

CORRECTIONS MADE :

STATION POSITIONS ~~48~~ (none)

UNIVERSITY OF CALIFORNIA    SCRIPPS INSTITUTION OF OCEANOGRAPHY

## data report

PHYSICAL AND CHEMICAL DATA  
CCOFI CRUISE 5302  
(MLR 45)  
4-26 February 1953

SIO Reference 57-33  
15 August 1957

UNIVERSITY OF CALIFORNIA  
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5302

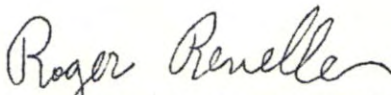
(MLR 45)

4-26 February 1953

Sponsored by  
Marine Research Committee

SIO Reference 57-33  
15 August 1957

Approved for distribution:

  
Roger Revelle, Director



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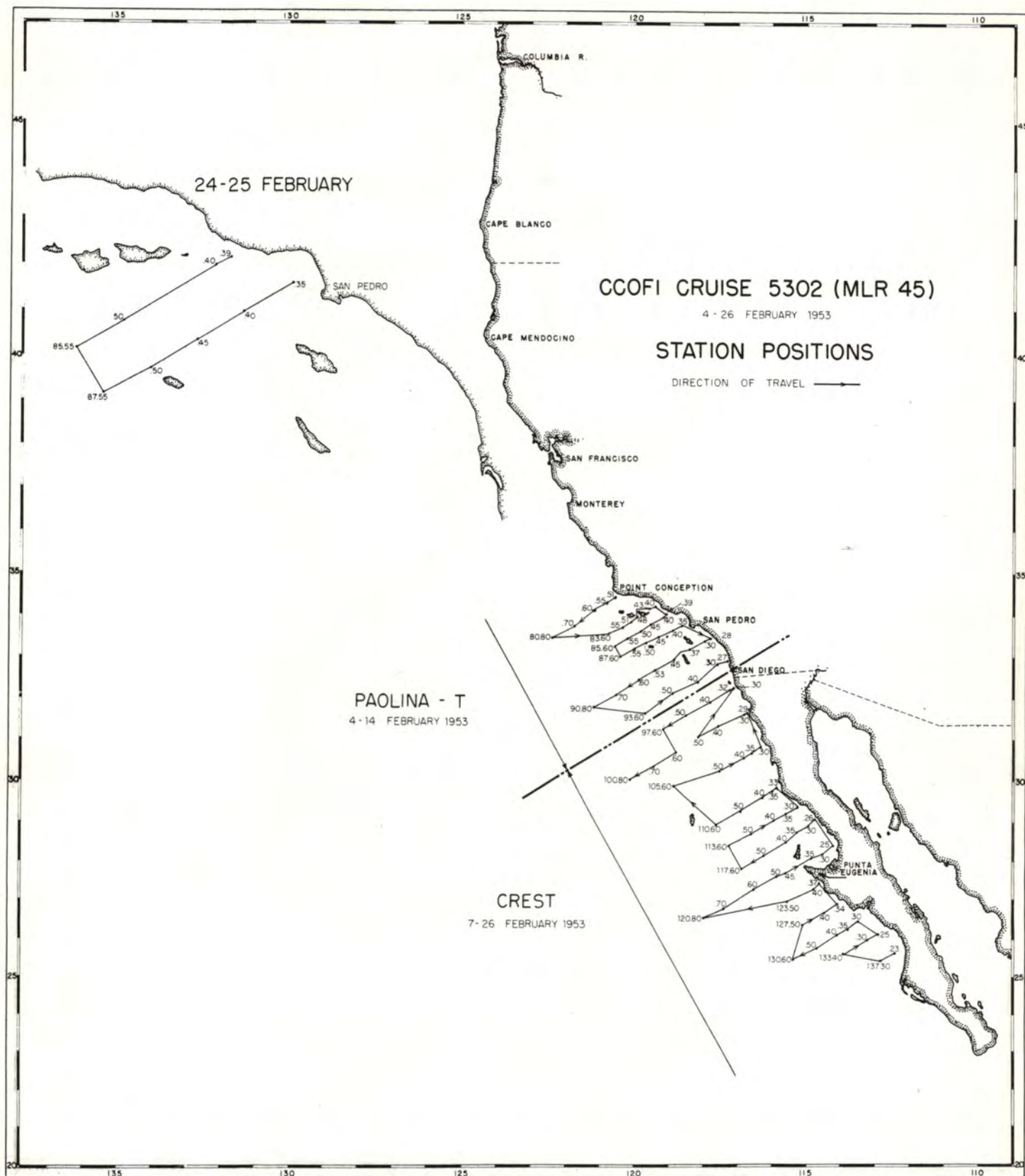


FIGURE 1



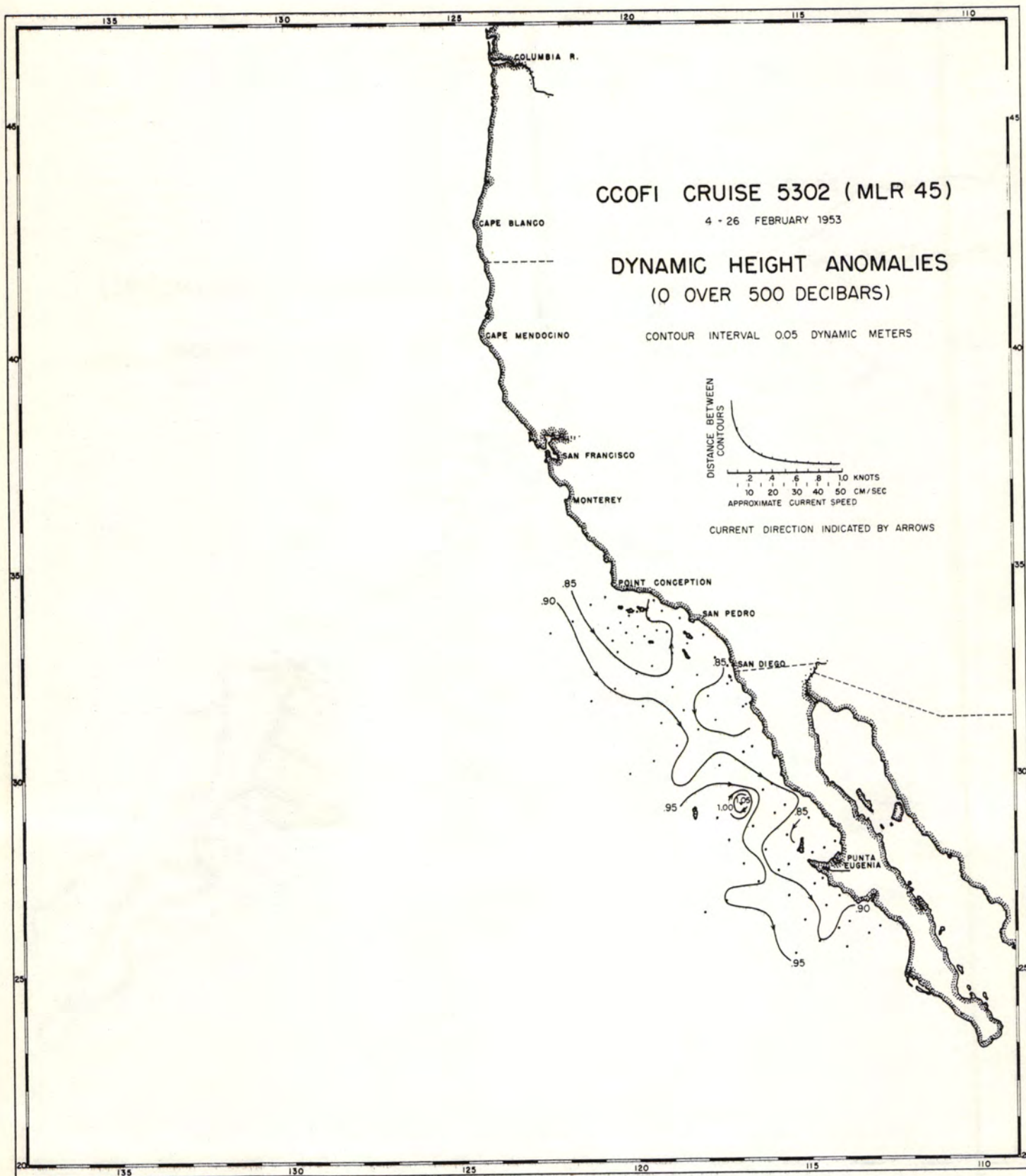


FIGURE 2

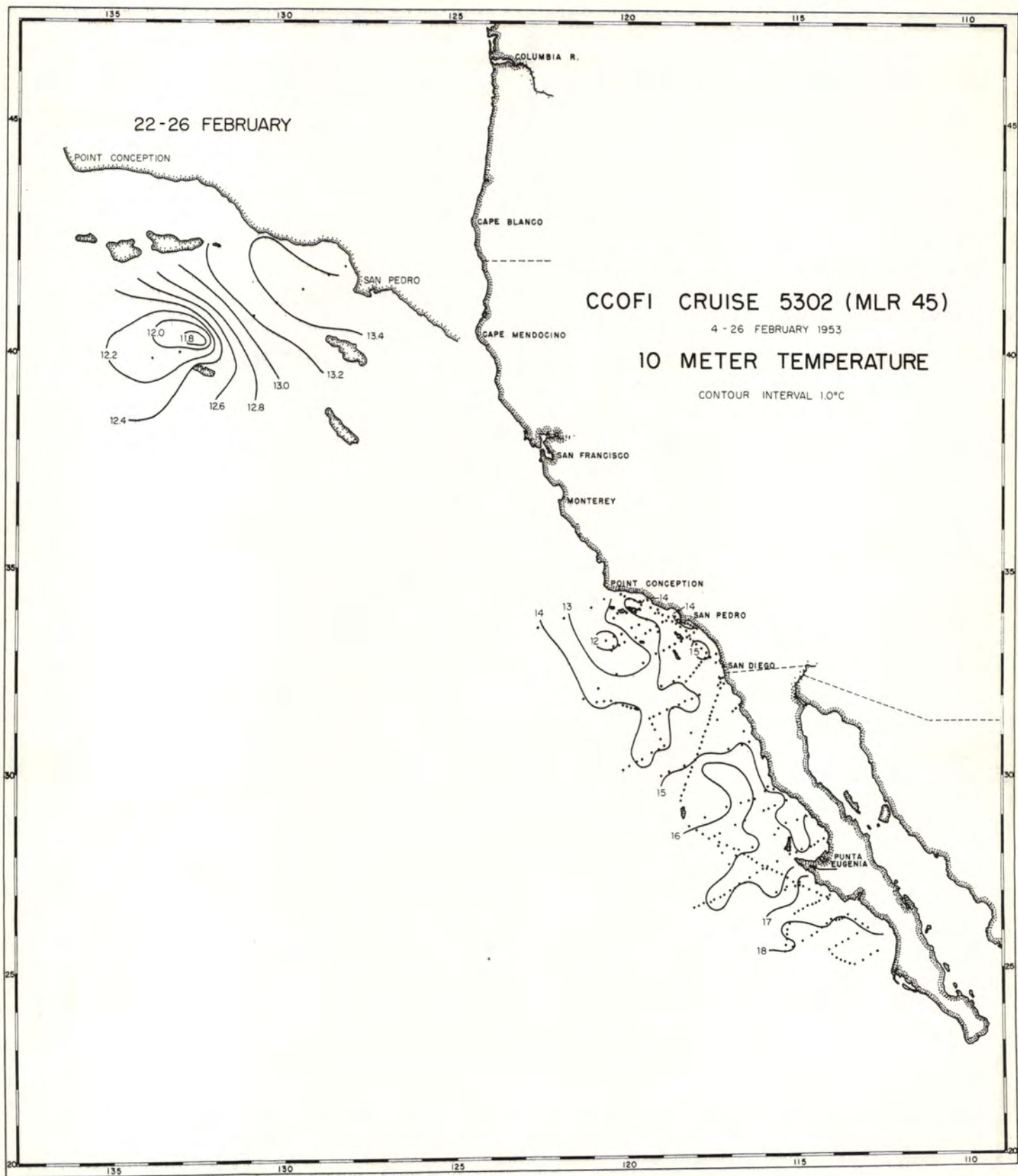


FIGURE 3





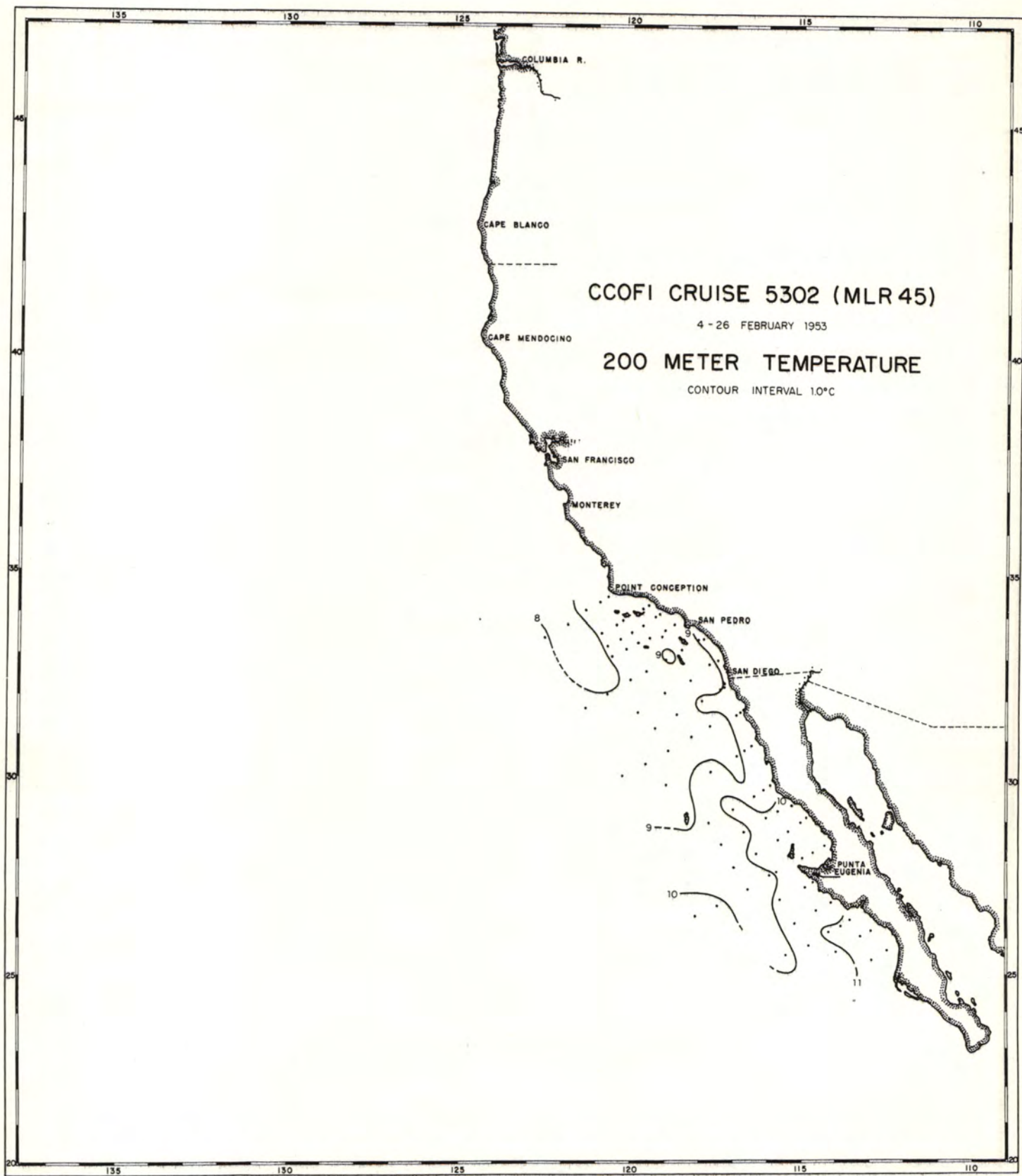


FIGURE 5

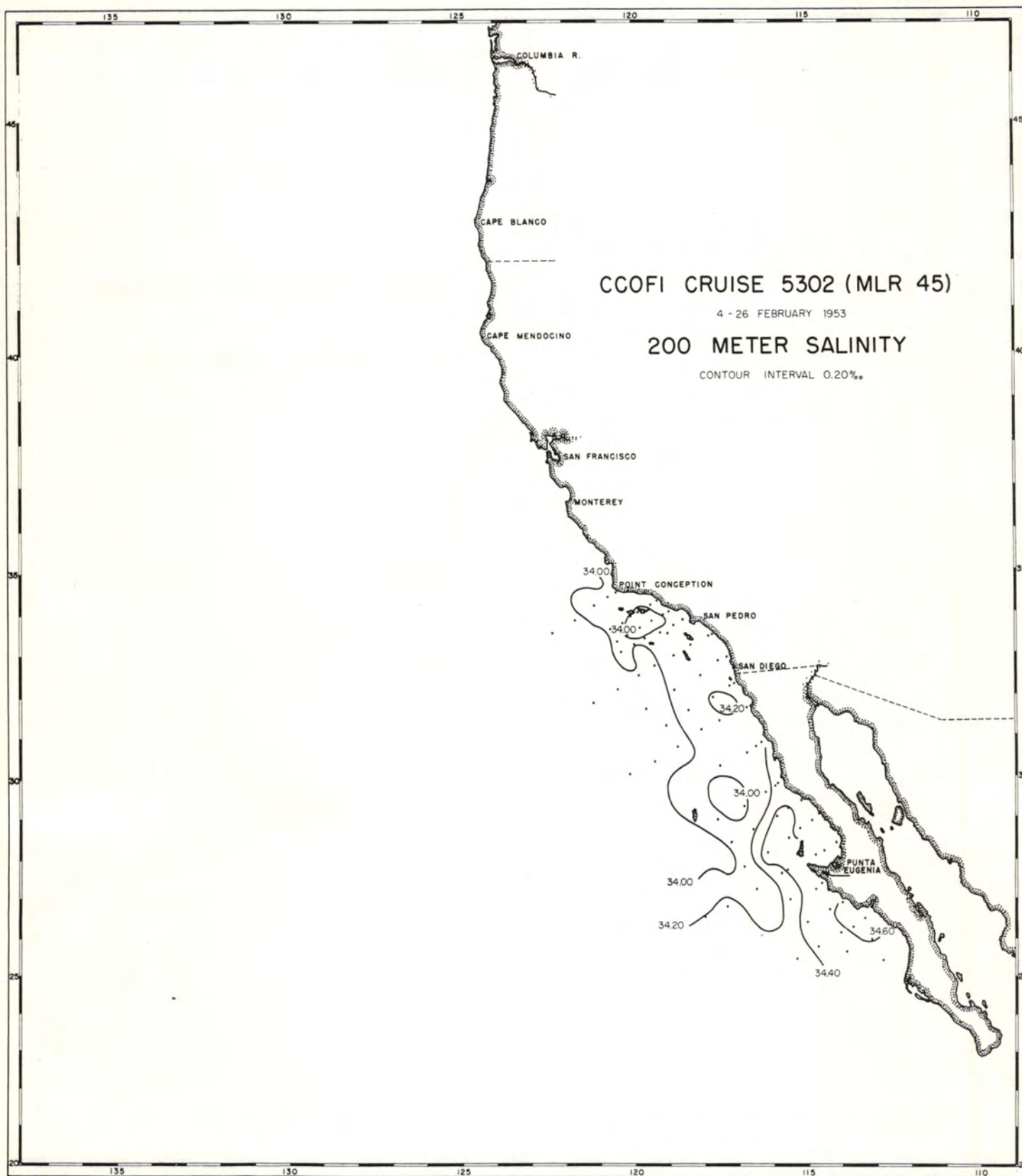


FIGURE 6



## INTRODUCTION

The data in this report were collected on the forty-fifth full-scale cruise conducted in the Marine Life Research Program. The three ships participating were the MV CREST, the MV PAOLINA-T, and the MV E. W. SCRIPPS, of the Scripps Institution of Oceanography.

