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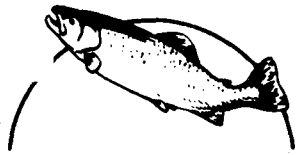
The Trade Wind Zone Oceanography Pilot Study Part VI: Townsend Cromwell Cruises 16, 17, and 21 May and June 1965 and January 1966

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



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UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES

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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 last regular cruises, Townsend Cromwell cruises 16 and 17, May and June 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. Oceanographic station data from Townsend Cromwell cruise 21 in January 1966, consisting of a single profile of stations between lat. 10° and 26.5° N. along long. 154° W., have been included.

INTRODUCTION

This is the last 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. In addition to the series of monthly cruises, the field program of the pilot study was extended to include a single profile of stations along long. 154° W. in January 1966.

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 cruises 16, 17, and 21, the last cruises in the series. Figure 1 shows the cruise track for cruises 16 and 17 and gives the position of the Nansen bottle oceanographic casts and the BT casts. It also contains these data for Townsend Cromwell cruise 21 with the single profile of stations along long. 154° W., including stations 7A to 16, 39, and one additional station, 39A, at lat. 26.5° N. Although this cruise was, strictly speaking, not a part of the series, the additional data provide a means of comparison of oceanographic conditions in January 1966 along long. 154° W. with those in January 1965.

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.

The 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 16:
May 12 to 31, 1965
- Lloyd T. Watarai - HL - Field Party Chief
- Jerome S. W. Marr - HL
- Howard N. Morinaga - HL
- John J. Naughton - HL
- James K. Tarasawa - HL
- Warren King - Smithsonian Institution

Townsend Cromwell, cruise 17:
June 10 to July 2, 1965
- David W. K. Au - HL - Field Party Chief
- Barbara E. Boldt - HL
- John L. Matthews - HL
- Howard N. Morinaga - HL
- James K. Tarasawa - HL
- Paul Woodward - Smithsonian Institution

Townsend Cromwell, cruise 21:
January 17 to February 2, 1966
- Gunter R. Seckel - HL - Field Party Chief
- David W. K. Au - HL
- John L. Matthews - HL
- Howard N. Morinaga - HL
- Alan M. Osato - HL

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; at oceanographic stations 3, 18, and 24, BT casts were made every 20 minutes for a 12-hour period on cruise 17. 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[2/] was used to collect additional data at stations south of lat. 14° N. on both cruises and at two additional stations along long. 148° W. on cruise 17. These data are not presented in this report.

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

Biological

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

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. Surface long wave radiation measurements were taken at night BT stations with the Suomi-Kuhn net radiometer.

Current

Eight drift bottles, supplemented by plastic-enclosed drift cards (Barkley, Ito, and Brown, 1964) during the first and last days of cruises 16 and 17, were released at each BT cast. Two current stations were occupied each cruise; Ekman, Hydro Products, and Roberts current meters were used. Cruise 21 was designed to develop a method of obtaining directly measured currents from a drifting ship which could be correlated with inferred currents and with the water mass structure. To this end, currents to 1,000 m. were measured at stations midway between oceanographic stations. Only the oceanographic station data and BT observations are included in this report.

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 °/oo, the salinity was redetermined on the U.W. salinity bridge, and the mean of the salinity bridge determina-

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[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.

tions 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 performed 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 intake values of temperature and salinity were compared, for each cruise, with values from the surface Nansen bottles when available. 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. Variations were large, however, and the root mean square value computed from above differences was as much as 0.5° C. The bucket salinity values also showed large variations with a mean of the differences of about 0.005 °/oo and a root mean square value within 0.12 °/oo 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 16, 17, and 21, 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 8, 25 and 26, and 37 and 40. In addition, surface temperature and salinities are presented with each section. All the sections were plotted automatically by the model 566 Calcomp plotter with a program designed at HL. These seven BT sections are shown in figures 2 through 7 for cruise 16 and figures 8 through 13 for cruise 17. The one BT section along 154° W. from cruise 21 is shown in figure 14.

The surface temperature distributions, based on intake temperature at each BT cast, are shown in figures 15 and 16 for cruises 16 and 17, respectively.

The surface salinity distributions, based on intake salinity samples at each BT cast, are

shown in figures 17 and 18 for cruises 16 and 17, respectively.

The dynamic topography, relative to 1,200 m. for cruises 16 and 17, is shown in figures 19 and 20, 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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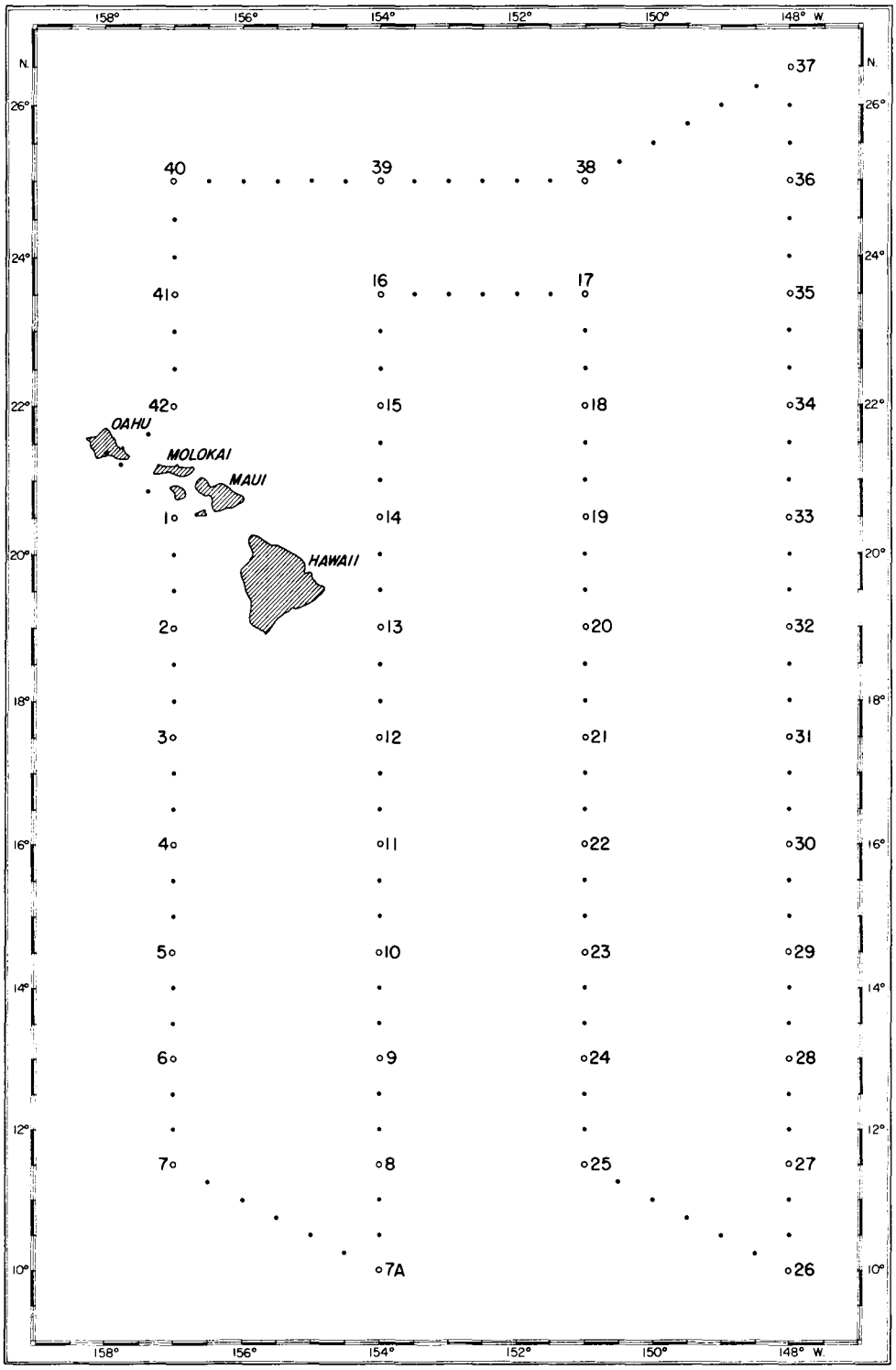


Figure 1.--Track chart for Townsend Cromwell cruises 16 and 17. The large, numbered dots indicate the locations at which both hydrographic and BT (bathythermograph) casts were made; the smaller dots indicate locations at which only BT casts were made.

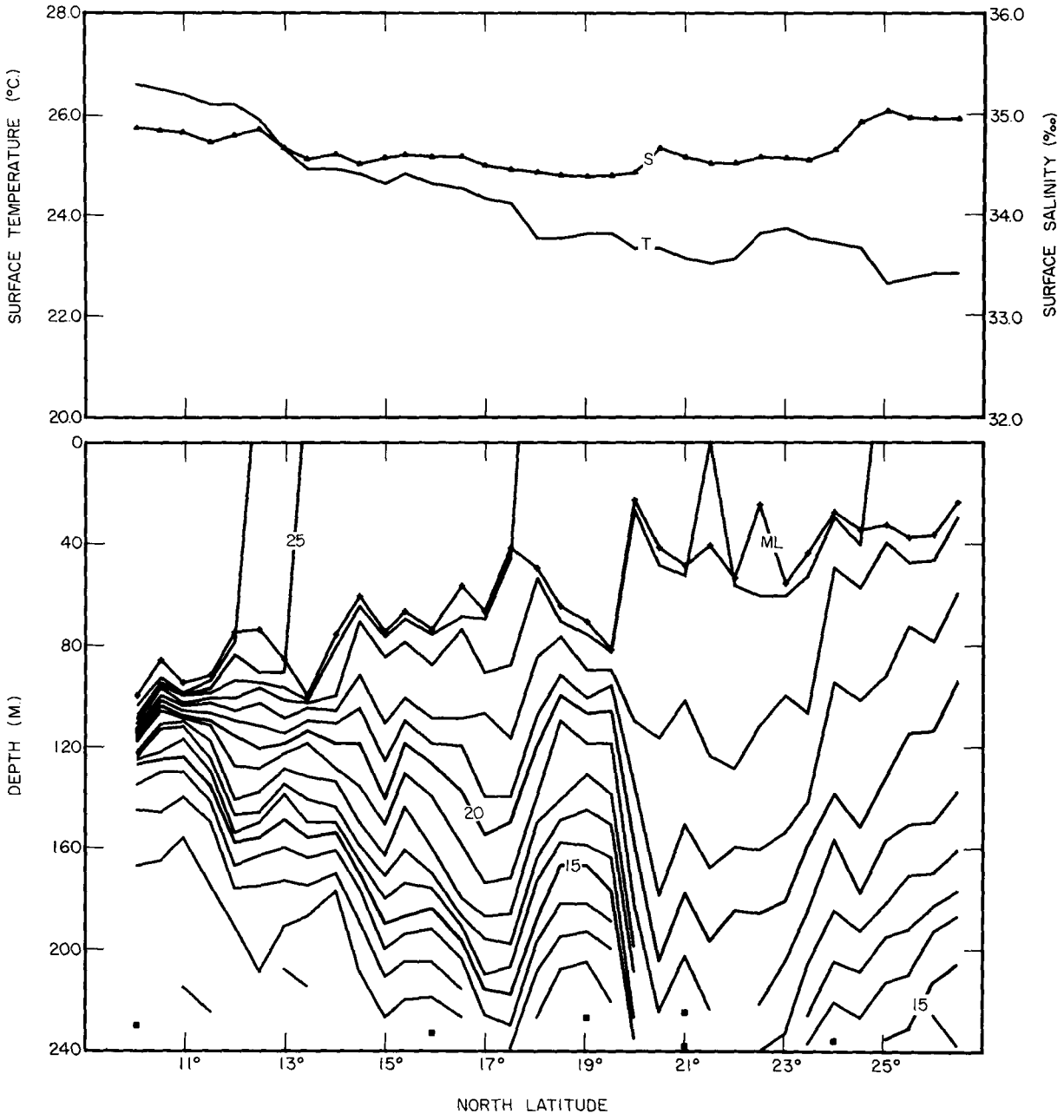
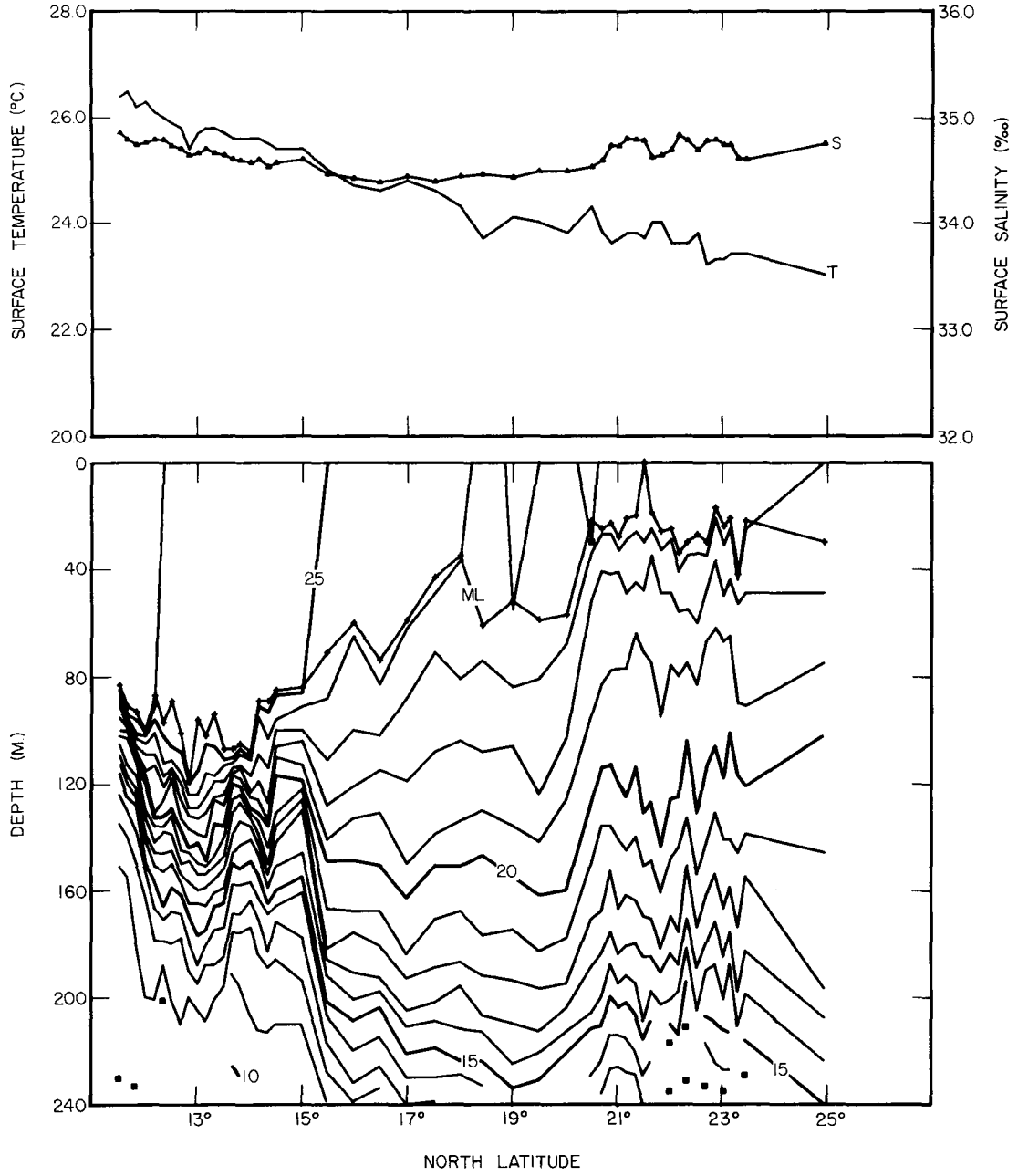


Figure 2.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 16 along long. 148° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.



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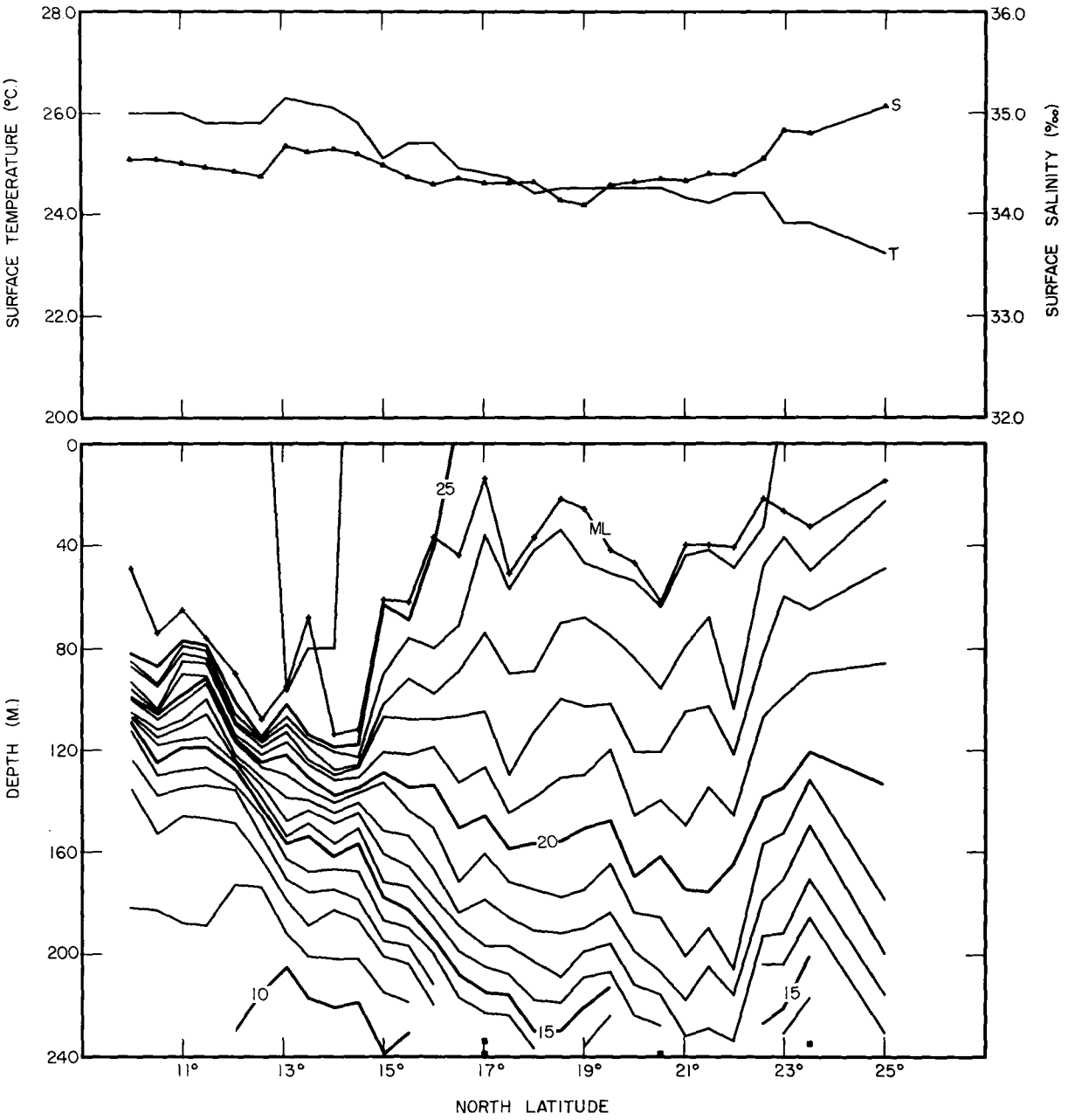

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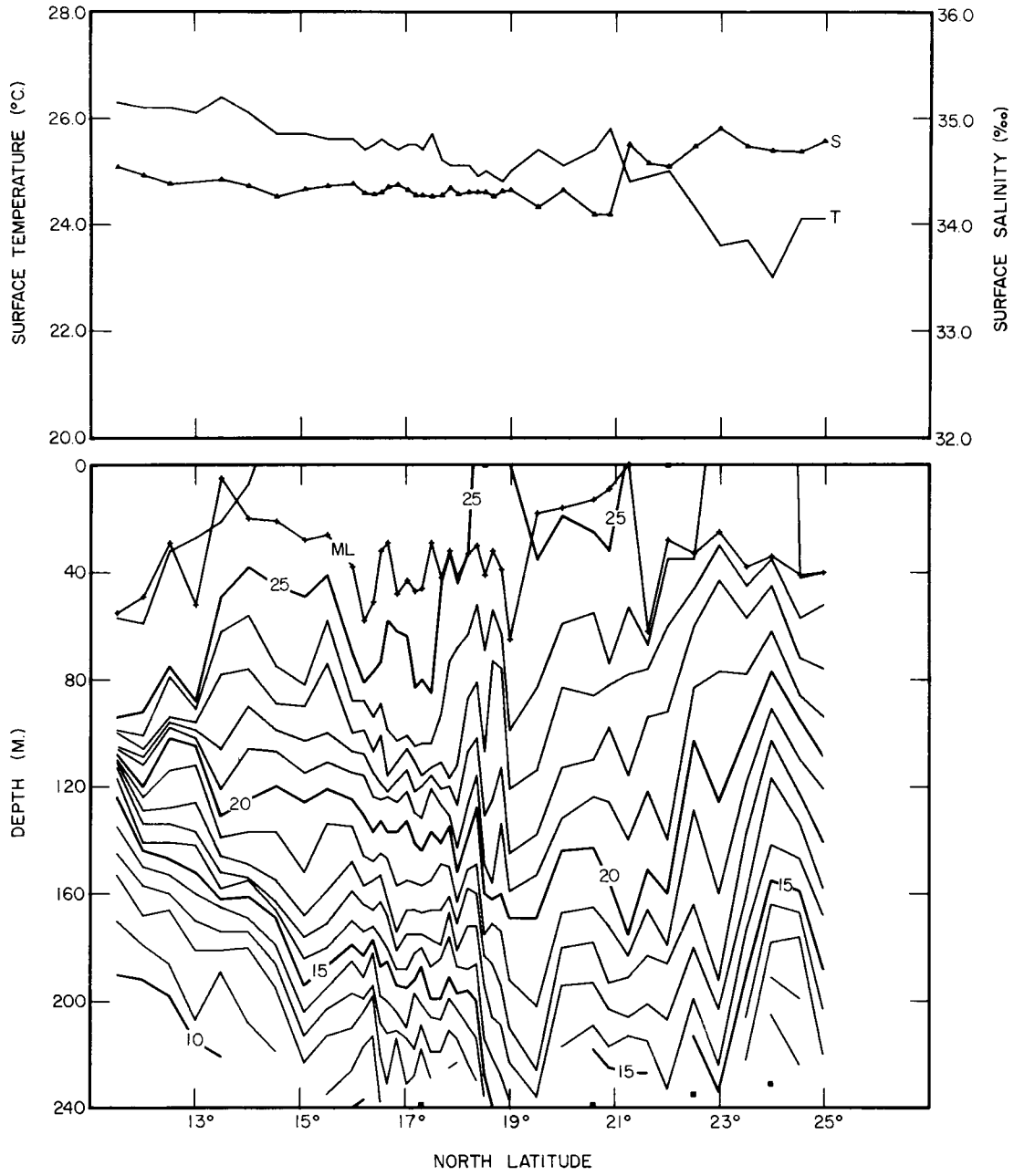

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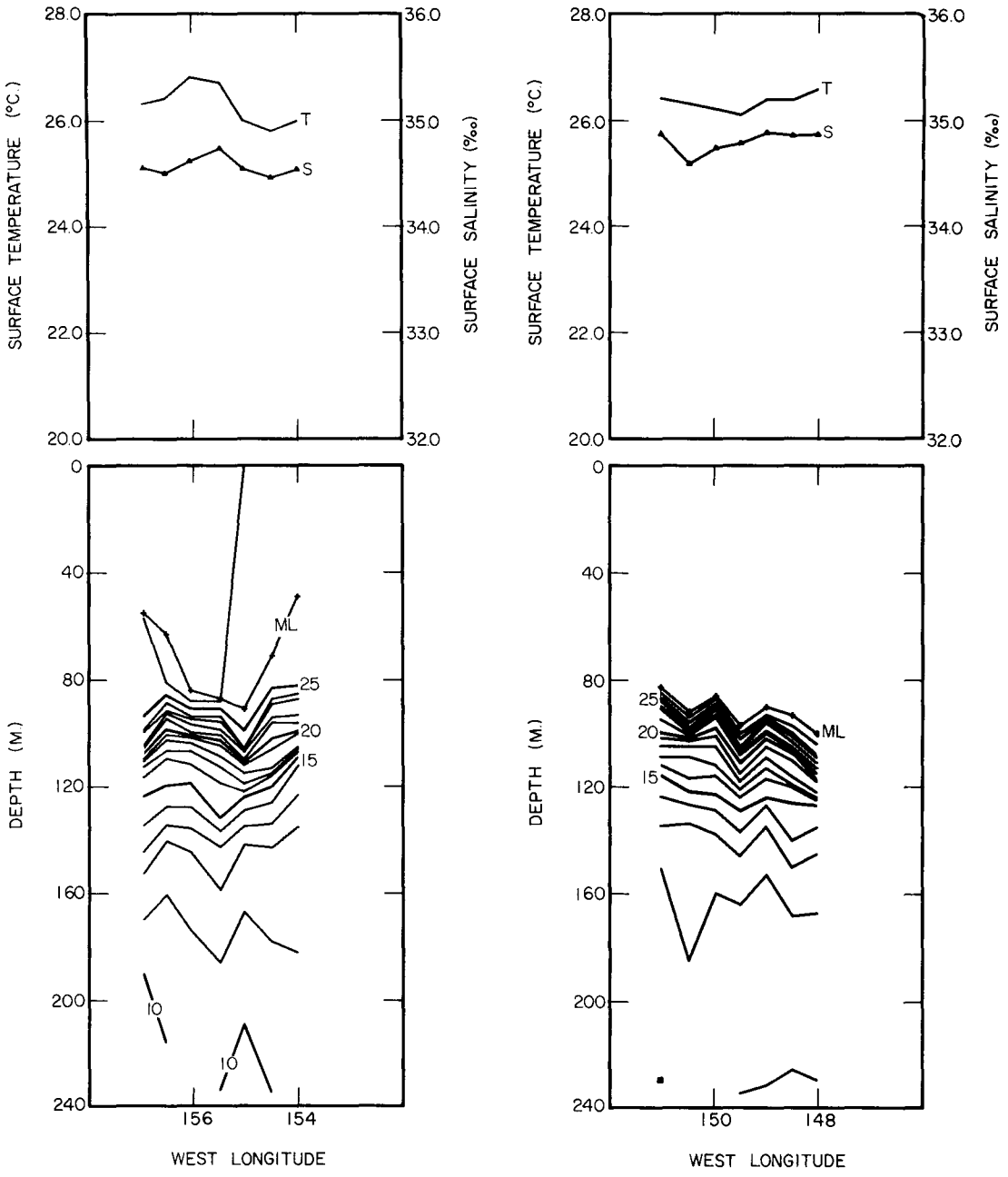

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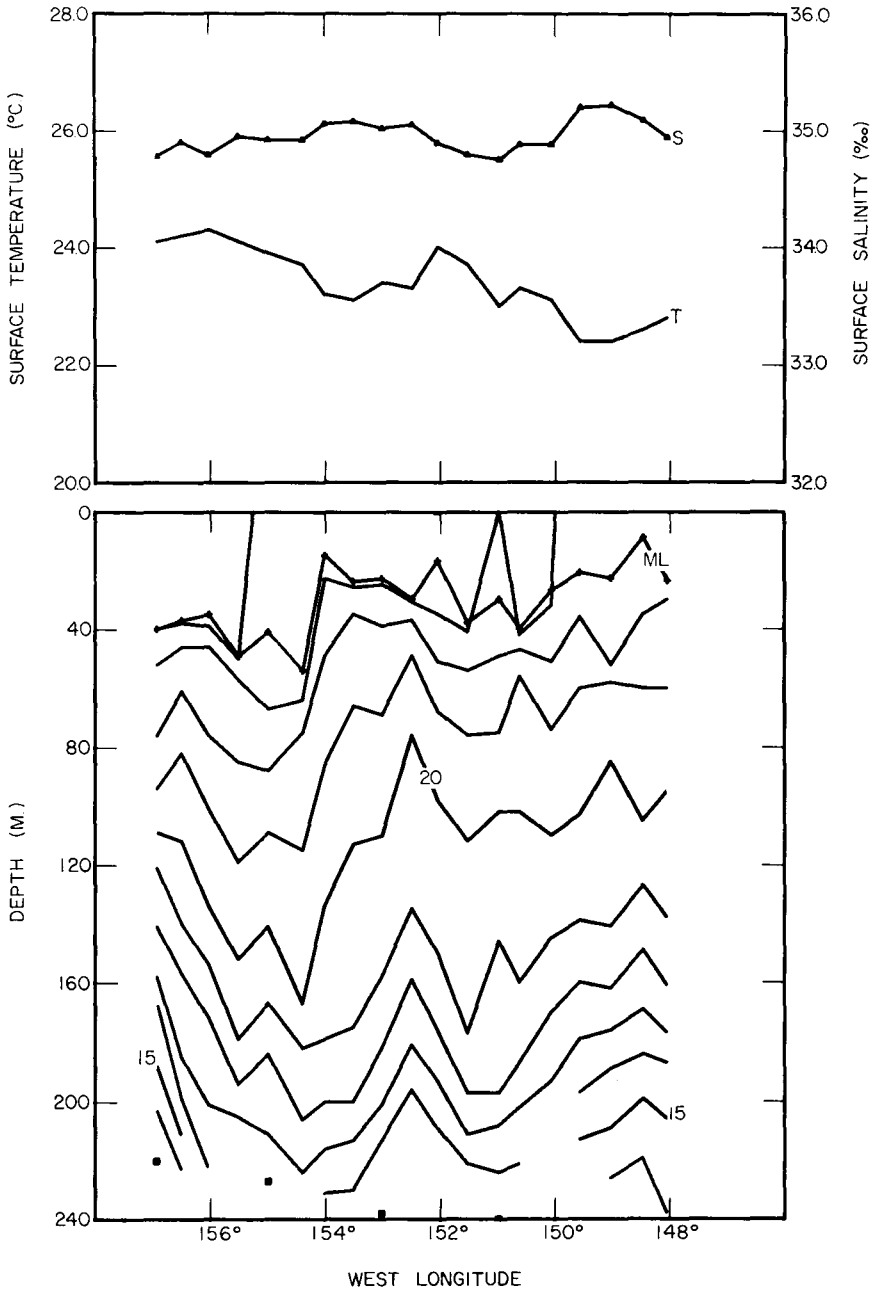

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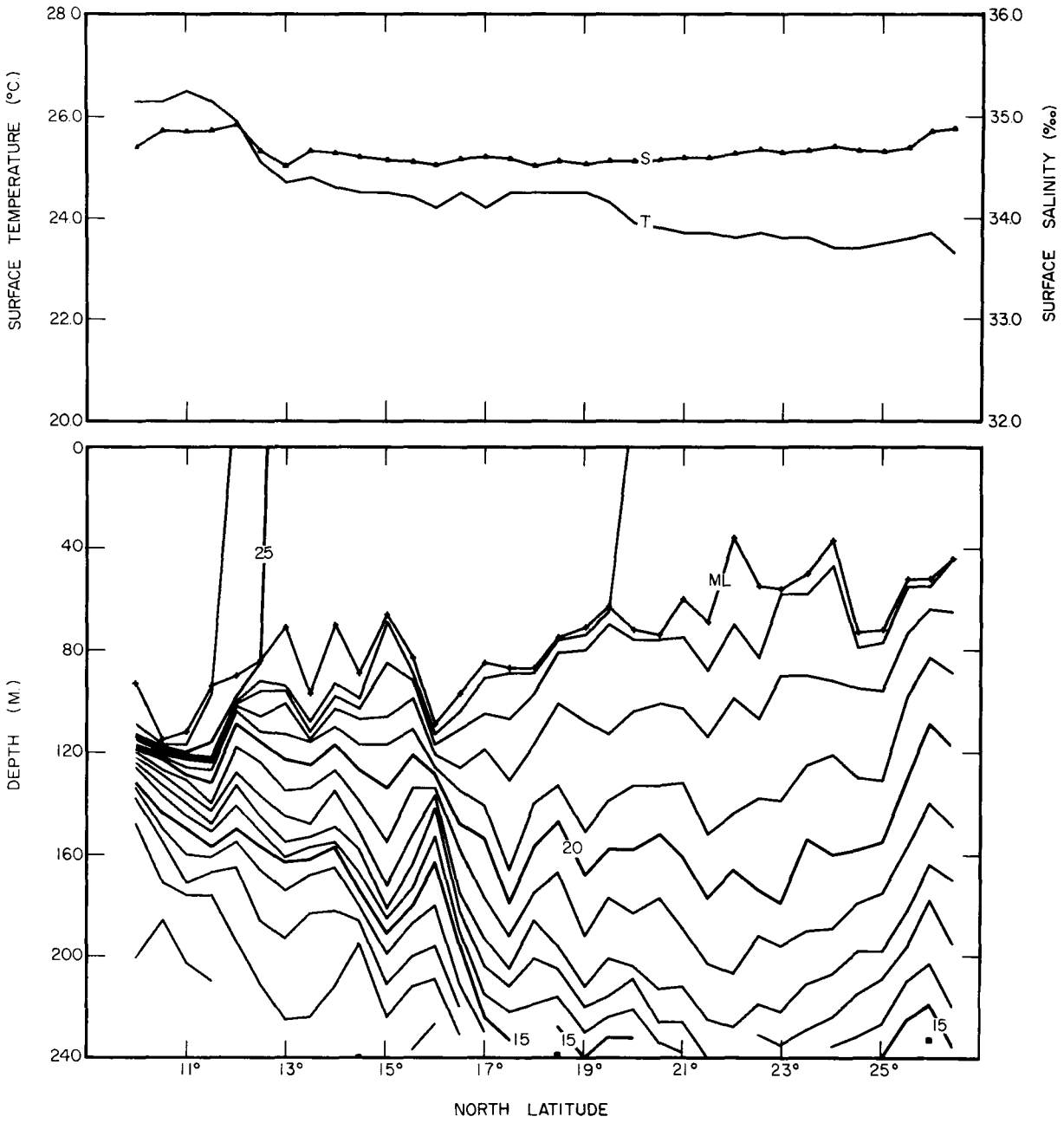

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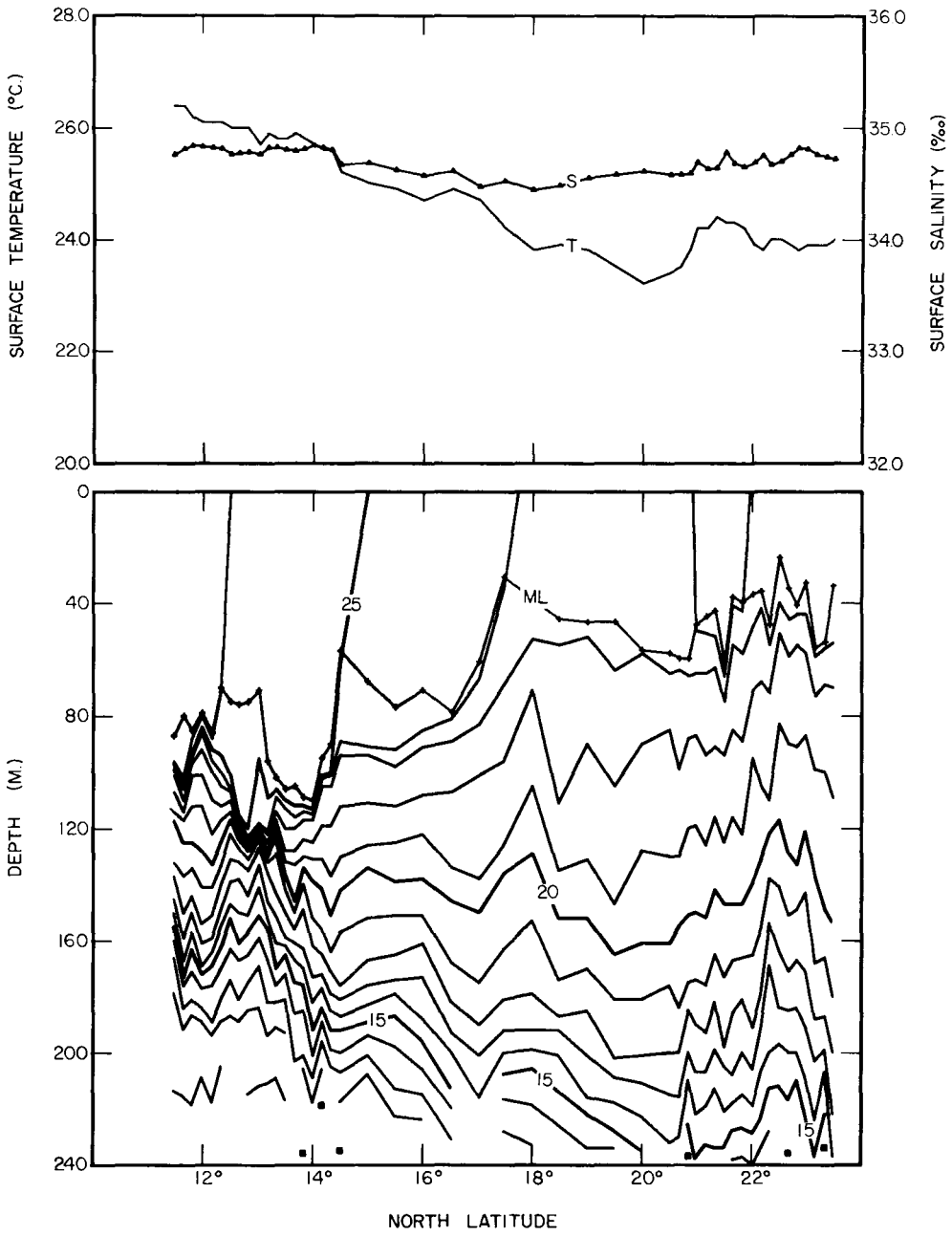

