

The Trade Wind Zone Oceanography Pilot Study
Part IV: Townsend Cromwell Cruises 11, 12, and 13
December 1964 to February 1965

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



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FISH AND WILDLIFE SERVICE

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UNITED STATES DEPARTMENT OF THE INTERIOR

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ABSTRACT

A standard grid of oceanographic stations in an area bounded by lat. 10° and 26° N., and long. 148° and 157° W., was occupied at monthly intervals between February 1964 and June 1965. For the fourth set of three cruises, Townsend Cromwell cruises 11, 12, and 13, December 1964 to February 1965, 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 1,200 m. are shown in charts for each cruise. Methods and procedures as well as the limitations of the data are discussed.

INTRODUCTION

This is the fourth 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° and 26° N. and long. 148° and 157° 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 11th, 12th, and 13th 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 Liefing and Pete Andrich. The scientific parties were composed of the following:

Townsend Cromwell, cruise 11:
December 1 to 20, 1964

Thomas S. Hida - HL - Field Party Chief
Joseph R. Harada - HL
Henry M. Kishinami - HL
Jerome S. W. Marr - HL
Howard N. Morinaga - HL
Charles J. Rollet - HL
Roger B. Clapp - Smithsonian Institution

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.

Warren King - Smithsonian Institution
Townsend Cromwell, cruise 12:
January 5 to 24, 1965
Robert L. Charnell - HL - Field Party Chief
Henry M. Kishinami - HL
Robert M. Moncrief - HL
Frank A. Moriguchi - HL
Alan M. Osato - HL
Patrick Gould - Smithsonian Institution
Warren King - Smithsonian Institution

Townsend Cromwell, cruise 13:
February 2 to 4 and 8 to 27, 1965
David W. K. Au - HL - Field Party Chief
Jerome S. W. Marr - HL
Howard N. Morinaga - HL
Alan M. Osato - HL
Charles J. Rollet - HL
Roger B. Clapp - Smithsonian Institution
Warren King - Smithsonian Institution

OBSERVATIONS^{1/}

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 2 and 4, 17 and 19, and 23 and 25. Further bathythermograms were obtained during cruise 12 in conjunction with tests of the XBT (Sippican expendable bathythermograph)^{2/}, carried out by Oscar E. Sette (BCF Biological Laboratory, Stanford, Calif. 94305).

Beginning with cruise 12, surface temperatures and salinity samples were taken from an inside pump system which has an intake at a depth of 8 feet.

A Hytech Model 9006 Salinity-Temperature-Depth Measuring System was tested and used during cruise 13 to collect additional data at stations 7A, 25, and 42.

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

^{1/}All data not presented in this report are on file at the Bureau of Commercial Fisheries Biological Laboratory, Honolulu, Hawaii 96812

^{2/}Trade names referred to in this publication do not imply endorsement of commercial products.

which stranded themselves on deck were collected daily. Squid were caught and preserved during cruises 11 and 12. Regular observations of fish schools, sea mammals, and birds were supplemented by more detailed bird counts by observers from the Smithsonian Institution.

Meteorological

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

Drift bottles or plastic-enclosed drift cards, described by Barkley, Ito, and Brown (1964), were released at each BT cast. The drift cards were released in groups of 10 at each cast during cruise 11. The drift bottles were released in groups of eight at each cast during cruises 12 and 13.

Current-measuring techniques were tested on cruises 11 and 12 by use of a Roberts current meter. On cruise 13 measurements were obtained from the Roberts current meter in the surface layers and an Ekman current meter at 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. Oxygen concentrations were determined by the modified Winkler method (Thompson and Robinson, 1939). Inorganic PO₄-P was determined by the procedure of Robinson and Thompson (1948) as modified at the University of Washington. All thermometers had been calibrated at HL since April 1962. The reported temperatures are estimated to be accurate to ±0.02°C. Application of corrections to protected and unprotected thermometer readings and computations of thermometric depths and L-Z values were per-

formed with an IBM 7040 digital computer^{2/} 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 ± 10 m. down to 1,000 m. and within ± 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 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 were usually larger than the Nansen bottle values, most probably owing to salt contamination at the time of sampling. The mean of the differences was about 0.003 ‰ 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 11, 12, and 13, 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, respectively; the next two columns contain calculated sigma-t and specific volume anomaly for the observed data. The next three columns 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 7A, 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 11, figures 8 through 13 for cruise 12, and figures 14 through 19 for cruise 13.

The surface temperature distributions, based on bucket or intake temperature at each BT cast, are shown in figures 20, 21, and 22 for cruises 11, 12, and 13, respectively.

The surface salinity distributions, based on bucket or intake salinity samples at each BT cast, are shown in figures 23, 24, and 25 for cruises 11, 12, and 13, respectively.

The dynamic topography, relative to 1,200 m. for cruises 11, 12, and 13, 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.

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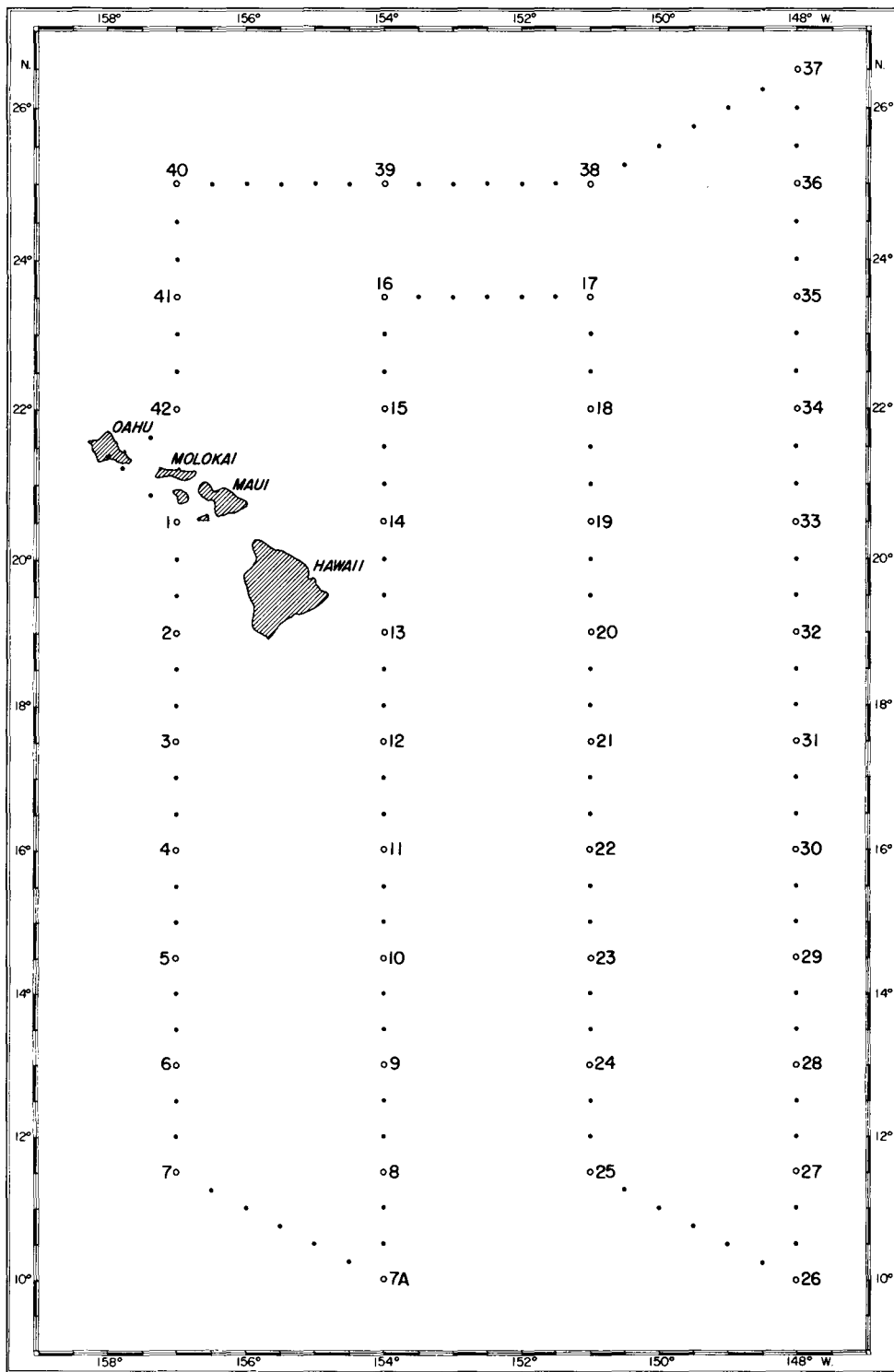


Figure 1.--Track chart for Townsend Cromwell cruises 11, 12, and 13. The large, numbered dots indicate the locations at which both hydrographic and BT (bathythermograph) casts were made; the smaller dots indicate locations at which only BT casts were made.

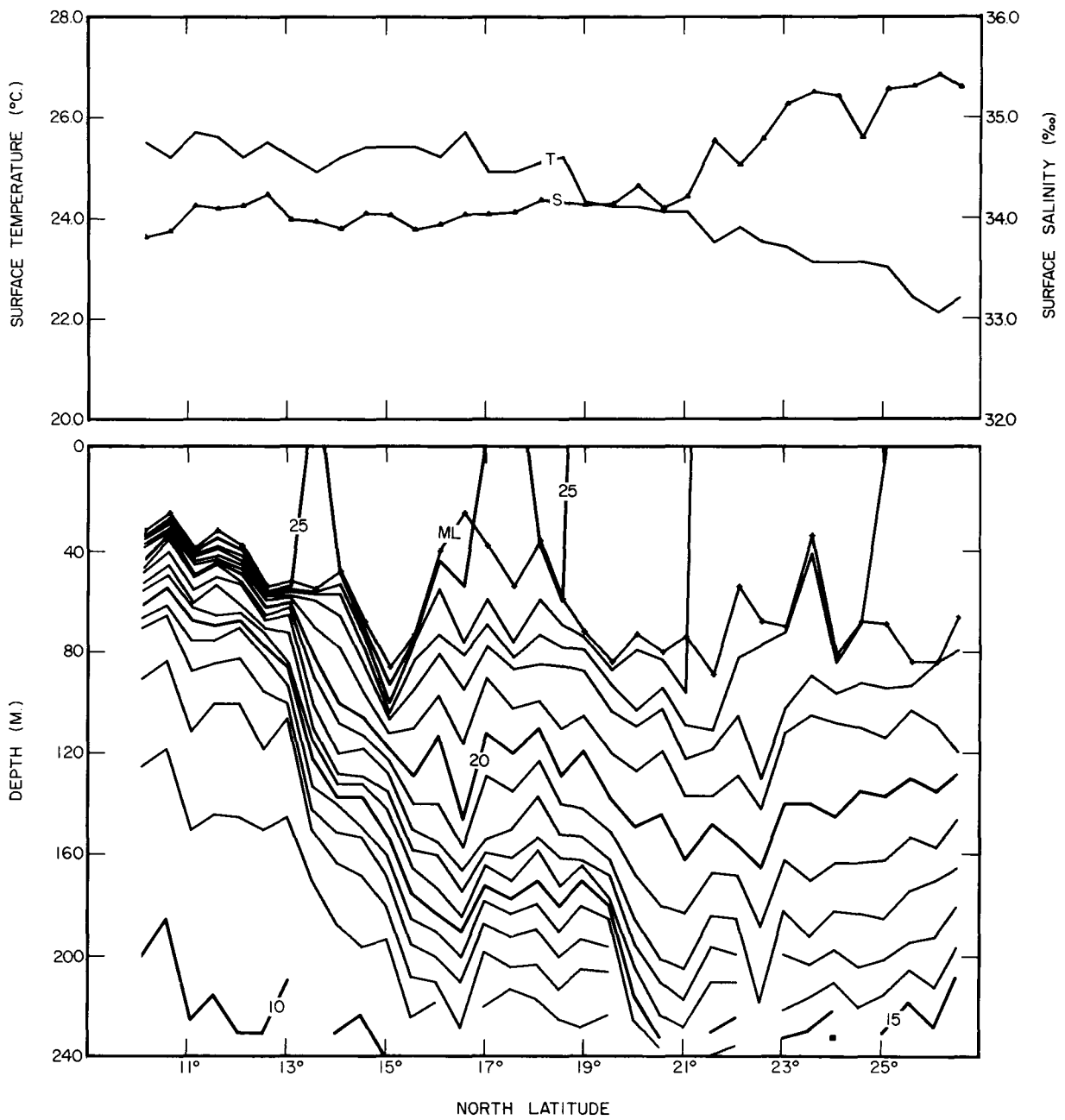


Figure 2.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 11 along long. 148° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

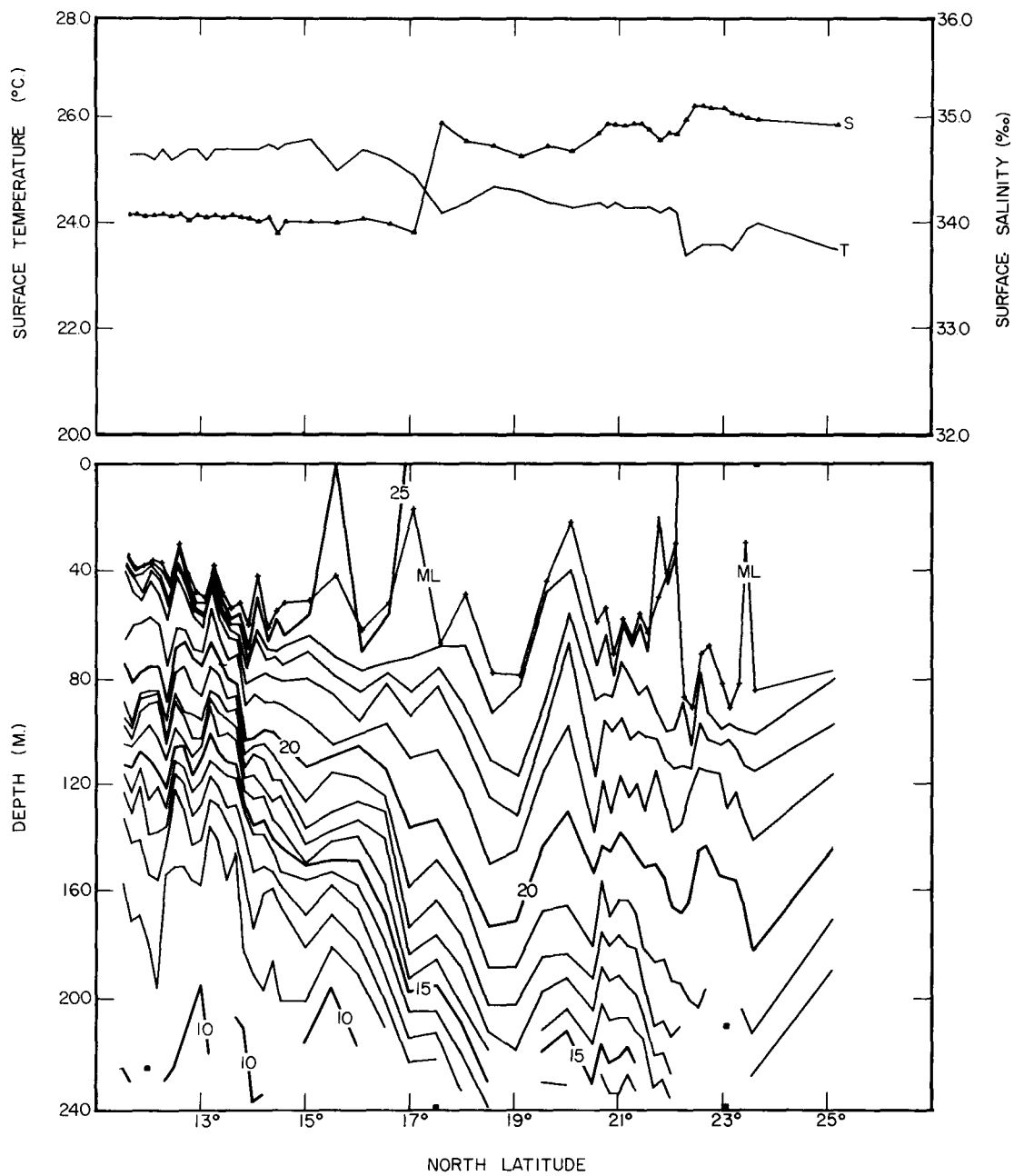


Figure 3.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 11 along long. 151° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

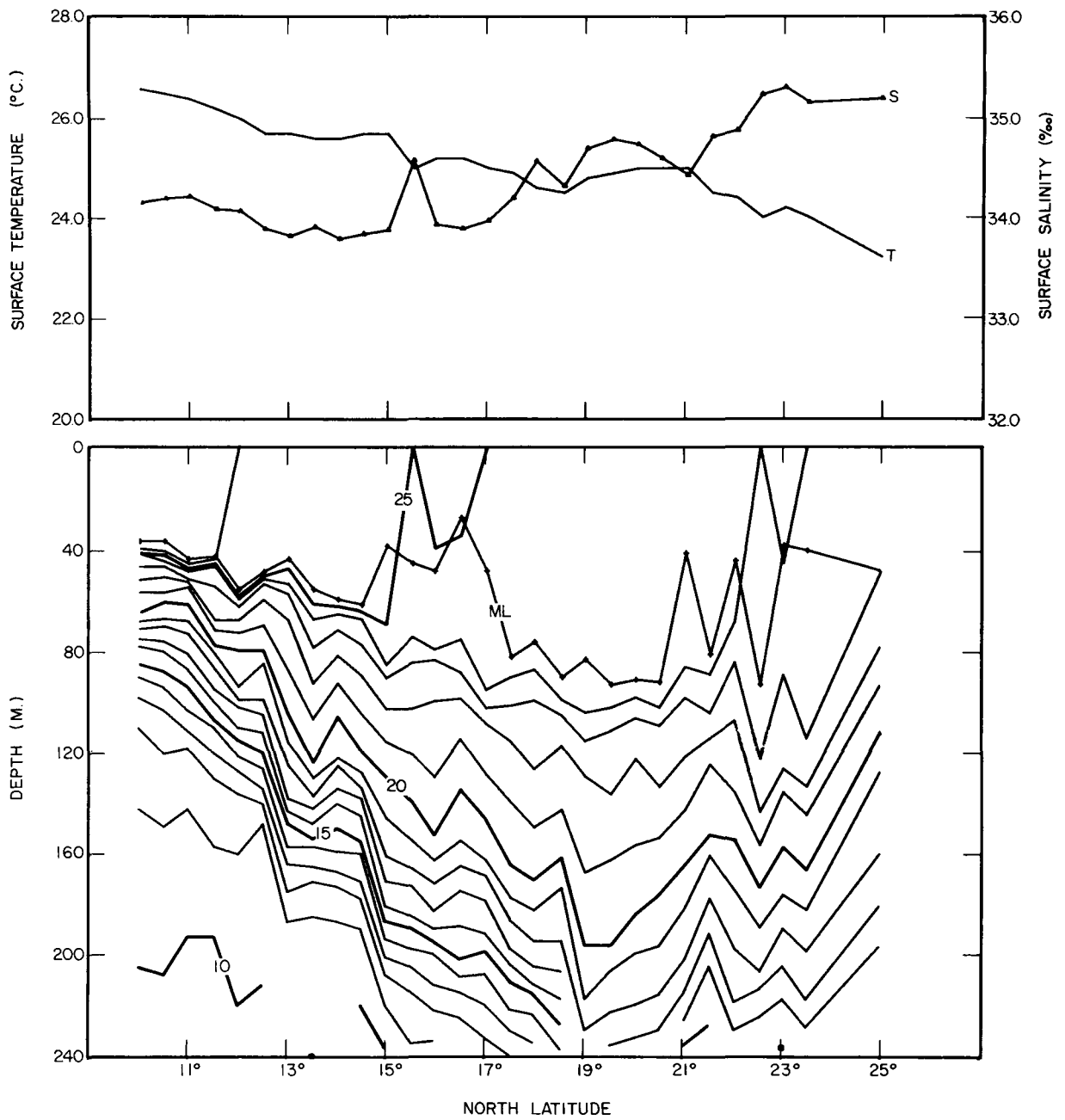


Figure 4.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 11 along long. 154° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

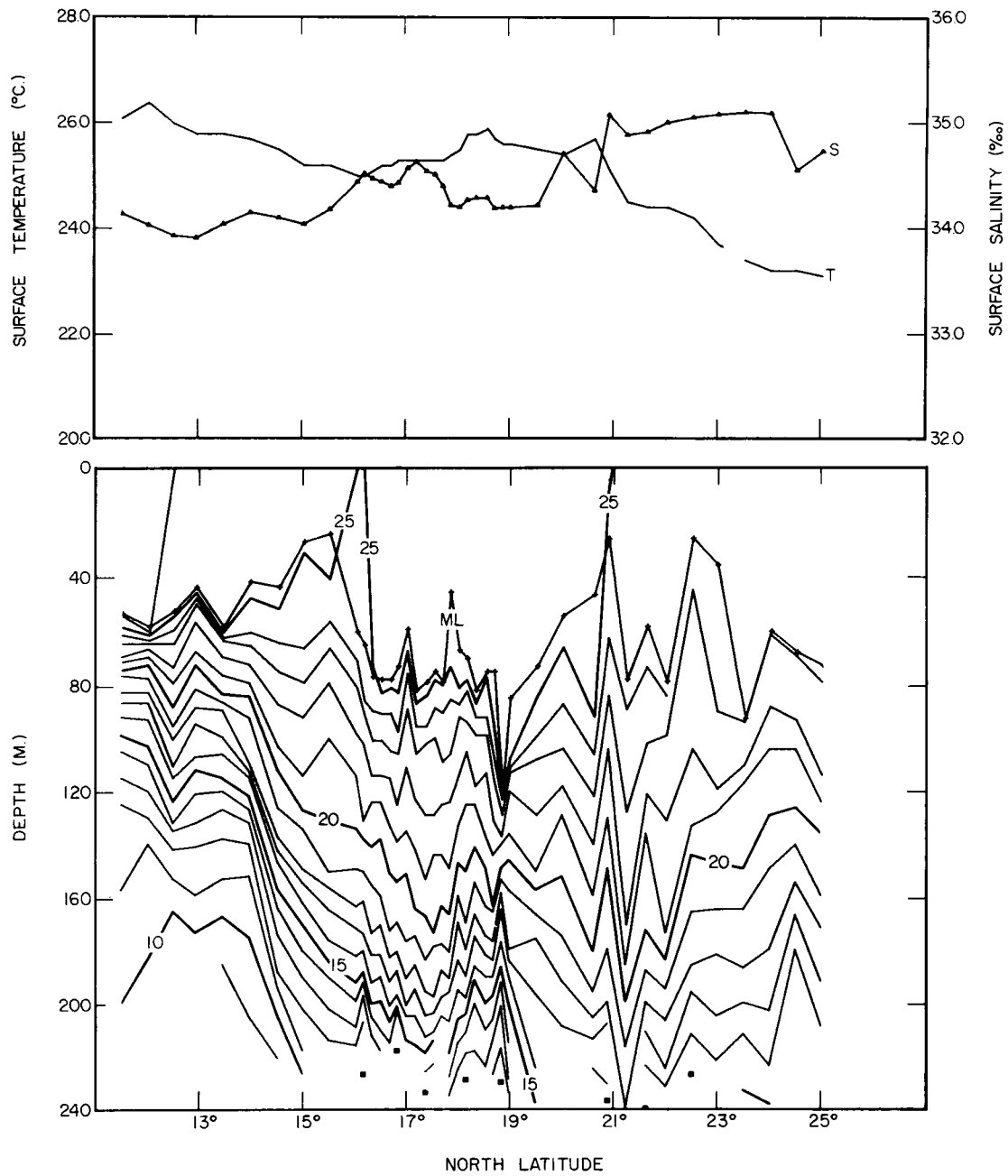


Figure 5.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 11 along long. 157° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

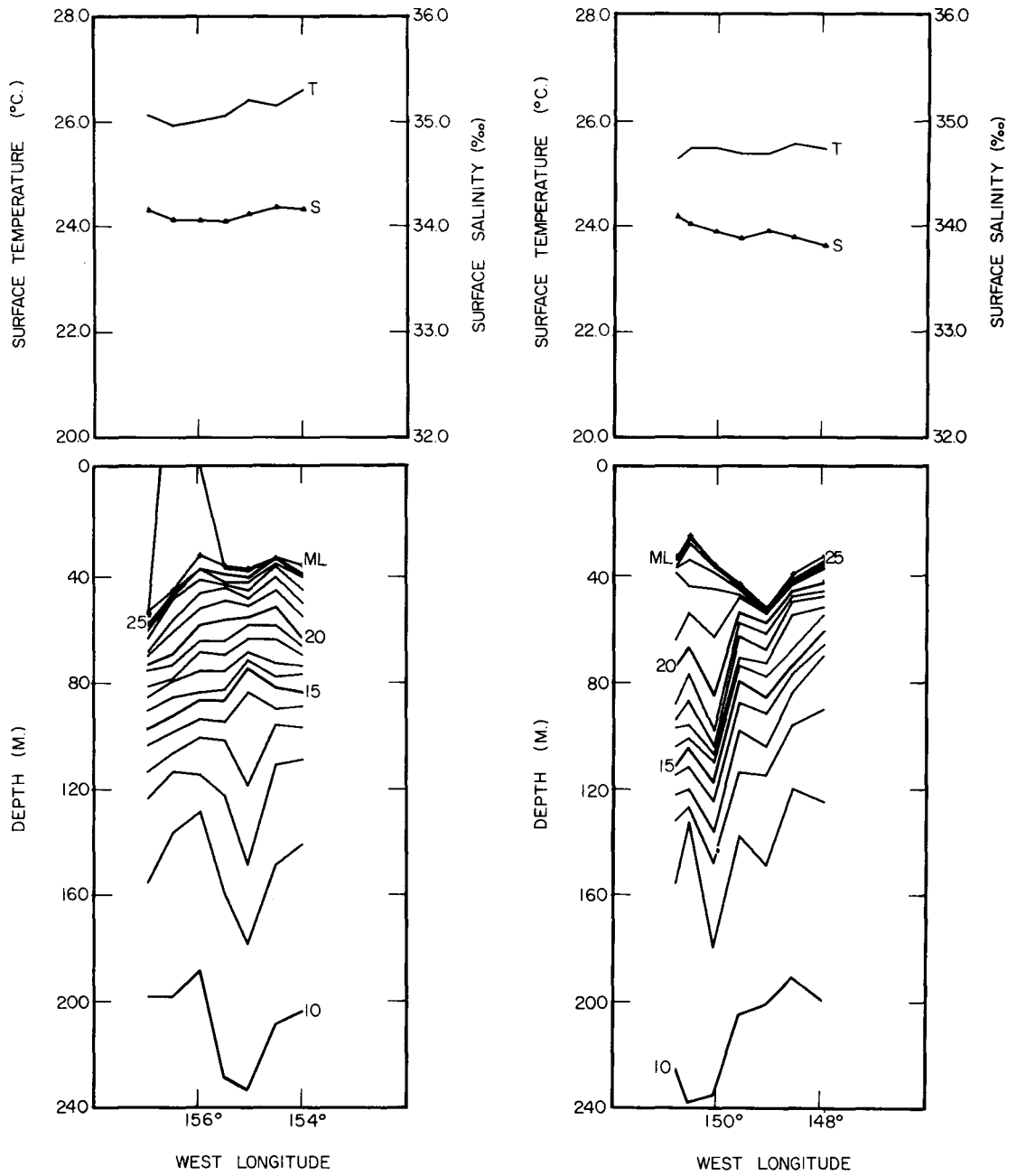


Figure 6.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and zonal BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cronwell cruise 11 between stations 7 and 7A, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

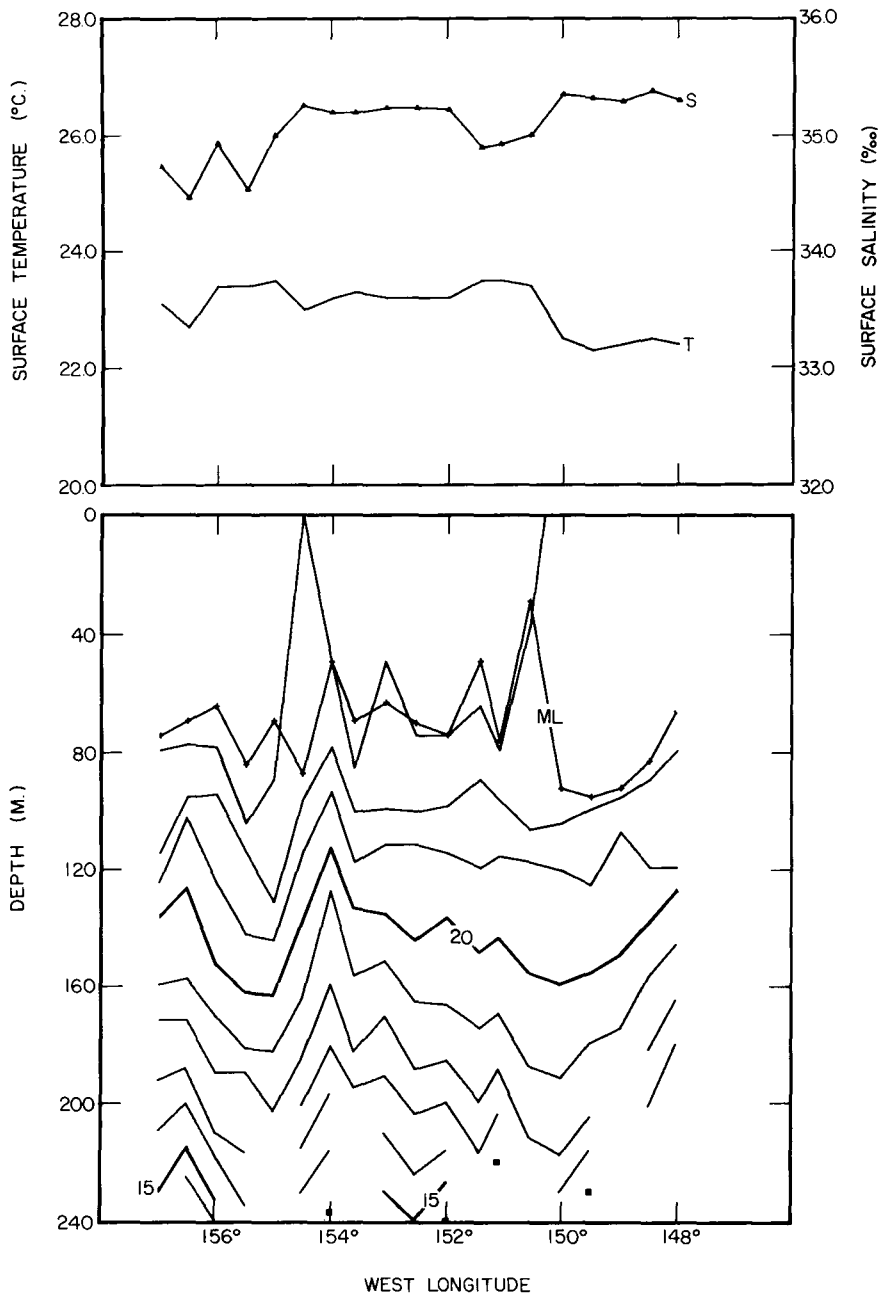


Figure 7.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and zonal BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 11 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

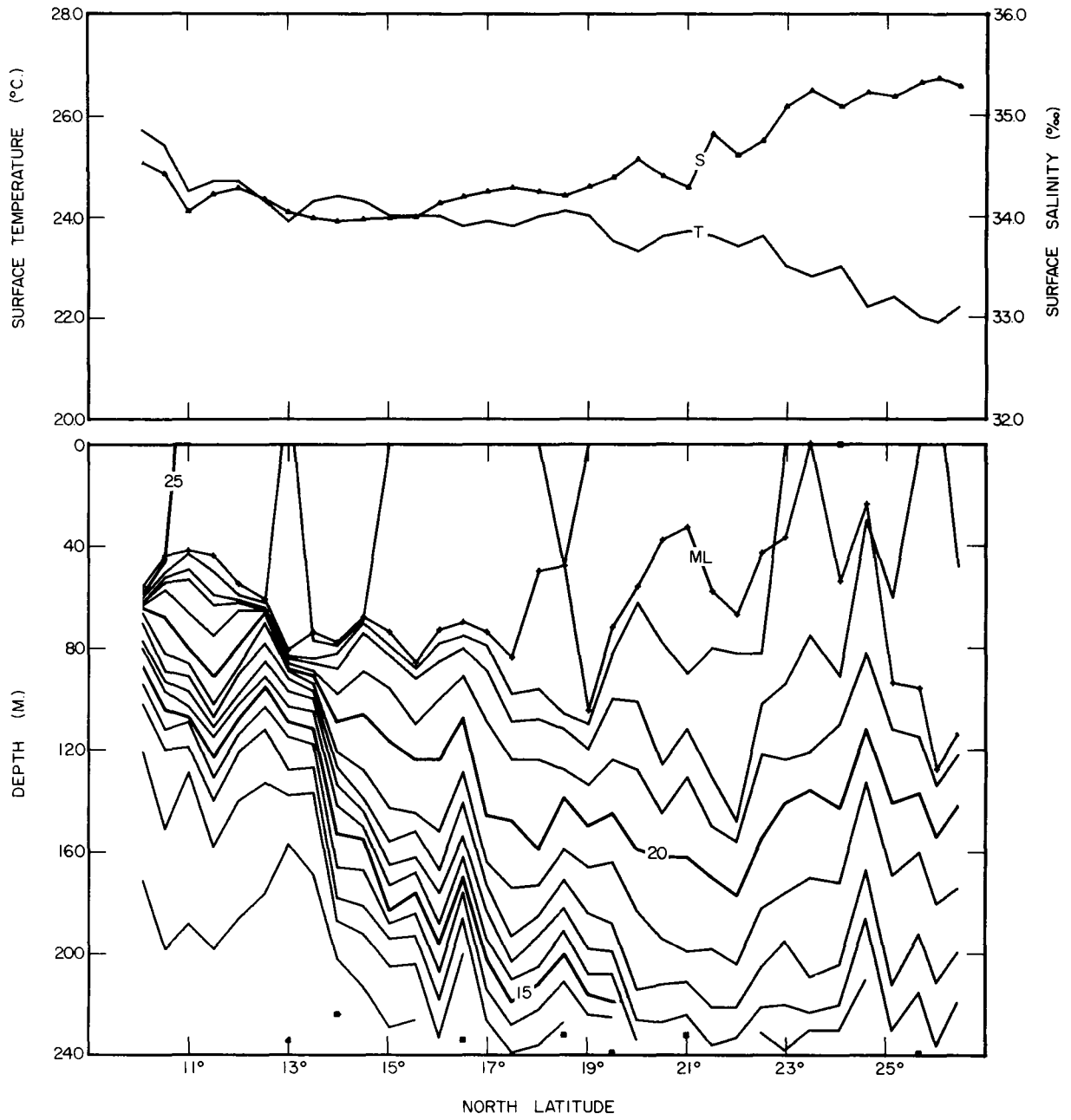


Figure 8.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 12 along long. 148° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

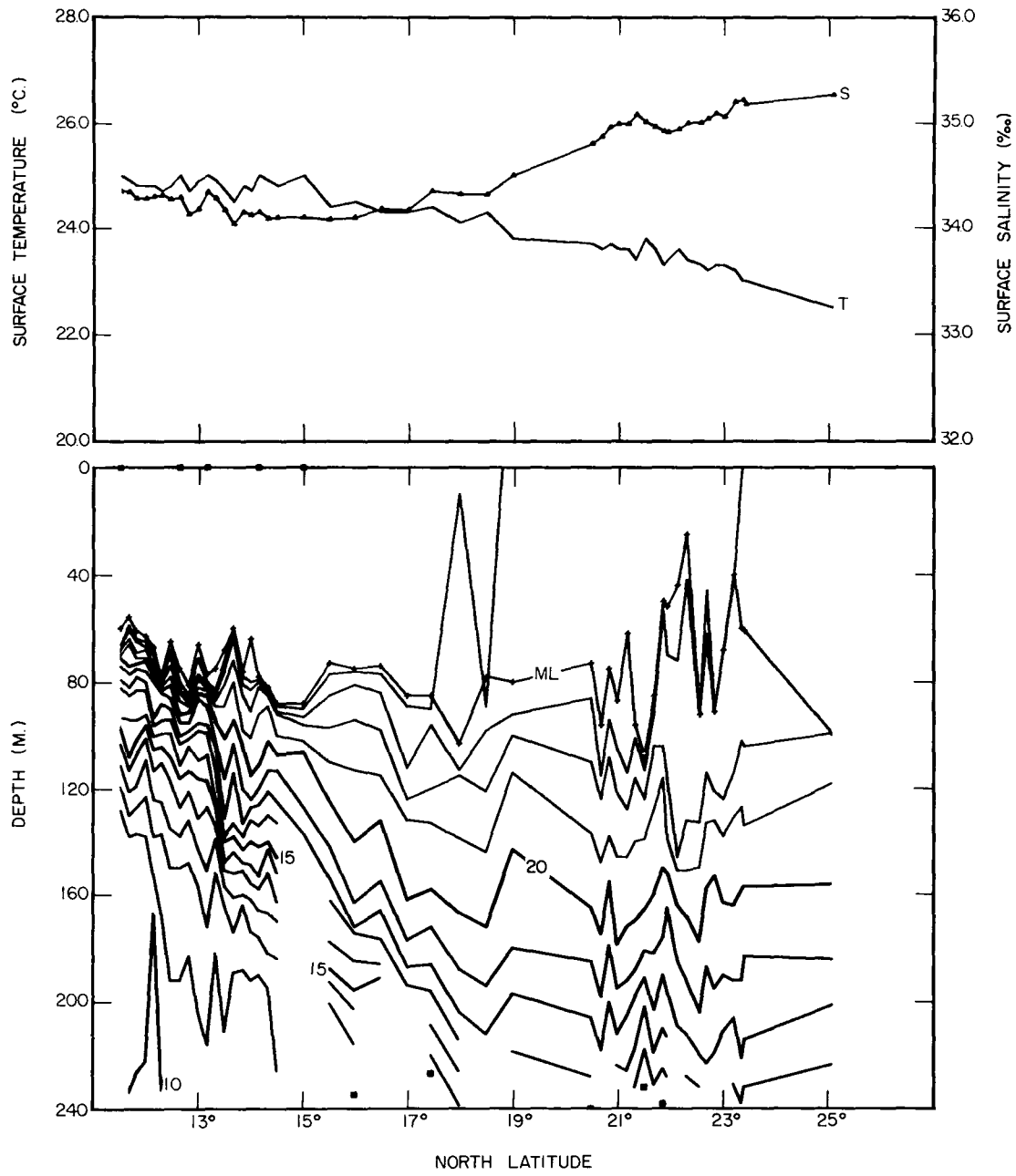


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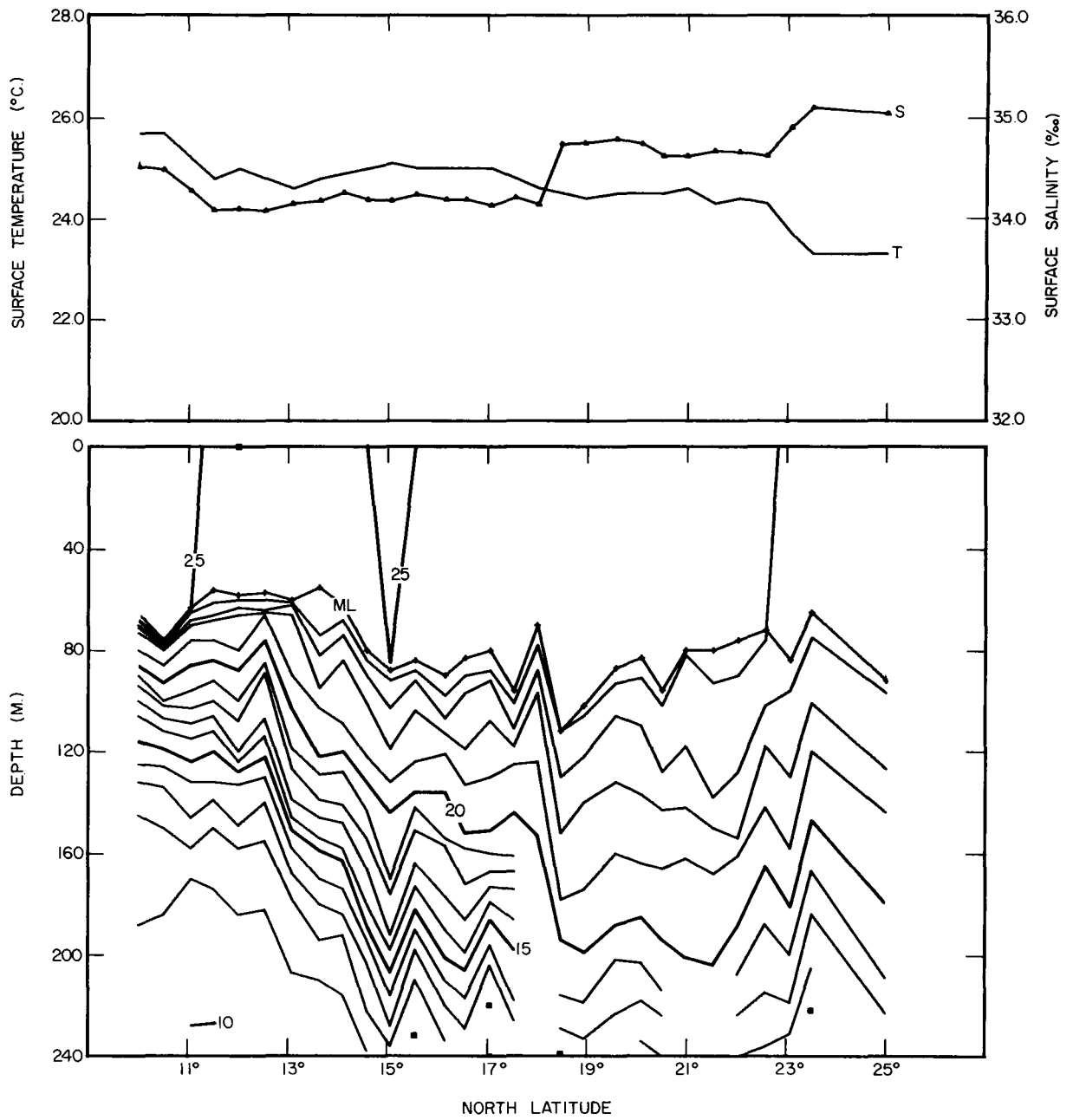


