U.S. Coast Guard Oceanographic Report

UNITED STATES COAST GUARD

OCEANOGRAPHIC REPORT No. 28

CG 373-28

Woods Hole Oceanographic Institution
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OCEANOGRAPHIC OBSERVATIONS BETWEEN ICELAND AND SCOTLAND

July–November 1965

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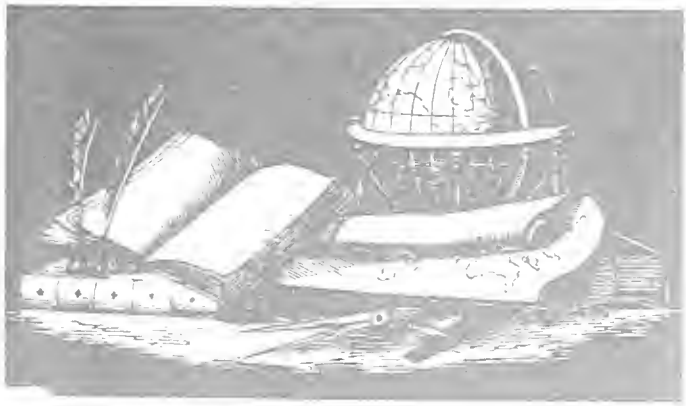

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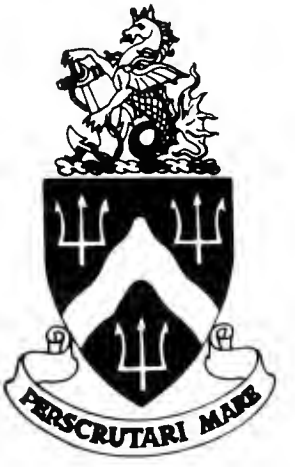

UNITED STATES COAST GUARD OCEANOGRAPHIC UNIT

REPORT No. 28 CG 373-28

OCEANOGRAPHIC OBSERVATIONS BETWEEN ICELAND AND SCOTLAND
July–November 1965

Robert B. Elder

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INTRODUCTION

In October 1965 the Coast Guard Oceanographic Unit initiated an oceanographic program to study the interchange between the North Atlantic Ocean and northern adjacent seas. This was a logical extension of the Coast Guard Oceanographic Unit program of systematic time-series studies at ocean stations BRAVO, CHARLIE, DELTA, and ECHO and the standard section program to obtain data en route to these stations. The initial cruises were planned to obtain measurements of the interchange through sections connecting southern Greenland, Iceland, and Scotland. Relatively short-term variations, on the order of a week to a month in duration, were of interest, as well as seasonal or longer variations which were to be determined by seasonal reoccupation of the sections.

As pointed out by Steele, Barrett, and Worthington (1962), a number of investigations have shown that conditions along the Iceland-Faroe Ridge are quite variable. One of the most comprehensive studies of the interchange between the Norwegian Sea and the North Atlantic Ocean through the Iceland-Scotland area was presented by Tait and Martin (1957 and 1961). Approximately 80 sections taken between 1927 and 1958 were presented in the two publications. The volume transport through sections between Faroe Bank and Butt of Lewis were compared to volume transports through sections between the Faroe and Shetland Islands. The volume transports computed from data taken quasi-synoptically at the two sections were generally in good agreement; however, they changed considerably from survey to survey. Further evidence of the variability of the interchange is given by Cooper (1955). Steele, Barrett, and Worthington (1962) pointed out the possibility that the assumptions of no vertical motion required for geostrophic flow might not hold in this area due to vertical mixing near the edge and components of motion down the ridge. They hypothesized that a better study of velocity, volume transport, and water mass characteristics could be made just south of the Ridge. Subsequently, they conducted a two-ship survey in the area south of Iceland and off the Ridge to investigate whether calculated and observed currents were in agreement. Analysis of the data indicated that there was close agreement between the direct current measurements made using neutrally buoyant floats and those calculated from routine hydrographic observations.

Based on the work cited above, the Coast Guard Oceanographic Unit initiated its study of the interchange between the Norwegian Sea and the North Atlantic Ocean by occupying a section approximately parallel to, but southwest of, the Iceland-Faroe Ridge (fig. 1). This section was occupied once in July 1965 by USCGC NORTHWIND (WAGB 282) and four times in a 27–day period in October and November 1965 by USCGC EVERGREEN (WAGO 295). Data from both cruises are included in Appendix 1, which also includes data obtained between Greenland and Iceland during the same cruises but not discussed in this report.

DATA COLLECTION PROCEDURE

Oceanographic data were obtained at approximately 35-mile intervals along the sections illustrated in figure 1 using an electronic bathythermograph and teflon-lined Nansen bottles. Desired sampling depths were 0, 10, 25, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1250, 1500, 2000, and 2500 meters insofar as depth of water permitted. In addition, an attempt was made to obtain samples at 25 and 100 meters above the bottom. The standard depths were frequently modified to define better the vertical temperature distribution as described by the electronic bathythermograph trace.

When the water depth exceeded approximately 1000 meters, two casts were made in order to limit the load on the hydrographic wire. Generally the upper 1000 meters were sampled on one cast and the layer from somewhat above 1000 meters to the bottom on the other. The casts were overlapped for purposes of quality control. On deep casts aboard USCGC EVERGREEN (WAGO 295) a 12-kc pinger was used in conjunction with a precision echo sounding

recorder (PESR) in an effort to place the lowest Nansen bottle at approximately 25 meters above the bottom. The PESR had been damaged and was not operating properly; therefore, it was not possible to use the pinger as effectively as would have been possible otherwise.

Two protected reversing thermometers were used on each sampling bottle. At 200 meters and deeper, unprotected reversing thermometers were used on alternate bottles. Salinities were determined aboard ship using inductive type salinometers, and dissolved oxygen content was determined using a modified Winkler oxygen determination method (Jacobsen, Robinson, and Thompson, 1950). Thermometer corrections, thermometric depths, sigma-t values and specific volume anomalies were determined using the computer programs described by O'Hagan (1964). These values were used in preparation of the figures included in this report. Processed temperature, salinity, and oxygen data were submitted to the National Oceanographic Data Center (NODC) for further processing and the results are included in Appendix 1 (NODC cruise numbers 31–938 and 31–963).

DATA ANALYSIS PROCEDURE

At the outset of the analysis of the data it was planned to use the volume transports through the sections as a basis of comparison. It immediately became apparent that this would not provide a legitimate quantitative means of comparison, because in most cases the difference in dynamic height between stations used in the computation of volume transports was of the same order of magnitude as the possible error in measurement. Kollmeyer (1964), in his discussion of errors in dynamic height determination, points out that a realistic instrumental accuracy of $\pm 0.02°C$ in the measurements of temperature, and $\pm 0.02‰$ in the measurement of salinity, and a similar interpolation error, would result in a possible error of ± 0.0338 dynamic meters over 1000 meters. The effect of this error on computed current speed, assuming a latitude of 61°N, station spacing of 35 miles and no navigational error, is 8.17 cm/sec. This exceeds the computed current speed in almost all instances and thus makes the value of the computed volume transports doubtful. As a result, it was necessary to utilize a more qualitative method of comparison of the sections.

T–S ANALYSIS

Possibly the best means of comparing the water mass characteristics of one section with another is by analysis of T–S diagrams (figs. 2–14). The diagrams are arranged to allow comparisons of observations taken at approximately the same position at different times. Included in the diagrams are dashed lines connecting the point representing North Atlantic Water ($T=9°C$, $S=35.31‰$) and Irminger Sea Water ($T=3°C$, $S=34.89‰$). A mixture of these two types of water would fall along this line. A second dashed line on each diagram connects the point representing North Atlantic water with that of Norwegian Sea Water ($T=0°C$, $S=34.95‰$, off diagram) which overflows the ridge.

The most apparent features indicated by the T–S diagrams were the similarity of the repeated stations at about the same position and the deviations from the Atlantic-Irminger line on part of the section (EVERGREEN stations 17–21) between Iceland and Outer Bailey Bank (figs. 2–6). The deviations from the Atlantic-Irminger line toward the Norwegian Sea line indicated the presence of varying quantities of Norwegian Sea Water in the three-component mixture. These observations were quite similar to those described by Steele, et al. (1962). He pointed out that at stations near Iceland, Norwegian Sea Water was present as a component of the water mixture from relatively shallow depths to the bottom; whereas at stations further away from Iceland, it was limited to the bottom layer. These conditions are shown in figures 17–21; the former by the proportion of Norwegian Sea Water found at CGC EVERGREEN stations 17A–D, and the latter by the proportion of Norwegian Sea Water near the bottom at CGC EVERGREEN stations 18–21. In general the water between Iceland and Outer Bailey Bank was a mixture mostly of North Atlantic Water and Irminger Sea Water. This was indicated by the T–S values falling near the Atlantic-Irminger line (figs. 3–6). At stations between Outer Bailey Bank and Scotland, the T–S curves tended more closely to the line that represents a mixture of North Atlantic Water and Norwegian Sea Water (figs. 10–13).

An exception to the temporal constancy of T–S characteristics was observed by comparing

USCGC EVERGREEN stations 21–A through 21–D and USCGC NORTHWIND station 17 (fig. 6). Considerable Norwegian Sea Water was present at stations 21–B and 21–C but none was apparent at stations 21–A, 21–D, and USCGC NORTHWIND station 17. This was illustrated further by determination of proportion of Norwegian Sea Water present (figs. 15–19). Also noteworthy was the relatively greater amount of Norwegian Sea Water at shallow depths in the vicinity of USCGC EVERGREEN station 20 during all but the initial occupation of the station (figs. 18–20). In general the amount of Norwegian Sea Water in the section increased throughout the survey.

DISTRIBUTION OF PROPERTIES

The temperature of the upper few hundred meters became cooler during the USCGC EVERGREEN survey (figs. 22–25). The location of the 9°C isotherm was approximately constant throughout the surveys; sloping from about 200 meters depth near Iceland to 800 meters depth near Scotland. Above this isotherm the temperature gradient diminished in time owing to cooling of the surface layers and more nearly approached isothermal conditions in the last section. The USCGC NORTHWIND section (fig. 21) showed a considerably warmer surface temperature and a much shallower 9°C isotherm indicating development of a seasonal thermocline. The permanent thermocline extends from the 8°C isotherm to the 5°C isotherm (figs. 21–25), and is also characterized by an oxygen minimum (figs. 36–40).

The overall temperature distribution between Iceland and Outer Bailey Bank did not vary significantly from survey to survey. There were significant changes in the near-bottom temperatures between Iceland and Outer Bailey Bank, however, as pointed out by variations in computed quantities (CB/CA) of Norwegian Sea Water present. There is good correlation between the 0.5 CB/CA isopleth and the 3.0°C isotherm.

The temperature distribution below 400 meters between Outer Bailey Bank and Scotland did not change greatly during the USCGC EVERGREEN survey. The average depths of the isotherms remained approximately constant with only a slight cooling (<0.5°C) near the middle of the section. Bottom water temperatures in this area did not vary appreciably on any of the surveys.

The salinity distribution in the section between Iceland and Scotland did not change significantly during the surveys (figs. 26–50). In addition, the horizontal and vertical gradients were small; with almost the entire body of water having salinity values between 35.00‰ and 35.40‰.

As a consequence of the relatively static salinity distribution, changes in density reflect changes in the temperature distribution; therefore, the most noticeable density changes were in the upper 300 to 500 meters of water. Beneath 500 meters the density distribution was quite constant except for the bottom layers between Iceland and Outer Bailey Bank, where density changes were related to variation in the quantities of Norwegian Sea Water present.

CONCLUSIONS

Variation of temperature above the permanent thermocline due to seasonal cooling was quite pronounced but the changes that occurred beneath it were somewhat less obvious and related to advection of Norwegian Sea Water. The maximum proportion of Norwegian Sea Water observed on each section varied from 0.301 to 0.684 (figs. 16–20). The distribution of the Norwegian Sea Water present also varied and extensive distribution was not necessarily asssociated with high proportions. For example, the individual calculations of the proportion of Norwegian Sea Water during the USCGC NORTHWIND section were relatively low (<0.301) yet Norwegian Sea Water was more widely distributed on this section than on some of the USCGC EVERGREEN sections which had higher individual calculations. Whether this is indicative of changes in the quantity of Norwegian Sea Water passing through the section or merely indicates a different mixture of an approximately constant amount of Norwegian Sea Water cannot be determined with the available data. Future study of the variability of the interchange should include continuous temperature and salinity measurement to within a few meters of the bottom. Other methods, such as the measurement of preformed nutrients, should also be applied to more carefully define the water types present.

Direct current measurements with drogues or neutrally buoyant floats would also be of value in determining volume flow and would allow a more quantitative determination of the variability of the flow of Norwegian Sea Water through the section.

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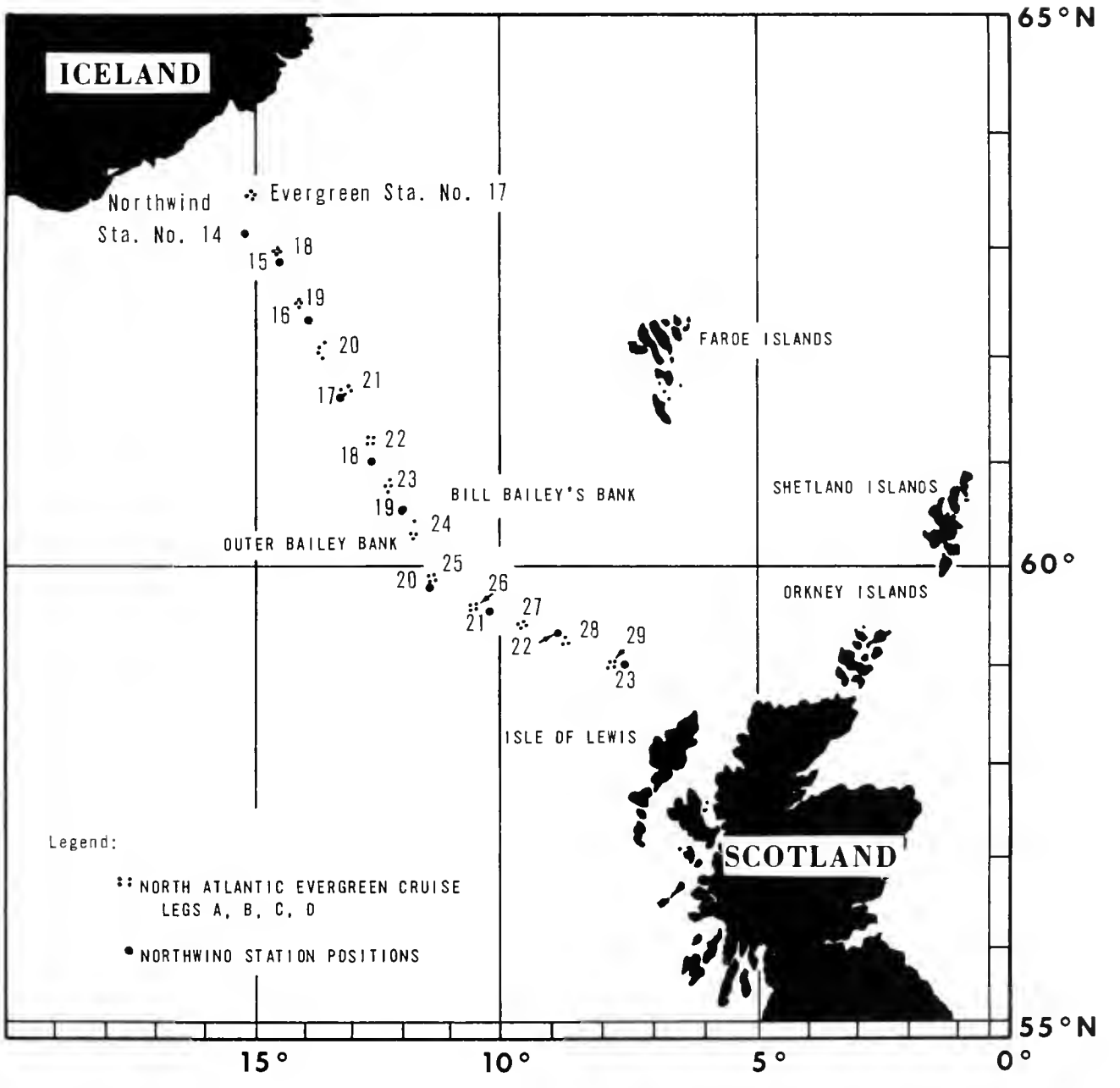

FIGURE 1. Positions of NORTHWIND stations 14–23, 7–9 July 1965 and EVERGREEN stations 17–29, 26 October–23 November 1965.

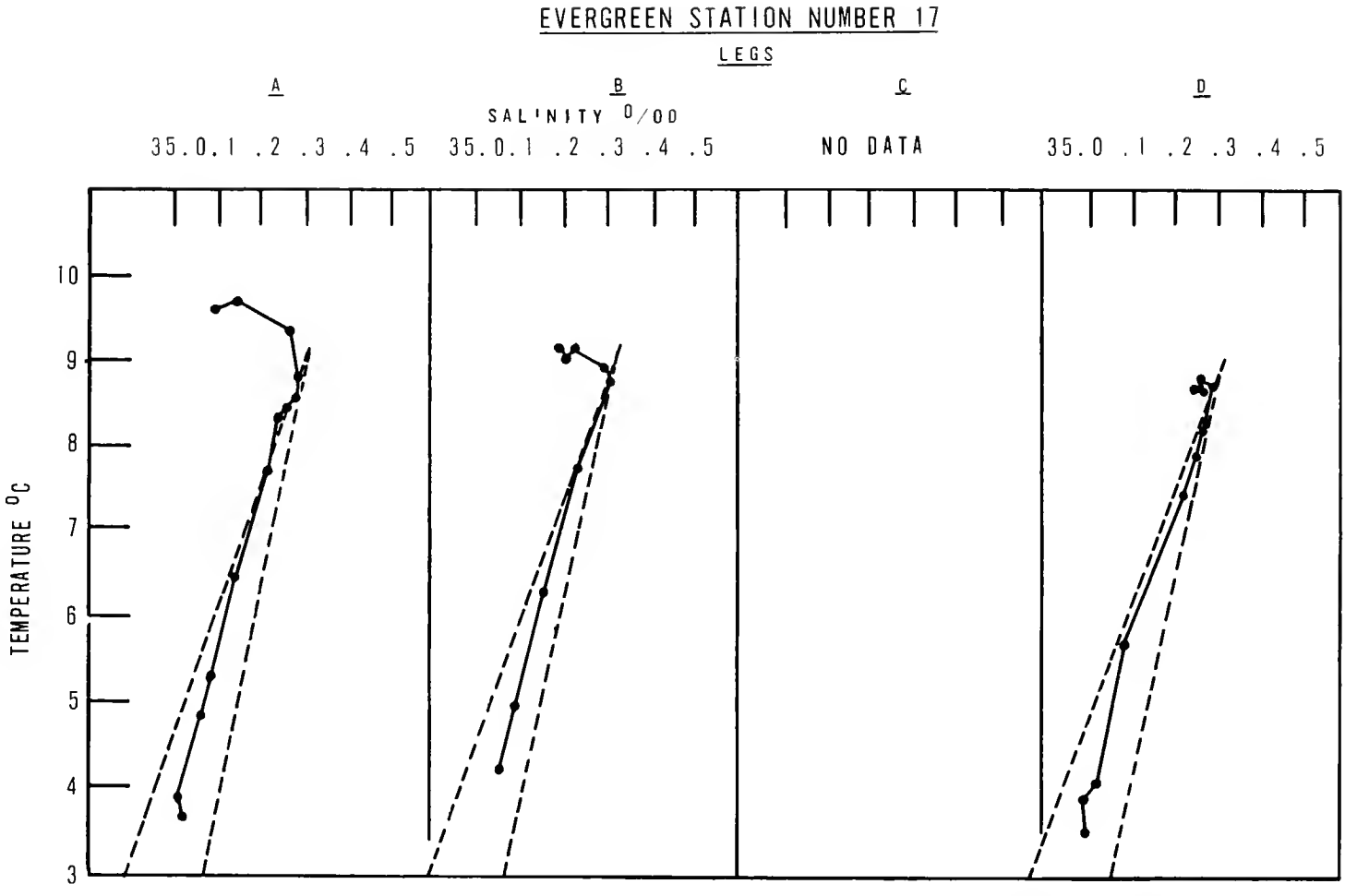

FIGURE 2. Temperature-salinity diagrams, **EVERGREEN** station 17. The base lines (------) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0° C, 34.95‰).

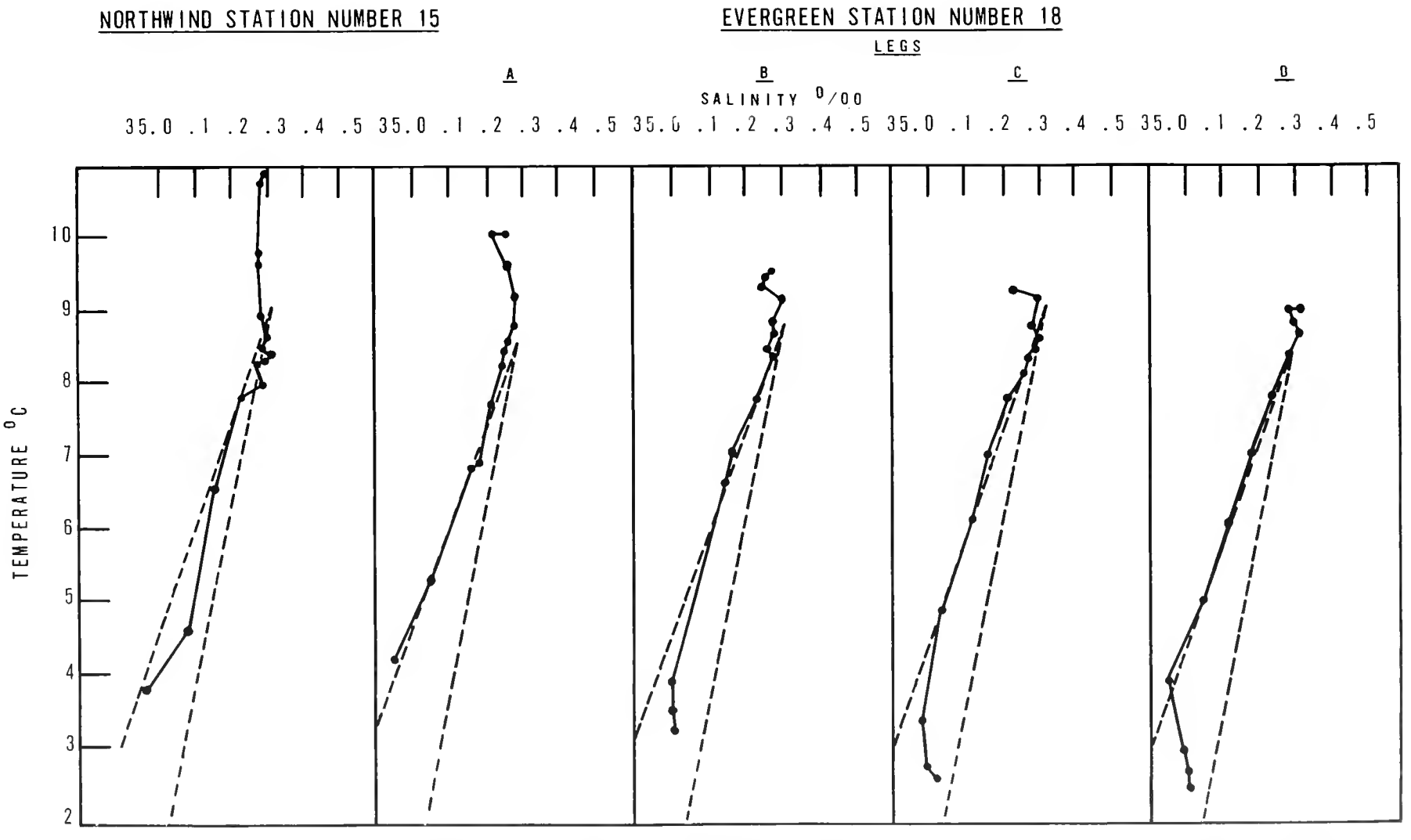

FIGURE 3. Temperature-salinity diagrams, NORTHWIND station 15, EVERGREEN station 18. The base lines (. . . .) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3° C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

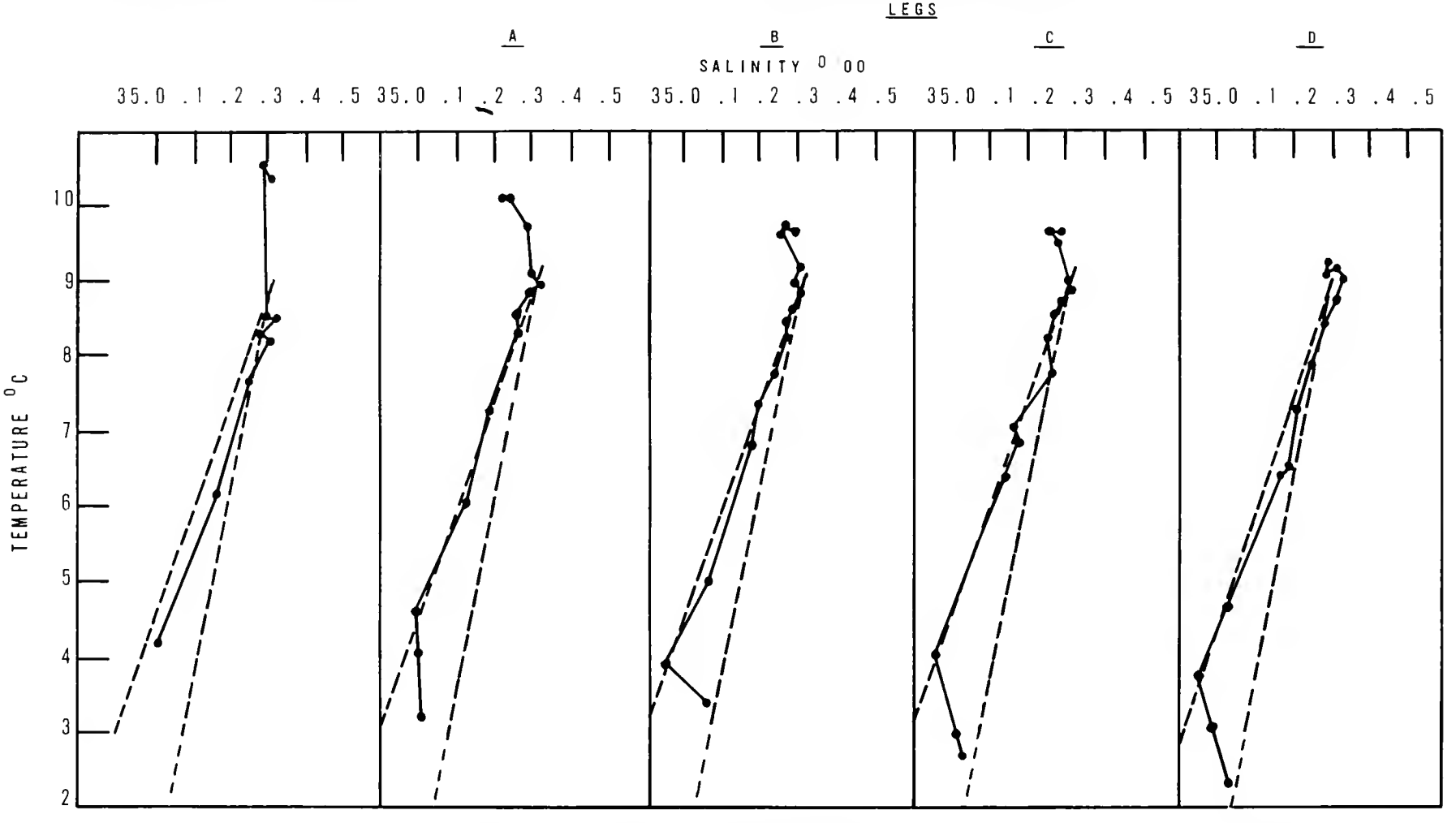

FIGURE 4. Temperature-salinity diagrams, NORTHWIND station 16, EVERGREEN station 19. The base lines (.....) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3° C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

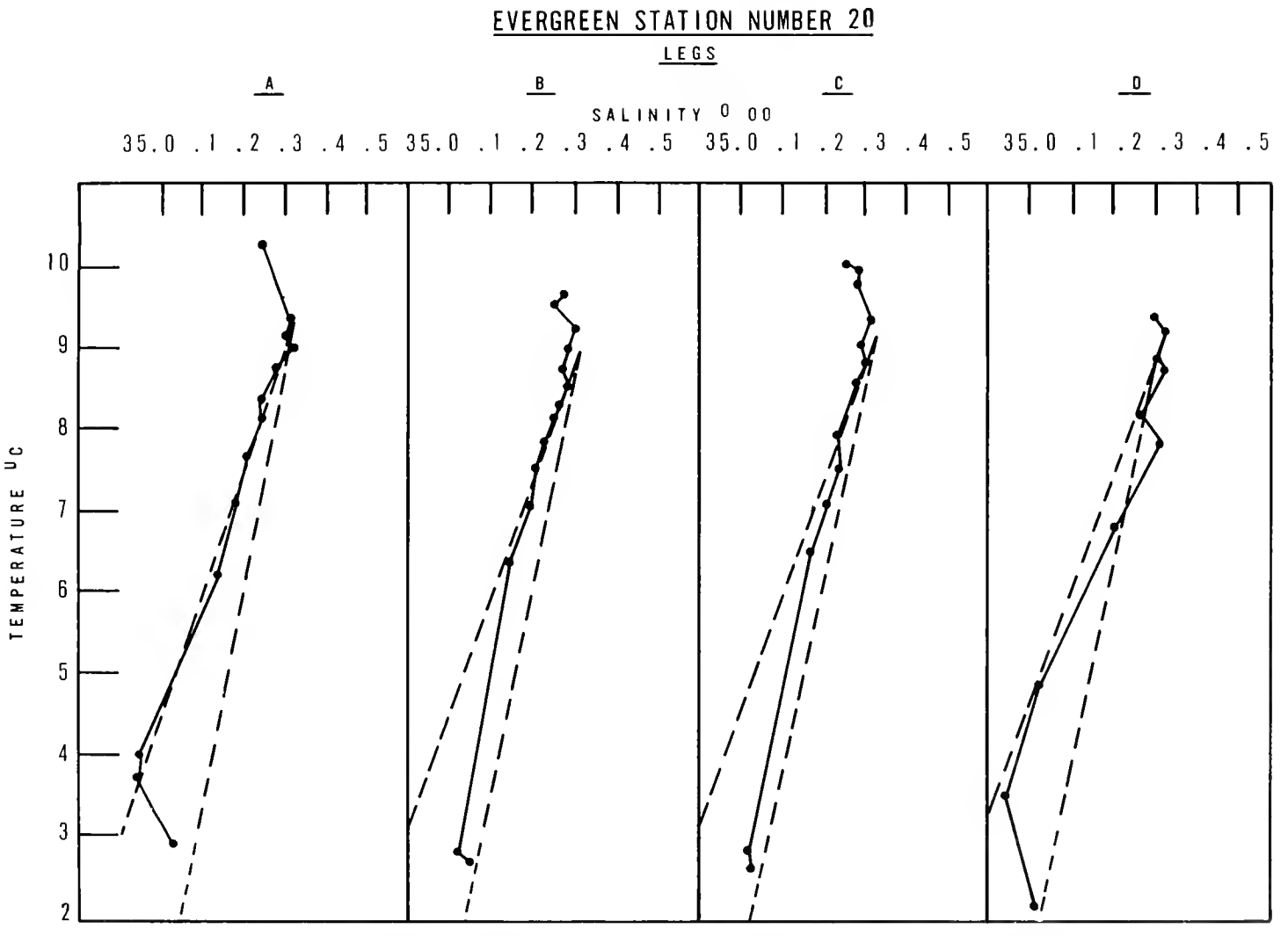

FIGURE 5. Temperature-salinity diagrams, **EVERGREEN** station 20. The base lines ( ) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

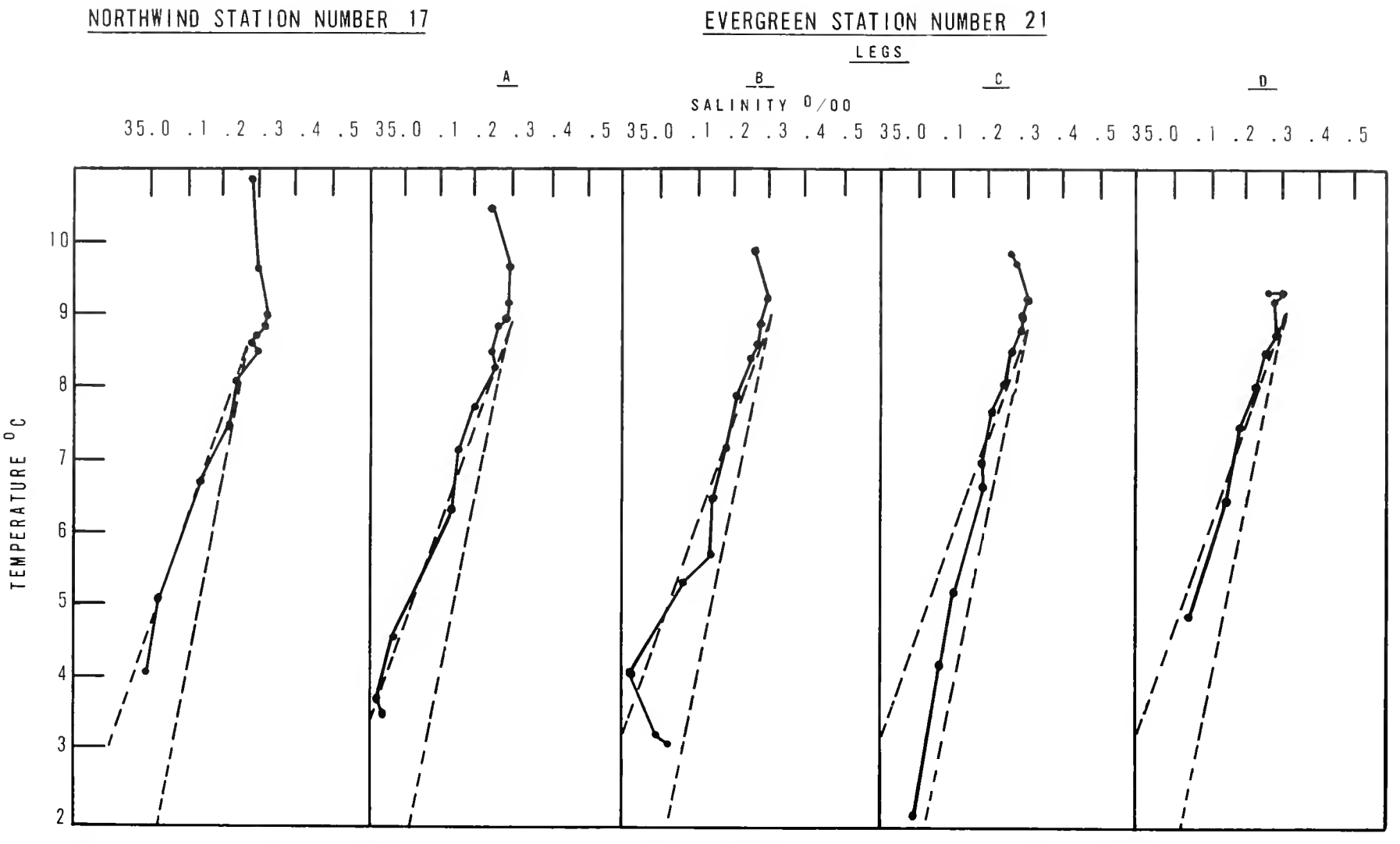

FIGURE 6. Temperature-salinity diagrams, NORTHWIND station 17, EVERGREEN station 21. The base lines (_ _ _ _) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

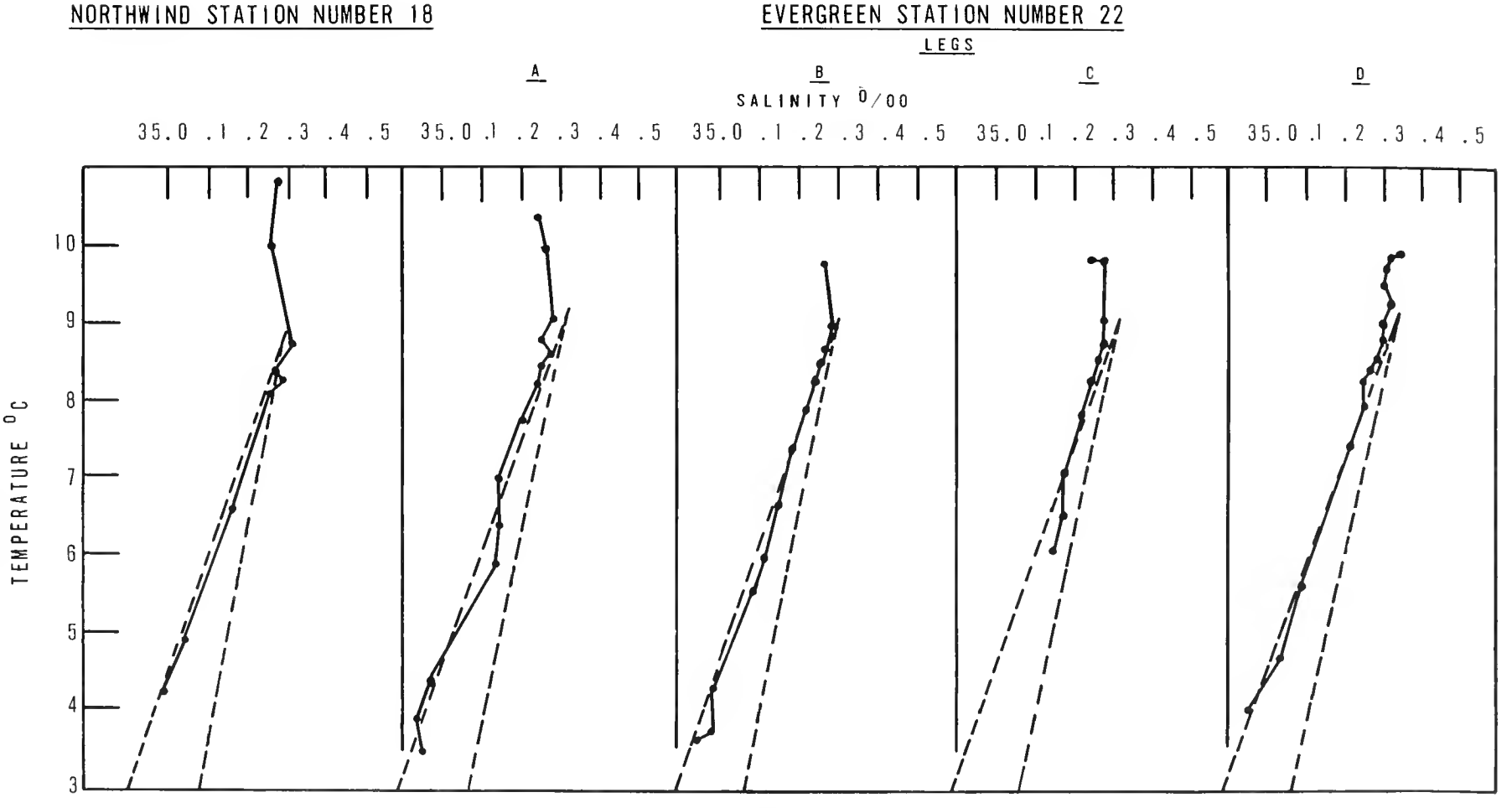

FIGURE 7. Temperature-salinity diagrams, NORTHWIND station 18, EVERGREEN station 22. The base lines ( ) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

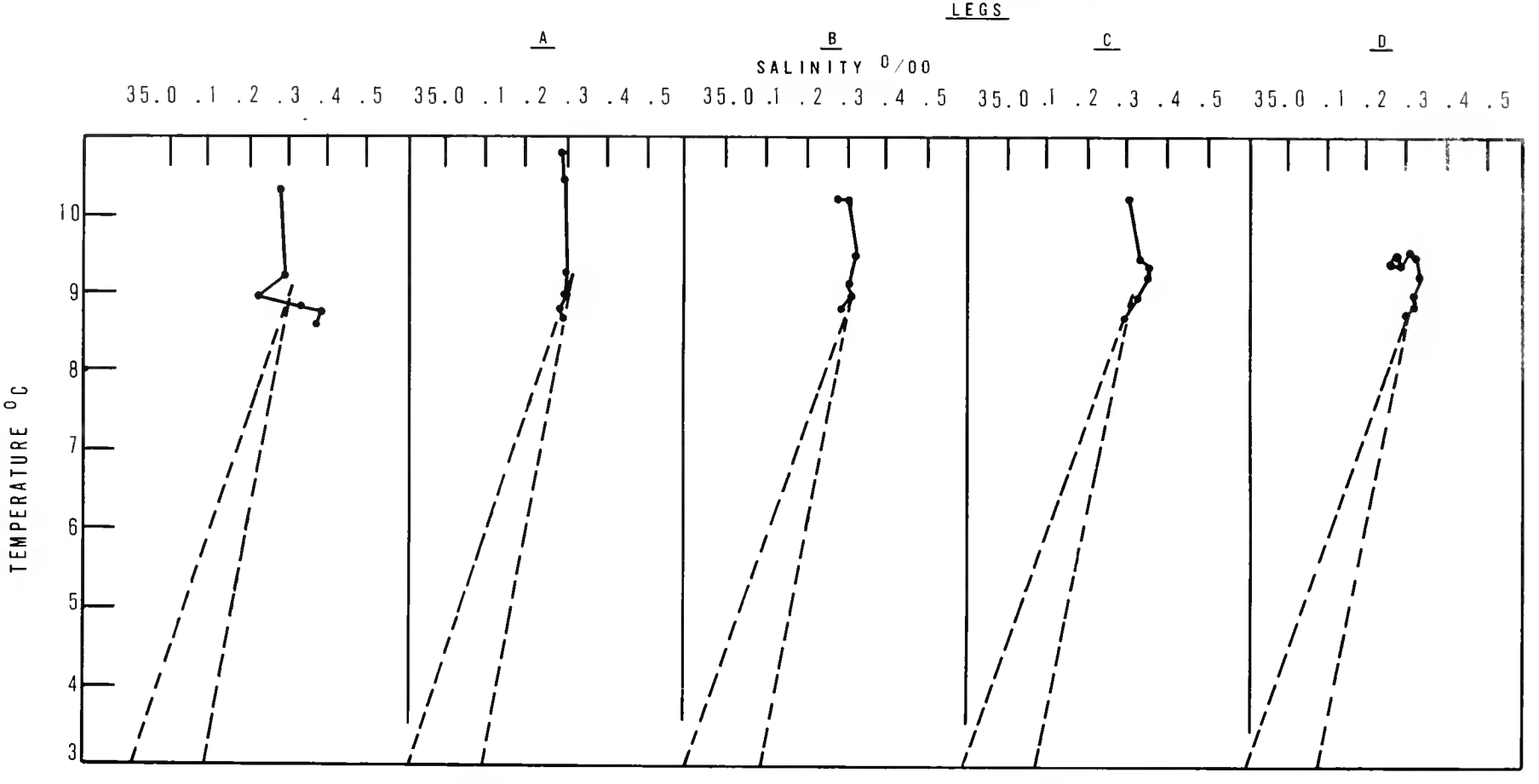

FIGURE 8. Temperature-salinity diagrams, NORTHWIND station 19, EVERGREEN station 23. The base lines (.....) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

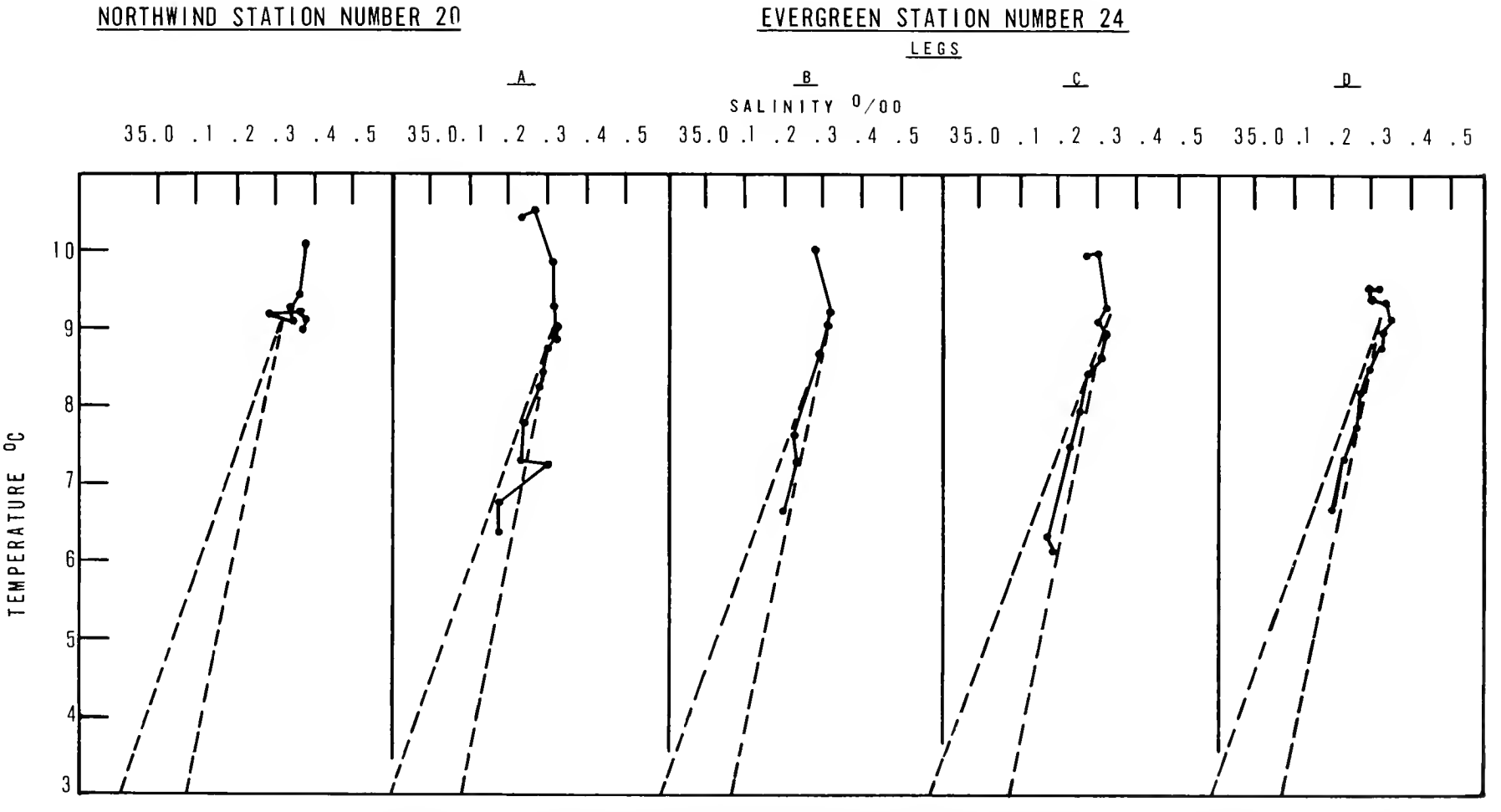

FIGURE 9. Temperature-salinity diagrams, NORTHWIND station 20, EVERGREEN station 24. The base lines (- - - -) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