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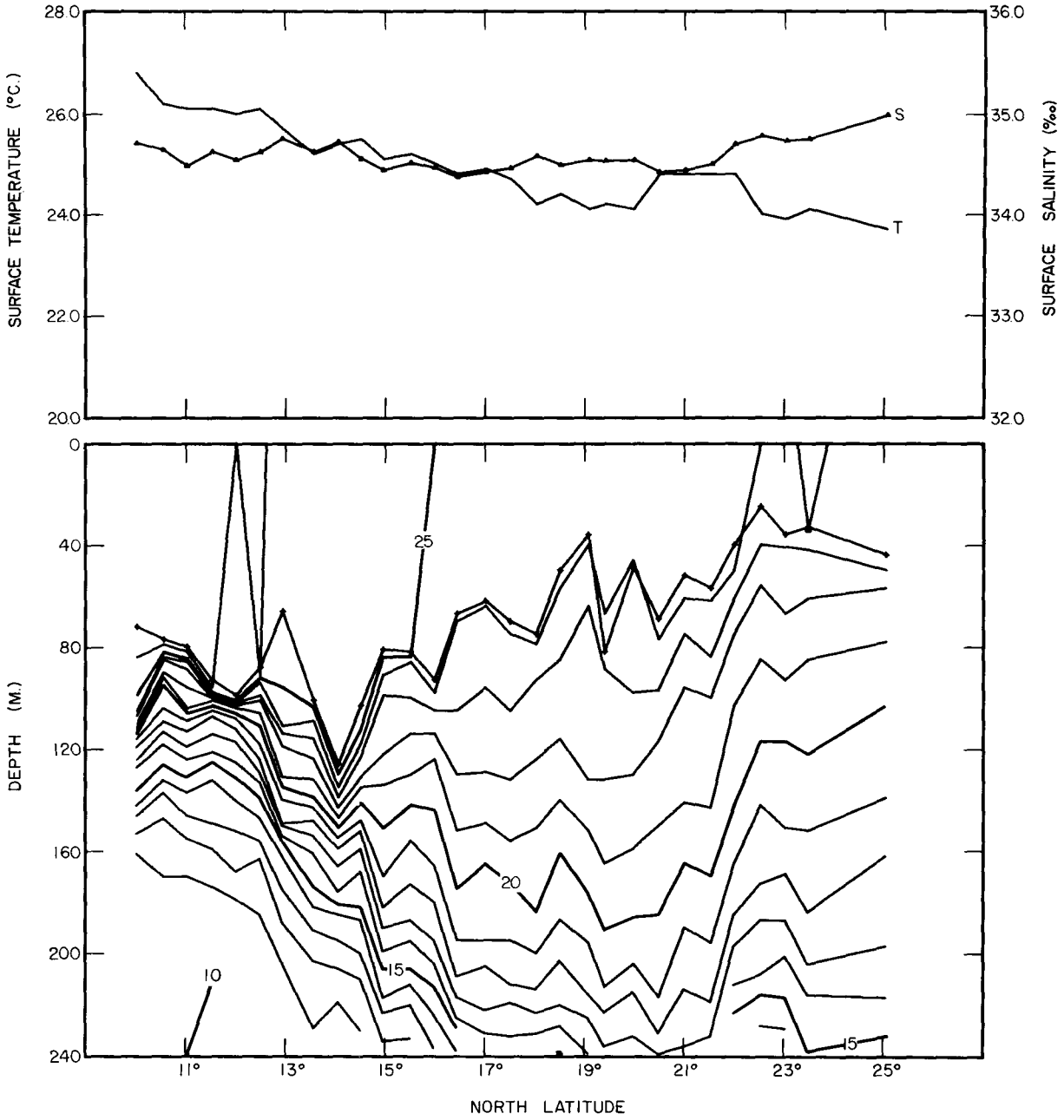

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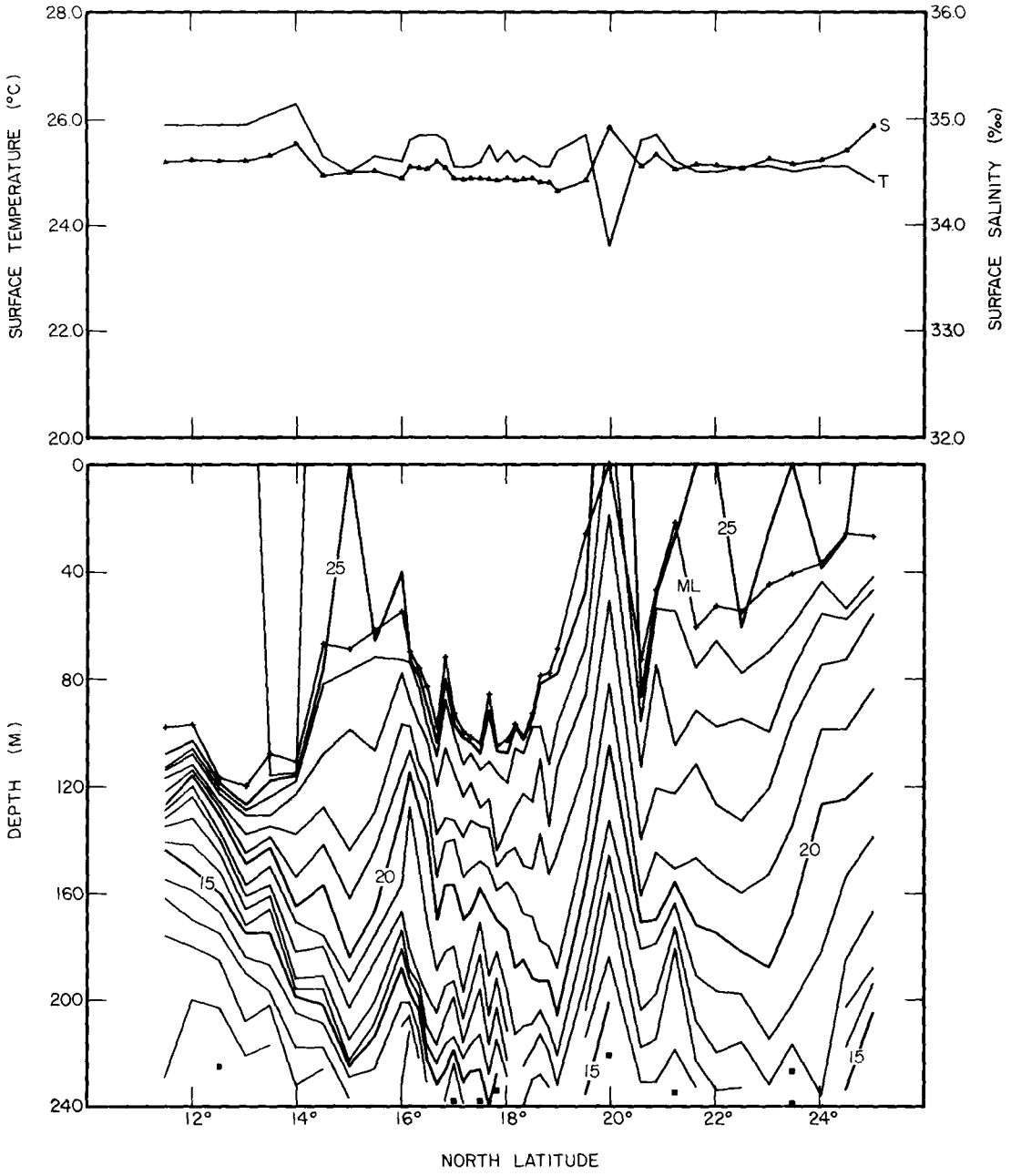

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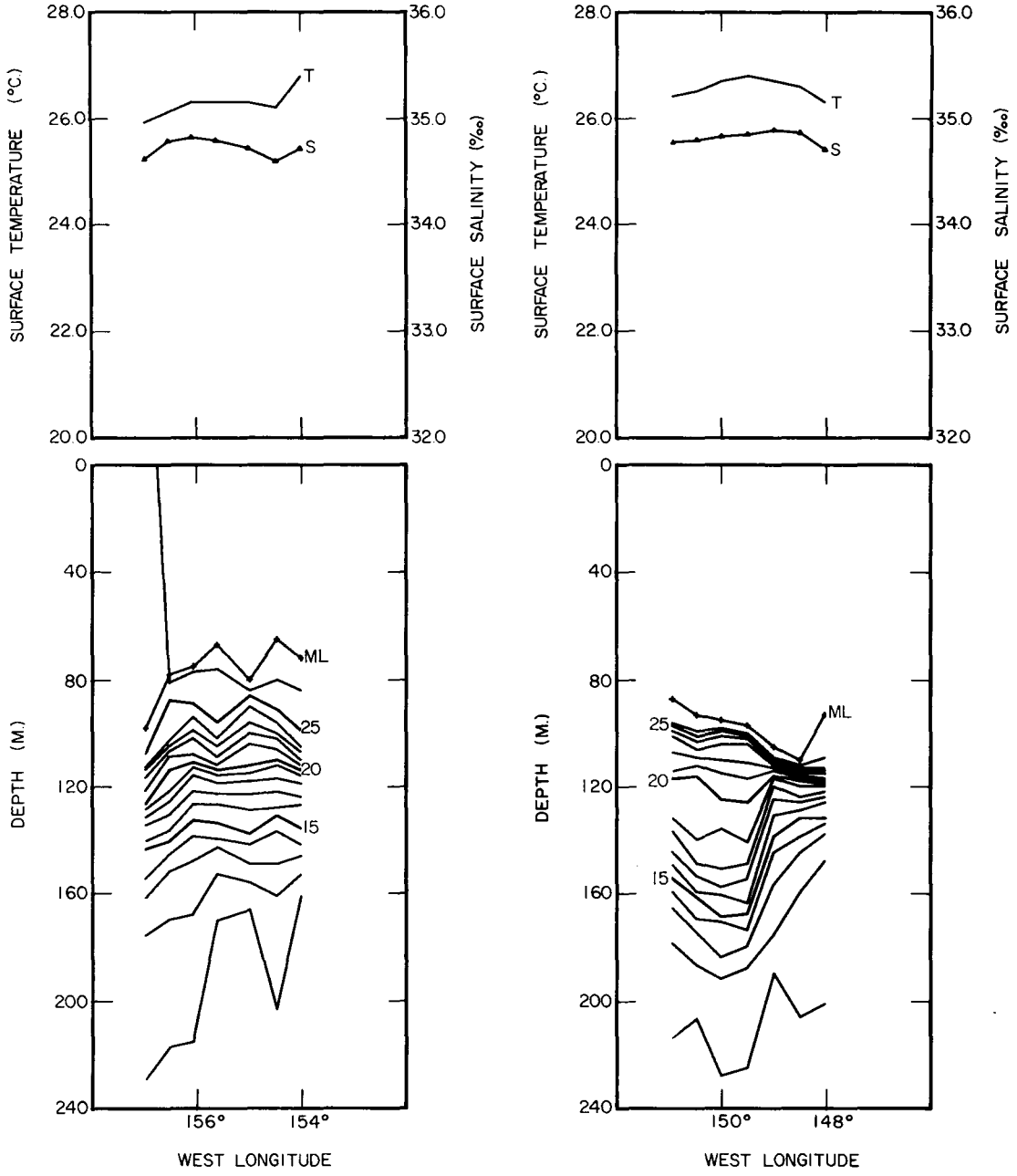

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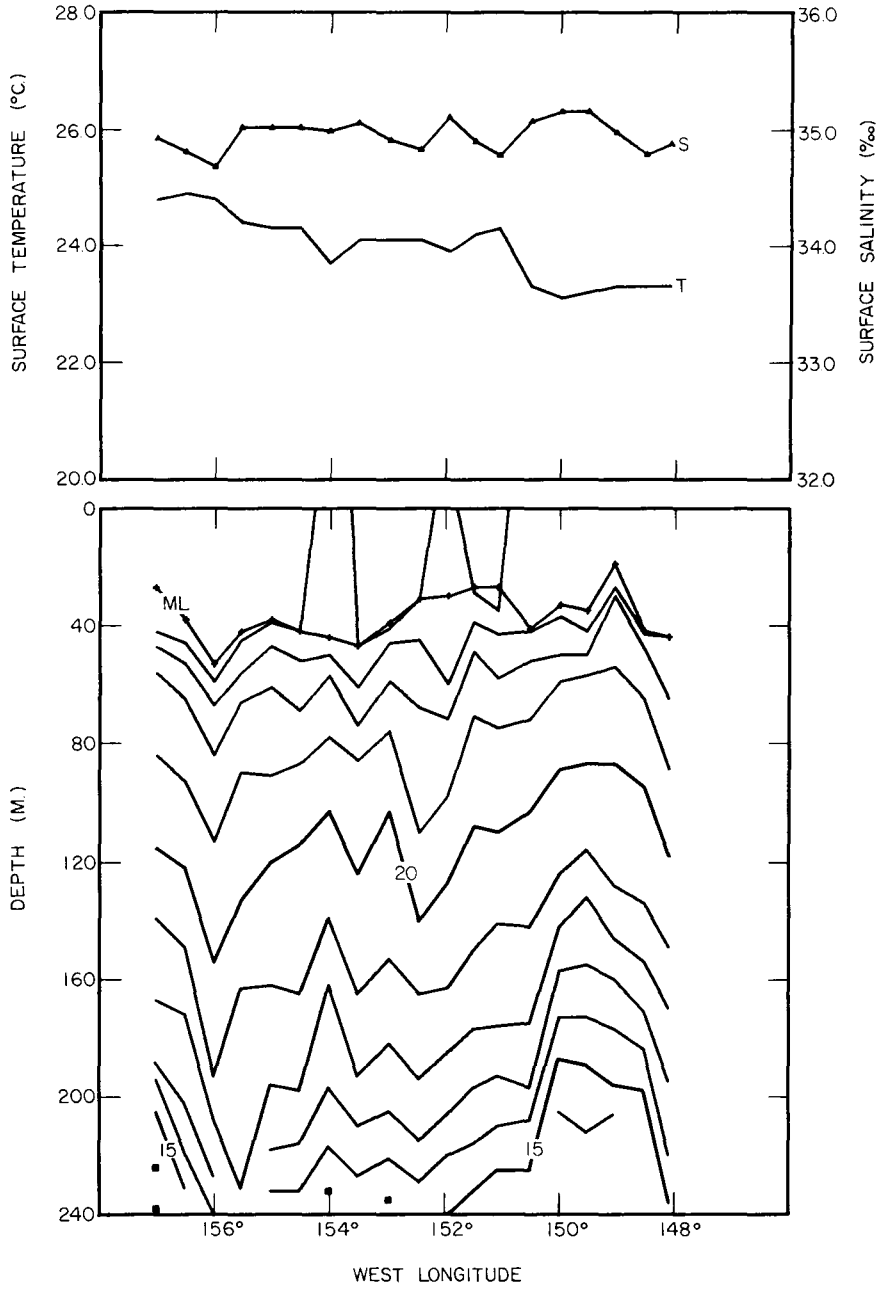

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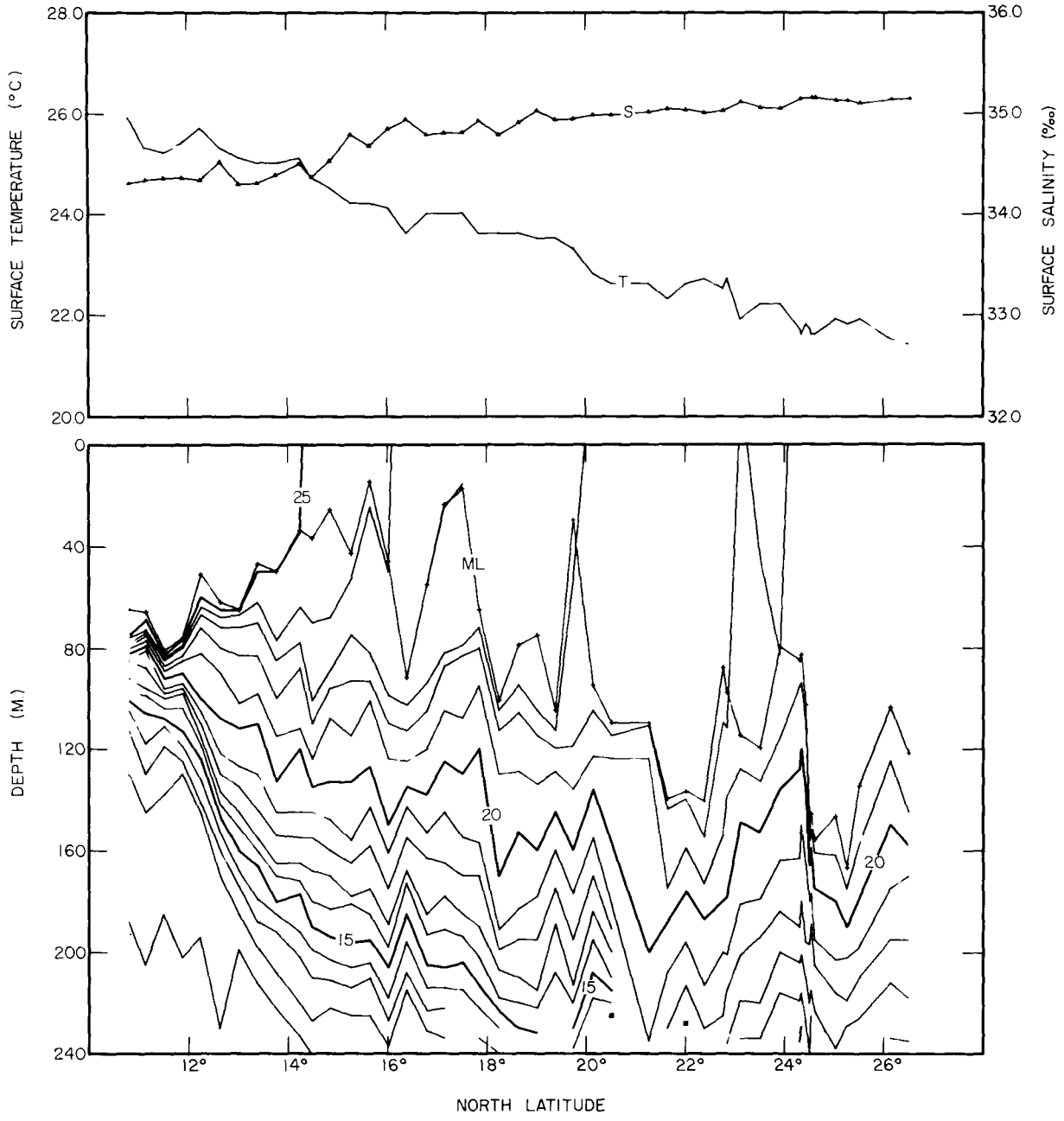

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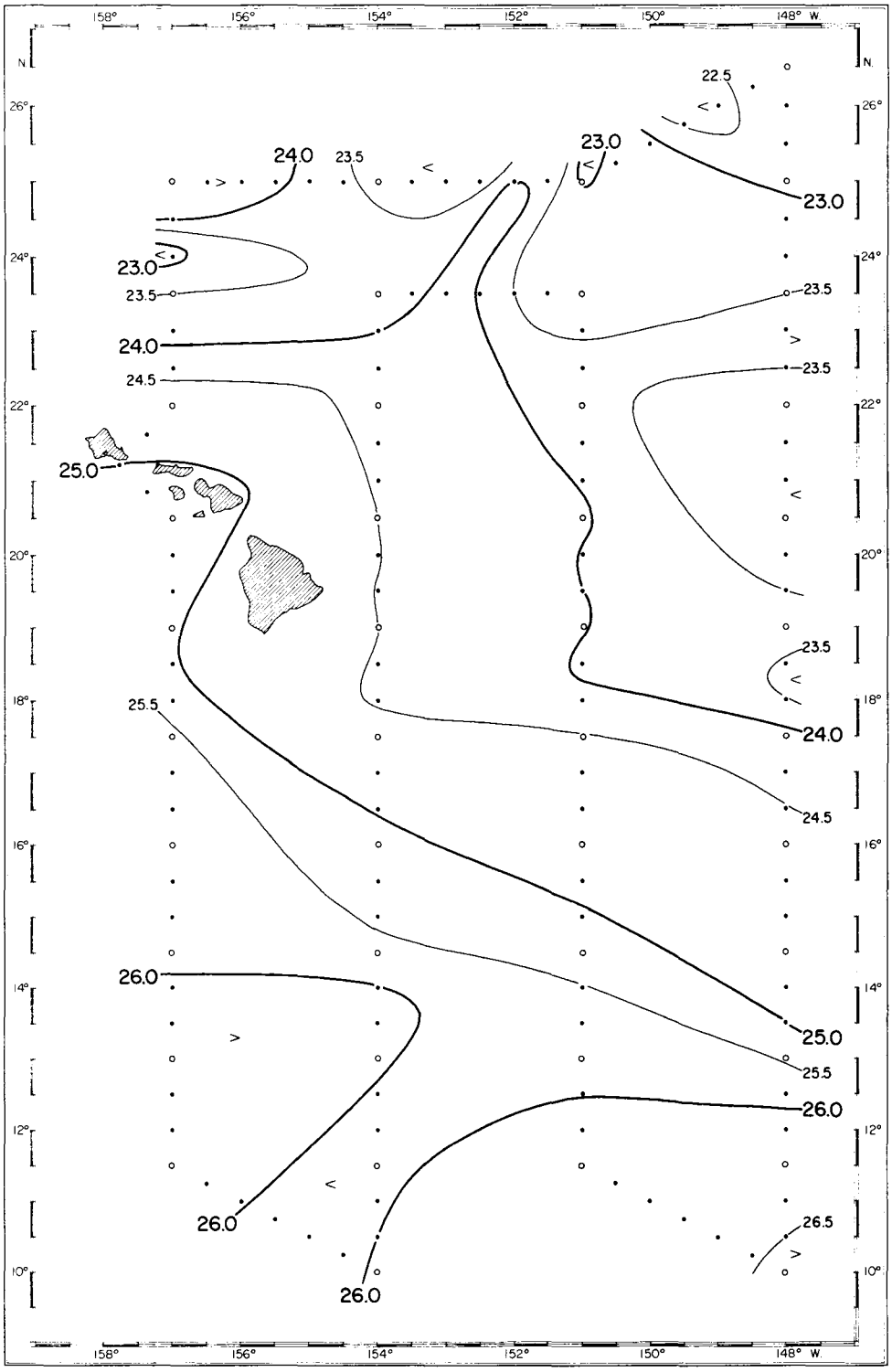
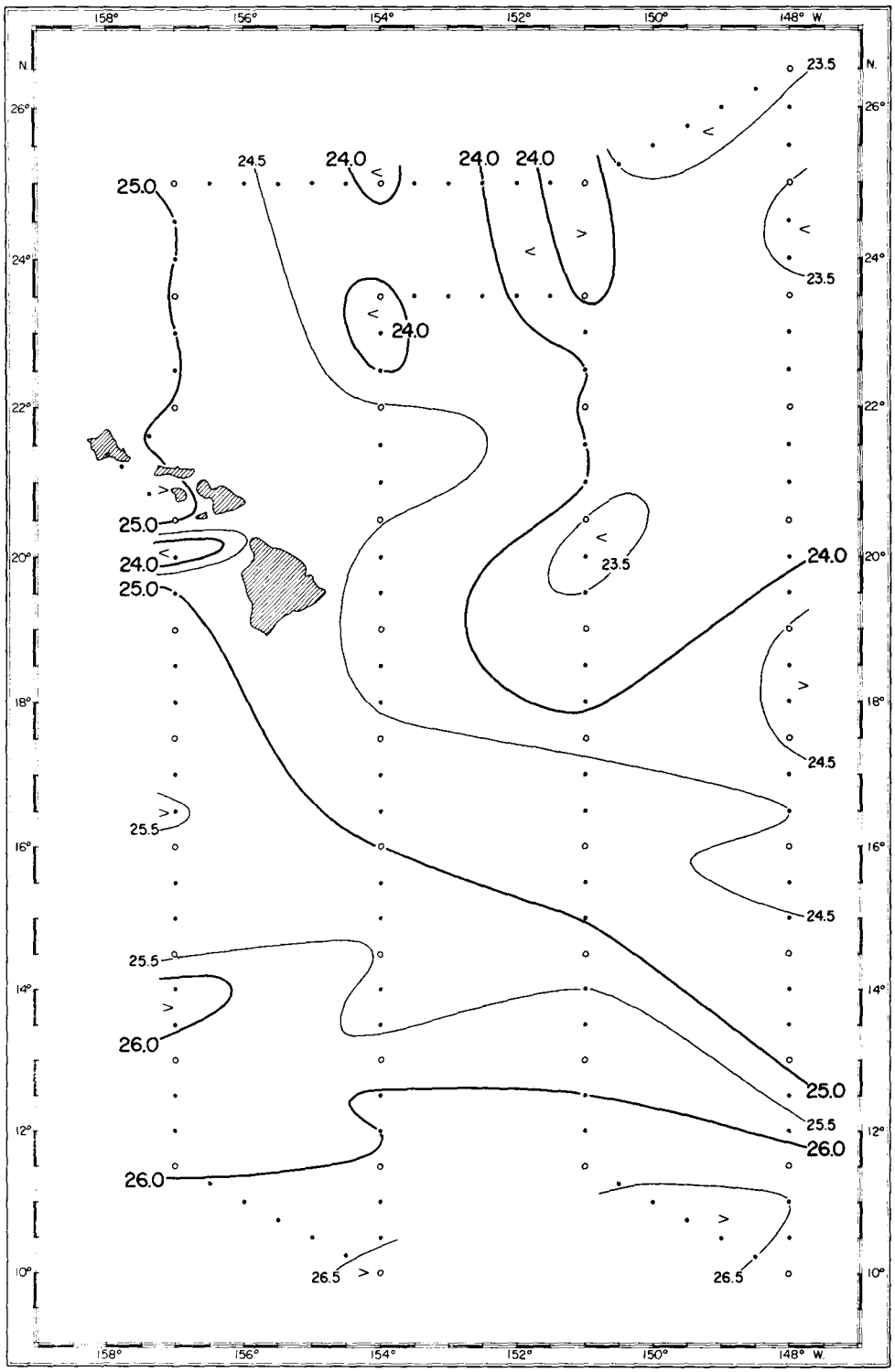


Figure 15.--Surface temperature distribution (° C.) based on intake temperature at each BT cast for Townsend Cromwell cruise 16.



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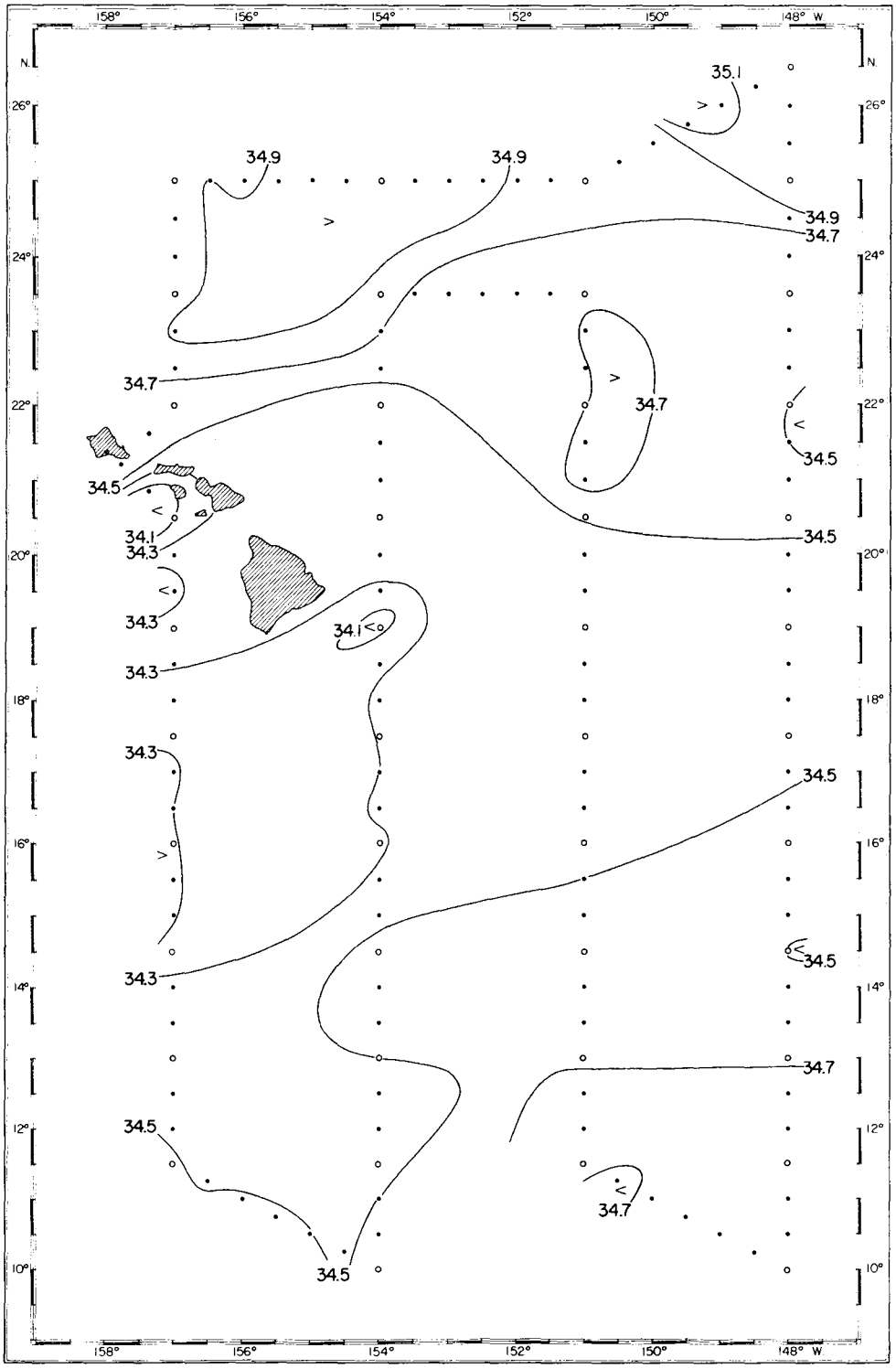


Figure 17.--Surface salinity distribution (°/oo) from intake salinity samples at each BT cast for Townsend Cromwell cruise 16.

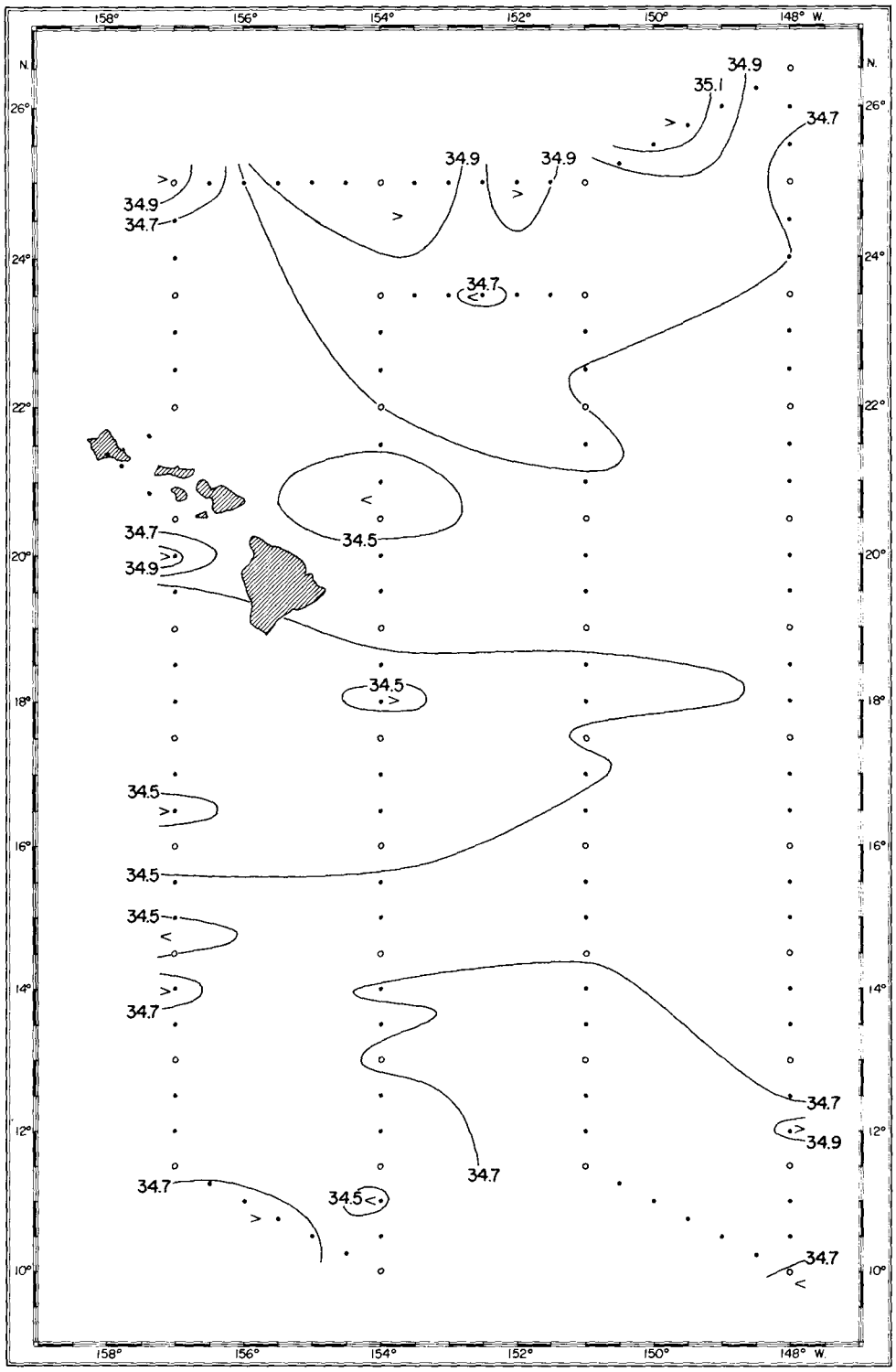
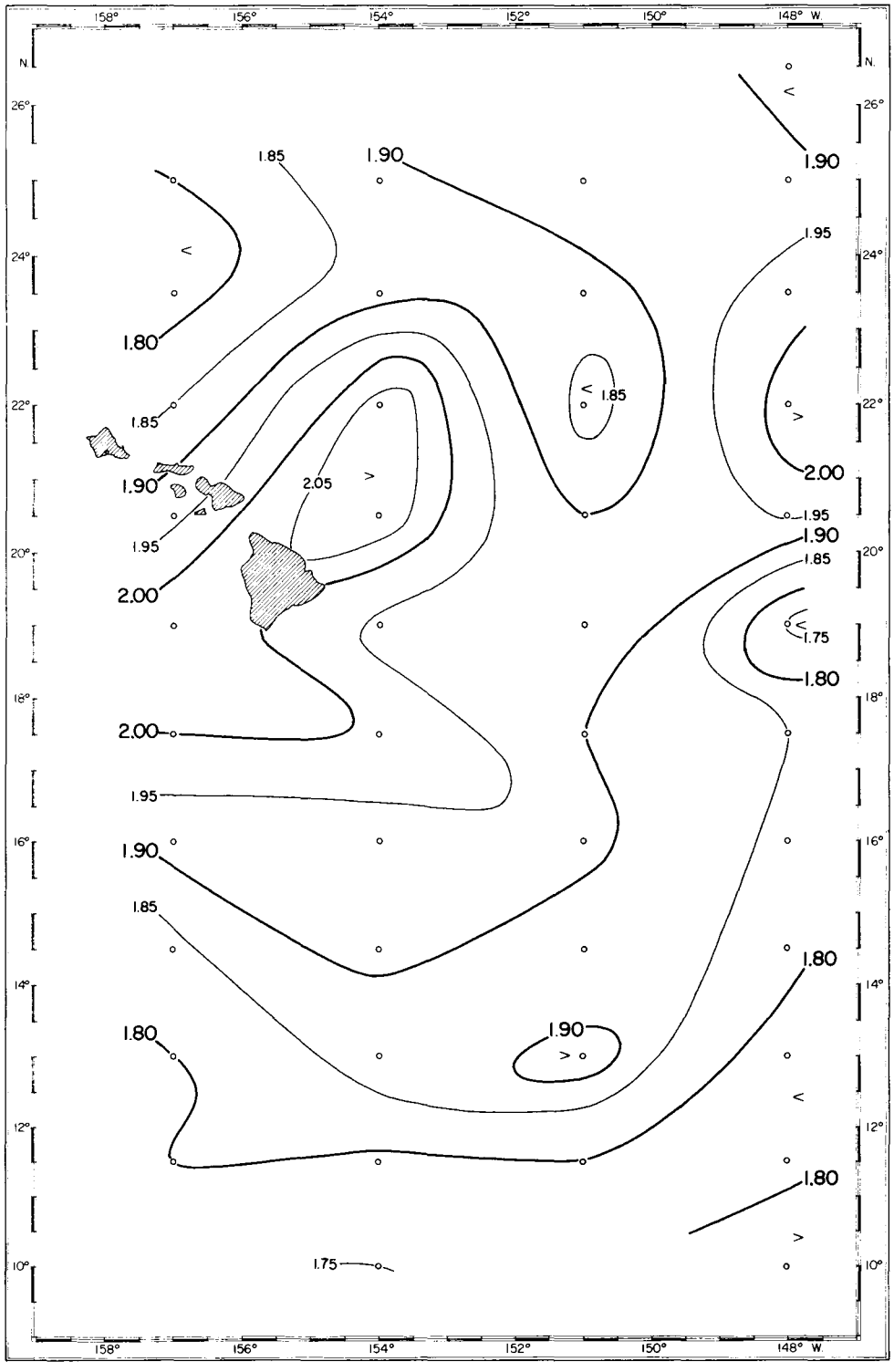


Figure 18.--Surface salinity distribution (°/oo) from intake salinity samples at each BT cast for Townsend Cromwell cruise 17.



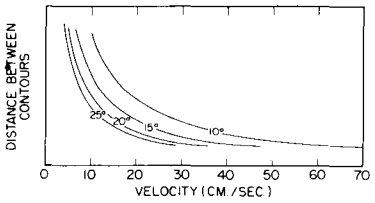
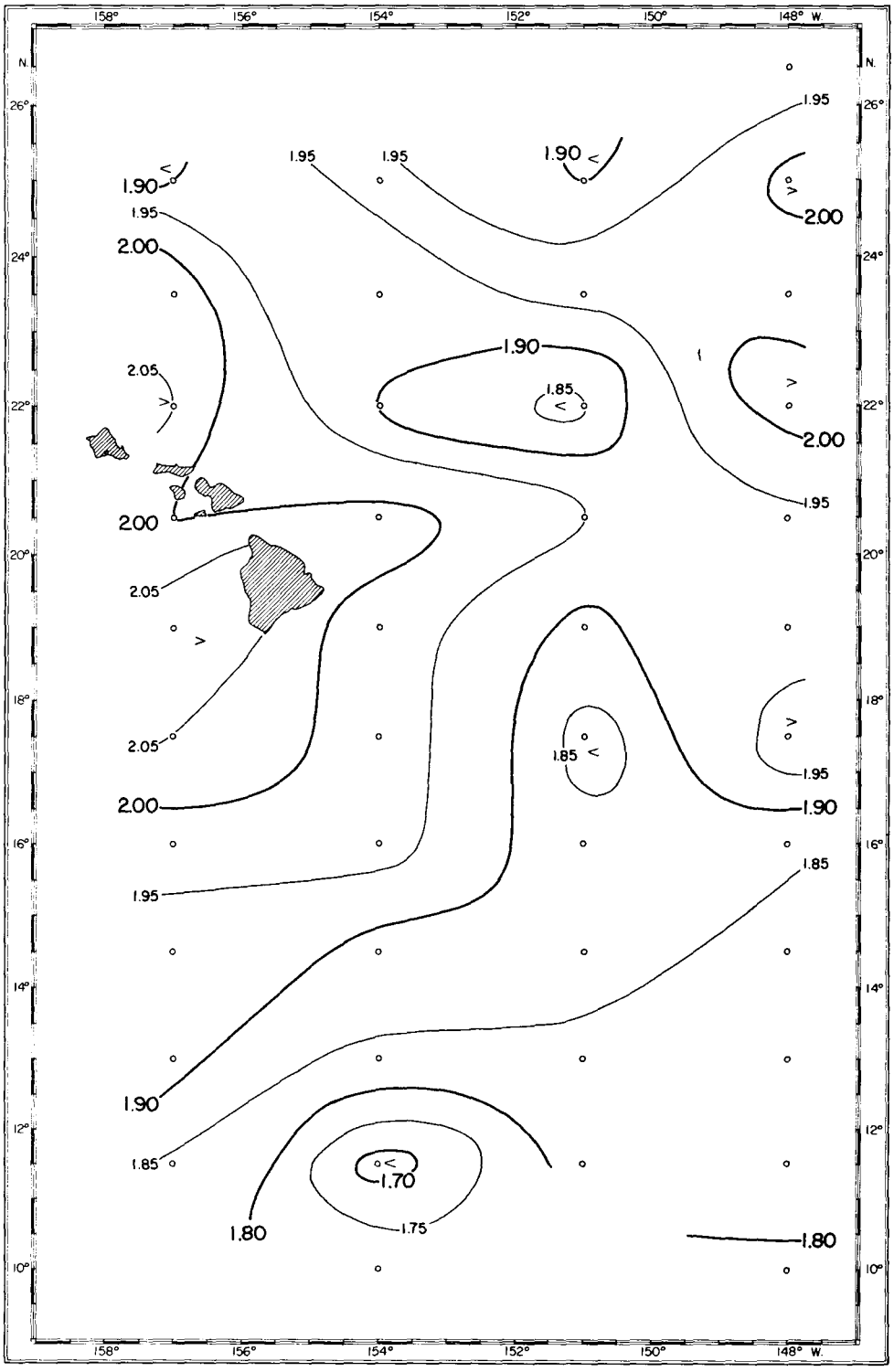


Figure 19.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 16.



