U.S. Coast Guard Oceanographic Report

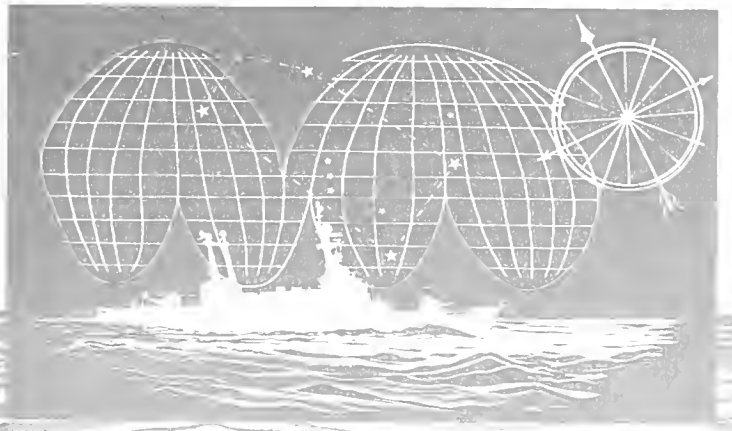
UNITED STATES COAST GUARD

OCEANOGRAPHIC REPORT No. 26

CG 373-26

OCEANOGRAPHIC OBSERVATIONS NORTH PACIFIC OCEAN STATION NOVEMBER

March 1967-March 1968



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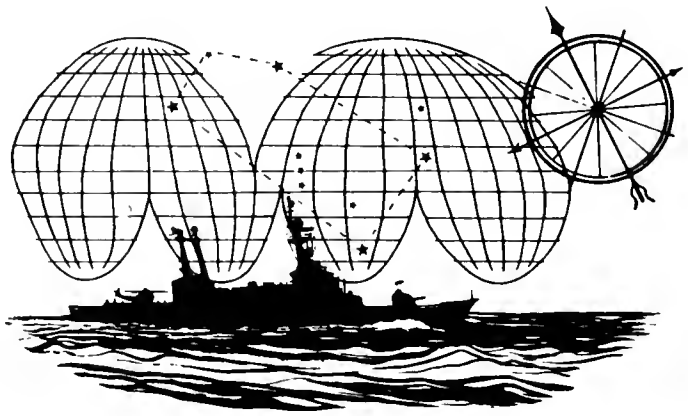


UNITED STATES COAST GUARD OCEANOGRAPHIC UNIT

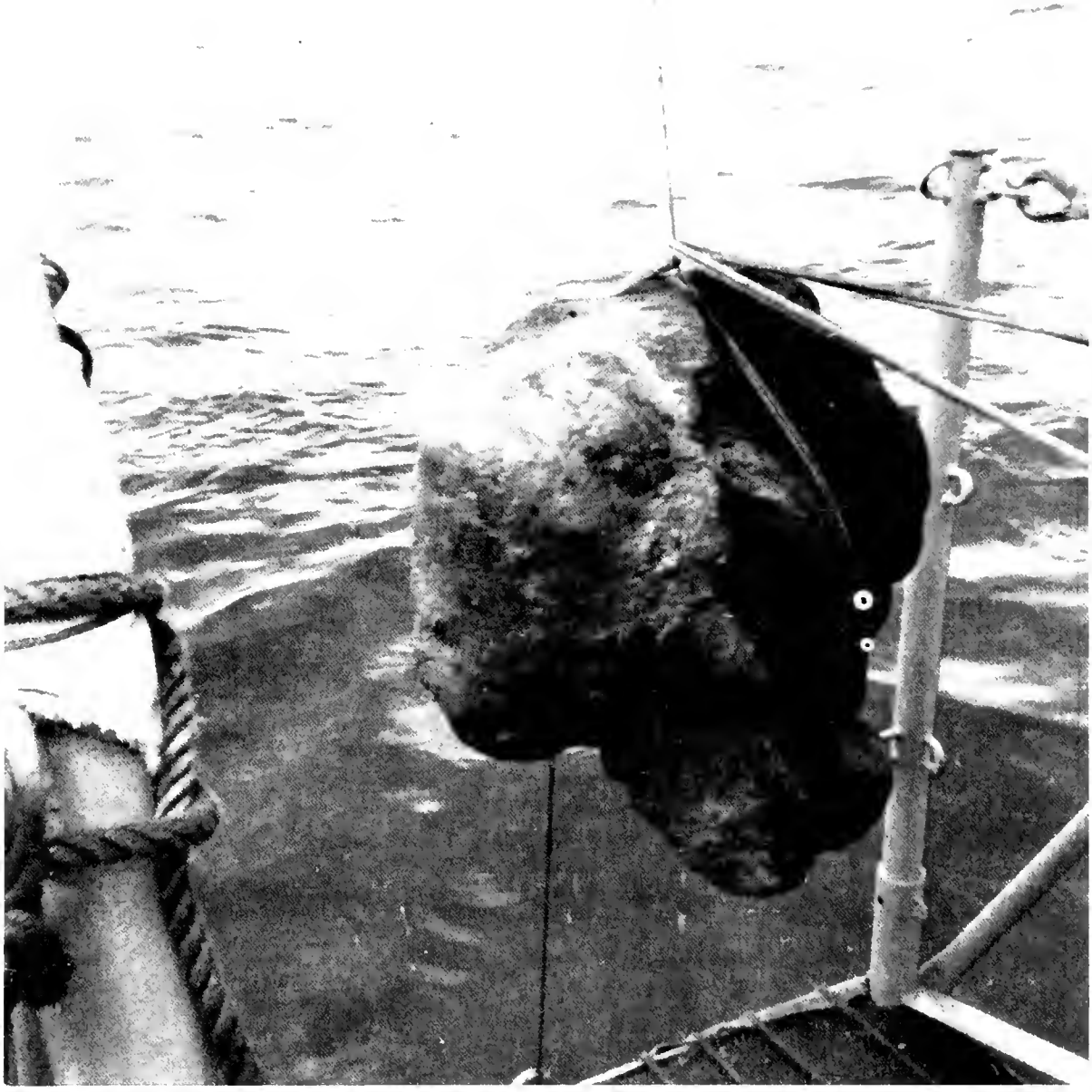
REPORT No. 26 CG 373-26

OCEANOGRAPHIC OBSERVATIONS NORTH PACIFIC OCEAN STATION NOVEMBER 30°00′ N., 140°00′ W.

March 1967–March 1968

David M. Husby

WASHINGTON, D.C. SEPTEMBER 1969



Frontispiece: An extremely large manganese nodule inadvertently retrieved by the USGC PONTCHARTRAIN (WHEC–70) during a deep Nansen cast on Ocean Station NOVEMBER in 3749 meters of water in September 1967. This specimen, weighing approximately 240 Kg., was entangled in the oceanographic cable which was accidentally laid on the bottom. Scientists from the Scripps Institution of Oceanography subsequently identified the rock as probably the largest manganese nodule ever found.

ABSTRACT

This report contains the observed and interpolated temperature and salinity data plus the computed sigma-t, geopotential anomalies and sound velocities for 195 oceanographic stations occupied by U. S. Coast Guard Cutters at Ocean Station NOVEMBER (centered at 30° N, 140° W) between 20 March 1967 and 31 March 1968. The particular cruises were the CGC KLAMATH, 20 March–8 April 1967; CGC PONTCHARTRAIN, 2–19 May 1967; CGC WINONA, 15 June–1 July 1967; CGC PONTCHARTRAIN, 23 July–13 August 1967; CGC PONTCHARTRAIN, 3–24 September 1967; CGC TANEY, 15 October–5 November 1967; CGC KLAMATH, 26 November–17 December 1967; CGC TANEY, 7–28 January 1968; CGC WACHUSETT, 28 January–18 February 1968; CGC TANEY, 18 February–10 March 1968; and the CGC PONTCHARTRAIN, 10–31 March 1968. Daily casts of 13–14 Nansen bottles were made to a depth of 1500 meters when weather conditions permitted. In addition, sampling was successfully extended to near the bottom on at least one station during each patrol.

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By David M. Husby

INTRODUCTION

The U.S Coast Guard has been conducting a long-term series of oceanographic observations at Ocean Station NOVEMBER (30°00′ N., 140°00′ W.) since July 1966 (Husby, 1968). Investigations of oceanographic conditions in this vicinity had been made prior to this time by other organizations (Cochrane, 1950 and Thomas and Amstutz, 1966). The location of NOVEMBER in relation to the other Ocean Stations in the world is shown in figure 1. The sampling program originally consisted of daily Nansen bottle casts to 1500 meters on alternate 21-day patrols. Since 7 January 1968 the program has been expanded to daily Nansen bottle casts on every patrol. Serial observations of temperature and salinity are made at all stations.

This report contains the oceanographic station data from 195 stations at NOVEMBER between March 1967 and March 1968. The cruises were the CGC KLAMATH, 20 March–8 April 1967; CGC PONTCHARTRAIN, 2–19 May 1967; CGC WINONA, 15 June–1 July 1967; CGC PONTCHARTRAIN, 23 July–13 August 1967; CGC PONTCHARTRAIN, 3–24 September 1967; CGC TANEY, 15 October–5 November 1967; CGC KLAMATH, 26 November–17 December 1967; CGC TANEY, 7–28 January 1968; CGC WACHUSETT, 28 January–18 February 1968; CGC TANEY, 18 February–10 March 1968; and the CGC PONTCHARTRAIN, 10–31 March 1968.

PROCEDURES

The Ocean Station Vessels are normally required to maintain their position within a ten-mile square grid centered on Ocean Station NOVEMBER (30°00′ N., 140°00′ W.) while engaged in oceanographic operations. Occasionally, the vessels are requested to move their position due south to about 29°00′ N., for periods of from one to five days, for other operational commitments. The bathymetry in the vicinity of NOVEMBER is shown in figure 2.

For the daily casts the desired sampling depths are surface, 10, 30, 50, 75, 100, 150, 200, 300, 400, 600, 800, 1000, and 1500 meters. For deep casts, an additional cast was made with desired sampling depths of 2000, 2500, 3000, 3500, 4000, 4500, and 4600 meters (near bottom). A pair of protected, deepsea reversing thermometers was placed in each Nansen bottle and, in addition, on five bottles from 200 to 1500 meters, an unprotected thermometer was paired with the two protected ones for the thermometric determination of the sampling depths. Depths which were determined thermometrically are preceded by a "T" in the station data. Field observations of temperature were transmitted via radio teletype to the Coast Guard Oceanographic Unit, Washington D.C. for real-time data processing and quality control. Procedures used in the recording and processing of the temperature data essentially follow those outlined in U.S. Naval Oceanographic Office Pub. No. 607 (Third ed., 1968) and LaFond (1951). The Coast Guard Oceanographic Unit uses a Digital Equipment Corporation PDP–5 computer to process the temperature data.

Salinity samples were drawn from each Nansen bottle and the salinity content of each sample determined aboard ship using inductive

salinometers. Duplicate water samples were drawn from the surface and 1500 meter Nansen bottle at each station and delivered to the Coast Guard Oceanographic Unit for quality control when the vessels returned to port. These samples were run by a different operator and on a different instrument and it was found that, on the average, 89 percent of the samples differed from the ship's values by less than 0.010‰. The samples were higher in salinity than the ship's values by an average of only .004 ‰ after about a month's period.

Processed temperature and salinity data were recorded on form NODC-EXP-3167/25 (3-64), Physical and Chemical Data form for oceanographic stations and delivered to the National Oceanographic Data Center (NODC) for archiving and the preparation of listings. The interpolated temperature and salinities for standard depths, sigma-t values, geopotential anomalies ($\triangle$D) and sound velocities were computed by NODC and listings provided for the preparation of Tables I–XI.

CRUISE NARRATIVES

The CGC KLAMATH occupied 17 oceanographic stations during her 20 March—8 April 1967 patrol. The majority of the casts had maximum useful depths between 1350 and 1950 meters. Two casts had maximum sampling depths of 1113 and 1123 meters due to extremely large wire angles. One deep cast was accomplished, with a maximum sampling depth of 3778 meters in a water depth of 4389 meters. One shallow station has no salinity values due to an error by the operator of the salinometer. Four stations were occupied 90 miles south of O.S. NOVEMBER grid. The distribution of the other 13 stations about the center of NOVEMBER is shown in figure 3. The data are listed by NODC as Ref. No. 31–1079 and as Table I in this report.

The CGC KLAMATH also occupied a line of 18 oceanographic stations from Ocean Station NOVEMBER to the coast of Oregon on the return trip to port. These stations make up a portion of Standard Monitoring Section 4 and the data will be published at a later date. The data are also listed by NODC as Ref. No. 31–1079.

During the period 2–19 May 1967, the CGC PONTCHARTRAIN occupied 17 oceanographic stations on Ocean Station NOVEMBER. The majority of these stations had maximum useful sampling depths between 1400 and 1700 meters. One cast reached only to 991 meters due to a very large wire angle. One deep cast was accomplished with a maximum sampling depth of 3669 meters in a water depth of 4114 meters. Four stations were taken 90 miles south of NOVEMBER and the distribution of the other 13 stations about the center of NOVEMBER is shown in figure 4. The data are listed by NODC as Ref. No. 31–1080 and as Table II of this report.

The CGC PONTCHARTRAIN also occupied 11 stations on Standard Monitoring Section 6 on the return voyage from O.S. NOVEMBER. The data are also listed by NODC under Ref. No. 31–1080 but will be published at a later date.

The CGC WINONA successfully occupied 17 oceanographic stations during the 15 June–1 July 1967 patrol on Ocean Station NOVEMBER. All seventeen stations had maximum useful depths between 1350 and 1650 meters. No deep cast was accomplished as the ship had difficulties with the winch brake. One station was taken 90 miles south of Ocean Station NOVEMBER and the distribution of the other 16 about the center of NOVEMBER is shown in figure 5. The data are listed by NODC as Ref. No. 31–1083 and as Table III in this report.

The entire 24 stations of Standard Monitoring Section 4 were occupied by the CGC WINONA on the return trip from NOVEMBER. These data are also listed by NODC as Ref. No. 31–1083, but will be published at a later date.

The CGC PONTCHARTRAIN successfully occupied 21 oceanographic stations during the 23 July–13 August patrol at Ocean Station NOVEMBER. All casts except one had maximum useful depths of between 1400 and 1530 meters. The one exception was to only 1296 meters due possibly to a large subsurface current. This station was taken 90 miles south of Ocean Station NOVEMBER, as were two other stations. The distribution of the other stations about the center of NOVEMBER is shown in figure 6. One deep cast was accomplished, with a maximum sampling depth of 4400 meters in

a water depth of 4663 meters. The data are listed by NODC as Ref. No. 31–1142 and as Table IV of this report.

The CGC PONTCHARTRAIN also participated in cooperative deep current observations conducted by personnel from the Scripps Institution of Oceanography. Two free-vehicle type current meters were used for six separate drops with five recoveries. The current meter array consisted of a fiberglass-aluminum pole with float connected by a nylon line to a secondary float to which was connected the current meter instrument and ballast weight. Each pole-float contained a radio beacon, battery and antenna, a radar reflector, and a bright orange flag. Little or no success was experienced with the radio beacons and radar reflectors. The most valuable recovery aid turned out to be the bright orange flag, which was sighted up to 3½ miles distant. The current observations are retained by the Scripps Institution of Oceanography, La Jolla, California.

The CGC PONTCHARTRAIN again was assigned to Ocean Station NOVEMBER patrol for the period of 30 August–29 September 1967. During this period 20 oceanographic stations were occupied. All twenty stations had maximum useful depths between 1400 and 1630 meters. One deep cast was accomplished, with a maximum sampling depth of 3265 meters in a water depth of 3749 meters. One station was occupied 60 miles south of Ocean Station NOVEMBER and one 90 miles south; the distribution of the other stations about the center of NOVEMBER is shown in figure 7. The data are listed by NODC as Ref. No. 31–1163 and as Table V of this report.

In cooperation with the Scripps Institution of Oceanography, six free-vehicle current meters were launched during this patrol and five recovered. Approximately 630 hours of bottom current observations were obtained. These data are retained by the Scripps Institution of Oceanography, La Jolla, California.

The CGC PONTCHARTRAIN also occupied the entire 24 stations of Standard Monitoring Section 6 on the return trip to port. These data are also listed by NODC as Ref. No. 31–1163, but will be published at a later date.

There was an interesting occurrence on the ship's first attempt at a deep cast on Ocean Station NOVEMBER. A miscalculation was made in the depth of water to the bottom and 500 meters of cable were laid on the bottom. When the cast was retrieved, a large boulder, weighing approximately 240kg. and with dimensions of about 36 inches in height and about 24 inches in breadth, was entangled in the cable and was brought to the surface. The specimen was subsequently given to the Scripps Institution of Oceanography for analysis and was identified as an extremely large manganese nodule. (see frontispiece).

During the 15 October–8 November patrol of the CGC TANEY on Ocean Station NOVEMBER, a total of 21 oceanographic stations were occupied. With the exception of one cast, all casts had maximum useful depths between 1450 and 1650 meters. One station had a maximum sampling depth of only 552 meters due to the failure of a Nansen bottle to release its messenger. One deep cast was accomplished, with a maximum sampling depth of 4270 meters in a water depth of 4390 meters. This distribution of the stations about the center of NOVEMBER is shown in figure 8. The data are listed by NODC as Ref. No. 31–1178 and as Table VI of this report.

The CGC TANEY also occupied 19 oceanographic stations on Standard Monitoring Section 5 on the return trip NOVEMBER. These data are also listed by NODC as Ref. No. 31–1178, but will be published at a later date.

The CGC KLAMATH occupied 13 oceanographic stations during the 26 November–17 December 1967 patrol on Ocean Station NOVEMBER. All stations had maximum useful depths between 1350 and 1950 meters. One deep cast was accomplished, with a maximum sampling depth of 3891 meters in a water depth of 4244 meters. The distribution of the stations about the center of NOVEMBER is shown in figure 9. Two stations were occupied approximately 60 miles south of Ocean Station NOVEMBER. The data are listed by NODC as Ref. No. 31–1185 and as Table VII of this report.

The CGC TANEY occupied 21 oceanographic stations during the 7–28 January 1968 patrol at Ocean Station NOVEMBER. With

the exception of four casts, all casts had maximum useful depths between 1250 and 1600 meters. The four shallow casts had maximum useful depths of 372, 693, 966, and 997 meters, due mainly to bottles failing to release messengers. Adverse weather caused difficult operating conditions and a difficulty in maintaining station, as can be seen in figure 10 which shows the distribution of stations about the center of NOVEMBER. Four stations were taken about 90 miles south of Ocean Station NOVEMBER. One deep cast was accomplished with a maximum sampling depth of 3964 meters in a water depth of 4114 meters. All these data are listed by NODC as Ref. No. 31–1200 and as Table VIII of this report.

During the 28 January–18 February 1968 patrol at Ocean Station NOVEMBER, the CGC WACHUSETT occupied 10 oceanographic stations. All casts had maximum useful depths between 1300 and 1520 meters. A deep cast was not accomplished due to a limited amount of cable available aboard ship. The distribution of the stations about the center of NOVEMBER is shown in figure 11. Daily casts were not accomplished during the entire three week period due to adverse weather conditions. The data are listed by NODC as Ref. No. 31–1205 and as Table IX of this report.

A total of 19 oceanographic stations were occupied by the CGC TANEY during the 18 February–10 March 1968 patrol at Ocean Station NOVEMBER. With the exception of two casts all stations had maximum useful depths between 1350 and 1950 meters. These two exceptions had maximum useful depths of only 449 and 861 meters due to the failure of a bottle to trip and the pretripping of a bottle, respectively; both these malfunctions being probably caused by very large wire angles. No deep cast was accomplished during this patrol. One station was taken outside the Ocean Station grid, about 90 miles directly south of station and the distribution of the other stations about the center of NOVEMBER is shown in figure 12. The data are listed by NODC as Ref. No. 31–1209 and as Table X of this report.

On 19 February 1968 the CGC TANEY performed the mooring of the Scripps Institution of Oceanography oceanographic raft. The raft was moored at 30° 01.3 N., 139° 56.6 W., in 4300 meters of water. The raft's position was checked throughout the remainder of the patrol by celestial observations and it was found that the raft was not drifting and that there was a 0.3 knot current setting eastward.

During the 10–31 March 1968 patrol by the CGC PONTCHARTRAIN, a total of 19 oceanographic stations were occupied. All stations had maximum useful depths between 1350 and 1800 meters. One deep cast was accomplished with a maximum sampling depth of 4213 meters in a water depth of 4480 meters. Three stations were occupied about 60 miles south of Ocean Station NOVEMBER and the distribution of the other stations about the center of NOVEMBER is shown in figure 13. The data are listed by NODC as Ref. No. 31–1249 and as Table XI of this report.

The CGC PONTCHARTRAIN also occupied 22 of the 24 stations on Standard Monitoring Section 6 between Ocean Station NOVEMBER and Long Beach, California. These data are also listed by NODC as Ref. No. 31–1249, but will be published at a later date.

COOPERATIVE PROJECTS

Occasionally other observations are made on station at the request of and in cooperation with other government agencies or private institutions. In the past, these programs have included the following:

(1) *Deep Free Vehicle Observations*—(Scripps Institution of Oceanography, La Jolla, California)

Deep Current observations have been made at Ocean Station NOVEMBER using a free vehicle equipped with a recording current meter. The vehicle is deployed from 2–5 days, returns to the surface automatically and is retrieved. It has employed an underwater camera. This research is sponsored by the National Science Foundation and is being conducted by Dr. Richard Schwartzlose. All data are retained at the Scripps Institution of Oceanography.

(2) *Survey of Fallout Cesium in the Pacific Ocean*—(Scripps Institution of Oceanography)

Since 1966 several Ocean Station Vessels on Ocean Station NOVEMBER have collected water samples and tested sampling equipment for the determination of the distribution of trace radioactive Cesium in the Pacific. The

sampling program usually consists of four hydrocasts to 850 meters on station with a four hour soak time. Also, a sampling "fish" is towed two hours per day while enroute port at normal cruising speed. This research is sponsored by the Atomic Energy Commission and is being conducted under the direction of Dr. T. R. Folsom.

(3) *Environmental Sampling*—(U.S. Naval Radiological Defense Laboratory, San Francisco, California)

Since September 1965 various Ocean Station Vessels have collected rainwater samples and a surface sea water sample for analysis of fallout distribution.

(4) *Carbon Dioxide Equalization Observations*—(University of Washington)

This program was initiated in spring of 1967 and consists of Ocean Station Vessels collecting volumes of water for an analysis equilibrating CO_2 in the atmosphere with CO_2 in the surface waters of the North Pacific. This research is being sponsored by the National Science Foundation and the Office of Naval Research and is being conducted by scientists at the University of Washington.

DISCUSSION

To illustrate the temporal or gross seasonal changes in water properties at different levels at Ocean Station NOVEMBER plots of water temperature versus time (figures 14, 15, and 16) and salinity versus time (figures 17, 18, and 19) were constructed. The diurnal changes in the surface layers have been effectively eliminated, as the majority of the 195 stations were occupied at the same time each day (2000 hours Greenwich Mean Time or 1100 hours Zone Time). The effects of spatial variability are revealed in the plots of the data from the 32 stations which were occupied from 60–90 miles south of Ocean Station NOVEMBER. These data are indicated in figures 14–19 by the large black dots on the data points. These data reveal that a water mass of significantly warmer temperature and higher salinity was present, at least in the upper 400 meters, just 60 miles to the south.

Figures 14–19 consist of plots of temperature and salinity versus time at the surface and 100, 200, 300, 400, 600, 800, 1000, and 1500 meter levels. The salient feature of the temperature versus time plots is the marked seasonal cycle with a heating period from March to September 1967 and then a cooling period from September 1967 to March 1968. The maximum surface temperatures were observed in September in the range of 24–25°C. The surface temperature dropped to a minimum of less than 18°C in March 1968. During the month of November 1967, the surface temperature appears to have dropped nearly 4.0°C and was the most pronounced change which occurred during the observational period. During the period from December 1967 to January 1968, a convective process raised the 100 meter temperature from 17°C to almost 19°C. The convective mixing appears to have been effective to the 400 meter level raising the temperature from about 7.90°C in December to about 8.40°C in January. From January 1968 to March 1968 there was a gradual decrease of temperature at all levels from the surface to 400 meters. At the 600 meter level and below there was little change in the temperature structure between March 1967 and March 1968.

The salinity versus time plots (figures 17, 18, and 19) reveal a somewhat similar seasonal cycle in the upper 200 meters, however there were anomalous conditions observed during the summer of 1967. Ignoring those stations which were occupied 60–90 miles to the south of Ocean Station NOVEMBER, (those data points with large black dots), the surface salinity appears to be increasing from March 1967 to June 1967, however there were a series of four stations occupied between 9–14 May at which the salinity showed a very significant decrease (nearly 0.40 ‰). These low salinities were associated with relatively low temperatures (17.40° C.) and it appears that there was an influx of a Subarctic type water into the vicinity during this period. The surface salinity reached a maximum of nearly 35.30 ‰ during early June 1967, followed by a sudden, inexplicable decrease in late June. A minimum was observed in the surface salinity in July of about 34.75 ‰ followed by anomalous increases in early August to values approaching 35.40 ‰. After August there appeared to be a trend

toward a seasonal cycle associated with the maximum heating of the surface layers. From September to November 1967 the surface salinity showed a gradual increase from about 35.10 to about 35.25 ‰. This second maximum was observed in October. From November 1967 to March 1968 there was a gradual decrease in surface salinity to a low of about 34.70 ‰.

The salinity at the 100 and 200 meter levels showed a considerable increase from December 1967 to January 1968 due to the convective mixing mentioned above. Since the high temperature at the surface creates a stable structure, it appears that the increase in salinity at the surface promotes the convective process at Ocean Station NOVEMBER. However, from January to March 1968, there was a decrease of salinity in the upper 200 meters. The salinity below 400 meters showed little variability during the observational period.

VERTICAL PROPERTY DISTRIBUTION

Envelopes of temperature and salinity versus depth have been constructed for each cruise to Ocean Station NOVEMBER to show the vertical structure in the water column and to delineate the gross seasonal changes in properties (figure 20–41). These envelopes reveal the basic thermohaline stratification of properties at Ocean Station NOVEMBER: (1) a surface mixed layer, varying from 10 to 150 meters in depth (2) the main thermocline from 200 to 600 meters in depth, and (3) the North Pacific deep water below 600 meters.

Ocean Station NOVEMBER is located in the Subtropical Region of the Pacific Ocean which is characterized by an excess of evaporation over precipitation. The salinity of the water is greatest at the surface and decreases to a minimum between 200 and 800 meters in depth (Tully, 1964). There is no permanent halocline in this region and therefore the stability of the density structure is solely dependent on the temperature structure. The envelopes of temperature versus depth (figures 20–30) illustrate the response of the surface waters to the seasonal cycles of heating and cooling. From March 1967 to May 1967 the effects of winter cooling were evidenced. The surface homogeneous layer (18.0–18.5° C. water) reached a depth of about 100 meters in March and by May had increased in depth to nearly 150 meters and the temperature was in the range of 17.9–18.9° C. with the exception of four anomalous stations where the temperatures dropped to about 17.4° C. During the period from June 1967 to September 1967, the summer heating established a seasonal thermocline in the upper 100 meters. In September when the maximum surface temperatures of 24.5° C. were reached, there was a negative gradient of almost 7.0° C. in the upper 100 meters. In October 1967, with the advent of a cooling season, the surface temperatures decreased nearly 1.0°C and a shallow mixed layer was formed of about 30 meters in depth. By December 1967 the surface temperature had decreased to the range of 20.0–21.5° C. and the homogeneous layer had increased in depth to about 50 meters. In January 1968 the mixed layer had reached a depth of about 100 meters with temperatures in the range of 19.0–20.5° C. From January to March 1968 the temperature and extent of the mixed layer changed very little, while the dominant process appeared to be an increase of the temperature in the depths between 100 and 400 meters. Little variability was observed in the temperature of the water at the levels below 400 meters. From 600 meters to 1500 meters the temperature showed a gradual decrease from about 5.00° to 2.65°C.

The dominant feature of the salinity versus depth envelopes (figures 31–41) is the salinity minimum located between 200 and 600 meters in depth. The sampling program of sampling at discrete levels obviously does not delineate the continuous vertical structure, but several major features are evident from the salinity envelopes. There is a salinity minimum of about 34.05–34.10 ‰ located at 200 meters. This feature is present during most of the year except during the late winter, January—February, when the convective mixing increases the salinity at this level to the range of 34.20–34.40 ‰. Associated with the salinity minimum at 200 meters there is an intermediate maximum at 300 meters of about 34.10–34.15 ‰.

A permanent feature of the vertical salinity structure at Ocean Station NOVEMBER is the minimum value between 400 and 600 meters.

This salinity minimum ranges between 33.95 and 34.05 ‰ and identifies the upper limit of the North Pacific Intermediate Water at NOVEMBER. Below 600 meters the salinity increases with depth to a value of about 34.56 ‰ at 1500 meters.

SUMMARY

Ocean Station NOVEMBER is located in the Subtropical Region at the eastern North Pacific Ocean which is known to be under the influence of a clockwise gyral motion. In the vicinity of NOVEMBER the flow is so slow, however, that the near surface waters have time to become adjusted to the local atmospheric climate (Tully, 1964). At the latitude of NOVEMBER the seasonal range of temperature is relatively small, 18 to 24°C, and the temperature of the surface waters is maintained at a high level. The dominant climatic influence in the vicinity of NOVEMBER is the excess of evaporation over precipitation. The excess evaporation increases the salinity of the surface waters and therefore increases the density, which, in turn, would promote convective mixing.

The results of the oceanographic observations at Ocean Station NOVEMBER between March 1967 and March 1968 revealed a stable temperature structure during the entire period with a maximum surface temperature of 24.5° C in September and a minimum of about 17.8° C in March 1968. A convective mixing process was evidenced in January and February 1968 by the rise in temperature at the 100, 200, 300, and 400 meters levels. Due to the stable temperature structure at NOVEMBER, this increase in temperature at the 100–400 meter levels could be explained only by a convective mixing process or by advection. Due to the increase of salinity at these levels during this period the convective mixing process, caused by an increase in surface salinity, is the most likely explanation.

Two minima were observed in the vertical salinity distribution during the spring and summer months, one at about 200 meters and the other at about 500 meters. This situation was explained by Sverdrup (1942) as the result of the oceanic circulation. The upper minimum was identified as the result of the North Pacific Central Water spreading over the Subarctic Water and the lower minimum as the direct continuation of the Intermediate Water flowing in the eastern gyral of the North Pacific Ocean. The upper minimum is destroyed during the winter months by the convective mixing which increases the salinity.

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CG-373-20 Shuhy, J. L. Oceanographic Observations at North Atlantic Ocean Station BRAVO, October 1966–October 1967. (In Prep.)

CG-373-21 Shuhy, J. L. Oceanographic Observations at North Atlantic Ocean Station ECHO, October 1966—October 1967. (In Prep.)

CG-373-22 Stanley, D. J. and G. Kelling (1969) Smithsonian Geological Investigation of Wilmington Submarine Canyon, USCGC ROCKAWAY, 4–10 December 1967.

CG-373-23 Husby, D. M. (1969) Oceanographic Observations at North Atlantic Ocean Station DELTA, July 1966—August 1967.

CG-373-24 Husby, D. M. Report of Oceanographic Cruise, USCGC NORTHWIND, Northern Bering Sea—Bering Strait—Chukchi Sea, July 1967. (In Prep.)

CG-373-25 Garcia, A. W. Oceanographic Results of Kara Barents Sea Survey 1967. (In Prep.)

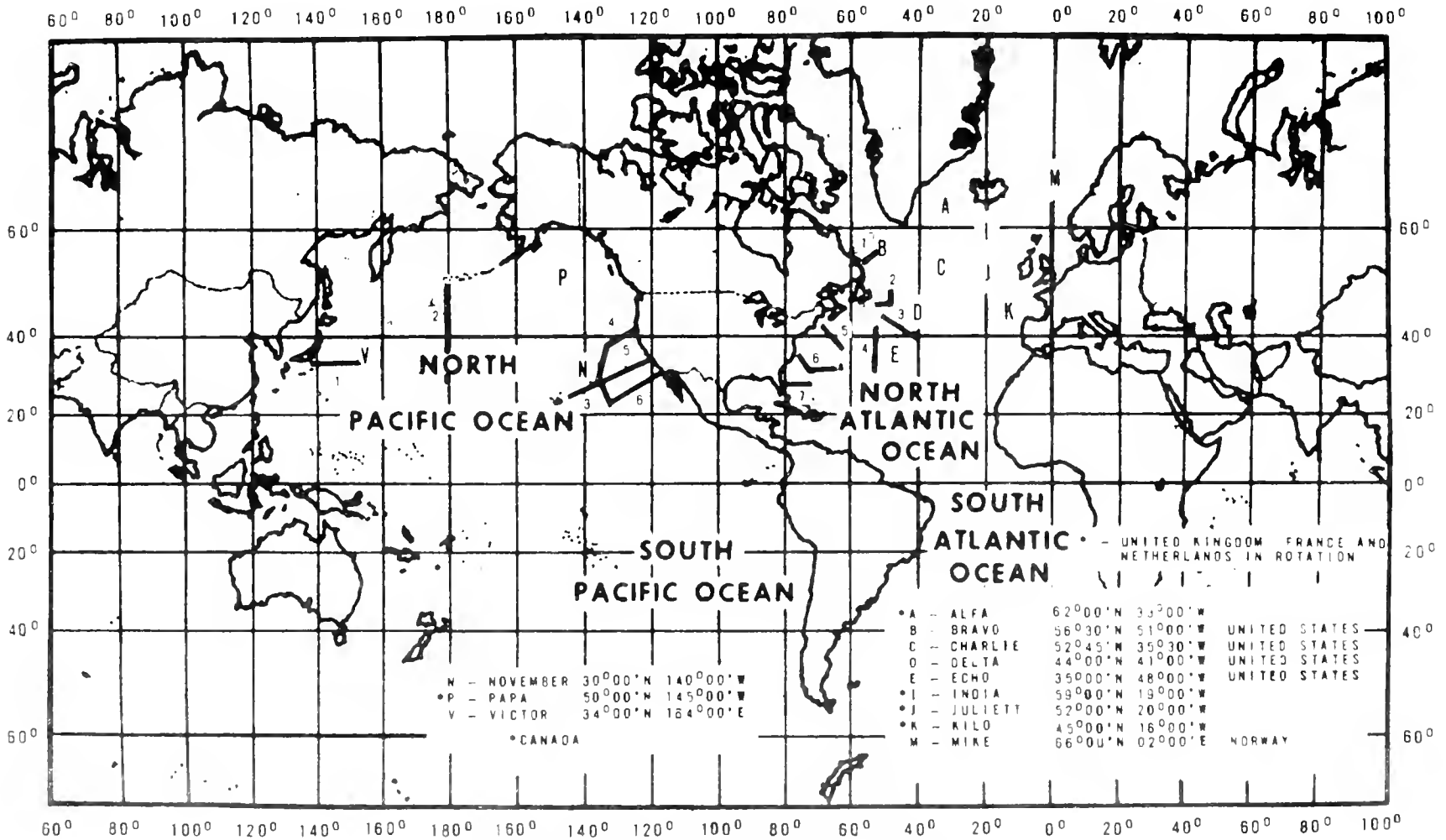

Figure 1.—Chart of all Ocean Stations in the world.

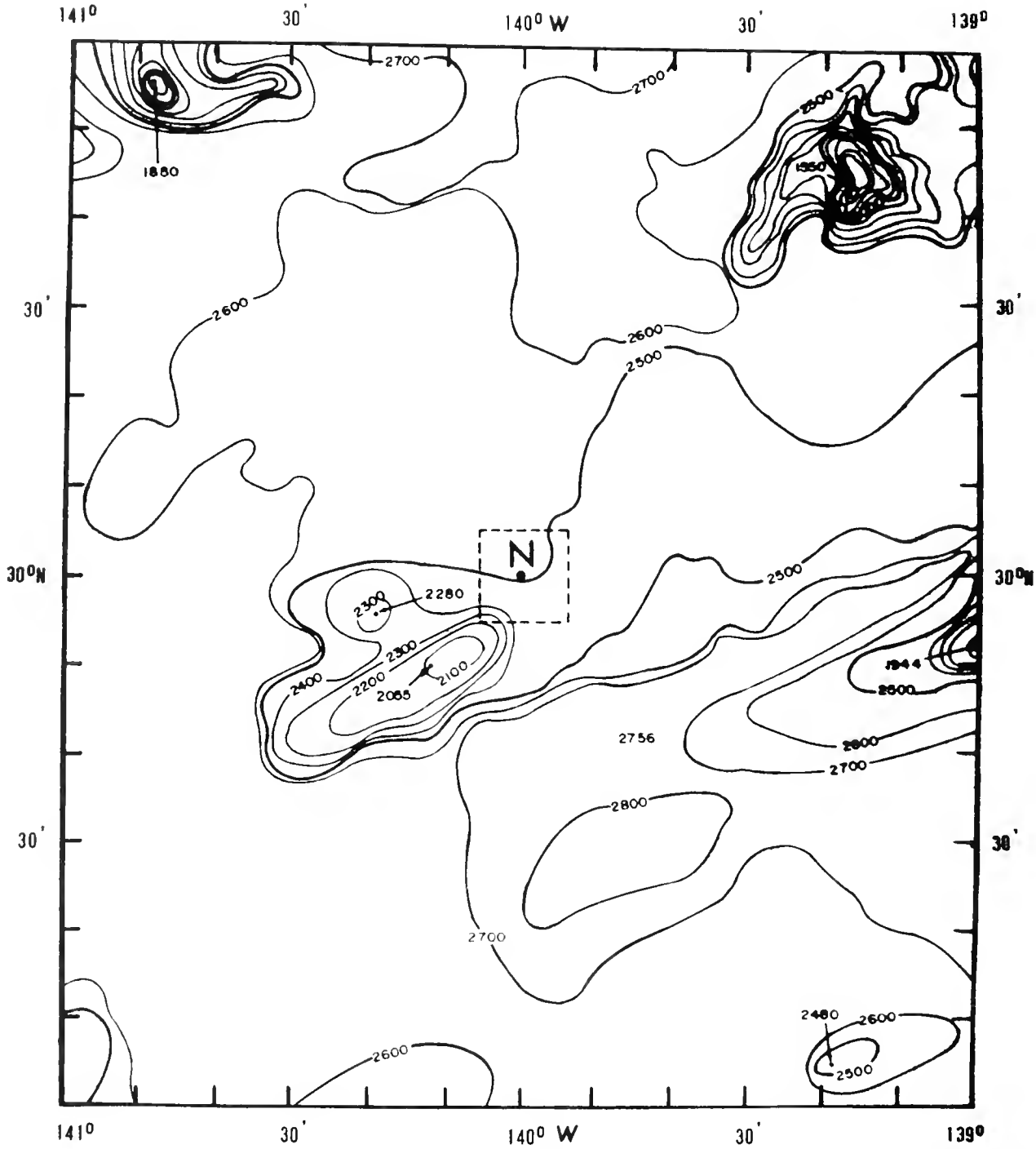

Figure 2.—Bathymetry in the vicinity of Ocean Station NOVEMBER (Contour interval is 100 fathoms).

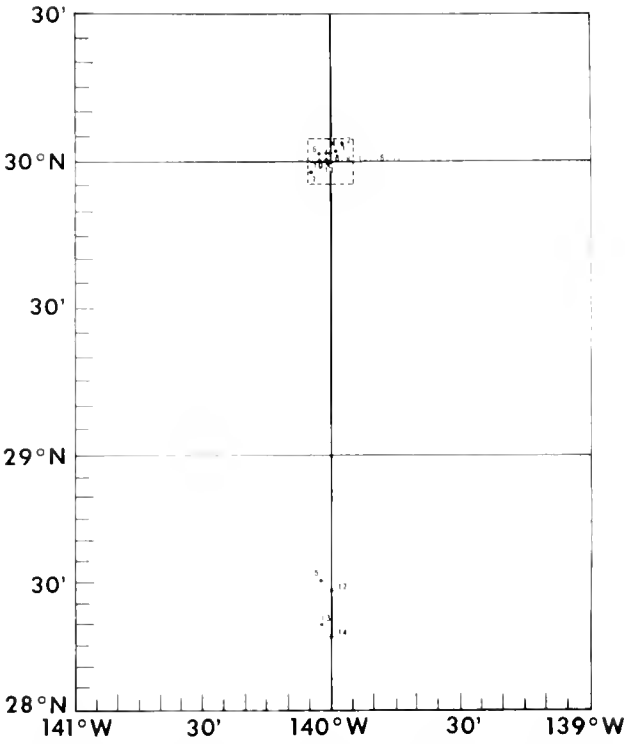

Figure 3.—Positions of oceanographic stations taken by USCGC KLAMATH during 20 March–8 April 1967 at Ocean Station NOVEMBER.

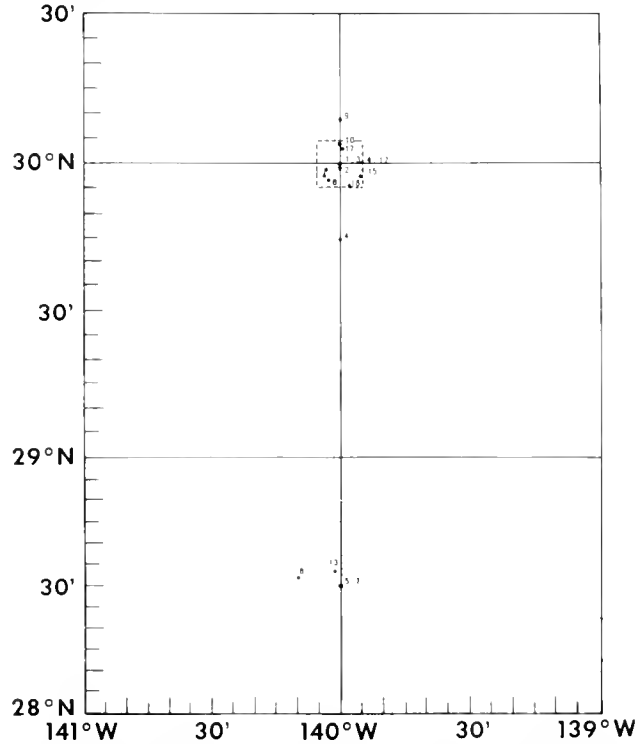

Figure 4.—Positions of oceanographic stations taken by USCGC PONTCHARTRAIN during 2–19 May 1967 at Ocean Station NOVEMBER.

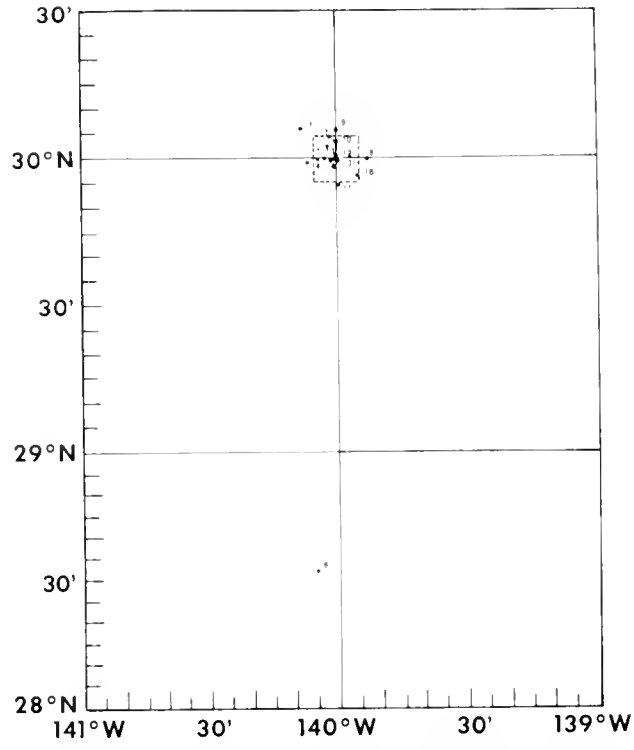

Figure 5.—Positions of oceanographic stations taken by USCGC WINONA during 15 June–1 July 1967 at Ocean Station NOVEMBER.

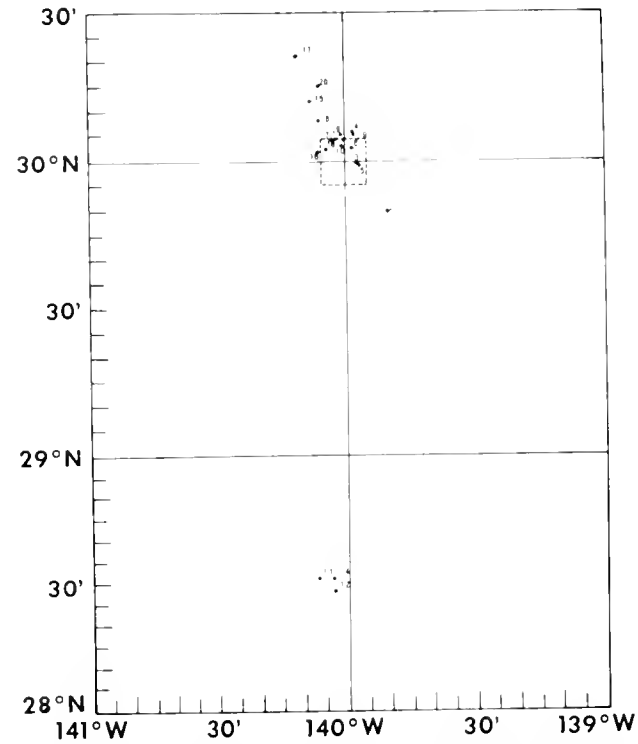

Figure 6.—Positions of oceanographic stations taken by USCGC PONTCHARTRAIN during 23 July–13 August 1967 at Ocean Station NOVEMBER.

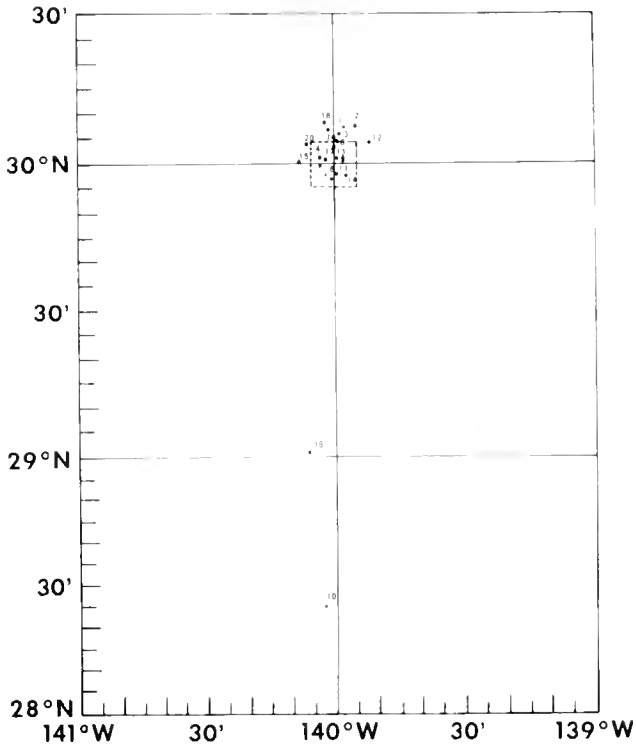

Figure 7.—Positions of oceanographic stations taken by USCGC PONTCHARTRAIN during 3–24 September 1967 at Ocean Station NOVEMBER.

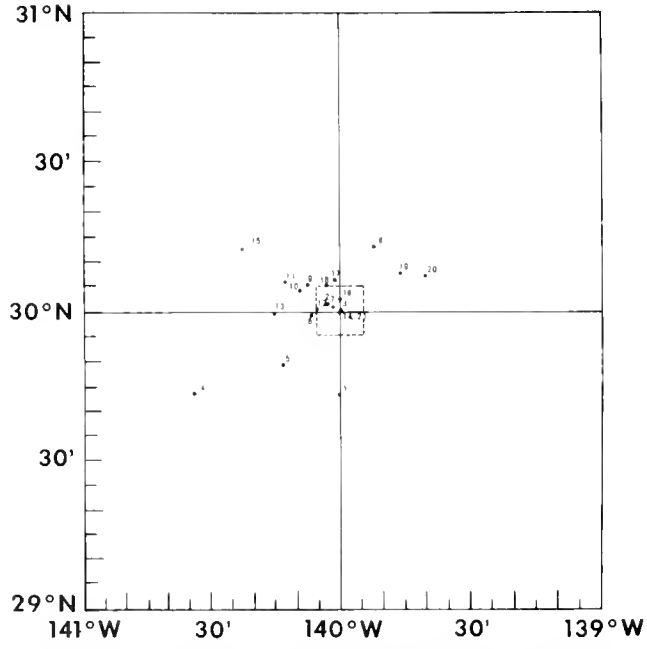

Figure 8.—Positions of oceanographic stations taken by USCGC TANEY during 15 October–5 November 1967 at Ocean Station NOVEMBER.

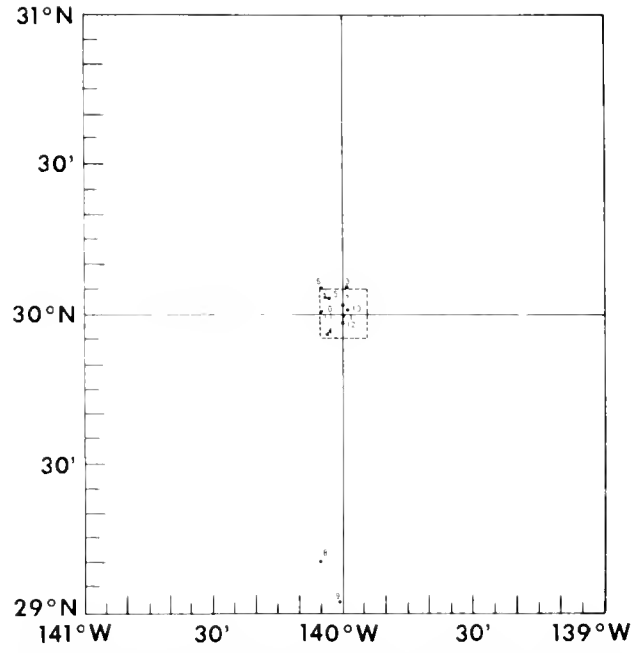

Figure 9.—Positions of oceanographic stations taken by USCGC KLAMATH during 26 November–17 December 1967 at Ocean Station NOVEMBER.

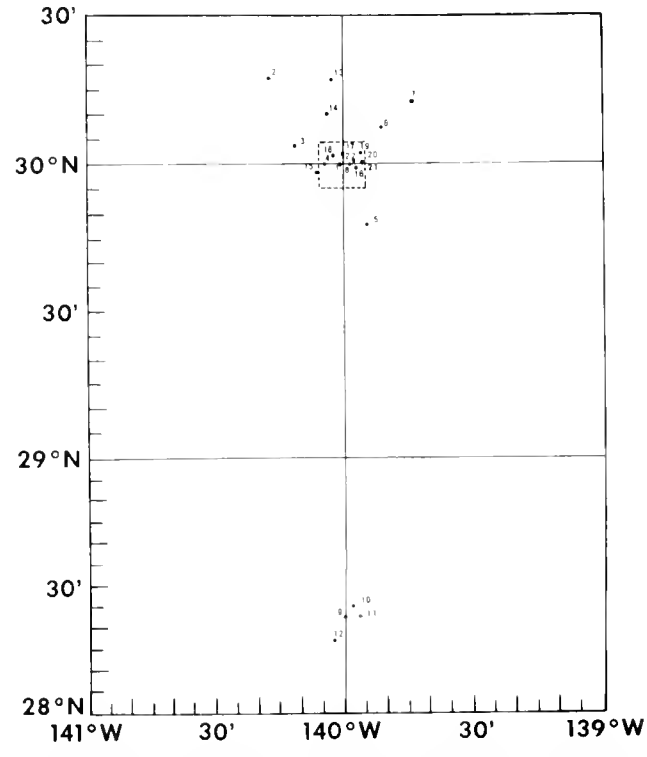

Figure 10.—Positions of oceanographic stations taken by USCGC TANEY during 7–28 January 1968 at Ocean Station NOVEMBER.

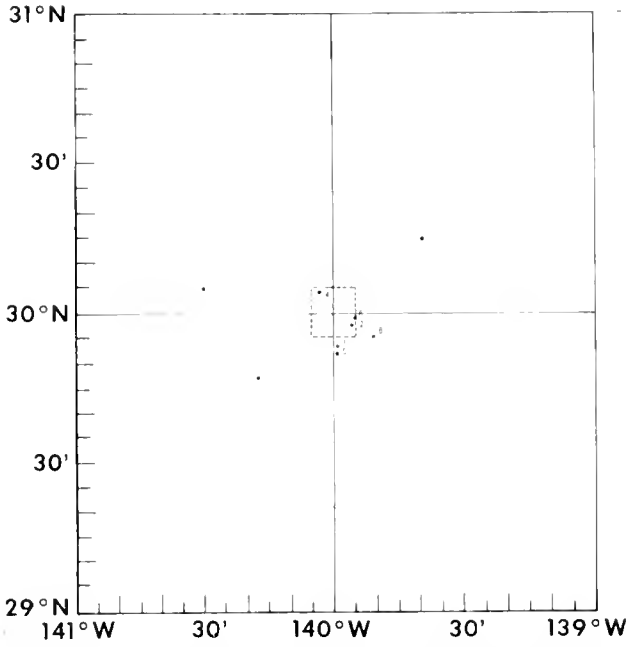

Figure 11.—Positions of oceanographic stations taken by USCGC WACHUSETT during 28 January–18 February 1968 at Ocean Station NOVEMBER.

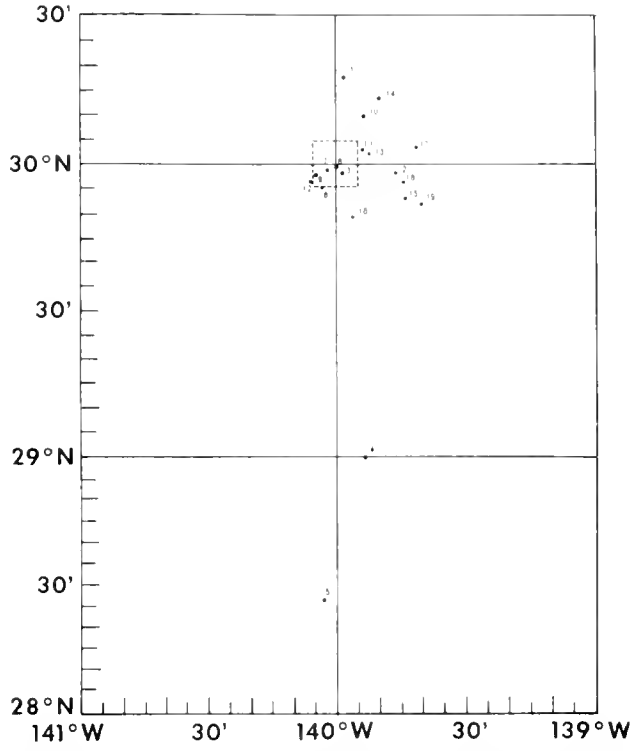

Figure 12.—Positions of oceanographic stations taken by USCGC TANEY during 18 February–10 March 1968 at Ocean Station NOVEMBER.

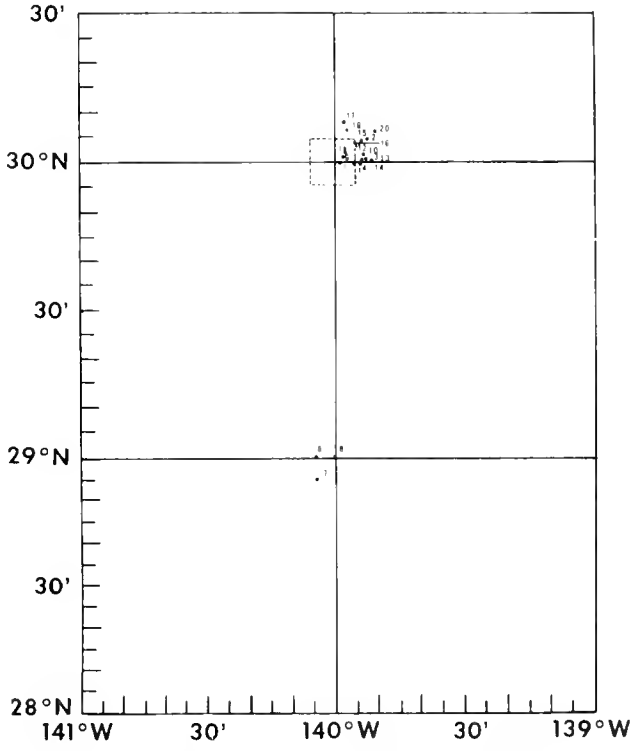

Figure 13.—Positions of oceanographic stations taken by USCGC PONTCHARTRAIN during 10–31 March 1968 at Ocean Station NOVEMBER.

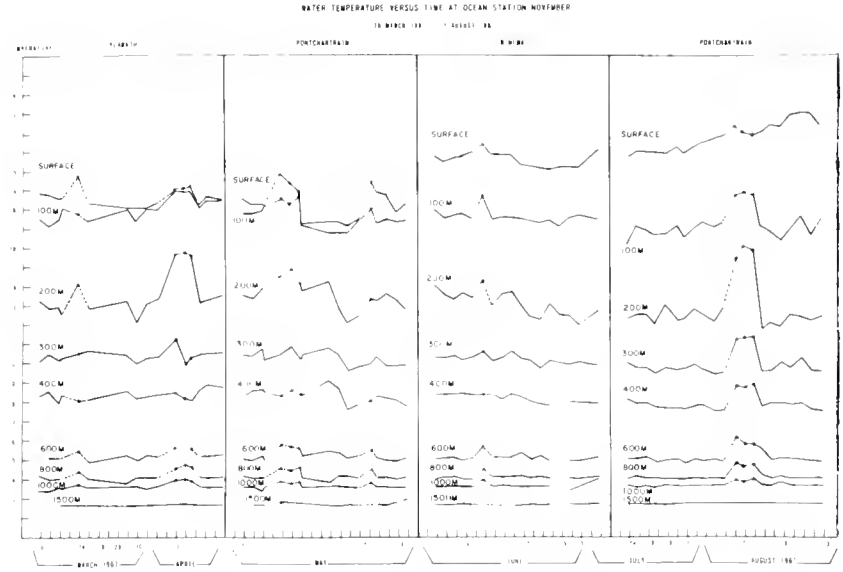

Figure 14.—Water temperature versus time at selected depths at Ocean Station NOVEMBER, 20 March–13 August 1967, (Dashed lines indicate data not taken on consecutive days and solid dots indicate data obtained outside normal O.S. grid, see Figures 3–6).

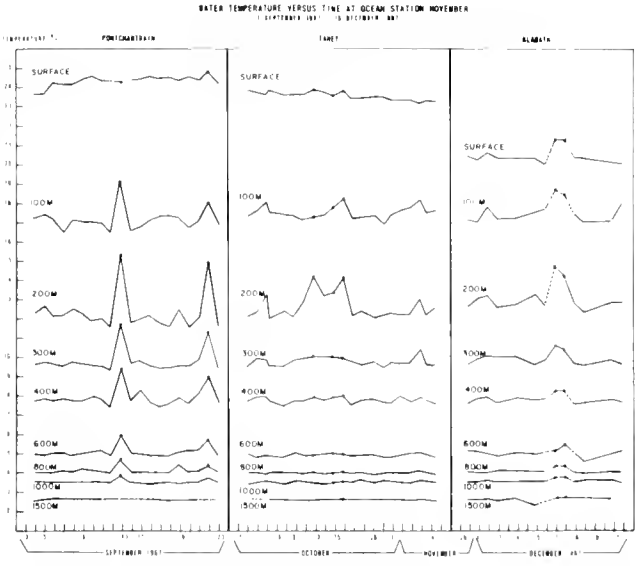

Figure 15.—Water temperature versus time at selected depths at Ocean Station NOVEMBER 3 September–16 December 1967, (Dashed lines indicate data not taken on consecutive days and solid dots indicate data obtained outside normal O.S. grid, see Figures 7–9.)

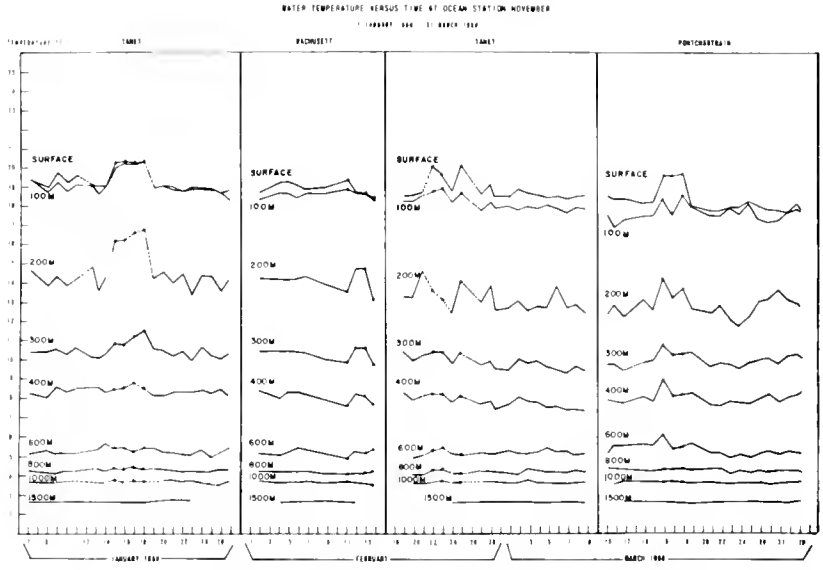

Figure 16.—Water temperature versus time at selected depths at Ocean Station NOVEMBER, 7 January–31 March 1968. (Dashed lines indicate data not taken on consecutive days and solid dots indicate data obtained outside normal O.S. grid, see Figures 10–13.)

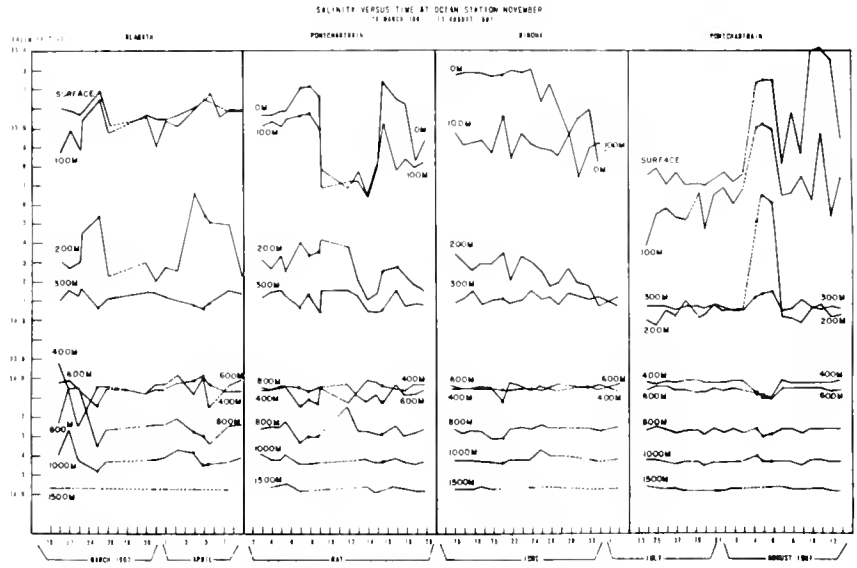

Figure 17.—Salinity versus time at selected depths at Ocean Station NOVEMBER, 20 March–13 August 1967. (Dashed lines indicate data not taken on consecutive days and solid dots indicate data obtained outside normal O.S. grid, see Figures 3–6.)

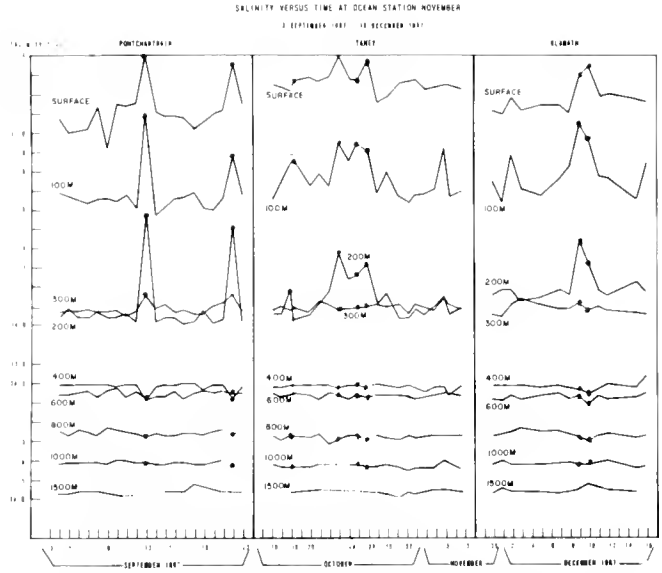

Figure 18.—Salinity versus time at selected depths at Ocean Station NOVEMBER, 3 September–16 December 1967, (Dashed lines indicate data not taken on consecutive days and solid dots indicate data obtained outside normal O.S. grid, see Figures 7–9.)

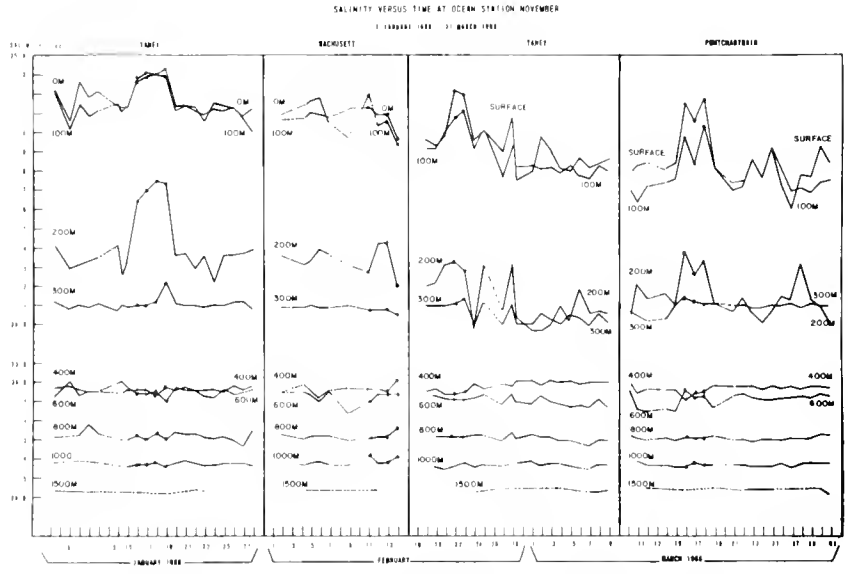

Figure 19.—Salinity versus time at selected depths at Ocean Station NOVEMBER, 7 January–31 March 1968, (Dashed lines indicate data not taken on consecutive days and solid dots indicate data obtained outside normal O.S. grid, see Figures 10–13.)

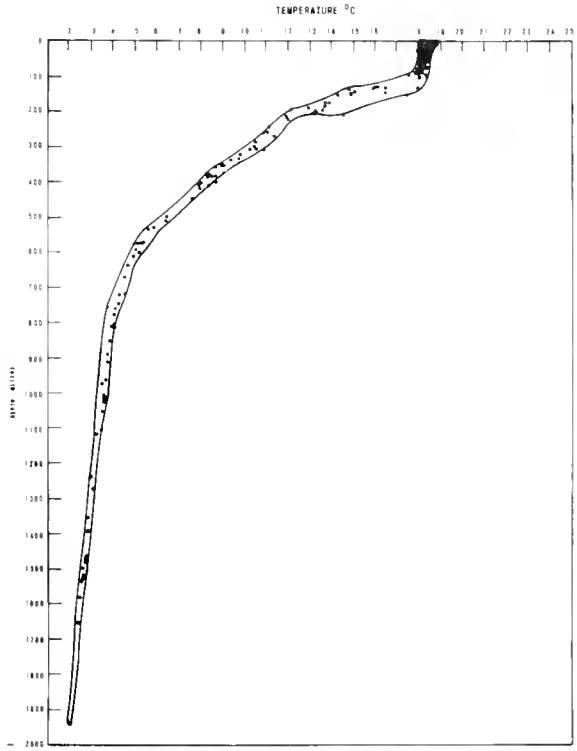

Figure 20.—Envelope of temperature versus depth at oceanographic stations taken by USCGC KLAMATH at Ocean Station NOVEMBER, 20 March–8 April 1967.

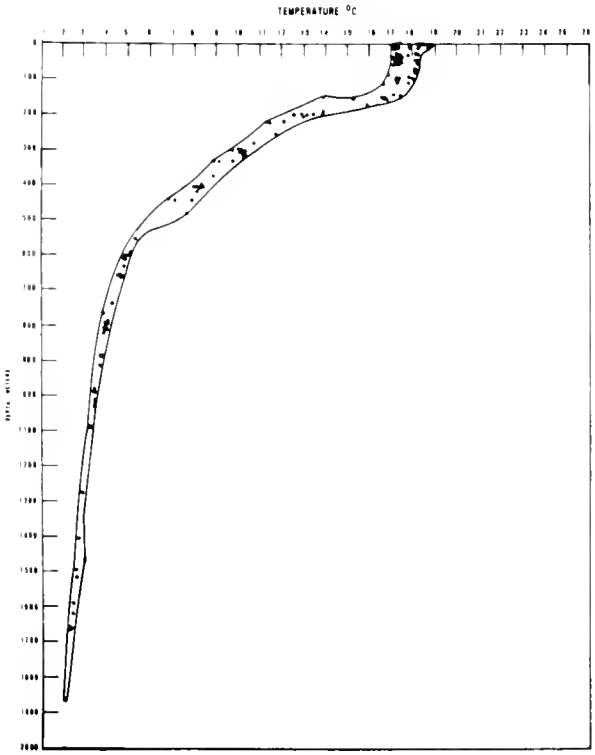

Figure 21.—Envelope of temperature versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 2–19 May 1967.

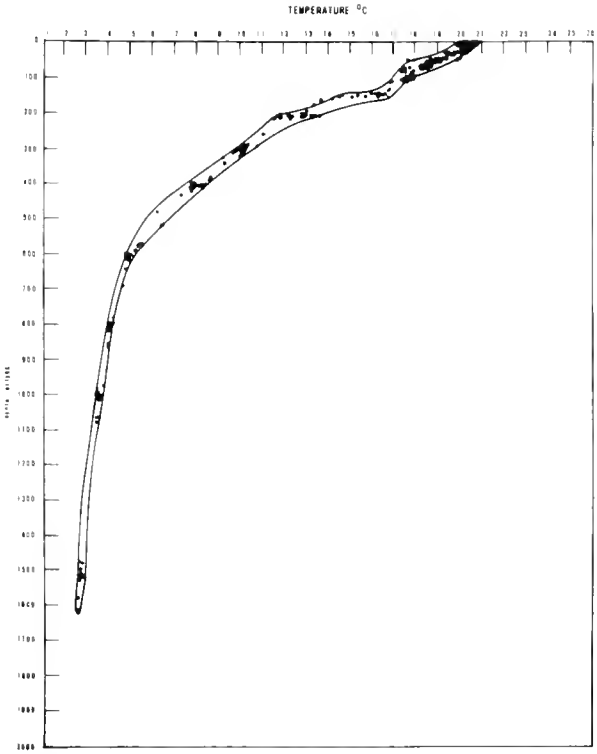

Figure 22.—Envelope of temperature versus depth at oceanographic stations taken by USCGC WINONA at Ocean Station NOVEMBER, 15 June–1 July 1967.

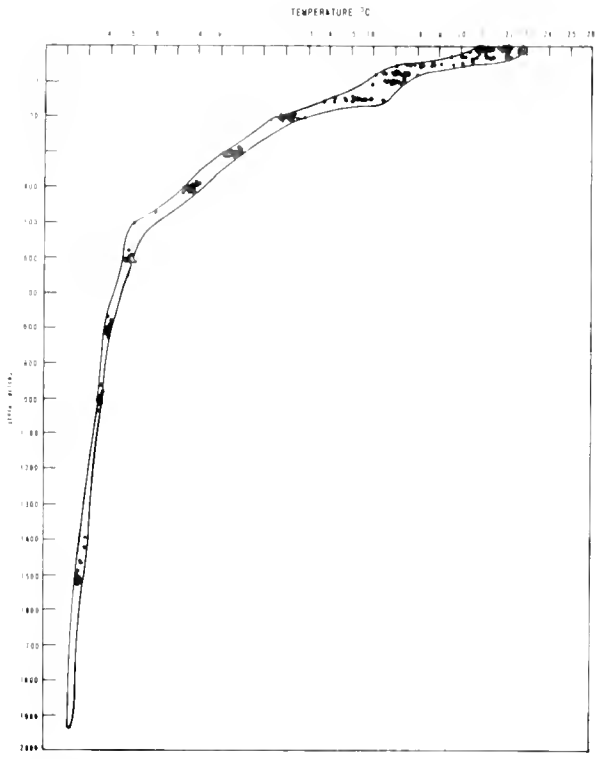

Figure 23.—Envelope of temperature versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 23 July–13 August 1967.

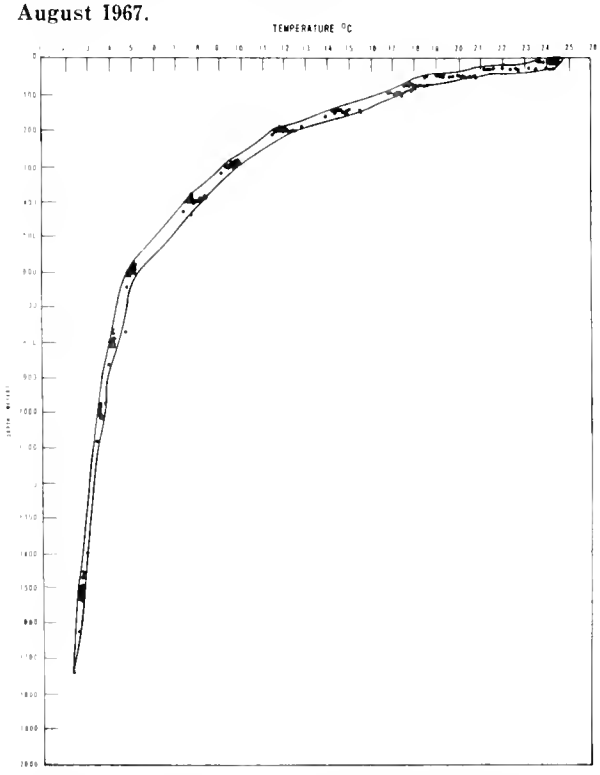

Figure 24.—Envelope of temperature versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 3–24 September 1967.