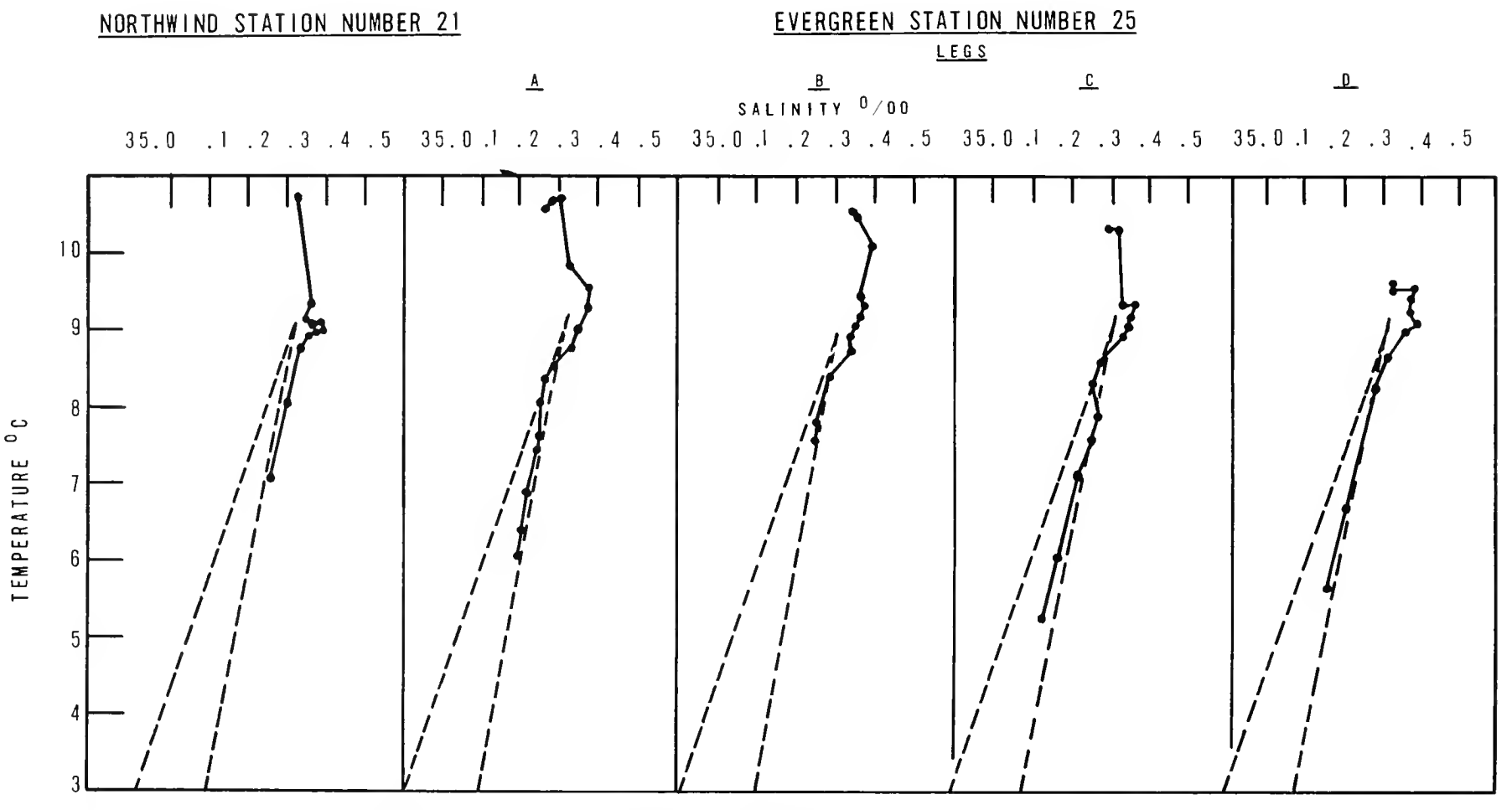

FIGURE 10. Temperature-salinity diagrams, NORTHWIND station 21, EVERGREEN station 25. The base lines (. . .) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

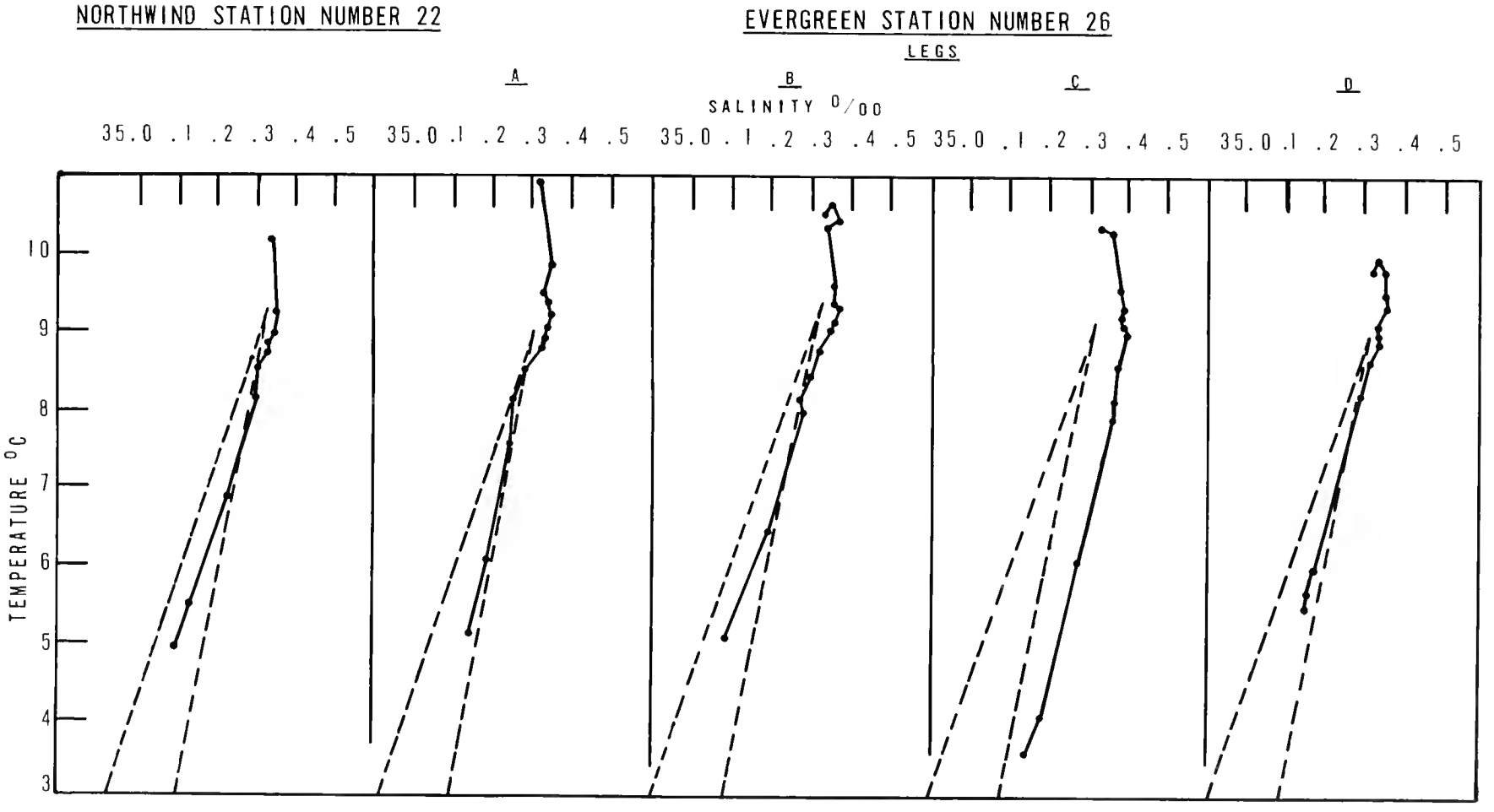

FIGURE 11. Temperature-salinity diagrams, NORTHWIND station 22, EVERGREEN station 26. The base lines ( ) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

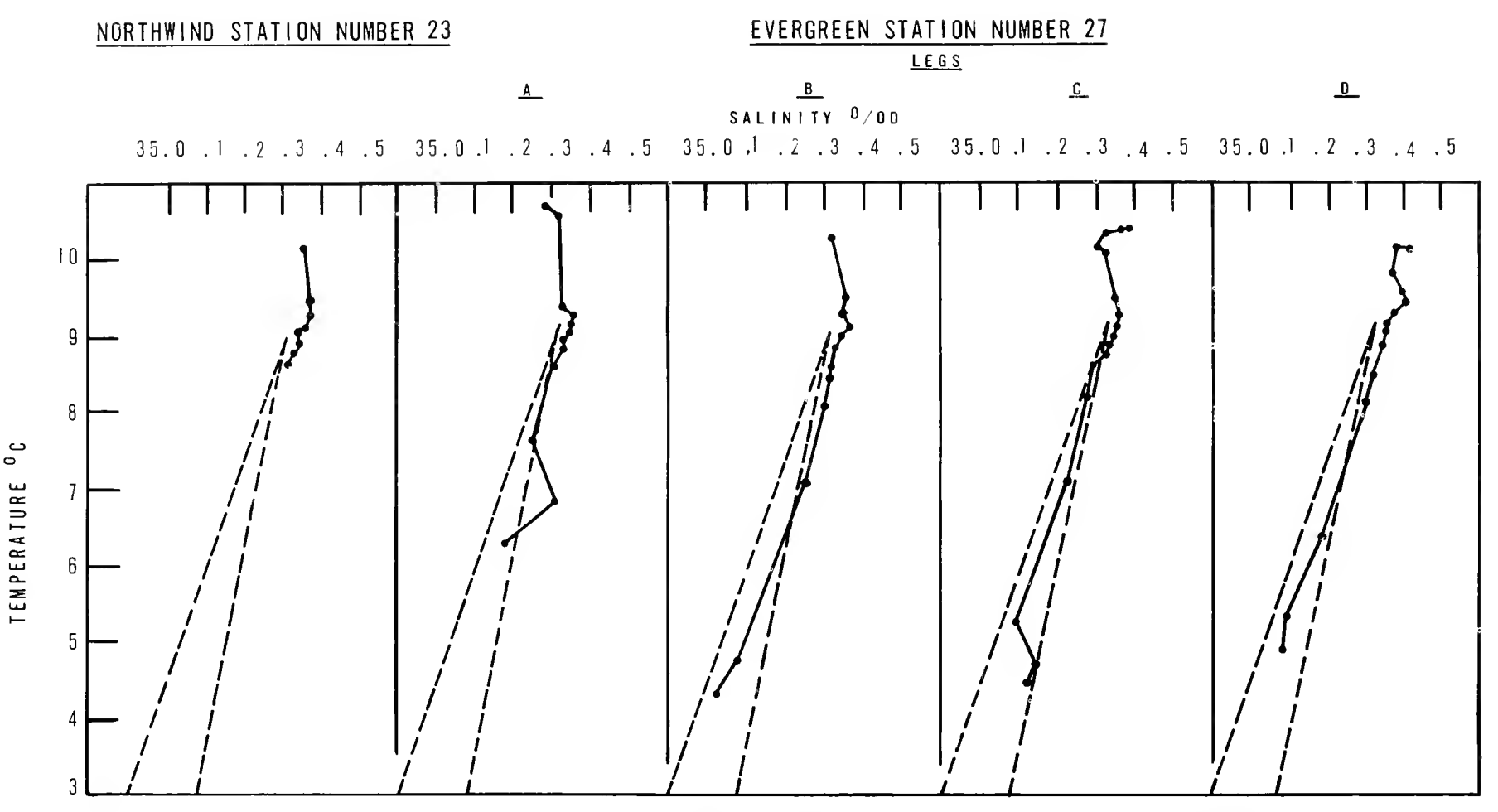

FIGURE 12. Temperature-salinity diagrams, NORTHWIND station 23, EVERGREEN station 27. The base lines ( ) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

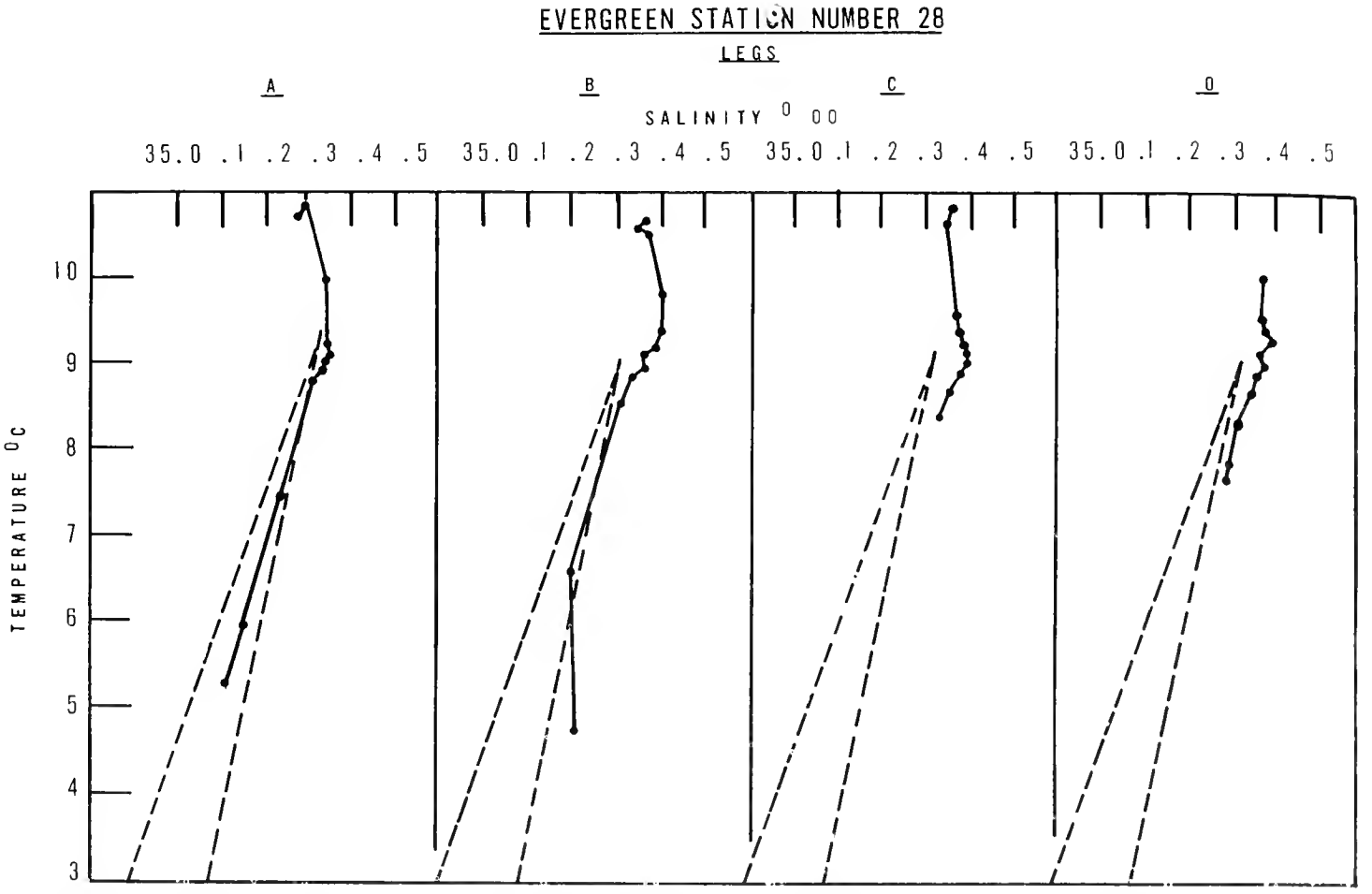

FIGURE 13. Temperature-salinity diagrams, EVERGREEN station 28. The base lines ( ) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

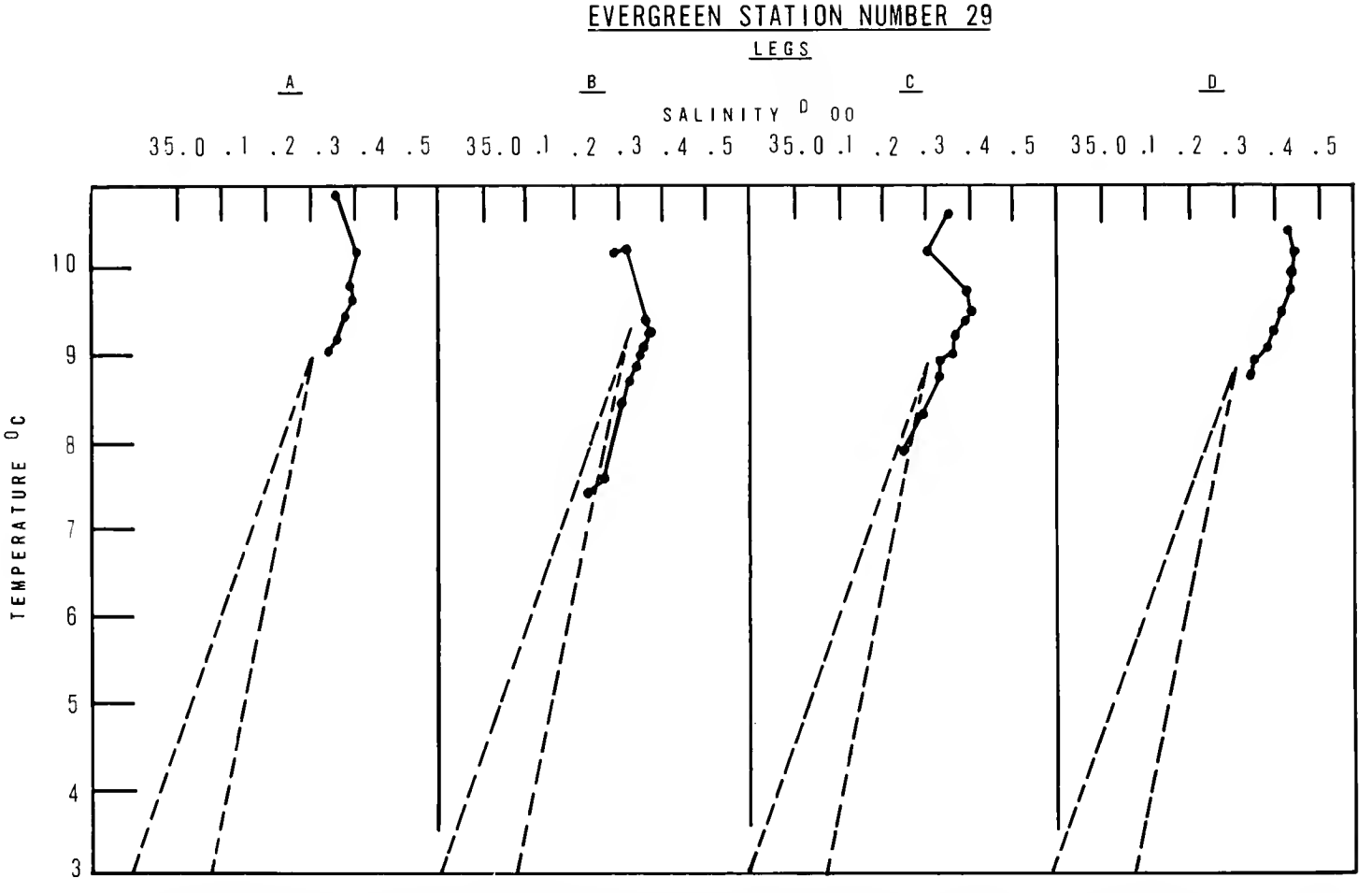

FIGURE 14. Temperature-salinity diagrams, EVERGREEN station 29. The base lines ( ) connect North Atlantic Water (9°C, 35.51‰) with Irminger Sea Water (3°C, 34.89‰) and Norwegian Sea Water (0°C, 34.95‰).

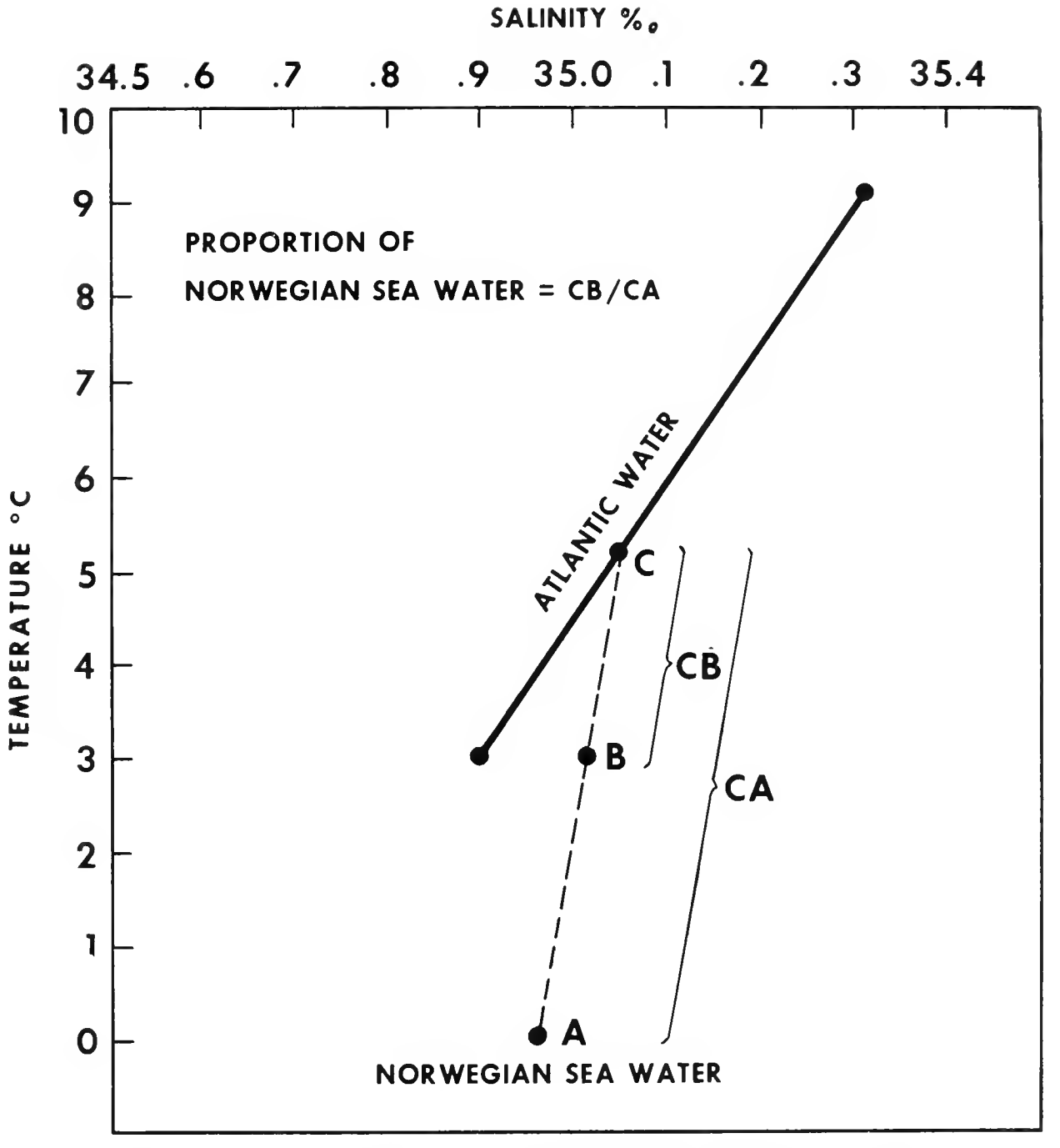

FIGURE 15. Method of determining proportion of Norwegian Sea Water. From Steele, et al., 1962.

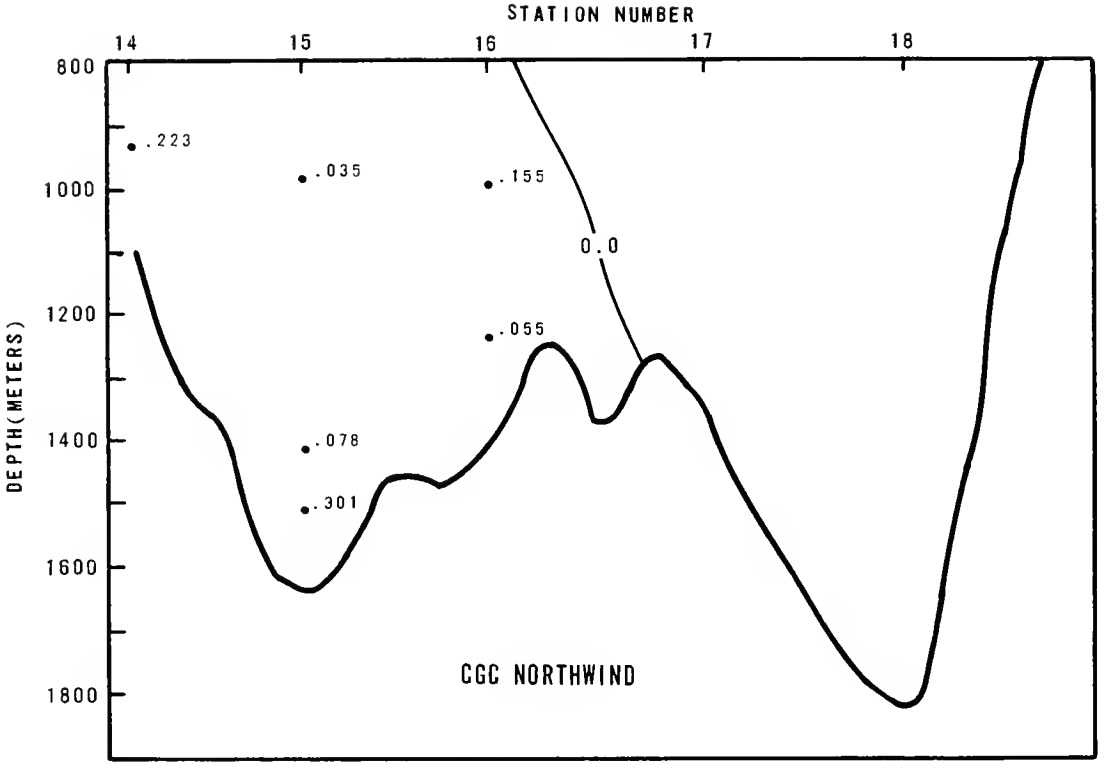

FIGURE 16. Proportion (CB/CA) of Norwegian Sea Water, NORTHWIND stations 14–18, 7–8 July 1965.

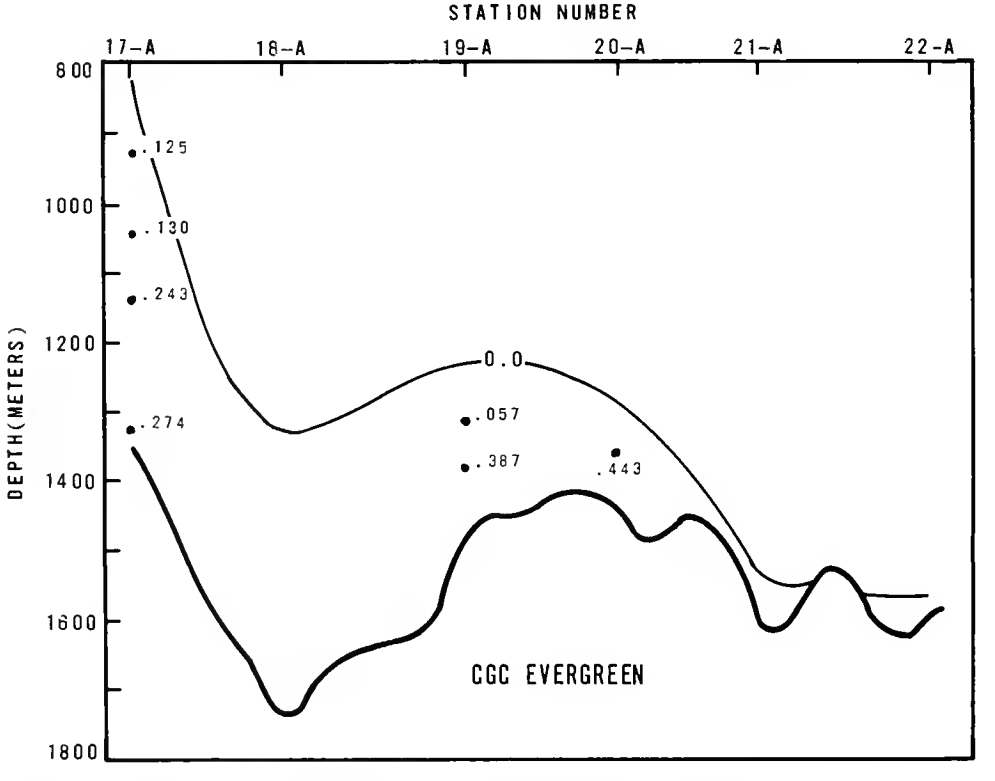

FIGURE 17. Proportion (CB/CA) of Norwegian Sea Water EVERGREEN stations 17–A to 22–A, 26–27 October 1965.

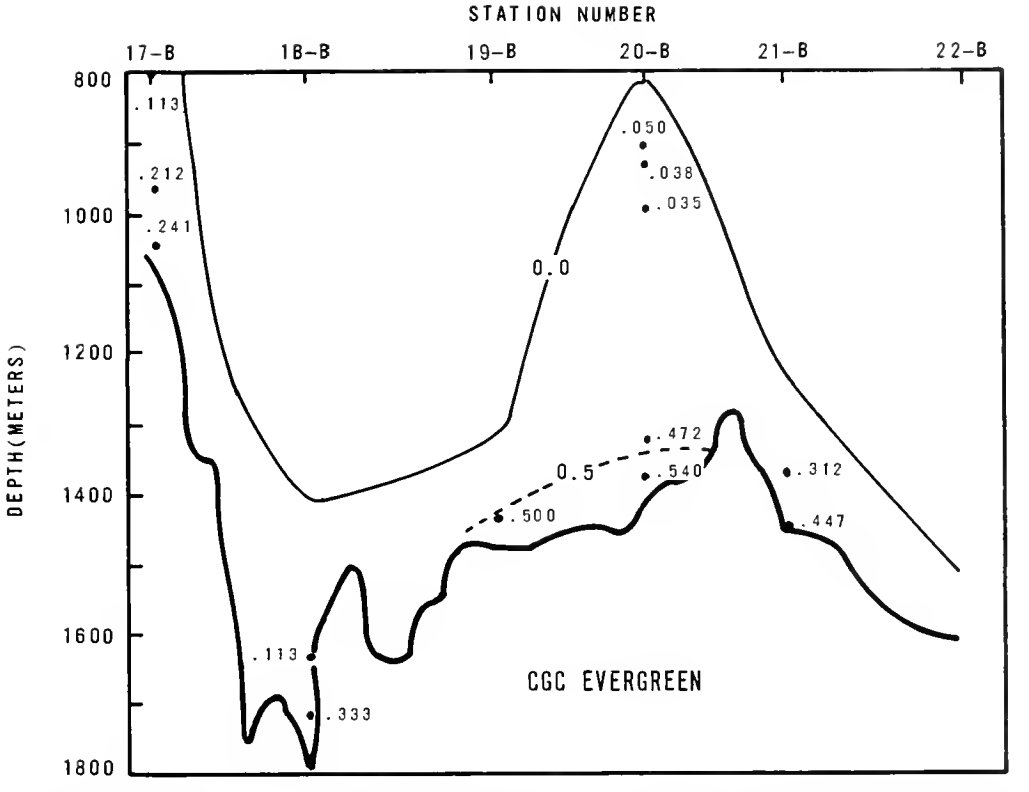

FIGURE 18. Proportion (CB/CA) of Norwegian Sea Water, EVERGREEN stations 17-B to 22-B, 4-6 November 1965.

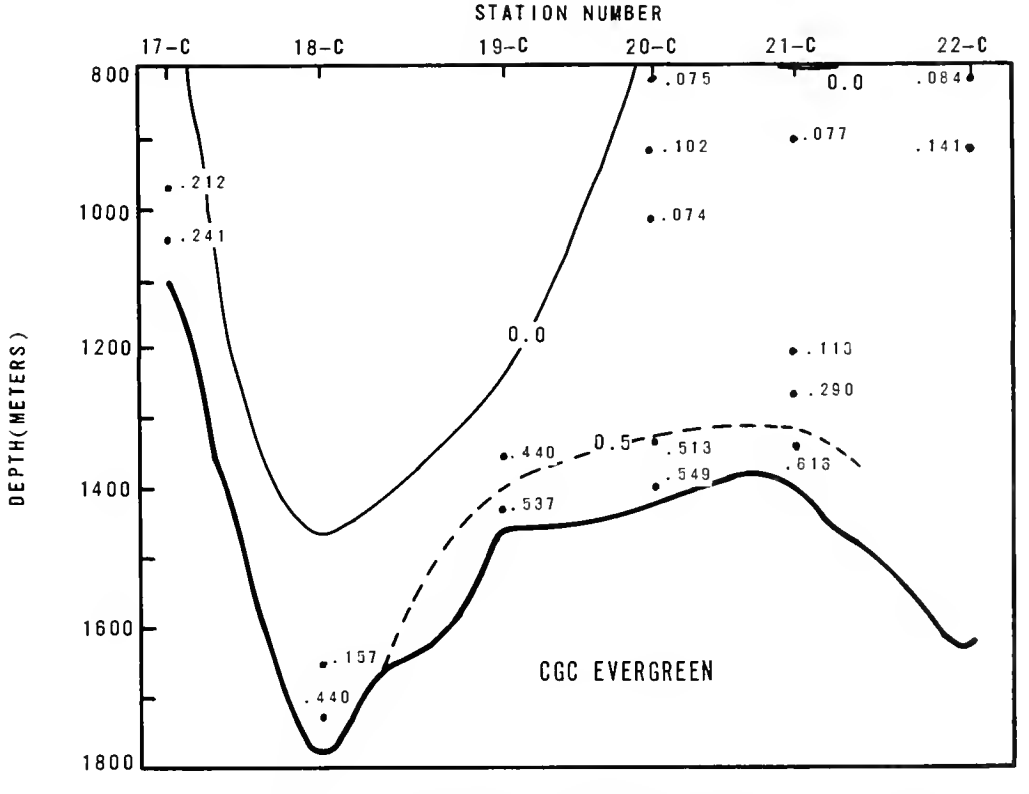

FIGURE 19. Proportion (CB/CA) Norwegian Sea Water, EVERGREEN stations 17-C to 22-C, 7 November 1965.

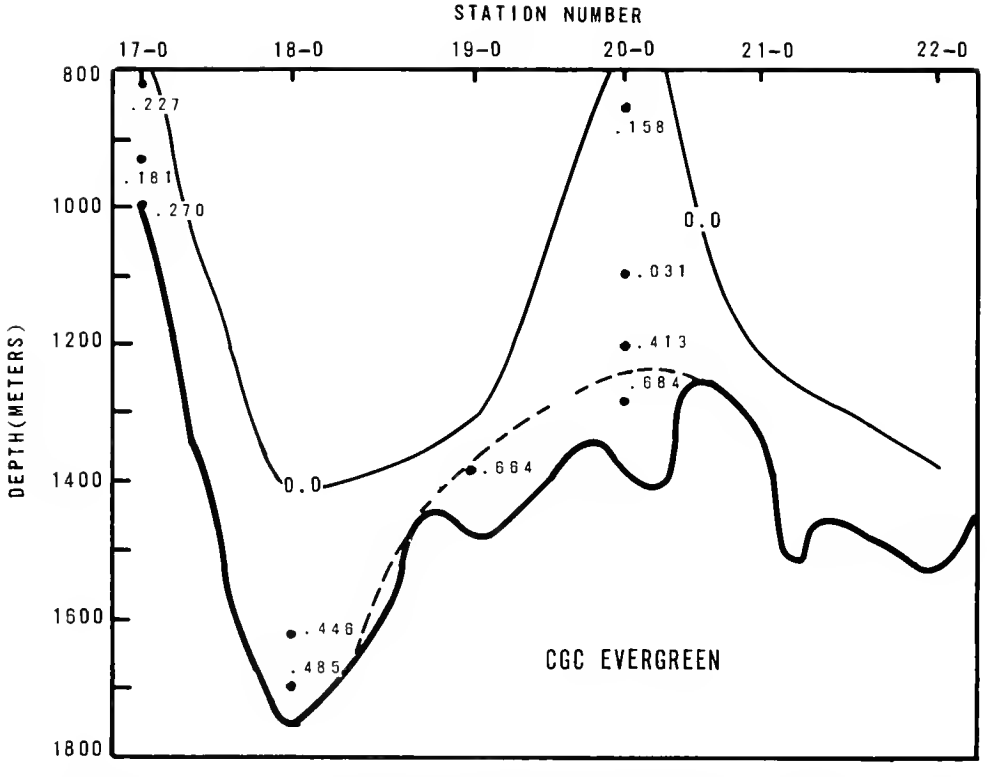

FIGURE 20. Proportion (CB/CA) of Norwegian Sea Water, EVERGREEN stations 17-D—22-D, 21-22 November 1965.

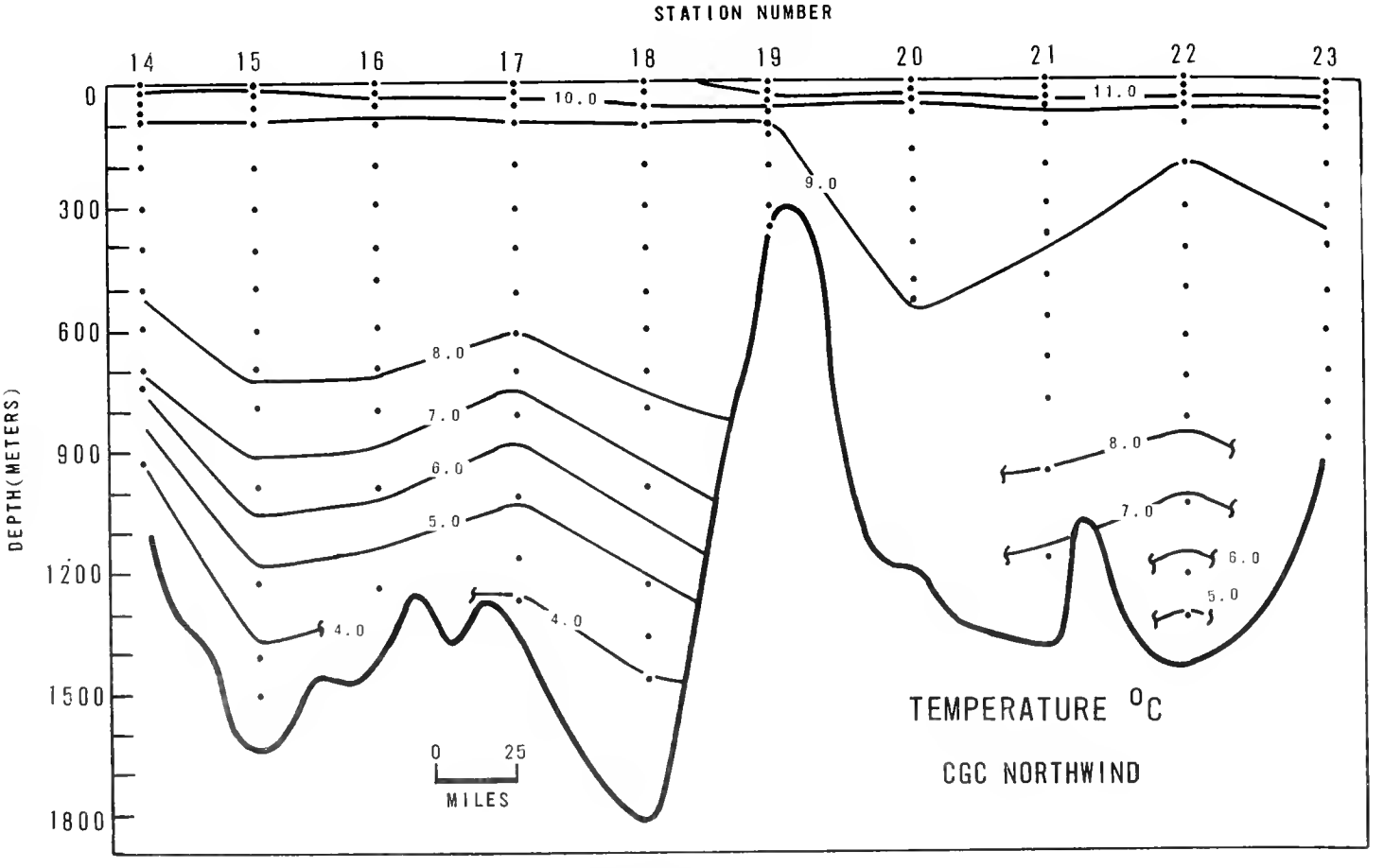

FIGURE 21. Vertical section of temperature (°C), NORTHWIND stations 14 to 23, 7–9 July 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

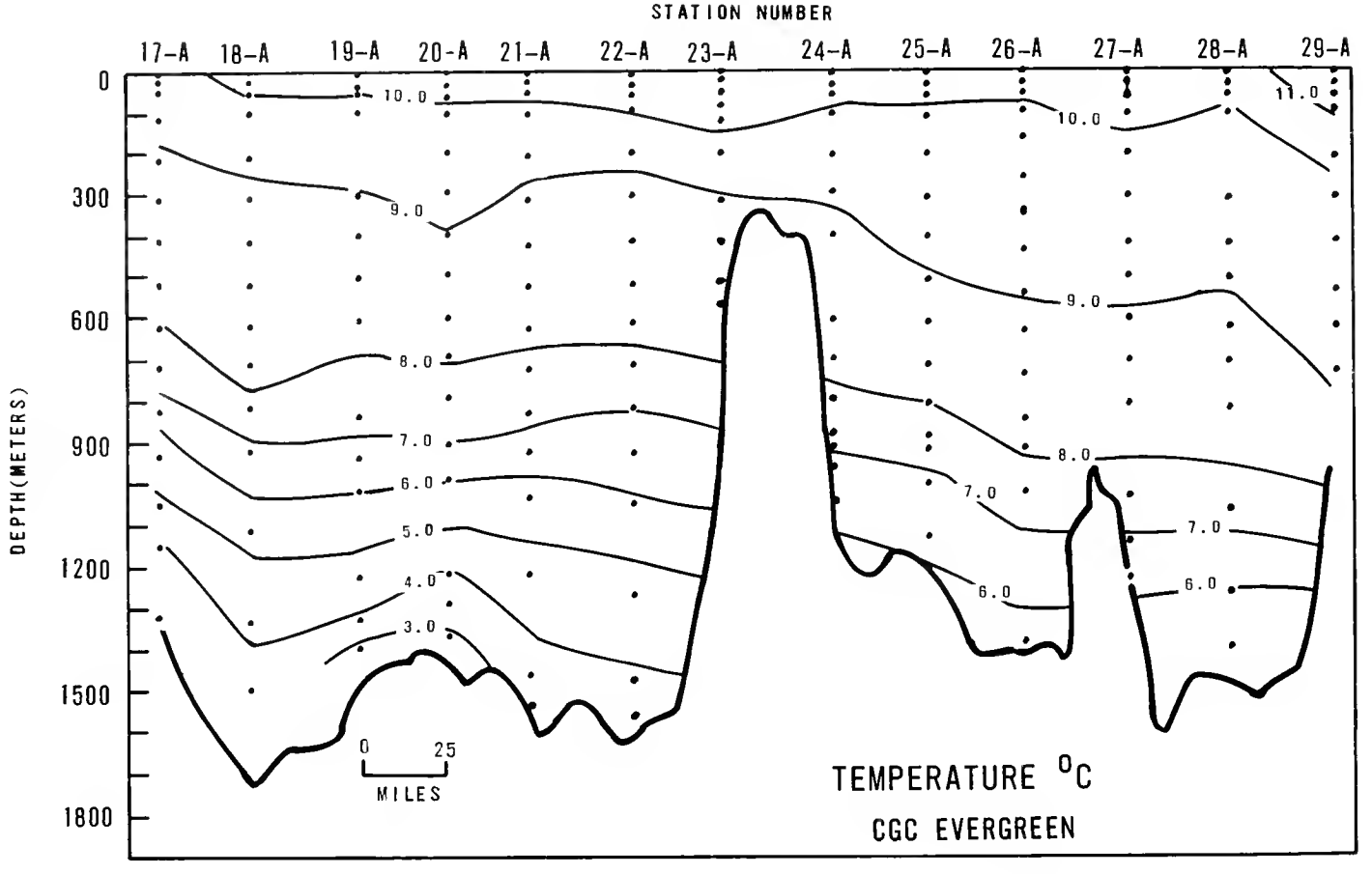

FIGURE 22. Vertical section of temperature (°C), EVERGREEN stations 17–A to 29–A, 26-29 October 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

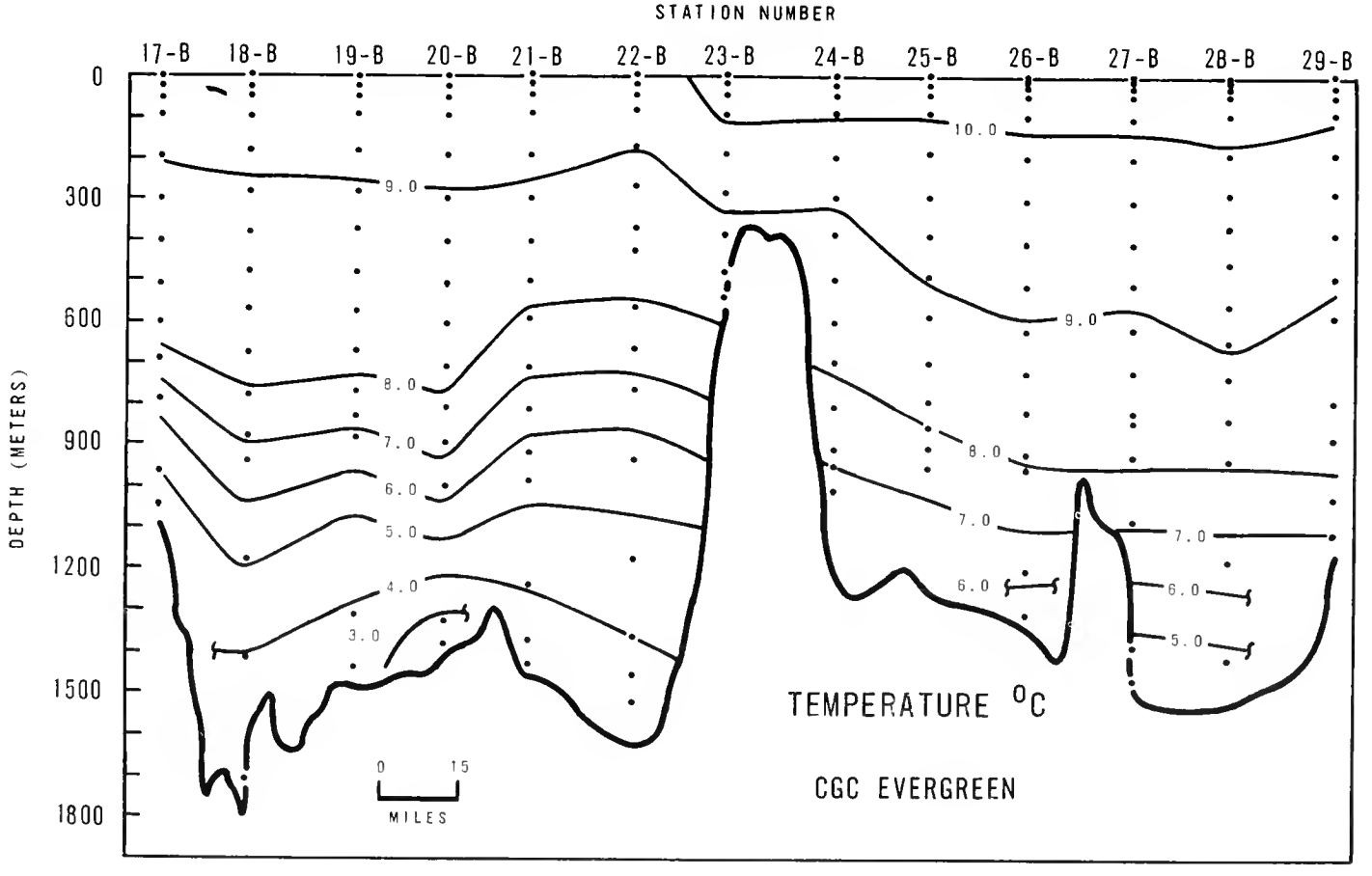

FIGURE 23. Vertical section of temperature (°C), EVERGREEN stations 17–B to 29–B, 4–7 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

