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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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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 Liefting 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 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 PO_4-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 $\pm 0.02°$ C. Application of corrections to protected and unprotected thermometer readings and computations of thermometric depths and L-Z values were per-

[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.

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 programing.

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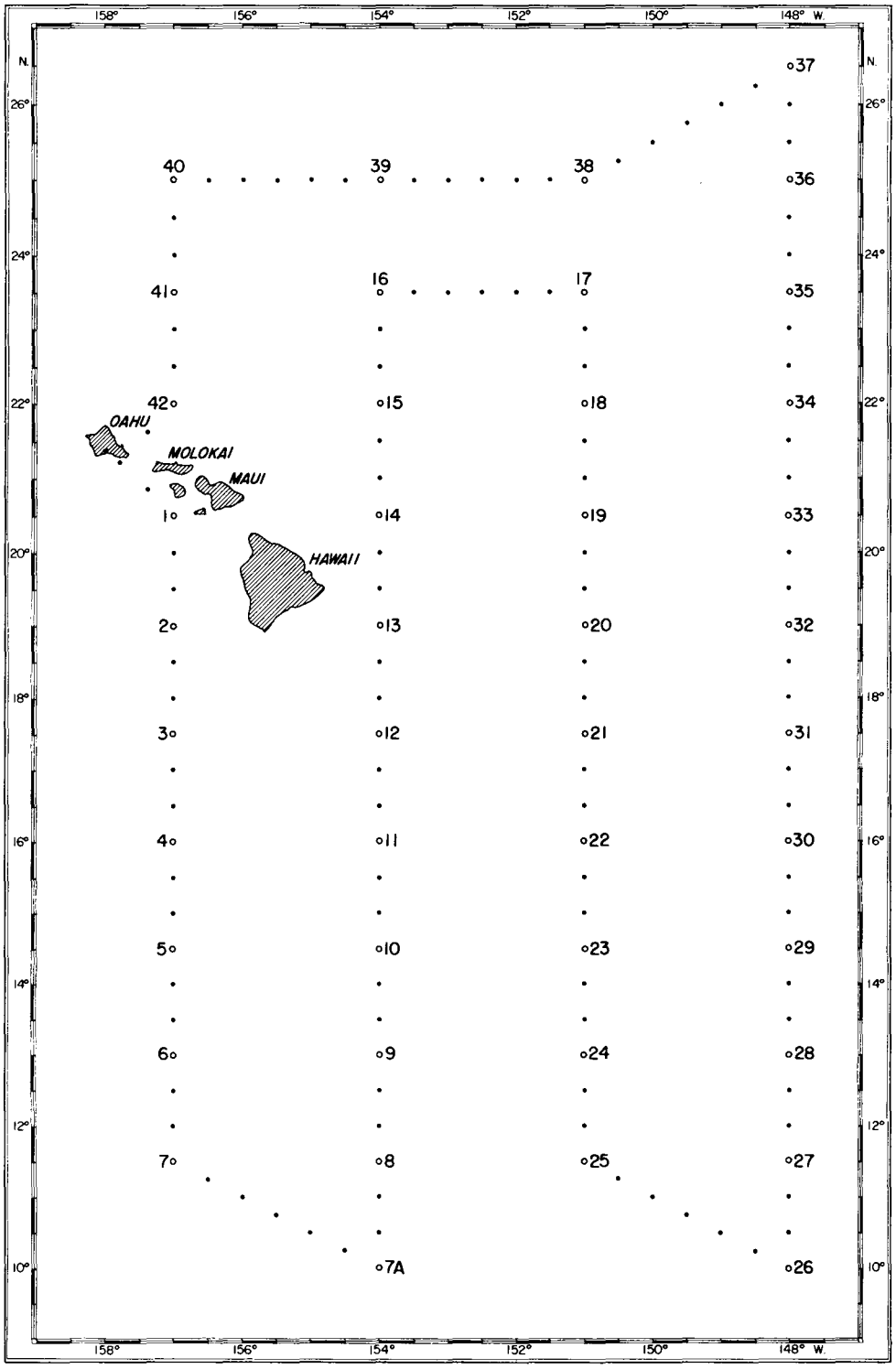


Figure 1.--Track chart for Townsend Cromwell cruises 11, 12, and 13. The large, numbered dots indicate the locations at which both hydrographic and BT (bathythermograph) casts were made; the smaller dots indicate locations at which only BT casts were made.

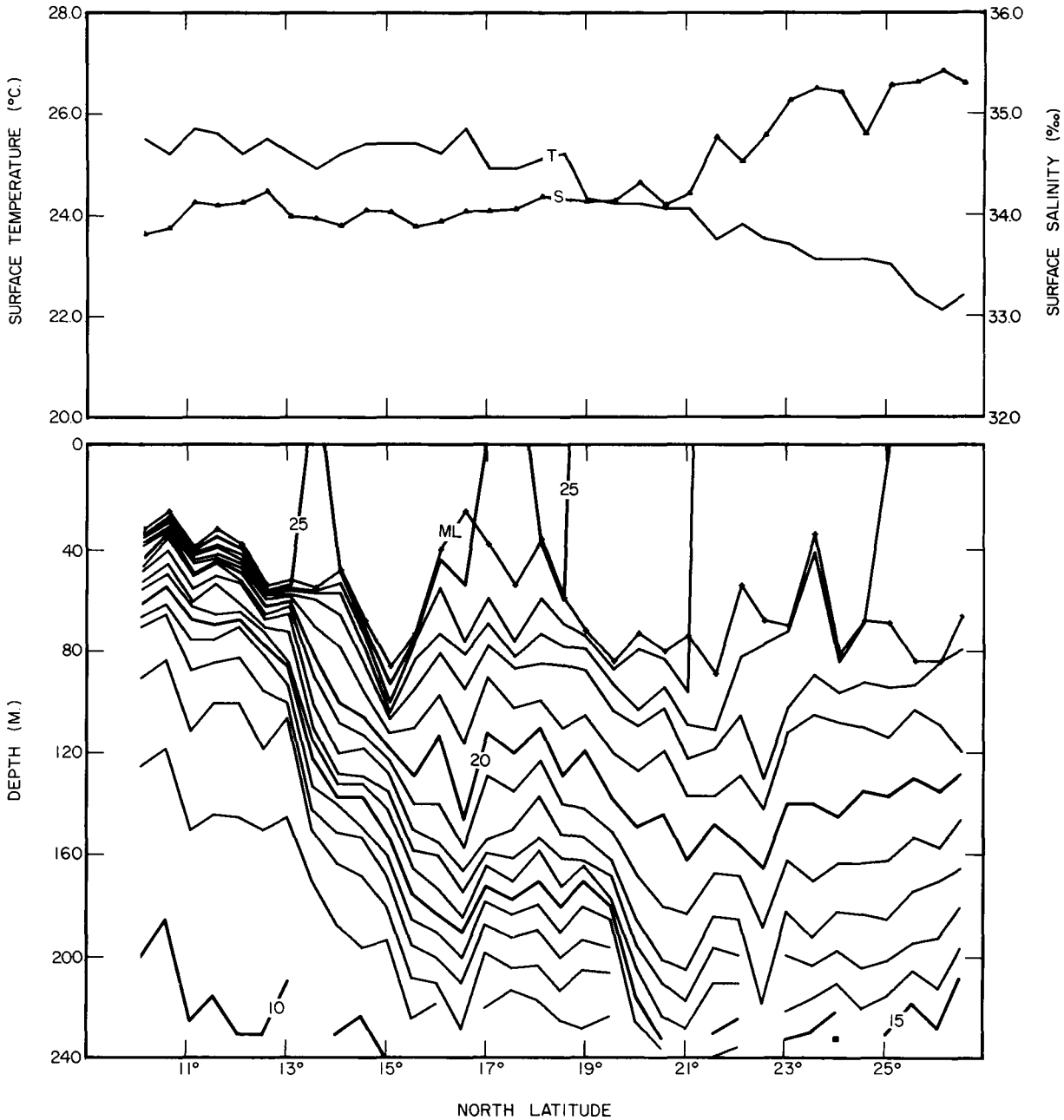
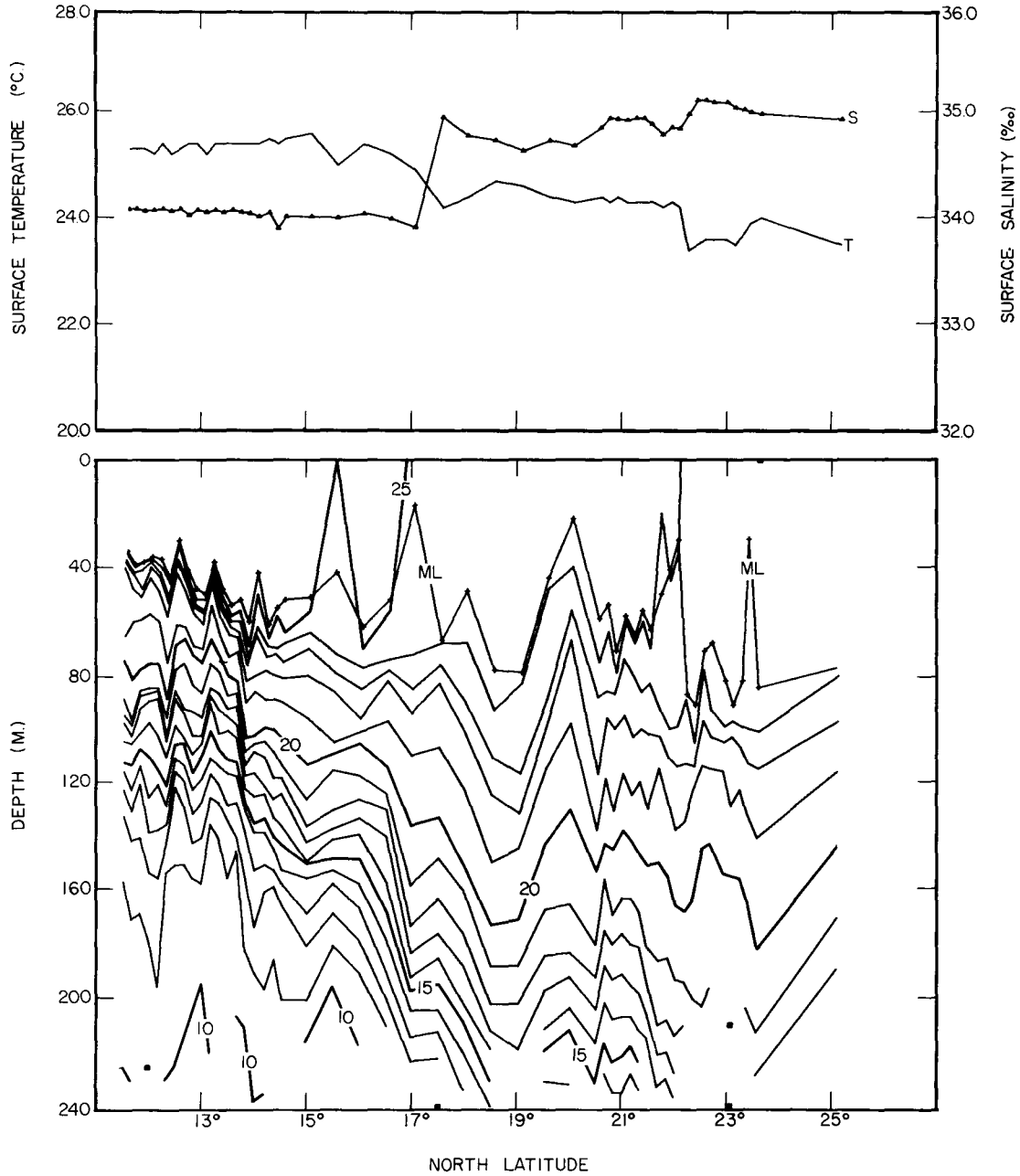


Figure 2.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 11 along long. 148° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.



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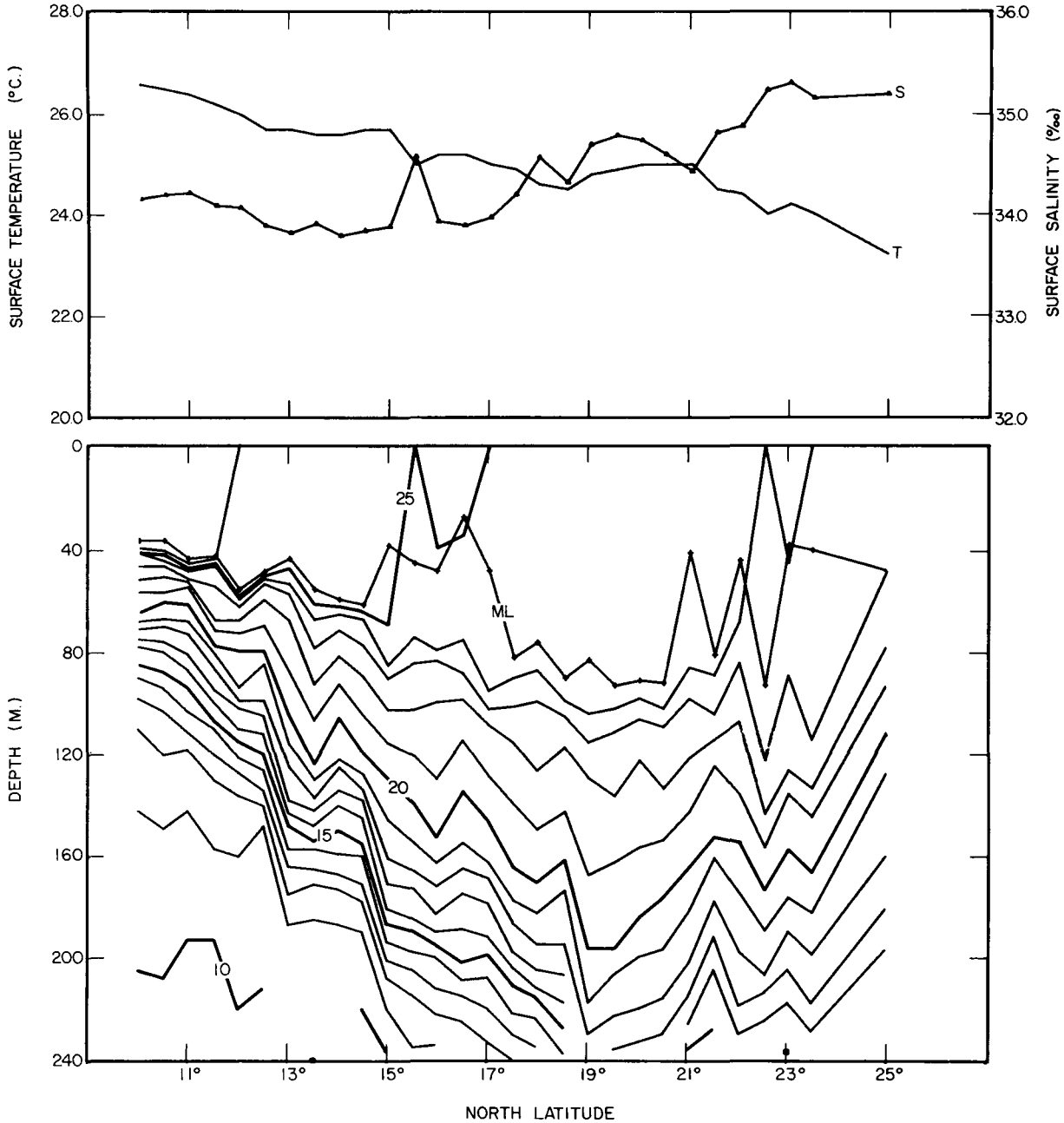

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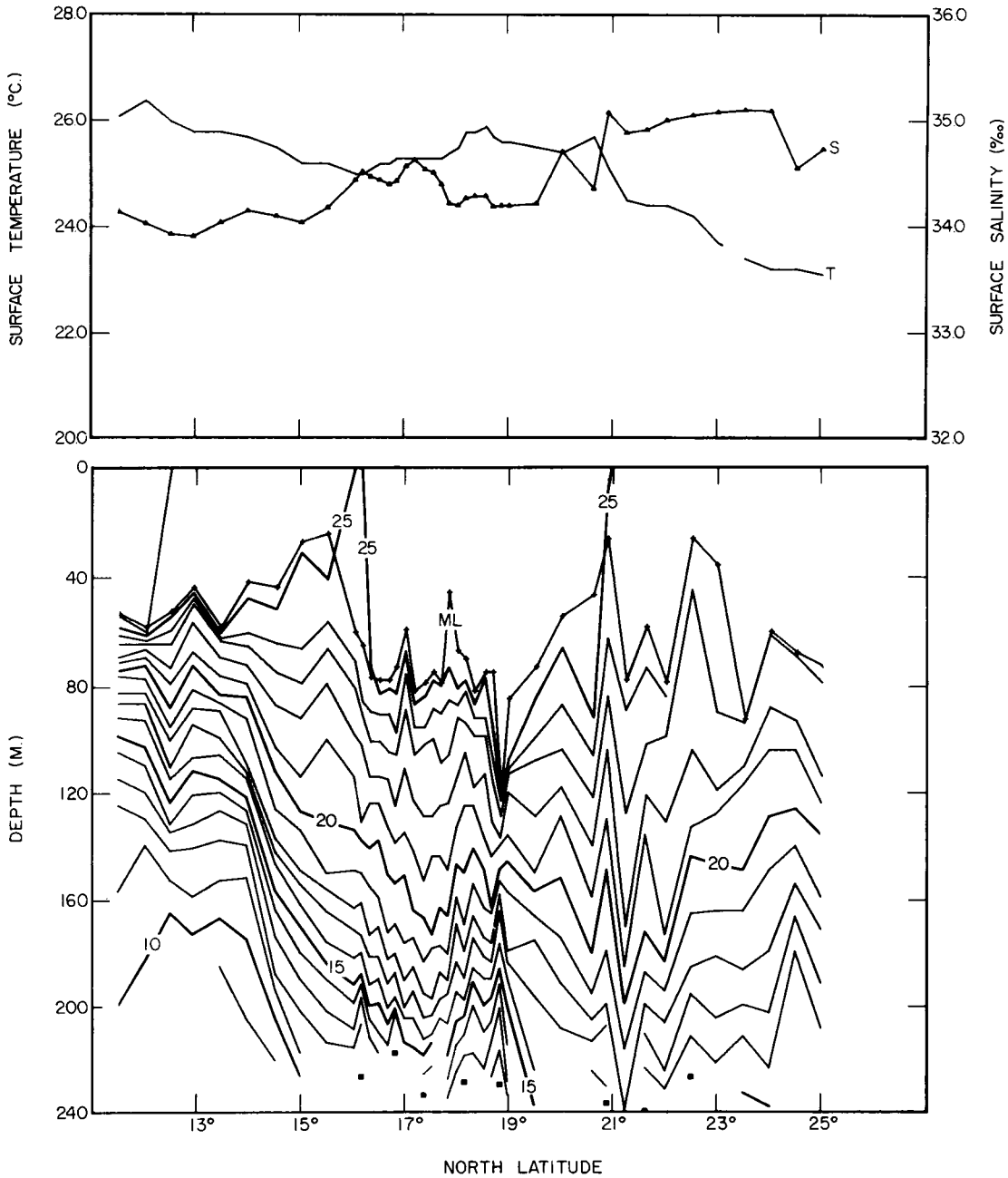

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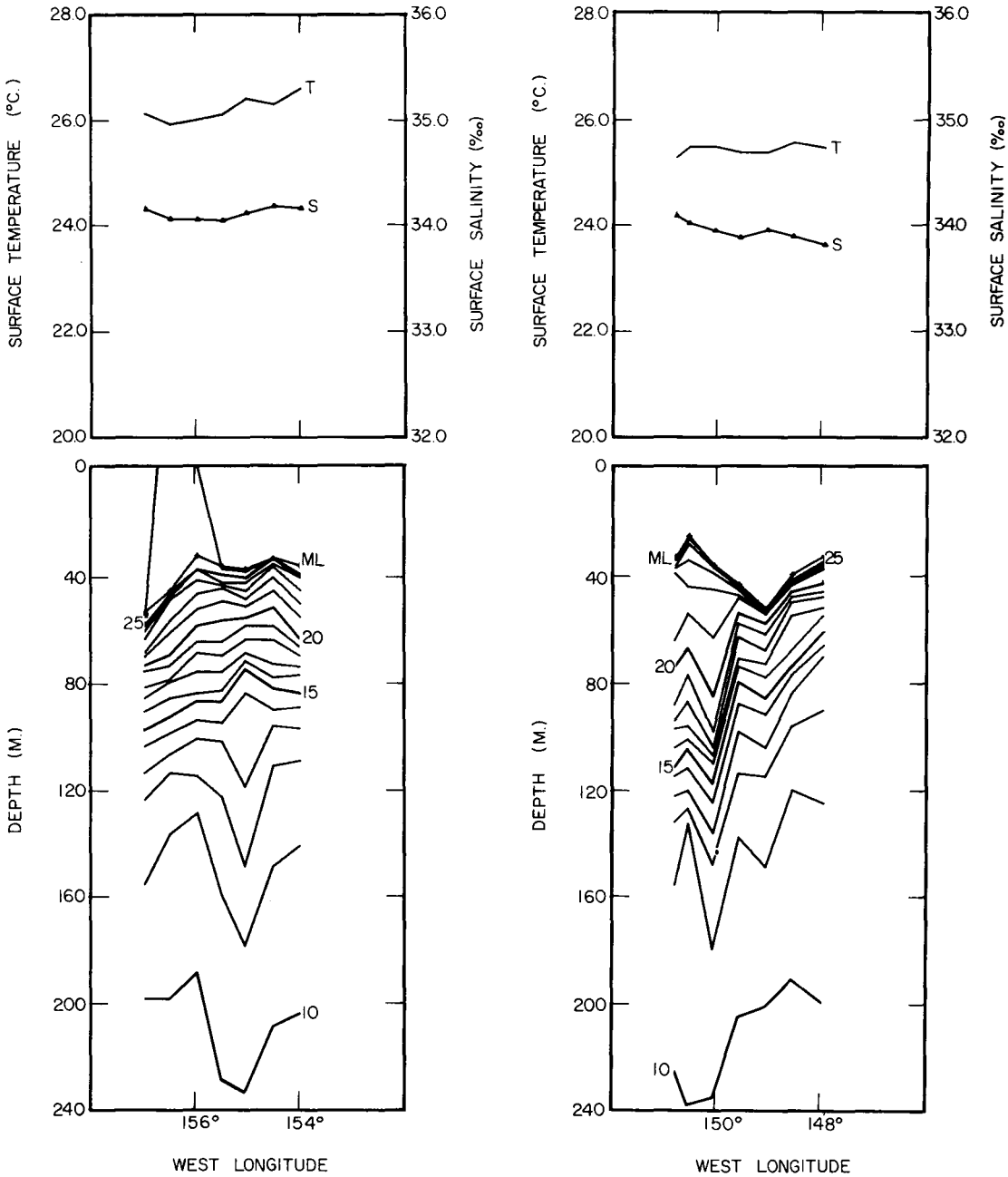

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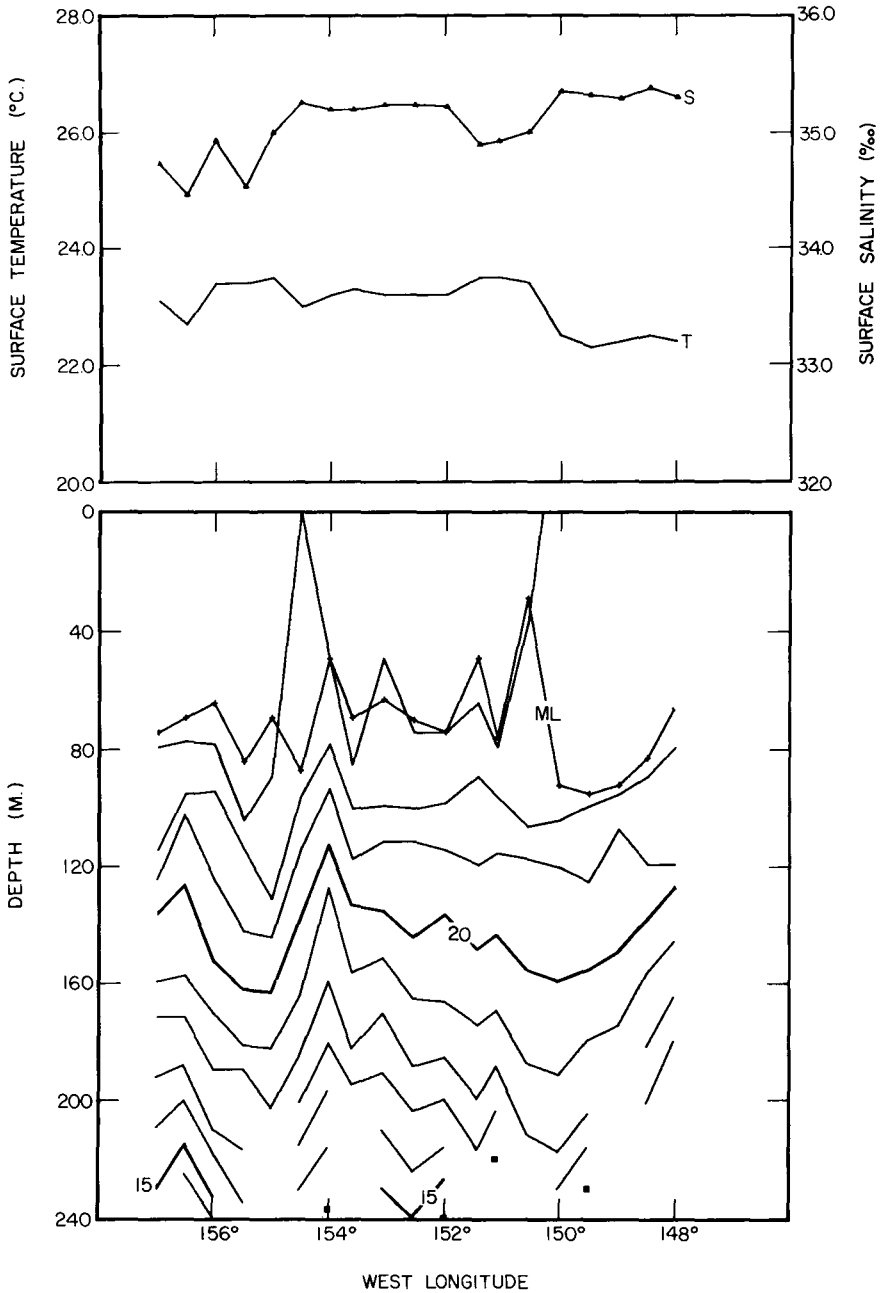

