

WOCE RADIOCARBON IV: PACIFIC OCEAN RESULTS; P10, P13N, P14C, P18, P19 & S4P

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ABSTRACT. The World Ocean Circulation Experiment, carried out between 1990 and 1997, provided the most comprehensive oceanic survey of radiocarbon to date. Approximately 10,000 samples were collected in the Pacific Ocean by U.S. investigators for both conventional large volume β counting and small volume accelerator mass spectrometry analysis techniques. Results from six cruises are presented. The data quality is as good or better than previous large-scale surveys. The ^{14}C distribution for the entire WOCE Pacific data set is graphically described using mean vertical profiles and sections, and property-property plots.

INTRODUCTION

This is the fourth in a series of papers that have described the collection and analysis of Pacific Ocean radiocarbon samples resulting from the U.S. portion of the World Ocean Circulation Experiment (WOCE). Key (1996) gave a general overview of the Pacific ^{14}C program including a summary of all U.S. WOCE ^{14}C cruises. Key et al. (1996) presented accelerator mass spectrometry (AMS) results, and Stuiver et al. (1996) presented large volume results from sections P6, P16, P17, and P19 (LV only). Results using both techniques are listed here for sections P10, P13N, P14C, P18, P19 (AMS only), and S4P. Figure 1 shows the station locations (remaining figures are in Appendix 1). All of the sections are essentially meridional except for S4P, which is zonal, in the Southern Ocean, and part of a complete circumpolar section. Additional cruise details are available in Table 1 of Key (1996) and in Appendix 2. In addition to presenting data, we summarize some of the major features of the Pacific Ocean ^{14}C distribution using the entire WOCE dataset.

METHODS AND PRECISION

The sampling strategy and analytical precision for the ^{14}C program described in Key (1996), Key et al. (1996), and Stuiver et al. (1996) and are not repeated here. Since then, Elder et al. (1998) published a more detailed analysis of the uncertainties associated with the WOCE AMS technique. Their analysis was based on replicate results and included uncertainty due to sample processing as well as the various counting components. Summary results from that work are reproduced in Table 1. They found the total error was slightly larger than the expected error based only on counting statistics. The additional uncertainty was ascribed to sample processing. They also found a slight difference in the total error between samples that were stripped and counted at NOSAMS and those that were stripped elsewhere, then shipped to NOSAMS as gas aliquots for final processing and counting. Errors given in the Appendix 2 tables are the same as given in Key et al. (1996) and Stuiver et al. (1996). For AMS samples, the uncertainty for individual analyses is the counting precision reported by NOSAMS. For replicates, the uncertainty is the larger of the standard deviation of the individual runs, and the error weighted standard deviation of the mean of the individual runs. Retaining these error estimates can occasionally give relative information for problematic samples. Individual counting errors are given

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for the large volume samples. It is much more difficult to estimate total uncertainty for large-volume samples because the number of replicates is far too small to give statistically significant results. The total large volume error can be as small as the counting error (~2‰ for analysis in Stuiver's laboratory). There are, however, additional potential error sources in collection, extraction, and storage. Neither Elder et al. (1998) nor Key (1996) found any significant difference between the large volume and AMS techniques when comparing results on individual station profiles. For the combined WOCE Pacific Ocean data set, an uniform uncertainty of 4.5‰ is recommended.

Table 1 Summary results of replicate AMS analyses at NOSAMS (from Elder et al. 1998)

Sample Type	Number of analyses	Number of replicate sets	Degrees of freedom	Mean reported precision	Pooled error estimate	Sample processing error
Seawater DIC ^a	162	73	89	4.3	4.9	2.4
Seawater CO ₂ ^b	46	21	25	3.4	5.8	4.8

^aWater samples stripped at NOSAMS

^bGas samples supplied to NOSAMS by P Quay (University of Washington)

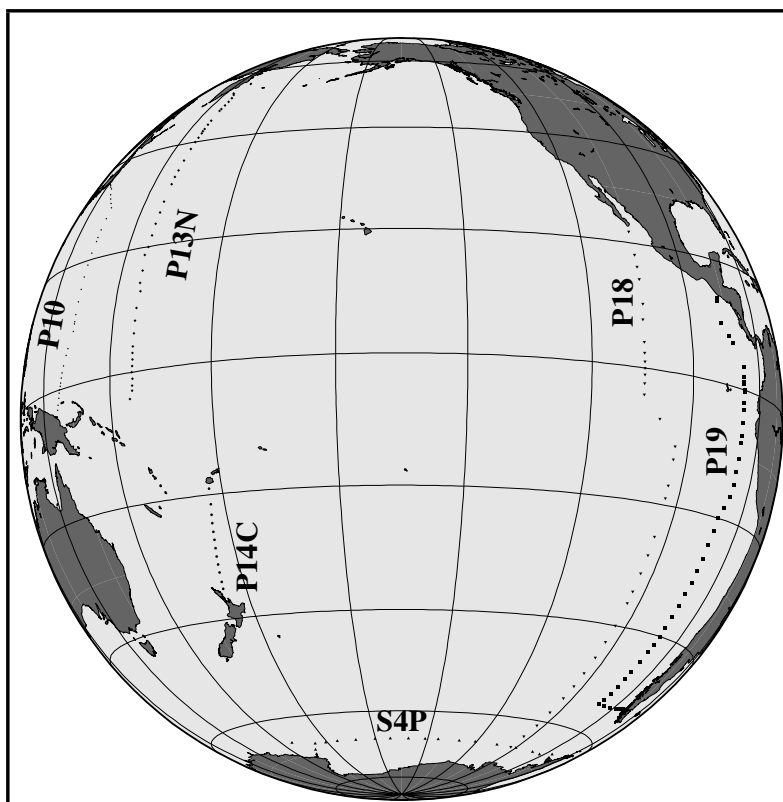


Figure 1 Station locations for the 6 WOCE radiocarbon sections reported. P10 aboard *R/V Thomas G. Thompson*, P14C and P19 aboard *R/V Knorr* were NSF cruises; P13N and P18 were NOAA cruises aboard the *R/V John Vickers* and *R/V Discoverer*, respectively; and S4P was a joint Russian/U.S. cruise aboard *R/V Akademik Ioffe*.

DISCUSSION

A complete description of the properties and distribution of ^{14}C in the Pacific Ocean is well beyond the scope of this paper and will be discussed elsewhere. Here we discuss *average* properties. The discussion is organized first by plot type rather than ocean regime. Inherent to the discussion is the assumption that the available data set is approximately uniformly distributed both spatially and with respect to property gradients. In other words, we assume that the averaging methods used result in an unbiased estimate of whatever quantity is estimated. Strictly speaking, this may not be true: features such as boundary currents are probably under represented; in the upper water column a seasonal bias may exist because most of the sampling was carried out other than in winter; and the eastern Pacific was more heavily sampled than the western Pacific. For most estimates the resulting bias is believed to be relatively unimportant, however, care should be exercised when comparing WOCE results to previous sampling programs (see Keller et al. 2001 for one example). Throughout the text, the term “standard error” (sometimes referred to as “standard deviation of the mean”) signifies the uncertainty associated with an estimated mean quantity, is calculated by dividing the standard deviation by the square root of the number of results, and is symbolized with σ_m .

Throughout the text depth and pressure are used synonymously. For WOCE data sets depth was calculated from measured pressure. For any given sample level, pressure is numerically larger than depth by approximately 2%. Blind substitution of the two parameters could lead to a small systematic bias, however, this difference is comparable to or less than the accuracy of the value, especially for the large volume samples.

PROFILES

The simplest and most traditional way to describe the Pacific Ocean ^{14}C distribution is with vertical profiles. Figure 2 shows three profiles representing the latitudinal zones:

- Southern Ocean (SO=green, span=0.2, n=2062) = Antarctic coast north to 45°S
- South Pacific basin (SB=red, span=0.1, n=3122) = 45°S to the Equator
- North Pacific basin (NB=black, span=0.1, n=3509) = Equator to ~55°N specifically excluding the area north of the Aleutian Islands.

For each profile, the continuous smooth line was derived using a one-dimensional loess fit (Cleveland and Devlin 1988; Cleveland and Grosse 1991; Chambers and Hastie 1991) to all of the data in the region. Loess is a local-regression technique. The span is the fraction of data used for each local regression. Span was increased for the Southern Ocean to derive a fit with smoothness comparable to the main basin fits. A Gaussian error distribution was assumed for each fit.

The small points and horizontal hash marks are the average and standard error derived by segregating the results into 100-m-depth bins. The standard errors for the deepest bins are substantially larger than for the rest of the water column due to the small number of results. The two techniques (loess and binning) produce identical results except for a very few points in the deepest waters. Since the error bars are $\pm 1 \sigma_m$ this level of difference is expected. The fact that the differences always occur in the deepest waters also reflects the bias that might be expected given what is known about the thermohaline circulation in the Pacific (for a recent discussion see Toggweiler and Key 2001). For all three profiles $\Delta^{14}\text{C}$ (Stuiver and Polach 1977; Stuiver 1980) is maximum at the surface and decreases with depth to a minimum at 2300–2800 m. In both the North and South Pacific basins, $\Delta^{14}\text{C}$ gradually increases with depth below the minimum zone. In the Southern Ocean (SO),

the minimum is reached around 2300 m, and from there to the bottom $\Delta^{14}\text{C}$ is extremely constant having an average of $-164.7 \pm 0.6\text{‰}$ ($n=360$; $z \geq 2300$ m).

The SO surface $\Delta^{14}\text{C}$ is significantly lower than either of the main basins. This reflects the strong vertical mixing and advection in that region. The average South Pacific basin (SB) surface value is slightly *higher* than for the North Pacific basin (NB). This result was unexpected since most atmospheric nuclear weapons testing was in the northern hemisphere. During the 1960s and 1970s, the northern hemisphere surface ocean and atmosphere were significantly higher than the southern hemisphere (see Key 2001 for a recent review and Östlund and Stuiver 1980 for GEOSECS data). The difference here is actually a bias caused by the choice of the southern boundary of the SB at 45°S . This conclusion is based on Figure 3, which shows the actual surface data plotted against the absolute value of the latitude using the same color scheme as Figure 2. If the SB surface water $\Delta^{14}\text{C}$ were 20‰ higher than the NB (Table 2), it would be easily visible, and that is not the case. The data included in Figure 3 were restricted to the surface 100 meters to be exactly comparable to the top bin in Figure 2. Limiting the data to the upper 25 m would not change the conclusion, but would reduce the number or “fliers” that fall below the general trend in Figure 3 and are clearly from below the mixed layer. If the $\Delta^{14}\text{C}$ is normalized to a constant salinity to minimize evaporation/precipitation differences, then the NB and SB data aggregate even closer than shown in Figure 3. Similar plots of salinity normalized TCO_2 are also symmetric about the equator for latitudes less than 45° , so the ^{14}C symmetry would be maintained if the values had been expressed in molar units rather than permil.

In Figure 2, $\Delta^{14}\text{C}$ decreases from south to north near the seafloor and in the minimum zone. This summary is correct, however, as with the surface water, the near bottom average is influenced by the selection of the SB southern boundary. Figure 4 shows the $\Delta^{14}\text{C}$ trends with latitude for the minimum (A) and near bottom (B) zones. For this figure the definition of “near bottom” was expanded to depths >4500 m to improve the statistics, however, the trend is essentially unchanged. For near bottom waters, there is a fair amount of scatter in the data, however, the trend with latitude shows no strong deviation from linearity ($R^2=0.79$; residual standard error of fit = 10.9‰). The least-squares fit indicates a gradient of 0.59‰ degree^{-1} , implying an average northward velocity for the bottom water of $4.8 \times 10^{-4}\text{m sec}^{-1}$. This calculation is greatly simplified, however, the linearity in Figure 4B implies that the complicating factors (principally particulate input) do not significantly change the result.

For the minimum zone waters (Figure 4A), $\Delta^{14}\text{C}$ decreases monotonically from south to north, but the gradient is not uniform. Based on other evidence we believe that the general long-term mean flow in the minimum zone (North Pacific Deep Water) is from north to south. In the absence of mixing, based on the data in Figure 4A, one would conclude the opposite. $\Delta^{14}\text{C}$ in Pacific deep waters must be significantly influenced by upwelling, downwelling, and mixing with younger (higher $\Delta^{14}\text{C}$) southern waters. In Figure 4, the minimum zone was defined in terms of a depth range. Had the definition been a potential or neutral density zone, the gradient with latitude south of $\sim 40^\circ\text{S}$ would change, however, the general picture would not. Although the signal is rather weak in this figure, it is noted that the very lowest $\Delta^{14}\text{C}$ values in the minimum zone occur at $30^\circ\text{--}40^\circ\text{N}$ rather than at the northern boundary (i.e. adjacent to the Aleutian Islands). Very close examination of the $\Delta^{14}\text{C}$ data in maps and sections shows that the extreme NB deep and abyssal waters are ventilated from the west adjacent to the island arc. This is contrary to what one might have expected from GEOSECS sections, however it supports results from detailed hydrographic studies (Warren and Owens 1988). The southward displacement of the minimum was first noted by Stuiver et al. (1983). The averages for the depth and latitude zones discussed are summarized in Table 2.

Table 2 Δ¹⁴C statistics for Pacific zones: WOCE data

	Surface 0–100 m			Minimum 2300–2500 m			Bottom >5000 m		
	Ave.	σ _m	n	Ave.	σ _m	n	Ave.	σ _m	n
SO (75°S–45°S)	–34	4	222	–167	2	41	–161	3	6
SB (45°S–Eq.)	96	1	341	–213	2	72	–169	2	52
NB (Eq.–55°N)	75	2	464	–239	1	45	–206	2	59

Table 3 shows the same summary statistics, for the GEOSECS data (Östlund and Stuiver 1980) which were collected in 1973–1974. Comparison shows identical results for bottom waters. If any bomb-produced Δ¹⁴C has been transported into Pacific bottom waters (as it must have been based on chlorofluorocarbon data) then the signal is totally washed out in this summary. In the minimum zone, significant change appears to have occurred, however, this is thought unlikely and we attribute the apparent change to bias in the GEOSECS data resulting from the limited sample size. The changes seen in surface waters between GEOSECS and WOCE is, however, real and reflects both incorporation of atmospheric bomb Δ¹⁴C into the surface ocean over time as well as transport of the bomb signal down into the thermocline. The change for the three latitude zones is (WOCE-GEOSECS): NB = –47 ± 7; SB = –15 ± 8; SO = –41 ± 24. ¹⁴C decay over the 20 years separating the expeditions is negligible. The fact that surface ocean values significantly decreased for each of the zones demonstrates that, for this time period, processes which incorporate surface ¹⁴C into the ocean interior dominated transfer of atmospheric bomb-produced Δ¹⁴C into the surface ocean. The fact that the NB decrease is significantly larger than the SB decrease could imply more active mixing processes, more stripping of surface ocean Δ¹⁴C into sinking particulate matter, or several other possible interpretations that are not addressed here.

Table 3 Δ¹⁴C statistics for Pacific zones: GEOSECS data

	Surface 0–100 m			Minimum 2300–2500 m			Bottom >5000 m		
	Ave.	σ _m	n	Ave.	σ _m	n	Ave.	σ _m	n
SO (75°S–45°S)	7	24	7	–158	2	4	–165	2	3
SB (45°S–Eq.)	111	8	24	–218	4	6	–168	2	15
NB (Eq.–55°N)	122	7	52	–246	2	9	–204	2	35

MEAN SECTIONS

Presentation and description of individual WOCE ¹⁴C sections is not done here. Figure 5 shows an average south-to-north section broken into upper (A) and lower (B) depth regions. The upper region is plotted against potential density (σ_θ) and covers the top 1500 decibars (dB) while the lower region is plotted against potential density relative to 3000 dB pressure (σ₃) and covers from 1500 dB to the bottom. The sections were prepared by first binning the data into the two depth zones, then gridding as if all the samples had been taken at the same longitude. A two dimensional loess function (A, n=5753, span = 0.02; B, n=2149, span=0.025) was used to grid the data. The loess gridding technique is not as common as the objective methods described by Roemmich (1983) or LeTraon (1990), but avoids numerical difficulties and produces a reliable smoothed estimate of the field. In each region of Figure 5, the colors and contour lines are redundant.

Most of the upper water column (Figure 5A) has been contaminated by the input of ^{14}C from atmospheric nuclear weapons testing in the 1960s (Broecker et al. 1985, 1995; Rubin and Key 2002). At the time of the GEOSECS measurements (1973–1974), this contamination resulted in near-surface waters always having the highest $\Delta^{14}\text{C}$ values (Östlund and Stuiver 1980). Twenty years later, a significant fraction of the bomb component has been transported below the surface by mixing and advection.

The $\Delta^{14}\text{C} = -100\text{‰}$ contour can be taken as the approximate penetration depth of the bomb component (Key 1998, 2001). Using this guideline, the bomb component has penetrated to somewhat greater density levels in the South Pacific than in the North Pacific. This “enhanced” penetration is due to the fact that deeper isopycnals outcrop in the south thus providing a direct ventilation pathway. The fact that the South Pacific is directly connected to the Southern Ocean circulation system is one of the important reasons for the asymmetry about the Equator. Close examination (plus a bit of mental averaging) shows that for $\sigma_{\theta} \leq 25.6$ $\Delta^{14}\text{C}$ values along isopycnals are approximately the same for the northern and southern subtropical gyres (latitudes 15 to 35). Below that, $\Delta^{14}\text{C}$ is lower in the northern basin for all isopycnals down to at least $\sigma_{\theta}=27.2$.