Data are presented in the form of values tabulated at standard depths, and on charts of horizontal distributions. Values of observed depths will be included in a final publication, OCEANIC OBSERVATIONS OF THE PACIFIC. The presentation of data in these Physical and Chemical Reports does not constitute publication, and these interpretations may be subject to modification as the program continues.

In the tabulated data extrapolated values are indicated by parentheses. The time given is the time that the messenger was released. When more than one cast was made on a station, both messenger times and both wire angles are given; the time and the wire angle given first are for the shallow cast. Horizontal lines separate the casts.

Nansen bottle pretripping occurred on MV PAOLINA-T Station 87.55, and on M/V CREST Station 117.30. Some of the depths of observations, therefore, may be slightly in error.

## PERSONNEL

### Ships' Captains

Colbeth, C. W., MV CREST  
Newbegin, R. C., MV PAOLINA-T  
Brandal, G., MV E. W. SCRIPPS

### PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

#### MV CREST

Gilkey, Robert W., Senior Marine Technician  
Moyer, John S., Marine Technician  
Lance, James R., Marine Technician  
Kramer, David, Marine Biologist, U. S. Fish and Wildlife Service  
O'Connell, Charles P.,\* Marine Biologist, U. S. Fish and Wildlife Service  
Worrall, Charles G.,\* Senior Marine Technician  
Limbaugh, Conrad,\* Graduate Research Biologist I

#### MV PAOLINA-T

Cunningham, Leonard M., Jr., Senior Marine Technician  
Howell, Robert W., Marine Technician  
Wyllie, John G., Marine Technician  
Hanson, Robert E., Senior Laboratory Technician

#### MV E. W. SCRIPPS

Smith, Alan C., Senior Marine Technician  
King, Robert D., Marine Technician  
Holmes, Robert W., Junior Research Biologist  
Bradshaw, John S., Research Assistant

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\*These personnel did not make complete cruise.



## STATION 80.51 (Interpolated Values at Standard Depths)

PAOLINA T.: 34°26' 120°32'; February 4, 1953; 2125 GCT;  
 wire angle: 20°; sounding: 53 fms; depth of observation:  
 70 m; weather: partly cloudy; sea: moderate; wind: 310°,  
 force 3.

| Depth | T       | S       | $\sigma_t$            | $10^5 s$ | $\Delta D$ | $O_2$  |
|-------|---------|---------|-----------------------|----------|------------|--------|
| (m)   | (°C)    | (‰)     | (mg/cm <sup>3</sup> ) |          | (dyn.m.)   | (ml/L) |
| 0     | 13.24   | 33.24   | 25.00                 |          | .000       | 5.96   |
| 10    | 13.24   | 33.25   | 25.01                 |          | .030       | 5.84   |
| 20    | 12.91   | 33.23   | 25.06                 |          | .059       | 5.74   |
| 30    | 12.39   | 33.26   | 25.19                 |          | .088       | 4.70   |
| 50    | 11.49   | 33.31   | 25.39                 |          | .142       | 4.34   |
| 75    | (10.82) | (33.41) | (25.59)               |          | (.204)     | (3.97) |

## STATION 80.55 (Interpolated Values at Standard Depths)

PAOLINA T.: 34°18' 120°49'; February 5, 1953; 0049 GCT;  
 wire angle: 27°; sounding: 415 fms; depth of observation:  
 616 m; weather: cloudy; sea: rough; wind: 310°, force 4.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 12.22 | 33.32 | 25.26 |  | .000 | 5.62 |
| 10  | 12.29 | 33.31 | 25.24 |  | .027 | 5.42 |
| 20  | 11.60 | 33.36 | 25.41 |  | .054 | 5.20 |
| 30  | 10.57 | 33.44 | 25.66 |  | .078 | 3.13 |
| 50  | 9.77  | 33.59 | 25.91 |  | .123 | 3.37 |
| 75  | 9.29  | 33.74 | 26.11 |  | .174 | 2.86 |
| 100 | 9.07  | 33.83 | 26.21 |  | .221 | 2.59 |
| 150 | 8.92  | 33.99 | 26.36 |  | .309 | 2.06 |
| 200 | 8.74  | 34.05 | 26.44 |  | .392 | 1.81 |
| 250 | 8.32  | 34.13 | 26.56 |  | .471 | 1.53 |
| 300 | 8.05  | 34.14 | 26.61 |  | .547 | 1.32 |
| 400 | 6.99  | 34.24 | 26.84 |  | .685 | 0.80 |
| 500 | 6.36  | 34.28 | 26.96 |  | .807 | 0.56 |
| 600 | 5.69  | 34.34 | 27.09 |  | .919 | 0.34 |



## STATION 80.60 (Interpolated Values at Standard Depths)

PAOLINA T.: 34°08' 121°12'; February 5, 1953; 0505 GCT;  
 wire angle: 24°; sounding: 1400 fms; depth of observation:  
 1146 m; weather: clear; sea: moderate; wind: 310°,  
 force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 12.39 | 33.25 | 25.18                 |               | .000       | 5.76           |
| 10    | 12.41 | 33.22 | 25.15                 |               | .028       | 5.92           |
| 20    | 12.41 | 33.24 | 25.17                 |               | .056       | 5.90           |
| 30    | 12.42 | 33.27 | 25.19                 |               | .084       | 5.75           |
| 50    | 11.55 | 33.31 | 25.38                 |               | .138       | 5.26           |
| 75    | 9.81  | 33.51 | 25.84                 |               | .198       | 3.71           |
| 100   | 9.18  | 33.72 | 26.11                 |               | .250       | 3.04           |
| 150   | 8.77  | 33.98 | 26.38                 |               | .340       | 2.27           |
| 200   | 8.30  | 34.10 | 26.54                 |               | .421       | 1.72           |
| 250   | 7.99  | 34.13 | 26.61                 |               | .496       | 1.34           |
| 300   | 7.74  | 34.18 | 26.69                 |               | .568       | 1.05           |
| 400   | 6.91  | 34.24 | 26.85                 |               | .702       | 0.67           |
| 500   | 6.19  | 34.26 | 26.97                 |               | .824       | 0.44           |
| 600   | 5.32  | 34.32 | 27.12                 |               | .933       | 0.33           |
| 700   | 4.88  | 34.32 | 27.17                 |               | 1.033      | 0.36           |
| 800   | 4.51  | 34.33 | 27.22                 |               | 1.129      | 0.40           |
| 1000  | 3.88  | 34.45 | 27.38                 |               | 1.302      | 0.56           |

## STATION 80.70 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°44' 121°43'; February 5, 1953; 1125 GCT;  
 wire angle: 25°; sounding: 2200 fms; depth of observation:  
 601 m; weather: partly cloudy; sea: very rough; wind:  
 330°, force 6.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 13.34 | 33.00 | 24.80 | .000 | 5.84 |
| 10  | 13.39 | 33.00 | 24.79 | .032 | 5.89 |
| 20  | 13.37 | 33.01 | 24.80 | .063 | 5.85 |
| 30  | 13.34 | 33.00 | 24.80 | .095 | 5.88 |
| 50  | 12.20 | 33.05 | 25.06 | .156 | 5.74 |
| 75  | 10.31 | 33.10 | 25.44 | .224 | 5.08 |
| 100 | 9.32  | 33.37 | 25.81 | .284 | 3.90 |
| 150 | 8.47  | 33.77 | 26.26 | .384 | 3.00 |
| 200 | 7.76  | 33.94 | 26.50 | .469 | 2.57 |
| 250 | 7.03  | 34.00 | 26.65 | .544 | 2.25 |
| 300 | 6.50  | 33.95 | 26.68 | .615 | 1.73 |
| 400 | 6.11  | 34.18 | 26.91 | .746 | 0.74 |
| 500 | 5.49  | 34.21 | 27.01 | .862 | 0.55 |
| 600 | 4.99  | 34.28 | 27.13 | .968 | 0.72 |

## STATION 80.80 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°27' 122°22'; February 5, 1953; 1910 GCT;  
 wire angle: 39°; sounding: 2450 fms; depth of observation:  
 1013 m; weather: overcast; sea: moderate; wind: 340°,  
 force 3.

| Depth | T     | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | $O_2$  |
|-------|-------|---------|-----------------------|---------------|------------|--------|
| (m)   | (°C)  | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L) |
| 0     | 13.85 | (33.12) | (24.79)               |               | (.000)     | 5.84   |
| 10    | 13.86 | 33.10   | 24.77                 |               | .032       | 5.79   |
| 20    | 13.85 | 32.92   | 24.63                 |               | .064       | 5.85   |
| 30    | 13.84 | 32.94   | 24.65                 |               | .097       | 5.83   |
| 50    | 13.60 | 32.96   | 24.71                 |               | .163       | 5.80   |
| 75    | 11.37 | 32.93   | 25.12                 |               | .240       | 5.75   |
| 100   | 10.24 | 33.18   | 25.51                 |               | .307       | 4.63   |
| 150   | 9.02  | 33.71   | 26.13                 |               | .417       | 3.09   |
| 200   | 8.09  | 33.90   | 26.42                 |               | .507       | 2.75   |
| 250   | 7.48  | 34.00   | 26.59                 |               | .585       | 2.42   |
| 300   | 6.79  | 34.01   | 26.69                 |               | .658       | 2.09   |
| 400   | 5.72  | 34.04   | 26.85                 |               | .791       | 1.33   |
| 500   | 5.29  | 34.13   | 26.97                 |               | .911       | 0.63   |
| 600   | 4.94  | 34.25   | 27.11                 |               | 1.020      | 0.42   |
| 700   | 4.73  | 34.32   | 27.19                 |               | 1.120      | 0.39   |
| 800   | 4.43  | 34.35   | 27.25                 |               | 1.213      | 0.43   |
| 1000  | 3.79  | 34.45   | 27.39                 |               | 1.383      | 0.55   |

## STATION 83.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 34°14' 119°22'; February 8, 1953; 0324 GCT;  
 wire angle: 5°; sounding: 12 fms; depth of observation:  
 20 m; weather: clear; sea: moderate; wind: 310°, force 2.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 14.18 | 33.20 | 24.78 | .000 | 5.75 |
| 10 | 13.88 | 33.18 | 24.83 | .032 | 5.81 |
| 20 | 12.26 | 33.21 | 25.17 | .061 | 5.03 |



## STATION 83.43 (Interpolated Values at Standard Depths)

PAOLINA T.: 34°10' 119°32'; February 8, 1953; 0135 GCT;  
 wire angle: 21°; sounding: 150 fms; depth of observation:  
 191 m; weather: partly cloudy; sea: moderate; wind: 320°, force 2.

| Depth | T      | S       | $\sigma_t$            | $10^5 \sigma$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.74  | 33.19   | 24.86                 |               | .000       | 6.26           |
| 10    | 13.71  | 33.26   | 24.92                 |               | .031       | 6.12           |
| 20    | 13.53  | 33.18   | 24.90                 |               | .061       | 6.00           |
| 30    | 12.73  | 33.19   | 25.07                 |               | .091       | 5.70           |
| 50    | 11.51  | 33.28   | 25.37                 |               | .147       | 4.73           |
| 75    | 10.01  | 33.49   | 25.79                 |               | .207       | 3.60           |
| 100   | 9.52   | 33.70   | 26.04                 |               | .260       | 3.01           |
| 150   | 9.19   | 33.90   | 26.25                 |               | .355       | 2.55           |
| 200   | (8.89) | (34.03) | (26.40)               |               | (.442)     | (2.17)         |

## STATION 83.48 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°58' 119°55'; February 7, 1953; 2108 GCT;  
 wire angle: 5°; sounding: 120 fms; depth of observation:  
 154 m; weather: clear; sea: moderate; wind: 330°, force 4.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 13.88 | 33.14 | 24.80 |  | .000 | 5.81 |
| 10  | 13.80 | 33.18 | 24.84 |  | .031 | 5.84 |
| 20  | 13.50 | 33.15 | 24.88 |  | .062 | 5.63 |
| 30  | 11.88 | 33.15 | 25.20 |  | .092 | 5.15 |
| 50  | 10.62 | 33.27 | 25.52 |  | .145 | 4.29 |
| 75  | 10.34 | 33.49 | 25.74 |  | .204 | 4.08 |
| 100 | 10.03 | 33.58 | 25.86 |  | .260 | 3.64 |
| 150 | 8.76  | 34.05 | 26.43 |  | .355 | 1.98 |



## STATION 83.51 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°52' 120°08'; February 7, 1953; 1840 GCT;  
 wire angle: 25°; sounding: 82 fms; depth of observation:  
 114 m; weather: clear; sea: rough; wind: 340°, force 5.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 12.51 | 33.25 | 25.15                 |               | .000       | 5.57           |
| 10    | 12.37 | 33.24 | 25.17                 |               | .028       | 5.61           |
| 20    | 12.05 | 33.27 | 25.26                 |               | .056       | 5.53           |
| 30    | 11.80 | 33.34 | 25.36                 |               | .083       | 4.88           |
| 50    | 9.95  | 33.46 | 25.78                 |               | .131       | 3.73           |
| 75    | 9.39  | 33.54 | 25.93                 |               | .185       | 3.18           |
| 100   | 9.09  | 33.84 | 26.22                 |               | .234       | 2.56           |

## STATION 83.55 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°44' 120°22'; February 7, 1953; 1528, 1548  
 GCT; wire angle: 28°, 25°; sounding: 680 fms; depth of  
 observation: 619 m; weather: partly cloudy; sea: rough; wind:  
 330°, force 4.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 12.68 | 33.31 | 25.17 | .000 | 5.65 |
| 10  | 12.68 | 33.29 | 25.15 | .028 | 5.66 |
| 20  | 12.68 | 33.31 | 25.17 | .056 | 5.72 |
| 30  | 12.68 | 33.27 | 25.14 | .085 | 5.60 |
| 50  | 11.26 | 33.38 | 25.49 | .138 | 4.71 |
| 75  | 9.33  | 33.52 | 25.93 | .196 | 3.77 |
| 100 | 9.01  | 33.74 | 26.15 | .246 | 3.19 |
| 150 | 8.34  | 33.90 | 26.38 | .335 | 2.29 |
| 200 | 8.12  | 34.08 | 26.55 | .415 | 1.63 |
| 250 | 7.99  | 34.14 | 26.62 | .490 | 1.38 |
| 300 | 7.69  | 34.19 | 26.70 | .561 | 0.97 |
| 400 | 6.95  | 34.18 | 26.80 | .697 | 0.67 |
| 500 | 6.31  | 34.22 | 26.92 | .823 | 0.49 |
| 600 | 5.78  | 34.27 | 27.03 | .940 | 0.39 |

## STATION 83.60 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°34' 120°44'; February 7, 1953; 1108 GCT;  
 wire angle: 30°; sounding: 870 fms; depth of observation:  
 584 m; weather: clear; sea: rough; wind: 330°, force 4.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 12.76  | 33.27   | 25.12                 |               | .000       | 5.90           |
| 10    | 12.78  | 33.27   | 25.12                 |               | .029       | 5.84           |
| 20    | 12.78  | 33.26   | 25.11                 |               | .057       | 5.89           |
| 30    | 12.78  | 33.26   | 25.11                 |               | .086       | 5.83           |
| 50    | 12.48  | 33.29   | 25.19                 |               | .143       | 5.72           |
| 75    | 11.27  | 33.38   | 25.49                 |               | .209       | 4.68           |
| 100   | 9.20   | 33.58   | 26.00                 |               | .266       | 3.38           |
| 150   | 8.62   | 33.89   | 26.33                 |               | .360       | 2.52           |
| 200   | 8.09   | 34.02   | 26.51                 |               | .442       | 1.95           |
| 250   | 7.62   | 34.07   | 26.62                 |               | .518       | 1.60           |
| 300   | 7.28   | 34.12   | 26.71                 |               | .590       | 1.22           |
| 400   | 6.66   | 34.21   | 26.86                 |               | .722       | 0.67           |
| 500   | 5.95   | 34.30   | 27.03                 |               | .840       | 0.40           |
| 600   | (5.59) | (34.32) | (27.09)               |               | (.948)     | (0.32)         |

## STATION 85.39 (Interpolated Values at Standard Depths)

PAOLINA T.: 34°00' 119°04'; February 8, 1953; 0650 GCT;  
 wire angle: 17°; sounding: 200 fms; depth of observation:  
 297 m; weather: clear; sea: rough; wind: 340°, force 5.

|     |        |         |         |  |        |        |
|-----|--------|---------|---------|--|--------|--------|
| 0   | 14.27  | 33.19   | 24.75   |  | .000   | 5.94   |
| 10  | 14.28  | 33.19   | 24.75   |  | .032   | 5.92   |
| 20  | 13.54  | 33.18   | 24.90   |  | .063   | 5.33   |
| 30  | 11.69  | 33.19   | 25.26   |  | .092   | 4.80   |
| 50  | 10.60  | 33.30   | 25.54   |  | .144   | 4.10   |
| 75  | 9.87   | 33.51   | 25.83   |  | .202   | 3.48   |
| 100 | 9.61   | 33.62   | 25.96   |  | .256   | 3.10   |
| 150 | 9.36   | 33.80   | 26.14   |  | .355   | 2.69   |
| 200 | 8.83   | 34.01   | 26.39   |  | .445   | 2.02   |
| 250 | 8.58   | 34.10   | 26.50   |  | .527   | 1.52   |
| 300 | (8.21) | (34.10) | (26.56) |  | (.605) | (1.28) |



## STATION 85.39 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 34°00' 119°04'; February 26, 1953; 0130 GCT; wire angle: 16°; sounding: 290 fms; depth of observation: 343 m; weather: partly cloudy; sea: smooth; wind: 260°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | $O_2$  |
|-------|-------|-------|-----------------------|---------------|------------|--------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L) |
| 0     | 13.74 | 33.23 | 24.89                 |               | .000       | -      |
| 10    | 13.54 | 33.23 | 24.94                 |               | .030       | -      |
| 20    | 13.43 | 33.23 | 24.96                 |               | .061       | -      |
| 30    | 13.32 | 33.22 | 24.97                 |               | .091       | -      |
| 50    | 10.80 | 33.22 | 25.45                 |               | .146       | -      |
| 75    | 10.03 | 33.50 | 25.80                 |               | .206       | -      |
| 100   | 9.60  | 33.65 | 25.99                 |               | .259       | -      |
| 150   | 9.12  | 33.93 | 26.28                 |               | .355       | -      |
| 200   | 8.90  | 34.06 | 26.42                 |               | .441       | -      |
| 250   | 8.49  | 34.11 | 26.52                 |               | .521       | -      |
| 300   | 8.19  | 34.11 | 26.57                 |               | .599       | -      |

## STATION 85.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°57' 119°09'; February 8, 1953; 0850 GCT; wire angle: 16°; sounding: 450 fms; depth of observation: 596 m; weather: clear; sea: very rough; wind: 340°, force 6.