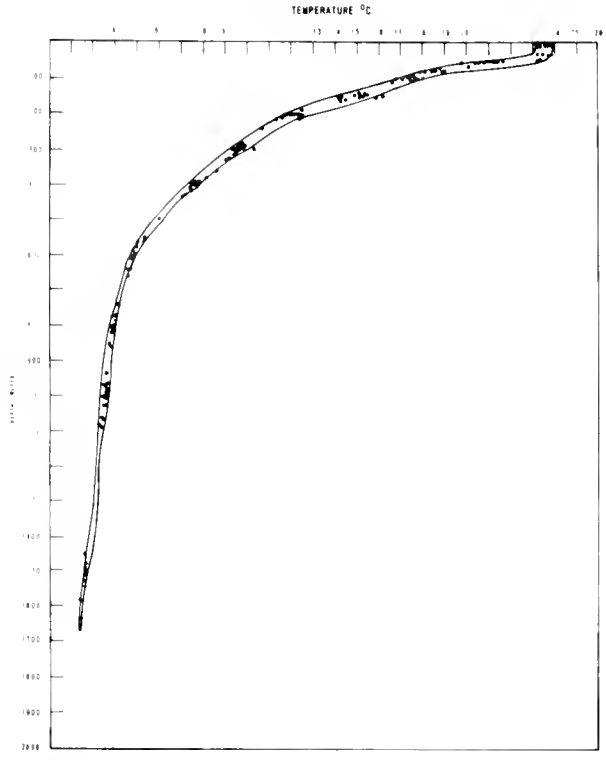

Figure 25.—Envelope of temperature versus depth at oceanographic stations taken by USCGC TANEY at Ocean Station NOVEMBER, 15 October–5 November 1967.

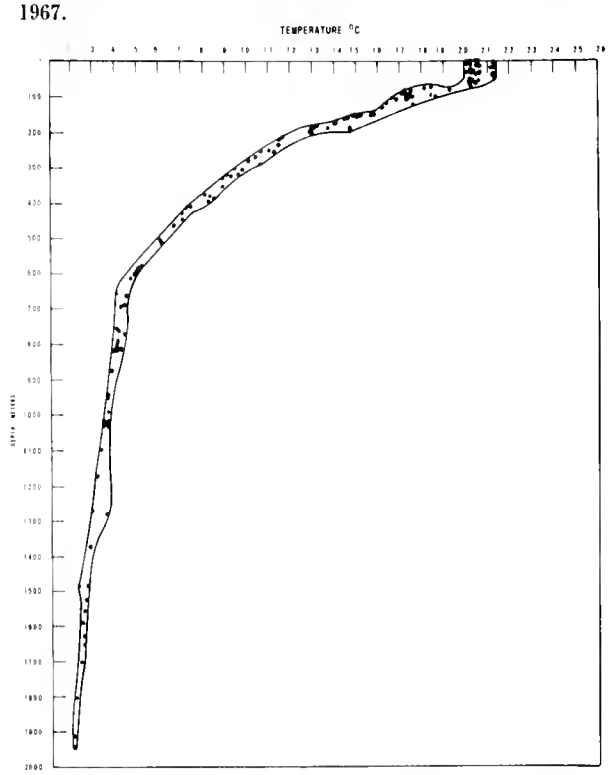

Figure 26.—Envelope of temperature versus depth at oceanographic stations taken by USCGC KLAMATH at Ocean Station NOVEMBER, 26 November–17 December 1967.

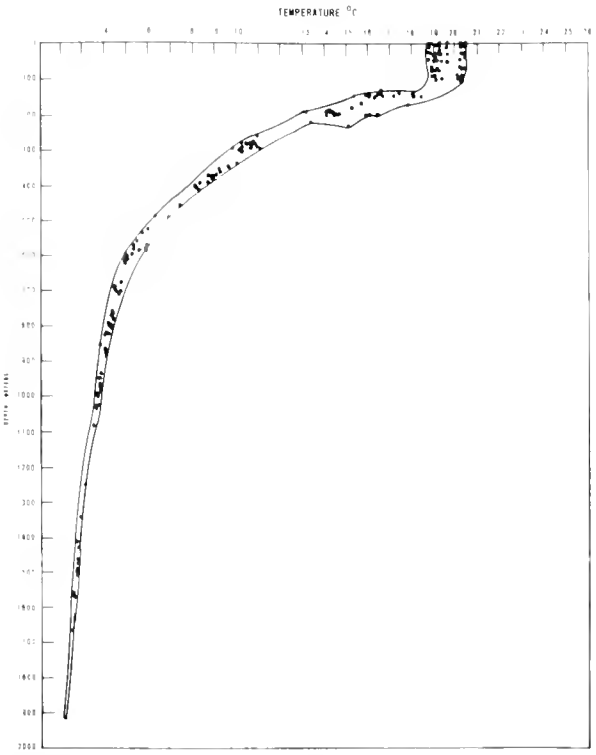

Figure 27.—Envelope of temperature versus depth at oceanographic stations taken by USCGC TANEY at Ocean Station NOVEMBER, 7–28 January 1968.

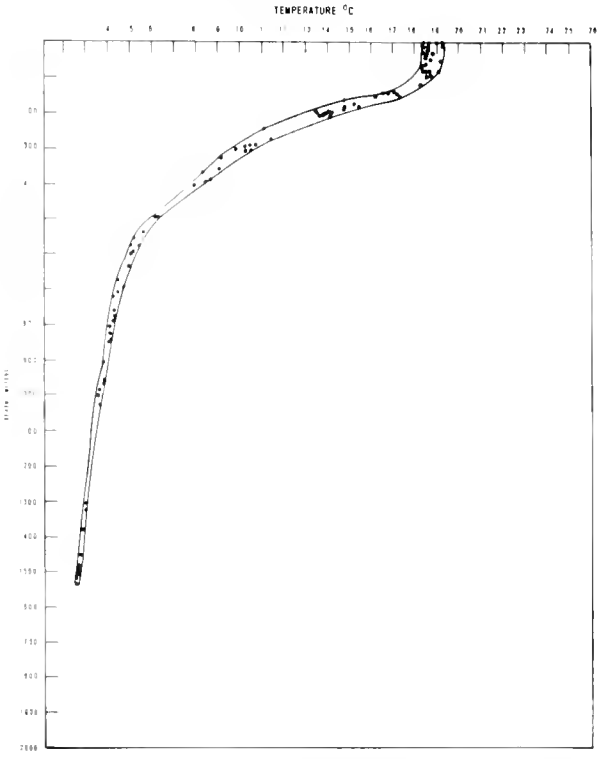

Figure 28.—Envelope of temperature versus depth at oceanographic stations taken by USCGC WACHUSETT at Ocean Station NOVEMBER, 28 January–18 February 1968.

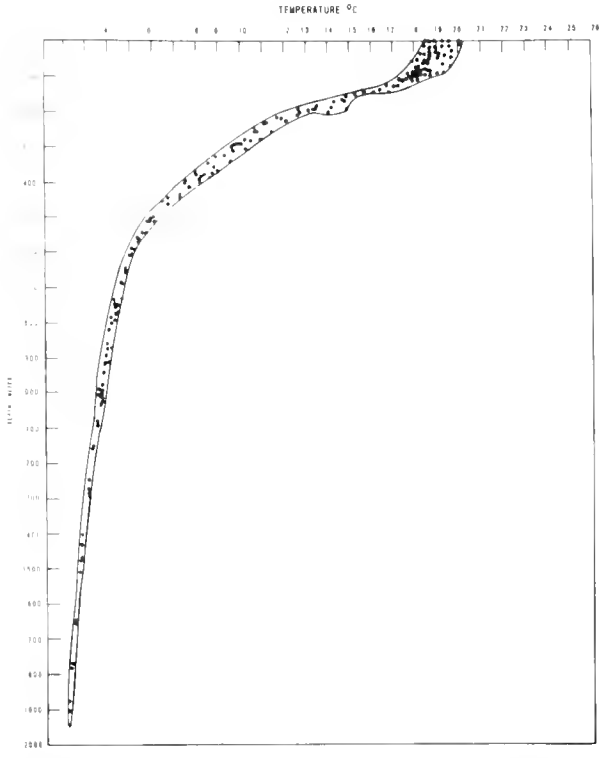

Figure 29.—Envelope of temperature versus depth at oceanographic stations taken by USCGC TANEY at Ocean Station NOVEMBER, 18 February–10 March 1968.

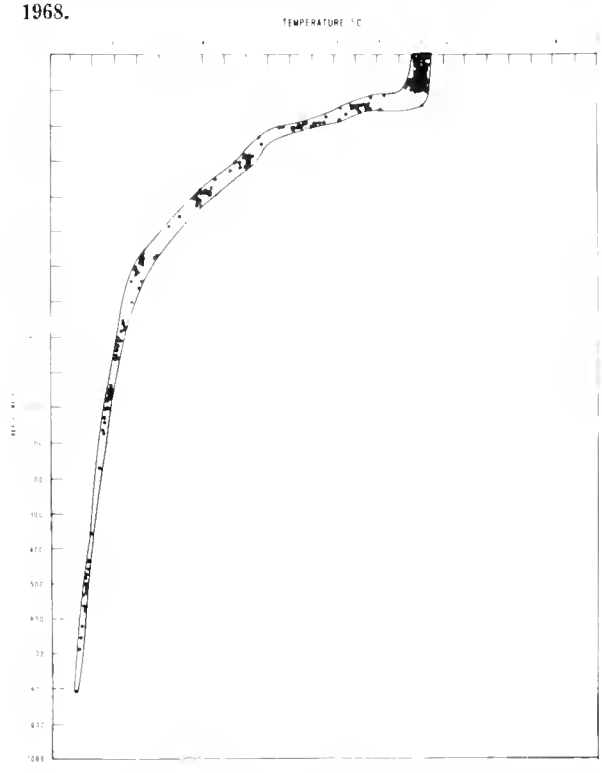

Figure 30.—Envelope of temperature versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 10–31 March 1968.

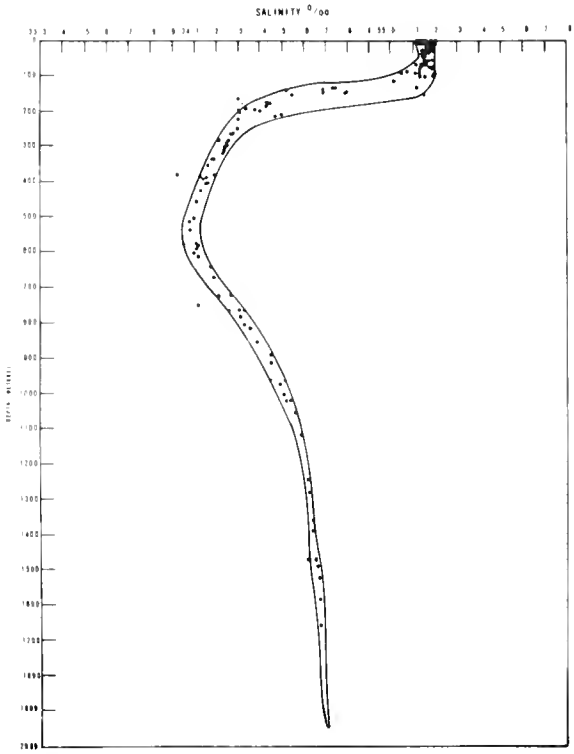

Figure 31.—Envelope of salinity versus depth at oceanographic stations taken by USCGC KLAMATH at Ocean Station NOVEMBER, 20 March–8 April 1967.

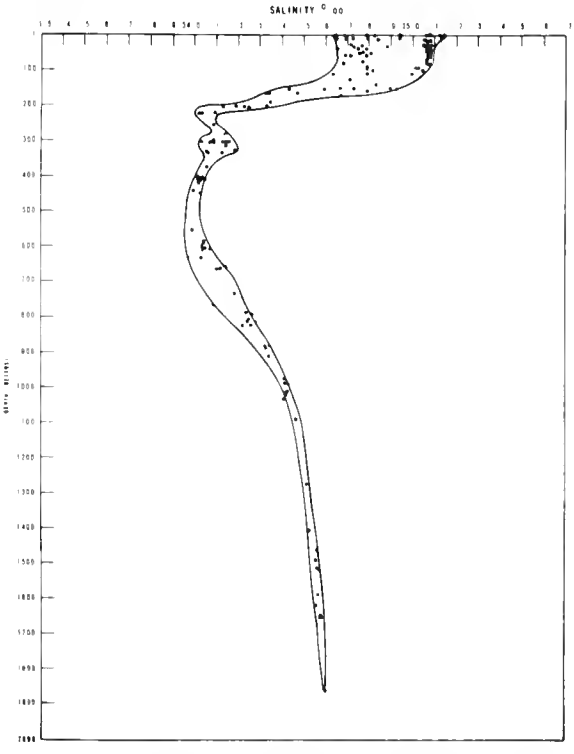

Figure 32.—Envelope of salinity versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 2–19 May 1967.

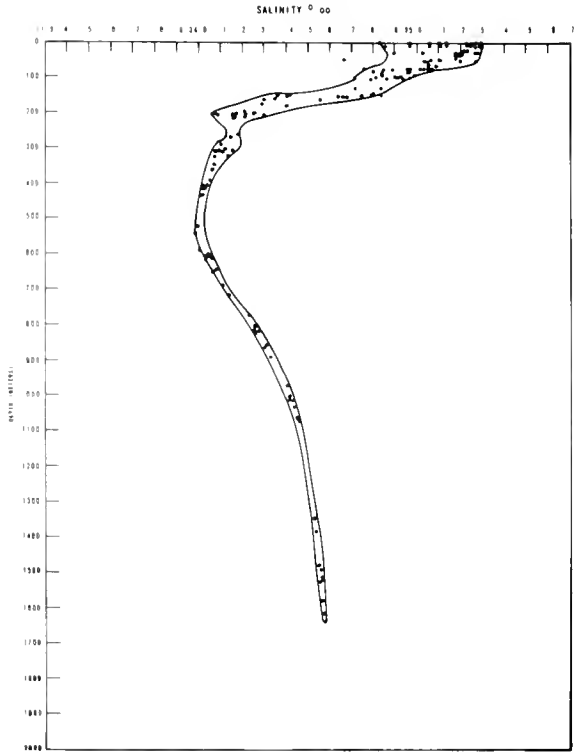

Figure 33.—Envelope of salinity versus depth at oceanographic stations taken by USCGC WINONA at Ocean Station NOVEMBER, 15 June–1 July 1967.

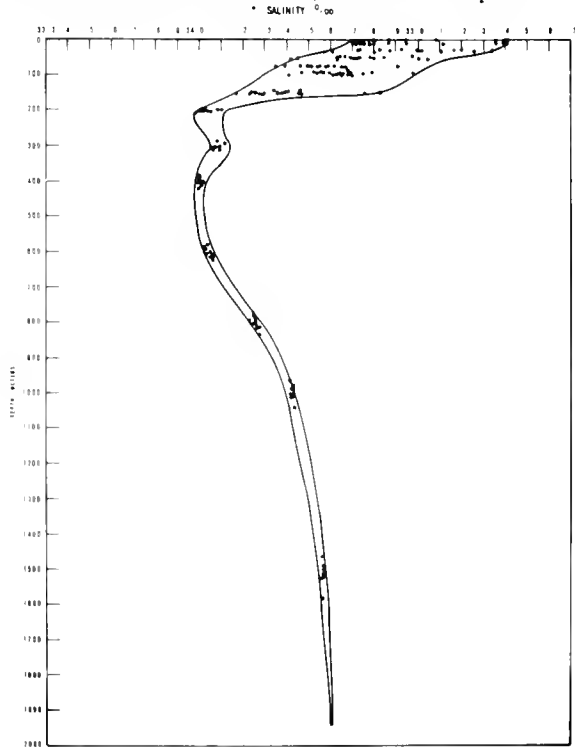

Figure 34.—Envelope of salinity versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 23 July–13 August 1967.

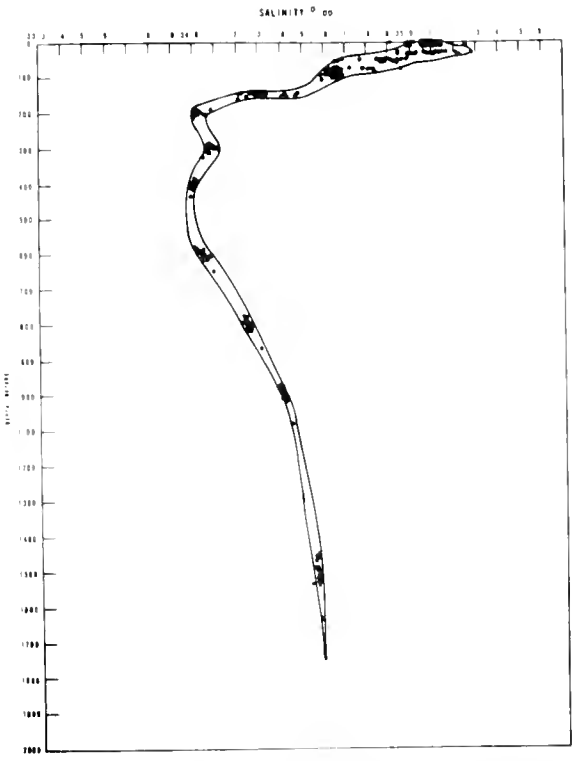

Figure 35.—Envelope of salinity versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 3–24 September 1967.

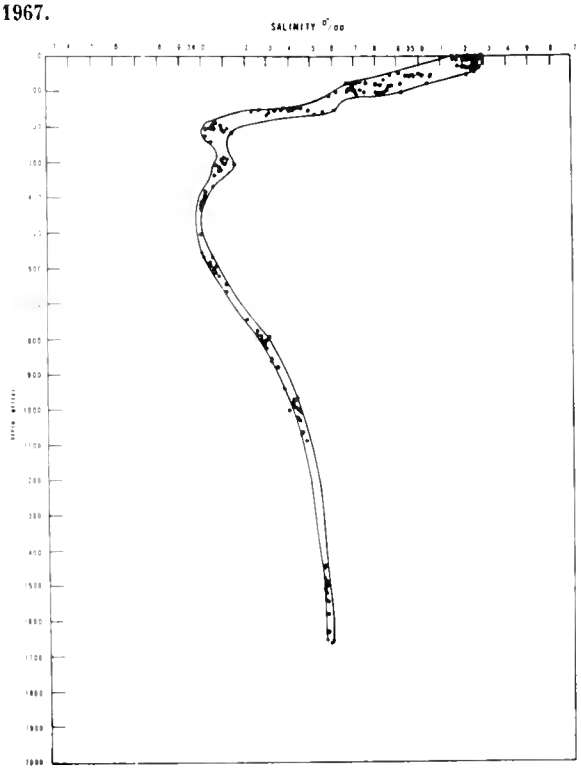

Figure 36.—Envelope of salinity versus depth at oceanographic stations taken by USCGC KLAMATH at Ocean Station NOVEMBER, 26 November–17 December 1967.

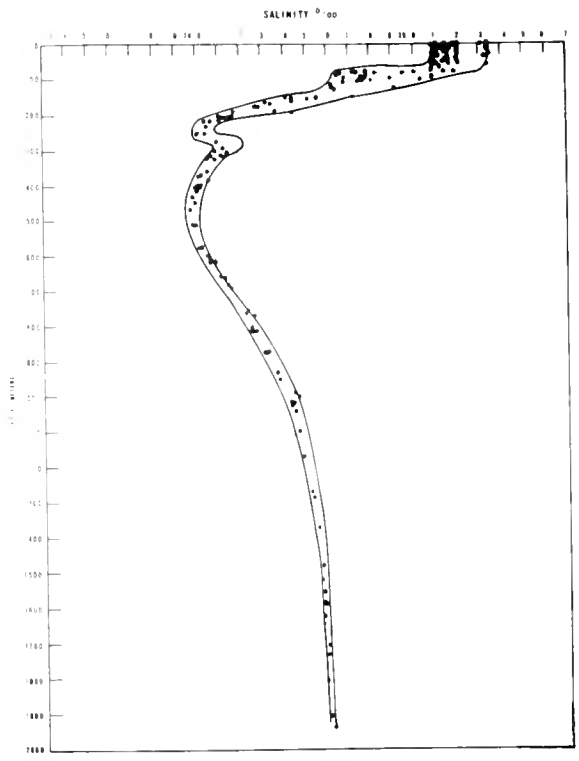

Figure 37.—Envelope of salinity versus depth at oceanographic stations taken by USCGC KLAMATH at Ocean Station NOVEMBER, 26 November–17 December 1967.

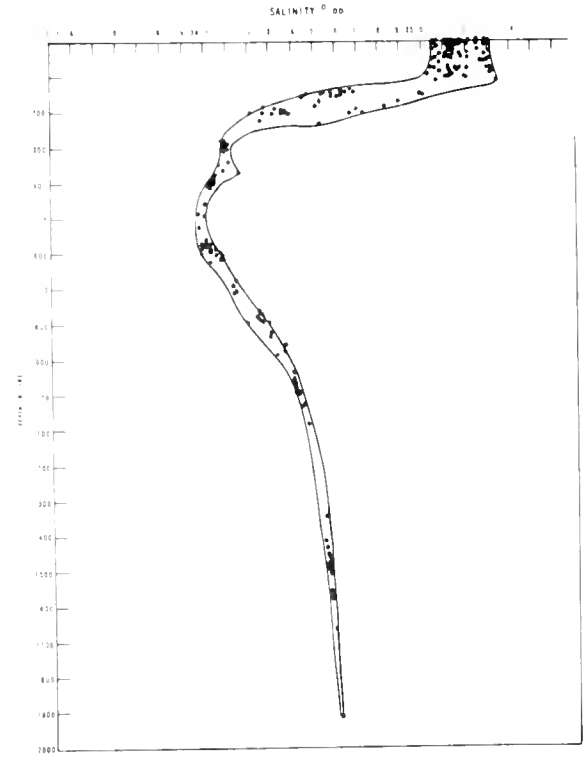

Figure 38.—Envelope of salinity versus depth at oceanographic stations taken by USCGC TANEY at Ocean Station NOVEMBER, 7–28 January 1968.

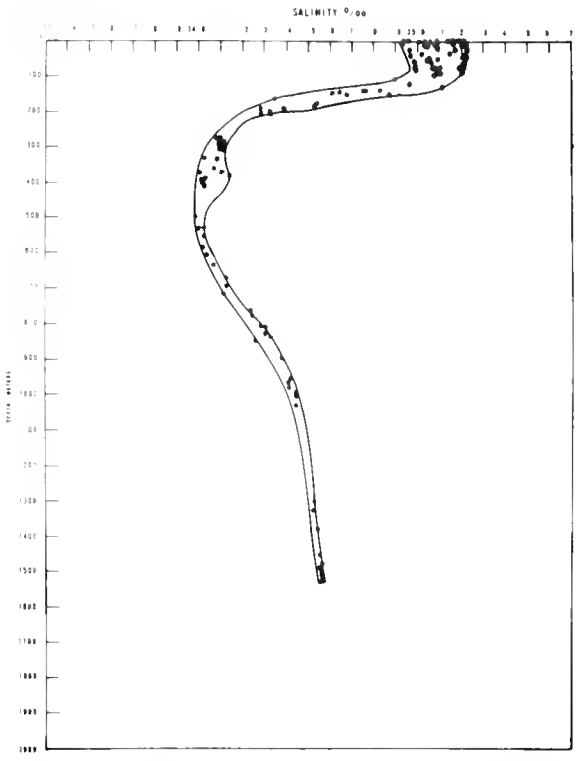

Figure 39.—Envelope of salinity versus depth at oceanographic stations taken by USCGC WACHUSETT at Ocean Station NOVEMBER, 28 January–18 February 1968.

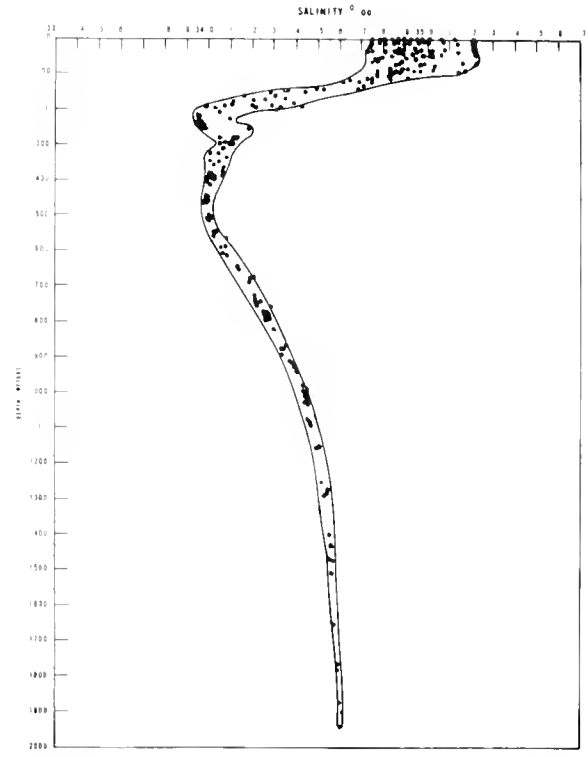

Figure 40.—Envelope of salinity versus depth at oceanographic stations taken by USCGC TANEY at Ocean Station NOVEMBER, 18 February–10 March 1968.

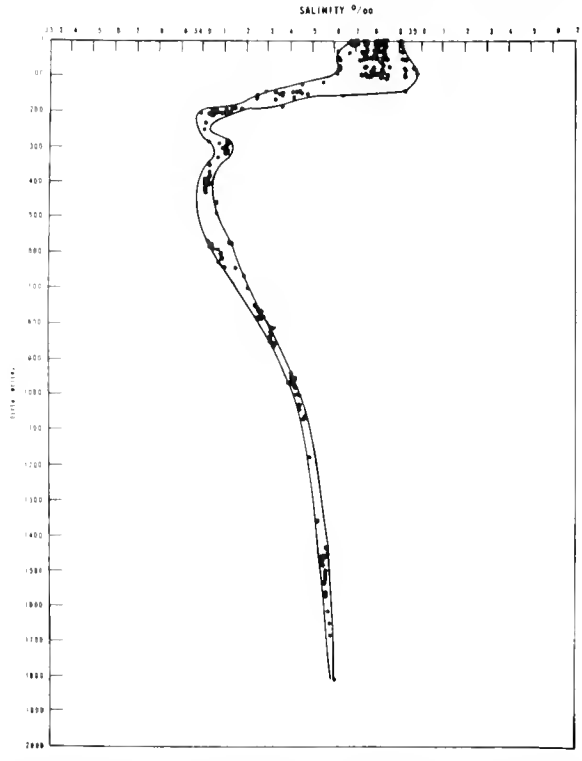

Figure 41.—Envelope of salinity versus depth at oceanographic stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 10–31 March 1968.

Explanation of Oceanographic Station Data

A. Description of Entries, Units and Codes on NODC Station Listing

1. Surface Observations

Entry	*Description of Field*
NODC REF. ID. NO.	NODC reference identity number.
COUNTRY CODE	Indicates nationality of the institute or agency conducting the survey or expedition.
CRUISE NUMBER	A reference number assigned by NODC for storage-retrieval purposes. NODC Publication C–1, *Reference Sources of Oceanographic Station Data*, gives complete bibliographic and other pertinent information for each cruise.
SHIP CODE	Alphabetic representation of ship's name (or ICES numeric ship code).
LATITUDE	Degree, minutes, and tenths of minutes, N or S.
LONGITUDE	Degrees, minutes, and tenths of minutes, E or W.
DRIFT INDICATOR	The letter D appears in this column if extensive drift occurred while on station.
MARSDEN SQUARE	
10°	Marsden square number according to the Marsden square system.
1°	The one-degree square number according to the Marsden square system.
STATION TIME (GMT)	Date and time given by the originator (GMT)
MONTH	Month (GMT)
DAY	Day (GMT)
HR. 1/10	GMT to nearest tenth of an hour.
YEAR	Year.
ORIGINATOR'S CRUISE NUMBER	Alphabetic or alpha-numeric designator as assigned by the originator. If the year of the cruise forms part of the cruise numbering system, the year digits are found in preceding field.
STATION NUMBER	Originator's station number or designator.
DEPTH TO BOTTOM	Corrected or uncorrected sounding depth in meters.
MAX. DEPTH OF SAMPLES	Depth of deepest sample in hundreds of meters to nearest hundred-meter interval.
WAVE OBSERVATIONS DIR.	Direction from which the dominant waves are coming, in tens of degrees, according to WMO Code 0885.
HGT.	Height of dominant waves according to WMO Code 1555.
PER.	Period of dominant waves according to WMO Code 3155.
SEA AMT.	Sea amount (sea state) according to WMO Code 3700 (preceded by the letter A).
WEATHER CODE	If preceded by the letter X, weather according to WMO Code 4501. A numeric two-digit entry indicates weather according to WMO Code 4677.
*INSTR. CLOUD	This field is used either for recording instrument code when electronically obtained data are being reported, or for reporting cloud type and cloud amount when conventional Nansen cast data are being reported.
*INSTR.	A two character code representing instrument package of system.
TYPE	Cloud type according to WMO Code 0500.
AMT.	Cloud amount according to WMO Code 2700.
NODC STATION NUMBER	Assigned by NODC for data storage and retrieval purposes. The NODC Reference Identity and Station numbers combined, uniquely define each station in the NODC archives.

Entry	*Description of Field*
*DT /*S"/D	This indicator specifies that the reported data have been obtained electronically rather than by Nansen-type casts. U (up) and D (down) are cast indicators for electronically obtained serial data and specify that the data were taken while hoisting or lowering respectively.
WATER COLOR	Water color according to Forel-Ule Code.
TRANS. (m)	Water transparency in meters as determined by Secchi disc.
WIND	
DIR.	Direction from which wind is blowing in tens of degrees, according to WMO Code 0877.
SPEED OR FORCE	If preceded by letter S, wind speed in knots; if preceded by letter F, wind force in Beaufort code.
BAROMETER (mbs)	Barometric pressure in millibars; tens, units, and tenths places only.
AIR TEMPERATURE °C	
DRY BULB	Dry bulb air temperature in degrees centigrade, to tenths.
WET BULB	Wet bulb air temperature in degrees centigrade, to tenths.
VIS CODE	Visibility according to WMO Code 4300.
NUMBER OBS, LEVEL	The number of observed levels associated with the station.
SPECIAL OBSERVATIONS	Entries in this space vary with individual cruises or stations. Information concerning entries in this field can be requested from the NODC.

2. A complete description of the codes can be found in NODC publication M–2 (Rev. August 1964), "Processing Physical and Chemical Data from Oceanographic Stations."

TABLE I. Observed and interpolated oceanographic data for stations taken by USCGC KLAMATH at Ocean Station NOVEMBER, 20 March–8 April 1967, prepared from NODC Listing No. 31–1079 KL.

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° '1/10	DRIFT INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR,1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1079	KL	30015N	140005W		123	00	03	20	190	1967	N05	001	4603	14	24	3	6		X1	8	6	0001

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		20	S04	230	189	183	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	ΣΔD DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1888	3510	2515	0028242	0000	15191								
190		OBS	0000	1888	35104	2515			15191								
190		OBS	0009	1879	35102	2517			15190								
		STD	0010	1877	3510	2517	0028040	0028	15190								
		STD	0020	1864	3510	2521	0027761	0056	15188								
190		OBS	0027	1857	35097	2522			15187								
		STD	0030	1857	3509	2522	0027700	0084	15187								
190		OBS	0045	1849													
		STD	0050	1839	3505	2523	0027628	0139	15185								
190		OBS	0068	1809	35013	2528			15179								
		STD	0075	1807	3500	2527	0027317	0208	15179								
190		OBS	0091	1786	34948	2529			15175								
		STD	0100	1750	3487	2531	0027012	0276	15165								
		STD	0125	1648	3469	2542	0026085	0342	15136								
190		OBS	0139	1589	34594	2548			15120								
		STD	0150	1537	3452	2554	0024979	0406	15104								
190		OBS	T0188	1373	34328	2574			15055								
		STD	0200	1327	3431	2582	0022360	0524	15042								
		STD	0250	1154	3423	2610	0019821	0630	14990								
190		OBS	0283	1055	34159	2622			14959								
		STD	0300	1012	3411	2626	0018344	0725	14946								
190		OBS	T0378	0836	33924	2640			14891								
		STD	0400	0803	3394	2645	0016508	0899	14882								
		STD	0500	0668	3399	2669	0014341	1054	14847								
		STD	0600	0557	3404	2687	0012608	1188	14819								
		STD	0700	0472	3410	2701	0011259	1308	14802								
190		OBS	0723	0456	34108	2704			14799								
		STD	0800	0418	3423	2718	0009715	1413	14798								
190		OBS	T0892	0378	34346	2731			14798								
		STD	0900	0375	3435	2732	0008417	1503	14798								
		STD	1000	0340	3439	2738	0007773	1584	14800								
		STD	1100	0313	3443	2744	0007225	1659	14806								
		STD	1200	0294	3448	2749	0006764	1729	14815								
		STD	1300	0284	3452	2754	0006394	1795	14828								
190		OBS	1360	0281	34544	2756			14837								

TABLE I.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS				WEATHER	CLOUD CODES			NODC STATION
CTRY CODE	ID. NO.	CODE	° 1/10	° '1/10	INDICTR	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA	CODE	TYPE	AMT		NUMBER
31	1079	KL	30035N	13957 W		122	09	03	21	192	1967	N05	002	4389	11	20	3	9		X1	6	7		0002

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		19	S22	183	200	200	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$x10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1874	3509	2517	0028028	0000	15187								
192		OBS	0000	1874	35087	2517			15187								
192		OBS	0007	1870	35092	2519			15187								
		STD	0010	1870	3509	2518	0027944	0028	15188								
		STD	0020	1868	3509	2519	0027930	0056	15189								
192		OBS	0022	1867	35089	2519			15189								
		STD	0030	1858	3509	2521	0027760	0084	15188								
192		OBS	0037	1852	35081	2522			15187								
		STD	0050	1843	3508	2524	0027506	0139	15186								
192		OBS	0055	1841	35076	2525			15187								
192		OBS	0074	1837	35077	2526			15189								
		STD	0075	1832	3507	2527	0027371	0208	15187								
		STD	0100	1718	3499	2548	0025441	0274	15157								
192		OBS	0119		34918												
		STD	0125	1608	3482	2561	0024255	0336	15126								
		STD	0150	1501	3448	2559	0024508	0397	15092								
192		OBS	0152	1493	34454	2559			15090								
		STD	0200	1288	3427	2587	0021898	0513	15028								
192		OBS	0226	1201	34200	2599			15002								
		STD	0250	1151	3419	2607	0020061	0618	14988								
		STD	0300	1048	3416	2623	0018615	0714	14960								
192		OBS	0300	1048	34156	2623			14960								
		STD	0400	0853	3405	2647	0016423	0890	14903								
192		OBS	0451	0759	34016	2658			14875								
		STD	0500	0658	3402	2672	0014012	1042	14843								
192		OBS	T0597	0511	34014	2690			14800								
		STD	0600	0509	3401	2691	0012215	1173	14799								
		STD	0700	0448	3402	2698	0011565	1292	14791								
192		OBS	T0751	0422	34017	2700			14788								
		STD	0800	0400	3404	2705	0010914	1404	14788								
		STD	0900	0363	3413	2715	0009902	1508	14790								
		STD	1000	0339	3426	2728	0008739	1601	14798								
		STD	1100	0327	3444	2744	0007341	1682	14812								
192		OBS	1123	0326	34485	2747			14816								

TABLE I.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° '1/10	QUARTER DEGREE SECTOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1079	KL	30021N	139585W		122	09	03	22	195	1967	N05	003		4206	14	13	4	6		X1	7	6		0003

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		31	S14	200	172	156	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1858	3507	2520	0027760	0000	15182								
195		OBS	0000	1858	35071	2520			15182								
195		OBS	0008	1854	35073	2521			15183								
		STD	0010	1854	3507	2521	0027684	0028	15183								
		STD	0020	1852	3507	2522	0027685	0055	15184								
195		OBS	0029	1848	35070	2522			15184								
		STD	0030	1847	3507	2523	0027606	0083	15184								
195		OBS	0044	1838	35063	2524			15184								
		STD	0050	1837	3506	2525	0027496	0138	15184								
195		OBS	0068	1832	35050	2525			15186								
		STD	0075	1824	3503	2525	0027501	0207	15185								
195		OBS	0088	1799	34979	2528			15179								
		STD	0100	1747	3488	2533	0026870	0275	15164								
		STD	0125	1634	3469	2545	0025774	0341	15132								
195		OBS	0133	1596	34630	2549			15121								
		STD	0150	1505	3450	2559	0024447	0403	15094								
195		OBS	0177	1377	34346	2575			15055								
		STD	0200	1294	3430	2588	0021794	0519	15031								
		STD	0250	1134	3420	2611	0019683	0623	14982								
195		OBS	0267	1087	34176	2618			14968								
		STD	0300	1014	3413	2627	0018230	0718	14947								
195		OBS	0357	0893	34064	2642			14911								
		STD	0400	0796	3405	2655	0015600	0887	14881								
		STD	0500	0612	3400	2677	0013508	1032	14824								
195		OBS	0540	0556	33982	2682			14808								
		STD	0600	0503	3404	2693	0011948	1159	14797								
		STD	0700	0436	3414	2709	0010504	1272	14787								
195		OBS	T0727	0422	34167	2712			14786								
		STD	0800	0405	3425	2721	0009415	1371	14792								
		STD	0900	0381	3434	2730	0008553	1461	14800								
195		OBS	T0915	0378	34350	2731			14802								
		STD	1000	0359	3441	2738	0007859	1543	14809								
		STD	1100	0338	3447	2745	0007246	1619	14817								
		STD	1200	0317	3451	2750	0006777	1689	14825								
		STD	1300	0297	3453	2753	0006463	1755	14834								
195		OBS	1395	0279	34539	2756			14842								

TABLE I.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT	MARSDEN 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.	CODE	° 1/10'	° '1/10	INDEX	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1079	KL	30015N	140000W		123	00	03	23	005	1967	N05	004	4572	16	35	4	4		x1	6	5		0004

WATER		WIND			BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE			DRY BULB	WET BULB			
		03	512		254	189	183	8	14	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	D_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL CODE
		STD	0000	1862	3508	2520	0027798	0000	15184								
005		OBS	0000	1862	35079	2520			15184								
		STD	0010	1852	3508	2522	0027607	0028	15182								
005		OBS	0010	1852	35077	2522			15182								
		STD	0020	1847	3507	2523	0027572	0055	15183								
		STD	0030	1843	3506	2523	0027562	0083	15183								
005		OBS	0034	1842	35060	2523			15183								
		STD	0050	1841	3506	2524	0027589	0138	15186								
005		OBS	0054	1839	35063	2524			15186								
		STD	0075	1814	3504	2529	0027191	0206	15182								
005		OBS	0084	1808	35036	2530			15181								
		STD	0100	1805	3504	2531	0027093	0274	15183								
005		OBS	0109	1804	35038	2531			15184								
		STD	0125	1680	3491	2551	0025203	0340	15149								
		STD	0150	1508	3473	2576	0022833	0400	15098								
005		OBS	0163	1430	34200	25530											
		STD	0200	1253	3445	2608	0019914	0507	15019								
005		OBS	T0217	1186	34371	2615			14997								
		STD	0250	1122	3428	2619	0018882	0604	14979								
		STD	0300	1027	3417	2628	0018155	0696	14952								
005		OBS	0323	0983	34134	2632			14939								
		STD	0400	0838	3405	2649	0016194	0868	14897								
005		OBS	T0428	0788	34028	2655			14882								
		STD	0500	0653	3404	2675	0013744	1018	14841								
		STD	0600	0511	3406	2694	0011891	1146	14801								
005		OBS	0641	0468	34069	2700			14790								
		STD	0700	0441	3414	2708	0010563	1258	14789								
		STD	0800	0403	3424	2720	0009466	1358	14792								
005		OBS	T0854	0386	34292	2726			14794								
		STD	0900	0376	3434	2731	0008495	1448	14798								
		STD	1000	0356	3442	2739	0007750	1529	14807								
005		OBS	T1059	0344	34459	2743			14813								
		STD	1100	0336	3447	2745	0007230	1604	14816								
		STD	1200	0316	3449	2749	0006898	1675	14825								
		STD	1300	0298	3452	2752	0006578	1742	14834								
		STD	1400	0279	3454	2756	0006241	1806	14843								
		STD	1500	0261	3456	2759	0005918	1867	14853								
005		OBS	1584	0247	34583	2762			14861								

TABLE I.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° '1/10	DRFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES A-M-T		NODC STATION NUMBER
31	1079	KL	28320N	140020W		087	80	03	24	195	1967	N05	005	4663	11	31	4	2		X1	6	4		0005

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		08	S19	237	189	178	8	13	

MESSENGR TIME or HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCO
		STD	0000	1976	3519	2499	0029763	0000	15217								
195		OBS	0000	1976	35192	2499			15217								
		STD	0010	1969	3519	2501	0029624	0030	15217								
195		OBS	0010	1969	35192	2501			15217								
		STD	0020	1967	3519	2501	0029614	0059	15218								
		STD	0030	1965	3519	2502	0029607	0089	15219								
195		OBS	0031		35190												
195		OBS	0047	19810	35191	24980											
		STD	0050	1961	3519	2503	0029575	0148	15221								
195		OBS	0073	1956	35173	2503			15223								
		STD	0075	1937	3517	2507	0029219	0222	15218								
195		OBS	0094	1790	35165	2544			15179								
		STD	0100	1781	3515	2545	0025700	0290	15178								
		STD	0125	1733	3505	2549	0025393	0354	15166								
195		OBS	0138	1702	34986	2552			15158								
		STD	0150	1642	3491	2560	0024429	0416	15141								
195		OBS	0185		34680												
		STD	0200	1413	3454	2582	0022393	0533	15073								
		STD	0250	1215	3420	2596	0021157	0642	15011								
195		OBS	0272	1138	34098	2602			14986								
		STD	0300	1052	3407	2616	0019316	0744	14960								
195		OBS	T0362	0884	34034	2641			14908								
		STD	0400	0803	3404	2654	0015755	0919	14883								
		STD	0500	0635	3405	2678	0013443	1065	14834								
195		OBS	0534	0592	34054	2684			14823								
		STD	0600	0549	3414	2696	0011780	1191	14817								
		STD	0700	0491	3425	2711	0010335	1302	14812								
195		OBS	T0700	0491	34252	2711			14812								
		STD	0800	0442	3435	2725	0009112	1399	14809								
		STD	0900	0403	3442	2734	0008219	1485	14811								
		STD	1000	0373	3447	2741	0007579	1564	14815								
		STD	1100	0352	3451	2747	0007114	1638	14824								
195		OBS	T1113	0350	34512	2747			14825								

TABLE I.—Continued

REFERENCE CTRY CODE	REFERENCE NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1079	KL	30020N	140015W		123	00	03	25	197	1967	N05	006	4389	15	13	3	4		X6	6	8	0006

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C ORY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		25	S05	125	150	150	6	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ O DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SOC
		STD	0000	1832	3502	2523	0027511	0000	15174								
197		OBS	0000	1832	35020	2523			15174								
197		OBS	0009	1830	35027	2524			15175								
		STD	0010	1830	3503	2524	0027437	0027	15176								
		STD	0020	1829	3504	2525	0027384	0055	15177								
		STD	0030	1828	3505	2525	0027324	0082	15179								
197		OBS	0031	1828	35048	2526			15179								
197		OBS	0049	1829	35063	2527			15182								
		STD	0050	1829	3506	2526	0027318	0137	15182								
		STD	0075	1807	3503	2529	0027121	0205	15180								
197		OBS	0075	1807	35027	2529			15180								
197		OBS	0097	1756	35.09	2541			15168								
		STD	0100	1740	3498	2542	0025992	0271	15163								
		STD	0125	1612	3476	2555	0024780	0335	15125								
197		OBS	0145	1514	34590	2564			15097								
		STD	0150	1489	3455	2567	0023746	0395	15089								
197		OBS	0193	1296	34242	2583			15029								
		STD	0200	1284	3423	2585	0022095	0510	15026								
		STD	0250	1180	3417	2600	0020733	0617	14998								
		STD	0300	1066	3411	2615	0019262	0717	14965								
197		OBS	0333	0984	34082	2628			14941								
197		OBS	T0390	0831	34039	2649			14892								
		STD	0400	0807	3404	2653	0015815	0892	14885								
		STD	0500	0609	3403	2680	0013247	1038	14824								
197		OBS	0580	0498	34023	2693			14792								
		STD	0600	0486	3405	2696	0011668	1162	14790								
		STD	0700	0433	3416	2711	0010320	1272	14786								
197		OBS	0766	0407	34228	2719			14737								
		STD	0800	0400	3426	2722	0009283	1370	14791								
		STD	0900	0379	3436	2732	0008332	1459	14800								
197		OBS	0964	0366	34406	2737			14805								
		STD	1000	0359	3442	2739	0007807	1540	14809								
		STD	1100	0339	3445	2743	0007428	1616	14817								
		STD	1200	0320	3448	2747	0007055	1688	14826								
		STD	1300	0301	3451	2751	0006671	1757	14835								
		STD	1400	0283	3454	2755	0006302	1822	14845								
197		OBS	1470	0270	34559	2758			14851								

TABLE I.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDEX	MARSDEN 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.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1079	KL	29583N	14004 W		087	90	03	29	201	1967	N05	007	4298	19	10	4	3		X3	6	8		0007

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		09	S18	295	167	144	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$x10^7$	$\Sigma\Delta D$ DYN. M. $x10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at.l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL
		STD	0000	1807	3506	2532	0026653	0000	15168								
201		OBS	0000	1807	35057	2532			15168								
		STD	0010	1807	3506	2532	0026664	0027	15169								
201		OBS	0016	1807	35067	2532			15170								
		STD	0020	1807	3507	2532	0026649	0053	15171								
		STD	0030	1806	3506	2532	0026688	0080	15172								
201		OBS	0041	1806	35062	2532			15174								
		STD	0050	1808	3507	2532	0026785	0133	15176								
201		OBS	0066	1811	35070	2532			15180								
		STD	0075	1811	3507	2532	0026898	0201	15181								
		STD	0100	1809	3507	2532	0026977	0258	15185								
201		OBS	0102	1809	35065	2532			15185								
		STD	0125	1669	3475	2541	0026118	0334	15144								
201		OBS	0134	1618	34650	2546			15128								
		STD	0150	1546	3454	2553	0025025	0398	15107								
		STD	0200	1324	3430	2582	0022375	0517	15041								
201		OBS	0200	1324	34300	2582			15041								
201		OBS	T0248	1118	34195	2614			14976								
		STD	0250	1115	3419	2614	0019419	0621	14976								
		STD	0300	1040	3415	2624	0018523	0716	14957								
201		OBS	0380	0902	34091	2642			14918								
		STD	0400	0856	3407	2648	0016322	0890	14904								
		STD	0500	0655	3400	2671	0014082	1042	14842								
201		OBS	T0503	0650	33998	2672			14840								
		STD	0600	0517	3407	2694	0011898	1172	14803								
		STD	0700	0417	3415	2711	0010209	1283	14780								
201		OBS	0762	0375	34204	2720			14773								
		STD	0800	0375	3424	2723	0009145	1379	14780								
		STD	0900	0372	3434	2731	0008449	1467	14796								
		STD	1000	0363	3441	2738	0007905	1549	14810								
201		OBS	T1021	0360	34423	2739			14813								
		STD	1100	0341	3446	2744	0007355	1626	14818								
		STD	1200	0319	3450	2749	0006874	1697	14826								
201		OBS	1280	0303	34527	2753			14833								
		STD	1300	0299	3453	2753	0006486	1763	14835								
		STD	1400	0280	3454	2756	0006223	1827	14844								
		STD	1500	0263	3456	2759	0005986	1888	14853								
		STD	1750	0228	3459	2764	0005444	2031	14881								
201		OBS	1945	0207	34619	2768			14905								

TABLE I.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDCTR	MAPSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY. CODE	ID. NO.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1079	KL	3000 N	14000 W		123	00	03	30	189	1967	N05	008	4572	15	04	4	5		X2	6	8		0008

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		03	S08	280	172	144	8	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ Φ DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at.l	pH	SCC
		STD	0000	1806	3505	2531	0026673	0000	15167								
189		OBS	0000	1806	35051	2531			15167								
189		OBS	0009	1806	35049	2531			15169								
		STD	0010	1806	3505	2531	0026721	0027	15169								
		STD	0020	1806	3505	2531	0026783	0053	15171								
189		OBS	0027	17970	35044	25330											
		STD	0030	1807	3505	2531	0026831	0080	15172								
189		OBS	0045	1807	35048	2531			15175								
		STD	0050	1807	3505	2531	0026897	0134	15176								
189		OBS	0068	1808	35044	2530			15179								
		STD	0075	1807	3504	2530	0027021	0201	15180								
189		OBS	0091	1806	35037	2530			15182								
		STD	0100	1736	3490	2537	0026471	0268	15161								
		STD	0125	1562	3457	2552	0025076	0333	15109								
189		OBS	0140	1472	34424	2561			15081								
		STD	0150	1422	3438	2568	0023606	0394	15066								
189		OBS	T0198	1220	34204	2595			15004								
		STD	0200	1215	3420	2596	0021036	0505	15002								
		STD	0250	1099	3418	2616	0019212	0606	14970								
189		OBS	0292	1011	34146	2629			14945								
		STD	0300	0997	3414	2631	0017873	0698	14941								
189		OBS	T0388	0846	34051	2648			14898								
		STD	0400	0818	3405	2652	0015906	0867	14889								
		STD	0500	0622	3403	2678	0013448	1014	14829								
189		OBS	0576	0515	34009	2689			14798								
		STD	0600	0499	3403	2693	0011974	1141	14795								
		STD	0700	0443	3413	2707	0010660	1254	14790								
189		OBS	T0782	0408	34214	2718			14790								
		STD	0800	0404	3423	2719	0009552	1355	14792								
		STD	0900	0384	3433	2729	0008662	1447	14801								
189		OBS	0973	0369	34392	2736			14808								
		STD	1000	0364	3441	2738	0007917	1529	14811								
		STD	1100	0344	3447	2744	0007316	1606	14820								
		STD	1200	0324	3452	2750	0006785	1676	14829								
		STD	1300	0304	3455	2754	0006397	1742	14837								
		STD	1400	0285	3455	2756	0006237	1805	14846								
189		OBS	T1472	0271	34550	2757			14852								

TABLE I.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1079	KL	3000 N	14000 W		123	00	03	31	191	1967	N05	009	4389	12	03	1	L		X9	7	5		0009

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		03	S12	261	178	167	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	QCC
		STD	0000	1807	3505	2531	0026733	0000	15168								
191		OBS	0000	1807	35046	2531			15168								
191		OBS	0008	1807	35045	2531			15169								
		STD	0010	1807	3505	2531	0026771	0027	15169								
		STD	0020	1806	3505	2531	0026783	0054	15171								
191		OBS	0026	1806	35046	2531			15171								
		STD	0030	1807	3505	2531	0026825	0080	15172								
191		OBS	0044	1809	35049	2531			15175								
		STD	0050	1808	3505	2531	0026916	0134	15176								
191		OBS	0065	1807	35042	2531			15178								
		STD	0075	1808	3504	2530	0027023	0201	15180								
191		OBS	0084	1806	35042	2530			15181								
		STD	0100	1804	3504	2531	0027068	0269	15183								
		STD	0125	1797	3502	2532	0027070	0337	15185								
191		OBS	0132	1795	35021	2532			15185								
		STD	0150	1616	3469	2549	0025453	0402	15131								
191		OBS	T0177	1399	34330	2569			15062								
		STD	0200	1310	3428	2583	0022249	0522	15036								
		STD	0250	1145	3419	2608	0019953	0627	14986								
191		OBS	0261	1113	34169	2613			14976								
		STD	0300	1023	3412	2625	0018455	0723	14950								
191		OBS	T0339	0940	34086	2636			14926								
		STD	0400	0825	3405	2651	0015997	0895	14892								
		STD	0500	0661	3399	2670	0014231	1047	14844								
191		OBS	0512	0644	33984	2672			14839								
		STD	0600	0524	3403	2690	0012281	1179	14806								
191		OBS	T0674	0453	34089	2703			14789								
		STD	0700	0443	3412	2706	0010735	1294	14790								
		STD	0800	0408	3423	2719	0009598	1396	14793								
191		OBS	T0856	0390	34284	2725			14796								
		STD	0900	0377	3432	2729	0008655	1487	14798								
		STD	1000	0349	3440	2738	0007817	1570	14804								
		STD	1100	0325	3446	2745	0007170	1644	14811								
		STD	1200	0305	3451	2751	0006639	1714	14820								
191		OBS	T1243	0298	34521	2753			14825								

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1079	KL	30009N	140017W		123	00	04	01	004	1967	N05	010	4389	38	03	3	4		X2	6	8		0010

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		01	S16	227	183	156		06	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	QCC
004		OBS	T1660	0240	34584	2763			14868								
		STD	1750	0229	3459	2764	0005470		14879								
		STD	2000	0202	3461	2768	0005108		14910								
004		OBS	T2148	0189	34623	2770			14929								
		STD	2500	0171	3464	2773	0004685		14982								
004		OBS	T2619	0166	34649	2774			15000								
		STD	3000	0155	3466	2776	0004481		15062								
004		OBS	3097	0153	34666	2776			15078								
004		OBS	3566	0149	34676	2777			15158								
004		OBS	T3778	0149	34681	2778			15195								

TABLE I.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR.1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1079	KL	30001N	14001 W		123	00	04	02	003	1967	N05	011	2018	15	06	6	8		X1	7	5		0011

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	S25	240	161	144	8	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta$ O DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	1836	3507	2526	0027214	0000	15176								
003		OBS	0000	1836	35074	2526			15176								
003		OBS	0009	1834	35076	2526			15177								
		STD	0010	1834	3508	2526	0027183	0027	15177								
		STD	0020	1833	3507	2527	0027206	0054	15178								
		STD	0030	1831	3507	2527	0027235	0082	15180								
003		OBS	0031	1831	35069	2527			15180								
003		OBS	0048	1833	35071	2526			15183								
		STD	0050	1830	3507	2527	0027269	0136	15183								
003		OBS	0074	1808	35038	2530			15180								
		STD	0075	1808	3504	2530	0027064	0204	15180								
003		OBS	0096	1808	35035	2530			15183								
		STD	0100	1799	3501	2530	0027138	0272	15181								
		STD	0125	1727	3484	2535	0026781	0339	15162								
003		OBS	0144	1651	34704	2542			15141								
		STD	0150	1612	3464	2546	0025729	0405	15129								
003		OBS	T0195	1357	34276	2574			15051								
		STD	0200	1337	3426	2576	0022921	0526	15045								
		STD	0250	1162	3416	2603	0020479	0635	14992								
003		OBS	0287	1055	34108	2618			14959								
		STD	0300	1030	3410	2622	0018721	0733	14952								
003		OBS	T0385	0868	34026	2643			14905								
		STD	0400	0834	3402	2647	0016354	0908	14895								
		STD	0500	0639	3398	2672	0014000	1060	14835								
003		OBS	0575	0532	33953	2683			14804								
		STD	0600	0512	3398	2688	0012504	1193	14800								
		STD	0700	0446	3409	2704	0010993	1310	14791								
003		OBS	T0768	0412	34162	2713			14789								
		STD	0800	0404	3420	2717	0009774	1414	14791								
		STD	0900	0382	3429	2726	0008935	1507	14800								
003		OBS	0966	0367	34347	2732			14805								
		STD	1000	0360	3436	2734	0008255	1593	14808								
		STD	1100	0339	3439	2738	0007841	1674	14816								
		STD	1200	0318	3443	2743	0007416	1750	14825								
		STD	1300	0299	3446	2748	0007016	1822	14834								
		STD	1400	0281	3449	2752	0006624	1891	14843								
003		OBS	T1484	0266	34519	2755			14851								

TABLE I.—Continued

REFERENCE CTRY. CODE	REFERENCE NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	QUADR. INDICTR.	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT.	WAVE OBSERVATIONS PER.	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1079	KL	2828 N	14000 W		087	80	04	03	202	1967	N05	012	4603	14	04	4	3		X1	6	6	0012

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		36	S12	254	167	156	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SECC
		STD	0000	1904	3511	2511	0028608	0000	15196								
202		OBS	0000	1904	35107	2511			15196								
202		OBS	0009	1897	35108	2513			15195								
		STD	0010	1897	3511	2513	0028465	0029	15196								
		STD	0020	1898	3511	2513	0028519	0057	15197								
		STD	0030	1898	3511	2513	0028580	0086	15199								
202		OBS	0030	1898	35105	2513			15199								
202		OBS	0046	1901	35106	2512			15203								
		STD	0050	1901	3511	2512	0028710	0143	15203								
202		OBS	0071	1900	35106	2512			15206								
		STD	0075	1901	3511	2512	0028800	0215	15207								
202		OBS	0091	1903	35106	2511			15211								
		STD	0100	1903	3511	2511	0028925	0287	15212								
		STD	0125	1902	3511	2512	0028984	0359	15216								
202		OBS	0136	1901	35106	2512			15217								
		STD	0150	1824	3501	2524	0027896	0430	15197								
202		OBS	0198	1574	34681	2558			15126								
		STD	0200	1564	3466	2559	0024687	0562	15123								
		STD	0250	1324	3423	2577	0023016	0681	15048								
202		OBS	0271	1235	34116	2586			15020								
		STD	0300	1126	3408	2603	0020535	0790	14986								
202		OBS	T0360	0933	34020	2632			14926								
		STD	0400	0843	3401	2646	0016543	0975	14898								
		STD	0500	0662	3400	2670	0014207	1129	14844								
202		OBS	0525	0627	33992	2674			14834								
		STD	0600	0559	3408	2690	0012352	1262	14821								
202		OBS	T0692	0494	34170	2705			14810								
		STD	0700	0491	3418	2706	0010868	1378	14811								
		STD	0800	0456	3427	2717	0009874	1482	14814								
202		OBS	0885	0428	34334	2725			14817								
		STD	0900	0423	3434	2726	0009057	1576	14818								
		STD	1000	0394	3437	2732	0008552	1664	14823								
		STD	1100	0368	3441	2737	0008072	1748	14829								
		STD	1200	0345	3444	2742	0007630	1826	14836								
		STD	1300	0324	3447	2746	0007208	1900	14845								
		STD	1400	0307	3451	2751	0006829	1970	14855								
202		OBS	T1402	0307	34506	2751			14855								

TABLE I.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1079	KL	2820 N	14002 W		087	80	04	04	190	1967	N05	013	4114	15	04	3	12		X1	6	5		0013

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		02	S16	247	183	161	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	1909	3515	2513	0028414	0000	15198								
190		OBS	0000	1909	35151	2515			15198								
190		OBS	0008	1902	35147	2515			15197								
		STD	0010	1902	3515	2515	0028282	0029	15197								
		STD	0020	1900	3515	2515	0028266	0057	15199								
		STD	0030	1899	3515	2515	0028282	0085	15200								
190		OBS	0031	1899	35146	2515			15200								
190		OBS	0049	1902	35148	2515			15204								
		STD	0050	1902	3515	2515	0028420	0141	15204								
		STD	0075	1900	3515	2515	0028456	0213	15208								
190		OBS	0075	1900	35148	2515			15208								
190		OBS	0098	1895	35147	2516			15210								
		STD	0100	1895	3515	2517	0028425	0284	15210								
		STD	0125	1888	3513	2517	0028480	0355	15212								
190		OBS	0145	1883	35118	2517			15214								
		STD	0150	1856	3506	2520	0028302	0427	15206								
		STD	0200	1579	3455	2547	0025814	0562	15126								
190		OBS	T0201	1573	34546	2548			15124								
		STD	0250	1225	3424	2597	0021053	0679	15015								
190		OBS	0293	1007	34068	2623			14942								
		STD	0300	0990	3406	2626	0018348	0777	14937								
190		OBS	T0396	0813	34019	2651			14886								
		STD	0400	0810	3402	2651	0015994	0949	14887								
		STD	0500	0742	3409	2666	0014636	1102	14878								
		STD	0600	0674	3416	2681	0013301	1241	14868								
		STD	0700	0605	3423	2696	0011974	1368	14857								
		STD	0800	0537	3430	2710	0010672	1481	14847								
		STD	0900	0468	3437	2723	0009385	1581	14836								
		STD	1000	0400	3444	2736	0008150	1669	14826								
190		OBS	1000	0400	34437	2736			14826								
		STD	1100	0368	3446	2741	0007676	1748	14828								
		STD	1200	0340	3449	2746	0007195	1823	14833								
		STD	1300	0314	3451	2750	0006810	1895	14839								
		STD	1400	0292	3454	2755	0006397	1959	14846								
		STD	1500	0273	3456	2758	0006082	2021	14855								
190		OBS	T1540	0266	34573	2760			14862								

TABLE I.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT IND CTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR.1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1079	KL	2817 N	14000 W		087	80	04	05	101	1967	N05	014	4609	15	36	5	5		X1	6	5		0014

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		36	S06	240	161	144	8	14	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SOQ
		STD	0000	1925	35178	2511	0028605	0000	15203								
101		OBS	0000	1925	35178	2511			15203								
		STD	0010	1921	35178	2512	0028534	0029	15203								
101		OBS	0010	1921	35179	2512			15203								
		STD	0020	1915	35177	2513	0028495	0057	15203								
		STD	0030	1910	35177	2515	0028391	0086	15203								
101		OBS	0031	1909	35165	2514			15203								
		STD	0050	1905	35175	2514	0028483	0142	15205								
101		OBS	0051	1905	35151	2514			15205								
		STD	0075	1903	35175	2515	0028533	0214	15208								
101		OBS	0076	1903	35149	2515			15209								
		STD	0100	1894	35174	2516	0028462	0285	15210								
101		OBS	0102	1893	35140	2516			15210								
		STD	0125	1891	35171	2515	0028699	0356	15213								
		STD	0150	1838	35101	2520	0028230	0428	15201								
101		OBS	0154	1824	34982	2522			15197								
		STD	0200	1551	34751	2550	0025498	0562	15117								
101		OBS	T0206	1506	34449	2555			15103								
		STD	0250	1258	34425	2591	0021598	0680	15026								
		STD	0300	1029	34109	2621	0018777	0781	14952								
101		OBS	0309	0946	34067	2625			14941								
		STD	0400	0803	34102	2652	0015888	0954	14883								
101		OBS	0410	0785	34014	2654			14878								
		STD	0500	0661	34107	2676	0013646	1102	14845								
		STD	0600	0556	34114	2695	0011869	1229	14820								
101		OBS	0617	0542	34152	2698			14817								
		STD	0700	0502	34124	2709	0010560	1341	14816								
		STD	0800	0458	34133	2721	0009454	1441	14816								
101		OBS	T0819	0450	34141	2723			14816								
		STD	0900	0420	34138	2729	0008718	1532	14817								
		STD	1000	0387	34143	2737	0008040	1616	14821								
101		OBS	T1015	0382	34132	2737			14821								
		STD	1100	0356	34146	2742	0007531	1694	14825								
		STD	1200	0330	34150	2748	0007003	1766	14831								
		STD	1300	0306	34153	2753	0006568	1834	14838								
		STD	1400	0286	34155	2756	0006249	1898	14846								
101		OBS	1466	0274	34159	2758			14852								

TABLE I.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPLICATE INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1079	KL	3000 N	14000 W		123	00	04	06	094	1967	N05	015	4572	15	02	2	5		X8	2	6		0015

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		25	505	230	167	144	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SIO
		STD	0000	1822	3506	2528	0026962	0000	15172								
094		OBS	0000	1822	35063	2528											
		STD	0010	1822				0027									
094		OBS	0010	1822													
		STD	0020	1821				0054									
		STD	0030	1820				0081									
094		OBS	0031	1820													
		STD	0050	1820				0135									
094		OBS	0051	1820													
		STD	0075	1810				0203									
094		OBS	0076	1810													
		STD	0100	1808				0271									
094		OBS	0102	1807													
		STD	0125	1784				0339									
		STD	0150	1759				0405									
094		OBS	0155	1754													
		STD	0200	1379				0517									
094		OBS	0209	1320													
		STD	0250	1186				0600									
		STD	0300	1048				0669									
094		OBS	0310	1024													
		STD	0400	0864				0783									
094		OBS	T0412	0843													
		STD	0500	0663				0871									
		STD	0600	0515				0938									
094		OBS	T0618	0495													
		STD	0700	0449				0995									
		STD	0800	0405				1050									
094		OBS	0816	0399													
		STD	0900	0381				1103									
		STD	1000	0360				1157									
094		OBS	T1018	0356													
		STD	1100	0339				1212									
		STD	1200	0319				1268									
		STD	1300	0299				1324									
		STD	1400	0280				1381									
		STD	1500	0262				1439									
094		OBS	T1520	0258	34568	2760			14855								

TABLE I.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DUPLICATE	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	NO.	CODE	° 1/10	° ' 1/10	INDICATOR	10°	1°	MO	DAY	HR. 1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AM		
31	1079	KL	3000 N	14000 W		123	00	04	07	009	1967	N05	016	4572	15	04	2	2		X1	6	4		0016

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		08	S10	220	189	183	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at.l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1868	3510	2520	0027804	0000	15186								
009		OBS	0000	1868	35098	2520			15186								
		STD	0010	1852	3510	2523	0027476	0028	15183								
009		OBS	0011	1851	35095	2524			15183								
		STD	0020	1846	3509	2524	0027406	0055	15183								
		STD	0030	1841	3509	2526	0027308	0082	15183								
009		OBS	0031	1840	35088	2526			15183								
		STD	0050	1842	3509	2526	0027405	0137	15186								
009		OBS	0052	1842	35093	2526			15187								
		STD	0075	1840	3509	2526	0027451	0206	15190								
009		OBS	0077	1840	35089	2526			15190								
		STD	0100	1843	3509	2525	0027595	0275	15195								
009		OBS	0103	1843	35090	2525			15195								
		STD	0125	1835	3507	2526	0027613	0344	15196								
		STD	0150	1826	3506	2527	0027615	0413	15198								
009		OBS	0156	1824	35052	2527			15198								
		STD	0200	1517	3450	2557	0024845	0544	15106								
009		OBS	T0210	1458	34404	2562			15087								
		STD	0250	1297	3428	2586	0022126	0661	15040								
		STD	0300	1126	3416	2609	0019948	0766	14987								
009		OBS	0311	1093	34144	2614			14977								
		STD	0400	0887	3406	2642	0016878	0950	14916								
009		OBS	T0407	0872	34054	2644			14911								
		STD	0500	0671	3404	2672	0014005	1105	14848								
		STD	0600	0516	3403	2691	0012212	1236	14802								
009		OBS	0617	0496	34023	2693			14797								
		STD	0700	0447	3413	2707	0010708	1351	14792								
		STD	0800	0401	3424	2720	0009443	1451	14791								
009		OBS	T0813	0396	34258	2722			14791								
		STD	0900	0378	3434	2731	0008518	1541	14799								
		STD	1000	0358	3442	2739	0007773	1623	14808								
009		OBS	T1023	0353	34435	2741			14810								
		STD	1100	0338	3446	2744	0007357	1698	14817								
		STD	1200	0318	3448	2748	0006995	1770	14825								
		STD	1300	0299	3451	2752	0006641	1838	14834								
		STD	1400	0280	3454	2755	0006289	1903	14843								
		STD	1500	0262	3456	2759	0005937	1964	14853								
009		OBS	1528	0257	34569	2760			14856								

TABLE I.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR. 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1079	KL	3000 N	14000 W		123	00	04	08	187	1967	N05	017	4206	15	04	3	4		X6	6	6		0017

WATER		WIND		BARO. METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		06	S15	240	178	172	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	D2 ml/l	PO4-P µg-at/l	TOTAL-P µg-at/l	NO2-N µg-at/l	NO3-N µg-at/l	SiO4-Si µg-at l	pH	SOC
		STD	0000	1851	3510	2524	0027368	0000	15181								
187		OBS	0000	1851	35102	2524			15181								
		STD	0010	1843	3510	2526	0027247	0027	15180								
187		OBS	0010	1843	35097	2526			15180								
		STD	0020	1843	3509	2525	0027332	0055	15182								
		STD	0030	1843	3509	2525	0027373	0082	15183								
187		OBS	0030	1843	35089	2525			15183								
187		OBS	0049	1846	35096	2525			15187								
		STD	0050	1846	3510	2525	0027461	0137	15188								
187		OBS	0074	1845	35096	2525			15191								
		STD	0075	1845	3510	2525	0027517	0206	15191								
187		OBS	0099	1841	35095	2526			15194								
		STD	0100	1838	3509	2527	0027482	0274	15193								
		STD	0125	1761	3489	2530	0027203	0343	15173								
		STD	0150	1654	3469	2540	0026311	0410	15142								
187		OBS	0150	1654	34688	2540			15142								
		STD	0200	1351	3423	2571	0023416	0534	15049								
187		OBS	0202	1341	34213	2572			15046								
		STD	0250	1191	3418	2599	0020868	0645	15002								
		STD	0300	1059	3414	2620	0018899	0744	14963								
187		OBS	0301	1057	34142	2620			14963								
		STD	0400	0873	3406	2645	0016659	0922	14910								
187		OBS	T0402	0869	34059	2645			14909								
		STD	0500	0667	3403	2672	0014017	1075	14847								
		STD	0600	0522	3400	2688	0012456	1207	14805								
187		OBS	0604	0517	34002	2689			14803								
		STD	0700	0465	3412	2704	0011001	1325	14799								
		STD	0800	0412	3423	2718	0009639	1428	14795								
187		OBS	T0801	0411	34232	2719			14795								
		STD	0900	0383	3432	2728	0008724	1520	14801								
		STD	1000	0357	3440	2737	0007909	1603	14808								
187		OBS	T1008	0355	34407	2738			14808								
		STD	1100	0333	3444	2743	0007447	1680	14815								
		STD	1200	0312	3447	2747	0007044	1752	14823								
		STD	1300	0293	3450	2751	0006667	1821	14832								
		STD	1400	0277	3453	2755	0006313	1886	14842								
187		OBS	T1498	0263	34557	2759			14853								

TABLE II. Observed and interpolated oceanographic data for stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 2–19 May 1967, prepared from NODC Listing No. 31–1080 PW.