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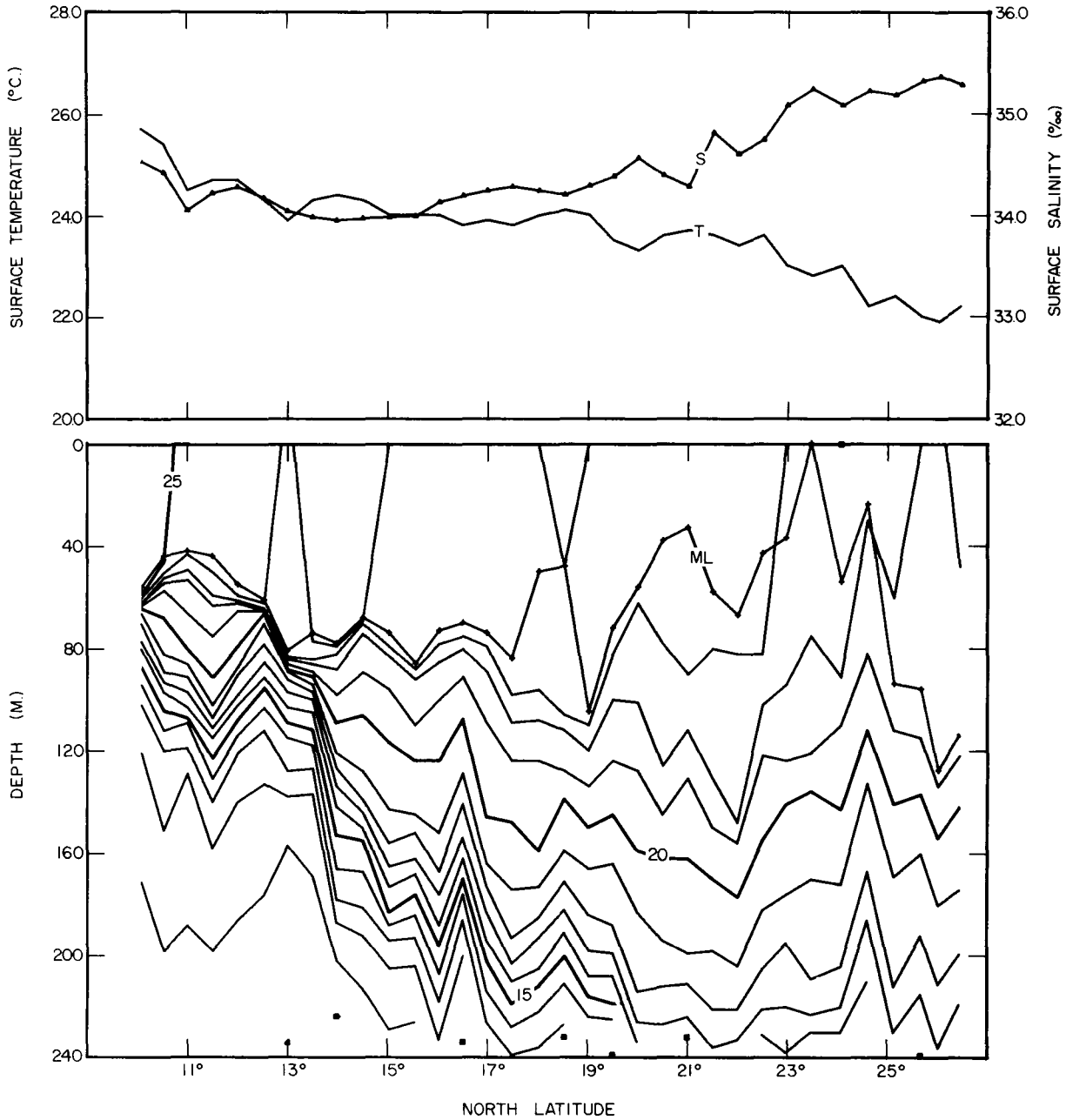

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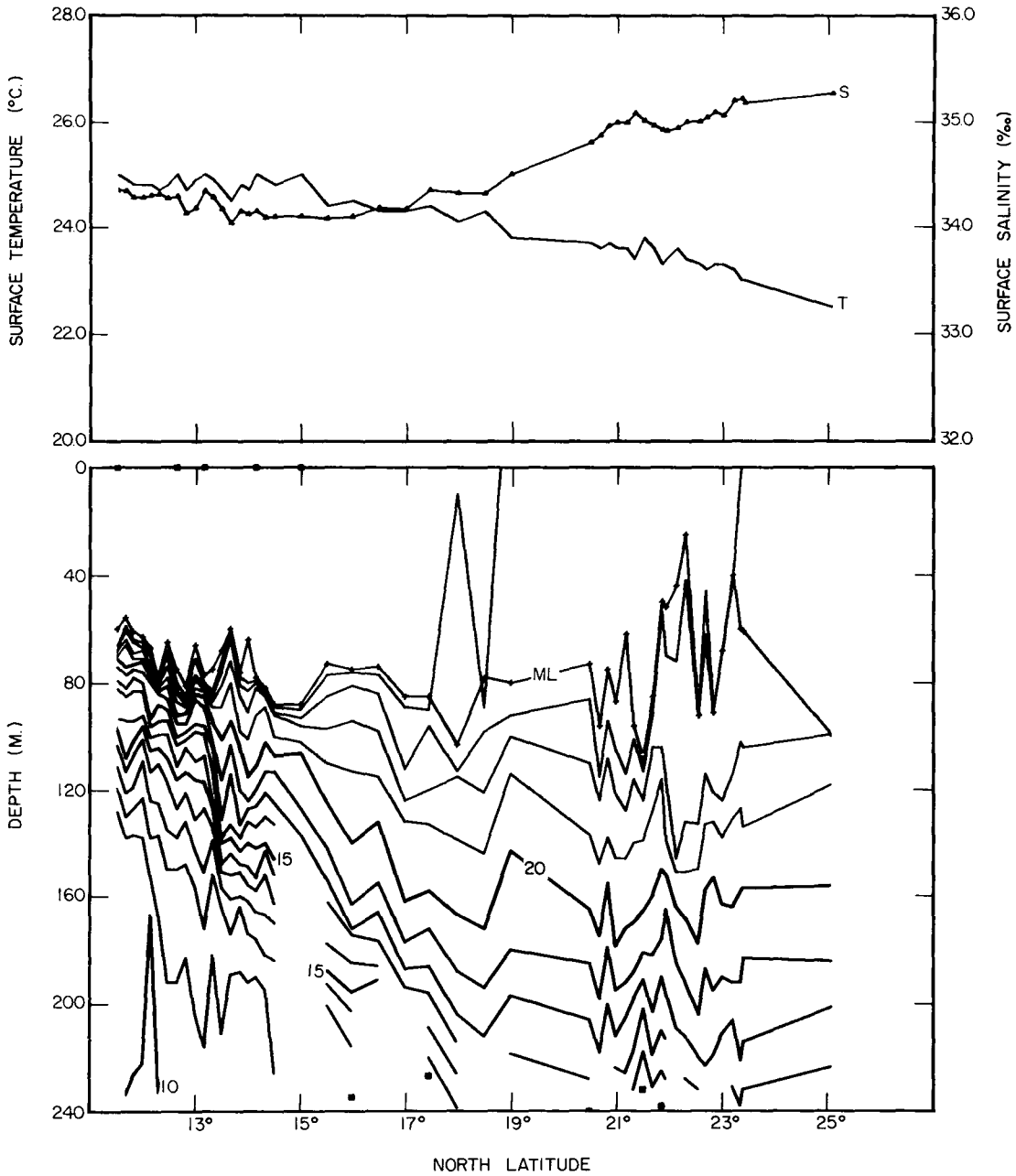

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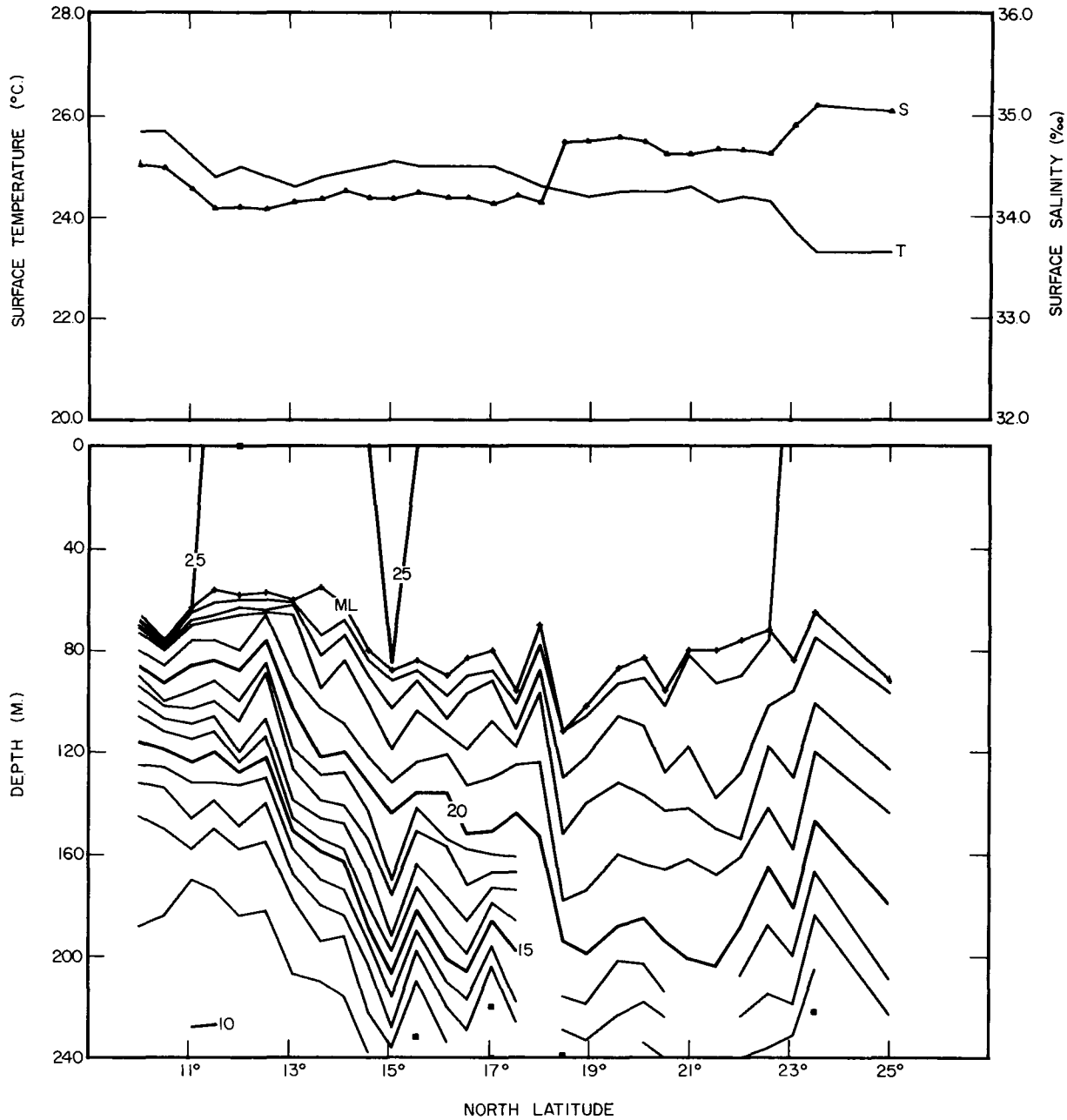

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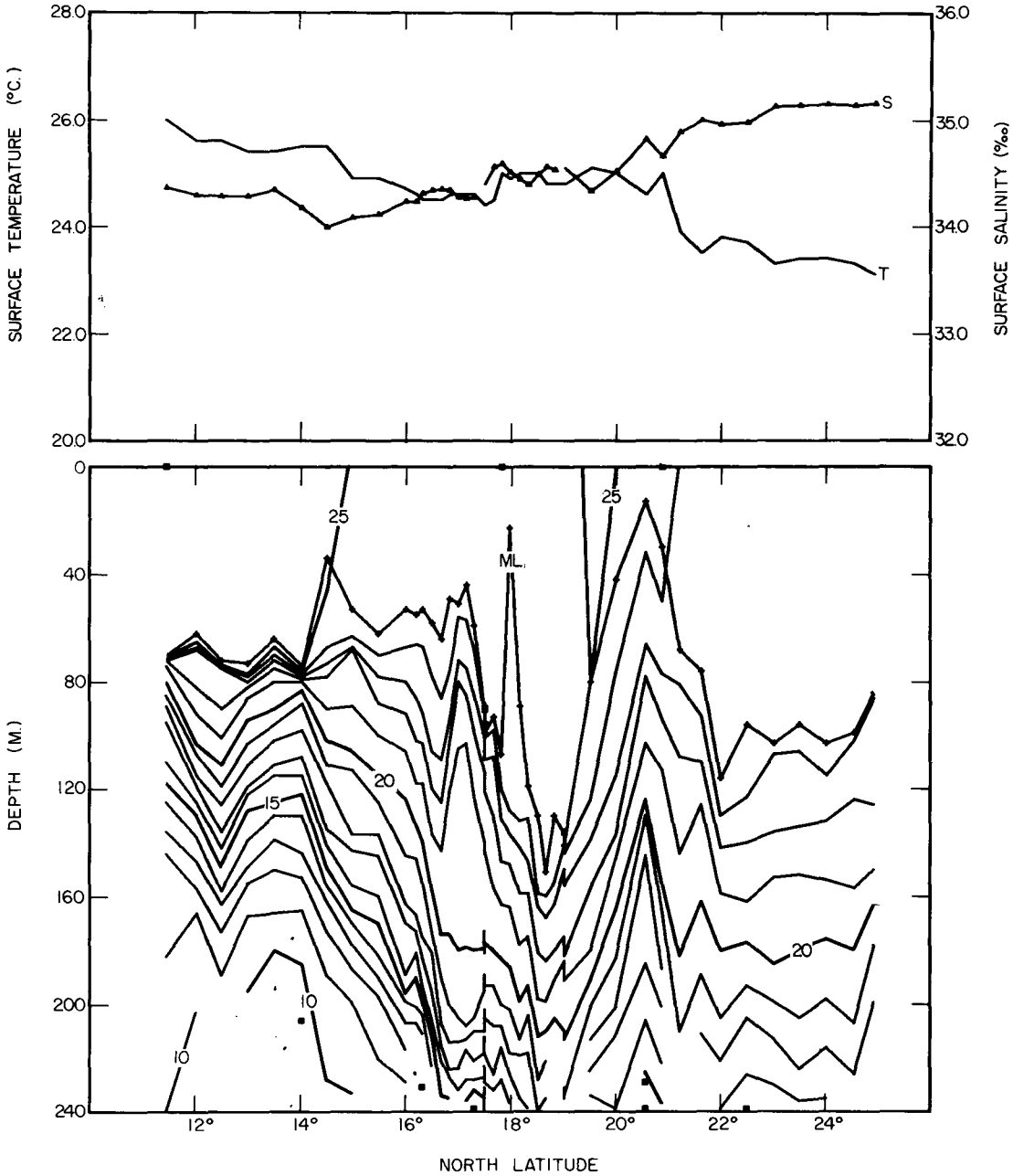

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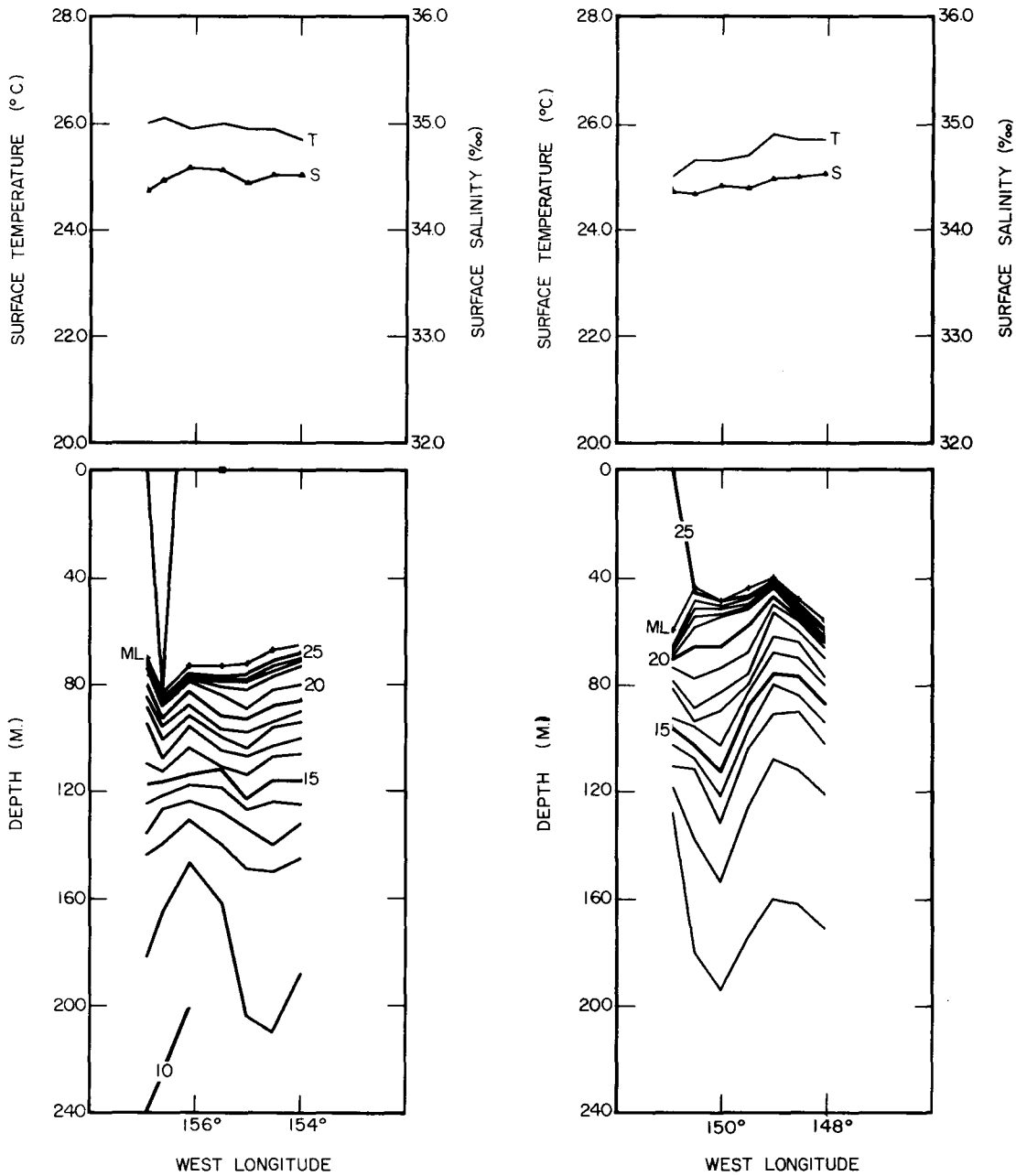

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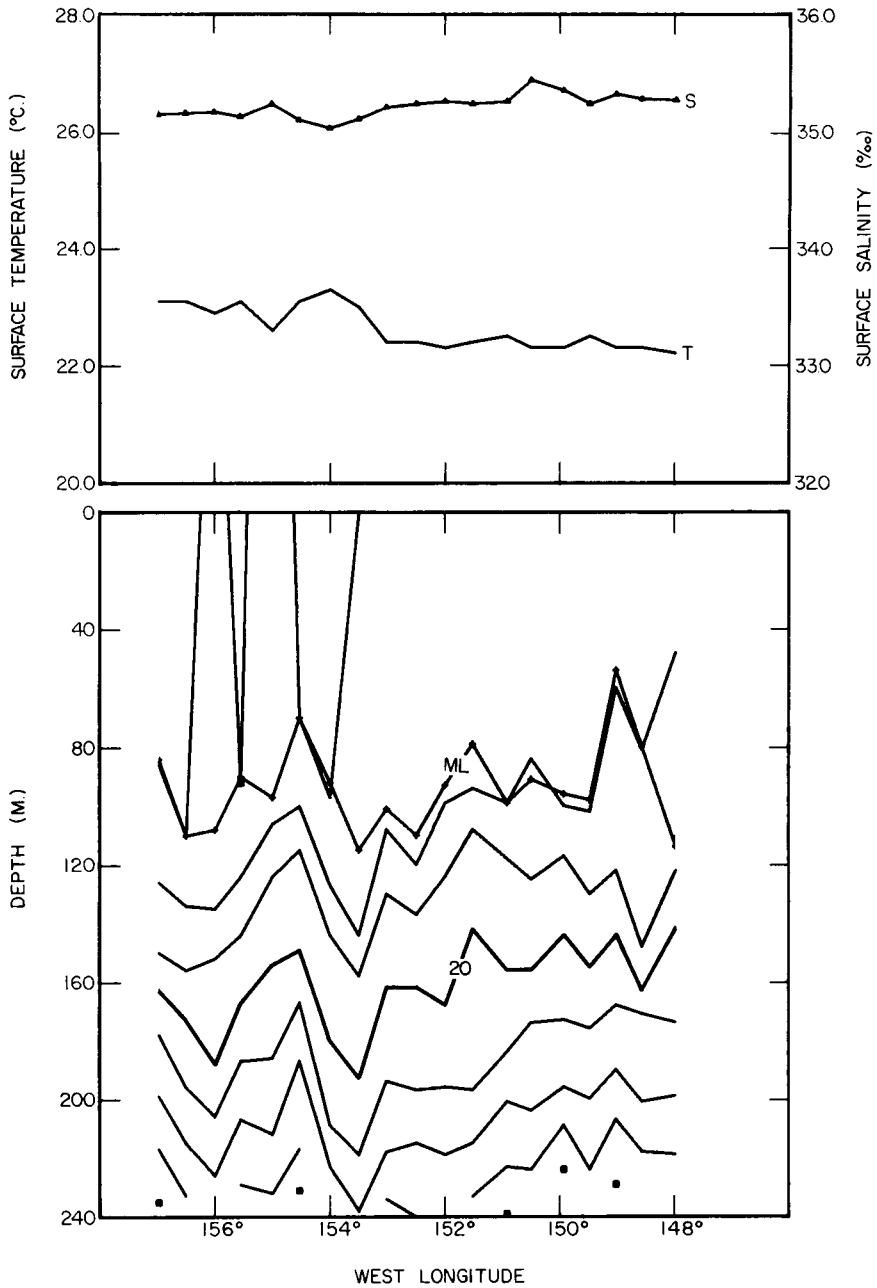

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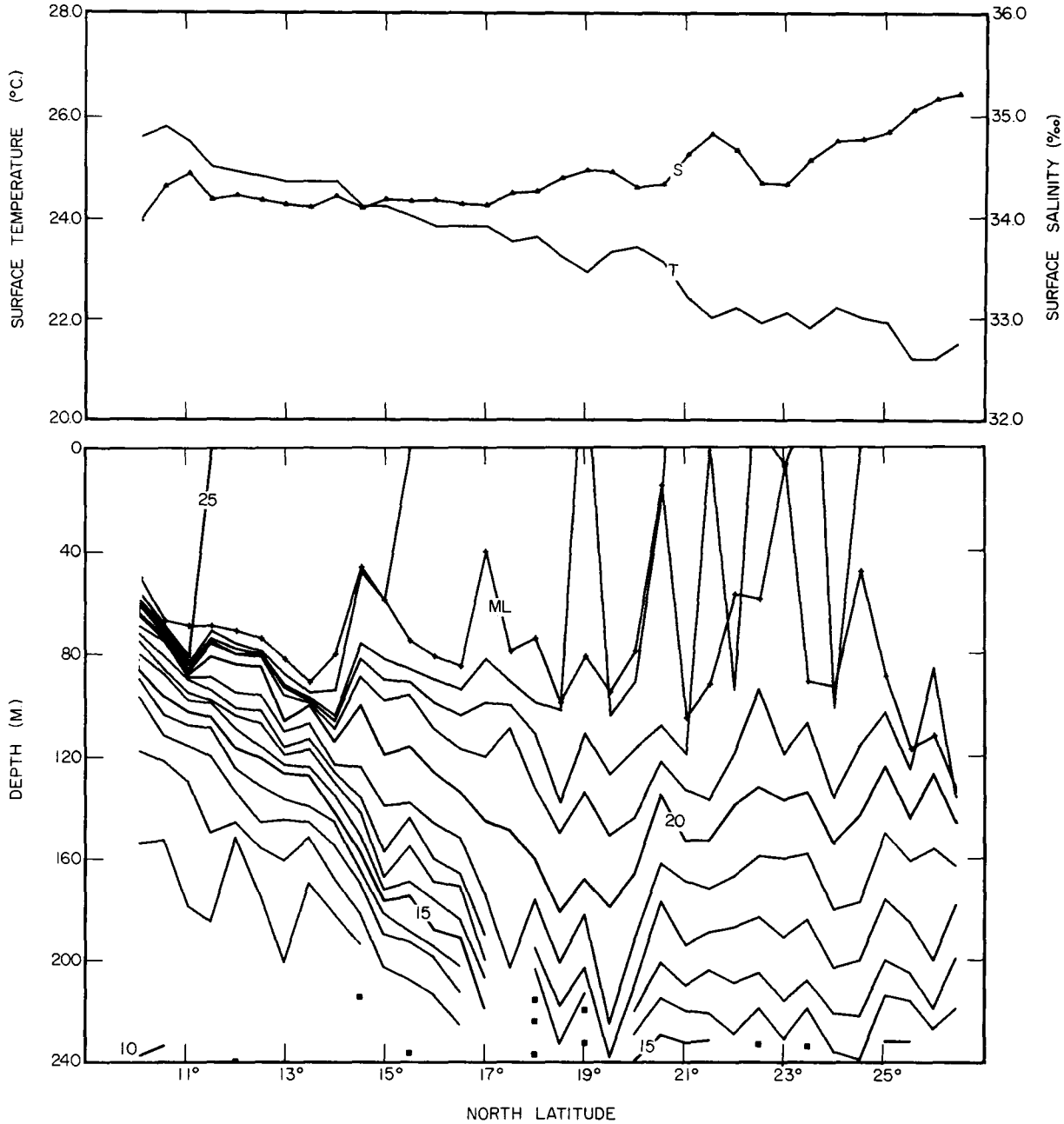

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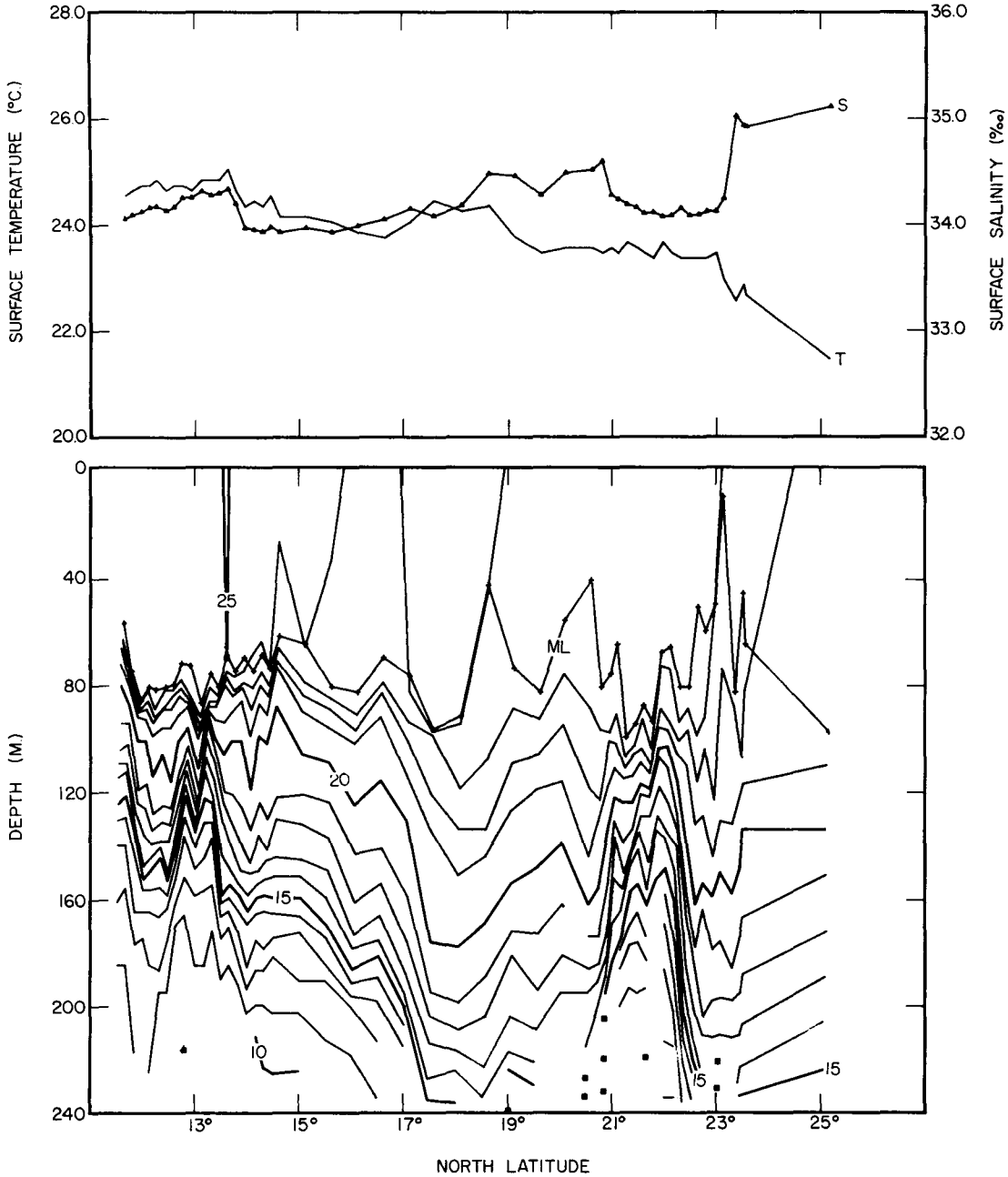

