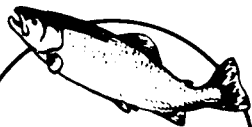


The Trade Wind Zone Oceanography Pilot Study  
Part I: Townsend Cromwell Cruises 1, 2, and 3  
February to April 1964

By Robert L. Charnell, David W. K. Au,  
and Gunter R. Seckel



**SPECIAL SCIENTIFIC REPORT-FISHERIES No. 552**

UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

BUREAU OF COMMERCIAL FISHERIES

UNITED STATES DEPARTMENT OF THE INTERIOR

Stewart L. Udall, *Secretary*

Charles F. Luce, *Under Secretary*

Stanley A. Cain, *Assistant Secretary for Fish and Wildlife and Parks*

FISH AND WILDLIFE SERVICE, Clarence F. Pautzke, *Commissioner*

BUREAU OF COMMERCIAL FISHERIES, Harold E. Crowther, *Director*

The Trade Wind Zone Oceanography Pilot Study  
Part I: Townsend Cromwell Cruises 1, 2, and 3  
February to April 1964

By

Robert L. Charnell, David W. K. Au  
and Gunter R. Seckel

United States Fish and Wildlife Service  
Special Scientific Report--Fisheries No. 552

Washington, D. C.

June 1967

# CONTENTS

	Page
Abstract	1
Introduction	1
Observations	2
Biological	2
Meteorological	2
Current	2
Preparation of data	2
Presentation of data	3
Acknowledgments	3
Literature cited	3

## FIGURES

1. Track chart for <u>Townsend Cromwell</u> cruises 1, 2, and 3. The large, numbered dots indicate the locations at which both hydrographic and BT (bathythermograph) casts were made; the smaller dots indicate locations at which only BT casts were made	5
2. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 1 along long. $148^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	6
3. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 1 along long. $151^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	7
4. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 1 along long. $154^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	8
5. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 1 along long. $157^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	9
6. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 1 between stations 7 and 8, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	10
7. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 1 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	11
8. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 2 along long. $148^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	12
9. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 2 along long. $151^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel	13

	Page
10. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 2 along long. $154^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	14
11. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 2 along long. $157^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	15
12. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 2 between stations 7 and 8, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	16
13. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 2 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	17
14. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 3 along long. $148^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	18
15. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 3 along long. $151^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	19
16. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 3 along long. $154^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	20
17. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 3 along long. $157^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	21
18. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 3 between stations 7 and 8, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	22
19. Surface temperatures ( $^{\circ}$ C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$ C.) section (lower panel) for <u>Townsend Cromwell</u> cruise 3 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel _____	23
20. Surface temperature distribution ( $^{\circ}$ C.) based on bucket temperature at each BT cast for <u>Townsend Cromwell</u> cruise 1 _____	24
21. Surface temperature distribution ( $^{\circ}$ C.) based on bucket temperature at each BT cast for <u>Townsend Cromwell</u> cruise 2 _____	25
22. Surface temperature distribution ( $^{\circ}$ C.) based on bucket temperature at each BT cast for <u>Townsend Cromwell</u> cruise 3 _____	26
23. Surface salinity distribution ( $^{\circ}$ /oo) from bucket salinity samples at each BT cast for <u>Townsend Cromwell</u> cruise 1 _____	27
24. Surface salinity distribution ( $^{\circ}$ /oo) from bucket salinity samples at each BT cast for <u>Townsend Cromwell</u> cruise 2 _____	28
25. Surface salinity distribution ( $^{\circ}$ /oo) from bucket salinity samples at each BT cast for <u>Townsend Cromwell</u> cruise 3 _____	29

	Page
26. Dynamic topography (dynamic meters) relative to 1,000 m. for <u>Townsend Cromwell</u> cruise 1 _____	30
27. Dynamic topography (dynamic meters) relative to 1,200 m. for <u>Townsend Cromwell</u> cruise 2 _____	31
28. Dynamic topography (dynamic meters) relative to 1,200 m. for <u>Townsend Cromwell</u> cruise 3 _____	32

## TABLES

1. Original and derived oceanographic data for <u>Townsend Cromwell</u> cruise 1 _____	34
2. Original and derived oceanographic data for <u>Townsend Cromwell</u> cruise 2 _____	48
3. Original and derived oceanographic data for <u>Townsend Cromwell</u> cruise 3 _____	62

# The Trade Wind Zone Oceanography Pilot Study

## Part I: Townsend Cromwell Cruises 1, 2, and 3

### February to April 1964

By

Robert L. Charnell, David W. K. Au  
and Gunter R. Seckel

#### ABSTRACT

A standard grid of oceanographic stations in an area bounded by lat.  $10^{\circ}$  and  $26^{\circ}$  N., and long.  $148^{\circ}$  and  $157^{\circ}$  W., was occupied at monthly intervals between February 1964 and June 1965. For the first set of three cruises, Townsend Cromwell cruises 1, 2, and 3, February to April 1964, oceanographic station data are tabulated, BT data are presented in vertical sections, and the distribution of surface temperature, surface salinity, and surface dynamic height relative to 1,000 m. (cruise 1), and 1,200 m. (cruises 2 and 3) are shown in charts for each cruise. Methods and procedures as well as the limitations of the data are discussed.

#### INTRODUCTION

This is the first of a series of reports presenting physical oceanographic data of the Trade Wind Zone Oceanography Pilot Study conducted by the Bureau of Commercial Fisheries Biological Laboratory, Honolulu. The data were obtained during a series of 16 monthly cruises between February 1964 and June 1965 over a set station pattern in an area near the Hawaiian Islands bounded approximately by lat.  $10^{\circ}$  and  $26^{\circ}$  N. and long.  $148^{\circ}$  and  $157^{\circ}$  W.

The complete set of observations represents a three-dimensional time-sequence distribution of properties (temperature, salinity....) in the trade wind zone of the central North Pacific. It is a pilot study of an investigation in which seasonal changes in the distribution of properties are to be explained in terms of 1) seasonal changes in the processes of net heat and water

exchange across the sea surface, and 2) the effects of seasonal changes in wind stress and water motion. The Trade Wind Zone Oceanography Program was planned by Gunter R. Seckel and is carried out under his direction by HL (Bureau of Commercial Fisheries Biological Laboratory, Honolulu).

This report contains the BT (bathythermograph) and oceanographic station data for the first, second, and third cruises in the series. Figure 1 shows the cruise track for the three cruises and gives the position of the Nansen bottle oceanographic casts and the BT casts.

All cruises were made by the R/V Townsend Cromwell, commanded by Captain Robert E. K. D. Lee, with officers Jan Liefting and Pete Andrich. The scientific parties were composed of the following:

Townsend Cromwell cruise 1:  
February 14 to March 6, 1964

Gunter R. Seckel - HL - Field Party Chief  
David W. K. Au - HL  
Robert P. Brown - HL  
William E. Hauser - HL  
Henry M. Kishinami - HL  
Lloyd T. Watarai - HL  
John Hazelworth - U.S. Naval Oceanographic  
Office

Note.--Robert L. Charnell, Oceanographer, presently with Hazelton Nuclear Science Corp., Palo Alto, California 94303, formerly with Bureau of Commercial Fisheries Biological Laboratory, Honolulu, Hawaii; David W. K. Au, Physical Science Technician and Gunter R. Seckel, Oceanographer, Bureau of Commercial Fisheries Biological Laboratory, Honolulu, Hawaii 96812.

Townsend Cromwell cruise 2:

March 16 to April 5, 1964

Robert P. Brown - HL - Field Party Chief

David W. K. Au - HL

Melvin E. Kau - HL

Rodney Kimura - HL

Lloyd T. Watarai - HL

Warren King - Smithsonian Institution

Robert Sundell - Smithsonian Institution

Townsend Cromwell cruise 3:

April 12 to May 4, 1964

Lloyd T. Watarai - HL - Field Party Chief

(4/12-4/18)

David W. K. Au - HL - Field Party Chief

(4/19-5/4)

Howard Adrian - HL

Joseph R. Harada - HL

Henry M. Kishinami - HL

Douglas Edsall - National Oceanographic  
Data Center

David Bratley - Smithsonian Institution

Warren King - Smithsonian Institution

## OBSERVATIONS<sup>1/</sup>

In addition to the regular Nansen and BT casts shown in figure 1, BT casts were made at 18.5-km. (10-nautical-mile) intervals for studies of variability between stations 19 and 21, 26 and 28, and 35 and 37, except for cruise 1, where one series was between stations 31 and 33 instead of stations 19 and 21.

To supplement the physical oceanographic data presented in this report, additional information of the following types was obtained.

### Biological

A 1/2-hour surface plankton tow was taken daily at 2000 hours with a 1-m. net. Flyingfish which stranded themselves on deck were collected daily. Regular observations of fish schools, sea mammals, and birds were supplemented by more detailed bird counts by observers from the Smithsonian Institution on Cromwell cruises 2 and 3.

### Meteorological

Rain measurements as well as standard weather observations were taken four times

---

<sup>1/</sup>All data not presented in this report are on file at the Bureau of Commercial Fisheries Biological Laboratory, Honolulu 96812.

daily. Radiation from sun and sky was measured and recorded daily with an Eppley pyranometer. These observations were supplemented by daily color photographs of clouds.

### Current

Ten plastic-enclosed drift cards, described by Barkley, Ito, and Brown (1964), were released at each BT cast. Current-measuring techniques were tested with an Ekman current meter, suspended from the ship. The ship was drifting relative to a parachute drogue placed at a depth of 1,200 m.

## PREPARATION OF DATA

Standard oceanographic procedures were employed in the preparation of the data for this report. Salinity determinations were made on the University of Washington salinity bridge (Paquette, 1958). Duplicate determinations were made with an induction salinometer. When values differed more than 0.02 ‰, the salinity was redetermined on the U.W. salinity bridge, and the mean of the salinity bridge determinations was reported. All thermometers had been calibrated at HL since April 1962. The reported temperatures are estimated to be accurate to  $\pm 0.02^{\circ}\text{C}$ . Application of corrections to protected and unprotected thermometer readings and computations of thermometric depths and L-Z values were performed with an IBM 7040 digital computer<sup>2/</sup> at the University of Hawaii Computing Center with a program written at HL. Depths were determined by the use of values from the L-Z curve for the actual depth. This procedure gave depth estimated to be within  $\pm 10$  m. down to 1,000 m. and within  $\pm 1$  percent below 1,000 m.

Sigma-t, specific volume anomaly, and the dynamic height were computed on the IBM 7040 computer by the program prepared at HL and based on equations given by LaFond (1951). The computer also was used to interpolate all properties at standard depths by means of a subroutine furnished by the University of Washington Oceanography Department and based on the interpolation method outlined by Rattray (1962).

In the region of study, a sharp thermocline generally separates a surface mixed layer from

---

<sup>2/</sup>Trade names referred to in this publication do not imply endorsement of commercial products.

the subsurface waters. Only infrequently do Nansen casts adequately define this configuration, with the result that the interpolation program provides inaccurate values for temperature. BT data were used to correct the temperature-depth curve in the thermocline and the isothermal layer. When necessary, a value of temperature was chosen from the corrected curve at standard depths in the mixed layer and upper thermocline and, with the corresponding salinity value from the T-S curve, was used with the Nansen cast data in the interpolation program. The resulting interpolated values were much nearer the actual oceanographic situation as implied by the BT trace.

To estimate the validity of values for the surface distribution charts, the surface bucket values of temperature and salinity were compared, for each cruise, with values from the surface Nansen bottles. For temperature, variation was fairly random so that the mean of the difference between the two values was well within the accuracy of the surface bucket thermometer. The root mean square value computed from the above differences was less than 0.2° C. The bucket salinity values, on the other hand, were consistently larger than the Nansen bottle values, most probably owing to salt contamination at the time of sampling. The mean of the differences was about 0.03 ‰ and the root mean square value was within 0.07 ‰ for each cruise.

## PRESENTATION OF DATA

For each of the three cruises the original as well as derived data and section plots for the properties have been included.

Tables 1, 2, and 3 contain the oceanographic station data for cruises 1, 2, and 3, respectively. In addition to the position, date, and time at each station, weather and sea conditions in standard notation have been included in the heading of each station. The first five columns of each station listing show the observed depth, temperature, salinity, oxygen, and phosphate,<sup>3/</sup> respectively; the next two columns contain calculated sigma-t and specific volume anomaly for the observed data. The next three columns

---

<sup>3/</sup>Oxygen and phosphate data are available only for cruises 6 to 17; the columns in the tables of the present report bear the oxygen and phosphate headings only to have a uniform format for this series of reports.

present the interpolated values of temperature and salinity at standard depths and the last three columns contain sigma-t and the specific volume anomaly calculated from the interpolated data and the anomaly of dynamic height summed from the surface. The error terms, defined by the Rattray interpolation technique, that exceeded 0.10 for temperature and 0.05 for salinity have been noted below the tabulation for each station. Interpolated and extrapolated values as well as irregularities in the original data are noted in these tables.

Temperature distribution sections along long. 148° W., 151° W., 154° W., and 157° W. based on the 270-m. BT's are included; so are the shorter zonal sections between stations 7 and 8, 25 and 26, and 37 and 40. In addition, surface temperature and salinities are presented with each section. All the sections were plotted automatically by the model 566 Calcomp plotter with a program designed at HL. These seven BT sections are shown in figures 2 through 7 for cruise 1, figures 8 through 13 for cruise 2, and figures 14 through 19 for cruise 3.

The surface temperature distributions, based on bucket temperature at each BT cast, are shown in figures 20, 21, and 22 for cruises 1, 2, and 3, respectively.

The surface salinity distributions, based on bucket salinity samples at each BT cast, are shown in figures 23, 24, and 25 for cruises 1, 2, and 3, respectively.

The dynamic topography, relative to 1,000 m. for cruise 1 and 1,200 m. for cruises 2 and 3, is shown in figures 26, 27, and 28, respectively.

## ACKNOWLEDGMENTS

The data for these cruises were processed by HL personnel under the direction of Mary Lynne Godfrey. Betty Ann L. Keala did the computer programming.

## LITERATURE CITED

- BARKLEY, RICHARD A., BERNARD M. ITO, and ROBERT P. BROWN.  
1964. Releases and recoveries of drift bottles and cards in the central Pacific. U.S. Fish Wildl. Serv., Spec. Sci. Rep. Fish. 492, iii + 31 p.
- LaFOND, EUGENE C.  
1951. Processing oceanographic data. U.S. Navy Hydrographic Office Publ. 614, 114 p.



PAQUETTE, ROBERT G.

1958. A modification of the Wenner-Smith-Soule salinity bridge for the determination of salinity in sea water. Dep. Oceanogr. Univ. Wash., Tech. Rep. 61, 57 p.

RATTRAY, MAURICE, JR.

1962. Interpolation errors and oceanographic sampling. Deep-Sea Res. 9: 25-37.

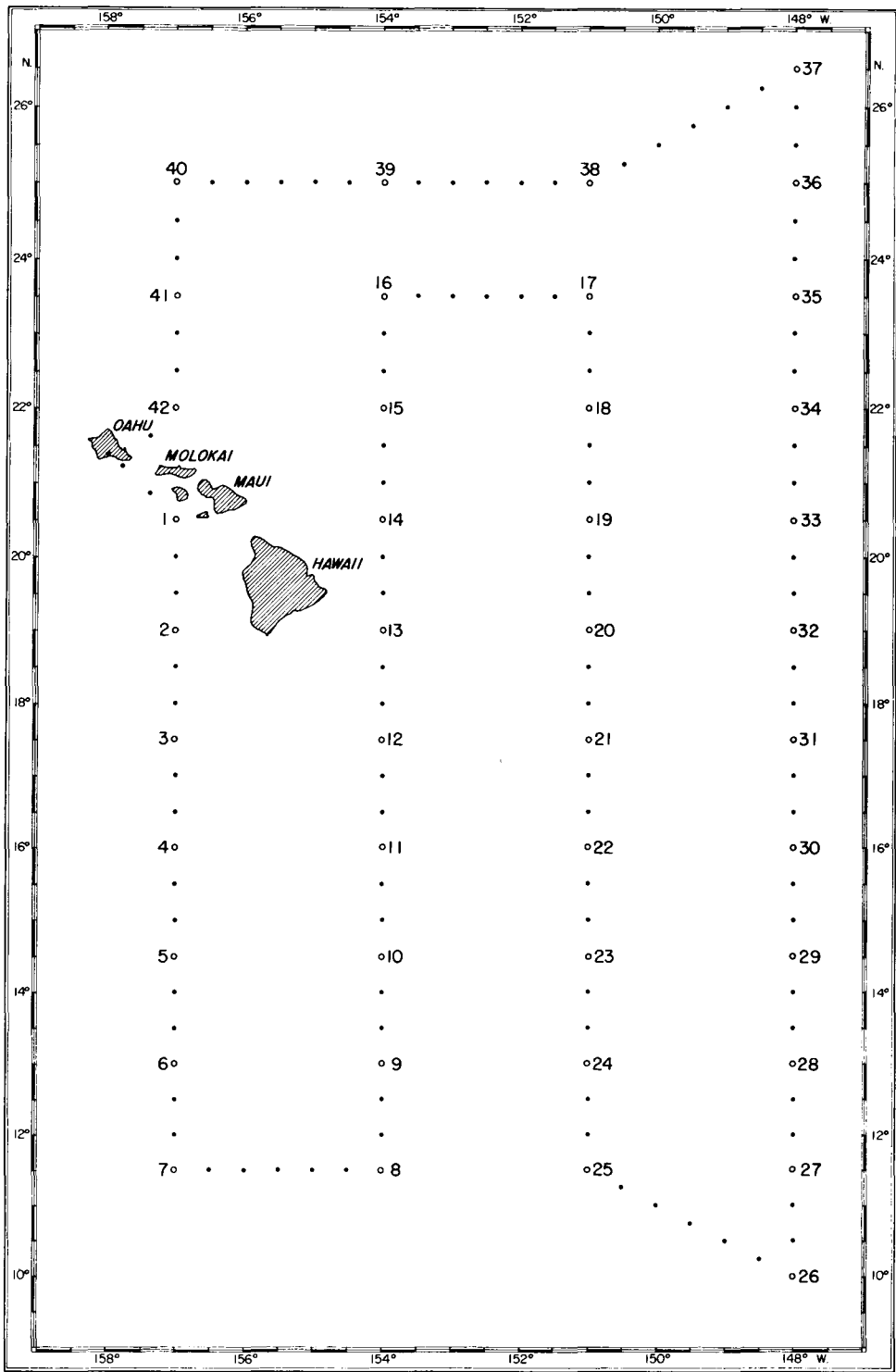


Figure 1.--Track chart for Townsend Cromwell cruises 1, 2, and 3. The large, numbered dots indicate the locations at which both hydrographic and BT (bathythermograph) casts were made; the smaller dots indicate locations at which only BT casts were made.

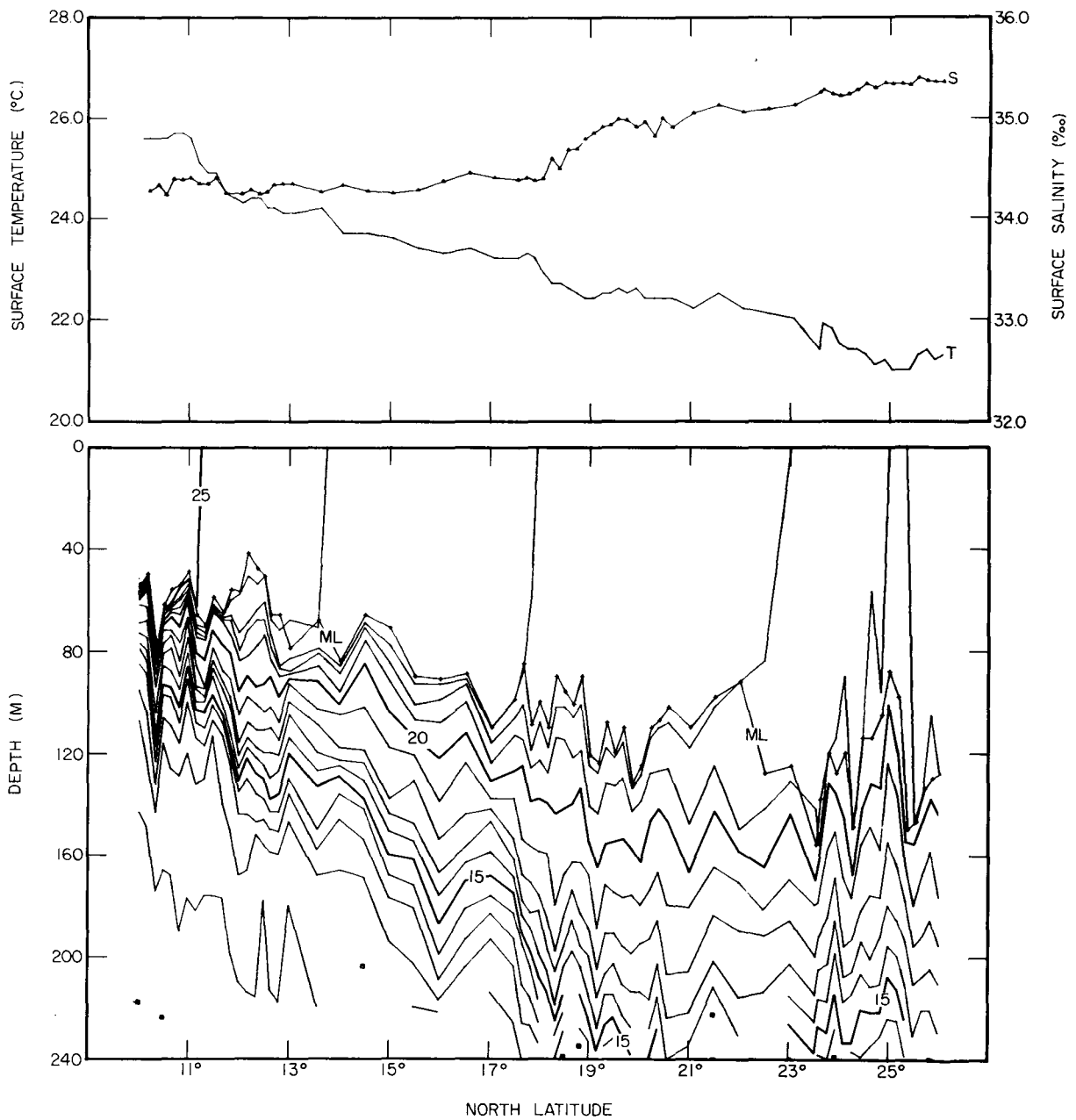


Figure 2.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 1 along long. 148 $^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

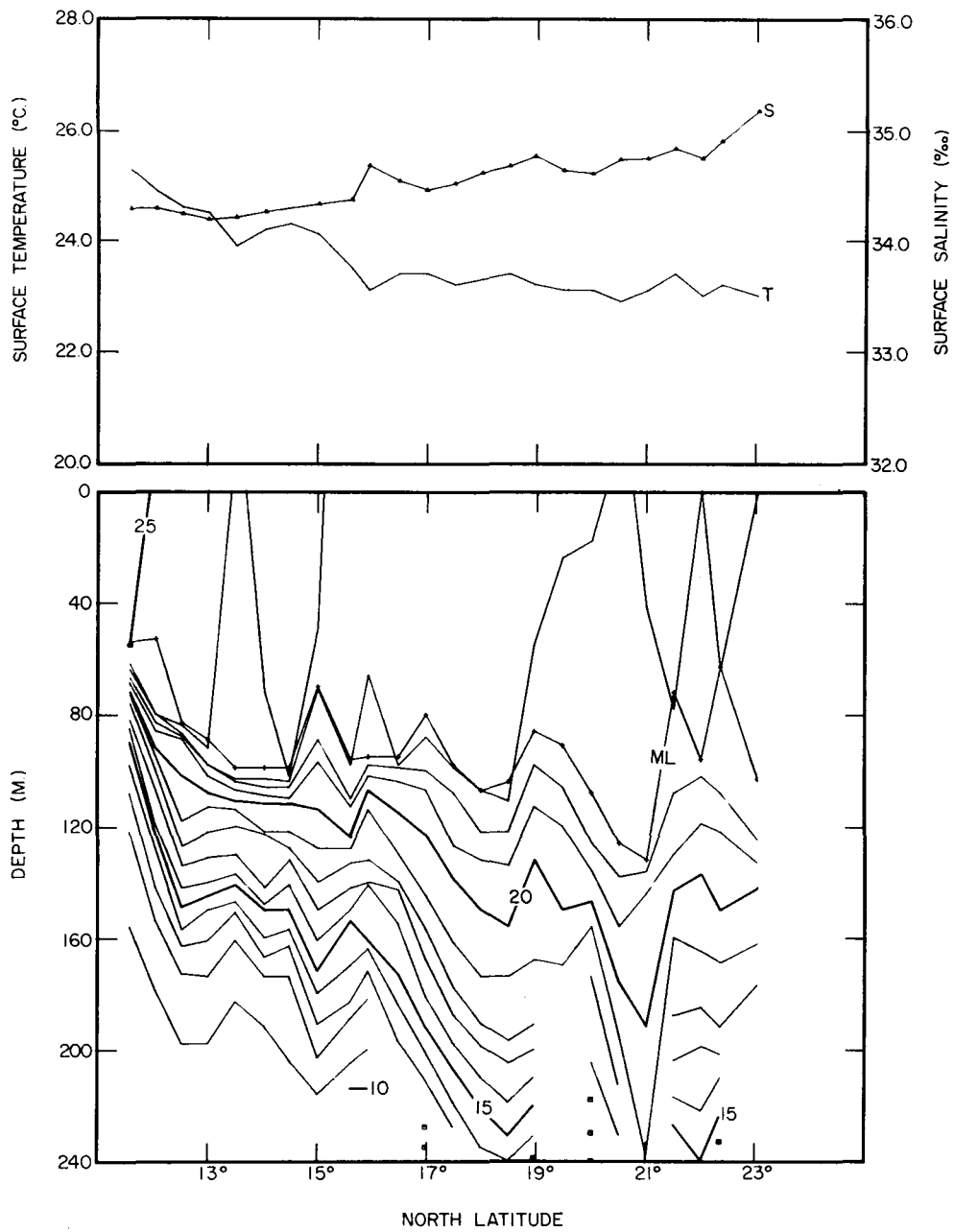


Figure 3.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 1 along long.  $151^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

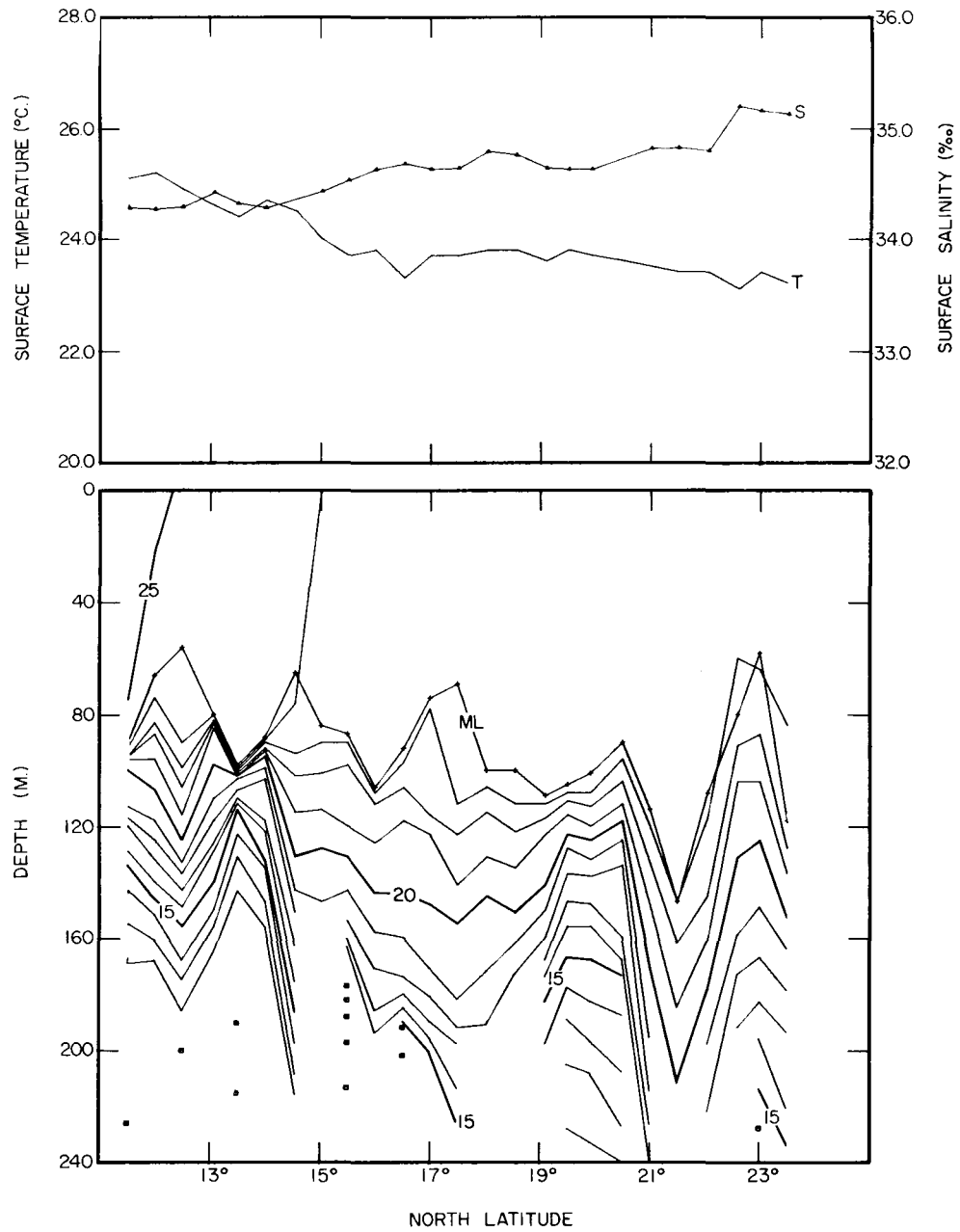


Figure 4.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 1 along long.  $154^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

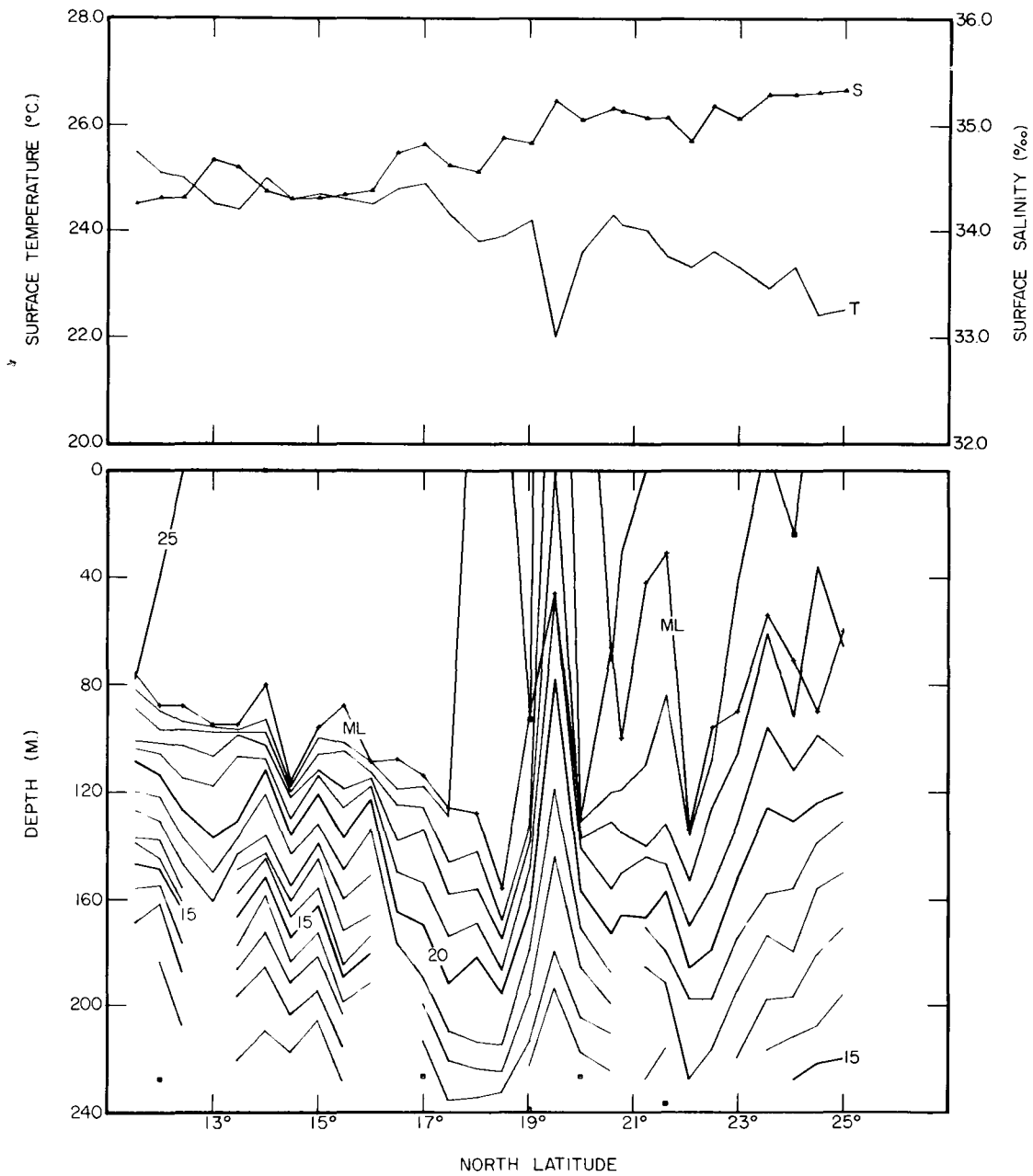


Figure 5.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 1 along long.  $157^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

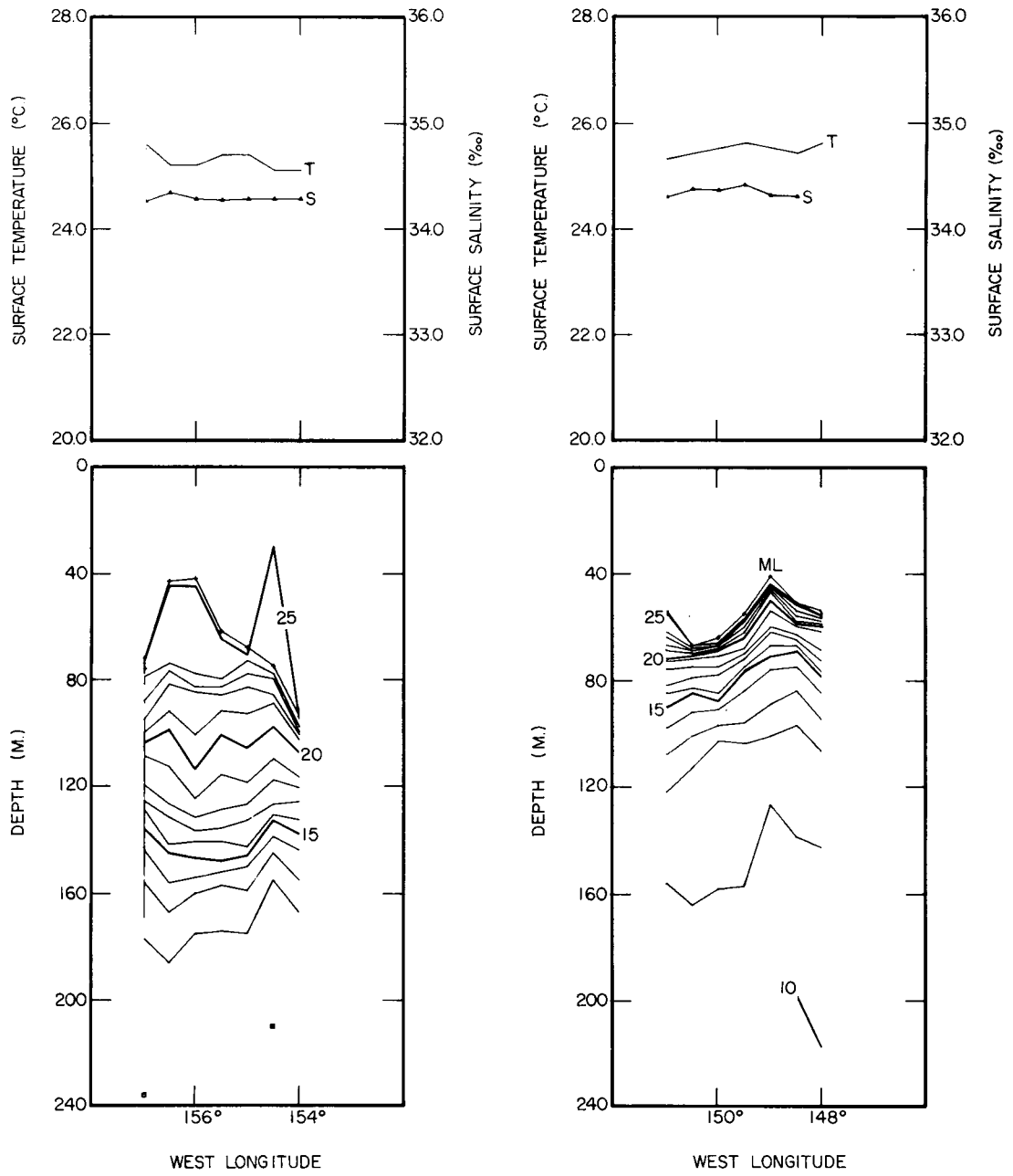


Figure 6.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 1 between stations 7 and 8, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

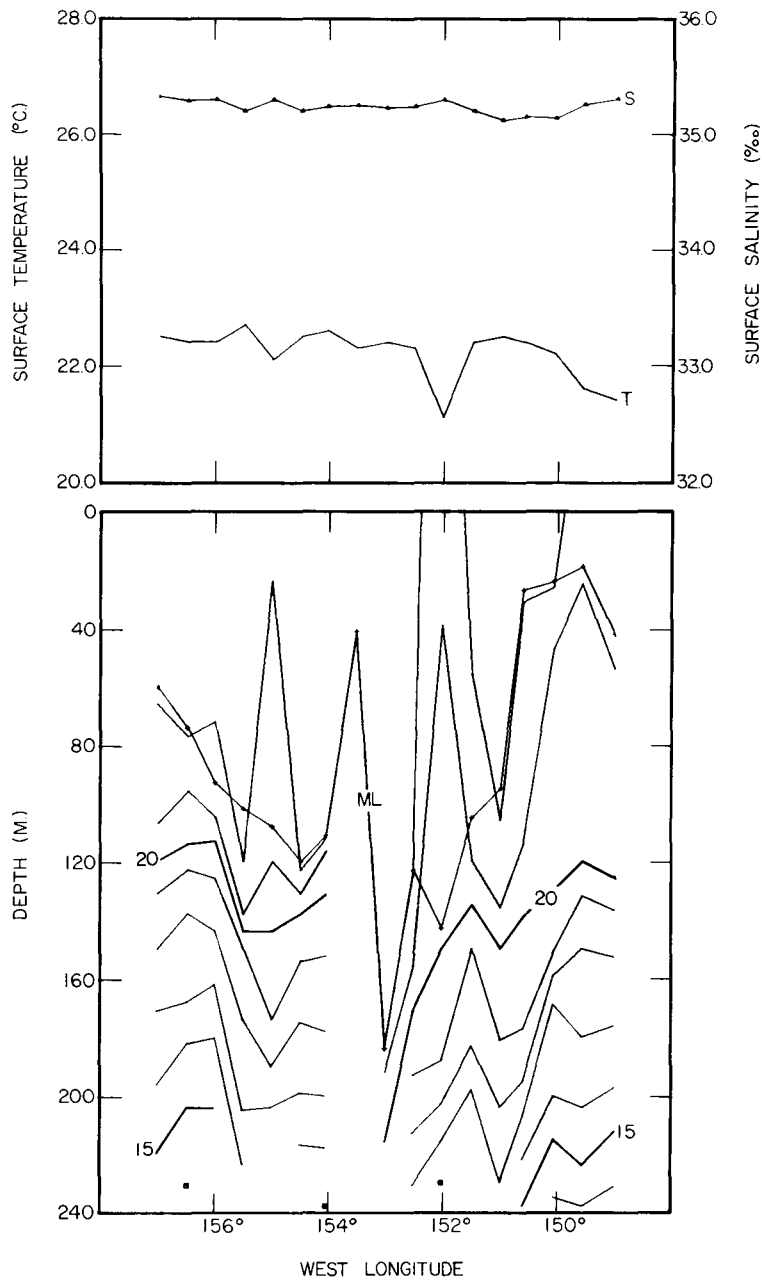


Figure 7.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 1 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.



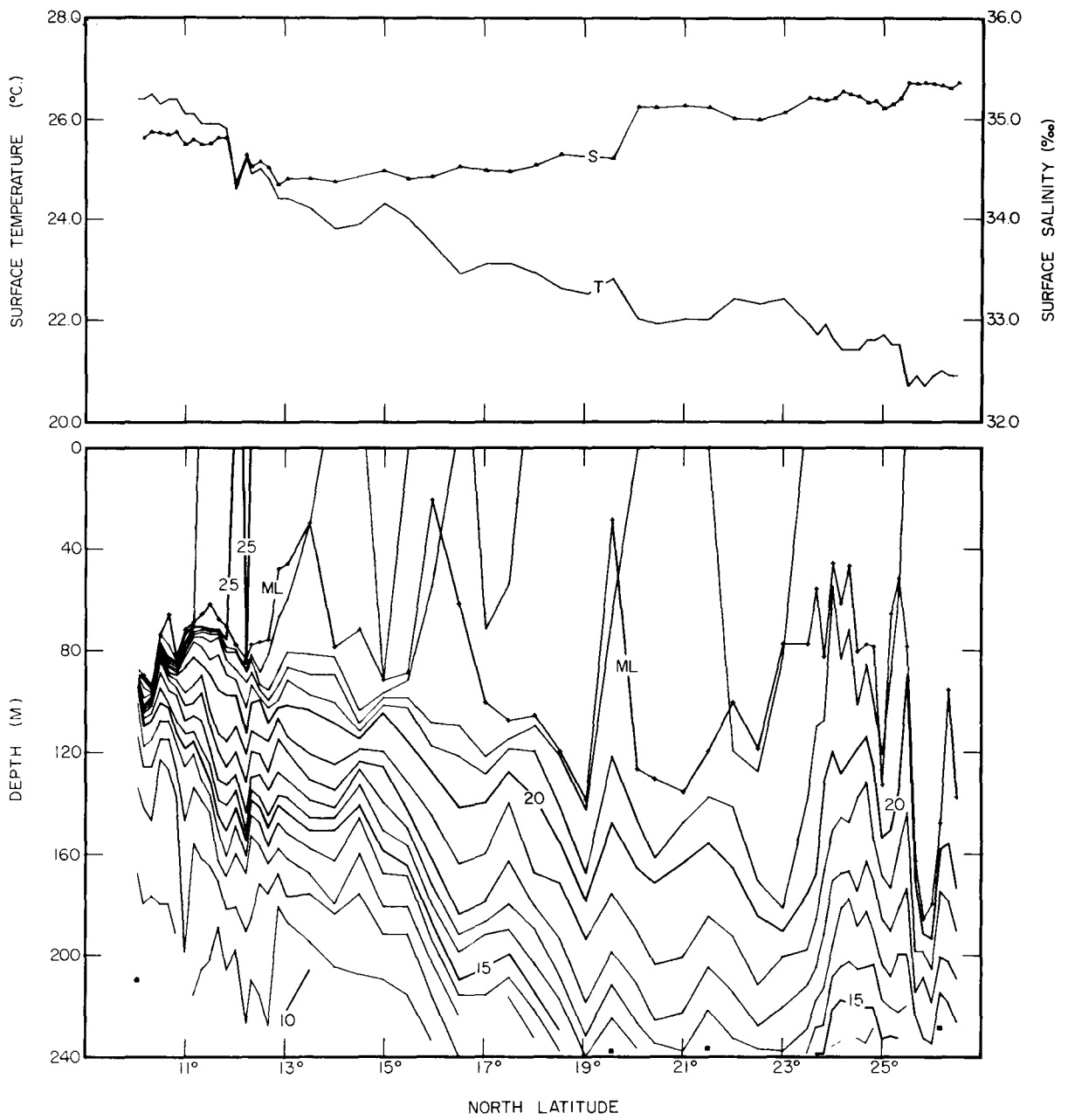


Figure 8.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 2 along long.  $148^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

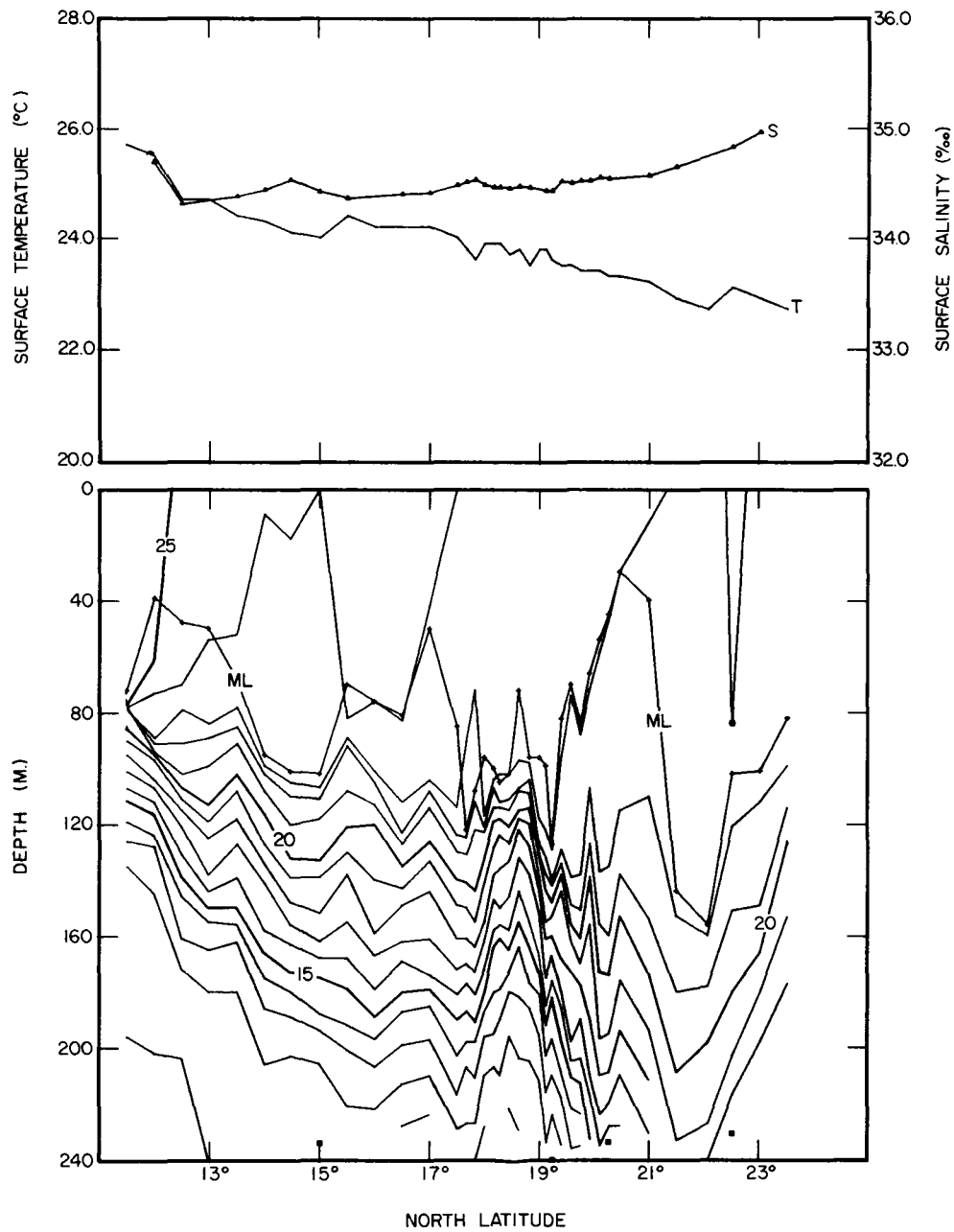


Figure 9.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 2 along long.  $151^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

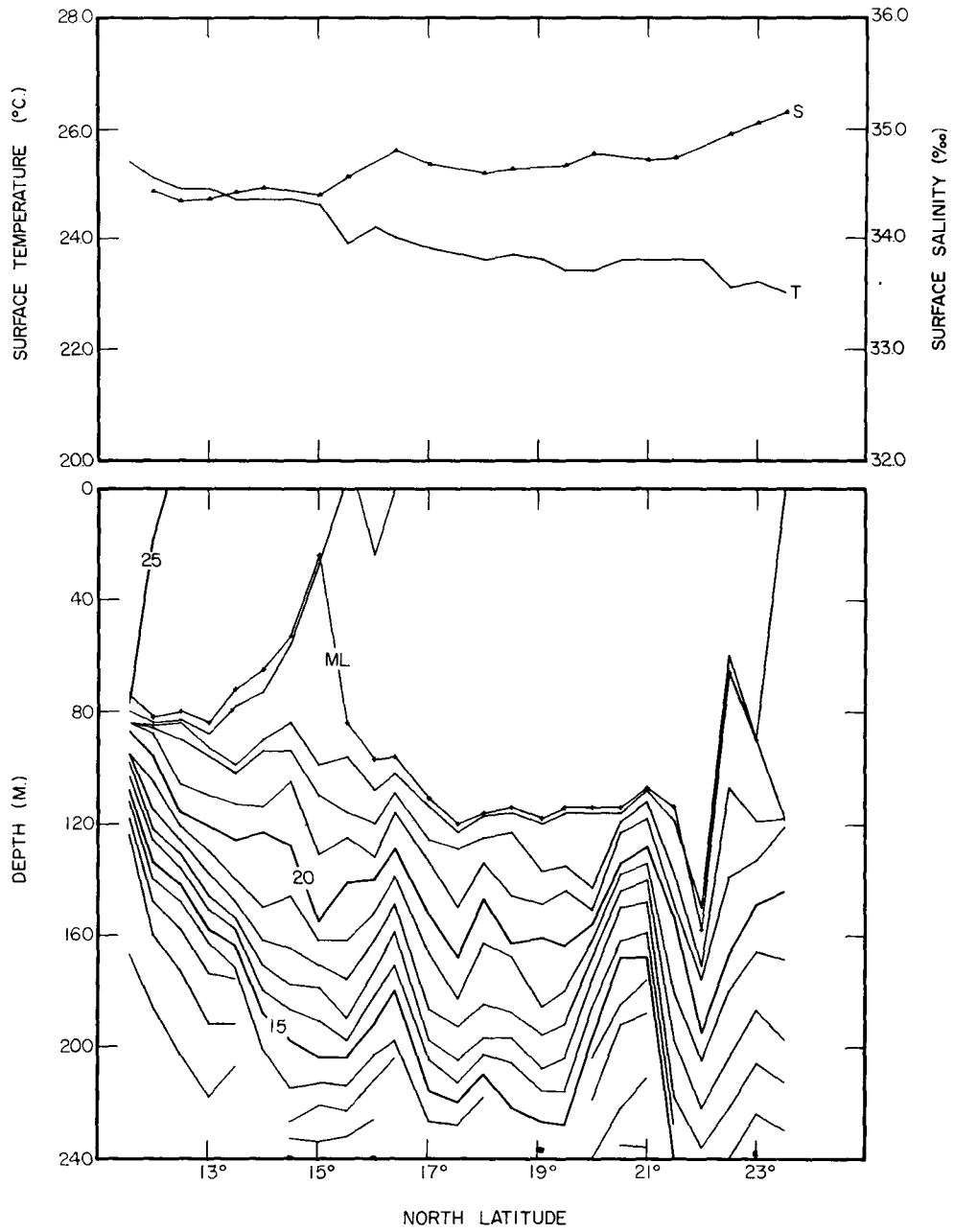


Figure 10.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 2 along long.  $154^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