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR.1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1080	PW	3000 N	14000 W		123	00	05	02	200	1967	N06	001	4206	14	34	3	4		X5	6	6	0001

WATER: COLOR CODE	WATER: TRANS (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		36	S11	261	189	161	8	14	

MESSENGR TIME BT HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	VOL (cc)
		STD	0000	1855	3507	2520	0027732	0000	15182								
200		OBS	0000	1855	35065	2520			15182								
200		OBS	0009	1835	35055	2525			15177								
		STD	0010	1834	3506	2525	0027338	0028	15177								
		STD	0020	1823	3506	2528	0027111	0055	15176								
200		OBS	0028	1817	35055	2529			15175								
		STD	0030	1817	3506	2529	0026967	0082	15175								
200		OBS	0046	1815	35068	2531			15178								
		STD	0050	1815	3507	2531	0026928	0136	15178								
200		OBS	0070	1810	35067	2532			15180								
		STD	0075	1806	3506	2532	0026857	0203	15180								
200		OBS	0094	1788	35022	2534			15177								
		STD	0100	1779	3501	2535	0026660	0270	15175								
		STD	0125	1740	3494	2539	0026344	0336	15167								
200		OBS	0142	1713	34837	2538			15161								
		STD	0150	1654	3474	2544	0025933	0401	15143								
200		OBS	T0191	1394	34350	2572			15063								
		STD	0200	1358	3432	2577	0022896	0523	15052								
		STD	0250	1178	3420	2603	0020476	0632	14998								
200		OBS	0284	1077	34142	2617			14967								
		STD	0300	1043	3412	2621	0018794	0730	14957								
200		OBS	T0375	0887	34059	2642			14911								
		STD	0400	0824	3405	2651	0015981	0904	14892								
		STD	0500	0619	3402	2677	0013482	1051	14827								
200		OBS	0557	0536	33996	2686			14803								
		STD	0600	0506	3404	2693	0011985	1179	14798								
		STD	0700	0448	3415	2708	0010571	1291	14793								
200		OBS	T0735	0431	34185	2713			14792								
		STD	0800	0410	3425	2720	0009473	1392	14795								
		STD	0900	0380	3433	2730	0008615	1482	14800								
200		OBS	T0915	0376	34346	2731			14801								
		STD	1000	0354	3438	2736	0008030	1565	14806								
		STD	1100	0330	3442	2741	0007545	1643	14813								
		STD	1200	0310	3446	2746	0007094	1716	14822								
		STD	1300	0294	3449	2751	0006693	1785	14832								
		STD	1400	0280	3453	2755	0006304	1850	14843								
200		OBS	T1409	0279	34536	2756			14845								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1.10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1080	PW	29597N	14000 W		087	90	05	03	195	1967	N06	002	4206	16	34	3	4		X1	6	5	0002

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
				262	178	139	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ O DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1830	3507	2527	0027093	0000	15174								
195		OBS	0000	1830	35071	2527			15174								
		STD	0010	1826	3507	2528	0027040	0027	15175								
195		OBS	0012	1825	35066	2528			15175								
		STD	0020	1825	3507	2528	0027077	0054	15176								
		STD	0030	1824	3506	2528	0027115	0081	15178								
195		OBS	0033	1824	35062	2528			15178								
		STD	0050	1824	3508	2529	0027054	0135	15181								
195		OBS	0054	1824	35088	2530			15182								
		STD	0075	1824	3509	2530	0027094	0203	15185								
195		OBS	0084	1819	35085	2531			15185								
		STD	0100	1799	3504	2532	0026921	0271	15181								
195		OBS	0111	1783	34998	2533			15178								
		STD	0125	1754	3498	2539	0026389	0337	15172								
		STD	0150	1703	3486	2542	0026157	0403	15159								
195		OBS	0159	1684	34793	2541			15154								
		STD	0200	1337	3427	2577	0022848	0525	15045								
195		OBS	T0204	1310	34230	2580			15036								
		STD	0250	1169	3419	2604	0020386	0634	14995								
		STD	0300	1038	3415	2624	0018489	0731	14956								
195		OBS	0305	1026	34147	2626			14952								
		STD	0400	0851	3405	2647	0.16393	0905	14902								
195		OBS	T0406	0840	34045	2648			14899								
		STD	0500	0640	3405	2677	0013525	1055	14836								
		STD	0600	0492	3405	2696	0011726	1181	14793								
195		OBS	0604	0487	34052	2696			14791								
		STD	0700	0440	3415	2709	0010477	1292	14789								
		STD	0800	0402	3424	2720	0009454	1392	14791								
195		OBS	T0809	0399	34253	2722			14791								
		STD	0900	0379	3433	2730	0008604	1482	14799								
		STD	1000	0358	3441	2738	0007847	1564	14808								
195		OBS	1025	0353	34422	2740			14810								
		STD	1100	0338	3444	2743	0007446	1641	14817								
		STD	1200	0318	3447	2747	0007084	1713	14825								
		STD	1300	0299	3450	2751	0006722	1782	14834								
		STD	1400	0280	3453	2755	0006363	1848	14843								
		STD	1500	0262	3455	2758	0006003	1910	14853								
195		OBS	T1591	0246	34578	2762			14862								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1080	PW	30000N	140000W		123	00	05	04	202	1967	N06	003	4663	13	04	2	4		X1	8	4		0003

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		04	S15	272	178	156	8	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\Delta 10^7$	$\Sigma \Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1829	3509	2529	0026939	0000	15174								
202		OBS	0000	1829	35089	2529			15174								
		STD	0010	1825	3509	2530	0026888	0027	15175								
202		OBS	0011	1824	35086	2530			15175								
		STD	0020	1824	3509	2530	0026898	0054	15176								
202		OBS	0029	1823	35085	2530			15177								
		STD	0030	1823	3509	2530	0026929	0081	15178								
202		OBS	0048	1825	35084	2529			15181								
		STD	0050	1825	3508	2529	0027078	0135	15181								
		STD	0075	1813	3507	2531	0026950	0202	15182								
202		OBS	0076	1812	35065	2531			15182								
202		OBS	0097	1793	35014	2532			15179								
		STD	0100	1790	3501	2532	0026946	0270	15179								
		STD	0125	1767	3495	2534	0026868	0337	15175								
		STD	0150	1743	3490	2535	0026794	0404	15172								
202		OBS	0150	1743	34900	2535			15172								
		STD	0200	1393	3434	2571	0023449	0530	15064								
202		OBS	T0202	1381	34325	2572			15060								
		STD	0250	1219	3424	2598	0020939	0641	15013								
		STD	0300	1072	3416	2619	0018999	0740	14968								
202		OBS	0315	1033	34143	2625			14956								
		STD	0400	0857	3404	2645	0016559	0918	14904								
202		OBS	0424	0811	34020	2651			14890								
		STD	0500	0663	3403	2672	0014006	1071	14845								
		STD	0600	0518	3403	2691	0012184	1202	14803								
202		OBS	0633	0482	34035	2695			14794								
		STD	0700	0447	3412	2706	0010782	1317	14792								
		STD	0800	0402	3424	2720	0009454	1418	14791								
202		OBS	T0823	0393	34265	2723			14791								
		STD	0900	0365	3434	2732	0008369	1507	14793								
		STD	1000	0336	3441	2740	0007595	1587	14799								
		STD	1100	0314	3447	2747	0006971	1660	14807								
		STD	1200	0300	3451	2752	0006581	1727	14818								
202		OBS	T1274	0295	34519	2753			14829								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO.	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1080	PW	29450N	140000W		087	90	05	05	008	1967	N06	004	4755	16	04	2	4		X1	7	6	0004

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OF FORCE	BARO. METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
				281	172	144	8	14	

MESSENGR TIME OFF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCO
		STD	0000	1827	3509	2529	0026913	0000	15174								
008		OBS	0000	1827	35086	2529			15174								
		STD	0010	1825	3508	2529	0026934	0027	15175								
008		OBS	0011	1825	35082	2529			15175								
		STD	0020	1824	3508	2529	0026970	0054	15176								
		STD	0030	1823	3507	2529	0027017	0081	15177								
008		OBS	0031	1823	35072	2529			15178								
		STD	0050	1826	3508	2528	0027128	0135	15182								
008		OBS	0051	1826	35076	2528			15182								
		STD	0075	1824	3508	2529	0027167	0203	15185								
008		OBS	0078	1823	35076	2529			15185								
		STD	0100	1811	3505	2530	0027117	0271	15185								
008		OBS	0101	1810	35051	2530			15185								
		STD	0125	1741	3491	2537	0026594	0338	15167								
		STD	0150	1661	3473	2542	0026148	0404	15145								
008		OBS	0150	1661	34732	2542			15145								
		STD	0200	1394	3425	2564	0024126	0529	15063								
008		OBS	0202	12930	34234	25830											
		STD	0250	1178	3419	2602	0020550	0641	14998								
		STD	0300	1013	3414	2628	0018140	0738	14947								
008		OBS	0302	1007	34134	2628			14945								
		STD	0400	0844	3403	2647	0016433	0911	14899								
008		OBS	T0412	0824	34023	2649			14893								
		STD	0500	0644	3403	2675	0013727	1062	14838								
		STD	0600	0498	3403	2693	0011932	1190	14795								
008		OBS	0614	0483	34035	2695			14791								
		STD	0700	0443	3412	2706	0010735	1303	14790								
		STD	0800	0405	3421	2718	0009712	1405	14792								
008		OBS	T0824	0397	34228	2720			14793								
		STD	0900	0380	3430	2727	0008838	1498	14799								
		STD	1000	0358	3438	2736	0008069	1583	14808								
008		OBS	T1033	0351	34408	2739			14811								
		STD	1100	0337	3443	2741	0007567	1661	14816								
		STD	1200	0318	3445	2745	0007217	1735	14825								
		STD	1300	0299	3448	2749	0006869	1805	14834								
		STD	1400	0282	3450	2753	0006540	1872	14844								
		STD	1500	0266	3453	2756	0006219	1936	14854								
008		OBS	T1620	0248	34561	2760			14867								

TABLE II.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPE INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1080	PW	2830 N	14000 W		087	80	05	06	198	1967	N06	005	4638	19	04	2	4		X2	6	8		0005

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C: DRY BULB	AIR TEMP °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
					178	167	8	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at l	NO_3–N µg-at l	SiO_4–Si µg-at/l	pH	
		STD	0000	1981	3521	2499	0029728	0000	15219								
198		OBS	0000	1981	35214	2499			15219								
		STD	0010	1980	3521	2500	0029738	0030	15220								
198		OBS	0014	1979	35214	2500			15220								
		STD	0020	1979	3521	2500	0029736	0059	15221								
		STD	0030	1978	3521	2500	0029759	0089	15223								
198		OBS	0039	1977	35212	2500			15224								
		STD	0050	1946	3519	2507	0029209	0148	15217								
198		OBS	0065	1906	35164	2515			15208								
		STD	0075	1896	3515	2516	0028360	0220	15206								
		STD	0100	1854	3507	2521	0028010	0291	15198								
		STD	0125	1789	3496	2529	0027349	0360	15182								
198		OBS	0127	1783	34952	2530			15180								
		STD	0150	1694	3477	2537	0026616	0427	15155								
198		OBS	0190	1514	34487	2556			15103								
		STD	0200	1450	3441	2564	0024099	0554	15083								
		STD	0250	1181	3412	2596	0021118	0667	14998								
198		OBS	T0254	1163	34098	2598			14992								
		STD	0300	1044	3407	2617	0019179	0768	14957								
198		OBS	0381	0862	34040	2645			14903								
		STD	0400	0824	3404	2650	0016070	0944	14891								
		STD	0500	0657	3403	2673	0013902	1094	14843								
198		OBS	T0508	0646	34027	2675			14840								
		STD	0600	0571	3414	2693	0012062	1224	14826								
		STD	0700	0504	3424	2709	0010585	1337	14817								
198		OBS	0768	0466	34301	2718			14813								
		STD	0800	0454	3432	2721	0009479	1437	14814								
		STD	0900	0419	3438	2730	0008706	1528	14817								
		STD	1000	0388	3443	2737	0008052	1612	14821								
198		OBS	T1019	0382	34442	2738			14822								
		STD	1100	0361	3447	2743	0007516	1690	14827								
		STD	1200	0337	3450	2747	0007085	1763	14834								
198		OBS	T1264	0323	34521	2750			14839								
		STD	1300	0315	3453	2752	0006674	1832	14842								
		STD	1400	0295	3455	2755	0006355	1897	14850								
		STD	1500	0277	3457	2758	0006055	1959	14859								
		STD	1750	0238	3460	2764	0005505	2103	14885								
198		OBS	T1909	0220	34606	2766			14905								

TABLE II.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° '1/10	INDEX	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1080	PW	2832 N	140100W		087	80	05	07	193	1967	N06	006	4755	15	03	3			X1	6	6		0006

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
				247	183	156	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY $\times 10^7$	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	CODE
		STD	0000	1940	3522	2510	0028676	0000	15207								
193		OBS	0000	1940	35219	2510			15207								
		STD	0010	1935	3522	2512	0028595	0029	15208								
193		OBS	0010	1935	35218	2512			15208								
		STD	0020	1926	3520	2513	0028539	0057	15206								
		STD	0030	1908	3517	2515	0028352	0086	15203								
193		OBS	0032	1903	35168	2516			15202								
		STD	0050	1845	3508	2524	0027532	0142	15187								
193		OBS	0050	1845	35083	2524			15187								
		STD	0075	1838	3508	2526	0027471	0210	15189								
193		OBS	0077		35076												
193		OBS	0098	1827	35085	2529			15190								
		STD	0100	1826	3508	2529	0027245	0279	15190								
		STD	0125	1808	3505	2531	0027153	0347	15188								
193		OBS	0148	1792	35019	2532			15187								
		STD	0150	1780	3499	2533	0027002	0414	15184								
193		OBS	T0196	1518	34481	2555			15105								
		STD	0200	1496	3446	2558	0024692	0544	15099								
		STD	0250	1257	3427	2593	0021433	0659	15026								
193		OBS	0290	1106	34159	2613			14979								
		STD	0300	1081	3414	2616	0019302	0761	14971								
193		OBS	T0383	0892	34056	2641			14915								
		STD	0400	0856	3406	2647	0016425	0939	14904								
		STD	0500	0678	3406	2673	0013961	1091	14851								
193		OBS	0567	0588	34060	2685			14827								
		STD	0600	0561	3410	2691	0012229	1222	14822								
		STD	0700	0490	3420	2707	0010708	1337	14811								
193		OBS	T0751	0461	34252	2715			14808								
		STD	0800	0442	3429	2720	0009556	1438	14808								
		STD	0900	0407	3437	2730	0008636	1529	14812								
193		OBS	T0942	0394	34394	2733			14813								
		STD	1000	0377	3443	2738	0007922	1612	14816								
		STD	1100	0350	3448	2744	0007312	1688	14822								
		STD	1200	0327	3451	2749	0006894	1759	14830								
		STD	1300	0309	3453	2752	0006603	1827	14839								
		STD	1400	0294	3454	2755	0006417	1892	14850								
193		OBS	T1463	0287	34544	2755			14857								

TABLE II.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR,1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1080	PW	2830 N	14000 W		087	80	05	08	187	1967	N06	007	4755	14	08	2	4		X1	8	2	0007

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C: DRY BULB	AIR TEMP °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		03	S12	240	211	167	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁻⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at.l	NO₃-N µg-at/l	SiO₄-Si µg-at.l	pH	SCC
		STD	0000	1889	3516	2519	0027881	0000	15192								
187		OBS	0000	1889	35157	2519			15192								
187		OBS	0009	1888	35157	2519			15193								
		STD	0010	1888	3516	2519	0027891	0028	15194								
		STD	0020	1885	3516	2520	0027846	0056	15194								
187		OBS	0029	1884	35158	2520			15196								
		STD	0030	1884	3516	2520	0027861	0084	15196								
187		OBS	0048	1888	35158	2519			15200								
		STD	0050	1888	3515	2519	0028072	0140	15200								
187		OBS	0073		3501P												
		STD	0075	1884	3509	2515	0028494	0210	15202								
187		OBS	0097	1880	3507P	2514P											
		STD	0100	1870	3500	2512	0028903	0282	15201								
		STD	0125	1776	3488	2526	0027625	0353	15177								
187		OBS	0148	1677	34748	2539			15150								
		STD	0150	1666	3473	2541	0026274	0420	15147								
		STD	0200	1412	3436	2568	0023716	0545	15070								
187		OBS	T0200	1412	34356	2568			15070								
		STD	0250	1182	3416	2599	0020843	0656	14999								
187		OBS	0295	1025	34047	2619			14949								
		STD	0300	1015	3405	2620	0018865	0756	14946								
187		OBS	T0390	0853	34035	2646			14901								
		STD	0400	0833	3404	2649	0016192	0931	14895								
		STD	0500	0664	3406	2675	0013761	1081	14846								
187		OBS	0580	0566	34101	2691			14820								
		STD	0600	0554	3412	2694	0011992	1209	14819								
		STD	0700	0499	3421	2707	0010745	1323	14814								
187		OBS	T0764	0468	34264	2715			14813								
		STD	0800	0453	3429	2719	0009689	1425	14813								
		STD	0900	0415	3437	2729	0008732	1517	14815								
187		OBS	T0948	0398	34400	2733			14816								
		STD	1000	0381	3442	2736	0008080	1601	14818								
		STD	1100	0352	3445	2742	0007594	1680	14823								
		STD	1200	0328	3447	2746	0007171	1754	14830								
		STD	1300	0308	3450	2750	0006783	1823	14838								
		STD	1400	0293	3453	2754	0006449	1890	14849								
187		OBS	T1442	0288	34546	2756			14854								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX #	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1080	PW	2957 N	14002 W		087	90	05	09	000	1967	N06	008	4105	15	2		2		X2	6	8	0008

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		35	S08	240	172	150	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$x10^7$	$\Sigma\Delta$ O DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1728	3469	2523	0027523	0000	15140								
000		OBS	0000	1728	34686	2523			15140								
		STD	0010	1722	3470	2525	0027353	0027	15140								
000		OBS	0010	1722	34695	2525			15140								
		STD	0020	1722	3471	2526	0027276	0055	15142								
		STD	0030	1722	3473	2527	0027147	0082	15144								
000		OBS	0030	1722	34732	2527			15144								
		STD	0050	1727	3476	2528	0027129	0136	15149								
000		OBS	0050	1727	34759	2528			15149								
		STD	0075	1729	3477	2529	0027153	0204	15154								
000		OBS	0075		34773												
		STD	0100	1731	3479	2530	0027170	0272	15159								
000		OBS	0100	1731	34788	2530			15159								
		STD	0125	1553	3469	2563	0024008	0336	15107								
		STD	0150	1400	3460	2590	0021554	0393	15061								
000		OBS	0152	1389	34594	2592			15058								
		STD	0200	1271	3442	2602	0020475	0498	15024								
000		OBS	T0204	1306P	3419P	2577P											
		STD	0250	1153	3428	2614	0019437	0598	14990								
		STD	0300	1040	3416	2625	0018449	0692	14957								
000		OBS	0303	1033	34159	2626			14955								
		STD	0400	0829	3404	2650	0016131	0865	14893								
000		OBS	0401	0827	34038	2650			14893								
		STD	0500	0644	3404	2676	0013660	1014	14838								
		STD	0600	0512	3404	2692	0012096	1143	14801								
000		OBS	0602	0510	34035	2692			14800								
		STD	0700	0451	3416	2709	0010533	1256	14794								
000		OBS	T0797	0406	34267	2722			14793								
		STD	0800	0405	3427	2722	0009267	1355	14793								
		STD	0900	0377	3435	2731	0008433	1444	14799								
000		OBS	T0990	0354	34415	2739			14805								
		STD	1000	0352	3442	2740	0007704	1524	14806								
		STD	1100	0329	3448	2747	0007068	1598	14813								
		STD	1200	0308	3452	2752	0006599	1667	14822								
		STD	1300	0290	3455	2756	0006234	1731	14831								
		STD	1400	0275	3456	2758	0006047	1792	14842								
000		OBS	T1498	0262	34563	2759			14853								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° '1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1080	PW	3009 N	14000 W		123	00	05	11	194	1967	N06	009	4609	10	08				X1	6	1	0009

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		06	S08	290	178	133	8	13	

MESSENGR TIME OF DAY HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta O$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1735	34723	2524	00_7389	0000	15143								
194		OBS	0001	1735	34725	2524			15143								
194		OBS	0008	1724	34718	2526			15141								
		STD	0010	1724	3472	2526	30_7215	0027	15141								
		STD	0020	1724	3473	2527	0027170	0055	15143								
194		OBS	0025	1724	34734	2527			15144								
		STD	0030	1724	3474	2528	00_7139	0082	15144								
194		OBS	0040	1724	34755	2529			15146								
		STD	0050	1719	3475	2528	00_7158	0136	15146								
		STD	0075	1712	3468	2524	00_7142	0204	15145								
194		OBS	0085	1654	34683	2530			15144								
		STD	0100	1676	3469	2535	0026535	0271	15141								
		STD	0125	1647	3470	2543	0025971	0337	15136								
194		OBS	0128		34705												
		STD	0150	1618	3469	2549	0025508	0401	15131								
194		OBS	0172	1542	34677	2553			15127								
		STD	0200	1425	3452	2568	0023732	0524	15075								
		STD	0250	1147	3410	2592	0021558	0637	15003								
194		OBS	0255	1134	34190	2594			14998								
		STD	0300	1075	3416	2619	0019651	0740	14962								
194		OBS	T0324	1024	34187	2630			14955								
		STD	0350	0911	3411	2642	0016454	0819	14927								
194		OBS	0386	0771	34044	2659			14885								
		STD	0500	0734	3404	2663	0014914	1074	14873								
		STD	0600	0564	3399	2687	0011593	1216	14805								
194		OBS	0630	0481	33973	2691			14782								
		STD	0700	0425	3403	2701	0011192	1345	14781								
194		OBS	0764	0347	34088	2710			14777								
		STD	0800	0371	3413	2715	0009917	1443	14777								
		STD	0900	0344	3426	2728	0008724	1534	14785								
194		OBS	T0991	0344	34427	2734			14801								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DATE LINE	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO.	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1080	PW	30040N	140000W		123	00	05	12	196	1967	N06	010	4554	17	09				X2	6	8		0010

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		11	S12	290	183	167	8	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^5	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	1731	3472	2525	0027322	0000	15141								
196		OBS	0000	1731	34723	2525			15141								
		STD	0010	1723	3472	2526	0027179	0027	15141								
196		OBS	0010	1723	34722	2526			15141								
		STD	0020	1721	3472	2527	0027189	0054	15142								
		STD	0030	1720	3472	2527	0027185	0082	15143								
196		OBS	0035	1719	34718	2527			15143								
		STD	0050	1720	3472	2527	0027254	0136	15146								
196		OBS	0056	1720	34719	2527			15147								
		STD	0075	1724	3474	2528	0027238	0204	15152								
		STD	0100	1728	3478	2530	0027181	0272	15157								
202		OBS	0111	1730	34791	2530			15160								
		STD	0125	1648	3472	2544	0025867	0339	15137								
		STD	0150	1512	3458	2564	0024011	0401	15097								
202		OBS	0167		34476												
		STD	0200	1286	3421	2583	0022299	0517	15027								
202		OBS	T0221	1209	34096	2589			15003								
		STD	0250	1145	3412	2603	0020467	0624	14985								
		STD	0300	1041	3413	2622	0018687	0721	14957								
202		OBS	0334	0976	34131	2633			14939								
		STD	0400	0865	3406	2646	0016535	0898	14907								
202		OBS	T0446	0790	34030	2655			14886								
		STD	0500	0688	3405	2671	0014188	1051	14855								
		STD	0600	0538	3408	2692	0012093	1183	14812								
202		OBS	0665	0468	34100	2702			14794								
		STD	0700	0454	3414	2707	0010716	1297	14795								
		STD	0800	0417	3426	2720	0009481	1398	14798								
202		OBS	T0885	0390	34334	2729			14801								
		STD	0900	0386	3434	2730	0008611	1488	14802								
		STD	1000	0360	3441	2738	0007870	1570	14809								
202		OBS	T1097	0337	34464	2744			14816								
		STD	1100	0336	3447	2745	0007223	1646	14816								
		STD	1200	0314	3451	2750	0006742	1716	14824								
		STD	1300	0294	3455	2755	0006281	1781	14833								
		STD	1400	0275	3457	2759	0005973	1842	14842								
		STD	1500	0258	3458	2761	0005758	1901	14851								
202		OBS	T1655	0236	34587	2763			14868								

Table II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	DAY	HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	HGT	PER	SEA	WEATHER CODE	CLOUD CODES TYPE	AMT	NODC STATION NUMBER
31	1080	PW	3000 N	14000 W		123	00	05	13	194	1967	N06	011	4663	16	09			3	X2	6	8	0011

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		10	S12	291	178	156		13	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁷	Σ Δ D DYN. M × 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH
		STD	0000	1712	3464	2523	0027487	0000	15135							
194		[illegible]	0000	1712	34641	2523			15135							
		STD	0010	1706	3466	2526	0027254	0027	15135							
194		[illegible]	0010	1706	34658	2526			15135							
		STD	0020	1706	3466	2526	0027282	0055	15136							
		STD	0030	1705	3466	2526	0027305	0082	15138							
194		[illegible]	0035	1705	34656	2526			15139							
		STD	0050	1704	3463	2527	0027217	0136	15142							
194		[illegible]	0050	1710	34695	2528			15144							
		STD	0075	1696	3464	2529	0027118	0204	15143							
		STD	0100	1679	3461	2531	0026894	0272	15141							
194		[illegible]	0111	1671	34638	2532			15141							
		STD	0125	1584	3456	2546	0025625	0335	15115							
		STD	0150	1443	3442	2567	0023743	0399	15073							
194		[illegible]	0165		34332											
		STD	0200	1217	3421	2590	0021543	0514	14995							
194		[illegible]	T0222	1127	34016	2596			14973							
		STD	0250	1053	34[illegible]	261[illegible]	0019704	0616	14955							
		STD	0300	0957	3405	2630	0017959	0712	14926							
194		[illegible]	0330	0895	34057	2641			14917							
		STD	0400	0762	34[illegible]	2658	0015290	0876	14863							
194		[illegible]	T0441	0681	33992	2667			14843							
		STD	0500	0618	3403	2691	0014234	1019	14822							
		STD	0600	0516	3411	2698	0011440	1142	14800							
194		[illegible]	0655	0463	34149	2705			14792							
		STD	0700	0446	3418	2711	0010325	1251	14792							
		STD	0800	0419	3425	2721	0009387	1350	14794							
194		[illegible]	0862	0383	34322	2719			14795							
		STD	0900	0379	3434	2730	0008530	1439	14799							
		STD	1000	0357	3441	2734	0007836	1521	14808							
194		[illegible]	T1093	0337	34461	2744			14815							
		STD	1100	0336	3446	2744	0007275	1597	14815							
		STD	1200	0316	3449	2748	0006951	1668	14825							
		STD	1300	0297	3451	2752	0006632	1736	14834							
		STD	1400	0279	3453	2755	0006322	1801	14843							
		STD	1500	0262	3455	2758	0006011	1862	14853							
194		[illegible]	T1644	023[illegible]	34585	2763			14968							

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1080	PW	3000 N	14000 W		123	00	05	14	197	1967	N06	012	4572	17	09	4	2		X5	6	5	0012

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		08	S15	291	172	150	7	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	ΣΔD DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at.l	NO₃-N µg-at/l	SiO₄-Si µg-at.l	pH	SCC
		STD	0000	1741	3480	2528	0027019	0000	15145								
197		OBS	0000	1741	34796	2528			15145								
		STD	0010	1741	3479	2528	0027066	0027	15147								
197		OBS	0010	1741	34794	2528			15147								
		STD	0020	1740	3479	2528	0027073	0054	15148								
		STD	0030	1739	3479	2528	0027085	0081	15149								
197		OBS	0036	1738	34793	2528			15150								
		STD	0050	1739	3479	2528	0027166	0135	15153								
197		OBS	0056	1740	34793	2528			15154								
		STD	0075	1738	3479	2528	0027214	0203	15157								
		STD	0100	1736	3480	2529	0027234	0271	15160								
197		OBS	0111	1735	34796	2529			15162								
		STD	0125	1644	3467	2541	0026142	0338	15135								
		STD	0150	1495	3447	2559	0024456	0401	15090								
197		OBS	0167		34348												
		STD	0200	1246	3414	2585	0022054	0518	15012								
197		OBS	T0223	1154	34038	2595			14983								
		STD	0250	1089	3404	2607	0020044	0623	14965								
		STD	0300	0977	3405	2627	0018183	0719	14932								
197		OBS	0334	0906	34060	2639			14912								
		STD	0400	0781	3401	2655	0015637	0888	14875								
197		OBS	T0444	0708	33994	2664			14853								
		STD	0500	0627	3402	2677	0013558	1034	14831								
		STD	0600	0511	3407	2695	0011824	1161	14801								
197		OBS	0662	0457	34120	2705			14790								
		STD	0700	0441	3417	2711	0010340	1271	14790								
		STD	0800	0402	3427	2723	0009232	1369	14791								
197		OBS	T0880	0377	34342	2731			14795								
		STD	0900	0373	3436	2733	0008312	1457	14797								
		STD	1000	0351	3442	2740	0007692	1537	14805								
197		OBS	T1094	0332	34466	2745			14814								
		STD	1100	0331	3447	2746	0007165	1611	14814								
		STD	1200	0312	3451	2751	0006719	1681	14823								
		STD	1300	0294	3454	2755	0006354	1746	14833								
		STD	1400	0277	3457	2758	0005997	1808	14843								
		STD	1500	0261	3458	2761	0005793	1867	14853								
197		OBS	T1652	0240	34582	2763			14869								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1080	PW	2833 N	14001 W		087	80	05	16	064	1967	N06	013	4846	15	15	2	4		X1	6	5	0013

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		06	S05		183	156		13	

MESSENGR TIME of HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ△D DYN. M. X 10³	SOUND VELOCITY	O₂ ml·l	PO₄-P µg-at l	TOTAL-P µg-at l	NO₂-N µg-at l	NO₃-N µg-at l	SiO₄-S µg-at	EH
		STD	0000	1944	3524	2511	0028636	0000	15209							
064		OBS	0000	1944	35238	2511			15209							
		STD	0010	1944	3523	2511	0028700	0029	15210							
064		OBS	0010	1944	35234	2511			15210							
		STD	0020	1936	3523	2512	0028567	0057	15210							
064		OBS	0029	1926	35218	2514			15208							
		STD	0030	1924	3521	2514	0028453	0086	15208							
064		OBS	0048	1897	35160	2517			15202							
		STD	0050	1896	3516	2517	0028201	0142	15202							
		STD	0075	1865	3512	2522	0027827	0213	15197							
064		OBS	0097	1818	35042	2528			15187							
		STD	0100	1802	3503	2531	0027064	0281	15182							
		STD	0125	1676	3487	2549	0025403	0347	15147							
		STD	0150	1556	3470	2564	0024074	0409	15112							
064		OBS	0152		34682											
		STD	0200	1338	3427	2577	0022868	0526	15045							
064		OBS	T0201	1334	34266	2578			15044							
		STD	0250	1143	3414	2605	0020284	0634	14985							
064		OBS	0297	0997	34066	2625			14939							
		STD	0300	0991	3406	2625	0018362	0730	14938							
064		OBS	T0395	0810	34028	2652			14885							
		STD	0400	0801	3403	2653	0015785	0901	14883							
		STD	0500	0650	3407	2678	0013497	1048	14841							
064		OBS	0589	0553	34116	2693			14817							
		STD	0600	0547	3412	2694	0011903	1175	14816							
		STD	0700	0497	3420	2707	0010794	1288	14813							
064		OBS	T0776	0462	34264	2716			14812							
		STD	0800	0452	3428	2718	0009751	1391	14812							
		STD	0900	0413	3436	2729	0008782	1483	14814							
064		OBS	T0964	0391	34406	2735			14816							
		STD	1000	0379	3442	2737	0008049	1568	14817							
		STD	1100	0350	3444	2742	0007578	1646	14822							
		STD	1200	0325	3447	2746	0007151	1719	14828							
		STD	1300	0305	3450	2750	0006777	1789	14837							
		STD	1400	0290	3453	2754	0006458	1855	14848							
064		OBS	T1460	0283	34545	2756			14855							

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1080	PW	2959 N	14003 W		087	90	05	16	195	1967	N06	014	4650	15	07	3	2		X1	6	5		0014

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OF FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		04	S04		200	161	7	13	

MESSENGR TIME OF HR 1 10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. X 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at l	NO_3-N µg-at l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	1387	3515	2519	0027915	0000	15192								
195		DBS	0000	1387	3514	2519			15192								
		STD	0020	1375	3514	2521	0027750	0028	15192								
195		DBS	0020	1375	3514	2521			15190								
		STD	0040	1426	3491	2515	0028904	0056	15175								
195		DBS	0040	1791	34777	2514			15164								
		STD	0060	1757	3475	2515	0028219	0084	15162								
195		DBS	0060	1741	34775	2516			15153								
		STD	0075	1746	3477	2520	0027318	0102	15152								
		STD	0075	1736	3479	2521	0027162	0098	15152								
195		DBS	0099	1727	34797	2531			15157								
		STD	0100	1723	3479	2532	0027697	0076	15156								
		STD	0125	1615	3462	2544	0025855	0342	15126								
		STD	0150	1515	3448	2550	0024761	0405	15096								
		STD	0200	1327	34[illegible]7	[illegible]	0022653	0523	15041								
195		DBS	T0215	1301	34249	2583			15033								
		STD	0250	1167	3421	2606	0020029	0631	14994								
		STD	0300	1029	3416	2627	0018264	0727	14952								
195		DBS	0300	1014	34153	2629			14948								
		STD	0350	0822	3434	2651	0016025	0898	14891								
195		DBS	T0359	0805	34134	2653			14886								
		STD	0400	0637	34 3	2676	0013611	1046	14835								
		STD	0500	0504	3413	2692	0011050	1175	14797								
195		DBS	0519	0491	34 27	2694			14794								
		STD	0700	0448	3413	2707	0010696	1288	14751								
		STD	0800	0415	3424	2720	0009484	1389	14714								
195		DBS	T0811	0401	34245	2721			14709								
		STD	0900	0381	3432	2729	0008627	1481	14686								
		STD	1000	0359	3441	2738	0007859	1562	14809								
195		DBS	T1014	0356	34414	2739			14803								
		STD	1100	0338	3444	2742	0007468	1639	14817								
		STD	1200	0318	3447	2747	0007084	1715	14825								
		STD	1300	0299	3451	2751	0006714	1781	14834								
		STD	1400	0281	3453	2755	0006345	1846	14844								
		STD	1500	0265	3456	2759	0005994	1908	14854								
195		DBS	T1517	0262	34564	2759			14856								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRFT IND CTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1080	PW	29575N	139553W		086	99	05	17	185	1967	N06	015	4023	15	13	2	3		X2	6	8		0015

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		13	S08	230	189	156	7	13	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SEC
		STD	0000	1871	3513	2521	0027665	0000	15187								
185		OBS	0000	1871	35127	2521			15187								
		STD	0010	1867	3513	2522	0027618	0028	15187								
185		OBS	0010	1867	35125	2522			15187								
		STD	0020	1819	3499	2524	0027489	0055	15174								
		STD	0030	1780	3489	2525	0027363	0083	15163								
185		OBS	0030	1780	34886	2525			15163								
		STD	0050	1731	3475	2526	0027315	0137	15150								
185		OBS	0050	1731	34746	2526			15150								
		STD	0075	1736	3479	2529	0027183	0205	15156								
		STD	0100	1741	3484	2531	0027059	0273	15162								
185		OBS	0100	1741													
		STD	0125	1745	3488	2533	0026900	0341	15168								
		STD	0150	1749	3492	2536	0026752	0408	15174								
185		OBS	0152	1749	34928	2536			15174								
		STD	0200	1360	3424	2570	0023521	0533	15052								
185		OBS	T0203	1340	34211	2572			15045								
		STD	0250	1145	3414	2604	0020320	0643	14986								
		STD	0300	0984	3408	2628	0018100	0739	14935								
185		OBS	0305	0971	34076	2630			14931								
		STD	0400	0814	3405	2652	0015868	0909	14888								
185		OBS	T0409	0799	34042	2654			14883								
		STD	0500	0628	3406	2679	0013298	1055	14832								
		STD	0600	0495	3407	2697	0011606	1179	14794								
185		OBS	0610	0485	34075	2698			14792								
		STD	0700	0444	3418	2711	0010301	1289	14791								
		STD	0800	0407	3428	2723	0009216	1386	14794								
185		OBS	T0814	0402	34292	2724			14794								
		STD	0900	0379	3436	2732	0008382	1474	14800								
		STD	1000	0355	3442	2739	0007738	1555	14807								
185		OBS	T1013	0352	34428	2740			14808								
		STD	1100	0333	3445	2744	0007321	1630	14815								
		STD	1200	0312	3448	2748	0006941	1702	14823								
		STD	1300	0294	3451	2752	0006597	1769	14832								
		STD	1400	0277	3454	2756	0006254	1834	14842								
		STD	1500	0263	3456	2759	0005942	1894	14853								
185		OBS	T1519	0260	34568	2760			14855								

TABLE II.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPE. INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO.	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1080	PW	29560N	139580W		086	99	05	18	186	1967	N06	016	4572	15	14	2	2		X2	6	8		0016

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		13	S11	227	194	178	8	13	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$X10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	REC
		STD	0000	1785	3483	2520	0027766	0000	15159								
186		OBS	0000	1785	34833	2520			15159								
		STD	0010	1790	3485	2520	0027829	0028	15162								
186		OBS	0010	1790	34845	2520			15162								
		STD	0020	1752	3476	2522	0027599	0056	15151								
		STD	0030	1732	3473	2525	0027412	0083	15147								
186		OBS	0030	1732	34727	2525			15147								
		STD	0050	1750	3481	2527	0027279	0138	15156								
186		OBS	0050	1750	34811	2527			15156								
		STD	0075	1746	3480	2527	0027318	0206	15159								
186		OBS	0099	1733	34798	2530			15159								
		STD	0100	1732	3480	2530	0027133	0274	15159								
		STD	0125	1705	3473	2532	0027037	0342	15154								
		STD	0150	1677	3467	2534	0026938	0409	15149								
186		OBS	0151	1676	34670	2534			15149								
		STD	0200	1329	3419	2573	0023277	0535	15041								
186		OBS	T0204	1306	34166	2575			15034								
		STD	0250	1134	3413	2606	0020197	0643	14982								
		STD	0300	0984	3409	2629	0018026	0739	14935								
186		OBS	0303	0976	34087	2630			14933								
		STD	0400	0802	3402	2652	0015873	0908	14883								
186		OBS	T0403	0797	34017	2653			14881								
		STD	0500	0619	3402	2678	0013452	1055	14828								
		STD	0600	0491	3407	2697	0011580	1180	14793								
186		OBS	0604	0487	34071	2698			14792								
		STD	0700	0439	3417	2711	0010316	1290	14789								
186		OBS	T0798	0400	34270	2723			14790								
		STD	0800	0399	3427	2723	0009182	1387	14790								
		STD	0900	0374	3435	2732	0008383	1475	14797								
186		OBS	T0991	0353	34426	2740			14805								
		STD	1000	0351	3443	2740	0007633	1555	14805								
		STD	1100	0330	3446	2745	0007257	1630	14814								
		STD	1200	0310	3448	2749	0006888	1700	14822								
		STD	1300	0293	3451	2752	0006556	1768	14832								
		STD	1400	0277	3454	2756	0006225	1831	14842								
186		OBS	T1496	0264	34565	2759			14853								

TABLE II.—Continued

REFERENCE CTRY. CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1080	PW	30030N	139590W		122	09	05	19	186	1967	N06	017	4114	37	16	4	2		X1	4	4		0017

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		17	S15	217	200	194	8	18	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY=x10⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1824	3494	2519	0027874	0000	15171								
	186	OBS	0000	1824	34944	2519			15171								
	186	OBS	0009	1817	34944	2521			15171								
		STD	0010	1814	3494	2521	0027701	0028	15170								
		STD	0020	1786	3486	2522	0027659	0055	15162								
		STD	0030	1764	3480	2523	0027617	0083	15157								
	186	OBS	0033	1758	34791	2523			15156								
		STD	0050	1734	3476	2527	0027282	0138	15151								
	186	OBS	0051	1733	34754	2527			15151								
		STD	0075	1735	3478	2528	0027206	0206	15155								
		STD	0100	1737	3482	2530	0027100	0274	15161								
	186	OBS	0103	1737	34820	2531			15161								
		STD	0125	1654	3465	2537	0026510	0341	15138								
		STD	0150	1546	3447	2548	0025536	0406	15106								
	186	OBS	0154	1527	34439	2550			15101								
		STD	0200	1280	3416	2580	0022551	0526	15024								
	186	OBS	T0205	1257	34137	2583			15017								
		STD	0250	1119	3412	2607	0020034	0633	14976								
		STD	0300	0982	3409	2629	0017978	0728	14935								
	186	OBS	0304	0972	34090	2631			14932								
		STD	0400	0777	3402	2656	0015490	0895	14873								
	186	OBS	0403		34020												
		STD	0500	0617	3403	2679	0013330	1039	14827								
	186	OBS	0597	0506	34046	2693			14798								
		STD	0600	0504	3405	2694	0011886	1165	14798								
		STD	0700	0450	3415	2708	0010595	1278	14793								
	186	OBS	T0789	0411	34240	2719			14793								
		STD	0800	0407	3425	2720	0009438	1378	14793								
		STD	0900	0377	3435	2731	0008433	1467	14799								
	186	OBS	T0978	0357	34411	2738			14804								
		STD	1000	0356	3442	2739	0007750	1548	14807								
		STD	1100	0352	3446	2743	0007484	1624	14823								
		STD	1200	0344	3450	2747	0007168	1698	14837								
		STD	1300	0333	3453	2750	0006888	1768	14849								
		STD	1400	0319	3455	2753	0006642	1835	14860								
	186	OBS	T1462	0309	34565	2755			14867								
		STD	1500	0298	3457	2757	0006307	1900	14869								
		STD	1750	0236	3460	2764	0005481	2048	14884								
	205	OBS	T1866	0215	34606	2767			14895								
		STD	2000	0203	3462	2769	0005048	2179	14913								
	205	OBS	T2404	0174	34643	2773			14970								
		STD	2500	0170	3465	2774	0004600	2420	14984								
	205	OBS	T2946	0156	34659	2775			15055								
		STD	3000	0155	3466	2776	0004481	2647	15064								
	205	OBS	3438	0150	34676	2777			15139								
	205	OBS	T3669	0150	34682	2778			15179								

TABLE III. Observed and interpolated oceanographic data for stations taken by USCGC WINONA at Ocean Station NOVEMBER, 15 June–1 July 1967, prepared from NODC Listing No. 31–1083 WI.

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1083	WI	2959 N	14007 W		087	90	06	15	218	1967	N07	001	4389	15	04	3	2		X1	7	1	0001

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		01	S05	240	192	153	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2071	3528	2480	0031534	0000	15244								
218		OBS	0000	2071	35279	2480			15244								
		STD	0010	2031	3527	2491	0030608	0031	15235								
218		OBS	0010	2031	35271	2491			15235								
		STD	0020	2029	3527	2491	0030600	0062	15236								
		STD	0030	2027	3527	2491	0030593	0092	15237								
218		OBS	0030	2027	35269	2491			15237								
		STD	0050	2027	3527	2491	0030672	0154	15240								
218		OBS	0051	2027	35268	2491			15240								
		STD	0075	1852	3506	2521	0027950	0227	15193								
218		OBS	0076	1847	35053	2521			15192								
		STD	0100	1793	3498	2529	0027215	0296	15179								
218		OBS	0102	1789	34972	2530			15178								
		STD	0125	1759	3490	2531	0027084	0364	15172								
		STD	0150	1687	3478	2539	0026384	0430	15153								
218		OBS	0154	1672	34753	2541			15149								
		STD	0200	1404	3435	2570	0023598	0555	15068								
218		OBS	T0209	1358	34296	2575			15053								
		STD	0250	1192	3419	2600	0020806	0666	15003								
		STD	0300	1027	3410	2622	0018670	0765	14951								
218		OBS	0310	0999	34086	2626			14943								
		STD	0400	0832	3404	2649	0016176	0939	14894								
218		OBS	T0413	0809	34032	2652			14888								
		STD	0500	0639	3403	2676	0013637	1088	14836								
		STD	0600	0498	3403	2693	0011962	1216	14795								
218		OBS	0615	0482	34030	2695			14791								
		STD	0700	0435	3414	2709	0010492	1329	14787								
		STD	0800	0394	3425	2722	0009288	1428	14788								
218		OBS	T0814	0389	34263	2723			14788								
		STD	0900	0374	3434	2731	0008472	1516	14797								
		STD	1000	0356	3441	2738	0007824	1598	14807								
218		OBS	T1017	0353	34420	2739			14809								
		STD	1100	0338	3447	2745	0007246	1673	14817								
		STD	1200	0320	3451	2750	0006812	1744	14827								
		STD	1300	0301	3454	2754	0006436	1810	14836								
		STD	1400	0282	3456	2757	0006129	1873	14845								
		STD	1500	0263	3456	2759	0005964	1933	14853								
218		OBS	T1528	0258	34562	2759			14856								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	QUIET INDICTN	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1083	WI	30032N	140015W		123	00	06	16	187	1967	N07	002	4773	15	49	0	X		X1	6	6	0002

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		14	504	225	196	153	7	14	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	QUAL CODE
		STD	0000	2042	3529	2489	0030728	0000	15236								
187		OBS	0000	2042	35288	2489			15236								
		STD	0010	2032	3529	2491	0030525	0031	15235								
187		OBS	0010	2032	35286	2491			15235								
		STD	0020	1992	3525	2499	0029813	0061	15225								
		STD	0030	1951	3521	2507	0029154	0090	15215								
187		OBS	0030	1951	35205	2507			15215								
		STD	0050	1866	3510	2520	0027890	0147	15193								
187		OBS	0050	1866	35103	2520			15193								
		STD	0075	1811	3496	2523	0027701	0217	15180								
187		OBS	0075	1811	34960	2523			15180								
		STD	0100	1751	3491	2534	0026745	0285	15166								
187		OBS	0101	1749	34906	2534			15165								
		STD	0125	1744	3490	2535	0026736	0352	15168								
		STD	0150	1681	3481	2543	0026031	0418	15152								
187		OBS	0152	1673	34794	2544			15150								
		STD	0200	1356	3431	2576	0022930	0540	15051								
187		OBS	0207	1318	34257	2580			15039								
		STD	0250	1167	3419	2604	0020350	0648	14994								
		STD	0300	1021	3412	2625	0018422	0745	14949								
187		OBS	0308	1001	34115	2628			14943								
		STD	0400	0835	3404	2649	0016222	0918	14896								
187		OBS	T0409	0819	34037	2651			14891								
		STD	0500	0640	3404	2676	0013591	1067	14836								
		STD	0600	0501	3404	2694	0011909	1195	14796								
187		OBS	0610	0490	34042	2695			14794								
		STD	0700	0445	3416	2709	0010461	1307	14791								
		STD	0800	0406	3427	2722	0009278	1406	14793								
187		OBS	T0805	0404	34271	2722			14793								
		STD	0900	0381	3434	2730	0008553	1495	14800								
		STD	1000	0357	3441	2738	0007836	1577	14808								
187		OBS	T1006	0356	34414	2739			14808								
		STD	1100	0335	3446	2744	0007285	1652	14816								
		STD	1200	0314	3451	2750	0006742	1722	14824								
		STD	1300	0295	3454	2754	0006366	1788	14833								
		STD	1400	0277	3456	2758	0006070	1850	14843								
		STD	1500	0260	3456	2759	0005929	1910	14852								
187		OBS	T1516	0257	34564	2760			14854								

TABLE III.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	QUAD NO.	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR. 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1083	WI	30084N	140080W		123	00	06	17	186	1967	N07	003	4633	15	19	2	5		X1	6	6		0003

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR	WIND: SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		29	S03	210	172	163	7	14	

MESSENGR TIME OF T HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2061	3530	2485	0031133	0000	15241								
186		OBS	0000	2061	35299	2485			15241								
		STD	0010	2047	3529	2488	0030884	0031	15239								
186		OBS	0010	2047	35289	2488			15239								
		STD	0020	2015	3528	2496	0030167	0062	15232								
		STD	0030	1982	3527	2504	0029439	0091	15224								
186		OBS	0030	1982	35272	2504			15224								
		STD	0050	1914	3510	2508	0029097	0150	15207								
186		OBS	0050	1914	35097	2508			15207								
		STD	0075	1821	3501	2524	0027597	0221	15183								
186		OBS	0075	1821	35007	2524			15183								
		STD	0100	1765	3493	2533	0026895	0289	15170								
186		OBS	0100	1765	34934	2533			15170								
		STD	0125	1720	3484	2536	0026620	0356	15160								
		STD	0150	1635	3470	2546	0025801	0421	15137								
186		OBS	0153	1622	34679	2547			15133								
		STD	0200	1323	3426	2579	0022648	0542	15040								
186		OBS	T0207	1287	34219	2583			15028								
		STD	0250	1163	3420	2606	0020204	0650	14993								
		STD	0300	1035	3416	2626	0018364	0746	14955								
186		OBS	0309	1014	34157	2629			14949								
		STD	0400	0836	3404	2649	0016237	0919	14896								
186		OBS	T0413	0812	34034	2652			14889								
		STD	0500	0643	3403	2676	0013669	1068	14837								
		STD	0600	0504	3404	2693	0011998	1197	14798								
186		OBS	0613	0490	34035	2694			14794								
		STD	0700	0445	3415	2709	0010536	1309	14791								
		STD	0800	0404	3426	2722	0009329	1409	14792								
186		OBS	T0808	0401	34266	2722			14792								
		STD	0900	0379	3434	2730	0008530	1498	14799								
		STD	1000	0356	3441	2738	0007824	1580	14807								
186		OBS	T1006	0355	34413	2739			14808								
		STD	1100	0335	3447	2745	0007211	1655	14816								
		STD	1200	0314	3451	2750	0006742	1725	14824								
		STD	1300	0295	3454	2754	0006366	1790	14833								
		STD	1400	0276	3456	2758	0006059	1852	14842								
187		OBS	1496	0260	34560	2759			14851								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1083	WI	29596N	140043W		087	90	06	18	177	1967	N07	004	4846	15	05	3	6		X2	6	8		0004

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		28	S03	210	197	166	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2070	3528	2481	0031494	0000	15243								
177		OBS	0000	2070	35281	2481			15243								
		STD	0010	2062	3528	2483	0031333	0031	15243								
177		OBS	0010	2062	35280	2483			15243								
		STD	0020	2053	3528	2485	0031153	0063	15242								
		STD	0030	2044	3528	2487	0030974	0094	15241								
177		OBS	0030	2044	35276	2487			15241								
		STD	0050	1887	3507	2512	0028650	0153	15199								
177		OBS	0050	1887	35068	2512			15199								
		STD	0075	1848	3507	2523	0027768	0224	15192								
177		OBS	0075	1848	35072	2523			15192								
		STD	0100	1774	3494	2531	0027032	0292	15173								
177		OBS	0100	1774	34944	2531			15173								
		STD	0125	1703	3481	2538	0026450	0359	15155								
		STD	0150	1613	3466	2548	0025606	0424	15130								
177		OBS	0152	1605	34644	2548			15127								
		STD	0200	1364	3430	2574	0023162	0546	15054								
177		OBS	T0208	1328	34259	2578			15043								
		STD	0250	1165	3417	2603	0020460	0655	14993								
		STD	0300	1010	3409	2624	0018458	0753	14945								
177		OBS	0305	0997	34086	2626			14941								
		STD	0400	0835	3404	2649	0016222	0926	14896								
177		OBS	T0405	0826	34037	2650			14893								
		STD	0500	0634	3403	2677	0013548	1075	14854								
		STD	0600	0492	3403	2694	0011882	1202	14793								
177		OBS	0609	0482	34031	2695			14790								
		STD	0700	0436	3415	2709	0010430	1314	14788								
		STD	0800	0397	3426	2722	0009248	1412	14789								
177		OBS	0808	0394	34270	2723			14789								
		STD	0900	0372	3435	2732	0008375	1500	14797								
		STD	1000	0351	3442	2740	0007692	1580	14805								
177		OBS	T1008	0349	34422	2740			14806								
		STD	1100	0331	3445	2744	0007342	1656	14814								
		STD	1200	0312	3447	2748	0006992	1727	14823								
		STD	1300	0296	3450	2751	0006680	1796	14833								
		STD	1400	0281	3453	2755	0006367	1861	14844								
		STD	1500	0268	3455	2756	0006081	1923	14855								
177		OBS	T1522	0265	34558	2759			14858								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1083	WI	30001N	140028W		123	00	06	19	186	1967	N07	005	4361	15	06	2	3		X1	6	7		0005

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		10	S05	228	211	170	7	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2095	3527	2473	0032232	0000	15250								
185		OBS	0000	2095	35268	2473			15250								
		STD	0010	2057	3525	2482	0031407	0032	15241								
185		OBS	0010	2057	35252	2482			15241								
		STD	0020	2025	3523	2489	0030767	0063	15234								
		STD	0030	1990	3521	2497	0030066	0093	15226								
185		OBS	0031	1986	35211	2498			15225								
		STD	0050	1876	3504	2513	0028588	0152	15195								
		STD	0075	1781	3490	2526	0027433	0222	15170								
185		OBS	0077	1776	34893	2527			15169								
		STD	0100	1746	3487	2532	0026920	0290	15164								
185		OBS	0103	1741	34864	2533			15163								
		STD	0125	1721	3481	2534	0026861	0357	15160								
		STD	0150	1652	3471	2542	0026106	0423	15142								
185		OBS	0159	1615	34657	2547			15132								
		STD	0200	1338	3430	2579	0022648	0545	15045								
185		OBS	T0211	1278	34225	2586			15026								
		STD	0250	1161	3417	2604	0020388	0653	14992								
		STD	0300	1029	3411	2623	0018630	0750	14952								
185		OBS	0311	1003	34101	2627			14944								
		STD	0400	0829	3404	2650	0016131	0924	14893								
185		OBS	T0410	0811	34033	2652			14888								
		STD	0500	0641	3403	2676	0013671	1073	14836								
		STD	0600	0503	3403	2692	0012037	1202	14797								
185		OBS	0616	0486	34027	2694			14793								
		STD	0700	0441	3415	2709	0010488	1314	14790								
		STD	0800	0398	3426	2722	0009260	1413	14790								
185		OBS	T0818	0392	34282	2725			14790								
		STD	0900	0375	3435	2732	0008410	1501	14798								
		STD	1000	0354	3442	2739	0007727	1582	14807								
185		OBS	T1020	0350	34429	2740			14808								
		STD	1100	0334	3445	2744	0007340	1657	14815								
		STD	1200	0315	3448	2748	0006997	1729	14824								
		STD	1300	0296	3450	2751	0006643	1797	14833								
		STD	1400	0278	3453	2755	0006295	1862	14843								
		STD	1500	0261	3456	2759	0005955	1923	14852								
185		OBS	T1525	0257	34565	2760			14855								

TABLE III.—Continued

REFERENCE: CTDY CODE	REFERENCE: IO. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR.1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1083	WI	2832 N	14005 W		087	80	06	20	208	1967	N07	006	4938	15	09	2	2		X1	6	2		0006

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		08	S13	231	205	172	7	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY=10^7	$\Sigma\Delta$D DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCO
		STD	0000	2134	3528	2463	0033189	0000	15260								
208		OBS	0000	2134	35276	2463			15260								
208		OBS	0009	2106	35272	2470			15254								
		STD	0010	2105	3527	2470	0032514	0033	15254								
		STD	0020	2089	3525	2473	0032281	0065	15251								
208		OBS	0028	2070	35238	2478			15248								
		STD	0030	2063	3523	2479	0031793	0097	15246								
208		OBS	0047	2001	35186	2492			15231								
		STD	0050	1989	3518	2495	0030351	0159	15229								
208		OBS	0071	1920	35135	2509			15212								
		STD	0075	1914	3513	2510	0028944	0234	15211								
208		OBS	0096	1874	35086	2517			15203								
		STD	0100	1867	3507	2518	0028323	0305	15201								
		STD	0125	1805	3495	2524	0027798	0375	15186								
208		OBS	0146	1726	34822	2533			15165								
		STD	0150	1701	3478	2536	0026702	0443	15158								
208		OBS	T0197	1435	34369	2564			15078								
		STD	0200	1422	3436	2567	0023690	0570	15074								
		STD	0250	1217	3421	2596	0021121	0682	15011								
208		OBS	0293	1072	34124	2616			14967								
		STD	0300	1054	3412	2619	0018982	0783	14961								
208		OBS	T0387	0851	34046	2647			14900								
		STD	0400	0828	3405	2651	0016057	0958	14893								
		STD	0500	0671	3407	2674	0013813	1107	14849								
208		OBS	0580	0576	34081	2688			14824								
		STD	0600	0561	3411	2692	0012155	1237	14822								
		STD	0700	0495	3421	2708	0010695	1351	14813								
208		OBS	T0767	0460	34276	2717			14810								
		STD	0800	0449	3430	2720	0009567	1453	14812								
		STD	0900	0418	3437	2729	0008768	1544	14816								
208		OBS	T0953	0402	34402	2733			14819								
		STD	1000	0389	3443	2737	0008064	1628	14821								
		STD	1100	0363	3447	2742	0007540	1706	14828								
		STD	1200	0339	3451	2748	0007035	1779	14835								
		STD	1300	0318	3453	2752	0006709	1848	14843								
		STD	1400	0300	3454	2754	0006488	1914	14852								
208		OBS	T1458	0291	34544	2755			14858								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1083	WI	30053N	140010W		123	00	06	21	171	1967	N07	007	4773	15	08	2	2		X2	6	8		0007

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S09	240	188	153	7	14	

MESSENGR TIME or HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	ΣΔD DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	S CC
		STD	0000	2080	3530	2480	0031585	0000	15246								
171		OBS	0000	2080	35304	2480			15246								
		STD	0010	2079	3530	2480	0031610	0032	15248								
171		OBS	0010	2079	35302	2480			15248								
		STD	0020	2031	3524	2488	0030868	0063	15236								
171		OBS	0029	1993	35196	2495			15226								
		STD	0030	1991	3519	2495	0030258	0093	15226								
171		OBS	0048	1930	35108	2505			15211								
		STD	0050	1913	3508	2507	0029195	0153	15206								
171		OBS	0073	1776	34851	2524			15168								
		STD	0075	1775	3485	2524	0027656	0224	15168								
171		OBS	0097	1752	34842	2529			15165								
		STD	0100	1746	3484	2530	0027145	0292	15164								
		STD	0125	1680	3482	2544	0025886	0359	15148								
171		OBS	0147	1595	34795	2562			15125								
		STD	0150	1575	3475	2563	0024121	0421	15119								
171		OBS	0199	1298	34208	2580			15031								
		STD	0200	1294	3421	2581	0022475	0538	15029								
		STD	0250	1130	3415	2608	0019972	0644	14980								
171		OBS	0296	1009	34100	2625			14944								
		STD	0300	1002	3410	2627	0018251	0739	14942								
171		OBS	T0396	0844	34046	2648			14898								
		STD	0400	0835	3405	2649	0016185	0912	14896								
		STD	0500	0637	3402	2676	0013670	1061	14835								
171		OBS	0593	0508	34002	2690			14798								
		STD	0600	0504	3401	2691	0012183	1190	14797								
		STD	0700	0448	3414	2707	0010645	1304	14795								
171		OBS	T0786	0410	34232	2719			14792								
		STD	0800	0406	3425	2721	0009427	1405	14793								
		STD	0900	0380	3434	2730	0008541	1494	14800								
171		OBS	T0975	0362	34395	2737			14805								
		STD	1000	0356	3441	2738	0007824	1576	14807								
		STD	1100	0334	3447	2745	0007200	1651	14815								
		STD	1200	0314	3452	2751	0006669	1721	14824								
		STD	1300	0295	3454	2754	0006366	1786	14833								
		STD	1400	0279	3455	2757	0006167	1849	14843								
171		OBS	T1480	0267	34555	2758			14852								

TABLE III.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° '1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT): MO	DAY	HR,1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR	HGT	PER	SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1083	WI	29563N	139532W		086	99	06	22	193	1967	N07	008	4663	14	08	2	2		X8	8	8	0008

WATER: COLOR CODE	WATER: TRANS (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		10	S11	247	186	173	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁵	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2079	3529	2479	0031697	0000	15246								
193		OBS	0000	2079	35285	2479			15246								
193		OBS	0009	2071	35287	2481			15245								
		STD	0010	2068	3528	2481	0031487	0032	15245								
		STD	0020	2039	3525	2487	0030999	0063	15238								
193		OBS	0027	2014	35231	2492			15232								
		STD	0030	2000	3522	2495	0030266	0093	15229								
193		OBS	0044	1941	35183	2507			15214								
		STD	0050	1921	3516	2511	0028611	0153	15209								
193		OBS	0067	1865	35086	2519			15196								
		STD	0075	1839	3504	2522	0027785	0223	15189								
193		OBS	0089	1792	34974	2529			15177								
		STD	0100	1752	3497	2538	0026332	0291	15167								
		STD	0125	1660	3489	2554	0024898	0355	15143								
193		OBS	0135		34840												
		STD	0150	1565	3468	2560	0024414	0417	15115								
193		OBS	0182	1442	34404	2566			15078								
		STD	0200	1355	3434	2579	0022691	0534	15051								
		STD	0250	1151	3419	2607	0020061	0641	14988								
193		OBS	0271	1082	34146	2616			14967								
		STD	0300	1020	3411	2624	0018478	0738	14949								
193		OBS	T0361	0895	34059	2641			14912								
		STD	0400	0807	3404	2653	0015785	0909	14885								
		STD	0500	0623	3400	2675	0013668	1056	14829								
193		OBS	0542	0563	33979	2681			14811								
		STD	0600	0506	3403	2692	0012059	1185	14798								
		STD	0700	0434	3413	2708	0010555	1298	14786								
193		OBS	T0718	0424	34145	2710			14785								
		STD	0800	0405	3424	2720	0009489	1398	14792								
193		OBS	T0891	0384	34327	2729			14800								
		STD	0900	0382	3433	2729	0008639	1489	14801								
		STD	1000	0360	3441	2738	0007870	1571	14809								
		STD	1100	0339	3447	2745	0007258	1647	14818								
		STD	1200	0320	3451	2750	0006812	1717	14827								
		STD	1300	0301	3453	2753	0006509	1784	14836								
193		OBS	T1386	0285	34537	2755			14843								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S.	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1083	WI	30067N	139596W		122	09	06	23	190	1967	N07	009	4645	16	08	2	2		X2	6	8		0009

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	S10	261	194	151	7	14	

MESSENGR. TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2078	3531	2481	0031519	0000	15246								
190		OBS	0000	2078	35306	2481			15246								
		STD	0010	2072	3531	2482	0031394	0031	15246								
190		OBS	0010	2072	35307	2482			15246								
		STD	0020	2036	3528	2490	0030706	0063	15238								
		STD	0030	1994	3523	2497	0030043	0093	15227								
190		OBS	0035	1970	35197	2501			15221								
		STD	0050	1884	3506	2513	0028636	0152	15198								
190		OBS	0054	1864	35032	2516			15193								
		STD	0075	1775	3486	2524	0027583	0222	15168								
190		OBS	0084	1755	34838	2528			15164								
		STD	0100	1757	3492	2533	0026609	0290	15168								
190		OBS	0109	1758	34936	2534			15170								
		STD	0125	1708	3482	2538	0026492	0356	15156								
		STD	0150	1618	3465	2546	0025789	0422	15131								
190		OBS	0163	1565	34565	2551			15116								
		STD	0200	1376	3431	2572	0023327	0545	15058								
190		OBS	T0219	1293	34214	2582			15032								
		STD	0250	1198	3420	2599	0020843	0655	15005								
		STD	0300	1058	3416	2622	0018757	0754	14963								
190		OBS	0325	0995	34140	2631			14944								
		STD	0400	0835	3404	2649	0016222	0929	14896								
190		OBS	T0434	0770	34018	2657			14876								
		STD	0500	0649	3402	2674	0013853	1079	14840								
		STD	0600	0509	3405	2693	0011948	1208	14800								
190		OBS	0645	0463	34075	2701			14789								
		STD	0700	0443	3414	2708	0010586	1321	14790								
		STD	0800	0410	3425	2720	0009473	1421	14795								
190		OBS	T0858	0393	34307	2726			14798								
		STD	0900	0382	3434	2730	0008565	1511	14801								
		STD	1000	0357	3441	2738	0007836	1593	14808								
190		OBS	T1068	0341	34446	2743			14813								
		STD	1100	0334	3445	2744	0007318	1669	14815								
		STD	1200	0312	3448	2748	0006955	1741	14823								
		STD	1300	0293	3450	2752	0006623	1808	14832								
		STD	1400	0275	3453	2755	0006297	1873	14841								
		STD	1500	0259	3455	2759	0005983	1934	14852								
190		OBS	T1617	0243	34579	2762			14865								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° '1. 10	DRIFT INDICR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO.	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1083	WI	30032N	139598W		122	09	06	24	185	1967	N07	010	4773	13	07	3	2		X1	6	7		0010

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	S13	299	192	154	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/..	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O2 ml/l	PO4-P µg-at/l	TOTAL-P µg-at/l	NO2-N µg-at/l	NO3-N µg-at/l	SiO4-Si µg-at/l	pH	T O C
		STD	0000	2028	3514	2481	0031452	0000	15231								
185		OBS	0000	2028	35139	2481			15231								
185		OBS	0009	2021	35141	2483			15230								
		STD	0010	2020	3515	2484	0031242	0031	15230								
		STD	0020	2005	3518	2491	0030624	0062	15228								
185		OBS	0027	1989	35209	2497			15225								
		STD	0030	1980	3518	2497	0030055	0093	15223								
185		OBS	0044	1932	35099	2503			15211								
		STD	0050	1906	3509	2509	0028952	0152	15204								
185		OBS	0066	1845	35055	2522			15189								
		STD	0075	1818	3502	2526	0027431	0222	15183								
185		OBS	0088	1778	34960	2531			15172								
		STD	0100	1748	3490	2534	0026748	0290	15165								
		STD	0125	1662	3475	2543	0025961	0356	15141								
185		OBS	0131	1636	34711	2546			15134								
		STD	0150	1520	3451	2557	0024690	0419	15099								
185		OBS	0178	1372	34293	2572			15053								
		STD	0200	1293	3426	2585	0022067	0536	15030								
		STD	0250	1135	3419	2610	0019774	0641	14983								
185		OBS	0263	1099	34177	2616			14972								
		STD	0300	1017	3412	2626	0018354	0736	14948								
185		OBS	T0348	0918	34067	2638			14919								
		STD	0400	0822	3405	2651	0015988	0908	14891								
		STD	0500	0662	3400	2671	0014170	1058	14844								
185		OBS	0521	0633	33992	2674			14836								
		STD	0600	0531	3403	2689	0012368	1191	14809								
185		OBS	T0691	0448	34097	2704			14790								
		STD	0700	0445	3411	2705	0010832	1307	14791								
		STD	0800	0412	3423	2718	0009645	1409	14795								
185		OBS	T0865	0393	34298	2726			14799								
		STD	0900	0383	3432	2728	0008761	1501	14801								
		STD	1000	0357	3436	2734	0008191	1586	14807								
		STD	1100	0334	3441	2740	0007650	1665	14815								
		STD	1200	0314	3446	2746	0007141	1739	14823								
		STD	1300	0298	3450	2751	0006673	1808	14834								
185		OBS	T1348	0291	34526	2754			14839								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1083	WI	30003N	140005W		123	00	06	25	186	1967	N07	011	4352	16	11	3	2		X1	6	5		0011

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S16	268	184	147	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	QUAL
		STD	0000	2020	3523	2490	0030612	0000	15229								
186		OBS	0000	2020	35227	2490			15229								
186		OBS	0009	2011	35229	2493			15228								
		STD	0010	2011	3523	2493	0030414	0031	15229								
		STD	0020	2006	3522	2493	0030418	0061	15229								
		STD	0030	1986	3520	2497	0030046	0091	15225								
186		OBS	0033	1977	35198	2499			15223								
		STD	0050	1899	3512	2513	0028564	0150	15203								
186		OBS	0052	1890	35106	2515			15200								
		STD	0075	1803	3500	2528	0027222	0220	15178								
186		OBS	0080	1787	34974	2530			15174								
		STD	0100	1737	3489	2536	0026567	0287	15162								
186		OBS	0103	1727	34868	2537			15159								
		STD	0125	1601	3464	2549	0025412	0352	15121								
		STD	0150	1468	3443	2562	0024185	0414	15081								
186		OBS	0155	1443	34397	2565			15074								
		STD	0200	1236	3418	2590	0021573	0528	15009								
186		OBS	T0206	1213	34165	2594			15002								
		STD	0250	1117	3415	2610	0019749	0631	14976								
		STD	0300	1010	3413	2628	0018163	0726	14945								
186		OBS	0306	0997	34123	2629			14942								
		STD	0400	0796	3403	2654	0015710	0896	14881								
186		OBS	0408	0781	34024	2656			14876								
		STD	0500	0620	3403	2678	0013384	1041	14828								
		STD	0600	0494	3404	2694	0011847	1167	14794								
186		OBS	0613	0481	34040	2696			14790								
		STD	0700	0439	3414	2708	0010539	1279	14789								
		STD	0800	0400	3424	2720	0009431	1379	14790								
186		OBS	T0824	0392	34260	2723			14791								
		STD	0900	0375	3433	2730	0008558	1469	14798								
		STD	1000	0353	3441	2739	0007789	1551	14806								
186		OBS	T1031	0347	34436	2741			14809								
		STD	1100	0333	3445	2744	0007314	1626	14815								
		STD	1200	0314	3448	2748	0006971	1698	14824								
		STD	1300	0295	3450	2752	0006631	1766	14833								
		STD	1400	0278	3453	2755	0006310	1830	14843								
		STD	1500	0262	3455	2759	0005996	1892	14853								
186		OBS	T1578	0250	34574	2761			14861								

TABLE III.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DUPLICATE	MARSDEN 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.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1083	WI	30002N	140000W		123	00	06	26	185	1967	N07	012	4480	16	06	2	2		X1	8	2		0012

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		07	516	264	191	168	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/..	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2013	3510	2482	0031341	0000	15226								
	185	OBS	0000	2013	35102	2482			15226								
		STD	0010	1998	3511	2487	0030964	0031	15224								
	185	OBS	0010	1998	35107	2487			15224								
		STD	0020	1987	3514	2492	0030526	0062	15223								
		STD	0030	1976	3516	2497	0030081	0092	15222								
	185	OBS	0035	1971	35178	2499			15221								
		STD	0050	1874	3508	2517	0028249	0151	15195								
	185	OBS	0055	1850	35049	2520			15189								
		STD	0075	1813	3501	2527	0027385	0220	15181								
	185	OBS	0085	1784	34962	2530			15174								
		STD	0100	1727	3486	2536	0026555	0288	15158								
	185	OBS	0109	1687	34789	2540			15147								
		STD	0125	1580	3461	2551	0025174	0352	15115								
		STD	0150	1433	3439	2567	0023757	0413	15069								
	185	OBS	0164	1361	34296	2574			15047								
		STD	0200	1218	3420	2595	0021092	0525	15004								
	185	OBS	0219	1153	34160	2604			14984								
		STD	0250	1079	3413	2616	0019231	0626	14962								
		STD	0300	0968	3409	2632	0017764	0719	14930								
	185	OBS	0328	0911	34068	2639			14913								
		STD	0400	0781	3402	2655	0015563	0885	14875								
	185	OBS	T0438	0720	34008	2663			14857								
		STD	0500	0630	3402	2676	0013576	1031	14832								
		STD	0600	0514	3405	2693	0012039	1159	14802								
	185	OBS	0653	0468	34059	2699			14792								
		STD	0700	0447	3412	2706	0010782	1273	14792								
		STD	0800	0407	3424	2720	0009512	1375	14793								
	185	OBS	T0864	0386	34308	2727			14796								
		STD	0900	0377	3434	2731	0008507	1465	14799								
		STD	1000	0353	3441	2739	0007789	1546	14806								
	185	OBS	T1078	0336	34458	2744			14812								
		STD	1100	0331	3446	2745	0007217	1621	14814								
		STD	1200	0311	3448	2749	0006899	1692	14823								
		STD	1300	0292	3451	2752	0006582	1759	14831								
		STD	1400	0276	3453	2755	0006301	1824	14842								
		STD	1500	0260	3455	2758	0006009	1885	14852								
	185	OBS	T1640	0242	34579	2762			14868								

TABLE III.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1083	WI	29592N	139592W		086	99	06	27	182	1967	N07	013	4389	15	06	2	3		X1	6	2	0013

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	S14	267	190	178	7	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2001	3497	2476	0031975	0000	15221								
182		OBS	0000	2001	34973	2476			15221								
		STD	0010	1994	3497	2477	0031849	0032	15221								
182		OBS	0010	1994	34971	2477			15221								
		STD	0020	1995	3501	2480	0031614	0064	15223								
		STD	0030	1995	3503	2482	0031495	0095	15225								
182		OBS	0030	1995	35033	2482			15225								
		STD	0050	1794	3503	2533	0026688	0153	15172								
182		OBS	0050	1794	35033	2533			15172								
		STD	0075	1742	3497	2541	0025998	0219	15160								
182		OBS	0075	1742	34973	2541			15160								
182		OBS	0099	1742	34987	2542			15164								
		STD	0100	1738	3498	2543	0025907	0284	15163								
		STD	0125	1639	3491	2561	0024255	0347	15136								
		STD	0150	1534	3484	2579	0022554	0405	15107								
182		OBS	0151	1530	34841	2580			15106								
		STD	0200	1306	3428	2584	0022172	0517	15034								
182		OBS	0203	1294	34253	2585			15031								
		STD	0250	1148	3421	2609	0019860	0622	14988								
		STD	0300	1007	3415	2630	0017966	0717	14945								
182		OBS	0302	1002	34147	2630			14943								
		STD	0400	0772	3402	2657	0015417	0884	14871								
182		OBS	T0401	0770	34021	2657			14871								
		STD	0500	0605	3403	2680	0013202	1027	14822								
		STD	0600	0487	3404	2695	0011777	1152	14791								
182		OBS	0605	0482	34037	2695			14789								
		STD	0700	0437	3415	2709	0010441	1263	14788								
		STD	0800	0399	3425	2721	0009345	1362	14790								
182		OBS	T0810	0396	34260	2722			14790								
		STD	0900	0376	3434	2731	0008495	1451	14798								
		STD	1000	0355	3441	2738	0007812	1532	14807								
182		OBS	T1014	0352	34420	2740			14808								
		STD	1100	0335	3447	2745	0007211	1608	14816								
		STD	1200	0315	3451	2750	0006754	1677	14825								
		STD	1300	0297	3455	2755	0006315	1743	14834								
		STD	1400	0279	3456	2757	0006093	1805	14843								
		STD	1500	0262	3456	2759	0005952	1865	14853								
182		OBS	T1514	0260	34564	2759			14854								

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1083	WI	29596N	140022W		087	90	06	28	182	1967	N07	014	4297	02	07	3	4		X1	8	7	0014

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		06	S19	257	198	180	7	08	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2014	3506	2479	0031700	0000	15226								
182		OBS	0000	2014	35056	2479			15226								
		STD	0010	2010	3506	2480	0031635	0032	15226								
182		OBS	0010	2010	35056	2480			15226								
		STD	0020	2002	3511	2486	0031085	0063	15226								
		STD	0030	1993	3516	2492	0030540	0094	15226								
182		OBS	0034	1990	35180	2494			15226								
		STD	0050	1876	3506	2515	0028442	0153	15196								
182		OBS	0054	1852	35027	2518			15189								
		STD	0075	1761	3485	2527	0027331	0223	15164								
182		OBS	0083	1735	34796	2529			15157								
		STD	0100	1705	3474	2532	0026926	0290	15150								
182		OBS	0108	1684	34708	2535			15145								
		STD	0125	1595	3458	2545	0025718	0356	15119								
		STD	0150	1470	3441	2560	0024372	0419	15082								
182		OBS	0162	1413	34350	2568			15064								
		STD	0200	1244	3420	2590	0021577	0534	15012								
182		OBS	T0216	1178	34167	2600			14992								

TABLE III.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR,1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT.	WAVE OBSERVATIONS: PER.	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1083	WI	29587N	140006W		087	90	06	29	180	1967	N07	015	4535	15	07	4	4		X2	8	8	0015

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	S15	221	191	182	7	14	

MESSENGR TIME or HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁻⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at l	NO₃-N µg-at l	SiO₄-Si µg-at/l	pH	SOC
		STD	0000	2017	3510	2482	0031428	0000	15227								
180		OBS	0000	2017	35104	2482			15227								
		STD	0010	2013	3510	2482	0031391	0031	15228								
180		OBS	0010	2013	35100	2482			15228								
		STD	0020	2013	3515	2486	0031065	0063	15230								
		STD	0030	2013	3518	2489	0030854	0094	15232								
180		OBS	0030	2013	35184	2489			15232								
		STD	0050	1984	3520	2497	0030117	0155	15227								
180		OBS	0050	1984	35195	2497			15227								
		STD	0075	1836	3503	2522	0027800	0227	15188								
180		OBS	0075	1836	35028	2522			15188								
		STD	0100	1749	3490	2534	0026756	0295	15165								
180		OBS	0100	1749	34902	2534			15165								
		STD	0125	1598	3463	2549	0025420	0360	15120								
		STD	0150	1463	3443	2563	0024081	0422	15080								
180		OBS	0151	1458	34418	2563			15078								
		STD	0200	1244	3419	2590	0021650	0537	15012								
180		OBS	T0206	1222	34173	2592			15006								
		STD	0250	1107	3415	2612	0019572	0640	14972								
		STD	0300	0989	3412	2630	0017888	0733	14938								
180		OBS	0304	0980	34113	2631			14935								
		STD	0400	0791	3403	2654	0015666	0901	14879								
180		OBS	0403	0786	34023	2655			14877								
		STD	0500	0613	3403	2679	0013299	1046	14825								
		STD	0600	0488	3404	2695	0011789	1171	14791								
180		OBS	0607	0481	34038	2696			14789								
		STD	0700	0438	3415	2709	0010453	1283	14788								
		STD	0800	0397	3425	2722	0009322	1381	14789								
180		OBS	T0804	0396	34256	2722			14789								
		STD	0900	0364	3434	2732	0008357	1470	14793								
		STD	1000	0336	3441	2740	0007587	1550	14799								
180		OBS	T1000	0336	34411	2740			14799								
		STD	1100	0312	3447	2747	0006948	1622	14806								
		STD	1200	0292	3451	2752	0006490	1689	14815								
		STD	1300	0277	3454	2756	0006159	1753	14825								
		STD	1400	0267	3456	2759	0005954	1813	14838								
		STD	1500	0261	3456	2759	0005940	1873	14854								
180		OBS	T1515	0260	34560	2759			14855								

TABLE III.—Continued

REFERENCE		SHIP CODE	LATITUDE	LONGITUDE	DRIFT IND CTP	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER 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		TYPE	AMT		
31	1083	WI	29561N	139554W		086	99	06	30	198	1967	N07	016	4435	15	08	2	4		X1	6	7		0016

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE		DRY BULB	WET BULB			
		04	503	190	199	178	7	14	

MESSENGR TIME OF CAST HR 1/10	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	OCC
	STD	0000	2014	34883	2462	0033308	0000	15223								
198	OBS	0000	2014	34834	2462			15223								
	STD	0010	1995	34886	2468	0032707	0033	15220								
198	OBS	0010	1995	34856	2468			15220								
	STD	0020	2004	35009	2484	0031673	0065	15227								
	STD	0030	2013	35021	2491	0030673	0098	15232								
198	OBS	0030	2013	35009	2491			15232								
	STD	0050	1994	3510	2504	0028953	0156	15205								
198	OBS	0050	1994	35104	2504			15205								
	STD	0075	1821	3501	2524	0027597	0226	15183								
198	OBS	0075	1821	35007	2524			15183								
	STD	0100	1763	3493	2533	0026863	0294	15170								
198	OBS	0100	1763	3493[illegible]	2533			15170								
	STD	0125	1585	3456	2551	0025209	0359	15116								
	STD	0150	1430	3438	2566	0023769	0421	15068								
198	OBS	0152		34361												
	STD	0200	1191	3408	2591	0021476	0534	14993								
198	OBS	0200	1168	34058	2594			14985								
	STD	0250	1133	3419	2610	0019739	0637	14967								
	STD	0300	1000	3413	263	0017967	0734	14942								
198	OBS	0305	0992	34138	2632			14939								
	STD	0400	0788	3412	2654	0015656	0894	14877								
198	OBS	0405	0778	34118	2656			14874								
	STD	0500	0613	3403	2674	0013294	1044	14825								
	STD	0600	0489	3395	2685	0011744	1169	14792								
198	OBS	0610	0479	34045	2687			14789								
	STD	0700	0434	3396	2710	0010332	1280	14787								
	STD	0800	0395	3424	2729	0009225	1377	14786								
198	OBS	0816	0390	34276	2724			14789								
	STD	0900	0374	3435	273	0008329	1465	14797								
	STD	1000	0356	3443	2738	0007751	1546	14807								
198	OBS	1016	0353	34429	274			14809								
	STD	1100	0337	3445	2744	0007357	1622	14816								
	STD	1200	0319	3448	2747	0007029	1694	14825								
	STD	1300	0304	3452	2751	0006674	1762	14835								
	STD	1400	0281	3453	2755	0006316	1827	14844								
	STD	1500	0256	3456	2759	0005956	1889	14853								
198	OBS	1526	0257	34568	2760			14856								

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	DAY	HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	HGT	PER	SEA	WEATHER CODE	CLOUD CODES TYPE	AMT	NODC STATION NUMBER
31	1083	WI	29548N	139594W		086	99	07	01	190	1967	N07	017	4572	15	03	2	3		X2	6	8	0017

WATER COLOR CODE	WATER TRANS (m)	WIND DIR	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		04	514	221	196	171	6	14	

MESSENGER TIME HR. 1/10	CAST NO	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁷	ΣΔD DYN. M × 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]							

TABLE IV. Observed and interpolated oceanographic data for stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 23 July–13 August 1967, prepared from NODC Listing No. 31–1142 PW.