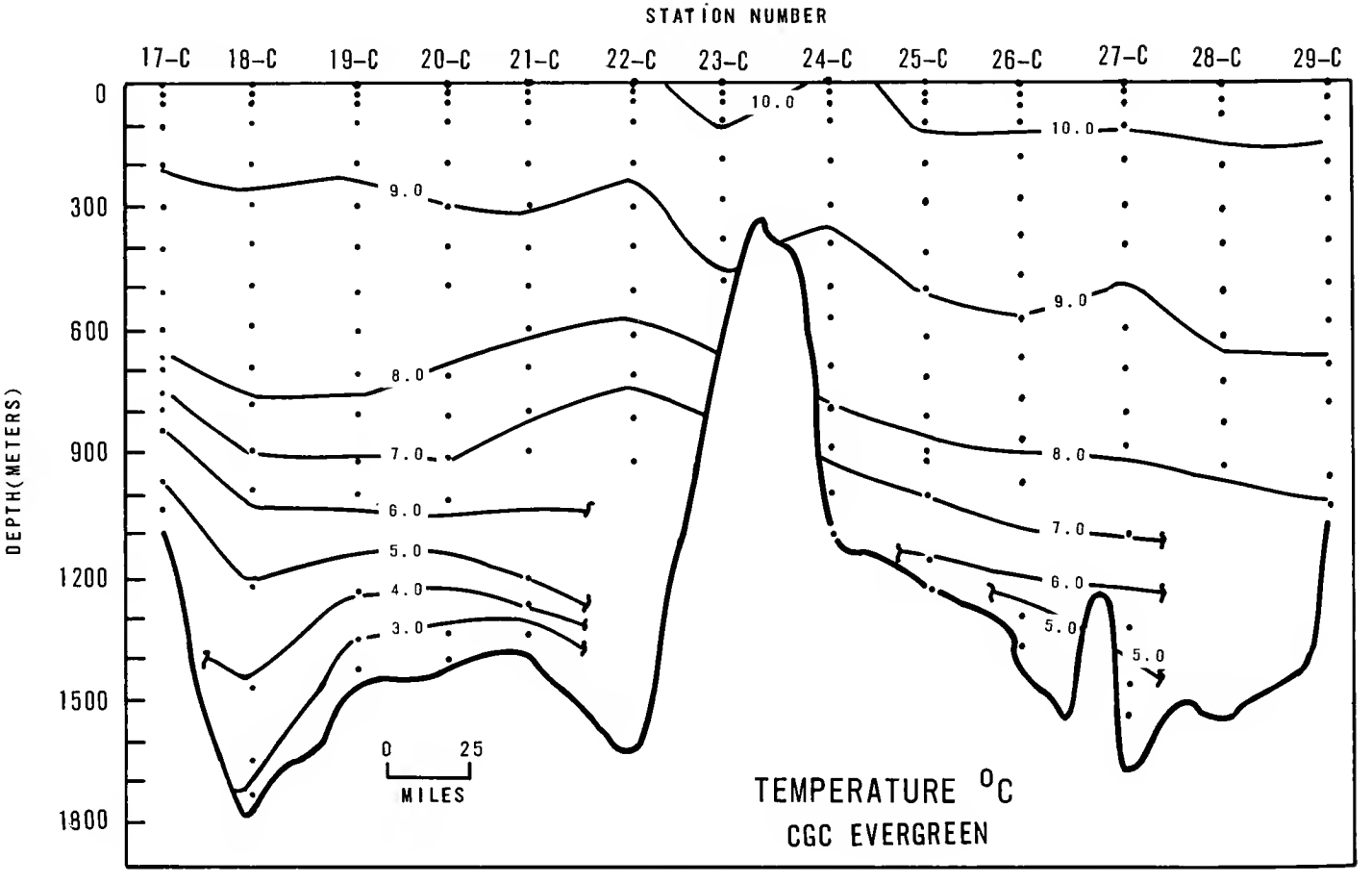

FIGURE 24. Vertical section of temperature (°C), EVERGREEN stations 17–C to 29–C, 7–9 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

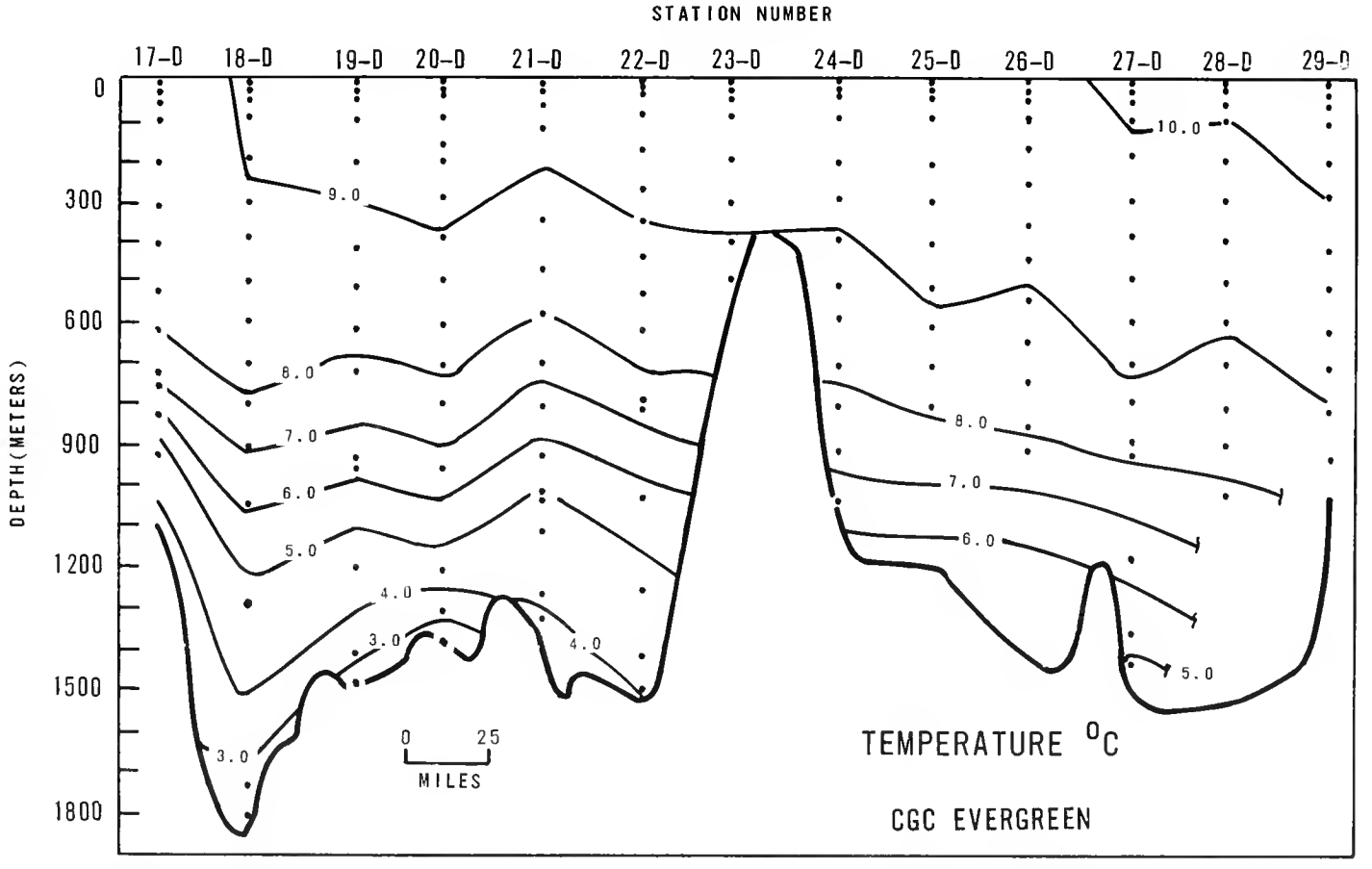

FIGURE 25. Vertical section of temperature (°C), EVERGREEN stations 17–D to 29–D, 21–23 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

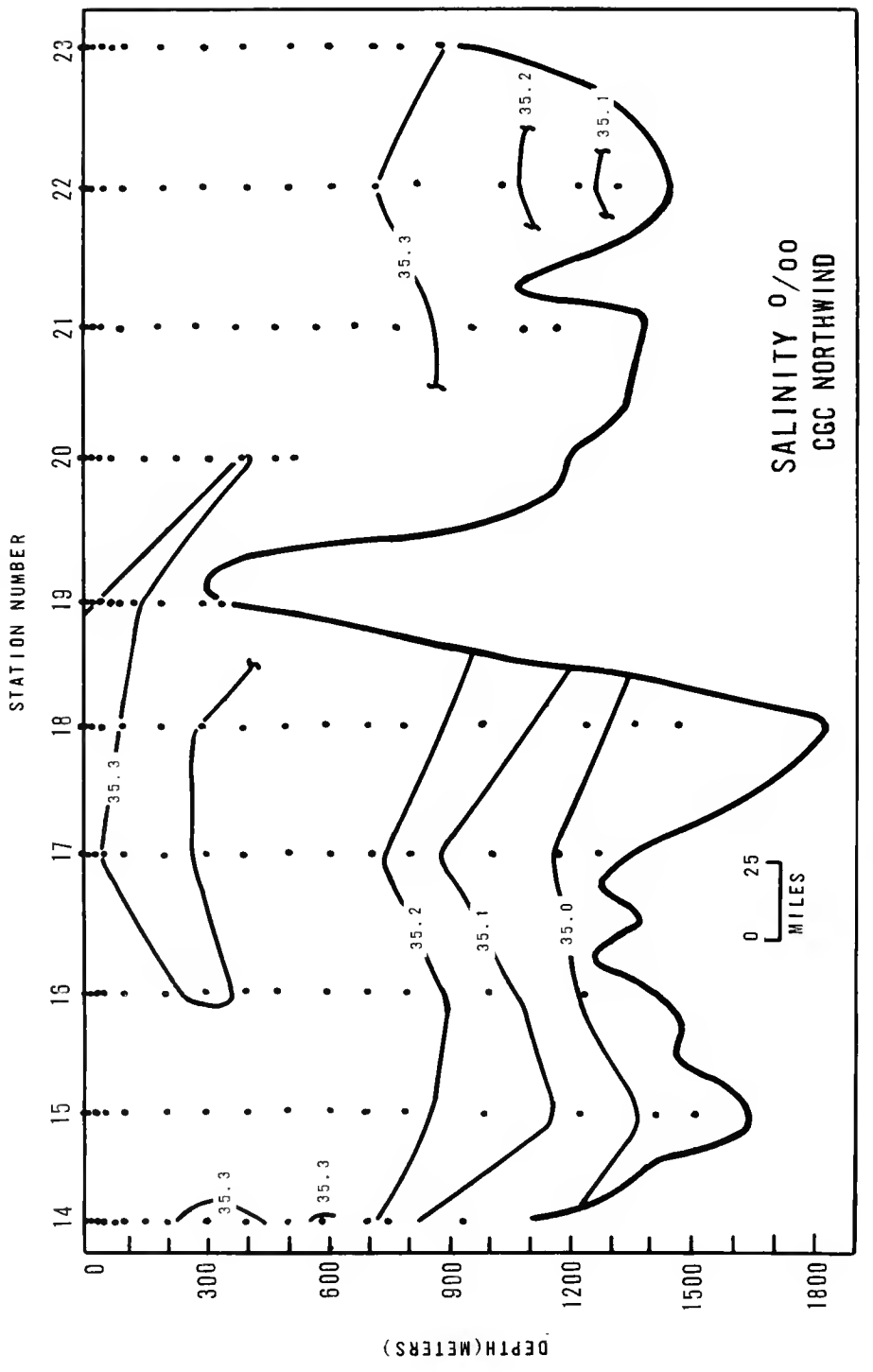

FIGURE 26. Vertical section of salinity (‰), NORTHWIND stations 14 to 23, 7–9 July 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

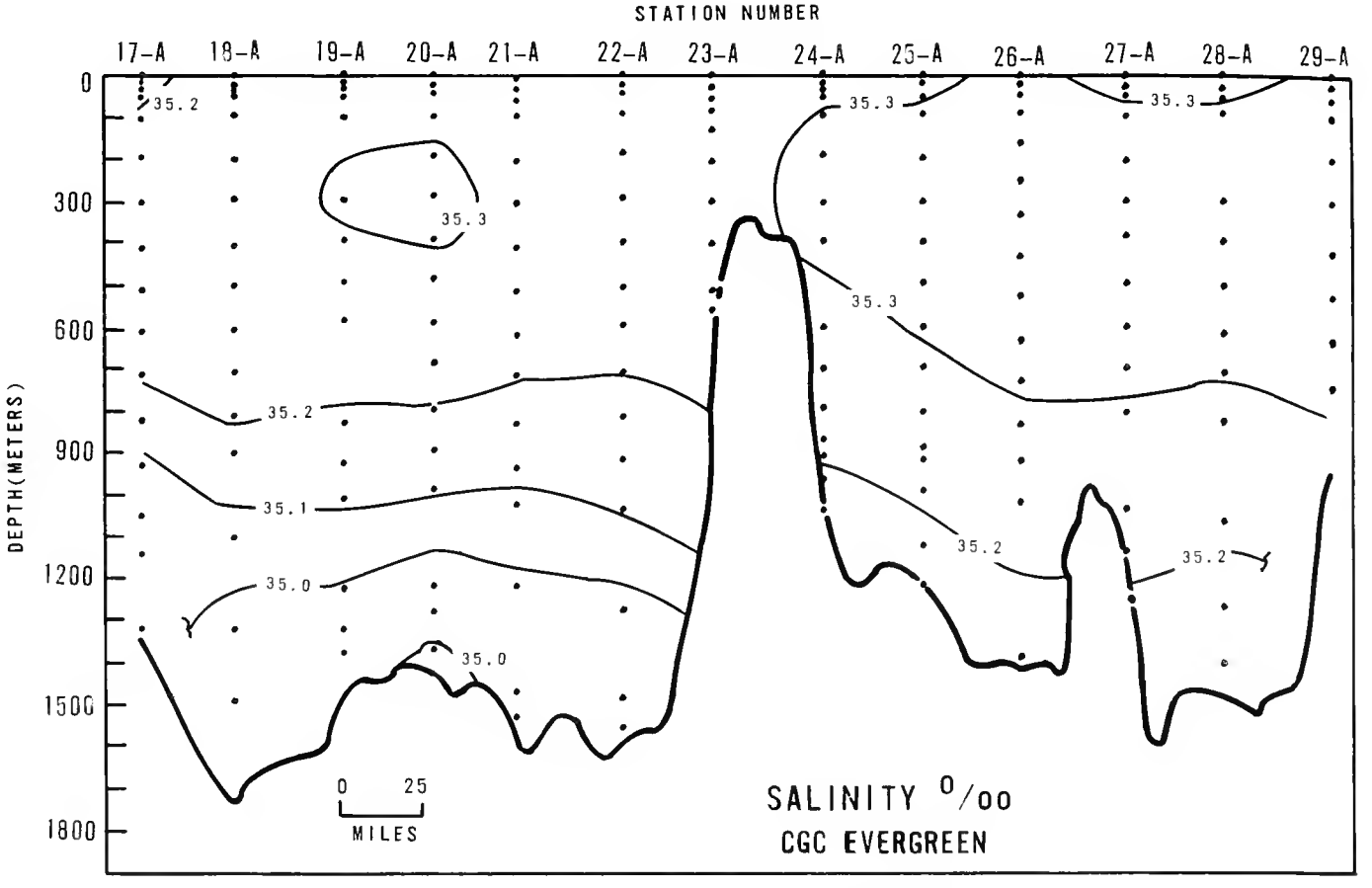

FIGURE 27. Vertical section of salinity (‰), EVERGREEN stations 17–A to 29–A, 26–29 October 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

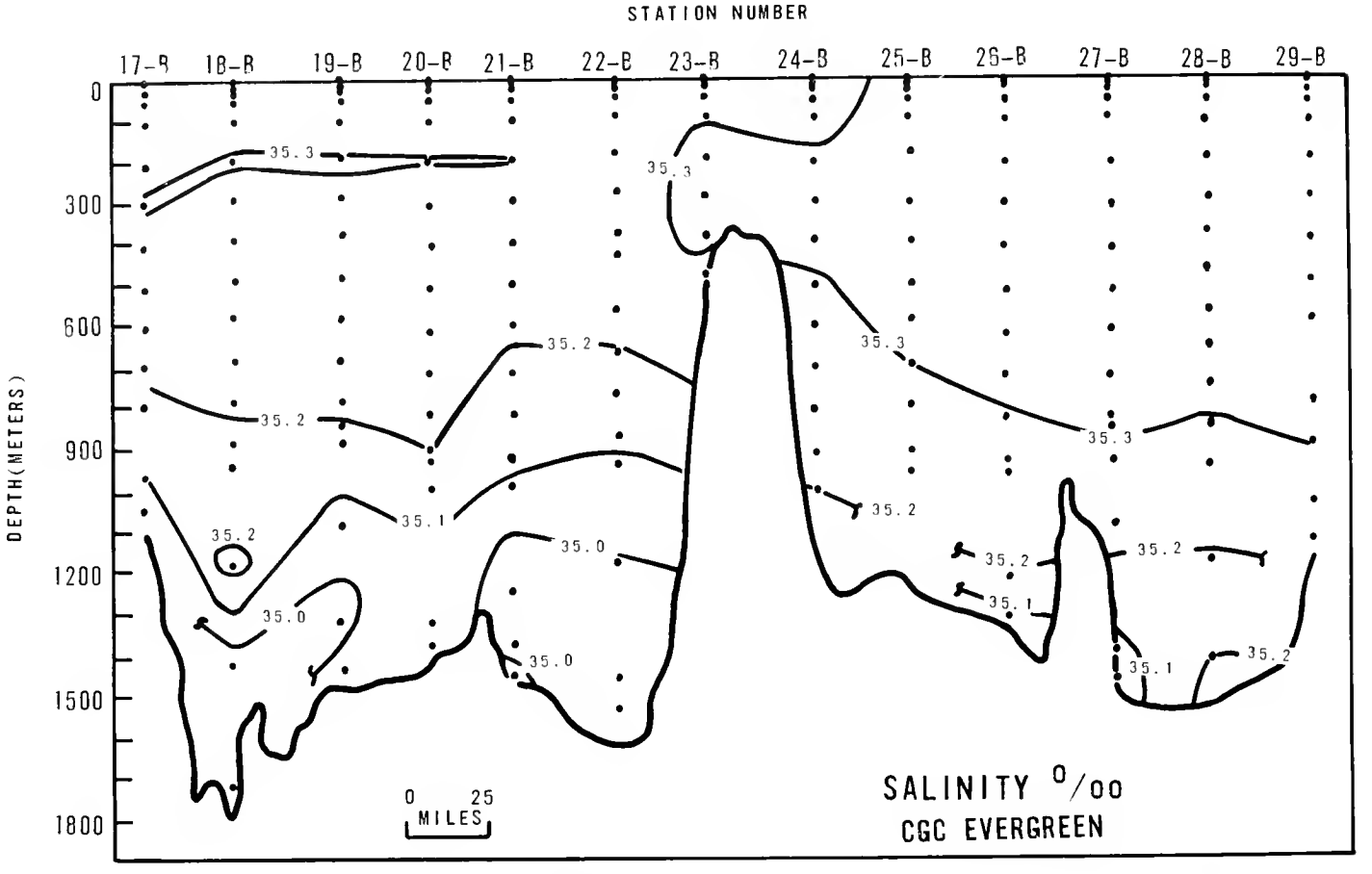

FIGURE 28. Vertical section of salinity (‰), EVERGREEN stations 17–B to 29–B, 4–7 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

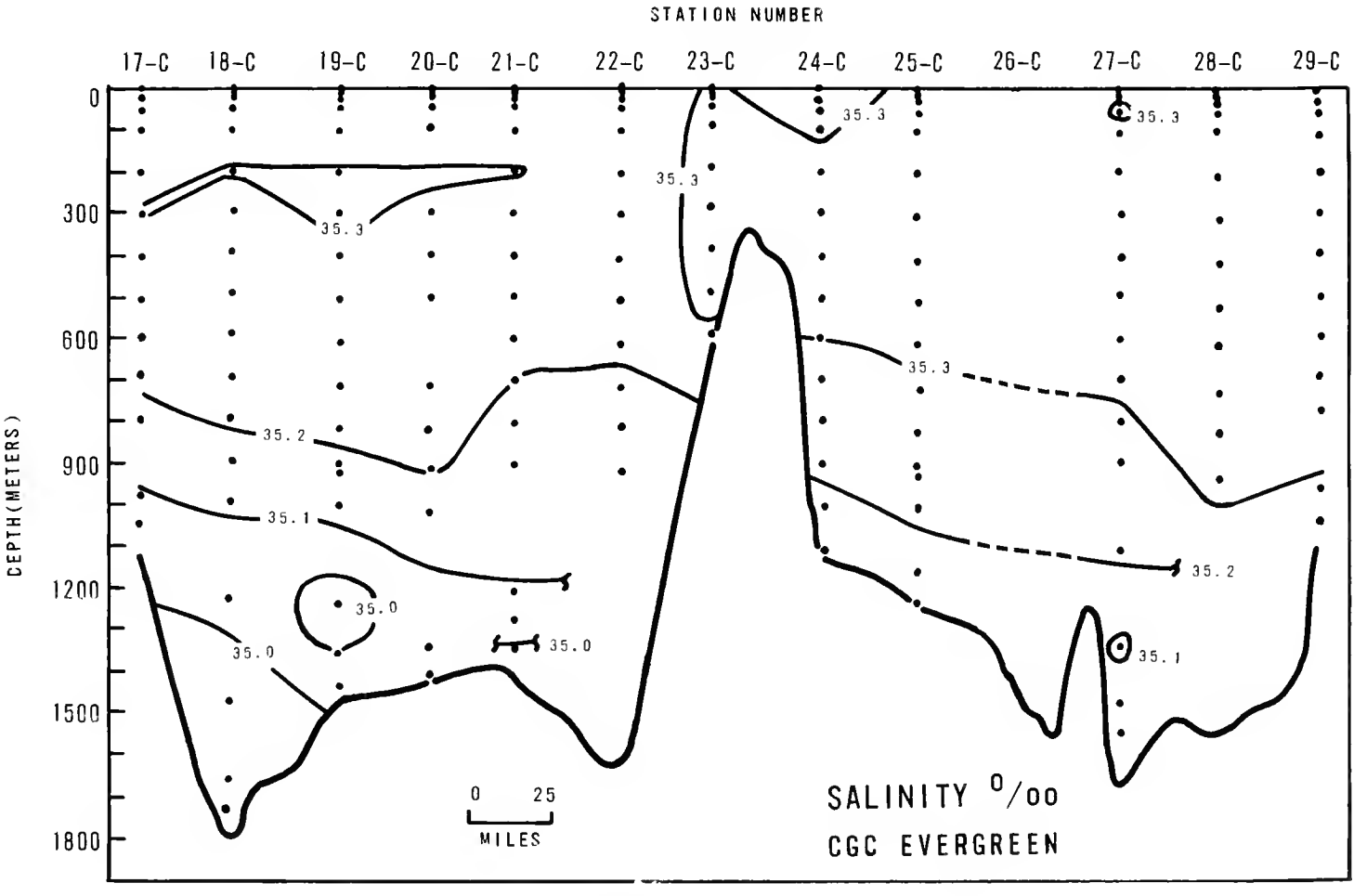

FIGURE 29. Vertical section of salinity (‰), EVERGREEN stations 17–C to 29–C, 7–9 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

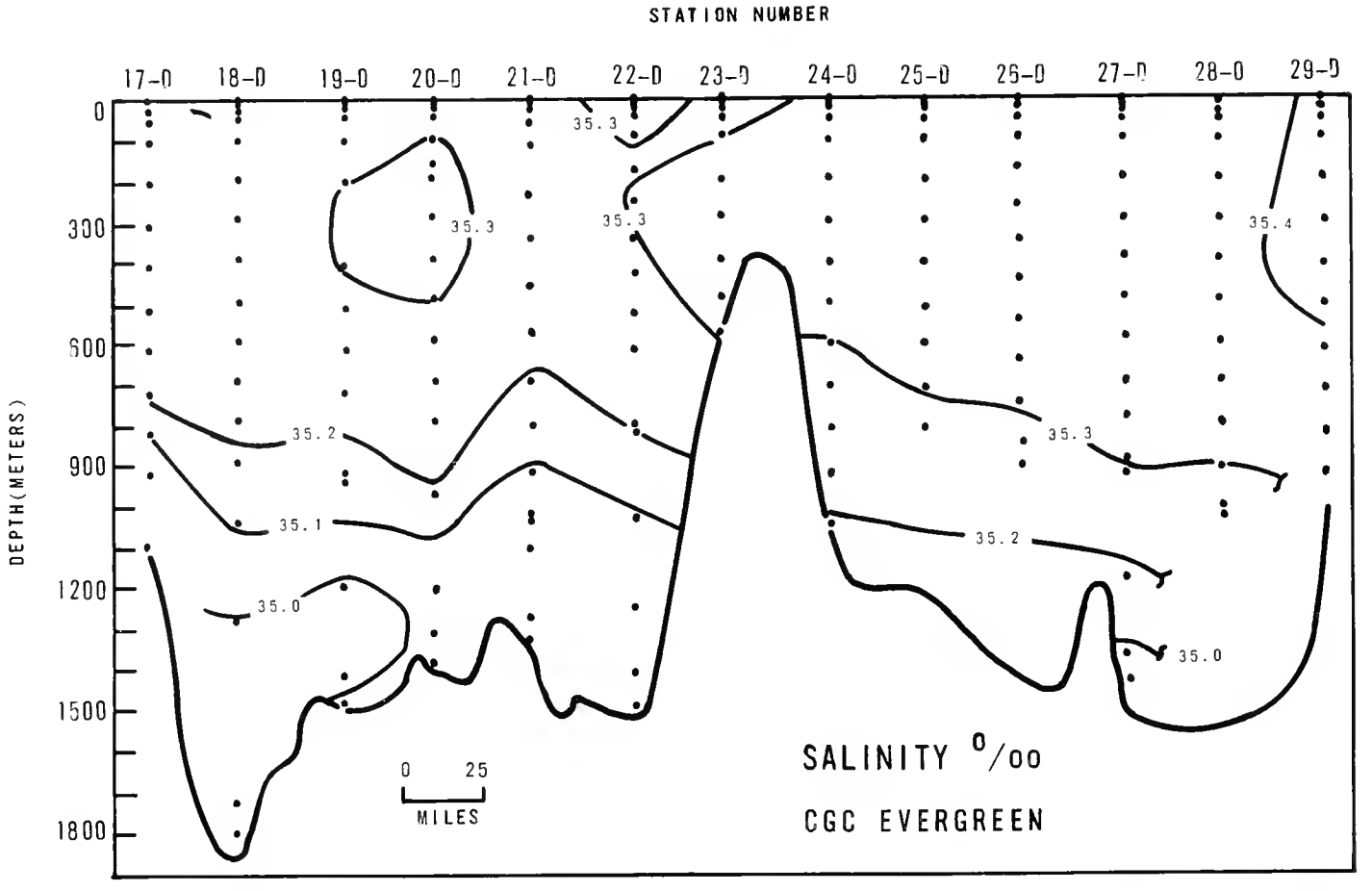

FIGURE 30. Vertical section of salinity (‰), EVERGREEN stations 17-D to 29-D, 21–23 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

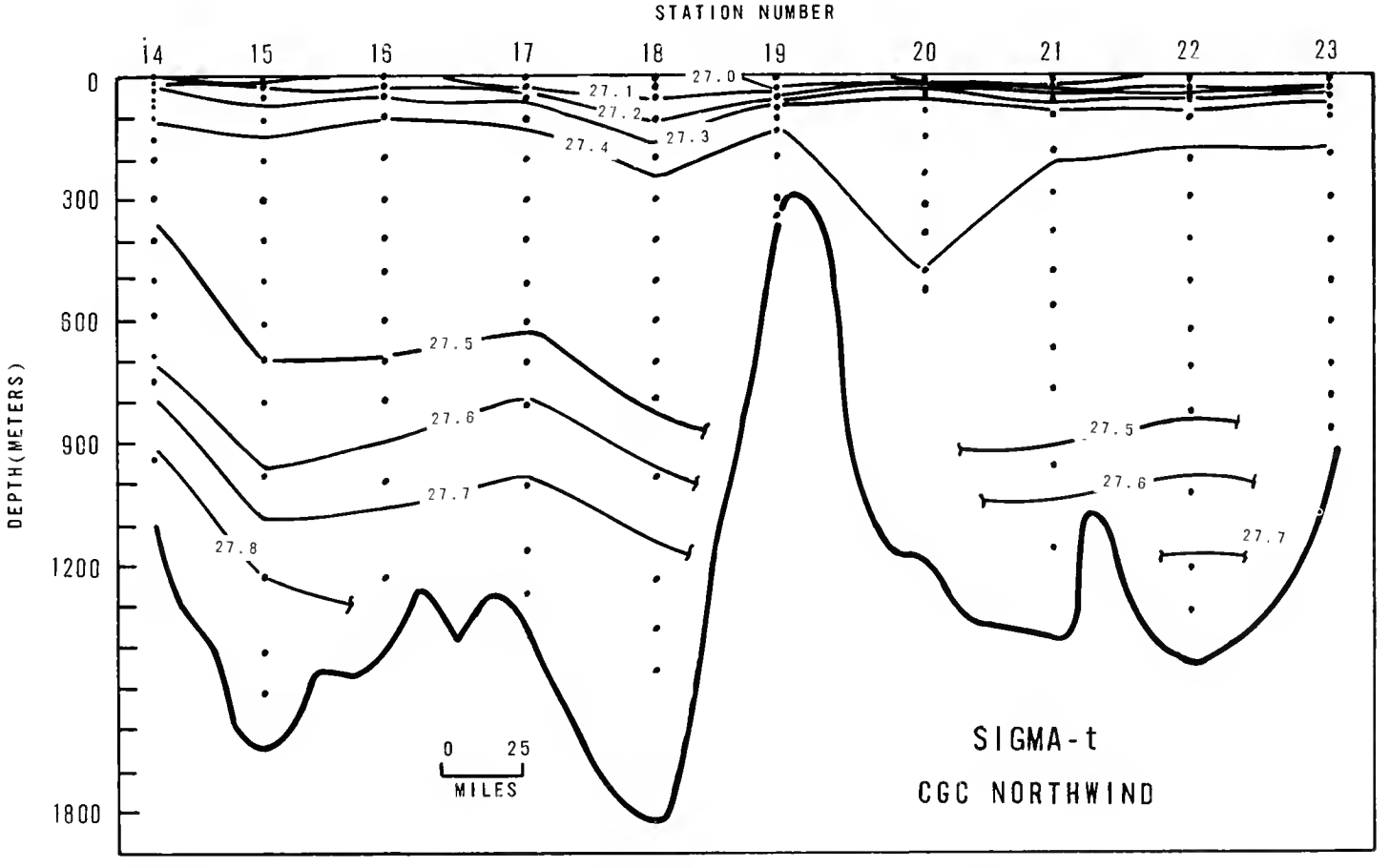

FIGURE 31. Vertical section of sigma-t, NORTHWIND stations 14 to 23, 7–9 July 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

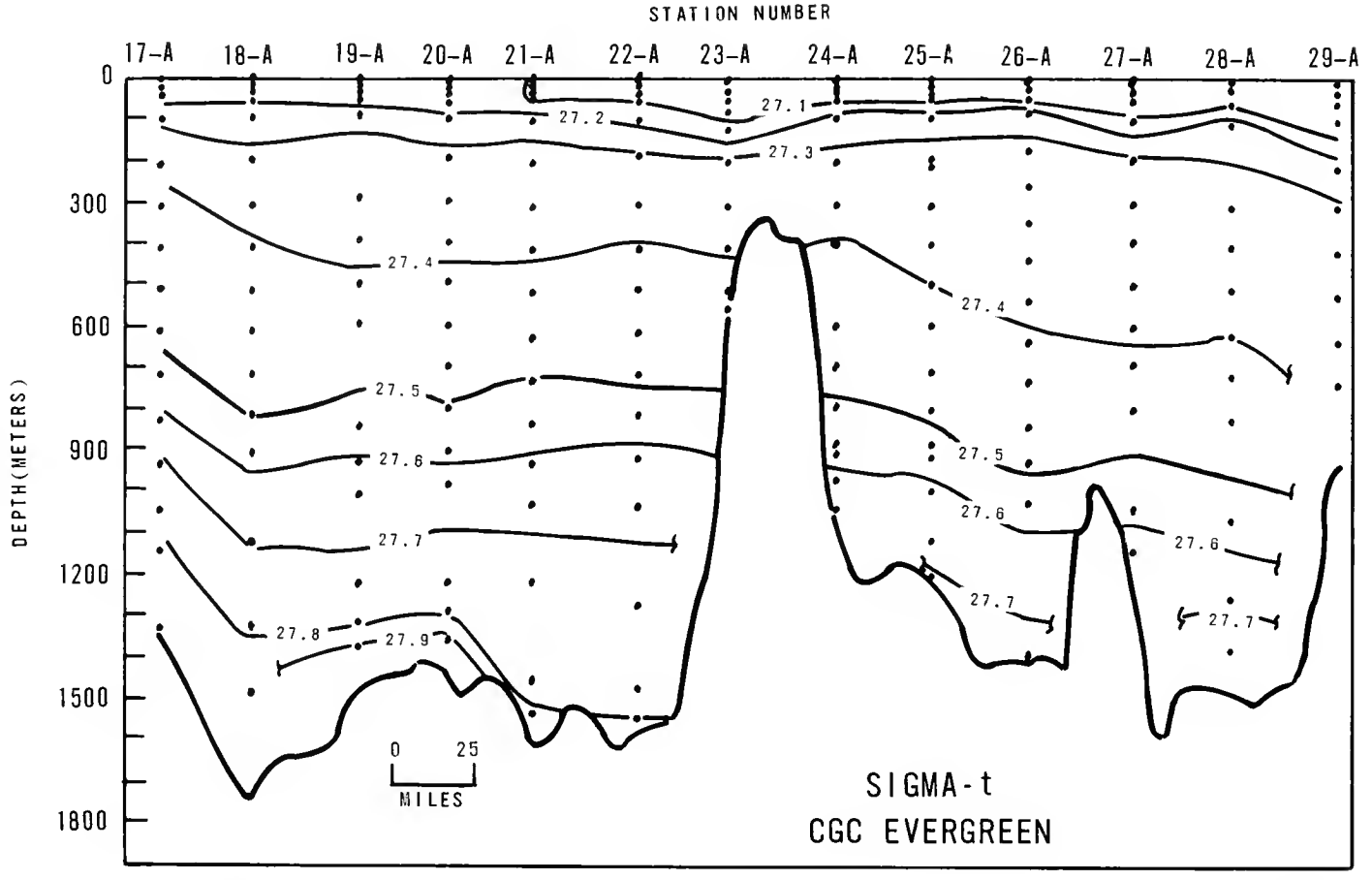

FIGURE 32. Vertical section of sigma-t, EVERGREEN stations 17–A to 29–A, 26–29 October 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

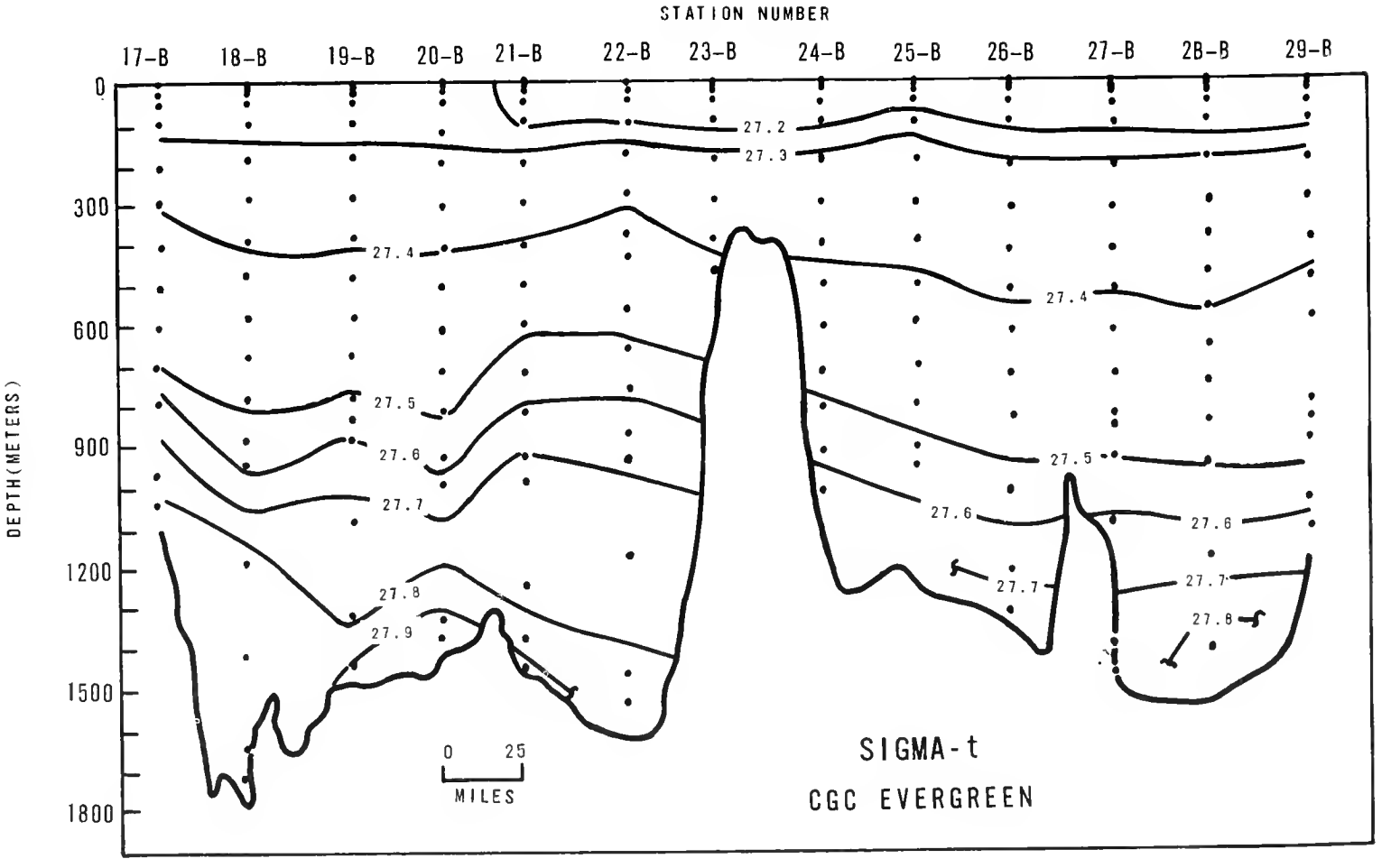

FIGURE 33. Vertical section of sigma-t, EVERGREEN stations 17–B to 29–B, 4–7 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

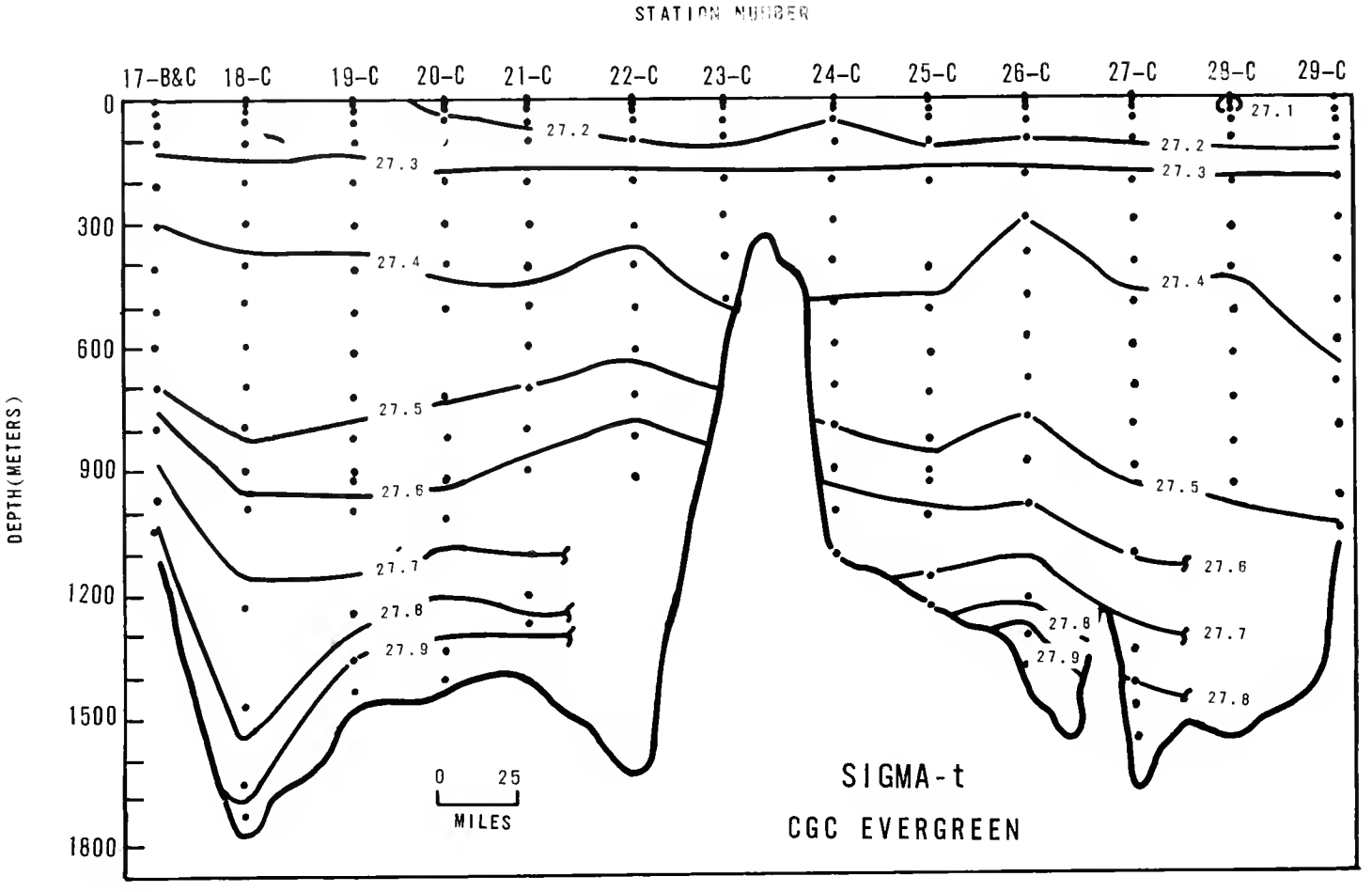

FIGURE 34. Vertical section of sigma-t, EVERGREEN stations 17-C to 29-C, 7-9 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

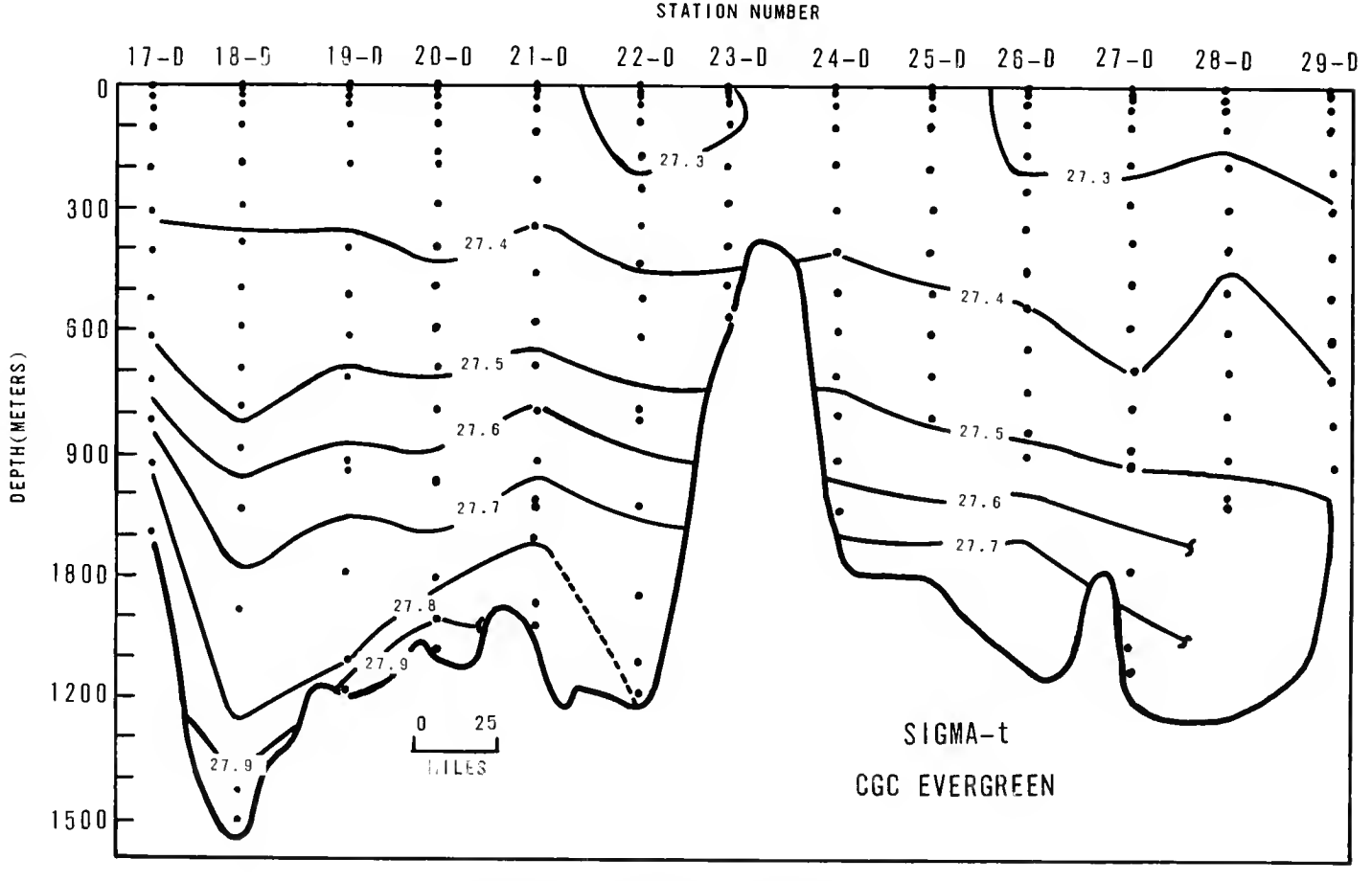

FIGURE 35. Vertical section of sigma-t, EVERGREEN stations 17–D to 29–D, 21–23 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

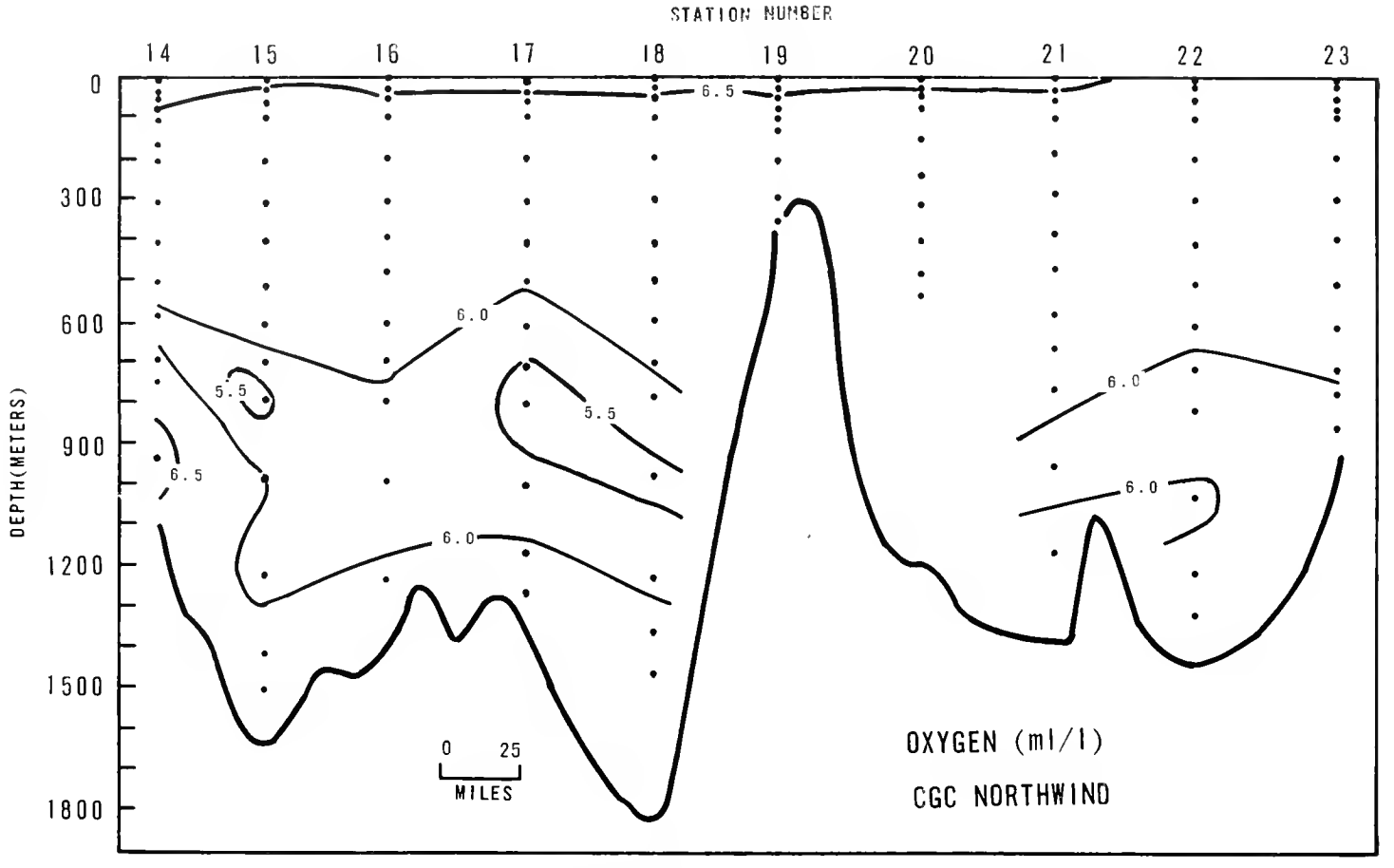

FIGURE 36. Vertical section of oxygen, NORTHWIND stations 14 to 23, 7–9 July 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