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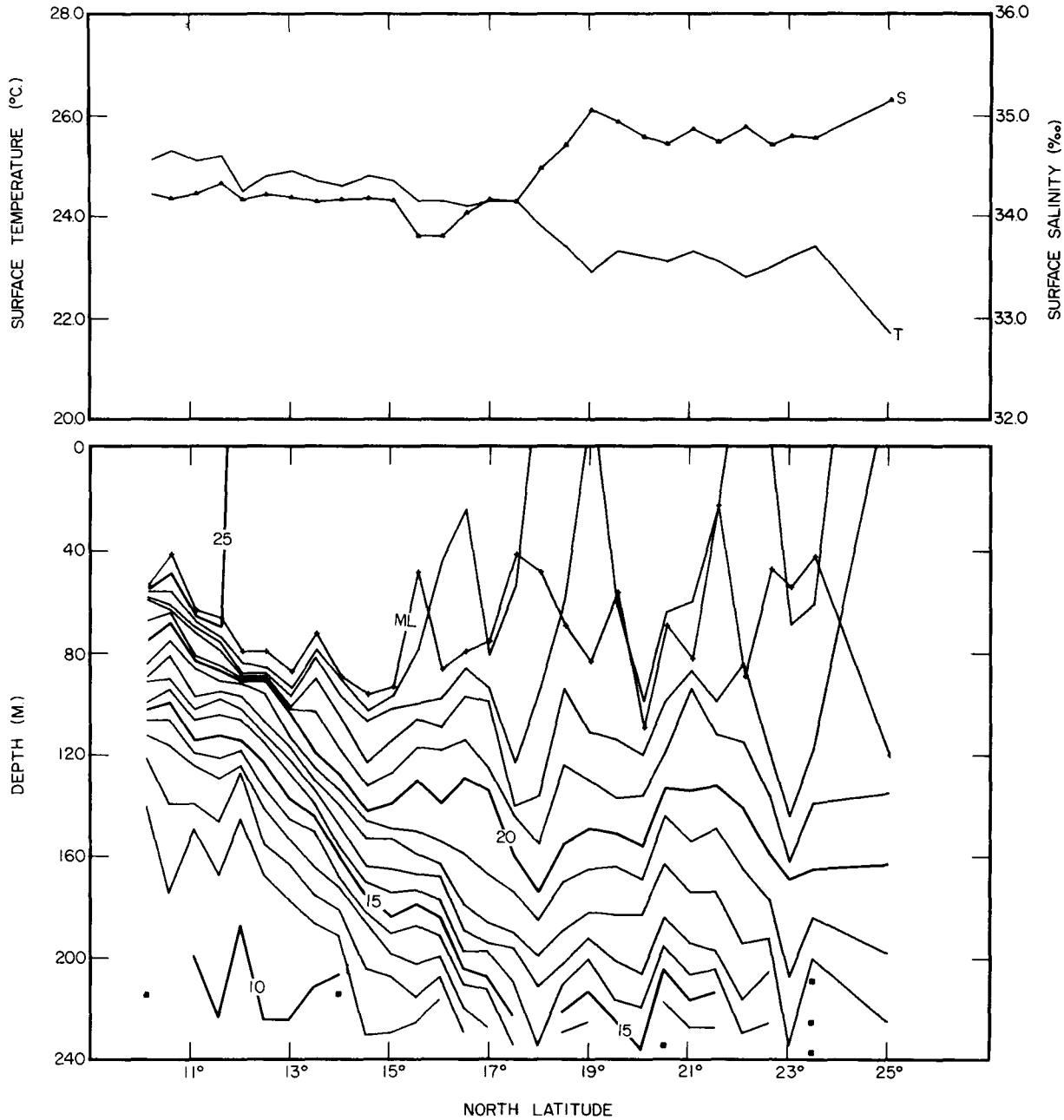


Figure 16.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 13 along long. 154° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

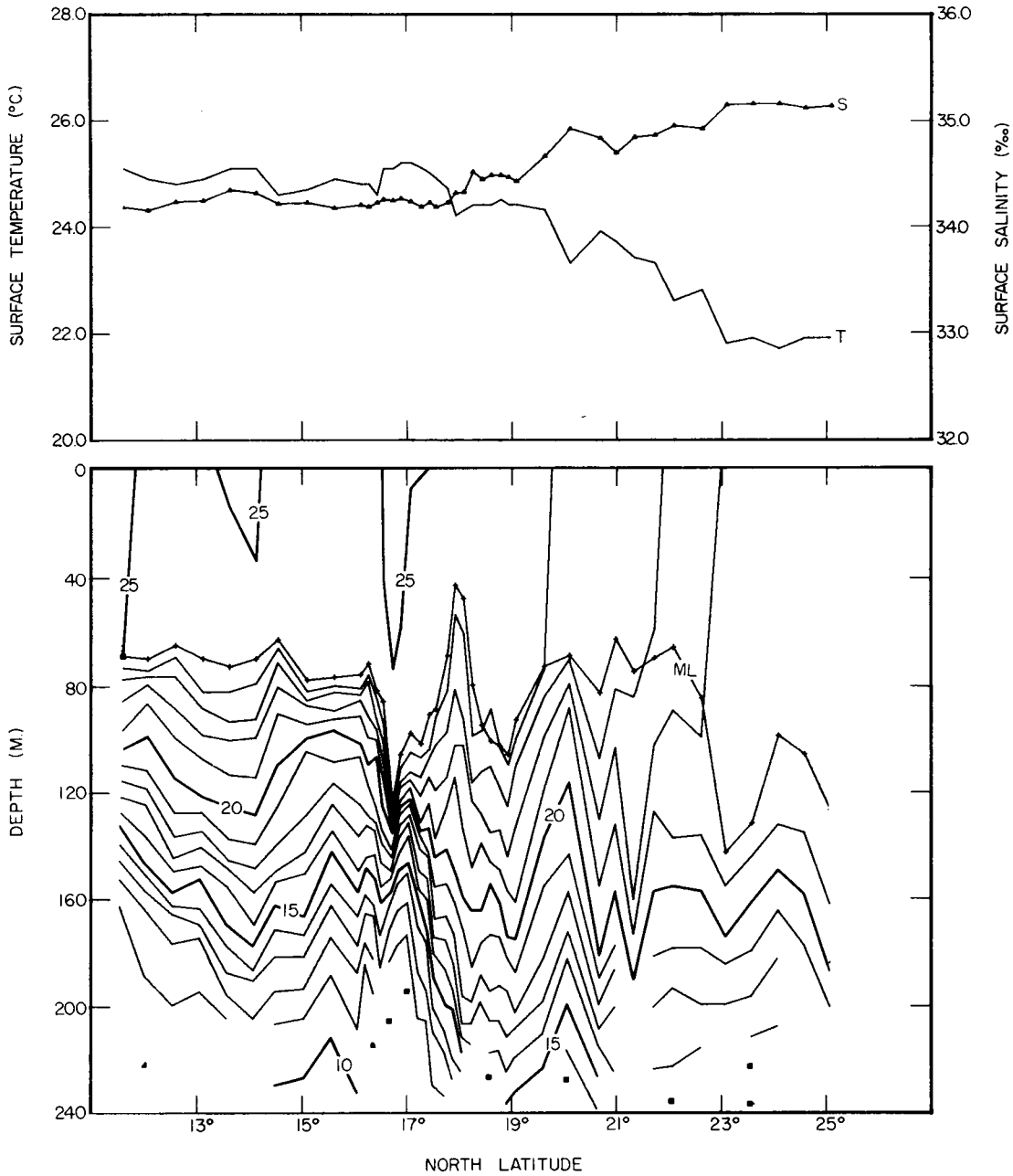


Figure 17.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 13 along long. 157° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

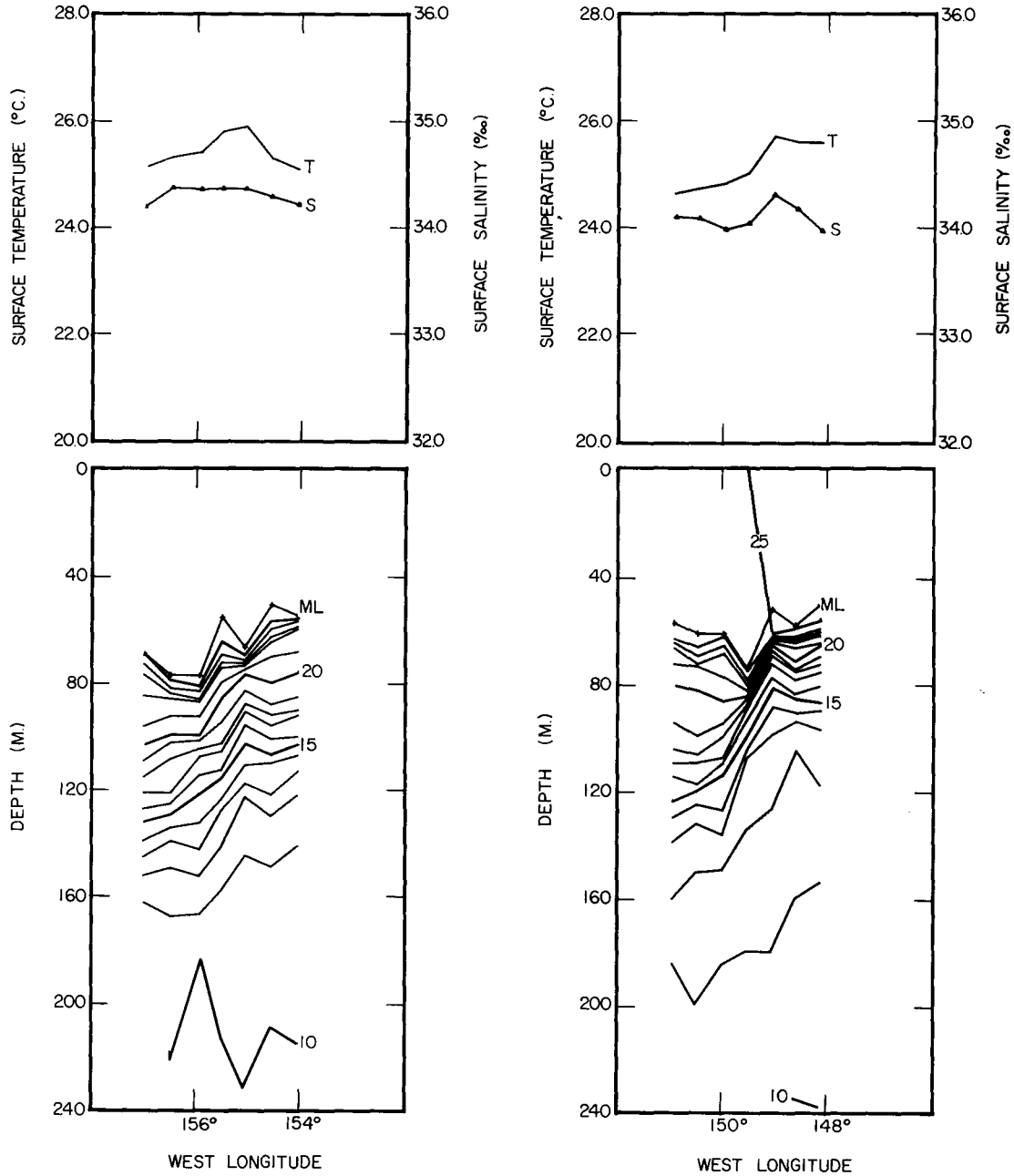


Figure 18.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and zonal BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 13 between stations 7 and 7A, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

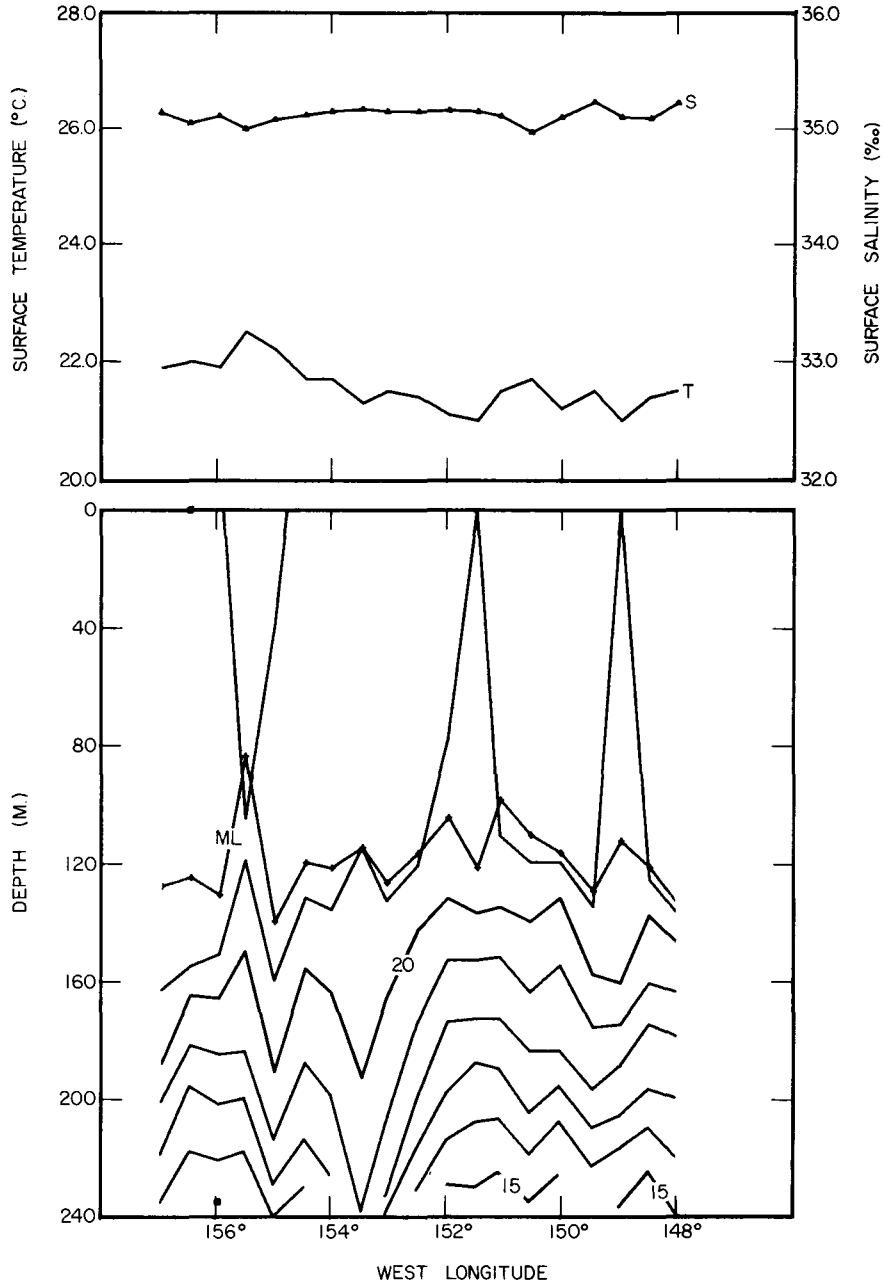


Figure 19.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and zonal BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 13 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

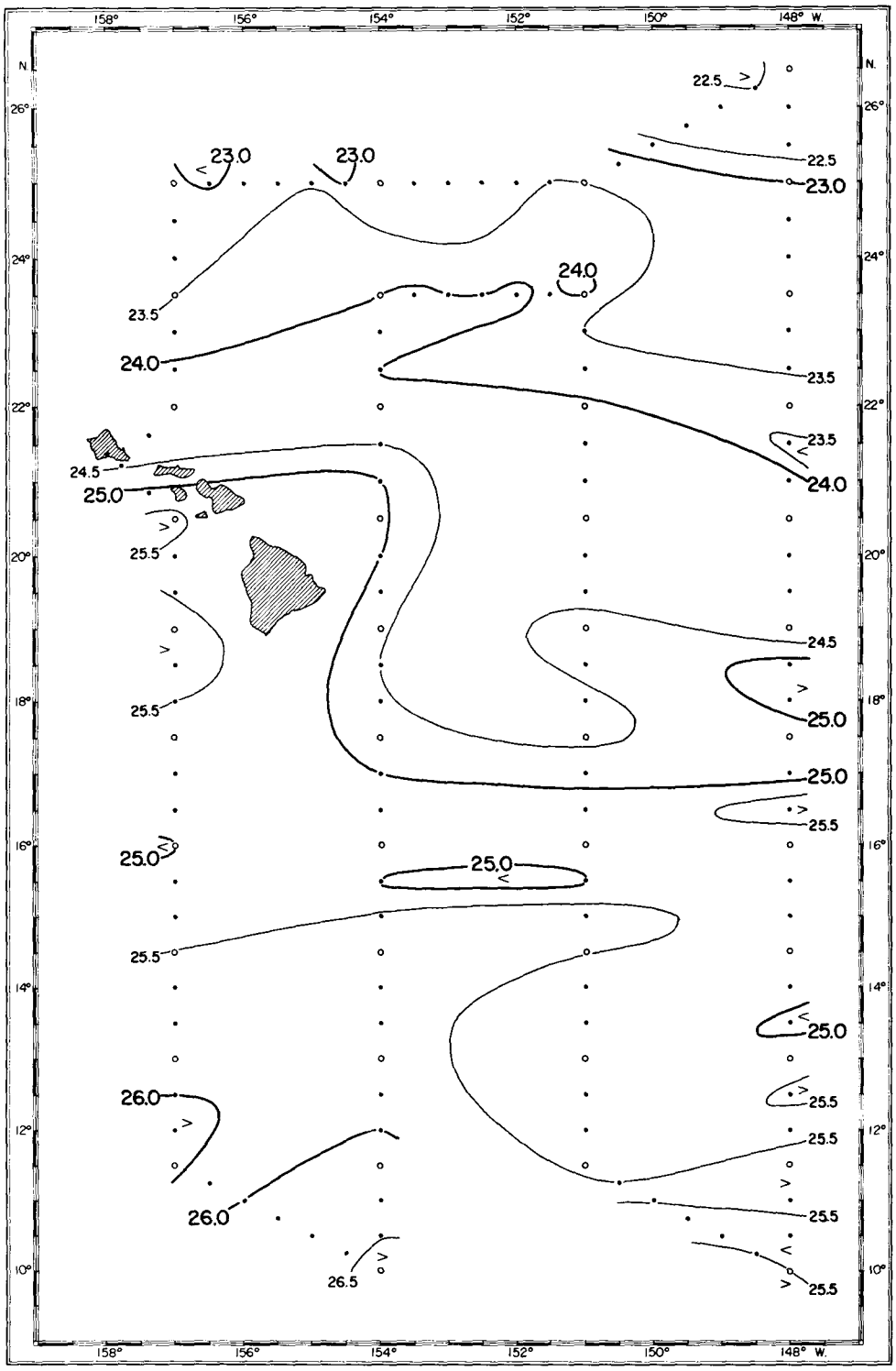


Figure 20.--Surface temperature distribution (° C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 11.

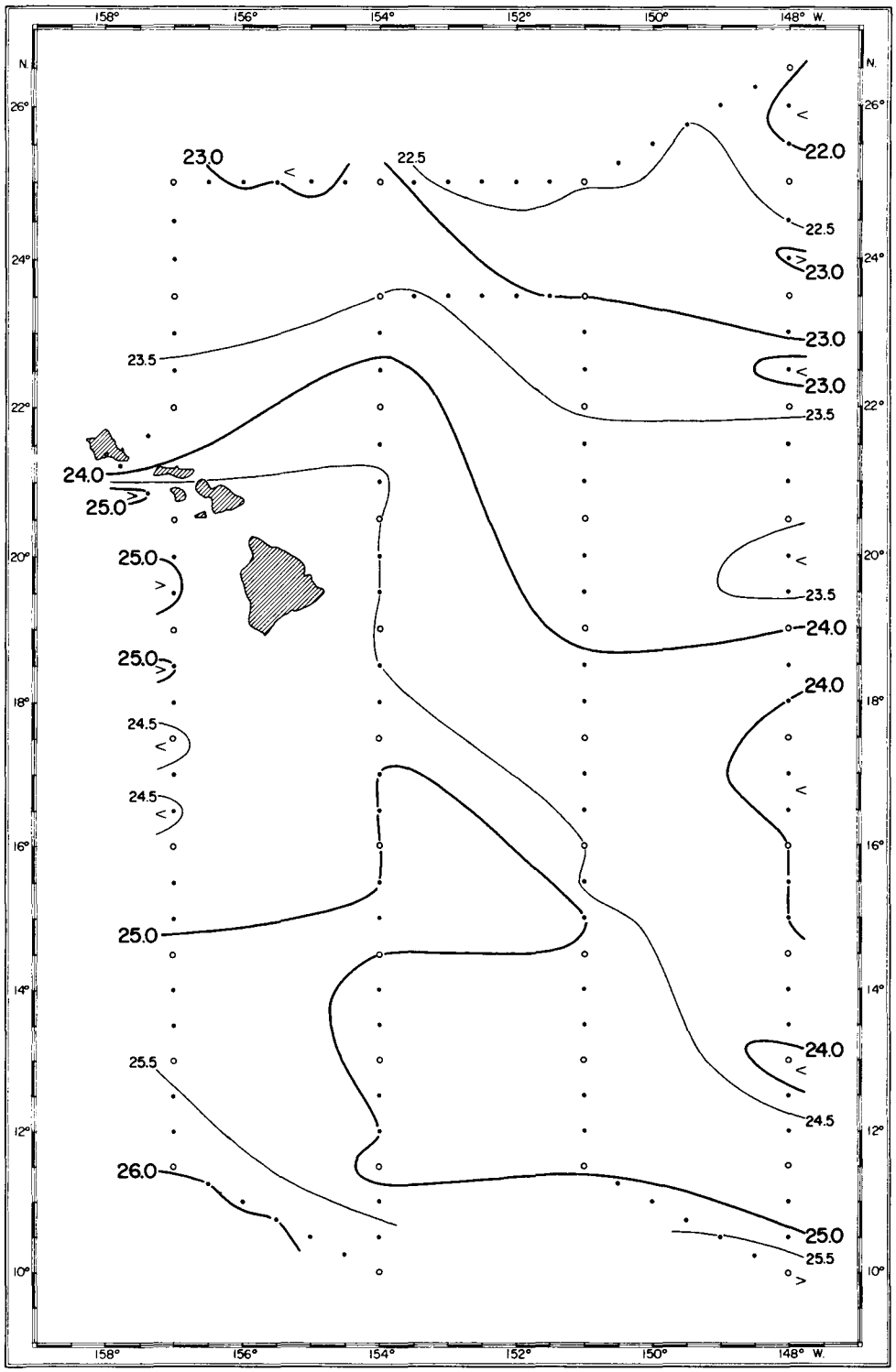


Figure 21.--Surface temperature distribution (° C.) based on intake temperature at each BT cast for Townsend Cromwell cruise 12.

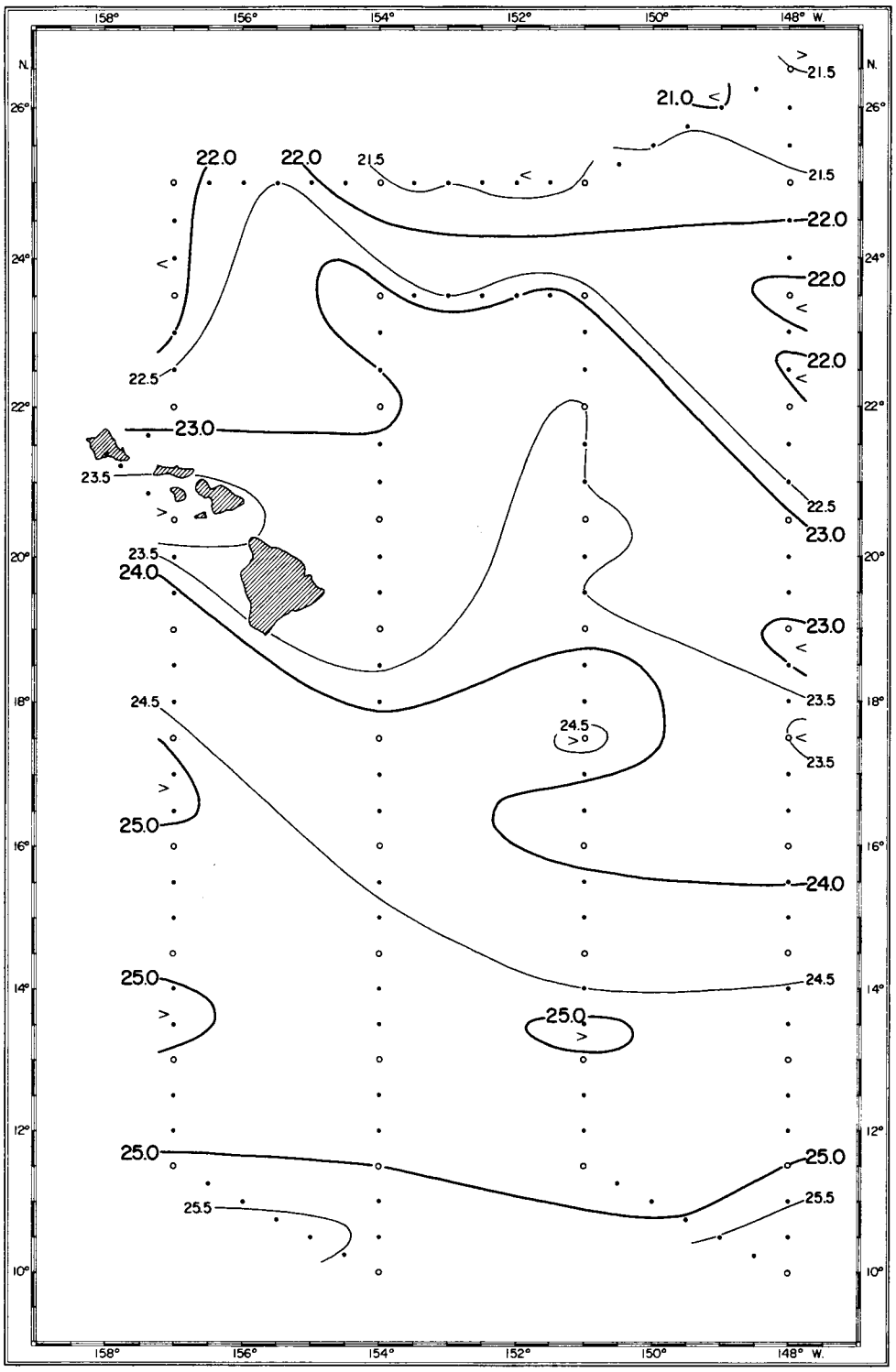


Figure 22.--Surface temperature distribution (° C.) based on intake temperature at each BT cast for Townsend Cromwell cruise 13.