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	3005 N	140015W		123	00	07	23	208	1967	N09	001	4297	15	09	2				6	6		0001

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	507	230	217	206	7	14	

MESSENGR TIME OF DEPTH HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2065	3476	2442	0035167	0000	15236								
208		OBS	0000	2065	34756	2442			15236								
		STD	0010	2046	3475	2447	0034798	0035	15232								
208		OBS	0010	2046	34745	2447			15232								
		STD	0020	1944	3476	2474	0032172	0068	15206								
		STD	0030	1855	3478	2498	0029939	0100	15183								
208		OBS	0031		34776												
		STD	0050	1717	3443	2506	0029295	0159	15142								
208		OBS	0051	1712	34419	2506			15140								
		STD	0075	1623	3436	2522	0027812	0230	15117								
208		OBS	0077	1618	34351	2523			15115								
		STD	0100	1603	3441	2531	0027056	0299	15115								
208		OBS	0103	1599	34415	2532			15115								
		STD	0125	1532	3435	2542	0026039	0365	15096								
		STD	0150	1445	3426	2554	0024952	0429	15072								
208		OBS	0156	1422	34232	2557			15065								
		STD	0200	1224	3401	2579	0022596	0548	15003								
208		OBS	0210	1187	33978	2584			14992								
		STD	0250	1097	3402	2604	0020338	0655	14967								
		STD	0300	0992	3408	2627	0018247	0751	14938								
208		OBS	0311	0970	34090	2631			14932								
		STD	0400	0807	3401	2651	0016022	0923	14885								
208		OBS	T0415	0781	34006	2654			14877								
		STD	0500	0626	3403	2677	0013501	1070	14830								
		STD	0600	0493	3405	2695	0011760	1197	14793								
208		OBS	0618	0475	34053	2698			14789								
		STD	0700	0435	3415	2710	0010418	1308	14787								
		STD	0800	0396	3426	2722	0009237	1406	14789								
208		OBS	T0817	0391	34273	2724			14790								
		STD	0900	0374	3434	2731	0008472	1494	14797								
		STD	1000	0353	3441	2739	0007789	1576	14806								
208		OBS	T1017	0350	34421	2740			14808								
		STD	1100	0334	3447	2745	0007200	1651	14815								
		STD	1200	0314	3451	2750	0006742	1720	14824								
		STD	1300	0296	3454	2754	0006377	1786	14834								
		STD	1400	0278	3455	2757	0006155	1849	14843								
		STD	1500	0260	3455	2758	0006002	1909	14852								
208		OBS	T1524	0256	34551	2759			14854								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PERT	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	2951 N	13950 W		086	99	07	24	191	1967	N09	002	3750	15	11	1				6	5		0002

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		17	S06	230	244	222	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	2097	3480	2437	0035657	0000	15245								
191		OBS	0000	2097	34802	2437			15245								
191		OBS	0009	2075	34794	2442			15241								
		STD	0010	2075	3480	2443	0035162	0035	15241								
		STD	0020	2071	3482	2445	0034970	0070	15242								
191		OBS	0029	2068	34833	2447			15242								
		STD	0030	2053	3482	2450	0034504	0105	15238								
191		OBS	0049	1830	34633	2494			15177								
		STD	0050	1824	3462	2494	0030394	0170	15176								
191		OBS	0073	1726	34493	2508			15149								
		STD	0075	1726	3450	2509	0029070	0244	15149								
191		OBS	0098	1709	34569	2518			15149								
		STD	0100	1709	3456	2518	0028303	0316	15149								
		STD	0125	1677	3448	2519	0028233	0387	15143								
191		OBS	0149	1594	34409	2533			15120								
		STD	0150	1586	3440	2534	0026908	0456	15118								
		STD	0200	1247	3398	2573	0023245	0581	15011								
191		OBS	0201	1242	33978	2574			15009								
		STD	0250	1094	3403	2605	0020227	0690	14966								
		STD	0300	0966	3408	2631	0017783	0785	14929								
191		OBS	0305	0955	34088	2634			14926								
		STD	0400	0781	3402	2656	0015541	0951	14875								
191		OBS	T0402	0778	34022	2656			14874								
		STD	0500	0614	3403	2679	0013349	1096	14826								
191		OBS	0598	0497	34028	2693			14794								
		STD	0600	0496	3403	2693	0011937	1222	14794								
		STD	0700	0443	3414	2708	0010586	1335	14790								
191		OBS	T0792	0404	34230	2719			14790								
		STD	0800	0402	3424	2720	0009454	1435	14791								
		STD	0900	0373	3433	2730	0008535	1525	14797								
		STD	1000	0347	3441	2739	0007720	1606	14803								
191		OBS	T1006	0346	34418	2740			14804								
		STD	1100	0324	3445	2744	0007255	1681	14811								
		STD	1200	0304	3448	2749	0006863	1752	14819								
		STD	1300	0286	3451	2753	0006498	1819	14829								
		STD	1400	0271	3454	2757	0006155	1882	14840								
191		OBS	T1491	0260	34567	2760			14851								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPE INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	29595N	139570W		086	99	07	25	200	1967	N09	003	4023	15	08	2				6	7		0003

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		02	S05	247	217	206	7	14	

MESSENGR TIME HR. 1, 10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–10^{8}	$\Sigma\Delta D$ DYN. M $\times 10^{3}$	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	QUAL CODE
		STD	0000	2095	3471	2430	0036307	0000	15243								
200		OBS	0000	2095	34705	2430			15243								
		STD	0010	2084	3470	2433	0036088	0036	15242								
200		OBS	0010	2084	34701	2433			15242								
		STD	0020	2070	3471	2437	0035700	0072	15240								
		STD	0030	2023	3472	2451	0034474	0107	15229								
200		OBS	0030	2023	34719	2451			15229								
		STD	0050	1827	3472	2501	0029717	0171	15178								
200		OBS	0050	1827	34723	2501			15178								
		STD	0075	1706	3455	2518	0028236	0244	15144								
200		OBS	0075	1706	34552	2518			15144								
		STD	0100	1687	3459	2525	0027602	0314	15143								
200		OBS	0100	1687	34591	2525			15143								
		STD	0125	1621	3449	2533	0026943	0382	15126								
		STD	0150	1527	3437	2545	0025860	0448	15099								
200		OBS	0152	1518	34358	2546			15097								
		STD	0200	1247	3406	2579	0022659	0569	15012								
200		OBS	0205	1224	34044	2582			15004								
		STD	0250	1091	3408	2610	0019807	0675	14966								
		STD	0300	0966	3408	2631	0017805	0769	14929								
200		OBS	0305	0955	34084	2633			14926								
		STD	0400	0789	3401	2653	0015755	0937	14878								
200		OBS	T0412	0770	34006	2656			14872								
		STD	0500	0628	3402	2676	0013586	1084	14831								
		STD	0600	0507	3403	2692	0012064	1212	14799								
200		OBS	0610	0497	34032	2693			14796								
		STD	0700	0441	3415	2709	0010488	1325	14790								
		STD	0800	0395	3425	2722	0009299	1424	14788								
200		OBS	T0816	0389	34270	2724			14789								
		STD	0900	0373	3434	2731	0008461	1513	14797								
		STD	1000	0354	3442	2739	0007727	1593	14807								
200		OBS	T1015	0351	34430	2740			14808								
		STD	1100	0335	3445	2744	0007337	1669	14816								
		STD	1200	0316	3448	2748	0006979	1740	14825								
		STD	1300	0298	3451	2752	0006636	1808	14834								
		STD	1400	0279	3454	2755	0006277	1873	14843								
		STD	1500	0261	3456	2759	0005918	1934	14853								
200		OBS	T1520	0257	34568	2760			14854								

TABLE IV.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DUPE INDCTR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° ' 1/10	° ' 1/10		10°	1°	MO	DAY	HR, 1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1142	PW	3007 N	139578W		122	09	07	26	188	1967	N09	004	4755	15	08	2				6	7		0004

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		09	506	254	228	222	6	13	

MESSENGR TIME HR, 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/..	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL CODE
		STD	0000	2092	3478	2437	0035672	0000	15244								
188		OBS	0000	2092	34782	2437			15244								
		STD	0010	2085	3478	2439	0035513	0036	15243								
188		OBS	0010	2085	34784	2439			15243								
		STD	0020	1996	3470	2456	0033898	0070	15220								
		STD	0030	1915	3463	2472	0032439	0103	15198								
		STD	0050	1776	3451	2497	0030105	0166	15160								
188		OBS	0050	1776	34505	2497			15160								
		STD	0075	1646	3440	2520	0027998	0239	15124								
188		OBS	0075	1646	34400	2520			15124								
		STD	0100	1660	3454	2528	0027338	0308	15134								
188		OBS	0100	1660	34544	2528			15134								
		STD	0125	1525	3442	2549	0025380	0374	15095								
		STD	0150	1403	3429	2565	0023880	0435	15058								
188		OBS	0152		34278												
		STD	0200	1197	3403	2586	0021952	0550	14994								
188		OBS	0205	1179	34015	2588			14989								
		STD	0250	1057	3403	2612	0019559	0654	14953								
		STD	0300	0940	3406	2633	0017568	0746	14919								
188		OBS	0305	0929	34057	2635			14916								
		STD	0400	0761	3401	2657	0015346	0911	14867								
188		OBS	T0410	0745	34003	2659			14862								
		STD	0500	0598	3403	2681	0013133	1053	14819								
		STD	0600	0481	3405	2697	0011601	1177	14788								
188		OBS	0610	0472	34054	2698			14786								
		STD	0700	0434	3416	2710	0010332	1287	14787								
		STD	0800	0399	3427	2723	0009197	1384	14790								
188		OBS	T0812	0395	34278	2724			14791								
		STD	0900	0372	3435	2732	0008375	1472	14797								
		STD	1000	0349	3443	2741	0007595	1552	14805								
188		OBS	T1012	0346	34434	2741			14805								
		STD	1100	0327	3446	2745	0007215	1626	14812								
		STD	1200	0307	3448	2749	0006853	1697	14821								
		STD	1300	0290	3451	2753	0006529	1763	14831								
		STD	1400	0275	3454	2756	0006216	1827	14841								
		STD	1500	0261	3456	2759	0005918	1888	14853								
188		OBS	T1518	0259	34568	2760			14855								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE IO. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.T/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	2959 N	13956 W		086	99	07	27	195	1967	N09	005	4389	15	11	2				6	6		0005

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
				224	217	211	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	SCC
		STD	0000	2084	3471	2434	0035995	0000	15241								
195		OBS	0000	2084	34709	2434			15241								
195		OBS	0009	2076	34706	2435			15240								
		STD	0010	2076	3471	2436	0035815	0036	15240								
		STD	0020	2074	3471	2436	0035812	0072	15241								
195		OBS	0029	2073	34736	2439			15243								
		STD	0030	2067	3475	2441	0035369	0107	15241								
195		OBS	0049	1920	34854	2488			15205								
		STD	0050	1904	3482	2489	0030861	0174	15201								
195		OBS	0073	1660	34389	2516			15128								
		STD	0075	1662	3440	2516	0028354	0248	15129								
195		OBS	0098	1669	34530	2525			15136								
		STD	0100	1666	3453	2525	0027569	0317	15136								
		STD	0125	1626	3453	2535	0026764	0385	15128								
195		OBS	0149	1588	34459	2538			15119								
		STD	0150	1582	3445	2538	0026457	0452	15117								
		STD	0200	1302	3411	2572	0023339	0576	15031								
195		OBS	T0202	1292	34098	2573			15028								
		STD	0250	1117	3409	2606	0020182	0685	14975								
		STD	0300	0966	3408	2631	0017775	0780	14929								
195		OBS	0305	0953	34083	2634			14925								
195		OBS	T0397	0763	34002	2657			14867								
		STD	0400	0758	3400	2657	0015355	0946	14866								
		STD	0500	0602	3403	2680	0013192	1088	14821								
		STD	0600	0489	3405	2696	0011719	1213	14792								
195		OBS	0601	0488	34048	2696			14791								
		STD	0700	0432	3416	2711	0010309	1323	14786								
195		OBS	T0799	0392	34262	2723			14787								
		STD	0800	0392	3426	2723	0009166	1421	14787								
		STD	0900	0375	3434	2731	0008484	1509	14798								
		STD	1000	0358	3442	2739	0007798	1590	14808								
195		OBS	1001	0358	34418	2739			14808								
		STD	1100	0340	3447	2745	0007269	1666	14818								
		STD	1200	0321	3452	2750	0006750	1736	14827								
		STD	1300	0301	3455	2755	0006362	1801	14836								
		STD	1400	0281	3456	2757	0006117	1864	14844								
		STD	1500	0259	3457	2760	0005858	1923	14852								
195		OBS	T1500	0259	34568	2760			14852								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF. INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	3003 N	139585W		122	09	07	29	004	1967	N09	006	4535	15	04	1				6	6		0006

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S09	213	233	217	7	14	

MESSENGR TIME OF HR 1.10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. X 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at l	NO_3-N µg-at l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	2120	3472	2425	0036817	0000	15250								
	004	OBS	0000	2120	34724	2425			15250								
		STD	0010	2090	3472	2433	0036084	0036	15244								
	004	OBS	0010	2090	34723	2433			15244								
		STD	0020	2072	3488	2450	0034520	0072	15243								
		STD	0030	2054	3489	2455	0034059	0106	15239								
	004	OBS	0030	2054	34885	2455			15239								
		STD	0050	1749	3445	2499	0029881	0170	15152								
	004	OBS	0050	1749	34450	2499			15152								
		STD	0075	1685	3451	2519	0028053	0242	15137								
	004	OBS	0075	1685	34512	2519			15137								
		STD	0100	1704	3468	2528	0027339	0312	15149								
	004	OBS	0100	1704	34680	2528			15149								
		STD	0125	1627	3454	2535	0026711	0379	15128								
		STD	0150	1522	3438	2546	0025681	0445	15098								
	004	OBS	0151	1517	34378	2547			15096								
		STD	0200	1216	3402	2582	0022375	0565	15001								
	004	OBS	T0204	1196	34006	2584			14994								
		STD	0250	1073	3406	2611	0019642	0670	14959								
		STD	0300	0954	3408	2633	0017610	0763	14924								
	004	OBS	0303	0947	34082	2634			14922								
		STD	0400	0759	3400	2657	0015376	0928	14866								
	004	OBS	T0402	0756	34000	2657			14865								
		STD	0500	0603	3403	2680	0013183	1071	14821								
		STD	0600	0490	3406	2696	0011665	1195	14792								
	004	OBS	0604	0486	34058	2697			14791								
		STD	0700	0433	3416	2711	0010320	1305	14786								
		STD	0800	0393	3426	2723	0009210	1403	14788								
	004	OBS	T0800	0393	34259	2723			14788								
		STD	0900	0374	3435	2732	0008398	1491	14797								
	004	OBS	T0991	0357	34420	2739			14806								
		STD	1000	0355	3442	2739	0007716	1571	14807								
		STD	1100	0336	3445	2744	0007356	1647	14816								
		STD	1200	0317	3448	2748	0006991	1718	14825								
		STD	1300	0298	3451	2752	0006622	1786	14834								
		STD	1400	0279	3454	2756	0006248	1851	14843								
		STD	1500	0260	3457	2760	0005870	1911	14852								
	004	OBS	T1500	0260	34568	2760			14852								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1142	Pw	30049N	14003 W		123	00	07	29	192	1967	N09	007	4297	15	07	2				7	4	0007

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	S11	234	222	206	7	14	

MESSENGR TIME OF HP 1.10	CAST NO.	CAPD TYPE	DEPTH (m)	T °C	S °/..	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at.l	NO₃-N µg-at/l	SiO₄-Si µg-at.l	pH	SCC
		STD	0000	2087	3471	2433	0036057	0000	15241								
192		OBS	0000	2087	34711	2433			15241								
192		OBS	0009	2085	34711	2433			15242								
		STD	0010	2085	3473	2435	0035897	0036	15243								
		STD	0020	2082	3486	2446	0034925	0071	15245								
192		OBS	0028	2080	34932	2452			15247								
		STD	0030	2079	3496	2454	0034157	0106	15247								
192		OBS	0047	2005	34983	2475			15230								
		STD	0050	1954	3489	2482	0031580	0172	15216								
192		OBS	0071	1708	34464	2510			15143								
		STD	0075	1701	3447	2512	0028720	0247	15142								
192		OBS	0095	1659	34473	2523			15132								
		STD	0100	1649	3447	2525	0027632	0317	15130								
		STD	0125	1583	3441	2535	0026696	0385	15113								
192		OBS	0145	1509	34341	2546			15092								
		STD	0150	1478	3430	2550	0025341	0450	15083								
192		OBS	T0196	1236	34031	2579			15007								
		STD	0200	1224	3404	2582	0022376	0570	15004								
		STD	0250	1085	3408	2611	0019703	0675	14964								
192		OBS	0290	0985	34083	2628			14934								
		STD	0300	0963	3407	2631	0017830	0769	14927								
192		OBS	T0384	0789	34004	2653			14875								
		STD	0400	0756	3401	2658	0015296	0934	14865								
		STD	0500	0582	3402	2683	0012949	1076	14813								
192		OBS	0580	0484	34036	2695			14786								
		STD	0600	0472	3406	2698	0011427	1197	14785								
		STD	0700	0423	3417	2712	0010130	1305	14782								
192		OBS	T0774	0395	34250	2722			14784								
		STD	0800	0390	3428	2725	0009019	1401	14787								
		STD	0900	0370	3436	2733	0008278	1488	14796								
192		OBS	T0964	0358	34412	2738			14802								
		STD	1000	0351	3444	2741	0007544	1567	14806								
		STD	1100	0332	3449	2747	0007029	1639	14815								
		STD	1200	0313	3453	2752	0006583	1708	14824								
		STD	1300	0295	3456	2756	0006218	1772	14833								
		STD	1400	0277	3456	2758	0006070	1833	14843								
192		OBS	T1466	0265	34561	2759			14849								

TABLE IV.—Continued

REFERENCE: GRAY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPE INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1142	PW	3008 N	14006 W		123	00	07	30	199	1967	N09	008	4297	15	07	1				6	6	0008

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	S04	240	250	228	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁸	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2117	3474	2427	0036645	0000	15250								
199		OBS	0000	2117	34737	2427			15250								
		STD	0010	2109	3475	2430	0036394	0037	15249								
199		OBS	0010	2109	34748	2430			15249								
		STD	0020	2006	3474	2457	0033859	0072	15223								
199		OBS	0029		34722												
		STD	0030	1919	3472	2478	0031884	0105	15200								
199		OBS	0049	1796	34657	2504			15168								
		STD	0050	1792	3465	2504	0029424	0166	15167								
199		OBS	0074	1719	34615	2519			15149								
		STD	0075	1719	3462	2520	0028037	0238	15149								
199		OBS	0099	1699	34662	2528			15147								
		STD	0100	1696	3466	2528	0027303	0307	15147								
		STD	0125	1615	3453	2537	0026520	0374	15124								
		STD	0150	1518	3439	2548	0025509	0439	15097								
199		OBS	0150	1518	34392	2548			15097								
		STD	0200	1272	3409	2576	0022911	0560	15021								
199		OBS	T0203	1259	34083	2578			15017								
		STD	0250	1115	3409	2606	0020176	0668	14974								
		STD	0300	0981	3409	2630	0017962	0763	14934								
199		OBS	0302	0976	34092	2630			14933								
		STD	0400	0770	3401	2656	0015462	0930	14870								
199		OBS	T0402	0766	34010	2657			14869								
		STD	0500	0607	3403	2680	0013250	1074	14823								
		STD	0600	0491	3404	2695	0011788	1199	14792								
199		OBS	0604	0487	34043	2695			14791								
		STD	0700	0436	3415	2709	0010430	1310	14788								
		STD	0800	0396	3425	2722	0009311	1409	14789								
199		OBS	T0802	0395	34254	2722			14789								
		STD	0900	0376	3433	2730	0008540	1498	14798								
		STD	1000	0357	3442	2739	0007791	1580	14808								
199		OBS	1005	0356	34420	2739			14808								
		STD	1100	0338	3445	2743	0007409	1656	14817								
		STD	1200	0319	3448	2747	0007044	1728	14826								
		STD	1300	0300	3451	2751	0006667	1797	14835								
		STD	1400	0281	3454	2755	0006293	1861	14844								
		STD	1500	0263	3457	2759	0005920	1923	14853								
199		OBS	T1504	0262	34567	2760			14854								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	30059N	140010W		123	00	07	31	184	1967	N09	009	4472	15	09	1				6	7		0009

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		11	507	230	228	206	7	14	

MESSENGR TIME OF HP 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁸	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SDC
		STD	0000	2140	3478	2423	0036970	0000	15256								
184		OBS	0000	2140	34775	2423			15256								
		STD	0010	2131	3478	2426	0036771	0037	15255								
184		OBS	0010	2131	34775	2426			15255								
		STD	0020	2032	3466	2444	0035094	0073	15229								
		STD	0030	1956	3461	2460	0033576	0107	15210								
184		OBS	0030	1956	34612	2460			15210								
		STD	0050	1870	3471	2490	0030823	0172	15190								
184		OBS	0050	1870	34712	2490			15190								
		STD	0075	1756	3465	2513	0028669	0246	15160								
184		OBS	0076	1753	34646	2513			15159								
		STD	0100	1726	3470	2524	0027695	0316	15156								
184		OBS	0101	1724	34702	2525			15156								
		STD	0125	1604	3449	2537	0026570	0384	15121								
		STD	0150	1481	3430	2549	0025403	0449	15084								
184		OBS	0153	1467	34283	2551			15080								
		STD	0200	1245	3406	2579	0022621	0569	15011								
184		OBS	T0207	1216	34038	2583			15002								
		STD	0250	1084	3405	2608	0019906	0676	14963								
		STD	0300	0955	3407	2632	0017736	0770	14924								
184		OBS	0308	0936	34067	2635			14919								
		STD	0400	0773	3401	2656	0015520	0936	14871								
184		OBS	T0412	0753	34007	2658			14866								
		STD	0500	0605	3401	2679	0013343	1080	14822								
		STD	0600	0483	3405	2696	0011632	1205	14789								
184		OBS	0615	0469	34064	2699			14786								
		STD	0700	0429	3416	2711	0010274	1315	14785								
		STD	0800	0392	3427	2724	0009116	1412	14787								
184		OBS	T0814	0388	34278	2725			14788								
		STD	0900	0372	3435	2732	0008375	1499	14797								
		STD	1000	0353	3442	2739	0007715	1580	14806								
184		OBS	T1015	0350	34430	2741			14807								
		STD	1100	0334	3448	2746	0007126	1654	14816								
		STD	1200	0316	3452	2751	0006692	1723	14825								
		STD	1300	0298	3455	2755	0006327	1788	14835								
		STD	1400	0280	3457	2758	0006032	1850	14844								
		STD	1500	0262	3457	2760	0005879	1909	14853								
184		OBS	T1528	0257	34572	2760			14856								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO.	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT.	WAVE OBSERVATIONS PER.	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT.	NODC STATION NUMBER
31	1142	PW	30037N	140007W		123	00	08	01	195	1967	N09	010	4297	15	14	0				7	2	0010

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		12	S06	230	239	211	7	14	

MESSENGR TIME OF HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2160	3473	2414	0037835	0000	15261								
195		OBS	0000	2160	34728	2414			15261								
		STD	0010	2140	3472	2419	0037433	0038	15257								
195		OBS	0010	2140	34716	2419			15257								
		STD	0020	2137	3493	2436	0035830	0074	15260								
		STD	0030	2133	3502	2444	0035132	0110	15262								
195		OBS	0030	2133	35019	2444			15262								
		STD	0050	1917	3480	2484	0031331	0176	15204								
195		OBS	0050	1917	34799	2484			15204								
		STD	0075	1741	3459	2512	0028759	0251	15155								
195		OBS	0076	1737	34586	2513			15154								
		STD	0100	1700	3461	2523	0027786	0322	15147								
195		OBS	0101	1698	34607	2524			15147								
		STD	0125	1610	3446	2533	0026920	0390	15122								
		STD	0150	1499	3432	2547	0025634	0456	15090								
195		OBS	0154	1480	34296	2549			15084								
		STD	0200	1210	3407	2587	0021898	0575	14999								
195		OBS	T0207	1176	34052	2592			14988								
		STD	0250	1058	3406	2614	0019407	0678	14954								
		STD	0300	0936	3406	2635	0017453	0770	14917								
195		OBS	0309	0916	34063	2638			14911								
		STD	0400	0746	3400	2659	0015204	0934	14861								
195		OBS	T0411	0728	33999	2661			14856								
		STD	0500	0599	3400	2679	0013339	1076	14819								
		STD	0600	0491	3404	2695	0011803	1202	14792								
195		OBS	0616	0477	34053	2697			14789								
		STD	0700	0436	3415	2709	0010430	1313	14788								
		STD	0800	0397	3425	2722	0009322	1412	14789								
195		OBS	T0816	0392	34267	2723			14790								
		STD	0900	0375	3435	2732	0008410	1501	14798								
		STD	1000	0356	3442	2739	0007750	1581	14807								
195		OBS	T1014	0353	34433	2740			14809								
		STD	1100	0337	3446	2744	0007338	1657	14817								
		STD	1200	0318	3448	2748	0006988	1728	14826								
		STD	1300	0300	3451	2752	0006645	1797	14835								
		STD	1400	0282	3454	2755	0006298	1861	14844								
		STD	1500	0264	3456	2759	0005946	1923	14854								
195		OBS	T1525	0260	34571	2760			14856								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPLICATE	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	3004 N	14002 W		123	00	08	02	192	1967	N09	011	4381	15	13	1				3	2		0011

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OF FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S05	234	256	222	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at l	pH	SCC
		STD	0000	2175	3477	2413	0037956	0000	15265								
192		OBS	0000	2175	34766	2413			15265								
		STD	0010	2143	3478	2423	0037027	0037	15259								
192		OBS	0010	2143	34783	2423			15259								
		STD	0020	2149	3510	2446	0034921	0073	15265								
		STD	0030	2154	3525	2455	0034024	0108	15270								
192		OBS	0031	2155	35261	2456			15271								
		STD	0050	2025	3506	2476	0032126	0174	15237								
192		OBS	0051	2017	35050	2477			15235								
		STD	0075	1770	3468	2512	0028775	0250	15165								
192		OBS	0076	1764	34671	2513			15163								
		STD	0100	1729	3469	2523	0027837	0321	15157								
192		OBS	0102	1725	34693	2524			15156								
		STD	0125	1678	3462	2529	0027266	0390	15145								
		STD	0150	1590	3449	2540	0026340	0457	15120								
192		OBS	0154	1573	34466	2542			15115								
		STD	0200	1283	3407	2573	0023267	0581	15024								
192		OBS	T0209	1236	34022	2578			15009								
		STD	0250	1090	3404	2606	0020106	0689	14965								
		STD	0300	0943	3406	2633	0017617	0784	14920								
192		OBS	0308	0922	34058	2637			14913								
		STD	0400	0749	3400	2658	0015269	0948	14862								
192		OBS	T0408	0735	33992	2660			14858								
		STD	0500	0594	3400	2679	0013274	1091	14817								
		STD	0600	0482	3405	2696	0011620	1215	14789								
192		OBS	0612	0471	34062	2699			14786								
		STD	0700	0429	3417	2712	0010199	1324	14785								
		STD	0800	0391	3427	2724	0009105	1421	14787								
192		OBS	T0811	0388	34279	2725			14788								
		STD	0900	0371	3435	2732	0008363	1508	14796								
		STD	1000	0352	3442	2740	0007704	1589	14806								
192		OBS	T1010	0350	34425	2740			14807								
		STD	1100	0333	3445	2744	0007336	1664	14815								
		STD	1200	0315	3448	2748	0006990	1735	14824								
		STD	1300	0297	3451	2752	0006640	1804	14834								
		STD	1400	0280	3453	2755	0006296	1868	14843								
		STD	1500	0263	3456	2759	0005949	1929	14853								
192		OBS	T1516	0260	34566	2760			14855								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	2828 N	14003 W		087	80	08	04	003	1967	N09	012	4755	13	11	1				6	5		0012

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO. METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S08	237	233	211	7	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2227	3525	2435	0035823	0000	15284								
003		OBS	0000	2227	35253	2435			15284								
003		OBS	0009	2200	35248	2443			15279								
		STD	0010	2196	3525	2444	0035081	0035	15278								
		STD	0020	2152	3523	2454	0034090	0070	15268								
003		OBS	0027	2124	35214	2461			15261								
		STD	0030	2116	3521	2463	0033307	0104	15260								
003		OBS	0046	2054	35166	2476			15245								
		STD	0050	2019	3512	2482	0031540	0169	15236								
003		OBS	0069	1900	34994	2504			15205								
		STD	0075	1890	3500	2507	0029301	0245	15203								
003		OBS	0092	1866	35007	2513			15199								
		STD	0100	1861	3501	2515	0028616	0317	15199								
		STD	0125	1845	3501	2519	0028285	0388	15198								
003		OBS	0140	1835	35016	2522			15198								
		STD	0150	1782	3492	2527	0027557	0458	15183								
		STD	0200	1532	3453	2556	0024945	0589	15111								
		STD	0250	1310	3426	2582	0022524	0708	15044								
003		OBS	0279	1195	34156	2596			15008								
		STD	0300	1116	3413	2609	0019990	0814	14983								
003		OBS	T0346	0965	34089	2632			14936								
		STD	0400	0870	3407	2646	0016553	0997	14909								
		STD	0500	0718	3403	2665	0014736	1153	14867								
003		OBS	0548	0656	34011	2672			14850								
		STD	0600	0614	3406	2681	0013219	1293	14843								
		STD	0700	0541	3416	2698	0011645	1417	14831								
003		OBS	0716		34174												
		STD	0800	0478	3425	2713	0010292	1527	14823								
003		OBS	0885	0432	34314	2723			14819								
		STD	0900	0425	3432	2724	0009222	1625	14818								
		STD	1000	0382	3439	2734	0008276	1712	14818								
		STD	1100	0349	3444	2741	0007596	1792	14821								
		STD	1200	0326	3449	2748	0007030	1865	14829								
003		OBS	T1296	0314	34517	2751			14840								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT.	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	2831 N	140070W		087	80	08	04	202	1967	N09	013	4718	14	08	1				7	6		0013

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		08	S10	264	239	217	7	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SOO
		STD	0000	2191	3526	2446	0034802	0000	15275								
202		OBS	0000	2191	35261	2446			15275								
202		OBS	0008	2187	35260	2447			15275								
		STD	0010	2183	3526	2448	0034620	0035	15275								
		STD	0020	2165	3527	2454	0034115	0069	15272								
202		OBS	0029	2150	35280	2459			15269								
		STD	0030	2149	3528	2459	0033652	0103	15269								
202		OBS	0047	2122	35259	2465			15265								
		STD	0050	2094	3523	2470	0032664	0169	15257								
202		OBS	0073	1936	35081	2501			15217								
		STD	0075	1930	3507	2502	0029771	0247	15215								
202		OBS	0092	1885	35026	2510			15205								
		STD	0100	1881	3503	2511	0028980	0321	15205								
		STD	0125	1855	3503	2517	0028445	0393	15202								
202		OBS	0139	1831	35025	2523			15197								
		STD	0150	1808	3497	2525	0027806	0463	15191								
202		OBS	T0185	1705	34791	2536			15165								
		STD	0200	1605	3466	2549	0025581	0596	15135								
		STD	0250	1320	3431	2584	0022353	0716	15048								
202		OBS	0280	1185	34170	2599			15005								
		STD	0300	1128	3415	2608	0020057	0822	14988								
202		OBS	T0373	0939	34091	2636			14931								
		STD	0400	0877	3408	2646	0016545	1005	14912								
		STD	0500	0686	3406	2672	0014087	1158	14855								
202		OBS	0558	0604	34041	2681			14831								
		STD	0600	0572	3409	2689	0012445	1291	14826								
		STD	0700	0504	3420	2706	0010881	1408	14816								
202		OBS	T0740	0481	34235	2711			14814								
		STD	0800	0454	3429	2719	0009701	1511	14813								
		STD	0900	0413	3436	2729	0008782	1603	14814								
202		OBS	0926	0403	34378	2731			14814								
		STD	1000	0377	3442	2737	0007995	1687	14816								
		STD	1100	0347	3447	2744	0007351	1764	14821								
		STD	1200	0321	3451	2750	0006824	1834	14827								
		STD	1300	0302	3453	2753	0006521	1901	14836								
		STD	1400	0287	3454	2755	0006334	1965	14847								
202		OBS	T1426	0284	34542	2756			14850								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE IO. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	2831 N	14003 W		087	80	08	05	197	1967	N09	014	4663	14	09	2				6	7		0014

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		06	510	264	239	206	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁻⁵	Σ Δ D. DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2179	3526	2449	0034483	0000	15272								
197		OBS	0000	2179	35261	2449			15272								
197		OBS	0006	2172	35259	2451			15271								
		STD	0010	2169	3526	2452	0034285	0034	15271								
		STD	0020	2154	3525	2455	0034012	0069	15269								
		STD	0030	2134	3523	2460	0033611	0102	15265								
197		OBS	0030	2134	35233	2460			15265								
197		OBS	0045	2095	35235	2471			15257								
		STD	0050	2053	3517	2477	0032043	0168	15246								
197		OBS	0070	1930	35018	2498			15214								
		STD	0075	1918	3502	2501	0029868	0245	15211								
197		OBS	0092	1880	35007	2510			15203								
		STD	0100	1870	3500	2512	0028895	0319	15201								
		STD	0125	1832	3498	2520	0028221	0390	15194								
197		OBS	0136	1811	34971	2524			15190								
		STD	0150	1789	3493	2526	0027648	0460	15185								
197		OBS	T0183	1699	34782	2537			15162								
		STD	0200	1582	3462	2552	0025369	0593	15128								
		STD	0250	1298	3427	2585	0022218	0712	15040								
197		OBS	0268	1217	34190	2595			15014								
		STD	0300	1131	3416	2609	0020037	0817	14989								
197		OBS	T0361	0979	34104	2631			14944								
		STD	0400	0879	3409	2646	0016554	1000	14913								
		STD	0500	0675	3404	2672	0014038	1153	14850								
197		OBS	0533	0625	34028	2677			14835								
		STD	0600	0572	3409	2689	0012445	1286	14826								
		STD	0700	0507	3419	2705	0010992	1403	14817								
197		OBS	0710	0501	34197	2706			14817								
		STD	0800	0463	3428	2717	0009885	1507	14817								
197		OBS	T0899	0425	34357	2727			14819								
		STD	0900	0425	3436	2727	0008926	1601	14819								
		STD	1000	0390	3442	2736	0008150	1687	14822								
		STD	1100	0359	3447	2743	0007492	1765	14826								
		STD	1200	0332	3451	2749	0006953	1837	14832								
		STD	1300	0309	3453	2752	0006603	1905	14839								
197		OBS	T1396	0290	34536	2755			14847								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	3012 N	14008 W		123	00	08	06	191	1967	N09	015		4755	16	09	2				8	3		0015

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		06	S10	240	239	217	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁸	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at l	TOTAL-P µg-at l	NO_2-N µg-at	NO_3-N µg-at l	SiO_4-Si µg-at	pH	QUAL CODE
		STD	0000	2194	3481	2411	0038171	0000	15271								
	191	OBS	0000	2194	34806	2411			15271								
		STD	0010	2190	3480	2412	0038116	0038	15271								
	191	OBS	0010	2190	34804	2412			15271								
		STD	0020	2154	3480	2422	0037201	0076	15263								
		STD	0030	2089	3480	2439	0035544	0112	15248								
	191	OBS	0034	2054	34804	2449			15239								
		STD	0050	1850	3485	2490	0030794	0179	15183								
	191	OBS	0054	1823	34829	2496			15176								
		STD	0075	1756	3486	2515	0028450	0253	15160								
	191	OBS	0081	1742	34882	2514			15157								
		STD	0100	1700	3486	2527	0027294	0322	15146								
	191	OBS	0105	1684	34846	2530			15144								
		STD	0125	1557	3482	2542	0026062	0389	15105								
		STD	0150	1412	3421	2557	0024646	0453	15060								
	191	OBS	0157	1374	34168	2562			15049								
		STD	0200	1167	3403	2592	0021407	0568	14984								
	191	OBS	T0209	1132	34009	2597			14973								
		STD	0250	1047	3404	2614	0019344	0670	14949								
		STD	0300	0948	3406	2633	0017660	0762	14922								
	191	OBS	0313	0923	34061	2637			14915								
		STD	0400	0765	3400	2656	0015478	0928	14868								
	191	OBS	T0422	0729	33993	2661			14858								
		STD	0500	0640	3400	2673	0013880	1075	14836								
		STD	0600	0542	3404	2689	0012432	1206	14813								
	191	OBS	0625		34059												
		STD	0700	0465	3415	2706	0010774	1322	14800								
		STD	0800	0407	3425	2720	0009438	1423	14793								
	191	OBS	T0833	0392	34285	2725			14793								
		STD	0900	0377	3434	2731	0008507	1513	14799								
		STD	1000	0356	3442	2739	0007750	1594	14807								
	191	OBS	T1042	0348	34442	2742			14811								
		STD	1100	0337	3446	2744	0007338	1670	14817								
		STD	1200	0318	3448	2748	0007010	1741	14825								
		STD	1300	0300	3450	2751	0006689	1810	14835								
		STD	1400	0283	3453	2755	0006376	1875	14845								
		STD	1500	0267	3455	2758	0006069	1937	14855								
	191	OBS	T1582	0255	34572	2761			14864								

TABLE IV.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DIFF	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO	MAX. DEPTH	WAVE OBSERVATIONS				WEATHER	CLOUD CODES			NODC STATION
CTRY CODE	ID. NO.	CODE	° 1/10	° '1, 10	INDCTR	10°	1°	MO	DAY	HR, 1/10		CRUISE NO.	STATION NUMBER	BOTTOM	OF SMPL'S	DIR	HGT	PER	SEA	CODE	TYPE	AMT		NUMBER
31	1142	Pw	3002 N	14006 W		123	00	08	07	188	1967	N09	016	4572	15	08	1				6	2		0016

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		05	S08	281	256	239	7	14	

MESSENGR TIME HR, T 10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	S
		STD	0000	2230	3509	2422	0037082	0000	15283								
188		OBS	0000	2230	35090	2422			15283								
		STD	0010	2224	3512	2426	0036777	0037	15283								
188		OBS	0010	2224	35115	2426			15283								
		STD	0020	2216	3501	2420	0037358	0074	15282								
		STD	0030	2208	3492	2415	0037831	0112	15280								
188		OBS	0030	2208													
188		OBS	0049	1834	34780	2504			15180								
		STD	0050	1832	3477	2504	0029495	0179	15180								
188		OBS	0074	1771	34661	2510			15165								
		STD	0075	1767	3467	2512	0028778	0252	15164								
188		OBS	0098		34691												
		STD	0100	1675	3467	2534	0026757	0321	15140								
		STD	0125	1573	3444	2540	0026261	0387	15110								
		STD	0150	1461	3426	2550	0025310	0452	15077								
188		OBS	0150	1461	34256	2550			15077								
		STD	0200	1206	3402	2584	0022191	0571	14997								
188		OBS	T0202	1198	34012	2585			14995								
		STD	0250	1066	3404	2611	0019676	0675	14956								
		STD	0300	0950	3407	2633	0017641	0769	14923								
188		OBS	0302	0946	34068	2633			14922								
		STD	0400	0784	3401	2654	0015681	0935	14876								
188		OBS	T0405	0776	34005	2655			14873								
		STD	0500	0613	3402	2678	0013373	1081	14825								
		STD	0600	0490	3404	2694	0011820	1206	14792								
188		OBS	0605	0485	34037	2695			14791								
		STD	0700	0436	3414	2709	0010504	1318	14787								
		STD	0800	0395	3425	2722	0009299	1417	14788								
188		OBS	T0804	0394	34251	2722			14789								
		STD	0900	0373	3434	2731	0008461	1506	14797								
		STD	1000	0352	3442	2740	0007704	1587	14806								
188		OBS	T1011	0350	34424	2740			14807								
		STD	1100	0332	3445	2744	0007339	1662	14814								
		STD	1200	0314	3448	2748	0007001	1734	14824								
		STD	1300	0296	3450	2751	0006650	1802	14833								
		STD	1400	0279	3453	2755	0006314	1867	14843								
		STD	1500	0263	3456	2759	0005986	1928	14853								
188		OBS	T1507	0262	34559	2759			14854								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10'	LONGITUDE ° 1/10'	DRIFT INDICR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	3021 N	140105W		123	00	08	08	183	1967	N09	017	4352	15	05	1				8	2		0017

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		04	S06	274	250	217	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△O DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2223	3487	2407	0038512	0000	15279								
183		OBS	0000	2223	34866	2407			15279								
		STD	0010	2215	3487	2409	0038327	0038	15278								
183		OBS	0010	2215	34867	2409			15278								
		STD	0020	2077	3498	2456	0033925	0075	15245								
183		OBS	0029		34981												
		STD	0030	1961	3496	2485	0031177	0107	15215								
183		OBS	0049	1806	34641	2500			15170								
		STD	0050	1803	3464	2501	0029754	0168	15170								
183		OBS	0073	1729	34622	2517			15151								
		STD	0075	1722	3465	2521	0027888	0240	15150								
183		OBS	0098	17410	34792	25280											
		STD	0100	1633	3476	2551	0025166	0306	15129								
		STD	0125	1535	3446	2550	0025301	0369	15099								
183		OBS	0149	1432	34241	2555			15067								
		STD	0150	1426	3423	2556	0024783	0432	15065								
		STD	0200	1183	3400	2586	0021917	0549	14989								
183		OBS	T0201	1179	33999	2587			14988								
		STD	0250	1095	3409	2610	0019803	0653	14967								
183		OBS	0297	1006	34120	2628			14943								
		STD	0300	0999	3412	2629	0018054	0748	14941								
183		OBS	T0394	0799	34011	2652			14881								
		STD	0400	0787	3401	2654	0015718	0917	14877								
		STD	0500	0617	3402	2678	0013448	1062	14827								
183		OBS	0590	0607	34023	2692			14797								
		STD	0600	0500	3404	2694	0011912	1189	14796								
		STD	0700	0440	3416	2710	0010402	1301	14789								
183		OBS	T0781	0406	34248	2720			14790								
		STD	0800	0403	3427	2722	0009244	1399	14792								
		STD	0900	0388	3437	2732	0008413	1487	14804								
183		OBS	T0979	0375	34430	2738			14812								
		STD	1000	0371	3444	2739	0007814	1568	14814								
		STD	1100	0353	3446	2743	0007488	1645	14823								
		STD	1200	0333	3449	2747	0007134	1718	14832								
		STD	1300	0311	3451	2751	0006752	1788	14840								
		STD	1400	0287	3454	2755	0006349	1853	14847								
183		OBS	T1468	0270	34556	2758			14851								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPLT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	3003 N	14004 W		123	00	08	09	184	1967	N09	018	4755	15	03	1				8	2		0018

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	508	247	250	228	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2284	3540	2430	0036330	0000	15300								
184		OBS	0000	2284	35397	2430			15300								
		STD	0010	2274	3539	2433	0036124	0036	15299								
184		OBS	0010	2274	35393	2433			15299								
		STD	0020	2140	3527	2461	0033464	0071	15265								
		STD	0030	2023	3511	2480	0031635	0104	15234								
184		OBS	0030		35111												
		STD	0050	1839	3470	2497	0030147	0165	15181								
184		OBS	0050	1839	34703	2497			15181								
		STD	0075	1705	3454	2517	0028316	0238	15144								
184		OBS	0075	1705	34538	2517			15144								
		STD	0100	1688	3463	2528	0027333	0308	15144								
184		OBS	0100	1688	34631	2528			15144								
		STD	0125	1656	3457	2531	0027137	0376	15137								
		STD	0150	1574	3446	2541	0026211	0443	15115								
184		OBS	0152	1565	34448	2542			15112								
		STD	0200	1244	3407	2580	0022529	0565	15011								
184		OBS	T0205	1217	34040	2583			15002								
		STD	0250	1093	3406	2608	0019989	0671	14966								
		STD	0300	0970	3408	2631	0017848	0766	14930								
184		OBS	0305	0959	34085	2633			14927								
		STD	0400	0778	3401	2655	0015593	0933	14873								
184		OBS	T0409	0762	34003	2657			14869								
		STD	0500	0615	3402	2678	0013407	1078	14826								
		STD	0600	0496	3404	2694	0011893	1204	14794								
184		OBS	0610	0487	34038	2695			14792								
		STD	0700	0438	3415	2709	0010453	1316	14788								
		STD	0800	0397	3425	2722	0009322	1415	14789								
184		OBS	T0805	0395	34256	2722			14789								
		STD	0900	0377	3434	2731	0008507	1504	14799								
		STD	1000	0358	3441	2738	0007847	1586	14808								
184		OBS	1015	0355	34417	2739			14809								
		STD	1100	0339	3444	2743	0007465	1662	14817								
		STD	1200	0320	3447	2747	0007092	1735	14826								
		STD	1300	0301	3450	2751	0006723	1804	14835								
		STD	1400	0282	3453	2755	0006342	1869	14844								
		STD	1500	0262	3456	2759	0005945	1931	14853								
184		OBS	T1518	0259	34566	2760			14855								

TABLE IV.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICA	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR 1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1142	PW	3005 N	13959 W		122	09	08	10	195	1967	N09	019	4480	15	06	2				7	2		0019

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		03	S07	240	256	228	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2297	3541	2427	0036600	0000	15304								
195		OBS	0000	2297	35409	2427			15304								
		STD	0010	2288	3541	2430	0036413	0037	15303								
195		OBS	0010	2288	35406	2430			15303								
		STD	0020	2284	3537	2428	0036573	0073	15303								
		STD	0030	2228	3534	2442	0035328	0109	15290								
195		OBS	0030	2228	35341	2442			15290								
		STD	0050	1962	3500	2488	0030967	0175	15219								
195		OBS	0050	1962	35002	2488			15219								
		STD	0075	1809	3491	2520	0027995	0249	15179								
195		OBS	0075	1809	34913	2520			15179								
		STD	0100	1758	3498	2538	0026384	0317	15169								
195		OBS	0100		34981												
		STD	0125	1706	3493	2546	0025656	0382	15157								
		STD	0150	1655	3477	2546	0025739	0446	15144								
195		OBS	0152	1651	34753	2546			15143								
		STD	0200	1238	3409	2583	0022270	0566	15009								
195		OBS	T0203	1219	34060	2584			15003								
		STD	0250	1126	3407	2602	0020525	0673	14978								
		STD	0300	1020	3407	2621	0018750	0771	14948								
195		OBS	0306	1007	34074	2624			14945								
		STD	0400	0786	3401	2654	0015711	0944	14876								
195		OBS	T0410	0766	34001	2656			14870								
		STD	0500	0614	3402	2678	0013387	1089	14826								
		STD	0600	0491	3404	2695	0011795	1215	14792								
195		OBS	0612	0480	34044	2696			14790								
		STD	0700	0437	3414	2709	0010516	1327	14788								
		STD	0800	0398	3425	2721	0009334	1426	14790								
195		OBS	T0816	0393	34261	2723			14790								
		STD	0900	0375	3433	2730	0008558	1515	14798								
		STD	1000	0353	3441	2739	0007789	1597	14806								
195		OBS	T1017	0350	34420	2740			14808								
		STD	1100	0334	3444	2743	0007392	1673	14815								
		STD	1200	0315	3447	2747	0007034	1745	14824								
		STD	1300	0297	3450	2751	0006676	1814	14834								
		STD	1400	0280	3453	2755	0006333	1879	14843								
		STD	1500	0264	3456	2759	0005997	1940	14854								
195		OBS	T1523	0261	34564	2759			14856								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE NO.	SHIP CODE	LATITUDE ° '/10	LONGITUDE ° '/10	DIFF INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	30155N	140055W		123	00	05	11	187	1967	N09	020	4663	44	08	2				7	3		0020

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		10	509	251	244	228	7	20	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	MISC
		STD	0000	2290	35536	2426	0036733	0000	15301								
187		OBS	0000	2290	35364	2426			15301								
		STD	0010	2278	35536	2429	0036457	0037	15300								
187		OBS	0010	2278	35362	2429			15300								
		STD	0020	2152	35331	2461	0033490	0072	15269								
187		OBS	0029		35205												
		STD	0030	2041	35177	2480	0031665	0104	15239								
187		OBS	0049	1875	34736	2490			15191								
		STD	0050	1869	34773	2491	0030668	0166	15190								
187		OBS	0074	1743	34585	2511			15155								
		STD	0075	1740	34588	2512	0028809	0241	15155								
187		OBS	0099	1661	34539	2527			15134								
		STD	0100	1659	34554	2527	0027374	0311	15134								
		STD	0125	1601	34446	2535	0026694	0379	15119								
		STD	0150	1508	34339	2550	0025305	0444	15093								
187		OBS	0150	1508	34391	2550			15093								
		STD	0200	1211	34103	2583	0022209	0562	14999								
187		OBS	T0202	1201	34021	2585			14996								
		STD	0250	1072	34107	2612	0019551	0667	14959								
		STD	0300	0950	34108	2634	0017545	0760	14923								
187		OBS	0301	0948	34081	2634			14922								
		STD	0400	0752	34101	2659	0015209	0923	14863								
187		OBS	0401		34010												
		STD	0500	0597	34103	2681	0013083	1065	14819								
		STD	0600	0486	34105	2696	0011646	1188	14790								
187		OBS	0604	0483	34054	2697			14790								
		STD	0700	0437	34115	2709	0010456	1299	14788								
		STD	0800	0399	34125	2721	0009375	1398	14790								
187		OBS	T0802	0398	34248	2721			14790								
		STD	0900	0376	34134	2731	0008495	1487	14798								
		STD	1000	0355	34142	2739	0007738	1569	14807								
187		OBS	T1006	0354	34422	2739			14808								
		STD	1100	0333	34145	2744	0007336	1644	14815								
		STD	1200	0312	34148	2748	0006948	1715	14823								
		STD	1300	0293	34151	2752	0006578	1783	14832								
		STD	1400	0276	34154	2756	0006220	1847	14842								
		STD	1500	0262	34157	2760	0005901	1908	14853								
187		OBS	T1504	0261	34568	2760			14853								
		STD	1750	0238	34159	2763	0005578	2051	14885								
214		OBS	1940	0220	34606	2766			14910								
		STD	2000	0212	34161	2767	0005231	2186	14917								
214		OBS	T2355	0177	34646	2773			14963								
		STD	2500	0172	34165	2773	0004626	2433	14985								
214		OBS	T2870	0160	34664	2775			15044								
		STD	3000	0157	34167	2776	0004437	2559	15065								
214		OBS	T3364	0150	34679	2777			15126								
		STD	4000	0152	34169	2778	0004500	3106	15239								
214		OBS	4309	0153	34696	2779			15294								
214		OBS	T4400	0152	34689	2778			15309								

TABLE IV.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1142	PW	3006 N	13958 W		122	09	08	12	188	1967	N09	021	4755	15	08	1				7	7		0021

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		02	509	254	222	211	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10⁴	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at l	NO₃-N µg-at l	SiO₄-Si µg-at l	pH	SCC
		STD	0000	2229	3495	2412	0038059	0000	15281								
188		OBS	0000	2229	34951	2412			15281								
		STD	0010	2219	3495	2415	0037806	0038	15280								
188		OBS	0010	2219	34954	2415			15280								
		STD	0020	2217	3515	2430	0036385	0075	15284								
188		OBS	0029	2216	35167	2432			15285								
		STD	0030	2189	3513	2437	0035807	0111	15278								
188		OBS	0049	1826	34691	2499			15177								
		STD	0050	1822	3469	2500	0029839	0177	15176								
188		OBS	0074	1756	34649	2513			15160								
		STD	0075	1756	3465	2513	0028659	0250	15160								
188		OBS	0098	1745	34747	2523			15162								
		STD	0100	1740	3475	2525	0027653	0320	15161								
		STD	0125	1657	3479	2547	0025566	0387	15140								
		STD	0150	1546	3483	2576	0022934	0447	15111								
188		OBS	0150	1546	34827	2576			15111								
		STD	0200	1231	3404	2580	0022506	0561	15006								
188		OBS	T0202	1221	34020	2581			15003								
		STD	0250	1079	3405	2609	0019849	0667	14961								
		STD	0300	0950	3407	2633	0017589	0761	14923								
188		OBS	0302	0945	34075	2634			14921								
		STD	0400	0745	3400	2659	0015183	0924	14861								
188		OBS	0401	0743	34000	2659			14860								
		STD	0500	0592	3401	2680	0013174	1066	14817								
		STD	0600	0482	3405	2696	0011620	1190	14789								
188		OBS	0606	0477	34053	2697			14788								
		STD	0700	0433	3416	2711	0010320	1300	14786								
		STD	0800	0396	3425	2722	0009311	1398	14789								
188		OBS	T0809	0393	34263	2723			14789								
		STD	0900	0375	3435	2732	0008410	1487	14798								
		STD	1000	0355	3442	2739	0007738	1567	14807								
188		OBS	T1009	0353	34429	2740			14808								
		STD	1100	0335	3445	2744	0007330	1643	14816								
		STD	1200	0317	3448	2748	0006984	1714	14825								
		STD	1300	0298	3451	2752	0006629	1782	14834								
		STD	1400	0280	3454	2756	0006274	1847	14844								
		STD	1500	0263	3457	2759	0005927	1908	14853								
188		OBS	T1512	0261	34568	2760			14855								

TABLE V. Observed and interpolated oceanographic data for stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 3–24 September 1967, prepared from NODC Listing No. 31–1163 PW.

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRAFT IN FEET	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	3008 N	139575W		122	09	09	03	190	1967	N09	001	4486	15	00	0	3		01	6	5		0001

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	S05	173	250	239	8	14	

MESSENGR TIME of HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2363	3508	2383	0040824	0000	15316								
190		OBS	0000	2363	35077	2383			15316								
		STD	0010	2358	3511	2387	0040507	0041	15317								
190		OBS	0010	2358	35107	2387			15317								
		STD	0020	2349	3520	2396	0039623	0081	15317								
		STD	0030	2340	3521	2400	0039339	0120	15317								
190		OBS	0030	2340	35210	2400			15317								
		STD	0050	2023	3495	2468	0032894	0192	15235								
190		OBS	0050	2023	34947	2468			15235								
190		OBS	0074	1844	34838	2506			15188								
		STD	0075	1839	3483	2506	0029309	0270	15186								
190		OBS	0099	1728	34698	2523			15156								
		STD	0100	1723	3469	2524	0027699	0341	15155								
		STD	0125	1607	3450	2537	0026563	0409	15122								
		STD	0150	1486	3433	2551	0025289	0474	15086								
190		OBS	0151	1481	34323	2551			15084								
		STD	0200	1225	3404	2582	0022395	0593	15004								
190		OBS	T0203	1212	34030	2583			15000								
		STD	0250	1082	3405	2609	0019879	0699	14962								
		STD	0300	0962	3407	2631	0017821	0793	14927								
190		OBS	0303	0955	34070	2632			14925								
		STD	0400	0774	3401	2656	0015535	0960	14872								
190		OBS	0402	0771	34006	2656			14871								
		STD	0500	0611	3402	2679	0013347	1104	14824								
		STD	0600	0494	3406	2696	0011691	1230	14794								
190		OBS	0605	0489	34063	2697			14793								
		STD	0700	0441	3416	2710	0010414	1340	14790								
		STD	0800	0401	3425	2721	0009369	1439	14791								
190		OBS	T0810	0398	34259	2722			14791								
		STD	0900	0376	3434	2731	0008495	1528	14798								
		STD	1000	0353	3442	2739	0007715	1609	14806								
190		OBS	T1004	0352	34421	2740			14806								
		STD	1100	0331	3448	2746	0007091	1683	14814								
		STD	1200	0311	3453	2752	0006560	1752	14823								
		STD	1300	0292	3456	2756	0006184	1815	14832								
		STD	1400	0275	3457	2759	0005973	1876	14842								
		STD	1500	0259	3457	2760	0005843	1935	14852								
190		OBS	T1509	0258	34570	2760			14853								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF. INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	30085N	13955 W		122	09	09	04	197	1967	N09	002	4572	15	34	0	4		01	6	3		0002

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		00	500	169	250	233	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	S CODE
		STD	0000	2362	3500	2377	0041381	0000	15315								
197		OBS	0000	2362	34996	2377			15315								
		STD	0010	2356	3500	2379	0041201	0041	15315								
197		OBS	0010	2356	35003	2379			15315								
		STD	0020	2267	3509	2412	0038159	0081	15296								
		STD	0030	2179	3510	2437	0035787	0118	15275								
197		OBS	0030		35096												
		STD	0050	2006	3491	2469	0032769	0186	15230								
197		OBS	0050	2006	34905	2469			15230								
		STD	0075	1795	3467	2505	0029460	0264	15172								
197		OBS	0075	1795	34666	2505			15172								
		STD	0100	1741	3467	2518	0028243	0336	15160								
197		OBS	0100		34672												
		STD	0125	1663	3458	2530	0027220	0406	15140								
		STD	0150	1559	3445	2544	0025960	0472	15110								
197		OBS	0152	1550	34437	2545			15108								
		STD	0200	1269	3409	2577	0022854	0594	15020								
197		OBS	T0205	1245	34061	2579			15012								
		STD	0250	1107	3407	2606	0020175	0702	14971								
		STD	0300	0975	3408	2629	0017989	0797	14932								
197		OBS	0305	0963	34076	2631			14928								
		STD	0400	0782	3401	2654	0015652	0965	14875								
197		OBS	T0402	0778	34008	2655			14874								
		STD	0500	0611	3402	2679	0013347	1110	14824								
		STD	0600	0491	3406	2696	0011654	1235	14793								
197		OBS	0607	0484	34068	2698			14791								
		STD	0700	0440	3417	2711	0010328	1345	14789								
		STD	0800	0401	3427	2723	0009220	1443	14791								
197		OBS	0804	0400	34274	2723			14791								
		STD	0900	0377	3435	2731	0008433	1531	14799								
		STD	1000	0354	3441	2739	0007801	1613	14806								
197		OBS	T1006	0353	34418	2739			14807								
		STD	1100	0333	3445	2744	0007358	1688	14815								
		STD	1200	0313	3448	2748	0006974	1760	14823								
		STD	1300	0295	3451	2752	0006609	1828	14833								
		STD	1400	0277	3454	2756	0006239	1892	14842								
		STD	1500	0262	3457	2760	0005893	1953	14853								
197		OBS	T1504	0261	34569	2760			14853								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1163	PW	3007 N	13958 W		122	09	04	05	194	1967	N09	003	4755	15	00	0	3		01	6	2	0003

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		00	S00	193	267	250	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at l	NO_3-N µg-at l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	2424	3501	2359	0043063	0000	15330								
194		OBS	0000	2424	35005	2359			15330								
		STD	0010	2359	3499	2377	0041407	0042	15316								
194		OBS	0010	2359	34986	2377			15316								
		STD	0020	2311	3501	2393	0039927	0083	15306								
		STD	0030	2230	3504	2418	0037577	0122	15287								
194		OBS	0030	2230	35037	2418			15287								
		STD	0050	1972	3490	2477	0031991	0191	15221								
194		OBS	0050	1972	34895	2477			15221								
		STD	0075	1815	3482	2511	0028827	0267	15179								
194		OBS	0075	1815	34818	2511			15179								
		STD	0100	1716	3465	2523	0027801	0338	15152								
194		OBS	0100		34654												
		STD	0125	1607	3449	2536	0026636	0406	15122								
		STD	0150	1489	3433	2550	0025351	0471	15087								
194		OBS	0152	1479	34317	2551			15084								
		STD	0200	1217	3404	2583	0022247	0590	15001								
194		OBS	T0206	1190	34022	2587			14993								
		STD	0250	1076	3406	2611	0019694	0695	14960								
		STD	0300	0961	3407	2631	0017797	0789	14927								
194		OBS	0307	0946	34071	2634			14922								
		STD	0400	0777	3401	2655	0015579	0956	14873								
194		OBS	T0407	0765	34009	2657			14870								
		STD	0500	0618	3401	2677	0013513	1101	14827								
		STD	0600	0502	3405	2694	0011862	1228	14797								
194		OBS	0613	0490	34061	2696			14794								
		STD	0700	0444	3415	2709	0010524	1340	14791								
		STD	0800	0402	3424	2720	0009454	1440	14791								
194		OBS	0814	0397	34254	2722			14791								
		STD	0900	0377	3433	2730	0008581	1530	14798								
		STD	1000	0355	3441	2738	0007812	1612	14807								
194		OBS	1020	0351	34420	2740			14809								
		STD	1100	0335	3444	2743	0007411	1688	14815								
		STD	1200	0316	3447	2747	0007053	1760	14824								
		STD	1300	0299	3450	2751	0006714	1829	14834								
		STD	1400	0283	3453	2755	0006376	1895	14845								
		STD	1500	0269	3456	2758	0006064	1957	14856								
194		OBS	T1528	0265	34564	2759			14859								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10		LONGITUDE ° 1/10		DEPTH IND'R	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	3002	N	14005	W		125	00	09	06	194	1967	X09	004	4572	15	32	0	4		01	8	6		0004

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C ORY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		00	S00	220	266	244	8	13	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2416	3502	2363	0042699	0000	15328								
194		OBS	0000	2416	35024	2363			15328								
		STD	0010	2378	3507	2378	0041570	0042	15321								
194		OBS	0010	2378	35065	2378			15321								
		STD	0020	2259	3503	2409	0038374	0082	15293								
		STD	0030	2132	3495	2439	0035590	0119	15261								
194		OBS	0030	2132	34952	2439			15261								
		STD	0050	1852	3467	2491	0030697	0185	15184								
194		OBS	0051	1842	34658	2493			15181								
		STD	0075	1746	3465	2515	0028438	0259	15157								
194		OBS	0076	1742	34650	2516			15156								
		STD	0100	1647	3464	2538	0026352	0329	15146								
194		OBS	0103		34642												
		STD	0125	1545	3447	2548	0025442	0395	15114								
		STD	0150	1441	3428	2556	0024725	0459	15081								
194		OBS	0154	1424	34251	2558			15065								
		STD	0200	1219	3404	2583	0022284	0576	15002								
194		OBS	T0207	1192	34020	2586			14993								
		STD	0250	1071	3404	2610	0019747	0682	14958								
		STD	0300	0952	3407	2632	0017681	0775	14923								
194		OBS	0308	0935	34070	2635			14918								
		STD	0400	0788	3401	2654	0015740	0942	14877								
194		OBS	T0411	0771	34006	2656			14872								
		STD	0500	0624	3402	2677	0013496	1088	14830								
		STD	0600	0503	3404	2693	0011941	1216	14797								
194		OBS	0614	0490	34044	2695			14793								
		STD	0700	0450	3414	2707	0010669	1329	14793								
		STD	0800	0411	3425	2720	0009485	1429	14795								
194		OBS	0814	0406	34260	2721			14795								
		STD	0900	0381	3433	2729	0008627	1520	14800								
		STD	1000	0355	3441	2738	0007812	1602	14807								
194		OBS	1017	0351	34419	2740			14808								
		STD	1100	0332	3447	2745	0007177	1677	14815								
		STD	1200	0311	3451	2751	0006708	1747	14823								
		STD	1300	0295	3454	2755	0006343	1812	14832								
		STD	1400	0278	3456	2758	0006082	1874	14843								
		STD	1500	0265	3456	2759	0005987	1934	14854								
194		OBS	T1519	0263	34564	2759			14857								

TABLE V.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	QUAD	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.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1163	PW	2957 N	140005W		087	90	09	07	190	1967	N09	005	4050	15	35	0	4		01	8	2		0005

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		00	500	217	278	256	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY=x10⁷	ΣΔD DYN. M. x 10³	SOUND VELOCITY	O2 ml/l	PO4-P µg-at/l	TOTAL-P µg-at/l	NO2-N µg-at/l	NO3-N µg-at/l	SiO4-Si µg-at/l	pH	QUAL
		STD	0000	2419	3514	2371	0041926	0000	15331								
190		OBS	0000	2419	35143	2371			15331								
		STD	0010	2440	3519	2369	0042224	0042	15338								
190		OBS	0010	2440													
		STD	0020	2430	3524	2375	0041640	0084	15338								
		STD	0030	2420	3528	2382	0041055	0125	15337								
190		OBS	0030	2420	35284	2382			15337								
		STD	0050	1958	3492	2483	0031440	0198	15217								
190		OBS	0050	1958	34923	2483			15217								
		STD	0075	1775	3469	2511	0028847	0273	15166								
190		OBS	0075	1775	34686	2511			15166								
		STD	0100	1712	3466	2525	0027637	0344	15151								
190		OBS	0100	1712	34664	2525			15151								
		STD	0125	1648	3460	2535	0026740	0412	15135								
		STD	0150	1552	3448	2548	0025591	0477	15108								
190		OBS	0151	1547	34471	2548			15107								
		STD	0200	1252	3407	2579	0022679	0598	15013								
190		OBS	T0204	1232	34049	2581			15007								
		STD	0250	1098	3406	2607	0020061	0705	14968								
		STD	0300	0972	3408	2630	0017932	0800	14931								
190		OBS	0303	0965	34077	2631			14929								
		STD	0400	0779	3401	2655	0015586	0967	14874								
190		OBS	0403	0774	34011	2656			14872								
		STD	0500	0612	3403	2679	0013286	1112	14825								
		STD	0600	0493	3407	2697	0011604	1236	14794								
190		OBS	0608	0486	34077	2698			14792								
		STD	0700	0444	3417	2710	0010375	1346	14791								
		STD	0800	0406	3427	2722	0009278	1444	14793								
190		OBS	0808	0403	34274	2723			14793								
		STD	0900	0379	3434	2730	0008530	1533	14799								
		STD	1000	0355	3441	2738	0007812	1615	14807								
190		OBS	1012	0352	34418	2739			14808								
		STD	1100	0333	3444	2743	0007380	1691	14815								
		STD	1200	0313	3447	2748	0006996	1763	14823								
		STD	1300	0294	3450	2752	0006627	1831	14832								
		STD	1400	0278	3453	2755	0006280	1896	14843								
		STD	1500	0265	3456	2759	0005972	1957	14854								
190		OBS	T1520	0262	34568	2760			14856								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDIC. #	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1163	PW	30075N	14001 W		123	00	09	08	191	1967	N09	006	4663	15	35	0	3		01	6	2	0006

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		34	507	213	267	228	8	13	

MESSENGR TIME OF CAST HR 1.10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2445	3492	2347	0044288	0000	15334								
191		OBS	0000	2445	34918	2347			15334								
		STD	0010	2390	3498	2368	0042291	0043	15323								
191		OBS	0010	2390	34984	2368			15323								
		STD	0020	2244	3499	2411	0038249	0084	15289								
		STD	0030	2106	3500	2449	0034587	0120	15255								
191		OBS	0030	2106	34997	2449			15255								
		STD	0050	1857	3468	2490	0030765	0185	15186								
191		OBS	0050	1857	34677	2490			15186								
		STD	0075	1770	3467	2511	0028833	0260	15165								
191		OBS	0075	1770	34672	2511			15165								
		STD	0100	1707	3466	2526	0027545	0330	15150								
191		OBS	0100	1707	34661	2526			15150								
		STD	0125	1613	3456	2540	0026258	0398	15124								
		STD	0150	1502	3443	2555	0024894	0461	15092								
191		OBS	0152	1492	34413	2556			15089								
		STD	0200	1223	3404	2582	0022358	0580	15003								
191		OBS	T0202	1214	34027	2583			15000								
		STD	0250	1084	3406	2609	0019832	0685	14963								
		STD	0300	0964	3407	2631	0017846	0779	14928								
191		OBS	0306	0951	34073	2633			14924								
		STD	0400	0774	3401	2656	0015535	0946	14872								
191		OBS	T0406	0764	34008	2657			14869								
		STD	0500	0621	3401	2677	0013553	1092	14828								
		STD	0600	0501	3404	2694	0011924	1219	14796								
191		OBS	0608	0493	34047	2695			14795								
		STD	0700	0460	3413	2706	0010833	1333	14797								
		STD	0800	0424	3423	2717	0009795	1436	14800								
		STD	0900	0388	3432	2728	0008763	1529	14803								
		STD	1000	0352	3442	2739	0007723	1611	14806								
191		OBS	T1001	0352	34419	2739			14806								
		STD	1100	0327	3445	2744	0007282	1686	14812								
		STD	1200	0305	3448	2749	0006875	1757	14820								
		STD	1300	0288	3451	2752	0006528	1824	14830								
		STD	1400	0274	3454	2756	0006212	1888	14841								
		STD	1500	0265	3457	2759	0005943	1948	14854								
191		OBS	T1501	0265	34566	2759			14854								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° ′ .1	LONGITUDE ° ′ .1	SHIFT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR .1	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SAMPLES	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	3006 N	14000 W		123	00	09	09	201	1967	N09	007	4380	14	02	3	3		01	8	4		0007

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	512	220	250	233	8	14	

MESSENGR TIME OF HR .1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁸	ΣΔD DYN. M ×10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2459	35151	2360	0043032	0000	15340								
	201	OBS	0000	2459	35148	2360			15340								
		STD	0010	2409	35263	2383	0040838	0042	15331								
	201	OBS	0010	2409	35260	2383			15331								
		STD	0020	2265	35201	2421	0037310	0081	15297								
	201	OBS	0029	2157	35135	2446			15270								
		STD	0030	2149	35131	2448	0034749	0117	15268								
	201	OBS	0048	1993	34962	2477			15227								
		STD	0050	1968	34931	2481	0031638	0183	15220								
	201	OBS	0072	1769	34682	2512			15164								
		STD	0075	1765	34681	2513	0028644	0259	15163								
	201	OBS	0096	1719	34683	2524			15153								
		STD	0100	1706	34651	2526	0027512	0329	15148								
		STD	0125	1592	34471	2538	0026454	0396	15117								
	201	OBS	0145	1494	34333	2549			15087								
		STD	0150	1461	34291	2553	0025062	0461	15077								
	201	OBS	T0197	1201	34034	2586			14995								
		STD	0200	1193	34041	2588	0021806	0578	14993								
		STD	0250	1063	34071	2614	0019397	0681	14956								
	201	OBS	0295	0965	34082	2631			14928								
		STD	0300	0957	34081	2633	0017658	0774	14925								
	201	OBS	T0397	0804	34019	2652			14883								
		STD	0400	0798	34021	2653	0015821	0941	14881								
		STD	0500	0629	34021	2676	0013585	1088	14832								
	201	OBS	0597	0512	34020	2691			14800								
		STD	0600	0510	34021	2691	0012160	1217	14800								
		STD	0700	0458	34131	2706	0010838	1332	14796								
	201	OBS	0792	0416	34228	2718			14796								
		STD	0800	0415	34241	2719	0009606	1434	14797								
		STD	0900	0383	34331	2729	0008650	1525	14801								
	201	OBS	0988	0358	34396	2737			14806								
		STD	1000	0355	34401	2738	0007886	1608	14807								
		STD	1100	0330	34471	2746	0007154	1683	14814								
		STD	1200	0308	34511	2751	0006673	1752	14822								
		STD	1300	0290	34541	2755	0006308	1817	14831								
		STD	1400	0276	34561	2758	0006059	1879	14842								
	201	OBS	T1448	0270	34562	2758			14848								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	3005 N	13959 W		122	09	09	10	197	1967	N09	008	4480	16	00	0	3		01	6	2		0008