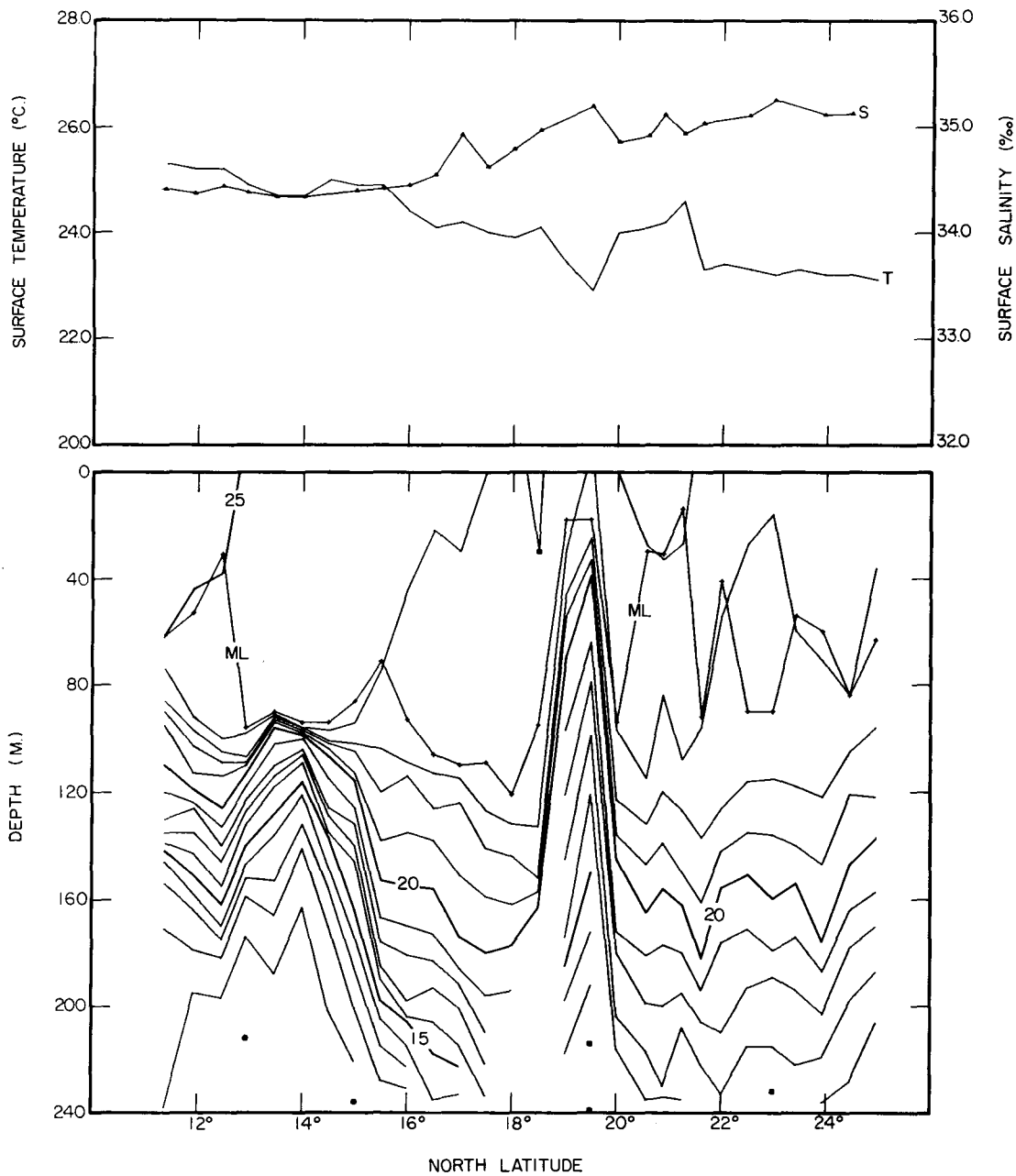


Figure 11.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 2 along long.  $157^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

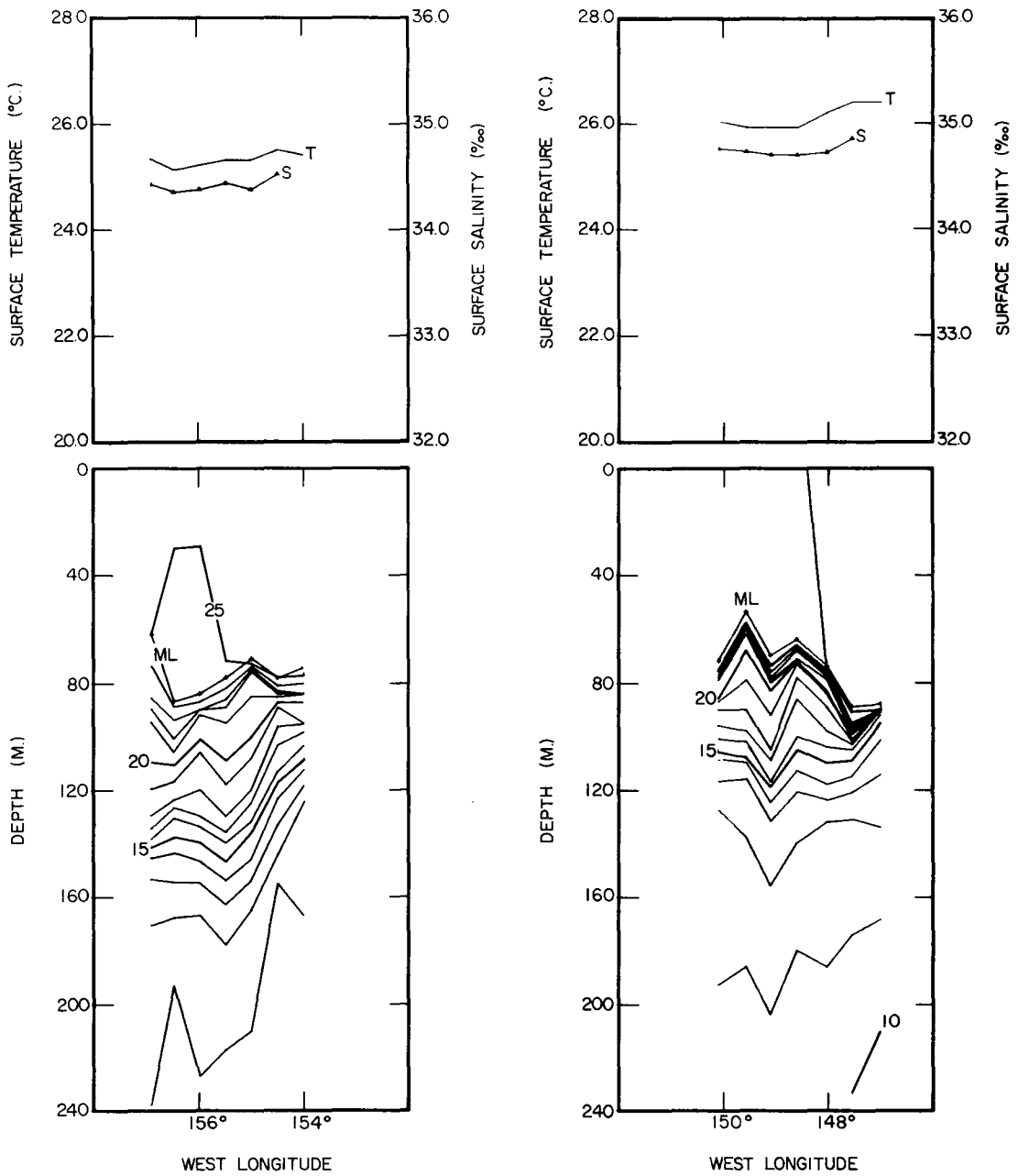


Figure 12.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Crowwell cruise 2 between stations 7 and 8, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

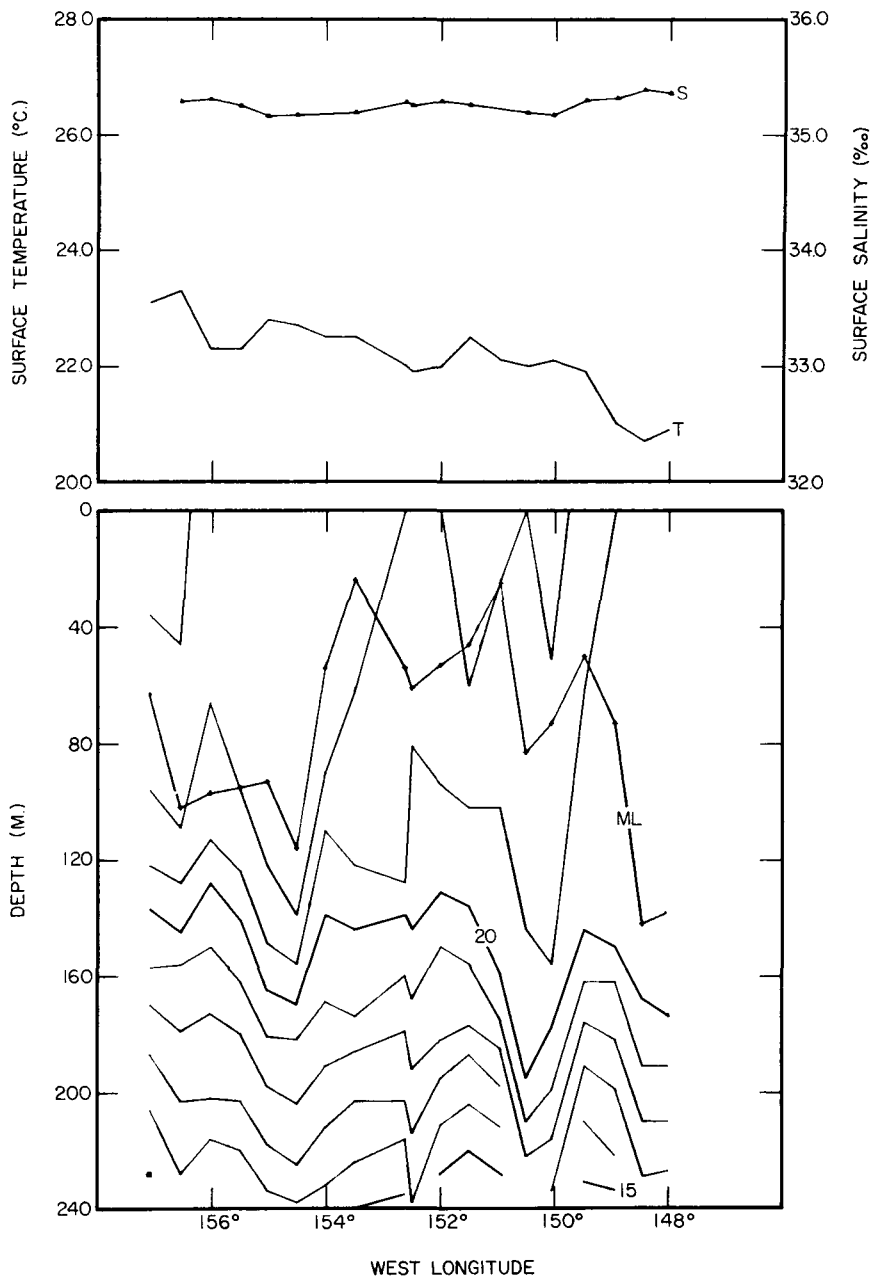


Figure 13.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 2 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

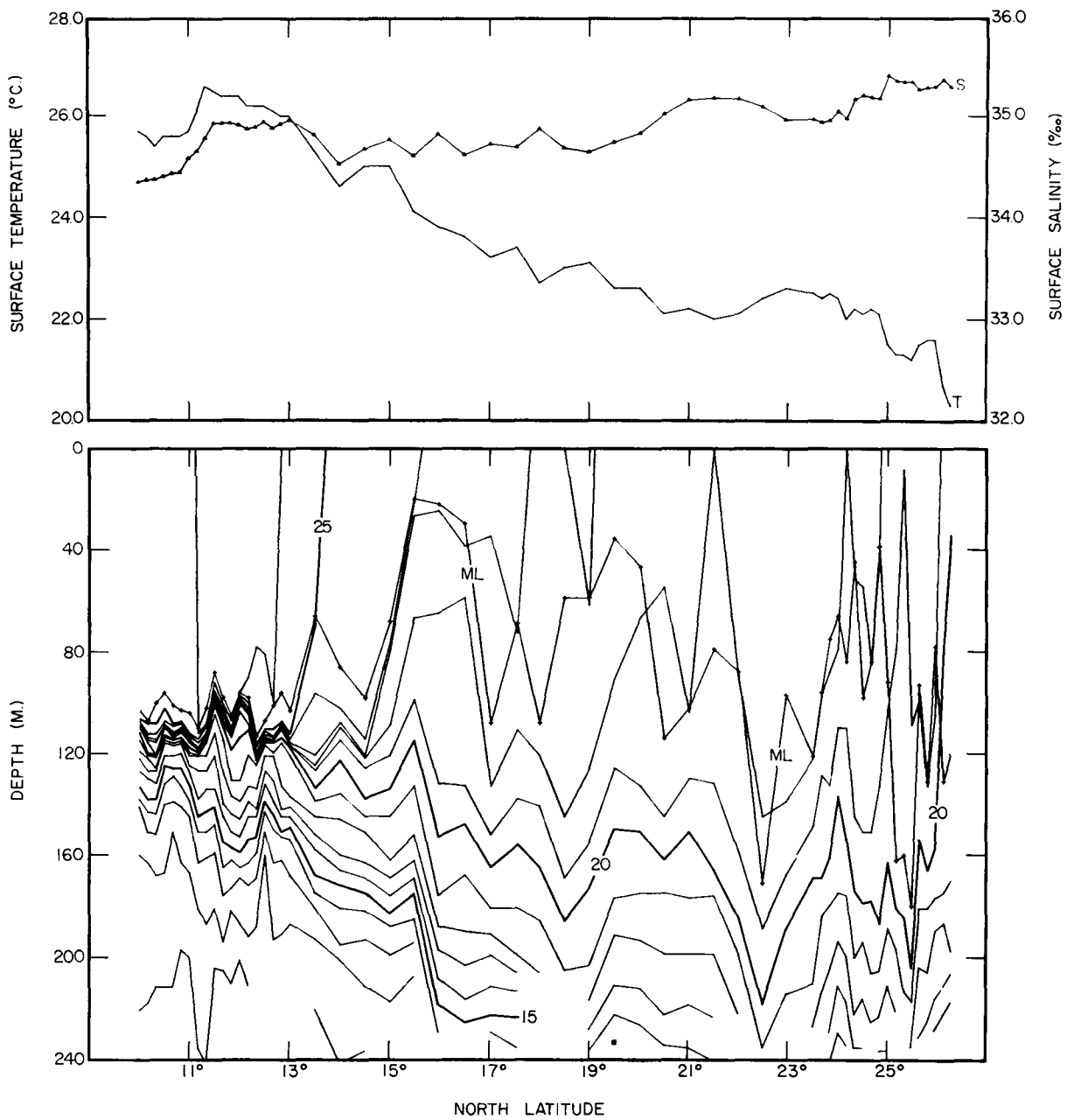


Figure 14.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 3 along long.  $148^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

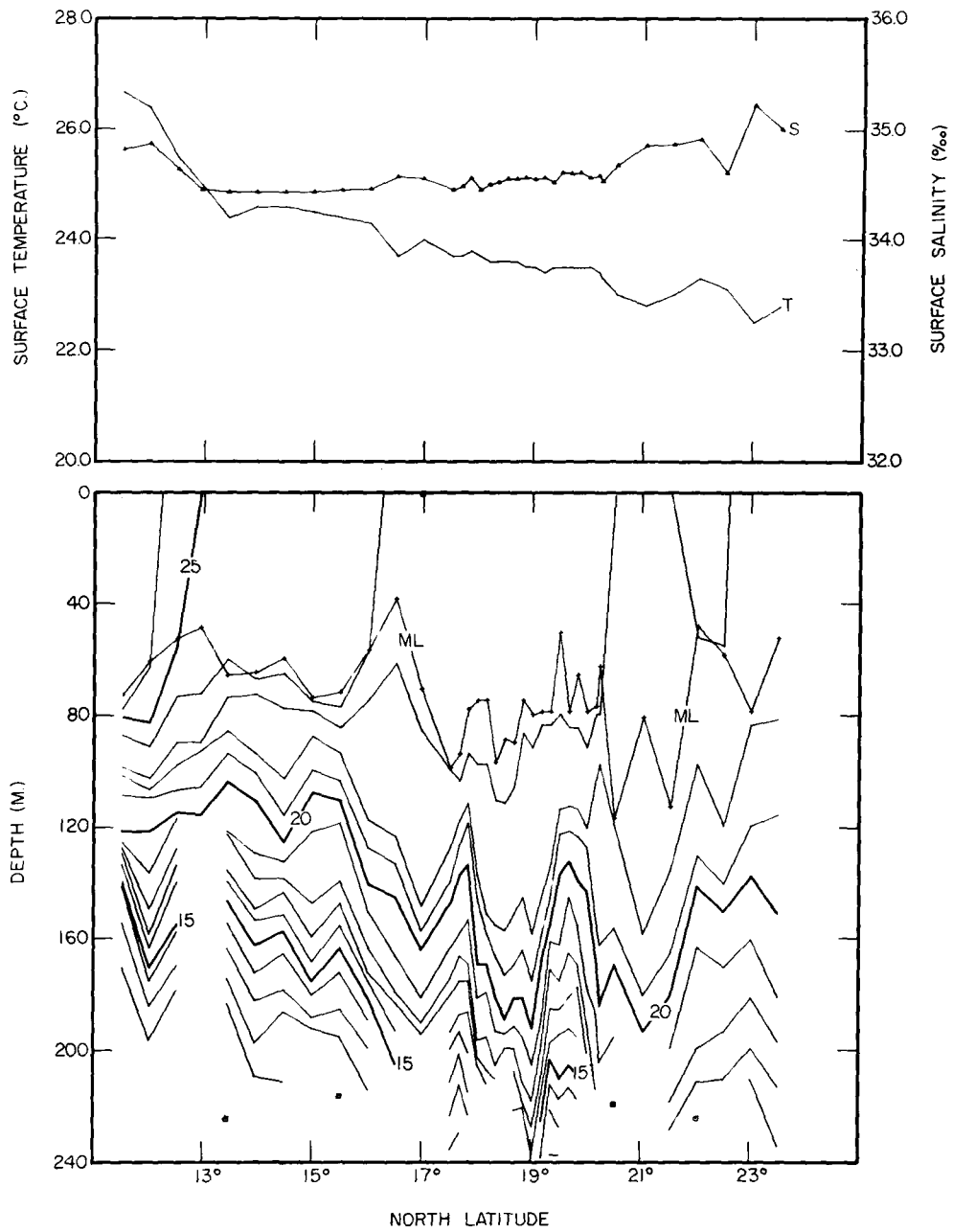


Figure 15.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 3 along long.  $151^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.



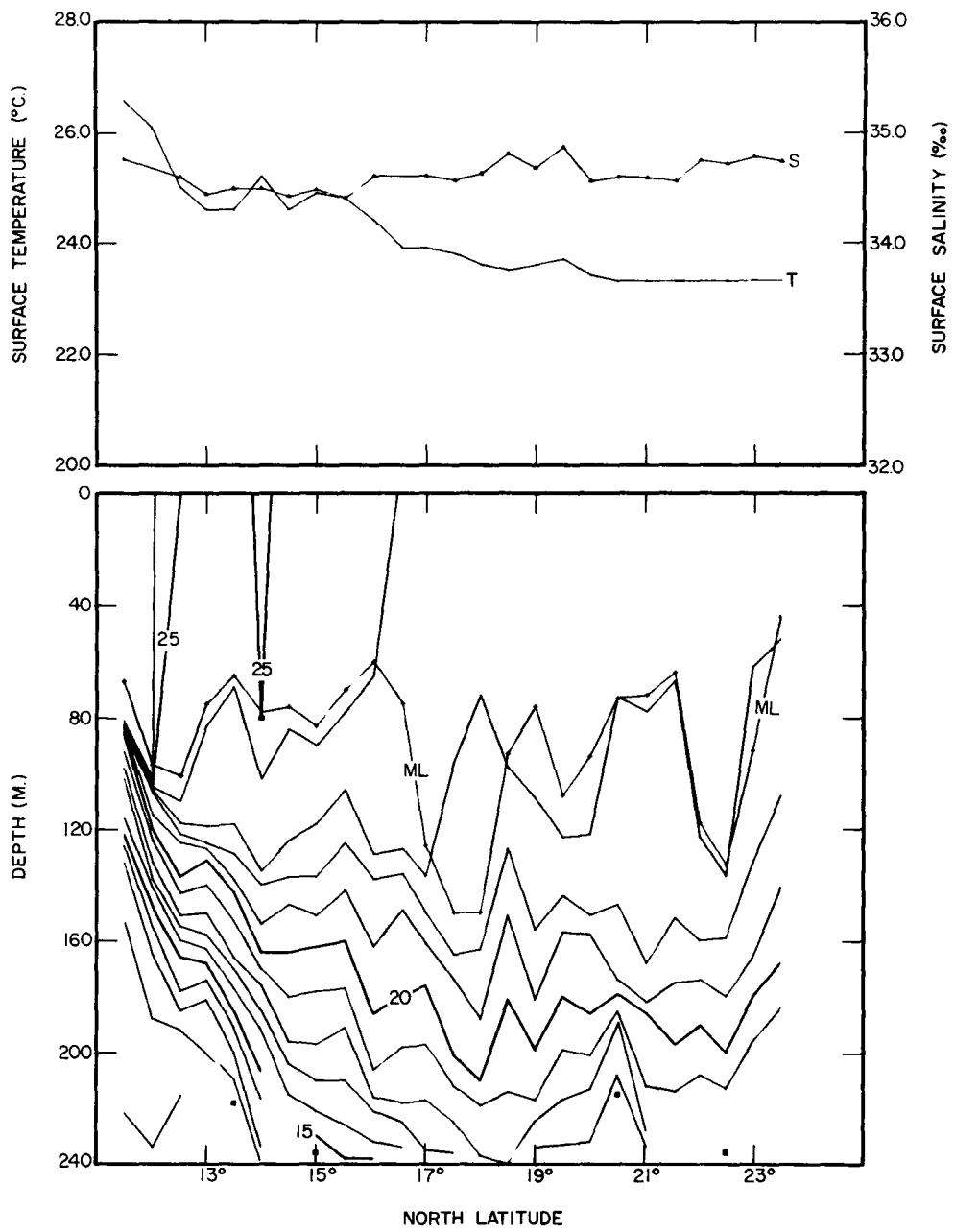


Figure 16.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 3 along long.  $154^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

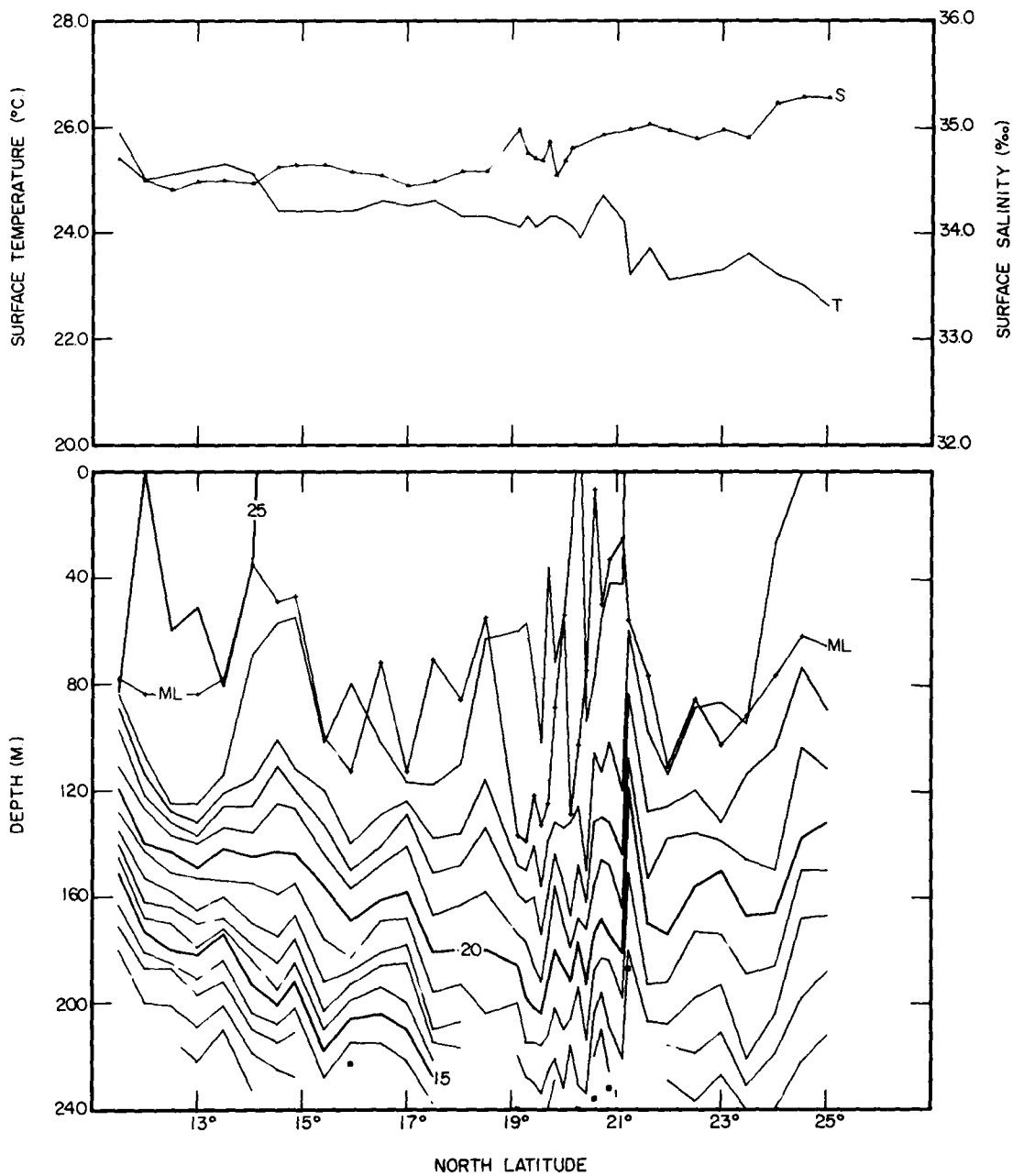


Figure 17.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 3 along long.  $157^{\circ}$  W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

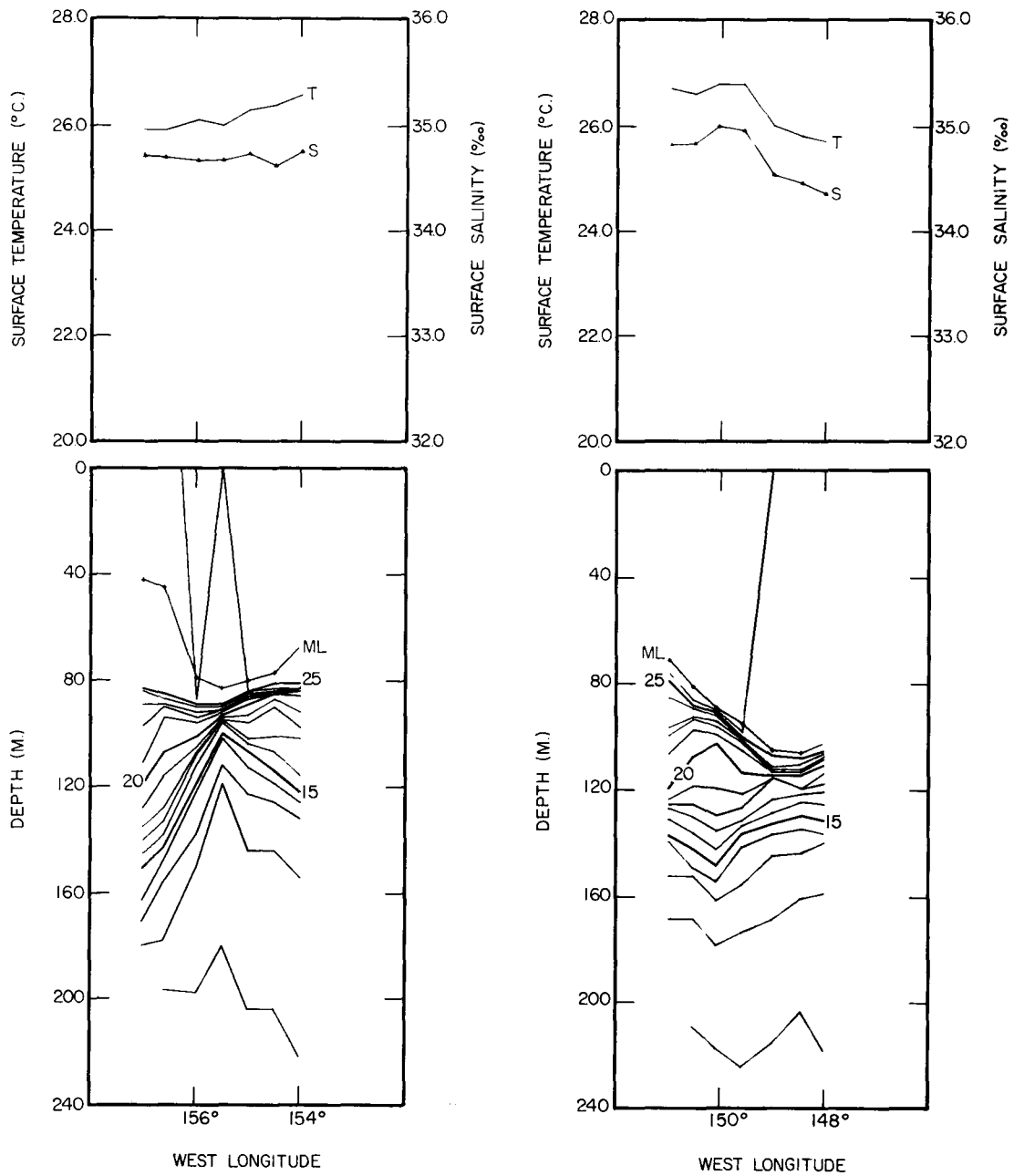


Figure 18.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 3 between stations 7 and 8, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

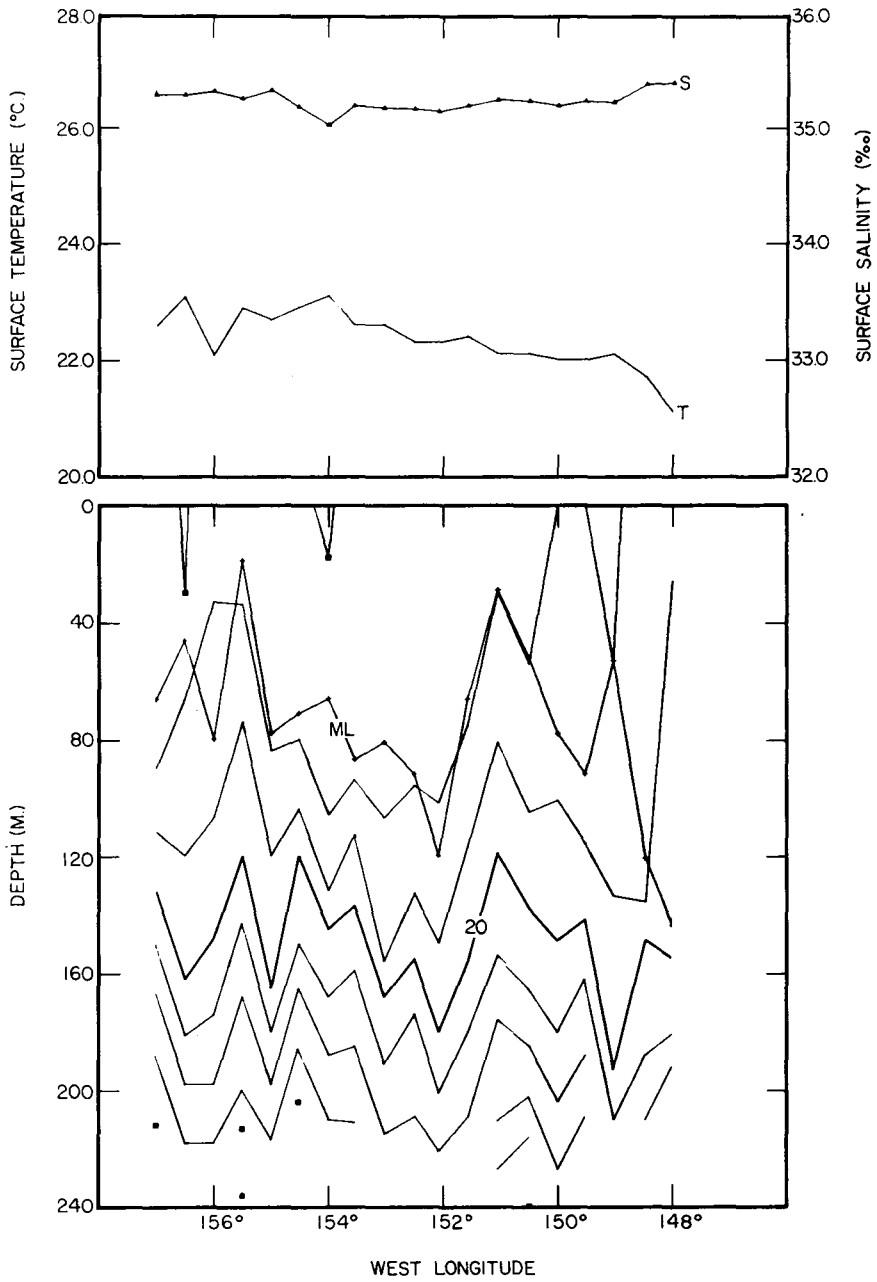


Figure 19.--Surface temperatures ( $^{\circ}$  C.) and salinities ( $^{\circ}$ /oo) (upper panel) and zonal BT temperature ( $^{\circ}$  C.) section (lower panel) for Townsend Cromwell cruise 3 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

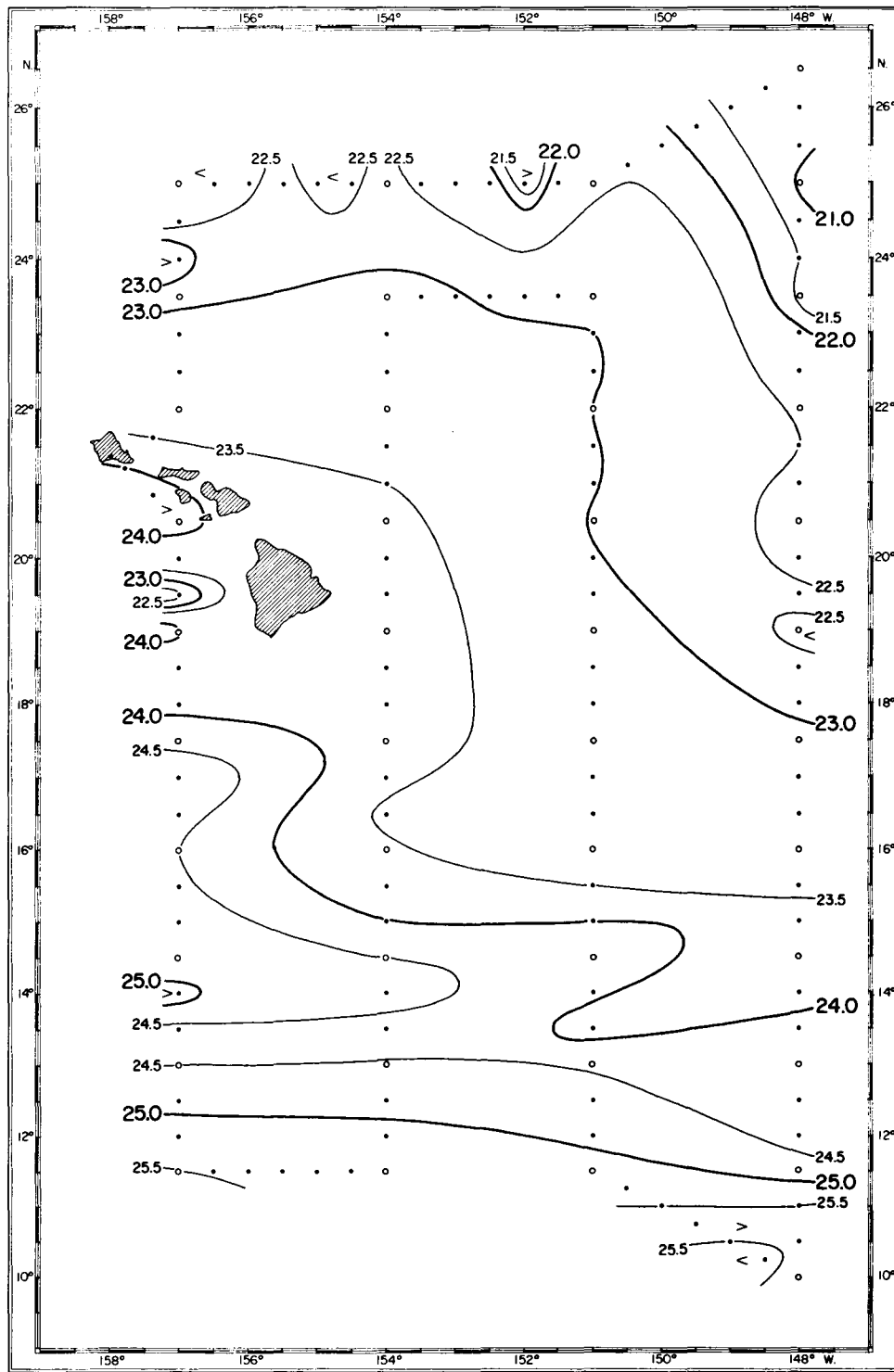


Figure 20.--Surface temperature distribution ( $^{\circ}$  C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 1.

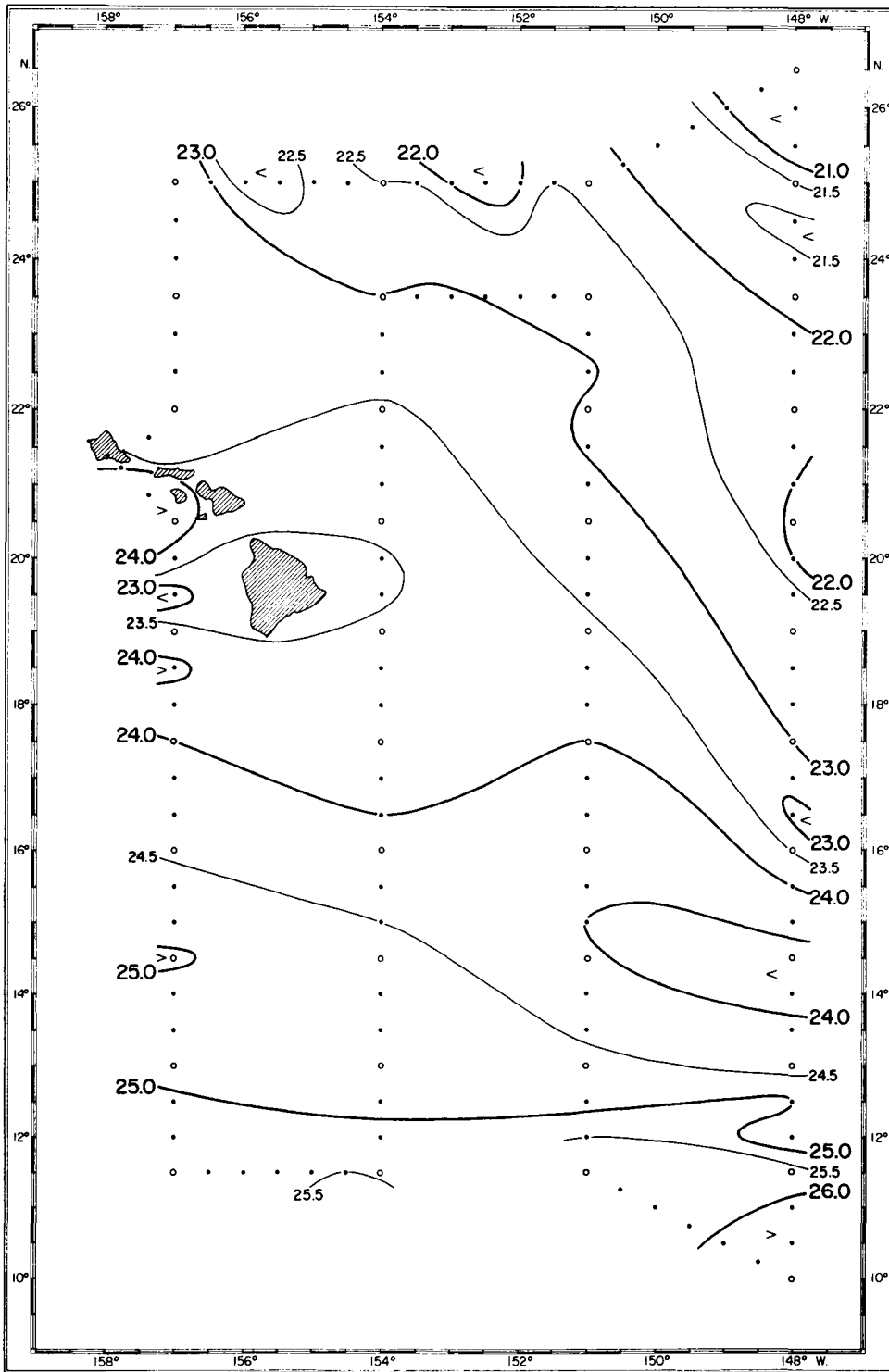


Figure 21.--Surface temperature distribution ( $^{\circ}$  C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 2.

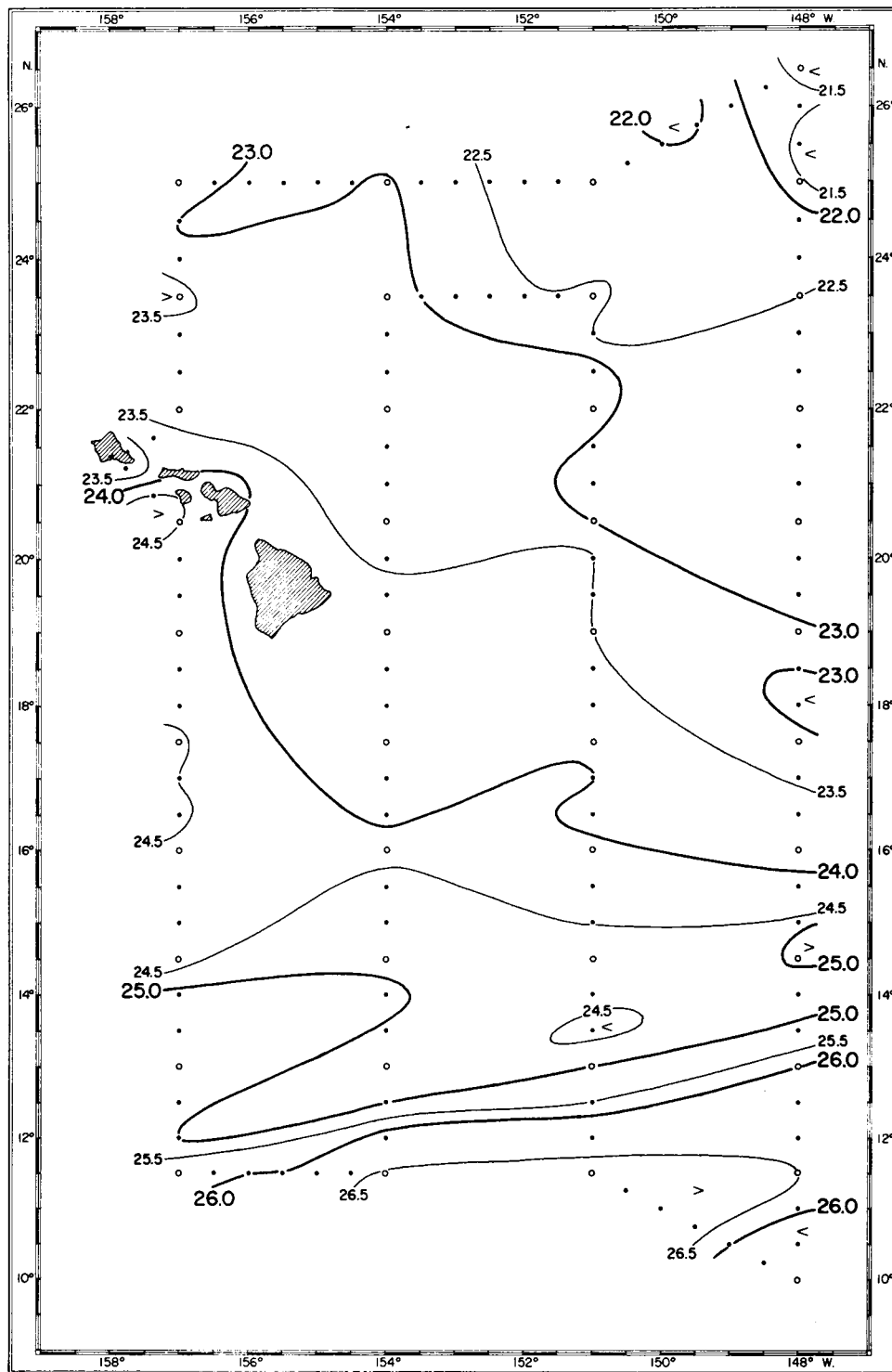


Figure 22.--Surface temperature distribution ( $^{\circ}$  C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 3.

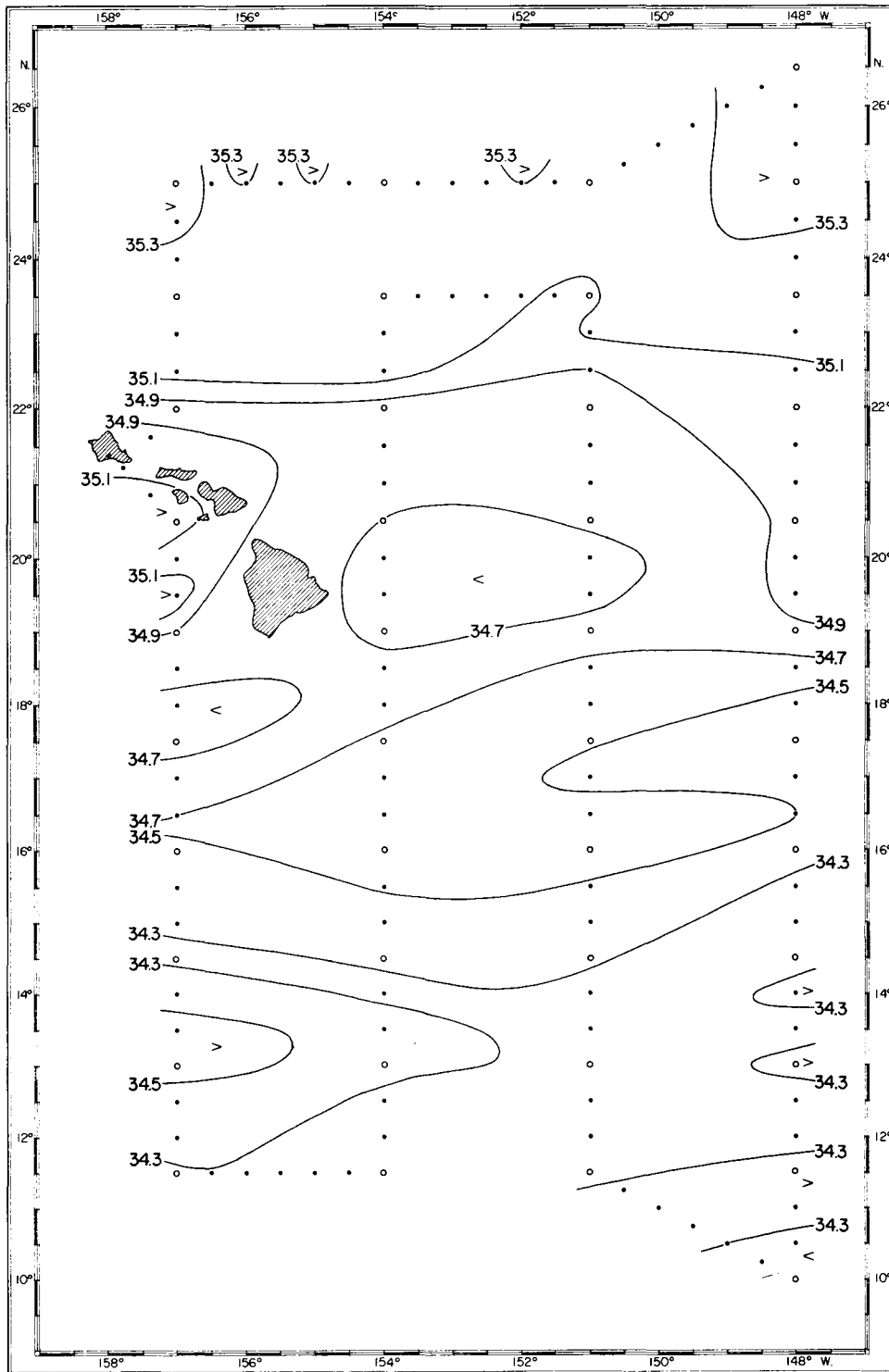


Figure 23.--Surface salinity distribution (‰) from bucket salinity samples at each BT cast for Townsend Cromwell cruise 1.



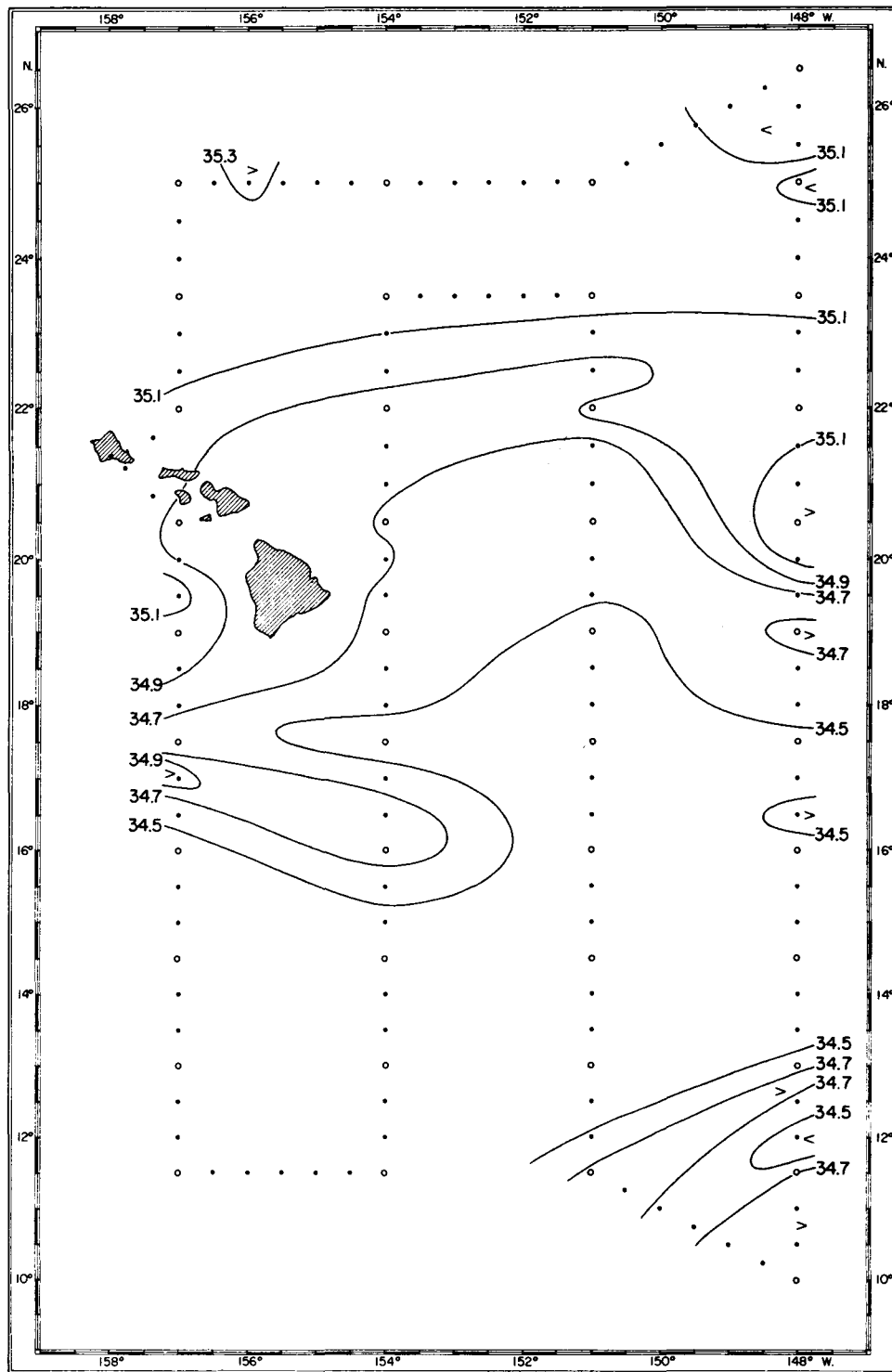


Figure 24.--Surface salinity distribution ( $^{\circ}/_{\infty}$ ) from bucket salinity samples at each BT cast for Townsend Cromwell cruise 2.