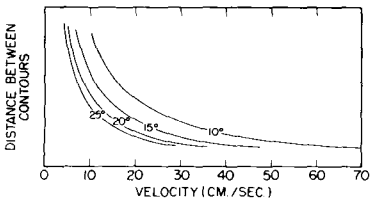


Figure 20.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 17.

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 16

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 16, STATION 1, 20-35N LAT, 157-15W LONG, MAY 13, 1965, 0500 G.C.T.
DRY BULB 23.7 WET BULB 21.1 WIND SPEED 09, DIR. 14 BAR. 16 WEATHER 21 VIS. 8 CLOUD TYPE 6, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.37	34.11			22.58	527.7	0	25.37	34.11	22.58	527.7	0.000
10	25.41	34.11			22.57	529.3	10	25.41	34.11	22.57	529.3	0.053
50	24.01	34.90			23.58	433.6	20	25.19	34.28	22.76	511.2	0.106
76	22.93	35.07			24.03	392.3	30	24.89	34.47	22.99	489.2	0.156
100	22.17	35.12			24.28	368.9	50	24.01	34.90	23.58	433.6	0.249
124	20.85	35.11			24.64	335.7	75	22.97	35.07	24.01	393.6	0.353
150	19.47	35.01			24.93	308.9	100	22.17	35.12	24.28	368.9	0.449
174	17.82	34.84			25.21	282.2	150	19.47	35.01	24.93	308.9	0.620
199	16.63	34.71			25.40	265.1	200	16.57	34.70	25.41	264.2	0.764
225	14.95	34.53			25.64	242.4	250	13.58	34.43	25.85	222.3	0.887
250	13.58	34.43			25.85	222.3	300	10.79	34.20	26.21	188.3	0.991
275	11.67	34.26			26.10	199.0	400	8.19	34.17	26.61	150.3	1.161
300	10.79	34.20			26.21	188.3	500	6.51	34.20	26.88	125.5	1.301
399	8.21	34.17			26.61	150.6	600	5.68	34.30	27.06	108.4	1.419
500	6.51	34.20			26.88	125.5	700	5.06	34.39	27.21	95.0	1.522
599	5.69	34.30			27.06	108.6	800	4.62	34.46	27.31	85.4	1.613
799	4.62	34.46			27.31	85.5	1000	4.17	34.51	27.40	78.2	1.778
999	4.17	34.51			27.40	78.2	1200	3.52	34.55	27.50	69.1	1.927
1200	3.52	34.55			27.50	69.1	1500	2.81	34.60	27.60	59.0	2.122
1501	2.81	34.60			27.60	58.9						

SALINITY ERROR TERM AT 20. METERS IS 0.06
SALINITY ERROR TERM AT 30. METERS IS 0.08

CROMWELL 16, STATION 2, 18-59N LAT, 157- 0W LONG, MAY 13, 1965, 1500 G.C.T.
DRY BULB 23.5 WET BULB 21.0 WIND SPEED 18, DIR. 13 BAR. 15 WEATHER 02 VIS. 7 CLOUD TYPE 6, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.11	34.33			22.82	504.3	0	25.11	34.33	22.82	504.3	0.000
9	25.11	34.34			22.83	503.9	10	25.10	34.34	22.84	503.5	0.051
46	24.82	34.51			23.05	484.7	20	25.04	34.38	22.88	499.3	0.101
69	24.70	34.59			23.14	476.4	30	24.97	34.43	22.94	494.3	0.151
91	24.04	34.68			23.41	451.9	50	24.82	34.52	23.06	483.8	0.250
114	23.21	34.91			23.83	413.0	75	24.55	34.61	23.20	471.1	0.370
136	22.56	35.05			24.12	385.9	100	23.71	34.77	23.57	436.8	0.484
159	20.67	34.93			24.55	345.3	150	21.44	34.99	24.38	361.0	0.686
183	19.43	34.92			24.87	315.6	200	18.56	34.87	25.05	298.6	0.852
205	18.25	34.84			25.11	293.4	250	14.53	34.45	25.67	240.1	0.988
228	16.08	34.59			25.43	262.5	300	11.48	34.22	26.10	198.8	1.098
250	14.53	34.45			25.67	240.1	400	7.89	34.12	26.62	149.2	1.274
273	13.05	34.32			25.88	220.5	500	6.57	34.20	26.87	126.2	1.413
363	8.72	34.13			26.50	160.7	600	5.68	34.31	27.07	108.0	1.531
455	7.16	34.16			26.76	136.9	700	5.19	34.40	27.20	96.2	1.634
545	6.08	34.25			26.97	116.7	800	4.82	34.46	27.29	88.1	1.727
729	5.10	34.42			27.23	93.7	1000	4.10	34.53	27.42	76.1	1.894
912	4.43	34.50			27.36	81.3	1200	3.51	34.56	27.51	68.3	2.040
1054	3.91	34.54			27.45	73.3						
1284	3.31	34.56			27.53	66.4						

CROMWELL 16, STATION 3, 17-29N LAT, 156-59W LONG, MAY 14, 1965, 0000 G.C.T.
DRY BULB 26.0 WET BULB 22.8 WIND SPEED 18, DIR. 14 BAR. 14 WEATHER 02 VIS. 8 CLOUD TYPE 6, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.58	34.26			22.63	523.1	0	25.58	34.26	22.63	523.1	0.000
10	25.54	34.26			22.64	522.3	10	25.54	34.26	22.64	522.3	0.053
51	25.21	34.23			22.72	516.4	20	25.46	34.25	22.66	520.9	0.105
77	25.18	34.26			22.75	514.4	30	25.37	34.24	22.68	519.5	0.158
101	24.02	34.32			23.14	477.7	50	25.22	34.23	22.72	516.5	0.262
125	20.35	34.72			24.48	351.1	75	25.20	34.26	22.74	515.2	0.392
152	18.80	34.79			24.93	308.5	100	24.10	34.31	23.11	480.5	0.517
176	16.78	34.60			25.28	275.7	150	18.88	34.80	24.92	309.9	0.716
202	14.13	34.34			25.67	238.6	200	14.33	34.36	25.64	241.3	0.855
227	12.43	34.24			25.94	213.4	250	11.31	34.26	26.16	192.3	0.965
252	11.23	34.26			26.18	190.6	300	9.78	34.38	26.53	157.7	1.053
278	10.25	34.33			26.41	169.0	400	8.66	34.48	26.79	134.6	1.200
303	9.73	34.39			26.54	156.5	500	7.74	34.51	26.95	120.2	1.329
404	8.63	34.48			26.79	134.2	600	7.01	34.51	27.05	111.0	1.446
507	7.68	34.51			26.96	119.4	700	6.36	34.51	27.14	103.0	1.554
607	6.96	34.51			27.06	110.5	800	5.78	34.52	27.22	96.1	1.655
813	5.71	34.52			27.23	95.3	1000	4.81	34.51	27.33	86.2	1.839
1009	4.77	34.51			27.33	85.9	1200	4.04	34.55	27.44	75.7	2.003
1212	4.00	34.55			27.45	75.1	1500	3.13	34.59	27.57	63.8	2.215
1514	3.10	34.59			27.57	63.3						

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 16, STATION 4, 15-59N LAT, 157- 0W LONG, MAY 14, 1965, 1100 G.C.T.
DRY BULB 24.9 WET BULB 23.2 WIND SPEED 15, DIR. 16 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	25.71	34.36			22.66	519.7	0	25.71	34.36	22.66	519.7	0.000
10	25.73	34.37			22.66	519.9	10	25.73	34.37	22.66	519.9	0.052
52	25.30	34.43			22.84	504.6	20	25.67	34.39	22.69	517.4	0.105
77	25.02	34.44			22.93	496.7	30	25.58	34.40	22.73	514.1	0.157
101	22.66	34.81			23.91	404.6	50	25.33	34.43	22.83	505.6	0.259
127	19.29	34.71			24.74	325.4	75	25.08	34.43	22.91	499.1	0.386
153	17.07	34.58			25.19	283.1	100	22.79	34.80	23.86	409.0	0.500
177	15.08	34.47			25.56	248.1	150	17.30	34.60	25.15	287.0	0.676
203	12.51	34.26			25.94	212.8	200	12.79	34.28	25.90	216.3	0.802
228	11.22	34.22			26.15	192.8	250	10.08	34.19	26.33	175.9	0.901
253	9.95	34.19			26.35	173.8	300	9.14	34.30	26.57	153.2	0.984
278	9.59	34.30			26.49	160.3	400	8.01	34.41	26.83	129.6	1.127
304	9.05	34.30			26.58	152.2	500	7.59	34.52	26.98	116.9	1.251
404	7.99	34.42			26.84	128.9	600	6.83	34.52	27.09	107.5	1.365
508	7.56	34.53			26.99	116.2	700	6.12	34.51	27.17	100.0	1.470
609	6.75	34.52			27.10	106.8	800	5.55	34.51	27.24	93.7	1.567
811	5.49	34.51			27.25	93.0	1000	4.79	34.55	27.36	83.2	1.746
1014	4.74	34.55			27.37	82.6	1200	4.01	34.56	27.46	74.2	1.906
1166	4.05	34.56			27.45	75.3						
1406	3.41	34.58			27.53	67.1						

CROMWELL 16, STATION 5, 14-32N LAT, 157- 2W LONG, MAY 14, 1965, 2200 G.C.T.
DRY BULB 26.5 WET BULB 24.0 WIND SPEED 14, DIR. 14 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	25.81	34.25			22.55	530.6	0	25.81	34.25	22.55	530.6	0.000
10	25.80	34.25			22.55	530.7	10	25.80	34.25	22.55	530.7	0.053
50	24.76	34.40			22.98	491.1	20	25.62	34.26	22.61	525.4	0.107
75	24.02	34.72			23.44	447.8	30	25.39	34.28	22.70	517.1	0.159
100	21.07	34.96			24.46	351.4	50	24.76	34.40	22.98	491.1	0.261
125	19.45	34.90			24.85	315.5	75	24.02	34.72	23.44	447.8	0.379
150	18.55	34.90			25.08	294.4	100	21.07	34.96	24.46	351.4	0.480
175	14.63	34.41			25.62	243.0	150	18.55	34.90	25.08	294.4	0.642
200	12.18	34.29			26.02	204.4	200	12.18	34.29	26.02	204.4	0.768
226	11.35	34.48			26.33	175.9	250	11.01	34.62	26.50	160.2	0.860
250	11.01	34.62			26.50	160.2	300	10.23	34.65	26.66	145.7	0.937
276	10.70	34.67			26.59	151.7	400	8.76	34.59	26.86	128.1	1.075
299	10.25	34.65			26.66	146.0	500	7.73	34.56	26.99	116.3	1.199
400	8.76	34.59			26.86	128.1	600	6.89	34.52	27.08	108.6	1.312
500	7.73	34.56			26.99	116.3	700	6.15	34.51	27.17	100.4	1.418
601	6.88	34.52			27.08	108.5	800	5.53	34.52	27.25	92.7	1.515
801	5.52	34.52			27.25	92.6	1000	4.62	34.55	27.38	81.0	1.691
1001	4.62	34.55			27.38	80.9	1200	3.89	34.58	27.48	71.4	1.845
1199	3.89	34.58			27.49	71.4	1500	3.11	34.62	27.59	61.1	2.047
1500	3.11	34.62			27.59	61.1						

CROMWELL 16, STATION 6, 13- 0N LAT, 157- 4W LONG, MAY 15, 1965, 0500 G.C.T.
DRY BULB 25.6 WET BULB 24.0 WIND SPEED 17, DIR. 09 BAR. 12 WEATHER 01 VIS. 9 CLOUD TYPE 8, COVER 3

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.14	34.33			22.51	534.6	0	26.14	34.33	22.51	534.6	0.000
10	26.13	34.33			22.51	534.7	10	26.13	34.33	22.51	534.7	0.054
52[Δ]	25.66	34.29			22.63	525.3	20	26.05	34.32	22.53	533.2	0.108
75[Δ]	25.43	34.29			22.70	519.4	30	25.95	34.31	22.55	531.3	0.161
77	25.41	34.29			22.70	518.9	50	25.69	34.29	22.62	525.9	0.268
103	19.27	34.77			24.80	319.7	75	25.43	34.29	22.70	519.4	0.399
129	17.05	34.63			25.24	278.2	100	20.16	34.71	24.52	346.2	0.508
155	13.94	34.36			25.72	232.0	150	14.52	34.41	25.64	240.1	0.656
180	12.25	34.28			26.00	205.9	200	11.49	34.29	26.16	191.6	0.765
206	11.29	34.30			26.20	187.6	250	10.14	34.41	26.49	160.4	0.854
231	10.08	34.28			26.40	168.9	300	9.40	34.53	26.71	140.5	0.930
257	10.22	34.47			26.52	157.8	400	8.19	34.54	26.90	123.0	1.063
283	9.72	34.53			26.65	145.6	500	7.39	34.54	27.02	112.7	1.182
308	9.26	34.53			26.73	138.6	600	6.56	34.54	27.14	102.6	1.290
410	8.11	34.54			26.92	121.9	700	5.88	34.55	27.23	94.0	1.390
513	7.29	34.54			27.04	111.6	800	5.35	34.56	27.31	87.5	1.481
614	6.45	34.54			27.15	101.2	1000	4.61	34.56	27.39	80.1	1.651
817	5.27	34.56			27.32	86.5	1200	3.88	34.58	27.49	71.4	1.804
1020	4.55	34.56			27.40	79.5						
1207	3.86	34.58			27.49	71.1						
1466	3.17	34.61			27.58	62.3						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.25

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 16, STATION 7, 11-30N LAT, 156-57W LONG, MAY 15, 1965, 1500 G.C.T.
DRY BULB 26.0 WET BULB 24.2 WIND SPEED 13, DIR. 08 BAR. 12 WEATHER 16 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	26.56	34.54			22.53	532.1	0	26.56	34.54	22.53	532.1	0.000
11	26.59	34.54			22.52	533.4	10	26.59	34.54	22.52	533.3	0.054
30Δ	26.55	34.52			22.52	534.4	20	26.58	34.53	22.52	534.1	0.107
51	26.50*	34.51			22.53	534.5	30	26.55	34.52	22.52	534.4	0.161
76	25.98	34.42			22.62	526.4	50	26.51	34.51	22.53	534.6	0.269
100	22.98	34.52			23.60	434.2	75	26.03	34.42	22.61	527.7	0.403
126	14.82	34.46			25.61	242.6	100	22.98	34.52	23.60	434.2	0.524
151	12.07	34.28			26.04	201.9	150	12.12	34.29	26.03	202.2	0.684
175	10.69	34.21			26.24	183.1	200	10.60	34.47	26.45	163.1	0.776
201	10.61	34.48			26.46	162.4	250	10.42	34.64	26.62	148.4	0.855
225	10.75	34.63			26.55	154.4	300	9.54	34.62	26.75	136.4	0.927
251	10.40	34.64			26.62	148.2	400	8.54	34.60	26.90	123.9	1.058
276	9.72	34.62			26.72	138.8	500	7.71	34.57	27.00	115.2	1.179
299	9.55	34.62			26.75	136.5	600	6.78	34.56	27.12	104.2	1.290
400	8.54	34.60			26.90	123.9	700	6.07	34.56	27.22	95.9	1.391
501	7.70	34.57			27.00	115.2	800	5.48	34.56	27.29	89.1	1.484
599	6.79	34.56			27.12	104.3	1000	4.45	34.58	27.43	76.5	1.652
799	5.49	34.56			27.29	89.2	1200	3.76	34.59	27.51	68.7	1.799
999	4.45	34.58			27.43	76.5	1500	3.10	34.62	27.59	61.0	1.996
1199	3.83	34.59			27.50	69.9						
1500	3.10	34.62			27.59	61.0						

CROMWELL 16, STATION 7A, 9-58N LAT, 154-0W LONG, MAY 16, 1965, 1100 G.C.T.
DRY BULB 23.5 WET BULB 23.0 WIND SPEED 16, DIR. 09 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	26.36	34.54	4.76		22.60	526.1	0	26.36	34.54	22.60	526.1	0.000
10	26.39	34.53	4.90	0.42	22.58	528.1	10	26.39	34.53	22.58	528.1	0.053
30Δ	26.38	34.53			22.58	528.6	20	26.42	34.53	22.57	529.6	0.106
50	25.93	34.55	5.04	0.40	22.74	514.5	30	26.38	34.53	22.58	528.6	0.160
76	22.98	34.55	4.99	0.49	23.62	431.2	50	25.93	34.55	22.74	514.5	0.265
101	18.99	34.55	4.13	0.85	24.71	327.8	75	23.13	34.55	23.58	435.2	0.384
125	13.23	34.51	1.43	1.41	25.99	206.2	100	19.17	34.56	24.66	332.4	0.481
150	12.09	34.71	0.18		26.37	170.6	150	12.09	34.71	26.37	170.6	0.608
175	11.69	34.75	0.22	1.77	26.47	161.0	200	11.27	34.76	26.56	153.3	0.689
201	11.25	34.76	0.41	2.23	26.56	153.0	250	10.65	34.76	26.67	143.7	0.764
226	10.94	34.75	0.50	2.27	26.61	148.9	300	10.13	34.75	26.75	136.6	0.835
249	10.66	34.76	0.41	2.58	26.67	143.8	400	9.46	34.70	26.83	131.2	0.970
276	10.42	34.75	0.41	1.62	26.70	141.0	500	8.63	34.65	26.92	123.4	1.099
300	10.13	34.75	0.38	3.13	26.75	136.6	600	7.60	34.58	27.02	114.5	1.219
400	9.46	34.70	0.28	2.62	26.83	131.2	700	6.55	34.56	27.15	102.5	1.328
502	8.61	34.65	0.15	2.47	26.93	123.2	800	5.64	34.56	27.27	91.2	1.426
602	7.58	34.58	0.41	3.02	27.03	114.3	1000	4.68	34.57	27.39	80.2	1.600
801	5.63	34.56		2.62	27.27	91.1	1200	3.75	34.59	27.50	69.1	1.751
1001	4.68	34.57	0.96	2.60	27.39	80.2						
1144	3.89	34.59	1.26	2.94	27.49	70.4						
1382	3.26	34.61	1.47	3.02	27.57	62.9						

CROMWELL 16, STATION 8, 11-28N LAT, 153-59W LONG, MAY 16, 1965, 2000 G.C.T.
DRY BULB 26.5 WET BULB 23.2 WIND SPEED 18, DIR. 07 BAR. 14 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	26.00	34.46	4.82		22.65	521.1	0	26.00	34.46	22.65	521.1	0.000
11	25.99	34.46	5.01	0.55	22.65	521.2	10	25.99	34.46	22.65	521.2	0.052
51	25.92*	34.46	4.80	1.02	22.67	520.7	20	25.98	34.45	22.65	521.9	0.105
76	25.84	34.56	4.82	0.33	22.77	512.1	30	25.96	34.45	22.65	522.1	0.158
100	17.76	34.64	4.31	0.96	25.07	292.9	50	25.92	34.46	22.67	520.8	0.263
124	14.29	34.40	2.87	1.53	25.68	235.3	75	25.93	34.56	22.74	515.0	0.393
151	12.17	34.52	0.94	2.44	26.20	186.1	100	17.76	34.64	25.07	292.9	0.495
174	11.87	34.73	0.19	2.71	26.43	164.8	150	12.22	34.51	26.19	187.6	0.616
200	11.29	34.72	0.25	2.74	26.52	156.6	200	11.29	34.72	26.52	156.6	0.703
224	10.99	34.74	0.29	2.62	26.60	150.3	250	10.62	34.73	26.65	145.3	0.779
249	10.63	34.73	0.40	2.19	26.65	145.5	300	10.14	34.72	26.73	139.0	0.851
274	10.34	34.72	0.37	2.38	26.69	141.8	400	9.50	34.70	26.82	132.1	0.987
299	10.15	34.72			26.73	139.1	500	8.65	34.63	26.90	125.4	1.117
398	9.52	34.70	0.24	2.52	26.82	132.2	600	7.74	34.60	27.02	115.3	1.239
498	8.67	34.63	0.22	2.74	26.90	125.6	700	6.76	34.57	27.13	104.7	1.350
597	7.77	34.60	0.32	3.06	27.01	115.6	800	5.88	34.55	27.23	95.2	1.451
794	5.92	34.55	0.61	2.89	27.23	95.7	1000	4.79	34.56	27.37	82.2	1.630
992	4.82	34.56	1.00	2.42	27.37	82.6	1200	4.00	34.58	27.47	72.9	1.788
1190	4.08	34.58	1.21	3.08	27.47	73.7						
1485	3.25	34.60	1.54	2.48	27.56	64.2						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 16, STATION 9, 13- 4N LAT, 154- 3W LONG, MAY 17, 1965, 0600 G.C.T.
DRY BULB 25.9 WET BULB 23.0 WIND SPEED 20, DIR. 06 BAR. 13 WEATHER 02 VIS. 7 CLOUD TYPE 9, COVER 3

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.57**	34.68	4.74		22.63	522.3	0	26.57	34.68	22.63	522.3	0.000
11	26.55	34.68	4.91	0.29	22.64	522.2	10	26.55	34.68	22.64	522.2	0.053
50	26.46	34.68	4.77	0.38	22.67	521.0	20	26.52	34.68	22.65	521.7	0.105
76	26.53	34.69	4.61	0.36	22.66	523.5	30	26.49	34.68	22.66	521.3	0.158
100	24.12	34.56	5.10	0.44	23.29	463.2	50	26.46	34.68	22.67	521.0	0.263
126	19.62	34.79	4.67	0.62	24.72	327.7	75	26.55	34.69	22.65	524.0	0.394
151	15.87	34.58	3.92	1.10	25.41	262.1	100	24.12	34.56	23.29	463.2	0.519
176	12.69	34.29	3.24	1.62	25.92	213.3	150	16.01	34.52	25.39	264.0	0.702
201	10.79	34.24	3.23	1.56	26.24	183.2	200	10.84	34.24	26.23	184.1	0.815
227	10.65	34.45	1.40	2.42	26.43	165.9	250	10.45	34.57	26.56	154.4	0.900
251	10.44	34.57	0.79	2.16	26.56	154.0	300	9.88	34.60	26.68	143.4	0.975
277	10.10	34.60	0.53	2.40	26.64	146.6	400	8.69	34.59	26.87	126.9	1.112
301	9.87	34.60	0.42	3.90	26.68	143.3	500	7.62	34.56	27.01	114.6	1.234
402	8.66	34.59	1.34	2.88	26.87	126.6	600	6.85	34.51	27.07	108.8	1.346
502	7.60	34.56	0.60	2.78	27.01	114.4	700	6.16	34.51	27.17	100.6	1.452
602	6.84	34.51	0.52	2.97	27.08	108.7	800	5.55	34.53	27.26	92.2	1.550
803	5.53	34.53	0.57	3.30	27.26	92.0	1000	4.64	34.54	27.37	81.9	1.726
1003	4.63	34.54	1.00	3.13	27.37	81.8	1200	3.93	34.57	27.47	72.9	1.883
1172	4.04*	34.57	1.42	3.20	27.46	73.7						
1441	3.25	34.59	1.72	2.99	27.56	64.6						

CROMWELL 16, STATION 10, 14-30N LAT, 154- 0W LONG, MAY 17, 1965, 1600 G.C.T.
DRY BULB 23.8 WET BULB 21.5 WIND SPEED 20, DIR. 08 BAR. 14 WEATHER 03 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	26.09	34.55	5.05		22.69	517.3	0	26.09	34.55	22.69	517.3	0.000
9	26.11	34.53	4.80	0.30	22.67	519.7	10	26.11	34.53	22.67	519.8	0.052
50	26.12	34.55	4.79	0.30	22.68	520.2	20	26.11	34.52	22.66	520.7	0.105
75	26.19	34.60	4.76	0.31	22.69	519.7	30	26.12	34.52	22.66	521.1	0.157
98	26.19	34.72	4.72	0.48	22.78	517.0	50	26.12	34.55	22.69	520.2	0.262
123	22.00	34.61		0.42	23.94	402.0	75	26.19	34.60	22.69	519.7	0.393
148	16.33	34.53	3.84	1.09	25.33	269.9	100	25.96	34.72	22.85	505.6	0.522
171	14.00	34.34	3.30	1.23	25.70	235.2	150	16.06	34.51	25.38	265.3	0.716
196	11.93	34.28	2.70	2.15	26.06	200.4	200	11.66	34.27	26.11	196.3	0.833
220	10.60	34.25	2.59	2.08	26.28	179.6	250	9.94	34.38	26.50	159.8	0.922
245	9.97	34.34	1.85	2.24	26.46	162.9	300	9.77	34.56	26.66	144.9	0.999
270	9.91	34.51	0.79	2.59	26.60	149.9	400	8.79	34.58	26.84	129.6	1.138
294	9.81	34.55	0.57	2.81	26.65	145.8	500	7.53	34.52	26.99	116.4	1.262
391	8.91	34.58	0.32	2.52	26.82	131.0	600	6.81	34.51	27.08	108.4	1.376
489	7.62	34.52	0.24	2.37	26.97	117.5	700	6.04	34.49	27.17	100.5	1.481
586	6.92	34.51	0.63	2.93	27.06	109.6	800	5.36	34.48	27.24	93.3	1.579
784	5.45	34.48	0.64	2.62	27.23	94.4	1000	4.51	34.52	27.37	81.5	1.756
981	4.57	34.52	1.26	3.30	27.37	82.3	1200	3.85	34.55	27.46	73.3	1.913
1179	3.97	34.54	1.28	3.15	27.45	75.1						
1478	3.17	34.58	1.62	3.02	27.56	64.0						

CROMWELL 16, STATION 11, 16- 0N LAT, 153-57W LONG, MAY 18, 1965, 0000 G.C.T.
DRY BULB 25.0 WET BULB 21.2 WIND SPEED 10, DIR. 06 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	25.73	34.29	4.90		22.60	525.3	0	25.73	34.29	22.60	525.3	0.000
11	25.61	34.30	5.00	0.43	22.65	521.5	10	25.67	34.30	22.64	521.9	0.053
51	25.00	34.36	4.94	0.50	22.88	500.9	20	25.52	34.31	22.69	518.0	0.105
76	24.26	34.37	5.10	0.39	23.11	479.9	30	25.38	34.33	22.74	513.4	0.157
101	22.33	34.88	5.24	0.34	24.05	390.6	50	25.02	34.36	22.87	501.6	0.259
127	20.36	34.93	4.85	0.49	24.63	336.2	75	24.30	34.37	23.09	481.5	0.383
152	18.94	34.88	4.56	0.55	24.96	305.3	100	22.42	34.86	24.01	394.4	0.493
177	16.56	34.61	4.26	0.76	25.34	270.1	150	19.06	34.89	24.94	307.6	0.670
203	13.76	34.35	3.97	1.77	25.75	230.9	200	14.09	34.38	25.70	235.2	0.807
228	11.71	34.22	3.58	1.54	26.06	201.6	250	10.62	34.26	26.29	180.0	0.912
253	10.52	34.27	2.64	2.00	26.31	177.5	300	9.79	34.43	26.56	154.3	0.996
278	10.11	34.34	1.78	2.27	26.44	165.9	400	8.47	34.48	26.82	131.5	1.140
302	9.76	34.44	1.00	2.92	26.58	153.3	500	7.66	34.52	26.97	118.3	1.266
403	8.44	34.48	0.57	2.55	26.82	131.3	600	6.58	34.47	27.08	107.8	1.380
505	7.62	34.52	0.66	2.62	26.97	117.7	700	5.92	34.47	27.17	99.9	1.485
606	6.52	34.47	0.82	2.79	27.09	107.2	800	5.48	34.50	27.24	93.7	1.583
807	5.46	34.50	0.69	3.06	27.25	93.3	1000	4.68	34.51	27.34	84.6	1.764
1010	4.64	34.51	0.86	3.46	27.35	84.2	1200	3.95	34.55	27.45	74.5	1.925
1210	3.92	34.55	1.09	2.51	27.46	74.0	1500	3.13	34.58	27.56	64.4	2.136
1512	3.10	34.58	1.55	2.81	27.56	64.0						

*INTERPOLATED DATA
**EXTRAPOLATED DATA

Table 1.--Continued

CROMWELL 16, STATION 12, 17-30N LAT, 154- 0W LONG, MAY 18, 1965, 0900 G.C.T.
DRY BULB 24.6 WET BULB 22.0 WIND SPEED 15, DIR. 07 BAR. 17 WEATHER 03 VIS. 5 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	25.05	34.34	4.94		22.85	501.8	0	25.05	34.34	22.85	501.8	0.000
10	25.06	34.35	5.12	0.48	22.85	501.8	10	25.06	34.35	22.85	501.8	0.051
30Δ	25.05	34.35			22.86	502.3	20	25.09	34.35	22.84	503.1	0.101
51	24.41	34.37	5.04	0.50	23.06	483.2	30	25.05	34.35	22.86	502.3	0.152
78	23.67	34.76	5.11	0.41	23.58	435.2	50	24.45	34.37	23.06	484.5	0.251
103	23.17	34.96	5.22	0.28	23.87	407.9	75	23.74	34.71	23.52	440.7	0.368
127	22.30	35.06	5.00	0.35	24.20	377.8	100	23.24	34.94	23.84	410.8	0.475
153	20.48	35.09	4.68	0.41	24.72	328.7	150	20.70	35.09	24.66	334.1	0.663
178	19.29	35.03	4.55	0.47	24.99	304.0	200	17.21	34.74	25.28	276.0	0.816
204	16.78	34.68	4.37	0.75	25.34	270.8	250	13.18	34.30	25.84	223.8	0.942
229	14.37	34.40	4.10	1.07	25.66	239.9	300	10.62	34.24	26.27	182.6	1.045
255	12.94	34.29	3.65	1.37	25.87	220.1	400	8.78	34.38	26.69	143.9	1.210
280	11.40	34.24	3.65	1.45	26.13	195.7	500	7.30	34.37	26.91	123.7	1.345
305	10.46	34.24		1.74	26.30	179.8	600	6.29	34.38	27.05	110.8	1.463
406	8.73	34.39	2.83	2.46	26.70	142.5	700	5.57	34.41	27.16	100.2	1.570
508	7.19	34.37	0.81	2.88	26.92	122.6	800	5.01	34.45	27.26	91.5	1.667
609	6.22	34.38	0.74	3.09	27.06	109.8	1000	4.24	34.51	27.39	79.3	1.840
812	4.96	34.45	0.98	2.47	27.27	90.6	1200	3.65	34.53	27.47	72.2	1.993
1014	4.20	34.51	1.10	3.21	27.40	78.7	1500	2.92	34.57	27.57	62.5	2.198
1216	3.61	34.53	1.19	2.67	27.47	71.7						
1519	2.88	34.57	1.62	3.13	27.57	62.1						

CROMWELL 16, STATION 13, 19- 0N LAT, 154- 5W LONG, MAY 18, 1965, 1800 G.C.T.
DRY BULB 24.1 WET BULB 21.6 WIND SPEED 15, DIR. 09 BAR. 18 WEATHER 02 VIS. 7 CLOUD TYPE 4, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.87	34.09	5.02		22.72	514.6	0	24.87	34.09	22.72	514.6	0.000
10	24.92	34.08	5.16	0.51	22.69	517.2	10	24.92	34.08	22.69	517.2	0.052
30Δ	24.82	34.14			22.77	510.7	20	24.94	34.07	22.68	518.7	0.104
51	23.81	34.75	5.05	0.36	23.53	438.8	30	24.82	34.14	22.77	510.7	0.156
77	23.10	34.89	5.20	0.27	23.84	410.0	50	23.86	34.72	23.49	442.5	0.252
103	22.18	35.08	5.04	0.22	24.25	372.2	75	23.15	34.89	23.83	411.2	0.360
128	21.46	35.15	4.98	0.28	24.50	348.9	100	22.29	35.06	24.20	376.4	0.459
154	20.17	35.11	4.64	0.46	24.82	319.4	150	20.39	35.12	24.77	323.7	0.635
179	19.04	34.99	4.75	0.40	25.02	300.7	200	17.45	34.75	25.24	280.7	0.787
205	17.02	34.69	4.40	0.63	25.29	275.6	250	13.19	34.26	25.80	227.1	0.915
231	14.84	34.42	4.21	0.98	25.58	248.3	300	10.71	34.17	26.20	189.0	1.020
256	12.72	34.22	4.05	1.13	25.86	221.1	400	7.97	34.18	26.66	145.9	1.189
282	11.50	34.18	3.56	1.27	26.07	202.0	500	6.47	34.27	26.94	119.8	1.323
307	10.42	34.17	3.88	1.58	26.25	184.3	600	5.63	34.35	27.11	104.0	1.436
409	7.62	34.19	2.32	2.18	26.69	143.4	700	5.15	34.42	27.22	94.3	1.537
510	6.36	34.28	0.90	2.84	26.96	117.7	800	4.81	34.46	27.29	87.6	1.629
613	5.55	34.36	0.85	2.75	27.12	102.5	1000	4.14	34.52	27.41	77.3	1.796
814	4.78	34.47	0.88	2.79	27.30	86.9	1200	3.58	34.56	27.50	69.3	1.944
1019	4.08	34.52	1.04	2.75	27.42	76.5	1500	2.89	34.61	27.60	59.4	2.140
1220	3.53	34.56	1.18	2.84	27.51	68.6						
1524	2.84	34.61	1.62	2.96	27.61	58.7						

CROMWELL 16, STATION 14, 20-31N LAT, 154- 3W LONG, MAY 19, 1965, 0300 G.C.T.
DRY BULB 24.0 WET BULB 20.5 WIND SPEED 18, DIR. 11 BAR. 15 WEATHER 02 VIS. 8 CLOUD TYPE 1, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1	24.86	34.35	5.00		22.91	495.6	0	24.86	34.35	22.91	495.6	0.000
11	24.88	34.34	5.20	0.47	22.90	497.3	10	24.88	34.34	22.90	497.2	0.050
50	24.71	34.36	5.02	0.39	22.97	492.5	20	24.92	34.33	22.88	499.6	0.100
76	23.80	34.51	5.19	0.34	23.35	456.8	30	24.91	34.33	22.88	499.7	0.151
100	23.22	34.88	5.20	0.69	23.80	414.9	50	24.71	34.36	22.97	492.5	0.250
132	22.02	35.02	5.10	0.31	24.25	373.3	75	23.84	34.50	23.33	458.5	0.370
149	20.91	35.14	4.80	0.39	24.64	336.0	100	23.22	34.88	23.80	414.9	0.480
173	20.02	35.10	4.63	0.44	24.85	317.0	150	20.87	35.14	24.66	334.8	0.669
198	18.77	34.96	4.57	0.49	25.07	297.0	200	18.60	34.94	25.09	294.7	0.828
222	16.59	34.66	4.50	0.83	25.37	268.5	250	14.18	34.39	25.69	237.6	0.962
248	14.40	34.41	4.36	1.03	25.67	240.3	300	10.66	34.10	26.16	193.4	1.071
272	11.98	34.17	4.40	1.50	25.97	211.2	400	8.64	34.26	26.62	150.6	1.244
297	10.76	34.10	4.27	1.23	26.14	195.1	500	7.67	34.38	26.86	128.7	1.385
395	8.70	34.25	1.93	2.52	26.60	152.1	600	6.66	34.34	26.97	118.7	1.510
495	7.72	34.38	0.84	2.77	26.85	129.4	700	5.84	34.38	27.10	106.2	1.624
594	6.72	34.34	0.78	3.09	26.96	119.4	800	5.21	34.43	27.22	94.9	1.725
793	5.24	34.43	0.68	3.16	27.22	95.5	1000	4.48	34.49	27.35	83.3	1.906
990	4.51	34.49	0.93	3.22	27.35	83.8	1200	3.85	34.54	27.46	73.9	2.065
1188	3.89	34.54	1.04	3.22	27.45	74.2						
1490	3.14	34.58	1.39	3.13	27.56	64.3						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 16, STATION 15, 21-59N LAT, 153-55W LONG, MAY 19, 1965, 1200 G.C.T.
DRY BULB 23.7 WET BULB 20.6 WIND SPEED 17, DIR. 09 BAR. 16 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	24.83	34.40	4.85		22.96	491.1	0	24.83	34.40	22.96	491.1	0.000
11	24.86	34.40	5.03	0.44	22.95	492.4	10	24.86	34.40	22.95	492.3	0.050
30Δ	24.82	34.40			22.96	492.0	20	24.90	34.39	22.94	494.2	0.099
51	23.89	34.51	5.00		23.32	458.4	30	24.82	34.40	22.96	492.0	0.149
75	23.72	34.80	5.00	0.29	23.59	433.6	50	23.94	34.50	23.30	460.2	0.245
99	23.33	34.95	5.02	0.69	23.82	412.9	75	23.72	34.80	23.59	433.6	0.357
125	22.03	35.07	4.87	0.53	24.28	369.7	100	23.29	34.96	23.84	411.2	0.464
151	21.09	35.12	4.72	0.48	24.58	342.2	150	21.12	35.12	24.57	343.0	0.654
174	20.62	35.17	4.74	0.31	24.75	327.2	200	19.22	35.02	25.00	303.7	0.817
199	19.29	35.03	4.46	0.79	24.99	304.7	250	15.97	34.61	25.47	259.2	0.959
224	17.60	34.81	4.50	0.75	25.24	280.9	300	12.73	34.27	25.90	218.5	1.079
248	16.12	34.63	4.36	0.73	25.45	261.1	400	8.76	34.07	26.45	166.6	1.273
273	14.30	34.42	4.40	1.70	25.69	238.2	500	6.48	34.06	26.77	135.2	1.426
298	12.83	34.28	4.65	0.95	25.89	219.8	600	5.52	34.21	27.01	113.4	1.551
397	8.85	34.07	4.06	1.49	26.43	167.7	700	4.94	34.32	27.17	98.6	1.659
497	6.52	34.06	2.17	2.69	26.76	136.0	800	4.59	34.41	27.28	88.5	1.753
596	5.55	34.20	1.04	2.97	27.00	114.1	1000	4.17	34.52	27.41	77.4	1.921
795	4.60	34.41	0.69	3.20	27.27	88.9	1200	3.67	34.56	27.49	70.0	2.070
994	4.19	34.52	1.00	2.77	27.41	77.7						
1193	3.63	34.54	1.21	3.10	27.48	71.1						
1492	3.04	34.59	1.53	3.02	27.58	62.4						

CROMWELL 16, STATION 16, 23-30N LAT, 153-56W LONG, MAY 19, 1965, 2000 G.C.T.
DRY BULB 23.5 WET BULB 20.8 WIND SPEED 15, DIR. 09 BAR. 20 WEATHER 02 VIS. 8 CLOUD TYPE 1, COVER 3