|     |        |         |         |        |        |
|-----|--------|---------|---------|--------|--------|
| 0   | 14.18  | 33.18   | 24.77   | .000   | 6.01   |
| 10  | 14.14  | 33.21   | 24.80   | .032   | 5.95   |
| 20  | 14.11  | 33.17   | 24.77   | .064   | 5.50   |
| 30  | 12.10  | 33.17   | 25.17   | .094   | 5.00   |
| 50  | 10.81  | 33.28   | 25.49   | .147   | 4.20   |
| 75  | 10.09  | 33.51   | 25.80   | .206   | 3.51   |
| 100 | 9.79   | 33.66   | 25.96   | .260   | 3.10   |
| 150 | 9.00   | 33.91   | 26.29   | .356   | 2.50   |
| 200 | 8.94   | 34.10   | 26.44   | .441   | 1.99   |
| 250 | 8.42   | 34.15   | 26.56   | .520   | 1.50   |
| 300 | 7.89   | 34.18   | 26.67   | .594   | 1.11   |
| 400 | 7.20   | 34.26   | 26.83   | .730   | 0.68   |
| 500 | 6.52   | 34.35   | 26.99   | .852   | 0.50   |
| 600 | (5.82) | (34.31) | (27.05) | (.964) | (0.25) |



## STATION 85.40 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°57' 119°10'; February 25, 1953; 2324 GCT; wire angle: 7°; sounding: 450 fms; depth of observation: 607 m; weather: partly cloudy; sea: slight; wind: 260°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.79 | 33.23 | 24.88                 |               | .000       | -              |
| 10    | 13.33 | 33.25 | 24.99                 |               | .030       | -              |
| 20    | 13.13 | 33.26 | 25.04                 |               | .060       | -              |
| 30    | 12.94 | 33.27 | 25.09                 |               | .089       | -              |
| 50    | 10.40 | 33.29 | 25.57                 |               | .142       | -              |
| 75    | 9.50  | 33.58 | 25.95                 |               | .199       | -              |
| 100   | 9.53  | 33.82 | 26.13                 |               | .249       | -              |
| 150   | 8.89  | 33.95 | 26.33                 |               | .339       | -              |
| 200   | 8.61  | 34.04 | 26.46                 |               | .423       | -              |
| 250   | 8.30  | 34.11 | 26.55                 |               | .502       | -              |
| 300   | 7.96  | 34.18 | 26.66                 |               | .576       | -              |
| 400   | 7.25  | 34.29 | 26.85                 |               | .712       | -              |
| 500   | 6.66  | 34.26 | 26.90                 |               | .838       | -              |
| 600   | 5.95  | -     | -                     |               | -          | -              |

## STATION 85.45 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°47' 119°31'; February 10, 1953; 0013 GCT; wire angle: 5°; sounding: 1150 fms; depth of observation: 597 m; weather: clear; sea: slight; wind: 320°, force 3.

|     |        |         |         |        |        |
|-----|--------|---------|---------|--------|--------|
| 0   | 13.73  | 33.30   | 24.95   | .000   | 5.90   |
| 10  | 13.57  | 33.26   | 24.95   | .030   | 5.86   |
| 20  | 13.52  | 33.24   | 24.95   | .060   | 5.80   |
| 30  | 13.50  | 33.23   | 24.94   | .091   | 5.72   |
| 50  | 12.36  | 33.23   | 25.17   | .149   | 5.11   |
| 75  | 10.35  | 33.41   | 25.67   | .214   | 3.99   |
| 100 | 9.61   | 33.75   | 26.06   | .268   | 3.20   |
| 150 | 9.16   | 33.84   | 26.21   | .363   | 2.77   |
| 200 | 8.68   | 33.99   | 26.40   | .451   | 2.19 2 |
| 250 | 8.16   | 34.10   | 26.56   | .531   | 1.50   |
| 300 | 7.74   | 34.18   | 26.69   | .605   | 1.03   |
| 400 | 7.14   | 34.21   | 26.80   | .741   | 0.67   |
| 500 | 6.36   | 34.24   | 26.93   | .867   | 0.43   |
| 600 | (5.73) | (34.26) | (27.02) | (.984) | (0.33) |



## STATION 85.50 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°36' 119°52'; February 10, 1953; 0400 GCT;  
 wire angle: 10°; sounding: 180 fms; depth of observation:  
 153 m; weather: clear; sea: slight; wind: 320°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.41 | 33.26 | 24.98                 |               | .000       | 5.68           |
| 10    | 13.42 | 33.24 | 24.97                 |               | .030       | 5.76           |
| 20    | 13.39 | 33.25 | 24.98                 |               | .060       | 5.76           |
| 30    | 13.32 | 33.30 | 25.03                 |               | .090       | 5.30           |
| 50    | 9.70  | 33.56 | 25.90                 |               | .140       | 3.46           |
| 75    | 9.20  | 33.71 | 26.10                 |               | .191       | 3.09           |
| 100   | 9.01  | 33.81 | 26.21                 |               | .238       | 2.85           |
| 150   | 8.76  | 33.96 | 26.36                 |               | .327       | 2.09           |

## STATION 85.50 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°37' 119°52'; February 25, 1953; 1720  
 GCT; wire angle: 3°; sounding: 170 fms; depth of obser-  
 vation: 204 m; weather: clear; sea: smooth; wind: 60°,  
 force 2.

|     |       |       |       |      |   |
|-----|-------|-------|-------|------|---|
| 0   | 12.38 | 33.29 | 25.21 | .000 | - |
| 10  | 12.30 | 33.31 | 25.24 | .028 | - |
| 20  | 12.20 | 33.33 | 25.28 | .055 | - |
| 30  | 12.11 | 33.36 | 25.32 | .082 | - |
| 50  | 9.56  | 33.69 | 26.02 | .128 | - |
| 75  | 8.97  | 33.93 | 26.31 | .175 | - |
| 100 | 8.78  | 33.97 | 26.37 | .218 | - |
| 150 | 8.67  | 34.15 | 26.53 | .299 | - |
| 200 | 8.66  | 34.09 | 26.48 | .377 | - |

## STATION 85.55 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°26' 120°12'; February 10, 1953; 0742 GCT;  
 wire angle: 8°; sounding: 720 fms; depth of observation:  
 603 m; weather: clear; sea: slight; wind: 290°, force 3.

| Depth | T     | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 12.21 | (33.30) | (25.25)               |               | (.000)     | 5.71           |
| 10    | 12.21 | 33.30   | 25.25                 |               | .027       | 5.84           |
| 20    | 12.19 | 33.30   | 25.25                 |               | .055       | 5.96           |
| 30    | 12.17 | 33.29   | 25.25                 |               | .082       | 5.95           |
| 50    | 11.35 | 33.28   | 25.40                 |               | .135       | 5.30           |
| 75    | 9.71  | 33.41   | 25.78                 |               | .196       | 3.81           |
| 100   | 9.15  | 33.59   | 26.01                 |               | .249       | 3.64           |
| 150   | 8.56  | 33.87   | 26.32                 |               | .343       | 3.37           |
| 200   | 8.06  | 33.99   | 26.49                 |               | .426       | 2.08           |
| 250   | 7.85  | 34.08   | 26.59                 |               | .503       | 1.40           |
| 300   | 7.63  | 34.16   | 26.69                 |               | .575       | 0.93           |
| 400   | 6.98  | 34.21   | 26.82                 |               | .711       | 0.63           |
| 500   | 6.25  | 34.24   | 26.94                 |               | .835       | 0.50           |
| 600   | 5.68  | 34.28   | 27.05                 |               | .950       | 0.38           |

## STATION 85.55 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°27' 120°12'; February 25, 1953; 1303  
 GCT; wire angle: 2°; sounding: 650 fms; depth of obser-  
 vation: 607 m; weather: clear; sea: smooth; wind: 340°,  
 force 2.

|     |       |       |       |      |   |
|-----|-------|-------|-------|------|---|
| 0   | 12.20 | 33.37 | 25.31 | .000 | - |
| 10  | 12.22 | 33.28 | 25.23 | .027 | - |
| 20  | 12.14 | 33.31 | 25.27 | .054 | - |
| 30  | 11.98 | 33.33 | 25.32 | .081 | - |
| 50  | 11.72 | 33.36 | 25.39 | .134 | - |
| 75  | 9.54  | 33.63 | 25.98 | .192 | - |
| 100 | 9.31  | 33.69 | 26.06 | .243 | - |
| 150 | 8.39  | 33.91 | 26.38 | .334 | - |
| 200 | 7.96  | 34.09 | 26.59 | .413 | - |
| 250 | 7.59  | 34.14 | 26.68 | .486 | - |
| 300 | 7.26  | 34.19 | 26.77 | .555 | - |
| 400 | 6.76  | 34.30 | 26.92 | .681 | - |
| 500 | 5.92  | 34.30 | 27.03 | .797 | - |
| 600 | 5.53  | 34.31 | 27.09 | .905 | - |



## STATION 85.60 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°15' 120°35'; February 10, 1953; 1206 GCT;  
 wire angle: 5°; sounding: 950 fms; depth of observation:  
 602 m; weather: partly cloudy; sea: slight; wind: 320°,  
 force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | $O_2$  |
|-------|-------|-------|-----------------------|---------------|------------|--------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L) |
| 0     | 11.91 | 33.32 | 25.32                 |               | .000       | 5.56   |
| 10    | 11.88 | 33.31 | 25.32                 |               | .027       | 5.65   |
| 20    | 11.80 | 33.26 | 25.30                 |               | .053       | 5.58   |
| 30    | 11.77 | 33.26 | 25.30                 |               | .080       | 5.52   |
| 50    | 11.72 | 33.28 | 25.33                 |               | .134       | 5.49   |
| 75    | 10.09 | 33.37 | 25.69                 |               | .196       | 4.13   |
| 100   | 8.95  | 33.60 | 26.05                 |               | .250       | 3.23   |
| 150   | 8.50  | 33.92 | 26.37                 |               | .342       | 2.30   |
| 200   | 8.01  | 34.01 | 26.52                 |               | .423       | 2.04   |
| 250   | 7.56  | 34.11 | 26.66                 |               | .498       | 1.52   |
| 300   | 7.28  | 34.13 | 26.72                 |               | .568       | 1.22   |
| 400   | 6.44  | 34.16 | 26.85                 |               | .700       | 0.86   |
| 500   | 5.81  | 34.21 | 26.97                 |               | .821       | 0.73   |
| 600   | 5.35  | 34.30 | 27.10                 |               | .931       | 0.38   |

## STATION 87.35 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°47' 118°36'; February 11, 1953; 1316 GCT;  
 wire angle: 5°; sounding: 450 fms; depth of observation:  
 124 m; weather: clear; sea: smooth; wind: 360°, force 1.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 13.86 | 33.23 | 24.87 |  | .000 | 5.90 |
| 10  | 13.80 | 33.22 | 24.87 |  | .031 | 5.88 |
| 20  | 13.46 | 33.21 | 24.94 |  | .061 | 5.68 |
| 30  | 13.09 | 33.22 | 25.02 |  | .091 | 5.39 |
| 50  | 11.31 | 33.20 | 25.34 |  | .148 | 4.69 |
| 75  | 10.26 | 33.37 | 25.66 |  | .210 | 3.96 |
| 100 | 9.52  | 33.59 | 25.95 |  | .266 | 3.63 |



## STATION 87.35 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°50' 118°38'; February 24, 1953; 2027, 2052 GCT; wire angle: 5°, 5°; sounding: 325 fms; depth of observation: 452 m; weather: partly cloudy; sea: smooth; wind: 110°, force 3.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.28  | 33.25   | 25.00                 |               | .000       | -              |
| 10    | 13.27  | 33.21   | 24.97                 |               | .030       | -              |
| 20    | 13.21  | 33.21   | 24.99                 |               | .060       | -              |
| 30    | 13.15  | 33.21   | 25.00                 |               | .089       | -              |
| 50    | 10.98  | 33.26   | 25.45                 |               | .145       | -              |
| 75    | 9.80   | 33.55   | 25.87                 |               | .204       | -              |
| 100   | 9.52   | 33.84   | 26.15                 |               | .254       | -              |
| 150   | 9.22   | 34.00   | 26.32                 |               | .345       | -              |
| 200   | 8.95   | 34.10   | 26.44                 |               | .429       | -              |
| 250   | 8.60   | 34.17   | 26.55                 |               | .509       | -              |
| 300   | 8.16   | 34.21   | 26.65                 |               | .583       | -              |
| 400   | 7.38   | 34.25   | 26.80                 |               | .722       | -              |
| 500   | (6.58) | (34.24) | (26.90)               |               | (.850)     | -              |

## STATION 87.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°38' 118°56'; February 11, 1953; 0933 GCT; wire angle: 10°; sounding: 350 fms; depth of observation: 450 m; weather: clear; sea: slight; wind: 320°; force 2.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 13.90 | 33.19 | 24.83 | .000 | 5.93 |
| 10  | 13.90 | 33.18 | 24.82 | .031 | 5.88 |
| 20  | 13.72 | 33.18 | 24.86 | .063 | 5.92 |
| 30  | 13.59 | 33.18 | 24.89 | .093 | 5.90 |
| 50  | 10.92 | 33.19 | 25.40 | .150 | 4.63 |
| 75  | 10.16 | 33.40 | 25.70 | .212 | 3.84 |
| 100 | 9.54  | 33.59 | 25.95 | .267 | 3.08 |
| 150 | 8.99  | 33.90 | 26.28 | .363 | 2.54 |
| 200 | 8.49  | 34.05 | 26.48 | .448 | 1.86 |
| 250 | 8.22  | 34.13 | 26.58 | .525 | 1.34 |
| 300 | 7.71  | 34.18 | 26.69 | .598 | 0.93 |
| 400 | 6.86  | 34.21 | 26.84 | .733 | 0.49 |



## STATION 87.40 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°40' 118°58'; February 25, 1953; 0012, 0028 GCT; wire angle: 12°, 15°; sounding: 470 fms; depth of observation: 591 m; weather: partly cloudy; sea: smooth; wind: calm.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.42  | 33.21   | 24.94                 |               | .000       | -              |
| 10    | 13.00  | 33.18   | 25.00                 |               | .030       | -              |
| 20    | 12.92  | 33.19   | 25.03                 |               | .059       | -              |
| 30    | 12.89  | 33.23   | 25.07                 |               | .089       | -              |
| 50    | 10.67  | 33.35   | 25.57                 |               | .142       | -              |
| 75    | 9.70   | 33.53   | 25.88                 |               | .199       | -              |
| 100   | 9.29   | 33.79   | 26.15                 |               | .250       | -              |
| 150   | 8.94   | 34.01   | 26.37                 |               | .340       | -              |
| 200   | 8.51   | 34.19   | 26.58                 |               | .419       | -              |
| 250   | 8.11   | 34.20   | 26.65                 |               | .493       | -              |
| 300   | 7.70   | 34.20   | 26.71                 |               | .564       | -              |
| 400   | 6.99   | 34.26   | 26.86                 |               | .696       | -              |
| 500   | 6.27   | (34.30) | (26.99)               |               | (.817)     | -              |
| 600   | (5.72) | -       | -                     |               | -          | -              |

## STATION 87.45 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°29' 119°18'; February 11, 1953; 0600 GCT; wire angle: 15°; sounding: 980 fms; depth of observation: 590 m; weather: partly cloudy; sea: slight; wind: 31Q°, force 2.

|     |        |         |         |        |   |
|-----|--------|---------|---------|--------|---|
| 0   | 13.38  | 33.23   | 24.97   | .000   | - |
| 10  | 13.42  | 33.25   | 24.98   | .030   | - |
| 20  | 12.60  | 33.26   | 25.14   | .059   | - |
| 30  | 12.34  | 33.22   | 25.16   | .087   | - |
| 50  | 10.27  | 33.32   | 25.62   | .139   | - |
| 75  | 9.69   | 33.72   | 26.03   | .194   | - |
| 100 | 9.41   | 33.86   | 26.18   | .243   | - |
| 150 | 8.70   | 33.94   | 26.36   | .332   | - |
| 200 | 8.52   | 34.09   | 26.50   | .414   | - |
| 250 | 8.18   | 34.19   | 26.63   | .490   | - |
| 300 | 7.79   | 34.25   | 26.74   | .560   | - |
| 400 | 7.12   | 34.27   | 26.85   | .692   | - |
| 500 | 6.40   | 34.32   | 26.99   | .814   | - |
| 600 | (5.86) | (34.30) | (27.04) | (.927) | - |

## STATION 87.45 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°30' 119°19'; February 25, 1953; 0337, 0400 GCT; wire angle: 2°, 1°; sounding: 940 fms; depth of observation: 614 m; weather: clear; sea: smooth; wind: 45°, force 1.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 12.80 | 33.21 | 25.07                 |               | .000       | -              |
| 10    | 12.47 | 33.26 | 25.17                 |               | .029       | -              |
| 20    | 11.86 | 33.35 | 25.36                 |               | .056       | -              |
| 30    | 11.12 | 33.40 | 25.53                 |               | .081       | -              |
| 50    | 10.02 | 33.47 | 25.78                 |               | .128       | -              |
| 75    | 9.38  | 33.65 | 26.02                 |               | .181       | -              |
| 100   | 9.20  | 33.84 | 26.20                 |               | .230       | -              |
| 150   | 8.72  | 34.01 | 26.41                 |               | .317       | -              |
| 200   | 8.43  | 34.12 | 26.54                 |               | .397       | -              |
| 250   | 8.09  | 34.17 | 26.63                 |               | .472       | -              |
| 300   | 7.69  | 34.21 | 26.72                 |               | .543       | -              |
| 400   | 7.08  | 34.26 | 26.85                 |               | .676       | -              |
| 500   | 6.48  | 34.28 | 26.94                 |               | .799       | -              |
| 600   | 5.87  | 34.31 | 27.05                 |               | .914       | -              |

## STATION 87.50 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°21' 119°40'; February 11, 1953; 0237 GCT; wire angle: 8°; sounding: 50 m; depth of observation: 74 m; weather: partly cloudy; sea: slight; wind: 320°, force 3.

|    |        |         |         |        |        |
|----|--------|---------|---------|--------|--------|
| 0  | 13.00  | 33.25   | 25.06   | .000   | 5.41   |
| 10 | 12.90  | 33.23   | 25.06   | .029   | 5.84   |
| 20 | 12.69  | 33.25   | 25.12   | .058   | 5.80   |
| 30 | 11.89  | 33.35   | 25.35   | .085   | 5.50   |
| 50 | 9.88   | 33.39   | 25.74   | .135   | 4.00   |
| 75 | (9.23) | (33.63) | (26.03) | (.188) | (3.36) |



## STATION 87.50 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°20' 119°40'; February 25, 1953; 0654 GCT; wire angle: 5°; sounding: 45 fms; depth of observation: 50 m; weather: clear; sea: smooth; wind: 300°, force 1.

| Depth | T     | S     | $\sigma_t$            | $10^5 s$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|----------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |          | (dyn.m.)   | (ml/L)         |
| 0     | 12.00 | 33.29 | 25.28                 |          | .000       | -              |
| 10    | 11.99 | 33.33 | 25.32                 |          | .027       | -              |
| 20    | 11.97 | 33.30 | 25.30                 |          | .054       | -              |
| 30    | 11.87 | 33.28 | 25.30                 |          | .081       | -              |
| 50    | 11.03 | 33.40 | 25.55                 |          | .132       | -              |

## STATION 87.55 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°12' 120°00'; February 10, 1953; 1952 GCT; wire angle: 12°; sounding: 550 fms; depth of observation: 389 m; weather: clear; sea: slight; wind: 45°, force 2.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 12.26 | 33.30 | 25.24 | .000 | 5.78 |
| 10  | 12.13 | 33.29 | 25.26 | .027 | 5.78 |
| 20  | 12.08 | 33.27 | 25.25 | .055 | 5.97 |
| 30  | 12.04 | 33.32 | 25.30 | .082 | 5.99 |
| 50  | 11.92 | 33.30 | 25.31 | .135 | 5.72 |
| 75  | 9.52  | 33.38 | 25.79 | .197 | 4.20 |
| 100 | 8.91  | 33.68 | 26.12 | .249 | 3.35 |
| 150 | 8.36  | 33.89 | 26.37 | .339 | 2.47 |
| 200 | 8.03  | 34.01 | 26.51 | .420 | 2.12 |
| 250 | 7.47  | 34.12 | 26.68 | .495 | 1.70 |
| 300 | 7.36  | 34.17 | 26.74 | .564 | 1.27 |