Figure 10.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 12 along long. 154° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

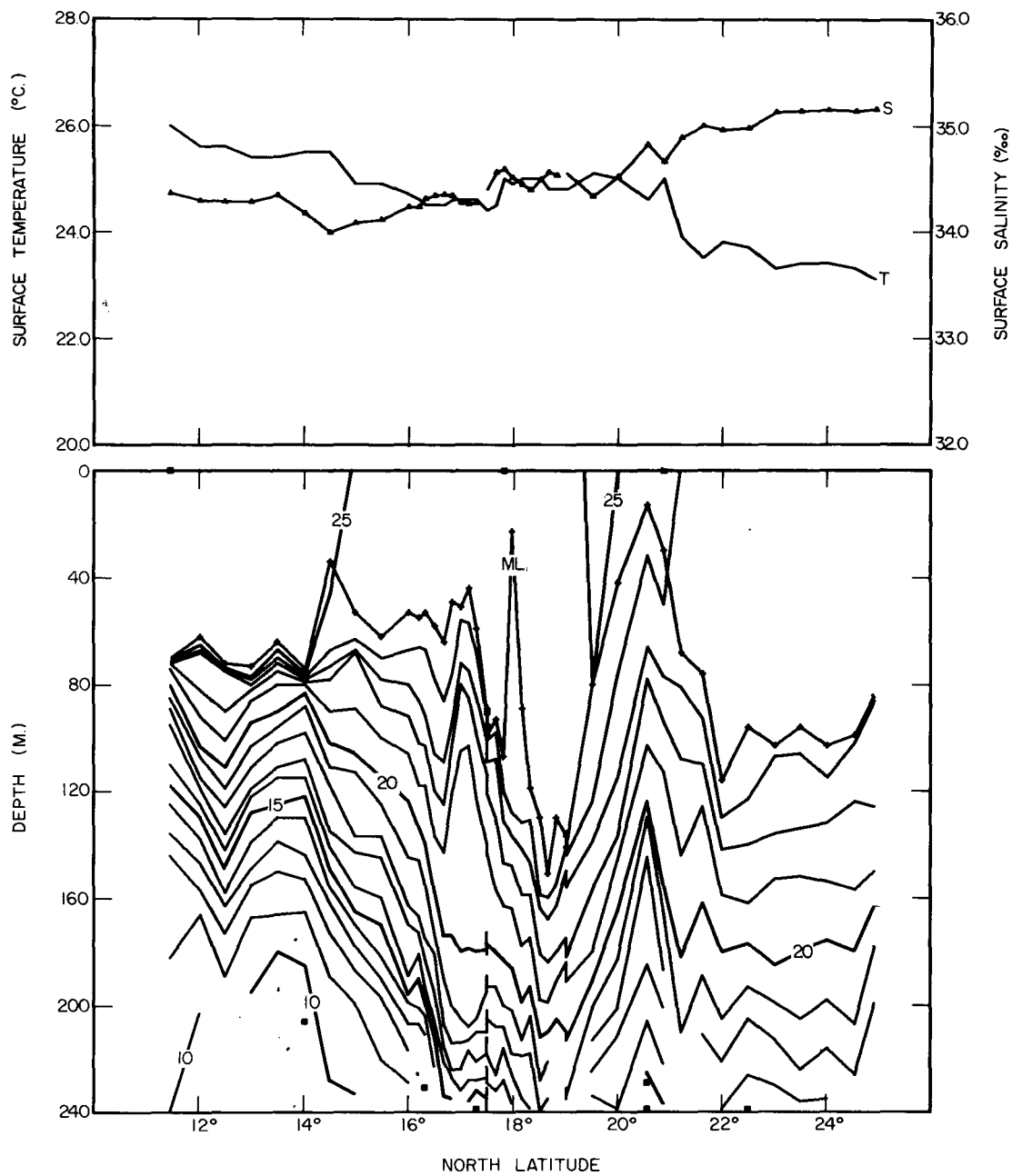


Figure 11.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 12 along long. 157° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

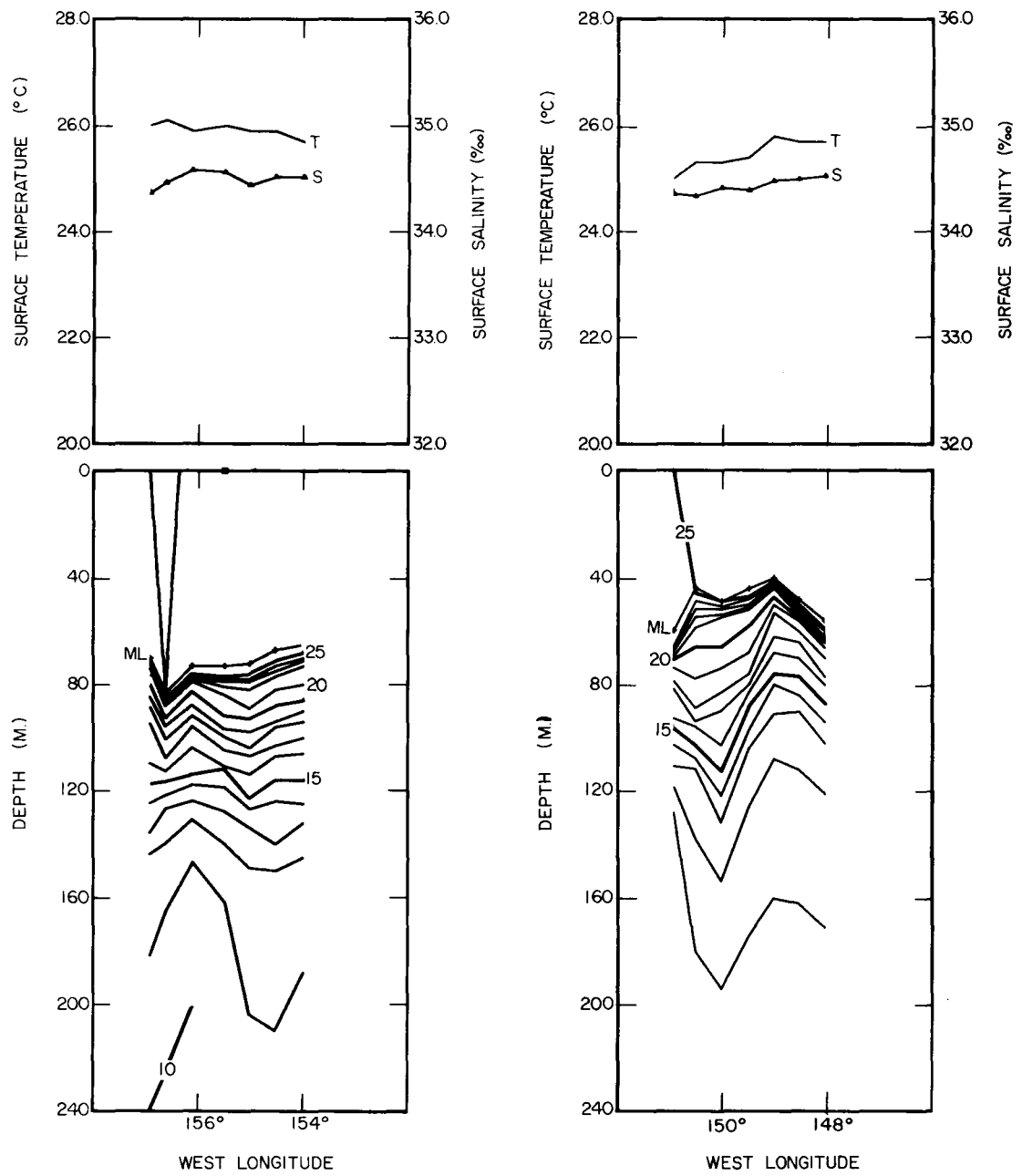


Figure 12.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and zonal BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 12 between stations 7 and 7A, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower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

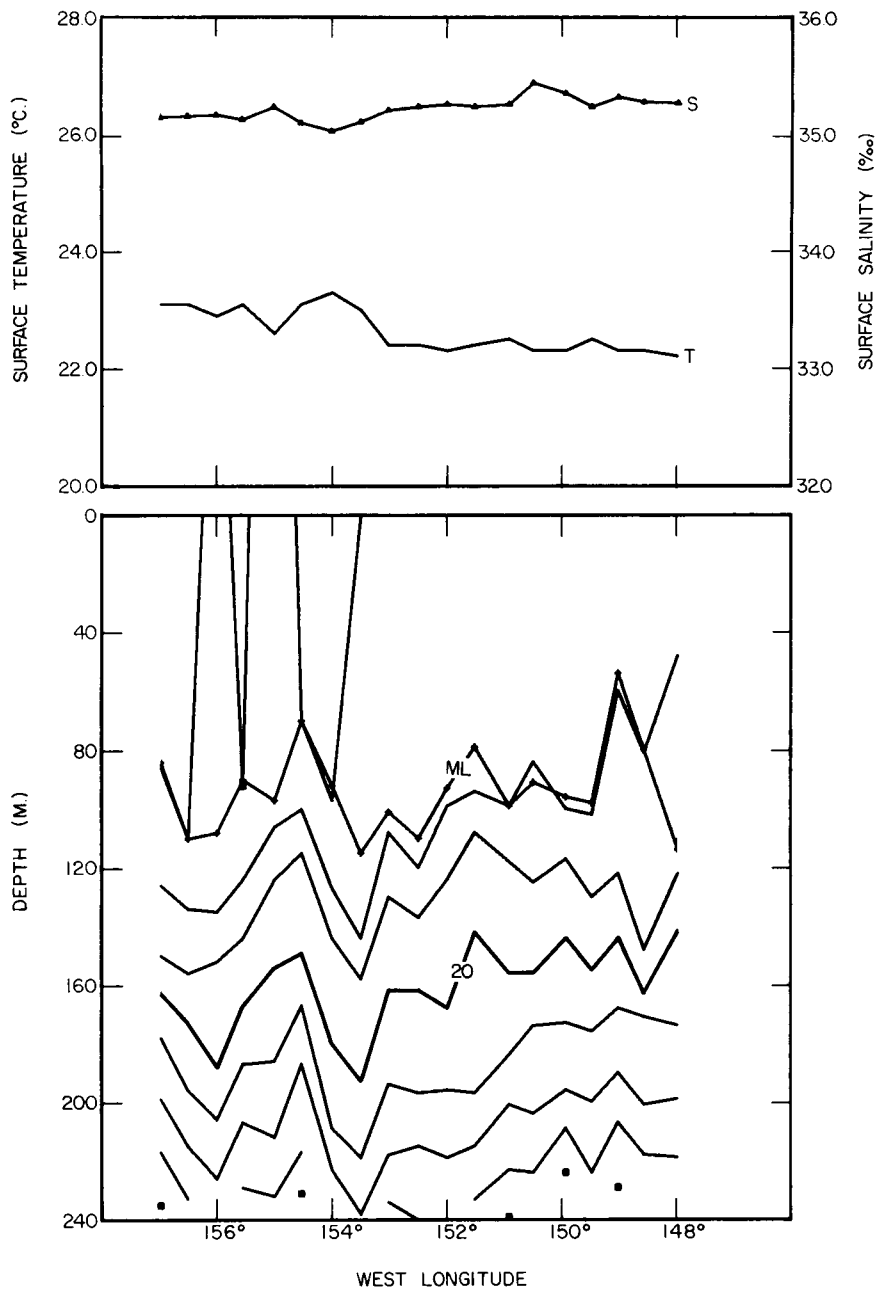


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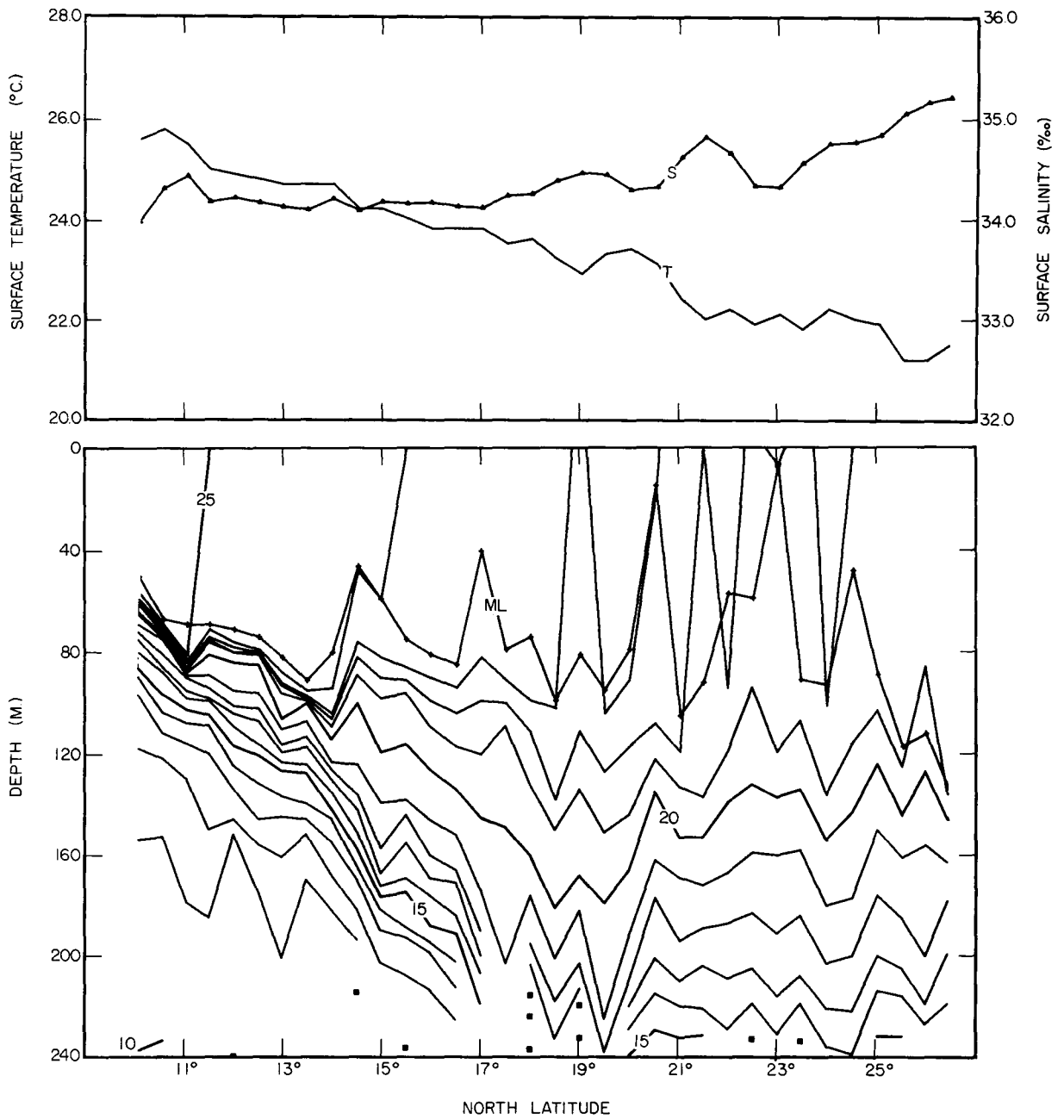


Figure 14.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 13 along long. 148° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

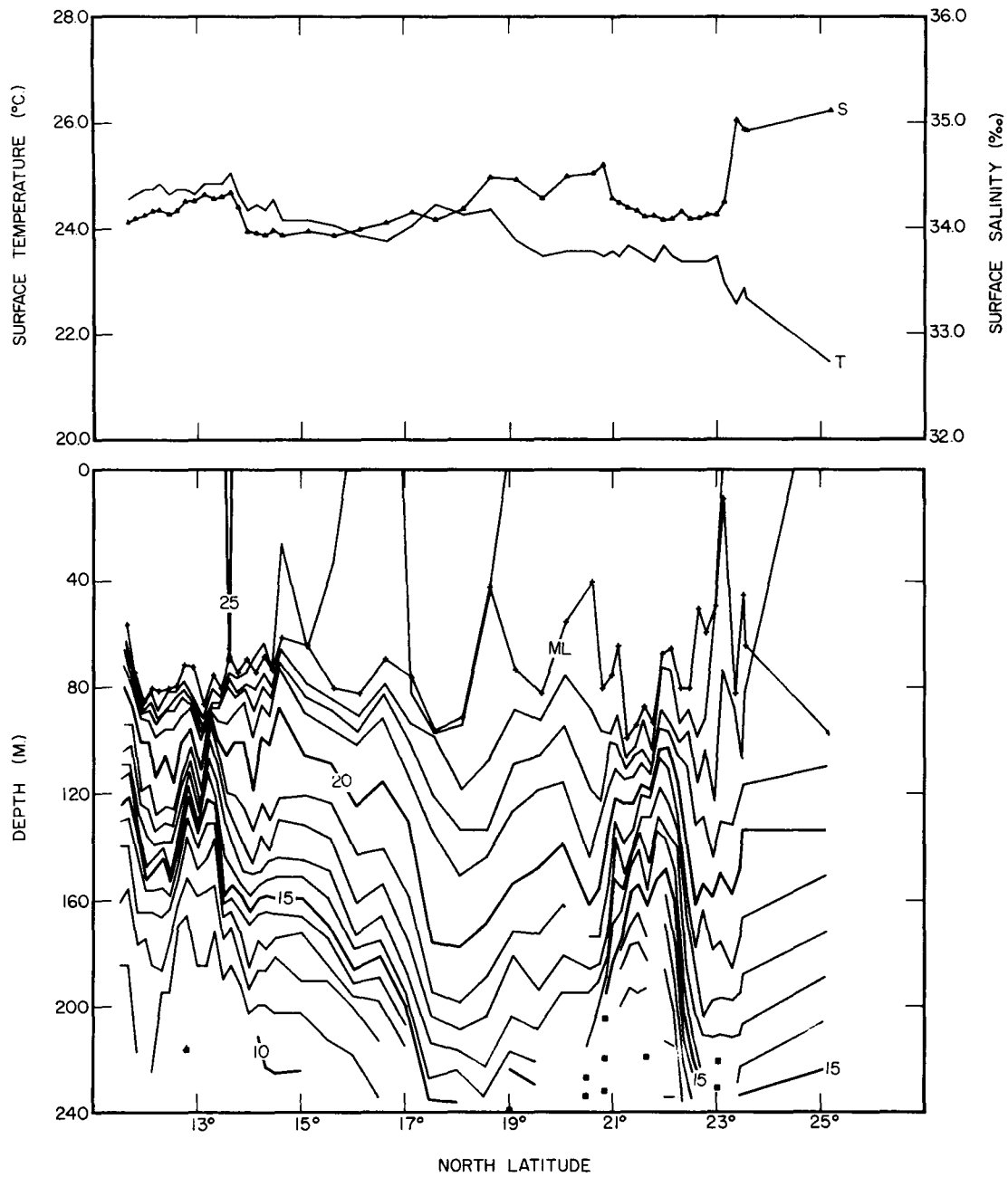


Figure 15.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Crowell cruise 13 along long. 151° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

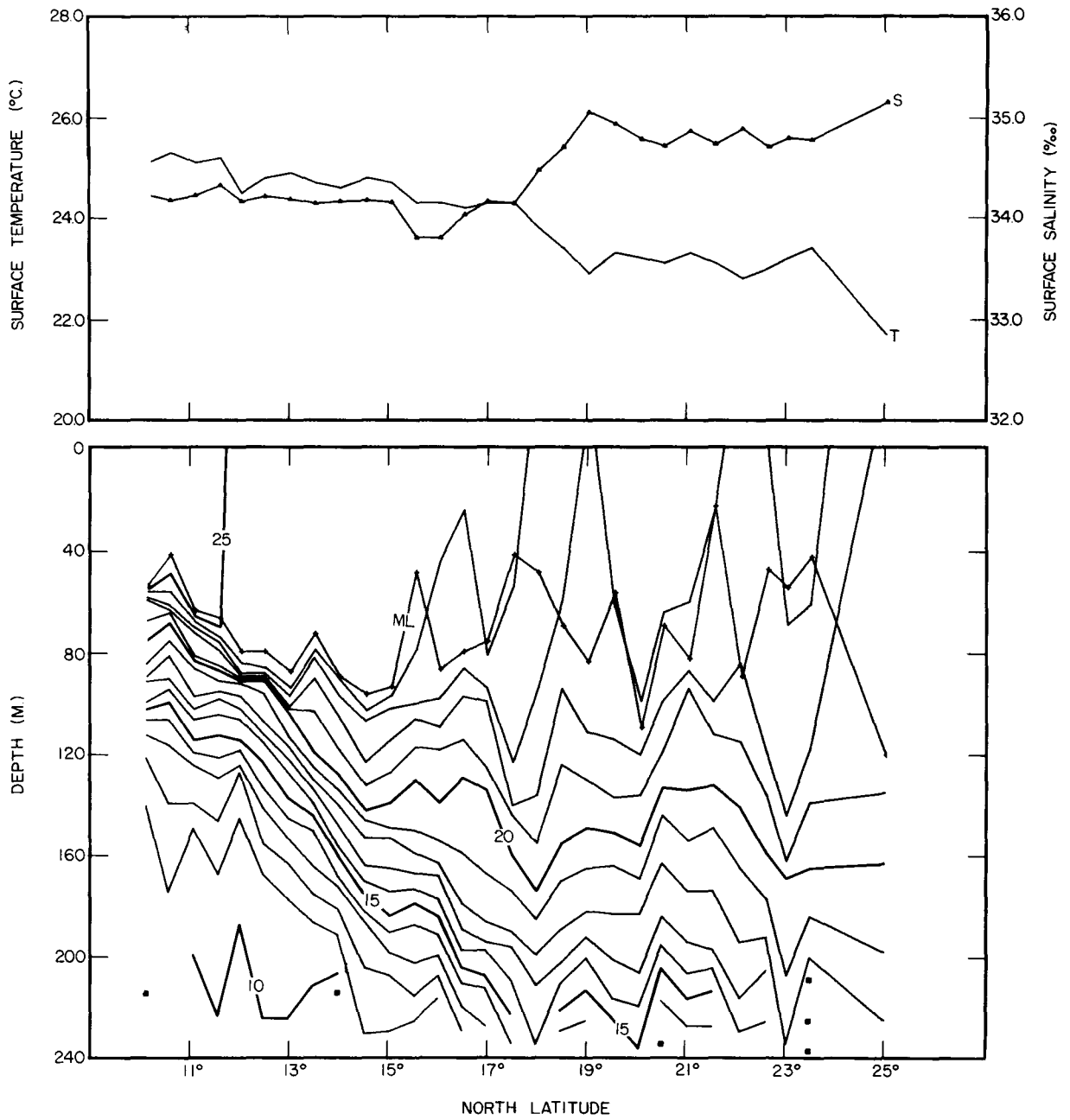


Figure 16.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 13 along long. 154 $^{\circ}$ W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

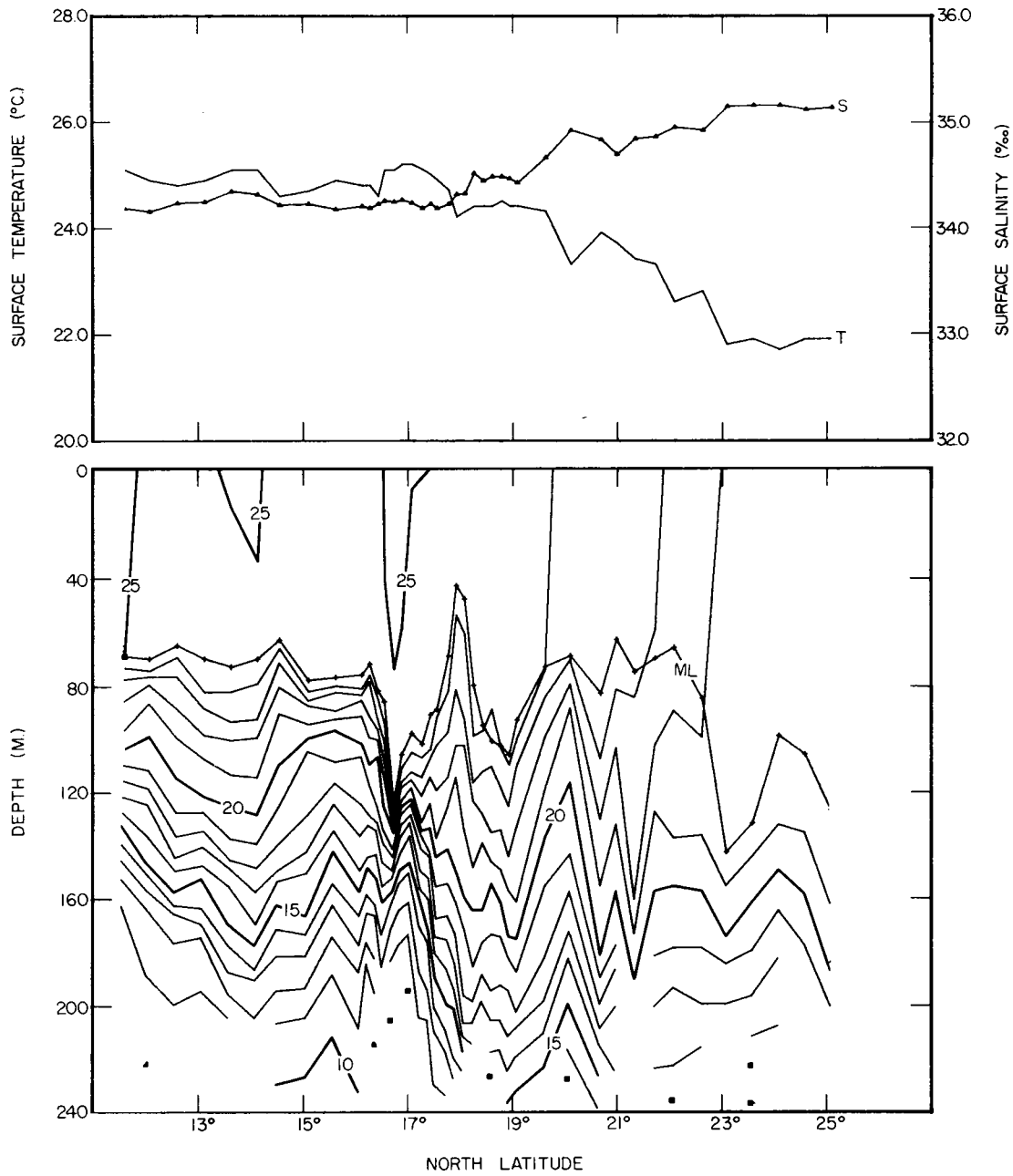


Figure 17.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 13 along long. 157° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

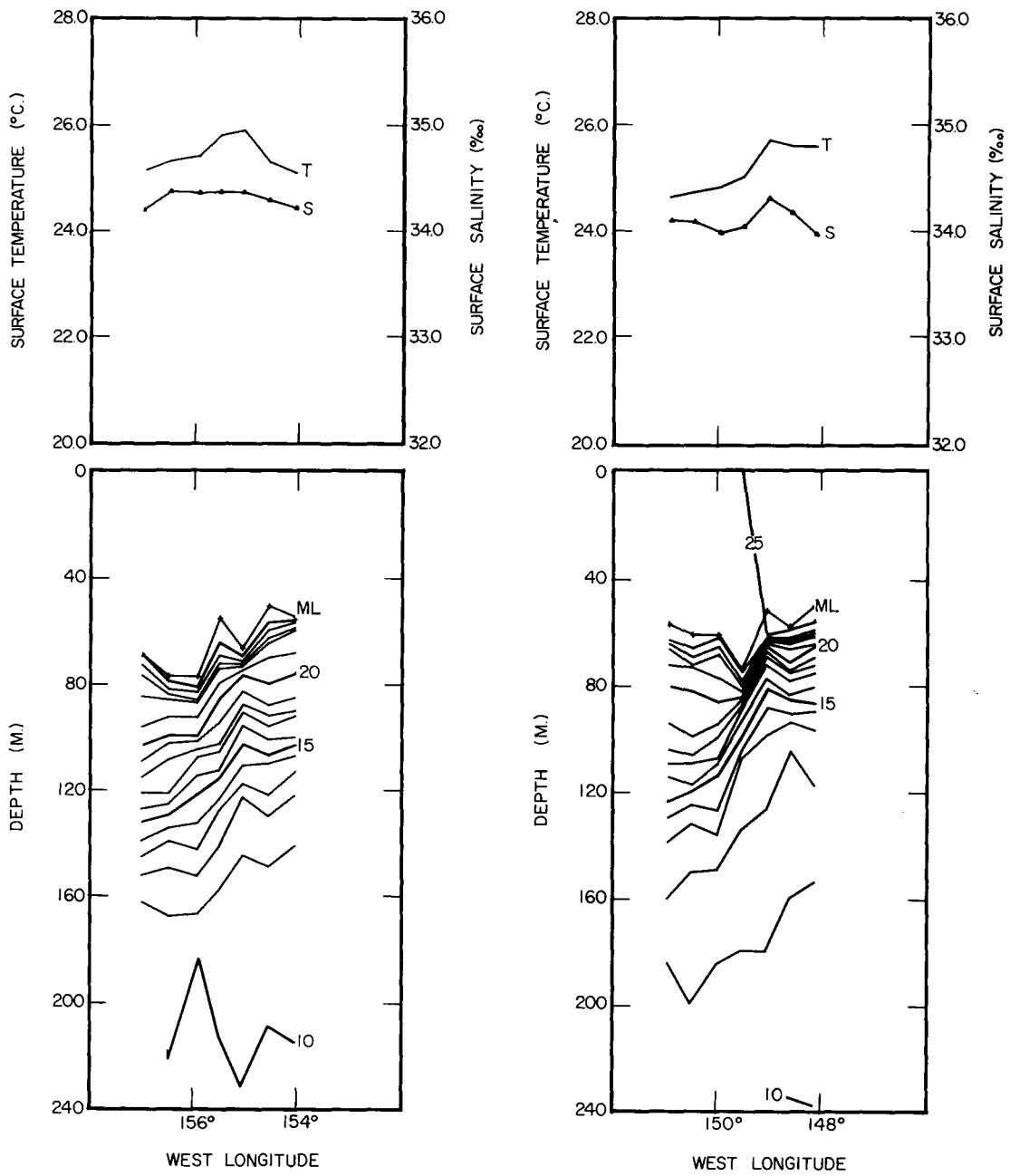


Figure 18.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and zonal BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 13 between stations 7 and 7A, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

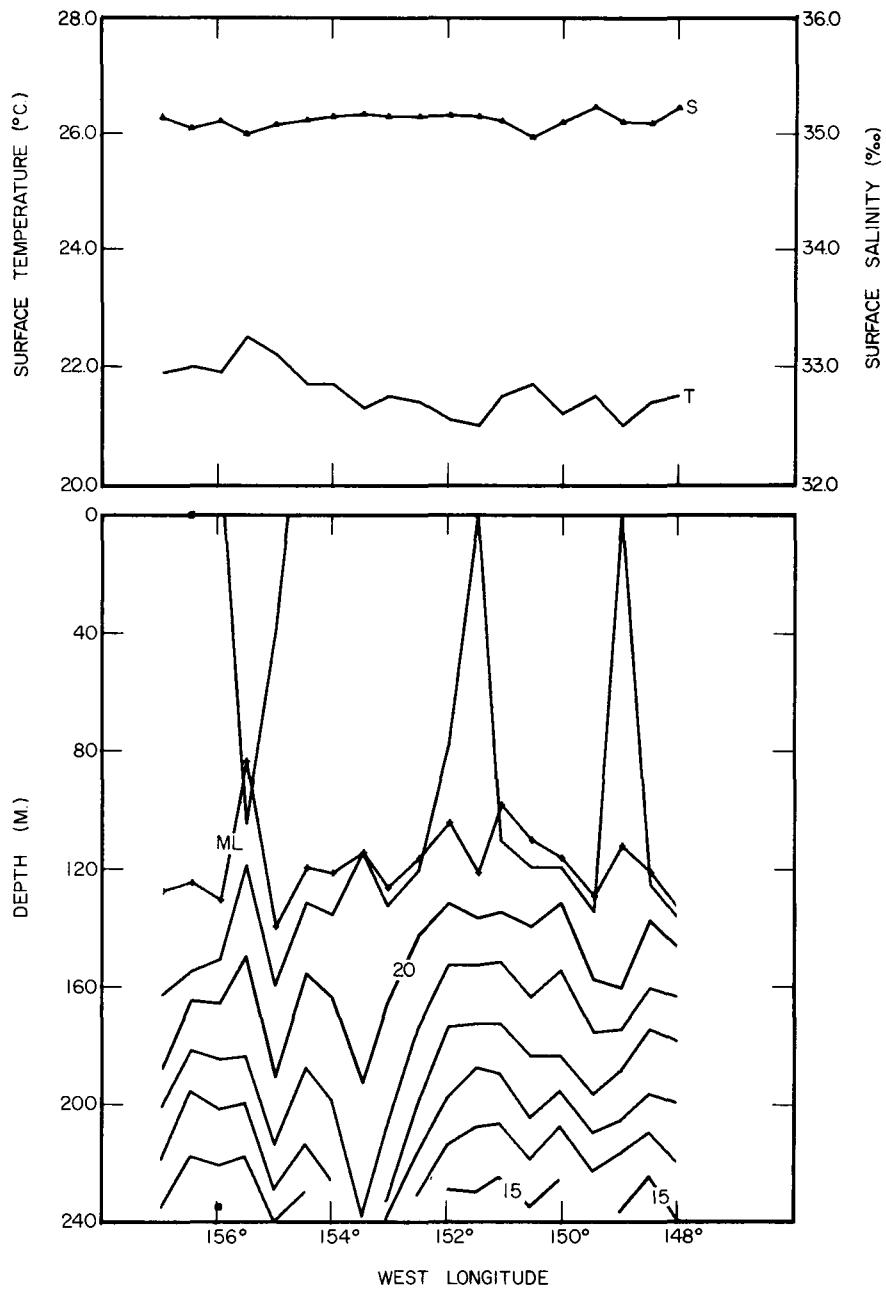


Figure 19.--Surface temperatures ($^{\circ}$ C.) and salinities ($^{\circ}$ /oo) (upper panel) and zonal BT temperature ($^{\circ}$ C.) section (lower panel) for Townsend Cromwell cruise 13 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

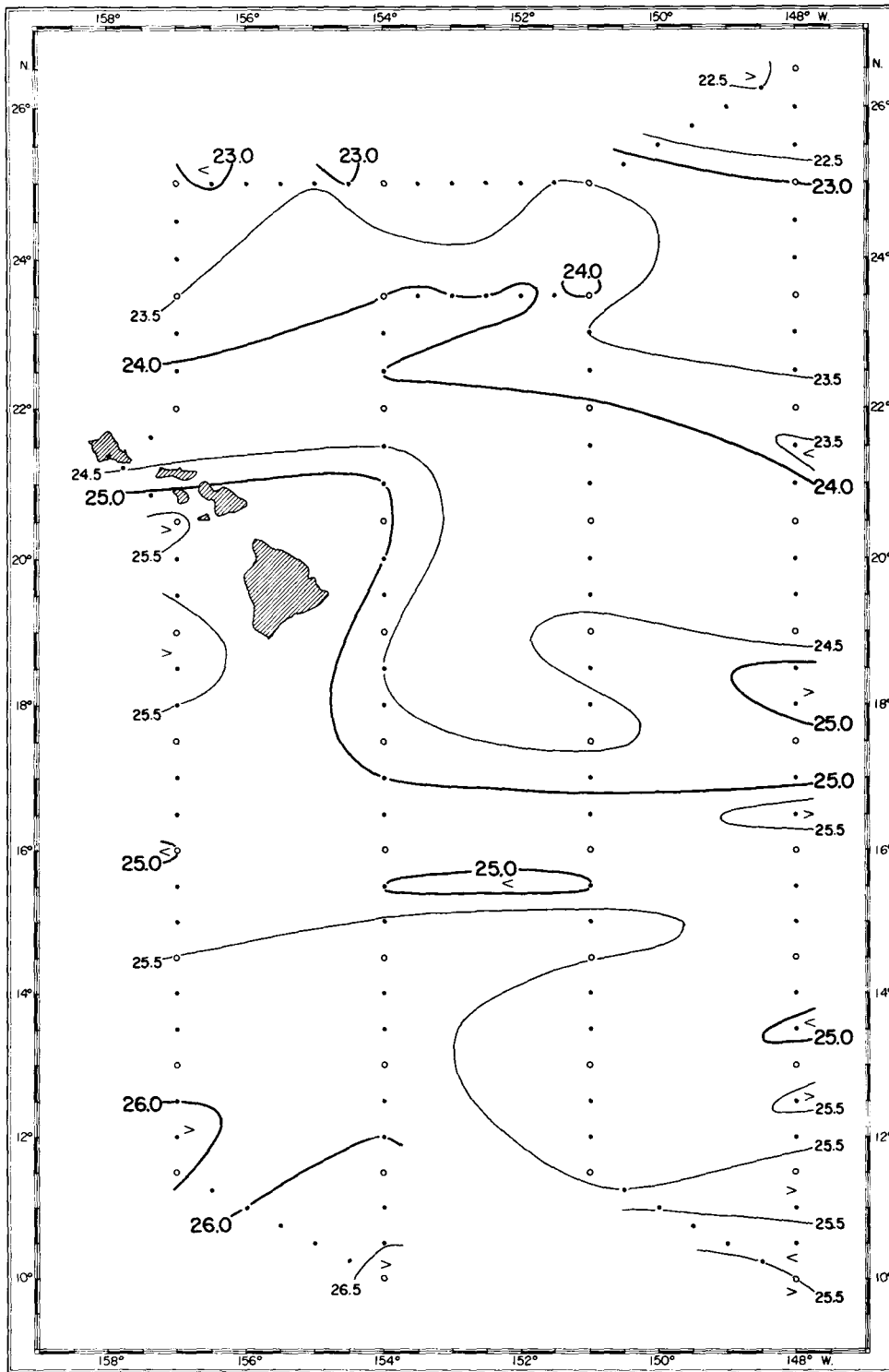


Figure 20.--Surface temperature distribution ($^{\circ}$ C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 11.

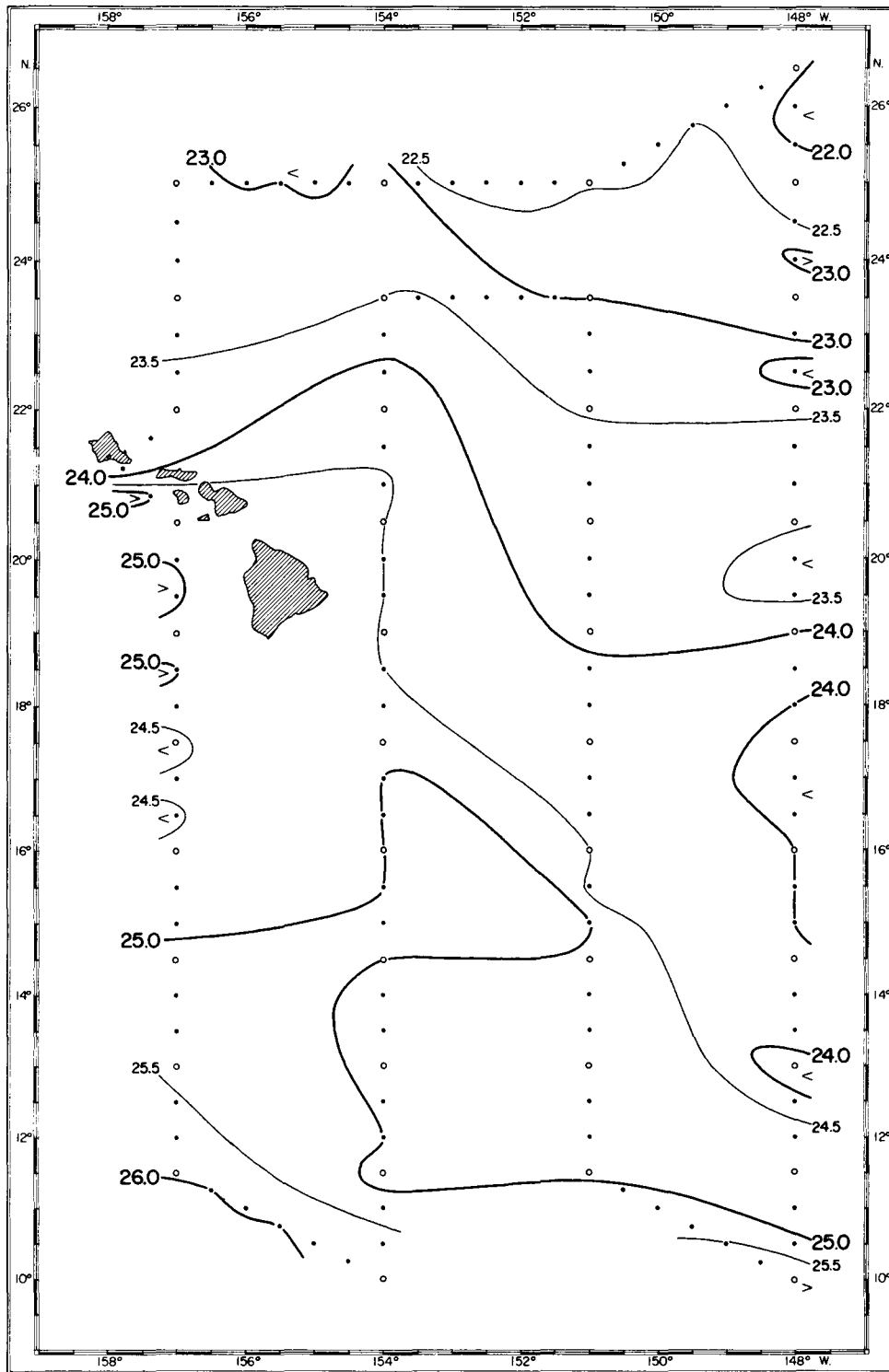


Figure 21.--Surface temperature distribution ($^{\circ}$ C.) based on intake temperature at each BT cast for Townsend Cromwell cruise 12.