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.17	34.82	4.94		23.48	442.0	0	24.17	34.82	23.48	442.0	0.000
11	24.18	34.82	5.10	0.25	23.47	442.7	10	24.18	34.82	23.47	442.6	0.045
20Δ	24.18	34.82			23.47	443.0	20	24.18	34.82	23.47	443.0	0.089
30Δ	24.18	34.82			23.47	443.4	30	24.18	34.82	23.47	443.4	0.134
49	23.05	35.05	5.10	0.25	23.98	396.0	50	22.99	35.06	24.00	393.9	0.218
74	21.77	35.17	5.02	0.25	24.43	353.6	75	21.73	35.17	24.44	352.5	0.312
97	20.86	35.17	4.80	0.27	24.68	330.6	100	20.70	35.16	24.71	327.5	0.398
121	19.56	35.06	4.43	0.96	24.94	306.5	150	18.16	34.90	25.17	285.1	0.552
146	18.32	34.92	4.40	0.55	25.15	287.3	200	15.27	34.54	25.57	248.0	0.687
170	17.26	34.78	4.36	0.53	25.30	273.4	250	12.63	34.27	25.92	215.7	0.803
194	15.63	34.59	4.39	0.74	25.53	252.3	300	10.65	34.15	26.19	189.9	0.906
218	14.27	34.42	4.40	0.76	25.70	236.1	400	8.02	34.13	26.61	150.8	1.078
243	13.03	34.31	4.38	1.04	25.87	220.1	500	6.16	34.09	26.83	129.2	1.219
267	11.73	34.18	4.36	1.82	26.02	205.8	600	5.40	34.20	27.01	112.6	1.341
291	10.93	34.15	4.30	1.33	26.15	194.2	700	4.97	34.33	27.17	98.2	1.447
386	8.36	34.14	2.70	2.28	26.57	154.8	800	4.70	34.45	27.29	87.6	1.541
485	6.34	34.08	2.17	2.48	26.80	131.9	1000	4.20	34.52	27.41	77.9	1.709
582	5.50	34.17	1.09	3.00	26.98	115.6	1200	3.70	34.57	27.50	69.9	1.858
776	4.77	34.43	0.71	3.22	27.27	89.3						
970	4.28	34.51	0.92	3.30	27.39	79.3						
1164	3.76	34.56	1.15	3.22	27.48	70.9						
1461	3.12	34.59	1.47	2.78	27.57	63.2						

CROMWELL 16, STATION 17, 23-27N LAT, 151- 0W LONG, MAY 20, 1965, 1300 G.C.T.
DRY BULB 20.5 WET BULB 19.1 WIND SPEED 19, DIR. 09 BAR. 20 WEATHER 01 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	23.75	34.63			23.46	443.8	0	23.75	34.63	23.46	443.8	0.000
10	23.86	34.62			23.42	448.0	10	23.86	34.62	23.42	448.0	0.045
50	22.48	35.02			24.12	382.6	20	23.63	34.70	23.54	436.5	0.089
76	21.82	35.17			24.42	355.1	30	23.32	34.79	23.70	421.7	0.133
100	21.06	35.20			24.65	333.8	50	22.48	35.02	24.12	382.6	0.214
126	19.84	35.07			24.88	312.9	75	21.85	35.17	24.41	356.0	0.307
152	18.67	34.90			25.05	297.3	100	21.06	35.20	24.65	333.8	0.394
176	17.89	34.86			25.21	282.5	150	18.75	34.91	25.04	298.5	0.553
202	16.22	34.64			25.44	261.1	200	16.36	34.66	25.42	262.8	0.694
228	14.61	34.42			25.63	243.4	250	13.35	34.28	25.79	228.4	0.818
253	13.19	34.27			25.81	226.4	300	10.86	34.11	26.13	196.2	0.925
278	11.97	34.13			25.98	210.4	400	8.15	34.06	26.53	158.0	1.104
303	10.71	34.10			26.15	194.3	500	6.36	34.09	26.81	131.9	1.250
404	8.09	34.06			26.54	157.0	600	5.12	34.17	27.03	110.9	1.373
506	6.27	34.09			26.82	130.5	700	4.61	34.29	27.18	96.6	1.478
607	5.06	34.18			27.04	109.6	800	4.42	34.41	27.29	86.8	1.570
809	4.42	34.42			27.30	86.1	1000	3.99	34.51	27.42	76.2	1.735
1012	3.96	34.51			27.42	75.8	1200	3.49	34.55	27.50	68.8	1.882
1212	3.46	34.55			27.50	68.4	1500	2.82	34.59	27.60	59.8	2.078
1514	2.79	34.59			27.60	59.5						

TEMPERATURE ERROR TERM AT 20. METERS IS 0.10
TEMPERATURE ERROR TERM AT 30. METERS IS 0.14

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 16, STATION 18, 22- 1N LAT, 151- 0W LONG, MAY 20, 1965, 2200 G.C.T. DRY BULB 23.0 WET BULB 20.2 WIND SPEED 16, DIR. 14 BAR. 20 WEATHER 02 VIS. 8 CLOUD TYPE 4, COVER 4												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	23.82	34.69			23.47	442.2	0	23.82	34.68	23.47	442.2	0.000
10	23.80	34.66			23.46	443.5	10	23.80	34.66	23.46	443.5	0.045
51	21.58	35.18			24.49	347.0	20	23.34	34.77	23.68	423.2	0.088
77	21.07	35.23			24.67	331.0	30	22.82	34.89	23.92	400.8	0.130
101	20.63	35.20			24.77	322.7	50	21.64	35.16	24.46	349.8	0.205
127	19.92	35.15			24.92	309.2	75	21.10	35.23	24.66	331.5	0.291
152	19.10	35.04			25.06	296.2	100	20.65	35.20	24.76	323.0	0.374
177	17.65	34.85			25.26	277.6	150	19.18	35.07	25.05	297.4	0.530
202	15.83	34.59			25.49	256.2	200	15.98	34.61	25.47	257.9	0.670
227	14.02	34.36			25.71	235.6	250	12.57	34.24	25.91	216.3	0.789
251	12.51	34.24			25.92	215.5	300	10.36	34.14	26.24	185.6	0.891
278	11.17	34.18			26.13	196.0	400	7.73	34.03	26.57	153.7	1.062
303	10.26	34.13			26.25	184.4	500	6.26	34.10	26.83	130.0	1.205
403	7.67	34.03			26.58	153.0	600	5.35	34.19	27.02	112.0	1.327
504	6.22	34.10			26.84	129.1	700	4.69	34.29	27.17	98.2	1.434
605	5.31	34.20			27.03	111.2	800	4.24	34.37	27.28	87.9	1.528
806	4.22	34.37			27.28	87.4	1000	3.83	34.48	27.41	76.5	1.694
1007	3.82	34.48			27.41	76.3	1200	3.37	34.53	27.50	68.8	1.841
1208	3.35	34.53			27.50	68.6	1500	2.72	34.57	27.59	60.1	2.037
1511	2.70	34.57			27.59	59.9						

TEMPERATURE ERROR TERM AT 20. METERS IS 0.16
TEMPERATURE ERROR TERM AT 40. METERS IS 0.22
SALINITY ERROR TERM AT 40. METERS IS 0.06

CROMWELL 16, STATION 19, 20-30N LAT, 151- 2W LONG, MAY 21, 1965, 0800 G.C.T. DRY BULB 23.2 WET BULB 19.7 WIND SPEED 20, DIR. 12 BAR. 19 WEATHER 03 VIS. CLOUD TYPE 8, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.35	34.49			23.17	470.9	0	24.35	34.49	23.17	470.9	0.000
9	24.38	34.48			23.16	472.8	10	24.38	34.48	23.16	472.9	0.048
20Δ	24.37	34.48			23.16	473.0	20	24.37	34.48	23.16	473.0	0.095
30Δ	24.30	34.49			23.19	470.6	30	24.30	34.49	23.19	470.6	0.143
49	22.64	34.98			24.04	389.8	50	22.57	34.99	24.07	387.2	0.229
73	21.49	35.13			24.48	349.1	75	21.44	35.14	24.50	347.5	0.322
97	21.09	35.16			24.63	335.9	100	21.04	35.18	24.64	334.5	0.408
121	20.56	35.17			24.76	323.8	150	19.36	35.06	24.99	302.8	0.568
147	19.49	35.07			24.97	304.9	200	16.39	34.64	25.40	265.0	0.711
169	18.44	34.94			25.14	289.5	250	12.75	34.23	25.87	220.4	0.834
193	16.98	34.72			25.32	272.1	300	10.12	34.10	26.25	184.3	0.936
217	14.95	34.46			25.58	248.0	400	7.95	34.17	26.65	146.6	1.103
242	13.34	34.27			25.78	229.0	500	6.59	34.24	26.90	123.7	1.239
262	11.89	34.19			26.00	207.8	600	5.79	34.32	27.06	108.5	1.356
287	10.59	34.11			26.18	191.2	700	5.34	34.37	27.16	99.7	1.461
380	8.31	34.16			26.59	152.5	800	5.02	34.42	27.24	93.4	1.559
476	6.86	34.22			26.85	128.5	1000	4.38	34.49	27.36	82.4	1.737
570	5.97	34.30			27.03	111.9	1200	3.78	34.52	27.45	74.3	1.895
757	5.17	34.40			27.20	96.4						
946	4.56	34.48			27.33	84.8						
1135	3.94	34.50			27.42	77.3						
1419	3.24	34.54			27.52	68.0						

CROMWELL 16, STATION 20, 19- 0N LAT, 150-55W LONG, MAY 21, 1965, 1700 G.C.T. DRY BULB 23.8 WET BULB 19.5 WIND SPEED 20, DIR. 09 BAR. 16 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	24.15	34.39			23.16	472.4	0	24.15	34.39	23.16	472.4	0.000
9	24.18	34.41			23.16	472.2	10	24.19	34.41	23.16	472.6	0.048
48	24.13	34.45			23.21	469.4	20	24.24	34.39	23.13	475.3	0.095
73	23.53	34.80			23.65	428.2	30	24.24	34.40	23.14	475.5	0.143
97	22.27	34.92			24.10	385.9	50	24.10	34.48	23.24	466.7	0.238
121	21.73	35.15			24.43	355.8	75	23.42	34.81	23.69	424.5	0.350
145	20.36	35.06			24.73	327.5	100	22.21	34.95	24.15	381.8	0.452
169	19.00	34.98			25.02	300.1	150	20.08	35.05	24.80	321.5	0.629
194	17.42	34.78			25.26	277.9	200	16.93	34.70	25.32	272.4	0.779
218	15.37	34.48			25.51	254.7	250	12.69	34.23	25.88	219.4	0.903
242	13.29	34.29			25.80	226.6	300	10.48	34.17	26.24	185.4	1.005
267	11.64	34.15			26.02	206.3	400	8.28	34.30	26.70	142.2	1.170
291	10.77	34.16			26.18	190.7	500	7.29	34.42	26.94	120.0	1.303
385	8.47	34.27			26.65	146.9	600	6.18	34.41	27.08	107.3	1.417
481	7.52	34.42			26.91	123.2	700	5.53	34.44	27.19	97.5	1.521
577	6.37	34.40			27.05	109.9	800	5.07	34.48	27.27	90.0	1.616
770	5.22	34.47			27.25	92.0	1000	4.25	34.51	27.39	79.3	1.787
961	4.38	34.50			27.37	81.2	1200	3.65	34.54	27.48	71.4	1.940
1153	3.82	34.54			27.46	73.1						
1442	3.12	34.56			27.54	65.2						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 16, STATION 21, 17-31N LAT, 150-59W LONG, MAY 22, 1965, 0100 G.C.T.
DRY BULB 23.9 WET BULB 20.9 WIND SPEED 21, DIR. 07 BAR. 17 WEATHER 03 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	24.66	34.39			23.00	487.0	0	24.66	34.39	23.00	487.0	0.000
11	24.67	34.39			22.99	488.4	10	24.67	34.38	22.99	488.3	0.049
30Δ	24.65	34.38			23.00	488.6	20	24.72	34.37	22.97	490.8	0.098
51	23.61	34.52			23.41	449.8	30	24.65	34.38	23.00	488.6	0.148
76	22.75	34.88			23.93	401.1	50	23.67	34.51	23.39	452.1	0.243
101	22.19	35.04			24.21	375.3	75	22.78	34.87	23.92	402.8	0.350
126	20.95	35.11			24.61	338.4	100	22.22	35.04	24.20	376.2	0.448
151	19.42	35.06			24.98	304.1	150	19.48	35.06	24.97	305.2	0.620
176	18.50	34.97			25.14	289.0	200	17.04	34.73	25.32	272.7	0.766
201	16.96	34.72			25.33	271.9	250	12.48	34.26	25.94	213.2	0.888
227	14.33	34.38			25.66	240.5	300	9.78	34.14	26.34	175.6	0.986
251	12.41	34.26			25.96	212.1	400	8.37	34.37	26.74	138.5	1.145
276	10.72	34.17			26.20	188.8	500	6.88	34.37	26.96	118.1	1.274
301	9.75	34.14			26.34	175.2	600	6.05	34.39	27.09	106.7	1.388
401	8.37	34.37			26.74	138.3	700	5.46	34.44	27.20	96.6	1.491
501	6.87	34.37			26.96	118.0	800	5.01	34.49	27.29	88.2	1.584
602	6.04	34.39			27.09	106.6	1000	4.26	34.52	27.40	78.6	1.753
802	5.00	34.49			27.29	88.1	1200	3.68	34.54	27.47	71.8	1.905
1003	4.25	34.52			27.40	78.5	1500	2.91	34.59	27.59	60.9	2.107
1205	3.67	34.54			27.48	71.7	2000	2.10	34.64	27.69	50.3	2.389
1507	2.89	34.59			27.59	60.7	2500	1.78	34.66	27.74	46.7	2.636
2077	2.02	34.64			27.70	49.3	3000	1.64	34.68	27.76	45.0	2.870
2582	1.76	34.66			27.74	46.5	4000	1.44	34.70	27.79	43.3	3.323
3086	1.62	34.68			27.77	44.8						
4094	1.43	34.70			27.80	43.3						

CROMWELL 16, STATION 22, 15-58N LAT, 150-59W LONG, MAY 22, 1965, 1200 G.C.T.
DRY BULB 24.0 WET BULB 21.5 WIND SPEED 20, DIR. 10 BAR. 14 WEATHER 02 VIS. 7 CLOUD TYPE , COVER 1

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.80	34.40			22.97	490.3	0	24.80	34.40	22.97	490.3	0.000
9	24.81	34.40			22.97	490.9	10	24.81	34.40	22.97	490.9	0.049
30Δ	24.80	34.40			22.97	491.4	20	24.81	34.40	22.97	491.3	0.099
47	24.76	34.40			22.98	491.5	30	24.80	34.40	22.97	491.4	0.148
70	24.02	34.57			23.33	458.5	50	24.71	34.41	23.01	488.7	0.247
94	23.10	34.90			23.85	409.9	75	23.87	34.64	23.43	449.1	0.365
117	21.47	34.98			24.37	361.0	100	22.70	34.93	23.99	396.7	0.472
141	20.02	35.04			24.81	320.2	150	19.48	35.01	24.92	309.4	0.650
164	18.60	34.91			25.07	295.3	200	15.71	34.54	25.48	257.5	0.793
189	16.87	34.67			25.31	273.1	250	11.24	34.20	26.13	195.1	0.907
212	14.40	34.40			25.66	240.0	300	9.94	34.35	26.48	162.7	0.997
235	12.42	34.26			25.95	211.9	400	8.64	34.49	26.79	133.8	1.146
259	10.69	34.19			26.22	186.4	500	7.67	34.50	26.95	119.8	1.274
283	10.22	34.30			26.39	170.8	600	6.85	34.50	27.06	109.8	1.390
376	8.92	34.47			26.74	139.0	700	5.96	34.49	27.18	99.3	1.496
471	7.91	34.56			26.92	122.9	800	5.32	34.50	27.26	91.5	1.593
565	7.18	34.58			27.02	113.7	1000	4.36	34.51	27.38	80.5	1.767
739	5.64	34.49			27.22	95.6	1200	3.66	34.55	27.48	70.8	1.920
880	4.97	34.51			27.31	87.1						
1022	4.25	34.51			27.39	79.4						
1243	3.54	34.56			27.50	68.9						

CROMWELL 16, STATION 23, 14-30N LAT, 150-59W LONG, MAY 22, 1965, 2100 G.C.T.
DRY BULB 24.9 WET BULB 21.7 WIND SPEED 18, DIR. 09 BAR. 15 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	25.54	34.60			22.90	497.4	0	25.54	34.60	22.90	497.4	0.000
10	25.57	34.61			22.89	497.9	10	25.57	34.61	22.89	497.9	0.050
50	25.57	34.60			22.89	500.3	20	25.58	34.61	22.89	498.6	0.100
74	25.56	34.60			22.89	500.9	30	25.58	34.61	22.89	499.2	0.151
98	23.27	34.60			23.57	436.4	50	25.57	34.60	22.89	500.3	0.251
124	19.69	34.86			24.76	324.3	75	25.50	34.60	22.91	499.3	0.377
148	16.09	34.54			25.39	263.7	100	23.02	34.63	23.67	427.7	0.494
171	13.10	34.27			25.83	222.5	150	15.78	34.51	25.44	259.5	0.667
196	11.60	34.41			26.23	184.9	200	11.48	34.43	26.26	181.5	0.778
221	11.14	34.51			26.39	169.9	250	10.97	34.62	26.51	159.2	0.864
246	11.03	34.62			26.49	160.5	300	10.14	34.64	26.67	144.8	0.941
271	10.61	34.63			26.58	153.0	400	9.09	34.63	26.83	130.6	1.080
294	10.22	34.64			26.65	146.1	500	7.93	34.57	26.96	118.9	1.206
393	9.17	34.63			26.82	131.5	600	7.04	34.53	27.06	110.2	1.321
492	8.01	34.57			26.96	119.7	700	6.23	34.52	27.17	100.6	1.428
589	7.14	34.53			27.05	111.3	800	5.58	34.53	27.26	92.5	1.525
784	5.65	34.53			27.25	93.4	1000	4.80	34.55	27.36	83.1	1.703
980	4.89	34.55			27.35	84.2	1200	4.01	34.57	27.47	73.4	1.862
1176	4.04	34.57			27.46	73.8						
1472	3.09	34.60			27.58	62.1						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					

CROMWELL 16, STATION 24, 13- 1N LAT, 151- 1W LONG, MAY 23, 1965, 0600 G.C.T.
DRY BULB 25.2 WET BULB 22.1 WIND SPEED 20, DIR. 09 BAR. 13 WEATHER 02 VIS. 6 CLOUD TYPE , COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.72	34.64			22.87	499.8	0	25.72	34.64	22.87	499.8	0.000
10	25.72	34.63			22.86	500.9	10	25.72	34.63	22.86	500.9	0.050
49	25.72	34.64			22.87	501.8	20	25.72	34.63	22.86	501.4	0.101
73	25.71	34.64			22.87	502.4	30	25.72	34.63	22.86	501.7	0.151
96	25.36	34.60			22.95	495.9	50	25.72	34.64	22.87	501.9	0.253
119	23.60	34.64			23.51	443.5	75	25.71	34.64	22.87	502.9	0.379
143	18.91	34.67			24.81	319.5	100	25.20	34.60	23.00	491.1	0.504
168	15.05	34.42			25.53	250.9	150	17.72	34.61	25.06	295.9	0.703
192	12.39	34.30			25.99	207.3	200	11.95	34.35	26.12	195.4	0.826
215	11.48	34.49			26.31	177.3	250	10.98	34.62	26.50	159.5	0.916
239	11.07	34.58			26.46	163.9	300	10.37	34.64	26.62	149.1	0.994
264	10.88	34.66			26.55	155.3	400	9.16	34.62	26.82	132.1	1.136
287	10.55	34.64			26.60	151.6	500	8.07	34.57	26.95	120.6	1.263
382	9.36	34.63			26.79	134.4	600	7.06	34.54	27.07	109.3	1.379
477	8.32	34.58			26.92	123.4	700	6.23	34.53	27.17	99.9	1.485
573	7.31	34.55			27.04	112.1	800	5.56	34.53	27.26	92.1	1.582
765	5.77	34.53			27.23	94.7	1000	4.58	34.55	27.39	80.1	1.756
957	4.76	34.55			27.37	82.2	1200	3.84	34.58	27.49	71.1	1.909
1150	4.04	34.57			27.46	73.5						
1445	3.21	34.60			27.57	63.4						

CROMWELL 16, STATION 25, 11-32N LAT, 151- 2W LONG, MAY 23, 1965, 1600 G.C.T.
DRY BULB 24.5 WET BULB 23.3 WIND SPEED 22, DIR. 07 BAR. 14 WEATHER 01 VIS. 6 CLOUD TYPE 7, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.76	34.85			22.70	515.8	0	26.76	34.85	22.70	515.8	0.000
10	26.79	34.86			22.70	516.4	10	26.79	34.86	22.70	516.4	0.052
52	26.78	34.84			22.69	519.3	20	26.80	34.86	22.70	517.2	0.104
76	26.79	34.85			22.69	519.8	30	26.80	34.85	22.69	517.9	0.156
102	17.24	34.52			25.11	289.7	50	26.78	34.84	22.69	519.2	0.261
126	13.18	34.47			25.97	208.2	75	26.87	34.85	22.67	522.2	0.392
153	11.51	34.46			26.28	178.5	100	18.06	34.55	24.93	306.6	0.496
178	11.46	34.69			26.46	162.1	150	11.58	34.45	26.26	180.2	0.619
204	11.12	34.70			26.54	155.2	200	11.18	34.70	26.53	155.9	0.704
229	10.85	34.72			26.60	149.6	250	10.64	34.71	26.63	147.0	0.780
253	10.61	34.71			26.64	146.7	300	10.11	34.69	26.71	140.9	0.853
279	10.31	34.72			26.70	141.4	400	9.37	34.67	26.82	132.2	0.990
304	10.09	34.68			26.71	141.0	500	8.58	34.62	26.90	125.2	1.120
405	9.34	34.67			26.82	131.6	600	7.61	34.56	27.01	115.9	1.242
508	8.51	34.61			26.91	124.7	700	6.68	34.53	27.11	106.3	1.354
609	7.52	34.56			27.02	115.0	800	5.87	34.52	27.21	97.3	1.457
811	5.79	34.52			27.22	96.3	1000	4.73	34.56	27.38	81.8	1.638
1013	4.67	34.56			27.35	80.9	1200	3.96	34.56	27.46	73.7	1.796
1216	3.91	34.56			27.47	73.2	1500	3.16	34.60	27.57	63.5	2.004
1520	3.12	34.60			27.58	62.8	2000	2.25	34.64	27.68	52.2	2.298
2093	2.14	34.64			27.69	50.9	2500	1.86	34.65	27.72	48.3	2.554
2598	1.82	34.65			27.73	48.1	3000	1.68	34.67	27.76	45.9	2.795
3102	1.66	34.65			27.76	45.4	4000	1.43	34.68	27.78	44.4	3.257
4112	1.42	34.68			27.78	44.6						

TEMPERATURE ERROR TERM AT 10C. METERS IS 0.18

CROMWELL 16, STATION 26, 10- 2N LAT, 148- 1W LONG, MAY 24, 1965, 1500 G.C.T.
DRY BULB 25.8 WET BULB 24.0 WIND SPEED 22, DIR. 07 BAR. 12 WEATHER 01 VIS. 4 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.91	34.85	4.65		22.65	520.4	0	26.91	34.85	22.65	520.4	0.000
10	26.93	34.84	4.70	0.41	22.64	522.1	10	26.93	34.84	22.64	522.1	0.053
52	26.90	34.85	4.61	0.94	22.66	522.2	20	26.93	34.84	22.64	522.4	0.105
75[A]	26.93	34.84			22.64	524.8	30	26.92	34.84	22.65	522.5	0.158
77	26.93	34.84	4.55	0.54	22.64	524.9	50	26.90	34.85	22.66	522.3	0.263
102	21.48	34.54	4.42	0.82	24.03	392.5	75	26.93	34.84	22.64	524.8	0.395
128	13.18	34.47	1.21	2.41	25.97	208.3	100	22.15	34.57	23.87	408.0	0.512
153	12.00	34.68	0.32	2.75	26.36	171.3	150	11.95	34.65	26.35	172.3	0.659
177	11.50	34.74	0.26	2.42	26.50	158.4	200	11.19	34.74	26.56	153.1	0.741
204	11.14	34.74	0.37	2.45	26.57	152.6	250	10.63	34.74	26.66	144.9	0.816
229	10.83	34.72	0.41	2.78	26.61	149.2	300	10.17	34.71	26.72	140.1	0.888
254	10.59	34.74	0.52	2.70	26.67	144.2	400	9.54	34.69	26.81	133.2	1.025
279	10.34	34.72	0.48	2.69	26.69	141.9	500	8.91	34.67	26.90	126.3	1.156
304	10.14	34.71	0.46	2.83	26.72	139.8	600	7.88	34.60	27.00	117.6	1.280
405	9.51	34.69	0.57	2.80	26.81	132.9	700	6.84	34.56	27.11	106.6	1.393
508	8.85	34.67	0.39	3.00	26.90	125.7	800	5.95	34.55	27.22	96.2	1.495
609	7.78	34.59	0.37	3.33	27.01	116.7	1000	4.86	34.56	27.36	83.4	1.677
812	5.85	34.55	0.61	3.56	27.24	94.9	1200	3.96	34.58	27.48	72.3	1.835
1013	4.81	34.56	0.78	3.33	27.37	82.7	1500	3.06	34.61	27.59	61.4	2.038
1214	3.90	34.58	1.28	3.27	27.48	71.6						
1518	3.02	34.61	1.69	3.19	27.59	60.9						

TEMPERATURE ERROR TERM AT 15C. METERS IS 0.11

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 16, STATION 27, 11-30N LAT, 147-59W LONG, MAY 25, 1965, 0000 G.C.T.
DRY BULB 26.0 WET BULB 23.2 WIND SPEED 22, DIR. 04 BAR. 13 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	26.60	34.72	4.68		22.66	520.3	0	26.60	34.72	22.66	520.3	0.000
11	26.61	34.72	4.85	0.42	22.65	521.1	10	26.61	34.72	22.65	521.0	0.052
53Δ	26.53	34.72	4.79	0.35	22.68	520.4	20	26.60	34.72	22.66	520.9	0.105
75Δ	26.54	34.71			22.67	522.3	30	26.58	34.72	22.66	520.8	0.157
78	26.54	34.71	4.66	0.32	22.67	522.4	50	26.54	34.72	22.68	520.4	0.262
102	20.82	34.61	4.52	0.62	24.27	370.3	75	26.54	34.71	22.67	522.3	0.394
128	14.65	34.44	1.88	1.71	25.64	239.9	100	21.49	34.62	24.09	386.7	0.508
154	12.21	34.45	1.20	2.32	26.14	192.0	150	12.41	34.44	26.09	196.5	0.655
178	11.34	34.54	0.80	2.64	26.37	170.2	200	10.98	34.58	26.47	161.2	0.745
205	10.92	34.59	0.54	2.77	26.49	159.9	250	10.30	34.64	26.64	146.2	0.823
230	10.46	34.62	0.45	2.60	26.60	150.2	300	9.70	34.64	26.74	137.7	0.894
255	10.27	34.65	0.29	2.79	26.65	145.3	400	8.63	34.60	26.88	125.3	1.027
281	9.94	34.66	0.35	2.82	26.72	139.6	500	7.70	34.55	26.99	116.3	1.149
305	9.64	34.63	0.31	2.78	26.74	137.4	600	6.94	34.54	27.09	107.9	1.262
406	8.57	34.60	0.43	3.10	26.89	124.5	700	6.23	34.53	27.18	99.8	1.367
509	7.62	34.53	0.57	2.89	27.00	115.6	800	5.57	34.53	27.26	92.5	1.464
610	6.87	34.54	0.65	3.38	27.10	107.0	1000	4.56	34.55	27.39	80.3	1.639
812	5.50	34.53	0.85	3.04	27.27	91.7	1200	3.87	34.57	27.48	72.0	1.793
1015	4.50	34.55	1.07	3.43	27.40	79.5	1500	3.07	34.60	27.58	62.2	1.998
1217	3.82	34.57	1.18	2.89	27.48	71.4						
1520	3.03	34.60	1.73	3.39	27.59	61.7						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.13

CROMWELL 16, STATION 28, 12-58N LAT, 147-58W LONG, MAY 25, 1965, 1000 G.C.T.
DRY BULB 23.8 WET BULB 21.9 WIND SPEED 24, DIR. 06 BAR. 16 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	25.38	34.64	4.80		22.97	489.8	0	25.38	34.64	22.97	489.8	0.000
10	25.37	34.65	4.90	0.49	22.99	489.2	10	25.37	34.65	22.99	489.2	0.049
51	25.39	34.64	4.72	0.54	22.97	492.1	20	25.38	34.65	22.98	489.8	0.099
75Δ	25.28	34.62			22.99	491.3	30	25.39	34.65	22.98	490.4	0.148
77	25.25	34.61	4.73	1.40	22.99	491.2	50	25.39	34.64	22.97	492.0	0.247
102	22.13	34.56	4.90	0.53	23.87	408.3	75	25.28	34.62	22.99	491.3	0.371
127	17.10	34.48	3.45	1.07	25.11	290.2	100	22.51	34.56	23.76	418.3	0.485
153	13.54	34.31	2.73	1.82	25.77	227.7	150	13.85	34.32	25.71	232.9	0.649
178	12.14	34.47	1.09	2.57	26.17	189.9	200	10.39	34.46	26.39	169.1	0.751
204	10.71	34.45	1.15	2.74	26.42	166.4	250	10.06	34.57	26.63	147.2	0.830
229	10.34	34.53	0.70	2.73	26.55	154.8	300	9.48	34.57	26.72	139.1	0.903
254	10.01	34.58	0.40	3.27	26.64	146.1	400	8.36	34.56	26.90	124.0	1.035
280	9.69	34.57	0.29	2.96	26.69	142.1	500	7.43	34.53	27.01	114.0	1.155
305	9.43	34.57	0.31	2.85	26.73	138.4	600	6.55	34.51	27.12	104.5	1.266
405	8.30	34.56	0.25	2.90	26.90	123.3	700	5.82	34.51	27.21	95.8	1.367
507	7.37	34.53	0.41	3.15	27.02	113.4	800	5.24	34.53	27.29	88.3	1.460
608	6.48	34.51	0.38	2.74	27.12	103.8	1000	4.39	34.56	27.42	77.4	1.628
811	5.18	34.53	0.57	3.56	27.30	87.5	1200	3.84	34.57	27.48	71.5	1.779
1013	4.35	34.56	0.85	3.23	27.42	76.9	1500	3.10	34.60	27.58	62.6	1.982
1215	3.80	34.57	1.42	2.72	27.49	71.1						
1517	3.07	34.60	1.71	2.45	27.58	62.2						

CROMWELL 16, STATION 29, 14-28N LAT, 147-59W LONG, MAY 25, 1965, 2000 G.C.T.
DRY BULB 22.7 WET BULB 21.4 WIND SPEED 17, DIR. 08 BAR. 18 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	24.84	34.49	4.83		23.03	484.9	0	24.84	34.49	23.03	484.9	0.000
10	24.82	34.48	5.15	0.85	23.02	485.5	10	24.82	34.48	23.02	485.5	0.049
30Δ	24.81	34.48			23.03	486.0	20	24.81	34.48	23.03	485.7	0.098
50	24.81	34.48	4.86	0.59	23.03	486.7	30	24.81	34.48	23.03	486.0	0.147
76	22.77	34.69	5.04	0.65	23.79	415.3	50	24.81	34.48	23.03	486.7	0.245
101	21.15	35.07	4.89	0.64	24.53	345.5	75	22.87	34.68	23.75	418.8	0.359
126	19.02	34.96	4.50	0.64	25.00	300.6	100	21.22	35.06	24.50	348.1	0.455
152	16.81	34.67	4.27	0.77	25.32	270.6	150	17.00	34.70	25.30	272.9	0.612
177	13.38	34.28	3.54	1.45	25.78	227.4	200	11.81	34.28	26.03	198.4	0.731
202	11.73	34.29	2.57	2.37	26.11	196.2	250	10.81	34.53	26.46	163.5	0.822
228	11.00	34.43	1.51	2.53	26.35	173.5	300	10.25	34.65	26.65	146.2	0.900
254	10.78	34.54	0.81	2.98	26.48	162.1	400	9.00	34.62	26.84	129.7	1.039
279	10.20	34.56	0.66	2.89	26.59	151.3	500	7.97	34.56	26.95	119.8	1.165
303	10.27	34.66	0.38		26.66	145.7	600	6.98	34.53	27.07	109.0	1.281
404	8.92	34.61	0.22	3.07	26.85	129.2	700	6.17	34.51	27.17	100.5	1.386
506	7.92	34.56	0.45	2.70	26.96	119.3	800	5.52	34.51	27.25	93.3	1.484
608	6.90	34.53	0.47	3.24	27.08	108.2	1000	4.52	34.55	27.39	79.9	1.660
810	5.46	34.51	0.57	2.74	27.25	92.6	1200	3.86	34.58	27.49	71.1	1.812
1011	4.48	34.55	0.65	3.37	27.40	79.2	1500	3.08	34.60	27.58	62.2	2.015
1213	3.82	34.58	1.21	3.46	27.49	70.6						
1517	3.05	34.60	1.65	3.23	27.58	61.9						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 16, STATION 30, 15-55N LAT, 147-57W LONG, MAY 26, 1965, 0500 G.C.T. DRY BULB 24.0 WET BULB 21.8 WIND SPEED 20, DIR. 08 BAR. 16 WEATHER 03 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	24.82	34.58	4.83		23.10	477.9	0	24.82	34.58	23.10	477.9	0.000
9	24.81	34.57	4.94	0.32	23.10	478.6	10	24.81	34.57	23.10	478.7	0.048
48	24.81	34.59	4.71	0.40	23.11	478.7	20	24.81	34.57	23.10	478.8	0.096
50Δ	24.81	34.59			23.11	478.8	30	24.81	34.58	23.10	478.9	0.145
74	24.78	34.59	4.79	0.44	23.12	478.9	50	24.81	34.59	23.11	478.8	0.241
96	23.13	34.73	5.02	0.40	23.71	423.1	75	24.73	34.60	23.14	477.0	0.361
120	20.84	34.95	4.58	0.67	24.44	354.1	100	22.77	34.76	23.84	411.3	0.473
144	18.48	34.79	4.24	0.87	25.01	300.5	150	17.68	34.71	25.15	287.4	0.649
167	15.36	34.46	3.36	1.18	25.50	254.5	200	12.10	34.22	25.98	208.0	0.774
190	12.88	34.26	2.98	1.42	25.86	219.5	250	10.12	34.35	26.44	165.1	0.868
213	11.32	34.21	2.83	1.96	26.12	194.9	300	9.74	34.52	26.64	146.9	0.947
236	10.49	34.30	2.13	2.52	26.34	174.4	400	7.66	34.39	26.87	126.1	1.085
259	9.97	34.38	1.53	2.31	26.49	160.3	500	6.80	34.44	27.02	112.0	1.205
282	10.04	34.51	0.77	2.62	26.58	152.4	600	6.13	34.47	27.14	101.7	1.313
372	8.01	34.39	0.83	2.95	26.81	130.8	700	5.57	34.49	27.22	94.4	1.412
461	7.12	34.42	0.61	3.19	26.97	117.2	800	5.09	34.50	27.29	88.4	1.504
551	6.44	34.46	0.50	3.11	27.09	106.1	1000	4.32	34.53	27.40	78.3	1.673
731	5.42	34.49	0.59	3.39	27.24	92.6	1200	3.69	34.57	27.49	69.9	1.823
912	4.63	34.52	0.76	2.86	27.36	82.3						
1093	4.03	34.55	1.00	3.31	27.45	74.4						
1373	3.25	34.59	1.39	3.38	27.56	64.1						

TEMPERATURE ERROR TERM AT 300. METERS IS 0.13

CROMWELL 16, STATION 31, 17-30N LAT, 148- 1W LONG, MAY 26, 1965, 1500 G.C.T. DRY BULB 23.6 WET BULB 20.7 WIND SPEED 18, DIR. 07 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	24.43	34.44	4.77		23.11	476.8	0	24.43	34.44	23.11	476.8	0.000
10	24.41	34.44	5.00	0.47	23.12	476.6	10	24.41	34.44	23.12	476.6	0.048
30Δ	24.40	34.44			23.12	477.1	20	24.46	34.43	23.10	479.1	0.096
50	23.46	34.58	5.10	0.66	23.50	441.3	30	24.40	34.44	23.12	477.1	0.144
74	23.08	34.82	5.12	0.49	23.79	414.4	50	23.46	34.58	23.50	441.3	0.237
98	22.24	34.93	5.05	0.46	24.12	384.4	75	23.05	34.82	23.81	413.2	0.344
123	21.53	35.15	4.87	0.33	24.48	350.6	100	22.21	34.95	24.14	382.0	0.445
146	19.50	34.98	4.71	0.94	24.90	311.7	150	19.35	34.97	24.93	308.6	0.619
171	18.50	34.90	4.57	0.46	25.09	293.9	200	15.62	34.52	25.48	256.8	0.761
197	15.90	34.55	4.19	1.59	25.44	260.5	250	11.19	34.21	26.15	193.5	0.875
222	13.62	34.34	3.55	1.90	25.78	228.9	300	9.66	34.23	26.43	167.1	0.965
247	11.31	34.21	3.54	2.16	26.12	195.5	400	7.63	34.29	26.79	133.2	1.117
271	10.66	34.24	2.80	2.02	26.26	182.5	500	6.74	34.41	27.01	112.9	1.241
294	9.84	34.23	2.79	2.28	26.40	169.9	600	6.04	34.44	27.13	102.6	1.350
394	7.70	34.28	1.35	2.53	26.77	134.8	700	5.48	34.47	27.22	94.5	1.450
493	6.80	34.41	0.68	3.02	27.00	113.9	800	5.00	34.49	27.29	87.8	1.542
591	6.09	34.44	0.49	2.95	27.12	103.4	1000	4.14	34.53	27.42	76.2	1.708
788	5.06	34.49	0.77	3.04	27.29	88.7	1200	3.52	34.56	27.51	68.0	1.854
985	4.19	34.53	1.07	3.19	27.41	76.8						
1183	3.62	34.56	1.26	3.68	27.50	69.4						
1479	2.85	34.60	1.57	2.86	27.60	59.3						