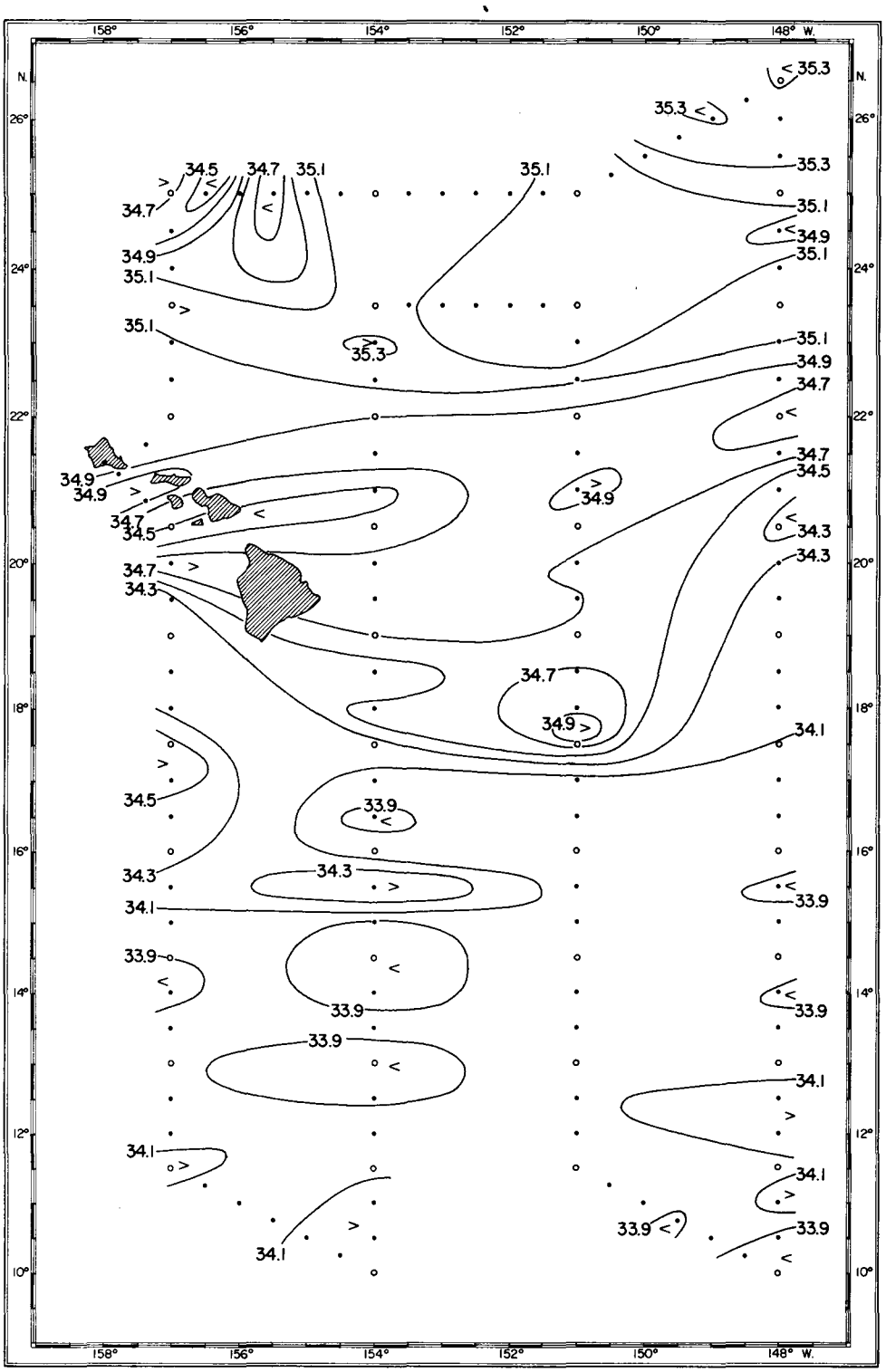


Figure 23.--Surface salinity distribution (o/oo) from bucket salinity samples at each BT cast for Townsend Cromwell cruise 11.

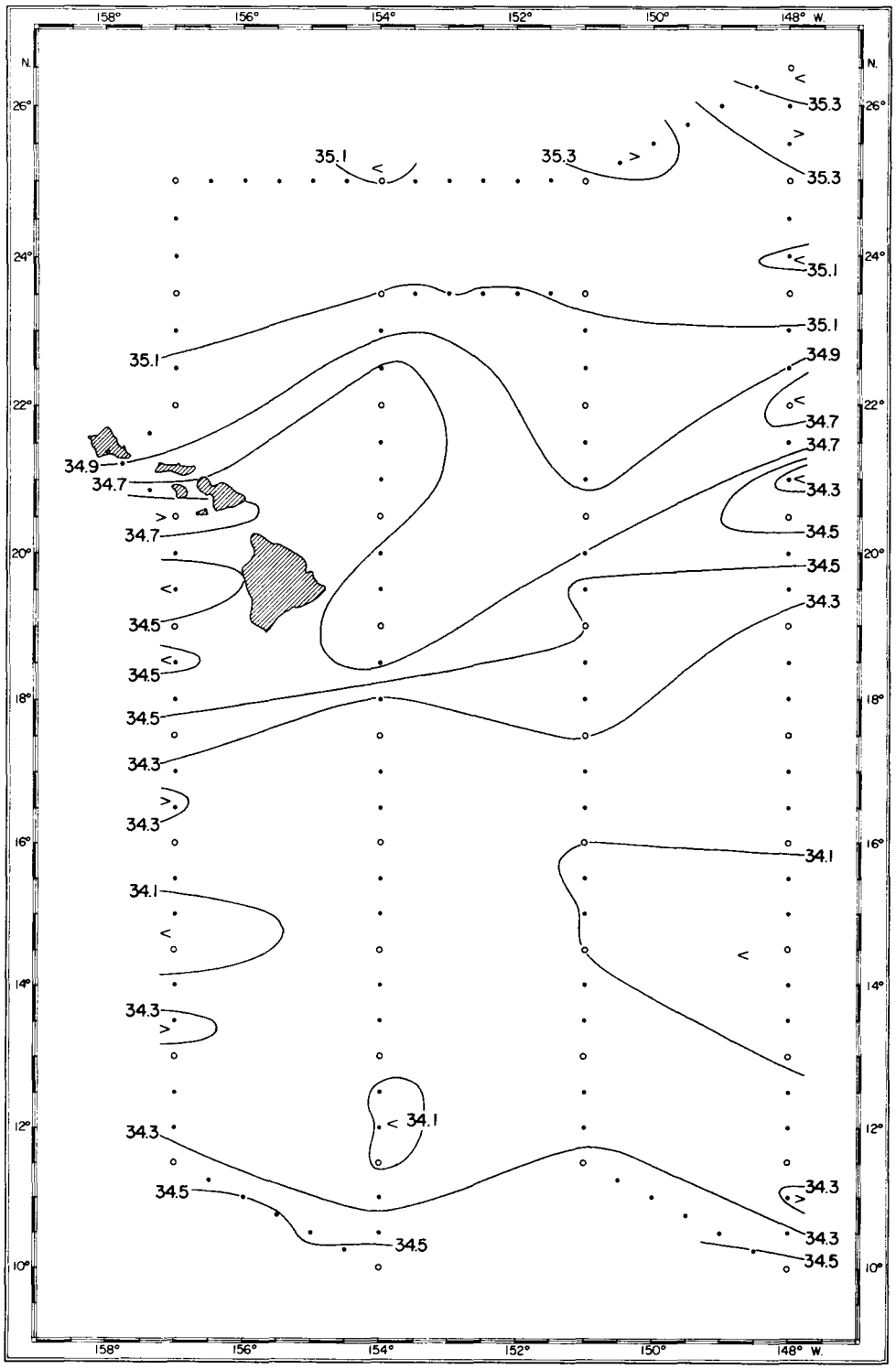


Figure 24.--Surface salinity distribution (°/oo) from intake salinity samples at each BT cast for Townsend Cromwell cruise 12.

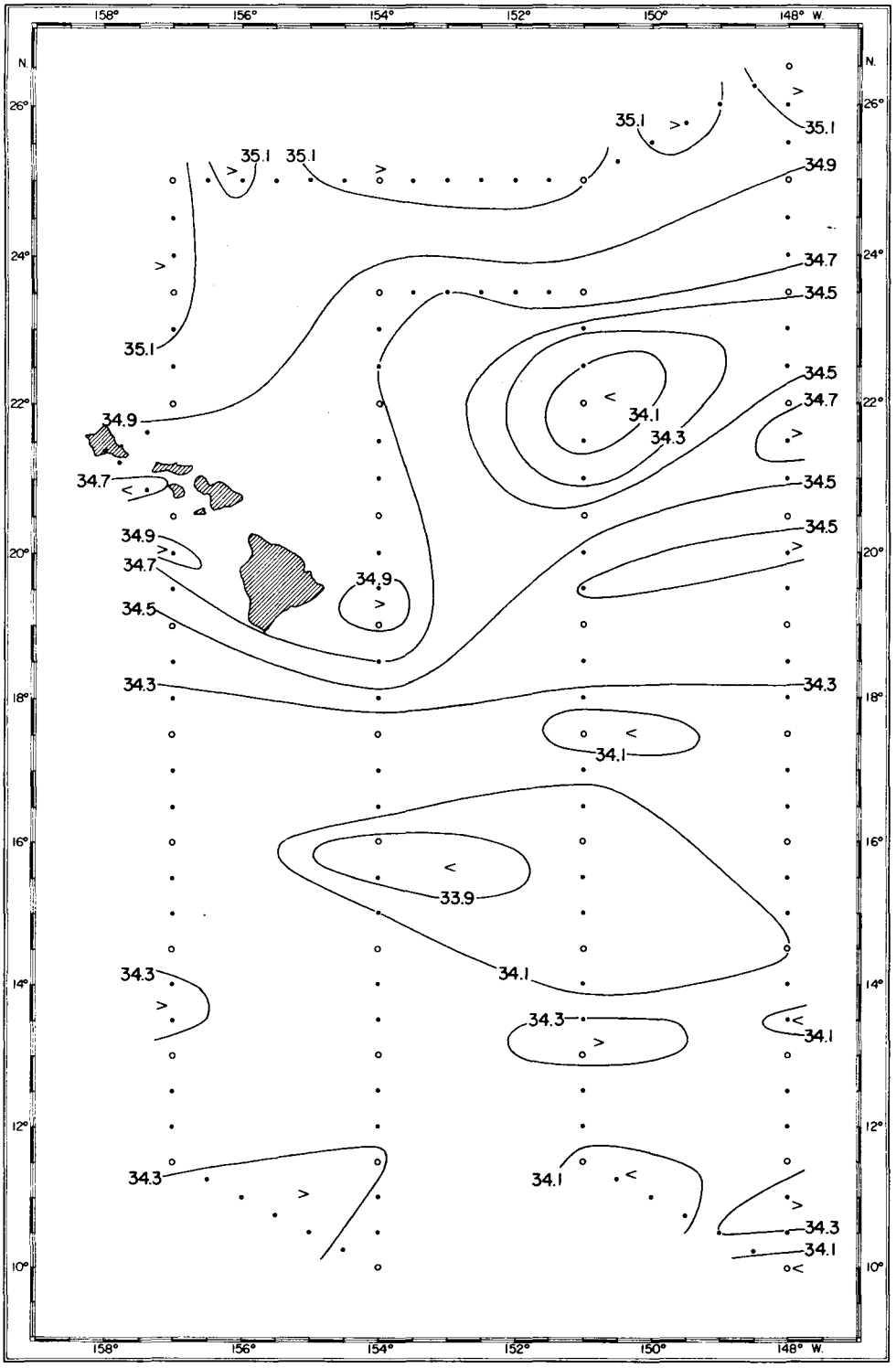
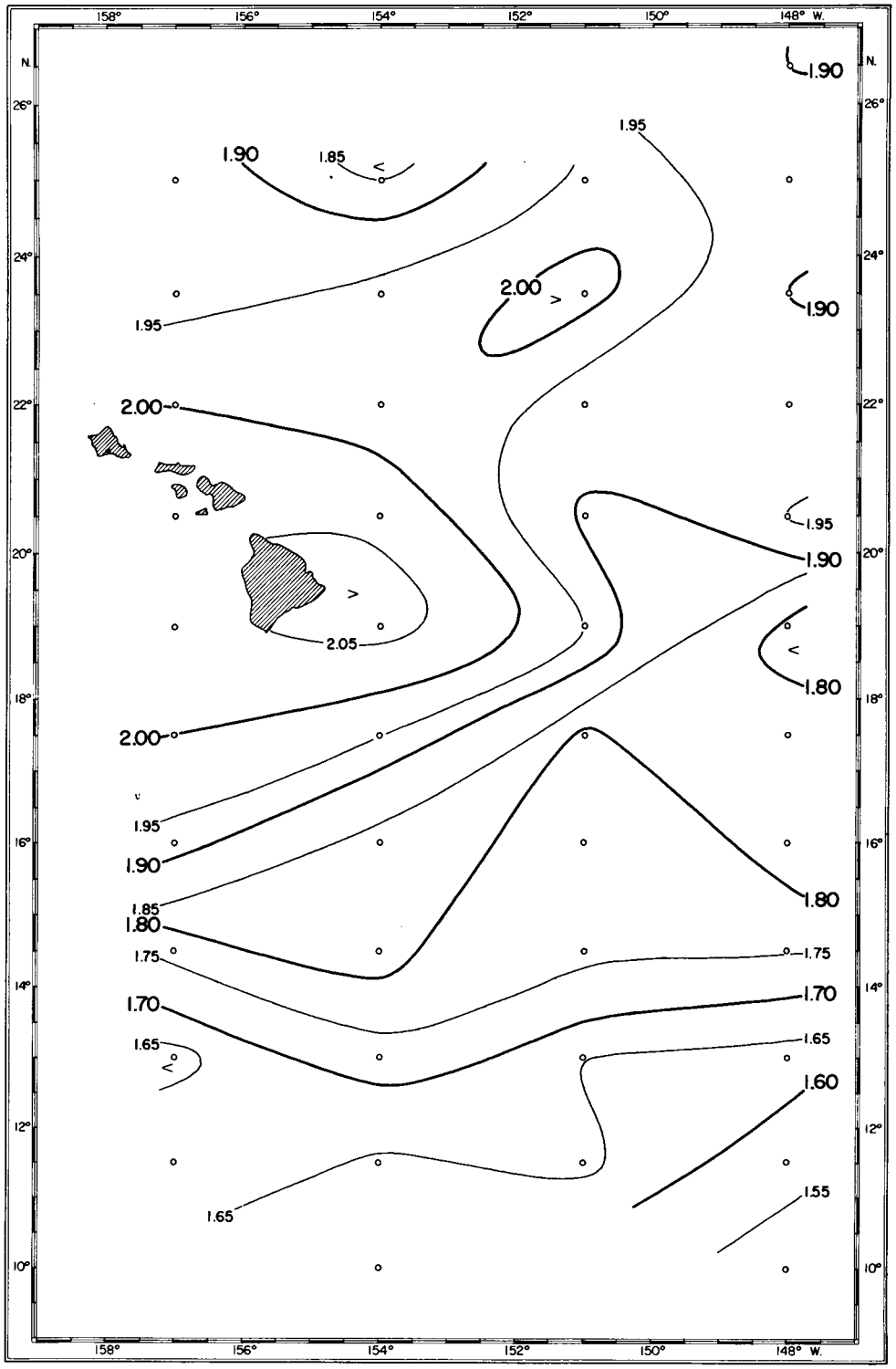


Figure 25.--Surface salinity distribution (°/oo) from intake salinity samples at each BT cast for Townsend Cromwell cruise 13.



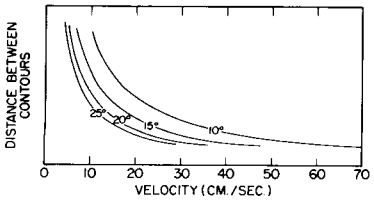
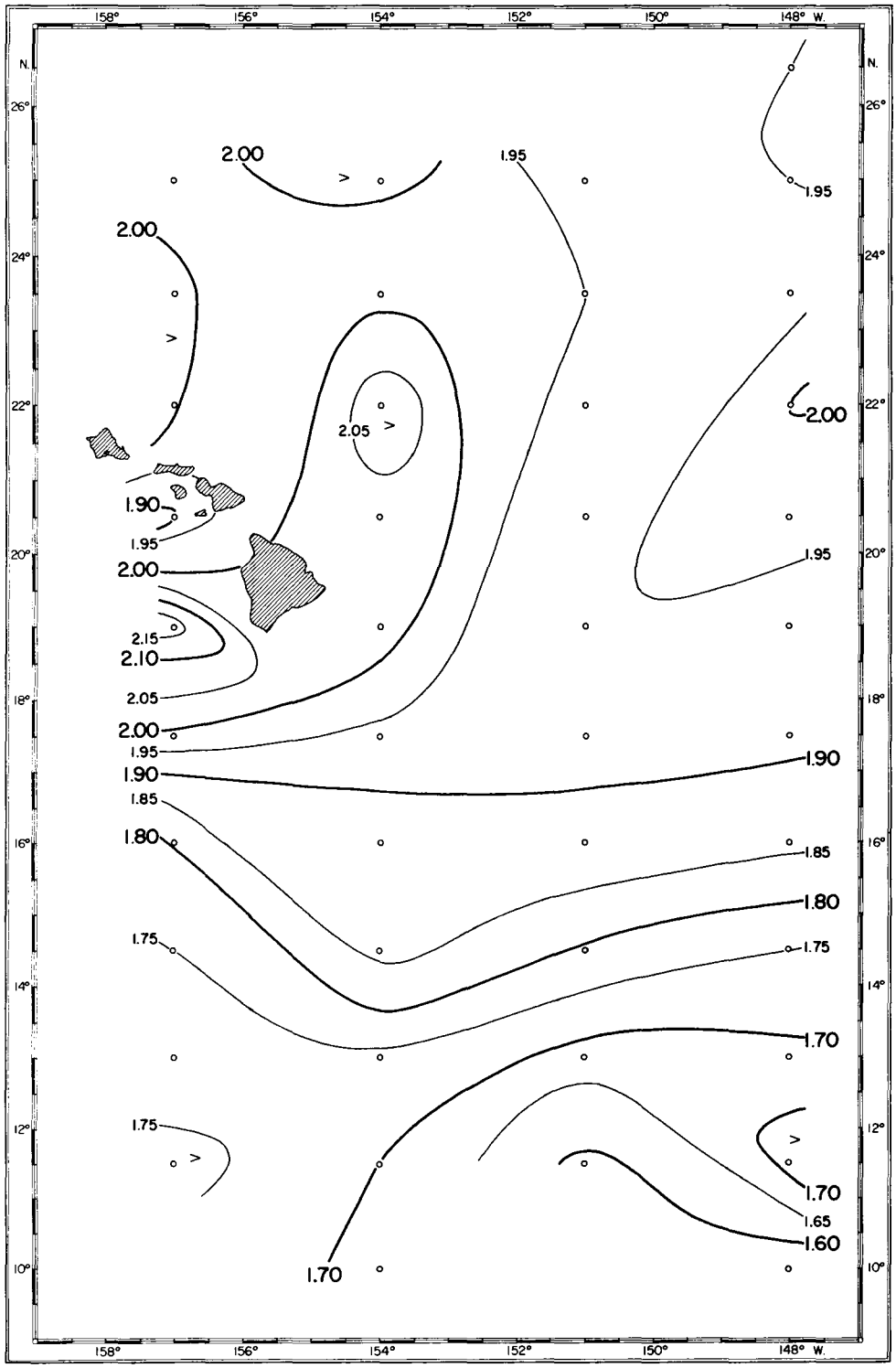


Figure 26.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 11.



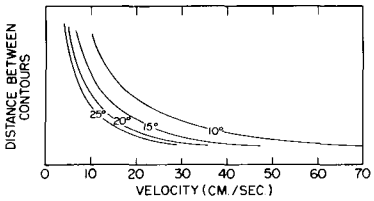
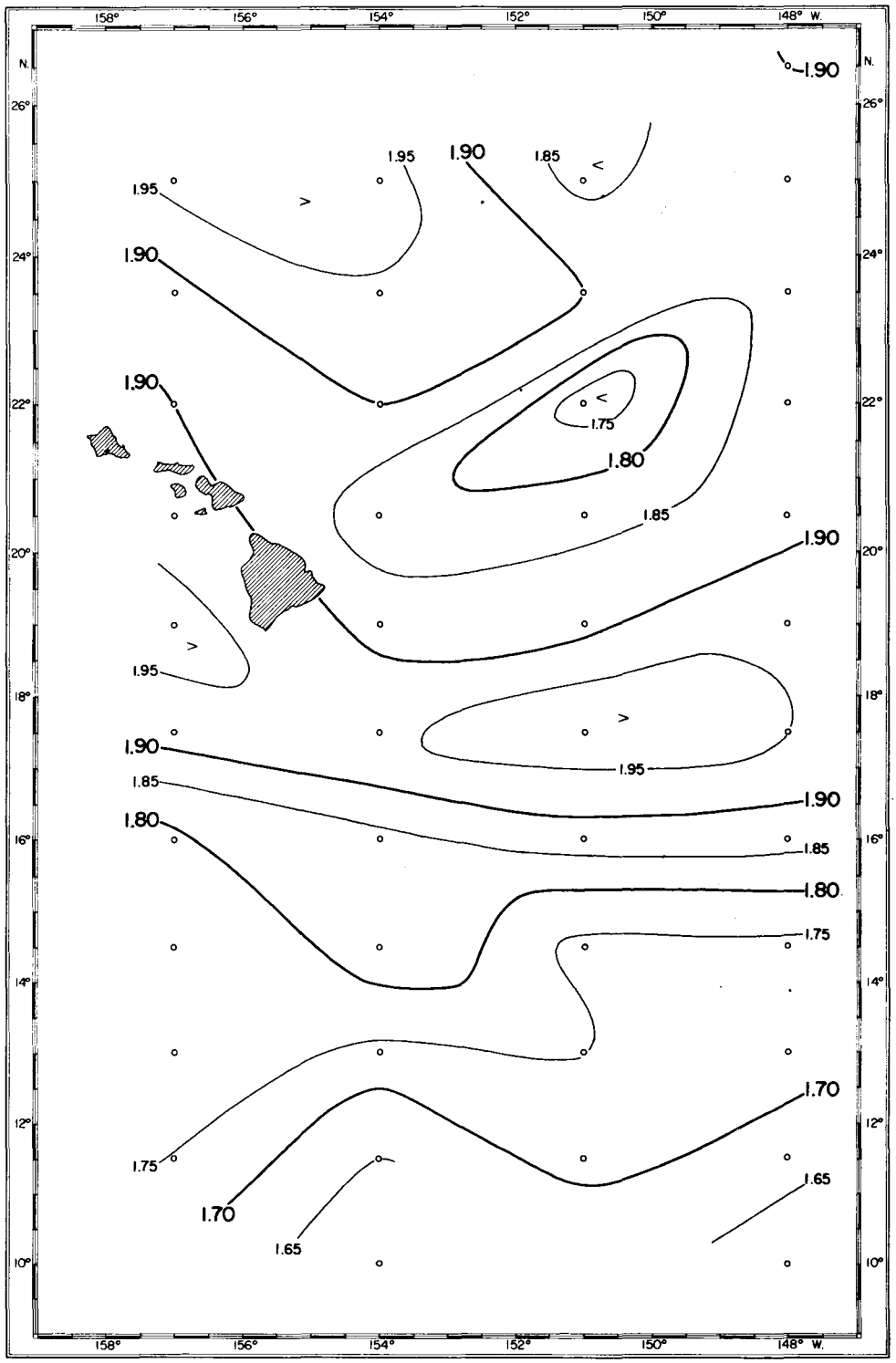


Figure 27.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 12.



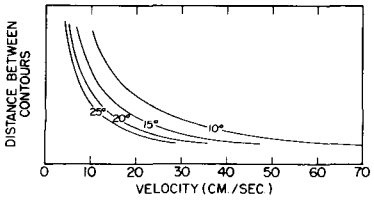


Figure 28.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 13.

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 (PO_4-P) in microgram-atoms per liter.

