

U.S. Coast Guard Oceanographic Report

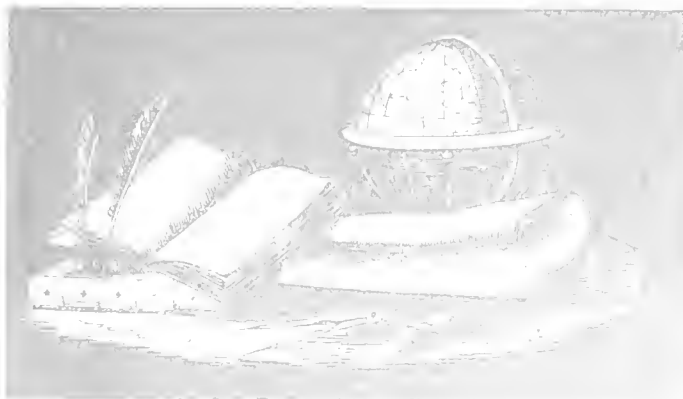
UNITED STATES COAST GUARD  
OCEANOGRAPHIC  
REPORT No. 34

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OCEANIC CONDITIONS OFF NORTHEASTERN  
BRAZIL FEBRUARY-MARCH AND  
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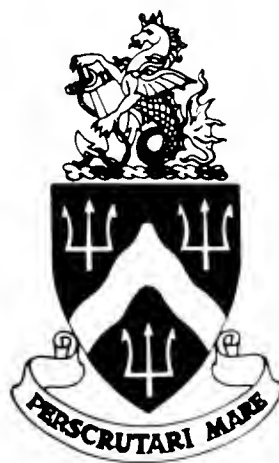
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UNITED STATES COAST GUARD OCEANOGRAPHIC UNIT

# REPORT No. 34 CG 373-34

## OCEANIC CONDITIONS OFF NORTHEASTERN BRAZIL FEBRUARY-MARCH AND OCTOBER-NOVEMBER 1966

*Merton C. Ingham*  
*and*  
*Robert B. Elder*



WASHINGTON, D.C.  DECEMBER 1970



USCGC ROCKAWAY (WAGO 377)



USCGC EVERGREEN (WAGO 295)



USCGC EASTWIND (WAGB 279)

## **ABSTRACT**

Oceanic conditions in the upper 1800 meters of the water column off northeastern Brazil are described. The description is based on seven transects of oceanographic stations extending about 700 miles northeast from the coast. The presence of four major near-surface currents (North Brazilian Coastal Current, Equatorial Undercurrent, South Equatorial Current, and Equatorial Countercurrent) and two intermediate-depth water masses (South Atlantic Central Water and Antarctic Intermediate Water) is discussed. Vertical sections of temperature, salinity, and density are included, along with listings of the station data from which they were constructed.

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# Oceanic Conditions off Northeastern Brazil February–March and October–November 1966

*Merton C. Ingham*<sup>1</sup>  
and  
*Robert B. Elder*<sup>1</sup>

## INTRODUCTION

An investigation of the interchange between the North and South Atlantic oceans was begun by the U.S. Coast Guard Oceanographic Unit (CGOU) in 1966. The press of other duties has prevented the completion of this investigation, but a series of oceanographic sections was completed in the western tropical Atlantic off Fortaleza, Brazil (fig. 1). These sections were intended to transect the Guiana Current, the northern branch of the South Equatorial Current, and the Equatorial Undercurrent.

Since 1966, the work of several oceanographers (Cochrane, 1968; Metcalf and Stalcup, 1967; and Metcalf, 1968) has shown the pattern of surface and near-surface currents in the western equatorial Atlantic to be more complex than formerly realized. Because of the incomplete state of understanding of this area at the time, planning of the sections occupied by USCGC EVERGREEN, USCGC EASTWIND, and USCGC ROCKAWAY did not yield optimum placement of the transects for intersection with the Equatorial Undercurrent or the currents flowing into it; however, four shallow currents, including the Equatorial Undercurrent, were intersected by one or more of the transects.

## DATA ACQUISITION AND PROCESSING

Temperature data were acquired with paired reversing thermometers on Nansen bottles, and mechanical or electronic bathythermographs. The acquisition and processing of temperature data generally followed the procedures specified by the U.S. Naval Hydrographic Office Publi-

cation No. 607 (1955) and LaFond (1951), and a PDP-5 digital computer was used for thermometer corrections.

Salinity samples were collected with teflon-lined Nansen bottles and analyzed on board with inductive salinometers. The salinometers were calibrated with standard (Copenhagen) water at least once per 30 samples.

Sampling depths were determined with paired protected and unprotected reversing thermometers or interpolated from L-Z curves based on thermometer performance and wire angle. Procedures used for these determinations were essentially those specified by LaFond (1951).

The concentration of dissolved oxygen was determined for water samples drawn from Nansen bottles on board ROCKAWAY and EASTWIND. A modified Winkler titration (Strickland and Parsons, 1965) was used for this determination.

All oceanographic and meteorological data acquired on station were quality-controlled at CGOU, then submitted to the National Oceanographic Data Center (NODC) for further processing and listing (reprinted in Appendix I). The NODC output, in punched card format, was used to construct vertical sections of temperature, salinity, sigma-t, and oxygen with a computer-driven automatic plotter using a computer program developed by Richard F. Johnson (description in preparation). The resulting sections were quality-controlled and smoothed by hand to yield plates of publication quality. The final form of the temperature, salinity, and density sections are included in this report (figs. 2–22).

Further details concerning the acquisition or processing of data from the cruises considered here can be obtained from CGOU.

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## INTERPRETATION OF RESULTS

Four shallow currents and two intermediate depth water masses were portrayed in the USCGC EVERGREEN, USCGC EASTWIND, and USCGC ROCKAWAY sections (figs. 2-22).

### North Brazilian Coastal Current

Investigations by Cochrane (1968) and Metcalf and Stalcup (1967) have revealed a strong (up to 2.8 kts.) northwestward current extending from Cape Sao Roque, Brazil (about 5°S) to about 4-6°N. This current, called the North Brazilian Coastal Current by Metcalf and Stalcup, is believed to be discontinuous with the Guiana Current, which also flows northwestward, roughly parallel to the coastline, from about 4-6°N to the vicinity of Trinidad (about 11°N), where it enters the Caribbean Sea. The North Brazilian Coastal Current was shown by these investigators to include a tongue of relatively high salinity (near 37.0‰), whose core, a layer of maximum salinity, is located at about 80 to 100 meters. The current, carrying the subsurface layer of high salinity, was portrayed as turning anticyclonically just north of the equator and entering the Equatorial Undercurrent, providing that current with its characteristic high salinity. Goulet and Ingham (in preparation) have shown that the source of the high salinity core of the North Brazilian Coastal Current is an area of high salinity at the sea surface near the South American continental margin at about 18-22°S.

Evidence for the presence of the North Brazilian Coastal Current was found in the distributions of salinity and density observed on the EVERGREEN, EASTWIND, and ROCKAWAY cruises. During each cruise a cell of relatively higher salinity (36.5-36.8‰) was found at the shoreward end of each transect in the layer of high salinity (figs. 2, 5, 8, 11, 14, 17 and 20) at about 80 to 100 meters. The density structure of the layer of high salinity in the vicinity of the cells (figs. 4, 7, 10, 13, 16, 19 and 22) generally involved an inclination of the  $\sigma_t$  isopleths (downward from offshore to onshore) which implied a northwestward geostrophic current. Whenever the layer of high salinity contained two cells of relatively higher salinity south of the equator, such as on the two southernmost ROCKAWAY sections (figs. 14 and 17), the corresponding density structure (figs. 16 and

19) indicated northwestward flow in the cells and a southeastward countercurrent between them.

### Equatorial Undercurrent

The structure and extent of the Atlantic Equatorial Undercurrent have been investigated by many oceanographers, but only recently has the Undercurrent been described off northeastern Brazil in the area of its origin (Cochrane, 1963, 1965 and 1968; Metcalf and Stalcup, 1967). The Undercurrent, identified in vertical salinity sections by a subsurface cell of relatively high salinity ( $>36.2‰$ ) on or near the equator at about 70 to 100 meters, was found to be definitely present during three of the Coast Guard transects (figs. 2, 5 and 14). Its absence during the third EVERGREEN transect (fig. 8), which was conducted along the same track as the second but five days later, gives some indication of the variability of the Equatorial Undercurrent in this area. Either the Undercurrent occasionally loses its characteristic high salinity or its flow at that longitude (33°W) is not steady, perhaps because the current's initial point of contact with the equator shifts. The cell of high salinity was present during the first (southernmost and easternmost) transect of the ROCKAWAY series (fig. 14), but was absent from the second and third transects (figs. 17 and 20). The point of intersection of the first ROCKAWAY transect with the equator (29°W) was about 240 nautical miles east of the point of intersection of the EVERGREEN transects, which supports the contention that the Undercurrent's initial contact with the equator shifts.

Only slight inclinations of isopycnal ( $iso-\sigma_t$ ) surfaces were observed in and near the cell of relatively high salinity associated with the Equatorial Undercurrent, but this is to be expected because of the inverse relationship between the inclination of the field of mass and the sine of latitude in the geostrophic equation. Spreading of the pycnocline on or near the equator, another characteristic associated with the Undercurrent, was pronounced only in the first ROCKAWAY transect (fig. 16).

### South Equatorial Current

Westward flow in the surface layer in the equatorial Atlantic Ocean constitutes part of a current system called the South Equatorial Cur-

rent. If this flow is in geostrophic balance, the field of mass should slope upward toward the equator from both the north and south. This configuration was observed in either the 23.5 or 24.0 g/l isopycnals in every one of the transects (figs. 4, 7, 10, 13, 16, 19 and 22), indicating the uniform presence of the westward flow.

### Equatorial Countercurrent

Evidence of the presence of the eastward flow of the shallow Equatorial Countercurrent north of the equator was found in the vertical distribution of density (isopycnals inclined downward toward the south) on the three EVERGREEN transects and on the third (northernmost) ROCKAWAY transect (figs. 4, 7, 10 and 22). This current has been found to be seasonally variable, and according to Boisvert (1967), who worked with the historical ship drift data held by NODC and USNOO, its maximum development in the western North Atlantic occurs in August–October, and its minimum development is in January–April. The inclinations of the field of mass observed on the EVERGREEN transects (February) certainly do not agree with Boisvert's portrayal of the current which shows it to be absent from the vicinity of the transects during that period.

### South Atlantic Central Water

Between the layer of maximum salinity at about 80 to 100 meters and the layer of minimum salinity at about 700 meters, the water column transected by EVERGREEN, EASTWIND, and ROCKAWAY was composed of South Atlantic Central Water. This mass, defined by Sverdrup, et al. (1942) by an approximately linear T-S envelope between 6–8°, 34.2–34.6°/∞ and 16–18°, 35.7–36.0°/∞, is thought to form at the subtropical convergence and spread throughout the South Atlantic at intermediate depths.

### Antarctic Intermediate Water

The layer of minimum salinity, found throughout the tropical Atlantic at about 700 to 900 meters, is the main characteristic of the Antarctic Intermediate Water mass which spreads northward in the Atlantic from the Antarctic Convergence. This water mass was found on all the transects (figs. 3, 6, 9, 12, 15, 18 and 21). Salinity values in the layer were found to be lower at the shoreward end of the transects (<34.5°/∞), suggesting that the principal advection of Antarctic Intermediate Water occurs near the continental margin, just as appeared to be the case with the high salinity water of the North Brazilian Coastal Current.

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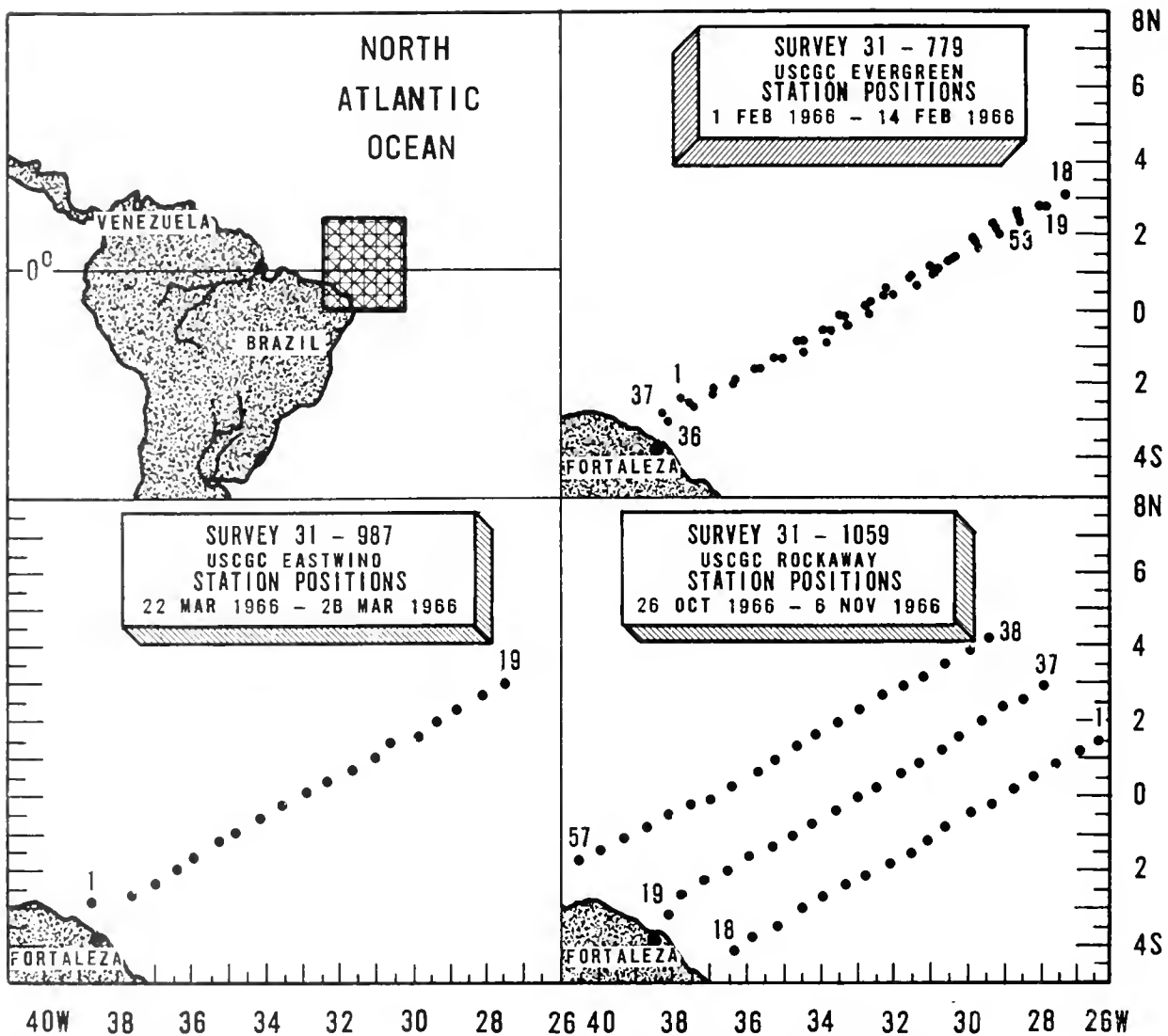


FIGURE 1. Station positions for transects conducted on EVERGREEN 31-779, EASTWIND 31-987, and ROCKAWAY 37-1059. Inset chart shows general location of area of investigation.

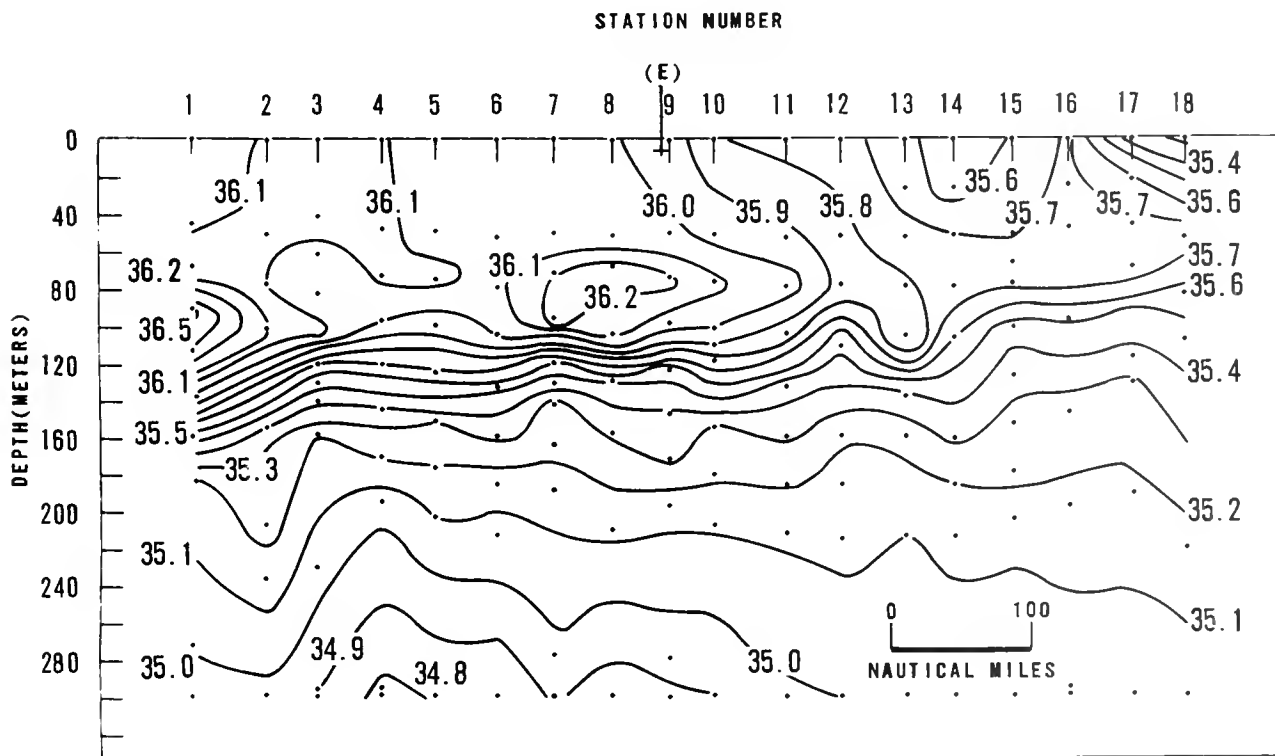
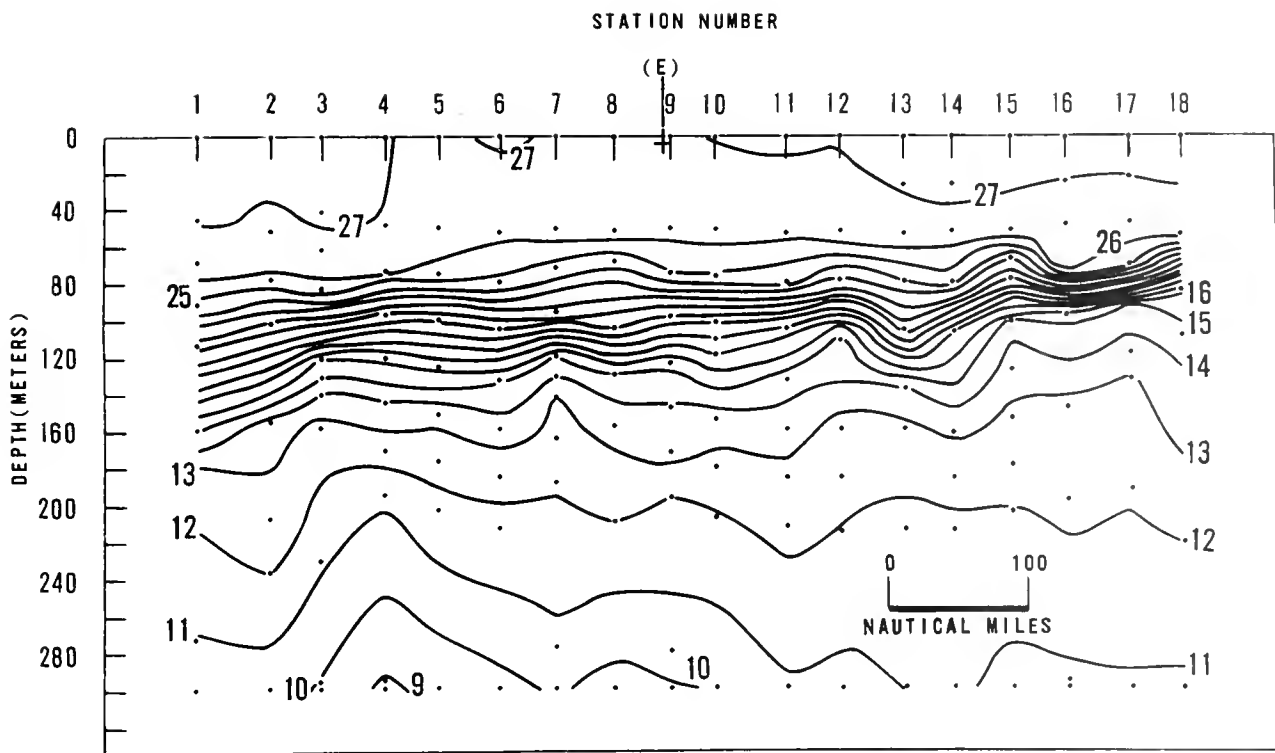


FIGURE 2. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 300 m. Contour intervals  $1^{\circ}\text{C}$  and  $0.1\text{‰}$ . Stations 1-18, 1-5 February 1966, EVERGREEN 31-779. E indicates position of equator.

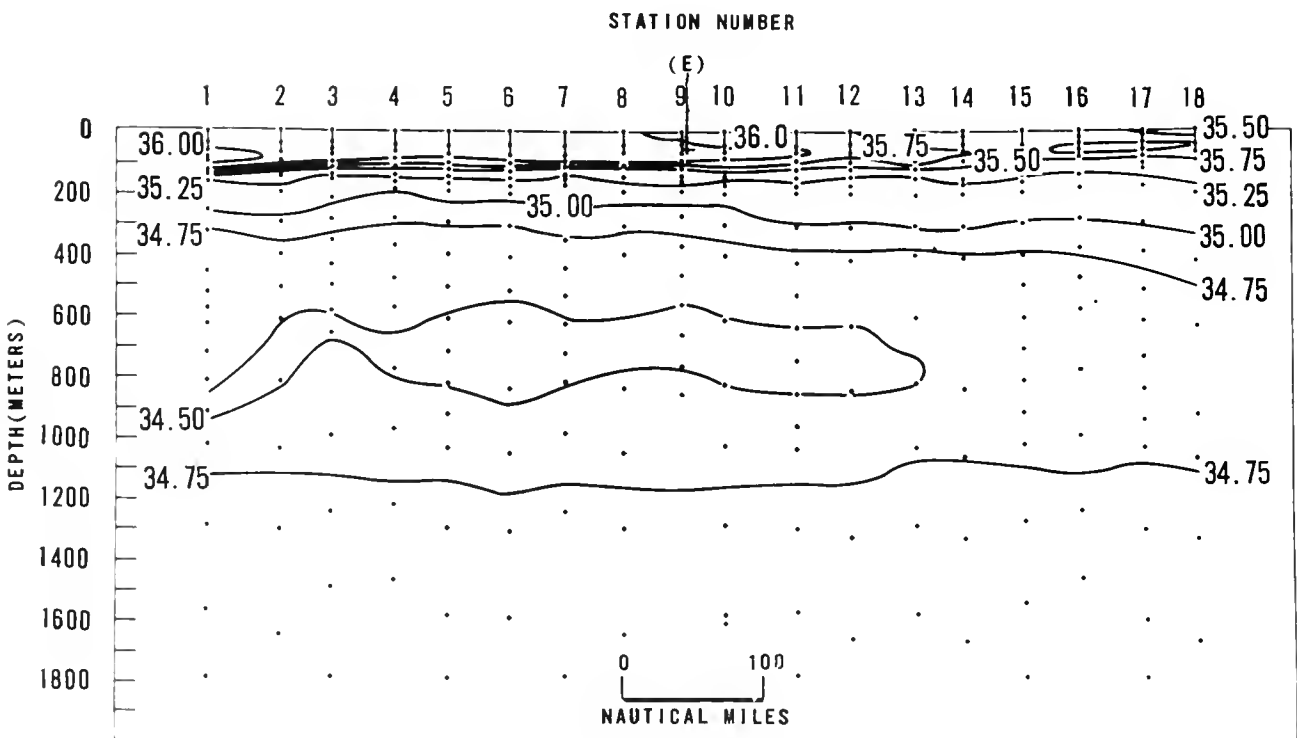
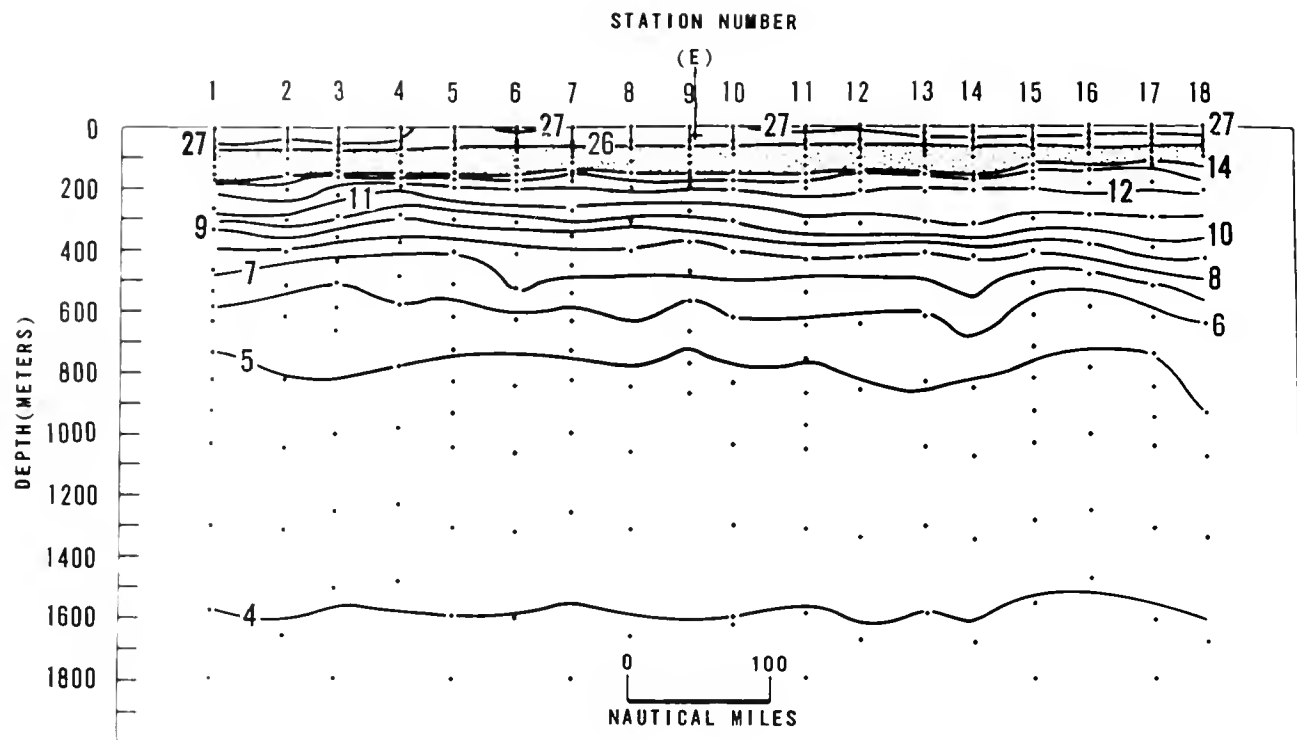


FIGURE 3. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 1800 m. Contour intervals  $1^{\circ}\text{C}$  (except in thermocline—shaded area) and  $0.25\text{‰}$ . Stations 1-18, 1-5 February 1966, EVERGREEN 31-779. E indicates position of equator.



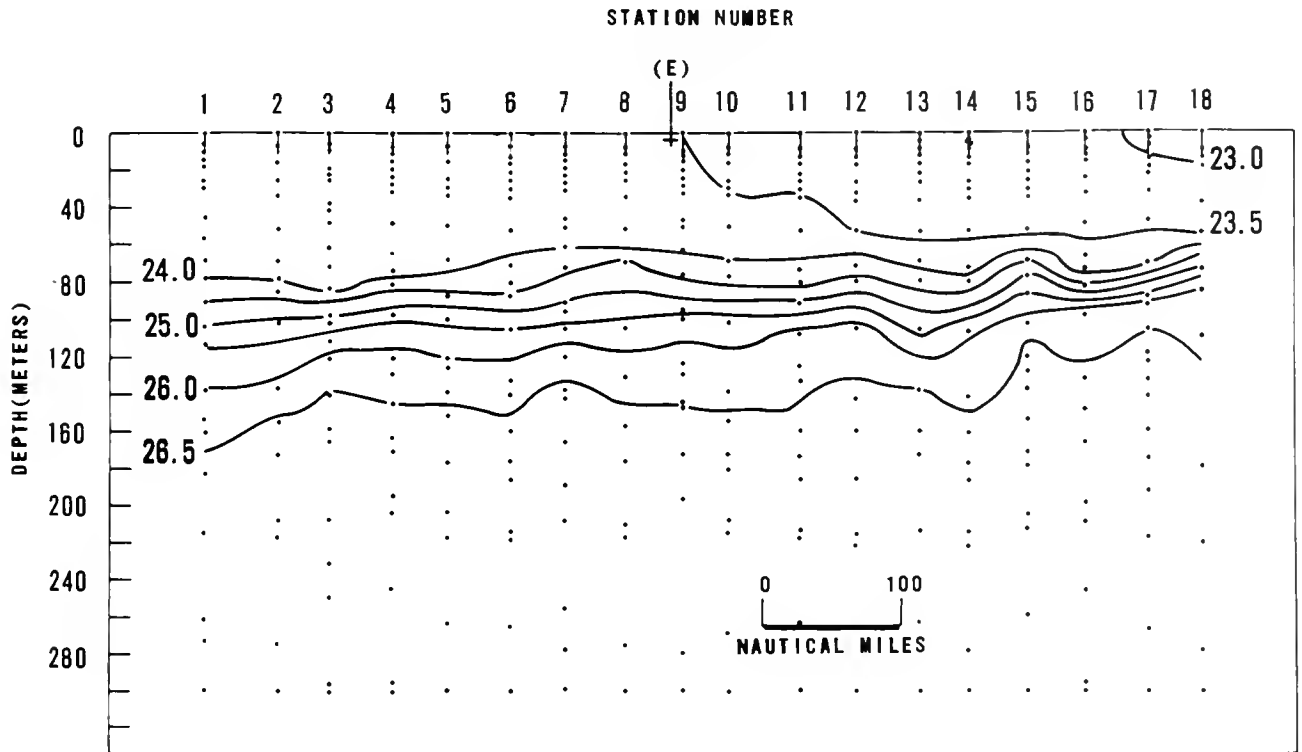
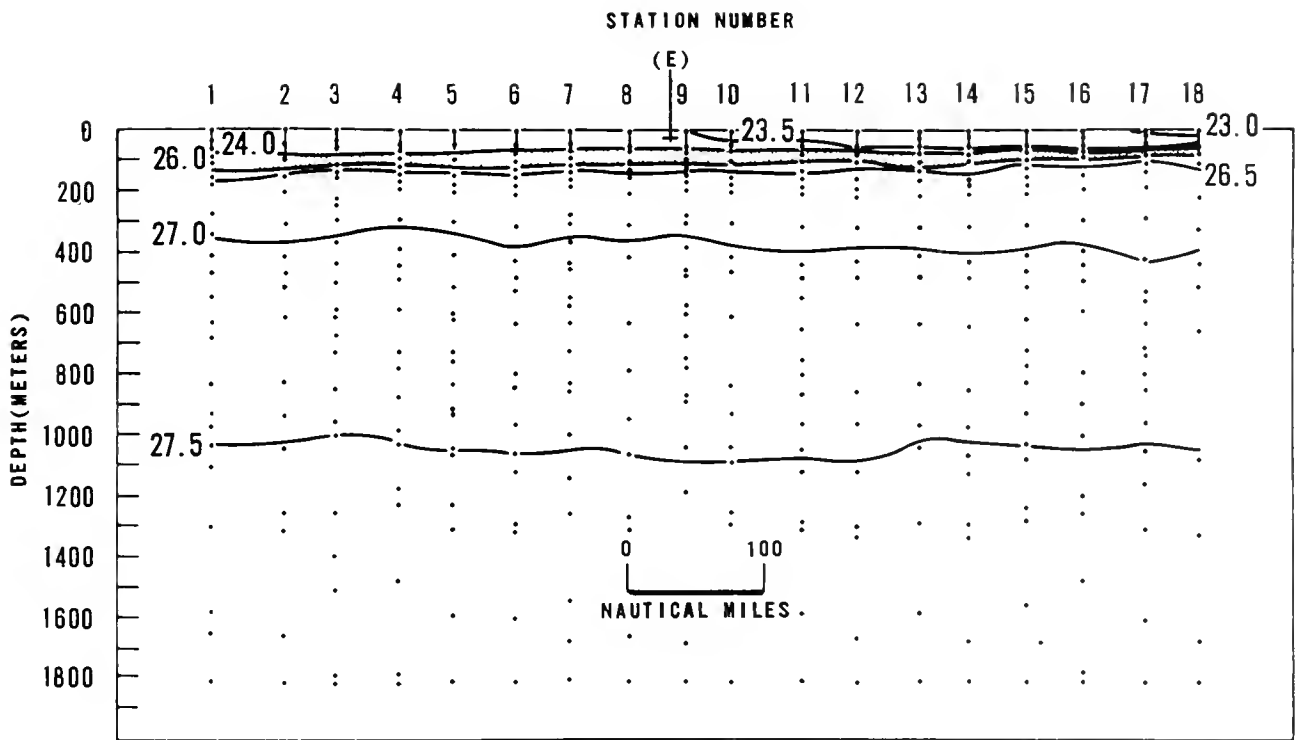


FIGURE 4. Vertical distribution of density ( $\sigma_t$ , in g/l). Stations 1-18, 1-5 February 1966, EVERGREEN 31-779. Contour intervals 0.5 g/l except in pycnocline (shaded area) on 1800 m section. E indicates position of equator.

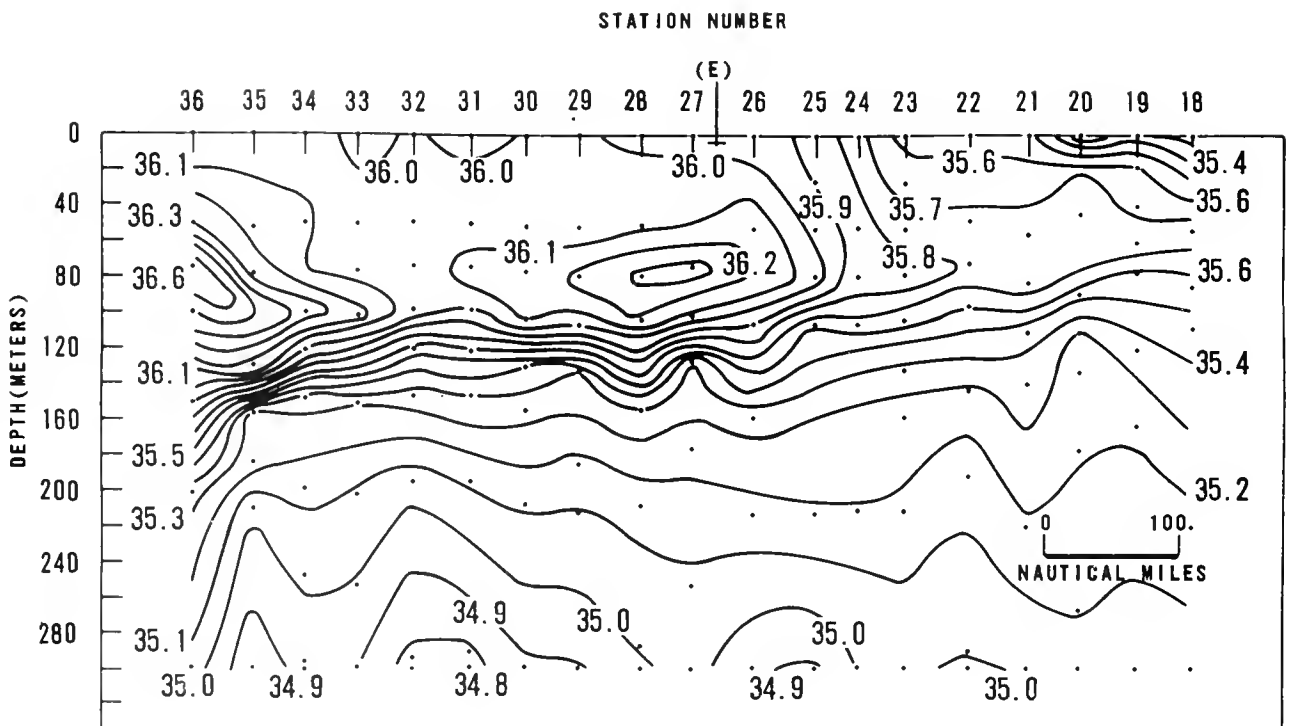
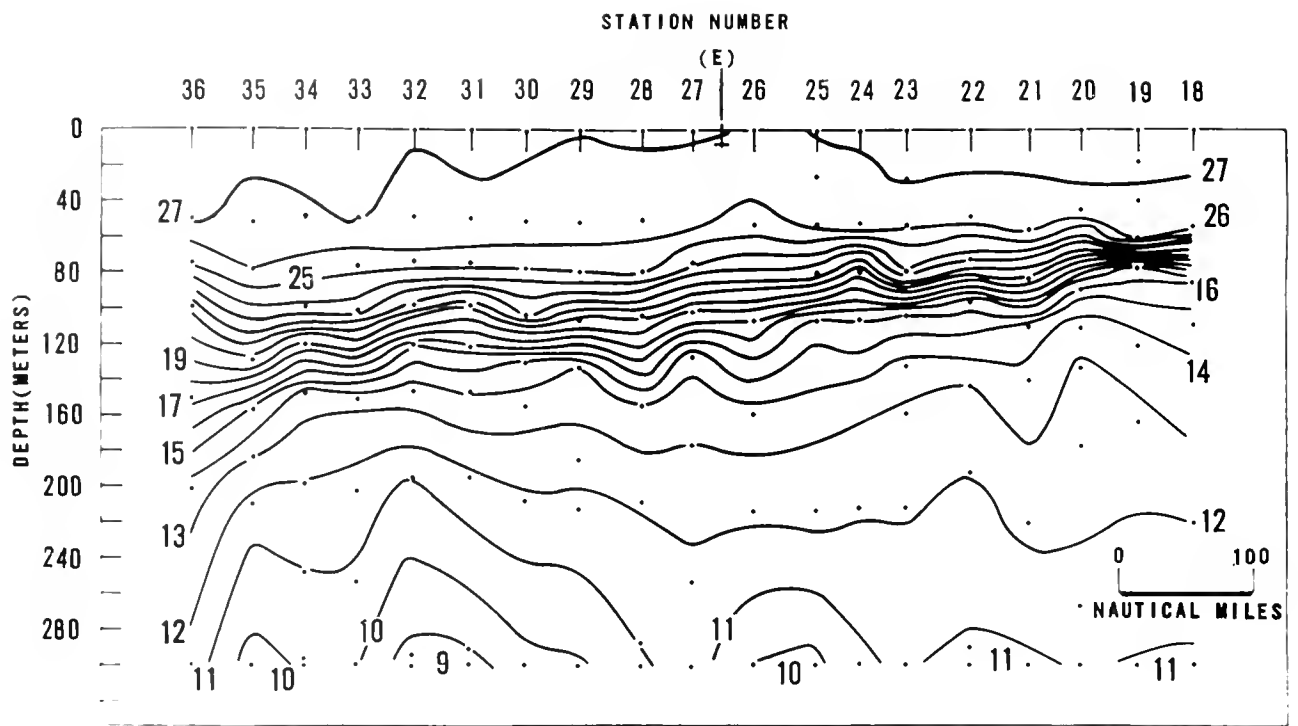


FIGURE 5. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 300 m. Contour intervals  $1^{\circ}\text{C}$  and  $0.1\text{‰}$ . Stations 18-36, 5-9 February 1966, EVERGREEN 31-779. E indicates position of equator.

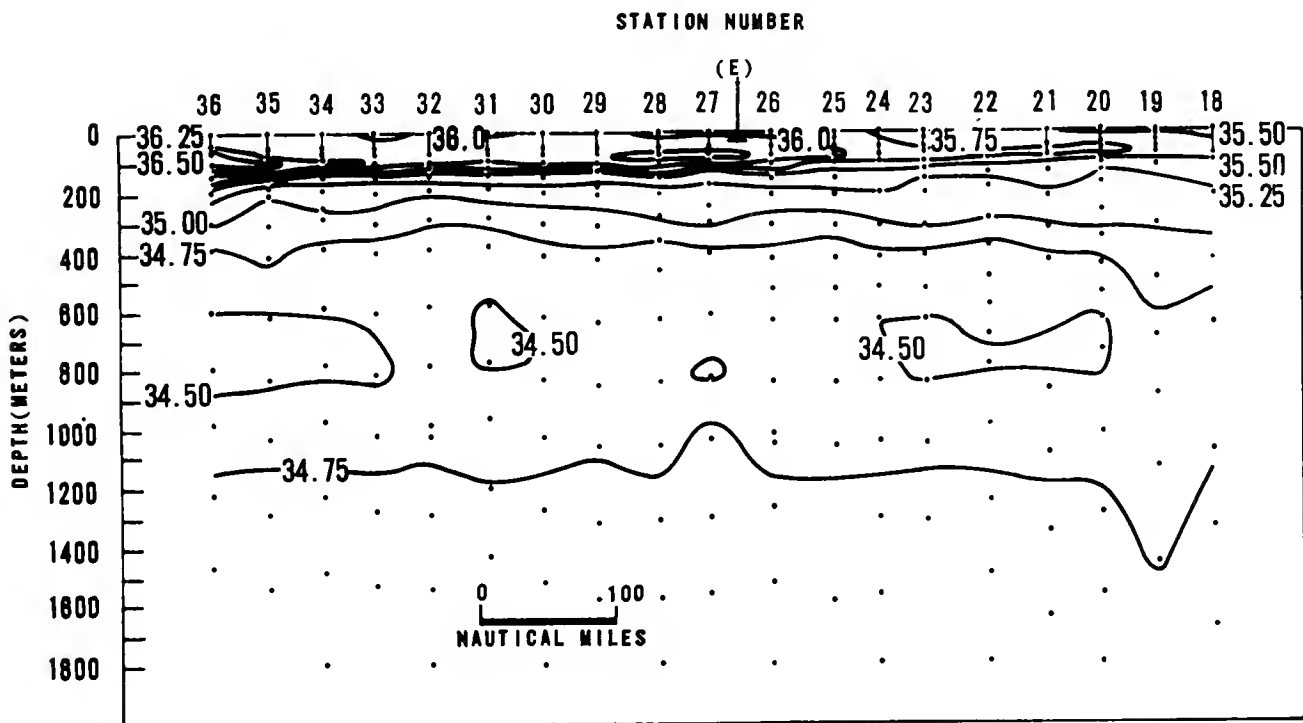
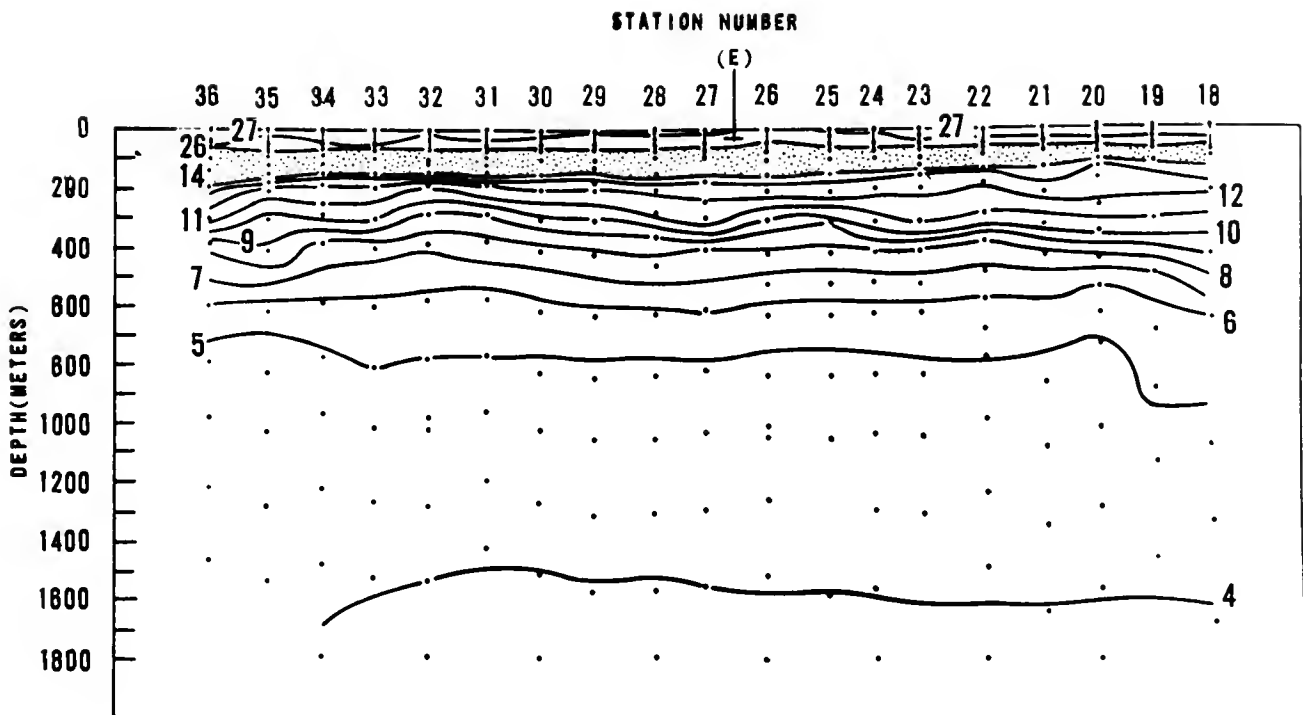


FIGURE 6. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 1800 m. Contour intervals  $1^{\circ}\text{C}$  (except in thermocline—shaded area) and  $0.25\text{‰}$ . Stations 18–36, 5–9 February 1966, EVERGREEN 31–779. E indicates position of equator.

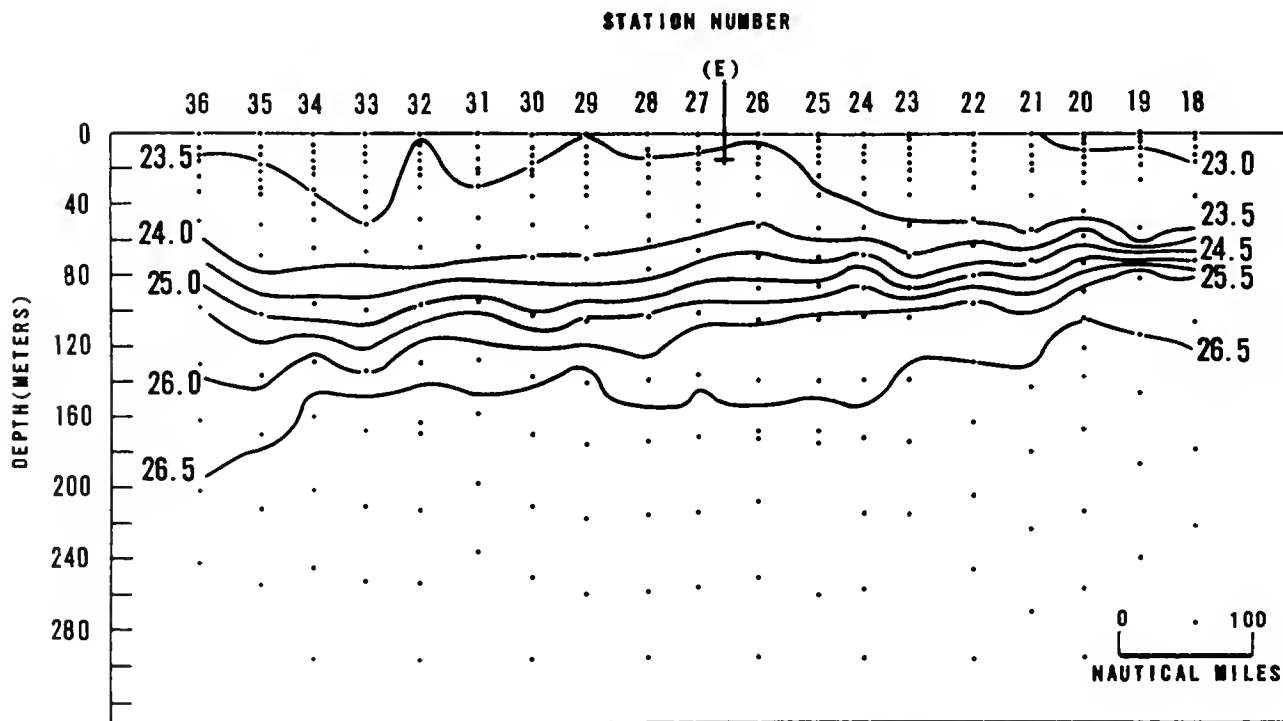
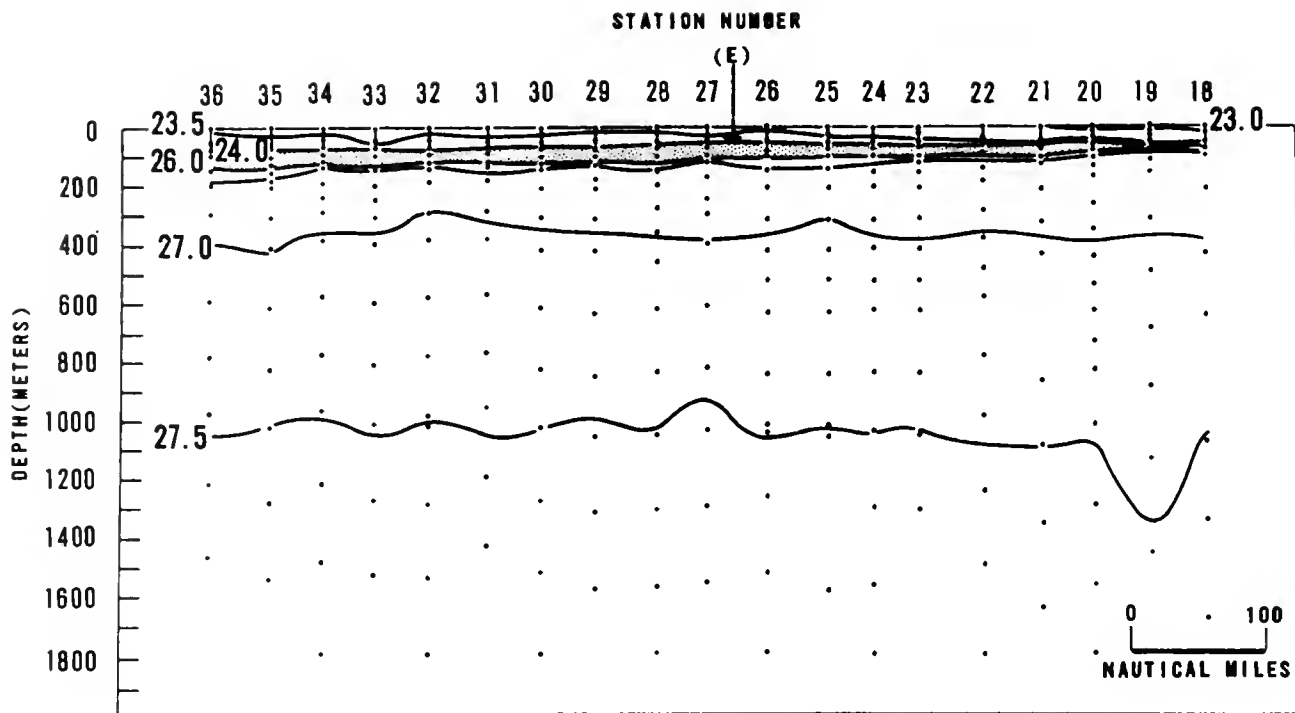


FIGURE 7. Vertical distribution of density ( $\sigma_t$ , in g/l). Stations 18-36, 5-9 February 1966, EVERGREEN 31-779. Contour intervals 0.5 g/l except in pycnocline (shaded area) on 1800 m section. E indicates position of equator.

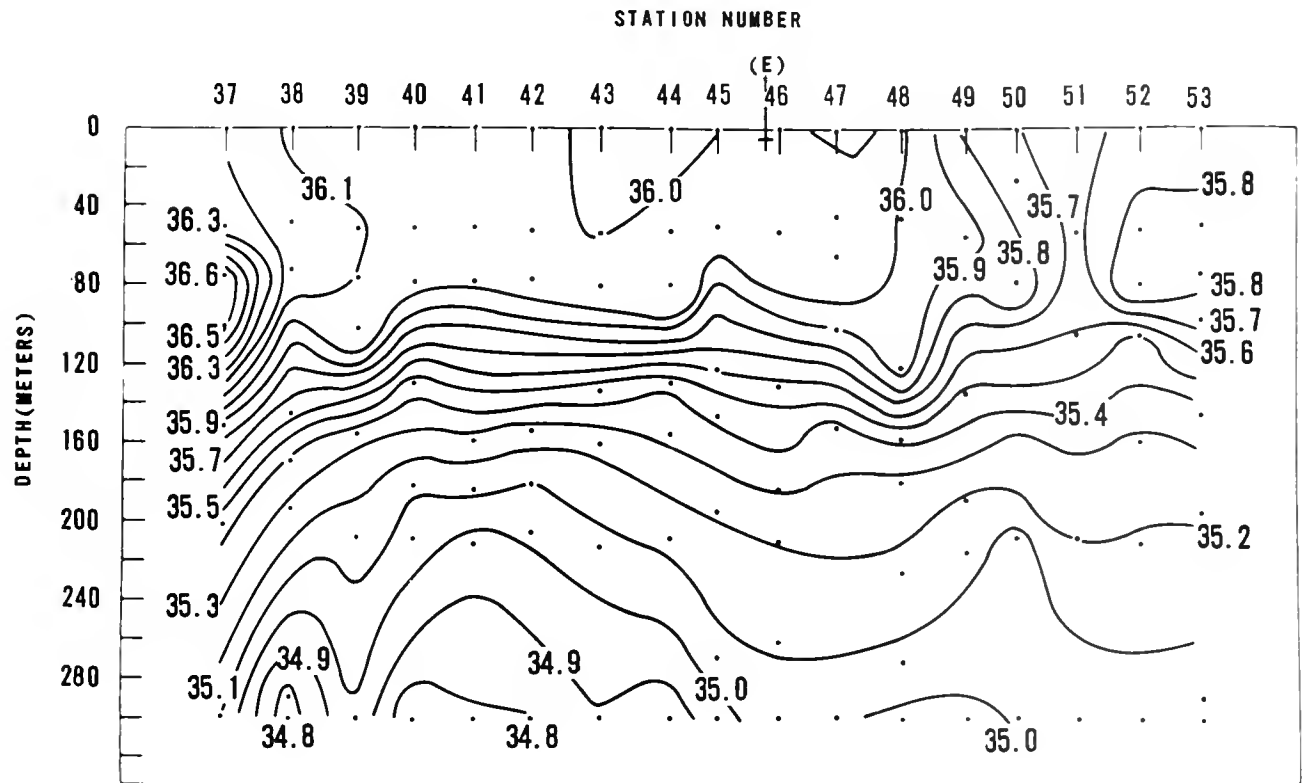
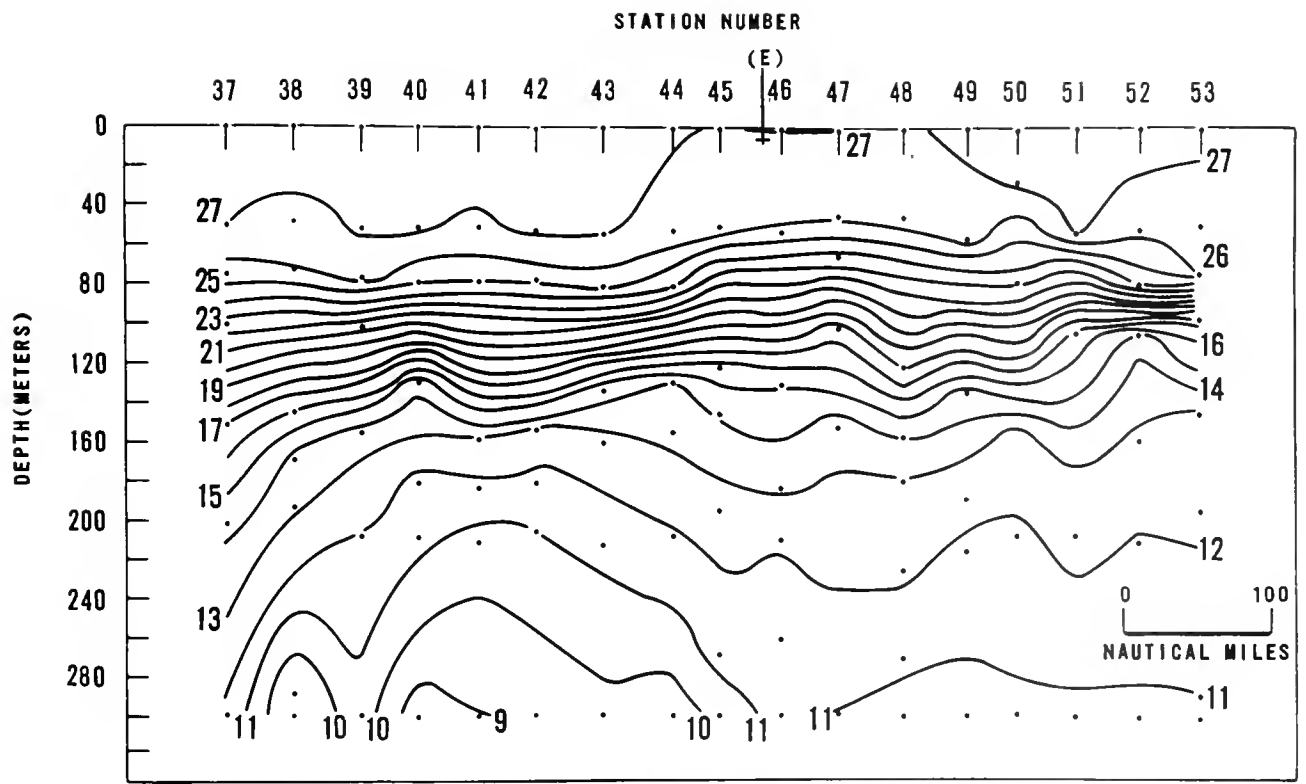


FIGURE 8. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 300 m. Contour intervals  $1^{\circ}\text{C}$  and  $0.1\text{‰}$ . Stations 37-53, 11-14 February 1966, EVERGREEN 31-779. E indicates position of equator.

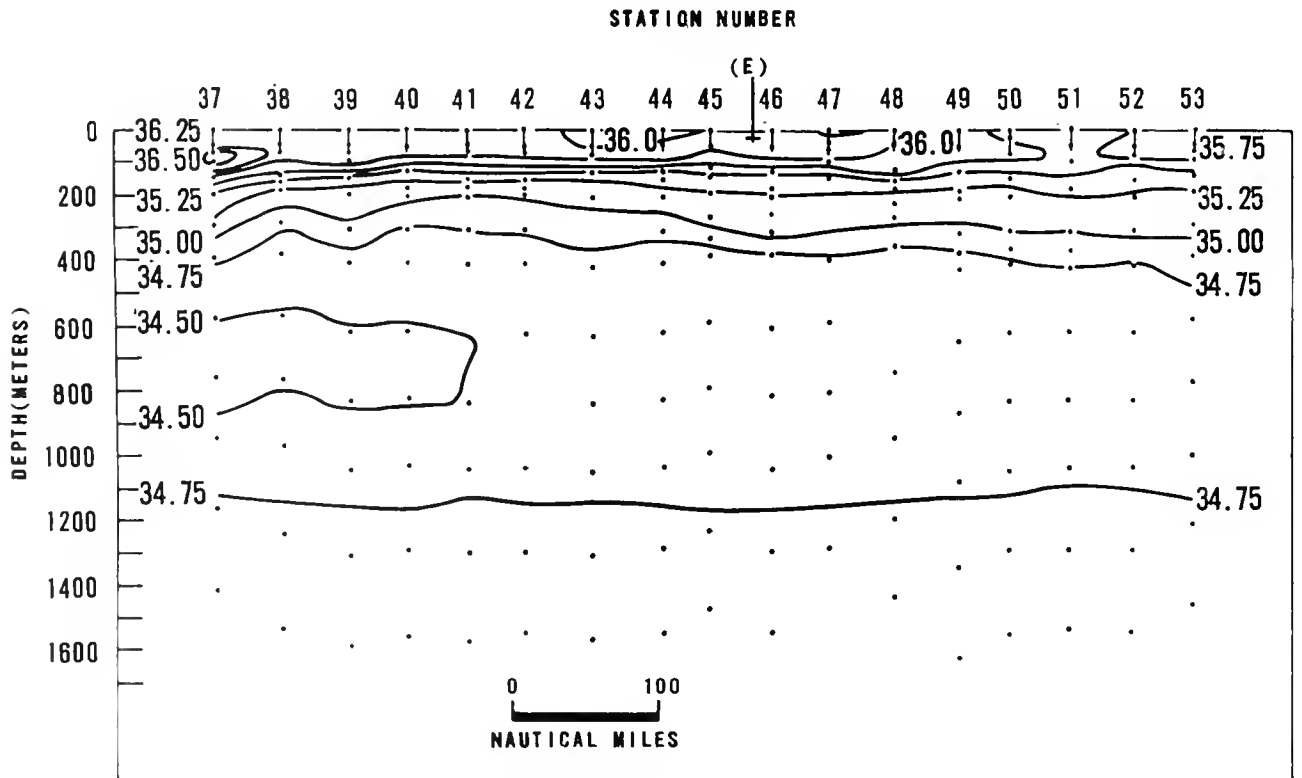
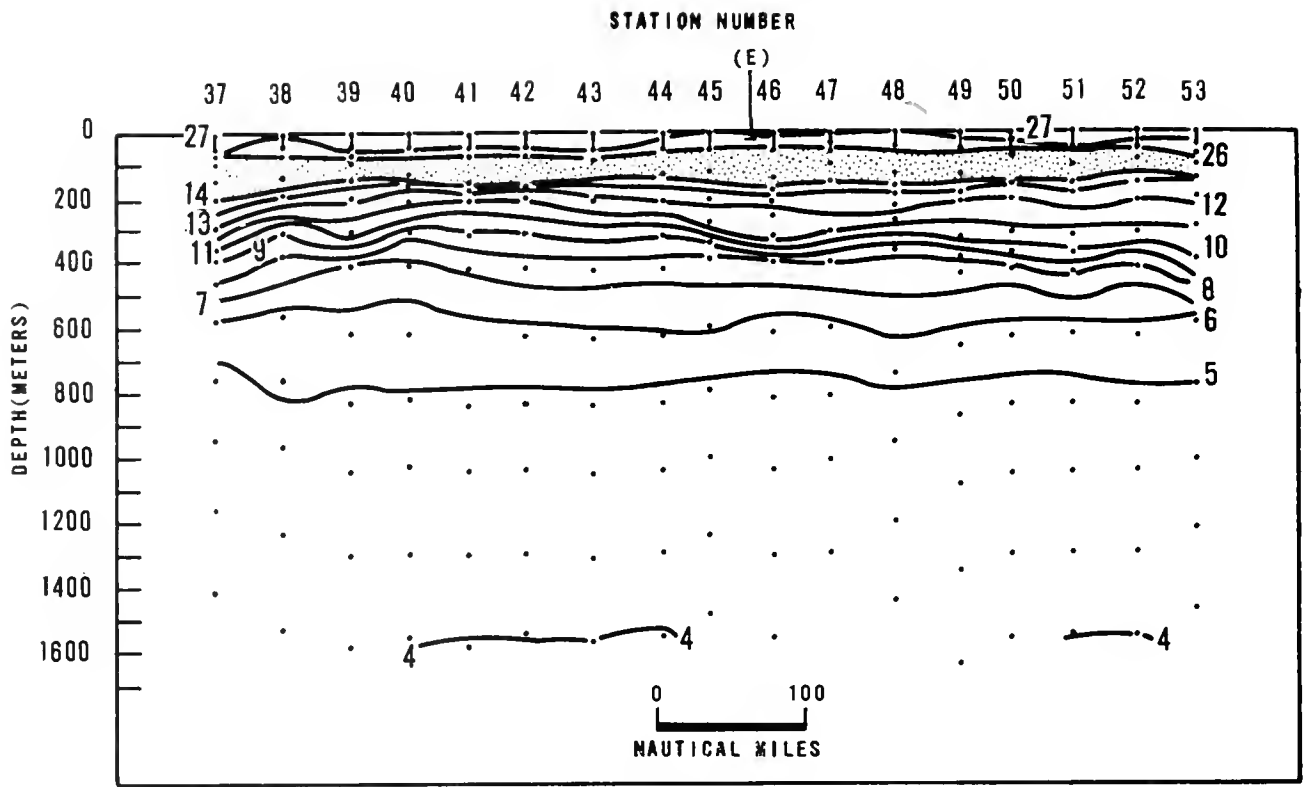


FIGURE 9. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 1700 m. Contour intervals  $1^{\circ}\text{C}$  (except in thermocline—shaded area) and  $0.25\text{‰}$ . Stations 37–53, 11–14 February 1966, EVERGREEN 31–779. E indicates position of equator.