CROMWELL 16, STATION 32, 19- 2N LAT, 148- 2W LONG, MAY 27, 1965, 0300 G.C.T. DRY BULB 23.2 WET BULB 19.8 WIND SPEED 19, DIR. 06 BAR. 17 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 7												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	23.75	34.37	5.02		23.26	462.6	0	23.75	34.37	23.26	462.6	0.000
10	23.76	34.37	5.17	0.41	23.26	463.3	10	23.76	34.37	23.26	463.3	0.047
30Δ	23.72	34.37			23.27	462.9	20	23.74	34.37	23.26	463.2	0.093
51	23.69	34.37	4.91	0.48	23.28	462.9	30	23.72	34.37	23.27	462.9	0.140
77	22.39	34.52	5.11	0.47	23.76	417.3	50	23.70	34.37	23.27	463.2	0.233
102	20.38	34.72	4.69	1.05	24.47	351.0	75	22.53	34.50	23.71	422.1	0.345
126	17.82	34.64	3.78	1.11	25.06	295.1	100	20.57	34.71	24.41	356.6	0.443
153	15.83	34.48	3.61	1.25	25.41	262.7	150	16.02	34.50	25.38	265.4	0.600
178	14.12	34.30	3.44	1.38	25.64	240.7	200	12.21	34.18	25.94	212.6	0.720
204	11.87	34.17	3.29	1.54	25.99	207.6	250	9.53	34.11	26.36	172.5	0.817
228	10.51	34.15	3.35	2.18	26.22	185.6	300	8.67	34.18	26.55	154.8	0.900
253	9.42	34.11	3.50	1.90	26.37	171.1	400	7.15	34.26	26.84	128.6	1.043
280	8.94	34.15	2.90	2.19	26.48	161.1	500	5.80	34.30	27.04	109.0	1.162
304	8.62	34.19	2.35	2.11	26.56	153.6	600	5.40	34.38	27.16	98.7	1.267
404	7.09	34.26	1.12	3.02	26.84	127.7	700	5.01	34.44	27.25	90.7	1.363
506	5.74	34.30	0.77	2.93	27.05	108.1	800	4.60	34.48	27.33	84.0	1.451
607	5.39	34.39	0.72	3.22	27.17	98.2	1000	3.92	34.54	27.45	73.1	1.610
810	4.56	34.48	0.81	3.30	27.33	83.4	1200	3.40	34.57	27.53	66.3	1.751
1009	3.89	34.54	1.02	3.51	27.45	72.7	1500	2.72	34.61	27.62	57.3	1.939
1210	3.38	34.57	1.16	3.30	27.53	66.0						
1513	2.70	34.61	1.59	2.64	27.62	57.0						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 16, STATION 33, 20-29N LAT, 148- 5W LONG, MAY 27, 1965, 1200 G.C.T. DRY BULB 22.1 WET BULB 19.6 WIND SPEED 16, DIR. 06 BAR. 18 WEATHER 02 VIS. CLOUD TYPE 8, COVER												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	23.05	34.67	5.05		23.69	421.5	0	23.05	34.67	23.69	421.5	0.000
9	23.07	34.66	5.26	0.37	23.68	423.2	10	23.08	34.66	23.67	423.5	0.043
48	22.92	34.66	5.14	0.78	23.72	420.5	20	23.12	34.65	23.66	425.5	0.085
72	22.14	34.71	5.14	0.46	23.98	396.7	30	23.10	34.65	23.66	425.5	0.128
95	22.00	34.79	5.10	0.46	24.08	388.0	50	22.85	34.66	23.74	418.5	0.213
119	21.84	35.00	5.03	0.39	24.28	369.5	75	22.11	34.72	23.99	395.4	0.316
144	21.31	35.04	5.02	0.47	24.46	353.5	100	21.98	34.84	24.12	384.4	0.414
167	20.92	35.14	4.80	0.61	24.64	336.9	150	21.24	35.07	24.50	349.5	0.599
191	19.78	35.07	4.63	0.68	24.89	313.7	200	19.35	35.03	24.98	305.8	0.764
214	18.63	34.96	4.59	0.69	25.10	294.1	250	15.75	34.53	25.46	260.3	0.907
238	17.18	34.75	4.50	0.70	25.30	275.9	300	11.71	34.19	26.03	205.5	1.024
263	14.17	34.31	4.21	1.06	25.64	243.3	400	8.16	34.13	26.59	152.9	1.205
286	12.49	34.22	2.99	1.51	25.91	217.4	500	6.52	34.20	26.87	125.8	1.346
380	8.69	34.13	3.00	2.34	26.51	160.5	600	5.86	34.33	27.07	108.3	1.464
478	6.75	34.17	1.71	2.40	26.82	130.7	700	5.42	34.43	27.20	96.3	1.567
573	6.00	34.30	0.96	3.26	27.02	112.3	800	5.03	34.49	27.29	88.4	1.661
764	5.20	34.48	0.81	3.06	27.26	90.9	1000	4.20	34.51	27.40	78.7	1.830
956	4.33	34.50	1.21	2.60	27.38	80.5	1200	3.62	34.54	27.48	70.7	1.981
1146	3.83	34.54	1.16	3.30	27.46	73.1						
1436	3.12	34.59	1.43	3.13	27.57	63.0						

TEMPERATURE ERROR TERM AT 25C. METERS IS 0.11

CROMWELL 16, STATION 34, 22- 0N LAT, 148- 1W LONG, MAY 27, 1965, 2100 G.C.T. DRY BULB 22.0 WET BULB 19.5 WIND SPEED 15, DIR. 09 BAR. 20 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 6												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	23.25	34.49	5.02		23.50	440.0	0	23.25	34.49	23.50	440.0	0.000
10	23.21	34.50	5.19	0.65	23.52	438.6	10	23.21	34.50	23.52	438.6	0.044
30Δ	23.20	34.50			23.52	439.1	20	23.20	34.50	23.52	438.6	0.088
51	23.16	34.51	5.04	0.44	23.54	438.0	30	23.20	34.50	23.52	439.1	0.133
76	22.33	34.61	5.11	0.49	23.85	409.1	50	23.17	34.51	23.53	438.4	0.221
100	22.16	34.82	5.06	0.80	24.06	390.3	75	22.36	34.60	23.84	410.5	0.328
125	21.83	35.12	4.97	0.74	24.38	360.8	100	22.16	34.82	24.06	390.3	0.429
150	20.90	35.15	4.71	0.67	24.65	335.1	150	20.90	35.15	24.65	335.1	0.612
175	19.84	35.08	4.61	0.80	24.88	313.9	200	19.22	35.05	25.02	301.5	0.772
201	19.20	35.05	4.66	0.43	25.03	301.1	250	16.60	34.66	25.37	269.6	0.916
226	18.32	34.92	4.56	0.51	25.15	290.0	300	12.67	34.24	25.89	219.7	1.039
250	16.60	34.66	4.27	1.72	25.37	269.6	400	8.67	34.08	26.47	164.3	1.233
275	14.72	34.43	4.26	1.04	25.61	246.3	500	6.98	34.14	26.76	136.6	1.385
300	12.67	34.24	3.52	1.65	25.89	219.7	600	5.86	34.25	27.00	114.6	1.512
400	8.67	34.08	3.55	2.06	26.47	164.3	700	5.19	34.36	27.17	99.0	1.620
501	6.97	34.14	2.02	2.72	26.77	136.4	800	4.77	34.45	27.29	88.2	1.714
601	5.85	34.25	0.96	3.72	27.00	114.4	1000	4.15	34.51	27.40	77.9	1.882
801	4.77	34.45	0.76	3.37	27.29	88.1	1200	3.53	34.57	27.51	67.7	2.030
1002	4.14	34.51	1.00	3.32	27.40	77.9	1500	2.87	34.60	27.60	59.6	2.224
1202	3.52	34.57	1.20	3.39	27.51	67.6						
1504	2.86	34.60	1.54	3.74	27.60	59.6						

CROMWELL 16, STATION 35, 23-28N LAT, 148- 0W LONG, MAY 28, 1965, 0600 G.C.T. DRY BULB 22.7 WET BULB 19.8 WIND SPEED 16, DIR. 08 BAR. 15 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	23.64	34.53	4.98		23.41	448.0	0	23.64	34.53	23.41	448.0	0.000
11	23.66	34.53	5.22	0.37	23.41	449.0	10	23.66	34.53	23.41	448.9	0.045
30Δ	23.65	34.53			23.41	449.4	20	23.67	34.53	23.40	449.9	0.090
51	23.43	34.60	5.00	0.59	23.53	439.0	30	23.65	34.53	23.41	449.4	0.136
75	22.32	34.94	5.07	0.65	24.10	385.0	50	23.45	34.59	23.52	440.1	0.225
100	22.03	35.11	5.29	0.84	24.31	365.9	75	22.32	34.94	24.10	385.0	0.329
124	21.21	35.15	4.79	0.50	24.59	340.0	100	22.03	35.11	24.31	365.9	0.424
150	19.99	35.05	4.69	0.62	24.82	319.0	150	19.99	35.05	24.82	319.0	0.596
174	19.09	35.00	4.54	0.57	25.02	301.1	200	17.87	34.83	25.19	285.0	0.749
199	17.94	34.84	4.47	0.74	25.18	285.8	250	14.46	34.40	25.65	242.2	0.882
225	16.10	34.59	4.17	0.93	25.43	262.8	300	11.67	34.16	26.02	206.6	0.995
249	14.52	34.41	4.48	0.89	25.64	242.8	400	8.59	34.05	26.46	165.2	1.182
274	13.16	34.26	4.49	1.11	25.81	227.1	500	6.63	34.08	26.77	135.9	1.334
298	11.76	34.17	4.65	1.07	26.01	207.8	600	5.58	34.17	26.97	117.0	1.462
397	8.66	34.05	3.91	2.28	26.45	166.3	700	4.95	34.27	27.13	102.3	1.573
497	6.67	34.08	2.66	2.14	26.76	136.6	800	4.70	34.40	27.25	91.2	1.671
795	4.72	34.39	0.66	2.72	27.25	91.9	1000	4.13	34.60	27.48	71.2	1.835
993	4.15	34.60	1.04	2.60	27.47	71.3	1200	3.61	34.60	27.53	66.3	1.974
1192	3.64	34.53	1.10	2.52	27.47	71.9						
1453	2.98	34.57	1.43	2.40	27.57	62.9						

TEMPERATURE ERROR TERM AT 60C. METERS IS 0.18
TEMPERATURE ERROR TERM AT 70C. METERS IS 0.17

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 16, STATION 36, 25- 3N LAT, 147-56W LONG, MAY 28, 1965, 1500 G.C.T.
DRY BULB 21.5 WET BULB 18.9 WIND SPEED 12, DIR. 10 BAR. 20 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	22.82	35.03	5.10		24.03	389.2	0	22.82	35.03	24.03	389.2	0.000
10	22.83	35.02	5.21	0.61	24.02	390.6	10	22.83	35.02	24.02	390.6	0.039
30Δ	22.82	35.03			24.03	390.4	20	22.90	35.02	24.00	393.1	0.079
51	21.62	35.15	5.25	0.29	24.46	350.3	30	22.82	35.03	24.03	390.4	0.118
76	21.26	35.19	5.13	0.37	24.59	338.8	50	21.68	35.14	24.44	352.3	0.193
100	20.93	35.21	5.10	0.56	24.69	329.7	75	21.26	35.19	24.59	338.9	0.280
125	20.19	35.18	5.01	0.50	24.87	313.8	100	20.93	35.21	24.69	329.7	0.364
151	19.37	35.11	4.74	0.55	25.03	299.2	150	19.41	35.11	25.02	299.8	0.523
174	18.22	34.93	4.69	0.85	25.18	285.1	200	16.32	34.66	25.43	261.7	0.664
201	16.24	34.65	4.69	0.62	25.44	260.8	250	13.58	34.36	25.80	227.4	0.788
225	14.88	34.48	4.72	0.74	25.62	244.6	300	11.56	34.22	26.08	200.7	0.896
250	13.58	34.36	4.67	1.07	25.80	227.4	400	8.95	34.07	26.42	169.4	1.082
275	12.40	34.26	4.86	1.40	25.96	212.5	500	6.92	34.02	26.68	144.6	1.241
299	11.59	34.22	4.85	1.10	26.08	201.1	600	5.64	34.06	26.88	125.6	1.377
399	8.97	34.07	4.32	1.66	26.42	169.7	700	4.80	34.18	27.07	107.5	1.495
499	6.94	34.02	3.00	2.39	26.68	144.8	800	4.27	34.31	27.23	92.2	1.596
598	5.66	34.06	1.74	3.38	26.87	125.9	1000	3.74	34.47	27.41	75.9	1.766
798	4.28	34.31	0.47	3.58	27.23	92.5	1200	3.30	34.55	27.52	66.7	1.911
999	3.74	34.47	0.91	3.34	27.41	76.0						
1198	3.32	34.53	1.25	3.67	27.50	68.1						
1497	2.80	34.58	1.51	3.71	27.59	60.3						

CROMWELL 16, STATION 37, 26-29N LAT, 148- 3W LONG, MAY 28, 1965, 2300 G.C.T.
DRY BULB 20.7 WET BULB 18.5 WIND SPEED 15, DIR. 08 BAR. 23 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	22.95	34.93	5.07		23.92	400.0	0	22.95	34.93	23.92	400.0	0.000
10	22.91	34.94	5.23	0.76	23.93	398.6	10	22.91	34.94	23.93	398.6	0.040
30Δ	22.60	34.98			24.05	388.0	20	22.83	34.95	23.97	396.0	0.080
51	21.32	35.16	5.17	0.39	24.55	341.6	30	22.60	34.98	24.05	388.0	0.120
77	20.24	35.18	5.19	0.50	24.85	313.3	50	21.39	35.15	24.52	344.0	0.193
101	19.88	35.16	5.20	0.49	24.93	306.5	75	20.30	35.18	24.84	314.5	0.276
127	19.37	35.12	4.96	0.95	25.04	297.6	100	19.89	35.16	24.93	306.7	0.355
152	18.16	34.92	4.80	0.46	25.19	283.7	150	18.29	34.94	25.17	285.1	0.504
177	16.05	34.62	4.77		25.46	258.1	200	14.87	34.47	25.61	244.4	0.637
202	14.79	34.46	4.77	0.87	25.62	243.5	250	13.07	34.33	25.88	219.3	0.754
228	13.85	34.38	4.85	0.81	25.76	230.8	300	11.36	34.21	26.12	197.4	0.859
252	13.00	34.33	4.95	1.22	25.89	218.3	400	9.14	34.10	26.41	170.1	1.045
278	12.09	34.26	4.94	1.29	26.02	206.8	500	6.80	34.02	26.70	142.7	1.203
302	11.30	34.21	4.90	1.36	26.13	196.6	600	5.86	34.07	26.86	128.0	1.339
403	9.09	34.10	4.58	1.60	26.42	169.4	700	4.97	34.19	27.06	109.1	1.459
504	6.72	34.02	3.23	2.28	26.71	141.8	800	4.23	34.31	27.24	91.7	1.561
603	5.84	34.07	1.50	3.00	26.86	127.6	1000	3.75	34.45	27.39	77.8	1.732
805	4.20	34.32	0.70	3.35	27.25	90.8	1200	3.26	34.53	27.51	67.6	1.879
1007	3.74	34.45	0.81	3.29	27.40	77.5	1500	2.73	34.59	27.60	58.8	2.072
1206	3.25	34.53	1.17	2.82	27.51	67.4						
1509	2.72	34.59	1.54	3.35	27.61	58.7						

CROMWELL 16, STATION 38, 24-57N LAT, 150-59W LONG, MAY 29, 1965, 1700 G.C.T.
DRY BULB 22.8 WET BULB 19.3 WIND SPEED 12, DIR. 09 BAR. 23 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	23.59	34.75			23.59	430.7	0	23.59	34.75	23.59	430.7	0.000
10	23.62	34.75			23.58	431.9	10	23.62	34.75	23.58	431.9	0.043
50	22.33	35.11			24.23	372.1	20	23.44	34.83	23.70	421.6	0.086
74	21.21	35.17			24.59	338.9	30	23.16	34.91	23.84	408.1	0.128
98	20.38	35.20			24.83	316.2	50	22.33	35.11	24.23	372.1	0.207
123	19.84	35.18			24.96	304.9	75	21.17	35.17	24.60	337.7	0.296
148	19.13	35.13			25.11	291.7	100	20.33	35.20	24.84	315.1	0.378
173	18.62	35.03			25.16	287.4	150	19.09	35.12	25.11	291.4	0.531
197	17.65	34.86			25.27	277.5	200	17.43	34.83	25.30	274.8	0.674
222	15.69	34.59			25.52	253.8	250	14.14	34.43	25.73	233.8	0.802
245	14.40	34.45			25.70	237.3	300	12.19	34.27	26.00	208.7	0.914
270	13.23	34.36			25.87	221.0	400	9.09	34.08	26.41	170.7	1.105
295	12.36	34.28			25.98	210.8	500	6.84	34.03	26.70	142.5	1.263
393	9.28	34.09			26.38	173.0	600	5.55	34.11	26.93	120.9	1.396
493	6.96	34.03			26.68	144.2	700	4.80	34.22	27.10	104.4	1.510
591	5.64	34.10			26.91	122.6	800	4.41	34.33	27.23	92.4	1.610
787	4.44	34.32			27.22	93.5	1000	4.07	34.48	27.38	79.5	1.783
985	4.11	34.47			27.38	80.3	1200	3.52	34.53	27.48	70.7	1.936
1157	3.63	34.52			27.46	72.3	1500	2.89	34.58	27.58	61.6	2.137
1453	2.98	34.57			27.57	62.9	2000	2.12	34.63	27.69	50.8	2.422
1970	2.15	34.63			27.69	51.2	2500	1.81	34.66	27.74	46.7	2.671
2476	1.82	34.66			27.74	46.9	3000	1.64	34.68	27.77	44.7	2.904
2981	1.64	34.68			27.76	44.7	4000	1.48	34.70	27.79	43.7	3.357
3989	1.50	34.70			27.79	44.2						
4998	1.50	34.70			27.79	46.8						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 16, STATION 39, 25- ON LAT, 154- 1W LONG, MAY 30, 1965, 1100 G.C.T. DRY BULB 21.7 WET BULB 19.7 WIND SPEED 18, DIR. 08 BAR. 24 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	23.43	35.05	4.94		23.87	404.6	0	23.43	35.05	23.87	404.6	0.000
10	23.42	35.04	5.03	0.39	23.86	405.4	10	23.42	35.04	23.86	405.4	0.041
52	22.28	35.12	5.29	0.53	24.25	370.1	20	23.26	35.05	23.92	400.8	0.081
77	21.30	35.20	5.28	0.65	24.58	339.2	30	23.03	35.06	23.99	393.8	0.121
101	20.83	35.24	5.08	0.58	24.74	325.0	50	22.36	35.11	24.22	372.7	0.199
153	19.33	35.15	4.95	0.31	25.07	295.4	75	21.37	35.19	24.56	341.5	0.289
176	18.77	35.07	5.11	0.38	25.15	288.3	100	20.85	35.24	24.74	325.4	0.373
205	17.16	34.78	4.65	0.83	25.33	272.2	150	19.42	35.16	25.05	296.8	0.529
228	15.25	34.52	4.63	0.74	25.57	249.6	200	17.51	34.84	25.29	275.8	0.674
252	14.04	34.41	4.56	1.45	25.74	233.1	250	14.13	34.42	25.73	234.3	0.802
278	12.69	34.30	4.58	0.97	25.93	215.2	300	11.82	34.20	26.02	206.7	0.913
303	11.72	34.19	4.68	0.78	26.03	205.7	400	9.09	34.08	26.40	170.9	1.104
404	8.97	34.08	4.29	1.66	26.42	169.0	500	5.95	34.02	26.81	131.4	1.257
449	6.85	34.03	3.00	1.81	26.70	142.1	600	5.52	34.09	26.92	121.6	1.384
570	5.74	34.06	1.73	2.76	26.86	126.6	700	4.91	34.23	27.10	105.3	1.499
722	4.80	34.26	0.71	3.26	27.13	101.7	800	4.53	34.35	27.24	92.2	1.599
876	4.34	34.43	0.90	3.22	27.32	85.0	1000	4.09	34.49	27.39	78.6	1.772
1032	4.03	34.50	0.99	3.26	27.41	77.5	1200	3.57	34.55	27.49	70.0	1.922
1274	3.39	34.54	1.26	3.30	27.50	68.8						

TEMPERATURE ERROR TERM AT 500. METERS IS 0.26

CROMWELL 16, STATION 40, 24-58N LAT, 156-56W LONG, MAY 31, 1965, 0200 G.C.T. DRY BULB 24.6 WET BULB 20.2 WIND SPEED 12, DIR. 10 BAR. 23 WEATHER 02 VIS. 8 CLOUD TYPE 1, COVER 5												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.13	34.77			23.45	444.4	0	24.13	34.77	23.45	444.4	0.000
10	24.24	34.76			23.41	448.7	10	24.24	34.76	23.41	448.7	0.045
20Δ	24.24	34.76			23.41	449.1	20	24.24	34.76	23.41	449.1	0.090
30Δ	24.24	34.76			23.41	449.5	30	24.24	34.76	23.41	449.5	0.135
49	23.15	34.71			23.69	423.3	50	23.11	34.72	23.71	421.6	0.223
75	22.04	34.95			24.19	376.8	75	22.04	34.95	24.19	376.8	0.324
100	20.38	34.96			24.65	333.6	100	20.38	34.96	24.65	333.6	0.413
124	18.66	34.81			24.98	302.7	150	17.24	34.68	25.23	279.6	0.568
149	17.33	34.69			25.22	280.9	200	13.29	34.31	25.82	223.9	0.695
173	15.13	34.45			25.54	250.5	250	10.96	34.18	26.16	191.9	0.799
198	13.39	34.32			25.81	225.2	300	9.23	34.09	26.39	170.5	0.891
223	12.26	34.24			25.97	210.1	400	7.45	34.09	26.66	145.3	1.050
248	11.06	34.18			26.15	193.4	500	5.99	34.11	26.88	125.0	1.187
273	9.90	34.13			26.31	177.8	600	5.23	34.23	27.06	108.3	1.304
298	9.27	34.09			26.38	171.0	700	4.72	34.33	27.20	95.3	1.407
397	7.50	34.09			26.65	146.0	800	4.35	34.41	27.30	85.6	1.499
496	6.03	34.11			26.87	125.8	1000	3.72	34.49	27.43	74.2	1.660
595	5.26	34.22			27.05	109.0	1200	3.26	34.54	27.52	66.7	1.803
794	4.37	34.41			27.30	86.1						
994	3.74	34.49			27.43	74.5						
1180	3.31	34.54			27.51	67.2						
1428	2.90	34.55			27.56	63.2						

CROMWELL 16, STATION 41, 23-30N LAT, 156-58W LONG, MAY 31, 1965, 1000 G.C.T. DRY BULB 22.2 WET BULB 20.5 WIND SPEED 18, DIR. 09 BAR. 23 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	23.80	34.76			23.54	435.9	0	23.80	34.76	23.54	435.9	0.000
10	24.02	34.75			23.47	443.2	10	24.02	34.75	23.47	443.2	0.044
20Δ	24.02	34.75			23.47	443.6	20	24.02	34.75	23.47	443.6	0.089
30Δ	24.02	34.75			23.47	443.9	30	24.02	34.75	23.47	443.9	0.134
51	22.48	34.98			24.09	385.5	50	22.57	34.97	24.05	389.0	0.218
75	21.13	35.10			24.55	341.9	75	21.13	35.10	24.55	341.9	0.310
99	20.12	35.12			24.84	315.4	100	20.05	35.11	24.85	314.3	0.392
123	18.49	34.91			25.10	291.3	150	17.28	34.74	25.27	276.0	0.541
149	17.35	34.75			25.26	277.0	200	13.78	34.35	25.75	231.1	0.669
171	15.70	34.57			25.50	253.9	250	10.93	34.16	26.15	192.5	0.776
196	14.06	34.37			25.71	234.9	300	9.31	34.11	26.39	170.1	0.867
220	12.44	34.25			25.94	212.6	400	7.05	34.04	26.68	143.5	1.025
245	11.12	34.17			26.13	195.1	500	5.54	34.09	26.91	121.3	1.159
268	10.34	34.14			26.24	184.3	600	4.74	34.21	27.10	103.5	1.272
292	9.54	34.12			26.36	173.0	700	4.42	34.33	27.23	92.0	1.371
386	7.32	34.04			26.64	146.9	800	4.26	34.42	27.32	84.0	1.460
483	5.74	34.07			26.87	124.8	1000	3.71	34.51	27.45	72.8	1.619
578	4.84	34.18			27.07	106.6	1200	3.22	34.55	27.53	65.3	1.759
770	4.34	34.40			27.30	86.3						
960	3.83	34.50			27.43	74.5						
1151	3.30	34.53			27.50	67.6						
1441	2.76	34.57			27.59	60.2						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA	DERIVED DATA	INTERPOLATED DATA
CROMWELL 16, STATION 42, 22- ON LAT, 156-59W LONG, MAY 31, 1965, 1900 G.C.T. DRY BULB 23.9 WET BULB 20.7 WIND SPEED 14, DIR. 10 BAR. 21 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 3		

OBSERVED DATA REJECTED DUE TO EQUIPMENT FAILURE

Table 2.--Original and derived oceanographic data for Townsend Cromwell cruise 17

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 17, STATION 1, 20-36N LAT, 157-14W LONG, JUNE 11, 1965, 0600 G.C.T.
DRY BULB 25.0 WET BULB 21.9 WIND SPEED 17, DIR. 05 BAR. 22 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.38	34.55			22.91	496.3	0	25.38	34.55	22.91	496.3	0.000
9	25.40	34.55			22.90	497.2	10	25.40	34.55	22.90	497.4	0.050
47	25.27	34.55			22.94	494.9	20	25.40	34.54	22.90	498.0	0.100
70	25.04	34.61			23.06	484.8	30	25.37	34.54	22.90	497.7	0.150
93	22.95	35.06			24.01	394.2	50	25.30	34.55	22.93	496.1	0.250
100Δ	22.74	35.10			24.10	385.8	75	24.57	34.71	23.27	464.2	0.371
116	22.41	35.16			24.24	373.1	100	22.74	35.10	24.10	385.8	0.478
139	21.00	35.15			24.63	337.2	150	20.46	35.12	24.75	326.0	0.658
162	19.82	35.06			24.87	314.4	200	17.36	34.78	25.28	276.9	0.810
186	17.87	34.84			25.20	283.8	250	12.73	34.31	25.93	214.6	0.934
209	16.97	34.73			25.33	271.7	300	10.38	34.17	26.26	183.4	1.034
232	14.42	34.44			25.68	238.1	400	8.18	34.17	26.62	150.1	1.202
256	12.26	34.28			26.00	208.0	500	6.30	34.22	26.92	121.1	1.339
279	11.06	34.20			26.16	192.6	600	5.53	34.33	27.10	104.2	1.453
372	8.88	34.17			26.51	160.4	700	5.08	34.42	27.23	93.3	1.553
466	6.74	34.19			26.84	128.9	800	4.80	34.47	27.30	87.0	1.644
560	5.78	34.29			27.04	110.0	1000	4.18	34.52	27.41	77.7	1.811
748	4.95	34.45			27.27	89.8	1200	3.56	34.56	27.50	69.0	1.959
938	4.41	34.50			27.37	81.3						
1130	3.69	34.55			27.48	70.6						
1428	2.96	34.58			27.58	61.7						

TEMPERATURE ERROR TERM AT 75. METERS IS 0.11
TEMPERATURE ERROR TERM AT 200. METERS IS 0.10
TEMPERATURE ERROR TERM AT 300. METERS IS 0.12

CROMWELL 17, STATION 2, 18-59N LAT, 156-59W LONG, JUNE 11, 1965, 1600 G.C.T.
DRY BULB 24.5 WET BULB 21.4 WIND SPEED 10, DIR. 18 BAR. 20 WEATHER 02 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	25.57	34.32			22.68	518.4	0	25.57	34.32	22.68	518.4	0.000
10	25.57	34.30			22.66	520.3	10	25.57	34.30	22.66	520.3	0.052
30Δ	25.57	34.30			22.66	521.1	20	25.57	34.30	22.66	520.9	0.105
51	25.59	34.31			22.66	521.8	30	25.57	34.30	22.66	521.1	0.157
77	25.01	34.54			23.01	489.3	50	25.59	34.31	22.66	522.0	0.262
103	23.46	34.94			23.78	417.4	75	25.08	34.52	22.97	493.1	0.390
128	21.96	35.03			24.27	370.8	100	23.66	34.90	23.68	426.0	0.506
154	21.62	35.18			24.48	351.9	150	21.64	35.16	24.46	353.7	0.702
179	21.13	35.13			24.61	339.9	200	19.99	35.10	24.86	316.9	0.871
205	19.64	35.07			24.93	310.7	250	15.24	34.49	25.55	252.1	1.015
231	17.53	34.76			25.22	283.1	300	12.13	34.26	26.01	207.7	1.131
255	14.66	34.43			25.63	244.5	400	8.94	34.22	26.53	158.5	1.316
281	13.02	34.32			25.88	220.2	500	6.71	34.22	26.86	127.0	1.460
306	11.88	34.25			26.05	204.3	600	5.75	34.31	27.06	108.9	1.579
406	8.80	34.22			26.56	156.1	700	5.19	34.39	27.19	96.7	1.683
510	6.54	34.22			26.89	124.6	800	4.77	34.45	27.29	87.9	1.776
611	5.70	34.32			27.07	107.4	1000	4.12	34.53	27.42	76.4	1.942
815	4.72	34.46			27.30	86.9	1200	3.60	34.57	27.50	68.7	2.089
1016	4.08	34.53			27.43	75.8	1500	2.87	34.61	27.61	59.0	2.284
1219	3.55	34.57			27.51	68.1						
1523	2.82	34.61			27.61	58.5						

CROMWELL 17, STATION 3, 17-30N LAT, 157- 0W LONG, JUNE 12, 1965, 0100 G.C.T.
DRY BULB 26.2 WET BULB 22.6 WIND SPEED 24, DIR. 07 BAR. 18 WEATHER 02 VIS. 7 CLOUD TYPE 6, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.40	34.44			22.82	504.8	0	25.40	34.44	22.82	504.8	0.000
10	25.39	34.44			22.82	504.9	10	25.39	34.44	22.82	504.9	0.051
50	25.40	34.43			22.81	507.5	20	25.39	34.44	22.82	505.5	0.102
76	25.39	34.44			22.82	507.5	30	25.39	34.43	22.82	506.2	0.153
99	25.33	34.43			22.83	507.4	50	25.40	34.43	22.81	507.5	0.255
124	22.69	34.82			23.91	405.6	75	25.39	34.44	22.82	507.5	0.383
149	19.89	34.82			24.67	333.1	100	25.25	34.45	22.87	504.0	0.510
174	18.18	34.78			25.08	295.0	150	19.81	34.82	24.69	331.1	0.720
199	16.72	34.61			25.30	274.4	200	16.61	34.60	25.32	272.8	0.873
225	13.97	34.35			25.71	235.3	250	12.44	34.27	25.96	212.1	0.995
249	12.49	34.27			25.95	212.8	300	10.67	34.30	26.31	178.9	1.094
275	11.38	34.23			26.13	196.0	400	9.09	34.51	26.74	139.2	1.254
300	10.67	34.30			26.31	178.9	500	7.71	34.46	26.91	123.4	1.387
400	9.09	34.51			26.74	139.2	600	6.83	34.48	27.05	110.7	1.505
500	7.71	34.46			26.91	123.4	700	6.11	34.50	27.16	100.9	1.612
601	6.82	34.48			27.06	110.6	800	5.51	34.51	27.25	93.2	1.710
799	5.52	34.51			27.25	93.3	1000	4.64	34.52	27.36	83.4	1.889
1001	4.64	34.52			27.36	83.4	1200	3.97	34.52	27.43	76.8	2.051
1201	3.97	34.52			27.43	76.8	1500	3.14	34.58	27.56	64.4	2.266
1503	3.13	34.58			27.56	64.3						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 17, STATION 4, 16- 0N LAT, 157- 0W LONG, JUNE 13, 1965, 0000 G.C.T. DRY BULB 25.0 WET BULB 22.5 WIND SPEED 24, DIR. 06 BAR. 17 WEATHER 01 VIS. 8 CLOUD TYPE 4, COVER 6												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.19	34.46			22.90	497.2	0	25.19	34.46	22.90	497.2	0.000
10	25.34	34.46			22.85	502.0	10	25.34	34.46	22.85	502.0	0.050
30Δ	25.31	34.46			22.86	501.9	20	25.36	34.46	22.85	503.0	0.101
51	25.16	34.46			22.91	498.4	30	25.31	34.46	22.86	501.9	0.152
77	23.08	34.72			23.72	421.7	50	25.18	34.46	22.90	499.2	0.252
102	21.80	34.95			24.26	371.4	75	23.26	34.70	23.65	428.5	0.369
126	20.18	34.97			24.71	328.7	100	21.90	34.94	24.22	374.9	0.470
153	19.24	34.93			24.93	309.1	150	19.38	34.94	24.90	311.4	0.643
177	16.34	34.60			25.38	265.9	200	13.60	34.32	25.76	229.7	0.780
203	13.30	34.29			25.80	225.8	250	11.56	34.38	26.21	187.8	0.885
229	12.00	34.27			26.04	203.2	300	10.69	34.48	26.44	166.2	0.974
254	11.50	34.40			26.24	185.2	400	9.98	34.63	26.69	144.7	1.131
280	10.86	34.44			26.38	171.5	500	8.72	34.60	26.87	128.8	1.269
306	10.67	34.49			26.46	165.1	600	7.65	34.55	26.99	117.4	1.393
406	9.93	34.64			26.70	143.6	700	6.79	34.53	27.09	108.3	1.508
508	8.61	34.59			26.88	127.7	800	6.07	34.51	27.18	100.6	1.613
609	7.57	34.55			27.00	116.5	1000	4.99	34.53	27.32	87.4	1.803
812	5.99	34.51			27.19	99.8	1200	4.32	34.56	27.42	78.4	1.971
1015	4.93	34.53			27.33	86.5	1500	3.42	34.59	27.54	67.3	2.193
1217	4.27	34.56			27.43	77.8						
1521	3.37	34.59			27.55	66.7						

CROMWELL 17, STATION 5, 14-30N LAT, 157- 1W LONG, JUNE 13, 1965, 1000 G.C.T. DRY BULB 24.7 WET BULB 22.0 WIND SPEED 23, DIR. 07 BAR. 17 WEATHER 02 VIS. 6 CLOUD TYPE 2, COVER 4												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.53	34.47			22.80	506.5	0	25.53	34.47	22.80	506.5	0.000
9	25.55	34.47			22.79	507.4	10	25.55	34.47	22.79	507.4	0.051
30Δ	25.54	34.47			22.80	507.9	20	25.55	34.47	22.80	507.7	0.102
47	25.57	34.47			22.79	509.5	30	25.54	34.47	22.80	507.9	0.153
50Δ	25.57	34.47			22.79	509.6	50	25.57	34.47	22.79	509.6	0.256
72	24.98	34.45			22.95	494.7	75	24.80	34.50	23.05	485.7	0.381
96	23.36	34.92			23.79	415.7	100	23.15	34.97	23.89	406.6	0.494
120	22.07	35.11			24.30	367.7	150	19.88	35.08	24.87	313.9	0.675
144	20.27	35.11			24.79	321.5	200	14.10	34.38	25.71	235.1	0.814
169	18.33	34.90			25.13	289.8	250	11.16	34.46	26.35	174.6	0.917
194	14.89	34.45			25.59	246.1	300	10.35	34.58	26.58	153.0	0.999
218	12.16	34.27			26.01	205.9	400	8.89	34.55	26.80	133.0	1.144
242	11.19	34.39			26.29	180.1	500	7.85	34.54	26.96	119.4	1.271
266	11.16	34.58			26.44	166.2	600	6.77	34.50	27.08	108.6	1.386
290	10.55	34.58			26.55	156.0	700	6.06	34.50	27.17	100.3	1.492
387	9.03	34.55			26.78	135.1	800	5.53	34.51	27.25	93.1	1.590
485	8.03	34.55			26.94	121.3	1000	4.56	34.54	27.38	80.7	1.765
582	6.92	34.50			27.06	110.3	1200	3.84	34.57	27.48	71.8	1.920
778	5.65	34.51			27.23	94.8						
973	4.67	34.54			27.37	82.0						
1169	3.97	34.56			27.46	73.6						
1464	3.21	34.60			27.57	63.6						

CROMWELL 17, STATION 6, 13- 1N LAT, 157- 1W LONG, JUNE 13, 1965, 1800 G.C.T. DRY BULB 24.9 WET BULB 22.1 WIND SPEED 25, DIR. 07 BAR. 15 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	26.08	34.60			22.73	513.4	0	26.08	34.60	22.73	513.4	0.000
9	26.10	34.60			22.72	514.3	10	26.10	34.60	22.72	514.4	0.052
49	26.11	34.59			22.71	516.9	20	26.11	34.60	22.72	515.3	0.104
74	26.11	34.60			22.72	517.2	30	26.11	34.59	22.71	516.0	0.156
98	26.09	34.60			22.73	517.6	50	26.11	34.59	22.71	517.0	0.260
122	24.02	34.64			23.38	455.4	75	26.13	34.60	22.71	517.9	0.390
147	18.61	34.63			24.86	315.3	100	26.02	34.60	22.75	515.2	0.520
171	14.31	34.41			25.68	236.3	150	17.97	34.60	24.99	302.2	0.726
195	12.73	34.36			25.97	209.4	200	12.32	34.34	26.04	203.1	0.853
220	10.98	34.32			26.27	181.0	250	10.68	34.50	26.47	163.0	0.946
245	10.72	34.48			26.44	165.3	300	10.11	34.58	26.63	148.4	1.024
269	10.53	34.57			26.54	156.0	400	9.07	34.60	26.82	131.9	1.166
294	10.17	34.58			26.61	149.6	500	7.67	34.54	26.98	117.3	1.291
391	9.20	34.61			26.80	133.4	600	6.67	34.51	27.10	106.3	1.404
490	7.79	34.54			26.96	118.5	700	5.84	34.51	27.21	96.0	1.507
587	6.79	34.51			27.08	107.8	800	5.20	34.53	27.30	87.5	1.599
783	5.29	34.53			27.29	88.6	1000	4.41	34.56	27.42	77.3	1.766
980	4.48	34.56			27.41	78.2	1200	3.74	34.58	27.50	69.3	1.915
1177	3.81	34.58			27.49	70.2						
1474	3.08	34.60			27.58	62.0						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 17, STATION 7, 11-29N LAT, 156-59W LONG, JUNE 14, 1965, 0400 G.C.T.
DRY BULB 26.1 WET BULB 22.7 WIND SPEED 23, DIR. 06 BAR. 12 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.10	34.65			22.76	510.4	0	26.10	34.65	22.76	510.4	0.000
9	26.12	34.65			22.75	511.3	10	26.12	34.65	22.75	511.4	0.051
49	26.05	34.64			22.77	511.6	20	26.11	34.65	22.75	511.8	0.103
75	26.02	34.65			22.78	511.0	30	26.10	34.64	22.76	511.9	0.155
100	24.82	34.63			23.14	478.2	50	26.06	34.64	22.77	511.9	0.258
125	16.91	34.58			25.23	278.5	75	26.02	34.65	22.78	511.0	0.387
151	13.09	34.44			25.96	209.3	100	24.82	34.63	23.14	478.2	0.511
175	12.08	34.65			26.32	175.5	150	13.17	34.44	25.95	210.7	0.685
201	11.54	34.74			26.49	159.7	200	11.55	34.74	26.49	160.0	0.778
225	11.12	34.72			26.55	154.2	250	10.78	34.73	26.62	148.2	0.856
251	10.77	34.73			26.63	147.9	300	10.18	34.71	26.71	140.3	0.929
277	10.42	34.72			26.68	143.2	400	9.28	34.68	26.84	129.8	1.065
301	10.17	34.71			26.72	140.2	500	8.36	34.63	26.95	120.6	1.191
330	9.97	34.69			26.73	139.0	600	7.41	34.60	27.06	110.5	1.308
400	9.28	34.68			26.84	129.8	700	6.54	34.57	27.17	101.2	1.415
503	8.33	34.63			26.95	120.3	800	5.76	34.56	27.26	92.8	1.513
805	5.72	34.56			27.26	92.3	1000	4.73	34.56	27.38	81.7	1.689
1006	4.71	34.56			27.38	81.4	1200	3.96	34.58	27.48	72.3	1.845
1206	3.94	34.58			27.48	72.1	1500	3.13	34.61	27.58	62.2	2.050
1507	3.12	34.61			27.58	62.0						