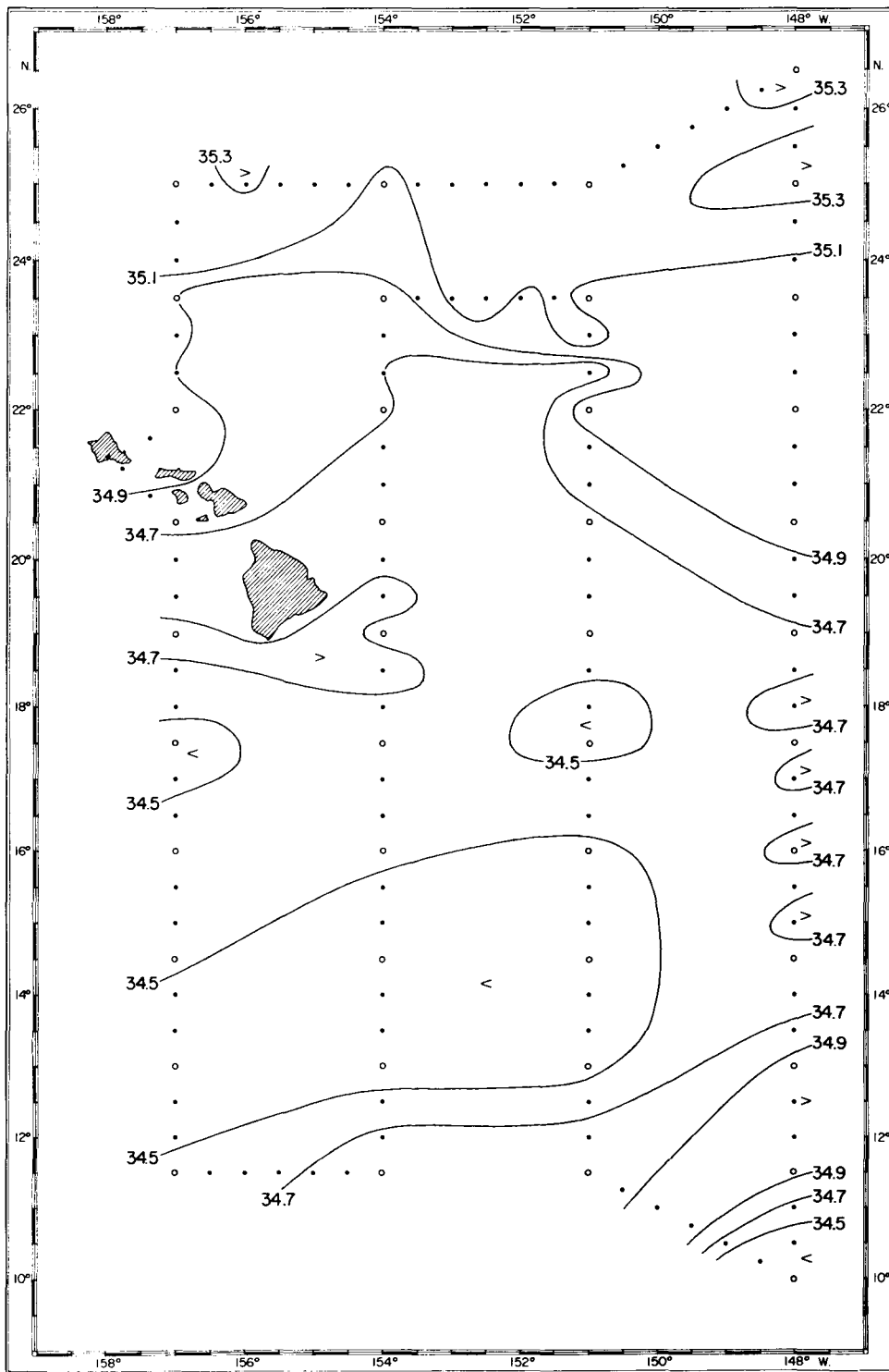


Figure 25.--Surface salinity distribution (‰) from bucket salinity samples at each BT cast for Townsend Crowwell cruise 3.

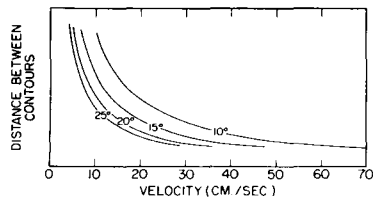
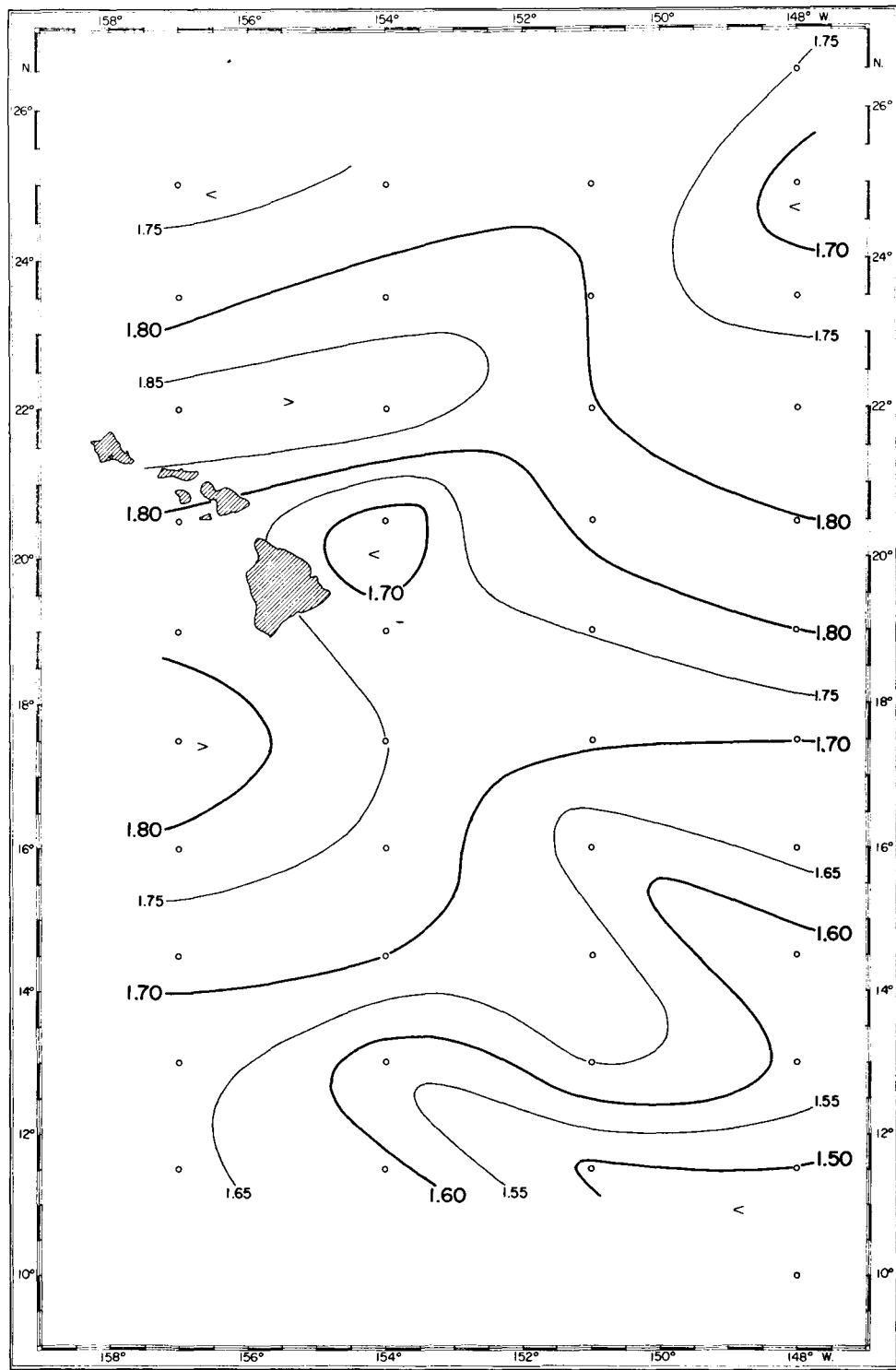


Figure 26.--Dynamic topography (dynamic meters) relative to 1,000 m. for Townsend Cromwell cruise 1.

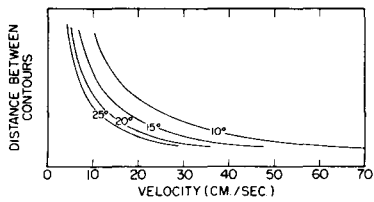
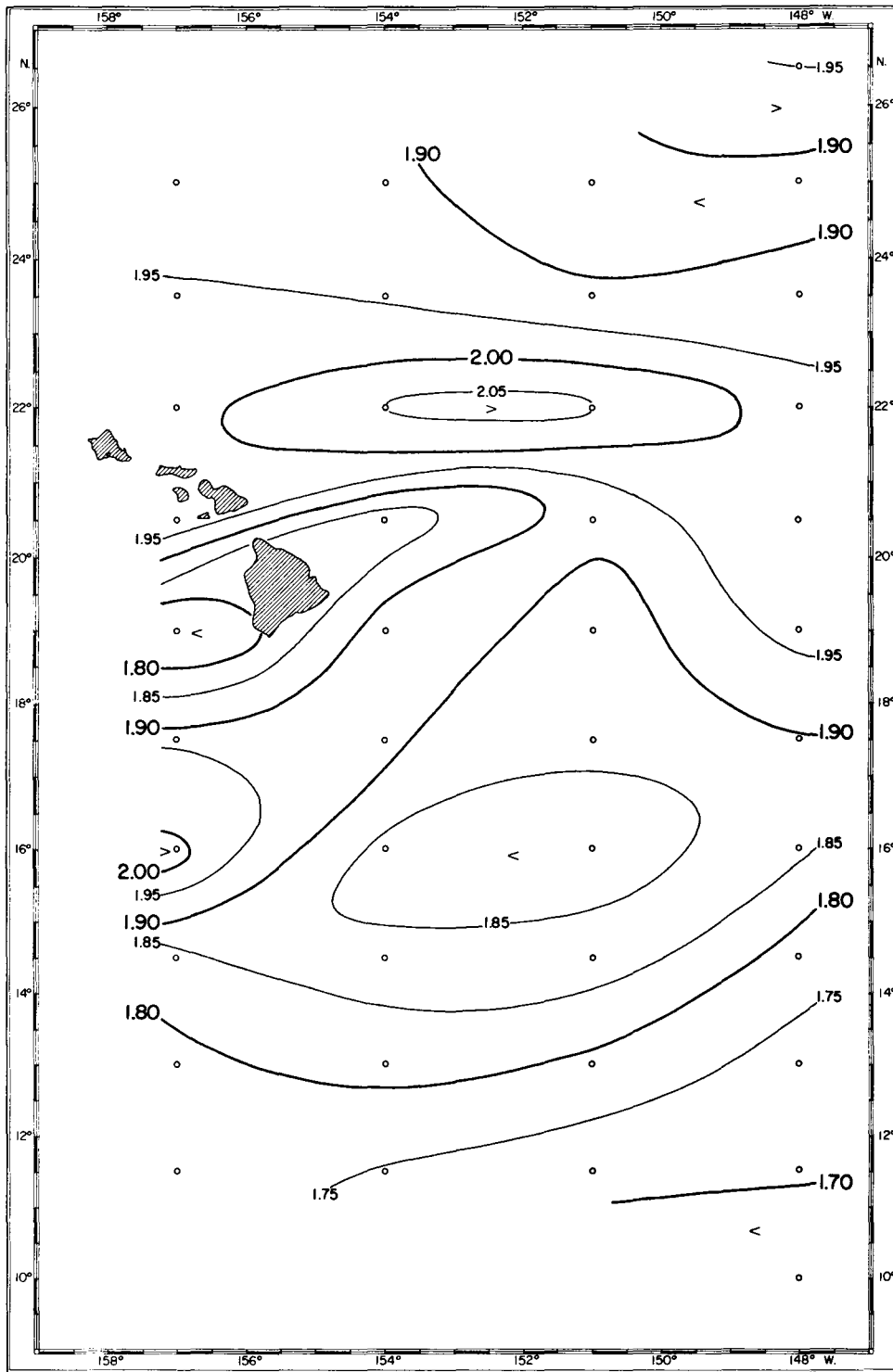


Figure 27.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 2.

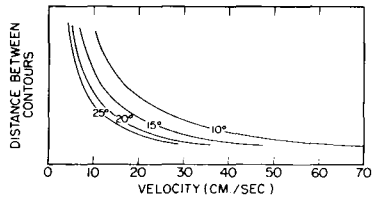
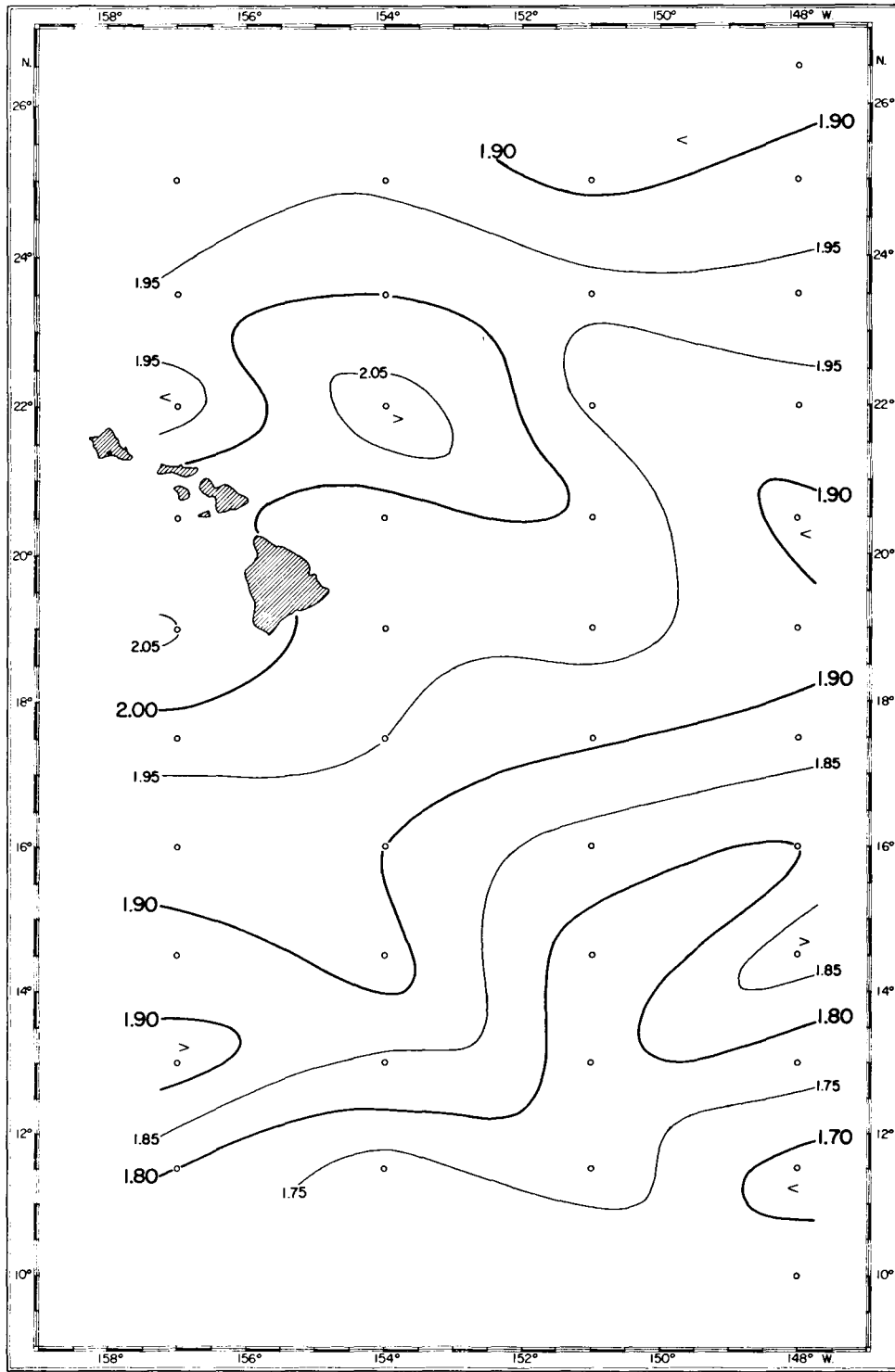


Figure 28.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 3.

## TABLES

Information printed in the station heading has the following units or coding. Latitude and longitude are in degrees and minutes. Wet and dry bulb temperatures are in degrees Celsius. Wind speed is in knots. Barometric pressure is in tens and units of millibars (initial 9 or 10 omitted). Wind direction, weather, visibility, cloud type, and cloud cover are coded in the manner described by the International Ship Weather Code.

The observed data are presented in the following units: Depth in meters; temperature in degrees Celsius; salinity in grams per kilogram; oxygen in milliliters per liter; and phosphate ( $\text{PO}_4\text{-P}$ ) in microgram-atoms per liter.

The derived data are listed with the following units: Density anomaly as sigma-t; specific volume anomaly ( $\delta$ ) in  $10^5$  cubic centimeters per gram; and dynamic depth anomaly (dyn. dpth.) in dynamic meters.

Table 1.--Original and derived oceanographic data for Townsend Cromwell cruise 1

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA						
CROMWELL DRY BULB 24.5		1, STATION WET BULB 20.1		1, 20-35N LAT, 157-16W LONG, FEB. 15, 1964, 2100 G.C.T.			BAR. 19		WEATHER 00		VIS. 8		CLOUD TYPE 8, COVER 1	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	24.34	34.99			23.55	434.6	0.	24.34	34.99	23.55	434.6	0.000		
11.	24.32	35.00			23.57	433.7	10.	24.32	35.00	23.57	433.8	0.044		
30. <sup>Δ</sup>	24.30	35.04			23.60	431.0	20.	24.31	35.02	23.58	432.4	0.038		
50.	24.29	35.07			23.63	429.3	30.	24.30	35.04	23.60	431.0	0.131		
75.	23.88	35.19			23.84	410.0	50.	24.29	35.07	23.63	429.3	0.218		
101.	22.77	35.14			24.13	383.8	75.	23.88	35.19	23.84	410.0	0.324		
126.	21.78	35.12			24.39	359.5	100.	22.82	35.14	24.11	334.9	0.424		
150.	20.16	35.06			24.78	322.6	150.	20.16	35.06	24.78	322.6	0.602		
176.	18.98	34.96			25.01	301.3	200.	17.10	34.77	25.33	271.5	0.752		
201.	17.02	34.76			25.34	270.4	250.	13.92	34.42	25.77	229.9	0.878		
226.	15.66	34.59			25.53	253.2	300.	11.70	34.23	26.07	202.3	0.987		
250.	13.92	34.42			25.77	229.9	400.	8.18	34.17	26.62	150.1	1.165		
275.	12.47	34.28			25.96	212.4	500.	6.70	34.21	26.86	127.4	1.305		
300.	11.70	34.23			26.07	202.3	600.	5.83	34.32	27.06	108.9	1.424		
400.	8.18	34.17			26.62	150.1	700.	5.26	34.40	27.19	96.8	1.528		
500.	6.70	34.21			26.86	127.4	800.	4.84	34.46	27.29	88.2	1.622		
600.	5.83	34.32			27.06	108.9	1000.	4.05	34.53	27.43	75.3	1.787		
800.	4.84	34.46			27.29	88.2		3.45	34.56	27.51	67.5	1.932		
1000.	4.05	34.53			27.43	75.3								
1200.	3.45	34.56			27.51	67.5								
1426.	2.85	34.60			27.60	59.0								

CROMWELL DRY BULB 24.0		1, STATION WET BULB 20.0		2, 19-1N LAT, 156-57W LONG, FEB. 16, 1964, 1000 G.C.T.			BAR. 17		WEATHER 00		VIS. 7		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	24.36	34.79			23.40	449.5	0.	24.36	34.79	23.40	449.5	0.000		
23.	24.36	34.87			23.46	444.7	10.	24.37	34.83	23.43	447.0	0.045		
30. <sup>Δ</sup>	24.35	34.88			23.47	443.9	20.	24.36	34.86	23.45	445.1	0.090		
41.	24.33	34.91			23.50	441.6	30.	24.35	34.88	23.47	443.9	0.135		
50. <sup>Δ</sup>	24.34	34.95			23.52	439.4	50.	24.34	34.95	23.52	439.4	0.224		
64.	24.35	35.01			23.57	435.9	75.	24.26	35.09	23.65	428.0	0.333		
75. <sup>Δ</sup>	24.26	35.09			23.65	428.0	100.	23.92	35.19	23.83	412.3	0.439		
92.	23.94	35.18			23.82	413.1	150.	20.60	35.08	24.68	332.5	0.627		
112.	23.72	35.18			23.88	407.7	200.	16.86	34.74	25.37	268.0	0.778		
137.	21.50	35.11			24.46	353.2	250.	12.71	34.29	25.92	215.4	0.900		
159.	20.02	35.05			24.81	320.1	300.	10.29	34.12	26.24	185.5	1.001		
194.	17.58	34.83			25.26	278.0	400.	7.50	34.07	26.64	147.5	1.169		
202.	16.61	34.71			25.40	264.7	500.	6.39	34.23	26.91	121.9	1.305		
246.	12.93	34.31			25.89	218.2	600.	5.49	34.34	27.12	103.1	1.419		
447.	7.13	34.18			26.78	134.8	700.	4.96	34.43	27.25	90.5	1.516		
639.	5.31	34.39			27.18	97.5	800.	4.69	34.46	27.31	86.2	1.606		
710.	4.91	34.44			27.26	89.6	1000.	4.00	34.54	27.44	74.0	1.768		
778.	4.73	34.45			27.29	87.4								
821.	4.63	34.47			27.32	85.1								
845.	4.51	34.47			27.33	83.9								
868.	4.43	34.48			27.35	82.4								
875.	4.39	34.49			27.36	81.2								
1048.	3.94	34.53			27.44	74.4								

TEMPERATURE ERROR TERM AT 300. METERS IS 0.46  
 SALINITY ERROR TERM AT 300. METERS IS 0.08  
 TEMPERATURE ERROR TERM AT 400. METERS IS 0.42  
 SALINITY ERROR TERM AT 400. METERS IS 0.07

CROMWELL DRY BULB 24.0		1, STATION WET BULB 20.9		3, 17-29N LAT, 157-0W LONG, FEB. 16, 1964, 2300 G.C.T.			BAR. 16		WEATHER 02		VIS. 9		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	24.15	34.58			23.30	458.7	0.	24.15	34.58	23.30	458.7	0.000		
9.	24.14	34.58			23.30	458.8	10.	24.14	34.59	23.30	458.8	0.047		
50. <sup>Δ</sup>	24.14	34.58			23.30	460.4	20.	24.14	34.58	23.30	459.1	0.093		
65.	24.14	34.58			23.30	460.9	30.	24.14	34.58	23.30	459.5	0.139		
75. <sup>Δ</sup>	24.14	34.58			23.30	461.3	50.	24.14	34.58	23.30	460.4	0.232		
92.	24.14	34.57			23.30	462.7	75.	24.14	34.59	23.30	461.3	0.348		
100. <sup>Δ</sup>	24.14	35.13			23.72	422.7	100.	24.14	35.13	23.72	422.7	0.459		
115.	24.14	35.13			23.72	423.3	150.	21.99	35.14	24.35	364.6	0.658		
142.	22.37	35.13			24.23	375.2	200.	18.00	34.85	25.19	296.3	0.822		
165.	21.16	35.13			24.57	343.8	250.	15.00	34.50	25.61	246.4	0.956		
189.	18.78	34.94			25.05	298.4	300.	10.61	34.17	26.22	187.5	1.065		
212.	17.28	34.76*			25.28	276.7	400.	8.05	34.18	26.64	147.7	1.235		
241.	15.80	34.57			25.48	253.2	500.	6.72	34.30	26.93	120.7	1.370		
296.	10.81	34.18			26.19	190.1	600.	5.93	34.37	27.09	106.3	1.485		
395.	8.14	34.17			26.62	149.4	700.	5.39	34.43	27.20	96.4	1.581		
485.	6.87	34.29			26.90	123.6	800.	4.97	34.48	27.28	88.7	1.681		
595.	5.96	34.37			27.08	106.9	1000.	4.15	34.55	27.43	75.1	1.847		
789.	5.02	34.47			27.27	89.6								
904.	4.52	34.52			27.37	80.9								
1006.	4.13	34.55			27.44	74.8								
1181.	3.66	34.57			27.50	69.1								

TEMPERATURE ERROR TERM AT 250. METERS IS 0.12

<sup>Δ</sup>FROM BT DATA  
 \*INTERPOLATED VALUE

Table 1.--Continued

ORIGINAL DATA			DERIVED DATA			INTERPOLATED DATA		
CROMWELL	1, STATION	4, 16-	ON LAT, 156-59W	LONG, FEB. 17, 1964,	1200 G.C.T.			
DRY BULB 24.0	WET BULB 20.0	WIND SPEED 30,	DIR. 05	BAR. 15	WEATHER 00	VIS. 7	CLOUD TYPE	, COVER

OBSERVED DATA REJECTED DUE TO EQUIPMENT FAILURE

CROMWELL 1, STATION 5, 14-29N LAT, 156-56W LONG, FEB. 17, 1964, 2300 G.C.T.												
DRY BULB 24.0		WET BULB 21.1		WIND SPEED 24, DIR. 07		BAR. 12		WEATHER 03		VIS. 8		CLOUD TYPE 8, COVER 2
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.74	34.27			22.89	497.9	0.	24.74	34.27	22.89	497.9	0.000
10.	24.78	34.28			22.89	498.7	10.	24.78	34.28	22.89	498.7	0.051
30.Δ	24.72	34.34			22.95	493.4	20.	24.76	34.31	22.91	496.5	0.101
50.Δ	24.66	34.37			22.99	490.3	30.	24.72	34.34	22.95	493.4	0.151
75.Δ	24.50	34.42			23.08	483.1	50.	24.66	34.37	22.99	490.3	0.250
105.	24.24	34.49			23.21	471.8	75.	24.50	34.42	23.08	483.1	0.372
129.	18.90	34.80			24.91	309.4	100.	24.53	34.47	23.10	481.7	0.494
159.	14.79	34.45			25.61	243.0	150.	15.74	34.59	25.51	252.9	0.679
183.	13.36	34.33			25.82	223.5	200.	12.20	34.26	25.99	207.1	0.795
208.	11.66	34.23			26.07	199.4	250.	9.93	34.29	26.43	166.5	0.889
233.	10.28	34.19			26.29	178.9	300.	9.14	34.43	26.67	144.1	0.967
262.	9.82	34.37			26.51	158.6	400.	7.96	34.48	26.89	124.0	1.103
277.	9.59	34.42			26.59	151.5	500.	7.30	34.52	27.02	113.1	1.222
311.	8.92	34.42			26.70	141.4	600.	6.67	34.52	27.11	105.5	1.333
413.	7.88	34.49			26.91	122.2	700.	6.04	34.52	27.19	98.0	1.436
514.	7.22	34.52			27.03	112.0	800.	5.45	34.53	27.27	90.9	1.531
615.	6.58	34.52			27.12	104.5	1000.	4.54	34.54	27.38	80.7	1.705
814.	5.37	34.53			27.28	90.0	1200.	3.81	34.57	27.48	71.3	1.859
1018.	4.47	34.54			27.39	79.9	1500.	3.09	34.64	27.61	59.1	2.057
1212.	3.77	34.57			27.49	70.7						
1515.	3.07	34.65			27.62	58.5						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.16

CROMWELL 1, STATION 6, 13- ON LAT, 157- 0W LONG, FEB. 18, 1964, 1300 G.C.T.												
DRY BULB 24.0		WET BULB 21.2		WIND SPEED 24, DIR. 06		BAR. 14		WEATHER 02		VIS. 8		CLOUD TYPE , COVER
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.58	34.63			23.21	467.4	0.	24.58	34.63	23.21	467.4	0.000
11.	24.57	34.63			23.21	467.5	10.	24.57	34.63	23.21	467.5	0.048
51.	24.58	34.63			23.21	469.4	20.	24.57	34.63	23.21	467.9	0.095
75.Δ	24.57	34.63			23.21	470.0	30.	24.57	34.63	23.21	468.3	0.142
76.	24.58	34.63			23.21	470.3	50.	24.58	34.63	23.21	469.3	0.236
105.	20.96	35.12			24.62	337.1	75.	24.57	34.63	23.21	470.0	0.355
131.	19.28	34.96			24.94	307.2	100.	21.79	35.03	24.32	365.4	0.460
171.	14.84	34.44			25.59	245.1	150.	17.60	34.69	25.15	287.0	0.624
185.	12.20	34.42			26.12	194.8	200.	11.61	34.46	26.26	181.7	0.742
210.	11.66	34.50			26.28	179.7	250.	10.58	34.61	26.56	153.7	0.827
225.	10.87	34.56			26.48	161.6	300.	10.20	34.64	26.66	145.9	0.902
265.	10.62	34.62			26.57	153.7	400.	9.17	34.61	26.81	132.8	1.043
280.	10.43	34.64			26.62	149.3	500.	8.13	34.59	26.94	120.9	1.171
314.	10.04	34.63			26.68	144.2	600.	7.15	34.55	27.06	110.5	1.288
419.	8.98	34.61			26.84	130.5	700.	6.29	34.53	27.17	100.9	1.395
522.	7.90	34.57			26.97	118.5	800.	5.55	34.53	27.26	92.4	1.493
625.	6.93	34.54			27.09	108.1	1000.	4.62	34.55	27.39	80.6	1.668
827.	5.38	34.53			27.28	90.3	1200.	3.95	34.57	27.47	73.0	1.823
1036.	4.50	34.56			27.40	79.0	1500.	3.13	34.60	27.57	63.1	2.030
1235.	3.85	34.57			27.48	71.9						
1542.	3.04	34.60			27.58	62.0						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.22  
 TEMPERATURE ERROR TERM AT 200. METERS IS 0.25  
 TEMPERATURE ERROR TERM AT 250. METERS IS 0.12

Δ FROM BT DATA



Table 1.-Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 1, STATION 7, 11-32N LAT, 156-58W LONG, FEB. 18, 1964, 2300 G.C.T.												
DRY BULB 25.5	WET BULB 22.7		WIND SPEED 18, DIR. 07		BAR. 12	WEATHER 02		VIS.	CLOUD TYPE 8, COVER 4			
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.47	34.25			22.65	520.5	0.	25.47	34.25	22.65	520.5	0.000
1.	25.44	34.25			22.66	519.7	10.	25.38	34.25	22.68	518.4	0.053
20.Δ	25.46	34.25			22.66	521.0	20.	25.46	34.25	22.66	521.0	0.105
40.	25.41	34.25			22.67	520.4	30.	25.44	34.25	22.66	520.9	0.158
50.Δ	25.40	34.26			22.68	519.7	50.	25.40	34.26	22.68	519.7	0.262
76.	24.44	34.56			23.20	471.4	75.	24.52	34.55	23.17	474.5	0.388
106.	19.85	34.81			24.68	331.3	100.	20.82	34.78	24.39	358.2	0.493
139.	17.56	34.74			25.20	282.2	150.	14.91	34.58	25.68	236.0	0.642
160.	12.63	34.45			26.06	200.1	200.	11.46	34.72	26.49	159.9	0.742
186.	11.73	34.62			26.36	171.6	250.	10.82	34.71	26.60	150.1	0.820
202.	11.43	34.73			26.51	158.5	300.	10.17	34.69	26.70	141.9	0.894
237.	10.93	34.71			26.58	151.9	400.	9.17	34.65	26.84	130.3	1.031
266.	10.66	34.71			26.63	147.8	500.	8.26	34.60	26.94	121.4	1.158
292.	10.40	34.69			26.66	145.2	600.	7.38	34.57	27.05	111.8	1.276
317.	9.98	34.69			26.73	138.9	700.	6.51	34.56	27.16	102.0	1.384
413.	9.06	34.64			26.85	129.4	800.	5.74	34.55	27.25	93.2	1.433
577.	8.02	34.59			26.97	118.9	1000.	4.68	34.56	27.38	81.0	1.659
623.	7.18	34.57			27.08	109.5	1200.	3.93	34.57	27.47	72.6	1.915
808.	5.68	34.55			27.26	92.6	1500.	3.06	34.61	27.57	63.3	2.021
1014.	4.62	34.56			27.39	80.3						
1209.	3.90	34.57			27.48	72.3						
1513.	3.02	34.61			27.58	63.0						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.16  
 TEMPERATURE ERROR TERM AT 150. METERS IS 0.27

CROMWELL 1, STATION 8, 11-32N LAT, 154-0W LONG, FEB. 19, 1964, 2000 G.C.T.												
DRY BULB 25.2	WET BULB 21.4		WIND SPEED 17, DIR. 06		BAR. 14	WEATHER 02		VIS. 8	CLOUD TYPE , COVER			
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.00	34.23			22.78	509.3	0.	25.00	34.23	22.78	509.3	0.000
10.	25.00	34.25			22.80	507.2	10.	25.00	34.25	22.80	507.2	0.052
30.Δ	25.00	34.25			22.80	508.0	20.	25.00	34.25	22.80	507.4	0.103
50.Δ	25.00	34.25			22.80	508.8	30.	25.00	34.25	22.80	508.0	0.154
69.	25.01	34.26			22.80	509.1	50.	25.00	34.25	22.80	508.8	0.256
75.Δ	25.01	34.26			22.80	509.3	75.	25.01	34.26	22.80	509.3	0.385
96.	19.73	34.85			24.74	325.0	100.	19.01	34.84	24.91	308.5	0.488
118.	16.38	34.60			25.37	265.0	150.	12.66	34.31	25.95	210.3	0.618
145.	13.13	34.31			25.85	219.5	200.	11.35	34.70	26.50	159.2	0.711
167.	11.54	34.41			26.24	183.1	250.	10.49	34.71	26.66	144.5	0.788
188.	11.49	34.63			26.42	166.5	300.	9.96	34.70	26.74	137.5	0.859
209.	11.21	34.73			26.55	154.7	400.	9.01	34.64	26.85	128.6	0.933
234.	10.67	34.71			26.63	147.3	500.	8.01	34.59	26.97	118.5	1.118
247.	10.52	34.71			26.65	145.0	600.	7.02	34.55	27.08	108.5	1.233
279.	10.17	34.71			26.72	139.8	700.	6.17	34.54	27.19	98.7	1.337
370.	9.30	34.65			26.82	131.7	800.	5.50	34.54	27.27	90.8	1.433
460.	8.42	34.61			26.92	122.4	1000.	4.52	34.56	27.41	78.6	1.605
552.	7.48	34.56			27.03	113.5	1200.	3.78	34.58	27.50	69.8	1.755
731.	5.94	34.54			27.22	95.8						
917.	4.89	34.55			27.35	83.5						
1099.	4.14	34.58			27.46	73.6						
1393.	3.31	34.60			27.56	64.3						

CROMWELL 1, STATION 9, 13-4N LAT, 153-53W LONG, FEB. 20, 1964, 0700 G.C.T.												
DRY BULB 24.2	WET BULB 21.0		WIND SPEED 17, DIR. 05		BAR. 12	WEATHER 02		VIS. 8	CLOUD TYPE 8, COVER 2			
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.52	34.38			23.04	483.7	0.	24.52	34.38	23.04	483.7	0.000
11.	24.49	34.39			23.06	482.5	10.	24.49	34.39	23.05	482.6	0.049
30.Δ	24.49	34.39			23.06	483.3	20.	24.49	34.39	23.06	482.6	0.098
51.	24.49	34.39			23.06	484.1	30.	24.49	34.39	23.06	483.3	0.146
76.	24.22	34.37			23.12	478.8	50.	24.49	34.39	23.06	484.1	0.244
106.	18.51	34.83			25.03	297.0	75.	24.27	34.37	23.10	480.4	0.365
131.	14.95	34.28			25.45	257.9	100.	19.42	34.77	24.65	333.6	0.468
160.	11.84	34.29			26.09	197.1	150.	12.70	34.23	25.88	217.2	0.607
186.	11.29	34.54			26.38	169.5	200.	11.16	34.61	26.46	162.6	0.702
209.	11.08	34.63			26.49	159.7	250.	10.29	34.64	26.64	146.0	0.780
235.	10.63	34.64			26.58	151.8	300.	9.41	34.62	26.77	134.5	0.851
264.	9.98	34.64			26.69	141.4	400.	8.31	34.58	26.92	127.1	0.930
278.	9.75	34.62			26.72	139.4	500.	7.31	34.54	27.04	111.5	1.098
311.	9.25	34.62			26.80	131.9	600.	6.43	34.52	27.14	102.2	1.206
410.	8.22	34.57			26.92	121.4	700.	5.75	34.52	27.23	94.0	1.305
507.	7.24	34.54			27.04	110.7	800.	5.21	34.54	27.31	87.0	1.397
604.	6.40	34.52			27.14	101.9	1000.	4.42	34.57	27.42	76.8	1.563
794.	5.24	34.54			27.30	87.3	1200.	3.77	34.59	27.50	69.3	1.711
989.	4.46	34.57			27.42	77.3						
1174.	3.85	34.58			27.49	70.7						
1440.	3.18	34.61			27.58	62.3						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.20

Δ FROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 1, STATION 10, 14-33N LAT, 153-57W LONG, FEB. 20, 1964, 1700 G.C.T.												
DRY BULB 23.5		WET BULB 20.5		WIND SPEED 17, DIR. 05		BAR. 14		WEATHER		VIS. CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.42	34.32			23.02	485.1	0.	24.42	34.32	23.02	485.1	0.000
10.	24.44	34.31			23.01	486.8	10.	24.44	34.31	23.01	486.8	0.049
30.Δ	24.46	34.34			23.03	486.0	20.	24.45	34.32	23.02	486.7	0.098
50.Δ	24.46	34.36			23.04	485.3	30.	24.46	34.34	23.03	486.0	0.147
76.	24.24	34.43			23.16	475.0	40.	24.46	34.36	23.04	485.3	0.245
105.	22.32	35.05			24.19	378.2	75.	24.25	34.42	23.15	476.2	0.366
130.	20.28	35.12			24.80	320.6	100.	22.73	34.94	23.99	396.9	0.476
159.	17.19	34.69			25.25	278.0	150.	18.15	34.84	25.14	288.8	0.649
185.	15.12	34.44			25.51	251.4	200.	13.05	34.26	25.83	222.7	0.778
208.	12.07	34.21			25.98	208.4	250.	11.58	34.60	26.38	171.8	0.878
235.	11.74	34.53			26.29	179.5	300.	9.02	34.39	26.66	144.7	0.957
264.	11.00	34.56			26.45	164.8	400.	8.31	34.53	26.80	125.4	1.094
278.	9.48	34.37			26.57	153.4	500.	7.48	34.55	27.01	113.8	1.214
314.	9.24	34.49			26.70	141.4	600.	6.73	34.54	27.12	104.5	1.325
418.	8.10	34.52			26.90	123.4	700.	6.04	34.53	27.20	97.2	1.427
523.	7.33	34.55			27.04	111.6	800.	5.46	34.53	27.27	91.0	1.522
627.	6.52	34.54			27.14	102.4	1000.	4.58	34.54	27.38	80.7	1.696
832.	5.30	34.53			27.29	89.3	1200.	3.84	34.57	27.48	71.8	1.250
1042.	4.42	34.55			27.41	78.8	1500.	3.00	34.60	27.58	61.6	2.053
1241.	3.70	34.57			27.50	70.1						
1551.	2.89	34.60			27.60	60.2						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.14  
 TEMPERATURE ERROR TERM AT 250. METERS IS 0.12  
 TEMPERATURE ERROR TERM AT 300. METERS IS 0.21

CROMWELL 1, STATION 11, 16- ON LAT, 154- 2W LONG, FEB. 21, 1964, 0200 G.C.T.												
DRY BULB 23.9		WET BULB 20.4		WIND SPEED 17, DIR. 05		BAR. 13		WEATHER 02		VIS. 8 CLOUD TYPE 8, COVER 2		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.75	34.60			23.43	446.0	0.	23.75	34.60	23.43	446.0	0.000
9.	23.69	34.59			23.44	445.4	10.	23.69	34.59	23.44	445.4	0.045
30.Δ	23.70	34.59			23.44	446.5	20.	23.69	34.59	23.44	445.9	0.090
47.	23.57	34.56			23.46	445.7	30.	23.70	34.59	23.44	446.5	0.135
71.	23.57	34.60			23.49	443.7	40.	23.56	34.57	23.46	445.0	0.225
75.Δ	23.58	34.59			23.48	444.8	75.	23.58	34.59	23.48	444.8	0.337
96.	23.32	34.59			23.55	438.4	100.	22.99	34.59	23.65	429.4	0.447
100.	22.99	34.59			23.65	429.4	150.	18.15	34.81	25.11	291.3	0.629
123.	20.44	35.10			24.74	325.8	200.	13.44	34.42	25.87	213.1	0.757
151.	18.06	34.79			25.12	290.7	250.	11.54	34.52	26.33	176.7	0.857
176.	15.09	34.46			25.55	249.0	300.	10.95	34.68	26.55	156.1	0.941
276.	11.36	34.69			26.44	162.6	400.	9.62	34.64	26.75	138.6	1.090
291.	11.10	34.68			26.53	158.3	500.	8.51	34.59	26.89	126.3	1.224
326.	10.56	34.67			26.62	150.4	600.	7.54	34.55	27.01	116.0	1.346
432.	9.27	34.62			26.80	134.7	700.	6.64	34.53	27.12	106.1	1.428
537.	8.13	34.57			26.94	122.3	800.	5.81	34.51	27.21	97.0	1.561
643.	7.17	34.54			27.05	111.9	1000.	4.76	34.54	27.36	83.7	1.744
848.	5.45	34.51			27.26	93.0	1200.	4.07	34.56	27.45	74.6	1.904
1060.	4.56	34.55			27.39	80.7	1500.	3.19	34.60	27.57	63.7	2.115
1261.	3.88	34.57			27.48	72.5						
1518.	3.15	34.60			27.57	63.2						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.29  
 SALINITY ERROR TERM AT 200. METERS IS 0.09  
 TEMPERATURE ERROR TERM AT 250. METERS IS 0.31  
 SALINITY ERROR TERM AT 250. METERS IS 0.09

CROMWELL 1, STATION 12, 17-30N LAT, 154- 0W LONG, FEB. 21, 1964, 1300 G.C.T.												
DRY BULB 23.0		WET BULB 20.5		WIND SPEED 15, DIR. 04		BAR. 16		WEATHER 00		VIS. 8 CLOUD TYPE , COVER 0		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	23.78	34.63			23.45	444.7	0.	23.75	34.63	23.45	444.7	0.000
11.	23.80	34.62			23.43	446.4	10.	23.80	34.62	23.43	446.4	0.045
30.Δ	23.80	34.72			23.51	439.9	20.	23.80	34.65	23.46	444.5	0.090
50.Δ	23.80	34.92			23.66	426.3	30.	23.80	34.72	23.51	439.9	0.135
76.	24.06	35.10			23.72	421.7	40.	23.80	34.92	23.66	426.3	0.222
100.Δ	23.24	35.22			24.05	390.9	75.	24.06	35.09	23.72	422.0	0.329
106.	22.92	35.22			24.14	382.3	100.	23.24	35.22	24.05	390.9	0.431
132.	21.38	35.13			24.51	348.4	150.	20.37	35.08	24.75	326.3	0.612
161.	19.70	35.04			24.89	312.8	200.	16.82	34.74	25.38	267.2	0.762
187.	17.69	34.83			25.24	280.3	250.	12.67	34.29	25.93	214.9	0.883
212.	15.98	34.65			25.50	255.4	300.	10.03	34.16	26.31	178.0	0.982
237.	13.81	34.40			25.78	228.7	400.	8.10	34.29	26.72	140.1	1.143
267.	11.39	34.19			26.09	198.9	500.	6.94	34.38	26.96	118.3	1.273
283.	10.62	34.17			26.22	187.2	600.	6.17	34.43	27.10	105.1	1.366
317.	9.58	34.17			26.39	170.5	700.	5.58	34.47	27.21	95.7	1.427
423.	7.84	34.33			26.79	133.6	800.	5.06	34.49	27.29	89.4	1.520
528.	6.68	34.39			27.00	114.2	1000.	4.29	34.53	27.41	78.0	1.749
633.	5.98	34.45			27.14	101.7	1200.	3.69	34.56	27.49	70.7	1.900
838.	4.88	34.50			27.31	86.2	1500.	3.01	34.59	27.58	61.9	2.101
1049.	4.14	34.54			27.43	76.1						
1250.	3.56	34.56			27.50	69.2						
1564.	2.90	34.60			27.60	60.4						

Δ FROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 23.2		1, STATION WET BULB 20.6	13, 19- 6N LAT, 153-57W LONG, FEB. 21, 1964, 2300 G.C.T.	WIND SPEED 11, DIR. 08	BAR. 19	WEATHER 02	VIS. 8	CLOUD TYPE 9, COVER 3				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	23.76	34.62			23.45	444.9	0.	23.76	34.62	23.45	444.9	0.000
10.	23.76	34.62			23.45	445.2	10.	23.76	34.62	23.45	445.2	0.045
20.	23.73	34.63			23.46	444.1	20.	23.73	34.63	23.46	444.1	0.090
30.Δ	23.70	34.65			23.49	442.2	30.	23.70	34.65	23.49	442.2	0.135
50.Δ	23.70	34.65			23.49	442.9	50.	23.70	34.65	23.49	442.9	0.224
75.Δ	23.71	34.66			23.49	443.4	75.	23.71	34.66	23.49	443.4	0.336
86.	23.77	34.63			23.45	447.7	100.	23.78	34.66	23.47	446.4	0.448
100.Δ	23.78	34.66			23.47	446.4	150.	19.06	34.96	24.99	302.3	0.636
115.	21.06	34.60			24.19	377.7	200.	14.24	34.38	25.68	237.7	0.772
140.	19.72	34.99			24.85	316.2	250.	11.92	34.20	26.00	207.3	0.885
171.	17.32	34.73			25.25	278.5	300.	10.19	34.15	26.27	182.0	0.983
196.	14.52	34.41			25.64	241.3	400.	7.15	34.09	26.70	141.3	1.146
221.	13.14	34.29			25.83	223.1	500.	5.87	34.19	26.95	117.8	1.277
246.	12.16	34.21			25.96	211.0	600.	5.35	34.35	27.14	100.8	1.387
275.	10.63	34.16			26.21	187.9	700.	4.89	34.44	27.26	89.5	1.433
291.	10.44	34.15			26.23	185.8	800.	4.55	34.49	27.34	82.6	1.570
326.	9.32	34.14			26.41	168.7	1000.	3.92	34.53	27.44	74.0	1.729
431.	6.46	34.08			26.79	132.8	1200.	3.41	34.56	27.52	67.0	1.871
534.	5.76	34.26			27.02	111.6	1500.	2.76	34.59	27.61	58.8	2.063
640.	5.13	34.39			27.20	95.3						
844.	4.43	34.50			27.36	80.7						
1052.	3.76	34.53			27.46	72.2						
1250.	3.31	34.57			27.53	65.4						
1558.	2.66	34.60			27.62	57.5						

CROMWELL DRY BULB 22.5		1, STATION WET BULB 20.8	14, 20-30N LAT, 154- 7W LONG, FEB. 22, 1964, 0900 G.C.T.	WIND SPEED 21, DIR. 06	BAR. 20	WEATHER 21	VIS. 8	CLOUD TYPE 8, COVER 5				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.69	34.61			23.46	443.6	0.	23.69	34.61	23.46	443.6	0.000
10.	23.67	34.61			23.46	443.4	10.	23.67	34.61	23.46	443.4	0.045
30.Δ	23.70	34.63			23.47	443.6	20.	23.68	34.62	23.47	443.5	0.090
50.Δ	23.70	34.64			23.48	443.6	30.	23.70	34.63	23.47	443.6	0.135
68.	23.65	34.65			23.50	442.2	50.	23.70	34.64	23.48	443.6	0.224
75.Δ	23.58	34.66			23.53	439.8	75.	23.58	34.66	23.53	439.8	0.335
95.	22.64	34.75			23.87	408.1	100.	21.85	34.73	24.07	388.6	0.440
117.	19.12	34.66			24.75	324.5	150.	17.04	34.74	25.37	271.4	0.606
142.	18.06	34.86			25.17	285.3	200.	13.25	34.30	25.82	223.9	0.731
165.	15.23	34.48			25.54	250.2	250.	10.55	34.15	26.21	186.7	0.834
185.	14.10	34.37			25.70	235.4	300.	9.47	34.17	26.41	168.4	0.924
208.	12.79	34.27			25.89	217.5	400.	6.97	34.08	26.72	139.5	1.079
232.	11.30	34.18			26.10	197.2	500.	5.63	34.17	26.97	116.2	1.208
244.	10.72	34.15			26.18	189.6	600.	5.11	34.31	27.14	100.4	1.318
273.	10.09	34.17			26.31	178.0	700.	4.80	34.42	27.26	89.9	1.414
354.	8.19	34.14			26.59	151.7	800.	4.55	34.49	27.34	82.7	1.501
433.	6.22	34.05			26.80	131.9	1000.	3.92	34.55	27.45	73.1	1.659
504.	5.61	34.18			26.98	115.3						
645.	4.96	34.36			27.15	95.4						
782.	4.60	34.48			27.33	83.6						
916.	4.22	34.51			27.40	78.0						
1158.	3.53	34.56			27.51	68.1						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.15  
 TEMPERATURE ERROR TERM AT 150. METERS IS 0.13

CROMWELL DRY BULB 22.5		1, STATION WET BULB 19.4	15, 22- 3N LAT, 153-58W LONG, FEB. 22, 1964, 1800 G.C.T.	WIND SPEED 20, DIR. 08	BAR. 21	WEATHER 02	VIS. 7	CLOUD TYPE 8, COVER 3				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	23.60	34.74			23.58	431.8	0.	23.60	34.74	23.58	431.7	0.000
11.	23.60	34.74			23.58	432.1	10.	23.60	34.74	23.58	432.0	0.044
21.	23.64	34.74			23.57	433.6	20.	23.64	34.74	23.57	433.5	0.088
76.	23.47	35.20			23.97	397.9	30.	23.65	34.81	23.62	429.1	0.131
100.Δ	23.22	35.17			24.02	394.0	50.	23.63	34.98	23.76	417.1	0.216
105.	22.88	35.14			24.09	387.0	75.	23.48	35.19	23.96	398.7	0.319
140.	21.49	35.15			24.49	350.1	100.	23.22	35.17	24.02	394.0	0.419
170.	19.94	35.07			24.85	317.0	150.	21.03	35.14	24.61	339.5	0.604
185.	18.90	34.98			25.05	298.3	200.	18.61	34.96	25.11	293.3	0.763
220.	18.04	34.89			25.20	285.3	250.	15.66	34.60	25.53	253.5	0.901
235.	16.59	34.71			25.41	265.3	300.	13.09	34.33	25.87	221.4	1.021
273.	14.63	34.48			25.67	240.7	400.	9.16	34.06	26.38	173.2	1.220
290.	13.81	34.40			25.78	230.2	500.	6.86	34.06	26.72	140.9	1.378
315.	11.97	34.22			26.01	208.4	600.	5.84	34.19	26.95	118.8	1.510
419.	8.90	34.08			26.43	168.2	700.	5.24	34.32	27.13	102.9	1.622
526.	6.36	34.07			26.79	133.5	800.	4.55	34.39	27.26	90.1	1.719
633.	5.75	34.25			27.01	113.5	1000.	3.93	34.50	27.42	75.8	1.887
832.	4.34	34.40			27.30	86.8	1200.	3.38	34.57	27.53	66.2	2.031
1034.	3.88	34.52			27.44	74.3	1500.	2.71	34.58	27.60	59.2	2.222
1226.	3.30	34.57			27.54	65.2						
1507.	2.70	34.58			27.60	59.1						