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

Table 1.--Original and derived oceanographic data for Townsend Cromwell cruise 11

CROMWELL 11, STATION 1, 20-36N LAT, 157-13W LONG, DEC. 2, 1964, 0600 G.C.T.
DRY BULB 25.7 WET BULB 21.9 WIND SPEED 10, DIR. 12 BAR. 16 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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	0.997
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.
DRY BULB 24.8 WET BULB 21.1 WIND SPEED 15, DIR. 15 BAR. 16 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.
1.	25.58	34.17			22.56	529.6	0.	25.58	34.17	22.56	529.5	0.000
11.Δ	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.Δ	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.
DRY BULB 25.2 WET BULB 21.2 WIND SPEED 22, DIR. 07 BAR. 13 WEATHER 02 VIS. CLOUD TYPE 8, COVER 1

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

CROMWELL 11, STATION 4, 16- 2N 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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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.	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

CROMWELL 11, STATION 7, 11-30N LAT, 156-59W LONG, DEC. 4, 1964, 1400 G.C.T.
DRY BULB 25.5 WET BULB 23.0 WIND SPEED 14, DIR. 09 BAR. 09 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	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.Δ	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						

CROMWELL 11, STATION 7A, 10- ON LAT, 154- OW LONG, DEC. 5, 1964, 1000 G.C.T.
DRY BULB 25.1 WET BULB 23.4 WIND SPEED 16, DIR. 14 BAR. 12 WEATHER 01 VIS. 6 CLOUD TYPE , COVER 6

DEPTH	TEMP.	SAL.	OXY.	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						

CROMWELL 11, STATION 8, 11-31N LAT, 154- OW LONG, DEC. 5, 1964, 1900 G.C.T.
DRY BULB 25.9 WET BULB 23.2 WIND SPEED 18, DIR. 06 BAR. 14 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.18	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	553.5	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

CROMWELL 11, STATION 9, 13- ON LAT, 154- 1W LONG, DEC. 6, 1964, 0500 G.C.T.
DRY BULB 25.6 WET BULB 22.9 WIND SPEED 16, DIR. 05 BAR. 15 WEATHER 03 VIS. 7 CLOUD TYPE 8, COVER 4

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.70	33.88	5.02		22.30	554.0	0.	25.70	33.88	22.30	554.0	0.000
11.	25.75	33.88	5.06		22.29	555.9	10.	25.75	33.88	22.29	556.1	0.056
20.Δ	25.72	33.95			22.35	550.3	20.	25.72	33.95	22.35	550.3	0.112
30.Δ	25.64	34.00			22.41	544.7	30.	25.64	34.00	22.41	544.7	0.167
51.	24.13	34.73	5.51		23.42	449.3	50.	24.23	34.69	23.36	454.9	0.267
76.	21.35	34.92	5.29		24.36	360.7	75.	21.46	34.92	24.33	363.5	0.371
101.	19.49	34.94	4.64		24.87	312.7	100.	19.56	34.94	24.85	314.3	0.456
125.	16.83	34.70	4.42		25.34	268.0	150.	13.75	34.37	25.77	227.3	0.592
152.	13.52	34.35	4.44		25.80	224.3	200.	10.94	34.54	26.45	163.7	0.691
176.	11.50	34.33	2.26		26.18	188.5	250.	10.64	34.68	26.61	149.2	0.770
190.	11.01	34.46	1.39		26.37	170.6	300.	9.76	34.63	26.72	139.2	0.843
224.	10.99	34.67	0.32		26.54	155.6	400.	8.63	34.60	26.88	125.3	0.976
251.	10.62	34.68	0.26		26.61	149.0	500.	7.50	34.56	27.02	112.9	1.096
277.	10.29	34.66	0.26		26.66	145.4	600.	6.68	34.55	27.13	103.5	1.205
301.	9.74	34.63	0.36		26.73	138.9	700.	5.95	34.54	27.22	95.4	1.306
401.	8.62	34.60	0.47		26.89	125.2	800.	5.32	34.54	27.29	88.4	1.399
503.	7.47	34.56	0.50		27.03	112.5	1000.	4.46	34.57	27.42	77.5	1.567
603.	6.66	34.55	0.57		27.13	103.2	1200.	3.80	34.59	27.50	69.6	1.716
805.	5.29	34.54	0.64		27.30	88.1						
1007.	4.44	34.57	1.06		27.42	77.2						
1208.	3.78	34.59	1.50		27.50	69.3						
1455.	3.02	34.60	1.73		27.59	61.2						

CROMWELL 11, STATION 10, 14-29N LAT, 154- 2W LONG, DEC. 6, 1964, 1700 G.C.T.
DRY BULB 24.7 WET BULB 22.1 WIND SPEED 18, DIR. 06 BAR. 13 WEATHER 15 VIS. 7 CLOUD TYPE 8, COVER 3

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.70	33.83	5.46		22.27	557.6	0.	25.70	33.83	22.27	557.6	0.000
11.	25.74	33.82	5.42		22.25	559.9	10.	25.74	33.82	22.25	559.7	0.056
30.Δ	25.74	33.82			22.25	560.6	20.	25.75	33.82	22.24	560.5	0.113
51.	25.73	33.82	5.40		22.25	561.1	30.	25.74	33.82	22.25	560.6	0.169
75.	23.71	33.72	5.95		22.78	511.2	50.	25.75	33.82	22.24	561.6	0.282
101.	21.85	34.73	5.80		24.07	388.5	75.	23.71	33.72	22.78	511.2	0.417
127.	20.24	34.85	5.61		24.60	339.0	100.	21.92	34.69	24.03	393.3	0.531
151.	16.40	34.56	4.42		25.34	269.4	150.	16.57	34.57	25.31	272.0	0.699
175.	14.24	34.40	3.97		25.69	235.7	200.	11.47	34.24	26.12	195.3	0.817
189.	12.22	34.24	3.70		25.98	208.5	250.	10.04	34.33	26.44	164.9	0.907
225.	10.79	34.34	2.10		26.32	176.4	300.	8.62	34.33	26.68	142.9	0.985
250.	10.04	34.33	2.25		26.44	164.9	400.	7.82	34.50	26.93	120.4	1.118
276.	8.83	34.24	2.42		26.57	152.6	500.	6.91	34.50	27.06	108.8	1.233
301.	8.62	34.34	1.49		26.68	142.5	600.	6.12	34.52	27.18	98.1	1.338
402.	7.80	34.50	0.62		26.93	120.1	700.	5.49	34.53	27.26	90.5	1.433
503.	6.88	34.50	0.64		27.06	108.5	800.	4.98	34.53	27.33	84.9	1.522
603.	6.10	34.52	0.74		27.18	97.8	1000.	4.21	34.56	27.44	75.1	1.684
803.	4.97	34.53	0.81		27.33	84.7	1200.	3.57	34.58	27.52	67.5	1.828
1008.	4.18	34.56	1.10		27.44	74.7	1500.	2.86	34.62	27.62	58.2	2.019
1208.	3.55	34.58	1.42		27.52	67.3						
1508.	2.85	34.62	1.96		27.62	58.0						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.18

CROMWELL 11, STATION 11, 15-57N LAT, 153-58W LONG, DEC. 7, 1964, 0300 G.C.T.
DRY BULB 25.5 WET BULB 22.1 WIND SPEED 14, DIR. 05 BAR. 14 WEATHER 03 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.	25.27	33.97	5.52		22.50	534.9	0.	25.27	33.97	22.50	534.9	0.000
10.	25.27	33.97	5.60		22.50	535.3	10.	25.27	33.97	22.50	535.3	0.054
30.Δ	25.14	34.66			23.06	482.6	20.	25.22	34.29	22.76	510.8	0.107
50.	25.00	34.77	5.52		23.19	471.4	30.	25.14	34.66	23.06	482.6	0.157
75.	23.54	34.98	5.95		23.78	415.6	50.	25.00	34.77	23.19	471.4	0.253
99.	21.81	35.04	5.80		24.32	365.0	75.	23.54	34.98	23.78	415.6	0.364
124.	21.22	35.22	5.47		24.62	337.4	100.	21.78	35.05	24.34	363.7	0.463
149.	19.73	35.06	5.01		24.90	311.7	150.	19.66	35.05	24.91	310.8	0.633
173.	17.64	34.77	4.77		25.20	283.0	200.	14.25	34.42	25.70	235.3	0.770
187.	15.71	34.57	4.89		25.50	254.6	250.	10.56	34.19	26.24	183.9	0.876
220.	12.46	34.26	4.82		25.95	212.3	300.	9.27	34.26	26.52	158.2	0.962
246.	10.74	34.20	4.18		26.22	186.3	400.	7.57	34.32	26.83	129.8	1.107
272.	9.84	34.18	3.80		26.36	173.1	500.	6.74	34.42	27.02	112.0	1.229
297.	9.33	34.26	2.70		26.51	159.4	600.	6.13	34.46	27.13	102.2	1.338
396.	7.62	34.32	1.38		26.82	130.7	700.	5.49	34.49	27.24	92.9	1.436
492.	6.79	34.42	0.75		27.01	113.0	800.	4.91	34.51	27.32	85.3	1.526
589.	6.20	34.46	0.76		27.12	103.4	1000.	4.12	34.54	27.43	75.7	1.689
784.	4.99	34.51	0.96		27.31	86.2	1200.	3.49	34.58	27.52	66.9	1.834
979.	4.19	34.53	1.15		27.41	76.8						
1164.	3.63	34.58	1.40		27.51	67.9						
1414.	2.94	34.61	1.78		27.60	59.2						

SALINITY ERROR TERM AT 20. METERS IS 0.06

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 11, STATION 12, 17-30N LAT, 153-58W LONG, DEC. 7, 1964, 1300 G.C.T.
DRY BULB 24.3 WET BULB 21.7 WIND SPEED 14, DIR. 04 BAR. 15 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 3

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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.	16.58	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						

CROMWELL 11, STATION 13, 19- ON LAT, 154- OW LONG, DEC. 7, 1964, 2200 G.C.T.
DRY BULB 24.6 WET BULB 21.9 WIND SPEED 18, DIR. 07 BAR. 16 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.	25.01	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

CROMWELL 11, STATION 14, 20-30N LAT, 153-57W LONG, DEC. 8, 1964, 0700 G.C.T.
DRY BULB 24.0 WET BULB 22.1 WIND SPEED 15, DIR. 09 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.	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

CROMWELL 11, STATION 15, 22- 1N LAT, 153-55W LONG, DEC. 8, 1964, 1600 G.C.T.
DRY BULB 24.0 WET BULB 21.8 WIND SPEED 24, DIR. 10 BAR. 17 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.60	34.84	4.82		23.36	452.8	0.	24.60	34.84	23.36	452.8	0.000
10.	24.63	34.84	4.86		23.35	454.1	10.	24.63	34.84	23.35	454.1	0.046
30.Δ	24.59	34.92			23.43	447.9	20.	24.63	34.87	23.38	452.0	0.091
50.	24.35	34.99	4.88		23.55	436.8	30.	24.59	34.92	23.43	447.9	0.137
76.	23.16	35.07	5.05		23.96	398.6	50.	24.35	34.99	23.55	436.8	0.226
101.	22.24	35.14	4.95		24.28	369.4	75.	23.21	35.07	23.94	400.2	0.331
126.	21.42	35.21	4.80		24.56	343.4	100.	22.27	35.14	24.26	370.5	0.428
152.	20.07	35.11	4.50		24.85	316.7	150.	20.18	35.12	24.83	318.6	0.602
176.	18.97	34.99	4.50		25.04	298.9	200.	17.65	34.80	25.22	282.0	0.753
190.	18.21	34.88	4.43		25.15	289.0	250.	14.01	34.37	25.72	235.3	0.884
225.	16.02	34.59	4.22		25.45	261.1	300.	11.77	34.20	26.03	205.6	0.995
247.	14.20	34.39	4.12		25.69	237.7	400.	8.84	34.13	26.48	163.1	1.181
277.	12.66	34.25	4.09		25.90	218.2	500.	6.57	34.03	26.74	138.8	1.333
302.	11.70	34.20	4.09		26.04	204.6	600.	5.31	34.13	26.97	116.6	1.462
402.	8.79	34.13	3.15		26.49	162.5	700.	4.77	34.28	27.15	99.5	1.571
503.	6.51	34.03	2.48		26.74	138.2	800.	4.54	34.43	27.29	87.1	1.666
603.	5.28	34.13	1.18		26.98	116.0	1000.	4.01	34.50	27.41	77.0	1.832
803.	4.54	34.43	1.22		27.30	86.8	1200.	3.51	34.55	27.50	69.0	1.980
1003.	4.00	34.50	1.13		27.41	76.9						
1196.	3.51	34.55	1.32		27.50	68.9						
1481.	2.90	34.58	1.59		27.58	61.4						

CROMWELL 11, STATION 16, 23-28N LAT, 153-56W LONG, DEC. 9, 1964, 0000 G.C.T.
DRY BULB 24.0 WET BULB 20.7 WIND SPEED 20, DIR. 09 BAR. 17 WEATHER 01 VIS. 7 CLOUD TYPE , COVER 1

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.95	35.14	4.92		23.78	412.7	0.	23.95	35.14	23.78	412.7	0.000
9.	23.92	35.15	4.94		23.80	411.5	10.	23.92	35.15	23.80	411.3	0.041
30.Δ	23.84	35.17			23.84	408.6	20.	23.88	35.16	23.82	409.9	0.083
50.Δ	23.80	35.18			23.86	407.5	30.	23.84	35.17	23.84	408.6	0.124
72.	23.48	35.20	4.92		23.97	398.0	50.	23.80	35.18	23.86	407.5	0.206
95.	23.08	35.30	4.88		24.16	380.6	75.	23.45	35.22	23.99	396.1	0.308
118.	22.04	35.25	4.90		24.42	356.7	100.	22.90	35.30	24.21	376.1	0.405
142.	20.48	35.19	4.79		24.80	321.0	150.	20.16	35.17	24.87	314.4	0.579
166.	19.45	35.10	4.74		25.00	302.4	200.	17.25	34.78	25.31	274.0	0.727
180.	18.40	34.95	4.70		25.15	288.2	250.	14.24	34.44	25.72	235.1	0.855
212.	16.59	34.69	4.62		25.39	266.1	300.	12.13	34.25	26.00	208.8	0.967
236.	14.95	34.50	4.68		25.62	244.9	400.	9.05	34.11	26.43	168.3	1.158
260.	13.79	34.40	4.72		25.79	229.0	500.	6.81	34.06	26.73	139.8	1.313
282.	12.80	34.30	4.79		25.91	217.4	600.	5.72	34.13	26.92	121.4	1.445
373.	9.87	34.14	3.96		26.32	178.6	700.	4.99	34.25	27.10	104.9	1.559
466.	7.36	34.06	2.96		26.65	147.3	800.	4.53	34.36	27.24	91.8	1.659
557.	6.13	34.09	1.81		26.84	129.4	1000.	3.90	34.50	27.42	75.7	1.828
742.	4.78	34.30	0.78		27.17	98.7	1200.	3.32	34.55	27.52	66.7	1.972
929.	4.12	34.47	1.02		27.37	79.9						
1117.	3.56	34.53	1.18		27.48	70.4						
1200.**	3.32**	34.55**			27.52	66.7						

CROMWELL 11, STATION 17, 23-33N LAT, 151- 0W LONG, DEC. 9, 1964, 1700 G.C.T.
DRY BULB 23.7 WET BULB 21.4 WIND SPEED 18, DIR. 11 BAR. 18 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.	23.89	35.03			23.72	418.9	0.	23.89	35.03	23.72	418.9	0.000
9.	23.90	35.02			23.71	420.3	10.	23.90	35.02	23.71	420.4	0.042
30.Δ	23.90	35.03			23.71	420.4	20.	23.91	35.02	23.71	420.8	0.085
50.Δ	23.76	35.03			23.76	417.2	30.	23.90	35.03	23.71	420.4	0.127
71.	23.66	35.04			23.79	414.5	50.	23.76	35.03	23.76	417.2	0.211
95.	23.12	35.14			24.03	393.2	75.	23.63	35.06	23.81	412.6	0.316
118.	21.52	35.19			24.52	347.2	100.	22.78	35.16	24.13	383.1	0.416
142.	20.68	35.18			24.74	326.9	150.	20.55	35.18	24.77	323.8	0.594
166.	20.21	35.15			24.84	317.9	200.	18.54	34.93	25.10	293.6	0.750
180.	19.55	35.05			24.94	309.0	250.	15.49	34.54	25.53	254.0	0.888
211.	17.93	34.86			25.20	284.6	300.	12.35	34.23	25.94	214.8	1.006
236.	16.39	34.65			25.41	265.2	400.	9.12	34.08	26.40	171.3	1.201
260.	14.82	34.46			25.61	245.8	500.	6.97	34.07	26.72	141.1	1.359
284.	13.15	34.29			25.83	225.0	600.	5.67	34.15	26.94	119.7	1.490
377.	9.77	34.10			26.31	180.0	700.	4.99	34.27	27.12	103.0	1.603
474.	7.44	34.07			26.65	147.8	800.	4.61	34.38	27.25	91.4	1.701
569.	5.96	34.11			26.88	125.8	1000.	3.98	34.47	27.39	78.6	1.873
760.	4.77	34.35			27.21	95.1	1200.	3.46	34.54	27.50	68.8	2.022
951.	4.12	34.45			27.36	81.6						
1143.	3.61	34.53			27.47	71.2						
1439.	2.97	34.58			27.57	61.9						

ΔFROM BT DATA
**EXTRAPOLATED DATA

Table 1.--Continued

CROMWELL 11, STATION 18, 22- ON LAT, 151- 1W LONG, DEC. 10, 1964, 0300 G.C.T.
DRY BULB 22.9 WET BULB 21.6 WIND SPEED 18, DIR. 15 BAR. 16 WEATHER 53 VIS. 3 CLOUD TYPE 8, COVER 9

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.12	34.80			23.48	442.0	0.	24.12	34.80	23.48	442.0	0.000
10.	24.17	34.86			23.51	439.5	10.	24.17	34.86	23.51	439.5	0.044
20.Δ	24.18	34.86			23.50	440.2	20.	24.18	34.86	23.50	440.2	0.089
30.Δ	24.10	34.90			23.56	435.4	30.	24.10	34.90	23.56	435.4	0.133
51.	23.34*	35.12			23.95	399.0	50.	23.38	35.11	23.93	400.8	0.217
76.	23.04	35.09			24.01	393.9	75.	23.05	35.09	24.01	394.0	0.317
100.	21.98	35.21			24.40	357.3	100.	21.98	35.21	24.40	357.3	0.412
125.	21.14	35.21			24.63	336.1	150.	20.42	35.20	24.82	319.0	0.582
151.	20.39	35.20			24.83	318.3	200.	18.65	34.99	25.12	291.8	0.736
175.	19.48	35.10			24.99	303.5	250.	14.67	34.40	25.60	247.2	0.872
190.	19.00	35.04			25.07	296.5	300.	11.42	34.09	26.01	207.4	0.987
223.	17.40	34.81			25.29	276.2	400.	8.38	34.08	26.52	159.8	1.172
251.	14.57	34.38			25.61	246.1	500.	6.26	34.10	26.83	129.6	1.318
275.	12.88	34.20			25.82	226.1	600.	5.06	34.20	27.06	108.0	1.438
301.	11.37	34.09			26.02	206.7	700.	4.57	34.34	27.22	93.0	1.539
400.	8.38	34.08			26.52	159.8	800.	4.40	34.46	27.34	82.8	1.628
501.	6.24	34.10			26.83	129.3	1000.	3.92	34.52	27.43	74.5	1.788
600.	5.06	34.20			27.06	108.0	1200.	3.49	34.56	27.51	68.0	1.932
800.	4.40	34.46			27.34	82.8	1500.	2.87	34.59	27.59	60.4	2.127
1002.	3.92	34.52			27.43	74.5						
1202.	3.49	34.56			27.51	68.0						
1502.	2.87	34.59			27.59	60.4						

CROMWELL 11, STATION 19, 20-30N LAT, 151- 6W LONG, DEC. 10, 1964, 1300 G.C.T.
DRY BULB 24.0 WET BULB 22.1 WIND SPEED 13, DIR. 14 BAR. 16 WEATHER 03 VIS. 7 CLOUD TYPE 3, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.19	34.85			23.49	440.4	0.	24.19	34.85	23.49	440.4	0.000
9.Δ	24.22	34.85			23.48	441.6	10.	24.22	34.85	23.48	441.8	0.044
30.Δ	24.21	34.85			23.49	442.1	20.	24.22	34.84	23.48	442.7	0.089
49.	24.17	34.96			23.58	433.8	30.	24.21	34.85	23.49	442.1	0.134
74.	23.73	35.08			23.80	413.7	50.	24.17	34.97	23.59	433.4	0.222
98.	22.07	35.16			24.34	363.3	75.	23.66	35.08	23.83	411.6	0.328
123.	21.40	35.18			24.54	345.0	100.	22.01	35.17	24.36	361.4	0.426
148.	20.02	35.07			24.83	318.2	150.	19.95	35.07	24.85	316.7	0.596
172.	18.99	35.00			25.04	298.6	200.	16.95	34.72	25.33	271.5	0.745
187.	17.73	34.83			25.23	281.2	250.	13.84	34.38	25.76	231.6	0.871
219.	15.93	34.59			25.47	258.9	300.	10.77	34.12	26.15	193.8	0.979
246.	14.14	34.41			25.72	234.9	400.	7.69	34.07	26.61	150.3	1.152
271.	12.34	34.21			25.93	215.0	500.	5.75	34.11	26.90	122.1	1.290
295.	10.99	34.13			26.12	196.8	600.	5.07	34.27	27.11	102.7	1.403
393.	7.87	34.07			26.58	152.8	700.	4.66	34.38	27.25	90.5	1.501
492.	5.84	34.10			26.88	124.0	800.	4.38	34.46	27.34	82.8	1.589
590.	5.12	34.26			27.10	104.2	1000.	3.84	34.52	27.45	73.2	1.747
787.	4.42	34.45			27.33	83.7	1200.	3.35	34.57	27.53	65.8	1.887
984.	3.88	34.52			27.44	73.8						
1182.	3.42	34.56			27.52	67.0						
1439.	2.78	34.60			27.61	58.2						

CROMWELL 11, STATION 20, 19- 1N LAT, 151- 0W LONG, DEC. 10, 1964, 2200 G.C.T.
DRY BULB 24.7 WET BULB 22.0 WIND SPEED 15, DIR. 11 BAR. 16 WEATHER 02 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.	24.77	34.69			23.20	468.5	0.	24.77	34.69	23.20	468.5	0.000
9.Δ	24.71	34.69			23.22	467.1	10.	24.71	34.69	23.22	467.1	0.047
30.Δ	24.66	34.70			23.24	465.8	20.	24.68	34.69	23.23	466.4	0.094
50.Δ	24.62	34.74			23.28	462.5	30.	24.66	34.70	23.24	465.8	0.141
75.	24.56	34.98			23.48	444.5	50.	24.62	34.74	23.28	462.5	0.235
99.	23.75	35.07			23.79	416.0	75.	24.56	34.98	23.48	444.5	0.349
125.	22.33	35.18			24.28	369.9	100.	23.70	35.07	23.81	414.3	0.457
150.	20.83	35.20			24.71	329.6	150.	20.83	35.20	24.71	329.6	0.644
175.	19.97	35.12			24.88	314.3	200.	18.46	34.94	25.13	291.1	0.801
190.	19.07	35.02			25.04	299.7	250.	13.97	34.35	25.71	236.0	0.934
224.	16.67	34.69			25.37	268.2	300.	10.52	34.23	26.28	181.5	1.039
251.	13.87	34.34			25.72	234.7	400.	7.85	34.23	26.71	140.8	1.202
276.	11.97	34.25			26.03	205.3	500.	6.67	34.32	26.95	118.7	1.333
300.	10.52	34.23			26.28	181.5	600.	5.87	34.40	27.12	103.3	1.445
400.	7.85	34.23			26.71	140.8	700.	5.32	34.46	27.23	93.5	1.544
498.	6.69	34.32			26.95	119.1	800.	4.92	34.49	27.30	86.9	1.635
596.	5.89	34.40			27.11	103.7	1000.	4.18	34.53	27.42	76.9	1.801
797.	4.93	34.49			27.30	87.1	1200.	3.57	34.56	27.50	69.2	1.949
995.	4.20	34.53			27.41	77.1						
1193.	3.61	34.55			27.49	70.1						
1423.	2.99	34.59			27.58	61.3						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 11, STATION 21, 17-30N LAT, 150-58W LONG, DEC. 11, 1964, 0800 G.C.T.												
DRY BULB 24.4	WET BULB 21.9	WIND SPEED 10, DIR. 10		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.	24.38	34.96			23.52	437.9	0.	24.38	34.96	23.52	437.9	0.000
9.	24.36	34.96			23.52	437.6	10.	24.36	34.96	23.53	437.5	0.044
19.	24.32	34.97			23.54	436.2	20.	24.31	34.97	23.55	435.9	0.088
50.Δ	24.10	35.02			23.65	427.5	30.	24.25	34.98	23.58	433.5	0.132
59.	24.05	35.04			23.68	425.0	50.	24.10	35.02	23.65	427.5	0.219
84.	21.84	35.19			24.43	354.4	75.	22.74	35.14	24.13	382.3	0.321
109.	20.89	35.21			24.70	329.0	100.	21.18	35.21	24.63	335.8	0.411
134.	19.62	35.15			24.99	301.9	150.	18.47	34.95	25.14	288.6	0.568
159.	17.74	34.82			25.22	281.3	200.	13.75	34.33	25.74	231.4	0.699
184.	15.58	34.53			25.50	254.6	250.	10.87	34.28	26.26	182.7	0.804
209.	12.78	34.25			25.88	218.8	300.	9.59	34.42	26.59	152.1	0.888
232.	11.34	34.24			26.14	193.5	400.	8.11	34.46	26.85	127.7	1.029
259.	10.71	34.31			26.31	177.9	500.	7.19	34.47	27.00	115.1	1.152
283.	9.96	34.40			26.51	159.1	600.	6.46	34.48	27.10	105.6	1.263
307.	9.46	34.42			26.61	150.0	700.	5.81	34.49	27.19	97.5	1.366
504.	7.17	34.47			27.00	114.9	800.	5.29	34.50	27.27	90.7	1.461
603.	6.44	34.48			27.11	105.3	1000.	4.49	34.54	27.39	80.3	1.634
704.	5.79	34.49			27.20	97.2	1200.	3.79	34.56	27.48	71.6	1.788
901.	4.85	34.52			27.33	85.0	1500.	2.94	34.60	27.60	60.2	1.989
1099.	4.16	34.55			27.43	76.1	2000.	2.10	34.65	27.71	49.0	2.266
1200.	3.79	34.56			27.48	71.6	2500.	1.75	34.68	27.76	44.6	2.504
1472.	3.00	34.60	3.56		27.59	61.0	3000.	1.60	34.70	27.80	43.2	2.737
1942.	2.16	34.65	2.87		27.70	49.7						
2913.	1.65	34.69	1.52		27.77	43.9						
3907.	1.44	34.70	2.27		27.80	43.0						

TEMPERATURE ERROR TERM AT 75. METERS IS 0.17
TEMPERATURE ERROR TERM AT 3000. METERS IS 0.14

CROMWELL 11, STATION 22, 16- ON LAT, 150-59W LONG, DEC. 11, 1964, 1700 G.C.T.												
DRY BULB 24.8	WET BULB 22.1	WIND SPEED 19, DIR. 06		BAR. 14	WEATHER 02	VIS. 7	CLOUD TYPE 4, COVER 8					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.40	34.04			22.52	533.6	0.	25.40	34.04	22.52	533.6	0.000
9.	25.41	34.04			22.51	534.3	10.	25.41	34.04	22.52	534.1	0.054
30.Δ	25.40	34.10			22.56	530.5	20.	25.41	34.07	22.54	532.2	0.107
50.	25.40	34.04			22.52	535.6	30.	25.40	34.10	22.56	530.5	0.161
75.	23.12	34.90			23.84	409.7	50.	25.40	34.04	22.52	535.6	0.268
100.	20.27	35.01			24.72	327.2	75.	23.12	34.90	23.84	409.7	0.387
126.	17.62	34.69			25.15	286.8	100.	20.27	35.01	24.72	327.2	0.490
151.	13.96	34.34			25.70	233.8	150.	14.10	34.35	25.68	235.7	0.622
176.	12.10	34.21			25.98	208.2	200.	11.08	34.22	26.17	189.6	0.729
191.	11.34	34.19			26.10	196.3	250.	9.16	34.21	26.50	159.3	0.817
224.	10.45	34.30			26.35	173.5	300.	8.94	34.41	26.69	142.3	0.893
251.	9.12	34.21			26.50	158.9	400.	7.82	34.47	26.91	122.6	1.027
277.	9.21	34.36			26.60	149.8	500.	7.31	34.54	27.03	111.7	1.145
301.	8.92	34.41			26.69	142.0	600.	6.56	34.53	27.13	103.3	1.254
402.	7.80	34.47			26.91	122.3	700.	5.86	34.52	27.21	95.7	1.354
502.	7.30	34.54			27.04	111.5	800.	5.24	34.52	27.29	88.9	1.448
603.	6.54	34.53			27.13	103.0	1000.	4.32	34.55	27.42	77.2	1.616
803.	5.22	34.52			27.29	88.7	1200.	3.73	34.58	27.50	69.4	1.764
1003.	4.31	34.55			27.42	77.0						
1203.	3.72	34.58			27.50	69.3						
1484.	2.94	34.61			27.60	59.7						