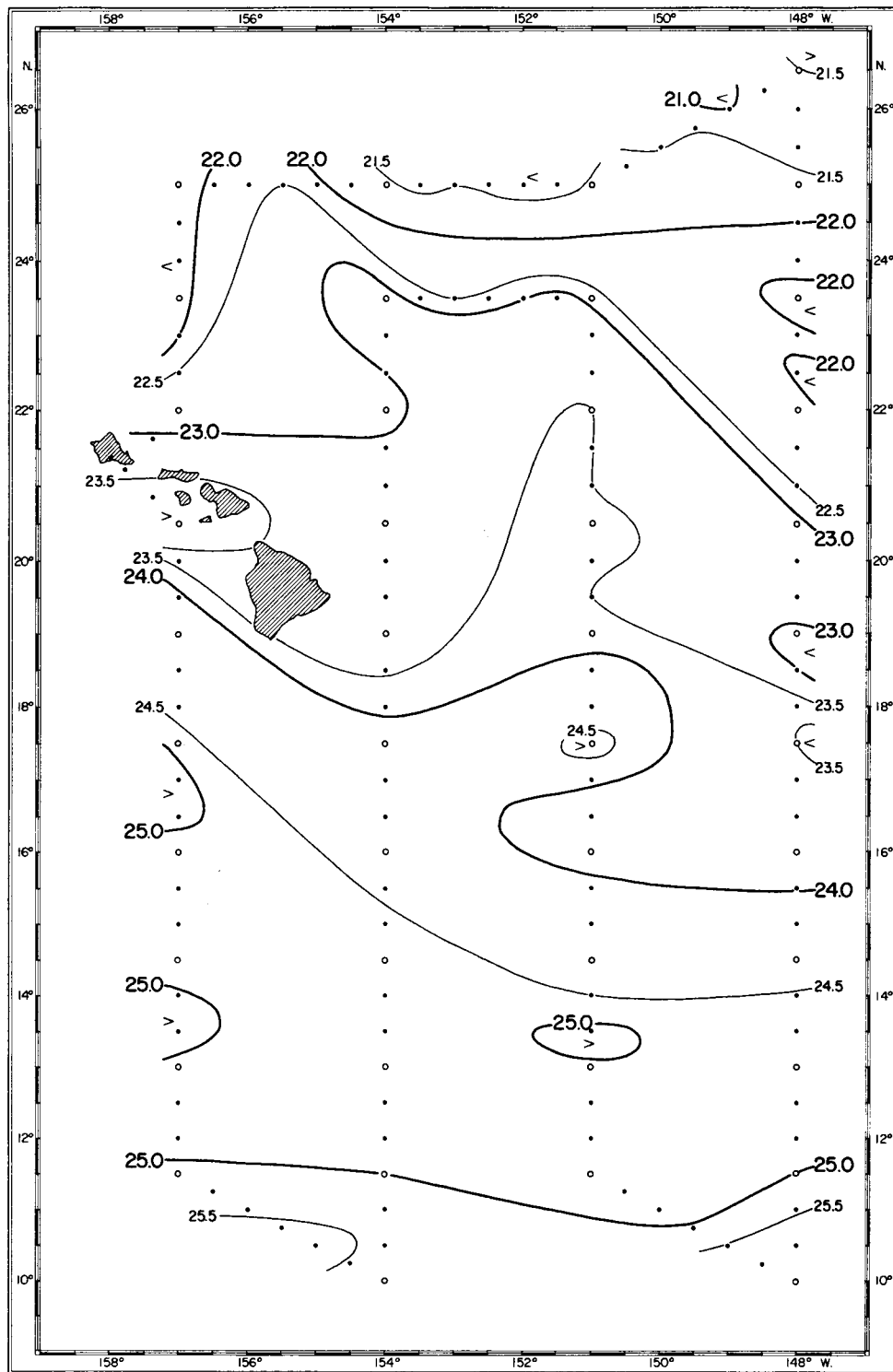


Figure 22.--Surface temperature distribution ($^{\circ}$ C.) based on intake temperature at each BT cast for Townsend Cromwell cruise 13.

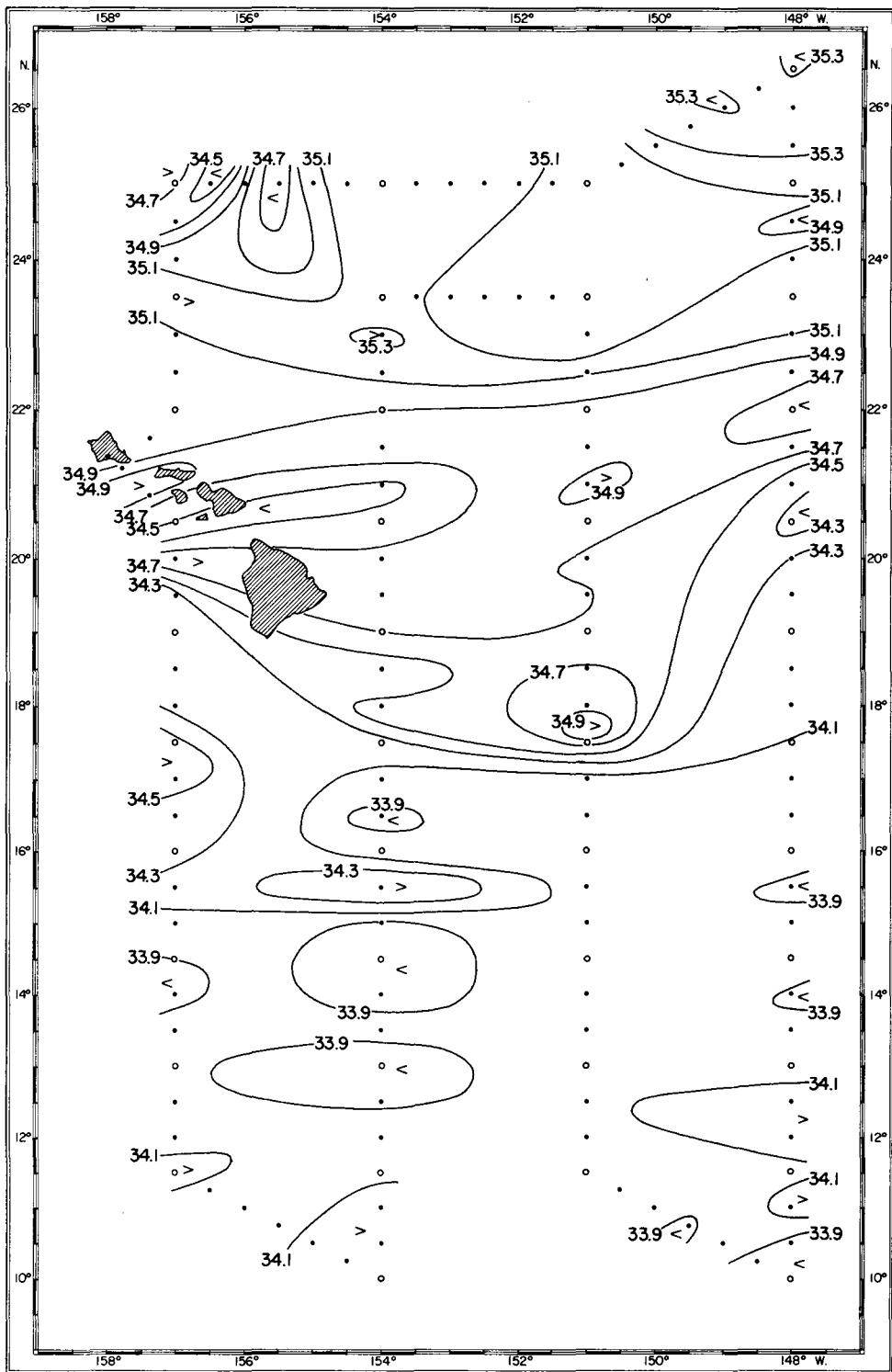


Figure 23.--Surface salinity distribution (‰) from bucket salinity samples at each BT cast for Townsend Cromwell cruise 11.

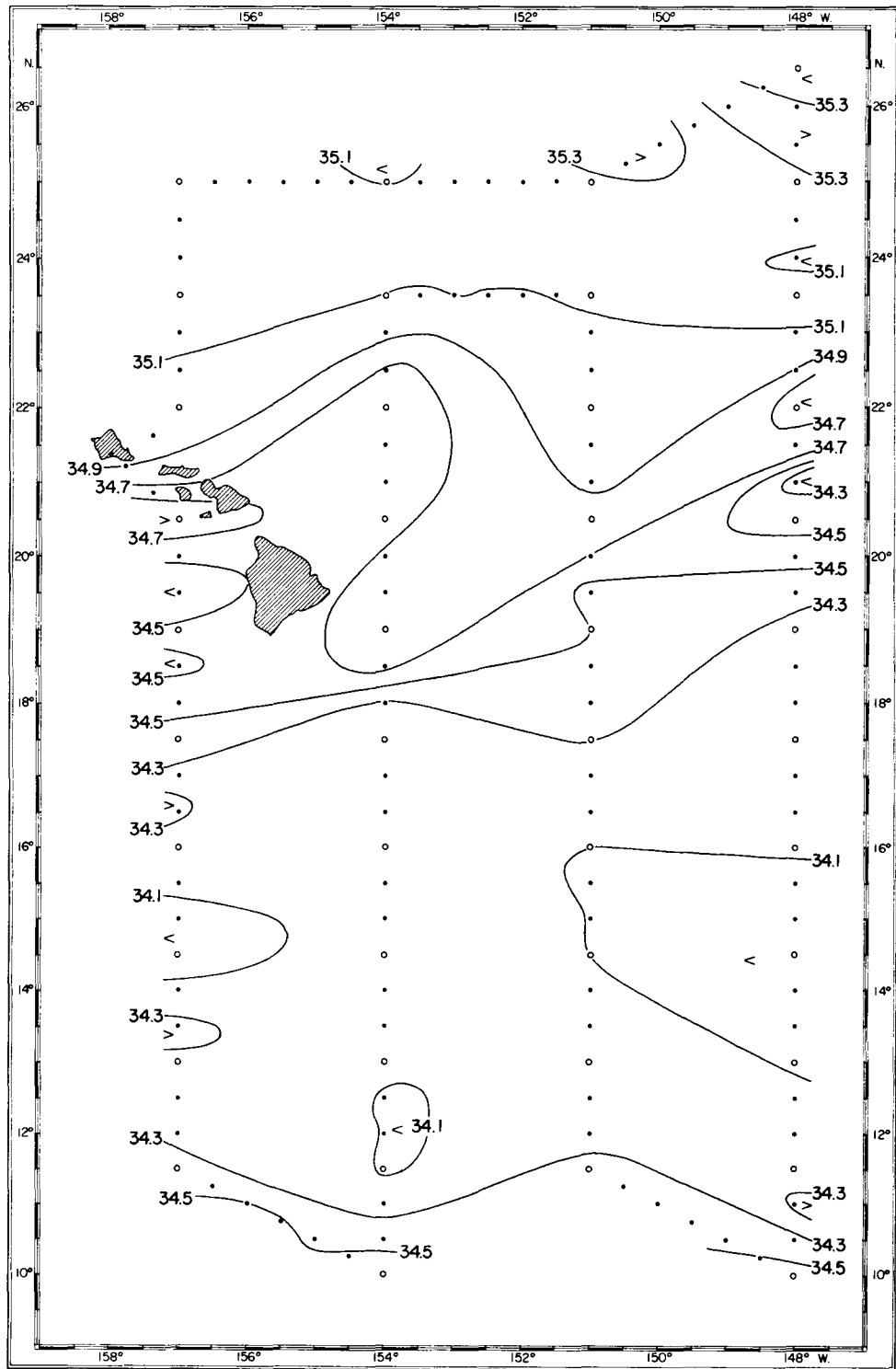


Figure 24.--Surface salinity distribution (‰) from intake salinity samples at each BT cast for Townsend Cromwell cruise 12.

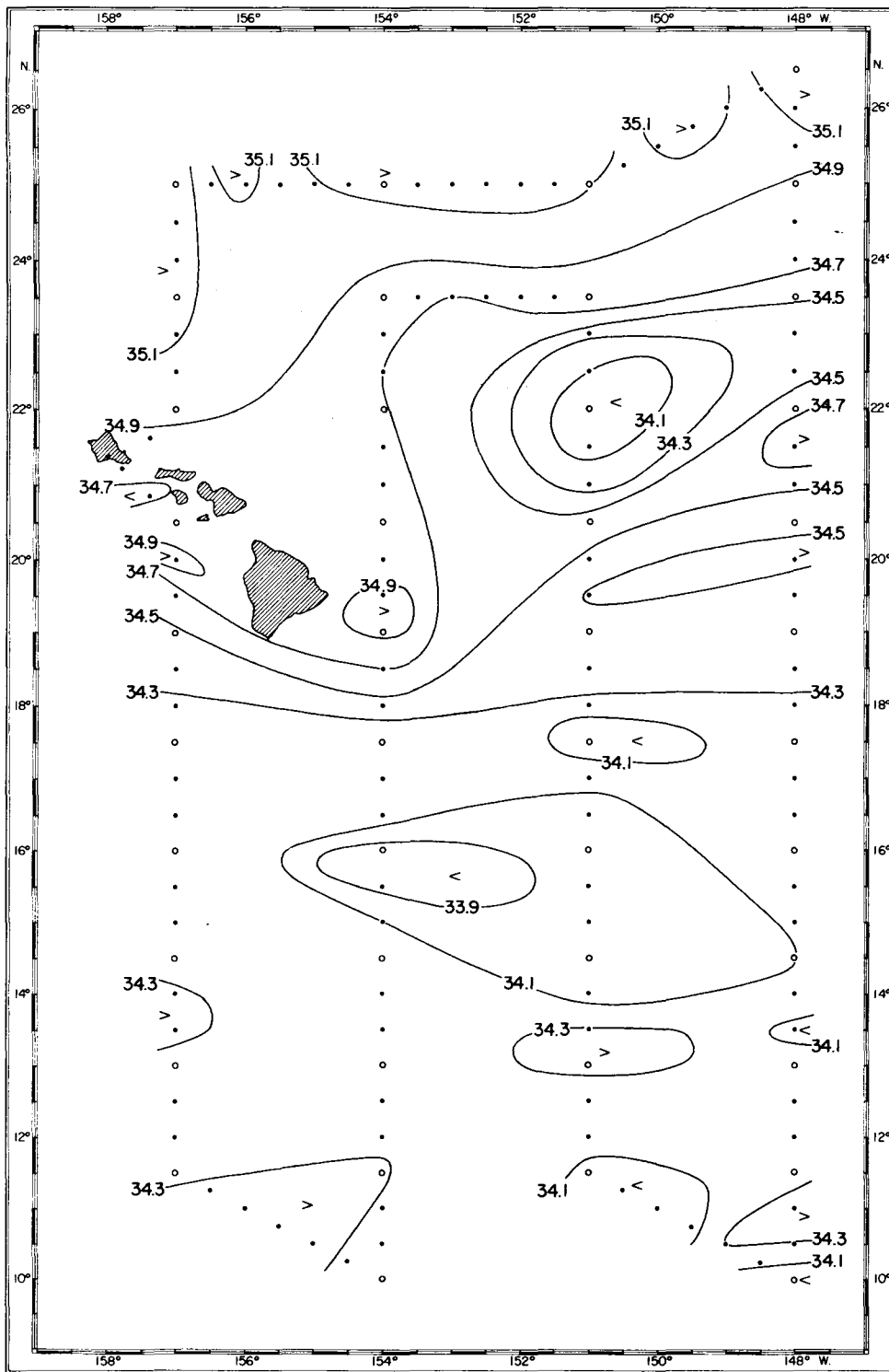


Figure 25.--Surface salinity distribution (‰) from intake salinity samples at each BT cast for Townsend Cromwell cruise 13.

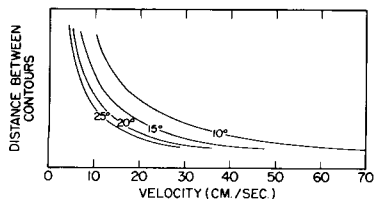
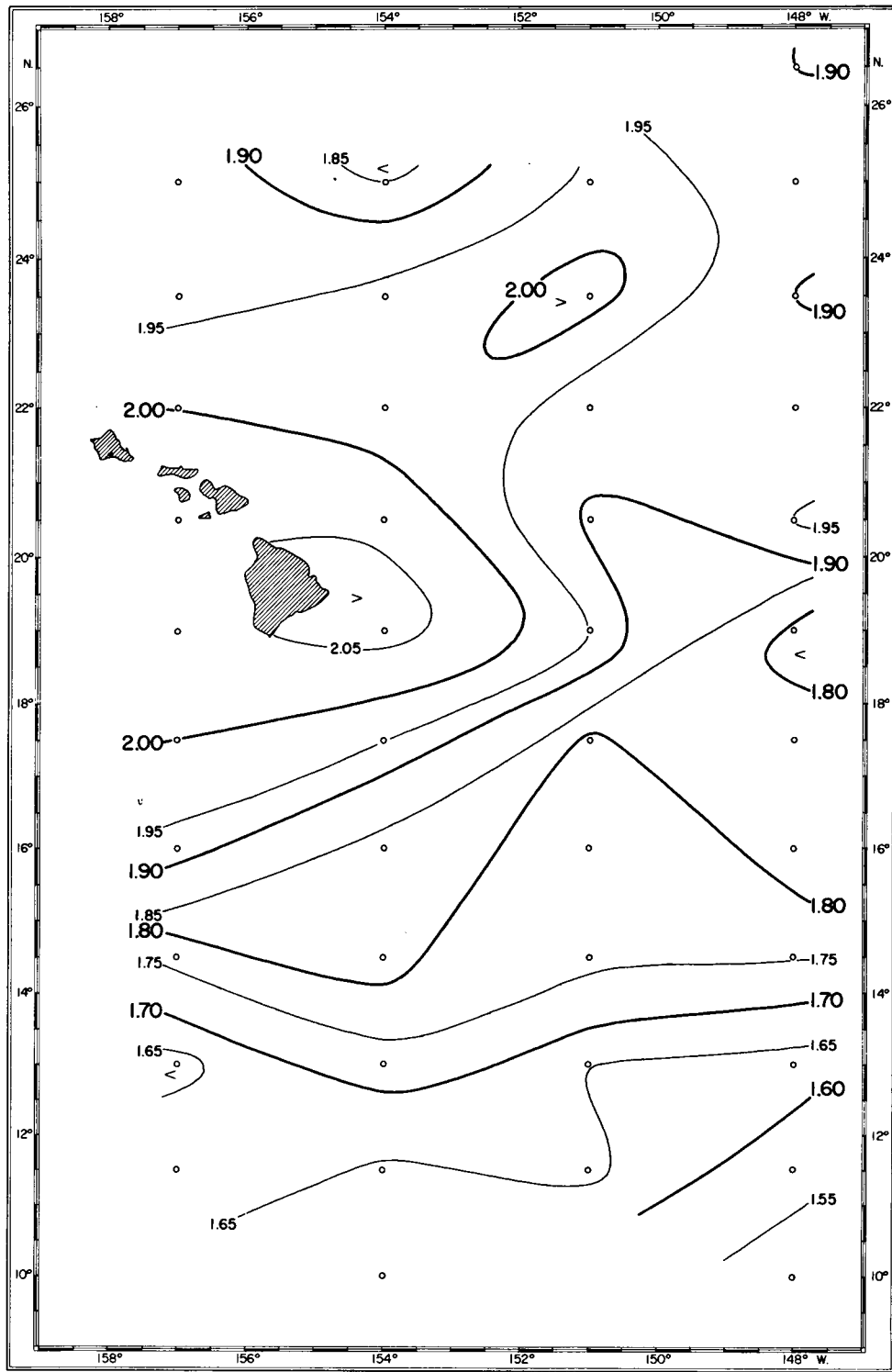


Figure 26.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 11.

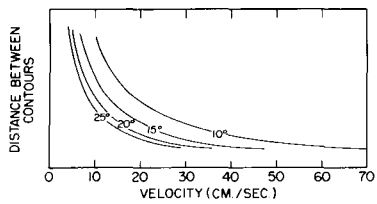
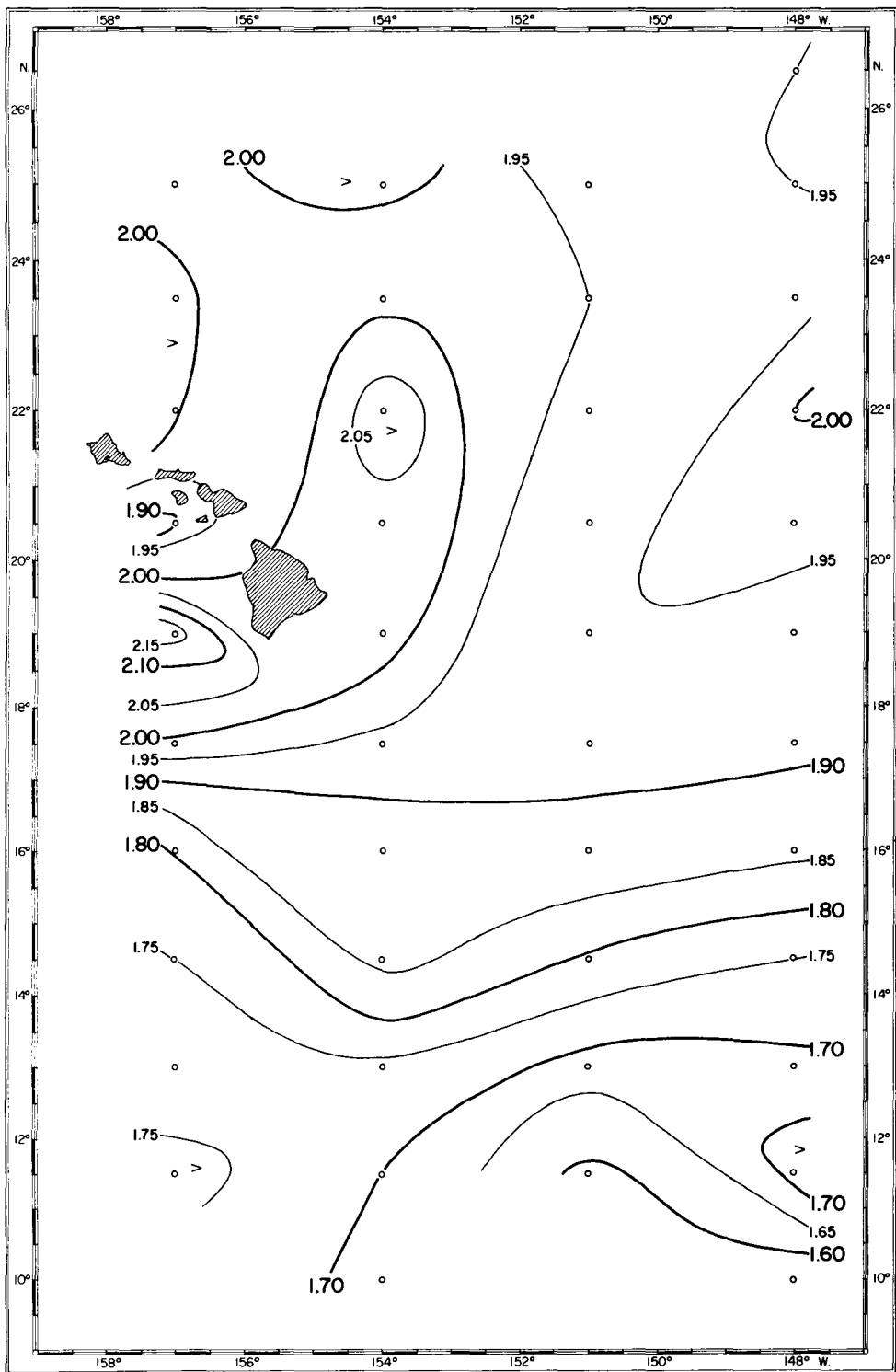


Figure 27.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 12.

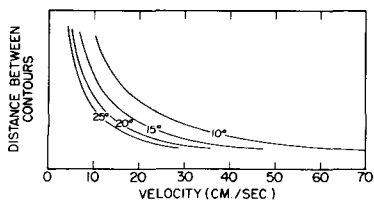
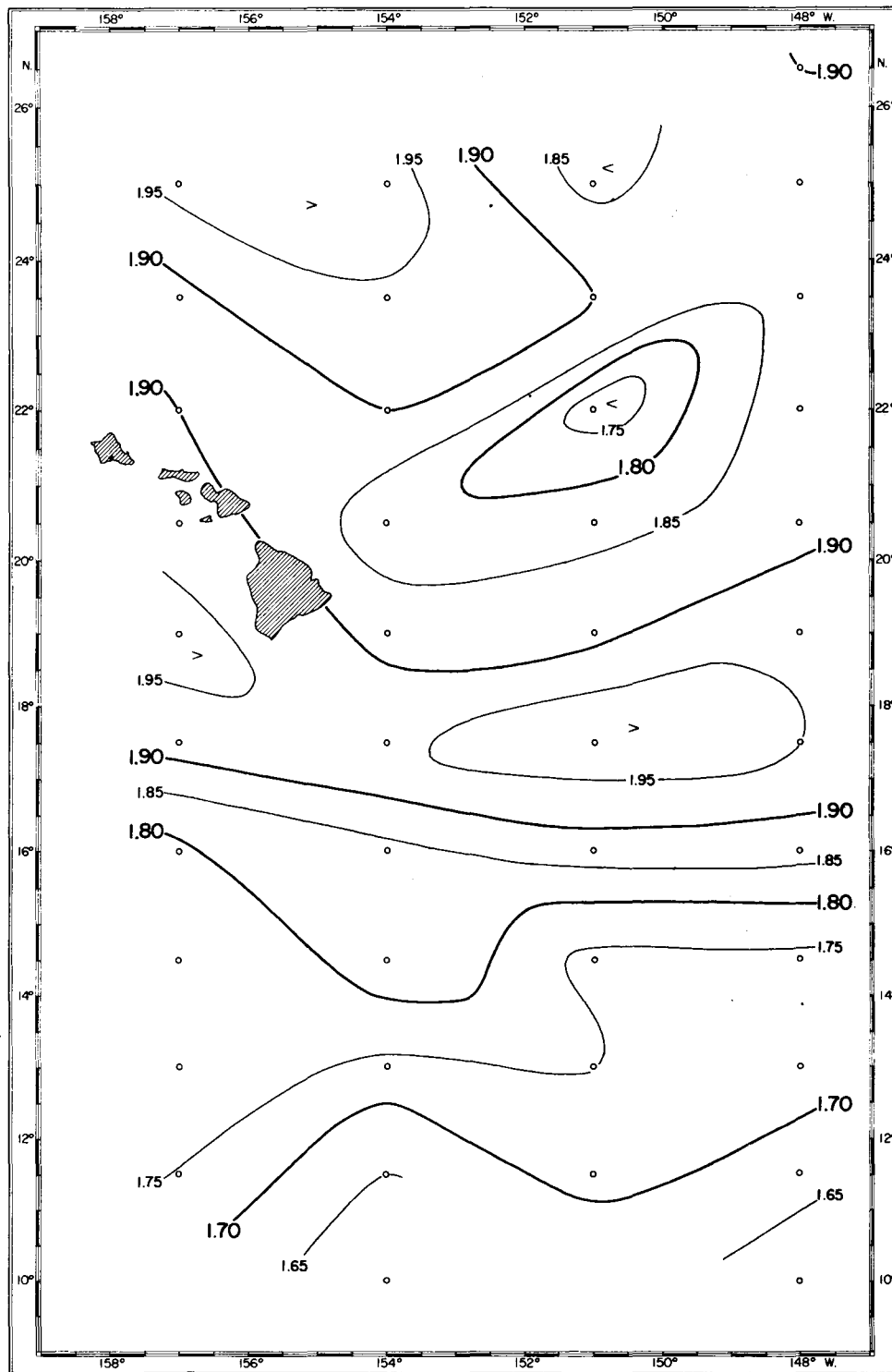


Figure 28.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 13.

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 (δ) 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 11

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 11, STATION		1, 20-36N LAT, 157-13W LONG, DEC. 2, 1964, 0600 G.C.T.				2, 1964, 0600 G.C.T.		VIS. 7		CLOUD TYPE , COVER		
DRY BULB 25.7	WET BULB 21.9	WIND SPEED 10, DIR. 12		BAR. 1c		WEATHER 02						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.67	34.37			22.68	517.8	0.	25.67	34.37	22.68	517.8	0.000
10.	25.66	34.36			22.68	518.6	10.	25.66	34.36	22.68	518.6	0.052
30.Δ	25.60	34.52			22.82	506.1	20.	25.64	34.42	22.73	514.3	0.104
50.Δ	25.48	34.82			23.08	481.8	30.	25.60	34.52	22.82	506.1	0.156
77.	25.42	34.83			23.11	480.4	50.	25.48	34.82	23.08	481.8	0.255
102.	24.38	34.82			23.41	451.9	75.	25.44	34.84	23.10	480.4	0.376
128.	22.58	35.08			24.13	384.0	100.	24.49	34.82	23.38	455.3	0.494
154.	21.42	35.08			24.46	353.8	150.	21.59	35.09	24.42	357.6	0.699
180.	19.78	35.04			24.87	315.5	200.	18.18	34.87	25.14	289.8	0.862
193.	18.84	34.94			25.03	300.0	250.	15.08	34.53	25.61	245.9	0.977
228.	15.84	34.60			25.50	256.5	300.	12.53	34.29	25.95	213.7	1.113
255.	14.96	34.52			25.63	244.2	400.	7.98	34.15	26.63	148.9	1.296
280.	14.02	34.42			25.75	232.7	500.	6.72	34.23	26.87	126.4	1.435
307.	11.97	34.24			26.02	206.7	600.	5.80	34.30	27.05	109.8	1.554
408.	7.81	34.16			26.66	145.5	700.	5.18	34.38	27.18	97.4	1.659
511.	6.68	34.24			26.89	125.1	800.	4.81	34.45	27.28	88.5	1.753
612.	5.69	34.31			27.07	108.0	1000.	4.18	34.51	27.40	78.6	1.922
814.	4.77	34.46			27.30	87.5						
1017.	4.14	34.52			27.41	77.3						

CROMWELL 11, STATION		2, 18-59N LAT, 156-59W LONG, DEC. 2, 1964, 1600 G.C.T.				2, 1964, 1600 G.C.T.		VIS. 7		CLOUD TYPE , COVER 3		
DRY BULB 24.8	WET BULB 21.1	WIND SPEED 15, DIR. 15		BAR. 16		WEATHER 02						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.58	34.17			22.56	529.6	0.	25.58	34.17	22.56	529.5	0.000
11.	25.59	34.18			22.56	529.5	10.	25.59	34.18	22.56	529.5	0.053
30.Δ	25.56	34.18			22.57	529.4	20.	25.58	34.18	22.57	529.5	0.107
50.Δ	25.52	34.18			22.59	529.0	30.	25.56	34.18	22.57	529.4	0.160
75.Δ	25.50	34.18			22.59	529.4	50.	25.52	34.18	22.59	529.0	0.267
100.Δ	25.38	34.21			22.65	524.7	75.	25.50	34.18	22.59	529.4	0.400
150.	19.80	34.57			24.51	348.9	100.	25.38	34.21	22.65	524.7	0.533
192.	16.42	34.49			25.28	276.2	150.	19.80	34.57	24.51	348.9	0.753
218.	14.11	34.36			25.69	237.2	200.	15.73	34.45	25.41	263.9	0.907
247.	11.28	34.22			26.14	194.3	250.	11.12	34.22	26.16	191.7	1.022
275.	10.46	34.29			26.34	175.5	300.	10.45	34.47	26.48	162.6	1.111
297.	10.48	34.46			26.47	163.8	400.	8.91	34.52	26.77	135.9	1.262
391.	9.05	34.52			26.75	137.7	500.	7.48	34.43	26.92	122.2	1.392
490.	7.60	34.44			26.91	123.1	600.	6.42	34.36	27.02	113.6	1.511
611.	6.32	34.36			27.03	112.7	700.	5.53	34.39	27.15	100.9	1.620
787.	4.93	34.45			27.27	90.0	800.	4.88	34.45	27.28	89.1	1.716
986.	4.37	34.51			27.38	80.6	1000.	4.33	34.51	27.39	79.9	1.887
1180.	3.79	34.55			27.47	72.2	1200.	3.76	34.56	27.48	71.6	2.040
1473.	3.09	34.59			27.57	62.9						

CROMWELL 11, STATION		3, 17-32N LAT, 156-56W LONG, DEC. 3, 1964, 0100 G.C.T.				3, 1964, 0100 G.C.T.		VIS.		CLOUD TYPE 8, COVER 1		
DRY BULB 25.2	WET BULB 21.2	WIND SPEED 22, DIR. 07		BAR. 13		WEATHER 02						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.28	34.44			22.85	501.3	0.	25.28	34.44	22.85	501.3	0.000
11.	25.25	34.44			22.86	500.9	10.	25.25	34.44	22.86	500.9	0.050
30.Δ	25.26	34.44			22.86	501.9	20.	25.25	34.44	22.86	501.2	0.101
50.Δ	25.26	34.44			22.86	502.7	30.	25.26	34.44	22.86	501.9	0.151
75.	25.26	34.67			23.03	487.1	50.	25.26	34.44	22.86	502.7	0.253
101.	23.11	34.81			23.78	416.9	75.	25.26	34.67	23.03	487.1	0.377
125.	22.42	35.08			24.18	379.5	100.	23.20	34.80	23.75	419.8	0.492
148.	20.95	35.12			24.62	338.4	150.	20.85	35.12	24.64	336.2	0.682
175.	19.60	35.02			24.90	312.3	200.	17.44	34.79	25.27	277.9	0.837
189.	18.83	34.97			25.06	297.4	250.	12.28	34.26	25.98	209.6	0.960
224.	14.17	34.37			25.68	237.9	300.	9.96	34.24	26.39	171.3	1.056
247.	12.45	34.26			25.95	212.8	400.	8.52	34.37	26.72	140.6	1.213
275.	11.09	34.29			26.23	186.4	500.	7.30	34.39	26.92	122.6	1.346
300.	9.96	34.24			26.39	171.3	600.	6.62	34.45	27.06	110.0	1.463
400.	8.52	34.37			26.72	140.6	700.	5.93	34.48	27.17	99.5	1.569
500.	7.30	34.39			26.92	122.6	800.	5.31	34.50	27.26	91.2	1.666
599.	6.63	34.45			27.06	110.1	1000.	4.55	34.53	27.38	81.4	1.840
796.	5.33	34.50			27.26	91.5	1200.	3.87	34.56	27.47	72.9	1.997
993.	4.58	34.53			27.37	81.8						
1166.	3.94	34.55			27.46	73.9						
1383.	3.40	34.58			27.53	66.8						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.23

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA						
CROMWELL 11, STATION 4, 16-24N LAT, 157-0W LONG, DEC. 3, 1964, 1100 G.C.T.														
DRY BULB	24.5	WET BULB	21.8	WIND SPEED	17, DIR. 07	BAR.	15	WEATHER	02	VIS.	7	CLOUD TYPE	8, COVER	2
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	25.21	34.45			22.88	498.5	0.	25.21	34.45	22.88	498.5	0.000		
11.Δ	25.20	34.44			22.88	499.4	10.	25.20	34.44	22.88	499.3	0.050		
30.Δ	25.20	34.44			22.88	500.1	20.	25.20	34.44	22.88	499.8	0.101		
50.Δ	25.20	34.44			22.88	500.9	30.	25.20	34.44	22.88	500.1	0.151		
76.	24.73	34.76			23.26	465.3	50.	25.20	34.44	22.88	500.9	0.252		
101.	22.69	34.97			24.02	393.9	75.	24.77	34.75	23.24	467.4	0.374		
127.	21.27	34.95			24.40	358.3	100.	22.78	34.96	23.99	396.7	0.483		
152.	19.96	34.94			24.75	326.3	150.	20.08	34.94	24.72	329.0	0.665		
175.	17.79	34.76			25.16	287.3	200.	14.97	34.44	25.57	248.4	0.811		
192.	15.88	34.55			25.45	259.9	250.	11.39	34.38	26.24	184.6	0.920		
226.	12.52	34.24			25.92	215.0	300.	10.80	34.61	26.53	158.1	1.006		
250.	11.39	34.38			26.24	184.6	400.	8.27	34.42	26.80	133.0	1.153		
277.	10.83	34.55			26.48	162.8	500.	7.31	34.46	26.97	117.5	1.280		
306.	10.80	34.62			26.54	157.8	600.	6.44	34.46	27.09	106.7	1.393		
407.	8.05	34.40			26.82	131.3	700.	5.81	34.48	27.19	97.9	1.496		
508.	7.28	34.47			26.98	116.5	800.	5.36	34.52	27.27	90.7	1.592		
608.	6.37	34.46			27.10	105.9	1000.	4.55	34.54	27.38	80.9	1.765		
810.	5.32	34.52			27.28	90.0	1200.	3.83	34.56	27.47	72.2	1.920		
1015.	4.50	34.54			27.39	80.3	1500.	3.01	34.61	27.59	60.8	2.123		
1215.	3.78	34.56			27.48	71.6								
1516.	2.97	34.61			27.60	60.2								

CROMWELL 11, STATION 5, 14-31N LAT, 157-1W LONG, DEC. 3, 1964, 2000 G.C.T.														
DRY BULB	24.9	WET BULB	21.9	WIND SPEED	18, DIR. 07	BAR.	12	WEATHER	03	VIS.	7	CLOUD TYPE	8, COVER	9
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	25.62	34.08			22.48	537.2	0.	25.62	34.08	22.48	537.2	0.000		
9.	25.62	34.09			22.49	536.8	10.	25.62	34.09	22.49	536.8	0.054		
20.Δ	25.62	34.09			22.49	537.3	20.	25.62	34.09	22.49	537.3	0.108		
30.Δ	25.62	34.09			22.49	537.6	30.	25.62	34.09	22.49	537.6	0.162		
50.	25.35	34.49			22.87	501.7	50.	25.35	34.49	22.87	501.7	0.267		
75.	23.26	34.96			23.85	409.3	75.	23.26	34.96	23.85	409.3	0.382		
100.	21.41	35.04			24.43	354.5	100.	21.41	35.04	24.43	354.5	0.478		
125.	19.55	34.95			24.86	314.3	150.	16.02	34.50	25.38	265.4	0.634		
151.	15.87	34.48			25.40	263.5	200.	11.62	34.32	26.15	191.8	0.749		
175.	13.51	34.33			25.79	226.2	250.	9.24	34.25	26.51	158.0	0.838		
190.	12.45	34.35			26.02	204.8	300.	8.27	34.30	26.70	140.1	0.913		
224.	9.92	34.24			26.39	169.0	400.	8.10	34.54	26.92	121.7	1.045		
251.	9.23	34.25			26.51	157.7	500.	7.11	34.52	27.05	110.2	1.162		
276.	8.76	34.29			26.62	147.9	600.	6.30	34.51	27.15	101.2	1.269		
302.	8.23	34.30			26.71	139.6	700.	5.61	34.52	27.24	92.8	1.367		
401.	8.10	34.54			26.92	121.6	800.	5.03	34.53	27.32	85.4	1.457		
502.	7.09	34.52			27.05	110.0	1000.	4.21	34.56	27.44	75.0	1.619		
603.	6.28	34.51			27.15	100.9	1200.	3.57	34.58	27.52	67.5	1.763		
803.	5.01	34.53			27.32	85.2								
1003.	4.20	34.56			27.44	74.9								
1203.	3.56	34.58			27.52	67.4								
1472.	2.87	34.61			27.61	58.7								

CROMWELL 11, STATION 6, 12-56N LAT, 157-0W LONG, DEC. 4, 1964, 0500 G.C.T.														
DRY BULB	25.3	WET BULB	23.2	WIND SPEED	17, DIR. 06	BAR.	10	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.		
0.	25.93	33.90			22.25	559.3	0.	25.93	33.90	22.25	559.3	0.000		
10.	25.95	33.90			22.24	560.3	10.	25.95	33.90	22.24	560.3	0.056		
20.Δ	25.95	33.90			22.24	560.7	20.	25.95	33.90	22.24	560.7	0.113		
30.Δ	25.95	33.90			22.24	561.1	30.	25.95	33.90	22.24	561.1	0.169		
50.	23.26	34.47			23.48	443.7	50.	23.26	34.47	23.48	443.7	0.271		
75.	20.14	34.84			24.62	335.3	75.	20.14	34.84	24.62	335.3	0.369		
102.	17.08	34.64			25.24	277.3	100.	17.30	34.67	25.21	280.3	0.446		
126.	14.39	34.40			25.66	237.4	150.	12.20	34.29	26.02	203.2	0.568		
149.	12.29	34.30			26.01	204.4	200.	10.42	34.49	26.50	158.4	0.659		
174.	10.58	34.25			26.29	178.3	250.	9.91	34.62	26.69	141.7	0.735		
189.	10.50	34.41			26.42	165.4	300.	9.05	34.56	26.79	132.9	0.804		
223.	10.22	34.59			26.61	148.2	400.	8.07	34.59	26.96	117.5	0.930		
248.	9.97	34.62			26.68	142.4	500.	7.06	34.55	27.08	107.5	1.044		
272.	9.30	34.57			26.75	135.6	600.	6.18	34.53	27.18	98.1	1.148		
299.	9.06	34.56			26.78	133.1	700.	5.57	34.53	27.26	91.2	1.244		
396.	8.11	34.59			26.96	118.0	800.	5.11	34.54	27.32	85.6	1.333		
493.	7.13	34.55			27.07	108.2	1000.	4.28	34.56	27.43	75.6	1.496		
587.	6.27	34.53			27.17	99.1	1200.	3.60	34.59	27.52	67.1	1.641		
781.	5.20	34.54			27.31	86.7								
974.	4.38	34.56			27.42	76.9								
1166.	3.71	34.59			27.51	68.1								
1420.	3.01	34.61			27.59	60.1								