SALINITY ERROR TERM AT 50. METERS IS 0.06  
 TEMPERATURE ERROR TERM AT 200. METERS IS 0.23  
 TEMPERATURE ERROR TERM AT 400. METERS IS 0.17

Δ FROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 1, STATION 16, 23-30N LAT, 154-4W LONG, FEB. 23, 1964, 0700 G.C.T.				BAR. 21 WEATHER 19 VIS. 8 CLOUD TYPE 6, COVER 7								
DEPTH	TEMP.	SAL.	OXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	23.20	35.07			23.95	396.8	0.	23.20	35.07	23.95	396.8	0.000
10.	23.18	35.13			24.00	392.3	10.	23.18	35.13	24.00	392.3	0.040
75.	23.04	35.20			24.09	385.9	70.	23.15	35.16	24.03	389.6	0.080
105.	23.04	35.19			24.09	387.8	30.	23.13	35.19	24.06	387.5	0.119
130.	20.96	35.10			24.60	339.5	50.	23.08	35.21	24.09	385.2	0.197
161.	18.93	34.98			25.04	298.2	75.	23.04	35.20	24.09	385.9	0.294
186.	17.28	34.76			25.28	275.8	100.	23.13	35.20	24.06	389.7	0.391
211.	16.15	34.64			25.46	259.9	150.	19.62	35.03	24.91	310.9	0.568
236.	14.70	34.50			25.67	239.6	200.	16.63	34.69	25.38	266.8	0.714
266.	13.40	34.38			25.85	222.8	250.	14.28	34.45	25.72	235.1	0.840
271.	12.85	34.35			25.94	214.4	300.	11.65	34.26	26.10	199.5	0.950
317.	11.59	34.23			26.09	200.6	400.	9.57	34.12	26.35	176.0	1.139
422.	9.06	34.10			26.42	169.3	500.	7.11	34.05	26.68	144.8	1.301
527.	6.52	34.05			26.76	137.2	600.	5.66	34.12	26.93	121.2	1.435
633.	5.41	34.17			26.99	115.0	700.	4.99	34.24	27.09	105.4	1.550
839.	4.42	34.36			27.25	90.8	800.	4.54	34.33	27.22	94.2	1.651
1049.	3.74	34.50			27.44	74.2	1000.	3.87	34.47	27.40	77.2	1.824
1251.	3.36	34.53			27.50	69.0	1200.	3.44	34.53	27.49	69.9	1.973
1561.	2.72	34.59			27.61	59.0	1500.	2.82	34.59	27.59	60.0	2.171
TEMPERATURE ERROR TERM AT 250. METERS IS 0.16												
TEMPERATURE ERROR TERM AT 300. METERS IS 0.26												

CROMWELL 1, STATION 17, 23-30N LAT, 150-59W LONG, FEB. 23, 1964, 1900 G.C.T.				BAR. 24 WEATHER 15 VIS. 8 CLOUD TYPE 8, COVER 4			
DRY BULB 21.5 WET BULB 17.9 WIND SPEED 17, DIR. 08							

OBSERVED DATA REJECTED DUE TO EQUIPMENT FAILURE

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 1, STATION 18, 22-0N LAT, 151-0W LONG, FEB. 24, 1964, 0400 G.C.T.				BAR. 21 WEATHER 15 VIS. 8 CLOUD TYPE 8, COVER 5								
DEPTH	TEMP.	SAL.	OXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	23.07	34.70			23.71	419.9	0.	23.07	34.70	23.71	419.9	0.000
10.	23.08	34.70			23.70	420.6	10.	23.08	34.70	23.70	420.6	0.043
51.	23.12	34.78			23.75	417.5	20.	23.10	34.69	23.69	422.0	0.085
76.	23.04	35.04			23.97	397.5	30.	23.11	34.70	23.70	422.0	0.128
106.	22.14	35.13			24.30	367.6	50.	23.12	34.77	23.75	417.8	0.212
131.	20.88	35.12			24.64	336.0	75.	23.05	35.03	23.96	398.4	0.315
161.	19.57	35.05			24.93	308.9	100.	22.38	35.13	24.23	374.2	0.412
186.	18.54	34.92			25.10	293.9	150.	20.03	35.08	24.84	317.6	0.587
211.	17.28	34.77			25.29	275.9	200.	17.84	34.84	25.20	283.8	0.738
237.	16.04	34.61			25.46	260.4	250.	14.87	34.66	25.61	246.2	0.872
265.	13.48	34.31			25.78	229.5	300.	11.61	34.18	26.05	204.3	0.956
280.	12.53	34.25			25.92	215.8	400.	8.37	34.06	26.51	160.7	1.170
315.	11.06	34.14			26.12	197.8	500.	6.35	34.10	26.82	130.8	1.317
418.	7.93	34.07			26.58	154.1	600.	5.44	34.23	27.03	110.7	1.439
523.	6.04	34.12			26.87	125.5	700.	4.99	34.36	27.19	96.6	1.544
627.	5.32	34.27			27.08	106.4	800.	4.65	34.45	27.30	86.6	1.636
827.	4.58	34.47			27.32	84.5	1000.	4.06	34.52	27.42	76.3	1.801
1028.	3.98	34.52			27.43	75.4	1200.	3.53	34.56	27.50	68.7	1.948
1220.	3.48	34.56			27.51	68.0	1500.	2.88	34.59	27.59	60.6	2.144
1522.	2.84	34.59			27.59	60.2						

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL DRY BULB 22.3		1, STATION WET BULB 18.5	19, 20-30N LAT, 151- WIND SPEED 15, DIR. 09	151- OW LCNG, FEB. 24, 1964, 1400 G.C.T.	BAR. 20	WEATHER 02	VIS. 8	CLOUD TYPE 8, COVER 1				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.06	34.73			23.73	417.5	0.	23.06	34.73	23.73	417.5	0.000
10.	23.08	34.72			23.72	419.1	10.	23.08	34.72	23.72	419.1	0.042
73.	23.08	34.74			23.73	420.1	20.	23.09	34.71	23.71	420.3	0.084
101.	23.08	34.81			23.79	416.1	30.	23.09	34.71	23.71	421.1	0.127
125.	22.26	35.09			24.23	374.5	50.	23.09	34.71	23.71	421.5	0.212
153.	21.22	35.15			24.57	343.5	75.	23.10	34.74	23.73	420.7	0.318
178.	19.64	35.04			24.91	311.9	100.	23.09	34.80	23.78	416.7	0.423
201.	18.50	34.90			25.09	294.9	150.	21.35	35.16	24.54	346.5	0.615
225.	16.58	34.65			25.36	269.1	200.	18.55	34.91	25.08	295.6	0.777
254.	14.12	34.37			25.69	237.7	250.	14.46	34.40	25.65	242.0	0.913
268.	12.98	34.27			25.85	222.7	300.	11.20	34.18	26.12	197.0	1.024
301.	11.16	34.18			26.13	196.3	400.	8.37	34.13	26.56	155.9	1.202
400.	8.37	34.13			26.56	155.9	500.	6.51	34.17	26.85	127.7	1.345
497.	6.56	34.17			26.85	128.4	600.	5.77	34.29	27.04	110.2	1.465
536.*	6.06*	34.20			26.93	120.0	700.	5.33	34.39	27.18	98.3	1.570
598.	5.78	34.29			27.04	110.5	800.	4.94	34.45	27.27	89.8	1.665
792.	4.96	34.45			27.27	90.4	1000.	4.35	34.51	27.38	80.4	1.838
994.	4.37	34.51			27.38	80.6						
1000.**	4.35**	34.51**			27.38	80.4						

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL DRY BULB 23.2		1, STATION WET BULB 19.7	20, 18-57N LAT, 151- WIND SPEED 22, DIR. 07	151- OW LCNG, FEB. 24, 1964, 2300 G.C.T.	BAR. 21	WEATHER 02	VIS. 9	CLOUD TYPE 8, COVER 1				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.38	34.73			23.64	426.3	0.	23.38	34.73	23.64	426.3	0.000
10.	23.37	34.73			23.64	426.4	10.	23.37	34.73	23.64	426.4	0.043
20.	23.35	34.74			23.66	425.5	20.	23.35	34.74	23.66	425.5	0.086
50.Δ	23.10	34.86			23.82	411.1	30.	23.27	34.78	23.71	420.8	0.129
75.Δ	23.10	34.87			23.83	411.3	50.	23.10	34.86	23.82	411.1	0.213
113.	21.43	35.16			24.52	346.8	75.	23.10	34.87	23.83	411.3	0.316
138.	20.20	35.13			24.83	318.1	100.	22.13	35.06	24.25	371.8	0.415
167.	19.44	35.09			25.00	302.9	150.	19.87	35.12	24.91	310.8	0.587
192.	18.44	34.96			25.15	288.8	200.	17.65	34.85	25.26	278.7	0.736
216.	15.90	34.60			25.48	257.4	250.	13.25	34.30	25.82	225.7	0.863
242.	13.66	34.34			25.77	230.3	300.	10.54	34.16	26.22	186.8	0.967
271.	12.22	34.22			25.96	212.0	400.	7.57	34.09	26.64	147.1	1.135
286.	11.10	34.17			26.13	195.6	500.	6.38	34.22	26.91	122.0	1.271
320.	10.04	34.17			26.32	176.2	600.	6.08	34.39	27.08	107.2	1.387
412.	7.26	34.08			26.68	143.5	700.	5.61	34.46	27.20	97.0	1.490
524.	6.32	34.28			26.96	117.4	800.	5.02	34.48	27.28	88.9	1.584
627.	6.02	34.42			27.11	104.4	1000.	4.21	34.51	27.40	78.4	1.753
825.	4.86	34.48			27.30	87.3	1200.	3.58	34.55	27.49	70.0	1.903
1031.	4.12	34.52			27.41	77.1	1500.	2.96	34.59	27.58	61.7	2.104
1227.	3.50	34.55			27.50	69.0						
1534.	2.91	34.59			27.59	61.1						

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL DRY BULB 23.1		1, STATION WET BULB 19.6	21, 17-29N LAT, 151- WIND SPEED 15, DIR. 06	151- OW LCNG, FEB. 25, 1964, 0900 G.C.T.	BAR. 20	WEATHER 02	VIS. 9	CLOUD TYPE 9, COVER 2				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.22	34.48			23.50	439.9	0.	23.22	34.48	23.50	439.9	0.000
9.	23.19	34.48			23.51	439.5	10.	23.19	34.48	23.51	439.5	0.045
44.	23.16	34.56			23.57	434.2	20.	23.19	34.48	23.51	439.6	0.089
50.Δ	23.12	34.60			23.62	430.4	30.	23.16	34.50	23.53	438.3	0.133
66.	23.36	34.80			23.70	423.2	50.	23.12	34.60	23.62	430.4	0.221
75.Δ	23.40	34.82			23.70	423.3	75.	23.40	34.82	23.70	423.3	0.328
93.	22.86	34.86			23.89	406.1	100.	22.53	34.92	24.03	393.2	0.431
115.	21.66	35.02			24.35	363.1	150.	19.30	34.86	24.86	315.3	0.610
141.	19.84	34.90			24.75	325.8	200.	14.88	34.42	25.57	248.3	0.752
163.	18.44	34.79			25.02	300.2	250.	11.42	34.23	26.12	196.0	0.864
184.	16.55	34.59			25.32	271.6	300.	9.51	34.24	26.46	164.0	0.954
205.	14.37	34.37			25.64	241.4	400.	7.16	34.20	26.79	133.1	1.104
230.	12.42	34.23			25.93	214.0	500.	6.63	34.35	26.98	115.7	1.230
242.	11.74	34.22			26.05	202.4	600.	6.04	34.42	27.11	104.7	1.341
272.	10.72	34.28			26.28	180.6	700.	5.65	34.45	27.19	98.0	1.444
356.	7.48	34.13			26.69	142.1	800.	5.13	34.49	27.28	89.3	1.538
440.	7.16	34.29			26.86	127.0	1000.	4.25	34.51	27.39	79.1	1.709
520.	6.44	34.37			27.02	112.3	1200.	3.63	34.55	27.49	70.1	1.860
723.	5.58	34.46			27.20	96.8						
842.	4.89	34.51			27.32	85.6						
1002.	4.24	34.51			27.39	79.1						
1256.	3.52	34.56			27.51	68.8						

TEMPERATURE ERROR TERM AT 300. METERS IS 0.13  
 TEMPERATURE ERROR TERM AT 400. METERS IS 0.14

Δ FROM BT DATA  
 \*INTERPOLATED VALUE  
 \*\*EXTRAPOLATED VALUE

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA						
CROMWELL 1, STATION 22, 15-55N LAT, 151- 9W LONG, FEB. 25, 1964, 1800 G.C.T.														
DRY BULB	23.2	WET BULB	20.8	WIND SPEED	25, DIR. 05	BAR.	17	WEATHER	02	VIS.	6	CLOUD TYPE	8, COVER	3
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	23.54	34.42			23.36	453.1	0.	23.54	34.42	23.36	453.1	0.000		
10.	23.50	34.40			23.36	453.8	10.	23.50	34.40	23.36	453.8	0.046		
30. <sup>Δ</sup>	23.49	34.42			23.37	452.9	20.	23.49	34.41	23.36	453.5	0.092		
50. <sup>Δ</sup>	23.49	34.42			23.37	453.6	30.	23.49	34.42	23.37	452.9	0.138		
74.	23.50	34.41			23.36	455.6	50.	23.49	34.42	23.37	453.6	0.279		
103.	21.66	34.58			24.01	394.4	75.	23.47	34.42	23.38	454.4	0.343		
127.	18.51	34.60			24.86	314.4	100.	21.95	34.56	23.92	403.3	0.451		
157.	15.36	34.41			25.46	257.8	150.	16.09	34.47	25.34	269.2	0.621		
181.	12.34	34.23			25.95	211.3	200.	11.34	34.15	26.07	199.4	0.739		
206.	11.16	34.14			26.10	197.1	250.	10.11	34.29	26.40	169.0	0.832		
230.	10.28	34.20			26.30	178.1	300.	9.34	34.44	26.64	146.7	0.911		
259.	10.10	34.34			26.44	165.4	400.	7.66	34.42	26.89	124.1	1.048		
274.	9.95	34.43			26.54	156.6	500.	6.87	34.47	27.04	110.4	1.166		
308.	9.12	34.42			26.67	144.5	600.	5.99	34.47	27.15	100.3	1.273		
411.	7.54	34.42			26.91	122.4	700.	5.30	34.47	27.24	91.9	1.370		
515.	6.78	34.48			27.06	108.8	800.	4.82	34.50	27.32	84.8	1.459		
619.	5.82	34.46			27.17	98.7	1000.	4.05	34.54	27.43	74.8	1.621		
820.	4.74	34.51			27.34	83.5	1200.	3.48	34.58	27.52	66.7	1.764		
1029.	3.96	34.54			27.45	73.7	1500.	2.77	34.61	27.61	57.9	1.953		
1217.	3.44	34.58			27.53	66.0								
1536.	2.70	34.61			27.62	57.1								

CROMWELL 1, STATION 23, 14-29N LAT, 151- 1W LONG, FEB. 26, 1964, 0300 G.C.T.														
DRY BULB	24.3	WET BULB	22.2	WIND SPEED	25, DIR. 06	BAR.	14	WEATHER	03	VIS.	6	CLOUD TYPE	0, COVER	8
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	24.50	34.33			23.01	486.7	0.	24.50	34.33	23.01	486.7	0.000		
10.	24.53	34.35			23.01	486.5	10.	24.53	34.35	23.01	486.5	0.050		
30. <sup>Δ</sup>	24.52	34.34			23.01	487.7	20.	24.53	34.35	23.01	487.0	0.099		
50. <sup>Δ</sup>	24.52	34.34			23.01	488.5	30.	24.52	34.34	23.01	487.7	0.148		
75. <sup>Δ</sup>	24.52	34.34			23.01	489.4	50.	24.52	34.34	23.01	488.5	0.246		
100.	21.60	34.51			24.98	397.8	75.	24.52	34.34	23.01	489.4	0.369		
103.	20.44	34.52			24.30	367.1	100.	21.60	34.51	23.98	397.8	0.481		
129.	17.54	34.47			25.00	301.1	150.	14.60	34.35	25.57	246.3	0.643		
158.	13.59	34.31			25.76	228.8	200.	11.66	34.46	26.26	182.2	0.751		
184.	12.10	34.39			26.12	195.2	250.	11.10	34.68	26.53	157.2	0.837		
207.	11.55	34.50			26.30	177.6	300.	10.25	34.67	26.67	144.7	0.913		
232.	11.28	34.64			26.46	163.1	400.	8.77	34.61	26.87	126.9	1.050		
262.	10.95	34.69			26.56	154.3	500.	7.68	34.55	26.99	116.3	1.173		
276.	10.68	34.68			26.60	150.6	600.	6.85	34.51	27.08	108.5	1.286		
312.	10.04	34.66			26.70	142.0	700.	6.14	34.51	27.17	100.3	1.392		
414.	8.60	34.60			26.89	125.1	800.	5.53	34.52	27.26	92.4	1.489		
518.	7.51	34.54			27.01	114.8	1000.	4.68	34.56	27.38	81.1	1.665		
623.	6.68	34.51			27.10	106.8	1200.	3.97	34.57	27.47	73.7	1.821		
825.	5.40	34.53			27.28	90.5								
1013.	4.64*	34.56			27.39	80.5								
1035.	4.56	34.56			27.40	79.7								
1223.	3.89	34.57			27.48	72.3								

TEMPERATURE ERROR TERM AT 150. METERS IS 0.11

CROMWELL 1, STATION 24, 13- 0N LAT, 151- 0W LONG, FEB. 26, 1964, 1300 G.C.T.														
DRY BULB	24.0	WET BULB	22.0	WIND SPEED	18, DIR. 06	BAR.	14	WEATHER	00	VIS.	6	CLOUD TYPE	, COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	24.47	34.18			22.90	496.7	0.	24.47	34.18	22.90	496.7	0.000		
9.	24.45	34.18			22.91	496.4	10.	24.45	34.18	22.91	496.5	0.051		
30. <sup>Δ</sup>	24.46	34.18			22.91	497.5	20.	24.45	34.18	22.91	496.9	0.101		
50. <sup>Δ</sup>	24.46	34.18			22.91	498.3	30.	24.46	34.18	22.91	497.5	0.151		
77.	24.47	34.17			22.90	500.3	50.	24.46	34.18	22.91	498.3	0.251		
104.	20.04	34.55			24.43	354.8	75.	24.55	34.16	22.87	507.8	0.377		
127.	17.98	34.62			25.01	300.4	100.	20.77	34.49	24.19	377.4	0.488		
154.	13.84	34.36			25.75	230.0	150.	14.44	34.40	25.65	238.9	0.643		
177.	12.16	34.32			26.05	201.2	200.	11.45	34.55	26.36	172.1	0.747		
198.	11.46	34.53			26.34	173.6	250.	10.81	34.68	26.58	152.0	0.828		
221.	11.38	34.68			26.48	161.7	300.	10.14	34.66	26.69	143.1	0.903		
247.	10.82	34.68			26.58	152.4	400.	8.90	34.61	26.85	129.1	1.040		
260.	10.77	34.69			26.59	151.1	500.	7.79	34.55	26.97	117.8	1.165		
290.	10.28	34.67			26.67	144.8	600.	6.92	34.53	27.08	108.1	1.279		
381.	9.14	34.62			26.82	131.5	700.	6.16	34.52	27.18	99.7	1.384		
472.	8.06	34.56			26.94	120.8	800.	5.91	34.52	27.25	92.7	1.481		
560.	7.26	34.54			27.04	111.9	1000.	4.54	34.54	27.39	80.5	1.657		
738.	5.90	34.52			27.21	96.9	1200.	3.84	34.57	27.48	71.7	1.811		
920.	4.87	34.52			27.33	85.5								
1093.	4.22	34.57			27.44	75.3								
1314.	3.56	34.58			27.52	68.2								

TEMPERATURE ERROR TERM AT 100. METERS IS 0.14

<sup>Δ</sup> FROM ST DATA  
\*INTERPOLATED VALUE

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 1, STATION 25, 11-35N LAT, 150-59W LONG, FEB. 26, 1964, 2200 G.C.T.												
DRY BULB 25.5		WET BULB 23.0		WIND SPEED 22, DIR. 06		BAR. 15		WEATHER 02		VIS. 7 CLOUD TYPE 6, COVER 8		
DEPTH	TEMP.	SAL.	OXY.	P04-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.33	34.25			22.70	516.5	0.	25.33	34.25	22.70	516.4	0.000
10.	25.39	34.25			22.68	518.6	10.	25.39	34.25	22.68	518.6	0.053
30.Δ	25.39	34.25			22.68	519.4	20.	25.40	34.25	22.67	519.3	0.105
49.	25.38	34.25			22.68	519.8	30.	25.39	34.25	22.68	519.4	0.157
74.	18.11	34.50			24.88	310.4	50.	25.14	34.26	22.76	512.2	0.261
103.	13.18	34.53			26.01	203.2	75.	17.88	34.50	24.94	304.9	0.364
127.	11.84	34.71			26.41	165.5	100.	13.52	34.53	25.94	209.9	0.429
156.	11.26	34.75			26.55	152.9	150.	11.32	34.75	26.54	153.7	0.520
182.	11.00	34.75			26.60	148.9	200.	10.78	34.74	26.63	146.0	0.596
205.	10.72	34.74			26.64	145.3	250.	10.32	34.73	26.71	140.0	0.668
230.	10.54	34.73			26.67	143.5	300.	9.91	34.71	26.76	135.5	0.738
258.	10.22	34.73			26.72	138.7	400.	9.09	34.67	26.86	127.6	0.870
273.	10.06	34.71			26.73	137.8	500.	8.11	34.63	26.98	117.2	0.994
308.	9.88	34.72			26.77	134.8	600.	7.17	34.57	27.08	109.1	1.108
410.	8.99	34.66			26.87	126.8	700.	6.34	34.54	27.17	100.9	1.214
513.	7.98	34.62			27.00	115.9	800.	5.63	34.54	27.26	92.6	1.312
615.	7.04	34.56			27.09	108.1	1000.	4.65	34.56	27.39	80.8	1.488
817.	5.52	34.54			27.27	91.3	1200.	3.96	34.58	27.48	72.4	1.643
1025.	4.56	34.56			27.40	79.6	1500.	3.14	34.61	27.58	62.5	1.848
1223.	3.89	34.58			27.49	71.6						
1532.	3.08	34.61			27.59	61.7						

CROMWELL 1, STATION 26, 10-1N LAT, 148-1W LONG, FEB. 27, 1964, 1900 G.C.T.												
DRY BULB 26.5		WET BULB 23.5		WIND SPEED 15, DIR. 08		BAR. 15		WEATHER 01		VIS. 6 CLOUD TYPE 8, COVER 7		
DEPTH	TEMP.	SAL.	OXY.	P04-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	25.62	34.26			22.61	524.2	0.	25.62	34.26	22.61	524.2	0.000
10.	25.62	34.26			22.61	524.6	10.	25.62	34.26	22.61	524.6	0.053
19.	25.61	34.25			22.61	525.4	20.	25.61	34.25	22.61	525.4	0.106
30.Δ	25.60	34.25			22.61	525.5	30.	25.60	34.25	22.61	525.5	0.159
50.Δ	25.58	34.26			22.63	525.0	50.	25.58	34.26	22.63	525.0	0.265
57.	21.12	34.46			24.07	387.3	75.	16.00	34.44	25.34	267.0	0.365
75.Δ	16.00	34.44			25.34	267.0	100.	12.36	34.57	26.20	185.0	0.422
80.	14.63	34.40			25.61	241.0	150.	11.32	34.75	26.55	153.3	0.507
109.	12.22	34.69			26.33	173.5	200.	10.66	34.74	26.66	143.9	0.582
132.	11.65	34.75			26.48	159.2	250.	10.14	34.72	26.73	137.5	0.653
161.	11.15	34.75			26.57	151.0	300.	9.77	34.70	26.78	134.2	0.721
185.	10.86	34.75			26.63	146.5	400.	8.94	34.65	26.88	126.2	0.853
208.	10.56	34.74			26.67	142.6	500.	7.90	34.60	27.00	115.7	0.975
232.	10.30	34.73			26.71	139.5	600.	7.02	34.56	27.09	107.4	1.087
261.	10.05	34.72			26.74	136.6	700.	6.31	34.55	27.18	99.9	1.192
275.	9.94	34.71			26.76	135.8	800.	5.72	34.55	27.25	93.1	1.290
308.	9.72	34.70			26.78	133.6	1000.	4.80	34.56	27.37	82.4	1.467
407.	8.87	34.65			26.88	125.5						
508.	7.82	34.60			27.01	114.9						
608.	6.96	34.56			27.10	106.8						
804.	5.70	34.55			27.26	92.8						
1004.	4.78	34.56			27.37	82.3						
1195.	4.02	34.57			27.46	73.7						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.27

CROMWELL 1, STATION 27, 11-30N LAT, 148-2W LONG, FEB. 28, 1964, 0700 G.C.T.												
DRY BULB 25.0		WET BULB 22.4		WIND SPEED 30, DIR. 08		BAR. 15		WEATHER 15		VIS. 7 CLOUD TYPE 6, COVER 8		
DEPTH	TEMP.	SAL.	OXY.	P04-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.96	34.33			22.87	499.9	0.	24.96	34.33	22.87	499.9	0.000
9.	24.94	34.34			22.88	499.0	10.	24.94	34.34	22.88	498.9	0.051
30.Δ	24.92	34.35			22.90	498.5	20.	24.93	34.35	22.89	498.6	0.101
50.Δ	24.88	34.35			22.91	498.1	30.	24.92	34.35	22.90	498.5	0.151
64.	19.96	34.67			24.54	342.7	50.	24.88	34.35	22.91	498.1	0.252
75.Δ	18.18	34.60			24.94	304.8	75.	18.18	34.60	24.94	304.8	0.353
89.	15.15	34.44			25.5	249.2	100.	13.40	34.44	25.90	214.0	0.418
110.	12.33	34.50			26.16	189.5	150.	11.57	34.77	26.51	156.9	0.512
134.	11.94	34.75			26.43	164.6	200.	10.94	34.75	26.61	148.3	0.589
156.	11.44	34.76			26.53	155.3	250.	10.43	34.74	26.69	141.6	0.662
177.	11.20	34.75			26.56	152.3	300.	9.96	34.72	26.76	136.1	0.732
198.	10.96	34.75			26.61	148.6	400.	9.23	34.68	26.85	129.0	0.865
223.	10.71	34.74			26.64	145.5	500.	8.37	34.63	26.95	121.1	0.992
236.	10.58	34.74			26.67	143.6	600.	7.40	34.58	27.05	111.6	1.109
266.	10.26	34.73			26.72	139.5	700.	6.53	34.55	27.15	102.6	1.217
354.	9.56	34.70			26.81	131.9	800.	5.84	34.55	27.24	94.6	1.317
442.	8.92	34.66			26.88	126.3	1000.	4.83	34.57	27.37	82.4	1.496
531.	8.06	34.61			26.98	118.2	1200.	4.07	34.58	27.47	73.7	1.654
708.	6.46	34.55			27.16	102.0						
894.	5.32	34.56			27.31	88.1						
1075.	4.53	34.57			27.41	79.0						
1373.	3.64	34.59			27.52	68.9						

Δ FROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 1, STATION 28, 13- ON LAT, 148- 7M LONG, FEB. 28, 1964, 1900 G.C.T.												
DRY BULB 24.0	WET BULB 21.5	WIND SPEED 25, DIR. 02	BAR. 18	WEATHER 02	VIS. 7	CLOUD TYPE 4,	COVER 5					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
1.	24.15	34.29			23.08	479.7	0.	24.15	34.29	23.08	479.6	0.000
10.	24.14	34.29			23.08	479.7	10.	24.14	34.29	23.08	479.7	0.049
30. <sup>Δ</sup>	24.12	34.30			23.10	479.2	20.	24.13	34.29	23.09	479.5	0.097
50.	24.12	34.32			23.11	478.5	30.	24.12	34.30	23.10	479.2	0.145
76.	23.22	34.48			23.50	442.8	50.	24.12	34.32	23.11	478.5	0.242
106.	16.74	34.50			25.21	279.9	75.	23.30	34.47	23.47	445.6	0.358
131.	14.38	34.40			25.66	237.4	100.	18.11	34.51	24.89	310.6	0.454
161.	11.62	34.32			26.15	191.0	150.	12.46	34.33	26.00	205.6	0.584
186.	11.54	34.51			26.31	176.2	200.	11.35	34.60	26.42	166.7	0.677
211.	11.20	34.65			26.49	160.4	250.	10.94	34.70	26.57	152.8	0.758
236.	11.13	34.70			26.54	156.1	300.	10.54	34.71	26.65	146.9	0.834
266.	10.73	34.70			26.61	149.8	400.	9.23	34.65	26.83	130.9	0.974
281.	10.67	34.70			26.62	149.1	500.	7.99	34.57	26.96	119.7	1.100
317.	10.39	34.71			26.68	144.3	600.	6.96	34.53	27.08	108.8	1.216
421.	8.90	34.63			26.86	127.8	700.	6.11	34.52	27.18	99.1	1.321
526.	7.72	34.55			26.98	117.4	800.	5.44	34.52	27.26	91.6	1.417
632.	6.66	34.53			27.12	105.1	1000.	4.46	34.54	27.39	79.5	1.590
837.	5.23	34.52			27.29	89.2	1200.	3.76	34.58	27.50	69.7	1.741
1047.	4.28	34.55			27.42	77.1	1500.	3.01	34.61	27.59	60.9	1.940
1247.	3.62	34.59			27.52	67.7						
1558.	2.92	34.61			27.60	59.9						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.26  
 TEMPERATURE ERROR TERM AT 150. METERS IS 0.11

CROMWELL 1, STATION 29, 14-30N LAT, 148- 5M LONG, FEB. 29, 1964, 0400 G.C.T.												
DRY BULB 24.1	WET BULB 21.2	WIND SPEED 26, DIR. 08	BAR. 17	WEATHER 02	VIS. 6	CLOUD TYPE 4,	COVER 4					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	23.64	34.23			23.19	469.6	0.	23.64	34.23	23.19	469.6	0.000
10.	23.65	34.23			23.18	470.3	10.	23.65	34.23	23.18	470.3	0.048
30. <sup>Δ</sup>	23.65	34.23			23.18	471.1	20.	23.65	34.23	23.18	470.8	0.095
50. <sup>Δ</sup>	23.64	34.25			23.20	470.1	30.	23.65	34.23	23.18	471.1	0.143
75.	20.74	34.72			24.37	359.3	50.	23.64	34.25	23.20	470.1	0.237
104.	18.84	34.89			25.00	300.5	75.	20.74	34.72	24.37	359.3	0.342
129.	15.11	34.40			25.50	252.5	100.	19.13	34.90	24.93	306.7	0.426
153.	12.48	34.40			26.05	200.7	150.	12.74	34.38	25.99	206.6	0.555
183.	11.64	34.55			26.33	175.0	200.	11.32	34.63	26.45	164.0	0.649
207.	11.22	34.65			26.48	160.7	250.	10.63	34.62	26.57	153.3	0.729
233.	10.91	34.63			26.52	157.3	300.	10.12	34.65	26.68	143.5	0.803
263.	10.45	34.63			26.60	150.0	400.	8.97	34.62	26.84	129.4	0.941
277.	10.36	34.65			26.64	147.3	500.	7.83	34.57	26.98	117.1	1.066
312.	9.98	34.65			26.72	141.7	600.	6.90	34.54	27.09	107.1	1.179
415.	8.80	34.61			26.86	127.5	700.	6.14	34.53	27.19	98.8	1.233
521.	7.60	34.56			27.01	114.8	800.	5.51	34.53	27.26	91.8	1.379
624.	6.71	34.54			27.12	105.0	1000.	4.66	34.55	27.38	81.8	1.555
828.	5.36	34.53			27.28	90.0	1200.	3.95	34.57	27.47	72.5	1.711
1036.	4.54	34.55			27.35	80.2	1500.	3.08	34.60	27.58	62.4	1.916
1234.	3.84	34.58			27.49	71.0						
1543.	2.97	34.60			27.59	61.1						

CROMWELL 1, STATION 30, 16- ON LAT, 147-58M LONG, FEB. 29, 1964, 1500 G.C.T.												
DRY BULB 23.0	WET BULB 20.3	WIND SPEED 30, DIR. 09	BAR. 17	WEATHER 50	VIS. 6	CLOUD TYPE 5,	COVER 5					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	23.45	34.34			23.32	456.4	0.	23.45	34.34	23.32	456.4	0.000
10.	23.44	34.34			23.33	456.5	10.	23.44	34.34	23.33	456.5	0.046
49.	23.45	34.34			23.32	458.3	20.	23.44	34.34	23.33	457.0	0.092
75.	23.46	34.36			23.34	458.1	30.	23.44	34.34	23.33	457.4	0.139
104.	20.84	34.82			24.42	355.7	50.	23.47	34.34	23.32	459.1	0.231
128.	19.74	34.88			24.76	324.2	75.	23.46	34.36	23.34	458.1	0.346
157.	17.70	34.78			25.20	283.2	100.	21.24	34.76	24.26	370.6	0.451
181.	15.48	34.52			25.51	253.1	150.	18.26	34.82	25.09	293.0	0.618
205.	12.78	34.23			25.86	220.2	200.	13.32	34.28	25.79	226.7	0.749
231.	10.96	34.18			26.16	191.2	250.	10.77	34.35	26.33	175.8	0.950
259.	10.75	34.43			26.40	169.8	300.	9.77	34.46	26.59	151.6	0.933
275.	10.24	34.43			26.49	161.4	400.	8.37	34.51	26.86	127.8	1.074
309.	9.65	34.48			26.62	148.7	500.	7.44	34.52	27.00	115.1	1.197
412.	8.23	34.51			26.88	126.0	600.	6.77	34.53	27.10	106.4	1.308
516.	7.33	34.52			27.02	113.7	700.	6.11	34.53	27.19	98.8	1.412
625.	6.62	34.53			27.12	104.5	800.	5.49	34.52	27.26	92.0	1.508
821.	5.36	34.52			27.27	90.7	1000.	4.55	34.54	27.38	81.0	1.664
1028.	4.44	34.54			27.40	79.6	1200.	3.84	34.57	27.48	71.8	1.838
1227.	3.76	34.57			27.49	70.7	1500.	3.10	34.60	27.58	62.1	2.042
1536.	3.04	34.61			27.59	61.2						

<sup>Δ</sup> FROM BT DATA



Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 22.5		1, STATION 31, 17-30N LAT, 148- WET BULB 19.4		OW LONG, MAR. 1, 1964, 0000 G.C.T. WIND SPEED 24, DIR. 08 BAR. 19 WEATHER 02				VIS. 7 CLOUD TYPE 2, COVER 7				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.32	34.32			23.35	454.2	0.	23.32	34.32	23.35	454.2	0.000
10.	23.31	34.31			23.34	455.1	10.	23.31	34.31	23.34	455.1	0.246
30.Δ	23.31	34.32			23.35	455.1	20.	23.31	34.31	23.35	455.2	0.092
50.Δ	23.30	34.32			23.35	455.6	30.	23.31	34.32	23.35	455.1	0.138
76.	23.28	34.34			23.37	454.6	50.	23.30	34.32	23.35	455.6	0.230
100.Δ	23.00	34.55			23.61	432.6	75.	23.28	34.34	23.37	454.8	0.344
107.	22.18	34.72			23.98	398.3	100.	23.00	34.55	23.61	432.6	0.456
131.	19.84	34.72			24.61	338.4	150.	17.83	34.57	25.00	301.3	0.641
161.	16.62	34.47			25.22	281.1	200.	12.84	34.33	25.92	213.9	0.771
187.	13.65	34.36			25.78	227.1	250.	10.43	34.33	26.38	171.2	0.868
212.	12.26	34.31			26.02	204.7	300.	9.96	34.49	26.58	152.6	0.956
237.	10.85	34.29			26.27	181.4	400.	8.50	34.50	26.82	130.9	1.093
267.	10.16	34.41			26.48	161.4	500.	7.33	34.47	26.98	117.0	1.218
282.	10.14	34.46			26.53	157.7	600.	6.44	34.46	27.09	107.1	1.331
318.	9.70	34.51			26.64	147.5	700.	5.75	34.46	27.18	98.8	1.435
422.	8.18	34.48			26.86	127.6	800.	5.23	34.49	27.26	91.3	1.531
528.	7.07	34.47			27.01	113.8	1000.	4.42	34.53	27.35	79.7	1.704
633.	6.18	34.45			27.12	104.4	1200.	3.88	34.56	27.47	73.0	1.859
840.	5.06	34.50			27.29	88.5	1500.	3.05	34.60	27.58	61.8	2.064
1050.	4.26	34.54			27.41	77.6						
1251.	3.76	34.56			27.48	71.7						
1563.	2.90	34.61			27.60	59.7						

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 21.6		1, STATION 32, 19- ON LAT, 148- WET BULB 19.7		OW LONG, MAR. 1, 1964, 1100 G.C.T. WIND SPEED 25, DIR. 09 BAR. 22 WEATHER 50				VIS. 7 CLOUD TYPE 5, COVER 8				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	22.67	34.79			23.89	402.5	0.	22.67	34.79	23.89	402.5	0.000
10.	22.68	34.78			23.88	403.9	10.	22.68	34.78	23.88	403.9	0.041
30.Δ	22.68	34.79			23.89	403.9	20.	22.68	34.78	23.88	404.1	0.032
50.	22.68	34.79			23.89	404.7	30.	22.68	34.79	23.89	403.9	0.122
76.	22.86	34.93			23.94	400.5	50.	22.68	34.79	23.89	404.7	0.204
106.	22.84	34.90			23.92	403.2	75.	22.85	34.92	23.94	400.6	0.305
130.	21.53	35.14			24.47	351.5	100.	22.93	34.90	23.90	405.4	0.407
161.	20.14	35.12			24.84	318.1	150.	20.64	35.16	24.73	327.6	0.592
186.	18.72	34.97			25.09	294.6	200.	17.71	34.82	25.22	282.2	0.745
211.	16.87	34.69			25.33	272.3	250.	13.85	34.32	25.71	235.9	0.876
236.	14.95	34.46			25.59	247.8	300.	11.01	34.25	26.21	188.3	0.993
266.	12.71	34.21			25.86	221.8	400.	9.34	34.49	26.68	144.9	1.151
281.	11.88	34.22			26.03	205.9	500.	8.12	34.48	26.87	128.3	1.289
316.	10.42	34.29			26.35	175.7	600.	6.94	34.43	27.00	115.9	1.412
420.	9.29	34.52			26.72	142.1	700.	6.08	34.44	27.12	104.7	1.524
525.	7.76	34.45			26.90	125.3	800.	5.40	34.47	27.23	94.9	1.624
631.	6.65	34.43			27.04	112.4	1000.	4.41	34.51	27.38	81.1	1.803
836.	5.20	34.48			27.26	91.7	1200.	3.78	34.56	27.48	71.6	1.957
1046.	4.24	34.52			27.40	78.8	1500.	2.98	34.60	27.59	61.3	2.159
1247.	3.66	34.57			27.50	69.7						
1558.	2.87	34.60			27.60	60.0						

TEMPERATURE ERROR TERM AT 400. METERS IS 0.13

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 21.7		1, STATION 33, 20-34N LAT, 147-59W LONG, MAR. 1, 1964, 2200 G.C.T. WET BULB 18.2		WIND SPEED 33, DIR. 09 BAR. 23 WEATHER 02				VIS. 6 CLOUD TYPE 6, COVER 8				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.65	34.86			23.95	396.9	0.	22.65	34.86	23.95	396.9	0.000
10.	22.64	34.85			23.94	397.7	10.	22.64	34.85	23.94	397.7	0.041
50.Δ	22.63	35.00			24.06	388.1	20.	22.64	34.87	23.96	396.3	0.091
74.	22.62	35.09			24.13	382.3	30.	22.63	34.91	23.99	394.2	0.120
103.	22.40	35.13			24.22	374.5	50.	22.63	35.00	24.06	388.1	0.199
127.	21.07	35.13			24.61	338.8	75.	22.63	35.09	24.13	382.4	0.296
156.	20.18	35.15			24.85	316.8	100.	22.46	35.13	24.20	376.3	0.392
180.	19.50	35.09			24.98	304.9	150.	20.32	35.15	24.81	320.1	0.567
204.	18.63	34.96			25.10	293.8	200.	18.80	34.99	25.08	295.9	0.722
230.	16.97	34.71			25.32	273.8	250.	15.36	34.51	25.53	253.6	0.861
258.	14.72	34.43			25.61	245.8	300.	11.95	34.16	25.97	212.1	0.978
273.	13.72	34.32			25.74	233.8	400.	7.97	34.05	26.55	155.8	1.164
306.	11.58	34.13			26.01	207.6	500.	6.22	34.13	26.86	127.0	1.307
407.	7.81	34.06			26.58	152.9	600.	5.56	34.26	27.04	110.1	1.426
509.	6.14	34.14			26.88	125.2	700.	5.11	34.36	27.17	98.1	1.532
610.	5.52	34.27			27.06	108.7	800.	4.73	34.43	27.27	89.4	1.626
807.	4.71	34.43			27.28	88.9	1000.	4.10	34.50	27.40	78.2	1.796
1013.	4.06	34.50			27.40	77.7	1200.	3.62	34.54	27.48	71.1	1.947
1207.	3.61	34.54			27.48	70.9	1500.	2.91	34.58	27.58	61.6	2.149
1513.	2.88	34.58			27.58	61.3						

Δ FROM BT DATA

Table 1.--Continued

ORIGINAL DATA						DERIVED DATA						INTERPOLATED DATA		
CROMWELL DRY BULB 21.0		1, STATION WET BULB 19.0		34, 22-- ON LAT, 147-53W LONG, MAR. WIND SPEED 22, DIR. 08		2, 1964, 0700 G.C.T. BAR. 25		WEATHER 01		VIS. 7		CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	22.40	35.04			24.16	377.1	0.	22.40	35.04	24.16	377.1	0.000		
10.	22.38	35.02			24.15	378.4	10.	22.38	35.02	24.15	378.4	0.039		
50.Δ	22.37	35.05			24.17	377.5	20.	22.37	35.02	24.15	378.6	0.077		
72.	22.37	35.06			24.18	377.6	30.	22.37	35.02	24.15	378.5	0.115		
100.	21.92	35.26			24.46	352.1	50.	22.37	35.05	24.17	377.5	0.191		
123.	21.82	35.30			24.52	347.4	75.	22.33	35.08	24.21	375.0	0.286		
151.	21.22	35.27			24.66	334.8	100.	21.92	35.26	24.46	352.1	0.377		
175.	19.27	35.05			25.01	301.9	150.	21.26	35.27	24.65	335.5	0.551		
199.	17.94	34.87			25.21	283.7	200.	17.88	34.86	25.21	282.8	0.706		
222.	16.45	34.67			25.41	264.7	250.	14.64	34.45	25.65	242.4	0.839		
250.	14.64	34.45			25.65	242.4	300.	10.88	34.11	26.12	196.7	0.950		
264.	12.91	34.27			25.86	221.2	400.	9.07	34.25	26.54	158.1	1.129		
297.	10.98	34.11			26.11	198.2	500.	7.09	34.73	26.82	131.2	1.275		
397.	9.14	34.25			26.53	159.1	600.	6.41	34.35	27.01	114.3	1.398		
497.	7.12	34.23			26.82	131.8	700.	5.78	34.42	27.15	102.0	1.508		
596.	6.44	34.35			27.00	114.8	800.	5.22	34.46	27.25	92.9	1.606		
791.	5.27	34.46			27.24	93.6	1000.	4.33	34.50	27.38	80.7	1.782		
990.	4.36	34.50			27.37	81.2	1200.	3.68	34.54	27.47	71.8	1.936		
1181.	3.78	34.54			27.46	72.8								
1479.	3.02	34.57			27.56	63.5								

CROMWELL DRY BULB 21.0		1, STATION WET BULB 18.0		35, 23-32N LAT, 147-48W LONG, MAR. WIND SPEED 26, DIR. 13		2, 1964, 1700 G.C.T. BAR. 24		WEATHER 01		VIS. 7		CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	21.52	35.24			24.55	339.2	0.	21.52	35.24	24.55	339.2	0.000		
9.	21.54	35.23			24.54	340.8	10.	21.54	35.23	24.54	340.9	0.035		
30.Δ	21.54	35.23			24.54	341.6	20.	21.54	35.23	24.54	341.5	0.069		
50.Δ	21.54	35.23			24.54	342.3	30.	21.54	35.23	24.54	341.6	0.104		
72.	21.46	35.29			24.61	336.7	50.	21.54	35.23	24.54	342.3	0.172		
101.	21.40	35.29			24.62	336.2	75.	21.45	35.29	24.61	336.5	0.258		
125.	21.34	35.29			24.64	335.5	100.	21.40	35.29	24.62	336.2	0.343		
153.	21.00	35.30			24.74	326.9	150.	21.09	35.31	24.72	328.7	0.510		
177.	19.06	35.03			25.05	298.3	200.	17.42	34.79	25.27	277.4	0.663		
200.	17.42	34.79			25.27	277.4	250.	13.69	34.31	25.74	233.0	0.792		
224.	15.55	34.54			25.51	254.4	300.	11.24	34.09	26.04	204.3	0.902		
253.	13.49	34.29			25.76	230.8	400.	8.24	34.03	26.50	161.5	1.086		
267.	12.64	34.19			25.86	222.0	500.	6.22	34.05	26.79	133.1	1.235		
300.	11.24	34.09			26.04	204.3	600.	5.31	34.16	26.99	114.3	1.360		
397.	8.32	34.03			26.49	162.5	700.	4.65	34.26	27.15	100.0	1.468		
494.	6.30	34.04			26.78	134.5	800.	4.24	34.35	27.26	89.4	1.564		
593.	5.36	34.15			26.98	115.4	1000.	3.89	34.49	27.41	76.5	1.732		
783.	4.29	34.33			27.25	91.0	1200.	3.48	34.56	27.51	68.1	1.878		
980.	3.93	34.48			27.40	77.3								
1170.	3.55	34.53			27.48	70.7								
1471.	2.86	34.59			27.59	60.1								

CROMWELL DRY BULB 21.4		1, STATION WET BULB 18.9		36, 24-59N LAT, 147-52W LONG, MAR. WIND SPEED 28, DIR. 09		3, 1964, 0300 G.C.T. BAR. 23		WEATHER 15		VIS. 7		CLOUD TYPE 6, COVER Δ		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	21.08	35.31			24.73	322.7	0.	21.08	35.31	24.73	322.7	0.000		
10.	21.07	35.32			24.74	322.0	10.	21.07	35.32	24.74	322.0	0.033		
30.Δ	21.07	35.32			24.74	322.8	20.	21.07	35.32	24.74	322.2	0.065		
50.Δ	21.06	35.31			24.73	324.0	30.	21.07	35.32	24.74	322.8	0.098		
71.	21.06	35.31			24.73	324.8	50.	21.06	35.31	24.73	324.0	0.163		
99.	20.07	35.16			24.88	311.2	75.	20.96	35.29	24.75	323.5	0.245		
122.	19.16	35.07			25.05	295.9	100.	20.03	35.16	24.89	310.6	0.324		
150.	18.14	34.89			25.17	285.3	150.	18.14	34.89	25.17	285.3	0.475		
174.	17.16	34.74			25.30	274.2	200.	15.29	34.48	25.52	252.7	0.610		
197.	15.46	34.50			25.50	254.6	250.	12.90	34.23	25.83	224.0	0.730		
220.	14.30	34.36			25.65	241.1	300.	10.58	34.04	26.13	196.2	0.836		
248.	13.03	34.24			25.82	225.3	400.	8.09	34.03	26.52	159.1	1.016		
262.	12.14	34.14			25.91	216.1	500.	6.41	34.08	26.79	133.3	1.163		
295.	10.75	34.05			26.10	198.5	600.	5.40	34.16	26.99	114.9	1.288		
393.	8.24	34.03			26.50	161.2	700.	4.80	34.27	27.14	101.1	1.398		
490.	6.54	34.07			26.77	135.4	800.	4.44	34.36	27.26	90.5	1.494		
586.	5.50	34.15			26.96	117.1	1000.	3.89	34.49	27.42	76.2	1.663		
774.	4.53	34.34			27.23	93.0	1200.	3.45	34.55	27.51	68.0	1.809		
970.	3.96	34.48			27.40	77.6								
1156.	3.56	34.53			27.48	70.7								
1455.	3.01	34.57			27.56	63.3								

Δ FROM BT DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA						
CROMWELL DRY BULB 21.0		1, STATION WET BULB 17.9		37, 26-30N LAT, 148- WIND SPEED 26, DIR. 10			0M LONG, MAR. 3, BAR. 24		1964, 1500 G.C.T. WEATHER 02		VIS. 6		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	21.49	35.28			24.59	335.5	0.	21.49	35.28	24.59	335.5	0.000		
10.	21.48	35.23			24.59	335.6	10.	21.48	35.23	24.59	335.6	0.034		
30. Δ	21.48	35.28			24.59	336.4	20.	21.48	35.28	24.59	336.1	0.068		
50. Δ	21.46	35.29			24.61	335.9	30.	21.48	35.28	24.59	336.4	0.102		
76.	21.24	35.29			24.67	331.1	50.	21.46	35.29	24.61	335.9	0.170		
105.	20.86	35.28			24.76	323.0	75.	21.25	35.29	24.67	331.3	0.254		
121.	20.35	35.20			24.84	316.2	100.	20.96	35.29	24.74	324.7	0.336		
171.	19.39	35.14			25.05	298.2	150.	19.94	35.20	24.95	306.8	0.496		
186.	18.44	34.95			25.14	289.3	200.	17.43	34.80	25.28	277.0	0.643		
211.	16.67	34.70			25.38	267.1	250.	14.88	34.45	25.59	247.8	0.775		
236.	15.38	34.54			25.55	251.1	300.	11.50	34.15	26.04	204.8	0.889		
267.	13.72	34.33			25.75	232.9	400.	8.94	34.04	26.39	171.7	1.079		
273.	12.94	34.29			25.87	220.6	500.	6.59	34.02	26.72	140.0	1.236		
307.	11.40	34.12			26.04	205.1	600.	5.50	34.03	26.91	122.2	1.369		
404.	8.87	34.04			26.41	170.4	700.	4.79	34.20	27.09	105.7	1.484		
501.	6.57	34.02			26.73	139.7	800.	4.31	34.32	27.24	91.9	1.584		
597.	5.53	34.08			26.91	122.8	1000.	3.74	34.47	27.41	76.1	1.754		
787.	4.36	34.31			27.22	93.3	1200.	3.36	34.55	27.51	67.5	1.899		
982.	3.78	34.46			27.40	77.1								
1171.	3.46	34.53			27.49	69.6								
1474.	2.97	34.56			27.56	63.6								

TEMPERATURE ERROR TERM AT 150. METERS IS 0.18  
TEMPERATURE ERROR TERM AT 250. METERS IS 0.16  
TEMPERATURE ERROR TERM AT 300. METERS IS 0.12