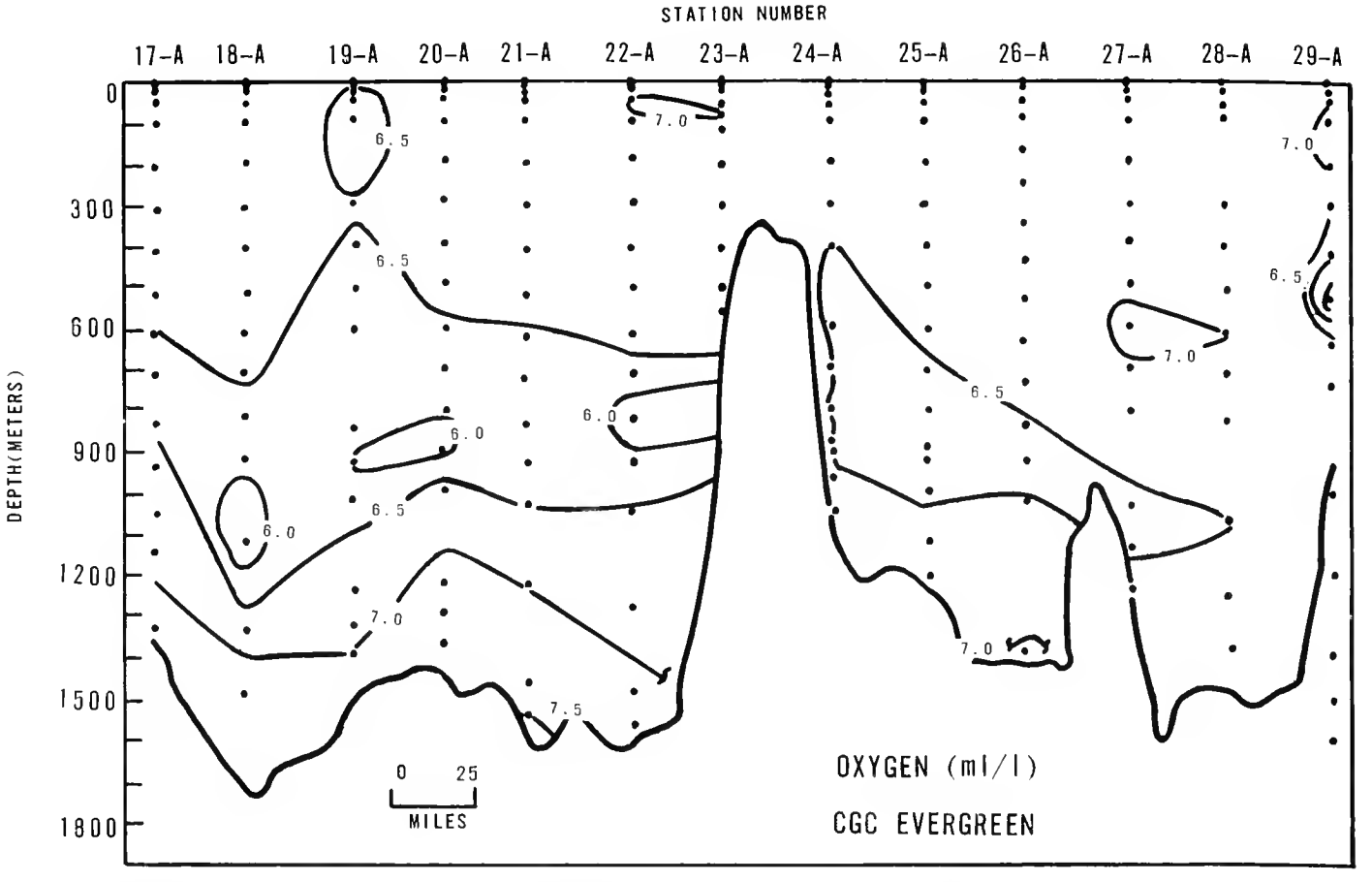

FIGURE 37. Vertical section of oxygen, EVERGREEN stations 17–A to 29–A, 26–29 October 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

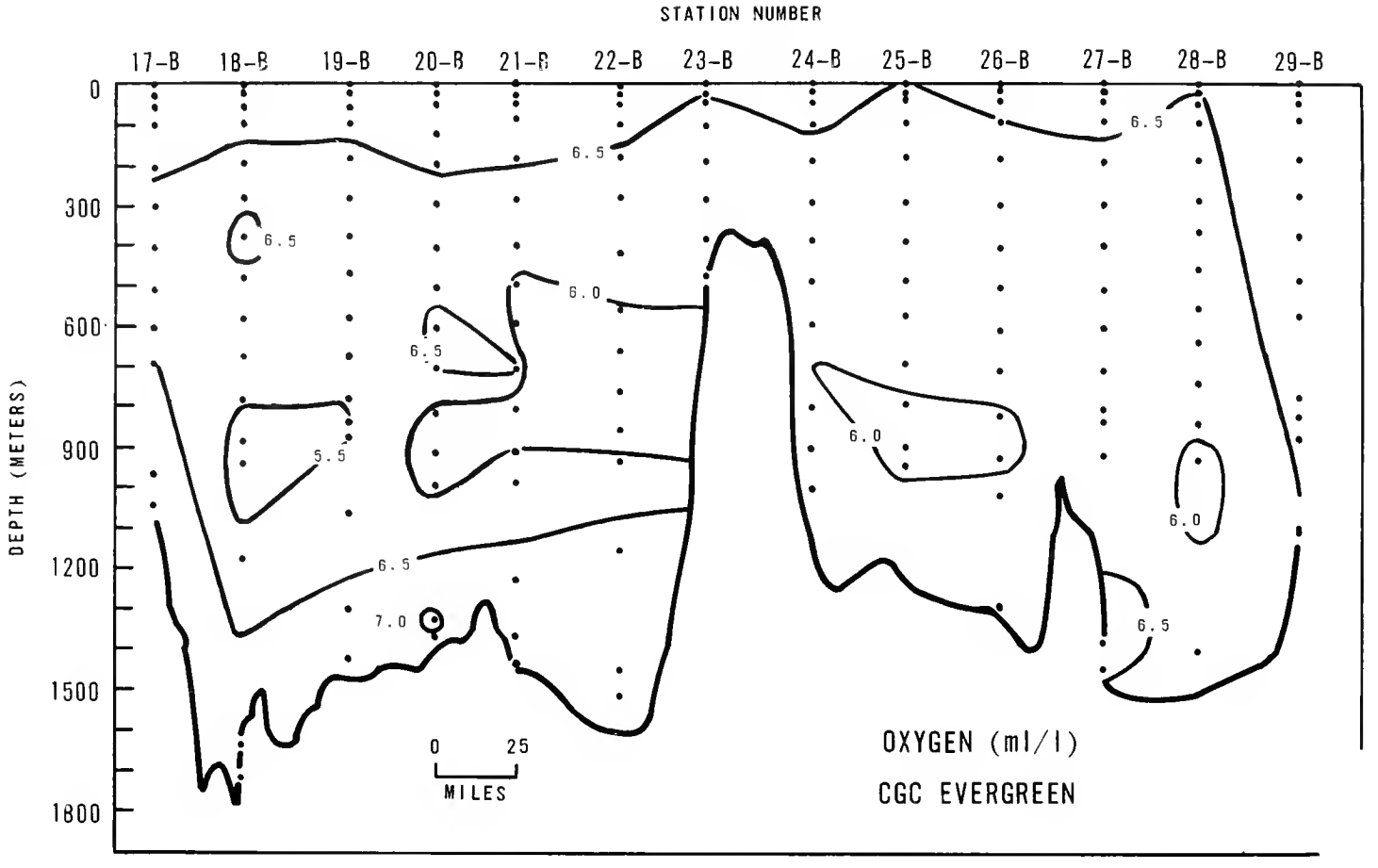

FIGURE 38. Vertical section of oxygen, EVERGREEN stations 17–B to 29–B, 4–7 November 1965. Vertical exaggeration 228.6
Points indicate observed values.

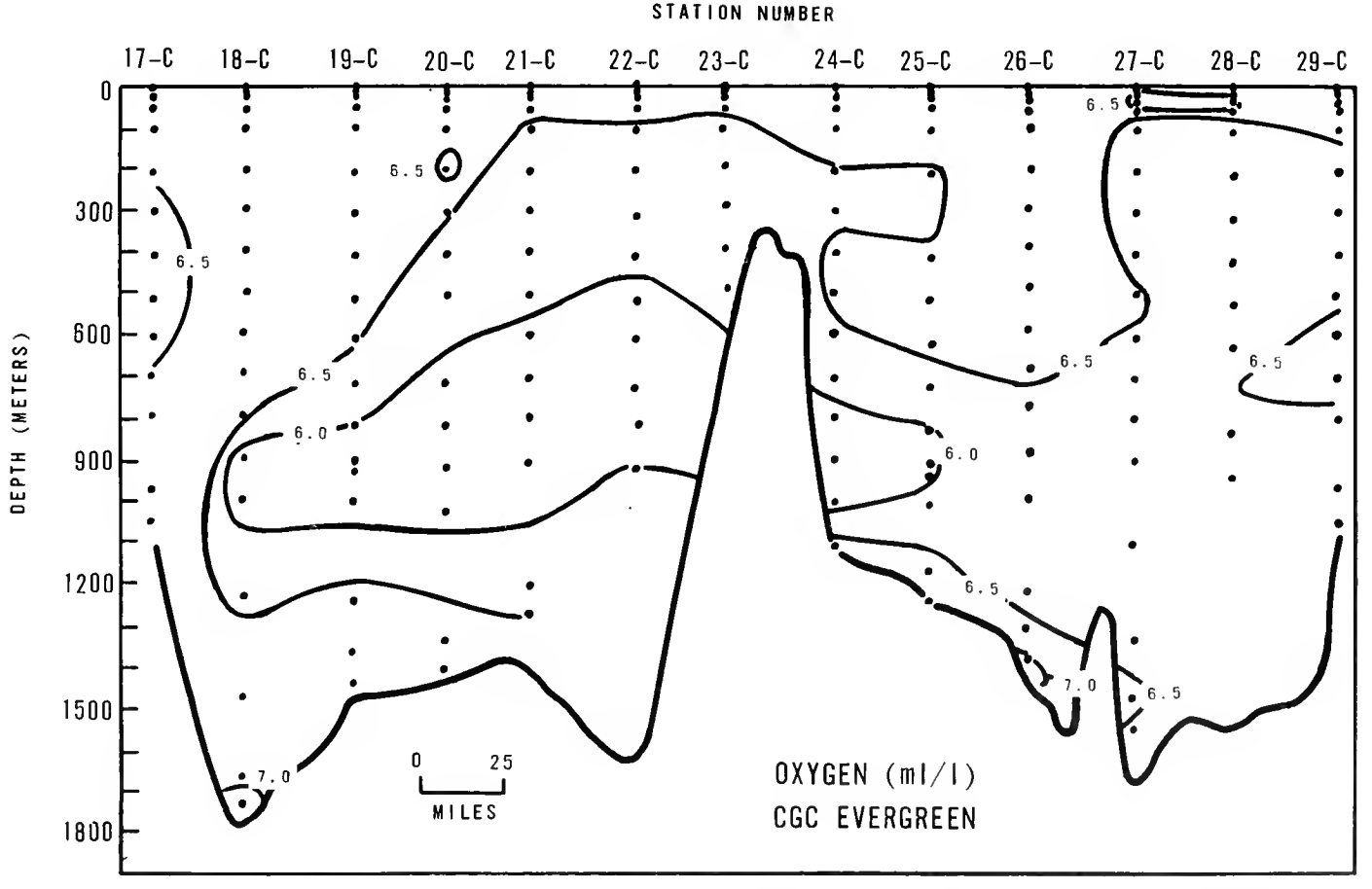

FIGURE 39. Vertical section of oxygen, EVERGREEN stations 17-C to 29-C, 7-9 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

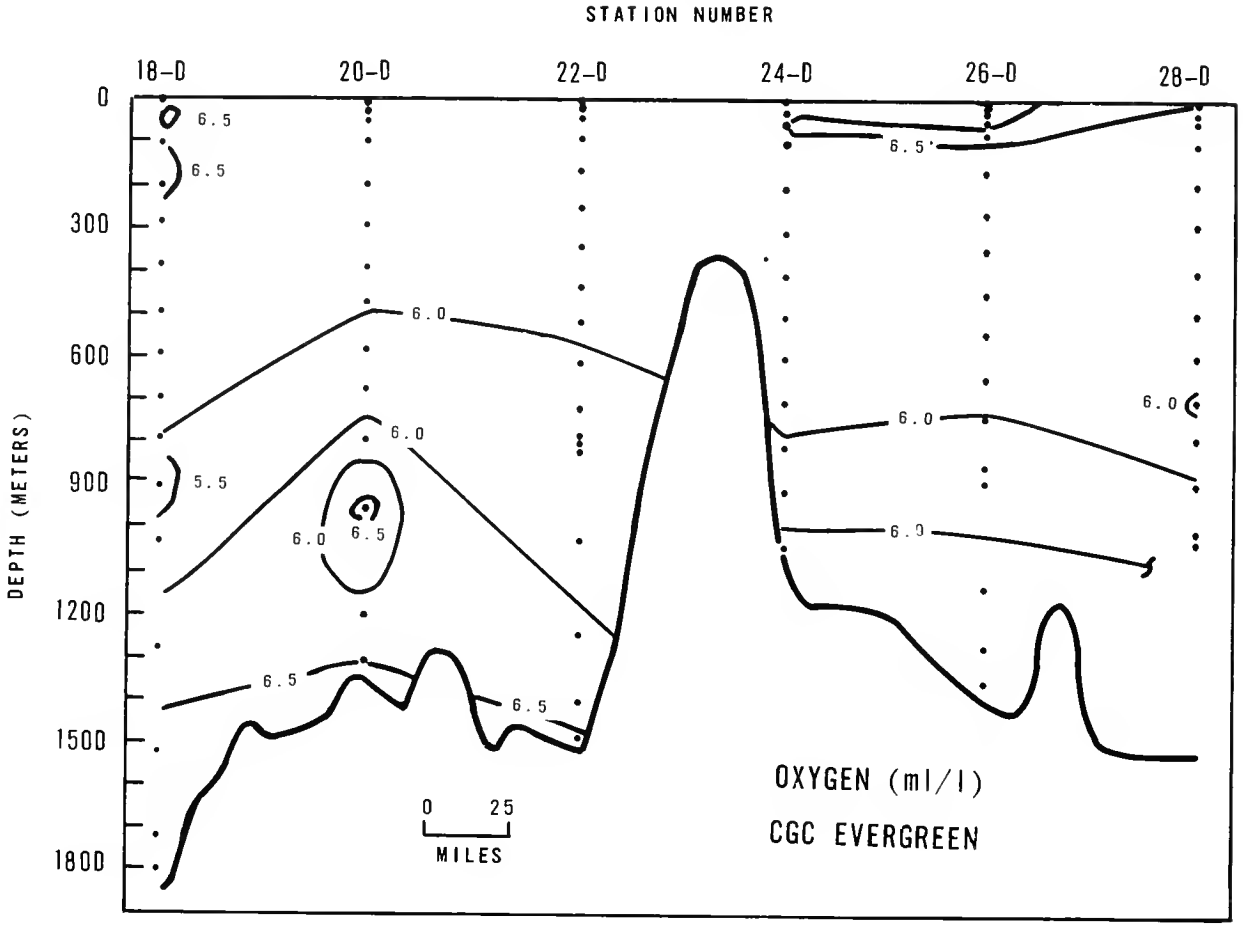

FIGURE 40. Vertical section of oxygen, EVERGREEN stations 17–D to 29–D, 21–23 November 1965. Vertical exaggeration 228.6 to 1. Points indicate observed values.

APPENDIX A.—OCEANOGRAPHIC DATA

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

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

Entry	*Description of Field*
Depth to bottom	Corrected or uncorrected sounding in meters.
Maximum depth of samples	Depth of deepest sample to nearest multiple of 100 meters.
Wave observations:	
DIR	Rounded to nearest multiple of 10°.
HGT	In increments of ½ m. Sum of 5 meters plus increments of ½ m if 50 is added to direction.
PER	If numerals 2 through 9 are entered, period in seconds is twice the numeric entry or 2× (numeric entry) +1. For other entries see WMO code 3155.
SEA	Sea state according to WMO code 3700.
Weather code	If preceded by X, weather according to WMO code 4501. If a two-digit entry, weather according to WMO code 4677.
Cloud code:	
Type	Cloud type according to WMO code 0500.
Amount	Cloud amount in eights. Entry of the numeral 9 indicates cloud amount could not be estimated.
Water:	
Color code	Color according to Forel-Ule scale.
Transparency	Transparency in whole meters as determined by Secchi disc.
Wind:	
Direction	Rounded to nearest multiple of 10°.
Speed or force	If preceded by letter S, wind speed in knots; if preceded by letter F, wind force according to Beaufort scale.
Barometer	Barometric pressure given in tens, units, and tenths of millibars.
Air temperature, °C	Air temperature to tenths of a degree centigrade.
Visibility code	Visibility according to WMO code 4300.
Number observed depths	Number of observed levels associated with the station.
Messenger time	Entered in hours and tenths of an hour GMT. For Nansen casts, indicates time of release of messenger applicable to the observational level. For STD casts, indicates the starting time of lowering the sensor.
Card type	OBS designates observed levels. STD indicates the values at this standard level were interpolated by a modified 3-point LaGrange formula.
Depth (m)	Depth to nearest meter. A postscript T indicates depth was obtained thermometrically; Z indicates uncorrected "wire out" depth. Postscript Q indicates value was marked doubtful by originator; P indicates value was considered doubtful by NODC. Postscripts P and Q retain this meaning throughout the following entries.
T °C	Temperature to hundredths of a degree centigrade.
S ‰	Salinity in parts-per-thousand.
SIGMA-T	Entered to hundredths.
Specific-volume Anomaly $\times 10^7$	Multiply entry by 10^{-7} to obtain specific-volume anomaly in cubic centimeters per gram.
$\Sigma\Delta D$ Dyn. M. $\times 10^3$	Multiply entry by 10^{-3} to obtain anomaly of dynamic height in dynamic meters referenced to the sea surface.
Sound velocity	Sound velocity according to Wilson's formula entered to tenths of a meter per second.
O_2 ml/l	Dissolved oxygen in milliliters per liter entered to hundredths.
PO_4-P μg-at/l	Inorganic phosphate in microgram-atoms per liter entered to hundredths.
Total-P μg-at/l	Total phosphous in microgram-atoms per liter entered to hundredths.
NO_2-N μg-at/l	Nitrite-nitrogen in microgram-atoms per liter entered to hundredths.
NO_3-N μg-at/l	Nitrate-nitrogen in microgram-atoms per liter entered to tenths.
SiO_4-Si μg-at/l	Silicate-silicon in microgram-atoms per liter entered to whole units.
pH	Entered to hundredths.

TABLE 1.—Observed and interpolated oceanographic data from stations taken by USCGC NORTHWIND, 4–9 July 1965 prepared from NODC listing No. 31–938.

REFERENCE		SHIP	LATITUDE	LONGITUDE		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
TAY CDE	ID NO.	CODE	° ' 1/10	° ' 1/10	LIGHT INDICATE	10°	°	MO	DAY	HR,1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT	
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														

MESSENGER TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$x10^5$	Σ 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	0845	3486	2712	0009575	0000	14945	7.4							
117	085		0000	0845	34850	2712			14884	7.4							
117	085		0005	0845	34854	2714			14845	7.3							
	STD		0010	0842	3489	2714	0009427	0009	14945	7.3							
	STD		0020	0805	3492	2722	0013628	0018	14857	7.1							
117	085		0028	0776	34938	2728			14814	7.0							
	STD		0030	0763	3496	2730	0007506	0027	14827	6.9							
	STD		0050	0697	3496	2746	0013558	0011	14784	6.8							
117	085		0055	0637	34954	2747			14749	6.7							
	STD		0075	0607	3497	2754	0008151	0034	14758	6.6							
	STD		0100	0581	3499	2759	0012210	0004	14781	7.0							
117	085		0100	0581	34991	2759			14806	7.0							
	STD		0125	0573	3500	2761	0006490	0041	14820	6.9							
	STD		0150	0569	3501	2762	0004991	0047	14833	6.7							
117	085		0163	0568	35017	2763			14834	6.7							
117	085		T0199	0570	35019	2763			14771	6.8							
	STD		0200	0572	3502	2764	0003405	0052	14772	6.9							
	STD		0250	0549	3501	2764	0004412	0062	14771	6.8							
117	085		0263	0544	35002	2765			14772	6.8							
	STD		0300	0526	3499	2766	0004817	0069	14777	6.9							
117	085		T0327	0516	34980	2766			14777	6.8							
	STD		0400	0501	3498	2768	0004715	0087	14776	6.9							
117	085		0408	0479	34980	2768			14777	6.9							
117	085		0495	0472	34967	2770			14781	6.9							
	STD		0500	0470	3497	2770	0004966	0094	14780	6.9							
117	085		T0576	0442	3511P	2785P				6.8							
	STD		0600	0433	3495	2773	0004951	0098	14751	6.8							
117	085		T0678	0406	34959	2775			14786	6.9							
	STD		0700	0404	3494	2775	0004907	0090	14785	6.9							
	STD		0800	0398	3494	2776	0004716	0044	14790	6.9							
	STD		0900	0341	3494	2777	0004734	0035	14818	6.9							
	STD		1000	0364	3494	2778	0004620	0027	14827	6.9							
	STD		1100	0378	3494	2779	0004520	0019	14841	6.9							
	STD		1200	0371	3495	2779	0004218	0011	14855	6.9							
	STD		1300	0364	3495	2780	0004115	0004	14869	6.9							
130	085		T1306	0364	34946	2780			14876	6.9							
	STD		1400	0360	3495	2780	0004248	0046	14884	6.9							
	STD		1500	0350	3494	2781	0004209	0088	14897	6.9							
130	085		T1563	0342	34945	2782			14904	6.9							
	STD		1750	0248	3494	2786	0003761	0788	14917	6.9							
130	085		T1997	0229	34916	2790			14929	6.9							
	STD		2000	0228	3492	2790	0003200	0875	14929								
130	085		2097	0197	34903	2792			14932								

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	938	NW	61096N	038505W		220	18	07	04	220	1965		003	2615	22	05	2	2		X4	X	9		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			
		05	512	163	099	094	3		

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	0865	3486	2738	0009879	0000	14852	721							
192		OBS	0000	0865	34859	2738			14852	721							
192		OBS	0000	0861	34851	2738			14852	724							
		STD	0010	0859	3486	2737	0009801	0010	14852	723							
		STD	0020	0827	3469	2717	0009126	0019	14841	712							
192		OBS	0022	0818	34896	2719			14838	709							
		STD	0040	0743	3488	2728	0008029	0028	14811	684							
192		OBS	0043	0637	34856	2741			14771	651							
		STD	0050	0630	3487	2742	0006748	0043	14769	650							
		STD	0075	0598	3492	2751	0005413	0056	14761	663							
192		OBS	0092	0581	34941	2755			14757	674							
		STD	0100	0572	3494	2756	0005482	0073	14755	654							
		STD	0125	0552	3494	2759	0005276	0086	14751	664							
		STD	0150	0535	3493	2760	0005181	0099	14748	657							
192		OBS	0187	0514	34928	2762			14746	651							
		STD	0200	0510	3493	2762	0004974	0124	14746	651							
		STD	0250	0495	3492	2764	0004883	0149	14748	650							
192		OBS	T0280	0486	34922	2765			14750	650							
		STD	0300	0479	3492	2766	0004764	0173	14750	648							
192		OBS	0373	0457	34926	2769			14753	633							
		STD	0400	0453	3493	2769	0004526	0220	14756	625							
192		OBS	T0478	0436	34932	2772			14762	619							
		STD	0500	0428	3493	2772	0004346	0264	14762	625							
192		OBS	0564	0408	34924	2774			14764	638							
		STD	0600	0400	3492	2774	0004202	0307	14767	647							
192		OBS	0659	0388	34915	2775			14771	647							
		STD	0700	0381	3492	2776	0004103	0348	14775	649							
192		OBS	T0760	0372	34920	2777			14781	650							
		STD	0800	0369	3492	2778	0004033	0389	14787	649							
		STD	0900	0364	3492	2778	0004047	0429	14801	645							
192		OBS	T0933	0363	34922	2778			14807	647							
		STD	1000	0362	3492	2778	0004110	0470	14817	648							
		STD	1100	0361	3492	2779	0004170	0512	14834	649							
		STD	1200	0359	3492	2779	0004237	0554	14850	650							
220		OBS	T1226	0359	34923	2779			14854	650							
		STD	1300	0359	3492	2779	0004309	0596	14866	648							
		STD	1400	0358	3492	2779	0004389	0640	14883	643							
		STD	1500	0357	3492	2779	0004460	0684	14899	636							
220		OBS	T1504	0357	34922	2779			14900	636							
		STD	1750	0343	3494	2782	0004343	0794	14936								
220		OBS	T1997	0323	34952	2785			14970								
		STD	2000	0323	3495	2785	0004173	0900	14970								
220		OBS	T2217	0299	34956	2787			14997								

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				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	938	NW	61254N	037316W		220	17	07	04	246	1965		004	2725	26	06	2	2		X2	6	8		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			
		02	S12	175	100	093	6		

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	0902	3500	2713	0009415	0000	14868	688							
238		OBS	0000	0902	34997	2713			14868	688							
238		OBS	0009	0904	34976	2711			14870	684							
		STD	0010	0896	3498	2713	0009469	0009	14867	685							
		STD	0020	0825	3499	2725	0008355	0018	14842	692							
238		OBS	0027	0782	35001	2732			14827	697							
		STD	0030	0767	3501	2735	0007395	0026	14822	690							
		STD	0050	0684	3503	2749	0006122	0040	14793	653							
238		OBS	0050	0684	35034	2749			14793	653							
		STD	0075	0627	3501	2754	0005618	0054	14774	659							
		STD	0100	0583	3498	2758	0005302	0068	14760	665							
238		OBS	0101	0582	34981	2758			14760	665							
		STD	0125	0575	3498	2759	0005276	0081	14761	658							
		STD	0150	0567	3497	2759	0005251	0094	14762	651							
		STD	0200	0551	3496	2761	0005191	0121	14763	641							
238		OBS	0207	0549	34962	2761			14764	640							
		STD	0250	0534	3496	2763	0005051	0146	14765	637							
		STD	0300	0517	3496	2765	0004903	0171	14766	632							
238		OBS	T0306	0515	34964	2765			14766	631							
		STD	0400	0482	3495	2768	0004713	0219	14768	618							
238		OBS	0408	0480	34948	2768			14769	617							
		STD	0500	0462	3497	2771	0004464	0265	14777	614							
238		OBS	T0513	0459	34970	2772			14778	613							
		STD	0600	0440	3497	2774	0004320	0309	14784	618							
		STD	0700	0421	3496	2776	0004229	0352	14793	624							
		STD	0800	0404	3496	2777	0004164	0394	14802	629							
		STD	0900	0390	3495	2778	0004122	0435	14813	635							
		STD	1000	0378	3495	2779	0004106	0476	14824	641							
		STD	1100	0369	3494	2780	0004115	0517	14837	646							
		STD	1200	0363	3494	2780	0004163	0559	14852	652							
246		OBS	T1252	0360	34937	2780			14859	655							
		STD	1300	0360	3494	2780	0004202	0601	14867	651							
		STD	1400	0360	3495	2781	0004211	0643	14884	644							
		STD	1500	0359	3496	2782	0004207	0685	14901	639							
246		OBS	T1532	0358	34965	2782			14906	638							
		STD	1750	0347	3498	2785	0004104	0789	14938	643							
		STD	2000	0330	3498	2786	0004064	0891	14973	647							
246		OBS	T2034	0327	34983	2787			14978	648							
246		OBS	T2460	0288	34962	2789			15034	653							
		STD	2500	0278	3495	2789	0003894	1090	15036	653							
246		OBS	2560	0261	34938	2789			15039	653							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	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	938	NW	61504N	034405W		220	14	07	05	166	1965		006	2871	19	12	3	3		X4	X	9		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			
		07	S05	208	110	096	6		

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 CODE
		STD	0000	0955	3505	2708	0009878	0000	14888	709							
154		OBS	0000	0955	35046	2708			14886	709							
		STD	0010	0932	3504	2712	0009582	0010	14881	698							
154		OBS	0010	0932	35040	2712			14881	698							
		STD	0020	0871	3505	2722	00086 8	0019	14860	694							
154		OBS	0025	0846	35048	2726			14852	691							
		STD	0030	0832	3505	2728	0008031	0027	14847	681							
		STD	0050	0764	3507	2737	0007226	0042	14832	654							
154		OBS	0059	0766	35072	2740			14827	650							
		STD	0075	0741	3508	2744	0006592	0060	14820	671							
		STD	0100	0709	3508	2749	0006196	0076	14814	694							
154		OBS	0102	0707	35084	2750			14811	695							
		STD	0125	0700	3505	2750	0006115	0091	14814	685							
		STD	0150	0693	3508	2751	0006055	0106	14813	675							
		STD	0200	0677	3508	2753	0005931	0136	14816	653							
154		OBS	0201	0677	35078	2753			14816	653							
		STD	0250	0672	3507	2753	0006013	0166	14822	654							
		STD	0300	0663	3506	2754	0006044	0196	14826	654							
154		OBS	T0306	0662	35055	2754			14827	654							
		STD	0400	0637	3505	2756	0005926	0256	14832	654							
154		OBS	0409	0635	35047	2756			14833	653							
		STD	0500	0621	3504	2758	0005926	0315	14834	635							
154		OBS	T0518	0613	35030	2755			14842	633							
		STD	0600	0548	3497	2762	0005629	0373	14828	627							
154		OBS	0613	0540	34968	2762			14827	616							
168		OBS	T0672	0512	34948	2764			14825	623							
		STD	0700	0504	3496	2765	0005255	0427	14827	625							
168		OBS	T0759	0485	34967	2769			14829	614							
		STD	0800	0468	3496	2770	0004917	0478	14824	617							
		STD	0900	0432	3494	2773	0004734	0528	14830	622							
168		OBS	0960	0414	34931	2774			14833	631							
		STD	1000	0408	3492	2774	0004570	0573	14836	637							
		STD	1100	0392	3491	2774	0004340	0664	14840	645							
		STD	1200	0376	3491	2776	0004231	0756	14850	657							
168		OBS	T1204	0375	34939	2776			14857	657							
		STD	1300	0372	3492	2777	0004449	0711	14872	656							
		STD	1400	0369	349[illegible]	2778	0004472	0756	14868	655							
168		OBS	1450	0368	34932	2779			14856	654							
		STD	1500	0366	3494	277[illegible]	0004498	0801	14904	654							
		STD	1750	0364	3495	2781	0004526	0914	14945	651							
168		OBS	T1849	0359	34960	2782			14961	650							
168		OBS	T1944	0353	34962	2783			14973	647							

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	938	NW	62052N	033199W		220	23	07	05	219	1965		007	2926	20	16	2	0		X2	6	7		0005

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
		17	S04	235	109	102	7		

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	SOC
		STD	0000	0938	3505	2711	0009580	0000	14882	709							
207		OBS	0000	0938	35050	2711			14882	709							
		STD	0010	0915	3505	2715	0009265	0009	14875	695							
207		OBS	0010	0915	35047	2715			14875	695							
		STD	0020	0867	3505	2723	0008553	0018	14859	688							
207		OBS	0025	0847	35047	2726			14852	684							
		STD	0030	0836	3505	2728	0008093	0027	14849	676							
		STD	0050	0795	3506	2735	0007457	0042	14836	651							
207		OBS	0059	0778	3406P	2659P				644							
		STD	0075	0749	3507	2742	0006777	0060	14823	642							
207		OBS	0098	0715	35074	2748			14813	641							
		STD	0100	0714	3507	2747	0006338	0076	14813	641							
		STD	0125	0700	3507	2749	0006190	0092	14812	643							
		STD	0150	0687	3506	2750	0006130	0107	14811	644							
207		OBS	0198	0667	35046	2752			14811	647							
		STD	0200	0667	3505	2752	0006046	0138	14811	647							
		STD	0250	0655	3504	2753	0006045	0168	14814	651							
207		OBS	T0299	0642	35025	2754			14817	654							
		STD	0300	0642	3502	2753	0006060	0198	14817	654							
207		OBS	0396	0613	35010	2756			14821	641							
		STD	0400	0611	3501	2757	0005872	0258	14821	640							
207		OBS	T0498	0559	34973	2760			14816	626							
		STD	0500	0558	3497	2760	0005619	0315	14816	626							
		STD	0600	0503	3497	2767	0005088	0369	14810	617							
207		OBS	0600	0503	34965	2767			14810	617							
		STD	0700	0469	3495	2769	0004894	0419	14812	606							
207		OBS	T0704	0468	34949	2769			14813	606							
		STD	0800	0434	3493	2772	0004692	0467	14814	630							
213		OBS	T0802	0433	34934	2772			14814	630							
		STD	0900	0407	3492	2774	0004569	0513	14820	639							
213		OBS	0996	0387	34909	2775			14827	646							
		STD	1000	0387	3491	2775	0004502	0559	14828	648							
		STD	1100	0373	3491	2776	0004451	0603	14838	656							
		STD	1200	0364	3490	2777	0004455	0648	14851	664							
213		OBS	T1252	0361	34899	2777			14859	668							
		STD	1300	0361	3490	2777	0004509	0693	14867	664							
		STD	1400	0361	3491	2778	0004517	0738	14884	658							
213		OBS	1493	0361	34922	2779			14900	653							
		STD	1500	0361	3492	2779	0004503	0783	14901	653							
		STD	1750	0351	3494	2781	0004441	0895	14939	647							
219		OBS	T1908	0348	34952	2782			14965	644							
		STD	2000	0347	3496	2783	0004478	1006	14980	650							
219		OBS	T2010	0347	34955	2783			14982	651							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	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	IO. NO.	CODE	° 1/10	° 1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR	HGT	PER	SEA		TYPE	AMT		
31	938	Nw	62198N	032008W		220	22	07	05	242	1965		008	2743	20	21	3	0		x4	7	8		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			
		00	S00	257	102	094	6		

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	SOURCE
		STD	0000	1015	3505	2698	0010854	0000	14910	707							
	237	OBS	0000	1015	35045	2698			14910	707							
		STD	0010	0939	3507	2713	0009484	0010	14884	709							
	237	OBS	0010	0939	35068	2713			14884	709							
		STD	0020	0904	3506	2718	0008997	0019	14873	694							
	237	OBS	0025	0889	35061	2720			14868	687							
		STD	0030	0883	3506	2721	0008719	0028	14866	680							
		STD	0050	0846	3504	2725	0008350	0045	14856	658							
	237	OBS	0060	0817	35033	2729			14846	653							
		STD	0075	0741	3502	2740	0007038	0065	14819	658							
	237	OBS	0099	0645	34991	2751			14785	665							
		STD	0100	0644	3499	2751	0005999	0081	14785	665							
		STD	0125	0631	3499	2753	0005863	0096	14784	665							
		STD	0150	0618	3499	2754	0005727	0110	14783	665							
	237	OBS	0199	0594	3469P	2734P				665							
		STD	0200	0593	3499	2758	0005475	0138	14781	664							
		STD	0250	0566	3500	2761	0005195	0165	14778	608							
	237	OBS	T0298	0549	34997	2764			14779	586							
		STD	0300	0549	3500	2763	0005052	0190	14780	588							
	237	OBS	0397	0539	34963	2762			14791	641							
		STD	0400	0539	3496	2762	0005296	0242	14792	639							
		STD	0500	0510	3499	2768	0004869	0293	14797	584							
	237	OBS	T0504	0508	34991	2768			14797	582							
	237	OBS	0595	0459	34964	2772			14791	607							
		STD	0600	0457	3496	2772	0004544	0340	14791	609							
		STD	0700	0421	3493	2773	0004437	0385	14792	631							
	237	OBS	T0713	0418	34930	2773			14793	633							
		STD	0800	0405	3493	2775	0004363	0429	14802	636							
	242	OBS	T0801	0405	34932	2775			14802	636							
		STD	0900	0384	3494	2777	0004177	0472	14810	651							
	242	OBS	0996	0374	34939	2779			14822	658							
		STD	1000	0375	3494	2779	0004129	0513	14823	657							
		STD	1100	0388	3495	2778	0004301	0555	14845	645							
		STD	1200	0395	3495	2777	0004478	0599	14865	637							
	242	OBS	T1260	0396	34955	2778			14876	634							
		STD	1300	0392	3496	2778	0004457	0644	14881	635							
		STD	1400	0384	3496	2779	0004443	0688	14894	638							
	242	OBS	1487	0376	34961	2780			14906	640							
		STD	1500	0375	3496	2780	0004413	0733	14907	640							
		STD	1750	0355	3496	2782	0004355	0842	14941	642							
	242	OBS	T1919	0340	3499P	2786P				644							
		STD	2000	0332	3496	2784	0004237	0950	14974	641							
	242	OBS	T2005	0332	34958	2784			14975	641							

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	938	NW	62297N	03033oW		220	20	07	06	071	1965		009	2195	20	35	1	4		X4	7	8		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
		31	507	263	103	091	5		

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	1037	3511	2699	0010768	0000	14919	704							
064		OBS	0000	1037	35106	2699			14919	704							
		STD	0010	0990	3511	2707	0010003	0010	14903	697							
064		OBS	0010	0990	35108	2707			14903	697							
		STD	0020	0929	3511	2718	0009037	0020	14883	702							
064		OBS	0025	0906	35112	2722			14875	705							
		STD	0030	0898	3511	2723	0008577	0029	14873	692							
064		OBS	0049	0865	35105	2728			14863	653							
		STD	0050	0863	3511	2728	0008085	0045	14863	652							
		STD	0075	0813	3513	2738	0007244	0065	14848	639							
064		OBS	0099	0772	35146	2745			14837	630							
		STD	0100	0771	3515	2745	0006567	0082	14836	630							
		STD	0125	0742	3514	2749	0006262	0098	14829	632							
		STD	0150	0718	3513	2752	0006024	0113	14824	634							
064		OBS	0198	0683	35116	2755			14818	638							
		STD	0200	0682	3512	2756	0005727	0143	14818	636							
		STD	0250	0670	3511	2757	0005667	0171	14821	608							
064		OBS	T0295	0660	35111	2758			14825	602							
		STD	0300	0659	3511	2758	0005619	0199	14825	606							
064		OBS	0398	0642	35089	2759			14834	657							
		STD	0400	0642	3509	2759	0005699	0256	14835	657							
064		OBS	T0499	0635	35079	2759			14848	653							
		STD	0500	0635	3508	2759	0005827	0313	14848	653							
064		OBS	0598	0589	35059	2763			14846	650							
		STD	0600	0589	3506	2763	0005505	0370	14846	650							
		STD	0700	0541	3501	2766	0005330	0424	14843	640							
064		OBS	T0700	0541	35014	2766			14843	640							
071		OBS	T0778	0463	34989	2773			14823	623							
		STD	0800	0450	3499	2774	0004480	0473	14822	619							
		STD	0900	0403	3499	2779	0004025	0516	14819	608							
071		OBS	0968	0381	34986	2782			14821	607							
		STD	1000	0380	3498	2781	0003908	0556	14826	616							
		STD	1100	0377	3495	2779	0004152	0596	14841	638							
		STD	1200	0374	3493	2777	0004401	0639	14856	652							
071		OBS	T1220	0373	34920	2777			14859	654							
		STD	1300	0369	3492	2778	0004432	0683	14871	653							
		STD	1400	0364	3493	2779	0004416	0727	14885	651							
071		OBS	1468	0362	34932	2779			14896	650							
		STD	1500	0361	3494	2780	0004416	0771	14901	650							
		STD	1750	0357	3496	2782	0004397	0881	14942	645							
071		OBS	T1876	0357	34969	2783			14964	643							
071		OBS	T1972	03480	34957	27830				644							

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	938	NW	62446N	029148W		219	29	07	06	114	1965		010	1737	15	31	2	2		X6	7	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			
		29	S10	247	098	096	5		

MESSENG® 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	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	1013	3507	2700	0010659	0000	14909	678							
109		OBS	0000	1013	35067	2700			14909	678							
		STD	0010	1012	3507	2700	0010665	0011	14911	681							
109		OBS	0010	1012	35067	2700			14911	681							
		STD	0020	0882	3508	2723	0008535	0020	14865	699							
109		OBS	0024	0847	35085	2729			14852	702							
		STD	0030	0845	3508	2729	0007994	0029	14852	694							
109		OBS	0049	0837	35066	2729			14852	672							
		STD	0050	0833	3507	2730	0007965	0044	14851	671							
		STD	0075	0736	3506	2743	0006694	0063	14818	656							
109		OBS	0097	0671	35050	2752			14796	647							
		STD	0100	0669	3505	2752	0005885	0079	14795	648							
		STD	0125	0654	3504	2753	0005802	0093	14793	654							
		STD	0150	0641	3504	2755	0005672	0107	14792	658							
		STD	0200	0620	3503	2757	0005536	0136	14792	661							
109		OBS	0200	0620	35032	2757			14792	661							
		STD	0250	0612	3504	2759	0005476	0163	14797	652							
109		OBS	T0296	0598	35040	2761			14799	647							
		STD	0300	0595	3504	2761	0005300	0190	14799	647							
109		OBS	0396	0543	35041	2768			14794	646							
		STD	0400	0541	3504	2768	0004756	0240	14793	645							
		STD	0500	0511	3497	2766	0005008	0289	14797	621							
109		OBS	0500	0511	34973	2766			14797	621							
109		OBS	0599	0502	35008	2770			14810	594							
		STD	0600	0502	3501	2770	0004757	0338	14810	594							
		STD	0700	0465	3500	2774	0004482	0384	14811	603							
109		OBS	T0702	0464	3510P	2782P				603							
114		OBS	T0788	0441	34991	2776			14816	614							
		STD	0800	0437	3499	2776	0004314	0428	14816	617							
		STD	0900	0408	3496	2777	0004285	0471	14821	635							
114		OBS	0987	0392	34955	2778			14828	644							
		STD	1000	0392	3496	2778	0004205	0514	14830	643							
		STD	1100	0390	3497	2779	0004188	0555	14847	639							
		STD	1200	0389	3498	2780	0004170	0597	14863	635							
114		OBS	T1237	0388	34986	2781			14869	633							
		STD	1300	0369	3497	2782	0004094	0639	14871	645							
114		OBS	T1360	0361	34961	2782			14878	650							
		STD	1400	0365	3497	2782	0004157	0680	14886	650							
114		OBS	T1491	0374	34978	2782			14906	638							

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			NOOC 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	938	NW	6255 N	02750 W		219	27	07	06	165	1965		011	1244	10	04	3	0		X2	7	8		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			
		31	S14	235	103	097	7		

MESSENGR TIME OF HR 1/10	CAST NO.	CARO 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	1063	3514	2697	0010975	0000	14928	694							
165		OBS	0000	1063	35137	2697			14928	694							
165		OBS	0009	1061	35137	2697			14929	695							
		STD	0010	1050	3514	2699	0010757	0011	14925	696							
		STD	0020	0961	3515	2715	0009247	0021	14895	706							
165		OBS	0023	0943	35152	2719			14889	709							
		STD	0030	0941	3516	2719	0008892	0030	14889	688							
165		OBS	0047	0936	35172	2721			14890	650							
		STD	0050	0916	3518	2725	0008379	0047	14884	646							
165		OBS	0069	0826	35227	2743			14853	628							
		STD	0075	0824	3522	2743	0006738	0066	14854	627							
165		OBS	0096	0817	35193	2742			14854	624							
		STD	0100	0815	3519	2742	0006876	0083	14854	625							
		STD	0125	0802	3519	2744	0006732	0100	14853	628							
		STD	0150	0792	3519	2746	0006633	0117	14853	631							
165		OBS	0189	0779	35185	2747			14855	633							
		STD	0200	0779	3518	2747	0006609	0150	14856	633							
		STD	0250	0774	3515	2745	0006848	0184	14862	631							
165		OBS	T0282	0767	35142	2745			14865	630							
		STD	0300	0760	3514	2746	0006800	0218	14865	629							
165		OBS	0382	0725	35138	2751			14865	627							
		STD	0400	0716	3513	2752	0006420	0284	14864	627							
165		OBS	T0480	0680	35084	2753			14863	627							
		STD	0500	0671	3508	2754	0006315	0347	14863	620							
165		OBS	T0575	0645	35067	2757			14865	596							
		STD	0600	0642	3508	2758	0006063	0409	14868	586							
165		OBS	T0667	0625	35107	2763			14872	569							
		STD	0700	0609	3510	2764	0005605	0468	14871	568							
165		OBS	0764	0579	35082	2767			14870	567							
		STD	0800	0558	3507	2768	0005269	0522	14867	568							
		STD	0900	0509	3505	2773	0004890	0573	14863	576							
165		OBS	T0940	0493	35042	2774			14863	582							
		STD	1000	0472	3504	2776	0004633	0620	14865	593							
165		OBS	T1029	0464	35031	2776			14866	599							

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	INDICTR	10° 1°	MO	DAY	HR.1/10			CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	938	NW	6304 N	02630 W		219 36	07	06	191		1965		012	1280	11	32	3	3		x2	6	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			
		32	S14	219	104	091	7		

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	SCO
		STD	0000	0987	3518	2714	0009370	0000	14902	695							
191		OBS	0000	0987	35184	2714			14902	695							
191		OBS	0009	0987	35186	2714			14903	677							
		STD	0010	0981	3519	2715	0009280	0009	14901	677							
		STD	0020	0934	3518	2722	0008590	0018	14885	678							
191		OBS	0021	0930	35180	2723			14884	678							
		STD	0030	0924	3518	2724	0008474	0027	14883	672							
191		OBS	0048	0913	35176	2725			14882	658							
		STD	0050	0902	3518	2728	0008162	0043	14878	655							
191		OBS	0074	0808	35218	2745			14847	636							
		STD	0075	0807	3522	2745	0006512	0062	14847	636							
191		OBS	0090	0789	35193	2746			14842	636							
		STD	0100	0787	3519	2746	0006476	0078	14843	633							
		STD	0125	0782	3518	2746	0006517	0094	14845	626							
		STD	0150	0777	3517	2746	0006557	0111	14847	622							
191		OBS	0180	0771	35160	2746			14850	619							
		STD	0200	0765	3517	2748	0006481	0143	14851	622							
		STD	0250	0754	3518	2750	0006338	0175	14855	626							
191		OBS	T0271	0751	35183	2751			14857	630							
		STD	0300	0750	3519	2752	0006290	0207	14862	630							
191		OBS	0364	0747	35192	2752			14871	630							
		STD	0400	0736	3519	2754	0006263	0270	14873	629							
191		OBS	T0459	0717	35175	2755			14875	627							
		STD	0500	0701	3516	2756	0006148	0332	14875	620							
191		OBS	T0556	0682	35144	2758			14877	607							
		STD	0600	0670	3514	2759	0006013	0392	14880	592							
191		OBS	T0641	0657	35127	2760			14881	582							
		STD	0700	0636	3510	2761	0005979	0452	14882	581							
191		OBS	0749	0617	35085	2762			14882	579							
		STD	0800	0587	3507	2765	0005662	0511	14879	577							
		STD	0900	0536	3506	2770	0005174	0565	14875	572							
191		OBS	T0947	0517	35050	2772			14875	570							
		STD	1000	0498	3504	2773	0004936	0615	14876	576							
191		OBS	T1065	0480	35037	2775			14879	587							

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	INDICTR	10° 1°	MO	DAY	HR.1/10			CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	938	NW	63205N	02504 W		219 35	07	06	230		1965		013	0301	02	32	3	0		x2	7	8		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			
		32	S10		092	085	6		

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	SCO
		STD	0000	1003	3515	2709	0009859	0000	14907	684							
230		OBS	0000	1003	35153	2709			14907	684							
		STD	0010	1004	3516	2709	0009824	0010	14909	684							
230		OBS	0010	1004	35163	2709			14909	682							
		STD	0020	0973	3517	2715	0009328	0019	14899	682							
		STD	0030	0948	3517	2719	0008943	0029	14892	681							
230		OBS	0030	0948	35166	2719			14892	681							
		STD	0050	0924	3517	2723	0008615	0046	14886	670							
230		OBS	0055	0913	35165	2725			14883	668							
		STD	0075	0841	3519	2738	0007212	0066	14860	664							
230		OBS	0080	0827	35191	2740			14855	661							
		STD	0100	0792	3519	2745	0006578	0083	14845	662							
230		OBS	0109	0781	35182	2747			14842	663							
		STD	0125	0780	3520	2748	0006340	0099	14845	645							
		STD	0150	0777	3522	2750	0006194	0115	14848	625							
230		OBS	0163	0773	35224	2751			14849	619							
		STD	0200	0753	3519	2751	0006162	0146	14847	620							
230		OBS	T0218	0747	35187	2752			14847	621							
230		OBS	0248	0742	35217	2755			14851	616							