CROMWELL 17, STATION 7A, 10- 1N LAT, 154- 1W LONG, JUNE 15, 1965, 0100 G.C.T.
DRY BULB 25.5 WET BULB 24.2 WIND SPEED 24, DIR. 07 BAR. 11 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	26.96	34.72	4.83		22.54	531.3	0	26.96	34.72	22.54	531.3	0.000
9	26.94	34.72	4.96	0.22	22.55	531.0	10	26.94	34.72	22.55	531.0	0.054
30Δ	26.91	34.71			22.55	531.7	20	26.92	34.71	22.55	531.3	0.107
50	26.89	34.71	4.78	0.30	22.56	531.9	30	26.91	34.71	22.55	531.7	0.161
75	25.56	34.66	4.95	0.30	22.93	496.6	50	26.89	34.71	22.56	531.9	0.268
100	20.05	34.67	4.63	0.50	24.52	346.2	75	25.56	34.66	22.93	496.6	0.397
125	15.37	34.49	3.73	0.90	25.52	251.3	100	20.05	34.67	24.52	346.2	0.503
152	11.45	34.32	2.44	1.90	26.18	187.7	150	11.65	34.32	26.15	191.2	0.639
175	11.48	34.71	0.24	2.53	26.48	160.2	200	11.07	34.74	26.58	151.3	0.725
203	11.01	34.73	0.29	2.37	26.58	151.0	250	10.45	34.75	26.70	141.0	0.799
226	10.74	34.73	0.31	2.27	26.63	146.9	300	9.92	34.73	26.77	134.6	0.868
251	10.44	34.75	0.34	2.54	26.70	140.8	400	9.14	34.69	26.87	126.7	1.000
277	10.15	34.73	0.38	3.46	26.73	137.9	500	8.21	34.63	26.97	118.3	1.124
302	9.90	34.73	0.42	2.50	26.78	134.3	600	7.18	34.58	27.09	108.2	1.238
403	9.12	34.69	0.30	2.13	26.88	126.5	700	6.37	34.54	27.16	101.2	1.344
503	8.18	34.63	0.33	2.66	26.98	118.0	800	5.71	34.52	27.23	95.0	1.443
605	7.13	34.58	0.53	2.52	27.09	107.8	1000	4.61	34.57	27.40	79.5	1.620
806	5.67	34.52	0.76	2.32	27.24	94.6	1200	3.83	34.59	27.50	70.0	1.771
1008	4.57	34.57	1.06	3.31	27.40	78.9	1500	3.04	34.62	27.60	60.3	1.969
1210	3.80	34.59	1.41	2.52	27.50	69.6						
1513	3.02	34.62	1.81	2.77	27.60	60.1						

CROMWELL 17, STATION 8, 11-31N LAT, 153-58W LONG, JUNE 15, 1965, 1100 G.C.T.
DRY BULB 24.6 WET BULB 22.1 WIND SPEED 24, DIR. 06 BAR. 14 WEATHER 02 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	26.16	34.67	4.90		22.76	510.7	0	26.16	34.67	22.76	510.7	0.000
9	26.31	34.67	4.93	0.25	22.71	515.6	10	26.32	34.67	22.71	515.8	0.052
30Δ	26.31	34.65			22.69	517.9	20	26.34	34.66	22.69	517.5	0.104
45	26.31	34.63	4.84	0.29	22.68	519.9	30	26.31	34.65	22.69	517.9	0.156
69	26.36	34.67	4.83	0.34	22.69	519.5	50	26.33	34.64	22.68	519.7	0.260
75Δ	26.34	34.65			22.68	520.6	75	26.34	34.65	22.68	520.6	0.391
90	18.70	34.49	4.07	0.72	24.73	325.7	100	16.03	34.45	25.33	268.0	0.491
113	14.19	34.42	2.86	2.12	25.72	231.5	150	11.69	34.35	26.16	189.7	0.606
136	12.49	34.36	2.53	1.80	26.02	203.4	200	10.26	34.52	26.55	153.7	0.693
159	11.26	34.36	1.93	1.68	26.25	181.6	250	9.99	34.64	26.69	141.3	0.767
181	10.39	34.42	1.57	2.10	26.45	162.7	300	9.51	34.67	26.80	132.2	0.836
204	10.27	34.54	0.88	1.79	26.57	152.3	400	8.28	34.61	26.94	119.3	0.963
227	10.24	34.65	0.40	2.17	26.66	144.2	500	7.30	34.57	27.06	109.5	1.078
250	9.99	34.64	0.35	2.24	26.69	141.3	600	6.49	34.55	27.15	101.0	1.184
273	9.82	34.67	0.34	2.49	26.74	136.7	700	5.85	34.55	27.24	93.7	1.283
363	8.70	34.63	0.40	2.58	26.90	123.5	800	5.34	34.56	27.30	87.6	1.374
456	7.70	34.58	0.50	2.79	27.01	113.7	1000	4.52	34.58	27.42	77.5	1.542
731	5.68	34.55	0.95	2.65	27.26	91.6	1200	3.86	34.60	27.50	69.5	1.690
917	4.86	34.57	1.06	3.12	27.37	81.6						
1105	4.13	34.59	1.30	2.51	27.47	72.8						
1397	3.38	34.62	1.64	3.01	27.57	63.7						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.24

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 17, STATION 9, 12-56N LAT, 154- 1W LONG, JUNE 15, 1965, 2100 G.C.T. DRY BULB 25.2 WET BULB 21.0 WIND SPEED 21, DIR. 05 BAR. 16 WEATHER 03 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	25.93	34.77	4.93		22.90	496.7	0	25.93	34.77	22.90	496.7	0.000
9	25.92	34.78	4.93	0.26	22.91	496.0	10	25.91	34.78	22.92	495.6	0.050
30Δ	25.91	34.78			22.92	496.6	20	25.84	34.78	22.94	493.8	0.100
47	26.81	34.78	4.84	0.31	22.63	524.3	30	25.91	34.78	22.92	496.6	0.150
72	25.48	34.64	4.89	0.31	22.94	495.6	50	26.71	34.76	22.65	522.4	0.252
95	25.19	34.64	4.90	0.27	23.03	488.0	75	25.44	34.63	22.95	495.1	0.380
100Δ	25.00	34.65			23.10	482.0	100	25.00	34.65	23.10	482.0	0.504
118	21.52	34.85	4.97	0.34	24.26	371.8	150	15.17	34.48	25.56	248.2	0.688
143	16.46	34.55	3.55	1.09	25.31	271.2	200	10.89	34.46	26.40	168.5	0.793
166	12.72	34.38	2.31	1.81	25.99	207.0	250	10.64	34.68	26.61	149.6	0.873
190	11.02	34.40	1.78	2.23	26.32	175.2	300	10.15	34.68	26.69	142.4	0.946
215	10.94	34.57	0.69	2.21	26.47	161.8	400	9.05	34.63	26.84	130.0	1.084
238	10.75	34.66	0.36	2.57	26.58	152.4	500	7.72	34.56	26.99	116.3	1.208
262	10.52	34.68	0.26	2.71	26.63	147.5	600	6.87	34.52	27.08	108.0	1.321
285	10.29	34.68	0.25	2.46	26.67	144.1	700	6.00	34.52	27.19	98.0	1.426
381	9.33	34.64	0.25	2.46	26.80	133.1	800	5.32	34.53	27.28	89.4	1.520
477	7.94	34.57	0.34	3.10	26.97	118.3	1000	4.54	34.56	27.40	79.0	1.691
572	7.13	34.53	0.47	2.72	27.05	110.9	1200	3.85	34.58	27.49	71.3	1.843
763	5.51	34.52	0.50	2.67	27.26	92.0						
955	4.71	34.56	0.94	3.18	27.38	80.8						
1147	4.02	34.56	1.23	3.13	27.46	74.0						
1438	3.21	34.59	1.59	3.13	27.56	64.1						

CROMWELL 17, STATION 10, 14-30N LAT, 154- 1W LONG, JUNE 16, 1965, 1000 G.C.T. DRY BULB 25.0 WET BULB 22.0 WIND SPEED 25, DIR. 06 BAR. 16 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	25.60	34.56	4.88		22.85	502.0	0	25.60	34.56	22.85	502.0	0.000
9	25.70	34.56	5.04	0.26	22.82	505.3	10	25.70	34.56	22.82	505.5	0.051
20Δ	25.71	34.56			22.81	506.1	20	25.71	34.56	22.81	506.1	0.102
50	25.73	34.56	4.88	0.25	22.81	507.9	30	25.72	34.56	22.81	506.7	0.153
75	25.73	34.56	4.87	0.23	22.81	508.8	50	25.73	34.56	22.81	507.9	0.255
99	25.29	34.57	4.87	0.29	22.95	496.1	75	25.73	34.56	22.81	508.8	0.383
124	20.60	34.62	4.75	0.50	24.33	364.7	100	25.14	34.57	23.00	491.5	0.509
151	16.25	34.51	3.62	1.62	25.33	269.7	150	16.39	34.52	25.31	272.3	0.701
174	13.79	34.34	3.48	1.89	25.74	231.0	200	11.69	34.28	26.11	196.4	0.820
198	11.83	34.28	2.87	1.72	26.08	198.6	250	9.97	34.40	26.51	158.3	0.909
224	10.45	34.29	2.39	2.05	26.34	174.2	300	9.56	34.50	26.66	145.5	0.986
249	9.98	34.40	1.51	2.31	26.51	158.8	400	8.66	34.59	26.87	126.5	1.123
274	9.70	34.46	0.97	2.11	26.60	150.2	500	7.69	34.56	26.99	115.8	1.245
299	9.57	34.50	0.87	2.22	26.65	145.7	600	6.89	34.55	27.10	106.4	1.357
399	8.67	34.59	0.38	2.65	26.87	126.7	700	6.31	34.54	27.17	100.3	1.462
499	7.70	34.56	0.56	2.95	26.99	115.9	800	5.71	34.54	27.25	93.3	1.560
600	6.89	34.55	0.37	2.40	27.10	106.4	1000	4.48	34.56	27.41	78.3	1.733
771	5.92	34.54	0.65	2.53	27.22	96.1	1200	3.70	34.58	27.50	69.2	1.883
934	4.78	34.56	0.85	3.18	27.37	81.5						
1100	4.11	34.56	1.03	3.18	27.45	74.7						
1351	3.37	34.60	1.37	3.06	27.55	64.7						

CROMWELL 17, STATION 11, 15-59N LAT, 154- 1W LONG, JUNE 16, 1965, 1800 G.C.T. DRY BULB 24.5 WET BULB 21.5 WIND SPEED 18, DIR. 05 BAR. 17 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	25.03	34.48	4.94		22.96	491.1	0	25.03	34.48	22.96	491.1	0.000
10	25.29	34.48	5.20	0.27	22.88	499.1	10	25.29	34.48	22.88	499.1	0.050
30Δ	25.30	34.48			22.88	500.2	20	25.34	34.48	22.87	500.9	0.100
48	25.31	34.49	4.89	0.26	22.88	500.5	30	25.30	34.48	22.88	500.2	0.151
50Δ	25.31	34.48			22.88	501.3	50	25.31	34.48	22.88	501.3	0.252
74	25.31	34.48	4.89	0.26	22.88	502.2	75	25.27	34.49	22.89	500.8	0.378
97	23.87	34.64	5.16	0.28	23.43	450.2	100	23.53	34.67	23.55	438.9	0.496
121	21.19	34.84	5.14	0.28	24.34	363.9	150	19.59	34.95	24.85	316.3	0.686
147	19.77	34.95	4.76	0.32	24.80	320.6	200	15.39	34.50	25.52	252.9	0.830
170	18.18	34.85	4.43	0.49	25.13	289.8	250	11.87	34.24	26.05	203.3	0.945
195	15.90	34.56	4.28	0.75	25.45	259.7	300	10.12	34.29	26.40	169.9	1.039
218	13.70	34.34	3.86	0.88	25.76	230.4	400	8.46	34.43	26.77	135.4	1.193
242	12.27	34.25	3.67	1.81	25.97	210.0	500	7.32	34.45	26.96	118.2	1.321
267	11.14	34.25	2.74	1.87	26.19	190.1	600	6.56	34.46	27.08	108.3	1.435
291	10.34	34.28	2.52	1.80	26.35	174.5	700	5.87	34.48	27.18	99.0	1.540
387	8.65	34.42	0.84	2.25	26.74	138.6	800	5.29	34.49	27.26	91.6	1.637
484	7.46	34.45	0.55	2.83	26.94	120.2	1000	4.48	34.52	27.37	81.5	1.812
582	6.70	34.46	0.49	3.29	27.06	110.1	1200	3.80	34.55	27.47	72.2	1.967
777	5.40	34.49	0.76	2.70	27.25	92.9						
971	4.58	34.51	0.76	2.70	27.36	83.0						
1167	3.93	34.56	1.08	2.83	27.47	73.1						
1463	3.09	34.59	1.51	3.16	27.57	62.8						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 17, STATION 12, 17-30N LAT, 154- 1W LONG, JUNE 17, 1965, 0400 G.C.T. DRY BULB 23.0 WET BULB 20.3 WIND SPEED 20, DIR. 07 BAR. 16 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	24.91	34.48	5.00		23.00	487.7	0	24.91	34.48	23.00	487.7	0.000
9	24.91	34.48	5.32	0.19	23.00	488.0	10	24.91	34.48	23.00	488.1	0.049
30Δ	24.90	34.48			23.00	488.6	20	24.91	34.48	23.00	488.4	0.098
50	24.82	34.47	5.00	0.21	23.02	487.7	30	24.90	34.48	23.00	488.6	0.148
75	23.93	34.58	5.23	0.18	23.37	455.4	50	24.82	34.47	23.02	487.7	0.246
99	23.14	34.90	5.22	0.30	23.84	411.2	75	23.93	34.58	23.37	455.4	0.365
124	22.26	35.03	5.08	0.18	24.19	378.7	100	23.11	34.91	23.85	409.8	0.474
150	21.16	35.16	4.84	0.26	24.59	341.1	150	21.16	35.16	24.59	341.1	0.663
174	19.82	35.09	4.70	0.31	24.90	312.7	200	18.18	34.89	25.16	288.2	0.821
199	18.28	34.90	4.50	0.48	25.14	289.6	250	13.68	34.38	25.79	228.1	0.952
223	15.82	34.58	4.44	0.61	25.48	257.3	300	11.10	34.27	26.21	188.8	1.057
248	13.82	34.39	3.86	1.06	25.77	230.0	400	7.95	34.20	26.68	144.3	1.225
273	12.23	34.27	3.46	2.27	26.00	208.6	500	6.40	34.28	26.96	117.8	1.357
297	11.22	34.27	3.07	1.78	26.19	190.7	600	5.84	34.38	27.10	105.0	1.470
395	8.06	34.20	2.30	2.38	26.66	146.0	700	5.23	34.43	27.22	94.4	1.570
495	6.44	34.28	1.18	2.95	26.95	118.6	800	4.72	34.46	27.30	86.4	1.662
592	5.89	34.37	0.82	3.00	27.09	105.9	1000	4.16	34.52	27.41	77.1	1.827
790	4.75	34.46	0.88	2.68	27.30	87.0	1200	3.54	34.56	27.51	68.3	1.974
987	4.20	34.52	1.17	3.18	27.41	77.7						
1184	3.53	34.56	1.33	3.11	27.51	68.3						
1483	2.81	34.60	1.67	3.26	27.60	58.8						

CROMWELL 17, STATION 13, 19- 4N LAT, 154- 3W LONG, JUNE 17, 1965, 1300 G.C.T. DRY BULB 23.5 WET BULB 20.5 WIND SPEED 14, DIR. 07 BAR. 19 WEATHER 02 VIS. 7 CLOUD TYPE 5, COVER 1												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.38	34.55	5.04		23.21	467.4	0	24.38	34.55	23.21	467.4	0.000
11	24.39	34.55	5.25	0.26	23.21	468.1	10	24.39	34.55	23.21	468.1	0.047
30Δ	24.38	34.55			23.21	468.6	20	24.39	34.55	23.20	468.6	0.094
49	24.26	34.56	5.06	0.25	23.25	465.2	30	24.38	34.55	23.21	468.6	0.141
73	23.12	34.60	5.20	0.25	23.62	431.3	50	24.21	34.56	23.27	463.8	0.235
75Δ	23.08	34.61			23.64	429.5	75	23.08	34.61	23.64	429.5	0.348
96	22.96	34.85	5.16	0.18	23.85	409.7	100	22.88	34.88	23.90	405.3	0.453
120	22.27	35.02	5.11	0.27	24.18	379.6	150	20.85	35.16	24.68	333.0	0.639
145	21.11	35.18	4.98	0.21	24.62	338.2	200	18.22	34.89	25.15	288.8	0.796
169	19.85	35.04	4.78	0.33	24.85	316.9	250	13.96	34.34	25.70	236.8	0.928
193	18.69	34.95	4.58	0.43	25.08	295.6	300	11.01	34.16	26.14	195.0	1.037
216	16.96	34.72	4.43	0.54	25.33	272.4	400	8.13	34.13	26.59	152.2	1.212
240	14.70	34.42	4.06	1.11	25.61	245.6	500	6.33	34.21	26.91	122.4	1.351
265	12.98	34.25	4.24	1.02	25.84	224.1	600	5.75	34.35	27.09	105.4	1.466
288	11.54	34.18	4.28	1.23	26.06	202.8	700	5.22	34.42	27.22	94.5	1.567
384	8.55	34.13	2.92	2.02	26.53	158.4	800	4.80	34.46	27.29	87.6	1.659
480	6.52	34.18	1.38	2.73	26.86	126.9	1000	4.17	34.52	27.41	77.4	1.826
576	5.89	34.33	0.74	3.01	27.06	108.7	1200	3.58	34.56	27.50	68.9	1.974
769	4.91	34.45	0.71	3.18	27.27	89.5						
962	4.29	34.51	0.96	3.05	27.39	79.3						
1156	3.69	34.56	1.11	3.16	27.49	70.0						
1450	2.97	34.58	1.47	3.09	27.57	62.0						

CROMWELL 17, STATION 14, 20-29N LAT, 154- 2W LONG, JUNE 17, 1965, 2100 G.C.T. DRY BULB 24.8 WET BULB 20.8 WIND SPEED 15, DIR. 05 BAR. 20 WEATHER 03 VIS. 8 CLOUD TYPE 8, COVER 5												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.92	34.44	5.02		22.96	490.8	0	24.92	34.44	22.96	490.8	0.000
10	24.99	34.44	5.28	0.24	22.94	493.3	10	24.99	34.44	22.94	493.3	0.050
30Δ	24.98	34.44			22.95	493.8	20	25.00	34.44	22.94	493.8	0.099
50	24.96	34.43	5.02	0.24	22.94	494.7	30	24.98	34.44	22.95	493.8	0.149
76	24.13	34.78	5.24	0.13	23.46	446.7	50	24.96	34.43	22.94	494.7	0.249
100	22.44	35.02	5.25	0.13	24.13	383.4	75	24.18	34.76	23.43	449.2	0.367
126	21.37	35.16	5.05	0.37	24.53	345.7	100	22.44	35.02	24.13	383.4	0.472
151	21.09	35.21	4.93	0.22	24.65	335.7	150	21.10	35.21	24.65	335.9	0.654
176	20.19	35.14	4.58	0.26	24.84	318.5	200	19.30	35.04	24.99	304.1	0.815
202	19.21	35.03	4.61	0.40	25.01	302.8	250	14.97	34.49	25.61	246.3	0.954
227	17.52	34.80	4.55	0.46	25.25	279.8	300	10.99	34.13	26.12	197.2	1.066
251	14.86	34.48	4.56	0.60	25.62	244.9	400	8.50	34.17	26.57	154.7	1.243
277	12.90	34.29	4.36	1.00	25.88	219.9	500	6.92	34.22	26.84	129.8	1.387
301	10.91	34.12	4.40	1.19	26.13	196.3	600	5.89	34.30	27.03	111.5	1.509
402	8.50	34.18	2.66	2.10	26.58	154.3	700	5.33	34.38	27.17	99.0	1.615
503	6.88	34.22	1.38	2.66	26.84	129.2	800	4.97	34.46	27.27	90.2	1.711
604	5.86	34.30	0.79	3.00	27.04	110.9	1000	4.28	34.53	27.40	78.3	1.881
806	4.96	34.46	0.87	3.05	27.27	89.8	1200	3.71	34.55	27.48	71.4	2.033
1008	4.26	34.53	1.10	3.07	27.41	77.9	1500	2.98	34.60	27.59	61.1	2.234
1208	3.69	34.55	1.24	3.07	27.48	71.2						
1512	2.96	34.60	1.56	3.76	27.59	60.8						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 17, STATION 15, 22- ON LAT, 153-58W LONG, JUNE 18, 1965, 0700 G.C.T. DRY BULB 24.0 WET BULB 21.2 WIND SPEED 17, DIR. 09 BAR. 2C 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	24.96	34.71	5.02		23.16	472.5	0	24.96	34.71	23.16	472.5	0.000
10	25.01	34.73	5.08	0.34	23.16	472.9	10	25.01	34.73	23.16	472.9	0.048
30Δ	24.80	34.73			23.22	467.7	20	25.02	34.72	23.15	474.0	0.095
50	23.20*	34.88	5.21	0.18	23.81	412.4	30	24.80	34.73	23.22	467.7	0.143
62	22.12	35.11	5.27	0.18	24.29	366.9	50	23.20	34.88	23.81	412.4	0.231
87	21.29	35.18	5.09	0.16	24.57	340.7	75	21.56	35.19	24.50	347.1	0.327
111	20.57	35.17	4.92	0.22	24.76	323.7	100	20.92	35.19	24.68	331.1	0.412
137	19.41	35.04	4.59	0.60	24.97	304.8	150	18.91	35.00	25.06	295.7	0.570
161	18.46	34.96	4.79	0.50	25.15	288.3	200	16.12	34.62	25.45	260.5	0.711
186	17.14	34.76	4.73	0.41	25.32	272.6	250	13.18	34.29	25.83	224.3	0.833
210	15.38	34.52	4.52	0.56	25.54	251.8	300	11.01	34.13	26.12	197.1	0.939
234	14.02	34.37	4.54	0.69	25.72	235.1	400	8.51	34.05	26.48	163.7	1.121
258	12.77	34.26	4.52	0.83	25.88	219.1	500	6.45	34.07	26.78	134.1	1.271
281	11.66	34.17	4.50	1.15	26.03	205.6	600	5.35	34.24	27.06	108.6	1.394
375	9.14	34.09	4.42	1.22	26.40	171.2	700	4.88	34.36	27.21	94.9	1.497
468	7.00*	34.03	2.93	2.11	26.68	144.4	800	4.62	34.44	27.30	86.7	1.588
558	5.67	34.18	1.15	2.89	26.97	116.7	1000	4.07	34.52	27.42	76.2	1.753
739	4.81	34.40	0.79	3.15	27.24	91.6	1200	3.58	34.57	27.51	68.2	1.900
921	4.30	34.50	0.98	2.92	27.38	79.8						
1103	3.79	34.54	1.20		27.46	72.3						
1380	3.20*	34.59	1.52	3.00	27.56	63.6						

CROMWELL 17, STATION 16, 23-29N LAT, 154- OW LONG, JUNE 18, 1965, 1600 G.C.T. DRY BULB 23.7 WET BULB 21.1 WIND SPEED 12, DIR. 08 BAR. 2C 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	24.41	34.77	4.92		23.37	452.4	0	24.41	34.77	23.37	452.4	0.000
10	24.42	34.76	5.30	0.26	23.36	453.8	10	24.42	34.76	23.36	453.8	0.046
20Δ	24.42	34.77			23.36	453.5	20	24.42	34.77	23.36	453.5	0.091
30Δ	24.42	34.77			23.36	453.9	30	24.42	34.77	23.36	453.9	0.137
50	22.79	35.07	5.40	0.21	24.07	387.5	50	22.79	35.07	24.07	387.5	0.222
74	21.62	35.18	5.23	0.22	24.48	349.0	75	21.59	35.18	24.49	348.0	0.314
98	20.99	35.21	5.20		24.68	331.2	100	20.94	35.21	24.69	329.8	0.400
123	20.28	35.20	5.03	0.18	24.86	314.5	150	19.20	35.10	25.06	296.0	0.557
148	19.25	35.10	4.81	0.28	25.05	296.9	200	16.65	34.70	25.39	265.9	0.699
171	18.57	35.02	5.00		25.16	286.9	250	14.45	34.45	25.68	238.6	0.826
196	16.93	34.74	4.68	0.51	25.35	269.6	300	11.62	34.19	26.05	204.1	0.938
221	15.36	34.56	4.65	0.61	25.57	248.8	400	8.60	34.10	26.49	162.0	1.123
245	14.67	34.47	4.73	0.62	25.65	241.5	500	6.72	34.09	26.76	136.5	1.273
270	13.39	34.35	4.73	1.24	25.83	224.9	600	5.42	34.15	26.97	116.5	1.401
293	11.95	34.21	4.33	0.79	26.00	208.2	700	4.90	34.27	27.13	101.9	1.511
391	8.81	34.10	3.89	1.82	26.46	164.8	800	4.69	34.39	27.25	91.3	1.609
489	6.91	34.09	2.25	2.42	26.74	139.0	1000	4.08	34.49	27.39	78.7	1.781
586	5.52	34.13	1.26	2.81	26.95	118.8	1200	3.56	34.56	27.50	69.2	1.931
782	4.75	34.38	0.76	3.11	27.23	92.8						
979	4.14	34.48	1.42	2.96	27.38	79.9						
1173	3.64	34.55	1.21	3.12	27.49	70.3						
1469	2.98	34.59	1.48	2.94	27.58	61.5						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.10

CROMWELL 17, STATION 17, 23-29N LAT, 151- OW LONG, JUNE 19, 1965, 1000 G.C.T. DRY BULB 23.0 WET BULB 20.0 WIND SPEED 22, DIR. 09 BAR. 22 WEATHER 02 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	24.23	34.73			23.39	450.2	0	24.23	34.73	23.39	450.2	0.000
9	24.25	34.74			23.39	450.4	10	24.23	34.74	23.40	449.6	0.045
49	22.82	34.96			23.98	396.2	20	23.98	34.78	23.50	440.0	0.090
73	21.94	35.11			24.34	362.5	30	23.66	34.84	23.64	427.6	0.134
97	21.35	35.19			24.56	342.0	50	22.78	34.97	23.99	394.6	0.217
123	20.84	35.21			24.72	328.2	75	21.88	35.12	24.36	360.4	0.312
148	20.10	35.17			24.88	313.0	100	21.29	35.20	24.58	340.2	0.400
171	19.30	35.10			25.04	298.9	150	20.04	35.17	24.90	311.9	0.564
195	18.09	34.94			25.22	282.0	200	17.82	34.89	25.25	279.2	0.713
220	16.56	34.69			25.40	265.6	250	14.17	34.42	25.72	234.9	0.843
244	14.53	34.45			25.67	240.0	300	12.04	34.26	26.02	206.7	0.954
268	13.29	34.36			25.86	222.2	400	8.62	34.06	26.46	165.1	1.142
292	12.36	34.28			25.98	210.7	500	6.55	34.04	26.74	138.1	1.295
389	8.92	34.07			26.42	168.7	600	5.46	34.14	26.96	117.6	1.424
488	6.73	34.03			26.71	141.0	700	4.85	34.25	27.12	102.6	1.535
584	5.59	34.12			26.93	120.4	800	4.52	34.36	27.24	91.7	1.634
779	4.58	34.34			27.22	93.7	1000	4.05	34.49	27.40	78.3	1.806
973	4.13	34.48			27.38	79.7	1200	3.55	34.55	27.50	69.1	1.955
1168	3.58	34.53			27.48	71.0						
1461	2.96	34.58			27.58	62.0						

TEMPERATURE ERROR TERM AT 30. METERS IS 0.10

ΔFROM BT DATA
*INTERPOLATED DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 17, STATION 18, 22- 1N LAT, 150-56W LONG, JUNE 19, 1965, 1900 G.C.T.
DRY BULB 23.0 WET BULB 20.8 WIND SPEED 22, DIR. 07 BAR. 20 WEATHER 15 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	24.14	34.69			23.39	450.5	0	24.14	34.69	23.39	450.5	0.000
10	24.15	34.69			23.38	451.2	10	24.15	34.69	23.38	451.2	0.045
20Δ	24.14	34.69			23.39	451.3	20	24.14	34.69	23.39	451.3	0.091
49	22.79	34.92			23.95	398.2	30	23.79	34.74	23.53	437.8	0.136
73	21.65	35.18			24.47	349.7	50	22.74	34.93	23.98	396.0	0.220
97	20.96	35.24			24.71	328.2	75	21.58	35.19	24.50	347.2	0.313
121	20.46	35.21			24.82	318.3	100	20.90	35.24	24.72	326.8	0.398
146	19.53	35.13			25.00	301.6	150	19.37	35.11	25.03	299.2	0.556
169	18.52	34.99			25.15	287.8	200	16.59	34.71	25.41	264.3	0.698
194	17.06	34.78			25.35	269.6	250	12.82	34.26	25.88	219.6	0.820
218	15.12	34.50			25.58	248.0	300	10.67	34.15	26.19	190.1	0.923
242	13.40	34.32			25.80	226.6	400	7.99	34.11	26.60	151.9	1.096
266	11.81	34.18			26.01	207.2	500	6.14	34.19	26.92	121.1	1.233
289	11.02	34.16			26.14	195.0	600	5.45	34.27	27.07	107.5	1.349
386	8.34	34.10			26.54	157.5	700	4.92	34.38	27.21	94.2	1.451
483	6.32	34.18			26.89	124.2	800	4.54	34.46	27.32	84.2	1.541
579	5.58	34.25			27.03	110.6	1000	3.94	34.51	27.43	75.3	1.702
773	4.63	34.45			27.30	86.1	1200	3.40	34.54	27.50	68.3	1.848
968	4.04	34.51			27.41	76.3						
1163	3.48	34.52			27.48	70.5						
1460	2.83	34.58			27.59	60.4						

CROMWELL 17, STATION 19, 20-30N LAT, 151- 3W LONG, JUNE 20, 1965, 1700 G.C.T.
DRY BULB 23.2 WET BULB 20.6 WIND SPEED 24, DIR. 08 BAR. 19 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	23.52	34.57			23.48	441.8	0	23.52	34.57	23.48	441.8	0.000
10	23.65	34.57			23.44	445.8	10	23.65	34.57	23.44	445.8	0.045
30Δ	23.65	34.57			23.44	446.5	20	23.67	34.57	23.43	446.8	0.090
50Δ	23.65	34.58			23.45	446.6	30	23.65	34.57	23.44	446.5	0.135
52	23.65	34.58			23.45	446.6	50	23.65	34.58	23.45	446.6	0.225
78	22.38	34.87			24.03	391.8	75	22.57	34.83	23.95	400.0	0.331
102	21.80	35.01			24.30	367.0	100	21.84	35.00	24.28	368.6	0.428
127	21.21	35.13			24.55	343.7	150	20.27	35.13	24.81	320.1	0.602
154	20.07	35.12			24.85	316.1	200	17.13	34.71	25.28	276.1	0.752
178	18.70	34.95			25.08	295.3	250	13.59	34.29	25.75	232.4	0.880
204	16.83	34.67			25.32	272.7	300	10.72	34.18	26.20	188.9	0.986
229	15.05	34.45			25.56	250.4	400	8.73	34.31	26.64	148.2	1.156
254	13.31	34.27			25.78	228.8	500	6.96	34.28	26.83	125.4	1.294
281	11.45	34.13			26.08	201.0	600	6.16	34.34	27.03	111.8	1.414
305	10.56	34.19			26.23	186.3	700	5.58	34.40	27.15	101.0	1.522
407	8.64	34.32			26.66	146.2	800	5.07	34.44	27.25	92.2	1.619
509	6.82	34.28			26.90	124.0	1000	4.36	34.51	27.38	80.8	1.794
611	6.11	34.35			27.05	110.6	1200	3.78	34.55	27.47	72.4	1.950
813	5.01	34.45			27.26	91.3	1500	3.09	34.57	27.56	64.5	2.158
1016	4.31	34.51			27.39	80.1						
1218	3.73	34.55			27.48	71.8						
1521	3.05	34.57			27.56	64.2						

CROMWELL 17, STATION 20, 19- 0N LAT, 151- 5W LONG, JUNE 21, 1965, 0200 G.C.T.
DRY BULB 23.9 WET BULB 20.4 WIND SPEED 18, DIR. 08 BAR. 16 WEATHER 03 VIS. 7 CLOUD TYPE 5, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.04	34.54			23.30	458.5	0	24.04	34.54	23.30	458.5	0.000
10	24.03	34.54			23.31	458.6	10	24.03	34.54	23.31	458.6	0.046
50	23.13	34.60			23.61	430.7	20	23.88	34.54	23.35	455.0	0.092
76	22.39	34.79			23.97	397.8	30	23.68	34.55	23.41	449.2	0.138
100	21.78	34.95			24.26	370.8	50	23.13	34.60	23.61	430.7	0.226
126	21.20	35.16			24.58	341.3	75	22.42	34.78	23.95	399.1	0.331
151	19.95	35.16			24.92	310.1	100	21.78	34.95	24.26	370.8	0.428
176	18.74	34.98			25.09	294.1	150	20.01	35.16	24.90	311.2	0.600
200	17.24	34.75			25.28	276.1	200	17.24	34.75	25.28	276.1	0.748
226	14.80	34.44			25.60	245.8	250	12.96	34.23	25.82	225.0	0.874
251	12.89	34.22			25.83	224.2	300	10.30	34.16	26.26	183.0	0.977
276	11.18	34.13			26.09	199.8	400	8.24	34.37	26.76	136.3	1.138
301	10.27	34.16			26.27	182.4	500	6.78	34.37	26.97	116.7	1.266
400	8.24	34.37			26.76	136.3	600	5.91	34.43	27.13	102.0	1.376
501	6.77	34.37			26.98	116.6	700	5.41	34.47	27.23	93.9	1.475
602	5.90	34.43			27.14	101.7	800	5.07	34.49	27.28	88.9	1.567
802	5.06	34.49			27.29	88.8	1000	4.31	34.53	27.40	78.5	1.737
1003	4.30	34.53			27.40	78.4	1200	3.62	34.56	27.50	69.6	1.887
1203	3.61	34.56			27.50	69.4	1500	2.89	34.61	27.60	59.3	2.083
1506	2.88	34.61			27.61	59.1						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA				
CROMWELL 17, STATION 21, 17-29N LAT, 151- 0W LONG, JUNE 21, 1965, 1200 G.C.T. DRY BULB 23.9 WET BULB 21.0 WIND SPEED 18, DIR. 07 BAR. 17 WEATHER 03 VIS. 6 CLOUD TYPE 6, COVER 7											
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.39	34.52			23.18	469.9	0	24.39	34.52	23.18	469.9	0.000
10	24.39	34.53			23.19	469.5	10	24.39	34.53	23.19	469.5	0.047
50	23.83	34.55			23.37	453.8	20	24.36	34.51	23.18	470.8	0.095
76	22.71	34.92			23.98	397.1	30	24.25	34.50	23.21	468.6	0.142
100	21.84	35.13			24.38	359.4	50	23.83	34.55	23.37	453.8	0.235
126	20.35	35.01			24.70	330.2	75	22.76	34.90	23.95	399.4	0.342
151	19.23	34.97			24.96	305.9	100	21.84	35.13	24.38	359.4	0.438
175	17.67	34.77			25.20	283.8	150	19.28	34.97	24.95	306.8	0.606
201	14.48	34.37			25.62	243.6	200	14.61	34.38	25.60	245.1	0.745
225	12.33	34.22			25.94	212.9	250	11.08	34.15	26.12	195.8	0.856
251	11.04	34.15			26.13	195.3	300	9.63	34.21	26.42	168.0	0.948
276	10.01	34.14			26.30	179.0	400	7.94	34.33	26.78	134.7	1.101
300	9.63	34.21			26.42	168.0	500	6.51	34.34	26.99	115.2	1.227
400	7.94	34.33			26.78	134.7	600	6.09	34.43	27.11	104.2	1.338
501	6.50	34.34			26.99	115.1	700	5.48	34.47	27.22	94.5	1.438
600	6.09	34.43			27.11	104.2	800	4.88	34.49	27.31	86.5	1.529
800	4.88	34.49			27.31	86.5	1000	4.20	34.53	27.41	77.0	1.695
994	4.22	34.53			27.41	77.3	1200	3.55	34.56	27.51	68.5	1.842
1186	3.59	34.56			27.50	69.1	1500	2.84	34.61	27.61	58.3	2.035
1480	2.88	34.61			27.61	58.9	2000	2.07	34.66	27.72	48.2	2.306
2015	2.05	34.66			27.72	48.0	2500	1.78	34.67	27.75	45.8	2.545
2516	1.78	34.67			27.75	45.8	3000	1.64	34.70	27.78	43.5	2.773
3017	1.64	34.70			27.78	43.4	4000	1.44	34.71	27.80	42.6	3.214
4023	1.44	34.71			27.80	42.6						

CROMWELL 17, STATION 22, 16- 0N LAT, 150-53W LONG, JUNE 21, 1965, 2200 G.C.T. DRY BULB 24.7 WET BULB 21.9 WIND SPEED 15, DIR. 09 BAR. 16 WEATHER 02 VIS. 7 CLOUD TYPE 4, COVER 7											
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.95**	34.57			23.05	482.3	0	24.95	34.57	23.05	482.3	0.000
9	24.93	34.56			23.05	482.8	10	24.93	34.56	23.05	482.9	0.049
30Δ	24.95	34.56			23.05	484.2	20	24.94	34.56	23.05	483.6	0.097
51	24.96	34.57			23.05	484.6	30	24.95	34.56	23.05	484.2	0.146
77	24.44	34.54			23.18	472.8	50	24.96	34.57	23.05	484.7	0.244
100	22.20	34.94			24.14	382.7	75	24.53	34.53	23.15	475.7	0.365
126	20.41	35.03			24.70	330.2	100	22.20	34.94	24.14	382.7	0.473
153	18.31	34.85			25.10	292.4	150	18.55	34.88	25.06	296.0	0.644
178	16.41	34.66			25.41	263.2	200	13.73	34.38	25.78	227.9	0.776
203	13.37	34.34			25.83	223.5	250	11.08	34.40	26.31	177.8	0.878
228	11.68	34.26			26.09	198.1	300	9.91	34.46	26.57	154.2	0.962
252	11.04	34.41			26.33	176.2	400	8.44	34.47	26.81	131.7	1.106
278	10.30	34.41			26.46	164.0	500	7.46	34.50	26.98	116.9	1.231
303	9.87	34.47			26.58	152.9	600	6.61	34.51	27.11	105.6	1.344
403	8.40	34.47			26.82	131.4	700	5.87	34.51	27.20	96.6	1.446
505	7.42	34.50			26.99	116.3	800	5.25	34.51	27.28	89.8	1.540
799	5.26	34.51			27.28	89.9	1000	4.40	34.53	27.39	79.7	1.712
1011	4.36	34.53			27.40	79.2	1200	3.68	34.58	27.50	69.0	1.862
1212	3.64	34.58			27.51	68.4	1500	2.89	34.60	27.60	60.0	2.059
1517	2.86	34.60			27.60	59.6						