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		36	510	237	261	239	8	14	

MESSENGR TIME of HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2439	3514	2365	0042553	0000	15335								
197		OBS	0000	2439	35135	2365			15335								
		STD	0010	2422	3513	2370	0042115	0042	15333								
197		OBS	0010	2422	35134	2370			15333								
		STD	0020	2355	3518	2393	0039971	0083	15319								
		STD	0030	2282	3522	2417	0037696	0122	15303								
197		OBS	0034	2251	35232	2427			15296								
		STD	0050	2115	3498	2446	0035017	0195	15260								
197		OBS	0054	2079	34941	2453			15251								
		STD	0075	1864	3489	2505	0029471	0276	15194								
197		OBS	0083	1792	34841	2519			15174								
		STD	0100	1699	3468	2529	0027226	0346	15148								
197		OBS	0109		34599												
		STD	0125	1568	3446	2542	0026007	0413	15109								
		STD	0150	1442	3428	2556	0024745	0476	15071								
197		OBS	0162	1384	34208	2563			15053								
		STD	0200	1203	3406	2587	0021842	0593	14997								
197		OBS	T0216	1139	34014	2596			14976								
		STD	0250	1061	3404	2612	0019583	0696	14955								
		STD	0300	0955	3405	2631	0017847	0790	14924								
197		OBS	0324	0909	34052	2638			14911								
		STD	0400	0782	3401	2654	0015652	0957	14875								
197		OBS	T0433	0731	33998	2661			14860								
		STD	0500	0632	3402	2676	0013625	1104	14833								
		STD	0600	0515	3407	2694	0011873	1231	14803								
197		OBS	0649	0471	34098	2702			14793								
		STD	0700	0448	3415	2708	0010571	1344	14793								
		STD	0800	0409	3425	2720	0009462	1444	14794								
197		OBS	0866	0387	34312	2727			14797								
		STD	0900	0379	3434	2730	0008530	1534	14799								
		STD	1000	0356	3440	2738	0007898	1616	14807								
197		OBS	1082	0338	34451	2743			14814								
		STD	1100	0334	3446	2744	0007274	1692	14815								
		STD	1200	0314	3451	2750	0006742	1762	14824								
		STD	1300	0296	3454	2754	0006377	1827	14834								
		STD	1400	0279	3456	2757	0006093	1890	14843								
		STD	1500	0264	3458	2760	0005828	1949	14854								
197		OBS	T1630	0246	34580	2762			14868								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	3002 N	13959 W		122	09	09	11	186	1967	N09	009	4480	15	02	0	1		01	3	4		0009

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		03	S09	234	261	233	8	14	

MESSENGR TIME OF HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–X10⁵	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	SCC
		STD	0000	2436	3515	2367	0042366	0000	15335								
186		OBS	0000	2436	35149	2367			15335								
186		OBS	0009	2424	35146	2370			15333								
		STD	0010	2410	3515	2374	0041695	0042	15330								
		STD	0020	2270	3513	2414	0037937	0082	15297								
186		OBS	0028	2157	35121	2445			15269								
		STD	0030	2121	3506	2450	0034522	0118	15259								
186		OBS	0047	1885	34699	2485			15193								
		STD	0050	1871	3469	2488	0031007	0184	15190								
186		OBS	0070	1779	34634	2506			15166								
		STD	0075	1759	3464	2511	0028832	0258	15161								
186		OBS	0094	1775Q	34647	2508Q											
		STD	0100	1653	3460	2534	0026774	0328	15133								
		STD	0125	1537	3440	2545	0025781	0394	15099								
186		OBS	0142	1452	34281	2554			15073								
		STD	0150	1400	3422	2560	0024331	0456	15057								
186		OBS	T0192	1175	34009	2589			14985								
		STD	0200	1156	3402	2593	0021283	0570	14980								
		STD	0250	1042	3407	2617	0019039	0671	14948								
186		OBS	0287	0962	34081	2632			14925								
		STD	0300	0934	3407	2636	0017362	0762	14917								
186		OBS	0383	0770	34008	2656			14868								
		STD	0400	0740	3401	2660	0015052	0924	14859								
		STD	0500	0592	3401	2680	0013159	1065	14817								
186		OBS	0579	0506	34015	2691			14795								
		STD	0600	0494	3404	2694	0011839	1190	14794								
		STD	0700	0443	3416	2710	0010438	1302	14791								
186		OBS	0774	0412	34238	2719			14791								
		STD	0800	0404	3426	2722	0009329	1400	14792								
		STD	0900	0376	3434	2731	0008495	1490	14798								
186		OBS	T0975	0357	34392	2737			14803								
		STD	1000	0351	3441	2739	0007766	1571	14805								
		STD	1100	0329	3446	2745	0007216	1646	14813								
		STD	1200	0310	3450	2750	0006770	1716	14822								
		STD	1300	0294	3453	2754	0006428	1782	14833								
		STD	1400	0281	3455	2757	0006190	1845	14844								
186		OBS	T1471	0273	34553	2757			14853								

TABLE V.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY. CODE	ID. NO.	CODE	° 1/10	° ' 1/10	INDEX	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1163	PW	2825 N	14002 W		087	80	09	12	197	1967	N09	010	4663	14	00	0	2		01	6	2		0010

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		07	515	179	256	228	8	14	

MESSENGR TIME or HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	D_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2426	3540	2389	0040244	0000	15335								
197		OBS	0000	2426	35404	2389			15335								
197		OBS	0006	2419	35402	2391			15335								
		STD	0010	2389	3538	2398	0039408	0040	15328								
		STD	0020	2254	3531	2432	0036217	0078	15295								
197		OBS	0029	2157	35269	2456			15271								
		STD	0030	2155	3527	2457	0033917	0113	15271								
197		OBS	0046	21510	35239	2456Q											
		STD	0050	2096	3522	2469	0032788	0179	15258								
197		OBS	0071	2018	35136	2484			15239								
		STD	0075	1998	3513	2489	0031027	0259	15235								
197		OBS	0091	1927	35111	2506			15217								
		STD	0100	1912	3510	2509	0029198	0334	15214								
		STD	0125	1855	3505	2519	0028263	0406	15202								
197		OBS	0137	1820	35003	2524			15193								
		STD	0150	1773	3492	2530	0027346	0476	15181								
197		OBS	T0179	1659	34745	2543			15149								
		STD	0200	1539	3458	2558	0024731	0606	15114								
		STD	0250	1306	3427	2583	0022373	0724	15042								
197		OBS	0270	1234	34193	2592			15020								
		STD	0300	1178	3416	2600	0020887	0832	15006								
197		OBS	0358	1063	34106	2617			14974								
		STD	0400	0943	3409	2635	0017582	1024	14937								
		STD	0500	0717	3404	2666	0014670	1186	14867								
197		OBS	0538	0653	34019	2673			14847								
		STD	0600	0599	3409	2686	0012798	1323	14837								
		STD	0700	0525	3419	2703	0011219	1443	14825								
197		OBS	0718	0513	34206	2705			14823								
		STD	0800	0470	3428	2716	0009971	1549	14820								
197		OBS	0899	0425	34349	2726			14819								
		STD	0900	0425	3435	2727	0009000	1644	14819								
		STD	1000	0386	3441	2735	0008176	1730	14820								
		STD	1100	0353	3446	2743	0007495	1808	14823								
		STD	1200	0328	3450	2748	0006979	1880	14830								
		STD	1300	0309	3452	2752	0006677	1949	14839								
197		OBS	T1355	0302	34530	2753			14845								

TABLE V.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDEX	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° ' 1/10	° ' 1/10		10°	1°	MO	DAY	HR T 10		CRUISE NO	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1163	PW	2958 N	13959 W		086	99	09	13	201	1967	N09	011	4206	15	06	0	3		01	6	2		0011

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		11	508	163	261	228	8	14	

MESSENGER TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY $\times 10^5$	$\Sigma \Delta D$ DYN. M $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at	NO_2-N µg-at	NO_3-N µg-at/l	SiO_4-Si µg-at	pH	SCC
		STD	0000	2439	3511	2363	0042747	0000	15335								
	201	OBS	0000	2439	35108	2363			15335								
		STD	0010	2425	3512	2368	0042294	0043	15333								
	201	OBS	0010	2425	35121	2368			15333								
		STD	0020	2262	3503	2409	0038456	0083	15294								
	201	OBS	0029		34954												
		STD	0030	2121	3494	2441	0035390	0120	15258								
	201	OBS	0048	1926	34775	2480			15206								
		STD	0050	1912	3477	2483	0031419	0187	15202								
	201	OBS	0072	1781	34724	2513			15168								
		STD	0075	1766	3471	2515	0028510	0262	15164								
	201	OBS	0096	1674	34594	2528			15138								
		STD	0100	1656	3457	2531	0027059	0331	15133								
		STD	0125	1539	3440	2544	0025823	0397	15099								
	201	OBS	0146	1438	34276	2557			15069								
		STD	0150	1415	3425	2560	0024414	0460	15062								
	201	OBS	0197	1185	34012	2587			14989								
		STD	0200	1178	3402	2589	0021680	0575	14987								
		STD	0250	1070	3408	2613	0019443	0678	14958								
	201	OBS	0294	0979	34095	2630			14933								
		STD	0300	0967	3409	2632	0017747	0771	14929								
	201	OBS	0390	0795	34013	2653			14878								
		STD	0400	0776	3402	2656	0015527	0937	14873								
		STD	0500	0614	3404	2679	0013275	1081	14826								
	201	OBS	0587	0512	34053	2693			14799								
		STD	0600	0504	3407	2696	0011738	1206	14798								
		STD	0700	0450	3417	2710	0010446	1317	14794								
	201	OBS	0780	0415	34242	2719			14793								
		STD	0800	0409	3426	2721	0009387	1416	14794								
		STD	0900	0378	3435	2731	0008444	1506	14799								
	201	OBS	0978	0357	34404	2738			14804								
		STD	1000	0351	3442	2740	0007692	1586	14805								
		STD	1100	0328	3448	2747	0007057	1660	14813								
		STD	1200	0308	3452	2752	0006599	1728	14822								
		STD	1300	0292	3455	2756	0006257	1793	14832								
		STD	1400	0279	3456	2757	0006093	1854	14843								
	201	OBS	T1464	0273	34564	2758			14852								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT IND CTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	3005 N	13951 W		122	09	09	14	197	1967	N09	012	4480	15	10	2	3		01	2	4		0012

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		24	S05	159	267	228	8	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at l	pH	SCC
		STD	0000	2441	3509	2361	0042913	0000	15335								
197		OBS	0000	2441	35093	2361			15335								
		STD	0010	2420	3511	2368	0042267	0043	15332								
197		OBS	0010	2420	35105	2368			15332								
		STD	0020	2298	3509	2403	0039013	0083	15304								
197		OBS	0029	2194	35074	2431			15278								
		STD	0030	2183	3506	2433	0036154	0121	15276								
197		OBS	0048	1992	34874	2471			15225								
		STD	0050	1966	3485	2476	0032168	0189	15218								
197		OBS	0073	1751	34648	2514			15158								
		STD	0075	1745	3465	2515	0028444	0265	15157								
197		OBS	0097	1680	34624	2529			15141								
		STD	0100	1673	3462	2531	0027076	0334	15139								
		STD	0125	1595	3458	2545	0025718	0400	15119								
197		OBS	0148	1499	34481	2559			15091								
		STD	0150	1485	3446	2561	0024319	0463	15087								
197		OBS	T0199	1203	34038	2586			14996								
		STD	0200	1200	3404	2586	0021934	0578	14995								
		STD	0250	1083	3410	2613	0019521	0682	14963								
		STD	0300	0982	3411	2631	0017816	0775	14935								
197		OBS	0300	0982	34114	2631			14935								
197		OBS	0399	0834	34013	2647			14895								
		STD	0400	0832	3401	2647	0016376	0946	14894								
		STD	0500	0637	3404	2677	0013536	1096	14835								
		STD	0600	0500	3407	2696	0011704	1222	14798								
197		OBS	0604	0496	34069	2696			14795								
		STD	0700	0447	3417	2711	0010411	1333	14792								
		STD	0800	0405	3427	2722	0009267	1431	14793								
197		OBS	0804	0404	34274	2723			14793								
		STD	0900	0377	3435	2731	0008433	1520	14799								
		STD	1000	0351	3442	2740	0007692	1600	14805								
197		OBS	1009	0349	34422	2740			14806								
		STD	1100	0328	3447	2746	0007131	1674	14813								
		STD	1200	0308	3451	2751	0006673	1743	14822								
		STD	1300	0291	3454	2755	0006320	1808	14831								
		STD	1400	0276	3456	2758	0006059	1870	14842								
		STD	1500	0264	3456	2759	0005975	1930	14854								
197		OBS	T1521	0262	34564	2759			14857								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	UNIT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	3004 N	14000 W		123	00	09	15	200	1967	N09	013		4572	15	31	0	2	01	6	2		0013

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		24	507	159	261	228	8	14	

MESSENGR TIME OF T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/..	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at l	NO₂-N µg-at l	NO₃-N µg-at l	SiO₄-Si µg-at l	pH	CODE
		STD	0000	2454	3509	2357	0043313	0000	15338								
	200	OBS	0000	2454	35089	2357			15338								
		STD	0010	2439	3509	2361	0042931	0043	15336								
	200	OBS	0010	2439	35088	2361			15336								
		STD	0020	2416	3513	2372	0041991	0086	15333								
	200	OBS	0029	2348	35173	2395			15318								
		STD	0030	2330	3515	2398	0039494	0126	15314								
	200	OBS	0049	2238	34851	2457			15238								
		STD	0050	2024	3464	2460	0038694	0203	15234								
	200	OBS	0073	1789	34628	2503			15169								
		STD	0075	1765	3464	2505	0029415	0276	15169								
	200	OBS	0098	1726	34672	2522			15155								
		STD	0100	1718	3466	2523	0027603	0350	15153								
		STD	0125	1608	3449	2536	0026658	0418	15122								
	200	OBS	0149	1493	34342	2550			15088								
		STD	0150	1487	3434	2551	0025266	0483	15086								
		STD	0200	1219	3404	2583	0022306	0602	15012								
	200	OBS	0201	1215	34031	2583			15000								
		STD	0250	1077	3406	2610	0019711	0707	14960								
	200	OBS	0299	0958	34071	2632			14925								
		STD	0300	0956	3407	2632	0017716	0800	14925								
		STD	0400	0769	3401	2656	0015492	0966	14870								
	200	OBS	T0400	0769	34006	2656			14870								
		STD	0500	0609	3402	2679	0013313	1111	14824								
	200	OBS	0597	0498	34036	2694			14795								
		STD	0600	0496	3404	2694	0011863	1236	14794								
		STD	0700	0446	3417	2710	0010399	1348	14792								
	200	OBS	0792	0408	34264	2721			14793								
		STD	0800	0405	3427	2722	0009267	1446	14793								
		STD	0900	0375	3435	2732	0008413	1534	14798								
	200	OBS	0993	0350	34408	2739			14804								
		STD	1000	0348	3441	2739	0007732	1615	14804								
		STD	1100	0325	3447	2746	0007096	1689	14812								
		STD	1200	0305	3451	2751	0006639	1758	14820								
		STD	1300	0289	3454	2755	0006298	1823	14831								
		STD	1400	0276	3455	2757	0006132	1885	14842								
	200	OBS	T1491	0267	34558	2758			14854								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° '/10	LONGITUDE ° '/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR./10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	29576N	13957 W		086	99	09	16	187	1967	N09	014	3749	33	33	0	2		01	8	4		0014

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		34	S04	156	261	228	8	16	

MESSENGR TIME OF HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	D_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2449	3508	2358	0043228	0000	15337								
187		OBS	0000	2449	35081	2358			15337								
		STD	0010	2442	3508	2360	0043081	0043	15337								
187		OBS	0010	2442	35079	2360			15337								
		STD	0020	2427	3507	2363	0042757	0086	15335								
		STD	0030	2412	3504	2366	0042594	0129	15333								
187		OBS	0030	2412	35039	2366			15333								
187		OBS	0049	2049	34900	2457			15241								
		STD	0050	2041	3490	2460	0033691	0205	15239								
187		OBS	0074	1858	34788	2498			15191								
		STD	0075	1853	3478	2479	0030006	0285	15190								
187		OBS	0098		34689												
		STD	0100	1733	3467	2520	0028074	0357	15158								
		STD	0125	1606	3448	2535	0026687	0426	15121								
		STD	0150	1472	3431	2552	0025180	0491	15081								
187		OBS	0150	1472	34305	2552			15081								
		STD	0200	1181	3401	2588	0021807	0608	14988								
187		OBS	T0202	1172	34007	2589			14985								
		STD	0250	1057	3404	2613	0019500	0711	14953								
		STD	0300	0945	3408	2635	0017472	0804	14921								
187		OBS	0301	0943	34080	2635			14920								
		STD	0400	0748	3400	2659	0015233	0967	14862								
187		OBS	0401	0746	33996	2659			14861								
		STD	0500	0598	3403	2681	0013103	1109	14819								
		STD	0600	0491	3408	2698	0011506	1232	14793								
187		OBS	0605	0487	34084	2699			14792								
		STD	0700	0443	3417	2710	0010364	1341	14791								
		STD	0800	0404	3426	2722	0009329	1440	14792								
187		OBS	0804	0403	34266	2722			14793								
		STD	0900	0376	3435	2732	0008421	1529	14798								
		STD	1000	0350	3441	2739	0007755	1609	14805								
187		OBS	1009	0348	34420	2740			14805								
		STD	1100	0330	3445	2744	0007301	1685	14813								
		STD	1200	0312	3449	2749	0006867	1756	14823								
		STD	1300	0294	3452	2753	0006502	1822	14832								
		STD	1400	0278	3454	2756	0006229	1886	14843								
		STD	1500	0262	3456	2759	0005952	1947	14853								
187		OBS	T1514	0260	34562	2759			14854								
210		OBS	T1747	0228	34589	2764			14880								
		STD	1750	0228	3459	2764	0005465	2090	14881								
		STD	2000	0209	3458	2765	0005435	2226	14915								
210		OBS	2254	0191	34564	2765			14950								
		STD	2500	0174	3462	2771	0004869	2483	14986								
210		OBS	2757	0161	34657	2775			15025								
		STD	3000	0153	3466	2775	0004475	2717	15063								
210		OBS	T3265	0150	34658	2776			15108								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° ′ 1/10	LONGITUDE ° ′ 1/10	QUIP INDICTR	MAPSDEN SQUARE 10°	MAPSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1163	PW	3001 N	14008 W		123	00	09	17	216	1967	N09	015	4252	15	33	3	3		01	6	7	0015

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S09	186	244	228	7	13	

MESSENGR TIME OF HR 1/10	CAST NO	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY—10^7	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at	NO_3-N µg-at	SiO_4-Si µg-at/l	pH	SI
		STD	0000	2456	3502	2351	0043854	0000	15338								
	216	OBS	0000	2456	35022	2351			15338								
		STD	0010	2450	3507	2356	0043404	0044	15339								
	216	OBS	0011	2446	35070	2358			15338								
		STD	0020	2375	3505	2377	0041432	0038	15322								
		STD	0030	2277	3502	2404	0038974	0126	15294								
	216	OBS	0031	2266	35011	2406			15296								
		STD	0050	2019	3490	2465	0031133	0198	15233								
	216	OBS	0051	2008	34894	2468			15231								
		STD	0075	1779	3462	2505	0024430	0277	15167								
	216	OBS	0076	1773	34618	2506			15165								
		STD	0100	1739	3469	2520	0028105	0348	15160								
	216	OBS	0101	1737	34688	2521			15159								
		STD	0125	1565	3446	2543	0025943	0416	15108								
		STD	0150	1407	3427	2563	0024107	0479	15059								
		STD	0200	1160	3402	2592	0021355	0592	14981								
	216	OBS	T0204	1144	34006	2594			14976								
		STD	0250	1047	3405	2615	0019271	0694	14950								
		STD	0300	0947	3406	2633	0017644	0786	14921								
	216	OBS	0307	0933	34064	2635			14917								
		STD	0400	0765	3400	2656	0015478	0952	14868								
	216	OBS	0407	0753	33999	2658			14865								
		STD	0500	0604	3400	2678	0013404	1096	14821								
		STD	0600	0490	3405	2696	0011717	1222	14792								
	216	OBS	0613	0478	34058	2699			14789								
		STD	0700	0441	3416	2710	0010414	1332	14790								
		STD	0800	0404	3426	2722	0009329	1431	14794								
	216	OBS	0813	0400	34277	2723			14793								
		STD	0900	0377	3435	2731	0008433	1525	14794								
		STD	1000	0353	3442	2739	0007715	1601	14806								
	216	OBS	T1018	0349	34428	2740			14808								
		STD	1100	0331	3444	2743	0007357	1676	14814								
		STD	1200	0310	3446	2747	0007035	1748	14822								
		STD	1300	0292	3448	2750	0006744	1817	14831								
		STD	1400	0275	3450	2753	0006459	1883	14841								
		STD	1500	0260	3452	2756	0006193	1946	14852								
	216	OBS	T1533	0256	34531	2757			14855								

TABLE V.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICTN	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1163	PW	3009 N	14002 W		123	00	09	18	202	1967	N09	016	4526	15	32	2	3		01	6	6		0016

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		10	509	224	233	228	7	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2435	3506	2360	0042965	0000	15333								
	201	OBS	0000	2435	35062	2360			15333								
	201	OBS	0009	2429	35061	2362			15334								
		STD	0010	2426	3506	2363	0042748	0043	15333								
		STD	0020	2377	3507	2378	0041330	0085	15323								
	201	OBS	0028	2313	35080	2398			15308								
		STD	0030	2286	3508	2405	0038787	0125	15302								
	201	OBS	0047	2072	34989	2458			15248								
		STD	0050	2034	3494	2465	0033223	0197	15236								
	201	OBS	0071	1805	34653	2501			15174								
		STD	0075	1796	3465	2503	0029600	0275	15172								
		STD	0100	1724	3461	2518	0028304	0348	15154								
		STD	0125	1633	3452	2532	0026989	0417	15130								
	201	OBS	0145	1544	34427	2545			15104								
		STD	0150	1513	3438	2548	0025490	0483	15095								
	201	OBS	T0193	1277	34082	2575			15021								
		STD	0200	1250	3408	2580	0022569	0603	15013								
		STD	0250	1080	3408	2614	0019616	0708	14962								
	201	OBS	0290	0973	34068	2629			14929								
		STD	0300	0958	3406	2631	0017822	0802	14925								
	201	OBS	T0390	0817	34025	2650			14887								
		STD	0400	0795	3403	2654	0015733	0970	14860								
		STD	0500	0610	3402	2679	0013334	1115	14824								
	201	OBS	0584	0508	34016	2691			14796								
		STD	0600	0506	3404	2693	0011985	1241	14798								
		STD	0700	0487	3417	2705	0010893	1356	14809								
	201	OBS	0778	0461	34250	2715			14812								
		STD	0800	0447	3427	2718	0009765	1459	14810								
		STD	0900	0390	3435	2730	0008584	1551	14804								
	201	OBS	0976	0354	34402	2738			14802								
		STD	1000	0350	3442	2740	0007681	1632	14805								
		STD	1100	0333	3447	2745	0007189	1707	14815								
		STD	1200	0316	3451	2750	0006769	1776	14825								
		STD	1300	0299	3454	2754	0006417	1842	14835								
		STD	1400	0283	3455	2756	0006209	1905	14845								
	201	OBS	T1457	0273	34556	2758			14850								

TABLE V.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR,1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1163	PW	30018N	140019W		123	00	09	19	198	1967	N09	017	4389	15	30	3	3		01	7	3		0017

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		09	S11	220	256	228	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2453	3510	2358	0043184	0000	15338								
198		OBS	0000	2453	35103	2358			15338								
198		OBS	0009	2444	35100	2361			15338								
		STD	0010	2433	3510	2364	0042651	0043	15335								
		STD	0020	2329	3513	2397	0039580	0084	15312								
198		OBS	0029		35153												
		STD	0030	2229	3513	2425	0036878	0122	15288								
198		OBS	0049	2052	34878	2455			15242								
		STD	0050	2043	3489	2458	0033814	0193	15240								
198		OBS	0073	1851	34918	2510			15191								
		STD	0075	1838	3489	2511	0028849	0271	15187								
198		OBS	0098	1691	34620	2526			15144								
		STD	0100	1677	3460	2528	0027311	0341	15140								
		STD	0125	1517	3438	2548	0025503	0408	15092								
198		OBS	0149		34216												
		STD	0150	1377	3421	2564	0023945	0469	15049								
		STD	0200	1157	3401	2592	0021374	0583	14980								
198		OBS	0201	1153	34009	2593			14979								
		STD	0250	1056	3408	2616	0019204	0684	14953								
		STD	0300	0958	3410	2634	0017535	0776	14926								
198		OBS	0300	0958	34099	2634			14926								
198		OBS	T0399	0769	34007	2656			14870								
		STD	0400	0767	3401	2657	0015433	0941	14869								
		STD	0500	0621	3401	2677	0013553	1086	14828								
		STD	0600	0513	3405	2693	0011997	1213	14801								
198		OBS	0601	0512	34051	2693			14801								
		STD	0700	0456	3416	2708	0010592	1326	14796								
198		OBS	0798	0411	34248	2720			14795								
		STD	0800	0410	3425	2720	0009473	1427	14795								
		STD	0900	0381	3433	2729	0008627	1517	14800								
		STD	1000	0355	3441	2738	0007849	1600	14807								
198		OBS	1000	0355	34405	2738			14807								
		STD	1100	0332	3446	2745	0007251	1675	14814								
		STD	1200	0311	3451	2751	0006708	1745	14823								
		STD	1300	0293	3454	2755	0006343	1810	14832								
		STD	1400	0278	3455	2757	0006155	1873	14843								
198		OBS	T1494	0267	34559	2758			14854								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1163	PW	29595N	140025W		087	90	09	20	197	1967	N09	018	4206	15	34	3	3		01	7	5		0018

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		01	S18	179	256	222	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	ΣΔD DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	S/C
		STD	0000	2437	3512	2364	0042618	0000	15335								
197		OBS	0000	2437	35118	2364			15335								
197		OBS	0009	2429	35116	2366			15334								
		STD	0010	2418	3512	2370	0042131	0042	15332								
		STD	0020	2310	3512	2401	0039156	0083	15307								
		STD	0030	2208	3511	2430	0036430	0121	15285								
197		OBS	0033		35114												
		STD	0050	2023	3489	2464	0033307	0191	15234								
197		OBS	0051	2014	34877	2465			15232								
		STD	0075	1823	3479	2507	0029219	0269	15181								
197		OBS	0077	1811	34783	2510			15178								
		STD	0100	1706	3466	2525	0027559	0340	15149								
197		OBS	0100	1706	34656	2525			15149								
		STD	0125	1591	3447	2538	0026432	0407	15116								
		STD	0150	1469	3431	2553	0025081	0472	15080								
197		OBS	0151	1464	34301	2553			15078								
		STD	0200	1202	3403	2585	0022044	0589	14996								
197		OBS	T0202	1193	34024	2586			14993								
		STD	0250	1088	3410	2612	0019608	0694	14965								
		STD	0300	0989	3412	2630	0017888	0787	14938								
197		OBS	0302	0985	34124	2631			14937								
		STD	0400	0819	3401	2649	0016201	0958	14889								
197		OBS	0404	0813	34005	2649			14887								
		STD	0500	0647	3402	2674	0013797	1108	14839								
		STD	0600	0520	3404	2692	0012135	1237	14804								
197		OBS	0606	0514	34044	2692			14803								
		STD	0700	0459	3415	2707	0010702	1352	14797								
		STD	0800	0413	3424	2719	0009582	1453	14796								
197		OBS	0810	0409	34253	2721			14796								
		STD	0900	0383	3433	2729	0008650	1544	14801								
		STD	1000	0357	3440	2737	0007909	1627	14808								
197		OBS	1012	0354	34410	2739			14808								
		STD	1100	0333	3444	2743	0007432	1704	14815								
		STD	1200	0312	3447	2747	0007036	1776	14823								
		STD	1300	0293	3450	2751	0006660	1844	14832								
		STD	1400	0277	3453	2755	0006313	1909	14842								
		STD	1500	0263	3456	2759	0005978	1971	14853								
197		OBS	T1524	0260	34565	2760			14856								

TABLE V.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SAMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1163	PW	2901 N	14006 W		087	90	09	21	217	1967	N09	019	4846	14	01	3	3		02	7	8	0012

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		02	S17	169	239	222	8	14	

MESSENGR TIME OF T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O2 ml l	PO4-P µg-at l	TOTAL-P µg-at l	NO2-N µg-at l	NO3-N µg-at l	SiO4-Si µg-at l	pH	QUAL
		STD	0000	2480	35360	2369	0042145	0000	15348								
217		OBS	0000	2480	35355	2369			15348								
217		OBS	0009	2478	35355	2370			15349								
		STD	0010	2470	35360	2372	0041896	0042	15347								
		STD	0020	2385	35360	2398	0039507	0083	15328								
217		OBS	0029		35357												
		STD	0030	2294	35340	2423	0037131	0121	15307								
217		OBS	0045	2144	35087	2446			15268								
		STD	0050	2069	35010	2460	0033610	0192	15248								
217		OBS	0069	1872	34841	2499			15195								
		STD	0075	1855	34860	2505	0029473	0271	15191								
217		OBS	0090	1816	34896	2517			15183								
		STD	0100	1801	34890	2520	0028035	0343	15180								
		STD	0125	1754	34860	2530	0027258	0412	15170								
217		OBS	0134	1734	34850	2534			15166								
		STD	0150	1695	34780	2538	0026566	0479	15156								
217		OBS	T0178	1613	34656	2547			15134								
		STD	0200	1498	34510	2562	0024370	0606	15100								
		STD	0250	1277	34250	2588	0021960	0722	15032								
217		OBS	0271	1201	34182	2597			15009								
		STD	0300	1131	34160	2609	0020037	0827	14989								
217		OBS	T0364	0986	34123	2631			14947								
		STD	0400	0901	34080	2642	0016952	1012	14921								
		STD	0500	0702	34010	2666	0014658	1170	14860								
217		OBS	0553	0620	34004	2676			14836								
		STD	0600	0570	34050	2686	0012715	1307	14825								
		STD	0700	0484	34150	2704	0011005	1426	14807								
217		OBS	0741	0457	34195	2711			14804								
		STD	0800	0437	34260	2718	0009718	1529	14806								
		STD	0900	0406	34350	2729	0008773	1622	14811								
217		OBS	0927	0398	34368	2731			14812								
		STD	1000	0377	34420	2737	0007995	1706	14816								
		STD	1100	0351	34470	2744	0007398	1783	14823								
		STD	1200	0327	34510	2749	0006894	1854	14830								
		STD	1300	0306	34530	2753	0006568	1921	14838								
		STD	1400	0287	34540	2755	0006356	1986	14845								
217		OBS	1400	0287	34537	2755			14846								

TABLE V.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRFT INDCTR	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR,1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1163	PW	3004 N	14006 W		123	00	09	22	194	1967	N09	020	4343	15	35	2	3		01	8	3		0020

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		06	S18	203	250	222	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	ND_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2423	3515	2370	0042018	0000	15332								
194		OBS	0000	2423	35146	2370			15332								
		STD	0010	2417	3514	2372	0041901	0042	15332								
194		OBS	0010	2417	35144	2372			15332								
		STD	0020	2409	3514	2374	0041765	0084	15331								
		STD	0030	2401	3513	2376	0041622	0125	15331								
194		OBS	0032	2399	35127	2376			15331								
		STD	0050	2049	3488	2456	0034032	0201	15241								
194		OBS	0050	2049	34881	2456			15241								
		STD	0075	1867	3497	2510	0029000	0280	15196								
194		OBS	0076	1860	34968	2512			15194								
194		OBS	0099	1703	34696	2529			15149								
		STD	0100	1696	3468	2530	0027158	0350	15147								
		STD	0125	1541	3442	2545	0025720	0416	15100								
194		OBS	0148	1410	34229	2559			15060								
		STD	0150	1399	3422	2561	0024311	0479	15056								
194		OBS	T0198	1167	34014	2591			14983								
		STD	0200	1162	3402	2592	0021391	0593	14982								
		STD	0250	1051	3406	2615	0019265	0695	14951								
194		OBS	0298	0953	34079	2633			14924								
		STD	0300	0949	3408	2634	0017544	0787	14922								
194		OBS	0398	0777	34016	2656			14873								
		STD	0400	0773	3402	2657	0015446	0952	14872								
		STD	0500	0608	3402	2679	0013308	1095	14823								
		STD	0600	0492	3405	2696	0011711	1220	14793								
194		OBS	0600	0492	34054	2696			14793								
		STD	0700	0449	3416	2709	0010509	1332	14793								
		STD	0800	0412	3425	2720	0009497	1432	14795								
194		OBS	0803	0411	34252	2720			14796								
		STD	0900	0383	3433	2729	0008650	1522	14801								
		STD	1000	0356	3440	2738	0007898	1605	14807								
194		OBS	1009	0354	34409	2738			14808								
		STD	1100	0332	3446	2745	0007251	1681	14814								
		STD	1200	0311	3451	2751	0006708	1751	14823								
		STD	1300	0292	3454	2755	0006331	1816	14832								
		STD	1400	0276	3456	2758	0006059	1878	14842								
		STD	1500	0262	3456	2759	0005952	1938	14853								
194		OBS	T1538	0258	34563	2760			14858								

TABLE VI. Observed and interpolated oceanographic data for stations taken by USCGC TANEY at Ocean Station NOVEMBER, 15 October–5 November 1967, prepared from NODC Listing No. 31–1178 RT.

REFERENCE: Ctry Code	REFERENCE: ID. No.	SHIP CODE	LATITUDE ° ' 1/10	LONGITUDE ° ' 1/10	DIFF INDEX	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1178	RT	2943 N	14000 W		087	90	10	15	239	1967	N10	001	4755	15	09		3		X1	8	5		0001

WATER: COLOR CODE	WATER: TRANS (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C: DRY BULB	AIR TEMP °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S16	190	244	233	7	14	

MESSENGR TIME or HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2389	3525	2389	0040277	0000	15325								
239		OBS	0000	2389	35254	2389			15325								
239		OBS	0009	2389	35254	2389			15326								
		STD	0010	2389	3525	2389	0040319	0040	15326								
		STD	0020	2390	3526	2388	0040387	0081	15328								
		STD	0030	2392	3526	2388	0040449	0121	15330								
239		OBS	0032	2392	35257	2388			15331								
		STD	0050	2171	3500	2432	0036350	0198	15275								
239		OBS	0050	2171	34999	2432			15275								
		STD	0075	1878	3471	2487	0031114	0282	15196								
239		OBS	0075	1878	34710	2487			15196								
239		OBS	0097	1750	34681	2517			15162								
		STD	0100	1735	3466	2514	0028142	0356	15158								
		STD	0125	1605	3450	2537	0026519	0425	15121								
239		OBS	0143	1509	34375	2549			15092								
		STD	0150	1465	3431	2554	0024999	0489	15079								
239		OBS	0190	1249	34055	2578			15011								
		STD	0200	1217	3406	2585	0022100	0607	15001								
		STD	0250	1070	3409	2614	0019370	0711	14956								
239		OBS	0288	0976	34095	2631			14931								
		STD	0300	0954	3408	2633	0017610	0803	14924								
239		OBS	T0383	0807	34.22	2652			14882								
		STD	0400	0774	3402	2656	0015454	0968	14872								
		STD	0500	0608	3401	2678	0013360	1112	14823								
239		OBS	T0567	0526	34007	2688			14801								
		STD	0600	0502	3405	2694	0011662	1238	14797								
		STD	0700	0441	3417	2711	0010340	1349	14790								
239		OBS	0742	0420	34213	2716			14789								
		STD	0800	0401	3427	2723	0009220	1447	14791								
		STD	0900	0370	3435	2732	0008352	1535	14796								
239		OBS	T0940	0359	34378	2735			14798								
		STD	1000	0344	3442	2740	0007612	1615	14802								
		STD	1100	0321	3447	2746	0007050	1688	14810								
		STD	1200	0302	3451	2751	0006604	1757	14819								
		STD	1300	0287	3454	2755	0006273	1821	14830								
		STD	1400	0276	3455	2757	0006132	1885	14842								
239		OBS	T1480	0270	34556	2758			14853								

TABLE VI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DUPLICATE	MARSDEN 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.	CODE	° ' 1/10	° ' 1/10	INDICATOR	10°	1°	MO	DAY	HR 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1178	RT	30015N	140023W		123	00	10	16	199	1967	N10	002	4755	14	06		5		X1	5	6		0002

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		08	508	200	256	222	7	14	

MESSENGER TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	QUAL
		STD	0000	2375	3524	2391	0040006	0000	15321								
199		OBS	0000	2375	35237	2391			15321								
199		OBS	0009	2372	35238	2392			15322								
		STD	0010	2372	3524	2392	0039951	0040	15322								
		STD	0020	2371	3524	2393	0039932	0080	15323								
		STD	0030	2369	3524	2394	0039915	0120	15325								
199		OBS	0033	2369	35245	2394			15325								
		STD	0050	2165	3498	2432	0036323	0196	15273								
199		OBS	0052	2141	34956	2437			15267								
		STD	0075	1854	3473	2495	0030392	0279	15190								
199		OBS	0080	1816	34710	2503			15179								
		STD	0100	1766	3474	2518	0028313	0353	15168								
199		OBS	0103	1756	34747	2520			15166								
		STD	0125	1655	3458	2532	0027042	0422	15137								
		STD	0150	1531	3440	2546	0025726	0485	15101								
199		OBS	0154	1510	34370	2548			15094								
		STD	0200	1239	3406	2580	0022509	0609	15009								
199		OBS	T0207	1206	34031	2589			14998								
		STD	0250	1108	3406	2605	0020222	0715	14972								
		STD	0300	0998	3410	2628	0018162	0811	14941								
199		OBS	0307	0983	34108	2630			14936								
		STD	0400	0793	3402	2654	0015740	0981	14879								
199		OBS	T0408	0778	34011	2655			14875								
		STD	0500	0607	3402	2674	0013295	1126	14823								
199		OBS	T0594	0485	34066	2697			14789								
		STD	0600	0482	3407	2698	0011472	1250	14769								
		STD	0700	0436	3419	2713	0010133	1355	14788								
199		OBS	0792	0403	34284	2724			14791								
		STD	0800	0401	3429	2724	0009072	1454	14791								
		STD	0900	0379	3437	2733	0008308	1541	14800								
199		OBS	0982	0361	34420	2739			14806								
		STD	1000	0357	3443	2740	0007688	1621	14808								
		STD	1100	0335	3448	2746	0007137	1695	14816								
		STD	1200	0314	3452	2751	0006669	1764	14824								
		STD	1300	0292	3455	2756	0006257	1829	14832								
		STD	1400	0271	3456	2758	0006001	1890	14840								
199		OBS	T1450	0260	34563	2759			14844								

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1178	RT	30008N	139597W		122	09	10	17	196	1967	N10	003	4531	16	07		3		X1	6	6		0003

WATER COLOP CODE	WATER TRANS. (m)	WIND DIR	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	S05	200	239	233	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^5	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2367	3522	2392	0039912	0000	15319								
196		OBS	0000	2367	35219	2392			15319								
		STD	0010	2366	3522	2393	0039915	0040	15320								
196		OBS	0010	2366	35220	2393			15320								
		STD	0020	2366	3522	2393	0039943	0080	15322								
		STD	0030	2365	3522	2393	0039970	0120	15323								
196		OBS	0034	2365	35220	2393			15324								
		STD	0050	2128	3501	2444	0035139	0195	15264								
196		OBS	0054	2081	34972	2454			15252								
		STD	0075	1939	3491	2487	0031152	0278	15216								
196		OBS	0083	1892	34884	2497			15203								
		STD	0100	1809	3484	2515	0028606	0352	15182								
196		OBS	0107	1778	34821	2521			15174								
		STD	0125	1732	3475	2526	0027549	0423	15162								
		STD	0150	1640	3462	2538	0026494	0490	15137								
196		OBS	0160	1594	34557	2544			15124								
		STD	0200	1329	3419	2573	0023277	0615	15041								
196		OBS	T0214	1252	34095	2581			15016								
		STD	0250	1132	3409	2603	0020455	0724	14980								
		STD	0300	0989	3408	2627	0018182	0821	14937								
196		OBS	0318	0944	34075	2634			14923								
		STD	0400	0791	3401	2653	0015784	0940	14876								
196		OBS	T0422	0753	34003	2658			14867								
		STD	0500	0619	3401	2677	0013526	1137	14827								
		STD	0600	0491	3406	2696	0011654	1283	14795								
196		OBS	T0618	0474	34073	2699			14789								
		STD	0700	0436	3417	2711	0010281	1373	14788								
		STD	0800	0399	3427	2723	0009197	1470	14790								
196		OBS	0826	0391	34297	2726			14794								
		STD	0900	0378	3436	2732	0008370	1558	14799								
		STD	1000	0360	3443	2740	0007722	1638	14809								
196		OBS	T1037	0353	34451	2742			14813								
		STD	1100	0341	3447	2744	0007318	1713	14818								
		STD	1200	0323	3449	2748	0007009	1785	14828								
		STD	1300	0304	3451	2751	0006684	1854	14837								
		STD	1400	0286	3453	2755	0006367	1919	14846								
		STD	1500	0267	3456	2758	0006040	1981	14855								
196		OBS	T1586	0250	34576	2761			14862								

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1178	RT	2943 N	14034 W		087	90	10	18	043	1967	N10	004	4297	15	34		3		X1	6	4		0004

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		06	S15	230	239	228	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M X 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2381	3527	2392	0039951	0000	15323								
043		OBS	0000	2381	35268	2392			15323								
043		OBS	0009	2373	35271	2395			15322								
		STD	0010	2373	3527	2395	0039741	0040	15322								
		STD	0020	2372	3527	2395	0039772	0080	15324								
		STD	0030	2371	3527	2395	0039800	0119	15325								
043		OBS	0032	2371	35266	2395			15326								
		STD	0050	2072	3503	2461	0033543	0193	15249								
043		OBS	0051	2059	35017	2464			15246								
		STD	0075	1873	3493	2506	0029398	0271	15197								
043		OBS	0078	1855	34921	2509			15193								
		STD	0100	1753	3486	2530	0027140	0342	15166								
043		OBS	0100	1753	34862	2530			15166								
		STD	0125	1627	3461	2540	0026202	0409	15129								
		STD	0150	1493	3439	2553	0025034	0473	15089								
043		OBS	0150	1493	34385	2553			15089								
		STD	0200	1200	3403	2586	0022007	0590	14995								
043		OBS	T0201	1195	34025	2586			14994								
		STD	0250	1071	3408	2613	0019461	0694	14959								
043		OBS	0299	0961	34091	2633			14927								
		STD	0300	0959	3409	2633	0017617	0787	14926								
043		OBS	T0398	0781	34006	2654			14874								
		STD	0400	0777	3401	2655	0015608	0953	14873								
		STD	0500	0604	3403	2680	0013211	1097	14822								
043		OBS	T0591	0493	34043	2695			14792								
		STD	0600	0488	3405	2696	0011692	1222	14791								
		STD	0700	0440	3416	2710	0010402	1332	14789								
043		OBS	0790	0406	34255	2721			14791								
		STD	0800	0404	3427	2722	0009255	1430	14792								
		STD	0900	0380	3436	2732	0008393	1519	14800								
043		OBS	0983	0361	34419	2739			14807								
		STD	1000	0357	3443	2740	0007688	1599	14809								
		STD	1100	0335	3449	2747	0007064	1673	14816								
		STD	1200	0314	3453	2752	0006595	1741	14824								
		STD	1300	0293	3456	2756	0006195	1805	14833								
		STD	1400	0273	3456	2758	0006024	1866	14841								
043		OBS	T1451	0263	34562	2759			14845								

TABLE VI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDCTR	MARSDEN 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.	CODE	° 1/10	° ' 1/10		10°	1°	MO.	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1178	RT	2949 N	14013 W		087	90	10	19	186	1967	N10	005	4389	14	07		3		X1	8	2		0003

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		06	509	240	250	239	8	14	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at l	pH	CODE
		STD	0000	2364	3529	2399	0039316	0000	15319								
188		OBS	0000	2364	35290	2399			15319								
188		OBS	0009	2364	35286	2398			15320								
		STD	0010	2364	3529	2398	0039386	0039	15320								
		STD	0020	2365	3528	2398	0039472	0079	15322								
		STD	0030	2366	3526	2398	0039547	0118	15324								
188		OBS	0032	2366	35280	2397			15324								
		STD	0050	2122	3498	2444	0035228	0193	15262								
188		OBS	0050	2122	34976	2444			15262								
		STD	0075	1880	3478	2492	0030655	0275	15198								
188		OBS	0078	1858	34764	2497			15192								
		STD	0100	1749	3473	2521	0026021	0349	15163								
188		OBS	0100	1749	34728	2521			15163								
		STD	0125	1657	3461	2534	0026868	0417	15138								
188		OBS	0149	1546	34464	2548			15106								
		STD	0150	1539	3445	2548	0025532	0483	15104								
188		OBS	T0199	1245	34053	2579			15011								
		STD	0200	1242	3405	2579	0022616	0603	15010								
		STD	0250	1085	3407	2610	0019798	0709	14963								
188		OBS	0295	0964	34080	2631			14927								
		STD	0300	0953	3407	2632	0017667	0803	14924								
188		OBS	T0397	0756	34004	2658			14864								
		STD	0400	0750	3401	2659	0015225	0967	14863								
		STD	0500	0592	3402	2681	0013077	1109	14817								
188		OBS	T0585	0495	34039	2694			14791								
		STD	0600	0487	3406	2697	0011606	1236	14791								
		STD	0700	0438	3418	2712	0010231	1342	14789								
188		OBS	0778	0407	34262	2721			14790								
		STD	0800	0400	3428	2724	0009135	1438	14791								
		STD	0900	0372	3437	2734	0008227	1525	14797								
188		OBS	0971	0353	34420	2739			14801								
		STD	1000	0346	3443	2741	0007568	1604	14803								
		STD	1100	0322	3446	2746	0007143	1678	14810								
		STD	1200	0302	3449	2750	0006759	1747	14819								
		STD	1300	0283	3452	2754	0006382	1813	14828								
		STD	1400	0268	3455	2758	0006047	1875	14839								
188		OBS	T1450	0261	34564	2759			14844								

TABLE VI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICTR	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1178	RT	29594N	140060W		087	90	10	20	189	1967	N10	006	3658	16	35	2	3		X1	8	3		0006

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		05	509	240	250	222	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	NODC
		STD	0000	2367	3527	2397	0029515	0000	15319								
189		OBS	0000	2367	35274	2397			15319								
		STD	0010	2360	3527	2399	0039365	0039	15319								
189		OBS	0010	2360	35273	2399			15319								
		STD	0020	2362	3521	2393	0039906	0079	15321								
		STD	0030	2363	3516	2389	0040350	0119	15322								
189		OBS	0034	2364													
		STD	0050	2023	3505	2476	0032148	0192	15236								
189		OBS	0053	1976	34940	24800											
		STD	0075	1827	3492	2516	0028370	0267	15184								
189		OBS	0082	1792	34830	25184											
		STD	0100	1740	3479	2528	0027363	0337	15161								
189		OBS	0107	1714	34800	25350											
		STD	0125	1613	3468	2549	0025384	0403	15126								
		STD	0150	1477	3458	2572	0023277	0464	15086								
189		OBS	0160	1424	34310	25620											
		STD	0200	1214	3439	2611	0019625	0571	15005								
189		OBS	0214	1155													
		STD	0250	1083	3425	2624	0018419	0666	14965								
		STD	0300	0983	3413	2632	0017715	0756	14936								
189		OBS	0322	0939	34093	2637			14923								
		STD	0400	0777	3401	2655	0015579	0923	14873								
189		OBS	T0433	0717	33997	2663			14855								
		STD	0500	0619	3402	2678	0013452	1068	14828								
		STD	0600	0504	3408	2696	0011664	1194	14798								
189		OBS	T0644	0466	34111	2703			14790								
		STD	0700	0441	3417	2711	0010540	1304	14790								
		STD	0800	0403	3426	2722	0009318	1402	14792								
189		OBS	0861	0385	34316	2728			14795								
		STD	0900	0378	3435	2731	0008444	1491	14799								
		STD	1000	0360	3442	2739	0007796	1572	14809								
189		OBS	T1071	0347	34460	2743			14816								
		STD	1100	0342	3447	2744	0007322	1648	14819								
		STD	1200	0324	3449	2748	0007021	1719	14828								
		STD	1300	0305	3451	2751	0006711	1788	14837								
		STD	1400	0287	3453	2754	0006400	1854	14846								
		STD	1500	0269	3455	2758	0006093	1916	14856								
189		OBS	T1633	0245	34581	2762			14868								

TABLE VI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT IND.	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
GTRY. CODE	ID. NO.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1178	RT	3001 N	140015W		123	00	10	21	183	1967	N10	007	4480	15	35		3		X1	8	2		0007

WATER		WIND		BARO-METER (mbs)	AIR TEMP °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		08	505	260	239	228	8	14	

MESSENGR TIME OF HP 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta$ D DYN. M. X 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SECC
		STD	0000	2368	35.29	23.97	0.39435	0.000	1532.0								
183		OBS	0000	2368	35.289	23.97			1532.0								
		STD	0010	2364	35.29	23.99	0.39376	0.039	1532.0								
183		OBS	0010	2364	35.287	23.99			1532.0								
		STD	0020	2364	35.29	23.98	0.39422	0.079	1532.2								
		STD	0030	2364	35.28	23.98	0.39475	0.118	1532.4								
183		OBS	0030	2364	35.284	23.96			1532.4								
		STD	0050	2116	35.03	24.49	0.34688	0.192	1526.1								
183		OBS	0050	2116	35.029	24.48			1526.1								
		STD	0075	1859	34.93	25.09	0.29061	0.272	1519.3								
183		OBS	0076	1851	34.923	25.11			1519.1								
		STD	0100	1715	34.72	25.28	0.27299	0.343	1515.2								
183		OBS	0101	1710	34.710	25.29			1515.1								
		STD	0125	1639	34.62	25.38	0.26345	0.410	1513.3								
		STD	0150	1546	34.51	25.51	0.25244	0.474	1510.7								
183		OBS	0153	1534	34.493	25.53			1510.3								
		STD	0200	1289	34.18	25.80	0.22576	0.594	1504.7								
183		OBS	T0208	1254	34.146	25.84			1501.6								
		STD	0250	1128	34.13	26.07	0.20090	0.700	1497.9								
		STD	0300	0993	34.11	26.29	0.18028	0.796	1493.9								
183		OBS	0307	0975	34.103	26.31			1493.3								
		STD	0400	0770	34.01	26.56	0.15477	0.953	1487.0								
183		OBS	T0406	0758	34.007	26.58			1486.7								
		STD	0500	0638	34.03	26.80	0.13256	1.107	1482.3								
		STD	0600	0493	34.05	26.95	0.11760	1.232	1479.3								
183		OBS	T0605	0488	34.050	26.96			1479.2								
		STD	0700	0439	34.20	27.13	0.10094	1.341	1478.7								
183		OBS	0795	0402	34.306	27.25			1479.1								
		STD	0800	0400	34.31	27.26	0.08912	1.436	1479.1								
		STD	0900	0374	34.39	27.35	0.08102	1.521	1479.8								
183		OBS	T0996	0361	34.420	27.39			1480.9								
183		OBS	1491.0	0263	34.568	27.60											

TABLE VI.—Continued

REFERENCE		SHIP CODE	LATITUDE	LONGITUDE	DRIFT INDICTR	MARSDEN 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	NO.		° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1178	RT	30128N	13952 W		122	09	10	22	183	1967	N10	008	4206	15	34	2	3		X1	8	2		0008

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		08	S06	281	250	239	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D OYN. M. X 10³	SOUND VELOCITY	D_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2392	3540	2399	0039331	0000	15327								
183		OBS	0000	2392	35397	2399			15327								
		STD	0010	2392	3540	2399	0039370	0039	15329								
183		OBS	0010	2392	35397	2399			15329								
		STD	0020	2392	3540	2399	0039402	0079	15330								
		STD	0030	2391	3539	2399	0039441	0118	15332								
183		OBS	0030	2391	35394	2399			15332								
		STD	0050	2037	3506	2473	0032431	0190	15240								
183		OBS	0051	2025	35047	2475			15237								
		STD	0075	1897	3502	2507	0029305	0267	15205								
183		OBS	0076	1891	35022	2508			15204								
		STD	0100	1724	3495	2544	0025833	0336	15158								
183		OBS	0102	1712	34945	2546			15155								
		STD	0125	1654	3486	2553	0024982	0400	15140								
		STD	0150	1584	3473	2560	0024462	0461	15121								
183		OBS	0155		34703												
		STD	0200	1422	3438	2568	0023744	0582	15074								
183		OBS	T0209	1390	34326	2571			15064								
		STD	0250	1193	3420	2600	0020751	0693	15003								
		STD	0300	1004	3409	2626	0018358	0791	14943								
183		OBS	0306	0985	34083	2628			14937								
		STD	0400	0798	3402	2653	0015814	0962	14881								
183		OBS	T0403	0792	34016	2653			14879								
		STD	0500	0620	3404	2679	0013347	1108	14828								
183		OBS	T0598	0498	34057	2695			14795								
		STD	0600	0497	3406	2696	0011727	1233	14795								
		STD	0700	0447	3418	2711	0010337	1343	14792								
183		OBS	0789	0412	34278	2722			14794								
		STD	0800	0408	3429	2724	0009154	1441	14794								
		STD	0900	0380	3438	2734	0008245	1528	14800								
183		OBS	T0989	0363	34441	2740			14809								
183		OBS	1490Q	0265	34569	2759											

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° ′1/10	LONGITUDE ° ′1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1178	RT	3005 N	14007 W		123	00	10	23	229	1967	N10	009	4437	16	33		4		X5	5	6		0009

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		14	S12	210	228	228	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M X 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2376	3528	2395	0039717	0000	15322								
229		OBS	0000	2376	35281	2395			15322								
		STD	0010	2364	3528	2398	0039448	0040	15320								
229		OBS	0010	2364	35277	2398			15320								
		STD	0020	2363	3528	2398	0039465	0079	15322								
		STD	0030	2362	3528	2398	0039481	0119	15323								
229		OBS	0035	2362	35277	2398			15324								
		STD	0050	2093	3503	2456	0034084	0192	15255								
229		OBS	0054	2035	34977	2467			15239								
		STD	0075	1842	3488	2509	0029017	0271	15188								
229		OBS	0084	1786	34858	2522			15173								
		STD	0100	1740	3485	2532	0026956	0341	15162								
229		OBS	0109	1712	34839	2538			15155								
		STD	0125	1666	3475	2542	0026051	0407	15143								
		STD	0150	1578	3460	2551	0025278	0471	15118								
229		OBS	0163	1524	34518	2557			151 2								
		STD	0200	1320	3424	2578	0022736	0591	15039								
229		OBS	T0218	1236	34137	2587			15012								
		STD	0250	1142	3412	2603	0020413	0699	14984								
		STD	0300	1006	3409	2625	0018391	0796	14943								
229		OBS	0326	0942	34077	2635			14924								
		STD	0400	0781	3401	2655	0015637	0966	14875								
229		OBS	T0437	0712	33994	2663			14854								
		STD	0500	0618	3402	2678	0013439	1112	14827								
		STD	0600	0501	3408	2697	0011627	1237	14797								
229		OBS	T0646	0460	34112	2704			14788								
		STD	0700	0437	3417	2711	0010293	1347	14788								
		STD	0800	0400	3427	2723	0009209	1444	14791								
229		OBS	0857	0382	34319	2729			14793								
		STD	0900	0370	3435	2732	0008352	1532	14796								
		STD	1000	0349	3442	2740	0007669	1612	14804								
229		OBS	T1066	0340	34462	2744			14812								
229		OBS	15800	0242	34580	2762											

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° ' 1/10	LONGITUDE ° ' 1/10	DIFF INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT.	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1178	RT	30038N	14009 W		123	00	10	24	182	1967	N10	010	4389	16	33		3		X5	8	8		0010

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		13	503	203	228	228	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2359	3527	2398	0039356	0000	15317								
182		OBS	0000	2359	35265	2398			15317								
		STD	0010	2359	3527	2399	0039366	0039	15319								
182		OBS	0010	2359	35269	2399			15319								
		STD	0020	2359	3527	2398	0039416	0079	15321								
		STD	0030	2360	3527	2398	0039473	0118	15323								
182		OBS	0035	2360	35268	2398			15323								
		STD	0050	2087	3500	2455	0034146	0192	15253								
182		OBS	0054	2030	34956	2467			15238								
		STD	0075	1871	3500	2511	0028864	0271	15198								
182		OBS	0084	1823	35015	2525			15185								
		STD	0100	1780	3495	2530	0027128	0341	15175								
182		OBS	0108	1757	34918	2533			15169								
		STD	0125	1718	3485	2537	0026502	0408	15159								
		STD	0150	1633	3471	2547	0025684	0473	15136								
182		OBS	0163	1576	34623	2553			15120								
		STD	0200	1334	3426	2577	0022863	0594	15043								
182		OBS	T0217	1242	34139	2586			15014								
		STD	0250	1138	3412	2604	0020342	0702	14983								
		STD	0300	1000	3409	2626	0018291	0799	14941								
182		OBS	0323	0943	34072	2634			14924								
		STD	0400	0793	3401	2653	0015814	0969	14879								
182		OBS	T0430	0740	34001	2660			14864								
		STD	0500	0628	3401	2676	0013646	1117	14831								
		STD	0600	0504	3406	2695	0011812	1244	14798								
182		OBS	T0639	0468	34086	2701			14790								
		STD	0700	0440	3416	2710	0010402	1355	14789								
		STD	0800	0401	3427	2723	0009222	1453	14791								
182		OBS	0852	0385	34318	2728			14794								
		STD	0900	0373	3436	2733	0008312	1541	14797								
		STD	1000	0354	3442	2739	0007727	1621	14807								
182		OBS	T1055	0347	34454	2743			14815								
182		OBS	1614Q	0248	34581	2762											

TABLE VI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DIFF. INDEX	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES		NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT	
31	1178	RT	30055N	140123W		123	00	10	25	198	1967	N10	011		4023	16	30			X1	8	5	0011

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		18	S12	237	244	233	7	14	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	S
		STD	0000	2386	3538	2399	0039313	0000	15325								
198		OBS	0000	2386	35376	2399			15325								
		STD	0010	2386	3538	2399	0039352	0039	15327								
198		OBS	0010	2386	35376	2399			15327								
		STD	0020	2386	3537	2399	0039401	0079	15328								
		STD	0030	2385	3537	2399	0039451	0118	15330								
198		OBS	0034	2385	35369	2399			15330								
		STD	0050	2184	3517	2441	0035460	0193	15260								
198		OBS	0052	2162	35146	2445			15275								
		STD	0075	1973	3506	2490	0030906	0276	15227								
198		OBS	0081	1932	35032	2498			15216								
		STD	0100	1829	3490	2514	0028646	0350	15188								
198		OBS	0105	1806	34877	2518			15182								
		STD	0125	1770	3487	2526	0027557	0421	15175								
		STD	0150	1692	3479	2539	0026425	0486	15155								
198		OBS	0157	1664	34756	2543			15147								
		STD	0200	1411	3432	2566	0023958	0614	15070								
198		OBS	T0211	1354	34234	2571			15052								
		STD	0250	1177	3417	2601	0020678	0726	14997								
		STD	0300	0997	3410	2627	0018167	0823	14940								
198		OBS	0310	0968	34084	2631			14931								
		STD	0400	0807	3402	2652	0015948	0993	14885								
198		OBS	T0409	0792	34013	2653			14880								
		STD	0500	0629	3402	2676	0013585	1141	14832								
		STD	0600	0500	3407	2696	0011689	1267	14795								
198		OBS	0605	0495	34071	2697			14795								
		STD	0700	0446	3418	2711	0010325	1378	14792								
		STD	0800	0405	3429	2724	0009119	1475	14793								
198		OBS	0809	0402	34294	2724			14793								
		STD	0900	0381	3437	2733	0008331	1562	14801								
		STD	1000	0359	3443	2740	0007711	1642	14809								
198		OBS	T1006	0358	34436	2740			14809								
		STD	1100	0338	3446	2744	0007320	1717	14817								
		STD	1200	0318	3449	2748	0006973	1789	14826								
		STD	1300	0299	3451	2752	0006633	1857	14834								
		STD	1400	0282	3454	2755	0006312	1922	14844								
		STD	1500	0265	3456	2759	0005987	1983	14854								
198		OBS	T1553	0256	34573	2761			14859								

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT.	WAVE OBSERVATIONS PER.	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1178	RT	30001N	140053W		123	00	10	26	185	1967	N10	012	4390	43	33	2	3		X1	8	1		0012

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		13	S02	247	256	233	7	20	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	SCC
		STD	0000	2345	3516	2394	0039752	0000	15313								
185		OBS	0000	2345	35156	2394			15313								
		STD	0010	2345	3516	2394	0039798	0040	15314								
185		OBS	0010	2345	35155	2394			15314								
		STD	0020	2348	3517	2394	0039820	0080	15317								
		STD	0030	2350	3518	2394	0039841	0119	15319								
185		OBS	0030	2350	35179	2394			15319								
		STD	0050	2179	3500	2430	0036526	0196	15277								
185		OBS	0050	2179	35004	2430			15277								
		STD	0075	1820	3470	2501	0029838	0279	15179								
185		OBS	0075	1820	34695	2501			15179								
		STD	0100	1727	3469	2523	0027776	0351	15156								
185		OBS	0100	1727	34692	2523			15156								
		STD	0125	1631	3456	2536	0026654	0419	15130								
		STD	0150	1515	3442	2551	0025241	0484	15096								
185		OBS	0152	1505	34405	2552			15093								
		STD	0200	1216	3411	2589	0021715	0601	15002								
185		OBS	0205	1192	34094	2592			14994								
		STD	0250	1090	3410	2612	0019621	0704	14966								
		STD	0300	0978	3411	2632	0017758	0798	14934								
185		OBS	0305	0967	34114	2634			14930								
		STD	0400	0757	3400	2657	0015362	0963	14865								
185		OBS	T0405	0747	33996	2658			14862								
		STD	0500	0601	3401	2679	0013290	1107	14820								
		STD	0600	0490	3406	2696	0011642	1231	14792								
185		OBS	0607	0484	34061	2697			14791								
		STD	0700	0440	3417	2711	0010328	1341	14789								
		STD	0800	0402	3427	2723	0009232	1439	14791								
185		OBS	0805	0400	34275	2723			14792								
		STD	0900	0378	3436	2732	0008370	1527	14799								
		STD	1000	0356	3443	2740	0007698	1607	14807								
185		OBS	T1000	0356	34427	2740			14807								
		STD	1100	0336	3446	2744	0007297	1682	14816								
		STD	1200	0316	3449	2749	0006913	1753	14825								
		STD	1300	0298	3452	2753	0006548	1821	14834								
		STD	1400	0281	3454	2756	0006264	1885	14844								
		STD	1500	0266	3456	2759	0005999	1946	14855								
185		OBS	T1517	0263	34564	2759			14856								
		STD	1750	0232	3459	2764	0005506	2090	14883								
		STD	2000	0205	3462	2769	0005072	2222	14914								
239		OBS	T2245	0185	34637	2771			14947								
		STD	2500	0171	3465	2774	0004613	2464	14985								
239		OBS	T2719	0162	34661	2775			15019								
		STD	3000	0155	3467	2776	0004445	2691	15064								
239		OBS	3233	0151	34669	2777			15103								
239		OBS	T3770	0148	34679	2778			15196								
		STD	4000	0149	3468	2777	0004537	3140	15237								
239		OBS	T4237	0151	34677	2777			15280								
239		OBS	4270Q	0151	34683	2778											

TABLE VI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT IND.	MARSDEN 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.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR,1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1178	RT	29594N	140147W		087	90	10	27	180	1967	N10	013	4389	15	32	2	3		X1	8	6		0013

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		10	S07	257	250	233	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2348	3519	2396	0039619	0000	15314								
180		OBS	0000	2348	35186	2396			15314								
		STD	0010	2347	3519	2396	0039637	0040	15315								
180		OBS	0010	2347	35185	2396			15315								
		STD	0020	2350	3519	2396	0039699	0079	15318								
		STD	0030	2353	3520	2395	0039758	0119	15320								
180		OBS	0031	2353	35202	2395			15320								
		STD	0050	2040	3488	2458	0033810	0193	15239								
180		OBS	0051	2026	34872	2461			15235								
		STD	0075	1790	3473	2511	0028878	0271	15171								
180		OBS	0076	1784	34729	2512			15169								
		STD	0100	1732	3480	2530	0027106	0341	15159								
180		OBS	0102	1727	34806	2532			15158								
		STD	0125	1657	3471	2541	0026141	0407	15139								
		STD	0150	1553	3458	2555	0024884	0471	15110								
180		OBS	0154	1534	34550	2557			15104								
		STD	0200	1246	3417	2588	0021634	0588	15013								
180		OBS	T0208	1206	34120	2591			15000								
		STD	0250	1086	3412	2614	0019426	0691	14964								
		STD	0300	0962	3410	2633	0017592	0784	14927								
180		OBS	0308	0944	34094	2636			14922								
		STD	0400	0781	3401	2655	0015637	0950	14875								
180		OBS	T0410	0765	34008	2657			14870								
		STD	0500	0614	3401	2677	0013461	1095	14825								
		STD	0600	0493	3406	2696	0011679	1221	14793								
180		OBS	T0612	0482	34067	2698			14791								
		STD	0700	0440	3417	2711	0010328	1331	14789								
		STD	0800	0402	3428	2723	0009158	1429	14792								
180		OBS	0817	0397	34291	2725			14792								
		STD	0900	0381	3436	2732	0008405	1516	14800								
		STD	1000	0363	3442	2738	0007831	1598	14810								
180		OBS	T1030	0357	34439	2741			14813								
		STD	1100	0344	3448	2745	0007242	1673	14820								
		STD	1200	0325	3452	2750	0006797	1743	14829								
		STD	1300	0306	3455	2754	0006421	1809	14838								
		STD	1400	0287	3457	2758	0006114	1872	14847								
		STD	1500	0268	3457	2759	0005949	1932	14856								
180		OBS	T1519	0264	34573	2760			14857								

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR/1 10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1178	RT	30000N	140000W		123	00	10	29	040	1967	N10	014	4206	17	33	3	3		X2	6	8		0014

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		10	S16	230	239	211	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °..	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	ΔD DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2356	3526	2399	0039309	0000	15317								
040		OBS	0000	2356	35260	2399			15317								
040		OBS	0009	2358	35261	2398			15319								
		STD	0010	2358	3526	2398	0039386	0039	15319								
		STD	0020	2357	3527	2399	0039345	0079	15320								
		STD	0030	2356	3528	2400	0039303	0118	15322								
040		OBS	0033	2356	35280	2400			15322								
		STD	0050	2351	3488	2455	0034090	0191	15242								
040		OBS	0051	2037	34867	2458			15238								
		STD	0075	1818	3467	2499	0029972	0272	15178								
040		OBS	0079	1794	34658	2504			15172								
		STD	0100	1739	3467	2518	0028248	0344	15159								
040		OBS	0103	1728	34666	2521			15157								
		STD	0125	1595	3447	2537	0026519	0413	15118								
		STD	0150	1455	3429	2554	0024938	0477	15075								
040		OBS	0154	1433	34267	2557			15069								
		STD	0200	1203	3404	2586	0021989	0594	14996								
040		OBS	T0205	1183	34023	2588			14990								
		STD	0250	1085	3406	2609	0019828	0699	14963								
		STD	0300	0980	3411	2631	0017828	0793	14934								
040		OBS	0308	0964	34115	2634			14930								
		STD	0400	0783	3402	2655	0015593	0960	14875								
040		OBS	T0407	0771	34011	2656			14872								
		STD	0500	0616	3403	2679	0013316	1105	14826								
		STD	0600	0495	3406	2696	0011725	1230	14794								
040		OBS	T0610	0485	34059	2697			14792								
		STD	0700	0436	3418	2712	0010207	1340	14788								
		STD	0800	0393	3429	2725	0008980	1436	14788								
040		OBS	0810	0389	34295	2726			14788								
		STD	0900	0371	3436	2733	0008289	1522	14796								
		STD	1000	0352	3443	2740	0007630	1601	14806								
047		OBS	T1093	0335	34477	2746			14815								
		STD	1100	0334	3448	2746	0007126	1675	14816								
		STD	1200	0316	3452	2751	0006692	1744	14825								
		STD	1300	0298	3456	2756	0006253	1809	14835								
		STD	1400	0281	3458	2759	0005970	1870	14845								
		STD	1500	0265	3459	2761	0005767	1929	14855								
047		OBS	T1665	0239	34591	2763			14871								

TABLE VI.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR,1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SAMPLES	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1178	RT	30124N	140230W		123	00	10	30	036	1967	N10	015	4850	15	13	4	3		X1	8	6	0015

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		14	S17	196	239	206	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ (ml/l)	PO₄–P (µg-at/l)	TOTAL–P (µg-at)	NO₃–N (µg-at/l)	NO₂–N (µg-at/l)	SiO₄–Si (µg-at/l)	pH	QUAL
		STD	0000	2352	3527	2400	0039161	0000	15316								
036		OBS	0000	2352	35265	2400			15316								
		STD	0010	2353	3527	2400	0039220	0039	15318								
036		OBS	0010	2353	35266	2400			15318								
		STD	0020	2353	3527	2400	0039241	0078	15319								
		STD	0030	2352	3527	2401	0039258	0118	15321								
036		OBS	0033	2352	35268	2401			15321								
		STD	0050	2191	3504	2429	0036585	0194	15281								
036		OBS	0052	2170	35013	2433			15275								
		STD	0075	1871	3483	2498	0030075	0277	15196								
036		OBS	0080	1823	34796	2509			15182								
		STD	0100	1696	3464	2527	0027449	0349	15146								
036		OBS	0103	1678	34618	2529			15141								
		STD	0125	1556	3443	2543	0025968	0416	15105								
		STD	0150	1430	3426	2557	0024646	0479	15067								
036		OBS	0155	1406	34233	2560			15060								
		STD	0200	1215	3404	2584	0022210	0596	15000								
036		OBS	T0207	1189	34020	2587			14992								
		STD	0250	1072	3405	2611	0019699	0701	14959								
		STD	0300	0952	3406	2632	0017725	0794	14923								
036		OBS	0309	0932	34062	2635			14917								
		STD	0400	0769	3401	2656	0015462	0960	14870								
036		OBS	T0415	0744	34003	2659			14863								
		STD	0500	0604	3402	2680	0013255	1104	14822								
		STD	0600	0485	3407	2698	0011508	1228	14790								
036		OBS	T0621	0466	34080	2701			14786								
		STD	0700	0433	3417	2711	0010246	1336	14787								
		STD	0800	0400	3427	2723	0009209	1434	14791								
036		OBS	0820	0394	34294	2725			14792								
		STD	0900	0379	3437	2733	0008308	1521	14800								
		STD	1000	0361	3445	2741	0007586	1601	14810								
036		OBS	T1011	0359	34454	2742			14811								
		STD	1100	0342	3447	2745	0007263	1675	14819								
		STD	1200	0323	3450	2748	0006943	1746	14828								
		STD	1300	0304	3452	2752	0006625	1814	14837								
		STD	1400	0285	3454	2755	0006303	1878	14846								
		STD	1500	0265	3456	2759	0005958	1940	14854								
036		OBS	T1549	0255	34575	2761			14858								

TABLE VI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT TRACER	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1178	RT	30050N	140030W		123	00	10	30	182	1967	N10	016	4389	15	14	3	3		X2	8	7		0016

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		15	S19	192	239	233	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O_2 ml/l	PO_4–P µg - at/l	TOTAL–P µg - at/l	NO_2–N µg - at/l	NO_3–N µg - at/l	SiO_4–Si µg - at/l	pH	SCC
		STD	0000	2340	3528	2405	0038733	0000	15313								
182		OBS	0000	2340	35278	2405			15313								
182		OBS	0009	2346	35281	2403			15316								
		STD	0010	2346	3528	2403	0038917	0039	15316								
		STD	0020	2347	3528	2403	0038970	0078	15318								
		STD	0030	2347	3528	2403	0039022	0117	15320								
182		OBS	0031	2347	35281	2403			15320								
182		OBS	0049	2067	34907	2453			15246								
		STD	0050	2054	3490	2456	0034022	0190	15243								
		STD	0075	1816	3470	2502	0029707	0269	15178								
182		OBS	0076	1810	34692	2503			15177								
182		OBS	0098	1747	34683	2518			15162								
		STD	0100	1741	3468	2519	0028185	0342	15160								
		STD	0125	1648	3456	2532	0027031	0411	15135								
182		OBS	0147	1543	34436	2546			15105								
		STD	0150	1521	3441	2549	0025441	0476	15098								
182		OBS	T0194	1249	34088	2581			15012								
		STD	0200	1232	3409	2584	0022158	0595	15007								
		STD	0250	1099	3411	2610	0019733	0700	14969								
182		OBS	0293	0993	34125	2630			14938								
		STD	0300	0977	3411	2632	0017764	0794	14933								
182		OBS	T0392	0781	34020	2655			14873								
		STD	0400	0764	3402	2658	0015308	0959	14868								
		STD	0500	0588	3404	2683	0012929	1100	14815								
182		OBS	T0569	0501	34046	2694			14791								
		STD	0600	0484	3408	2699	0011422	1222	14790								
		STD	0700	0437	3418	2712	0010219	1330	14788								
182		OBS	0780	0407	34261	2721			14790								
		STD	0800	0403	3428	2723	0009169	1427	14792								
		STD	0900	0381	3438	2733	0008257	1514	14801								
182		OBS	T0970	0366	34436	2739			14807								
		STD	1000	0360	3444	2741	0007619	1594	14809								
		STD	1100	0339	3447	2745	0007265	1668	14818								
		STD	1200	0320	3449	2748	0006930	1739	14827								
		STD	1300	0301	3452	2752	0006590	1807	14835								
		STD	1400	0282	3455	2756	0006239	1871	14844								
		STD	1500	0265	3457	2760	0005914	1932	14854								
182		OBS	T1504	0264	34571	2760			14855								