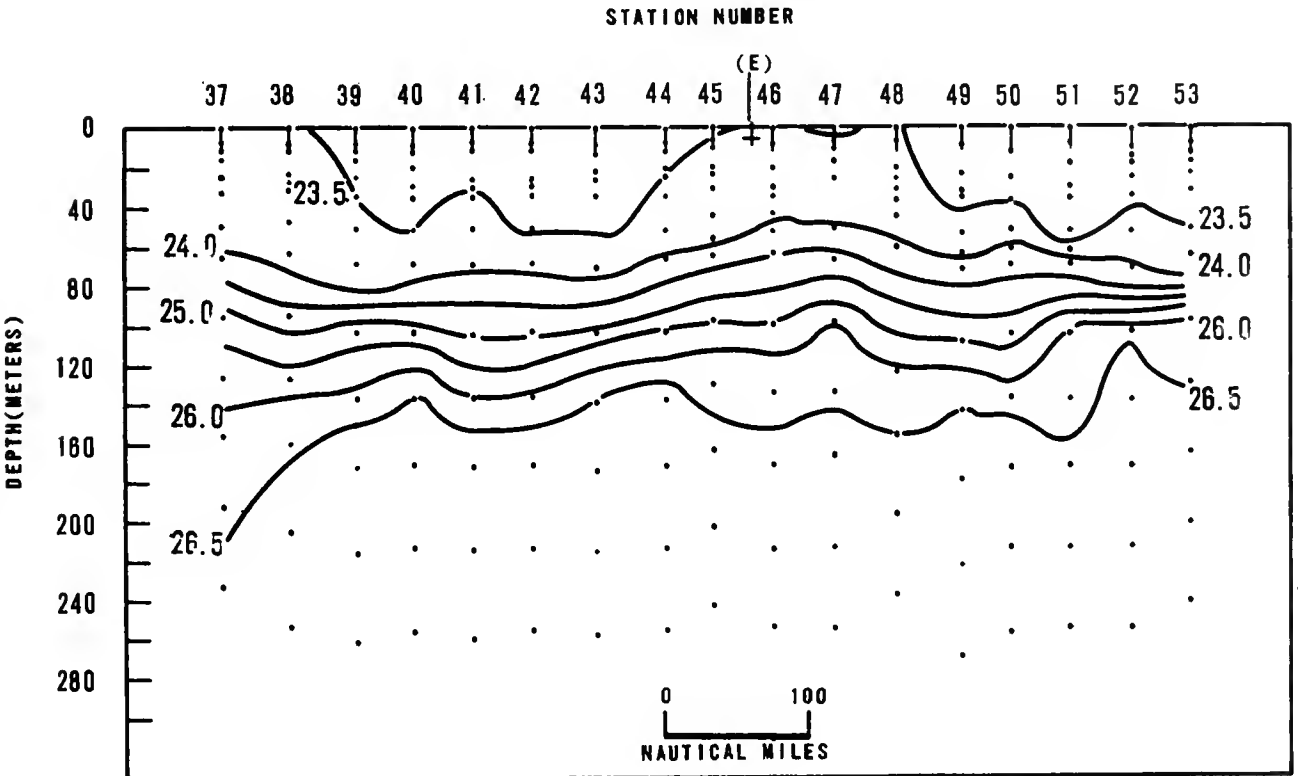
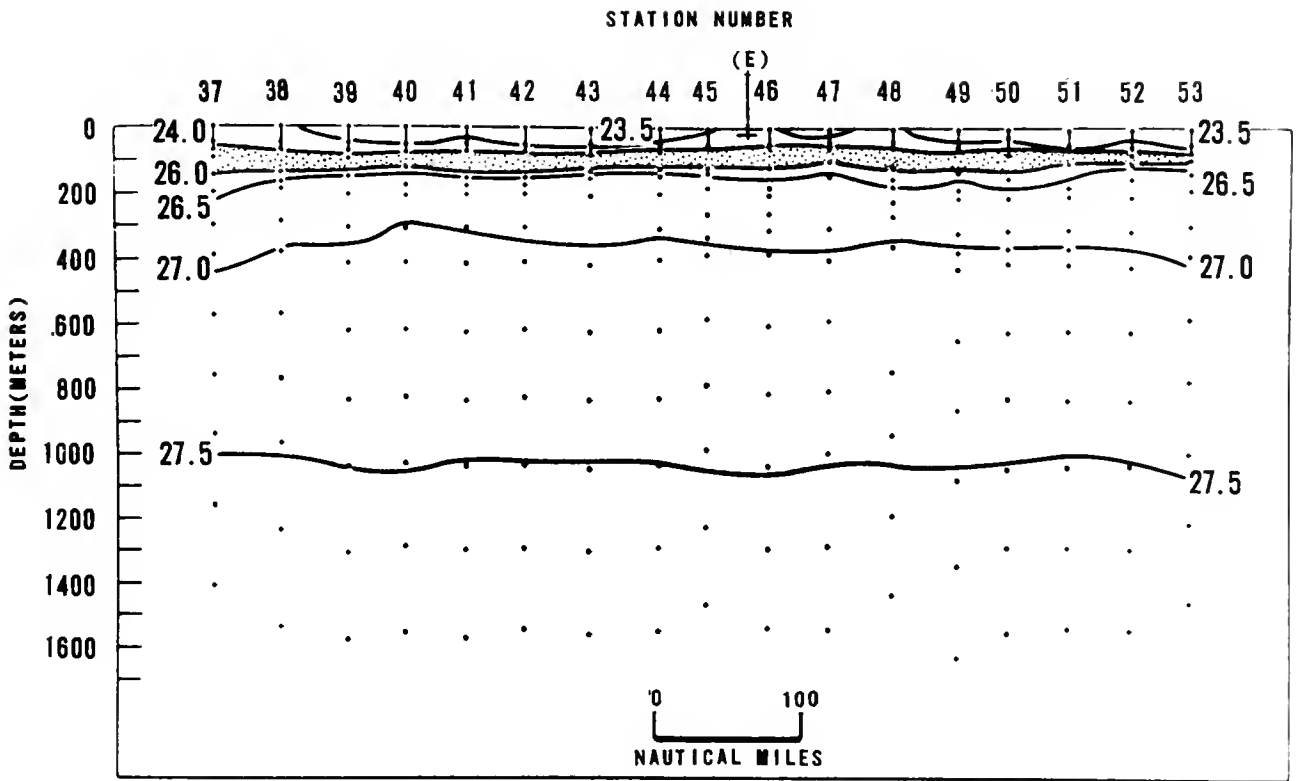


FIGURE 10. Vertical distribution of density ( $\sigma_t$ , in g/l). Stations 37-53, 11-14 February 1966, EVERGREEN 31-779. Contour intervals 0.5 g/l except in pycnocline (shaded area) on 1700 m section. E indicates position of equator.

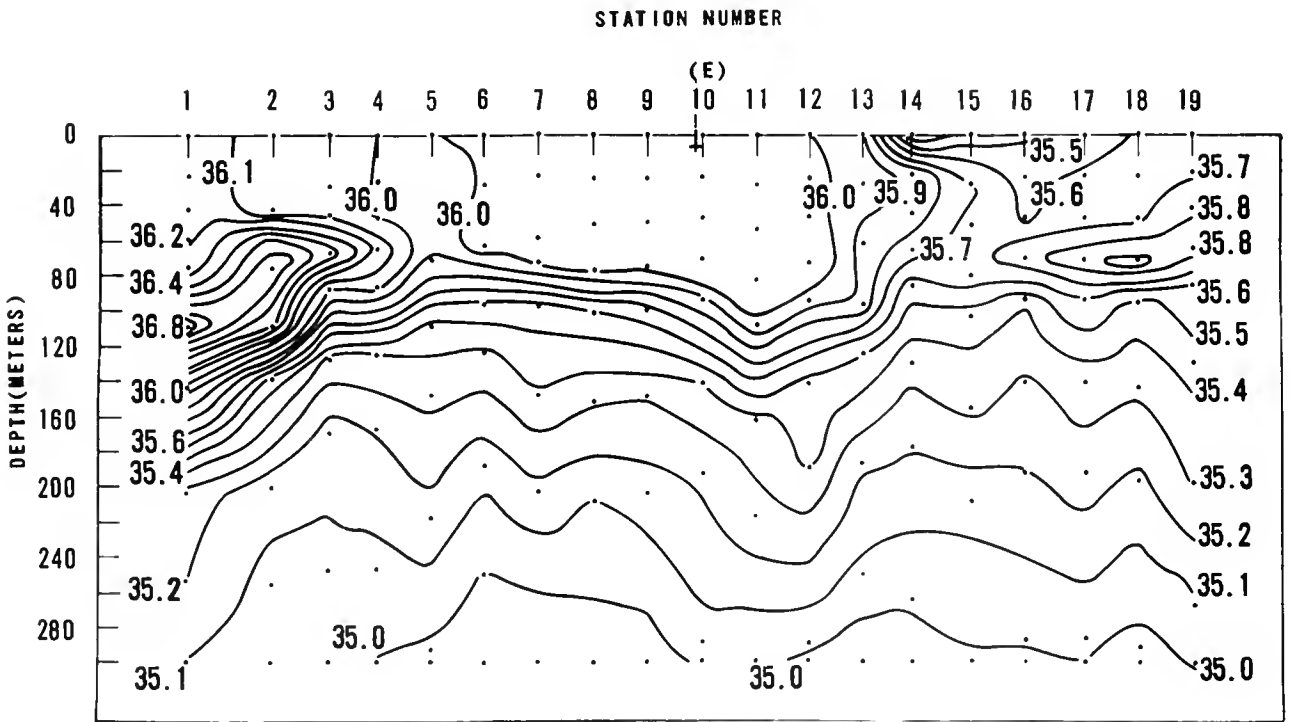
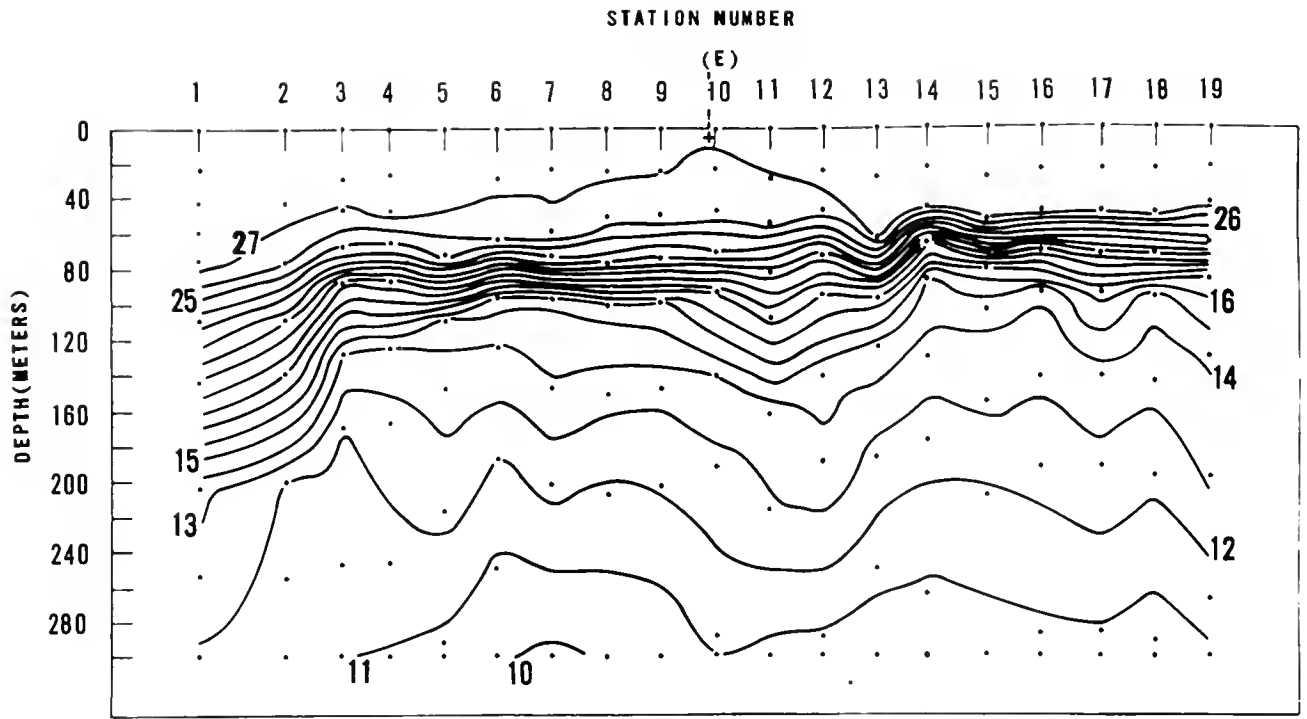


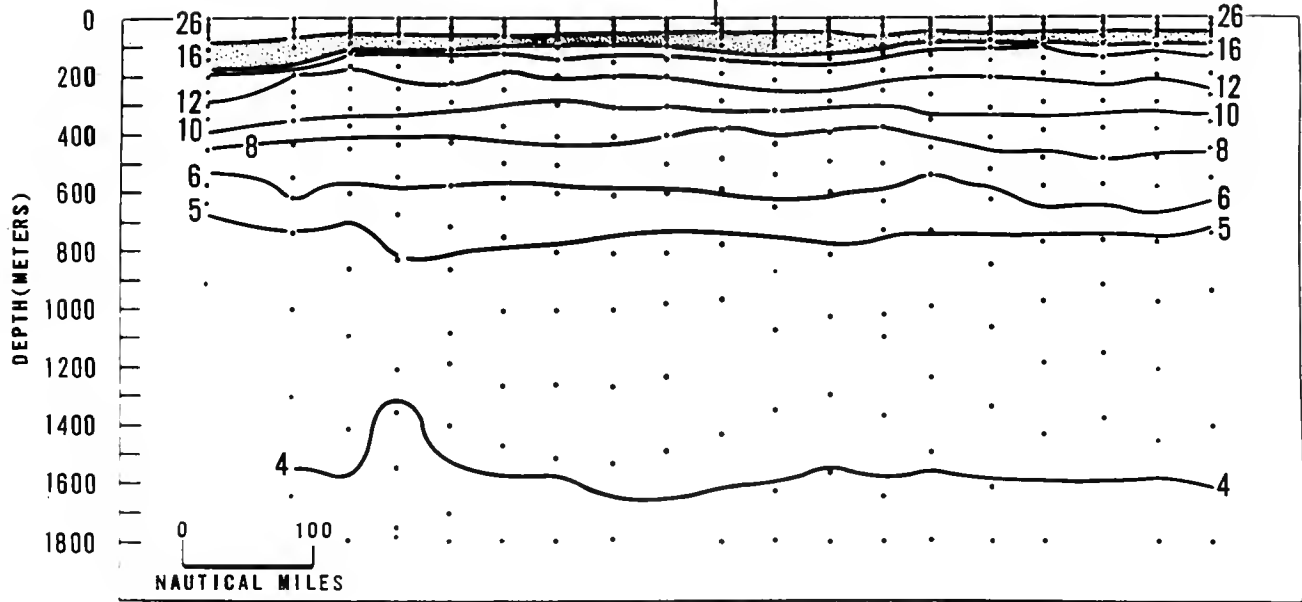
FIGURE 11. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 300 m. Contour intervals  $1^{\circ}\text{C}$  and  $0.1\text{‰}$ . Stations 1-19, 22-26 March 1966, EASTWIND 31-987. E indicates position of equator.



STATION NUMBER

(E)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19



STATION NUMBER

(E)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

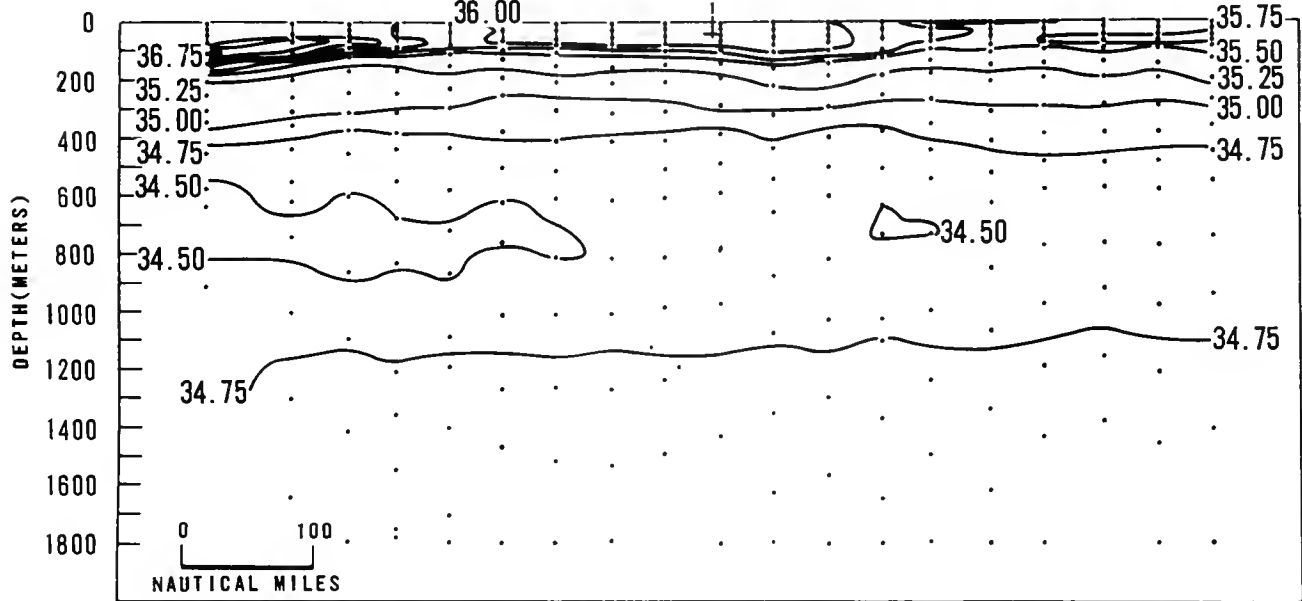


FIGURE 12. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 1800 m. Contour intervals are  $2^{\circ}\text{C}$  (except in thermocline—shaded area—and in  $4\text{--}6^{\circ}\text{C}$  range) and  $0.25\text{‰}$ . Stations 1–19, 22–26 March 1966, EASTWIND 31–987. E indicates position of equator.

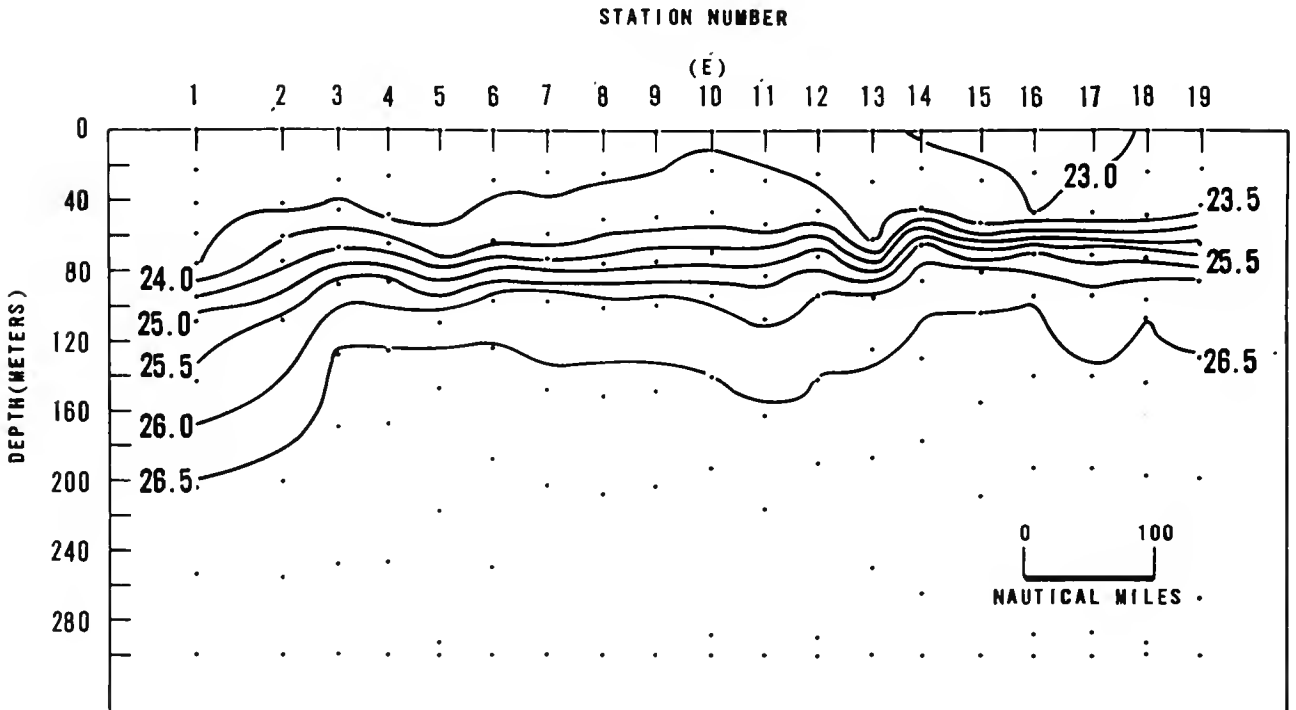
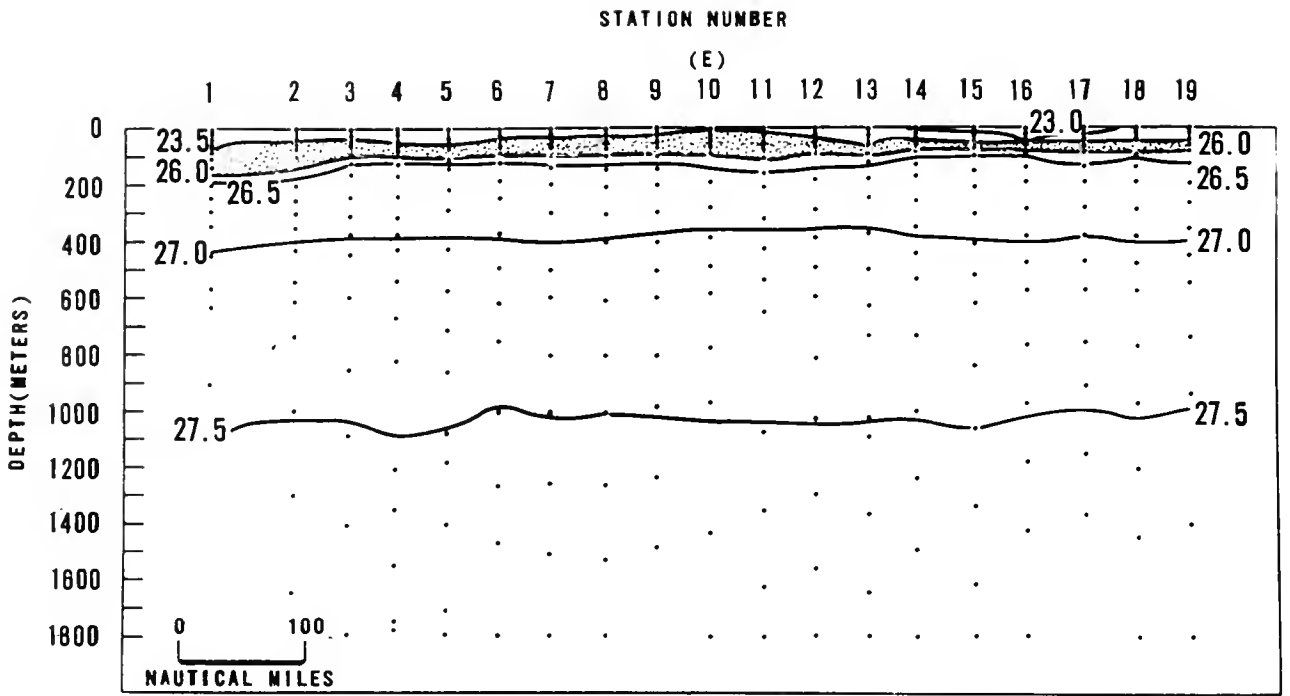


FIGURE 13. Vertical distribution of density ( $\sigma_t$ , in g/l). Stations 1-19, 22-26 March 1966, EASTWIND 31-987. Contour intervals 0.5 g/l except in pycnocline (shaded area) on 1800 m section. E indicates position of equator.

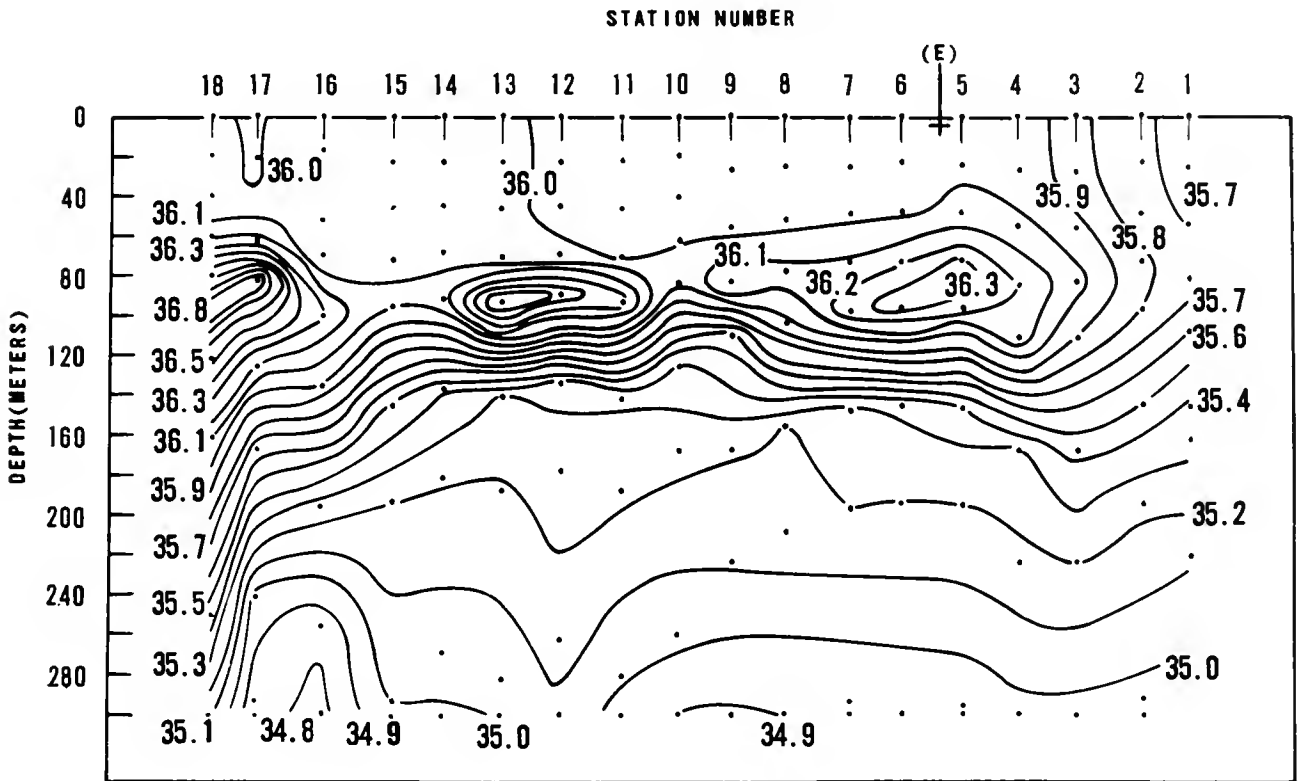
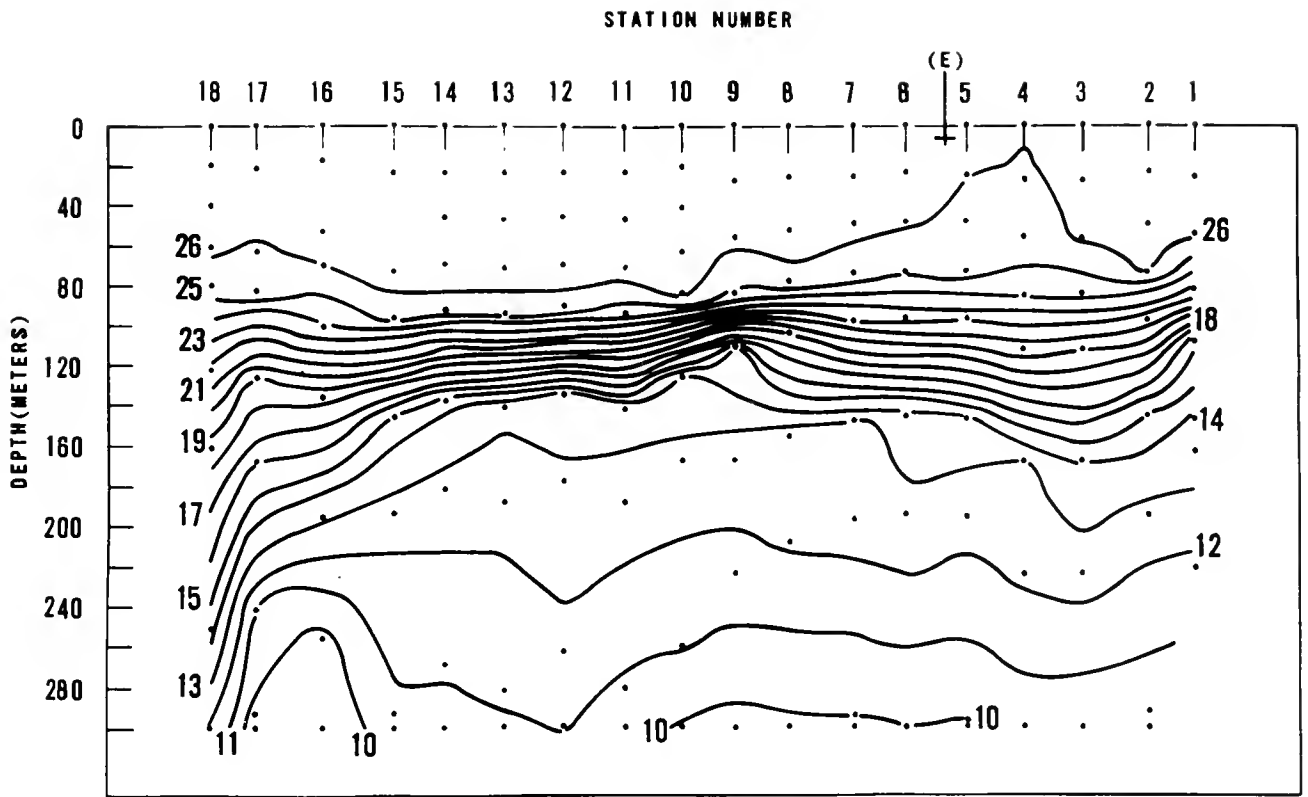


FIGURE 14. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 300 m. Contour intervals  $1^{\circ}\text{C}$  and  $0.1\text{‰}$ . Stations 1-18, 26-30 October 1966, ROCKAWAY 31-1059. E indicates position of equator.

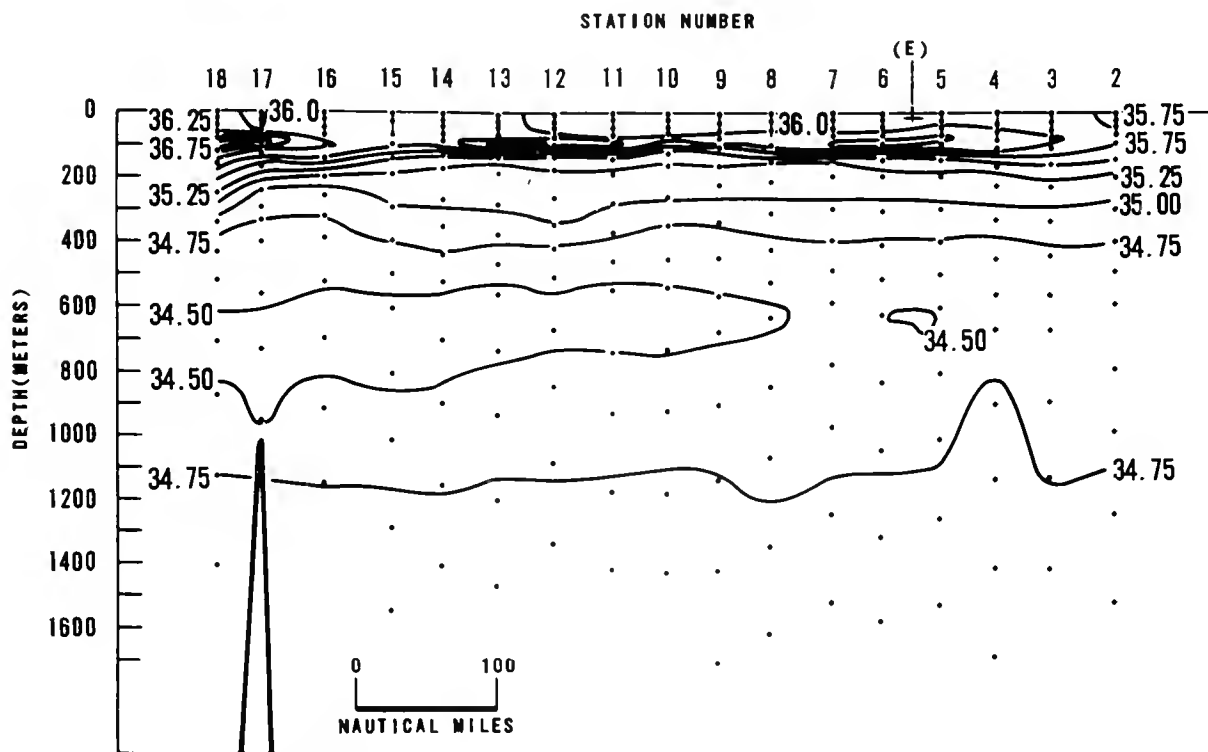
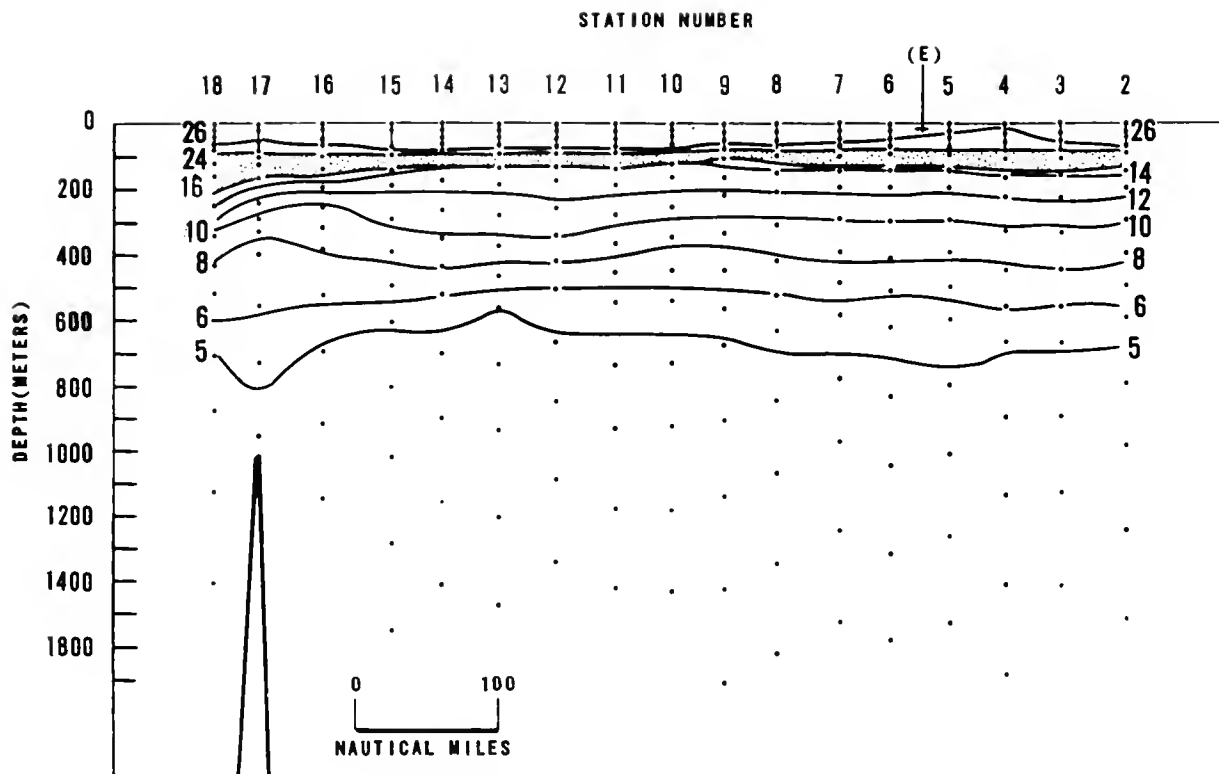


FIGURE 15. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 1700 m. Contour intervals are  $2^{\circ}\text{C}$  (except in thermocline—shaded area—and in  $4\text{--}6^{\circ}\text{C}$  range) and  $0.25\text{‰}$ . Stations 2-18, 26-30 October 1966, ROCKAWAY 31-1059. E indicates position of equator.

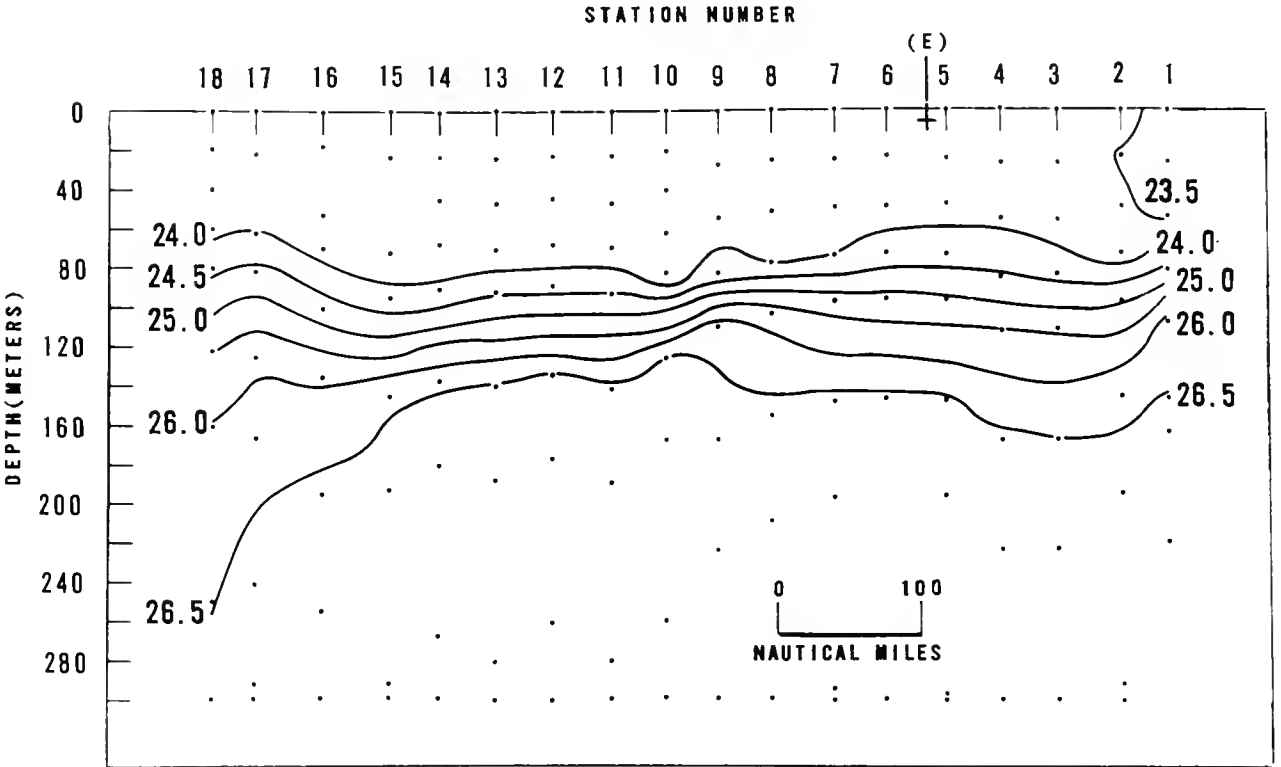
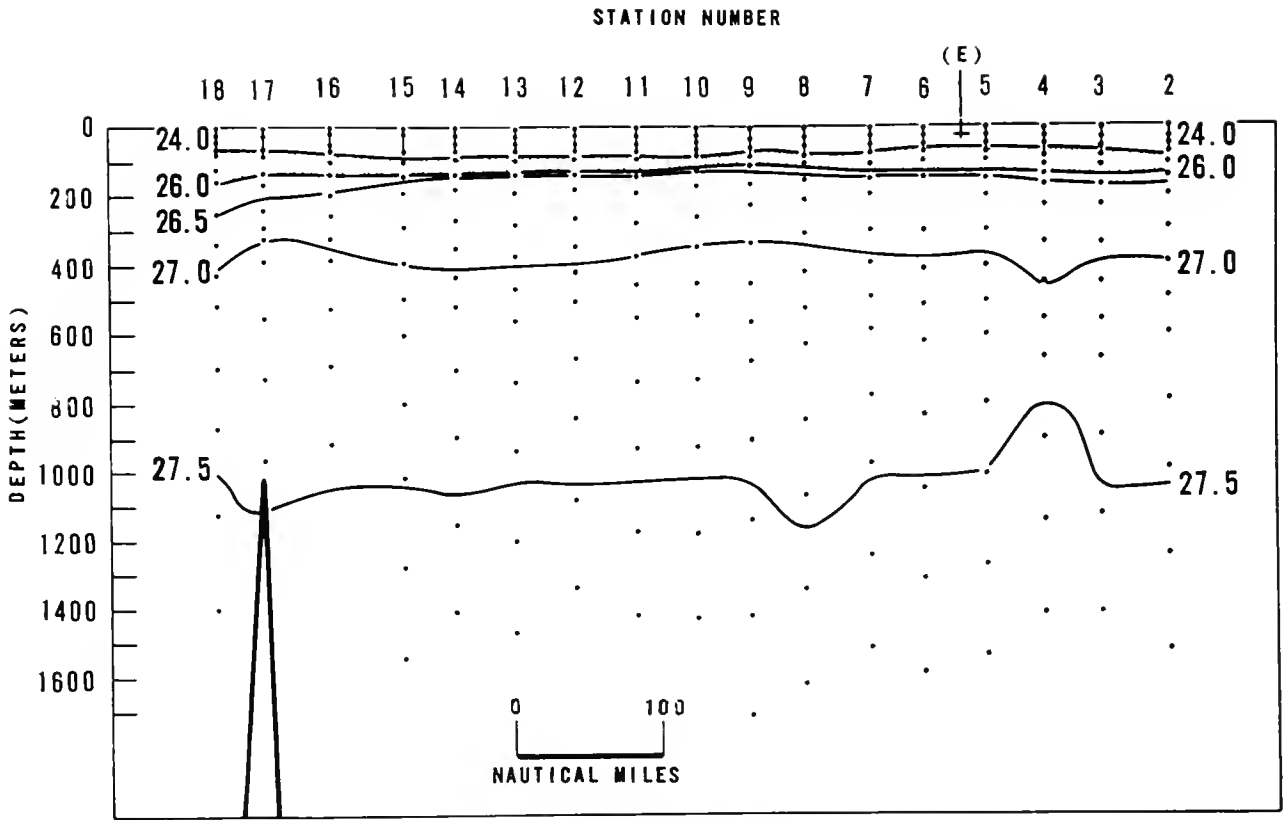


FIGURE 16. Vertical distribution of density ( $\sigma_t$ , in g/l). Stations 1–18, 26–30 October 1966, ROCKAWAY 31–1059. Contour intervals 0.5 g/l except in pycnocline (shaded area) on 1700 m section. E indicates position of equator.

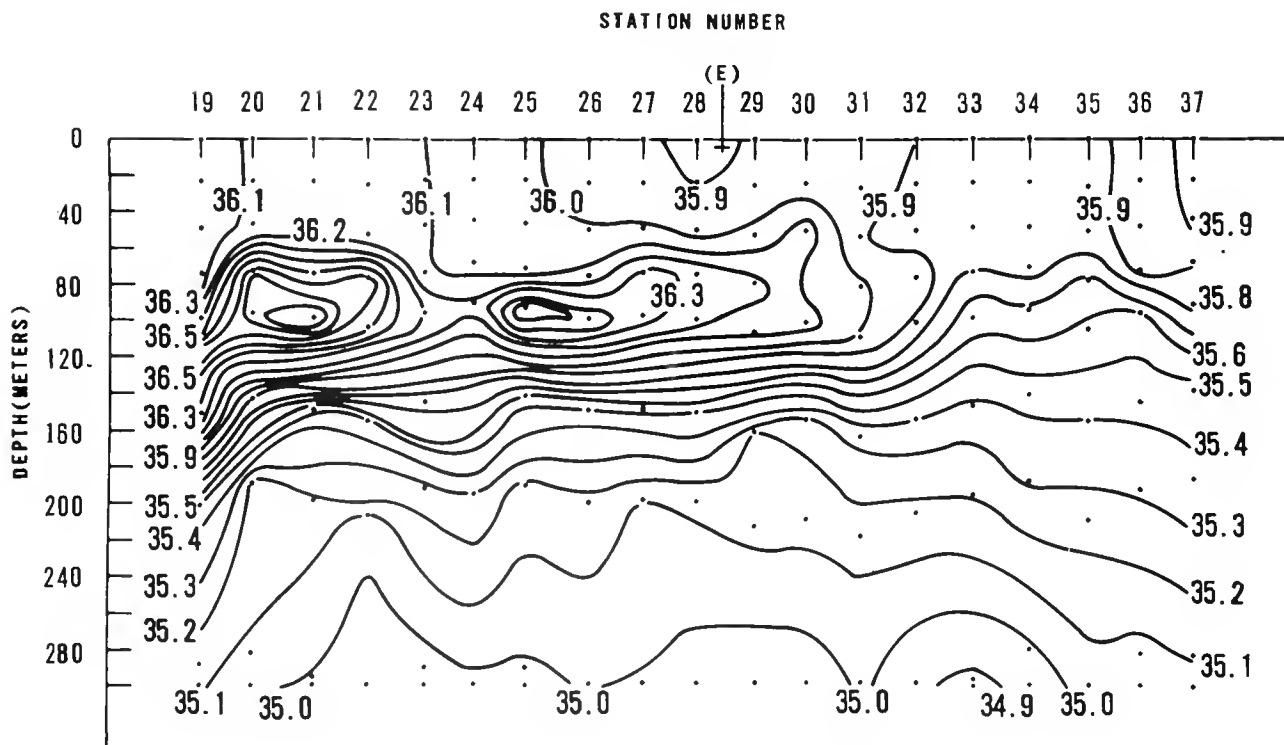
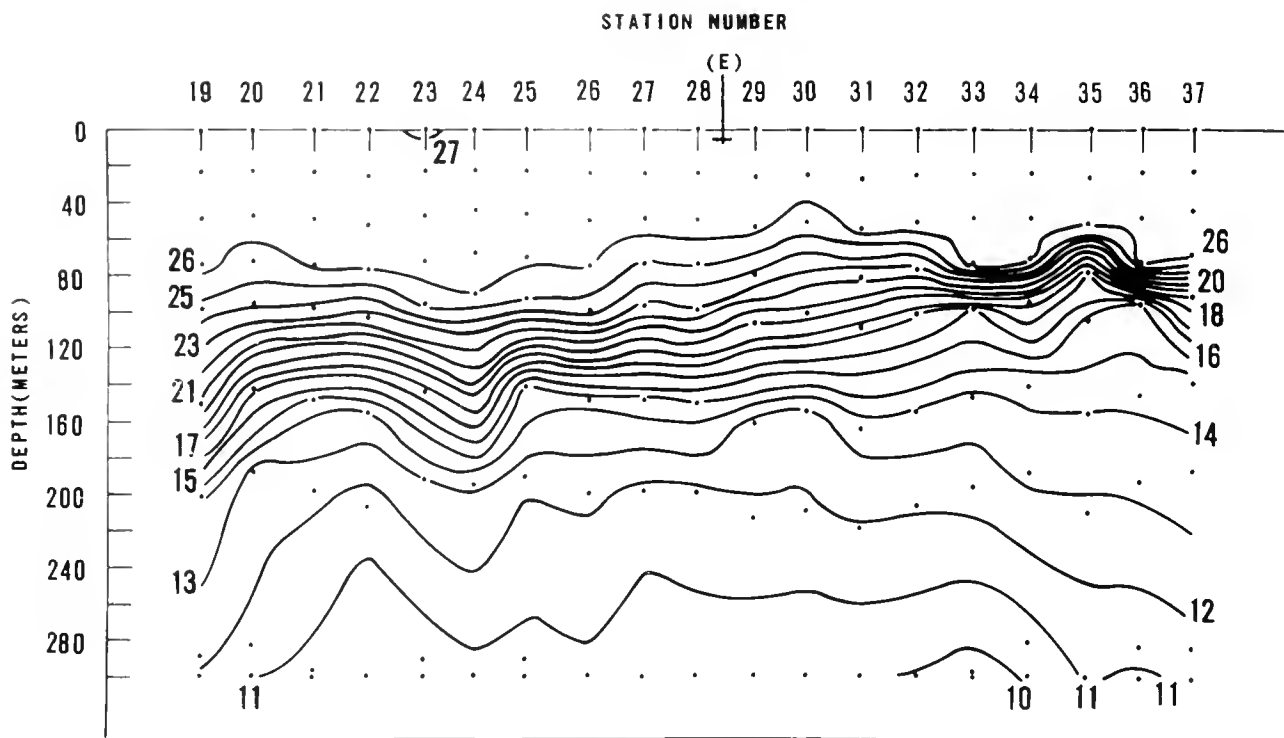


FIGURE 17. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 300 m. Contour intervals  $1^{\circ}\text{C}$  and  $0.1\text{‰}$ . Stations 19–37, 30 October–2 November 1966, ROCKAWAY 31–1059. E indicates position of equator.

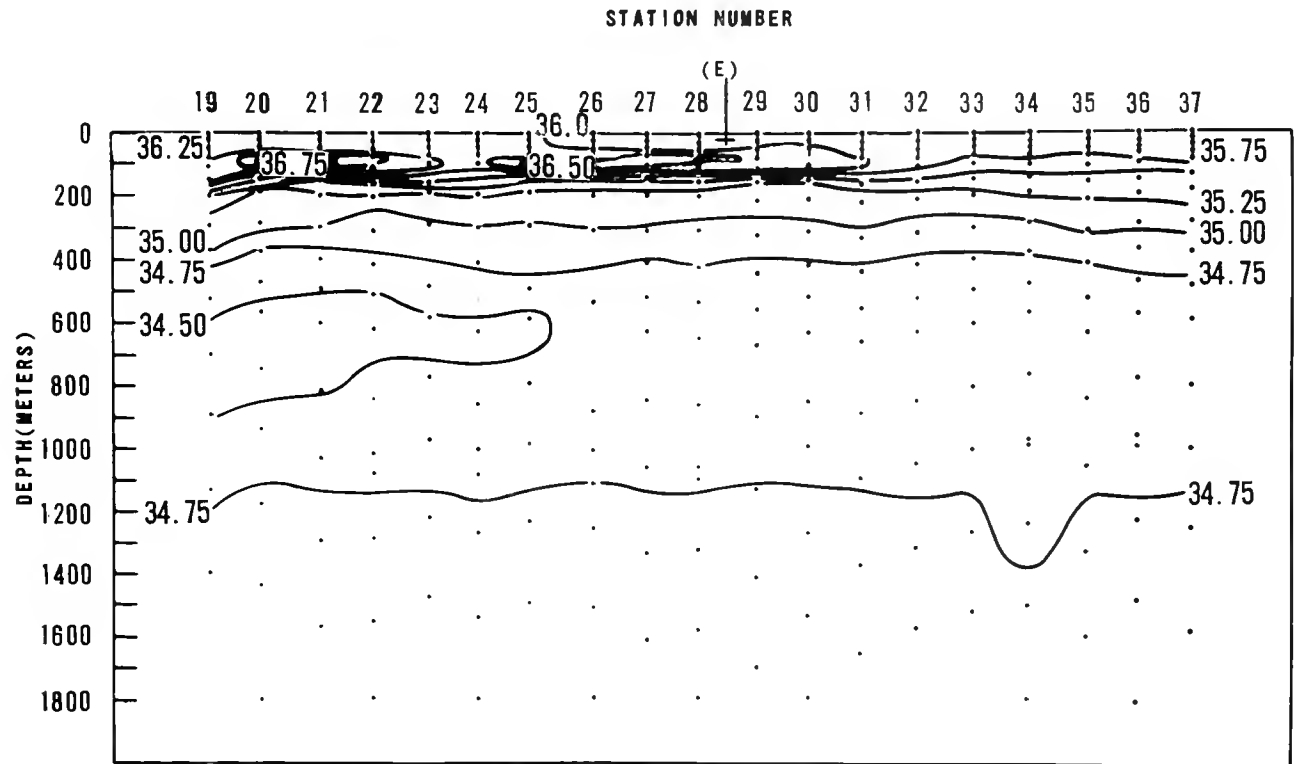
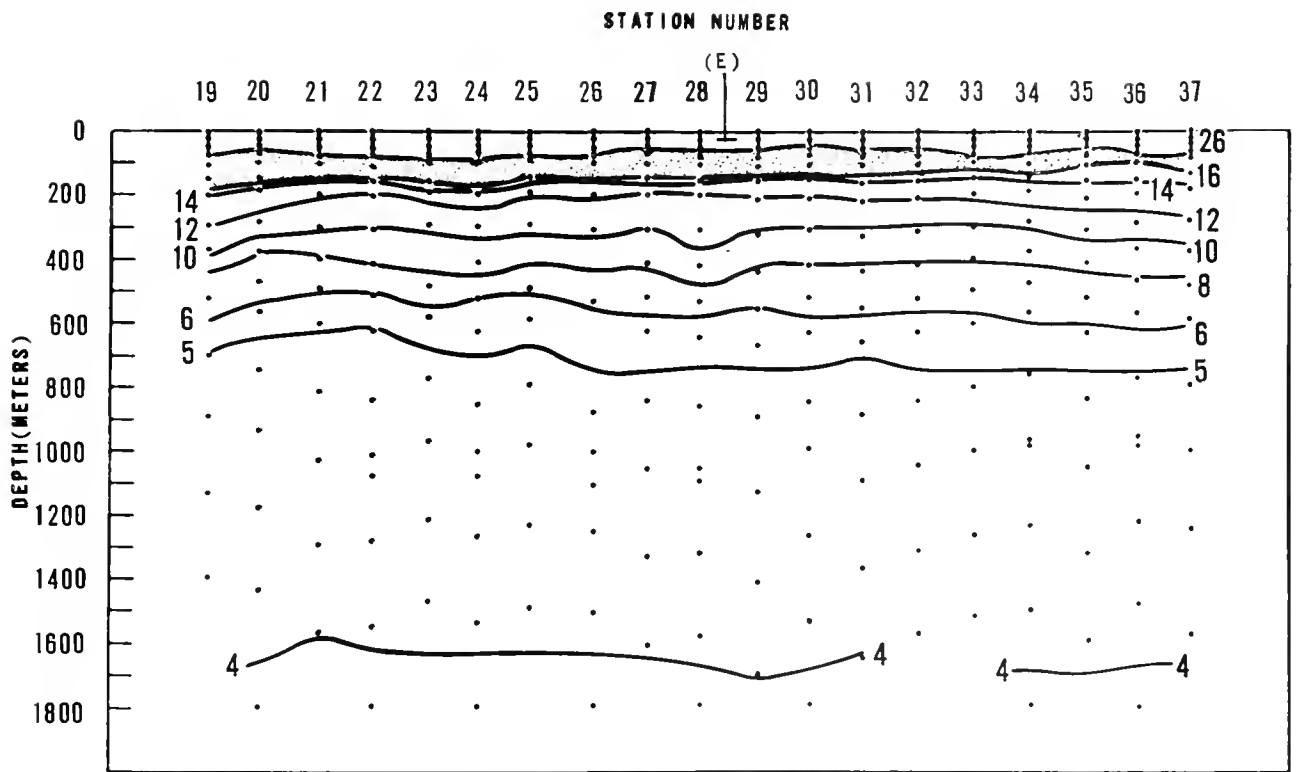


FIGURE 18. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 1800 m. Contour intervals  $2^{\circ}\text{C}$  (except in thermocline—shaded area—and in  $4\text{--}6^{\circ}\text{C}$  range) and  $0.25\text{‰}$ . Stations 19–37, 30 October–5 November 1966, ROCKAWAY 31–1059. E indicates position of equator.

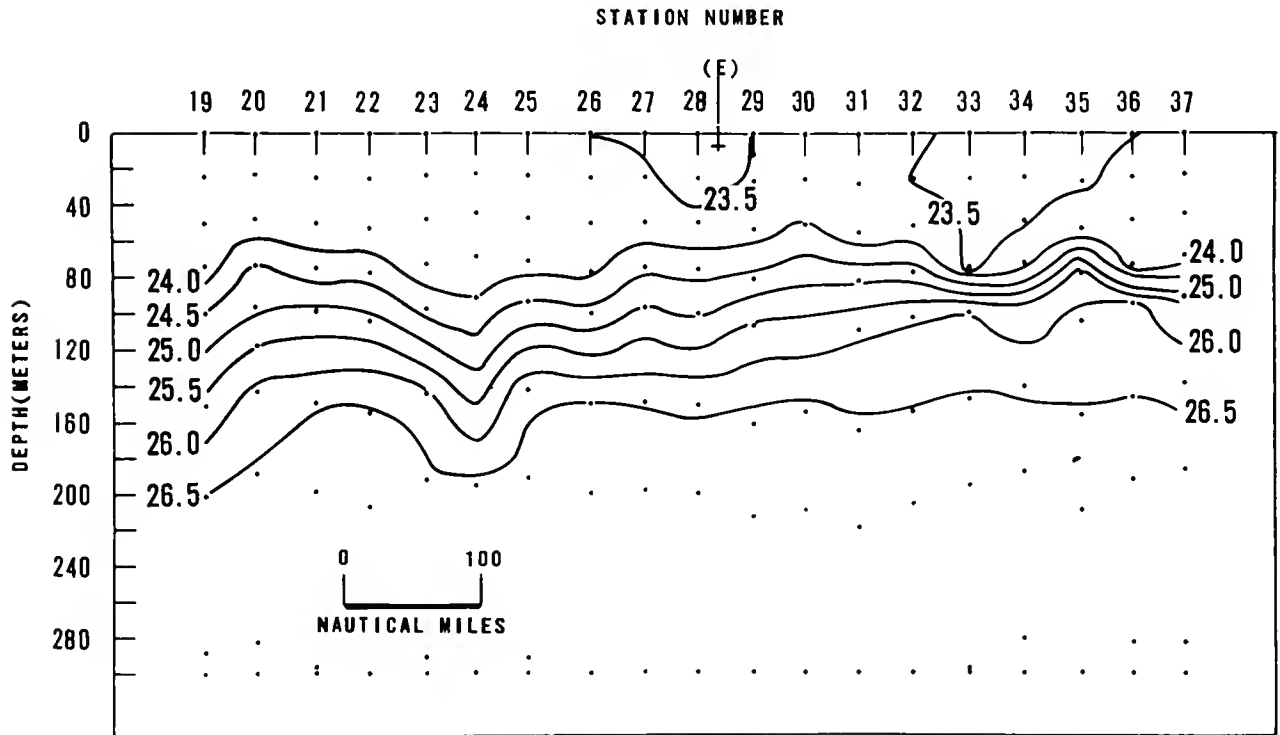
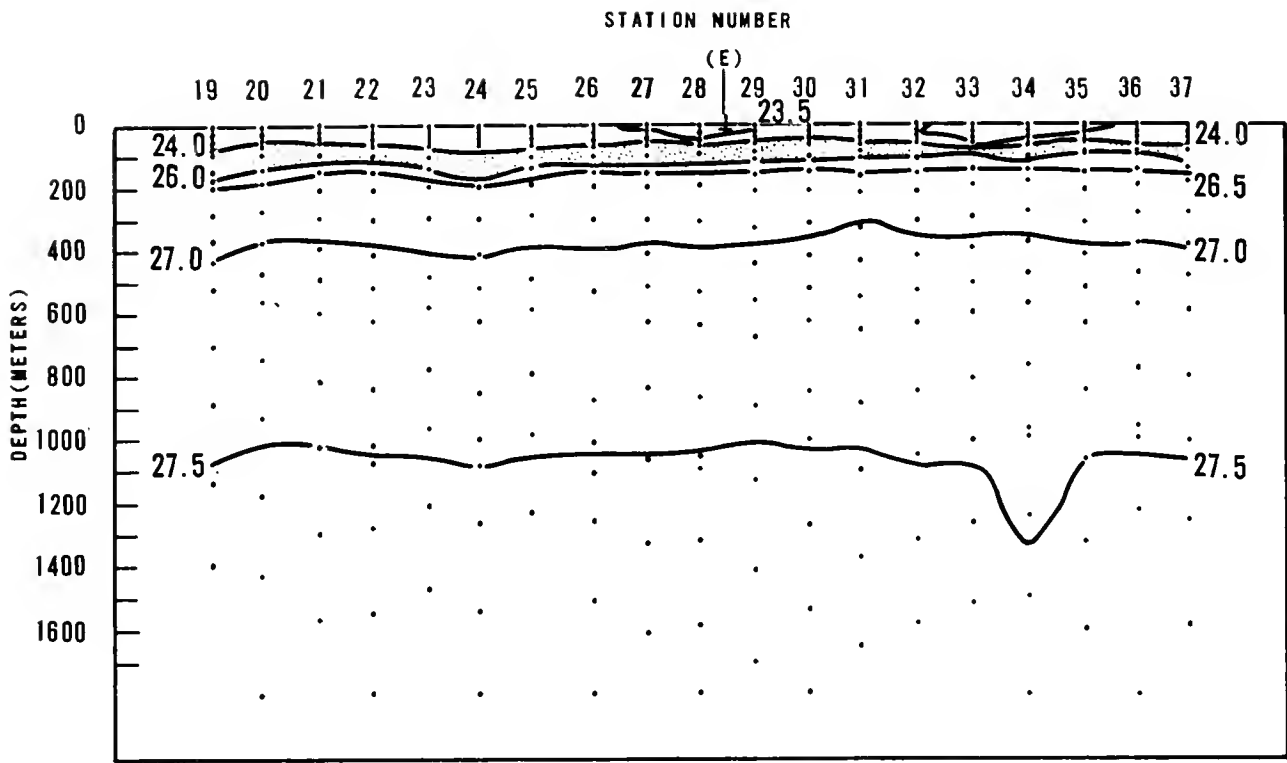


FIGURE 19. Vertical distribution of density ( $\sigma_t$ , in g/l). Stations 19-37, 30 October-5 November 1966, ROCKAWAY 31-1059. Contour intervals 0.5 g/l except in pycnocline (shaded area) on 1800 m section. E indicates position of equator.





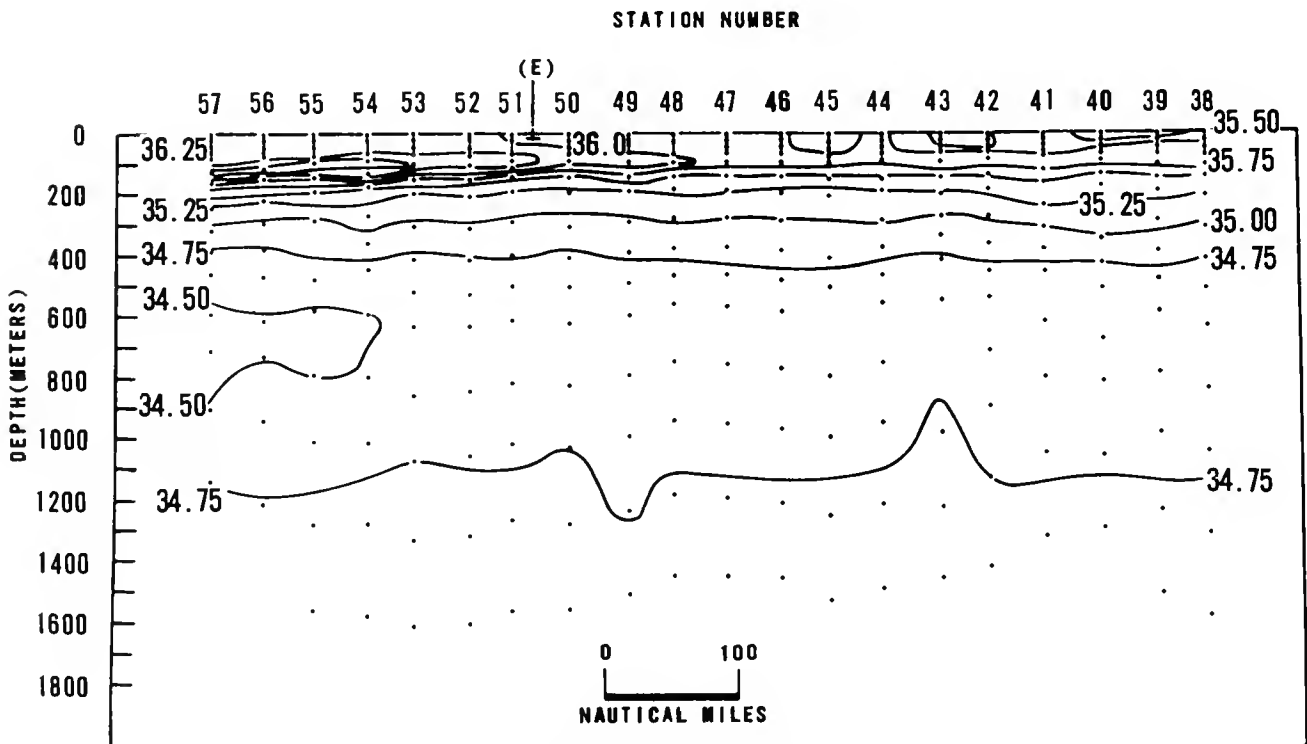
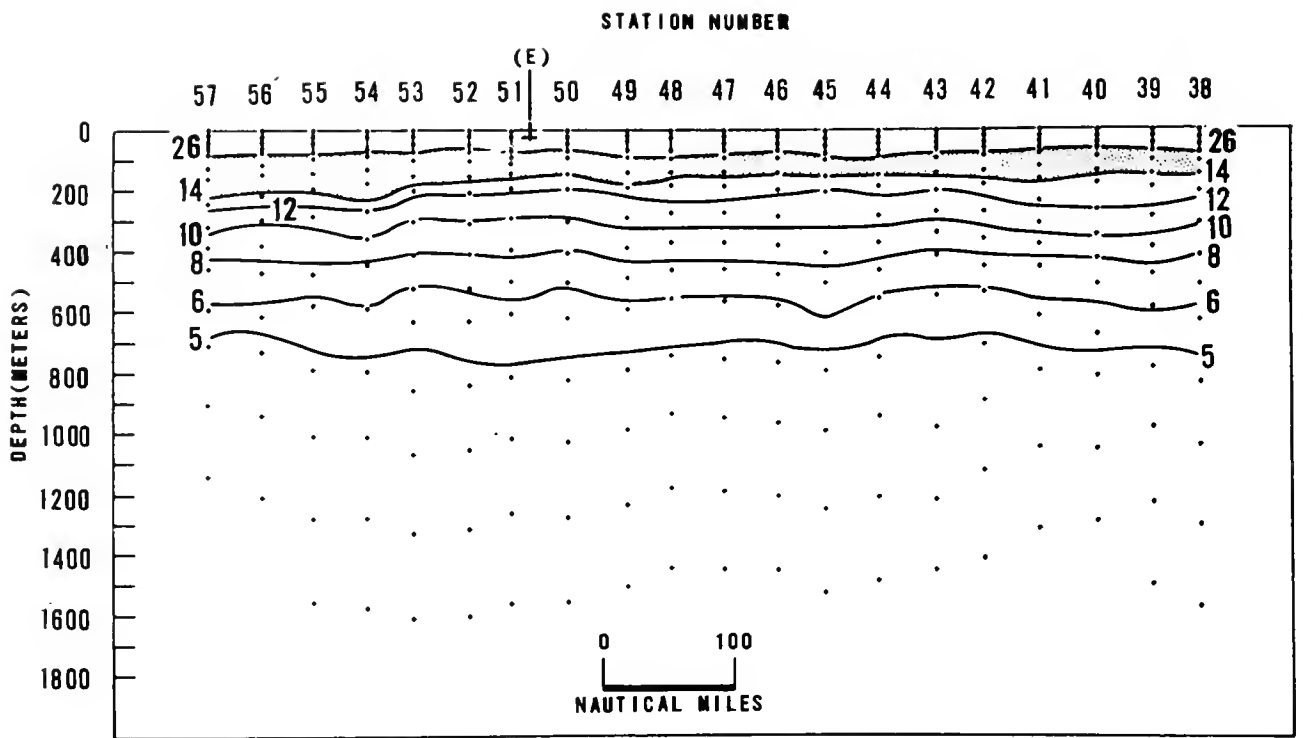


FIGURE 21. Vertical distribution of temperature ( $^{\circ}\text{C}$ ) and salinity ( $\text{‰}$ ) in the upper 1800 m. Contour intervals  $2^{\circ}\text{C}$  (except in thermocline—shaded area—and in  $4\text{--}6^{\circ}\text{C}$  range) and  $0.25\text{‰}$ . Stations 38–57, 3–6 November 1966, ROCKAWAY 31–1059. E indicates position of equator.