CROMWELL DRY BULB 27.0		1, STATION WET BULB 19.0		38, 25- ON LAT, 151- WIND SPEED 19, DIR. 12			0M LONG, MAR. 4, BAR. 23		1964, 0900 G.C.T. WEATHER 01		VIS. 6		CLOUD TYPE , COVER 0	
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	22.45	35.13			24.21	372.0	0.	22.45	35.13	24.21	372.0	0.000		
11.	22.44	35.13			24.21	372.1	10.	22.44	35.13	24.21	372.1	0.038		
30. Δ	22.44	35.13			24.21	372.8	20.	22.44	35.13	24.21	372.4	0.075		
50. Δ	22.44	35.13			24.21	373.6	30.	22.44	35.13	24.21	372.8	0.113		
75.	22.29	35.25			24.35	361.8	50.	22.44	35.13	24.21	373.6	0.188		
105.	21.89	35.26			24.47	351.5	75.	22.29	35.25	24.35	361.8	0.281		
130.	20.78	35.18			24.71	329.1	100.	22.00	35.27	24.44	353.7	0.371		
159.	19.30	35.03			24.99	303.5	150.	19.73	35.08	24.91	310.7	0.538		
185.	18.60	34.97			25.12	291.7	200.	17.9F	34.88	25.20	284.0	0.688		
209.	17.54	34.81			25.26	279.0	250.	15.12	34.49	25.57	249.6	0.823		
234.	16.16	34.61			25.43	263.0	300.	11.51	34.12	26.02	206.7	0.938		
264.	14.04	34.37			25.71	236.3	400.	8.74	34.04	26.43	168.4	1.127		
279.	12.65	34.21			25.87	221.0	500.	6.56	34.02	26.73	139.2	1.282		
314.	11.02	34.11			26.10	199.3	600.	5.30	34.10	26.95	118.6	1.413		
418.	8.42	34.04			26.48	163.7	700.	4.69	34.22	27.11	103.5	1.525		
523.	6.13	34.03			26.79	133.4	800.	4.28	34.33	27.24	91.3	1.623		
627.	5.12	34.13			26.99	114.3	1000.	3.74	34.48	27.42	75.2	1.792		
831.	4.20	34.36			27.28	88.1	1200.	3.31	34.54	27.51	67.0	1.936		
1039.	3.66	34.50			27.45	73.2	1500.	2.74	34.59	27.60	58.7	2.127		
1240.	3.23	34.55			27.53	65.9								
1549.	2.66	34.59			27.61	58.2								

CROMWELL DRY BULB 23.8		1, STATION WET BULB 20.1		39, 25- 3N LAT, 154- WIND SPEED 18, DIR. 10			3M LONG, MAR. 4, BAR. 22		1964, 2400 G.C.T. WEATHER 02		VIS. 9		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	22.66	35.21			24.21	371.9	0.	22.66	35.21	24.21	371.9	0.000		
9.	22.66	35.18			24.19	374.4	10.	22.66	35.18	24.19	374.5	0.038		
30. Δ	22.66	35.18			24.19	375.2	20.	22.67	35.17	24.18	375.4	0.076		
50. Δ	22.58	35.18			24.21	373.8	30.	22.66	35.18	24.19	375.2	0.114		
75. Δ	22.50	35.18			24.23	372.6	50.	22.58	35.18	24.21	373.8	0.189		
101.	22.46	35.18			24.24	372.5	75.	22.50	35.18	24.23	372.6	0.283		
125.	19.60	35.01			24.89	311.2	100.	22.49	35.18	24.24	373.1	0.377		
155.	19.00	35.02			25.06	296.8	150.	19.04	35.02	25.05	297.3	0.546		
179.	17.43	34.76			25.25	279.1	200.	16.67	34.68	25.37	267.3	0.688		
203.	16.52	34.67			25.39	265.7	250.	13.92	34.39	25.75	232.4	0.814		
227.	15.39	34.57			25.57	248.9	300.	11.71	34.18	26.03	206.0	0.925		
256.	13.57	34.34			25.79	228.8	400.	9.76	34.08	26.46	165.7	1.112		
270.	13.08	34.29			25.85	223.2	500.	6.16	34.02	26.78	134.1	1.264		
304.	11.52	34.17			26.05	203.6	600.	5.08	34.11	26.98	115.2	1.390		
405.	8.65	34.08			26.47	164.0	700.	4.55	34.22	27.13	101.3	1.499		
507.	6.01	34.02			26.80	132.3	800.	4.22	34.33	27.25	90.3	1.596		
609.	5.04	34.12			27.00	113.8	1000.	3.75	34.48	27.42	75.1	1.763		
810.	4.20	34.34			27.26	89.4	1200.	3.24	34.54	27.52	66.5	1.907		
1013.	3.72	34.49			27.43	74.4	1500.	2.70	34.58	27.60	59.0	2.098		
1208.	3.22	34.54			27.52	66.3								
1514.	2.68	34.58			27.60	58.9								

TEMPERATURE ERROR TERM AT 150. METERS IS 0.11

<sup>a</sup> FROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA							
CROMWELL DRY BULB 22.8		1, STATION WET BULB 20.2		40, 25- ON LAT, 157- ON LONG, MAR. 5, 1964, 2000 G.C.T.		WIND SPEED 13, DIR. 10		BAR. 22		WEATHER 01		VIS. 8		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.			
0.	22.56	35.29			24.30	363.4	0.	22.56	35.29	24.30	363.4	0.000			
10.	22.52	35.29			24.31	362.7	10.	22.52	35.29	24.31	362.7	0.037			
30.Δ	22.46	35.29			24.33	361.8	20.	22.49	35.29	24.32	362.3	0.074			
50.Δ	22.40	35.30			24.35	360.2	30.	22.46	35.29	24.33	361.8	0.110			
76.	22.10	35.30			24.44	353.2	50.	22.40	35.30	24.35	360.2	0.183			
106.	20.14	35.08			24.80	319.1	75.	22.13	35.30	24.43	353.7	0.273			
130.	18.75	34.92			25.04	297.1	100.	20.59	35.13	24.72	326.5	0.358			
160.	17.08	34.79			25.35	268.2	150.	17.64	34.83	25.25	277.8	0.511			
185.	15.58	34.65			25.59	245.9	200.	14.94	34.57	25.68	238.3	0.641			
211.	14.52	34.52			25.72	233.7	250.	12.96	34.37	25.94	214.2	0.755			
236.	13.45	34.40			25.86	221.6	300.	11.21	34.20	26.14	195.5	0.858			
266.	12.45	34.34			26.01	207.4	400.	9.21	34.11	26.41	170.6	1.043			
280.	12.03	34.27			26.04	205.0	500.	7.26	34.05	26.66	147.0	1.203			
315.	10.59	34.17			26.22	187.4	600.	5.67	34.08	26.89	124.6	1.340			
420.	9.04	34.11			26.44	168.2	700.	4.83	34.19	27.08	106.7	1.457			
525.	6.71	34.04			26.72	140.5	800.	4.32	34.32	27.23	92.5	1.558			
631.	5.35	34.11			26.95	118.7	1000.	3.69	34.46	27.41	75.9	1.728			
835.	4.21	34.36			27.28	88.3	1200.	3.28	34.52	27.50	68.3	1.874			
1047.	3.58	34.48			27.44	73.8	1500.	2.68	34.59	27.61	58.4	2.067			
1247.	3.20	34.53			27.51	67.1									
1558.	2.58	34.59			27.62	57.3									

TEMPERATURE ERROR TERM AT 400. METERS IS 0.13

CROMWELL DRY BULB 22.9		1, STATION WET BULB 20.2		41, 23-33N LAT, 157- 6W LONG, MAR. 6, 1964, 0600 G.C.T.		WIND SPEED 21, DIR. 08		BAR. 19		WEATHER 02		VIS. 8		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.			
0.	22.91	35.26			24.18	375.1	0.	22.91	35.26	24.18	375.1	0.000			
10.	22.90	35.24			24.16	376.7	10.	22.90	35.24	24.16	376.7	0.038			
30.Δ	22.70	35.25			24.23	371.2	20.	22.81	35.24	24.19	374.5	0.076			
50.	22.62	35.26			24.26	369.1	30.	22.70	35.25	24.23	371.2	0.114			
76.	21.77	35.20			24.45	351.6	50.	22.67	35.26	24.26	369.1	0.188			
106.	20.18	35.12			24.82	317.2	75.	21.82	35.20	24.44	352.5	0.279			
131.	19.40	35.02			24.95	305.8	100.	20.50	35.14	24.75	323.7	0.364			
161.	18.24	34.89			25.15	288.1	150.	18.68	34.94	25.07	294.9	0.520			
186.	17.28	34.81			25.32	272.2	200.	16.40	34.72	25.46	259.6	0.660			
211.	15.72	34.64			25.55	250.4	250.	14.34	34.49	25.74	233.6	0.784			
236.	14.84	34.54			25.67	239.7	300.	12.83	34.35	25.94	215.0	0.897			
266.	13.78	34.43			25.81	226.7	400.	9.91	34.14	26.31	180.2	1.097			
281.	13.30	34.39			25.88	220.5	500.	7.20	34.05	26.66	146.3	1.266			
317.	12.44	34.31			25.99	210.7	600.	5.57	34.13	26.94	119.5	1.396			
422.	9.22	34.10			26.40	171.9	700.	4.86	34.26	27.13	102.2	1.508			
518.	6.80	34.05			26.72	140.9	800.	4.55	34.36	27.24	91.8	1.606			
633.	5.24	34.18			27.02	112.1	1000.	3.98	34.49	27.40	77.8	1.777			
839.	4.52	34.40			27.26	89.1	1200.	3.49	34.53	27.48	70.5	1.928			
1048.	3.84	34.50			27.43	75.4	1500.	2.84	34.58	27.58	61.0	2.128			
1247.	3.40	34.53			27.49	69.4									
1557.	2.74	34.58			27.60	59.9									

CROMWELL DRY BULB 22.8		1, STATION WET BULB 20.7		42, 22- 4N LAT, 156-58W LONG, MAR. 6, 1964, 1600 G.C.T.		WIND SPEED 20, DIR. 07		BAR. 17		WEATHER 01		VIS. 8		CLOUD TYPE 8, COVER 1	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.			
0.	23.43	34.85			23.72	419.0	0.	23.43	34.85	23.72	419.0	0.000			
10.	23.42	34.85			23.72	419.2	10.	23.42	34.85	23.72	419.2	0.043			
50.Δ	23.42	34.92			23.77	415.6	20.	23.41	34.86	23.73	418.2	0.085			
74.	23.54	34.96			23.77	417.0	30.	23.40	34.88	23.75	417.3	0.127			
104.	23.54	35.14			23.90	405.2	50.	23.42	34.92	23.77	415.6	0.211			
128.	22.72	35.18			24.17	380.6	75.	23.55	34.97	23.77	416.9	0.316			
158.	21.08	35.12			24.58	342.2	100.	23.58	35.12	23.87	407.8	0.420			
182.	19.42	35.02			24.95	308.0	150.	21.57	35.15	24.47	353.1	0.611			
207.	18.24	34.90			25.15	288.9	200.	18.55	34.94	25.11	293.3	0.774			
231.	17.05	34.75			25.33	272.7	250.	15.34	34.56	25.58	249.0	0.911			
261.	14.30	34.45			25.72	235.7	300.	12.41	34.24	25.94	214.6	1.223			
275.	13.30	34.33			25.83	224.7	400.	9.19	34.09	26.40	171.7	1.223			
311.	12.18	34.23			25.98	211.5	500.	7.19	34.11	26.72	141.4	1.381			
415.	8.73	34.08			26.46	165.5	600.	5.85	34.22	26.97	116.8	1.511			
516.	6.98	34.13			26.76	137.5	700.	4.98	34.29	27.14	101.2	1.621			
622.	5.60	34.24			27.02	112.1	800.	4.46	34.35	27.24	91.7	1.719			
824.	4.38	34.36			27.26	90.2	1000.	3.87	34.45	27.39	78.7	1.891			
1031.	3.81	34.47			27.41	77.1	1200.	3.42	34.54	27.50	68.6	2.040			
1231.	3.35	34.55			27.52	67.3	1500.	2.78	34.58	27.59	59.9	2.236			
1541.	2.70	34.58			27.60	59.3									

4 FROM BT DATA

Table 2.--Original and derived oceanographic data for Townsend Cromwell cruise 2

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 23.9		2, STATION	1, 20-34N LAT, 157-16W LCNG, MAR. 17, 1964, 0600 G.C.T.					17, 1964, 0600 G.C.T.					
		WET BULB 21.1	WIND SPEED 17, DIR. 15	BAR. 18	WEATHER 02	VIS. 9	CLUD TYPE	COVER					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	24.11	34.88			23.54	435.9	0.	24.11	34.88	23.54	435.9	C.000	
9.	24.10	34.88			23.54	436.0	10.	24.10	34.88	23.54	436.0	0.044	
47.	23.86	34.91			23.64	428.6	20.	24.05	34.88	23.56	435.1	0.088	
73.	23.61	34.99			23.77	416.8	30.	24.00	34.89	23.58	433.4	0.132	
94.	23.41	35.04			23.87	404.4	50.	23.83	34.92	23.65	427.3	0.219	
119.	22.80	35.12			24.10	386.7	75.	23.60	34.99	23.78	416.2	0.325	
143.	20.79	35.07			24.62	337.7	100.	23.35	35.06	23.90	405.2	0.428	
166.	19.70	35.00			24.86	315.9	150.	20.44	35.05	24.71	330.1	0.614	
189.	18.18	34.87			25.15	289.0	200.	17.69	34.81	25.22	282.1	0.768	
214.	17.11	34.74			25.31	274.3	250.	14.89	34.51	25.64	243.4	0.901	
237.	15.82	34.62			25.52	254.9	300.	12.23	34.30	26.02	207.0	1.014	
261.	14.12	34.42			25.73	234.2	400.	8.79	34.12	26.48	163.5	1.201	
285.	12.91	34.35			25.93	215.9	500.	6.77	34.20	26.84	129.2	1.349	
380.	9.34	34.12			26.40	171.5	600.	5.69	34.32	27.08	107.1	1.468	
467.	7.32	34.16			26.73	139.3	700.	5.14	34.40	27.21	95.2	1.570	
561.	6.00	34.28			27.01	113.6	800.	4.81	34.46	27.29	88.1	1.663	
747.	5.01	34.43			27.24	92.0	1000.	4.20	34.51	27.40	78.4	1.832	
936.	4.38	34.50			27.37	80.9	1200.	3.65	34.55	27.49	70.5	1.982	
1126.	3.86	34.53			27.45	74.1							
1460.	3.03	34.58			27.57	62.8							

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL DRY BULB 23.3		2, STATION	2, 19-1N LAT, 156-59W LCNG, MAR. 17, 1964, 1700 G.C.T.					17, 1964, 1700 G.C.T.				
		WET BULB 20.3	WIND SPEED 16, DIR. 14	BAR. 17	WEATHER 00	VIS. 9	CLUD TYPE	COVER ?				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.44	35.07			23.88	403.4	0.	23.44	35.07	23.88	403.4	C.000
10.	23.42	35.08			23.89	402.6	10.	23.42	35.08	23.89	402.6	0.041
30.Δ	23.00	35.11			24.04	389.6	20.	23.36	35.10	23.93	399.8	0.082
50.	20.76	35.06			24.62	334.3	30.	23.00	35.11	24.04	389.6	0.121
74.	19.50	35.01			24.92	307.0	50.	20.76	35.06	24.62	334.3	0.194
98.	18.63	34.92			25.07	293.1	75.	19.46	35.01	24.93	306.3	0.275
122.	17.54	34.80			25.25	276.9	100.	18.53	34.91	25.09	291.7	0.350
147.	16.88	34.74			25.36	266.9	150.	16.75	34.72	25.38	265.2	0.490
173.	15.43	34.56			25.56	248.9	200.	13.53	34.37	25.82	224.4	0.614
197.	13.63	34.38			25.80	225.5	250.	11.95	34.24	26.03	204.7	0.722
220.	13.07	34.32			25.88	218.6	300.	10.40	34.17	26.25	184.0	0.820
246.	12.04	34.25			26.02	205.8	400.	7.57	34.16	26.70	141.8	0.984
271.	11.49	34.22			26.10	198.6	500.	6.07	34.21	26.94	119.1	1.116
296.	10.54	34.17			26.23	186.1	600.	5.39	34.34	27.13	101.8	1.228
392.	7.74	34.16			26.67	144.2	700.	4.91	34.43	27.25	90.4	1.325
493.	6.14	34.20			26.92	120.5	800.	4.56	34.48	27.34	82.9	1.413
591.	5.44	34.33			27.11	103.0	1000.	3.96	34.53	27.44	74.0	1.571
788.	4.60	34.48			27.33	83.6	1200.	3.42	34.57	27.52	66.6	1.714
987.	3.99	34.53			27.44	74.4						
1186.	3.51	34.56			27.51	68.1						
1415.	2.76	34.60			27.61	57.8						

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL DRY BULB 24.0		2, STATION	3, 17-30N LAT, 157-1W LCNG, MAR. 18, 1964, 0200 G.C.T.					18, 1964, 0200 G.C.T.				
		WET BULB 21.6	WIND SPEED 20, DIR. 19	BAR. 15	WEATHER 03	VIS. 9	CLUD TYPE	COVER 7				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	23.81	34.59			23.41	448.5	0.	23.81	34.59	23.41	448.4	C.000
10.	23.75	34.60			23.43	446.4	10.	23.75	34.60	23.43	446.4	C.046
47.	23.64	34.60			23.47	444.7	20.	23.70	34.60	23.45	445.4	0.090
71.	23.65	34.61			23.47	445.2	30.	23.67	34.60	23.46	444.7	0.135
93.	23.71	34.68			23.51	442.7	50.	23.64	34.60	23.47	444.9	0.225
116.	23.50	34.80			23.66	429.1	75.	23.67	34.62	23.47	445.2	0.337
139.	22.50	35.10			24.17	380.8	100.	23.70	34.70	23.53	441.0	0.449
164.	20.57	35.08			24.69	332.1	150.	21.70	35.12	24.41	358.1	0.650
187.	18.88	34.94			25.02	300.7	200.	17.77	34.80	25.19	285.1	0.812
209.	16.91	34.68			25.31	273.9	250.	12.58	34.28	25.94	213.7	0.938
234.	13.98	34.35			25.71	235.7	300.	9.91	34.20	26.36	173.7	1.036
257.	12.07	34.27			26.03	205.2	400.	7.94	34.30	26.75	136.9	1.192
279.	10.77	34.21			26.22	186.8	500.	7.11	34.42	26.97	117.8	1.321
373.	8.22	34.26			26.68	143.6	600.	6.09	34.45	27.13	102.9	1.432
467.	7.51	34.40			26.90	124.3	700.	5.57	34.49	27.23	94.1	1.532
561.	6.36	34.43			27.08	107.4	800.	5.14	34.52	27.30	87.7	1.624
748.	5.41	34.51			27.26	91.2	1000.	4.32	34.54	27.41	77.9	1.791
939.	4.50	34.53			27.38	80.2	1200.	3.77	34.56	27.49	71.1	1.942
1131.	4.02	34.56			27.46	73.9						
1424.	3.39	34.59			27.54	66.2						

Δ FROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 24.0		2, STATION WET BULB 21.4		4, 16-0N LAT, 157-0W LONG, MAR. 18, 1964, 1200 G.C.T. WIND SPEED 18, DIR. 06 BAR. 17 WEATHER 00				VIS. 8		CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.27	34.43			23.15	472.9	0.	24.27	34.43	23.15	472.9	0.000
8.	24.26	34.42			23.15	473.7	10.	24.25	34.42	23.15	473.6	0.048
30.Δ	24.08	34.42			23.20	469.4	20.	24.18	34.41	23.17	472.2	0.096
51.	23.86	34.46			23.30	461.1	30.	24.08	34.42	23.20	469.4	0.143
76.	23.65	34.57			23.44	448.3	50.	23.87	34.46	23.29	461.6	0.237
100.	23.82	35.04			23.75	420.1	75.	23.65	34.56	23.43	449.0	0.352
125.	21.37	35.01			24.42	356.5	100.	23.82	35.04	23.75	420.1	0.461
150.	20.28	35.07			24.76	324.9	150.	20.28	35.07	24.76	324.9	0.649
174.	18.87	34.97			25.05	297.9	200.	17.13	34.70	25.27	277.0	0.801
199.	17.26	34.72			25.26	278.7	250.	11.35	34.18	26.09	198.6	0.921
224.	13.88	34.33			25.71	234.9	300.	11.26	34.67	26.49	162.3	1.012
249.	11.42	34.18			26.08	199.8	400.	10.01	34.67	26.71	142.7	1.165
275.	10.52	34.30			26.34	175.8	500.	8.63	34.58	26.87	128.7	1.302
299.	11.25	34.66			26.48	162.7	600.	7.27	34.48	26.99	117.2	1.427
398.	10.04	34.67			26.71	143.1	700.	6.48	34.47	27.09	108.0	1.540
499.	8.64	34.58			26.87	128.8	800.	5.97	34.50	27.18	100.1	1.646
597.	7.30	34.48			26.99	117.5	1000.	5.07	34.54	27.32	87.4	1.835
798.	5.98	34.50			27.18	100.2	1200.	4.15	34.57	27.45	75.6	2.000
998.	5.08	34.54			27.32	87.6						
1133.	4.31	34.56			27.43	77.5						
1499.	3.35	34.58			27.54	67.0						

CROMWELL DRY BULB 24.8		2, STATION WET BULB 22.5		5, 14-30N LAT, 157-4W LONG, MAR. 18, 1964, 2100 G.C.T. WIND SPEED 14, DIR. 07 BAR. 16 WEATHER 02				VIS. 9		CLOUD TYPE 8, COVER 2		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.80	34.43			22.99	488.1	0.	24.80	34.43	22.99	488.1	0.000
9.	24.77	34.41			22.99	489.0	10.	24.77	34.41	22.99	489.1	0.050
49.	24.68	34.41			23.01	488.0	20.	24.74	34.40	22.99	489.3	0.099
76.	24.63	34.43			23.04	486.2	30.	24.72	34.40	22.99	489.1	0.148
100.	24.46	34.45			23.11	480.8	50.	24.68	34.41	23.01	488.0	0.247
123.	18.56	34.75			24.96	304.6	75.	24.63	34.43	23.04	486.3	0.369
149.	14.44	34.39			25.64	239.8	100.	24.46	34.45	23.11	480.8	0.491
175.	12.23	34.29			26.01	204.7	150.	14.32	34.38	23.66	238.1	0.672
190.	11.75	34.36			26.16	191.1	200.	11.19	34.35	26.26	181.9	0.778
220.	10.15	34.32			26.42	166.9	250.	9.78	34.41	26.55	154.3	0.863
248.	9.81	34.41			26.54	155.2	300.	9.13	34.48	26.71	139.8	0.937
276.	9.37	34.48			26.66	144.9	400.	8.55	34.59	26.89	124.7	1.071
298.	9.14	34.48			26.71	140.2	500.	7.77	34.58	27.00	115.6	1.192
397.	8.57	34.59			26.89	125.1	600.	6.85	34.55	27.11	105.9	1.304
496.	7.81	34.58			26.99	116.0	700.	6.14	34.54	27.20	97.8	1.407
595.	6.89	34.55			27.10	106.4	800.	5.56	34.55	27.27	90.8	1.502
792.	5.60	34.55			27.27	91.3	1000.	4.59	34.56	27.39	79.8	1.675
989.	4.64	34.56			27.39	80.3	1200.	3.84	34.57	27.49	71.2	1.828
1186.	3.89	34.57			27.48	72.0						
1484.	3.10	34.61			27.59	61.6						

CROMWELL DRY BULB 24.9		2, STATION WET BULB 22.7		6, 12-56N LAT, 157-0W LONG, MAR. 19, 1964, 0600 G.C.T. WIND SPEED 13, DIR. 07 BAR. 13 WEATHER 02				VIS. 8		CLOUD TYPE 4, COVER 6		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.70	34.35			22.96	491.0	0.	24.70	34.35	22.96	491.0	0.000
9.	24.70	34.35			22.96	491.3	10.	24.69	34.35	22.96	491.2	0.050
30.Δ	24.54	34.35			23.01	487.6	20.	24.62	34.35	22.98	489.6	0.099
48.	24.48	34.36			23.04	485.8	30.	24.54	34.35	23.01	487.6	0.149
75.Δ	24.44	34.36			23.05	485.7	50.	24.50	34.35	23.03	486.9	0.247
97.	23.45	34.67			23.57	436.3	75.	24.44	34.36	23.05	485.7	0.369
120.	18.04	34.67			25.03	297.9	100.	22.82	34.69	23.77	417.7	0.483
145.	14.38	34.40			25.66	237.8	150.	13.64	34.35	25.78	227.0	0.645
169.	11.42	34.20			26.10	196.4	200.	10.41	34.23	26.30	177.5	0.747
184.	10.80	34.20			26.21	185.9	250.	9.80	34.48	26.60	149.9	0.830
215.	10.15	34.28			26.38	169.7	300.	9.25	34.54	26.74	137.3	0.902
238.	9.73	34.41			26.56	153.7	400.	8.48	34.58	26.89	124.2	1.034
264.	9.87	34.54			26.63	146.9	500.	7.62	34.57	27.01	113.8	1.154
288.	9.40	34.54			26.71	139.8	600.	6.81	34.55	27.11	105.7	1.265
383.	8.62	34.58			26.87	126.3	700.	6.10	34.54	27.20	97.8	1.368
477.	7.82	34.58			26.99	115.8	800.	5.52	34.54	27.27	90.9	1.463
571.	7.04	34.55			27.08	108.1	1000.	4.65	34.56	27.39	80.3	1.637
758.	5.74	34.54			27.24	93.5	1200.	3.86	34.58	27.49	70.9	1.790
951.	4.85	34.56			27.37	82.6						
1140.	4.10	34.57			27.46	74.2						
1391.	3.19	34.61			27.58	62.1						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.12

Δ FROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA					
CROMWELL 2, STATION 7, 11-24N LAT, 156-56W LONG, MAR. 19, 1964, 1500 G.C.T.													
DRY BULB 24.8		WET BULB 22.8		WIND SPEED 14, DIR. 07		BAR. 11		WEATHER 00		VIS. 8		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	25.21	34.34			22.80	506.5	0.	25.21	34.34	22.80	506.5	0.000	
11.	25.18	34.35			22.82	505.3	10.	25.18	34.35	22.82	505.4	0.051	
49.	25.23	34.35			22.80	508.2	20.	25.23	34.34	22.80	507.7	0.102	
78.	24.59	34.53			23.13	477.9	30.	25.25	34.34	22.78	509.1	0.154	
100.	21.26	35.09			24.51	346.9	50.	25.25	34.35	22.80	508.8	0.256	
122.	18.73	34.89			25.02	298.5	75.	24.77	34.49	23.05	485.6	0.391	
149.	13.69	34.38			25.79	225.4	100.	21.26	35.09	24.51	346.9	0.486	
173.	12.09	34.61			26.29	178.6	150.	13.58	34.38	25.82	223.0	0.630	
188.	11.74	34.67			26.40	168.1	200.	11.54	34.70	26.47	162.2	0.727	
220.	11.28	34.74			26.54	155.5	250.	10.92	34.75	26.61	149.1	0.806	
246.	10.97	34.75			26.61	149.9	300.	10.21	34.72	26.71	140.4	0.879	
275.	10.58	34.74			26.67	144.5	400.	9.16	34.66	26.84	129.5	1.015	
297.	10.25	34.72			26.71	140.8	500.	8.18	34.61	26.96	119.3	1.140	
396.	9.20	34.66			26.84	129.9	600.	7.09	34.56	27.08	108.9	1.255	
487.	8.33	34.62			26.95	120.8	700.	6.32	34.54	27.17	100.7	1.361	
585.	7.22	34.56			27.06	110.2	800.	5.70	34.54	27.25	93.4	1.460	
778.	5.84	34.54			27.23	95.1	1000.	4.59	34.55	27.39	80.2	1.635	
967.	4.74	34.55			27.37	82.1	1200.	3.81	34.58	27.49	70.6	1.788	
1169.	3.96	34.58			27.48	72.0							
1463.	3.19	34.61			27.58	62.6							

CROMWELL 2, STATION 8, 11-34N LAT, 154-2W LONG, MAR. 20, 1964, 0900 G.C.T.													
DRY BULB 25.4		WET BULB 22.8		WIND SPEED 14, DIR. 09		BAR. 12		WEATHER 00		VIS. 9		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	25.43	34.32			22.72	514.3	0.	25.43	34.32	22.72	514.3	0.000	
10.	25.44	34.33			22.72	514.3	10.	25.44	34.33	22.72	514.3	0.052	
30. <sup>Δ</sup>	25.44	34.38			22.76	511.5	20.	25.45	34.35	22.74	513.3	0.104	
48.	25.38	34.44			22.82	506.1	30.	25.44	34.38	22.76	511.5	0.156	
74.	25.34	34.48			22.87	503.1	50.	25.48	34.44	22.79	509.0	0.258	
99.	19.70	34.65			24.59	338.9	75.	25.18	34.49	22.92	497.6	0.335	
120.	14.12	34.38			25.70	233.2	100.	19.41	34.64	24.66	332.4	0.490	
143.	11.71	34.33			26.14	191.4	150.	11.57	34.40	26.22	183.9	0.620	
168.	11.42	34.57			26.38	169.2	200.	10.64	34.60	26.55	154.3	0.705	
182.	10.75	34.55			26.49	159.3	250.	10.35	34.68	26.66	144.6	0.780	
212.	10.72	34.64			26.56	152.8	300.	9.88	34.68	26.75	137.3	0.852	
236.	10.42	34.66			26.63	146.7	400.	8.85	34.63	26.87	126.4	0.985	
263.	10.29	34.69			26.68	142.9	500.	7.89	34.59	26.99	116.4	1.107	
285.	10.04	34.69			26.72	139.2	600.	7.06	34.55	27.02	108.7	1.221	
377.	9.09	34.64			26.84	129.2	700.	6.32	34.55	27.17	100.1	1.326	
467.	8.19	34.61			26.96	119.0	800.	5.61	34.55	27.27	91.4	1.423	
559.	7.38	34.56			27.04	112.1	1000.	4.52	34.57	27.41	78.0	1.595	
743.	6.02	34.55			27.22	96.3	1200.	3.78	34.59	27.50	69.3	1.744	
927.	4.81	34.56			27.37	81.8							
1113.	4.16	34.59			27.47	73.2							
1395.	3.34	34.60			27.56	64.7							

TEMPERATURE ERROR TERM AT 150. METERS IS 0.12

CROMWELL 2, STATION 9, 13-1N LAT, 154-2W LONG, MAR. 20, 1964, 1800 G.C.T.													
DRY BULB 24.9		WET BULB 22.2		WIND SPEED 22, DIR. 10		BAR. 12		WEATHER 03		VIS. 8		CLOUD TYPE 6, COVER 7	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
1.	24.79	34.32			22.91	495.8	0.	24.79	34.32	22.91	495.7	0.000	
9.	24.80	34.32			22.91	496.4	10.	24.80	34.32	22.91	496.5	0.050	
30. <sup>Δ</sup>	24.80	34.33			22.92	496.5	20.	24.81	34.32	22.91	496.8	0.100	
52.	24.66	34.35			22.97	491.9	30.	24.80	34.33	22.92	496.5	0.151	
75. <sup>Δ</sup>	24.52	34.39			23.05	485.8	50.	24.68	34.35	22.97	492.4	0.250	
101.	21.78	34.70			24.07	388.8	75.	24.52	34.39	23.05	485.8	0.373	
126.	19.87	34.95			24.78	322.4	100.	21.90	34.69	24.03	393.1	0.484	
152.	16.15	34.55			25.39	264.6	150.	16.46	34.59	25.35	268.5	0.651	
176.	13.05	34.31			25.87	218.7	200.	11.70	34.40	26.19	187.9	0.766	
191.	12.17	34.37			26.09	198.1	250.	10.81	34.61	26.53	157.4	0.853	
224.	10.87	34.47			26.41	168.2	300.	10.26	34.65	26.65	146.2	0.929	
250.	10.81	34.61			26.53	157.4	400.	9.11	34.60	26.81	132.9	1.070	
276.	10.58	34.64			26.59	151.8	500.	7.93	34.55	26.95	120.1	1.198	
300.	10.26	34.65			26.65	146.2	600.	6.96	34.54	27.08	108.2	1.313	
399.	9.12	34.60			26.81	133.0	700.	6.20	34.54	27.18	99.1	1.418	
499.	7.94	34.55			26.95	120.2	800.	5.58	34.54	27.26	91.9	1.515	
598.	6.98	34.54			27.08	108.4	1000.	4.64	34.55	27.38	81.1	1.690	
795.	5.61	34.54			27.26	92.2	1200.	3.92	34.57	27.48	72.3	1.845	
993.	4.67	34.55			27.38	81.5							
1191.	3.98	34.58			27.48	72.4							
1489.	3.16	34.59			27.57	63.8							

<sup>Δ</sup> FROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA							
CROMWELL 2, STATION 10, 14-30N LAT, 153-58W LONG, MAR. 21, 1964, 0200 G.C.T.															
DRY BULB 25.0		WET BULB 22.5		WIND SPEED 16, DIR. 10				BAR. 11		WEATHER 02		VIS. 8		CLOUD TYPE 6, COVER 6	
DEPTH	TEMP.	SAL.	OXY.	P04-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.			
0.	24.72	34.40			22.99	488.0	0.	24.72	34.40	22.99	488.0	0.000			
9.	24.60	34.38			23.02	486.3	10.	24.60	34.38	23.02	486.3	0.050			
30.Δ	24.58	34.38			23.02	486.5	20.	24.57	34.38	23.02	486.1	0.099			
51.	24.53	34.38			23.04	485.9	30.	24.58	34.38	23.02	486.5	0.148			
78.	23.50	34.47			23.41	451.4	50.	24.54	34.38	23.03	486.2	0.246			
102.	21.56	35.05			24.40	357.8	75.	23.67	34.44	23.34	458.0	0.364			
126.	20.46	35.13			24.76	324.3	100.	21.72	35.00	24.32	365.5	0.468			
153.	18.80	34.94			25.05	297.6	150.	19.01	34.97	25.02	300.4	0.636			
178.	16.81	34.69			25.34	270.0	200.	14.69	34.43	25.62	243.4	0.773			
193.	15.30	34.50			25.54	251.1	250.	10.75	34.17	26.20	188.4	0.882			
226.	12.61	34.25			25.91	216.0	300.	9.27	34.28	26.53	156.9	0.969			
253.	10.55	34.17			26.23	185.4	400.	7.92	34.41	26.94	128.8	1.113			
282.	9.62	34.17			26.39	170.5	500.	7.01	34.46	27.01	113.5	1.235			
304.	9.20	34.31			26.57	153.8	600.	6.22	34.47	27.13	103.1	1.345			
405.	7.87	34.40			26.84	128.6	700.	5.63	34.49	27.21	95.3	1.445			
508.	6.95	34.46			27.02	112.5	800.	5.16	34.51	27.29	88.7	1.538			
609.	6.16	34.47			27.13	102.3	1000.	4.33	34.55	27.41	77.4	1.706			
811.	5.11	34.51			27.30	88.1	1200.	3.69	34.56	27.49	70.4	1.856			
1012.	4.29	34.55			27.42	76.9	1500.	2.93	34.58	27.58	61.3	2.057			
1215.	3.65	34.56			27.49	70.0									
1518.	2.89	34.58			27.58	61.5									

CROMWELL 2, STATION 11, 16-2N LAT, 154-2W LONG, MAR. 21, 1964, 1100 G.C.T.															
DRY BULB 24.2		WET BULB 22.6		WIND SPEED 14, DIR. 11				BAR. 15		WEATHER 01		VIS. 8		CLOUD TYPE 0, COVER 0	
DEPTH	TEMP.	SAL.	OXY.	P04-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.			
1.	24.02	34.84			23.54	436.3	0.	24.02	34.84	23.54	436.3	0.000			
11.	23.97	34.84			23.55	435.3	10.	23.97	34.84	23.55	435.4	0.044			
50.	23.84	34.86			23.60	431.7	20.	23.93	34.84	23.56	434.4	0.088			
75.Δ	23.83	34.88			23.62	431.0	30.	23.89	34.85	23.58	433.4	0.131			
102.	22.58	35.09			24.14	382.3	50.	23.84	34.86	23.60	431.7	0.219			
126.	20.48	35.05			24.69	330.6	75.	23.83	34.88	23.62	431.0	0.327			
152.	18.34	34.89			25.12	290.1	100.	22.71	35.08	24.09	386.9	0.430			
177.	16.25	34.66			25.45	259.6	150.	18.50	34.91	25.09	292.8	0.601			
193.	14.75	34.50			25.66	239.5	200.	14.07	34.43	25.75	230.8	0.733			
225.	11.95	34.24			26.03	204.4	250.	10.61	34.18	26.23	185.6	0.838			
250.	10.61	34.18			26.23	185.6	300.	9.21	34.28	26.54	156.1	0.925			
277.	9.84	34.21			26.38	171.0	400.	7.64	34.31	26.81	131.7	1.070			
303.	9.13	34.29			26.56	154.2	500.	6.89	34.41	26.99	115.0	1.194			
401.	7.63	34.31			26.81	131.7	600.	6.35	34.48	27.12	104.3	1.305			
505.	6.97	34.42			27.00	114.3	700.	5.80	34.50	27.20	96.8	1.407			
605.	6.33	34.48			27.12	103.9	800.	5.29	34.50	27.27	90.9	1.502			
805.	5.26	34.50			27.27	90.7	1000.	4.48	34.54	27.39	80.0	1.674			
1008.	4.45	34.54			27.39	79.6	1200.	3.84	34.57	27.48	71.5	1.828			
1209.	3.81	34.57			27.45	71.2	1500.	3.00	34.60	27.59	61.3	2.030			
1510.	2.98	34.60			27.59	61.0									

CROMWELL 2, STATION 12, 17-33N LAT, 154-2W LONG, MAR. 21, 1964, 2000 G.C.T.															
DRY BULB 22.9		WET BULB 20.9		WIND SPEED 14, DIR. 05				BAR. 16		WEATHER 02		VIS. 8		CLOUD TYPE 4, COVER 7	
DEPTH	TEMP.	SAL.	OXY.	P04-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.			
0.	23.45	34.34			23.32	456.4	0.	23.45	34.34	23.32	456.4	0.000			
10.	23.54	34.56			23.46	443.4	10.	23.54	34.56	23.46	443.4	0.046			
30.Δ	23.50	34.58			23.49	441.6	20.	23.54	34.60	23.50	440.5	0.090			
49.	23.45	34.60			23.52	439.5	30.	23.50	34.58	23.49	441.6	0.135			
76.	23.36	34.61			23.55	437.3	50.	23.45	34.60	23.52	439.4	0.224			
100.	23.38	34.67			23.59	434.5	75.	23.36	34.61	23.55	437.4	0.334			
122.	21.77	34.95			24.26	371.3	100.	23.38	34.67	23.59	434.5	0.444			
148.	20.59	35.05			24.66	333.9	150.	20.44	35.04	24.70	330.9	0.637			
173.	18.67	34.89			25.04	298.8	200.	16.54	34.65	25.37	267.7	0.787			
188.	17.66	34.79			25.21	282.5	250.	12.30	34.74	25.96	211.4	0.908			
219.	14.69	34.42			25.61	244.8	300.	10.42	34.76	26.40	170.5	1.005			
246.	12.61	34.26			25.92	215.6	400.	8.48	34.36	26.72	140.9	1.152			
273.	10.89	34.21			26.20	188.7	500.	6.69	34.33	26.96	118.3	1.272			
297.	10.48	34.35			26.38	171.9	600.	5.98	34.38	27.09	106.3	1.406			
395.	8.59	34.36			26.70	142.3	700.	5.43	34.44	27.20	96.3	1.508			
496.	6.73	34.33			26.95	118.9	800.	4.99	34.48	27.29	88.3	1.602			
594.	6.02	34.38			27.08	106.9	1000.	4.19	34.52	27.41	77.6	1.769			
791.	5.02	34.48			27.28	88.9									
991.	4.22	34.52			27.40	78.0									
1191.	3.68	34.57			27.50	69.5									
1493.	3.03	34.59			27.58	62.3									

FROM BT DATA



Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA						
CROMWELL		2, STATION 13, 19-5N LAT, 154-0W LONG, MAR. 22, 1964, 0500 G.C.T.												
DRY BULB	23.7	WET BULB	21.1	WIND SPEED	21, DIR. 09	BAR.	14	WEATHER	50	VIS.	7	CLOUD TYPE	6, COVER	8
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
1.	23.47	34.66			23.56	433.9	0.	23.47	34.66	23.56	433.9	0.000		
10.	23.46	34.66			23.56	434.0	10.	23.46	34.66	23.56	434.0	0.044		
30. Δ	23.38	34.69			23.61	430.4	20.	23.43	34.67	23.58	432.8	0.088		
50. Δ	23.28	34.78			23.71	421.9	30.	23.38	34.69	23.61	430.4	0.131		
75. Δ	23.27	34.79			23.72	421.8	50.	23.28	34.78	23.71	421.9	0.217		
99.	23.26	34.79			23.72	422.4	75.	23.27	34.79	23.72	421.8	0.323		
122.	23.00	34.92			23.89	406.8	100.	23.26	34.79	23.72	422.2	0.430		
146.	21.69	35.05			24.36	362.9	150.	21.37	35.03	24.43	356.1	0.626		
172.	19.78	34.89			24.75	326.1	200.	17.97	34.75	25.11	293.2	0.790		
186.	19.25	34.88			24.88	314.1	250.	12.18	34.23	25.98	209.9	0.916		
219.	15.71	34.51			25.46	259.9	300.	10.20	34.19	26.31	178.8	1.014		
244.	12.70	34.26			25.90	217.4	400.	7.50	34.10	26.66	145.4	1.178		
270.	10.96	34.19			26.17	191.4	500.	6.29	34.25	26.94	118.9	1.311		
293.	10.41	34.20			26.28	181.6	600.	5.66	34.34	27.10	105.1	1.424		
392.	7.64	34.09			26.63	147.9	700.	5.26	34.42	27.21	95.5	1.526		
490.	6.38	34.24			26.92	120.7	800.	4.96	34.48	27.29	88.5	1.619		
588.	5.71	34.33			27.08	106.5	1000.	4.27	34.53	27.49	77.7	1.787		
784.	5.02	34.47			27.27	89.6	1200.	3.67	34.57	27.50	69.5	1.936		
980.	4.34	34.53			27.40	78.7								
1176.	3.73	34.56			27.49	70.7								
1475.	3.01	34.60			27.59	61.2								

TEMPERATURE ERROR TERM AT 200. METERS IS 0.11

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA						
CROMWELL		2, STATION 14, 20-31N LAT, 154-0W LONG, MAR. 23, 1964, 0300 G.C.T.												
DRY BULB	23.5	WET BULB	20.4	WIND SPEED	17, DIR. 10	BAR.	17	WEATHER	03	VIS.	9	CLOUD TYPE	4, COVER	6
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	23.54	34.68			23.56	434.4	0.	23.54	34.68	23.56	434.4	0.000		
10.	23.55	34.69			23.56	434.3	10.	23.55	34.69	23.56	434.3	0.044		
30. Δ	23.55	34.69			23.56	435.1	20.	23.55	34.69	23.56	434.6	0.088		
50. Δ	23.55	34.69			23.56	435.8	30.	23.55	34.69	23.56	435.1	0.132		
75. Δ	23.54	34.69			23.56	436.5	50.	23.55	34.69	23.56	435.8	0.220		
102.	23.49	34.69			23.58	436.2	75.	23.54	34.69	23.56	436.5	0.329		
125.	20.36	34.62			24.40	358.6	100.	23.56	34.69	23.56	438.0	0.440		
151.	16.52	34.84			25.52	251.7	150.	16.66	34.84	25.49	255.0	0.614		
177.	14.36	34.34			25.62	242.6	200.	12.57	34.22	25.90	216.5	0.733		
192.	13.00	34.24			25.82	223.3	250.	10.90	34.18	26.17	190.8	0.836		
226.	11.65	34.22			26.07	200.4	300.	8.77	34.12	26.49	160.7	0.924		
266.	10.23	34.15			26.27	181.7	400.	6.59	34.06	26.76	135.6	1.074		
280.	9.28	34.14			26.42	167.2	500.	5.61	34.14	26.94	118.1	1.202		
304.	8.72	34.12			26.49	160.3	600.	5.10	34.28	27.12	102.5	1.313		
404.	6.52	34.06			26.76	134.7	700.	4.84	34.39	27.23	92.4	1.412		
506.	5.58	34.15			26.96	117.1	800.	4.65	34.46	27.31	85.6	1.502		
607.	5.07	34.29			27.13	101.6	1000.	4.01	34.52	27.42	75.6	1.665		
809.	4.64	34.47			27.32	85.1	1200.	3.55	34.55	27.49	69.5	1.812		
1010.	3.98	34.52			27.43	75.3	1500.	2.96	34.58	27.58	62.2	2.012		
1211.	3.53	34.55			27.50	69.3								
1512.	2.94	34.58			27.58	62.0								

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA						
CROMWELL		2, STATION 15, 22-0N LAT, 153-58W LONG, MAR. 23, 1964, 1200 G.C.T.												
DRY BULB	21.0	WET BULB	19.8	WIND SPEED	16, DIR. 10	BAR.	20	WEATHER	25	VIS.	9	CLOUD TYPE	, COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
1.	23.39	34.84			23.72	418.7	0.	23.39	34.84	23.72	418.7	0.000		
10.	23.40	34.85			23.72	418.6	10.	23.40	34.85	23.72	418.6	0.043		
94.	23.36	34.89			23.77	417.8	20.	23.42	34.86	23.73	418.6	0.085		
116.	23.22	34.86			23.78	416.9	30.	23.44	34.87	23.73	418.6	0.127		
140.	23.12	35.08			23.98	399.2	50.	23.44	34.89	23.74	419.5	0.211		
164.	22.16	35.14			24.30	369.6	75.	23.41	34.90	23.76	418.2	0.317		
177.	20.93	35.14			24.64	337.5	100.	23.32	34.87	23.76	418.3	0.422		
208.	18.84	34.94			25.03	300.5	150.	22.88	35.12	24.08	390.0	0.626		
233.	17.71	34.82			25.22	283.0	200.	19.29	35.00	24.97	306.6	0.801		
257.	15.88	34.61			25.49	257.5	250.	16.43	34.68	25.42	264.8	0.945		
281.	14.39	34.41			25.67	241.0	300.	13.27	34.31	25.82	226.3	1.069		
374.	9.68	34.13			26.35	176.2	400.	8.84	34.12	26.47	164.3	1.266		
468.	7.17	34.13			26.73	139.4	500.	6.43	34.13	26.83	129.7	1.415		
551.	5.47	34.14			26.96	117.0	600.	5.12	34.20	27.05	108.6	1.535		
750.	4.94	34.42			27.24	91.9	700.	4.85	34.34	27.19	95.9	1.638		
938.	4.20	34.48			27.37	80.2	800.	4.74	34.45	27.29	88.0	1.731		
1130.	3.75	34.52			27.45	73.5	1000.	4.04	34.49	27.40	77.8	1.899		
1423.	3.08	34.57			27.56	63.9	1200.	3.52	34.54	27.49	70.1	2.049		

TEMPERATURE ERROR TERM AT 600. METERS IS 0.16

TEMPERATURE ERROR TERM AT 700. METERS IS 0.17

FROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA					
CROMWELL 2, STATION 16, 23-31N LAT, 154-2W LONG, MAR. 23, 1964, 2100 G.C.T.													
DRY BULB	22.3	WET BULB	19.4	WIND SPEED	16, DIR. 09	BAR.	21	WEATHER	01	VIS.	9	CLOUD TYPE 8,	COVER 2
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	22.82	35.12			24.10	382.8	0.	22.82	35.12	24.10	382.8	0.000	
10.	22.83	35.12			24.09	383.4	10.	22.83	35.12	24.09	383.4	0.039	
30. <sup>Δ</sup>	22.80	35.12			24.10	383.4	20.	22.82	35.12	24.10	383.6	0.078	
50. <sup>Δ</sup>	22.76	35.13			24.12	382.3	30.	22.80	35.12	24.10	383.4	0.116	
75. <sup>Δ</sup>	22.56	35.19			24.22	373.5	50.	22.76	35.13	24.12	382.3	0.193	
102.	22.43	35.22			24.28	368.8	75.	22.56	35.19	24.22	373.5	0.299	
125.	20.86	35.09			24.62	337.4	100.	22.47	35.22	24.27	369.7	0.382	
151.	19.59	35.02			24.90	311.2	150.	19.63	35.02	24.89	312.0	0.554	
177.	18.88	34.97			25.05	298.2	200.	17.67	34.81	25.23	281.5	0.704	
193.	18.10	34.86			25.16	288.0	250.	14.48	34.46	25.69	238.5	0.835	
224.	16.10	34.65			25.47	258.4	300.	12.36	34.26	25.97	212.1	0.948	
251.	14.42	34.45			25.69	237.9	400.	9.02	34.09	26.42	169.3	1.141	
280.	13.15	34.30			25.84	224.1	500.	6.56	34.06	26.76	136.9	1.295	
304.	12.21	34.26			25.99	209.7	600.	5.37	34.17	27.00	114.1	1.422	
405.	8.88	34.08			26.44	167.6	700.	4.78	34.29	27.16	99.3	1.530	
506.	6.45	34.06			26.77	135.2	800.	4.45	34.38	27.27	89.2	1.625	
606.	5.33	34.18			27.01	113.0	1000.	3.91	34.50	27.42	76.1	1.792	
808.	4.44	34.39			27.28	88.6	1200.	3.42	34.56	27.51	67.4	1.938	
1009.	3.89	34.50			27.42	75.6	1500.	2.83	34.60	27.60	59.1	2.130	
1211.	3.40	34.56			27.52	67.0							
1510.	2.81	34.60			27.60	59.0							

CROMWELL 2, STATION 17, 23-32N LAT, 151-4W LONG, MAR. 24, 1964, 1300 G.C.T.													
DRY BULB	20.7	WET BULB	19.9	WIND SPEED	16, DIR. 09	BAR.	19	WEATHER	18	VIS.	9	CLOUD TYPE 8,	COVER 5
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	22.42	35.14			24.23	370.4	0.	22.42	35.14	24.23	370.4	0.000	
10.	22.45	35.17			24.24	369.5	10.	22.45	35.17	24.24	369.5	0.038	
30. <sup>Δ</sup>	22.44	35.18			24.25	369.2	20.	22.45	35.18	24.25	369.2	0.075	
50. <sup>Δ</sup>	22.40	35.18			24.26	368.9	30.	22.44	35.18	24.25	369.2	0.112	
75. <sup>Δ</sup>	22.28	35.18			24.30	366.6	50.	22.40	35.18	24.26	368.9	0.187	
99.	21.70	35.17			24.45	352.7	75.	22.28	35.18	24.30	366.6	0.279	
123.	20.07	35.03			24.79	321.5	100.	21.64	35.16	24.46	351.4	0.370	
147.	19.18	34.96			24.96	305.2	150.	19.04	34.95	24.99	303.0	0.534	
173.	17.95	34.83			25.17	285.9	200.	16.64	34.68	25.38	267.2	0.678	
187.	17.33	34.76			25.27	277.0	250.	13.41	34.32	25.81	226.7	0.803	
220.	15.42	34.55			25.55	250.8	300.	11.71	34.17	26.02	206.7	0.912	
247.	13.56	34.34			25.79	228.4	400.	8.70	34.06	26.45	166.4	1.100	
273.	12.49	34.23			25.92	216.4	500.	6.75	34.04	26.72	140.3	1.255	
297.	11.81	34.18			26.01	207.9	600.	5.75	34.15	26.93	120.8	1.387	
395.	8.82	34.06			26.43	168.0	700.	4.93	34.25	27.11	103.5	1.500	
495.	6.81	34.04			26.71	141.4	800.	4.33	34.36	27.26	89.5	1.598	
594.	5.81	34.14			26.92	121.9	1000.	3.80	34.51	27.44	73.4	1.763	
792.	4.36	34.35			27.25	90.4	1200.	3.34	34.58	27.54	64.6	1.902	
991.	3.82	34.51			27.44	73.9							
1190.	3.36	34.56			27.52	66.3							
1492.	2.79	34.59			27.60	59.4							