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1178	RT	3006 N	14001 W		123	00	10	31	183	1967	N10	017	4663	06	14	3	2		X1	6	5	0017

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		15	S15	179	239	222	7	11	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta$D DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2338	3523	2402	0039024	0000	15312								
183		OBS	0000	2338	35230	2402			15312								
183		OBS	0009	2339	35235	2402			15314								
		STD	0010	2339	3524	2402	0039054	0039	15314								
		STD	0020	2340	3523	2402	0039121	0078	15315								
		STD	0030	2340	3523	2401	0039185	0117	15317								
183		OBS	0032	2340	35231	2401			15318								
		STD	0050	2331	3523	2404	0039022	0195	15318								
183		OBS	0051	2324	35220	2405			15317								
		STD	0075	1915	3477	2483	0031577	0284	15207								
183		OBS	0078	1881	34740	2489			15198								
		STD	0100	1765	3469	2514	0028667	0359	15167								
183		OBS	0102	1754	34679	2516			15164								
		STD	0125	1623	3452	2534	0026769	0428	15127								
		STD	0150	1487	3435	2552	0025164	0493	15086								
183		OBS	0152	1476	34339	2553			15083								
		STD	0200	1229	3406	2582	0022323	0612	15006								
183		OBS	T0204	1212	34047	2585			15000								
		STD	0250	1086	3407	2610	0019772	0717	14964								
		STD	0300	0972	3410	2632	0017741	0811	14931								
183		OBS	0305	0962	34105	2634			14928								
187		OBS	T0364	0863	34049	2645			14900								
		STD	0400	0802	3404	2654	0015726	0978	14883								
		STD	0500	0632	3401	2675	0013669	1125	14833								
192		OBS	T0552	0542	34000	2686			14805								

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1178	RT	3002 N	14000 W		123	00	11	01	195	1967	N10	018	4619	17	18	3	3		X1	8	2	0018

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		17	S14	181	258	231	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta$D DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2338	3524	2403	0038945	0000	15312								
195		OBS	0000	2338	35241	2403			15312								
		STD	0010	2338	3524	2403	0038969	0039	15314								
195		OBS	0010	2338	35243	2403			15314								
		STD	0020	2337	3524	2403	0038988	0078	15315								
		STD	0030	2336	3524	2403	0039001	0117	15316								
195		OBS	0035	2335	35239	2403			15317								
		STD	0050	2214	3511	2428	0036694	0193	15287								
195		OBS	0055	2167	35056	2437			15275								
		STD	0075	1899	3477	2487	0031187	0277	15203								
195		OBS	0085	1815	34700	2502			15180								
		STD	0100	1780	3471	2511	0028907	0353	15172								
195		OBS	0110	1748	34709	2519			15164								
		STD	0125	1668	3458	2529	0027332	0423	15141								
		STD	0150	1532	3440	2546	0025747	0489	15101								
195		OBS	0165	1448	34300	2556			15076								
		STD	0200	1228	3410	2586	0022011	0609	15006								
195		OBS	0220	1128	34019	2598			14973								
		STD	0250	1072	3405	2611	0019699	0713	14959								
		STD	0300	0977	3408	2629	0017985	0807	14933								
195		OBS	0330	0919	34083	2639			14916								
		STD	0400	0772	3402	2657	0015432	0974	14871								
195		OBS	0440	0700	33996	2665			14849								
		STD	0500	0619	3401	2677	0013526	1119	14827								
		STD	0600	0509	3406	2694	0011873	1246	14800								
195		OBS	T0666	0455	34107	2704			14789								
		STD	0700	0440	3415	2709	0010477	1358	14789								
		STD	0800	0401	3427	2723	0009220	1456	14791								
195		OBS	0880	0376	34352	2732			14795								
		STD	0900	0372	3437	2734	0008227	1543	14797								
		STD	1000	0351	3444	2741	0007544	1622	14806								
195		OBS	T1089	0334	34491	2747			14814								
		STD	1100	0332	3449	2747	0007014	1695	14815								
		STD	1200	0313	3451	2750	0006760	1764	14824								
		STD	1300	0295	3452	2753	0006513	1830	14833								
		STD	1400	0278	3453	2755	0006280	1894	14843								
		STD	1500	0261	3455	2758	0006036	1956	14852								
195		OBS	T1654	0237	34568	2762			14868								

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1178	RT	30080N	139460W		122	09	11	02	185	1967	N10	019	4343	15	26	3	4		X5	5	8	0019

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		20	S15	172	228	228	6	14	

MESSENGR TIME OF HP, 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁴	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2321	3520	2405	0038741	0000	15307								
185		OBS	0000	2321	35204	2405			15307								
185		OBS	0009	2322	35207	2405			15309								
		STD	0010	2322	3521	2405	0038788	0039	15309								
		STD	0020	2323	3521	2404	0038865	0078	15311								
		STD	0030	2324	3520	2404	0038940	0116	15313								
185		OBS	0032	2324	35203	2404			15313								
		STD	0050	2110	3499	2448	0034814	0190	15259								
185		OBS	0051	2100	34988	2450			15256								
		STD	0075	1920	3501	2500	0029953	0271	15212								
185		OBS	0079	1898	35015	2506			15206								
		STD	0100	1820	3493	2519	0028215	0344	15186								
185		OBS	0102	1812	34920	2520			15184								
		STD	0125	1739	3480	2529	0027347	0413	15165								
		STD	0150	1630	3463	2541	0026199	0480	15134								
189		OBS	0153	1615	34612	2543			15130								
		STD	0200	1301	3416	2576	0022953	0603	15031								
189		OBS	T0207	1265	34117	2580			15020								
		STD	0250	1165	3413	2600	0020746	0712	14992								
		STD	0300	1046	3415	2623	0018647	0811	14959								
189		OBS	0306	1032	34149	2625			14955								
		STD	0400	0797	3401	2652	0015873	0984	14881								
189		OBS	T0407	0782	34005	2654			14876								
		STD	0500	0628	3403	2677	0013535	1131	14831								
		STD	0600	0508	3405	2693	0011958	1258	14799								
189		OBS	T0608	0500	34049	2694			14797								
		STD	0700	0453	3417	2709	0010482	1370	14795								
		STD	0800	0412	3427	2722	0009348	1469	14796								
189		OBS	0804	0411	34276	2722			14796								
		STD	0900	0389	3434	2729	0008677	1559	14804								
		STD	1000	0366	3440	2736	0008031	1643	14811								
189		OBS	T1001	0366	34399	2736			14811								
		STD	1100	0345	3443	2741	0007638	1721	14820								
		STD	1200	0324	3446	2745	0007250	1796	14828								
		STD	1300	0304	3449	2749	0006861	1866	14836								
		STD	1400	0285	3452	2753	0006487	1933	14845								
		STD	1500	0266	3455	2758	0006102	1996	14854								
189		OBS	T1542	0259	34558	2759			14859								

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1178	RT	30070N	139400W		122	09	11	03	082	1967	N10	020	4480	05	31	3	5		X3	6	8	0020

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		22	S15	165	228	222	7	11	

MESSENGR TIME OF HP, 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁴	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2333	3525	2405	0038726	0000	15311								
082		OBS	0000	2333	35252	2405			15311								
082		OBS	0008	2333	35248	2405			15312								
		STD	0010	2333	3525	2405	0038782	0039	15312								
		STD	0020	2334	3525	2405	0038835	0078	15314								
082		OBS	0028	2334	35254	2405			15316								
		STD	0030	2334	3525	2405	0038847	0116	15316								
082		OBS	0045	2331	35251	2405			15318								
		STD	0050	2278	3516	2414	0038067	0193	15304								
082		OBS	0069	2014	34838	2462			15234								
		STD	0075	1902	3474	2484	0031478	0280	15203								
095		OBS	0078	1853	34701	2493			15189								
		STD	0100	1751	3467	2516	0028488	0355	15163								
095		OBS	0117	1659	34586	2531			15137								
		STD	0125	1602	3450	2538	0026454	0424	15120								
		STD	0150	1442	3428	2556	0024745	0488	15071								
95		OBS	T0156	1407	34232	2560			15060								
		STD	0200	1218	3411	2588	0021752	0604	15002								
95		OBS	0244	1071	34042	2610			14957								
		STD	0250	1059	3404	2613	0019520	0707	14954								
		STD	0300	0964	3406	2630	0017949	0801	14928								
095		OBS	T0333	0903	34065	2640			14911								
		STD	0400	0781	3406	2658	0015268	0967	14875								
		STD	0500	0608	3400	2677	0013456	1111	14823								
95		OBS	T0504	0601	33998	2678			14821								

TABLE VI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'G	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1178	RT	3000 N	14000 W		123	00	11	04	146	1967	N10	021	4297	15	30	3	4		X1	4	6		0021

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		19	506	132	220	196	7	14	

MESSENGR TIME OF HR 1, 10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^{7}	$\Sigma\Delta D$ DYN. M x 10^{3}	SOUND VELOCITY	O_2 ml l	PO_4-P µg-at l	TOTAL-P µg-at l	NO_2-N µg-at l	NO_3-N µg-at l	SiO_4-Si µg-at	pH	SUS
		STD	0000	2331	35231	2404	0038815	0000	15310								
146		OBS	0000	2331	35232	2404			15310								
		STD	0010	2324	35241	2406	0038617	0039	15310								
146		OBS	0010	2324	35238	2406			15310								
		STD	0020	2326	35241	2406	0038704	0077	15312								
		STD	0030	2327	35241	2405	0038798	0116	15314								
146		OBS	0030	2327	35235	2405			15314								
		STD	0050	2319	35231	2407	0038711	0194	15315								
146		OBS	0050	2319	35227	2407			15315								
		STD	0075	1849	34691	2493	0030549	0280	15188								
146		OBS	0075	1849	34692	2493			15188								
		STD	0100	1764	34702	2515	0028557	0354	15167								
146		OBS	0100	1764	34702	2515			15167								
		STD	0125	1667	34571	2528	0027383	0424	15141								
		STD	0150	1551	34431	2544	0025934	0491	15107								
146		OBS	0152	1541	34417	2545			15105								
		STD	0200	1256	34081	2579	0022682	0612	15015								
146		OBS	0205	1231	34059	2582			15007								
		STD	0250	1091	34081	2603	0019836	0718	14966								
		STD	0300	0957	34091	2634	0017555	0812	14926								
146		OBS	0305	0945	34096	2636			14922								
		STD	0400	0763	34011	2657	0015375	0977	14866								
146		OBS	0405	0754	34005	2658			14865								
		STD	0500	0601	34011	2679	0013290	1120	14820								
		STD	0600	0485	34036	2697	0011582	1244	14790								
146		OBS	0610	0476	34063	2698			14788								
		STD	0700	0434	34171	2711	0010258	1354	14787								
		STD	0800	0397	34271	2723	0009174	1451	14789								
146		OBS	0810	0394	34279	2724			14790								
		STD	0900	0374	34371	2733	0008250	1538	14796								
		STD	1000	0353	34441	2741	0007567	1617	14806								
146		OBS	T1009	0351	34450	2742			14807								
		STD	1100	0333	34471	2745	0007188	1691	14815								
		STD	1200	0314	34491	2749	0006868	1761	14824								
		STD	1300	0296	34521	2752	0006562	1828	14833								
		STD	1400	0280	34541	2756	0006274	1892	14844								
		STD	1500	0264	34561	2759	0005975	1954	14854								
146		OBS	T1529	0260	34556	2761			14857								

TABLE VII. Observed and interpolated oceanographic data for stations taken by USCGC KLAMATH at Ocean Station NOVEMBER, 26 November–17 December 1967, prepared from NODC Listing No. 31–1185 KL.

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	GRIFFITH INDICIA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	3000 N	14000 W		123	00	11	29	189	1967	N11	001	4390	19	04	2	2			5	8		0001

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		03	S12	288	189	172	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	2046	3512	2475	0032066	0000	15235								
189		OBS	0000	2046	35117	2475			15235								
		STD	0010	2047	3513	2475	0032057	0032	15237								
189		OBS	0014	2047	35130	2476			15238								
		STD	0020	2047	3513	2476	0032059	0064	15239								
		STD	0030	2046	3513	2476	0032068	0096	15240								
189		OBS	0038	2046	35134	2476			15242								
		STD	0050	2045	3513	2476	0032128	0160	15243								
189		OBS	0063	2044	35126	2476			15245								
		STD	0075	1905	3497	2500	0029884	0238	15207								
189		OBS	0096	1729	34764	2528			15157								
		STD	0100	1717	3475	2530	0027126	0309	15154								
		STD	0125	1628	3462	2541	0026137	0376	15150								
189		OBS	0125	1628	34622	2541			15130								
		STD	0150	1497	3441	2554	0024935	0440	15090								
189		OBS	0189	1313	34180	2575			15034								
		STD	0200	1265	3416	2583	0022266	0558	15019								
		STD	0250	1077	3409	2613	0019491	0664	14961								
189		OBS	T0251	1074	34086	2613			14960								
		STD	0300	0963	3406	2630	0017903	0755	14927								
189		OBS	0378	0805	34030	2653			14880								
		STD	0400	0763	3401	2657	0015375	0922	14868								
		STD	0500	0605	3399	2677	0013491	1066	14822								
189		OBS	T0508	0594	33986	2678			14818								
		STD	0600	0519	3408	2695	0011848	1193	14804								
		STD	0700	0453	3417	2703	0010482	1305	14795								
189		OBS	0763	0420	34230	2718			14792								
		STD	0800	0409	3427	2722	0009313	1403	14794								
		STD	0900	0380	3435	2731	0008467	1492	14800								
		STD	1000	0355	3442	2739	0007738	1573	14807								
189		OBS	1020	0350	34430	2741			14808								
		STD	1100	0333	3446	2745	0007262	1648	14815								
		STD	1200	0313	3449	2749	0006878	1719	14823								
189		OBS	1273	0299	34517	2752			14830								
		STD	1300	0294	3452	2753	0006502	1786	14833								
		STD	1400	0277	3455	2757	0006144	1849	14842								
		STD	1500	0261	3457	2760	0005867	1909	14853								
		STD	1750	0229	3460	2765	0005397	2050	14881								
189		OBS	T1919	0212	34604	2767			14903								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	3003 N	14004 W		123	00	11	30	191	1967	N11	002	4024	18	03	3	5			6	7		0002

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	S20	257	183	176	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma \Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2026	3510	2478	0031720	0000	15229								
191		OBS	0000	2026	35095	2478			15229								
		STD	0010	2027	3510	2478	0031770	0032	15232								
191		OBS	0014	2028	35099	2478			15232								
		STD	0020	2028	3510	2478	0031815	0064	15233								
		STD	0030	2027	3510	2478	0031860	0095	15235								
191		OBS	0038	2027	35093	2478			15236								
		STD	0050	2026	3509	2478	0031925	0159	15238								
191		OBS	0060	2025	35090	2478			15239								
		STD	0075	1850	3483	2504	0029571	0236	15190								
191		OBS	0092	1718	34649	2522			15152								
		STD	0100	1701	3464	2526	0027540	0307	15148								
191		OBS	0119	1651	34629	2536			15136								
		STD	0125	1628	3459	2539	0026370	0375	15129								
		STD	0150	1528	3445	2551	0025298	0439	15101								
191		OBS	0179	1408	34297	2565			15065								
		STD	0200	1305	3419	2578	0022811	0560	15033								
191		OBS	T0237	1150	34054	2597			14984								
		STD	0250	1117	3405	2603	0020454	0668	14975								
		STD	0300	0995	3405	2624	0018488	0765	14939								
191		OBS	0351	0883	34051	2642			14906								
		STD	0400	0785	3401	2654	0015696	0936	14876								
191		OBS	T0469	0667	33978	2668			14841								
		STD	0500	0626	3400	2675	0013693	1083	14830								
		STD	0600	0514	3409	2696	0011712	1410	14802								
191		OBS	T0697	0436	34166	2711			14787								
		STD	0700	0435	3417	2711	0010270	1320	14787								
		STD	0800	0406	3426	2721	0009353	1418	14793								
		STD	0900	0380	3434	2730	0008541	1508	14800								
191		OBS	0944	0369	34373	2734			14803								
		STD	1000	0357	3440	2737	0007909	1590	14808								
		STD	1100	0335	3445	2744	0007359	1666	14816								
191		OBS	T1176	0320	34486	2748			14822								
		STD	1200	0315	3449	2749	0006901	1737	14824								
		STD	1300	0297	3451	2751	0006647	1805	14834								
		STD	1400	0279	3452	2754	0006388	1870	14843								
		STD	1500	0263	3454	2757	0006147	1933	14853								
		STD	1750	0229	3457	2763	0005587	2080	14881								
191		OBS	T1805	0222	34582	2764			14887								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	30051N	139590W		122	09	12	01	188	1967	N11	003	4846	15	01	2	2			6	6		0003

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		00	S00	240	194	183	7	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–t	SPECIFIC VOLUME ANOMALY–10^7	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	SVC
		STD	0000	2064	3519	2476	0031985	0000	15241								
188		OBS	0000	2064	35192	2476			15241								
		STD	0010	2065	3518	2475	0032119	0032	15243								
188		OBS	0010	2065	35182	2475			15243								
		STD	0020	2066	3519	2475	0032123	0064	15245								
		STD	0030	2067	3520	2476	0032091	0096	15247								
188		OBS	0030	2067	35203	2476			15247								
		STD	0050	2067	3521	2476	0032141	0161	15250								
188		OBS	0051	2067	35206	2476			15250								
		STD	0075	1826	3474	2503	0029653	0238	15182								
188		OBS	0076	1820	34734	2504			15180								
		STD	0100	1789	3489	2523	0027796	0310	15177								
188		OBS	0102	1784	34900	2525			15176								
		STD	0125	1690	3472	2534	0026810	0378	15150								
		STD	0150	1560	3454	2546	0025758	0444	15118								
188		OBS	0154	1561	34510	2548			15112								
		STD	0200	1324	3419	2574	0023179	0566	15039								
188		OBS	T0207	1293	34151	2577			15030								
		STD	0250	1149	3414	2604	0020392	0675	14987								
		STD	0300	1005	3411	2627	0018227	0771	14943								
188		OBS	0309	0982	34106	2630			14936								
		STD	0400	0795	3401	2653	0015843	0942	14880								
188		OBS	T0410	0776	33999	2654			14874								
		STD	0500	0624	3401	2676	0013593	1089	14829								
		STD	0600	0501	3406	2695	0011776	1216	14797								
188		OBS	0615	0487	34069	2697			14794								
		STD	0700	0443	3416	2710	0010438	1327	14791								
		STD	0800	0404	3425	2721	0009403	1426	14792								
188		OBS	0817	0398	34268	2723			14793								
		STD	0900	0383	3434	2730	0008576	1516	14801								
		STD	1000	0365	3442	2738	0007855	1598	14811								
188		OBS	T1031	0359	34436	2740			14814								
		STD	1100	0346	3445	2743	0007458	1675	14820								
		STD	1200	0327	3448	2747	0007108	1747	14829								
		STD	1300	0307	3451	2751	0006749	1817	14838								
		STD	1400	0286	3453	2755	0006367	1882	14846								
		STD	1500	0265	3456	2759	0005987	1944	14854								
188		OBS	T1525	0260	34567	2760			14856								

TABLE VII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT	MARSDEN 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.	CODE	° 1/10	° 1/10	INDCTR	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1185	KL	29560N	140030W		087	90	12	02	195	1967	N11	004	4618	16	34	3	6			6	8		0004

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE		DRY BULB	WET BULB			
		34	S18	210	194	178	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL
		STD	0000	2037	3512	2477	0031818	0000	15233								
195		OBS	0000	2037	35120	2477			15233								
		STD	0010	2038	3511	2476	0031946	0032	15234								
195		OBS	0012	2038	35108	2476			15235								
		STD	0020	2038	3511	2476	0032012	0064	15236								
		STD	0030	2039	3511	2476	0032051	0096	15238								
195		OBS	0034	2039	35109	2476			15239								
		STD	0050	2040	3512	2477	0032083	0160	15242								
195		OBS	0055	2040	35121	2477			15243								
		STD	0075	1843	3482	2505	0029477	0237	15187								
195		OBS	0084	1779	34740	2514			15169								
		STD	0100	1720	3471	2526	0027485	0308	15154								
195		OBS	0110	1682	34685	2533			15144								
		STD	0125	1629	3459	2538	0026392	0376	15129								
		STD	0150	1529	3444	2550	0025392	0440	15101								
195		OBS	0165	1462	34350	2557			15081								
		STD	0200	1259	3413	2582	0022372	0560	15017								
195		OBS	T0220	1167	34047	2593			14987								
		STD	0250	1109	3410	2608	0019975	0666	14972								
		STD	0300	1005	3414	2629	0018006	0760	14944								
195		OBS	0319	0963	34142	2636			14932								
		STD	0400	0766	3401	2657	0015418	0928	14869								
195		OBS	T0414	0737	34000	2660			14860								
		STD	0500	0602	3403	2681	0013155	1070	14821								
		STD	0600	0489	3408	2698	0011482	1194	14792								
195		OBS	T0617	0474	34091	2701			14789								
		STD	0700	0444	3415	2709	0010524	1304	14791								
		STD	0800	0411	3423	2718	0009633	1404	14795								
195		OBS	0819	0405	34249	2721			14796								
		STD	0900	0381	3433	2729	0008627	1496	14800								
		STD	1000	0353	3442	2739	0007715	1577	14806								
195		OBS	T1020	0348	34437	2741			14808								
		STD	1100	0328	3446	2745	0007227	1652	14813								
		STD	1200	0307	3448	2749	0006861	1723	14821								
		STD	1300	0287	3451	2753	0006509	1789	14829								
		STD	1400	0271	3453	2756	0006199	1853	14840								
		STD	1500	0257	3456	2759	0005901	1914	14851								
195		OBS	T1596	0247	34583	2762			14863								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF NOCTN	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	30032N	140032W		123	00	12	04	190	1967	N11	005	4006	16	34	3	4			9	6		0005

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		28	508	234	178	156	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	ΔΔ DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCO
		STD	0000	2033	3515	2481	0031470	0000	15232								
190		OBS	0000	2033	35154	2481			15232								
190		OBS	0009	2036	35162	2481			15234								
		STD	0010	2036	3516	2481	0031524	0031	15235								
		STD	0020	2036	3516	2481	0031579	0063	15236								
		STD	0030	2035	3516	2481	0031624	0095	15238								
190		OBS	0033	2035	35154	2481			15238								
		STD	0050	2034	3516	2481	0031648	0158	15241								
190		OBS	0052	2034	35159	2481			15241								
		STD	0075	1850	3479	2501	0029861	0235	15189								
190		OBS	0076	1843	34775	2501			15187								
		STD	0100	1724	3468	2523	0027795	0307	15155								
190		OBS	0104	1706	34658	2526			15150								
		STD	0125	1627	3457	2537	0026493	0375	15129								
		STD	0150	1522	3445	2552	0025170	0439	15099								
190		OBS	0151	1518	34442	2552			15097								
		STD	0200	1272	3415	2581	0022472	0558	15021								
190		OBS	T0209	1235	34113	2585			15010								
		STD	0250	1125	3411	2606	0020162	0665	14978								
		STD	0300	1002	3411	2628	0018162	0761	14942								
190		OBS	0312	0974	34112	2632			14934								
		STD	0400	0793	3402	2654	0015740	0930	14879								
190		OBS	T0414	0767	34010	2657			14871								
		STD	0500	0629	3402	2676	0013585	1077	14832								
		STD	0600	0508	3406	2694	0011861	1204	14800								
190		OBS	T0625	0485	34080	2699			14794								
		STD	0700	0450	3415	2708	0010595	1316	14793								
		STD	0800	0410	3425	2720	0009473	1417	14795								
190		OBS	0836	0398	34280	2724			14796								
		STD	0900	0382	3434	2730	0008565	1507	14801								
		STD	1000	0358	3442	2739	0007773	1589	14808								
190		OBS	1049	0347	34449	2742			14812								
		STD	1100	0336	3446	2744	0007289	1664	14816								
		STD	1200	0315	3449	2748	0006938	1735	14824								
		STD	1300	0297	3451	2752	0006625	1803	14834								
		STD	1400	0280	3453	2755	0006311	1868	14843								
		STD	1500	0264	3456	2758	0006005	1929	14854								
190		OBS	T1590	0252	34577	2761			14864								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	30050N	140050W		123	00	12	06	195	1967	N11	006	4244	39	36	1	4			6	3		0006

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		36	S05	261	211	172	8	19	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. X 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	S CC
		STD	0000	2036	3515	2480	0031575	0000	15233								
195		OBS	0000	2036	35150	2480			15233								
		STD	0010	2034	3515	2481	0031546	0032	15234								
195		OBS	0010	2034	35152	2481			15234								
		STD	0020	2031	3515	2481	0031520	0063	15235								
		STD	0030	2030	3514	2481	0031574	0095	15236								
195		OBS	0030	2030	35144	2481			15236								
		STD	0050	2032	3515	2481	0031624	0158	15240								
195		OBS	0050	2032	35154	2481			15240								
		STD	0075	2028	3514	2482	0031691	0237	15243								
195		OBS	0075	2028	35143	2482			15243								
		STD	0100	1756	3477	2522	0027877	0311	15166								
195		OBS	0101	1747	34755	2523			15163								
		STD	0125	1645	3461	2536	0026601	0380	15135								
		STD	0150	1539	3447	2550	0025386	0445	15104								
195		OBS	0153	1526	34453	2551			15100								
		STD	0200	1328	3419	2573	0023257	0566	15041								
195		OBS	0207	1300	34163	2576			15032								
		STD	0250	1123	3413	2608	0020002	0674	14978								
		STD	0300	0960	3409	2633	0017633	0768	14927								
195		OBS	0307	0941	34083	2635			14921								
		STD	0400	0781	3401	2654	0015659	0935	14875								
195		OBS	T0408	0768	34000	2656			14871								
		STD	0500	0618	3401	2677	0013513	1081	14827								
		STD	0600	0499	3405	2695	0011825	1207	14796								
195		OBS	T0607	0493	34052	2695			14794								
		STD	0700	0449	3415	2708	0010583	1319	14793								
		STD	0800	0409	3425	2720	0009462	1420	14794								
195		OBS	0810	0406	34256	2721			14795								
		STD	0900	0383	3434	2730	0008576	1510	14801								
		STD	1000	0357	3441	2738	0007836	1592	14808								
195		OBS	T1019	0352	34425	2740			14809								
		STD	1100	0322	3446	2746	0007136	1667	14810								
		STD	1200	0290	3449	2751	0006615	1736	14814								
		STD	1300	0265	3452	2756	0006170	1799	14820								
		STD	1400	0246	3455	2760	0005788	1859	14829								
195		OBS	T1487	0235	34567	2762			14839								
		STD	1500	0235	3457	2762	0005566	1916	14841								
251		OBS	T1734	0229	34598	2765			14879								
		STD	1750	0227	3460	2765	0005373	2053	14881								
		STD	2000	0199	3461	2768	0005072	2183	14911								
251		OBS	2191	0183	34619	2770			14937								
		STD	2500	0168	3462	2771	0004791	2430	14983								
251		OBS	2745	0159	34621	2772			15021								
		STD	3000	0155	3463	2773	0004718	2668	15064								
251		OBS	T3300	0152	34633	2774			15115								
251		OBS	T3891	0150	34665	2776			15218								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	30020N	140000W		123	00	12	07	193	1967	N11	007	4390	10	35	1	4			0	7		0007

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		05	S12	261	211	161	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2007	3511	2484	0031169	0000	15224								
193		OBS	0000	2007	35105	2484			15224								
193		OBS	0009	2008	35108	2484			15226								
		STD	0010	2008	3511	2484	0031208	0031	15226								
		STD	0020	2008	3511	2484	0031258	0062	15228								
		STD	0030	2008	3511	2484	0031300	0094	15230								
193		OBS	0034	2008	35104	2484			15230								
		STD	0050	2008	3510	2484	0031400	0156	15233								
193		OBS	0054	2008	35100	2484			15233								
		STD	0075	1880	3486	2498	0030075	0233	15198								
193		OBS	0079	1859	34831	2501			15193								
		STD	0100	1773	3483	2523	0027836	0306	15171								
193		OBS	0108	1738	34803	2529			15162								
		STD	0125	1660	3466	2537	0026571	0374	15140								
		STD	0150	1541	3447	2549	0025429	0439	15105								
193		OBS	0158	1502	34418	2554			15093								
		STD	0200	1269	3416	2582	0022341	0558	15020								
193		OBS	T0221	1175	34078	2594			14991								
		STD	0250	1103	3408	2608	0020002	0664	14970								
		STD	0300	0986	3409	2628	0018066	0759	14936								
193		OBS	0326	0930	34092	2638			14920								
		STD	0400	0785	3402	2655	0015622	0928	14876								
193		OBS	T0449	0702	33996	2665			14852								
		STD	0500	0627	3402	2677	0013558	1073	14831								
		STD	0600	0509	3408	2696	0011725	1200	14800								
193		OBS	T0661	0456	34129	2706			14789								
		STD	0700	0440	3417	2711	0010328	1310	14789								
		STD	0800	0403	3427	2722	0009244	1408	14792								
193		OBS	0875	0381	34332	2730			14796								
		STD	0900	0375	3435	2731	0008432	1496	14798								
		STD	1000	0355	3441	2738	0007835	1578	14807								
		STD	1100	0343	3447	2744	0007326	1653	14819								
193		OBS	T1101	0343	34468	2744			14819								
193		OBS	16500	0248	34568	2761											

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1185	KL	29100N	140050W		087	90	12	08	222	1967	N11	008	3722	16	36	1	3			6	6	0008

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		08	S15	224	200	172	8	14	

MESSENGER TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SOURCE
		STD	0000	2130	3531	2467	0032846	0000	15260								
	222	OBS	0000	2130	35309	2467			15260								
		STD	0010	2132	3534	2468	0032706	0033	15262								
	222	OBS	0011	2132	35345	2469			15262								
		STD	0020	2132	3535	2469	0032663	0065	15264								
		STD	0030	2131	3535	2470	0032665	0098	15265								
	222	OBS	0030	2131	35353	2470			15265								
		STD	0050	2131	3535	2469	0032760	0164	15269								
	222	OBS	0051	2131	35348	2469			15269								
		STD	0075	2030	3511	2479	0031980	0244	15243								
	222	OBS	0078	2014	35095	2482			15239								
		STD	0100	1876	3505	2514	0028685	0320	15204								
	222	OBS	0102	1865	35040	2516			15201								
		STD	0125	1775	3489	2527	0027529	0391	15177								
		STD	0150	1676	3474	2539	0026463	0456	15150								
	222	OBS	0150	1676	34735	2539			15150								
		STD	0200	1478	3445	2561	0024417	0585	15093								
	222	OBS	T0200	1478	34446	2561			15093								
		STD	0250	1245	3425	2594	0021352	0700	15022								
	222	OBS	0296	1072	34130	2617			14967								
		STD	0300	1061	3412	2618	0019103	0801	14964								
		STD	0400	0824	3403	2650	0016144	0977	14891								
	222	OBS	0400	0824	34028	2650			14891								
		STD	0500	0640	3404	2677	0013562	1126	14836								
		STD	0600	0512	3406	2694	0011918	1253	14801								
	222	OBS	T0603	0509	34059	2694			14800								
		STD	0700	0472	3418	2708	0010636	1366	14803								
		STD	0800	0437	3428	2720	0009570	1467	14806								
	222	OBS	0818	0431	34295	2722			14807								
		STD	0900	0404	3436	2730	0008675	1558	14810								
		STD	1000	0374	3442	2737	0007960	1641	14815								
	222	OBS	T1023	0367	34434	2739			14816								
		STD	1100	0346	3445	2743	0007472	1718	14820								
		STD	1200	0322	3448	2747	0007086	1791	14827								
		STD	1300	0301	3450	2751	0006730	1860	14835								
		STD	1400	0282	3452	2754	0006393	1926	14844								
		STD	1500	0267	3455	2758	0006099	1988	14855								
	222	OBS	T1629	0252	34579	2761			14871								

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	29020N	140005W		087	90	12	09	194	1967	N11	009	4207	19	14	1	3			6	3		0009

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S09	227	206	194	8	14	

MESSENGER TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁷	Σ Δ D DYN. M. × 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2128	3535	2470	0032519	0000	15260								
194		OBS	0000	2128	35347	2470			15260								
		STD	0010	2127	3535	2470	0032537	0033	15261								
194		OBS	0015	2127	35347	2470			15262								
		STD	0020	2127	3534	2470	0032583	0065	15263								
		STD	0030	2126	3534	2470	0032646	0098	15264								
194		OBS	0039	2126	35334	2470			15265								
		STD	0050	2086	3523	2473	0032457	0163	15255								
194		OBS	0064	2027	35130	2481			15241								
		STD	0075	1962	3507	2493	0030562	0242	15224								
194		OBS	0098	1852	34977	2514			15196								
		STD	0100	1847	3497	2515	0028553	0315	15195								
		STD	0125	1774	3491	2529	0027331	0385	15177								
194		OBS	0128	1764	34907	2531			15174								
		STD	0150	1668	3469	2537	0026610	0453	15147								
194		OBS	0191	1476	34369	2556			15090								
		STD	0200	1421	3432	2564	0024162	0580	15073								
		STD	0250	1161	3411	2599	0020828	0692	14991								
194		OBS	0255	1139	34090	2602			14984								
		STD	0300	1037	3408	2619	0018986	0792	14955								
194		OBS	0384	0859	34060	2647			14902								
		STD	0400	0824	3405	2652	0015959	0966	14892								
		STD	0500	0640	3401	2674	0013828	1115	14836								
194		OBS	T0516	0616	34000	2676			14829								
		STD	0600	0548	3411	2694	0011989	1244	14817								
		STD	0700	0481	3422	2710	0010449	1357	14807								
194		OBS	T0772	0442	34283	2719			14804								
		STD	0800	0434	3430	2722	0009386	1456	14805								
		STD	0900	0406	3437	2730	0008625	1546	14811								
		STD	1000	0379	3442	2737	0008019	1629	14817								
194		OBS	1035	0370	34442	2739			14819								
		STD	1100	0354	3447	2743	0007433	1706	14824								
		STD	1200	0331	3451	2749	0006941	1778	14831								
194		OBS	T1290	0311	34530	2752			14838								
		STD	1300	0309	3453	2752	0006603	1846	14839								
		STD	1400	0289	3453	2754	0006453	1911	14847								
		STD	1500	0271	3452	2755	0006322	1975	14856								
		STD	1750	0233	3452	2758	0006060	2130	14882								
194		OBS	T1946	0211	34510	2759			14906								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	30010N	140050W		123	00	12	11	202	1967	N11	010	6856	15	14	1	6		18	8	3		0010

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		11	S11	244	211	194	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	S CODE
		STD	0000	2039	3520	2483	0031325	0000	15234								
202		OBS	0000	2039	35195	2483			15234								
		STD	0010	2045	3521	2482	0031414	0031	15237								
202		OBS	0011	2045	35208	2482			15236								
		STD	0020	2043	3521	2482	0031427	0063	15239								
		STD	0030	2041	3520	2483	0031441	0094	15240								
202		OBS	0030	2041	35201	2483			15240								
202		OBS	0047	2040	35199	2483			15242								
		STD	0050	2040	3520	2483	0031494	0157	15243								
202		OBS	0074	2037	35199	2483			15246								
		STD	0075	2021	3518	2486	0031246	0236	15241								
202		OBS	0096	1749	34785	2525			15163								
		STD	0100	1749	3478	2525	0027643	0309	15164								
		STD	0125	1709	3473	2530	0027168	0378	15155								
		STD	0150	1607	3458	2543	0026056	0444	15127								
202		OBS	0153	1590	34561	2545			15122								
202		OBS	0188	1329	34204	2574			15039								
		STD	0200	1281	3419	2582	0022350	0565	15025								
		STD	0250	1103	3415	2613	0019502	0670	14971								
202		OBS	0280	1012	34121	2627			14943								
		STD	0300	0964	3410	2633	0017625	0763	14928								
202		OBS	0372	0809	34025	2652			14881								
		STD	0400	0759	3403	2659	0015206	0927	14866								
		STD	0500	0609	3403	2679	0013284	1069	14824								
202		OBS	T0575	0524	34025	2690			14802								
		STD	0600	0506	3406	2695	0011837	1195	14799								
		STD	0700	0444	3418	2711	0010301	1306	14791								
202		OBS	0757	0417	34240	2719			14790								
		STD	0800	0406	3427	2722	0009278	1403	14793								
		STD	0900	0380	3435	2731	0008467	1492	14800								
202		OBS	T0952	0368	34380	2735			14804								
		STD	1000	0357	3441	2738	0007836	1574	14808								
		STD	1100	0335	3446	2744	0007285	1649	14816								
		STD	1200	0316	3450	2749	0006839	1720	14825								
		STD	1300	0297	3454	2754	0006389	1786	14834								
		STD	1400	0281	3456	2757	0006117	1849	14844								
202		OBS	T1484	0269	34569	2759			14853								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	30010N	140050W		123	00	12	11	192	1967	N11	011	4755	17	14	2	2			8	5		0011

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C ORY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		11	S15	220	189	178	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ△ O DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at.l	pH	SCC
		STD	0000	2037	3521	2484	0031159	0000	15234								
192		OBS	0000	2037	35211	2484			15234								
		STD	0010	2038	3521	2484	0031200	0031	15236								
192		OBS	0013	2038	35214	2484			15236								
		STD	0020	2038	3521	2484	0031252	0062	15237								
		STD	0030	2039	3521	2484	0031308	0094	15239								
192		OBS	0033	2039	35211	2484			15240								
		STD	0050	2039	3521	2484	0031396	0156	15243								
192		OBS	0053	2039	35204	2483			15243								
		STD	0075	1865	3501	2514	0028625	0231	15196								
192		OBS	0081		34959												
		STD	0100	1706	3477	2534	0026730	0301	15151								
192		OBS	0105	1679	34722	2537			15143								
		STD	0125	1626	3462	2541	0026107	0367	15129								
		STD	0150	1533	3449	2553	0025112	0431	15103								
192		OBS	0158	1497	34442	2557			15092								
		STD	0200	1235	3416	2589	0021701	0548	15009								
192		OBS	0212	1175	34104	2596			14989								
		STD	0250	1077	3410	2614	0019417	0651	14961								
		STD	0300	0959	3408	2632	0017691	0743	14926								
192		OBS	0320	0915	34073	2639			14913								
		STD	0400	0764	3400	2656	0015463	0909	14868								
192		OBS	0427	0717	33987	2662			14854								
		STD	0500	0588	3402	2682	0013048	1052	14815								
		STD	0600	0460	3408	2701	0011137	1173	14780								
192		OBS	0651	0415	34116	2709			14770								
		STD	0700	0411	3417	2714	0009992	1278	14777								
		STD	0800	0399	3426	2722	0009271	1374	14790								
192		OBS	0874	0388	34318	2728			14799								
		STD	0900	0383	3434	2730	0008607	1464	14801								
		STD	1000	0361	3440	2737	0007953	1547	14809								
		STD	1100	0340	3447	2744	0007301	1623	14818								
192		OBS	T1101	0340	34467	2744			14818								
		STD	1200	0321	3449	2748	0006993	1694	14827								
		STD	1300	0303	3451	2751	0006702	1763	14836								
		STD	1400	0286	3453	2754	0006418	1829	14846								
		STD	1500	0270	3455	2757	0006141	1891	14856								
192		OBS	T1707	0240	34589	2763			14879								

TABLE VII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDCTR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1185	KL	29580N	140000W		087	90	12	14	189	1967	N11	012	4572	16	08	1	2			6	8		0012

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		11	S20	210	200	183	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2017	3518	2487	0030863	0000	15228								
189		OBS	0000	2017	35182	2487			15228								
		STD	0010	2018	3518	2487	0030914	0031	15230								
189		OBS	0011	2018	35183	2487			15230								
		STD	0020	2019	3518	2487	0030999	0062	15232								
189		OBS	0028	2020													
		STD	0030	2020	3518	2487	0031060	0093	15234								
189		OBS	0045	2020	35176	2486			15236								
		STD	0050	2019	3517	2486	0031159	0155	15237								
189		OBS	0068	2016	35160	2486			15239								
		STD	0075	1895	3495	2501	0029785	0231	15204								
189		OBS	0088	1723	34667	2522			15153								
		STD	0100	1710	3466	2525	0027606	0303	15151								
		STD	0125	1649	3465	2539	0026391	0371	15136								
189		OBS	0131	1628	34648	2543			15131								
		STD	0150	1517	3448	2555	0024846	0435	15097								
189		OBS	0178	1371	34277	2571			15052								
		STD	0200	1285	3423	2585	0022134	0552	15027								
		STD	0250	1112	3413	2610	0019807	0657	14974								
189		OBS	0274	1042	34098	2620			14952								
		STD	0300	0985	3407	2627	0018190	0752	14936								
189		OBS	0376	0830	34012	2647			14889								
		STD	0400	0782	3402	2655	0015600	0921	14875								
		STD	0500	0612	3404	2680	0013212	1065	14825								
189		OBS	T0589	0504	34060	2695			14796								
		STD	0600	0498	3407	2696	0011665	1189	14798								
		STD	0700	0447	3418	2711	0010337	1299	14793								
189		OBS	0791	0411	34270	2722			14794								
		STD	0800	0409	3428	2723	0009239	1397	14795								
		STD	0900	0388	3437	2732	0008413	1485	14804								
189		OBS	T0996	0368	34442	2740			14812								
		STD	1000	0367	3444	2740	0007708	1566	14812								
		STD	1100	0347	3447	2744	0007381	1641	14821								
		STD	1200	0327	3449	2747	0007049	1714	14829								
		STD	1300	0307	3451	2751	0006712	1782	14836								
		STD	1400	0288	3454	2755	0006383	1848	14847								
		STD	1500	0270	3456	2758	0006053	1910	14856								
189		OBS	T1558	0259	34572	2760			14862								

TABLE VII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1185	KL	30010N	13959[illegible]		12[illegible]	[illegible]	12	15	191	1967	N11	013	4572	-4	30	1	2			6	6		0013

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	15	220	183	155	8	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SOC
		STD	0000	2008	3517	2489	0030694	0000	15226								
191		OBS	0000	2008	35174	2489			15226								
191		OBS	0007	2013	35203	2490			15228								
		STD	0010	2013	3520	2490	0030667	0031	15229								
		STD	0020	2013	3519	2489	0030775	0061	15230								
191		OBS	0026	2013	35185	2489			15231								
		STD	0030	2012	3519	2489	0030822	0092	15232								
191		OBS	0041	2010	35183	2489			15233								
		STD	0050	2010	3518	2489	0030873	0154	15234								
191		OBS	0060	2009	35174	2489			15236								
		STD	0075	1973	3508	2491	0030763	0231	15227								
191		OBS	0084	1935	35007	2496			15217								
		STD	0100	1801	3484	2517	0028419	0305	15180								
191		OBS	0122	1646	34630	2538			15135								
		STD	0125	1631	3460	2539	0026363	0373	15130								
		STD	0150	1508	3441	2552	0025166	0438	15094								
191		OBS	0163	1448	34329	2559			15076								
		STD	0200	1285	3418	2581	0022500	0557	15026								
		STD	0250	1102	3405	2605	0020197	0664	14969								
191		OBS	0250	1102	34053	2605			14969								
		STD	0300	0968	3406	2629	0017985	0759	14929								
191		OBS	0333	0889	34061	2642			14905								
		STD	0400	0764	3396	2653	0015759	0928	14867								
		STD	0500	0613	3392	2671	0014114	1077	14824								
191		OBS	T0505	0607	33917	2671			14822								
		STD	0600	0512	3405	2693	0011984	1208	14801								
191		OBS	0688	0447	34155	2709			14790								
		STD	0700	0442	3417	2710	0010352	1319	14790								
		STD	0800	0407	3427	2722	0009290	1418	14794								
191		OBS	0874	0384	34338	2730			14797								
		STD	0900	0376	3436	2732	0008347	1506	14798								
		STD	1000	0350	3443	2741	0007607	1586	14805								
		STD	1100	0327	3449	2748	0006971	1658	14813								
		STD	1200	0309	3453	2752	0006537	1726	14822								
		STD	1300	0295	3455	2755	0006292	1790	14833								
191		OBS	T1378	0287	34556	2756			14843								

TABLE VIII. Observed and interpolated oceanographic data for stations taken by USCGC TANEY at Ocean Station NOVEMBER, 7–28 January 1968, prepared from NODC Listing No. 31–1200 RT.

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT IND.	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR,1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1200	RT	3000 N	14001 W		123	00	01	07	009	1968	N12	001	3840	16	13	3	4		×1	6	6		0001

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		10	517	251	167	156	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O2 ml/l	PO4-P µg-at/l	TOTAL-P µg-at/l	NO2-N µg-at/l	NO3-N µg-at/l	SiO4-Si µg-at/l	pH	SCC
		STD	0000	1939	35220	2511	0028666	0000	15207								
009		OBS	0000	1939	35217	2511			15207								
009		OBS	0008	1940	35209	2510			15209								
		STD	0010	1940	3521	2510	0028776	0029	15209								
		STD	0020	1940	3521	2510	0028796	0058	15211								
		STD	0030	1940	3522	2510	0028810	0086	15212								
009		OBS	0032	1940	35216	2510			15213								
		STD	0050	1941	3521	2510	0028919	0144	15216								
009		OBS	0050	1941	35213	2510			15216								
		STD	0075	1939	3522	2510	0028947	0216	15219								
009		OBS	0078	1939	35215	2510			15220								
		STD	0100	1941	3521	2510	0029112	0289	15224								
009		OBS	0101	1941	35209	2509			15224								
		STD	0125	1784	3490	2525	0027667	0360	15180								
		STD	0150	1647	3466	2540	0026358	0427	15140								
009		OBS	0153	1633	34633	2541			15136								
		STD	0200	1463	3441	2562	0024368	0554	15088								
009		OBS	T0204	1448	34394	2564			15083								
		STD	0250	1227	3424	2597	0021088	0668	15015								
		STD	0300	1036	3412	2622	0018675	0767	14955								
009		OBS	0306	1017	34107	2625			14949								
		STD	0400	0821	3403	2650	0016084	0941	14890								
009		OBS	0409	0804	34026	2652			14885								
		STD	0500	0640	3403	2676	0013658	1090	14836								
		STD	0600	0511	3408	2696	0011750	1217	14801								
009		OBS	T0615	0496	34089	2698			14797								
		STD	0700	0460	3419	2710	0010417	1328	14798								
		STD	0800	0424	3429	2722	0009341	1426	14801								
009		OBS	0820	0417	34304	2724			14802								
		STD	0900	0395	3436	2730	0008569	1516	14806								
		STD	1000	0369	3442	2738	0007901	1598	14813								
009		OBS	T1038	0360	34440	2740			14816								
		STD	1100	0345	3447	2744	0007328	1675	14820								
		STD	1200	0323	3451	2749	0006847	1745	14828								
		STD	1300	0303	3454	2754	0006459	1812	14837								
		STD	1400	0284	3456	2757	0006152	1875	14846								
		STD	1500	0267	3457	2759	0005937	1935	14855								
009		OBS	T1556	0258	34570	2760			14861								

TABLE VIII.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR, 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT.	WAVE OBSERVATIONS: PER.	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1200	RT	3018 N	14017 W		123	00	01	08	198	1968	N12	002	4572	07	15	3	4		X5	5	8		0002

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OF FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		16	S25	152	183	178	7	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	
		STD	0000	1899	35056	2509	0028828	0000	15194								
198		OBS	0000	1899	35060	2509			15194								
198		OBS	0008	1901	35071	2509			15196								
		STD	0010	1901	3507	2509	0028838	0029	15196								
		STD	0020	1899	3507	2510	0028824	0058	15197								
		STD	0030	1898	3507	2510	0028848	0086	15199								
198		OBS	0030	1898	35068	2510			15199								
		STD	0050	1900	3507	2509	0028980	0144	15202								
198		OBS	0050	1900	35066	2509			15202								
		STD	0075	1900	3506	2509	0029109	0217	15207								
198		OBS	0075	1900	35060	2509			15207								
198		OBS	0098	1890	35034	2509			15207								
		STD	0100	1875	3501	2511	0028951	0290	15203								
		STD	0125	1705	3475	2533	0026932	0369	15154								
198		OBS	0145	1595	34585	2546			15122								
		STD	0150	1577	3455	2547	0025620	0425	15117								
198		OBS	T0190	1430	34334	2563			15074								
		STD	0200	1383	3429	2569	0023613	0548	15060								
		STD	0250	1178	3414	2598	0020916	0659	14997								
198		OBS	0280	1081	34080	2611			14967								
		STD	0300	1040	3408	2619	0019037	0759	14956								
198		OBS	0355	0924	34067	2637			14922								
		STD	0400	0806	3402	2652	0015933	0934	14884								
198		OBS	T0488	0634	33976	2672			14831								
		STD	0500	0623	3398	2674	0013816	1083	14829								
		STD	0600	0531	3400	2687	0012613	1215	14808								
198		OBS	0605	0527	33998	2687			14807								
198		OBS	T0693	0454	34139	2707			14794								

TABLE VIII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT IND.	MAPSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY. CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1200	RT	3004 N	14011 W		123	00	01	09	199	1968	N12	003	4572	16	15	4	4		X4	6	6		0003

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR	SPEED OR FORCE		DRY BULB	WET BULB			
		07	S12	102	189	189	6	14	

MESSENGR TIME OF HR 1.10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1976	35.26	25.04	0029284	0000	15218								
199		OBS	0000	1976	35.258	25.04			15216								
		STD	0010	1976	35.27	25.05	0029247	0029	15219								
199		OBS	0010	1976	35.268	25.05			15219								
		STD	0020	1974	35.27	25.05	0029242	0059	15220								
		STD	0030	1972	35.27	25.06	0029232	0088	15222								
199		OBS	0033	1971	35.264	25.06			15222								
		STD	0050	1971	35.26	25.06	0029293	0146	15225								
199		OBS	0052	1971	35.264	25.06			15225								
		STD	0075	1943	35.19	25.07	0029222	0219	15220								
199		OBS	0081	1937	35.176	25.08			15219								
		STD	0100	1928	35.15	25.08	0029229	0292	15220								
199		OBS	0104	1920	35.129	25.09			15218								
		STD	0125	1797	34.90	25.22	0027972	0364	15183								
		STD	0150	1662	34.67	25.37	0026621	0432	15145								
199		OBS	0156	1632	34.616	25.40			15136								
		STD	0200	1434	34.31	25.60	0024500	0560	15077								
199		OBS	T0207	1404	34.278	25.64			15068								
		STD	0250	1225	34.18	25.92	0021490	0675	15014								
		STD	0300	1056	34.10	26.17	0019164	0777	14962								
199		OBS	0310	1028	34.092	26.22			14953								
		STD	0400	0859	34.04	26.45	0016590	0955	14905								
199		OBS	0413	0836	34.033	26.48			14898								
		STD	0500	0663	34.05	26.74	0013829	1107	14845								
		STD	0600	0518	34.07	26.94	0011940	1236	14804								
199		OBS	T0615	0501	34.069	26.96			14799								
		STD	0700	0455	34.18	27.10	0010432	1348	14796								
		STD	0800	0412	34.28	27.22	0009274	1447	14796								
199		OBS	0824	0404	34.303	27.25			14797								
		STD	0900	0388	34.35	27.30	0008561	1536	14803								
		STD	1000	0366	34.41	27.37	0007940	1618	14811								
199		OBS	T1030	0360	34.431	27.40			14814								
		STD	1100	0345	34.47	27.44	0007328	1695	14820								
		STD	1200	0325	34.51	27.49	0006870	1766	14829								
		STD	1300	0305	34.54	27.54	0006482	1832	14837								
		STD	1400	0285	34.56	27.57	0006164	1896	14846								
		STD	1500	0266	34.57	27.59	0005925	1956	14855								
199		OBS	T1565	0254	34.575	27.61			14861								

TABLE VIII.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR, 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1200	RT	3000 N	14004 W		123	00	01	10	198	1968	N12	004	4572	10	11	4	3		45	6	8		0004

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	520	135	183	183	6	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1924	35118	2512	0028544	0000	15202								
198		OBS	0000	1924	35183	2512			15202								
198		OBS	0009	1928	35181	2511			15205								
		STD	0010	1928	3518	2511	0028689	0029	15205								
		STD	0020	1927	3518	2511	0028689	0057	15206								
		STD	0030	1925	3518	2511	0028690	0086	15208								
198		OBS	0031	1925	35181	2511			15208								
198		OBS	0049	1925	35185	2512			15211								
		STD	0050	1925	3519	2512	0028728	0143	15211								
198		OBS	0074	1926	35182	2511			15215								
		STD	0075	1925	3518	2511	0028856	0215	15215								
198		OBS	0096	1908	35138	2512			15213								
		STD	0100	1877	3508	2516	0028492	0287	15204								
		STD	0125	1706	3476	2533	0026882	0356	15155								
198		OBS	0143	1605	34584	2544			15125								
		STD	0150	1580	3455	2547	0025685	0422	15118								
198		OBS	T0193	1419	34358	2567			15072								
		STD	0200	1384	3433	2572	0023341	0545	15061								
		STD	0250	1167	3417	2603	0020496	0654	14994								
198		OBS	0284	1055	34098	2617			14959								
		STD	0300	1029	3409	2621	0018777	0752	14952								
198		OBS	T0378	0894	34058	2641			14915								
		STD	0400	0837	3405	2650	0016156	0927	14897								
		STD	0500	0628	3403	2677	0013512	1075	14831								
198		OBS	T0558	0545	34013	2686			14807								
		STD	0600	0520	3405	2692	0012083	1203	14804								
		STD	0700	0468	3413	2704	0010958	1319	14801								
203		OBS	0710	0463	34140	2706			14800								
		STD	0800	0425	3422	2716	0009872	1423	14800								
		STD	0900	0392	3433	2728	0008755	1516	14805								
206		OBS	T0997	0369	34432	2739			14813								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1200	RT	2948 N	13954 W		086	99	01	11	198	1968	N12	005	4750	12	18	4	4		50	6	6	0005

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		19	S20	061	21	20	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY=x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at l	pH	SCC
		STD	0000	1961	3521	2504	0029245	0000	15213								
198		OBS	0000	1961	35212	2504			15213								
198		OBS	0008	1964	35210	2504			15215								
		STD	0010	1963	3521	2504	0029344	0029	15215								
		STD	0020	1956	3520	2505	0029278	0059	15215								
		STD	0030	1947	3518	2506	0029236	0088	15214								
198		OBS	0031	1946	35178	2506			15214								
		STD	0050	1920	3514	2509	0028961	0146	15209								
198		OBS	0050	1920	35136	2509			15209								
		STD	0075	1919	3513	2509	0029044	0219	15213								
198		OBS	0079	1918	35132	2509			15213								
		STD	0100	1910	3511	2510	0029077	0291	15214								
198		OBS	0102	1906	35098	2510			15213								
		STD	0125	1750	3483	2528	0027383	0362	15169								
		STD	0150	1608	3461	2545	0025882	0428	15127								
198		OBS	0150	1608	34607	2545			15127								
		STD	0200	1419	3435	2566	0023902	0553	15073								
198		OBS	T0204	1404	34332	2568			15068								
		STD	0250	1216	3419	2595	0021249	0666	15011								
198		OBS	0290	1084	34111	2613			14970								
		STD	0300	1063	3411	2617	0019211	0767	14964								
198		OBS	T0385	0889	34058	2642			14914								
		STD	0400	0850	3405	2647	0016370	0945	14901								
		STD	0500	0635	3400	2674	0013791	1096	14834								
198		OBS	T0539	0574	33984	2680			14815								
		STD	0600	0519	3405	2692	0012071	1225	14804								
		STD	0700	0453	3416	2709	0010534	1338	14795								
198		OBS	0700	0453	34163	2709			14795								
		STD	0800	0425	3427	2720	0009502	1438	14801								
198		OBS	0865	0407	34324	2726			14805								
		STD	0900	0398	3435	2729	0008678	1529	14807								
		STD	1000	0372	3442	2738	0007937	1612	14814								
		STD	1100	0348	3447	2744	0007363	1689	14821								
		STD	1200	0326	3450	2748	0006956	1760	14829								
198		OBS	T1250	0315	34504	2750			14833								

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1200	RT	3008 N	139505W		122	09	01	13	030	1968	N12	006	4755	04	22	2	5		X1	6	4	0006

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		22	S24	036	202	188	7	10	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY=x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at	pH	SCC
		STD	0000	1909	3514	2512	0028499	0000	15198								
030		OBS	0000	1909	35140	2512			15198								
		STD	0010	1913	3514	2511	0028627	0029	15201								
030		OBS	0012	1914	35138	2511			15201								
		STD	0020	1913	3514	2511	0028676	0057	15202								
		STD	0030	1912	3514	2511	0028691	0086	15203								
030		OBS	0031	1912	35137	2511			15204								
		STD	0050	1912	3514	2511	0028772	0143	15207								
030		OBS	0051	1912	35135	2511			15207								
		STD	0075	1914	3514	2511	0028878	0215	15211								
030		OBS	0079	1914	35139	2511			15212								
		STD	0100	1912	3515	2513	0028821	0288	15215								
030		OBS	0102	1909	35153	2513			15215								
		STD	0125	1796	3490	2522	0027948	0359	15183								
		STD	0150	1682	3468	2533	0026998	0427	15151								
030		OBS	0152	1673	34660	2534			15148								
		STD	0200	1485	3441	2557	0024826	0557	15095								
030		OBS	T0204	1476	34401	2558			15092								
		STD	0250	1239	3420	2597	0021046	0671	15009								
030		OBS	0285	1062	34103	2616			14961								
		STD	0300	1011	3407	2623	0018622	0771	14945								
030		OBS	T0372	0867	34047	2644			14903								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,T 10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1200	RT	3013 N	13944 W		122	09	01	14	026	1968	N12	007	4755	10	28	5	4		X1	9	1		0007

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		23	522	064	206	189	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	SCC
		STD	0000	1910	3513	2512	0028572	0000	15198								
026		OBS	0000	1910	35132	2512			15198								
		STD	0010	1910	3513	2511	0028629	0029	15200								
026		OBS	0010	1910	35129	2511			15200								
		STD	0020	1910	3513	2511	0028656	0057	15201								
		STD	0030	1910	3513	2511	0028691	0086	15203								
026		OBS	0030	1910	35130	2511			15203								
026		OBS	0045	1909	35133	2512			15205								
		STD	0050	1909	3513	2512	0028716	0143	15206								
026		OBS	0070	1911	35137	2512			15210								
		STD	0075	1912	3514	2512	0028817	0215	15211								
026		OBS	0090	1913	35146	2512			15214								
		STD	0100	1864	3503	2515	0028541	0287	15200								
		STD	0125	1740	3477	2526	0027588	0357	15165								
026		OBS	0140	1665	34636	2534			15143								
		STD	0150	1613	3455	2539	0026406	0425	15126								
026		OBS	0190	1413	34280	2562			15068								
		STD	0200	1355	3425	2572	0023349	0549	15050								
		STD	0250	1120	3414	2609	0019875	0657	14977								
026		OBS	0280	1024	34097	2623			14947								
		STD	0300	1008	3410	2625	0018380	0753	14944								
031		OBS	T0364	0935	34092	2637			14928								
		STD	0400	0857	3406	2647	0016411	0927	14904								
031		OBS	T0495	0689	34003	2667			14854								
		STD	0500	0684	3400	2667	0014480	1081	14853								
31		OBS	0570	0595	33987	2678			14829								
		STD	0600	0539	3400	2686	0012691	1217	14811								
031		OBS	T0627	0495	34029	2693			14798								
		STD	0700	0470													
		STD	0800	0436													
		STD	0900	0402													
031		OBS	T0966	0380													

TABLE VIII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR, 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1200	RT	3000 N	139583W		122	09	01	14	198	1968	N12	008	4206	14	28	6	5		X1	8	1		0008

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		25	S24	149	189	172	7	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$x10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QCC
		STD	0000	1904	3513	2513	0028419	0000	15196								
198		OBS	0000	1904	35133	2513			15196								
198		OBS	0009	1906	35126	2512			15198								
		STD	0010	1906	3513	2512	0028524	0028	15198								
		STD	0020	1906	3513	2512	0028559	0057	15200								
		STD	0030	1906	3513	2512	0028593	0086	15202								
198		OBS	0033	1906	35134	2513			15202								
		STD	0050	1907	3513	2512	0028662	0143	15205								
198		OBS	0051	1907	35133	2512			15205								
		STD	0075	1910	3514	2512	0028800	0215	15210								
199		OBS	0079	1910	35135	2512			15211								
		STD	0100	1910	3514	2512	0028888	0287	15214								
198		OBS	0101	1910	35136	2512			15214								
		STD	0125	1765	3484	2525	0027659	0357	15173								
		STD	0150	1633	3459	2538	0026556	0425	15135								
198		OBS	0151	1628	34586	2538			15133								
		STD	0200	1431	3433	2563	0024272	0552	15076								
199		OBS	T0203	1418	34318	2564			15072								
		STD	0250	1207	3419	2597	0021082	0666	15008								
		STD	0300	1032	3409	2621	0018806	0765	14953								
198		OBS	0300	1032	34093	2621			14953								
198		OBS	T0395	0839	34038	2648			14896								
		STD	0400	0831	3404	2649	0016183	0940	14894								
		STD	0500	0685	3401	2668	0014398	1093	14854								
199		OBS	0582	0587	33993	2680			14828								
		STD	0600	0568	3403	2685	0012838	1229	14824								
		STD	0700	0478	3418	2707	0010709	1547	14805								
198		OBS	0760	0438	34259	2718			14800								
		STD	0800	0425	3430	2723	0009279	1447	14802								
		STD	0900	0394	3438	2732	0008409	1536	14806								
199		OBS	T0937	0383	34403	2735			14808								
		STD	1000	0366	3444	2740	0007718	1616	14812								
		STD	1100	0340	3449	2746	0007122	1690	14818								
		STD	1200	0318	3453	2752	0006641	1759	14826								
		STD	1300	0299	3455	2755	0006339	1824	14835								
		STD	1400	0283	3455	2756	0006214	1887	14845								
198		OBS	T1432	0278	34556	2757			14848								

TABLE VIII.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR. 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1200	RT	28222N	140005W		087	80	01	15	198	1968	N12	009	5029	15	36	3	4		X1	6	6		0009

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		00	S00	220	189	178	7	14	

MESSENGR TIME OF HP 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	2030	3528	2491	0030489	0000	15233								
198		OBS	0000	2030	35279	2491			15233								
		STD	0010	2028	3528	2492	0030467	0030	15234								
198		OBS	0010	2028	35280	2492			15234								
		STD	0020	2029	3528	2492	0030494	0061	15236								
198		OBS	0029	2029	35286	2492			15237								
		STD	0030	2029	3529	2492	0030520	0091	15237								
198		OBS	0048	2026	35283	2493			15240								
		STD	0050	2026	3528	2493	0030531	0153	15240								
198		OBS	0072	2024	35290	2494			15243								
		STD	0075	2023	3529	2494	0030493	0229	15243								
198		OBS	0096	2016	35297	2496			15245								
		STD	0100	1998	3526	2498	0030175	0305	15240								
		STD	0125	1893	3508	2512	0028965	0379	15213								
198		OBS	0146	1809	34934	2522			15191								
		STD	0150	1798	3491	2523	0028005	0450	15188								
		STD	0200	1621	3464	2544	0026079	0585	15140								
198		OBS	T0206	1595	34608	2548			15132								
		STD	0250	1314	3431	2585	0022236	0706	15046								
198		OBS	0294	1098	34106	2610			14976								
		STD	0300	1082	3410	2613	0019613	0810	14971								
198		OBS	T0398	0850	34040	2647			14901								
		STD	0400	0846	3404	2647	0016390	0990	14900								
		STD	0500	0665	3404	2673	0013901	1142	14846								
198		OBS	T0586	0553	34046	2688			14815								
		STD	0600	0544	3406	2690	0012309	1273	14814								
		STD	0700	0484	3418	2707	0010782	1388	14808								
198		OBS	0784	0444	34268	2718			14806								
		STD	0800	0439	3428	2719	0009594	1490	14807								
		STD	0900	0407	3436	2729	0008710	1582	14811								
198		OBS	T0978	0384	34413	2736			14815								
		STD	1000	0378	3443	2738	0007933	1665	14817								
		STD	1100	0351	3448	2744	0007324	1741	14823								
		STD	1200	0327	3452	2750	0006820	1812	14830								
		STD	1300	0305	3455	2754	0006409	1878	14838								
		STD	1400	0286	3456	2757	0006175	1941	14846								
198		OBS	T1492	0270	34564	2759			14855								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1200	RT	2625 N	139583W		086	89	01	16	197	1968	N12	010	4572	15	31	4	2		X1	8	5		0010

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OF FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		11	506	240	194	178	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	2036	3531	2492	0030409	0000	15235								
197		OBS	0000	2036	35311	2492			15235								
197		OBS	0009	2038	35313	2492			15237								
		STD	0010	2038	3531	2492	0030482	0030	15237								
		STD	0020	2036	3531	2492	0030467	0061	15238								
197		OBS	0029	2035	35312	2493			15239								
		STD	0030	2035	3531	2493	0030485	0091	15239								
197		OBS	0049	2034	35313	2493			15242								
		STD	0050	2034	3531	2493	0030529	0152	15242								
197		OBS	0074	2038	35310	2492			15247								
		STD	0075	2038	3531	2492	0030730	0229	15247								
197		OBS	0098	2031	35309	2493			15249								
		STD	0100	2022	3529	2494	0030565	0306	15247								
		STD	0125	1917	3510	2507	0029407	0381	15220								
		STD	0150	1815	3493	2520	0028240	0453	15193								
197		OBS	0150	1815	34933	2520			15193								
		STD	0200	1627	3470	2547	0025776	0588	15142								
197		OBS	T0204	1610	34676	2549			15138								
		STD	0250	1317	3440	2591	0021644	0706	15048								
		STD	0300	1078	3410	2613	0019566	0809	14969								
197		OBS	0301	1074	34091	2613			14968								
		STD	0400	0852	3404	2646	0016460	0989	14902								
197		OBS	0400	0852	34043	2646			14902								
		STD	0500	0672	3405	2673	0013945	1141	14849								
		STD	0600	0542	3406	2690	0012314	1273	14813								
197		OBS	T0608	0534	34057	2691			14811								
		STD	0700	0482	3419	2705	0010684	1388	14807								
197		OBS	0798	0436	34299	2721			14806								
		STD	0800	0435	3430	2721	0009398	1488	14806								
		STD	0900	0401	3437	2731	0008565	1578	14809								
		STD	1000	0370	3443	2739	0007832	1660	14815								
197		OBS	T1000	0370	34431	2739			14813								
		STD	1100	0343	3448	2745	0007231	1735	14819								
		STD	1200	0319	3452	2751	0006727	1805	14826								
		STD	1300	0298	3454	2754	0006401	1871	14834								
		STD	1400	0281	3456	2757	0006117	1933	14844								
197		OBS	T1476	0271	34564	2759			14853								

TABLE VIII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR. 1/10		CRUISE NO	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	12000	RT	28212N	139560W		086	89	01	17	197	1968	N12	011	4700	15	17	4	4		X5	8	5		0011

WATER		WIND		BAROMETER (mbst)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		17	S20	176	21	20	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY $\times 10^7$	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at l	SiO_4-Si µg-at/l	pH	DOC
		STD	0000	2023	3530	2495	0030167	0000	15231								
197		OBS	0000	2023	35299	2495			15231								
197		OBS	0009	2027	35301	2494			15234								
		STD	0010	2027	3530	2494	0030287	0030	15234								
		STD	0020	2026	3530	2494	0030295	0061	15235								
		STD	0030	2025	3530	2495	0030296	0091	15237								
197		OBS	0033	2025	35304	2495			15237								
		STD	0050	2024	3530	2495	0030367	0151	15240								
197		OBS	0051	2024	35300	2495			15240								
		STD	0075	2025	3530	2495	0030455	0228	15244								
197		OBS	0079	2025	35303	2495			15245								
		STD	0100	2016	3530	2497	0030340	0304	15246								
197		OBS	0101	2015	35298	2497			15245								
		STD	0125	1939	3516	2506	0029514	0378	15227								
		STD	0150	1854	3501	2516	0028613	0451	15205								
197		OBS	0151	1850	35007	2517			15204								
		STD	0200	1667	3475	2542	0026307	0588	15155								
197		OBS	T0202	1658	34736	2543			15153								
		STD	0250	1358	3436	2580	0022737	0711	15061								
		STD	0300	1122	3412	2607	0020170	0818	14985								
197		OBS	0301	1118	34113	2607			14984								
197		OBS	T0397	0888	34052	2642			14915								
		STD	0400	0880	3405	2643	0016827	1003	14913								
		STD	0500	0662	3406	2675	0013771	1156	14845								
197		OBS	T0584	0536	34057	2691			14808								
		STD	0600	0528	3407	2693	0012034	1285	14808								
		STD	0700	0484	3418	2707	0010782	1399	14808								
197		OBS	0786	0448	34256	2717			14808								
		STD	0800	0442	3427	2718	0009704	1502	14808								
		STD	0900	0405	3436	2729	0008687	1594	14811								
197		OBS	T0974	0380	34410	2736			14813								
		STD	1000	0372	3442	2737	0007951	1677	14814								
		STD	1100	0343	3445	2743	0007467	1754	14819								
		STD	1200	0318	3448	2747	0007025	1826	14825								
		STD	1300	0298	3451	2752	0006629	1895	14834								
		STD	1400	0281	3454	2756	0006271	1959	14844								
197		OBS	T1466	0273	34559	2758			14852								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1200	RT	2817 N	14002 W		087	80	01	18	198	1966	N12	012	4755	17	16	4	4		X1	3	6	00121

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		19	521	173	222	217	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL
		STD	0000	2024	3529	2494	0030228	0000	15231								
196		OBS	0000	2024	35294	2494			15231								
		STD	0010	2026	3530	2494	0030295	0030	15233								
196		OBS	0013	2026	35295	2494			15234								
		STD	0020	2026	3529	2494	0030351	0061	15235								
		STD	0030	2026	3529	2494	0030387	0091	15237								
196		OBS	0036	2026	35293	2494			15238								
		STD	0050	2024	3530	2494	0030390	0152	15239								
196		OBS	0059	2022	35296	2495			15240								
		STD	0075	2028	3532	2495	0030410	0228	15245								
196		OBS	0070	2032	35330	2495			15249								
		STD	0100	2032	3533	2495	0030511	0304	15250								
196		OBS	0118	2033	35341	2495			15254								
		STD	0125	2005	3528	2498	0030295	0380	15246								
		STD	0150	1903	3509	2513	0029222	0454	15220								
196		OBS	0176	1790	34898	2524			15190								
		STD	0200	1677	3474	2539	0026605	0594	15158								
196		OBS	T0235	1510	34532	2561			15110								
		STD	0250	1419	3445	2574	0023309	0719	15082								
		STD	0300	1155	3422	2609	0020029	0827	14998								
196		OBS	0348	0962	34072	2631			14935								
		STD	0400	0850	3403	2646	0016525	1010	14901								
196		OBS	T0457	0742	34013	2660			14869								
		STD	0500	0675	3404	2671	0014134	1163	14850								
		STD	0600	0547	3410	2693	0012051	1294	14816								
196		OBS	T0673	0480	34155	2705			14801								
		STD	0700	0470	3419	2709	0010538	1407	14802								
		STD	0800	0434	3430	2722	0009386	1507	14805								
196		OBS	0875	0409	34369	2730			14808								
		STD	0900	0402	3438	2731	0008503	1596	14810								
		STD	1000	0373	3444	2739	0007800	1677	14815								
196		OBS	T1089	0350	34475	2744			14820								
		STD	1100	0347	3448	2745	0007277	1753	14821								
		STD	1200	0323	3452	2750	0006773	1823	14826								
		STD	1300	0302	3455	2755	0006374	1889	14836								
		STD	1400	0283	3457	2758	0006067	1951	14845								
		STD	1500	0266	3458	2760	0005852	2011	14855								
196		OBS	T1664	0243	34589	2763			14873								

TABLE VIII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DIFF. IND.	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA	CODE	TYPE	AMT		
31	1230	BT	3018 N	14002 W		123	00	01	19	200	1968	N12	013	4480	15	20	4	4		x1	3	6		0013