## STATION 87.55 (Interpolated Values at Standard Depths)

E. W. SCRIPPS: 33°10' 120°00'; February 25, 1953; 0953 GCT; wire angle: 0°; sounding: 625 fm; depth of observation: 609 m; weather: clear; sea: smooth; wind: 360°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 12.20 | 33.37 | 25.31                 |               | .000       | -              |
| 10    | 12.23 | 33.43 | 25.35                 |               | .027       | -              |
| 20    | 12.11 | 33.45 | 25.39                 |               | .053       | -              |
| 30    | 12.06 | 33.46 | 25.40                 |               | .079       | -              |
| 50    | 12.03 | 33.48 | 25.42                 |               | .130       | -              |
| 75    | 9.30  | 33.61 | 26.00                 |               | .188       | -              |
| 100   | 9.06  | 33.74 | 26.14                 |               | .237       | -              |
| 150   | 8.59  | 33.88 | 26.33                 |               | .328       | -              |
| 200   | 8.01  | 34.04 | 26.54                 |               | .409       | -              |
| 250   | 7.57  | 34.13 | 26.67                 |               | .483       | -              |
| 300   | 7.21  | 34.18 | 26.77                 |               | .552       | -              |
| 400   | 6.52  | 34.24 | 26.91                 |               | .680       | -              |
| 500   | 6.12  | 34.27 | 26.98                 |               | .798       | -              |
| 600   | 5.55  | 34.29 | 27.07                 |               | .909       | -              |

## STATION 87.60 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°00' 120°26'; February 10, 1953; 1529 GCT; wire angle: 2°; sounding: 650 fms; depth of observation: 606 m; weather: clear; sea: slight; wind: 140°, force 2.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 12.48 | 33.21 | 25.13 | .000 | 5.86 |
| 10  | 12.50 | 33.19 | 25.11 | .029 | 5.81 |
| 20  | 12.49 | 33.18 | 25.10 | .057 | 5.79 |
| 30  | 12.49 | 33.20 | 25.12 | .086 | 5.80 |
| 50  | 12.50 | 33.19 | 25.11 | .143 | 5.78 |
| 75  | 9.92  | 33.33 | 25.68 | .208 | 4.60 |
| 100 | 9.36  | 33.46 | 25.88 | .264 | 3.70 |
| 150 | 8.50  | 33.87 | 26.33 | .361 | 2.79 |
| 200 | 8.14  | 34.05 | 26.53 | .443 | 2.29 |
| 250 | 7.76  | 34.10 | 26.62 | .518 | 1.88 |
| 300 | 7.69  | 34.10 | 26.63 | .592 | 1.73 |
| 400 | 6.41  | 34.17 | 26.87 | .727 | 0.71 |
| 500 | 5.75  | 34.28 | 27.04 | .845 | 0.40 |
| 600 | 5.41  | 34.37 | 27.15 | .949 | 0.38 |



## STATION 90.28 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°28' 117°46'; February 11, 1953; 1941 GCT;  
 wire angle: 0°; sounding: 150 fms; depth of observation:  
 156 m; weather: clear; sea: slight; wind: 300°, force 1.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.11 | 33.21 | 24.80                 |               | .000       | 5.90           |
| 10    | 13.97 | 33.24 | 24.85                 |               | .031       | 5.88           |
| 20    | 13.83 | 33.24 | 24.88                 |               | .062       | 5.92           |
| 30    | 13.71 | 33.24 | 24.91                 |               | .093       | 5.93           |
| 50    | 11.30 | 33.23 | 25.37                 |               | .150       | 4.65           |
| 75    | 10.27 | 33.47 | 25.73                 |               | .211       | 3.73           |
| 100   | 9.99  | 33.61 | 25.89                 |               | .267       | 3.30           |
| 150   | 9.43  | 33.84 | 26.16                 |               | .367       | 2.60           |

## STATION 90.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°24' 117°55'; February 11, 1953; 2115 GCT;  
 wire angle: 4°; sounding: 370 fms; depth of observation:  
 553 m; weather: partly cloudy; sea: slight; wind: 310°, force 1.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 14.34 | 33.28 | 24.81 |  | .000 | 5.83 |
| 10  | 14.24 | 33.25 | 24.81 |  | .032 | 5.88 |
| 20  | 14.19 | 33.23 | 24.80 |  | .063 | 5.83 |
| 30  | 14.08 | 33.22 | 24.82 |  | .095 | 5.80 |
| 50  | 12.06 | 33.19 | 25.19 |  | .154 | 5.00 |
| 75  | 10.63 | 33.30 | 25.54 |  | .220 | 4.24 |
| 100 | 10.01 | 33.62 | 25.89 |  | .277 | 3.44 |
| 150 | 9.39  | 33.87 | 26.19 |  | .377 | 2.68 |
| 200 | 9.08  | 34.06 | 26.39 |  | .466 | 2.03 |
| 250 | 8.52  | 34.10 | 26.51 |  | .548 | 1.68 |
| 300 | 7.94  | 34.20 | 26.68 |  | .623 | 1.23 |
| 400 | 7.10  | 34.19 | 26.79 |  | .760 | 0.81 |
| 500 | 6.54  | 34.28 | 26.94 |  | .887 | 0.44 |

## STATION 90.37 (Interpolated Values at Standard Depths)

PAOLINA T.: 33°11' 118°24'; February 12, 1953; 0122 GCT;  
 wire angle: 20°; sounding: 650 fms; depth of observation:  
 961 m; weather: partly cloudy; sea: slight; wind: 230°,  
 force 2.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.52  | 33.27   | 24.76                 |               | .000       | 5.87           |
| 10    | 14.29  | 33.25   | 24.80                 |               | .032       | 5.83           |
| 20    | 14.27  | 33.20   | 24.76                 |               | .064       | 5.82           |
| 30    | 14.24  | 33.17   | 24.74                 |               | .096       | 5.77           |
| 50    | 12.08  | 33.19   | 25.19                 |               | .156       | 4.93           |
| 75    | 10.78  | 33.36   | 25.56                 |               | .221       | 4.04           |
| 100   | 10.06  | 33.56   | 25.84                 |               | .279       | 3.37           |
| 150   | 8.99   | 33.85   | 26.24                 |               | .380       | 2.78           |
| 200   | 8.67   | 34.03   | 26.43                 |               | .466       | 2.10           |
| 250   | 8.49   | 34.14   | 26.55                 |               | .546       | 1.61           |
| 300   | 8.13   | 34.19   | 26.64                 |               | .621       | 1.23           |
| 400   | 7.01   | 34.21   | 26.82                 |               | .759       | 0.70           |
| 500   | 6.31   | 34.28   | 26.97                 |               | .882       | 0.40           |
| 600   | 5.71   | 34.33   | 27.08                 |               | .994       | 0.30           |
| 700   | 5.31   | 34.35   | 27.15                 |               | 1.098      | 0.34           |
| 800   | 4.83   | 34.37   | 27.22                 |               | 1.196      | 0.40           |
| 1000  | (4.12) | (34.40) | (27.32)               |               | (1.376)    | (0.45)         |

## STATION 90.45 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°56' 118°54'; February 12, 1953; 0641 GCT;  
 wire angle: 14°; sounding: 1000 fms; depth of observation:  
 600 m; weather: clear; sea: slight; wind: 320°, force 2.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 14.13 | 33.22 | 24.81 | .000 | 5.81 |
| 10  | 14.15 | 33.18 | 24.77 | .032 | 5.87 |
| 20  | 14.15 | 33.22 | 24.80 | .063 | 5.73 |
| 30  | 14.12 | 33.24 | 24.82 | .095 | 5.72 |
| 50  | 11.54 | 33.17 | 25.28 | .154 | 5.00 |
| 75  | 10.40 | 33.51 | 25.74 | .216 | 3.32 |
| 100 | 10.03 | 33.70 | 25.95 | .270 | 2.77 |
| 150 | 9.70  | 33.99 | 26.23 | .368 | 2.11 |
| 200 | 9.00  | 34.09 | 26.43 | .455 | 1.99 |
| 250 | 8.40  | 34.17 | 26.58 | .534 | 1.53 |
| 300 | 7.84  | 34.18 | 26.67 | .607 | 1.15 |
| 400 | 7.01  | 34.24 | 26.84 | .742 | 0.60 |
| 500 | 6.34  | 34.34 | 27.01 | .863 | 0.41 |
| 600 | 5.78  | 34.30 | 27.05 | .974 | 0.28 |



## STATION 90.53 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°40' 119°26'; February 12, 1953; 1142 GCT;  
 wire angle: 15°; sounding: 650 fms; depth of observation:  
 988 m; weather: clear; sea: moderate; wind: 300°, force 4.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.41  | 33.17   | 24.92                 |               | .000       | 6.02           |
| 10    | 13.33  | 33.18   | 24.94                 |               | .030       | 5.85           |
| 20    | 13.20  | 33.18   | 24.97                 |               | .061       | 5.83           |
| 30    | 13.01  | 33.18   | 25.00                 |               | .090       | 5.81           |
| 50    | 11.84  | 33.22   | 25.26                 |               | .147       | 5.24           |
| 75    | 9.80   | 33.35   | 25.72                 |               | .210       | 4.03           |
| 100   | 9.04   | 33.62   | 26.05                 |               | .264       | 3.41           |
| 150   | 8.61   | 33.89   | 26.33                 |               | .357       | 3.00           |
| 200   | 8.12   | 33.98   | 26.48                 |               | .440       | 2.60           |
| 250   | 7.85   | 34.12   | 26.63                 |               | .516       | 1.74           |
| 300   | 7.52   | 34.22   | 26.75                 |               | .587       | 0.92           |
| 400   | 6.75   | 34.28   | 26.91                 |               | .715       | 0.59           |
| 500   | 6.22   | 34.28   | 26.98                 |               | .833       | 0.50           |
| 600   | 5.79   | 34.32   | 27.06                 |               | .945       | 0.42           |
| 700   | 5.20   | 34.35   | 27.16                 |               | 1.049      | 0.40           |
| 800   | 4.73   | 34.39   | 27.24                 |               | 1.145      | 0.47           |
| 1000  | (4.14) | (34.41) | (27.32)               |               | (1.322)    | (0.62)         |

## STATION 90.60 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°27' 119°53'; February 12, 1953; 1617 GCT;  
 wire angle: 20°; sounding: 950 fms; depth of observation:  
 638 m; weather: partly cloudy; sea: rough; wind: 340°,  
 force 4.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 13.04 | 33.23 | 25.04 |  | .000 | 5.82 |
| 10  | 13.06 | 33.25 | 25.05 |  | .029 | 5.84 |
| 20  | 13.03 | 33.18 | 25.00 |  | .059 | 5.82 |
| 30  | 13.04 | 33.19 | 25.00 |  | .088 | 5.80 |
| 50  | 13.01 | 33.26 | 25.06 |  | .147 | 5.85 |
| 75  | 10.19 | 33.31 | 25.62 |  | .214 | 4.20 |
| 100 | 9.04  | 33.56 | 26.01 |  | .269 | 3.36 |
| 150 | 8.49  | 33.89 | 26.35 |  | .362 | 2.75 |
| 200 | 8.10  | 33.99 | 26.49 |  | .445 | 2.20 |
| 250 | 7.75  | 34.01 | 26.55 |  | .523 | 2.00 |
| 300 | 7.16  | 34.05 | 26.67 |  | .597 | 1.66 |
| 400 | 6.51  | 34.10 | 26.87 |  | .730 | 0.70 |
| 500 | 5.98  | 34.28 | 27.01 |  | .849 | 0.40 |
| 600 | 5.47  | 34.32 | 27.10 |  | .957 | 0.35 |



## STATION 90.70 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°05' 120°32'; February 12, 1953; 2312 GCT;  
 wire angle: 42°; sounding: 2340 fms; depth of observation:  
 891 m; weather: partly cloudy; sea: moderate; wind: 320°,  
 force 3.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml./L)        |
| 0     | 13.86  | 33.12   | 24.79                 |               | .000       | 5.85           |
| 10    | 13.86  | 33.08   | 24.75                 |               | .032       | 5.70           |
| 20    | 13.86  | 33.08   | 24.75                 |               | .064       | 5.82           |
| 30    | 13.85  | 33.10   | 24.77                 |               | .096       | 5.84           |
| 50    | 13.82  | 33.12   | 24.79                 |               | .160       | 5.83           |
| 75    | 11.50  | 33.09   | 25.22                 |               | .234       | 5.52           |
| 100   | 9.99   | 33.26   | 25.62                 |               | .299       | 4.27           |
| 150   | 8.74   | 33.75   | 26.20                 |               | .405       | 3.19           |
| 200   | 8.10   | 33.97   | 26.47                 |               | .491       | 2.49           |
| 250   | 7.64   | 34.07   | 26.62                 |               | .568       | 1.72           |
| 300   | 7.31   | 34.15   | 26.73                 |               | .639       | 1.09           |
| 400   | 6.71   | 34.25   | 26.89                 |               | .769       | 0.50           |
| 500   | 6.23   | 34.28   | 26.98                 |               | .889       | 0.37           |
| 600   | 5.87   | 34.32   | 27.05                 |               | 1.001      | 0.33           |
| 700   | 5.49   | 34.36   | 27.13                 |               | 1.107      | 0.32           |
| 800   | 5.01   | 34.37   | 27.20                 |               | 1.207      | 0.33           |
| 1000  | (4.29) | (34.39) | (27.29)               |               | (1.392)    | -              |

## STATION 90.80 (Interpolated Values at Standard Depths)

PAOLINA T.: 31°46' 121°10'; February 13, 1953; 0601 GCT;  
 wire angle: 15°; sounding: 2300 fms; depth of observation:  
 594 m; weather: clear; sea: moderate; wind: 320°, force 3.

|     |        |         |         |  |         |        |
|-----|--------|---------|---------|--|---------|--------|
| 0   | 13.90  | 33.07   | 24.74   |  | .000    | 5.95   |
| 10  | 13.92  | 33.08   | 24.74   |  | .032    | 5.94   |
| 20  | 13.93  | 33.08   | 24.74   |  | .064    | 5.76   |
| 30  | 13.93  | 33.08   | 24.74   |  | .097    | 5.76   |
| 50  | 13.87  | 33.09   | 24.76   |  | .161    | 5.68   |
| 75  | 12.21  | 33.18   | 25.16   |  | .236    | 5.57   |
| 100 | 10.31  | 33.14   | 25.47   |  | .304    | 5.27   |
| 150 | 9.02   | 33.62   | 26.06   |  | .417    | 3.40   |
| 200 | 8.39   | 33.92   | 26.39   |  | .509    | 2.80   |
| 250 | 7.73   | 34.01   | 26.56   |  | .589    | 2.37   |
| 300 | 7.28   | 34.07   | 26.67   |  | .663    | 1.86   |
| 400 | 6.59   | 34.20   | 26.87   |  | .797    | 0.91   |
| 500 | 6.01   | 34.25   | 26.98   |  | .917    | 0.55   |
| 600 | (5.32) | (34.30) | (27.10) |  | (1.026) | (0.36) |



## STATION 93.27 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°55' 117°20'; February 14, 1953; 1517 GCT;  
 wire angle: 0°; sounding: 190 fms; depth of observation:  
 301 m; weather: clear; sea: slight; wind: 320°, force 1.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.12 | 33.21 | 24.80                 |               | .000       | 5.75           |
| 10    | 14.11 | 33.22 | 24.81                 |               | .032       | 5.82           |
| 20    | 14.10 | 33.20 | 24.80                 |               | .063       | 5.79           |
| 30    | 12.48 | 33.18 | 25.11                 |               | .093       | 5.53           |
| 50    | 11.00 | 33.23 | 25.42                 |               | .148       | 4.38           |
| 75    | 10.12 | 33.49 | 25.77                 |               | .208       | 3.51           |
| 100   | 9.76  | 33.67 | 25.98                 |               | .262       | 3.12           |
| 150   | 9.36  | 33.96 | 26.27                 |               | .358       | 2.29           |
| 200   | 9.03  | 34.06 | 26.40                 |               | .445       | 1.85           |
| 250   | 8.49  | 34.16 | 26.56                 |               | .525       | 1.37           |
| 300   | 7.96  | 34.21 | 26.68                 |               | .599       | 1.04           |

## STATION 93.30 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°51' 117°36'; February 14, 1953; 1230 GCT;  
 wire angle: 8°; sounding: 560 fms; depth of observation:  
 602 m; weather: clear; sea: smooth; wind: 140°, force 1.

|     |       |       |       |  |       |      |
|-----|-------|-------|-------|--|-------|------|
| 0   | 14.79 | 33.27 | 24.71 |  | .000  | 5.72 |
| 10  | 14.81 | 33.30 | 24.72 |  | .032  | 5.84 |
| 20  | 14.81 | 33.29 | 24.72 |  | .065  | 5.74 |
| 30  | 14.72 | 33.27 | 24.72 |  | .097  | 5.60 |
| 50  | 12.62 | 33.14 | 25.05 |  | .159  | 5.24 |
| 75  | 10.62 | 33.29 | 25.53 |  | .227  | 4.10 |
| 100 | 10.09 | 33.58 | 25.85 |  | .285  | 3.33 |
| 150 | 9.40  | 33.90 | 26.21 |  | .385  | 2.43 |
| 200 | 8.88  | 34.09 | 26.45 |  | .472  | 1.88 |
| 250 | 8.54  | 34.15 | 26.55 |  | .551  | 1.62 |
| 300 | 8.24  | 34.18 | 26.61 |  | .627  | 1.21 |
| 400 | 7.34  | 34.19 | 26.75 |  | .769  | 0.88 |
| 500 | 6.64  | 34.24 | 26.89 |  | .900  | 0.48 |
| 600 | 5.81  | 34.30 | 27.05 |  | 1.017 | 0.33 |



## STATION 93.40 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°24' 118°06'; February 14, 1953; 0620 GCT;  
 wire angle: 5°; sounding: 925 fms; depth of observation:  
 612 m; weather: clear; sea: slight; wind: 320°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.64 | 33.27 | 24.74                 |               | .000       | 5.79           |
| 10    | 14.66 | 33.27 | 24.73                 |               | .032       | 5.83           |
| 20    | 14.60 | 33.26 | 24.74                 |               | .064       | 5.86           |
| 30    | 14.53 | 33.26 | 24.75                 |               | .097       | 5.92           |
| 50    | 12.38 | 33.22 | 25.16                 |               | .157       | 5.24           |
| 75    | 11.00 | 33.31 | 25.48                 |               | .224       | 4.36           |
| 100   | 10.22 | 33.48 | 25.75                 |               | .284       | 3.70           |
| 150   | 9.38  | 33.84 | 26.17                 |               | .388       | 2.78           |
| 200   | 8.56  | 34.05 | 26.46                 |               | .475       | 2.18           |
| 250   | 8.25  | 34.19 | 26.62                 |               | .552       | 1.51           |
| 300   | 7.90  | 34.19 | 26.67                 |               | .625       | 1.09           |
| 400   | 6.92  | 34.27 | 26.88                 |               | .758       | 0.61           |
| 500   | 6.26  | 34.30 | 26.99                 |               | .878       | 0.42           |
| 600   | 5.72  | 34.31 | 27.06                 |               | .989       | 0.31           |