CROMWELL 17, STATION 23, 14-30N LAT, 150-59W LONG, JUNE 22, 1965, 0700 G.C.T. DRY BULB 24.5 WET BULB 21.9 WIND SPEED 18, DIR. 07 BAR. 16 WEATHER 02 VIS. 7 CLOUD TYPE , COVER 8											
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.43	34.67			22.98	489.1	0	25.43	34.67	22.98	489.1	0.000
9	25.44	34.67			22.98	489.8	10	25.44	34.67	22.98	489.8	0.049
30Δ	25.43	34.67			22.98	490.3	20	25.44	34.67	22.98	490.1	0.099
48	25.43	34.67			22.98	491.0	30	25.43	34.67	22.98	490.3	0.148
73	25.14	34.68			23.08	482.8	50	25.46	34.67	22.97	492.3	0.247
75Δ	25.00	34.69			23.13	478.1	75	25.00	34.69	23.13	478.1	0.369
97	22.68	34.86			23.94	401.4	100	22.48	34.89	24.02	393.4	0.479
122	21.13	35.07			24.53	345.8	150	18.83	34.87	24.98	303.5	0.655
147	19.13	34.90			24.93	308.4	200	12.44	34.20	25.90	215.7	0.785
172	16.28	34.58			25.38	265.9	250	11.04	34.54	26.43	166.6	0.882
197	12.72	34.22			25.86	219.6	300	10.58	34.65	26.60	151.8	0.962
221	11.19	34.21			26.15	192.8	400	8.97	34.58	26.81	132.3	1.105
245	11.06	34.50			26.35	169.8	500	8.01	34.57	26.95	119.9	1.233
271	10.94	34.65			26.53	157.2	600	7.09	34.55	27.07	109.2	1.348
295	10.66	34.65			26.58	152.9	700	6.27	34.54	27.17	100.1	1.454
393	9.05	34.58			26.80	133.3	800	5.58	34.53	27.26	92.5	1.552
491	8.10	34.57			26.94	121.0	1000	4.66	34.55	27.38	81.3	1.727
787	5.65	34.53			27.25	93.4	1200	3.93	34.57	27.47	72.5	1.883
985	4.72	34.55			27.37	82.0						
1183	4.00	34.57			27.47	73.3						
1483	3.20	34.60			27.57	63.6						

ΔFROM BT DATA
**EXTRAPOLATED DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 17, STATION 24, 13- 1N LAT, 151- 2W LONG, JUNE 22, 1965, 1600 G.C.T. DRY BULB 25.C WET BULB 21.8 WIND SPEED 17, DIR. 08 BAR. 14 WEATHER 03 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	25.92	34.77			22.91	496.4	0	25.92	34.77	22.91	496.4	0.000
10Δ	25.94	34.75			22.88	498.8	10	25.94	34.75	22.88	498.8	0.050
30Δ	25.93	34.76			22.90	498.6	20	25.94	34.75	22.89	499.1	0.100
51	25.92	34.76			22.90	499.1	30	25.93	34.76	22.90	498.6	0.151
77	25.33	34.64			22.99	491.4	50	25.93	34.76	22.90	499.2	0.251
100Δ	25.26	34.64			23.01	490.3	75	25.38	34.65	22.98	492.0	0.376
102	25.25	34.64			23.01	490.0	100	25.26	34.64	23.01	490.3	0.500
127	16.38	34.45			25.26	276.2	150	13.40	34.42	25.88	216.9	0.678
153	13.24	34.42			25.91	213.8	200	11.22	34.51	26.37	171.0	0.776
178	11.79	34.38			26.17	190.1	250	10.60	34.63	26.58	152.2	0.857
203	11.18	34.53			26.40	168.7	300	10.21	34.66	26.67	144.8	0.932
229	10.88	34.63			26.53	156.7	400	9.08	34.60	26.81	132.4	1.072
254	10.55	34.63			26.59	151.6	500	7.70	34.54	26.98	117.1	1.198
279	10.40	34.68			26.65	145.9	600	6.73	34.51	27.09	107.0	1.311
304	10.17	34.65			26.67	144.7	700	5.89	34.50	27.20	97.5	1.414
405	9.02	34.60			26.82	131.6	900	5.19	34.51	27.29	89.1	1.509
507	7.61	34.54			26.99	116.1	1000	4.40	34.56	27.41	77.6	1.677
607	6.67	34.51			27.10	106.4	1200	3.71	34.57	27.50	70.0	1.827
810	5.13	34.51			27.29	88.3	1500	3.04	34.60	27.58	61.8	2.027
1014	4.36	34.56			27.42	77.0						
1214	3.67	34.57			27.50	69.5						
1518	3.01	34.60			27.59	61.5						

CROMWELL 17, STATION 25, 11-28N LAT, 150-56W LONG, JUNE 23, 1965, 1600 G.C.T. DRY BULB 25.8 WET BULB 22.9 WIND SPEED 21, DIR. 06 BAR. 14 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	26.46	34.77			22.74	512.5	0	26.46	34.77	22.74	512.5	0.000
9	26.50	34.77			22.72	514.1	10	26.50	34.77	22.72	514.3	0.052
49	26.53	34.75			22.70	518.1	20	26.52	34.75	22.71	516.4	0.104
74	26.56	34.88			22.79	510.6	30	26.53	34.74	22.70	517.7	0.156
98	20.46	34.62			24.37	360.2	50	26.59	34.76	22.69	519.4	0.260
123	18.08	34.68			25.03	298.2	75	26.33	34.87	22.85	504.4	0.389
148	13.71	34.35			25.76	228.0	100	20.23	34.63	24.44	354.0	0.497
172	12.12	34.40			26.12	194.5	150	13.51	34.35	25.80	224.5	0.643
197	11.51	34.58			26.37	170.8	200	11.37	34.59	26.41	167.9	0.742
221	10.50	34.60			26.57	152.2	250	10.30	34.62	26.62	147.8	0.821
246	10.34	34.62			26.62	148.5	300	9.82	34.64	26.72	139.6	0.894
270	10.10	34.63			26.67	144.3	400	8.93	34.61	26.84	129.5	1.030
295	9.87	34.64			26.71	140.2	500	8.09	34.58	26.95	120.5	1.156
393	8.99	34.61			26.83	130.1	600	7.15	34.55	27.06	110.2	1.272
493	8.16	34.58			26.94	121.2	700	6.30	34.54	27.17	100.4	1.379
591	7.23	34.55			27.05	111.2	800	5.60	34.54	27.26	92.1	1.476
789	5.66	34.54			27.25	92.8	1000	4.67	34.55	27.38	81.3	1.652
974	4.79	34.55			27.36	82.8	1200	3.84	34.57	27.49	71.3	1.806
1169	3.94	34.57			27.47	72.5	1500	3.09	34.61	27.58	61.9	2.009
1459	3.18	34.60			27.57	63.2	2000	2.24	34.66	27.70	50.8	2.293
1946	2.30	34.66			27.70	50.8	2500	1.88	34.68	27.75	46.2	2.538
2438	1.91	34.68			27.74	46.5	3000	1.65	34.69	27.78	43.9	2.768
2936	1.71	34.69			27.77	44.8						
3944	1.45	34.71			27.80	42.5						

CROMWELL 17, STATION 26, 9-59N LAT, 148- 1W LONG, JUNE 24, 1965, 1400 G.C.T. DRY BULB 25.4 WET BULB 23.6 WIND SPEED 20, DIR. 05 BAR. 13 WEATHER 00 VIS. 7 CLOUD TYPE 1, COVER 3												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.36	34.71	4.89		22.72	513.8	0	26.36	34.71	22.72	513.8	0.000
10	26.51	34.72	5.15	0.27	22.68	518.0	10	26.51	34.72	22.68	518.0	0.052
51	26.53	34.92	5.11	0.31	22.83	505.9	20	26.56	34.77	22.70	516.5	0.104
75	26.50	34.92	4.86	0.23	22.84	506.0	30	26.59	34.82	22.73	514.1	0.156
99	26.18	34.93	4.77	0.31	22.95	496.6	50	26.54	34.92	22.82	506.4	0.259
125	13.98	34.42	2.00	1.31	25.76	227.6	75	26.50	34.92	22.84	506.0	0.386
151	11.86	34.67	0.51	2.53	26.38	169.4	100	25.73	34.91	23.07	484.8	0.511
175	11.42	34.73	0.30	2.53	26.51	157.6	150	11.83	34.66	26.37	170.0	0.676
201	11.09	34.76	0.41	2.40	26.59	150.2	200	11.10	34.76	26.59	150.4	0.757
225	10.63	34.74	0.40	2.15	26.66	144.2	250	10.38	34.73	26.70	141.2	0.830
251	10.37	34.73	0.47	2.51	26.70	141.1	300	9.93	34.70	26.75	136.8	0.900
277	10.09	34.72	0.35	2.10	26.74	137.6	400	9.11	34.67	26.86	127.7	1.034
301	9.92	34.70	0.40	2.58	26.75	136.8	500	8.24	34.62	26.96	119.5	1.159
401	9.10	34.67	0.57	2.53	26.86	127.6	600	7.04	34.57	27.10	107.1	1.273
502	8.22	34.62	0.31	2.95	26.96	119.4	700	6.17	34.55	27.20	97.7	1.377
602	7.02	34.57	0.42	3.05	27.10	106.9	800	5.51	34.55	27.28	90.2	1.472
803	5.49	34.55	0.65	3.24	27.28	90.0	1000	4.49	34.57	27.41	77.8	1.642
996	4.51	34.57	1.11	3.08	27.41	78.0	1200	3.71	34.59	27.51	68.4	1.790
1189	3.76	34.59	1.34	2.15	27.51	68.9						
1483	2.96	34.62	1.72	2.40	27.61	59.2						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.14

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 17, STATION 27, 11-30N LAT, 147-59W LONG, JUNE 25, 1965, 0200 G.C.T.
DRY BULB 26.0 WET BULB 22.0 WIND SPEED 20, DIR. 04 BAR. 15 WEATHER 03 VIS. 8 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.54	34.87	4.90		22.79	507.7	0	26.54	34.87	22.79	507.7	0.000
10	26.55	34.87	5.26	0.47	22.78	508.4	10	26.55	34.87	22.78	508.4	0.051
51	26.46	34.88		0.31	22.82	506.7	20	26.53	34.87	22.79	508.2	0.102
76	26.44	34.87	4.88	0.59	22.82	507.8	30	26.51	34.88	22.80	507.8	0.154
100	26.09	34.90	4.85	0.81	22.95	496.1	50	26.46	34.88	22.82	506.7	0.256
125	20.22	34.77	4.83	0.44	24.55	344.2	75	26.44	34.87	22.82	507.9	0.384
151	14.30	34.42	1.90	1.87	25.69	234.8	100	26.09	34.90	22.95	496.1	0.510
175	12.10	34.57	0.67	2.68	26.26	181.7	150	14.49	34.43	25.66	238.0	0.695
201	11.29	34.64	0.37	3.01	26.46	162.5	200	11.30	34.64	26.46	162.8	0.796
225	11.03	34.69	0.24	2.24	26.55	154.8	250	10.41	34.67	26.64	146.1	0.874
250	10.41	34.67	0.19	2.66	26.64	146.1	300	9.86	34.67	26.74	138.0	0.945
276	10.05	34.66	0.17	2.73	26.70	141.4	400	8.87	34.63	26.87	126.9	1.079
300	9.86	34.67	0.21	2.73	26.74	138.0	500	7.79	34.57	26.99	116.5	1.202
399	8.88	34.63	0.38	2.68	26.87	127.0	600	6.81	34.54	27.10	106.0	1.314
500	7.79	34.57	0.54	2.92	26.99	116.5	700	5.99	34.53	27.21	96.5	1.417
600	6.81	34.54	0.52	3.07	27.10	106.0	800	5.32	34.54	27.29	88.5	1.510
800	5.32	34.54	0.60	3.70	27.29	88.5	1000	4.47	34.56	27.41	78.3	1.679
1001	4.47	34.56	1.14	3.13	27.41	78.3	1200	3.75	34.59	27.51	68.9	1.828
1200	3.75	34.59	1.36	3.13	27.51	68.9	1500	2.93	34.62	27.61	58.9	2.023
1501	2.93	34.62	1.90	2.92	27.61	58.9						

CROMWELL 17, STATION 28, 12-39N LAT, 147-57W LONG, JUNE 25, 1965, 1200 G.C.T.
DRY BULB 24.0 WET BULB 20.2 WIND SPEED 25, DIR. 06 BAR. 16 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	24.78	34.49	5.03		23.04	483.2	0	24.78	34.49	23.04	483.2	0.000
8	24.81	34.49	5.31	0.26	23.04	484.4	10	24.81	34.49	23.03	484.6	0.049
30Δ	24.81	34.48			23.03	486.0	20	24.82	34.48	23.03	485.6	0.098
48	24.81	34.50	5.26	0.26	23.04	485.2	30	24.81	34.48	23.03	486.0	0.147
71	24.56	34.49	5.04	0.37	23.11	479.6	50	24.84	34.49	23.03	486.7	0.245
94	21.74	34.79	5.12	0.31	24.15	381.0	75	24.14	34.54	23.27	464.1	0.364
119	19.38	34.80	4.58	0.50	24.79	320.8	100	21.15	34.82	24.33	363.9	0.469
143	16.87	34.62	4.17	0.75	25.27	275.3	150	15.75	34.54	25.47	256.6	0.625
166	13.47	34.43	1.38	2.13	25.88	217.9	200	12.38	34.74	26.33	175.2	0.734
190	12.65	34.71	0.11	2.27	26.26	182.2	250	11.38	34.74	26.52	157.9	0.818
214	12.06	34.74	0.15	1.96	26.39	169.5	300	10.64	34.71	26.63	148.4	0.895
238	11.57	34.74	0.11	1.90	26.49	161.1	400	9.25	34.63	26.81	132.7	1.037
262	11.21	34.74	0.08	2.14	26.55	155.2	500	8.07	34.57	26.95	120.5	1.165
285	10.86	34.72	0.08	2.23	26.60	151.0	600	7.11	34.55	27.07	109.3	1.281
380	9.52	34.65	0.15	2.83	26.78	135.5	700	6.20	34.54	27.18	99.2	1.386
477	8.31	34.58	0.31	2.83	26.92	123.2	800	5.46	34.53	27.27	91.0	1.482
573	7.38	34.56	0.41	3.00	27.04	112.4	1000	4.55	34.55	27.39	79.7	1.655
766	5.67	34.53	0.48	3.18	27.24	93.4	1200	3.84	34.58	27.49	71.0	1.808
958	4.72	34.55	0.79	3.31	27.37	81.7						
1151	4.03	34.57	1.15	3.18	27.46	73.4						
1445	3.20	34.61	1.61	2.77	27.58	62.6						

TEMPERATURE ERROR TEMP AT 15C. METERS IS 0.12

CROMWELL 17, STATION 29, 14-28N LAT, 147-57W LONG, JUNE 25, 1965, 2200 G.C.T.
DRY BULB 23.8 WET BULB 20.8 WIND SPEED 22, DIR. 06 BAR. 17 WEATHER 02 VIS. 7 CLOUD TYPE 1, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.63	34.63	5.00		23.19	468.8	0	24.63	34.63	23.19	468.8	0.000
9	24.69	34.63	5.33	0.46	23.18	470.9	10	24.69	34.63	23.18	471.0	0.047
51	24.68	34.64	5.06	0.56	23.19	471.5	20	24.71	34.63	23.17	471.7	0.095
76	24.66	34.63	5.07	0.28	23.19	472.6	30	24.72	34.64	23.17	472.0	0.142
99	21.98	34.87	5.18	0.29	24.14	381.8	50	24.68	34.64	23.19	471.6	0.237
124	19.38	34.88	4.74	0.41	24.85	315.2	75	24.69	34.63	23.18	473.6	0.356
150	16.89	34.60	3.84	0.90	25.25	277.4	100	21.87	34.88	24.18	378.6	0.464
175	13.06	34.34	1.95	1.80	25.89	216.7	150	16.89	34.60	25.25	277.4	0.629
199	11.71	34.49	0.94	2.49	26.27	181.0	200	11.68	34.50	26.28	180.0	0.744
224	11.28	34.64	0.32	2.61	26.46	162.9	250	11.00	34.70	26.56	154.1	0.829
250	11.00	34.70	0.21	3.15	26.56	154.1	300	10.25	34.68	26.68	143.8	0.904
275	10.62	34.69	0.24	2.50	26.62	148.8	400	9.06	34.62	26.83	130.7	1.042
299	10.26	34.68	0.26	2.20	26.68	143.9	500	7.97	34.56	26.95	119.9	1.169
398	9.08	34.62	0.20	2.72	26.83	130.9	600	6.90	34.53	27.08	108.1	1.284
499	7.98	34.56	0.34	2.88	26.95	120.1	700	6.11	34.51	27.18	99.6	1.389
599	6.91	34.53	0.38	2.99	27.08	108.2	800	5.50	34.51	27.25	93.1	1.486
799	5.51	34.51	0.51	2.68	27.25	93.2	1000	4.64	34.53	27.37	82.6	1.664
999	4.64	34.53	0.78	2.71	27.37	82.6	1200	3.93	34.56	27.47	73.2	1.822
1198	3.94	34.57	1.09	2.92	27.47	72.7	1500	3.18	34.60	27.57	63.4	2.030
1500	3.18	34.60	1.54	2.88	27.57	63.4						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 17, STATION 30, 16- ON LAT, 148- OW LONG, JUNE 26, 1965, 0700 G.C.T.
DRY BULB 23.7 WET BULB 20.2 WIND SPEED 23, DIR. 07 BAR. 16 WEATHER 00 VIS. 7 CLOUD TYPE 2, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.32	34.54	5.03		23.22	466.4	0	24.32	34.54	23.22	466.4	0.000
9	24.49	34.54	5.28	0.21	23.17	471.6	10	24.49	34.54	23.17	471.8	0.047
20Δ	24.49	34.54			23.17	472.1	20	24.49	34.54	23.17	472.1	0.095
52	24.52	34.53	5.03	0.25	23.15	474.9	30	24.50	34.54	23.16	473.0	0.142
76	24.49	34.53	5.03	0.24	23.16	474.9	50	24.52	34.53	23.15	474.7	0.238
101	24.32	34.52	5.06	0.25	23.20	471.8	75	24.49	34.53	23.16	475.0	0.357
125	19.28	34.58	4.38	1.05	24.65	334.5	100	24.38	34.52	23.19	473.4	0.477
151	15.49	34.46	3.76	1.01	25.47	256.8	150	15.60	34.47	25.45	258.7	0.661
176	13.62	34.30	3.47	1.85	25.74	230.6	200	11.87	34.19	26.00	206.0	0.778
200	11.87	34.19	3.47	1.47	26.00	206.0	250	9.96	34.22	26.37	171.8	0.874
226	10.57	34.20	3.03	1.82	26.25	182.9	300	9.12	34.31	26.58	152.5	0.955
251	9.94	34.22	2.36	2.00	26.37	171.4	400	8.18	34.43	26.82	130.9	1.098
275	9.61	34.30	1.98	2.39	26.49	160.6	500	7.25	34.45	26.97	117.4	1.224
300	9.12	34.31	1.74	2.45	26.58	152.5	600	6.35	34.45	27.09	106.2	1.337
400	8.18	34.43	0.71	2.78	26.82	130.9	700	5.65	34.47	27.20	97.0	1.439
502	7.23	34.45	0.61		26.97	117.2	800	5.11	34.49	27.28	89.5	1.534
602	6.33	34.45	0.54		27.10	106.0	1000	4.36	34.53	27.40	79.1	1.704
803	5.10	34.49	0.76		27.28	89.3	1200	3.73	34.56	27.49	70.9	1.856
1003	4.35	34.53	0.97	3.20	27.40	79.0	1500	2.98	34.60	27.59	61.1	2.057
1204	3.72	34.56	1.13	3.16	27.49	70.8						
1506	2.97	34.60	1.60	3.16	27.59	60.9						

CROMWELL 17, STATION 31, 17-30N LAT, 148- 3W LONG, JUNE 26, 1965, 1600 G.C.T.
DRY BULB 23.5 WET BULB 19.7 WIND SPEED 23, DIR. 09 BAR. 16 WEATHER VIS. 7 CLOUD TYPE 9, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.53	34.59	5.06		23.19	468.8	0	24.53	34.59	23.19	468.8	0.000
9	24.52	34.59	5.19	0.26	23.20	468.9	10	24.52	34.59	23.20	468.9	0.047
49	24.53	34.59	5.04	0.24	23.19	470.7	20	24.52	34.59	23.20	469.3	0.094
75	24.54	34.60	4.99	0.49	23.20	471.3	30	24.52	34.59	23.20	469.9	0.142
99	23.32	34.84	5.25	0.21	23.74	420.5	50	24.54	34.59	23.19	471.3	0.237
123	22.21	34.94	5.20	0.34	24.13	383.8	75	24.54	34.60	23.20	471.3	0.355
150	21.27	35.07	5.03	0.22	24.49	350.5	100	23.27	34.85	23.76	418.9	0.467
174	19.86	35.01	4.69	0.67	24.83	319.5	150	21.27	35.07	24.49	350.5	0.661
198	17.98	34.79	4.70	0.54	25.14	290.4	200	17.77	34.76	25.17	287.4	0.822
222	15.34	34.47	4.01	0.83	25.51	254.9	250	12.69	34.24	25.88	218.9	0.950
247	12.89	34.25	3.52	1.32	25.85	221.9	300	9.90	34.18	26.35	174.8	1.049
273	11.37	34.20	3.36	1.88	26.11	198.0	400	7.66	34.18	26.70	141.9	1.209
297	10.02	34.18	3.02	1.80	26.33	176.6	500	7.01	34.33	26.91	122.5	1.342
395	7.71	34.17	2.04	2.16	26.69	143.1	600	6.23	34.41	27.08	107.4	1.458
496	7.04	34.33	0.83	2.89	26.91	123.2	700	5.53	34.46	27.21	95.8	1.561
595	6.27	34.41	0.47	3.22	27.07	108.1	800	4.95	34.49	27.30	87.3	1.654
794	4.98	34.49	0.82	3.22	27.30	87.7	1000	4.22	34.52	27.40	78.0	1.821
994	4.24	34.52	1.03	3.04	27.40	78.3	1200	3.59	34.56	27.50	69.5	1.970
1194	3.61	34.56	1.24	3.22	27.50	69.4						
1497	2.86	34.60	1.65	2.93	27.60	59.5						

CROMWELL 17, STATION 32, 19- 2N LAT, 147-59W LONG, JUNE 27, 1965, 0100 G.C.T.
DRY BULB 22.4 WET BULB 21.0 WIND SPEED 25, DIR. 11 BAR. 17 WEATHER 15 VIS. 7 CLOUD TYPE 6, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.61	34.53	5.07		23.13	475.4	0	24.61	34.53	23.13	475.4	0.000
9	24.63	34.52	5.26	0.23	23.11	477.1	10	24.63	34.52	23.11	477.2	0.048
30Δ	24.62	34.52			23.11	477.6	20	24.63	34.52	23.11	477.7	0.096
51	24.58	34.52	5.31	0.24	23.13	477.3	30	24.62	34.52	23.11	477.6	0.144
76	22.59	34.68	5.39	0.23	23.83	411.1	50	24.60	34.52	23.12	477.9	0.240
101	22.08	34.96	5.26	0.18	24.19	378.1	75	22.68	34.67	23.80	414.1	0.353
125	21.58	35.10	5.15	0.18	24.43	355.6	100	22.09	34.95	24.17	379.0	0.453
152	20.19	35.06	4.91	0.37	24.78	323.4	150	20.30	35.07	24.75	325.7	0.630
177	19.08	34.95	4.74	0.38	24.98	304.5	200	17.72	34.79	25.20	284.5	0.784
203	17.49	34.76	4.62	0.49	25.23	281.2	250	12.77	34.21	25.84	222.8	0.912
227	14.77	34.42	4.33	0.78	25.59	246.7	300	10.21	34.16	26.28	181.2	1.014
253	12.56	34.19	3.52	1.34	25.87	220.1	400	7.62	34.21	26.73	139.2	1.175
279	11.28	34.17	4.33	1.68	26.10	198.7	500	6.87	34.35	26.95	119.3	1.306
303	10.06	34.16	3.30	1.84	26.31	178.9	600	6.13	34.41	27.09	106.4	1.420
404	7.58	34.21	1.68	2.74	26.74	138.4	700	5.49	34.45	27.20	96.4	1.522
506	6.85	34.36	0.67	3.01	26.96	118.5	800	4.95	34.48	27.29	88.4	1.616
607	6.08	34.41	0.51	3.09	27.10	105.7	1000	4.15	34.53	27.42	76.6	1.783
809	4.91	34.42	0.72	3.14	27.30	87.7	1200	3.52	34.56	27.51	68.4	1.930
1011	4.11	34.53	0.96	3.18	27.42	76.1	1500	2.82	34.59	27.60	59.8	2.125
1213	3.48	34.56	1.22	3.18	27.51	67.9						
1517	2.79	34.59	1.55	2.51	27.60	59.5						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 17, STATION 33, 20-31N LAT, 147-58W LONG, JUNE 27, 1965, 1800 G.C.T. DRY BULB 23.1 WET BULB 20.3 WIND SPEED 22, DIR. 10 BAR. 21 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	24.04	34.60	5.04		23.35	454.2	0	24.04	34.60	23.35	454.2	0.000
9	24.03	34.60	5.15	0.37	23.35	454.2	10	24.03	34.60	23.35	454.3	0.046
30Δ	24.03	34.60			23.35	455.0	20	24.03	34.60	23.35	454.6	0.092
47	24.03	34.60	5.01	0.23	23.35	455.7	30	24.03	34.60	23.35	455.0	0.137
50Δ	24.03	34.60			23.35	455.8	50	24.03	34.60	23.35	455.8	0.229
72	22.62	34.70	5.30	0.21	23.84	410.3	75	22.60	34.71	23.85	409.2	0.338
75Δ	22.60	34.71			23.85	409.2	100	22.09	34.87	24.12	384.5	0.438
96	22.22	34.85	5.27	0.36	24.06	389.6	150	20.06	34.92	24.70	330.4	0.618
119	21.37	34.95	5.21	0.23	24.37	360.6	200	17.88	34.84	25.20	284.1	0.773
143	20.50	34.94	5.44	0.27	24.60	339.7	250	13.60	34.26	25.72	235.2	0.904
167	19.06	34.88	4.75	0.40	24.93	308.8	300	10.74	34.13	26.17	192.5	1.012
191	18.52	34.95	4.75	0.34	25.12	291.4	400	7.78	34.12	26.63	148.1	1.184
214	16.65	34.63	4.41	0.64	25.33	271.8	500	6.28	34.20	26.90	122.8	1.320
239	14.42	34.34	4.18	0.85	25.61	245.6	600	5.52	34.31	27.09	105.7	1.436
262	12.80	34.20	4.19	1.02	25.83	224.2	700	5.11	34.42	27.22	93.8	1.536
285	11.43	34.15	3.95	1.36	26.02	203.0	800	4.89	34.49	27.31	86.6	1.628
380	8.22	34.11	2.88	2.10	26.56	154.8	1000	4.19	34.52	27.41	77.6	1.794
478	6.50	34.17	1.57	2.64	26.85	127.3	1200	3.59	34.56	27.50	69.4	1.943
764	5.03	34.48	0.78	3.22	27.28	88.7						
957	4.33	34.51	1.10	2.96	27.38	79.8						
1149	3.73	34.56	1.26	3.13	27.49	70.5						
1441	3.01	34.58	1.47	2.90	27.57	62.4						

TEMPERATURE ERROR TERM AT 600. METERS IS 0.19
TEMPERATURE ERROR TERM AT 700. METERS IS 0.14

CROMWELL 17, STATION 34, 22-1N LAT, 148-0W LONG, JUNE 28, 1965, 0200 G.C.T. DRY BULB 23.3 WET BULB 19.5 WIND SPEED 23, DIR. 09 BAR. 21 WEATHER 21 VIS. 7 CLOUD TYPE 9, COVER 7												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	23.43	34.62	5.28		23.54	435.6	0	23.43	34.62	23.54	435.6	0.000
8	23.73	34.62	5.38	0.41	23.45	444.3	10	23.73	34.62	23.45	444.4	0.044
20Δ	23.60	34.62			23.49	441.1	20	23.60	34.62	23.49	441.1	0.089
47	23.32	34.61	5.34	0.23	23.57	435.1	30	23.50	34.61	23.52	439.2	0.133
71	23.07	34.68	5.34	0.22	23.69	424.1	50	23.31	34.61	23.57	434.8	0.221
93	22.22	34.92	5.28	0.24	24.10	386.1	75	22.94	34.72	23.76	417.6	0.329
117	21.73	35.06	5.18	0.19	24.36	362.1	100	22.10	34.97	24.19	377.9	0.429
142	21.13	35.13	5.04	0.26	24.58	342.2	150	20.85	35.12	24.65	335.9	0.609
165	20.29	35.09	4.90	0.31	24.77	324.2	200	18.90	34.98	25.05	298.5	0.769
189	19.41	35.04	4.80	0.34	24.97	306.6	250	16.22	34.62	25.42	264.2	0.910
211	18.33	34.91	4.78	0.39	25.14	290.4	300	11.91	34.15	25.97	211.9	1.030
235	16.99	34.73	4.68	0.52	25.33	272.9	400	8.66	34.15	26.53	159.1	1.218
259	15.64	34.54	4.64	0.59	25.49	257.4	500	7.05	34.22	26.82	131.9	1.365
281	13.24	34.26	4.42	1.00	25.79	228.8	600	5.49	34.18	26.99	114.8	1.489
376	9.14	34.12	3.66	1.88	26.43	168.3	700	5.03	34.31	27.15	100.7	1.598
470	7.68	34.24	1.77	2.64	26.75	138.7	800	4.88	34.43	27.26	91.0	1.695
565	5.79	34.15	1.24		26.93	120.6	1000	4.27	34.49	27.38	80.6	1.869
754	5.02	34.40	0.86	3.09	27.22	94.4	1200	3.68	34.54	27.48	71.7	2.023
944	4.46	34.48	0.65	3.18	27.35	83.5						
1134	3.82	34.52	1.08	3.13	27.44	74.4						
1423	3.10	34.57	1.42	3.04	27.55	64.1						

TEMPERATURE ERROR TERM AT 300. METERS IS 0.20
TEMPERATURE ERROR TERM AT 700. METERS IS 0.13

CROMWELL 17, STATION 35, 23-30N LAT, 148-0W LONG, JUNE 28, 1965, 1100 G.C.T. DRY BULB 22.9 WET BULB 19.5 WIND SPEED 18, DIR. 08 BAR. 24 WEATHER 02 VIS. 7 CLOUD TYPE , COVER 6												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	23.83	34.65	5.08		23.45	444.6	0	23.83	34.65	23.45	444.6	0.000
7	23.87	34.64	5.18	0.20	23.43	446.8	10	23.87	34.64	23.43	446.9	0.045
20Δ	23.85	34.65			23.44	446.0	20	23.85	34.65	23.44	446.0	0.090
42	23.76	34.68	5.10	0.28	23.49	442.1	30	23.87	34.65	23.44	447.0	0.135
64	22.83	34.96	5.25	0.26	23.97	397.0	50	23.47	34.78	23.65	427.2	0.223
83	22.08	35.06	5.22	0.13	24.26	370.2	75	22.38	35.03	24.15	380.4	0.325
105	21.47	35.17	5.02	0.16	24.51	346.9	100	21.59	35.15	24.46	351.4	0.417
126	21.00	35.19	4.92	0.19	24.66	333.9	150	20.18	35.11	24.82	319.3	0.586
148	20.27	35.12	4.74	0.26	24.80	321.0	200	17.91	34.84	25.19	285.0	0.738
168	19.35	35.03	4.62	0.37	24.97	305.1	250	14.86	34.48	25.62	244.9	0.872
188	18.54	34.92	4.50		25.10	294.0	300	12.14	34.21	25.97	211.7	0.987
209	17.39	34.78	4.50	0.48	25.27	277.7	400	8.62	34.06	26.46	165.2	1.177
230	16.15	34.64	4.70	0.48	25.46	260.4	500	6.75	34.09	26.76	136.8	1.329
250	14.86	34.48	4.76	0.99	25.62	244.9	600	5.52	34.17	26.98	116.1	1.457
331	10.78	34.12	4.70	0.96	26.15	194.7	700	4.85	34.27	27.14	101.4	1.567
414	8.29	34.06	3.68	1.84	26.51	160.1	800	4.55	34.37	27.25	91.4	1.664
496	6.81	34.03	2.10	2.49	26.75	137.7	1000	4.06	34.50	27.40	77.8	1.836
663	5.02	34.23	0.72	3.00	27.08	106.0	1200	3.55	34.56	27.50	68.8	1.984
832	4.51	34.40	0.70	2.77	27.28	88.9						
1007	4.04	34.50	0.97	2.93	27.41	77.4						
1284	3.36	34.56	1.30	2.72	27.52	67.0						

ΔFROM BT DATA

Table 2.--Continued

CROMWELL 17, STATION 36, 25- 1N LAT, 147-56W LONG, JUNE 28, 1965, 2100 G.C.T.
DRY BULB 23.2 WET BULB 18.4 WIND SPEED 23, DIR. 09 BAR. 25 WEATHER 01 VIS. 7 CLOUD TYPE 4, 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	23.78	34.66	5.22		23.47	442.5	0	23.78	34.66	23.47	442.5	0.000
9	23.80	34.66	5.40	0.22	23.46	443.4	10	23.80	34.66	23.46	443.5	0.045
30Δ	23.81	34.66			23.46	444.5	20	23.81	34.66	23.46	444.1	0.089
51	23.82	34.66	5.17	0.21	23.46	445.6	30	23.81	34.66	23.46	444.5	0.134
76	22.52	34.99	5.34	0.17	24.08	386.9	50	23.83	34.66	23.45	446.1	0.224
99	21.55	35.15	5.28	0.19	24.48	350.2	75	22.58	34.97	24.05	389.6	0.329
126	20.63	35.09	4.93	0.25	24.66	331.5	100	21.51	35.15	24.49	349.3	0.422
152	19.89	35.12	4.75	0.30	24.90	311.5	150	19.96	35.12	24.88	313.1	0.589
176	18.50	34.95	4.88	0.35	25.13	290.4	200	16.97	34.69	25.30	274.2	0.737
202	16.84	34.67	4.44	0.68	25.32	272.8	250	13.79	34.37	25.76	231.3	0.864
227	15.16	34.51	4.89	0.50	25.58	248.3	300	11.94	34.23	26.03	206.5	0.975
253	13.64	34.35	4.97	0.64	25.78	229.4	400	9.39	34.10	26.37	174.1	1.167
277	12.79	34.29	5.02	0.75	25.90	217.8	500	6.96	34.00	26.66	146.5	1.329
302	11.87	34.23	5.10	0.88	26.04	205.5	600	5.50	34.06	26.89	124.2	1.465
402	9.35	34.10	4.80	1.06	26.38	173.6	700	4.74	34.17	27.07	107.5	1.582
503	6.90	34.00	3.09	2.19	26.67	145.7	800	4.35	34.29	27.21	94.5	1.685
603	5.47	34.06	1.63	2.70	26.90	123.6	1000	3.80	34.46	27.40	77.7	1.859
805	4.34	34.30	0.51	2.97	27.22	94.0	1200	3.37	34.52	27.49	69.6	2.008
1006	3.79	34.46	0.92	3.16	27.40	77.4	1500	2.82	34.57	27.58	61.2	2.207
1207	3.36	34.52	1.23	3.16	27.49	69.4						
1511	2.80	34.57	1.62	3.39	27.58	61.1						

CROMWELL 17, STATION 37, 26-26N LAT, 148- 6W LONG, JUNE 29, 1965, 0400 G.C.T.
DRY BULB 23.5 WET BULB 19.2 WIND SPEED 18, DIR. 07 BAR. 16 WEATHER 02 VIS. 8 CLOUD TYPE 5, 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	23.12	34.89	5.19		23.84	407.6	0	23.12	34.89	23.84	407.6	0.000
10	23.35	34.89	5.32	0.75	23.77	414.3	10	23.35	34.89	23.77	414.3	0.041
48	22.68	35.04	5.32	0.28	24.08	386.5	20	23.37	34.91	23.78	413.6	0.083
72	21.41	35.18	5.40	0.15	24.54	343.3	30	23.25	34.95	23.84	408.2	0.124
95	20.59	35.18	5.13	0.14	24.76	322.9	50	22.58	35.05	24.17	382.9	0.204
118	19.98	35.17	5.06	0.16	24.92	308.9	75	21.29	35.18	24.58	339.9	0.295
143	19.09	35.06	4.81	0.25	25.06	295.7	100	20.46	35.18	24.80	319.5	0.378
167	17.96	34.90	4.83	0.37	25.22	280.9	150	18.77	35.02	25.11	291.3	0.532
190	16.99	34.75	4.83	0.37	25.34	270.1	200	16.51	34.68	25.40	264.8	0.672
214	15.68	34.56	4.83	0.50	25.50	255.5	250	12.79	34.22	25.85	222.7	0.795
238	13.64	34.30	4.85	0.76	25.74	232.7	300	11.41	34.24	26.13	196.2	0.901
262	12.15	34.17	4.86	0.90	25.94	214.1						
285	11.71	34.22	5.04	0.84	26.06	202.9						
300**	11.40**	34.24**			26.13	196.2						

CROMWELL 17, STATION 38, 24-56N LAT, 151- 5W LONG, JUNE 30, 1965, 0100 G.C.T.
DRY BULB 25.8 WET BULB 21.0 WIND SPEED 14, DIR. 07 BAR. 23 WEATHER 02 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	24.34	34.78			23.35	449.7	0	24.34	34.78	23.39	449.7	0.000
10	24.36	34.78			23.39	450.7	10	24.36	34.78	23.39	450.7	0.045
30Δ	24.35	34.78			23.39	451.1	20	24.50	34.76	23.33	456.6	0.091
49	22.31	35.12			24.24	370.8	30	24.35	34.78	23.39	451.1	0.137
74	20.96	35.20			24.68	330.2	50	22.23	35.13	24.27	368.2	0.219
98	20.31	35.17			24.83	316.6	75	20.93	35.20	24.68	329.4	0.307
121	19.60	35.14			24.99	301.7	100	20.25	35.17	24.84	315.3	0.388
146	18.71	35.05			25.15	287.2	150	18.59	35.03	25.17	285.9	0.540
170	17.83	34.90			25.26	278.0	200	15.80	34.61	25.51	254.1	0.676
195	16.13	34.65			25.47	258.2	250	12.78	34.32	25.93	215.0	0.794
218	14.63	34.48			25.67	239.1	300	11.42	34.26	26.14	195.4	0.898
242	13.11	34.34			25.88	219.4	400	8.83	34.10	26.46	165.1	1.080
267	12.26	34.29			26.01	207.5	500	6.89	34.03	26.69	143.5	1.235
291	11.67	34.27			26.10	198.7	600	5.46	34.08	26.91	121.9	1.369
386	9.14	34.12			26.43	168.4	700	4.70	34.20	27.10	104.8	1.484
483	7.20	34.03			26.65	147.5	800	4.33	34.33	27.24	91.7	1.583
581	5.65	34.06			26.88	125.6	1000	3.89	34.49	27.41	76.6	1.754
773	4.42	34.30			27.21	94.6	1200	3.49	34.55	27.50	68.9	1.901
969	3.95	34.47			27.35	78.2	1500	2.86	34.59	27.59	60.6	2.098
1163	3.57	34.54			27.49	70.1	2000	2.13	34.64	27.70	50.2	2.379
1457	2.94	34.58			27.58	61.7	2500	1.82	34.68	27.75	45.4	2.623
1971	2.16	34.64			27.69	50.6	3000	1.63	34.68	27.77	44.6	2.853
2471	1.83	34.68			27.75	45.6	4000	1.47	34.70	27.79	43.7	3.305
2970	1.64	34.68			27.76	44.7						
3971	1.49	34.71			27.80	43.2						
4976	1.51	34.71			27.80	46.2						