Very prominent in the meridional section (Figure 5A) is the fact that $\Delta^{14}\text{C}$ levels are significantly lower near the Equator than at mid latitudes. The difference is due to upwelling of deeper waters with lower bomb contamination near the Equator. This process was described in detail by Toggweiler et al. (1991) based on GEOSECS data and has not yet been reinvestigated in detail with the WOCE data, however, a cursory investigation has not revealed any major discrepancies.

The average west to east (zonal) ^{14}C distribution in the thermocline is more uniform than the latitudinal variation. Figure 6 shows average thermocline sections for the subtropical northern (A, $n=541$; span=0.15) and southern (B, $n=850$; span=0.15) basins. Since U.S. WOCE included only one zonal section in the Pacific (P6) these figures were prepared in a slightly different manner than those in Figure 5. The data for each section was limited to latitudes between 15 and 35, depths between 50 and 1000 m and potential density greater than $\sigma_{\theta}=25.0$. These cuts were made to reduce the impacts of the sample distribution and seasonal effects on local near surface density. A significantly larger span value was used for the loess function during gridding to help bridge the data gap between sections. These sections are useful to demonstrate the zonal uniformity of $\Delta^{14}\text{C}$ relative to the meridional distribution and to show that the average zonal distribution for the upper thermocline is bowl shaped. Otherwise, extreme care must be taken in any further interpretation. For example, the $\sigma_{\theta}=26.0$ surface outcrops in the northwest Pacific and across the South Pacific; $\Delta^{14}\text{C}$ values on the $\sigma_{\theta}=26.0$ surface range from approximately 100‰ to 150‰ in the NB and from approximately 110‰ to 170‰ in the SB. Additionally, on many density surfaces in the NB thermocline $\Delta^{14}\text{C}$ isopleths trend from northeast to southwest. In this case, the averaging process totally hides some features and distorts others.

In the deep meridional density section (Figure 5B) the most prominent feature is the south to north $\Delta^{14}\text{C}$ decrease discussed with respect to Figure 4. The zonal uniformity of $\Delta^{14}\text{C}$ in the SO and the southward displacement of the absolute minimum ($\sim 40^{\circ}\text{N}$; $\sigma_3=41.35$) from the northern boundary are also very evident. The northward flow of Circumpolar Deep Water is implied by the shape of the contours which are deeper than $\sigma_3=41.45$ and north of $\sim 40^{\circ}\text{S}$. The origin of the partially pinched “blob” of relatively low activity water between latitudes 40°S and 30°S and $41.25 < \sigma_3 < 41.47$ has not yet been investigated, but the northern boundary is approximately co-located with major topographic features (Sala Y Gomez Ridge, Easter Fracture Zone), which span most of the basin at that latitude.

PROPERTY-PROPERTY VARIATIONS

Property-property plots are one of the oldest and most common visual methods to investigate the distribution of a parameter relative to another. Generally when the data, or part of the data in a property-property plot forms a straight line, the linear region is interpreted as mixing line between two end members. The size of the WOCE Pacific $\Delta^{14}\text{C}$ data set is sufficiently large that a single plot for each parameter pair using all the data would mask significant features, particularly in deep and bottom waters. To avoid this a variation of the standard property-property plot was developed. The data set is segregated into the three previously defined basins (Southern Ocean = SO = south of 45°S ; Southern Basin = SB = 45°S to Equator; Northern Basin = NB = north of Equator) and further divided into 4 depth zones (Surface = 0–500 m; Intermediate = 500–1500 m; Deep = 1500–2600 m; Bottom = >2600 m). The depth zone division was arbitrary except that the deep limit of the Deep zone was chosen to include the $\Delta^{14}\text{C}$ minimum.

In each of Figures 7–14 the data plots are grouped into 3 rows and 2 columns. The top-left subplot is the standard property-property plot and includes all of the data with the four depth zones indicated by color: Surface = black, Intermediate = blue, Deep = red, and Bottom = green. Moving down the first column, the data shown in the second and third rows is segregated by depth zone. Moving from the first to the second column along any of the rows, the data is segregated by basin. The first two rows are scaled the same, but in the third row—deep and bottom waters—both the x and y scales are significantly expanded in order to demonstrate whatever variability exists in the two plotted properties. In each of the subdivisions the basin is identified by labels in the light tan title bar and depth zone by the label in the light blue-green title bar. In each of the subplots in the second column, south is always to the left and north to the right. As in the top-left subplot, data point color always indicates depth zone. ^{14}C is always plotted on the y axis, and the same two y scales are used in all of the property-property figures (except for Figure 12, where ^{14}C age in kilo years is substituted for $\Delta^{14}\text{C}$).

At first, these figures can be a bit difficult to absorb, however, they can contain a lot of information. When examining the figures, look up and/or left to get a summary picture and right and/or down to see the detail. Change in any depth zone from south to north is obtained by scanning the small subplots in any row of the second column from left to right. For example, if one examines the upper half of the bottom row from Figure 7 ($\Delta^{14}\text{C}$ vs. potential temperature for the Deep water zone), the subplot in the left column shows the distribution to have a shape similar to the number “7”. Moving right to the second column, one sees that the top of the “7” is made up solely of water from the SO, while the lower part of the “7” is composed of waters from both the SB and NB. Scanning from left to right across the subplots in the second column, the mass of points moves from the upper and left portions of the plot region to the lower right. That is, NB Deep water is warmer and older (lower $\Delta^{14}\text{C}$) than SB Deep water, which is in turn warmer and older than SO Deep water. The SO Deep water subplot indicates a relatively large range in potential temperature compared to a rather narrow range of $\Delta^{14}\text{C}$. The same is true for the SO Bottom water. These two subplots echo information that was also evident for these waters as shown earlier in Figure 2 (green depth profile) and Figure 5B (southern end of section). Comparing the Deep water to the Bottom water (upper and lower portion of the bottom row), one can see from the first column that the property relationship is similar for the two depth zones, but there is significantly more scatter (range) in Deep water than in Bottom water. Details of the similarities and differences are magnified in the second column subplots. The scale increase for Deep and Bottom water was necessary to see any of the property details in those depth zones. Unfortunately, the scale change precludes easy vertical comparison through the water column. To accomplish this, visual reference back to the first row of summary plots is necessary.

Figures are shown for potential temperature (Figure 7), salinity (Figure 8), nitrate (Figure 9), total inorganic carbon (Figure 10), CFC-11 partial pressure (Figure 11), ^{14}C age vs. apparent oxygen utilization (Figure 12), silicate (Figure 13), and potential alkalinity (Figure 14). The first three were included for completeness and historical reasons and are not discussed further. Each of the remaining plots has significance to a specific research question and is briefly discussed below.

$\Delta^{14}\text{C}$ vs. Total Inorganic Carbon (Figure 10)

Most oceanic ^{14}C exists as part of the dissolved inorganic carbon pool. It is not surprising, therefore, that these two parameters show significant correlation. The very large depth range over which a near-linear correlation exists is unusual. This is one case a linear relationship cannot be interpreted as mixing between two end members. This fact is best demonstrated by the subplots for combined intermediate water (B1-lower) and SB Intermediate water (B2-lower center). Both show different slopes for data above and below the property extreme (TCO_2 maximum ~ 2400 ; $\Delta^{14}\text{C}$ minimum ~ -230) point. Moving from south to north in Deep and Bottom waters (C2, left to right) the TCO_2 increase and $\Delta^{14}\text{C}$ decrease are evident. Toggweiler and Samuels (1993) have discussed in detail the implications of the North Pacific–Antarctic $\Delta^{14}\text{C}$ difference relative to the study of global thermohaline circulation and upwelling. Examination of the deep and bottom water subplots (C1 and C2) shows a distinct curvature in the relationship. This downward curvature is what would be expected from two end member mixing combined with ^{14}C decay. The degree of curvature is decreased by the dissolution of carbonate particulate matter. For years, numerous authors have attempted to use this relationship to study deep and abyssal water movement in the deep Indian and Pacific or to study carbonate dissolution (Bien et al. 1965; Craig 1969, 1971; Suess and Goldberg 1971, etc.) and in various modeling studies (e.g. Fiadeiro 1982; Toggweiler et al. 1989). These studies were always hampered by a severe lack of data. Data scarcity is no longer the limiting factor and these investigations will be resumed.

$\Delta^{14}\text{C}$ vs. pCFC-11 (Figure 11)

Over the past decade, chlorofluorocarbons have become the most widely used transient tracer for the investigation of thermocline ventilation processes (e.g. Fine 1993; Warner et al. 1996). Other important applications include separation of natural and anthropogenic CO_2 (Gruber et al. 1996; Sabine et al. 1999), separation of natural and bomb-produced $\Delta^{14}\text{C}$ (Leboucher et al. 1999) and formation rates and flow paths for newly formed bottom waters (Schlosser et al. 1991; Orsi et al. 1999; Smetthie and Fine 2001). ^{14}C , and estimates of bomb-produced ^{14}C have been used for similar purposes. Tsunogai et al. (1995), Sonnerup et al. (1999), and Ortiz et al. (2000) used $\Delta^{14}\text{C}$ either directly or indirectly to investigate North Pacific thermocline ventilation. Revelle and Suess (1957), Nydal (1968), Nydal and Gislefoss (1996), Broecker and Peng (1974), Broecker et al. (1980) and many others have used ^{14}C or bomb-produced ^{14}C to investigate air-sea exchange and as a proxy for anthropogenic CO_2 . Östlund and Rooth (1990), Schlosser et al. (1994) and others have used ^{14}C as a tracer to study bottom-water formation and spreading. Given the common applications and that the atmosphere is the source for both, it is not surprising that $\Delta^{14}\text{C}$ and CFC-11 show significant correlation in spite of the fact that the atmospheric time histories for the two tracers are very different (Stuiver et al. 1998; Walker et al. 2000) and the air-sea equilibration times are very different. In the ocean the correlation is dominated by bomb-produced $\Delta^{14}\text{C}$.

In Figure 11, the partial pressure of CFC-11 is plotted rather than concentration to minimize the influence of temperature (chlorofluorocarbon solubility is highly temperature dependent; Warner et al. 1988). One of the more interesting features is the segregation into two distinct data groupings seen in the SO upper-water column (A2 left and B2 left-upper and lower). The data in the upper grouping

(A2 left) have a reasonable linear correlation with a slope of $\sim 40\%/ \text{pmol}$. (note unit change here) and are all from waters between 56°S and 45°S . The lower grouping (south of 56°S) is less linear, has more scatter, and has a slope of $\sim 10\%/ \text{pmol}$. The separation latitude (56°S) is the approximate location of the Antarctic Convergence. Shallow water south of the convergence is generally called Antarctic Surface Water and is additionally distinguishable by having elevated silicate concentration. Between $\sim 56^\circ\text{S}$ and $\sim 45^\circ\text{S}$ is the Subantarctic Zone, which is bounded on the north by the Subtropical Convergence. The Subantarctic Zone is the region in which Antarctic Intermediate Water is formed. The fact that the $\Delta^{14}\text{C}$ –CFC-11 slope is significantly higher in the Subantarctic Zone than in the Antarctic Zone implies a much longer residence time for waters in the former. The distinct separation between the two water masses remains clearly evident if estimated bomb-produced ^{14}C is substituted for measured $\Delta^{14}\text{C}$ or if CFC-11 concentration is substituted for pCFC-11. To our knowledge, this is the first time that this feature has been noted. If these data can be used to derive reasonably precise residence times for circumpolar surface waters, the results should prove valuable constraints on numerical ocean models and could significantly influence methods recently used to estimate oceanic anthropogenic CO_2 (e.g. Gruber et al. 1998; Sabine et al. 1999). It is worth noting that, if total inorganic carbon is plotted against CFC-11 for these same waters, the Antarctic Zone data fall above the Subantarctic Zone data—that is, the relative position of the two data groups is reversed. For this property pair, upwelling of deep water having elevated total CO_2 in the Antarctic Zone easily dominates atmospheric input of the anthropogenic signal.

In subplot C2 in the SO, both deep and bottom water have a few samples with non-zero pCFC-11 values. These samples have increasing $\Delta^{14}\text{C}$ with increasing pCFC-11 although the signal is rather weak due to the small number of results. Almost all of these samples were collected on section S4P when the ship approached the Antarctic slope and are indicative of bottom water formation in the Ross Sea vicinity. The penetration of bomb-produced $\Delta^{14}\text{C}$ has been described for the deep and abyssal waters of the North Atlantic (Östlund and Rooth 1990) and for bottom waters in the Weddell Sea (Schlosser et al. 1991, 1994), but this is the first reasonably conclusive evidence for deep penetration anywhere in the Pacific. Orsi et al. (1999) recently reviewed Antarctic Bottom Water production using chlorofluorocarbons as one of the primary tracers.

^{14}C Age vs. Apparent Oxygen Utilization (Figure 12)

Apparent oxygen utilization (AOU) is the difference between measured oxygen concentration of a sample and the saturation concentration that sample would have had at the ocean surface assuming no temperature change or mixing. It is an estimate of the oxygen used in various biological processes. For this figure $\Delta^{14}\text{C}$ values have been converted to approximate ^{14}C age using Eq. 1. These transformations help eliminate the temperature dependence of oxygen solubility and allow a crude, but direct, estimate of the oxygen utilization rate (OUR) from the plots. Negative ^{14}C age indicates bomb ^{14}C contamination and $\text{AOU} < 0$ indicates supersaturation at the ocean surface. Neither are of particular interest here. The general trend of all data (A1) shows the expected increase in AOU with increasing age. The upper ocean processes are too complex for this discussion. Here we note only that for any given ^{14}C age, northern upper water column samples tend to have significantly higher AOU than southern and that the SO source water data are consistent with previous comments regarding CFC-11 and residence times for different surface waters.

$$^{14}\text{C age} = -8033 \log\left(1 + \frac{\Delta^{14}\text{C}}{1000}\right) \quad (1)$$

Broecker et al. (1991) demonstrated the application of ^{14}C decay to AOU for the deep Atlantic Ocean where the circulation is more complicated than in the deep and abyssal Pacific. Here we make only the most simple interpretation. If for the deep and abyssal Pacific one assumes a single water source (Circumpolar Deep Water), that ^{14}C changes only by decay and that OUR is constant then ^{14}C age should plot as a linear function of AOU. Subplots C1 and C2 show that these approximations are at least reasonably met for the entire deep Pacific except for N.B. Deep Water (C2 right-upper). The regression line shown in each plot (Eq. 2; $n=1187$; $r^2=0.78$; residual standard error = 119) was calculated using all data deeper than 1500 m and having $\text{AOU} < 200 \mu\text{M kg}^{-1}$ (i.e. excluding NB deep water). The regression slope corresponds to an OUR of $0.093 \mu\text{M kg}^{-1} \text{ yr}^{-1}$, which agrees with previous estimates. Clearly, the NB Deep Water data do not fit the trend found elsewhere. Rather, AOU continues to increase while the ^{14}C age remains relatively constant. One can imagine various scenarios for such a relationship, however the most likely is that ^{14}C decay is approximately balanced by input via dissolution of sinking particulate carbonate.

$$^{14}\text{C age (years)} = -68 \pm 27 + 10.72 \pm 0.16 \cdot \text{AOU}(\text{micromole/kg}) \quad (2)$$

$\Delta^{14}\text{C}$ vs. Silicate (Figure 13)

Broecker et al. (1995) reported a method using GEOSECS data to separate natural and bomb-produced $\Delta^{14}\text{C}$ in the ocean based on the strong linear correlation they found between natural $\Delta^{14}\text{C}$ and silicate concentration for the global ocean excluding high latitude (particularly high southern latitude) waters. The silicate method was a significant improvement on an earlier technique (Broecker et al. 1985) because it gave an estimate of the shape of the natural $\Delta^{14}\text{C}$ profile with depth, in waters contaminated by bomb-produced $\Delta^{14}\text{C}$. They based natural surface water values on pre-bomb measurements. They also noted that in high southern latitude waters that the correlation held only for waters with silicate concentrations less than $\sim 90 \mu\text{mol kg}^{-1}$. They used measured tritium concentration to determine the depth of bomb $\Delta^{14}\text{C}$ penetration. The regression they derived is given in Eq. 3 and reproduced in each Figure 13 subplot. With this method, for measurements in the SB and NB Surface and Intermediate Waters, the vertical distance above the regression line is assumed to be the bomb-produced $\Delta^{14}\text{C}$ component. For SO waters, the same would hold for samples in which the silicate was less than $90 \mu\text{mol kg}^{-1}$. They estimated the uncertainty in the estimated natural $\Delta^{14}\text{C}$ and bomb-produced $\Delta^{14}\text{C}$ to be approximately 10%.

$$\text{Natural } \Delta^{14}\text{C} = -70 - 1 \cdot \text{Silicate} \quad (3)$$

In general, this relationship was very robust for the GEOSECS data. Close examination does show, however, that in the Pacific for waters having only natural $\Delta^{14}\text{C}$, the GEOSECS data actually have the shape of a backward check mark. That is, waters above the $\Delta^{14}\text{C}$ minimum–silicate maximum have a different slope than waters below (Rubin and Key 2002). As the new WOCE data set became available discrepancies in the silicate relationship have been more clearly identified. A potential solution is briefly mentioned in the next section. Subplot A1 demonstrates that the silicate regression does pass through the mass of data from lower intermediate and deeper depths. The lack of fit is amplified in the subplots C1 and C2 particularly for SB Deep Water (recall that the regression was already known to not fit SO waters for silicate > 90 ; e.g. C2 left upper and lower).