## STATION 93.50 (Interpolated Values at Standard Depths)

PAOLINA T.: 32°08' 118°54'; February 14, 1953; 0057 GCT;  
 wire angle: 20°; sounding: 850 fms; depth of observation:  
 568 m; weather: clear; sea: moderate; wind: 320°, force 3.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 14.47 | 33.23 | 24.74 | .000 | 5.89 |
| 10  | 14.22 | 33.22 | 24.79 | .032 | 5.92 |
| 20  | 14.09 | 33.22 | 24.81 | .064 | 5.89 |
| 30  | 13.94 | 33.20 | 24.83 | .095 | 5.83 |
| 50  | 12.28 | 33.18 | 25.14 | .155 | 5.30 |
| 75  | 10.65 | 33.26 | 25.50 | .221 | 4.43 |
| 100 | 9.99  | 33.44 | 25.76 | .281 | 3.90 |
| 150 | 9.21  | 33.80 | 26.17 | .385 | 2.96 |
| 200 | 8.79  | 34.06 | 26.44 | .473 | 2.04 |
| 250 | 8.22  | 34.15 | 26.59 | .551 | 1.45 |
| 300 | 7.79  | 34.15 | 26.66 | .625 | 1.12 |
| 400 | 7.01  | 34.26 | 26.86 | .760 | 0.59 |
| 500 | 6.13  | 34.32 | 27.02 | .879 | 0.39 |



## STATION 93.60 (Interpolated Values at Standard Depths)

PAOLINA T: 31°40' 119°40'; February 13, 1953; 1725  
 GCT; wire angle: 5°; sounding: 2200 fms; depth of  
 observation: 603 m; weather: clear; sea: slight; wind:  
 300°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.13 | 33.18 | 24.78                 |               | .000       | 5.80           |
| 10    | 14.10 | 33.16 | 24.77                 |               | .032       | 5.96           |
| 20    | 14.05 | 33.15 | 24.77                 |               | .064       | 5.83           |
| 30    | 14.02 | 33.14 | 24.77                 |               | .096       | 5.79           |
| 50    | 14.02 | 33.16 | 24.78                 |               | .160       | 5.78           |
| 75    | 12.25 | 33.08 | 25.07                 |               | .236       | 5.63           |
| 100   | 9.82  | 33.24 | 25.63                 |               | .302       | 4.54           |
| 150   | 8.85  | 33.67 | 26.12                 |               | .410       | 3.43           |
| 200   | 8.26  | 33.89 | 26.38                 |               | .500       | 2.75           |
| 250   | 7.63  | 34.00 | 26.56                 |               | .580       | 2.09           |
| 300   | 7.21  | 34.06 | 26.67                 |               | .654       | 1.50           |
| 400   | 6.80  | 34.21 | 26.85                 |               | .789       | 0.69           |
| 500   | 6.12  | 34.29 | 27.00                 |               | .909       | 0.41           |
| 600   | 5.50  | 34.30 | 27.08                 |               | 1.019      | 0.34           |

## STATION 97.30 (Interpolated Values at Standard Depths)

CREST: 32°15' 117°09'; February 25, 1953; 0036 GCT; wire  
 angle: 3°; sounding: 20 fms; depth of observation: 30 m;  
 weather: partly cloudy; sea: moderate; wind: 170°, force 4.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 12.32 | 33.20 | 25.15 | .000 | 6.04 |
| 10 | 11.89 | 33.19 | 25.23 | .028 | 5.60 |
| 20 | 11.63 | 33.20 | 25.28 | .055 | 5.08 |
| 30 | 11.31 | 33.25 | 25.38 | .082 | 4.75 |

## STATION 97.32 (Interpolated Values at Standard Depths)

CREST: 32°12' 117°17'; February 25, 1953; 0217 GCT; wire angle: 0°; sounding: 775 fms; depth of observation: 590 m; weather: partly cloudy; sea: slight; wind: 180°, force 3.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 12.59  | 33.29   | 25.17                 |               | .000       | 5.70           |
| 10    | 12.57  | 33.17   | 25.08                 |               | .028       | 5.70           |
| 20    | 12.35  | 33.19   | 25.14                 |               | .057       | 5.50           |
| 30    | 12.04  | 33.25   | 25.24                 |               | .085       | 4.47           |
| 50    | 11.06  | 33.65   | 25.73                 |               | .135       | 3.65           |
| 75    | 10.18  | 33.60   | 25.85                 |               | .191       | 3.21           |
| 100   | 9.91   | 33.72   | 25.99                 |               | .244       | 2.83           |
| 150   | 9.46   | 33.93   | 26.23                 |               | .341       | 2.52           |
| 200   | 9.00   | 34.14   | 26.47                 |               | .427       | 1.53           |
| 250   | 8.50   | 34.17   | 26.57                 |               | .505       | 1.00           |
| 300   | 8.08   | 34.29   | 26.73                 |               | .577       | 0.58           |
| 400   | 7.27   | 34.31   | 26.86                 |               | .710       | 0.38           |
| 500   | 6.60   | 34.33   | 26.97                 |               | .831       | 0.23           |
| 600   | (5.93) | (34.37) | (27.09)               |               | (.943)     | (0.30)         |

## STATION 97.40 (Interpolated Values at Standard Depths)

CREST: 31°55' 117°50'; February 25, 1953; 0625 GCT; wire angle: 2°; sounding: 780 fms; depth of observation: 591 m; weather: partly cloudy; sea: slight; wind: 120°, force 2.

|     |        |         |         |  |        |        |
|-----|--------|---------|---------|--|--------|--------|
| 0   | 13.57  | 33.28   | 24.97   |  | .000   | 5.94   |
| 10  | 13.42  | 33.27   | 24.99   |  | .030   | 5.92   |
| 20  | 13.34  | 33.27   | 25.01   |  | .060   | 5.80   |
| 30  | 13.22  | 33.27   | 25.03   |  | .089   | 5.72   |
| 50  | 11.86  | 33.33   | 25.34   |  | .145   | 4.70   |
| 75  | 10.32  | 33.51   | 25.76   |  | .207   | 3.43   |
| 100 | 9.83   | 33.77   | 26.04   |  | .260   | 2.88   |
| 150 | 9.46   | 34.03   | 26.34   |  | .353   | 2.17   |
| 200 | 9.19   | 34.20   | 26.48   |  | .436   | 1.67   |
| 250 | 8.98   | 34.27   | 26.57   |  | .514   | 1.27   |
| 300 | 8.38   | 34.28   | 26.67   |  | .587   | 1.07   |
| 400 | 7.50   | 34.29   | 26.81   |  | .725   | 0.64   |
| 500 | 6.48   | 34.31   | 26.97   |  | .849   | 0.40   |
| 600 | (5.88) | (34.33) | (27.06) |  | (.962) | (0.34) |



## STATION 97.50 (Interpolated Values at Standard Depths)

CREST: 31°35' 118°31'; February 25, 1953; 1126 GCT; wire angle: 5°; sounding: 1300 fms; depth of observation: 591 m; weather: overcast; sea: smooth; wind: 360°, force 2.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.98  | 33.30   | 24.90                 |               | .000       | 5.85           |
| 10    | 13.98  | 33.31   | 24.91                 |               | .031       | 5.84           |
| 20    | 13.99  | 33.31   | 24.90                 |               | .061       | 5.80           |
| 30    | 13.97  | 33.32   | 24.92                 |               | .092       | 5.77           |
| 50    | 12.98  | 33.27   | 25.08                 |               | .151       | 5.51           |
| 75    | 10.40  | 33.37   | 25.63                 |               | .217       | 4.02           |
| 100   | 9.89   | 33.63   | 25.92                 |               | .274       | 3.30           |
| 150   | 9.27   | 33.92   | 26.25                 |               | .371       | 2.54           |
| 200   | 8.56   | 34.07   | 26.48                 |               | .457       | 2.13           |
| 250   | 8.13   | 34.13   | 26.59                 |               | .534       | 1.82           |
| 300   | 7.69   | 34.31   | 26.80                 |               | .604       | 0.98           |
| 400   | 6.89   | 34.28   | 26.89                 |               | .731       | 0.54           |
| 500   | 6.15   | 34.28   | 26.99                 |               | .850       | 0.33           |
| 600   | (5.63) | (34.33) | (27.09)               |               | (.960)     | (0.20)         |

## STATION 97.60 (Interpolated Values at Standard Depths)

CREST: 31°15' 119°10'; February 25, 1953; 1554 GCT; wire angle: 2°; sounding: 1780 fms; depth of observation: 589 m; weather: partly cloudy; sea: smooth; wind: 80°, force 3.

|     |        |         |         |  |         |        |
|-----|--------|---------|---------|--|---------|--------|
| 0   | 13.78  | 33.14   | 24.82   |  | .000    | 5.80   |
| 10  | 13.76  | 33.15   | 24.83   |  | .031    | 5.82   |
| 20  | 13.75  | 33.14   | 24.82   |  | .063    | 5.76   |
| 30  | 13.74  | 33.15   | 24.83   |  | .094    | 5.78   |
| 50  | 13.72  | 33.15   | 24.84   |  | .157    | 5.81   |
| 75  | 13.23  | 33.17   | 24.95   |  | .234    | 5.78   |
| 100 | 10.23  | 33.17   | 25.51   |  | .303    | 4.72   |
| 150 | 9.06   | 33.58   | 26.02   |  | .416    | 3.48   |
| 200 | 8.68   | 33.90   | 26.33   |  | .510    | 2.63   |
| 250 | 8.22   | 34.04   | 26.51   |  | .593    | 1.97   |
| 300 | 7.81   | 34.14   | 26.65   |  | .669    | 1.22   |
| 400 | 6.80   | 34.17   | 26.81   |  | .807    | 0.78   |
| 500 | 6.20   | 34.24   | 26.95   |  | .931    | 0.38   |
| 600 | (5.45) | (34.29) | (27.08) |  | (1.043) | (0.37) |

## STATION 100.29 (Interpolated Values at Standard Depths)

CREST: 31°41' 116°45'; February 18, 1953; 0635 GCT; wire  
 angle: 5°; sounding: 205 fms; depth of observation: 151 m;  
 weather: clear; sea: smooth; wind: 340°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 s$ | $\Delta D$ | $O_2$  |
|-------|-------|-------|-----------------------|----------|------------|--------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |          | (dyn.m.)   | (ml/L) |
| 0     | 14.21 | 33.29 | 24.84                 |          | .000       | 5.99   |
| 10    | 14.16 | 33.23 | 24.81                 |          | .031       | 6.01   |
| 20    | 12.81 | 33.25 | 25.10                 |          | .062       | 5.57   |
| 30    | 11.76 | 33.30 | 25.34                 |          | .089       | 4.80   |
| 50    | 10.40 | 33.47 | 25.71                 |          | .139       | 3.64   |
| 75    | 9.93  | 33.66 | 25.94                 |          | .194       | 3.22   |
| 100   | 9.77  | 33.78 | 26.06                 |          | .244       | 2.85   |
| 150   | 9.44  | 33.93 | 26.23                 |          | .340       | -      |

## STATION 100.30 (Interpolated Values at Standard Depths)

CREST: 31°38' 116°51'; February 18, 1953; 0755 GCT; wire  
 angle: 0°; sounding: 60 fms; depth of observation: 50 m;  
 weather: clear; sea: slight; wind: 340°, force 3.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 14.85 | 33.25 | 24.68 | .000 | 5.77 |
| 10 | 14.86 | 33.32 | 24.73 | .033 | 5.68 |
| 20 | 14.70 | 33.28 | 24.73 | .065 | 5.77 |
| 30 | 13.56 | 33.26 | 24.95 | .096 | 5.64 |
| 50 | 10.91 | 33.40 | 25.57 | .151 | 4.66 |



## STATION 100.40 (Interpolated Values at Standard Depths)

CREST: 31°20' 117°36'; February 18, 1953; 1229 GCT; wire angle: 23°; sounding: 1080 fms; depth of observation: 1198 m; weather: clear; sea: rough; wind: 320°, force 5.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.75 | 33.31 | 24.74                 |               | .000       | 5.68           |
| 10    | 14.75 | 33.32 | 24.75                 |               | .032       | 5.73           |
| 20    | 14.78 | 33.34 | 24.76                 |               | .064       | 5.77           |
| 30    | 13.78 | 33.34 | 24.97                 |               | .095       | 5.34           |
| 50    | 11.29 | 33.31 | 25.43                 |               | .151       | 4.32           |
| 75    | 9.91  | 33.64 | 25.93                 |               | .209       | 3.51           |
| 100   | 9.52  | 33.65 | 26.00                 |               | .261       | 3.08           |
| 150   | 9.24  | 34.01 | 26.33                 |               | .355       | 2.36           |
| 200   | 8.81  | 34.13 | 26.49                 |               | .438       | 1.84           |
| 250   | 8.19  | 34.17 | 26.61                 |               | .515       | 1.44           |
| 300   | 7.60  | 34.33 | 26.83                 |               | .584       | 1.00           |
| 400   | 6.78  | 34.31 | 26.93                 |               | .708       | 0.50           |
| 500   | 6.18  | 34.42 | 27.09                 |               | .820       | 0.35           |
| 600   | 5.68  | 34.39 | 27.13                 |               | .923       | 0.29           |
| 700   | 5.10  | 34.43 | 27.23                 |               | 1.020      | 0.31           |
| 800   | 4.66  | 34.47 | 27.32                 |               | 1.109      | 0.33           |
| 1000  | 4.08  | 34.50 | 27.40                 |               | 1.272      | 0.54           |

## STATION 100.50 (Interpolated Values at Standard Depths)

CREST: 31°03' 118°08'; February 18, 1953; 1626, 1750 GCT; wire angle: 38°, 50°; sounding: 950 fms; depth of observation: 465 m; weather: clear; sea: rough; wind: 300°, force 6.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 14.66 | 33.38 | 24.82 |  | .000 | 5.71 |
| 10  | 14.66 | 33.26 | 24.73 |  | .032 | 5.72 |
| 20  | 14.66 | 33.26 | 24.73 |  | .064 | 5.73 |
| 30  | 14.58 | 33.24 | 24.73 |  | .097 | 5.66 |
| 50  | 11.66 | 33.17 | 25.25 |  | .156 | 5.08 |
| 75  | 10.82 | 33.26 | 25.47 |  | .222 | 4.31 |
| 100 | 10.36 | 33.46 | 25.71 |  | .283 | 3.47 |
| 150 | 9.35  | 33.89 | 26.21 |  | .386 | 2.60 |
| 200 | 8.63  | 34.06 | 26.46 |  | .473 | 2.15 |
| 250 | 8.00  | 34.11 | 26.60 |  | .551 | 1.59 |
| 300 | 7.53  | 34.14 | 26.69 |  | .623 | 1.25 |
| 400 | 6.84  | 34.20 | 26.83 |  | .758 | -    |



## STATION 100.60 (Interpolated Values at Standard Depths)

CREST: 30°41' 118°48'; February 25, 1953; 2041 GCT; wire angle: 5°; sounding: 1600 fms; depth of observation: 1159 m; weather: cloudy; sea: smooth; wind: 45°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 13.97 | 33.15 | 24.79                 |               | .000       | 5.91           |
| 10    | 13.74 | 33.15 | 24.83                 |               | .031       | 5.77           |
| 20    | 13.68 | 33.18 | 24.87                 |               | .063       | 5.81           |
| 30    | 13.68 | 33.19 | 24.86                 |               | .094       | 5.84           |
| 50    | 13.67 | 33.19 | 24.88                 |               | .156       | 5.85           |
| 75    | 12.64 | 33.19 | 25.08                 |               | .231       | 5.40           |
| 100   | 10.50 | 33.28 | 25.55                 |               | .298       | 4.52           |
| 150   | 8.95  | 33.72 | 26.15                 |               | .407       | 3.57           |
| 200   | 8.54  | 33.97 | 26.40                 |               | .496       | 2.85           |
| 250   | 8.06  | 34.05 | 26.54                 |               | .577       | 2.15           |
| 300   | 7.50  | 34.07 | 26.64                 |               | .652       | 1.55           |
| 400   | 6.64  | 34.13 | 26.80                 |               | .790       | 0.80           |
| 500   | 6.03  | 34.21 | 26.95                 |               | .915       | 0.49           |
| 600   | 5.54  | 34.32 | 27.09                 |               | 1.027      | 0.33           |
| 700   | 5.04  | 34.36 | 27.19                 |               | 1.128      | 0.37           |
| 800   | 4.66  | 34.37 | 27.24                 |               | 1.223      | 0.42           |
| 1000  | 3.99  | 34.37 | 27.31                 |               | 1.401      | 0.60           |

## STATION 100.70 (Interpolated Values at Standard Depths)

CREST: 30°20' 119°27'; February 26, 1953; 0126 GCT; wire angle: 12°; sounding: 2100 fms; depth of observation: 575 m; weather: partly cloudy; sea: slight; wind: 45°, force 2.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 13.94 | 33.12 | 24.77 | .000 | 5.91 |
| 10  | 13.62 | 33.23 | 24.92 | .031 | 5.93 |
| 20  | 13.59 | 33.17 | 24.88 | .062 | 5.98 |
| 30  | 13.59 | 33.15 | 24.86 | .093 | 5.87 |
| 50  | 13.47 | 33.14 | 24.88 | .155 | 5.78 |
| 75  | 11.30 | 33.09 | 25.26 | .228 | 5.18 |
| 100 | 10.28 | 33.28 | 25.58 | .292 | 4.53 |
| 150 | 9.32  | 33.74 | 26.10 | .402 | 3.35 |
| 200 | 8.28  | 33.94 | 26.42 | .492 | 2.96 |
| 250 | 7.97  | 34.12 | 26.61 | .570 | 2.25 |
| 300 | 7.94  | 34.18 | 26.66 | .643 | 1.33 |
| 400 | 6.79  | 34.17 | 26.82 | .780 | 0.70 |
| 500 | 5.97  | 34.13 | 26.89 | .907 | 0.48 |



## STATION 100.80 (Interpolated Values at Standard Depths)

CREST: 30°01' 120°07'; February 26, 1953; 0546 GCT; wire angle: 20°; sounding: 2150 fms; depth of observation: 1088 m; weather: partly cloudy; sea: slight; wind: 45°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.20 | 33.15 | 24.74                 |               | .000       | 5.78           |
| 10    | 14.22 | 33.15 | 24.73                 |               | .032       | 5.77           |
| 20    | 14.21 | 33.15 | 24.74                 |               | .064       | 5.77           |
| 30    | 14.20 | 33.15 | 24.74                 |               | .097       | 5.75           |
| 50    | 14.20 | 33.15 | 24.74                 |               | .161       | 5.73           |
| 75    | 13.60 | 33.14 | 24.85                 |               | .241       | 5.75           |
| 100   | 11.66 | 33.10 | 25.20                 |               | .315       | 5.60           |
| 150   | 9.41  | 33.46 | 25.87                 |               | .439       | 4.27           |
| 200   | 8.50  | 33.87 | 26.33                 |               | .536       | 3.28           |
| 250   | 7.89  | 34.00 | 26.53                 |               | .619       | 2.94           |
| 300   | 7.17  | 34.07 | 26.68                 |               | .693       | 2.33           |
| 400   | 6.35  | 34.15 | 26.86                 |               | .827       | 1.17           |
| 500   | 5.75  | 34.27 | 27.03                 |               | .944       | 0.58           |
| 600   | 5.29  | 34.35 | 27.15                 |               | 1.049      | 0.36           |
| 700   | 4.91  | 34.42 | 27.25                 |               | 1.145      | 0.33           |
| 800   | 4.52  | 34.50 | 27.35                 |               | 1.231      | 0.35           |
| 1000  | 3.85  | 34.52 | 27.44                 |               | 1.386      | 0.58           |