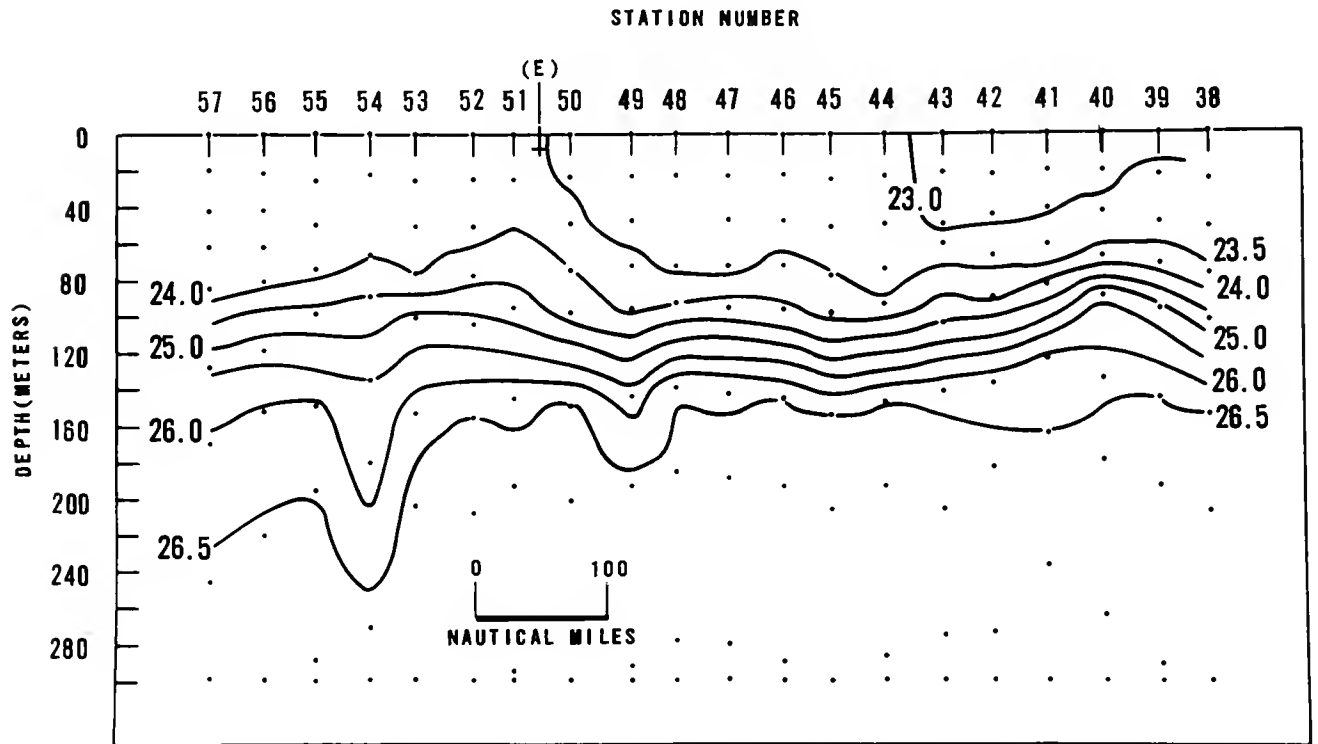
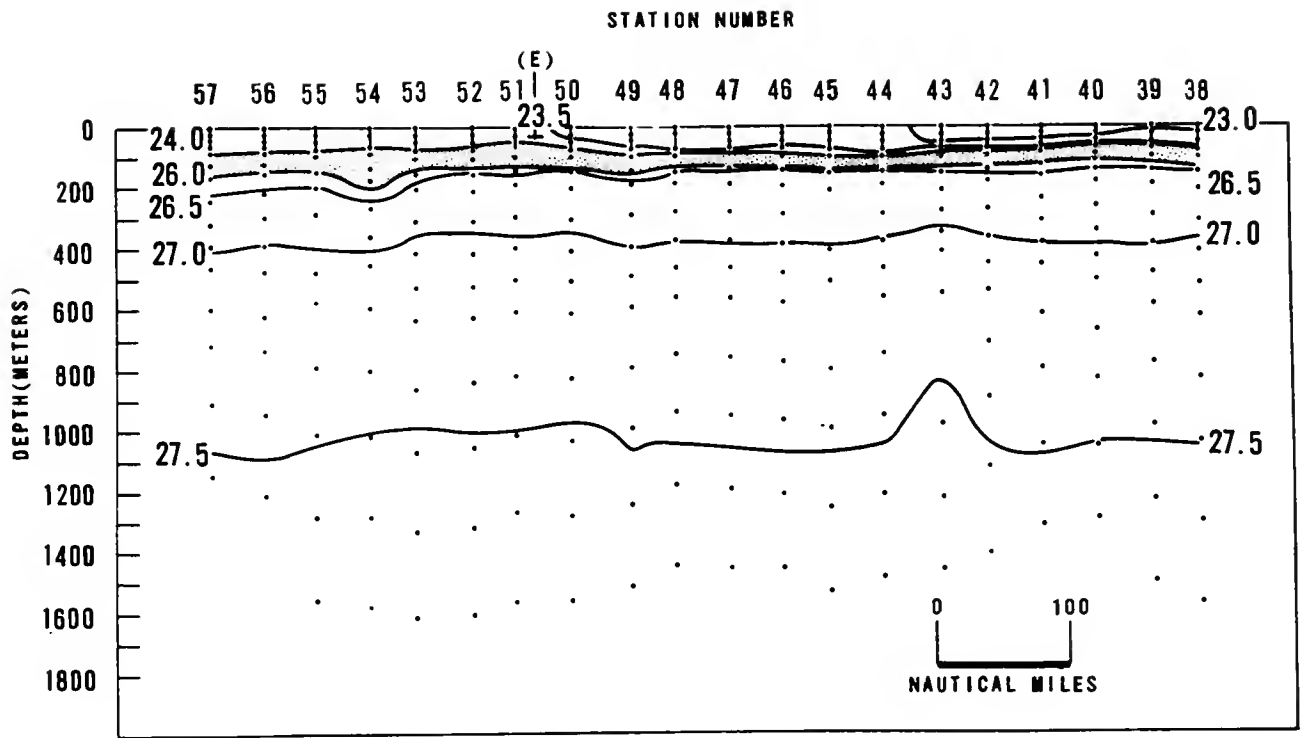


FIGURE 22. Vertical distribution of density ( $\sigma_t$ , in g/l). Stations 38–57, 3–6 November 1966, ROCKAWAY 31–1059. Contour intervals 0.5 g/l except in pycnocline (shaded area) on 1800 m section. E indicates position of equator.

# APPENDIX A

## OCEANOGRAPHIC DATA

A complete description of the codes utilized in the tabulation of oceanographic station data can be found in National Oceanographic Data Center publication M-2, *Processing Physical and Chemical Data from Oceanographic Stations*. (Rev. August 1964, supplement issued May 1966).

To facilitate use of the oceanographic station data listing, entry headings which are not self-explanatory are described below.

Depth to Bottom	Corrected or uncorrected sounding in meters.
Max. Depth of Samples	Depth of deepest sample to nearest multiple of one hundred meters.
Wave Observations:	
DIR.	Rounded to nearest multiple of ten degrees.
HGT.	In increments of 1/2 m. Sum of 5 meters plus increments of 1/2 m if 50 is added to direction.
PER.	If numerals 2 through 9 are entered, period in seconds is twice the numeric entry or 2X (numeric entry) + 1. For other entries see WMO Code 3155.
SEA	Sea state according to WMO Code 3700
Weather Code	If preceded by X, weather according to WMO Code 4501. If a two-digit entry, weather according to WMO Code 4677.
Cloud Code:	
Type	Cloud type according to WMO Code 0500.
Amount	Cloud amount in eights. Entry of the numeral 9 indicates cloud amount could not be estimated.
Water:	
Color Code	Color according to Forel-Ule scale.
Trans.	Transparency in whole meters as determined by Secchi disc.
Wind:	
Dir.	Rounded to nearest multiple of ten degrees.
Speed or Force	If preceded by letter S, wind speed in knots; if preceded by letter F, wind force according to Beaufort scale.
Barometer	Barometric pressure given in tens, units and tenths of millibars.
Air Temp. °C	Air temperature to tenths of a degree centigrade.
Vis. Code	Visibility according to WMO Code 4300.
No obs. depths	Number of observed levels associated with the station.
Messenger time	Entered in hours and tenths of an hour GMT. For Nansen casts, indicates time of release of messenger applicable to the observational level. For STD casts, indicates the starting time of lowering the sensor.
Card type	OBS designates observed levels. STD indicates the values at this standard level were interpolated by a modified 3-point LaGrange formula.
Depth (m)	Depth to nearest meter. A postscript T indicates depth was obtained thermometrically; S indicates uncorrected "wire out" depth. Postscript Q indicates value was marked doubtful by originator; P indicates value was considered doubtful by NODC. Postscripts P and Q retain this meaning throughout the following entries.
T °C	Temperature to hundredths of a degree Centigrade
S ‰	Salinity in parts-per-thousand.
SIGMA-T	Entered to hundredths.
Specific-volume Anomaly — x 10 <sup>7</sup>	Multiply entry by 10 <sup>-7</sup> to obtain specific-volume anomaly in cubic centimeters per gram.
ΣΔD Dyn. M. x 10 <sup>3</sup>	Multiply entry by 10 <sup>-3</sup> to obtain anomaly of dynamic height in dynamic meters referenced to the sea surface.
Sound Velocity	Sound velocity according to Wilson's formula entered to tenths of a meter per second.
O <sub>2</sub> ml/l	Dissolved oxygen in milliliters per liter entered to hundredths.
PO <sub>4</sub> -P μg-at/l	Inorganic phosphate in microgram-atoms per liter entered to hundredths.
Total-P μg-at/l	Total phosphorus in microgram-atoms per liter entered to hundredths.
NO <sub>2</sub> -N μg-at/l	Nitrite-nitrogen in microgram-atoms per liter entered to hundredths.
NO <sub>3</sub> -N μg-at/l	Nitrate-nitrogen in microgram-atoms per liter entered to tenths.
SiO <sub>4</sub> -Si μg-at/l	Silicate-silicon in microgram-atoms per liter entered to whole units.
pH	Entered to hundredths.

TABLE I.—Observed and interpolated oceanographic data collected on USCGC EVERGREEN (WAGO 295) during 1-14 February 1966; prepared from NODC listing 31-779.

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	DEPTH IN METERS	MARS DEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		HOOC STATION NUMBER
CTRY CODE	IO. NO.					10'	1'	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TYPE	
31	779	EV	0230 S	037555W	303	27	02	01	074	1966		021	3017	29	11	2	2	X1	8	1	0001	
						WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS				
						COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE	MBAR	DRY BULB	WET BULB										
							17	S15	112	272	250	7	21									
MESSNGR TIME OF HR 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \theta$ OYN. M. $\times 10^3$	SOUHO VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{ml}^{-1}$	TOTAL P $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{ml}^{-1}$	pH	S.C.C.					
		STD	0000	2713	3607	2350	0043933	0000	15409													
074		OBS	0000	2713	36071	2350			15409													
		STD	0010	2712	3608	2352	0043864	0044	15410													
		STD	0020	2710	3609	2353	0043788	0088	15412													
		STD	0030	2708	3609	2353	0043781	0132	15413													
074		OBS	0046	2706	36100	2355			15415													
		STD	0050	2699	3610	2357	0043508	0219	15414													
074		OBS	0069	2666	36101	2368			15410													
		STD	0075	2631	3627	2391	0040323	0324	15405													
074		OBS	0092	2470	36523	2460			15373													
		STD	0100	2342	3649	2496	0030447	0412	15344													
074		OBS	0114	2127	36363	2548			15290													
		STD	0125	1966	3617	2576	0022879	0479	15246													
074		OBS	0138	1783	35935	2605			15194													
		STD	0150	1615	3569	2626	0018157	0530	15143													
074		OBS	0160	1490	35512	2641			15103													
074		OBS	T0183	1258	35169	2663			15026													
		STD	0200	1237	3516	2666	0014411	0611	15022													
		STD	0250	1146	3508	2677	0013442	0681	14998													
074		OBS	0273	1089	35014	2683			14981													
		STD	0300	0987	3488	2690	0012262	0745	14947													
074		OBS	T0344	0853	34714	2699			14902													
		STD	0400	0790	3466	2704	0010970	0861	14886													
074		OBS	0474	0701	34586	2711			14863													
		STD	0500	0662	3455	2714	0010109	0967	14852													
074		OBS	T0538	0618	34521	2717			14840													
		STD	0600	0595	3451	2719	0009638	1066	14841													
074		OBS	T0634	0578	34509	2721			14840													
		STD	0700	0498	3450	2730	0008615	1157	14818													
		STD	0800	0427	3448	2736	0007999	1240	14805													
083		OBS	0827	0419	34530	27410																
		STD	0900	0425	3446	2735	0008216	1321	14820													
083		OBS	0928	0427	34450	2734			14825													
		STD	1000	0435	3460	2745	0007370	1399	14843													
083		OBS	T1039	0438	34674	2751			14852													
		STD	1100	0440	3472	2754	0006639	1469	14863													
		STD	1200	0444	3480	2760	0006215	1533	14882													
		STD	1300	0447	3488	2766	0005795	1593	14902													
083		OBS	1301	0447	34876	2766			14902													
		STD	1400	0428	3492	2771	0005311	1649	14911													
		STD	1500	0410	3495	2776	0004946	1700	14921													
083		OBS	T1580	0398	34972	2779			14929													
		STD	1750	0384	3497	2780	0004672	1820	14952													
		STD	2000	0360	3497	2782	0004548	1936	14984													
083		OBS	T2119	0348	34964	2783			14999													
		STD	2500	0296	3494	2786	0004221	2155	15042													
083		OBS	T2620	0287	34936	2787			15059													
083		OBS	T2920	0278	34930	2787			15106													

TABLE I.—Continued

REFERENCE CITY CODE	SHIP ID. NO.	SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NDDC STATION NUMBER
					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYP	AMT	
31	779	EV	02155S	03704 W	303	27	02	01	156	1966	031	031	3480	17	0	2	2	X1	3	6	0002	
					WATER		WIND		BARO-	AIR TEMP. °C		VIL CODE	NO. D&L DEPTH	SPECIAL OBSERVATIONS								
					COLOR CODE	TRANSL (m)	DIR.	SPED Dz FORCE	METER (mbs)	DRY BULB	WET BULB					NO. D&L DEPTH						
							11	S20	132	267	256	8	14									
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>2</sub> -P PB - ml/l	TOTAL-P PB - ml/l	NO <sub>2</sub> -N PB - ml/l	NO <sub>3</sub> -N PB - ml/l	SiO <sub>2</sub> -Si PB - ml/l	pH	S CTD					
156		STD	0000	2717	3611	2352	0043804	0000	15410													
		OBS	0000	2717	36106	2352			15410													
		STD	0010	2712	3611	2353	0043699	0044	15411													
		STD	0020	2707	3611	2355	0043593	0087	15411													
		STD	0030	2703	3611	2356	0043488	0131	15412													
		STD	0050	2693	3611	2359	0043278	0218	15413													
156		OBS	0052	2692	36106	2360			15413													
		STD	0075	2601	3610	2388	0040644	0323	15396													
156		OBS	0078	2570	36099	2398			15390													
		STD	0100	2197	3619	2515	0028656	0409	15304													
156		OBS	0103	2148	36199	2529			15292													
		STD	0125	1717	3574	2606	0020014	0470	15170													
		STD	0150	1386	3538	2653	0015572	0515	15066													
156		OBS	0156	1332	35318	2659			15049													
		STD	0200	1285	3525	2663	0014668	0590	15039													
156		OBS	T0208	1273	35234	2665			15036													
		STD	0250	1173	3512	2675	0013640	0661	15008													
		STD	0300	1049	3497	2686	0012651	0727	14970													
156		OBS	0310	1023	34945	2689			14962													
		STD	0400	0768	3466	2707	0010645	0843	14878													
156		OBS	T0414	0739	34626	2709			14869													
		STD	0500	0624	3453	2717	0009742	0945	14836													
156		OBS	0519	0608	34516	2718			14833													
		STD	0600	0584	3451	2720	0009522	1041	14836													
156		OBS	T0625	0576	34500	2721Q																
		STD	0700	0541	3450	2725	0009167	1135	14835													
		STD	0800	0501	3448	2729	0008858	1225	14835													
156		OBS	T0831	0490	34479	2730			14836													
		STD	0900	0468	3455	2738	0008052	1310	14839													
		STD	1000	0445	3464	2747	0007200	1386	14847													
156		OBS	1050	0438	34689	2752			14854													
		STD	1100	0440	3474	2756	0006494	1454	14863													
		STD	1200	0443	3482	2762	0006047	1517	14882													
		STD	1300	0446	3489	2767	0005677	1576	14901													
156		OBS	1318	0447	34901	2768			14905													
		STD	1400	0440	3494	2772	0005325	1631	14916													
		STD	1500	0426	3497	2776	0005014	1682	14928													
156		OBS	T1658	0391	34972	2779			14940													

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1°/10'	LONGITUDE ° '10'	OBS. MOON	MARDEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NOOC STATION NUMBER
CTRY CODE	ID. NO.					10'	1°	MD	DAY	HR,1/10	CRUISE NO.		STATION NUMBER	DIR			HGT	PER	SEA		TYPE	AMT	
31	779	EV	0202 S	03630 W		303	26	02	01	212	1966		041	3676	36	12	2	2	X1	8	7	0003	
		WATER		WIND		BARO-METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS												
		COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB															
				09	S10	119	283	244	8	22													
MESSING TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-10 <sup>3</sup>	Σ Δ D CYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - dl/l	TOTAL-P μg - dl/l	NO <sub>2</sub> -N μg - dl/l	NO <sub>3</sub> -N μg - dl/l	SiO <sub>4</sub> -Si μg - dl/l	pH	SIC						
212		STD	0000	2720	3612	2352	0043774	0000	15411														
		OBS	0000	2720	36123	2352			15411														
		STD	0010	2719	3612	2352	0043792	0044	15412														
		STD	0020	2717	3612	2353	0043780	0088	15413														
		STD	0030	2713	3612	2354	0043707	0131	15414														
212		OBS	0042	2706	36118	2356			15415														
		STD	0050	2700	3611	2358	0043452	0218	15414														
212		OBS	0062	2690	36086	2359			15414														
		STD	0075	2667	3605	2364	0042978	0327	15411														
212		OBS	0083	2574	36031	2391			15391														
		STD	0100	2161	3612	2519	0028200	0415	15294														
212		OBS	0102	2110	36127	2534			15281														
212		OBS	0121	1595	35611	2625			15131														
		STD	0125	1546	3557	2633	0017446	0473	15116														
212		OBS	0141	1378	35394	2656			15062														
		STD	0150	1308	3529	2662	0014687	0513	15039														
212		OBS	T0159	1247	35197	2667			15019														
		STD	0200	1168	3510	2675	0013572	0583	14998														
212		OBS	0231	1110	35028	2680			14981														
		STD	0250	1082	3500	2683	0012891	0650	14974														
212		OBS	T0296	0992	34901	2691			14948														
		STD	0300	0979	3489	2692	0012056	0712	14944														
212		OBS	0364	0803	34674	2703			14886														
		STD	0400	0719	3459	2709	0010456	0824	14858														
212		OBS	T0440	0651	34532	2714			14837														
		STD	0500	0604	3451	2718	0009625	0925	14828														
212		OBS	T0513	0596	34503	2719			14827														
212		OBS	0591	0567	34502	2722			14828														
		STD	0600	0564	3450	2722	0009306	1019	14828														
212		OBS	0672	0543	34494	2725			14831														
		STD	0700	0530	3451	2727	0008922	1111	14831														
		STD	0800	0489	3456	2736	0008130	1196	14831														
		STD	0900	0460	3461	2744	0007487	1274	14837														
		STD	1000	0441	3467	2750	0006958	1346	14846														
222		OBS	T1006	0440	34669	2750			14847														
		STD	1100	0441	3473	2755	0006582	1414	14864														
		STD	1200	0442	3479	2760	0006249	1478	14881														
222		OBS	1256	0442	34823	2762			14891														
		STD	1300	0435	3485	2765	0005820	1538	14896														
		STD	1400	0421	3491	2771	0005292	1594	14908														
		STD	1500	0407	3495	2776	0004906	1645	14919														
222		OBS	T1507	0406	34951	2776			14920														
		STD	1750	0378	3496	2779	0004700	1765	14949														
		STD	2000	0350	3496	2783	0004483	1880	14980														
222		OBS	2016	0348	34960	2783			14982														
		STD	2500	0294	3494	2786	0004192	2097	15041														
222		OBS	T2515	0293	34937	2786			15043														
222		OBS	T2987	0268	34906	2786			15113														
		STD	3000	0267	3491	2786	0004343	2310	15115														
222		OBS	3645	0239	34865	2785			15215														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLING	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	NO.					10"	1"	MO	DAY		HR	MIN			CRUISE NO.	STATION NUMBER	DIR	HTY		PER	SEA	
31	779	EV	0137 S	03552 W	303	15	02	02	049	1966	051	4026	15	14	3	4	X2	3	8	0004		
						WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS						
						COLOR		DIR.		DRY BULB		WET BULB		/10 CODE								
						14		509		112		278		244		8		16				
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub> ?	± Δ D DTN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>3</sub> -N µg - ml/l	NO <sub>2</sub> -N µg - ml/l	Si O <sub>4</sub> -Si µg - ml/l	pH	3 C C					
		STD	0000	2703	3610	2356	0043396	0000	15407													
	049	OBS	0000	2703	36103	2356			15407													
		STD	0010	2702	3611	2357	0043363	0043	15408													
		STD	0020	2701	3611	2357	0043381	0087	15410													
		STD	0030	2701	3611	2357	0043398	0130	15411													
	049	OBS	0049	2699	36111	2358			15414													
		STD	0050	2695	3611	2359	0043317	0217	15413													
	049	OBS	0074	2603	36109	2388			15397													
		STD	0075	2576	3610	2396	0039871	0321	15391													
	049	OBS	0098	2029	35977	2545			15257													
		STD	0100	1986	3595	2554	0024882	0402	15245													
	049	OBS	0121	1617	35655	2623			15138													
		STD	0125	1572	3560	2629	0017790	0455	15124													
	049	OBS	0146	1378	35361	2653			15063													
		STD	0150	1356	3533	2655	0015338	0497	15056													
	049	OBS	0171	1243	35190	2667			15020													
		OBS	T0195	1113	35029	2679			14977													
		STD	0200	1101	3501	2680	0013034	0567	14973													
		STD	0250	0986	3488	2690	0012139	0630	14938													
	049	OBS	0295	0892	34775	2697			14909													
		STD	0300	0881	3476	2698	0011436	0689	14906													
	049	OBS	T0393	0719	34616	2711			14857													
		STD	0400	0712	3461	2712	0010210	0798	14856													
	049	OBS	0492	0640	34547	2716			14841													
		STD	0500	0636	3454	2716	0009829	0898	14841													
	049	OBS	T0591	0591	34521	2721			14838													
		STD	0600	0586	3452	2721	0009453	0994	14837													
		STD	0700	0533	3450	2726	0009050	1087	14832													
	049	OBS	T0787	0494	34477	2729			14830													
		STD	0800	0488	3449	2731	0008642	1175	14830													
		STD	0900	0452	3456	2740	0007779	1257	14833													
	049	OBS	0985	0433	34621	2747			14840													
		STD	1000	0434	3463	2748	0007130	1332	14843													
		STD	1100	0437	3471	2754	0006683	1401	14862													
		STD	1200	0441	3478	2759	0006312	1466	14881													
	049	OBS	1234	0442	34800	2760			14887													
		STD	1300	0439	3484	2764	0005946	1527	14898													
		STD	1400	0430	3491	2770	0005411	1584	14912													
	049	OBS	T1484	0418	34965	2776			14922													



TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	SECTION	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NDDC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO	DAY	HR./1/10		CRUISE NO.	STATION NUMBER			DR	HGT	PER	SEA		TYPE	AMT	
31	779	EV	0121 S	03516 W		303	15	02	02	107	1966	061	4371	40	14	2	2		X1	8	7		0005
		WATER		WIND		AIR TEMP. °C																	
		COLOR CODE		TRANS. (m)		DIR.		SPEED OF FORCE		BARO-METER (mmHg)		DRY BULB		WET BULB		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS			
		12		514		125		283		250		8		22									
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta$ DW. M. $\times 10^3$	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{dl}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{dl}^{-1}$	pH	SIC						
		STD	0000	2684	3607	2360	0043024	0000	15402														
107		OBS	0000	2684	36074	2360			15402														
		STD	0010	2683	3608	2360	0043022	0043	15404														
		STD	0020	2682	3608	2361	0043021	0086	15405														
		STD	0030	2680	3608	2361	0043019	0129	15406														
		STD	0050	2678	3608	2362	0043015	0215	15409														
107		OBS	0050	2678	36079	2362			15409														
		STD	0075	2560	3612	2402	0039289	0318	15387														
107		OBS	0075	2560	36119	2402			15387														
		STD	0100	2011	3593	2546	0025672	0399	15252														
107		OBS	0100	2011	35928	2546			15252														
		STD	0125	1648	3566	2616	0019030	0455	15148														
107		OBS	0126	1635	35648	2618			15144														
		STD	0150	1334	3532	2659	0014976	0498	15048														
107		OBS	0152	1318	35298	2661			15043														
107		OBS	0177	1241	35183	2667			15020														
		STD	0200	1184	3511	2672	0013792	0569	15003														
107		OBS	T0204	1174	35099	2673			15000														
		STD	0250	1049	3495	2685	0012686	0636	14962														
		STD	0300	0925	3481	2695	0011764	0697	14923														
107		OBS	0307	0909	34788	2696			14918														
		STD	0400	0710	3461	2712	0010181	0807	14855														
107		OBS	T0413	0692	34591	2713			14850														
		STD	0500	0642	3455	2716	0009836	0907	14844														
107		OBS	0518	0629	34538	2717			14841														
		STD	0600	0554	3449	2723	0009251	1002	14824														
107		OBS	T0624	0538	34487	2725			14821														
		STD	0700	0511	3449	2728	0008844	1093	14823														
107		OBS	0729	0503	34487	2729			14824														
		STD	0800	0490	3449	2731	0008653	1180	14831														
107		OBS	0834	0480	34495	2732			14832														
		STD	0900	0444	3457	2742	0007606	1261	14830														
107		OBS	0939	0432	34600	2746			14831														
		STD	1000	0436	3464	2748	0007087	1335	14844														
116		OBS	T1048	0438	34667	2750			14853														
		STD	1100	0439	3472	2754	0006638	1403	14863														
		STD	1200	0442	3480	2760	0006181	1467	14882														
		STD	1300	0445	3487	2766	0005801	1527	14901														
116		OBS	1311	0445	34872	2766			14902														
		STD	1400	0429	3491	2771	0005398	1583	14911														
		STD	1500	0413	3494	2775	0005059	1636	14922														
116		OBS	1594	0398	34966	2778			14932														
		STD	1750	0377	3496	2780	0004650	1757	14949														
		STD	2000	0345	3495	2782	0004487	1871	14978														
116		OBS	T2114	0332	34945	2783			14992														
		STD	2500	0291	3492	2785	0004294	2091	15040														
116		OBS	T2625	0281	34918	2786			15057														
		STD	3000	0268	3491	2787	0004301	2306	15116														
116		OBS	T3148	0261	34911	2787			15138														
		STD	4000	0194	3484	2787	0004118	2727	15258														
116		OBS	T4041	0190	34837	2787			15263														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° / 10'	LONGITUDE ° / 10'	MARSOEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLE	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		MODEC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DR.	HGT	PER		SEA	TYPE	
31	779	EV	0100 S	03437 W	303	14	02	176	1966		071	4389	16	12	2	4	X1	8	4	0006		
WATER		WIND		BARO-METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS													
COLDR CODE	TRNSL (m)	DIR.	SPEED OR FORCE		DRY RULE	WET RULE																
		10	S10	112	283	250	8	16														
MESSAGE TIME HR / 10'	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \theta$ OBS. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>3</sub> -N µg - ml/l	NO <sub>2</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	S/C					
		STD	0000	2713	3603	2347	0044263	0000	15408													
176		OBS	0000	2713	36025	2347			15408													
		STD	0010	2696	3604	2354	0043662	0044	15406													
		STD	0020	2678	3606	2361	0043023	0087	15404													
		STD	0030	2660	3607	2367	0042461	0130	15402													
		STD	0050	2625	3608	2379	0041413	0214	15397													
176		OBS	0053	2620	36082	2381			15397													
		STD	0075	2530	3608	2409	0038685	0314	15380													
176		OBS	0080	2476	36072	2424			15368													
		STD	0100	2110	3605	2528	0027340	0397	15279													
176		OBS	0106	2000	36001	2554			15250													
		STD	0125	1611	3563	2622	0018426	0454	15137													
176		OBS	0133	1499	35511	2639			15102													
		STD	0150	1404	3538	2649	0015936	0497	15072													
176		OBS	0160	1351	35311	2655			15056													
176		OBS	0186	1222	35126	2666			15014													
		STD	0200	1202	3510	2668	0014197	0572	15009													
176		OBS	T0214	1179	35068	2670			15003													
		STD	0250	1081	3494	2678	0013314	0641	14973													
		STD	0300	0960	3479	2688	0012478	0705	14936													
176		OBS	0319	0918	34738	2690			14922													
		STD	0400	0757	3459	2704	0011001	0823	14873													
176		OBS	T0426	0726	34557	2705			14865													
		STD	0500	0723	3455	2705	0010967	0933	14876													
176		OBS	0530	0703	34539	2707			14873													
		STD	0600	0590	3446	2716	0009942	1037	14838													
176		OBS	-T0636	0544	34434	2720			14825													
		STD	0700	0507	3444	2724	0009164	1133	14821													
		STD	0800	0464	3444	2730	0008699	1222	14820													
176		OBS	T0852	0449	34445	2731			14822													
		STD	0900	0445	3450	2736	0008135	1306	14829													
		STD	1000	0440	3461	2746	0007358	1384	14845													
176		OBS	1065	0438	34664	2750			14856													
		STD	1100	0439	3469	2752	0006851	1455	14862													
		STD	1200	0441	3475	2757	0006536	1522	14881													
		STD	1300	0443	3481	2761	0006224	1585	14899													
176		OBS	T1324	0444	34822	2762			14904													
		STD	1400	0436	3486	2766	0005857	1646	14913													
		STD	1500	0420	3491	2771	0005372	1702	14924													
176		OBS	T1606	0395	34950	2777			14932													

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER							
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DIR		HGT	PER		SEA	TPPL	AMT				
31	779	EV	0040 S	03402 W	303	04	02	227	1966		081	4206	26	11	2	3		X1	8	1	0007						
WATER		WIND		BARO-METER		AIR TEMP. °C		VEL CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS															
COLOR CODE		TRNSL. (m)		DIR.		SPEED OR FORCE		METER (m/hr)		DRY RULR		WET RULR		VCL CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
		11		S06		132		278		250		8		20													
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	D <sub>2</sub> m/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{ml}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{ml}^{-1}$	PH	SIG CODE										
		STD	0000	2693	3602	2353	0043694	0000	15404																		
227		OBS	0000	2693	36019	2353			15404																		
		STD	0010	2688	3602	2354	0043580	0044	15404																		
		STD	0020	2683	3602	2356	0043467	0087	15405																		
		STD	0030	2678	3602	2358	0043353	0131	15405																		
		STD	0050	2668	3602	2361	0043126	0217	15406																		
227		OBS	0051	2667	36019	2361			15406																		
227		OBS	0072	2453	36214	2442			15363																		
		STD	0075	2434	3622	2448	0034916	0315	15359																		
227		OBS	0096	2147	36235	2532			15291																		
		STD	0100	2005	3609	2560	0024349	0389	15252																		
227		OBS	0120	1489	35539	2643			15097																		
		STD	0125	1432	3546	2649	0015852	0439	15078																		
227		OBS	0143	1294	35254	2662			15033																		
		STD	0150	1287	3525	2663	0014573	0477	15032																		
227		OBS	0165	1265	35220	2665			15027																		
227		OBS	T0189	1206	35138	2670			15009																		
		STD	0200	1196	3512	2671	0013939	0548	15007																		
		STD	0250	1129	3504	2677	0013429	0617	14991																		
227		OBS	0278	1075	34979	2682			14976																		
		STD	0300	0998	3489	2689	0012372	0681	14951																		
227		OBS	T0367	0823	34712	2703			14894																		
		STD	0400	0793	3471	2708	0010645	0796	14888																		
227		OBS	0458	0733	34671	2713			14874																		
		STD	0500	0678	3459	2715	0010035	0900	14858																		
227		OBS	T0549	0623	34529	2717			14844																		
		STD	0600	0577	3451	2722	0009401	0997	14834																		
227		OBS	T0640	0549	34498	2724			14829																		
		STD	0700	0523	3450	2727	0008929	1088	14828																		
227		OBS	0735	0507	34495	2729			14827																		
		STD	0800	0472	3450	2733	0008369	1175	14824																		
227		OBS	T0831	0459	34505	2735			14823																		
		STD	0900	0451	3456	2740	0007777	1256	14832																		
		STD	1000	0440	3464	2748	0007153	1330	14845																		
237		OBS	T1001	0440	34639	2748			14846																		
		STD	1100	0442	3471	2753	0006738	1400	14864																		
		STD	1200	0443	3478	2759	0006341	1465	14882																		
237		OBS	T1263	0444	34819	2762			14893																		
		STD	1300	0437	3484	2764	0005920	1527	14897																		
		STD	1400	0421	3490	2771	0005365	1583	14908																		
		STD	1500	0405	3495	2776	0004880	1634	14919																		
237		OBS	T1546	0398	34968	2778			14924																		
		STD	1750	0374	3496	2781	0004580	1752	14948																		
		STD	2000	0345	3496	2783	0004421	1865	14978																		
237		OBS	T2067	0338	34958	2784			14986																		
		STD	2500	0294	3494	2786	0004192	2080	15041																		
237		OBS	2566	0288	34935	2787			15050																		

TABLE I.—Continued

REFERENCE	SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MAP/DEN SQU ARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		MOOC STATION NUMBER			
					10"	1'	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR	HGT		PER	SEA		TYM	AMT	
31	779	EV	0020 S	03325 W	303	03	02	03	058	1966		091	4389	17	10	1	2		X1	8	6		0008
				WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
				COLOR CODE	TRANS. (M)	DIR.	SPEED OR FORCE	METER (MBS)	DRY BULB	WET BULB	VTL CODE												
						13	S14	112	267	244	8	13											
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (M)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> M/L	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	PH	STATION NO.						
		STD	0000	2674	3601	2358	0043173	0000	15399														
058		OBS	0000	2674	36011	2358			15399														
		STD	0010	2670	3601	2360	0043099	0043	15400														
		STD	0020	2666	3601	2361	0043023	0086	15401														
		STD	0030	2663	3601	2362	0042949	0129	15402														
		STD	0050	2655	3601	2364	0042799	0215	15403														
058		OBS	0052	2654	36011	2365			15403														
058		OBS	0069	2423	36272	2456			15356														
		STD	0075	2376	3625	2468	0033059	0310	15345														
		STD	0100	2077	3614	2544	0025839	0383	15272														
058		OBS	0105	1997	36117	2564			15251														
		STD	0125	1563	3559	2630	0017667	0438	15121														
058		OBS	0131	1477	35481	2641			15094														
		STD	0150	1374	3536	2654	0015477	0479	15062														
058		OBS	0158	1338	35315	2658			15051														
		STD	0200	1228	3515	2667	0014315	0554	15019														
058		OBS	T0210	1201	35118	2670			15011														
		STD	0250	1077	3497	2681	0013024	0622	14972														
		STD	0300	0948	3482	2692	0012062	0685	14932														
058		OBS	0316	0912	34778	2694			14920														
		STD	0400	0777	3465	2705	0010851	0799	14881														
058		OBS	0422	0746	34624	2708			14873														
		STD	0500	0666	3463	2719	0009580	0901	14854														
		STD	0600	0580	3464	2731	0008515	0992	14836														
		STD	0700	0514	3464	2740	0007750	1073	14826														
		STD	0800	0467	3465	2745	0007227	1148	14823														
058		OBS	T0852	0451																			
		STD	0900	0447	3465	2748	0007037	1219	14832														
		STD	1000	0441	3466	2749	0007017	1290	14846														
058		OBS	T1066	0439	34662	2750			14856														
		STD	1100	0440	3469	2752	0006860	1359	14863														
		STD	1200	0441	3477	2758	0006389	1425	14881														
		STD	1300	0443	3484	2763	0005995	1487	14899														
063		OBS	1317	0443	34848	2764			14902														
		STD	1400	0436	3489	2768	0005637	1545	14914														
		STD	1500	0422	3493	2773	0005253	1600	14925														
063		OBS	T1660	0387	34954	2778			14938														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	DATE MO DAY HR.1/10	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NODC STATION NUMBER	
CRUISE CODE	ID. NO.					10"	1"	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			CR.	HGT	PER	SEA		TYN	AMT		
31	779	EV	0002 N	032495W	004 02 02 03 118	004	02	02	03	118	1966	101	4435	09	36	3	3	X1	8	6	0009			
		WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS												
		COLOR CODE		TRANS. M		DIR. SMO OR FORCE		DRY BULB		WET BULB		VIL. CODE												
				13		S10		142		289		258 8		15										
MESSAGE NO. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	$\frac{\sigma}{\rho}$ O. CYN. 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} - \text{ml/l}$	TOTAL-P $\mu\text{g} - \text{ml/l}$	NO <sub>2</sub> -N $\mu\text{g} - \text{ml/l}$	NO <sub>3</sub> -N $\mu\text{g} - \text{ml/l}$	Si O <sub>4</sub> -Si $\mu\text{g} - \text{ml/l}$	pH	1/10							
118		STD	0000	2686	3596	2350	0043934	0000	15401															
		OBS	0000	2686	35956	2350			15401															
		STD	0010	2677	3597	2354	0043595	0044	15401															
		STD	0020	2668	3599	2358	0043249	0087	15401															
		STD	0030	2658	3600	2362	0042911	0130	15401															
		STD	0050	2640	3603	2370	0042226	0215	15400															
118		OBS	0051	2639	36029	2371			15400															
		STD	0075	2504	3621	2426	0036997	0314	15375															
118		OBS	0076	2490	36217	2431			15372															
		STD	0100	1931	3603	2574	0022967	0389	15231															
118		OBS	0100	1931	36025	2574			15231															
118		OBS	0124	1506	35528	2638			15103															
		STD	0125	1500	3552	2639	0016830	0439	15101															
118		OBS	0148	1386	35368	2652			15066															
		STD	0150	1385	3536	2652	0015669	0480	15066															
118		OBS	0172	1335	35313	2658			15052															
118		OBS	T0197	1198	35128	2671			15008															
		STD	0200	1194	3512	2671	0013902	0554	15007															
		STD	0250	1110	3501	2678	0013310	0622	14984															
118		OBS	0280	1047	34940	2684			14966															
		STD	0300	0974	3487	2691	0012120	0685	14942															
118		OBS	T0382	0764	34655	2708			14873															
		STD	0400	0757	3464	2708	0010632	0799	14873															
118		OBS	0476	0704	34580	2710			14865															
		STD	0500	0669	3455	2713	0010206	0903	14854															
118		OBS	T0573	0584	34498	2720			14832															
		STD	0600	0568	3450	2722	0009387	1001	14830															
118		OBS	T0673	0525	34490	2726			14824															
		STD	0700	0504	3449	2729	0008719	1092	14820															
118		OBS	0776	0465	34497	2734			14817															
		STD	0800	0459	3450	2735	0008208	1176	14818															
118		OBS	T0872	0457	34533	2738			14830															

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARS DEN SQUARE	STATION TIME IGMTI				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO	DAY		HR	1/10			CRUISE NO.	STATION NUMBER	OR.	HGT		PER	SEA	
31	779	EV	0021 N	03223 W	004	02	02	03	192	1966	111	4206	16	34	3	2	X2	8	8	0010		
				WATER		WIND		BARO- METER		AIR TEMP. °C		NO. DRS. DEPTHS		SPECIAL OBSERVATIONS								
				COLOR CODE		TRANS. DIR.		SPEED OR FORCE		DRY RULR		WET RULR		VS CODE								
				07		S04		112		267		250		8								
MESSNGR TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>2</sub> -Si µg - ml/l	pH	S C					
		STD	0000	2704	3581	2333	0045555	0000	15404													
192		OBS	0000	2704	35807	2333			15404													
		STD	0010	2695	3582	2337	0045240	0045	15404													
		STD	0020	2687	3584	2341	0044875	0090	15404													
		STD	0030	2678	3587	2346	0044436	0135	15404													
		STD	0050	2661	3596	2359	0043350	0223	15404													
192		OBS	0051	2660	35961	2359			15404													
		STD	0075	2514	3612	2416	0037928	0324	15376													
192		OBS	0077	2485	36121	2425			15370													
		STD	0100	1937	3600	2571	0023297	0401	15232													
192		OBS	0102	1897	35986	2580			15221													
		STD	0125	1571	3560	2629	0017768	0452	15124													
		STD	0150	1352	3533	2656	0015258	0494	15055													
192		OBS	0155	1325	35291	2659			15046													
192		OBS	0181	1275	35208	2662			15032													
		STD	0200	1212	3513	2669	0014163	0567	15013													
192		OBS	T0208	1187	35106	2671			15005													
		STD	0250	1104	3500	2679	0013277	0636	14982													
		STD	0300	1006	3489	2688	0012507	0700	14954													
192		OBS	0313	0980	34862	2690			14946													
		STD	0400	0800	3468	2704	0010971	0818	14891													
192		OBS	T0420	0767	34645	2706			14881													
		STD	0500	0696	3457	2711	0010435	0925	14865													
		STD	0600	0616	3451	2717	0009919	1026	14849													
192		OBS	0629	0595	34500	2719			14845													
		STD	0700	0539	3450	2725	0009105	1122	14835													
		STD	0800	0481	3450	2732	0008488	1210	14827													
192		OBS	T0836	0466	34499	2734			14827													
		STD	0900	0455	3453	2738	0008038	1292	14834													
		STD	1000	0442	3460	2745	0007457	1370	14846													
192		OBS	T1040	0439	34629	2747			14852													
		STD	1100	0439	3469	2752	0006856	1441	14862													
		STD	1200	0440	3479	2760	0006223	1507	14881													
192		OBS	1298	0440	34857	2765			14898													
		STD	1300	0440	3486	2765	0005813	1567	14898													
		STD	1400	0432	3491	2770	0005437	1623	14913													
		STD	1500	0418	3494	2774	0005126	1676	14924													
192		OBS	T1625	0395	34957	2778			14935													



TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	MO	MARSDEN SQUARE			STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		MOOC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MD	DAY	HR./10	CRUISE NO.		STATION NUMBER	DIR.			HGT	PER	SEA		TTN	AMT	
31	779	EV	0108 N	03107 W	004	11	02	04	087	1966	131	2834	17	12	2	2	X8	8	7	0012			
		WATER		WIND		BARO-METER		AIR TEMP. °C			VIS. CODE		SPECIAL OBSERVATIONS										
		COLOR CODE		TRANS. (M)		DIR.		SPEED OR FORCE		METER (mm)		DRY BULB		WET BULB		VIS. CODE		NO. DES. DEPTHS					
								10		S17		132		267		244		7		13			
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10 <sup>3</sup>	Σ Δ D DYN. M. X 10 <sup>2</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH							
087		STD	0000	2706	3575	2328	0046025	0000	15404														
		OBS	0000	2706	35750	2328			15404														
		STD	0010	2697	3577	2333	0045651	0046	15404														
		STD	0020	2688	3579	2337	0045280	0091	15403														
		STD	0030	2679	3580	2341	0044979	0136	15403														
		STD	0050	2662	3583	2349	0044308	0226	15403														
087		OBS	0053	2659	35838	2350			15403														
		STD	0075	2364	3587	2442	0035450	0325	15338														
087		OBS	0080	2262	35873	2472			15313														
		STD	0100	1655	3562	2611	0019398	0394	15146														
087		OBS	0106	1519	35557	2638			15104														
		STD	0125	1392	3539	2652	0015549	0438	15064														
		STD	0150	1277	3524	2664	0014455	0475	15028														
087		OBS	0160	1247	35203	2667			15019														
087		OBS	0186	1213	35159	2671			15012														
		STD	0200	1207	3515	2671	0013923	0546	15012														
087		OBS	T0216	1196	35133	2672			15010														
		STD	0250	1157	3509	2676	0013568	0615	15002														
		STD	0300	1078	3501	2684	0012862	0681	14981														
087		OBS	0323	1034	34960	2688			14968														
		STD	0400	0821	3473	2705	0010919	0800	14899														
087		OBS	T0433	0749	34652	2710			14876														
		STD	0500	0678	3459	2715	0010035	0905	14858														
		STD	0600	0593	3452	2720	0009538	1002	14840														
087		OBS	0649	0560	34500	2723			14835														
		STD	0700	0540	3450	2725	0009125	1096	14835														
		STD	0800	0505	3450	2729	0008798	1185	14837														
087		OBS	T0864	0487	34497	2731			14840														
		STD	0900	0484	3454	2735	0008329	1271	14846														
		STD	1000	0474	3464	2744	0007569	1351	14859														
		STD	1100	0464	3473	2752	0006880	1423	14873														
		STD	1200	0454	3481	2760	0006264	1488	14887														
		STD	1300	0442	3487	2766	0005766	1549	14899														
087		OBS	1341	0437	34893	2768			14904														
		STD	1400	0430	3492	2771	0005338	1604	14912														
		STD	1500	0417	3495	2775	0005040	1656	14924														
087		OBS	T1674	0392	34970	2779			14943														



TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE	LONGITUDE	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S/MPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	JO. NO.					10"	1'	MO		DAY	N.L./10			CRUISE NO.	STATION NUMBER	DIR	HGT		PER	SEA	
31	779	EV	0121 N	03022 W	004	10	02	04	145	1966	141	1829	16	10	2	3	X1	3	2	0013	
				WATER		WIND		BARO-METER		AIR TEMP. °C		SPECIAL OBS. DEPTHS		SPECIAL OBSERVATIONS							
				COLOR CODE	TRANL. (M)	DIR.	SPEED OR FORCE	(Mph)	DRY BULB	WET BULB	VIS. CODE										
						11	504	132	300	272	8	15									
MEASURED TIME HB 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	σ <sub>t</sub> ‰	SIOMA-T	SPECIFIC VOLUME ANOMALY-δ <sub>s</sub>	Σ Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TC - AL - P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	Si D <sub>4</sub> -Si μg - ml/l	pH	SEC				
		STD	0000	2748	3563	2306	0048209	0000	15412												
145		OBS	0000	2748	35626	2306			15412												
		STD	0010	2729	3563	2312	0047636	0048	15409												
		STD	0020	2713	3564	2318	0047114	0095	15407												
145		OBS	0027	2704	35656	2322			15407												
		STD	0030	2702	3566	2323	0046659	0142	15407												
		STD	0050	2685	3572	2333	0045792	0235	15407												
145		OBS	0053	2682	35725	2334			15407												
		STD	0075	2459	3581	2410	0038562	0340	15360												
145		OBS	0080	2400	35829	2429			15347												
		STD	0100	2140	3593	2511	0029023	0425	15286												
145		OBS	0106	2043	35955	2539			15261												
		STD	0125	1569	3555	2626	0018089	0483	15123												
145		OBS	0138	1370	35361	2655			15059												
		STD	0150	1309	3528	2661	0014779	0525	15040												
145		OBS	0160	1266	35224	2665			15026												
		STD	0200	1186	3513	2674	0013682	0596	15004												
145		OBS	T0214	1164	35098	2675			14998												
		STD	0250	1138	3507	2678	0013391	0663	14995												
		STD	0300	1102	3502	2681	0013181	0730	14990												
145		OBS	0320	1087	35005	2682			14987												
		STD	0400	0801	3470	2706	0010839	0850	14891												
150		OBS	T0413	0765	34666	2708			14879												
		STD	0500	0674	3458	2714	0010053	0954	14857												
		STD	0600	0594	3452	2720	0009551	1052	14841												
150		OBS	0624	0579	34506	2721			14838												
		STD	0700	0553	3450	2724	0009271	1146	14840												
		STD	0800	0520	3450	2728	0008990	1238	14843												
150		OBS	0834	0509	34496	2729			14844												
		STD	0900	0483	3458	2738	0008021	1323	14846												
		STD	1000	0454	3469	2750	0006945	1398	14852												
150		OBS	1047	0445	34736	2755			14857												
		STD	1100	0445	3476	2757	0006412	1464	14866												
		STD	1200	0444	3481	2761	0006138	1527	14883												
		STD	1300	0444	3485	2764	0005939	1588	14900												
150		OBS	T1308	0444	34856	2765			14901												
		STD	1400	0434	3489	2768	0005611	1645	14913												
		STD	1500	0417	3493	2773	0005186	1699	14923												
150		OBS	T1589	0397	34967	2778			14930												

TABLE I.—Continued

REFERENCE CTRY CODE	SNIP NO.	SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARSSEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TD BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES TYPE AMT	MOCC STATION NUMBER	
						10"	1'	MO DAY HR./10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER				SEA
31	779	EV	0147 N	02959 W	003	19	02	04	197	1966	151	2926	17	13	3	3	X1	8	6	0014
						WATER		WIND		BARO- METER		AIR TEMP. °C		VIB CODE	NO. OBS. DEPTH	SPECIAL OBSERVATIONS				
						CO. DR CODE	TRANS M	DIR.	SPEED OR FORCE	DRY BULB	WET BULB									
						12	510	112	283	250	8	14								
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub> ?	Σ Δ D OYN. M. R 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>2</sub> -Si pg - ml/l	pH	Σ CODE			
		STD	0000	2758	3555	2297	0049072	0000	15413											
197		OBS	0000	2758	35549	2297			15413											
		STD	0010	2742	3555	2302	0048619	0049	15411											
		STD	0020	2726	3555	2307	0048167	0097	15409											
197		OBS	0027	2715	35549	2310			15408											
		STD	0030	2711	3558	2314	0047516	0145	15408											
		STD	0050	2682	3571	2333	0045797	0238	15406											
197		OBS	0053	2678	35721	2335			15406											
		STD	0075	2522	3575	2386	0040823	0347	15374											
197		OBS	0080	2440	35756	2411			15356											
		STD	0100	1857	3563	2563	0024022	0428	15205											
197		OBS	0107	1700	35590	2598			15160											
		STD	0125	1548	3550	2627	0017999	0480	15116											
		STD	0150	1381	3537	2653	0015545	0522	15065											
197		OBS	0161	1324	35320	2661			15047											
197		OBS	0187	1230	35198	2670			15018											
		STD	0200	1208	3516	2672	0013869	0596	15012											
197		OBS	T0215	1185	35124	2673			15006											
		STD	0250	1184	3512	2673	0013843	0665	15011											
		STD	0300	1141	3506	2677	0013618	0734	15004											
197		OBS	0322	1106	35026	2680			14995											
		STD	0400	0874	3478	2701	0011370	0859	14920											
197		OBS	T0430	0797	34696	2706			14895											
		STD	0500	0715	3467	2716	0009974	0965	14874											
		STD	0600	0616	3463	2726	0009032	1060	14851											
		STD	0700	0541	3459	2732	0008457	1148	14837											
		STD	0800	0487	3455	2736	0008171	1231	14830											
197		OBS	T0858	0467	34529	2736			14832											
		STD	0900	0465	3458	2740	0007793	1311	14838											
		STD	1000	0461	3468	2749	0007107	1385	14855											
197		OBS	T1074	0458	34742	2754			14867											
		STD	1100	0457	3476	2756	0006572	1454	14871											
		STD	1200	0454	3483	2761	0006120	1517	14887											
		STD	1300	0451	3488	2766	0005816	1577	14903											
197		OBS	1342	0450	34900	2767			14910											
		STD	1400	0443	3492	2770	0005512	1633	14917											
		STD	1500	0428	3495	2774	0005187	1687	14928											
197		OBS	T1682	0386	34972	2780			14942											

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	MARS DEN SQUARE	STATION TIME (GMT)					YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEA- TNER CODE	CLDUD CODES		NDDC STATION NUMBER				
CRUISE CODE	ID. NO.					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER		SEA	TYPE		AMT			
31	779	EV	0200 N	029185W	003	29	02	05	012	1966		161	3163	25	11	1	2	X1	8	3	0015					
		WATER		WIND		BARD- METER		AIR TEMP. °C		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS												
		COLDR CODE		TRANS. UN)		DIR.		SPEED OR FORCE		METER (mb)		DRY BULB		WET BULB		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS						
						12		S06		135		278		250		8		20								
MESSAGE TIME NR 1/10	CASST NO.	CASST TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY-310?	Σ Δ O DTN. M. X 10 <sup>3</sup>	SDUND VELDCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - at/l	TOTAL-P μg - at/l	NO <sub>3</sub> -N μg - at/l	NO <sub>2</sub> -N μg - at/l	SID <sub>4</sub> -SI μg - at/l	pH	σ <sub>t</sub>									
		STD	0000	2742	3560	2306	0048189	0000	15410																	
012		OBS	0000	2742	35603	2306			15410																	
		STD	0010	2728	3562	2312	0047671	0048	15409																	
		STD	0020	2714	3564	2318	0047129	0095	15407																	
		STD	0030	2699	3566	2324	0046592	0142	15406																	
		STD	0050	2671	3569	2335	0045593	0234	15403																	
012		OBS	0052	2668	35695	2336			15403																	
		STD	0075	2124	3572	2500	0029967	0329	15275																	
012		OBS	0078	2051	35728	2520			15256																	
		STD	0100	1472	3545	2640	0016678	0387	15087																	
012		OBS	0103	1426	35423	2648			15072																	
		STD	0125	1351	3535	2658	0015023	0427	15050																	
012		OBS	0128	1342	35341	2659			15048																	
		STD	0150	1276	3526	2666	0014289	0463	15028																	
012		OBS	0154	1269	35247	2666			15026																	
012		OBS	0179	1254	35230	2668			15025																	
		STD	0200	1202	3515	2672	0013830	0534	15010																	
012		OBS	T0205	1191	35139	2673			15007																	
		STD	0250	1146	3508	2677	0013442	0602	14998																	
		STD	0300	1068	3499	2684	0012834	0668	14977																	
012		OBS	0307	1055	34981	2686			14974																	
		STD	0400	0816	3475	2707	0010696	0785	14898																	
012		OBS	T0410	0795	34730	2709			14891																	
		STD	0500	0645	3458	2718	0009655	0887	14845																	
012		OBS	0513	0628	34567	2720			14840																	
		STD	0600	0554	3451	2724	0009103	0981	14824																	
012		OBS	T0618	0543	34501	2725			14823																	
		STD	0700	0520	3451	2728	0008825	1070	14827																	
012		OBS	T0722	0513	34506	2729			14828																	
		STD	0800	0486	3452	2733	0008395	1156	14830																	
012		OBS	0826	0478	34527	2735			14831																	
		STD	0900	0459	3456	2739	0007866	1238	14836																	
012		OBS	T0931	0454	34577	2741			14839																	
		STD	1000	0454	3466	2748	0007166	1313	14852																	
021		OBS	1032	0454	34690	2750			14857																	
		STD	1100	0452	3476	2756	0006503	1381	14869																	
		STD	1200	0449	3484	2763	0005974	1444	14885																	
021		OBS	T1285	0446	34893	2767			14899																	
		STD	1300	0442	3490	2768	0005546	1501	14900																	
		STD	1400	0420	3493	2773	0005132	1555	14908																	
		STD	1500	0400	3496	2778	0004740	1604	14917																	
150		OBS	1559	0389	34966	2779			14922																	
		STD	1750	0364	3496	2781	0004497	1720	14944																	
		STD	2000	0334	3495	2783	0004373	1830	14973																	
150		OBS	2061	0328	34942	2783			14981																	
		STD	2500	0289	3493	2786	0004193	2045	15039																	
150		OBS	T2543	0286	34930	2786			15045																	

TABLE I.—Continued

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	STATION	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SWMPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER
ETW CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DIR.		HGT PER	SEA	
31	779	EV	0218 N	02842 W	003	28	02 05	069	1966	171	1646	15	11	1	3	X1	8	6	0016	
		WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
		COLOR CODE	TRANS. INI	DIR.	SPEED OR FORCE	DRY BULB	WET BULB	VIS. CODE												
				12	SO2	125	278	250	8	15										
MESSAGE TIME 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D OYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	SEC			
		STD	0000	2706	3572	2326	0046248	0000	15403											
069		OBS	0000	2706	35719	2326			15403											
		STD	0010	2705	3572	2326	0046252	0046	15405											
		STD	0020	2702	3572	2327	0046202	0092	15406											
069		OBS	0025	2700	35721	2328			15406											
		STD	0030	2700	3573	2329	0046132	0139	15407											
069		OBS	0049	2680	35751	2337			15406											
		STD	0050	2677	3576	2338	0045273	0230	15406											
069		OBS	0074	2603	35814	2366			15393											
		STD	0075	2546	3580	2383	0041168	0338	15380											
069		OBS	0098	1534	35518	2631			15107											
		STD	0100	1519	3550	2633	0017302	0411	15102											
		STD	0125	1361	3534	2655	0015294	0452	15054											
069		OBS	0148	1267	35234	2666			15025											
		STD	0150	1266	3523	2666	0014318	0489	15025											
069		OBS	0198	1229	35181	2669			15019											
		STD	0200	1227	3518	2670	0014077	0560	15019											
		STD	0250	1161	3510	2676	0013567	0629	15003											
069		OBS	0296	1083	35015	2684			14982											
		STD	0300	1074	3501	2685	0012792	0695	14980											
069		OBS	T0395	0862	34801	2704			14915											
		STD	0400	0847	3479	2706	0010875	0813	14910											
069		OBS	0494	0633	34568	2719			14839											
		STD	0500	0626	3456	2719	0009546	0915	14837											
069		OBS	T0595	0532	34501	2726			14814											
		STD	0600	0530	3450	2727	0008865	1007	14814											
		STD	0700	0496	3451	2731	0008516	1094	14817											
069		OBS	T0795	0474	34510	2734			14824											
		STD	0800	0474	3451	2734	0008292	1178	14824											
		STD	0900	0465	3457	2740	0007865	1259	14838											
		STD	1000	0457	3463	2745	0007428	1336	14852											
069		OBS	1002	0457	34631	2745			14853											
		STD	1100	0455	3474	2754	0006690	1406	14870											
		STD	1200	0450	3483	2762	0006065	1470	14885											
069		OBS	T1260	0445	34868	2765			14894											
		STD	1300	0441	3489	2768	0005606	1528	14899											
		STD	1400	0429	3493	2772	0005251	1583	14912											
069		OBS	T1478	0417	34951	2775			14920											

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	OBS. NO.	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPLS	WAVE OBSERVATIONS			WEA-TNR CODE	CLOUD CODES		NOOC STATION NUMBER			
CTRY CODE	NO. NO.					10"	1"	MO	DAY	HR. 1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TYPE		AMT		
31	779	EV	0239 N	028015W	003	28	02	05	130	1966	181	3583	32	02	2	3		X1	8	6	0017				
		WATER		WIND		AIR TEMP. °C								SPECIAL OBSERVATIONS											
		GOLD CODE		TRANS. (m)		DIR.		SPEED OF FORCE		BARO-METER (mbars)		DRY BULB		WET BULB		VIS. CODE		NO. DES. DEPTHS							
				07		S02		146		283		250		8		20									
MESSAGE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	σ <sub>t</sub> ‰	SIGMA-t	SPECIFIC VOLUME ANOMALY-210°	Σ Δ D DYN. M. x 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - 01/l	TOTAL-P μg - 01/l	NO <sub>2</sub> -N μg - 01/l	NO <sub>3</sub> -N μg - 01/l	SI O <sub>4</sub> -Si μg - 01/l	pH	SEC								
		STD	0000	2763	3535	2280	0050686	0000	15412																
130		OBS	0000	2763	35346	2280			15412																
		STD	0010	2729	3549	2301	0048642	0050	15408																
		STD	0020	2703	3560	2318	0047095	0098	15405																
130		OBS	0023	2697	35631	2322			15404																
		STD	0030	2691	3566	2326	0046335	0144	15404																
130		OBS	0047	2676	35729	2336			15404																
		STD	0050	2657	3576	2345	0044660	0235	15401																
130		OBS	0070	2528	35796	2388			15375																
		STD	0075	2216	3571	2473	0032512	0332	15299																
130		OBS	0093	1458	35484	2645			15082																
		STD	0100	1432	3545	2648	0015852	0392	15074																
130		OBS	0118	1356	35356	2657			15051																
		STD	0125	1320	3532	2662	0014633	0430	15040																
130		OBS	0132	1289	35284	2665			15030																
		STD	0150	1265	3525	2667	0014152	0466	15025																
130		OBS	T0192	1212	35170	2672			15012																
		STD	0200	1203	3516	2673	0013776	0536	15010																
		STD	0250	1145	3509	2678	0013350	0604	14998																
130		OBS	0299	1089	35021	2683			14985																
		STD	0300	1088	3502	2683	0012964	0670	14985																
		STD	0400	0977	3491	2694	0012086	0795	14960																
130		OBS	T0407	0965	34894	2695			14956																
		STD	0500	0719	3466	2715	0010098	0906	14875																
130		OBS	0529	0666	34614	2718			14859																
		STD	0600	0592	3456	2724	0009228	1002	14840																
130		OBS	T0632	0565	34542	2726			14834																
		STD	0700	0519	3451	2729	0008775	1092	14826																
130		OBS	T0742	0498	34509	2731			14825																
		STD	0800	0478	3452	2734	0008295	1178	14826																
130		OBS	0852	0466	34538	2737			14830																
		STD	0900	0461	3456	2739	0007891	1259	14836																
130		OBS	T0957	0458	34609	2743			14845																
		STD	1000	0458	3466	2748	0007217	1334	14853																
144		OBS	1046	0457	34718	2752			14861																
		STD	1100	0452	3476	2756	0006504	1403	14869																
		STD	1200	0442	3483	2763	0005960	1465	14882																
		STD	1300	0431	3489	2769	0005474	1522	14895																
144		OBS	T1307	0430	34893	2769			14896																
		STD	1400	0418	3492	2773	0005179	1576	14907																
		STD	1500	0406	3494	2775	0004966	1626	14919																
144		OBS	1610	0392	34964	2779			14932																
		STD	1750	0372	3496	2780	0004583	1746	14947																
		STD	2000	0341	3495	2783	0004432	1858	14976																
144		OBS	T2153	0324	34947	2784			14995																
		STD	2500	0292	3493	2786	0004236	2075	15040																
		STD	3000	0261	3491	2787	0004217	2286	15113																
144		OBS	T3190	0254	34901	2787			15143																

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE I/10	LONGITUDE I/10	SOUNDING METER	MARSSEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NOOC STATION NUMBER			
CTW CODE	ID. NO.					10"	1"	MO	DAY	HR	MIN		SEC	CRUISE NO.			STATION NUMBER	DIR	HGT		PER	SEA		TYPE	AMT	
31	779	EV	0300 N	02730 W	003	37	02	05	195	1966		191	3931	17	01	3	3	X2	8	8	0018					
		WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE		SPECIAL OBSERVATIONS														
		COLOR CODE		TRANS. DIR.		SPEED OR FORCE		DRY BULB		WET BULB																
				02		510		119		278		250		8		10										
MESSAGE TIME NR I/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-2107	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - at/l	TOTAL-P µg - at/l	NO <sub>2</sub> -N µg - at/l	NO <sub>3</sub> -N µg - at/l	SiO <sub>4</sub> -Si µg - at/l	PN	SC									
195		STD	0000	2749	3526	2278	0050842	0000	15408																	
		OBS	0000	2749	35264	2278			15408																	
		STD	0010	2731	3536	2291	0049652	0050	15407																	
		STD	0020	2713	3545	2304	0048475	0099	15405																	
		STD	0030	2695	3555	2316	0047290	0147	15404																	
		STD	0050	2659	3573	2342	0044937	0239	15401																	
195		OBS	0054	2652	35769	2347			15401																	
		STD	0075	1844	3561	2565	0023769	0325	15197																	
195		OBS	0085	1609	35550	2617			15128																	
		STD	0100	1499	3549	2637	0016952	0376	15096																	
195		OBS	0109	1441	35454	2647			15078																	
		STD	0125	1403	3540	2651	0015698	0417	15068																	
		STD	0150	1347	3533	2657	0015159	0456	15053																	
		STD	0200	1241	3520	2668	0014194	0529	15024																	
195		OBS	T0220	1202	35155	2672			15013																	
		STD	0250	1156	3512	2678	0013330	0598	15002																	
		STD	0300	1079	3506	2688	0012513	0662	14982																	
		STD	0400	0931	3494	2704	0011105	0780	14943																	
195		OBS	T0436	0879	34887	2708			14929																	
		STD	0500	0774	3476	2714	0010165	0887	14898																	
		STD	0600	0638	3461	2722	0009479	0985	14859																	
195		OBS	T0652	0581	34560	2725			14844																	
		STD	0700	0561	3457	2728	0008873	1077	14844																	
		STD	0800	0525	3459	2734	0008376	1163	14847																	
		STD	0900	0495	3462	2740	0007879	1244	14851																	
		STD	1000	0470	3467	2747	0007296	1320	14858																	
195		OBS	1080	0455	34715	2752			14866																	
		STD	1100	0454	3474	2754	0006677	1390	14869																	
		STD	1200	0446	3482	2762	0006086	1454	14884																	
		STD	1300	0436	3489	2768	0005540	1512	14897																	
195		OBS	T1344	0432	34916	2771			14903																	
		STD	1400	0426	3492	2772	0005255	1566	14910																	
		STD	1500	0414	3494	2774	0005087	1618	14922																	
195		OBS	T1680	0390	34963	2779			14943																	

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARSSEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PLS	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NOCC STATION NUMBER
CTRY CODE	IO. NO.					10"	1"	MO		DAY	HR. 1/10			CRUISE NO.	STATION NUMBER	DIR.		HGT	PER	
31	779	EV	0241 N	028075 W	003	28	02	06	012	1966	182	3658	15	04	2	2	X1	8	7	0019
		WATER		WIND		AIR TEMP. °C		BARO-METER (mb)		WET BULB		VIL. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS				
		COLOR C-DE		TRANS. (m)		DIR.		SPEED OR FORCE		WET BULB		VIL. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS				
				04		S06		149		267		244		8		13				
MESSING TIME NE 1/10	CASIT NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-3107	Σ Δ D DYN. M. x 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - at/l	TOTAL-P μg - at/l	NO <sub>2</sub> -N μg - at/l	NO <sub>3</sub> -N μg - at/l	SiO <sub>2</sub> -Si μg - at/l	pH	CO <sub>2</sub>			
		STD	0000	2742	3537	2288	0049893	0000	15407											
012		OBS	0000	2742	35366	2288			15407											
		STD	0010	2726	3554	2306	0048190	0049	15407											
		STD	0020	2711	3565	2319	0046988	0097	15407											
012		OBS	0020	2711	35649	2319			15407											
		STD	0030	2699	3566	2324	0046583	0143	15406											
012		OBS	0040	2688	35680	2329			15405											
		STD	0050	2679	3570	2333	0045755	0236	15405											
012		OBS	0061	2670	35728	2338			15405											
		STD	0075	1776	3559	2580	0022305	0321	15177											
012		OBS	0078	1631	35564	2613			15134											
		STD	0100	1467	3544	2640	0016647	0370	15085											
012		OBS	0121	1355	35341	2656			15051											
		STD	0125	1345	3533	2657	0015050	0409	15048											
		STD	0150	1290	3529	2666	0014338	0446	15033											
012		OBS	T0164	1261	35210	26650														
		STD	0200	1231	3520	2670	0014005	0517	15020											
		STD	0250	1175	3511	2674	0013750	0586	15008											
		STD	0300	1104	3503	2681	0013174	0653	14991											
012		OBS	T0320	1071	35004	2685			14982											
		STD	0400	0855	3489	2712	0010263	0771	14914											
		STD	0500	0660	3477	2731	0008455	0864	14854											
012		OBS	0501	0658	34930	27440														
		STD	0600	0575	3468	2735	0008117	0947	14835											
012		OBS	T0693	0514	34608	2737			14825											
		STD	0700	0513	3460	2736	0008033	1028	14825											
		STD	0800	0498	3456	2735	0008251	1109	14835											
012		OBS	0891	05120	34526	27310														
		STD	0900	0484	3453	2734	0008432	1193	14845											
		STD	1000	0470	3452	2735	0008394	1277	14856											
		STD	1100	0457	3452	2736	0008364	1361	14867											
012		OBS	T1139	0452	34514	2737			14872											
		STD	1200	0444	3453	2739	0008190	1443	14879											
		STD	1300	0432	3459	2745	0007688	1523	14891											
		STD	1400	0420	3467	2752	0007036	1596	14904											
012		OBS	1460	0413	34724	2757			14912											