The other really interesting feature in Figure 13 is that the NB Surface Water data falls into two distinct groupings (B2 right upper). For the samples which have silicate concentration greater than $20 \mu\text{mol/kg}$ all of the points in the lower group are from latitudes south of $\sim 20^\circ\text{N}$ while the upper group are from north of that latitude. The northern data grouping form a remarkably straight line

(latitude 20°N – 50°N ; depth $\leq 500\text{m}$; silicate $\geq 20 \mu\text{mol/kg}$; $n=642$; $r^2=0.92$) reminiscent of two end-member mixing. Further investigation shows the data to be consistent with isopycnal mixing between intermediate (and/or mode) waters forming in the Sea of Okhotsk and perhaps to a lesser extent in the Gulf of Alaska (high $\Delta^{14}\text{C}$ low silicate) with equatorial water masses (low $\Delta^{14}\text{C}$ high silicate). Clearly, the data are recording the invasion of bomb-produced $\Delta^{14}\text{C}$ into the thermocline of the main North Pacific gyre. Detailed comparison of estimated bomb-produced $\Delta^{14}\text{C}$ with CFC-11 on density surfaces in the thermocline supports this interpretation.

$\Delta^{14}\text{C}$ vs. Potential Alkalinity (Figure 14)

Potential alkalinity (Palk) was first defined by Brewer et al. (1975) in an attempt to account for changes in titration alkalinity of a water parcel with time due to proton transfer from redox reactions. Their definition included fluxes due to both nitrate and phosphate reactions. Effectively, potential alkalinity is titration alkalinity which has been corrected for the influence of biologically induced changes. Since the phosphate chemistry is not completely understood and is a small effect, the definition used here is simplified to Eq. 4 where TA is the measured titration alkalinity and NO_3^- is the measured nitrate concentration.

$$\text{Palk}_{35} = (\text{TA} + \text{NO}_3^-) \cdot 35 / \text{Salinity} \quad (4)$$

Rubin and Key (2002) suggest that potential alkalinity is a better covariable than silicate to separate bomb-produced and natural $\Delta^{14}\text{C}$. Like the silicate method, the potential alkalinity method was derived using the global GEOSECS data. The regression they derived is given in Eq. 5 and reproduced in each Figure 14 subplot. The benefits of this method were that it could be used at all latitudes, the data from all depths more closely approximated a single straight line, and the function generated reasonable estimates of pre-bomb surface water concentrations. The primary weak point was that alkalinity is measured with ^{14}C much less frequently than silicate. One additional benefit for WOCE era measurements was the existence of a certified reference material for alkalinity measurements (Dickson et al. 2001a, 2001b) while none exists for nutrient measurements. Both the Palk and the silicate separation methods are essentially empirical. In each case the strong correlation probably exists because the oceanic distribution of the input parameters is primarily controlled by large scale thermocline circulation with a secondary influence of vertical particulate flux and dissolution.

$$\text{Natural } \Delta^{14}\text{C} = -59.0 - 0.962(\text{Palk} - 2320) \quad (5)$$

With respect to bomb-produced $\Delta^{14}\text{C}$, interpretation of data in Figure 14 is exactly analogous to Figure 13. That is, the vertical separation of a datum above the regression line is the bomb contribution. Comparison of the C1 subplots from the two figures clearly demonstrates the improvement in fit by using Palk rather than silicate. The latitudinal separation of the bomb component by latitude into two distinct groupings for NB Surface Water discussed above is replicated (although somewhat less distinctly) in this figure (B2 upper right). The fact that SO waters for all depth ranges are fit by the regression is evident in subplot C2 (left upper and lower). Work is currently underway to complete this analysis for the WOCE data including calculation of bomb $\Delta^{14}\text{C}$ inventories.

CONCLUSIONS

The recently completed WOCE Pacific Ocean ^{14}C data set provides the first three-dimensional description for this important tracer of ocean processes. Here we have provided not only a listing of

the data, but an initial, very general picture of ^{14}C properties in the Pacific. Numerous new discoveries are briefly mentioned and will be addressed fully in future publications. All of the ^{14}C data from the U.S. portion of the Pacific WOCE survey are currently available on the internet at http://whpo.ucsd.edu/data/tables/onetime/1tim_pac.htm. In the future all data will be transferred for permanent archiving at the National Ocean Data Center. Gridded versions of this data set are available through the Global Ocean Data Analysis Program web site (<http://cdiac.esd.ornl.gov/oceans/glodap/index.html> under "Data Products"). In the near future a merged ascii version of the Pacific data will be available from this site as well.

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REFERENCES

- Bien GS, Rakestraw NW, Suess HE. 1965. Radiocarbon in the Pacific and Indian Oceans and its relation to deep water movements. *Limnol. Oceanogr.* 10 (Supplement):R25–R37.
- Brewer PG, Wong GTF, Bacon MP, Spencer DW. 1975. An oceanic calcium problem? *Earth Planet. Sci. Lett.* 26: 81–7.
- Broecker WS, Peng T-H. 1974. Gas exchange rates between air and sea. *Tellus* 26:21–35.
- Broecker WS, Peng T-H, Takahashi T. 1980. A strategy for the use of bomb-produced radiocarbon as a tracer for the transport of fossil fuel CO_2 into the deep-sea source regions. *Earth Planet. Sci. Lett.* 49:463–8.
- Broecker WS, Peng T-H, Östlund G, Stuiver M. 1985. The distribution of bomb radiocarbon in the ocean. *J. Geophysical Research* 90(C4):6953–70.
- Broecker WS, Blanton S, Smethie WM Jr, Östlund G. 1991. Radiocarbon decay and oxygen utilization in the deep Atlantic Ocean. *Global Biogeochemical Cycles.* 5(1):87–117.
- Broecker WS, Sutherland S, Smethie W, Peng T-H, Östlund G. 1995. Oceanic radiocarbon: separation of the natural and bomb components. *Global Biogeochemical Cycles* 9(2):263–88.
- Broecker WS, Peacock S, Walker S, Weiss R, Fahrbach E, Schroeder M, Mikolajewicz U, Heinze C, Key R, Peng T-H, Rubin S. 1998. How much deep water is formed in the Southern Ocean? *J. Geophys. Res.*, 103(C8):15,833–44.
- Chambers JM, Hastie TJ. 1991. *Statistical Models in S.* p 309–76.
- Cleveland WS, Devlin SJ. 1988. Locally-weighted regression: an approach to regression analysis by local fitting. *J. Am. Statist. Assoc.* 83:596–610.
- Cleveland WS, Grosse E. 1991. Computational methods for local regression. *Statistics and Computing* 1.
- Craig, H. 1969. Abyssal carbon and radiocarbon in the Pacific. *J. Geophys. Res.* 74(23):5491–506.
- Craig, H. 1971. Son of abyssal carbon. *J. Geophys. Res.* 76(21):5133–9.
- Dickson AG, Anderson GC, Afghan JD. 2001. Reference materials for oceanic CO_2 analysis: 1. Preparation, distribution, and use. *Mar. Chem.* Submitted
- Dickson AG, Afghan JD, Anderson GC. 2001. Reference materials for oceanic CO_2 analysis: 2. A method for the certification of total alkalinity. *Mar. Chem.* Submitted.
- Elder KL, McNichol AP, Gagnon AR. 1998. Reproducibility of seawater, inorganic and organic carbon ^{14}C results at NOSAMS. *Radiocarbon* 40(1):223–30.
- Fiadeiro ME. 1982. Three-dimensional modeling of tracers in the deep Pacific Ocean. II, Radiocarbon and the circulation. *J. Mar. Res.* 40:537–50.
- Fine RA. 1993. Circulation of Antarctic intermediate water in the South Indian Ocean. *Deep-Sea Res.* 40(10): 2021–42.
- Gruber N. 1998. Anthropogenic CO_2 in the Atlantic Ocean. *Global. Biogeochem. Cycles* 10:809–37.

- Gruber N, Sarmiento JL, Stocker TF. 1996. An improved method for detecting anthropogenic CO₂ in the oceans. *Global Biogeochemical Cycles* 10:809–37.
- Guilderson TP, Caldeira K, Duffy PB. 2000. Radiocarbon as a diagnostic tracer in ocean and carbon cycle modeling. *Global Biogeochemical Cycles* 14(3):887–902.
- Keller K, Slater RD, Bender M, Key RM. 2001. Decadal scale trends in North Pacific nutrient and oxygen concentrations: Biological or physical explanation. *Deep-Sea Research*. In press.
- Key RM. 1996. 1996 WOCE Pacific radiocarbon program. *Radiocarbon* 38(2):415–23.
- Key RM. 1998. Radiocarbon in the North Pacific: what we have learned since GEOSECS. Invited talk. Seventh Annual PICES Meeting, Fairbanks, Alaska. October 1998.
- Key RM. 2001. Ocean process tracers: radiocarbon. In: Steele J, Thorpe S, Turekian K, editors. *Encyclopedia of Ocean Sciences*. London: Academic Press, Ltd. 2338–2353.
- Key RM, Quay PD, Jones GA, McNichol AP, von Reden KF, Schneider RJ. 1996. WOCE Radiocarbon I: Pacific Ocean Results; P6, P16 & P17. *Radiocarbon* 38(3):425–518.
- Rubin S., Key RM. 2002. Separating natural and bomb-produced radiocarbon in the ocean: the potential alkalinity method. *Global Biogeochem. Cycles*. In press.
- Leboucher V, Orr J, Jean-Baptiste P, Arnold M, Monfray P, Tisnérat-Laborde N, Poisson A, Duplessy J-C. 1999. Oceanic radiocarbon between Antarctica and South Africa along WOCE section I6 at 30°E. *Radiocarbon* 41(1):51–73.
- Le Traon PY. 1990. A method for optimal analysis of fields with spatially variable mean. *J. Geophys. Res.* 95:13,543–7.
- Nydal R. 1968. Further investigations on the transfer of radiocarbon in nature. *J. Geophys. Res.* 73(12):3617–35.
- Nydal R, Gislefoss JS. 1996. Further application of bomb ¹⁴C as a tracer in the atmosphere and ocean. *Radiocarbon* 38(3): 389–406.
- Orsi AH, Johnson GC, Bullister JL. 1999. Circulation, mixing, and production of Antarctic Bottom Water. *Prog. Oceanography* 43:55–109.
- Ortiz JD, Mix AC, Wheeler P, Key RM. 2000. An estimate of the anthropogenic offset of oceanic δ¹³C_{DIC} based on the ventilation of the California Current at 42°N. *Global Biogeochem. Cycles* 14(3):917–30.
- Östlund HG, Rooth CGH. 1990. The North Atlantic tritium and radiocarbon transients 1972–1983. *J. Geophys. Res.* 95(C11): 20,147–65.
- Östlund HG, Stuiver M. 1980. GEOSECS Pacific radiocarbon. *Radiocarbon* 22(1):25–53.
- Peng T-H, Key RM, Östlund HG. 1998. Temporal variations of bomb radiocarbon inventory in the Pacific Ocean. *Marine Chem.* 60:3–14.
- Roemmich D. 1983. Optimal estimation of hydrographic station data and derived fields. *J. Phys. Oceanography* 13:1544–9.
- Sabine CL, Key RM, Johnson KM, Millero FJ, Poisson A, Sarmiento JL, Wallace DWR, Winn CD. 1999. Anthropogenic CO₂ inventory of the Indian Ocean. *Global Biogeochem. Cycles* 13(1):179–98.
- Schlösser P, Bullister JL, Bayer R. 1991. Studies of deep water formation and circulation in the Weddell Sea using natural and anthropogenic tracers. *Mar. Chem.* 35: 97–122.
- Schlösser P, Kromer B, Weppernig R, Loosli HH, Bayer R, Bonani G, Suter M. 1994. The distribution of ¹⁴C and ³⁹Ar in the Weddell Sea. *J. Geophys. Res.* 99(C5): 10,275–87.
- Smethie WM Jr, Fine RA. 2001. Rates of North Atlantic Deep Water formation calculated from chlorofluorocarbon inventories. *Deep-Sea Res.* 48:189–215.
- Sonnerup RE, Quay PD, Bullister JL. 1999. Thermocline ventilation and oxygen utilization rates in the subtropical North Pacific based on CFC distributions during WOCE. *Deep-Sea Res.* 46:777–805.
- Stuiver M. 1980. Workshop on ¹⁴C data reporting. *Radiocarbon* 22(3):964–966.
- Stuiver M, Polach H. 1977. Discussion: reporting of ¹⁴C data. *Radiocarbon* 19(3):355–363.
- Stuiver M, Quay PD, Östlund HG. 1983. Abyssal water carbon-14 distribution and the age of the World Ocean. *Science* 219: 849–51.
- Stuiver M, Östlund G, Key RM, Reimer PJ. 1996. Large volume WOCE radiocarbon sampling in the Pacific Ocean. *Radiocarbon* 38(2):519–61.
- Stuiver M, Reimer PJ, Braziunas TF. 1998. High-precision radiocarbon age calibration for terrestrial and marine samples. *Radiocarbon* 40(3):1127–51.
- Suess HE, Goldberg E. 1971. Comments on paper by H. Craig, “Abyssal carbon and radiocarbon in the Pacific”. *J. Geophys. Res.* 76(21):5131–2.
- Toggweiler JR, Key RM. 2001. Thermohaline circulation. In: Steele J, Thorpe S, Turekian K, editors. *Encyclopedia of ocean sciences*. London: Academic Press, Ltd. 2941–2947.
- Toggweiler JR, Samuels B. 1993. New radiocarbon constraints on the upwelling of abyssal water to the ocean's surface. In: Heimann M, editor. *The global carbon cycle*. NATO ASI Series. Volume 115. Berlin & Heidelberg: Springer-Verlag. p 333–66.
- Toggweiler JR, Dixon K, Bryan K. 1989. Simulations of radiocarbon in a coarse-resolution World Ocean model 1. Steady state prebomb distributions. *J. Geophys. Res.* 94(C6):8217–42.
- Toggweiler JR, Dixon K, Broecker WS. 1991. The Peru upwelling and the ventilation of the South Pacific thermocline. *J. Geophysical Research* 96(C11): 20,467–97.
- Tsunogai S, Watanabe S, Honda M, Aramaki T. 1995. North Pacific Intermediate Water studied chiefly with

- radiocarbon. *J. Oceanography* 51:519–36.
- von Reden KF, Peden JC, Schneider RJ, Bellino M, Donoghue J, Elder KL, Gagnon AR, Long P, McNichol AP, Morin T, Stuart D, Hayes JM, Key RM. 1999. High-precision measurements of ^{14}C as a circulation tracer in the Pacific, Indian, and Southern Oceans with accelerator mass spectrometry. In: Shepard K, editor. *American Institute of Physics, conference proceedings series, 8th International Conference on Heavy Ion Accelerator Technology*. Woodbury, New York. p 410–21.
- Walker SJ, Weiss RF, Salameh P. 2000. Reconstructed histories of the annual mean atmospheric mole fractions for the halo carbons CFC-11, CFC-12, CFC-113 and carbon tetrachloride. *J. Geophys. Res.* 105(C6): 14,285–96.
- Warner MJ, Weiss RF. 1988. Solubilities of chlorofluorocarbons 11 and 12 in water and seawater. *Deep-Sea Res.* 32:1485–97.
- Warner MJ, Bullister JL, Wisegarver DP, Gammon RH, Weiss RF. 1996. Basin-wide distributions of chlorofluorocarbons CFC-11 and CFC-12 in the North Pacific 1985–1989. *J. Geophys. Res.* 101(C9):20525–42.
- Warren BA, Owens WB. 1988. Deep currents in the central Subarctic Pacific Ocean. *J. Phys. Ocean.* 18:529–51.

**APPENDIX 1:
Figures 2–14**

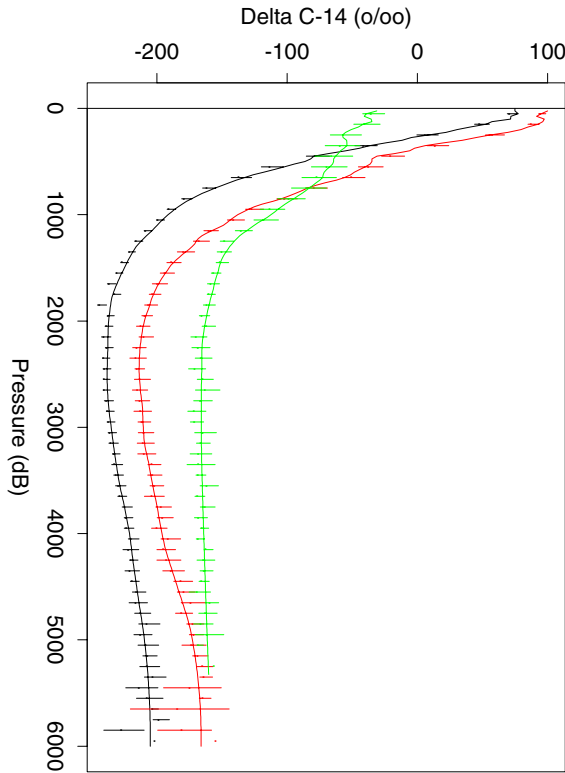


Figure 2 Mean $\Delta^{14}\text{C}$ profiles for the main Pacific zones (green = Southern Ocean; red = South Pacific Basin; black = North Pacific Basin) based on U.S. WOCE data set. See text for derivation of curves and error bars.