CROMWELL 11, STATION 23, 14-31N LAT, 151- 0W LONG, DEC. 12, 1964, 0200 G.C.T.												
DRY BULB 26.2	WET BULB 22.6	WIND SPEED 19, DIR. 16		BAR. 11	WEATHER 02	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.	25.55	34.00			22.44	540.9	0.	25.55	34.00	22.44	540.9	0.000
9.	25.54	34.00			22.44	541.0	10.	25.53	34.01	22.45	540.3	0.054
30.Δ	25.32	34.13			22.61	526.0	20.	25.43	34.06	22.53	533.6	0.109
49.	25.34	34.17			22.63	524.4	30.	25.32	34.13	22.61	526.0	0.162
74.	22.86	34.83			23.87	407.6	50.	25.27	34.20	22.67	520.4	0.267
98.	20.69	34.88			24.51	347.3	75.	22.78	34.84	23.90	404.6	0.384
123.	17.12	34.56			25.17	284.7	100.	20.41	34.86	24.56	341.7	0.478
148.	14.75	34.44			25.61	242.6	150.	14.47	34.41	25.65	238.7	0.624
172.	11.87	34.25			26.05	200.9	200.	11.32	34.57	26.40	168.1	0.727
186.	11.50	34.44			26.27	180.6	250.	10.34	34.62	26.61	148.8	0.807
219.	11.10	34.66			26.51	158.1	300.	9.74	34.63	26.73	138.9	0.879
246.	10.40	34.62			26.61	149.6	400.	8.53	34.59	26.89	124.7	1.012
271.	10.08	34.61			26.65	145.4	500.	7.50	34.55	27.01	113.9	1.133
295.	9.80	34.63			26.72	139.8	600.	6.70	34.53	27.11	105.4	1.243
392.	8.62	34.59			26.88	125.7	700.	5.95	34.53	27.21	96.7	1.345
490.	7.59	34.55			27.00	114.8	800.	5.32	34.53	27.29	89.0	1.439
587.	6.81	34.53			27.10	106.6	1000.	4.45	34.55	27.40	78.5	1.609
782.	5.41	34.53			27.28	90.2	1200.	3.74	34.57	27.50	69.9	1.759
977.	4.54	34.55			27.39	79.6						
1173.	3.82	34.57			27.48	71.0						
1393.	3.21	34.60			27.57	63.1						

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 11, STATION 24, 13- ON LAT, 151- OW LONG, DEC. 12, 1964, 1200 G.C.T.
DRY BULB 24.8 WET BULB 22.5 WIND SPEED 15, DIR. 08 BAR. 12 WEATHER 02 VIS. 6 CLOUD TYPE 8, COVER 4

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.51	34.05			22.49	536.1	0.	25.51	34.05	22.49	536.1	0.000
10.Δ	25.53	34.05			22.48	537.1	10.	25.53	34.05	22.48	537.1	0.054
20.Δ	25.53	34.05			22.48	537.5	20.	25.53	34.05	22.48	537.5	0.108
30.Δ	25.53	34.05			22.48	537.9	30.	25.53	34.05	22.48	537.9	0.162
52.	22.83	34.62			23.72	421.1	50.	23.15	34.56	23.58	434.0	0.260
77.	20.03	34.74			24.58	339.9	75.	20.27	34.75	24.52	345.3	0.358
103.	15.78	34.47			25.41	260.9	100.	16.28	34.51	25.33	268.8	0.436
127.	12.85	34.32			25.92	212.9	150.	11.50	34.41	26.25	181.8	0.549
154.	11.37	34.44			26.29	177.5	200.	10.51	34.62	26.59	150.3	0.633
179.	10.83	34.57			26.49	159.1	250.	10.11	34.67	26.70	141.0	0.706
194.	10.58	34.61			26.57	152.2	300.	9.50	34.66	26.79	133.1	0.776
228.	10.28	34.66			26.66	144.2	400.	8.53	34.61	26.91	123.2	0.905
256.	10.05	34.67			26.71	140.2	500.	7.54	34.56	27.02	113.3	1.024
282.	9.60	34.65			26.77	134.8	600.	6.64	34.54	27.13	103.5	1.134
307.	9.48	34.66			26.79	132.6	700.	5.95	34.54	27.22	95.6	1.234
408.	8.43	34.60			26.91	122.4	800.	5.41	34.55	27.29	89.0	1.328
511.	7.44	34.56			27.03	112.2	1000.	4.52	34.57	27.41	78.3	1.497
612.	6.54	34.54			27.14	102.4	1200.	3.98	34.58	27.47	72.6	1.650
815.	5.34	34.55			27.30	88.2	1500.	3.14	34.61	27.58	62.3	1.855
1019.	4.45	34.57			27.42	77.5						
1220.	3.94	34.58			27.48	72.2						
1511.	3.12	34.61			27.58	62.0						

CROMWELL 11, STATION 25, 11-31N LAT, 150-49W LONG, DEC. 12, 1964, 2300 G.C.T.
DRY BULB 26.3 WET BULB 23.0 WIND SPEED 19, DIR. 07 BAR. 11 WEATHER 02 VIS. 5 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.42	34.08			22.54	531.3	0.	25.42	34.08	22.54	531.3	0.000
9.Δ	25.42	34.08			22.54	531.7	10.	25.42	34.08	22.54	531.8	0.054
20.Δ	25.40	34.08			22.55	531.5	20.	25.40	34.08	22.55	531.5	0.107
30.Δ	25.30	34.14			22.62	524.7	30.	25.30	34.14	22.62	524.7	0.160
49.	21.80	34.83			24.16	378.1	50.	21.72	34.85	24.20	374.5	0.251
74.	19.99	34.99			24.78	320.6	75.	19.84	34.97	24.80	318.0	0.338
98.	16.06	34.55			25.41	261.0	100.	15.76	34.53	25.46	255.9	0.410
124.	12.96	34.48			26.02	203.2	150.	12.06	34.72	26.38	169.7	0.518
148.	12.13	34.71			26.36	171.3	200.	10.91	34.75	26.61	147.9	0.598
172.	11.42	34.74			26.52	156.8	250.	10.35	34.73	26.70	140.9	0.670
197.	10.95	34.75			26.61	148.4	300.	9.94	34.72	26.76	135.8	0.740
221.	10.70	34.74			26.65	145.3	400.	9.33	34.68	26.83	130.8	0.875
245.	10.41	34.73			26.69	141.6	500.	8.47	34.64	26.94	121.7	1.002
270.	10.14	34.72			26.73	138.3	600.	7.51	34.59	27.05	112.5	1.120
293.	9.98	34.72			26.76	136.1	700.	6.62	34.56	27.15	103.3	1.229
386.	9.43	34.68			26.82	131.9	800.	5.88	34.55	27.23	95.3	1.330
482.	8.64	34.65			26.92	123.3	1000.	4.85	34.56	27.37	83.0	1.510
577.	7.73	34.60			27.02	114.7	1200.	4.00	34.57	27.47	73.1	1.668
767.	6.09	34.55			27.21	97.6	1500.	3.16	34.61	27.58	62.8	1.875
958.	5.06	34.56			27.34	85.4	2000.	2.28	34.65	27.69	51.8	2.166
1148.	4.18	34.57			27.45	75.3	2500.	1.89	34.67	27.74	47.0	2.418
1441.	3.31	34.60			27.56	64.6	3000.	1.63	34.69	27.77	44.1	2.650
1911.	2.39	34.64	2.23		27.67	53.2						
2388.	1.96	34.67	2.57		27.73	47.7						
2869.	1.72	34.68	2.91		27.76	45.5						
3852.	1.46	34.70	3.57		27.79	43.2						

CROMWELL 11, STATION 26, 10- 4N LAT, 147-58W LONG, DEC. 13, 1964, 2200 G.C.T.
DRY BULB 26.0 WET BULB 24.0 WIND SPEED 20, DIR. 12 BAR. 11 WEATHER 02 VIS. 6 CLOUD TYPE 8, COVER 9

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	25.58	33.84			22.31	553.3	0.	25.58	33.84	22.31	553.3	0.000
10.Δ	25.58	33.84	4.77		22.31	553.7	10.	25.58	33.84	22.31	553.7	0.056
20.Δ	25.58	33.84			22.31	554.1	20.	25.58	33.84	22.31	554.1	0.112
30.Δ	25.50	33.85			22.34	551.4	30.	25.50	33.85	22.34	551.4	0.167
40.	17.24	34.56	3.91		25.14	284.8	50.	14.91	34.52	25.64	237.4	0.247
52.	14.82	34.47	3.17		25.62	239.0	75.	12.73	34.63	26.18	186.7	0.300
77.	12.65	34.65	0.45		26.21	183.6	100.	11.71	34.75	26.47	159.2	0.344
102.	11.66	34.76	0.19		26.49	158.0	150.	10.95	34.74	26.60	147.8	0.421
128.	11.19	34.75	0.34		26.57	151.0	200.	10.35	34.74	26.71	138.9	0.493
155.	10.90	34.74	0.45		26.61	147.3	250.	9.90	34.71	26.76	134.5	0.562
180.	10.58	34.73	0.41		26.66	143.1	300.	9.57	34.70	26.81	130.8	0.629
194.	10.42	34.74	0.45		26.70	139.9	400.	8.81	34.66	26.90	123.5	0.757
229.	10.03	34.72	0.37		26.75	135.6	500.	7.95	34.61	26.99	116.2	0.878
256.	9.87	34.71	0.37		26.77	134.2	600.	7.05	34.57	27.10	107.0	0.991
282.	9.71	34.71	0.39		26.79	132.2	700.	6.17	34.56	27.20	97.5	1.094
307.	9.52	34.70	0.32		26.82	130.3	800.	5.42	34.55	27.29	89.1	1.189
408.	8.75	34.66	0.28		26.91	122.9	1000.	4.52	34.57	27.41	78.4	1.358
511.	7.85	34.60	0.30		27.00	115.4	1200.	3.82	34.59	27.50	70.0	1.508
612.	6.94	34.57	0.50		27.11	105.9						
815.	5.32	34.55	0.93		27.30	87.9						
1019.	4.46	34.57	1.08		27.42	77.6						
1220.	3.76	34.59	1.49		27.51	69.2						
1455.	3.13	34.62	1.71		27.59	61.0						

TEMPERATURE ERROR TERM AT 50. METERS IS 0.17

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 11, STATION 27, 11-32N LAT, 148- 1W LONG, DEC. 14, 1964, 0600 G.C.T.
DRY BULB 26.2 WET BULB 23.4 WIND SPEED 22, DIR. 06 BAR. 12 WEATHER 01 VIS. 6 CLOUD TYPE 8, COVER 7

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	25.65	34.10			22.49	536.6	0.	25.65	34.10	22.49	536.6	0.000
11.	25.64	34.10	4.74		22.49	536.8	10.	25.64	34.10	22.49	536.9	0.054
20.Δ	25.58	34.11			22.51	534.6	20.	25.58	34.11	22.51	534.6	0.108
30.Δ	25.40	34.13			22.58	528.3	30.	25.40	34.13	22.58	528.3	0.162
52.	16.93	34.52	3.63		25.18	281.0	50.	17.80	34.49	24.95	303.3	0.245
65.	14.83	34.46	1.98		25.61	240.4	75.	13.52	34.55	25.96	207.4	0.310
78.	13.20	34.59	0.74		26.05	198.6	100.	12.31	34.71	26.33	173.1	0.358
102.	12.29	34.72	0.24		26.33	172.4	150.	11.20	34.75	26.57	151.3	0.439
128.	11.67	34.76	0.21		26.48	158.8	200.	10.58	34.74	26.66	143.0	0.514
155.	11.10	34.75	0.31		26.58	150.0	250.	10.17	34.72	26.72	138.3	0.584
179.	10.75	34.75	0.45		26.65	144.5	300.	9.80	34.71	26.78	133.8	0.653
194.	10.63	34.74	0.45		26.66	143.5	400.	9.04	34.67	26.88	126.3	0.784
229.	10.36	34.73	0.43		26.70	140.4	500.	8.18	34.62	26.97	119.0	0.908
256.	10.12	34.72	0.40		26.73	137.7	600.	7.24	34.57	27.07	109.7	1.024
282.	9.92	34.72	0.39		26.77	134.9	700.	6.41	34.55	27.17	100.8	1.130
307.	9.76	34.71	0.37		26.79	133.5	800.	5.71	34.55	27.25	92.9	1.228
408.	8.97	34.67	0.19		26.88	125.7	1000.	4.71	34.57	27.39	80.7	1.404
511.	8.08	34.61	0.30		26.98	118.1	1200.	3.86	34.59	27.50	70.3	1.557
614.	7.11	34.57	0.43		27.09	108.3						
816.	5.61	34.55	0.73		27.27	91.7						
1019.	4.63	34.57	1.04		27.40	79.7						
1203.	3.85	34.59	1.28		27.50	70.2						
1440.	3.27	34.61	1.55		27.57	63.4						

TEMPERATURE ERROR TERM AT 50. METERS IS 0.24

CROMWELL 11, STATION 28, 13- 0N LAT, 147-58W LONG, DEC. 14, 1964, 1500 G.C.T.
DRY BULB 24.8 WET BULB 22.2 WIND SPEED 25, DIR. 08 BAR. 12 WEATHER 02 VIS. 6 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.22	33.89	4.89		22.46	539.2	0.	25.22	33.89	22.46	539.2	0.000
9.	25.26	33.88	4.89		22.44	541.4	10.	25.29	33.88	22.43	542.5	0.054
30.Δ	25.24	33.89			22.45	540.9	20.	25.42	33.87	22.38	547.5	0.109
49.	22.99	34.11	4.72		23.28	462.2	30.	25.24	33.89	22.45	540.9	0.164
74.	16.58	34.51	3.73		25.26	274.6	50.	22.75	34.13	23.37	454.1	0.264
98.	12.60	34.32	2.46		25.96	207.4	75.	16.36	34.50	25.30	270.3	0.356
122.	11.84	34.58	0.64		26.31	174.9	100.	12.47	34.34	26.00	203.9	0.415
148.	11.27	34.67	0.41		26.49	158.7	150.	11.22	34.67	26.50	157.8	0.507
170.	10.82	34.68	0.37		26.58	150.6	200.	10.56	34.70	26.64	145.6	0.583
185.	10.66	34.69	0.37		26.61	147.5	250.	10.10	34.69	26.71	139.3	0.655
219.	10.44	34.70	0.34		26.66	143.7	300.	9.72	34.68	26.77	135.0	0.724
245.	10.14	34.69	0.37		26.71	140.0	400.	8.91	34.64	26.87	126.5	0.856
270.	9.94	34.69	0.47		26.74	137.2	500.	8.01	34.57	26.96	119.4	0.980
293.	9.77	34.68	0.32		26.76	135.6	600.	7.04	34.54	27.07	109.4	1.096
391.	8.99	34.65	0.37		26.87	127.1	700.	6.23	34.53	27.17	100.4	1.202
490.	8.11	34.58	0.39		26.95	120.4	800.	5.57	34.53	27.26	92.4	1.299
587.	7.15	34.54	0.66		27.06	110.7	1000.	4.56	34.55	27.39	79.9	1.474
783.	5.67	34.53	0.66		27.24	93.6	1200.	3.80	34.58	27.49	70.3	1.626
979.	4.65	34.55	0.79		27.38	81.1						
1175.	3.92	34.58	1.18		27.48	71.5						
1472.	3.06	34.61	1.65		27.59	61.0						

TEMPERATURE ERROR TERM AT 20. METERS IS 0.10

CROMWELL 11, STATION 29, 14-30N LAT, 147-59W LONG, DEC. 15, 1964, 0000 G.C.T.
DRY BULB 26.7 WET BULB 22.5 WIND SPEED 21, DIR. 07 BAR. 12 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.	25.42	34.00	4.77		22.48	537.1	0.	25.42	34.00	22.48	537.1	0.000
10.	25.42	34.00	4.78		22.48	537.5	10.	25.42	34.00	22.48	537.5	0.054
30.Δ	25.42	34.00			22.48	538.3	20.	25.42	34.00	22.48	538.0	0.108
51.	25.39	34.01	4.76		22.50	537.5	30.	25.42	34.00	22.48	538.3	0.162
77.	21.70	34.70	4.69		24.09	385.8	50.	25.42	34.00	22.48	538.8	0.271
102.	19.55	34.80	4.67		24.75	324.4	75.	22.03	34.64	23.96	398.6	0.389
128.	15.71	34.50	3.71		25.45	257.9	100.	19.72	34.81	24.71	328.0	0.481
153.	12.90*	34.32	2.48		25.91	214.5	150.	13.17	34.33	25.86	219.0	0.618
177.	11.70	34.47	1.10		26.25	181.8	200.	10.52	34.43	26.44	164.2	0.715
193.	10.72	34.42	1.46		26.39	168.6	250.	9.98	34.55	26.62	147.8	0.794
227.	10.20	34.53	0.79		26.57	152.4	300.	9.59	34.60	26.73	139.0	0.866
255.	9.94	34.55	0.62		26.63	147.2	400.	8.51	34.57	26.88	125.3	0.999
280.	9.76	34.58	0.50		26.68	142.5	500.	7.61	34.55	27.00	115.2	1.121
305.	9.55	34.60	0.31		26.74	138.1	600.	6.79	34.53	27.10	106.4	1.233
406.	8.44	34.57	0.38		26.89	124.7	700.	6.00	34.52	27.19	97.7	1.336
509.	7.54	34.55	0.37		27.01	114.4	800.	5.32	34.52	27.28	90.0	1.431
610.	6.71	34.53	0.49		27.11	105.5	1000.	4.44	34.55	27.40	78.9	1.601
813.	5.24	34.52	0.61		27.29	89.0	1200.	3.79	34.58	27.49	70.3	1.753
1016.	4.39	34.55	1.04		27.41	78.1						
1217.	3.74	34.58	1.23		27.50	69.7						
1475.	2.97	34.61	1.62		27.60	60.0						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 1.--Continued

CROMWELL 11, STATION 30, 16- ON 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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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.	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

CROMWELL 11, STATION 33, 20-30N LAT, 147-58W LONG, DEC. 16, 1964, 1200 G.C.T.
DRY BULB 23.1 WET BULB 19.7 WIND SPEED 20, DIR. 09 BAR. 16 WEATHER 01 VIS. 6 CLOUD TYPE 8, COVER 7

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.18	34.06	5.04		22.90	497.1	0.	24.18	34.06	22.90	497.1	0.000
10.	24.18	34.06	5.06		22.90	497.5	10.	24.18	34.06	22.90	497.5	0.050
50.Δ	24.14	34.40			23.17	473.3	20.	24.17	34.12	22.95	493.2	0.100
77.	24.11	34.60	4.92		23.33	459.1	30.	24.16	34.20	23.01	487.7	0.149
102.	21.61	34.78	5.32		24.18	378.6	50.	24.14	34.40	23.17	473.3	0.246
128.	20.50	34.84	5.21		24.53	346.3	75.	24.16	34.59	23.30	461.5	0.364
154.	19.97	35.05	5.12		24.83	318.6	100.	21.83	34.77	24.11	385.2	0.471
178.	18.81	34.95	4.67		25.05	298.0	150.	20.06	35.02	24.78	322.6	0.649
193.	18.26	34.95	4.86		25.19	285.3	200.	17.82	34.88	25.24	280.1	0.801
227.	15.49	34.51	4.60		25.50	255.4	250.	12.86	34.23	25.84	223.0	0.928
254.	12.45	34.19	4.70		25.89	218.1	300.	10.72	34.11	26.16	193.4	1.033
280.	11.40	34.14	4.73		26.05	203.0	400.	7.48	34.07	26.64	147.3	1.205
304.	10.59	34.11	4.62		26.18	191.6	500.	6.05	34.19	26.93	119.9	1.339
405.	7.34	34.07	2.85		26.66	145.3	600.	5.52	34.35	27.12	103.1	1.452
509.	5.99	34.21	1.06		26.95	118.0	700.	5.09	34.43	27.23	92.7	1.551
611.	5.49	34.36	0.69		27.13	101.7	800.	4.69	34.47	27.31	85.8	1.641
813.	4.64	34.47	0.86		27.32	85.1	1000.	4.01	34.52	27.42	75.7	1.805
1016.	3.96	34.52	1.17		27.43	75.1	1200.	3.49	34.57	27.51	67.5	1.950
1219.	3.44	34.57	1.27		27.52	66.8						
1443.	2.88	34.59	1.50		27.59	60.2						

CROMWELL 11, STATION 34, 22- 2N LAT, 147-58W LONG, DEC. 16, 1964, 2100 G.C.T.
DRY BULB 23.0 WET BULB 18.3 WIND SPEED 18, DIR. 09 BAR. 17 WEATHER 01 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.	23.80	34.50	5.02		23.34	454.6	0.	23.80	34.50	23.34	454.6	0.000
10.	23.84	34.50	5.04		23.33	456.1	10.	23.84	34.50	23.33	456.1	0.046
20.Δ	23.84	34.50			23.33	456.5	20.	23.84	34.50	23.33	456.5	0.092
30.Δ	23.85	34.50			23.33	457.2	30.	23.85	34.50	23.33	457.2	0.138
51.	24.34	35.00	4.97		23.56	435.8	50.	24.33	34.97	23.54	437.4	0.228
76.	23.00	35.15	5.29		24.07	388.4	75.	23.07	35.15	24.05	390.4	0.332
100.	22.00	35.19	5.21		24.38	359.3	100.	22.00	35.19	24.38	359.3	0.427
126.	20.81	35.14	4.74		24.67	332.6	150.	19.87	35.08	24.88	313.4	0.596
151.	19.82	35.08	4.52		24.89	312.6	200.	16.44	34.55	25.32	272.9	0.744
175.	18.16	34.82	4.31		25.11	291.7	250.	12.96	34.28	25.86	221.4	0.868
189.	17.27	34.63	4.22		25.18	285.1	300.	10.98	34.15	26.14	195.3	0.974
224.	14.62	34.43	4.39		25.63	242.7	400.	7.76	34.07	26.60	151.3	1.148
251.	12.90	34.27	4.63		25.87	220.7	500.	6.05	34.11	26.87	126.0	1.288
276.	11.92	34.18	4.59		25.99	209.5	600.	5.26	34.23	27.06	108.1	1.407
300.	10.98	34.15	4.24		26.14	195.3	700.	4.87	34.35	27.20	95.5	1.509
400.	7.76	34.07	3.11		26.60	151.3	800.	4.64	34.45	27.30	86.4	1.601
499.	6.06	34.11	1.63		26.86	126.2	1000.	4.04	34.52	27.42	75.9	1.766
599.	5.26	34.23	0.86		27.06	108.3	1200.	3.49	34.56	27.51	68.1	1.912
798.	4.65	34.45	0.79		27.30	86.6						
998.	4.05	34.52	1.12		27.42	76.0						
1195.	3.49	34.55	1.20		27.50	68.7						
1469.	2.86	34.59	1.50		27.59	60.1						

CROMWELL 11, STATION 35, 23-30N LAT, 147-56W LONG, DEC. 17, 1964, 0500 G.C.T.
DRY BULB 22.9 WET BULB 18.6 WIND SPEED 13, DIR. 10 BAR. 15 WEATHER 01 VIS. 7 CLOUD TYPE 1, COVER 1

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	23.13	35.20	5.07		24.07	385.5	0.	23.13	35.20	24.07	385.5	0.000
9.	23.12	35.20	5.04		24.07	385.6	10.	23.12	35.20	24.07	385.6	0.039
30.Δ	23.06	35.23			24.11	382.6	20.	23.10	35.21	24.08	384.8	0.078
50.Δ	22.84	35.30			24.23	372.2	30.	23.06	35.23	24.11	382.6	0.116
73.	22.74	35.31	5.06		24.26	369.7	50.	22.84	35.30	24.23	372.2	0.192
98.	21.19	35.27	5.08		24.67	332.0	75.	22.63	35.31	24.29	366.9	0.285
122.	20.35	35.23	4.92		24.86	314.1	100.	21.11	35.27	24.69	330.1	0.373
147.	19.58	35.13	4.76		24.99	302.8	150.	19.51	35.12	25.00	301.8	0.532
170.	18.95	35.05	4.81		25.09	293.9	200.	16.97	34.74	25.34	270.5	0.677
185.	18.19	34.93	4.73		25.19	284.8	250.	13.46	34.31	25.78	229.0	0.803
217.	15.50	34.53	4.66		25.52	253.9	300.	11.18	34.13	26.08	200.5	0.911
244.	13.81	34.34	4.69		25.74	233.3	400.	8.50	34.06	26.48	163.4	1.094
268.	12.50	34.22	4.59		25.91	217.2	500.	6.45	34.06	26.77	135.4	1.245
293.	11.42	34.14	4.61		26.05	203.7	600.	5.43	34.14	26.96	117.3	1.373
390.	8.75	34.06	4.24		26.44	166.8	700.	4.88	34.26	27.12	102.4	1.484
488.	6.62	34.05	2.30		26.74	138.0	800.	4.57	34.38	27.25	91.0	1.582
585.	5.54	34.12	1.24		26.94	119.8	1000.	4.05	34.50	27.41	77.5	1.752
780.	4.63	34.36	0.61		27.23	92.8	1200.	3.51	34.56	27.51	68.2	1.900
973.	4.13	34.49	0.94		27.39	79.0						
1168.	3.55	34.54	1.22		27.49	69.9						
1463.	2.93	34.58	1.49		27.58	61.6						

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 11, STATION 36, 25- ON LAT, 147-59W LONG, DEC. 17, 1964, 1400 G.C.T.
DRY BULB 21.5 WET BULB 18.0 WIND SPEED 11, DIR. 14 BAR. 15 WEATHER 01 VIS. 7 CLOUD TYPE 8, COVER 6

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.88	35.27	5.01		24.19	373.6	0.	22.88	35.27	24.19	373.6	0.000
9.	22.88	35.26	5.10		24.19	374.6	10.	22.88	35.26	24.18	374.7	0.038
30.Δ	22.88	35.26			24.19	375.4	20.	22.88	35.26	24.18	375.2	0.075
50.Δ	22.88	35.26			24.19	376.2	30.	22.88	35.26	24.19	375.4	0.113
74.	22.20	35.34	5.10		24.44	352.9	50.	22.88	35.26	24.19	376.2	0.189
98.	20.93	35.25	5.12		24.72	326.7	75.	22.15	35.34	24.45	351.7	0.281
123.	19.96	35.18	5.04		24.93	307.9	100.	20.85	35.24	24.74	325.0	0.366
148.	18.94	35.06	4.88		25.10	292.2	150.	18.88	35.05	25.11	291.4	0.521
172.	18.04	34.92	4.91		25.22	281.5	200.	16.13	34.63	25.45	259.6	0.660
187.	16.98	34.75	4.84		25.35	269.7	250.	13.13	34.33	25.87	220.7	0.781
220.	14.89	34.49	4.95		25.62	243.9	300.	11.57	34.24	26.10	198.9	0.887
247.	13.26	34.34	5.08		25.85	222.5	400.	9.50	34.12	26.37	174.5	1.075
271.	12.40	34.29	5.02		25.98	210.2	500.	7.13	34.02	26.65	147.5	1.238
296.	11.66	34.25	4.99		26.09	200.1	600.	5.62	34.08	26.89	124.0	1.375
394.	9.65	34.13	4.89		26.35	176.1	700.	4.81	34.21	27.09	105.6	1.491
494.	7.25	34.02	3.41		26.63	149.1	800.	4.42	34.34	27.24	91.8	1.591
592.	5.70	34.07	1.74		26.88	125.6	1000.	3.99	34.49	27.40	77.8	1.762
788.	4.46	34.33	0.62		27.23	93.0	1200.	3.49	34.56	27.51	68.2	1.910
985.	4.03	34.48	1.31		27.39	78.6						
1182.	3.50	34.54	1.18		27.49	69.4						
1430.	2.93	34.58	1.48		27.58	61.4						