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA							
CROMWELL DRY BULB 25.5		11, STATION WET BULB 23.0		7, 11-30N LAT, 156-59W LONG, DEC. WIND SPEED 14, DIR. 09			4, 1964, BAR. 09		1400 G.C.T. WEATHER 02		VIS. 7		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	26.24	34.12			22.32	552.7	0.	26.24	34.12	22.32	552.7	0.000		
10.	26.25	34.11			22.31	554.1	10.	26.25	34.11	22.31	554.1	0.056		
30. ^Δ	26.26	34.12			22.31	554.5	20.	26.26	34.11	22.31	554.5	0.112		
50.	26.27	34.13			22.32	554.9	30.	26.26	34.12	22.31	554.5	0.167		
75.	20.26	34.78			24.54	342.7	50.	26.27	34.13	22.32	554.9	0.279		
100.	15.34	34.50			25.53	249.2	75.	20.26	34.78	24.54	342.7	0.392		
125.	12.91	34.39			25.96	208.9	100.	15.34	34.50	25.53	249.2	0.467		
151.	11.73	34.56			26.32	175.1	150.	11.76	34.55	26.31	176.2	0.574		
176.	11.01	34.64			26.51	157.0	200.	10.73	34.71	26.62	147.4	0.656		
191.	10.86	34.70			26.59	150.3	250.	10.15	34.71	26.72	138.8	0.728		
224.	10.38	34.71			26.68	142.1	300.	9.53	34.69	26.81	131.1	0.796		
249.	10.16	34.71			26.72	138.9	400.	8.58	34.63	26.92	122.2	0.924		
276.	9.87	34.70			26.76	135.4	500.	7.60	34.58	27.02	112.9	1.042		
301.	9.52	34.69			26.81	130.9	600.	6.85	34.56	27.11	105.1	1.152		
401.	8.57	34.63			26.92	122.2	700.	6.16	34.55	27.20	97.6	1.255		
501.	7.59	34.58			27.03	112.8	800.	5.57	34.55	27.27	91.0	1.350		
601.	6.84	34.56			27.12	105.0	1000.	4.74	34.56	27.38	81.7	1.525		
801.	5.56	34.55			27.27	90.9	1200.	3.92	34.58	27.48	71.7	1.680		
1001.	4.74	34.56			27.38	81.7								
1200.	3.92	34.58			27.48	71.7								
1480.	3.14	34.61			27.58	62.1								

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA							
CROMWELL DRY BULB 25.1		11, STATION WET BULB 23.4		7A, 10- ON LAT, 154- 0W LONG, DEC. WIND SPEED 16, DIR. 14			5, 1964, BAR. 12		1000 G.C.T. WEATHER 01		VIS. 6		CLOUD TYPE , COVER 6	
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0. ^Δ	26.79	34.15			22.17	567.1	0.	26.79	34.15	22.17	567.1	0.000		
9. ^Δ	26.79	34.15	5.25		22.17	567.5	10.	26.79	34.15	22.17	567.5	0.057		
20. ^Δ	26.79	34.15			22.17	567.9	20.	26.79	34.15	22.17	567.9	0.114		
30. ^Δ	26.79	34.15			22.17	568.3	30.	26.79	34.15	22.17	568.3	0.172		
48.	22.63	34.79	5.26		23.90	403.2	50.	22.31	34.82	24.01	392.6	0.268		
61.	20.44	34.84	5.15		24.54	342.4	75.	16.83	34.60	25.27	273.5	0.352		
74.	17.05	34.62	4.13		25.23	277.2	100.	12.98	34.39	25.94	209.6	0.413		
100.	12.98	34.39	2.48		25.94	209.6	150.	11.42	34.73	26.51	157.0	0.505		
124.	11.86	34.63	0.57		26.35	171.7	200.	10.69	34.74	26.65	144.5	0.581		
150.	11.42	34.73	0.24		26.51	157.0	250.	10.14	34.72	26.73	137.9	0.653		
174.	10.92	34.74	0.28		26.61	148.0	300.	9.81	34.71	26.78	134.3	0.721		
189.	10.78	34.74	0.49		26.63	146.0	400.	9.02	34.67	26.88	126.5	0.853		
222.	10.49	34.74	0.44		26.68	141.7	500.	8.14	34.61	26.97	118.5	0.976		
249.	10.15	34.72	0.48		26.73	138.0	600.	7.05	34.57	27.10	107.0	1.090		
274.	9.94	34.71	0.54		26.76	135.8	700.	6.20	34.56	27.20	97.5	1.194		
299.	9.82	34.71	0.49		26.78	134.3	800.	5.54	34.56	27.28	89.9	1.289		
398.	9.04	34.67	0.51		26.87	126.6	1000.	4.59	34.57	27.40	79.0	1.459		
507.	8.07	34.61	0.28		26.98	117.9	1200.	3.83	34.59	27.50	70.0	1.610		
606.	6.98	34.57	0.43		27.10	106.3								
799.	5.55	34.56	0.76		27.28	90.0								
999.	4.59	34.57	1.00		27.40	79.0								
1198.	3.84	34.59	1.41		27.50	70.0								
1499.	3.06	34.62	1.84		27.60	60.5								

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA							
CROMWELL DRY BULB 25.9		11, STATION WET BULB 23.2		8, 11-31N LAT, 154- 0W LONG, DEC. WIND SPEED 18, DIR. 06			5, 1964, BAR. 14		1900 G.C.T. WEATHER 02		VIS. 7		CLOUD TYPE B, COVER 4	
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0. ^Δ	26.18	34.09	5.42		22.31	553.1	0.	26.18	34.09	22.31	553.1	0.000		
20. ^Δ	26.18	34.09			22.31	553.9	10.	26.18	34.09	22.31	553.9	0.056		
30. ^Δ	26.18	34.09			22.31	554.3	20.	26.18	34.09	22.31	553.9	0.111		
49.	23.33	34.70	6.10		23.63	429.0	30.	26.18	34.09	22.31	554.3	0.167		
61.	21.87	34.78	5.70		24.11	384.0	50.	23.21	34.71	23.68	424.8	0.266		
75.	19.50	34.72	5.48		24.70	328.0	75.	19.50	34.72	24.70	328.0	0.361		
100.	15.25	34.51	3.74		25.56	246.5	100.	15.25	34.51	25.56	246.5	0.433		
126.	12.60	34.36	3.21		26.00	205.2	150.	11.68	34.48	26.27	180.0	0.541		
148.	11.69	34.47	1.96		26.26	180.9	200.	10.39	34.60	26.59	149.6	0.624		
175.	11.39	34.57	1.08		26.39	168.8	250.	10.06	34.68	26.71	139.5	0.697		
189.	10.58	34.57	1.04		26.54	155.0	300.	9.50	34.66	26.79	132.6	0.765		
224.	10.38	34.68	0.40		26.66	144.3	400.	8.45	34.61	26.92	121.7	0.894		
248.	10.09	34.68	0.34		26.71	139.9	500.	7.77	34.58	27.00	115.5	1.013		
275.	9.76	34.68	0.38		26.76	135.0	600.	6.82	34.55	27.11	105.4	1.125		
302.	9.48	34.66	0.45		26.79	132.5	700.	6.08	34.54	27.20	97.0	1.227		
401.	8.44	34.61	0.60		26.92	121.6	800.	5.48	34.55	27.28	89.8	1.322		
502.	7.76	34.58	0.70		27.00	115.3	1000.	4.46	34.57	27.42	77.4	1.491		
601.	6.81	34.55	0.76		27.11	105.3	1200.	3.74	34.59	27.51	68.8	1.639		
801.	5.47	34.55	0.92		27.28	89.7	1500.	2.98	34.62	27.61	59.5	1.834		
1002.	4.45	34.57	0.74		27.42	77.3								
1201.	3.74	34.59	1.57		27.51	68.8								
1500.	2.98	34.62	1.96		27.61	59.5								

TEMPERATURE ERROR TERM AT 200. METERS IS 0.10

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 24.3		11, STATION WET BULB 21.7		12, 17-30N LAT, 153-58W LONG, DEC. 7, 1964, 1300 G.C.T. WIND SPEED 14, DIR. 04 BAR. 15 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.
0.	24.98	34.04	4.98		22.64	521.4	0.	24.98	34.04	22.64	521.4	0.000
10.	24.99	34.04	5.07		22.64	522.1	10.	24.99	34.04	22.64	522.1	0.053
30.Δ	25.06	34.32			22.83	504.7	20.	25.02	34.15	22.72	515.1	0.105
51.	25.13	34.65	4.79		23.06	483.8	30.	25.06	34.32	22.83	504.7	0.156
78.	25.03	34.76	4.90		23.17	474.0	50.	25.13	34.64	23.05	484.7	0.256
101.	22.92	35.03	5.13		24.00	395.8	75.	25.11	34.75	23.14	476.9	0.377
126.	21.68	35.16	4.86		24.45	353.9	100.	23.02	35.02	23.96	399.5	0.487
151.	20.70	35.15	4.79		24.71	329.9	150.	20.75	35.15	24.70	330.8	0.671
175.	18.85	34.92	4.31		25.02	301.0	200.	18.58	34.63	25.35	270.0	0.823
190.	17.53	34.74			25.21	283.2	250.	11.81	34.19	26.02	205.9	0.943
224.	14.24	34.39	4.14		25.69	237.8	300.	10.03	34.17	26.32	177.6	1.039
248.	11.93	34.20	4.46		26.00	207.5	400.	7.63	34.20	26.72	139.7	1.199
274.	10.81	34.17	3.80		26.18	190.3	500.	6.17	34.24	26.95	118.0	1.330
300.	10.03	34.17	3.65		26.32	177.6	600.	5.91	34.40	27.11	104.1	1.442
396.	7.71	34.20	2.17		26.71	140.9	700.	5.41	34.46	27.22	94.6	1.542
493.	6.21	34.23	1.35		26.94	119.2	800.	4.90	34.47	27.29	88.0	1.634
589.	5.96	34.39	0.80		27.10	105.3	1000.	4.26	34.52	27.40	78.2	1.803
787.	4.95	34.47	0.91		27.28	88.7	1200.	3.63	34.56	27.50	69.4	1.952
982.	4.32	34.52	1.04		27.39	79.2						
1178.	3.65	34.56	1.29		27.49	69.7						
1472.	2.99	34.60	1.75		27.59	60.9						

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 24.6		11, STATION WET BULB 21.9		13, 19- ON LAT, 154- OW LONG, DEC. 7, 1964, 2200 G.C.T. WIND SPEED 18, DIR. 07 BAR. 16 WEATHER 02			VIS. 7		CLOUD TYPE 8, COVER 2			
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.01	34.74	4.99		23.16	471.8	0.	25.01	34.74	23.16	471.8	0.000
10.	25.00	34.74	5.05		23.17	471.9	10.	25.00	34.74	23.17	471.9	0.048
30.Δ	25.00	34.74			23.17	472.7	20.	25.00	34.74	23.16	472.4	0.095
50.Δ	25.01	34.78			23.19	470.9	30.	25.00	34.74	23.17	472.7	0.143
73.	25.02	34.81	4.93		23.21	470.0	50.	25.01	34.78	23.19	470.9	0.238
97.	24.91	34.89	5.01		23.31	462.0	75.	25.05	34.81	23.21	470.6	0.356
122.	22.71	35.04	5.12		24.07	390.2	100.	24.67	34.90	23.39	454.1	0.473
147.	21.78	35.26	5.04		24.50	350.1	150.	21.71	35.27	24.52	347.6	0.675
172.	21.21	35.29	4.87		24.68	333.8	200.	20.10	35.20	24.91	312.5	0.841
185.	20.83	35.29	4.81		24.78	324.4	250.	16.51	34.67	25.39	267.1	0.987
217.	19.01	35.04	4.68		25.07	297.7	300.	12.14	34.22	25.97	211.4	1.108
243.	16.96	34.73	4.60		25.34	272.5	400.	9.42	34.39	26.59	153.2	1.292
268.	15.22	34.51	4.62		25.56	250.8	500.	7.64	34.40	26.87	127.1	1.433
292.	12.63	34.24	4.34		25.90	218.8	600.	6.82	34.44	27.03	113.4	1.555
389.	9.69	34.39	1.48		26.55	157.6	700.	5.90	34.45	27.16	101.1	1.663
487.	7.78	34.39	0.80		26.85	129.4	800.	5.13	34.47	27.26	91.4	1.761
586.	6.96	34.44	0.62		27.00	115.3	1000.	4.43	34.54	27.40	79.1	1.933
782.	5.22	34.46	0.88		27.24	92.9	1200.	3.75	34.57	27.49	70.2	2.084
982.	4.50	34.54	1.06		27.39	79.9						
1179.	3.78	34.55	1.22		27.47	72.1						
1480.	2.95	34.60	1.60		27.59	60.5						

TEMPERATURE ERROR TERM AT 300. METERS IS 0.14

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 24.0		11, STATION WET BULB 22.1		14, 20-30N LAT, 153-57W LONG, DEC. 8, 1964, 0700 G.C.T. WIND SPEED 15, DIR. 09 BAR. 16 WEATHER 02			VIS. 7		CLOUD TYPE 8, COVER 3			
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.12	34.55	4.84		22.99	488.7	0.	25.12	34.55	22.99	488.7	0.000
10.	25.11	34.55	4.91		22.99	488.8	10.	25.11	34.55	22.99	488.8	0.049
50.Δ	25.10	34.68			23.09	480.7	20.	25.11	34.57	23.01	487.3	0.098
76.	25.09	34.75	4.86		23.15	476.4	30.	25.10	34.60	23.03	485.5	0.147
102.	23.01	34.90	5.23		23.88	407.7	50.	25.10	34.68	23.09	480.7	0.245
127.	22.38	35.19	4.93		24.27	370.6	75.	25.11	34.75	23.14	477.2	0.365
152.	20.90*	35.19	4.69		24.68	332.2	100.	23.18	34.88	23.81	413.5	0.478
176.	19.98	35.13	4.59		24.89	313.9	150.	21.02	35.20	24.66	334.9	0.666
192.	19.30	35.05	4.54		25.00	303.2	200.	18.86	34.99	25.07	296.9	0.825
226.	17.03	34.76	4.52		25.34	271.4	250.	14.79	34.51	25.66	241.4	0.961
252.	14.62	34.49	4.54		25.68	239.2	300.	12.48	34.29	25.97	212.2	1.075
278.	13.54	34.39	4.61		25.83	225.2	400.	8.94	34.11	26.45	166.3	1.266
303.	12.33	34.28	4.69		25.99	210.4	500.	6.81	34.17	26.82	131.6	1.417
404.	8.84	34.11	3.73		26.47	164.8	600.	5.60	34.28	27.05	109.3	1.538
505.	6.73	34.18	1.65		26.83	130.1	700.	4.99	34.38	27.20	95.3	1.642
604.	5.57	34.28	0.99		27.06	108.6	800.	4.67	34.46	27.30	86.3	1.734
804.	4.66	34.46	0.86		27.31	86.0	1000.	4.07	34.52	27.42	76.3	1.898
1006.	4.05	34.52	1.09		27.42	76.1	1200.	3.47	34.56	27.51	68.1	2.044
1199.	3.42	34.55	1.41		27.51	67.9						
1492.	2.85	34.59	1.65		27.59	60.1						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 11, STATION 30, 16-0M LAT, 147-59W LONG, DEC. 15, 1964, 1000 G.C.T.												
DRY BULB 24.0	WET BULB 21.8	WIND SPEED 20, DIR. 08	BAR. 14	WEATHER 02	VIS. 7	CLOUD TYPE 8,	COVER 9					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.23	33.92	4.86		22.48	537.3	0.	25.23	33.92	22.48	537.3	0.000
10.	25.24	33.92	4.84		22.48	538.0	10.	25.24	33.92	22.48	538.0	0.054
30.Δ	25.23	33.92			22.48	538.5	20.	25.26	33.88	22.44	541.4	0.109
52.	24.89	34.58	4.95		23.08	481.9	30.	25.23	33.92	22.48	538.5	0.163
76.	22.29	34.85	5.31		24.04	390.7	50.	24.97	34.51	23.01	488.9	0.266
101.	20.62	34.96	5.14		24.59	339.8	75.	22.41	34.85	24.00	394.3	0.378
128.	19.42	34.98	4.88		24.92	309.1	100.	20.67	34.96	24.57	341.2	0.470
153.	17.09	34.65	4.42		25.24	278.4	150.	17.39	34.70	25.21	281.9	0.627
177.	15.07	34.40	4.09		25.51	253.0	200.	12.54	34.25	25.93	213.6	0.752
192.	13.26	34.25	3.21		25.78	227.6	250.	10.77	34.53	26.47	162.7	0.847
227.	11.04	34.41	1.63		26.33	175.6	300.	10.14	34.57	26.62	149.6	0.926
253.	10.76	34.54	0.38		26.48	161.8	400.	8.84	34.58	26.84	129.9	1.067
279.	10.31	34.55	0.64		26.57	153.9	500.	7.82	34.55	26.97	118.2	1.192
304.	10.11	34.58	0.73		26.62	148.8	600.	6.97	34.53	27.07	109.0	1.307
405.	8.77	34.58	0.24		26.85	129.1	700.	6.21	34.52	27.17	100.4	1.413
508.	7.75	34.55	0.30		26.98	117.5	800.	5.54	34.52	27.25	92.8	1.510
608.	6.91	34.53	0.34		27.08	108.3	1000.	4.57	34.54	27.38	81.1	1.686
811.	5.47	34.52	0.60		27.26	92.0	1200.	3.84	34.56	27.47	72.3	1.842
1013.	4.52	34.54	0.82		27.39	80.5						
1215.	3.79	34.56	1.09		27.48	71.7						
1483.	2.93	34.60	0.88		27.59	60.3						

CROMWELL 11, STATION 31, 17-30N LAT, 147-59W LONG, DEC. 15, 1964, 1800 G.C.T.												
DRY BULB 24.0	WET BULB 21.2	WIND SPEED 22, DIR. 08	BAR. 15	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.	24.78	34.03	4.84		22.70	516.4	0.	24.78	34.03	22.70	516.4	0.000
10.	24.79	34.03	4.94		22.69	517.0	10.	24.79	34.03	22.69	517.0	0.052
30.Δ	24.77	34.03			22.70	517.2	20.	24.80	34.00	22.67	520.0	0.104
51.	24.52	34.61	4.94		23.21	469.1	30.	24.77	34.03	22.70	517.2	0.157
77.	21.99	34.74	5.27		24.04	390.7	50.	24.55	34.58	23.18	472.1	0.256
102.	20.59	34.93	5.20		24.57	341.2	75.	22.21	34.74	23.98	396.4	0.366
127.	19.00	34.85	4.68		24.93	308.1	100.	20.69	34.92	24.54	344.5	0.459
154.	16.76	34.63	4.16		25.31	272.4	150.	17.13	34.67	25.25	277.8	0.616
178.	14.13	34.34	4.13		25.67	238.0	200.	12.35	34.27	25.97	209.2	0.738
194.	12.74	34.26	3.12		25.89	216.9	250.	10.59	34.45	26.44	165.7	0.833
228.	11.10	34.38	1.72		26.29	178.9	300.	9.78	34.50	26.62	148.9	0.912
256.	10.49	34.46	1.10		26.47	163.1	400.	8.45	34.50	26.84	129.5	1.053
281.	9.96	34.48	0.92		26.57	153.2	500.	7.28	34.48	26.99	115.5	1.176
306.	9.74	34.51	0.63		26.63	147.9	600.	6.30	34.46	27.11	104.8	1.288
408.	8.33	34.50	0.32		26.85	128.2	700.	5.62	34.47	27.20	96.3	1.389
510.	7.18	34.48	0.40		27.01	114.4	800.	5.11	34.49	27.28	89.2	1.483
612.	6.20	34.46	0.53		27.12	103.7	1000.	4.38	34.53	27.40	79.1	1.653
816.	5.05	34.50	0.60		27.29	88.1	1200.	3.82	34.57	27.48	71.2	1.806
964.	4.42	34.54	0.90		27.40	78.8						
1019.	4.37	34.53	0.75		27.40	79.4						
1193.	3.83	34.57	1.09		27.48	71.3						
1200.**	3.82**	34.57**			27.48	71.2						

CROMWELL 11, STATION 32, 18-55N LAT, 147-56W LONG, DEC. 16, 1964, 0200 G.C.T.												
DRY BULB 23.9	WET BULB 19.2	WIND SPEED 20, DIR. 08	BAR. 14	WEATHER 01	VIS. 7	CLOUD TYPE 8,	COVER 2					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.29	34.02	4.93		22.84	503.1	0.	24.29	34.02	22.84	503.1	0.000
9.Δ	24.28	34.02	4.95		22.84	503.1	10.	24.28	34.02	22.84	503.1	0.051
30.Δ	24.34	34.10			22.88	499.9	20.	24.31	34.05	22.86	501.9	0.101
50.Δ	24.38	34.20			22.95	494.6	30.	24.34	34.10	22.88	499.9	0.152
73.	22.55	34.59	5.25		23.77	416.4	50.	24.38	34.20	22.95	494.6	0.252
96.	20.75	34.76	5.08		24.40	357.4	75.	22.38	34.61	23.84	410.3	0.366
121.	19.53	34.78*			24.74	326.0	100.	20.55	34.77	24.46	351.5	0.462
145.	17.76	34.70	4.28		25.12	290.0	150.	17.13	34.63	25.22	280.6	0.621
169.	14.68	34.36	3.24		25.57	247.5	200.	12.43	34.24	25.93	212.9	0.745
183.	13.37	34.26	3.30		25.76	228.8	250.	10.13	34.24	26.36	173.1	0.843
216.	11.82	34.26	2.53		26.07	200.3	300.	8.39	34.11	26.54	155.6	0.926
243.	10.66	34.29	2.34		26.30	178.2	400.	6.99	34.23	26.83	128.8	1.069
266.	9.02	34.12	3.69		26.45	164.3	500.	6.28	34.32	27.00	113.3	1.191
291.	8.55	34.11	3.41		26.51	158.2	600.	5.66	34.39	27.14	101.3	1.300
386.	7.12	34.21	1.65		26.80	131.5	700.	5.16	34.45	27.24	92.0	1.397
484.	6.39	34.31	0.82		26.98	115.6	800.	4.75	34.49	27.32	84.9	1.487
580.	5.77	34.38	0.66		27.11	103.5	1000.	4.01	34.54	27.44	74.2	1.648
771.	4.86	34.48	0.75		27.30	86.7	1200.	3.40	34.57	27.53	65.8	1.789
963.	4.15	34.53	0.92		27.42	76.2						
1103.	3.65	34.56	1.09		27.49	69.1						
1328.	3.10	34.59	1.35		27.57	62.0						

ΔFROM BT DATA
 *INTERPOLATED DATA
 **EXTRAPOLATED DATA

Table 1.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 11, STATION 42, 22- ON LAT, 157- 2W LONG, DEC. 20, 1964, 1700 G.C.T.												
DEPTH	DRY BULB	WET BULB	SAL.	WIND SPEED	DIR.	BAR.	WEATHER	VIS.	CLOUD TYPE	COVER		
	23.9	21.5		12	23	10	02	6	8,	COVER 1		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.30	35.00			23.57	432.7	0.	24.30	35.00	23.57	432.7	0.000
9.	24.32	35.00			23.57	433.6	10.	24.32	35.00	23.57	433.7	0.044
30. ^Δ	24.32	35.00			23.57	434.4	20.	24.32	35.00	23.57	434.2	0.087
50. ^Δ	24.32	35.00			23.57	435.2	30.	24.32	35.00	23.57	434.4	0.131
73.	23.63	35.19			23.91	402.9	50.	24.32	35.00	23.57	435.2	0.219
96.	22.67	35.20			24.20	376.6	75.	23.55	35.19	23.94	400.4	0.324
120.	21.90	35.25			24.46	353.1	100.	22.52	35.21	24.25	372.1	0.421
145.	21.54	35.31			24.60	340.1	150.	21.53	35.33	24.62	338.9	0.600
167.	21.06	35.29			24.72	329.7	200.	18.44	34.92	25.12	292.3	0.759
181.	19.67	35.08			24.93	309.9	250.	14.58	34.46	25.67	240.3	0.894
213.	17.69	34.83			25.24	281.2	300.	12.12	34.26	26.01	207.9	1.007
237.	15.67	34.59			25.53	253.8	400.	9.00	34.12	26.45	166.5	1.196
260.	13.83	34.38			25.76	231.2	500.	6.73	34.19	26.84	129.3	1.345
283.	12.76	34.31			25.93	215.9	600.	6.02	34.28	27.00	114.7	1.468
375.	9.82	34.12			26.32	179.3	700.	5.51	34.37	27.14	102.0	1.578
470.	7.12	34.17			26.77	135.8	800.	5.06	34.44	27.25	92.4	1.676
564.	6.25	34.24			26.94	120.0	1000.	4.23	34.50	27.38	80.0	1.850
752.	5.30	34.42			27.20	96.5	1200.	3.60	34.54	27.49	70.5	2.003
943.	4.43	34.48			27.35	83.1						
1136.	3.83	34.53			27.45	73.8						
1437.	3.03	34.58			27.57	62.6						

ΔFROM BT DATA

Table 2.--Original and derived oceanographic data for Townsend Cromwell cruise 12

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA				
CROMWELL 12, STATION 1, 20-34N LAT, 157-15W LONG, JAN. 6, 1965, 0600 G.C.T.						BAR. 11 WEATHER 02 VIS. CLOUD TYPE , COVER						
DRY BULB 24.0 WET BULB 21.0		WIND SPEED 16, DIR. 19										
DEPTH	TEMP.	SAL.	CHL.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.60	34.79			23.32	456.4	0.	24.60	34.79	23.32	456.4	0.000
10.	24.62	34.78			23.31	456.1	10.	24.62	34.78	23.31	456.1	0.046
31.	24.59	34.81			23.34	455.9	20.	24.65	34.79	23.31	456.0	0.092
75.	22.30	35.06			24.20	375.8	30.	24.60	34.81	23.34	456.4	0.138
100.	21.22	35.09			24.52	345.9	50.	23.76	34.92	23.67	425.2	0.227
124.	19.25	34.97			24.95	305.4	75.	22.30	35.06	24.20	375.8	0.328
150.	18.30	34.87			25.12	290.6	100.	21.22	35.09	24.52	345.9	0.419
174.	17.47	34.78			25.25	278.4	150.	18.30	34.87	25.12	290.6	0.579
180.	16.80	34.71			25.36	268.3	200.	15.84	34.60	25.50	255.3	0.717
222.	15.18	34.53			25.59	247.2	250.	12.83	34.30	25.90	217.2	0.836
250.	12.83	34.30			25.90	217.2	300.	10.94	34.19	26.17	191.8	0.939
275.	11.91	34.24			26.04	204.9	400.	8.50	34.13	26.54	157.9	1.116
299.	10.97	34.17			26.17	192.2	500.	6.55	34.19	26.87	126.6	1.259
398.	8.55	34.13			26.53	158.7	600.	5.74	34.29	27.05	109.8	1.379
496.	6.60	34.17			26.86	127.5	700.	5.25	34.37	27.17	98.9	1.484
598.	5.75	34.24			27.04	110.1	800.	4.90	34.43	27.26	91.1	1.580
797.	4.91	34.43			27.26	91.3	1000.	4.15	34.51	27.40	76.1	1.751
968.	4.26	34.50			27.38	79.8	1200.	3.59	34.54	27.48	70.6	1.902
1117.	3.80	34.53			27.45	73.3						
1346.	3.30	34.54			27.51	68.2						

TEMPERATURE ERROR TERM AT 50. METERS IS 0.14
 TEMPERATURE ERROR TERM AT 200. METERS IS 0.32

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA				
CROMWELL 12, STATION 2, 19-14N LAT, 157-0W LONG, JAN. 6, 1965, 1800 G.C.T.						BAR. 11 WEATHER 02 VIS. 5 CLOUD TYPE 8, COVER 8						
DRY BULB 24.2 WET BULB 22.0		WIND SPEED 18, DIR. 08										
DEPTH	TEMP.	SAL.	CHL.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.78	34.50			23.05	482.5	0.	24.78	34.50	23.05	482.5	0.000
11.	24.80	34.50			23.05	483.5	10.	24.80	34.50	23.05	483.4	0.049
50.Δ	24.81	34.51			23.05	484.6	20.	24.81	34.50	23.04	483.9	0.097
75.Δ	24.81	34.52			23.06	484.8	30.	24.81	34.50	23.04	484.3	0.146
102.	24.82	34.53			23.06	485.5	50.	24.81	34.51	23.05	484.6	0.244
128.	24.65	34.74			23.27	466.4	75.	24.81	34.52	23.06	484.8	0.366
154.	23.08*	35.00			23.93	404.4	100.	24.82	34.53	23.06	485.8	0.488
178.	21.39	35.04			24.44	356.8	150.	23.38	34.97	23.82	415.0	0.715
193.	20.39	35.05			24.72	330.7	200.	20.18	35.05	24.77	325.9	0.902
228.	19.28	34.96			24.94	310.5	250.	17.52	34.78	25.24	282.3	1.055
255.	17.09	34.73			25.30	275.9	300.	13.45	34.35	25.81	227.3	1.183
281.	15.35	34.53			25.55	252.5	400.	8.45	34.12	26.54	157.7	1.378
306.	12.84	34.29			25.89	219.5	500.	6.92	34.23	26.84	129.3	1.523
408.	8.32	34.14			26.57	154.6	600.	6.04	34.35	27.05	109.6	1.643
509.	6.86	34.24			26.86	127.5	700.	5.49	34.43	27.19	97.4	1.748
611.	5.96	34.36			27.07	107.8	800.	5.11	34.49	27.28	89.7	1.842
812.	5.07	34.49			27.28	89.1	1000.	4.30	34.52	27.39	79.1	2.013
1016.	4.24	34.52			27.40	78.5	1200.	3.68	34.55	27.48	71.1	2.165
1217.	3.63	34.55			27.49	70.5	1500.	2.98	34.57	27.56	63.3	2.370
1521.	2.95	34.57			27.57	63.0						

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA				
CROMWELL 12, STATION 3, 17-30N LAT, 157-0W LONG, JAN. 7, 1965, 0500 G.C.T.						BAR. 11 WEATHER 02 VIS. CLOUD TYPE 8, COVER 8						
DRY BULB 25.0 WET BULB 22.0		WIND SPEED 13, DIR. 13										
DEPTH	TEMP.	SAL.	CHL.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.40	34.33			23.04	483.8	0.	24.40	34.33	23.04	483.8	0.000
9.	24.43	34.32			23.02	485.8	10.	24.44	34.32	23.02	486.2	0.049
47.	24.51	34.59			23.20	470.1	20.	24.48	34.31	23.00	488.0	0.098
50.Δ	24.50	34.66			23.26	464.9	30.	24.50	34.37	23.03	485.2	0.147
72.	24.48	34.83			23.39	452.9	50.	24.50	34.66	23.26	464.9	0.243
95.	23.23	34.97			23.86	408.5	75.	24.36	34.85	23.44	448.2	0.358
118.	21.64	35.08			24.40	358.3	100.	22.86	35.00	23.99	396.6	0.464
142.	20.92	35.15			24.65	335.3	150.	20.80	35.15	24.68	332.4	0.648
165.	20.40	35.12			24.77	324.9	200.	17.68	34.78	25.20	284.0	0.803
179.	19.47	35.05			24.96	307.0	250.	12.55	34.28	25.94	213.5	0.928
211.	16.59	34.62			25.34	271.1	300.	10.63	34.23	26.27	183.0	1.028
236.	13.87	34.38			25.75	231.4	400.	8.67	34.41	26.73	139.6	1.191
261.	11.73	34.27			26.05	202.7	500.	7.52	34.44	26.92	122.2	1.323
284.	11.05	34.21			26.17	191.8	600.	6.68	34.46	27.06	109.7	1.440
378.	9.00	34.40			26.67	145.4	700.	5.94	34.48	27.17	100.1	1.546
474.	7.78	34.43			26.88	126.2	800.	5.35	34.49	27.25	92.8	1.644
568.	6.94	34.46			27.02	113.3	1000.	4.50	34.52	27.37	81.5	1.820
758.	5.57	34.48			27.22	95.7	1200.	3.84	34.55	27.47	72.9	1.977
950.	4.60	34.51			27.34	84.2						
1140.	4.04	34.55			27.45	74.9						
1433.	3.28	34.57			27.54	66.4						

ΔFROM BI DATA
 *INTERPOLATED DATA

Table 2.--Continued

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA					
CROMWELL 12, STATION		4, 16- ON LAT, 157- OW LONG, JAN. 7, 1965, 1600 G.C.T.											
DRY BULB	24.4	WET BULB	20.8	WIND SPEED	12, DIR. 17	BAR.	10	WEATHER	02	VIS.		CLOUD TYPE	, COVER
DEPTH	TEMP.	SAL.	UXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	24.73	34.19			22.83	503.4	0.	24.73	34.19	22.83	503.4	0.000	
9.	24.75	34.19			22.83	504.3	10.	24.76	34.22	22.84	502.7	0.051	
30. Δ	24.88	34.80			23.25	464.9	20.	24.82	34.49	23.03	485.2	0.100	
49.	24.90	34.92			23.33	457.6	30.	24.88	34.80	23.25	464.9	0.148	
72.	22.94	35.06			24.02	393.1	50.	24.83	34.93	23.36	455.3	0.241	
96.	21.22	35.13			24.55	342.9	75.	22.70	35.07	24.10	385.7	0.347	
120.	19.99	35.07			24.84	316.5	100.	20.99	35.12	24.61	337.5	0.438	
144.	18.87	35.00			25.07	294.7	150.	18.41	34.94	25.14	288.1	0.596	
168.	16.60	34.68			25.38	265.6	200.	12.72	34.22	25.86	219.8	0.724	
182.	14.78	34.42			25.59	245.6	250.	10.38	34.34	26.39	170.0	0.822	
214.	11.54	34.17			26.05	201.8	300.	9.54	34.43	26.60	150.6	0.903	
239.	10.76	34.33			26.32	176.9	400.	8.57	34.47	26.79	133.9	1.046	
262.	10.02	34.34			26.45	164.1	500.	7.05	34.43	26.98	116.3	1.173	
286.	9.65	34.40			26.56	154.1	600.	6.41	34.49	27.12	104.1	1.284	
378.	8.97	34.49			26.74	138.3	700.	5.75	34.50	27.21	95.7	1.385	
471.	7.30	34.41			26.93	120.6	800.	5.18	34.51	27.28	89.2	1.478	
562.	6.68	34.48			27.07	108.1	1000.	4.32	34.53	27.40	78.6	1.648	
747.	5.46	34.50			27.25	92.6	1200.	3.65	34.56	27.49	70.2	1.799	
931.	4.59	34.52			27.36	82.0							
1116.	3.93	34.55			27.46	73.4							
1397.	3.17	34.58			27.56	64.1							

SALINITY ERROR TERM AT 20. METERS IS 0.06

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA					
CROMWELL 12, STATION		5, 14-30N LAT, 156-59W LONG, JAN. 8, 1965, 0100 G.C.T.											
DRY BULB	26.0	WET BULB	22.4	WIND SPEED	14, DIR. 12	BAR.	11	WEATHER	01	VIS.	7	CLOUD TYPE	4, COVER 5
DEPTH	TEMP.	SAL.	UXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	25.46	34.00			22.47	538.3	0.	25.46	34.00	22.47	538.3	0.000	
10.	25.41	34.00			22.48	537.2	10.	25.41	34.00	22.48	537.2	0.054	
30. Δ	25.18	34.29			22.77	510.4	20.	25.31	34.12	22.61	525.9	0.108	
49.	24.86	34.53			23.05	484.5	30.	25.18	34.29	22.77	510.4	0.160	
75.	23.09	35.00			23.93	401.7	50.	24.81	34.55	23.08	481.7	0.260	
99.	20.76	34.93			24.53	345.5	75.	23.09	35.00	23.93	401.7	0.371	
123.	17.81	34.70			25.11	290.5	100.	20.65	34.92	24.55	343.1	0.465	
148.	14.52	34.40			25.63	240.7	150.	14.25	34.38	25.67	236.8	0.611	
172.	11.92	34.24			26.03	202.6	200.	11.09	34.34	26.26	181.4	0.716	
187.	11.38	34.26			26.15	191.7	250.	10.43	34.57	26.54	154.0	0.801	
220.	10.80	34.47			26.42	166.9	300.	9.78	34.57	26.67	144.2	0.876	
245.	10.49	34.56			26.54	155.5	400.	8.01	34.51	26.91	122.7	1.011	
271.	10.19	34.58			26.61	149.5	500.	7.02	34.48	27.03	111.9	1.129	
295.	9.87	34.57			26.66	145.4	600.	6.28	34.48	27.13	102.8	1.238	
392.	8.11	34.51			26.89	123.8	700.	5.64	34.50	27.23	94.2	1.337	
490.	7.10	34.48			27.02	112.9	800.	5.12	34.52	27.30	87.2	1.429	
582.	6.40	34.48			27.11	104.5	1000.	4.31	34.53	27.40	78.2	1.596	
776.	5.23	34.52			27.29	88.5	1200.	3.64	34.56	27.49	69.8	1.746	
974.	4.40	34.53			27.39	79.3							
1171.	3.74	34.56			27.48	70.8							
1468.	2.95	34.60			27.59	60.4							

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA					
CROMWELL 12, STATION		6, 13- ON LAT, 157- OW LONG, JAN. 8, 1965, 1000 G.C.T.											
DRY BULB	25.1	WET BULB	22.5	WIND SPEED	14, DIR. 10	BAR.	11	WEATHER	02	VIS.		CLOUD TYPE	, COVER
DEPTH	TEMP.	SAL.	UXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	25.54	34.25			22.63	522.6	0.	25.54	34.25	22.63	522.6	0.000	
10.	25.56	34.25			22.63	523.6	10.	25.56	34.25	22.63	523.6	0.053	
30. Δ	25.55	34.26			22.64	523.3	20.	25.56	34.25	22.63	523.6	0.105	
50. Δ	25.54	34.27			22.65	523.1	30.	25.55	34.26	22.64	523.3	0.158	
52.	25.53	34.28			22.66	522.2	50.	25.54	34.27	22.65	523.1	0.264	
77.	21.60	34.84			24.23	373.1	75.	22.04	34.79	24.07	388.0	0.378	
101.	18.28	34.74			25.02	297.9	100.	18.41	34.75	25.00	300.2	0.465	
127.	14.58	34.46			25.67	237.0	150.	12.22	34.28	26.01	204.8	0.592	
153.	11.98	34.26			26.04	201.7	200.	10.73	34.41	26.38	169.7	0.687	
177.	10.80	34.21			26.22	185.0	250.	10.15	34.56	26.60	149.9	0.767	
192.	10.79	34.35			26.33	174.9	300.	9.54	34.59	26.73	138.5	0.840	
226.	10.43	34.53			26.53	156.2	400.	8.47	34.57	26.89	125.0	0.973	
254.	10.10	34.56			26.61	149.1	500.	7.37	34.52	27.01	113.8	1.093	
279.	9.85	34.59			26.68	143.2	600.	6.52	34.52	27.13	103.5	1.203	
304.	9.48	34.59			26.74	137.7	700.	5.80	34.52	27.22	94.8	1.303	
405.	8.43	34.57			26.89	124.5	800.	5.21	34.53	27.30	87.8	1.396	
508.	7.29	34.52			27.02	113.0	1000.	4.50	34.55	27.40	79.5	1.565	
607.	6.47	34.52			27.13	102.9	1200.	3.82	34.57	27.48	71.3	1.718	
808.	5.17	34.53			27.30	87.3	1500.	3.03	34.60	27.58	61.7	1.920	
1011.	4.47	34.55			27.40	79.1							
1212.	3.78	34.57			27.49	70.9							
1513.	3.00	34.60			27.59	61.3							

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA					INTERPOLATED DATA				
CROMWELL DRY BULB 25.0		12, STATION WET BULB 23.5		7, 11-27N LAT, 156-55W LONG, JAN. 8, 1965, 1000 G.C.T.					8, 1965, 1000 G.C.T.					
				WIND SPEED 11, DIR. 10					BAR. 10 WEATHER 02 VIS. 6 CLOUD TYPE 4, COVER 9					
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	26.07	34.43			22.60	525.3	0.	26.07	34.43	22.60	525.3	0.000		
10.	26.09	34.43			22.60	526.3	10.	26.09	34.43	22.60	526.3	0.053		
50.	26.09	34.43			22.60	527.9	20.	26.11	34.43	22.59	527.2	0.106		
65.	26.04	34.43			22.61	527.0	30.	26.11	34.43	22.59	527.7	0.159		
75.	25.72	34.47			22.74	515.0	50.	26.09	34.43	22.60	527.9	0.265		
81.	19.50	34.78			24.74	323.9	75.	25.72	34.47	22.74	515.0	0.397		
101.	16.50	34.58			25.33	268.6	100.	16.32	34.61	25.40	262.1	0.495		
125.	13.91	34.33			25.71	232.8	150.	12.14	34.52	26.21	185.6	0.608		
151.	12.09	34.53			26.23	183.9	200.	11.24	34.71	26.53	156.3	0.694		
176.	11.56	34.70			26.46	162.4	250.	10.54	34.71	26.65	145.5	0.770		
191.	11.36	34.71			26.50	158.4	300.	10.03	34.69	26.73	139.2	0.842		
224.	10.90	34.71			26.59	151.1	400.	9.14	34.66	26.85	128.9	0.977		
251.	10.53	34.71			26.65	145.3	500.	8.19	34.60	26.95	120.2	1.103		
277.	10.23	34.70			26.70	141.5	600.	7.22	34.56	27.06	110.4	1.219		
302.	10.01	34.69			26.73	139.0	700.	6.41	34.54	27.16	101.7	1.326		
402.	9.12	34.66			26.65	128.7	800.	5.76	34.54	27.24	94.3	1.425		
503.	8.16	34.60			26.96	119.9	1000.	4.83	34.56	27.37	82.8	1.604		
603.	7.19	34.56			27.07	110.1	1200.	4.03	34.57	27.46	73.9	1.763		
803.	5.74	34.54			27.24	94.1	1500.	3.22	34.60	27.57	63.9	1.973		
1004.	4.81	34.56			27.37	82.6								
1203.	4.02	34.57			27.46	73.8								
1503.	3.21	34.60			27.57	63.8								