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	938	NW	63271N	015101W		218	35	07	07	183	1965		014	1097	09	08	3	0		X1	6	7		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			
		11	S04	191	095	080	8		

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	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	SO
		STD	0000	1093	3521	2697	0010971	0000	14940	688							
183		OBS	0000	1093	35207	2697			14940	688							
		STD	0010	1074	3542	2717	0009113	0010	14938	677							
183		OBS	0010	1074	35418	2717			14938	677							
		STD	0020	1000	3541	2729	0007956	0019	14912	701							
183		OBS	0025	0972	35403	2733			14903	708							
		STD	0030	0959	3540	2735	0007388	0026	14899	707							
		STD	0050	0922	3537	2739	0007037	0041	14888	701							
183		OBS	0050	0922	35374	2739			14888	701							
183		OBS	0074	0910	35308	2736			14887	641							
		STD	0075	0909	3531	2737	0007360	0059	14887	640							
183		OBS	0099	0895	35322	2740			14886	627							
		STD	0100	0894	3532	2740	0007089	0077	14885	627							
		STD	0125	0874	3531	2742	0006928	0094	14882	618							
		STD	0150	0860	3530	2743	0006853	0111	14881	610							
183		OBS	0153	0859	3547P	2757P				609							
		STD	0200	0851	3527	2743	0006991	0146	14885	629							
183		OBS	T0203	0850	3527	2743			14885	630							
		STD	0250	0868	3534	2746	0006851	0181	14900	623							
		STD	0300	0887	3537	2745	0007025	0215	14916	616							
183		OBS	0301	0887	35374	2745			14917	616							
		STD	0400	0826	3535	2753	0006409	0283	14910	605							
183		OBS	T0405	0824	35351	2753			14910	604							
		STD	0500	0812	3535	2755	0006397	0347	14921	607							
183		OBS	T0501	0812	3524P	2746P				607							
183		OBS	T0589	0777	35320	2758			14922	596							
		STD	0600	0773	3532	2759	0006193	0410	14922	597							
		STD	0700	0733	3524	2758	0006325	0472	14922	604							
183		OBS	0700	0733	35244	2758			14922	604							
183		OBS	T0751	0615	35150	2767			14883	633							
		STD	0800	0524	3511	2776	0004494	0526	14854	641							
		STD	0900	0408	3504	2783	0003693	0567	14822	658							
183		OBS	T0937	0389	35012	2783			14819	664							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DEPT. 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	938	NW	62544N	014276W		218	24	07	07	224	1965		015	1646	15	10	2	0		x2	6	8		0013

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			
		31	504	191	091	070	8		

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	S.O.O.
		STD	0000	1090	3529	2704	0010315	0000	14940	653							
219		OBS	0000	1090	35289	2704			14940	653							
		STD	0010	1080	3528	2705	0010211	0010	14938	655							
219		OBS	0010	1080	35283	2705			14938	655							
		STD	0020	1004	3528	2718	0008982	0020	14912	647							
219		OBS	0025	0978	35279	2723			14904	643							
		STD	0030	0977	3528	2723	0008565	0029	14904	641							
		STD	0050	0965	3528	2725	0008400	0046	14903	633							
219		OBS	0050	0965	35282	2725			14903	633							
		STD	0075	0926	3529	2732	0007803	0066	14893	618							
219		OBS	0099	0896	35290	2737			14886	609							
		STD	0100	0896	3529	2737	0007357	0085	14886	609							
		STD	0125	0885	3529	2739	0007230	0103	14886	614							
		STD	0150	0875	3529	2741	0007127	0121	14886	619							
		STD	0200	0861	3529	2743	0006996	0156	14889	629							
219		OBS	0203	0860	35293	2743			14889	630							
		STD	0250	0855	3529	2744	0007014	0191	14895	618							
		STD	0300	0850	3529	2744	0007040	0226	14901	605							
219		OBS	0302	0850	35291	2745			14902	604							
		STD	0400	0845	3530	2746	0007095	0297	14916	610							
219		OBS	T0401	0845	35299	2746			14916	610							
		STD	0500	0836	3529	2747	0007216	0369	14929	604							
219		OBS	0504	0836	35287	2746			14930	604							
		STD	0600	0829	3527	2746	0007407	0442	14943	629							
219		OBS	T0603	0829	35273	2746			14943	630							
219		OBS	T0699	0809	35281	2750			14952	577							
		STD	0700	0809	3528	2750	0007229	0515	14952	577							
224		OBS	T0797	0780	35220	2750			14956	553							
		STD	0800	0778	3522	2750	0007360	0588	14956	554							
		STD	0900	0716	3518	2756	0006896	0659	14949	590							
224		OBS	0988	0658	35152	2762			14939	607							
		STD	1000	0646	3515	2763	0006192	0725	14937	606							
		STD	1100	0553	3513	2774	0005142	0781	14916	597							
		STD	1200	0479	3510	2780	0004467	0829	14902	586							
224		OBS	T1232	0459	35081	2781			14899	585							
		STD	1300	0436	3504	2780	0004440	0874	14900	606							
		STD	1400	0390	3498	2780	0004366	0918	14897	626							
224		OBS	T1416	0382	34971	2780			14896	627							
		STD	1500	0332	3499	2787	0003645	0958	14890	625							
224		OBS	T1510	0326	34990	2787			14889	624							

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	938	NW	62207N	013534W		218	23	07	08	021	1965		016	1416	12	01	2	2		X2	6	8		0014

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			
		35	S10	185	090	070	7		

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	OXY
		STD	0000	1038	3529	2713	0009433	0000	14921	655							
021		OBS	0000	1038	35289	2713			14921	655							
		STD	0010	1040	3529	2713	0009453	0009	14924	653							
021		OBS	0010	1040	35294	2713			14924	653							
		STD	0020	1049	3529	2711	0009691	0019	14929	653							
021		OBS	0024	1053	35282	2710			14931	653							
		STD	0030	1024	3528	2715	0009306	0029	14921	652							
021		OBS	0048	0954	35291	2728			14899	648							
		STD	0050	0950	3529	2728	0008093	0046	14898	647							
		STD	0075	0910	3529	2735	0007493	0065	14887	636							
021		OBS	0098	0881	35296	2740			14880	627							
		STD	0100	0880	3530	2740	0007066	0084	14880	626							
		STD	0125	0870	3530	2742	0006963	0101	14880	619							
		STD	0150	0863	3530	2743	0006898	0118	14882	614							
		STD	0200	0852	3530	2745	0006829	0153	14886	610							
021		OBS	0200	0852	35297	2745			14886	610							
		STD	0250	0852	3531	2746	0006831	0187	14894	618							
021		OBS	T0298	0852	35311	2746			14902	624							
		STD	0300	0852	3531	2746	0006928	0221	14902	624							
021		OBS	0398	0837	35295	2747			14913	631							
		STD	0400	0837	3529	2746	0007036	0291	14913	631							
021		OBS	T0478	0827	35276	2747			14922	621							
		STD	0500	0827	3528	2747	0007135	0362	14925	628							
021		OBS	0599	0824	35299	2749			14941	638							
		STD	0600	0824	3530	2749	0007142	0433	14941	638							
		STD	0700	0804	3527	2750	0007209	0505	14950	616							
021		OBS	T0700	0804	35272	2750			14950	616							
		STD	0800	0768	3524	2753	0007064	0576	14952	575							
021		OBS	0801	0768	35239	2753			14952	575							
		STD	0900	0695	3520	2760	0006402	0644	14940	555							
021		OBS	T0996	0621	35157	2767			14926	553							
		STD	1000	0618	3515	2767	0005785	0705	14925	554							
		STD	1100	0537	3509	2772	0005213	0760	14909	582							
		STD	1200	0452	3502	2777	0004695	0809	14890	610							
021		OBS	T1237	0420	34992	2778			14882	620							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DATE LINE 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	938	NW	61402N	013166W		218	13	07	08	064	1965		017	1372	13	03	2	2		X1	6	4		0015

WATER		WIND		BARO-METER (mba)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		01	S08	171	083	063	8		

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	SAC
		STD	0000	1095	3530	2704	0010312	0000	14942	675							
064		OBS	0000	1095	35301	2704			14942	675							
		STD	0010	1094	3530	2704	0010319	0010	14943	670							
064		OBS	0010	1094	35301	2704			14943	670							
		STD	0020	1093	3529	2704	0010383	0021	14944	673							
064		OBS	0025	1093	35290	2703			14945	675							
		STD	0030	1060	3529	2709	0009844	0031	14934	666							
064		OBS	0049	0962	35303	2727			14902	636							
		STD	0050	0960	3530	2728	0008165	0049	14901	635							
		STD	0075	0924	3531	2734	0007572	0068	14892	616							
064		OBS	0099	0897	35322	2739			14886	604							
		STD	0100	0897	3532	2739	0007134	0087	14887	604							
		STD	0125	0893	3532	2740	0007140	0105	14889	606							
		STD	0150	0889	3532	2740	0007146	0123	14892	608							
		STD	0200	0882	3531	2741	0007165	0158	14897	613							
064		OBS	0203	0881	35313	2741			14897	613							
		STD	0250	0872	3530	2742	0007213	0194	14902	618							
		STD	0300	0864	3530	2743	0007187	0230	14907	624							
064		OBS	T0305	0863	35296	2743			14907	624							
		STD	0400	0849	3530	2745	0007168	0302	14918	609							
064		OBS	0402	0849	35298	2745			14918	609							
		STD	0500	0840	3529	2746	0007272	0374	14931	607							
064		OBS	T0511	0837	35284	2746			14931	607							
		STD	0600	0805	3525	2748	0007206	0447	14933	565							
064		OBS	0607	0802	35243	2748			14933	563							
		STD	0700	0749	3523	2755	0006669	0516	14928	551							
064		OBS	T0711	0741	35222	2756			14927	549							
		STD	0800	0665	3515	2761	0006173	0580	14911	529							
064		OBS	T0810	0657	35142	2761			14909	528							
		STD	0900	0585	3509	2766	0005621	0639	14895	543							
		STD	1000	0516	3504	2771	0005175	0693	14883	564							
064		OBS	T1014	0507	35031	2771			14881	567							
		STD	1100	0457	3500	2775	0004803	0743	14875	593							
064		OBS	1171	0425	3599P	2857P				610							
		STD	1200	0415	3497	2777	0004584	0790	14874	616							
064		OBS	T1270	0396	3495	2777			14877	627							

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	938	NW	61042N	012401W		21	8	12	07	08	1965		018	1829	15					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
		02	S04	171	098	068	8		

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	1090	3429	2626	0017692	0000	14927	667							
104		OBS	0000	1090	34289	2626			14927	667							
		STD	0010	1089	3529	2704	0010351	0014	14941	661							
104		OBS	0010	1089	35285	2704			14941	661							
		STD	0020	1088	3528	2704	0010367	0024	14942	673							
104		OBS	0025	1087	35282	2704			14943	675							
		STD	0030	1069	3528	2707	0010093	0035	14937	668							
104		OBS	0049	1006	35263	2717			14918	644							
		STD	0050	1003	3526	2717	0009151	0054	14917	643							
		STD	0075	0942	3529	2729	0008057	0075	14899	623							
104		OBS	0098	0900	35307	2738			14887	610							
		STD	0100	0900	3531	2738	0007293	0095	14887	610							
		STD	0125	0893	3531	2739	0007214	0113	14889	612							
		STD	0150	0888	3531	2740	0007172	0131	14891	615							
		STD	0200	0877	3532	2742	0007065	0166	14895	619							
104		OBS	0200	0877	35317	2742			14895	619							
		STD	0250	0867	3530	2743	0007135	0202	14900	617							
104		OBS	T0299	0859	35296	2743			14905	616							
		STD	0300	0859	3530	2743	0007139	0237	14905	616							
104		OBS	0398	0847	35288	2745			14916	617							
		STD	0400	0847	3529	2745	0007202	0309	14917	617							
		STD	0500	0838	3528	2745	0007334	0382	14930	626							
104		OBS	T0504	0838	35277	2745			14930	626							
		STD	0600	0834	3529	2747	0007382	0455	14945	617							
104		OBS	0601	0834	35288	2747			14945	617							
		STD	0700	0817	3526	2747	0007509	0530	14955	609							
104		OBS	T0700	0817	35259	2747			14955	609							
111		OBS	T0790	0790	3573P	2788P				582							
		STD	0800	0784	3523	2750	0007381	0604	14958	578							
		STD	0900	0722	3520	2757	0006810	0675	14950	547							
111		OBS	T0984	0666	35165	2762			14942	536							
		STD	1000	0651	3515	2762	0006266	0741	14939	539							
		STD	1100	0569	3509	2768	0005660	0800	14922	560							
		STD	1200	0502	3504	2773	0005218	0855	14911	582							
111		OBS	1235	0482	35027	2774			14908	590							
		STD	1300	0450	3500	2775	0004919	0905	14905	608							
111		OBS	T1362	0425	34983	2777			14905	621							
		STD	1400	0413	3497	2777	0004747	0954	14906	627							
111		OBS	T1477	0394	34944	2777			14911	633							

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	938	NW	60310N	012039W		21	8	02	07	08	1965		019	0375	04	36	2	0		X2	6	8		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
		35	S11	168	100	079	8		

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	1130	3529	2697	0010995	0000	14954	638							
147		OBS	0000	1130	35291	2697			14954	638							
		STD	0010	1130	3531	2698	0010858	0011	14956	664							
147		OBS	0010	1130	35313	2698			14956	664							
		STD	0020	1127	3531	2699	0010857	0022	14957	661							
147		OBS	0025	1126	35304	2698			14957	658							
		STD	0030	1109	3530	2701	0010635	0033	14952	650							
		STD	0050	1034	3528	2713	0009555	0053	14928	631							
147		OBS	0050	1034	35279	2713			14928	631							
		STD	0075	0923	3529	2733	0007734	0074	14892	638							
147		OBS	0075	0923	35289	2733			14892	638							
		STD	0100	0900	3522	2731	0007944	0094	14886	621							
147		OBS	0100	0900	35219	2731			14886	621							
		STD	0125	0892	3528	2737	0007420	0113	14888	619							
		STD	0150	0886	3533	2742	0007001	0131	14891	617							
147		OBS	0150	0886	35331	2742			14891	617							
		STD	0200	0880	3539	2747	0006610	0165	14897	613							
147		OBS	T0200	0880	35385	2747			14897	613							
		STD	0250	0869	3537	2748	0006650	0198	14901	613							
		STD	0300	0862	3536	2748	0006699	0232	14907	613							
147		OBS	0300	0862	35362	2748			14907	613							
147		OBS	T0351	0858	35365	2749			14914	609							

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	938	NW	59501N	011286W		182	91	07	08	200	1965		020	1189	05					X1	6	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
		36	509	160	100	076	7		

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	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 CODE
		STD	0000	1192	3535	2689	0011699	0000	14976	611							
200		OBS	0000	1192	35346	2689			14976	611							
200		OBS	0007	1187	35327	2689			14976	664							
		STD	0010	1188	3533	2688	0011790	0012	14976	664							
200		OBS	0019	1189	35324	2688			14978	664							
		STD	0020	1178	3533	2691	0011614	0023	14975	660							
		STD	0030	1077	3536	2712	0009640	0034	14941	625							
200		OBS	0039	1008	35379	2725			14918	603							
		STD	0050	0986	3537	2728	0008090	0052	14912	607							
		STD	0075	0946	3536	2734	0007573	0071	14901	615							
200		OBS	0078	0942	35355	2735			14900	616							
		STD	0100	0937	3535	2735	0007572	0090	14902	619							
		STD	0125	0931	3534	2735	0007581	0109	14904	622							
		STD	0150	0926	3533	2736	0007614	0128	14906	625							
200		OBS	0157	0925	35331	2736			14906	626							
		STD	0200	0919	3534	2737	0007585	0166	14911	622							
200		OBS	T0239	0915	35340	2738			14916	619							
		STD	0250	0914	3534	2738	0007584	0204	14918	619							
		STD	0300	0911	3534	2739	0007623	0242	14925	617							
200		OBS	0319	0910	35342	2739			14928	616							
		STD	0400	0919	3535	2738	0007871	0320	14944	613							
200		OBS	T0401	0919	3528P	2733P				613							
200		OBS	0484	0913	35364	2740			14956	614							
		STD	0500	0910	3536	2740	0007879	0398	14958	614							
200		OBS	T0528	0904	35353	2741			14960	614							

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	938	NW	59339N	010156W		182	90	07	09	001	1965		021	1388	12	03	3	2		X2	6	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
		02	512	155	103	061	7		

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	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 CODE
		STD	0000	1280	3531	2669	0013605	0000	15006	670							
001		OBS	0000	1280	35309	2669			15006	670							
001		OBS	0008	1180	35305	2688			14973	660							
		STD	0010	1180	3531	2688	0011803	0013	14973	660							
		STD	0020	1178	3531	2689	0011785	0024	14974	659							
001		OBS	0027	1177	35308	2689			14975	658							
		STD	0030	1159	3531	2693	0011444	0036	14969	651							
001		OBS	0046	1067	35329	2711			14940	619							
		STD	0050	1059	3533	2713	0009601	0057	14938	618							
		STD	0075	0977	3535	2728	0008146	0079	14912	611							
001		OBS	0096	0926	35359	2738			14897	607							
		STD	0100	0925	3535	2738	0007301	0099	14897	608							
		STD	0125	0919	3536	2738	0007288	0117	14899	613							
		STD	0150	0914	3535	2739	0007283	0135	14901	618							
001		OBS	0192	0908	35346	2740			14906	624							
		STD	0200	0907	3535	2740	0007291	0172	14907	625							
		STD	0250	0904	3535	2741	0007346	0208	14914	632							
001		OBS	T0286	0902	35353	2741			14919	633							
		STD	0300	0902	3536	2742	0007343	0245	14922	631							
001		OBS	0382	0902	35369	2742			14935	624							
		STD	0400	0901	3537	2743	0007457	0319	14938	624							
001		OBS	T0478	0897	35374	2744			14949	624							
		STD	0500	0897	3537	2743	0007593	0394	14953	624							
001		OBS	0576	0896	35359	2743			14965	624							
		STD	0600	0895	3535	2742	0007907	0472	14968	624							
001		OBS	T0675	0887	35334	2742			14978	621							
		STD	0700	0884	3533	2742	0008069	0551	14981	619							
001		OBS	T0774	0870	35318	2743			14988	611							
		STD	0800	0861	3531	2744	0008030	0632	14988	604							
		STD	0900	0822	3530	2750	0007652	0710	14990	587							
001		OBS	T0959	0797	35286	2752			14990	585							
		STD	1000	0778	3528	2755	0007266	0785	14990	587							
		STD	1100	0729	3525	2759	0006876	0856	14987	602							
001		OBS	1168	0693	35236	2763			14984	621							

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	938	NW	5920 N	00855 W		181	98	07	09	035	1965		022	1445	13					X9	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
		35	S06	137	100	070	7		

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	QQQ
		STD	0000	1173	3537	2694	0011201	0000	14970	640							
035		OBS	0000	1173	35367	2694			14970	640							
		STD	0010	1170	3534	2693	0011378	0011	14970	634							
035		OBS	0010	1170	35339	2693			14970	634							
		STD	0020	1169	3534	2693	0011404	0023	14972	636							
035		OBS	0023	1169	35336	2693			14972	637							
		STD	0030	1127	3534	2701	0010656	0034	14959	632							
		STD	0050	1029	3534	2719	0009021	0053	14927	620							
035		OBS	0052	1021	35342	2720			14924	619							
		STD	0075	0968	3535	2730	0008001	0075	14909	612							
035		OBS	0099	0926	35353	2737			14898	607							
		STD	0100	0926	3535	2737	0007383	0094	14898	607							
		STD	0125	0916	3535	2739	0007278	0112	14898	610							
		STD	0150	0909	3535	2740	0007219	0130	14900	612							
035		OBS	0199	0899	35342	2741			14904	617							
		STD	0200	0899	3534	2741	0007239	0166	14904	617							
		STD	0250	0899	3534	2741	0007341	0203	14912	618							
		STD	0300	0898	3534	2741	0007427	0240	14920	619							
035		OBS	T0300	0898	3434P	2663P				619							
		STD	0400	0894	3534	2741	0007568	0315	14935	616							
035		OBS	0406	0894	35336	2741			14936	616							
		STD	0500	0886	3533	2742	0007709	0391	14948	616							
035		OBS	T0509	0885	35327	2742			14949	616							
		STD	0600	0879	3532	2742	0007851	0469	14962	611							
035		OBS	0615	0877	35321	2743			14964	609							
		STD	0700	0859	3530	2744	0007851	0548	14971	597							
035		OBS	T0720	0854	35300	2745			14972	593							
		STD	0800	0833	3529	2747	0007699	0625	14978	570							
035		OBS	0826	0823	35291	2749			14978	567							
		STD	0900	0777	3527	2754	0007151	0700	14973	591							
		STD	1000	0711	3523	2760	0006583	0768	14963	609							
035		OBS	T1031	0690	35221	2763			14960	611							
		STD	1100	0635	3519	2768	0005882	0831	14949	602							
		STD	1200	0565	3513	2772	0005439	0887	14937	589							
035		OBS	1215	0555	35127	2773			14936	587							
		STD	1300	0505	3508	2775	0005081	0940	14929	598							
035		OBS	T1318	0496	35075	2776			14928	602							

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	938	NW	58599N	007389W		181	87	07	09	078	1965		023	0914	08	36	2	0		X9	6	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
		34	S08	135	103	080	7		

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	QQQ
		STD	0000	1182	3536	2692	0011429	0000	14973	627							
078		OBS	0000	1182	35358	2692			14973	627							
		STD	0010	1182	3536	2692	0011462	0011	14975	628							
078		OBS	0010	1182	35357	2692			14975	628							
		STD	0020	1179	3535	2692	0011455	0023	14975	625							
078		OBS	0024	1170	35353	2694			14973	624							
		STD	0030	1123	3536	2703	0010438	0034	14957	624							
078		OBS	0048	1015	35362	2723			14922	624							
		STD	0050	1009	3536	2724	0008527	0053	14920	624							
		STD	0075	0949	3537	2734	0007569	0073	14902	617							
078		OBS	0078	0944	35368	2735			14901	616							
		STD	0100	0927	3536	2738	0007303	0092	14898	629							
078		OBS	0102	0926	35362	2738			14898	630							
		STD	0125	0920	3536	2739	0007267	0110	14900	627							
		STD	0150	0915	3536	2739	0007240	0128	14902	624							
078		OBS	T0195	0908	35357	2740			14907	620							
		STD	0200	0908	3536	2740	0007258	0164	14907	620							
		STD	0250	0905	3535	2740	0007375	0201	14914	618							
		STD	0300	0902	3534	2740	0007499	0238	14922	616							
078		OBS	0302	0902	35339	2740			14922	616							
		STD	0400	0898	3534	2741	0007632	0314	14937	617							
078		OBS	T0406	0898	35340	2741			14937	617							
		STD	0500	0893	3534	2742	0007749	0390	14951	614							
078		OBS	0510	0892	35340	2742			14952	614							
		STD	0600	0888	3534	2742	0007902	0469	14966	610							
078		OBS	T0608	0887	35334	2742			14967	610							
		STD	0700	0879	3533	2743	0007987	0548	14979	605							
078		OBS	T0712	0877	35325	2743			14980	604							
078		OBS	T0786	0864	35306	2743			14987	592							

TABLE 2.—Observed and interpolated oceanographic data from stations taken by USCGC EVERGREEN, 22 October–23 November 1965, prepared from NODC listing No. 31–963.

REFERENCE CTRY CODE	REFERENCE NO. 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	963	EV	60235N	041492W		221	01	10	22	084	1965	NAS	001	1362	12	02	2	4		X1	X	9	0001

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
		31	S10	922	017	006	8		

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	SECC
		STD	0000	0474	3435	2721	0008648	0000	14691	680							
075		OBS	0000	04743	4352	2721			14691	680							
		STD	0010	0479	3434	2720	0008772	0009	14694	744							
075		OBS	0010	04793	4344	2720			14694	744							
		STD	0020	0530	3448	2725	0008327	0017	14719	744							
075		OBS	0025	05493	4527	2726			14728	744							
		STD	0030	0556	3454	2727	0008189	0026	14732	747							
		STD	0050	0583	3461	2729	0007989	0042	14747	753							
075		OBS	0050	05833	4613	2729			14747	753							
		STD	0075	0614	3472	2733	0007604	0061	14765	741							
		STD	0100	0641	3482	2738	0007258	0080	14781	730							
075		OBS	0100	06413	4817	2738			14781	730							
		STD	0125	0668	3487	2738	0007251	0098	14797	725							
		STD	0150	0689	3492	2739	0007197	0116	14810	720							
		STD	0200	0715	3500	2742	0007031	0152	14829	708							
075		OBS	T0200	07153	5001	2742			14829	708							
		STD	0250	0712	3506	2747	0006634	0186	14837	689							
		STD	0300	0700	3508	2750	0006394	0218	14841	677							
075		OBS	0300	07003	5081	2750			14841	677							
		STD	0400	0646	3504	2754	0006153	0281	14836	678							
075		OBS	T0402	06453	5034	2754			14835	678							
		STD	0500	0618	3502	2757	0006034	0342	14841	673							
075		OBS	0502	06173	5019	2757			14841	673							
		STD	0600	0565	3499	2761	0005677	0400	14836	662							
075		OBS	T0603	05643	4991	2761			14836	662							
084		OBS	0691	05273	4976	2765			14835	657							
		STD	0700	0522	3497	2765	0005380	0456	14834	652							
075		OBS	0706	05193	4972	2765			14834	649							
084		OBS	T0779	05053	4970	2767			14841	662							
		STD	0800	0474	3496	2769	0004992	0508	14831	663							
075		OBS	0809	04653	4957	2770			14829	664							
084		OBS	0882	04683	4967	2771			14843	655							
		STD	0900	0467	3497	2771	0004976	0557	14845	655							
		STD	1000	0446	3495	2772	0004905	0607	14853	654							
084		OBS	T1089	04100	34943	27750				653							
		STD	1100	0402	3495	2776	0004503	0654	14851	655							
084		OBS	T1159	03653	4960	2781			14846	673							

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	INDIC'R	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	60364N	040342W		221	00	10	22	138	1965	NAS	002	2377	20	03	9	3		X1	4	7		0002

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			
		25	532	841	056	033	8		

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	Σ Δ 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	0728	3488	2730	0007811	0000	14800	694							
130		OBS	0000	0728	34875	2730			14800	694							
130		OBS	0009	0728	34850	2728			14801	719							
		STD	0010	0728	3485	2728	0008014	0008	14801	719							
		STD	0020	0728	3486	2728	0008031	0016	14803	718							
130		OBS	0024	0728	34847	2728			14803	717							
		STD	0030	0729	3485	2728	0008084	0024	14805	724							
130		OBS	0049	0732	34845	2727			14809	737							
		STD	0050	0732	3485	2728	0008137	0040	14809	736							
		STD	0075	0735	3486	2728	0008148	0061	14815	719							
130		OBS	0098	0738	34880	2729			14820	707							
		STD	0100	0737	3488	2729	0008059	0081	14820	706							
		STD	0125	0723	3490	2733	0007774	0101	14819	700							
		STD	0150	0709	3492	2736	0007490	0120	14818	695							
130		OBS	T0197	0682	34951	2743			14815	687							
		STD	0200	0680	3495	2743	0006933	0156	14815	687							
		STD	0250	0646	3492	2745	0006781	0190	14809	683							
130		OBS	0296	0619	34906	2747			14806	680							
		STD	0300	0617	3491	2748	0006587	0223	14806	680							
130		OBS	T0396	0575	34886	2752			14804	675							
		STD	0400	0573	3488	2751	0006346	0288	14804	675							
130		OBS	0495	0524	34850	2755			14800	673							
		STD	0500	0522	3485	2755	0006057	0350	14800	673							
130		OBS	T0595	0493	34850	2759			14804	668							
		STD	0600	0491	3485	2759	0005793	0409	14804	668							
130		OBS	0694	0463	34839	2761			14807	668							
		STD	0700	0461	3484	2761	0005626	0466	14808	669							
130		OBS	T0796	0434	34826	2763			14812	677							
		STD	0800	0433	3483	2763	0005480	0522	14812	677							
130		OBS	T0895	0413	34821	2765			14820	677							
		STD	0900	0412	3482	2765	0005368	0576	14820	678							
		STD	1000	0402	3480	2765	0005488	0631	14833	698							
138		OBS	T1019	0386Q	34798	2766Q				700							
		STD	1100	0392	3480	2766	0005456	0685	14845	699							
		STD	1200	0381	3480	2767	0005408	0740	14857	698							
138		OBS	1277	0373	34807	2768			14867	697							
		STD	1300	0371	3481	2769	0005294	0793	14870	698							
		STD	1400	0360	3481	2770	0005238	0846	14882	701							
		STD	1500	0348	3481	2771	0005165	0898	14894	704							
138		OBS	T1517	0346	34813	2771			14896	705							
		STD	1750	0317	3482	2775	0004880	1023	14923	704							
		STD	2000	0282	3482	2778	0004589	1142	14951	703							
138		OBS	2013	0280	34821	2778			14952	703							

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	963	EV	60418N	039278W		220	09	10	22	200	1965	NAS	003	2377	24	24	7	3		X1	4	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			
		25	S20	831	056	044	8		

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-$\Sigma 10^7$	$\Sigma\Delta D$ 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	0724	3477	2722	0008554	0000	14797	732							
189		OBS	0000	0724	34768	2722			14797	732							
		STD	0010	0725	3477	2722	0008607	0009	14799	719							
189		OBS	0010	0725	34765	2722			14799	719							
		STD	0020	0725	3476	2722	0008631	0017	14801	678							
189		OBS	0025	0725	34763	2722			14801	668							
		STD	0030	0729	3476	2721	0008709	0026	14804	683							
189		OBS	0048	0730	34764	2721			14807	719							
		STD	0050	0725	3477	2722	0008636	0043	14806	717							
		STD	0075	0666	3488	2739	0007073	0063	14788	699							
189		OBS	0096	0627	34940	2749			14777	689							
		STD	0100	0624	3494	2750	0006125	0079	14776	690							
		STD	0125	0607	3494	2752	0005940	0094	14773	698							
		STD	0150	0590	3494	2754	0005749	0109	14771	702							
189		OBS	T0195	0564	34945	2758			14768	705							
		STD	0200	0562	3495	2758	0005458	0137	14768	703							
		STD	0250	0539	3495	2761	0005231	0164	14767	690							
189		OBS	0294	0520	34946	2763			14766	684							
		STD	0300	0518	3495	2763	0005034	0189	14766	685							
189		OBS	T0395	0482	34946	2768			14767	687							
		STD	0400	0481	3495	2768	0004701	0238	14768	685							
189		OBS	0498	0451	34955	2772			14772	663							
		STD	0500	0450	3495	2772	0004420	0284	14771	663							
		STD	0600	0411	3490	2772	0004453	0328	14771	665							
189		OBS	0602	0410	34902	2772			14771	665							
		STD	0700	0390	3489	2773	0004405	0372	14779	718							
189		OBS	0705	0389	34885	2773			14779	719							
		STD	0800	0375	3488	2774	0004398	0416	14789	719							
189		OBS	T0810	0374	34878	2774			14790	719							
		STD	0900	0367	3487	2774	0004445	0461	14802	711							
189		OBS	T0916	0366	34872	2774			14804	710							
		STD	1000	0366	3488	2775	0004466	0505	14818	724							
200		OBS	T1082	0366	34881	2775			14832	729							
		STD	1100	0365	3488	2775	0004524	0550	14835	725							
		STD	1200	0362	3489	2776	0004549	0595	14850	707							
		STD	1300	0359	3489	2775	0004572	0641	14866	699							
200		OBS	1320	0358	34889	2776			14869	698							
		STD	1400	0356	3489	2777	0004601	0687	14882	706							
		STD	1500	0353	3490	2778	0004570	0733	14897	714							
200		OBS	T1560	0350	34904	2778			14906	718							
		STD	1750	0347	3491	2779	0004643	0848	14937	720							
		STD	2000	0320	3491	2782	0004445	0962	14968	723							
200		OBS	2044	0313	34910	2782			14973	723							
200		OBS	2337	0244	34877	2786			14993	733							
200		OBS	T2411	0198	34855	2788			14985	735							

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	963	EV	60591N	038177W		220	08	10	23	016	1965	NAS	004	2743	20	24	5	3		X2	4	8		0004

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
		23	S14	841	056	039	8		

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	0769	3480	2718	0008962	0000	14815	717							
005		OBS	0000	0769	34796	2718			14815	717							
		STD	0010	0767	3479	2718	0008999	0009	14816	718							
005		OBS	0011	0767	34787	2718			14816	718							
		STD	0020	0768	3479	2718	0009028	0018	14818	718							
005		OBS	0028	0769	34791	2718			14819	717							
		STD	0030	0769	3479	2718	0009054	0027	14820	717							
		STD	0050	0771	3479	2717	0009135	0045	14824	719							
005		OBS	0055	0772	34788	2717			14825	720							
		STD	0075	0733	3494	2735	0007522	0066	14815	694							
005		OBS	0083	0719	34991	2741			14812	685							
		STD	0100	0716	3499	2741	0006960	0084	14813	686							
		STD	0125	0710	3499	2742	0006920	0102	14815	686							
		STD	0150	0700	3499	2743	0006825	0119	14815	687							
		STD	0200	0672	3498	2746	0006603	0152	14812	688							
005		OBS	T0222	0656	34966	2747			14809	689							
		STD	0250	0620	3493	2749	0006367	0185	14799	680							
		STD	0300	0566	3489	2753	0006051	0216	14785	668							
005		OBS	0332	0539	34879	2755			14779	665							
		STD	0400	0508	3489	2760	0005468	0273	14778	674							
005		OBS	T0442	0492	34898	2763			14778	675							
		STD	0500	0478	3492	2766	0005003	0326	14783	666							
005		OBS	0552	0461	34933	2769			14784	665							
		STD	0600	0434	3494	2772	0004480	0373	14761	676							
005		OBS	T0663	0410	34938	2775			14782	687							
		STD	0700	0406	3492	2774	0004366	0417	14786	689							
005		OBS	0770	0397	34894	2773			14793	697							
		STD	0800	0391	3490	2773	0004471	0462	14796	704							
005		OBS	T0885	0378	34896	2775			14805	718							
		STD	0900	0377	3490	2775	0004388	0506	14807	719							
005		OBS	T0991	0374	34905	2776			14821	725							
		STD	1000	0371	3491	2777	0004304	0549	14821	734							
016		OBS	T1004	0370	34911	2777			14821	738							
		STD	1100	0365	3491	2778	0004288	0592	14835	746							
		STD	1200	0360	3492	2778	0004295	0635	14850	753							
016		OBS	1255	0357	34918	2779			14858	755							
		STD	1300	0360	3493	2779	0004276	0678	14867	753							
016		OBS	T1390	0364	34956	2781			14884								
		STD	1400	0364	3496	2781	0004211	0720	14886	748							
		STD	1500	0359	3496	2781	0004234	0763	14900	743							
		STD	1750	0347	3496	2783	0004273	0869	14938	730							
		STD	2000	0335	3496	2784	0004303	0976	14975	717							
016		OBS	T2006	0335	34957	2784			14976	717							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICATOR	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.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	61108N	037099W		220	17	10	23	073	1965	NAS	005	2889	28	16	2	3		X1	4	6		0005

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			
		18	S12	881	072	061	8		

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	0832	3485	2713	0009444	0000	14840	712							
062		OBS	0000	0832	34852	2713			14840	712							
		STD	0010	0832	3485	2713	0009478	0009	14841	734							
062		OBS	0010	0832	34850	2713			14841	734							
		STD	0020	0831	3485	2713	0009479	0019	14843	711							
062		OBS	0024	0831	34851	2713			14843	705							
		STD	0030	0832	3485	2713	0009508	0028	14844	708							
062		OBS	0048	0835	34852	2712			14849	712							
		STD	0050	0832	3485	2713	0009528	0047	14848	712							
062		OBS	0072	0803	34871	2719			14841	710							
		STD	0075	0784	3488	2722	0008682	0070	14834	710							
062		OBS	T0095	0678	34945	2743			14797	707							
		STD	0100	0674	3495	2744	0006695	0089	14796	707							
		STD	0125	0656	3495	2746	0006498	0106	14793	705							
		STD	0150	0640	3496	2749	0006255	0122	14791	703							
062		OBS	0189	0618	34962	2752			14789	698							
		STD	0200	0613	3496	2753	0005982	0152	14788	696							
		STD	0250	0593	3495	2754	0005874	0182	14789	687							
062		OBS	T0285	0580	34947	2756			14789	680							
		STD	0300	0576	3496	2757	0005655	0211	14790	675							
062		OBS	0382	0546	34981	2763			14792	662							
		STD	0400	0535	3498	2764	0005127	0265	14790	665							
062		OBS	T0480	0497	34966	2767			14788	674							
		STD	0500	0492	3497	2768	0004829	0315	14789	673							
062		OBS	0579	0468	34964	2770			14792	669							
		STD	0600	0457	3496	2771	0004566	0362	14791	683							
062		OBS	0679	0424	34936	2773			14790	712							
		STD	0700	0420	3494	2773	0004418	0407	14792	709							
062		OBS	T0779	0406	34932	2775			14799	699							
		STD	0800	0403	3493	2775	0004338	0450	14801	700							
		STD	0900	0390	3493	2776	0004299	0493	14813	704							
		STD	1000	0380	3493	2777	0004285	0536	14825	709							
073		OBS	T1092	0372	34925	2778			14837	713							
		STD	1100	0372	3493	2778	0004284	0579	14838	712							
		STD	1200	0372	3494	2779	0004259	0622	14855	704							
		STD	1300	0372	3496	2780	0004241	0664	14872	696							
073		OBS	1331		34960					695							
		STD	1400	0371	3496	2781	0004270	0707	14889	696							
		STD	1500	0368	3496	2781	0004315	0750	14904	698							
073		OBS	T1575	0366	34962	2781			14916	699							
		STD	1750	0359	3496	2782	0004394	0859	14943	700							
		STD	2000	0344	3496	2784	0004379	0968	14979	702							
073		OBS	T2065	0339	34963	2784			14988	702							
		STD	2500	0310	3495	2786	0004349	1187	15050	709							
073		OBS	2553	0288	34944	2787			15050	714							
073		OBS	2721		34905					738							
073		OBS	T2791	0138	34898	2796			15026	749							

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	963	EV	61219N	036040W		220	16	10	23	134	1965	NAS	006	2743	28	08	8	3		X2	4	8		0006

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	S20	895	078	056	8		

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	0820	3490	2718	0008928	0000	14836	712							
124		OBS	0000	0820	34898	2718			14836	712							
		STD	0010	0819	3490	2719	0008919	0009	14837	715							
124		OBS	0011	0819	34900	2719			14837	715							
		STD	0020	0819	3492	2720	0008787	0018	14839	714							
124		OBS	0027	0819	34928	2721			14840	713							
		STD	0030	0820	3493	2721	0008742	0027	14841	713							
		STD	0050	0825	3493	2720	0008849	0044	14846	709							
124		OBS	0052	0825	34931	2720			14846	708							
		STD	0075	0780	3501	2733	0007659	0065	14834	697							
		STD	0100	0741	3508	2744	0006635	0083	14824	688							
124		OBS	0105	0734	35086	2746			14822	687							
		STD	0125	0723	3508	2747	0006436	0099	14821	687							
		STD	0150	0710	3507	2748	0006360	0115	14820	688							
		STD	0200	0683	3505	2751	0006201	0146	14817	689							
124		OBS	T0210	0677	35050	2751			14817	689							
		STD	0250	0657	3504	2753	0006035	0177	14815	665							
		STD	0300	0628	3502	2755	0005876	0207	14812	647							
124		OBS	0313	0619	35014	2756			14810	645							
		STD	0400	0546	3497	2762	0005338	0263	14795	660							
124		OBS	T0418	0534	34966	2763			14793	662							
		STD	0500	0493	3494	2766	0005034	0315	14789	663							
124		OBS	0521	0484	34939	2767			14789	663							
		STD	0600	0457	3495	2770	0004677	0363	14791	689							
124		OBS	T0627	0449	34947	2771			14792	693							
		STD	0700	0429	3494	2773	0004487	0409	14796	685							
124		OBS	0731	0421	34936	2773			14797	682							
		STD	0800	0406	3495	2776	0004239	0453	14803	696							
124		OBS	T0835	0399	34955	2777			14806	700							
		STD	0900	0388	3493	2776	0004268	0495	14812	701							
124		OBS	0940		34924					703							
		STD	1000	0374	3493	2777	0004228	0538	14822	711							
134		OBS	T1082	0367	34927	2778			14833	718							
		STD	1100	0367	3493	2778	0004207	0580	14836	718							
		STD	1200	0367	3493	2779	0004258	0622	14853	718							
		STD	1300	0366	3494	2779	0004307	0665	14870	715							
134		OBS	1326	0366	34937	2779			14874	714							
		STD	1400	0366	3495	2780	0004287	0708	14887	708							
		STD	1500	0365	3496	2781	0004284	0751	14903	702							
134		OBS	T1558	0364	34961	2781			14913	699							
		STD	1750	0351	3496	2783	0004302	0858	14939	701							
		STD	2000	0333	3496	2784	0004250	0965	14974	704							
134		OBS	2045	0330	34957	2784			14981	704							
		STD	2500	0296	3496	2788	0004106	1174	15044	587							
134		OBS	T2533	0290	34956	2788			15047	576							
134		OBS	2700	0254	34929	2789			15060	693							
134		OBS	T2773	0208	34922	2792			15053	649							

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	963	EV	61363N	034572W		220	14	10	23	209	1965	NAS	007	2950	28	05	5	2		X1	4	6		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			
		06	S21	902	078	072	8		

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	0845	34841	2710	0009694	0000	14844	707							
197		OBS	0000	0845	34844	2710			14844	707							
		STD	0010	0843	34845	2711	0009676	0010	14845	620							
197		OBS	0010	0843	34845	2711			14845	620							
		STD	0020	0844	34841	2710	0009736	0019	14847	715							
197		OBS	0025	0845	34841	2710			14848	740							
		STD	0030	0845	34841	2710	0009767	0029	14849	725							
197		OBS	0048	0843	34842	2710			14851	668							
		STD	0050	0832	34841	2712	0009597	0049	14848	659							
		STD	0075	0708	34861	2732	0007755	0070	14804	564							
197		OBS	0095	0631	34878	2744			14777	511							
		STD	0100	0625	34881	2745	0006585	0088	14776	515							
		STD	0125	0599	34881	2748	0006295	0104	14769	532							
		STD	0150	0576	34891	2752	0005972	0120	14764	543							
197		OBS	T0194	0546	34903	2756			14760	549							
		STD	0200	0545	34911	2757	0005514	0148	14760	545							
		STD	0250	0534	34941	2761	0005223	0175	14764	515							
197		OBS	0294	0521	34949	2763			14767	499							
		STD	0300	0518	34951	2763	0005034	0201	14766	499							
197		OBS	0395	0479	34930	2767			14766	502							
		STD	0400	0478	34931	2767	0004807	0250	14766	508							
197		OBS	0498	0457	34949	2771			14774	576							
		STD	0500	0456	34951	2771	0004531	0297	14774	576							
		STD	0600	0419	34931	2773	0004364	0341	14775	550							
197		OBS	0602	0418	34926	2773			14775	549							
		STD	0700	0414	34941	2775	0004314	0385	14789	691							
197		OBS	0701	0414	34941	2775			14790	692							
		STD	0800	0400	34941	2776	0004243	0427	14800	608							
197		OBS	T0809	0398	34937	2776			14801	607							
		STD	0900	0373	34921	2778	0004137	0469	14805	676							
197		OBS	T0916	0370	34922	2778			14807	688							
209		OBS	T0990	0362	34910	2778			14816	578							
		STD	1000	0362	34911	2778	0004195	0511	14817	586							
		STD	1100	0360	34921	2778	0004222	0553	14833	655							
		STD	1200	0358	34921	2779	0004255	0595	14849	700							
209		OBS	1224	0358	34920	2779			14853	707							
		STD	1300	0359	34931	2779	0004267	0638	14867	708							
		STD	1400	0361	34931	2779	0004372	0681	14884	709							
209		OBS	1452	0362	34936	2780			14893	709							
		STD	1500	0360	34941	2780	0004366	0725	14901	709							
		STD	1750	0349	34961	2783	0004276	0833	14939	707							
209		OBS	1924	0340	34961	2784			14964	705							
		STD	2000	0339	34961	2784	0004332	0940	14977	706							
209		OBS	T2404	0307	34933	2785			15032	724							
		STD	2500	0289	34931	2786	0004199	1154	15041	670							
209		OBS	2774	0239	34922	2790			15067	516							
209		OBS	T2849	0189	34894	2792			15058	752							

REFERENCE CTRY CODE	REFERENCE 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	963	EV	61481N	033481W		220	13	10	24	030	1965	NAS	008	2889	29	07	2	2		X1	4	5		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
		07	509	963	094	083	8		

MESSENGR TIME OF HR 1/10	CAST NO.	CARO 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	0824	3484	2713	0009394	0000	14836	695							
018		OBS	0000	0824	34843	2713			14836	695							
		STD	0010	0825	3484	2713	0009442	0009	14838	709							
018		OBS	0010	0825	34841	2713			14838	709							
		STD	0020	0826	3485	2713	0009431	0019	14841	726							
018		OBS	0025	0827	34850	2714			14842	730							
		STD	0030	0828	3485	2714	0009442	0028	14843	726							
		STD	0050	0832	3486	2714	0009461	0047	14848	713							
018		OBS	0051	0832	34862	2714			14848	712							
		STD	0075	0731	3502	2741	0006900	0068	14815	700							
018		OBS	0076	0727	35030	2742			14814	699							
		STD	0100	0724	3504	2744	0006693	0085	14817	695							
		STD	0125	0721	3505	2745	0006605	0101	14820	692							
		STD	0150	0718	3507	2746	0006517	0118	14823	688							
		STD	0200	0712	3509	2749	0006339	0150	14829	680							
018		OBS	T0202	0712	35090	2749			14830	680							
		STD	0250	0650	3502	2752	0006090	0181	14812	677							
		STD	0300	0602	3497	2755	0005910	0211	14801	673							
018		OBS	0305	0598	34964	2755			14800	673							
		STD	0400	0555	3496	2760	0005502	0268	14798	664							
018		OBS	T0406	0552	34963	2760			14798	663							
		STD	0500	0494	3493	2765	0005120	0321	14789	684							
018		OBS	0510	0489	34928	2765			14789	685							
		STD	0600	0461	3493	2769	0004836	0371	14792	687							
018		OBS	T0611	0458	34932	2769			14793	687							
		STD	0700	0430	3493	2772	0004573	0418	14796	693							
018		OBS	0705	0429	34927	2772			14796	693							
		STD	0800	0411	3493	2774	0004476	0463	14805	698							
018		OBS	T0817	0408	34926	2774			14806	700							
		STD	0900	0393	3492	2775	0004401	0508	14814	716							
018		OBS	T0921	03920	34914	27750				719							
		STD	1000	0376	3490	2775	0004461	0552	14824	723							
024		OBS	T1051	0372	34898	2776			14830	725							
		STD	1100	0368	3490	2776	0004442	0596	14836	728							
		STD	1200	0361	3490	2777	0004448	0641	14850	731							
024		OBS	1286	0358	34896	2777			14863	732							
		STD	1300	0358	3490	2777	0004474	0685	14866	732							
		STD	1400	0359	3491	2778	0004497	0730	14883	729							
		STD	1500	0361	3492	2778	0004522	0775	14901	725							
024		OBS	T1524	0361	34925	2779			14905	724							
		STD	1750	0353	3494	2781	0004475	0888	14940	708							
		STD	2000	0344	3494	2782	0004548	1001	14979	689							
024		OBS	2004	0344	34942	2782			14979	689							
024		OBS	T2490	0310	34938	2785			15048	717							
		STD	2500	0308	3494	2785	0004407	1224	15049	718							
024		OBS	2807	0246	34926	2790			15075	733							
024		OBS	T2876	0194	34898	2792			15065	750							

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
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	963	EV	62020N	032405W		220	22	10	24	093	1965	NAS	009	2889	15	12	2	2		X1	6	2		0009