ΔFROM BT DATA
**EXTRAPOLATED DATA

Table 2.--Continued

CROMWELL 17, STATION 39, 25- 3N LAT, 154- 1W LONG, JUNE 30, 1965, 2100 G.C.T.
DRY BULB 24.6 WET BULB 20.5 WIND SPEED 12, DIR. 08 BAR. 24 WEATHER 02 VIS. 8 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	24.23	34.99	4.94		23.59	431.4	0	24.23	34.99	23.59	431.4	0.000
10	24.22	34.98	5.02	0.19	23.58	432.3	10	24.22	34.98	23.58	432.3	0.043
30Δ	24.20	34.99			23.60	431.7	20	24.31	34.97	23.55	435.4	0.087
51	22.54	35.13	5.36	0.29	24.18	376.4	30	24.20	34.99	23.60	431.7	0.131
77	21.29	35.17	5.23	0.23	24.56	341.1	50	22.63	35.12	24.15	379.3	0.213
101	20.34	35.15	4.90	0.20	24.80	318.9	75	21.37	35.17	24.54	343.0	0.304
127	19.70	35.11	5.02	0.49	24.94	306.6	100	20.37	35.15	24.80	319.6	0.387
153	18.56	34.96	4.96	0.40	25.12	290.4	150	18.69	34.98	25.10	292.2	0.541
178	17.96	34.91	4.67	0.44	25.23	280.5	200	16.71	34.72	25.39	266.3	0.682
203	16.52	34.69	4.83	0.44	25.41	264.2	250	13.95	34.41	25.76	231.1	0.807
228	15.16	34.52	4.77	0.89	25.59	247.6	300	12.28	34.29	26.00	208.7	0.918
253	13.80	34.40	4.92	1.51	25.78	229.0	400	9.61	34.12	26.36	175.9	1.112
279	12.95	34.35	5.00	1.27	25.92	216.6	500	7.36	34.02	26.62	150.5	1.277
304	12.16	34.28	4.88	0.98	26.02	207.3	600	5.77	34.07	26.87	126.4	1.417
405	9.49	34.12	4.71	1.50	26.37	174.5	700	4.83	34.17	27.06	108.7	1.536
507	7.22	34.02	3.56	2.05	26.64	148.8	800	4.30	34.27	27.20	95.5	1.639
607	5.68	34.08	1.52	2.87	26.89	124.8	1000	3.78	34.45	27.40	77.7	1.814
807	4.28	34.29	0.54	3.28	27.21	94.8	1200	3.34	34.52	27.49	69.2	1.963
1011	3.76	34.46	0.96	3.33	27.40	77.1	1500	2.74	34.57	27.59	60.2	2.160
1212	3.31	34.52	1.29	3.17	27.50	68.9						
1516	2.71	34.57	1.65	3.17	27.59	60.0						

CROMWELL 17, STATION 40, 25- 1N LAT, 157- 1W LONG, JULY 1, 1965, 1400 G.C.T.
DRY BULB 22.3 WET BULB 20.5 WIND SPEED 16, DIR. 07 BAR. 22 WEATHER 60 VIS. 7 CLOUD TYPE , COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.84	34.83			23.28	460.4	0	24.84	34.83	23.28	460.4	0.000
10	25.06	34.84			23.22	466.5	10	25.06	34.84	23.22	466.5	0.047
51	22.95	34.92			23.91	402.7	20	24.78	34.84	23.30	459.1	0.093
76	21.49	35.18			24.52	345.6	30	24.36	34.85	23.44	446.4	0.139
100	20.90	35.16			24.66	332.5	50	23.03	34.92	23.88	405.3	0.225
126	20.09	35.12			24.85	315.6	75	21.54	35.17	24.49	347.6	0.320
151	18.85	34.98			25.06	295.9	100	20.90	35.16	24.66	332.5	0.405
176	17.72	34.82			25.22	281.4	150	18.90	34.99	25.05	296.6	0.564
201	15.20	34.56			25.56	249.2	200	15.30	34.51	25.55	250.4	0.702
226	13.99	34.39			25.74	232.8	250	12.65	34.26	25.91	216.3	0.819
251	12.60	34.26			25.92	215.7	300	11.44	34.20	26.09	199.8	0.924
276	11.99	34.23			26.01	207.1	400	8.55	34.07	26.48	163.1	1.107
301	11.42	34.20			26.10	199.5	500	6.21	34.03	26.78	134.1	1.257
401	8.52	34.07			26.49	162.7	600	5.11	34.12	26.99	114.5	1.383
503	6.15	34.03			26.79	133.4	700	4.53	34.24	27.15	99.6	1.491
803	4.45	34.39			27.28	88.6	800	4.44	34.39	27.27	88.9	1.586
1004	3.94	34.49			27.41	76.9	1000	3.95	34.49	27.41	77.1	1.754
1205	3.44	34.52			27.48	70.4	1200	3.45	34.52	27.48	70.5	1.904
1509	2.79	34.54			27.56	63.2	1500	2.81	34.54	27.56	63.3	2.107

TEMPERATURE ERROR TERM AT 20. METERS IS 0.14
TEMPERATURE ERROR TERM AT 30. METERS IS 0.19
TEMPERATURE ERROR TERM AT 600. METERS IS 0.25
TEMPERATURE ERROR TERM AT 700. METERS IS 0.25

CROMWELL 17, STATION 41, 23-28N LAT, 156-58W LONG, JULY 1, 1965, 2300 G.C.T.
DRY BULB 24.9 WET BULB 21.7 WIND SPEED 20, DIR. 08 BAR. 23 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.20	34.56			22.97	490.3	0	25.20	34.56	22.97	490.3	0.000
9	25.15	34.56			22.98	489.2	10	25.15	34.56	22.98	489.3	0.049
46	24.56	34.74			23.30	460.7	20	25.12	34.57	23.01	487.6	0.099
69	23.13	35.08			23.98	396.8	30	24.98	34.62	23.08	481.1	0.147
92	22.14	35.19			24.34	362.8	50	24.32	34.80	23.42	449.7	0.241
114	21.65	35.19			24.48	350.5	75	22.83	35.13	24.10	385.4	0.346
137	20.95	35.20			24.68	332.3	100	21.95	35.20	24.40	357.5	0.440
159	20.37	35.19			24.83	318.8	150	20.62	35.20	24.77	324.3	0.612
182	19.42	35.10			25.01	302.3	200	18.35	34.93	25.15	289.1	0.766
204	18.09	34.89			25.18	285.9	250	14.90	34.51	25.63	243.5	0.900
226	16.59	34.71			25.41	265.0	300	12.25	34.27	26.00	209.5	1.015
247	15.10	34.53			25.61	246.2	400	8.95	34.09	26.44	167.7	1.205
269	13.69	34.39			25.80	227.9	500	6.78	34.07	26.74	139.0	1.360
356	10.35	34.16			26.26	184.9	600	5.66	34.17	26.98	117.9	1.490
444	7.80	34.06			26.59	153.3	700	5.03	34.30	27.14	101.1	1.600
532	6.35	34.09			26.81	132.0	800	4.61	34.39	27.26	90.4	1.697
712	4.98	34.32			27.16	99.4	1000	4.01	34.49	27.40	77.6	1.867
897	4.32	34.45			27.34	83.5	1200	3.48	34.55	27.51	68.3	2.015
1091	3.77	34.52			27.45	73.4						
1392	3.08	34.57			27.56	63.7						

TEMPERATURE ERROR TERM AT 300. METERS IS 0.11

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 17, STATION 42, 22- IN LAT, 157- OW LONG, JULY 2, 1965, 0900 G.C.T. DRY BULB 24.6 WET BULB 21.5 WIND SPEED 23, DIR. 07 BAR. 20 WEATHER 00 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	25.14	34.50			22.94	492.9	0	25.14	34.50	22.94	492.9	0.000
10	25.17	34.50			22.93	494.2	10	25.17	34.50	22.93	494.2	0.050
30Δ	25.14	34.50			22.94	494.1	20	25.16	34.50	22.94	494.3	0.099
52	25.11	34.50			22.95	494.1	30	25.14	34.50	22.94	494.1	0.149
78	23.72	34.85			23.63	430.1	50	25.13	34.49	22.94	495.1	0.249
102	22.90	34.98			23.97	398.9	75	23.90	34.81	23.54	438.4	0.366
127	21.62	35.09			24.41	357.4	100	22.97	34.97	23.94	401.2	0.472
154	20.76	35.14			24.68	332.3	150	20.89	35.14	24.65	335.4	0.658
178	19.39	34.99			24.93	309.3	200	18.48	34.89	25.09	295.3	0.817
203	18.34	34.87			25.11	293.3	250	14.76	34.43	25.60	246.5	0.953
230	16.23	34.59			25.40	265.8	300	11.86	34.17	26.00	209.3	1.068
254	14.48	34.40			25.64	242.9	400	8.86	34.11	26.47	164.7	1.257
280	12.88	34.26			25.86	221.8	500	6.61	34.10	26.78	134.4	1.408
304	11.67	34.16			26.02	207.0	600	5.42	34.19	27.01	113.2	1.533
405	8.77	34.12			26.49	163.0	700	4.82	34.29	27.16	99.3	1.640
507	6.48	34.10			26.80	132.6	800	4.50	34.38	27.26	89.7	1.736
607	5.37	34.20			27.02	112.0	1000	4.01	34.50	27.41	77.3	1.905
809	4.48	34.39			27.27	89.1	1200	3.36	34.53	27.50	68.7	2.053
1012	3.98	34.50			27.41	76.7	1500	2.87	34.58	27.58	61.2	2.250
1213	3.32	34.53			27.50	68.2						
1518	2.85	34.58			27.59	61.0						

ΔFROM BT DATA

Table 3.--Original and derived oceanographic data for Townsend Cromwell cruise 21

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
CROMWELL 21, STATION 7A, 10- 0N LAT, 154- 0W LONG, JAN. 22, 1966, 1000 G.C.T. DRY BULB 25.0 WET BULB 22.7 WIND SPEED 18, DIR. 06 BAR. 09 WEATHER 02 VIS. 6 CLOUD TYPE , COVER 7												
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	26.23	34.02	4.69		22.25	559.6	0	26.23	34.02	22.25	559.6	0.000
9	26.25	34.01	4.78	0.24	22.23	561.3	10	26.25	34.01	22.23	561.1	0.056
30Δ	26.30	34.15			22.32	553.5	20	26.28	34.07	22.27	558.1	0.113
47	26.33	34.24	4.73	0.26	22.38	548.6	30	26.30	34.15	22.32	553.5	0.169
50Δ	26.33	34.24			22.38	548.7	50	26.33	34.24	22.38	548.7	0.280
69	25.74	34.33	4.81	0.33	22.63	525.4	75	23.91	34.39	23.23	468.3	0.408
94	17.18	34.53	3.63	1.12	25.13	287.3	100	15.72	34.48	25.43	258.5	0.499
118	12.74	34.37	2.26	1.28	25.98	206.9	150	11.71	34.68	26.42	165.7	0.606
140	11.95	34.64	0.48	2.51	26.34	173.0	200	11.00	34.71	26.57	152.3	0.686
164	11.45	34.70	0.32	2.09	26.48	160.1	250	10.36	34.72	26.69	141.3	0.761
188	11.17	34.72	0.26	2.34	26.55	154.2	300	9.90	34.68	26.74	138.2	0.831
212	10.83	34.70	0.29	2.59	26.59	150.3	400	9.16	34.64	26.83	130.4	0.967
234	10.54	34.72	0.37	2.46	26.66	144.3	500	8.21	34.62	26.96	119.4	1.093
258	10.27	34.72	0.39	2.64	26.71	140.3	600	7.20	34.58	27.08	108.8	1.208
281	10.05	34.69	0.38	2.40	26.72	139.3	700	6.38	34.56	27.17	100.3	1.314
375	9.36	34.65	0.36	2.54	26.81	132.8	800	5.70	34.55	27.26	92.8	1.411
468	8.55	34.63	0.30	2.98	26.92	123.1	1000	4.69	34.57	27.39	80.3	1.586
561	7.56	34.59	0.34	2.58	27.04	112.6	1200	3.91	34.59	27.49	70.8	1.739
749	6.03	34.55	0.73	3.07	27.21	96.6	1500	3.12	34.62	27.59	61.3	1.940
938	4.96	34.56	0.80	3.01	27.35	83.9						
1175	4.06	34.60	1.26	2.86	27.48	71.8						
1517	3.09	34.62	1.71	2.98	27.60	61.0						

TEMPERATURE ERROR TERM AT 75. METERS IS 0.39

CROMWELL 21, STATION 8, 11-30N LAT, 154- 0W LONG, JAN. 23, 1966, 1100 G.C.T. DRY BULB 24.8 WET BULB 22.3 WIND SPEED 12, DIR. 05 BAR. 11 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	25.32	34.37	4.85		22.79	507.5	0	25.32	34.37	22.79	507.5	0.000
11	25.34	34.36	4.82	0.33	22.78	509.2	10	25.34	34.36	22.78	509.1	0.051
49	25.36	34.34	4.84	0.30	22.75	512.8	20	25.35	34.35	22.77	510.4	0.103
74Δ	25.34	34.34	4.88	0.24	22.76	513.2	30	25.36	34.35	22.76	511.5	0.154
75Δ	25.34	34.34			22.76	513.2	50	25.36	34.34	22.76	512.8	0.257
98	17.56	34.55	3.72	1.06	25.05	294.7	75	25.34	34.34	22.76	513.2	0.386
123	12.57	34.36	2.46	1.63	26.00	204.6	100	17.01	34.53	25.17	283.5	0.487
147	11.84	34.64	0.64	2.53	26.36	171.1	150	11.76	34.66	26.39	168.6	0.601
171	11.30	34.71	0.31	2.71	26.51	156.9	200	10.91	34.72	26.59	149.8	0.681
196	10.96	34.72	0.40	1.96	26.58	150.7	250	10.35	34.72	26.69	141.3	0.754
221	10.66	34.73	0.39	2.58	26.65	145.4	300	9.76	34.70	26.77	134.4	0.824
245	10.40	34.72	0.40	2.94	26.68	142.2	400	8.97	34.65	26.87	127.3	0.956
269	10.13	34.72	0.58	2.63	26.73	138.1	500	8.05	34.60	26.97	118.6	1.080
294	9.82	34.70	0.54	2.40	26.77	135.0	600	7.13	34.56	27.07	109.3	1.195
392	9.04	34.65	0.38	2.63	26.86	127.9	700	6.36	34.54	27.16	101.2	1.301
491	8.14	34.60	0.44	2.61	26.96	119.4	800	5.71	34.54	27.25	93.5	1.400
589	7.22	34.56	0.48	2.84	27.06	110.3	1000	4.66	34.57	27.40	79.8	1.575
786	5.80	34.54	0.64	2.93	27.24	94.7	1200	4.03	34.59	27.48	72.5	1.730
982	4.73	34.57	1.05	3.29	27.39	80.6	1500	3.18	34.62	27.59	61.8	1.934
1228	3.96	34.59	1.32	2.93	27.49	71.8						
1573	3.05	34.63	1.78	2.89	27.61	60.1						

CROMWELL 21, STATION 9, 13- 0N LAT, 154- 0W LONG, JAN. 24, 1966, 1200 G.C.T. DRY BULB 24.0 WET BULB 22.8 WIND SPEED 19, DIR. 05 BAR. 14 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	25.04	34.28	4.89		22.81	505.8	0	25.04	34.28	22.81	505.8	0.000
9	25.06	34.28	4.86	0.35	22.80	506.8	10	25.06	34.28	22.80	506.8	0.051
30Δ	25.07	34.28			22.80	507.9	20	25.07	34.28	22.80	507.4	0.102
47	25.08	34.28	4.86	0.29	22.79	508.8	30	25.07	34.28	22.80	507.9	0.153
50Δ	25.07	34.28			22.80	508.7	50	25.07	34.28	22.80	508.7	0.256
72	22.99	34.80		0.29	23.81	413.2	75	22.74	34.85	23.92	402.7	0.370
96	21.07	35.06	4.89	0.24	24.54	344.0	100	20.78	35.06	24.62	336.9	0.464
120	19.21	34.93	4.55	0.33	24.93	307.2	150	15.87	34.58	25.47	256.6	0.613
144	16.70	34.67	4.35	0.63	25.35	267.9	200	10.90	34.22	26.20	186.8	0.725
168	13.46	34.32	3.86	1.15	25.79	225.8	250	10.47	34.56	26.55	155.0	0.811
193	11.22	34.20	3.54	1.56	26.13	193.4	300	10.05	34.63	26.67	144.1	0.886
217	10.49	34.31	2.43	2.17	26.35	173.3	400	8.58	34.58	26.88	125.7	1.023
241	10.43	34.51	0.92	2.50	26.51	158.0	500	7.41	34.54	27.02	112.8	1.143
264	10.50	34.62	0.35	2.75	26.59	151.7	600	6.44	34.52	27.14	102.3	1.252
288	10.22	34.63	0.34	2.59	26.64	146.7	700	5.76	34.53	27.23	93.9	1.351
386	8.76	34.59	0.28	2.75	26.86	127.8	800	5.16	34.54	27.31	86.5	1.442
482	7.61	34.55	0.45	2.96	27.00	115.0	1000	4.05	34.56	27.46	72.8	1.603
579	6.60	34.52	0.40	3.12	27.12	104.3	1200	3.40	34.58	27.54	65.1	1.743
774	5.34	34.54	0.52	3.16	27.29	88.4						
909	4.47	34.54	0.76	3.29	27.39	78.8						
1055	3.85	34.58	1.20	3.23	27.49	69.6						
1356	3.22	34.60	1.66	3.02	27.57	62.9						

ΔFROM BT DATA

Table 3.--Continued

CROMWELL 21, STATION 10, 14-28N LAT, 153-57W LONG, JAN. 25, 1966, 1100 G.C.T.
DRY BULB 24.5 WET BULB 21.9 WIND SPEED 20, DIR. 05 BAR. 14 WEATHER 02 VIS. 7 CLOUD TYPE , 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	24.78	34.38	4.88		22.96	491.1	0	24.78	34.38	22.96	491.1	0.000
9Δ	24.82	34.39	5.49	0.32	22.96	491.9	10	24.82	34.39	22.96	492.0	0.050
30Δ	24.85	34.40			22.96	492.9	20	24.85	34.40	22.95	492.7	0.099
47	24.78	34.41	4.95	0.28	22.98	490.8	30	24.85	34.40	22.96	492.9	0.149
69	24.31	34.88	4.95	0.23	23.48	444.3	50	24.73	34.47	23.04	485.2	0.247
93	23.61	34.93	4.95	0.25	23.72	421.9	75	24.20	34.91	23.53	439.3	0.364
116	21.78	35.06	4.93	0.20	24.34	363.4	100	23.11	34.98	23.91	404.8	0.470
140	19.90	34.92	4.54	0.42	24.75	325.8	150	18.94	34.85	24.94	307.7	0.650
163	17.58	34.73	4.08	0.70	25.19	284.2	200	13.68	34.35	25.77	229.0	0.785
186	15.02	34.47	3.92	0.94	25.58	247.1	250	10.32	34.23	26.31	177.3	0.887
210	12.80	34.28	3.82	1.21	25.89	217.0	300	9.29	34.36	26.59	151.6	0.970
233	10.93	34.21	3.48	1.53	26.19	188.5	400	8.10	34.46	26.85	127.8	1.111
256	10.19	34.24	2.92	2.03	26.35	174.2	500	7.27	34.50	27.01	114.2	1.233
280	9.64	34.32	2.07	2.26	26.50	159.7	600	6.46	34.48	27.11	105.3	1.344
374	8.35	34.43	0.81	2.34	26.79	133.1	700	5.75	34.50	27.21	96.0	1.446
467	7.55	34.50	0.69	2.90	26.97	117.5	800	5.17	34.52	27.29	88.3	1.539
561	6.76	34.48	0.64	2.98	27.06	109.2	1000	4.30	34.54	27.41	77.6	1.707
750	5.44	34.51	0.66	3.11	27.26	91.6	1200	3.60	34.57	27.51	68.6	1.855
939	4.53	34.53	1.40	2.58	27.38	80.6	1500	2.85	34.62	27.62	58.1	2.048
1176	3.72	34.57	1.20	2.74	27.49	69.8						
1510	2.83	34.62	1.66	2.58	27.62	57.8						

CROMWELL 21, STATION 11, 16- 0N LAT, 154- 0W LONG, JAN. 26, 1966, 1100 G.C.T.
DRY BULB 23.7 WET BULB 20.8 WIND SPEED 22, DIR. 04 BAR. 14 WEATHER 02 VIS. 6 CLOUD TYPE , COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	24.10	34.83	5.48		23.50	439.3	0	24.10	34.83	23.50	439.3	0.000
25	24.12	34.82	4.90	0.21	23.49	441.5	10	24.12	34.82	23.49	440.7	0.044
50	24.07	34.84	4.91	0.25	23.52	439.7	20	24.12	34.82	23.49	441.4	0.089
75	23.86	34.88	4.91	0.19	23.61	431.8	30	24.12	34.82	23.49	441.6	0.133
98	23.71	34.93	4.96	0.24	23.69	424.9	50	24.07	34.84	23.52	439.7	0.222
124	22.00	35.06	4.88	0.24	24.28	369.6	75	23.86	34.88	23.61	431.8	0.332
148	20.40	35.10	4.52	0.34	24.75	325.7	100	23.61	34.94	23.73	421.4	0.439
172	18.84	34.92	4.41	0.50	25.02	300.7	150	20.28	35.09	24.78	323.3	0.627
196	16.83	34.66	4.16	0.59	25.31	273.1	200	16.43	34.61	25.37	268.0	0.776
221	14.29	34.37	3.92	1.00	25.66	240.2	250	11.86	34.28	26.07	200.6	0.894
245	12.16	34.28	2.68	1.78	26.02	205.8	300	9.67	34.30	26.48	161.8	0.985
343	8.93	34.40	1.06	2.73	26.68	143.7	400	8.22	34.43	26.82	131.2	1.133
441	7.97	34.45	0.53	2.66	26.87	127.0	500	7.55	34.48	26.95	119.8	1.260
539	7.29	34.49	0.52	3.05	27.00	115.7	600	6.76	34.49	27.07	108.8	1.375
734	5.67	34.49	0.62	2.80	27.21	95.9	700	5.94	34.49	27.18	98.9	1.480
931	4.75	34.52	0.80	2.97	27.35	84.0	800	5.31	34.50	27.26	91.4	1.577
1175	3.84	34.56	1.16	3.15	27.47	72.0	1000	4.47	34.53	27.39	80.4	1.750
1520	2.88	34.60	1.62	2.53	27.60	59.9	1200	3.74	34.56	27.49	71.0	1.904
							1500	2.92	34.60	27.59	60.5	2.104

TEMPERATURE ERROR TERM AT 300. METERS IS 0.27

CROMWELL 21, STATION 12, 17-30N LAT, 153-58W LONG, JAN. 27, 1966, 1000 G.C.T.
DRY BULB 23.5 WET BULB 20.3 WIND SPEED 15, DIR. 10 BAR. 18 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	23.88	34.80	4.95		23.55	435.2	0	23.88	34.80	23.55	435.2	0.000
11	23.91	34.79	4.95	0.25	23.53	437.2	10	23.91	34.79	23.53	437.2	0.044
51	23.51	34.96	5.01	0.25	23.78	415.3	20	23.84	34.82	23.58	433.2	0.088
75	23.44	34.96	4.99	0.22	23.80	414.3	30	23.75	34.86	23.63	428.1	0.131
100	21.55	35.02	5.04	0.27	24.38	359.6	50	23.52	34.96	23.77	416.0	0.216
126	20.38	35.05	4.70	0.27	24.72	328.0	75	23.44	34.96	23.80	414.3	0.321
150	19.40	35.02	4.54	0.37	24.95	306.4	100	21.55	35.02	24.38	359.6	0.418
175	17.92	34.83	4.47	0.45	25.18	285.3	150	19.40	35.02	24.95	306.4	0.586
200	15.88	34.57	4.31	0.63	25.46	258.7	200	15.88	34.57	25.46	258.7	0.728
225	13.58	34.32	4.22	0.89	25.77	229.7	250	11.50	34.15	26.04	203.4	0.845
250	11.50	34.15	4.22	0.98	26.04	203.4	300	9.44	34.13	26.39	170.9	0.939
275	10.32	34.12	4.04	1.24	26.23	185.6	400	7.40	34.17	26.73	138.7	1.095
300	9.44	34.13	3.68	1.70	26.39	170.9	500	6.44	34.31	26.97	116.4	1.224
400	7.40	34.17	1.88	2.48	26.73	138.7	600	5.86	34.42	27.13	101.8	1.334
499	6.45	34.31	0.91	2.88	26.97	116.6	700	5.34	34.48	27.24	92.3	1.433
598	5.87	34.42	0.69	2.85	27.13	102.0	800	4.89	34.50	27.31	85.9	1.523
798	4.90	34.50	0.86	3.08	27.31	86.0	1000	4.16	34.52	27.41	77.3	1.688
997	4.17	34.52	1.16	3.13	27.41	77.5	1200	3.60	34.59	27.53	66.8	1.834
1245	3.49	34.61	1.33	2.62	27.55	64.6	1500	2.86	34.60	27.60	59.4	2.026
1594	2.67	34.60	1.78	2.50	27.62	57.8						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 21, STATION 13, 19- 0N LAT, 153-59W LONG, JAN. 28, 1966, 1000 G.C.T.
DRY BULB 23.1 WET BULB 19.8 WIND SPEED 17, DIR. 04 BAR. 20 WEATHER 03 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	23.54	34.92	4.96		23.74	417.1	0	23.54	34.92	23.74	417.1	0.000
9	23.56	34.93	5.04	0.34	23.74	417.2	10	23.56	34.93	23.74	417.2	0.042
45	23.48	34.93	5.09	0.28	23.76	416.4	20	23.54	34.93	23.74	417.1	0.084
68	23.47	34.94	5.00	0.30	23.77	416.3	30	23.52	34.93	23.75	416.9	0.126
92	23.40	34.94	4.99	0.28	23.79	415.3	50	23.48	34.93	23.76	416.4	0.210
115	23.17	34.96	5.00	0.25	23.87	408.3	75	23.46	34.94	23.77	416.4	0.315
137	21.36	35.04	5.00	0.28	24.45	354.5	100	23.43	34.94	23.79	416.1	0.420
160	20.23	35.11	4.77	0.51	24.80	321.1	150	20.65	35.09	24.68	333.0	0.608
183	19.48	35.05	4.65	0.41	24.95	307.4	200	18.69	34.96	25.09	295.4	0.767
206	18.34	34.91	4.58	0.47	25.14	290.5	250	14.02	34.33	25.69	238.1	0.901
230	16.50*	34.66	4.42	0.61	25.39	266.8	300	10.97	34.15	26.14	194.8	1.011
253	13.66	34.29	4.20	1.01	25.73	234.2	400	8.45	34.34	26.70	142.0	1.180
276	12.16	34.17	4.09	1.16	25.93	214.6	500	7.34	34.39	26.91	123.2	1.314
369	8.83	34.29	1.88	2.42	26.61	150.7	600	5.98	34.37	27.08	107.0	1.431
461	7.99	34.40	0.69	2.89	26.82	131.4	700	5.33	34.42	27.20	96.1	1.533
554	6.43	34.36	0.68	3.02	27.01	113.4	800	4.96	34.47	27.28	89.0	1.627
740	5.20	34.45	0.88	3.11	27.24	92.9	1000	4.30	34.51	27.39	79.8	1.798
927	4.55	34.50	0.94	3.11	27.35	83.0	1200	3.68	34.55	27.48	71.3	1.951
1161	3.78	34.53	1.30	3.20	27.46	73.4						
1493	2.91	34.59	1.58	3.11	27.59	60.8						

TEMPERATURE ERROR TERM AT 400. METERS IS 0.12

CROMWELL 21, STATION 14, 20-30N LAT, 153-58W LONG, JAN. 29, 1966, 1200 G.C.T.
DRY BULB 21.5 WET BULB 19.4 WIND SPEED 20, DIR. 05 BAR. 20 WEATHER 02 VIS. 6 CLOUD TYPE 5, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0	22.66	34.98	5.06		24.04	388.5	0	22.66	34.98	24.04	388.5	0.000
10	22.68	34.98	5.06	0.50	24.03	389.4	10	22.68	34.98	24.03	389.4	0.039
50	22.53	35.03	5.18		24.11	383.3	20	22.66	34.99	24.05	388.4	0.078
75	22.48	35.04	5.09	0.21	24.13	382.1	30	22.62	35.00	24.06	387.0	0.117
100	22.40	35.03	5.08	0.22	24.15	381.6	50	22.53	35.03	24.11	383.3	0.195
125	21.79	35.10	5.00	0.29	24.37	361.1	75	22.48	35.04	24.13	382.1	0.291
150	20.46	35.14	4.90	0.30	24.77	324.4	100	22.40	35.03	24.15	381.6	0.388
174	19.95	35.14	4.80	0.27	24.90	312.3	150	20.46	35.14	24.77	324.4	0.565
200	18.83	34.99	4.64	0.36	25.08	296.3	200	18.83	34.99	25.08	296.3	0.722
225	16.91	34.74	4.57	0.47	25.35	270.1	250	14.32	34.35	25.64	243.2	0.858
249	14.41	34.36	4.39	0.79	25.63	244.2	300	11.19	34.18	26.12	196.9	0.969
274	12.56	34.21	4.41	0.99	25.89	219.2	400	8.07	34.07	26.55	155.8	1.147
299	11.23	34.18	4.66	1.04	26.12	197.5	500	6.42	34.16	26.86	127.2	1.290
399	8.09	34.07	3.36	1.98	26.55	156.1	600	5.49	34.26	27.05	108.9	1.409
499	6.43	34.16	1.48	2.66	26.86	127.4	700	5.06	34.37	27.19	96.6	1.513
599	5.50	34.26	0.82	2.93	27.05	109.1	800	4.84	34.46	27.29	88.2	1.606
799	4.84	34.46	0.86	3.06	27.29	88.2	1000	4.22	34.51	27.40	78.9	1.775
998	4.23	34.51	1.05	3.19	27.39	78.9	1200	3.65	34.54	27.48	71.1	1.927
1247	3.53	34.55	1.26	3.10	27.50	69.5	1500	2.95	34.58	27.57	62.4	2.130
1596	2.75	34.58	1.69	3.11	27.59	60.3						

CROMWELL 21, STATION 15, 22- 0N LAT, 153-59W LONG, JAN. 30, 1966, 1000 G.C.T.
DRY BULB 21.4 WET BULB 17.1 WIND SPEED 09, DIR. 06 BAR. 21 WEATHER 03 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	22.49	35.03	6.00		24.12	380.3	0	22.49	35.03	24.12	380.3	0.000
10	22.58	35.03	5.18	0.27	24.10	383.1	10	22.58	35.03	24.10	383.1	0.038
46	22.60	35.01	5.33	0.20	24.08	386.4	20	22.61	35.02	24.08	384.8	0.077
69	22.60	35.02	5.29	0.18	24.08	386.6	30	22.52	35.02	24.08	385.9	0.116
93	22.57	35.03	5.38	0.19	24.10	386.0	50	22.60	35.01	24.08	386.6	0.194
116	22.57	35.04	5.17	0.18	24.11	386.1	75	22.59	35.02	24.09	386.4	0.291
139	21.61	35.10	4.83	0.42	24.42	356.9	100	22.62	35.03	24.09	387.6	0.389
161	20.88	35.13	4.72	0.24	24.64	336.4	150	21.26	35.12	24.54	346.4	0.574
185	19.69	35.09	4.58	0.30	24.93	309.8	200	18.98	35.02	25.06	298.2	0.736
208	18.56	34.96	4.45	0.35	25.12	292.2	250	15.39	34.54	25.55	251.9	0.875
231	16.90*	34.74	4.58	0.44	25.36	270.0	300	12.68	34.28	25.92	217.0	0.993
254	15.09	34.50	4.58	0.62	25.59	248.4	400	8.95	34.12	26.46	165.7	1.186
277	13.83	34.37	4.65	0.67	25.75	232.4	500	6.97	34.13	26.76	137.4	1.339
369	9.88	34.14	3.90	1.62	26.32	178.7	600	5.96	34.20	26.95	119.7	1.469
461	7.57	34.12	2.48	2.29	26.67	145.8	700	5.29	34.32	27.12	103.3	1.582
555	6.36	34.15	1.46	2.63	26.86	128.0	800	4.82	34.42	27.26	91.0	1.680
740	5.10	34.37	0.70	3.15	27.19	97.5	1000	4.10	34.51	27.41	77.1	1.850
926	4.34	34.49	0.90	3.21	27.37	81.1	1200	3.51	34.57	27.51	67.7	1.997
1161	3.64	34.54	1.16		27.48	70.9						
1494	2.93	34.59	1.57	2.96	27.59	61.1						

*INTERPOLATED DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 21, STATION 16, 23-30N LAT, 153-58W LONG, JAN. 31, 1966, 0900 G.C.T.
DRY BULB 22.2 WET BULB 19.0 WIND SPEED 15, DIR. 13 BAR. 19 WEATHER 03 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	22.25	35.04	5.10		24.20	373.1	0	22.25	35.04	24.20	373.1	0.000
9	22.27	35.04	5.16	0.16	24.19	374.0	10	22.27	35.04	24.19	373.9	0.038
47	22.02	35.06	5.18	0.19	24.28	367.2	20	22.22	35.04	24.21	373.0	0.075
70	21.90	35.10	5.32	0.18	24.34	362.0	30	22.16	35.05	24.23	371.4	0.113
94	21.82	35.11	5.14	0.19	24.37	360.1	50	22.00	35.07	24.29	366.5	0.187
116	21.73	35.18	5.12	0.11	24.45	353.4	75	21.88	35.10	24.35	361.7	0.279
140	20.45	35.13	4.96	0.19	24.76	324.5	100	21.85	35.13	24.38	359.5	0.370
164	19.65	35.12	4.88	0.18	24.96	305.9	150	20.13	35.14	24.85	316.3	0.540
186	18.33	34.94	4.74	0.30	25.16	287.4	200	17.69	34.85	25.25	279.3	0.690
209	17.27	34.79	4.73	0.54	25.31	274.2	250	15.15	34.52	25.59	248.2	0.823
232	15.82	34.60	4.78	0.47	25.50	256.2	300	12.86	34.31	25.90	218.6	0.941
255	14.98	34.50	4.75	0.58	25.61	246.1	400	9.67	34.12	26.34	177.2	1.140
278	13.81	34.38	4.78	0.64	25.77	231.3	500	7.28	34.04	26.64	148.3	1.305
371	10.44	34.17	4.91	1.12	26.25	186.0	600	5.51	34.10	26.92	121.4	1.441
462	8.22	34.05	3.92	1.79	26.52	160.6	700	4.73	34.22	27.11	103.5	1.555
554	6.10	34.05	2.14	2.47	26.81	131.9	800	4.40	34.35	27.25	91.0	1.653
738	4.62	34.28	0.69	3.10	27.17	98.2	1000	3.95	34.50	27.41	76.4	1.822
922	4.14	34.46	1.04	3.28	27.36	80.8	1200	3.48	34.58	27.52	66.6	1.967
1154	3.59	34.54	1.38	3.01	27.48	70.3						
1482	2.89	34.59	1.67	3.06	27.59	60.5						

CROMWELL 21, STATION 39, 25- 1N LAT, 153-57W LONG, FEB. 1, 1966, 0900 G.C.T.
DRY BULB 21.0 WET BULB 19.0 WIND SPEED 20, DIR. 27 BAR. 15 WEATHER 01 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	21.85**	35.12	5.14		24.37	356.6	0	21.85	35.12	24.37	356.6	0.000
10	21.83	35.10	5.10	0.14	24.36	357.9	10	21.83	35.10	24.36	357.9	0.036
48	21.87	35.11	5.13	0.12	24.36	359.7	20	21.84	35.10	24.36	358.7	0.072
72	21.84	35.11	5.10	0.16	24.37	359.8	30	21.85	35.10	24.35	359.3	0.108
96	21.59	35.16	5.10	0.15	24.47	350.4	50	21.87	35.11	24.36	359.9	0.181
121	21.60	35.16	5.10	0.11	24.47	351.6	75	21.81	35.12	24.38	358.6	0.271
146	21.40	35.18	5.02	0.20	24.54	345.8	100	21.59	35.16	24.47	350.5	0.360
170	20.17	35.10	4.88	0.22	24.81	320.6	150	21.22	35.17	24.58	342.0	0.535
194	19.14	35.02	5.32	0.46	25.02	301.5	200	18.73	34.98	25.09	295.0	0.696
219	17.34	34.81	4.82	0.40	25.31	274.7	250	15.45	34.56	25.55	251.7	0.833
244	15.76	34.60	4.71	0.54	25.51	255.2	300	12.99	34.34	25.90	219.0	0.952
267	14.63	34.46	4.66	0.78	25.66	242.0	400	9.81	34.13	26.33	178.6	1.153
292	13.33	34.36	4.88	0.78	25.85	223.6	500	7.57	34.05	26.61	151.5	1.319
390	10.08	34.15	4.84	1.20	26.30	181.8	600	6.02	34.08	26.84	129.4	1.461
489	7.77	34.05	3.75	1.95	26.58	154.3	700	5.03	34.16	27.03	111.5	1.583
586	6.29	34.10	1.76	2.66	26.83	131.1						
782	4.64	34.28	0.64	3.19	27.17	98.9						

CROMWELL 21, STATION 39A, 26-30N LAT, 153-58W LONG, FEB. 2, 1966, 1200 G.C.T.
DRY BULB 18.0 WET BULB 13.8 WIND SPEED 12, DIR. 01 BAR. 16 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	21.34	35.13	5.43		24.52	342.4	0	21.34	35.13	24.52	342.4	0.000
9	21.37	35.13	5.20	0.15	24.51	343.6	10	21.37	35.13	24.51	343.7	0.035
45	21.38	35.12	5.18	0.11	24.50	345.9	20	21.38	35.13	24.50	344.6	0.069
67	21.38	35.13	5.24	0.23	24.51	346.0	30	21.39	35.12	24.50	345.3	0.104
90	21.35	35.13	5.14	0.16	24.52	346.0	50	21.38	35.12	24.50	346.0	0.174
113	21.36	35.14	5.22	0.16	24.52	346.4	75	21.37	35.13	24.51	346.0	0.261
135	21.35	35.19	5.06	0.16	24.56	343.4	100	21.35	35.13	24.52	346.4	0.348
156	19.22	35.03	4.88	0.29	25.01	301.5	150	19.88	35.08	24.88	313.7	0.514
178	18.16	34.90	4.83	0.28	25.17	286.0	200	17.40	34.81	25.29	275.5	0.663
202	17.32	34.80	4.80	0.41	25.30	274.4	250	14.86	34.51	25.64	242.6	0.793
225	15.69	34.60	4.83	0.50	25.53	253.1	300	12.82	34.34	25.93	215.5	0.909
248	14.95	34.52	4.80	0.62	25.63	243.8	400	9.85	34.13	26.32	179.9	1.108
270	13.96	34.43	4.77	0.68	25.77	230.5	500	7.59	34.04	26.60	152.7	1.276
360	10.93	34.20	4.97	0.87	26.19	192.1	600	5.97	34.06	26.83	130.2	1.419
451	8.64	34.06	3.96	1.46	26.46	166.2	700	4.91	34.12	27.01	113.4	1.542
542	6.81	34.04	2.70	2.25	26.71	142.1	800	4.29	34.22	27.16	99.3	1.650
725	4.73	34.14	1.00-	2.93	27.05	109.8	1000	3.69	34.41	27.37	80.2	1.831
909	3.91	34.34	0.52	3.28	27.29	86.9	1200	3.22	34.52	27.50	68.0	1.981
1144	3.46	34.48	1.03	3.15	27.45	73.1	1500	2.85	34.56	27.57	62.2	2.180
1523	2.84	34.56	1.58	2.91	27.57	62.4						

TEMPERATURE ERROR TERM AT 150. METERS IS 0.11

**EXTRAPOLATED DATA

MS# 1587

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

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

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

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