TEMPERATURE ERROR TERM AT 100. METERS IS 0.21

CROMWELL DRY BULB 24.5		12, STATION WET BULB 23.5		7A, 10- ON LAT, 154- ON LONG, JAN. 9, 1965, 1700 G.C.T.					8, 1965, 1700 G.C.T.				
				WIND SPEED 18, DIR. 07					BAR. 09 WEATHER 21 VIS. CLOUD TYPE 8, COVER 8				
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	25.84	34.48	4.72	0.41	22.71	514.9	0.	25.84	34.48	22.71	514.9	0.000	
11.	25.85	34.48	5.03	0.33	22.71	515.6	10.	25.85	34.48	22.71	515.6	0.052	
30.	25.86	34.49			22.71	515.9	20.	25.86	34.48	22.71	515.8	0.104	
51.	25.87	34.50	4.97	0.30	22.72	516.4	30.	25.86	34.49	22.71	515.9	0.156	
75.	20.21	34.79	4.84	0.41	24.57	340.7	50.	25.92	34.50	22.70	518.1	0.260	
101.	15.90	34.53	4.64	0.22	25.43	259.0	75.	20.21	34.79	24.57	340.7	0.368	
125.	12.99	34.42	2.06	1.86	25.96	208.2	100.	16.04	34.54	25.41	261.0	0.444	
150.	12.00	34.59	0.54	2.13	26.29	177.8	150.	12.00	34.59	26.29	177.8	0.554	
175.	11.54	34.70	0.26	2.28	26.46	162.0	200.	10.90	34.72	26.60	149.5	0.637	
189.	11.11	34.72	0.19	2.59	26.56	153.2	250.	10.29	34.71	26.70	141.2	0.710	
224.	10.61	34.72	0.37	2.40	26.65	145.3	300.	9.94	34.70	26.75	137.1	0.780	
250.	10.29	34.71	0.41	2.60	26.70	141.2	400.	9.23	34.66	26.83	130.5	0.915	
274.	10.11	34.71	0.40	2.46	26.73	138.6	500.	8.29	34.61	26.94	121.2	1.042	
300.	9.94	34.70	0.44	2.60	26.75	137.1	600.	7.12	34.55	27.07	109.8	1.159	
398.	9.25	34.66	0.40	3.09	26.83	130.7	700.	6.30	34.53	27.17	100.8	1.266	
499.	8.30	34.61	0.21	2.86	26.94	121.3	800.	5.68	34.54	27.25	93.2	1.364	
598.	7.14	34.55	0.36	3.00	27.07	110.0	1000.	4.68	34.56	27.38	80.9	1.540	
802.	5.67	34.54	0.62	3.16	27.25	93.1	1200.	3.91	34.58	27.48	71.7	1.694	
996.	4.70	34.56	0.98	3.33	27.38	81.1							
1197.	3.92	34.58	1.23	3.04	27.48	71.7							
1496.	3.18	34.60	1.54	2.91	27.57	63.4							

CROMWELL DRY BULB 25.0		12, STATION WET BULB 22.5		8, 11-30N LAT, 154- 1W LONG, JAN. 10, 1965, 0100 G.C.T.					9, 1965, 0100 G.C.T.				
				WIND SPEED 22, DIR. 08					BAR. 08 WEATHER 02 VIS. 6 CLOUD TYPE 8, COVER 7				
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	25.10	34.05	4.83		22.62	524.2	0.	25.10	34.05	22.62	524.2	0.000	
9.	25.08	34.04	4.82	0.29	22.61	524.6	10.	25.08	34.04	22.61	524.7	0.053	
30.	25.06	34.05			22.63	524.2	20.	25.07	34.04	22.62	524.5	0.106	
47.	25.05	34.06	4.84	0.34	22.64	523.8	30.	25.06	34.05	22.63	524.2	0.158	
50.	25.00	34.09			22.68	520.3	50.	25.00	34.09	22.68	520.3	0.264	
72.	21.06	34.90	5.11	0.33	24.42	354.4	75.	20.72	34.91	24.52	344.8	0.373	
97.	18.40	34.73	4.12	0.66	24.99	301.3	100.	17.93	34.69	25.07	293.3	0.453	
122.	14.58	34.42	3.59	0.87	25.64	239.8	150.	12.08	34.36	26.09	196.4	0.576	
147.	12.23	34.34	2.56	1.89	26.05	200.3	200.	10.82	34.59	26.51	157.9	0.666	
171.	11.40	34.50	1.15	2.02	26.33	174.1	250.	10.13	34.65	26.68	142.7	0.741	
185.	11.12	34.56	0.77	2.47	26.43	165.0	300.	9.58	34.65	26.77	134.9	0.811	
217.	10.53	34.61	0.51	2.48	26.58	151.9	400.	8.62	34.61	26.90	124.2	0.942	
244.	10.22	34.65	0.41	2.64	26.66	144.3	500.	7.62	34.57	27.01	114.3	1.063	
267.	9.88	34.65	0.28	2.62	26.72	139.1	600.	6.72	34.55	27.12	104.2	1.173	
291.	9.66	34.65	0.38	2.11	26.76	135.9	700.	6.01	34.54	27.21	96.5	1.274	
387.	8.75	34.62	0.30	2.51	26.88	125.5	800.	5.50	34.54	27.28	90.5	1.369	
484.	7.78	34.57	0.41	2.64	26.99	116.1	1000.	4.76	34.57	27.39	81.0	1.543	
580.	6.88	34.55	0.60	2.62	27.10	106.0	1200.	4.01	34.59	27.48	72.4	1.698	
773.	5.61	34.54	0.68	3.02	27.26	91.9							
967.	4.90	34.57	1.05	3.00	27.37	82.7							
1162.	4.09	34.58	1.44	2.90	27.46	73.5							
1458.	3.19	34.60	1.66	3.04	27.57	63.3							

AFROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 12, STATION		9, 13-	5N LAT, 154-	6W LONG, JAN. 10, 1965, 1100 G.C.T.								
DRY BULB 24.3	WET BULB 22.0	WIND SPEED 21, DIR. 09	BAR. 10	WEATHER 02	VIS. 6	CLOUD TYPE , COVER						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.84	34.14	4.97		22.76	510.2	0.	24.84	34.14	22.76	510.2	0.000
11.	24.85	34.14	5.14	0.56	22.76	510.9	10.	24.85	34.14	22.76	510.8	0.051
30. Δ	24.85	34.13			22.75	512.3	20.	24.85	34.14	22.76	511.6	0.103
51.	24.85	34.13	4.97	0.31	22.75	513.1	30.	24.85	34.13	22.75	512.3	0.154
77.	21.37	34.83	5.13	0.33	24.28	367.8	50.	24.88	34.12	22.74	514.3	0.258
102.	20.17	35.07	4.77	0.38	24.79	320.4	75.	21.67	34.77	24.16	379.8	0.371
128.	17.28	34.75	4.54	0.76	25.27	274.7	100.	20.26	35.07	24.77	322.6	0.459
153.	12.71	34.27	2.90	1.70	25.90	214.6	150.	13.22	34.31	25.84	221.0	0.596
177.	11.45	34.44	1.36	2.22	26.28	179.5	200.	11.00	34.56	26.45	163.4	0.693
192.	11.10	34.52	1.05	2.11	26.40	167.8	250.	10.40	34.65	26.63	147.3	0.771
226.	10.75	34.64	0.32	2.24	26.56	153.6	300.	9.78	34.63	26.72	139.5	0.843
253.	10.35	34.65	0.23	2.36	26.64	146.6	400.	8.53	34.58	26.88	125.1	0.977
278.	9.97	34.64	0.19	2.35	26.70	141.5	500.	7.66	34.55	26.99	115.9	1.099
303.	9.76	34.63	0.15	2.80	26.72	139.3	600.	6.71	34.53	27.11	105.3	1.210
402.	8.50	34.58	0.38	2.26	26.89	124.8	700.	5.98	34.53	27.20	97.1	1.313
502.	7.64	34.55	0.41	2.64	26.99	115.8	800.	5.42	34.53	27.27	90.5	1.407
602.	6.69	34.53	0.58	2.84	27.11	105.1	1000.	4.58	34.55	27.39	80.4	1.580
800.	5.42	34.53	0.62	2.94	27.27	90.5	1200.	3.91	34.57	27.48	72.4	1.735
1000.	4.58	34.55	1.01	3.08	27.39	80.4						
1200.	3.91	34.57	1.39	2.83	27.48	72.4						
1499.	3.10	34.59	1.80	2.86	27.57	63.2						

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 12, STATION		10, 14-35N	LAT, 154-10W	LONG, JAN. 10, 1965, 2000 G.C.T.								
DRY BULB 24.0	WET BULB 22.5	WIND SPEED 14, DIR. 10	BAR. 12	WEATHER 02	VIS. 6	CLOUD TYPE 4, COVER 7						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.14	34.15	4.77		22.68	518.1	0.	25.14	34.15	22.68	518.1	0.000
10.	25.16	34.15	4.96	0.63	22.67	519.1	10.	25.16	34.15	22.67	519.1	0.052
49.	25.13	34.16	4.90	0.29	22.69	519.0	20.	25.16	34.15	22.67	519.8	0.105
75.	25.08	34.22	4.95	0.37	22.75	514.2	30.	25.16	34.15	22.67	520.0	0.157
99.	22.12	35.07	5.02	0.71	24.26	371.1	50.	25.16	34.15	22.68	520.3	0.262
122.	20.21	35.07	4.54	0.36	24.78	322.1	75.	25.08	34.22	22.75	514.2	0.392
147.	17.74	34.79	4.33	0.63	25.19	283.1	100.	22.03	35.08	24.29	368.0	0.503
171.	15.03	34.46	3.82	0.99	25.57	247.6	150.	17.43	34.75	25.24	279.0	0.666
185.	13.11	34.30	3.74		25.85	220.9	200.	11.96	34.27	26.05	201.7	0.787
218.	11.30	34.34	2.05	1.84	26.23	185.1	250.	10.85	34.52	26.45	164.6	0.880
243.	10.94	34.49	1.42	2.23	26.41	168.4	300.	10.03	34.60	26.66	145.8	0.958
267.	10.62	34.58	0.58	2.25	26.54	156.7	400.	8.77	34.59	26.85	128.3	1.096
291.	10.18	34.60	1.10	2.51	26.63	148.3	500.	8.00	34.58	26.96	119.2	1.221
386.	8.89	34.59	0.90	2.87	26.83	129.9	600.	7.07	34.54	27.07	109.6	1.337
483.	8.15	34.58	0.58	2.87	26.94	120.9	700.	6.20	34.51	27.16	101.0	1.443
578.	7.28	34.55	0.76	3.00	27.05	111.7	800.	5.48	34.50	27.24	93.4	1.541
770.	5.66	34.50	0.50	2.60	27.22	95.5	1000.	4.57	34.54	27.38	81.3	1.710
963.	4.72	34.53	0.43	3.09	27.36	83.3	1200.	3.81	34.56	27.48	71.6	1.873
1155.	4.00	34.56	1.70	3.47	27.46	73.8						
1448.	3.06	34.59	1.24	2.42	27.57	62.3						

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 12, STATION		11, 16- 9N	LAT, 154- 4W	LONG, JAN. 11, 1965, 0400 G.C.T.								
DRY BULB 24.1	WET BULB 22.0	WIND SPEED 15, DIR. 09	BAR. 12	WEATHER 02	VIS. 6	CLOUD TYPE 4, COVER 7						
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.15	34.16	4.88		22.68	517.7	0.	25.15	34.16	22.68	517.7	0.000
11.	25.15	34.16	5.01	0.91	22.68	518.1	10.	25.15	34.16	22.68	518.1	0.052
50. Δ	25.15	34.16			22.68	519.6	20.	25.15	34.16	22.68	518.5	0.104
61.	25.15	34.16	4.85	0.31	22.68	520.1	30.	25.15	34.16	22.68	518.9	0.157
75. Δ	25.06	34.22			22.76	513.7	50.	25.15	34.16	22.68	519.6	0.261
90.	24.98	34.32	4.70	0.27	22.86	504.7	75.	25.06	34.22	22.76	513.7	0.391
100.	23.00	34.86	5.25	0.30	23.85	410.3	100.	23.00	34.86	23.85	410.3	0.500
127.	20.27	34.76	4.84	0.47	24.53	346.2	150.	18.07	34.60	25.03	298.9	0.686
153.	17.80*	34.67	4.27	0.69	25.09	293.4	200.	13.39	34.33	25.81	224.6	0.810
176.	15.83	34.53	4.01	0.82	25.44	259.8	250.	10.56	34.34	26.36	173.2	0.919
191.	14.26	34.38	3.61	1.16	25.67	238.1	300.	9.33	34.35	26.58	152.7	1.001
226.	11.42	34.28	2.32	1.93	26.16	191.9	400.	7.38	34.31	26.84	128.1	1.142
252.	10.50	34.34	1.80	2.17	26.37	172.0	500.	6.02	34.29	27.01	112.5	1.264
279.	9.38	34.25	2.14	1.73	26.49	160.6	600.	5.85	34.44	27.15	100.3	1.371
303.	9.34	34.37	1.38	2.12	26.59	151.6	700.	5.37	34.49	27.25	91.5	1.460
403.	7.30	34.30	1.20	2.44	26.85	127.7	800.	4.78	34.49	27.32	85.2	1.558
505.	5.98	34.29	0.90	2.69	27.02	111.9	1000.	4.13	34.53	27.42	76.3	1.721
606.	5.85	34.45	0.68		27.16	99.7	1200.	3.54	34.57	27.51	68.0	1.867
807.	4.74	34.49	0.88	2.51	27.32	84.8	1500.	2.93	34.60	27.59	60.4	2.062
1007.	4.11	34.53	1.20	2.38	27.42	76.1						
1208.	3.52	34.57	1.24	2.89	27.51	67.6						
1509.	2.91	34.60	1.54	2.71	27.60	60.2						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 12, STATION 12, 17-32N LAT, 154- 3W LONG, JAN. 11, 1965, 1300 G.C.T.												
DRY BULB 24.3	WET BULB 22.4	WIND SPEED 18,	DIR. 09	BAR. 14	WEATHER 02	VIS. 6	CLOUD TYPE , COVER					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.01	34.18	4.94		22.74	512.2	0.	25.01	34.18	22.74	512.2	0.000
10.	25.00	34.18	5.00	0.26	22.74	512.3	10.	25.00	34.18	22.74	512.3	0.052
50.	24.99	34.18	4.76	0.70	22.75	513.5	20.	24.99	34.18	22.75	512.4	0.103
76.	25.03	34.18	4.89	0.26	22.73	515.7	30.	24.99	34.18	22.75	512.7	0.155
101.	21.85	34.66	5.14	0.37	24.02	393.6	50.	24.99	34.18	22.75	513.5	0.250
126.	20.41	35.06	4.68	0.33	24.72	328.1	75.	25.06	34.18	22.72	516.9	0.388
152.	18.07*	34.73	4.09	0.70	25.08	293.7	100.	21.99	34.64	23.97	399.0	0.503
176.	15.42	34.47	3.59	1.11	25.49	255.3	150.	18.21	34.77	25.06	295.8	0.678
191.	14.62	34.39	3.60	1.00	25.60	244.7	200.	13.94	34.32	25.70	235.9	0.812
225.	12.18	34.21	4.05	1.38	25.96	210.8	250.	11.35	34.31	26.19	189.0	0.920
252.	11.30	34.32	2.02	1.81	26.21	187.4	300.	9.60	34.30	26.49	161.1	1.008
278.	10.22	34.29	2.28	2.04	26.38	171.5	400.	8.46	34.44	26.78	134.8	1.157
303.	9.53	34.30	2.08	1.84	26.50	159.8	500.	7.54	34.44	26.92	122.2	1.287
403.	8.45	34.44	0.74	2.26	26.79	134.4	600.	6.62	34.47	27.07	108.6	1.403
504.	7.50	34.44	0.49	2.57	26.93	121.8	700.	5.86	34.48	27.18	98.6	1.508
604.	6.58	34.47	0.53	3.00	27.08	108.0	800.	5.24	34.49	27.26	91.1	1.604
804.	5.22	34.49	0.82	2.55	27.27	90.9	1000.	4.36	34.52	27.39	79.9	1.777
1005.	4.34	34.52	0.99	2.68	27.39	79.6	1200.	3.71	34.55	27.48	71.5	1.930
1205.	3.70	34.55	1.18	3.11	27.48	71.3	1500.	2.89	34.59	27.59	60.7	2.131
1506.	2.88	34.59	1.65	2.24	27.59	60.5						

CROMWELL 12, STATION 13, 18-56N LAT, 154- 0W LONG, JAN. 11, 1965, 2100 G.C.T.												
DRY BULB 23.5	WET BULB 21.8	WIND SPEED 11,	DIR. 06	BAR. 15	WEATHER 15	VIS. 7	CLOUD TYPE 8, COVER 8					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.56	34.71	4.88		23.28	461.0	0.	24.56	34.71	23.28	461.0	0.000
9.	24.57	34.72	4.92	0.31	23.28	460.9	10.	24.57	34.72	23.28	461.0	0.046
46.	24.57	34.72	4.78	0.37	23.28	462.4	20.	24.57	34.72	23.28	461.2	0.093
69.	24.58	34.72	4.95	0.29	23.28	463.6	30.	24.57	34.72	23.28	461.6	0.139
75.	24.52	34.93			23.45	447.0	50.	24.59	34.67	23.24	466.3	0.233
92.	24.36	35.01	4.81	0.28	23.56	437.3	75.	24.52	34.93	23.45	447.0	0.348
114.	22.82	34.97	4.80	0.24	23.98	397.9	100.	23.85	34.99	23.70	424.5	0.458
138.	21.90*	35.20	5.02	0.20	24.42	357.3	150.	21.49	35.23	24.55	344.9	0.651
160.	21.11	35.21	4.65	0.38	24.64	336.6	200.	19.02	34.93	24.98	305.2	0.815
174.	20.39	35.12	4.54	0.31	24.77	324.9	250.	14.32	34.41	25.68	238.6	0.952
205.	18.69	34.89	4.27	1.12	25.03	300.3	300.	11.57	34.18	26.05	203.7	1.064
229.	16.36	34.66	4.32	0.64	25.42	263.6	400.	7.95	34.13	26.62	149.7	1.242
253.	14.06	34.38	4.50	0.80	25.71	235.7	500.	6.35	34.19	26.89	124.0	1.380
284.	12.36	34.22	4.08	1.15	25.93	214.9	600.	5.74	34.29	27.05	109.7	1.498
368.	8.85	34.13	3.04	1.60	26.48	162.8	700.	5.31	34.40	27.18	97.8	1.603
460.	6.78	34.16	1.64	2.24	26.81	131.6	800.	4.94	34.47	27.28	89.0	1.698
551.	6.01	34.24	0.98	2.49	26.97	116.6	1000.	4.24	34.52	27.40	78.2	1.867
737.	5.19	34.43	0.72	3.05	27.22	94.2	1200.	3.65	34.56	27.49	70.2	2.017
922.	4.49	34.51	0.86	2.29	27.37	81.4						
1110.	3.92	34.53	1.06	2.84	27.44	74.7						
1395.	3.18	34.57	1.39	2.53	27.55	64.9						

CROMWELL 12, STATION 14, 20-30N LAT, 154- 1W LONG, JAN. 12, 1965, 0600 G.C.T.												
DRY BULB 24.0	WET BULB 21.4	WIND SPEED 16,	DIR. 12	BAR. 14	WEATHER 01	VIS.	CLOUD TYPE , COVER					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.54	34.59	4.89		23.19	469.1	0.	24.54	34.59	23.19	469.1	0.000
9.	24.58	34.59	5.06	0.43	23.18	470.6	10.	24.58	34.59	23.18	470.5	0.047
46.	24.57	34.70	4.92	0.49	23.27	463.8	20.	24.59	34.61	23.19	469.6	0.095
70.	24.62	34.79	5.09	0.28	23.32	459.7	30.	24.59	34.64	23.22	468.0	0.142
93.	23.92	35.02	4.91		23.70	424.1	50.	24.60	34.71	23.26	464.3	0.236
116.	22.84	35.03	4.88	0.27	24.02	394.2	75.	24.52	34.84	23.39	453.1	0.351
140.	21.49	35.08	4.80	0.32	24.44	355.2	100.	23.62	35.03	23.80	415.1	0.461
162.	20.51	35.10	4.57	0.36	24.72	329.0	150.	21.05	35.10	24.58	342.3	0.652
176.	19.75	35.02	4.43	0.48	24.86	316.0	200.	18.30	34.85	25.10	294.0	0.812
207.	17.84	34.79	4.24	0.67	25.17	287.4	250.	15.04	34.48	25.58	248.6	0.949
232.	16.02	34.58	4.28	0.72	25.44	262.0	300.	12.11	34.24	26.00	208.8	1.064
256.	14.72	34.45	4.44	0.80	25.63	244.3	400.	9.39	34.27	26.50	161.7	1.251
279.	13.13	34.30	4.01	1.22	25.84	223.7	500.	7.68	34.31	26.80	133.7	1.400
372.	9.92	34.25	2.55	2.28	26.40	171.4	600.	6.04	34.32	27.03	112.0	1.524
466.	8.38	34.32	1.54	2.02	26.70	143.3	700.	5.23	34.38	27.17	98.4	1.630
559.	6.53	34.30	1.22	2.36	26.95	119.3	800.	4.79	34.44	27.27	89.4	1.725
746.	5.04	34.41	0.82	2.53	27.22	93.9	1000.	4.10	34.51	27.41	77.3	1.894
935.	4.32	34.49	1.06	2.69	27.37	80.9	1200.	3.49	34.55	27.51	68.4	2.042
1124.	3.71	34.54	1.35	2.53	27.47	71.5						
1414.	2.97	34.57	1.65	2.96	27.57	62.5						

TEMPERATURE ERROR TEMP AT 300. METERS IS 0.10

ΔFROM ST DATA
 *INTERPOLATED DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 23.0		STATION 15, 22-1N WET BULB 20.8		LAT, 153-59W WIND SPEED 17, DIR. 13		LONG, JAN. 12, 1965, 1600 G.C.T. BAR. 14		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.	24.54	34.53	4.88		23.18	469.8	0.	24.54	34.58	23.18	469.8	0.000
10.	24.60	34.58	5.06	0.33	23.17	471.9	10.	24.60	34.58	23.17	471.9	0.047
50.	24.38	34.63	4.88	0.29	23.27	463.6	20.	24.59	34.56	23.15	473.6	0.095
76.	24.13	35.01	5.06	0.26	23.63	430.1	30.	24.55	34.56	23.17	472.7	0.143
100.	23.69	35.10	4.92	0.22	23.83	412.1	50.	24.38	34.63	23.27	463.6	0.237
125.	22.88	35.27	4.88	0.26	24.19	378.4	75.	24.14	35.00	23.62	431.5	0.350
152.	21.32	35.15	4.72	0.29	24.54	346.1	100.	23.69	35.10	23.83	412.1	0.456
175.	19.89	35.07	4.46	0.40	24.86	315.9	150.	21.45	35.16	24.51	348.4	0.648
190.	19.22	35.01	4.42	0.80	24.99	304.1	200.	18.68	34.95	25.08	295.9	0.810
223.	17.24	34.76	4.44	0.48	25.29	276.1	250.	15.29	34.51	25.55	251.9	0.948
251.	15.22	34.50	4.38	2.18	25.56	251.0	300.	12.24	34.22	25.96	212.8	1.065
277.	13.53	34.33	4.42	2.44	25.79	229.3	400.	9.16	34.09	26.40	171.2	1.259
301.	12.19	34.22	4.61	1.62	25.97	212.2	500.	6.75	34.03	26.71	141.4	1.417
400.	9.16	34.09	4.12	1.59	26.40	171.2	600.	5.50	34.12	26.94	119.6	1.549
501.	6.73	34.03	7.63	1.89	26.71	141.1	700.	4.89	34.25	27.11	103.7	1.662
602.	5.48	34.12	1.28		26.94	119.2	800.	4.59	34.37	27.24	91.9	1.760
801.	4.59	34.37	0.85		27.24	91.8	1000.	4.06	34.49	27.40	78.4	1.933
1003.	4.05	34.49	1.10	3.13	27.40	78.3	1200.	3.53	34.53	27.48	70.6	2.084
1203.	3.52	34.53	1.28	3.44	27.48	70.6	1500.	2.85	34.58	27.59	60.8	2.284
1503.	2.84	34.58	1.66	2.91	27.59	60.8						

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 24.2		STATION 16, 23-30N WET BULB 21.0		LAT, 153-53W WIND SPEED 14, DIR. 16		LONG, JAN. 12, 1965, 2400 G.C.T. BAR. 13		WEATHER 01 VIS. 7		CLOUD TYPE 8, COVER 2		
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.52	35.08	5.07		23.86	405.0	0.	23.52	35.08	23.86	405.0	0.000
10.	23.52	35.07	5.01	0.68	23.86	406.1	10.	23.52	35.07	23.86	406.1	0.041
52.	23.35	35.17	4.90	0.24	23.98	395.7	20.	23.52	35.08	23.87	405.5	0.082
77.	22.97	35.24	4.96	0.20	24.14	381.2	30.	23.49	35.10	23.89	403.8	0.122
102.	21.70	35.24	4.80	0.34	24.50	347.8	50.	23.37	35.16	23.97	396.7	0.203
127.	20.73	35.17	4.65	0.43	24.72	328.4	75.	23.02	35.24	24.13	382.8	0.301
152.	19.48	35.08	4.76	0.39	24.98	304.1	100.	21.81	35.24	24.47	350.5	0.399
178.	18.20	34.90	4.54	0.44	25.16	287.0	150.	19.58	35.09	24.96	306.0	0.559
194.	17.44	34.80	4.70	0.44	25.27	276.9	200.	17.10	34.75	25.32	272.8	0.705
228.	15.36	34.52	4.65	1.53	25.59	251.9	250.	14.00	34.39	25.74	233.6	0.833
252.	13.88	34.38	4.94	1.09	25.75	232.0	300.	12.00	34.24	26.02	207.0	0.944
282.	12.45	34.26	5.00	1.78	25.95	213.6	400.	9.83	34.12	26.31	180.1	1.139
305.	11.90	34.24	4.86		26.04	205.4	500.	7.29	34.08	26.67	145.4	1.303
407.	9.68	34.11	4.66	1.20	26.33	178.4	600.	5.79	34.19	26.96	118.4	1.437
505.	7.17	34.08	2.80	2.01	26.69	143.7	700.	4.98	34.28	27.13	102.3	1.548
610.	5.69	34.20	1.11	2.69	26.98	116.1	800.	4.51	34.35	27.24	92.2	1.644
813.	4.48	34.36	0.90	3.13	27.25	91.3	1000.	4.00	34.48	27.40	78.2	1.819
1016.	3.97	34.49	1.12	2.98	27.41	77.4	1200.	3.50	34.52	27.48	71.1	1.970
1217.	3.46	34.52	1.32	2.51	27.48	70.7	1500.	2.90	34.58	27.58	61.5	2.172
1520.	2.86	34.58	1.64		27.58	61.1						

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL DRY BULB 22.9		STATION 17, 23-24N WET BULB 20.2		LAT, 150-58W WIND SPEED 24, DIR. 16		LONG, JAN. 13, 1965, 1600 G.C.T. BAR. 12		WEATHER 02 VIS.		CLOUD TYPE , COVER		
DEPTH	TEMP.	SAL.	CXY.	PO4-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.	23.07	35.15			24.05	387.8	10.	23.07	35.15	24.05	387.8	0.039
30. Δ	23.07	35.15			24.05	388.6	20.	23.07	35.15	24.05	388.3	0.078
49.	23.03	35.15			24.06	388.2	30.	23.07	35.15	24.05	388.6	0.117
75.	22.59	35.33			24.32	364.2	50.	23.02	35.16	24.07	387.4	0.195
99.	22.15	35.29			24.42	356.1	75.	22.59	35.33	24.32	364.2	0.290
124.	20.68	35.25			24.79	321.2	100.	22.09	35.29	24.43	354.7	0.381
149.	19.88	35.18			24.95	306.8	150.	19.84	35.17	24.96	306.2	0.547
172.	18.94	35.04			25.09	294.4	200.	17.88	34.89	25.23	281.2	0.695
187.	18.59	35.00			25.14	289.4	250.	14.98	34.48	25.59	247.4	0.828
220.	16.59	34.68			25.38	267.0	300.	12.24	34.24	25.97	211.9	0.944
246.	15.26	34.51			25.56	251.0	400.	9.24	34.08	26.38	173.1	1.139
271.	13.55	34.34			25.79	228.8	500.	6.59	34.03	26.74	138.9	1.296
295.	12.43	34.25			25.94	214.3	600.	5.37	34.13	26.97	116.8	1.425
393.	9.46	34.09			26.35	175.9	700.	4.78	34.26	27.13	101.3	1.535
491.	6.75	34.03			26.71	141.3	800.	4.48	34.37	27.26	90.3	1.632
589.	5.46	34.12			26.95	118.8	1000.	3.90	34.49	27.41	76.6	1.801
785.	4.53	34.36			27.24	91.6	1200.	3.39	34.55	27.51	67.4	1.947
982.	3.95	34.48			27.40	77.6						
1179.	3.44	34.54			27.50	68.7						
1475.	2.83	34.58			27.59	60.5						

APROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA					
CROMWELL 12, STATION 18, 21-56N LAT, 150-54W LONG, JAN. 14, 1965, 0200 G.C.T.		DRY BULB 24.1 WET BULB 21.1		WIND SPEED 18, DIR. 16		BAR. 11		WEATHER 02		VIS. 6		CLOUD TYPE 6, COVER 7	
DEPTH	TEMP.	SAL.	XY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.62	34.88			23.68	422.2	0.	23.62	34.88	23.68	422.2	0.000	
10.	23.65	34.88			23.67	423.4	10.	23.65	34.88	23.67	423.4	0.043	
30.Δ	23.58	34.94			23.74	417.9	20.	23.64	34.91	23.70	421.5	0.085	
50.	23.36	34.99			23.34	408.9	30.	23.58	34.94	23.74	417.9	0.127	
76.	23.18	35.04			23.93	401.3	50.	23.36	34.99	23.84	408.9	0.211	
100.	22.82	35.07			24.06	390.2	75.	23.19	35.04	23.93	401.3	0.313	
125.	21.68	35.29			24.55	344.5	100.	22.82	35.07	24.06	390.2	0.413	
151.	19.34	34.97			24.93	308.6	150.	19.43	34.99	24.92	309.6	0.589	
175.	18.36	34.86			25.09	293.6	200.	16.67	34.65	25.34	270.8	0.735	
190.	17.36	34.74			25.25	279.3	250.	12.95	34.23	25.83	224.6	0.860	
223.	15.07	34.43			25.55	251.1	300.	10.49	34.08	26.17	192.0	0.965	
250.	12.95	34.23			25.83	224.6	400.	7.78	34.04	26.57	153.7	1.139	
276.	11.67	34.14			26.00	207.8	500.	5.99	34.09	26.86	126.7	1.281	
300.	10.49	34.08			26.17	192.0	600.	5.44	34.23	27.04	110.4	1.401	
399.	7.80	34.04			26.57	154.1	700.	4.98	34.35	27.18	97.2	1.506	
499.	6.00	34.09			26.86	126.9	800.	4.60	34.43	27.29	87.3	1.599	
598.	5.45	34.23			27.03	110.7	1000.	4.05	34.51	27.41	76.6	1.765	
796.	4.61	34.43			27.29	87.6	1200.	3.52	34.55	27.50	68.9	1.912	
995.	4.06	34.51			27.41	76.8							
1194.	3.52	34.54			27.49	69.8							
1493.	2.84	34.59			27.59	60.0							

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA					
CROMWELL 12, STATION 19, 20-29N LAT, 151- 2W LONG, JAN. 14, 1965, 1100 G.C.T.		DRY BULB 23.0 WET BULB 21.0		WIND SPEED 12, DIR. 17		BAR. 13		WEATHER 03		VIS.		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	XY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.86	34.79			23.54	435.4	0.	23.86	34.79	23.54	435.4	0.000	
10.	23.88	34.79			23.54	436.3	10.	23.88	34.79	23.54	436.3	0.044	
30.Δ	23.86	34.80			23.55	435.8	20.	23.88	34.79	23.53	437.1	0.088	
51.	23.72	34.96			23.71	421.2	30.	23.86	34.80	23.55	435.8	0.132	
75.	23.37	35.13			23.95	400.1	50.	23.73	34.95	23.70	422.1	0.218	
100.	22.74	35.16			24.15	381.5	75.	23.37	35.13	23.95	400.1	0.322	
124.	21.25	35.19			24.59	340.3	100.	22.74	35.16	24.15	381.5	0.420	
150.	20.29	35.16			24.83	318.6	150.	20.29	35.16	24.83	318.6	0.597	
173.	19.30	35.05			25.00	302.6	200.	17.62	34.81	25.24	280.3	0.748	
187.	18.49	34.94			25.12	291.3	250.	13.45	34.30	25.78	229.3	0.876	
221.	16.00	34.59			25.45	260.5	300.	11.10	34.14	26.10	198.6	0.984	
247.	13.67	34.32			25.75	232.1	400.	7.74	34.07	26.60	151.1	1.160	
272.	12.11	34.19			25.96	212.2	500.	5.97	34.10	26.86	126.1	1.300	
297.	11.22	34.14			26.09	200.2	600.	5.15	34.22	27.06	107.5	1.418	
394.	7.89	34.07			26.58	153.1	700.	4.69	34.35	27.22	93.6	1.520	
494.	6.04	34.09			26.85	127.4	800.	4.42	34.45	27.32	84.0	1.610	
591.	5.20	34.21			27.05	108.9	1000.	3.92	34.51	27.43	74.9	1.770	
788.	4.45	34.44			27.31	84.8	1200.	3.43	34.56	27.51	67.5	1.915	
985.	3.96	34.51			27.42	75.5							
1182.	3.45	34.55			27.51	68.1							
1479.	2.87	34.59			27.59	60.3							

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA					
CROMWELL 12, STATION 20, 18-59N LAT, 151- 6W LONG, JAN. 14, 1965, 2000 G.C.T.		DRY BULB 23.3 WET BULB 20.9		WIND SPEED 16, DIR. 17		BAR. 13		WEATHER 15		VIS. 6		CLOUD TYPE 9, COVER 8	
DEPTH	TEMP.	SAL.	XY.	PD4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.85	34.48			23.31	457.5	0.	23.85	34.48	23.31	457.5	0.000	
10.	23.88	34.48			23.30	458.7	10.	23.88	34.48	23.30	458.7	0.046	
30.Δ	23.87	34.48			23.31	459.2	20.	23.88	34.48	23.30	459.1	0.092	
51.	23.87	34.48			23.31	460.0	30.	23.87	34.48	23.31	459.2	0.139	
75.Δ	23.00	34.75			23.76	417.2	50.	23.88	34.48	23.30	460.4	0.231	
84.	22.19	34.90			24.11	384.7	75.	23.00	34.75	23.76	417.2	0.342	
99.	21.13	34.89			24.39	358.0	100.	21.08	34.89	24.41	354.8	0.439	
124.	20.30	34.92			24.64	335.3	150.	19.90	35.08	24.87	314.6	0.608	
150.	19.90	35.08			24.87	314.6	200.	17.31	34.72	25.24	280.3	0.758	
175.	18.73	34.94			25.06	296.7	250.	14.01	34.34	25.70	237.3	0.889	
189.	17.92	34.80			25.16	287.9	300.	10.74	34.15	26.18	191.3	0.997	
221.	16.07	34.57			25.42	263.5	400.	8.20	34.24	26.67	145.0	1.167	
246.	14.26	34.37			25.65	240.3	500.	6.38	34.21	26.90	123.0	1.302	
272.	12.65	34.23			25.89	219.4	600.	5.88	34.34	27.06	108.4	1.419	
294.	11.02	34.15			26.13	195.9	700.	5.39	34.41	27.18	97.7	1.523	
390.	8.45	34.25			26.64	148.1	800.	4.95	34.46	27.27	89.8	1.618	
488.	6.49	34.20			26.88	125.1	1000.	4.18	34.51	27.40	78.5	1.788	
584.	5.96	34.32			27.04	110.4	1200.	3.57	34.56	27.50	69.2	1.938	
779.	5.04	34.45			27.26	91.3							
974.	4.27	34.50			27.38	79.9							
1169.	3.66	34.55			27.48	70.5							
1466.	2.94	34.58			27.58	61.8							

AFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA				INTERPOLATED DATA				
CROMWELL 12, STATION 33, 20-30N LAT, 148- 2W LONG, JAN. 20, 1965, 0900 G.C.T. DRY BULB 23.0 WET BULB 20.1 WIND SPEED 20, DIR. 05 BAR. 20 WEATHER 03 VIS. 6 CLOUD TYPE 8, COVER 5													
DEPTH	TEMP.	SAL.	OKY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.71	34.38	5.25		23.28	460.8	0.	23.71	34.38	23.28	460.8	0.000	
11.	23.72	34.38	4.89	0.38	23.28	461.5	10.	23.72	34.38	23.27	461.6	0.046	
30. ^Δ	23.60	34.48			23.39	451.6	20.	23.68	34.42	23.32	457.9	0.093	
53. ^Δ	23.34	34.62	5.04	0.35	23.57	435.2	30.	23.60	34.48	23.39	451.6	0.139	
75. ^Δ	23.18	34.61			23.61	432.3	50.	23.37	34.61	23.55	437.1	0.228	
78.	23.15	34.61	5.00	0.30	23.62	431.6	75.	23.18	34.61	23.61	432.3	0.338	
103.	23.18	35.06	5.02	0.24	23.95	400.9	100.	23.19	34.99	23.89	406.1	0.443	
129.	21.97	35.22	5.09	0.27	24.41	357.4	150.	20.55	35.06	24.68	332.3	0.629	
154.	20.30	35.03	4.84	0.33	24.72	328.4	200.	18.09	34.90	25.19	285.2	0.785	
179.	19.54	35.08	4.88	0.30	24.96	306.6	250.	13.84	34.30	25.70	236.9	0.916	
194.	18.49	34.96	4.90	0.40	25.14	290.1	300.	10.96	34.17	26.16	193.6	1.025	
229.	15.91	34.56	4.52	0.60	25.45	260.9	400.	8.61	34.31	26.66	146.7	1.197	
256.	13.26	34.24	3.98	1.21	25.77	230.0	500.	7.18	34.38	26.92	122.0	1.332	
280.	11.51	34.13	4.20	1.24	26.03	205.8	600.	6.54	34.44	27.06	110.0	1.449	
306.	10.87	34.19	3.20	1.81	26.19	190.6	700.	5.93	34.47	27.16	100.9	1.554	
407.	8.46	34.31	1.46	2.66	26.68	144.2	800.	5.36	34.48	27.24	93.5	1.654	
509.	7.12	34.38	0.68	3.13	26.94	120.6	1000.	4.56	34.51	27.36	83.2	1.833	
609.	6.50	34.44	0.38	3.07	27.07	109.2	1200.	3.89	34.54	27.45	74.5	1.993	
813.	5.29	34.48	0.56	3.07	27.25	92.6	1500.	3.14	34.56	27.54	66.0	2.206	
1014.	4.51	34.51	1.12	3.06	27.36	82.6							
1216.	3.84	34.54	1.09	3.11	27.46	73.8							
1519.	3.11	34.56	1.39	3.11	27.55	65.6							

ORIGINAL DATA					DERIVED DATA				INTERPOLATED DATA				
CROMWELL 12, STATION 34, 22- ON LAT, 147-55W LONG, JAN. 20, 1965, 1800 G.C.T. DRY BULB 22.8 WET BULB 22.0 WIND SPEED 16, DIR. 08 BAR. 20 WEATHER 01 VIS. 7 CLOUD TYPE 8, COVER 2													
DEPTH	TEMP.	SAL.	OKY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.51	34.57	5.06		23.48	441.5	0.	23.51	34.57	23.48	441.5	0.000	
9.	23.54	34.57	5.10	0.28	23.47	442.7	10.	23.54	34.57	23.47	442.7	0.045	
30. ^Δ	23.54	34.57			23.47	443.5	20.	23.55	34.57	23.47	443.4	0.089	
48.	23.50	34.60	5.02	0.31	23.49	442.3	30.	23.54	34.57	23.47	443.5	0.134	
71.	23.28	35.14	5.16	0.18	23.98	396.7	50.	23.53	34.65	23.53	438.5	0.223	
95.	23.15	35.20	5.13	0.21	24.06	389.7	75.	23.27	35.17	24.00	394.7	0.328	
119.	22.57	35.32	5.14	0.21	24.32	366.1	100.	23.07	35.23	24.11	385.6	0.426	
143.	21.42	35.27	5.10	0.20	24.60	339.7	150.	21.02	35.24	24.69	331.6	0.607	
166.	20.14	35.17	4.95	0.51	24.87	314.7	200.	18.53	34.97	25.14	290.3	0.763	
180.	19.57	35.13	4.90		24.99	303.7	250.	14.81	34.42	25.59	248.1	0.899	
212.	17.74	34.84	4.70		25.23	281.8	300.	11.77	34.16	26.00	208.4	1.014	
236.	15.77	34.53	4.41	0.52	25.46	260.3	400.	8.43	34.10	26.52	159.1	1.200	
262.	14.64	34.35	4.72	0.64	25.70	237.7	500.	6.48	34.09	26.79	133.2	1.347	
284.	12.57	34.21	4.59	0.82	25.89	219.6	600.	5.68	34.22	27.00	114.4	1.472	
378.	9.06	34.12	3.45	1.89	26.44	167.0	700.	5.17	34.34	27.15	100.3	1.581	
475.	6.80	34.07	2.29	2.44	26.74	138.8	800.	4.83	34.42	27.26	90.8	1.677	
570.	5.87	34.18	1.16	2.87	26.94	119.4	1000.	4.19	34.49	27.39	79.6	1.850	
759.	4.98	34.40	0.67	3.31	27.22	94.0	1200.	3.61	34.54	27.48	70.6	2.002	
952.	4.35	34.48	0.94	2.87	27.36	82.2							
1144.	3.74	34.53	1.16	3.17	27.46	72.7							
1435.	3.64	34.57	1.44	2.87	27.56	63.5							