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			
		18	505	024	089	083	8		

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY=x10⁷	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	CCC
		STD	0000	0853	3493	2716	0009196	0000	14848	705							
081		OBS	0000	0853	34927	2716			14848	705							
		STD	0010	0853	3492	2715	0009252	0009	14850	698							
081		OBS	0010	0853	34922	2715			14850	698							
		STD	0020	0853	3492	2715	0009294	0018	14852	699							
081		OBS	0025	0853	34918	2715			14852	699							
		STD	0030	0849	3494	2717	0009098	0028	14852	696							
081		OBS	0049	0829	35003	2725			14848	685							
		STD	0050	0827	3500	2726	0008337	0045	14848	685							
		STD	0075	0782	3503	2735	0007517	0065	14835	678							
081		OBS	0098	0750	35059	2741			14827	675							
		STD	0100	0750	3506	2741	0006917	0083	14827	675							
		STD	0125	0745	3506	2743	0006853	0100	14829	678							
		STD	0150	0738	3507	2744	0006761	0117	14831	682							
081		OBS	T0194	0718	35077	2747			14830	687							
		STD	0200	0710	3507	2748	0006450	0150	14828	687							
		STD	0250	0657	3499	2749	0006406	0182	14815	687							
		STD	0300	0626	3497	2752	0006221	0214	14810	687							
081		OBS	0315	0621	34968	2752			14811	687							
081		OBS	T0388	0626	35028	2756			14826	629							
		STD	0400	0616	3502	2757	0005864	0274	14823	631							
081		OBS	0487	0556	34990	2762			14813	643							
		STD	0500	0551	3499	2763	0005381	0331	14813	644							
081		OBS	0585	0514	34982	2767			14812	647							
		STD	0600	0503	3497	2767	0005051	0383	14810	650							
081		OBS	0685	0456	34941	2770			14804	668							
		STD	0700	0451	3494	2770	0004749	0432	14805	671							
081		OBS	T0783	0427	34938	2773			14809	687							
		STD	0800	0424	3494	2773	0004542	0478	14810	689							
081		OBS	T0884	0408	34935	2775			14817	699							
		STD	0900	0404	3493	2775	0004459	0523	14818	702							
		STD	1000	0384	3492	2776	0004385	0567	14827	718							
093		OBS	T1057	0376	34911	2776			14833	723							
		STD	1100	0373	3491	2777	0004399	0611	14839	722							
		STD	1200	0369	3492	2777	0004414	0655	14854	720							
093		OBS	1282	0367	34917	2778			14867	718							
		STD	1300	0367	3492	2778	0004439	0700	14870	718							
		STD	1400	0369	3493	2778	0004467	0744	14887	716							
		STD	1500	0370	3494	2779	0004493	0789	14905	714							
093		OBS	T1509	0370	34945	2779			14907	714							

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	963	EV	62090N	031339W		220	21	10	24	151	1965	NAS	010	2377	23	17	3	3		X1	8	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
		20	S08	064	106	094	8		

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	0888	3498	2714	0009305	0000	14862	703							
144		OBS	0000	0888	34983	2714			14862	703							
		STD	0010	0884	3498	2715	0009293	0009	14863	696							
144		OBS	0011	0884	34975	2714			14863	695							
		STD	0020	0881	3497	2714	0009335	0019	14863	698							
144		OBS	0027	0878	34967	2715			14863	699							
		STD	0030	0878	3497	2715	0009310	0028	14863	698							
		STD	0050	0863	3500	2720	0008901	0046	14861	689							
144		OBS	0053	0859	35007	2721			14860	688							
		STD	0075	0808	3510	2736	0007394	0067	14846	675							
144		OBS	0085	0788	35139	2742			14840	670							
		STD	0100	0779	3513	2743	0006777	0084	14839	673							
		STD	0125	0763	3512	2745	0006661	0101	14837	677							
		STD	0150	0748	3511	2746	0006567	0118	14835	682							
		STD	0200	0719	3510	2749	0006389	0150	14832	691							
144		OBS	T0213	0711	35090	2749			14831	693							
		STD	0250	0693	3508	2751	0006224	0181	14830	681							
		STD	0300	0664	3506	2754	0006058	0212	14827	671							
144		OBS	0320	0652	35049	2754			14825	669							
		STD	0400	0591	3501	2759	0005611	0271	14813	673							
144		OBS	T0428	0574	34997	2760			14811	675							
		STD	0500	0541	3499	2764	0005225	0325	14809	663							
144		OBS	0531	0528	34993	2766			14809	660							
		STD	0600	0502	3498	2768	0004964	0376	14810	661							
144		OBS	T0637	0488	34977	2769			14810	662							
		STD	0700	0463	3497	2772	0004672	0424	14810	673							
144		OBS	0745	0447	34963	2773			14811	684							
		STD	0800	0427	3494	2775	0004564	0470	14811	694							
144		OBS	T0852	0417	34934	2774			14816	704							
		STD	0900	0416	3494	2774	0004537	0516	14824	711							
144		OBS	0912	0415	34940	2774			14825	713							
144		OBS	0957	0409	34977	2778			14831	699							
		STD	1000	0401	3497	2778	0004221	0559	14834	705							
		STD	1100	0387	3495	2778	0004289	0602	14845	714							
151		OBS	1164	0381	34945	2778			14853	717							
		STD	1200	0381	3495	2779	0004305	0645	14859	715							
		STD	1300	0382	3496	2780	0004324	0688	14876	710							
		STD	1400	0382	3496	2779	0004416	0732	14893	705							
151		OBS	T1415	0382	34965	2780			14896	704							
		STD	1500	0375	3496	2780	0004413	0776	14907	708							
		STD	1750	0356	3496	2782	0004369	0886	14942	717							
151		OBS	T1918	0344	34959	2783			14965	724							
		STD	2000	0338	3496	2784	0004326	0994	14976	724							
151		OBS	T2212	0326	34960	2785			15008	729							
151		OBS	T2302	0323	34957	2785			15022	712							

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	963	EV	62219N	030256W		220	20	10	24	202	1965	NAS	011	1993	16	20	2	X		X1	8	2		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
		00	S00	071	094	078	8		

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/₀₀	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 C C
		STD	0000	0898	3500	2714	0009332	0000	14866	705							
193		OBS	0000	0898	35000	2714			14866	705							
		STD	0010	0899	3500	2714	0009374	0009	14868	704							
193		OBS	0010	0899	34999	2714			14868	704							
		STD	0020	0900	3500	2713	0009437	0019	14870	705							
193		OBS	0025	0901	34994	2713			14871	705							
		STD	0030	0900	3499	2713	0009460	0028	14872	704							
		STD	0050	0893	3500	2714	0009398	0047	14873	700							
193		OBS	0051	0893	34995	2715			14873	700							
		STD	0075	0826	3506	2730	0007954	0069	14852	700							
		STD	0100	0771	3510	2742	0006908	0087	14836	700							
193		OBS	0102	0767	35103	2742			14835	700							
		STD	0125	0751	3509	2744	0006714	0104	14832	695							
		STD	0150	0735	3508	2745	0006615	0121	14830	691							
		STD	0200	0709	3506	2748	0006495	0154	14828	681							
193		OBS	T0203	0708	35061	2748			14828	680							
		STD	0250	0699	3506	2749	0006447	0186	14832	677							
		STD	0300	0683	3506	2751	0006301	0218	14834	675							
193		OBS	0305	0681	35062	2751			14834								
		STD	0400	0627	3503	2756	0005972	0279	14828	669							
193		OBS	T0403	0626	35024	2756			14828	669							
		STD	0500	0600	3505	2762	0005542	0337	14834	638							
193		OBS	0507	0597	35056	2762			14834	637							
		STD	0600	0545	3504	2767	0005078	0390	14828	633							
193		OBS	T0600	0545	35038	2767			14828	633							
		STD	0700	0495	3501	2771	0004772	0439	14824	660							
193		OBS	0710	0490	35003	2771			14823	662							
		STD	0800	0450	3497	2773	0004621	0486	14821	674							
193		OBS	T0824	0441	34968	2774			14822	677							
		STD	0900	0419	3497	2776	0004366	0531	14825	689							
193		OBS	T0936	0411	34967	2777			14828	693							
		STD	1000	0404	3497	2778	0004287	0574	14836	695							
202		OBS	T1093	0396	34964	2778			14848	698							
		STD	1100	0396	3496	2778	0004296	0617	14849	698							
		STD	1200	0392	3497	2779	0004316	0660	14864	698							
		STD	1300	0387	3497	2780	0004320	0704	14879	699							
202		OBS	T1339	0385	34971	2780			14885	699							
		STD	1400	0381	3497	2780	0004331	0747	14893	702							
		STD	1500	0373	3496	2780	0004387	0790	14906	709							
202		OBS	T1588	0365	34958	2781			14918	717							

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	963	EV	62318N	029158W		219	29	10	25	009	1965	NAS	012	1939	19	31	0	2		X1	3	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			
		31	S02	064	089	078	8		

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	0874	3497	2716	0009198	0000	14857	693							
003		OBS	0000	0874	34969	2716			14857	693							
		STD	0010	0872	3497	2716	0009202	0009	14858	707							
003		OBS	0010	0872	34967	2716			14858	707							
		STD	0020	0873	3497	2716	0009234	0018	14860	701							
003		OBS	0025	0874	34969	2716			14861	699							
		STD	0030	0874	3498	2716	0009169	0028	14862	699							
		STD	0050	0872	3502	2720	0008888	0046	14865	695							
003		OBS	0050	0872	35020	2720			14865	695							
		STD	0075	0832	3510	2732	0007746	0066	14855	678							
003		OBS	0099	0801	35147	2741			14848	668							
		STD	0100	0800	3515	2741	0006976	0085	14848	668							
		STD	0125	0788	3515	2743	0006855	0102	14847	672							
		STD	0150	0775	3515	2745	0006721	0119	14846	675							
003		OBS	T0198	0752	35143	2748			14845	682							
		STD	0200	0751	3514	2748	0006504	0152	14845	682							
		STD	0250	0732	3512	2749	0006469	0185	14846	679							
003		OBS	0298	0706	35099	2751			14843	675							
		STD	0300	0704	3510	2751	0006324	0217	14843	675							
003		OBS	T0397	0626	35022	2756			14827	660							
		STD	0400	0625	3502	2756	0005983	0278	14827	658							
003		OBS	0498	0576	35010	2761			14823	635							
		STD	0500	0575	3501	2761	0005541	0336	14823	636							
003		OBS	0598	0525	34995	2766			14819	670							
		STD	0600	0525	3499	2766	0005178	0389	14819	669							
003		OBS	0697	0496	34980	2769			14823	648							
		STD	0700	0494	3498	2769	0004982	0440	14823	649							
003		OBS	T0798	0435	34938	2772			14814	680							
		STD	0800	0434	3494	2772	0004664	0488	14814	681							
		STD	0900	0390	3492	2775	0004371	0534	14813	709							
003		OBS	T0901	0390	34920	2775			14813	709							
		STD	1000	0379	3491	2775	0004436	0578	14824	721							
009		OBS	T1008	0378	34904	2775			14825	722							
		STD	1100	0376	3491	2776	0004446	0622	14840	721							
		STD	1200	0373	3492	2777	0004429	0666	14856	719							
009		OBS	1252	0372	34924	2778			14864	718							
		STD	1300	0377	3494	2778	0004414	0711	14874	717							
		STD	1400	0384	3495	2778	0004516	0755	14894	715							
009		OBS	T1498	0387	34967	2780			14912	712							
		STD	1500	0387	3497	2780	0004518	0800	14912	712							
		STD	1750	0376	3496	2780	0004607	0914	14950	701							
009		OBS	T1845	0368	34963	2781			14963	697							
009		OBS	T1933	0358	34960	2782			14974	705							

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			NDOC 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	963	EV	62448N	028120W		219	28	10	25	067	1965	NAS	013	1445	14	33	1	4		X1	8	2		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			
		31	S15	044	083	078	8		

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	0883	3499	2716	0009170	0000	14861	704							
	059	OBS	0000	0883	34991	2716			14861	704							
		STD	0010	0881	3500	2717	0009101	0009	14862	704							
	059	OBS	0010	0881	34999	2717			14862	702							
		STD	0020	0882	3500	2716	0009150	0018	14864	704							
	059	OBS	0026	0883	34995	2716			14865	705							
		STD	0030	0883	3499	2716	0009240	0027	14866	704							
		STD	0050	0884	3499	2716	0009293	0046	14869	699							
	059	OBS	0051	0884	34987	2715			14869	699							
		STD	0075	0884	3499	2716	0009342	0069	14873	698							
	059	OBS	0076	0879	34991	2716			14872	698							
	059	OBS	0090	0770	35049	2738			14833	687							
		STD	0100	0764	3506	2739	0007106	0090	14833	686							
		STD	0125	0749	3507	2742	0006864	0107	14831	685							
		STD	0150	0734	3508	2745	0006624	0124	14830	683							
		STD	0200	0708	3508	2749	0006348	0157	14828	680							
	059	OBS	0202	0707	35084	2750			14828	680							
		STD	0250	0687	3506	2750	0006290	0188	14827	679							
		STD	0300	0665	3505	2753	0006145	0219	14827	678							
	059	OBS	0305	0663	35049	2753			14827	678							
		STD	0400	0620	3504	2758	0005768	0279	14825	653							
	059	OBS	0406	0617	35037	2758			14825	654							
		STD	0500	0549	3501	2765	0005208	0334	14813	643							
	059	OBS	T0510	0544	35008	2765			14812	642							
		STD	0600	0517	3501	2768	0004929	0384	14816	654							
	059	OBS	0611	0513	35012	2769			14817	653							
		STD	0700	0482	3501	2773	0004610	0432	14819	667							
	059	OBS	T0719	0477	35008	2773			14820	669							
		STD	0800	0459	3501	2775	0004458	0477	14826	674							
	059	OBS	0822	0456	35006	2775			14828	677							
	067	OBS	T0869	0454	35004	2775			14835	685							
		STD	0900	0448	3500	2776	0004479	0522	14838	687							
	067	OBS	T0966	0434	34980	2776			14843	692							
		STD	1000	0423	3498	2776	0004447	0567	14844	694							
		STD	1100	0399	3497	2778	0004326	0611	14850	702							
		STD	1200	0385	3495	2779	0004331	0654	14861	709							
	067	OBS	T1219	0384	34951	2779			14864	710							
		STD	1300	0384	3496	2779	0004356	0697	14877	701							
	067	OBS	T1338	0383	34965	2780			14883	699							
		STD	1400	0381	3497	2780	0004331	0741	14893	699							
	067	OBS	T1413	0381	34971	2780			14895	699							

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.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	963	EV	62564N	027036W		219	27	10	25	105	1965	NAS	014	1408	09	31	5	2		X1	4	7		0014

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
		30	S14	030	083	078	8		

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	SIO
		STD	0000	0920	3510	2718	0008952	0000	14876	680							
	105	OBS	0000	0920	35097	2718			14876	680							
		STD	0010	0918	3509	2718	0008967	0009	14877	686							
	105	OBS	0011	0918	35094	2718			14877	687							
		STD	0020	0919	3510	2718	0008964	0018	14879	691							
	105	OBS	0026	0919	35100	2719			14880	694							
		STD	0030	0919	3510	2718	0008979	0027	14880	687							
		STD	0050	0920	3510	2719	0009017	0045	14884	659							
	105	OBS	0052	0920	35102	2719			14884	657							
		STD	0075	0880	3513	2727	0008230	0066	14874	656							
		STD	0100	0845	3517	2735	0007506	0086	14865	654							
	105	OBS	0103	0841	35169	2736			14864	654							
		STD	0125	0825	3517	2739	0007226	0105	14862	654							
		STD	0150	0810	3517	2741	0007052	0122	14860	653							
		STD	0200	0788	3517	2745	0006814	0157	14860	652							
	105	OBS	T0204	0787	35170	2745			14860	652							
	105	OBS	T0246	0778	35173	2746			14864	688							
		STD	0250	0777	3517	2746	0006744	0191	14864	686							
		STD	0300	0764	3517	2748	0006644	0224	14867	664							
	105	OBS	0306	0762	35168	2748			14867	662							
		STD	0400	0742	3515	2750	0006646	0291	14875	671							
	105	OBS	T0412	0739	35148	2750			14876	672							
	105	OBS	T0495	0709	35137	2753			14877	660							
		STD	0500	0707	3514	2754	0006418	0356	14877	656							
	105	OBS	0507	0704	35131	2754			14877	650							
	105	OBS	T0577	0677	35130	2757			14878	634							
		STD	0600	0663	3512	2758	0006091	0419	14876	631							
	105	OBS	T0608	0659	35111	2758			14876	630							
	105	OBS	T0653	0640	35102	2760			14876	624							
		STD	0700	0608	3509	2763	0005665	0477	14871	651							
	105	OBS	0714	0600	35085	2764			14870	657							
		STD	0800	0579	3507	2765	0005589	0534	14875	672							
	105	OBS	T0818	0574	35061	2765			14876	674							
		STD	0900	0546	3505	2768	0005382	0589	14879	682							
	105	OBS	T0926	0535	35047	2769			14878	683							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DIFF. 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	A	M	
31	963	EV	63072N	025594W		219	35	10	25	155	1965	NAS	015	1152	11	30	2	1		X1	8	6		0015

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			
		29	S16	020	089	083	8		

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	0959	3508	2710	0009690	0000	14890	682							
155		OBS	0000	0959	35080	2710			14890	68-							
		STD	0010	0957	3508	2711	0009680	0010	14891	685							
155		OBS	0010	0957	35080	2711			14891	688							
		STD	0020	0958	3508	2710	0009717	0019	14893	675							
155		OBS	0025	0959	35077	2710			14894	669							
		STD	0030	0959	3508	2710	0009776	0029	14895	672							
		STD	0050	0961	3508	2710	0009807	0049	14899	680							
155		OBS	0050	0961	35083	2710			14899	680							
		STD	0075	0925	3518	2724	0008572	0072	14891	671							
		STD	0100	0895	3524	2734	0007682	0092	14885	663							
155		OBS	0100	0895	35244	2734			14885	663							
		STD	0125	0875	3523	2736	0007526	0111	14881	656							
		STD	0150	0856	3522	2738	0007361	0130	14878	651							
155		OBS	T0199	0826	35202	2741			14875	648							
		STD	0200	0826	3520	2741	0007154	0166	14875	648							
		STD	0250	0807	3520	2744	0006964	0201	14876	658							
155		OBS	0298	0789	35192	2746			14877	668							
		STD	0300	0788	3519	2746	0006848	0236	14876	669							
155		OBS	T0397	0752	35153	2749			14878	678							
		STD	0400	0750	3515	2749	0006762	0304	14876	678							
155		OBS	0496	0701	35099	2752			14874	657							
		STD	0500	0700	3510	2752	0006577	0370	14874	654							
155		OBS	0596	0675	35122	2757			14881	616							
		STD	0600	0673	3512	2757	0006203	0434	14880	619							
155		OBS	0696	0627	35092	2761			14878	630							
		STD	0700	0625	3509	2761	0005699	0495	14878	630							
155		OBS	T0796	0577	35055	2765			14874	637							
		STD	0800	0576	3505	2764	0005659	0555	14874	637							
		STD	0900	0546	3504	2767	0005456	0608	14878	643							
155		OBS	T0996	0516	35026	2770			14882	649							
		STD	1000	0515	3503	2770	0005264	0662	14882	649							
155		OBS	T1097	0483	35015	2773			14885	650							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DIFF. 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	A	M	
31	963	EV	63218N	024520W		219	34	10	25	201	1965	NAS	016	0293	03	25	3	3		X2	6	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			
		25	S14	983	083	078	8		

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	0922	3513	2720	0008775	0000	14877	705							
201		OBS	0000	0922	35125	2720			14877	705							
201		OBS	0009	0921	35123	2720			14878	714							
		STD	0010	0921	3512	2720	0008795	0009	14878	710							
		STD	0020	0921	3512	2720	0008816	0018	14880	696							
201		OBS	0023	0921	35123	2720			14880	693							
		STD	0030	0923	3512	2719	0008890	0026	14882	688							
201		OBS	0047	0924	35116	2719			14885	678							
		STD	0050	0924	3512	2719	0008948	0044	14886	677							
		STD	0075	0917	3513	2721	0008816	0066	14887	674							
201		OBS	0093	0908	35139	2723			14887	668							
		STD	0100	0897	3515	2726	0008408	0088	14884	665							
		STD	0125	0859	3517	2734	0007728	0108	14874	656							
		STD	0150	0828	3519	2740	0007163	0127	14867	653							
201		OBS	T0191	0790	35209	2747			14860	649							
		STD	0200	0784	3521	2748	0006474	0161	14859	650							
		STD	0250	0763	3520	2751	0006312	0193	14859	655							
201		OBS	T0268	0762	35199	2751			14861	657							

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	963	EV	63250N	014471W		218	34	10	26	220	1965	NAS	17A	1262	13	24	3	2		X1	3	2		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
		22	S26	112	089	083	8		

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	0965	3512	2712	0009504	0000	14893	708							
210		OBS	0000	0965	35118	2712			14893	708							
		STD	0010	0964	3511	2712	0009584	0010	14894	705							
210		OBS	0010	0964	35108	2712			14894	705							
		STD	0020	0965	3511	2712	0009607	0019	14896	705							
210		OBS	0025	0966	35113	2712			14897	705							
		STD	0030	0969	3512	2712	0009619	0029	14899	704							
		STD	0050	0974	3515	2713	0009528	0048	14905	699							
210		OBS	0050	0974	35149	2713			14905	699							
		STD	0075	0956	3521	2721	0008864	0071	14903	691							
		STD	0100	0940	3526	2728	0008241	0092	14902	683							
210		OBS	0102	0939	35269	2728			14902	682							
		STD	0125	0925	3527	2731	0007989	0113	14900	681							
		STD	0150	0912	3528	2734	0007798	0132	14900	681							
		STD	0200	0890	3529	2738	0007482	0170	14900	679							
210		OBS	T0206	0888	35289	2738			14900	679							
		STD	0250	0876	3529	2740	0007371	0208	14903	677							
		STD	0300	0865	3528	2742	0007321	0244	14907	675							
210		OBS	0307	0864	35284	2742			14908	675							
		STD	0400	0851	3527	2743	0007400	0318	14918	678							
210		OBS	0410	0850	35264	2742			14919	678							
		STD	0500	0845	3526	2743	0007571	0393	14932	679							
210		OBS	0512	0842	35259	2743			14933	679							
		STD	0600	0804	3524	2748	0007264	0467	14933	644							
210		OBS	T0616	0797	35236	2748			14933	640							
		STD	0700	0769	3522	2751	0007048	0539	14936	631							
210		OBS	0721	0756	35211	2752			14934	629							
		STD	0800	0680	3516	2759	0006318	0605	14917	643							
210		OBS	0827	0653	35143	2762			14910	648							
		STD	0900	0565	3510	2770	0005272	0663	14887	667							
210		OBS	T0934	0536	35088	2772			14881	673							
		STD	1000	0520	3508	2774	0004934	0714	14885	680							
220		OBS	T1049	0490	35062	2776			14881	685							
		STD	1100	0428	3504	2781	0004137	0760	14863	690							
220		OBS	1146	0388	35018	2783			14854	694							
		STD	1200	0382	3502	2784	0003821	0800	14861	699							
		STD	1300	0372	3502	2785	0003792	0838	14873	707							
220		OBS	T1328	0369	35016	2785			14877	709							

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	963	EV	63040N	014320W		218	34	10	27	027	1965	NAS	18A	1756	13	19	3	3		X6	5	9		0018

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
		20	S22	739	089	089	7		

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	1008	3523	2714	0009380	0000	14910	685							
020		OBS	0000	1008	35229	2714			14910	685							
		STD	0010	1009	3522	2713	0009476	0009	14912	690							
020		OBS	0011	1009	35220	2713			14912	690							
		STD	0020	1009	3524	2714	0009360	0019	14914	692							
020		OBS	0026	1009	35243	2715			14915	694							
		STD	0030	1009	3524	2714	0009382	0028	14915	691							
		STD	0050	1007	3523	2713	0009505	0047	14918	679							
020		OBS	0050	1007	35225	2713			14918	679							
		STD	0075	0986	3525	2719	0009032	0070	14914	676							
		STD	0100	0968	3526	2723	0008720	0092	14912	672							
020		OBS	0101	0967	35264	2723			14912	672							
		STD	0125	0954	3527	2726	0008474	0114	14911	671							
		STD	0150	0941	3528	2729	0008244	0135	14911	671							
		STD	0200	0919	3528	2733	0007998	0175	14911	669							
020		OBS	0202	0918	35282	2733			14911	669							
		STD	0250	0900	3528	2735	0007822	0215	14912	667							
		STD	0300	0884	3527	2738	0007707	0254	14914	664							
020		OBS	0303	0883	35272	2738			14914	664							
		STD	0400	0860	3526	2741	0007615	0330	14921	662							
020		OBS	T0406	0859	35255	2740			14922	662							
		STD	0500	0853	3525	2741	0007749	0407	14935	681							
020		OBS	0510	0852	35253	2741			14936	682							
		STD	0600	0846	3525	2742	0007849	0485	14949	688							
020		OBS	0611	0845	35249	2742			14950	689							
		STD	0700	0833	3525	2744	0007866	0564	14960	672							
020		OBS	0713	0829	35244	2744			14961	668							
		STD	0800	0783	3521	2748	0007512	0641	14957	629							
020		OBS	T0816	0773	35209	2750			14956	624							
		STD	0900	0710	3520	2758	0006628	0711	14946	610							
020		OBS	T0915	0698	35174	2758			14943								
020		OBS	T0921	0693	35161	2758			14942	606							
		STD	1000	0626	3512	2763	0006120	0775	14928	586							
		STD	1100	0551	3506	2768	0005628	0834	14914	561							
027		OBS	T1121	0537	35053	2769			14912	556							
		STD	1200	0487	3502	2773	0005161	0888	14904	583							
		STD	1300	0434	3497	2775	0004927	0938	14898	655							
027		OBS	T1332	0419	34958	2775			14897	687							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DRIFT INDICA	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	TOR	10°	1°	MO	DAY	HR 1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	62296N	014072W		218	24	10	27	091	1965	NAS	19A	1426	14	24	6	3		X1	3	7		0019

WATER		WIND		BAROMETER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS 1m	DIR.	SPEED OR FORCE		DRY BULB	WET BULB			
		26	S25	702	100	089	8		

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH 1m	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	SIGC
		STD	0000	1014	3524	2713	0009434	0000	14912	693							
079		OBS	0000	1014	35235	2713			14912	693							
		STD	0010	1011	3524	2714	0009392	0009	14913	613							
079		OBS	0010	1011	35237	2714			14913	613							
		STD	0020	1014	3523	2713	0009516	0019	14915	616							
079		OBS	0025	1015	35229	2712			14916	617							
		STD	0030	1015	3523	2712	0009569	0028	14917	618							
079		OBS	0049	1017	35230	2712			14921	620							
		STD	0050	1015	3523	2713	0009593	0048	14921	620							
		STD	0075	0978	3526	2721	0008842	0071	14912	615							
079		OBS	0098	0951	35282	2727			14906	613							
		STD	0100	0950	3528	2728	0008267	0092	14906	613							
		STD	0125	0938	3529	2730	0008092	0112	14905	616							
		STD	0150	0927	3529	2732	0007940	0132	14905	618							
079		OBS	T0198	0911	35299	2735			14908	623							
		STD	0200	0911	3530	2735	0007731	0172	14908	624							
		STD	0250	0904	3530	2737	0007686	0210	14914	648							
079		OBS	0297	0898	35309	2738			14919	658							
		STD	0300	0898	3531	2738	0007655	0249	14920	657							
079		OBS	0396	0890	35293	2738			14932	638							
		STD	0400	0888	3529	2738	0007837	0326	14932	636							
079		OBS	0497	0857	35264	2741			14936	615							
		STD	0500	0857	3526	2741	0007731	0404	14937	616							
079		OBS	T0595	0842	35260	2743			14947	637							
		STD	0600	0841	3526	2743	0007697	0481	14947	637							
		STD	0700	0815	3524	2746	0007617	0558	14954	634							
		STD	0800	0763	3520	2751	0007274	0632	14950	627							
091		OBS	T0844	0732	35183	2754			14945	625							
		STD	0900	0681	3515	2758	0006560	0701	14934	592							
091		OBS	T0927	0660	35140	2760			14930	589							
		STD	1000	0616	3512	2765	0005976	0764	14924	633							
079		OBS	T1014	0607	35114	2765			14923	640							
		STD	1100	0545	3505	2768	0005618	0822	14912	650							
		STD	1200	0478	3500	2772	0005187	0876	14900	664							
079		OBS	T1227	0461	34991	2773			14898	668							
		STD	1300	0426	3499	2777	0004675	0925	14895	680							
079		OBS	T1316	0408	34986	2779			14890	684							
079		OBS	T1381	0295	34993	2791			14854	703							

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	ID. NO.	CODE	° 1/10	° '1/10	MONTH	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIF	HGT	PER	SEA		TYPE	AMT		
31	963	EV	62074N	013398W		218	23	10	27	142	1965	NAS	20A	1399	14	27	9	3		X1	8	6		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			
		26	S31	787	111	106	8		

MESSENGR TIME or T HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	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	SIGMA-T
		STD	0000	1026	3525	2712	0009551	0000	14916	694							
136		OBS	0000	1026	35246	2712			14916	694							
		STD	0010	1026	3524	2711	0009611	0010	14918	685							
136		OBS	0010	1026	35241	2711			14918	685							
		STD	0020	1026	3524	2711	0009641	0019	14920	683							
136		OBS	0025	1026	35240	2711			14921	682							
		STD	0030	1026	3524	2711	0009670	0029	14921	679							
		STD	0050	1028	3524	2711	0009728	0048	14925	670							
136		OBS	0050	1028	35242	2711			14925	670							
		STD	0075	1002	3526	2717	0009220	0072	14920	665							
136		OBS	0099	0981	35280	2722			14917	662							
		STD	0100	0980	3528	2722	0008767	0094	14917	662							
		STD	0125	0966	3529	2725	0008535	0116	14916	660							
		STD	0150	0954	3530	2728	0008335	0137	14916	659							
136		OBS	T0197	0934	35311	2733			14916	658							
		STD	0200	0933	3531	2733	0007993	0178	14916	658							
		STD	0250	0920	3531	2734	0007926	0218	14920	660							
136		OBS	0294	0911	35301	2736			14923	662							
		STD	0300	0911	3530	2736	0007914	0257	14924	662							
136		OBS	0394	0899	35314	2738			14936	665							
		STD	0400	0897	3531	2739	0007834	0336	14936	665							
136		OBS	0495	0870	35279	2740			14941	663							
		STD	0500	0868	3528	2741	0007810	0414	14941	662							
136		OBS	0594	0836	35241	2743			14944	645							
		STD	0600	0835	3524	2743	0007749	0492	14945	644							
136		OBS	0694	0808	35236	2747			14950	624							
		STD	0700	0806	3523	2747	0007548	0569	14950	622							
136		OBS	0795	0763	35201	2751			14949	601							
		STD	0800	0762	3520	2751	0007258	0643	14949	598							
136		OBS	T0897	0709	35173	2756			14945	591							
		STD	0900	0706	3517	2756	0006787	0713	14944	594							
142		OBS	T0985	0619	35126	2765			14923	670							
		STD	1000	0598	3511	2766	0005792	0776	14917	674							
		STD	1100	0479	3500	2772	0005091	0830	14884	699							
		STD	1200	0401	3494	2776	0004627	0879	14867	715							
142		OBS	T1217	0392	34934	2776			14866	717							
142		OBS	T1288	0367	34929	2779			14868	723							
		STD	1300	0358	3494	2780	0004178	0923	14866	722							
142		OBS	T1361	0289	35004	2792			14848	712							

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	963	EV	61406N	013072W		218	13	10	27	192	1965	NAS	21A	1573	15	77	9	3		X1	7	6		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			
		27	S25	817	106	100	8		

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	1037	3525	2710	0009704	0000	14921	689							
176		OBS	0000	1037	35250	2710			14921	689							
		STD	0010	1042	3525	2709	0009841	0010	14924	683							
176		OBS	0010	1042	35246	2709			14924	683							
		STD	0020	1043	3525	2709	0009873	0020	14926	688							
176		OBS	0025	1044	35248	2709			14927	690							
		STD	0030	1044	3525	2709	0009916	0030	14928	691							
		STD	0050	1045	3524	2708	0009998	0049	14931	693							
176		OBS	0050	1045	35244	2708			14931	693							
		STD	0075	0998	3527	2719	0009081	0073	14919	688							
		STD	0100	0961	3530	2727	0008348	0095	14910	683							
176		OBS	0100	0961	35295	2727			14910	683							
		STD	0125	0948	3529	2729	0008230	0116	14909	679							
		STD	0150	0936	3529	2731	0008091	0136	14909	674							
		STD	0200	0916	3529	2734	0007876	0176	14910	666							
176		OBS	T0203	0915	35285	2734			14910	665							
		STD	0250	0901	3528	2736	0007815	0215	14912	659							
		STD	0300	0889	3528	2737	0007727	0254	14916	653							
176		OBS	0307	0888	35276	2737			14917	652							
		STD	0400	0881	3528	2739	0007799	0332	14929	657							
176		OBS	T0413	0878	35280	2739			14930	658							
		STD	0500	0849	3525	2741	0007708	0409	14933	655							
176		OBS	0519	0844	35243	2742			14935	654							
		STD	0600	0835	3525	2744	0007675	0486	14945	650							
176		OBS	T0624	0828	35252	2745			14946	648							
		STD	0700	0786	3522	2749	0007310	0561	14942	637							
176		OBS	0729	0770	35203	2750			14941	634							
		STD	0800	0733	3517	2753	0007034	0633	14938	628							
176		OBS	T0834	0713	35162	2755			14935	625							
		STD	0900	0666	3514	2760	0006412	0700	14928	618							
176		OBS	T0940	0637	35130	2763			14923	613							
		STD	1000	0592	3510	2766	0005780	0761	14914	638							
192		OBS	T1032	0569	35083	2768			14910	650							
		STD	1100	0522	3504	2770	0005375	0817	14902	667							
		STD	1200	0462	3499	2773	0005048	0869	14893	693							
192		OBS	T1222	0451	34982	2774			14893	699							
		STD	1300	0418	3497	2776	0004754	0918	14892	737							
		STD	1400	0383	3494	2778	0004548	0965	14894	761							
192		OBS	T1463	0366	34930	2779			14897	762							
		STD	1500	0358	3493	2780	0004399	1009	14900	757							
192		OBS	T1534	0351	34934	2781			14903	750							

REFERENCE		SHIP	LATITUDE	LONGITUDE	ONSET 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	963	EV	61116N	012386W		218	12	10	27	239	1965	NAS	22A	1536	16	28	3	6		x1	4	3	0022

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			
		27	S12	854	100	094	8		

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 10^3	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	SCC
		STD	0000	1044	3525	2709	0009851	0000	14923	707							
231		OBS	0000	1044	35246	2709			14923	707							
		STD	0010	1043	3524	2708	0009902	0010	14924	694							
231		OBS	0010	1043	35240	2708			14924	694							
		STD	0020	1044	3524	2708	0009927	0020	14926	697							
231		OBS	0026	1044	35242	2708			14927	699							
		STD	0030	1044	3524	2708	0009950	0030	14928	701							
		STD	0050	1044	3524	2708	0009996	0050	14931	709							
231		OBS	0051	1044	35242	2708			14931	709							
		STD	0075	1023	3525	2713	0009642	0074	14928	690							
		STD	0100	1002	3526	2717	0009261	0098	14924	675							
231		OBS	0100	1002	35263	2717			14924	675							
		STD	0125	0975	3527	2722	0008814	0120	14919	675							
		STD	0150	0951	3528	2727	0008405	0142	14914	675							
		STD	0200	0915	3528	2733	0007934	0183	14909	674							
231		OBS	T0203	0913	35284	2734			14909	674							
		STD	0250	0898	3527	2735	0007843	0222	14911	669							
		STD	0300	0886	3526	2736	0007864	0262	14914	663							
231		OBS	0304	0885	35254	2736			14915	663							
		STD	0400	0872	3528	2740	0007679	0339	14926	664							
231		OBS	T0407	0871	35279	2740			14927	662							
		STD	0500	0855	3526	2742	0007697	0416	14935	676							
231		OBS	0511	0851	35254	2741			14936	677							
		STD	0600	0832	3525	2744	0007628	0493	14944	677							
231		OBS	0612	0828	35244	2744			14944	677							
		STD	0700	0793	3521	2747	0007492	0568	14945	627							
231		OBS	0715	0784	35206	2748			14944	619							
		STD	0800	0718	3515	2753	0006955	0641	14932	570							
231		OBS	T0817	0706	35146	2755			14930	568							
		STD	0900	0656	3515	2762	0006214	0706	14924	601							
231		OBS	T0921	0645	35147	2763			14923	609							
		STD	1000	0614	3514	2767	0005800	0766	14924	642							
239		OBS	T1040	0596	35132	2768			14923	655							
		STD	1100	0548	3508	2770	0005439	0823	14913	664							
		STD	1200	0483	3501	2772	0005181	0876	14902	677							
239		OBS	T1278	0444	34968	2773			14899	687							
		STD	1300	0443	3496	2773	0005119	0927	14902	690							
		STD	1400	0424	3494	2773	0005112	0978	14911	700							
239		OBS	T1485	0391	34933	2776			14911	706							
		STD	1500	0383	3493	2777	0004715	1028	14910	709							
239		OBS	1559	0349	34935	2781			14906	714							

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	963	EV	60460N	012200W		218	02	10	28	035	1965	NAS	23A	0594	05	30	0	3		X2	4	8		0023

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	834	117	106	8		

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	1079	3529	2706	0010141	0000	14936	687							
035		OBS	0000	1079	35287	2706			14936	687							
		STD	0010	1080	3529	2705	0010196	0010	14938	687							
035		OBS	0010	1080	35285	2705			14938	687							
		STD	0020	1079	3529	2705	0010208	0020	14939	686							
035		OBS	0025	1079	35285	2705			14940	685							
		STD	0030	1079	3529	2705	0010230	0031	14941	685							
		STD	0050	1080	3528	2705	0010299	0051	14945	687							
035		OBS	0051	1080	35284	2705			14945	687							
		STD	0075	1080	3529	2705	0010351	0077	14949	704							
035		OBS	0076	1080	35285	2705			14949	705							
		STD	0100	1065	3529	2708	0010115	0103	14947	681							
		STD	0125	1043	3529	2713	0009768	0127	14944	664							
035		OBS	T0125	1043	35294	2713			14944	664							
		STD	0150	0997	3529	2721	0009054	0151	14931	665							
		STD	0200	0929	3529	2732	0008054	0194	14914	668							
035		OBS	0203	0926	35294	2733			14914	668							
		STD	0250	0912	3529	2735	0007886	0234	14916	668							
		STD	0300	0900	3529	2737	0007798	0273	14920	668							
035		OBS	0307	0898	35294	2737			14921	668							
		STD	0400	0881	3529	2740	0007725	0350	14929	664							
035		OBS	0410	0880	35287	2739			14931	663							
		STD	0500	0871	3529	2741	0007762	0428	14942	655							
035		OBS	T0513	0870	35291	2741			14944	654							

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	963	EV	60262N	011505W		218	01	10	28	077	1965	NAS	24A	1198	10	24	3	3		X6	5	8		0024

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	S09	797	089	078	7		

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	1044	3524	2708	0009910	0000	14923	674							
068		OBS	0000	1044	35238	2708			14923	674							
		STD	0010	1048	3526	2709	0009830	0010	14926	675							
068		OBS	0010	1048	35261	2709			14926	675							
		STD	0020	1047	3526	2709	0009820	0020	14928	674							
068		OBS	0025	1047	35265	2710			14928	673							
		STD	0030	1047	3527	2710	0009834	0030	14929	675							
		STD	0050	1048	3527	2709	0009894	0049	14933	680							
068		OBS	0050	1048	35265	2709			14933	680							
		STD	0075	1013	3529	2717	0009181	0073	14925	677							
068		OBS	0099	0985	35312	2724			14919	675							
		STD	0100	0984	3531	2724	0008596	0095	14918	675							
		STD	0125	0967	3531	2727	0008359	0117	14916	673							
		STD	0150	0952	3532	2730	0008156	0137	14915	670							
068		OBS	0199	0928	35320	2734			14914	665							
		STD	0200	0928	3532	2734	0007846	0177	14914	665							
		STD	0250	0915	3532	2736	0007743	0216	14918	658							
068		OBS	0298	0905	35319	2738			14922	654							
		STD	0300	0905	3532	2738	0007693	0255	14922	654							
068		OBS	T0388	0890	35319	2740			14931	650							
		STD	0400	0889	3532	2740	0007654	0331	14933	650							
068		OBS	0497	0877	35299	2741			14944	648							
		STD	0500	0876	3530	2741	0007776	0409	14944	648							
068		OBS	T0596	0852	35281	2743			14951	644							
		STD	0600	0851	3528	2743	0007709	0486	14951	645							
068		OBS	0695	0827	35276	2747			14958	653							
		STD	0700	0825	3527	2747	0007555	0562	14958	652							
068		OBS	0795	0782	35245	2751			14957	645							
		STD	0800	0779	3524	2751	0007229	0636	14956	654							
068		OBS	T0885	0733	35231	2757			14953	663							
077		OBS	0894	0728	35229	2758			14952	648							
		STD	0900	0723	3522	2758	0006679	0706	14951	649							
077		OBS	T0969	0676	35175	2761			14944	660							
		STD	1000	0659	3518	2763	0006201	0770	14942	664							
077		OBS	T1043	0639	35174	2766			14941	670							

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	963	EV	59502N	011230W		182	91	10	28	119	1965	NAS	25A	1216	12	27	3	2		X8	5	8		0025

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
		27	S16	783	094	094	8		

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	S CO
		STD	0000	1060	3528	2708	0009891	0000	14929	683							
111		OBS	0000	1060	35277	2708			14929	683							
111		OBS	0009	1062	35277	2708			14931	685							
		STD	0010	1062	3528	2708	0009928	0010	14932	685							
		STD	0020	1063	3528	2708	0009962	0020	14933	687							
111		OBS	0024	1063	35284	2708			14934	688							
		STD	0030	1062	3528	2708	0009949	0030	14935	686							
111		OBS	0049	1060	35284	2709			14937	679							
		STD	0050	1058	3529	2709	0009916	0050	14937	679							
		STD	0075	1010	3530	2719	0009042	0073	14924	674							
111		OBS	0099	0976	35319	2726			14915	670							
		STD	0100	0976	3532	2726	0008407	0095	14916	670							
		STD	0125	0968	3534	2729	0008183	0116	14917	667							
		STD	0150	0961	3535	2731	0008050	0136	14919	665							
111		OBS	T0199	0948	35364	2734			14922	662							
		STD	0200	0948	3536	2734	0007870	0176	14922	662							
		STD	0250	0938	3536	2736	0007809	0215	14927	663							
		STD	0300	0927	3536	2737	0007747	0254	14931	664							
111		OBS	0301	0927	35358	2737			14931	664							
		STD	0400	0918	3536	2739	0007845	0332	14944	668							
111		OBS	T0402	0918	35355	2739			14944	668							
		STD	0500	0898	3533	2740	0007881	0411	14953	672							
111		OBS	0503	0897	35332	2740			14953	672							
		STD	0600	0877	3532	2743	0007833	0489	14961	659							
111		OBS	T0605	0875	35315	2742			14961	658							
		STD	0700	0835	3526	2744	0007817	0568	14961	645							
111		OBS	0706	0833	35252	2744			14961	644							
		STD	0800	0806	3525	2748	0007618	0645	14967	635							
111		OBS	T0806	0804	35244	2748			14967	634							
111		OBS	T0893	0757	35241	2755			14963	638							
		STD	0900	0753	3524	2755	0006987	0718	14963	634							
119		OBS	0914	0745	35240	2756			14962	628							
119		OBS	T0991	0685	35206	2762			14951	639							
		STD	1000	0682	3521	2763	0006325	0784	14951	644							
		STD	1100	0646	3520	2767	0005994	0846	14954	681							
119		OBS	T1126	0635	35195	2768			14954	687							
		STD	1200	0598	3518	2772	0005528	0903	14951	693							
119		OBS	T1204	0596	35182	2772			14951	693							

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	NO.	CODE	° 1/10	° 1/10	INDIC'R	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	59366N	010360W		182	90	10	28	165	1965	NAS	26A	1372	14	31	4	X		X5	5	8		0026

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			
		31	S24	810	089	089	7		

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	1090	3531	2706	0010138	0000	14940	692							
159		OBS	0000	1090	35313	2706			14940	692							
159		OBS	0008	1091	35305	2705			14942	693							
		STD	0010	1092	3531	2705	0010246	0010	14942	693							
		STD	0020	1094	3530	2704	0010325	0020	14945	692							
159		OBS	0021	1094	35303	2704			14945	692							
		STD	0030	1094	3531	2705	0010294	0031	14946	693							
159		OBS	0044	1093	35315	2705			14949	695							
		STD	0050	1074	3532	2709	0009930	0051	14943	695							
		STD	0075	1007	3534	2722	0008712	0074	14923	697							
159		OBS	0087	0983	35351	2727			14916	698							
		STD	0100	0976	3535	2728	0008200	0095	14916	698							
		STD	0125	0963	3534	2730	0008088	0116	14915	696							
		STD	0150	0953	3534	2731	0008017	0136	14916	695							
159		OBS	T0169	0947	35332	2732			14917	693							
		STD	0200	0944	3535	2734	0007882	0176	14921	689							
		STD	0250	0939	3536	2736	0007833	0215	14927	684							
159		OBS	0255	0938	35363	2736			14928	683							
		STD	0300	0930	3535	2736	0007866	0254	14932	679							
159		OBS	T0344	0923	35341	2737			14937	677							
		STD	0400	0918	3534	2737	0007952	0333	14944	682							
159		OBS	0439	0914	35338	2738			14949	683							
		STD	0500	0908	3533	2739	0008037	0413	14957	675							
159		OBS	T0536	0904	35331	2739			14961	673							
		STD	0600	0894	3533	2740	0008074	0494	14968	674							
159		OBS	0634	0890	35322	2741			14972	674							
		STD	0700	0886	3532	2741	0008176	0575	14981	668							
159		OBS	T0736	0880	35314	2742			14985	663							
		STD	0800	0864	3530	2743	0008152	0657	14989	650							
159		OBS	T0840	0850	35284	2744			14991	643							
		STD	0900	0825	3526	2746	0007993	0737	14991	637							
165		OBS	T0926	0812	35256	2748			14990	634							
		STD	1000	0766	3524	2754	0007338	0814	14985	652							
165		OBS	T1024	0752	35240	2755			14983	657							
		STD	1100	0747	3524	2756	0007233	0887	14994	663							
		STD	1200	0703	3522	2761	0006846	0957	14993	670							
		STD	1300	0619	3518	2769	0005997	1022	14976	678							
165		OBS	T1316	0602	35173	2771			14972	679							
165		OBS	T1389	0510	35132	2779			14947	725							

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	963	EV	59243N	009344W		181	99	10	28	205	1965	NAS	27A	1243	12	30	7	3		X1	6	5		0027

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
		30	S40	841	094	089	7		

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	SOQ
		STD	0000	1072	3529	2707	0010029	0000	14933	668							
205		OBS	0000	1072	35286	2707			14933	668							
		STD	0010	1072	3529	2707	0010053	0010	14935	679							
		STD	0020	1071	3528	2707	0010077	0020	14936	686							
205		OBS	0025	1071	35284	2707			14937	687							
		STD	0030	1071	3528	2707	0010101	0030	14938	683							
		STD	0050	1072	3529	2707	0010147	0050	14942	674							
205		OBS	0050	1072	35286	2707			14942	674							
		STD	0075	1071	3530	2708	0010085	0076	14946	684							
		STD	0100	1061	3532	2711	0009833	0101	14946	687							
205		OBS	0100	1061	35319	2711			14946	687							
		STD	0125	1020	3532	2719	0009182	0124	14936	685							
		STD	0150	0987	3532	2725	0008675	0147	14928	684							
		STD	0200	0941	3533	2733	0007996	0188	14919	680							
205		OBS	0201	0940	35328	2733			14919	680							
		STD	0250	0937	3535	2735	0007675	0228	14926	680							
		STD	0300	0932	3536	2737	0007845	0267	14933	675							
205		OBS	T0300	0932	35358	2737			14933	675							
205		OBS	0398	0915	35344	2738			14943	653							
		STD	0400	0915	3534	2738	0007903	0346	14943	654							
205		OBS	T0497	0906	35335	2739			14955	694							
		STD	0500	0906	3533	2739	0008033	0426	14956	695							
205		OBS	0598	0898	35326	2740			14969	709							
		STD	0600	0898	3533	2740	0008132	0507	14969	709							
205		OBS	0698	0888	35322	2741			14982	695							
		STD	0700	0888	3532	2741	0008208	0588	14982	694							
		STD	0800	0863	3530	2743	0008136	0670	14989	670							
205		OBS	0807	0861	35294	2743			14989	669							
		STD	0900	0832	3528	2746	0007997	0751	14994	658							
		STD	1000	0784	3526	2752	0007545	0828	14992	647							
205		OBS	T1041	0760	35247	2755			14989	642							
		STD	1100	0717	3528	2764	0006440	0698	14983	646							
205		OBS	1139	0690	35309	2770			14979	649							
		STD	1200	0650	3525	2770	0005812	0960	14973	653							
205		OBS	1237	0628	35179	2768			14969	655							