## STATION 105.32 (Interpolated Values at Standard Depths)

CREST: 30°47' 116°22'; February 17, 1953; 1721 GCT; wire angle: 0°; sounding: 46 fms; depth of observation: 50 m; weather: clear; sea: smooth; wind: 120°, force 2.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 14.44 | 33.29 | 24.80 | .000 | 5.86 |
| 10 | 14.39 | 33.29 | 24.81 | .032 | 5.84 |
| 20 | 14.38 | 33.34 | 24.85 | .063 | 5.82 |
| 30 | 13.61 | 33.28 | 24.96 | .094 | 5.73 |
| 50 | 10.98 | 33.24 | 25.43 | .149 | 4.69 |

## STATION 105.35 (Interpolated Values at Standard Depths)

CREST: 30°41' 116°34'; February 17, 1953; 1523 GCT; wire angle: 3°; sounding: 650 fms; depth of observation: 592 m; weather: clear; sea: slight; wind: 280°, force 2.

| Depth | T      | S       | $\sigma_t$            | $10^3 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.62  | 33.52   | 24.72                 |               | .000       | 5.59           |
| 10    | 15.62  | 33.44   | 24.65                 |               | .033       | 5.58           |
| 20    | 15.60  | 33.45   | 24.67                 |               | .066       | 5.56           |
| 30    | 15.52  | 33.31   | 24.58                 |               | .099       | 5.71           |
| 50    | 12.76  | 33.33   | 25.17                 |               | .161       | 5.07           |
| 75    | 10.74  | 33.37   | 25.57                 |               | .227       | 4.18           |
| 100   | 10.47  | 33.72   | 25.89                 |               | .284       | 3.25           |
| 150   | 9.93   | 34.08   | 26.27                 |               | .382       | 2.48           |
| 200   | 9.13   | 34.18   | 26.48                 |               | .467       | 2.06           |
| 250   | 8.46   | 34.22   | 26.61                 |               | .544       | 1.70           |
| 300   | 8.19   | 34.32   | 26.73                 |               | .615       | 0.84           |
| 400   | 7.11   | 34.24   | 26.83                 |               | .749       | 0.73           |
| 500   | 6.37   | 34.35   | 27.01                 |               | .870       | 0.38           |
| 600   | (5.62) | (34.31) | (27.08)               |               | (.979)     | (0.26)         |

## STATION 105.40 (Interpolated Values at Standard Depths)

CREST: 30°32' 116°52'; February 17, 1953; 1248 GCT; wire angle: 0°; sounding: 1100 fms; depth of observation: 595 m; weather: clear; sea: smooth; wind: 270°, force 2.

|     |        |         |         |  |        |        |
|-----|--------|---------|---------|--|--------|--------|
| 0   | 14.78  | 33.27   | 24.71   |  | .000   | 5.85   |
| 10  | 14.78  | 33.30   | 24.73   |  | .032   | 5.72   |
| 20  | 14.73  | 33.29   | 24.72   |  | .065   | 5.70   |
| 30  | 14.63  | 33.28   | 24.75   |  | .097   | 5.74   |
| 50  | 13.71  | 33.19   | 24.87   |  | .160   | 5.65   |
| 75  | 11.01  | 33.16   | 25.36   |  | .232   | 5.03   |
| 100 | 10.48  | 33.52   | 25.74   |  | .293   | 3.69   |
| 150 | 9.36   | 33.78   | 26.13   |  | .399   | 2.80   |
| 200 | 8.86   | 34.04   | 26.41   |  | .488   | 2.23   |
| 250 | 8.33   | 34.15   | 26.58   |  | .568   | 1.78   |
| 300 | 8.01   | 34.24   | 26.70   |  | .641   | 1.25   |
| 400 | 7.13   | 34.31   | 26.88   |  | .773   | 0.64   |
| 500 | 6.37   | 34.34   | 27.01   |  | .892   | 0.34   |
| 600 | (5.63) | (34.40) | (27.15) |  | (.999) | (0.30) |



## STATION 105.50 (Interpolated Values at Standard Depths)

CREST: 30°13' 117°31'; February 17, 1953; 0815 GCT; wire angle: 12°; sounding: 1650 fms; depth of observation: 580 m; weather: clear; sea: slight; wind: 340°, force 4.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 16.28  | 33.55   | 24.59                 |               | .000       | 5.45           |
| 10    | 16.30  | 33.52   | 24.56                 |               | .034       | 5.38           |
| 20    | 16.27  | 33.55   | 24.59                 |               | .067       | 5.45           |
| 30    | 16.25  | 33.52   | 24.57                 |               | .101       | 5.45           |
| 50    | 16.26  | 33.54   | 24.59                 |               | .169       | 5.42           |
| 75    | 12.91  | 33.35   | 25.15                 |               | .246       | 4.76           |
| 100   | 11.70  | 33.39   | 25.42                 |               | .314       | 4.31           |
| 150   | 10.03  | 33.90   | 26.11                 |               | .428       | 2.90           |
| 200   | 9.32   | 34.03   | 26.33                 |               | .520       | 2.57           |
| 250   | 8.79   | 34.17   | 26.52                 |               | .603       | 1.92           |
| 300   | 8.18   | 34.23   | 26.66                 |               | .678       | 1.29           |
| 400   | 7.16   | 34.30   | 26.87                 |               | .812       | 0.67           |
| 500   | 6.50   | 34.35   | 27.00                 |               | .932       | 0.32           |
| 600   | (5.66) | (34.33) | (27.09)               |               | (1.042)    | (0.26)         |

## STATION 105.60 (Interpolated Values at Standard Depths)

CREST: 29°51' 118°52'; February 16, 1953; 2354 GCT; wire angle: 20°; sounding: 1900 fms; depth of observation: 546 m; weather: clear; sea: slight; wind: 10°, force 4.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 14.71 | 33.33 | 24.77 | .000 | 5.64 |
| 10  | 14.64 | 33.22 | 24.70 | .032 | 5.71 |
| 20  | 14.57 | 33.15 | 24.66 | .065 | 5.74 |
| 30  | 14.51 | 33.19 | 24.70 | .098 | 5.70 |
| 50  | 14.43 | 33.21 | 24.74 | .163 | 5.78 |
| 75  | 12.18 | 33.22 | 25.19 | .238 | 5.57 |
| 100 | 10.34 | 33.21 | 25.52 | .304 | 4.60 |
| 150 | 9.00  | 33.77 | 26.18 | .413 | 3.25 |
| 200 | 8.73  | 34.07 | 26.45 | .501 | 2.38 |
| 250 | 8.06  | 34.12 | 26.60 | .579 | 1.94 |
| 300 | 7.36  | 34.15 | 26.72 | .651 | 1.51 |
| 400 | 6.26  | 34.21 | 26.92 | .780 | 0.83 |
| 500 | 5.79  | 34.27 | 27.02 | .895 | 0.45 |

## STATION 110.33 (Interpolated Values at Standard Depths)

CREST: 29°50' 115°53'; February 15, 1953; 1800 GCT; wire angle: 3°; sounding: 60 fms; depth of observation: 75 m; weather: partly cloudy; sea: slight; wind: 340°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.40 | 33.23 | 24.76                 |               | .000       | 5.71           |
| 10    | 14.31 | 33.25 | 24.79                 |               | .032       | 5.84           |
| 20    | 14.27 | 33.25 | 24.80                 |               | .063       | 5.78           |
| 30    | 14.22 | 33.26 | 24.82                 |               | .095       | 5.54           |
| 50    | 11.68 | 33.34 | 25.38                 |               | .153       | 4.46           |
| 75    | 10.18 | 33.63 | 25.87                 |               | .212       | 3.27           |

## STATION 110.35 (Interpolated Values at Standard Depths)

CREST: 29°47' 116°00'; February 15, 1953; 1929 GCT; wire angle: 23°; sounding: 700 fms; depth of observation: 575 m; weather: cloudy; sea: rough; wind: 330°, force 4.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 15.81 | 33.38 | 24.57 |  | .000 | 5.54 |
| 10  | 15.76 | 33.42 | 24.61 |  | .034 | 5.53 |
| 20  | 15.77 | 33.36 | 24.56 |  | .067 | 5.53 |
| 30  | 15.74 | 33.32 | 24.54 |  | .101 | 5.50 |
| 50  | 13.73 | 33.36 | 25.00 |  | .165 | 5.22 |
| 75  | 11.21 | 33.42 | 25.53 |  | .234 | 4.00 |
| 100 | 10.64 | 33.61 | 25.78 |  | .293 | 3.46 |
| 150 | 9.71  | 33.96 | 26.21 |  | .395 | 2.33 |
| 200 | 9.68  | 34.26 | 26.45 |  | .482 | 1.40 |
| 250 | 9.18  | 34.31 | 26.57 |  | .561 | 1.01 |
| 300 | 8.47  | 34.31 | 26.68 |  | .635 | 0.73 |
| 400 | 7.61  | 34.31 | 26.81 |  | .771 | 0.47 |
| 500 | 6.68  | 34.31 | 26.94 |  | .897 | 0.36 |



## STATION 110.40 (Interpolated Values at Standard Depths)

CREST: 29°36' 116°20'; February 15, 1953; 2228 GCT; wire angle: 28°; sounding: 1325 fms; depth of observation: 544 m; weather: cloudy; sea: rough; wind: 330°, force 5.

| Depth | T     | S     | $\sigma_t$            | $10^5 s$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|----------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |          | (dyn.m.)   | (ml/L)         |
| 0     | 15.64 | 33.40 | 24.62                 |          | .000       | 5.60           |
| 10    | 15.65 | 33.38 | 24.60                 |          | .033       | 5.62           |
| 20    | 15.62 | 33.43 | 24.65                 |          | .067       | 5.53           |
| 30    | 15.54 | 33.42 | 24.66                 |          | .100       | 5.50           |
| 50    | 15.46 | 33.36 | 24.62                 |          | .166       | 5.49           |
| 75    | 13.93 | 33.29 | 24.90                 |          | .246       | 5.56           |
| 100   | 11.43 | 33.30 | 25.40                 |          | .318       | 4.24           |
| 150   | 9.83  | 33.87 | 26.12                 |          | .431       | 2.98           |
| 200   | 9.16  | 34.08 | 26.39                 |          | .522       | 2.37           |
| 250   | 9.18  | 34.30 | 26.56                 |          | .602       | 1.22           |
| 300   | 8.55  | 34.29 | 26.65                 |          | .676       | 1.06           |
| 400   | 7.24  | 34.28 | 26.84                 |          | .813       | 0.82           |
| 500   | 6.41  | 34.31 | 26.98                 |          | .935       | 0.38           |

## STATION 110.50 (Interpolated Values at Standard Depths)

CREST: 29°16' 116°59'; February 16, 1953; 0310 GCT; wire angle: 20°; sounding: 2000 fms; depth of observation: 1174 m; weather: clear; sea: rough; wind: 320°, force 4.

|      |       |         |         |  |         |      |
|------|-------|---------|---------|--|---------|------|
| 0    | 15.90 | 33.54   | 24.67   |  | .000    | 5.50 |
| 10   | 15.91 | 33.43   | 24.58   |  | .033    | 5.50 |
| 20   | 15.91 | 33.45   | 24.50   |  | .067    | 5.50 |
| 30   | 15.89 | 33.45   | 24.60   |  | .100    | 5.49 |
| 50   | 15.84 | 33.45   | 24.61   |  | .167    | 5.51 |
| 75   | 15.87 | 33.44   | 24.60   |  | .251    | 5.56 |
| 100  | 15.84 | 33.41   | 24.58   |  | .336    | 5.56 |
| 150  | 12.29 | 33.41   | 25.32   |  | .488    | 4.68 |
| 200  | 10.34 | 33.95   | 26.09   |  | .605    | 2.48 |
| 250  | 9.56  | 34.14   | 26.37   |  | .697    | 2.10 |
| 300  | 9.50  | 34.29   | 26.50   |  | .780    | 1.33 |
| 400  | 7.89  | 34.31   | 26.77   |  | .927    | 0.75 |
| 500  | 6.72  | 34.30   | 26.93   |  | 1.055   | 0.53 |
| 600  | 5.96  | 34.31   | 27.03   |  | 1.172   | 0.37 |
| 700  | 5.37  | 34.37   | 27.15   |  | 1.277   | 0.33 |
| 800  | 4.94  | 34.43   | 27.25   |  | 1.373   | 0.33 |
| 1000 | 4.24  | (34.50) | (27.39) |  | (1.545) | 0.49 |

## STATION 110.60 (Interpolated Values at Standard Depths)

CREST: 28°56' 117°39'; February 16, 1953; 0819 GCT; wire  
 angle: 8°; sounding: 2000+ fms; depth of observation: 554 m;  
 weather: clear; sea: slight; wind: 310°, force 4.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.99 | 33.50 | 24.62                 |               | .000       | 5.51           |
| 10    | 16.01 | 33.54 | 24.64                 |               | .033       | 5.55           |
| 20    | 16.01 | 33.52 | 24.63                 |               | .066       | 5.54           |
| 30    | 15.98 | 33.51 | 24.63                 |               | .100       | 5.53           |
| 50    | 16.00 | 33.53 | 24.64                 |               | .166       | 5.56           |
| 75    | 15.73 | 33.49 | 24.67                 |               | .249       | 5.50           |
| 100   | 13.30 | 33.44 | 25.15                 |               | .326       | 5.12           |
| 150   | 10.75 | 33.68 | 25.81                 |               | .453       | 3.49           |
| 200   | 9.67  | 34.08 | 26.31                 |               | .553       | 2.33           |
| 250   | 9.02  | 34.25 | 26.55                 |               | .635       | 1.91           |
| 300   | 8.42  | 34.31 | 26.69                 |               | .709       | 1.28           |
| 400   | 7.36  | 34.31 | 26.85                 |               | .844       | 0.90           |
| 500   | 6.54  | 34.38 | 27.01                 |               | .964       | 0.42           |

## STATION 113.30 (Interpolated Values at Standard Depths)

CREST: 29°22' 115°18'; February 15, 1953; 1314 GCT; wire  
 angle: 0°; sounding: 30 fms; depth of observation: 30 m;  
 weather: clear; sea: slight; wind: 330°, force 4.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 14.31 | 33.43 | 24.93 | .000 | 5.29 |
| 10 | 14.32 | 33.40 | 24.91 | .030 | 5.29 |
| 20 | 13.40 | 33.38 | 25.08 | .060 | 3.84 |
| 30 | 12.74 | 33.48 | 25.29 | .088 | 2.75 |



## STATION 113.35 (Interpolated Values at Standard Depths)

CREST: 29°12' 115°39'; February 15, 1953; 0938 GCT; wire angle: 34°; sounding: 900 fms; depth of observation: 499 m; weather: clear; sea: moderate; wind: 340°, force 4.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.06  | 33.20   | 24.59                 |               | .000       | 5.94           |
| 10    | 15.04  | 33.24   | 24.63                 |               | .033       | 5.74           |
| 20    | 15.04  | 33.25   | 24.64                 |               | .067       | 5.73           |
| 30    | 15.04  | 33.27   | 24.65                 |               | .100       | 5.74           |
| 50    | 14.06  | 33.27   | 24.86                 |               | .164       | 5.73           |
| 75    | 11.97  | 33.31   | 25.30                 |               | .237       | 4.54           |
| 100   | 11.00  | 33.67   | 25.76                 |               | .299       | 3.30           |
| 150   | 10.98  | 34.28   | 26.24                 |               | .401       | 1.30           |
| 200   | 10.57  | 34.42   | 26.42                 |               | .488       | 0.77           |
| 250   | 9.95   | 34.46   | 26.56                 |               | .568       | 0.59           |
| 300   | 9.04   | 34.37   | 26.64                 |               | .643       | 0.62           |
| 400   | 8.06   | 34.36   | 26.78                 |               | .783       | 0.45           |
| 500   | (6.90) | (34.31) | (26.91)               |               | (.912)     | (0.37)         |

## STATION 113.40 (Interpolated Values at Standard Depths)

CREST: 29°02' 115°58'; February 15, 1953; 0625 GCT; wire angle: 21°; sounding: 800 fms; depth of observation: 560 m; weather: clear; sea: moderate; wind: 240°, force 4.

|     |       |       |       |      |      |
|-----|-------|-------|-------|------|------|
| 0   | 14.93 | 33.35 | 24.74 | .000 | 5.80 |
| 10  | 14.93 | 33.28 | 24.68 | .032 | 5.80 |
| 20  | 14.80 | 33.31 | 24.73 | .065 | 5.83 |
| 30  | 14.77 | 33.35 | 24.77 | .096 | 5.71 |
| 50  | 14.53 | 33.67 | 25.07 | .157 | 4.15 |
| 75  | 11.89 | 33.52 | 25.48 | .225 | 3.71 |
| 100 | 10.78 | 33.66 | 25.79 | .285 | 3.19 |
| 150 | 11.36 | 34.29 | 26.18 | .387 | 1.30 |
| 200 | 10.67 | 34.46 | 26.43 | .476 | 0.65 |
| 250 | 10.00 | 34.42 | 26.52 | .556 | 0.59 |
| 300 | 9.49  | 34.38 | 26.57 | .634 | 0.48 |
| 400 | 8.37  | 34.39 | 26.76 | .779 | 0.38 |
| 500 | 7.07  | 34.35 | 26.92 | .908 | 0.33 |



## STATION 113.50 (Interpolated Values at Standard Depths)

CREST: 28°42' 116°38'; February 15, 1953; 0108 GCT; wire angle: 25°; sounding: 1900 fms; depth of observation: 523 m; weather: clear; sea: slight; wind: 200°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 16.38 | 33.51 | 24.54                 |               | .000       | 5.51           |
| 10    | 16.18 | 33.55 | 24.61                 |               | .034       | 5.48           |
| 20    | 16.15 | 33.49 | 24.57                 |               | .067       | 5.45           |
| 30    | 16.11 | 33.52 | 24.61                 |               | .101       | 5.44           |
| 50    | 15.78 | 33.46 | 24.63                 |               | .168       | 5.42           |
| 75    | 12.56 | 33.48 | 25.32                 |               | .243       | 4.73           |
| 100   | 11.36 | 33.46 | 25.53                 |               | .307       | 4.06           |
| 150   | 9.91  | 33.85 | 26.09                 |               | .418       | 2.83           |
| 200   | 9.35  | 34.05 | 26.34                 |               | .511       | 2.25           |
| 250   | 9.60  | 34.35 | 26.53                 |               | .593       | 1.11           |
| 300   | 8.80  | 34.35 | 26.66                 |               | .668       | 0.85           |
| 400   | 7.67  | 34.35 | 26.83                 |               | .805       | 0.48           |
| 500   | 6.79  | 34.38 | 26.98                 |               | .928       | 0.36           |

## STATION 113.60 (Interpolated Values at Standard Depths)

CREST: 28°22' 117°17'; February 14, 1953; 2015 GCT; wire angle: 2°; sounding: 2000+ fms; depth of observation: 589 m; weather: clear; sea: smooth; wind: 320°, force 3.

|     |        |         |         |  |         |        |
|-----|--------|---------|---------|--|---------|--------|
| 0   | 16.13  | 33.45   | 24.55   |  | .000    | 5.46   |
| 10  | 15.96  | 33.45   | 24.59   |  | .034    | 5.57   |
| 20  | 15.95  | 33.41   | 24.56   |  | .068    | 5.66   |
| 30  | 15.93  | 33.43   | 24.58   |  | .101    | 5.62   |
| 50  | 15.92  | 33.47   | 24.61   |  | .169    | 5.55   |
| 75  | 14.77  | 33.27   | 24.71   |  | .251    | 5.70   |
| 100 | 13.40  | 33.27   | 24.99   |  | .330    | 5.32   |
| 150 | 10.39  | 33.54   | 25.77   |  | .461    | 3.65   |
| 200 | 9.82   | 34.02   | 26.24   |  | .564    | 2.37   |
| 250 | 9.02   | 34.19   | 26.50   |  | .649    | 1.91   |
| 300 | 8.67   | 34.24   | 26.60   |  | .727    | 1.28   |
| 400 | 7.56   | 34.29   | 26.80   |  | .868    | 0.72   |
| 500 | 6.67   | 34.31   | 26.94   |  | .994    | 0.46   |
| 600 | (5.88) | (34.34) | (27.07) |  | (1.107) | (0.36) |