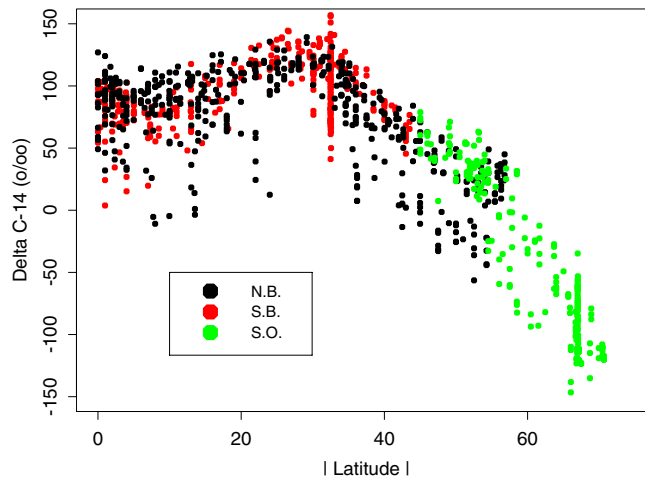


Figure 3 Surface (0–100 m) Pacific $\Delta^{14}\text{C}$ as a function of the absolute value of latitude. The color code and division of data is the same as in Figure 2 and Table 2. There appears to be no statistically significant difference between the NB and the SB over the latitude range common to both. The points that fall below the main trend simply indicate that the zone defined here as *surface* (0–100 m) sometimes extends into the upper edge of the thermocline.

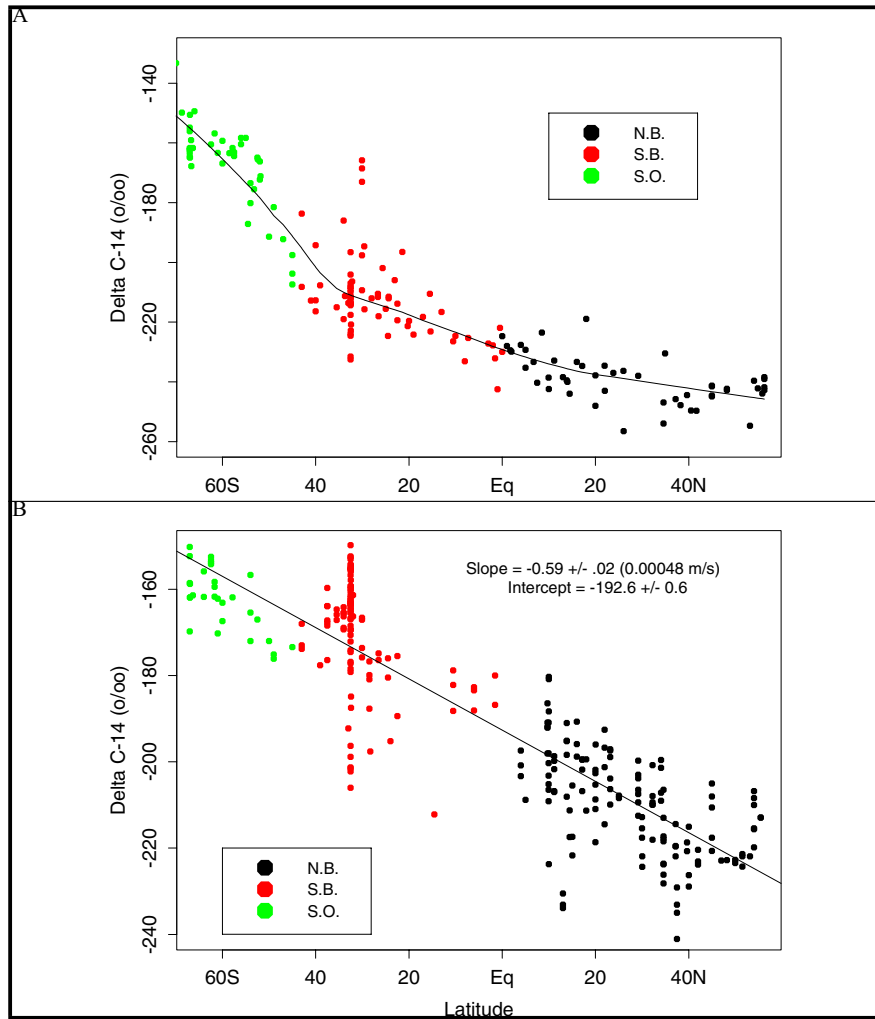


Figure 4 Distribution of radiocarbon with latitude for the minimum (A) zone in the Pacific here defined to be 2300–2500 m and (B) for the near bottom zone (depth >4500 m).

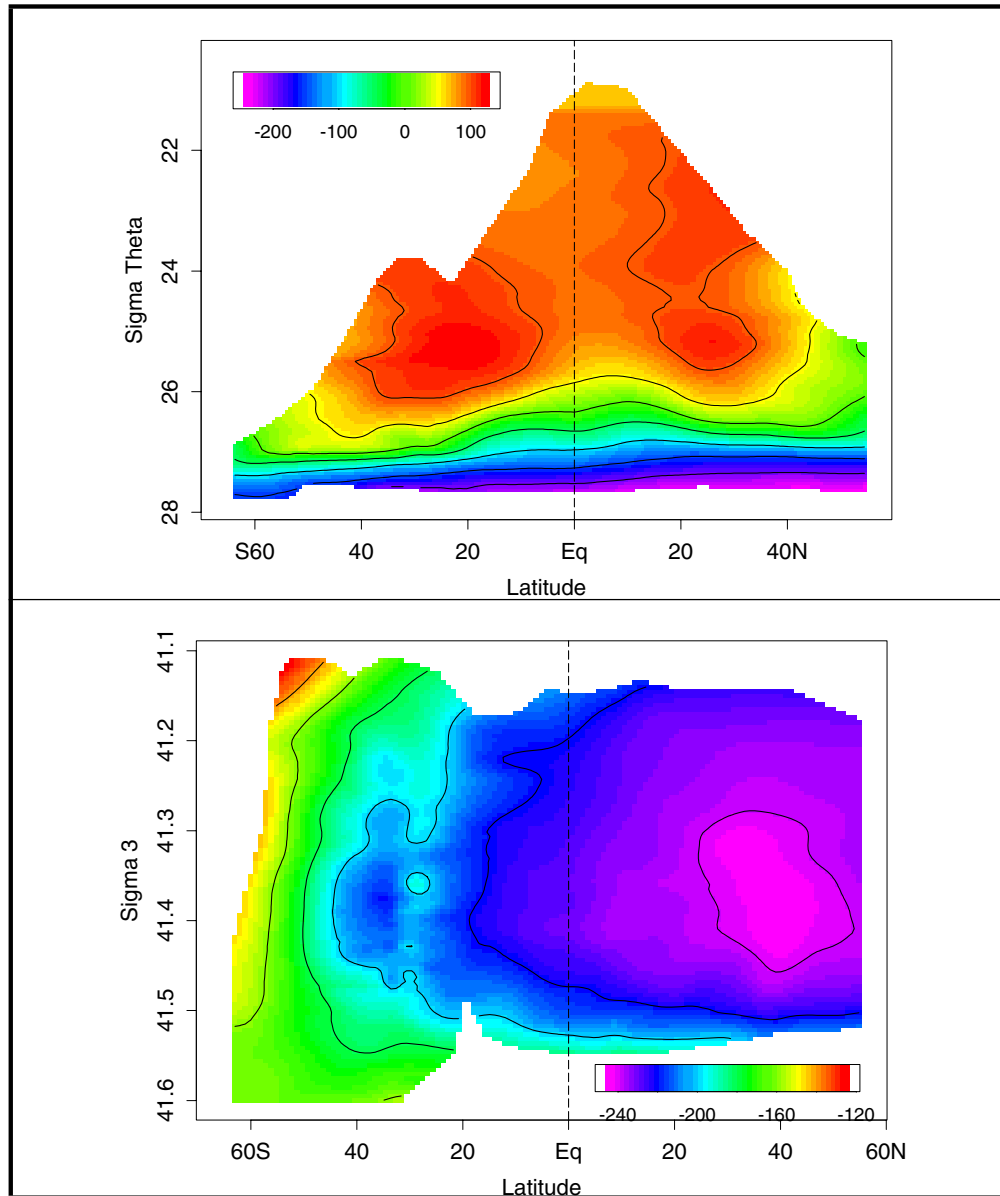


Figure 5 Mean zonal $\Delta^{14}\text{C}$ section for the Pacific. (A) includes the upper 1550 m and (B) from 1500 m to the sea floor. The contour interval is 50‰ in (A) and 20‰ in (B). Colors and contour lines carry redundant information.

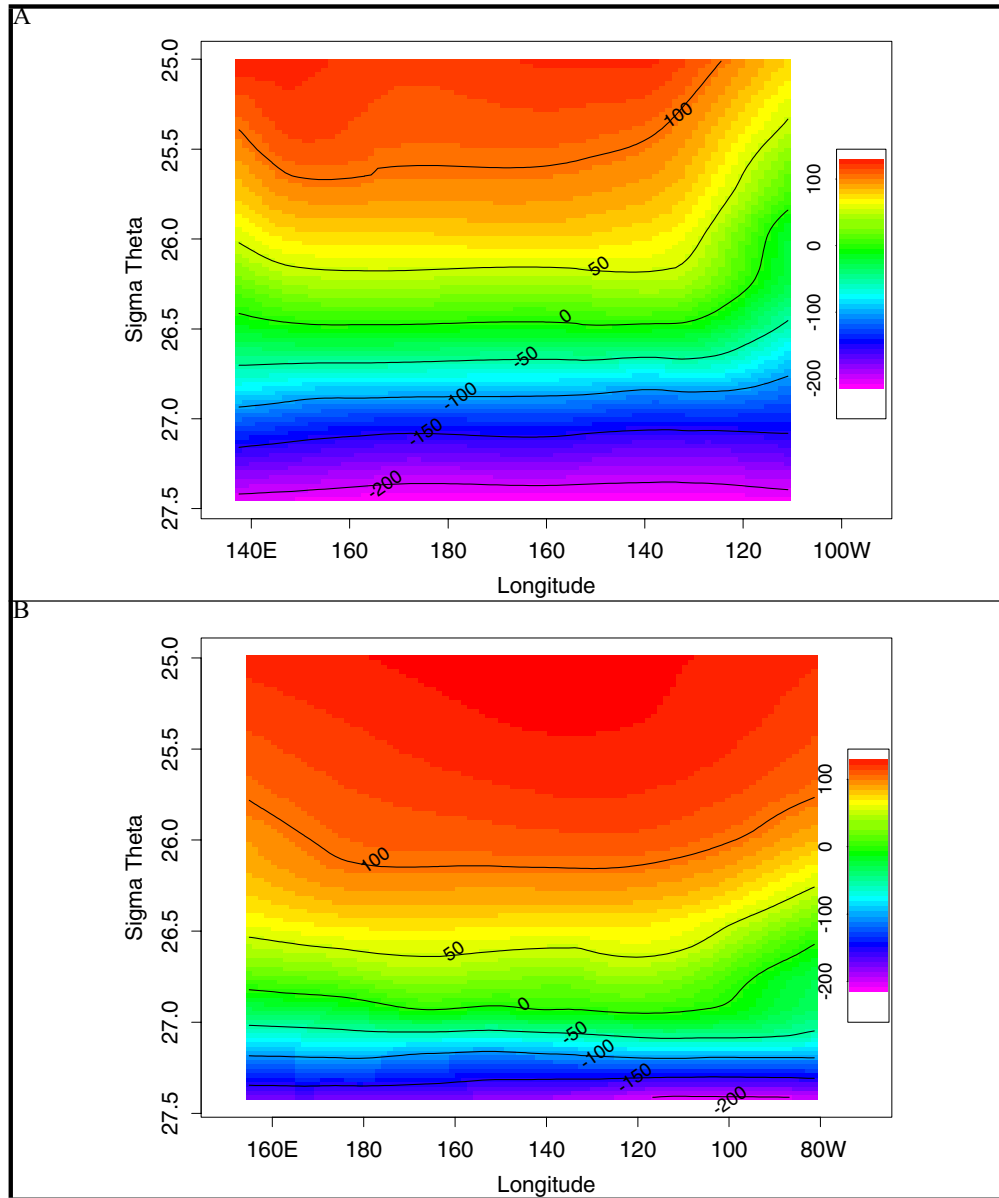


Figure 6 Mean west-to-east sections of radiocarbon in the northern (A) and southern (B) subtropical gyre (latitudes 15–35). Data were restricted to depths between 50 and 1000 m and potential density greater than 25.0. The color scale and contour lines are the same for both sections.

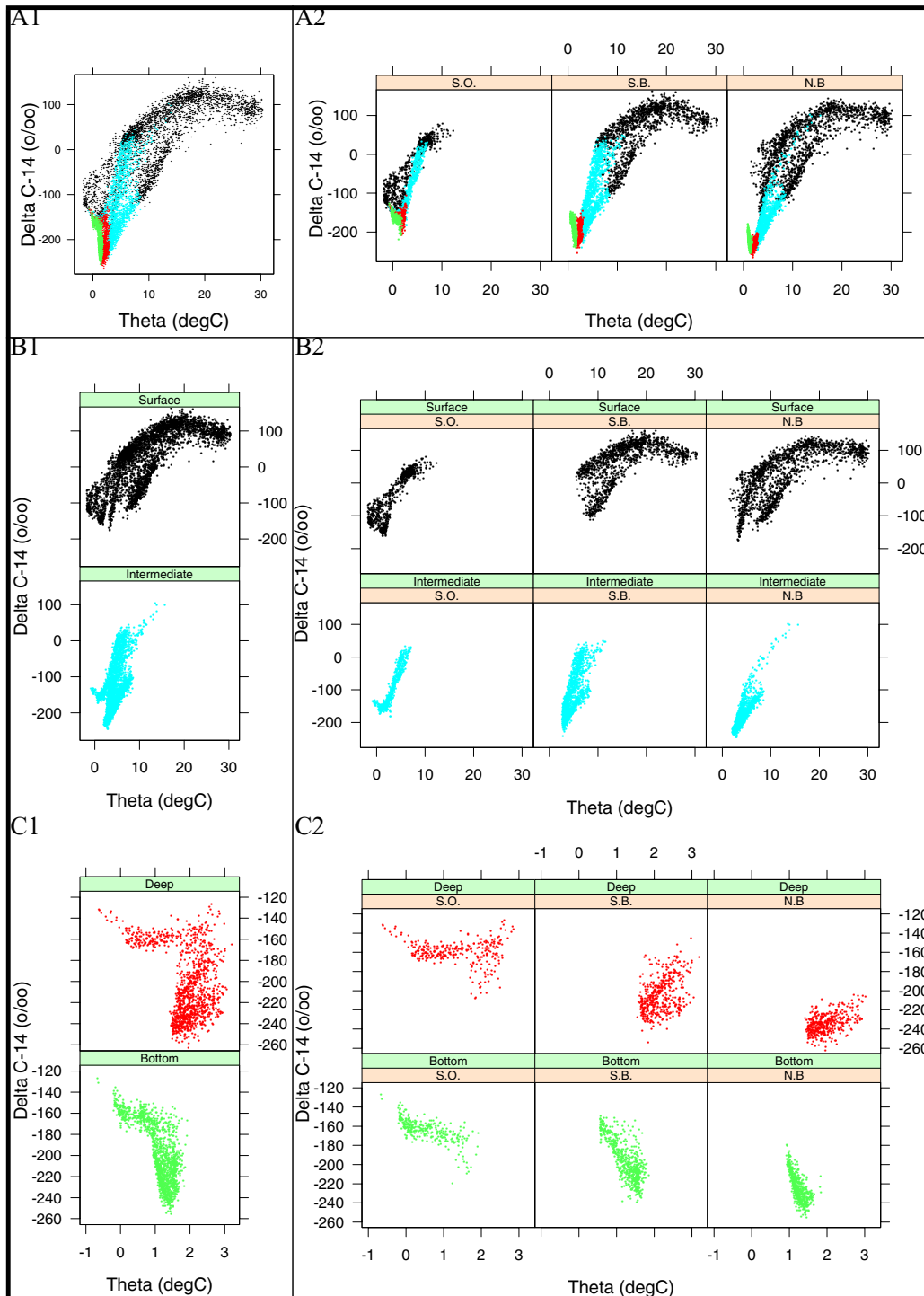


Figure 7 $\Delta^{14}\text{C}$ vs. potential temperature. Color indicates depth zone: Surface (0–500, black), intermediate (500–1500, blue), deep (1500–2600, red), and bottom (>2600, green). Region division is from Table 2.