ORIGINAL DATA					DERIVED DATA				INTERPOLATED DATA				
CROMWELL 12, STATION 35, 23-28N LAT, 148- 1W LONG, JAN. 21, 1965, 0300 G.C.T. DRY BULB 22.6 WET BULB 19.9 WIND SPEED 16, DIR. 10 BAR. 17 WEATHER 03 VIS. 7 CLOUD TYPE 8, COVER 3													
DEPTH	TEMP.	SAL.	OKY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	22.83	35.19	5.07		24.15	378.0	0.	22.83	35.19	24.15	378.0	0.000	
10.	22.80	35.19	5.10	0.24	24.16	377.5	10.	22.80	35.19	24.16	377.5	0.038	
46.	22.32	35.29	5.09	0.22	24.37	358.7	20.	22.68	35.22	24.21	372.8	0.076	
69.	22.15	35.29	5.12	0.26	24.42	355.0	30.	22.55	35.24	24.27	367.7	0.113	
91.	21.86	35.36	5.11	0.19	24.55	343.0	50.	22.29	35.29	24.37	358.1	0.186	
114.	20.89	35.23	5.12	0.22	24.72	327.7	75.	22.11	35.32	24.45	352.2	0.276	
137.	19.91	35.13	4.90	0.27	24.93	308.2	100.	21.53	35.32	24.61	337.4	0.363	
158.	19.28	35.05	4.88	0.47	25.03	299.4	150.	19.48	35.10	24.99	302.5	0.524	
171.	18.79	35.02	4.88	0.31	25.11	292.2	200.	17.48	34.81	25.27	277.4	0.670	
202.	17.37	34.79	4.80	0.48	25.28	276.3	250.	14.67	34.44	25.63	243.8	0.801	
227.	15.63	34.54	4.73	0.57	25.50	256.2	300.	11.88	34.15	25.98	211.1	0.916	
250.	14.67	34.44	4.83	0.69	25.63	243.8	400.	8.76	34.04	26.43	168.6	1.108	
271.	13.25	34.27	4.65	0.83	25.80	228.0	500.	6.56	34.04	26.74	138.0	1.262	
362.	9.87	34.08	4.72	1.33	26.28	182.8	600.	5.36	34.15	26.98	115.3	1.390	
452.	7.49	34.02	3.34	2.16	26.60	151.9	700.	4.80	34.29	27.15	99.6	1.499	
543.	5.91	34.08	1.47	2.81	26.86	127.0	800.	4.54	34.39	27.26	89.8	1.595	
725.	4.74	34.32	1.20	3.28	27.19	96.6	1000.	4.10	34.50	27.40	78.4	1.745	
909.	4.35	34.46	0.87	3.04	27.34	83.3	1200.	3.60	34.55	27.49	69.7	1.915	
1093.	3.84	34.52	1.05	2.86	27.44	74.3							
1377.	3.14	34.56	1.50	3.09	27.54	65.0							

TEMPERATURE ERROR TEMP AT 300. METERS IS 0.13

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA					INTERPOLATED DATA				
CROMWELL 12, STATION 39, 25-44 LAT, 147-59W LONG, JAN. 21, 1965, 1300 G.C.T.														
DRY BULB 21.5 WET PULB 19.8 WIND SPEED 10, DIR. 14 BAR. 16 WEATHER 03 VIS. 6 CLOUD TYPE 8, COVER 6														
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	22.54	35.15	5.07		24.20	373.0	0.	22.54	35.15	24.20	373.0	0.000		
10.	22.54	35.14	5.21	0.22	24.19	374.1	10.	22.54	35.14	24.19	374.1	0.038		
48.	22.26	35.21	5.19		24.40	355.7	20.	22.49	35.18	24.23	370.5	0.075		
72.	22.10	35.25	5.18	0.21	24.48	349.4	30.	22.42	35.22	24.28	366.0	0.112		
95.	21.95	35.30	5.15		24.48	349.8	50.	22.25	35.32	24.41	354.9	0.185		
118.	20.94	35.34	5.12		24.79	321.2	75.	22.10	35.34	24.47	350.1	0.274		
141.	19.66	35.13	4.84	0.29	24.97	304.6	100.	21.78	35.32	24.54	344.3	0.361		
165.	19.01	35.04	4.82	0.35	25.07	295.9	150.	19.35	35.08	25.01	300.9	0.524		
179.	18.82	35.06	5.07		25.13	290.3	200.	18.12	34.94	25.22	282.9	0.671		
211.	17.52	34.83	5.06		25.28	277.1	250.	14.30	34.37	25.65	241.5	0.803		
236.	15.41	34.92	4.84	0.59	25.33	253.2	300.	12.04	34.17	25.95	213.3	0.918		
260.	13.62	34.28	4.82	0.75	25.73	234.3	400.	9.07	34.07	26.40	171.5	1.112		
283.	12.67	34.70	4.76	0.76	25.86	222.2	500.	6.97	34.02	26.67	145.1	1.272		
377.	9.66	34.29	4.76	1.40	26.32	178.9	600.	5.56	34.08	26.90	123.2	1.407		
472.	7.47	36.02	1.68		26.60	152.2	700.	4.75	34.19	27.08	106.1	1.523		
567.	5.73	34.35	1.84		26.83	129.8	800.	4.36	34.31	27.22	93.7	1.624		
755.	4.30	34.26	0.56		27.17	98.4	1000.	3.94	34.46	27.38	79.1	1.799		
944.	4.09	34.43	0.86		27.35	82.5	1200.	3.48	34.54	27.50	69.2	1.949		
1133.	3.62	34.51	1.20		27.46	72.7								
1420.	2.97	34.56	1.52		27.56	63.3								

CROMWELL 12, STATION 37, 26-27N LAT, 147-59W LONG, JAN. 21, 1965, 2000 G.C.T.														
DRY BULB 21.8 WET PULB 20.0 WIND SPEED 14, DIR. 17 BAR. 15 WEATHER 15 VIS. 7 CLOUD TYPE 8, COVER 7														
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	22.34	35.24	5.14		24.32	361.1	0.	22.34	35.24	24.32	361.1	0.000		
10.	22.35	35.24	5.30		24.32	361.7	10.	22.35	35.24	24.32	361.7	0.036		
52.	22.16	35.34	5.08		24.45	351.0	20.	22.32	35.26	24.35	359.8	0.073		
77.	22.05	35.35	5.09		24.49	348.2	30.	22.28	35.28	24.37	357.5	0.109		
101.	21.93	35.36	5.06		24.53	345.2	50.	22.17	35.33	24.44	351.6	0.180		
127.	20.44	35.23	4.91		24.84	316.6	75.	22.06	35.35	24.49	348.4	0.268		
153.	19.58	35.14	4.84		25.00	302.3	100.	21.95	35.36	24.53	345.6	0.356		
177.	18.66	34.99	4.87		25.12	291.4	150.	19.67	35.15	24.98	303.6	0.519		
192.	17.90	34.87	4.89		25.22	282.5	200.	17.47	34.81	25.27	277.3	0.666		
226.	15.97	34.61	4.91		25.47	258.5	250.	14.43	34.44	25.68	239.2	0.796		
253.	14.21	34.41	4.83		25.71	236.6	300.	11.39	34.12	26.04	204.4	0.908		
274.	12.30	34.17	4.65		25.91	217.2	400.	9.27	34.06	26.36	175.0	1.099		
304.	11.32	34.13	4.73		26.06	202.9	500.	7.11	34.02	26.65	147.1	1.262		
405.	9.15	34.06	4.50		26.37	173.9	600.	5.59	34.06	26.89	124.8	1.399		
507.	6.97	34.02	3.69		26.67	145.3	700.	4.79	34.16	27.06	108.7	1.517		
608.	5.50	34.07	1.55		26.90	123.3	800.	4.36	34.27	27.19	96.5	1.621		
810.	4.34	34.28	0.48		27.20	95.5	1000.	3.80	34.42	27.37	80.2	1.800		
1012.	3.78	34.43	0.79		27.38	79.5	1200.	3.36	34.52	27.49	69.7	1.952		
1214.	3.33	34.52	1.10		27.49	69.1	1500.	2.77	34.57	27.59	60.6	2.150		
1516.	2.74	34.57	1.60		27.59	60.4								

CROMWELL 12, STATION 33, 25-44 LAT, 150-55W LONG, JAN. 22, 1965, 1500 G.C.T.														
DRY BULB 20.3 WET PULB 16.8 WIND SPEED 20, DIR. 30 BAR. 15 WEATHER 01 VIS. 6 CLOUD TYPE 8, COVER 4														
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	22.51	35.23			24.27	366.4	0.	22.51	35.23	24.27	366.4	0.000		
9.	22.61	35.23			24.24	369.4	10.	22.61	35.23	24.24	369.4	0.037		
20.4	22.60	35.23			24.24	369.6	20.	22.60	35.23	24.24	369.6	0.074		
30.4	22.50	35.25			24.29	365.8	30.	22.50	35.25	24.29	365.8	0.111		
50.	22.27	35.23			24.37	358.2	50.	22.27	35.28	24.37	358.2	0.184		
74.	22.20	35.29			24.40	356.5	75.	22.18	35.29	24.41	355.8	0.274		
99.	21.43	35.31			24.63	335.5	100.	21.39	35.31	24.64	334.5	0.361		
124.	20.46	35.26			24.86	314.9	150.	20.06	35.24	24.95	306.8	0.523		
151.	20.04	35.24			24.95	306.6	200.	17.35	34.79	25.29	276.0	0.670		
174.	18.89	35.04			25.10	293.3	250.	14.87	34.47	25.61	245.5	0.801		
188.	17.49	34.39			25.21	283.0	300.	12.26	34.22	25.95	213.4	0.917		
223.	16.25	34.63			25.42	263.2	400.	9.09	34.07	26.40	171.6	1.111		
249.	14.93	34.48			25.61	246.3	500.	6.88	34.02	26.69	143.9	1.270		
275.	13.50	34.33			25.81	227.2	600.	5.50	34.11	26.93	120.4	1.404		
300.	12.26	34.22			25.95	213.4	700.	4.76	34.22	27.11	104.0	1.517		
401.	9.07	34.07			26.40	171.3	800.	4.39	34.33	27.23	92.4	1.617		
501.	6.86	34.02			26.69	143.7	1000.	4.03	34.48	27.39	78.8	1.790		
602.	5.48	34.11			26.94	120.0	1200.	3.48	34.51	27.47	71.5	1.942		
801.	4.39	34.33			27.23	92.3	1500.	2.78	34.57	27.58	60.8	2.143		
1001.	4.03	34.48			27.39	78.7	2000.	2.14	34.62	27.68	52.0	2.430		
1200.	3.48	34.51			27.47	71.5	2500.	1.78	34.65	27.73	47.2	2.682		
1500.	2.78	34.57			27.58	60.8	3000.	1.58	34.67	27.76	44.7	2.917		
2020.	2.12	34.62			27.68	51.9	4000.	1.47	34.69	27.78	44.5	3.374		
2504.	1.73	34.65			27.73	47.2								
3010.	1.58	34.67			27.76	44.7								
4041.	1.49	34.69			27.78	44.7								

AFROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA					
CROMWELL 12, STATION 39, 25-0N LAT, 154-0W LONG, JAN. 23, 1965, 0900 G.C.T.													
DRY BULB 21.0		WET BULB 16.2		WIND SPEED 18, DIR. 03		BAR. 23		WEATHER 02		VIS.		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	CHL.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.30	35.01	5.12		23.87	403.9	0.	23.30	35.01	23.87	403.9	0.000	
10.	23.33	35.02	5.15		23.87	404.4	10.	23.33	35.02	23.87	404.4	0.041	
30.Δ	23.32	35.02			23.88	404.9	20.	23.33	35.02	23.87	404.7	0.081	
51.	23.30	35.02	5.11		23.88	405.1	30.	23.32	35.02	23.88	404.9	0.122	
77.	23.35	35.04	5.02		23.88	406.1	50.	23.30	35.02	23.88	405.1	0.204	
102.	22.67	35.23	5.06		24.24	373.3	75.	23.36	35.03	23.88	406.6	0.306	
128.	21.63	35.22	5.03		24.51	348.3	100.	22.70	35.22	24.20	376.3	0.405	
154.	20.37	35.15	5.06		24.80	321.6	150.	20.55	35.16	24.76	325.3	0.581	
178.	19.73	35.14	4.92		24.96	306.9	200.	18.52	34.97	25.14	290.6	0.737	
192.	18.94	35.03	4.78		25.08	295.8	250.	15.62	34.56	25.51	255.4	0.874	
227.	17.07	34.73	4.75		25.32	273.1	300.	12.63	34.23	25.89	219.6	0.974	
255.	15.30	34.52	4.73		25.55	251.4	400.	9.15	34.07	26.39	172.3	1.192	
280.	13.76	34.36	4.74		25.76	231.8	500.	6.78	34.02	26.70	142.5	1.351	
305.	12.36	34.20	4.77		25.92	216.9	600.	5.44	34.09	26.92	121.0	1.484	
406.	9.02	34.08	4.11		26.42	169.9	700.	4.74	34.21	27.10	104.7	1.598	
508.	6.63	34.02	3.06		26.72	140.6	800.	4.35	34.33	27.23	92.2	1.697	
610.	5.35	34.10	1.33		26.94	119.2	1000.	3.90	34.48	27.41	77.0	1.869	
812.	4.33	34.34	0.68		27.25	91.0	1200.	3.43	34.53	27.49	69.5	2.017	
1014.	3.98	34.49	1.44		27.41	76.3	1500.	2.85	34.58	27.59	60.9	2.215	
1215.	3.39	34.51	1.33		27.50	69.1							
1517.	2.82	34.53	1.64		27.59	60.6							

CROMWELL 12, STATION 40, 24-56N LAT, 156-58W LONG, JAN. 24, 1965, 0000 G.C.T.													
DRY BULB 22.9		WET BULB 17.7		WIND SPEED 25, DIR. 09		BAR. 22		WEATHER 02		VIS. 7		CLOUD TYPE 8, COVER 5	
DEPTH	TEMP.	SAL.	CHL.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.16	35.15			24.02	389.9	0.	23.16	35.15	24.02	389.9	0.000	
10.	23.19	35.12			23.99	393.3	10.	23.19	35.12	23.99	393.3	0.039	
30.Δ	23.17	35.12			24.00	393.5	20.	23.19	35.11	23.99	394.0	0.079	
51.	23.16	35.13			24.01	393.3	30.	23.17	35.12	24.00	393.5	0.119	
76.	23.17	35.14			24.03	392.5	50.	23.16	35.13	24.01	393.4	0.198	
101.	22.71	35.24			24.22	375.0	75.	23.13	35.14	24.02	392.7	0.297	
125.	21.65	35.16			24.46	353.1	100.	22.74	35.24	24.21	375.9	0.394	
150.	20.76	35.10			24.65	335.0	150.	20.76	35.10	24.65	335.0	0.573	
175.	18.73	34.91			25.04	298.9	200.	17.17	34.76	25.31	273.4	0.726	
190.	17.94	34.85			25.19	284.8	250.	13.73	34.40	25.80	227.2	0.852	
223.	15.31	34.59			25.58	248.5	300.	12.33	34.28	25.99	210.1	0.963	
251.	13.68	34.49			25.81	226.5	400.	8.88	34.07	26.43	168.3	1.154	
276.	12.82	34.32			25.92	216.2	500.	6.64	34.02	26.72	140.6	1.310	
311.	12.12	34.27			26.02	207.4	600.	5.57	34.08	26.90	123.4	1.443	
400.	8.83	34.07			26.43	168.3	700.	4.89	34.19	27.07	107.4	1.559	
501.	6.62	34.02			26.72	140.4	800.	4.44	34.32	27.22	93.8	1.661	
601.	5.56	34.08			26.90	123.2	1000.	3.85	34.47	27.40	77.4	1.834	
801.	4.44	34.32			27.22	93.7	1200.	3.30	34.53	27.50	67.9	1.982	
1002.	3.85	34.47			27.40	77.3	1500.	2.73	34.57	27.59	60.2	2.176	
1202.	3.29	34.53			27.50	67.8							
1503.	2.73	34.57			27.59	60.2							

CROMWELL 12, STATION 41, 23-30N LAT, 156-59W LONG, JAN. 24, 1965, 1000 G.C.T.													
DRY BULB 23.9		WET BULB 19.9		WIND SPEED 25, DIR. 07		BAR. 21		WEATHER 02		VIS.		CLOUD TYPE , COVER	
DEPTH	TEMP.	SAL.	CHL.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.29	35.12			23.96	395.7	0.	23.29	35.12	23.96	395.7	0.000	
11.	23.31	35.12			23.96	396.7	10.	23.31	35.12	23.96	396.6	0.040	
30.Δ	23.30	35.12			23.96	397.1	20.	23.31	35.12	23.96	397.0	0.080	
52.	23.29	35.13			23.97	397.0	30.	23.30	35.12	23.96	397.1	0.120	
77.	23.34	35.13			23.95	399.3	50.	23.29	35.13	23.97	397.0	0.200	
102.	23.63	35.20			24.10	386.7	75.	23.34	35.13	23.95	399.4	0.300	
127.	21.93	35.19			24.40	358.5	100.	23.08	35.19	24.08	388.2	0.399	
153.	20.52	35.16			24.76	324.6	150.	20.68	35.17	24.73	328.2	0.580	
176.	19.65	35.07			24.93	309.9	200.	18.34	34.90	25.13	290.8	0.736	
191.	18.84	34.97			25.06	297.7	250.	15.23	34.53	25.58	249.0	0.872	
227.	16.75	34.70			25.36	269.4	300.	12.67	34.27	25.92	217.3	0.990	
254.	14.95	34.50			25.62	245.4	400.	9.38	34.13	26.39	172.1	1.186	
279.	13.22	34.32			25.84	224.0	500.	6.97	34.08	26.72	140.8	1.344	
306.	12.56	34.27			25.93	216.0	600.	5.49	34.14	26.96	117.7	1.474	
405.	9.20	34.12			26.42	169.8	700.	4.84	34.25	27.12	102.8	1.586	
507.	6.84	34.08			26.74	139.1	800.	4.59	34.36	27.24	92.5	1.685	
608.	5.40	34.15			26.98	116.1	1000.	4.06	34.49	27.40	78.0	1.857	
810.	4.58	34.37			27.25	91.8	1200.	3.53	34.54	27.49	70.0	2.007	
1013.	4.03	34.50			27.41	77.4	1500.	2.84	34.58	27.59	60.7	2.206	
1213.	3.50	34.54			27.49	69.7							
1516.	2.80	34.58			27.59	60.4							

TEMPERATURE ERROR FROM AT 700. METERS IS 0.10

FROM BT DATA

Table 2.--Continued

ORIGINAL DATA			DERIVED DATA			INTERPOLATED DATA							
CROMWELL 12, STATION 42, 22- ON LAT, 157- 1W LONG, JAN. 24, 1965, 1900 G.C.T.													
DRY BULB 23.8		WET BULB 21.5		WIND SPEED 26, DIR. 07		BAR. 18		WEATHER 02		VIS. 7		CLOUD TYPE 6, COVER 5	
DEPTH	TEMP.	SAL.	RAY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.68	34.97			23.73	417.4	0.	23.68	34.97	23.73	417.4	0.000	
10.	23.74	34.96			23.71	420.1	10.	23.74	34.96	23.71	420.1	0.042	
52.	23.70	34.99			23.74	418.5	20.	23.75	34.96	23.71	420.8	0.085	
77.	23.69	35.02			23.77	417.0	30.	23.75	34.97	23.71	420.8	0.127	
102.	23.65	35.02			23.78	416.9	50.	23.71	34.99	23.74	418.8	0.212	
129.	22.75	35.24			24.21	377.1	75.	23.69	35.02	23.77	417.1	0.317	
154.	20.09	35.08			24.82	319.5	100.	23.67	35.02	23.77	417.5	0.422	
179.	19.45	35.04			24.95	307.2	150.	20.51	35.11	24.73	327.6	0.610	
194.	18.03	34.86			25.18	286.4	200.	17.65	34.81	25.23	281.2	0.763	
228.	16.23	34.63			25.43	262.9	250.	14.92	34.48	25.61	245.8	0.896	
255.	14.61	34.45			25.65	242.0	300.	12.17	34.21	25.96	212.6	1.012	
281.	13.05	34.29			25.85	222.9	400.	9.19	34.10	26.40	171.1	1.205	
305.	11.46	34.19			25.99	210.2	500.	6.94	34.09	26.73	139.7	1.362	
406.	9.06	34.10			26.42	169.0	600.	5.70	34.17	26.95	118.5	1.492	
508.	6.79	34.09			26.75	137.6	700.	5.11	34.30	27.13	102.2	1.604	
610.	5.62	34.18			26.97	116.7	800.	4.78	34.43	27.27	90.0	1.701	
812.	4.76	34.44			27.28	88.8	1000.	4.07	34.50	27.40	77.8	1.871	
1016.	4.02	34.50			27.41	77.3	1200.	3.49	34.53	27.48	70.4	2.021	
1217.	3.45	34.53			27.49	69.8	1500.	2.86	34.58	27.58	61.2	2.221	
1519.	2.83	34.58			27.59	60.8							

Table 3.--Original and derived oceanographic data for Townsend Cromwell cruise 13

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 13, STATION 1, 20-35N LAT, 157-16W LONG, FEB. 9, 1965, 0500 G.C.T.												
DRY BULB 23.8		WET BULB 19.7		WIND SPEED 08, DIR. 17		BAR. 15		WEATHER 03		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.	23.82	34.87			23.62	428.5	0.	23.82	34.87	23.62	428.5	0.000
11.Δ	23.84	34.87			23.61	429.5	10.	23.84	34.87	23.61	429.5	0.043
30.	23.76	34.88			23.64	427.3	20.	23.82	34.87	23.62	429.3	0.086
50.	23.52	34.96			23.77	415.5	30.	23.76	34.88	23.64	427.3	0.130
74.	23.39	35.01			23.85	409.2	50.	23.52	34.96	23.77	415.5	0.215
98.	22.61	35.09			24.13	382.9	75.	23.36	35.01	23.86	408.3	0.318
123.	21.69	35.06			24.37	361.3	100.	22.54	35.09	24.15	381.0	0.418
147.	20.96	35.05			24.56	343.7	150.	20.95	35.06	24.57	343.1	0.600
169.	20.52	35.06			24.69	332.4	200.	16.88	34.72	25.34	270.2	0.755
194.	17.56	34.79			25.24	280.4	250.	13.27	34.34	25.85	222.8	0.879
217.	15.21	34.53			25.58	247.7	300.	10.91	34.18	26.17	191.9	0.984
241.	13.96	34.40			25.75	231.9	400.	8.24	34.18	26.61	150.4	1.156
265.	12.18	34.25			25.99	208.9	500.	6.64	34.21	26.86	126.9	1.296
289.	11.28	34.19			26.11	197.4	600.	5.73	34.31	27.06	108.7	1.415
384.	8.58	34.18			26.56	155.2	700.	5.13	34.39	27.20	95.8	1.519
480.	6.89	34.19			26.82	131.2	800.	4.72	34.46	27.30	86.9	1.611
574.	5.92	34.28			27.02	112.7	1000.	4.07	34.52	27.42	76.1	1.776
765.	4.86	34.44			27.27	89.6	1200.	3.52	34.56	27.50	68.5	1.922
956.	4.20	34.51			27.40	78.2						
1146.	3.67	34.55			27.48	70.4						
1431.	3.01	34.56			27.56	63.8						

CROMWELL 13, STATION 2, 18-59N LAT, 156-57W LONG, FEB. 9, 1965, 1500 G.C.T.												
DRY BULB 23.2		WET BULB 19.4		WIND SPEED 08, DIR. 18		BAR. 18		WEATHER 02		VIS. 7 CLOUD TYPE 8, COVER 1		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.36	34.46			23.15	473.3	0.	24.36	34.46	23.15	473.3	0.000
10.	24.39	34.48			23.15	473.1	10.	24.39	34.48	23.15	473.1	0.048
49.	24.47	34.51			23.15	474.8	20.	24.41	34.49	23.16	473.3	0.095
74.	24.52	34.52			23.14	476.4	30.	24.43	34.50	23.16	473.7	0.143
98.	23.71	34.88			23.66	428.5	50.	24.48	34.51	23.15	475.3	0.239
124.	22.22	35.00			24.18	379.8	75.	24.50	34.53	23.16	474.9	0.358
149.	21.37	35.10			24.49	350.9	100.	23.60	34.89	23.70	424.3	0.472
173.	19.53	34.99			24.90	312.6	150.	21.30	35.10	24.51	349.3	0.666
198.	17.92	34.84			25.19	285.3	200.	17.77	34.83	25.21	283.0	0.826
222.	16.08	34.65			25.48	257.9	250.	13.89	34.39	25.75	231.8	0.956
247.	14.15	34.41			25.72	235.2	300.	11.42	34.23	26.12	197.5	1.064
271.	12.34	34.26			25.97	211.3	400.	7.97	34.16	26.64	147.7	1.238
297.	11.53	34.23			26.10	199.2	500.	6.13	34.23	26.95	116.6	1.372
394.	8.13	34.16			26.62	150.0	600.	5.50	34.35	27.12	102.7	1.484
495.	6.18	34.22			26.94	119.6	700.	5.07	34.44	27.24	91.8	1.582
594.	5.53	34.34			27.11	103.5	800.	4.75	34.49	27.32	84.6	1.672
790.	4.78	34.49			27.32	85.2	1000.	4.11	34.51	27.41	77.3	1.836
989.	4.14	34.51			27.40	77.7	1200.	3.55	34.54	27.49	70.2	1.985
1185.	3.58	34.54			27.48	70.4						
1481.	2.93	34.58			27.58	61.7						

CROMWELL 13, STATION 3, 17-27N LAT, 157-0W LONG, FEB. 9, 1965, 2300 G.C.T.												
DRY BULB 24.5		WET BULB 20.2		WIND SPEED 10, DIR. 03		BAR. 18		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.	25.19	34.22			22.72	514.5	0.	25.19	34.22	22.72	514.5	0.000
10.	24.86	34.21			22.81	506.1	10.	24.86	34.21	22.81	506.1	0.051
20.Δ	24.80	34.21			22.83	504.7	20.	24.80	34.21	22.83	504.7	0.102
30.Δ	24.80	34.21			22.83	505.1	30.	24.80	34.21	22.83	505.1	0.153
51.	24.80	34.21			22.83	505.9	50.	24.80	34.21	22.83	505.9	0.255
76.	24.79	34.21			22.83	506.6	75.	24.81	34.20	22.82	507.4	0.383
100.	23.28	34.78			23.71	423.8	100.	23.28	34.78	23.71	423.8	0.500
125.	21.85	35.04			24.31	367.1	150.	18.92	34.76	24.87	313.8	0.686
151.	18.79	34.74			24.89	311.8	200.	13.54	34.32	25.78	227.9	0.822
175.	15.73	34.49			25.44	260.5	250.	10.98	34.29	26.25	183.9	0.926
201.	13.47	34.32			25.79	226.9	300.	9.57	34.29	26.49	161.2	1.013
225.	12.10	34.28			26.03	204.2	400.	7.96	34.39	26.82	130.6	1.160
251.	10.94	34.29			26.25	183.2	500.	7.36	34.46	26.96	118.4	1.286
276.	10.22	34.26			26.36	173.6	600.	6.26	34.46	27.11	104.3	1.399
301.	9.54	34.29			26.49	160.7	700.	5.59	34.48	27.21	95.4	1.499
400.	7.96	34.39			26.82	130.6	800.	5.14	34.50	27.28	89.1	1.593
501.	7.36	34.46			26.96	118.3	1000.	4.38	34.53	27.39	79.4	1.763
602.	6.24	34.46			27.12	104.1	1200.	3.68	34.56	27.49	70.3	1.915
801.	5.14	34.50			27.28	89.1	1500.	2.91	34.59	27.59	60.9	2.115
1001.	4.38	34.53			27.39	79.4						
1201.	3.68	34.56			27.49	70.3						
1502.	2.91	34.59			27.59	60.9						

AFROM BT DATA

Table 3.--Continued

ORIGINAL DATA						DERIVED DATA		INTERPOLATED DATA							
CROMWELL		13, STATION		4, 16- IN LAT, 156-59W LONG, FEB. 10, 1965, 1200 G.C.T.											
DRY BULB	24.2	WET BULB	20.9	WIND SPEED	12, DIR. 03	BAR.	17	WEATHER	03	VIS.	7	CLOUD TYPE	4,	COVER	3
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.			
0.	24.74	34.23			22.86	500.8	0.	24.74	34.23	22.86	500.8	0.000			
10.	24.76	34.23			22.85	501.8	10.	24.76	34.23	22.85	501.8	0.050			
30.	24.76	34.24			22.86	501.8	20.	24.76	34.23	22.86	501.9	0.101			
51.	24.77	34.25			22.87	502.2	30.	24.76	34.24	22.86	501.8	0.152			
76.	24.86	34.29			22.87	502.9	50.	24.77	34.25	22.87	502.2	0.253			
100.	19.12	34.72			24.80	319.5	75.	24.92	34.28	22.85	504.8	0.380			
125.	17.66	34.75			25.18	283.4	100.	19.12	34.72	24.80	319.5	0.483			
151.	14.40	34.30			25.58	245.6	150.	14.53	34.32	25.57	246.9	0.626			
177.	12.51	34.23			25.91	214.3	200.	11.41	34.23	26.12	194.9	0.737			
202.	11.33	34.23			26.14	193.4	250.	10.12	34.35	26.44	165.0	0.828			
226.	10.52	34.27			26.31	176.9	300.	9.72	34.49	26.62	149.0	0.907			
251.	10.11	34.35			26.45	164.6	400.	8.28	34.48	26.84	128.7	1.048			
277.	10.10	34.45			26.53	157.7	500.	7.14	34.47	27.00	114.4	1.170			
302.	9.68	34.49			26.63	148.3	600.	6.17	34.46	27.13	103.0	1.280			
402.	8.26	34.48			26.85	128.5	700.	5.40	34.46	27.22	94.0	1.380			
502.	7.12	34.47			27.01	114.1	800.	4.82	34.48	27.30	86.6	1.471			
603.	6.14	34.46			27.13	102.7	1000.	4.16	34.55	27.43	75.2	1.635			
803.	4.81	34.48			27.31	86.4	1200.	3.54	34.56	27.51	68.5	1.780			
1003.	4.15	34.55			27.43	75.0	1500.	2.78	34.61	27.62	57.8	1.972			
1202.	3.53	34.56			27.51	68.5									
1503.	2.77	34.61			27.62	57.7									

CROMWELL		13, STATION		5, 14-27N LAT, 156-56W LONG, FEB. 10, 1965, 2100 G.C.T.											
DRY BULB	25.3	WET BULB	22.0	WIND SPEED	20, DIR. 05	BAR.	15	WEATHER	03	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.	24.72	34.26			22.89	498.1	0.	24.72	34.26	22.89	498.1	0.000			
11.	24.72	34.24			22.87	499.9	10.	24.72	34.24	22.87	499.8	0.050			
30.	24.72	34.25			22.88	499.9	20.	24.72	34.24	22.87	500.2	0.101			
51.	24.69	34.26			22.90	499.2	30.	24.72	34.25	22.88	499.9	0.151			
76.	22.81	34.91			23.94	400.5	50.	24.71	34.25	22.89	500.1	0.252			
101.	20.48	35.01			24.66	332.6	75.	22.91	34.88	23.89	405.2	0.366			
125.	18.86	34.96			25.05	296.7	100.	20.57	35.01	24.64	334.7	0.459			
151.	16.31	34.62			25.40	263.0	150.	16.41	34.64	25.39	264.2	0.610			
174.	14.22	34.37			25.67	237.5	200.	12.16	34.29	26.03	204.0	0.728			
201.	12.09	34.29			26.04	202.7	250.	9.64	34.32	26.50	159.1	0.819			
225.	10.88	34.35			26.31	177.2	300.	9.45	34.52	26.69	142.0	0.895			
250.	9.64	34.32			26.50	159.1	400.	8.08	34.54	26.92	121.3	1.028			
275.	9.18	34.39			26.63	147.0	500.	7.12	34.52	27.04	110.4	1.145			
299.	9.45	34.52			26.69	142.3	600.	6.41	34.53	27.15	101.1	1.252			
399.	8.09	34.54			26.92	121.4	700.	5.74	34.53	27.24	93.4	1.350			
498.	7.14	34.52			27.04	110.6	800.	5.17	34.53	27.30	87.3	1.442			
598.	6.42	34.53			27.15	101.3	1000.	4.49	34.55	27.40	79.2	1.610			
796.	5.19	34.53			27.30	87.5	1200.	3.85	34.57	27.48	71.5	1.763			
996.	4.50	34.55			27.40	79.3									
1195.	3.86	34.57			27.48	71.7									
1493.	3.02	34.61			27.59	60.7									

CROMWELL		13, STATION		6, 13- IN LAT, 157- 0W LONG, FEB. 11, 1965, 0600 G.C.T.											
DRY BULB	25.2	WET BULB	22.3	WIND SPEED	22, DIR. 05	BAR.	13	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.			
0.	24.93	34.29			22.85	501.9	0.	24.93	34.29	22.85	501.9	0.000			
10.	24.93	34.29			22.85	502.3	10.	24.93	34.29	22.85	502.3	0.051			
30.	24.93	34.29			22.85	503.1	20.	24.94	34.29	22.85	502.9	0.101			
51.	24.83	34.29			22.88	501.0	30.	24.93	34.29	22.85	503.1	0.152			
76.	24.16	34.99			23.61	432.4	50.	24.84	34.28	22.87	501.7	0.253			
101.	21.44	35.14			24.50	348.1	75.	24.21	34.96	23.57	436.0	0.371			
126.	18.61	34.89			25.05	295.7	100.	21.57	35.14	24.47	351.2	0.470			
152.	15.16	34.48			25.55	248.3	150.	15.43	34.51	25.52	251.7	0.622			
174.	12.35	34.29			25.99	206.9	200.	11.32	34.47	26.32	175.5	0.730			
201.	11.30	34.48			26.34	174.5	250.	10.88	34.65	26.54	155.9	0.814			
227.	11.08	34.60			26.47	162.4	300.	9.99	34.68	26.72	139.4	0.888			
252.	10.86	34.65			26.55	155.4	400.	8.71	34.59	26.87	127.1	1.022			
278.	10.47	34.67			26.63	147.8	500.	7.75	34.57	26.99	115.8	1.145			
302.	9.94	34.68			26.73	138.6	600.	6.86	34.54	27.10	106.6	1.257			
403.	8.69	34.59			26.87	127.0	700.	6.12	34.53	27.19	98.3	1.361			
504.	7.71	34.57			27.00	115.4	800.	5.51	34.54	27.27	90.9	1.456			
603.	6.83	34.54			27.10	106.4	1000.	4.61	34.56	27.39	80.1	1.630			
803.	5.49	34.54			27.27	90.7	1200.	3.93	34.58	27.48	71.9	1.784			
1004.	4.60	34.56			27.39	79.9	1500.	3.14	34.61	27.58	62.2	1.988			
1204.	3.92	34.58			27.48	71.8									
1504.	3.13	34.61			27.58	62.1									

AFROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 13, STATION 7, 11-30N LAT, 157- 0W LONG, FEB. 11, 1965, 1500 G.C.T.		DRY BULB 24.4 WET BULB 22.1 WIND SPEED 26, DIR. 04 BAR. 11 WEATHER 01 VIS. 7 CLOUD TYPE , COVER 0										
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.92	34.20			22.78	508.1	0.	24.92	34.20	22.78	508.1	0.000
10.	24.96	34.20			22.77	509.7	10.	24.96	34.20	22.77	509.7	0.051
30.Δ	24.96	34.20			22.77	510.5	20.	24.97	34.20	22.77	510.3	0.103
50.	24.96	34.20			22.77	511.2	30.	24.96	34.20	22.77	510.5	0.154
75.	22.33	34.71			23.93	401.9	50.	24.96	34.20	22.77	511.2	0.257
100.	20.06	34.89			24.68	330.6	75.	22.33	34.71	23.93	401.9	0.372
125.	16.26	34.58			25.38	264.0	100.	20.06	34.89	24.68	330.6	0.464
151.	11.91	34.26			26.05	200.4	150.	12.05	34.27	26.03	202.3	0.598
174.	10.83	34.34			26.31	175.9	200.	10.93	34.56	26.47	162.0	0.690
201.	10.95	34.57			26.47	161.7	250.	10.65	34.70	26.62	148.0	0.768
226.	10.98	34.70			26.56	153.2	300.	9.95	34.68	26.73	138.7	0.841
250.	10.65	34.70			26.62	148.0	400.	8.98	34.63	26.85	128.6	0.976
275.	10.29	34.70			26.69	142.4	500.	8.06	34.58	26.96	119.8	1.101
300.	9.95	34.68			26.73	138.7	600.	7.17	34.56	27.07	109.7	1.217
400.	8.98	34.63			26.85	128.6	700.	6.39	34.55	27.17	101.1	1.329
501.	8.05	34.58			26.96	119.7	800.	5.70	34.54	27.25	93.5	1.422
601.	7.16	34.56			27.07	109.6	1000.	4.56	34.55	27.39	80.0	1.597
800.	5.70	34.54			27.25	93.5	1200.	3.78	34.57	27.49	70.8	1.750
992.	4.59	34.55			27.39	80.4						
1187.	3.89	34.57			27.48	72.0						
1483.	3.07	34.60			27.58	62.0						

CROMWELL 13, STATION 7A, 10- 7N LAT, 154- 4W LONG, FEB. 12, 1965, 1200 G.C.T.		DRY BULB 24.9 WET BULB 22.7 WIND SPEED 19, DIR. 04 BAR. 12 WEATHER 03 VIS. 7 CLOUD TYPE 4, COVER 6										
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.08	34.24	5.13		22.76	509.9	0.	25.08	34.24	22.76	509.9	0.000
10.	25.08	34.23	5.14		22.76	511.0	10.	25.08	34.23	22.76	511.0	0.051
20.Δ	25.08	34.23			22.76	511.4	20.	25.08	34.23	22.76	511.4	0.103
30.Δ	25.02	34.24			22.78	509.3	30.	25.02	34.24	22.78	509.3	0.154
51.	21.57	34.80	5.51		24.21	374.2	50.	21.78	34.77	24.13	381.8	0.244
77.	18.31	34.80	4.56		25.06	293.4	75.	18.56	34.82	25.01	297.9	0.330
101.	14.12	34.41	3.47		26.22	230.5	100.	14.28	34.43	25.70	232.7	0.397
126.	12.00	34.50	1.42		26.50	183.8	150.	11.45	34.70	26.48	159.4	0.495
152.	11.44	34.72	0.23		26.50	158.2	200.	10.73	34.72	26.63	146.8	0.572
177.	11.03	34.72	0.56		26.57	151.5	250.	10.07	34.71	26.73	137.3	0.644
202.	10.70	34.72	0.47		26.63	146.3	300.	9.69	34.69	26.78	133.7	0.712
227.	10.31	34.72	0.70		26.70	140.2	400.	8.88	34.65	26.88	125.5	0.843
252.	10.05	34.71	0.56		26.74	137.2	500.	7.84	34.60	27.01	114.9	0.965
278.	9.81	34.70	0.35		26.77	134.5	600.	7.03	34.57	27.10	106.8	1.077
303.	9.68	34.69	0.35		26.78	133.6	700.	6.27	34.56	27.19	98.9	1.180
402.	8.86	34.65	0.47		26.89	125.3	800.	5.60	34.55	27.27	91.4	1.277
504.	7.80	34.60	0.55		27.01	114.5	1000.	4.56	34.56	27.40	79.4	1.449
605.	6.99	34.57	0.61		27.10	106.5	1200.	3.77	34.59	27.51	69.2	1.600
806.	5.56	34.55	0.70		27.27	91.0	1500.	2.99	34.62	27.60	59.7	1.796
1006.	4.53	34.56	1.21		27.40	79.1						
1205.	3.75	34.59			27.51	69.0						
1507.	2.98	34.62	1.89		27.61	59.6						

CROMWELL 13, STATION 8, 11-34N LAT, 154- 2W LONG, FEB. 12, 1965, 2200 G.C.T.		DRY BULB 25.2 WET BULB 22.5 WIND SPEED 12, DIR. 03 BAR. 11 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 8										
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.28	34.36	5.25		22.79	507.1	0.	25.28	34.36	22.79	507.1	0.000
9.	25.28	34.36	5.06		22.79	507.4	10.	25.28	34.36	22.79	507.5	0.051
30.Δ	25.28	34.36			22.79	508.2	20.	25.28	34.36	22.79	507.9	0.102
49.	25.27	34.36	4.91		22.80	508.7	30.	25.28	34.36	22.79	508.2	0.153
74.	21.60	34.84	5.26		24.23	373.0	50.	25.19	34.38	22.84	504.8	0.255
97.	15.81	34.53	5.31		25.45	257.0	75.	21.34	34.83	24.29	366.7	0.365
121.	12.98	34.30	4.00		25.87	216.7	100.	15.32	34.49	25.53	249.5	0.443
146.	11.76	34.39	1.93		26.18	188.0	150.	11.70	34.38	26.19	187.4	0.553
169.	11.12	34.50	1.08		26.38	169.1	200.	10.23	34.73	26.72	137.7	0.635
174.	10.74	34.61	0.53		26.54	154.5	250.	10.02	34.64	26.69	141.4	0.705
217.	10.39	34.64	0.34		26.62	147.3	300.	9.44	34.63	26.77	134.3	0.775
242.	10.07	34.64	0.26		26.68	142.4	400.	8.46	34.61	26.91	122.3	0.904
267.	9.90	34.65	0.23		26.72	139.4	500.	7.56	34.57	27.02	113.4	1.023
291.	9.55	34.63	0.27		26.76	135.6	600.	6.75	34.55	27.12	104.5	1.133
389.	8.57	34.61	0.54		26.90	123.4	700.	5.97	34.54	27.21	95.8	1.234
486.	7.68	34.57	0.73		27.00	114.6	800.	5.33	34.54	27.29	88.6	1.328
584.	6.88	34.55	0.56		27.10	106.1	1000.	4.52	34.55	27.40	79.5	1.498
778.	5.44	34.54	1.00		27.28	89.8	1200.	3.82	34.57	27.48	71.3	1.650
975.	4.62	34.55	1.17		27.38	80.6						
1170.	3.91	34.57	1.34		27.48	72.1						
1466.	3.10	34.59	1.82		27.57	63.0						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.22
SALINITY ERROR TERM AT 200. METERS IS 0.06

AFROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION		9, 12-59N LAT, 154- ON LCNG, FEB. 13, 1965, 0600 G.C.T.										
DRY BULB 25.1	WET BULB 22.6	WIND SPEED 19, DIR. 05		BAR. 14	WEATHER 03	VIS. 7	CLOUD TYPE 9, COVER 7					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.72	34.09	5.25		22.76	510.3	0.	24.72	34.09	22.76	510.3	0.000
10.	24.74	34.20	5.31		22.84	503.3	10.	24.74	34.20	22.84	503.3	0.051
49.	24.63	34.20	5.19		22.87	501.7	20.	24.72	34.23	22.86	501.3	0.102
76.	24.64	34.29	5.14		22.94	496.5	30.	24.69	34.23	22.88	500.4	0.152
100.	18.41	34.58	4.56		24.87	312.6	50.	24.70	34.20	22.85	503.6	0.253
124.	14.92	34.43	4.21		25.57	246.1	75.	24.71	34.28	22.91	498.8	0.379
150.	12.35	34.26	3.28		25.97	208.5	100.	18.41	34.58	24.87	312.6	0.482
173.	10.88	34.26	2.75		26.24	182.6	150.	12.35	34.26	25.97	208.5	0.613
198.	10.51	34.38	1.75		26.40	168.0	200.	10.48	34.39	26.41	166.9	0.708
222.	10.16	34.46	1.09		26.52	156.8	250.	9.80	34.49	26.61	148.9	0.787
248.	9.82	34.49	0.78		26.60	149.5	300.	9.06	34.48	26.72	139.1	0.860
273.	9.49	34.51	0.84		26.67	143.1	400.	8.10	34.52	26.90	123.1	0.992
297.	9.10	34.48	0.70		26.72	139.6	500.	7.28	34.51	27.01	113.5	1.112
396.	8.14	34.52	0.45		26.90	123.6	600.	6.53	34.49	27.10	105.7	1.222
496.	7.31	34.51	0.44		27.01	113.8	700.	5.84	34.51	27.20	96.7	1.324
594.	6.57	34.49	0.55		27.10	106.3	800.	5.28	34.53	27.29	88.5	1.418
792.	5.31	34.53	1.23		27.29	89.0	1000.	4.55	34.56	27.40	79.2	1.588
990.	4.59	34.56	1.15		27.39	79.7	1200.	3.85	34.58	27.49	71.2	1.740
1190.	3.84	34.57	1.31		27.48	71.4						
1491.	3.02	34.59	1.85		27.58	62.1						

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION		10, 14-31N LAT, 154- ON LONG, FEB. 13, 1965, 1600 G.C.T.										
DRY BULB 24.2	WET BULB 22.0	WIND SPEED 24, DIR. 08		BAR. 12	WEATHER 02	VIS. 5	CLOUD TYPE , COVER 8					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.68	34.20	5.70		22.86	501.2	0.	24.68	34.20	22.86	501.2	0.000
10.	24.70	34.19	5.55		22.84	502.9	10.	24.70	34.19	22.84	502.9	0.051
50.	24.70	34.20	5.25		22.85	503.7	20.	24.71	34.19	22.84	503.5	0.101
74.	24.71	34.20	5.15		22.85	504.9	30.	24.71	34.19	22.84	503.8	0.152
100.	23.84	34.48	5.18		23.32	461.0	50.	24.70	34.20	22.85	503.7	0.253
124.	21.21	34.90	5.29		24.38	360.2	75.	24.70	34.21	22.85	504.4	0.380
149.	17.56	34.74	4.59		25.20	282.6	100.	23.84	34.48	23.32	461.0	0.502
173.	13.11	34.31	3.23		25.86	219.8	150.	17.35	34.72	25.23	279.2	0.689
199.	11.94	34.34	2.41		26.11	196.2	200.	11.91	34.34	26.12	195.5	0.808
224.	11.15	34.39	1.76		26.29	179.0	250.	10.34	34.42	26.46	163.7	0.899
248.	10.38	34.41	1.52		26.45	164.7	300.	9.12	34.41	26.66	145.2	0.977
274.	9.91	34.46	1.21		26.57	153.7	400.	8.04	34.48	26.88	125.2	1.113
298.	9.16	34.41	1.22		26.65	145.7	500.	6.98	34.49	27.04	110.5	1.232
397.	8.08	34.48	0.57		26.87	125.7	600.	6.26	34.51	27.15	100.6	1.339
497.	7.00	34.49	0.51		27.04	110.9	700.	5.54	34.51	27.25	92.3	1.436
595.	6.30	34.51	0.54		27.15	101.1	800.	4.94	34.51	27.32	85.7	1.526
794.	4.96	34.51	0.90		27.31	86.0	1000.	4.34	34.55	27.42	77.2	1.691
990.	4.38	34.55	1.01		27.41	77.8	1200.	3.70	34.59	27.51	68.6	1.839
1188.	3.67	34.59	1.33		27.52	67.8						
1486.	2.98	34.61	1.77		27.60	60.2						

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION		11, 16- ON LAT, 153-59N LCNG, FEB. 14, 1965, 0100 G.C.T.										
DRY BULB 24.4	WET BULB 21.8	WIND SPEED 13, DIR. 00		BAR. 15	WEATHER 02	VIS. 6	CLOUD TYPE , COVER 9					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.15	33.85	5.32		22.75	511.4	0.	24.15	33.85	22.75	511.4	0.000
11.	24.16	33.84	5.37		22.74	512.8	10.	24.16	33.84	22.74	512.9	0.052
30.A	24.08	33.96			22.85	502.6	20.	24.13	33.89	22.78	508.9	0.103
51.	23.98	34.08	5.21		22.97	491.9	30.	24.08	33.96	22.85	502.6	0.154
76.	23.92	34.17	5.42		23.06	484.7	50.	23.98	34.07	22.97	492.4	0.254
99.	22.39	34.74	5.66		23.93	402.2	75.	23.94	34.16	23.05	485.8	0.377
124.	20.34	34.98	5.29		24.68	332.0	100.	22.32	34.76	23.97	399.0	0.489
149.	17.59	34.68	4.88		25.15	287.6	150.	17.45	34.66	25.17	285.7	0.661
174.	14.28	34.31	3.84		25.61	243.1	200.	11.92	34.23	26.03	203.8	0.785
199.	11.97	34.23	2.99		26.02	204.9	250.	10.49	34.42	26.43	166.1	0.878
223.	11.09	34.30	2.03		26.23	184.5	300.	9.79	34.50	26.62	149.1	0.957
247.	10.55	34.41	1.37		26.42	167.6	400.	8.35	34.48	26.83	130.0	1.098
272.	10.12	34.46	1.15		26.53	157.2	500.	7.07	34.46	27.00	114.1	1.221
296.	9.84	34.50	0.90		26.61	150.1	600.	6.24	34.47	27.13	103.1	1.331
394.	8.44	34.48	0.48		26.82	131.1	700.	5.61	34.49	27.22	94.5	1.431
493.	7.14	34.46	0.48		27.00	115.0	800.	5.11	34.51	27.30	87.8	1.523
591.	6.30	34.47	0.50		27.12	104.0	1000.	4.33	34.53	27.40	78.5	1.692
787.	5.17	34.51	0.75		27.29	88.6	1200.	3.74	34.56	27.48	71.0	1.843
983.	4.38	34.53	1.28		27.39	79.2						
1179.	3.83	34.56	1.09		27.48	71.9						
1474.	3.12	34.59	1.60		27.57	63.3						

AFROM BT DATA

Table 3.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION 12, 17-29N LAT, 153-58W LONG, FEB. 14, 1965, 1000 G.C.T.													
DRY BULB 24.2		WET BULB 21.8		WIND SPEED 20, DIR. 11		BAR. 16		WEATHER 02		VIS. 5		CLOUD TYPE , COVER 8	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN-DPTH.	
0.	24.31	34.17	5.25		22.94	492.8	0.	24.31	34.17	22.94	492.8	0.000	
11.	24.34	34.18	5.20		22.94	493.4	10.	24.34	34.18	22.94	493.6	0.050	
48.	24.14	34.65	5.18		23.36	455.2	20.	24.32	34.27	23.02	486.7	0.099	
72.	23.95	34.89	5.17		23.59	433.5	30.	24.27	34.39	23.12	477.3	0.148	
97.	23.29	34.95	5.16		23.83	411.7	50.	24.13	34.67	23.38	453.4	0.241	
121.	22.58	35.11	5.11		24.16	381.5	75.	23.89	34.90	23.62	431.1	0.353	
145.	20.60	34.96	4.98		24.59	340.8	100.	23.24	34.98	23.87	408.5	0.459	
169.	18.98	34.82	4.49		24.91	311.2	150.	20.26	34.93	24.66	334.5	0.646	
195.	16.95	34.69	4.42		25.31	273.7	200.	16.50	34.64	25.37	267.5	0.797	
218.	14.83	34.44	4.17		25.60	246.2	250.	12.20	34.28	26.01	206.7	0.917	
242.	12.73	34.30	2.95		25.92	215.0	300.	10.41	34.37	26.41	168.9	1.012	
267.	11.34	34.28	2.70		26.17	191.4	400.	8.44	34.40	26.76	137.0	1.166	
291.	10.64	34.36			26.36	173.8	500.	7.24	34.40	26.93	121.3	1.296	
380.	8.75	34.40			26.71	141.5	600.	6.38	34.40	27.05	110.1	1.413	
475.	7.51	34.40			26.90	124.5	700.	5.74	34.45	27.18	99.1	1.519	
571.	6.59	34.39			27.02	113.6	800.	5.22	34.50	27.27	90.4	1.615	
762.	5.42	34.49			27.24	93.0	1000.	4.36	34.52	27.39	79.9	1.787	
953.	4.53	34.51	0.99		27.36	82.2	1200.	3.70	34.55	27.48	71.2	1.940	
1147.	3.90	34.55	1.13		27.46	73.3							
1443.	3.10	34.58	1.68		27.56	63.5							

CROMWELL 13, STATION 13, 18-59N LAT, 153-58W LONG, FEB. 14, 1965, 1900 G.C.T.													
DRY BULB 23.0		WET BULB 20.9		WIND SPEED 13, DIR. 19		BAR. 19		WEATHER 03		VIS. 7		CLOUD TYPE 6, COVER 8	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN-DPTH.	
0.	23.00	35.08	5.27		24.01	390.6	0.	23.00	35.08	24.01	390.6	0.000	
10.	23.06	35.08	5.38		24.00	392.6	10.	23.06	35.08	24.00	392.6	0.039	
30.Δ	23.05	35.08			24.00	393.1	20.	23.07	35.08	24.00	393.1	0.079	
49.	23.04	35.08	5.28		24.00	393.6	30.	23.05	35.08	24.00	393.1	0.119	
73.	22.94	35.11	5.25		24.05	389.6	50.	23.04	35.08	24.00	393.6	0.198	
97.	22.43	35.28	5.29		24.33	364.3	75.	22.92	35.13	24.07	387.9	0.296	
121.	21.17	35.21	5.06		24.63	336.7	100.	22.29	35.28	24.37	360.8	0.391	
146.	20.13	35.21	5.05		24.91	310.8	150.	19.94	35.18	24.94	308.1	0.559	
168.	18.94	35.02	4.87		25.07	295.8	200.	16.38	34.65	25.41	263.6	0.703	
194.	16.87	34.72	4.63		25.35	269.6	250.	12.56	34.27	25.94	213.9	0.824	
218.	14.99	34.48	4.57		25.59	246.7	300.	10.01	34.17	26.33	176.8	0.922	
241.	13.55	34.34	4.57		25.79	228.1	400.	8.86	34.48	26.76	137.4	1.081	
255.	12.02	34.24	4.57		26.01	206.4	500.	7.78	34.50	26.94	121.4	1.211	
277.	10.70	34.14	4.64		26.18	190.7	600.	6.66	34.46	27.06	109.5	1.328	
369.	9.23	34.45	1.00		26.67	145.3	700.	5.68	34.42	27.15	101.1	1.434	
465.	8.17	34.50	0.54		26.88	126.8	800.	5.06	34.42	27.23	94.0	1.533	
554.	7.18	34.49	0.71		27.01	114.3	1000.	4.38	34.50	27.37	81.4	1.711	
740.	5.35	34.40	0.78		27.18	98.5	1200.	3.75	34.55	27.48	71.9	1.866	
926.	4.64	34.48	1.01		27.33	85.6							
1113.	4.01	34.53	1.17		27.43	75.8							
1393.	3.23	34.57	1.57		27.54	65.5							

TEMPERATURE ERROR TERM AT 300. METERS IS 0.19

CROMWELL 13, STATION 14, 20-30N LAT, 153-56W LONG, FEB. 15, 1965, 0400 G.C.T.													
DRY BULB 22.2		WET BULB 20.0		WIND SPEED 10, DIR. 13		BAR. 15		WEATHER 50		VIS. 7		CLOUD TYPE 8, COVER 8	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN-DPTH.	
0.	23.13	34.74	5.30		23.72	418.7	0.	23.13	34.74	23.72	418.7	0.000	
11.	23.17	34.74	5.28		23.71	420.2	10.	23.17	34.74	23.71	420.1	0.042	
30.Δ	23.16	34.76			23.73	419.2	20.	23.17	34.74	23.71	420.5	0.085	
51.	23.13	34.91	5.24		23.85	408.4	30.	23.16	34.76	23.73	419.2	0.127	
77.	22.44	35.07	5.27		24.17	379.0	50.	23.14	34.90	23.84	409.1	0.210	
101.	22.05	35.20	5.24		24.38	360.0	75.	22.50	35.06	24.14	381.4	0.310	
126.	20.25	35.01	4.75		24.72	327.6	100.	22.08	35.20	24.37	360.8	0.403	
153.	18.46	34.87	4.62		25.08	294.5	150.	18.64	34.88	25.04	297.8	0.569	
178.	17.24	34.75	4.74		25.28	275.4	200.	15.22	34.47	25.53	251.8	0.708	
203.	14.93	34.43	4.56		25.57	248.6	250.	11.93	34.16	25.97	210.6	0.824	
227.	13.32	34.28	4.55		25.79	227.5	300.	9.83	34.07	26.28	181.6	0.923	
252.	11.82	34.15	4.81		25.98	209.3	400.	7.37	34.07	26.65	145.8	1.088	
278.	10.57	34.08	4.74		26.16	192.9	500.	6.27	34.23	26.93	119.9	1.223	
303.	9.74	34.07	4.29		26.29	180.2	600.	5.24	34.29	27.11	103.6	1.335	
403.	7.32	34.07	2.60		26.66	145.0	700.	4.68	34.37	27.24	91.7	1.434	
504.	6.24	34.24	1.21		26.94	119.0	800.	4.39	34.46	27.33	83.0	1.523	
604.	5.20	34.29	0.80		27.11	103.1	1000.	3.87	34.52	27.44	73.9	1.681	
805.	4.38	34.46	0.95		27.34	82.6	1200.	3.29	34.55	27.52	66.4	1.823	
1006.	3.86	34.52	1.21		27.44	73.8	1500.	2.67	34.60	27.62	57.4	2.012	
1208.	3.27	34.55	1.52		27.52	66.1							
1510.	2.65	34.60	1.82		27.62	57.1							

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 21.9		13, STATION WET BULB 19.7		15, 22- 4N LAT, 153-52W LONG, FEB. 15, 1965, 1400 G.C.T. WIND SPEED 08, DIR. 23 BAR. 17 WEATHER 02			VIS. 7		CLOUD TYPE 6, COVER 7			
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.94	34.90	5.84		23.90	401.9	0.	22.94	34.90	23.90	401.9	0.000
10.	22.87	34.92	5.30		23.93	398.9	10.	22.87	34.92	23.93	398.9	0.040
30.Δ	22.68	35.04			24.08	385.9	20.	22.78	34.98	24.00	392.9	0.080
50.	22.48	35.13	5.26		24.20	374.7	30.	22.68	35.04	24.08	385.9	0.119
74.	22.30	35.22	5.22		24.32	364.2	50.	22.48	35.13	24.20	374.7	0.196
98.	21.39	35.21	5.06		24.57	341.6	75.	22.27	35.22	24.33	363.4	0.289
122.	20.42	35.13	4.98		24.77	323.1	100.	21.31	35.20	24.58	339.9	0.378
147.	19.51	35.06	4.83		24.95	308.2	150.	19.40	35.05	24.98	308.3	0.540
170.	18.60	34.96	4.91		25.11	291.9	200.	17.07	34.75	25.32	272.4	0.685
194.	17.41	34.80	4.92		25.28	276.2	250.	13.93	34.36	25.72	234.7	0.813
218.	15.96	34.58	4.76		25.45	260.3	300.	11.22	34.08	26.04	204.7	0.924
242.	14.35	34.39	4.81		25.66	240.6	400.	8.36	34.04	26.49	162.2	1.109
266.	13.11	34.29	4.95		25.84	223.7	500.	6.26	34.06	26.80	132.7	1.258
288.	11.74	34.12	4.81		25.97	210.9	600.	5.31	34.17	27.01	113.2	1.382
383.	8.83	34.05	3.93		26.42	168.6	700.	4.82	34.31	27.17	98.2	1.489
475.	6.63	34.04	2.45		26.73	138.7	800.	4.56	34.42	27.28	88.1	1.583
569.	5.53	34.13	1.29		26.95	118.8	1000.	4.07	34.51	27.41	77.3	1.750
756.	4.68	34.38	0.74		27.24	91.7	1200.	3.54	34.56	27.50	68.7	1.898
944.	4.24	34.49	1.01		27.38	80.0						
1131.	3.66	34.53	1.25		27.47	71.7						
1415.	3.02	34.58	1.62		27.57	62.4						

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 23.2		13, STATION WET BULB 20.8		16, 23-28N LAT, 153-58W LONG, FEB. 15, 1965, 2200 G.C.T. WIND SPEED 10, DIR. 09 BAR. 16 WEATHER 03			VIS. 7		CLOUD TYPE 8, COVER 6			
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.38	34.82	5.25		23.71	419.8	0.	23.38	34.82	23.71	419.8	0.000
9.	23.34	34.85	5.26		23.74	416.9	10.	23.34	34.85	23.75	416.6	0.042
30.Δ	23.22	34.91			23.82	410.1	20.	23.28	34.88	23.78	413.5	0.084
50.	23.08	35.00	5.24		23.93	400.5	30.	23.22	34.91	23.82	410.1	0.125
75.	22.66	35.14	5.22		24.16	379.8	50.	23.08	35.00	23.93	400.5	0.207
100.	22.24	35.19	5.14		24.31	365.8	75.	22.66	35.14	24.16	379.8	0.305
126.	21.00	35.17	4.92		24.64	335.3	100.	22.24	35.19	24.31	365.8	0.399
152.	19.46	35.05	4.74		24.96	305.8	150.	19.58	35.06	24.94	307.9	0.569
176.	18.06	34.84	4.54		25.15	287.9	200.	16.69	34.68	25.36	268.5	0.714
203.	16.50	34.66	4.79		25.39	265.9	250.	13.73	34.35	25.76	231.4	0.840
228.	14.58	34.42	4.78		25.64	242.8	300.	11.30	34.19	26.11	197.9	0.949
253.	13.62	34.34	4.88		25.78	229.8	400.	8.88	34.08	26.44	167.2	1.133
279.	11.89	34.23	5.05		26.03	205.3	500.	6.61	34.05	26.74	138.0	1.287
303.	11.25	34.19	4.94		26.12	197.2	600.	5.38	34.13	26.96	117.2	1.416
405.	8.76	34.08	4.57		26.46	165.7	700.	4.78	34.25	27.13	101.7	1.526
507.	6.47	34.05	2.29		26.76	136.2	800.	4.46	34.37	27.26	90.2	1.623
607.	5.33	34.14	1.12		26.98	115.9	1000.	3.98	34.49	27.40	77.7	1.793
809.	4.44	34.38	0.73		27.27	89.3	1200.	3.40	34.55	27.51	67.8	1.940
1011.	3.96	34.49	1.08		27.41	77.2	1500.	2.84	34.58	27.59	60.8	2.136
1213.	3.36	34.55	1.51		27.51	67.2						
1515.	2.82	34.58	1.71		27.59	60.6						

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 22.0		13, STATION WET BULB 19.8		17, 23-26N LAT, 150-55W LONG, FEB. 16, 1965, 1400 G.C.T. WIND SPEED 13, DIR. 15 BAR. 14 WEATHER 02			VIS. 7		CLOUD TYPE 6, COVER 4			
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.62	34.95			24.02	389.6	0.	22.62	34.95	24.02	389.6	0.000
10.	22.62	34.96			24.03	389.2	10.	22.62	34.96	24.03	389.2	0.039
30.Δ	22.66	34.97			24.03	390.4	20.	22.64	34.97	24.03	389.8	0.078
52.	22.61	34.98			24.05	389.1	30.	22.66	34.97	24.03	390.4	0.118
77.	22.11	35.18			24.34	362.1	50.	22.62	34.98	24.04	389.7	0.196
101.	21.56	35.26			24.56	342.6	75.	22.16	35.16	24.32	364.7	0.291
126.	20.12	35.15			24.86	314.2	100.	21.59	35.26	24.55	343.4	0.381
153.	19.30	35.09			25.03	299.0	150.	19.38	35.10	25.02	300.2	0.543
178.	18.40	34.95			25.15	288.1	200.	17.13	34.74	25.30	274.2	0.687
202.	16.99	34.72			25.32	272.6	250.	13.40	34.34	25.82	225.4	0.813
228.	14.82	34.46			25.61	244.8	300.	11.63	34.20	26.06	203.5	0.922
252.	13.29	34.33			25.83	223.9	400.	8.45	34.04	26.48	163.6	1.107
278.	12.34	34.26			25.97	211.5	500.	6.39	34.04	26.76	135.9	1.258
303.	11.54	34.19			26.07	202.4	600.	5.24	34.15	27.00	114.0	1.384
404.	8.33	34.04			26.49	162.1	700.	4.68	34.28	27.16	98.5	1.492
505.	6.31	34.04			26.78	134.8	800.	4.38	34.39	27.28	87.7	1.586
607.	5.19	34.16			27.01	112.7	1000.	3.90	34.50	27.42	75.9	1.751
808.	4.37	34.40			27.29	87.0	1200.	3.38	34.54	27.50	68.2	1.897
1010.	3.88	34.50			27.42	75.5	1500.	2.81	34.59	27.60	59.7	2.092
1211.	3.35	34.54			27.51	67.9						
1515.	2.78	34.59			27.60	59.4						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA						DERIVED DATA			INTERPOLATED DATA				
CROMWELL 13, STATION 18, 22- ON LAT, 150-58W LONG, FEB. 16, 1965, 2300 G.C.T. DRY BULB 24.2 WET BULB 21.0 WIND SPEED 10, DIR. 17 BAR. 14 WEATHER 21 VIS. 7 CLOUD TYPE 6, COVER 6													
DEPTH	TEMP.	SAL.	OKY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.	
0.	23.47	34.14			23.17	471.4	0.	23.47	34.14	23.17	471.4	0.000	
9.	23.33	34.15			23.22	467.1	10.	23.32	34.15	23.22	466.9	0.047	
30.Δ	23.28	34.18			23.25	464.4	20.	23.27	34.16	23.24	465.2	0.094	
50.	23.32	34.26			23.30	460.5	30.	23.28	34.18	23.25	464.4	0.141	
75.	22.98	34.61			23.66	426.8	50.	23.32	34.26	23.30	460.5	0.234	
99.	19.37	34.58			24.63	335.8	75.	22.98	34.61	23.66	426.8	0.346	
124.	17.26	34.62			25.18	283.6	100.	19.28	34.58	24.65	333.3	0.442	
149.	14.29	34.36			25.65	239.0	150.	14.22	34.35	25.66	238.0	0.566	
173.	13.06	34.28			25.84	221.1	200.	11.84	34.30	26.09	197.4	0.695	
199.	11.88	34.30			26.09	198.1	250.	9.42	34.15	26.41	168.0	0.787	
224.	10.76	34.24			26.25	183.2	300.	8.42	34.18	26.59	151.0	0.868	
248.	9.50	34.16			26.40	168.6	400.	6.45	34.20	26.88	123.5	1.006	
274.	8.76	34.09			26.46	162.6	500.	6.23	34.37	27.05	109.0	1.124	
298.	8.46	34.18			26.58	151.8	600.	5.74	34.42	27.15	100.2	1.229	
396.	6.47	34.19			26.87	124.3	700.	5.20	34.45	27.24	92.4	1.327	
497.	6.24	34.37			27.05	109.3	800.	4.71	34.47	27.31	85.8	1.417	
596.	5.76	34.42			27.15	100.6	1000.	4.14	34.52	27.41	77.0	1.582	
795.	4.73	34.47			27.31	86.1	1200.	3.57	34.55	27.50	69.5	1.730	
985.	4.19	34.52			27.41	77.6							
1178.	3.56	34.54			27.49	70.1							
1472.	3.02	34.59			27.58	62.0							

CROMWELL 13, STATION 19, 20-29N LAT, 150-59W LONG, FEB. 17, 1965, 0900 G.C.T. DRY BULB 22.9 WET BULB 19.7 WIND SPEED 16, DIR. 35 BAR. 16 WEATHER 01 VIS. 6 CLOUD TYPE 4, COVER 7												
DEPTH	TEMP.	SAL.	OKY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.50	34.48			23.42	447.7	0.	23.50	34.48	23.42	447.7	0.000
10.	23.61	34.53			23.42	447.5	10.	23.61	34.53	23.42	447.5	0.045
30.Δ	23.58	34.64			23.51	439.5	20.	23.63	34.58	23.46	444.7	0.090
50.	23.35	34.79			23.69	423.1	30.	23.58	34.64	23.51	439.5	0.135
75.	23.25	35.01			23.89	405.4	50.	23.35	34.79	23.69	423.1	0.221
99.	22.83	35.10			24.08	388.2	75.	23.25	35.01	23.89	405.4	0.326
123.	21.91	35.29			24.48	350.6	100.	22.80	35.11	24.09	386.9	0.426
148.	20.16	35.18			24.88	313.8	150.	20.02	35.16	24.90	311.7	0.602
173.	18.38	34.91			25.13	290.4	200.	16.46	34.67	25.40	264.4	0.747
197.	16.68	34.70			25.38	266.9	250.	11.57	34.16	26.04	203.6	0.845
222.	14.62	34.43			25.63	242.7	300.	9.67	34.10	26.32	177.0	0.961
246.	11.84	34.18			26.00	207.3	400.	6.97	34.13	26.76	135.8	1.119
271.	10.58	34.13			26.19	189.2	500.	6.34	34.32	27.00	114.2	1.245
295.	9.84	34.10			26.30	179.5	600.	5.15	34.32	27.14	100.4	1.353
392.	7.05	34.11			26.73	138.1	700.	4.72	34.40	27.25	90.2	1.449
491.	6.45	34.32			26.98	115.7	800.	4.55	34.49	27.34	82.7	1.537
589.	5.22	34.31			27.12	101.7	1000.	3.91	34.53	27.44	73.8	1.695
784.	4.60	34.48			27.33	83.6	1200.	3.37	34.56	27.52	66.2	1.837
972.	3.99	34.52			27.43	75.0						
1165.	3.45	34.56			27.51	67.2						
1458.	2.82	34.60			27.60	58.8						

CROMWELL 13, STATION 20, 19- ON LAT, 151- ON LONG, FEB. 17, 1965, 1700 G.C.T. DRY BULB 23.0 WET BULB 19.8 WIND SPEED 14, DIR. 35 BAR. 15 WEATHER 03 VIS. 7 CLOUD TYPE 8, COVER 6												
DEPTH	TEMP.	SAL.	OKY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.71	34.55			23.41	448.5	0.	23.71	34.55	23.41	448.5	0.000
10.	23.73	34.55			23.40	449.4	10.	23.73	34.55	23.40	449.4	0.045
30.Δ	23.70	34.70			23.52	438.6	20.	23.72	34.61	23.45	445.0	0.090
51.	23.63	34.82			23.63	428.7	30.	23.70	34.70	23.52	438.6	0.135
77.	23.53	34.94			23.75	418.3	50.	23.63	34.81	23.63	429.2	0.222
102.	21.96	35.02			24.26	370.6	75.	23.57	34.93	23.74	419.8	0.329
128.	20.86	35.08			24.61	338.3	100.	22.10	35.01	24.22	374.7	0.429
153.	19.76	35.08			24.90	311.2	150.	19.91	35.09	24.87	314.2	0.603
178.	18.04	34.82			25.14	289.0	200.	16.83	34.70	25.35	270.1	0.750
204.	16.58	34.68			25.39	266.3	250.	12.78	34.24	25.87	220.4	0.874
229.	14.20	34.39			25.69	237.2	300.	10.07	34.09	26.25	184.3	0.976
254.	12.53	34.22			25.90	217.4	400.	7.17	34.07	26.68	142.9	1.141
279.	10.78	34.10			26.13	195.0	500.	5.85	34.21	26.97	116.4	1.272
305.	9.95	34.09			26.27	182.2	600.	5.51	34.38	27.14	100.5	1.381
405.	7.05	34.07			26.70	141.2	700.	5.11	34.45	27.25	91.0	1.478
507.	5.81	34.22			26.98	114.9	800.	4.68	34.48	27.32	84.8	1.567
608.	5.50	34.39			27.15	99.6	1000.	4.10	34.53	27.42	76.1	1.730
810.	4.64	34.48			27.33	84.4	1200.	3.52	34.56	27.51	68.4	1.876
1013.	4.07	34.53			27.43	75.6	1500.	2.82	34.59	27.60	59.9	2.071
1213.	3.48	34.56			27.51	67.9						
1515.	2.79	34.59			27.60	59.5						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 13, STATION 21, 17-27N LAT, 150-59W LONG, FEB. 18, 1965, 0200 G.C.T.				WIND SPEED 15, DIR. 01 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.	24.28	34.21			22.98	489.1	0.	24.28	34.21	22.98	489.1	0.000
11.	24.26	34.25			23.02	486.1	10.	24.26	34.25	23.02	486.3	0.049
30. Δ	24.16	34.29			23.08	481.1	20.	24.22	34.27	23.05	483.5	0.098
52.	24.10	34.32			23.12	478.0	30.	24.16	34.29	23.08	481.1	0.147
78.	24.21	34.64			23.33	459.1	50.	24.10	34.31	23.11	478.5	0.243
103.	22.99	34.95			23.92	403.6	75.	24.23	34.60	23.29	462.7	0.362
129.	20.94	34.90			24.45	353.4	100.	23.19	34.92	23.84	411.0	0.472
155.	20.75	35.15			24.70	331.3	150.	20.75	35.10	24.66	334.6	0.660
179.	19.05	35.13			24.92	310.7	200.	17.95	34.86	25.20	284.7	0.816
205.	17.42	34.78			25.26	278.2	250.	13.05	34.29	25.85	222.4	0.944
230.	14.90	34.45			25.59	247.3	300.	10.44	34.28	26.33	176.7	1.044
255.	12.63	34.26			25.91	216.4	400.	8.36	34.34	26.72	140.2	1.204
280.	11.00	34.23			26.20	189.3	500.	7.68	34.46	26.92	123.0	1.337
305.	10.35	34.29			26.36	174.3	600.	6.80	34.48	27.06	110.2	1.455
407.	8.25	34.34			26.74	138.8	700.	6.00	34.48	27.17	100.5	1.561
509.	7.65	34.47			26.93	121.9	800.	5.37	34.49	27.25	92.9	1.659
610.	6.70	34.48			27.07	109.1	1000.	4.49	34.53	27.38	80.9	1.835
813.	5.30	34.49			27.26	92.0	1200.	3.81	34.55	27.47	72.7	1.990
1014.	4.44	34.53			27.39	80.2	1500.	3.10	34.60	27.58	62.6	2.196
1216.	3.76	34.55			27.47	72.1	2000.	2.21	34.65	27.70	50.6	2.484
1508.	3.08	34.60			27.58	62.3	2500.	1.85	34.67	27.74	46.7	2.731
1520.	3.03	34.60			27.59	61.7	3000.	1.64	34.69	27.77	44.3	2.964
2000.	2.21	34.65			27.70	50.6	4000.	1.42	34.71	27.80	42.4	3.408
2504.	1.85	34.67			27.74	46.7						
3511.	1.52	34.70			27.79	43.1						
4519.**	1.44**	34.71**			27.80	43.8						

CROMWELL 13, STATION 22, 16- ON LAT, 151- 2W LONG, FEB. 18, 1965, 1300 G.C.T.				WIND SPEED 21, DIR. 03 BAR. 15 WEATHER 02 VIS. 6 CLOUD TYPE 6, COVER 6								
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.03	34.07			22.95	492.1	0.	24.03	34.07	22.95	492.1	0.000
10.	24.06	34.07			22.94	493.3	10.	24.06	34.07	22.94	493.3	0.050
50.	23.97	34.08			22.98	491.6	20.	24.06	34.02	22.90	497.7	0.100
75.	23.80	34.68			23.48	444.5	30.	24.05	34.00	22.89	498.8	0.150
99.	21.22	34.88			24.36	361.0	50.	23.97	34.08	22.98	491.6	0.250
123.	19.58	34.99			24.88	312.1	75.	23.80	34.68	23.48	444.5	0.367
148.	17.74	34.82			25.22	280.9	100.	21.14	34.89	24.39	358.5	0.469
172.	14.19	34.38			25.69	236.1	150.	17.44	34.78	25.26	277.0	0.629
197.	12.34	34.35			26.04	202.9	200.	12.19	34.37	26.08	198.8	0.749
221.	11.45	34.52			26.34	174.7	250.	11.17	34.64	26.48	161.8	0.839
246.	11.22	34.63			26.47	163.1	300.	10.42	34.64	26.62	149.7	0.918
271.	10.87	34.65			26.55	156.0	400.	9.30	34.64	26.80	133.4	1.061
295.	10.49	34.64			26.61	150.7	500.	8.31	34.57	26.91	124.7	1.191
392.	9.38	34.64			26.79	134.2	600.	7.27	34.53	27.03	113.5	1.311
492.	8.40	34.57			26.90	125.6	700.	6.41	34.51	27.13	104.0	1.421
589.	7.37	34.53			27.02	114.7	800.	5.74	34.51	27.22	96.3	1.523
786.	5.62	34.51			27.21	97.1	1000.	4.80	34.52	27.34	85.2	1.706
982.	4.88	34.52			27.33	86.3	1200.	4.02	34.55	27.45	75.5	1.869
1177.	4.10	34.55			27.44	76.0						
1471.	3.26	34.58			27.55	65.7						

CROMWELL 13, STATION 23, 14-30N LAT, 151- 1W LONG, FEB. 18, 1965, 2200 G.C.T.				WIND SPEED 22, DIR. 03 BAR. 17 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.	24.30	33.99			22.81	505.5	0.	24.30	33.99	22.81	505.5	0.000
10.	24.24	34.00			22.84	503.5	10.	24.24	34.00	22.84	503.5	0.051
30.	24.18	34.00			22.85	502.5	20.	24.21	34.00	22.85	502.9	0.101
50.	24.06	34.00			22.89	499.9	30.	24.18	34.00	22.85	502.5	0.152
75.	21.21	34.67			24.21	375.1	50.	24.06	34.00	22.89	499.9	0.253
99.	19.50	34.78			24.74	324.5	75.	21.21	34.67	24.21	375.1	0.363
124.	18.62	34.81			24.99	301.7	100.	19.47	34.79	24.75	323.5	0.451
149.	16.00	34.51			25.39	264.1	150.	15.86	34.50	25.41	262.0	0.599
173.	12.82	34.29			25.90	215.7	200.	10.95	34.27	26.24	183.5	0.711
198.	11.06	34.28			26.22	184.9	250.	10.31	34.47	26.51	159.0	0.797
223.	10.20	34.26			26.36	172.2	300.	9.28	34.47	26.68	143.0	0.874
246.	10.46	34.48			26.49	160.9	400.	7.95	34.47	26.89	124.4	1.008
272.	9.38	34.39			26.60	150.2	500.	7.09	34.51	27.04	110.8	1.127
297.	9.31	34.47			26.67	143.6	600.	6.32	34.48	27.12	103.6	1.235
395.	8.00	34.47			26.88	125.2	700.	5.68	34.50	27.22	95.3	1.334
493.	7.15	34.51			27.03	111.4	800.	5.15	34.52	27.30	87.6	1.428
591.	6.38	34.48			27.11	104.4	1000.	4.30	34.54	27.41	77.5	1.595
788.	5.21	34.52			27.29	88.4	1200.	3.65	34.56	27.50	69.7	1.745
986.	4.35	34.54			27.41	78.1						
1182.	3.73	34.56			27.49	70.7						
1481.	3.00	34.60			27.59	61.1						

ΔFROM BT DATA
**EXTRAPOLATED DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA					
CROMWELL 13, STATION 24, 13- ON LAT, 151- ON LONG, FEB. 19, 1965, 0800 G.C.T.													
DRY BULB 24.5		WET BULB 21.8		WIND SPEED 24, DIR. 05		BAR. 12		WEATHER 02		VIS. 7		CLOUD TYPE , COVER 2	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN-DPTH.	
0.	24.92	34.33			22.88	498.8	0.	24.92	34.33	22.88	498.8	0.000	
9.	24.93	34.34			22.89	498.7	10.	24.93	34.34	22.89	498.7	0.050	
48.	24.92	34.34			22.89	499.9	20.	24.94	34.35	22.89	499.0	0.100	
72.	24.82	34.31			22.90	500.1	30.	24.94	34.35	22.89	499.3	0.151	
96.	20.48	34.82			24.52	346.1	50.	24.99	34.33	22.86	503.0	0.252	
121.	15.97	34.48			25.37	264.8	75.	24.39	34.38	23.08	482.8	0.376	
144.	12.75	34.34			25.95	210.0	100.	19.72	34.79	24.69	329.4	0.478	
167.	11.56	34.48			26.29	178.3	150.	12.30	34.36	26.06	200.0	0.612	
192.	11.21	34.63			26.47	161.6	200.	11.10	34.64	26.50	158.8	0.702	
216.	10.88	34.65			26.54	154.9	250.	10.39	34.65	26.63	147.2	0.779	
240.	10.52	34.65			26.61	149.3	300.	9.86	34.65	26.72	139.7	0.852	
265.	10.21	34.65			26.66	144.5	400.	8.87	34.61	26.85	128.3	0.987	
288.	9.97	34.65			26.70	141.0	500.	7.71	34.60	27.02	113.4	1.109	
384.	9.06	34.61			26.82	131.1	600.	6.78	34.52	27.09	107.1	1.220	
481.	7.91	34.61			27.00	115.0	700.	6.06	34.50	27.17	99.9	1.325	
576.	6.98	34.53			27.07	108.8	800.	5.48	34.51	27.26	92.4	1.422	
770.	5.65	34.51			27.23	94.7	1000.	4.55	34.55	27.40	79.6	1.596	
961.	4.71	34.55			27.37	81.6	1200.	3.82	34.58	27.49	70.5	1.748	
1155.	3.98	34.57			27.47	72.8							
1445.	3.17	34.60			27.57	62.9							

CROMWELL 13, STATION 25, 11-30N LAT, 150-57W LONG, FEB. 19, 1965, 1700 G.C.T.													
DRY BULB 24.3		WET BULB 22.0		WIND SPEED 35, DIR. 04		BAR. 16		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.	
0.	24.56	34.10			22.82	505.0	0.	24.56	34.10	22.82	505.0	0.000	
11.	24.57	34.10			22.81	505.7	10.	24.57	34.10	22.81	505.7	0.051	
30A	24.55	34.10			22.82	505.9	20.	24.56	34.10	22.82	505.8	0.102	
48.	24.56	34.10			22.82	506.8	30.	24.55	34.10	22.82	505.9	0.153	
72.	20.25	34.80			24.56	340.9	50.	24.26	34.16	22.95	494.0	0.254	
95.	18.09	34.70			25.04	296.1	75.	19.94	34.81	24.65	332.2	0.358	
119.	14.68	34.37			25.57	245.4	100.	17.37	34.62	25.15	285.2	0.435	
143.	12.67	34.49			26.08	197.4	150.	12.34	34.57	26.21	185.8	0.554	
166.	11.81	34.72			26.43	165.2	200.	11.12	34.72	26.56	153.3	0.639	
190.	11.25	34.72			26.53	155.7	250.	10.64	34.72	26.64	146.1	0.715	
213.	10.99	34.73			26.59	150.9	300.	10.23	34.72	26.71	140.7	0.787	
237.	10.76	34.73			26.63	147.4	400.	9.49	34.68	26.81	133.1	0.925	
260.	10.55	34.72			26.66	145.1	500.	8.67	34.64	26.91	125.2	1.056	
283.	10.36	34.72			26.69	142.3	600.	7.65	34.59	27.02	114.8	1.177	
377.	9.65	34.69			26.79	134.6	700.	6.71	34.56	27.13	104.7	1.288	
473.	8.93	34.65			26.88	127.8	800.	5.94	34.55	27.22	96.2	1.389	
567.	7.99	34.60			26.98	118.5	1000.	4.87	34.55	27.36	84.0	1.572	
757.	6.22	34.55			27.19	99.3	1200.	4.02	34.57	27.46	74.0	1.732	
949.	5.14	34.55			27.32	87.1	1500.	3.26	34.60	27.56	64.6	1.943	
1142.	4.21	34.56			27.44	76.3	2000.	2.34	34.64	27.68	52.9	2.241	
1432.	3.42	34.59			27.54	66.7	2500.	1.92	34.66	27.73	48.3	2.499	
1984.	2.36	34.64			27.64	53.2	3000.	1.76	34.68	27.76	46.4	2.741	
2488.	1.93	34.66			27.73	48.4	4000.	1.48	34.70	27.80	43.6	3.202	
2992.	1.76	34.68			27.76	46.5	5000.	1.42	34.71	27.80	44.6	3.657	
3949.	1.44	34.70			27.80	43.1							
5011.	1.42	34.71			27.80	44.7							