CROMWELL 2, STATION 18, 22-4N LAT, 150-57W LONG, MAR. 24, 1964, 2200 G.C.T.													
DRY BULB	22.4	WET BULB	19.3	WIND SPEED	12, DIR. 13	BAR.	19	WEATHER	02	VIS.	9	CLOUD TYPE 8,	COVER 4
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	22.68	34.91			23.98	394.1	0.	22.68	34.91	23.98	394.1	0.000	
10.	22.63	34.91			23.99	393.1	10.	22.63	34.91	23.99	393.1	0.040	
101.	22.58	35.05			24.11	385.1	20.	22.61	34.92	24.01	392.0	0.040	
124.	22.55	35.06			24.13	384.4	30.	22.59	34.94	24.02	390.9	0.119	
150.	22.21	35.12			24.27	371.9	50.	22.57	34.97	24.05	389.0	0.198	
174.	21.56	35.26			24.56	345.3	75.	22.56	35.01	24.08	386.9	0.295	
190.	20.58	35.11			24.71	331.1	100.	22.55	35.05	24.11	385.2	0.393	
222.	19.27	35.06			25.02	302.8	150.	22.21	35.12	24.27	371.9	0.583	
254.	17.29	34.75			25.27	279.0	200.	20.16	35.09	24.81	322.2	0.758	
282.	15.17	34.47			25.55	253.1	250.	17.57	34.80	25.24	282.0	0.911	
306.	12.94	34.28			25.87	222.2	300.	13.49	34.32	25.79	229.7	1.040	
407.	9.26	34.13			26.42	170.0	400.	9.35	34.12	26.40	171.9	1.242	
510.	6.86	34.12			26.77	136.4	500.	7.03	34.11	26.74	139.2	1.399	
611.	5.80	34.28			27.03	111.6	600.	5.88	34.26	27.01	114.0	1.527	
814.	4.76	34.42			27.26	90.3	700.	5.23	34.36	27.16	99.6	1.635	
1017.	4.05	34.52			27.42	76.2	800.	4.80	34.41	27.26	91.1	1.731	
1219.	3.58	34.55			27.49	69.9	1000.	4.10	34.51	27.41	77.1	1.902	
1401.	3.07	34.59			27.57	62.2	1200.	3.62	34.55	27.49	70.4	2.051	

<sup>Δ</sup>FROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA					
CROMWELL DRY BULB 22.1	2, STATION WET BULB 19.8	19, 20-28N LAT, 151- WIND SPEED 11, DIR. 12	OW LONG, MAR. 25, 1964, 0800 G.C.T.					BAR. 19	WEATHER 18	VIS. 9	CLOUD TYPE 9, COVER 5		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.19	34.51			23.53	436.9	0.	23.19	34.51	23.53	436.9	C.000	
10.	23.18	34.51			23.53	437.0	10.	23.18	34.51	23.53	437.0	0.045	
48.	22.61	34.94			24.02	391.8	20.	23.06	34.61	23.64	427.1	0.088	
75.	22.40	35.05			24.16	379.2	30.	22.91	34.71	23.76	415.7	0.130	
100.	21.36	35.11			24.24	373.1	50.	22.59	34.95	24.03	390.5	C.212	
125.	21.36	35.19			24.56	343.3	75.	22.40	35.05	24.16	379.2	0.309	
150.	20.03	35.11			24.86	315.7	100.	22.30	35.11	24.24	373.1	0.403	
174.	18.81	35.01			25.10	293.5	150.	20.03	35.11	24.86	315.7	0.577	
190.	17.95	34.89			25.22	282.2	200.	17.36	34.80	25.29	275.4	0.726	
224.	15.80	34.57			25.48	257.7	250.	13.90	34.35	25.73	234.3	0.854	
249.	13.97	34.36			25.72	235.2	300.	11.07	34.17	26.14	195.4	0.963	
275.	12.29	34.22			25.95	213.4	400.	8.31	34.15	26.58	153.6	1.139	
300.	11.07	34.17			26.14	195.4	500.	6.99	34.22	26.83	130.7	1.232	
400.	8.31	34.15			26.58	153.6	600.	6.07	34.31	27.02	112.7	1.405	
500.	6.99	34.22			26.83	130.7	700.	5.29	34.37	27.17	99.2	1.512	
597.	6.10	34.31			27.02	113.2	800.	4.68	34.42	27.27	89.2	1.608	
800.	4.68	34.42			27.27	89.2	1000.	4.09	34.51	27.41	77.2	1.776	
999.	4.09	34.51			27.41	77.2	1200.	3.53	34.57	27.51	67.6	1.923	
1199.	3.51	34.57			27.52	67.5	1500.	2.87	34.61	27.61	58.9	2.115	
1503.	2.86	34.61			27.61	58.8							

CROMWELL DRY BULB 22.5	2, STATION WET BULB 19.7	20, 19- ON LAT, 151- WIND SPEED 07, DIR. 15	OW LONG, MAR. 25, 1964, 1800 G.C.T.					BAR. 16	WEATHER 03	VIS. 8	CLOUD TYPE 4, COVER 6		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.73	34.40			23.29	459.9	0.	23.73	34.40	23.29	459.9	0.000	
10.	23.73	34.41			23.30	459.5	10.	23.73	34.41	23.30	459.5	0.047	
30.Δ	23.73	34.41			23.30	460.3	20.	23.73	34.41	23.30	459.8	0.093	
50.Δ	23.72	34.41			23.30	460.8	30.	23.73	34.41	23.30	460.3	0.139	
75.Δ	23.71	34.41			23.30	461.5	50.	23.72	34.41	23.30	460.8	0.232	
98.	23.71	34.41			23.30	462.3	75.	23.71	34.41	23.30	461.5	0.348	
121.	22.80	34.49			23.63	432.2	100.	23.73	34.42	23.30	462.6	0.465	
145.	17.28	34.50			25.09	293.4	150.	16.50	34.46	25.24	278.6	0.652	
170.	14.17	34.30			25.63	241.5	200.	11.92	34.23	26.03	203.5	0.773	
184.	12.98	34.25			25.84	222.0	250.	10.33	34.29	26.36	172.5	0.868	
216.	11.16	34.25			26.18	189.2	300.	9.51	34.38	26.57	153.5	0.950	
242.	10.57	34.31			26.33	175.2	400.	7.32	34.30	26.84	127.9	1.092	
268.	9.88	34.27			26.42	167.1	500.	7.06	34.44	26.99	115.3	1.215	
291.	9.76	34.38			26.53	157.5	600.	5.73	34.41	27.15	100.6	1.324	
346.	8.02	34.30			26.74	137.2	700.	4.44	34.40	27.28	87.0	1.419	
389.	7.47	34.31			26.83	129.1							
461.	6.84	34.32			26.93	120.6							
487.	6.93	34.41			26.98	115.6							
585.	6.09	34.43			27.11	104.0							
589.	5.92	34.42			27.13	102.6							
790.	4.93	34.51			27.32	85.6							

TEMPERATURE ERROR TERM AT 600. METERS IS 0.16  
 TEMPERATURE ERROR TERM AT 700. METERS IS 0.60

CROMWELL DRY BULB 22.2	2, STATION WET BULB 20.4	21, 17-30N LAT, 151- WIND SPEED 14, DIR. 15	OW LONG, MAR. 26, 1964, 0300 G.C.T.					BAR. 13	WEATHER 02	VIS. 8	CLOUD TYPE 5, COVER 6		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
1.	23.79	34.46			23.32	457.3	0.	23.79	34.46	23.32	457.2	0.000	
11.	23.63	34.45			23.36	453.9	10.	23.64	34.45	23.35	454.1	0.046	
30.Δ	23.48	34.43			23.38	451.9	20.	23.54	34.44	23.37	452.5	0.092	
50.Δ	23.42	34.42			23.39	451.7	30.	23.48	34.43	23.38	451.9	0.138	
75.Δ	23.40	34.42			23.40	452.1	50.	23.42	34.42	23.39	451.7	0.229	
99.	23.29	34.42			23.43	449.9	75.	23.40	34.42	23.40	452.1	0.342	
124.	21.41	34.71			24.18	379.2	100.	23.23	34.43	23.46	447.6	0.456	
158.	18.73	34.68			24.86	314.9	150.	19.54	34.73	24.70	330.7	0.652	
173.	16.30	34.49			25.31	272.9	200.	14.02	34.35	25.70	235.6	0.795	
188.	14.98	34.42			25.55	250.0	250.	10.89	34.19	26.18	190.0	0.902	
220.	12.57	34.24			25.91	215.8	300.	9.20	34.13	26.43	167.0	0.992	
246.	10.97	34.17			26.15	192.5	400.	6.65	34.14	26.81	130.4	1.142	
272.	10.52	34.26			26.30	178.6	500.	6.41	34.37	27.02	111.7	1.264	
296.	9.36	34.14			26.41	168.8	600.	5.85	34.43	27.15	100.7	1.371	
395.	6.69	34.13			26.80	131.7	700.	5.28	34.48	27.25	91.5	1.469	
493.	6.44	34.36			27.01	112.7	800.	4.78	34.50	27.33	84.2	1.557	
590.	5.91	34.43			27.14	101.7	1000.	4.08	34.55	27.44	74.0	1.717	
787.	4.83	34.50			27.32	85.0	1200.	3.49	34.58	27.52	66.6	1.860	
984.	4.13	34.55			27.44	74.6							
1180.	3.55	34.57			27.51	67.8							
1477.	2.86	34.60			27.60	59.4							

TEMPERATURE ERROR TERM AT 150. METERS IS 0.11

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA					
CROMWELL 2, STATION 22, 16- ON LAT, 150-59W LONG, MAR. 26, 1964, 1200 G.C.T.													
DRY BULB 23.5		WET BULB 21.1		WIND SPEED 14, DIR. 13		BAR. 14		WEATHER 00		VIS. 8		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	24.07	34.36			23.16	472.3	0.	24.07	34.36	23.16	472.3	0.000	
10.	24.08	34.37			23.16	472.3	10.	24.08	34.37	23.16	472.3	0.048	
48.	24.01	34.38			23.19	471.0	20.	24.08	34.38	23.17	472.3	0.096	
75.Δ	23.82	34.38			23.25	466.7	30.	24.07	34.38	23.17	472.1	0.143	
100.	21.49	34.67			24.13	383.3	50.	24.04	34.37	23.18	472.3	0.238	
123.	19.28	34.84			24.85	315.6	75.	23.82	34.38	23.25	466.7	0.357	
148.	18.12	34.80			25.11	291.3	100.	21.49	34.67	24.13	383.3	0.464	
175.	15.73	34.53			25.47	257.6	150.	17.99	34.79	25.13	289.3	0.633	
189.	13.93	34.35			25.72	233.5	200.	12.88	34.29	25.89	217.3	0.761	
220.	11.53	34.28			26.14	195.7	250.	10.41	34.30	26.35	173.6	0.859	
246.	10.50	34.29			26.33	175.5	300.	9.88	34.45	26.56	154.4	0.942	
275.	10.07	34.36			26.46	163.7	400.	8.00	34.44	26.86	127.3	1.084	
299.	9.90	34.45			26.56	154.8	500.	7.39	34.51	27.00	115.1	1.207	
397.	8.02	34.44			26.85	127.7	600.	6.20	34.47	27.13	102.8	1.317	
496.	7.44	34.51			26.99	115.7	700.	5.49	34.48	27.23	93.9	1.416	
597.	6.23	34.47			27.13	103.1	800.	5.04	34.51	27.30	87.0	1.508	
796.	5.06	34.51			27.30	87.3	1000.	4.34	34.56	27.42	76.6	1.673	
995.	4.36	34.56			27.42	76.8	1200.	3.74	34.58	27.50	69.3	1.821	
1193.	3.76	34.57			27.49	70.4							
1493.	3.01	34.61			27.59	60.6							

CROMWELL 2, STATION 23, 14-28N LAT, 151- 0W LONG, MAR. 26, 1964, 2100 G.C.T.													
DRY BULB 24.3		WET BULB 21.8		WIND SPEED 13, DIR. 07		BAR. 15		WEATHER 01		VIS. 9		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	24.08	34.47			23.24	464.7	0.	24.08	34.47	23.24	464.7	0.000	
11.	23.97	34.47			23.27	462.0	10.	23.98	34.47	23.27	462.2	0.047	
30.Δ	23.90	34.47			23.29	460.7	20.	23.93	34.47	23.28	461.2	0.094	
50.Δ	23.84	34.48			23.32	459.1	30.	23.90	34.47	23.29	460.7	0.140	
75.Δ	23.82	34.48			23.32	459.5	50.	23.84	34.48	23.32	459.1	0.233	
100.	23.57	34.59			23.48	445.5	75.	23.82	34.48	23.32	459.5	0.348	
124.	20.47	34.93			24.60	338.9	100.	23.57	34.59	23.48	445.5	0.462	
149.	17.26	34.69			25.23	279.3	150.	17.12	34.67	25.26	277.2	0.645	
174.	13.94	34.38			25.74	231.1	200.	11.94	34.62	26.17	190.2	0.762	
190.	12.47	34.40			26.05	201.5	250.	11.15	34.62	26.47	162.4	0.851	
222.	11.37	34.50			26.34	174.7	300.	10.41	34.64	26.62	149.6	0.930	
249.	11.16	34.62			26.47	162.8	400.	9.02	34.59	26.81	132.3	1.072	
275.	10.74	34.65			26.57	153.8	500.	8.19	34.57	26.93	122.6	1.201	
299.	10.43	34.64			26.62	149.8	600.	7.21	34.54	27.05	111.8	1.319	
398.	9.04	34.59			26.81	132.5	700.	6.41	34.53	27.15	102.6	1.427	
498.	8.21	34.57			26.93	122.8	800.	5.75	34.53	27.23	94.9	1.527	
598.	7.23	34.54			27.05	112.0	1000.	4.75	34.54	27.36	83.3	1.708	
793.	5.79	34.53			27.23	95.3	1200.	4.06	34.57	27.46	74.3	1.867	
998.	4.76	34.54			27.36	83.4							
1198.	4.14	34.58			27.46	74.5							
1497.	3.29	34.60			27.56	64.8							

CROMWELL 2, STATION 24, 12-59N LAT, 151- 1W LONG, MAR. 27, 1964, 0500 G.C.T.													
DRY BULB 24.3		WET BULB 22.2		WIND SPEED 15, DIR. 07		BAR. 14		WEATHER 01		VIS. 9		CLOUD TYPE 8, CGVR 3	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	24.64	34.38			23.00	487.1	0.	24.64	34.38	23.00	487.1	0.000	
10.	24.63	34.37			23.00	487.9	10.	24.63	34.37	23.00	487.9	0.050	
30.Δ	24.58	34.36			23.01	488.0	20.	24.66	34.36	22.99	489.6	0.099	
48.	23.84	34.36			23.23	467.7	30.	24.58	34.36	23.01	488.0	0.148	
75.	23.64	34.36			23.28	463.1	50.	23.68	34.35	23.21	469.3	0.245	
99.	20.76	34.99			24.57	341.1	75.	23.64	34.36	23.28	463.1	0.362	
123.	17.88	34.69			25.08	292.8	100.	20.64	34.99	24.60	338.3	0.463	
148.	15.22	34.46			25.53	251.0	150.	14.96	34.44	25.57	247.0	0.610	
174.	12.33	34.36			26.05	201.4	200.	11.41	34.60	26.41	167.3	0.715	
190.	11.56	34.54			26.33	174.5	250.	10.81	34.68	26.58	152.2	0.795	
221.	11.32	34.67			26.48	161.3	300.	10.35	34.68	26.66	145.5	0.870	
247.	10.85	34.68			26.57	152.9	400.	9.10	34.62	26.82	131.3	1.010	
274.	10.57	34.69			26.63	147.9	500.	8.15	34.58	26.94	121.2	1.137	
299.	10.36	34.68			26.66	145.6	600.	7.00	34.53	27.07	109.5	1.254	
399.	9.11	34.62			26.82	131.4	700.	6.14	34.52	27.18	99.6	1.360	
500.	8.15	34.58			26.94	121.2	800.	5.49	34.53	27.27	91.4	1.456	
598.	7.02	34.53			27.07	109.7	1000.	4.56	34.54	27.38	80.8	1.630	
796.	5.51	34.53			27.26	91.6	1200.	3.87	34.56	27.48	72.2	1.785	
996.	4.57	34.54			27.38	81.0							
1195.	3.93	34.57			27.47	72.6							
1496.	3.09	34.60			27.58	62.3							

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA						DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 25.3		2, STATION WET BULB 22.7		25, 11-30N LAT, 151- WIND SPEED 19, DIR. 08		0W LONG, MAR. 27, 1964, BAR. 12 WEATHER 03			1400 G.C.T.		VIS. 8		CLOUD TYPE 6, COVER 7	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	25.90	34.71			22.87	500.1	0.	25.90	34.71	22.87	500.1	0.000		
10.	25.91	34.71			22.86	500.8	10.	25.91	34.71	22.86	500.8	0.051		
30. Δ	25.92	34.70			22.85	502.6	20.	25.92	34.70	22.86	501.8	0.101		
50.	25.92	34.71			22.86	502.7	30.	25.92	34.70	22.85	502.6	0.152		
75. Δ	24.40	34.75			23.35	456.5	50.	25.92	34.71	22.86	502.7	0.253		
101.	15.80	34.42			25.37	264.9	75.	24.40	34.75	23.35	456.5	0.374		
125.	12.62	34.31			25.95	209.2	100.	16.15	34.43	25.30	271.4	0.466		
150.	11.95	34.75			26.42	165.1	150.	11.95	34.75	26.42	165.1	0.576		
176.	11.57	34.76			26.50	158.1	200.	11.09	34.76	26.59	150.4	0.655		
191.	11.23	34.76			26.57	152.4	250.	10.56	34.75	26.68	142.8	0.729		
223.	10.83	34.75			26.63	146.9	300.	10.03	34.72	26.75	137.1	0.800		
250.	10.56	34.75			26.68	142.8	400.	9.23	34.68	26.83	131.3	0.935		
276.	10.28	34.73			26.71	140.1	500.	8.49	34.64	26.94	122.0	1.063		
300.	10.03	34.72			26.75	137.1	600.	7.54	34.59	27.04	112.9	1.182		
401.	9.28	34.66			26.83	131.3	700.	6.67	34.57	27.14	103.5	1.291		
501.	8.48	34.64			26.94	121.9	800.	5.91	34.56	27.24	94.9	1.391		
601.	7.53	34.59			27.04	112.8	1000.	4.82	34.55	27.36	83.5	1.572		
799.	5.92	34.56			27.24	95.0	1200.	4.05	34.57	27.46	74.1	1.731		
998.	4.83	34.55			27.36	83.6								
1198.	4.11	34.58			27.46	74.1								
1497.	3.28	34.61			27.57	63.9								

CROMWELL DRY BULB 26.4		2, STATION WET BULB 23.6		26, 10- 3N LAT, 147-58W LONG, WIND SPEED 15, DIR. 11		MAR. 29, 1964, 0000 G.C.T. BAR. 11 WEATHER 02			VIS. 8		CLOUD TYPE 8, COVER 7	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.69	34.83			22.71	515.1	0.	26.69	34.83	22.71	515.1	0.000
11.	26.67	34.84			22.72	514.3	10.	26.67	34.84	22.72	514.4	0.052
30. Δ	26.58	34.85			22.76	511.6	20.	26.63	34.85	22.74	513.1	0.104
50. Δ	26.44	34.85			22.80	508.2	30.	26.58	34.85	22.76	511.6	0.156
75. Δ	26.20	34.85			22.88	502.0	50.	26.44	34.85	22.80	508.2	0.258
102.	13.98	34.41			25.75	227.7	75.	26.20	34.85	22.88	502.0	0.386
124.	12.80	34.60			26.14	191.4	100.	14.89	34.44	25.58	244.3	0.480
136.	12.04	34.70			26.37	170.1	150.	11.75	34.76	26.47	161.0	0.592
146.	11.84	34.75			26.44	163.0	200.	10.99	34.76	26.61	148.7	0.660
152.	11.71	34.76			26.48	160.1	250.	10.29	34.72	26.70	140.3	0.733
178.	11.25	34.76			26.56	152.5	300.	9.87	34.70	26.76	135.8	0.802
194.	11.08	34.76			26.59	149.8	400.	9.25	34.67	26.84	129.9	0.936
226.	10.57	34.73			26.66	143.9	500.	8.38	34.61	26.93	122.2	1.064
253.	10.26	34.72			26.71	140.0	600.	7.34	34.57	27.05	111.3	1.182
281.	10.06	34.71			26.73	138.0	700.	6.47	34.55	27.16	101.7	1.289
304.	9.83	34.70			26.77	135.3	800.	5.75	34.55	27.25	93.5	1.398
406.	9.22	34.67			26.84	129.6	1000.	4.68	34.56	27.38	81.0	1.564
508.	8.30	34.61			26.94	121.4	1200.	3.89	34.59	27.49	70.9	1.718
608.	7.26	34.57			27.06	110.4	1500.	3.18	34.61	27.58	62.8	1.922
810.	5.69	34.55			27.26	92.7						
1013.	4.62	34.56			27.39	80.3						
1214.	3.85	34.59			27.50	70.3						
1517.	3.16	34.61			27.58	62.6						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.28

CROMWELL DRY BULB 25.3		2, STATION WET BULB 21.9		27, 11-30N LAT, 147-58W LONG, WIND SPEED 20, DIR. 07		MAR. 29, 1964, 1100 G.C.T. BAR. 13 WEATHER 03			VIS. 9		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.01	34.72			22.84	502.6	0.	26.01	34.72	22.84	502.6	0.000
11.	26.03	34.72			22.83	503.7	10.	26.03	34.72	22.83	503.6	0.051
30. Δ	26.04	34.72			22.83	504.7	20.	26.04	34.72	22.83	504.2	0.102
49.	26.05	34.72			22.83	505.8	30.	26.04	34.72	22.83	504.7	0.153
75. Δ	24.80	34.77			23.25	466.5	50.	26.06	34.72	22.83	506.0	0.255
100.	19.20	34.81			24.84	315.0	75.	24.80	34.77	23.25	466.5	0.377
123.	15.25	34.44			25.50	252.3	100.	19.20	34.81	24.84	315.0	0.476
149.	12.47	34.66			26.25	181.4	150.	12.39	34.66	26.27	180.1	0.600
173.	11.31	34.63			26.45	163.0	200.	11.13	34.73	26.56	153.0	0.684
187.	11.28	34.71			26.52	156.9	250.	10.28	34.71	26.70	141.1	0.758
221.	10.77	34.72			26.62	148.0	300.	9.92	34.70	26.75	136.9	0.828
247.	10.31	34.71			26.69	141.4	400.	9.01	34.64	26.85	128.5	0.962
273.	10.10	34.70			26.72	139.2	500.	7.97	34.59	26.98	117.8	1.087
298.	9.94	34.70			26.75	137.0	600.	6.99	34.56	27.09	107.2	1.200
396.	9.05	34.64			26.85	128.9	700.	6.16	34.54	27.19	98.6	1.304
496.	8.01	34.59			26.97	118.3	800.	5.49	34.53	27.27	91.4	1.400
594.	7.04	34.56			27.09	107.8	1000.	4.55	34.56	27.40	79.3	1.573
792.	5.54	34.53			27.26	92.0	1200.	3.83	34.58	27.49	70.6	1.725
989.	4.60	34.56			27.39	79.8						
1187.	3.88	34.57			27.48	71.9						
1483.	3.11	34.62			27.59	61.0						

Δ FROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 2, STATION 28, 13-3N LAT, 147-58W LONG, MAR. 29, 1964, 2000 G.C.T.												
DRY BULB 25.5	WET BULB 21.8	WIND SPEED 18, DIR. 07	BAR. 15	WEATHER 03	VIS. 9	CLOUD TYPE 8,	COVER 4					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.53	34.35**			23.01	486.1	0.	24.53	34.35	23.01	486.1	0.000
10.	24.54	34.35**			23.01	486.8	10.	24.54	34.35	23.01	486.8	0.049
30.Δ	24.46	34.34			23.03	486.0	20.	24.52	34.35	23.01	486.8	0.099
50.	24.25	34.33			23.08	481.5	30.	24.46	34.34	23.03	486.0	0.148
75.Δ	23.36	34.46			23.44	448.1	50.	24.25	34.33	23.08	481.5	0.245
100.	19.80	34.72			24.62	336.3	75.	23.36	34.46	23.44	448.1	0.362
124.	17.31	34.64			25.18	293.3	100.	19.80	34.72	24.62	336.3	0.461
149.	14.12	34.37			25.69	234.8	150.	14.02	34.37	25.71	233.0	0.604
171.	12.35	34.36			26.04	201.7	200.	10.75	34.33	26.32	176.0	0.707
190.	11.19	34.32			26.23	184.0	250.	9.91	34.45	26.56	154.0	0.791
220.	10.16	34.37			26.45	163.3	300.	9.63	34.56	26.69	142.2	0.865
248.	9.90	34.44			26.55	154.5	400.	8.62	34.56	26.85	128.1	1.002
276.	9.94	34.54			26.62	148.3	500.	7.73	34.56	26.99	116.4	1.125
299.	9.64	34.56			26.69	142.4	600.	6.73	34.53	27.11	105.7	1.237
397.	8.65	34.56			26.85	128.5	700.	5.93	34.52	27.21	96.5	1.339
496.	7.77	34.56			26.98	116.9	800.	5.30	34.53	27.29	88.9	1.433
594.	6.78	34.53			27.10	106.3	1000.	4.39	34.55	27.41	77.8	1.602
790.	5.36	34.53			27.28	89.6	1200.	3.70	34.58	27.50	69.2	1.751
985.	4.45	34.55			27.40	78.6						
1181.	3.78	34.58			27.50	69.9						
1480.	3.04	34.61			27.59	60.9						

CROMWELL 2, STATION 29, 14-30N LAT, 147-58W LONG, MAR. 30, 1964, 0500 G.C.T.												
DRY BULB 23.5	WET BULB 20.5	WIND SPEED 20, DIR. 08	BAR. 15	WEATHER 02	VIS. 8	CLOUD TYPE 8,	COVER 5					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.31	34.32			23.06	482.0	0.	24.31	34.32	23.06	482.0	0.000
9.	24.33	34.32			23.05	482.9	10.	24.33	34.32	23.05	483.0	0.049
30.Δ	24.32	34.31			23.05	484.2	20.	24.33	34.31	23.05	483.7	0.098
48.	24.31	34.31			23.05	484.6	30.	24.32	34.31	23.05	484.2	0.147
75.Δ	24.08	34.31			23.12	479.1	50.	24.30	34.31	23.05	484.5	0.244
98.	23.58	34.34			23.29	463.7	75.	24.08	34.31	23.12	479.1	0.365
122.	18.00	34.45			24.87	313.0	100.	23.19	34.35	23.41	452.0	0.483
146.	13.67	34.27			25.71	233.0	150.	13.33	34.27	25.78	226.1	0.654
172.	12.28	34.35			26.05	201.1	200.	11.22	34.41	26.30	178.0	0.755
187.	11.71	34.39			26.19	188.1	250.	9.91	34.49	26.59	150.9	0.838
219.	10.59	34.44			26.43	165.4	300.	9.30	34.52	26.71	139.8	0.912
245.	9.98	34.49			26.58	152.0	400.	7.85	34.48	26.91	122.4	1.044
271.	9.66	34.49			26.63	147.3	500.	6.84	34.47	27.04	110.2	1.161
296.	9.36	34.52			26.70	140.7	600.	5.99	34.47	27.16	99.9	1.268
394.	7.92	34.48			26.90	123.2	700.	5.35	34.49	27.25	91.5	1.364
493.	6.91	34.47			27.03	111.0	800.	4.85	34.51	27.33	84.5	1.453
592.	6.05	34.47			27.15	100.6	1000.	4.05	34.55	27.45	73.7	1.613
790.	4.90	34.51			27.32	85.2	1200.	3.50	34.58	27.52	66.8	1.756
988.	4.09	34.55			27.44	74.2						
1185.	3.58	34.57			27.51	68.2						
1429.	3.02	34.60			27.59	61.0						

CROMWELL 2, STATION 30, 15-57N LAT, 148-5W LONG, MAR. 30, 1964, 1400 G.C.T.												
DRY BULB 22.3	WET BULB 19.0	WIND SPEED 21, DIR. 08	BAR. 15	WEATHER 03	VIS. 8	CLOUD TYPE 6,	COVER 6					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.84	34.33			23.20	468.0	0.	23.84	34.33	23.20	468.0	0.000
10.	23.83	34.33			23.21	468.1	10.	23.83	34.33	23.21	468.1	0.048
48.	23.49	34.45			23.40	451.4	20.	23.80	34.32	23.21	468.2	0.095
77.	22.78	34.97			23.99	395.4	30.	23.72	34.34	23.25	465.0	0.142
104.	22.64	34.98			24.04	391.9	50.	23.44	34.49	23.44	447.3	0.234
124.	20.13	34.92			24.69	331.0	75.	22.83	34.94	23.96	399.0	0.340
150.	18.87	34.96			25.04	297.8	100.	22.76	35.00	24.02	393.9	0.440
177.	15.53	34.44			25.44	259.9	150.	18.87	34.96	25.04	297.8	0.614
194.	13.54	34.25			25.72	233.2	200.	13.01	34.25	25.93	222.8	0.746
223.	11.62	34.38			26.20	188.1	250.	11.07	34.52	26.41	168.6	0.844
250.	11.07	34.52			26.41	168.6	300.	10.35	34.56	26.57	154.2	0.926
279.	10.69	34.56			26.51	159.7	400.	9.14	34.55	26.76	137.0	1.073
304.	10.28	34.56			26.58	153.2	500.	7.98	34.52	26.92	122.9	1.204
405.	9.09	34.55			26.77	136.4	600.	6.78	34.49	27.07	109.2	1.321
507.	7.90	34.52			26.93	121.9	700.	5.97	34.49	27.17	99.8	1.427
606.	6.71	34.49			27.06	108.4	800.	5.42	34.50	27.25	92.8	1.524
809.	5.38	34.50			27.26	92.3	1000.	4.58	34.54	27.38	81.3	1.700
1009.	4.55	34.54			27.38	80.8	1200.	3.87	34.56	27.47	72.4	1.856
1185.	3.91	34.56			27.47	73.0						
1397.	3.30	34.57			27.54	66.4						

ΔFROM BT DATA  
 \*\*EXTRAPOLATED VALUE

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 2, STATION 31, 17-30N LAT, 147-58W LONG, MAR. 31, 1964, 0200 G.C.T.												
DRY BULB 23.4		WET BULB 19.1		WIND SPEED 25, DIR. 08		BAR. 17		WEATHER 01		VIS. 8 CLOUD TYPE 8, COVER 6		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.29	34.45			23.45	444.0	0.	23.29	34.45	23.45	444.0	0.000
8.	23.30	34.45			23.45	444.6	10.	23.30	34.45	23.45	444.8	0.045
46.	23.26	34.44			23.46	445.7	20.	23.30	34.45	23.45	445.3	0.090
75.	23.20	34.46			23.49	443.7	30.	23.29	34.44	23.45	445.7	0.135
99.	23.02	34.47			23.55	438.9	50.	23.26	34.44	23.46	445.6	0.225
124.	20.58	34.74			24.43	355.5	75.	23.20	34.46	23.49	443.7	0.337
149.	19.07	34.85			24.91	310.6	100.	22.94	34.48	23.58	435.9	0.448
173.	17.32	34.71			25.23	280.0	150.	19.01	34.85	24.92	309.2	0.635
189.	15.61	34.48			25.45	259.0	200.	14.45	34.36	25.62	243.4	0.775
222.	12.32	34.22			25.94	212.6	250.	10.25	34.17	26.28	180.1	0.931
247.	10.37	34.18			26.27	181.4	300.	10.12	34.43	26.50	160.3	0.967
273.	9.84	34.17			26.35	173.9	400.	9.07	34.52	26.75	138.2	1.118
297.	10.12	34.41			26.49	161.4	500.	7.50	34.47	26.95	119.9	1.248
397.	9.12	34.52			26.74	138.9	600.	6.58	34.46	27.07	108.6	1.363
486.	7.67	34.47			26.93	121.8	700.	5.92	34.48	27.17	99.5	1.469
594.	6.62	34.46			27.07	109.2	800.	5.42	34.51	27.26	91.9	1.565
791.	5.47	34.51			27.25	92.5	1000.	4.51	34.54	27.39	80.1	1.739
990.	4.55	34.54			27.38	80.6	1200.	3.83	34.58	27.49	70.9	1.892
1190.	3.89	34.58			27.49	71.3						
1429.	3.22	34.60			27.57	63.4						

CROMWELL 2, STATION 32, 19-3N LAT, 147-57W LONG, MAR. 31, 1964, 1200 G.C.T.												
DRY BULB 20.9		WET BULB 17.1		WIND SPEED 26, DIR. 07		BAR. 21		WEATHER 00		VIS. 8 CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.70	34.79			23.88	403.3	0.	22.70	34.79	23.88	403.3	0.000
9.	22.72	34.80			23.88	403.5	10.	22.72	34.80	23.88	403.6	0.041
47.	22.72	34.79			23.88	405.6	20.	22.73	34.79	23.88	404.6	0.082
99.	22.58	34.98			24.06	390.1	30.	22.73	34.79	23.87	405.2	0.123
120.	22.51	35.06			24.14	383.2	50.	22.71	34.80	23.88	405.1	0.204
144.	21.60	35.14			24.46	353.9	75.	22.66	34.88	23.96	398.7	0.305
171.	20.06	35.08			24.83	319.3	100.	22.58	34.98	24.06	390.0	0.405
185.	19.40	35.02			24.95	307.6	150.	21.27	35.14	24.54	345.6	0.590
216.	17.68	34.81			25.22	282.5	200.	18.71	34.95	25.07	296.5	0.752
240.	15.04	34.41			25.53	253.5	250.	14.28	34.31	25.62	244.9	0.938
268.	13.10	34.22			25.79	228.7	300.	11.07	34.23	26.18	191.3	0.998
292.	11.42	34.22			26.11	197.8	400.	8.81	34.32	26.64	148.7	1.170
390.	9.01	34.32			26.60	151.7	500.	7.22	34.32	26.88	126.3	1.309
488.	7.38	34.32			26.85	128.7	600.	6.18	34.37	27.05	110.0	1.428
585.	6.29	34.36			27.03	111.9	700.	5.56	34.41	27.17	99.7	1.534
780.	5.24	34.45			27.23	93.8	800.	5.15	34.46	27.25	92.5	1.631
976.	4.48	34.50			27.36	82.6	1000.	4.39	34.50	27.37	81.4	1.807
1171.	3.80	34.53			27.45	73.7	1200.	3.73	34.54	27.47	72.3	1.963
1468.	3.04	34.58			27.57	63.0						

CROMWELL 2, STATION 33, 20-26N LAT, 147-56W LONG, MAR. 31, 1964, 2000 G.C.T.												
DRY BULB 21.8		WET BULB 17.5		WIND SPEED 20, DIR. 07		BAR. 23		WEATHER 02		VIS. 8 CLOUD TYPE 8, COVER 7		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	22.19	35.08			24.25	368.6	0.	22.19	35.08	24.25	368.6	0.000
10.	22.20	35.09			24.25	368.5	10.	22.20	35.09	24.25	368.5	0.038
97.	22.18	35.10			24.26	370.5	20.	22.21	35.09	24.25	369.3	0.075
121.	22.10	35.14			24.32	366.4	30.	22.27	35.09	24.24	369.9	0.112
146.	21.78	35.15			24.41	358.0	50.	22.23	35.09	24.24	370.8	0.187
171.	20.10	35.08			24.82	320.4	75.	22.21	35.09	24.25	371.0	0.280
185.	19.79	35.11			24.92	310.9	100.	22.18	35.11	24.27	370.2	0.373
217.	18.04	34.84			25.16	288.8	150.	21.51	35.14	24.48	351.0	0.555
243.	15.74	34.52			25.46	260.6	200.	19.13	35.02	25.02	301.5	0.720
268.	13.86	34.29			25.69	238.6	250.	15.18	34.45	25.52	254.1	0.860
292.	12.29	34.14			25.89	219.7	300.	11.91	34.12	25.95	214.0	0.978
389.	9.10	34.17			26.47	164.2	400.	8.80	34.17	26.52	160.0	1.167
487.	6.92	34.14			26.77	135.4	500.	6.74	34.14	26.80	132.8	1.315
584.	5.89	34.20			26.96	118.4	600.	5.78	34.22	26.98	116.0	1.440
779.	4.96	34.40			27.23	93.9	700.	5.24	34.32	27.13	102.6	1.551
975.	4.18	34.50			27.39	78.8	800.	4.87	34.41	27.25	91.9	1.649
1170.	3.68	34.54			27.47	71.5	1000.	4.11	34.51	27.40	77.7	1.821
1468.	2.93	34.58			27.58	61.6	1200.	3.54	34.56	27.50	68.9	1.969

4FROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA					INTERPOLATED DATA					
CROMWELL DRY BULB 20.8		2, STATION WET BULB 17.8		34, 22- ON LAT, 147-59W LONG, APR. 1, 1964, 0600 G.C.T.		WIND SPEED 22, DIR. 07		BAR. 23		WEATHER 01		VIS. 8		CLOUD TYPE 8, COVER 5	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.			
0.	22.55	34.92			24.02	389.8	0.	22.55	34.92	24.02	389.8	0.000			
9.	22.55	34.93			24.03	389.5	10.	22.55	34.93	24.03	389.3	0.040			
30.Δ	22.55	34.98			24.07	386.7	20.	22.55	34.96	24.05	388.0	0.079			
50.Δ	22.54	35.00			24.09	385.7	30.	22.55	34.98	24.07	386.7	0.118			
75.Δ	22.53	35.04			24.12	383.5	50.	22.54	35.00	24.09	385.7	0.196			
94.	22.53	35.08			24.15	381.3	75.	22.53	35.04	24.12	383.5	0.293			
116.	21.85	35.11			24.36	361.7	100.	22.40	35.09	24.19	377.4	0.388			
140.	20.63	35.13			24.71	329.2	150.	20.38	35.13	24.78	323.4	0.565			
168.	19.86	35.08			24.88	314.2	200.	18.27	34.89	25.14	289.9	0.720			
181.	19.12	35.00			25.01	302.0	250.	15.43	34.51	25.51	255.1	0.857			
211.	17.75	34.82			25.21	283.2	300.	12.62	34.26	25.92	217.2	0.976			
234.	16.22	34.61			25.42	264.3	400.	8.59	34.21	26.58	153.6	1.163			
262.	14.87	34.44			25.59	248.3	500.	7.86	34.36	26.82	132.7	1.308			
286.	13.47	34.31			25.78	229.8	600.	6.73	34.39	27.00	115.8	1.433			
380.	8.90	34.18			26.51	160.1	700.	5.86	34.44	27.15	102.1	1.543			
477.	8.12	34.35			26.77	137.3	800.	5.19	34.47	27.25	92.1	1.641			
571.	7.02	34.38			26.95	120.4	1000.	4.25	34.50	27.39	79.8	1.815			
760.	5.44	34.46			27.22	95.5	1200.	3.58	34.54	27.49	70.3	1.967			
951.	4.44	34.49			27.36	82.6									
1142.	3.80	34.54			27.46	72.7									
1429.	3.09	34.58			27.56	63.3									

TEMPERATURE ERRCR TERM AT 400. METERS IS 0.12

CROMWELL DRY BULB 20.8		2, STATION WET BULB 16.4		35, 23-30N LAT, 147-59W LONG, APR. 1, 1964, 1500 G.C.T.		WIND SPEED 20, DIR. 09		BAR. 24		WEATHER 00		VIS. 8		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.			
0.	22.00	35.16			24.36	357.7	0.	22.00	35.16	24.36	357.7	0.000			
8.	22.02	35.17			24.36	357.8	10.	22.02	35.17	24.36	357.9	0.036			
47.	22.03	35.16			24.35	360.3	20.	22.03	35.17	24.36	358.5	0.072			
75.Δ	22.03	35.17			24.36	360.6	30.	22.04	35.17	24.36	359.2	0.108			
95.	21.43	35.29			24.62	336.8	50.	22.05	35.16	24.34	361.3	0.181			
117.	21.29	35.30			24.66	333.2	75.	22.03	35.17	24.36	360.6	0.272			
143.	21.06	35.29			24.72	328.9	100.	21.38	35.30	24.64	334.9	0.359			
168.	20.48	35.32			24.90	312.6	150.	20.95	35.30	24.76	325.2	0.526			
185.*	19.68	35.25			25.06	298.0	200.	18.77	35.17	25.23	281.7	0.679			
213.	17.99	35.10			25.37	268.7	250.	16.64	34.91	25.55	252.6	0.813			
251.*	16.60	34.90			25.55	252.3	300.	10.17	34.06	26.21	187.8	0.924			
264.	15.70	34.76			25.65	242.9	400.	7.73	34.03	26.57	153.7	1.097			
272.*	14.26	34.48			25.75	233.0	500.	6.00	34.05	26.83	129.5	1.240			
297.	10.39	34.08			26.19	190.2	600.	4.95	34.15	27.03	110.7	1.361			
372.	8.36	34.04			26.49	161.9	700.	4.48	34.28	27.18	96.4	1.466			
446.	6.84	34.03			26.70	141.9	800.	4.28	34.40	27.30	86.1	1.558			
595.	4.98	34.14			27.02	111.5	1000.	3.88	34.52	27.44	73.8	1.720			
747.	4.39	34.34			27.24	91.1	1200.	3.44	34.54	27.50	68.8	1.864			
900.	4.12	34.48			27.38	78.9									
1131.	3.57	34.54			27.49	69.9									
1200.**	3.44**	34.54**			27.50	68.8									

CROMWELL DRY BULB 20.2		2, STATION WET BULB 17.8		36, 25- ON LAT, 148- ON LONG, APR. 2, 1964, 0100 G.C.T.		WIND SPEED 21, DIR. 07		BAR. 25		WEATHER 02		VIS. 8		CLOUD TYPE 6, COVER 7	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.			
0.	21.91	35.07			24.32	361.8	0.	21.91	35.07	24.32	361.8	0.000			
10.	21.91	35.07			24.32	362.2	10.	21.91	35.07	24.32	362.2	0.037			
49.	21.70	35.16			24.44	351.6	20.	21.87	35.09	24.34	360.4	0.073			
102.	21.42	35.27			24.60	338.2	30.	21.82	35.11	24.37	357.9	0.110			
125.	21.17	35.31			24.70	329.6	50.	21.70	35.16	24.45	351.4	0.181			
150.	19.73	35.12			24.94	307.4	75.	21.59	35.22	24.52	345.5	0.269			
175.	18.28	34.92			25.16	287.3	100.	21.43	35.27	24.60	338.8	0.355			
191.	17.66	34.82			25.24	280.5	150.	19.73	35.12	24.94	307.4	0.518			
223.	15.17	34.46			25.54	252.1	200.	17.02	34.72	25.32	273.0	0.664			
251.	13.33	34.24			25.76	231.3	250.	13.39	34.25	25.75	232.0	0.791			
278.	11.65	34.10			25.98	210.4	300.	10.85	34.09	26.11	197.5	0.900			
301.	10.82	34.09			26.12	196.9	400.	8.62	34.04	26.45	166.4	1.083			
401.	8.60	34.04			26.45	166.1	500.	6.10	34.06	26.82	130.6	1.233			
502.	6.06	34.06			26.82	129.9	600.	5.31	34.14	26.98	115.8	1.358			
603.	5.30	34.14			26.98	115.5	700.	4.76	34.25	27.13	101.9	1.468			
803.	4.34	34.36			27.26	89.5	800.	4.35	34.36	27.26	89.9	1.564			
1003.	3.86	34.49			27.42	76.0	1000.	3.87	34.49	27.42	76.1	1.732			
1204.	3.48	34.54			27.49	69.3	1200.	3.49	34.54	27.49	69.4	1.880			
1505.	2.84	34.58			27.59	60.8	1500.	2.85	34.58	27.59	60.9	2.078			

Δ FROM ST DATA  
 \*INTERPOLATED VALUE  
 \*\*EXTRAPOLATED VALUE



Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA							
CROMWELL 2, STATION 37, 26-30N LAT, 148-0W LONG, APR. 2, 1964, 1000 G.C.T.															
DRY BULB	20.2	WET BULB	16.8	WIND SPEED	19,	DIR.	10	BAR.	27	WEATHER	02	VIS.	8	CLOUD TYPE	, COVER
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.			
1.	21.10	35.33			24.74	321.8	0.	21.10	35.33	24.74	321.7	0.000			
10.	21.10	35.32			24.73	322.8	10.	21.10	35.32	24.73	322.8	0.033			
98.	21.13	35.34			24.74	325.4	20.	21.10	35.32	24.73	323.2	0.065			
121.	21.12	35.32			24.72	327.4	30.	21.11	35.32	24.73	323.6	0.098			
141.	20.85	35.28			24.77	324.0	50.	21.12	35.33	24.73	324.3	0.163			
170.	20.47	35.29			24.88	314.6	75.	21.12	35.33	24.73	324.9	0.245			
185.	19.55	35.10			24.97	305.6	100.	21.14	35.34	24.73	325.7	0.327			
218.	17.60	34.81			25.24	280.7	150.	20.83	35.31	24.79	322.0	0.490			
243.	16.03	34.62			25.47	259.6	200.	18.67	34.95	25.09	294.9	0.646			
268.	14.55	34.44			25.66	241.8	250.	15.61	34.57	25.52	254.5	0.784			
292.	13.14	34.29			25.83	225.0	300.	12.80	34.26	25.88	220.4	0.904			
389.	10.10	34.16			26.30	181.3	400.	9.78	34.14	26.34	177.5	1.105			
487.	7.59	34.03			26.59	153.1	500.	7.34	34.02	26.62	150.3	1.270			
583.	6.08	34.02			26.79	134.2	600.	5.89	34.04	26.83	130.6	1.412			
768.	4.60	34.27			27.16	99.0	700.	4.99	34.16	27.03	111.1	1.534			
970.	3.91	34.46			27.39	78.5	800.	4.45	34.31	27.21	94.8	1.638			
1164.	3.47	34.53			27.49	69.7	1000.	3.83	34.48	27.41	76.7	1.812			
1455.	2.92	34.58			27.58	61.4	1200.	3.36	34.56	27.52	66.6	1.957			

CROMWELL 2, STATION 38, 25-4N LAT, 150-57W LONG, APR. 3, 1964, 0400 G.C.T.															
DRY BULB	22.0	WET BULB	19.0	WIND SPEED	12,	DIR.	13	BAR.	23	WEATHER	01	VIS.	9	CLOUD TYPE	8, COVER 4
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.			
0.	22.25	35.21			24.33	360.8	0.	22.25	35.21	24.33	360.8	0.000			
10.	22.28	35.21			24.32	362.0	10.	22.28	35.21	24.32	362.0	0.037			
30.Δ	22.27	35.22			24.33	361.8	20.	22.31	35.21	24.31	363.0	0.073			
50.	21.78	35.25			24.49	347.2	30.	22.27	35.22	24.33	361.8	0.110			
75.Δ	21.46	35.25			24.58	339.7	50.	21.78	35.25	24.49	347.2	0.181			
103.	20.80	35.26			24.77	322.8	75.	21.46	35.25	24.58	339.7	0.268			
126.	20.66	35.32			24.85	315.7	100.	20.87	35.26	24.75	324.6	0.352			
153.	19.79	35.16			24.96	306.1	150.	19.93	35.19	24.94	307.6	0.511			
179.	18.00	34.88			25.20	283.7	200.	16.41	34.65	25.40	268.8	0.655			
194.	16.78	34.70			25.35	269.0	250.	13.58	34.32	25.77	230.4	0.780			
227.	14.96	34.46			25.58	247.8	300.	11.67	34.18	26.04	204.8	0.890			
254.	13.36	34.30			25.80	227.6	400.	8.83	34.09	26.46	165.9	1.077			
283.	12.27	34.24			25.97	211.7	500.	6.53	34.08	26.78	134.7	1.228			
307.	11.36	34.15			26.07	202.2	600.	5.34	34.13	26.97	116.8	1.355			
409.	8.64	34.10			26.49	162.5	700.	4.67	34.22	27.12	102.6	1.466			
511.	6.32	34.08			26.81	132.0	800.	4.22	34.32	27.25	90.7	1.564			
612.	5.26	34.14			26.99	115.1	1000.	3.71	34.49	27.43	74.2	1.731			
815.	4.17	34.34			27.27	89.1	1200.	3.29	34.54	27.51	67.2	1.874			
1018.	3.68	34.50			27.44	73.2	1500.	2.77	34.58	27.59	59.8	2.067			
1221.	3.25	34.54			27.52	66.7									
1523.	2.74	34.58			27.60	59.7									

CROMWELL 2, STATION 39, 24-59N LAT, 154-1W LONG, APR. 3, 1964, 2000 G.C.T.															
DRY BULB	23.0	WET BULB	19.8	WIND SPEED	16,	DIR.	15	BAR.	23	WEATHER	02	VIS.	9	CLOUD TYPE	8, COVER 3
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.			
1.	22.52	35.21			24.25	368.1	0.	22.52	35.21	24.25	368.1	0.000			
11.	22.56	35.20			24.23	370.3	10.	22.56	35.20	24.23	370.2	0.038			
50.	22.43	35.20			24.27	368.3	20.	22.57	35.19	24.22	371.3	0.075			
76.	22.11	35.24			24.35	357.8	30.	22.55	35.19	24.23	371.3	0.112			
101.	21.40	35.17			24.53	344.9	50.	22.43	35.20	24.27	368.3	0.147			
126.	20.46	35.12			24.75	325.0	75.	22.13	35.24	24.38	358.3	0.278			
152.	19.56	35.04			24.93	309.0	100.	21.43	35.17	24.53	345.5	0.367			
177.	18.59	34.95			25.11	292.6	150.	19.63	35.05	24.91	310.2	0.532			
192.	17.90	34.88			25.22	281.8	200.	17.57	34.84	25.28	276.4	0.690			
225.	16.28	34.68			25.46	260.3	250.	14.96	34.51	25.62	244.6	0.811			
252.	14.85	34.50			25.64	243.2	300.	12.34	34.24	25.95	213.6	0.927			
278.	13.10	34.32			25.87	221.6	400.	9.41	34.14	26.40	171.6	1.121			
303.	12.26	34.23			25.96	212.8	500.	7.25	34.07	26.67	145.3	1.281			
403.	9.33	34.14			26.41	170.4	600.	5.44	34.08	26.91	121.9	1.416			
503.	7.19	34.07			26.68	144.7	700.	4.61	34.27	27.16	98.7	1.528			
604.	5.38	34.08			26.92	121.0	800.	4.29	34.48	27.36	80.0	1.618			
804.	4.29	34.49			27.37	79.3	1000.	3.86	34.54	27.46	72.1	1.772			
1004.	3.85	34.54			27.46	72.2	1200.	3.40	34.54	27.50	68.3	1.914			
1204.	3.39	34.54			27.50	68.3									
1451.	2.86	34.58			27.58	60.7									

TEMPERATURE ERROR TERM AT 700. METERS IS 0.11

Δ FROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 23.4		2, STATION WET BULB 20.3		40, 24-57N LAT, 157- 5W LONG, APR. 4, 1964, 1400 G.C.T. WIND SPEED 20, DIR. 15				4, 1964, 1400 G.C.T. BAR. 19 WEATHER 00 VIS. 9 CLOUD TYPE , COVER				
DEPTH	TEMP.	SAL.	CXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.07	35.15			24.05	387.4	0.	23.07	35.15	24.05	387.4	0.000
10.	23.09	35.16			24.05	387.7	10.	23.09	35.16	24.05	387.7	0.040
49.	22.98	35.17			24.09	385.4	20.	23.11	35.16	24.05	388.3	C.079
103.	21.71	35.24			24.5C	348.1	30.	23.09	35.17	24.05	388.1	0.118
125.	20.70	35.16			24.72	328.2	50.	22.97	35.17	24.09	385.0	0.196
150.	19.07	35.00			25.02	299.8	75.	22.56	35.22	24.25	371.0	0.291
178.	17.39	34.82			25.3C	273.8	100.	21.82	35.24	24.47	350.9	0.382
194.	16.54	34.76			25.46	259.3	150.	19.07	35.00	25.02	299.8	0.546
226.	14.83	34.56			25.69	237.7	200.	16.24	34.73	25.50	255.0	0.685
251.	13.15	34.36			25.89	219.0	250.	13.21	34.37	25.88	219.6	0.805
281.	12.25	34.28			26.0C	208.4	300.	11.78	34.25	26.07	202.5	0.912
306.	11.64	34.24			26.09	200.7	400.	9.26	34.12	26.41	170.8	1.100
408.	9.06	34.11			26.43	168.3	500.	7.05	34.06	26.69	143.4	1.258
510.	6.86	34.06			26.72	140.9	600.	5.41	34.13	26.96	117.8	1.390
611.	5.27	34.14			26.98	115.2	700.	4.63	34.22	27.12	102.2	1.502
814.	4.28	34.33			27.25	91.1	800.	4.29	34.32	27.23	92.2	1.600
1016.	3.72	34.49			27.43	74.4	1000.	3.76	34.48	27.42	75.4	1.769
1218.	3.23	34.54			27.52	66.5	1200.	3.27	34.54	27.51	67.0	1.914
1520.	2.66	34.61			27.63	56.5	1500.	2.69	34.61	27.62	56.9	2.102