## STATION 117.26 (Interpolated Values at Standard Depths)

CREST: 29°04' 114°47'; February 13, 1953; 1232 GCT; wire angle: 2°; sounding: 45 fms; depth of observation: 50 m; weather: clear; sea: slight; wind: 45°, force 4.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 14.94 | 33.46 | 24.82                 |               | .000       | 5.49           |
| 10    | 14.95 | 33.52 | 24.86                 |               | .031       | 5.49           |
| 20    | 14.90 | 33.49 | 24.85                 |               | .062       | 5.42           |
| 30    | 13.48 | 33.50 | 25.16                 |               | .092       | 5.07           |
| 50    | 11.87 | 33.67 | 25.60                 |               | .144       | 2.73           |

## STATION 117.30 (Interpolated Values at Standard Depths)

CREST: 28°56' 114°59'; February 13, 1953; 1430 GCT; wire angle: 0°; sounding: 45 fms; depth of observation: 40 m; weather: clear; sea: slight; wind: 20°, force 4.

|    |       |       |       |  |      |      |
|----|-------|-------|-------|--|------|------|
| 0  | 14.97 | 33.46 | 24.81 |  | .000 | 5.57 |
| 10 | 15.00 | 33.50 | 24.84 |  | .031 | 5.60 |
| 20 | 14.93 | 33.54 | 24.88 |  | .062 | 5.49 |
| 30 | 13.74 | 33.55 | 25.14 |  | .092 | 5.16 |

## STATION 117.35 (Interpolated Values at Standard Depths)

CREST: 28°45' 115°21'; February 13, 1953; 1650 GCT; wire angle: 2°; sounding: 300 fms; depth of observation: 396 m; weather: partly cloudy; sea: slight; wind: 210°, force 3.

|     |        |         |         |  |        |        |
|-----|--------|---------|---------|--|--------|--------|
| 0   | 14.88  | 33.48   | 24.85   |  | .000   | 5.57   |
| 10  | 14.87  | 33.52   | 24.88   |  | .031   | 5.52   |
| 20  | 14.51  | 33.56   | 24.99   |  | .061   | 5.57   |
| 30  | 13.58  | 33.37   | 25.04   |  | .091   | 5.36   |
| 50  | 12.19  | 33.24   | 25.21   |  | .148   | 4.69   |
| 75  | 11.45  | 33.42   | 25.49   |  | .214   | 4.05   |
| 100 | 11.65  | 33.90   | 25.82   |  | .274   | 2.45   |
| 150 | 10.76  | 34.18   | 26.20   |  | .375   | 1.55   |
| 200 | 10.52  | 34.35   | 26.37   |  | .464   | 0.90   |
| 250 | 9.72   | 34.47   | 26.61   |  | .545   | 0.70   |
| 300 | 9.38   | 34.43   | 26.63   |  | .619   | 0.55   |
| 400 | (8.02) | (34.42) | (26.84) |  | (.757) | (0.40) |

## STATION 117.40 (Interpolated Values at Standard Depths)

CREST: 28°28' 115°36'; February 13, 1953; 1940 GCT; wire angle: 12°; sounding: 500 fms; depth of observation: 584 m; weather: clear; sea: slight; wind: 250°, force 4.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.31  | 33.64   | 24.88                 |               | .000       | 5.63           |
| 10    | 15.16  | 33.64   | 24.91                 |               | .031       | 5.57           |
| 20    | 15.13  | 33.64   | 24.92                 |               | .061       | 5.49           |
| 30    | 15.11  | 33.62   | 24.90                 |               | .092       | 4.88           |
| 50    | 11.97  | 33.62   | 25.54                 |               | .147       | 3.65           |
| 75    | 10.96  | 33.81   | 25.88                 |               | .205       | 3.22           |
| 100   | 10.83  | 34.02   | 26.06                 |               | .256       | 2.23           |
| 150   | 11.07  | 34.40   | 26.32                 |               | .350       | 1.02           |
| 200   | 10.23  | 34.44   | 26.50                 |               | .433       | 0.77           |
| 250   | 9.88   | 34.48   | 26.59                 |               | .511       | 0.64           |
| 300   | 9.58   | 34.49   | 26.64                 |               | .585       | 0.60           |
| 400   | 8.33   | 34.40   | 26.77                 |               | .726       | 0.50           |
| 500   | 6.69   | 34.39   | 27.00                 |               | .850       | 0.31           |
| 600   | (6.13) | (34.39) | (27.08)               |               | (.961)     | -              |

## STATION 117.50 (Interpolated Values at Standard Depths)

CREST: 28°08' 116°15'; February 14, 1953; 1029 GCT; wire angle: 8°; sounding: 2000+ fms; depth of observation: 579 m; weather: clear; sea: smooth; wind: 320°, force 2.

|     |        |         |         |  |        |      |
|-----|--------|---------|---------|--|--------|------|
| 0   | 15.84  | 33.56   | 24.70   |  | .000   | 5.66 |
| 10  | 15.86  | 33.49   | 24.64   |  | .033   | 5.64 |
| 20  | 15.67  | 33.45   | 24.65   |  | .066   | 5.79 |
| 30  | 14.56  | 33.37   | 24.83   |  | .098   | 5.72 |
| 50  | 12.97  | 33.37   | 25.16   |  | .158   | 5.02 |
| 75  | 11.56  | 33.43   | 25.47   |  | .225   | 4.36 |
| 100 | 11.05  | 33.67   | 25.75   |  | .285   | 3.48 |
| 150 | 11.52  | 34.36   | 26.20   |  | .388   | 1.15 |
| 200 | 10.56  | 34.48   | 26.47   |  | .475   | 0.71 |
| 250 | 10.09  | 34.53   | 26.59   |  | .553   | 0.72 |
| 300 | 9.12   | 34.47   | 26.70   |  | .626   | 0.42 |
| 400 | 7.65   | 34.38   | 26.86   |  | .760   | 0.48 |
| 500 | 6.69   | 34.38   | 26.99   |  | .880   | 0.33 |
| 600 | (5.99) | (34.40) | (27.10) |  | (.990) |      |



## STATION 117.60 (Interpolated Values at Standard Depths)

CREST: 27°48' 116°55'; February 14, 1953; 1517 GCT; wire angle: 12°; sounding: 2000+ fms; depth of observation: 578 m; weather: partly cloudy; sea: smooth; wind: 360°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 16.61 | 33.67 | 24.61                 |               | .000       | 5.50           |
| 10    | 16.62 | 33.65 | 24.59                 |               | .034       | 5.54           |
| 20    | 16.63 | 33.62 | 24.56                 |               | .067       | 5.54           |
| 30    | 16.62 | 33.65 | 24.59                 |               | .101       | 5.51           |
| 50    | 16.60 | 33.59 | 24.55                 |               | .169       | 5.47           |
| 75    | 14.39 | 33.42 | 24.91                 |               | .250       | 5.13           |
| 100   | 12.00 | 33.52 | 25.46                 |               | .320       | 4.16           |
| 150   | 10.38 | 33.70 | 25.89                 |               | .438       | 3.27           |
| 200   | 9.63  | 34.04 | 26.29                 |               | .536       | 2.36           |
| 250   | 8.99  | 34.16 | 26.48                 |               | .621       | 1.75           |
| 300   | 8.38  | 34.19 | 26.60                 |               | .698       | 1.32           |
| 400   | 7.21  | 34.24 | 26.81                 |               | .839       | 0.75           |
| 500   | 6.41  | 34.34 | 27.00                 |               | .961       | 0.41           |

## STATION 120.25 (Interpolated Values at Standard Depths)

CREST: 28°23' 114°14'; February 12, 1953; 1520 GCT; wire angle: 2°; sounding: 32 fms; depth of observation: 50 m; weather: clear; sea: slight; wind: 330°, force 2.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 15.49 | 33.59 | 24.80 | .000 | 5.74 |
| 10 | 15.51 | 33.42 | 24.66 | .032 | 5.77 |
| 20 | 15.44 | 33.55 | 24.78 | .065 | 5.76 |
| 30 | 15.37 | 33.50 | 24.76 | .097 | 5.27 |
| 50 | 12.78 | 33.42 | 25.23 | .156 | 3.93 |

## STATION 120.30 (Interpolated Values at Standard Depths)

CREST: 28°11' 114°32'; February 12, 1953; 1227 GCT; wire angle: 8°; sounding: 52 fms; depth of observation: 74 m; weather: partly cloudy; sea: rough; wind: 220°, force 4.

|    |         |         |         |        |        |
|----|---------|---------|---------|--------|--------|
| 0  | 15.37   | 33.50   | 24.76   | .000   | 6.02   |
| 10 | 15.38   | 33.49   | 24.75   | .032   | 5.80   |
| 20 | 15.40   | 33.51   | 24.76   | .064   | 5.80   |
| 30 | 15.36   | 33.50   | 24.76   | .096   | 5.77   |
| 50 | 14.71   | 33.65   | 25.01   | .158   | 4.72   |
| 75 | (12.18) | (33.54) | (25.44) | (.227) | (3.85) |



## STATION 120.35 (Interpolated Values at Standard Depths)

CREST: 28°03' 114°54'; February 12, 1953; 0917 GCT; wire angle: 6°; sounding: 44 fms; depth of observation: 50 m; weather: clear; sea: rough; wind: 250°, force 5.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.38 | 33.52 | 24.77                 |               | .000       | 5.80           |
| 10    | 15.37 | 33.53 | 24.78                 |               | .032       | 5.83           |
| 20    | 15.37 | 33.51 | 24.76                 |               | .064       | 5.82           |
| 30    | 15.36 | 33.51 | 24.77                 |               | .096       | 5.75           |
| 50    | 14.48 | 33.50 | 24.95                 |               | .158       | 5.29           |

## STATION 120.45 (Interpolated Values at Standard Depths)

CREST: 27°42' 115°34'; February 12, 1953; 0405 GCT; wire angle: 38°; sounding: 1250 fms; depth of observation: 1014 m; weather: clear; sea: slight; wind: 340°, force 2.

|      |       |       |       |       |      |
|------|-------|-------|-------|-------|------|
| 0    | 15.44 | 33.52 | 24.76 | .000  | 5.69 |
| 10   | 15.45 | 33.52 | 24.75 | .032  | 5.76 |
| 20   | 15.43 | 33.53 | 24.77 | .064  | 5.72 |
| 30   | 15.41 | 33.49 | 24.74 | .096  | 5.30 |
| 50   | 12.76 | 33.43 | 25.25 | .156  | 4.74 |
| 75   | 12.31 | 33.67 | 25.52 | .221  | 3.40 |
| 100  | 12.28 | 34.12 | 25.87 | .279  | 2.08 |
| 150  | 11.05 | 34.38 | 26.30 | .378  | 1.30 |
| 200  | 10.86 | 34.53 | 26.45 | .462  | 0.73 |
| 250  | 10.28 | 34.58 | 26.60 | .541  | 0.46 |
| 300  | 9.51  | 34.55 | 26.70 | .614  | 0.35 |
| 400  | 8.21  | 34.45 | 26.83 | .749  | 0.36 |
| 500  | 6.93  | 34.41 | 26.98 | .872  | 0.26 |
| 600  | 6.27  | 34.42 | 27.08 | .983  | 0.23 |
| 700  | 5.61  | 34.47 | 27.20 | 1.085 | 0.24 |
| 800  | 5.02  | 34.51 | 27.31 | 1.176 | 0.30 |
| 1000 | 4.17  | 34.51 | 27.40 | 1.341 | 0.50 |



## STATION 120.50 (Interpolated Values at Standard Depths)

CREST: 27°34' 115°52'; February 12, 1953; 0115 GCT; wire angle: 21°; sounding: 2400 fms; depth of observation: 601 m; weather: clear; sea: moderate; wind: 320°; force 4.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.78 | 33.46 | 24.63                 |               | .000       | 5.82           |
| 10    | 15.81 | 33.48 | 24.64                 |               | .033       | 5.81           |
| 20    | 15.60 | 33.48 | 24.69                 |               | .066       | 5.77           |
| 30    | 15.22 | 33.52 | 24.80                 |               | .098       | 5.69           |
| 50    | 14.85 | 33.46 | 24.84                 |               | .161       | 5.39           |
| 75    | 12.18 | 33.49 | 25.40                 |               | .233       | 4.36           |
| 100   | 10.72 | 33.55 | 25.72                 |               | .294       | 3.79           |
| 150   | 10.00 | 33.97 | 26.17                 |               | .399       | 2.63           |
| 200   | 9.61  | 34.25 | 26.45                 |               | .487       | 1.85           |
| 250   | 9.28  | 34.37 | 26.60                 |               | .565       | 1.10           |
| 300   | 9.44  | 34.54 | 26.71                 |               | .637       | 0.44           |
| 400   | 7.56  | 34.38 | 26.87                 |               | .770       | 0.52           |
| 500   | 6.75  | 34.43 | 27.03                 |               | .889       | 0.27           |
| 600   | 6.07  | 34.46 | 27.14                 |               | .996       | 0.25           |

## STATION 120.60 (Interpolated Values at Standard Depths)

CREST: 27°14' 116°31'; February 11, 1953; 2010 GCT; wire angle: 22°; sounding: 2000+ fms; depth of observation: 892 m; weather: clear; sea: moderate; wind: 360°, force 3.

|     |       |       |       |  |       |      |
|-----|-------|-------|-------|--|-------|------|
| 0   | 16.07 | 33.48 | 24.58 |  | .000  | 5.64 |
| 10  | 16.01 | 33.48 | 24.60 |  | .034  | 5.53 |
| 20  | 15.96 | 33.49 | 24.62 |  | .067  | 5.63 |
| 30  | 15.94 | 33.49 | 24.62 |  | .100  | 5.63 |
| 50  | 15.94 | 33.47 | 24.61 |  | .167  | 5.64 |
| 75  | 14.90 | 33.27 | 24.68 |  | .250  | 5.76 |
| 100 | 13.10 | 33.33 | 25.10 |  | .328  | 5.47 |
| 150 | 10.31 | 33.74 | 25.94 |  | .453  | 3.28 |
| 200 | 9.61  | 34.14 | 26.37 |  | .548  | 2.30 |
| 250 | 9.41  | 34.39 | 26.59 |  | .628  | 1.00 |
| 300 | 8.83  | 34.38 | 26.68 |  | .702  | 0.82 |
| 400 | 7.41  | 34.35 | 26.87 |  | .836  | 0.59 |
| 500 | 6.49  | 34.37 | 27.01 |  | .955  | 0.40 |
| 600 | 5.84  | 34.40 | 27.12 |  | 1.063 | 0.33 |
| 700 | 5.33  | 34.44 | 27.21 |  | 1.161 | 0.32 |
| 800 | 4.87  | 34.47 | 27.29 |  | 1.253 | 0.36 |



## STATION 120.70 (Interpolated Values at Standard Depths)

CREST: 26°48' 117°23'; February 11, 1953; 1306 GCT; wire angle: 23°; sounding: 2000+ fms; depth of observation: 565 m; weather: partly cloudy; sea: moderate; wind: 300°, force 4.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.73 | 33.34 | 24.55                 |               | .000       | 5.77           |
| 10    | 15.73 | 33.37 | 24.58                 |               | .034       | 5.73           |
| 20    | 15.72 | 33.35 | 24.56                 |               | .068       | 5.68           |
| 30    | 15.64 | 33.35 | 24.58                 |               | .101       | 5.71           |
| 50    | 15.49 | 33.50 | 24.73                 |               | .168       | 5.74           |
| 75    | 14.81 | 33.52 | 24.89                 |               | .247       | 5.26           |
| 100   | 12.60 | 33.45 | 25.29                 |               | .319       | 5.01           |
| 150   | 11.54 | 34.10 | 26.00                 |               | .438       | 1.84           |
| 200   | 10.63 | 34.37 | 26.37                 |               | .532       | 1.22           |
| 250   | 10.04 | 34.47 | 26.55                 |               | .614       | 0.79           |
| 300   | 9.45  | 34.48 | 26.66                 |               | .689       | 0.57           |
| 400   | 7.97  | 34.42 | 26.84                 |               | .826       | 0.38           |
| 500   | 6.79  | 34.39 | 26.99                 |               | .947       | 0.32           |

## STATION 120.80 (Interpolated Values at Standard Depths)

CREST: 26°31' 117°59'; February 11, 1953; 0739 GCT; wire angle: 18°; sounding: 2000+ fms; depth of observation: 1099 m; weather: clear; sea: moderate; wind: 20°, force 3.

|      |       |       |       |  |       |      |
|------|-------|-------|-------|--|-------|------|
| 0    | 16.70 | 33.61 | 24.54 |  | .000  | 5.51 |
| 10   | 16.70 | 33.55 | 24.49 |  | .034  | 5.48 |
| 20   | 16.73 | 33.56 | 24.49 |  | .069  | 5.49 |
| 30   | 16.71 | 33.57 | 24.51 |  | .103  | 5.50 |
| 50   | 16.56 | 33.60 | 24.56 |  | .172  | 5.50 |
| 75   | 15.78 | 33.44 | 24.62 |  | .256  | 5.43 |
| 100  | 13.70 | 33.44 | 25.06 |  | .335  | 5.20 |
| 150  | 10.85 | 33.67 | 25.79 |  | .464  | 3.15 |
| 200  | 10.29 | 34.21 | 26.31 |  | .565  | 1.76 |
| 250  | 9.47  | 34.28 | 26.50 |  | .649  | 1.44 |
| 300  | 8.32  | 34.23 | 26.64 |  | .725  | 1.30 |
| 400  | 7.22  | 34.25 | 26.82 |  | .863  | 0.62 |
| 500  | 6.47  | 34.30 | 26.96 |  | .987  | 0.36 |
| 600  | 5.82  | 34.33 | 27.07 |  | 1.100 | 0.28 |
| 700  | 5.26  | 34.39 | 27.18 |  | 1.202 | 0.28 |
| 800  | 4.80  | 34.45 | 27.28 |  | 1.295 | 0.34 |
| 1000 | 4.07  | 34.50 | 27.40 |  | 1.461 | 0.55 |



## STATION 123.37 (Interpolated Values at Standard Depths)

CREST: 27°24' 114°40'; February 10, 1953; 1143 GCT; wire angle: 5°; sounding: 40 fms; depth of observation: 50 m; weather: clear; sea: smooth; wind: 320°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | $O_2$  |
|-------|-------|-------|-----------------------|---------------|------------|--------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L) |
| 0     | 16.94 | 33.87 | 24.68                 |               | .000       | 5.46   |
| 10    | 16.94 | 33.89 | 24.70                 |               | .033       | 5.51   |
| 20    | 16.95 | 33.89 | 24.69                 |               | .065       | 5.50   |
| 30    | 15.83 | 33.75 | 24.85                 |               | .097       | 5.23   |
| 50    | 12.74 | 33.57 | 25.36                 |               | .155       | 3.97   |

## STATION 123.40 (Interpolated Values at Standard Depths)

CREST: 27°18' 114°52'; February 10, 1953; 1338 GCT; wire angle: 16°; sounding: 300 fms; depth of observation: 486 m; weather: partly cloudy; sea: smooth; wind: 360°, force 3.