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE L/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TD BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- TNER CODE	CLOUD CODES		NDDC STATION NUMBER			
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	GR.		HGT	PER		SEA	TYPE	AMT
31	779	EV	0226 N	02846 W	003	28	02	06	061	1966		172	3475	31	04	2	2		X1	8	8	0020	
		WATER		WIND		BARO- METER		AIR TEMP. °C		SPECIAL OBSERVATIONS													
		CDLDR CODE		TRANS. (M)		DIR.		SPEED OF FORCE		METER (mba)		DRY BULB		WET BULB		VIL CODE		NO. OBS. DEPTHS					
								04		S10		119		256		244		8		20			
MESSENGER TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta$ DYN. M. $\times 10^2$	SOUND VELOCITY	D <sub>2</sub> m/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{dl}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{dl}^{-1}$	pH	REL.						
		STD	0000	2733	3525	2282	0050442	0000	15404														
061		OBS	0000	2733	35251	2282			15404														
		STD	0010	2722	3551	2305	0048283	0049	15406														
		STD	0020	2712	3568	2321	0046796	0097	15407														
061		OBS	0023	2709	35715	2325			15408														
		STD	0030	2703	3573	2328	0046190	0143	15408														
061		OBS	0045	2689	35757	2334			15407														
		STD	0050	2589	3580	2369	0042340	0232	15386														
061		OBS	0068	2171	35807	2493			15287														
		STD	0075	1922	3571	2553	0024938	0316	15220														
061		OBS	0090	1532	35511	2631			15105														
		STD	0100	1406	3538	2649	0015834	0367	15065														
061		OBS	0111	1315	35287	2660			15035														
		STD	0125	1296	3526	2662	0014607	0405	15031														
061		OBS	T0134	1285	35245	2663			15029														
		STD	0150	1274	3523	2664	0014471	0441	15027														
061		OBS	0178	1252	35205	2667			15024														
		STD	0200	1241	3519	2668	0014267	0513	15024														
		STD	0250	1194	3513	2672	0013954	0584	15015														
061		OBS	T0268	1171	35108	2675			15010														
		STD	0300	1120	3505	2680	0013313	0652	14996														
061		OBS	0358	0999	34928	2692			14961														
		STD	0400	0859	3479	2704	0011062	0774	14914														
061		OBS	T0451	0725	34657	2713			14870														
		STD	0500	0538	3457	2719	0009634	0877	14842														
061		OBS	T0544	0579	34516	2722			14825														
		STD	0600	0536	3450	2726	0008948	0970	14817														
061		OBS	0631	0518	34493	2727			14814														
		STD	0700	0499	3449	2730	0008642	1058	14818														
061		OBS	T0737	0491	34494	2731			14821														
		STD	0800	0479	3450	2732	0008470	1144	14826														
061		OBS	0837	0473	34501	2733			14830														
		STD	0900	0467	3454	2737	0008114	1227	14839														
		STD	1000	0459	3460	2743	0007672	1306	14853														
070		OBS	T1021	0457	34616	2744			14856														
		STD	1100	0454	3470	2751	0006972	1379	14869														
		STD	1200	0449	3479	2759	0006345	1445	14885														
070		OBS	1290	0441	34851	2765			14897														
		STD	1300	0440	3485	2765	0005864	1506	14898														
		STD	1400	0426	3488	2768	0005614	1564	14910														
		STD	1500	0412	3490	2771	0005368	1619	14921														
070		OBS	T1564	0403	34910	2773			14928														
		STD	1750	0376	3493	2778	0004855	1746	14948														
		STD	2000	0344	3494	2782	0004546	1864	14977														
070		OBS	2086	0334	34945	2783			14988														
		STD	2500	0293	3494	2787	0004178	2082	15041														
		STD	3000	0261	3491	2787	0004217	2292	15113														
070		OBS	T3098	0257	34895	2786			15128														



TABLE I.—Continued

REFERENCE	SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER	
					10"	1"	MO DAY HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER		SEA	TYPE		AMT
31 779	EV	02135N	02924 W	003	29	02 06 121	1966		162		3237	16	01	2			X2	8 8	0021	
				WATER		WIND		BARO-METER			AIR TEMP. °C		SPECIAL OBSERVATIONS							
				COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	BARO- METER (mba)	DRY RULR	WET RULR	WET RULR	WET RULR		WET RULR	WET RULR	WET RULR	WET RULR	WET RULR	WET RULR	WET RULR
						03	S11	146	278	250	8	13								
MESSNGR TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \sigma$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} - \text{at/l}$	TOTAL-P $\mu\text{g} - \text{at/l}$	NO <sub>2</sub> -N $\mu\text{g} - \text{at/l}$	NO <sub>3</sub> -N $\mu\text{g} - \text{at/l}$	SiO <sub>2</sub> -Si $\mu\text{g} - \text{at/l}$	pH	S CODE			
		STD	0000	2746	3556	2301	0048636	0000	15410											
121		OBS	0000	2746	35558	2301			15410											
		STD	0010	2728	3560	2310	0047821	0048	15408											
		STD	0020	2710	3564	2319	0047019	0096	15407											
		STD	0030	2692	3567	2327	0046294	0142	15405											
		STD	0050	2656	3573	2343	0044848	0233	15400											
121		OBS	0056	2645	35746	2348			15399											
		STD	0075	2294	3578	2456	0034138	0332	15319											
121		OBS	0083	2127	35793	2504			15278											
		STD	0100	1650	3555	2607	0019795	0400	15143											
121		OBS	0111	1456	35443	2643			15083											
		STD	0125	1416	3540	2648	0015963	0444	15072											
121		OBS	0140	1377	35360	2653			15062											
		STD	0150	1359	3534	2655	0015324	0483	15037											
		STD	0200	1267	3523	2666	0014469	0558	15033											
121		OBS	T0221	1228	35188	2670			15023											
		STD	0250	1181	3513	2674	0013714	0628	15011											
		STD	0300	1086	3502	2684	0012929	0695	14984											
121		OBS	0328	1027	34951	2689			14967											
		STD	0400	0832	3476	2706	0010866	0814	14904											
121		OBS	T0436	0752	34686	2712			14878											
		STD	0500	0665	3466	2722	0009315	0915	14854											
		STD	0600	0561	3463	2733	0008334	1003	14829											
121		OBS	0653	0522																
		STD	0700	0510	3459	2736	0008076	1085	14824											
		STD	0800	0489	3455	2736	0008189	1166	14831											
121		OBS	T0870	0476	34527	2735			14837											
		STD	0900	0472	3454	2736	0008177	1248	14841											
		STD	1000	0459	3461	2743	0007598	1327	14853											
121		OBS	1089	0451	34672	2749			14865											
		STD	1100	0451	3468	2750	0007075	1401	14867											
		STD	1200	0447	3479	2759	0006323	1468	14884											
		STD	1300	0444	3487	2766	0005792	1528	14900											
121		OBS	1359	0442	34903	2769			14910											
		STD	1400	0437	3492	2770	0005431	1584	14915											
		STD	1500	0423	3496	2775	0005047	1637	14926											
121		OBS	T1642	0394	34962	2778			14938											



TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° /18	LONGITUDE ° /18	E W	MAGNETIC SQUARE		STATION TIME (GMT)			YEAR	OBSERVATIONS		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER		
CTRY CODE	NO. NO.					1'	1'	MO	DAT	HL/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TYPE		AMT	
31	779	EV	0116 N	03034 W		004	10	02	06	220	1966		142	3200	13	03	2	4		X1	8	3	0023	
						WATER		WIND		AIR TEMP. °C														
						COLOR CODE	TRANSP. (m)	DIR.	SPEED OF FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS									
								01	S07	146	278	256	8	15										
REFERENCE TIME MO 1/18	CASE NO.	CARD TYPE	DEPTH (m)	T °C	σ <sub>t</sub> ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-187	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - dl/l	TOTAL-P pg - dl/l	NO <sub>2</sub> -N pg - dl/l	NO <sub>3</sub> -N pg - dl/l	SI O <sub>4</sub> -S pg - dl/l	pH	DOCS							
		STD	0000	2735	3556	2305	0048261	0000	15408															
220		OBS	0000	2735	35563	2305			15408															
		STD	0010	2727	3559	2310	0047868	0048	15408															
		STD	0020	2720	3562	2314	0047457	0096	15408															
220		OBS	0027	2714	35638	2317			15409															
		STD	0030	2710	3565	2320	0046991	0143	15408															
		STD	0050	2640	3572	2347	0044443	0234	15397															
220		OBS	0053	2623	35738	2354			15394															
		STD	0075	2479	3586	2408	0038766	0338	15365															
220		OBS	0079	2405	35884	2432			15349															
		STD	0100	1685	3568	2609	0019638	0411	15156															
220		OBS	0105	1572	35632	2632			15121															
		STD	0125	1400	3541	2652	0015565	0455	15067															
220		OBS	0133	1352	35341	2657			15052															
		STD	0150	1297	3527	2663	0014620	0493	15036															
220		OBS	0159	1274	35237	2665			15029															
		STD	0200	1228	3518	2669	0014096	0565	15019															
220		OBS	T0212	1215	35159	2670			15016															
		STD	0250	1200	3513	2671	0014066	0635	15017															
		STD	0300	1134	3505	2677	0013565	0704	15001															
220		OBS	0316	1102	35014	2680			14992															
		STD	0400	0802	3470	2706	0010854	0826	14892															
220		OBS	T0422	0751	34651	2709			14875															
		STD	0500	0692	3459	2713	0010231	0932	14864															
220		OBS	0529	0664	34573	2715			14857															
		STD	0600	0569	3451	2723	0009297	1030	14830															
220		OBS	T0633	0535	34492	2725			14822															
		STD	0700	0517	3449	2728	0008868	1120	14825															
220		STD	0800	0493	3450	2731	0008653	1208	14832															
		OBS	0844	0483	34498	2732			14835															
		STD	0900	0470	3455	2737	0008078	1292	14840															
		STD	1000	0452	3464	2747	0007288	1368	14850															
220		OBS	1054	0446	34691	2751			14858															
		STD	1100	0446	3473	2754	0006646	1438	14866															
		STD	1200	0445	3481	2761	0006152	1502	14883															
		STD	1300	0445	3489	2767	0005660	1561	14901															
220		OBS	T1314	0445	34902	2768			14903															

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARSSEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NOCC STATION NUMBER	
CTRY CODE	ID. NO.					10"	T'	MO		DAY	HR. 1/10			CRUISE NO.	STATION NUMBER	DIR.		HGT	PER		SEA
31	779	EV	0057 N	03102 W	004	01	02	07	024	1966	132	3200	26	04	1	3		X8	8	6	0024
				WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS							
				COLDER CODE		TRANS (m)		DIR.		SPEED OF FORCE		METER (mb)		DRY BULB		WET BULB		VIL CODE			
				06		S04		122		272		250		8		17					
MESSAGE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta D$ DTN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu g - ml/l$	TOTAL-P $\mu g - ml/l$	NO <sub>2</sub> -N $\mu g - ml/l$	NO <sub>3</sub> -N $\mu g - ml/l$	SiO <sub>2</sub> -Si $\mu g - ml/l$	pH	3 C				
		STD	0000	2720	3573	2322	0046599	0000	15406												
	024	OBS	0000	2720	3573	2322			15406												
		STD	0010	2704	3577	2331	0045850	0046	15405												
		STD	0020	2687	3580	2338	0045175	0092	15403												
		STD	0030	2671	3582	2345	0044574	0137	15402												
		STD	0050	2638	3585	2358	0043445	0225	15398												
	024	OBS	0053	2633	35854	2359			15397												
		STD	0075	2132	3585	2507	0029289	0316	15279												
	024	OBS	0080	2033	35845	2534			15253												
		STD	0100	1689	3572	2611	0019438	0376	15157												
	024	OBS	0107	1595	35672	2629			15129												
		STD	0125	1479	3556	2647	0016096	0421	15095												
		STD	0150	1352	3542	2663	0014600	0459	15056												
	024	OBS	0159	1316																	
		STD	0200	1232	3519	2669	0014098	0531	15021												
	024	OBS	T0212	1210	35151	2671			15015												
		STD	0250	1170	3510	2674	0013732	0601	15006												
		STD	0300	1090	3501	2682	0013073	0668	14985												
	024	OBS	0319	1051	34969	2686			14974												
		STD	0400	0804	3471	2706	0010810	0787	14892												
	024	OBS	T0425	0752	34662	2710			14876												
		STD	0500	0682	3460	2715	0010017	0891	14860												
	024	OBS	0528	0654	34575	2717			14853												
		STD	0600	0572	3452	2723	0009262	0988	14832												
	024	OBS	T0633	0542	34501	2725			14825												
		STD	0700	0513	3451	2729	0008714	1077	14824												
		STD	0800	0479	3452	2734	0008323	1163	14827												
	024	OBS	0840	0468	34522	2735			14829												
		STD	0900	0460	3456	2739	0007875	1244	14836												
		STD	1000	0447	3463	2746	0007333	1320	14848												
	032	OBS	T1042	0442	34653	2749			14853												
	024	OBS	T1047	0444	34666	2750			14855												
		STD	1100	0444	3471	2753	0006772	1390	14865												
		STD	1200	0445	3478	2759	0006361	1456	14883												
		STD	1300	0445	3485	2764	0005952	1517	14900												
	032	OBS	T1306	0445	34851	2764			14901												
		STD	1400	0428	3490	2770	0005458	1574	14911												
		STD	1500	0412	3494	2775	0005046	1627	14921												
	032	OBS	1571	0401	34965	2778			14929												
		STD	1750	0381	3496	2780	0004682	1749	14951												
		STD	2000	0354	3496	2782	0004531	1864	14982												
	032	OBS	T2083	0345	34960	2783			14992												
		STD	2500	0300	3494	2786	0004278	2084	15044												
	032	OBS	T2611	0288	34936	2787			15058												

TABLE I.—Continued

REFERENCE CTRY CODE	SHIP CODE	LATITUDE *	LONGITUDE *	DEPTH METER	MARSDEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
					18°	1'	MO	DAY	HR.	1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TR	AMT	
31 779	EV	0037 N	03130 W	004	01	02	07	081	1966		122	3949	16	04	2	2		X1	8	6		0025	
				WATER		WIND		BARO- METER		AIR TEMP. °C		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS							
				COLOR CODE	TRANS. (M)	DIR.	SPEED OR FORCE	(mbs)	DRY BULB	WET BULB													
						01	508	125	272	250	8	15											
MESSNGR TIME HR 1/10	CAST NO.	CARGO TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$ ?	$\Sigma \Delta \sigma$ DTN. M. $\times 10^2$	SDUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{dl}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{dl}^{-1}$	pH	SIC C						
		STD	0000	2703	3588	2339	0044992	0000	15404														
081		OBS	0000	2703	35881	2339			15404														
		STD	0010	2701	3589	2341	0044908	0045	15406														
		STD	0020	2693	3590	2344	0044640	0090	15406														
081		OBS	0027	2684	35905	2347			15405														
		STD	0030	2678	3591	2350	0044133	0134	15404														
		STD	0050	2635	3597	2368	0042483	0221	15398														
081		OBS	0054	2626	35987	2372			15397														
		STD	0075	2379	3606	2452	0034519	0317	15343														
081		OBS	0081	2268	36075	2486			15317														
		STD	0100	1714	3570	2604	0020154	0385	15164														
081		OBS	0108	1543	35582	2634			15112														
		STD	0125	1459	3547	2644	0016336	0431	15087														
		STD	0150	1359	3534	2655	0015324	0471	15057														
081		OBS	0160	1328	35301	2659			15048														
		STD	0200	1268	3522	2665	0014561	0545	15033														
081		OBS	T0214	1240	35183	2667			15026														
		STD	0250	1102	3503	2681	0013022	0614	14982														
		STD	0300	0947	3486	2695	0011751	0676	14932														
081		OBS	0321	0894	34807	2700			14915														
		STD	0400	0775	3467	2707	0010674	0788	14881														
081		OBS	T0427	0741	34641	2710			14872														
		STD	0500	0669	3459	2716	0009910	0891	14855														
081		OBS	0533	0638	34564	2718			14848														
		STD	0600	0575	3452	2723	0009301	0987	14833														
081		OBS	T0639	0545	34504	2725			14827														
		STD	0700	0513	3451	2729	0008714	1077	14824														
		STD	0800	0474	3452	2734	0008283	1162	14825														
081		OBS	T0850	0460	34518	2736			14827														
		STD	0900	0455	3456	2740	0007816	1243	14834														
		STD	1000	0447	3465	2748	0007151	1318	14848														
081		OBS	T1060	0443	34696	2752			14857														
		STD	1100	0442	3473	2755	0006602	1386	14864														
		STD	1200	0441	3479	2760	0006240	1451	14881														
		STD	1300	0439	3485	2765	0005878	1511	14898														
081		OBS	T1324	0439																			
		STD	1400	0431	3490	2770	0005497	1568	14912														
		STD	1500	0415	3494	2774	0005086	1621	14923														
081		OBS	T1588	0396	34968	2779			14930														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARSSEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NOQC STATION NUMBER	
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR. 1/10			CRUISE NO.	STATION NUMBER	DIR		HGT	PER		SEA
31	779	EV	0012 N	032085W	004	02	02	07	133	1966	112	3749	26	02	1	2	X1	6	7	0026	
		WATER		WIND		BARO-METER		AIR TEMP. °C													
		COLOR CODE		TRNSL. DIR.		SPEED OF FORCE		DRY BULB		WET BULB		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS					
		03		S10		146		300		261		8		17							
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	$\frac{\Delta \sigma}{\Delta \rho}$ DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - 01/l	TOTAL-P µg - 01/l	NO <sub>2</sub> -N µg - 01/l	NO <sub>3</sub> -N µg - 01/l	SiO <sub>4</sub> -Si µg - 01/l	pH	ST C				
		STD	0000	2693	3593	2346	0044305	0000	15403												
133		OBS	0000	2693	35934	2346			15403												
		STD	0010	2668	3600	2359	0043115	0044	15400												
		STD	0020	2643	3606	2372	0041971	0086	15396												
		STD	0030	2618	3611	2383	0040904	0128	15393												
		STD	0050	2569	3618	2404	0038999	0208	15386												
133		OBS	0053	2561	36185	2407			15384												
		STD	0075	2351	3620	2471	0032702	0297	15338												
133		OBS	0080	2284	36201	2491			15323												
		STD	0100	1905	3598	2577	0022653	0366	15223												
133		OBS	0107	1796	35908	2599			15192												
		STD	0125	1617	3568	2625	0018195	0417	15139												
		STD	0150	1423	3542	2648	0016032	0460	15079												
133		OBS	0160	1364	35346	2655			15060												
		STD	0200	1258	3520	2665	0014517	0537	15030												
133		OBS	T0214	1221	35156	2669			15019												
		STD	0250	1121	3504	2679	0013286	0606	14989												
		STD	0300	0994	3490	2690	0012232	0670	14949												
133		OBS	0321	0946	34853	2695			14935												
		STD	0400	0785	3469	2707	0010674	0784	14885												
133		OBS	T0427	0744	34647	2710			14873												
		STD	0500	0682	3460	2715	0010017	0888	14860												
133		OBS	0532	0652	34573	2717			14853												
		STD	0600	0576	3452	2723	0009314	0985	14833												
133		OBS	T0636	0544	34500	2725			14826												
		STD	0700	0511	3451	2730	0008674	1074	14823												
		STD	0800	0472	3453	2736	0008147	1159	14824												
133		OBS	0845	0459	34540	2738			14826												
		STD	0900	0451	3455	2740	0007840	1239	14832												
		STD	1000	0441	3460	2745	0007445	1315	14845												
142		OBS	T1023	0439	34616	2746			14849												
133		OBS	T1054	0437	34644	2749			14853												
		STD	1100	0438	3469	2752	0006842	1386	14862												
		STD	1200	0440	3479	2760	0006233	1452	14881												
142		OBS	1270	0442	34845	2764			14894												
		STD	1300	0438	3486	2766	0005786	1512	14898												
		STD	1400	0423	3492	2772	0005245	1567	14909												
		STD	1500	0409	3496	2777	0004860	1618	14920												
142		OBS	T1524	0406	34969	2778			14923												
		STD	1750	0379	3496	2780	0004648	1736	14950												
		STD	2000	0351	3496	2783	0004504	1851	14980												
142		OBS	T2063	0344	34958	2783			14988												
		STD	2500	0298	3494	2786	0004249	2070	15043												
142		OBS	T2588	0289	34931	2786			15054												

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE * 1/10	LONGITUDE * 1/10	MARSOEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NOOC STATION NUMBER		
CTRY CODE	ID. NO.					CRUISE NO.	STATION NUMBER	M		Q	H			DIL	HGT	PER		SEA	TYPE		AMT	
31	779	EV	0012 S	03247 W	303	02	02	07	198	1966		4462	16	08	2	2		X1	6	17		0027
WATER		WIND		BARO-METER (mb)	AIR TEMP. °C			NO. OBS. DEPTHS	SPECIAL OBSERVATIONS													
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB	VIL CODE															
		08	S08	125	283	250	8	14														
MESSAGE TIME of NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \sigma$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{at/l}$	TOTAL-P $\mu\text{g} \cdot \text{at/l}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{at/l}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{at/l}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{at/l}$	pH	SEC					
		STD	0000	2721	3598	2341	0044861	0000	15409													
198		OBS	0000	2721	35976	2341			15409													
		STD	0010	2702	3600	2349	0044141	0045	15407													
		STD	0020	2683	3603	2357	0043415	0088	15405													
		STD	0030	2664	3605	2365	0042700	0131	15403													
		STD	0050	2626	3610	2380	0041273	0215	15398													
198		OBS	0051	2624	36105	2381			15398													
		STD	0075	2424	3636	2462	0033601	0309	15358													
198		OBS	0076	2410	36363	2466			15355													
		STD	0100	1924	3611	2583	0022179	0379	15230													
198		OBS	0102	1885	36072	2590			15219													
		STD	0125	1452	3544	2643	0016410	0427	15084													
198		OBS	0127	1425	35403	2646			15076													
		STD	0150	1362	3532	2653	0015530	0467	15058													
198		OBS	0178	1295	35232	2660			15039													
		STD	0200	1262	3517	2662	0014812	0543	15031													
		STD	0250	1175	3508	2672	0013970	0615	15008													
198		OBS	T0254	1167	35075	2673			15006													
		STD	0300	1032	3506	2696	0011698	0679	14965													
198		OBS	0305	11660	35048	2671Q																
		STD	0400	0803	3469	2705	0010943	0792	14892													
198		OBS	0407	0790	34671	2705			14888													
		STD	0500	0701	3459	2712	0010358	0898	14867													
		STD	0600	0616	3453	2718	0009771	0999	14849													
198		OBS	0618	0602	34519	2719			14847													
		STD	0700	0537	3451	2726	0009020	1093	14834													
		STD	0800	0480	3450	2732	0008505	1181	14827													
198		OBS	T0828	0468	34491	2733			14826													
		STD	0900	0455	3465	2747	0007151	1259	14835													
		STD	1000	0441	3481	2761	0005896	1324	14848													
198		OBS	1039	0438	34856	2765			14854													
		STD	1100	0439	3486	2765	0005625	1382	14864													
		STD	1200	0439	3486	2765	0005733	1439	14881													
		STD	1300	0440	3486	2765	0005842	1496	14898													
198		OBS	T1303	0440	34856	2765			14899													
		STD	1400	0429	3489	2769	0005544	1553	14911													
		STD	1500	0412	3493	2774	0005119	1607	14921													
198		OBS	T1560	0398	34967	2778			14926													

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER				
STN CODE	ID. NO.					10"	1"	MO		DAY	HR./1/10			CRUISE NO.	STATION NUMBER	DR.	HGT.		PER.	SEA		TYPE	AMT		
31	779	EV	0032 S	03320 W	303	03	02	08	008	1966	092	4470	43	08	1	2	X1	3	6	0028					
		WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS													
		COLOR		DIR.		UNITS		DRY RULE		WET RULE		VIS. CODE													
		CODE		17		SO1		146		267		244		8		18									
MISSING TIME HR 1/10	CARD NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta$ DYN. W. $\times 10^3$	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} - \text{ol/l}$	TOTAL-P $\mu\text{g} - \text{ol/l}$	NO <sub>3</sub> -N $\mu\text{g} - \text{ol/l}$	NO <sub>2</sub> -N $\mu\text{g} - \text{ol/l}$	SiO <sub>4</sub> -Si $\mu\text{g} - \text{ol/l}$	pH	S C								
		STD	0000	2713	3596	2342	0044716	0000	15407																
008		OBS	0000	2713	35962	2342			15407																
		STD	0010	2700	3599	2348	0044165	0044	15406																
		STD	0020	2686	3601	2355	0043610	0088	15405																
		STD	0030	2673	3604	2361	0043062	0132	15404																
		STD	0050	2646	3609	2373	0041963	0217	15402																
008		OBS	0052	2643	36094	2374			15402																
		STD	0075	2567	3632	2415	0038051	0317	15391																
008		OBS	0079	2524	36332	2429			15382																
		STD	0100	2113	3622	2541	0026191	0397	15282																
008		OBS	0105	2026	36181	2561			15259																
		STD	0125	1721	3580	2610	0019671	0454	15172																
		STD	0150	1438	3544	2646	0016194	0499	15084																
008		OBS	0156	1387	35378	2652			15068																
		STD	0200	1234	3517	2667	0014282	0575	15021																
008		OBS	T0209	1210	35136	2669			15014																
		STD	0250	1172	3509	2673	0013842	0646	15007																
008		OBS	0288	1104	35009	2679			14988																
		STD	0300	1059	3496	2684	0012898	0713	14974																
008		OBS	T0366	0867	34743	2699			14911																
		STD	0400	0829	3472	2703	0011115	0833	14902																
008		OBS	0472	0749	34667	2711			14883																
		STD	0500	0713	3463	2713	0010233	0939	14873																
		STD	0600	0603	3453	2720	0009597	1038	14844																
008		OBS	T0631	0575	34514	2722			14838																
		STD	0700	0531	3451	2728	0008898	1131	14831																
		STD	0800	0481	3451	2733	0008385	1217	14827																
008		OBS	0843	0465	34513	2735			14828																
		STD	0900	0452	3455	2739	0007853	1299	14833																
		STD	1000	0436	3462	2747	0007235	1374	14843																
008		OBS	1057	0431	34665	2751			14851																
		STD	1100	0433	3470	2753	0006704	1444	14860																
		STD	1200	0438	3478	2759	0006272	1509	14880																
		STD	1300	0442	3485	2764	0005918	1569	14899																
018		OBS	T1313	0443	34857	2765			14902																
		STD	1400	0422	3490	2770	0005378	1626	14908																
		STD	1500	0401	3495	2777	0004827	1677	14917																
018		OBS	T1576	0387	34970	2780			14924																
		STD	1750	0370	3497	2781	0004505	1794	14946																
		STD	2000	0346	3496	2783	0004406	1905	14978																
018		OBS	2099	0336	34961	2784			14991																
		STD	2500	0294	3494	2786	0004192	2120	15041																
018		OBS	T2633	0284	34933	2787			15060																
		STD	3000	0273	3493	2788	0004254	2331	15118																
018		OBS	3241	0258	34914	2788			15153																
		STD	4000	0173	3483	2788	0003850	2736	15249																
018		OBS	T4297	0124	34781	2787			15279																



TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	L. TO W. MILES	MARSOEN SQUARE			STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES TYPE AMT	NOCC STATION NUMBER
CTR CODE	IO. NO.					10"	1"	MD	DAY	HR./10	CRUISE NO.		STATION NUMBER	DR.			HGT	PER	SEA				
31	779	EV	0056 S	03400 W		303	04	02	08	078	1966		082	4187	16	06	1	2		X1	8	4	0029
WATER		WIND		BARO-METER (mba)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS														
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB																	
				08	S12	125	267	250	8	14													
MESSNGR TRM NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Σ Δ σ DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - dl/l	TOTAL-P μg - dl/l	NO <sub>2</sub> -N μg - dl/l	NO <sub>3</sub> -N μg - dl/l	SIO <sub>4</sub> -Si μg - dl/l	pH	S C						
		STD	0000	2702	3603	2350	0043919	0000	15406														
078		OBS	0000	2702	36026	2350			15406														
		STD	0010	2698	3603	2352	0043824	0044	15407														
		STD	0020	2694	3603	2353	0043740	0088	15407														
		STD	0030	2690	3603	2355	0043645	0131	15408														
		STD	0050	2682	3603	2357	0043466	0218	15410														
078		OBS	0053	2681	36034	2358			15410														
		STD	0075	2560	3623	2411	0038491	0321	15388														
078		OBS	0080	2500	36233	2429			15375														
		STD	0100	2106	3610	2533	0026874	0403	15279														
078		OBS	0107	1962	36002	2564			15240														
		STD	0125	1536	3555	2633	0017377	0458	15112														
078		OBS	0133	1396	35396	2652			15067														
		STD	0150	1334	3531	2658	0015049	0498	15048														
078		OBS	0186	1228	35165	2668			15017														
		STD	0200	1198	3513	2671	0013903	0571	15008														
078		OBS	T0213	1170	35091	2674			15000														
		STD	0250	1082	3500	2683	0012891	0638	14974														
		STD	0300	0976	3488	2692	0012079	0700	14943														
078		OBS	0321	0935	34839	2695			14930														
		STD	0400	0806	3471	2706	0010840	0815	14893														
078		OBS	T0429	0765	34671	2709			14882														
		STD	0500	0684	3461	2715	0009971	0919	14861														
		STD	0600	0592	3455	2723	0009302	1015	14840														
078		OBS	T0644	0559	34531	2725			14834														
		STD	0700	0530	3453	2729	0008782	1106	14831														
		STD	0800	0489	3452	2733	0008411	1192	14831														
078		OBS	0855	0471	34520	2735			14833														
		STD	0900	0460	3457	2740	0007804	1273	14836														
		STD	1000	0442	3468	2751	0006867	1346	14847														
078		OBS	T1064	0436	34734	2756			14856														
		STD	1100	0438	3476	2758	0006321	1412	14863														
		STD	1200	0442	3482	2762	0006038	1474	14882														
		STD	1300	0447	3487	2765	0005830	1533	14901														
078		OBS	1324	0448	34881	2766			14906														
		STD	1400	0438	3491	2770	0005518	1590	14915														
		STD	1500	0416	3495	2775	0005026	1643	14923														
078		OBS	T1581	0390	34972	2780			14926														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE L/10	LONGITUDE ° T/10	MARSSEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODE	MOC STATION NUMBER	
CRUISE CODE	ID. NO.					CRUISE NO.	STATION NUMBER	10'	1'		MD	DAY			HL/10	NO.	NUMBER				DIR
31	779	EV	0114 5	03435 W	303	14	02	08	125	1966	072	4297	36	02	2	3	X1	817	0030		
WATER		WIND		BARO-METER		AIR TEMP. °C		VEL CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
COLOR		DIR.		METER		DRY BULB		WET BULB													
CODE		SPEED OF FORCE		(mbars)																	
		08		S09		146		289		256		8		19							
MESSAGE TIME ME 1/10	CAS# NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	± Δ D DYN. M. X 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	PH	S CODE				
		STD	0000	2711	3600	2346	0044353	0000	15408												
125		OBS	0000	2711	36004	2346			15408												
		STD	0010	2705	3601	2349	0044133	0044	15408												
		STD	0020	2699	3602	2351	0043913	0088	15408												
		STD	0030	2692	3604	2354	0043683	0132	15409												
		STD	0050	2680	3606	2360	0043245	0219	15409												
125		OBS	0053	2678	36058	2361			15410												
		STD	0075	2525	3614	2415	0038107	0321	15379												
125		OBS	0078	2498	36143	2423			15373												
		STD	0100	2275	3612	2487	0031292	0407	15323												
125		OBS	0105	2183	36108	2513			15300												
		STD	0125	1576	3558	2627	0018022	0469	15125												
125		OBS	0131	1464	35480	2644			15090												
		STD	0150	1372	3536	2654	0015437	0511	15062												
125		OBS	0156	1346	35332	2657			15054												
		STD	0200	1206	3515	2671	0013905	0584	15011												
125		OBS	T0209	1180	35118	2674			15003												
		STD	0250	1087	3500	2682	0012978	0651	14976												
		STD	0300	0978	3488	2692	0012113	0714	14943												
125		OBS	0314	0948	34847	2694			14934												
		STD	0400	0770	3467	2708	0010600	0828	14879												
125		OBS	T0418	0740	34642	2710			14870												
		STD	0500	0656	3457	2716	0009879	0930	14849												
		STD	0600	0575	3452	2723	0009301	1026	14833												
125		OBS	0627	0557	34509	2724			14830												
		STD	0700	0523	3451	2728	0008855	1117	14828												
		STD	0800	0485	3450	2732	0008516	1204	14829												
125		OBS	T0836	0473	34501	2733			14830												
		STD	0900	0458	3455	2738	0007959	1286	14835												
		STD	1000	0435	3462	2747	0007237	1362	14843												
133		OBS	T1026	0429	34636	2749			14845												
125		OBS	T1031	0438	34665	2750			14850												
		STD	1100	0441	3472	2754	0006652	1431	14863												
		STD	1200	0444	3478	2759	0006356	1497	14882												
133		OBS	1278	0447	34834	2763			14897												
		STD	1300	0441	3485	2764	0005899	1558	14899												
		STD	1400	0418	3491	2772	0005252	1614	14907												
		STD	1500	0398	3496	2778	0004714	1663	14916												
133		OBS	T1530	0392	34972	2779			14918												
		STD	1750	0368	3497	2782	0004456	1778	14945												
		STD	2000	0343	3496	2783	0004387	1889	14977												
133		OBS	2050	0338	34959	2784			14983												
		STD	2500	0301	3495	2787	0004220	2104	15044												
133		OBS	T2560	0296	34943	2786			15052												
		STD	3000	0263	3492	2788	0004147	2313	15114												
133		OBS	T3080	0258	34920	2788			15126												
133		OBS	T3584	0240	34903	2788			15205												

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	DEPTH IN METERS	MARDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NOOC STATION NUMBER
CTRY CODE	ID. NO.					10'	1'	MO	DAY	HR.		1/10	CRUISE NO.			STATION NUMBER	DIR.	HGT		PER	SEA	
31	779	EV	0120 S	03516 W	303	15	02	08	186	1966	062	4370	14	01	1	2		X1	8	4	0031	
						WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTH		SPECIAL OBSERVATIONS						
						COLOR	TRANSP.	DIR.	SPEED OF FORCE	METER (mb)	DRY BULB	WET BULB	VIS CODE									
						02	509	122	283	250	8	14										
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DYN. M. x 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - at/l	TOTAL-P μg - at/l	NO <sub>2</sub> -N μg - at/l	NO <sub>3</sub> -N μg - at/l	SiO <sub>4</sub> -Si μg - at/l	pH	S C/C					
186		STD	0000	2734	3598	2337	0045247	0000	15412													
		OBS	0000	2734	35978	2337			15412													
		STD	0010	2724	3598	2340	0044954	0045	15412													
		STD	0020	2713	3599	2344	0044605	0090	15411													
		STD	0030	2703	3600	2348	0044256	0134	15411													
		STD	0050	2682	3605	2359	0043345	0222	15410													
186		OBS	0051	2681	36053	2359			15410													
		STD	0075	2543	3615	2410	0038564	0324	15383													
186		OBS	0076	2529	36151	2414			15380													
		STD	0100	2006	3597	2551	0025213	0404	15251													
186		OBS	0100	2006	35974	2551			15251													
186		OBS	0123	1627	35656	2621			15141													
		STD	0125	1606	3563	2624	0018316	0458	15135													
186		OBS	0147	1410	35401	2649			15074													
		STD	0150	1395	3538	2651	0015754	0501	15069													
186		OBS	T0196	1187	35109	2672			15004													
		STD	0200	1172	3509	2673	0013719	0575	14999													
		STD	0250	1003	3490	2689	0012275	0640	14945													
186		OBS	0291	0895	34778	2697			14910													
		STD	0300	0880	3476	2698	0011420	0699	14905													
186		OBS	0387	0753	34639	2708			14870													
		STD	0400	0736	3462	2709	0010477	0808	14865													
		STD	0500	0622	3453	2717	0009715	0909	14835													
186		OBS	T0579	0559	34487	2722			14822													
		STD	0600	0553	3449	2723	0009260	1004	14824													
		STD	0700	0524	3449	2726	0009001	1096	14828													
186		OBS	0772	0502	34488	2729			14831													
		STD	0800	0489	3450	2731	0008581	1183	14831													
		STD	0900	0452	3456	2740	0007779	1265	14833													
186		OBS	T0966	0437	34606	2746			14838													
		STD	1000	0437	3463	2747	0007177	1340	14844													
		STD	1100	0438	3469	2752	0006842	1410	14862													
		STD	1200	0439	3476	2758	0006436	1477	14880													
186		OBS	1202	0439	34763	2758			14880													
		STD	1300	0437	3484	2764	0005920	1538	14897													
		STD	1400	0434	3492	2771	0005391	1595	14913													
186		OBS	T1435	0433	34945	2773			14919													

TABLE I.—Continued

REFERENCE		SNIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	# OF STATIONS	MASSEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS				WEA-THER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DR	HGT	PER	SEA		TYPE	AMT	
31	779	EV	0141 S	03554 W	303	15	02	08	235	1966		052	4132	36	02	2	2		X2	8	8		0032
		WATER		WIND		AIR TEMP. °C		SPECIAL OBSERVATIONS															
		COLOR CODE	TRANSL. (m)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIS. CODE	NO. DES. DEPTHS													
					12	507	132	250	239	7	19												
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta$ D OYN. M. $10^3$	SDUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{ml}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{ml}^{-1}$	pH	SEC						
	235	STD	0000	2701	3601	2350	0044011	0000	15405														
		OBS	0000	2701	36009	2350			15405														
		STD	0010	2700	3602	2350	0043967	0044	15407														
		STD	0020	2698	3602	2351	0043930	0088	15408														
		STD	0030	2697	3603	2352	0043886	0132	15410														
		STD	0050	2694	3604	2354	0043805	0220	15412														
	235	OBS	0050	2694	36037	2354			15412														
	235	OBS	0074	2563	36008	2393			15386														
		STD	0075	2550	3602	2398	0039705	0324	15384														
	235	OBS	0099	2145	36058	2519			15289														
		STD	0100	2113	3603	2526	0027563	0408	15280														
	235	OBS	0122	1578	35614	2629			15126														
		STD	0125	1545	3558	2634	0017351	0464	15116														
	235	OBS	0147	1338	35341	2660			15050														
		STD	0150	1321	3532	2662	0014721	0504	15044														
	235	OBS	T0196	1101	35030	2682			14972														
		STD	0200	1090	3502	2683	0012768	0573	14969														
		STD	0250	0961	3487	2694	0011802	0634	14929														
	235	OBS	0295	0864	34768	2701			14899														
		STD	0300	0855	3476	2702	0011033	0691	14896														
	235	OBS	T0392	0714	34642	2714			14855														
		STD	0400	0706	3464	2715	0009903	0796	14854														
		STD	0500	0623	3458	2721	0009358	0892	14836														
	235	OBS	0589	0565	34547	2726			14827														
		STD	0600	0561	3455	2726	0008927	0984	14828														
		STD	0700	0526	3454	2730	0008649	1072	14830														
	235	OBS	T0789	0494	34533	2733			14831														
		STD	0800	0490	3454	2734	0008320	1157	14832														
		STD	0900	0454	3458	2741	0007672	1237	14834														
	235	OBS	T0992	0420	34614	2748			14835														
		STD	1000	0424	3463	2749	0007012	1310	14839														
	244	OBS	T1027	0438	34698	2753			14850														
		STD	1100	0441	3475	2757	0006431	1377	14864														
		STD	1200	0444	3482	2762	0006057	1440	14883														
	244	OBS	T1294	0447	34877	2766			14901														
		STD	1300	0446	3488	2766	0005745	1499	14901														
		STD	1400	0425	3494	2773	0005125	1553	14910														
		STD	1500	0406	3498	2779	0004674	1602	14919														
	244	OBS	1544	0399	34999	2781			14924														
		STD	1750	0376	3499	2783	0004396	1715	14949														
		STD	2000	0348	3499	2785	0004274	1824	14980														
	244	OBS	T2056	0342	34983	2785			14986														
		STD	2500	0288	3494	2787	0004107	2033	15039														
	244	OBS	T2564	0283	34935	2787			15047														
		STD	3000	0272	3493	2788	0004239	2242	15118														
	244	OBS	T3087	0269	34926	2788			15131														
	244	OBS	T3586	0242	34911	2789			15207														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	STATION TIME (GMT)	YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NOOC STATION NUMBER
CTD CODE	IC. NO.						CRUISE NO.	STATION NUMBER			DR.	HGT	PER	SEA		TIME	AMT	
31	779	EV	0202 S	03629 W	303 26 02 09 057 1966		042	3658	15	03	1	2		X2	9	8	0033	
WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS	SPECIAL OBSERVATIONS									
COLOR CODE	TEMP. (°C)	DIR.	SPEED OR FORCE	METER (mbars)	DRY BULB	WET BULB	VIS. CODE											
		12	S07	125	256	233	7	14										
MESSAGE TIME MR 1/10	CAST NO.	CAST TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ ρ DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - μl/l	TOTAL-P μg - μl/l	NO <sub>3</sub> -N μg - μl/l	NO <sub>2</sub> -N μg - μl/l	SIO <sub>4</sub> -Si μg - μl/l	BP	SC	
		STD	0000	2702	3597	2347	0044293	0000	15405									
057		OBS	0000	2702	35974	2347			15405									
		STD	0010	2702	3599	2348	0044232	0044	15407									
		STD	0020	2703	3600	2348	0044214	0088	15409									
		STD	0030	2703	3601	2349	0044196	0133	15411									
		STD	0050	2704	3603	2350	0044161	0221	15414									
057		OBS	0051	2704	36032	2350			15415									
		STD	0075	2542	3605	2403	0039253	0325	15382									
057		OBS	0077	2528	36055	2407			15379									
		STD	0100	2374	3625	2468	0033073	0416	15349									
057		OBS	0102	2352	36253	2475			15344									
		STD	0125	1774	3572	2591	0021483	0484	15186									
		STD	0150	1350	3532	2656	0015292	0530	15054									
057		OBS	0152	1325	35301	2659			15046									
		STD	0200	1157	3510	2677	0013373	0602	14994									
057		OBS	T0203	1150	35087	2677			14992									
		STD	0250	1099	3500	2680	0013189	0668	14980									
057		OBS	0254	1093	34993	2680			14979									
		STD	0300	1015	3491	2688	0012511	0732	14957									
057		OBS	T0305	1005	34897	2688			14954									
		STD	0400	0749	3462	2707	0010664	0848	14870									
057		OBS	0406	0737	34606	2708			14866									
		STD	0500	0647	3455	2716	0009904	0951	14846									
		STD	0600	0574	3451	2722	0009362	1047	14832									
057		OBS	T0609	0569	34506	2722			14832									
		STD	0700	0538	3449	2725	0009136	1140	14834									
		STD	0800	0506	3448	2728	0008944	1230	14837									
057		OBS	0814	0501	34478	2728			14838									
		STD	0900	0466	3454	2737	0008101	1315	14838									
		STD	1000	0440	3462	2746	0007285	1392	14845									
057		OBS	T1020	0437	34641	2748			14848									
		STD	1100	0441	3472	2754	0006659	1462	14864									
		STD	1200	0446	3481	2761	0006161	1526	14884									
057		OBS	T1276	0450	34863	2764			14899									
		STD	1300	0448	3488	2766	0005772	1586	14902									
		STD	1400	0436	3493	2771	0005344	1641	14914									
		STD	1500	0415	3497	2777	0004867	1692	14923									
057		OBS	T1532	0406	34980	2779			14925									

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARSSEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES	NOOC STATION NUMBER					
CTRY CODE	IC. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DIR.				HGT.	PER.	SEA	TYPE	AMT
31	779					EV	0220	S		03703	W			303	27									
WATER		WIND		BARO- METER (mb)	AIR TEMP. °C		VEL. CODE	NO. OES. DEPTHS	SPECIAL OBSERVATIONS															
COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE		DRY BULB	WET BULB																		
				12	S09	146	261	239	B	19														

MESSAGE TIME HR. 1/10	CASE NO.	CASE TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	$\frac{\Delta \rho}{\rho}$ DYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -F pg - ml/l	TOTAL-F pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>2</sub> -Si pg - ml/l	pH	DATE
		STD	0000	2716	3604	2347	0044240	0000	15409								
101		OBS	0000	2716	36041	2347			15409								
		STD	0010	2712	3607	2350	0043963	0044	15410								
		STD	0020	2709	3610	2354	0043679	0088	15411								
		STD	0030	2705	3611	2356	0043539	0132	15412								
		STD	0050	2698	3613	2359	0043280	0218	15414								
101		OBS	0050	2698	36127	2359			15414								
		STD	0075	2568	3610	2399	0039640	0322	15389								
101		OBS	0075	2568	36103	2399			15389								
		STD	0100	2370	3635	2477	0032212	0412	15349								
101		OBS	0100	2370	36354	2477			15349								
101		OBS	0122	1816	35956	2598			15201								
		STD	0125	1749	3587	2608	0019810	0477	15181								
101		OBS	0149	1338	35333	2659			15050								
		STD	0150	1335	3533	2660	0014922	0520	15049								
101		OBS	T0199	1193	35135	2673			15006								
		STD	0200	1191	3513	2673	0013774	0592	15006								
101		OBS	0248	1100	35023	2681			14981								
		STD	0250	1097	3502	2682	0013007	0659	14980								
101		OBS	0297	1018	34937	2689			14958								
		STD	0300	1008	3493	2690	0012246	0722	14955								
101		OBS	T0393	0759	34643	2707			14873								
		STD	0400	0751	3464	2708	0010545	0836	14871								
		STD	0500	0653	3456	2716	0009912	0938	14848								
101		OBS	0587	0583	34510	2721			14834								
		STD	0600	0575	3451	2722	0009404	1035	14833								
		STD	0700	0518	3448	2726	0008999	1127	14826								
101		OBS	T0780	0480	34456	2729			14823								
		STD	0800	0475	3448	2731	0008554	1215	14825								
		STD	0900	0444	3460	2744	0007384	1294	14830								
108		OBS	T0972	0412	34670	2753			14829								
101		OBS	T0978	0409	34590	27470											
		STD	1000	0414	3469	2755	0006446	1364	14835								
		STD	1100	0433	3477	2759	0006188	1427	14861								
		STD	1200	0445	3484	2763	0005926	1487	14884								
108		OBS	1228	0447	34858	2764			14889								
		STD	1300	0447	3489	2767	0005685	1545	14902								
		STD	1400	0443	3493	2771	0005438	1601	14917								
108		OBS	T1482	0437	34960	2774			14929								
		STD	1500	0433	3496	2774	0005175	1654	14930								
		STD	1750	0387	3497	2780	0004691	1777	14953								
108		OBS	T1981	0350	34984	2785			14977								
		STD	2000	0347	3498	2785	0004296	1890	14979								
108		OBS	T2486	0292	34954	2788			15038								
		STD	2500	0291	3495	2788	0004078	2099	15040								
		STD	3000	0268	3495	2790	0004036	2302	15116								
108		OBS	T3020	0268	34946	2789			15120								

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS				WEA-TNER CODE	CLOUD CODES		NODC STATION NUMBER	
CTRY CODE	ID. NO.					10"	1"	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR	HGT	PER		SEA	TYP		AMT
WATER		WIND		BARO-METER (mba)	AIR TEMP. °C		VIL CODE	NO. OBS. DEPTNS	SPECIAL OBSERVATIONS														
COLOR CODE	TRANSL (m)	DIR	SPEED OR FORCE		DRY BULB	WET BULB																	
				13	S11	146	267	239	8	15													
MESSAGE TIME ME 1/10	CASST NO.	CASO TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta D$ DYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu g - \mu l/l$	TOTAL-P $\mu g - \mu l/l$	NO <sub>3</sub> -N $\mu g - \mu l/l$	NO <sub>2</sub> -N $\mu g - \mu l/l$	SiD <sub>4</sub> -Si $\mu g - \mu l/l$	pH	S.C.C.						
		STD	0000	2729	3603	2342	0044690	0000	15412														
162		OBS	0000	2729	36034	2342			15412														
		STD	0010	2724	3605	2345	0044464	0045	15413														
		STD	0020	2716	3608	2350	0044044	0089	15413														
		STD	0030	2704	3610	2355	0043574	0133	15412														
		STD	0050	2672	3616	2370	0042250	0218	15409														
162		OBS	0053	2666	36167	2373			15408														
		STD	0075	2624	3622	2390	0040472	0322	15403														
162		OBS	0079	2602	36253	2399			15399														
		STD	0100	2412	3662	2485	0031489	0412	15362														
162		OBS	0106	2341	36639	2508			15346														
		STD	0125	2064	3637	2565	0023927	0481	15275														
162		OBS	0131	1968	36273	2583			15249														
		STD	0150	1602	3581	2638	0016997	0532	15140														
162		OBS	0158	1490	35210	2617Q																	
162		OBS	0185	1293	35222	2660			15039														
		STD	0200	1199	3509	2668	0014215	0610	15008														
162		OBS	T0211	1138	35013	2673			14988														
		STD	0250	1039	3491	2683	0012809	0678	14958														
		STD	0300	0948	3481	2691	0012135	0740	14931														
162		OBS	0315	0929	34796	2693			14927														
		STD	0400	0906	3479	2697	0011790	0860	14932														
162		OBS	T0418	0893	34791	2699			14930														
		STD	0500	0720	3462	2711	0010407	0971	14875														
		STD	0600	0562	3448	2721	0009428	1070	14827														
162		OBS	T0626	0530	34462	2724			14818														
		STD	0700	0475	3446	2730	0008583	1160	14808														
		STD	0800	0427	3446	2735	0008103	1243	14804														
162		OBS	0830	0419	34462	2736			14806														
		STD	0900	0426	3454	2741	0007607	1322	14822														
		STD	1000	0434	3464	2749	0007062	1395	14843														
162		OBS	1034	0436	34675	2751			14850														
		STD	1100	0439	3473	2755	0006556	1463	14863														
		STD	1200	0443	3481	2761	0006123	1527	14882														
162		OBS	T1289	0447	34871	2765			14900														
		STD	1300	0447	3488	2766	0005758	1586	14902														
		STD	1400	0439	3493	2771	0005385	1642	14916														
		STD	1500	0425	3497	2776	0005001	1694	14927														
162		OBS	T1547	0416	34979	2777			14931														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MO 10	DAY 11	HR. 12	MIN. 13	YEAR 14	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLE	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES	MOOC STATION NUMBER			
CTRY CODE	TO. NO.									CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA				TYPE	AMT	
31	779	EV	0301 S	03817 W	303	38	02	09	213	1966	012	2103	15	02	2	2	X2	8	7	0036			
WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS											
COLD CODE		TRANS. (M)		DIR.		SPEC. OF FORCE		DRY BULB		WET BULB													
		11		S10		139		267		244		7		13									
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ ρ DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	PH	CHLORIDE						
		STD	0000	2711	3599	2345	0044475	0000	15407														
	213	OBS	0000	2711	35987	2345			15407														
		STD	0010	2711	3599	2345	0044508	0044	15409														
		STD	0020	2712	3602	2347	0044346	0089	15411														
		STD	0030	2712	3609	2352	0043898	0133	15414														
		STD	0050	2713	3630	2368	0042498	0219	15419														
	213	OBS	0051	2713	36309	2368			15420														
		STD	0075	2515	3674	2463	0033500	0314	15384														
	213	OBS	0076	2503	36741	2467			15381														
		STD	0100	2132	3649	2556	0024741	0387	15290														
	213	OBS	0101	2119	36480	2559			15287														
		STD	0125	1932	3620	2587	0021815	0445	15237														
		STD	0150	1741	3592	2614	0019345	0497	15183														
	213	OBS	0151	1733	35907	2615			15181														
		STD	0200	1364	3535	2655	0015490	0584	15067														
	213	OBS	T0202	1353	35336	2656			15063														
		STD	0250	1277	3522	2663	0014866	0660	15045														
		STD	0300	1164	3507	2673	0013964	0732	15012														
	213	OBS	0303	1156	35056	2673			15010														
		STD	0400	0829	3468	2700	0011410	0859	14902														
	213	OBS	T0403	0821	34674	2701			14899														
		STD	0500	0701	3458	2711	0010432	0968	14867														
	213	OBS	0599	0596	34502	2719			14841														
		STD	0600	0595	3450	2719	0009712	1069	14841														
		STD	0700	0499	3444	2725	0009042	1163	14817														
	213	OBS	T0791	0444	34432	2731			14810														
		STD	0800	0442	3444	2732	0008446	1250	14810														
		STD	0900	0429	3451	2739	0007866	1331	14822														
	213	OBS	0983	0425	34583	2745			14836														
		STD	1000	0427	3460	2746	0007266	1407	14839														
		STD	1100	0436	3471	2754	0006671	1477	14861														
		STD	1200	0446	3480	2760	0006229	1541	14883														
	213	OBS	T1224	0448	34821	2761			14889														
		STD	1300	0447	3487	2765	0005832	1602	14901														
		STD	1400	0439	3492	2770	0005458	1658	14916														
	213	OBS	T1469	0430	34935	2772			14924														



TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' / 10"	LONGITUDE ° ' / 10"	L E S E	MARDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NDDC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MD	DAY	HR./10		CRUISE NO.	STATION NUMBER			DR	HGT	PER	SEA		TYPE	AMT	
31	779	EV	0255 S	03821 W	303	28	02	11	191	1966		013	2195	14	10	2	2		X1	8	3	0037	
		WATER		WIND		BARO-METER		AIR TEMP. °C		SPECIAL OBSERVATIONS													
		COLOR CODE		TRAIL (mi)		SPEED OR FORCE		DRY BULB		WET BULB		VLS. CODE		NO. OBS. DEPTHS									
		13		S10		115		294		261		8		13									
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta D$ DYN. ML. $\times 10^3$	SOUND VELOCITY	D <sub>2</sub> m/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	SiO <sub>4</sub> -Si pg - ml/l	pH	CHL						
		STD	0000	2728	3618	2354	0043625	0000	15413														
191		OBS	0000	2728	36178	2354			15413														
		STD	0010	2724	3619	2356	0043452	0044	15414														
		STD	0020	2721	3621	2358	0043280	0087	15415														
		STD	0030	2717	3622	2360	0043105	0130	15416														
		STD	0050	2709	3625	2365	0042761	0216	15418														
191		OPS	0051	2709	36249	2365			15418														
		STD	0075	2570	3668	2441	0035554	0314	15396														
191		OPS	0077	2552	36693	2448			15392														
		STD	0100	2273	3665	2528	0027382	0393	15328														
191		OBS	0102	2250	36642	2534			15323														
		STD	0125	1962	3624	2583	0022273	0455	15246														
		STD	0150	1717	3590	2618	0018935	0506	15176														
191		OBS	0153	1692	35859	2621			15168														
		STD	0200	1441	3546	2647	0016255	0594	15093														
191		OBS	T0203	1428	35439	2648			15089														
		STD	0250	1314	3528	2660	0015147	0673	15058														
191		OBS	0299	1187	35111	2672			15020														
		STD	0300	1184	3511	2672	0014040	0746	15020														
191		OBS	T0396	0910	34773	2694			14933														
		STD	0400	0901	3477	2696	0011872	0875	14930														
		STD	0500	0710	3460	2711	0010412	0987	14871														
191		OBS	T0579	0595	34506	2719			14837														
		STD	0600	0573	3449	2721	0009497	1086	14832														
		STD	0700	0486	3444	2727	0008881	1178	14812														
191		OBS	0762	0449	34435	2731			14807														
		STD	0800	0436	3445	2733	0008300	1264	14808														
		STD	0900	0416	3451	2740	0007709	1344	14817														
191		OBS	T0946	0412	34545	2743			14823														
		STD	1000	0424	3462	2748	0007086	1418	14838														
		STD	1100	0440	3474	2756	0006498	1486	14863														
191		OBS	T1162	0446	34801	2760			14877														
		STD	1200	0445	3483	2762	0005993	1548	14883														
		STD	1300	0441	3490	2768	0005527	1606	14899														
		STD	1400	0437	3494	2772	0005279	1660	14915														
191		OBS	T1416	0436	34943	2772			14917														

TABLE I.—Continued

REFERENCE		SNIP CODE	LATITUDE	LONGITUDE	MARSden SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLE	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER			
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DIR.		HGT PER	SEA		TYPE	AMT	
31	779	EV	0237 S	03739 W	303	27	02	12	013	1966		023	3200	15	12	4	2	X1	8	1	0038		
WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS											
COLDER CODE		TRANS. DIR.		SPEED OF FORCE		DRY RULR		WET RULR															
		07		S12		135		283		250		8		13									
MESSAGE TRAIL NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P $\mu\text{g} \cdot \text{ml}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	SiO <sub>4</sub> -E $\mu\text{g} \cdot \text{ml}^{-1}$	pH	0038						
		STD	0000	2713	3608	2351	0043861	0000	15409														
013		OBS	0000	2713	36081	2351			15409														
		STD	0010	2701	3609	2356	0043470	0044	15408														
		STD	0020	2687	3610	2361	0043013	0087	15407														
		STD	0030	2673	3611	2366	0042564	0130	15405														
013		OBS	0049	2641	36127	2378			15401														
		STD	0050	2639	3613	2378	0041469	0214	15401														
013		OBS	0073	2594	36182	2396			15395														
		STD	0075	2557	3617	2407	0038833	0314	15387														
		STD	0100	2140	3600	2516	0028489	0398	15287														
		STD	0125	1798	3580	2591	0021467	0461	15194														
013		OBS	0146	1568	35607	2630			15126														
		STD	0150	1525	3556	2637	0017145	0509	15113														
013		OBS	0169	1377	35367	2654			15066														
013		OBS	0194	1317	35160	26500																	
		STD	0200	1283	3517	2658	0015215	0590	15038														
		STD	0250	1042	3491	2683	0012860	0660	14959														
013		OBS	0289	0909	34768	2694			14915														
		STD	0300	0894	3475	2695	0011714	0721	14911														
013		OBS	0384	0782	34633	2703			14880														
		STD	0400	0754	3461	2706	0010810	0834	14872														
		STD	0500	0613	3451	2717	0009743	0937	14832														
013		OBS	T0573	0549	34465	2721			14817														
		STD	0600	0548	3447	2722	0009331	1032	14821														
		STD	0700	0542	3448	2724	0009288	1125	14835														
013		OBS	0766	0538	34488	2725			14845														
		STD	0800	0510	3450	2729	0008847	1216	14839														
		STD	0900	0447	3456	2741	0007717	1299	14831														
013		OBS	T0970	0420	34605	2747			14832														
		STD	1000	0423	3464	2750	0006928	1372	14838														
		STD	1100	0434	3473	2756	0006494	1439	14861														
		STD	1200	0445	3481	2761	0006141	1502	14883														
013		OBS	T1241	0449	34840	2763			14892														
		STD	1300	0447	3488	2766	0005758	1562	14902														
		STD	1400	0437	3493	2771	0005358	1617	14915														
		STD	1500	0418	3497	2776	0004907	1669	14924														
013		OBS	T1535	0410	34980	2778			14927														

TABLE I.—Continued

REFERENCE CTRY CODE	SHIP CODE NO.	LATITUDE 1/18	LONGITUDE 1/18	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NDDC STATION NUMBER	
					MO	DAY	HR.	1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TYPE		AMT
31	779	EV	0211 S	03702 W	303	27	02	12	069	1966		033	3430	16	13	3	2	X1	3	4	0039
				WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTNS		SPECIAL OBSERVATIONS							
				COLOR CODE	TRANS. (m)	DIR.	SPEED DI FORCE	(mb)	DRY RULR	WET RULR	VIS. CODE										
						08	S14	125	272	244	8	13									
MESSAGE TIME ME 1/18	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - at/l	TOTAL-P μg - at/l	NO <sub>3</sub> -N μg - at/l	NO <sub>2</sub> -N μg - at/l	Si O <sub>2</sub> -Si μg - at/l	pH	S C C				
	069	STD	0000	2720	3606	2347	0044212	0000	15410												
		OBS	0000	2720	36062	2347			15410												
		STD	0010	2720	3607	2348	0044184	0044	15412												
		STD	0020	2720	3608	2349	0044155	0088	15414												
		STD	0030	2719	3609	2350	0044126	0133	15415												
		STD	0050	2719	3611	2351	0044068	0221	15419												
	069	OBS	0052	2719	36109	2351			15419												
		STD	0075	2685	3610	2361	0043189	0330	15415												
	069	OBS	0078	2653	36098	2372			15408												
		STD	0100	2197	3618	2514	0028707	0420	15304												
	069	OBS	0103	2140	36191	2531			15289												
		STD	0125	1727	3575	2604	0020172	0481	15173												
		STD	0150	1397	3539	2651	0015721	0526	15070												
	069	OBS	0156	1340	35328	2658			15052												
		STD	0200	1219	3516	2670	0014074	0600	15016												
	069	OBS	T0208	1200	35140	2672			15010												
		STD	0250	1162	3510	2676	0013586	0669	15004												
		STD	0300	1073	3500	2684	0012848	0735	14979												
	069	OBS	0312	1044	34965	2687			14970												
		STD	0400	0721	3461	2710	0010337	0851	14859												
	069	OBS	T0416	0678	34569	2713			14844												
		STD	0500	0621	3453	2718	0009702	0951	14835												
		STD	0600	0564	3450	2722	0009306	1046	14828												
	069	OBS	0625	0552	34495	2723			14827												
		STD	0700	0523	3449	2727	0008981	1138	14828												
		STD	0800	0490	3448	2730	0008741	1227	14831												
	069	OBS	T0834	0480	34477	2731			14832												
		STD	0900	0460	3453	2737	0008100	1311	14836												
		STD	1000	0438	3462	2747	0007260	1388	14844												
	069	OBS	T1046	0432	34663	2751			14850												
		STD	1100	0435	3472	2755	0006575	1457	14861												
		STD	1200	0439	3482	2762	0005995	1520	14881												
		STD	1300	0444	3489	2767	0005640	1578	14900												
	069	OBS	T1309	0444	34895	2768			14902												
		STD	1400	0437	3494	2772	0005285	1632	14915												
		STD	1500	0423	3497	2776	0004974	1684	14926												
	069	OBS	T1588	0405	34974	2778			14934												

TABLE I.—Continued

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MO	DAY	YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES TYP AMT	NOCC STATION NUMBER
CTRY CODE	ID. NO.							CRUISE NO.	STATION NUMBER			10"	1"	MO			

31 779		EV	0200 S	03625 W	303	26	02 12 120	1966	043	3658	16	13	3	2	X1	8	2	0040
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WATER		WIND		BARO-METER (mba)	AIR TEMP. °C		VEL. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. MI	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			

				09	511	139	278	244	8	13
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MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-t	SPECIFIC VOLUME AND MALT-1787	Σ Δ D DYN. M. 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>4</sub> -Si pg - ml/l	PH	1 C C
		STD	0000	2720	3605	2346	0044327	0000	15410								
120		OBS	0000	2720	36046	2346			15410								
		STD	0010	2719	3605	2347	0044300	0044	15411								
		STD	0020	2718	3606	2348	0044276	0089	15413								
		STD	0030	2717	3606	2348	0044245	0133	15414								
		STD	0050	2714	3607	2350	0044194	0221	15417								
120		OBS	0052	2714	36070	2350			15417								
		STD	0075	2567	3607	2396	0039848	0326	15388								
120		OBS	0079	2522	36051	2409			15378								
		STD	0100	1980	3577	2542	0026033	0409	15241								
		STD	0125	1511	3549	2634	0017281	0463	15104								
120		OBS	0131	1427	35437	2649			15077								
		STD	0150	1294	3527	2663	0014562	0503	15035								
120		OBS	0182	1162	35102	2676			14993								
		STD	0200	1151	3508	2676	0013411	0573	14991								
120		OBS	T0209	1141	35069	2677			14989								
		STD	0250	0988	3489	2691	0012099	0636	14939								
		STD	0300	0837	3472	2702	0011054	0694	14889								
120		OBS	0311	0809	34692	2704			14880								
		STD	0400	0656	3455	2715	0009882	0799	14833								
120		OBS	T0414	0638	34531	2715			14828								
		STD	0500	0595	3451	2719	0009507	0896	14824								
		STD	0600	0553	3449	2723	0009238	0990	14824								
120		OBS	0621	0545	34488	2724			14824								
		STD	0700	0525	3449	2726	0009021	1081	14829								
		STD	0800	0499	3449	2729	0008811	1170	14835								
120		OBS	T0825	0492	34486	2730			14836								
		STD	0900	0466	3455	2738	0008027	1254	14638								
		STD	1000	0442	3463	2747	0007236	1331	14846								
120		OBS	T1035	0437	34654	2749			14850								
		STD	1100	0440	3471	2754	0006712	1400	14863								
		STD	1200	0444	3479	2759	0006274	1465	14882								
120		OBS	T1290	0447	34854	2764			14900								
		STD	1300	0446	3486	2765	0005892	1526	14901								
		STD	1400	0436	3491	2770	0005491	1583	14914								
		STD	1500	0417	3495	2775	0005040	1636	14924								
120		OBS	T1558	0403	34971	2778			14928								

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	DEPTH METERS	MARSOEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.					10'	1"	MO	DAY	HR, 1/10	CRUISE NO.		STATION NUMBER	DR.			NGT	PER	SEA	TYPE		AMT		
31	779	EV	0140 S	03549 W	303	15	02	12	173	1966		053	4151	16	12	2	2		X1	B	2	0041		
		WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS										
		COLOR CODE		TRANS. (m)		DIR.		SPEED OR FORCE		METER (mbs)		DRY BULB		WET BULB										
		09		S11		105		289		250		8		13										
INTERFERE TIME HR 1/10	CAS NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-210?		± Δ σ DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P μg - dl/l	TOTAL-P μg - dl/l	NO <sub>2</sub> -N μg - dl/l	NO <sub>3</sub> -N μg - dl/l	SiO <sub>2</sub> -Si μg - dl/l	PH	TC						
		STD	0000	2750	3607	2338	0045116		0000	15417														
173		OBS	0000	2750	36065	2338				15417														
		STD	0010	2738	3607	2342	0044790		0045	15416														
		STD	0020	2726	3607	2346	0044458		0090	15415														
		STD	0030	2714	3607	2350	0044131		0134	15414														
		STD	0050	2690	3607	2357	0043479		0221	15412														
173		OBS	0052	2688	36067	2358				15412														
		STD	0075	2531	3602	2404	0039145		0325	15379														
173		OBS	0079	2496	36008	2414				15372														
		STD	0100	2055	3577	2522	0027937		0409	15262														
		STD	0125	1646	3553	2607	0019931		0468	15146														
		STD	0150	1364	3533	2654	0015497		0513	15059														
173		OBS	0159	1293	35269	2663				15036														
173		OBS	0184	1182	35123	2674				15000														
		STD	0200	1096	3501	2681	0012946		0584	14971														
173		OBS	T0211	1045	34945	2685				14954														
		STD	0250	0977	3487	2691	0012064		0646	14935														
		STD	0300	0895	3478	2697	0011508		0705	14911														
173		OBS	T0315	0871	34754	2699				14904														
		STD	0400	0745	3464	2709	0010458		0815	14869														
173		OBS	0421	0718	34616	2711				14861														
		STD	0500	0645	3456	2717	0009803		0916	14845														
		STD	0600	0571	3451	2722	0009323		1012	14831														
173		OBS	0631	0553	34499	2724				14829														
		STD	0700	0527	3450	2727	0008951		1103	14830														
		STD	0800	0494	3450	2731	0008629		1191	14833														
173		OBS	T0840	0482	34503	2732				14834														
		STD	0900	0464	3457	2740	0007855		1274	14838														
		STD	1000	0444	3466	2749	0007040		1348	14847														
173		OBS	T1044	0438	34700	2753				14853														
		STD	1100	0440	3474	2756	0006495		1416	14863														
		STD	1200	0443	3481	2761	0006119		1479	14882														
173		OBS	T1299	0446	34863	2765				14901														
		STD	1300	0446	3486	2765	0005870		1539	14901														
		STD	1400	0434	3491	2770	0005501		1596	14913														
		STD	1500	0414	3495	2775	0005029		1648	14922														
173		OBS	T1574	0393	34977	2780				14926														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° ' 1/10	MOON PHASE	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		MOOC STATION NUMBER		
CTRY CODE	ID. NO.					10'	1'	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TTM		AMT	
31	779	EV	0121 S	03515 W		303	15	02	12	220	1966		063	4334	15				X1	8	1	0042		
						WATER		WIND		AIR TEMP. °C			NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
						COLOR CODE	TRANS. (m)	DIR.	SPID OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VEL CODE											
								12	512	119	278	250	8	13										
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	± Δ σ DTN, M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	σ <sub>t</sub>							
		STD	0000	2737	3604	2341	0044872	0000	15414															
220		OBS	0000	2737	36043	2341			15414															
		STD	0010	2734	3604	2342	0044819	0045	15415															
		STD	0020	2731	3604	2342	0044776	0090	15416															
		STD	0030	2728	3604	2343	0044729	0134	15417															
		STD	0050	2722	3604	2345	0044630	0224	15418															
220		OBS	0052	2721	36040	2345			15419															
		STD	0075	2571	3612	2399	0039586	0329	15390															
220		OBS	0077	2553	36130	2405			15386															
		STD	0100	2029	3579	2531	0027127	0412	15255															
		STD	0125	1599	3549	2614	0019180	0470	15131															
		STD	0150	1314	3527	2659	0014950	0513	15041															
220		OBS	0154	1282	35238	2663			15031															
220		OBS	0181	1162	35090	2675			14992															
		STD	0200	1114	3503	2679	0013116	0583	14978															
220		OBS	T0206	1100	35014	2681			14974															
		STD	0250	1005	3490	2688	0012308	0647	14945															
		STD	0300	0908	3479	2696	0011640	0707	14916															
220		OBS	T0312	0887	34764	2697			14910															
		STD	0400	0754	3465	2709	0010514	0817	14872															
220		OBS	T0416	0733	34638	2711			14867															
		STD	0500	0650	3457	2717	0009797	0919	14847															
		STD	0600	0572	3452	2723	0009262	1014	14832															
220		OBS	0622	0558	34514	2724			14830															
		STD	0700	0523	3451	2728	0008840	1105	14828															
		STD	0800	0486	3450	2732	0008551	1192	14829															
220		OBS	T0829	0477	34497	2732			14830															
		STD	0900	0459	3456	2739	0007866	1274	14836															
		STD	1000	0441	3464	2748	0007150	1349	14846															
220		OBS	1041	0437	34673	2751			14851															
		STD	1100	0440	3473	2755	0006572	1417	14863															
		STD	1200	0445	3481	2761	0006146	1481	14883															
		STD	1300	0450	3488	2765	0005835	1541	14903															
220		OBS	T1300	0450	34875	2765			14903															
		STD	1400	0438	3493	2771	0005371	1597	14915															
		STD	1500	0416	3497	2777	0004880	1648	14923															
220		OBS	T1550	0401	34984	2779			14926															