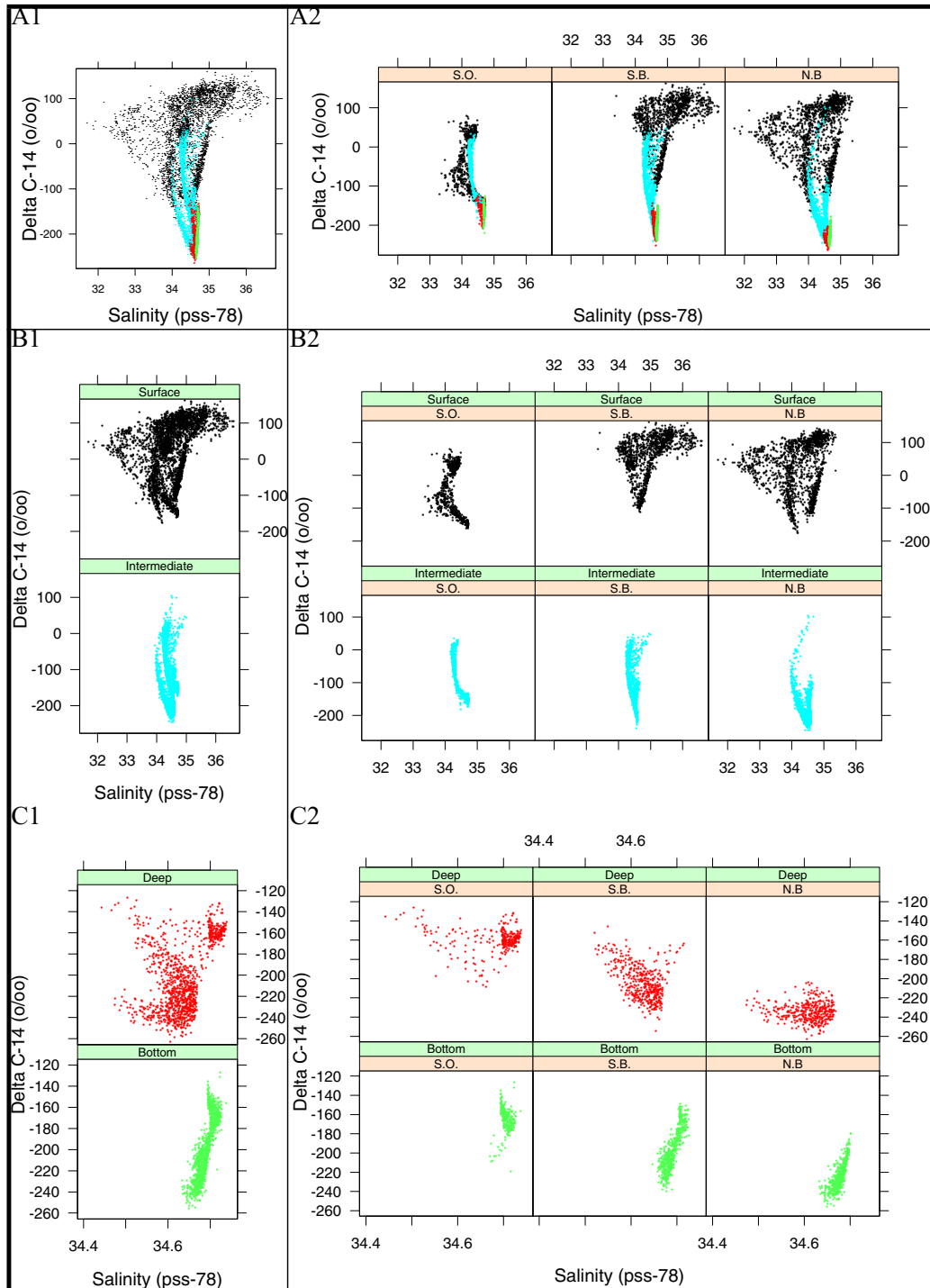


Figure 8 $\Delta^{14}\text{C}$ vs. salinity (relative to the practical salinity scale of 1978). See Figure 7 caption.

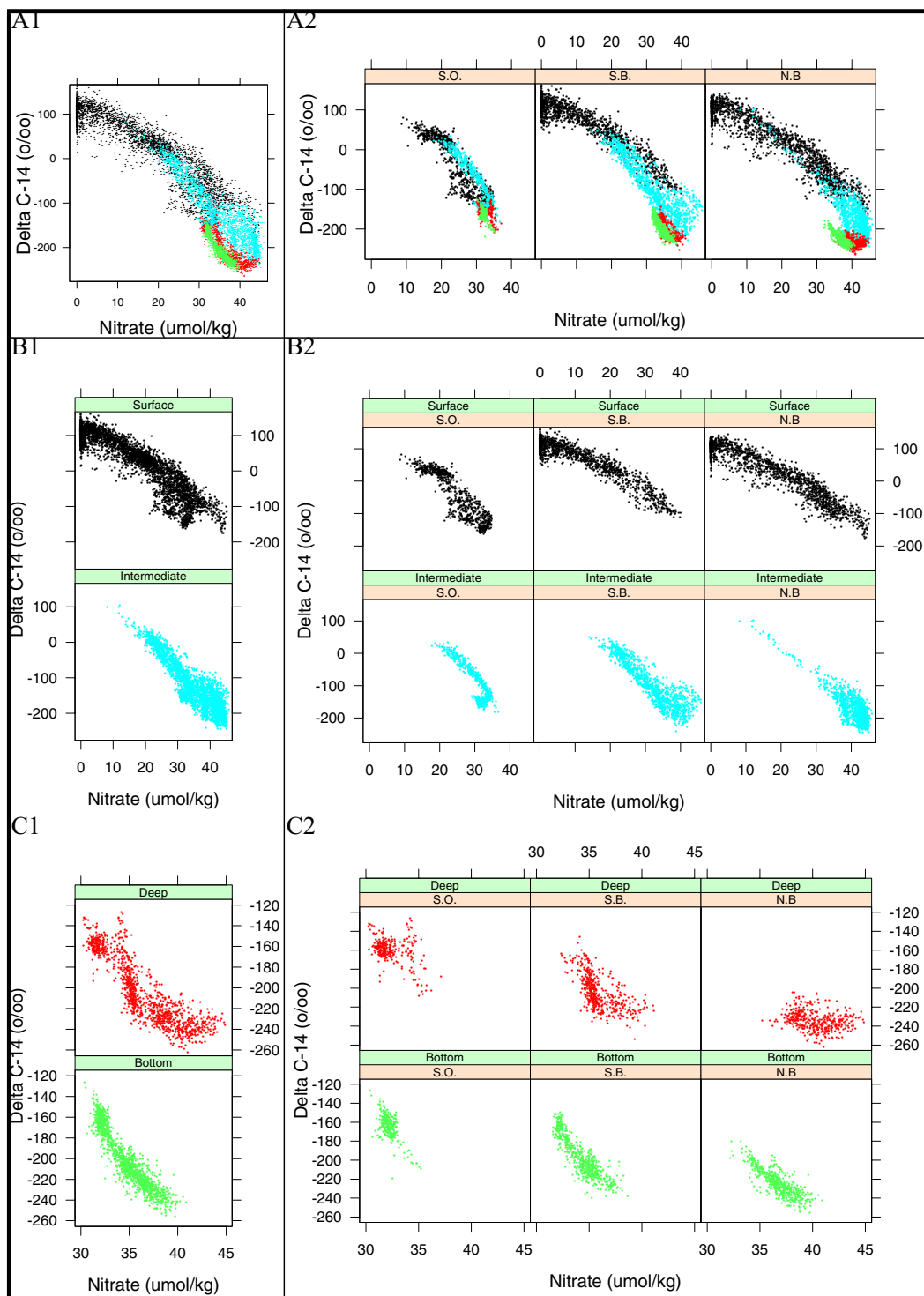


Figure 9 $\Delta^{14}\text{C}$ vs. nitrate. See Figure 7 caption.

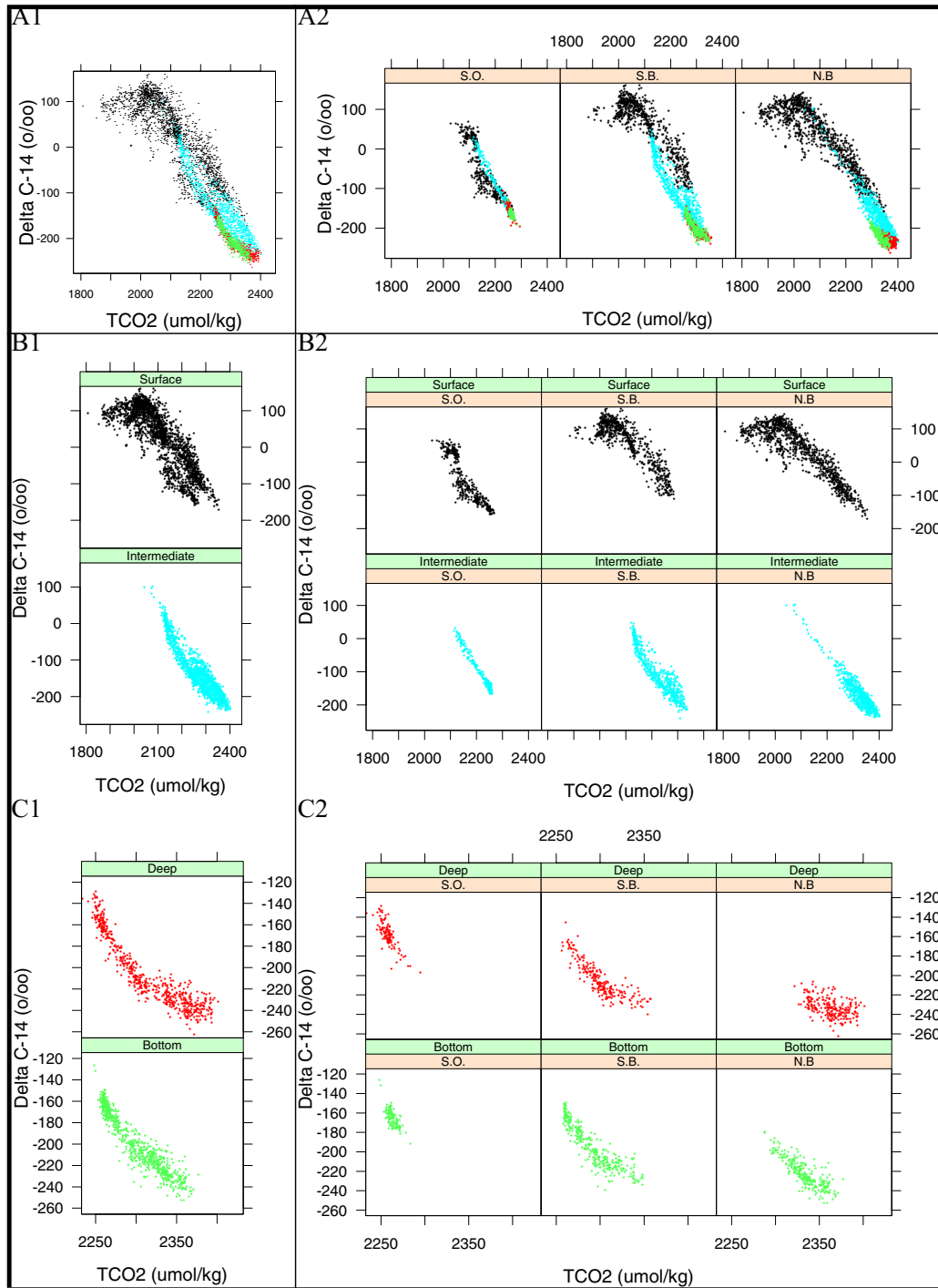


Figure 10 $\Delta^{14}\text{C}$ vs. total inorganic carbon. See Figure 7 caption.

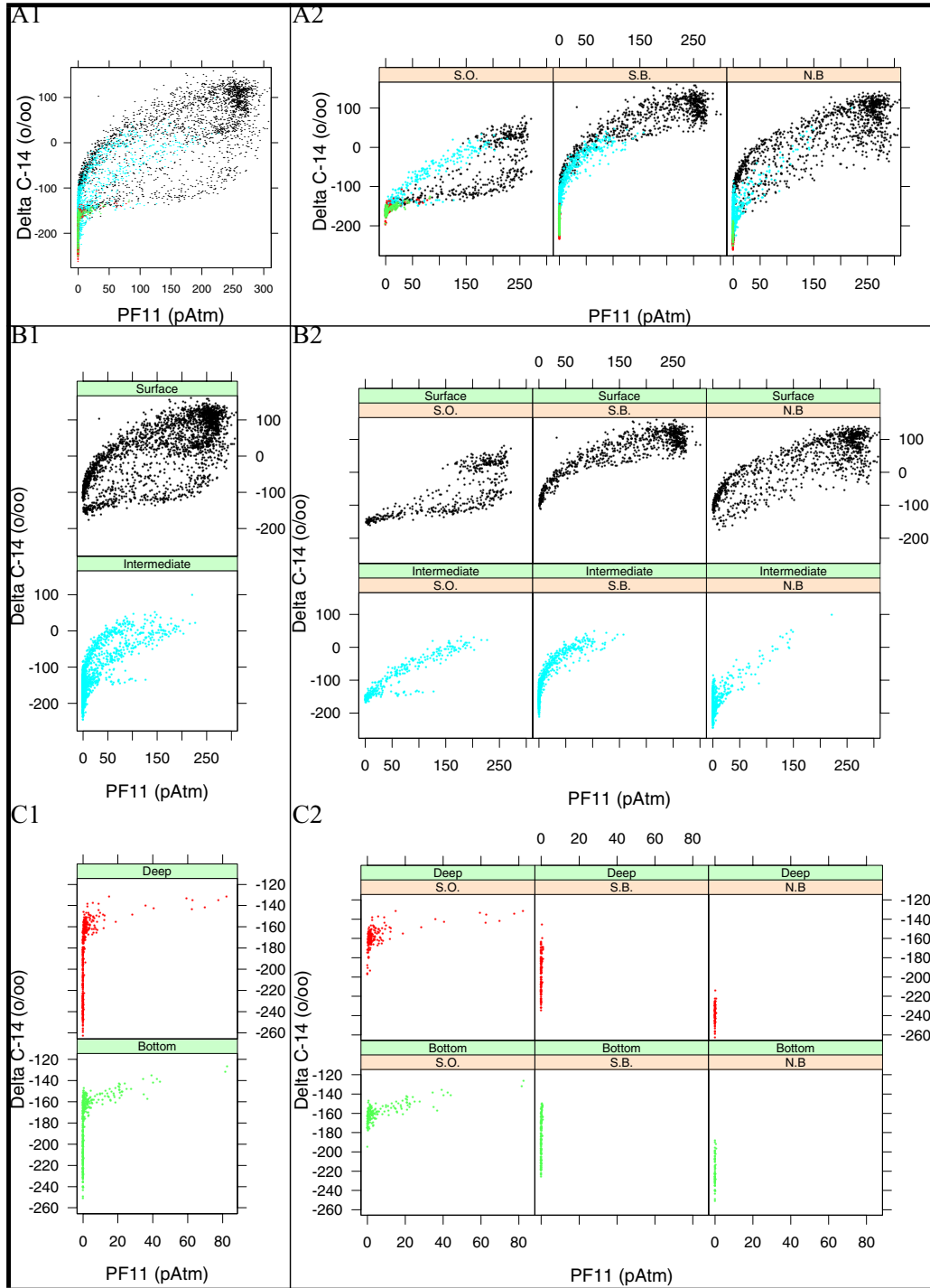


Figure 11 $\Delta^{14}\text{C}$ vs. pFCF-11. See Figure 7 caption.

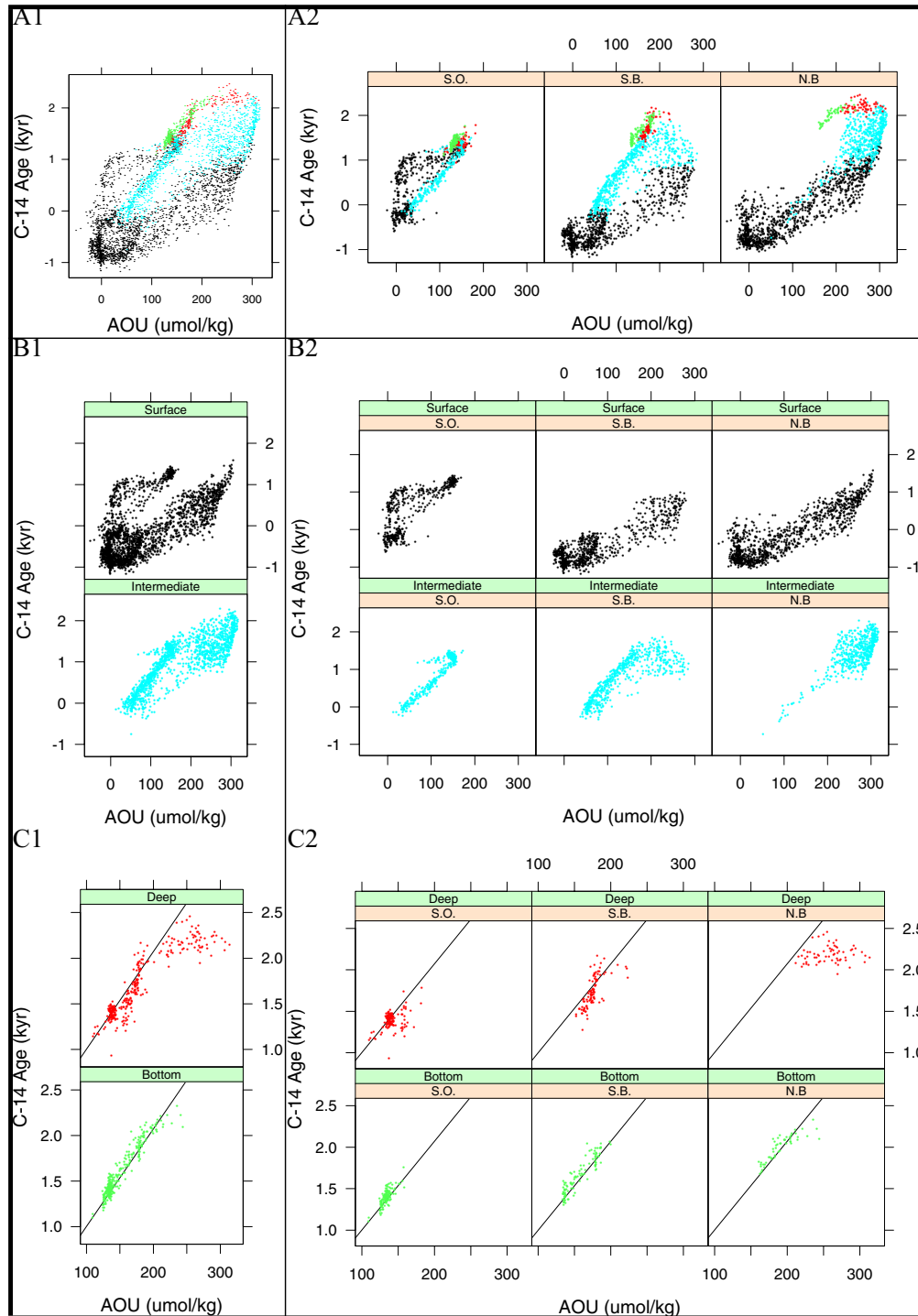


Figure 12 $\Delta^{14}\text{C}$ vs. Apparent Oxygen Utilization. See Figure 7 caption.