|     |        |         |         |        |        |
|-----|--------|---------|---------|--------|--------|
| 0   | 17.44  | 33.97   | 24.64   | .000   | 5.44   |
| 10  | 17.43  | 33.97   | 24.64   | .033   | 5.46   |
| 20  | 17.35  | 33.95   | 24.65   | .066   | 5.45   |
| 30  | 17.29  | 33.79   | 24.54   | .100   | 5.23   |
| 50  | 13.00  | 33.53   | 25.28   | .161   | 4.29   |
| 75  | 11.40  | 33.57   | 25.61   | .225   | 3.66   |
| 100 | 10.80  | 33.87   | 25.95   | .281   | 2.85   |
| 150 | 11.66  | 34.51   | 26.29   | .378   | 0.65   |
| 200 | 10.78  | 34.51   | 26.45   | .463   | 0.67   |
| 250 | 10.35  | 34.58   | 26.58   | .541   | 0.35   |
| 300 | 9.69   | 34.59   | 26.70   | .615   | 0.25   |
| 400 | 8.27   | 34.48   | 26.85   | .749   | 0.29   |
| 500 | (7.19) | (34.50) | (27.02) | (.870) | (0.27) |

## STATION 123.50 (Interpolated Values at Standard Depths)

CREST: 26°58' 115°32'; February 10, 1953; 1850 GCT; wire angle: 0°; sounding: 2000+ fms; depth of observation: 591 m; weather: partly cloudy; sea: smooth; wind: 30°, force 2.

| Depth | T      | S       | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|--------|---------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)   | (‰)     | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 15.64  | 33.32   | 24.56                 |               | .000       | 5.63           |
| 10    | 15.58  | 33.36   | 24.60                 |               | .034       | 5.67           |
| 20    | 15.56  | 33.31   | 24.57                 |               | .067       | 5.69           |
| 30    | 15.46  | 33.40   | 24.66                 |               | .101       | 5.82           |
| 50    | 14.65  | 33.41   | 24.84                 |               | .165       | 5.33           |
| 75    | 12.75  | 33.50   | 25.30                 |               | .238       | 4.26           |
| 100   | 12.96  | 33.96   | 25.62                 |               | .302       | 2.50           |
| 150   | 10.60  | 34.13   | 26.19                 |               | .409       | 2.04           |
| 200   | 10.10  | 34.26   | 26.38                 |               | .498       | 1.36           |
| 250   | 9.79   | 34.39   | 26.53                 |               | .579       | 0.76           |
| 300   | 9.26   | 34.40   | 26.63                 |               | .655       | 0.52           |
| 400   | 7.97   | 34.40   | 26.83                 |               | .794       | 0.33           |
| 500   | 7.15   | 34.38   | 26.93                 |               | .920       | 0.22           |
| 600   | (6.05) | (34.36) | (27.06)               |               | (1.035)    | (0.27)         |

## STATION 127.34 (Interpolated Values at Standard Depths)

CREST: 26°56' 114°07'; February 9, 1953; 1334 GCT; wire angle: 7°; sounding: 45 fms; depth of observation: 49 m; weather: cloudy; sea: slight; wind: 330°, force 3.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 17.60 | 34.03 | 24.65 | .000 | 5.44 |
| 10 | 17.64 | 34.05 | 24.65 | .033 | 5.57 |
| 20 | 17.63 | 34.05 | 24.65 | .066 | 5.42 |
| 30 | 17.38 | 34.07 | 24.73 | .099 | 5.38 |



## STATION 127.40 (Interpolated Values at Standard Depths)

CREST: 26°43' 114°29'; February 9, 1953; 1015 GCT; wire angle: 15°; sounding: 1550 fms; depth of observation: 574 m; weather: clear; sea: rough; wind: 330°, force 4.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 17.42 | 33.96 | 24.64                 |               | .000       | 5.37           |
| 10    | 17.41 | 33.96 | 24.64                 |               | .033       | 5.46           |
| 20    | 17.43 | 33.95 | 24.63                 |               | .066       | 5.45           |
| 30    | 17.44 | 33.91 | 24.59                 |               | .100       | 5.46           |
| 50    | 16.00 | 33.84 | 24.88                 |               | .164       | 5.36           |
| 75    | 12.70 | 33.83 | 25.57                 |               | .234       | 3.01           |
| 100   | 11.43 | 33.90 | 25.86                 |               | .291       | 2.65           |
| 150   | 10.64 | 34.29 | 26.31                 |               | .390       | 1.65           |
| 200   | 10.53 | 34.59 | 26.56                 |               | .472       | 0.75           |
| 250   | 9.84  | 34.58 | 26.67                 |               | .546       | 0.46           |
| 300   | 8.96  | 34.45 | 26.71                 |               | .616       | 0.61           |
| 400   | 8.18  | 34.51 | 26.88                 |               | .749       | 0.25           |
| 500   | 7.23  | 34.54 | 27.05                 |               | .866       | 0.18           |

## STATION 127.50 (Interpolated Values at Standard Depths)

CREST: 26°24' 115°08'; February 9, 1953; 0431 GCT; wire angle: 15°; sounding: 2250 fms; depth of observation: 624 m; weather: partly cloudy; sea: moderate; wind: 330°, force 5.

|     |       |       |       |  |       |      |
|-----|-------|-------|-------|--|-------|------|
| 0   | 17.44 | 33.91 | 24.59 |  | .000  | 5.53 |
| 10  | 17.43 | 33.89 | 24.58 |  | .034  | 5.50 |
| 20  | 17.41 | 33.89 | 24.59 |  | .067  | 5.50 |
| 30  | 17.34 | 34.00 | 24.69 |  | .101  | 5.49 |
| 50  | 16.78 | 33.87 | 24.72 |  | .166  | 5.54 |
| 75  | 13.04 | 33.46 | 25.21 |  | .241  | 5.21 |
| 100 | 11.49 | 33.58 | 25.60 |  | .306  | 4.43 |
| 150 | 11.26 | 34.28 | 26.19 |  | .413  | 1.53 |
| 200 | 10.71 | 34.50 | 26.46 |  | .501  | 0.81 |
| 250 | 10.08 | 34.56 | 26.61 |  | .579  | 0.45 |
| 300 | 9.52  | 34.58 | 26.72 |  | .650  | 0.25 |
| 400 | 8.29  | 34.53 | 26.88 |  | .783  | 0.22 |
| 500 | 6.85  | 34.42 | 27.00 |  | .902  | 0.24 |
| 600 | 6.00  | 34.43 | 27.12 |  | 1.010 | 0.23 |

## STATION 130.30 (Interpolated Values at Standard Depths)

CREST: 26°29' 113°29'; February 8, 1953; 0310 GCT; wire angle: 0°; sounding: 45 fms; depth of observation: 50 m; weather: partly cloudy; sea: smooth; wind: 320°, force 3.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 17.97 | 34.01 | 24.54                 |               | .000       | 5.46           |
| 10    | 17.74 | 33.96 | 24.56                 |               | .034       | 5.54           |
| 20    | 17.31 | 34.01 | 24.70                 |               | .067       | 5.51           |
| 30    | 16.26 | 33.91 | 24.87                 |               | .099       | 4.95           |
| 50    | 14.42 | 33.87 | 25.25                 |               | .157       | 3.25           |

## STATION 130.35 (Interpolated Values at Standard Depths)

CREST: 26°19' 113°48'; February 8, 1953; 0626 GCT; wire angle: 4°; sounding: 650 fms; depth of observation: 494 m; weather: partly cloudy; sea: smooth; wind: 270°, force 1.

|     |        |         |         |  |        |        |
|-----|--------|---------|---------|--|--------|--------|
| 0   | 18.09  | 33.91   | 24.44   |  | .000   | 5.39   |
| 10  | 17.94  | 33.89   | 24.46   |  | .035   | 5.42   |
| 20  | 18.04  | 33.93   | 24.46   |  | .070   | 5.39   |
| 30  | 18.10  | 34.00   | 24.50   |  | .104   | 5.42   |
| 50  | 16.82  | 33.95   | 24.77   |  | .171   | 5.10   |
| 75  | 12.72  | 33.78   | 25.52   |  | .242   | 3.14   |
| 100 | 12.35  | 34.07   | 25.82   |  | .301   | 2.04   |
| 150 | 11.74  | 34.49   | 26.26   |  | .401   | 0.75   |
| 200 | 11.27  | 34.63   | 26.46   |  | .487   | 0.27   |
| 250 | 10.62  | 34.62   | 26.57   |  | .566   | 0.21   |
| 300 | 9.42   | 34.49   | 26.67   |  | .640   | 0.42   |
| 400 | 8.32   | 34.49   | 26.85   |  | .777   | 0.24   |
| 500 | (7.31) | (34.41) | (26.93) |  | (.901) | (0.25) |



## STATION 130.40 (Interpolated Values at Standard Depths)

CREST: 26°09' 114°08'; February 8, 1953; 1033 GCT; wire angle: 7°; sounding: 1520 fms; depth of observation: 1168 m; weather: partly cloudy; sea: smooth; wind: 260°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 17.98 | 33.83 | 24.40                 |               | .000       | 5.40           |
| 10    | 17.98 | 33.83 | 24.40                 |               | .035       | 5.35           |
| 20    | 17.88 | 33.86 | 24.45                 |               | .071       | 5.39           |
| 30    | 17.73 | 33.89 | 24.51                 |               | .105       | 5.39           |
| 50    | 17.38 | 33.91 | 24.61                 |               | .173       | 5.31           |
| 75    | 13.34 | 33.35 | 25.07                 |               | .252       | 4.94           |
| 100   | 12.50 | 33.94 | 25.69                 |               | .317       | 2.88           |
| 150   | 11.87 | 34.46 | 26.21                 |               | .422       | 1.04           |
| 200   | 11.10 | 34.51 | 26.40                 |               | .510       | 0.72           |
| 250   | 10.39 | 34.58 | 26.58                 |               | .591       | 0.45           |
| 300   | 9.55  | 34.54 | 26.69                 |               | .664       | 0.35           |
| 400   | 8.53  | 34.51 | 26.83                 |               | .801       | 0.22           |
| 500   | 6.99  | 34.46 | 27.02                 |               | .922       | 0.19           |
| 600   | 6.25  | 34.44 | 27.10                 |               | 1.032      | 0.16           |
| 700   | 5.58  | 34.46 | 27.20                 |               | 1.133      | 0.17           |
| 800   | 5.01  | 34.51 | 27.31                 |               | 1.224      | 0.21           |
| 1000  | 4.21  | 34.59 | 27.46                 |               | 1.383      | 0.45           |

## STATION 130.50 (Interpolated Values at Standard Depths)

CREST: 25°49' 114°46'; February 8, 1953; 1621 GCT; wire angle: 17°; sounding: 2000+ fms; depth of observation: 570 m; weather: partly cloudy; sea: moderate; wind: 260°, force 4.

|     |       |       |       |  |      |      |
|-----|-------|-------|-------|--|------|------|
| 0   | 18.33 | 33.94 | 24.40 |  | .000 | 5.21 |
| 10  | 18.34 | 33.99 | 24.44 |  | .035 | 5.22 |
| 20  | 18.29 | 33.93 | 24.40 |  | .070 | 5.24 |
| 30  | 18.26 | 33.95 | 24.42 |  | .106 | 5.23 |
| 50  | 15.71 | 33.81 | 24.92 |  | .172 | 5.17 |
| 75  | 12.76 | 33.39 | 25.21 |  | .245 | 4.54 |
| 100 | 11.13 | 33.53 | 25.63 |  | .309 | 3.75 |
| 150 | 11.31 | 34.35 | 26.23 |  | .415 | 1.29 |
| 200 | 10.75 | 34.52 | 26.47 |  | .501 | 0.68 |
| 250 | 10.05 | 34.54 | 26.60 |  | .579 | 0.56 |
| 300 | 9.29  | 34.53 | 26.72 |  | .651 | 0.41 |
| 400 | 8.22  | 34.54 | 26.90 |  | .782 | 0.26 |
| 500 | 7.23  | 34.50 | 27.01 |  | .900 | 0.20 |



## STATION 130.60 (Interpolated Values at Standard Depths)

CREST: 25°29' 115°24'; February 8, 1953; 2117 GCT; wire angle: 11°; sounding: 2050 fms; depth of observation: 1217 m; weather: partly cloudy; sea: smooth; wind: 60°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 18.68 | 33.98 | 24.34                 |               | .000       | 5.32           |
| 10    | 18.44 | 33.97 | 24.40                 |               | .036       | 5.27           |
| 20    | 18.28 | 33.96 | 24.43                 |               | .071       | 5.33           |
| 30    | 18.07 | 33.93 | 24.46                 |               | .106       | 5.37           |
| 50    | 17.47 | 33.84 | 24.53                 |               | .175       | 5.40           |
| 75    | 16.98 | 33.81 | 24.63                 |               | .260       | 5.24           |
| 100   | 13.30 | 33.84 | 25.45                 |               | .334       | 3.35           |
| 150   | 10.44 | 34.00 | 26.12                 |               | .446       | 2.32           |
| 200   | 9.91  | 34.29 | 26.43                 |               | .536       | 1.30           |
| 250   | 9.47  | 34.43 | 26.62                 |               | .614       | 0.68           |
| 300   | 8.71  | 34.45 | 26.75                 |               | .685       | 0.46           |
| 400   | 7.70  | 34.40 | 26.87                 |               | .816       | 0.31           |
| 500   | 6.49  | 34.38 | 27.02                 |               | .935       | 0.30           |
| 600   | 5.83  | 34.42 | 27.14                 |               | 1.041      | 0.26           |
| 700   | 5.29  | 34.46 | 27.24                 |               | 1.138      | 0.29           |
| 800   | 4.76  | 34.48 | 27.31                 |               | 1.228      | 0.37           |
| 1000  | 4.12  | 34.52 | 27.41                 |               | 1.390      | 0.52           |
| 1200  | 3.53  | 34.57 | 27.51                 |               | 1.534      | 0.80           |

## STATION 133.25 (Interpolated Values at Standard Depths)

CREST: 26°10' 112°56'; February 7, 1953; 2336 GCT; wire angle: 0°; sounding: 45 fms; depth of observation: 50 m; weather: partly cloudy; sea: smooth; wind: 290°, force 2.

|    |       |       |       |      |      |
|----|-------|-------|-------|------|------|
| 0  | 18.34 | 34.08 | 24.50 | .000 | 5.42 |
| 10 | 17.75 | 34.04 | 24.62 | .034 | 5.38 |
| 20 | 17.34 | 34.03 | 24.71 | .067 | 4.94 |
| 30 | 15.79 | 33.90 | 24.97 | .098 | 4.15 |
| 50 | 14.52 | 33.97 | 25.30 | .155 | 2.29 |



## STATION 133.30 (Interpolated Values at Standard Depths)

CREST: 26°00' 113°15'; February 7, 1953; 2053 GCT; wire angle: 2°; sounding: 100 fms; depth of observation: 151 m; weather: clear; sea: smooth; wind: 280°, force 2.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | $O_2$  |
|-------|-------|-------|-----------------------|---------------|------------|--------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L) |
| 0     | 18.45 | 33.98 | 24.40                 |               | .000       | 5.28   |
| 10    | 17.97 | 33.96 | 24.50                 |               | .035       | 5.34   |
| 20    | 17.89 | 34.00 | 24.55                 |               | .069       | 5.33   |
| 30    | 17.86 | 33.99 | 24.55                 |               | .103       | 5.24   |
| 50    | 16.11 | 33.92 | 24.91                 |               | .168       | 4.71   |
| 75    | 13.79 | 33.96 | 25.45                 |               | .238       | 2.64   |
| 100   | 12.92 | 34.21 | 25.82                 |               | .298       | 1.33   |
| 150   | 11.97 | 34.46 | 26.19                 |               | .400       | 0.61   |

## STATION 133.40 (Interpolated Values at Standard Depths)

CREST: 25°38' 113°57'; February 7, 1953; 1548 GCT; wire angle: 6°; sounding: 1950 fms; depth of observation: 591 m; weather: partly cloudy; sea: smooth; wind: 310°, force 1.

|     |        |         |         |  |         |        |
|-----|--------|---------|---------|--|---------|--------|
| 0   | 18.50  | 33.99   | 24.40   |  | .000    | 5.33   |
| 10  | 18.51  | 34.00   | 24.40   |  | .035    | 5.31   |
| 20  | 18.51  | 33.94   | 24.36   |  | .071    | 5.30   |
| 30  | 18.47  | 33.97   | 24.39   |  | .107    | 5.27   |
| 50  | 18.37  | 33.99   | 24.43   |  | .178    | 5.30   |
| 75  | 14.74  | 33.79   | 25.12   |  | .258    | 4.04   |
| 100 | 12.76  | 33.90   | 25.61   |  | .324    | 2.63   |
| 150 | 11.75  | 34.43   | 26.21   |  | .430    | 0.83   |
| 200 | 10.91  | 34.48   | 26.41   |  | .519    | 0.64   |
| 250 | 10.26  | 34.46   | 26.51   |  | .600    | 0.53   |
| 300 | 9.53   | 34.44   | 26.61   |  | .677    | 0.43   |
| 400 | 8.21   | 34.37   | 26.77   |  | .820    | 0.26   |
| 500 | 7.24   | 34.41   | 26.94   |  | .948    | 0.19   |
| 600 | (6.47) | (34.39) | (27.03) |  | (1.064) | (0.17) |

## STATION 137.23 (Interpolated Values at Standard Depths)

CREST: 25°41' 112°26'; February 7, 1953; 0427 GCT; wire angle: 0°; sounding: 40 fms; depth of observation: 50 m; weather: clear; sea: smooth; wind: 120°, force 1.

| Depth | T     | S     | $\sigma_t$            | $10^5 \delta$ | $\Delta D$ | O <sub>2</sub> |
|-------|-------|-------|-----------------------|---------------|------------|----------------|
| (m)   | (°C)  | (‰)   | (mg/cm <sup>3</sup> ) |               | (dyn.m.)   | (ml/L)         |
| 0     | 18.72 | 34.13 | 24.45                 |               | .000       | 5.17           |
| 10    | 18.66 | 34.15 | 24.48                 |               | .035       | 5.45           |
| 20    | 18.42 | 34.06 | 24.47                 |               | .070       | 5.39           |
| 30    | 17.80 | 34.07 | 24.63                 |               | .104       | 5.25           |
| 50    | 15.05 | 33.95 | 25.17                 |               | .165       | 3.26           |

## STATION 137.30 (Interpolated Values at Standard Depths)

CREST: 25°26' 112°54'; February 7, 1953; 0830 GCT; wire angle: 0°; sounding: 160 fms; depth of observation: 243 m; weather: partly cloudy; sea: slight; wind: 310°, force 1.

|     |         |         |         |  |        |        |
|-----|---------|---------|---------|--|--------|--------|
| 0   | 18.67   | 34.09   | 24.43   |  | .000   | 5.34   |
| 10  | 18.70   | 34.12   | 24.44   |  | .035   | 5.33   |
| 20  | 18.58   | 34.12   | 24.47   |  | .070   | 5.40   |
| 30  | 18.42   | 34.05   | 24.46   |  | .105   | 5.29   |
| 50  | 16.22   | 33.86   | 24.84   |  | .171   | 4.66   |
| 75  | 14.20   | 33.91   | 25.32   |  | .244   | 3.45   |
| 100 | 13.29   | 34.17   | 25.71   |  | .306   | 2.03   |
| 150 | 12.18   | 34.50   | 26.19   |  | .411   | 0.32   |
| 200 | 11.49   | 34.54   | 26.35   |  | .501   | 0.18   |
| 250 | (10.86) | (34.60) | (26.51) |  | (.584) | (0.14) |



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