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/18	LONGITUDE 1/18	MO	DAY	HR. 1/10	YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NDDC STATION NUMBER				
CTRY CODE	ID. NO.								CBUISE NO.	STATION NUMBER			DR.	HGT	PER		SEA	TYPE		AMT			
31	779	EV	0102 S	03434 W	303	14	02 13	034	1966	073	4371	16	13	2	2	X1	8	2	0043				
		WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE		SPECIAL OBSERVATIONS											
		COLOR CODE		TRANS. (m)		DIR.		SPEED OF FORCE		DRY BULB		WET BULB											
				12		S10		122		272		250		8		13							
MESSAGE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Σ Δ D DYN. SH. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - at/l	TOTAL-P μg - at/l	NO <sub>2</sub> -N μg - at/l	NO <sub>3</sub> -N μg - at/l	SiO <sub>4</sub> -Si μg - at/l	pH	Σ CTDC						
	034	STD	0000	2720	3596	2340	0044960	0000	15409														
		OBS	0000	2720	35958	2340			15409														
		STD	0010	2718	3596	2341	0044900	0045	15410														
		STD	0020	2716	3597	2342	0044841	0090	15412														
		STD	0030	2714	3598	2343	0044781	0135	15413														
		STD	0050	2711	3599	2345	0044672	0224	15415														
	034	OBS	0053	2710	35989	2345			15416														
		STD	0075	2602	3615	2392	0040315	0330	15397														
	034	OBS	0080	2552	36151	2407			15386														
		STD	0100	2006	3584	2540	0026182	0413	15249														
		STD	0125	1534	3553	2632	0017480	0468	15111														
	034	OBS	0133	1433	35447	2648			15080														
		STD	0150	1321	3530	2660	0014867	0508	15044														
	034	OBS	0160	1268	35226	2665			15027														
		STD	0200	1167	3510	2675	0013554	0579	14997														
	034	OBS	T0213	1136	35063	2678			14988														
		STD	0250	1048	3496	2686	0012596	0645	14962														
		STD	0300	0940	3485	2696	0011711	0706	14929														
		STD	0400	0767	3467	2708	0010556	0817	14878														
	034	OBS	T0424	0733	34633	2710			14868														
		STD	0500	0669	3458	2715	0009984	0920	14855														
		STD	0600	0595	3453	2721	0009490	1017	14841														
	034	OBS	0635	0573	34523	2723			14838														
		STD	0700	0535	3452	2727	0008920	1109	14833														
		STD	0800	0489	3451	2732	0008500	1196	14831														
	034	OBS	T0841	0474	34508	2734			14831														
		STD	0900	0459	3456	2739	0007866	1278	14836														
		STD	1000	0441	3465	2749	0007076	1353	14846														
	034	OBS	T1049	0436	34691	2752			14853														
		STD	1100	0437	3473	2755	0006539	1421	14862														
		STD	1200	0440	3480	2761	0006156	1484	14881														
		STD	1300	0443	3486	2765	0005849	1544	14900														
	034	OBS	T1308	0443	34868	2766			14901														
		STD	1400	0433	3492	2771	0005378	1600	14913														
		STD	1500	0414	3496	2776	0004926	1652	14922														
	034	OBS	T1566	0397	34981	2780			14927														

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARSSEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NOOD STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO	DAY		HR.	1/10			CRUISE NO.	STATION NUMBER	DR.	HGT		PER	SEA	
31	779	EV	0041 S	03351 W	303	03	02	13	087	1966	083	4408	16	14	2	2	X1	8	2	0044		
				WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
				COLOR	TRANSP.	DIR.	SPEED OR FORCE	METER (mbars)	DRY RULR	WET RULR	VIS. CODE											
						09	509	122	272	244	8	13										
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub> ?	Σ Δ D OYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - σ <sub>t</sub> /l	TOTAL-P pg - σ <sub>t</sub> /l	NO <sub>2</sub> -N pg - σ <sub>t</sub> /l	NO <sub>3</sub> -N pg - σ <sub>t</sub> /l	SI O <sub>4</sub> -SI pg - σ <sub>t</sub> /l	pH	LOG					
		STD	0000	2705	3594	2343	0044636	0000	15405													
087		OBS	0000	2705	35939	2343			15405													
		STD	0010	2701	3596	2346	0044412	0045	15406													
		STD	0020	2697	3598	2349	0044192	0089	15407													
		STD	0030	2693	3600	2351	0043968	0133	15408													
		STD	0050	2685	3604	2357	0043524	0220	15410													
087		OBS	0052	2684	36041	2357			15411													
		STD	0075	2490	3628	2436	0036078	0320	15373													
087		OBS	0079	2440	36288	2452			15361													
		STD	0100	1868	3581	2574	0022984	0394	15210													
		STD	0125	1449	3545	2645	0016275	0443	15084													
087		OBS	0130	1399	35403	2652			15068													
		STD	0150	1340	3533	2658	0015021	0482	15051													
087		OBS	0156	1323	35311	2661			15046													
		STD	0200	1211	3515	2670	0013998	0554	15013													
087		OBS	T0208	1190	35122	2672			15007													
		STD	0250	1062	3497	2684	0012763	0621	14967													
		STD	0300	0932	3483	2695	0011729	0683	14926													
087		OBS	T0311	0906	34800	2697			14918													
		STD	0400	0742	3464	2710	0010415	0793	14868													
087		OBS	0414	0721	34616	2711			14861													
		STD	0500	0661	3457	2715	0009947	0895	14851													
		STD	0600	0597	3453	2721	0009517	0992	14842													
087		OBS	0622	0583	34523	2722			14840													
		STD	0700	0530	3452	2728	0008863	1084	14831													
		STD	0800	0480	3451	2733	0008394	1171	14827													
087		OBS	0830	0468	34508	2734			14827													
		STD	0900	0452	3456	2740	0007779	1251	14833													
		STD	1000	0437	3464	2748	0007100	1326	14844													
087		OBS	T1036	0434	34665	2751			14849													
		STD	1100	0437	3473	2755	0006527	1394	14862													
		STD	1200	0440	3481	2761	0006086	1457	14881													
087		OBS	T1292	0444	34871	2766			14899													
		STD	1300	0443	3488	2767	0005705	1516	14900													
		STD	1400	0430	3493	2772	0005264	1571	14912													
		STD	1500	0407	3496	2777	0004833	1621	14920													
087		OBS	T1552	0392	34973	2779			14922													



TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARSSEN SQUARE	STATION TIME (GMT)					YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DR.	HGT	PER		SEA	TYPE	
31	779	EV	0019 S	03328 W	303	03	02	13	125	1966		093	4	117	15	13	2	2	X1	8	2	0045
				WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
				COLOR CODE		TRNSL. DIR.		SPEED OR FORCE		DRY BULB		WET BULB		VIS. CODE								
				12		S10		139		283		250		8 13								
MESSAGE TIME HR 1/10	CASE NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \sigma$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SIO <sub>4</sub> -Si µg - ml/l	pH	CHL					
		STD	0000	2699	3600	2349	0044043	0000	15405													
	125	OBS	0000	2699	35996	2349			15405													
		STD	0010	2692	3601	2353	0043766	0044	15405													
		STD	0020	2685	3603	2356	0043487	0088	15405													
		STD	0030	2678	3604	2359	0043210	0131	15406													
	125	OBS	0049	2665	36070	2366			15406													
		STD	0050	2643	3606	2372	0042090	0216	15401													
		STD	0075	2157	3592	2506	0029421	0306	15286													
		STD	0100	1787	3576	2590	0021413	0369	15187													
	125	OBS	0122	1558	35605	2633			15119													
		STD	0125	1537	3558	2635	0017180	0417	15113													
	125	OBS	0146	1411	35415	2650			15074													
		STD	0150	1395	3539	2652	0015681	0458	15069													
	125	OBS	0195	1249	35204	2667			15026													
		STD	0200	1247	3520	2667	0014308	0533	15026													
		STD	0250	1186	3512	2673	0013880	0604	15012													
	125	OBS	0269	1144	35070	2677			15000													
		STD	0300	1023	3492	2687	0012574	0670	14960													
	125	OBS	T0341	0887	34775	2698			14915													
	125	OBS	T0390	0762	34660	2708			14874													
		STD	0400	0755	3465	2709	0010529	0786	14873													
		STD	0500	0684	3459	2714	0010119	0889	14861													
	125	OBS	0593	0617	34550	2720			14849													
		STD	0600	0610	3455	2720	0009550	0987	14847													
		STD	0700	0523	3453	2730	0008670	1078	14828													
	125	OBS	T0795	0468	34514	2735			14821													
		STD	0800	0467	3452	2735	0008159	1162	14822													
		STD	0900	0449	3456	2741	0007741	1242	14831													
	125	OBS	T0992	0439	34615	2746			14843													
		STD	1000	0439	3462	2746	0007275	1317	14845													
		STD	1100	0441	3471	2753	0006734	1387	14864													
		STD	1200	0443	3479	2759	0006271	1452	14882													
	125	OBS	T1234	0444	34813	2761			14888													
		STD	1300	0441	3486	2765	0005826	1512	14899													
		STD	1400	0433	3493	2772	0005304	1568	14913													
	125	OBS	T1470	0425	34968	2776			14922													

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE	LONGITUDE	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		MOON STATION NUMBER
CTRY CODE	IO. NO.					10'	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DR.		HGT	PER	
31	779	EV	0003 N	032515W	004	02	02	13	170	1966	103	4480	15	15	2	2	X1	8	4	0046
WATER		WIND		BARO-METER (mb)	AIR TEMP. °C		WV. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS											
CDLOR CODE	TRNSL (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB														
				12	508	125	306	256	8	13										
MESSAGE TIME NR 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>4</sub> -E pg - ml/l	pH	CTE			
		STD	0000	2705	3604	2350	0043939	0000	15407											
170		OBS	0000	2705	36036	2350			15407											
		STD	0010	2683	3609	2361	0042933	0043	15404											
		STD	0020	2660	3614	2372	0041931	0086	15401											
		STD	0030	2638	3619	2383	0040939	0127	15398											
		STD	0050	2594	3629	2405	0038952	0207	15393											
170		OBS	0052	2589	36300	2407			15392											
		STD	0075	2172	3604	2511	0028953	0292	15291											
		STD	0100	1812	3580	2587	0021714	0355	15194											
		STD	0125	1551	3560	2634	0017335	0404	15118											
170		OBS	0130	1511	35563	2640			15106											
		STD	0150	1449	3546	2646	0016275	0446	15088											
170		OBS	0183	1324	35309	2660			15050											
		STD	0200	1238	3524	2672	0013844	0522	15023											
170		OBS	0209	1205	35204	2676			15013											
		STD	0250	1181	3512	2674	0013787	0591	15010											
170		OBS	T0262	1173	35108	2674			15010											
		STD	0300	1168	3508	2673	0013950	0660	15014											
170		OBS	T0316	1136	35071	2678			15005											
170		OBS	T0387	0778	34676	2707			14880											
		STD	0400	0760	3466	2709	0010528	0782	14875											
		STD	0500	0637	3456	2718	0009694	0883	14842											
		STD	0600	0548	3450	2724	0009100	0977	14822											
170		OBS	T0608	0542	34499	2725			14821											
		STD	0700	0502	3450	2730	0008635	1066	14819											
		STD	0800	0469	3452	2735	0008184	1150	14823											
170		OBS	T0817	0465	34524	2736			14824											
		STD	0900	0451	3456	2740	0007766	1230	14832											
		STD	1000	0441	3462	2746	0007297	1305	14846											
170		OBS	T1041	0438	34643	2748			14851											
		STD	1100	0440	3471	2753	0006716	1375	14863											
		STD	1200	0443	3481	2761	0006120	1440	14882											
170		OBS	T1297	0446	34879	2766			14901											
		STD	1300	0446	3488	2766	0005745	1499	14901											
		STD	1400	0433	3493	2772	0005304	1554	14911											
		STD	1500	0412	3496	2776	0004900	1605	14922											
170		OBS	T1546	0399	34962	2778			14924											

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' /18	LONGITUDE ° ' /18	MARSDEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NOOQ STATION NUMBER
TYPE CODE	ID. NO.					10'	1'	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR.	HGT		PER	SEA	
31	779	EV	0024 N	03218 W	004	02	13	216	1966		113	4517	15	14	1	2	X1	8	2	0047	
WATER		WIND		BARO- METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTH'S	SPECIAL OBSERVATIONS												
COLOR CODE	TRANL. (m)	DIR.	SPEED OR FORCE		DRY RULR	WET RULR															
				15	S08	132	272	247	8	13											
MESSNGR TAG NB 1/18	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$ ?	$\Sigma \Delta D$ OYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} - \mu\text{l/l}$	TOTAL-P $\mu\text{g} - \mu\text{l/l}$	NO <sub>2</sub> -N $\mu\text{g} - \mu\text{l/l}$	NO <sub>3</sub> -N $\mu\text{g} - \mu\text{l/l}$	SiO <sub>4</sub> -Si $\mu\text{g} - \mu\text{l/l}$	pH	S CODE				
		STO	0000	2701	3597	2347	0044291	0000	15405												
216		OBS	0000	2701	35970	2347			15405												
		STD	0010	2685	3599	2353	0043697	0044	15403												
		STD	0020	2669	3601	2360	0043103	0087	15401												
		STO	0030	2653	3604	2367	0042441	0130	15400												
216		OBS	0044	2630	36092	2378			15398												
		STD	0050	2565	3614	2402	0039183	0212	15384												
216		OBS	0065	2374	36193	2464			15342												
		STD	0075	2177	3611	2514	0028581	0296	15294												
		STD	0100	1773	3589	2604	0020141	0357	15184												
216		OBS	0101	1759	35885	2607			15180												
		STD	0125	1506	3560	2644	0016373	0403	15104												
		STD	0150	1350	3535	2658	0015072	0442	15054												
216		OBS	0152	1342	35336	2659			15052												
216		OBS	T0173	1302																	
		STD	0200	1279	3527	2666	0014406	0516	15038												
		STD	0250	1208	3516	2672	0013995	0587	15020												
		STD	0300	1102	3503	2681	0013139	0655	14990												
216		OBS	0306	1087	35014	2683			14985												
		STO	0400	0781	3468	2707	0010689	0774	14883												
216		OBS	T0402	0776	34673	2707			14882												
		STD	0500	0658	3457	2716	0009906	0877	14850												
216		OBS	T0590	0573	34515	2722			14830												
		STD	0600	0566	3452	2723	0009221	0973	14829												
		STD	0700	0504	3451	2731	0008556	1062	14820												
		STD	0800	0462	3451	2735	0008149	1145	14820												
216		OBS	T0803	0461	34513	2736			14820												
		STD	0900	0450	3457	2741	0007685	1224	14832												
		STD	1000	0439	3463	2747	0007203	1299	14845												
216		OBS	1004	0439	34636	2748			14846												
		STD	1100	0439	3473	2755	0006563	1367	14863												
		STD	1200	0440	3481	2761	0006077	1431	14881												
216		OBS	T1281	0440	34868	2766			14895												
		STD	1300	0439	3488	2767	0005653	1489	14898												
		STD	1400	0428	3493	2772	0005238	1544	14911												
		STD	1500	0413	3497	2777	0004840	1594	14922												
216		OBS	T1540	0405	34979	2779			14926												

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1°	LONGITUDE 1°/18	SECTION	MAGNETIC SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		WDOC STATION NUMBER	
CTRY CODE	NO.					16"	1"	MO	DAY	ML/18		CRUISE NO.	STATION NUMBER			OR.	HGT	PER		SEA	TYN		AMT
31	779	EV	0043 N	03138 W		004	01	02	14	022	1966	123	1920	14	14	2	2	X1	8	1	0048		
						WATER		WIND				BARO-METER		AIR TEMP. °C									
						COLOR CODE		DR.		SPEED OR FORCE		DRY BULB		WET BULB		VIS. CODE		NO. OBS. DEPTNS		SPECIAL OBSERVATIONS			
						13		S07		149		272		250		7		12					
MESSAGE NO.	TIME 1/18	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPHCIFIC VOLUME ANOMALY-σ <sub>t</sub>	S Δ O DYN. M. 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	Si CC					
			STD	0000	2693	3602	2353	0043694	0000	15404													
	022		OBS	0000	2693	36019	2353			15404													
			STD	0010	2687	3601	2354	0043612	0044	15404													
			STD	0020	2681	3601	2356	0043464	0087	15404													
			STD	0030	2674	3600	2357	0043386	0131	15404													
	022		OBS	0045	2665	35995	2360			15405													
			STD	0050	2609	3599	2378	0041542	0216	15393													
			STD	0075	2329	3599	2462	0033615	0309	15330													
			STD	0100	2050	3598	2539	0026298	0384	15263													
	022		OBS	0121	1817	35973	2599			15201													
			STD	0125	1759	3590	2608	0019826	0442	15184													
			STD	0150	1472	3551	2644	0016389	0487	15096													
	022		OBS	0158	1408	35424	2652			15075													
	022		OBS	0180	1300	35274	2662			15041													
			STD	0200	1263	3523	2666	0014392	0564	15032													
	022		OBS	0226	1216	35170	2671			15019													
			STD	0250	1183	3513	2674	0013751	0635	15011													
	022		OBS	T0271	1141	35076	2678			14999													
			STD	0300	1023	3495	2689	0012353	0700	14961													
	022		OBS	0362	0806	34707	2706			14887													
			STD	0400	0770	3469	2709	0010475	0814	14879													
			STD	0500	0682	3464	2718	0009758	0915	14861													
			STD	0600	0607	3458	2723	0009266	1010	14847													
			STD	0700	0544	3453	2727	0008947	1101	14837													
	022		OBS	T0747	0519	34505	2728			14834													
			STD	0800	0491	3452	2733	0008458	1188	14832													
			STD	0900	0453	3457	2741	0007717	1269	14833													
	022		OBS	T0946	0441	34594	2744			14836													
			STD	1000	0441	3464	2748	0007150	1344	14846													
			STD	1100	0441	3473	2755	0006584	1412	14864													
	022		OBS	T1191	0441	34802	2761			14880													
			STD	1200	0441	3481	2761	0006094	1476	14881													
			STD	1300	0435	3488	2767	0005600	1534	14897													
			STD	1400	0425	3495	2774	0005052	1587	14910													
	022		OBS	T1439	0421	34970	2776			14915													

TABLE I.—Continued

REFERENCE		SHIP CODES	LATITUDE ° 1/10	LONGITUDE ° 1/10	E W	MARSDEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES TYPE AMT	NODC STATION NUMBER							
CTRY CODE	ID. NO.					10'	1'	MO	DAY	HR	MIN		CRUISE NO.	STATION NUMBER			DIR	HGT	PER				SEA						
31	779	EV	01025N	03059 W		004	10	02	14	069	1966		133	3200	16	14	1	2	X1	8	6	0049							
		WATER		WIND		BARO-METER		AIR TEMP. °C			SPECIAL OBS. DEPTHS																		
		COLOR CODE		TRANS. (mm)		DIR.		SPEED OR FORCE		METER (mbars)		DRY BULB		WET BULB		VTL CODE		NO. OBS. DEPTHS											
				14		S10		135		283		250		8		13													
MESSENGER TIME MB 1/10	CASE NO.	CASE TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-2107	$\frac{\Delta D}{D} \times 10^4$	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - at/l	TOTAL-P µg - at/l	NO <sub>2</sub> -N µg - at/l	NO <sub>3</sub> -N µg - at/l	SiO <sub>4</sub> -Si µg - at/l	PN	3 C C												
		STO	0000	2714	3578	2328	0046069	0000	15406																				
069		OBS	0000	2714	35778	2328			15406																				
		STO	0010	2706	3581	2333	0045648	0046	15406																				
		STD	0020	2699	3584	2338	0045224	0091	15406																				
		STD	0030	2691	3588	2343	0044796	0136	15407																				
		STD	0050	2676	3594	2352	0043953	0225	15407																				
069		OBS	0055	2672	35955	2355			15407																				
		STD	0075	2264	3582	2468	0033020	0321	15312																				
		STD	0100	1848	3566	2568	0023589	0392	15203																				
		STD	0125	1538	3552	2631	0017638	0444	15113																				
069		OBS	0135	1444	35459	2647			15084																				
		STD	0150	1365	3536	2656	0015297	0485	15059																				
069		OBS	0189	1225	35179	2670			15016																				
		STD	0200	1208	3516	2672	0013869	0558	15012																				
069		OBS	0216	1184	35134	2674			15006																				
		STD	0250	1164	3511	2676	0013549	0626	15004																				
		STD	0300	1078	3501	2684	0012862	0692	14981																				
069		OBS	T0324	1012	34934	2690			14960																				
069		OBS	T0378	0807	34705	2705			14890																				
		STD	0400	0783	3468	2707	0010718	0810	14884																				
069		OBS	T0433	0747	34653	2710			14875																				
		STD	0500	0670	3459	2716	0009924	0913	14855																				
		STD	0600	0577	3452	2722	0009327	1010	14834																				
069		OBS	T0650	0540	34504	2726			14827																				
		STD	0700	0514	3451	2729	0008712	1100	14824																				
		STD	0800	0475	3452	2735	0008236	1185	14825																				
069		OBS	T0866	0457	34532	2737			14829																				
		STD	0900	0455	3456	2740	0007816	1265	14834																				
		STD	1000	0451	3465	2747	0007202	1340	14850																				
069		OBS	T1082	0448	34723	2754			14864																				
		STD	1100	0448	3474	2755	0006596	1409	14867																				
		STD	1200	0446	3484	2763	0005942	1472	14884																				
		STD	1300	0445	3492	2770	0005435	1528	14901																				
069		OBS	T1347	0444	34943	2772			14909																				
		STD	1400	0437	3495	2773	0005219	1582	14915																				
		STD	1500	0418	3496	2776	0004980	1633	14924																				
069		OBS	1627	0383	34975	2781			14931																				

TABLE I.—Continued

REFERENCE	SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MO	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		MOOC STATION NUMBER
					16"	1"	MO		DAY	HR./1/10			CRUISE NO.	STATION NUMBER	CR.		HGT	PER	
31 779	EV	0118 N	03028 W	004	10	02	14	106	1966	143	3402	15	12	1	2	X1	8	3	0050
				WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS					
				COLOR CODE	TRANSP. (M)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIS. CODE								
						14	503	152	278	250	8	13							
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub> ?	Σ Δ σ OTH. M. x 10 <sup>2</sup>	SDUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	σ <sub>t</sub> (°C)		
		STD	0000	2725	3570	2319	0046939	0000	15407										
106		OBS	0000	2725	35704	2319			15407										
		STD	0010	2724	3571	2320	0046899	0047	15409										
		STD	0020	2722	3571	2321	0046863	0094	15410										
106		OBS	0026	2721	35716	2321			15411										
		STD	0030	2703	3573	2328	0046195	0140	15408										
		STD	0050	2585	3581	2371	0042178	0229	15385										
		STD	0075	2379	3590	2440	0035642	0326	15342										
106		OBS	0078	2350	35910	2450			15335										
		STD	0100	1932	3570	2549	0025345	0402	15227										
		STD	0125	1566	3549	2622	0018460	0457	15121										
		STD	0150	1315	3532	2663	0014604	0498	15042										
106		OBS	0155	1279	35287	2668			15031										
		STD	0200	1190	3508	2669	0014122	0570	15005										
106		OBS	0208	1177	35056	2669			15001										
		STD	0250	1166	3503	2670	0014150	0641	15004										
		STD	0300	1095	3501	2681	0013198	0709	14987										
106		OBS	T0313	1066	34998	2685			14979										
106		OBS	T0365	0908	34861	2702			14928										
		STD	0400	0794	3473	2709	0010513	0828	14889										
106		OBS	T0416	0748	34676	2712			14873										
		STD	0500	0647	3459	2719	0009608	0928	14846										
		STD	0600	0555	3452	2725	0009042	1022	14825										
106		OBS	0625	0537	34511	2727			14821										
		STD	0700	0503	3452	2731	0008536	1109	14820										
		STD	0800	0470	3452	2735	0008189	1193	14823										
106		OBS	T0831	0462	34523	2736			14825										
		STD	0900	0455	3458	2742	0007668	1272	14834										
		STD	1000	0448	3466	2749	0007090	1346	14849										
106		OBS	1046	0446	34699	2752			14856										
		STD	1100	0447	3475	2756	0006518	1414	14867										
		STD	1200	0450	3483	2762	0006062	1477	14885										
106		OBS	T1290	0452	34884	2766			14902										
		STD	1300	0451	3489	2767	0005738	1536	14903										
		STD	1400	0438	3494	2772	0005298	1591	14915										
		STD	1500	0417	3497	2777	0004893	1642	14924										
106		OBS	T1550	0403	34979	2779			14927										

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARSOEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF F'EMPL	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NODC STATION NUMBER					
CTRY CODE	RD. NO.					10"	1"	MO	DAY		HR	1/10			CRUISE NO.	STATION NUMBER	DIR	HGT		PER	SEA		TYPE	AMT			
31	779	EV	0136 N	02952 W	003	19	02	14	151	1966	153	3329	15	16	1	2	X1	8	4	0051							
		WATER		WIND		BARO-METER		AIR TEMP. °C			NO. OBS. DEPTHS		SPECIAL OBSERVATIONS														
		COLOR CODE		TRANS. DIR.		SPEED OR FORCE		METER (mb)		DRY BULB		WET BULB		VIS. CODE													
				15		S08		152		272		261		8		13											
PRESSENCE TIME HR 1/10	CAST NO.	CAST TYPE	DEPTH (m)	t °C	s %	SIGMA-t	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta$ O DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pp - ml/l	TOTAL-P pp - ml/l	NO <sub>3</sub> -N pp - ml/l	NO <sub>2</sub> -N pp - ml/l	SiO <sub>4</sub> -Si pp - ml/l	pH	SIC										
		STD	0000	2773	3566	2300	0048733	0000	15417																		
151		OBS	0000	2773	35661	2300			15417																		
		STD	0010	2762	3566	2304	0048408	0049	15417																		
		STD	0020	2751	3567	2308	0048082	0097	15416																		
		STD	0030	2740	3567	2312	0047755	0145	15415																		
		STD	0050	2717	3568	2319	0047116	0240	15414																		
151		OBS	0052	2715	35676	2320			15413																		
		STD	0075	2174	3564	2480	0031894	0338	15287																		
		STD	0100	1725	3559	2592	0021205	0405	15166																		
151		OBS	0104	1667	35585	2606			15150																		
		STD	0125	1513	3550	2635	0017251	0453	15105																		
		STD	0150	1375	3540	2657	0015205	0493	15063																		
151		OBS	0181	1271																							
		STD	0200	1250	3523	2669	0014145	0567	15027																		
151		OBS	0207	1242	35209	2669			15025																		
		STD	0250	1161	3512	2677	0013421	0636	15004																		
		STD	0300	1078	3502	2685	0012789	0701	14981																		
151		OBS	0312	1060	34992	2686			14976																		
151		OBS	T0362	0992	35030	27010																					
		STD	0400	0877	3479	2701	0011364	0822	14921																		
151		OBS	T0416	0833	34757	2705			14907																		
		STD	0500	0684	3462	2716	0009897	0928	14861																		
		STD	0600	0557	3452	2725	0009067	1023	14826																		
151		OBS	T0622	0536	34509	2727			14821																		
		STD	0700	0508	3451	2730	0008636	1111	14822																		
		STD	0800	0480	3453	2735	0008246	1196	14827																		
151		OBS	T0829	0474	34547	2737			14830																		
		STD	0900	0464	3461	2743	0007559	1275	14838																		
		STD	1000	0454	3469	2750	0006945	1347	14852																		
151		OBS	T1036	0451	34718	2753			14857																		
		STD	1100	0451	3477	2757	0006412	1414	14868																		
		STD	1200	0450	3484	2763	0005987	1476	14885																		
151		OBS	T1288	0449	34903	2768			14901																		
		STD	1300	0448	3491	2768	0005552	1534	14902																		
		STD	1400	0433	3497	2775	0005012	1587	14914																		
		STD	1500	0410	3501	2781	0004507	1634	14921																		
151		OBS	T1536	0400	35029	2783			14924																		

TABLE I.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES	NODC STATION NUMBER		
CTRY CODE	ID. NO.					10'	1'	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DR	HGT	PER				SEA	TYPE
31	779	EV	0204 N	02920 W	003	29	02	14	195	1966		163	3109	15	17	2	2	X1	8	16		0052	
		WATER		WIND		BARO- METER		AIR TEMP. °C			VIS CODE	NO. OBS. DEPTH	SPECIAL OBSERVATIONS										
		COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	UMBI	DRY BULB	WET BULB															
					19	S05	152	289	258	8	13												
MESSAGE TIME NR 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY-210°	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SIO <sub>4</sub> -Si µg - ml/l	PH	S C						
		STD	0000	2769	3574	2307	0048027	0000	15417														
195		OBS	0000	2769	35742	2307			15417														
		STD	0010	2761	3575	2311	0047763	0048	15417														
		STD	0020	2744	3577	2318	0047134	0095	15416														
		STD	0030	2716	3578	2327	0046241	0142	15411														
		STD	0050	2631	3584	2359	0043309	0232	15396														
195		OBS	0052	2620	35844	2363			15394														
		STD	0075	2515	3593	2402	0039295	0335	15375														
195		OBS	0079	2436	35950	2427			15357														
		STD	0100	1600	3555	2619	0018687	0407	15128														
195		OBS	0106	1431	35464	2650			15075														
		STD	0125	1362	3539	2659	0014948	0449	15055														
		STD	0150	1289	3530	2667	0014246	0486	15033														
195		OBS	0158	1270	35277	2669			15028														
		STD	0200	1209	3520	2675	0013594	0555	15013														
195		OBS	T0210	1195	35178	2676			15009														
		STD	0250	1164	3515	2679	0013256	0623	15005														
		STD	0300	1087	3506	2686	0012653	0687	14985														
195		OBS	T0312	1062	35037	2689			14978														
		STD	0400	0783	3472	2710	0010423	0803	14885														
195		OBS	T0418	0739	34672	2713			14870														
		STD	0500	0640	3459	2720	0009513	0902	14843														
		STD	0600	0551	3454	2727	0008842	0994	14823														
195		OBS	T0623	0536	34527	2728			14821														
		STD	0700	0513	3454	2731	0008514	1081	14824														
		STD	0800	0489	3455	2735	0008241	1165	14831														
195		OBS	T0831	0483	34549	2736			14834														
		STD	0900	0473	3460	2741	0007746	1245	14842														
		STD	1000	0461	3467	2748	0007181	1319	14855														
195		OBS	T1036	0458	34699	2751			14860														
		STD	1100	0458	3477	2756	0006508	1388	14871														
		STD	1200	0453	3485	2763	0005957	1450	14887														
195		OBS	T1288	0445	34912	2769			14899														
		STD	1300	0444	3492	2769	0005455	1507	14901														
		STD	1400	0428	3495	2773	0005121	1560	14911														
		STD	1500	0408	3498	2778	0004729	1609	14920														
195		OBS	T1542	0398	34989	2780			14923														



TABLE I.—Continued

REFERENCE		SNIP CODE	LATITUDE		LONGITUDE		DRIFT DIR SPEED	MARSOEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.		'	1/10	'	1/10		10"	1"	MO	DAY	HR	1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TRN	
31	779	EV	0221	N	02843	W	003	28	02	14	237	1966		173	3401	15	15	1	5	X1	8	2	0053		
		WATER		WIND		BARO-METER		AIR TEMP. °C		VIS CODE		NO. OBS. DEPTNS		SPECIAL OBSERVATIONS											
		COLOR CODE		TRANS. (m)		DIR.		SPEED OR FORCE		METER (mbars)		DRY BULB		WET BULB											
								15		508		169		278		250		8		13					
MESSAGE #	CAST NO.	CARD NO.	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-210°	S Δ D GYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	SIC								
		STD	0000	2723	3577	2324	0046410	0000	15408																
237		OBS	0000	2723	35769	2324			15408																
		STD	0010	2713	3578	2328	0046066	0046	15407																
		STD	0020	2701	3579	2333	0045668	0092	15406																
		STD	0030	2688	3580	2338	0045241	0138	15405																
237		OBS	0049	2657	35819	2349			15402																
		STD	0050	2655	3582	2350	0044177	0227	15401																
237		OBS	0073	2609	35851	2367			15395																
		STD	0075	2520	3584	2394	0040117	0332	15375																
237		OBS	0097	1742	35724	2599			15172																
		STD	0100	1702	3569	2606	0019952	0407	15161																
		STD	0125	1432	3547	2650	0015779	0452	15078																
237		OBS	0145	1291	35343	2669			15034																
		STD	0150	1265	3533	2670	0013949	0489	15032																
237		OBS	T0194	1229	35212	2672			15019																
		STD	0200	1220	3520	2672	0013799	0559	15017																
		STD	0250	1151	3511	2679	0013312	0626	15000																
237		OBS	T0290	1099	35051	2684			14987																
		STD	0300	1091	3504	2684	0012871	0692	14986																
237		OBS	T0386	0990	34934	2694			14963																
		STD	0400	0946	3489	2698	0011719	0815	14948																
		STD	0500	0691	3466	2718	0009699	0922	14864																
237		OBS	T0580	0558	34547	2727			14823																
		STD	0600	0550	3455	2728	0008778	1014	14823																
		STD	0700	0517	3455	2732	0008491	1101	14826																
237		OBS	T0771	0497	34543	2734			14830																
		STD	0800	0490	3455	2735	0008246	1184	14832																
		STD	0900	0471	3456	2738	0008002	1266	14841																
237		OBS	T0996	0459	34577	2741			14852																
		STD	1000	0459	3458	2741	0007819	1345	14853																
		STD	1100	0459	3474	2754	0006742	1417	14871																
		STD	1200	0455	3486	2764	0005910	1481	14888																
237		OBS	T1209	0454	34868	2764			14889																
		STD	1300	0446	3494	2771	0005305	1537	14902																
		STD	1400	0432	3497	2775	0004998	1588	14913																
237		OBS	1455	0423	34977	2776			14919																

TABLE II.—Observed and interpolated oceanographic data collected on USCGC EASTWIND (WAGB 279) during 22–26 March 1966; prepared from NODC listing 31–987.

REFERENCE		SHIP CODE	LATITUDE ° ' /18	LONGITUDE ° ' /18	REF. NO.	MARS DEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	NO. NO.					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER		SEA	TYH	
31	987	EW	0251 S	03843 W		303	28	03	22	085	1966	001		1975	09	11	1		X1	8	2	0001
WATER		WIND		BARO-METER (mb)	AIR TEMP. °C		NO. OBS. DEPTHS	SPECIAL OBSERVATIONS														
COLOR CODE	TRNSL. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB																
		06	S10	189	271	238	7	16														
MESSAGE TIME NR 1/18	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	$\Sigma \Delta \sigma_t$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{ml}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{ml}^{-1}$	SIO <sub>4</sub> -Si $\mu\text{g} \cdot \text{ml}^{-1}$	pH	COND.					
		STD	0000	2768	3619	2342	0044762	0000	15422	448												
057		OBS	0000	2768	36192	2342			15422	448												
		STD	0010	2769	3619	2341	0044835	0045	15424	433												
		STD	0020	2769	3619	2341	0044890	0090	15426	422												
057		OBS	0024	2741P	36189	2350P																
		STD	0030	2769	3619	2341	0044955	0135	15427	417												
057		OBS	0043	2770	36189	2341			15430	416												
		STD	0050	2771	3619	2341	0045083	0225	15431	421												
057		OBS	0060	2772	36189	2340			15433	427												
		STD	0075	2769	3620	2342	0045054	0337	15435	522												
057		OBS	0076	2765	36208	2344			15434	526												
		STD	0100	2445	3680	2489	0031140	0433	15372	474												
057		OBS	0110	2327	36835	2527			15345	459												
		STD	0125	2185	3647	2540	0026390	0504	15308	447												
057		OBS	0144	1996	36067	2560			15256	435												
		STD	0150	1897	3595	2577	0022850	0566	15228	434												
		STD	0200	1342	3528	2654	0015563	0662	15059	423												
057		OBS	T0205	1313	35248	2658			15050	421												
		STD	0250	1285	3521	2660	0015093	0739	15047	404												
057		OBS	0254	1280	35205	2661			15046	402												
		STD	0300	1185	3510	2671	0014131	0812	15020	376												
057		OBS	T0303	1181	35095	2672			15019	375												
057		OBS	0353	1159	35069	2674			15019	355												
		STD	0400	1073	3492	2678	0013662	0951	14995	380												
057		OBS	T0453	0784	34656	2705			14893	408												
085		OBS	T0466	0682	34575	2713			14854	372												
		STD	0500	0631	3453	2716	0009836	1068	14839	385												
085		OBS	0572	0554	34474	2722			14819	392												
		STD	0600	0539	3447	2723	0009208	1163	14818	384												
085		OBS	T0640	0519	34463	2725			14816	375												
		STD	0700	0491	3448	2729	0008683	1253	14815	378												
		STD	0800	0452	3450	2735	0008153	1337	14815	383												
		STD	0900	0421	3452	2740	0007717	1416	14819	388												
085		OBS	T0916	0417	34520	2741			14820	389												

TABLE II.—Continued

REFERENCE SHIP CODE	LATITUDE ° 1/18	LONGITUDE ° 1/18	MANSION SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TD BOTTOM	MAL. DEPTH OF SAMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODE	NODC STATION NUMBER
				MO		DAY			CRUISE NO.	STATION NUMBER			DR	HGT	PER	SEA			
				10°	1'	MO	DAY												

31 987	EW	0235 S	03739 W	303	27	03	22	166	1966		002	3145	16	09	2				X 1	6 4	0002
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WATER COLDER CODE	WIND SPEED OR FORCE	BARO- METER (mb)	AIR TEMP. °C		VLS CODE	NO. OBS. DEPTH	SPECIAL OBSERVATIONS
			DRY BULB	WET BULB			

MEASURE NO.	CARD NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	$\sigma_{\theta}$ D DYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - µl/l	TOTAL-P µg - µl/l	NO <sub>2</sub> -N µg - µl/l	NO <sub>3</sub> -N µg - µl/l	SiO <sub>2</sub> -Si µg - µl/l	pH	SEC
155		STD	0000	2782	3602	2324	0046434	0000	15423	451							
		OBS	0000	2782	36020	2324			15423	451							
		STD	0010	2776	3602	2326	0046275	0046	15424	451							
		STD	0020	2770	3602	2328	0046120	0093	15424	451							
		STD	0030	2764	3603	2330	0045961	0139	15424	451							
155		OBS	0043	2756	36027	2333			15425	451							
		STD	0050	2724	3626	2361	0043124	0228	15421	449							
155		OBS	0061	2673	36534	2398			15415	446							
		STD	0075	2609	3670	2431	0036574	0327	15405	470							
155		OBS	0076	2601	36710	2434			15403	471							
		STD	0100	2231	3655	2533	0026957	0407	15317	434							
155		OBS	0109	2104	36408	2557			15283	421							
		STD	0125	1870	3591	2581	0022395	0468	15216	396							
155		OBS	0140		35547					377							
		STD	0150	1567	3545	2619	0018850	0520	15125	371							
		STD	0200	1196	3514	2672	0013793	0602	15008	344							
155		OBS	T0201	1192	35134	2673			15006	343							
		STD	0250	1154	3507	2675	0013660	0670	15000	348							
155		OBS	0256	1150	35066	2676			15000	348							
		STD	0300	1125	3505	2679	0013403	0738	14998	348							
155		OBS	T0308	1115	35039	2680			14996	347							
155		OBS	0355	1019	34922	2688			14968	331							
		STD	0400	0843	3473	2702	0011256	0861	14908	339							
155		OBS	T0439	0731	34611	2709			14869	347							
		STD	0500	0656	3455	2715	0010027	0968	14849	361							
155		OBS	T0551	0618	34521	2717			14842	373							
		STD	0600	0613	3453	2719	0009731	1066	14848	345							
166		OBS	T0623	0604	34531	2720			14848	338							
		STD	0700	0524	3447	2725	0009134	1161	14828	355							
166		OBS	T0744	0488	34452	2728			14820	362							
		STD	0800	0467	3448	2732	0008455	1249	14821	361							
		STD	0900	0440	3454	2740	0007778	1330	14827	360							
		STD	1000	0423	3461	2747	0007147	1404	14838	359							
166		OBS	1010	0422	34618	2748			14839	359							
		STD	1100	0428	3471	2755	0006570	1473	14858	393							
		STD	1200	0435	3480	2761	0006094	1536	14879	420							
		STD	1300	0442	3487	2766	0005771	1596	14900	436							
166		OBS	T1309	0443	34872	2766			14901	437							
		STD	1400	0436	3492	2771	0005418	1652	14914	429							
		STD	1500	0420	3496	2775	0005007	1704	14925	421							
166		OBS	T1647	0384	34979	2781			14935	408							





TABLE II.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MOON	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		MOOC STATION NUMBER	
CTRY CODE	IQ. NO.					10"	1'	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT.	PER.		SEA	TYPE		AMT
31	987	EW	0140 S	03552 W	303	15	03	23	125	1966		005	4114	23	07	2		X2	8	5		0005	
WATER		WIND		AIR TEMP. °C			BARO-METER		NO. OBS. DEPTHS			SPECIAL OBSERVATIONS											
COLOR CODE		TRANS. (m)	DIR.	SPEED OR FORCE		HGT. (mb)	OBJ. RULE	WET. RULE	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS												
		08	S08	137		272	256	7	16														
MESSINGS TIME	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-2107	Σ Δ ρ DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - dl/l	TOTAL-P μg - dl/l	NO <sub>2</sub> -N μg - dl/l	NO <sub>3</sub> -N μg - dl/l	SI O <sub>4</sub> -Si μg - dl/l	#N	#C						
117		STD	0000	2746	3600	2334	0045474	0000	15415	451													
		OBS	0000	2746	35998	2334			15415	451													
		STD	0010	2745	3598	2333	0045586	0046	15416	453													
		STD	0020	2744	3597	2333	0045705	0091	15418	455													
		STD	0030	2743	3595	2332	0045820	0137	15419	456													
117		OBS	0039	2742	3499P	2260P				458													
		STD	0050	2675	3593	2352	0044030	0227	15407	418													
117		OBS	0072	2541	35893	2391			15380	356													
		STD	0075	2418	3585	2425	0037100	0328	15351	349													
		STD	0100	1637	3554	2609	0019578	0399	15139	313													
117		OBS	0110	1445	35455	2646			15080	309													
		STD	0125	1403	3540	2651	0015698	0443	15068	330													
117		OBS	0148	1347	35330	2657			15053	352													
		STD	0150	1344	3533	2658	0015100	0482	15052	352													
		STD	0200	1262	3521	2665	0014520	0556	15031	351													
117		OBS	0218	1230	35169	2668			15023	350													
		STD	0250	1167	3509	2674	0013750	0626	15005	309													
117		OBS	0293	1077	34989	2683			14979	276													
		STD	0300	1054	3496	2685	0012811	0693	14972	282													
		STD	0400	0790	3467	2705	0010896	0811	14887	343													
117		OBS	T0437	0720	34602	2710			14865	354													
		STD	0500	0658	3455	2714	0010054	0916	14850	346													
117		OBS	0582	0595	34513	2720			14838	342													
		STD	0600	0586	3451	2720	0009519	1014	14837	344													
		STD	0700	0542	3450	2725	0009143	1107	14836	351													
117		OBS	T0723	0533	34495	2726			14836	353													
		STD	0800	0504	3448	2728	0008889	1197	14837	357													
117		OBS	0871	0481	34474	2730			14839	360													
		STD	0900	0468	3450	2734	0008422	1284	14839	373													
		STD	1000	0438	3459	2744	0007481	1363	14844	407													
125		OBS	T1086	0431	34684	2752			14857	422													
		STD	1100	0434	3470	2753	0006716	1434	14860	422													
117		OBS	T1191	0445	34809	2761			14882	423													
		STD	1200	0444	3482	2761	0006097	1499	14883	428													
		STD	1300	0435	3488	2768	0005571	1557	14897	475													
		STD	1400	0423	3495	2775	0005003	1610	14909	514													
125		OBS	1409	0422	34959	2775			14911	517													
		STD	1500	0406	3496	2777	0004820	1659	14919	540													
125		OBS	T1710	0375	34972	2781			14942	580													
		STD	1750	0370	3497	2781	0004483	1775	14946	580													
		STD	2000	0345	3497	2784	0004342	1885	14978	582													
125		OBS	T2337	0328	34961	2785			15028	585													



TABLE II.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARSJOEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES TYPE AMT	NODC STATION NUMBER						
CTRY CODE	ID. NO.					CRUISE NO.	STATION NUMBER	10"		1'	MO DAY HR./10			DIR.	HGT PER	SEA									
31	987	EW	005855	03442	W	303	04	03	23	233	1966		007	4	297	20	11	3	2		XX	X	9		0007

WATER			WIND		BARO-METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OF FORCE	DRY BULB		WET BULB				
			06	S09	127	273	250	7	16	

MESSING TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}^t$	$\Delta \sigma_{\theta}^t$ DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - dl/l	TOTAL-P μg - dl/l	NO <sub>2</sub> -N μg - dl/l	NO <sub>3</sub> -N μg - dl/l	SIO <sub>4</sub> -Si μg - dl/l	pH	SC
		STD	0000	2736	3603	2340	0044964	0000	15413	458							
228		OBS	0000	2736	36026	2340			15413	458							
		STD	0010	2732	3602	2340	0044918	0045	15414	457							
		STD	0020	2726	3602	2342	0044811	0090	15414	456							
228		OBS	0024	2723	36014	2343			15414	456							
		STD	0030	2716	3602	2345	0044548	0134	15414	440							
		STD	0050	2694	3603	2353	0043876	0223	15412	387							
228		OBS	0059	2684	36031	2357			15412	363							
228		OBS	0073	2416	36007	2438			15352	432							
		STD	0075	2323	3596	2461	0033636	0320	15329	433							
228		OBS	0098	1513	35553	2639			15101								
		STD	0100	1508	3555	2640	0016704	0383	15099	439							
		STD	0125	1445	3547	2647	0016046	0424	15083	445							
228		OBS	0148	1384	35390	2654			15066	451							
		STD	0150	1378	3538	2654	0015411	0463	15064	445							
		STD	0200	1236	3519	2669	0014173	0537	15022	331							
228		OBS	0203	1228	35177	2669			15020	327							
		STD	0250	1086	3501	2683	0012887	0605	14976	333							
		STD	0300	0975	3487	2691	0012136	0667	14942	340							
228		OBS	T0302	0971	34869	2692			14941	340							
		STD	0400	0874	3476	2699	0011517	0785	14920	337							
228		OBS	0403	0870	34758	2700			14919	337							
		STD	0500	0680	3458	2714	0010137	0894	14859	340							
228		OBS	T0508	0668	34570	2714			14856	341							
		STD	0600	0576	3451	2722	0009388	0991	14833	359							
228		OBS	0607	0570	34508	2722			14832	360							
		STD	0700	0526	3450	2727	0008930	1083	14829	359							
		STD	0800	0488	3449	2731	0008620	1171	14830	357							
228		OBS	T0807	0486	34492	2731			14830	357							
		STD	0900	0458	3457	2740	0007780	1253	14835	376							
		STD	1000	0439	3464	2748	0007125	1327	14845	394							
233		OBS	T1013	0437	34651	2749			14846	396							
		STD	1100	0439	3471	2754	0006711	1396	14863	407							
		STD	1200	0442	3477	2758	0006404	1462	14881	419							
233		OBS	1266	0444	34818	2762			14894	427							
		STD	1300	0439	3485	2765	0005873	1523	14898	448							
		STD	1400	0423	3492	2772	0005245	1579	14909	501							
		STD	1500	0409	3497	2777	0004786	1629	14921	544							
233		OBS	T1515	0407	34977	2778			14922	549							
		STD	1750	0379	3497	2781	0004597	1746	14950	566							
		STD	2000	0357	3496	2782	0004550	1861	14983	583							
233		OBS	T2023	0355	34963	2782			14986	585							





TABLE II.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARSDEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL.	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER																																
CTD CODE	ID. NO.					10'	1"	MO		DAY	ML/10			CRUISE NO.	STATION NUMBER	DR.		HGT	PER		SEA	TYPE	AMT																													
31	987	EW	0021 S	03328 W	303	03	03	24	096	1966	009	4389	15	13	3	X1	8	4	0009																																	
<table border="1"> <thead> <tr> <th colspan="4">WATER</th> <th colspan="2">WIND</th> <th colspan="3">AIR TEMP. °C</th> <th colspan="2">SPECIAL OBSERVATIONS</th> </tr> <tr> <th>COLOR CODE</th> <th>TRAN. M1</th> <th>DIL.</th> <th>SPEED DIR FORCE</th> <th>BARO- METER (mm)</th> <th>DRY BULB</th> <th>WET BULB</th> <th>WIL CODE</th> <th>NO. OBS. DEPTH</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>02</td> <td>27</td> <td>09</td> <td>S07</td> <td>048</td> <td>279</td> <td>246</td> <td>7</td> <td>15</td> <td colspan="2"></td> </tr> </tbody> </table>																				WATER				WIND		AIR TEMP. °C			SPECIAL OBSERVATIONS		COLOR CODE	TRAN. M1	DIL.	SPEED DIR FORCE	BARO- METER (mm)	DRY BULB	WET BULB	WIL CODE	NO. OBS. DEPTH			02	27	09	S07	048	279	246	7	15		
WATER				WIND		AIR TEMP. °C			SPECIAL OBSERVATIONS																																											
COLOR CODE	TRAN. M1	DIL.	SPEED DIR FORCE	BARO- METER (mm)	DRY BULB	WET BULB	WIL CODE	NO. OBS. DEPTH																																												
02	27	09	S07	048	279	246	7	15																																												
MEASURED TIME NE 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	S Δ D DTH. M. 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	SiO <sub>2</sub> -S pg - ml/l	pH	CO <sub>2</sub>																																			
		STD	0000	2704	3601	2349	0044081	0000	15406	461																																										
080		OBS	0000	2704	36012	2349			15406	461																																										
		STD	0010	2703	3601	2349	0044098	0044	15408	456																																										
		STD	0020	2702	3601	2349	0044108	0088	15409	454																																										
080		OBS	0025	2702	36013	2350			15410	453																																										
		STD	0030	2694	3602	2353	0043843	0132	15409	454																																										
		STD	0050	2662	3603	2363	0042916	0219	15405	456																																										
080		OBS	0050	2662	36025	2363			15405	456																																										
		STD	0075	2247	3604	2489	0031007	0311	15311	385																																										
080		OBS	0075	2247	36035	2489			15311	385																																										
		STD	0100	1574	3564	2632	0017464	0372	15121	357																																										
080		OBS	0100	1574	35640	2632			15121	357																																										
		STD	0125	1427	3544	2649	0015895	0414	15076	355																																										
080		OBS	0149	1321	35303	2660			15044	353																																										
		STD	0150	1319	3530	2660	0014828	0452	15043	353																																										
		STD	0200	1216	3516	2670	0014017	0524	15015	371																																										
080		OBS	0204	1208	35145	2670			15013	372																																										
		STD	0250	1121	3505	2679	0013213	0592	14989	304																																										
		STD	0300	1022	3493	2688	0012483	0656	14960	268																																										
080		OBS	T0303	1016	34928	2689			14958	267																																										
		STD	0400	0811	3471	2705	0010915	0773	14895	315																																										
080		OBS	0403	0806	34700	2705			14894	316																																										
		STD	0500	0684	3459	2714	0010119	0879	14861	330																																										
080		OBS	T0508	0675	34580	2714			14858																																											
		STD	0600	0586	3452	2721	0009445	0976	14837	340																																										
080		OBS	0608	0579	34519	2722			14836	341																																										
		STD	0700	0519	3452	2729	0008701	1067	14827	343																																										
		STD	0800	0473	3452	2735	0008226	1152	14824	345																																										
080		OBS	T0808	0470	34521	2735			14824	345																																										
		STD	0900	0453	3458	2742	0007643	1231	14833	357																																										
096		OBS	0989	0442	34640	2748			14844	370																																										
		STD	1000	0442	3465	2748	0007090	1305	14846	372																																										
		STD	1100	0443	3471	2753	0006756	1374	14864	389																																										
		STD	1200	0444	3478	2759	0006350	1440	14882	405																																										
096		OBS	1240	0444	34805	2761			14889	412																																										
		STD	1300	0441	3484	2764	0005972	1501	14899	433																																										
		STD	1400	0432	3491	2770	0005437	1558	14913	477																																										
096		OBS	T1486	0422	34970	2776			14924	524																																										



TABLE II.—Continued

REFERENCE		SHIP CODE	LATITUDE	LONGITUDE	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEA-TNER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.	' / 18	' / 10	' / 10		' / 10	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	NGS PER	SEA		TYPE	AMT	
						16"	1"						4444	22	09	5	2		X2	6	
31	987	EW	00201N	03216 W	004	02	03	24	189	1966	011										0011
WATER		WIND			BARO-METERS			AIR TEMP. °C			SPECIAL OBSERVATIONS										
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE	NO.	DRY BULB	WET BULB	VIS. CODE	NO. OBS. DEPTHS													
02	35	12	S05	112	268	254	7	16													
MESSAGE TIME NR 1/10	CASST OF HO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	$\Sigma \Delta \sigma$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu g - \mu l/l$	TOTAL-P $\mu g - \mu l/l$	NO <sub>3</sub> -N $\mu g - \mu l/l$	NO <sub>2</sub> -N $\mu g - \mu l/l$	SiO <sub>4</sub> -Si $\mu g - \mu l/l$	pH	S C				
184		STD	0000	2729	3605	2343	0044597	0000	15412	462											
		OBS	0000	2729	36047	2343			15412	462											
		STD	0010	2724	3605	2345	0044500	0045	15412	465											
		STD	0020	2712	3604	2349	0044187	0089	15411	468											
184		OBS	0029	2697	36041	2353			15410	470											
		STD	0030	2694	3604	2354	0043701	0133	15409	470											
		STD	0050	2641	3604	2371	0042135	0219	15401	463											
184		OBS	0054	2630	36044	2375			15399	460											
		STD	0075	2261	3617	2495	0030422	0309	15316	432											
184		OBS	0083	2141	36216	2532			15287	428											
		STD	0100	1932	3604	2575	0022883	0376	15231	439											
184		OBS	0108	1841	35960	2592			15206	440											
		STD	0125	1640	3571	2622	0018488	0428	15146	408											
		STD	0150	1421	3544	2650	0015845	0471	15078	375											
184		OBS	0163	1344	35340	2658			15054	365											
		STD	0200	1315	3530	2661	0014886	0547	15050	368											
184		OBS	0217	1292	35271	2664			15045	370											
		STD	0250	1202	3516	2673	0013883	0619	15018	328											
		STD	0300	1068	3500	2685	0012761	0686	14977	286											
184		OBS	T0327	0998	34928	2692			14956	274											
		STD	0400	0796	3476	2711	0010321	0801	14890	292											
184		OBS	0434	0733	34704	2716			14871	301											
		STD	0500	0696	3464	2716	0009918	0903	14866	320											
184		OBS	T0544	0666	34597	2717			14861	328											
		STD	0600	0614	3456	2721	0009522	1000	14849	329											
184		OBS	0653	0571	34530	2724			14840	329											
		STD	0700	0537	3455	2730	0008709	1091	14834	338											
		STD	0800	0482	3460	2740	0007754	1173	14829	356											
184		OBS	T0871	0457	34920	27680			368												
		STD	0900	0455	3465	2747	0007151	1248	14835	372											
		STD	1000	0451	3470	2751	0006833	1318	14851	389											
189		OBS	T1078	0448	34743	2755			14863	403											
		STD	1100	0448	3476	2757	0006450	1384	14867	407											
		STD	1200	0447	3483	2762	0006022	1446	14884	426											
		STD	1300	0446	3489	2767	0005667	1505	14901	450											
189		OBS	1358	0445	34912	2769			14911	466											
		STD	1400	0437	3492	2770	0005431	1560	14915	484											
		STD	1500	0418	3495	2775	0005053	1613	14924	521											
189		OBS	T1632	0395	34975	2779			14937	559											
		STD	1750	0377	3497	2781	0004563	1733	14949	564											
		STD	2000	0347	3497	2783	0004398	1845	14979	576											
189		OBS	T2178	0331	34962	2785			15002	584											

TABLE II.—Continued

REFERENCE CTRY CODE	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DEPTH METER	MARSSEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NOOC STATION NUMBER
					10"	1"	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TYPE	
31 987	EW	0040 N	03141 W	004	01	03	24	24	1966		012	3383	34	01	2	4		XO	0	0	0012
					WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
					COLOR CODE	TRANS. (m <sup>2</sup> )	DIR.	SPEED OR FORCE	NO.	DRY BULB	WET BULB	WIND CODE				NO. OBS. DEPTHS					
					36	36	305	140	262	244	7	19									

MESSAGE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D OYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	σ <sub>t</sub> C
		STD	0000	2739	3600	2337	0045222	0000	15414	464							
229		OBS	0000	2739	36003	2337			15414	464							
		STD	0010	2730	3602	2341	0044864	0045	15414	464							
		STD	0020	2720	3604	2346	0044454	0090	15413	464							
229		OBS	0025	2714	36043	2348			15413	464							
		STD	0030	2707	3604	2350	0044078	0134	15412	463							
229		OBS	0046	2686	36046	2357			15410	462							
		STD	0050	2588	3609	2391	0040225	0218	15389	462							
229		OBS	0072	2126	36160	2532			15280	462							
		STD	0075	2075	3613	2544	0025759	0301	15267	454							
229		OBS	0094	1794	35934	2602			15190	410							
		STD	0100	1728	3585	2612	0019386	0357	15170	402							
		STD	0125	1513	3557	2640	0016740	0402	15105	375							
229		OBS	0142	1419	35448	2651			15077	365							
		STD	0150	1418	3544	2651	0015783	0443	15078	369							
229		OBS	0190	1386	35401	2654			15073	372							
		STD	0200	1357	3536	2657	0015277	0521	15065	355							
		STD	0250	1208	3517	2672	0013922	0594	15020	294							
229		OBS	T0290	1087	35027	2684			14983	274							
		STD	0300	1047	3498	2687	0012544	0660	14970	283							
229		OBS	0390	0778	34668	2707			14880	338							
		STD	0400	0767	3466	2708	0010630	0776	14878	339							
229		OBS	T0493	0680	34600	2715			14858	342							
		STD	0500	0675	3460	2716	0009919	0878	14857	340							
229		OBS	0597	0614	34548	2720			14848	326							
		STD	0600	0612	3455	2720	0009584	0976	14848	326							
		STD	0700	0540	3453	2728	0008873	1068	14835	338							
		STD	0800	0488	3452	2733	0008435	1155	14830	350							
241		OBS	T0816	0482	34516	2733			14831	352							
		STD	0900	0463	3457	2740	0007842	1236	14837	366							
		STD	1000	0448	3464	2747	0007238	1312	14849	384							
241		OBS	T1029	0445	34659	2749			14853	390							
		STD	1100	0446	3472	2754	0006726	1381	14866	401							
		STD	1200	0448	3480	2760	0006261	1446	14884	422							
		STD	1300	0450	3487	2765	0005879	1507	14903	451							
241		OBS	T1300	0450	34869	2765			14903	451							
		STD	1400	0428	3492	2771	0005311	1563	14911	502							
		STD	1500	0408	3496	2777	0004846	1614	14920	543							
241		OBS	T1565	0397	34976	2779			14927	565							
		STD	1750	0377	3497	2781	0004555	1731	14949	579							
		STD	2000	0351	3497	2783	0004431	1844	14981	591							
241		OBS	2103	0340	34967	2784			14993	594							
		STD	2500	0298	3494	2786	0004249	2061	15043	586							
241		OBS	T2656	0286	34935	2787			15065	585							
		STD	3000	0270	3492	2787	0004280	2274	15117	591							
241		OBS	T3182	0261	34918	2788			15144	594							
241		OBS	T3376	0250	34916	2788			15173	627							

TABLE II.—Continued

REFERENCE		SHIP CODE	SHIP NO.	LATITUDE 1/10	LONGITUDE 1/10	Z TIME	STATION TIME (GMT)					YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES	NODC STATION NUMBER	
CTRY CODE	ID. NO.						1 <sup>st</sup>	2 <sup>nd</sup>	MO	DAY	HR./10		CLUISE NO.	STATION NUMBER			DR.	HGT	PER				SEA
31	987	EW		0100 N	03105 W		004	11	03	25	046	1966		013	2560	22	09	0		X1	6 3		0013
WATER			WIND			BARO- METER		AIR TEMP. °C			NO. OBS. DEPTHS	SPECIAL OBSERVATIONS											
COLOUR CODE	TEMP. °C	DIR.	SPEED OF FORCE	DRY BULB	WET BULB	MR. CODE	NO. OBS. DEPTHS																
		00	500	118	272	247	7	16															
MESSAGE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SINCPIC VOLUME ANOMALY—10 <sup>3</sup>	± Δ D DTN, M. 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> m/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>2</sub> -Si pg - ml/l	pH	σ <sub>t</sub>						
		STD	0000	2748	3592	2328	0046103	0000	15415	449													
041		OBS	0000	2748	35919	2328			15415	449													
		STD	0010	2742	3593	2330	0045910	0046	15415	454													
		STD	0020	2736	3593	2333	0045716	0092	15416	457													
041		OBS	0029	2733	35940	2334			15416	458													
		STD	0030	2733	3594	2334	0045612	0137	15417	458													
		STD	0050	2731	3588	2330	0046071	0229	15419	455													
041		OBS	0062	2730	35862	2329			15420	447													
		STD	0075	2280	3587	2467	0033097	0328	15317	425													
041		OBS	0096	1760	35884	2606			15180	398													
		STD	0100	1711	3582	2613	0019213	0394	15165	397													
		STD	0125	1461	3550	2646	0016166	0438	15088	380													
041		OBS	0125	1461	35499	2646			15088	380													
		STD	0150	1367	3537	2656	0015264	0477	15060	321													
041		OBS	0187	1255	35213	2667			15027	273													
		STD	0200	1234	3519	2669	0014135	0551	15021	278													
		STD	0250	1139	3507	2678	0013403	0619	14995	296													
041		OBS	0250	1139	35068	2678			14995	296													
		STD	0300	0970	3488	2693	0011980	0683	14940	309													
041		OBS	0376	0793	34689	2706			14884	317													
		STD	0400	0783	3468	2706	0010755	0797	14884	313													
		STD	0500	0712	3461	2712	0010337	0902	14872	299													
041		OBS	0503	0709	34612	2712			14871	298													
		STD	0600	0575	3452	2723	0009301	1000	14833	355													
041		OBS	T0631	0546	34500	2725			14826	363													
		STD	0700	0512	3450	2728	0008797	1091	14823	353													
041		OBS	0735	0497	34493	2730			14823	350													
		STD	0800	0486	3451	2732	0008469	1177	14830	356													
		STD	0900	0469	3456	2738	0007992	1259	14840	365													
		STD	1000	0452	3465	2747	0007217	1335	14851	375													
041		OBS	T1025	0448	34671	2749			14853	377													
		STD	1100	0452	3476	2756	0006512	1404	14869	411													
046		OBS	T1100	0452	34759	2756			14869	411													
		STD	1200	0449	3483	2762	0006053	1467	14885	436													
		STD	1300	0446	3488	2766	0005747	1526	14901	463													
046		OBS	1371	0444	34913	2769			14913	483													
		STD	1400	0437	3492	2770	0005431	1582	14915	495													
		STD	1500	0416	3494	2774	0005099	1634	14923	532													
046		OBS	T1647	0389	34965	2779			14937	573													
		STD	1750	0373	3496	2781	0004582	1755	14947	576													
		STD	2000	0344	3496	2783	0004430	1868	14977	585													
046		OBS	T2196	0332	34951	2784			15006	591													

TABLE II.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	SOUNDING	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER		
CRUISE CODE	ID. NO.	CODE	' 1/10	' 1/10		10"	1"	MO	DAY	HR./10	CRUISE NO.	STATION NUMBER	TO		BDTDM	DIR	HGT		PER	SEA		TYPE	AMT
31	987	EW	01230N	030365W		004	10	03	25	086	1966		014	3200	30	15	4		X1	3	7	0014	
				WATER		WIND		AIR TEMP. °C				HD. OBS. DEPTHS	SPECIAL OBSERVATIONS										
COLOR CODE		TRANS. MI	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY RULE	WET RULE	VIS. CODE															
				36	505	120	260	246	8	18													
MESSAGE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-t	SPECIFIC VOLUME ANOMALY-10 <sup>3</sup>	Σ Δ σ <sub>t</sub> (μmole/l)	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg-at/l	TOTAL-P μg-at/l	NO <sub>3</sub> -N μg-at/l	NO <sub>2</sub> -N μg-at/l	SiO <sub>4</sub> -Si μg-at/l	pH	SIC						
		STD	0000	2738	3532	2286	0050071	0000	15406	467													
	086	OBS	0000	2738	35324	2286			15406	467													
		STD	0010	2740	3565	2310	0047825	0049	15412	465													
		STD	0020	2742	3586	2325	0046413	0096	15416	463													
	086	OBS	0022	2742	35887	2327			15417	463													
		STD	0030	2737	3589	2329	0046143	0142	15417	465													
	086	OBS	0044	2729	35881	2331			15417	468													
		STD	0050	2454	3585	2414	0038031	0227	15355	412													
	086	OBS	0065	1909	35747	2559			15216	334													
		STD	0075	1679	3564	2607	0019712	0299	15149	361													
	086	OBS	0086	1486	35538	2644			15090	374													
		STD	0100	1436	3546	2648	0015861	0343	15075	319													
		STD	0125	1358	3535	2656	0015161	0382	15053	260													
	086	OBS	0130	1344	35332	2658			15049	254													
		STD	0150	1300	3528	2663	0014605	0419	15037	277													
	086	OBS	0178	1242	35205	2669			15021	297													
		STD	0200	1195	3515	2673	0013701	0490	15008	284													
		STD	0250	1104	3503	2681	0013057	0557	14982	268													
	086	OBS	T0265	1080	35007	2684			14976	267													
		STD	0300	1055	3498	2686	0012682	0621	14972	281													
	086	OBS	0353	0977	34898	2693			14952	299													
		STD	0400	0830	3474	2704	0010983	0739	14903	309													
	086	OBS	T0447	0717	34633	2713			14866	317													
		STD	0500	0643	3458	2719	0009627	0843	14844	321													
	086	OBS	0541	0596	34541	2722			14832														
		STD	0600	0564	3451	2723	0009232	0937	14828	329													
		STD	0700	0518	3450	2728	0008836	1027	14826	340													
	086	OBS	T0732	0506	34498	2729			14826	344													
		STD	0800	0488	3453	2734	0008347	1113	14831	347													
		STD	0900	0466	3459	2741	0007732	1193	14839	357													
		STD	1000	0452	3465	2748	0007185	1268	14851	373													
	090	OBS	1000	0452	34654	2748			14851														
		STD	1100	0449	3475	2756	0006541	1337	14867	395													
		STD	1200	0446	3483	2762	0006015	1399	14884	425													
	090	OBS	1240	0445	34855	2764			14890	438													
		STD	1300	0435	3489	2768	0005527	1457	14897	470													
		STD	1400	0420	3494	2774	0005059	1510	14908	515													
	090	OBS	1498	0406	34976	2778			14919	550													
		STD	1500	0406	3498	2778	0004703	1559	14919	550													
		STD	1750	0380	3497	2781	0004596	1675	14951	567													
	090	OBS	T1998	0355	34970	2783			14982	583													
		STD	2000	0355	3497	2783	0004476	1789	14982	583													
		STD	2500	0302	3494	2786	0004309	2008	15045	577													
	090	OBS	T2502	0302	34939	2786			15045	577													
		STD	3000	0270	3492	2787	0004273	2223	15117	580													
	090	OBS	T3002	0270	34921	2787			15117	580													