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE		DRY BULB	WET BULB			
		18	S18	186	200	194	7	14	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁻⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	S
		STD	0000	1899	3511	2513	0028465	0000	15195								
200		OBS	0000	1899	35110	2513			15195								
200		OBS	0008	1901	35112	2512			15196								
		STD	0010	1901	3511	2512	0028523	0028	15197								
		STD	0020	1901	3512	2513	0028534	0057	15198								
		STD	0030	1900	3512	2513	0028534	0086	15200								
200		OBS	0030	1900	35118	2513			15200								
200		OBS	0048	1899	35118	2513			15203								
		STD	0050	1899	3512	2513	0028564	0143	15203								
		STD	0075	1898	3513	2514	0028546	0214	15207								
200		OBS	0075	1898	35131	2514			15207								
200		OBS	0097	1900	35144	2515			15211								
		STD	0100	1895	3513	2515	0028566	0285	15210								
		STD	0125	1835	3498	2519	0028292	0357	15195								
200		OBS	0146	1753	34833	2528			15173								
		STD	0150	1725	3479	2531	0027178	0426	15165								
200		OBS	T0197	1437	34370	2564			15078								
		STD	0200	1424	3436	2566	0023931	0554	15074								
		STD	0250	1224	3421	2595	0021252	0667	15014								
200		OBS	0294	1074	34113	2615			14967								
		STD	0300	1057	3411	2618	0019107	0767	14962								
200		OBS	T0391	0829	34031	2649			14892								
		STD	0400	0813	3403	2651	0015964	0943	14887								
		STD	0500	0654	3402	2673	0013906	1092	14842								
200		OBS	T0581	0557	34015	2685			14816								
		STD	0600	0543	3404	2689	0012445	1224	14814								
		STD	0700	0480	3416	2705	0010882	1341	14806								
200		OBS	0779	0440	34240	2716			14803								
		STD	0800	0433	3426	2719	0009671	1443	14804								
		STD	0900	0400	3435	2729	0008701	1535	14808								
200		OBS	T0978	0377	34412	2736			14812								
200		OBS	T1510	0268	34564	2759			14857								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DEPT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1200	RT	30108N	14003 W		123	00	01	20	197	1968	N12	014	4755	15	21	4	2		X1	6	7		0014

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		18	S13	240	200	194	7	14	

MESSENGR TIME OR T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1904	34514	2513	0028390	0000	15196								
197		OBS	0000	1904	35137	2513			15196								
197		OBS	0009	1906	35142	2513			15198								
		STD	0010	1906	3514	2513	0028435	0028	15199								
		STD	0020	1905	3514	2514	0028423	0057	15200								
		STD	0030	1903	3515	2514	0028421	0085	15201								
197		OBS	0033	1903	35146	2514			15202								
		STD	0050	1903	3515	2514	0028473	0142	15204								
197		OBS	0050	1903	35146	2514			15204								
		STD	0075	1903	3514	2514	0028603	0214	15208								
197		OBS	0077	1903	35137	2514			15209								
		STD	0100	1901	3514	2515	0028625	0285	15212								
197		OBS	0100	1901	35142	2515			15212								
		STD	0125	1820	3496	2521	0028080	0356	15191								
		STD	0150	1720	3477	2531	0027208	0425	15163								
197		OBS	0150	1720	34770	2531			15163								
		STD	0200	1461	3437	2559	0024618	0555	15086								
197		OBS	T0201	1456	34367	2560			15085								
		STD	0250	1231	3421	2594	0021382	0670	15016								
		STD	0300	1047	3410	2619	0018988	0771	14958								
197		OBS	0300	1047	34103	2619			14958								
197		OBS	T0398	0819	34026	2650			14889								
		STD	0400	0815	3403	2651	0016023	0946	14888								
		STD	0500	0638	3403	2676	0013661	1094	14835								
197		OBS	T0589	0527	34026	2689			14805								
		STD	0600	0521	3404	2691	0012170	1223	14805								
		STD	0700	0473	3417	2707	0010722	1338	14803								
197		OBS	0783	0439	34254	2717			14804								
		STD	0800	0433	3427	2719	0009597	1439	14804								
		STD	0900	0402	3435	2729	0008725	1531	14809								
197		OBS	T0978	0380	34408	2736			14814								
		STD	1000	0374	3441	2737	0008004	1614	14815								
		STD	1100	0348	3444	2742	0007555	1692	14821								
		STD	1200	0324	3447	2746	0007132	1766	14828								
		STD	1300	0303	3450	2751	0006739	1835	14836								
		STD	1400	0285	3453	2755	0006377	1901	14846								
197		OBS	T1491	0270	34558	2758			14855								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° '1/10	LONGITUDE ° '1/10	DUPLICATE	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1200	RT	2956 N	14005 W		067	90	01	21	196	1968	N12	015	4114	40	30	4	2		X1	6	7		0015

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		13	S05	193	200	189	7	20	

MESSENGR TIME OF T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1900	35.13	25.14	0028329	0000	15195								
196		OBS	0000	1900	35132	2514			15195								
		STD	0010	1902	35.13	25.14	0028405	0028	15197								
196		OBS	0010	1902	35133	2514			15197								
		STD	0020	1899	3513	2514	0028359	0057	15198								
		STD	0030	1898	3514	2515	0028362	0085	15199								
196		OBS	0030	1898	35135	2515			15199								
196		OBS	0049	1900	35135	2514			15203								
		STD	0050	1900	3514	2514	0028480	0142	15203								
196		OBS	0074	1899	35139	2515			15207								
		STD	0075	1899	3514	2515	0028505	0213	15207								
196		OBS	0098	1899	35142	2515			15211								
		STD	0100	1885	3511	2516	0028468	0284	15207								
		STD	0125	1729	3479	2530	0027190	0354	15162								
196		OBS	0149	1601	34553	2542			15124								
		STD	0150	1597	3455	2543	0026056	0421	15123								
		STD	0200	1406	3429	2565	0024076	0546	15068								
196		OBS	T0201	1402	34286	2565			15066								
		STD	0250	1189	3418	2599	0020824	0658	15001								
196		OBS	0299	1024	34100	2623			14950								
		STD	0300	1022	3410	2623	0018586	0757	14949								
196		OBS	0397	0842	34041	2648			14898								
		STD	0400	0835	3404	2649	0016215	0931	14896								
		STD	0500	0648	3404	2675	0013692	1080	14839								
196		OBS	T0596	0520	34038	2691			14804								
		STD	0600	0519	3404	2691	0012145	1209	14804								
		STD	0700	0470	3417	2707	0010686	1324	14802								
196		OBS	0796	0431	34268	2719			14803								
		STD	0800	0430	3427	2720	0009561	1425	14803								
		STD	0900	0402	3435	2729	0008725	1516	14809								
196		OBS	0999	0377	34418	2737			14816								
		STD	1000	0377	3442	2737	0007995	1600	14816								
		STD	1100	0353	3445	2742	0007569	1678	14823								
		STD	1200	0331	3448	2746	0007162	1751	14831								
		STD	1300	0310	3451	2751	0006762	1821	14839								
		STD	1400	0291	3453	2754	0006455	1887	14848								
196		OBS	T1498	0273	34555	2758			14857								
		STD	1500	0273	3456	2758	0006081	1950	14856								
		STD	1750	0233	3459	2764	0005518	2095	14883								
216		OBS	T1912	0212	34610	2767			14902								
		STD	2000	0204	3462	2769	0005060	2227	14913								
216		OBS	T2416	0174	34646	2773			14972								
		STD	2500	0171	3465	2774	0004613	2469	14985								
216		OBS	2933	0158	34664	2776			15054								
		STD	3000	0157	3467	2776	0004437	2695	15065								
216		OBS	3425	0152	34675	2777			15137								
216		OBS	T3865	0149	34684	2778			15213								
216		OBS	T3964	0149	34680	2778			15231								

TABLE VIII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICTR	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1200	RT	29598N	13957 W		086	99	01	22	194	1968	N12	016	4572	15	12	3	3		x1	6	6		0016

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		13	S12	254	189	161	8	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	QUAL
		STD	0000	1879	3506	2514	0028322	0000	15188								
194		OBS	0000	1879	35063	2514			15188								
		STD	0010	1883	3507	2513	0028424	0028	15191								
194		OBS	0010	1883	35067	2513			15191								
		STD	0020	1880	3507	2514	0028400	0057	15192								
194		OBS	0029	1879	35063	2514			15193								
		STD	0030	1879	3506	2514	0028430	0085	15193								
194		OBS	0048	1882	35066	2514			15197								
		STD	0050	1882	3507	2514	0028522	0142	15198								
194		OBS	0072	1886	35084	2514			15202								
		STD	0075	1892	3510	2514	0028625	0214	15205								
194		OBS	0097	1896	35121	2514			15210								
		STD	0100	1880	3509	2516	0028492	0285	15205								
		STD	0125	1753	3483	2528	0027453	0355	15170								
194		OBS	0146	1657	34655	2537			15142								
		STD	0150	1643	3463	2538	0026488	0422	15138								
194		OBS	T0198	1462	34372	2559			15086								
		STD	0200	1451	3436	2560	0024484	0550	15083								
		STD	0250	1215	3419	2595	0021231	0664	15011								
194		OBS	0291	1065	34093	2615			14963								
		STD	0300	1045	3409	2618	0019049	0765	14958								
194		OBS	T0383	0872	34046	2644			14907								
		STD	0400	0831	3404	2650	0016132	0941	14894								
		STD	0500	0628	3403	2678	0013468	1089	14831								
194		OBS	T0573	0525	34027	2690			14802								
		STD	0600	0510	3407	2695	0011811	1215	14801								
		STD	0700	0460	3419	2710	0010417	1326	14798								
194		OBS	0769	0432	34265	2719			14799								
		STD	0800	0423	3429	2722	0009330	1425	14801								
		STD	0900	0395	3437	2731	0008495	1514	14807								
194		OBS	0967	0378	34411	2736			14811								
		STD	1000	0370	3443	2739	0007839	1596	14813								
		STD	1100	0346	3448	2745	0007266	1671	14821								
		STD	1200	0324	3452	2750	0006785	1741	14829								
		STD	1300	0304	3454	2754	0006471	1808	14837								
		STD	1400	0287	3455	2756	0006261	1871	14847								
194		OBS	T1459	0277	34552	2757			14852								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1200	RT	3003 N	14000 W		123	00	01	23	195	1968	N12	017	4115	16	26	5	2		X1	6	3		0017

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	S12	247	19	16	7	14	

MESSENGR TIME OF T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–$\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	SCC
		STD	0000	1898	3515	2516	0028121	0000	15195								
195		OBS	0000	1898	35154	2516			15195								
195		OBS	0009	1900	35154	2516			15197								
		STD	0010	1900	3515	2516	0028204	0028	15197								
		STD	0020	1900	3515	2516	0028226	0056	15198								
		STD	0030	1899	3515	2516	0028258	0085	15200								
195		OBS	0032	1899	35153	2516			15200								
		STD	0050	1900	3516	2516	0028332	0141	15204								
195		OBS	0051	1900	35155	2516			15204								
		STD	0075	1901	3516	2516	0028421	0212	15208								
195		OBS	0078	1901	35158	2516			15208								
		STD	0100	1885	3512	2517	0028396	0283	15207								
195		OBS	0101	1882	35112	2517			15206								
		STD	0125	1707	3475	2532	0026978	0352	15155								
		STD	0150	1553	3448	2547	0025613	0418	15109								
195		OBS	0152	1542	34458	2548			15105								
		STD	0200	1336	34[illegible]2	2574	0023194	0540	15044								
195		OBS	0203	1324	34213	2575			15040								
		STD	0250	1146	3415	2605	0020265	0649	14986								
		STD	0300	0997	3410	2627	0018167	0745	14940								
195		OBS	0305	0985	34097	2629			14937								
		STD	0400	0835	3404	2649	0016251	0917	14896								
195		OBS	0407	0824	34031	2650			14892								
		STD	0500	0645	3405	2677	0013548	1066	14838								
		STD	0600	0508	3408	2696	0011720	1192	14800								
195		OBS	T0610	0498	34081	2697			14797								
		STD	0700	0459	3419	2710	0010405	1303	14798								
		STD	0800	0423	3429	2722	0009330	1402	14801								
195		OBS	0821	0416	34310	2724			14801								
		STD	0900	0399	3437	2731	0008542	1491	14808								
		STD	1000	0377	3443	2738	0007922	1573	14816								
195		OBS	1034	0370	34445	2740			14819								
		STD	1100	0356	3448	2744	0007383	1650	14825								
		STD	1200	0335	3452	2749	0006914	1721	14833								
		STD	1300	0315	3455	2753	0006527	1788	14842								
		STD	1400	0294	3457	2757	0006196	1852	14850								
		STD	1500	0274	3457	2759	0006020	1913	14858								
195		OBS	T1572	0260	34574	2760			14864								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	DAY	HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'M'PL'S	WAVE OBSERVATIONS DIR.	HGT	PER	SEA	WEATHER CODE	CLOUD CODES TYPE	AMT	NODC STATION NUMBER
31	1200	RT	3002 N	140015W		123	00	01	24	196	1968	N12	018	4369	15	08	2	3		x2	6	8	0018

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	S16	224	183	156	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁷	ΣΔD DYN. M. ×10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH
		STD	0000	1898	3514	2515	0028201	0000	15195							
196		OBS	0000	1898	35143	2515			15195							
196		OBS	0009	1901	35150	2515			15197							
		STD	0010	1901	3515	2515	0028255	0028	15197							
		STD	0020	1900	3515	2516	0028258	0056	15198							
		STD	0030	1898	3515	2516	0028261	0085	152[illegible]							
196		OBS	0032	1898	35145	2516			15200							
		STD	0050	1894	3514	2515	0028405	0141	15203							
196		OBS	0050	1899	35142	2515			15203							
		STD	0075	1900	3514	2515	0028527	0213	15207							
196		OBS	0078	1900	35135	2514			15208							
196		OBS	0099	1893	35122	2515			15209							
		STD	0100	1888	3511	2515	0028541	0284	15206							
		STD	0125	1764	3485	2525	0027553	0354	15174							
196		OBS	0148	1657	34652	2537			15143							
		STD	0150	1648	3464	2536	0026526	0421	15140							
196		OBS	T0199	1445	34364	2562			15081							
		STD	0200	1440	3436	2563	0024259	0549	15080							
		STD	0250	1232	3420	2593	0021474	0663	15016							
196		OBS	0294	1083	34104	2613			14970							
		STD	0300	1068	3410	2615	0019370	0765	14964							
196		OBS	T0384	0880	34054	2643			14910							
		STD	0400	0845	3405	2648	0016301	0943	14900							
		STD	0500	0659	3412	2673	0013959	1095	14844							
196		OBS	T0572	0559	34406	2684			14815							
		STD	0600	0536	3404	2689	0012357	1226	14811							
		STD	0700	0467	3417	2706	0010650	1341	14801							
196		OBS	0768	0431	34247	2719			14799							
		STD	0800	0421	3428	2721	0009380	1441	14800							
		STD	0900	0393	3437	2731	0008471	1531	14806							
196		OBS	T0953	0379	34406	2736			14809							
		STD	1000	0367	3442	2738	0007876	1612	14811							
		STD	1100	0343	3445	2743	0007452	1689	14819							
		STD	1200	0321	3448	2747	0007052	1762	14827							
		STD	1300	0301	3451	2751	0006664	1830	14835							
		STD	1400	0283	3454	2755	0006302	1895	14845							
196		OBS	T1490	0269	34565	2759			14854							

TABLE VIII.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° '1.10	LONGITUDE ° '1.10	DRIFT IND.CD	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR.1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1200	RT	3003 N	14000 W		123	00	01	25	195	1968	N12	019	4389	25	06	3	4		X1	5	7		0019

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		06	508	213	183	161	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁷	Σ Δ D DYN. M X 10³	SOUND VELOCITY	O2 ml/l	PO4-P µg-at/l	TOTAL-P µg-at/l	NO2-N µg-at/l	NO3-N µg-at/l	SiO4-Si µg-at/l	pH	SIC
		STD	0000	1893	3513	2516	0028145	0000	15193								
195		OBS	0000	1893	35134	2516			15193								
		STD	0010	1892	3515	2517	0028046	0028	15195								
195		OBS	0010	1892	35149	2517			15195								
		STD	0020	1893	3515	2517	0028093	0056	15196								
195		OBS	0029	1893	35144	2517			15196								
		STD	0030	1893	3515	2517	0028134	0084	15195								
195		OBS	0049	1892	35148	2517			15201								
		STD	0050	1892	3515	2517	0028191	0141	15201								
195		OBS	0073	1892	35147	2517			15205								
		STD	0075	1892	3515	2517	0028257	0211	15205								
195		OBS	0098	1893	35147	2517			15208								
		STD	0100	1884	3513	2518	0028299	0282	15207								
		STD	0125	1775	3484	2527	0027529	0352	15177								
195		OBS	0149	1668	34694	2537			15147								
		STD	0150	1663	3469	2538	0026498	0417	15145								
		STD	0200	1437	3436	2563	0024196	0546	15079								
195		OBS	0202	1428	34350	2565			15076								
		STD	0250	1203	3424	2601	0020679	0658	15007								
		STD	0300	1023	3412	2624	0018492	0756	14950								
195		OBS	0302	1017	34110	2625			14948								
		STD	0400	0829	3402	2648	0016278	0930	14893								
195		OBS	T0403	0824	34014	2648			14892								
		STD	0500	0631	3403	2676	0013614	1079	14834								
		STD	0600	0497	3407	2696	0011668	1206	14795								
195		OBS	T0600	0497	34068	2696			14795								
		STD	0700	0457	3420	2711	0010307	1316	14797								
19.		OBS	0798	0423	34297	2723			14800								
		STD	0800	0422	3430	2723	0009244	1413	14800								
		STD	0900	0396	3437	2731	0008506	1502	14807								
195		OBS	T0993	0373	34429	2738			14814								
195		OBS	T1503	0267	34565	2759			14856								

TABLE VIII.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	CHIEF INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1200	RT	30003N	139553W		122	09	01	26	196	1968	N12	020	4389	14	04	4	4		x2	6	8		0020

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	S22	207	172	156	7	13	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCO
		STD	0000	1869	3508	2518	0027980	0000	15186								
196		OBS	0000	1869	35077	2518			15186								
		STD	0010	1873	3508	2517	0028096	0028	15188								
196		OBS	0010	1873	35079	2517			15188								
		STD	0020	1872	3508	2517	0028099	0056	15190								
		STD	0030	1871	3508	2518	0028094	0084	15191								
196		OBS	0030	1871	35082	2519			15191								
		STD	0050	1873	3508	2517	0028211	0141	15195								
196		OBS	0050	1873	35082	2517			15195								
		STD	0075	1873	3509	2517	0028259	0211	15199								
196		OBS	0077	1873	35087	2517			15200								
		STD	0100	1872	3508	2517	0028400	0282	15203								
196		OBS	0100	1872	35076	2517			15203								
		STD	0125	1710	3477	2533	0026901	0351	15156								
		STD	0150	1569	3454	2548	0025535	0417	15114								
196		OBS	0150	1569	34538	2548			15114								
		STD	0200	1354	3427	2574	0023183	0538	15050								
196		OBS	0202	1346	34262	2575			15048								
		STD	0250	1150	3418	2607	0020116	0647	14988								
		STD	0300	1005	3412	2628	0018154	0742	14943								
196		OBS	0303	0998	34113	2628			14941								
196		OBS	T0370	0904	34060	2640			14917								
		STD	0400	0849	3404	2647	0016436	0915	14901								
196		OBS	T0414	0825	34038	2650			14894								
		STD	0500	0713	3412	2673	0014000	1067	14866								
		STD	0600	0599	3420	2694	0011984	1197	14838								
		STD	0700	0501	3428	2713	0010251	1309	14816								
		STD	0800	0419	3434	2726	0008912	1404	14800								
196		OBS	T0856	0380	34375	2733			14793								
		STD	0900	0372	3439	2735	0008090	1489	14797								
		STD	1000	0353	3442	2739	0007719	1568	14806								
		STD	1100	0334	3445	2744	0007344	1644	14815								
		STD	1200	0315	3448	2748	0006972	1715	14824								
		STD	1300	0296	3451	2752	0006588	1783	14833								
		STD	1400	0277	3454	2756	0006199	1847	14842								
196		OBS	T1414	0274	34546	2757			14843								

TABLE VIII.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT	MARSDEN 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.	CODE	° 1/10	° 1/10	INDCTR	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1200	RT	30004N	139576W		122	09	01	27	157	1968	N12	021	4206	13	04	4	4		X2	6	8		0021

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		04	S16	220	161	128	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1880	35125	2518	0027911	0000	15189								
	157	OBS	0000	1880	35123	2518			15189								
	157	OBS	0008	1884	35118	2517			15192								
		STD	0010	1883	3512	2517	0028039	0028	15192								
		STD	0020	1881	3512	2516	0028018	0056	15193								
	157	OBS	0020	1881	35121	2518			15193								
		STD	0030	1880	3512	2518	0028040	0084	15194								
	157	OBS	0045	1879	35119	2518			15196								
		STD	0050	1880	3512	2518	0028104	0140	15197								
	157	OBS	0070	1883	35122	2518			15202								
		STD	0075	1883	3512	2518	0028247	0211	15203								
	157	OBS	0090	1884	35124	2518			15205								
		STD	0100	1825	3500	2523	0027826	0281	15189								
		STD	0125	1700	3474	2535	0026891	0349	15153								
	157	OBS	0135	1659	34667	2537			15141								
		STD	0150	1628	3462	2541	0026228	0416	15134								
	157	OBS	T0183	1529	34505	2555			15107								
		STD	0200	1419	3439	2569	0023610	0540	15073								
		STD	0250	1162	3414	2601	0020626	0651	14992								
	157	OBS	0267	1096	34085	2609			14970								
		STD	0300	1030	3408	2621	0018546	0749	14952								
	157	OBS	T0348	0936	34079	2636			14925								
		STD	0400	0816	3402	2650	0016082	0924	14888								
		STD	0500	0635	3398	2672	0013961	1074	14833								
	157	OBS	T0526	0599	33979	2677			14823								
		STD	0600	0540	3404	2689	0012407	1206	14812								
		STD	0700	0476	3414	2704	0010981	1323	14804								
	157	OBS	0707	0472	34143	2705			14804								
		STD	0800	0435	3425	2718	0009759	1427	14805								
	157	OBS	0884	0405	34336	2728			14808								
		STD	0900	0400	3435	2729	0008701	1519	14808								
		STD	1000	0369	3443	2739	0007827	1602	14813								
		STD	1100	0342	3449	2746	0007145	1677	14819								
		STD	1200	0320	3452	2751	0006738	1746	14827								
		STD	1300	0303	3454	2754	0006459	1812	14837								
	157	OBS	T1347	0296	34541	2754			14842								

TABLE IX. Observed and interpolated oceanographic data for stations taken by USCGC WACHUSETT at Ocean Station NOVEMBER, 28 January–18 February 1968, prepared from NODC Listing No. 31–1205 WC.

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPLICATE INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1205	WC	29525N	13959 W		086	99	02	01	194	1968	N13	001	3658	15	24			3		5	3		0001

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		24	S14	149	189	183	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1872	3509	2518	0027965	0000	15187								
194		OBS	0000	1872	35089	2518			15187								
194		OBS	0009	1866	35091	2520			15186								
		STD	0010	1866	3509	2520	0027838	0028	15187								
		STD	0020	1865	3509	2520	0027843	0056	15188								
		STD	0030	1864	3509	2520	0027849	0084	15189								
194		OBS	0031	1864	35093	2520			15190								
194		OBS	0048	1865	35092	2520			15193								
		STD	0050	1864	3509	2520	0027921	0139	15193								
		STD	0075	1858	3509	2522	0027862	0209	15195								
194		OBS	0075	1858	35092	2522			15195								
194		OBS	0097	1856	35092	2522			15198								
		STD	0100	1842	3506	2523	0027795	0279	15194								
		STD	0125	1731	3481	2531	0027091	0347	15163								
194		OBS	0145	1647	34648	2539			15139								
		STD	0150	1628	3462	2541	0026228	0414	15134								
194		OBS	T0193	1461	34394	2561			15086								
		STD	0200	1426	3436	2566	0023471	0539	15075								
		STD	0250	1206	3419	2597	0021064	0652	15007								
194		OBS	0290	1068	34094	2615			14964								
		STD	0300	1047	3409	2618	0019083	0752	14958								
194		OBS	T0388	0869	34048	2644			14907								
		STD	0400	0841	3405	2648	0016264	0929	14898								
		STD	0500	0642	3403	2676	0013663	1079	14837								
194		OBS	T0579	0530	34022	2689			14805								
		STD	0600	0516	3405	2693	0012034	1207	14803								
		STD	0700	0460	3417	2708	0010566	1320	14798								
194		OBS	0776	0427	34246	2718			14798								
		STD	0800	0421	3427	2721	0009454	1420	14799								
		STD	0900	0398	3435	2729	0008678	1511	14808								
194		OBS	T0969	0382	34403	2735			14813								
		STD	1000	0375	3441	2737	0008031	1595	14815								
		STD	1100	0353	3444	2741	0007643	1673	14823								
		STD	1200	0332	3447	2745	0007255	1747	14831								
		STD	1300	0311	3450	2750	0006870	1818	14839								
		STD	1400	0291	3453	2754	0006492	1885	14846								
194		OBS	T1497	0272	34553	2758			14857								

TABLE IX.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRFT IND CTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1205	WC	2957 N	139555W		086	99	02	04	009	1968	N13	002	4114	15	29			2		3	6		0002

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		32	502	200	206	194	8	14	

MESSENGR TIME OF CAST HR 1.10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	ΣΔD DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	XCC
		STD	0000	1925	3514	2508	0028881	0000	15202								
009		OBS	0000	1925	35140	2508			15202								
		STD	0010	1884	3509	2515	0028252	0029	15192								
009		OBS	0010	1884	35094	2515			15192								
		STD	0020	1879	3509	2516	0028180	0057	15192								
		STD	0030	1874	3509	2517	0028108	0085	15192								
009		OBS	0030	1874	35090	2517			15192								
009		OBS	0049	1868	35080	2518			15193								
		STD	0050	1868	3508	2518	0028105	0141	15194								
009		OBS	0074	1868	35078	2518			15198								
		STD	0075	1868	3508	2518	0028204	0212	15198								
009		OBS	0099	1868	35079	2518			15202								
		STD	0100	1865	3507	2518	0028275	0282	15201								
		STD	0125	1776	3488	2526	0027625	0352	15177								
		STD	0150	1671	3469	2536	0026677	0420	15148								
009		OBS	0151	1667	34680	2537			15146								
		STD	0200	1415	3431	2564	0024113	0547	15071								
009		OBS	0204	1396	34284	2566			15065								
		STD	0250	1213	3418	2595	0021267	0660	15010								
		STD	0300	1044	3409	2619	0019032	0761	14957								
009		OBS	0303	1035	34085	2620			14954								
		STD	0400	0802	3401	2652	0015932	0936	14883								
009		OBS	T0402	0798	34010	2652			14881								
		STD	0500	0627	3403	2677	0013477	1083	14831								
		STD	0600	0505	3405	2694	0011884	1210	14798								
009		OBS	T0605	0500	34053	2695			14797								
		STD	0700	0458	3418	2709	0010468	1321	14797								
		STD	0800	0421	3429	2722	0009306	1420	14800								
009		OBS	0806	0419	34292	2723			14800								
		STD	0900	0393	3436	2731	0008545	1510	14806								
		STD	1000	0367	3443	2739	0007604	1591	14812								
009		OBS	T1005	0366	34432	2739			14813								
		STD	1100	0343	3448	2745	0007231	1667	14819								
		STD	1200	0321	3452	2750	0006750	1736	14827								
		STD	1300	0301	3455	2755	0006362	1802	14836								
		STD	1400	0282	3456	2757	0006129	1864	14845								
		STD	1500	0265	3456	2759	0005987	1925	14854								
009		OBS	T1514	0263	34562	2759			14856								

TABLE IX.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF. INDICTR.	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1205	WC	29463N	140177W		087	90	02	04	196	1968	N13	003	4198	15	30			2		5	5		0003

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	506	217	189	183	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁷	Σ Δ D DYN. M ×10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH
		STD	0000	1929	35211	2513	0028464	0000	15204							
196		OBS	0000	1929	35211	2513			15204							
196		OBS	0003	1924	35211	2514			15204							
		STD	0010	1924	3521	2514	0028369	0028	15204							
		STD	0020	1921	3522	2515	0028286	0057	15205							
196		OBS	0028	1920	35223	2516			15206							
		STD	0030	1920	3522	2516	0028260	0085	15207							
196		OBS	0048	1918	35224	2516			15209							
		STD	0050	1917	3522	2517	0028271	0114	15209							
		STD	0075	1909	3520	2517	0028343	0171	15211							
196		OBS	0078	1909	35193	2517			15211							
196		OBS	0097	1867	35114	2521			15201							
		STD	0100	1863	3510	2521	0028307	0283	15201							
		STD	0125	1805	3498	2526	0027580	0355	15187							
196		OBS	0148	1721	34831	2535			15164							
		STD	0150	1706	3481	2537	0026044	0420	15160							
		STD	0200	1418	3433	2565	0024042	0547	15072							
196		OBS	T0200	1418	34328	2565			15072							
		STD	0250	1211	3420	2597	0021084	0660	15009							
196		OBS	0297	1054	34107	2618			14961							
		STD	0300	1047	3413	2619	0019013	0761	14958							
196		OBS	T0396	0844	34037	2647			14898							
		STD	0400	0835	3404	2649	0016244	0936	14895							
		STD	0500	0643	3404	2676	0013609	1095	14827							
196		OBS	T0592	0519	34047	2692			14805							
		STD	0600	0514	3406	2694	0011933	1213	14802							
		STD	0700	0462	3418	2709	0010516	1325	14799							
196		OBS	0788	0425	34266	2720			14799							
		STD	0800	0422	3428	2721	0009392	1425	14800							
		STD	0900	0395	3436	2730	0008569	1515	14806							
196		OBS	0987	0373	34414	2737			14812							
		STD	1000	0370	3442	2736	0007913	1597	14813							
		STD	1100	0346	3448	2745	0007266	1673	14821							
		STD	1200	0324	3452	2750	0006785	1743	14829							
		STD	1300	0303	3454	2754	0006459	1809	14837							
		STD	1400	0283	3456	2757	0006140	1872	14845							
196		OBS	T1485	0268	34563	2759			14853							

TABLE IX.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1205	WC	3004 N	14003 W		123	00	02	05	190	1968	N13	004	4160	13	11	3	2			8	6		0004

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		14	S15	190	189	183	7	13	

MESSENGR TIME or HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1912	3518	2515	0028280	0000	15199								
190		OBS	0000	1912	35179	2515			15199								
190		OBS	0006	1907	35176	2516			15199								
		STD	0010	1907	3518	2516	0028212	0028	15199								
		STD	0020	1906	3517	2516	0028242	0056	15200								
190		OBS	0025	1905	35171	2516			15201								
		STD	0030	1901	3516	2516	0028254	0085	15201								
190		OBS	0042	1890	35131	2517			15199								
		STD	0050	1879	3510	2517	0028225	0141	15197								
190		OBS	0065	1865	35075	2519			15195								
		STD	0075	1863	3509	2520	0027997	0211	15196								
190		OBS	0084	1860	35095	2521			15197								
		STD	0100	1847	3509	2524	0027690	0281	15196								
		STD	0125	1826	3501	2523	0027855	0351	15193								
190		OBS	0126	1825	35000	2523			15193								
		STD	0150	1693	3475	2536	0026738	0419	15155								
190		OBS	T0174	1562	34539	2550			15116								
		STD	0200	1394	3434	2571	0023469	0544	15064								
		STD	0250	1147	3410	2601	0020649	0655	14986								
190		OBS	0252	1139	34094	2602			14983								
		STD	0300	1036	3409	2620	0018874	0753	14954								
190		OBS	0337	0958	34092	2633			14932								
		STD	0400	0815	3410	2656	0015492	0925	14889								
		STD	0500	0637	3411	2682	0013040	1068	14836								
190		OBS	T0503	0633													
		STD	0600	0531	3412	2696	0011716	1192	14810								
190		OBS	0673	0475	34125	2703			14799								
		STD	0700	0464	3416	2707	0010688	1304	14799								
		STD	0800	0424	3428	2721	0009416	1404	14801								
190		OBS	T0840	0410	34318	2726			14802								
		STD	0900	0390	3434	2730	0008628	1494	14804								
		STD	1000	0361	3439	2736	0008059	1578	14809								
		STD	1100	0337	3443	2742	0007537	1656	14816								
		STD	1200	0318	3447	2747	0007069	1729	14825								
		STD	1300	0304	3451	2752	0006662	1798	14837								
190		OBS	T1330	0301	34527	2753			14841								

TABLE IX.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDEX	MARSDEN 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.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1205	WC	29525N	13959 W		086	99	02	06	188	1968	N13	005	4663	15	17	3	2			6	6		0005

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		13	S04	173	194	189	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1886	35105	2511	0028607	0000	15190								
188		OBS	0000	1886	35047	2511			15190								
		STD	0010	1883	35105	2512	0028533	0029	15191								
188		OBS	0010	1883	35052	2512			15191								
		STD	0020	1878	35107	2515	0028316	0057	15191								
188		OBS	0028	1875	35080	2516			15192								
		STD	0030	1875	35108	2516	0028205	0085	15192								
188		OBS	0047	1875	35078	2516			15195								
		STD	0050	1877	35108	2516	0028321	0142	15196								
188		OBS	0071	1885	35110	2516			15202								
		STD	0075	1884	35112	2517	0028293	0213	15203								
188		OBS	0094	1881	35124	2518			15205								
		STD	0100	1862	35108	2520	0028130	0283	15200								
		STD	0125	1773	34980	2528	0027410	0353	15176								
188		OBS	0143	1702	34764	2535			15157								
		STD	0150	1669	34710	2538	0026560	0420	15147								
188		OBS	T0192	1476	34392	2557			15090								
		STD	0200	1433	34336	2564	0024115	0547	15077								
		STD	0250	1198	34119	2598	0020916	0659	15005								
188		OBS	0286	1066	34104	2616			14963								
		STD	0300	1035	34109	2620	0018879	0759	14954								
188		OBS	T0379	0671	34046	2644			14906								
		STD	0400	0827	34104	2650	0016086	0934	14893								
		STD	0500	0549	34103	2674	0013816	1083	14840								
188		OBS	T0573	0553	34012	2665			14813								
		STD	0600	0533	34105	2691	0012245	1213	14810								
		STD	0700	0469	34118	2708	0010600	1328	14802								
188		OBS	0765	0437	34246	2717			14800								
		STD	0800	0426	34245	2721	0009439	1428	14802								
		STD	0900	0398	34336	2730	0008604	1518	14808								
188		OBS	0961	0381	34403	2735			14811								
		STD	1000	0371	34443	2738	0007651	1600	14814								
		STD	1100	0346	34448	2745	0007266	1676	14821								
		STD	1200	0323	34452	2750	0006773	1746	14828								
		STD	1300	0302	34454	2754	0006447	1812	14836								
		STD	1400	0284	34455	2756	0006225	1876	14845								
188		OBS	T1451	0275	34554	2757			14850								

TABLE IX.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DATE INDICA	MAPSDEN SQUARE 10°	MAPSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1205	WE	29548N	139507W		086	99	02	08	193	1968	N13	006	4389	15	15	2	2			5	9		0006

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		00	500	156	200	194	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\times 10^7$	$\Sigma \Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	SCC
		STD	0000	1897	3497	2502	0029454	0000	15192								
193		OBS	0000	1897	34967	2502			15192								
		STD	0010	1889	3505	2510	0028729	0029	15193								
193		OBS	0010	1884	35045	2510			15193								
		STD	0020	1883	3507	2514	0028436	0058	15195								
		STD	0030	1878	3509	2516	0028227	0086	15193								
193		OBS	0030	1878	35087	2516			15193								
		STD	0050	1875	3509	2518	0028172	0142	15196								
193		OBS	0050	1875	35094	2518			15196								
		STD	0075	1876	3512	2521	0028063	0213	15200								
193		OBS	0075	1876	35124	2521			15200								
		STD	0100	1867	3512	2521	0027975	0284	15202								
193		OBS	0100	1867	35118	2521			15202								
		STD	0125	1747	3466	2531	0027096	0352	15168								
		STD	0150	1629	3463	2542	0026177	0418	15134								
193		OBS	0152	1620	34618	2543			15131								
		STD	0200	1397	3431	2568	0023749	0543	15065								
193		OBS	T0205	1375	34281	2570			15058								
		STD	0250	1177	3418	2602	0020605	0654	14997								
		STD	0300	1002	3410	2627	0018251	0751	14942								
193		OBS	0305	0987	34091	2628			14937								
		STD	0400	0795	3405	2654	0015733	0921	14880								
193		OBS	0405	0786	34021	2655			14877								
		STD	0500	0633	3409	2681	0013120	1065	14834								
		STD	0600	0514	3416	2702	0011193	1187	14803								
193		OBS	T0616	0499													
		STD	0700	0454	3423	2714	0010049	1293	14796								
		STD	0800	0412	3430	2724	0009126	1389	14796								
193		OBS	0810	0405	34305	2725			14796								
		STD	0900	0388	3437	2732	0008413	1477	14804								
		STD	1000	0367	3443	2739	0007804	1556	14814								
193		OBS	1015	0364	34441	2740			14814								
		STD	1100	0347	3446	2743	0007418	1634	14821								
		STD	1200	0327	3449	2747	0007078	1705	14829								
		STD	1300	0307	3451	2751	0006734	1775	14838								
		STD	1400	0288	3453	2755	0006398	1841	14847								
		STD	1500	0270	3456	2758	0006068	1903	14856								
193		OBS	T1530	0265	34564	2759			14859								

TABLE IX.—Continued

REFERENCE CTRY CODE	REFERENCE NO.	SHIP CODE	LATITUDE ° ′ 1/10	LONGITUDE ° ′ 1/10	QUADR INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1205	WC	3004 N	14031 W		123	00	02	11	001	1968	N13	007	4663	13	29	5	4			0	3	1007

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		36	503	156	200	156	8	13	

MESSENGR TIME OF HP 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10⁸	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SI (O)
		STD	0000	1937	3520	2510	0028711	0000	15206								
	001	OBS	0000	1937	35204	2510			15206								
	001	OBS	0009	1932	35207	2511			15206								
		STD	0010	1931	3520	2512	0028605	0029	15206								
		STD	0020	1925	3520	2513	0028486	0057	15206								
	001	OBS	0028	1922	35204	2514			15207								
		STD	0030	1922	3520	2514	0028450	0086	15207								
	001	OBS	0046	1923	35202	2514			15210								
		STD	0050	1924	3520	2513	0028580	0143	15211								
	001	OBS	0069	1925	35202	2513			15214								
		STD	0075	1924	3520	2513	0028672	0214	15215								
	001	OBS	0092	1922	35200	2514			15217								
		STD	0100	1883	3513	2516	0028275	0285	15207								
		STD	0125	1759	3490	2531	0027084	0355	15172								
	001	OBS	0141	1676	34757	2540			15148								
		STD	0150	1623	3465	2544	0025899	0421	15132								
	001	OBS	T0191	1401	34293	2566			15065								
		STD	0200	1357	3427	2573	0023642	0544	15051								
		STD	0250	1140	3415	2606	0020157	0652	14984								
	001	OBS	0282	1029	34100	2622			14949								
		STD	0300	0987	3408	2628	0018149	0748	14936								
	001	OBS	0372	0830	34030	2649			14889								
		STD	0400	0767	3403	2658	0015285	0815	14869								
		STD	0500	0585	3403	2683	0012928	1056	14814								
	001	OBS	0550	0520	34032	2691			14796								
		STD	0600	0491	3410	2699	0011357	1178	14793								
		STD	0700	0439	3423	2715	0009871	1284	14790								
	001	OBS	0725	0427	34256	2719			14789								
		STD	0800	0412	3429	2723	0009200	1379	14796								
		STD	0900	0392	3434	2729	0008717	1469	14805								
		STD	1000	0372	3438	2734	0008238	1554	14814								
		STD	1100	0352	3442	2740	0007748	1633	14822								
		STD	1200	0332	3447	2745	0007253	1709	14831								
		STD	1300	0312	3451	2751	0006754	1778	14840								
	001	OBS	T1304	0311	34516	2751			14840								

TABLE IX.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPE INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1205	WC	2958 N	13955 W		086	99	02	11	200	1968	N13	008	4389	15	34	4	2			5	5		0008

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		23	S01	200	200	150	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M X 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at.l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1872	3503	2513	0028393	0000	15186								
200		OBS	0000	1872	35030	2513			15186								
		STD	0010	1867	3503	2515	0028298	0028	15186								
200		OBS	0011	1866	35027	2515			15186								
		STD	0020	1866	3503	2515	0028317	0057	15188								
		STD	0030	1866	3503	2515	0028351	0085	15189								
200		OBS	0031	1866	35032	2515			15189								
		STD	0050	1867	3504	2515	0028376	0142	15193								
200		OBS	0052	1867	35040	2515			15193								
		STD	0075	1873	3507	2516	0028392	0213	15199								
200		OBS	0077	1874	35072	2516			15200								
		STD	0100	1869	3509	2518	0028262	0283	15202								
200		OBS	0103	1867	35087	2519			15202								
		STD	0125	1851	3504	2519	0028240	0354	15201								
		STD	0150	1785	3492	2527	0027627	0424	15184								
200		OBS	0156	1761	34878	2529			15178								
		STD	0200	1471	3442	2561	0024461	0554	15090								
200		OBS	T0210	1414	34337	2566			15072								
		STD	0250	1243	3423	2593	0021461	0669	15041								
		STD	0300	1063	3413	2618	0019064	0770	14965								
200		OBS	0313	1023	34106	2624			14952								
		STD	0400	0826	3403	2649	0016159	0946	14892								
200		OBS	T0412	0802	34021	2652			14885								
		STD	0500	0654	3404	2674	0013788	1096	14842								
		STD	0600	0527	3406	2692	0012118	1226	14807								
200		OBS	T0630	0498	34063	2696			14800								
		STD	0700	0458	3416	2708	0010616	1339	14797								
		STD	0800	0412	3428	2722	0009274	1439	14796								
200		OBS	0826	0403	34301	2725			14797								
		STD	0900	0389	3436	2731	0008498	1528	14804								
		STD	1000	0369	3442	2738	0007901	1610	14813								
200		OBS	1033	0363	34444	2740			14816								
		STD	1100	0350	3446	2743	0007453	1686	14822								
		STD	1200	0330	3449	2747	0007113	1759	14831								
		STD	1300	0309	3451	2751	0006750	1829	14839								
		STD	1400	0288	3453	2755	0006390	1894	14847								
		STD	1500	0267	3456	2758	0006018	1956	14855								
200		OBS	T1536	0259	34568	2760			14858								

TABLE IX.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDCTR	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR,1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1205	WC	29585N	13900 W		086	99	02	12	195	1968	N13	009	4389	14	26	3	2			1	6		0009

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		17	S05	159	189	161	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$x10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1867	3506	2517	0028056	0000	15185								
195		OBS	0000	1867	35060	2517			15185								
195		OBS	0009	1867	35060	2517			15186								
		STD	0010	1867	3506	2517	0028090	0028	15187								
		STD	0020	1867	3506	2517	0028095	0056	15188								
195		OBS	0028	1867	35067	2517			15190								
		STD	0030	1867	3507	2517	0028107	0084	15190								
195		OBS	0046	1866	35069	2518			15192								
		STD	0050	1867	3507	2518	0028168	0141	15193								
195		OBS	0068	1870	35062	2516			15197								
		STD	0075	1869	3507	2517	0028286	0211	15198								
195		OBS	0090	1868	35091	2519			15200								
		STD	0100	1867	3509	2519	0028158	0282	15202								
		STD	0125	1866	3510	2520	0028147	0352	15206								
195		OBS	0138	1865	35106	2521			15207								
		STD	0150	1780	3494	2529	0027365	0421	15183								
195		OBS	T0185	1556	34531	2551			15116								
		STD	0200	1474	3443	2561	0024451	0351	15091								
		STD	0250	1236	3416	2589	0021842	0667	15017								
195		OBS	0273	1145	34090	2601			14989								
		STD	0300	1065	3408	2614	0019465	0770	14965								
195		OBS	T0360	0905	34068	2640			14916								
		STD	0400	0811	3405	2654	0015764	0946	14887								
		STD	0500	0624	3402	2677	0013548	1093	14829								
195		OBS	T0539	0569	34001	2682			14814								
		STD	0600	0519	3406	2693	0011997	1220	14804								
		STD	0700	0454	3417	2709	0010494	1333	14795								
195		OBS	0715	0446	34185	2711			14795								
		STD	0800	0419	3428	2722	0009357	1432	14799								
		STD	0900	0390	3438	2733	0008362	1521	14805								
195		OBS	T0904	0389	34382	2733			14805								
		STD	1000	0363	3442	2738	0007868	1602	14810								
		STD	1100	0339	3445	2743	0007420	1678	14817								
		STD	1200	0317	3448	2748	0006984	1750	14825								
		STD	1300	0297	3452	2752	0006566	1818	14834								
195		OBS	T1382	0283	34544	2756			14842								

TABLE IX.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1205	WC	3014 N	13939 W		122	09	02	13	187	1968	N13	010	4572	13	20	5	L			8	2		0010

WATER: COLOR CODE	WATER: TRANS (m)	WIND: DIR.	WIND: SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		29	S10	047	206	179	8	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	S CODE
		STD	0000	1840	3493	2514	0028333	0000	15176								
187		OBS	0000	1840	34933	2514			15176								
187		OBS	0008	1840	34938	2514			15177								
		STD	0010	1840	3494	2515	0028318	0028	15177								
		STD	0020	1841	3496	2516	0028219	0057	15179								
187		OBS	0027	1841	34962	2516			15181								
		STD	0030	1841	3496	2516	0028245	0085	15181								
187		OBS	0043	1842	34969	2516			15184								
		STD	0050	1842	3497	2516	0028302	0141	15185								
187		OBS	0065	1842	34963	2516			15187								
		STD	0075	1842	3497	2516	0028393	0212	15189								
187		OBS	0084	1840	34969	2517			15190								
		STD	0100	1832	3496	2518	0028277	0283	15190								
		STD	0125	1819	3495	2520	0028158	0354	15190								
187		OBS	0125	1819	34946	2520			15190								
		STD	0150	1595	3454	2542	0026085	0421	15123								
187		OBS	T0165	1481	34350	2553			15087								
		STD	0200	1311	3420	2577	0022854	0544	15035								
187		OBS	0248	1121	34067	2603			14976								
		STD	0250	1115	3407	2604	0020330	0652	14974								
		STD	0300	0980	3405	2626	0018284	0748	14933								
187		OBS	T0330	0908	34033	2637			14912								
		STD	0400	0773	3399	2654	0015668	0918	14871								
		STD	0500	0623	3399	2674	0013757	1065	14829								
187		OBS	0500	0623	33986	2674			14829								
		STD	0600	0540	3406	2691	0012259	1195	14813								
187		OBS	0693	0477	34131	2703			14803								
		STD	0700	0473	3414	2705	0010945	1311	14803								
		STD	0800	0424	3424	2718	0009712	1415	14800								
187		OBS	0850	0403	34280	2723			14800								
		STD	0900	0384	3432	2728	0008736	1507	14801								
		STD	1000	0351	3439	2737	0007914	1590	14805								
		STD	1100	0327	3445	2744	0007267	1666	14812								
		STD	1200	0312	3449	2749	0006867	1737	14823								
		STD	1300	0304	3452	2752	0006618	1804	14837								
187		OBS	T1305	0304	34524	2752			14838								

TABLE X. Observed and interpolated oceanographic data for stations taken by USCGC TANEY at Ocean Station NOVEMBER, 18 February–10 March 1968, prepared from NODC Listing No. 31–1209 RT.

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° ′ 1/10	LONGITUDE ° ′ 1/10	DRIFT INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1209	RT	3018 N	13958 W		122	09	02	18	200	1968	N14	001	4440	04	28	4	5		X6	6	8	0001

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		17	S19	125	200	189	7	10	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	CODE
		STD	0000	1850	3496	2514	0028382	0000	15179								
200		OBS	0000	1850	34959	2514			15179								
		STD	0010	1852	3496	2513	0028464	0028	15181								
200		OBS	0013	1853	34962	2513			15182								
		STD	0020	1852	3496	2513	0028449	0057	15183								
		STD	0030	1850	3496	2514	0028476	0085	15184								
200		OBS	0035	1849	34954	2513			15184								
		STD	0050	1849	3495	2513	0028593	0142	15187								
200		OBS	0057	1847	34946	2513			15187								
		STD	0075	1836	3492	2514	0028584	0214	15187								
200		OBS	0087	1830	34913	2515			15187								
		STD	0100	1827	3491	2516	0028500	0285	15188								
200		OBS	0113	1823	34910	2516			15189								
		STD	0125	1744	3477	2525	0027680	0356	15166								
		STD	0150	1591	3451	2541	0026216	0423	15121								
200		OBS	0170	1480	34354	2554			15087								
		STD	0200	1330	3420	2573	0023223	0546	15041								
200		OBS	T0228	1212	34100	2589			15005								
		STD	0250	1161	3410	2598	0020901	0657	14991								
		STD	0300	1047	3410	2619	0019010	0757	14958								
200		OBS	0340	0959	34084	2633			14933								
		STD	0400	0831	3405	2650	0016087	0932	14894								
200		OBS	T0449	0730	34000	2661			14863								

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° ′ 1/10	LONGITUDE ° ′ 1/10	DRIFT INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT	NODC STATION NUMBER
31	1209	RT	2958 N	13946 W		086	99	02	19	198	1968	N14	002	4206	15	25	4	4		X1	4	1	0002

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		19	S10	179	200	189	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	CODE
		STD	0000	1856	3493	2510	0028722	0000	15180								
198		OBS	0000	1856	34932	2510			15180								
		STD	0010	1854	3492	2510	0028766	0029	15181								
198		OBS	0010	1854	34924	2510			15181								
		STD	0020	1855	3494	2511	0028695	0057	15183								
198		OBS	0029	1855	34946	2511			15185								
		STD	0030	1855	3495	2512	0028671	0086	15185								
198		OBS	0049	1856	34962	2514			15184								
		STD	0050	1856	3495	2514	0028542	0143	15184								
198		OBS	0073	1856	34972	2513			15193								
		STD	0075	1855	3497	2513	0028675	0215	15196								
198		OBS	0097	1844	34940	2514			15194								
		STD	0100	1826	3491	2516	0028502	0286	15188								
		STD	0125	1685	3470	2534	0026842	0356	15145								
198		OBS	0147	1564	34528	2547			15134								
		STD	0150	1554	3451	2549	0025416	0421	15104								
198		OBS	0198	1331	34219	2574			15048								
		STD	0200	1324	3422	2575	0025482	0541	15040								
		STD	0250	1139	3416	2607	0020173	0649	14984								
198		OBS	0295	1004	34107	2627			14942								
		STD	0300	0993	3411	2628	0018101	0745	14954								
198		OBS	0391	0814	34032	2651			14886								
		STD	0400	0795	3403	2654	0015574	0914	14880								
		STD	0500	0616	3405	2680	0013220	1058	14827								
198		OBS	T0591	0501	34058	2695			14795								
		STD	0600	0496	3407	2696	[illegible]	1183	14795								
		STD	0700	0445	3418	2711	0011013	1292	14792								
198		OBS	0783	0412	34255	2721			14795								
		STD	0800	0408	3428	2723	0010208	1399	14794								
		STD	0900	0386	3437	2732	0008369	1478	14803								
198		OBS	T0979	0368	34432	2739			14809								
		STD	1000	0363	3444	2747	0007706	1559	14811								
		STD	1100	0342	3448	2754	0007354	1644	14819								
		STD	1200	0321	3449	2758	0007001	1726	14827								
		STD	1300	0300	3451	2762	0006658	1774	14835								
		STD	1400	0280	3454	2765	0006289	1835	14843								
198		OBS	T1469	0266	34552	2768			14849								

TABLE X.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRFT INDC'TR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR, 1/10	YEAP	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1209	RT	2958 N	13958 W		086	99	02	20	196	1968	N14	003	4390	14	27	4	5		X5	6	6		0003

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		21	S20	179	222	211	7	14	

MESSENGR TIME OF DAY HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1873	3498	2509	0028766	0000	15186								
196		OBS	0000	1873	34982	2509			15186								
196		OBS	0008	1875	34986	2509			15188								
		STD	0010	1875	3499	2510	0028778	0029	15188								
		STD	0020	1872	3500	2511	0028677	0057	15189								
		STD	0030	1869	3501	2513	0028576	0086	15190								
196		OBS	0031	1869	35012	2513			15190								
196		OBS	0049	1871	35034	2514			15194								
		STD	0050	1871	3503	2514	0028511	0143	15194								
		STD	0075	1871	3504	2514	0028566	0215	15198								
196		OBS	0075	1871	35038	2514			15198								
196		OBS	0097	1866	35026	2515			15200								
		STD	0100	1854	3500	2516	0028518	0286	15197								
		STD	0125	1759	3482	2525	0027664	0356	15171								
196		OBS	0145	1682	34686	2533			15150								
		STD	0150	1664	3466	2536	0026738	0424	15145								
196		OBS	T0195	1491	34430	2557			15096								
		STD	0200	1461	3441	2562	0024326	0552	15087								
		STD	0250	1197	3420	2599	0020824	0665	15004								
196		OBS	0286	1055	34110	2618			14959								
		STD	0300	1026	3410	2623	0018653	0763	14951								
196		OBS	T0377	0871	34062	2645			14906								
		STD	0400	0815	3406	2653	0015794	0936	14888								
		STD	0500	0614	3403	2679	0013283	1081	14826								
196		OBS	T0547	0545	34023	2687			14805								
		STD	0600	0504	3408	2696	0011664	1206	14798								
		STD	0700	0443	3418	2711	0010289	1315	14791								
196		OBS	0738	0425	34217	2716			14790								
		STD	0800	0409	3428	2723	0009239	1413	14795								
		STD	0900	0384	3437	2732	0008366	1501	14802								
196		OBS	T0919	0379	34388	2734			14803								
		STD	1000	0360	3445	2741	0007575	1581	14809								
		STD	1100	0338	3450	2747	0007025	1654	14818								
		STD	1200	0318	3454	2752	0006567	1722	14826								
		STD	1300	0299	3456	2756	0006265	1786	14835								
		STD	1400	0282	3456	2757	0006129	1848	14845								
196		OBS	T1430	0277	34561	2758			14848								

TABLE X.—Continued

REFERENCE		SHIP CODE	LATITUDE	LONGITUDE	DRIFT INDCTR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER 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		TYPE	A	M	
31	1209	RT	2900 N	13953 W		086	99	02	21	196	1968	N14	004	4755	14	28	3	4		X1	3	5		0004

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		21	S14	220	233	222	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL
		STD	0000	2004	3522	2494	0030267	0000	15225								
197		OBS	0000	2004	35219	2494			15225								
197		OBS	0009	2004	35219	2494			15226								
		STD	0010	2002	3522	2494	0030253	0030	15226								
		STD	0020	1987	3522	2498	0029934	0060	15224								
197		OBS	0028	1979	35214	2500			15223								
		STD	0030	1979	3522	2500	0029740	0090	15223								
197		OBS	0046	1976	35221	2501			15225								
		STD	0050	1976	3522	2501	0029736	0150	15225								
197		OBS	0068	1967	35205	2502			15226								
		STD	0075	1965	3520	2502	0029724	0224	15226								
197		OBS	0091	1935	35176	2508			15220								
		STD	0100	1873	3507	2516	0028468	0297	15203								
		STD	0125	1716	3482	2536	0026674	0366	15159								
197		OBS	0138	1642	34707	2544			15137								
		STD	0150	1583	3462	2551	0025241	0431	15120								
197		OBS	0186	1419	34388	2569			15071								
		STD	0200	1359	3433	2577	0022843	0551	15053								
		STD	0250	1173	3418	2602	0020532	0659	14996								
197		OBS	0276	1093	34130	2613			14971								
		STD	0300	1041	3411	2621	0018834	0758	14956								
197		OBS	T0365	0899	34069	2641			14915								
		STD	0400	0822	3406	2653	0015863	0931	14891								
		STD	0500	0630	3404	2678	0013450	1078	14832								
197		OBS	T0545	0567	34030	2685			14814								
		STD	0600	0530	3409	2694	0011911	1204	14809								
		STD	0700	0473	3419	2709	0010574	1317	14803								
197		OBS	0759	0459	34214	2712			14803								
		STD	0800	0430	3428	2720	0009487	1417	14802								
		STD	0900	0399	3437	2731	0008542	1507	14808								
197		OBS	T0914	0396	34379	2732			14809								
197		OBS	13790	0294	34546	2755											

TABLE X.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDCTR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR, 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	209	RT	2826 N	14003 W		087	80	02	22	196	1968	N14	005	4750	19	29	4	4		X1	6	6		0005

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		17	512	207	206	194	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL
		STD	0000	1960	3514	2499	0029779	0000	15212								
196		OBS	0000	1960	35135	2499			15212								
		STD	0010	1961	3514	2499	0029795	0030	15214								
196		OBS	0015	1961	35145	2499			15215								
		STD	0020	1956	3515	2501	0029677	0060	15214								
		STD	0030	1947	3514	2503	0029497	0089	15213								
196		OBS	0039	1941	35144	2504			15213								
		STD	0050	1940	3516	2506	0029278	0148	15215								
196		OBS	0064	1935	35164	2508			15216								
		STD	0075	1926	3516	2509	0029032	0221	15215								
196		OBS	0098	1906	35142	2513			15213								
		STD	0100	1892	3511	2514	0028638	0293	15209								
		STD	0125	1723	3478	2531	0027125	0363	15160								
196		OBS	0128	1704	34750	2533			15155								
		STD	0150	1563	3455	2550	0025318	0428	15113								
196		OBS	0192	1345	34294	2577			15046								
		STD	0200	1318	3428	2582	0022404	0547	15038								
		STD	0250	1162	3419	2605	0020259	0654	14992								
196		OBS	0256	1145	34186	2608			14987								
		STD	0300	1043	3413	2622	0018721	0752	14957								
196		OBS	0384	0862	34054	2646			14903								
		STD	0400	0827	3405	2651	0016042	0925	14893								
		STD	0500	0642	3401	2674	0013855	1075	14837								
196		OBS	T0516	0618	34000	2676			14829								
		STD	0600	0549	3409	2692	0012150	1205	14817								
		STD	0700	0481	3419	2708	0010671	1319	14807								
196		OBS	T0770	0443	34252	2717			14803								
		STD	0800	0434	3428	2720	0009535	1420	14805								
		STD	0900	0404	3436	2733	0008675	1511	14810								
		STD	1000	0376	3442	2737	0007984	1594	14816								
196		OBS	1030	0368	34440	2740			14818								
		STD	1100	0359	3447	2744	0007386	1671	14822								
		STD	1200	0327	3451	2749	0006894	1743	14830								
196		OBS	T1283	0310	34523	2752			14837								
196		OBS	13360	0212	34612	2767											

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1209	RT	29555N	14003 W		087	90	02	23	197	1968	N14	006	4755	19	30	4	5		X1	6	7	0006

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		17	S16	193	194	184	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁵	Σ Δ D DYN. M. × 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1874	3495	2507	0024015	0001	15186								
197		OBS	0000	1874	34951	2507			15186								
		STD	0010	1874	3495	2507	0029056	0029	15187								
197		OBS	0015	1874	34947	2507			15188								
		STD	0020	1872	3494	2507	0029095	0058	15188								
		STD	0030	1869	3494	2507	0029096	0087	15184								
197		OBS	0040	1866	34932	2507			15190								
		STD	0050	1847	34[illegible]	2511	0028535	0145	15156								
197		OBS	0064	1828	34885	2512			15182								
		STD	0075	1827	3490	2514	0028547	0217	15184								
197		OBS	0099	1825	34927	2517			15187								
		STD	0100	1822	3491	2517	0028360	0286	15186								
		STD	0125	1692	3466	2524	0027291	0358	15149								
197		OBS	0129	1677	34615	2531			15143								
		STD	0150	1515	3434	2545	0025824	0424	15095								
197		OBS	0194	1261	33984	2570			15015								
		STD	0200	1240	3398	2574	0023145	0544	15007								
		STD	0250	1054	3396	2603	0020475	0655	14962								
197		OBS	T0256	1062	33982	2607			14955								
		STD	0300	0976	3400	2623	0018657	0752	14931								
197		OBS	0384	0816	34021	2651			14884								
		STD	0400	0781	3401	2655	0015437	0922	14874								
		STD	0500	0607	3399	2677	0013517	1069	14822								
197		OBS	T0523	0596	33989	2674			14819								
		STD	0600	0516	3409	2695	0011312	1194	14813								
		STD	0700	0448	3417	2710	0010423	1307	14794								
197		OBS	T0749	0422	34213	2716			14791								
		STD	0800	0411	3427	2721	0009437	1406	14795								
		STD	0900	0388	3437	2732	0008413	1494	14804								
		STD	1000	0366	3444	2743	0007718	1575	14812								
197		OBS	1008	0364	34443	2744			14813								
		STD	1100	0341	3448	2749	0007207	1650	14814								
		STD	1200	0318	3451	2751	0006789	1720	14826								
197		OBS	T1248	0309	34527	2752			1483[illegible]								
		STD	1300	0297	3453	2754	0006463	1786	14834								
		STD	1400	0273	3456	2758	0006082	1849	14843								
		STD	1500	0262	3457	2760	0005879	1909	14855								
		STD	1750	0225	3460	2765	0005385	2049	14881								
197		OBS	T1876	0216	346[illegible]	276[illegible]			14897								

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1209	RT	2050 N	14003 W		087	03	02	24	196	1968	N14	007	4000	15	28	4	4		41	6	6		0007

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		28	512	176	206	194	7	12	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	2010	3501	2476	0031947	0000	15224								
196		OBS	0000	2010	35008	2476			15224								
		STD	0010	1871	3502	2508	0028987	0030	15193								
196		OBS	0010	1871	3501[illegible]	2508			15193								
		STD	0020	1889	3502	2508	0028944	0059	15194								
		STD	0030	1887	3502	2509	0028916	0088	15195								
196		OBS	0030	1887	35022	2509			15195								
		STD	0050	1881	3503	2511	0028810	0145	15197								
		STD	0075	1873	3503	2513	0028688	0218	15198								
		STD	0100	1865	3503	2515	0028557	0290	15200								
196		OBS	0100	1865	35031	2515			15200								
		STD	0125	1678	3459	2535	0026757	0356	15146								
		STD	0150	1538	3446	2549	0025438	0424	15104								
196		OBS	0152	1529	34443	2550			15101								
		STD	0200	1412	3432	2566	0023979	0547	15070								
196		OBS	0204	1400	34309	2567			15067								
		STD	0250	1208	3420	2597	0021027	0668	15008								
		STD	0300	1037	3411	2621	0018766	0758	14955								
196		OBS	0304	1025	34103	2623			14951								
		STD	0400	0812	3403	2652	0015949	0933	14887								
196		OBS	0403	0806	34027	2652			14885								
		STD	0500	0639	3415	2678	0013480	1080	14834								
		STD	0600	0529	3405	2694	0011651	1207	14803								
196		OBS	T0611	0498	34065	2696			14797								
		STD	0700	0456	3416	2708	0010603	1319	14796								
		STD	0800	0410	3427	2721	00093[illegible]6	1419	14795								
196		OBS	0801	0409	34266	2722			14795								
		STD	0900	0389	3436	2731	0008498	1508	14804								
196		OBS	T0994	0369	34428	2738			14812								
		STD	1000	0366	3443	2739	0007816	1590	14813								
		STD	1100	0347	3446	2743	0007454	1666	14821								
		STD	1200	0326	3448	2747	0007031	1739	14829								
		STD	1300	0305	3451	2751	0006704	1808	14837								
		STD	1401	0283	3454	2755	0006309	1873	14845								
196		OBS	T1476	0267	34557	2758			14951								

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1209	RT	2959 N	14001 W		087	93	02	26	199	1968	N14	008	4270	19	18			5	71	0	3		0008

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		2	523	985	194	172	8	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1860	34900	2506	0029072	0000	15181								
199		OBS	0000	1860	34897	2506			15181								
		STD	0010	1867	3490	2506	0029098	0029	15182								
199		OBS	0015	1860	34899	2506			15183								
		STD	0020	1859	3489	2506	0029156	0058	15184								
		STD	0030	1858	3488	2505	0029258	0087	15185								
199		OBS	0039	1856	34863	2505			15186								
		STD	0050	1814	3480	2513	0028851	0146	15175								
199		OBS	0063	1780	34747	2515			15166								
		STD	0075	1779	3476	2516	0028430	0217	15166								
199		OBS	0087	1776	34770	2517			15171								
		STD	0100	1774	3477	2518	0028295	0286	15171								
		STD	0125	1727	3470	2524	0027798	0358	15160								
199		OBS	0136	1724	34692	2524			15160								
		STD	0150	1569	3442	2539	0026394	0426	15114								
199		OBS	0190	1344	34100	2563			15043								
		STD	0200	1295	3407	2570	0023497	0551	15028								
		STD	0250	1086	3398	2603	0020455	0661	14963								
199		OBS	T0253	1075	33972	2604			14959								
		STD	0300	0975	3399	2623	0018615	0758	14931								
199		OBS	0382	0811	34006	2650			14883								
		STD	0400	0772	3401	2656	0015528	0926	14871								
		STD	0500	0595	3401	2680	0012190	1072	14818								
199		OBS	T0511	0579	34114	2682			14813								
		STD	0600	0520	3411	2697	0011638	1197	14805								
		STD	0700	0465	3421	2711	0010329	1316	14805								
199		OBS	T0779	0429	34279	2720			14799								
		STD	0800	0423	3430	2723	0009256	1404	14801								
		STD	0900	0396	3437	2731	0008506	1473	14807								
		STD	1000	0370	3443	2739	0007839	1535	14813								
199		OBS	1033	0362	34448	2741			14816								
		STD	1100	0347	3447	2744	0007351	1651	14821								
		STD	1200	0325	3450	2748	0006944	1722	14829								
199		OBS	T1292	0306	34523	2752			14836								
		STD	1300	0304	3452	2752	0006589	1790	14837								
		STD	1400	0286	3454	2755	0006352	1855	14846								
		STD	1500	0269	3456	2757	0006122	1917	14856								
		STD	1750	0232	3458	2763	0005594	2064	14882								
199		OBS	T1944	0211	34602	2767			14907								

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPLICATE INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR, 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1200	RT	29577N	140058W		087	95	02	27	201	1968	N14	009	3340	14	28			7	X0		0		0000

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		29	507	183	211	194	7	14	

MESSENGER TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	CODE
		STD	0000	1914	3508	2506	0029069	0000	15198								
201		OBS	0000	1914	35077	2506			15198								
201		OBS	0009	1913	35080	2507			15200								
		STD	0010	1913	3508	2507	0029057	0029	15200								
		STD	0020	1911	3508	2507	0029029	0058	15201								
201		OBS	0028	1910	35083	2508			15202								
		STD	0030	1910	3508	2508	0028953	0087	15202								
201		OBS	0047	1910	35071	2507			15200								
		STD	0050	1899	3506	2509	0028489	0145	15202								
201		OBS	0070	1847	34987	2516			15197								
		STD	0075	1845	3498	2517	0028337	0217	15190								
201		OBS	0094	1838	34972	2517			15191								
		STD	0100	1814	3494	2520	0028119	0287	15186								
		STD	0125	1731	3480	2531	0027163	0357	15163								
201		OBS	0142	1664	34893	2538			15144								
		STD	0150	1626	3483	2542	0026111	0423	15133								
201		OBS	T0195	1417	34737	2564			15071								
		STD	0200	1390	3432	2573	0023535	0547	15063								
		STD	0250	1151	3419	2607	0020161	0656	14999								
201		OBS	0285	1022	34117	2625			14947								
		STD	0300	0940	3410	2634	0018052	0752	14938								
201		OBS	T0379	0833	34021	2648			14891								
		STD	0400	0788	3402	2654	0015659	0820	14877								
		STD	0500	0611	3402	2674	0012332	1005	14824								
201		OBS	T0558	0537	34022	2688			14804								
		STD	0600	0513	3406	2694	0011923	1191	14812								
		STD	0700	0463	3416	27	0010676	1364	14799								
201		OBS	0756	0438	34212	2714			14798								
		STD	0800	0421	3426	2727	0009528	1435	14799								
		STD	0900	0387	3436	2731	0008475	1495	14803								
201		OBS	T0944	0375	34401	2736			14806								
201		OBS	14270	0283	34551	2756											

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	DAY	HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	HGT	PER	SEA	WEATHER CODE	CLOUD CODES TYPE	AMT	NIL STATION NUMBER
31	1209	RT	3010 N	13953 W		122	09	02	28	061	1968	N14	110	4270	17	20				1	6	5	

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		20	511	173	194	189	7	14	

MESSENGR TIME OR HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁷	Σ Δ D DYN. M × 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l
		STD	0000	1843	3475	2499	0029734	0000	15174						
061		OBS	0006	1843	34750	2499			15174						
		STD	0010	1837	3475	2501	0029640	0030	15174						
061		OBS	0010	1837	34748	2501			15174						
		STD	0020	1833	3475	2502	0029564	0059	15175						
		STD	0030	1829	3475	2503	0029510	0089	15175						
061		OBS	0035	1827	34753	2504			15176						
		STD	0050	1796	3476	2511	0028733	0147	15169						
061		OBS	0055	1789	34760	2514			15169						
		STD	0075	1791	3482	2518	0028248	0218	15172						
061		OBS	0085	1792	34832	2519			15174						
		STD	0100	1786	3482	2519	0028196	0289	15173						
061		OBS	0109	1771	34816	2521			15172						
		STD	0125	1688	3465	2529	0027296	0358	15148						
		STD	0150	1556	3442	2542	0026114	0425	151[illegible]						
061		OBS	0164	1479	34305	2550			15085						
		STD	0200	1259	3404	2575	0023031	0546	15016						
061		OBS	0218	1168	33947	2585			14986						
		STD	0250	1080	3397	2603	0021425	0656	14967						
		STD	0300	0953	3400	2627	0018183	0754	14922						
061		OBS	0328	0889	34007	2638			14904						
		STD	0400	0745	3399	2658	0015264	0910	14860						
061		OBS	T0445	0670	33989	2668			14836						
		STD	0500	0608	3403	2680	0013234	1063	14823						
		STD	0600	0516	3410	2697	0011663	1187	14803						
061		OBS	T0653	0478	34142	2704			14797						
		STD	0700	0458	3419	2710	0010393	1297	14797						
		STD	0800	0420	3429	2722	0009294	1395	14799						
061		OBS	0874	0396	34346	2724			148[illegible]						
		STD	0900	0390	3436	2731	008851	1485	14804						
		STD	1000	0368	3442	2738	007789	1567	14812						
061		OBS	T1096	0347	34471	2744			14820						
		STD	1100	0346	3447	2744	0007325	1643	14821						
		STD	1200	0326	3449	2748	0007032	1715	14829						
		STD	1300	0306	3451	2751	0006730	1784	14837						
		STD	1400	0287	3453	2754	0006437	1849	14846						
		STD	1500	0269	3455	2757	0006144	1913	14856						
061		OBS	T1659	0243	34574	2762			14872						

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	4249	RT	[illegible] N	13453 W		122	04	02	29	1900	1968	N14	011	4755	15	26			3	X5	3	6		0011

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		26	518	179	169	066	7	14	

MESSENGR TIME OF HP 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–X10⁷	ΣΔD DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	SCC
		STD	0000	1846	34779	2501	0029544	0000	15176								
190		OBS	0000	1846	34786	2501			15176								
		STD	0010	1849	3478	2500	0029685	0030	15178								
190		OBS	0012	1850	34781	2500			15179								
		STD	0020	1848	3476	2499	0029847	0059	15174								
		STD	0030	1842	3474	2499	0029883	0089	15179								
190		OBS	0035	1838	34735	2496			15178								
		STD	0050	1813	3476	2506	0029259	0148	15176								
190		OBS	0057	1812	34760	2508			15175								
		STD	0075	1806	3480	2512	0028744	0221	15177								
190		OBS	0091	1801	34821	2515			15178								
		STD	0100	1798	3483	2516	0028451	0292	15178								
190		OBS	0115	1794	34838	2516			15180								
		STD	0125	1728	3470	2524	0027821	0363	15161								
		STD	0150	1570	3442	2539	0026416	0431	15113								
190		OBS	0174	1426	34203	2554			15064								
		STD	0200	1269	3407	2575	0023001	0554	15019								
190		OBS	T0233	1106	33949	2587			14967								
		STD	0250	1064	3397	2606	0020149	0662	14955								
		STD	0300	0949	3400	2628	0018118	0758	14941								
190		OBS	0348	0853	34019	2644			14894								
		STD	0400	0769	3399	2655	0015610	0826	14870								
190		OBS	T0467	0673	33978	2667			14843								
		STD	0500	0633	3401	2675	0013712	1073	14833								
		STD	0600	0531	3411	2696	0011775	1200	14810								
190		OBS	0690	0462	34184	2709			14797								
		STD	0700	0457	3419	2710	0010382	1311	14797								
		STD	0800	0415	3427	2721	0009384	1410	14797								
190		OBS	0895	0384	34338	2730			14801								
		STD	0900	0383	3434	2730	0008576	1500	14801								
		STD	1000	0360	3441	2738	0007870	1582	14809								
190		OBS	T1078	0349	34450	2743			14818								
190		OBS	15000	0249	34572	2761											

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° '1/10	LONGITUDE ° '1/10	DUPE INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME IGMT MO	STATION TIME IGMT DAY	STATION TIME IGMT HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1209	RT	29565N	14006 W		087	90	03	01	189	1968	N14	012	4572	15	32	5	5		X1		3	0012

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	512	254	189	161	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	CCC
		STD	0000	1885	34998	2506	0029106	0000	15189								
189		OBS	0000	1885	34975	2506			15189								
		STD	0010	1888	3497	2505	0029270	0029	15191								
189		OBS	0010	1888	34967	2505			15191								
		STD	0020	1882	3496	2506	0029189	0058	15191								
		STD	0030	1874	3496	2507	0029066	0038	15191								
189		OBS	0034	1870	34956	2508			15190								
		STD	0050	1849	3491	2510	0028883	0145	15186								
189		OBS	0053	1846	34904	2510			15186								
		STD	0075	1829	3490	2514	0028563	0217	15184								
189		OBS	0082	1821	34893	2516			15183								
189		OBS	0096	1800	34854	2518			15179								
		STD	0100	1777	3481	2520	0028075	0288	15172								
		STD	0125	1642	3456	2533	0026898	0357	15133								
		STD	0150	1519	3435	2545	0025836	0423	15106								
189		OBS	0158	1482	34297	2549			15095								
		STD	0200	1308	3407	2568	0023747	0547	15062								
189		OBS	T0212	1263	34027	2573			15019								
		STD	0250	1140	3405	2598	0020831	0658	14983								
		STD	0300	1000	3406	2624	0018512	0757	14941								
189		OBS	0314	0965	34063	2630			14930								
		STD	0400	0802	34 1	2651	0015947	0829	14885								
189		OBS	T0418	0771	34005	2656			14874								
		STD	0500	0640	3402	2675	0013732	1077	14836								
		STD	0600	0519	3407	2694	0011922	1206	14804								
189		OBS	T0618	0502	34082	2697			14800								
		STD	0700	0454	3418	2710	0010420	1317	14795								
		STD	0800	0403	3428	2723	0009228	1415	14794								
189		OBS	0822	0400	343 3	2725			14795								
		STD	0900	0377	3437	2733	0008284	1503	14799								
		STD	1000	0362	3447	2739	0007746	1583	14810								
189		OBS	T1023	0360	34445	2741			14813								
189		OBS	15270	0262	34564	2759											