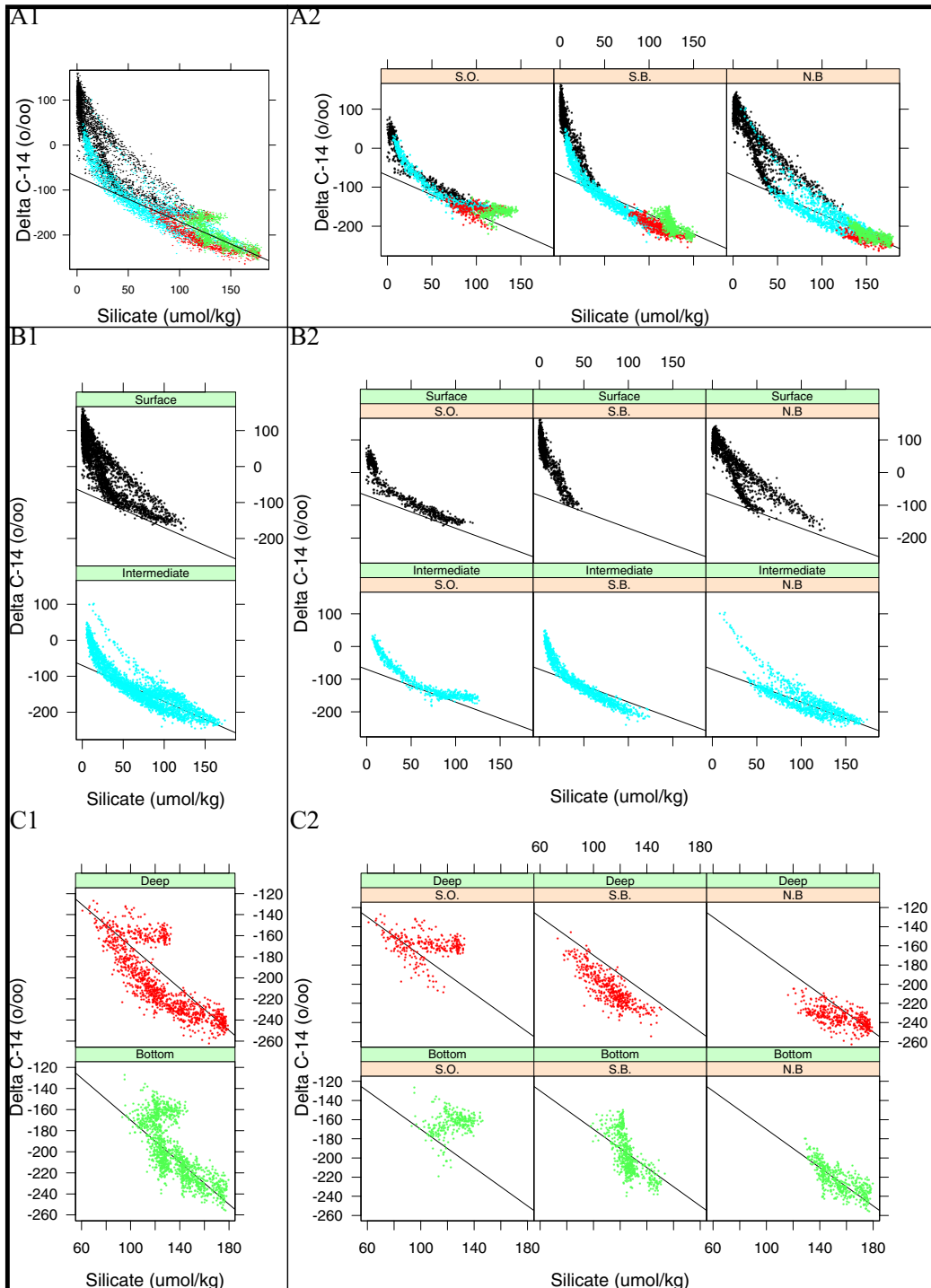


Figure 13 $\Delta^{14}\text{C}$ vs. silicate. See Figure 7 caption for data division and the text for a discussion of the regression used to distinguish bomb-produced from naturally occurring radiocarbon (Broecker et al. 1995).

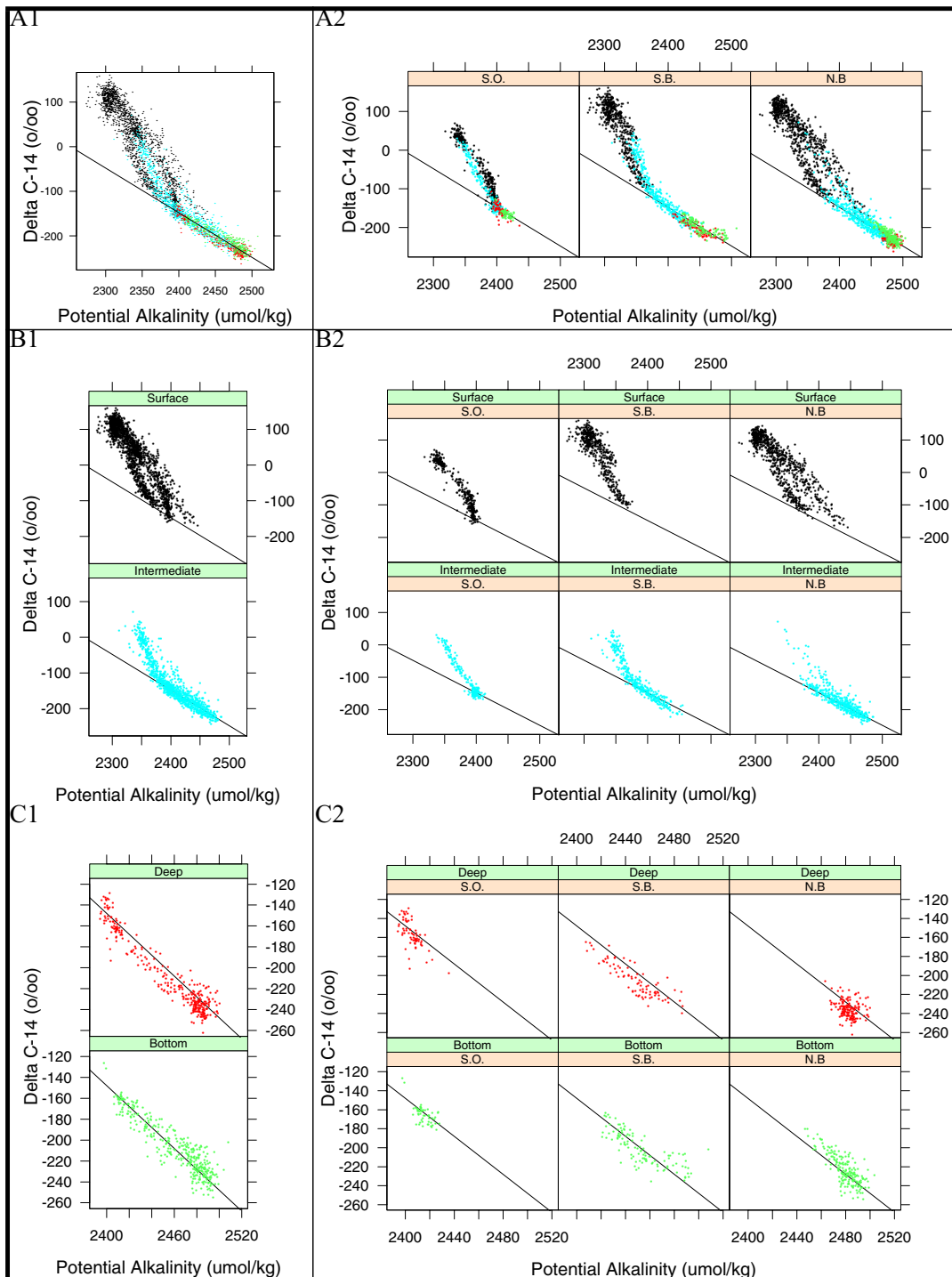


Figure 14 $\Delta^{14}\text{C}$ vs. potential alkalinity. The straight line shown in each subplot is the regression derived by Rubin and Key (2002) based on global GEOSECS data to separate bomb-produced and naturally occurring radiocarbon.

APPENDIX 2: Data Tables

Key to WOCE Cruises	
Cruise number	Starting page
P10	266
P13	290
P14C	312
P18	321
P19C	346
S4P	372

WOCE Cruise P10
EXPOCODE: 3250TN026/1
 10/5/93 - 11/10/93
 Chief Scientist: M. Hall
 Principal Investigator for $\Delta^{14}\text{C}$: R.M. Key
 NOSAMS Report 98-027
 Large Volume Analysis: M. Stuiver

Station 1

		Latitude		4.015°S		Date		10/12.93			
		Longitude		144.811°E		Bottom Depth		212			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	9	8	28.173	34.518	2	1.20	2	102.6	3.1	2	11364
1	5	103	25.112	34.942	2	1.70	2	107.1	3.5	2	11362
1	3	152	21.948	35.363	2	2.80	2	101.7	3.1	2	11361
1	1	200	16.380	35.302	2	6.20	2	72.1	3.1	2	11359

Station 3

		Latitude		3.892°S		Date		10/12.93			
		Longitude		144.892°E		Bottom Depth		1399			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	16	5	28.435	34.406	2	1.00	2	94.9	3.1	2	11363
1	13	151	21.027	35.459	2	3.00	2	105.1	3.1	2	11360
1	12	201	17.584	35.388	2	5.10	2	83.1	3.9	2	11358
1	8	504	8.406	34.620	2	20.50	2	-49.9	3.4	2	11264
1	7	605	7.065	34.557	2	34.70	2	-96.5	2.9	2	11263
1	6	706	6.022	34.511	2	42.00	2	-108.6	3.0	2	11262
1	3	1008	4.427	34.538	2	75.90	2	-158.7	2.9	2	11261
1	1	1382	3.390	34.583	2	106.20	2	-190.1	2.8	2	11260

Station 6

		Latitude		3.000°S		Date		10/13.93			
		Longitude		144.296°E		Bottom Depth		2080			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	22	18	28.562	34.216	2	1.40	2	93.9	4.0	2	11453
1	21	57	28.342	34.332	2	1.40	2	96.4	3.7	2	11452
1	20	107	23.282	35.388	2	2.50	2	107.2	3.0	2	11357
1	19	157	20.070	35.438	2	4.10	2	100.6	3.0	2	11356
1	18	207	17.876	35.366	2	5.60	2	77.2	3.0	2	11355
1	16	296	13.428	35.053	2	10.10	2	33.8	2.8	2	11354
1	15	396	9.626	34.718	2	19.10	2	-34.4	3.0	2	11353
1	13	598	6.790	34.544	2	36.50	2	-101.5	3.8	2	11352

Station 6 (Continued)

		Latitude		3.000°S		Date		10/13.93			
		Longitude		144.296°E		Bottom Depth		2080			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	11	688	5.953	34.511	2	42.90	2	-113.4	2.7	2	11351
1	9	799	5.399	34.533	2	60.50	2	-143.3	2.8	2	11350
1	7	1020	4.449	34.552	2	81.70	2	-161.1	3.5	2	11266
1	6	1182	3.922	34.564	2	92.20	2	-175.3	2.9	2	11265
1	5	1399	3.445	34.585	2	106.00	2	-189.2	4.4	6	11257
1	4	1597	2.972	34.606	2	117.90	2	-203.1	2.8	2	11565
1	3	1798	2.597	34.613	3	126.80	2	-211.0	2.2	6	11255
											11480
1	1	2077	2.247	34.638	2	134.90	2	-217.6	2.8	2	11254

Station 9

		Latitude		2.250°S		Date		10/13.93			
		Longitude		145.500°E		Bottom Depth		1005			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	16	6	28.515	34.207	2	1.40	2	100.5	3.2	2	11052
1	15	54	28.208	34.333	2	1.20	2	94.9	4.6	2	11048
1	14	99	24.088	35.201	2	2.40	2	96.4	4.1	2	11047
1	12	199	17.873	35.363	2	5.90	2	60.4	4.8	2	11046
1	10	298	12.764	34.971	2	12.80	2	-7.6	6.3	2	11045
1	8	499	8.275	34.623	2	26.00	2	-78.3	4.4	2	11044
1	4	695	5.969	34.537	2	50.60	2	-130.8	4.5	2	11043
1	1	998	4.802	34.542	2	73.00	2	-163.4	3.8	2	11042

Station 13

		Latitude		1.250°S		Date		10/14/93			
		Longitude		145.786°E		Bottom Depth		2299			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	22	17	28.535	34.296	2	1.30	2	97.3	4.2	2	11478
1	21	57	26.894	34.597	2	1.40	2	98.8	3.7	2	11477
1	20	106	24.910	34.889	2	3.10	2	94.9	3.4	2	11476
1	19	156	20.594	35.497	2	3.90	2	96.3	3.4	2	11475
1	18	206	17.391	35.307	2	6.50	2	73.5	3.3	2	11474
1	17	255	12.977	34.996	2	11.80	2	28.2	3.3	2	11473
1	16	305	10.943	34.794	2	20.60	2	-17.8	3.2	2	11472
1	15	405	9.724	34.709	2	24.60	2	-52.9	3.1	2	11471
1	14	465	9.094	34.678	2	24.20	2	-48.6	3.1	2	11470
1	13	506	8.154	34.614	2	27.40	2	-74.5	3.5	2	11469

Station 13 (Continued)

		Latitude		1.250°S		Date		10/14/93			
		Longitude		145.786°E		Bottom Depth		2299			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	12	606	6.735	34.552	2	40.30	2	-112.9	4.1	2	11459
1	11	700	5.932	34.534	2	51.70	2	-124.7	3.0	2	11458
1	10	798	5.338	34.539	2	63.80	2	-150.3	3.0	2	11457
1	9	899	4.793	34.541	2	72.50	2	-167.2	3.5	2	11456
1	8	1030	4.430	34.564	3	85.00	2	-179.6	3.0	2	11455
1	7	1201	3.774	34.572	2	97.90	2	-191.7	3.0	2	11454

Station 16

		Latitude		0.475°S		Date		10/15/93			
		Longitude		146.008°E		Bottom Depth		3523			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	28	8	28.472	34.354	2	1.10	2	97.6	3.1	2	11743
3	27	47	27.325	34.554	2	1.10	2	103.2	4.1	2	11742
3	26	97	25.018	34.806	2	2.20	2	87.3	4.5	2	11741
3	25	146	21.553	35.238	2	4.80	2	94.4	3.5	2	13904
3	24	196	18.331	35.348	2	5.50	2	84.0	2.9	2	13905
3	23	266	12.411	34.917	2	15.00	2	15.2	3.1	2	11839
3	22	322	11.096	34.807	2	19.20	2	-18.9	4.2	2	11838
3	21	376	9.709	34.706	2	24.80	2	-49.2	4.1	2	11837
3	20	496	7.906	34.589	2	29.30	2	-72.8	6.8	2	11836
3	19	597	6.629	34.534	2	38.00	2	-103.3	2.8	2	13898
3	18	695	6.132	34.537	2	49.00	2	-126.3	2.4	2	11730
3	17	796	5.346	34.542	2	65.40	2	-151.2	3.4	2	11729
3	16	871	4.896	34.543	2	73.10	2	-165.2	2.4	2	11728
3	15	998	4.521	34.554	2	83.30	2	-180.0	2.5	2	11727
3	14	1197	3.749	34.572	2	97.90	2	-194.5	5.5	2	11726
3	81	1257	3.587	34.578	2	101.09	2	-201.0	2.1	2	
3	13	1296	3.517	34.584	2	105.80	2	-205.5	3.7	2	11725
3	82	1377	3.404	34.586	2	105.83	2	-207.8	2.2	2	
3	83	1507	3.036	34.600	2	112.19	2	-205.2	2.3	2	
3	84	1631	2.791	34.613	2	119.02	2	-217.8	2.6	2	
3	85	1755	2.545	34.622	2	124.23	2	-225.0	2.5	2	
3	87	1878	2.429	34.628	2	127.36	2	-216.8	2.0	2	
3	89	2009	2.374	34.631	2	129.52	2	-222.6	1.9	2	
3	90	2130	2.221	34.639	2	132.96	2	-225.8	2.6	2	
3	93	2264	2.075	34.646	0	135.92	2	-232.3	2.5	2	
1	81	2391	2.011	34.650	2	137.50	2	-221.9	2.1	2	
1	82	2520	1.898	34.654	2	139.11	2	-230.5	2.2	2	
1	83	2644	1.799	34.652	3	140.41	2	-230.0	2.2	2	