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	963	EV	59138N	008430W		181	98	10	29	009	1965	NAS	28A	1485	14	27	9	3		X1	5	2		0028

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	S38	888	100	083	8		

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	1068	3529	2707	0009968	0000	14932	694							
009		OBS	0000	1068	35285	2707			14932	694							
		STD	0010	1071	3529	2707	0010043	0010	14935	694							
		STD	0020	1072	3529	2707	0010083	0020	14937	694							
009		OBS	0025	1073	35285	2706			14938	694							
		STD	0030	1073	3529	2706	0010124	0030	14939	696							
		STD	0050	1073	3528	2706	0010179	0050	14942	699							
009		OBS	0050	1073	35284	2706			14942	699							
		STD	0075	1030	3531	2716	0009317	0075	14931	677							
009		OBS	0099	0995	35334	2724			14923	660							
		STD	0100	0994	3533	2724	0008598	0097	14922	660							
		STD	0125	0982	3533	2726	0008456	0119	14922	664							
		STD	0150	0970	3533	2728	0008315	0140	14922	667							
		STD	0200	0950	3534	2732	0008090	0181	14923	674							
		STD	0250	0934	3534	2734	0007937	0221	14925	681							
		STD	0300	0922	3534	2736	0007840	0260	14929	687							
009		OBS	0305	0921	35336	2737			14929	688							
		STD	0400	0911	3534	2738	0007875	0339	14941	688							
009		OBS	0409	0910	35335	2738			14942	688							
		STD	0500	0903	3533	2739	0007985	0418	14955	685							
009		OBS	0513	0902	35328	2739			14956	685							
		STD	0600	0896	3533	2740	0008107	0498	14969	699							
009		OBS	0619	0894	35324	2740			14971	702							
		STD	0700	0883	3531	2741	0008199	0580	14980	685							
009		OBS	T0722	0880	35302	2741			14982	682							
		STD	0800	0871	3530	2742	0008268	0662	14992	681							
009		OBS	0833	0863	35291	2742			14994	679							
		STD	0900	0837	3528	2746	0008042	0744	14996	664							
		STD	1000	0787	3525	2751	0007629	0822	14993	652							
009		OBS	T1070	0745	35232	2756			14988	650							
		STD	1100	0720	3522	2758	0006954	0895	14983	656							
		STD	1200	0642	3517	2765	0006275	0961	14969	669							
009		OBS	T1264	0598	35147	2769			14962	674							
		STD	1300	0575	3513	2771	0005711	1021	14958	675							
009		OBS	1388	0526	35103	2775			14953	675							

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	963	EV	59021N	007445W		181	97	10	29	055	1965	NAS	29A	0805	07	78	3	4		X1	4	2		0029

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	S40	946	089	089	8		

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	1117	3534	2703	0010421	0000	14950	689							
055		OBS	0000	1117	35338	2703			14950	689							
		STD	0010	1117	3534	2703	0010446	0010	14952	695							
055		OBS	0010	1117	35338	2703			14952	695							
		STD	0020	1118	3534	2702	0010481	0021	14954	697							
055		OBS	0026	1118	35338	2702			14955	698							
		STD	0030	1118	3534	2702	0010523	0031	14955	697							
		STD	0050	1119	3533	2702	0010606	0053	14959	693							
055		OBS	0052	1119	35334	2702			14959	692							
		STD	0075	1119	3534	2702	0010625	0079	14963	729							
		STD	0100	1119	3534	2702	0010686	0106	14967	755							
055		OBS	0103	1119	35342	2703			14968	757							
		STD	0125	1094	3536	2708	0010175	0132	14963	746							
		STD	0150	1068	3538	2714	0009650	0157	14958	733							
		STD	0200	1027	3541	2725	0008792	0203	14952	708							
055		OBS	T0207	1022	35418	2726			14951	705							
		STD	0250	1002	3541	2729	0008527	0246	14951	686							
		STD	0300	0983	3540	2731	0008407	0288	14952	662							
055		OBS	0311	0980	35392	2731			14953	657							
		STD	0400	0965	3539	2734	0008337	0372	14962	614							
055		OBS	T0419	0962	35393	2734			14964	603							
		STD	0500	0953	3539	2736	0008370	0456	14974	544							
055		OBS	0527	0949	35383	2736			14977	524							
		STD	0600	0930	3537	2738	0008339	0539	14982	652							
055		OBS	T0636	0923	35360	2738			14985	685							
		STD	0700	0915	3535	2739	0008437	0623	14992	676							
055		OBS	0742	0912	35348	2739			14998	670							

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
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		
21	963	EV	58585N	007440W		181	87	11	04	216	1965	NAS	29B	1152	11	27	5	2		X8	5	8		0030

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			
		27	S20	902	106	106	8		

MESSENGR TIME OF HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	$\Sigma\Delta$ 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	1026	3530	2716	0009137	0000	14917	670							
216		OBS	0000	1026	35302	2716			14917	670							
		STD	0010	1026	3531	2717	0009115	0009	14919	680							
		STD	0020	1027	3532	2717	0009100	0018	14921	686							
216		OBS	0024	1027	35318	2717			14922	687							
		STD	0030	1027	3531	2717	0009163	0027	14923	684							
216		OBS	0046	1027	35306	2716			14925	680							
		STD	0050	1027	3531	2717	0009209	0046	14926	681							
		STD	0075	1028	3531	2716	0009276	0069	14930	689							
216		OBS	0096	1028	35311	2717			14934	693							
		STD	0100	1023	3531	2718	0009234	0092	14933	693							
		STD	0125	0995	3533	2723	0008729	0114	14927	690							
		STD	0150	0971	3534	2728	0008302	0136	14922	688							
216		OBS	0195	0941	35361	2735			14919	683							
		STD	0200	0940	3536	2735	0007737	0176	14919	682							
		STD	0250	0934	3537	2737	0007708	0214	14925	677							
216		OBS	T0289	0929	35369	2738			14930	673							
		STD	0300	0927	3537	2738	0007685	0253	14931	672							
216		OBS	0391	0913	35359	2740			14941	664							
		STD	0400	0912	3536	2740	0007722	0330	14942	663							
216		OBS	T0490	0903	35347	2740			14953	662							
		STD	0500	0902	3535	2741	0007843	0408	14955	663							
216		OBS	0589	0896	35345	2741			14967	671							
		STD	0600	0896	3534	2741	0007997	0487	14969	671							
		STD	0700	0892	3533	2741	0008201	0568	14984	669							
216		OBS	0787	0877	35323	2743			14992	667							
		STD	0800	0875	3532	2743	0008187	0650	14994	665							
216		OBS	0887	0848	35305	2746			14998	653							
		STD	0900	0842	3530	2746	0007978	0731	14998	653							
		STD	1000	0783	3527	2753	0007419	0808	14991	651							
216		OBS	T1033	0760	35260	2756			14988	650							
		STD	1100	0708	3524	2762	0006621	0878	14979	648							
216		OBS	T1113	0697	35236	2763			14977	648							

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	963	EV	59132N	008378W		181	98	11	05	030	1965	NAS	28B	1536	14	22	4	2		X5	5	8		0031

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	S22	234	117	111	8		

MESSENGR TIME or 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	CODE
		STD	0000	1058	3536	2715	0009230	0000	14929	673							
022		OBS	0000	1058	35362	2715			14929	673							
022		OBS	0009	1057	35354	2715			14930	661							
		STD	0010	1057	3535	2715	0009296	0009	14931	660							
		STD	0020	1057	3536	2715	0009305	0019	14932	654							
022		OBS	0024	1057	35357	2715			14933	651							
		STD	0030	1057	3536	2715	0009321	0028	14934	646							
022		OBS	0049	1056	35358	2715			14937	634							
		STD	0050	1056	3536	2715	0009327	0047	14937	634							
		STD	0075	1054	3536	2716	0009351	0070	14940	627							
022		OBS	0098	1052	35363	2716			14943	621							
		STD	0100	1050	3536	2717	0009314	0093	14943	620							
		STD	0125	1028	3537	2721	0008940	0116	14939	610							
		STD	0150	1008	3538	2725	0008595	0138	14936	603							
022		OBS	0189	0984	35395	2731			14934	597							
		STD	0200	0980	3540	2731	0008138	0180	14935	599							
		STD	0250	0965	3540	2734	0007993	0220	14937	606							
022		OBS	0292	0955	35396	2736			14940	613							
		STD	0300	0953	3540	2736	0007903	0260	14941	615							
022		OBS	T0375	0940	35396	2738			14949	627							
		STD	0400	0936	3539	2738	0007879	0339	14951	631							
022		OBS	0467	0925	35383	2740			14958	637							
		STD	0500	0919	3537	2740	0007953	0418	14961	634							
022		OBS	0560	0910	35357	2740			14968	629							
		STD	0600	0907	3536	2740	0008060	0498	14973	627							
022		OBS	0655	0902	35355	2741			14980	623							
		STD	0700	0897	3534	2741	0008211	0579	14986	620							
022		OBS	T0746	0888	35329	2741			14990	617							
		STD	0800	0872	3531	2743	0008211	0661	14992	617							
022		OBS	T0844	0856	35297	2744			14994	613							
		STD	0900	0831	3528	2747	0007944	0742	14993	598							
030		OBS	T0941	0810	35272	2749			14992	590							
		STD	1000	0775	3524	2752	0007510	0819	14988	591							
		STD	1100	0710	3521	2759	0006871	0891	14979	596							
030		OBS	T1175	0658	35193	2765			14971	602							
		STD	1200	0640	3519	2767	0006070	0956	14968	604							
		STD	1300	0564	3520	2777	0005062	1012	14955	616							
		STD	1400	0483	3520	2787	0004010	1057	14938	630							
030		OBS	T1412	0473	35200	2789			14936	632							

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	NO.	CODE	° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	59246N	009358W		181	99	11	05	088	1965	NAS	27B	1628	15	26	9	4		X2	5	8		0032

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			
		28	S18	251	106	100	7		

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	SEC
		STD	0000	1025	3531	2717	0009032	0000	14917	665							
081		OBS	0000	1025	35314	2717			14917	665							
		STD	0010	1025	3531	2717	0009062	0009	14919	658							
081		OBS	0010	1025	35313	2717			14919	658							
		STD	0020	1026	3531	2717	0009090	0018	14921	658							
081		OBS	0025	1026	35314	2717			14921	658							
		STD	0030	1026	3532	2717	0009110	0027	14922	657							
		STD	0050	1026	3532	2717	0009141	0045	14926	654							
081		OBS	0051	1026	35317	2717			14926	654							
		STD	0075	1026	3532	2717	0009190	0068	14930	659							
		STD	0100	1025	3532	2718	0009231	0091	14933	665							
081		OBS	0102	1025	35318	2718			14934	665							
		STD	0125	1005	3533	2722	0008865	0114	14930	654							
		STD	0150	0985	3534	2726	0008516	0136	14927	644							
		STD	0200	0955	3535	2732	0008061	0177	14925	632							
081		OBS	T0206	0952	35354	2733			14925	631							
		STD	0250	0940	3535	2735	0007923	0217	14927	634							
		STD	0300	0930	3535	2736	0007866	0257	14932	638							
081		OBS	0310	0928	35349	2736			14933	639							
		STD	0400	0918	3536	2739	0007812	0335	14944	640							
081		OBS	T0414	0916	35360	2739			14946	640							
		STD	0500	0905	3535	2740	0007907	0414	14956	644							
081		OBS	0518	0903	35342	2740			14958	645							
		STD	0600	0899	3534	2741	0008046	0493	14970	646							
081		OBS	0621	0897	35339	2741			14973	646							
		STD	0700	0891	3533	2741	0008185	0575	14983	645							
081		OBS	0725	0887	35328	2742			14986	645							
		STD	0800	0882	3531	2741	0008369	0657	14996	634							
081		OBS	0828	0864	35305	2743			14994	630							
088		OBS	T0844	0850	35308	2746			14992	614							
		STD	0900	0830	3530	2748	0007782	0738	14993	623							
081		OBS	T0932	0816	35296	2750			14993	628							
		STD	1000	0772	3527	2755	0007243	0813	14987	633							
088		OBS	T1089	0711	35240	2761			14978								
		STD	1100	0701	3523	2762	0006586	0882	14976	640							
		STD	1200	0614	3518	2770	0005785	0944	14958	648							
		STD	1300	0538	3513	2775	0005178	0999	14943	655							
088		OBS	T1391	0476	35068	2778			14932	662							
		STD	1400	0470	3506	2778	0004854	1049	14931	661							
088		OBS	1461	0434	35019	2779			14926	654							

REFERENCE CTRY CODE	REFERENCE ID. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DIFF. 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	963	EV	59369N	010332W		182	90	11	05	136	1965	NAS	26B	1426	13	28	4	3		X1	3	6		0033

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
		30	S10	278	117	089	8		

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	1045	3536	2717	0009026	0000	14925	653							
130		OBS	0000	1045	35360	2717			14925	653							
		STD	0010	1052	3536	2716	0009204	0009	14929	658							
130		OBS	0010	1052	35355	2716			14929	658							
		STD	0020	1047	3535	2716	0009158	0018	14929	669							
130		OBS	0025	1045	35352	2717			14929	671							
		STD	0030	1045	3535	2717	0009152	0027	14930	666							
		STD	0050	1044	3535	2717	0009199	0046	14932	652							
130		OBS	0051	1044	35350	2717			14933	651							
		STD	0075	1042	3534	2716	0009297	0069	14936	651							
		STD	0100	1035	3534	2718	0009237	0092	14937	650							
130		OBS	0102	1034	35339	2718			14937	650							
		STD	0125	1009	3535	2723	0008784	0115	14932	647							
		STD	0150	0986	3535	2727	0008459	0136	14928	644							
		STD	0200	0953	3536	2733	0007954	0177	14924	638							
130		OBS	0205	0950	35362	2734			14924	637							
		STD	0250	0942	3536	2735	0007867	0217	14928	634							
		STD	0300	0935	3536	2736	0007859	0256	14934	632							
130		OBS	0310	0934	35362	2737			14935	631							
		STD	0400	0928	3537	2738	0007924	0335	14948	640							
130		OBS	0413	0927	35367	2738			14950	641							
		STD	0500	0911	3535	2740	0007939	0414	14958	646							
130		OBS	0516	0909	35351	2740			14960	647							
		STD	0600	0901	3535	2741	0008005	0494	14971	640							
130		OBS	0620	0898	35343	2741			14973	638							
		STD	0700	0878	3532	2742	0008044	0574	14978	629							
130		OBS	0724	0872	35314	2743			14980	624							
		STD	0800	0852	3530	2745	0007956	0654	14985	599							
130		OBS	T0828	0844	35297	2746			14986	594							
		STD	0900	0822	3528	2748	0007798	0733	14990	595							
130		OBS	T0934	0806	35272	2750			14989	595							
136		OBS	T0958	0793	35274	2752			14988	587							
		STD	1000	0786	3526	2752	0007533	0810	14993	601							
		STD	1100	0738	3523	2757	0007163	0883	14990	626							
		STD	1200	0649	3520	2767	0006169	0950	14972	640							
136		OBS	T1208	0640	35196	2768			14970	641							
		STD	1300	0518	3510	2775	0005115	1006	14935	644							
136		OBS	1309	0504	35084	2776			14930	644							

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	963	EV	59516N	011248W		182	91	11	05	184	1965	NAS	258	1161	10	29	3	4		X2	4	8		0034

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	S10	284	106	089	8		

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	1043	3535	2717	0009096	0000	14924	650							
175		OBS	0000	1043	35346	2717			14924	650							
175		OBS	0009	1044	35346	2716			14926	644							
		STD	0010	1044	3535	2716	0009138	0009	14926	644							
		STD	0020	1045	3534	2716	0009186	0018	14928	640							
175		OBS	0024	1045	35343	2716			14929	638							
		STD	0030	1045	3534	2716	0009217	0027	14930	635							
175		OBS	0049	1046	35347	2716			14933	625							
		STD	0050	1045	3535	2717	0009216	0046	14933	625							
		STD	0075	1022	3537	2722	0008740	0068	14929	614							
175		OBS	0098	1003	35384	2727			14926	608							
		STD	0100	1001	3538	2727	0008374	0090	14926	608							
		STD	0125	0980	3537	2729	0008158	0110	14922	611							
		STD	0150	0961	3537	2733	0007903	0130	14919	613							
175		OBS	T0195	0938	35358	2736			14918	617							
		STD	0200	0938	3536	2736	0007726	0170	14919	617							
		STD	0250	0933	3536	2737	0007714	0208	14925	621							
		STD	0300	0928	3537	2738	0007701	0247	14932	624							
175		OBS	0300	0928	35368	2738			14932	624							
175		OBS	T0397	0914	35354	2739			14942	630							
		STD	0400	0914	3535	2739	0007778	0324	14942	630							
		STD	0500	0901	3534	2741	0007851	0402	14954	637							
175		OBS	0501	0901	35344	2741			14954	637							
175		OBS	T0593	0891	35331	2741			14966	628							
		STD	0600	0890	3533	2741	0007979	0481	14966	628							
		STD	0700	0865	3530	2743	0007971	0561	14973	623							
175		OBS	0702	0864	35300	2743			14973	623							
175		OBS	T0798	0831	35280	2747			14976	597							
		STD	0800	0830	3528	2747	0007745	0640	14976	596							
		STD	0900	0775	3525	2753	0007237	0715	14972	568							
175		OBS	T0910	0770	35251	2754			14971	565							
184		OBS	T0952	0748	35248	2757			14970	590							

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	963	EV	60154N	011496W		218	01	11	05	221	1965	NAS	248	1070	10	28	1	2		X1	2	7		0035

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			
		27	S06	268	106	089	8		

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	1000	3528	2719	0008864	0000	14908	664							
221		OBS	0000	1000	35281	2719			14908	664							
221		OBS	0009	1000	35276	2719			14909	671							
		STD	0010	1000	3528	2719	0008924	0009	14909	671							
		STD	0020	1000	3528	2719	0008931	0018	14911	667							
221		OBS	0025	1000	35279	2719			14912	666							
		STD	0030	1000	3528	2719	0008950	0027	14912	666							
		STD	0050	1001	3528	2718	0009030	0045	14916	667							
221		OBS	0051	1001	35276	2718			14916	667							
		STD	0075	1001	3528	2718	0009093	0067	14920	662							
		STD	0100	1001	3527	2718	0009156	0090	14924	657							
221		OBS	0102	1001	35274	2718			14925	657							
		STD	0125	0978	3529	2724	0008715	0113	14920	652							
		STD	0150	0957	3530	2728	0008354	0134	14917	646							
		STD	0200	0925	3531	2734	0007872	0174	14913	635							
221		OBS	T0202	0924	35313	2734			14913	634							
		STD	0250	0914	3531	2736	0007800	0214	14917	627							
		STD	0300	0905	3531	2737	0007759	0253	14922	620							
221		OBS	0303	0904	35306	2737			14922	619							
221		OBS	T0398	0888	35303	2739			14932	625							
		STD	0400	0888	3530	2739	0007763	0330	14932	625							
		STD	0500	0876	3530	2741	0007769	0408	14944	639							
221		OBS	0505	0875	35298	2741			14945	640							
		STD	0600	0851	3527	2743	0007753	0485	14951	610							
221		OBS	0606	0849	35272	2743			14951	609							
		STD	0700	0816	3524	2745	0007610	0562	14954	601							
221		OBS	0707	0813	35241	2746			14954	600							
		STD	0800	0769	3522	2752	0007198	0636	14952	616							
221		OBS	T0805	0767	35222	2752			14952	617							
		STD	0900	0733	3523	2757	0006759	0706	14955	627							
221		OBS	T0912	0727	35233	2758			14955	628							
		STD	1000	0672	3520	2764	0006211	0771	14947	631							
221		OBS	T1007	0667	35198	2764			14947	631							

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	963	EV	60454N	012169W		218	02	11	06	022	1965	NAS	23B	0540	05	24	2	3		X2	4	8		0036

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	S05	298	094	083	8		

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	1019	3527	2715	0009250	0000	14914	653							
022		OBS	0000	1019	35271	2715			14914	653							
		STD	0010	1019	3530	2717	0009096	0009	14916	654							
022		OBS	0010	1019	35295	2717			14916	654							
		STD	0020	1020	3529	2716	0009157	0018	14918	653							
022		OBS	0024	1021	35292	2716			14919	653							
		STD	0030	1021	3529	2716	0009189	0027	14920	652							
022		OBS	0049	1020	35295	2717			14923	649							
		STD	0050	1020	3530	2717	0009203	0046	14923	649							
		STD	0075	1020	3530	2717	0009245	0069	14927	650							
022		OBS	0098	1020	35298	2717			14931	651							
		STD	0100	1018	3530	2717	0009247	0092	14931	651							
		STD	0125	0995	3531	2722	0008847	0115	14927	645							
		STD	0150	0975	3531	2726	0008573	0136	14923	641							
022		OBS	0194	0946	35320	2731			14920	636							
		STD	0200	0943	3532	2732	0008087	0178	14920	636							
		STD	0250	0924	3531	2734	0007960	0218	14921	637							
022		OBS	0291	0911	35308	2736			14923	637							
		STD	0300	0909	3531	2736	0007838	0258	14924	637							
022		OBS	T0391	0888	35306	2740			14931	637							
		STD	0400	0886	3531	2740	0007695	0335	14932	637							
022		OBS	T0482	0876	35293	2741			14941	631							

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	963	EV	61105N	012392W		218	12	11	06	065	1965	NAS	22B	1628	15	22	2	2		X2	6	8		0037

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
		22	S08	274	100	094	8		

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	0991	3527	2720	0008807	0000	14904	670							
057		OBS	0000	0991	35269	2720			14904	670							
057		OBS	0009	0990	35268	2720			14905	672							
		STD	0010	0990	3527	2720	0008821	0009	14905	672							
		STD	0020	0992	3527	2719	0008875	0018	14908	674							
057		OBS	0023	0992	35266	2719			14908	675							
		STD	0030	0992	3527	2719	0008912	0027	14909	673							
057		OBS	0047	0992	35264	2719			14912	670							
		STD	0050	0992	3526	2719	0008969	0044	14913	670							
		STD	0075	0991	3527	2719	0008987	0067	14917	669							
057		OBS	0094	0991	35271	2720			14920	667							
		STD	0100	0983	3527	2721	0008875	0089	14918	665							
		STD	0125	0952	3528	2727	0008397	0111	14910	657							
		STD	0150	0926	3528	2732	0007998	0131	14905	651							
057		OBS	T0182	0901	35286	2736			14901	645							
		STD	0200	0895	3528	2736	0007619	0170	14902	645							
		STD	0250	0881	3528	2739	0007501	0208	14905	645							
057		OBS	0277	0875	35275	2739			14907	645							
		STD	0300	0874	3527	2739	0007543	0246	14910	648							
057		OBS	T0372	0858	35267	2741			14916	650							
		STD	0400	0846	3526	2743	0007396	0320	14916	649							
057		OBS	0429	0834	35250	2744			14916	645							
		STD	0500	0819	3524	2745	0007313	0394	14922	621							
057		OBS	0567	0795	35224	2748			14924	599							
		STD	0600	0780	3522	2750	0007042	0466	14923	586							
057		OBS	0666	0744	35196	2753			14920	570							
		STD	0700	0720	3518	2755	0006602	0534	14916	570							
057		OBS	T0764	0674	35155	2760			14908	569							
		STD	0800	0646	3514	2762	0005973	0597	14903	572							
057		OBS	T0869	0600	35112	2766			14896	578							
		STD	0900	0584	3510	2767	0005534	0654	14895	591							
065		OBS	T0939	0564	35089	2769			14893	606							
		STD	1000	0526	3506	2771	0005162	0708	14887	629							
		STD	1100	0474	3501	2773	0004952	0758	14882	659							
065		OBS	T1171	0443	34991	2775			14881	674							
		STD	1200	0434	3499	2776	0004681	0807	14882	675							
		STD	1300	0407	3499	2779	0004451	0852	14887	677							
		STD	1400	0387	3498	2781	0004306	0896	14896	680							
065		OBS	T1461	0378	34982	2782			14902	681							
		STD	1500	0374	3496	2780	0004400	0940	14907	688							
065		OBS	T1528	0371	34942	2779			14910	693							

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	963	EV	61399N	013106W		218	13	11	06	110	1965	NAS	21b	1463	14	20	3	6		x2	7	8		0038

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
		21	S08	254	106	106	8		

MESSENGR TIME OF HR. 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S °/..	SIGMA-T	SPECIFIC VOLUME ANOMALY-10^7	Σ Δ 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	SUS
		STD	0000	0994	3526	2719	0008900	0000	14905	674							
104		OBS	0000	0994	35263	2719			14905	672							
		STD	0010	0994	3526	2718	0008952	0009	14907	672							
104		OBS	0010	0994	35259	2718			14907	672							
		STD	0020	0994	3526	2718	0008981	0018	14908	674							
104		OBS	0025	0994	35258	2718			14909	675							
		STD	0030	0995	3526	2718	0009020	0027	14910	674							
		STD	0050	0996	3526	2718	0009073	0045	14914	672							
104		OBS	0050	0996	35259	2718			14914	672							
		STD	0075	0996	3526	2718	0009128	0068	14918	674							
104		OBS	0099	0995	35257	2718			14922	675							
		STD	0100	0994	3526	2718	0009144	0091	14921	675							
		STD	0125	0972	3527	2723	0008765	0113	14918	659							
		STD	0150	0953	3529	2728	0008364	0134	14915	664							
104		OBS	T0198	0922	35300	2734			14912	653							
		STD	0200	0921	3530	2734	0007882	0175	14912	652							
		STD	0250	0903	3529	2736	0007773	0214	14913	639							
		STD	0300	0887	3528	2737	0007725	0253	14915	631							
104		OBS	0300	0887	35276	2737			14915	631							
		STD	0400	0864	3527	2741	0007604	0331	14923	630							
104		OBS	T0402	0863	35267	2741			14923	630							
		STD	0500	0836	3525	2743	0007504	0405	14929	591							
104		OBS	0505	0834	35247	2744			14929	590							
104		OBS	T0597	0785	35212	2748			14925	579							
		STD	0600	0783	3521	2748	0007161	0478	14924	581							
		STD	0700	0728	3519	2755	0006648	0547	14919	655							
104		OBS	0715	0719	35184	2756			14918	666							
		STD	0800	0663	3515	2761	0006144	0611	14910	578							
104		OBS	T0815	0652	35142	2762			14908	571							
		STD	0900	0587	3514	2770	0005281	0668	14896	596							
104		OBS	T0926	0569	35139	2772			14893	605							
110		OBS	T0990	0529	35057	2771			14887	629							
		STD	1000	0525	3505	2771	0005207	0721	14887	650							
		STD	1100	0480	3500	2772	0005112	0773	14884	643							
		STD	1200	0428	3495	2774	0004920	0823	14879	657							
110		OBS	T1242	0404	34925	2774			14876	664							
		STD	1300	0357	3495	2781	0004092	0868	14866	679							
110		OBS	1372	0322	34988	2788			14864	687							
		STD	1400	0315	35[illegible]0	2789	0003287	0905	14866	687							
110		OBS	T1446	0313	35020	2791			14873	684							

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	963	EV	62029N	013402W		218	23	11	06	148	1965	NAS	208	1381	14	20	2	2		X2	4	8		0039

WATER		WIND		BARO-METER (mbs)	AIR TEMP. °C		VIS. CODE	NO. OBS. DEPTHS	SPECIAL OBSERVATIONS
COLOR CODE	TRANS. (m)	DIR.	SPEED OR FORCE		ORY BULB	WET BULB			
		14	S16	227	111	100	8		

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	0961	3526	2724	0008360	0000	14893	687							
142		OBS	0000	0961	35264	2724			14893	687							
		STD	0010	0958	3526	2725	0008357	0008	14894	675							
142		OBS	0010	0958	35261	2725			14894	675							
		STD	0020	0956	3526	2725	0008354	0017	14894	673							
142		OBS	0026	0955	35255	2725			14895	672							
		STD	0030	0955	3526	2725	0008293	0025	14896	673							
		STD	0050	0954	3526	2725	0008416	0042	14899	679							
142		OBS	0051	0954	35256	2725			14899	679							
		STD	0075	0953	3526	2725	0008455	0063	14902	675							
		STD	0100	0952	3526	2725	0008500	0084	14906	671							
142		OBS	0102	0952	35255	2725			14906	671							
		STD	0125	0946	3527	2727	0008345	0105	14908	669							
		STD	0150	0939	3529	2730	0008138	0126	14910	666							
		STD	0200	0925	3530	2733	0007946	0166	14913	658							
142		OBS	T0203	0924	35301	2733			14913	657							
		STD	0250	0910	3529	2735	0007884	0206	14916	643							
		STD	0300	0895	3528	2736	0007821	0245	14918	634							
142		OBS	0305	0894	35277	2736			14919	633							
		STD	0400	0870	3527	2740	0007698	0322	14925	636							
142		OBS	T0410	0868	35269	2740			14926	636							
		STD	0500	0857	3527	2742	0007687	0399	14937	641							
142		OBS	0509	0856	35274	2742			14938	642							
		STD	0600	0845	3527	2744	0007687	0476	14949	661							
142		OBS	0612	0843	35266	2744			14950	662							
		STD	0700	0830	3526	2745	0007708	0553	14959	655							
142		OBS	0714	0826	35257	2746			14960	650							
		STD	0800	0790	3523	2749	0007475	0629	14960	595							
142		OBS	T0816	0781	35226	2750			14960	589							
		STD	0900	0724	3520	2756	0006841	0701	14951	581							
148		OBS	T0904	0721	35198	2757			14951	580							
142		OBS	T0922	0709	35189	2758			14949	575							
148		OBS	T0994	0653	35144	2762			14938	585							
		STD	1000	0641	3514	2763	0006178	0766	14935	587							
		STD	1100	0467	3510	2781	0004198	0618	14880	623							
		STD	1200	0349	3506	2791	0003117	0854	14847	659							
		STD	1300	0285	3502	2793	0002736	0884	14836	695							
148		OBS	1325	0278	35006	2793			14837	704							
148		OBS	T1378	0274	35021	2795			14845	698							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DIRECT 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	963	EV	62307N	014058W		218	24	11	06	188	1965	NAS	19B	1609	14	21	2	12		X1	6	7		0040

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	514	210	094	083	8		

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	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	0962	3527	2724	0008354	0000	14893	664							
180		OBS	0000	0962	35267	2724			14893	664							
180		OBS	0009	0962	35260	2724			14895	664							
		STD	0010	0962	3526	2724	0008429	0008	14895	664							
		STD	0020	0963	3526	2724	0008465	0017	14897	664							
180		OBS	0025	0964	35262	2724			14898	664							
		STD	0030	0964	3526	2724	0008503	0025	14899	664							
		STD	0050	0964	3526	2723	0008554	0042	14902	664							
180		OBS	0050	0964	35259	2723			14902	664							
		STD	0075	0963	3526	2724	0008598	0064	14906	664							
180		OBS	0097	0962	35257	2724			14909	664							
		STD	0100	0960	3526	2724	0008591	0085	14909	662							
		STD	0125	0945	3528	2728	0008255	0106	14908	650							
		STD	0150	0932	3529	2731	0008027	0127	14907	640							
180		OBS	T0189	0915	35304	2735			14908	630							
		STD	0200	0912	3530	2735	0007739	0166	14908	630							
		STD	0250	0900	3530	2737	0007652	0205	14912	631							
180		OBS	0286	0894	35294	2738			14916	631							
		STD	0300	0894	3530	2738	0007695	0243	14916	633							
180		OBS	T0380	0887	35299	2739			14929	641							
		STD	0400	0880	3529	2740	0007710	0320	14929	641							
180		OBS	0481	0857	35276	2742			14934	641							
		STD	0500	0855	3527	2742	0007655	0397	14936	644							
180		OBS	0579	0844	35268	2744			14945	647							
		STD	0600	0844	3527	2744	0007686	0474	14948	644							
180		OBS	0678	0829	35266	2746			14956	629							
		STD	0700	0821	3526	2747	0007565	0550	14956	616							
180		OBS	T0780	0777	35231	2751			14952	595							
		STD	0800	0765	3521	2751	0007231	0624	14951	601							
188		OBS	T0838	0732	35187	2754			14944	605							
180		OBS	T0881	0680	35169	2760			14930	600							
		STD	0900	0659	3516	2762	0006162	0691	14925	601							
		STD	1000	0562	3510	2770	0005360	0748	14906	611							
188		OBS	T1080	0499	35059	2774			14890	622							
		STD	1100	0468	3505	2775	0004643	0799	14888	626							
		STD	1200	0438	3500	2777	0004645	0847	14884	652							
		STD	1300	0392	3495	2778	0004501	0893	14881	665							
188		OBS	T1312	0387	34948	2778			14881	666							
		STD	1400	0350	3502	2787	0003572	0933	14881	667							
188		OBS	T1432	0338	35057	2792			14882	667							

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	963	EV	63000N	01433dW		218	34	11	06	230	1965	NAS	188	1783	17	23	2	4		X2	4	8		0041

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
		22	S10	186	106	100	8		

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	0957	3525	2724	0008371	0000	14891	661							
223		OBS	0000	0957	35254	2724			14891	661							
223		OBS	0009	0957	35253	2724			14893	668							
		STD	0010	0957	3525	2724	0008422	0008	14893	667							
		STD	0020	0955	3525	2724	0008412	0017	14894	663							
223		OBS	0024	0954	35248	2724			14894	662							
		STD	0030	0953	3525	2724	0008416	0025	14895	662							
223		OBS	0049	0949	35246	2725			14896	662							
		STD	0050	0949	3525	2725	0008410	0042	14897	664							
		STD	0075	0945	3524	2725	0008430	0063	14899	663							
223		OBS	0098	0941	35239	2726			14901	664							
		STD	0100	0941	3524	2726	0008434	0084	14902	663							
		STD	0125	0938	3527	2729	0008217	0105	14905	655							
		STD	0150	0934	3528	2730	0008132	0125	14908	648							
223		OBS	T0189	0925	35300	2733			14911	640							
		STD	0200	0920	3530	2734	0007866	0165	14911	640							
		STD	0250	0900	3528	2736	0007799	0205	14912	638							
223		OBS	0289	0888	35271	2737			14914	636							
		STD	0300	0887	3527	2737	0007761	0243	14915	642							
223		OBS	T0386	0873	35274	2740			14924	667							
		STD	0400	0869	3527	2740	0007683	0321	14925	661							
223		OBS	0483	0851	35265	2742			14932	641							
		STD	0500	0851	3527	2743	0007592	0397	14934	643							
223		OBS	T0576	0846	35272	2744			14945	645							
		STD	0600	0843	3527	2744	0007655	0473	14948	644							
223		OBS	0681	0828	35259	2745			14956	636							
		STD	0700	0825	3525	2745	0007672	0550	14958	633							
223		OBS	T0782	0794	35230	2748			14959	619							
		STD	0800	0779	3521	2749	0007449	0626	14956	599							
223		OBS	T0885	0712	35157	2755			14943	550							
		STD	0900	0701	3515	2756	0006859	0697	14942	552							
230		OBS	T0942	0671	35139	2759			14937	556							
		STD	1000	0628	3512	2763	0006120	0762	14929	576							
		STD	1100	0560	3510	2770	0005467	0820	14918	604							
230		OBS	T1184	0509	35219	27859				624							
		STD	1200	0499	3507	2776	0004928	0872	14910	629							
		STD	1300	0444	3505	2780	0004487	0919	14904	656							
		STD	1400	0402	3502	2782	0004214	0962	14903	675							
230		OBS	T1415	0397	34959	27779											
		STD	1500	0390	3500	2782	0004331	1005	14914	686							
230		OBS	1640	0357	34962	2782			14923	688							
230		OBS	1715	0328	35004	2788			14924	683							

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	963	EV	63277N	015020W		218	35	11	07	026	1965	NAS	178	1097	10	20	2	4		X5	5	8		0042

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	S09	183	100	100	8		

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 CODE
		STD	0000	0914	3521	2728	0008044	0000	14875	670							
	026	OBS	0000	0914	35207	2728			14875	670							
		STD	0010	0914	3521	2728	0008036	0008	14877	673							
		STD	0020	0913	3521	2728	0008051	0016	14878	676							
	026	OBS	0026	0913	35211	2728			14879	676							
		STD	0030	0913	3521	2728	0008066	0024	14880	677							
		STD	0050	0915	3521	2728	0008132	0040	14884	671							
	026	OBS	0051	0915	35211	2728			14884	671							
		STD	0075	0916	3521	2728	0008171	0061	14888	666							
		STD	0100	0916	3522	2728	0008209	0081	14892	661							
	026	OBS	0101	0916	35217	2728			14892	661							
		STD	0125	0913	3524	2730	0008043	0102	14896	661							
		STD	0150	0910	3526	2732	0007900	0121	14899	660							
		STD	0200	0903	3529	2736	0007671	0160	14905	656							
	026	OBS	0207	0902	35291	2736			14906	655							
		STD	0250	0894	3530	2738	0007556	0198	14910	647							
		STD	0300	0884	3530	2740	0007507	0236	14914	637							
	026	OBS	T0302	0884	35303	2740			14915	637							
		STD	0400	0867	3529	2742	0007504	0311	14924	639							
	026	OBS	0406	0866	35286	2742			14925	639							
		STD	0500	0853	3528	2743	0007587	0387	14935	634							
	026	OBS	T0509	0851	35274	2743			14936	634							
		STD	0600	0831	3527	2746	0007465	0462	14943	641							
	026	OBS	0603	0830	35265	2746			14943	641							
	026	OBS	T0695	0782	35232	2750			14940	654							
		STD	0700	0774	3523	2751	0007051	0534	14938	654							
	026	OBS	0796	0636	35158	2765			14899	662							
		STD	0800	0633	3516	2765	0005662	0598	14898	663							
		STD	0900	0560	3512	2772	0005071	0652	14885	679							
	026	OBS	T0970	0500	35091	2777			14872	682							
		STD	1000	0472	3508	2779	0004301	0699	14865	681							
	026	OBS	T1044	0429	35052	2782			14855	678							

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	963	EV	62599N	014341W		218	24	11	07	071	1965	NAS	18C	1764	17	20	3	2		X5	4	8		0043

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	510	176	100	094	8		

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	0940	3523	2726	0008250	0000	14885	688							
063		OBS	0000	0940	35234	2726			14885	688							
063		OBS	0009	0939	35236	2726			14886	688							
		STD	0010	0939	3524	2726	0008242	0008	14886	688							
		STD	0020	0940	3524	2726	0008280	0017	14888	688							
063		OBS	0024	0940	35235	2726			14889	688							
		STD	0030	0940	3524	2726	0008306	0025	14890	688							
063		OBS	0049	0940	35234	2726			14893	687							
		STD	0050	0940	3523	2726	0008356	0041	14893	687							
		STD	0075	0940	3524	2726	0008387	0062	14897	688							
063		OBS	0098	0939	35239	2726			14901	688							
		STD	0100	0939	3524	2726	0008402	0083	14901	687							
		STD	0125	0938	3526	2728	0008291	0104	14905	676							
		STD	0150	0936	3528	2730	0008164	0125	14909	666							
063		OBS	T0197	0926	35302	2733			14913	655							
		STD	0200	0924	3530	2733	0007930	0165	14913	655							
		STD	0250	0900	3528	2736	0007799	0204	14912	656							
063		OBS	0295	0885	35278	2738			14914	657							
		STD	0300	0885	3528	2738	0007663	0243	14914	658							
063		OBS	T0393	0874	35292	2741			14926	670							
		STD	0400	0873	3529	2741	0007599	0319	14926	670							
063		OBS	0493	0856	35280	2743			14935	670							
		STD	0500	0855	3528	2743	0007582	0395	14936	669							
063		OBS	0592	0841	35269	2744			14946	661							
		STD	0600	0841	3527	2744	0007631	0471	14947	661							
063		OBS	0693	0826	35262	2746			14957	664							
		STD	0700	0825	3526	2746	0007628	0548	14958	664							
063		OBS	T0793	0788	35214	2748			14958	664							
		STD	0800	0783	3521	2748	0007512	0623	14957	654							
063		OBS	T0894	0712	35159	2755			14945	567							
		STD	0900	0706	3516	2755	0006890	0695	14944	568							
071		OBS	0991	0619	35115	2764			14924	580							
		STD	1000	0614	3511	2764	0006021	0760	14923	582							
		STD	1100	0558	3507	2768	0005652	0818	14917	607							
		STD	1200	0506	3503	2771	0005346	0873	14912	631							
071		OBS	T1227	0493	35023	2772			14911	637							
		STD	1300	0457	3499	2774	0005085	0925	14908	660							
		STD	1400	0415	3496	2776	0004846	0975	14907	683							
071		OBS	T1467	0392	34952	2778			14909	693							
		STD	1500	0384	3496	2779	0004571	1022	14911	694							
071		OBS	T1655	0348	34971	2784			14922	698							
071		OBS	1727	0281	34994	2792			14906	704							

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	963	EV	62300N	014055W		218	24	11	07	115	1965	NAS	19C	1445	14	20	2	4		X1	4	6		0044

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	503	173	111	100	8		

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	QUAL CODE
		STD	0000	0965	3526	2724	0008432	0000	14895	688							
110		OBS	0000	0965	35263	2724			14895	688							
		STD	0010	0967	3526	2723	0008478	0008	14897	675							
110		OBS	0010	0967	35264	2723			14897	675							
		STD	0020	0967	3526	2723	0008515	0017	14899	681							
110		OBS	0026	0967	35260	2723			14899	682							
		STD	0030	0967	3526	2723	0008551	0025	14900	681							
		STD	0050	0967	3526	2723	0008595	0043	14903	673							
110		OBS	0051	0967	35259	2723			14904	673							
		STD	0075	0963	3527	2724	0008533	0064	14906	665							
		STD	0100	0956	3528	2726	0008408	0085	14908	660							
110		OBS	0103	0955	35277	2726			14908	659							
		STD	0125	0940	3528	2729	0008175	0106	14906	660							
		STD	0150	0925	3529	2732	0007915	0126	14905	661							
		STD	0200	0903	3530	2737	0007597	0165	14905	664							
110		OBS	T0204	0902	35301	2737			14905	664							
		STD	0250	0900	3531	2738	0007578	0203	14912	659							
		STD	0300	0895	3531	2739	0007600	0241	14919	654							
110		OBS	0307	0894	35313	2739			14919	653							
		STD	0400	0875	3529	2740	0007630	0317	14927	653							
110		OBS	T0409	0873	35285	2740			14928	653							
		STD	0500	0859	3527	2742	0007689	0393	14938	654							
110		OBS	0511	0857	35272	2742			14939	654							
		STD	0600	0845	3526	2743	0007738	0471	14949	652							
110		OBS	T0613	0843	35261	2743			14950	651							
		STD	0700	0828	3525	2745	0007749	0548	14959	642							
110		OBS	0715	0823	35249	2745			14959	639							
		STD	0800	0788	3526	2751	0007253	0623	14960	609							
110		OBS	T0818	0777	35257	2753			14959	602							
		STD	0900	0704	3516	2756	0006830	0693	14943	569							
110		OBS	T0905	0701	35157	2756			14943	567							
110		OBS	T0920	0694	35160	2757			14942	579							
		STD	1000	0639	3513	2763	0006236	0759	14934	583							
115		OBS	T1001	0638	35127	2762			14933	583							
		STD	1100	0542	3500	2765	0005943	0820	14910	625							
		STD	1200	0447	3495	2772	0005144	0875	14887	659							
115		OBS	T1242	0407	34945	2776			14877	670							
		STD	1300	0344	3498	2785	0003711	0919	14861	683							
115		OBS	T1356	0301	35008	2791			14852	692							
		STD	1400	0280	3501	2793	0002781	0952	14851	697							
115		OBS	T1430	0272	35015	2794			14852	699							

REFERENCE		SHIP	LATITUDE	LONGITUDE	DUPE 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	963	EV	62040N	013400W		218	23	11	07	155	1965	NAS	20C	1385	14	12	1	2		X2	4	8		0045

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	S07	146	111	106	8		

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	0994	3526	2719	0008907	0000	14905	665							
149		OBS	0000	0994	35262	2719			14905	665							
		STD	0010	0993	3526	2719	0008906	0009	14906	675							
149		OBS	0010	0993	35263	2719			14906	675							
		STD	0020	0993	3527	2719	0008906	0018	14908	678							
149		OBS	0025	0993	35268	2719			14909	679							
		STD	0030	0992	3527	2720	0008882	0027	14909	677							
		STD	0050	0989	3527	2720	0008863	0044	14912	671							
149		OBS	0050	0989	35272	2720			14912	671							
		STD	0075	0983	3527	2721	0008820	0067	14914	671							
		STD	0100	0975	3527	2723	0008745	0089	14915	671							
149		OBS	0100	0975	35272	2723			14915	671							
		STD	0125	0963	3529	2726	0008471	0110	14915	661							
		STD	0150	0951	3530	2729	0008257	0131	14914	654							
		STD	0200	0931	3531	2733	0007983	0172	14915	645							
149		OBS	T0200	0931	35308	2733			14915	646							
		STD	0250	0916	3530	2735	0007911	0211	14918	652							
		STD	0300	0902	3529	2736	0007845	0251	14921	656							
149		OBS	0302	0901	35291	2736			14921	656							
		STD	0400	0888	3530	2739	0007785	0329	14932	638							
149		OBS	T0404	0887	35297	2739			14932	637							
		STD	0500	0859	3528	2742	0007645	0406	14938	648							
149		OBS	0504	0858	35275	2742			14938	648							
		STD	0600	0831	3525	2744	0007612	0482	14943	606							
		STD	0700	0797	3524	2749	0007334	0557	14947	578							
155		OBS	T0716	0791	35234	2749			14947	575							
		STD	0800	0756	3523	2754	0006946	0628	14947	568							
155		OBS	0816	0749	35225	2755			14947	567							
		STD	0900	0715	3521	2758	0006630	0696	14948	569							
155		OBS	T0917	0707	35201	2759			14947	569							
		STD	1000	0660	3516	2762	0006326	0761	14942	570							
155		OBS	T1016	0649	35156	2763			14941	571							
		STD	1100	0505	3510	2777	0004703	0816	14896	619							
		STD	1200	0377	3505	2787	0003518	0857	14859	661							
		STD	1300	0296	3502	2793	0002842	0889	14841	687							
155		OBS	T1336	0279	35017	2794			14840	692							
		STD	1400	0263	3502	2795	0002545	0916	14844	696							
155		OBS	T1401	0263	35017	2795			14844	696							

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	963	EV	61400N	013088W		218	13	11	07	196	1965	NAS	21C	1391	13	12	3	2		X5	5	8		0046

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			
		12	S10	122	094	089	7		

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	0993	3526	2718	0008943	0000	14905	663							
190		OBS	0000	0993	35255	2718			14905	663							
		STD	0010	0992	3526	2718	0008941	0009	14906	666							
190		OBS	0010	0992	35256	2718			14906	666							
		STD	0020	0993	3526	2718	0008966	0018	14908	665							
190		OBS	0026	0993	35257	2718			14909	664							
		STD	0030	0993	3526	2718	0008994	0027	14910	664							
		STD	0050	0993	3526	2719	0009017	0045	14913	661							
190		OBS	0051	0993	35260	2719			14913	661							
		STD	0075	0988	3527	2720	0008924	0067	14915	651							
		STD	0100	0981	3528	2722	0008798	0089	14917	643							
190		OBS	0102	0980	35279	2722			14917	642							
		STD	0125	0964	3529	2726	0008488	0111	14915	641							
		STD	0150	0949	3530	2729	0008225	0132	14914	640							
		STD	0200	0926	3530	2733	0007962	0172	14913	637							
190		OBS	T0202	0925	35302	2733			14913	637							
		STD	0250	0915	3529	2734	0007962	0212	14917	635							
		STD	0300	0904	3529	2736	0007897	0252	14922	632							
190		OBS	0302	0904	35285	2735			14922	632							
		STD	0400	0884	3528	2738	0007838	0331	14931	630							
190		OBS	T0402	0884	35282	2738			14931	630							
		STD	0500	0856	3526	2741	0007737	0408	14936	619							
190		OBS	0502	0855	35260	2741			14936	619							
		STD	0600	0818	3524	2746	0007466	0484	14938	585							
190		OBS	0601	0818	35243	2746			14938	585							
		STD	0700	0766	3520	2750	0007141	0557	14934	557							
190		OBS	0702	0765	35200	2750			14934	556							
		STD	0800	0707	3518	2757	0006570	0626	14928	553							
190		OBS	0802	0706	35175	2757			14928	553							
		STD	0900	0674	3518	2761	0006265	0690	14931	569							
190		OBS	T0902	0673	35176	2762			14931	569							
		STD	1000	0623	3516	2767	0005784	0750	14928	589							
		STD	1100	0572	3514	2772	0005336	0806	14924	609							
		STD	1200	0521	3510	2775	0005039	0858	14919	628							
196		OBS	T1204	0519	35093	2775			14919	629							
196		OBS	1267	0425	35058	2783			14890	641							
		STD	1300	0341	3503	2789	0003307	0900	14860	663							
196		OBS	T1340	0208	34994	2798			14809	703							