TABLE II.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	ORIG. PROJECT	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NOOC STATION NUMBER
CTRY CODE	IO. NO.					10"	1"	MO	DAY	HL1/10		CRUISE NO.	STATION NUMBER			OR.	HGT	PER	SEA		TYPE	AMT	
31	987	EW	01317N	029520W	003	19	03	25	138	1966		015	3109	22	11	2		X2	7	8		0015	
		WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE	NO. OES. DEPTHS	SPECIAL OBSERVATIONS											
		COLOR CODE	TRANS. UNIT	OR.	SPEED OR FORCE	UNITS	DRY BULB	WET BULB															
				06	503	143	276	260	7	16													

MESSAGE TIME HR 1/10	CARD NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-210?	$\Sigma \Delta \sigma_{\theta}$ OYN. M. x 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	SiO <sub>4</sub> -Si pg - ml/l	pH	SIG
		STD	0000	2777	3544	2282	0050417	0000	15416	490							
138		OBS	0000	2777	35444	2282			15416	490							
		STD	0010	2771	3558	2295	0049288	0050	15418	492							
		STD	0020	2765	3568	2304	0048419	0099	15419	493							
138		OBS	0029	2759	35719	2309			15420	495							
		STD	0030	2756	3572	2310	0047948	0147	15419	496							
		STD	0050	2703	3566	2322	0046826	0242	15410	506							
138		OBS	0052	2698	35650	2323			15409	507							
		STD	0075	1814	3567	2576	0022648	0329	15189	423							
138		OBS	0081	1667	35670	2612			15147	399							
		STD	0100	1460	3548	2645	0016210	0377	15083	314							
138		OBS	0104	1427	35450	2650			15073	301							
		STD	0125	1390	3540	2654	0015436	0417	15064	296							
		STD	0150	1339	3534	2659	0014928	0455	15050	290							
138		OBS	0156	1325	35319	2661			15046	289							
		STD	0200	1206	3516	2672	0013831	0526	15011	363							
138		OBS	0209	1185	35134	2674			15005	371							
		STD	0250	1123	3506	2680	0013175	0594	14989	329							
		STD	0300	1049	3498	2687	0012578	0658	14970	295							
138		OBS	T0312	1031	34963	2689			14966	290							
		STD	0400	0906	3484	2700	0011437	0778	14933	289							
138		OBS	0417	0877	34810	2703			14924	289							
		STD	0500	0703	3464	2715	0010017	0886	14869	307							
138		OBS	T0522	0667	34612	2718			14858	311							
		STD	0600	0575	3454	2724	0009153	0982	14833	327							
138		OBS	0629	0548	34518	2726			14827	332							
		STD	0700	0518	3452	2729	0008710	1071	14826	336							
		STD	0800	0484	3452	2733	0008392	1156	14829	346							
138		OBS	T0846	0473	34516	2734			14832	353							
		STD	0900	0467	3455	2738	0008040	1239	14839	364							
		STD	1000	0457	3463	2745	0007425	1316	14852	385							
143		OBS	T1063	0452	34681	2750			14861	399							
		STD	1100	0451	3473	2754	0006711	1387	14868	407							
		STD	1200	0448	3484	2763	0005966	1450	14885	432							
		STD	1300	0445	3492	2770	0005441	1507	14901	460							
143		OBS	1340	0444	34942	2771			14908	472							
		STD	1400	0432	3495	2773	0005145	1560	14913	499							
		STD	1500	0414	3497	2777	0004853	1610	14923	538							
143		OBS	T1613	0396	34981	2780			14934	571							
		STD	1750	0376	3499	2782	0004447	1726	14949	575							
		STD	2000	0348	3499	2786	0004208	1834	14980	581							
143		OBS	T2154	0335	34999	2787			15000	585							



TABLE II.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTN TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THEP CODE	CLOUD CODES		NODC STATION NUMBER
CRUISE CODE	ID. NO.					10'	1'	MO	DAY		ML/10	10			STATION NUMBER	DR	HGT	PER		SEA	TYPE	
31	987	EW	01580N	029210W	003	19	03	25	182	1966	016	3200	31	16	3	X8	7	8	0016			
		WATER		WIND		BARO- METER (mbars)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS											
		COLOR CODE	TRANS. IM	DIR.	SPEED OR FORCE		DRY BULB	WET BULB														
			16	S03	123	264	244	7	19													
MESSAGE TIME NB 1/10	CASST NO.	CARD TYPE	DEPTN IMI	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \sigma$ DYN. M. $\Sigma 10^6$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu g - \sigma l/l$	TOTAL-P $\mu g - \sigma l/l$	NO <sub>2</sub> -N $\mu g - \sigma l/l$	NO <sub>3</sub> -N $\mu g - \sigma l/l$	SiO <sub>4</sub> -Si $\mu g - \sigma l/l$	pH	SIG CODE					
182		STD	0000	2796	3549	2279	0050715	0000	15420	464												
		OBS	0000	2796	35485	2279			15420	464												
		STD	0010	2780	3554	2289	0049862	0050	15419	461												
		STD	0020	2768	3558	2296	0049243	0100	15419	457												
182		OBS	0024	2765	35587	2297			15419	456												
		STD	0030	2763	3559	2298	0049085	0149	15419	458												
182		OBS	0047	2759	35591	2299			15421	465												
		STD	0050	2634	3565	2344	0044765	0243	15395	449												
182		OBS	0070	1935	35779	2554			15224	354												
		STD	0075	1800	3568	2581	0022215	0327	15185	329												
182		OBS	0094	1412	35407	2649			15066	260												
		STD	0100	1398	3539	2651	0015599	0374	15062	262												
		STD	0125	1343	3532	2657	0015084	0412	15047	270												
182		OBS	0141	1313	35286	2661			15040	275												
		STD	0150	1301	3527	2662	0014697	0449	15037	265												
182		OBS	0193	1239	35190	2668			15022	239												
		STD	0200	1227	3518	2670	0014077	0521	15019	246												
		STD	0250	1143	3508	2678	0013388	0590	14997	283												
182		OBS	T0288	1080	35006	2684			14980	300												
		STD	0300	1061	3498	2685	0012786	0655	14975	300												
182		OBS	0383	0924	34822	2696			14936	302												
		STD	0400	0889	3481	2701	0011386	0776	14926	293												
182		OBS	0482	0757	34736	2715			14888	270												
		STD	0500	0743	3471	2715	0010076	0884	14885	272												
182		OBS	0578	0677	34616	2717			14871	282												
		STD	0600	0648	3460	2720	0009691	0982	14863	288												
		STD	0700	0542	3455	2729	0008774	1075	14836	315												
182		OBS	T0771	0491	34537	2734			14827	334												
		STD	0800	0483	3454	2735	0008210	1160	14829	342												
		STD	0900	0463	3459	2741	0007694	1239	14838	367												
182		OBS	T0975	0453	34632	2746			14847	384												
		STD	1000	0453	3466	2748	0007152	1313	14851	387												
		STD	1100	0452	3476	2756	0006510	1382	14869	402												
187		OBS	T1186	0452	34834	2762			14884	422												
		STD	1200	0450	3484	2763	0005991	1444	14886	428												
		STD	1300	0439	3490	2769	0005506	1502	14899	468												
		STD	1400	0427	3494	2773	0005151	1555	14911	502												
187		OBS	T1428	0424	34948	2774			14914	510												
		STD	1500	0412	3495	2776	0004973	1606	14922	523												
		STD	1750	0375	3496	2780	0004623	1726	14948	559												
187		OBS	1924	0353	34962	2783			14968	575												
		STD	2000	0345	3496	2783	0004414	1839	14978	575												
187		OBS	2418	0306	34943	2786			15032	576												
		STD	2500	0298	3494	2786	0004249	2055	15043	576												
187		OBS	T2920	0267	34912	2787			15102	567												
		STD	3000	0263	3491	2787	0004233	2267	15114	563												
187		OBS	T3067	0260	34911	2787			15124	560												

TABLE II.—Continued

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		MOOC STATION NUMBER
CTRY CODE	ID. NO.					10'	1"	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR.	HGT	PER		SEA	TPP	
31	987	EW	02200N	028420W	003	28	03	25	238	1966	017	1536	14	05	5	3	X8	6	2	0017		
		WATER		WIND		BARO- METER		AIR TEMP. °C		VIT. CODES		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
		COLOR CODE		TRNSL. (m)		DIR.		SPEED OF FORCE		METER (mm)		DRY RULE		WET RULE								
				09		S04		141		273		260		7		15						
MESSENGER TIME NR 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DTN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	SiO <sub>2</sub> -Si pg - ml/l	pH	S CL					
		STD	0000	2794	3552	2283	0050387	0000	15420	466												
238		OBS	0000	2794	35522	2283			15420	466												
		STD	0010	2780	3557	2291	0049647	0050	15420	466												
		STD	0020	2767	3560	2297	0049068	0099	15419	466												
238		OBS	0024	2762	35614	2300			15418	466												
		STD	0030	2755	3562	2302	0048629	0148	15418	467												
238		OBS	0047	2736	35621	2309			15417	468												
		STD	0050	2639	3568	2344	0044700	0242	15396	450												
238		OBS	0071	2065	35885	2528			15261	346												
		STD	0075	1977	3583	2547	0025434	0329	15237	332												
238		OBS	0094	1639	35610	2614			15140	284												
		STD	0100	1591	3557	2622	0018345	0384	15126	286												
		STD	0125	1428	3542	2647	0016062	0427	15076	296												
238		OBS	0141	1354	35353	2657			15054	302												
		STD	0150	1342	3534	2659	0014987	0466	15051	291												
238		OBS	0193	1279	35256	2665			15036	259												
		STD	0200	1265	3524	2667	0014357	0539	15033	263												
		STD	0250	1166	3511	2676	0013585	0609	15005	285												
238		OBS	T0287	1092	35026	2683			14984	291												
		STD	0300	1060	3499	2686	0012695	0675	14974	285												
238		OBS	0381	0905	34831	2700			14929	267												
		STD	0400	0893	3481	2700	0011450	0795	14927	274												
238		OBS	T0480	0816	34730	2706			14910	299												
		STD	0500	0781	3470	2709	0010712	0906	14900	304												
238		OBS	0575	0664	34609	2718			14865	320												
		STD	0600	0630	3459	2721	0009517	1007	14856	323												
		STD	0700	0523	3456	2732	0008456	1097	14829	337												
238		OBS	T0765	0480	34555	2737			14822	346												
		STD	0800	0473	3456	2738	0007937	1179	14825	349												
		STD	0900	0459	3459	2742	0007644	1257	14836	365												
242		OBS	T0915	0457	34599	2743			14838	368												
		STD	1000	0457	3471	2752	0006835	1329	14853	402												
		STD	1100	0455	3482	2761	0006102	1394	14871	436												
242		OBS	1156	0452	34863	2764			14879	453												
		STD	1200	0449	3489	2767	0005611	1453	14886	465												
		STD	1300	0440	3493	2771	0005299	1507	14899	487												
242		OBS	T1373	0432	34941	2773			14908	500												





TABLE III.—Observed and interpolated oceanographic data collected on USCGC ROCKAWAY (WAGO 377) during 26 October–6 November 1966; prepared from NODC listing 31-1059.

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	STATION NO.	MARS DEN SQUARE			STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BDTDM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
CRUISE CODE	ID. NO.					10"	1"	MO	DAY	HR./10	CRUISE NO.		STATION NUMBER	DIR.			HGT	PER	SEA		TYR	AMT	
311059	RC	0124 N	02630 W	003	16	10	26	210	1966		057		3383	02	10	2	2		X1	8	2	0001	
		WATER		WIND		BARO- METER		AIR TEMP. °C			ND. OBS. DEPTHS		SPECIAL OBSERVATIONS										
		COLOR CODE	TRANSP. M	DIR.	SPEED OR FORCE	METER (mba)		DRY BULB	WET BULB	VIS. CODE													
					10	S14	078	283	245	7	08												
REFERENCE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	S Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	RE- COR.						
		STD	0000	2673	3567	2333	0045595	0000	15395	454													
	210	OBS	0000	2673	35670	2333			15395	454													
		STD	0010	2664	3567	2336	0045356	0045	15395	458													
		STD	0020	2657	3567	2338	0045178	0091	15395	460													
	210	OBS	0027	2653	35673	2340			15395	461													
		STD	0030	2652	3568	2340	0045049	0136	15396	461													
		STD	0050	2646	3569	2343	0044831	0226	15398	459													
	210	OBS	0054	2645	35695	2344			15398	459													
		STD	0075	2389	3575	2426	0036975	0328	15342	390													
	210	OBS	0082	2263	35773	2465			15313	363													
		STD	0100	1772	3565	2586	0021860	0402	15181	271													
	210	OBS	0108	1614	35595	2619			15134	245													
		STD	0125	1478	3547	2640	0016732	0450	15093	246													
	187	OBS	0147	1375	35367	2654			15062	253													
		STD	0150	1371	3536	2654	0015417	0490	15061	255													
	210	OBS	0163	1351	35340	2657			15056	263													
		STD	0200	1253	3522	2668	0014275	0564	15028	258													
	187	OBS	0221	1171	35115	2675			15002	255													

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1°/10	LONGITUDE °/10	DEPTH 10°	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLING	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		HOOC STATION NUMBER
CRUISE NO.	TO. NO.					10"	1"	MO	DAY	HL/10		CRUISE NO.	STATION NUMBER			DR.	HGT	PER	SEA		1/10	AMT	
311059	RC	0110 N	02659 W	003	16	10	27	010	1966		056	3155	15	12	2	2		X1	8	2		0002	
WATER	WIND	BARO- METER		AIR TEMP. °C		VIL CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS															
		COLOR CODE	TRNSL. (m)	DIR.	SPEED OR FORCE				DRY BULB	WET BULB													
		13	S05	115	260	234	7	15															
MESSAGE TIME NR 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta C$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N ug - ml/l	NO <sub>2</sub> -N ug - ml/l	SiO <sub>2</sub> -Si ug - ml/l	pH	S C						
		STD	0000	2586	3571	2364	0042665	0000	15376	420													
010		OBS	0000	2586	3571	2364			15376	420													
		STD	0010	2614	3571	2355	0043541	0043	15384	439													
		STD	0020	2632	3571	2349	0044122	0087	15390	452													
010		OBS	0024	2636	3571	2348			15392	455													
		STD	0030	2635	3572	2349	0044210	0131	15392	454													
010		OBS	0049	2627	3575	2354			15394	452													
		STD	0050	2626	3576	2355	0043734	0219	15394	452													
010		OBS	0073	2603	3582	2366			15393	448													
		STD	0075	2563	3582	2379	0041526	0326	15384	437													
010		OBS	0097	2158	3579	2495			15288	339													
		STD	0100	2102	3577	2509	0029153	0414	15274	333													
		STD	0125	1707	3561	2598	0020729	0476	15165	293													
010		OBS	0145	1479	3548	2641			15097	278													
		STD	0150	1453	3546	2645	0016358	0523	15089	283													
010		OBS	0195	1253	3521	2667			15027	308													
		STD	0200	1240	3520	2669	0014175	0599	15024	303													
		STD	0250	1119	3506	2681	0013104	0667	14988	262													
010		OBS	0292	1031	3496	2689			14962	241													
		STD	0300	1020	3495	2690	0012302	0731	14959	241													
010		OBS	0392	0873	3478	2701			14918	240													
		STD	0400	0852	3477	2703	0011100	0848	14911	248													
010		OBS	T0493	0661	3458	2716			14850	309													
		STD	0500	0652	3458	2717	0009750	0952	14848	309													
010		OBS	0593	0552	3451	2725			14822	313													
		STD	0600	0547	3451	2725	0009006	1046	14821	314													
		STD	0700	0493	3451	2732	0008419	1133	14816	325													
010		OBS	T0788	0460	3451	2736			14817	334													
		STD	0800	0458	3452	2736	0008048	1215	14818	335													
		STD	0900	0446	3457	2742	0007631	1294	14830	345													
010		OBS	0985	0440	3462	2746			14843	354													
		STD	1000	0440	3464	2748	0007141	1367	14846	360													
		STD	1100	0442	3476	2757	0006379	1435	14865	400													
		STD	1200	0444	3486	2765	0005767	1496	14883	434													
010		OBS	1245	0445	3488	2767			14892	447													
		STD	1300	0442	3490	2768	0005531	1552	14900	462													
		STD	1400	0431	3493	2772	0005300	1606	14912	484													
		STD	1500	0416	3495	2775	0005012	1658	14923	500													
010		OBS	T1523	0412	3495	2776			14925	503													

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/18	LONGITUDE 1/18	SOUNDING METER	MARDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER	
CRFT CODE	ID. NO.					18"	1'	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER		SEA	TYPE		AMT
311059	RC	0043 N	02736 W	003	07	10	27	061	1966		055	3949	14	13	2	2		X1	8	2		0003	
						WATER		WIND		AIR TEMP. °C		BARO-METER (mb)		WET BULB		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS			
						COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB											
									14	512	090	256	230	7	14								
MESSENGER TIME OR NO.	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-2107	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P μg-at/l	TOTAL-P μg-at/l	NO <sub>2</sub> -N μg-at/l	NO <sub>3</sub> -N μg-at/l	SI O <sub>4</sub> -S μg-at/l	pH	S. COND.						
	061	STD	0000	2614	3583	2364	0042651	0000	15384	499													
		OBS	0000	2614	35832	2364			15384	499													
		STD	0010	2614	3584	2364	0042670	0043	15386	485													
		STD	0020	2613	3584	2365	0042660	0085	15387	473													
	061	OBS	0028	2612	35841	2365			15388	464													
		STD	0030	2612	3585	2366	0042576	0128	15389	463													
		STD	0050	2608	3591	2372	0042119	0213	15392	447													
	061	OBS	0056	2607	35929	2373			15393	440													
		STD	0075	2519	3604	2409	0038650	0314	15377	412													
	061	OBS	0084	2436	36054	2435			15359	395													
		STD	0100	2179	3597	2503	0029740	0399	15297	350													
	061	OBS	0112	2005	35898	2545			15251	326													
		STD	0125	1828	3577	2581	0022398	0464	15203	326													
		STD	0150	1553	3555	2630	0017819	0515	15122	326													
	061	OBS	0168	1408	35429	2652			15077	326													
		STD	0200	1314	3530	2661	0014866	0596	15050	320													
	061	OBS	T0224	1244	35207	2668			15029	313													
		STD	0250	1155	3510	2677	0013458	0667	15001	294													
		STD	0300	1012	3494	2690	0012240	0731	14956	266													
	061	OBS	0335	0934	34851	2697			14933	254													
		STD	0400	0869	3478	2702	0011292	0849	14918	256													
	061	OBS	0446	0806	34717	2706			14901	257													
		STD	0500	0690	3461	2715	0010055	0956	14863	288													
	061	OBS	T0558	0597	34540	2721			14835	313													
		STD	0600	0562	3452	2724	0009132	1052	14828	322													
	061	OBS	0669	0514	34497	2728			14819	334													
		STD	0700	0500	3450	2730	0008610	1140	14819	335													
		STD	0800	0465	3453	2736	0008060	1224	14821	339													
	061	OBS	T0894	0444	34568	2742			14828	345													
		STD	0900	0444	3457	2742	0007607	1302	14830	346													
		STD	1000	0446	3464	2747	0007210	1376	14848	357													
		STD	1100	0448	3471	2753	0006815	1446	14866	368													
	061	OBS	T1131	0448	34731	2754			14872	371													
		STD	1200	0445	3478	2758	0006367	1512	14883	364													
		STD	1300	0438	3485	2765	0005860	1573	14897	341													
		STD	1400	0427	3493	2772	0005225	1629	14911	305													
	061	OBS	1413	0425	34936	2773			14912	299													

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE * 1/10	LONGITUDE * 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLE'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES TFR AMT	NODC STATION NUMBER
CTM CODE	IO. NO.					10"	1"	MO	DAY		HR, 1/10	CRUISE NO.			STATION NUMBER	DR.	HGT	PER			
311059	RC	0025 N	02811 W	003	08	10	27	112	1966	054		3475	17	13	3	3	X1	8	5	0004	
					WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTH'S	SPECIAL OBSERVATIONS							
					COLOR CODE	TRALS (m)	DR.	SPED OF FORCE	BARO- METER (mb)	DRY BULB	WET BULB	VIS CODE									
							11	S15	122	262	230	7	15								
MESSAGE TIME HR 1/10	CAST ND.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SINCRIC VOLUME AND MALT-2107	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELDCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - μl/l	TOTAL-P pg - μl/l	NO <sub>2</sub> -N pg - μl/l	NO <sub>3</sub> -N pg - μl/l	SiO <sub>4</sub> -Si pg - μl/l	pH	TOTAL CO <sub>2</sub>				
		STD	0000	2602	3598	2379	0041235	0000	15383	479											
112		OBS	0000	2602	35979	2379			15383	479											
		STD	0010	2602	3598	2379	0041276	0041	15384	474											
		STD	0020	2600	3598	2379	0041250	0083	15386	469											
112		OBS	0028	2596	35980	2381			15386	465											
		STD	0030	2594	3598	2381	0041107	0124	15386	451											
		STD	0050	2577	3601	2388	0040508	0205	15386	356											
112		OBS	0056	2572	36013	2391			15386	345											
		STD	0075	2486	3617	2429	0036753	0302	15370	383											
112		OBS	0085	2403	36206	2456			15353	409											
		STD	0100	2207	3618	2511	0028968	0384	15306	468											
112		OBS	0112	2049	36160	2553			15266	499											
		STD	0125	1810	3588	2594	0021172	0447	15199	491											
		STD	0150	1456	3547	2645	0016347	0494	15090	472											
112		OBS	0168	1287	35269	2665			15035	454											
		STD	0200	1253	3522	2668	0014275	0570	15028	410											
112		OBS	0224	1219	35174	2671			15020	381											
		STD	0250	1154	3510	2677	0013440	0639	15001	350											
		STD	0300	1038	3496	2687	0012536	0704	14966	306											
112		OBS	0335	0964	34871	2693			14944	289											
		STD	0400	0848	3472	2700	0011407	0824	14909	303											
112		OBS	0447	0771	34540	26980			14862	298											
		STD	0500	0689	3455	2710	0010484	0934	14862	298											
112		OBS	T0560	0612	34504	2717			14841	289											
		STD	0600	0573	3456	2726	0008979	1031	14833	336											
112		OBS	0670	0516	34560	27330			14822	387											
		STD	0700	0502	3469	2745	0007228	1112	14822	387											
		STD	0800	0465	3480	2758	0006063	1178	14825	370											
		STD	0900	0442	3487	2766	0005358	1235	14833	363											
112		OBS	T0900	0442	34871	2766			14833	363											
		STD	1000	0443	3490	2768	0005261	1289	14850	365											
		STD	1100	0445	3493	2770	0005157	1341	14868	379											
112		OBS	T1136	0445	34933	2771			14874	387											
		STD	1200	0441	3495	2772	0005066	1392	14883	420											
		STD	1300	0434	3496	2774	0005000	1442	14897	463											
		STD	1400	0426	3497	2776	0004918	1492	14911	498											
112		OBS	1413	0425	34971	2776			14913	502											
		STD	1500	0417					524												
112		OBS	T1685	0397					549												



TABLE III.—Continued

REFERENCE CITY CODE	SNIP ID. NO. CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	OBS. NO.	MARSDEN SQUARE		STATION TIME IGMTI				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
					10"	1"	MO	DAY	HR.	1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER		SEA	TYPE	
311059	RC	0006 N	02845 W	003	08	10	27	161	1966		053		3749	15	12	4	2		X1	8	1	0005

WATER		WIND		SARD- METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
	14	S14		102	263	233	7	15	

MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta D$ OYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>2</sub> -Si µg - ml/l	pH	S CC
		STD	0000	2622	3599	2373	0041761	0000	15387	468							
161		OBS	0000	2622	35989	2373			15387	468							
		STD	0010	2612	3599	2376	0041496	0042	15387	466							
		STD	0020	2604	3599	2379	0041298	0083	15387	464							
161		OBS	0025	2600	35991	2380			15387	463							
		STD	0030	2598	3600	2381	0041102	0124	15387	455							
161		OBS	0048	2587	36023	2387			15388	434							
		STD	0050	2585	3606	2390	0040343	0206	15388	433							
161		OBS	0073	2558	36307	2417			15388	430							
		STD	0075	2530	3630	2425	0037110	0302	15382	434							
161		OBS	0097	2205	36209	2514			15305	452							
		STD	0100	2134	3614	2529	0027320	0383	15287	440							
		STD	0125	1645	3565	2616	0019036	0441	15147	361							
161		OBS	0147	1363	35368	2657			15058	323							
		STD	0150	1355	3536	2658	0015098	0484	15056	325							
161		OBS	0196	1238	35198	2669			15022	341							
		STD	0200	1227	3519	2670	0014004	0556	15019	337							
		STD	0250	1100	3504	2683	0012913	0624	14981	292							
161		OBS	0297	0997	34920	2691			14950	267							
		STD	0300	0992	3491	2691	0012125	0686	14949	267							
161		OBS	0398	0829	34739	2705			14902	267							
		STD	0400	0824	3473	2705	0010965	0802	14900	268							
161		OBS	T0499	0632	34555	2718			14840	314							
		STD	0500	0631	3455	2718	0009687	0905	14839	314							
		STD	0600	0541	3450	2725	0009018	0999	14819	351							
161		OBS	0600	0541	34499	2725			14819	351							
		STD	0700	0514	3450	2728	0008781	1088	14824	376							
		STD	0800	0486	3450	2732	0008540	1174	14830	401							
161		OBS	T0801	0486	34501	2732			14830	401							
		STD	0900	0460	3459	2742	0007657	1255	14836	388							
		STD	1000	0442	3467	2750	0006941	1328	14847	374							
161		OBS	T1010	0441	34680	2751			14848	373							
		STD	1100	0441	3476	2757	0006363	1395	14864	404							
		STD	1200	0441	3483	2763	0005947	1456	14882	432							
161		OBS	1271	0441	34869	2766			14894	446							
		STD	1300	0439	3488	2767	0005653	1514	14898	44							
		STD	1400	0431	3493	2772	0005278	1569	14912	454							
		STD	1500	0419	3495	2775	0005066	1621	14924	461							
161		OBS	1533	0414	34958	2776			14928	463							

TABLE III.—Continued

REFERENCE CTR CODE	SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARSSEN SQUARE	STATION TIME IGMT			YEAR	ORIGINATOR'S STATION NUMBER		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLE'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES	NODC STATION NUMBER
					10"	1'	MO DAY HR.1/10		CRUISE NO.				DIR.	HGT PER	SEA			
311059	RC	0016 S	02921 W	302	09	10	27	211	1966	052	3931	16	14	3	2	X1	8 1	0006
				WATER		WIND		BARO- METER (mb)	AIR TEMP. °C		VEL CODE	NO. OBS. DEPTH	SPECIAL OBSERVATIONS					
				COLOR CODE	TRANS (m)	DIR.	SPEED OF FORCE		DRY RULR	WET RULR								
					13	S10	097	259	231	7	15							
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \sigma$ OYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µM - ml/l	TOTAL-P µM - ml/l	NO <sub>3</sub> -N µM - ml/l	NO <sub>2</sub> -N µM - ml/l	SiO <sub>4</sub> -Si µM - ml/l	PH	COND.	
		STD	0000	2624	3597	2371	0041987	0000	15388	538								
221		OBS	0000	2624	35966	2371			15388	538								
		STD	0010	2623	3597	2371	0042005	0042	15389	507								
		STD	0020	2621	3596	2372	0041994	0084	15390	485								
221		OBS	0024	2620	35963	2372			15391	478								
		STD	0030	2617	3597	2373	0041917	0126	15391	475								
221		OBS	0048	2609	35971	2376			15392	465								
		STD	0050	2602	3599	2380	0041353	0209	15391	465								
221		OBS	0073	2518	36186	2420			15378	449								
		STD	0075	2496	3622	2430	0036684	0307	15373	444								
221		OBS	0096	2233	36374	2519			15314	397								
		STD	0100	2130	3627	2540	0026276	0385	15287	391								
		STD	0125	1609	3571	2629	0017800	0441	15137	361								
221		OBS	0146	1336	35324	2659			15049	346								
		STD	0150	1334	3531	2658	0015049	0482	15048	346								
221		OBS	T0195	1283						344								
		STD	0200	1267	3516	2660	0014981	0557	15032	342								
		STD	0250	1120	3503	2678	0013342	0628	14988	318								
		STD	0300	0997	3491	2691	0012208	0691	14951	294								
221		OBS	0301	0995	34909	2691			14950	293								
		STD	0400	0831	3474	2704	0010998	0807	14903	273								
221		OBS	0407	0818	34723	2705			14899	272								
		STD	0500	0630	3455	2718	0009674	0911	14839	325								
221		OBS	0515	0609	34535	2720			14833	330								
		STD	0600	0552	3451	2724	0009099	1005	14823	334								
221		OBS	0621	0540	34500	2725			14822	335								
		STD	0700	0507	3450	2730	0008668	1093	14822	339								
		STD	0800	0475	3451	2734	0008339	1179	14825	348								
221		OBS	T0836	0466	34511	2735			14827	352								
		STD	0900	0456	3457	2741	0007755	1259	14835	361								
		STD	1000	0443	3465	2748	0007101	1333	14847	378								
221		OBS	T1050	0439	34689	2752			14854	388								
		STD	1100	0439	3474	2756	0006480	1401	14863	398								
		STD	1200	0438	3482	2762	0005981	1463	14880	422								
		STD	1300	0437	3488	2767	0005628	1522	14897	449								
221		OBS	1318	0437	34888	2768			14901	454								
		STD	1400	0432	3492	2771	0005364	1576	14913	479								
		STD	1500	0424	3495	2774	0005133	1629	14926	513								
221		OBS	T1587	0415	34964	2776			14938	545								

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° /10	LONGITUDE ° /10	MO	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NOCC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DR.	HGT		PER	SEA	
311059	RC		0032 S	02953 W	302	09	10	28	022	1966		3795	15	13	2	2		X1	8	1	0007
						WATER		WIND		BARO-METER (mba)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS						
						COLOR CODE	TRANSL. (m)	DIR.	SPEED OF FORCE		DRY BULB	WET BULB									
							14	S13	121	258	228	7	15								
MESSAGE TIME HR 1/10	CARD NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta \sigma$ DYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P $\mu\text{g} - \mu\text{l/l}$	TOTAL-P $\mu\text{g} - \mu\text{l/l}$	NO <sub>3</sub> -N $\mu\text{g} - \mu\text{l/l}$	NO <sub>3</sub> -N $\mu\text{g} - \mu\text{l/l}$	SI O <sub>4</sub> -SI $\mu\text{g} - \mu\text{l/l}$	pH	ST. C				
		STD	0000	2626	3597	2371	0042004	0000	15388	463											
	022	OBS	0000	2626	35972	2371			15388	463											
		STD	0010	2626	3597	2371	0042045	0042	15390	462											
		STD	0020	2626	3597	2371	0042086	0084	15391	461											
	022	OBS	0026	2625	35972	2371			15392	459											
		STD	0030	2624	3597	2371	0042063	0126	15393	457											
	022	OBS	0049	2620	35976	2373			15395	449											
		STD	0050	2618	3598	2374	0041910	0210	15395	449											
	022	OBS	0074	2568	36114	2399			15389	437											
		STD	0075	2552	3613	2406	0038973	0311	15385	433											
	022	OBS	0098	2181	36265	2525			15300	368											
		STD	0100	2128	3621	2536	0026657	0393	15286	367											
		STD	0125	1588	3560	2625	0018139	0449	15129	352											
	022	OBS	0148	1282	35251	2664			15030	341											
		STD	0150	1281	3525	2664	0014458	0490	15030	341											
	022	OBS	T0197	1241	35200	2668			15023	329											
		STD	0200	1232	3519	2669	0014098	0561	15021	327											
		STD	0250	1097	3502	2682	0013007	0629	14980	303											
	022	OBS	0294	0999	34912	2690			14950	285											
		STD	0300	0992	3491	2691	0012125	0692	14949	279											
	022	OBS	0391	0855	34767	2703			14911	257											
		STD	0400	0833	3474	2704	0011029	0808	14904	272											
	022	OBS	T0488	0658	34552	2714			14848	359											
		STD	0500	0644	3454	2715	0009937	0913	14844	355											
	022	OBS	0585	0560	34506	2723			14824	337											
		STD	0600	0551	3451	2724	0009102	1008	14823	338											
		STD	0700	0498	3450	2730	0008578	1096	14818	342											
	022	OBS	T0781	0468	34498	2734			14819	345											
		STD	0800	0464	3451	2735	0008196	1180	14820	346											
		STD	0900	0449	3459	2743	0007520	1259	14832	349											
	022	OBS	T0977	0441	34646	2748			14842	352											
		STD	1000	0441	3467	2750	0006930	1331	14846	361											
		STD	1100	0442	3475	2756	0006443	1398	14864	399											
		STD	1200	0442	3482	2762	0006031	1460	14882	434											
	022	OBS	1248	0442	34851	2764			14890	449											
		STD	1300	0439	3488	2767	0005653	1519	14898	465											
		STD	1400	0432	3492	2771	0005364	1574	14913	492											
		STD	1500	0422	3495	2774	0005107	1626	14926	515											
	022	OBS	1522	0419	34960	2776			14928	520											

TABLE III.—Continued

REFERENCE CTRY CODE	SHIP ID. NO.	SNIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MAGNETIC CORRECTION	MAGNETIC SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLING	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
						10'	1"	MO	DAT	HR, L/10		CRUISE NO.	STATION NUMBER			OR	HGT	PER		SEA	TYPE	
311059	RC	0051	S	03033	W	303	00	10	28	073	1966	050	4114	16	13	3	2	X1	8	3	0008	
		WATER		WIND		AIR TEMP. °C																
		COLOR CODE		TRANS. M		DIR.		SPEED OF FORCE		SAR- METER (mb)		DRY BULB		WET BULB		VLS CODE		NO. OBS. DEPTH		SPECIAL OBSERVATIONS		
				11		S14		100		253		231		7		15						
MESSAGE TIME NR	1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	σ <sub>t</sub> ‰	SIGMA-T	SMPIC VOLUME ANOMALY-10 <sup>3</sup>	Σ Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - μl/l	TOTAL-P μg - μl/l	NO <sub>3</sub> -N μg - μl/l	NO <sub>2</sub> -N μg - μl/l	SiO <sub>4</sub> -Si μg - μl/l	pH	3 COND.				
073			STD	0000	2630	3596	2369	0042188	0000	15389	454											
			OBS	0000	2630	3596.3	2369			15389	454											
			STD	0010	2630	3596	2369	0042218	0042	15391	456											
			STD	0020	2629	3596	2369	0042240	0084	15392	459											
073			OBS	0026	2629	3596.4	2369			15393	460											
			STD	0030	2629	3596	2369	0042275	0127	15394	458											
			STD	0050	2629	3596	2369	0042358	0211	15397	450											
073			OBS	0052	2629	3596.4	2369			15397	449											
			STD	0075	2624	3613	2383	0041118	0316	15402	482											
073			OBS	0078	2585	36133	2396			15393	486											
			STD	0100	1973	3602	2563	0024049	0397	15242	338											
073			OBS	0104	1881	3598.3	2584			15217	320											
			STD	0125	1547	3557	2632	0017467	0449	15116	329											
			STD	0150	1280	3525	2664	0014439	0469	15030	340											
073			OBS	0156	1237	3519.4	2669			15015	343											
			STD	0200	1223	3517	2670	0014075	0560	15017	327											
073			OBS	T0209	1214	3516.4	2671			15016	322											
			STD	0250	1096	3503	2683	0012916	0628	14980	273											
			STD	0300	0973	3489	2693	0011956	0690	14942	239											
073			OBS	0314	0943	3486.2	2696			14933	235											
			STD	0400	0810	3472	2706	0010826	0804	14895	268											
073			OBS	0420	0777	3469.1	2709			14885	278											
			STD	0500	0628	3455	2718	0009647	0906	14838	332											
073			OBS	T0526	0593	3451.7	2720			14828	341											
			STD	0600	0542	3450	2725	0009024	0999	14819	336											
073			OBS	0633	0523	3449.7	2727			14817	335											
			STD	0700	0500	3451	2731	0008536	1087	14819	337											
			STD	0800	0472	3452	2735	0008221	1171	14824	340											
073			OBS	T0850	0461	3452.5	2736			14828	341											
			STD	0900	0453	3452	2737	0008064	1252	14833	348											
			STD	1000	0440	3452	2738	0008030	1333	14844	365											
073			OBS	T1073	0434	3451.6	2739			14853	381											
			STD	1100	0434	3457	2743	0007676	1411	14859	390											
			STD	1200	0435	3474	2756	0006530	1483	14878	422											
			STD	1300	0436	3486	2766	0005755	1544	14897	452											
073			OBS	1350	0436	3491.1	2770			14906	465											
			STD	1400	0434	3492	2771	0005376	1600	14913	478											
			STD	1500	0428	3494	2773	0005231	1653	14928	501											
073			OBS	T1628	0415	3497.3	2777			14945	526											

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° /10	LONGITUDE ° /10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES	NODC STATION NUMBER	
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	OW				HGT
311059		RC	0113 S	03103 W	303	11	10	28	119	1966		049	4390	17	13	2	2	X1	8 1	0009
						WATER		WIND		BARO- METER		AIR TEMP. °C		VELOCITY		NO. OBS. DEPTH		SPECIAL OBSERVATIONS		
				COLOR CODE		TRANS. M		DIR. SPEED OR FORCE		DRY RULE		WET RULE		VIL CODE						
				13		S14		139		271		233		7		15				
MESSAGE TIME HR 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Delta$ D DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{dl/l}$	TOTAL-P $\mu\text{g} \cdot \text{dl/l}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{dl/l}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{dl/l}$	SiD <sub>4</sub> -Si $\mu\text{g} \cdot \text{dl/l}$	pH	ST CL			
		STD	0000	2638	3595	2365	0042508	0000	15391											
119		OBS	0000	2638	35952	2365			15391											
		STD	0010	2636	3595	2366	0042489	0042	15392											
		STD	0020	2634	3595	2367	0042463	0085	15393											
119		OBS	0028	2632	35953	2367			15394	448										
		STD	0030	2632	3595	2367	0042436	0127	15394	448										
		STD	0050	2629	3595	2368	0042434	0212	15397	450										
119		OBS	0056	2628	35953	2368			15398	451										
		STD	0075	2625	3614	2384	0041062	0317	15402	439										
119		OBS	0084	2481	36232	2435			15371	417										
		STD	0100	1831	3578	2581	0022311	0396	15200	331										
119		OBS	0111	1498	35541	2641			15098	285										
		STD	0125	1421	3544	2650	0015772	0443	15074	263										
		STD	0150	1308	3529	2662	0014687	0482	15039	234										
119		OBS	0168	1247	35211	2668			15021	221										
		STD	0200	1204	3516	2672	0013794	0553	15011	220										
119		OBS	0224	1163	35108	2676			15000	220										
		STD	0250	1080	3501	2684	0012782	0619	14974	227										
		STD	0300	0944	3486	2696	0011702	0680	14931	243										
119		OBS	0337	0862	34768	2702			14905	259										
		STD	0400	0781	3468	2707	0010689	0792	14883	301										
119		OBS	0452	0710	34619	2713			14863	325										
		STD	0500	0625	3455	2719	0009607	0894	14837	334										
119		OBS	T0567	0541	34491	2725			14813	341										
		STD	0600	0523	3449	2727	0008851	0986	14811	341										
119		OBS	0683	0487	34491	2731			14810	341										
		STD	0700	0483	3450	2732	0008429	1073	14812	342										
		STD	0800	0462	3453	2736	0008060	1155	14820	350										
		STD	0900	0448	3455	2740	0007773	1234	14831	357										
119		OBS	T0910	0447	34557	2741			14832	358										
		STD	1000	0447	3465	2748	0007151	1309	14848	377										
		STD	1100	0445	3475	2756	0006488	1377	14866	399										
119		OBS	T1144	0444	34781	2759			14873	409										
		STD	1200	0443	3483	2763	0005973	1439	14883	424										
		STD	1300	0438	3489	2768	0005566	1497	14898	450										
		STD	1400	0431	3493	2772	0005278	1551	14912	475										
119		OBS	1428	0428	34934	2773			14916	482										
		STD	1500	0420	3493	2773	0005255	1604	14925	500										
119		OBS	T1716	0389	34900	2774			14948	550										

TABLE III.—Continued

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARSDEM SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES	NODC STATION NUMBER
CTRY CODE	IO. NO.					CRUISE NO.	STATION NUMBER	10"	1'		MO	DAY			HL/10					
311059	RC		0132 S	03134 W	303	11	10	28	164	1966	048	4681	14	13	2	2	X1	8 2	0010	
		WATER		WIND		BARO-METER (mba)		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
		CDLOR CODE	TRANS. (m)	DIR.	SPED OR FORCE			DRY BULB	WET BULB	WIL CODE										
						12	S14	107	234	226	7	15								
MESSAGE TIME NE 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND SALINITY	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	PH	ST. CLG			
		STD	0000		3600															
164		OBS	0000	26550	35999	23630				456										
		STD	0010		3600					458										
		STD	0020		3599					460										
164		OBS	0021	2650	35992	2364				15397										
		STD	0030	2647	3599	2365	0042616			15398										
164		OBS	0041	2645	35993	2366				15399										
		STD	0050	2645	3599	2366	0042639			15401										
164		OBS	0063	2644	35991	2366				15403										
		STD	0075	2643	3599	2367	0042672			15405										
164		OBS	0084	2642	35995	2367				15406										
		STD	0100	2016	3570	2527	0027447			15250										
		STD	0125	1381	3538	2654	0015401			15061										
164		OBS	0126	1364	35367	2656				15055										
		STD	0150	1304	3528	2662	0014682			15038										
164		OBS	T0168	1263	35227	2666				15026										
		STD	0200	1222	3517	2670	0014056			15017										
		STD	0250	1129	3505	2678	0013356			14991										
164		OBS	0260	1106	35028	2681				14985										
		STD	0300	0971	3488	2693	0011997			14941										
164		OBS	0350	0836	34731	2703				14897										
		STD	0400	0756	3465	2708	0010544			14873										
164		OBS	T0450	0679	34585	2714				14851										
		STD	0500	0598	3453	2721	0009398			14826										
164		OBS	0546	0541	34487	2724				14810										
		STD	0600	0518	3449	2727	0008803			14809										
		STD	0700	0483	3449	2731	0008459			14811										
164		OBS	T0736	0473	34493	2733				14813										
		STD	0800	0459	3451	2736	0008134			14818										
		STD	0900	0444	3456	2741	0007680			14829										
164		OBS	T0933	0441	34581	2743				14834										
		STD	1000	0441	3466	2749	0007006			14846										
		STD	1100	0442	3477	2758	0006299			14865										
164		OBS	1182	0442	34833	2763				14879										
		STD	1200	0442	3485	2764	0005813			14882										
		STD	1300	0438	3490	2769	0005493			14898										
		STD	1400	0432	3493	2772	0005291			14913										
164		OBS	T1433	0430	34935	2772				14918										

TABLE III.—Continued

REFERENCE CITE CODE	SHIP NO. CODE	LATITUDE ° '/10	LONGITUDE ° '/10	MARSDEN SQUARE 10°	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
					MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DR.	HGT	PER	SEA		TR	AMT	
				303	12	10	28	207	1966	047	4480	14	12	3	2	X1	8	2	0011	
				WATER		WIND		BARO- METER (mb)	AIR TEMP. °C		VIL CODE	NO. DYS. DEPTNS	SPECIAL OBSERVATIONS							
				CDLOR CODE	TRANL (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB										
				12	S11	111	259	227	7	15										
MESSAGE TIME NO 1/10	CASR NO.	CARD TYPE	DEPTH (m)	T °C	S %.	SIGMA-T	SPECIFIC VOLUME AND MALT-218'	$\Sigma \Delta D$ DYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SIO <sub>4</sub> -S pg - ml/l	pH	S C			
207		STD	0000	2666	3599	2359	0043096	0000	15397	455										
		OBS	0000	2666	35988	2359			15397	455										
		STD	0010	2664	3599	2360	0043077	0043	15399	455										
		STD	0020	2663	3599	2360	0043095	0086	15400	455										
207		OBS	0024	2662	35987	2360			15400	454										
		STD	0030	2661	3599	2361	0043076	0129	15401	451										
207		OBS	0047	2658	35986	2362			15403	447										
		STD	0050	2658	3599	2362	0043056	0215	15404	450										
207		OBS	0071	2655	35992	2363			15407	452										
		STD	0075	2632	3610	2378	0041574	0321	15403	446										
207		OBS	0094	2438	36359	2458			15364	409										
		STD	0100	2242	3618	2501	0029922	0411	15315	380										
		STD	0125	1602	3557	2620	0018664	0471	15133	285										
207		OBS	0142	1328	35313	2660			15045	244										
		STD	0150	1316	3530	2661	0014769	0513	15042	240										
207		OBS	T0189	1254	35220	2667			15027	230										
		STD	0200	1235	3520	2669	0014081	0585	15022	231										
		STD	0250	1143	3508	2678	0013388	0654	14997	241										
207		OBS	0281	1081	35009	2684			14979	249										
		STD	0300	1038	3496	2687	0012536	0719	14966	254										
207		OBS	0371	0879	34784	2700			14917	282										
		STD	0400	0808	3470	2705	0010944	0836	14894	305										
207		OBS	T0456	0687	34577	2712			14855	333										
		STD	0500	0605	3452	2719	0009564	0939	14828	334										
207		OBS	0549	0535	34471	2724			14808	335										
		STD	0600	0515	3448	2727	0008833	1031	14808	336										
		STD	0700	0481	3449	2731	0008449	1117	14811	337										
207		OBS	0739	0471	34501	2733			14813	338										
		STD	0800	0458	3451	2736	0008122	1200	14818	342										
		STD	0900	0443	3454	2740	0007815	1280	14829	351										
207		OBS	T0936	0439	34563	2742			14833	356										
		STD	1000	0440	3464	2748	0007131	1354	14845	365										
		STD	1100	0440	3474	2756	0006502	1422	14864	383										
207		OBS	1180	0441	34809	2761			14878	402										
		STD	1200	0440	3482	2762	0006008	1485	14881	407										
		STD	1300	0436	3489	2768	0005540	1543	14897	438										
		STD	1400	0430	3493	2772	0005264	1597	14912	474										
207		OBS	T1424	0428	34935	2773			14915	484										

TABLE III.—Continued

REFERENCE CTRY CODE	SHIP CODE NO.	LATITUDE ° 1/10	LONGITUDE ° 1/10	STATION NO.	MAREOGH SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		MOOC STATION NUMBER	
					10'	1"	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER		SEA	TYPE		AMT
311059	RC	0211 S	03246 W	303	22	10	29	013	1966		046		4096	13	12	3	2		X1	8	2	0012
				WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTH'S		SPECIAL OBSERVATIONS								
				COLOR CODE	TRANS. m	DIR.	SPEED OR FORCE	BARO- METER Inch	DRY BULB	WET BULB	VIS. CODE											
							11	515	135	263	233	7	15									

MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	$\Sigma \Delta$ D OTN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>4</sub> -S µg - ml/l	pH	CHLOR
		STD	0000	2664	3598	2359											
013		OBS	0000	2664	35983	2359	0043071	0000	15397	449							
		STD	0010	2664	3598	2359	0043117	0043	15399	449							
		STD	0020	2665	3599	2359	0043160	0086	15400	448							
013		OBS	0023	2665	35986	2359			15401	448							
		STD	0030	2665	3599	2359	0043204	0129	15402	450							
013		OBS	0046	2662	35986	2360			15404	451							
		STD	0050	2660	3599	2361	0043123	0216	15404	448							
013		OBS	0069	2652	36006	2365			15406	443							
		STD	0075	2628	3621	2388	0040673	0320	15404	446							
013		OBS	0090	2569	36500	2428			15396	453							
		STD	0100	2193	3614	2512	0028888	0407	15302	387							
		STD	0125	1511	3550	2635	0017208	0465	15104	268							
013		OBS	0135	1342	35333	2658			15049	240							
		STD	0150	1323	3530	2660	0014906	0505	15045	241							
013		OBS	T0178	1287	35255	2663			15037	242							
		STD	0200	1259	3523	2667	0014316	0578	15030	234							
		STD	0250	1188	3517	2676	0013550	0648	15014	215							
013		OBS	0262	1170	35150	2678			15009	211							
		STD	0300	1116	3509	2684	0012948	0714	14996	189							
013		OBS	0344	1030	34996	2692			14971	182							
		STD	0400	0876	3480	2702	0011254	0835	14921	202							
013		OBS	T0424	0811	34721	2706			14899	222							
		STD	0500	0608	3452	2718	0009603	0939	14830	337							
013		OBS	0507	0594	34508	2719			14825	344							
		STD	0600	0517	3450	2728	0008709	1031	14809	345							
013		OBS	T0668	0478	34493	2732			14804	346							
		STD	0700	0472	3450	2733	0008287	1116	14807	347							
		STD	0800	0455	3451	2736	0008093	1198	14817	350							
013		OBS	T0847	0449	34515	2737			14822	352							
		STD	0900	0445	3455	2740	0007766	1277	14830	354							
		STD	1000	0440	3463	2747	0007211	1352	14845	365							
013		OBS	1089	0438	34698	2753			14860	381							
		STD	1100	0438	3471	2754	0006696	1422	14862	383							
		STD	1200	0440	3479	2760	0006231	1486	14881	410							
		STD	1300	0442	3488	2767	0005695	1546	14900	445							
013		OBS	T1343	0443	34916	2769			14908	462							



TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	DEPTH M	MARS DEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTN TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES TYP AMT	NOOC STATION NUMBER	
CTRY CODE	IO. NO.					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER				SEA
311059	RC		0227 S	03323 W	303	23	10	29	055	1966	045	4114	15	11	2	2		X1	8	1	0013	
						WATER		WIND		BARO- METER (mb)	AIR TEMP. °C		WIL CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
						COLOR CODE	TRANSL (m)	DIR.	SPEED OF FORCE		DRY BULB	WET BULB										
						11	S13		104	257	224	7	15									
MESSNGR TIME HR 1/10	CASST NO.	CARD TYPE	DEPTN (m)	T °C	S %.	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta$ D OYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} \cdot \text{dl}^{-1}$	TOTAL-P $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>3</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	NO <sub>2</sub> -N $\mu\text{g} \cdot \text{dl}^{-1}$	SiO <sub>4</sub> -Si $\mu\text{g} \cdot \text{dl}^{-1}$	pH	S CC					
		STD	0000	2662	3602	2362	0042780	0000	15397	461												
055		OBS	0000	2662	36015	2362			15397	461												
		STD	0010	2662	3602	2362	0042822	0043	15398	455												
		STD	0020	2661	3602	2363	0042833	0086	15400	450												
055		OBS	0024	2660	36015	2363			15400	449												
		STD	0030	2656	3601	2364	0042731	0128	15400	449												
055		OBS	0047	2650	36012	2366			15402	448												
		STD	0050	2651	3601	2366	0042669	0214	15402	448												
055		OBS	0071	2658	36019	2364			15408	443												
		STD	0075	2657	3619	2377	0041684	0319	15410	441												
055		OBS	0094	2526	36631	2451			15388	431												
		STD	0100	2309	3639	2498	0030248	0409	15334	392												
		STD	0125	1603	3561	2623	0018395	0470	15134	268												
055		OBS	0141	1318	35291	2660			15041	222												
		STD	0150	1299	3527	2662	0014659	0511	15036	227												
055		OBS	T0188	1230	35181	2669			15018	241												
		STD	0200	1220	3517	2670	0014019	0583	15016	238												
		STD	0250	1166	3509	2674	0013732	0652	15005	226												
055		OBS	0282	1120	35040	2679			14993	218												
		STD	0300	1091	3501	2682	0013091	0719	14986	203												
055		OBS	0377	0934	34839	2696			14939	193												
		STD	0400	0861	3476	2701	0011314	0841	14915	226												
055		OBS	T0469	0675	34567	2713			14852	301												
		STD	0500	0605	3452	2719	0009564	0946	14828	319												
055		OBS	0560	0503	34454	2726			14796	344												
		STD	0600	0493	3446	2728	0008710	1037	14799	346												
		STD	0700	0469	3448	2732	0008376	1123	14806	350												
055		OBS	T0741	0460	34488	2734			14809	352												
		STD	0800	0442	3450	2737	0008002	1205	14811	360												
		STD	0900	0423	3455	2743	0007497	1262	14821	374												
055		OBS	T0940	0419	34570	2745			14826	379												
		STD	1000	0425	3464	2750	0006948	1354	14839	386												
		STD	1100	0435	3473	2756	0006502	1421	14861	398												
		STD	1200	0444	3481	2761	0006136	1485	14883	409												
055		OBS	1208	0445	34818	2761			14885	410												
		STD	1300	0442	3488	2767	0005692	1544	14900	439												
		STD	1400	0431	3493	2772	0005278	1599	14912	482												
055		OBS	T1477	0418	34955	2775			14920	523												

TABLE III.—Continued

REFERENCE CTD CODE	SHIP CODE	LATITUDE ° '"/10	LONGITUDE ° '"/10	MARSSEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		MOOC STATION NUMBER	
					CRUISE NO.	STATION NUMBER	10'		1'	MO			DAY	HR./10	OR.		HGT	PER		SEA
311059	RC	0249 S	03357 W	303	23	10	29	094	1966	044	3931	14	12	4	2		X1	8	2	0014
					WATER		WIND		BARO- METER Umbar	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTH	SPECIAL OBSERVATIONS						
					COLOR CODE	TRANSP (m)	OR.	SPEED OR FORCE		DRY BULB	WET BULB									
							11	518	119	263	232	7	15							

MESSAGE TIME NO 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-10 <sup>3</sup>	Σ Δ D OYN. M. X 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>2</sub> -Si μg - ml/l	PH	CHL
		STD	0000	2654	3604	2366	0042394	0000	15395	499							
094		OBS	0000	2654	36035	2366			15395	499							
		STD	0010	2654	3603	2366	0042462	0042	15397	518							
		STD	0020	2655	3603	2366	0042530	0085	15399	537							
094		OBS	0024	2655	36030	2366			15399	545							
		STD	0030	2655	3603	2366	0042585	0127	15400	510							
094		OBS	0046	2655	36031	2366			15403	462							
		STD	0050	2655	3603	2366	0042652	0213	15404	473							
094		OBS	0069	2653	36028	2366			15406	511							
		STD	0075	2627	3611	2381	0041343	0318	15402	514							
094		OBS	0092	2552	36191	2410			15389	522							
		STD	0100	2287	3601	2476	0032378	0410	15324	453							
		STD	0125	1646	3557	2610	0019640	0475	15146	292							
094		OBS	0138	1425	35408	2647			15077	241							
		STD	0150	1370	3535	2654	0015471	0519	15061	235							
094		OBS	T0182	1249	35209	2667			15024	233							
		STD	0200	1218	3517	2670	0013982	0592	15016	264							
		STD	0250	1138	3506	2677	0013444	0661	14995	314							
094		OBS	0269	1109	35030	2680			14987	319							
		STD	0300	1070	3499	2684	0012869	0727	14978	290							
094		OBS	0355	0989	34911	2692			14957	247							
		STD	0400	0913	3483	2698	0011623	0849	14935	224							
094		OBS	T0437	0837	34749	2704			14912	205							
		STD	0500	0666	3457	2715	0010016	0957	14853	316							
094		OBS	0523	0616	34519	2717			14837	346							
		STD	0600	0531	3448	2725	0009033	1053	14814	370							
		STD	0700	0456	3446	2732	0008368	1140	14800	388							
094		OBS	T0705	0453	34457	2732			14799	389							
		STD	0800	0440	3449	2736	0008076	1222	14810	385							
		STD	0900	0426	3452	2740	0007773	1301	14821	380							
094		OBS	T0904	0425	34518	2740			14822	380							
		STD	1000	0430	3460	2746	0007303	1376	14841	386							
		STD	1100	0434	3468	2752	0006867	1447	14860	398							
094		OBS	1157	0437	34721	2755			14871	409							
		STD	1200	0436	3475	2757	0006470	1514	14879	419							
		STD	1300	0432	3483	2764	0005927	1576	14895	446							
		STD	1400	0424	3491	2771	0005331	1632	14909	480							
094		OBS	T1410	0423	34916	2772			14911	484							

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE		LONGITUDE		MARSden SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NOCC STATION NUMBER
CTD CODE	ID. NO.		L	S	W	E		MO	DAY	HR	MIN.		CRUISE NO.	STATION NUMBER			DR.	HGT.	PER.	SEA		TTM	AMT	
311059		RC	0304	S	03429	W	303	34	10	29	135	1966		043	3749	15	11	3	2		X1	6	2	0015
							WATER		WIND		BARO-METER		AIR TEMP. °C		VIL CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
							COLOR CODE	TRNSL. (m)	DIR.	SPEED OR FORC.	(mm)	DRY BULB	WET BULB											
								11	S14	136	278	238	7	15										
ANNEALS	CAST	CARD	DEPTH	T	S	SIGMA-T	SPECIFIC VOLUME	Δσ <sub>t</sub>	SOUND	O <sub>2</sub>	PO <sub>4</sub> -P	TOTAL-P	NO <sub>2</sub> -N	NO <sub>3</sub> -N	SiO <sub>4</sub> -Si	PH	CTD							
NO. 1/10	NO.	TYPE	(m)	(°C)	(‰)	(kg/m <sup>3</sup> )	(cm <sup>3</sup> /kg)	(10 <sup>-3</sup> )	VELOCITY	(ml/l)	(µg-at/l)	(µg-at/l)	(µg-at/l)	(µg-at/l)	(µg-at/l)									
	135	STD	0000		3609												465							
		OBS	0000	2598P	36090	2388P											465							
		STD	0010		3609												453							
		STD	0020		3609												447							
	135	OBS	0024	2666	36090	2367				15402							446							
		STD	0030	2666	3609	2367			0042472	15403							450							
	135	OBS	0048		36089												462							
		STD	0050	2664	3609	2367			0042514	15406							465							
	135	OBS	0073	2662	36088	2368				15410							479							
		STD	0075	2659	3609	2369			0042477	15409							478							
	135	OBS	0096	2527	36091	2410				15383							453							
		STD	0100	2409	3603	2441			0035648	15355							433							
		STD	0125	1797	3569	2583			0022241	15193							328							
	135	OBS	0146	1452	35472	2646				15088							270							
		STD	0150	1431	3544	2648			0016050	15082							266							
	135	OBS	T0194	1241	35198	2668				15023							240							
		STD	0200	1232	3519	2669			0014098	15021							244							
		STD	0250	1154	3509	2676			0013513	15001							271							
	135	OBS	0293	1078	35000	2683				14980							286							
		STD	0300	1062	3498	2685			0012803	14975							286							
	135	OBS	0394	0865	34755	2700				14915							289							
		STD	0400	0854	3474	2701			0011352	14912							295							
	135	OBS	T0498	0680	34559	2712				14858							363							
		STD	0500	0676	3456	2712			0010251	14857							363							
		STD	0600	0526	3447	2725			0009029	14812							381							
	135	OBS	0602	0524	34470	2725				14812							381							
		STD	0700	0457	3446	2732			0008380	14800							395							
		STD	0800	0415	3445	2735			0008057	14799							409							
	135	OBS	T0803	0414	34449	2736				14799							409							
		STD	0900	0415	3452	2741			0007623	14817							401							
		STD	1000	0418	3460	2747			0007160	14836							394							
	135	OBS	T1021	0419	34621	2749				14840							392							
		STD	1100	0428	3471	2755			0006567	14858							410							
		STD	1200	0434	3480	2761			0006077	14878							436							
	135	OBS	1283	0435	34857	2766				14893							460							
		STD	1300	0435	3487	2767			0005673	14896							465							
		STD	1400	0429	3492	2771			0005324	14911							499							
		STD	1500	0418	3496	2776			0004980	14924							537							
	135	OBS	T1548	0411	34968	2777				14929							556							

TABLE III.—Continued

REFERENCE CTSP CODE	SHIP NO. CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAR. DEPTH OF SAMPLES			WAVE OBSERVATIONS			WEA- THEB CODE	CLOUD CODES	NODC STATION NUMBER																														
					10"	1"	MO		DAY	HR.1/10		CRUISE NO.	STATION NUMBER	DIR.	HGT PER	SEA	TTM				AMT																													
311059	RC	0332 S	03509 W	303	35	10	29	177	1966	042	3063	11	12	4	2	X1	8	2	0016																															
<table border="1"> <thead> <tr> <th colspan="4">WATER</th> <th colspan="3">WIND</th> <th colspan="3">AIR TEMP. °C</th> <th rowspan="2">NO. OBS. DEPTHS</th> <th rowspan="2">SPECIAL OBSERVATIONS</th> </tr> <tr> <th>COLOR CODE</th> <th>TRANS. M</th> <th>DIR.</th> <th>SPED OR FORCE</th> <th>BARO- METER (mb)</th> <th>DRY BULB</th> <th>WET BULB</th> <th>VIS. CODE</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>13</td> <td>S14</td> <td>106</td> <td>275</td> <td>232</td> <td>7</td> <td>15</td> <td></td> </tr> </tbody> </table>																				WATER				WIND			AIR TEMP. °C			NO. OBS. DEPTHS	SPECIAL OBSERVATIONS	COLOR CODE	TRANS. M	DIR.	SPED OR FORCE	BARO- METER (mb)	DRY BULB	WET BULB	VIS. CODE				13	S14	106	275	232	7	15	
WATER				WIND			AIR TEMP. °C			NO. OBS. DEPTHS	SPECIAL OBSERVATIONS																																							
COLOR CODE	TRANS. M	DIR.	SPED OR FORCE	BARO- METER (mb)	DRY BULB	WET BULB	VIS. CODE																																											
			13	S14	106	275	232	7	15																																									
MESSAGE NO. 1/10	CAST NO.	CARD TYPE	DEPTH m	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-2107	Σ Δ D. DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	3 C C																																	
		STD	0000	2667	3606	2364	0042594	0000	15398	466																																								
177		OBS	0000	2667	36062	2364			15398	466																																								
		STD	0010	2665	3606	2365	0042589	0043	15400	464																																								
177		OBS	0018	2662	36056	2366			15400	462																																								
		STD	0020	2659	3606	2366	0042490	0085	15400	462																																								
		STD	0030	2646	3606	2371	0042128	0127	15399	461																																								
177		OBS	0038		36057					460																																								
		STD	0050	2620	3606	2379	0041425	0211	15396	460																																								
177		OBS	0053		36057					460																																								
177		OBS	0070	2594	35970	23800				462																																								
		STD	0075	2576	3618	2402	0039346	0312	15391	460																																								
		STD	0100	2390	3631	2468	0033072	0402	15353	429																																								
177		OBS	0101	2379	36318	2472			15351	427																																								
		STD	0125	1994	3610	2563	0024089	0474	15253	343																																								
177		OBS	T0136	1843	35992	2594			15211	321																																								
		STD	0150	1700	3579	2614	0019344	0528	15169	345																																								
177		OBS	0196	1304	35250	2660			15045	386																																								
		STD	0200	1273	3521	2663	0014730	0613	15035	384																																								
		STD	0250	0981	3484	2688	0012351	0681	14936	356																																								
177		OBS	0256	0958	34816	2690			14928	352																																								
		STD	0300	0904	3477	2695	0011724	0741	14915	314																																								
177		OBS	T0321	0881	34753	2698			14909	306																																								
177		OBS	0384	0825	34707	2703			14898	325																																								
		STD	0400	0797	3468	2705	0010926	0855	14889	335																																								
		STD	0500	0651	3453	2714	0010106	0960	14847	378																																								
177		OBS	T0526	0620	34503	2716			14839	384																																								
		STD	0600	0558	3448	2722	0009377	1057	14825	382																																								
177		OBS	T0692	0497	34468	2728			14816	376																																								
		STD	0700	0492	3447	2729	0008733	1148	14815	375																																								
		STD	0800	0446	3448	2735	0008198	1232	14813	360																																								
		STD	0900	0419	3452	2741	0007671	1312	14818	344																																								
177		OBS	0921	0416	34536	2742			14821	341																																								
		STD	1000	0423	3459	2746	0007290	1386	14837	351																																								
		STD	1100	0431	3468	2752	0006824	1457	14859	379																																								
177		OBS	T1149	0435	34740	2756			14870	400																																								

TABLE III.—Continued

REFERENCE CTRY COOR	SNIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MAGNETIC DECLIN	MAGNETIC SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES TYPE AMT	NOOC STATION NUMBER	
					10'	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA				
311059	RC	0353 S	035495W	303	35	10	29	218	1966		041	1006	10	11	4	2		XO	0		0017	
				WATER		WIND		BARO- METER		AIR TEMP. °C		VIS CODE	NO. DPS. DEPTMS	SPECIAL OBSERVATIONS								
				COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY RULB	WET RULB												
						11	S14	110		262	231	7	14									
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub> ?	Σ Δ D DYN. M. x 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	TC					
		STD	0000	2646	3600	2366	0042426	0000	15393	462												
218		OBS	0000	2646	35997	2366			15393	462												
		STD	0010	2646	3600	2366	0042448	0042	15395	459												
		STD	0020	2645	3600	2367	0042460	0085	15396	457												
218		OBS	0022	2645	36000	2367			15396	456												
		STD	0030	2640	3600	2368	0042355	0127	15397	458												
218		OBS	0041		35998					460												
		STD	0050	2615	3611	2384	0040888	0211	15395	463												
218		OBS	0063	2589	36230	2402			15393	466												
		STD	0075	2575	3622	2405	0039036	0310	15392	468												
218		OBS	0083	2535	3692Q	2470Q				470												
		STD	0100	2237	3619	2503	0029750	0396	15314	458												
		STD	0125	1900	3616	2592	0021352	0460	15228	441												
218		OBS	0126	1889	36154	2595			15225	440												
		STD	0150	1728	3584	2611	0019625	0512	15178	440												
218		OBS	T0168	1605	35631	2624			15142	439												
		STD	0200	1326	3526	2656	0015394	0599	15053	432												
218		OBS	0242	1081	34945	2679			14972	421												
		STD	0250	1066	3493	2680	0013126	0670	14968	417												
218		OBS	0293	0969	34844	2690			14938	403												
		STD	0300	0949	3483	2692	0012004	0733	14932	403												
218		OBS	T0328	0869	34757	2700			14906	400												
218		OBS	0393	0667	34569	2715			14836	388												
		STD	0400	0665	3457	2715	0009877	0843	14837	387												
		STD	0500	0634	3453	2716	0009876	0941	14840	371												
218		OBS	T0556	0614	34509	2717			14841	367												
		STD	0600	0598	3450	2718	0009752	1040	14842	368												
		STD	0700	0558	3449	2722	0009425	1135	14842	371												
218		OBS	0729	0545	34486	2724			14842	372												
		STD	0800	0512	3449	2728	0008976	1227	14840	375												
		STD	0900	0460	3449	2733	0008432	1314	14835	379												
218		OBS	0960	0426	34485	2737			14831	382												