Station 16

		Latitude		0.475°S		Date		10/15/93			
		Longitude		146.008°E		Bottom Depth		3523			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	84	2779	1.679	34.668	2	141.54	2	-223.5	2.1	2	
1	85	2896	1.629	34.670	2	141.72	2	-220.5	2.2	2	
1	87	3019	1.613	34.672	2	141.88	2	-226.8	1.6	2	
1	89	3149	1.600	34.674	2	141.89	2	-222.9	2.2	2	
1	90	3271	1.585	34.675	2	141.90	2	-217.2	2.1	2	
1	93	3408	1.570	34.678	2	141.59	2	-221.2	2.2	2	

Station 18

		Latitude		0.000°S		Date		10/15/93			
		Longitude		146.142°E		Bottom Depth		3477			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	27	15	28.101	34.587	3	1.10	2	103.8	2.9	2	13900
1	26	60	26.604	34.817	3	1.20	2	101.6	2.8	2	13899
1	25	109	24.506	44.245	4	2.70	2	112.7	3.5	2	10970
1	24	158	19.808	35.398	2	4.50	2	104.2	3.5	2	10969
1	23	206	16.659	35.280	2	6.40	2	59.4	4.4	2	10968
1	22	256	13.746	35.061	2	9.80	2	48.3	4.1	2	10967
1	21	306	11.392	34.840	2	17.10	2	-1.5	3.7	2	10966
1	20	406	9.408	34.703	2	26.00	2	-55.3	3.1	2	10965
1	19	506	7.604	34.575	2	29.30	2	-72.6	3.9	2	10964
1	18	556	6.910	34.550	2	41.20	2	-104.8	3.7	2	10963
1	17	606	6.540	34.525	3	39.90	2	-104.2	3.3	2	10962
1	16	706	6.084	34.542	2	53.20	2	-128.4	3.1	2	10961
1	15	807	5.377	34.541	2	64.60	2	-145.2	2.8	2	10843
1	14	907	5.140	34.542	2	68.50	2	-154.7	3.0	2	10842
1	12	1208	3.872	34.577	3	95.10	2	-194.0	2.9	2	10841
1	10	1609	2.837	34.608	2	118.90	2	-221.5	2.7	2	10839

Station 20

		Latitude		0.500°N		Date		10/16/93			
		Longitude		146.283°E		Bottom Depth		4134			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	30	20	28.583	34.343	2	0.90	2	94.0	4.2	2	11416
1	28	109	23.722	34.935	2	3.20	2	100.0	3.7	2	11415
1	27	158	19.917	35.272	2	5.80	2	90.8	4.0	2	11414
1	26	207	16.794	35.124	2	9.90	2	72.1	4.3	2	11413
1	25	256	13.030	34.791	2	19.50	2	8.6	3.1	2	11412

Station 20 (Continued)

		Latitude		0.500°N		Date		10/16/93			
		Longitude		146.283°E		Bottom Depth		4134			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	306	11.726	34.871	2	16.20	2	3.6	2.9	2	11411
1	23	405	9.991	34.720	2	25.80	2	-39.3	2.8	2	11410
1	21	554	7.616	34.576	2	37.20	2	-82.2	3.5	2	11409
1	20	605	6.664	34.530	2	39.50	2	-98.9	3.4	2	11408
1	19	706	6.192	34.542	2	51.30	2	-122.8	2.6	2	11407
1	18	806	5.603	34.540	2	61.40	2	-147.0	2.7	2	11406
1	17	886	5.200	34.545	2	66.90	2	-149.8	2.8	2	11405
1	16	1007	4.553	34.561	3	81.70	2	-168.5	4.6	2	11404
1	15	1198	3.951	34.569	2	96.60	2	-190.6	3.4	2	11403
1	14	1394	3.283	34.590	3	110.10	2	-199.7	3.0	2	11402
1	13	1595	2.828	34.609	2	120.80	2	-204.8	3.1	2	11401

Station 22

		Latitude		1.000°N		Date		10/16/93			
		Longitude		146.428°E		Bottom Depth		4521			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	30	20	28.661	34.205	2	6.80	2	105.0	3.7	2	11434
1	29	59	27.692	34.343	2	5.00	2	103.4	3.5	2	11433
1	28	108	23.670	34.963	2	9.20	2	79.6	5.6	2	11432
1	27	158	19.881	35.177	2	7.00	2	65.4	7.7	2	11431
1	26	207	16.380	35.062	2	11.20	2	35.9	5.0	2	11430
1	24	306	10.819	34.759	2	23.10	2	-28.7	3.7	2	11429
1	23	386	9.997	34.715	2	26.50	2	-43.2	4.1	2	11428
1	22	506	7.913	34.590	2	35.60	2	-78.7	3.1	2	11427
1	21	599	6.558	34.538	2	43.60	2	-111.0	4.1	2	11400
1	20	698	6.077	34.539	2	52.00	2	-123.0	3.7	2	11399
1	19	822	5.341	34.541	2	64.40	2	-153.9	3.4	2	11398
1	18	922	4.858	34.546	2	75.20	2	-158.5	3.0	2	11397
1	17	994	4.554	34.552	2	82.10	2	-167.2	5.9	2	11396
1	16	1195	4.053	34.571	2	95.90	2	-189.8	4.8	2	11395
1	15	1397	3.447	34.585	2	108.60	2	-205.7	3.5	2	11479

Station 25

		Latitude		1.750°N		Date		10/17/93			
		Longitude		146.642°E		Bottom Depth		4446			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	35	11	28.962	34.055	2	2.10	2	99.3	5.3	2	10946
3	34	50	28.201	34.241	2	2.10	2	106.1	3.7	2	10945
3	33	99	24.692	34.866	2	3.20	2	115.5	5.2	2	10944
3	32	147	21.382	35.143	2	6.30	2	93.5	4.2	2	10943
3	31	197	15.190	34.805	2	15.70	2	58.7	4.0	2	10942
3	30	249	11.489	34.624	2	27.80	2	4.9	4.2	2	10941
3	28	351	9.893	34.704	2	27.70	2	-41.0	4.3	2	10940
3	27	425	9.430	34.678	2	29.20	2	-48.8	4.3	2	10939
3	26	499	8.657	34.633	2	31.90	2	-71.6	4.2	2	10938
3	25	599	6.957	34.560	2	44.30	2	-106.2	4.2	2	10937
3	23	721	5.808	34.538	2	57.40	2	-137.5	4.7	2	10824
3	22	823	5.527	34.532	3	58.90	2	-137.3	3.2	2	10772
3	20	991	4.734	34.543	2	78.60	2	-164.6	2.8	2	10770
3	19	1094	4.324	34.561	2	90.40	2	-182.3	2.6	2	10769
3	18	1196	3.961	34.577	3	97.60	2	-183.5	2.7	2	10768
3	81	1418	3.345	34.591	2	110.36	2	-203.2	2.1	2	
3	82	1622	2.789	34.613	2	121.58	2	-221.5	2.1	2	
3	16	1624	2.782	34.604	3	122.00	2	-210.2	4.3	2	10771
3	83	1802	2.541	34.622	2	127.68	2	-213.4	2.2	2	
3	84	1983	2.289	34.626	2	133.45	2	-232.2	2.1	2	
3	85	2150	2.117	34.643	2	136.58	2	-231.8	2.1	2	
3	87	2322	1.991	34.644	2	139.37	2	-229.4	1.5	2	
3	89	2512	1.803	34.660	2	141.84	2	-228.8	2.2	2	
3	90	2683	1.685	34.666	2	142.30	2	-228.7	1.7	2	
3	93	2868	1.648	34.662	2	141.95	2	-225.5	2.1	2	
1	81	3052	1.634	34.673	2	143.40	2	-231.1	2.1	2	
1	82	3230	1.604	34.674	2	143.21	2	-222.8	2.1	2	
1	83	3406	1.567	34.678	2	143.36	2	-220.2	2.2	2	
1	84	3596	1.542	34.680	2	143.39	2	-216.5	2.2	2	
1	85	3767	1.542	34.683	2	142.82	2	-219.9	2.1	2	
1	87	3936	1.537	34.685	2	142.47	2	-214.0	2.2	2	
1	89	4117	1.516	34.687	2	141.93	2	-214.1	2.4	2	
1	90	4292	1.522	34.688	2	141.26	2	-211.7	2.1	2	
1	93	4479	1.535	34.688	2	141.07	2	-213.6	2.1	2	

Station 28

		Latitude		2.500°N		Date		10/18/93			
		Longitude		146.858°E		Bottom Depth		4437			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	29.070	34.048	2	0.80	2	104.6	6.6	2	11861
1	31	20	29.021	34.046	2	0.60	2	94.3	5.4	2	11860
1	30	47	28.301	34.234	2	1.00	2	101.7	4.3	2	11859
1	29	73	28.124	34.323	2	0.70	2	93.6	4.6	2	11858
1	28	97	25.532	34.645	2	1.50	2	106.6	6.3	2	11849
1	27	146	21.557	35.126	2	3.80	2	93.6	5.0	2	11848
1	26	196	14.852	34.648	2	15.80	2	64.5	3.8	2	11847
1	25	226	11.413	34.507	2	27.90	2	-4.4	6.5	2	11846
1	24	296	10.061	34.734	2	21.50	2	-27.4	3.6	2	11845
1	23	396	9.493	34.678	2	25.20	2	-49.6	3.8	2	11844
1	22	496	8.579	34.615	2	31.10	2	-69.8	5.5	2	11843
1	20	696	6.541	34.539	2	50.90	2	-125.2	6.0	2	11842
1	18	896	5.114	34.538	2	73.80	2	-162.1	3.1	2	11841
1	17	996	4.666	34.552	2	83.00	2	-169.4	3.9	2	11840
1	16	1196	3.863	34.573	2	99.00	2	-179.7	4.2	2	11738
1	14	1594	2.936	34.604	2	120.30	2	-205.5	5.0	2	11737

Station 31

		Latitude		3.503°N		Date		10/19/93			
		Longitude		147.214°E		Bottom Depth		4586			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	15	28.858	-9	9	-9	9	84.8	5.2	2	11801
1	30	58	28.596	34.208	2	1.80	2	89.9	5.3	2	11800
1	29	106	25.507	34.502	2	3.20	2	89.4	3.5	6	11799
1	28	156	16.817	34.672	2	12.60	2	79.6	4.8	2	11888
1	27	206	11.333	34.473	2	28.70	2	-7.5	3.6	2	11877
1	26	255	9.648	34.505	2	37.40	2	-43.8	4.8	2	11876
1	25	305	8.855	34.583	2	38.40	2	-67.3	3.8	2	11875
1	24	406	8.419	34.610	2	34.60	2	-83.4	3.9	2	11874
1	23	505	7.858	34.587	2	40.20	2	-98.9	3.5	2	11873
1	22	606	7.155	34.568	4	46.90	2	-112.2	4.7	2	11872
1	21	706	6.468	34.548	2	54.30	2	-136.2	3.5	2	11871
1	20	806	5.640	34.551	4	66.60	2	-158.8	4.0	2	11870
1	19	906	5.177	34.548	2	74.00	2	-157.2	5.9	2	11869
1	18	1006	4.868	34.552	2	79.80	2	-167.7	4.1	2	11868
1	16	1408	3.245	34.594	2	115.80	2	-207.6	5.0	2	11865
1	15	1609	2.799	34.611	2	126.00	2	-227.9	4.8	2	11864

Station 34

		Latitude		5.000°N		Date		10/20/93			
		Longitude		147.850°E		Bottom Depth		4193			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	16	29.010	33.525	2	1.50	2	91.3	5.6	2	11798
2	28	107	24.477	34.578	2	3.30	2	105.4	5.8	2	11797
2	27	157	15.578	34.660	2	14.40	2	71.5	3.5	6	11796
											11934
2	26	207	9.970	34.494	2	34.00	2	-37.2	4.4	2	11795
2	25	256	9.481	34.589	2	36.70	2	-55.3	2.6	6	11794
											12041
2	24	307	8.911	34.586	2	37.70	2	-68.3	4.2	2	11793
2	23	406	8.076	34.589	2	38.40	2	-80.9	4.1	2	11792
2	22	481	7.629	34.575	2	40.30	2	-83.0	4.9	2	11791
2	21	556	7.261	34.561	2	47.70	2	-125.1	4.4	2	11878
2	20	631	6.874	34.550	2	50.60	2	-122.7	4.7	2	11857
2	19	706	6.378	34.542	2	59.20	2	-135.1	6.9	2	11856
2	18	806	5.530	34.536	2	71.10	2	-155.2	5.1	6	11855
											11867
2	17	906	5.052	34.541	2	78.80	2	-173.7	5.5	2	11854
2	16	1006	4.596	34.569	4	88.40	2	-182.0	3.7	2	11866
2	15	1206	3.756	34.574	2	105.60	2	-191.8	3.8	2	11852
2	14	1406	3.129	34.594	2	119.10	2	-212.4	5.5	2	11851
3	81	1498	2.872	34.606	2	125.60	2	-220.9	2.1	2	
3	82	1625	2.685	34.614	2	129.32	2	-227.2	2.1	2	
3	83	1750	2.502	34.622	2	133.38	2	-229.4	2.2	2	
3	84	1879	2.342	34.629	2	137.11	2	-229.0	2.1	2	
3	85	1999	2.163	34.639	2	141.00	2	-234.8	2.1	2	
3	87	2122	2.057	34.645	2	141.30	2	-227.8	2.2	2	
3	89	2251	1.979	34.649	2	142.76	2	-234.5	2.1	2	
3	90	2375	1.900	34.654	2	143.55	2	-229.3	2.2	2	
3	93	2510	1.808	34.659	2	144.67	2	-232.5	2.1	2	
1	81	2819	1.661	34.668	2	142.39	2	-224.3	1.5	2	
1	82	2996	1.586	34.673	2	142.16	2	-216.8	2.1	2	
1	83	3174	1.572	34.675	2	142.08	2	-219.9	2.1	2	
1	84	3362	1.538	34.677	2	142.17	2	-219.8	2.1	2	
1	85	3527	1.541	34.680	2	141.93	2	-214.5	2.1	2	
1	87	3699	1.531	34.683	2	141.85	2	-219.4	2.1	2	
1	89	3876	1.538	34.684	2	141.93	2	-215.2	2.1	2	
1	90	4055	1.541	34.684	2	142.02	2	-218.1	2.1	2	
1	93	4240	1.552	34.684	2	141.78	2	-218.7	2.2	2	

Station 36

		Latitude		6.000°N		Date		10/20/93			
		Longitude		148.272°E		Bottom Depth		4095			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	28.852	33.715	2	1.10	2	114.2	5.7	2	11259
1	29	97	22.337	34.695	2	4.90	2	113.7	3.5	2	11229
1	28	146	14.846	34.630	2	16.70	2	63.4	3.1	2	11258
1	27	196	12.081	34.541	2	25.30	2	3.4	3.2	2	11250
1	26	246	10.329	34.616	4	33.00	2	-40.8	2.8	2	11393
1	25	297	9.616	34.580	2	36.40	2	-59.3	3.0	2	11248
1	24	347	9.114	34.610	2	36.70	2	-79.8	2.8	6	11247
											11437
1	23	387	9.037	34.607	2	37.00	2	-80.5	3.0	2	11246
1	22	495	8.087	34.599	2	43.00	2	-105.0	2.9	2	11245
1	20	597	6.806	34.602	4	56.30	2	-129.8	4.3	2	11244
1	19	699	6.101	34.538	2	65.60	2	-141.8	3.8	2	11243
1	18	798	5.177	34.545	2	79.20	2	-167.2	2.8	2	11242
1	17	955	4.537	34.552	2	90.60	2	-174.0	2.7	2	11241
1	16	1104	3.810	34.571	2	104.90	2	-191.4	3.3	2	11226
1	15	1220	3.505	34.583	2	110.90	2	-195.0	2.8	2	11225
1	13	1578	2.790	34.633	4	126.30	2	-218.0	3.7	2	11224

Station 41

		Latitude		8.500°N		Date		10/21/93			
		Longitude		149.333°E		Bottom Depth		3617			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	14	29.032	33.813	2	1.10	2	91.5	3.9	2	11444
1	25	97	22.815	34.775	2	3.40	2	100.9	4.1	2	11443
1	22	245	9.847	34.554	2	34.60	2	-58.2	3.3	2	11442
1	21	282	9.222	34.537	4	5.50	4	93.8	3.8	4	11441
1	20	334	8.648	34.608	3	39.80	2	-95.6	3.3	2	11440
1	19	496	7.340	34.559	2	50.60	2	-124.6	4.0	2	11439
1	18	595	6.646	34.535	2	58.40	2	-128.8	3.0	2	11438
1	17	697	5.975	34.532	2	67.30	2	-146.0	3.8	2	11564
1	16	797	5.587	34.537	2	73.10	2	-152.1	3.4	2	11563
1	15	898	5.025	34.542	2	82.50	2	-163.2	5.1	2	11562
1	14	1004	4.576	34.552	2	90.90	2	-175.0	3.7	2	11561
1	13	1215	3.704	34.576	2	107.70	2	-194.6	3.0	2	11560
1	12	1374	3.176	34.591	2	118.70	2	-207.0	3.3	2	11559
1	10	1785	2.439	34.625	2	133.70	2	-216.9	5.1	2	11558
1	9	1992	2.208	34.635	2	138.40	2	-223.1	3.2	2	11557
1	7	2391	1.895	34.653	2	143.20	2	-223.5	3.0	2	11556