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	963	EV	61114N	012404W		218	12	11	07	238	1965	NAS	22C	1609	09	13	4	2		X6	5	8	0047

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
		12	S16	088	100	089	8		

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	0991	3527	2719	0008836	0000	14904	659							
238		OBS	0000	0991	35265	2719			14904	659							
		STD	0010	0991	3527	2719	0008851	0009	14906	664							
238		OBS	0010	0991	35266	2719			14906	664							
		STD	0020	0992	3527	2719	0008883	0018	14908	650							
238		OBS	0026	0992	35266	2719			14909	645							
		STD	0030	0992	3527	2719	0008907	0027	14909	646							
		STD	0050	0990	3527	2719	0008932	0044	14912	653							
238		OBS	0051	0990	35265	2720			14912	653							
		STD	0075	0991	3527	2720	0008957	0067	14916	651							
		STD	0100	0991	3527	2720	0009021	0089	14921	648							
238		OBS	0102	0991	35271	2720			14921	648							
		STD	0125	0968	3528	2724	0008626	0111	14916	647							
		STD	0150	0946	3528	2728	0008325	0133	14912	645							
		STD	0200	0912	3528	2734	0007687	0173	14908	642							
238		OBS	T0204	0910	35284	2734			14908	642							
		STD	0250	0896	3528	2736	0007736	0212	14910	637							
		STD	0300	0883	3528	2738	0007632	0251	14914	633							
238		OBS	0306	0881	35278	2739			14914	632							
		STD	0400	0859	3527	2741	0007525	0326	14921	627							
238		OBS	T0408	0857	35267	2742			14921	624							
		STD	0500	0832	3525	2744	0007441	0401	14927	559							
238		OBS	0510	0829	35249	2744			14928	556							
		STD	0600	0794	3522	2748	0007234	0475	14929	578							
238		OBS	0611	0788	35220	2748			14928	581							
		STD	0700	0730	3518	2754	0006751	0544	14920	559							
238		OBS	0714	0721	35178	2755			14919	556							
		STD	0800	0671	3517	2761	0006106	0609	14913	566							
238		OBS	T0815	0663	35170	2762			14913	569							
		STD	0900	0619	3515	2767	0005658	0668	14909	596							
238		OBS	0917	0611	35146	2767			14909	604							

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	963	EV	60467N	012202W		218	02	11	08	042	1965	NAS	23C	0631	06	12	5	3		X6	5	8	0048

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	S22	054	100	089	8		

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	1020	3530	2717	0009023	0000	14915	655							
042		OBS	0000	1020	35304	2717			14915	655							
042		OBS	0009	1020	35305	2717			14917	656							
		STD	0010	1020	3531	2717	0009040	0009	14917	656							
		STD	0020	1021	3531	2717	0009058	0018	14919	655							
042		OBS	0024	1021	35308	2717			14919	654							
		STD	0030	1021	3531	2717	0009091	0027	14920	653							
042		OBS	0047	1022	35303	2717			14923	651							
		STD	0050	1022	3530	2717	0009174	0045	14924	651							
		STD	0075	1020	3531	2717	0009190	0068	14927	649							
042		OBS	0094	1019	35307	2718			14930	648							
		STD	0100	1012	3531	2719	0009073	0091	14929	647							
		STD	0125	0987	3531	2724	0008642	0113	14924	648							
		STD	0150	0966	3532	2728	0008353	0135	14920	644							
042		OBS	T0191	0942	35332	2733			14918	642							
		STD	0200	0942	3534	2733	0007924	0175	14920	642							
		STD	0250	0938	3535	2735	0007691	0215	14927	642							
042		OBS	0288	0934	35356	2736			14932	641							
		STD	0300	0932	3536	2736	0007862	0254	14933	641							
042		OBS	T0387	0917	35344	2738			14941	638							
		STD	0400	0914	3534	2738	0007887	0333	14942	638							
042		OBS	0488	0894	35318	274.			14949	634							
		STD	0500	0891	3532	2740	0007900	0412	14950	633							
042		OBS	T0589	0870	35294	2742			14957	625							

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	963	EV	60162N	011477W		218	01	11	08	088	1965	NAS	24C	1116	11	13	4	2		X2	6	8		0049

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	S14	030	111	106	8		

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	QUAL
		STD	0000	0996	3530	2721	0008681	0000	14906	671							
088		OBS	0000	0996	35297	2721			14906	671							
		STD	0010	0996	3530	2721	0008717	0009	14908	669							
		STD	0020	0997	3530	2721	0008753	0017	14910	666							
088		OBS	0025	0997	35295	2721			14911	665							
		STD	0030	0997	3529	2720	0008816	0026	14911	668							
		STD	0050	0997	3529	2720	0008883	0044	14915	675							
088		OBS	0050	0997	35287	2720			14915	675							
		STD	0075	0997	3529	2720	0008908	0066	14919	671							
		STD	0100	0996	3529	2721	0008933	0088	14923	667							
088		OBS	0100	0996	35293	2721			14923	667							
		STD	0125	0976	3530	2725	0008609	0110	14920	660							
		STD	0150	0958	3531	2728	0008297	0132	14917	654							
		STD	0200	0931	3532	2734	0007894	0172	14916	647							
088		OBS	0200	0931	35320	2734			14916	647							
		STD	0250	0918	3531	2735	0007864	0211	14919	648							
		STD	0300	0908	3531	2737	0007822	0251	14923	648							
088		OBS	T0300	0908	35308	2737			14923	648							
088		OBS	0398	0895	35312	2739			14935	653							
		STD	0400	0895	3531	2739	0007787	0329	14935	653							
088		OBS	0498	0888	35313	2740			14949	653							
		STD	0500	0888	3531	2740	0007688	0407	14949	653							
088		OBS	0597	0870	35299	2742			14958	647							
		STD	0600	0869	3530	2742	0007666	0486	14958	646							
088		OBS	T0697	0836	35266	2745			14961	617							
		STD	0700	0835	3527	2745	0007744	0564	14961	616							
088		OBS	0795	0794	35250	2750			14961	589							
		STD	0800	0793	3525	2750	0007376	0639	14962	588							
088		OBS	0895	0746	35222	2755			14959	578							
		STD	0900	0738	3522	2756	0006909	0711	14957	579							
088		OBS	0999	0628	35173	2767			14930	591							
		STD	1000	0628	3517	2767	0005759	0774	14930	592							
		STD	1100	0616	3517	2769	0005712	0832	14941	662							
088		OBS	T1104	0615	35174	2769			14942	665							

REFERENCE		SHIP CODE	LATITUDE	LONGITUDE	DUPLICATE 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.		° 1/10	° '1/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	59498N	011250W		182	91	11	08	133	1965	NAS	25C	1234	12	13	3	5		X1	3	5		0050

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			
		15	S18	024	117	111	8		

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	1024	3531	2717	0009075	0000	14917	682							
127		OBS	0000	1024	35306	2717			14917	682							
		STD	0010	1024	3531	2717	0009090	0009	14918	676							
127		OBS	0010	1024	35307	2717			14918	676							
		STD	0020	1025	3531	2717	0009130	0018	14920	673							
127		OBS	0026	1026	35307	2717			14922	672							
		STD	0030	1026	3531	2717	0009169	0027	14922	672							
		STD	0050	1026	3531	2716	0009229	0046	14925	670							
127		OBS	0052	1026	35305	2716			14926	670							
		STD	0075	1026	3531	2717	0009250	0069	14930	668							
		STD	0100	1026	3531	2717	0009307	0092	14934	665							
127		OBS	0103	1026	35315	2717			14934	665							
		STD	0125	0996	3532	2723	0008805	0115	14927	661							
		STD	0150	0967	3532	2728	0008362	0136	14921	656							
		STD	0200	0928	3533	2735	0007795	0177	14915	647							
127		OBS	T0205	0925	35328	2735			14914	646							
		STD	0250	0926	3535	2737	0007733	0215	14922	646							
		STD	0300	0927	3536	2738	0007711	0254	14931	647							
127		OBS	0309	0927	35367	2738			14933	647							
		STD	0400	0911	3535	2739	0007765	0331	14941	652							
127		OBS	T0413	0909	35345	2739			14943	653							
		STD	0500	0903	3534	2740	0007882	0410	14955	657							
127		OBS	0514	0902	35344	2740			14957	658							
		STD	0600	0891	3533	2741	0007988	0489	14967	655							
127		OBS	0616	0887	35326	2741			14968	654							
		STD	0700	0857	3528	2743	0007945	0569	14970	645							
127		OBS	0720	0851	35274	2743			14971	640							
		STD	0800	0833	3528	2746	0007744	0648	14977	601							
127		OBS	T0822	0825	35281	2748			14978	594							
		STD	0900	0788	3526	2752	0007384	0724	14977	588							
127		OBS	T0907	0780	35260	2753			14975	585							
127		OBS	T0925	0755	35251	2756			14968	574							
		STD	1000	0707	3522	2760	0006580	0793	14961	631							
133		OBS	T1005	0704	35220	2761			14961	634							
		STD	1100	0648	3519	2766	0006075	0857	14955	644							
133		OBS	T1160	0598	35163	2770			14944	659							
		STD	1200	0558	3515	2775	0005192	0913	14935	673							
133		OBS	T1233	0521	35134	2778			14925	686							

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	963	EV	59380N	010330W		182	90	11	08	173	1965	NAS	26C	1417	14	15	2	2		X1	3	3		0051

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
		14	S20	041	122	117	8		

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	1027	3533	2718	0008940	0000	14918	670							
167		OBS	0000	1027	35331	2718			14918	670							
		STD	0010	1027	3533	2718	0008955	0009	14920	675							
167		OBS	0010	1027	35332	2718			14920	675							
		STD	0020	1028	3534	2719	0008931	0018	14922	680							
167		OBS	0025	1028	35343	2719			14923	681							
		STD	0030	1028	3534	2719	0008929	0027	14923	679							
167		OBS	0049	1028	35349	2719			14927	674							
		STD	0050	1028	3535	2720	0008931	0045	14927	674							
		STD	0075	1027	3535	2720	0008970	0067	14930	671							
167		OBS	0098	1026	35352	2720			14934	668							
		STD	0100	1024	3535	2720	0008956	0089	14934	668							
		STD	0125	0999	3536	2725	0008544	0111	14929	664							
		STD	0150	0977	3537	2730	0008186	0132	14925	661							
167		OBS	T0191	0950	35379	2735			14922	657							
		STD	0200	0947	3538	2736	0007709	0172	14922	657							
		STD	0250	0934	3539	2738	0007568	0210	14926	655							
167		OBS	0287	0926	35389	2740			14929	653							
		STD	0300	0924	3539	2740	0007489	0248	14930	654							
167		OBS	T0382	0912	35381	2742			14939	659							
		STD	0400	0911	3538	2742	0007537	0323	14942	659							
167		OBS	0480	0907	35381	2742			14954	661							
		STD	0500	0905	3538	2743	0007635	0399	14956	662							
167		OBS	0577	0899	35384	2744			14967	664							
		STD	0600	0898	3539	2745	0007659	0475	14970	664							
167		OBS	0675	0894	35391	2745			14981	664							
		STD	0700	0883	3538	2746	0007687	0552	14981	662							
167		OBS	T0774	0851	35370	2751			14981	631							
		STD	0800	0837	3537	2753	0007200	0626	14980	632							
167		OBS	T0874	0807	35363	2757			14981	633							
		STD	0900	0806	3536	2757	0006955	0697	14985	633							
173		OBS	T0982	0786	35359	2760			14991	630							
		STD	1000	0772	3535	2761	0006631	0765	14988	628							
		STD	1100	0691	3532	2770	0005810	0827	14973	616							
		STD	1200	0611	3528	2778	0005020	0882	14958	604							
173		OBS	1214	0600	35274	2779			14956	602							
173		OBS	1299	0398	35177	2795			14886	675							
		STD	1300	0397	3518	2795	0002928	0921	14886	676							
173		OBS	T1369	0358	35137	2796			14880	709							

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	963	EV	59244N	00934UW		181	99	11	08	220	1965	NAS	27C	1463	15	15	3	2		X8	5	8		0052

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			
			15	516	075	122	111	8		

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	CODE
		STD	0000	1040	3537	2719	0008839	0000	14923	658							
	214	OBS	0000	1040	35374	2719			14923	658							
		STD	0010	1040	3536	2718	0008965	0009	14925	626							
	214	OBS	0011	1040	35358	2718			14925	624							
		STD	0020	1038	3533	2716	0009177	0018	14925	628							
	214	OBS	0026	1036	35312	2715			14925	632							
		STD	0030	1032	3531	2716	0009247	0027	14924	638							
		STD	0050	1015	3530	2718	0009113	0046	14921	655							
	214	OBS	0050	1015	35296	2718			14921	655							
		STD	0075	1015	3531	2719	0009066	0068	14926	636							
		STD	0100	1010	3532	2720	0009003	0091	14928	623							
	214	OBS	0100	1010	35315	2720			14928	623							
		STD	0125	0989	3532	2724	0008674	0113	14925	623							
		STD	0150	0972	3533	2728	0008377	0134	14923	623							
		STD	0200	0945	3535	2733	0007935	0175	14921	623							
	214	OBS	T0200	0945	35345	2733			14921	623							
		STD	0250	0935	3535	2735	0007842	0214	14926	631							
	214	OBS	0299	0926	35354	2737			14930	637							
		STD	0300	0926	3535	2737	0007802	0254	14931	637							
	214	OBS	T0398	0908	35344	2739			14940	646							
		STD	0400	0908	3534	2739	0007790	0332	14940	646							
	214	OBS	0495	0900	35338	2740			14953	653							
		STD	0500	0900	3534	2740	0007877	0410	14954	653							
	214	OBS	0596	0895	35331	2740			14968	649							
		STD	0600	0895	3533	2740	0008053	0490	14968	649							
	214	OBS	0695	0882	35315	2741			14979	648							
		STD	0700	0882	3531	2741	0008183	0571	14980	647							
	214	OBS	T0793	0864	35291	2742			14988	625							
		STD	0800	0861	3529	2743	0008176	0653	14988	623							
	214	OBS	T0889	0823	35272	2747			14988	607							
		STD	0900	0818	3527	2748	0007806	0732	14988	608							
		STD	1000	0770	3525	2753	0007358	0808	14986	616							
		STD	1100	0710	3522	2760	0006798	0879	14979	624							
	220	OBS	T1105	0707	35215	2760			14979	624							
		STD	1200	0620	3513	2765	0006239	0944	14959	630							
		STD	1300	0548	3509	2771	0005614	1003	14947	638							
	220	OBS	T1333	0528	35086	2773			14944	641							
		STD	1400	0497	3513	2780	0004717	1055	14943	655							
	220	OBS	T1468	0470	35138	2784			14944	657							
		STD	1500	0459	3513	2785	0004296	1100	14944	654							
	220	OBS	1538	0446	35119	2785			14945	647							

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	INDICTR	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT.	PER.		TYPE	AMT	
31	963	EV	59134N	008422W		181	98	11	09	016	1965	NAS	28C	1454	09	27	3	6	X1	3	3	0053

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			
		17	S20	105	122	117	8		

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	1082	3535	2710	0009713	0000	14938	692							
016		OBS	0000	1082	35352	2710			14938	692							
		STD	0010	1082	3535	2710	0009744	0010	14940	654							
016		OBS	0011	1082	35351	2710			14940	651							
		STD	0020	1083	3535	2710	0009770	0019	14942	634							
016		OBS	0026	1084	35355	2710			14943	624							
		STD	0030	1084	3536	2710	0009793	0029	14943	637							
		STD	0050	1083	3536	2710	0009812	0049	14947	660							
016		OBS	0051	1083	35357	2710			14947	661							
		STD	0075	1075	3535	2712	0009756	0073	14948	634							
016		OBS	0098	1063	35351	2713			14947	610							
		STD	0100	1060	3535	2714	0009560	0098	14946	610							
		STD	0125	1029	3536	2720	0009082	0121	14939	614							
		STD	0150	1002	3536	2725	0008656	0143	14934	622							
		STD	0200	0963	3537	2732	0008058	0185	14928	627							
016		OBS	T0206	0959	35369	2733			14927	626							
		STD	0250	0949	3537	2735	0007922	0225	14931	629							
		STD	0300	0940	3537	2736	0007882	0264	14936	631							
016		OBS	0309	0938	35372	2737			14937	631							
		STD	0400	0925	3538	2739	0007772	0342	14947	639							
016		OBS	T0415	0924	35384	2740			14949	642							
		STD	0500	0920	3539	2741	0007637	0421	14962	644							
016		OBS	0517	0919	35389	2741			14964	645							
		STD	0600	0909	3539	2743	0007651	0499	14974	514							
016		OBS	0622	0906	35389	2743			14977	613							
		STD	0700	0897	3538	2744	0007916	0575	14986	650							
016		OBS	0725	0893	35372	2744			14959	653							
		STD	0800	0877	3536	2746	0007928	0657	14995	628							
016		OBS	T0829	0870	35353	2746			14997	620							
		STD	0900	0850	3533	2748	0007891	0736	15001	633							
016		OBS	T0932	0840	35325	2749			15003	648							

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	INDICTR	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT.	PER.		TYPE	AMT	
31	963	EV	59134N	008436W		181	97	11	09	063	1965	NAS	29C	1083	10	27	3	-	X1	3	3	0054

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			
		18	S16	125	122	117	8		

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	1066	3535	2713	0009440	0000	14932	667							
063		OBS	0000	1066	35352	2713			14932	667							
		STD	0010	1066	3535	2713	0009471	0009	14934	666							
		STD	0020	1066	3535	2713	0009502	0019	14935	664							
063		OBS	0025	1066	35350	2713			14936	670							
		STD	0030	1066	3535	2713	0009522	0023	14937	666							
		STD	0050	1065	3535	2713	0009548	0048	14940	653							
063		OBS	0050	1065	35351	2713			14940	653							
		STD	0075	1045	3532	2714	0009495	0071	14937	655							
		STD	0100	1028	3531	2715	0009377	0095	14934	657							
063		OBS	0100	1028	35305	2715			14934	657							
		STD	0125	1013	3534	2721	0008925	0118	14933	640							
		STD	0150	1000	3536	2725	0008617	0140	14933	660							
063		OBS	0196	0980	35395	2731			14934	610							
		STD	0200	0979	3540	2732	0008122	0182	14934	617							
		STD	0250	0967	3540	2734	0008018	0222	14938	633							
063		OBS	T0295	0958	35398	2735			14942	641							
		STD	0300	0957	3540	2735	0007961	0262	14943	640							
63		OBS	0394	0944	35382	2736			14953	636							
		STD	0400	0943	3538	2736	0008067	0342	14954	637							
063		OBS	T0494	0924	35363	2738			14962	648							
		STD	0500	0923	3536	2738	0008092	0423	14963	648							
063		OBS	0593	0908	35352	2740			14972	655							
		STD	0600	0907	3535	2740	0008104	0504	14973	656							
063		OBS	0693	0898	35332	2742			14985	675							
		STD	0700	0898	3533	2743	0008501	0586	14986	674							
063		OBS	0791	0886	35328	2742			14996	636							
		STD	0800	0885	3533	2742	0008809	0669	14998	636							
		STD	0900	0864	3531	2744	0008290	0752	15006	636							
063		OBS	0983	0838	35294	2747			15007	632							
		STD	1000	0816	3528	2749	0007913	0833	15005	629							
063		OBS	T1040	0793	35257	2751			15002	624							

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	963	EV	58592N	007428W		181	87	11	21	138	1965	NAS	29D	1024	09	03	4	2		X7	5	8		0055

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	S20	203	044	028	8		

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	1048													
138		OBS	0000	1048													
		STD	0010	1048													
		STD	0020	1048													
138		OBS	0026	1048	35431	2722			14931								
		STD	0030	1048	3543	2722	0008630		14932								
		STD	0050	1048	3543	2722	0008677		14935								
138		OBS	0051	1048	35429	2722			14935								
		STD	0075	1049	3543	2722	0008766		14940								
		STD	0100	1051	3543	2722	0008848		14944								
138		OBS	0103	1051	35429	2722			14945								
		STD	0125	1045	3543	2723	0008800		14946								
		STD	0150	1039	3544	2725	0008683		14948								
		STD	0200	1026	3544	2727	0008577		14952								
138		OBS	0207	1024	35445	2728			14952								
		STD	0250	1012	3544	2729	0008453		14955								
		STD	0300	1000	3544	2731	0008362		14959								
138		OBS	T0310	0998	35436	2731			14960								
		STD	0400	0981	3544	2735	0008275		14968								
138		OBS	0414	0978	35438	2735			14970								
		STD	0500	0957	3541	2736	0008291		14976								
138		OBS	0516	0954	35405	2737			14977								
		STD	0600	0941	3540	2738	0008304		14986								
138		OBS	0621	0937	35394	2739			14988								
		STD	0700	0921	3538	2740	0008319		14995								
138		OBS	T0724	0916	35374	2740			14997								
		STD	0800	0900	3535	2741	0008385		15003								
138		OBS	0828	0895	35343	2741			15006								
		STD	0900	0885	3534	2743	0008415		15014								
138		OBS	T0933	0882	35335	2743			15019								

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	963	EV	59139N	008401W		181	98	11	21	192	1965	NAS	28D	1335	10	02	4	2		X1	6	3		0056

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
		02	S25	875	056	028	8		

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	1003	3537	2726	0008248	0000	14910	655							
179		OBS	0000	1003	35371	2726			14910	655							
		STD	0010	1003	3537	2725	0008285	0008	14912	648							
		STD	0020	1004	3537	2725	0008314	0017	14913	641							
179		OBS	0025	1004	35367	2725			14914	638							
		STD	0030	1004	3537	2725	0008373	0025	14915	634							
		STD	0050	1005	3536	2724	0008468	0042	14919	625							
179		OBS	0050	1005	35361	2724			14919	625							
		STD	0075	1005	3536	2725	0008501	0063	14923	638							
		STD	0100	1004	3537	2725	0008534	0084	14926	645							
179		OBS	0100	1004	35365	2725			14926	645							
		STD	0125	0987	3537	2728	0008310	0105	14924	633							
		STD	0150	0973	3537	2730	0008135	0126	14923	624							
		STD	0200	0952	3536	2734	0007908	0166	14924	616							
179		OBS	0200	0952	35364	2734			14924	616							
		STD	0250	0946	3536	2735	0007919	0206	14930	626							
		STD	0300	0940	3536	2736	0007929	0245	14936	636							
179		OBS	T0302	0940	35364	2736			14936	636							
		STD	0400	0928	3539	2740	0007757	0324	14948	628							
179		OBS	0401	0928	35389	2740			14948	628							
		STD	0500	0912	3535	2740	0007947	0402	14958	629							
179		OBS	0503	0911	35353	2740			14958	629							
		STD	0600	0902	3536	2742	0007955	0482	14971	615							
179		OBS	0604	0902	35360	2742			14972	614							
		STD	0700	0897	3535	2742	0008130	0562	14986	597							
179		OBS	0706	0896	35350	2742			14986	596							
		STD	0800	0872	3534	2744	0008028	0643	14993	640							
179		OBS	0803	0871	35334	2745			14993	641							
		STD	0900	0840	3530	2747	0007945	0723	14997	589							
179		OBS	T0911	0836	35298	2747			14997	585							
		STD	1000	0800	3529	2752	0007547	0800	14998	573							
179		OBS	1014	0784	35282	2754			14994	567							
192		OBS	T1026	0768	35277	2756			14990	561							

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
CRY. 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	963	EV	59247N	009340W		181	99	11	21	231	1965	NAS	27D	1518	14	34	2	2		X1	5	3		0057

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			
		01	S10	244	039	028	8		

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	1012	3541	2727	0008145	0000	14913								
	226	OBS	0000	1012	35405	2727			14913								
		STD	0010	1013	3537	2724	0008413	0008	14915								
	226	OBS	0010	1013	35374	2724			14915								
		STD	0020	1014	3538	2724	0008450	0017	14917								
	226	OBS	0025	1015	35375	2724			14918								
		STD	0030	1015	3537	2724	0008492	0025	14919								
		STD	0050	1014	3537	2724	0008536	0042	14922								
	226	OBS	0050	1014	35372	2724			14922								
		STD	0075	1014	3537	2724	0008600	0064	14926								
	226	OBS	0099	1014	35370	2724			14930								
		STD	0100	1014	3537	2724	0008664	0085	14930								
		STD	0125	1004	3537	2725	0008568	0107	14931								
		STD	0150	0996	3537	2726	0008506	0128	14932								
	226	OBS	T0197	0981	35362	2729			14934								
		STD	0200	0980	3536	2729	0008374	0170	14934								
		STD	0250	0967	3538	2732	0008151	0212	14938								
	226	OBS	0295	0958	35393	2735			14942								
		STD	0300	0957	3539	2735	0007991	0252	14943								
	226	OBS	T0392	0945	35394	2737			14953								
		STD	0400	0944	3539	2737	0008010	0332	14954								
	226	OBS	0493	0928	35367	2738			14963								
		STD	0500	0927	3537	2738	0008114	0413	14964								
	226	OBS	0593	0914	35348	2739			14974								
		STD	0600	0914	3535	2739	0008234	0494	14976								
	226	OBS	0694	0906	35347	2740			14988								
		STD	0700	0906	3535	2740	0008309	0577	14989								
	226	OBS	0794	0894	35338	2741			15000								
		STD	0800	0894	3534	2741	0008386	0661	15001								
	226	OBS	T0896	0846	35310	2747			14999								
		STD	0900	0841	3531	2747	0007889	0742	14997								
	231	OBS	T0928	0811	35284	2750			14990								
		STD	1000	0757	3526	2756	0007079	0817	14981								
		STD	1100	0688	3521	2762	0006533	0885	14971								
	231	OBS	T1179	0637	35177	2766			14963								
		STD	1200	0625	3516	2767	0006094	0948	14962								
		STD	1300	0568	3511	2770	0005756	1007	14955								
	231	OBS	1369	0529	35082	2773			14950								
		STD	1400	0511	3508	2775	0005279	1062	14948								
	231	OBS	T1443	0487	35070	2777			14946								

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) MD	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	963	EV	59380N	010355W		182	90	11	22	033	1965	NAS	20D	1463	14	34	2	2		X1	3	2		0058

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
		32	S12	257	061	033	8		

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	SEC
		STD	0000	0976	3535	2728	0008002	0000	14900	637							
027		OBS	0000	0976	35345	2728			14900	637							
027		OBS	0009	0976	35340	2728			14901	636							
		STD	0010	0976	3534	2728	0008064	0008	14901	636							
		STD	0020	0978	3534	2727	0008110	0016	14903	637							
027		OBS	0022	0978	35335	2727			14904	637							
		STD	0030	0978	3534	2727	0008174	0024	14905	641							
027		OBS	0045	0978	35336	2727			14908	647							
		STD	0050	0978	3534	2727	0008213	0041	14908	648							
		STD	0075	0979	3533	2727	0008292	0061	14913	652							
027		OBS	0087	0979	35333	2727			14915	653							
		STD	0100	0979	3533	2727	0008353	0082	14917	649							
		STD	0125	0978	3533	2727	0008386	0103	14921	642							
		STD	0150	0977	3534	2727	0008419	0124	14924	636							
027		OBS	T0172	0976	35336	2727			14928	632							
		STD	0200	0964	3534	2730	0008281	0166	14928	630							
		STD	0250	0946	3534	2733	0008094	0207	14930	625							
027		OBS	0263	0942	35345	2734			14930	624							
		STD	0300	0936	3535	2735	0007986	0247	14934	617							
027		OBS	T0353	0926	35350	2737			14939	611							
		STD	0400	0914	3534	2738	0007887	0326	14942	611							
027		OBS	0450	0905	35327	2739			14947	611							
		STD	0500	0901	3533	2739	0007952	0405	14954	609							
027		OBS	0549	0897	35332	2740			14961	607							
		STD	0600	0894	3533	2741	0008037	0485	14968	621							
027		OBS	0650	0887	35328	2742			14973	623							
		STD	0700	0876	3532	2743	0008011	0566	14978	606							
027		OBS	T0752	0861	35305	2744			14980	594							
		STD	0800	0846	3529	2745	0007931	0645	14982	591							
027		OBS	T0856	0819	35281	2749			14981	588							
		STD	0900	0790	3526	2751	0007430	0722	14977	569							
033		OBS	T0907	0785	3517Q	2745Q				567							
		STD	1000	0689	3522	2763	0006321	0791	14954	609							
		STD	1100	0615	3518	2770	0005661	0851	14941	637							
033		OBS	T1151	0590	35174	2772			14940	644							
		STD	1200	0582	3517	2773	0005390	0906	14945	642							
033		OBS	T1289	0562	35161	2775			14951	639							
		STD	1300	0559	3516	2775	0005260	0959	14952	640							
033		OBS	1364	0540	35151	2777			14955	649							

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	963	EV	59502N	011244W		182	91	11	22	067	1965	NAS	25D	1207	12	01	2	4		X1	3	6		0059

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			
		31	506	274	069	067	8		

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	QUAL CODE
		STD	0000	0949	3533	2731	0007704	0000	14889								
067		OBS	0000	0949	35327	2731			14889								
		STD	0010	0949	3532	2731	0007777	0008	14891								
067		OBS	0010	0949	35320	2731			14891								
		STD	0020	0950	3532	2731	0007792	0016	14893								
067		OBS	0025	0951	35324	2731			14894								
		STD	0030	0951	3532	2731	0007822	0023	14895								
		STD	0050	0951	3532	2731	0007880	0039	14898								
067		OBS	0051	0951	35322	2731			14899								
		STD	0075	0951	3533	2731	0007912	0059	14902								
		STD	0100	0951	3533	2731	0007944	0079	14907								
067		OBS	0102	0951	35328	2731			14907								
		STD	0125	0951	3534	2732	0007910	0098	14911								
		STD	0150	0950	3535	2733	0007867	0118	14915								
		STD	0200	0949	3537	2735	0007788	0157	14923								
067		OBS	T0204	0949	35376	2735			14924								
		STD	0250	0941	3537	2736	0007792	0196	14928								
		STD	0300	0933	3537	2737	0007768	0235	14933								
067		OBS	0308	0932	35368	2737			14934								
		STD	0400	0921	3536	2739	0007824	0313	14945								
067		OBS	T0410	0920	35363	2739			14947								
		STD	0500	0909	3536	2740	0007884	0392	14957								
067		OBS	0513	0907	35390	27430											
		STD	0600	0898	3535	2741	0007956	0471	14970								
067		OBS	0615	0895	35349	2742			14971								
		STD	0700	0868	3531	2743	0007954	0550	14974								
067		OBS	0719	0861	35304	2744			14975								
		STD	0800	0829	3528	2747	0007729	0629	14976								
067		OBS	T0820	0820	35276	2748			14976								
		STD	0900	0773	3526	2754	0007161	0703	14971								
		STD	1000	0705	3523	2761	0006491	0771	14961								
067		OBS	T1053	0666	35210	2765			14954								
		STD	1100	0629	3519	2769	0005793	0833	14947								
067		OBS	1183	0558	35156	2775			14932								

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	INDICES	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	60167N	011486W		218	01	11	22	100	1965	NAS	24D	1061	10	06	3	2		X2	4	8		0060

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	308	261	067	044	8		

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	0936	35331	2732	0007595	0000	14885	649							
100		OBS	0000	0936	35314	2732			14885	649							
		STD	0010	0936	3531	2732	0007683	0008	14886	645							
100		OBS	0010	0936	35305	2732			14886	645							
		STD	0020	0937	3531	2732	0007712	0015	14888	634							
100		OBS	0025	0938	35307	2732			14889	632							
		STD	0030	0938	3531	2732	0007745	0023	14890	636							
		STD	0050	0939	3531	2731	0007793	0039	14894	649							
100		OBS	0051	0939	35308	2731			14894	650							
		STD	0075	0939	3531	2731	0007868	0058	14898	635							
		STD	0100	0939	3530	2731	0007944	0078	14902	625							
100		OBS	0102	0939	35302	2731			14902	624							
		STD	0125	0938	3531	2732	0007915	0098	14906	626							
		STD	0150	0936	3532	2733	0007871	0118	14909	627							
		STD	0200	0933	3533	2734	0007854	0157	14916	631							
100		OBS	T0201	0933	35334	2734			14917	631							
		STD	0250	0926	3534	2736	0007771	0196	14922	627							
		STD	0300	0917	3534	2738	0007730	0235	14927	623							
100		OBS	0305	0916	35342	2738			14928	623							
		STD	0400	0895	3532	2740	0007713	0312	14935	624							
100		OBS	T0408	0893	35320	2740			14936	624							
		STD	0500	0878	3531	2742	0007698	0389	14945	631							
100		OBS	0507	0876	35313	2742			14946	632							
		STD	0600	0851	3529	2744	0007635	0466	14951	622							
100		OBS	T0604	0850	35289	2744			14952	622							
		STD	0700	0821	3528	2748	0007418	0541	14956	627							
100		OBS	0710	0817	35274	2748			14956	627							
		STD	0800	0779	3526	2753	0007083	0613	14957	592							
100		OBS	T0812	0774	35258	2754			14957	589							
		STD	0900	0739	3523	2756	0006851	0683	14957	577							
100		OBS	T0921	0729	35228	2758			14957	574							
		STD	1000	0687	3521	2762	0006364	0749	14954	593							
100		OBS	T1042	0662	35197	2765			14951	613							

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	INDICES	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	60460N	012176W		218	02	11	22	133	1965	NAS	23D	0589	06	21	2	2		X8	5	8		0061

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	S10	220	050	039	8		

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	0942	3530	2730	0007800	0000	14887								
133		OBS	0000	0942	35299	2730			14887								
		STD	0010	0944	3529	2729	0007934	0008	14889								
133		OBS	0010	0944	35288	2729			14889								
		STD	0020	0948	3529	2728	0008012	0016	14892								
133		OBS	0024	0949	35289	2728			14893								
		STD	0030	0948	3529	2729	0008026	0024	14894								
133		OBS	0049	0945	35296	2730			14896								
		STD	0050	0945	3530	2730	0007979	0040	14896								
		STD	0075	0948	3530	2729	0008059	0060	14901								
133		OBS	0098	0950	35300	2729			14906								
		STD	0100	0950	3530	2729	0008134	0080	14906								
		STD	0125	0949	3531	2730	0008135	0100	14910								
		STD	0150	0947	3531	2730	0008119	0121	14913								
133		OBS	T0196	0941	35319	2732			14919								
		STD	0200	0940	3532	2732	0008046	0161	14919								
		STD	0250	0929	3532	2734	0007937	0201	14923								
133		OBS	0297	0919	35328	2736			14927								
		STD	0300	0918	3533	2736	0007835	0241	14927								
133		OBS	T0397	0899	35318	2739			14936								
		STD	0400	0898	3532	2739	0007791	0319	14936								
133		OBS	0497	0884	35315	2741			14947								
		STD	0500	0884	3531	2741	0007824	0397	14947								
133		OBS	T0576	0878	35309	2741			14958								

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	° ′/10	° ′/10		10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	61101N	012402W		218	12	11	22	168	1965	NAS	22D	1536	15	12	3	6		X2	5	8		0062

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	525	163	050	039	8		

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	CODE
		STD	0000	0997	3533	2724	0008439	0000	14907	634							
	162	OBS	0000	0997	35332	2724			14907	634							
	162	OBS	0009	0997	35334	2724			14909	648							
		STD	0010	0997	3533	2724	0008448	0008	14909	645							
		STD	0020	0999	3533	2723	0008495	0017	14911	622							
	162	OBS	0023	0999	35334	2723			14912	619							
		STD	0030	0995	3532	2723	0008562	0025	14911	630							
	162	OBS	0045	0989	35309	2723			14911	647							
		STD	0050	0989	3531	2723	0008589	0043	14912	644							
		STD	0075	0986	3531	2723	0008618	0064	14915	634							
	162	OBS	0090	0984	35305	2724			14917	630							
		STD	0100	0982	3530	2724	0008652	0086	14918	633							
		STD	0125	0976	3530	2725	0008609	0107	14920	639							
		STD	0150	0969	3530	2726	0008549	0129	14921	645							
	162	OBS	T0175	0962	35296	2727			14923	651							
		STD	0200	0953	3530	2729	0008382	0171	14923	633							
		STD	0250	0935	3531	2733	0008115	0212	14925	610							
	162	OBS	0261	0931	35316	2733			14926	608							
		STD	0300	0917	3530	2734	0008025	0253	14927	619							
	162	OBS	T0347	0904	35294	2736			14929	623							
		STD	0400	0895	3530	2738	0007905	0332	14935	610							
	162	OBS	0436	0887	35298	2739			14938	607							
		STD	0500	0870	3529	2741	0007746	0411	14942	616							
	162	OBS	0527	0862	35283	2742			14943	620							
		STD	0600	0835	3525	2744	0007675	0488	14945	584							
	162	OBS	0622	0828	35246	2744			14946	579							
		STD	0700	0808	3524	2747	0007506	0564	14951	584							
	162	OBS	0718	0800	35236	2748			14951	585							
		STD	0800	0748	3521	2754	0006970	0636	14944	542							
	162	OBS	T0806	0743	35206	2754			14943	539							
	168	OBS	T0816	0735	35200	2755			14941	562							
		STD	0900	0660	3515	2761	0006250	0702	14925	565							
		STD	1000	0585	3510	2767	0005681	0762	14912	568							
	168	OBS	T1031	0564	35089	2769			14908	569							
		STD	1100	0525	3506	2771	0005269	0816	14903	584							
		STD	1200	0478	3503	2775	0004967	0868	14901	604							
	168	OBS	1253	0457	35011	2775			14901	613							
		STD	1300	0440	3500	2776	0004786	0916	14901	618							
		STD	1400	0414	3497	2777	0004760	0964	14907	633							
	168	OBS	T1415	0411	34968	2777			14908	636							
	168	OBS	T1488	0403	34951	2777			14917	653							

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	963	EV	61394N	013107W		21B	13	11	22	210	1965	NAS	21D	1207	13	10	7	4		X6	5	8		0063

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	S40	139	039	033	6		

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	SCC
		STD	0000	0932	3529	2731	0007709	0000	14883								
204		OBS	0000	0932	35290	2731			14883								
		STD	0010	0930	3528	2731	0007766	0008	14883								
204		OBS	0012	0929	35277	2731			14883								
		STD	0020	0931	3528	2730	0007832	0016	14885								
204		OBS	0029	0932	35277	2730			14887								
		STD	0030	0932	3528	2730	0007869	0023	14887								
		STD	0050	0932	3527	2730	0007956	0039	14891								
204		OBS	0058	0932	35268	2730			14892								
		STD	0075	0932	3527	2730	0008009	0059	14895								
		STD	0100	0932	3528	2730	0008032	0079	14899								
204		OBS	0115	0932	35276	2730			14901								
		STD	0125	0929	3528	2731	0008015	0099	14902								
		STD	0150	0921	3528	2732	0007933	0119	14903								
		STD	0200	0906	3528	2735	0007799	0159	14906								
204		OBS	0231	0898													
		STD	0250	0894	3528	2737	0007705	0197	14910								
		STD	0300	0883	3528	2738	0007625	0236	14914								
204		OBS	0346	0874	35282	2740			14918								
		STD	0400	0867	3527	2740	0007651	0312	14924								
204		OBS	T0466	0852	35255	2741			14928								
		STD	0500	0838	3525	2743	0007535	0388	14929								
204		OBS	0577	0806	35234	2747			14930								
		STD	0600	0797	3522	2747	0007302	0462	14930								
204		OBS	0693	0745	35187	2752			14925								
		STD	0700	0739	3518	2753	0006857	0533	14924								
		STD	0800	0656	3514	2761	0006102	0598	14907								
204		OBS	0805	0652	35140	2762			14906								
		STD	0900	0586	3510	2767	0005590	0656	14896								
204		OBS	T0924	0571	35085	2768			14893								
		STD	1000	0532	3507	2771	0005170	0710	14890								
204		OBS	T1027	0494	35040	2774			14878								
210		OBS	T1034	0482	35031	2774			14874								
		STD	1100	0456													
210		OBS	T1106	0454	34770	2757Q											
		STD	1200	0421													
210		OBS	1252	0406	34540	2744Q											
		STD	1300	0395													
210		OBS	T1325	0390	34610	2751W											

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 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	963	EV	62054N	013402W		218	23	11	23	011	1965	NAS	20D	1426	14	06	2	3		X				0064

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	520	152	050	033			

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁷	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	
		STD	0000	0936	3530	2732	0007669	0000	14884	633							
002		OBS	0000	0936	35304	2732			14884	633							
002		OBS	0009	0938	35301	2731			14887	641							
		STD	0010	0938	3530	2731	0007742	0008	14887	641							
		STD	0020	0937	3530	2731	0007754	0015	14888	640							
002		OBS	0024	0937	35301	2731			14889	640							
		STD	0030	0937	3530	2731	0007763	0023	14890	640							
002		OBS	0048	0937	35304	2731			14893	641							
		STD	0050	0937	3530	2731	0007791	0039	14893	641							
		STD	0075	0937	3530	2731	0007859	0058	14897	639							
002		OBS	0096	0937	35300	2731			14900	638							
		STD	0100	0937	3530	2731	0007930	0078	14901	638							
		STD	0125	0938	3530	2731	0007999	0098	14906	637							
		STD	0150	0939	3530	2731	0008062	0118	14910	635							
002		OBS	T0190	0941	35301	2731			14917	631							
		STD	0200	0940	3530	2731	0008164	0159	14919	628							
		STD	0250	0932	3531	2733	0008067	0199	14924	617							
002		OBS	0291	0923	35321	2735			14928	611							
		STD	0300	0920	3532	2736	0007926	0239	14928	610							
002		OBS	0390	0893	35301	2738			14932	606							
		STD	0400	0892	3530	2739	0007820	0318	14934	609							
006		OBS	0491	0877	35305	2741			14943	617							
		STD	0500	0875	3530	2741	0007753	0396	14944	612							
006		OBS	T0591	0851	35280	2743			14950	578							
		STD	0600	0848	3528	2744	0007661	0473	14950	575							
006		OBS	0694	0818	35262	2747			14954	570							
		STD	0700	0817	3527	2748	0007428	0548	14955	575							
006		OBS	T0795	0789	35305	2755			14960	624							
		STD	0800	0786	3530	2755	0006899	0620	14960	620							
		STD	0900	0713	3523	2760	0006453	0687	14947	564							
011		OBS	T0958	0669	35193	2763			14939	548							
		STD	1000	0641	3514	2763	0006192	0750	14934	559							
		STD	1100	0564	3504	2765	0005956	0811	14919	585							
		STD	1200	0468	3501	2774	0004980	0865	14896	612							
011		OBS	T1206	0462	35008	2775			14895	614							
		STD	1300	0358	3504	2788	0003479	0908	14867	639							
011		OBS	T1307	0347	35037	2789			14864	642							
011		OBS	T1380	0207	35012	2800			14816	680							

REFERENCE CTRY CODE	REFERENCE IO. NO.	SHIP CODE	LATITUDE ° 1/10	LONGITUDE ° 1/10	DRIFT IND.	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	963	EV	62296N	014038W		218	24	11	23	049	1965	NAS	19D	1536	15	06		3		X0		0		0065

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	S22	173	044	022	8		

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	0913	3531	2736	0007302	0000	14876								
042		OBS	0000	0913	35305	2736			14876								
		STD	0010	0913	3530	2735	0007397	0007	14877								
042		OBS	0010	0913	35295	2735			14877								
		STD	0020	0915	3530	2734	0007442	0015	14880								
042		OBS	0025	0916	35297	2734			14881								
		STD	0030	0916	3530	2734	0007477	0022	14882								
		STD	0050	0918	3530	2734	0007557	0037	14886								
042		OBS	0051	0918	35295	2734			14886								
		STD	0075	0917	3530	2734	0007589	0056	14889								
		STD	0100	0915	3530	2734	0007610	0075	14893								
042		OBS	0102	0915	35296	2734			14893								
		STD	0125	0915	3530	2735	0007658	0094	14897								
		STD	0150	0915	3530	2735	0007705	0113	14901								
		STD	0200	0914	3530	2735	0007793	0152	14909								
042		OBS	T0202	0914	35297	2735			14909								
		STD	0250	0907	3531	2737	0007689	0191	14915								
042		OBS	0297	0900	35322	2739			14920								
		STD	0300	0900	3532	2739	0007606	0229	14921								
		STD	0400	0882	3531	2741	0007594	0305	14930								
042		OBS	0409	0880	35305	2741			14931								
		STD	0500	0854	3528	2743	0007536	0381	14936								
042		OBS	0512	0851	35281	2744			14937								
		STD	0600	0830	3527	2746	0007449	0456	14943								
042		OBS	0615	0825	35268	2747			14944								
		STD	0700	0793	3525	2750	0007198	0529	14945								
042		OBS	0718	0784	35244	2751			14945								
		STD	0800	0736	3521	2755	0006786	0599	14939								
042		OBS	0821	0723	35201	2756			14938								
		STD	0900	0666	3519	2764	0006045	0663	14928								
042		OBS	0925	0649	35173	2765			14926								
049		OBS	T0941	0638	35163	2765			14924								
		STD	1000	0579	3511	2769	0005524	0721	14909								
		STD	1100	0496	3503	2772	0005097	0774	14891								
049		OBS	T1195	0437	34984	2776			14882								
		STD	1200	0436	3498	2776	0004752	0823	14882								
		STD	1300	0405	3496	2777	0004610	0870	14886								
		STD	1400	0375	3494	2779	0004463	0915	14890								
049		OBS	1409	0372	34939	2779			14890								
049		OBS	T1480	0230	35018	2798			14843								

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	INDCTR	10°	1°	MO	DAY	HR.1/10		CRUISE NO.	STATION NUMBER			DIR.	HGT	PER	SEA		TYPE	AMT		
31	963	EV	63001N	014355W		218	34	11	23	097	1965	NAS	18D	1792	18	04		2		X8	5	7		0066

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			
		04	S35	183	022	006	8		

MESSENGR TIME HR 1/10	CAST NO.	CARD TYPE	DEPTH (m)	T °C	S ‰	SIGMA-T	SPECIFIC VOLUME ANOMALY-x10⁵	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	S CODE
		STD	0000	0905	3530	2736	0007245	0000	14873	682							
090		OBS	0000	0905	35296	2736			14873	682							
090		OBS	0009	0905	35291	2736			14874	664							
		STD	0010	0905	3529	2736	0007314	0007	14874	663							
		STD	0020	0907	3529	2735	0007365	0015	14877	653							
090		OBS	0024	0908	35289	2735			14878	651							
		STD	0030	0907	3529	2735	0007390	0022	14878	652							
090		OBS	0049	0906	35289	2735			14881	653							
		STD	0050	0906	3529	2735	0007416	0037	14881	653							
		STD	0075	0907	3529	2735	0007508	0055	14886	649							
090		OBS	0098	0908	35284	2735			14890	647							
		STD	0100	0908	3528	2735	0007588	0074	14890	648							
		STD	0125	0908	3528	2735	0007635	0093	14894	656							
		STD	0150	0908	3528	2735	0007683	0113	14898	662							
090		OBS	T0194	0907	35284	2735			14905	664							
		STD	0200	0906	3528	2735	0007763	0151	14906	661							
		STD	0250	0895	3529	2737	0007654	0190	14910	643							
090		OBS	0293	0888	35292	2739			14915	634							
		STD	0300	0888	3529	2739	0007615	0228	14916	635							
090		OBS	T0386	0881	35299	2740			14927	636							
		STD	0400	0878	3530	2741	0007625	0304	14928	634							
090		OBS	0497	0860	35282	2742			14938	624							
		STD	0500	0860	3528	2742	0007646	0380	14938	624							
090		OBS	0592	0848	35281	2744			14949	624							
		STD	0600	0848	3528	2744	0007661	0457	14950	627							
090		OBS	0692	0834	35267	2745			14960	636							
		STD	0700	0832	3526	2745	0007740	0534	14960	634							
090		OBS	0793	0792	35226	2748			14960	597							
		STD	0800	0787	3522	2749	0007501	0610	14959	589							
090		OBS	T0894	0724	35184	2755			14950	521							
		STD	0900	0719	3518	2755	0006911	0682	14949	523							
		STD	1000	0643	3513	2762	0006295	0748	14935	555							
097		OBS	T1040	0615	35112	2764			14930	567							
		STD	1100	0570	3508	2767	0005748	0808	14922	583							
		STD	1200	0506	3503	2771	0005346	0864	14912	607							
097		OBS	T1280	0466	34997	2773			14909	624							
		STD	1300	0464	3499	2773	0005179	0917	14911	629							
		STD	1400	0443	3496	2773	0005219	0969	14919	650							
		STD	1500	0408	3495	2776	0004919	1019	14921	663							
097		OBS	1516	0400	34949	2777			14921	665							
097		OBS	T1725	0277	34996	2792			14904	665							
		STD	1750	0269	3500	2793	0002987	1118	14905	673							
097		OBS	T1798	0258	34995	2794			14908	692							

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