CROMWELL 11, STATION 37, 26-28N LAT, 148- 0W LONG, DEC. 17, 1964, 2200 G.C.T.
DRY BULB 22.3 WET BULB 18.8 WIND SPEED 09, DIR. 15 BAR. 14 WEATHER 03 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.	22.34	35.28	5.00		24.35	358.2	0.	22.34	35.28	24.35	358.2	0.000
10.Δ	22.30	35.29	5.10		24.37	356.7	10.	22.30	35.29	24.37	356.7	0.036
30.Δ	22.30	35.29			24.37	357.5	20.	22.29	35.29	24.38	356.9	0.072
50.Δ	22.28	35.30			24.39	357.0	30.	22.30	35.29	24.37	357.5	0.108
76.	22.07	35.39	5.05		24.51	345.9	50.	22.28	35.30	24.39	357.0	0.180
101.	21.48	35.38	4.99		24.67	331.8	75.	22.08	35.39	24.51	346.4	0.269
127.	19.91	35.15	5.11		24.92	308.9	100.	21.52	35.38	24.66	332.5	0.354
153.	18.67	35.00	4.91		25.12	290.1	150.	18.82	35.02	25.10	292.3	0.511
176.	17.16	34.77	4.58		25.32	272.0	200.	15.68	34.57	25.51	254.2	0.649
192.	16.24	34.64	4.59		25.43	261.3	250.	13.00	34.28	25.85	222.0	0.769
226.	13.98	34.38	4.79		25.73	233.3	300.	11.57	34.23	26.09	199.8	0.876
253.	12.90	34.27	4.79		25.87	220.8	400.	9.36	34.13	26.40	171.6	1.063
278.	11.97	34.21	4.82		26.00	208.2	500.	7.10	34.04	26.67	145.4	1.223
304.	11.52	34.24	4.97		26.11	198.4	600.	5.43	34.03	26.88	124.9	1.359
405.ε	9.24	34.12	4.69		26.41	170.4	700.	4.65	34.15	27.07	107.6	1.477
475.ε	7.63	34.06	4.24		26.61	151.3	800.	4.28	34.29	27.21	93.9	1.579
614.ε	5.25	34.04	1.94		26.91	122.4	1000.	3.66	34.45	27.40	76.8	1.752
760.ε	4.43	34.25	0.55		27.17	98.3	1200.	3.29	34.53	27.50	68.0	1.898
1216.	3.27	34.53	1.20		27.51	67.7	1500.	2.72	34.59	27.61	58.4	2.091
1519.	2.71	34.59	1.80		27.61	58.6						

CROMWELL 11, STATION 38, 25- 4N LAT, 151- 6W LONG, DEC. 18, 1964, 1600 G.C.T.
DRY BULB 22.0 WET BULB 20.2 WIND SPEED 15, DIR. 19 BAR. 11 WEATHER 51 VIS. CLOUD TYPE , COVER 9

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.61	34.92			23.72	419.0	0.	23.61	34.92	23.72	419.0	0.000
10.Δ	23.63	34.93			23.72	419.2	10.	23.63	34.93	23.72	419.2	0.042
30.Δ	23.60	34.93			23.73	419.2	20.	23.63	34.92	23.71	420.4	0.085
50.Δ	23.48	35.15			23.93	400.7	30.	23.60	34.93	23.73	419.2	0.127
78.	23.04	35.28			24.15	380.2	50.	23.48	35.15	23.93	400.7	0.209
103.	21.34	35.22			24.59	339.8	75.	23.13	35.28	24.12	382.9	0.308
128.	20.59	35.21			24.78	321.9	100.	21.55	35.23	24.54	344.5	0.400
154.	19.53	35.14			25.01	301.1	150.	19.70	35.16	24.98	304.1	0.563
179.	18.60	34.99			25.13	290.1	200.	17.17	34.77	25.32	273.0	0.709
204.	16.89	34.73			25.35	269.7	250.	14.32	34.40	25.68	239.3	0.838
229.	15.68	34.58			25.52	254.5	300.	11.75	34.19	26.03	206.2	0.950
254.	14.05	34.37			25.71	236.2	400.	9.14	34.08	26.40	171.5	1.141
280.	12.48	34.24			25.93	215.6	500.	6.87	34.03	26.70	143.0	1.299
305.	11.60	34.18			26.05	204.3	600.	5.46	34.10	26.93	120.5	1.432
406.	9.01	34.08			26.42	169.7	700.	4.73	34.22	27.11	103.8	1.546
509.	6.69	34.03			26.72	140.7	800.	4.35	34.33	27.24	91.5	1.645
610.	5.36	34.11			26.95	118.6	1000.	3.94	34.47	27.40	78.1	1.816
813.	4.33	34.35			27.26	90.2	1200.	3.48	34.54	27.49	69.6	1.966
1015.	3.92	34.48			27.40	77.5	1500.	2.89	34.58	27.58	61.4	2.165
1218.	3.44	34.54			27.50	69.0	2000.	2.15	34.63	27.68	51.4	2.452
1521.	2.85	34.58			27.59	61.0	2500.	1.79	34.67	27.74	45.9	2.700
2016.	2.13	34.63	2.02		27.69	51.2	3000.	1.59	34.69	27.78	43.4	2.928
2519.	1.78	34.67	2.44		27.75	45.8	4000.	1.47	34.69	27.79	44.4	3.377
3022.	1.58	34.69	2.90		27.78	43.3						
4050.	1.48	34.69	3.45		27.78	44.7						

ΔFROM BT DATA
εTHERMOMETRIC DEPTH

Table 1.--Continued

CROMWELL 11, STATION 39, 24-57N LAT, 154- 1W LONG, DEC. 19, 1964, 0900 G.C.T.
DRY BULB 23.0 WET BULB 21.3 WIND SPEED 18, DIR. 16 BAR. 11 WEATHER 03 VIS. 7 CLOUD TYPE 8, COVER 8

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.13	35.21	5.02		24.08	384.8	0.	23.13	35.21	24.08	384.8	0.000
10.	23.16	35.21	5.02		24.07	386.0	10.	23.16	35.21	24.07	386.0	0.039
30.Δ	23.06	35.27			24.14	379.7	20.	23.13	35.24	24.10	383.6	0.078
50.	22.84	35.30	4.97		24.23	372.2	30.	23.06	35.27	24.14	379.7	0.116
75.	21.18	35.21	4.78		24.62	335.3	50.	22.84	35.30	24.23	372.2	0.192
100.	20.24	35.17	4.74		24.85	314.9	75.	21.18	35.21	24.62	335.3	0.281
125.	18.87	34.99	4.65		25.07	294.7	100.	20.24	35.17	24.85	314.9	0.363
150.	18.10	34.89	4.69		25.18	284.4	150.	18.10	34.89	25.18	284.4	0.514
174.	16.98	34.74	4.74		25.34	270.0	200.	15.39	34.52	25.54	251.5	0.649
189.	15.93	34.60	4.69		25.47	257.3	250.	12.86	34.28	25.88	219.4	0.768
223.	14.39	34.40	4.69		25.66	240.1	300.	11.15	34.17	26.12	197.0	0.873
249.	12.91	34.28	4.78		25.87	220.1	400.	8.49	34.07	26.49	162.4	1.054
274.	11.88	34.22	4.76		26.03	205.8	500.	6.32	34.03	26.77	135.5	1.204
299.	11.18	34.17	4.72		26.12	197.4	600.	5.11	34.09	26.97	116.5	1.332
397.	8.57	34.07	3.88		26.48	163.4	700.	4.53	34.22	27.13	100.9	1.441
497.	6.37	34.03	2.55		26.76	136.2	800.	4.26	34.36	27.27	88.8	1.537
596.	5.14	34.09	1.37		26.96	117.1	1000.	3.81	34.49	27.42	75.2	1.703
793.	4.28	34.35			27.26	89.5	1200.	3.40	34.56	27.52	67.0	1.847
992.	3.83	34.49	1.09		27.42	75.5						
1190.	3.42	34.54	1.29		27.50	69.5						
1490.	2.83	34.58	1.54		27.59	60.6						

CROMWELL 11, STATION 40, 25- 0N LAT, 157- 0W LONG, DEC. 19, 1964, 2300 G.C.T.
DRY BULB 21.8 WET BULB 19.4 WIND SPEED 12, DIR. 24 BAR. 07 WEATHER 15 VIS. 6 CLOUD TYPE 8, COVER 9

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.24	35.08			23.95	397.2	0.	23.24	35.08	23.95	397.2	0.000
9.	23.26	35.11			23.96	395.9	10.	23.26	35.11	23.96	396.0	0.040
30.Δ	23.26	35.11			23.96	396.7	20.	23.27	35.11	23.96	396.6	0.080
50.Δ	23.24	35.22			24.05	389.0	30.	23.26	35.11	23.96	396.7	0.120
76.	23.00	35.30			24.18	377.6	50.	23.24	35.22	24.05	389.0	0.199
101.	22.35	35.30			24.37	360.8	75.	23.02	35.30	24.18	378.1	0.296
125.	20.34	35.12			24.78	321.9	100.	22.39	35.30	24.36	361.8	0.389
151.	19.10	34.99			25.01	301.3	150.	19.14	35.00	25.00	301.9	0.556
176.	17.43	34.79			25.27	276.8	200.	16.12	34.63	25.45	259.7	0.698
191.	16.54	34.68			25.40	265.0	250.	13.76	34.38	25.78	229.6	0.821
225.	15.05	34.51			25.60	246.0	300.	11.53	34.19	26.06	202.5	0.930
252.	13.66	34.37			25.75	228.3	400.	9.04	34.10	26.43	168.6	1.117
278.	12.56	34.26			25.93	215.6	500.	6.73	34.01	26.70	142.5	1.274
302.	11.44	34.18			26.08	201.3	600.	5.45	34.08	26.91	121.9	1.408
403.	8.99	34.10			26.44	167.9	700.	4.67	34.18	27.09	105.5	1.523
503.	6.67	34.01			26.71	141.8	800.	4.21	34.30	27.23	92.5	1.623
602.	5.43	34.08			26.92	121.6	1000.	3.81	34.47	27.40	77.1	1.794
802.	4.20	34.30			27.23	92.3	1200.	3.29	34.53	27.50	67.9	1.941
1004.	3.81	34.47			27.41	76.9						
1204.	3.28	34.53			27.51	67.7						
1433.	2.76	34.58			27.59	59.4						

CROMWELL 11, STATION 41, 23-30N LAT, 157- 0W LONG, DEC. 20, 1964, 0800 G.C.T.
DRY BULB 22.6 WET BULB 20.6 WIND SPEED 06, DIR. 21 BAR. 11 WEATHER 15 VIS. 6 CLOUD TYPE 8, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.35	35.12			23.94	397.3	0.	23.35	35.12	23.94	397.3	0.000
10.	23.41	35.13			23.93	398.7	10.	23.41	35.13	23.93	398.7	0.040
30.Δ	23.41	35.16			23.96	397.3	20.	23.42	35.14	23.94	398.3	0.080
50.Δ	23.41	35.18			23.97	396.6	30.	23.41	35.16	23.96	397.3	0.120
75.Δ	23.20	35.23			24.07	388.2	50.	23.41	35.18	23.97	396.6	0.200
100.	22.93	35.26			24.17	379.5	75.	23.20	35.23	24.07	388.2	0.299
124.	20.72	35.14			24.70	330.2	100.	22.93	35.26	24.17	379.5	0.396
149.	19.62	35.04			24.91	310.4	150.	19.58	35.04	24.92	309.7	0.569
174.	18.26	34.89			25.14	289.0	200.	16.23	34.67	25.46	259.3	0.713
188.	17.04	34.75			25.33	271.1	250.	13.19	34.36	25.88	219.3	0.834
222.	14.92	34.54			25.65	240.9	300.	11.86	34.25	26.05	204.0	0.940
247.	13.33	34.38			25.87	220.9	400.	8.89	34.10	26.45	166.6	1.127
273.	12.35	34.28			25.98	210.1	500.	6.73	34.03	26.72	141.0	1.282
298.	11.91	34.25			26.04	204.7	600.	5.30	34.13	26.97	116.4	1.412
397.	8.97	34.10			26.44	167.4	700.	4.67	34.25	27.14	100.6	1.522
496.	6.80	34.03			26.70	142.0	800.	4.41	34.37	27.26	89.6	1.618
594.	5.35	34.12			26.96	117.5	1000.	3.86	34.51	27.43	74.8	1.785
789.	4.45	34.36			27.25	90.7	1200.	3.31	34.57	27.53	65.3	1.926
986.	3.90	34.50			27.42	75.6						
1168.	3.37	34.55			27.51	67.0						
1424.	2.78	34.58			27.59	59.6						

ΔFROM BT 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. DRY BULB 23.9 WET BULB 21.5 WIND SPEED 12, DIR. 23 BAR. 10 WEATHER 02 VIS. 6 CLOUD TYPE 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.
DRY BULB 24.0 WET BULB 21.0 WIND SPEED 16, DIR. 19 BAR. 11 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	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	458.1	10.	24.62	34.78	23.31	458.1	0.046
31.	24.59	34.81			23.34	455.9	20.	24.65	34.79	23.31	459.0	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	34.19			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	34.19			26.86	127.5	700.	5.25	34.37	27.17	98.9	1.484
598.	5.75	34.29			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	78.1	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

CROMWELL 12, STATION 2, 19- 1N LAT, 157- 0W LONG, JAN. 6, 1965, 1800 G.C.T.
DRY BULB 24.2 WET BULB 22.0 WIND SPEED 18, DIR. 08 BAR. 11 WEATHER 02 VIS. 5 CLOUD TYPE 8, COVER 8

DEPTH	TEMP.	SAL.	OXY.	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	325.7	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						

CROMWELL 12, STATION 3, 17-30N LAT, 157- 0W LONG, JAN. 7, 1965, 0500 G.C.T.
DRY BULB 25.0 WET BULB 22.0 WIND SPEED 13, DIR. 13 BAR. 11 WEATHER 02 VIS. CLOUD TYPE 8, COVER 8

DEPTH	TEMP.	SAL.	OXY.	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	34.22			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.	4.69	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 BT DATA
*INTERPOLATED DATA

Table 2.--Continued

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	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

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.	OXY.	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.Δ	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	26.56	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						

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.	OXY.	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.Δ	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

CROMWELL 12, STATION 7, 11-27N LAT, 156-55W LONG, JAN. 8, 1965, 1900 G.C.T.
DRY BULB 25.0 WET BULB 23.5 WIND SPEED 11, DIR. 10 BAR. 10 WEATHER 02 VIS. 6 CLOUD TYPE 4, COVER 9

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	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.Δ	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.Δ	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 12, STATION 7A, 10- ON LAT, 154- OW LONG, JAN. 9, 1965, 1700 G.C.T.
DRY BULB 24.5 WET BULB 23.5 WIND SPEED 18, DIR. 07 BAR. 09 WEATHER 21 VIS. CLOUD TYPE 8, COVER 8

DEPTH	TEMP.	SAL.	OXY.	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.Δ	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	0.82	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	1.28	3.04	27.48	71.7						
1496.	3.18	34.60	1.54	2.91	27.57	63.4						

CROMWELL 12, STATION 8, 11-30N LAT, 154- 1W LONG, JAN. 10, 1965, 0100 G.C.T.
DRY BULB 25.0 WET BULB 22.5 WIND SPEED 22, DIR. 08 BAR. 08 WEATHER 02 VIS. 6 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	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.Δ	25.08	34.04	4.82	0.29	22.61	524.6	10.	25.08	34.04	22.61	524.7	0.053
30.Δ	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.Δ	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						

ΔFROM BT DATA

ΔFROM BT DATA
*INTERPOLATED DATA

Table 2.--Continued

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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.Δ	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						

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	1.718
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						

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.Δ	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	0.508
127.	20.27	34.76	4.84	0.47	24.53	346.2	150.	18.07	34.68	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	0.818
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	1.468
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

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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	0.258
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.	18.00*	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.Δ	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 TERM AT 300. METERS IS 0.10

ΔFROM BT DATA
*INTERPOLATED DATA

Table 2.--Continued

CROMWELL 12, STATION 15, 22- 1N LAT, 153-59W LONG, JAN. 12, 1965, 1600 G.C.T.
DRY BULB 23.0 WET BULB 20.8 WIND SPEED 17, DIR. 13 BAR. 14 WEATHER 02 VIS. 6 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.54	34.58	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	2.63	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						

CROMWELL 12, STATION 16, 23-30N LAT, 153-53W LONG, JAN. 12, 1965, 2400 G.C.T.
DRY BULB 24.2 WET BULB 21.0 WIND SPEED 14, DIR. 16 BAR. 13 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.	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	0.394
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	25.54	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	1.646
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						

CROMWELL 12, STATION 17, 23-24N LAT, 150-58W LONG, JAN. 13, 1965, 1600 G.C.T.
DRY BULB 22.9 WET BULB 20.2 WIND SPEED 24, DIR. 16 BAR. 12 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	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						

ΔFROM BT DATA

Table 2.--Continued

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-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			23.94	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	401.6	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						

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.	OXY.	PO4-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						

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.	OXY.	PO4-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	356.8	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						

ΔFROM BT DATA

Table 2.--Continued

CROMWELL 12, STATION 21, 17-26N LAT, 151- 2W LONG, JAN. 15, 1965, 0400 G.C.T.
DRY BULB 23.9 WET BULB 21.1 WIND SPEED 13, DIR. 16 BAR. 11 WEATHER 01 VIS. 7 CLOUD TYPE 8, COVER 1

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.38	34.32			23.04	484.0	0.	24.38	34.32	23.04	484.0	0.000
11.Δ	24.34	34.34			23.06	481.8	10.	24.34	34.34	23.06	482.2	0.049
30.Δ	24.20	34.48			23.21	468.5	20.	24.27	34.40	23.13	476.1	0.097
50.	24.18	34.64			23.34	457.2	30.	24.20	34.48	23.21	468.5	0.145
75.	24.34	34.91			23.49	443.3	50.	24.18	34.64	23.34	457.2	0.238
99.	22.88	35.08			24.05	391.1	75.	24.34	34.91	23.49	443.3	0.351
123.	20.94	35.08			24.59	340.2	100.	22.80	35.08	24.07	388.6	0.456
148.	19.76	35.01			24.85	316.0	150.	19.67	35.00	24.87	314.3	0.633
171.	18.33	34.86			25.10	292.7	200.	15.44	34.49	25.50	255.3	0.777
185.	16.84	34.65			25.30	273.8	250.	11.30	34.16	26.09	198.7	0.891
218.	13.88	34.34			25.72	234.0	300.	9.82	34.14	26.33	176.5	0.986
244.	11.60	34.18			26.05	202.9	400.	8.15	34.29	26.72	140.4	1.146
269.	10.62	34.14			26.19	189.1	500.	7.34	34.41	26.93	121.8	1.278
293.	9.98	34.13			26.30	179.5	600.	6.44	34.44	27.08	107.9	1.394
390.	8.25	34.28			26.69	142.9	700.	5.76	34.47	27.18	98.5	1.498
488.	7.45	34.40			26.90	123.8	800.	5.25	34.48	27.26	91.7	1.594
585.	6.55	34.44			27.06	109.6	1000.	4.47	34.52	27.38	81.0	1.769
781.	5.34	34.48			27.24	92.9	1200.	3.73	34.54	27.47	72.1	1.924
977.	4.56	34.52			27.37	82.1	1500.	2.96	34.58	27.58	61.9	2.128
1174.	3.81	34.54			27.46	73.1	2000.	2.16	34.64	27.69	50.8	2.414
1472.	3.02	34.58			27.57	62.8						
2019.	2.14	34.64			27.69	50.6						
2048.	2.10	34.64			27.70	50.2						
2417.	1.82	34.66			27.74	46.7						

CROMWELL 12, STATION 22, 15-58N LAT, 151- 0W LONG, JAN. 15, 1965, 1500 G.C.T.
DRY BULB 23.0 WET BULB 21.4 WIND SPEED 05, DIR. 16 BAR. 11 WEATHER 01 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.	24.51	34.09			22.82	504.3	0.	24.51	34.09	22.82	504.3	0.000
10.	24.52	34.08			22.81	505.7	10.	24.52	34.08	22.81	505.7	0.051
30.Δ	24.51	34.07			22.81	506.9	20.	24.52	34.07	22.81	506.5	0.102
51.	24.47	34.07			22.82	506.5	30.	24.51	34.07	22.81	506.9	0.153
75.	23.28	34.64			23.60	432.9	50.	24.48	34.06	22.81	507.3	0.255
99.	21.90	34.78			24.10	386.2	75.	23.28	34.64	23.60	432.9	0.373
124.	20.17	34.95			24.70	329.9	100.	21.83	34.79	24.13	383.7	0.476
148.	19.09	34.93			24.96	305.2	150.	18.87	34.90	25.00	301.9	0.649
172.	16.04	34.55			25.41	262.8	200.	13.01	34.26	25.83	222.5	0.781
187.	14.12	34.35			25.68	237.3	250.	10.55	34.24	26.28	180.3	0.883
220.	11.87	34.21			26.02	205.0	300.	9.64	34.32	26.51	159.8	0.969
244.	10.84	34.24			26.23	185.0	400.	8.70	34.47	26.77	135.7	1.118
269.	9.87	34.24			26.41	168.3	500.	7.37	34.47	26.97	117.8	1.246
294.	9.68	34.31			26.49	161.4	600.	6.44	34.46	27.09	106.8	1.359
393.	8.79	34.47			26.76	137.3	700.	5.75	34.47	27.19	97.9	1.462
491.	7.47	34.47			26.96	119.0	800.	5.22	34.49	27.27	90.7	1.558
589.	6.53	34.46			27.08	107.9	1000.	4.42	34.53	27.39	79.7	1.730
786.	5.29	34.49			27.26	91.6	1200.	3.77	34.56	27.48	71.5	1.883
983.	4.48	34.53			27.38	80.4						
1181.	3.82	34.55			27.47	72.6						
1476.	3.14	34.59			27.57	63.5						

CROMWELL 12, STATION 23, 14-30N LAT, 151- 4W LONG, JAN. 16, 1965, 0200 G.C.T.
DRY BULB 24.9 WET BULB 22.0 WIND SPEED 07, DIR. 14 BAR. 11 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.	25.29	34.07			22.58	528.0	0.	25.28	34.07	22.58	528.0	0.000
10.	24.83	34.07			22.71	515.3	10.	24.83	34.07	22.71	515.3	0.053
20.Δ	24.80	34.07			22.72	514.8	20.	24.80	34.07	22.72	514.8	0.104
30.Δ	24.78	34.07			22.73	514.6	30.	24.78	34.07	22.73	514.6	0.156
50.	24.78	34.07			22.73	515.4	50.	24.78	34.07	22.73	515.4	0.260
76.	24.80	34.07			22.72	517.0	75.	24.86	34.06	22.70	518.9	0.390
101.	19.09	34.65			24.75	323.9	100.	19.34	34.63	24.67	331.6	0.497
126.	16.83	34.62			25.28	273.9	150.	13.94	34.37	25.73	231.0	0.639
152.	13.70	34.35			25.77	227.9	200.	11.25	34.46	26.33	175.0	0.742
177.	11.63	34.28			26.12	194.5	250.	10.47	34.60	26.58	152.1	0.824
192.	11.40	34.40			26.26	181.9	300.	9.62	34.57	26.70	141.1	0.898
226.	10.76	34.59			26.52	157.5	400.	8.67	34.58	26.86	127.5	1.033
253.	10.43	34.60			26.58	151.7	500.	7.57	34.53	26.99	115.9	1.156
278.	9.96	34.59			26.66	145.0	600.	6.70	34.52	27.10	106.0	1.268
304.	9.56	34.57			26.71	140.5	700.	5.96	34.53	27.21	96.1	1.370
405.	8.63	34.58			26.87	126.9	800.	5.33	34.55	27.30	88.0	1.464
506.	7.50	34.53			27.00	115.2	1000.	4.42	34.50	27.37	81.9	1.635
607.	6.65*	34.52			27.11	105.4	1200.	3.86	34.56	27.48	72.1	1.791
809.	5.23	34.55			27.31	87.3	1500.	3.10	34.60	27.58	62.7	1.996
1011.	4.38	34.50			27.37	81.7						
1212.	3.83	34.57			27.48	71.5						
1515.	3.07	34.60			27.58	62.2						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 2.--Continued

CROMWELL 12, STATION 24, 13- 0N LAT, 150-59W LONG, JAN. 16, 1965, 1200 G.C.T.
DRY BULB 24.0 WET BULB 21.5 WIND SPEED 10, DIR. 09 BAR. 12 WEATHER 01 VIS. 6 CLOUD TYPE 8, COVER 2

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.98	34.17			22.74	512.0	0.	24.98	34.17	22.74	512.0	0.000
10.	24.98	34.17			22.74	512.4	10.	24.98	34.17	22.74	512.4	0.052
30.Δ	24.90	34.17			22.77	510.9	20.	24.94	34.17	22.75	511.8	0.103
51.	24.85	34.17			22.78	510.3	30.	24.90	34.17	22.77	510.9	0.155
77.	18.65	34.58			24.81	317.5	50.	24.90	34.17	22.76	512.0	0.258
101.	15.35	34.43			25.47	254.5	75.	19.20	34.55	24.65	332.9	0.364
126.	13.76	34.40			25.79	224.7	100.	15.45	34.44	25.46	255.8	0.438
151.	11.55	34.42			26.24	182.2	150.	11.63	34.42	26.23	183.7	0.549
176.	11.35	34.61			26.43	165.2	200.	10.79	34.61	26.53	155.6	0.635
191.	10.92	34.60			26.50	158.7	250.	10.19	34.65	26.67	143.9	0.710
224.	10.57	34.66			26.61	149.0	300.	9.73	34.64	26.74	138.0	0.781
251.	10.18	34.65			26.67	143.7	400.	8.58	34.59	26.88	125.3	0.914
277.	9.94	34.65			26.71	140.3	500.	7.46	34.54	27.01	113.8	1.035
301.	9.72	34.64			26.74	137.9	600.	6.52	34.51	27.12	104.2	1.145
400.	8.58	34.59			26.88	125.3	700.	5.79	34.52	27.22	95.0	1.245
501.	7.45	34.54			27.01	113.7	800.	5.22	34.54	27.31	87.2	1.337
600.	6.52	34.51			27.12	104.2	1000.	4.42	34.55	27.41	78.4	1.505
800.	5.22	34.54			27.31	87.2	1200.	3.79	34.58	27.50	70.1	1.655
1000.	4.42	34.55			27.41	78.4	1500.	3.09	34.61	27.59	61.6	1.856
1200.	3.79	34.58			27.50	70.1						
1500.	3.09	34.61			27.59	61.6						

TEMPERATURE ERROR TERM AT 75. METERS IS 0.11

CROMWELL 12, STATION 25, 11-31N LAT, 150-56W LONG, JAN. 16, 1965, 2100 G.C.T.
DRY BULB 25.1 WET BULB 22.1 WIND SPEED 16, DIR. 06 BAR. 13 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.04	34.34			22.85	501.5	0.	25.04	34.34	22.85	501.5	0.000
9.	25.04	34.33			22.84	502.6	10.	25.04	34.33	22.85	502.4	0.051
30.Δ	25.00	34.44			22.94	494.3	20.	25.03	34.38	22.88	499.4	0.101
49.	24.92	34.55			23.05	484.8	30.	25.00	34.44	22.94	494.3	0.151
74.	17.09	34.59			25.19	281.0	50.	24.66	34.55	23.13	476.9	0.249
98.	13.06	34.37			25.91	212.5	75.	16.87	34.57	25.24	276.5	0.344
122.	10.98	34.21			26.18	186.9	100.	12.81	34.35	25.94	209.5	0.405
147.	11.11	34.55			26.42	164.7	150.	11.07	34.56	26.44	163.1	0.499
170.	10.74	34.60			26.53	155.1	200.	10.44	34.65	26.62	146.8	0.577
184.	10.58	34.64			26.59	149.8	250.	9.98	34.66	26.71	139.5	0.649
218.	10.29	34.65			26.65	144.9	300.	9.58	34.66	26.78	134.2	0.718
245.	10.02	34.66			26.70	140.2	400.	8.56	34.61	26.90	123.8	0.848
269.	9.82	34.66			26.74	137.4	500.	7.50	34.57	27.03	112.4	0.968
293.	9.64	34.66			26.77	134.9	600.	6.58	34.54	27.13	102.9	1.076
391.	8.66	34.61			26.89	124.9	700.	5.84	34.53	27.23	94.6	1.176
492.	7.58	34.57			27.02	113.2	800.	5.26	34.54	27.30	87.7	1.268
592.	6.65	34.54			27.13	103.7	1000.	4.49	34.56	27.41	78.5	1.437
794.	5.29	34.54			27.30	88.0	1200.	3.74	34.58	27.50	69.5	1.586
996.	4.51	34.56			27.40	78.7	1500.	3.05	34.60	27.58	61.8	1.786
1196.	3.75	34.58			27.50	69.6	2000.	2.19	34.64	27.69	51.0	2.073
1499.	3.05	34.60			27.58	61.8	2500.	1.91	34.66	27.73	48.2	2.326
1951.	2.24	34.64			27.69	51.5	3000.	1.71	34.67	27.75	46.2	2.567
2326.	1.99	34.65			27.71	49.2						
2703.	1.83	34.67			27.74	47.1						
3459.	1.60	34.68			27.77	45.6						