CROMWELL 13, STATION 26, 10- 5N LAT, 148- 9W LONG, FEB. 20, 1965, 1500 G.C.T.													
DRY BULB 25.5		WET BULB 23.2		WIND SPEED 20, DIR. 05		BAR. 10		WEATHER 02		VIS. 7		CLOUD TYPE 8, COVER 8	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN-DPTH.	
0.	25.57	33.98	5.31		22.42	542.9	0.	25.57	33.98	22.42	542.9	0.000	
10.	25.58	33.98	5.30		22.42	543.6	10.	25.58	33.98	22.42	543.6	0.055	
30A	25.55	33.98			22.43	543.5	20.	25.72	33.95	22.35	550.3	0.110	
52.	22.66	34.52	5.29		23.69	423.7	30.	25.55	33.98	22.43	543.5	0.165	
78.	19.36	34.45	3.69		25.49	252.6	50.	23.05	34.47	23.34	437.7	0.264	
103.	12.89	34.59	0.71		26.12	193.3	75.	16.19	34.47	25.32	268.7	0.353	
128.	11.78	34.70	0.28		26.42	165.2	100.	13.03	34.57	26.07	197.5	0.411	
153.	11.21	34.70	0.27		26.52	155.6	150.	11.26	34.70	26.52	156.2	0.501	
178.	10.92	34.72	0.26		26.59	149.6	200.	10.67	34.73	26.64	145.1	0.576	
204.	10.63	34.73	0.32		26.65	144.5	250.	10.17	34.69	26.70	140.3	0.648	
230.	10.37	34.71	0.32		26.68	142.1	300.	9.73	34.68	26.77	134.9	0.718	
255.	10.12	34.69	0.42		26.71	139.9	400.	8.93	34.65	26.88	126.2	0.850	
280.	9.92	34.69	0.36		26.74	137.1	500.	7.93	34.58	26.97	118.0	0.973	
305.	9.68	34.68	0.38		26.78	134.4	600.	7.01	34.55	27.08	108.1	1.087	
407.	8.88	34.65	0.28		26.88	125.7	700.	6.12	34.53	27.19	98.3	1.191	
510.	7.82	34.57	0.51		26.98	117.1	800.	5.43	34.53	27.27	90.7	1.287	
611.	6.92	34.55	0.36		27.10	107.0	1000.	4.89	34.57	27.37	83.1	1.463	
815.	5.38	34.53	0.64		27.28	89.8	1200.	3.81	34.58	27.49	70.4	1.618	
945.	5.15	34.56	1.20		27.33	86.4	1500.	3.01	34.61	27.59	60.7	1.818	
1222.	3.68	34.58	1.61		27.51	69.0							
1526.	2.92	34.61	1.90		27.60	59.7							

TEMPERATURE ERROR TERM AT 20. METERS IS 0.10
TEMPERATURE ERROR TERM AT 75. METERS IS 0.15

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA							
CROMWELL 13, STATION 27, 11-30N LAT, 148-7W LONG, FEB. 20, 1965, 2400 G.C.T.														
DRY BULB 25.0			WET BULB 23.0		WIND SPEED 20, DIR. 03		BAR. 12		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.	24.74	34.15	5.21		22.80	506.6	0.	24.74	34.15	22.80	506.6	0.000		
11.	24.75	34.14	5.23		22.79	508.0	10.	24.75	34.14	22.79	507.9	0.051		
30.Δ	24.80	34.19			22.81	506.6	20.	24.77	34.16	22.80	507.6	0.102		
50.	24.83	34.22	5.16		22.83	506.0	30.	24.80	34.19	22.81	506.6	0.153		
75.	18.84	34.70	4.86		24.85	313.3	50.	24.83	34.22	22.83	506.0	0.255		
99.	13.92	34.33	3.32		25.71	232.3	75.	18.84	34.70	24.85	313.3	0.359		
125.	12.53	34.59	0.70		26.19	187.0	100.	13.82	34.34	25.73	230.0	0.427		
150.	11.76	34.70	0.31		26.42	165.3	150.	11.76	34.70	26.42	165.3	0.527		
174.	11.32	34.73	0.29		26.53	155.8	200.	10.93	34.72	26.59	150.3	0.606		
200.	10.93	34.72	0.34		26.59	150.3	250.	10.33	34.71	26.69	141.9	0.680		
224.	10.68	34.72	0.39		26.63	146.5	300.	9.99	34.70	26.74	138.0	0.750		
248.	10.35	34.71	0.46		26.68	142.1	400.	9.32	34.68	26.83	130.5	0.886		
273.	10.17	34.71	0.48		26.72	139.6	500.	8.39	34.61	26.93	122.7	1.014		
297.	10.01	34.70	0.46		26.74	138.2	600.	7.34	34.57	27.05	111.6	1.132		
397.	9.34	34.68	0.26		26.83	130.7	700.	6.45	34.55	27.16	101.9	1.240		
498.	8.41	34.61	0.30		26.93	123.0	800.	5.72	34.54	27.25	93.8	1.339		
596.	7.38	34.57	0.36		27.05	112.0	1000.	4.75	34.55	27.37	82.5	1.517		
795.	5.75	34.56	0.71		27.24	94.1	1200.	3.89	34.57	27.48	72.2	1.674		
993.	4.78	34.55	0.93		27.37	82.9								
1192.	3.87	34.57	1.36		27.48	71.8								
1493.	3.02	34.60	1.75		27.59	61.4								

CROMWELL 13, STATION 28, 12-58N LAT, 148-0W LONG, FEB. 21, 1965, 0900 G.C.T.														
DRY BULB 24.6			WET BULB 21.9		WIND SPEED 18, DIR. 03		BAR. 13		WEATHER 02		VIS. 6		CLOUD TYPE , COVER 8	
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	24.51	34.13	4.94		22.85	501.4	0.	24.51	34.13	22.85	501.4	0.000		
12.	24.54	34.12	4.93		22.84	503.4	10.	24.54	34.12	22.84	503.2	0.051		
51.	24.52	34.13	4.89		22.85	503.7	20.	24.54	34.12	22.84	503.8	0.101		
76.	24.53	34.13	4.86		22.85	504.9	30.	24.54	34.12	22.84	504.0	0.152		
101.	19.20	34.62	4.34		24.70	328.8	50.	24.52	34.13	22.85	503.7	0.254		
127.	13.96	34.39	2.25		25.74	229.5	75.	24.58	34.13	22.83	506.6	0.381		
151.	12.21	34.49	1.07		26.17	189.0	100.	19.46	34.60	24.62	336.5	0.487		
176.	11.60	34.60	0.63		26.37	170.4	150.	12.24	34.48	26.16	190.1	0.620		
203.	11.09	34.63	0.41		26.49	159.8	200.	11.14	34.63	26.48	160.7	0.708		
227.	10.69	34.67	0.23		26.59	150.4	250.	10.44	34.68	26.65	145.9	0.785		
252.	10.42	34.68	0.22		26.65	145.6	300.	9.91	34.66	26.72	139.5	0.857		
278.	10.10	34.66	0.18		26.69	142.2	400.	8.67	34.59	26.87	126.5	0.992		
303.	9.88	34.66	0.22		26.73	139.1	500.	7.62	34.56	27.01	114.6	1.113		
403.	8.63	34.59	0.27		26.88	126.1	600.	6.66	34.55	27.13	103.2	1.223		
504.	7.58	34.56	0.36		27.01	114.2	700.	5.89	34.54	27.23	94.6	1.323		
605.	6.62	34.55	0.46		27.14	102.7	800.	5.27	34.54	27.30	87.8	1.415		
806.	5.24	34.54	0.59		27.30	87.5	1000.	4.41	34.56	27.41	77.6	1.583		
1008.	4.38	34.56	0.91		27.42	77.2	1200.	3.71	34.59	27.51	68.6	1.731		
1208.	3.69	34.59	1.27		27.51	68.2	1500.	2.95	34.61	27.60	60.0	1.926		
1512.	2.93	34.61	1.68		27.60	59.7								

CROMWELL 13, STATION 29, 14-30N LAT, 147-58W LONG, FEB. 21, 1965, 1900 G.C.T.														
DRY BULB 24.7			WET BULB 22.0		WIND SPEED 16, DIR. 02		BAR. 15		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.	24.11	34.10	4.98		22.95	492.2	0.	24.11	34.10	22.95	492.2	0.000		
11.	24.08	34.09	5.08		22.95	492.5	10.	24.08	34.09	22.95	492.5	0.050		
30.Δ	24.07	34.09			22.95	492.9	20.	24.09	34.09	22.95	493.2	0.099		
52.	23.72	34.10	4.94		23.06	483.2	30.	24.07	34.09	22.95	492.9	0.149		
77.	21.35	34.77	4.98		24.24	371.6	50.	23.79	34.09	23.03	486.1	0.248		
102.	19.43	34.88	4.86		24.84	315.6	75.	21.57	34.71	24.14	381.3	0.357		
128.	18.14	34.82	4.63		25.12	289.7	100.	19.56	34.88	24.81	318.5	0.445		
154.	14.53	34.36	4.09		25.60	244.0	150.	15.14	34.43	25.52	251.2	0.588		
177.	11.84	34.19	3.57		26.01	204.9	200.	10.47	34.22	26.28	179.1	0.697		
204.	10.35	34.24	2.82		26.32	175.8	250.	10.05	34.49	26.57	153.1	0.781		
229.	10.29	34.41	1.36		26.46	162.8	300.	8.93	34.47	26.73	137.7	0.854		
254.	9.98	34.50	0.93		26.58	151.5	400.	8.48	34.59	26.90	123.9	0.986		
280.	9.30	34.44	0.97		26.65	145.4	500.	7.45	34.56	27.03	112.6	1.105		
304.	8.87	34.48	0.86		26.75	136.1	600.	6.74	34.52	27.10	106.4	1.216		
405.	8.48	34.59	0.30		26.90	123.8	700.	5.96	34.51	27.19	97.7	1.319		
507.	7.37	34.55	0.35		27.03	111.9	800.	5.24	34.52	27.29	89.0	1.413		
607.	6.70	34.52	0.34		27.10	106.1	1000.	4.52	34.56	27.40	79.1	1.584		
810.	5.17	34.52	0.59		27.30	88.1	1200.	3.80	34.64	27.54	66.1	1.731		
1012.	4.49	34.56	0.76		27.41	78.6	1500.	3.04	34.62	27.60	60.0	1.923		
1213.	3.75	34.64	1.19		27.55	65.3								
1516.	3.00	34.62	1.76		27.60	59.9								

APRON BY DATA

Table 3.--Continued

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL	13, STATION	30, 15-57N LAT, 147-58W LONG, FEB. 22, 1965,	0400 G.C.T.									
DRY BULB	21.7	WET BULB 19.2	WIND SPEED 35, DIR. 33	BAR. 15	WEATHER 99	VIS. 5	CLOUD TYPE 9,	COVER 8				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.67	34.10	5.06		23.08	479.9	0.	23.67	34.10	23.08	479.9	0.000
9.	23.72	34.16	5.17		23.11	477.3	10.	23.72	34.16	23.11	477.3	0.048
50.	23.69	34.18	5.02		23.13	476.5	20.	23.72	34.17	23.11	477.2	0.096
74.	23.78	34.37	5.03		23.25	466.3	30.	23.72	34.17	23.12	477.1	0.144
99.	21.29	34.88	5.34		24.34	362.9	50.	23.69	34.18	23.13	476.5	0.240
123.	20.01	34.96	4.79		24.75	325.1	75.	23.69	34.39	23.29	462.4	0.359
148.	18.67	34.86	4.59		25.02	300.1	100.	21.23	34.89	24.37	360.6	0.462
173.	15.95	34.49	4.11		25.39	265.2	150.	18.49	34.83	25.04	297.7	0.628
198.	12.83	34.26	2.63		25.87	218.7	200.	12.70	34.26	25.90	215.9	0.758
223.	11.80	34.41	1.61		26.19	189.1	250.	11.30	34.56	26.40	170.0	0.855
247.	11.40	34.56	0.70		26.38	171.5	300.	10.44	34.60	26.59	152.7	0.936
272.	10.63	34.52	0.82		26.49	161.4	400.	8.99	34.56	26.80	134.0	1.081
297.	10.48	34.60	0.59		26.58	153.5	500.	8.08	34.55	26.93	122.6	1.210
396.	9.03	34.56	0.40		26.79	134.5	600.	6.86	34.48	27.05	111.3	1.328
495.	8.14	34.55	0.47		26.92	123.2	700.	6.05	34.47	27.15	102.0	1.436
595.	6.91	34.48	0.60		27.04	111.8	800.	5.48	34.49	27.24	94.3	1.535
793.	5.52	34.49	0.49		27.23	94.7	1000.	4.61	34.51	27.35	83.6	1.715
993.	4.64	34.51	0.82		27.35	84.0	1200.	3.82	34.54	27.46	73.1	1.874
1192.	3.79	34.55	1.44		27.47	72.3						
1494.	3.08	34.59	1.50		27.57	62.9						

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL	13, STATION	31, 17-30N LAT, 148-2W LONG, FEB. 22, 1965,	1400 G.C.T.									
DRY BULB	20.3	WET BULB 19.3	WIND SPEED 14, DIR. 33	BAR. 14	WEATHER 51	VIS. 6	CLOUD TYPE 9,	COVER 9				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.45	34.26	5.33		23.26	462.2	0.	23.45	34.26	23.26	462.2	0.000
10.	23.49	34.26	4.91		23.25	463.7	10.	23.49	34.26	23.25	463.7	0.047
30.Δ	23.52	34.26			23.24	465.3	20.	23.51	34.26	23.25	464.7	0.093
50.	23.48	34.26	5.53		23.26	464.9	30.	23.52	34.26	23.24	465.3	0.140
75.	23.28	34.73	5.27		23.67	426.4	50.	23.48	34.26	23.26	464.9	0.234
99.	21.36	34.88	5.27		24.32	364.7	75.	23.28	34.73	23.67	426.4	0.346
123.	20.43	34.99	5.04		24.66	333.5	100.	21.30	34.89	24.34	362.9	0.446
149.	20.18	35.02	4.91		24.75	325.9	150.	20.18	35.02	24.75	325.8	0.619
172.	19.91	35.01	4.79		24.81	320.6	200.	18.46	34.87	25.07	296.4	0.776
197.	18.71	34.90	4.56		25.04	299.8	250.	13.00	34.27	25.85	222.5	0.907
221.	16.35	34.60	4.26		25.38	267.5	300.	10.12	34.12	26.27	182.7	1.009
245.	13.36	34.30	4.37		25.80	227.3	400.	8.55	34.31	26.67	145.4	1.174
270.	11.86	34.20	4.40		26.01	206.8	500.	7.16	34.37	26.92	122.1	1.309
294.	10.33	34.12	4.32		26.23	186.2	600.	6.13	34.36	27.06	109.7	1.426
391.	8.69	34.30	1.81		26.64	148.2	700.	5.53	34.41	27.17	99.6	1.532
492.	7.26	34.37	0.86		26.91	123.3	800.	5.11	34.46	27.26	91.3	1.629
589.	6.21	34.36	0.70		27.04	110.9	1000.	4.29	34.51	27.39	79.4	1.802
786.	5.18	34.46	0.82		27.25	92.4	1200.	3.66	34.55	27.48	71.0	1.954
984.	4.34	34.51	0.99		27.38	80.2						
1182.	3.74	34.54	1.14		27.47	72.3						
1482.	3.00	34.58	1.58		27.57	62.6						

ORIGINAL DATA					DERIVED DATA			INTERPOLATED DATA				
CROMWELL	13, STATION	32, 19- ON LAT, 148-2W LONG, FEB. 22, 1965,	2300 G.C.T.									
DRY BULB	21.8	WET BULB 18.2	WIND SPEED 08, DIR. 36	BAR. 15	WEATHER 02	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.	22.90	34.45	5.09		23.57	433.3	0.	22.90	34.45	23.57	433.3	0.000
10.	22.82	34.45	5.14		23.59	431.5	10.	22.82	34.45	23.59	431.5	0.044
30.Δ	22.75	34.45			23.61	430.4	20.	22.77	34.45	23.60	430.6	0.087
52.	22.76	34.45	5.08		23.61	431.4	30.	22.75	34.45	23.61	430.4	0.130
75.Δ	23.08	34.76			23.75	418.7	50.	22.75	34.44	23.60	431.6	0.217
77.	23.09	34.79	5.05		23.77	416.9	75.	23.08	34.76	23.75	418.7	0.324
103.	22.05	34.98	5.08		24.21	375.9	100.	22.22	34.97	24.15	381.1	0.425
128.	21.11	35.04	4.98		24.51	347.7	150.	20.44	35.10	24.74	327.1	0.603
153.	20.34	35.10	4.70		24.77	324.4	200.	17.61	34.76	25.20	283.7	0.757
178.	19.16	35.04	4.70		25.03	300.0	250.	12.70	34.23	25.88	219.6	0.884
204.	17.26	34.70	4.28		25.24	280.3	300.	10.19	34.16	26.28	181.2	0.985
229.	14.52	34.36	3.74		25.60	245.9	400.	8.60	34.31	26.66	146.3	1.151
254.	12.42	34.22	3.55		25.92	215.3	500.	7.03	34.30	26.88	125.7	1.288
279.	11.47	34.22	2.75		26.10	198.4	600.	6.26	34.38	27.05	110.4	1.407
305.	9.88	34.14	3.16		26.32	177.4	700.	5.70	34.44	27.17	99.8	1.513
407.	8.63	34.33	1.16		26.67	145.3	800.	5.20	34.47	27.25	92.2	1.610
509.	6.89	34.29	0.93		26.90	124.3	1000.	4.42	34.51	27.37	81.5	1.786
611.	6.21	34.39	0.62		27.07	109.0	1200.	3.71	34.54	27.47	72.3	1.942
813.	5.14	34.47	0.58		27.26	91.4	1500.	3.03	34.58	27.57	63.2	2.148
1017.	4.36	34.51	0.96		27.38	80.7						
1218.	3.65	34.54	1.10		27.48	71.5						
1522.	2.99	34.58	1.44		27.57	62.7						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 20.8	13, STATION WET BULB 16.8	33, 20-32N LAT, 148- 1W LONG, FEB. 23, 1965, 0900 G.C.T.	33	20-32N LAT, 148- 1W LONG, FEB. 23, 1965, 0900 G.C.T.	WIND SPEED 11, DIR. 31	BAR. 15	WEATHER 02	VIS. 8	CLOUD TYPE 8,	COVER 2		
DEPTH	TEMP.	SAL.	QXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.89	34.32	4.91		23.47	442.4	0.	22.89	34.32	23.47	442.4	0.000
10.	22.95	34.32	5.10		23.45	444.4	10.	22.95	34.32	23.45	444.4	0.045
30.	22.68	34.38			23.58	433.5	20.	22.84	34.32	23.48	441.9	0.089
48.	22.50	34.77	5.10		23.92	401.1	30.	22.68	34.38	23.58	433.5	0.133
72.	22.51	35.19	5.02		24.24	372.0	50.	22.50	34.81	23.96	398.1	0.217
95.	22.37	35.30	4.97		24.36	361.1	75.	22.55	35.22	24.25	370.8	0.314
119.	20.24	35.01	4.83		24.73	327.1	100.	21.97	35.25	24.43	354.3	0.405
143.	19.05	34.91	4.62		24.96	305.5	150.	18.81	34.89	25.00	301.8	0.571
166.	18.19	34.81	4.49		25.10	292.8	200.	15.92	34.51	25.41	263.8	0.713
189.	16.57	34.59	4.29		25.32	272.2	250.	12.08	34.12	25.91	216.0	0.834
213.	15.08	34.42	4.10		25.53	252.8	300.	10.36	34.22	26.30	179.4	0.934
236.	12.90	34.19	4.39		25.80	226.2	400.	8.16	34.25	26.68	143.8	1.097
260.	11.65	34.11	4.01		25.98	209.3	500.	6.84	34.28	26.90	123.9	1.232
283.	10.84	34.19	3.32		26.19	189.6	600.	6.48	34.42	27.05	110.6	1.350
377.	8.67	34.26	2.02		26.61	150.6	700.	5.62	34.43	27.17	99.1	1.456
471.	6.96	34.24	1.31		26.85	128.4	800.	5.05	34.44	27.24	92.7	1.553
566.	6.77	34.40	0.62		27.00	115.3	1000.	4.64	34.50	27.34	84.7	1.733
755.	5.13	34.42	0.82		27.22	94.4	1200.	3.91	34.54	27.45	74.5	1.894
944.	4.92	34.49	0.96		27.30	88.6						
1134.	3.89	34.52	1.39		27.44	75.2						
1420.	3.14	34.57	1.39		27.55	64.6						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.11
 TEMPERATURE ERROR TERM AT 1200. METERS IS 0.18

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 19.8	13, STATION WET BULB 17.0	34, 22- ON LAT, 147-55W LONG, FEB. 23, 1965, 1800 G.C.T.	34	22- ON LAT, 147-55W LONG, FEB. 23, 1965, 1800 G.C.T.	WIND SPEED 14, DIR. 36	BAR. 11	WEATHER 03	VIS. 8	CLOUD TYPE 8,	COVER 6		
DEPTH	TEMP.	SAL.	QXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.18	34.78	5.11		24.02	390.0	0.	22.18	34.78	24.02	390.0	0.000
11.	22.18	34.79	5.20		24.03	389.7	10.	22.18	34.79	24.03	389.8	0.039
30.	22.32	34.96			24.12	381.9	20.	22.23	34.86	24.06	386.5	0.078
50.	22.50	35.14	5.05		24.20	374.5	30.	22.32	34.96	24.12	381.9	0.117
76.	22.12	35.26	5.05		24.40	356.6	50.	22.50	35.14	24.20	374.5	0.193
100.	21.85	35.34	5.03		24.54	344.5	75.	22.14	35.26	24.39	357.3	0.285
126.	20.52	35.18	4.92		24.78	322.2	100.	21.85	35.34	24.54	344.5	0.374
151.	19.58	35.11	4.76		24.97	304.4	150.	19.62	35.11	24.97	305.1	0.538
175.	18.37	34.92	4.54		25.14	289.5	200.	17.34	34.80	25.30	274.8	0.684
200.	17.34	34.80	4.73		25.30	274.8	250.	14.11	34.37	25.70	237.4	0.813
226.	15.92	34.59	4.67		25.47	258.9	300.	11.36	34.17	26.08	200.6	0.923
250.	14.11	34.37	4.93		25.70	237.4	400.	8.47	34.06	26.49	162.6	1.106
275.	12.30	34.23	4.93		25.95	212.8	500.	6.14	34.06	26.81	131.0	1.255
300.	11.36	34.17	4.96		26.08	200.6	600.	5.18	34.20	27.04	109.6	1.376
400.	8.47	34.06	4.13		26.49	162.6	700.	4.75	34.33	27.19	95.8	1.480
501.	6.12	34.06	1.97		26.82	130.7	800.	4.55	34.43	27.30	86.9	1.572
601.	5.12	34.20	0.76		27.04	109.4	1000.	4.00	34.50	27.41	76.9	1.738
800.	4.55	34.43	0.88		27.30	86.9	1200.	3.47	34.54	27.50	68.9	1.886
1000.	4.00	34.50	1.04		27.41	76.9						
1199.	3.46	34.54	1.17		27.50	69.1						
1498.	2.81	34.58	1.56		27.59	60.4						

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL DRY BULB 21.5	13, STATION WET BULB 18.5	35, 23-28N LAT, 148-2W LONG, FEB. 24, 1965, 0200 G.C.T.	35	23-28N LAT, 148-2W LONG, FEB. 24, 1965, 0200 G.C.T.	WIND SPEED 08, DIR. 36	BAR. 15	WEATHER 02	VIS. 9	CLOUD TYPE 8,	COVER 4		
DEPTH	TEMP.	SAL.	QXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	21.55	34.44	5.23		23.94	397.9	0.	21.55	34.44	23.94	397.9	0.000
10.	21.43	34.47	5.21		23.99	392.9	10.	21.43	34.47	23.99	392.9	0.040
50.	21.53	35.12	5.15		24.46	350.0	20.	21.42	34.62	24.11	382.4	0.079
76.	21.46	35.26	5.16		24.58	339.0	30.	21.44	34.77	24.22	371.8	0.117
101.	21.07	35.27	5.16		24.70	329.0	50.	21.53	35.12	24.46	350.0	0.190
126.	20.14	35.19	4.95		24.89	311.8	75.	21.47	35.26	24.58	339.3	0.276
151.	19.01	35.06	4.92		25.08	294.0	100.	21.09	35.27	24.69	329.5	0.361
175.	18.10	34.91	4.97		25.20	283.8	150.	19.06	35.07	25.08	294.6	0.518
201.	16.52	34.68	4.86		25.40	264.9	200.	16.59	34.69	25.39	265.7	0.659
225.	14.79	34.46	4.96		25.62	244.1	250.	13.45	34.34	25.81	226.3	0.783
250.	13.45	34.34	4.94		25.81	226.3	300.	11.23	34.19	26.12	196.8	0.890
276.	11.87	34.21	4.93		26.02	206.4	400.	8.56	34.05	26.46	164.8	1.072
300.	11.23	34.19	5.17		26.12	196.8	500.	6.32	34.04	26.78	134.0	1.223
400.	8.56	34.05	4.99		26.46	164.8	600.	5.33	34.12	26.96	117.4	1.351
501.	6.30	34.04	2.32		26.78	134.6	700.	4.76	34.27	27.14	100.5	1.461
601.	5.32	34.12	1.13		26.96	117.2	800.	4.42	34.41	27.29	86.9	1.556
801.	4.42	34.41	0.79		27.29	86.8	1000.	4.00	34.50	27.41	76.8	1.721
992.	4.02	34.50	1.13		27.41	77.1	1200.	3.55	34.54	27.49	69.7	1.870
1187.	3.56	34.53	1.21		27.48	70.9						
1482.	2.90	34.57	1.61		27.57	62.1						

SALINITY ERROR TERM AT 30. METERS IS 0.06

FROM BT DATA

Table 3.--Continued

ORIGINAL DATA						DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION 36, 25- 2N LAT, 148- 1W LONG, FEB. 24, 1965, 1300 G.C.T.		WET BULB 18.8		WIND SPEED 12, DIR. 02		BAR. 11 WEATHER 02			VIS. 7		CLOUD TYPE , COVER 4			
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	21.76	34.87	5.30		24.21	372.3	0.	21.76	34.87	24.21	372.3	0.000		
10.	21.75	34.87	4.76		24.21	372.4	10.	21.75	34.87	24.21	372.4	0.038		
30. ^Δ	21.44	35.08			24.45	349.8	20.	21.61	34.96	24.32	362.4	0.075		
51.	21.35	35.24	5.10		24.60	336.7	30.	21.44	35.08	24.45	349.8	0.110		
76.	21.27	35.29	5.02		24.66	331.9	50.	21.35	35.23	24.60	337.1	0.180		
101.	20.24	35.21	4.89		24.88	312.0	75.	21.28	35.29	24.66	332.1	0.264		
126.	19.46	35.13	4.87		25.02	299.1	100.	20.29	35.21	24.87	312.9	0.345		
153.	18.59	34.99	4.77		25.14	288.9	150.	18.69	35.01	25.12	290.0	0.497		
177.	17.60	34.83	4.77		25.26	277.9	200.	16.23	34.64	25.44	260.9	0.634		
204.	15.96	34.61	4.97		25.48	257.6	250.	13.09	34.28	25.84	223.3	0.758		
229.	14.30	34.41	4.92		25.69	237.7	300.	11.25	34.15	26.08	200.4	0.865		
253.	12.93	34.27	4.69		25.86	221.3	400.	9.03	34.07	26.41	170.6	1.052		
277.	11.86	34.20	5.05		26.01	206.9	500.	6.74	34.02	26.70	142.0	1.210		
303.	11.19	34.14	5.03		26.09	199.8	600.	5.37	34.09	26.93	119.9	1.344		
405.	8.92	34.07	5.22		26.42	169.0	700.	4.62	34.22	27.12	102.6	1.454		
507.	6.60	34.02	2.69		26.72	140.2	800.	4.20	34.48	27.26	89.4	1.551		
607.	5.30	34.10	1.25		26.95	118.5	1000.	3.77	34.48	27.41	76.0	1.719		
809.	4.18	34.35	0.60		27.27	88.4	1200.	3.36	34.53	27.50	68.8	1.865		
1011.	3.76	34.48	1.07		27.42	75.6	1500.	2.78	34.58	27.59	60.0	2.061		
1212.	3.34	34.53	1.27		27.50	68.5								
1515.	2.75	34.58	1.62		27.59	59.8								

ORIGINAL DATA						DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION 37, 26-27N LAT, 148- 2W LONG, FEB. 24, 1965, 2100 G.C.T.		WET BULB 18.2		WIND SPEED 07, DIR. 23		BAR. 10 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.	21.39	35.25	5.31		24.60	335.1	0.	21.39	35.25	24.60	335.1	0.000		
10.	21.19	35.25	5.35		24.65	330.2	10.	21.19	35.25	24.65	330.2	0.034		
30. ^Δ	21.13	35.25			24.67	329.4	20.	21.13	35.25	24.67	328.9	0.067		
51.	21.17	35.25	5.26		24.66	331.2	30.	21.13	35.25	24.67	328.9	0.100		
77.	21.16	35.24	5.30		24.65	332.6	50.	21.17	35.25	24.66	331.1	0.166		
102.	21.17	35.25	5.33		24.66	333.1	75.	21.16	35.24	24.65	332.6	0.250		
127.	20.38	35.22	4.99		24.85	315.8	100.	21.18	35.25	24.65	333.4	0.334		
152.	18.76	35.01	5.00		25.11	291.6	150.	18.89	35.03	25.09	293.3	0.492		
178.	17.78	34.86	4.86		25.24	279.9	200.	16.47	34.68	25.41	264.0	0.632		
203.	16.28	34.65	4.86		25.43	261.8	250.	13.47	34.34	25.81	226.7	0.756		
229.	14.97	34.49	4.89		25.60	245.8	300.	11.59	34.24	26.10	199.2	0.863		
253.	13.26	34.32	4.94		25.83	224.1	400.	9.53	34.11	26.35	176.0	1.053		
280.	12.26	34.27	5.21		25.99	209.3	500.	7.13	34.02	26.65	147.3	1.216		
304.	11.46	34.24	5.16		26.12	197.4	600.	5.57	34.05	26.88	125.3	1.353		
405.	9.45	34.10	4.99		26.36	175.3	700.	4.78	34.16	27.06	108.5	1.472		
507.	6.97	34.02	3.14		26.67	145.3	800.	4.37	34.29	27.20	95.3	1.575		
608.	5.48	34.06	1.63		26.90	123.8	1000.	3.83	34.44	27.38	79.0	1.751		
810.	4.35	34.30	0.47		27.21	94.2	1200.	3.37	34.51	27.48	70.4	1.902		
1013.	3.80*	34.45	1.01		27.39	78.3	1500	2.80	34.57	27.58	61.0	2.102		
1214.	3.34	34.51	1.25		27.48	70.0								
1518.	2.77	34.57	1.59		27.58	60.8								

ORIGINAL DATA						DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION 38, 25- 2N LAT, 151- 6W LONG, FEB. 25, 1965, 1900 G.C.T.		WET BULB 16.2		WIND SPEED 26, DIR. 30		BAR. 07 WEATHER 02			VIS. 7		CLOUD TYPE , COVER 3			
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.		
0.	21.38	35.18			24.55	339.9	0.	21.38	35.18	24.55	339.9	0.000		
9.	21.42	35.18			24.54	341.3	10.	21.42	35.18	24.54	341.2	0.034		
30. ^Δ	21.41	35.23			24.58	338.2	20.	21.42	35.20	24.55	340.1	0.069		
49.	21.40	35.26			24.60	336.4	30.	21.41	35.23	24.58	338.2	0.103		
73.	21.36	35.27			24.62	335.6	50.	21.40	35.26	24.60	336.4	0.171		
97.	21.10	35.24			24.67	331.8	75.	21.35	35.27	24.62	335.6	0.255		
120.	20.38	35.21			24.84	316.3	100.	21.04	35.24	24.69	330.3	0.339		
145.	18.96	35.04			25.08	294.0	150.	18.67	35.00	25.12	290.2	0.496		
169.	17.59	34.83			25.26	277.4	200.	16.00	34.59	25.45	259.6	0.634		
194.	16.35	34.64			25.41	263.8	250.	13.34	34.28	25.79	228.3	0.757		
217.	15.02	34.47			25.58	248.0	300.	11.05	34.12	26.10	198.6	0.865		
241.	13.94	34.34			25.71	235.9	400.	8.28	34.04	26.50	160.9	1.046		
265.	12.36	34.20			25.92	215.9	500.	6.43	34.05	26.77	135.6	1.196		
289.	11.43	34.14			26.05	203.8	600.	5.31	34.13	26.97	116.1	1.323		
385.	8.63	34.05			26.45	165.6	700.	4.63	34.25	27.14	100.3	1.432		
481.	6.71	34.04			26.72	139.8	800.	4.27	34.36	27.27	88.9	1.528		
578.	5.51	34.11			26.93	120.1	1000.	3.92	34.48	27.41	77.2	1.696		
771.	4.34	34.33			27.24	91.4	1200.	3.46	34.55	27.50	68.6	1.844		
963.	4.02	34.47			27.38	79.0								
1160.	3.49	34.52			27.48	70.6								
1451.	2.87	34.57			27.58	61.6								

ΔFROM BT DATA
*INTERPOLATED DATA

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA			INTERPOLATED DATA					
CROMWELL 13, STATION 39, 24-50N LAT, 154-2W LONG, FEB. 26, 1965, 0800 G.C.T.												
DRY BULB 18.8	WET BULB 14.3		WIND SPEED 22, DIR. 02			BAR. 18	WEATHER 02		VIS.	CLOUD TYPE 8, COVER 2		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	21.48	35.20	5.53		24.53	341.1	0.	21.48	35.20	24.53	341.1	0.000
11.	21.51	35.19	5.22		24.52	343.0	10.	21.51	35.19	24.52	342.8	0.034
50.	21.50	35.18	5.10		24.51	344.9	20.	21.52	35.18	24.51	343.8	0.069
74.	21.50	35.19	5.11		24.52	345.1	30.	21.52	35.18	24.51	344.5	0.104
98.	21.48	35.20	5.09		24.53	344.7	50.	21.50	35.18	24.51	344.9	0.173
122.	21.11	35.25	4.97		24.67	332.3	75.	21.50	35.19	24.52	345.2	0.260
147.	20.06	35.17	4.85		24.89	312.0	100.	21.47	35.21	24.54	344.0	0.347
172.	19.56	35.12	4.79		24.99	303.9	150.	19.99	35.16	24.91	310.7	0.512
197.	18.87	35.03	4.74		25.10	294.3	200.	18.80	35.02	25.11	293.3	0.664
221.	18.16	34.94	4.74		25.21	284.5	250.	16.42	34.66	25.41	265.7	0.805
245.	16.79	34.71	4.71		25.36	270.2	300.	13.18	34.33	25.86	222.9	0.928
269.	14.98	34.48	4.72		25.59	247.9	400.	9.57	34.09	26.34	177.6	1.130
293.	13.53	34.36	4.82		25.81	227.6	500.	7.25	34.02	26.64	149.1	1.295
390.	9.86	34.11	4.67		26.30	181.0	600.	5.80	34.09	26.89	125.2	1.434
489.	7.46	34.02	3.44		26.60	152.0	700.	4.99	34.21	27.07	107.4	1.551
587.	5.93	34.08	1.70		26.86	127.8	800.	4.58	34.33	27.21	94.9	1.653
781.	4.64	34.31	0.63		27.19	96.6	1000.	4.07	34.45	27.36	81.3	1.832
977.	4.14	34.44	1.00		27.35	82.8	1200.	3.54	34.53	27.48	70.6	1.986
1171.	3.57	34.52	1.24		27.47	71.6						
1466.	2.91	34.57	1.54		27.57	62.1						

CROMWELL 13, STATION 40, 24-50N LAT, 156-50W LONG, FEB. 26, 1965, 2300 G.C.T.												
DRY BULB 20.9	WET BULB 15.9		WIND SPEED 16, DIR. 05			BAR. 22	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.	21.73	35.20			24.46	347.7	0.	21.73	35.20	24.46	347.7	0.000
10.	21.74	35.21			24.47	347.6	10.	21.74	35.21	24.47	347.6	0.035
50.	21.68	35.20			24.48	348.2	20.	21.73	35.21	24.47	347.5	0.070
73.	21.71	35.20			24.47	349.9	30.	21.71	35.21	24.48	347.6	0.105
98.	21.69	35.20			24.48	350.3	50.	21.68	35.20	24.48	348.2	0.175
122.	21.37	35.23			24.59	340.5	75.	21.72	35.20	24.47	350.1	0.263
147.	21.10	35.21			24.65	335.8	100.	21.67	35.20	24.48	349.5	0.351
171.	19.57	35.03			24.92	310.7	150.	20.95	35.19	24.67	333.2	0.523
196.	17.73	34.81			25.21	283.0	200.	17.51	34.78	25.25	279.8	0.678
220.	16.41	34.66			25.41	264.5	250.	14.26	34.44	25.72	235.5	0.808
245.	14.61	34.47			25.67	240.2	300.	12.10	34.24	26.00	209.2	0.920
269.	13.10	34.33			25.87	220.7	400.	9.63	34.11	26.34	177.5	1.115
294.	12.27	34.25			25.97	211.3	500.	7.41	34.04	26.62	150.3	1.280
390.	9.87	34.12			26.31	180.4	600.	5.72	34.05	26.86	127.4	1.421
489.	7.64	34.04			26.59	153.2	700.	4.92	34.15	27.03	110.9	1.541
587.	5.86	34.04			26.83	129.9	800.	4.55	34.28	27.18	98.0	1.647
782.	4.62	34.26			27.15	100.1	1000.	3.95	34.45	27.38	79.8	1.826
977.	4.02	34.44			27.36	81.4	1200.	3.36	34.52	27.49	69.5	1.978
1171.	3.43	34.51			27.48	70.7	1500.	2.72	34.58	27.59	59.6	2.174
1464.	2.78	34.57			27.58	60.6	2000.	2.04	34.63	27.69	50.1	2.453
2031.	2.01	34.63			27.70	49.7	2500.	1.68	34.66	27.74	45.2	2.696
2534.	1.66	34.66			27.75	45.0	3000.	1.53	34.67	27.76	44.1	2.923
3037.	1.53	34.67			27.76	44.1						
3841.	1.46	34.69			27.79	43.8						

CROMWELL 13, STATION 41, 23-29N LAT, 156-50W LONG, FEB. 27, 1965, 0900 G.C.T.												
DRY BULB 21.3	WET BULB 16.0		WIND SPEED 17, DIR. 04			BAR. 17	WEATHER 02		VIS. 5	CLOUD TYPE , COVER 4		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	21.67	35.19			24.47	346.8	0.	21.67	35.19	24.47	346.8	0.000
10.	21.65	35.19			24.48	346.6	10.	21.65	35.19	24.48	346.6	0.035
49.	21.65	35.18			24.47	348.8	20.	21.64	35.19	24.48	347.0	0.070
73.	21.68	35.19			24.47	349.8	30.	21.64	35.18	24.48	347.5	0.105
97.	21.65	35.20			24.49	349.2	50.	21.65	35.18	24.47	348.9	0.175
120.	21.45	35.21			24.55	344.0	75.	21.68	35.19	24.47	349.9	0.263
145.	19.95	35.08			24.85	315.6	100.	21.66	35.20	24.49	349.2	0.351
170.	18.81	34.96			25.06	297.0	150.	19.73	35.06	24.90	311.8	0.518
194.	17.29	34.78			25.29	274.9	200.	16.80	34.72	25.37	267.8	0.664
218.	15.40	34.57			25.57	248.8	250.	13.91	34.41	25.77	230.2	0.789
242.	14.34	34.45			25.71	236.0	300.	11.78	34.24	26.06	203.4	0.899
266.	13.06	34.34			25.89	219.1	400.	8.83	34.08	26.45	166.7	1.085
290.	12.12	34.26			26.01	207.6	500.	6.54	34.05	26.75	137.3	1.239
387.	9.23	34.10			26.40	171.4	600.	5.83	34.20	26.96	118.1	1.368
485.	6.71	34.03			26.72	140.6	700.	5.09	34.32	27.15	100.9	1.478
581.	5.98	34.17			26.92	121.8	800.	4.49	34.41	27.28	87.9	1.574
776.	4.60	34.39			27.26	90.2	1000.	3.84	34.50	27.43	74.9	1.738
971.	3.92	34.49			27.41	76.4	1200.	3.35	34.56	27.52	66.4	1.882
1167.	3.46	34.55			27.50	68.1						
1462.	2.88	34.58			27.58	61.0						

Table 3.--Continued

ORIGINAL DATA				DERIVED DATA				INTERPOLATED DATA				
CROMWELL 13, STATION 42, 21-59N LAT, 157- 1W LONG, FEB. 27, 1965, 1800 G.C.T.												
DRY BULB 19.9	WET BULB 16.1	WIND SPEED 16, DIR. 08	BAR. 20	WEATHER 02	VIS. 9	CLOUD TYPE 8, COVER 4						
DEPTH	TEMP.	SAL.	CHL.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.52	35.00			24.09	383.3	0.	22.52	35.00	24.09	383.3	0.000
9.	22.55	35.00			24.08	384.4	10.	22.55	35.00	24.08	384.5	0.039
30. Δ	22.56	35.00			24.08	385.5	20.	22.56	35.00	24.08	385.2	0.077
50.	22.53	35.00			24.09	385.4	30.	22.56	35.00	24.08	385.5	0.116
74.	22.24	35.16			24.29	366.9	50.	22.53	35.00	24.09	385.4	0.194
98.	21.90	35.27			24.47	350.8	75.	22.23	35.17	24.30	366.2	0.289
123.	21.20	35.25			24.65	334.7	100.	21.87	35.27	24.48	349.7	0.379
149.	19.63	35.11			24.96	305.6	150.	19.58	35.10	24.97	304.8	0.544
173.	18.42	34.93			25.13	289.9	200.	17.28	34.77	25.29	275.3	0.690
198.	17.39	34.79			25.28	276.6	250.	14.11	34.40	25.72	235.4	0.819
222.	15.90	34.58			25.47	259.1	300.	11.71	34.20	26.05	204.4	0.930
248.	14.24	34.41			25.70	237.0	400.	8.46	34.11	26.53	158.9	1.113
272.	12.80	34.27			25.89	219.3	500.	6.67	34.11	26.79	134.2	1.261
297.	11.83	34.21			26.03	206.1	600.	5.53	34.23	27.02	112.0	1.385
397.	8.53	34.11			26.52	159.8	700.	5.01	34.33	27.17	98.5	1.491
496.	6.73	34.11			26.78	135.2	800.	4.75	34.42	27.27	89.8	1.587
595.	5.56	34.22			27.01	112.8	1000.	4.07	34.50	27.40	77.7	1.756
794.	4.77	34.42			27.26	90.2	1200.	3.53	34.54	27.49	69.8	1.905
994.	4.09	34.50			27.40	77.9						
1192.	3.56	34.53			27.48	71.0						
1493.	2.96	34.58			27.58	62.2						

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