TEMPERATURE ERROR TERM AT 700. METERS IS 0.10

CROMWELL DRY BULB 23.5		2, STATION WET BULB 20.5		41, 23-25N LAT, 157- 0W LONG, APR. 4, 1964, 2300 G.C.T. WIND SPEED 14, DIR. 18				4, 1964, 2300 G.C.T. BAR. 21 WEATHER 01 VIS. 9 CLOUD TYPE 8, COVER 3				
DEPTH	TEMP.	SAL.	OXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.29	35.15			23.98	393.5	0.	23.29	35.15	23.98	393.5	0.000
9.	23.23	35.15			24.0C	392.2	10.	23.23	35.15	24.00	392.3	0.040
47.	23.23	35.16			24.01	392.9	20.	23.23	35.14	23.99	393.2	0.080
71.	22.99	35.26			24.15	380.0	30.	23.23	35.14	23.99	393.6	0.119
95.	22.30	35.28			24.37	360.7	50.	23.22	35.17	24.02	391.8	0.198
118.	21.50	35.20			24.53	346.0	75.	22.90	35.27	24.19	376.9	0.295
142.	20.21	35.11			24.81	319.9	100.	22.15	35.27	24.40	357.8	0.388
165.	19.27	35.04			25.0C	302.3	150.	19.91	35.09	24.88	313.8	0.557
179.	18.33	34.92			25.15	288.6	200.	17.33	34.82	25.31	273.4	0.705
210.	16.95	34.78			25.38	267.6	250.	14.98	34.55	25.65	242.0	0.835
234.	16.00	34.66			25.5C	255.8	300.	12.65	34.38	26.00	209.5	0.949
259.	14.40	34.50			25.74	234.1	400.	9.28	34.14	26.42	169.4	1.140
282.	13.39	34.43			25.89	219.4	500.	6.96	34.05	26.70	142.5	1.297
374.	10.04	34.19			26.33	177.8	600.	5.60	34.14	26.94	119.6	1.430
468.	7.61	34.06			26.61	150.9	700.	5.03	34.29	27.13	102.4	1.542
560.	5.97	34.08			26.85	128.0	800.	4.73	34.39	27.25	91.8	1.640
746.	4.93	34.36			27.2C	96.2	1000.	4.09	34.47	27.38	80.0	1.814
933.	4.32	34.44			27.33	84.6	1200.	3.47	34.55	27.50	68.6	1.964
1120.	3.70	34.53			27.46	72.1						
1348.	3.05	34.59			27.58	61.6						

CROMWELL DRY BULB 23.7		2, STATION WET BULB 20.7		42, 22- 0N LAT, 157- 0W LONG, APR. 5, 1964, 0700 G.C.T. WIND SPEED 10, DIR. 21				5, 1964, 0700 G.C.T. BAR. 20 WEATHER 02 VIS. 9 CLOUD TYPE 8, COVER 3				
DEPTH	TEMP.	SAL.	OXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.42	35.02			23.85	406.5	0.	23.42	35.02	23.85	406.5	0.000
9.	23.40	35.02			23.85	406.3	10.	23.40	35.02	23.86	406.0	0.041
46.	23.22	35.19			24.03	390.5	20.	23.36	35.06	23.90	402.5	0.082
72.	23.06	35.24			24.12	383.4	30.	23.31	35.11	23.94	398.4	0.122
94.	22.91	35.28			24.19	377.3	50.	23.20	35.20	24.05	389.3	0.202
116.	22.35	35.28			24.35	362.8	75.	23.05	35.25	24.13	382.9	0.299
139.	20.73	35.12			24.66	332.4	100.	22.83	35.29	24.22	374.5	0.394
165.	19.47	35.06			24.98	304.6	150.	20.10	35.09	24.82	319.0	0.569
180.	18.99	35.02			25.06	297.4	200.	18.32	34.93	25.16	288.1	0.722
210.	17.90	34.88			25.22	282.4	250.	15.51	34.62	25.58	248.7	0.858
233.	16.55	34.73			25.43	262.9	300.	13.34	34.42	25.89	219.6	0.976
260.	14.96	34.56			25.66	241.4	400.	9.13	34.15	26.45	166.2	1.170
284.	14.08	34.48			25.79	229.7	500.	7.03	34.14	26.76	137.5	1.324
378.	9.84	34.18			26.36	175.3	600.	6.12	34.20	26.93	121.3	1.454
475.	7.37	34.13			26.7C	142.4	700.	5.34	34.30	27.10	105.6	1.569
571.	6.3P	34.18			26.88	126.2	800.	4.78	34.39	27.24	92.7	1.669
764.	4.95	34.36			27.20	96.6	1000.	4.10	34.52	27.41	76.7	1.840
956.	4.24	34.50			27.35	79.4	1200.	3.52	34.59	27.53	66.4	1.985
1151.	3.66	34.56			27.49	69.6						
1446.	2.96	34.61			27.6C	59.7						

Table 3.--Original and derived oceanographic data for Townsend Cromwell cruise 3

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA								
CROMWELL DRY BULB 24.4		3, STATION WET BULB 19.5		1, 20-36N LAT, 157-15W LONG, APR. 13, 1964, 0500 G.C.T.			WIND SPEED 15, DIR. 13		BAR. 16		WEATHER 02		VIS. 9		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.				
1.	24.64	34.84			23.35	454.0	0.	24.64	34.84	23.35	453.9	0.000				
10.	24.52	34.86			23.40	449.5	10.	24.52	34.86	23.40	449.5	0.046				
50.	24.21	34.88			23.51	440.7	20.	24.44	34.87	23.43	447.2	0.091				
103.	23.34	35.02			23.87	408.2	30.	24.37	34.87	23.46	445.0	0.136				
127.	22.12	35.09			24.27	370.8	50.	24.21	34.88	23.51	440.7	0.225				
153.	20.52	35.05			24.68	332.6	75.	23.99	34.94	23.62	431.4	0.335				
179.	19.05	34.94			24.98	304.6	100.	23.43	35.01	23.84	411.3	0.441				
194.	18.14	34.86			25.15	289.0	150.	20.71	35.06	24.64	336.6	0.630				
228.	15.48	34.58			25.56	250.1	200.	17.66	34.81	25.23	281.3	0.786				
255.	14.21	34.44			25.73	234.4	250.	14.42	34.46	25.70	236.9	0.916				
282.	12.98	34.32			25.89	219.4	300.	12.00	34.25	26.02	206.7	1.028				
307.	11.62	34.22			26.07	201.8	400.	8.99	34.14	26.46	165.3	1.216				
408.	8.86	34.14			26.49	162.9	500.	6.55	34.14	26.83	130.3	1.365				
510.	6.36	34.15			26.86	127.4	600.	5.90	34.28	27.02	112.6	1.487				
610.	5.90	34.30			27.03	111.5	700.	5.50	34.38	27.14	101.8	1.596				
813.	5.02	34.43			27.24	92.9	800.	5.08	34.43	27.23	93.7	1.695				
1015.	4.16	34.51			27.40	78.2	1000.	4.22	34.51	27.39	79.1	1.870				
1215.	3.60	34.54			27.48	70.9	1200.	3.64	34.54	27.48	71.3	2.022				
1513.	2.84	34.58			27.59	60.8	1500.	2.87	34.58	27.58	61.1	2.223				

CROMWELL DRY BULB 23.9		3, STATION WET BULB 19.2		2, 19- 8N LAT, 156-58W LONG, APR. 13, 1964, 1500 G.C.T.			WIND SPEED 12, DIR. 17		BAR. 15		WEATHER 02		VIS. 9		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.				
0.	24.19	34.68			23.36	452.6	0.	24.19	34.68	23.36	452.6	0.000				
10.	24.20	34.69			23.37	452.6	10.	24.20	34.69	23.37	452.6	0.046				
102.	23.85	34.76			23.52	441.2	20.	24.16	34.69	23.38	451.8	0.092				
126.	23.87	34.82			23.56	438.4	30.	24.13	34.70	23.39	450.9	0.137				
151.	21.77	35.04			24.33	365.9	50.	24.06	34.71	23.42	448.8	0.228				
176.	19.94	35.01			24.80	321.5	75.	23.96	34.73	23.47	445.5	0.340				
192.	19.28	34.97			24.95	308.5	100.	23.86	34.76	23.52	441.6	0.452				
225.	17.22	34.76			25.30	275.7	150.	21.87	35.03	24.30	369.2	0.656				
251.	14.69	34.48			25.66	241.3	200.	18.88	34.93	25.02	301.6	0.825				
277.	13.52	34.39			25.83	224.8	250.	14.78	34.49	25.65	242.5	0.963				
302.	12.39	34.30			25.99	210.1	300.	12.48	34.31	25.98	211.2	1.077				
403.	8.64	34.11			26.50	161.6	400.	8.73	34.11	26.49	162.8	1.266				
505.	6.99	34.16			26.78	135.2	500.	7.04	34.15	26.77	136.3	1.417				
603.	5.76	34.30			27.05	109.5	600.	5.79	34.30	27.04	110.3	1.541				
802.	4.71	34.46			27.30	86.6	700.	5.11	34.39	27.21	95.3	1.645				
1002.	4.00	34.52			27.43	75.4	800.	4.71	34.46	27.30	86.7	1.737				
1201.	3.48	34.57			27.52	67.1	1000.	4.01	34.52	27.43	75.5	1.901				
1496.	2.91	34.60			27.60	60.1	1200.	3.48	34.57	27.52	67.1	2.046				

CROMWELL DRY BULB 24.9		3, STATION WET BULB 20.8		3, 17-30N LAT, 157- 1W LONG, APR. 14, 1964, 0100 G.C.T.			WIND SPEED 14, DIR. 11		BAR. 15		WEATHER 02		VIS. 9		CLOUD TYPE 8, COVER 5	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.				
0.	24.66	34.46			23.06	481.9	0.	24.66	34.46	23.06	481.9	0.000				
8.	24.66	34.44			23.04	483.7	10.	24.66	34.44	23.04	483.9	0.049				
49.	24.58	34.46			23.08	481.5	20.	24.65	34.43	23.04	484.6	0.098				
100.	24.21	34.60			23.30	462.8	30.	24.64	34.43	23.04	484.4	0.147				
125.	23.38	34.66			23.59	436.1	50.	24.58	34.46	23.08	481.5	0.244				
151.	21.24	35.08			24.51	349.0	75.	24.52	34.52	23.15	476.2	0.365				
177.	19.67	35.02			24.88	314.1	100.	24.21	34.60	23.30	462.8	0.483				
192.	18.20	34.83			25.11	292.5	150.	21.33	35.06	24.47	352.4	0.688				
225.	13.83	34.33			25.72	233.9	200.	17.15	34.70	25.27	277.8	0.847				
249.	11.55	34.20			26.07	200.6	250.	11.50	34.20	26.08	199.8	0.968				
279.	10.37	34.18			26.27	182.1	300.	9.66	34.18	26.39	170.7	1.061				
294.	9.79	34.17			26.36	173.5	400.	8.33	34.37	26.75	137.3	1.216				
386.	8.61	34.38			26.71	141.0	500.	6.69	34.32	26.95	119.0	1.346				
488.	6.75	34.31			26.93	120.5	600.	6.48	34.45	27.08	108.2	1.460				
607.	6.49	34.46			27.08	107.6	700.	5.84	34.49	27.19	97.8	1.564				
772.	5.28	34.49			27.26	91.3	800.	5.12	34.49	27.28	89.3	1.659				
954.	4.40	34.51			27.38	80.6	1000.	4.27	34.52	27.40	78.9	1.829				
1209.	3.80	34.55			27.47	72.5	1200.	3.82	34.55	27.47	72.8	1.983				
1509.	3.03	34.58			27.57	63.1	1500.	3.05	34.58	27.57	63.3	2.190				

Table 3.--Continued

ORIGINAL DATA						DERIVED DATA			INTERPOLATED DATA					
CROMWELL		3, STATION		4, 15-56N LAT, 157-1W LONG, APR. 14, 1964, 1000 G.C.T.										
DRY BULB 24.0		WET BULB 21.2		WIND SPEED 16, DIR. 10		BAR. 15			WEATHER 00		VIS. 9		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.		
1.	24.55	34.54			23.15	473.0	0.	24.55	34.54	23.15	473.0	0.000		
11.	24.55	34.54			23.15	473.4	10.	24.55	34.54	23.15	473.4	0.048		
50. Δ	24.51	34.56			23.18	472.4	20.	24.56	34.54	23.15	474.3	0.096		
75. Δ	24.28	34.65			23.31	460.3	30.	24.56	34.54	23.15	474.5	0.144		
98.	23.97	34.84			23.55	438.7	50.	24.51	34.56	23.18	472.4	0.239		
122.	23.86	34.92			23.64	430.7	75.	24.28	34.65	23.31	460.3	0.357		
146.	21.07	35.06			24.54	345.8	100.	24.01	34.85	23.54	439.3	0.470		
169.	19.32	34.98			24.94	308.0	150.	20.88	35.08	24.61	339.6	0.666		
183.	16.29	34.58			25.38	266.5	200.	13.99	34.36	25.72	234.0	0.811		
215.	12.71	34.31			25.94	213.2	250.	10.95	34.36	26.31	178.0	0.914		
240.	11.12	34.28			26.21	186.9	300.	9.94	34.48	26.58	153.2	0.998		
264.	10.82	34.48			26.42	167.5	400.	9.39	34.63	26.79	135.2	1.404		
287.	10.09	34.46			26.53	157.0	500.	7.87	34.53	26.95	120.4	1.273		
383.	9.64	34.64			26.75	138.3	600.	6.90	34.51	27.07	109.3	1.389		
479.	8.11	34.54			26.92	123.2	700.	6.08	34.50	27.17	100.5	1.495		
576.	7.13	34.52			27.04	111.7	800.	5.49	34.49	27.24	94.0	1.593		
770.	5.61	34.49			27.22	95.6	1000.	4.78	34.53	27.35	84.1	1.773		
963.	4.95	34.53			27.33	86.2	1200.	4.04	34.56	27.45	74.8	1.934		
1157.	4.09	34.55			27.44	75.7								
1450.	3.32	34.58			27.54	66.3								

TEMPERATURE ERROR TERM AT 150. METERS IS 0.12  
 TEMPERATURE ERROR TERM AT 200. METERS IS 0.12  
 TEMPERATURE ERROR TERM AT 300. METERS IS 0.10

CROMWELL		3, STATION		5, 14-32N LAT, 157-0W LONG, APR. 14, 1964, 1800 G.C.T.										
DRY BULB 25.6		WET BULB 22.7		WIND SPEED 12, DIR. 11		BAR. 12			WEATHER 01		VIS. 9		CLOUD TYPE 8, COVER 3	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.		
0.	24.36	34.58			23.24	464.7	0.	24.36	34.58	23.24	464.7	0.000		
10.	24.37	34.56			23.22	466.8	10.	24.37	34.56	23.22	466.8	0.047		
44. Δ	24.38	34.58			23.23	467.0	20.	24.38	34.56	23.22	467.3	0.094		
50. Δ	24.38	34.58			23.23	467.2	30.	24.38	34.57	23.22	467.4	0.142		
75. Δ	23.84	34.86			23.60	432.7	50.	24.38	34.58	23.23	467.2	0.236		
99.	23.27	35.03			23.90	405.4	75.	23.84	34.86	23.60	432.7	0.349		
122.	20.91	35.06			24.58	340.8	100.	23.18	35.03	23.93	402.7	0.454		
146.	18.89	34.94			25.02	299.6	150.	18.61	34.91	25.07	295.4	0.630		
171.	16.86	34.67			25.31	272.3	200.	13.55	34.35	25.79	226.5	0.762		
186.	15.00	34.46			25.57	247.4	250.	10.92	34.40	26.34	175.1	0.863		
218.	12.11	34.29			26.04	203.5	300.	9.71	34.45	26.59	151.5	0.945		
243.	10.93	34.34			26.29	179.2	400.	9.09	34.60	26.81	133.0	1.039		
269.	10.90	34.52			26.44	166.0	500.	7.66	34.51	26.96	119.0	1.216		
293.	9.84	34.45			26.57	153.7	600.	6.71	34.48	27.07	109.1	1.311		
388.	9.26	34.60			26.78	135.1	700.	5.98	34.48	27.17	100.1	1.437		
484.	7.85	34.52			26.94	120.8	800.	5.41	34.51	27.26	92.0	1.534		
578.	6.89	34.48			27.05	111.3	1000.	4.48	34.55	27.40	79.4	1.707		
765.	5.60	34.50			27.23	94.7	1200.	3.77	34.57	27.49	70.7	1.960		
952.	4.68	34.54			27.37	81.9								
1138.	3.98	34.56			27.46	73.4								
1424.	3.22	34.58			27.55	64.9								

CROMWELL		3, STATION		6, 13-0N LAT, 157-0W LONG, APR. 15, 1964, 0300 G.C.T.										
DRY BULB 25.4		WET BULB 23.0		WIND SPEED 12, DIR. 08		BAR. 11			WEATHER 02		VIS. 9		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.		
1.	25.32	34.38			22.80	506.8	0.	25.32	34.38	22.80	506.8	0.000		
10.	25.30	34.38			22.80	506.6	10.	25.30	34.38	22.80	506.6	0.072		
30. Δ	25.12	34.18			22.71	516.5	20.	25.21	34.28	22.76	511.4	0.103		
50. Δ	25.10	34.19			22.72	516.0	30.	25.12	34.18	22.71	516.5	0.155		
75. Δ	25.08	34.19			22.73	516.4	50.	25.10	34.19	22.72	516.0	0.259		
99.	24.66	34.42			23.03	488.6	75.	25.08	34.19	22.73	516.4	0.389		
124.	23.39	34.67			23.59	435.7	100.	24.65	34.43	23.04	487.5	0.515		
149.	18.69	34.70			24.89	312.2	150.	18.55	34.69	24.92	309.3	0.716		
173.	15.72	34.51			25.45	258.8	200.	12.43	34.26	25.95	211.0	0.847		
188.	13.91	34.37			25.74	231.6	250.	10.21	34.34	26.42	166.9	0.942		
220.	10.57	34.17			26.23	185.0	300.	9.50	34.46	26.64	147.2	1.021		
247.	10.24	34.32			26.40	168.9	400.	8.70	34.59	26.87	127.0	1.160		
272.	9.94	34.46			26.56	154.2	500.	7.79	34.57	26.99	116.7	1.283		
297.	9.53	34.46			26.63	147.9	600.	6.84	34.53	27.09	107.3	1.396		
395.	8.74	34.59			26.86	127.7	700.	6.07	34.52	27.19	98.5	1.500		
495.	7.84	34.57			26.98	117.1	800.	5.46	34.53	27.27	91.0	1.596		
593.	6.90	34.53			27.08	107.9	1000.	4.59	34.54	27.38	81.1	1.770		
790.	5.51	34.53			27.26	91.6	1200.	3.83	34.57	27.48	71.6	1.974		
988.	4.64	34.54			27.37	81.8								
1186.	3.86	34.57			27.48	71.6								
1483.	2.99	34.60			27.59	61.0								

<sup>4</sup> FROM BT DATA

Table 3.--Continued

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA					
CROMWELL DRY BULB 25.2		3, STATION WET BULB 23.6		7, 11-30N LAT, 157- WIND SPEED 18, DIR. 09		0W LONG, APR. 15, 1964, BAR. 12		1200 G.C.T. WEATHER 02		VIS. 9		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	CHY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	25.91	34.66			22.83	504.0	0.	25.91	34.66	22.83	504.0	0.000	
10.	25.92	34.66			22.82	504.7	10.	25.92	34.66	22.82	504.7	0.051	
45.	25.65	34.66			22.91	498.1	20.	25.89	34.65	22.83	504.6	0.102	
50.Δ	25.58	34.67			22.94	495.5	30.	25.82	34.65	22.85	503.0	0.153	
75.Δ	25.50	34.68			22.97	493.4	50.	25.58	34.67	22.94	495.5	0.233	
99.	22.28	35.03			24.18	378.3	75.	25.50	34.68	22.97	493.4	0.378	
122.	19.67	35.00			24.87	313.6	100.	22.18	35.04	24.22	375.1	0.487	
145.	15.58	34.50			25.48	255.6	150.	14.95	34.44	25.57	247.1	0.644	
171.	12.84	34.28			25.89	216.8	200.	11.20	34.36	26.26	181.5	0.752	
186.	11.55	34.24			26.10	196.2	250.	10.84	34.71	26.60	150.5	0.836	
217.	11.21	34.56			26.41	167.4	300.	10.23	34.71	26.71	141.2	0.909	
240.	10.95	34.70			26.57	153.0	400.	9.15	34.66	26.85	128.9	1.046	
269.	10.61	34.70			26.63	147.8	500.	8.06	34.60	26.97	118.6	1.171	
292.	10.32	34.71			26.69	142.6	600.	6.91	34.54	27.09	107.2	1.285	
387.	9.28	34.67			26.83	130.2	700.	6.11	34.53	27.19	98.2	1.388	
482.	8.29	34.61			26.94	120.8	800.	5.50	34.54	27.27	90.7	1.484	
574.	7.15	34.55			27.06	109.8	1000.	4.48	34.57	27.41	77.8	1.654	
762.	5.73	34.54			27.24	93.4	1200.	3.71	34.59	27.51	68.5	1.802	
950.	4.72	34.56			27.38	80.9							
1139.	3.90	34.59			27.49	70.2							
1427.	3.17	34.60			27.57	62.8							

TEMPERATURE ERROR TERM AT 200. METERS IS 0.13

CROMWELL DRY BULB 26.2		3, STATION WET BULB 24.0		8, 11-30N LAT, 154- WIND SPEED 28, DIR. 09		0W LONG, APR. 16, 1964, BAR. 13		0800 G.C.T. WEATHER 02		VIS. 7		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	CHY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	26.59	34.71			22.65	520.8	0.	26.59	34.71	22.65	520.8	0.000	
8.	26.63	34.72			22.65	521.6	10.	26.63	34.72	22.65	521.7	0.053	
30.Δ	26.60	34.71			22.65	522.3	20.	26.63	34.72	22.64	522.2	0.106	
43.	26.56	34.71			22.66	521.6	30.	26.60	34.71	22.65	522.3	0.158	
50.Δ	26.51	34.71			22.68	520.4	50.	26.51	34.71	22.68	520.4	0.263	
75.Δ	26.20	34.72			22.78	511.3	75.	26.20	34.72	22.78	511.3	0.333	
96.	16.42	34.51			25.29	271.8	100.	15.45	34.50	25.50	251.7	0.489	
119.	12.90	34.53			26.07	198.3	150.	11.68	34.76	26.49	159.2	0.593	
140.	11.93	34.74			26.42	165.3	200.	11.10	34.74	26.57	151.9	0.671	
169.	11.42	34.75			26.52	156.0	250.	10.37	34.73	26.70	141.0	0.745	
182.	11.30	34.74			26.54	154.9	300.	10.03	34.72	26.75	137.3	0.815	
214.	10.91	34.74			26.61	148.8	400.	9.28	34.67	26.84	130.2	0.950	
237.	10.53	34.74			26.68	142.7	500.	8.49	34.63	26.93	122.7	1.078	
266.	10.23	34.72			26.71	139.8	600.	7.54	34.58	27.04	113.4	1.197	
289.	10.10	34.72			26.74	138.1	700.	6.67	34.56	27.14	103.8	1.307	
385.	9.39	34.68			26.82	131.3	800.	5.91	34.56	27.24	94.9	1.407	
485.	8.63	34.64			26.92	124.0	1000.	4.81	34.57	27.38	81.7	1.586	
581.	7.72	34.59			27.01	115.3	1200.	4.04	34.58	27.47	73.0	1.743	
774.	6.09	34.56			27.21	97.0							
971.	4.94	34.57			27.36	83.2							
1166.	4.18	34.58			27.46	74.7							
1460.	3.45	34.60			27.55	66.5							

TEMPERATURE ERROR TERM AT 100. METERS IS 0.12

CROMWELL DRY BULB 25.1		3, STATION WET BULB 22.9		9, 13- ON LAT, 154- WIND SPEED 17, DIR. 08		1W LONG, APR. 16, 1964, BAR. 13		1800 G.C.T. WEATHER 01		VIS. 8		CLOUD TYPE 4, COVER 5	
DEPTH	TEMP.	SAL.	CHY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	24.71	34.37			22.97	489.8	0.	24.71	34.37	22.97	489.8	0.000	
8.	24.71	34.38			22.98	489.4	10.	24.71	34.38	22.98	489.4	0.050	
30.Δ	24.70	34.38			22.99	490.0	20.	24.70	34.38	22.99	489.6	0.099	
50.Δ	24.70	34.38			22.99	490.8	30.	24.70	34.38	22.99	490.0	0.148	
75.Δ	23.80	34.74			23.52	440.2	50.	24.70	34.38	22.99	490.8	0.247	
97.	23.22	34.85			23.78	416.9	75.	23.80	34.74	23.52	440.2	0.365	
100.Δ	23.18	34.85			23.79	415.9	100.	23.18	34.85	23.79	415.9	0.472	
121.	19.37	34.75			24.75	324.2	150.	15.83	34.53	25.45	258.8	0.642	
146.	16.55	34.58			25.32	271.1	200.	11.57	34.55	26.34	174.2	0.751	
169.	12.81	34.38			25.97	208.8	250.	10.74	34.70	26.61	149.7	0.833	
184.	11.98	34.45			26.19	188.5	300.	10.11	34.69	26.71	140.9	0.906	
216.	11.37	34.64			26.45	164.3	400.	9.26	34.63	26.81	132.8	1.045	
241.	10.92	34.70			26.58	152.5	500.	8.17	34.59	26.95	120.5	1.172	
265.	10.47	34.69			26.65	146.0	600.	7.20	34.55	27.06	110.7	1.289	
289.	10.20	34.69			26.70	142.0	700.	6.37	34.53	27.15	102.1	1.397	
386.	9.41	34.64			26.79	134.5	800.	5.70	34.52	27.23	94.8	1.496	
484.	8.33	34.60			26.93	122.2	1000.	4.82	34.55	27.36	83.3	1.676	
581.	7.38	34.56			27.04	112.5	1200.	4.07	34.58	27.46	73.9	1.836	
765.	5.90	34.52			27.21	97.2							
971.	4.94	34.55			27.35	84.7							
1165.	4.21	34.57			27.44	75.8							
1457.	3.27	34.60			27.56	64.2							

Δ FROM BT DATA

Table 3.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA					
CROMWELL 3, STATION 10, 14-30N LAT, 154-1W LONG, APR. 17, 1964, 0300 G.C.T.													
DRY BULB 24.9		WET BULB 22.2		WIND SPEED 19, DIR. 07		BAR. 12		WEATHER 02		VIS. 8		CLOUD TYPE 3, COVER 5	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	24.80	34.38			22.96	491.7	0.	24.80	34.38	22.96	491.7	0.000	
11.	24.82	34.38			22.95	492.7	10.	24.82	34.38	22.95	492.6	0.050	
49.	24.76	34.36			22.95	493.9	20.	24.84	34.37	22.94	494.2	0.100	
74.	24.47	34.42			23.08	482.2	30.	24.83	34.36	22.93	495.0	0.150	
100.	23.50	34.76			23.63	431.3	50.	24.76	34.36	22.95	493.9	0.249	
125.	21.42	34.98			24.38	360.0	75.	24.45	34.43	23.10	480.9	0.372	
149.	19.72	35.05			24.89	312.2	100.	23.50	34.76	23.63	431.3	0.487	
174.	18.01	34.84			25.17	286.7	150.	19.66	35.05	24.90	311.0	0.674	
190.	16.39	34.62			25.38	266.0	200.	15.51	34.53	25.52	253.6	0.816	
223.	13.62	34.38			25.81	226.0	250.	11.42	34.23	26.12	195.8	0.929	
248.	11.58	34.24			26.10	198.2	300.	9.13	34.28	26.55	155.2	1.018	
275.	9.75	34.21			26.40	169.5	400.	8.35	34.50	26.85	128.3	1.161	
298.	9.16	34.27			26.54	156.0	500.	7.32	34.50	27.00	114.8	1.234	
398.	8.37	34.50			26.85	128.6	600.	6.58	34.50	27.10	105.7	1.395	
499.	7.33	34.50			27.00	114.9	700.	5.84	34.50	27.20	97.2	1.497	
601.	6.57	34.50			27.10	105.6	800.	5.20	34.50	27.28	89.9	1.592	
800.	5.20	34.50			27.28	89.9	1000.	4.39	34.52	27.38	80.2	1.764	
1000.	4.39	34.52			27.38	80.2	1200.	3.78	34.57	27.49	70.8	1.917	
1200.	3.78	34.57			27.49	70.8							
1398.	3.11	34.58			27.56	63.4							

CROMWELL 3, STATION 11, 16-3N LAT, 154-0W LONG, APR. 17, 1964, 1300 G.C.T.													
DRY BULB 23.9		WET BULB 21.2		WIND SPEED 21, DIR. 06		BAR. 15		WEATHER 02		VIS. 8		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	24.40	34.53			23.19	469.4	0.	24.40	34.53	23.19	469.4	0.000	
11.	24.40	34.52			23.18	470.6	10.	24.40	34.52	23.18	470.5	0.048	
50. <sup>Δ</sup>	24.40	34.52			23.18	472.1	20.	24.45	34.50	23.15	473.7	0.095	
75. <sup>Δ</sup>	23.80	34.71			23.50	442.4	30.	24.47	34.49	23.14	475.2	0.143	
99.	23.35	34.81			23.71	423.5	50.	24.40	34.52	23.18	472.1	0.239	
122.	21.72	34.98			24.30	367.8	75.	23.80	34.71	23.50	442.4	0.314	
146.	20.25	35.02			24.73	327.6	100.	23.29	34.82	23.73	421.3	0.463	
169.	19.19	34.98			24.98	304.8	150.	20.09	35.02	24.78	323.3	0.650	
184.	17.97	34.82			25.16	287.5	200.	15.90	34.57	25.46	259.2	0.797	
214.	14.06	34.36			25.70	236.1	250.	11.48	34.20	26.09	199.1	0.913	
240.	12.07	34.19			25.97	210.6	300.	10.05	34.36	26.47	163.8	1.004	
265.	10.80	34.26			26.26	183.3	400.	7.70	34.27	26.77	135.6	1.155	
290.	10.32	34.36			26.42	168.3	500.	6.85	34.39	26.98	116.4	1.252	
388.	7.85	34.26			26.74	138.4	600.	6.03	34.43	27.12	103.8	1.393	
488.	6.96	34.38			26.96	118.3	700.	5.47	34.47	27.22	94.6	1.494	
588.	6.11	34.42			27.10	105.1	800.	5.02	34.50	27.30	87.3	1.586	
788.	5.08	34.50			27.29	88.2	1000.	4.17	34.55	27.43	75.2	1.750	
989.	4.21	34.55			27.43	75.7	1200.	3.55	34.58	27.52	67.1	1.894	
1188.	3.62	34.57			27.50	68.7							
1488.	2.90	34.63			27.62	57.7							

TEMPERATURE ERROR TERM AT 200. METERS IS 0.15

CROMWELL 3, STATION 12, 17-31N LAT, 153-59W LONG, APR. 17, 1964, 2200 G.C.T.													
DRY BULB 24.6		WET BULB 21.0		WIND SPEED 26, DIR. 07		BAR. 16		WEATHER 02		VIS. 8		CLOUD TYPE 6, COVER 3	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
1.	23.76	34.54			23.35	450.7	0.	23.76	34.54	23.39	450.6	0.000	
11.	23.77	34.53			23.37	452.0	10.	23.77	34.53	23.37	452.1	0.046	
49.	23.20	34.82			23.76	416.7	20.	23.66	34.59	23.45	445.2	0.091	
75. <sup>Δ</sup>	23.06	34.88			23.85	409.5	30.	23.52	34.66	23.55	436.4	0.136	
99.	22.72	35.02			24.05	391.0	50.	23.19	34.82	23.76	416.4	0.221	
123.	22.62	35.06			24.11	386.3	75.	23.06	34.88	23.85	409.5	0.325	
146.	21.75	35.10			24.38	360.8	100.	22.72	35.02	24.05	390.9	0.426	
173.	19.92	35.02			24.82	320.2	150.	21.50	35.09	24.45	354.7	0.614	
188.	19.06	34.97			25.00	303.0	200.	17.93	34.83	25.18	286.5	0.776	
221.	15.69	34.54			25.48	257.4	250.	13.08	34.31	25.86	221.3	0.904	
246.	13.36	34.33			25.82	225.2	300.	10.57	34.18	26.24	185.7	1.006	
271.	11.88	34.24			26.04	204.2	400.	8.94	34.47	26.73	139.9	1.171	
297.	10.66	34.18			26.22	187.5	500.	7.69	34.50	26.95	120.2	1.302	
394.	9.02	34.46			26.71	141.7	600.	6.66	34.48	27.08	108.3	1.417	
493.	7.77	34.50			26.94	121.2	700.	5.94	34.49	27.18	99.3	1.522	
590.	6.74	34.48			27.07	109.3	800.	5.39	34.50	27.26	92.2	1.619	
785.	5.47	34.50			27.24	93.2	1000.	4.44	34.51	27.37	81.3	1.795	
981.	4.51	34.51			27.36	82.3	1200.	3.73	34.55	27.48	71.8	1.950	
1176.	3.86	34.55			27.46	73.0							
1370.	3.21	34.58			27.55	64.4							

<sup>Δ</sup> FROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 3, STATION 13, 19- ON LAT, 154- OW LONG, APR. 18, 1964, 0700 G.C.T.												
DRY BULB 23.2		WET BULB 20.0		WIND SPEED 18, DIR. 06		BAR. 17		WEATHER 02		VIS. 8 CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.48	34.64			23.54	435.6	0.	23.48	34.64	23.54	435.6	0.700
10.	23.50	34.66			23.55	435.1	10.	23.50	34.66	23.55	435.1	0.044
50.Δ	23.49	34.65			23.55	437.1	20.	23.51	34.66	23.55	435.9	0.088
75.Δ	23.42	34.71			23.61	431.7	30.	23.51	34.66	23.55	436.5	0.132
99.	22.93	34.94			23.93	402.5	50.	23.49	34.65	23.55	437.1	0.220
123.	22.45	35.05			24.15	382.4	75.	23.42	34.71	23.61	431.7	0.350
147.	21.51	35.21			24.53	346.6	100.	22.91	34.95	23.94	401.8	0.435
171.	20.11	35.11			24.84	318.4	150.	21.36	35.21	24.57	343.0	0.622
185.	19.07	35.01			25.03	300.2	200.	17.46	34.80	25.27	277.4	0.779
216.	15.71	34.57			25.50	255.5	250.	13.16	34.31	25.84	223.2	0.905
241.	13.83	34.36			25.75	232.2	300.	10.76	34.19	26.21	188.5	1.009
265.	12.17	34.24			25.99	209.4	400.	8.87	34.33	26.63	149.1	1.179
288.	11.13	34.19			26.14	194.8	500.	7.31	34.38	26.91	123.6	1.317
381.	9.18	34.30			26.56	155.7	600.	5.96	34.31	27.04	111.3	1.435
475.	7.75	34.40			26.86	128.0	700.	5.43	34.38	27.16	100.1	1.542
569.	6.21	34.30			26.99	115.0	800.	5.09	34.47	27.27	90.7	1.639
757.	5.31	34.45			27.22	94.5	1000.	4.31	34.52	27.39	79.2	1.910
947.	4.44	34.51			27.37	81.0	1200.	3.83	34.55	27.47	72.8	1.964
1136.	4.07	34.54			27.43	76.0						
1424.	3.49	34.56			27.51	69.7						
TEMPERATURE ERROR TERM AT 200. METERS IS 0.11												
TEMPERATURE ERROR TERM AT 700. METERS IS 0.10												

CROMWELL 3, STATION 14, 20-30N LAT, 154- OW LONG, APR. 21, 1964, 1200 G.C.T.												
DRY BULB 23.0		WET BULB 20.5		WIND SPEED 21, DIR. 10		BAR. 19		WEATHER 00		VIS. 8 CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.42	34.52			23.47	442.6	0.	23.42	34.52	23.47	442.6	0.700
9.	23.44	34.52			23.46	443.5	10.	23.44	34.52	23.46	443.6	0.045
47.	23.40	34.52			23.48	443.8	20.	23.44	34.52	23.46	444.1	0.090
75.Δ	23.30	34.54			23.52	440.7	30.	23.44	34.52	23.46	444.3	0.135
96.	22.80	34.90			23.94	401.7	50.	23.41	34.51	23.47	444.9	0.224
120.	22.55	35.00			24.08	388.6	75.	23.30	34.54	23.52	440.7	0.336
143.	22.02	35.07			24.29	370.1	100.	22.76	34.93	23.97	398.6	0.441
170.	19.36	34.72			24.73	327.8	150.	21.50	35.00	24.37	361.9	0.633
183.	17.57	34.58			25.07	295.5	200.	16.08	34.45	25.33	271.4	0.793
214.	15.21	34.39			25.47	257.8	250.	12.91	34.26	25.86	221.3	0.917
238.	13.74	34.34			25.75	231.8	300.	10.87	34.17	26.17	192.1	1.021
266.	11.92	34.17			25.98	210.0	400.	8.54	34.16	26.56	156.2	1.197
289.	11.18	34.17			26.12	197.1	500.	6.66	34.21	26.86	127.2	1.340
394.	8.67	34.16			26.53	158.2	600.	5.47	34.26	27.06	108.3	1.459
482.	6.95	34.20			26.82	131.4	700.	4.89	34.38	27.21	94.0	1.561
577.	5.65	34.24			27.02	112.2	800.	4.61	34.47	27.32	84.8	1.651
766.	4.71	34.45			27.29	87.0	1000.	4.10	34.52	27.42	76.5	1.815
958.	4.21	34.51			27.40	78.3	1200.	3.58	34.56	27.50	69.2	1.962
1151.	3.69	34.55			27.48	70.7						
1446.	3.00	34.58			27.57	62.3						

CROMWELL 3, STATION 15, 22- ON LAT, 154- 2W LONG, APR. 21, 1964, 2000 G.C.T.												
DRY BULB 21.4		WET BULB 19.7		WIND SPEED 20, DIR. 07		BAR. 23		WEATHER 03		VIS. 8 CLOUD TYPE 7, COVER 7		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.37	34.64			23.57	432.5	0.	23.37	34.64	23.57	432.5	0.000
10.	23.35	34.64			23.58	432.4	10.	23.35	34.64	23.58	432.4	0.044
30.Δ	23.34	34.66			23.60	431.4	20.	23.34	34.65	23.59	431.9	0.088
50.Δ	23.36	34.68			23.61	431.3	30.	23.34	34.66	23.60	431.4	0.131
75.Δ	23.40	34.76			23.66	427.6	50.	23.36	34.68	23.61	431.3	0.218
100.	23.42	34.90			23.76	419.0	75.	23.40	34.76	23.66	427.6	0.326
124.	22.97	34.97			23.94	402.4	100.	23.42	34.90	23.76	419.0	0.433
149.	22.46	35.04			24.14	384.4	150.	22.41	35.04	24.15	383.1	0.635
174.	20.94	35.02			24.54	346.3	200.	19.37	34.99	24.94	309.3	0.809
189.	19.46	35.02			24.81	321.8	250.	15.85	34.58	25.48	258.8	0.953
221.	18.17	34.88			25.16	289.1	300.	12.26	34.23	25.96	212.5	1.071
247.	16.07	34.61			25.45	261.4	400.	8.94	34.14	26.48	164.0	1.261
272.	14.25	34.38			25.67	240.1	500.	7.06	34.16	26.77	136.2	1.413
298.	12.37	34.24			25.95	214.0	600.	5.44	34.18	27.00	114.3	1.539
395.	9.05	34.14			26.46	165.7	700.	4.95	34.30	27.14	100.7	1.648
493.	7.20	34.16			26.75	138.0	800.	4.84	34.42	27.26	91.1	1.745
591.	5.51	34.17			26.98	115.8	1000.	4.11	34.50	27.40	78.1	1.916
785.	4.90	34.41			27.24	92.5	1200.	3.56	34.53	27.48	70.8	2.067
979.	4.17	34.50			27.39	78.8						
1175.	3.65	34.50			27.45	74.1						
1469.	3.03	34.58			27.57	62.9						
TEMPERATURE ERROR TERM AT 700. METERS IS 0.15												

FROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 3, STATION 16, 23-29N LAT, 153-58W LONG, APR. 22, 1964, 0500 G.C.T.												
DRY BULB 22.8	WET BULB 19.9	WIND SPEED 24, DIR. 09	BAR. 22	WEATHER 03	VIS. 8	CLOUD TYPE 8, COVER 7						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	23.34	34.68			23.61	428.8	0.	23.34	34.68	23.61	428.8	0.000
11.	23.35	34.70			23.63	428.1	10.	23.35	34.70	23.62	428.1	0.044
30. Δ	23.36	34.71			23.63	428.4	20.	23.39	34.67	23.60	431.3	0.087
48.	22.87	35.19			24.14	380.9	30.	23.36	34.71	23.63	428.4	0.130
74.	22.56	35.20			24.23	372.7	50.	22.84	35.20	24.15	379.1	0.212
98.	22.13	35.24			24.38	359.1	75.	22.55	35.20	24.24	372.2	0.306
120.	21.54	35.23			24.54	344.9	100.	22.09	35.24	24.40	357.9	0.398
144.	20.45	35.11			24.75	326.1	150.	20.30	35.10	24.78	323.2	0.570
172.	19.57	35.04			24.92	310.0	200.	17.86	34.85	25.21	283.0	0.723
185.	18.73	34.95			25.07	296.3	250.	14.72	34.49	25.66	240.9	0.855
214.	17.04	34.76			25.34	271.2	300.	12.51	34.29	25.96	213.2	0.969
240.	15.27	34.55			25.58	248.2	400.	9.52	34.11	26.35	175.9	1.165
268.	13.84	34.41			25.78	229.5	500.	7.29	34.04	26.65	148.0	1.329
290.	12.89	34.32			25.91	217.9	600.	5.61	34.06	26.88	125.1	1.467
387.	9.85	34.12			26.31	180.0	700.	4.83	34.20	27.08	106.3	1.584
485.	7.61	34.05			26.61	151.9	800.	4.47	34.35	27.24	91.9	1.684
580.	5.83	34.04			26.84	129.4	1000.	3.88	34.49	27.41	76.4	1.854
771.	4.59	34.32			27.20	95.2	1200.	3.41	34.56	27.52	67.0	2.000
965.	3.97	34.47			27.39	78.4						
1158.	3.53	34.54			27.49	69.6						
1453.	2.92	34.57			27.57	62.2						

CROMWELL 3, STATION 17, 23-30N LAT, 151-0W LONG, APR. 22, 1964, 2300 G.C.T.												
DRY BULB 22.2	WET BULB 18.7	WIND SPEED 20, DIR. 09	BAR. 22	WEATHER 02	VIS. 9	CLOUD TYPE 8, COVER 3						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	22.89	34.98			23.97	394.8	0.	22.89	34.98	23.97	394.8	0.000
10.	22.92	34.98			23.96	396.0	10.	22.92	34.98	23.96	396.0	0.040
30. Δ	22.92	35.06			24.02	391.0	20.	22.93	35.01	23.98	394.3	0.080
48.	22.82	35.13			24.10	383.9	30.	22.92	35.06	24.02	391.0	0.120
75. Δ	22.02	35.22			24.40	356.7	50.	22.77	35.14	24.13	381.9	0.198
98.	21.62	35.22			24.51	347.0	75.	22.02	35.22	24.40	356.7	0.291
122.	20.75	35.24			24.76	323.7	100.	21.56	35.22	24.53	345.0	0.379
146.	19.85	35.08			24.88	313.2	150.	19.69	35.07	24.91	310.3	0.544
171.	18.68	34.97			25.10	293.2	200.	16.95	34.72	25.33	271.6	0.691
188.	17.53	34.80			25.25	278.8	250.	14.20	34.39	25.70	237.5	0.819
220.	16.05	34.61			25.46	260.1	300.	11.64	34.20	26.06	203.2	0.930
245.	14.58	34.44			25.65	241.8	400.	8.78	34.05	26.43	167.9	1.117
272.	12.68	34.23			25.88	220.0	500.	6.70	34.01	26.70	142.0	1.274
295.	11.81	34.21			26.03	205.7	600.	5.46	34.10	26.93	120.7	1.407
394.	8.93	34.06			26.41	169.7	700.	4.79	34.20	27.09	105.6	1.521
495.	6.78	34.01			26.69	143.2	800.	4.44	34.31	27.21	94.5	1.622
594.	5.51	34.09			26.92	121.8	1000.	4.01	34.46	27.38	79.7	1.798
792.	4.46	34.30			27.20	95.3	1200.	3.63	34.53	27.47	71.7	1.952
993.	4.02	34.46			27.38	80.0						
1193.	3.65	34.51			27.45	73.5						
1495.	3.18	34.56			27.54	66.3						

CROMWELL 3, STATION 18, 22- IN LAT, 150-50W LONG, APR. 23, 1964, 0800 G.C.T.												
DRY BULB 21.7	WET BULB 19.5	WIND SPEED 15, DIR. 09	BAR. 21	WEATHER 00	VIS. 9	CLOUD TYPE , COVER						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	23.30	34.88			23.78	413.3	0.	23.30	34.88	23.78	413.3	0.000
11.	23.32	34.88			23.77	414.3	10.	23.32	34.88	23.77	414.2	0.042
30. Δ	23.28	34.89			23.79	413.2	20.	23.33	34.87	23.76	415.5	0.084
51.	22.85	35.16			24.12	382.6	30.	23.28	34.89	23.79	413.2	0.126
75. Δ	22.30	35.20			24.31	365.7	50.	22.88	35.15	24.10	384.3	0.206
102.	21.88	35.20			24.42	355.5	75.	22.30	35.20	24.31	365.7	0.300
127.	20.70	35.13			24.69	330.5	100.	21.92	35.20	24.41	356.4	0.391
153.	19.20	34.98			24.97	304.5	150.	19.37	35.00	24.94	307.2	0.559
177.	18.34	34.92			25.15	288.8	200.	17.28	34.77	25.29	275.5	0.705
192.	17.71	34.83			25.23	280.9	250.	13.80	34.36	25.75	232.0	0.833
226.	15.61	34.56			25.52	254.3	300.	11.80	34.20	26.03	206.2	0.944
254.	13.53	34.33			25.79	228.7	400.	9.09	34.10	26.42	169.4	1.133
280.	12.55	34.26			25.93	215.5	500.	6.61	34.08	26.77	136.0	1.288
304.	11.65	34.19			26.05	204.5	600.	5.79	34.25	27.01	113.8	1.414
405.	8.98	34.10			26.44	167.7	700.	5.20	34.37	27.17	98.6	1.521
507.	6.47	34.08			26.79	134.0	800.	4.71	34.44	27.28	88.4	1.616
606.	5.77	34.26			27.02	112.7	1000.	4.12	34.51	27.40	77.7	1.784
808.	4.68	34.44			27.29	87.8	1200.	3.87	34.52	27.44	75.5	1.939
1010.	4.10	34.51			27.41	77.5	1500.	3.36	34.56	27.52	68.6	2.158
1210.	3.86	34.52			27.44	75.5						
1513.	3.34	34.56			27.52	68.4						

Δ FROM BT DATA



Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 3, STATION 19, 20-30N LAT, 150-59W LONG, APR. 23, 1964, 1700 G.C.T.												
DRY BULB 21.8	WET BULB 18.7	WIND SPEED 16, DIR. 08	BAR. 18	WEATHER 02	VIS. 9	CLOUD TYPE 8, COVER 3						
DEPTH	TEMP.	SAL.	OXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	23.11	34.63			23.64	426.1	0.	23.11	34.63	23.64	426.1	0.000
10.	23.13	34.62			23.63	427.7	10.	23.13	34.62	23.63	427.7	0.043
30.Δ	23.06	34.66			23.68	423.7	20.	23.13	34.61	23.62	428.7	0.087
48.	22.59	35.00			24.07	387.0	30.	23.06	34.66	23.68	423.7	0.130
75.Δ	22.46	35.02			24.12	383.0	50.	22.57	35.01	24.09	385.6	0.211
101.	22.35	35.04			24.17	379.6	75.	22.46	35.02	24.12	383.0	0.308
123.	22.08	35.12			24.31	367.4	100.	22.36	35.04	24.17	379.8	0.404
148.	21.21	35.16			24.58	342.3	150.	21.11	35.16	24.60	339.9	0.585
173.	20.01	35.10			24.85	316.7	200.	19.22	35.01	24.99	304.3	0.748
188.	19.67	35.07			24.92	310.9	250.	16.34	34.63	25.41	265.7	0.991
220.	18.23	34.88			25.14	290.5	300.	12.59	34.22	25.89	219.5	1.014
246.	16.61	34.67			25.37	269.0	400.	8.68	34.13	26.51	160.4	1.205
273.	14.66	34.42			25.62	245.7	500.	7.08	34.24	26.83	130.5	1.352
296.	12.84	34.24			25.86	222.9	600.	5.61	34.23	27.01	112.9	1.475
395.	8.79	34.13			26.49	162.3	700.	5.02	34.33	27.16	99.1	1.582
494.	7.18	34.24			26.82	131.8	800.	4.79	34.45	27.28	88.6	1.677
592.	5.67	34.22			27.00	114.2	1000.	4.07	34.51	27.41	76.7	1.844
789.	4.83	34.44			27.27	89.5	1200.	3.56	34.55	27.50	69.3	1.992
986.	4.12	34.51			27.41	77.5						
1182.	3.56	34.55			27.49	69.4						
1478.	3.31	34.56			27.53	67.8						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.12

CROMWELL 3, STATION 20, 19- ON LAT, 150-59W LONG, APR. 24, 1964, 0200 G.C.T.												
DRY BULB 22.9	WET BULB 20.3	WIND SPEED 21, DIR. 09	BAR. 16	WEATHER 01	VIS. 8	CLOUD TYPE 6, COVER 5						
DEPTH	TEMP.	SAL.	OXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.62	34.52			23.41	448.1	0.	23.62	34.52	23.41	448.1	0.000
10.	23.62	34.52			23.41	448.5	10.	23.62	34.52	23.41	448.5	0.046
30.Δ	23.62	34.52			23.41	449.3	20.	23.62	34.52	23.41	448.9	0.091
50.Δ	23.62	34.52			23.41	450.1	30.	23.62	34.52	23.41	449.3	0.136
75.Δ	23.54	34.53			23.44	448.1	50.	23.62	34.52	23.41	450.1	0.227
100.	22.95	34.88			23.88	407.4	75.	23.54	34.53	23.44	448.1	0.340
125.	22.60	35.01			24.08	389.4	100.	22.95	34.88	23.88	407.4	0.448
150.	21.75	35.14			24.41	358.1	150.	21.75	35.14	24.41	358.1	0.640
174.	20.32	35.12			24.79	323.2	200.	18.51	34.90	25.09	295.0	0.805
190.	19.31	35.03			24.98	304.9	250.	13.69	34.27	25.71	235.9	0.939
223.	16.39	34.56			25.34	271.4	300.	10.16	34.16	26.29	180.7	1.044
249.	13.78	34.28			25.70	237.2	400.	7.59	34.10	26.65	146.3	1.209
274.	11.70	34.18			26.03	205.4	500.	6.31	34.22	26.92	121.6	1.344
297.	10.29	34.16			26.27	182.6	600.	5.63	34.34	27.10	105.0	1.459
393.	7.72*	34.10			26.63	148.4	700.	5.26	34.42	27.21	95.6	1.560
487.	6.43	34.20			26.89	124.3	800.	4.99	34.47	27.28	89.4	1.633
582.	5.71	34.32			27.07	107.1	1000.	4.28	34.52	27.40	78.5	1.823
778.	5.07	34.46			27.26	90.9	1200.	3.70	34.55	27.48	71.0	1.975
976.	4.35	34.52			27.39	79.5						
1173.	3.79	34.54			27.46	72.9						
1471.	3.07	34.58			27.57	63.4						