TABLE III.—Continued

REFERENCE CITY CODE	SNIP ID. NO.	SNIP CODE	LATITUDE * 1/10	LONGITUDE * 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAR. DEPTH OF SAMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER	
						10"	1"	MO	DAY		HR.	1/10			CRUISE NO.	STATION NUMBER	DR.	HGT		PER	SEA		TYPE
311059	RC		0411 S	03615 W	303	46	10	30	013	1966		040	2110	14	11	6	3		X1	8	1		001B
		WATER		WIND		BARO- METER		AIR TEMP. °C		VIL CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
		COLOR CODE		TRANS. (m)		DIR.		SPEED OF FORCE		METER (mb)		DRY RULE		WET RULE									
				11		S25		120		261		231		7		15							
MESSAGE TIME 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-3107	Σ Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	PH	1 CONT.						
		STD	0000	2635	3600	2370	0042051	0000	15391														
	013	OBS	0000	2635	36003	2370			15391														
		STD	0010	2627	3600	2373	0041852	0042	15390														
		STD	0020	2625	3600	2373	0041833	0084	15392														
	013	OBS	0020	2625	36003	2373			15392														
		STD	0030	2637	3600	2369	0042236	0126	15396														
	013	OBS	0040	2640	36002	2368			15398														
		STD	0050	2633	3604	2373	0041932	0210	15399														
	013	OBS	0061	2615	36162	2388			15398														
		STD	0075	2578	3649	2425	0037156	0309	15395														
	013	OBS	0080	2556	36572	2438			15392														
		STD	0100	2374	3657	2492	0030799	0394	15352														
	013	OBS	0122	2179	36559	2548			15307														
		STD	0125	2150	3652	2553	0025096	0464	15299														
		STD	0150	1933	3623	2589	0021712	0522	15242														
	013	OBS	T0161	1850	36118	2602			15219														
		STD	0200	1682	3584	2622	0018733	0623	15173														
		STD	0250	1450	3548	2647	0016442	0711	15105														
	013	OBS	0251	1445	35474	2647			15103														
		STD	0300	1155	3507	2675	0013800	0787	15009														
	013	OBS	0341	0978	34841	2688			14950														
		STD	0400	0850	3471	2699	0011511	0913	14910														
	013	OBS	T0432	0795	34655	2703			14894														
		STD	0500	0719	3459	2709	0010614	1024	14874														
	013	OBS	0521	0695	34571	2711			14868														
		STD	0600	0593	3448	2717	0009833	1126	14840														
		STD	0700	0496	3444	2726	0009004	1220	14816														
	013	OBS	T0701	0495	34436	2726			14816														
		STD	0800	0439	3447	2735	0008188	1306	14809														
	013	OBS	T0876	0413	34520	2741			14812														
		STD	0900	0415	3455	2743	0007401	1384	14817														
		STD	1000	0422	3466	2751	0006766	1455	14838														
		STD	1100	0428	3475	2758	0006272	1520	14859														
	013	OBS	1128	0429	34770	2759			14864														
		STD	1200	0432	3482	2763	0005904	1581	14878														
		STD	1300	0436	3488	2767	0005613	1639	14897														
		STD	1400	0439	3492	2770	0005458	1694	14916														
	013	OBS	T1406	0439	34924	2771			14917														

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	OBS. MOON	MARS DEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES TYPE AMT	NOOC STATION NUMBER
CITY CODE	IO. NO.					10'	1"	MO	DAY	HLI/10		CRUISE NO.	STATION NUMBER			DIR.	HGT PER	SEA			
311059	RC	03106S	038072W	303	38	10	30	100	1966		021	1847	14	11	5	3		X1	8	3	0019
WATER		WIND		BARO-METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS												
COLOR CODE	TRNSL. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB															
		08	S16	106	260	233	7	15													
MISSION TIME HB 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-210°	Σ Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SIO <sub>4</sub> -SI μg - ml/l	pH	σ <sub>t</sub>				
100		STD	0000	2630	3602	2373	0041786	0000	15390	465											
		OBS	0000	2630	36019	2373			15390	465											
		STD	0010	2632	3602	2372	0041909	0042	15392	465											
		STD	0020	2634	3601	2371	0042032	0084	15394	465											
100		OBS	0025	2635	36011	2371			15395	465											
		STD	0030	2634	3601	2371	0042088	0126	15395	465											
		STD	0050	2631	3601	2372	0042066	0210	15398	463											
100		OBS	0050	2631	36013	2372			15398	463											
		STD	0075	2632	3602	2372	0042156	0315	15402	479											
100		OBS	0075	2632	36019	2372			15402	479											
		STD	0100	2447	3634	2454	0034498	0411	15367	463											
100		OBS	0100	2447	36341	2454			15367	463											
		STD	0125	2292	3636	2501	0030092	0492	15334	459											
		STD	0150	2072	3638	2564	0024162	0560	15281	454											
100		OBS	0151	2062	36380	2567			15279	454											
		STD	0200	1428	3548	2652	0015841	0660	15089	444											
100		OBS	T0202	1410	35449	2653			15084	443											
		STD	0250	1288	3524	2662	0014932	0737	15048	404											
100		OBS	0289	1210	35129	2669			15027	390											
		STD	0300	1196	3512	2670	0014224	0810	15024	396											
100		OBS	0370	1109	35035	2681			15004	409											
		STD	0400	0944	3484	2694	0012053	0941	14947	392											
100		OBS	T0445	0768	34630	2705			14885	377											
		STD	0500	0698	3457	2710	0010463	1053	14866	380											
100		OBS	0526	0667	34544	2713			14858	382											
		STD	0600	0574	3450	2721	0009451	1153	14832	391											
		STD	0700	0484	3444	2727	0008893	1245	14811	403											
100		OBS	T0703	0482	34433	2727			14811	403											
		STD	0800	0448	3445	2732	0008444	1331	14813	387											
100		OBS	T0890	0428	34489	2737			14820	380											
		STD	0900	0428	3450	2738	0007931	1413	14822	381											
		STD	1000	0431	3459	2745	0007395	1490	14841	390											
		STD	1100	0434	3468	2752	0006863	1561	14860	399											
100		OBS	1137	0435	34708	2754			14867	402											
		STD	1200	0436	3476	2758	0006397	1628	14879	416											
		STD	1300	0437	3484	2764	0005920	1689	14897	445											
100		OBS	T1396	0437	34906	2769			14914	481											

TABLE III.—Continued

REFERENCE CTRY CODE	SHIP ID. NO.	SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER		
						10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DIR.		HGT	PER		SEA	TR
311059	RC		02415S	03744 W	303	27	10	30	147	1966		022	2834	24	11	3	2		X1	8	3	0020

WATER		WIND		BARO- METER (mb)	AIR TEMP. °C		VIL CODE	NO. OBS. DEPTH	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. M	DIR.	SPEED OF FORCE		DRY BULB	WET BULB			
		11	S13	120	270	236	7	18	

REFERENCE TIME ME 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-t	SPECIFIC VOLUME ANOMALY- $\sigma_{10}^t$	$\Delta$ D DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} - \mu\text{M}$	TOTAL-P $\mu\text{g} - \mu\text{M}$	NO <sub>3</sub> -N $\mu\text{g} - \mu\text{M}$	NO <sub>2</sub> -N $\mu\text{g} - \mu\text{M}$	SI O <sub>2</sub> -SI $\mu\text{g} - \mu\text{M}$	pH	COND
		STD	0000	2671	3612	2368	0042284	0000	15400	457							
139		OBS	0000	2671	36122	2368			15400	457							
		STD	0010	2668	3612	2369	0042242	0042	15401	456							
		STD	0020	2665	3612	2369	0042200	0084	15402	455							
139		OBS	0024	2664	36120	2370			15402	454							
		STD	0030	2662	3612	2370	0042160	0127	15403	455							
139		OBS	0048	2657	36120	2372			15405	456							
		STD	0050	2649	3619	2380	0041337	0210	15404	456							
139		OBS	0073	2547	36721	2452			15390	452							
		STD	0075	2542	3674	2455	0034294	0305	15390	439							
139		OBS	0096	2424	36791	2494			15366	337							
		STD	0100	2353	3670	2509	0029244	0384	15349	334							
		STD	0125	1951	3619	2582	0022360	0449	15242	315							
139		OBS	0143	1706	35863	2618			15171	301							
		STD	0150	1618	3573	2628	0017933	0499	15144	321							
139		OBS	0189	1245	35157	2664			15023	402							
		STD	0200	1236	3515	2665	0014477	0580	15022	403							
		STD	0250	1196	3511	2670	0014143	0652	15016	407							
139		OBS	0283	1170	35085	2673			15012	409							
		STD	0300	1085	3499	2681	0013132	0720	14983	387							
139		OBS	0377	0803	34687	2704			14888	329							
		STD	0400	0779	3465	2705	0010880	0840	14882	334							
139		OBS	T0471	0690	34560	2711			14858	351							
		STD	0500	0634	3452	2715	0009950	0944	14840	362							
139		OBS	0564	0535	34451	2722			14810	378							
		STD	0600	0515	3445	2724	0009048	1039	14808	375							
		STD	0700	0468	3445	2730	0008579	1127	14805	370							
139		OBS	T0749	0451	34451	2732			14806	369							
		STD	0800	0442	3448	2735	0008167	1211	14811	372							
		STD	0900	0423	3453	2741	0007654	1290	14820	376							
147		OBS	T0933	0417	34546	2743			14823	378							
139		OBS	T0934	0414	34553	2744			14822	377							
		STD	1000	0426	3465	2750	0006889	1363	14840	382							
		STD	1100	0439	3477	2758	0006264	1428	14863	397							
147		OBS	1179	0445	34838	2763			14880	414							
		STD	1200	0445	3485	2764	0005852	1489	14884	423							
		STD	1300	0442	3490	2768	0005546	1546	14900	460							
		STD	1400	0437	3494	2772	0005285	1600	14915	492							
147		OBS	1431	0435	34946	2773			14919	501							
		STD	1500	0425	3495	2774	0005147	1652	14927	508							
		STD	1750	0389	3497	2780	0004740	1776	14954	542							
147		OBS	T1902	0368	34971	2782			14971	571							
		STD	2000	0355	3497	2783	0004479	1891	14982	593							
147		OBS	T2399	0304	34950	2786			15028	705							



TABLE III.—Continued

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	DEPTH METER	MARSDEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.					10'	1'	MO	DAY	HR.	1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT.	PER		SEA	TYPE	
311059	RC	02183S	03707 W	303	27	10	30	191	1966		023	3219	16	10	5	3		X1	8	5		0021	
						WATER		WIND		BARO-METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS								
						COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB											
								10	S12	100	277	243	7	15									
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$ ?	$\Sigma \Delta$ D DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>3</sub> -N µg - ml/l	NO <sub>2</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	SIG						
191		STD	0000	2689	3614	2363	0042702	0000	15404	480													
		OBS	0000	2689	36140	2363			15404	480													
		STD	0010	2681	3614	2366	0042515	0043	15404	482													
		STD	0020	2675	3614	2367	0042396	0085	15404	484													
191		OBS	0025	2673	36134	2368			15405	485													
		STD	0030	2672	3613	2368	0042347	0127	15405	481													
		STD	0050	2667	3614	2370	0042278	0212	15407	470													
191		OBS	0050	2667	36135	2370			15407	470													
		STD	0075	2605	3653	2419	0037653	0312	15402	471													
191		OBS	0075	2605	36533	2419			15402	471													
191		OBS	0099	2378	36924	2518			15357	471													
		STD	0100	2352	3688	2523	0027920	0394	15350	469													
		STD	0125	1802	3601	2606	0020039	0454	15198	427													
		STD	0150	1430	3544	2648	0016051	0499	15081	378													
191		OBS	0150	1430	35437	2648			15081	378													
191		OBS	0199	1220	35183	2671			15016	264													
		STD	0200	1219	3518	2671	0013927	0574	15016	264													
		STD	0250	1158	3510	2676	0013513	0643	15002	246													
191		OBS	0297	1068	34993	2685			14977	230													
		STD	0300	1057	3498	2686	0012716	0708	14973	235													
191		OBS	0397	0774	34657	2706			14880	347													
		STD	0400	0768	3465	2707	0010719	0825	14878	348													
191		OBS	T0492	0608	34508	2718			14828	373													
		STD	0500	0600	3451	2718	0009609	0927	14826	373													
		STD	0600	0513	3447	2726	0008919	1020	14807	373													
191		OBS	0601	0512	34464	2726			14807	373													
		STD	0700	0467	3447	2732	0008404	1106	14805	384													
		STD	0800	0437	3448	2736	0008067	1189	14809	393													
191		OBS	T0815	0434	34484	2736			14810	394													
		STD	0900	0432	3456	2742	0007538	1267	14825	397													
		STD	1000	0431	3465	2750	0006946	1339	14842	401													
191		OBS	1029	0430	34671	2751			14847	402													
		STD	1100	0434	3473	2756	0006491	1406	14861	409													
		STD	1200	0439	3481	2762	0006067	1469	14881	425													
191		OBS	1298	0444	34869	2766			14900	448													
		STD	1300	0444	3487	2766	0005792	1528	14900	449													
		STD	1400	0434	3492	2771	0005391	1584	14913	480													
		STD	1500	0417	3496	2776	0004966	1636	14924	520													
191		OBS	T1568	0401	34975	2779			14929	552													

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES	HODC STATION NUMBER
CTRY CODE	ID. NO.					10'	1'	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	GR.			
311059	RC	0203 S	03631 W	303	26	10	30	244	1966	024		3475	30	09	4	2	X1	8 3	0022
WATER		WIND		AIR TEMP. °C			NO. OBS. DEPTHS	SPECIAL OBSERVATIONS	NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
COLOR CODE	TRNSL. m-1	DIR.	SPED. kt	DRY BULB	WET BULB	VS. CODE			NO. OBS. DEPTHS	SPECIAL OBSERVATIONS	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
			09	514	124	263	232	7	18										
MESSAGE NO	CAST NO.	CARD TYPE	DEPTH (m)	T °C	σ <sub>t</sub>	SIOMA-T	ENCLOSURE VOLUME	Δ D DTN, M.	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SI O <sub>2</sub> -S pg - ml/l	PH	CHL		
		STD	0000	2675	3613	2367	0042355	0000	15401	448									
233	OBS	0000	2675	36129	2367				15401	448									
	STD	0010	2676	3613	2367		0042428	0042	15403	495									
	STD	0020	2677	3613	2366		0042499	0085	15405	523									
233	OBS	0026	2677	36126	2366				15406	531									
	STD	0030	2676	3613	2366		0042519	0127	15406	524									
	STD	0050	2670	3613	2369		0042402	0212	15408	486									
233	OBS	0053	2669	36131	2369				15408	480									
	STD	0075	2620	3668	2426		0037047	0312	15407	639									
233	OBS	0078	2597	36708	2435				15403	648									
	STD	0100	2292	3650	2511		0028986	0394	15331	602									
233	OBS	0104	2233	36464	2526				15317	594									
	STD	0125	1802	3623	2623		0018445	0453	15201	571									
	STD	0150	1427	3598	2690		0012026	0492	15087	544									
233	OBS	0156	1359																
	STD	0200	1165	3554	2709		0010290	0547	15002	496									
233	OBS	T0208	1137	3504P	2676P														
	STD	0250	1078	3519	2698		0011425	0602	14975	455									
	STD	0300	1001	3493	2691		0012128	0660	14952	420									
233	OBS	0309	0986	34891	2691				14948										
	STD	0400	0825	3470	2702		0011201	0777	14900	371									
233	OBS	0413	0798	34671	2704				14892	367									
	STD	0500	0578	3449	2720		0009434	0880	14817	351									
233	OBS	T0515	0554	34475	2722				14810	348									
	STD	0600	0508	3448	2728		0008746	0971	14805	398									
233	OBS	0623	0498	34484	2729				14805	407									
	STD	0700	0482	3449	2731		0008461	1057	14811	406									
	STD	0800	0461	3451	2735		0008159	1140	14819	404									
233	OBS	T0843	0452	34523	2737				14823	403									
	STD	0900	0441	3454	2740		0007782	1220	14828	392									
	STD	1000	0421	3457	2745		0007392	1296	14837	373									
244	OBS	T1017	0418	34579	2745				14838	370									
233	OBS	T1073	0431	34687	2753				14854	386									
	STD	1100	0435	3472	2755		0006582	1366	14861	405									
	STD	1200	0443	3481	2761		0006120	1429	14882	467									
244	OBS	T1283	0444	34884	2767				14898	506									
	STD	1300	0442	3489	2767		0005656	1488	14900	510									
	STD	1400	0428	3489	2769		0005931	1544	14911	532									
	STD	1500	0415	3490	2771		0005415	1599	14922	551									
244	OBS	1551	0408	34740	27590					560									
	STD	1750	0387	3491	2775		0005172	1731	14953	566									
	STD	2000	0362	3492	2778		0004939	1858	14985	574									
	STD	2500	0315	3495	2785		0004457	2092	15050	589									
244	OBS	T2525	0313	34946	2785				15054	590									
	STD	3000	0274	3493	2787		0004269	2311	15119	578									
244	OBS	3017	0273	34930	2788				15121	577									

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAR. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER
CRUISE CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DR.	HGT		PER	SEA	
311059	RC	0143 S	03555 W	303	15	10	31	050	1966	025	2923	15	09	4	2	X1	8	1	0023		
				WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS							
				COLOR CODE	TRANS. mm	DIR.	SPEED OR FORCE	METER (mm)	DRY BULB	WET BULB	WIK CODE										
						09	S15	104	254	229	7	14									
MESSAGE TIME HR 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta O$ OYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	Si O <sub>4</sub> -Si pg - ml/l	pH	S CODE				
		STD	0000	2712	3611	2354	0043615	0000	15409	463											
050		OBS	0000	2712	36111	2354			15409	463											
		STD	0010	2694	3611	2359	0043105	0043	15407	462											
		STD	0020	2682	3611	2363	0042781	0086	15406	461											
050		OBS	0024	2678	36111	2365			15405	460											
		STD	0030	2677	3611	2365	0042671	0129	15406	457											
050		OBS	0048	2674	36112	2366			15408	452											
		STD	0050	2674	3611	2366	0042656	0214	15409	452											
050		OBS	0073	2674	36108	2366			15412	454											
		STD	0075	2667	3614	2370	0042346	0321	15412	454											
050		OBS	0097	2514	36315	2431			15382	452											
		STD	0100	2455	3629	2447	0035095	0417	15369	444											
		STD	0125	2013	3605	2555	0024932	0492	15258	390											
050		OBS	0145	1727	35843	2611			15177	364											
		STD	0150	1671	3577	2619	0018829	0547	15161	365											
050		OBS	0193	1287	35249	2663			15039	367											
		STD	0200	1267	3522	2665	0014542	0631	15033	366											
		STD	0250	1132	3506	2678	0013336	0700	14993	360											
050		OBS	0291	1034	34941	2687			14963	356											
		STD	0300	1021	3492	2687	0012540	0765	14959	356											
		STD	0400	0867	3472	2697	0011702	0886	14916	356											
050		OBS	0484	0727	34597	2708			14875	356											
		STD	0500	0692	3458	2712	0010305	0996	14864	356											
050		OBS	0581	0554	34494	2723			14821	354											
		STD	0600	0543	3450	2725	0009074	1093	14820	354											
		STD	0700	0496	3450	2731	0008560	1181	14817	352											
050		OBS	T0774	0470	34504	2734			14819	350											
		STD	0800	0465	3451	2735	0008193	1265	14821	352											
		STD	0900	0448	3454	2739	0007855	1345	14831	360											
050		OBS	T0969	0441	34564	2742			14840	365											
		STD	1000	0442	3461	2745	0007377	1421	14846	371											
		STD	1100	0443	3473	2755	0006611	1491	14865	395											
		STD	1200	0445	3483	2762	0005995	1554	14883	423											
050		OBS	1219	0445	34846	2764			14887	429											
		STD	1300	0442	3490	2768	0005546	1612	14900	456											
		STD	1400	0434	3495	2773	0005171	1666	14914	495											
050		OBS	T1476	0426	34967	2775			14924	527											

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MOSELE	MARSON SQUARE		STATION TIME (GMT)		YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		HDDC STATION NUMBER	
CTRY CODE	ID. NO.					10'	1'	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR	HGT	PER		SEA	TPP		AMT
311059		RC	0127 S	03522 W		303	15 10 31	100	1966		026	4114	38	10	4	2		X1	8	1		0024	
						WATER		WIND		BARD-METER		AIR TEMP. °C		SPECIAL OBSERVATIONS									
						COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE			DRY BULB	WET BULB			VEL. CODE	NO. OBS. DEPTHS						
							11	S12	125			261	227	7	20								

MESSAGE TIME HR. 1/10	CASE NO.	CARD TYPE	DEPTH (m)	T °C	σ - t	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Σ Δ D OYN. M. × 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> m/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	SEC
		STD	0000	2654	3603	2366	0042452	0000	15395	469							
092		OBS	0000	2654	3603	2366			15395	469							
		STD	0010	2654	3603	2366	0042493	0042	15397	482							
		STD	0020	2654	3603	2366	0042535	0085	15398	495							
092		OBS	0023	2654	36027	2366			15399	499							
		STD	0030	2654	3603	2366	0042569	0128	15400	482							
092		OBS	0045	2650	36030	2367			15402	457							
		STD	0050	2644	3603	2369	0042326	0212	15401	456							
092		OBS	0068	26620	36042	23640				452							
		STD	0075	2616	3611	2384	0041025	0317	15400	450							
092		OBS	0091	2598	36222	2398			15400	444							
		STD	0100	2447	3612	2437	0036087	0413	15365	433							
		STD	0125	2068	3585	2525	0027785	0493	15270	407							
		STD	0150	1748	3562	2589	0021684	0555	15182	385							
092		OBS	0196	1312	35291	2661			15048	356							
		STD	0200	1301	3528	2663	0014759	0646	15045	356							
		STD	0250	1176	3511	2674	0013769	0717	15009	351							
		STD	0300	1069	3498	2683	0012925	0784	14977	346							
092		OBS	0302	1065	34971	2683			14976	346							
		STD	0400	0922	3481	2695	0011915	0908	14938	262							
092		OBS	0411	0899	34788	2697			14931	260							
		STD	0500	0639	3456	2718	0009721	1016	14843	314							
092		OBS	0521	0600	34523	2720			14830	323							
		STD	0600	0542	3449	2724	0009098	1110	14819	339							
092		OBS	T0621	0529	34489	2726			14817	342							
		STD	0700	0500	3449	2729	0008684	1199	14818	343							
		STD	0800	0470	3450	2733	0008344	1284	14823	345							
092		OBS	0852	0456	34510	2736			14826	346							
		STD	0900	0440	3453	2739	0007867	1365	14827	357							
		STD	1000	0426	3457	2744	0007509	1442	14839	369							
100		OBS	T1000	0426	34566	2744			14839	369							
092		OBS	T1081	0435	34652	2749			14857	367							
		STD	1100	0437	3468	2751	0006901	1514	14861	368							
		STD	1200	0445	3479	2759	0006293	1580	14883	375							
100		OBS	1267	0446	34851	2764			14895	379							
		STD	1300	0441	3487	2766	0005752	1641	14899	405							
		STD	1400	0427	3492	2772	0005298	1696	14911	473							
		STD	1500	0414	3496	2776	0004926	1747	14922	527							
100		OBS	T1540	0409	34977	2778			14927	544							
		STD	1750	0389	3497	2780	0004711	1867	14954	552							
		STD	2000	0363	3497	2782	0004590	1984	14986	560							
100		OBS	2035	0359	34969	2783			14990	561							
		STD	2500	0304	3495	2786	0004299	2206	15046	572							
100		OBS	2531	0301	34943	2786			15050	573							
		STD	3000	0274	3494	2788	0004198	2418	15119	595							
100		OBS	T3050	0271	34935	2788			15126	596							
100		OBS	T3527	0248	34914	2788			15199	586							
100		OBS	T3849	0233	34903	2789			15249	581							

TABLE III.—Continued

REFERENCE		SNIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DEPTH FATHOMS	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES TYPE AMT	NDOC STATION NUMBER			
ENTRY CODE	ID. NO.					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT.	PER				SEA		
311059		RC	0112 S	03448 W		303	14	10	31	145	1966		027	4206	15	12	4	2		X1	8	2		0025
						WATER		WIND		AIR TEMP. °C			NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
						COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIS. CODE											
									14	S12	131	274	231	7	15									
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-310*	Σ Δ Δ OYN, M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	STATION NO.							
		STD	0000	2657	3602	2364	0042593	0000	15396	454														
145		OBS	0000	2657	36020	2364			15396	454														
		STD	0010	2654	3602	2365	0042544	0043	15397	459														
		STD	0020	2651	3602	2366	0042495	0085	15398	463														
145		OBS	0024	2650	36016	2366			15398	465														
		STD	0030	2649	3602	2367	0042476	0128	15399	463														
145		OBS	0047	2644	36030	2369			15401	457														
		STD	0050	2643	3604	2370	0042255	0212	15401	457														
145		OBS	0071	2632	36068	2376			15402	449														
		STD	0075	2623	3621	2389	0040513	0316	15402	446														
145		OBS	0094	2490	36618	2461			15379	428														
		STD	0100	2323	3644	2498	0030277	0404	15338	419														
		STD	0125	1752	3583	2604	0020170	0467	15181	388														
145		OBS	0142	1479	35531	2644			15097	371														
		STD	0150	1428	3546	2650	0015842	0512	15081	363														
145		OBS	T0192	1214	35157	2670			15013	342														
		STD	0200	1203	3514	2671	0013922	0587	15010	356														
		STD	0250	1130	3506	2679	0013300	0655	14992	417														
145		OBS	0291	1060	34980	2685			14973	432														
		STD	0300	1032	3495	2688	0012506	0719	14964	420														
145		OBS	0389		3511P					339														
		STD	0400	0766	3468	2709	0010468	0834	14877	337														
145		OBS	T0489	0610	34538	2720			14829	334														
		STD	0500	0599	3453	2720	0009411	0934	14826	337														
145		OBS	0590	0523	34481	2726			14810	355														
		STD	0600	0520	3448	2726	0008880	1025	14810	354														
		STD	0700	0489	3450	2731	0008496	1112	14814	347														
145		OBS	T0791	0467	34510	2735			14820	346														
		STD	0800	0465	3451	2735	0008179	1195	14821	347														
		STD	0900	0445	3456	2741	0007714	1275	14830	354														
145		OBS	T0985	0436	34593	2745			14841	360														
		STD	1000	0437	3460	2745	0007390	1350	14843	364														
		STD	1100	0441	3470	2753	0006800	1421	14863	394														
		STD	1200	0445	3482	2762	0006068	1486	14883	425														
145		OBS	1236	0446	34868	2765			14890	437														
		STD	1300	0444						458														
		STD	1400	0437						494														
145		OBS	T1496	0426						529														

TABLE III.—Continued

REFERENCE SHIP CODE	ID. NO.	SHIP CODE	LATITUDE ° /'10"	LONGITUDE ° /'10"	MARENGH SQUARE 10' 1"	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL.	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD COVS		NODC STATION NUMBER		
						10'	1"	MD		OAT	M/L/10			CRUISE NO.	STATION NUMBER	DIR	HGT		PER	SEA		TYP	AMT
						303	04	10		31	198			1966	028	4206	39		14	3		2	
WATER		WIND		BARO-		AIR TEMP. °C			VIS. CODE	NO. OBS. DEPTHM	SPECIAL OBSERVATIONS												
COLOR CODE	TRANL (m)	DIR	SPEED OF FORCE	METER (mb)	DRY RULB	WET RULB	7	20															
14	510	105	266	231	7	20																	
MESSNGR TIME NR	1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SMCIFIC VOLUME ANOMALY- $\sigma_t$	$\pm \Delta \theta$ DYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	SiO <sub>2</sub> -S pg - ml/l	pH	SIC					
			STD	0000	2684	3595	2350	0043930	0000	15401	457												
189			OBS	0000	2684	35948	2350			15401	457												
			STD	0010	2677	3595	2353	0043759	0044	15401	458												
			STD	0020	2670	3595	2355	0043595	0088	15401	459												
189			OBS	0025	2666	35947	2356			15401	460												
			STD	0030	2662	3595	2358	0043372	0131	15401	459												
			STD	0050	2643	3601	2368	0042464	0217	15401	454												
189			OBS	0050	2643	36008	2368			15401	454												
			STD	0075	2613	3613	2387	0040788	0321	15399	444												
189			OBS	0076	2609	36137	2388			15399	444												
			STD	0100	2453	3650	2464	0033534	0414	15370	440												
189			OBS	0100	2453	36499	2464			15370	440												
			STD	0125	1826	3587	2589	0021625	0483	15203	394												
			STD	0150	1411	3544	2652	0015626	0529	15075	361												
189			OBS	0150	1411	35442	2652			15075	361												
			STD	0200	1221	3517	2670	0014038	0603	15017	337												
189			OBS	T0200	1221	35170	2670			15017	337												
			STD	0250	1154	3509	2676	0013513	0672	15001	270												
			STD	0300	1077	3500	2684	0012918	0738	14981	226												
189			OBS	0307	1066	34991	2685			14978	222												
			STD	0400	0843	3474	2702	0011182	0859	14908	288												
			STD	0500	0658	3458	2717	0009832	0964	14850	330												
189			OBS	T0532	0610	34545	2720			14836	337												
			STD	0600	0569	3453	2724	0009149	1059	14831	336												
189			OBS	0648		34519				14831	336												
			STD	0700	0519	3452	2729	0008708	1148	14827	337												
			STD	0800	0481	3452	2734	0008333	1233	14828	343												
189			OBS	0879	0460	34520	2736			14832	352												
			STD	0900	0456	3453	2737	0008050	1315	14834	356												
			STD	1000	0442	3461	2745	0007383	1392	14846	374												
198			OBS	T1008	0441	34623	2746			14847	375												
			STD	1100	0440	3475	2757	0006426	1462	14864	389												
189			OBS	T1110	0440	34761	2758			14865	390												
			STD	1200	0442	3481	2761	0006105	1524	14882	351												
198			OBS	1259	0443	35060	27810			14882	351												
			STD	1300	0439	3486	2766	0005770	1584	14898	386												
			STD	1400	0428	3492	2771	0005326	1639	14911	468												
			STD	1500	0416	3497	2777	0004865	1690	14923	532												
198			OBS	1512	0415	34979	2778			14925	538												
			STD	1750	0384	3498	2781	0004621	1809	14952	556												
			STD	2000	0354	3497	2783	0004436	1922	14982	575												
198			OBS	2021	0352	34974	2784			14985	577												
			STD	2500	0307	3497	2788	0004162	2137	15047	530												
198			OBS	2536	0304	34964	2787			15052	526												
			STD	3000	0278	3494	2788	0004258	2347	15120	585												
198			OBS	T3054	0275	34933	2788			15128	590												
198			OBS	3572	0247	34914	2789			15206	609												
198			OBS	T3884	0234	34926	2791			15256	592												

TABLE III.—Continued

REFERENCE CTRY CODE	SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARSDEK SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TD BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER		
					10'	1'	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DIR.		HGT	PER		SEA	TYPE
311059	RC	0027 S	03335 W	303	03	11	01	010	1966	029	4298	16	13	3	2		X1	8	2	0027	
				WATER		WIND		AIR TEMP. °C													
				COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	BARO- METER (mbar)	DRY RULR	WET RULR	WIL CODE	ND. OBS. DEPTNS	SPECIAL OBSERVATIONS								
						14	518	126	266	236	7	15									
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub> ?	Σ Δ D DYN. M. x 10 <sup>3</sup>	SDUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P μg - dl/l	TOTAL-P μg - dl/l	NO <sub>3</sub> -N μg - dl/l	ND <sub>3</sub> -N μg - dl/l	SiO <sub>2</sub> -Si μg - dl/l	pH	3 CC				
		STD	0000		3595																
010		OBS	0000	2688Q	35953	2349Q					447										
		STD	0010		3596						447										
		STD	0020		3596						451										
010		OBS	0025	2681	35958	2352				15404	454										
		STD	0030	2676	3597	2354	0043662			15404	454										
010		OBS	0049	2656	36008	2364				15403	455										
		STD	0050	2651	3603	2367	0042547			15403	454										
010		OBS	0074	2486	36357	2443				15372	435										
		STD	0075	2478	3636	2445	0035184			15371	435										
010		OBS	0098	2252	36335	2510				15319	423										
		STD	0100	2211	3629	2519	0028290			15308	420										
		STD	0125	1761	3583	2602	0020380			15184	389										
010		OBS	0149	1446	35481	2648				15087	364										
		STD	0150	1439	3547	2648	0015995			15085	363										
010		OBS	T0199	1159	35091	2676				14994	331										
		STD	0200	1158	3509	2676	0013464			14994	331										
		STD	0250	1091	3506	2686	0012608			14978	325										
		STD	0300	1017	3499	2693	0011957			14959	319										
010		OBS	0305	1009	34984	2694				14957	318										
		STD	0400	0841	3474	2703	0011151			14907	326										
010		OBS	0411	0822	34717	2704				14901	327										
		STD	0500	0656	3457	2716	0009879			14849	334										
010		OBS	T0518	0633	34551	2718				14843	335										
		STD	0600	0583	3452	2722	0009406			14836	340										
010		OBS	0625	0569	34512	2723				14834	342										
		STD	0700	0523	3451	2728	0008826			14828	345										
		STD	0800	0476	3451	2733	0008374			14825	351										
010		OBS	T0842	0462	34505	2735				14826	355										
		STD	0900	0453	3455	2739	0007865			14833	361										
		STD	1000	0442	3463	2747	0007236			14846	375										
010		OBS	T1060	0438	34677	2751				14855											
		STD	1100	0438	3471	2754	0006697			14862	392										
		STD	1200	0439	3479	2760	0006215			14880	413										
		STD	1300	0440	3486	2765	0005809			14898	439										
010		OBS	1336	0440	34882	2767				14905	449										
		STD	1400	0437	3491	2770	0005504			14915	468										
		STD	1500	0429	3495	2774	0005201			14929	502										
010		OBS	T1613	0417	34979	2777				14943	544										

TABLE III.—Continued

REFERENCE CTRY CODE	IO. NO.	SHIP CODE	LATITUDE ° /10	LONGITUDE ° /10	MAGNETIC DECLINATION	MAGNETIC SQUARE			STATION TIME IGMT			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES TPT AMT	MOOC STATION NUMBER
						10"	1"	MO	DAY	HR./10	CRUISE NO.		STATION NUMBER	DR.			HGT.	PER.	SEA				
311059	RC	0008	S	03301	W	303	03	11	01	058	1966		030	4979	41	13	4	2	X8	8	8	0028	
						WATER		WIND		BARO-		AIR TEMP. °C		VIL CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
						COLOR CODE	TRANS. COE	DIR.	SPEED OF FORCE	BARO- METER (mb)	DRY BULB	WET BULB											
								15	S13	115	256	237	7	21									
MESSAGE TIME NR	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ σ QYN, M. 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SIO <sub>4</sub> -Si μg - ml/l	P-N	CHL						
		STD	0000	2692	3582	2338	0045066	0000	15401	447													
049		OBS	0000	2692	35824	2338			15401	447													
		STD	0010	2693	3586	2341	0044885	0045	15404	447													
		STD	0020	2694	3589	2343	0044748	0090	15406	448													
049		OBS	0025	2695	35905	2344			15407	448													
		STD	0030	2691	3591	2345	0044534	0134	15407	448													
		STD	0050	2676	3594	2352	0043952	0223	15407	448													
049		OBS	0050	2676	35940	2352			15407	448													
		STD	0075	2503	3628	2432	0036435	0323	15376	435													
049		OBS	0075	2503	36283	2432			15376	435													
		STD	0100	2281	3621	2493	0030772	0407	15325	420													
049		OBS	0100	2281	36210	2493			15325	420													
		STD	0125	1817	3582	2588	0021773	0473	15200	395													
		STD	0150	1479	3551	2643	0016535	0521	15098	370													
049		OBS	0151	1468	35501	2645			15095	369													
		STD	0200	1179	3512	2674	0013649	0596	15002	390													
049		OBS	T0200	1179	35117	2674			15002	390													
		STD	0250	1089	3503	2684	0012793	0663	14977	358													
		STD	0300	1028	3494	2688	0012512	0726	14962	326													
049		OBS	0311	1018	34921	2688			14960	319													
		STD	0400	0999	3475	2678	0013624	0856	14966	467													
049		OBS	0421	0994						473													
		STD	0500	0731	3460	2708	0010713	0978	14879	349													
049		OBS	T0533	0653	34570	2717			14854	323													
		STD	0600	0572	3452	2723	0009262	1078	14832	335													
049		OBS	0642	0532	34500	2726			14822	341													
		STD	0700	0505	3450	2730	0008650	1168	14821	348													
		STD	0800	0469	3451	2734	0008265	1252	14822	358													
049		OBS	0863	0454	34512	2736			14827	363													
		STD	0900	0452	3454	2739	0007926	1333	14832	365													
		STD	1000	0446	3463	2746	0007286	1409	14848	371													
058		OBS	T1059	0443	34691	2752			14857	375													
049		OBS	T1093	0441	34727	2755			14862	377													
		STD	1100	0441	3473	2755	0006584	1479	14864	392													
		STD	1200	0441	3481	2761	0006094	1542	14881	568													
		STD	1300	0441	3487	2766	0005752	1601	14899	666													
058		OBS	T1324	0441	34879	2767			14903	678													
		STD	1400	0436	3491	2770	0005491	1657	14914	614													
		STD	1500	0427	3494	2773	0005247	1711	14928	547													
058		OBS	T1590	0417	34966	2776			14939	506													
		STD	1750	0386	3497	2779	0004736	1836	14953	539													
		STD	2000	0347	3496	2783	0004420	1950	14979	574													
058		OBS	2080	0337	34962	2784			14988	581													
		STD	2500	0305	3494	2786	0004328	2169	15046	579													
058		OBS	T2567	0300	34940	2786			15055	579													
		STD	3000	0270	3493	2788	0004209	2382	15117	581													
058		OBS	3073	0266	34925	2788			15128	582													
058		OBS	3573	0246	34910	2788			15206	587													
		STD	4000	0205	3487	2789	0004087	2797	15263	572													
058		OBS	T4081	0195	34862	2789			15273	567													



TABLE III.—Continued

REFERENCE CTRY CODE	SHIP CODE	LATITUDE ° ' / 10	LONGITUDE ° ' / 10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		HODC STATION NUMBER																												
					16'	1'	MO	DAY		HR	1/10			CRUISE NO.	STATION NUMBER	DIR	HGT		PER	SEA		TPR	AMT																										
311059	RC	0011 N	03224 W	004	02	11	01	115	1966	031	4207	17	14	4	2	X1	8	3	0029																														
<table border="1"> <thead> <tr> <th colspan="2">WATER</th> <th colspan="2">WIND</th> <th colspan="2">BARO- METER</th> <th colspan="2">AIR TEMP. °C</th> <th rowspan="2">VIS. CODD</th> <th rowspan="2">NO. OBS. DEPTHS</th> <th rowspan="2">SPECIAL OBSERVATIONS</th> </tr> <tr> <th>COLOR CODE</th> <th>TRNS. M</th> <th>DIR.</th> <th>SPEED OR FORCE</th> <th>METER</th> <th>DRY BULB</th> <th>WET BULB</th> <th>°C</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>14</td> <td>S20</td> <td>141</td> <td>268</td> <td>234</td> <td>7</td> <td>15</td> <td></td> <td></td> </tr> </tbody> </table>																				WATER		WIND		BARO- METER		AIR TEMP. °C		VIS. CODD	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS	COLOR CODE	TRNS. M	DIR.	SPEED OR FORCE	METER	DRY BULB	WET BULB	°C			14	S20	141	268	234	7	15		
WATER		WIND		BARO- METER		AIR TEMP. °C		VIS. CODD	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS																																							
COLOR CODE	TRNS. M	DIR.	SPEED OR FORCE	METER	DRY BULB	WET BULB	°C																																										
		14	S20	141	268	234	7	15																																									
MEASURED TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MLT-218'	$\Sigma \Delta \rho$ DYN. M. x 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SI O <sub>4</sub> -SI pg - ml/l	pH	1 C C																																
		STO	0000	2679	3593	2351	0043900	0000	15400	456																																							
115		OBS	0000	2679	35931	2351			15400	456																																							
		STO	0010	2679	3593	2351	0043930	0044	15401	458																																							
		STO	0020	2678	3593	2351	0043962	0088	15403	460																																							
115		OBS	0027	2678	35931	2351			15404	462																																							
		STO	0030	2672	3594	2353	0043757	0132	15403	462																																							
		STO	0050	2635	3602	2371	0042124	0218	15399	456																																							
115		OBS	0054	2627	36044	2376			15398	454																																							
		STO	0075	2440	3623	2447	0034994	0314	15360	436																																							
115		OBS	0081	2370	36248	2469			15344	431																																							
		STO	0100	2083	3616	2544	0025842	0390	15274	417																																							
115		OBS	0107	1981	36099	2567			15246	411																																							
		STO	0125	1661	3571	2617	0018959	0446	15153	378																																							
		STO	0150	1342	3532	2657	0015133	0489	15051	344																																							
115		OBS	0162	1240	35193	2668			15017	333																																							
		STO	0200	1204	3515	2672	0013868	0561	15011	328																																							
115		OBS	T0214	1187	35128	2673			15007	325																																							
		STO	0250	1114	3504	2680	0013161	0629	14986	310																																							
		STO	0300	1014	3492	2688	0012421	0693	14957	296																																							
115		OBS	0328	0958	34863	2694			14940	292																																							
		STO	0400	0807	3471	2706	0010855	0809	14894	295																																							
115		OBS	0442	0734	34642	2711			14871	301																																							
		STO	0500	0651	3457	2717	0009810	0912	14847	319																																							
115		OBS	0557	0589	34525	2721			14831	331																																							
		STO	0600	0563	3451	2723	0009219	1008	14828	335																																							
115		OBS	0673	0523	34498	2727			14824	341																																							
		STO	0700	0509	3451	2730	0008649	1097	14822	342																																							
		STO	0800	0467	3454	2737	0008011	1180	14822	348																																							
115		OBS	0894	0443	34594	2744			14828	358																																							
		STO	0900	0443	3460	2744	0007374	1257	14830	359																																							
		STO	1000	0447	3468	2750	0006925	1329	14849	373																																							
		STO	1100	0450	3475	2756	0006552	1396	14868	395																																							
115		OBS	T1128	0451	34772	2757			14873	403																																							
		STO	1200	0443	3483	2763	0005973	1459	14863	437																																							
		STO	1300	0432	3489	2769	0005487	1516	14896	477																																							
		STO	1400	0422	3494	2774	0005085	1569	14909	509																																							
115		OBS	1417	0421	34947	2774			14911	514																																							
		STO	1500	0414	3497	2777	0004853	1618	14923	533																																							
115		OBS	T1705	0402	34970	2778			14952	556																																							

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' / 10	LONGITUDE ° ' / 10	OBS. TIME 10 <sup>00</sup> 10 <sup>00</sup>	MARS DEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPLS	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		WDC STATION NUMBER
CITY CODE	ID. NO.					10"	1'	MO	DAY	HR	10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT	
311059		RC	0030 N	03151 W	004	01	11	01	160	1966		032	4389	40	11	4	2		X1	8	1	0030		
								WATER		WIND		BARO-METER		AIR TEMP. °C		VIL CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS				
								COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE	(mb)	DRY BULB	WET BULB										
								13	514	127		267	231	7	21									

MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-2107	Σ Δ D OYN, M. x 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -S μg - ml/l	PH	OTSP
		STD	0000	2684	3594	2350	0043995	0000	15401	473							
152		OBS	0000	2684	35939	2350			15401	473							
		STD	0010	2676	3595	2353	0043743	0044	15401	479							
		STD	0020	2660	3595	2358	0043256	0087	15399	485							
152		OBS	0026	2646	35956	2363			15397	488							
		STD	0030	2638	3600	2369	0042287	0130	15396	483							
		STD	0050	2559	3616	2406	0038862	0211	15383	462							
152		OBS	0051	2553	36164	2408			15382	461							
		STD	0075	2340	3615	2471	0032747	0301	15335	441							
152		OBS	0077		36070					438							
		STD	0100	2064	3613	2547	0025546	0374	15268	399							
152		OBS	0102	2040	36132	2554			15262	396							
		STD	0125	1620	3565	2622	0018479	0429	15140	383							
		STD	0150	1308	3529	2662	0014687	0470	15039	374							
152		OBS	0155	1264	35234	2666			15025	373							
		STD	0200	1195	3515	2673	0013701	0541	15008	376							
152		OBS	T0210	1178	35129	2675			15003	377							
		STD	0250	1101	3504	2682	0012931	0608	14981	339							
		STD	0300	1007	3493	2690	0012229	0671	14955	308							
152		OBS	0311	0987	34910	2692			14949	304							
		STD	0400	0825	3473	2704	0010980	0787	14901	305							
152		OBS	0417	0799	34707	2707			14893	306							
		STD	0500	0705	3461	2713	0010267	0893	14869	317							
152		OBS	T0519	0682	34596	2715			14863	320							
		STD	0600	0566	3453	2725	0009110	0990	14829	337							
152		OBS	0629	0534	34518	2727			14821	341							
		STD	0700	0507	3452	2731	0008572	1078	14822	341							
		STD	0800	0477	3452	2734	0008305	1163	14826	341							
152		OBS	T0848	0465	34516	2735			14829	341							
		STD	0900	0455	3456	2740	0007816	1243	14834	360							
160		OBS	T0996	0442	34632	2747			14845	390							
		STD	1000	0442	3464	2747	0007199	1318	14846	391							
152		OBS	1054		34679					406							
		STD	1100	0442	3475	2756	0006455	1387	14865	419							
		STD	1200	0443	3487	2766	0005677	1447	14883	446							
160		OBS	1267	0443	34920	2770			14895	461							
		STD	1300	0441	3492	2770	0005378	1502	14900	467							
		STD	1400	0433	3492	2771	0005363	1556	14913	484							
		STD	1500	0423	3492	2772	0005310	1610	14926	501							
160		OBS	1533	0420	34925	2773			14930	506							
		STD	1750	0389	3494	2777	0004937	1738	14954	544							
		STD	2000	0357	3496	2782	0004550	1856	14983	576							
160		OBS	2037	0352	34967	2783			14987	579							
		STD	2500	0301	3494	2786	0004292	2077	15044	594							
160		OBS	T2542	0297	34939	2786			15050	596							
		STD	3000	0271	3492	2787	0004281	2292	15117	624							
160		OBS	3037	0269	34921	2787			15123	626							
160		OBS	3537	0249	34910	2788			15201	590							
		STD	4000	0248	3491	2788	0004518	2732	15282	702							
160		OBS	4037	0248	34910	2788			15288	717							

TABLE III.—Continued

REFERENCE CITE CODE	SHIP CODE	LATITUDE ° '/10	LONGITUDE ° '/10	MARSSEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SPLS	WAVE OBSERVATIONS				WEA- TNER CODE	CLOUD CODES		NOOC STATION NUMBER
					MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DR.	HGT	PER	SEA		TYPE	AMT	
311059	RC	0049 N	03117 W	004	01	11	01	205	1966	033	3475	17	14	4	2	X1	8	2	0031	
				WATER		WIND		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
				COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIL CODE									
					14	S12	119	261	223	7	15									
MESSENGE R NR	TIME 1/10	CARD NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta O$ OYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	SiO <sub>4</sub> -Si pg - ml/l	pH	S C		
			STD	0000	2661	3593	2356	0043361	0000	15396	456									
205			OBS	0000	2661	35930	2356			15396	456									
			STD	0010	2659	3593	2357	0043339	0043	15397	454									
			STD	0020	2657	3592	2357	0043386	0087	15398	451									
205			OBS	0028	2655	35918	2357			15399										
			STD	0090	2653	3592	2358	0043334	0130	15399	449									
			STD	0050	2631	3591	2364	0042854	0216	15397	444									
205			OBS	0055	2626	35902	2365			15396	443									
			STD	0075	2327	3600	2463	0033459	0312	15330	380									
205			OBS	0082	2225	36015	2494			15306	368									
			STD	0100	1958	3600	2565	0023804	0383	15238	367									
205			OBS	0109	1840	35995	2595			15206	367									
			STD	0125	1662	3576	2621	0018618	0436	15154	345									
			STD	0150	1441	3546	2647	0016109	0480	15085	318									
205			OBS	0165	1342	35329	2658			15054	306									
			STD	0200	1242	3520	2668	0014213	0555	15024	297									
205			OBS	T0219	1191	35138	2673			15009	293									
			STD	0250	1116	3505	2680	0013123	0624	14987	291									
			STD	0300	1005	3493	2691	0012196	0687	14954	288									
205			OBS	0329	0946	34970	27040				286									
			STD	0400	0819	3473	2705	0010889	0803	14898	282									
205			OBS	0438	0760	34672	2710			14881	280									
			STD	0500	0679	3460	2715	0009975	0907	14859	303									
205			OBS	T0548	0624	34555	2719			14844	316									
			STD	0600	0571	3452	2723	0009249	1003	14831	323									
205			OBS	0657	0523	34502	2728			14821	330									
			STD	0700	0501	3452	2732	0008474	1092	14819	335									
			STD	0800	0462	3455	2738	0007875	1173	14820	347									
205			OBS	T0884	0444	34593	2744			14827	358									
			STD	0900	0446	3460	2744	0007409	1250	14831	359									
			STD	1000	0453	3466	2748	0007153	1323	14851	370									
205			OBS	T1095	0454	34725	2753			14868	389									
			STD	1100	0454	3473	2754	0006751	1392	14869	392									
			STD	1200	0445	3482	2762	0006073	1456	14883	443									
			STD	1300	0435	3489	2768	0005527	1514	14897	475									
205			OBS	1371	0428	34929	2772			14906	487									
			STD	1400	0425	3494	2773	0005125	1567	14910	483									
			STD	1500	0415	3497	2777	0004867	1617	14923	468									
205			OBS	T1652	0398	34970	2779			14941	445									

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MO	MARSEN SQ. FT			STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		MOOC STATION NUMBER
CTRY CODE	NO.					10"	1"	MO	OAT	NR. 1/10	CBUISE NO.		STATION NUMBER	DIR.			HGT	PER	SEA	TYR		AMT		
311059		RC	0111 N	03043 W	004	10	11	02	006	1966		034	2286	16	14	4	2		X1	8	5		0032	
		WATER		WIND		BARO-METER (mb)		AIR TEMP. °C																
		COLOR CODE		TRANS. (m)		DIR.		SPEED OF FORCE		METER		DRY BULB		WET BULB		VEL. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS				
						15		S14		131		261		232		7		15						
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-2107	S Δ σ <sub>T</sub> DYN. M. 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	PH	SEC							
		STD	0000	2672	3590	2351	0043896	0000	15398	460														
	006	OBS	0000	2672	35902	2351			15398	460														
		STD	0010	2672	3590	2350	0043964	0044	15399	458														
		STD	0020	2673	3590	2350	0044018	0088	15401	457														
	006	OBS	0026	2673	35891	2350			15402	456														
		STD	0030	2670	3587	2349	0044178	0132	15402	456														
		STD	0050	2653	3585	2353	0043895	0220	15401	453														
	006	OBS	0051	2652	35848	2353			15401	453														
		STD	0075	2279	3597	2475	0032349	0315	15318	364														
	006	OBS	0077	2246	35980	2485			15310	360														
		STD	0100	1832	3588	2588	0021610	0383	15201	347														
	006	OBS	0102	1802	35866	2595			15193	346														
		STD	0125	1587	3562	2627	0017971	0432	15129	335														
		STD	0150	1407	3541	2651	0015778	0475	15074	315														
	006	OBS	0155	1378	35377	2654			15065	310														
		STD	0200	1226	3518	2670	0014058	0549	15019	243														
	006	OBS	T0206	1208	35161	2672			15013	238														
		STD	0250	1102	3503	2681	0013022	0617	14982	258														
		STD	0300	0991	3491	2692	0012108	0680	14948	274														
	006	OBS	0311	0968	34881	2693			14941	277														
		STD	0400	0799	3471	2707	0010735	0794	14891	281														
	006	OBS	0417	0772	34681	2709			14883	284														
		STD	0500	0670	3459	2716	0009924	0897	14855	320														
	006	OBS	T0523	0644	34570	2718			14848	326														
		STD	0600	0562	3452	2724	0009132	0992	14828	328														
	006	OBS	0629	0538	34506	2726			14822	330														
		STD	0700	0509	3451	2730	0008626	1081	14822	338														
		STD	0800	0477	3452	2734	0008268	1166	14826	348														
	006	OBS	T0845	0466	34526	2736			14829	352														
		STD	0900	0457	3455	2739	0007915	1247	14835	356														
		STD	1000	0446	3460	2744	0007507	1324	14847	363														
	006	OBS	T1049	0442	34635	2747			14854	367														
		STD	1100	0442	3471	2753	0006744	1395	14864	389														
		STD	1200	0442	3483	2763	0005960	1458	14882	429														
		STD	1300	0442	3491	2769	0005472	1516	14900	464														
	006	OBS	1317	0442	34920	2770			14903	469														
		STD	1400	0438	3493	2771	0005349	1570	14915	493														
		STD	1500	0430	3495	2774	0005222	1623	14929	516														
	006	OBS	T1582	0421	34962	2776			14939	531														

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE * 1/10	LONGITUDE * 1/10	MARSden SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES	NODC STATION NUMBER
CTRY CODE	ID. NO.					10'	1'	MO	DAY		HR.1/10	CRUISE NO.			STATION NUMBER	DIR	HGT PER			
311059	RC	0133 N	03009 W	004	10	11	02	035	1966		035	3109	15	16	4	2	X1	8	1	0033
				WATER		WIND		AIR TEMP. °C			NO. OBS. DEPTHS		SPECIAL OBSERVATIONS							
				COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY RULR	WET RULR	VIS. CODE									
						16	S13	120	261	227	7	15								
WAVESENSE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-210?	Σ Δ σ DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - μl/l	TOTAL-P μg - μl/l	NO <sub>2</sub> -N μg - μl/l	NO <sub>3</sub> -N μg - μl/l	SiO <sub>2</sub> -Si μg - μl/l	pH	S.C.C.			
		STD	0000	2667	3586	2349	0044025	0000	15396	464										
035		OBS	0000	2667	35863	2349			15396	464										
		STD	0010	2669	3586	2349	0044136	0044	15398	459										
		STD	0020	2670	3586	2348	0044226	0088	15400	455										
035		OBS	0025	2671	35859	2348			15401	454										
		STD	0030	2669	3586	2349	0044231	0132	15402	453										
035		OBS	0049	2662	35863	2351			15403	451										
		STD	0050	2662	3586	2351	0044093	0221	15403	443										
035		OBS	0074	2654	35730	23430				303										
		STD	0075	2606	3575	2360	0043309	0330	15394	302										
035		OBS	0099	1701	35632	2601			15160	274										
		STD	0100	1692	3562	2603	0020233	0409	15157	272										
		STD	0125	1489	3546	2637	0017035	0456	15096	238										
035		OBS	0147	1359	35352	2656			15057	227										
		STD	0150	1352	3534	2657	0015185	0496	15055	230										
035		OBS	T0196	1236	35196	2669			15021	266										
		STD	0200	1223	3518	2670	0014002	0569	15017	267										
		STD	0250	1072	3500	2684	0012716	0636	14971	279										
035		OBS	0298	0956	34869	2694			14935	285										
		STD	0300	0953	3487	2695	0011804	0697	14934	284										
035		OBS	0398	0808	34717	2706			14894	278										
		STD	0400	0806	3471	2706	0010840	0811	14893	279										
		STD	0500	0692	3460	2714	0010150	0916	14864	316										
035		OBS	T0500	0692	34601	2714			14864	316										
		STD	0600	0551	3451	2725	0009064	1012	14823	347										
035		OBS	0601	0550	34509	2725			14823	347										
		STD	0700	0509	3451	2730	0008663	1100	14822	346										
		STD	0800	0477	3451	2733	0008386	1186	14826	345										
035		OBS	T0805	0476	34506	2733			14826	345										
		STD	0900	0460	3455	2739	0007939	1267	14836	349										
		STD	1000	0442	3460	2744	0007474	1344	14846	353										
035		OBS	T1001	0442	34598	2744			14846	353										
		STD	1100	0445	3474	2755	0006557	1414	14865	400										
		STD	1200	0447	3484	2763	0005956	1477	14884	440										
035		OBS	1265	0449	34894	2767			14897	461										
		STD	1300	0448	3490	2768	0005618	1535	14902	471										
		STD	1400	0440	3492	2770	0005449	1590	14916	494										
		STD	1500	0429	3494	2773	0005245	1644	14928	509										
035		OBS	T1520	0426	34948	2774			14931	511										

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MOOR NO.	MABSDEN SQUARE		STATION TIME (GMT)		YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES TYP AMT	NOOC STATION NUMBER	
CTR CODE	ID. NO.					10"	1"	MO	DAY		HR.	1/10			CRUISE NO.	STATION NUMBER	DR.	HGT				PER
311059		RC	0155 N	02935 W	003	19	11	02	088	1966		036	2926	25	14	4	2		X1	8	6	0034
		WATER		WIND		BARO-METER		AIR TEMP. °C		VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
		COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE	METER (mbal)		DRY BULB	WET BULB													
					15	S12	120	254	231	7	18											
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \sigma$ OBS. M. $\times 10^3$	SOUND VELOCITY	O <sub>3</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>2</sub> -Si µg - ml/l	PN	3	CO				
		STD	0000	2677	3587	2346	0044314	0000	15398	451												
083		OBS	0000	2677	35865	2346			15398	451												
		STD	0010	2679	3586	2346	0044431	0044	15401	456												
		STD	0020	2681	3586	2345	0044540	0089	15403	458												
083		OBS	0025	2682	35861	2344			15404	459												
		STD	0030	2681	3586	2345	0044601	0133	15404	458												
083		OBS	0048	2679	35863	2346			15407	456												
		STD	0050	2675	3586	2347	0044467	0222	15406	456												
083		OBS	0071	2627	35849	2361			15399	454												
		STD	0075	2488	3582	2402	0039329	0327	15367	418												
083		OBS	0095	1920	35680	2551			15223	284												
		STD	0100	1848	3565	2567	0023661	0406	15203	279												
		STD	0125	1556	3551	2626	0018098	0458	15118	259												
083		OBS	0141	1429	35436	2648			15080	252												
		STD	0150	1412	3542	2650	0015807	0501	15075	252												
083		OBS	T0188	1327	35315	2660			15052	253												
		STD	0200	1286	3526	2664	0014614	0577	15040	263												
		STD	0250	1129	3508	2680	0013136	0646	14992	289												
083		OBS	0281	1044	34977	2688			14965	295												
		STD	0300	0997	3492	2691	0012135	0709	14951	282												
083		OBS	0376	0845	34756	2703			14905	259												
		STD	0400	0817	3472	2705	0010932	0824	14898	272												
083		OBS	T0469	0739	34644	2710			14878	300												
		STD	0500	0702	3461	2713	0010224	0930	14868	303												
083		OBS	0566	0632	34565	2719			14851	312												
		STD	0600	0598	3455	2722	0009382	1028	14843	321												
		STD	0700	0519	3453	2730	0008627	1118	14827	340												
083		OBS	T0762	0484	34523	2734			14823	348												
		STD	0800	0476	3453	2735	0008197	1202	14826	349												
		STD	0900	0458	3455	2739	0007927	1283	14835	351												
083		OBS	T0963	0449	34575	2742			14842	352												
088		OBS	T0986	0446	34584	2743			14845	363												
		STD	1000	0447	3460	2744	0007515	1360	14848	368												
		STD	1100	0451	3470	2752	0006927	1433	14867	401												
		STD	1200	0454	3479	2758	0006416	1499	14887	432												
088		OBS	1240	0456	34490	27340			444													
		STD	1300	0450	3486	2764	0005945	1561	14903	463												
		STD	1400	0439	3491	2769	0005531	1618	14915	490												
088		OBS	1498	0428	34957	2774			14928	513												
		STD	1500	0428	3496	2775	0005114	1672	14928	513												
		STD	1750	0388	3496	2779	0004799	1796	14954	541												
088		OBS	1993	0354	34962	2782			14981	567												
		STD	2000	0353	3496	2782	0004524	1912	14981	567												
088		OBS	T2490	0296	34932	2786			15040	558												

TABLE III.—Continued

REFERENCE CITY CODE	SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	MARSDEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES	NODC STATION NUMBER
					10'	1'	MD		DAY	HR./10			CRUISE NO.	STATION NUMBER	DIR.	HGT			
311059	RC	0218 N	02900 W	003	29	11	02	128	1966	037	3292	16	14	3	2	X1	8	2	0035
				WATER		WIND		AIR TEMP. °C		NO. DES. DEPTHS		SPECIAL OBSERVATIONS							
				COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIS. CODE								
					14	S14	122	269	240	7	15								
MESSNGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - at/l	TOTAL-P μg - at/l	NO <sub>2</sub> -N μg - at/l	NO <sub>3</sub> -N μg - at/l	SiO <sub>4</sub> -Si μg - at/l	pH	1 C		
		STD	0000	2686	3585	2343	0044674	0000	15400	448									
128		OBS	0000	2686	3585.3	2343			15400	448									
		STD	0010	2683	3585	2343	0044644	0045	15401	451									
		STD	0020	2681	3585	2344	0044606	0089	15402	454									
128		OBS	0027	2679	3585.1	2345			15403	456									
		STD	0030	2669	3585	2348	0044288	0134	15402	455									
		STD	0050	2604	3587	2370	0042287	0220	15390	446									
128		OBS	0052	2597	3587.0	2372			15389	445									
		STD	0075	1865	3566	2563	0023912	0303	15204	366									
128		OBS	0078	1802	3564.4	2578			15186	356									
		STD	0100	1606	3559	2621	0018528	0356	15130	280									
128		OBS	0104	1577	3557.4	2626			15122	270									
		STD	0125	1494	3550	2639	0016849	0400	15099	258									
		STD	0150	1410	3541	2650	0015839	0441	15075	251									
128		OBS	0156	1392	3539.3	2653			15069	250									
		STD	0200	1296	3527	2663	0014735	0518	15043	259									
128		OBS	T0210	1275	3524.4	2665			15038	262									
		STD	0250	1208	3517	2672	0013922	0589	15020	284									
		STD	0300	1110	3505	2682	0013134	0657	14993	304									
128		OBS	0311	1087	3502.7	2684			14986	308									
		STD	0400	0858	3477	2702	0011193	0779	14914	321									
128		OBS	0415	0829	3473.8	2704			14905	323									
		STD	0500	0733	3465	2712	0010373	0886	14881	298									
128		OBS	T0522	0706	3463.2	2714			14874	296									
		STD	0600	0595	3456	2723	0009268	0985	14841	307									
128		OBS	0628	0563	3454.9	2726			14833	311									
		STD	0700	0519	3455	2732	0008479	1073	14827	324									
		STD	0800	0475	3456	2738	0007962	1156	14826	340									
128		OBS	T0842	0462	3457.4	2740			14827	346									
		STD	0900	0459	3460	2743	0007570	1233	14836	347									
		STD	1000	0454	3464	2746	0007313	1308	14851	357									
128		OBS	1056	0452	3468.0	2750			14860	367									
		STD	1100	0452	3473	2754	0006721	1378	14868	385									
		STD	1200	0451	3483	2762	0006076	1442	14886	421									
		STD	1300	0450	3491	2768	0005581	1500	14903	455									
128		OBS	1324	0450	3491.9	2769			14907	462									
		STD	1400	0444	3493	2771	0005437	1555	14918	484									
		STD	1500	0432	3495	2773	0005256	1609	14930	509									
128		OBS	T1596	0416	3496.4	2776			14939	530									

TABLE III.—Continued

REFERENCE CTRY CODE	SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARSDEH SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NOCC STATION NUMBER	
					10'	1"	MO DAY HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER		SEA	FTS		AMT
311059	RC	0233 N	02826 W	003	28	11	02	172	1966	038	3109	25	17	3	2	X1	8	2	0036	
				WATER		WIND		AIR TEMP. °C												
				COLOR CODE	TRANS. IMI	DIR.	SPEED OR FORCE	BARO- METER (mbal)	DRY BULB	WET RULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
						16	512	097	274	249	7	18								
MESSAGE TIME NR 1/10	CAS1 NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME AND MALT-2107	$\frac{\Delta \rho}{\rho_0}$ DYN. AL. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P #g - dl/l	TOTAL-P #g - dl/l	NO <sub>2</sub> -N #g - dl/l	NO <sub>3</sub> -N #g - dl/l	SiO <sub>2</sub> -Si #g - dl/l	PH	SI CODE			
		STD	0000	2692	3596	2349	0044059	0000	15403	455										
165		OBS	0000	2692	35964	2349			15403	455										
		STD	0010	2679	3597	2354	0043662	0044	15402	461										
		STD	0020	2667	3597	2357	0043339	0087	15401	464										
165		OBS	0024	2663	35972	2359			15400	465										
		STD	0030	2660	3597	2360	0043168	0131	15401	464										
165		OBS	0048	2645	35967	2364			15400	460										
		STD	0050	2642	3597	2365	0042755	0217	15400	460										
165		OBS	0073	2613	35936	2372			15397	457										
		STD	0075	2498	3589	2404	0039116	0319	15370	434										
165		OBS	0096	1572	35555	2626			15119	250										
		STD	0100	1557	3554	2628	0017824	0390	15115	252										
		STD	0125	1473	3548	2642	0016554	0433	15092	262										
165		OBS	0145	1416	35423	2650			15076	267										
		STD	0150	1406	3541	2651	0015758	0473	15073	267										
165		OBS	T0192	1320	35306	2661			15051	267										
		STD	0200	1304	3529	2663	0014744	0550	15046	267										
		STD	0250	1197	3516	2674	0013790	0621	15016	270										
165		OBS	0283	1123	35069	2681			14995	272										
		STD	0300	1075	3501	2685	0012810	0688	14980	285										
165		OBS	0374	0905	34831	2700			14928	306										
		STD	0400	0871	3480	2703	0011176	0807	14919	279										
165		OBS	T0467	0782	34723	2710			14895	246										
		STD	0500	0734	3468	2714	0010166	0914	14882	265										
165		OBS	0569	0645	34601	2720			14857	297										
		STD	0600	0612	3459	2723	0009274	1011	14849	305										
		STD	0700	0525	3456	2732	0008481	1100	14830	328										
165		OBS	T0776	0481	34553	2736			14824	341										
		STD	0800	0475	3456	2738	0007962	1182	14826	343										
		STD	0900	0458	3459	2742	0007632	1260	14836	353										
172		OBS	T0960	0453	34614	2744			14844	358										
165		OBS	T0984	0452	34626	2745			14848	352										
		STD	1000	0452	3464	2747	0007288	1335	14850	354										
		STD	1100	0452	3472	2753	0006799	1405	14868	369										
		STD	1200	0449	3478	2758	0006419	1471	14884	392										
172		OBS	1220	0448	34797	2759			14888	398										
		STD	1300	0442	3481	2761	0006176	1534	14899	436										
		STD	1400	0434	3484	2764	0006006	1595	14912	478										
172		OBS	T1482	0426						506										
		STD	1500	0423	3486	2767	0005800	1654	14925	508										
		STD	1750	0386	3491	2775	0005129	1791	14952	537										
		STD	2000	0353	3497	2783	0004488	1911	14981	566										
172		OBS	2008	0352	34967	2783			14982	567										
		STD	2500	0301	3494	2786	0004292	2131	15044	565										
172		OBS	T2531	0298	34938	2786			15048	563										



TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	SOUNDING METER	MARGEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER		
CTRY CODE	ID. NO.					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT			
311059		RC	0252 N	02754 W	003	27	11	02	213	1966		039	2749	16	15	3	2		X1	8	2	0037			
		WATER		WIND		AIR TEMP. °C		BARO- METER (mb)		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS													
		COLOR CODE		TRANS. (ml)		DIL.		SPEED OR FORCE		DRY BULB		WET BULB		VIL CODE											
		14		S11		115		260		238		7		15											
MESSAGE TIME HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-2107	$\frac{\sigma}{\rho}$ Δ D DYN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	S C C								
		STD	0000	2644	3586	2357	0043336	0000	15391	500															
213		OBS	0000	2644	35862	2357			15391	500															
		STD	0010	2638	3587	2359	0043175	0043	15391	499															
		STD	0020	2633	3587	2360	0043052	0086	15392	495															
213		OBS	0023	2632	35868	2361			15392	493															
		STD	0030	2629	3588	2363	0042879	0129	15393	482															
213		OBS	0045	2625	35898	2365			15395	468															
		STD	0050	2624	3590	2366	0042671	0215	15395	468															
213		OBS	0068	2621	35908	2367			15398	469															
		STD	0075	2411	3589	2430	0036613	0314	15349	417															
213		OBS	0091	2007	35824	2539			15248	323															
		STD	0100	1859	3573	2570	0023346	0389	15207	299															
		STD	0125	1545	3552	2629	0017789	0440	15115	254															
213		OBS	0139	1432	35446	2648			15080	241															
		STD	0150	1422	3543	2649	0015938	0483	15079	247															
213		OBS	T0186	1378	35378	2654			15070	266															
		STD	0200	1347	3534	2658	0015224	0560	15061	271															
		STD	0250	1235	3520	2669	0014209	0634	15030	288															
213		OBS	0283	1159	35106	2677			15008	300															
		STD	0300	1113	3506	2682	0013115	0702	14994	282															
213		OBS	0384	0918	34854	2699			14935	227															
		STD	0400	0891	3483	2702	0011271	0824	14927	229															
213		OBS	T0485	0756	34697	2712			14888	242															
		STD	0500	0732	3468	2714	0010137	0931	14881	252															
213		OBS	0589	0613	34577	2722			14847	299															
		STD	0600	0603	3458	2724	0009256	1028	14845	301															
		STD	0700	0528	3457	2732	0008460	1117	14831	318															
213		OBS	T0798	0478	34560	2737			14827	333															
		STD	0800	0478	3456	2737	0007988	1199	14827	333															
		STD	0900	0463	3459	2742	0007666	1277	14838	347															
		STD	1000	0448	3463	2746	0007338	1352	14849	362															
213		OBS	1003	0448	34628	2746			14849	362															
		STD	1100	0450	3474	2755	0006621	1422	14867	387															
		STD	1200	0451	3483	2762	0006080	1486	14886	415															
213		OBS	T1252	0452	34867	2765			14895	431															
		STD	1300	0449	3488	2766	0005770	1545	14902	446															
		STD	1400	0440	3491	2770	0005522	1601	14916	479															
		STD	1500	0426	3495	2774	0005197	1655	14927	515															
213		OBS	T1578	0412	34969	2777			14935	544															