CROMWELL 12, STATION 26, 10- 5N LAT, 148- 3W LONG, JAN. 17, 1965, 1700 G.C.T.
DRY BULB 24.5 WET BULB 22.7 WIND SPEED 16, DIR. 04 BAR. 13 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.74	34.46	4.84		22.73	513.4	0.	25.74	34.46	22.73	513.4	0.000
10.	25.78	34.46	4.84	1.08	22.72	514.9	10.	25.78	34.46	22.72	514.9	0.052
20.Δ	25.66	34.46			22.75	511.8	20.	25.66	34.46	22.75	511.8	0.103
30.Δ	25.00	34.49			22.98	490.7	30.	25.00	34.49	22.98	490.7	0.154
51.	19.39	34.70	4.95	0.57	24.71	325.9	50.	19.71	34.69	24.62	334.2	0.237
76.	14.32	34.31	4.01	0.96	25.61	241.2	75.	14.48	34.33	25.59	243.0	0.310
91.	12.75	34.27	2.64		25.89	214.3	100.	12.29	34.35	26.04	199.9	0.366
126.	11.63	34.63	0.44		26.39	167.6	150.	11.17	34.72	26.54	153.5	0.455
151.	11.16	34.72	0.40		26.55	153.2	200.	10.54	34.72	26.66	143.9	0.530
177.	10.82	34.73	0.38		26.62	147.1	250.	10.09	34.70	26.72	138.5	0.601
191.	10.63	34.72	0.45	2.44	26.64	144.9	300.	9.78	34.70	26.78	134.3	0.670
226.	10.33	34.71	0.41	2.76	26.69	141.3	400.	8.92	34.64	26.87	126.7	0.801
250.	10.09	34.70	0.40	2.51	26.72	138.5	500.	7.90	34.59	26.99	116.5	0.924
278.	9.93	34.71	0.64	2.40	26.76	135.7	600.	6.91	34.54	27.09	107.3	1.037
303.	9.76	34.70	0.39	2.23	26.78	134.2	700.	6.08	34.53	27.19	98.1	1.141
404.	8.88	34.64	0.48	2.38	26.88	126.4	800.	5.41	34.54	27.28	89.8	1.236
505.	7.85	34.59	0.19	2.64	26.99	116.0	1000.	4.48	34.56	27.41	78.5	1.406
605.	6.86	34.54	0.36	3.33	27.10	106.8	1200.	3.80	34.58	27.49	70.3	1.557
810.	5.35	34.54	0.64	2.67	27.29	89.0	1500.	3.03	34.60	27.58	61.7	1.758
1009.	4.45	34.56	1.12	2.87	27.41	78.1						
1210.	3.77	34.58	1.47	3.13	27.50	70.0						
1512.	3.01	34.60	1.80	3.27	27.59	61.4						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 12, STATION 27, 11-30N LAT, 148- 3W LONG, JAN. 18, 1965, 0100 G.C.T.												
DRY BULB 24.7	WET BULB 22.3		WIND SPEED 12, DIR. 04		BAR. 12		WEATHER 02		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.	24.74	34.20	4.90		22.84	503.0	0.	24.74	34.20	22.84	503.0	0.000
10.Δ	24.72	34.20	5.02	0.[illegible]8	22.84	502.8	10.	24.72	34.20	22.84	502.8	0.051
30.Δ	24.42	34.27			22.99	489.9	20.	24.65	34.22	22.88	500.1	0.101
52.	22.94	34.59	5.20	0.[illegible]	23.66	426.3	30.	24.42	34.27	22.99	489.9	0.151
78.	20.25	34.92	4.94	0.39	24.65	332.4	50.	23.11	34.56	23.59	433.4	0.244
103.	16.04	34.48	3.89	0.88	25.36	265.8	75.	20.63	34.90	24.54	343.2	0.342
128.	13.38	34.45	1.54	1.24	25.91	213.6	100.	16.55	34.54	25.29	272.4	0.419
154.	12.09	34.66	0.38	2.62	26.33	174.4	150.	12.22	34.62	26.27	179.3	0.533
179.	11.38	34.72	0.30	2.44	26.51	157.7	200.	11.10	34.73	26.57	152.4	0.617
194.	11.16	34.73	0.34	1.98	26.56	153.5	250.	10.59	34.72	26.65	145.4	0.692
228.	10.84	34.73	[illegible]	2.47	26.61	148.6	300.	10.11	34.71	26.73	139.0	0.764
253.	10.55	34.72	0.44	1.86	26.66	144.9	400.	9.38	34.68	26.83	131.3	0.900
281.	10.26	34.72	0.43	2.16	26.71	140.6	500.	8.57	34.63	26.91	124.3	1.029
306.	10.07	34.71	0.48	2.68	26.73	138.7	600.	7.60	34.57	27.02	115.0	1.150
406.	9.35	34.68	0.33	2.38	26.83	130.9	700.	6.72	34.55	27.12	105.7	1.261
509.	8.49	34.62	0.24	3.13	26.92	123.7	800.	5.98	34.54	27.21	97.3	1.364
610.	7.50	34.57	0.31	3.04	27.03	114.0	1000.	4.87	34.55	27.35	84.2	1.548
812.	5.90	34.54	0.56	2.67	27.22	96.4	1200.	4.01	34.57	27.46	73.8	1.708
1013.	4.81	34.55	1.05	2.3[illegible]	27.36	83.5	1500.	3.17	34.60	27.57	63.5	1.917
1217.	3.95	34.57	1.37	2.48	27.47	73.0						
1518.	3.14	34.60	1.77	2.84	27.57	63.1						

CROMWELL 12, STATION 28, 13-[illegible]ON LAT, 148- 1W LONG, JAN. 18, 1965, 1100 G.C.T.												
DRY BULB 23.8	WET BULB 21.[illegible]		WIND SPEED 17, DIR. 05		BAR. 15		WEATHER 01		VIS. 6	CLOUD TYPE 8, COVER 1		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.39	34.03			22.81	505.2	0.	24.39	34.03	22.81	505.2	0.000
9.	24.37	34.03	5.02	0.56	22.82	505.0	10.	24.37	34.03	22.82	505.0	0.051
30.Δ	24.38	34.03			22.82	506.1	20.	24.37	34.03	22.82	505.4	0.102
48.	24.38	34.03	4.99	0.88	22.82	506.7	30.	24.38	34.03	22.82	506.1	0.153
72.	24.25	34.04	4.95	0.44	22.86	503.2	50.	24.54	34.02	22.76	511.9	0.255
96.	15.20	34.42	3.06	1.51	25.50	251.9	75.	23.16	34.10	23.22	468.8	0.379
100.Δ	14.40	34.41			25.67	236.2	100.	14.40	34.41	25.67	236.2	0.468
119.	12.67	34.38	1.85	2.00	26.00	204.9	150.	11.33	34.45	26.30	176.3	0.571
144.	11.35	34.39	1.72	2.42	26.26	180.6	200.	10.77	34.61	26.53	155.6	0.655
167.	11.40	34.60	0.63	2.69	26.41	166.6	250.	10.17	34.64	26.66	144.7	0.731
181.	11.14	34.61	0.45	2.56	26.47	161.6	300.	9.89	34.65	26.71	140.2	0.803
213.	10.54	34.61	0.41	2.76	26.57	151.9	400.	8.67	34.59	26.87	126.8	0.937
239.	10.24	34.63	0.30	2.80	26.64	146.0	500.	7.62	34.53	26.98	116.8	1.060
263.	10.12	34.64	0.28	2.78	26.67	143.7	600.	6.67	34.51	27.10	106.5	1.173
287.	10.02	34.65	0.19	2.44	26.69	141.8	700.	5.86	34.50	27.20	97.0	1.276
382.	8.87	34.60	0.34	2.82	26.85	128.7	800.	5.25	34.51	27.28	89.5	1.370
479.	7.83	34.54	0.64	3.05	26.96	118.9	1000.	4.50	34.54	27.39	79.7	1.541
574.	6.91	34.51	0.42	2.98	27.07	109.3	1200.	3.81	34.57	27.48	71.3	1.694
765.	5.42	34.51	0.58		27.26	91.6						
958.	4.66	34.54	0.99	2.96	27.37	81.7						
1150.	3.95	34.56	1.16	2.58	27.46	73.2						
1441.	3.13	34.59	1.65	2.60	27.57	63.1						

TEMPERATURE ERROR TERM AT 50. METERS IS 0.11
TEMPERATURE ERROR TERM AT 75. METERS IS 0.30

CROMWELL 12, STATION 29, 14-30N LAT, 148- 2W LONG, JAN. 18, 1965, 2000 G.C.T.												
DRY BULB 24.1	WET BULB 21.1		WIND SPEED 23, DIR. 05		BAR. 18		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.	24.22	33.94	5.07		22.80	506.9	0.	24.22	33.94	22.80	506.9	0.000
10.	24.25	33.95	5.12	0.28	22.80	507.4	10.	24.25	33.95	22.80	507.4	0.051
30.Δ	24.14	34.05			22.90	497.8	20.	24.21	34.00	22.84	503.5	0.102
50.Δ	23.35	34.12			23.01	488.2	30.	24.14	34.05	22.90	497.8	0.152
54.	23.12	34.32	5.07	0.40	23.40	450.8	50.	23.95	34.12	23.01	488.2	0.252
74.	21.32	34.76	5.06	0.36	24.24	371.4	75.	21.25	34.77	24.27	368.7	0.360
98.	19.83	34.91	5.17	0.37	24.76	323.3	100.	19.77	34.92	24.78	321.0	0.447
123.	18.54	34.89	4.64	0.48	25.07	294.0	150.	14.56	34.32	25.57	247.1	0.590
148.	14.76	34.34	3.86	1.04	25.53	250.1	200.	11.03	34.24	26.20	187.0	0.699
170.	12.88	34.26	3.05	1.33	25.86	219.0	250.	10.20	34.44	26.50	159.7	0.786
185.	11.68	34.23	2.94	1.80	26.07	199.3	300.	9.73	34.53	26.65	145.7	0.863
218.	10.64	34.30	2.42	2.09	26.31	176.6	400.	8.43	34.56	26.89	125.0	1.000
243.	10.30	34.41	1.48	2.46	26.46	163.2	500.	7.38	34.51	27.00	115.0	1.121
267.	9.97	34.49	1.00	1.96	26.58	152.3	600.	6.71	34.51	27.09	106.8	1.233
296.	9.77	34.53	0.64	2.11	26.64	146.7	700.	5.97	34.52	27.19	97.7	1.336
386.	8.61	34.57	0.48	2.87	26.86	126.9	800.	5.33	34.52	27.28	89.9	1.431
481.	7.52	34.51	0.56	2.73	26.98	116.6	1000.	4.45	34.54	27.40	79.1	1.602
576.	6.89	34.51	0.52	2.92	27.07	109.0	1200.	3.71	34.57	27.49	70.2	1.753
765.	5.52	34.52	0.54	3.22	27.25	92.1						
956.	4.63	34.54	0.86	3.18	27.37	81.3						
1146.	3.89	34.56	1.18	2.33	27.47	72.4						
1432.	3.06	34.59	1.61	3.04	27.57	62.2						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA				DERIVED DATA		INTERPOLATED DATA					
CROMWELL 12, STATION 30, 16- 2N LAT, 148- 5W LONG, JAN. 19, 1965, 0500 G.C.T.											
DRY BULB 23.9	WET BULB 21.0		WIND SPEED 12, DIR. 06		BAR. 17	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.	24.10	34.11	4.98		22.96	491.2	0.	24.10	34.11	22.96	491.2	0.000
11.	24.14	34.10	5.18	0.32	22.94	493.5	10.	24.14	34.10	22.94	493.4	0.050
30.Δ	24.08	34.17			23.01	487.5	20.	24.13	34.12	22.96	491.8	0.099
50.	23.92	34.29	5.02	0.48	23.15	475.1	30.	24.08	34.17	23.01	487.5	0.149
73.	22.72	34.70	5.25	0.91	23.81	413.1	50.	23.92	34.29	23.15	475.1	0.245
97.	20.67	34.89	5.07	0.36	24.52	346.0	75.	22.54	34.72	23.88	406.6	0.357
123.	19.79	34.92	5.02	0.35	24.78	322.4	100.	20.54	34.90	24.56	342.0	0.451
146.	18.76	34.86	4.62	0.46	24.99	302.2	150.	18.48	34.82	25.03	298.5	0.612
171.	16.54	34.55	4.24	0.82	25.30	273.8	200.	13.32	34.28	25.79	227.1	0.745
185.	14.83	34.37	3.75	1.14	25.54	250.4	250.	10.33	34.22	26.31	177.6	0.847
217.	11.98	34.24	2.78	1.80	26.02	204.8	300.	10.59	34.61	26.56	154.8	0.931
242.	10.63	34.22	3.04	1.79	26.25	182.8	400.	8.94	34.53	26.78	135.2	1.077
268.	10.02	34.29	2.28	2.15	26.41	167.9	500.	7.70	34.47	26.93	122.2	1.207
291.	10.60	34.57	0.70	2.02	26.53	157.7	600.	6.75	34.46	27.05	111.1	1.325
388.	9.11	34.54	0.46	2.81	26.76	137.1	700.	5.96	34.47	27.16	100.7	1.432
484.	7.87	34.48	0.38	3.04	26.91	124.0	800.	5.34	34.50	27.26	92.1	1.529
580.	6.93	34.46	0.34	2.37	27.02	113.3	1000.	4.53	34.54	27.38	80.8	1.704
774.	5.48	34.49	0.54	3.36	27.24	93.9	1200.	3.86	34.57	27.48	72.1	1.859
968.	4.64	34.53	0.80	3.29	27.37	82.3						
1162.	4.01	34.56	1.04	3.36	27.46	74.0						
1456.	3.18	34.59	1.43	2.69	27.56	63.9						

CROMWELL 12, STATION 31, 17-29N LAT, 147-59W LONG, JAN. 19, 1965, 1500 G.C.T.											
DRY BULB 23.0	WET BULB 20.9		WIND SPEED 16, DIR. 04		BAR. 19	WEATHER 03		VIS. 5	CLOUD TYPE 8, COVER 7		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.10	34.28	5.06		23.09	478.9	0.	24.10	34.28	23.09	478.9	0.000
11.Δ	24.09	34.28	5.18	0.36	23.09	479.1	10.	24.09	34.28	23.09	479.1	0.048
30.Δ	24.09	34.28			23.09	479.8	20.	24.09	34.28	23.09	479.4	0.097
49.	24.09	34.29	5.03	0.33	23.10	479.8	30.	24.09	34.28	23.09	479.8	0.145
76.	24.40	34.79	5.00	0.34	23.38	453.7	50.	24.12	34.31	23.10	479.5	0.241
99.	22.33	34.78	5.30	0.56	23.98	397.7	75.	24.41	34.77	23.37	455.3	0.359
124.	20.83	34.86	4.99	0.44	24.45	353.2	100.	22.26	34.78	24.00	395.7	0.466
149.	19.59	34.89	4.81	0.68	24.80	320.5	150.	19.56	34.89	24.81	319.7	0.647
172.	18.45	34.81	4.60	0.52	25.03	299.2	200.	15.12	34.42	25.52	253.4	0.791
187.	16.62	34.57	4.24	0.64	25.29	274.7	250.	11.13	34.16	26.12	196.3	0.904
220.	13.12	34.26	4.29	0.89	25.82	224.9	300.	9.28	34.14	26.42	167.5	0.996
247.	11.26	34.16	4.13	1.41	26.09	198.3	400.	7.40	34.21	26.76	135.7	1.149
272.	10.33	34.15	3.58	2.09	26.25	183.5	500.	7.01	34.39	26.96	118.2	1.277
296.	9.40	34.14	3.52	1.71	26.40	169.4	600.	6.15	34.42	27.10	105.5	1.390
395.	7.43	34.20	3.31	2.60	26.75	136.8	700.	5.59	34.46	27.20	96.7	1.492
495.	7.05	34.39	0.60		26.95	118.9	800.	5.18	34.49	27.27	90.2	1.587
593.	6.19	34.42	0.68	3.00	27.09	106.2	1000.	4.35	34.51	27.38	80.3	1.759
789.	5.23	34.49	0.79	3.00	27.27	90.9	1200.	3.70	34.54	27.48	71.6	1.913
987.	4.40	34.51	0.98	3.07	27.38	80.9						
1185.	3.76	34.55	1.17	3.19	27.47	71.9						
1480.	2.99	34.58	1.53	3.11	27.57	62.4						

CROMWELL 12, STATION 32, 19- 1N LAT, 147-57W LONG, JAN. 19, 1965, 2300 G.C.T.											
DRY BULB 24.1	WET BULB 20.9		WIND SPEED 16, DIR. 06		BAR. 20	WEATHER 02		VIS. 7	CLOUD TYPE 8, COVER 5		
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.15	34.27	5.02		23.07	481.1	0.	24.15	34.27	23.07	481.1	0.000
10.Δ	24.15	34.27	5.10	1.25	23.07	481.5	10.	24.15	34.27	23.07	481.5	0.048
30.Δ	24.12	34.27			23.08	481.4	20.	24.14	34.27	23.07	481.6	0.097
51.	24.01	34.26	5.04	1.02	23.10	479.8	30.	24.12	34.27	23.08	481.4	0.145
77.	23.87	34.39	5.21	0.29	23.24	467.5	50.	24.02	34.26	23.10	480.0	0.242
102.	23.03	34.60	5.17		23.64	429.9	75.	23.89	34.38	23.22	469.1	0.362
127.	20.90	34.79	5.06	0.37	24.38	360.2	100.	23.13	34.58	23.60	434.0	0.476
153.	19.08	34.78	4.50	0.59	24.85	316.0	150.	19.28	34.79	24.81	320.2	0.666
178.	17.36	34.70	4.41	0.60	25.22	281.8	200.	14.89	34.40	25.55	250.0	0.809
193.	15.76	34.48	3.75	0.92	25.42	262.4	250.	10.33	34.15	26.25	183.0	0.918
227.	11.84	34.19	3.20	1.40	26.01	206.1	300.	9.38	34.24	26.48	162.0	1.005
254.	10.15	34.15	3.28	1.67	26.28	180.1	400.	7.17	34.20	26.79	133.3	1.154
280.	9.41	34.10	3.76	1.48	26.37	172.2	500.	6.91	34.41	26.99	115.8	1.280
305.	9.40	34.28	2.16	2.40	26.51	159.3	600.	6.33	34.47	27.11	104.5	1.391
406.	7.01	34.13	1.78	2.65	26.79	132.5	700.	5.69	34.48	27.20	96.6	1.493
508.	6.94	34.43	0.56	3.04	27.00	114.6	800.	5.14	34.48	27.27	90.5	1.588
609.	6.26	34.47	0.50	3.13	27.12	103.7	1000.	4.34	34.52	27.39	79.8	1.760
811.	5.08	34.46	0.72	3.18	27.28	89.9	1200.	3.71	34.55	27.48	71.5	1.913
1013.	4.30	34.52	0.92	3.28	27.39	79.2	1500.	3.05	34.59	27.57	62.6	2.117
1214.	3.67	34.55	1.16	2.96	27.48	71.0						
1516.	3.02	34.59	1.42	3.08	27.58	62.3						

ΔFROM BT DATA

Table 2.--Continued

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	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.	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	1.556
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.	7.10	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						

CROMWELL 12, STATION 34, 22- 0N 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.	OXY.	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.	23.59	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.	17.75	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.	14.04	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.	3.04	34.57	1.44	2.87	27.56	63.5						

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.	OXY.	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	35.09	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	1.765
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 TERM AT 300. METERS IS 0.13

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 12, STATION 36, 25- 6N LAT, 147-58W LONG, JAN. 21, 1965, 1300 G.C.T. DRY BULB 21.5 WET BULB 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	35.31	5.19		24.40	355.7	20.	22.49	35.18	24.23	370.5	0.075
72.	22.10	35.35	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	34.52	4.84	0.59	25.53	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	34.20	4.76	0.76	25.86	222.2	500.	6.97	34.02	26.67	145.1	1.272
377.	9.66	34.09	4.76	1.40	26.32	178.9	600.	5.56	34.08	26.90	123.2	1.407
472.	7.49	34.02	3.68		26.60	152.2	700.	4.75	34.19	27.08	106.1	1.523
567.	5.93	34.05	1.84		26.83	129.8	800.	4.36	34.31	27.22	93.7	1.624
755.	4.50	34.26	0.56		27.17	98.4	1000.	3.94	34.46	27.38	79.1	1.799
944.	4.08	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 BULB 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.	9.18	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	1.18		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 38, 25- 4N LAT, 150-55W LONG, JAN. 22, 1965, 1500 G.C.T. DRY BULB 20.3 WET BULB 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	369.6	0.037
20.Δ	22.60	35.23			24.24	369.6	20.	22.60	35.23	24.24	369.6	0.074
30.Δ	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	314.8	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.	17.99	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	51.8	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						

ΔFROM BT DATA

Table 2.--Continued

CROMWELL 12, STATION 39, 25- ON LAT, 154- OW 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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	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.	22.62	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	30649	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	34.75	4.75		25.32	273.1	300.	12.63	34.23	25.89	219.6	0.934
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.	12.46	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.	3.88	34.49	1.44		27.41	76.3	1500.	2.85	34.58	27.59	60.9	2.215
1215.	3.39	34.53	1.33		27.50	69.1						
1517.	2.82	34.58	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 17.2 WIND SPEED 25, DIR. 09 BAR. 22 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 5

DEPTH	TEMP.	SAL.	OXY.	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.	23.12	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	34.55			25.58	248.5	300.	12.33	34.28	25.99	210.1	0.963
251.	13.68	34.40			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.	OXY.	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.	23.03	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.	12.58	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	[illegible]	2.206
1213.	3.50	34.54			27.49	69.7						
1516.	2.80	34.58			27.59	60.4						

TEMPERATURE ERROR TEST AT 700. METERS IS 0.10

ΔFROM 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.	OXY.	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.	11.96	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

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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.Δ	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	118.6	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						

ΔFROM BT DATA

Table 3.--Continued

CROMWELL 13, STATION 4, 16- 1N 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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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.Δ	24.76	34.23			22.85	501.8	10.	24.76	34.23	22.85	501.8	0.050
30.Δ	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.Δ	24.72	34.24			22.87	499.9	10.	24.72	34.24	22.87	499.8	0.050
30.Δ	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- 1N 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.Δ	24.93	34.29			22.85	502.3	10.	24.93	34.29	22.85	502.3	0.051
30.Δ	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
176.	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						

ΔFROM BT DATA

Table 3.--Continued

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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	1.323
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		25.73	230.5	100.	14.28	34.43	25.70	232.7	0.397
126.	12.00	34.50	1.42		26.22	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

ΔFROM BT DATA

Table 3.--Continued

CROMWELL 13, STATION 9, 12-59N LAT, 154- 0W LONG, 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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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						

CROMWELL 13, STATION 10, 14-31N LAT, 154- 0W 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						

CROMWELL 13, STATION 11, 16- 0N LAT, 153-59W LONG, 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.Δ	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						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 13, STATICN 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, STATICN 13, 18-59N LAT, 153-58W LCNG, 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		24.0C	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 13, STATION 15, 22- 4N LAT, 153-52W LONG, FEB. 15, 1965, 1400 G.C.T.												
DRY BULB 21.9	WET BULB 19.7	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	306.2	150.	19.40	35.05	24.98	304.3	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	34.39	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						

CROMWELL 13, STATION 16, 23-28N LAT, 153-58W LONG, FEB. 15, 1965, 2200 G.C.T.												
DRY BULB 23.2	WET BULB 20.8	WIND SPEED 10, DIR. 09			BAR. 16		WEATHER 03		VIS. 7		CLOUD TYPE 8, COVER 6	
DEPTH	TEMP.	SAL.	OXY.	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						

CROMWELL 13, STATION 17, 23-26N LAT, 150-55W LONG, FEB. 16, 1965, 1400 G.C.T.												
DRY BULB 22.0	WET BULB 19.8	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

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	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.Δ	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	0.586
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.	OXY.	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.Δ	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	0.865
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- OW 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.	OXY.	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.Δ	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

CROMWELL 13, STATION 21, 17-27N LAT, 150-59W LONG, FEB. 18, 1965, 0200 G.C.T.
DRY BULB 26.5 WET BULB 22.0 WIND SPEED 15, DIR. 01 BAR. 15 WEATHER 01 VIS. 9 CLOUD TYPE 8, COVER 2

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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.Δ	24.26	34.25			23.02	486.1	10.	24.26	34.25	23.02	486.3	0.049
30.	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.	19.85	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.
DRY BULB 23.0 WET BULB 20.9 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.	5.82	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.
DRY BULB 24.8 WET BULB 22.0 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.Δ	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	1.336
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

CRONWELL 13, STATION 24, 13- ON LAT, 151- OW 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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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						

CRONWELL 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
30.Δ	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			27.68	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						

CRONWELL 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
30.Δ	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.	15.36	34.45	3.69		25.49	252.6	50.	23.05	34.47	23.54	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	34.54	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						

ΔFROM BT DATA

Table 3.--Continued

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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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	0.146
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						

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 , 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						

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

CROMWELL 13, STATION 33, 20-32N LAT, 148- 1W LONG, FEB. 23, 1965, 0900 G.C.T.
DRY BULB 20.8 WET BULB 16.8 WIND SPEED 11, DIR. 31 BAR. 15 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 2

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	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.Δ	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

CROMWELL 13, STATION 34, 22- 0N LAT, 147-55W LONG, FEB. 23, 1965, 1800 G.C.T.
DRY BULB 19.8 WET BULB 17.0 WIND SPEED 14, DIR. 36 BAR. 11 WEATHER 03 VIS. 8 CLOUD TYPE 8, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	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.Δ	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						

CROMWELL 13, STATION 35, 23-28N LAT, 148- 2W LONG, FEB. 24, 1965, 0200 G.C.T.
DRY BULB 21.5 WET BULB 18.5 WIND SPEED 08, DIR. 36 BAR. 15 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.
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	134.8	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

ΔFROM BT DATA

Table 3.--Continued

CROMWELL 13, STATION 36, 25- 2N LAT, 148- 1W LONG, FEB. 24, 1965, 1300 G.C.T.
DRY BULB 21.8 WET BULB 18.8 WIND SPEED 12, DIR. 02 BAR. 11 WEATHER 02 VIS. 7 CLOUD TYPE , COVER 4

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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	1.342
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	34.34	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						

CROMWELL 13, STATION 37, 26-27N LAT, 148- 2W LONG, FEB. 24, 1965, 2100 G.C.T.
DRY BULB 21.0 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	329.4	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						

CROMWELL 13, STATION 38, 25- 2N LAT, 151- 6W LONG, FEB. 25, 1965, 1500 G.C.T.
DRY BULB 18.4 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

CROMWELL 13, STATION 39, 24-58N 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

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
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, 24-58N LAT, 156-58W 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, 156-58W 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.	OXY.	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						

ΔFROM BT DATA

MS# 1585

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