CROMWELL 3, STATION 21, 17-30N LAT, 150-57W LONG, APR. 24, 1964, 1300 G.C.T.												
DRY BULB 23.0	WET BULB 20.3	WIND SPEED 22, DIR. 06	BAR. 15	WEATHER 02	VIS. 8	CLOUD TYPE , COVER						
DEPTH	TEMP.	SAL.	OXY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.82	34.40			23.26	462.4	0.	23.82	34.40	23.26	462.4	0.000
10.	23.82	34.40			23.26	462.8	10.	23.82	34.40	23.26	462.8	0.047
30.Δ	23.78	34.41			23.29	461.7	20.	23.91	34.40	23.27	462.6	0.094
50.Δ	23.68	34.44			23.33	457.5	30.	23.78	34.41	23.28	461.7	0.140
75.Δ	23.58	34.49			23.40	452.1	50.	23.68	34.44	23.33	457.5	0.233
102.	23.00	34.77			23.78	416.8	75.	23.58	34.49	23.40	452.1	0.347
124.	21.22	34.88			24.36	361.9	100.	23.08	34.75	23.74	420.6	0.457
151.	18.83	34.83			24.95	306.3	150.	18.93	34.84	24.93	308.1	0.641
175.	15.91	34.48			25.39	265.1	200.	13.82	34.36	25.75	230.7	0.777
190.	14.61	34.42			25.63	242.3	250.	11.03	34.17	26.15	193.4	0.884
222.	12.34	34.24			25.95	211.6	300.	9.46	34.12	26.38	171.8	0.976
248.	11.12	34.19			26.14	194.4	400.	7.66	34.22	26.73	138.9	1.132
274.	10.13	34.12			26.26	182.4	500.	7.19	34.43	26.96	118.3	1.262
299.	9.48	34.21			26.37	172.2	600.	6.58	34.46	27.07	108.6	1.377
397.	7.68	34.21			26.72	139.7	700.	5.92	34.48	27.17	99.5	1.482
494.	7.22	34.42			26.95	119.1	800.	5.30	34.49	27.26	91.8	1.579
593.	6.63	34.46			27.07	109.3	1000.	4.46	34.52	27.38	80.8	1.754
790.	5.35	34.49			27.25	92.4	1200.	3.79	34.56	27.48	71.9	1.908
986.	4.51	34.52			27.37	81.6						
1183.	3.86	34.56			27.47	72.3						
1481.	3.06	34.58			27.57	63.3						

Δ FROM BT DATA  
\*INTERPOLATED VALUE

Table 3.--Continued

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA					
CROMWELL 3, STATION 22, 16- ON LAT, 151- 1W LONG, APR. 24, 1964, 2100 G.C.T.													
DRY BULB	23.2	WET BULB	21.6	WIND SPEED	18, DIR. 06	BAR. 1c	WEATHER 02	VIS. 8	CLOUD TYPE , COVER			3	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
1.	24.45	34.40			23.08	480.3	0.	24.45	34.40	23.08	480.2	0.000	
10.	24.45	34.40			23.08	480.6	10.	24.45	34.40	23.08	480.6	0.049	
30. Δ	24.40	34.41			23.10	479.2	20.	24.43	34.40	23.08	480.2	0.297	
50. Δ	24.28	34.42			23.14	479.9	30.	24.40	34.41	23.10	479.2	0.146	
74.	23.22	34.70			23.66	426.9	50.	24.28	34.42	23.14	479.9	0.242	
98.	22.57	34.84			23.97	398.5	75.	23.20	34.71	23.67	425.8	0.355	
122.	20.83	35.09			24.63	336.6	100.	22.62	34.87	24.02	393.7	0.459	
147.	17.86	34.71			25.10	291.7	150.	17.33	34.65	25.18	284.0	0.629	
171.	14.10	34.31			25.65	239.4	200.	12.49	34.27	25.95	211.5	0.754	
195.	13.28	34.29			25.81	224.9	250.	10.93	34.42	26.35	173.6	0.951	
219.	11.68	34.28			26.11	196.4	300.	10.41	34.58	26.57	154.2	0.934	
246.	11.00	34.40			26.33	176.1	400.	9.09	34.54	26.77	136.8	1.081	
271.	10.63	34.50			26.47	162.9	500.	7.27	34.44	26.96	118.5	1.210	
295.	10.46	34.57			26.56	155.3	600.	6.42	34.46	27.10	106.3	1.323	
394.	9.21	34.55			26.75	138.1	700.	5.80	34.49	27.20	97.0	1.426	
493.	7.35	34.44			26.95	119.5	800.	5.31	34.52	27.28	89.8	1.520	
592.	6.47	34.46			27.09	107.1	1000.	4.36	34.54	27.40	78.5	1.691	
791.	5.36	34.52			27.27	90.3	1200.	3.69	34.57	27.50	69.4	1.840	
988.	4.43	34.56			27.40	79.1							
1187.	3.75	34.58			27.50	69.5							
1483.	3.01	34.60			27.59	61.2							

CROMWELL 3, STATION 23, 14-27N LAT, 151- 1W LONG, APR. 25, 1964, 0600 G.C.T.												
DRY BULB	24.9	WET BULB	22.6	WIND SPEED	20, DIR. 04	BAR. 15	WEATHER 02	VIS. 8	CLOUD TYPE , COVER			
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.54	34.40			23.05	482.8	0.	24.54	34.40	23.05	482.8	0.000
10.	24.52	34.40			23.05	482.6	10.	24.52	34.40	23.05	482.6	0.049
30. Δ	24.48	34.40			23.07	482.2	20.	24.50	34.40	23.06	482.4	0.098
50. Δ	24.48	34.40			23.07	483.0	30.	24.49	34.40	23.07	482.2	0.146
75. Δ	22.88	34.78			23.82	411.8	50.	24.47	34.40	23.07	483.0	0.244
102.	21.79	35.00			24.30	367.5	75.	22.88	34.78	23.82	411.8	0.356
124.	18.65	34.85			25.01	299.5	100.	21.91	34.99	24.26	371.0	0.455
148.	15.38	34.48			25.51	252.9	150.	15.15	34.46	25.54	249.8	0.611
175.	12.82	34.26			25.87	218.0	200.	11.37	34.25	26.14	192.9	0.723
194.	11.59	34.20			26.06	200.1	250.	10.02	34.40	26.55	155.1	0.811
221.	10.83	34.44			26.39	169.6	300.	9.63	34.54	26.71	140.0	0.885
246.	10.08	34.45			26.53	156.7	400.	8.52	34.58	26.89	125.1	1.019
274.	9.82	34.53			26.64	147.1	500.	7.43	34.55	27.02	112.6	1.139
299.	9.64	34.59			26.71	140.2	600.	6.55	34.53	27.13	103.2	1.248
400.	8.52	34.58			26.89	125.1	700.	5.86	34.53	27.22	95.4	1.348
500.	7.43	34.55			27.02	112.6	800.	5.29	34.53	27.29	88.8	1.441
599.	6.56	34.53			27.13	103.3	1000.	4.33	34.54	27.41	77.9	1.610
795.	5.32	34.53			27.29	89.1	1200.	3.65	34.57	27.50	69.4	1.759
991.	4.36	34.54			27.40	78.3						
1186.	3.75	34.57			27.49	70.3						
1481.	2.96	34.61			27.60	59.9						

CROMWELL 3, STATION 24, 12-56N LAT, 150-59W LONG, APR. 25, 1964, 1600 G.C.T.												
DRY BULB	24.6	WET BULB	22.3	WIND SPEED	20, DIR. 06	BAR. 14	WEATHER 02	VIS. 8	CLOUD TYPE , COVER			
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.08	34.46			22.93	494.1	0.	25.08	34.46	22.93	494.0	0.000
11.	25.09	34.46			22.93	494.8	10.	25.09	34.46	22.93	494.8	0.050
74.	23.66	34.50			23.36	453.5	20.	25.14	34.41	22.87	500.2	0.100
97.	21.67	34.94			24.28	368.5	30.	25.10	34.38	22.86	501.7	0.151
119.	19.28	34.90			24.89	311.1	50.	24.70	34.38	22.98	490.8	0.251
143.	15.98	34.52			25.40	262.8	75.	23.59	34.52	23.42	450.0	0.369
166.	13.05	34.30			25.86	219.2	100.	21.36	34.96	24.38	359.6	0.471
179.	11.89	34.35			26.12	194.1	150.	15.02	34.42	25.54	249.3	0.625
211.	11.29	34.59			26.42	166.4	200.	11.30	34.51	26.36	172.5	0.731
236.	10.98	34.67			26.54	155.7	250.	10.74	34.67	26.58	152.0	0.813
260.	10.57	34.66			26.61	149.8	300.	10.02	34.66	26.70	141.2	0.897
282.	10.25	34.67			26.67	144.1	400.	8.84	34.59	26.85	129.0	1.023
374.	9.14	34.60			26.80	132.9	500.	7.75	34.56	26.99	116.4	1.147
469.	8.07	34.54			26.95	119.4	600.	6.80	34.52	27.09	107.2	1.260
561.	7.16	34.53			27.05	111.2	700.	5.98	34.52	27.19	97.7	1.364
745.	5.66	34.52			27.24	93.7	800.	5.36	34.52	27.28	90.1	1.458
929.	4.80	34.54			27.36	83.2	1000.	4.51	34.55	27.39	79.7	1.630
1113.	4.10	34.56			27.45	74.7	1200.	3.79	34.57	27.49	70.7	1.783
1394.	3.23	34.60			27.57	63.3						

TEMPERATURE ERROR TERM AT 30. METERS IS 0.12  
 SALINITY ERROR TERM AT 30. METERS IS 0.06  
 TEMPERATURE ERROR TERM AT 50. METERS IS 0.13  
 SALINITY ERROR TERM AT 50. METERS IS 0.06  
 TEMPERATURE ERROR TERM AT 200. METERS IS 0.11

Δ FROM BT DATA

Table 3.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA						
CROMWELL 3, STATION 25, 11-30N LAT, 151-0W LONG, APR. 25, 1964, 0700 G.C.T.														
DRY BULB	26.5	WET BULB	23.9	WIND SPEED	22, DIR.	04	BAR.	15	WEATHER	02	VIS.	8	CLOUD TYPE	, COVER
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	26.74	34.77			22.65	521.0	0.	26.74	34.77	22.65	521.0	0.000		
8.	26.76	34.76			22.63	522.6	10.	26.76	34.76	22.63	522.9	0.053		
30.Δ	26.75	34.76			22.64	523.2	20.	26.77	34.76	22.63	523.6	0.106		
50.Δ	26.62	34.76			22.68	520.1	30.	26.75	34.76	22.64	523.2	0.158		
75.Δ	24.60	34.75			23.29	462.2	50.	26.62	34.76	22.68	520.1	0.264		
97.	21.34	34.73			24.22	374.9	75.	24.60	34.75	23.29	462.2	0.387		
120.	17.67	34.64			25.10	291.4	100.	20.88	34.72	24.33	363.6	0.491		
145.	13.19	34.66			25.96	209.7	150.	12.74	34.50	26.08	198.0	0.633		
169.	11.84	34.70			26.41	167.3	200.	11.31	34.74	26.53	155.6	0.722		
185.	11.58	34.73			26.48	160.7	250.	10.68	34.74	26.65	145.8	0.798		
216.	11.05	34.74			26.58	151.3	300.	10.13	34.72	26.73	139.1	0.870		
242.	10.75	34.74			26.64	146.7	400.	9.26	34.67	26.84	130.2	1.006		
268.	10.51	34.73			26.67	143.8	500.	8.26	34.61	26.95	120.4	1.132		
292.	10.21	34.72			26.72	140.0	600.	7.14	34.57	27.08	108.3	1.248		
389.	9.38	34.68			26.83	131.2	700.	6.27	34.55	27.19	99.3	1.353		
487.	8.41	34.62			26.93	122.0	800.	5.58	34.54	27.26	91.8	1.449		
582.	7.32	34.58			27.06	110.2	1000.	4.59	34.56	27.40	79.5	1.622		
776.	5.73	34.54			27.24	93.6	1200.	3.90	34.58	27.48	71.6	1.775		
967.	4.72	34.56			27.38	81.1								
1159.	4.07	34.58			27.47	73.3								
1450.	3.36	34.58			27.54	66.8								

CROMWELL 3, STATION 26, 10-0N LAT, 148-1W LONG, APR. 27, 1964, 0300 G.C.T.														
DRY BULB	26.0	WET BULB	24.0	WIND SPEED	19, DIR.	11	BAR.	11	WEATHER	01	VIS.	8	CLOUD TYPE	6, COVER
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	25.60	34.32			22.67	519.3	0.	25.60	34.32	22.67	519.3	0.000		
11.	25.60	34.33			22.67	519.0	10.	25.60	34.33	22.67	519.2	0.053		
30.Δ	25.44	34.36			22.75	517.9	20.	25.53	34.34	22.71	516.3	0.105		
50.Δ	25.36	34.37			22.78	510.6	30.	25.44	34.36	22.75	512.9	0.157		
75.Δ	25.32	34.37			22.79	510.4	50.	25.36	34.37	22.78	510.6	0.260		
100.	18.94	34.52			24.69	329.7	75.	25.32	34.37	22.79	510.4	0.389		
123.	13.93	34.38			25.74	229.5	100.	18.94	34.52	24.69	329.7	0.494		
147.	12.04	34.59			26.27	179.2	150.	11.92	34.60	26.31	175.7	0.622		
174.	11.42	34.70			26.48	159.8	200.	11.06	34.72	26.57	152.2	0.704		
189.	11.23	34.72			26.53	155.3	250.	10.40	34.70	26.67	143.6	0.779		
221.	10.74	34.72			26.62	147.5	300.	10.07	34.70	26.73	139.3	0.950		
247.	10.43	34.70			26.66	144.2	400.	9.36	34.68	26.83	131.1	0.987		
274.	10.21	34.72			26.72	139.6	500.	8.52	34.62	26.92	124.1	1.116		
298.	10.08	34.70			26.72	139.4	600.	7.41	34.57	27.04	112.7	1.235		
397.	9.38	34.68			26.83	131.3	700.	6.39	34.55	27.16	101.3	1.343		
496.	8.56	34.62			26.91	124.5	800.	5.54	34.54	27.27	91.3	1.441		
595.	7.47	34.57			27.03	113.3	1000.	4.46	34.56	27.41	78.4	1.612		
791.	5.60	34.54			27.26	92.0	1200.	3.77	34.58	27.50	69.8	1.762		
968.	4.60	34.55			27.39	80.3								
1160.	3.91	34.59			27.49	70.5								
1450.	3.37	34.59			27.55	66.2								

CROMWELL 3, STATION 27, 11-30N LAT, 148-4W LONG, APR. 27, 1964, 1400 G.C.T.														
DRY BULB	25.8	WET BULB	23.2	WIND SPEED	24, DIR.	06	BAR.	12	WEATHER	00	VIS.	8	CLOUD TYPE	, COVER
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	26.98	34.89			22.79	507.5	0.	26.98	34.89	22.79	507.5	0.000		
10.	26.60	34.90			22.79	507.8	10.	26.60	34.90	22.79	507.8	0.052		
30.Δ	26.60	34.90			22.79	508.6	20.	26.60	34.90	22.79	508.2	0.103		
50.Δ	26.60	34.90			22.79	509.4	30.	26.60	34.90	22.79	508.6	0.154		
75.Δ	26.48	34.90			22.83	506.8	50.	26.60	34.90	22.79	509.4	0.257		
101.	18.03	34.59			24.97	302.9	75.	26.48	34.90	22.83	506.8	0.385		
126.	14.97	34.43			25.56	247.2	100.	18.39	34.60	24.89	310.2	0.487		
152.	12.48	34.55			26.17	189.7	150.	12.63	34.54	26.13	193.5	0.614		
177.	11.74	34.65			26.39	169.3	200.	11.10	34.72	26.56	153.2	0.702		
193.	11.24	34.71			26.53	156.3	250.	10.42	34.70	26.67	144.0	0.777		
226.	10.72	34.72			26.63	147.2	300.	9.86	34.69	26.75	136.4	0.847		
253.	10.39	34.70			26.67	143.7	400.	8.84	34.62	26.87	126.9	0.990		
279.	10.13	34.70			26.72	139.8	500.	7.78	34.57	26.99	116.2	1.103		
304.	9.81	34.69			26.76	135.7	600.	6.86	34.54	27.10	106.6	1.215		
406.	8.79	34.62			26.87	126.5	700.	6.09	34.53	27.19	97.9	1.319		
508.	7.70	34.57			27.00	115.3	800.	5.45	34.54	27.28	90.2	1.414		
609.	6.78	34.54			27.11	105.8	1000.	4.46	34.56	27.41	78.3	1.584		
812.	5.38	34.54			27.29	89.4	1200.	3.84	34.58	27.49	70.9	1.735		
1013.	4.41	34.56			27.41	77.6	1500.	3.07	34.62	27.60	60.7	1.936		
1214.	3.81	34.58			27.49	70.5								
1515.	3.04	34.62			27.60	60.3								

Δ FROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 3, STATION 28, 13- ON LAT, 148- 1W LONG, APR. 27, 1964, 2400 G.C.T.												
DRY BULB 26.0		WET BULB 23.8		WIND SPEED 18, DIR. 07		BAR. 14		WEATHER 01		VIS. 7 CLOUD TYPE 8, COVER 4		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.05	34.88			22.95	492.3	0.	26.05	34.88	22.95	492.3	0.060
10.	26.00	34.88			22.96	491.2	10.	26.01	34.88	22.96	491.2	0.050
30. Δ	25.94	34.88			22.98	490.3	20.	25.97	34.88	22.97	490.6	0.099
50. Δ	25.90	34.88			23.00	489.9	30.	25.94	34.88	23.00	490.3	0.149
75. Δ	25.86	34.88			23.01	489.7	40.	25.90	34.88	23.00	489.9	0.248
100.	21.40	34.75			24.21	375.2	75.	25.86	34.86	23.01	489.7	0.371
125.	17.26	34.58			25.15	286.5	100.	21.40	34.75	24.21	375.2	0.450
151.	13.34	34.32			25.82	223.0	150.	13.46	34.33	25.80	224.9	0.631
175.	12.05	34.54			26.24	183.0	200.	11.80	34.68	26.40	169.0	0.730
191.	11.87	34.64			26.35	172.8	250.	10.74	34.64	26.56	154.0	0.812
224.	11.45	34.70			26.48	161.5	300.	10.29	34.67	26.66	145.3	0.837
243.	10.86	34.64			26.54	155.9	400.	9.17	34.63	26.82	131.9	1.027
270.	10.53	34.66			26.61	149.4	500.	8.03	34.58	26.96	119.5	1.154
294.	10.35	34.67			26.65	146.1	600.	7.03	34.53	27.07	109.9	1.270
324.	9.74	34.63			26.81	132.7	700.	6.21	34.52	27.17	100.6	1.376
495.	8.08	34.58			26.95	120.0	800.	5.55	34.53	27.26	92.2	1.474
594.	7.08	34.53			27.06	110.5	1000.	4.57	34.54	27.38	80.9	1.649
795.	5.58	34.53			27.26	92.6	1200.	3.84	34.57	27.48	71.7	1.803
925.	4.59	34.54			27.38	81.2						
1194.	3.89	34.57			27.48	72.1						
1493.	3.08	34.62			27.60	60.7						

CROMWELL 3, STATION 29, 14-30N LAT, 148- 0W LONG, APR. 28, 1964, 1000 G.C.T.												
DRY BULB 24.5		WET BULB 22.2		WIND SPEED 26, DIR. 07		BAR. 17		WEATHER 00		VIS. 7 CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.17	34.69			23.08	480.1	0.	25.17	34.69	23.08	480.1	0.000
9.	25.18	34.70			23.08	480.0	10.	25.18	34.70	23.08	480.1	0.049
30. Δ	25.18	34.69			23.07	481.6	20.	25.18	34.70	23.08	480.7	0.097
50. Δ	25.18	34.69			23.07	482.3	30.	25.18	34.69	23.07	481.6	0.146
75. Δ	25.18	34.69			23.07	483.3	40.	25.18	34.69	23.07	482.3	0.243
98.	24.43	34.49			23.15	477.0	75.	25.18	34.69	23.07	483.3	0.364
122.	20.58	34.88			24.54	345.3	100.	24.15	34.52	23.26	466.7	0.484
148.	17.72	34.65			25.09	292.8	150.	17.41	34.61	25.14	288.2	0.674
173.	14.15	34.30			25.63	241.2	200.	12.40	34.35	26.03	203.9	0.798
187.	13.11	34.33			25.87	218.7	250.	10.83	34.58	26.50	160.2	0.890
220.	11.62	34.41			26.22	185.8	300.	9.83	34.54	26.64	147.2	0.968
246.	10.95	34.58			26.48	162.0	400.	8.44	34.50	26.83	129.8	1.107
271.	10.26	34.53			26.56	154.3	500.	7.44	34.50	26.98	116.5	1.232
295.	9.91	34.54			26.65	148.3	600.	6.47	34.49	27.11	104.9	1.344
393.	8.52	34.50			26.92	130.8	700.	5.64	34.50	27.22	94.6	1.444
492.	7.52	34.50			26.97	117.5	800.	5.00	34.51	27.31	86.2	1.536
589.	6.57	34.49			27.10	106.2	1000.	4.30	34.56	27.43	76.1	1.700
783.	5.08	34.51			27.30	87.4	1200.	3.69	34.58	27.50	69.2	1.947
977.	4.38	34.56			27.42	76.9						
1170.	3.78	34.56			27.48	71.2						
1465.	3.03	34.59			27.58	62.1						

CROMWELL 3, STATION 30, 15-58N LAT, 148- 4W LONG, APR. 28, 1964, 1900 G.C.T.												
DRY BULB 23.2		WET BULB 21.3		WIND SPEED 22, DIR. 07		BAR. 17		WEATHER 02		VIS. 8 CLOUD TYPE 8, COVER 7		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	23.72	34.61			23.45	444.5	0.	23.72	34.61	23.45	444.4	0.000
9.	23.73	34.62			23.45	444.4	10.	23.71	34.62	23.46	443.5	0.045
46.	22.49	34.89			24.02	392.1	20.	23.46	34.68	23.58	433.0	0.089
73.	21.74	35.14			24.42	355.0	30.	23.14	34.75	23.72	419.6	0.132
96.	21.58	35.17			24.48	349.4	40.	22.36	34.93	24.09	385.5	0.213
119.	20.89	35.16			24.66	332.9	50.	21.73	35.15	24.42	354.2	0.307
143.	19.73	35.11			24.94	307.9	75.	21.49	35.17	24.51	347.2	0.395
169.	17.76	34.84			25.23	280.6	100.	19.27	34.79	25.02	300.4	0.558
182.	16.49	34.61			25.35	268.7	150.	14.41	34.37	25.63	242.4	0.695
212.	13.15	34.27			25.82	224.5	200.	11.14	34.29	26.21	187.1	0.803
238.	11.69	34.28			26.11	197.0	300.	10.12	34.46	26.53	158.1	0.890
264.	10.66	34.31			26.32	177.2	400.	8.36	34.46	26.82	131.2	1.036
287.	10.35	34.43			26.47	163.6	500.	7.16	34.47	27.00	114.4	1.160
381.	8.66	34.46			26.77	135.7	600.	6.53	34.49	27.10	105.7	1.271
477.	7.35	34.47			26.97	117.0	700.	5.91	34.50	27.19	98.1	1.374
573.	6.71	34.49			27.08	107.9	800.	5.33	34.51	27.27	91.2	1.470
760.	5.56	34.50			27.23	94.1	1000.	4.43	34.54	27.39	79.6	1.643
949.	4.61	34.53			27.37	81.7	1200.	3.77	34.56	27.48	71.3	1.796
1139.	4.02	34.55			27.45	74.7						
1427.	3.22	34.59			27.56	64.2						

Δ FROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA					
CROMWELL DRY BULB 22.9		3, STATION WET BULB 19.8		31, 17-32N LAT, 148- WIND SPEED 24, DIR. 07		1W LONG, APR. 29, 1964, BAR. 17		0500 G.C.T. WEATHER 01		VIS. 8		CLOUD TYPE 8, COVER 3	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	23.38	34.54			23.50	440.0	0.	23.38	34.54	23.50	440.0	0.000	
10.	23.38	34.54			23.50	440.4	10.	23.38	34.54	23.50	440.4	0.045	
30. <sup>Δ</sup>	23.26	34.57			23.55	435.7	20.	23.33	34.55	23.52	438.7	0.059	
50. <sup>Δ</sup>	23.12	34.63			23.64	422.3	30.	23.26	34.57	23.55	435.7	0.133	
76.	22.45	34.80			23.96	398.7	50.	23.12	34.63	23.64	428.3	0.220	
100.	21.76	35.01			24.31	365.9	75.	22.45	34.79	23.94	400.1	0.325	
125.	20.63	35.10			24.69	330.8	100.	21.76	35.01	24.31	365.9	0.421	
150.	19.42	35.02			24.95	306.9	150.	19.42	35.02	24.95	306.9	0.591	
175.	18.05	34.82			25.14	289.1	200.	15.62	34.82	25.43	261.7	0.734	
190.	16.60	34.58			25.31	273.6	250.	11.45	34.71	26.10	198.1	0.850	
224.	13.42	34.25			25.75	231.6	300.	10.30	34.44	26.47	153.3	0.961	
250.	11.45	34.21			26.10	198.1	400.	8.74	34.46	26.76	137.2	1.092	
276.	10.55	34.32			26.35	174.8	500.	7.46	34.45	26.94	120.5	1.223	
300.	10.36	34.44			26.47	163.3	600.	6.57	34.46	27.07	108.6	1.338	
401.	8.72	34.46			26.76	137.0	700.	5.94	34.47	27.17	100.3	1.444	
501.	7.45	34.45			26.94	120.3	800.	5.45	34.49	27.24	93.9	1.542	
600.	6.57	34.46			27.07	108.6	1000.	4.57	34.53	27.37	81.7	1.720	
800.	5.45	34.49			27.24	93.9	1200.	3.83	34.56	27.47	72.6	1.876	
995.	4.58	34.53			27.37	81.8							
1197.	3.91	34.56			27.47	73.1							
1497.	3.07	34.59			27.57	62.8							

CROMWELL DRY BULB 22.2		3, STATION WET BULB 18.9		32, 19-04N LAT, 147-58W LONG, WIND SPEED 25, DIR. 08		APR. 29, 1964, BAR. 15		1400 G.C.T. WEATHER 02		VIS. 7		CLOUD TYPE 8, COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	23.22	34.53			23.53	436.3	0.	23.22	34.53	23.53	436.3	0.000	
9.	23.25	34.52			23.52	433.2	10.	23.25	34.52	23.52	438.3	0.045	
50. <sup>Δ</sup>	23.10	34.64			23.65	427.0	20.	23.25	34.53	23.53	438.0	0.059	
98.	22.36	34.98			24.12	384.1	30.	23.23	34.55	23.55	436.0	0.133	
121.	22.07	35.11			24.30	367.7	50.	23.10	34.64	23.65	427.0	0.220	
145.	20.89	35.15			24.66	334.6	75.	22.74	34.81	23.88	405.0	0.325	
168.	19.76	35.08			24.90	311.7	100.	22.35	34.99	24.13	382.9	0.421	
133.	19.27	35.05			25.01	302.2	150.	20.62	35.14	24.72	328.8	0.603	
214.	17.13	34.72			25.29	276.2	200.	18.22	34.89	25.15	298.9	0.759	
238.	15.10	34.47			25.56	250.3	250.	13.77	34.32	25.73	234.1	0.891	
264.	12.38	34.20			25.91	216.3	300.	10.64	34.28	26.26	163.5	0.996	
285.	11.40	34.26			26.15	194.4	400.	8.19	34.28	26.70	142.1	1.150	
374.	8.77	34.28			26.61	150.6	500.	6.70	34.31	26.94	120.2	1.293	
464.	7.09	34.29			26.87	126.4	600.	5.94	34.37	27.08	106.9	1.407	
556.	6.25	34.34			27.02	112.5	700.	5.36	34.42	27.20	96.5	1.510	
736.	5.19	34.44			27.23	93.4	800.	4.90	34.46	27.28	89.0	1.604	
919.	4.45	34.49			27.35	82.4	1000.	4.17	34.51	27.40	76.1	1.773	
1104.	3.85	34.54			27.46	73.0	1200.	3.55	34.56	27.50	68.8	1.882	
1382.	3.08	34.59			27.57	62.1							

CROMWELL DRY BULB 21.5		3, STATION WET BULB 19.0		33, 20-30N LAT, 148-05W LONG, WIND SPEED 25, DIR. 07		APR. 29, 1964, BAR. 22		2400 G.C.T. WEATHER 03		VIS. 8		CLOUD TYPE 8, COVER 4	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.	
0.	22.44	34.99			24.11	381.8	0.	22.44	34.99	24.11	381.8	0.000	
10.	22.42	34.98			24.10	382.4	10.	22.42	34.98	24.10	382.4	0.039	
30. <sup>Δ</sup>	22.36	35.00			24.14	380.1	20.	22.39	34.98	24.12	381.7	0.077	
50. <sup>Δ</sup>	22.26	35.05			24.20	374.5	30.	22.36	35.00	24.14	380.1	0.116	
75. <sup>Δ</sup>	22.18	35.10			24.26	369.7	50.	22.26	35.05	24.20	374.5	0.192	
100.	22.05	35.15			24.34	363.5	75.	22.18	35.10	24.26	369.7	0.276	
123.	21.23	35.20			24.60	339.1	100.	22.05	35.15	24.34	363.5	0.378	
147.	19.42	35.03			24.96	306.1	150.	19.29	35.02	24.98	303.9	0.546	
171.	18.59	34.94			25.10	293.2	200.	17.13	34.74	25.30	274.5	0.662	
185.	18.06	34.87			25.18	286.0	250.	12.93	34.26	25.86	221.6	0.817	
218.	15.71	34.55			25.49	257.0	300.	10.39	34.10	26.20	189.1	0.921	
244.	13.37	34.30			25.80	227.5	400.	8.27	34.16	26.59	152.5	1.093	
269.	11.73	34.14			26.02	205.8	500.	6.48	34.15	26.84	128.6	1.235	
294.	10.58	34.10			26.17	191.9	600.	5.91	34.32	27.05	109.6	1.355	
391.	8.47	34.16			26.56	155.1	700.	5.50	34.42	27.18	98.6	1.460	
490.	6.58	34.14			26.82	130.8	800.	5.14	34.47	27.26	91.6	1.556	
588.	5.96	34.31			27.03	111.2	1000.	4.30	34.50	27.38	80.2	1.730	
784.	5.21	34.46			27.24	92.8	1200.	3.64	34.54	27.48	71.2	1.884	
980.	4.37	34.50			27.37	81.2							
1177.	3.71	34.54			27.47	71.9							
1473.	3.02	34.57			27.56	63.5							

<sup>Δ</sup> FROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 3, STATION 34, 22- ON LAT, 148- OW LONG, APR. 30, 1964, 0900 G.C.T.		WET BULB 12.9 WIND SPEED 26, DIR. 08 BAR. 24 WEATHER 00 VIS. 7 CLOUD TYPE , COVER										
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	22.24	35.12			24.26	367.1	0.	22.24	35.12	24.26	367.0	0.000
10.	22.25	35.10			24.24	369.1	10.	22.25	35.10	24.24	369.1	0.038
30. Δ	22.24	35.12			24.26	368.2	20.	22.25	35.11	24.25	369.0	0.075
50. Δ	22.22	35.13			24.27	367.7	30.	22.24	35.12	24.26	368.2	0.112
75. Δ	22.18	35.14			24.29	366.8	50.	22.22	35.13	24.27	367.7	0.186
91.	22.04	35.15			24.34	362.9	75.	22.18	35.14	24.29	366.8	0.279
110.	21.61	35.25			24.54	345.0	100.	21.84	35.20	24.43	354.7	0.369
130.	21.37	35.28			24.62	337.2	150.	21.10	35.27	24.69	331.5	0.542
151.	21.08	35.27			24.70	331.1	200.	18.46	34.95	25.14	290.3	0.699
164.	20.54	35.23			24.81	320.5	250.	15.10	34.50	25.58	248.6	0.835
191.	19.03	35.04			25.06	297.3	300.	12.02	34.21	25.99	209.5	0.950
214.	17.53	34.80			25.25	279.6	400.	8.59	34.05	26.46	165.3	1.139
280.	13.17	34.31			25.84	223.8	500.	6.52	34.06	26.77	135.9	1.292
303.	11.86	34.20			26.01	207.5	600.	5.52	34.20	27.00	114.2	1.418
402.	8.55	34.05			26.47	164.6	700.	4.99	34.33	27.17	98.8	1.525
499.	6.53	34.06			26.76	136.2	800.	4.68	34.44	27.29	88.0	1.620
596.	5.55	34.19			26.99	114.9	1000.	4.11	34.53	27.42	75.9	1.786
793.	4.70	34.43			27.28	83.6	1200.	3.66	34.56	27.49	70.1	1.934
987.	4.14	34.53			27.42	76.3						
1184.	3.70	34.53			27.46	72.6						
1477.	3.22	34.58			27.55	65.2						

CROMWELL 3, STATION 35, 23-30N LAT, 148- OW LONG, APR. 30, 1964, 2000 G.C.T.		WET BULB 16.5 WIND SPEED 25, DIR. 08 BAR. 26 WEATHER 02 VIS. 8 CLOUD TYPE 6, COVER 7										
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.74	34.92			23.97	395.0	0.	22.74	34.92	23.97	395.0	0.000
10.	22.74	34.91			23.96	396.1	10.	22.74	34.91	23.96	396.1	0.040
30. Δ	22.70	34.94			23.99	393.6	20.	22.72	34.92	23.97	395.4	0.080
50. Δ	22.68	35.02			24.06	388.1	30.	22.70	34.94	23.99	393.6	0.120
75. Δ	22.62	35.11			24.15	380.9	50.	22.68	35.02	24.06	388.1	0.199
100.	22.40	35.19			24.27	370.1	75.	22.62	35.11	24.15	380.9	0.296
124.	21.35	35.14			24.52	346.6	100.	22.40	35.19	24.27	370.1	0.390
150.	20.17	35.07			24.79	322.1	150.	20.17	35.07	24.79	322.1	0.565
175.	19.67	35.10			24.94	308.2	200.	18.42	34.93	25.13	290.8	0.719
190.	18.88	35.00			25.07	296.5	250.	14.56	34.41	25.63	243.4	0.854
224.	17.01	34.72			25.32	273.8	300.	12.03	34.18	25.97	212.1	0.969
249.	14.62	34.42			25.63	244.2	400.	8.98	34.08	26.42	169.2	1.161
275.	13.35	34.30			25.80	227.9	500.	6.77	34.03	26.71	141.6	1.318
300.	12.03	34.18			25.97	212.1	600.	5.22	34.12	26.97	115.9	1.448
398.	9.03	34.08			26.41	169.9	700.	4.64	34.26	27.15	99.5	1.557
496.	6.85	34.03			26.70	142.7	800.	4.47	34.39	27.28	88.7	1.652
592.	5.29	34.11			26.96	117.5	1000.	3.98	34.51	27.42	76.1	1.819
786.	4.51	34.38			27.26	89.9	1200.	3.48	34.56	27.51	67.8	1.964
980.	4.03	34.50			27.41	77.1						
1174.	3.52	34.54			27.49	69.6						
1466.	2.86	34.58			27.58	60.8						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.12

CROMWELL 3, STATION 36, 25- ON LAT, 148- OW LONG, MAY 1, 1964, 0600 G.C.T.		WET BULB 17.2 WIND SPEED 24, DIR. 08 BAR. 25 WEATHER 00 VIS. 8 CLOUD TYPE , COVER										
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	21.33	35.29			24.64	330.6	0.	21.33	35.29	24.64	330.6	0.000
10.	21.34	35.29			24.64	331.2	10.	21.34	35.29	24.64	331.2	0.034
30. Δ	21.34	35.29			24.64	332.7	20.	21.34	35.29	24.64	331.7	0.067
50. Δ	21.34	35.29			24.64	333.7	30.	21.34	35.29	24.64	332.1	0.101
75. Δ	20.79	35.26			24.77	323.2	50.	21.34	35.29	24.64	332.7	0.168
121.	20.04	35.18			24.91	310.8	75.	21.34	35.29	24.64	333.7	0.252
147.	19.26	35.08			25.03	299.4	100.	21.15	35.28	24.69	329.9	0.335
186.	18.66	34.97			25.10	293.7	150.	19.95	35.17	24.92	309.3	0.496
217.	17.14	34.74			25.30	275.1	200.	18.01	34.86	25.18	285.9	0.646
242.	15.92	34.60			25.48	258.6	250.	15.51	34.54	25.53	253.9	0.782
268.	14.50	34.42			25.65	242.2	300.	12.53	34.25	25.93	216.1	0.901
292.	12.91	34.28			25.87	221.2	400.	9.50	34.11	26.36	175.1	1.098
388.	9.80	34.13			26.33	178.5	500.	7.35	34.04	26.64	149.1	1.262
482.	7.74	34.04			26.58	154.5	600.	5.63	34.11	26.91	122.2	1.399
574.	5.95	34.08			26.85	127.9	700.	4.74	34.22	27.11	103.9	1.513
764.	4.47	34.30			27.20	95.2	800.	4.34	34.34	27.25	90.9	1.612
956.	4.01	34.48			27.39	78.1	1000.	3.91	34.49	27.42	76.2	1.731
1146.	3.57	34.51			27.46	72.2	1200.	3.46	34.55	27.51	68.2	1.927
1435.	3.00	34.56			27.56	63.7						

Δ FROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA							
CROMWELL DRY BULB 19.0		3, STATION 37, 26-25N LAT, 148- 0W LONG, MAY 1, 1964, 1600 G.C.T.		WET BULB 16.9		WIND SPEED 22, DIR. 08		BAR. 20		WEATHER 03		VIS. 8		CLOUD TYPE 8, COVER 7	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DEPTH.			
1.	20.93	35.33			24.76	317.4	0.	20.93	35.33	24.78	317.3	0.000			
11.	20.94	35.35			24.80	316.5	10.	20.94	35.35	24.79	316.6	0.042			
52.	20.44	35.33			24.92	306.6	20.	20.84	35.35	24.82	314.3	0.064			
75. Δ	20.44	35.34			24.92	306.8	30.	20.72	35.35	24.85	311.8	0.096			
103.	20.43	35.35			24.93	306.8	40.	20.47	35.33	24.91	307.1	0.158			
129.	20.45	35.34			24.92	309.0	50.	20.44	35.34	24.92	306.8	0.235			
155.	19.76	35.16			24.98	304.0	60.	20.43	35.35	24.93	306.7	0.313			
180.	18.47	34.97			25.15	288.4	70.	19.95	35.22	24.96	305.7	0.497			
195.	17.21	34.74			25.28	276.0	80.	16.85	34.68	25.33	272.0	0.613			
229.	14.62	34.42			25.58	247.8	90.	13.16	34.24	25.79	228.0	0.739			
256.	12.74	34.20			25.84	222.9	100.	11.30	34.15	26.08	201.3	0.947			
283.	11.76	34.16			26.00	203.2	110.	9.01	34.08	26.41	169.9	1.034			
308.	11.10	34.14			26.11	198.3	120.	6.40	34.01	26.69	143.4	1.192			
409.	8.82	34.07			26.44	167.5	130.	5.34	34.07	26.92	121.1	1.326			
509.	6.62	34.01			26.71	141.2	140.	4.60	34.18	27.10	104.7	1.440			
608.	5.26	34.08			26.94	119.5	150.	4.22	34.30	27.23	92.6	1.540			
801.	4.22	34.30			27.23	92.5	160.	3.70	34.44	27.39	77.6	1.712			
998.	3.70	34.44			27.39	77.7	170.	3.26	34.53	27.51	67.6	1.899			
1193.	3.29	34.52			27.50	68.5									
1499.	2.76	34.58			27.59	59.7									

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA							
CROMWELL DRY BULB 22.2		3, STATION 38, 25- 0N LAT, 151- 3W LONG, MAY 2, 1964, 0900 G.C.T.		WET BULB 18.9		WIND SPEED 14, DIR. 07		BAR. 20		WEATHER 00		VIS. 8		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DEPTH.			
0.	22.15	35.19			24.34	359.6	0.	22.15	35.19	24.34	359.6	0.000			
10.	22.16	35.18			24.33	360.9	10.	22.16	35.18	24.33	360.9	0.037			
30. Δ	22.10	35.21			24.37	357.9	20.	22.17	35.19	24.33	361.1	0.073			
48.	21.56	35.29			24.58	338.5	30.	22.10	35.21	24.37	357.9	0.109			
75.	21.29	35.30			24.66	331.6	40.	21.54	35.29	24.59	337.6	0.179			
99.	20.56	35.22			24.80	319.4	50.	21.29	35.30	24.66	331.6	0.264			
122.	19.92	35.14			24.91	309.7	60.	20.53	35.22	24.80	318.9	0.346			
148.	19.07	35.00			25.02	299.7	70.	18.96	34.98	25.03	298.6	0.501			
173.	17.80	34.77			25.16	286.8	80.	16.94	34.71	25.33	272.0	0.645			
189.	17.47	34.76			25.24	280.3	90.	14.40	34.48	25.72	235.7	0.773			
220.	15.80	34.60			25.50	255.4	100.	12.21	34.28	26.01	208.5	0.935			
246.	14.63	34.50			25.69	238.5	110.	9.05	34.09	26.42	169.4	1.076			
274.	13.12	34.34			25.88	220.5	120.	6.49	34.02	26.74	138.4	1.231			
298.	12.28	34.28			26.00	209.4	130.	5.13	34.10	26.97	116.7	1.360			
393.	9.26	34.10			26.39	172.0	140.	4.53	34.21	27.13	101.7	1.470			
489.	6.70	34.02			26.71	141.3	150.	4.26	34.33	27.25	90.7	1.568			
586.	5.25	34.08			26.94	119.1	160.	3.72	34.47	27.42	75.7	1.736			
779.	4.33	34.31			27.27	92.9	170.	3.29	34.55	27.52	66.7	1.930			
973.	3.78	34.46			27.60	77.0									
1167.	3.39	34.52			27.49	69.5									
1462.	2.81	34.58			27.59	60.2									

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA							
CROMWELL DRY BULB 25.5		3, STATION 39, 25- 1N LAT, 154- 0W LONG, MAY 2, 1964, 2400 G.C.T.		WET BULB 20.7		WIND SPEED 15, DIR. 08		BAR. 22		WEATHER 01		VIS. 8		CLOUD TYPE 8, COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DEPTH.			
0.	23.24	34.93			23.83	408.0	0.	23.24	34.93	23.83	408.0	0.000			
10.	23.19	34.91			23.83	408.5	10.	23.19	34.91	23.83	408.5	0.042			
50. Δ	23.08	35.00			23.93	400.5	20.	23.19	34.90	23.83	409.3	0.033			
76.	22.67	35.24			24.24	371.5	30.	23.17	34.92	23.84	408.2	0.124			
102.	22.08	35.24			24.40	357.9	40.	23.08	35.00	23.93	400.5	0.205			
127.	20.78	35.12			24.66	333.3	50.	22.64	35.23	24.23	372.7	0.303			
152.	19.51	35.01			24.92	309.9	60.	22.14	35.25	24.39	358.9	0.395			
177.	18.16	34.88			25.16	287.4	70.	19.61	35.02	24.90	311.8	0.564			
192.	17.30	34.78			25.29	275.0	80.	16.88	34.73	25.36	268.9	0.710			
226.	15.52	34.59			25.56	250.2	90.	14.17	34.43	25.73	234.1	0.837			
252.	14.07	34.42			25.74	233.0	100.	12.22	34.24	25.98	211.3	0.949			
278.	13.27	34.34			25.85	223.5	110.	9.30	34.08	26.37	174.2	1.144			
304.	12.02	34.22			26.00	209.1	120.	6.61	34.02	26.72	140.2	1.303			
404.	9.27	34.08			26.38	173.0	130.	5.20	34.08	26.95	118.4	1.433			
505.	6.49	34.02			26.74	138.7	140.	4.53	34.21	27.12	102.0	1.545			
606.	5.15	34.09			26.96	117.4	150.	4.21	34.34	27.26	89.4	1.641			
807.	4.20	34.35			27.27	88.6	160.	3.81	34.49	27.42	75.6	1.808			
1008.	3.80	34.49			27.42	75.3	170.	3.37	34.54	27.51	68.0	1.954			
1207.	3.35	34.54			27.51	67.8	180.	2.84	34.58	27.59	60.7	2.150			
1509.	2.82	34.58			27.59	60.6									

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 3, STATION 40, 25- ON LAT, 157- ON LONG, MAY 3, 1964, 1600 G.C.T.												
DRY BULB 23.0	WET BULB 19.9	WIND SPEED 16, DIR. 09	BAR. 21	WEATHER 02	VIS. 8	CLOUD TYPE	COVER					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	22.66	35.25			24.24	369.0	0.	22.66	35.25	24.24	369.0	0.000
10.	22.66	35.24			24.23	370.1	10.	22.66	35.24	24.23	370.1	0.038
30. Δ	22.66	35.24			24.23	370.9	20.	22.66	35.24	24.23	370.6	0.075
50. Δ	22.66	35.24			24.23	371.6	30.	22.66	35.24	24.23	370.9	0.112
75. Δ	22.20	35.22			24.35	361.6	50.	22.66	35.24	24.23	371.0	0.187
102.	20.81	35.12			24.66	333.1	75.	22.20	35.22	24.35	361.6	0.280
126.	19.74	35.04			24.88	312.6	100.	20.93	35.13	24.63	335.4	0.367
151.	18.44	34.90			25.11	291.8	150.	18.49	34.91	25.10	292.6	0.526
177.	17.27	34.79			25.30	273.9	200.	16.16	34.68	25.49	256.7	0.664
192.	16.52	34.72			25.43	261.7	250.	13.97	34.43	25.77	230.1	0.787
225.	15.19	34.56			25.63	243.4	300.	11.93	34.24	26.03	205.6	0.897
252.	13.88	34.42			25.77	229.1	400.	9.38	34.11	26.38	173.2	1.088
279.	12.61	34.32			25.92	216.0	500.	7.29	34.03	26.64	148.8	1.250
304.	11.77	34.23			26.05	203.7	600.	5.79	34.08	26.88	125.9	1.389
404.	9.31	34.11			26.39	172.3	700.	4.86	34.19	27.07	107.2	1.507
507.	7.16	34.03			26.65	147.3	800.	4.31	34.31	27.23	92.7	1.605
606.	5.72	34.09			26.89	124.6	1000.	3.78	34.46	27.40	77.4	1.780
807.	4.28	34.32			27.24	91.8	1200.	3.26	34.54	27.51	66.8	1.926
1005.	3.77	34.46			27.40	77.1	1500.	2.70	34.58	27.60	59.0	2.117
1204.	3.25	34.54			27.52	66.6						
1504.	2.69	34.58			27.60	59.0						

CROMWELL 3, STATION 41, 23-29N LAT, 157- ON LONG, MAY 4, 1964, 0500 G.C.T.												
DRY BULB 23.7	WET BULB 20.9	WIND SPEED 21, DIR. 09	BAR. 19	WEATHER 03	VIS. 8	CLOUD TYPE 8,	COVER 5					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
1.	23.42	34.87			23.73	417.4	0.	23.42	34.87	23.73	417.4	0.000
10.	23.44	34.89			23.74	416.8	10.	23.44	34.89	23.74	416.8	0.043
30. Δ	23.42	34.90			23.76	416.3	20.	23.43	34.90	23.75	416.6	0.084
50. Δ	23.40	34.92			23.76	415.1	30.	23.42	34.90	23.76	416.3	0.126
75. Δ	23.38	34.93			23.79	414.8	50.	23.40	34.92	23.78	415.1	0.210
100.	22.20	35.00			24.24	372.6	75.	23.38	34.93	23.79	414.8	0.315
124.	20.96	35.05			24.56	342.9	100.	22.20	35.08	24.24	372.6	0.414
150.	20.16	35.08			24.80	321.1	150.	20.16	35.08	24.80	321.1	0.589
174.	19.02	34.96			25.00	302.3	200.	17.97	34.32	25.16	287.8	0.742
190.	18.52	34.98			25.07	296.5	250.	14.26	34.45	25.73	234.3	0.874
223.	16.36	34.67			25.43	262.7	300.	11.86	34.26	26.07	202.7	0.984
249.	14.33	34.46			25.72	235.3	400.	8.68	34.09	26.47	163.9	1.169
273.	12.88	34.34			25.92	215.8	500.	6.50	34.05	26.76	136.5	1.320
298.	11.93	34.27			26.06	204.6	600.	5.45	34.12	26.95	118.9	1.449
337.	8.76	34.09			26.46	164.9	700.	4.84	34.24	27.12	103.3	1.562
436.	6.56	34.05			26.75	137.3	800.	4.47	34.37	27.25	90.7	1.660
592.	5.51	34.11			26.93	120.3	1000.	3.89	34.49	27.41	76.2	1.829
782.	4.54	34.35			27.23	92.5	1200.	3.40	34.56	27.52	66.7	1.973
974.	3.95	34.48			27.40	77.5						
1166.	3.51	34.54			27.49	69.4						
1461.	2.86	34.61			27.61	58.6						

CROMWELL 3, STATION 42, 21-58N LAT, 157- ON LONG, MAY 4, 1964, 1500 G.C.T.												
DRY BULB 23.2	WET BULB 20.1	WIND SPEED 22, DIR. 09	BAR. 18	WEATHER 02	VIS. 8	CLOUD TYPE	COVER					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN. DPTH.
0.	23.26	35.00			23.86	403.5	0.	23.26	35.00	23.88	403.5	0.000
9.	23.24	35.01			23.89	402.6	10.	23.24	35.01	23.89	402.5	0.041
30. Δ	23.20	35.03			23.92	400.8	20.	23.22	35.02	23.91	401.5	0.082
50. Δ	23.20	35.03			23.92	401.6	30.	23.20	35.03	23.92	400.8	0.122
75. Δ	23.20	35.03			23.92	402.6	50.	23.20	35.03	23.92	401.6	0.203
100.	23.18	35.03			23.92	403.0	75.	23.20	35.03	23.92	402.6	0.304
123.	21.52	35.07			24.42	356.1	100.	23.18	35.03	23.92	403.0	0.406
148.	20.60	35.05			24.66	334.5	150.	20.50	35.05	24.69	332.0	0.591
174.	19.05	35.00			25.03	300.1	200.	16.88	34.74	25.36	268.8	0.742
190.	17.72	34.84			25.24	280.4	250.	13.96	34.43	25.77	229.9	0.868
222.	15.28	34.55			25.58	247.8	300.	12.29	34.32	26.02	206.9	0.978
247.	14.12	34.44			25.75	232.4	400.	8.75	34.08	26.46	165.6	1.166
276.	12.74	34.36			25.97	211.7	500.	6.26	34.04	26.78	133.9	1.317
299.	12.32	34.32			26.02	207.2	600.	5.29	34.15	26.99	114.4	1.442
399.	8.76	34.08			26.45	165.9	700.	4.87	34.28	27.14	100.8	1.551
499.	6.27	34.04			26.78	134.2	800.	4.62	34.40	27.26	90.2	1.648
598.	5.30	34.15			26.99	114.7	1000.	3.76	34.51	27.44	73.2	1.813
793.	4.65	34.39			27.25	91.0	1200.	3.23	34.56	27.53	64.9	1.953
988.	3.80	34.51			27.44	73.6						
1184.	3.33	34.53			27.50	68.2						
1478.	2.77	34.60			27.61	58.3						

Δ FROM BT DATA

MS #1493



Created in 1849 the Department of the Interior--a department of conservation--is concerned with the management, conservation, and development of the Nation's water, fish, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States--now and in the future.



---

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
BUREAU OF COMMERCIAL FISHERIES  
WASHINGTON, D.C. 20240

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF THE INTERIOR

**OFFICIAL BUSINESS**

Return this sheet to above address, if you do NOT wish to receive this material , or if change of address is needed  (indicate change).