TABLE X.—Continued

Reference (Ctry code / ID. No.)	Ship code	Latitude ° ′ 1/10	Longitude ° ′ 1/10	Drift indctr	Marsden square 10°	Marsden square 1°	Station time (GMT) Mo	Day	Hr. 1/10	Year	Originator's cruise no.	Originator's station number	Depth to bottom	Max. depth of s'mpl's	Wave observations Dir	Hgt	Per	Sea	Weather code	Cloud codes Type	Amt		NODC station number
311[illegible]	[illegible]	[illegible]38N	139°22W		122	[illegible]	03	02	186	1968	N14	013	4755	16	18			2	X0		0		0013

Water color code	Water trans. (m)	Wind dir	Wind speed or force	Barometer (mbs)	Air temp. °C dry bulb	Air temp. °C wet bulb	Vis code	No. obs. depths	Special observations
		18	014	240	194	183	7	14	

Messengr time Hr. 1/10	Cast no.	Card type	Depth (m)	T °C	S ‰	Sigma-T	Specific volume anomaly-X10⁷	ΣΔD dyn. m. x 10³	Sound velocity	O₂ ml/l	PO₄-P µg-at/l	Total-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH
		STD	0000	1866	3490	2505	0029193	0000	15183							
186		OBS	0000	1866	34900	2505			15183							
		STD	0010	1866	3490	2505	0029264	0029	15194							
186		OBS	0019	1866	34895	2505			15184							
		STD	0020	1866	3490	2505	0029271	0058	15186							
		STD	0030	1864	3490	2505	0029269	0088	15187							
186		OBS	0034	1864	34899	2505			15188							
		STD	0050	1864	3489	2505	0029373	0146	151[illegible]							
186		OBS	0054	1861	34890	2505			15190							
		STD	0075	1822	3489	2514	0028542	0219	15182							
186		OBS	0084	18[illegible]7	34956	2516			15179							
		STD	0100	1744	3482	2517	00284[illegible]	0291	15177							
186		OBS	01[illegible]	1777	347[illegible]	2515			15172							
		STD	0125	1653	3455	2530	0027215	0359	15136							
		STD	0150	14[illegible]	3427	2545	[illegible]	0426	15085							
186		OBS	0163	1410	34154	2553			150[illegible]							
		STD	[illegible]	1254	3400	2573	00232[illegible]	0545	150[illegible]							
186		OBS	0218	1186	33954	2582			14992							
		STD	0250	1101	3395	2601	0020643	0658	14966							
		STD	0300	[illegible]	3412	2625	0018402	0756	14935							
185		OBS	0326	0923	34141	2625			14917							
		STD	0400	0784	3399	2653	0015829	0927	14875							
186		OBS	T0438	0721	33986	2661			14857							
		STD	0500	0630	3403	2677	0013524	1074	14832							
		STD	0600	0516	3410	2697	0011663	1200	14803							
186		OBS	T0647	0477	34137	2704			14796							
		STD	0700	0462	3419	271	0010441	1310	14799							
		STD	0800	0433	3428	2721	0009521	1410	14805							
186		OBS	0871	0411	34332	2726			14808							
		STD	0900	0403	3435	2729	0008737	1511	14510							
		STD	1000	0374	3442	2737	0007960	1585	14815							
186		OBS	T1084	0351	34464	2742			14820							
		STD	1100	0347	3447	2744	0007372	1661	14821							
		STD	1200	0323	3449	2748	0007017	1733	14828							
		STD	1300	0301	3451	2751	0006684	1802	14835							
		STD	1400	0283	3453	2754	0006390	1867	14845							
		STD	1500	0266	3455	2757	0006109	1930	14854							
186		OBS	T154[illegible]	0248	34573	2761			14871							

TABLE X.—Continued

Reference: Ctry code	Reference: ID No.	Ship code	Latitude ° 1/10	Longitude ° 1/10	Drift indctr	Marsden square 10°	Marsden square 1°	Station time (GMT) Mo	Day	Hr. 1/10	Year	Originator's cruise no.	Originator's station number	Depth to bottom	Max depth of smpl's	Wave observations: Dir	Hgt	Per	Sea	Weather code	Cloud codes: Type	Amt	NODC station number
31	1209	RT	3013 N	13950 W		122	09	03	03	185	1968	N14	014	4207	18	30			2	[illegible]	3	5	[illegible]

Water: Color code	Water: Trans. (m)	Wind: Dir.	Wind: Speed or force	Barometer (mbs)	Air temp. °C: Dry bulb	Air temp. °C: Wet bulb	Vis code	No. obs. depths	Special observations
		20	S17	227	18[illegible]	179	8	14	

Messengr time or HR 1/10	Cast no.	Card type	Depth (m)	T °C	S ‰	Sigma-T	Specific volume anomaly ×10⁷	ΣΔD dyn m ×10³	Sound velocity	O_2 ml/l	PO_4–P µg-at/l	Total-P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l
		STD	0000	1857	3481	2501	0029610	0000	15179						
185		OBS	0000	1857	34813	2501			15179						
		STD	0010	1857	3482	2501	0029629	0030	15181						
185		OBS	0013	1857	34816	2501			15181						
		STD	0020	1856	3481	2501	0029575	0059	15182						
		STD	0030	1850	3481	2502	0029566	0089	15182						
185		OBS	0036	1845	34821	2503			15181						
		STD	0050	1821	3473	2507	0029154	0148	15177						
185		OBS	0058	1811	34770	2509			15175						
		STD	0075	1806	3482	2514	00286[illegible]	02[illegible]	15177						
185		OBS	0089	1802	34826	2515			15176						
		STD	0100	1787	3479	2516	0028454	0291	15175						
185		OBS	0116	1747	34720	2521			15165						
		STD	0125	1697	3464	2526	0027550	0361	15151						
		STD	0150	1561	3443	2542	0026149	0428	15111						
185		OBS	0173	1436	34261	2556			15073						
		STD	0200	1275	3410	2577	00[illegible]	0551	15[illegible]						
185		OBS	T0234	1111	33950	2596			14969						
		STD	0250	1082	3397	2603	0020459	0659	14961						
		STD	0300	0990	3400	2621	0018764	0757	14936						
185		OBS	0358	0878	34022	2641			14905						
		STD	0400	0782	3400	2654	0015726	0930	14875						
185		OBS	T0461	0665	33992	2669			148[illegible]						
		STD	0500	0521	3403	2678	0013405	1076	14828						
		STD	0600	0525	3411	2696	00117[illegible]	12[illegible]1	14807						
185		OBS	T0687	0463	34187	2709			14[illegible]7						
		STD	0700	0459	3420	2711	0010331	1311	14795						
		STD	0800	0428	3432	2722	0009315	14[illegible]	148[illegible]						
		STD	0900	0398	3437	2731	000[illegible]852	14[illegible]	14816						
185		OBS	0921	0392	34387	2733			148[illegible]						
		STD	1000	0369	3442	2738	0007901	1581	1481[illegible]						
		STD	1100	0343	3446	2744	0007378	1657	14819						
185		OBS	T1159	0328	34486	2747			14823						
		STD	1200	0318	3449	2749	0006914	1729	14826						
		STD	1300	0296	3451	2752	0006591	1798	1483[illegible]						
		STD	1400	0277	3453	2755	0006298	1861	1484[illegible]						
		STD	1500	0259	3455	2758	0006012	1922	14851						
		STC	1750	0226	3459	2765	0005425	2065	1485[illegible]						
185		OBS	1782	0223	34598	2765			14884						

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT # INDIC #	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1209	RT	2953 N	13942 W		086	99	03	04	189	1968	N14	015	4572	09	30	7	3		X1	8	3		0015

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		32	518	264	172	150	8	12	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-E10⁷	ΣΔD DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at l	NO₃-N µg-at l	SiO₄-Si µg-at l	pH	QUAL CODE
		STD	0000	1842	3480	2503	0029369	0000	15175								
189		OBS	0000	1842	34797	2503			15175								
		STD	0010	1844	3481	2503	0029392	0029	15177								
189		OBS	0010	1844	34805	2503			15177								
		STD	0020	1844	3480	2503	0029433	0059	15179								
		STD	0030	1844	3480	2503	0029473	0088	15180								
189		OBS	0030	1844	34803	2503			15180								
		STD	0050	1817	3479	2509	0028994	0147	15176								
189		OBS	0050	1817	34790	2509			15176								
		STD	0075	1802	3480	2513	0028651	0219	15175								
189		OBS	0081	1800	34809	2514			15176								
		STD	0100	1802	3483	2516	0028506	0290	15180								
189		OBS	0105	1802	34835	2516			15181								
		STD	0125	1677	3460	2528	0027389	0360	15144								
		STD	0150	1531	3436	2543	0026010	0427	15100								
189		OBS	0150	1531	34361	2543			15100								
		STD	0200	1270	3402	2572	0023357	0550	15019								
189		OBS	T0200	1270	34024	2572			15019								
		STD	0250	1103	3405	2605	0020237	0659	14970								
		STD	0300	0961	3405	2630	0017944	0755	14926								
189		OBS	0303	0953	34052	2631			14924								
		STD	0400	0752	3400	2658	0015290	0921	14863								
189		OBS	T0402	0748	33995	2658			14862								
		STD	0500	0637	3405	2678	0013470	1065	14835								
		STD	0600	0545	3412	2695	0011677	1191	14815								
		STD	0700	0472	3420	2709	0010488	1303	14803								
189		OBS	0744	0447	34242	2716			14801								
		STD	0800	0421	3430	2723	0009232	1402	14800								
189		OBS	T0861	0399	34357	2730			14802								

TABLE X.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° ' 1/10		10°	1°	MO	DAY	HR. 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1209	RT	29498N	13955oW		086	99	03	05	186	1968	N14	016	4206	14	26			2	X2	o	8		0016

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		21	S04	264	189	144	8	13	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH
		STD	0000	1849	3487	2507	0028991	0000	15178							
186		OBS	0000	1849	34872	2507			15178							
186		OBS	0009	1852	34870	2506			15180							
		STD	0010	1852	3487	2506	0029110	0029	15180							
		STD	0020	1852	3488	2507	0029108	0058	15182							
186		OBS	0028	1852	34878	2507			15183							
		STD	0030	1852	3488	2507	0029120	0087	15183							
186		OBS	0047	1851	34877	2507			15186							
		STD	0050	1851	3488	2507	0029175	0146	15186							
186		OBS	0072	1853	34879	2507			15191							
		STD	0075	1848	3487	2507	0029233	0219	15189							
186		OBS	0095	1805	34816	2514			15180							
		STD	0100	1786	3478	2516	0028503	0291	15175							
		STD	0125	1690	3462	2527	0027537	0361	15148							
186		OBS	0145	1612	34499	2535			15126							
		STD	0150	1592	3446	2537	0026602	0426	15121							
186		OBS	T0196	1404	34202	2558			15065							
		STD	0200	1381	3419	2562	0024304	0556	15058							
		STD	0250	1132	3410	2604	0020382	0667	14980							
186		OBS	0287	0990	34050	2625			14935							
		STD	0300	0959	3404	2629	0017985	0763	14926							
186		OBS	T0378	0795	34000	2652			14876							
		STD	0400	0758	3401	2658	0015303	0930	14866							
		STD	0500	0614	3405	2681	0013164	1072	14826							
186		OBS	T0560	0548	34085	2692			14810							
		STD	0600	0523	3412	2697	0011601	1196	14807							
		STD	0700	0465	3421	2711	0010329	1306	14800							
186		OBS	0741	0444	34249	2716			14799							
186		OBS	T1405	0275	34553	2757			14842							

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1209	RT	3003 N	139415W		122	09	03	06	193	1968	N14	017	4755	19	31	3	4		X1	6	7		0017

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		26	S18	220	194	161	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY—x10⁸	ΔD DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at l	TOTAL-P µg-at/l	NO₂-N µg-at l	NO₃-N µg-at l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1834	3481	2506	0029092	0000	15172								
193		OBS	0000	1834	34809	2506			15172								
		STD	0010	1836	3481	2506	0029168	0029	15175								
193		OBS	0014	1837	34812	2506			15176								
		STD	0020	1837	3481	2506	0029208	0058	15177								
		STD	0040	1836	3481	2506	0029225	0088	15178								
193		OBS	0037	1834	34811	2506			15179								
		STD	0050	1830	3481	2507	0029157	0146	15180								
193		OBS	0061	1823	34803	2508			15179								
		STD	0075	1811	3480	2511	0028870	0218	15178								
193		OBS	0093	1781	34794	2518			15172								
		STD	0100	1766	3476	2519	0028182	0290	15168								
193		OBS	0122	1700	34645	2526			15151								
		STD	0125	1661	3461	2528	0027406	0359	15146								
		STD	0150	1532	3434	2541	0026184	0426	15100								
193		OBS	0183	1352	34101	2561			15045								
		STD	0200	1263	3406	2576	0022960	0549	15017								
193		OBS	T0244	1067	33978	2606			14955								
		STD	0250	1052	3398	2609	0019871	0656	14951								
		STD	0300	0934	3399	2629	0017951	0751	14916								
193		OBS	0371	0790	34001	2653			14873								
		STD	0400	0741	3400	2660	0015126	0916	14859								
		STD	0500	0601	3400	2679	0013342	1058	14820								
193		OBS	T0501	0600	34003	2679			14820								
		STD	0600	0523	3413	2698	0011527	1183	14807								
		STD	0700	0460	3424	2714	0010047	1291	14799								
193		OBS	T0753	0433	34291	2721			14797								
		STD	0800	0418	3433	2726	0008974	1386	14799								
		STD	0900	0388	3439	2734	0008264	1472	14804								
		STD	1000	0361	3445	2741	0007586	1551	14810								
193		OBS	1009	0359	34453	2741			14811								
		STD	1100	0334	3449	2746	0007110	1625	14818								
		STD	1200	0318	3452	2751	0006715	1694	14826								
193		OBS	T1270	0304	34544	2754			14832								
		STD	1300	0298	3455	2755	0006349	1759	14835								
		STD	1400	0281	3456	2757	0006124	1822	14844								
		STD	1500	0265	3457	2760	0005914	1882	14854								
		STD	1750	0232	3460	2765	0005447	2024	14883								
193		OBS	T1905	0217	34616	2767			14903								

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10'	LONGITUDE ° 1/10'	DRIFT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1209	RT	2957 N	13944 W		086	99	03	07	185	1968	N14	018	4700	15	30	4	4		X1	3	6	0018

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		29	S12	200	200	178	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. X 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1846	3484	2506	0029123	0000	15176								
185		OBS	0000	1846	34844	2506			15176								
185		OBS	0008	1848	34850	2506			15178								
		STD	0010	1847	3485	2506	0029146	0029	15178								
		STD	0020	1844	3485	2507	0029108	0058	15179								
		STD	0030	1841	3485	2507	0029068	0087	15180								
185		OBS	0031	1841	34850	2507			15180								
185		OBS	0049	1839	34840	2507			15182								
		STD	0050	1838	3484	2507	0029122	0146	15182								
		STD	0075	1813	3486	2515	0028496	0218	15179								
185		OBS	0076	1812	34858	2515			15179								
185		OBS	0098	1805	34858	2517			15181								
		STD	0100	1791	3483	2518	0028257	0289	15177								
		STD	0125	1632	3454	2534	0026822	0357	15130								
185		OBS	0146	1516	34343	2545			15095								
		STD	0150	1498	3431	2546	0025686	0423	15089								
185		OBS	T0196	1303	34071	2569			15030								
		STD	0200	1288	3407	2572	0023355	0546	15026								
		STD	0250	1115	3407	2604	0020315	0655	14974								
185		OBS	0297	0974	34065	2629			14931								
		STD	0300	0966	3406	2630	0017952	0750	14928								
185		OBS	T0391	0757	34000	2657			14864								
		STD	0400	0743	3400	2660	0015139	0916	14860								
		STD	0500	0604	3404	2681	0013092	1057	14822								
185		OBS	0590	0514	34076	2695			14801								
		STD	0600	0509	3409	2697	0011651	1181	14800								
		STD	0700	0466	3420	2710	0010415	1291	14801								
185		OBS	0790	0431	34290	2721			14802								
		STD	0800	0428	3430	2722	0009315	1390	14803								
		STD	0900	0396	3437	2731	0008505	1479	14807								
185		OBS	T0992	0369	34429	2739			14812								
		STD	1000	0367	3443	2739	0007797	1560	14812								
		STD	1100	0340	3446	2744	0007358	1636	14818								
		STD	1200	0317	3448	2748	0006969	1708	14825								
		STD	1300	0296	3451	2752	0006591	1776	14833								
		STD	1400	0277	3454	2756	0006232	1840	14842								
		STD	1500	0262	3457	2759	0005915	1900	14853								
185		OBS	T1513	0260	34568	2760			14854								

TABLE X.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DUPE INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1209	RT	2952 N	13940 W		386	99	03	08	187	1968	N14	019	3658	18	33	4	4		X1	8	7		0019

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		33	S13	220	211	194	8	14	

MESSENGR TIME OF HR. T. 10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-X10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O2 ml/l	PD4-P µg-at/l	TOTAL-P µg-at/l	NO2-N µg-at/l	ND3-N µg-at/l	SiD4-Si µg-at/l	pH	SCC
		STD	0000	1852	3486	2505	0029149	0000	15178								
187		OBS	0000	1852	34860	2505			15178								
		STD	0010	1854	3486	2505	0029223	0029	15180								
187		OBS	0014	1855	34862	2505			15181								
		STD	0020	1855	3486	2505	0029252	0058	15182								
		STD	0030	1854	3487	2505	0029247	0088	15184								
187		OBS	0037	1854	34871	2506			15185								
		STD	0050	1854	3488	2506	0029220	0146	15187								
187		OBS	0059	1854	34884	2507			15189								
		STD	0075	1832	3487	2511	0028852	0219	15185								
187		OBS	0090	1804	34834	2515			15179								
		STD	0100	1784	3480	2518	0028311	0290	15174								
187		OBS	0116	1737	34727	2524			15162								
		STD	0125	1684	3462	2528	0027401	0360	15147								
		STD	0150	1539	3438	2543	0026042	0427	15103								
187		OBS	0174	1403	34190	2557			15061								
		STD	0200	1246	3406	2579	0022640	0548	15011								
187		OBS	T0230	1098	33959	2599			14963								
		STD	0250	1052	3398	2609	0019871	0655	14951								
		STD	0300	0943	3401	2629	0017948	0749	14919								
187		OBS	0344	0852	34023	2645			14893								
		STD	0400	0739	3400	2660	0015104	0914	14858								
187		OBS	T0457	0644	33996	2672			14830								
		STD	0500	0600	3404	2682	0013055	1055	14820								
		STD	0600	0512	3413	2699	0011391	1177	14802								
187		OBS	T0682	0458	34204	2711			14794								
		STD	0700	0452	3422	2713	0010099	1285	14795								
		STD	0800	0421	3430	2723	0009232	1382	14800								
		STD	0900	0391	3437	2732	0008448	1470	14805								
187		OBS	0916	0387	34383	2733			14806								
		STD	1000	0365	3443	2739	0007781	1551	14811								
		STD	1100	0340	3449	2746	0007122	1626	14818								
187		OBS	T1151	0328	34508	2749			14822								
		STD	1200	0317	3452	2750	0006740	1695	14826								
		STD	1300	0297	3453	2753	0006470	1761	14834								
		STD	1400	0278	3454	2756	0006200	1824	14843								
		STD	1500	0262	3456	2759	0005967	1885	14853								
		STD	1750	0231	3459	2764	0005472	2028	14882								
187		OBS	T1768	0229	34596	2765			14884								

TABLE XI. Observed and interpolated oceanographic data for stations taken by USCGC PONTCHARTRAIN at Ocean Station NOVEMBER, 10–31 March 1968, prepared from NODC Listing No. 31-1249 PW.

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	UNIT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT.	WAVE OBSERVATIONS PER.	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT.		NODC STATION NUMBER
31	1249	PW	2959 N	13955 W		086	99	03	10	009	1968	N15	001	4114	15	15			2	X1	6	3		0001

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		13	S12	261	194	161	7	14	

MESSENGR. TIME OF HR. T. 10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY $\times 10^7$	$\Sigma\Delta D$ DYN. M. $\times 10^3$	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCO
		STD	0000	1850	3480	2501	0029530	0000	15177								
009		OBS	0000	1850	34801	2501			15177								
		STD	0010	1840	3480	2504	0029348	0029	15176								
009		OBS	0010	1840	34798	2504			15176								
		STD	0020	1833	3480	2505	0029222	0059	15175								
009		OBS	0029	1827	34795	2507			15175								
		STD	0030	1826	3479	2507	0029141	0088	15175								
009		OBS	0048	1819	34786	2508			15176								
		STD	0050	1819	3479	2508	0029071	0145	15176								
009		OBS	0072	1819	34787	2508			15180								
		STD	0075	1814	3478	2509	0029079	0219	15179								
009		OBS	0096	1768	34727	2516			15168								
		STD	0100	1754	3470	2517	0028339	0291	15164								
		STD	0125	1654	3452	2527	0027456	0365	15136								
009		OBS	0147	1548	34367	2540			15105								
		STD	0150	1527	3434	2542	0026078	0427	15099								
009		OBS	T0198	1240	34046	2579			15009								
		STD	0200	1234	3405	2580	0022518	0549	15007								
		STD	0250	1093	3406	2608	0019996	0655	14966								
009		OBS	0295	0984	34070	2627			14934								
		STD	0300	0974	3407	2629	0018009	0750	14932								
009		OBS	0392	0806	34013	2651			14883								
		STD	0400	0790	3401	2654	0015740	0919	14878								
		STD	0500	0622	3403	2678	0013455	1065	14829								
009		OBS	T0589	0519	34035	2691			14805								
		STD	0600	0515	3405	2693	0012021	1192	14802								
		STD	0700	0475	3418	2708	0010673	1306	14804								
009		OBS	0781	0445	34259	2717			14806								
		STD	0800	0438	3428	2720	0009582	1407	14807								
		STD	0900	0402	3435	2729	0008725	1498	14809								
009		OBS	T0977	0376	34387	2735			14812								
009		OBS	1455Q	0272	34551	2757											

TABLE XI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICTR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1249	PW	3005 N	13952 W		122	09	03	10	197	1968	N15	002	4846	14	17			3	X1	6	4		0002

WATER		WIND		BARO-METER (mbs)	AIR TEMP °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		18	S18	234	228	206	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at l	SiO₄-Si µg-at./	pH	SDC
		STD	0000	1834	3483	2508	0028939	0000	15173								
197		OBS	0000	1834	34830	2508			15173								
197		OBS	0008	1831	34831	2508			15173								
		STD	0010	1830	3483	2509	0028871	0029	15173								
		STD	0020	1828	3483	2509	0028857	0058	15174								
197		OBS	0027	1827	34831	2509			15175								
		STD	0030	1827	3483	2510	0028859	0087	15175								
197		OBS	0043	1827	34838	2510			15176								
		STD	0050	1825	3484	2510	0028857	0144	15178								
197		OBS	0067	1821	34830	2511			15180								
		STD	0075	1803	3481	2514	0028602	0216	15176								
197		OBS	0085	1773	34779	2519			15168								
		STD	0100	1689	3464	2528	0027290	0286	15144								
		STD	0125	1577	3447	2541	0026129	0353	15112								
197		OBS	0127	1569	34459	2542			15110								
		STD	0150	1516	3440	2549	0025408	0417	15096								
197		OBS	T0169	1458	34337	2557			15080								
		STD	0200	1283	3421	2584	0022234	0536	15026								
		STD	0250	1072	3401	2607	0020015	0642	14958								
197		OBS	0251	1069	34003	2607			14957								
		STD	0300	0975	3405	2627	0018173	0737	14932								
197		OBS	T0329	0922	34065	2637			14917								
		STD	0400	0785	3406	2658	0015304	0905	14877								
197		OBS	0491	0649	34061	2677			14839								
		STD	0500	0641	3407	2679	0013375	1048	14837								
		STD	0600	0557	3414	2695	0011882	1174	14821								
197		OBS	0668	0509	34193	2705			14813								
		STD	0700	0490	3422	2709	0010560	1287	14811								
		STD	0800	0438	3423	2720	0009508	1387	14807								
197		OBS	T0858	0411	34332	2727			14806								
		STD	0900	0393	3436	2731	0006545	1477	14806								
		STD	1000	0356	3441	2738	0007824	1559	14807								
		STD	1100	0328	3446	2745	0007204	1634	14813								
		STD	1200	0307	3449	2749	0006809	1704	14821								
		STD	1300	0294	3452	2753	0006502	1771	14833								
197		OBS	T1357	0290	34528	2754			14840								

TABLE XI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDCTR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° ' 1/10	° ' 1/10		10°	1°	MO	DAY	HR 1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1249	PW	30027N	139524W		122	09	03	11	179	1968	N15	003	4755	18	29			3	71	5	6		0003

WATER			WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)		DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
			29	S20	186	189	172	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SIO
		STD	0000	1837	3484	2508	0028931	0000	15174								
179		OBS	0000	1837	34841	2508			15174								
		STD	0010	1836	3484	2509	0028955	0029	15175								
179		OBS	0014	1836	34840	2508			15176								
		STD	0020	1836	3484	2508	0028981	0058	15177								
		STD	0030	1834	3484	2508	0028967	0087	15178								
179		OBS	0037	1832	34835	2509			15178								
		STD	0050	1826	3483	2509	0028946	0145	15179								
179		OBS	0059	1820	34820	2510			15178								
		STD	0075	1803	3482	2515	0028496	0217	15176								
179		OBS	0090	1786	34826	2519			15173								
		STD	0100	1728	3472	2525	0027596	0287	15157								
179		OBS	0115	1629	34550	2535			15128								
		STD	0125	1600	3451	2539	0026337	0354	15100								
		STD	0150	1492	3438	2553	0025049	0415	15088								
179		OBS	0177	1365	34250	257[illegible]			15055								
		STD	0200	1225	3413	2584	0021735	0535	15005								
179		OBS	T0234	1059	34010	2610			14951								
		STD	0250	1030	3401	2615	0019263	0638	14943								
		STD	0300	0942	3402	2630	0017858	0731	14919								
179		OBS	0351	0857	34028	2645			14896								
		STD	0400	0779	3404	2657	0015386	0897	14874								
179		OBS	T0459	0696	34062	2671			14852								
		STD	0500	0651	3409	2679	0013396	1041	14841								
		STD	0600	0554	3415	2696	0011799	1167	14819								
		STD	0700	0479	3421	2709	0010529	1278	14806								
179		OBS	T0707	0475	34210	2710			14806								
		STD	0800	0435	3430	2721	0009398	1378	14805								
		STD	0900	0398	3438	2732	0008456	1467	14806								
179		OBS	0938	0386	34401	2735			14809								
		STD	1000	0370	3443	2739	0007839	1549	14813								
		STD	1100	0347	3447	2744	0007351	1625	14821								
179		OBS	T1173	0330	34493	2747			14826								
		STD	1200	0324	3450	2748	0006947	1696	14828								
		STD	1300	0303	3452	2752	0006636	1764	14836								
		STD	1400	0284	3453	2755	0006343	1829	14845								
		STD	1500	0266	3455	2758	0006050	1891	14855								
		STD	1750	0228	3465	2768	0005430	2034	14881								
179		OBS	T1809	0220	34609	2768			14888								

TABLE XI.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR, 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1249	PW	3300 N	139545W		122	09	03	13	186	1968	N15	004	4389	14	32			6	x1	6	6		0004

WATER: COLOR CODE	WATER: TRANS. m	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		33	515	240	161	133	7	14	

MESSENGR TIME OF CAST HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁻⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1616	3481	2511	0028631	0000	15167								
186		OBS	0000	1816	34814	2511			15167								
186		OBS	0009	1813	34819	2512			15168								
		STD	0010	1813	3482	2512	0028554	0029	15168								
		STD	0020	1812	3482	2512	0028576	0057	15169								
186		OBS	0027	1811	34815	2512			15170								
		STD	0030	1811	3482	2512	0028610	0086	15171								
186		OBS	0046	1812	34815	2512			15174								
		STD	0050	1813	3482	2512	0028707	0144	15175								
186		OBS	0070	1815	34815	2511			15179								
		STD	0075	1810	3481	2512	0028767	0215	15176								
186		OBS	0093	1776	34791	2519			15173								
		STD	0100	1743	3474	2523	0027795	0286	15161								
		STD	0125	1630	3455	2535	0026705	0354	15139								
186		OBS	0142	1556	34444	2544			15108								
		STD	0150	1522	3439	2547	0025608	0419	15098								
186		OBS	0191	1355	34181	2567			15048								
		STD	0200	1315	3416	2573	0023224	0541	15036								
		STD	0250	1119	3406	2603	0020445	0650	14975								
186		OBS	0285	1011	34026	2619			14942								
		STD	0300	0981	3403	2625	0018418	0748	14934								
186		OBS	T0378	0839	34033	2648			14893								
		STD	0400	0806	3404	2653	0015785	0919	14885								
		STD	0500	0672	3409	2676	0013649	1066	14850								
186		OBS	T0570	0593	34123	2689			14830								
		STD	0600	0562	3414	2694	0011946	1194	14823								
		STD	0700	0476	3421	2710	0010462	1306	14805								
186		OBS	0757	0439	34252	2717			14800								
		STD	0800	0426	3429	2722	0009365	1405	14802								
		STD	0900	0396	3437	2731	0008506	1494	14807								
186		OBS	0951	0382	34411	2736			14810								
		STD	1000	0369	3443	2738	0007850	1576	14813								
		STD	1100	0344	3446	2743	0007397	1652	14820								
		STD	1200	0322	3449	2748	0006975	1724	14827								
		STD	1300	0302	3452	2753	0006565	1792	14836								
		STD	1400	0284	3456	2757	0006181	1856	14845								
186		OBS	T1431	0279	34566	2758			14849								

TABLE XI.—Continued

REFERENCE: CRAY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICATOR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR.1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1249	PW	3001 N	13954 W		122	09	03	14	217	1968	N15	005	4297	15	31			3	X2	6	7		0005

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		29	S15	213	161	156	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^5	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at l	pH	SCO
		STD	0000	1820	3484	2512	0028572	0000	15169								
217		OBS	0000	1820	34835	2512			15169								
		STD	0010	1815	3483	2513	0028495	0029	15169								
217		OBS	0010	1815	34834	2513			15169								
		STD	0020	1814	3483	2513	0028504	0057	15170								
217		OBS	0029	1813	34833	2513			15171								
		STD	0030	1813	3483	2513	0028521	0086	15172								
217		OBS	0048	1812	34835	2513			15174								
		STD	0050	1814	3484	2513	0028597	0143	15175								
217		OBS	0072	1816	34835	2513			15179								
		STD	0075	1813	3483	2513	0028578	0214	15179								
217		OBS	0095	1775	34808	2521			15171								
		STD	0100	1749	3476	2523	0027788	0285	15163								
		STD	0125	1621	3456	2538	0026434	0353	15147								
217		OBS	0144	1525	34414	2548			15098								
		STD	0150	1491	3437	2553	0025101	0417	15088								
217		OBS	T0195	1275	34103	2577			15021								
		STD	0200	1261	3410	2580	0022600	0536	15017								
		STD	0250	1123	3411	2606	0020141	0645	14977								
217		OBS	0289	1023	34117	2624			14946								
		STD	0300	0994	3410	2628	0018118	0739	14939								
217		OBS	T0386	0801	34035	2654			14880								
		STD	0400	0782	3404	2657	0015430	0907	14875								
		STD	0500	0658	3409	2678	0013457	1051	14844								
217		OBS	T0576	0579	34136	2692			14826								
		STD	0600	0556	3415	2696	0011795	1177	14820								
		STD	0700	0477	3422	2711	0010400	1288	14805								
217		OBS	0765	0438	34264	2718			14801								
		STD	0800	0427	3430	2722	0009303	1387	14802								
		STD	0900	0396	3438	2732	0008432	1475	14807								
217		OBS	T0958	0380	34422	2737			14811								
		STD	1000	0369	3444	2739	0007790	1557	14813								
		STD	1100	0343	3447	2744	0007334	1632	14819								
		STD	1200	0321	3450	2749	0006920	1703	14827								
		STD	1300	0301	3453	2753	0006531	1771	14836								
		STD	1400	0283	3456	2757	0006155	1834	14845								
217		OBS	T1454	0275	34575	2759			14851								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1249	PW	2900 N	14000 W		087	90	03	15	195	1968	N15	006	4389	15	26			2	X1	6	6		0006

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		28	S10	224	194	169	7	13	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1960	35516	2501	0029612	0000	15212								
195		OBS	0000	1960	35158	2501			15212								
195		OBS	0008	1957	35157	2501			15213								
		STD	0010	1957	3516	2501	0029580	0030	15213								
		STD	0020	1957	3516	2501	0029615	0059	15215								
		STD	0030	1957	3516	2501	0029657	0089	15216								
195		OBS	0030	1957	35156	2501			15216								
195		OBS	0046	1957	35156	2501			15219								
		STD	0050	1958	3516	2501	0029740	0148	15220								
195		OBS	0072	1960	35158	2501			15224								
		STD	0075	1947	3514	2503	0029683	0223	15221								
195		OBS	0093	1868	35040	2515			15200								
		STD	0100	1836	3498	2517	0028232	0295	15191								
		STD	0125	1724	3480	2532	0027002	0364	15161								
195		OBS	0139	1665	34707	2539			15144								
		STD	0150	1622	3464	2544	0025949	0430	15132								
195		OBS	T0185	1485	34448	2560			15093								
		STD	0200	1419	3439	2569	0023610	0554	15073								
		STD	0250	1219	3423	2597	0021012	0668	15012								
195		OBS	0279	1116	34150	2610			14980								
		STD	0300	1075	3414	2617	0019198	0766	14969								
		STD	0400	0894	3409	2644	0016753	1246	14919								
		STD	0500	0739	3405	2663	0014926	1104	14875								
195		OBS	0577	0638	34008	2674			14846								
		STD	0600	0610	3404	2680	0013314	1245	14841								
		STD	0700	0507	3418	2704	0011067	1367	14817								
195		OBS	0781	0444	34268	2718			14806								
		STD	0800	0436	3429	2721	0009484	1470	14806								
		STD	0900	0399	3437	2731	0008542	1560	14808								
195		OBS	T0990	0369	34436	2739			14811								
		STD	1000	0366	3444	2740	0007733	1642	14812								
		STD	1100	0337	3446	2744	0007286	1717	14817								
		STD	1200	0312	3449	2749	0006889	1788	14823								
		STD	1300	0292	3451	2752	0006545	1855	14831								
		STD	1400	0276	3454	2756	0006242	1919	14842								
		STD	1500	0265	3456	2759	0005994	1980	14854								
195		OBS	T1528	0262	34566	2759			14858								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	QUADRANT INDICATOR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1249	PW	2855 N	14004 W		087	80	03	16	192	1968	N15	007	4755	14	01			2	X1	5	5	0007

WATER COLOR CODE	WATER TRANS (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		03	S15	288	178	128	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma \Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	
		STD	0000	1961	3516	2500	0029629	0000	15212								
192		OBS	0000	1961	35159	2500			15212								
		STD	0010	1952	3516	2503	0029463	0030	15212								
192		OBS	0010	1952	35156	2503			15212								
		STD	0020	1951	3516	2503	0029471	0059	15213								
192		OBS	0028	1950	35156	2503			15214								
		STD	0030	1950	3516	2503	0029489	0088	15214								
192		OBS	0047	1952	35157	2503			15216								
		STD	0050	1952	3516	2503	0029599	0148	15216								
192		OBS	0070	1953	35155	2502			15222								
		STD	0075	1917	3510	2507	0029634	0221	15212								
192		OBS	0093	1795	34915	2524			15178								
		STD	0100	1754	3483	2527	0027395	0292	15166								
		STD	0125	1620	3458	2540	0026266	0359	15127								
192		OBS	0141	1544	34454	2547			15104								
		STD	0150	1508	3441	2552	0025166	0423	15094								
192		OBS	T0189	1361	34270	2572			15051								
		STD	0200	1320	3425	2579	0022663	0543	15039								
		STD	0250	1152	3417	2605	0020226	0650	14988								
192		OBS	0281	1063	34135	2619			14962								
		STD	0300	1021	3412	2625	0018422	0747	14949								
192		OBS	T0369	0877	34060	2644			14907								
		STD	0400	0812	3406	2654	0015764	0918	14887								
		STD	0500	0646	3404	2676	0013591	1064	14836								
192		OBS	T0562	0561	34029	2686			14814								
		STD	0600	0534	3408	2693	0012035	1193	14810								
		STD	0700	0473	3420	2709	0010500	1335	14804								
192		OBS	0739	0453	34238	2715			14802								
		STD	0800	0432	3429	2721	0009437	1405	14804								
		STD	0900	0400	3437	2731	0008554	1495	14809								
192		OBS	T0932	0390	34395	2734			14810								
		STD	1000	0371	3442	2737	0007954	1577	14814								
		STD	1100	0345	3445	2742	0007497	1655	14820								
		STD	1200	0322	3448	2747	0007064	1727	14827								
		STD	1300	0303	3451	2751	0006680	1795	14836								
		STD	1400	0286	3454	2755	0006315	1861	14846								
192		OBS	T1423	0283	34548	2756			14849								

TABLE XI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDCTR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1249	PW	2900 N	14000 W		087	90	03	17	212	1968	N15	008	4755	15	05			3	x1	6	5		0008

WATER		WIND		BAROMETER (mbst)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		06	S20	315	189	183	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄–P µg-at/l	TOTAL–P µg-at/l	NO₂–N µg-at/l	NO₃–N µg-at/l	SiO₄–Si µg-at/l	pH	TCC
		STD	0000	1969	3518	2500	0029697	0000	15215								
	212	OBS	0000	1969	35177	2500			15215								
	212	OBS	0009	1958	35178	2503			15213								
		STD	0010	1958	3518	2503	0029450	0030	15213								
		STD	0020	1957	3518	2503	0029470	0059	15215								
		STD	0030	1956	3518	2503	0029490	0089	15216								
	212	OBS	0031	1956	35176	2503			15216								
	212	OBS	0049	1955	35173	2503			15219								
		STD	0050	1955	3517	2503	0029557	0148	15219								
	212	OBS	0074	1957	35175	2503			15224								
		STD	0075	1954	3517	2503	0029639	0222	15223								
	212	OBS	0096	1880	35064	2514			15204								
		STD	0100	1860	3503	2516	0028444	0294	15199								
		STD	0125	1736	3481	2530	0027205	0364	15164								
	212	OBS	0144	1642	34668	2541			15137								
		STD	0150	1610	3462	2545	0025831	0430	15128								
	212	OBS	T0192	1407	34361	2570			15068								
		STD	0200	1372	3434	2575	0023028	0552	15057								
		STD	0250	1178	3420	2603	0020476	0661	14998								
	212	OBS	0285	1065	34131	2618			14963								
		STD	0300	1029	3411	2623	0018630	0759	14952								
	212	OBS	T0374	0866	34052	2645			14903								
		STD	0400	0817	3405	2652	0015883	0931	14889								
		STD	0500	0655	3404	2674	0013816	1080	14842								
	212	OBS	T0568	0570	34027	2684			14819								
		STD	0600	0544	3407	2691	0012235	1210	14814								
		STD	0700	0475	3419	2708	0010598	1324	14804								
	212	OBS	0757	0444	34251	2717			14802								
		STD	0800	0429	3429	2721	0009401	1424	14803								
		STD	0900	0397	3438	2732	0008444	1513	14807								
	212	OBS	T0954	0381	34416	2736			14810								
		STD	1000	0368	3443	2739	0007823	1595	14813								
		STD	1100	0342	3446	2743	0007396	1671	14819								
		STD	1200	0320	3448	2748	0007011	1743	14826								
		STD	1300	0301	3451	2752	0006657	1811	14835								
		STD	1400	0285	3454	2755	0006326	1876	14846								
	212	OBS	T1475	0275	34558	2758			14854								

TABLE XI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	ID. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR, 1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	1249	Pw	3001 N	13955 W		122	09	03	18	186	1968	N15	009	4205	17	10			3	X1	5	6		0009

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OF FORCE		DRY BULB	WET BULB			
		11	523	301	178	133	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	S COD
		STD	0000	1801	3482	2515	0028220	0000	15163								
188		OBS	0000	1801	34822	2515			15163								
		STD	0010	1797	3483	2516	0028138	0028	15164								
188		OBS	0012	1796	34825	2517			15164								
		STD	0020	1796	3482	2517	0028155	0056	15165								
		STD	0030	1796	3482	2516	0028202	0085	15167								
188		OBS	0032	1796	34822	2516			15167								
		STD	0050	1794	3482	2517	0028226	0141	15169								
188		OBS	0052	1794	34822	2517			15170								
		STD	0075	1747	3486	2516	0028395	0212	15174								
188		OBS	0080	1798	34820	2516			15175								
		STD	0100	1794	3482	2517	0028410	0283	15177								
188		OBS	0104	1793	34817	2517			15178								
		STD	0125	1676	3466	2530	0027221	0352	15144								
		STD	0150	1539	3441	2545	0025823	0419	15103								
188		OBS	0156	1506	34367	2549			15094								
		STD	0200	1267	3411	2579	0022670	0543	15019								
188		OBS	T0207	1236	34084	2583			15009								
		STD	0250	1143	3409	2601	0020622	0648	14984								
		STD	0300	1037	3411	2621	0018802	0747	14955								
188		OBS	0315	1006	34108	2627			14946								
		STD	0400	0828	3402	2648	0016263	0922	14893								
188		OBS	T0429	0776	34010	2655			14877								
		STD	0500	0679	3406	2673	0013967	1073	14852								
		STD	0600	0566	3413	2693	0012071	1203	14824								
188		OBS	T0645	0524	34159	2700			14815								
		STD	0700	0487	3421	2709	0010597	1317	14809								
		STD	0800	0430	3428	2720	0009487	1417	14803								
188		OBS	0861	0402	34330	2727			14802								
		STD	0900	0390	3436	2731	0008510	1507	14804								
		STD	1000	0362	3443	2739	0007746	1588	14810								
188		OBS	T1069	0344	34470	2744			14814								
		STD	1100	0336	3448	2746	0007179	1663	14816								
		STD	1200	0313	3450	2749	0006841	1733	14824								
		STD	1300	0292	3451	2753	0006523	1800	14834								
		STD	1400	0274	3453	2756	0006227	1864	14841								
		STD	1500	0258	3455	2759	0005957	1924	14851								
188		OBS	T1687	0235	34589	2764			14873								

TABLE XI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT IND'TR	MARSDEN 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.	CODE	° 1/10	° 1/10		10°	1°	MO.	DAY	HR. 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT.	PER.	SEA		TYPE	AMT.		
31	1249	PW	3002 N	13952 W		122	09	03	20	194	1966	N15	010	4572	15	13			3	X2	4	8		0010

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		23	S15	142	172	144	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	QUAL CODE
		STD	0000	1777	3474	2515	0028228	0000	15155								
194		OBS	0000	1777	34744	2515			15155								
		STD	0010	1775	3474	2516	0028214	0028	15156								
194		OBS	0010	1775	34744	2516			15156								
		STD	0020	1775	3474	2516	0028235	0056	15158								
		STD	0030	1774	3474	2516	0028263	0085	15159								
194		OBS	0030	1774	34743	2516			15159								
194		OBS	0049	1774	34745	2516			15162								
		STD	0050	1774	3475	2516	0028319	0141	15163								
194		OBS	0071	1778	34746	2515			15167								
		STD	0075	1778	3475	2515	0028474	0212	15168								
194		OBS	0095	1776	34744	2515			15170								
		STD	0100	1751	3470	2516	0026270	0283	15163								
		STD	0125	1623	3451	2534	0026842	0352	15127								
194		OBS	0144	1526	34376	2545			15098								
		STD	0150	1491	3433	2549	0025393	0417	15087								
194		OBS	T0195	1264	34059	2575			15017								
		STD	0200	1247	3407	2580	0022586	0537	15012								
		STD	0250	1094	3410	2611	0019712	0645	14967								
194		OBS	0289	0989	34110	2630			14936								
		STD	0300	0964	3410	2633	0017625	0736	14928								
194		OBS	T0387	0786	34022	2655			14875								
		STD	0400	0763	3402	2658	0015279	0901	14868								
		STD	0500	0613	3404	2680	0013262	1044	14825								
194		OBS	T0579	0528	34044	2691			14804								
		STD	0600	0518	3407	2694	0011910	1170	14804								
		STD	0700	0473	3420	2709	0010500	1282	14804								
194		OBS	0771	0444	34276	2719			14804								
		STD	0800	0433	3430	2722	0009374	1381	14805								
		STD	0900	0398	3437	2731	0008530	1470	14808								
194		OBS	T0972	0375	34412	2737			14811								
		STD	1000	0367	3443	2739	0007804	1552	14812								
		STD	1100	0339	3448	2746	0007184	1627	14818								
		STD	1200	0315	3451	2750	0006754	1697	14825								
		STD	1300	0294	3454	2755	0006354	1762	14833								
		STD	1400	0277	3455	2757	0006144	1825	14842								
194		OBS	T1474	0267	34556	2758			14851								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1249	PW	3000 N	13958 W		122	09	03	21	192	1968	N15	011	4297	15	28			2	X1	6	6		0011

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		29	S15	159	156	150	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at l	NO_3-N µg-at l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1776	3475	2516	0028175	0000	15155								
192		OBS	0000	1776	34748	2516			15155								
192		OBS	0007	1774	34748	2516			15155								
		STD	0010	1773	3475	2516	0028139	0028	15156								
		STD	0020	1772	3475	2517	0028155	0056	15157								
192		OBS	0029	1771	34746	2517			15158								
		STD	0030	1771	3475	2517	0028172	0084	15158								
192		OBS	0047	1771	34750	2517			15161								
		STD	0050	1772	3475	2517	0028231	0141	15162								
192		OBS	0074	1774	34746	2516			15166								
		STD	0075	1774	3475	2516	0028384	0212	15167								
192		OBS	0096	1769	34743	2517			15169								
		STD	0100	1750	3472	2520	0028102	0282	15163								
		STD	0125	1632	3456	2535	0026676	0351	15130								
192		OBS	0145	1537	34438	2548			15102								
		STD	0150	1511	3440	2550	0025302	0416	15095								
192		OBS	T0195	1301	34140	2574			15030								
		STD	0200	1284	3414	2575	0022774	0536	15025								
		STD	0250	1121	3413	2608	0019966	0643	14977								
192		OBS	0293	0998	34113	2628			14940								
		STD	0300	0980	3410	2630	0017887	0737	14934								
192		OBS	0391	0778	34020	2656			14872								
		STD	0400	0762	3402	2658	0015279	0903	14867								
		STD	0500	0613	3403	2679	0013284	1046	14825								
192		OBS	T0589	0519	34042	2692			14802								
		STD	0600	0514	3406	2694	0011935	1172	14802								
		STD	0700	0473	3419	2709	0010574	1285	14803								
192		OBS	0781	0441	34280	2719			14805								
		STD	0800	0433	3430	2722	0009374	1384	14805								
		STD	0900	0396	3437	2731	0008506	1474	14807								
192		OBS	T0976	0370	34429	2738			14809								
		STD	1000	0362	3443	2739	0007746	1555	14810								
		STD	1100	0334	3448	2746	0007126	1629	14816								
		STD	1200	0305	3452	2752	0006611	1698	14822								
		STD	1300	0289	3455	2756	0006223	1762	14831								
		STD	1400	0274	3456	2758	0006035	1824	14841								
		STD	1500	0262	3456	2759	0005952	1883	14853								
192		OBS	T1504	0262	34563	2759			14854								

TABLE XI.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR, 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT	WAVE OBSERVATIONS: PER	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT		NODC STATION NUMBER
31	1249	PW	3004 N	13955 W		122	09	03	22	186	1968	N19	012	4389	15	30			2	X1	6	2		0012

WATER: COLOR CODE	WATER: TRANS (m)	WIND: DIR.	WIND: SPEED OF FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		34	505	264	189	133	8	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10⁵	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SOC
		STD	0000	1794	3482	2517	0028071	0000	15161								
186		OBS	0000	1794	34820	2517			15161								
		STD	0010	1792	3482	2517	0028057	0028	15162								
186		OBS	0010	1792	34820	2517			15162								
		STD	0020	1790	3483	2518	0028000	0056	15163								
		STD	0030	1789	3483	2519	0027973	0084	15165								
186		OBS	0030	1789	34831	2519			15165								
		STD	0050	1794	3485	2519	0027996	0140	15170								
186		OBS	0050	1794	34853	2519			15170								
		STD	0075	1799	3486	2519	0028123	0210	15175								
186		OBS	0075	1799	34863	2519			15175								
		STD	0100	1796	3486	2519	0028178	0281	15178								
186		OBS	0100	1796	34857	2519			15178								
		STD	0125	1642	3459	2535	0026680	0349	15133								
		STD	0150	1494	3437	2552	0025164	0414	15089								
186		OBS	0152	1482	34356	2553			15085								
		STD	0200	1208	3406	2586	0021934	0532	14998								
186		OBS	T0208	1172	34025	2590			14987								
		STD	0250	1081	3406	2609	0019613	0636	14962								
		STD	0300	0977	3409	2630	0017889	0730	14933								
186		OBS	0305	0967	34097	2632			14930								
		STD	0400	0782	3402	2655	0015578	0898	14875								
186		OBS	T0409	0766	34017	2657			14870								
		STD	0500	0615	3403	2679	0013326	1042	14826								
		STD	0600	0497	3408	2697	0011579	1167	14795								
186		OBS	T0606	0491	34083	2698			14794								
		STD	0700	0448	3421	2713	0010126	1275	14793								
		STD	0800	0410	3431	2725	0009029	1371	14795								
186		OBS	0810	0407	34321	2726			14796								
		STD	0900	0384	3438	2733	0008292	1458	14802								
		STD	1000	0359	3444	2740	0007637	1537	14809								
186		OBS	T1006	0358	34443	2741			14810								
		STD	1100	0337	3447	2745	0007271	1612	14817								
		STD	1200	0316	3449	2748	0006928	1683	14825								
		STD	1300	0296	3451	2752	0006584	1750	14833								
		STD	1400	0279	3454	2755	0006277	1815	14843								
		STD	1500	0263	3456	2759	0005971	1876	14853								
186		OBS	T1531	0258	34566	2760			14857								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR,1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1249	PW	3001 N	13951 W		122	09	03	23	186	1968	N15	013	4480	42	07			1	x1	2	3		0013

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	509	268	183	144	8	21	

MESSENGR TIME or HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA–T	SPECIFIC VOLUME ANOMALY–x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O_2 ml/l	PO_4–P µg-at/l	TOTAL–P µg-at/l	NO_2–N µg-at/l	NO_3–N µg-at/l	SiO_4–Si µg-at/l	pH	SCC
		STD	0000	1793	34880	2516	0028171	0000	15161								
186		OBS	0000	1793	34803	2516			15161								
		STD	0010	1791	3480	2516	0028165	0028	15162								
186		OBS	0010	1791	34802	2516			15162								
		STD	0020	1788	3480	2517	0028120	0056	15162								
		STD	0030	1786	3480	2518	0028099	0084	15163								
186		OBS	0030	1786	34804	2518			15163								
		STD	0050	1789	3482	2518	0028133	0141	15168								
186		OBS	0050	1789	34818	2518			15168								
		STD	0075	1793	3484	2516	0028229	0211	15173								
186		OBS	0075	1793	34829	2518			15173								
		STD	0100	1757	3476	2521	0028002	0281	15166								
186		OBS	0100	1757	34756	2521			15166								
		STD	0125	1591	3448	2539	0026360	0349	15116								
		STD	0150	1439	3427	2556	0024756	0413	15070								
186		OBS	0152	1427	34254	2557			15066								
		STD	0200	1171	3401	2589	0021626	0529	14985								
186		OBS	T0205	1150	33992	2592			14978								
		STD	0250	1052	3404	2613	0019437	0632	14951								
		STD	0300	0952	3409	2634	0017489	0724	14924								
186		OBS	0305	0942	34097	2636			14921								
		STD	0400	0778	3404	2657	0015409	0889	14874								
186		OBS	0405	0770	34032	2658			14871								
		STD	0500	0622	3404	2679	0013344	1032	14829								
		STD	0600	0509	3409	2697	0011651	1157	14800								
186		OBS	T0611	0499	34094	2698			14798								
		STD	0700	0459	3420	2711	0010331	1267	14798								
		STD	0800	0421	3430	2723	0009232	1365	14800								
186		OBS	0810	0417	34313	2724			14800								
		STD	0900	0390	3437	2732	0008428	1453	14804								
		STD	1000	0362	3444	2740	0007709	1534	14810								
186		OBS	T1007	0360	34439	2740			14811								
		STD	1100	0340	3447	2745	0007269	1609	14818								
		STD	1200	0319	3450	2749	0006874	1680	14826								
		STD	1300	0299	3452	2752	0006560	1747	14835								
		STD	1400	0281	3454	2756	0006264	1811	14844								
		STD	1500	0264	3456	2759	0005975	1872	14854								
186		OBS	T1517	0261	34565	2759			14855								
206		OBS	T1652	0240	34585	2763			14869								
		STD	1750	0228	3460	2765	0005385	2014	14881								
		STD	2000	0201	3462	2769	0005023	2144	14912								
206		OBS	2162	0187	34635	2771			14934								
		STD	2500	0169	3465	2774	0004587	2385	14984								
206		OBS	T2667	0162	34661	2775			15010								
		STD	3000	0155	3467	2776	0004410	2609	15065								
206		OBS	T3177	0152	34674	2777			15094								
206		OBS	T3656	0148	34682	2778			15176								
		STD	4000	0149	3468	2778	0004497	3055	15237								
206		OBS	T4132	0149	34684	2778			15261								
206		OBS	42130	0151	34688	2778											

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1249	PW	3000 N	13954 W		122	09	03	24	194	1968	N15	014	4023	15	31			2	X1	2	6		0014

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BARO-METER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		09	505	268	200	168	7	14	

MESSENGR TIME OF T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	NOTE
		STD	0000	1826	3492	2516	0028118	0000	15171								
194		OBS	0000	1826	34917	2516			15171								
		STD	0010	1823	3492	2517	0028066	0028	15172								
194		OBS	0010	1823	34919	2517			15172								
		STD	0020	1817	3492	2519	0027965	0056	15172								
		STD	0030	1813	3492	2520	0027911	0084	15173								
194		OBS	0030	1813	34917	2520			15173								
		STD	0050	1812	3492	2520	0027954	0140	15176								
194		OBS	0050	1812	34917	2520			15176								
		STD	0075	1816	3493	2520	0028059	0210	15181								
194		OBS	0075	1816	34927	2520			15181								
		STD	0100	1815	3493	2520	0028075	0280	15185								
194		OBS	0100	1815	34933	2520			15185								
		STD	0125	1709	3471	2529	0027314	0349	15155								
		STD	0150	1575	3450	2544	0025941	0416	15116								
194		OBS	0152	1563	34480	2545			15112								
		STD	0200	1220	3407	2585	0022082	0536	15003								
194		OBS	T0202	1209	34062	2586			14999								
		STD	0250	1096	3410	2610	0019747	0641	14968								
		STD	0300	0984	3410	2630	0017952	0735	14936								
194		OBS	0306	0971	34103	2632			14932								
		STD	0400	0776	3402	2656	0015498	0902	14873								
194		OBS	T0410	0758	34010	2658			14867								
		STD	0500	0610	3403	2680	0013260	1046	14824								
		STD	0600	0494	3409	2698	0011468	1169	14794								
194		OBS	T0610	0485	34096	2700			14792								
		STD	0700	0450	3420	2712	0010224	1278	14794								
		STD	0800	0416	3430	2723	0009173	1375	14798								
194		OBS	0808	0413	34310	2725			14798								
		STD	0900	0387	3438	2733	0008327	1462	14803								
		STD	1000	0361	3444	2740	0007660	1542	14810								
194		OBS	T1003	0360	34441	2740			14810								
		STD	1100	0337	3449	2747	0007087	1616	14817								
		STD	1200	0316	3453	2752	0006618	1685	14825								
		STD	1300	0296	3455	2755	0006304	1749	14834								
		STD	1400	0280	3456	2757	0006105	1811	14844								
		STD	1500	0265	3456	2759	0005987	1872	14854								
194		OBS	T1525	0262	34562	2759			14857								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1249	PW	3005 N	13953 W		122	09	03	25	195	1968	N15	015	4755	15	12			2	X2	6	8		0015

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP °C DRY BULB	AIR TEMP °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		11	S05	271	189	156	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ△D DYN. M x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at l	SiO₄-Si µg-at.l	pH	QUAL
		STD	0000	1800	3480	2514	0028357	0000	15163								
195		OBS	0000	1800	34800	2514			15163								
195		OBS	0009	1794	34802	2515			15162								
		STD	0010	1793	3480	2515	0028226	0028	15162								
		STD	0020	1784	3479	2517	0028122	0056	15161								
195		OBS	0028	1780	34787	2518			15161								
		STD	0030	1780	3479	2518	0028061	0085	15162								
195		OBS	0047	1780	34795	2518			15164								
		STD	0050	1779	3479	2518	0028103	0141	15164								
195		OBS	0071	1776	34789	2519			15167								
		STD	0075	1776	3479	2519	0028096	0211	15168								
195		OBS	0094	1773	34799	2520			15170								
		STD	0100	1730	3472	2525	0027642	0281	15157								
		STD	0125	1575	3444	2539	0026304	0348	15111								
195		OBS	0144	1480	34294	2549			15082								
		STD	0150	1462	3427	2551	0025229	0412	15077								
195		OBS	T0193	1328	34154	2570			15039								
		STD	0200	1302	3415	2575	0023046	0533	15031								
		STD	0250	1133	3413	2606	0020179	0641	14981								
195		OBS	0287	1028	34110	2623			14950								
		STD	0300	1000	3410	2627	0018217	0737	14941								
195		OBS	T0385	0830	34027	2649			14891								
		STD	0400	0797	3403	2654	0015740	0907	14881								
		STD	0500	0617	3404	2679	0013307	1052	14827								
195		OBS	T0573	0524	34042	2691			14801								
		STD	0600	0511	3408	2696	0011750	1178	14801								
		STD	0700	0465	3421	2711	0010329	1288	14800								
195		OBS	0763	0434	34272	2719			14801								
		STD	0800	0426	3430	2722	0009291	1386	14802								
		STD	0900	0393	3437	2731	0008471	1475	14806								
195		OBS	T0959	0375	34406	2736			14808								
		STD	1000	0363	3442	2738	0007846	1556	14810								
		STD	1100	0337	3445	2743	0007412	1633	14816								
		STD	1200	0314	3447	2747	0007008	1705	14824								
		STD	1300	0294	3450	2752	0006627	1773	14832								
		STD	1400	0278	3453	2755	0006295	1838	14843								
195		OBS	T1456	0270	34547	2757			14849								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR.1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1249	PW	3004 N	13955 W		122	09	03	26	201	1968	N15	016	4755	15	15			2	X1	6	7		0016

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		10	S08	271	172	161	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCC
		STD	0000	1780	3469	2511	0028666	0000	15155								
201		OBS	0000	1780	34693	2511			15155								
		STD	0010	1774	3469	2512	0028562	0029	15155								
201		OBS	0010	1774	34693	2512			15155								
		STD	0020	1762	3465	2512	0028629	0057	15153								
		STD	0030	1752	3462	2512	0028649	0086	15151								
201		OBS	0030	1752	34620	2512			15151								
201		OBS	0049	1739	34625	2515			15151								
		STD	0050	1740	3463	2515	0028401	0143	15151								
201		OBS	0074	1742	34625	2515			15156								
		STD	0075	1742	3463	2515	0028528	0214	15156								
201		OBS	0098	1726	34613	2517			15155								
		STD	0100	1717	3460	2519	0028217	0285	15152								
		STD	0125	1609	3446	2533	0026898	0354	15122								
201		OBS	0149	1509	34336	2546			15093								
		STD	0150	1505	3433	2546	0025687	0420	15092								
		STD	0200	1313	3413	2571	0023441	0542	15035								
201		OBS	T0200	1313	34125	2571			15035								
		STD	0250	1143	3412	2603	0020453	0652	14985								
201		OBS	0298	1010	34109	2626			14945								
		STD	0300	1006	3411	2627	0018266	0749	14944								
201		OBS	T0398	0827	34022	2649			14892								
		STD	0400	0823	3402	2649	0016166	0921	14891								
		STD	0500	0645	3405	2677	0013584	1070	14838								
201		OBS	T0594	0526	34074	2693			14806								
		STD	0600	0522	3408	2694	0011885	1197	14806								
		STD	0700	0466	3419	2709	0010490	1309	14801								
201		OBS	0786	0425	34273	2720			14799								
		STD	0800	0420	3429	2722	0009294	1408	14799								
		STD	0900	0386	3437	2732	0008389	1496	14803								
201		OBS	T0982	0361	34431	2740			14807								
		STD	1000	0356	3444	2740	0007639	1577	14808								
		STD	1100	0329	3446	2745	0007216	1651	14813								
		STD	1200	0306	3449	2749	0006834	1721	14820								
		STD	1300	0287	3451	2753	0006494	1788	14829								
		STD	1400	0271	3454	2756	0006184	1851	14840								
201		OBS	T1485	0260	34556	2759			14849								

TABLE XI.—Continued

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRFT IND(T)	MARSDEN SQUARE		STATION TIME (GMT)			YEAR	ORIGINATOR'S		DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS				WEATHER CODE	CLOUD CODES			NODC STATION NUMBER
CTRY CODE	NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR,1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	1249	PW	3008 N	13958 W		122	09	03	27	198	1968	N15	017	4755	15	07			2	x1	2	6		0017

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		08	S20	274	183	150	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH	SCT
		STD	0000	1780	3471	2511	0028574	0000	15156								
198		OBS	0000	1780	34706	2511			15156								
198		OBS	0008	1774	34711	2513			15155								
		STD	0010	1774	3471	2513	0028424	0028	15156								
		STD	0020	1774	3472	2514	0028398	0057	15157								
		STD	0030	1774	3473	2515	0028380	0085	15159								
198		OBS	0031	1774	34728	2515			15159								
198		OBS	0047	1778	34778	2517			15164								
		STD	0050	1787	3481	2518	0028145	0142	15167								
		STD	0075	1830	3497	2520	0028050	0212	15186								
198		OBS	0075	1830	34974	2520			15186								
198		OBS	0094	1828	34985	2521			15188								
		STD	0100	1825	3498	2521	0027968	0282	15188								
		STD	0125	1810	3495	2523	0027909	0352	15188								
198		OBS	0143	1800	34932	2524			15188								
		STD	0150	1737	3483	2531	0027163	0421	15169								
198		OBS	T0189	1431	34363	2565			15075								
		STD	0200	1368	3432	2575	0023095	0546	15056								
		STD	0250	1127	3418	2611	0019705	0653	14980								
198		OBS	0282	1010	34110	2626			14942								
		STD	0300	0976	3409	2630	0017895	0747	14933								
198		OBS	T0378	0833	34033	2649			14891								
		STD	0400	0786	3403	2656	0015548	0915	14877								
		STD	0500	0610	3403	2679	0013267	1359	14824								
198		OBS	T0564	0529	34027	2689			14802								
		STD	0600	0510	3407	2695	0011811	1184	14801								
		STD	0700	0461	3419	2710	0010429	1295	14798								
198		OBS	0754	0438	34241	2716			14799								
		STD	0800	0421	3429	2722	0009306	1394	14800								
		STD	0900	0388	3437	2732	0008413	1483	14804								
198		OBS	T0950	0373	34410	2737			14806								
		STD	1000	0359	3442	2739	0007755	1563	14809								
		STD	1100	0333	3445	2744	0007321	1639	14815								
		STD	1200	0311	3448	2748	0006936	1718	14824								
		STD	1300	0293	3451	2752	0006586	1778	14832								
		STD	1400	0279	3454	2755	0006277	1842	14843								
198		OBS	T1468	0271	34554	2758			14851								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDICA.	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT		NODC STATION NUMBER
31	1249	PW	3004 N	13957 W		122	09	03	28	189	1968	N15	018	4389	16	08			2	X2	2	7		0018

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		08	S15	254	183	156	7	14	

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	Σ Δ D DYN. M. x 10³	SOUND VELOCITY	D2 ml/l	PO4-P µg-at/l	TOTAL-P µg-at/l	NO2-N µg-at/l	NO3-N µg-at/l	SiO4-Si µg-at/l	pH	QUALITY CODES
		STD	0000	1768	34689	2513	0028448	0000	15152								
189		OBS	0000	1768	34685	2513			15152								
189		OBS	0009	1766	34686	2513			15153								
		STD	0010	1766	3469	2513	0028421	0028	15153								
		STD	0020	1762	3468	2514	0028403	0057	15153								
		STD	0030	1759	3468	2514	0028389	0085	15154								
189		OBS	0033	1758	34677	2515			15154								
		STD	0050	1768	3472	2515	0028366	0142	15161								
189		OBS	0051	1769	34721	2515			15161								
		STD	0075	1744	3465	2516	0028418	0213	15157								
189		OBS	0079	1740	34634	2516			15156								
		STD	0100	1773	3477	2518	0028270	0284	15171								
189		OBS	0102	1776	34773	2518			15172								
		STD	0125	1674	3463	2531	0027103	0353	15144								
		STD	0150	1558	3448	2546	0025720	0419	15110								
189		OBS	0153	1544	34456	2547			15106								
		STD	0200	1311	3413	2572	0023366	0542	15034								
189		OBS	T0204	1294	34113	2574			15029								
		STD	0250	1154	3411	2600	0020702	0652	14988								
		STD	0300	1018	3411	2624	0018467	0750	14948								
189		OBS	0307	1001	34106	2627			14943								
		STD	0400	0804	3402	2652	0015903	0922	14884								
189		OBS	T0412	0782	34011	2655			14877								
		STD	0500	0643	3403	2675	0013698	1070	14837								
		STD	0600	0525	3408	2694	0011923	1198	14807								
189		OBS	T0620	0506	34090	2697			14802								
		STD	0700	0467	3419	2709	0010502	1310	14801								
		STD	0800	0424	3429	2722	0009341	1409	14801								
189		OBS	0827	0414	34311	2725			14802								
		STD	0900	0392	3436	2731	0008533	1499	14805								
		STD	1000	0364	3442	2738	0007843	1580	14811								
189		OBS	1032	0355	34441	2741			14813								
		STD	1100	0338	3446	2744	0007342	1656	14817								
		STD	1200	0315	3448	2748	0006968	1728	14824								
		STD	1300	0294	3451	2752	0006612	1796	14832								
		STD	1400	0276	3453	2755	0006294	1860	14842								
		STD	1500	0260	3455	2759	0005987	1922	14852								
189		OBS	T1562	0252	34567	2760			14859								

TABLE XI.—Continued

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDCTR	MARSDEN SQUARE 10°	MARSDEN SQUARE 1°	STATION TIME (GMT) MO	STATION TIME (GMT) DAY	STATION TIME (GMT) HR. 1/10	YEAR	ORIGINATOR'S CRUISE NO.	ORIGINATOR'S STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF S'MPL'S	WAVE OBSERVATIONS DIR.	WAVE OBSERVATIONS HGT	WAVE OBSERVATIONS PER	WAVE OBSERVATIONS SEA	WEATHER CODE	CLOUD CODES TYPE	CLOUD CODES AMT	NODC STATION NUMBER
31	1249	PW	3007 N	13957 W		122	09	03	29	190	1968	N15	019	4663	16	09			2	X1	6	3	0019

WATER COLOR CODE	WATER TRANS. (m)	WIND DIR.	WIND SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C DRY BULB	AIR TEMP. °C WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		07	S13	254	178	156	7	14	

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY×10⁷	ΣΔD DYN. M. x 10³	SOUND VELOCITY	O₂ ml/l	PO₄-P µg-at/l	TOTAL-P µg-at/l	NO₂-N µg-at/l	NO₃-N µg-at/l	SiO₄-Si µg-at/l	pH
		STD	0000	1781	3474	2514	0028335	0000	15156							
190		OBS	0000	1781	34742	2514			15156							
190		OBS	0009	1779	34740	2514			15157							
		STD	0010	1780	3474	2514	0028326	0028	15158							
		STD	0020	1785	3477	2515	0028269	0057	15161							
		STD	0030	1790	3480	2516	0028217	0085	15165							
190		OBS	0033	1792	34811	2517			15166							
		STD	0050	1820	3493	2519	0028049	0141	15178							
190		OBS	0051	1821	34938	2519			15179							
		STD	0075	1817	3493	2520	0028046	0211	15181							
190		OBS	0080	1816	34931	2520			15182							
		STD	0100	1815	3493	2520	0028096	0281	15185							
190		OBS	0103	1812	34930	2521			15184							
		STD	0125	1751	3485	2530	0027261	0351	15169							
		STD	0150	1645	3469	2542	0026096	0417	15140							
190		OBS	0156	1614	34644	2546			15131							
		STD	0200	1295	3410	2573	0023277	0541	15028							
190		OBS	T0206	1249	34036	2577			15013							
		STD	0250	1145	3407	2599	0020871	0651	14985							
		STD	0300	1028	3410	2622	0018694	0750	14952							
19		OBS	0314	0997	34109	2628			14943							
		STD	0400	0816	3402	2650	0016082	0924	14886							
190		OBS	T0420	0778	34010	2655			14877							
		STD	0500	0644	3403	2675	0013689	1073	14838							
		STD	0600	0519	3405	2693	0011982	1201	14804							
190		OBS	0629	0491	34070	2697			14797							
		STD	0700	0461	3416	2706	0010652	1314	14798							
		STD	0800	0423	3427	2720	0009478	1415	14800							
190		OBS	0838	0410	34308	2725			14802							
		STD	0900	0393	3435	2730	0008619	1505	14805							
		STD	1000	0366	3442	2738	0007666	1588	14812							
190		OBS	1046	0355	34446	2741			14815							
		STD	1100	0342	3445	2744	0007381	1664	14819							
		STD	1200	0320	3448	2747	0007026	1736	14826							
		STD	1300	0301	3450	2751	0006708	1805	14835							
		STD	1400	0283	3453	2754	0006398	1870	14845							
		STD	1500	0268	3455	2756	0006111	1933	14855							
190		OBS	T1577	0258	34565	2760			14864							

TABLE XI.—Continued

REFERENCE: CTRY CODE	REFERENCE: ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT INDEX	MARSDEN SQUARE: 10°	MARSDEN SQUARE: 1°	STATION TIME (GMT): MO	STATION TIME (GMT): DAY	STATION TIME (GMT): HR. 1/10	YEAR	ORIGINATOR'S: CRUISE NO.	ORIGINATOR'S: STATION NUMBER	DEPTH TO BOTTOM	MAX. DEPTH OF SMPL'S	WAVE OBSERVATIONS: DIR.	WAVE OBSERVATIONS: HGT.	WAVE OBSERVATIONS: PER.	WAVE OBSERVATIONS: SEA	WEATHER CODE	CLOUD CODES: TYPE	CLOUD CODES: AMT.		NODC STATION NUMBER
31	1249	PX	3007 N	13955 W		122	09	03	30	070	1968	N15	020	4663	16	07			2	X1	6	3		0020

WATER: COLOR CODE	WATER: TRANS. (m)	WIND: DIR.	WIND: SPEED OR FORCE	BAROMETER (mbs)	AIR TEMP. °C: DRY BULB	AIR TEMP. °C: WET BULB	VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
		08	S15	240	161	144	7	14	

MESSENGR TIME OR T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta D$ DYN. M. x 10^3	SOUND VELOCITY	O_2 ml/l	PO_4-P µg-at/l	TOTAL-P µg-at/l	NO_2-N µg-at/l	NO_3-N µg-at/l	SiO_4-Si µg-at/l	pH	SCC
		STD	0000	1771	34475	2517	0028081	0000	15153								
070		OBS	0000	1771	34745	2517			15153								
070		OBS	0009	1764	34743	2518			15153								
		STD	0010	1764	3474	2518	0027974	0028	15153								
		STD	0020	1760	3474	2519	0027965	0056	15153								
		STD	0030	1753	3473	2520	0027887	0084	15153								
070		OBS	0034	1750	34725	2520			15153								
		STD	0050	1732	3464	2519	0028098	0140	15149								
070		OBS	0053	1728	34638	2519			15148								
		STD	0075	1776	3479	2519	0028115	0210	15168								
070		OBS	0082	1784	34821	2519			15172								
		STD	0100	1786	3484	2520	0028077	0280	15175								
070		OBS	0106	1786	34843	2520			15176								
		STD	0125	1694	3469	2531	0027118	0349	15150								
		STD	0150	1565	3449	2545	0025798	0416	15113								
070		OBS	0160	1512	34416	2551			15097								
		STD	0200	1272	3412	2579	0022691	0537	15021								
070		OBS	T0213	1209	34050	2585			15001								
		STD	0250	1119	3408	2605	0020298	0644	14976								
		STD	0300	1009	3410	2625	0018367	0741	14945								
070		OBS	0320	0969	34102	2632			14933								
		STD	0400	0831	3403	2649	0016235	0914	14894								
070		OBS	0427	0787	34016	2654			14881								
		STD	0500	0652	3403	2674	0013820	1064	14841								
		STD	0600	0514	3407	2694	0011861	1193	14802								
070		OBS	0642	0472	34100	2702			14792								
		STD	0700	0451	3417	2709	0010458	1304	14794								
		STD	0800	0418	3427	2721	0009419	1404	14798								
070		OBS	0851	0403	34314	2726			14801								
		STD	0900	0390	3435	2730	0008584	1494	14804								
		STD	1000	0366	3442	2738	0007866	1576	14812								
070		OBS	1071	0349	34462	2743			14817								
		STD	1100	0342	3448	2745	0007219	1651	14819								
		STD	1200	0321	3452	2750	0006750	1721	14827								
		STD	1300	0300	3455	2755	0006350	1787	14835								
		STD	1400	0281	3458	2759	0005970	1848	14845								
		STD	1500	0263	3458	2760	0005817	1907	14854								
070		OBS	T1620	0244	34580	2762			14866								

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