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME IGMT			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S' MPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLDUD CODES		NDDC STATION NUMBER	
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR./1/10			CRUISE NO.	STATION NUMBER	DIR.		HGT	PER		SEA
311059	RC	0413 N	02929 W	003	49	11	03	064	1966	020	4114	16	13	3	2	X1	8	4	0038		
		WATER		WIND		BARO- METER		AIR TEMP. °C		VE. CODE		NO. OBS. DEPTH		SPECIAL OBSERVATIONS							
		CDLOR CODE		TRNS. (mi)		DIR.		SPEED OR FORCE		SARO- METER (mba)		AIR TEMP. °C DRY BULB		WET BULB		VE. CODE		NO. OBS. DEPTH		SPECIAL OBSERVATIONS	
		13		S14		111		267		237		7		15							
MISSING TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY-210?	Σ Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	PH	3 DD				
	064	STD	0000	2768	3553	2292	0049548	0000	15415	449											
		OBS	0000	2768	35526	2292			15415	449											
		STD	0010	2770	3561	2297	0049054	0049	15418	460											
		STD	0020	2772	3568	2302	0048662	0098	15421	465											
	064	OBS	0027	2774	35725	2305			15423	466											
		STD	0030	2773	3573	2305	0048357	0147	15423	464											
		STD	0050	2765	3582	2315	0047546	0243	15426	450											
	064	OBS	0052	2764	35832	2316			15426	449											
		STD	0075	2697	3602	2352	0044123	0357	15417	584											
	064	OBS	0078	2669	36027	2361			15411	602											
		STD	0100	2309	3591	2462	0033705	0454	15329	387											
	064	OBS	0104	2243	35889	2479			15313	358											
		STD	0125	1809	3565	2577	0022816	0525	15196	317											
		STD	0150	1447	3544	2644	0016379	0574	15087	288											
	064	OBS	0156	1385	35399	2654			15067	284											
		STD	0200	1271	3525	2666	0014399	0651	15035	299											
	064	OBS	T0208	1251	35227	2668			15029	301											
		STD	0250	1162	3512	2677	0013439	0721	15004	299											
		STD	0300	1055	3499	2687	0012608	0786	14973	297											
	064	OBS	0311	1031	34969	2689			14966	296											
		STD	0400	0830	3477	2707	0010761	0903	14903	300											
	064	OBS	0416	0801	34746	2709			14894	301											
		STD	0500	0695	3465	2717	0009830	1006	14866	252											
	064	OBS	T0516	0676	34637	2719			14861	250											
		STD	0600	0577	3456	2726	0009031	1100	14834	288											
	064	OBS	0625	0554	34544	2727			14829	296											
		STD	0700	0519	3455	2732	0008494	1187	14827	304											
		STD	0800	0483	3455	2736	0008106	1270	14829	315											
	064	OBS	T0834	0474	34556	2737			14831	319											
		STD	0900	0464	3459	2741	0007707	1350	14838	363											
		STD	1000	0453	3464	2746	0007301	1425	14851	414											
	064	OBS	1044	0449	34671	2749			14857	431											
		STD	1100	0448	3473	2754	0006676	1494	14867	432											
		STD	1200	0447	3482	2761	0006094	1558	14884	439											
		STD	1300	0445	3489	2767	0005660	1617	14901	453											
	064	OBS	1306	0445	34892	2767			14902	454											
		STD	1400	0438	3492	2770	0005474	1673	14915	474											
		STD	1500	0426	3494	2773	0005226	1726	14927	503											
	064	OBS	T1570	0416	34958	2776			14935	528											

TABLE III.—Continued

REFERENCE CITE CODE	SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES	NOCC STATION NUMBER	
					10"	1"	MO DAY HR./10		CRUISE NO.	STATION NUMBER		MAR. DEPTH OF SAMPL'S	DIR.	HGT PER				SEA
311059	RC	0355 N	03000 W	004	30	11	03	101	1966	019	3520	15	15	3	2	X1	9 2	0039
				WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTH'S		SPECIAL OBSERVATIONS				
				COLOR	TRANS.	DIR.	SPED OF FORCE	METER		DRY BULB	WET BULB	VIS. CODE						
				13	510	126	275	247	7	15								
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \sigma$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} - \text{dl/l}$	TOTAL-P $\mu\text{g} - \text{dl/l}$	NO <sub>2</sub> -N $\mu\text{g} - \text{dl/l}$	NO <sub>3</sub> -N $\mu\text{g} - \text{dl/l}$	SiO <sub>4</sub> -Si $\mu\text{g} - \text{dl/l}$	PH	CTD	
		STD	0000	2754	3524	2275	0051155	0000	15409	455								
101		OBS	0000	2754	35242	2275			15409	455								
		STD	0010	2752	3550	2295	0049277	0050	15413	458								
		STD	0020	2750	3569	2310	0047888	0099	15416	461								
101		OBS	0024	2749	35741	2314			15417	462								
		STD	0030	2750	3577	2316	0047368	0146	15419	461								
101		OBS	0049	2754	35822	2318			15423	451								
		STD	0050	2751	3582	2319	0047096	0241	15423	451								
101		OBS	0073	2550	35847	2385			15381	420								
		STD	0075	2507	3585	2398	0039666	0349	15372	412								
101		OBS	0098	2060	35870	2528			15264	329								
		STD	0100	2021	3585	2537	0026490	0432	15253	323								
		STD	0125	1618	3560	2618	0018799	0489	15138	264								
101		OBS	0146	1404	35450	2654			15072	238								
		STD	0150	1400	3544	2654	0015417	0531	15072	239								
101		OBS	T0194	1345	35339	2658			15060	259								
		STD	0200	1330	3532	2660	0015034	0608	15055	268								
		STD	0250	1214	3516	2670	0014107	0680	15022	316								
101		OBS	0291	1125	35054	2679			14997	323								
		STD	0300	1109	3504	2681	0013190	0749	14992	309								
101		OBS	0387	0941	34883	2698			14944	222								
		STD	0400	0907	3485	2701	0011379	0871	14933	223								
101		OBS	T0482	0734	34675	2714			14878	236								
		STD	0500	0712	3465	2715	0010071	0979	14873	244								
101		OBS	0583	0619	34585	2722			14849	277								
		STD	0600	0601	3458	2724	0009200	1075	14844	283								
		STD	0700	0515	3457	2734	0008280	1162	14826	314								
101		OBS	T0784	0468	34567	2739			14820	334								
		STD	0800	0466	3457	2739	0007777	1243	14822	335								
		STD	0900	0455	3459	2742	0007594	1320	14834	346								
101		OBS	0985	0449	34626	2746			14846	358								
		STD	1000	0449	3464	2747	0007250	1394	14849	360								
		STD	1100	0449	3473	2754	0006687	1464	14867	379								
		STD	1200	0447	3481	2761	0006172	1528	14884	402								
101		OBS	T1234	0445	34828	2762			14889	411								
		STD	1300	0441	3487	2766	0005752	1587	14899	430								
		STD	1400	0433	3492	2771	0005378	1643	14913	462								
		STD	1500	0423	3495	2774	0005120	1696	14926	499								
101		OBS	T1506	0422	34951	2775			14927	501								

TABLE III.—Continued

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAIL DEPTH OF S' MPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		HODC STATION NUMBER	
CTRY CODE	ID. NO.					10'	1'	MO		DAY	HR/L/10			CRUISE NO.	STATION NUMBER	DR.		HGT	PER		SEA
311059	RC		03285N	03033 W	004	30	11	03	140	1966		018	2926	13	14	3	2	X1	8	3	0040
		WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTH		SPECIAL OBSERVATIONS									
		COLOR CODE		TRAMS DIR.		SPEED OR FORCE		DRY WET BULB		VIS CODE											
		11		S08		110		276 246		7		15									
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH m	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Σ Δ D OYN. M. ± 10 <sup>2</sup>	SOUND VELOCITY	D <sub>2</sub> m/l	PO <sub>2</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SI O <sub>4</sub> -SI μg - ml/l	pH	S CC				
		STD	0000	2763	3544	2286	0050047	0000	15413	454											
140		OBS	0000	2763	35435	2286			15413	454											
		STD	0010	2761	3544	2287	0049985	0050	15414	455											
		STD	0020	2758	3544	2289	0049916	0100	15415	456											
140		OBS	0021	2758	35444	2289			15415	456											
		STD	0030	2761	3558	2298	0049056	0149	15419	453											
140		OBS	0044	2765	35733	2308			15424	446											
		STD	0050	2723	3577	2324	0046621	0245	15416	442											
140		OBS	0068	2598	35869	2372			15392	428											
		STD	0075	2390	3591	2438	0035873	0348	15345	400											
140		OBS	0090	2013	35927	2545			15250	346											
		STD	0100	1849	3579	2577	0022670	0421	15205	313											
		STD	0125	1535	3554	2633	0017428	0472	15112	254											
140		OBS	0135	1448	35460	2646			15085	241											
		STD	0150	1404	3541	2651	0015717	0513	15073	243											
140		OBS	T0180	1328	35321	2660			15051	251											
		STD	0200	1301	3529	2663	0014686	0589	15045	276											
		STD	0250	1221	3520	2672	0013945	0661	15025	310											
140		OBS	0265	1194	35167	2675			15018	312											
		STD	0300	1125	3509	2682	0013110	0728	14999	291											
140		OBS	0344	1026	34979	2691			14969	266											
		STD	0400	0869	3481	2704	0011071	0849	14918	230											
140		OBS	T0426	0805	34742	2708			14898	227											
		STD	0500	0657	3462	2720	0009523	0952	14851	269											
140		OBS	0507	0646	34607	2720			14847	272											
		STD	0600	0566	3457	2728	0008814	1044	14830	284											
140		OBS	0671	0521	34555	2732			14823	295											
		STD	0700	0510	3456	2733	0008313	1129	14823	301											
		STD	0800	0481	3456	2737	0008022	1211	14828	322											
140		OBS	0834	0473	34564	2738			14831	328											
		STD	0900	0467	3460	2742	0007671	1290	14839	334											
		STD	1000	0459	3466	2747	0007229	1364	14854	350											
140		OBS	T1054	0455	34697	2751			14861	362											
		STD	1100	0452	3473	2754	0006725	1434	14868	374											
		STD	1200	0448	3481	2761	0006185	1498	14884	407											
140		OBS	T1294	0445	34898	2768			14900	446											

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° / 10'	LONGITUDE ° / 10'	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES TYPE AMT	MOOC STATION NUMBER	
SHIP CODE	ID. NO.					10"	1"	MO		DAY	MLI/10			CAUSE NO.	STATION NUMBER	DIR.				HGT PER
311059	RC	0312 N	03111 W	004	31	11	03	176	1966	017	2012	13	13	3	2	X1	8	2	0041	
				WATER		WIND		AIR TEMP. °C					SPECIAL OBSERVATIONS							
				COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIS. CODE	NO. OBS. DEPTHS								
							13	S10	099	284	243	7	15							
MESSAGE TIME NB 1/10	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-210°	Σ Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	ND <sub>2</sub> -N µg - ml/l	ND <sub>3</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	BN	SC			
		STD	0000	2782	3558	2291	0049603	0000	15418	462										
176		OBS	0000	2782	35579	2291			15418	462										
		STD	0010	2779	3558	2292	0049551	0050	15419	458										
		STD	0020	2775	3558	2293	0049468	0099	15420	453										
176		OBS	0021	2774	35579	2294			15420	453										
		STD	0030	2767	3558	2296	0049254	0148	15420	453										
176		OBS	0042	2760	35589	2299			15421	454										
		STD	0050	2759	3559	2299	0049011	0247	15422	433										
176		OBS	0062	2757	35641	2304			15424	414										
		STD	0075	2591	3579	2368	0042573	0361	15391	417										
176		OBS	0083	2473	35855	2409			15365	419										
		STD	0100	2078	3584	2521	0028024	0449	15268	363										
176		OBS	0124	1679	35762	2617			15159	299										
		STD	0125	1671	3575	2618	0018894	0508	15156	296										
		STD	0150	1502	3554	2640	0016801	0553	15106	245										
176		OBS	T0165	1424	35443	2650			15082	227										
		STD	0200	1372	3537	2655	0015504	0633	15070	253										
176		OBS	0237	1293	35270	2663			15048	278										
		STD	0250	1246	3521	2668	0014345	0708	15034	291										
		STD	0300	1095	3502	2682	0013088	0777	14987	318										
176		OBS	0309	1072	34995	2684			14980	319										
176		OBS	0380	0944	34882	2697			14944	280										
		STD	0400	0872	3481	2703	0011118	0898	14920	268										
176		OBS	0453	0717	34665	2715			14867	250										
		STD	0500	0662	3462	2719	0009591	1001	14852	274										
		STD	0600	0567	3456	2727	0008901	1094	14830	312										
176		OBS	T0617	0554	34550	2728			14828	317										
		STD	0700	0508	3453	2732	0008488	1181	14822	330										
176		OBS	0798	0470	34528	2736			14823	342										
		STD	0800	0470	3453	2736	0008122	1264	14823	342										
		STD	0900	0464	3456	2739	0007928	1344	14838	349										
		STD	1000	0460	3462	2744	0007537	1421	14853	355										
176		OBS	T1051	0458	34656	2747			14862	358										
		STD	1100	0456	3470	2751	0006998	1494	14870	366										
		STD	1200	0454	3480	2759	0006337	1561	14887	388										
		STD	1300	0452	3493	2770	0005458	1620	14904	416										
176		OBS	T1321	0452	34959	2772			14908	423										

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	OBS. PROJECT	MARSEN SQUARE				STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLE	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	NO. NO.					10"	1'	MO	DAY	HR	1/10	CRUISE NO.	STATION NUMBER		DR.	HGT			PER	SEA	TYPE		AMT		
																								004	
MESSENGER TIME HR 1/10		CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-‰ <sup>3</sup>	Σ Δ σ OYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>2</sub> -N μg - ml/l	NO <sub>3</sub> -N μg - ml/l	SiO <sub>4</sub> -Si μg - ml/l	pH	S.C.C.							
1/10	HR																								
			STD	0000	2773	3550	2288	0049904	0000	15416	520														
			OBS	0000	2773	35498	2288			15416	520														
			STD	0010	2772	3549	2288	0049973	0050	15417	484														
			STD	0020	2769	3549	2289	0049921	0100	15418	461														
			OBS	0023	2768	35487	2289			15418	457														
			STD	0030	2764	3549	2290	0049836	0150	15418	458														
			OBS	0045	2752	35484	2294			15418	461														
			STD	0050	2747	3560	2304	0048573	0248	15419	476														
			OBS	0068	2729	35866	2330			15421	491														
			STD	0075	2684	3586	2344	0044874	0365	15412	470														
			OBS	0090	2530	35846	2391			15380	428														
			STD	0100	2245	3577	2469	0032959	0462	15311	394														
			STD	0125	1694	3559	2600	0020578	0529	15161	340														
			OBS	0138	1500	35510	2638			15103	329														
			STD	0150	1446	3545	2645	0016286	0575	15087	347														
			OBS	T0183	1315	35294	2661			15047	381														
			STD	0200	1267	3523	2666	0014469	0652	15033	381														
			STD	0250	1140	3508	2678	0013333	0722	14996	369														
			OBS	0274	1086	35021	2684			14980	356														
			STD	0300	1045	3498	2688	0012509	0786	14969	323														
			OBS	0366	0924	34867	2699			14934	266														
			STD	0400	0844	3479	2706	0010829	0903	14909	258														
			OBS	T0455	0727	34682	2715			14871	250														
			STD	0500	0639	3461	2722	0009351	1004	14843	251														
			OBS	0542	0574	34564	2726			14823	251														
			STD	0600	0535	3454	2729	0008609	1094	14817	293														
			STD	0700	0485	3451	2732	0008365	1179	14812	341														
			OBS	T0714	0480	34503	2733			14813	346														
			STD	0800	0464	3451	2735	0008196	1261	14820	349														
			OBS	0895	0453	34542	2739			14832	354														
			STD	0900	0453	3455	2739	0007867	1342	14833	355														
			STD	1000	0457	3464	2746	0007346	1418	14852	365														
			STD	1100	0460	3472	2752	0006902	1489	14871	376														
			OBS	T1129	0461	34744	2754			14877	379														
			STD	1200	0459	3480	2758	0006403	1555	14889	399														
			STD	1300	0451	3487	2765	0005885	1617	14903	438														
			STD	1400	0440	3493	2771	0005398	1673	14916	488														
			OBS	T1413	0438	34938	2772			14918	495														

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/18	LONGITUDE 1/18	MARSOM SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		MOQC STATION NUMBER	
CRUISE CODE	ID. NO.					CRUISE NO.	STATION NUMBER	10'	1'		MO	DAY			HR./10	NO.	NUMBER		DIR.	HGT.		PER
311059	RC		0238 N	03221 W	004	22	11	04	013	1966	015	3566	15	13	3	2	X1	8	2	0043		
		WATER		WIND		BARO-METER		AIR TEMP. °C			NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
		COLOR CODE		DIR. TRNS. (M)		SPEED OR FORCE		DRY BULB		WET BULB		VIL CODE										
				10		508		124		264		239		7		15						
MESSING TIME HR 1/18	CASE NO.	CARD TYPE	DEPTH (M)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Σ Δ D OTN, M. 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> M/L	PO <sub>4</sub> -P μg - μl/l	TOTAL-P μg - μl/l	NO <sub>2</sub> -N μg - μl/l	NO <sub>3</sub> -N μg - μl/l	SiO <sub>4</sub> -Si μg - μl/l	PH	S. COC.					
		STD	0000	2770	3541	2282	0050415	0000	15414	461												
004		OBS	0000	2770	35414	2282			15414	461												
		STD	0010	2772	3545	2284	0050284	0050	15417	480												
		STD	0020	2775	3548	2286	0050157	0101	15419	499												
004		OBS	0022	2775	35488	2286			15420	503												
		STD	0030	2772	3547	2286	0050212	0151	15420	461												
007		OBS	0033		35466					454												
		STD	0050	2766	3555	2294	0049493	0250	15423	497												
007		OBS	0050	2766	35554	2294			15423	497												
007		OBS	0061	2750	35798	2318			15424	511												
		STD	0075	2695	3586	2340	0045225	0369	15415	454												
		STD	0100	2422	3596	2433	0036493	0471	15357	400												
007		OBS	0103	2374	35977	2448			15346	397												
		STD	0125	1788	3567	2583	0022174	0544	15190	434												
007		OBS	T0142	1459	35482	2645			15090	442												
		STD	0150	1419	3543	2650	0015877	0592	15078	421												
		STD	0200	1212	3518	2672	0013796	0666	15014	324												
007		OBS	0207	1189	35150	2675			15007	316												
		STD	0250	1095	3504	2689	0012825	0733	14979	310												
007		OBS	0276	1039	34974	2688			14963	303												
		STD	0300	0985	3492	2693	0011934	0795	14946	288												
007		OBS	T0345	0892	34836	2702			14918	270												
		STD	0400	0794	3474	2710	0010439	0906	14889	267												
007		OBS	0412	0773	34722	2712			14883	266												
		STD	0500	0620	3458	2722	0009318	1005	14835	308												
007		OBS	T0547	0554	34535	2726			14816	327												
		STD	0600	0533	3459	2733	0008243	1093	14817	332												
		STD	0700	0499	3468	2744	0007265	1171	14821	341												
		STD	0800	0474	3476	2754	0006471	1239	14828	350												
		STD	0900	0457	3482	2760	0005921	1301	14838	359												
013		OBS	T0984	0449	34851	2764			14849	367												
		STD	1000	0450	3485	2764	0005689	1359	14852	370												
		STD	1100	0454	3487	2764	0005746	1416	14871	395												
		STD	1200	0459	3488	2765	0005804	1474	14890	425												
013		OBS	1228	0460	34885	2765			14895	434												
		STD	1300	0455	3490	2767	0005718	1532	14905	460												
		STD	1400	0443	3494	2771	0005365	1587	14917	499												
013		OBS	T1461	0432	34963	2774			14923	526												

TABLE III.—Continued

REFERENCE CTW CODE	SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	MARSDEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLING	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NOOC STATION NUMBER	
					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DR.	HGT		PER	SEA		TYPE
311059	RC	02185N	03300 W	004	23	11	04	052	1966	014	3566	15	13	3	2		X1	8	6	0044	
				WATER		WIND		AIR TEMP. °C			NO. OBL. DEPTHS		SPECIAL OBSERVATIONS								
				COLOR CODE	TRANSL. (m)	DIR.	SPEED OR FORCE	BARO-METER (mb)	DRY BULB	WET BULB	VIS. CODE										
						15	511	105	261	240	7	15									
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta \theta$ DTN, $M. \times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu g - ml/l$	TOTAL-P $\mu g - ml/l$	NO <sub>2</sub> -N $\mu g - ml/l$	NO <sub>3</sub> -N $\mu g - ml/l$	SiO <sub>4</sub> -Si $\mu g - ml/l$	PH	SIG C				
		STD	0000	2757	3579	2315	0047302	0000	15415	471											
052		OBS	0000	2757	35791	2315			15415	471											
		STD	0010	2757	3579	2315	0047339	0047	15417	470											
		STD	0020	2756	3579	2315	0047368	0095	15418	469											
052		OBS	0025	2756	35788	2315			15419	468											
		STD	0030	2756	3579	2315	0047392	0142	15420	454											
		STD	0050	2754	3580	2317	0047361	0237	15423	426											
052		OBS	0050	2754	35799	2317			15423	426											
		STD	0075	2739	3577	2319	0047202	0355	15424	452											
		OBS	0075	2739	35771	2319			15424	452											
052		OBS	0094	2617	35773	2358			15399	463											
		STD	0100	2427	3573	2413	0038319	0462	15356	435											
		STD	0125	1785	3555	2575	0022974	0539	15188	345											
052		OBS	0148	1406	35423	2652			15073	303											
		STD	0150	1399	3541	2652	0015616	0587	15071	305											
052		OBS	T0194	1259	35241	2668			15030	337											
		STD	0200	1247	3523	2669	0014088	0661	15026	334											
		STD	0250	1146	3511	2680	0013222	0729	14998	311											
052		OBS	0287	1071	35020	2686			14977	299											
		STD	0300	1044	3499	2689	0012418	0793	14969	298											
052		OBS	0378	0888	34814	2701			14922	289											
		STD	0400	0842	3478	2706	0010872	0910	14908	278											
052		OBS	TC468	0718	34670	2715			14870	271											
		STD	0500	0668	3463	2719	0009600	1012	14855	295											
052		OBS	0562	0587	34562	2724			14832	331											
		STD	0600	0557	3455	2727	0008845	1104	14826	337											
		STD	0700	0496	3452	2732	0008412	1191	14817	349											
052		OBS	T0755	0473	34518	2735			14817	354											
		STD	0800	0465	3453	2736	0008075	1273	14821	356											
		STD	0900	0453	3455	2739	0007872	1353	14833	360											
052		OBS	0952	0449	34560	2741			14840	362											
		STD	1000	0450	3464	2747	0007259	1429	14849	379											
		STD	1100	0451	3477	2757	0006421	1497	14868	413											
		STD	1200	0453	3487	2765	0005806	1558	14887	443											
052		OBS	T1217	0453	34879	2765			14890	448											
		STD	1300	0449	3490	2768	0005631	1615	14903	470											
		STD	1400	0440	3493	2771	0005420	1671	14916	493											
052		OBS	T1493	0429	34951	2774			14927	511											



TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTN TO BOTTOM	MAX. DEPTN OF S'AMPL'S	WAVE OBSERVATIONS			WEA- TNER CODE	CLOUD CODES	NOOC STATION NUMBER					
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR. 1/10			CRUISE NO.	STATION NUMBER	DIR.				HGT	PER	SEA	TYPE	AMT
311059		RC	0159 N	03336 W	004	13	11	04	086	1966		013	3749	15	13	3	2	X1	8	3		0045		
					WATER		WIND		AIR TEMP. °C															
					COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE	BARO- METER (mba)	DRY BULB	WET BULB	VEL CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS										
								12	509	115	267	240	7	13										
MESSENGER TIME OF NR 1/10	CAST NO.	CARD TYPE	DEPTN (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Sigma \Delta$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>2</sub> -Si pg - ml/l	PH	S CC							
		STD	0000	2741	3569	2313	0047526	0000	15411	440														
086		OBS	0000	2741	35691	2313			15411	440														
		STD	0010	2741	3569	2313	0047567	0048	15412	446														
		STD	0020	2741	3569	2313	0047616	0095	15414	451														
086		OBS	0026	2741	35690	2313			15415	454														
		STD	0030	2740	3569	2313	0047639	0143	15415	455														
		STD	0050	2737	3569	2314	0047634	0238	15418	460														
086		OBS	0052	2737	35689	2314			15418	460														
		STD	0075	2648	3581	2351	0044140	0353	15404	449														
086		OBS	0078	2638	35822	2355			15402	448														
086		OBS	0099	2580	35876	2378			15393	448														
		STD	0100	2549	3586	2386	0040927	0459	15386	445														
		STD	0125	1888	3561	2554	0025005	0542	15218	383														
		STD	0150	1434	3541	2645	0016330	0593	15082	342														
086		OBS	0155	1368	35372	2656			15061	336														
		STD	0200	1196	3515	2673	0013719	0668	15008	330														
086		OBS	T0207	1172	35117	2675			15000	329														
		STD	0250	1118	3505	2680	0013159	0735	14988	319														
		STD	0300	1049	3498	2687	0012578	0800	14970	308														
		STD	0400	0894	3483	2701	0011318	0919	14928	286														
086		OBS	0409	0879	34811	2702			14924	284														
		STD	0500	0711	3466	2716	0009983	1026	14872	299														
086		OBS	T0512	0692	34647	2717			14867	301														
		STD	0600	0595	3461	2727	0008921	1120	14842	320														
		STD	0700	0512	3456	2734	0008302	1206	14824	341														
		STD	0800	0460	3452	2736	0008102	1288	14819	362														
086		OBS	T0805	0458	34514	2736			14819	363														
		STD	0900	0450	3455	2740	0007828	1368	14832	364														
086		OBS	0997	0445	34603	2744			14846	364														
		STD	1000	0445	3461	2745	0007421	1444	14847	365														
		STD	1100	0446	3474	2755	0006577	1514	14866	399														
		STD	1200	0447	3484	2763	0005956	1577	14884	431														
086		OBS	T1260	0448	34884	2766			14895	449														
		STD	1300	0446	3491	2769	0005525	1634	14902	461														
		STD	1400	0438	3495	2773	0005225	1688	14916	488														
		STD	1500	0426	3496	2775	0005087	1740	14927	513														
086		OBS	T1536	0421	34962	2776			14931	522														

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/19	LONGITUDE 1/19	MARS DEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NODC STATION NUMBER			
CTRY CODE	ID. NO.					10"	1'	MO		DAY	ML/10		CRUISE NO.	STATION NUMBER	DR	HGT		PER	SEA		TYM	AMT	
311059	RC		0137 N	03405 W	004	14	11	04	121	1966		012	3658	15	12	3	2		X8	8	2		0046
		WATER		WIND		BARO- METER		AIR TEMP. °C		SPECIAL OBSERVATIONS													
		COLOR		DIR.		S10		WET															
		08		S10		121		272		244		7		15									
MESSAGE TIME 1/19	CASST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$	$\Sigma \Delta \rho$ DYN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>4</sub> -E pg - ml/l	pH	CTD						
		STD	0000	2755	3577	2314	0047413	0000	15415	449													
121		OBS	0000	2755	35767	2314			15415	449													
		STD	0010	2754	3577	2314	0047444	0047	15416	450													
		STD	0020	2753	3576	2314	0047465	0095	15417	452													
121		OBS	0024	2753	35763	2314			15418	452													
		STD	0030	2752	3576	2315	0047467	0142	15419	486													
121		OBS	0048	2749	35768	2316			15421	531													
		STD	0050	2737	3577	2320	0047043	0237	15419	524													
121		OBS	0073	2599	35823	2368			15392	451													
		STD	0075	2597	3583	2369	0042465	0349	15392	447													
121		OBS	0097	2456	35842	2413			15363	397													
		STD	0100	2365	3581	2438	0035987	0447	15341	386													
		STD	0125	1738	3556	2587	0021805	0519	15174	316													
121		OBS	0146	1394	35396	2652			15069	284													
		STD	0150	1380	3538	2654	0015452	0566	15064	286													
121		OBS	T0195	1240	35203	2669			15023	302													
		STD	0200	1229	3519	2670	0014041	0639	15020	303													
		STD	0250	1128	3506	2679	0013264	0708	14991	314													
121		OBS	0290	1057	34981	2686			14972	322													
		STD	0300	1047	3497	2687	0012617	0772	14969	307													
121		OBS	0387	0918	34862	2700			14935	235													
		STD	0400	0879	3482	2703	0011154	0891	14922	242													
121		OBS	0483	0686	34639	2717			14859	278													
		STD	0500	0664	3462	2719	0009619	0995	14853	281													
121		OBS	0581	0577	34554	2725			14831	302													
		STD	0600	0563	3455	2726	0008923	1088	14828	319													
		STD	0700	0503	3451	2731	0008573	1175	14820	385													
121		OBS	T0776	0472	34508	2734			14820	406													
		STD	0800	0468	3451	2735	0008245	1259	14822	394													
		STD	0900	0455	3453	2738	0008038	1341	14834	359													
121		OBS	0970	0449	34564	2741			14843	350													
		STD	1000	0449	3461	2744	0007476	1418	14849	357													
		STD	1100	0451	3473	2754	0006707	1489	14868	384													
		STD	1200	0452	3482	2761	0006162	1554	14886	417													
121		OBS	1216	0452	34837	2762			14889	423													
		STD	1300	0447	3489	2767	0005685	1613	14902	457													
		STD	1400	0438	3494	2772	0005298	1668	14915	503													
121		OBS	T1462	0430	34954	2774			14923	535													

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° 1/18	LONGITUDE ° 1/18	MARSSEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES TFR AMT	MOOC STATION NUMBER
SHIP CODE	ID. NO.					10'	1'	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR	HGT PER			
311059		RC	0117 N	03441 W	004	14	11	04	155	1966	011	3840	15	12	3	2	X1	8	12	0047
		WATER		WIND		BARO-METER		AIR TEMP. °C		VIL. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS						
		COLOR CODE		DIR.		DRY BULB		WET BULB												
		10		S12		107		276 249		7		15								
MESSINER NO. 1/18	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	± Δ D DTN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	S CC			
		STD	0000	2771	3587	2317	0047162	0000	15419	447										
155		OBS	0000	2771	35871	2317	0046986	0047	15419	447										
		STD	0010	2764	3587	2319	0046842	0094	15420	454										
		STD	0020	2758	3587	2321	0046842	0094	15420	459										
155		OBS	0024	2757	35871	2321			15420	461										
		STD	0030	2757	3587	2321	0046840	0141	15421	463										
155		OBS	0048	2756	35874	2322			15424	464										
		STD	0050	2753	3588	2323	0046787	0234	15424	464										
155		OBS	0072	2721	35881	2333			15420	449										
		STD	0075	2695	3590	2343	0044923	0349	15415	445										
155		OBS	0095	2461	35931	2418			15365	410										
		STD	0100	2315	3587	2457	0034159	0448	15330	386										
		STD	0125	1726	3560	2593	0021238	0517	15171	296										
155		OBS	0143	1447	35452	2645			15086	260										
		STD	0150	1421	3542	2648	0015991	0564	15078	262										
155		OBS	T0189	1287	35271	2665			15039	276										
		STD	0200	1255	3523	2668	0014240	0639	15029	291										
		STD	0250	1127	3507	2680	0013173	0708	14991	337										
155		OBS	0281	1061	34986	2685			14972	350										
		STD	0300	1040	3496	2687	0012570	0772	14967	343										
155		OBS	0373	0930	34844	2697			14937	316										
		STD	0400	0865	3479	2703	0011155	0891	14917	295										
155		OBS	T0466	0728	34677	2715			14874	278										
		STD	0500	0671	3461	2717	0009790	0996	14856	304										
155		OBS	0563	0584	34525	2722			14830	341										
		STD	0600	0559	3452	2725	0009078	1090	14826	346										
		STD	0700	0503	3451	2731	0008551	1178	14820	355										
155		OBS	T0761	0478	34507	2733			14820	358										
		STD	0800	0469	3451	2734	0008258	1262	14822	357										
		STD	0900	0452	3454	2739	0007926	1343	14832	356										
155		OBS	0954	0446	34568	2742			14839	355										
		STD	1000	0447	3463	2746	0007302	1419	14848	364										
		STD	1100	0450	3474	2755	0006629	1489	14868	367										
155		OBS	T1195	0453	34824	2761			14886	413										
		STD	1200	0453	3483	2762	0006104	1552	14887	414										
		STD	1300	0447	3489	2767	0005685	1611	14902	446										
		STD	1400	0437	3494	2772	0005285	1666	14915	482										
155		OBS	T1459	0429	34953	2774			14922	505										

TABLE III.—Continued

REFERENCE#		SNIP CODE	LATITUDE * L/10	LONGITUDE * T/10	MARSJOEN SQUARE	STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTO M	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NOOC STATION NUMBER	
CTRY CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	DR.		HGT PER	SEA		TYPE
311059	RC	0054	N	03514	W	004	05	11	04	192	1966	010	3710	15	12	3	2	X1	8	2	0048
		WATER		WIND		BARO-METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
		COLOR CODE	TRANS. (M)	DIR.	SPEED OR FORCE	BARO-METER (mba)	DRY BULB	WET BULB	VIS. CODE												
				09	S10	071	278	247	7	15											
MESSNGR TIME & HR	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-20°	Σ Δ σ TYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg - ml/l	TOTAL-P μg - ml/l	NO <sub>3</sub> -N μg - ml/l	NO <sub>2</sub> -N μg - ml/l	SiO <sub>4</sub> -S μg - ml/l	pH	SEC				
		STD	0000	2769	3588	2318	0047006	0000	15419	457											
192		OBS	0000	2769	3588	2318			15419	457											
		STD	0010	2767	3588	2319	0047015	0047	15420	484											
		STD	0020	2764	3588	2319	0046964	0094	15421	497											
192		OBS	0024	2762	35879	2320			15421	499											
		STD	0030	2758	3588	2321	0046825	0141	15422	487											
192		OBS	0048		35886					463											
		STD	0050	2746	3589	2326	0046469	0234	15422	461											
192		OBS	0072	2733	35984	2337			15424	457											
		STD	0075	2719	3601	2344	0044870	0348	15422	467											
192		OBS	0093	2551	36094	2403			15388	494											
		STD	0100	2323	3597	2462	0033661	0447	15333	452											
		STD	0125	1690	3562	2603	0020269	0514	15160	337											
192		OBS	0140	1444	35477	2648			15085	295											
		STD	0150	1416	3544	2651	0015742	0559	15077	294											
192		OBS	T0186	1318	35310	2661			15049	292											
		STD	0200	1280	3526	2665	0014499	0635	15038	292											
		STD	0250	1154	3511	2678	0013367	0704	15001	291											
192		OBS	0279	1089	35032	2684			14982	291											
		STD	0300	1051	3499	2687	0012539	0769	14971	282											
192		OBS	0373	0914	34831	2698			14931	272											
		STD	0400	0854	3477	2703	0011131	0887	14912	287											
192		OBS	0466	0726	34636	2712			14872	312											
		STD	0500	0672	3459	2716	0009951	0993	14856	314											
192		OBS	0561	0592	34528	2721			14833	318											
		STD	0600	0567	3452	2724	0009197	1088	14830	320											
		STD	0700	0513	3451	2729	0008699	1178	14824	326											
192		OBS	T0750	0492	34509	2732			14824	330											
		STD	0800	0475	3451	2734	0008332	1263	14825	332											
		STD	0900	0452	3455	2739	0007853	1344	14833	341											
192		OBS	0942	0446	34574	2742			14837	347											
		STD	1000	0449	3465	2748	0007174	1419	14849	361											
		STD	1100	0454	3475	2755	0006600	1488	14869	387											
192		OBS	T1187	0458	34825	2761			14887	411											
		STD	1200	0458	3483	2761	0006170	1552	14889	415											
		STD	1300	0451	3490	2767	0005665	1611	14903	446											
		STD	1400	0438	3494	2772	0005298	1666	14915	479											
192		OBS	T1455	0428	34949	2774			14921	498											

TABLE III.—Continued

REFERENCE CITY NO.	SHIP CODE	LATITUDE ° ' / 10	LONGITUDE ° ' / 10	ORIG PROJECT	MARSOEN SQUARE		STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES		NOOC STATION NUMBER
					10'	1"	MO	DAY	HR	1/10		CRUISE NO.	STATION NUMBER			DR.	HG.	PER	SEA		TYPE	AMT	
					311059	RC	0036 N	03543 W	004	05													
WATER COLOR COUDE	TRANS UNIT	WIND DIR.	SPEED OR FORCE	BARO- METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS														
				09	508	116			261	241	7	15											
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub> ?	Σ Δ C OTN. M. X 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	SEC CG						
223		STD	0000	2756	3586	2321	0046775	0000	15416	459													
		OBS	0000	2756	35860	2321			15416	459													
		STD	0010	2752	3586	2322	0046664	0047	15417	457													
		STD	0020	2750	3587	2323	0046616	0093	15418	454													
223		OBS	0024	2749	35870	2324			15418	453													
		STD	0030	2749	3587	2324	0046585	0140	15419	451													
223		OBS	0048	2748	35884	2325			15422	446													
		STD	0050	2740	3590	2329	0046202	0233	15421	446													
223		OBS	0072	2658	36048	2366			15408	442													
		STD	0075	2650	3606	2370	0042399	0343	15407	441													
223		OBS	0096	2592	36083	2390			15397	437													
		STD	0100	2518	3605	2410	0038650	0445	15381	416													
		STD	0125	2093	3585	2518	0028433	0529	15277	313													
223		OBS	0145	1800	35670	2580			15197	270													
		STD	0150	1731	3561	2593	0021363	0591	15177	276													
223		OBS	0194	1255	35201	2666			15028	312													
		STD	0200	1242	3518	2667	0014359	0680	15024	311													
		STD	0250	1139	3506	2677	0013462	0750	14995	306													
223		OBS	0292	1059	34965	2684			14972	305													
		STD	0300	1047	3495	2685	0012764	0815	14969	306													
223		OBS	0393	0892	34786	2698			14926	318													
		STD	0400	0875	3477	2700	0011459	0936	14920	320													
223		OBS	T0493	0689	34599	2714			14862	335													
		STD	0500	0679	3459	2715	0010049	1044	14859	333													
223		OBS	0597	0569	34516	2723			14830	321													
		STD	0600	0567	3452	2723	0009226	1140	14830	321													
		STD	0700	0513	3451	2730	0008677	1230	14824	334													
223		OBS	T0795	0476	34511	2734			14825	345													
		STD	0800	0475	3452	2735	0008258	1315	14825	347													
		STD	0900	0453	3459	2743	0007570	1394	14834	387													
223		OBS	0997	0441	34649	2749			14845	414													
		STD	1000	0441	3465	2749	0007077	1467	14846	414													
		STD	1100	0444	3465	2748	0007210	1538	14864	420													
		STD	1200	0447	3468	2750	0007123	1610	14882	426													
223		OBS	T1248	0448	34702	2752			14891	429													
		STD	1300	0446	3474	2755	0006772	1680	14899	433													
		STD	1400	0438	3483	2763	0006103	1744	14914	441													
		STD	1500	0426	3495	2774	0005160	1800	14927	450													
223		OBS	T1516	0424	34971	2776			14929	452													

TABLE III.—Continued

REFERENCE CTRY CODE	ID. NO.	SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- TNER CODE	CLOUD CODES		NOOC STATION NUMBER
						10"	1"	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR.	HGT		PER	SEA	
311059	RC		0014 N	03623 W	004	06	11	05	022	1966	008	4389	16	10	3	2	X1	8	3	0050	
						WATER		WIND		AIR TEMP. °C			NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
COLD R CODE		TRANS. (m)	DIR.	SPEED OF FORCE	BARO- METER (mba)	DRY RULR	WET RULR	VEL CODE													
				10	509	107	267	246	7	15											
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DYN. M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P μg-at/l	TOTAL-P μg-at/l	NO <sub>2</sub> -N μg-at/l	NO <sub>3</sub> -N μg-at/l	SiO <sub>2</sub> -Si μg-at/l	pH	S CL				
	022	STD OBS	0000	2704	3596	2345	0044462	0000	15405	465											
		STD	0010	2703	3596	2345	0044474	0044	15407	465											
		STD	0020	2702	3596	2345	0044486	0089	15408	463											
	022	OBS	0025	2701	35957	2346			15409	461											
		STD	0030	2696	3596	2347	0044335	0133	15409	458											
		STD	0050	2656	3601	2364	0042842	0221	15404	446											
	022	OBS	0050	2656	36010	2364			15404	446											
		STD	0075	2558	3610	2401	0039366	0323	15386	431											
	022	OBS	0076	2553	36102	2403			15385	430											
		STD	0100	2408	3598	2438	0035993	0417	15354	381											
	022	OBS	0100	2408	35978	2438			15354	381											
		STD	0125	1748	3559	2587	0021819	0490	15177	333											
		STD	0150	1323	3532	2661	0014789	0536	15045	306											
	022	OBS	0150	1323	35316	2661			15045	306											
		STD	0200	1193	3516	2675	0013591	0606	15007	318											
	022	OBS	T0202	1188	35150	2675			15005	318											
		STD	0250	1087	3503	2684	0012758	0672	14976	321											
		STD	0300	0986	3491	2692	0012025	0734	14947	325											
	022	OBS	0306	0974	34898	2694			14943	325											
		STD	0400	0793	3470	2707	0010719	0848	14888	327											
	022	OBS	0410	0775	34680	2708			14883	329											
		STD	0500	0616	3455	2720	0009487	0949	14833	357											
	022	OBS	T0511	0603	34537	2720			14830	358											
		STD	0600	0562	3454	2726	0008991	1041	14828	336											
	022	OBS	0619	0554	34540	2727			14828	333											
		STD	0700	0518	3454	2731	0008533	1129	14826	336											
		STD	0800	0484	3454	2735	0008208	1213	14829	341											
	022	OBS	T0834	0475	34542	2736			14831	342											
		STD	0900	0463	3462	2744	0007473	1291	14838	355											
		STD	1000	0450	3473	2754	0006599	1362	14851	377											
	022	OBS	1037	0447	34758	2756			14856	386											
		STD	1100	0447	3479	2759	0006219	1426	14867	402											
		STD	1200	0447	3485	2764	0005878	1486	14884	429											
	022	OBS	T1287	0447	34903	2768			14900	455											
		STD	1300	0446	3491	2769	0005525	1543	14902	459											
		STD	1400	0437	3498	2775	0004992	1596	14916	491											
		STD	1500	0424	3505	2782	0004403	1643	14928	524											
	022	OBS	T1566	0412	35106	2788			14935	548											

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' 10	LONGITUDE ° ' 10	MARS DEN METER	STATION TIME (GMT)			YEAR	ORIGINATION'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS				WEA- THER CODE	CLOUD CODES TYPE AMT	NODC STATION NUMBER				
CTR CODE	ID. NO.					10"	1"	MO		DAY	HR./10			CRUISE NO.	STATION NUMBER	ORL	HGT				PER	SEA		
	311059	RC	0005 S	03701 W	303	07	11	05	061	1966		007	4297	16	11	3	2	X8	8	6			0051	
				WATER		WIND			BARO-		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS									
				COLOR CODE	TRANS. UNIT	DIR.	SPEED OF FORCE	METER (mbars)	DRY RULE	WET RULE	VIS. CODE													
						13	510	096	255	241	7	15												
MESSAGE TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-30°	Δ D DYH. M. R 10 <sup>2</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>3</sub> -N µg - ml/l	NO <sub>2</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	S OC							
061		STD	0000	2666	3597	2358	0043239	0000	15397	462														
		OBS	0000	2666	35968	2358			15397	462														
		STD	0010	2664	3598	2359	0043175	0043	15398	462														
		STD	0020	2663	3598	2360	0043118	0086	15400	461														
061		OBS	0025	2662	35987	2360			15401	461														
		STD	0030	2656	3602	2365	0042675	0129	15400	457														
061		OBS	0048		36107					448														
		STD	0050	2630	3610	2379	0041414	0213	15399	448														
061		OBS	0072	2602						443														
		STD	0075	2590	3596	2381	0041322	0317	15392	442														
061		OBS	0096	2428	36520	24730				431														
		STD	0100	2332	3582	2448	0034992	0412	15333	409														
		STD	0125	1823	3567	2575	0023003	0485	15200	308														
061		OBS	0146	1516	35536	2637			15109	267														
		STD	0150	1488	3550	2640	0016797	0534	15101	273														
061		OBS	T0194	1228	35214	2672			15019	325														
		STD	0200	1212	3519	2673	0013723	0611	15014	324														
		STD	0250	1090	3504	2684	0012737	0677	14978	317														
061		OBS	0295	0999	34938	2692			14951	316														
		STD	0300	0993	3493	2693	0011994	0739	14949	317														
061		OBS	0397	0855	34791	2705			14912	330														
		STD	0400	0848	3479	2705	0010928	0853	14910	331														
		STD	0500	0663	3459	2717	0009849	0957	14852	354														
061		OBS	T0503	0659	34581	2717			14851	355														
		STD	0600	0565	3454	2725	0009023	1052	14829	342														
061		OBS	0610	0557	34532	2726			14827	341														
		STD	0700	0523	3453	2730	0008663	1140	14828	341														
		STD	0800	0491	3453	2734	0008377	1225	14832	342														
061		OBS	T0821	0485	34531	2734			14833	342														
		STD	0900	0462	3459	2742	0007682	1305	14837	350														
		STD	1000	0442	3467	2750	0006941	1379	14847	365														
061		OBS	1021	0440	34681	2751			14849	369														
		STD	1100	0443	3475	2756	0006468	1446	14865	388														
		STD	1200	0448	3483	2762	0006036	1508	14885	415														
061		OBS	T1274	0451	34874	2765			14899	437														
		STD	1300	0450	3489	2767	0005725	1567	14903	445														
		STD	1400	0441	3493	2771	0005411	1623	14917	480														
		STD	1500	0427	3497	2776	0005028	1675	14928	519														
061		OBS	T1568	0413	34978	2778			14934	547														

TABLE III.—Continued

REFERENCE		SNIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MAGNETIC DEVIATION	MARSSEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS			WEATHER CODE	CLOUD CODES		NODC STATION NUMBER	
CTM CODE	ID. NO.					10"	1"	MO	DAY	HR./10		CRUISE NO.	STATION NUMBER			OR.	HGT PER	SEA		TYPE	AMT		
311059	RC		0020 S	03729 W		303	07	11	05	092	1966		006	4297	16	11	3	2	X1	8	3	0052	
		WATER		WIND		BARO-METER		AIR TEMP. °C			VIS. CODE		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS								
		COLOR CODE		TRANS. (m)		DIR.		SPEED OR FORCE		DRY BULB		WET BULB											
				12		S10		106		261		246		7		15							
MESSNGR TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DYN. M. X 10 <sup>3</sup>	SDUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>2</sub> -P μg - 01/l	TOTAL-P μg - 01/l	NO <sub>2</sub> -N μg - 01/l	NO <sub>3</sub> -N μg - 01/l	SiO <sub>4</sub> -Si μg - 01/l	pH	SEC						
	092	STD	0000	2646	3604	2370	0042088	0000	15393	499													
		OBS	0000	2646	36044	2370			15393	499													
		STD	0010	2646	3611	2375	0041655	0042	15396	490													
		STD	0020	2645	3616	2379	0041307	0083	15398	481													
	092	OBS	0026	2644	36178	2380			15399	476													
		STD	0030	2643	3618	2381	0041138	0125	15399	472													
		STD	0050	2637	3619	2384	0040941	0207	15401	455													
	092	OBS	0052	2636	36194	2384			15401	454													
		STD	0075	2545	3641	2429	0036754	0304	15387	451													
	092	OBS	0079	2515	36421	2439			15381	449													
		STD	0100	2275	3636	2506	0029526	0387	15325	430													
	092	OBS	0104	2226	36336	2518			15313	426													
		STD	0125	1863	3601	2590	0021501	0450	15215	395													
		STD	0150	1537	3570	2645	0016382	0498	15119	366													
	092	OBS	0157	1466	35622	2654			15096	359													
		STD	0200	1261	3529	2671	0013915	0574	15032	333													
	092	OBS	0209	1225	35231	2674			15020	329													
		STD	0250	1127	3511	2683	0012880	0640	14991	324													
		STD	0300	1016	3497	2692	0012087	0703	14958	319													
	092	OBS	0314	0987	34938	2695			14950	317													
		STD	0400	0824	3475	2706	0010817	0817	14901	326													
	092	OBS	0419	0790	34715	2709			14890	329													
		STD	0500	0640	3458	2719	0009587	0919	14843	355													
	092	OBS	T0525	0608	34552	2721			14834	359													
		STD	0600	0561	3454	2726	0008971	1012	14827	355													
	092	OBS	0632	0544	34533	2727			14826	354													
		STD	0700	0522	3453	2729	0008702	1101	14828	351													
		STD	0800	0493	3451	2732	0008535	1187	14832	346													
	092	OBS	T0845	0481	34507	2733			14835	344													
		STD	0900	0465	3456	2739	0007941	1269	14838	349													
		STD	1000	0444	3466	2749	0007040	1344	14847	365													
	092	OBS	1057	0437	34710	2754			14855	379													
		STD	1100	0438	3475	2757	0006404	1411	14863	399													
		STD	1200	0442	3482	2762	0006031	1473	14882	442													
		STD	1300	0445	3489	2767	0005661	1532	14901	480													
	092	OBS	T1324	0446	34899	2768			14905	488													
		STD	1400	0440	3494	2772	0005325	1587	14916	513													
		STD	1500	0426	3498	2776	0004941	1638	14928	541													
	092	OBS	T1613	0403	35005	2781			14937	567													



TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE ° ' /10	LONGITUDE ° ' /10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES	NODC STATION NUMBER
CTRY CODE	ID. NO.					10°	1°	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR.	HGR			
311059	RC	0038 S	03808 W	303	08	11	05	129	1966	005	4206	16	11	4	2	X1	8 2	0053		
WATER		WIND		BARO- METER (mb)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS											
COLOR CODE	TRANS. IM	DIR.	SPEED OR FORCE		DRY BULB	WET BULB														
		12	S12	120	275	250	7	15												
MESSOR TIME HR 1/10	CAS NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DYN. M. R 10 <sup>3</sup>	SOUND VELOCITY	D <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>3</sub> -N pg - ml/l	NO <sub>2</sub> -N pg - ml/l	SiO <sub>4</sub> -Si pg - ml/l	pH	1 CG			
		STD	0000	2660	3617	2375	0041612	0000	15398	461										
129		OBS	0000	2660	36169	2375			15398	461										
		STD	0010	2656	3617	2376	0041533	0042	15399	459										
		STD	0020	2653	3617	2377	0041477	0083	15400	457										
129		OBS	0026	2652	36170	2377			15400	456										
		STD	0030	2651	3617	2377	0041470	0125	15401	456										
		STD	0050	2648	3617	2379	0041449	0207	15404	454										
129		OBS	0051	2648	36171	2379			15404	454										
		STD	0075	2621	3626	2394	0040094	0309	15403	472										
129		OBS	0077	2607	36273	2399			15400	473										
		STD	0100	2298	3652	2511	0029007	0396	15333	429										
129		OBS	0102	2271	36527	2519			15327	426										
		STD	0125	1901	3606	2585	0022064	0460	15227	396										
		STD	0150	1587	3567	2631	0017685	0509	15134	372										
129		OBS	0154	1545	35617	2636			15121	369										
		STD	0200	1243	3523	2670	0014012	0589	15025	350										
129		OBS	T0205	1217	35194	2673			15016	348										
		STD	0250	1107	3506	2683	0012890	0656	14984	331										
		STD	0300	0994	3493	2693	0012011	0718	14950	319										
129		OBS	0311	0971	34899	2694			14943	318										
		STD	0400	0800	3471	2707	0010750	0832	14891	322										
129		OBS	0418	0767	34675	2709			14881	325										
		STD	0500	0611	3454	2720	0009495	0933	14831	352										
129		OBS	T0527	0577	34514	2722			14822	355										
		STD	0600	0546	3451	2725	0009001	1026	14821	344										
129		OBS	0636	0532	34507	2727			14821	341										
		STD	0700	0505	3452	2731	0008532	1113	14821	342										
		STD	0800	0471	3454	2736	0008090	1196	14824	346										
129		OBS	T0864	0456	34548	2739			14828	352										
		STD	0900	0452	3459	2743	0007557	1275	14833	358										
		STD	1000	0443	3469	2752	0006806	1346	14847	373										
129		OBS	1074	0440	34750	2757			14859	384										
		STD	1100	0441	3477	2758	0006286	1412	14864	387										
		STD	1200	0443	3484	2763	0005904	1473	14883	399										
		STD	1300	0446	3490	2768	0005599	1530	14901	416										
129		OBS	T1339	0447	34918	2769			14909	423										
		STD	1400	0441	3494	2772	0005338	1585	14917	426										
		STD	1500	0425	3497	2776	0005001	1637	14927	459										
129		OBS	T1620	0396	34977	2779			14935	493										

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE L/10	LONGITUDE ° ' /10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF F.M.P.'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		MOO STATION NUMBER
CTD CODE	ID. NO.					10'	1'	MO	DAY		HR.	MIN.			CRUISE NO.	STATION NUMBER	DR.		HGT	PER	
311059		RC	0053 S	03639 W	303	08	11	05	165	1966		004	4114	16	11	4	2	X1	8	2	0054
WATER		WIND		BARO- METER	AIR TEMP. °C		NO. OBS. DEPTH	SPECIAL OBSERVATIONS													
COLDER CODE	TEMP. (°C)	DR.	SPED OR FORCE		DRY RULE	WET RULE															
		12	512	097			7	15													
MEASURE NO	TIME 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-σ <sub>t</sub>	Σ Δ D DYN. M. × 10 <sup>2</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P pg - ml/l	TOTAL-P pg - ml/l	NO <sub>2</sub> -N pg - ml/l	NO <sub>3</sub> -N pg - ml/l	SiO <sub>4</sub> -E pg - ml/l	pH	CHL			
			STD	0000	2680	3613	2365	0042500	0000	15402	502										
162			OBS	0000	2680	36130	2365			15402	502										
			STD	0010	2674	3613	2367	0042359	0042	15402	479										
			STD	0020	2667	3613	2369	0042189	0085	15402	463										
162			OBS	0023	2664	36124	2370			15402	459										
			STD	0030	2655	3612	2372	0041947	0127	15401	457										
162			OBS	0045		36112					452										
			STD	0050	2630	3614	2382	0041135	0210	15399	487										
162			OBS	0068	2608	36311	2402			15399	553										
			STD	0075	2583	3645	2420	0037593	0308	15396	535										
162			OBS	0090	2510	36644	2457			15384	505										
			STD	0100	2418	3659	2481	0031876	0395	15363	502										
			STD	0125	2199	3643	2533	0027054	0469	15311	484										
162			OBS	0136	2108	36359	2552			15288	472										
			STD	0150	1998	3618	2568	0023703	0532	15259	444										
162			OBS	0181	1766	35470	25730				394										
			STD	0200	1613	3564	2623	0018634	0638	15150	383										
			STD	0250	1291	3525	2662	0014917	0722	15050	358										
162			OBS	0272	1188	35128	2673			15017	350										
			STD	0300	1141	3508	2678	0013472	0793	15004	341										
162			OBS	0363	1007	34926	2690			14965	331										
			STD	0400	0884	3479	2700	0011454	0918	14924	336										
162			OBS	T0455	0740	34629	2709			14876	344										
			STD	0500	0686	3458	2713	0010220	1026	14861	356										
165			OBS	0595	0590	34498	2719			14838	369										
			STD	0600	0586	3450	2720	0009608	1125	14837	368										
			STD	0700	0520	3450	2728	0008854	1217	14827	355										
			STD	0800	0474	3450	2733	0008371	1303	14824	341										
165			OBS	T0803	0473	34503	2733			14825	341										
			STD	0900	0455	3459	2742	0007594	1383	14834	354										
			STD	1000	0443	3467	2750	0006953	1456	14847	371										
165			OBS	1022	0441	34689	2752			14850	375										
			STD	1100	0441	3474	2756	0006515	1523	14864	408										
			STD	1200	0442	3481	2761	0006103	1586	14882	433										
165			OBS	T1289	0442	34855	2765			14897	439										
			STD	1300	0441	3486	2765	0005826	1646	14899	439										
			STD	1400	0433	3491	2770	0005451	1703	14913	426										
			STD	1500	0420	3495	2775	0005080	1755	14925	394										
165			OBS	T1584	0406	34977	2778			14933	352										

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	DEPTH METER	MARDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'PL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NOOC STATION NUMBER
CTRY CODE	ID. NO.					10"	1"	MO	DAY	HR./1/10		CRUISE NO.	STATION NUMBER			OR.	HGT	PER		SEA	TYP	
311059	RC		0110 S	03917 W	303	19	11	05	199	1966	003		3658	16	13	4	2		X1	8	1	0055
WATER		WIND		SARO- METER (mb)	AIR TEMP. °C		VLS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS													
COLOR CODE	TRANSL (m)	DIR	SPEED OR FORCE		DRY BULB	WET BULB			1	2												
13	S14		089		272	247	7	14														
MESSAGE TIME NR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_t$ ?	$\Sigma \Delta \sigma$ DTN. M. $\times 10^2$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>3</sub> -N µg - ml/l	NO <sub>2</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	3 C O C					
199		STD	0000	2683	3608	2361	0042944	0000	15402	459												
		OBS	0000	2683	36081	2361			15402	459												
		STD	0010	2680	3608	2362	0042880	0043	15403	458												
		STD	0020	2678	3609	2363	0042839	0086	15404	458												
199		OBS	0026	2676	36087	2363			15405	457												
		STD	0030	2675	3609	2364	0042761	0129	15405	457												
		STD	0050	2670	3610	2367	0042592	0214	15408	454												
199		OBS	0050	2670	36104	2367			15408	454												
		STD	0075	2629	3619	2386	0040809	0318	15404	448												
199		OBS	0075	2629	36194	2386			15404	448												
199		OBS	0099	2482	36702	2470			15379	468												
		STD	0100	2465	3669	2474	0032508	0410	15375	467												
		STD	0125	2083	3632	2556	0024780	0481	15280	437												
199		OBS	0149	1791	35992	2607			15199	412												
		STD	0150	1782	3598	2608	0019869	0537	15196	411												
199		OBS	T0196	1428	35451	2649			15088	372												
		STD	0200	1410	3543	2652	0015836	0627	15083	371												
		STD	0250	1199	3515	2673	0013901	0701	15017	362												
199		OBS	0289	1061	34967	2684			14973	356												
		STD	0300	1040	3494	2685	0012717	0767	14967	355												
		STD	0400	0853	3474	2701	0011337	0888	14911	346												
199		OBS	T0480	0712	34608	2711			14869	338												
		STD	0500	0672	3458	2715	0010025	0994	14856	345												
199		OBS	0582	0543	34482	2724			14816	365												
		STD	0600	0537	3448	2724	0009086	1090	14817	366												
		STD	0700	0506	3449	2729	0008766	1179	14821	370												
199		OBS	0795	0481	34494	2732			14826	372												
		STD	0800	0480	3450	2732	0008468	1265	14827	372												
		STD	0900	0456	3457	2741	0007755	1347	14834	372												
		STD	1000	0440	3464	2748	0007137	1421	14845	372												
199		OBS	1013	0439	34644	2748			14847	372												
		STD	1100	0441	3470	2753	0006800	1491	14863	415												
		STD	1200	0442	3476	2757	0006480	1557	14881	458												
199		OBS	1288	0444	34817	2762			14897	491												
		STD	1300	0443	3482	2762	0006145	1620	14899	495												
		STD	1400	0433	3489	2769	0005597	1679	14913	525												
		STD	1500	0417	3495	2775	0005040	1732	14924	549												
199		OBS	T1564	0404	34991	2780			14929	561												

TABLE III.—Continued

REFERENCE CTRY CODE	SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	# OF OBS.	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS			WEA- THER CODE	CLOUD CODES		NOOC STATION NUMBER	
					10"	1"	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER		SEA	TYPE		AMT
311059	RC	0132 S	03949 W		303	19	11	06	001	1966		002	3475	12	10	5	2	X1	8	3	0056	
					WATER		WIND		BARO- METER		AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS							
					CDLDR CODE	TRANS. (M)	DIR.	SPEED OR FORCE	(mb)	DRY RULR	WET RULR											
							10	S18	108	267	246	7	15									
MESSENGER TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S %	SIGMA-T	SPECIFIC VOLUME AND SALTY-210 <sup>3</sup>	$\frac{\Delta \sigma}{\sigma}$ OWN, M. x 10 <sup>3</sup>	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P µg - ml/l	TOTAL-P µg - ml/l	NO <sub>2</sub> -N µg - ml/l	NO <sub>3</sub> -N µg - ml/l	SiO <sub>4</sub> -Si µg - ml/l	pH	SIG C					
		STD	0000	2645	3607	2372	0041907	0000	15393	469												
001		OBS	0000	2645	36065	2372			15393	469												
		STD	0010	2644	3607	2372	0041906	0042	15395	468												
		STD	0020	2642	3606	2372	0041916	0084	15396	465												
001		OBS	0022	2642	36064	2372			15396	464												
		STD	0030	2642	3606	2372	0041955	0126	15398	460												
001		OBS	0043	2641	36062	2373			15400	453												
		STD	0050	2640	3606	2373	0041966	0210	15400	505												
001		OBS	0063	2637	36064	2374			15402	541												
		STD	0075	2627	3615	2384	0041065	0313	15403	483												
001		OBS	0081	2607	36209	2394			15400	462												
		STD	0100	2459	3663	2472	0032766	0406	15373	458												
001		OBS	0119	2251	36689	2537			15326	454												
		STD	0125	2145	3653	2555	0024892	0478	15298	441												
		STD	0150	1771	3595	2609	0019828	0534	15192	393												
001		OBS	T0152	1746	35913	2612			15185	389												
		STD	0200	1421	3544	2650	0015989	0623	15087	302												
001		OBS	0221	1305	35271	2661			15050	287												
		STD	0250	1184	3511	2672	0013916	0698	15011	323												
		STD	0300	1016	3489	2686	0012675	0765	14957	359												
001		OBS	0302	1010	34885	2686			14955	360												
001		OBS	T0390	0837	34715	2701			14903	346												
		STD	0400	0828	3470	2702	0011247	0884	14901	351												
001		OBS	0476	0748	34626	2708			14882	377												
		STD	0500	0697	3459	2712	0010301	0992	14866	375												
		STD	0600	0541	3448	2724	0009159	1089	14819	364												
001		OBS	T0626	0515	34469	2726			14812	361												
		STD	0700	0484	3449	2731	0008486	1177	14812	350												
001		OBS	0737	0471	34500	2733			14813	348												
		STD	0800	0459	3451	2736	0008134	1260	14818	357												
		STD	0900	0444	3454	2740	0007828	1340	14829	371												
001		OBS	T0946	0440	34559	2741			14835	377												
		STD	1000	0441	3459	2744	0007513	1417	14845	384												
		STD	1100	0442	3466	2749	0007109	1490	14863	398												
		STD	1200	0443	3476	2757	0006485	1558	14882	412												
001		OBS	T1218	0443	34776	2758			14885	414												

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE 1/10	LONGITUDE 1/10	MARS DEN SQUARE	STATION TIME (GMT)				YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAR. DEPTH OF S'AMPL'S	WAVE OBSERVATIONS			WEA- TNER CODE	CLOUD CODES	MOOC STATION NUMBER
CTRY CODE	ID. NO.					10"	1'	MO	DAY		HR./10	CRUISE NO.			STATION NUMBER	DIR	HGT			
311059	RC	0148 S	04027 W	304	10	11	06	039	1966	001		3402	11	11	5	2	X1	8	2	0057
				WATER		WIND		BARO- METER		AIR TEMP. °C		NO. OBS. DEPTHS		SPECIAL OBSERVATIONS						
				COLOR CODE	TRANSL (m)	DIR.	SPEED OF FORCE	UMBS		DRY BULB	WET BULB	VIL CODE								
				09	S17	097	267	246	7	15										
MESSAGE TIME HR 1/10	CST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY- $\sigma_{\theta}$	$\Delta \rho$ DYN. M. $\times 10^3$	SOUND VELOCITY	O <sub>2</sub> ml/l	PO <sub>4</sub> -P $\mu\text{g} - \mu\text{l/l}$	TOTAL-P $\mu\text{g} - \mu\text{l/l}$	NO <sub>2</sub> -N $\mu\text{g} - \mu\text{l/l}$	NO <sub>3</sub> -N $\mu\text{g} - \mu\text{l/l}$	SiO <sub>4</sub> -Si $\mu\text{g} - \mu\text{l/l}$	PH	S CC			
		STD	0000	2649	3604	2369	0042186	0000	15394	472										
039		OBS	0000	2649	36043	2369	0042186	0000	15394	472										
		STD	0010	2648	3604	2369	0042192	0042	15395	467										
		STD	0020	2646	3604	2369	0042199	0084	15397	463										
039		OBS	0021	2646	36041	2369			15397	462										
		STD	0030	2646	3604	2369	0042241	0127	15398	462										
039		OBS	0043	2646	36035	2369			15400	463										
		STD	0050	2645	3603	2369	0042366	0211	15401	461										
039		OBS	0064	2638	36028	2371			15402	460										
		STD	0075	2626	3604	2375	0041854	0316	15401	461										
039		OBS	0085	2615	36043	2379			15400	462										
		STD	0100	2477	3621	2435	0036277	0414	15373	461										
		STD	0125	2229	3650	2529	0027374	0494	15319	455										
039		OBS	0129	2187	36544	2545			15310	454										
		STD	0150	1934	3618	2585	0022099	0556	15242	441										
039		OBS	T0170	1728	35874	2613			15182	431										
		STD	0200	1513	3554	2638	0017185	0654	15117	425										
039		OBS	0247	1257	35170	2663			15037	410										
		STD	0250	1249	3516	2664	0014768	0734	15034	407										
		STD	0300	1113	3500	2677	0013555	0804	14993	376										
039		OBS	0322	1054	34927	2682			14975	369										
039		OBS	0394	0863	34707	2697			14914	376										
		STD	0400	0851	3469	2697	0011674	0931	14910	377										
039		OBS	0467	0727	34580	2707			14872	386										
		STD	0500	0680	3454	2711	0010432	1041	14859	385										
039		OBS	T0598	0565	34463	2719			14828	381										
		STD	0600	0563	3446	2720	0009567	1141	14827	380										
		STD	0700	0484	3447	2730	0008634	1232	14812	360										
039		OBS	0719	0473	34471	2731			14810	358										
		STD	0800	0444	3449	2735	0008137	1316	14812	366										
		STD	0900	0423	3450	2739	0007845	1396	14820	378										
039		OBS	T0909	0422	34505	2739			14821	379										
		STD	1000	0428	3457	2744	0007505	1473	14840	391										
		STD	1100	0435	3467	2751	0006947	1545	14860	405										
039		OBS	T1148	0438	34733	2756			14870	413										



532-AA

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