Station 44

		Latitude		9.697°N		Date		10/22/93			
		Longitude		149.333°E		Bottom Depth		5333			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	
1	9	4003	1.462	34.690	2	139.40	2	-209.9	2.8	2	11041
1	8	4204	1.445	34.693	2	137.40	2	-205.0	3.8	2	11040
1	7	4396	1.444	34.693	2	135.90	2	-203.5	2.9	2	11039
1	6	4592	1.442	34.696	2	134.30	2	-198.1	3.5	2	11038
1	4	4794	1.448	34.696	2	133.00	2	-192.1	4.1	2	11037
1	3	4996	1.454	34.700	2	132.10	2	-190.9	3.5	2	11036
1	2	5194	1.464	34.700	2	130.70	2	-191.9	3.3	2	11050
1	1	5428	1.492	34.699	2	130.40	2	-186.5	3.4	2	11032

Station 45

		Latitude		10.000°N		Date		10/22/93			
		Longitude		149.333°E		Bottom Depth		5548			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	29.004	34.077	2	1.40	2	103.4	3.3	2	11380
1	33	96	22.480	34.844	2	2.50	2	110.9	3.4	2	11379
1	31	200	12.213	34.410	2	18.20	2	49.8	3.2	2	11378
1	30	298	9.658	34.596	2	35.70	2	-70.5	3.1	2	11377
1	29	390	8.536	34.593	2	41.00	2	-102.3	2.9	2	11376
1	28	498	7.684	34.565	2	47.90	2	-115.8	3.0	2	11374
1	27	594	7.029	34.542	2	55.30	2	-126.6	2.8	2	11373
1	26	700	6.287	34.533	2	64.40	2	-142.5	2.7	2	11372
1	25	801	5.596	34.530	2	74.00	2	-161.1	2.8	2	11371
1	24	999	4.530	34.547	2	93.10	2	-184.4	2.7	2	11370
1	22	1398	3.116	34.596	2	121.70	2	-209.6	2.5	2	11369
1	19	1804	2.475	34.624	2	134.90	2	-229.3	2.6	2	11368
1	18	2013	2.202	34.650	4	139.80	2	-231.9	2.7	2	11367
1	17	2262	1.983	34.648	2	144.00	2	-230.8	2.5	2	11366

Station 47

		Latitude		11.158°N		Date		10/23/93			
		Longitude		149.331°E		Bottom Depth		5809			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	17	29.123	34.146	2	1.10	2	100.1	3.9	2	11216
2	35	62	26.984	34.713	2	0.90	2	115.6	6.1	2	11215
2	34	110	23.484	35.079	2	1.50	2	124.8	5.4	2	11214
2	33	159	18.176	34.848	2	4.80	2	118.9	3.6	2	11213
2	32	209	13.387	34.513	2	15.20	2	61.8	4.8	2	11212

Station 47 (Continued)

		Latitude		11.158°N		Date		10/23/93			
		Longitude		149.331°E		Bottom Depth		5809			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	31	309	9.170	34.332	2	36.00	2	-43.8	3.5	2	11210
2	30	410	7.765	34.458	2	49.20	2	-105.7	4.0	2	11209
2	29	508	6.849	34.474	2	56.90	2	-134.8	7.3	2	11208
2	28	610	6.153	34.498	2	64.10	2	-138.3	3.2	2	11207
2	27	709	5.663	34.519	2	71.30	2	-154.4	3.6	2	11206
2	26	808	5.218	34.528	2	79.30	2	-178.3	5.9	2	11205
2	24	1010	4.358	34.548	2	95.40	2	-189.3	3.0	2	11204
2	23	1210	3.680	34.572	2	108.90	2	-204.4	3.3	2	11203
2	22	1411	3.089	34.588	2	120.70	2	-216.6	3.8	2	11202
3	81	1473	2.973	34.595	2	125.56	2	-220.6	2.1	2	
2	20	1613	2.641	34.609	2	129.60	2	-225.5	3.1	2	11201
3	82	1721	2.468	34.618	2	135.45	2	-228.6	2.3	2	
2	19	1814	2.339	34.626	2	134.80	2	-227.0	2.7	2	11163
3	83	1975	2.216	34.635	2	140.24	2	-232.1	1.8	2	
3	84	2233	2.010	34.645	2	142.90	2	-235.2	1.5	2	
3	85	2484	1.833	34.656	2	145.57	2	-232.9	2.5	2	
3	87	2725	1.737	34.663	2	146.76	2	-233.8	2.5	2	
3	89	2986	1.638	34.669	2	146.89	2	-226.7	2.2	2	
3	90	3233	1.588	34.675	2	147.44	2	-225.7	2.4	2	
3	93	3499	1.533	34.678	2	145.25	2	-223.0	1.3	2	
1	81	3834	1.516	34.682	2	142.70	2	-222.3	2.0	2	
1	82	4088	1.490	34.685	2	140.62	2	-212.4	2.5	2	
1	83	4343	1.446	34.690	2	138.83	2	-212.8	2.3	2	
1	84	4598	1.437	34.693	2	136.59	2	-207.0	2.5	2	
1	85	4856	1.449	34.695	2	135.12	2	-206.8	2.5	2	
1	89	5366	1.480	34.697	2	133.69	2	-199.8	2.3	2	
1	90	5621	1.510	34.698	2	133.28	2	-198.7	2.5	2	
1	93	5879	1.540	34.698	2	131.80	2	-201.7	2.6	2	

Station 50

		Latitude		13.167°N		Date		10/25/93			
		Longitude		149.333°E		Bottom Depth		5959			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	18	29.452	34.541	2	1.10	2	103.9	3.2	2	11967
1	35	48	29.259	34.576	2	1.10	2	106.6	6.6	2	11942
1	34	96	26.446	34.833	2	0.90	2	107.5	5.7	2	11941
1	33	146	23.979	35.010	2	1.10	2	117.5	5.8	2	11940
1	32	197	19.290	34.924	2	3.70	2	127.1	5.9	2	11939
1	31	246	13.652	34.499	2	11.80	2	103.7	5.9	2	11938

Station 50 (Continued)

		Latitude		13.167°N		Date		10/25/93			
		Longitude		149.333°E		Bottom Depth		5959			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	30	298	11.386	34.332	2	21.00	2	44.9	6.8	2	12508
1	29	348	9.766	34.316	2	32.00	2	-8.9	4.4	2	11936
1	28	398	8.541	34.340	2	42.50	2	-62.4	3.8	2	11935
1	27	496	7.086	34.424	2	58.00	2	-120.8	3.8	2	11933
1	26	597	6.245	34.469	2	67.60	2	-145.8	3.4	2	11932
1	25	693	5.656	34.493	2	75.80	2	-157.7	4.6	2	11809
1	24	795	5.152	34.510	2	84.00	2	-170.0	3.6	2	11808
1	23	896	4.666	34.526	2	93.00	2	-184.1	3.4	2	11807
1	22	994	4.269	34.542	2	101.00	2	-193.9	4.0	2	11804
1	21	1197	3.587	34.561	2	114.20	2	-199.6	3.7	2	11803

Station 53

		Latitude		15.167°N		Date		10/26/93			
		Longitude		149.333°E		Bottom Depth		5677			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	10	28.985	34.292	2	1.10	2	108.4	4.1	2	11581
1	35	53	29.007	34.397	2	1.10	2	107.9	4.3	2	11580
1	34	102	26.928	34.862	2	0.90	2	111.7	3.7	2	11579
1	33	152	24.800	35.111	2	1.10	2	121.1	3.3	2	11578
1	32	200	21.623	35.130	2	1.90	2	124.1	3.3	2	11577
1	31	249	17.333	34.815	2	4.90	2	118.3	3.1	2	11576
1	30	299	13.340	34.459	2	13.30	2	80.8	3.6	2	11426
1	29	348	10.440	34.309	2	26.70	2	15.8	3.3	2	11425
1	28	398	9.177	34.283	2	35.80	2	-34.4	4.7	2	11424
1	27	458	7.601	34.292	2	51.40	2	-83.4	4.3	2	11423
1	26	498	7.284	34.362	2	55.90	2	-110.6	3.7	2	11422
1	25	550	6.729	34.420	2	62.60	2	-122.8	3.2	2	11421
1	24	599	6.373	34.438	2	66.80	2	-131.8	3.1	2	11420
1	22	805	5.253	34.499	2	82.20	2	-162.4	3.6	2	11419
1	20	998	4.361	34.533	2	98.60	2	-186.7	2.9	2	11418
1	18	1492	2.886	34.588	2	128.10	2	-221.7	2.9	2	11417

Station 56

		Latitude		17.167°N		Date		10/27/93			
		Longitude		149.333°E		Bottom Depth		5391			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	11	28.884	34.939	2	0.50	2	119.5	4.2	2	11707
2	34	97	24.963	35.121	2	1.00	2	125.5	4.2	2	11706
2	33	146	22.176	35.107	2	1.40	2	113.1	3.2	2	11705
2	32	197	19.012	34.953	2	2.60	2	105.5	6.1	2	11704
2	31	246	17.629	34.843	2	3.60	2	114.7	4.2	2	11593
2	30	298	15.100	34.624	2	7.90	2	104.4	3.3	2	11592
2	29	401	10.565	34.264	2	22.00	2	38.3	3.2	2	11591
2	28	500	7.932	34.205	2	44.80	2	-59.6	2.9	2	11590
2	27	595	6.382	34.282	2	66.40	2	-135.6	5.4	2	11863
2	26	693	5.646	34.387	3	78.30	2	-159.8	3.2	2	11588
2	25	795	5.172	34.463	3	85.80	2	-170.2	2.7	2	11587
2	24	897	4.679	34.497	2	94.20	2	-189.1	2.8	2	11586
2	23	998	4.241	34.518	2	102.20	2	-193.8	3.0	2	11585
2	22	1095	3.987	34.536	2	107.00	2	-192.4	3.4	2	11584
2	21	1199	3.685	34.544	2	113.30	2	-205.1	2.9	2	11583
2	20	1394	3.118	34.568	2	124.50	2	-218.2	2.8	2	11582
3	81	1604	2.689	34.589	2	133.29	2	-230.5	2.1	2	
3	82	1805	2.360	34.603	2	139.36	2	-231.6	2.0	2	
3	83	2001	2.133	34.618	2	143.17	2	-233.5	2.2	2	
3	84	2205	1.947	34.633	2	146.64	2	-233.5	2.1	2	
3	85	2412	1.804	34.648	2	148.55	2	-234.7	1.5	2	
3	87	2615	1.731	34.655	2	149.08	2	-235.3	1.4	2	
3	89	2810	1.669	34.662	2	149.43	2	-229.3	2.1	2	
3	90	3016	1.605	34.667	2	149.26	2	-233.9	2.0	2	
3	93	3227	1.579	34.671	2	148.93	2	-229.6	2.0	2	
1	81	3408	1.564	34.675	2	147.82	2	-228.6	2.7	2	
1	82	3660	1.519	34.679	2	146.09	2	-224.6	2.3	2	
1	83	3904	1.483	34.685	2	144.02	2	-216.6	2.5	2	
1	84	4158	1.465	34.687	2	141.78	2	-213.9	2.3	2	
1	85	4452	1.446	34.691	2	139.20	2	-212.8	2.5	2	
1	87	4681	1.432	34.693	2	136.28	2	-206.8	2.2	2	
1	89	4967	1.445	34.695	2	134.90	2	-201.8	2.1	2	
1	90	5224	1.456	34.696	2	133.36	2	-199.4	2.1	2	
1	93	5451	1.489	34.698	2	131.47	2	-199.5	2.1	2	

Station 59

		Latitude		19.167°N		Date		10/28/93			
		Longitude		149.333°E		Bottom Depth		5550			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	28.752	34.728	2	0.70	2	107.5	3.8	2	11162
1	34	51	28.758	34.728	2	0.80	2	102.1	4.0	2	11161
1	33	100	25.913	35.059	2	0.80	2	121.6	3.9	2	11160
1	32	150	23.509	35.127	2	1.00	2	122.9	3.9	2	11159
1	31	200	19.400	34.984	2	2.60	2	119.1	3.4	2	11158
1	30	249	17.482	34.825	2	3.80	2	117.7	3.4	2	11157
1	29	298	15.830	34.681	2	6.20	2	113.1	3.6	2	11143
1	28	347	14.242	34.517	2	9.80	2	96.4	3.3	2	11142
1	27	397	12.027	34.353	2	15.70	2	76.2	3.1	2	11141
1	26	496	8.759	34.167	2	35.10	2	-4.6	3.2	2	11140
1	25	596	6.757	34.156	2	57.80	2	-81.5	2.8	2	11139
1	24	695	5.585	34.264	2	78.00	2	-140.5	2.4	2	11138
1	23	796	4.903	34.363	2	91.50	2	-166.8	2.4	2	11137
1	22	900	4.481	34.431	2	99.50	2	-183.2	2.4	2	11136
1	21	1000	4.025	34.491	2	107.70	2	-194.7	3.5	2	11089
1	20	1203	3.368	34.540	2	120.30	2	-210.8	2.7	2	11088

Station 62

		Latitude		21.167°N		Date		10/29/93			
		Longitude		149.333°E		Bottom Depth		5389			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	22	28.433	34.859	2	0.70	2	117.7	5.2	2	11555
1	35	47	28.445	34.868	2	0.70	2	117.9	4.3	2	11554
1	34	96	24.880	35.051	2	1.00	2	117.7	4.7	2	11553
1	33	142	21.060	35.008	2	1.70	2	119.6	3.7	2	11552
1	32	200	18.481	34.875	2	3.10	2	137.7	5.3	2	11551
1	31	249	17.250	34.793	2	4.10	2	141.9	3.9	2	11550
1	30	299	15.975	34.693	2	6.30	2	127.9	9.0	2	11549
1	29	397	12.766	34.416	2	13.90	2	100.1	5.4	2	11548
1	28	497	9.720	34.212	2	27.50	2	48.4	3.7	2	11547
1	27	598	7.038	34.172	4	72.20	4	-72.2	3.3	2	11546
1	26	702	5.804	34.142	2	70.60	2	-108.7	2.5	2	13901
1	25	796	4.782	34.248	2	92.30	2	-161.1	2.4	2	13902
1	24	897	4.349	34.349	2	103.00	2	-154.6	3.1	2	11543
1	23	992	4.018	34.422	2	109.80	2	-171.1	4.1	2	11542
1	22	1095	3.578	34.476	2	118.80	2	-195.2	3.6	2	11541
1	20	1407	2.718	34.556	2	134.30	2	-211.1	3.1	2	11540

Station 65

		Latitude		23.181°N		Date		10/30/93			
		Longitude		149.339°E		Bottom Depth		5797			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	36	16	27.303	35.011	2	0.90	2	120.2	3.4	2	11253
3	35	60	26.793	35.012	2	1.10	2	118.6	2.6	6	11252
											11394
3	34	109	20.281	34.946	2	1.60	2	130.4	3.4	2	11251
3	33	156	18.676	34.886	2	2.50	2	134.6	2.5	6	11240
											11607
3	32	208	17.462	34.808	2	3.10	2	127.6	3.3	2	11239
3	30	310	16.021	34.700	2	6.40	2	114.9	3.3	2	11238
3	28	406	12.966	34.440	2	13.70	2	86.3	3.3	2	11237
3	27	508	10.281	34.252	2	25.00	2	39.5	3.3	2	11236
3	26	609	7.666	34.113	2	45.10	2	-28.8	5.3	2	11235
3	25	705	5.518	34.106	2	73.90	2	-95.9	3.0	2	11234
3	24	800	4.766	34.185	2	91.60	2	-142.0	2.8	2	11233
3	23	904	4.157	34.265	2	106.90	2	-159.3	3.1	2	11228
3	22	1006	3.669	34.353	2	119.90	2	-182.3	3.0	2	11227
3	21	1160	3.224	34.450	2	129.30	2	-204.3	3.7	2	11219
3	20	1261	2.871	34.476	2	140.00	2	-212.9	3.4	2	11218
3	19	1411	2.593	34.526	2	143.50	2	-221.0	3.1	2	11217
3	81	1569	2.356	34.560	2	146.04	2	-226.7	2.1	2	
3	82	1821	2.052	34.603	2	147.50	2	-239.4	2.0	2	
1	81	3841	1.476	34.682	2	145.21	2	-222.0	2.0	2	
1	82	4090	1.462	34.684	2	143.78	2	-215.0	2.1	2	
1	83	4337	1.465	34.688	2	142.01	2	-215.0	2.2	2	
1	84	4593	1.459	34.691	2	140.59	2	-206.3	2.1	2	
1	85	4853	1.469	34.693	2	138.47	2	-209.9	2.1	2	
1	87	5115	1.473	34.694	2	136.89	2	-203.9	2.5	2	
1	89	5375	1.499	34.696	2	135.12	2	-198.9	2.4	2	
1	90	5636	1.516	34.697	2	132.83	2	-197.1	1.7	2	
1	93	5892	1.530	34.699	2	131.24	2	-197.4	1.7	2	

Station 66

		Latitude		23.833°N		Date		10/31/93			
		Longitude		149.333°E		Bottom Depth		5835			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	894	4.015	34.258	2	109.60	2	-176.5	3.5	2	11723
1	23	996	3.681	34.359	2	118.90	2	-199.9	3.0	2	11722
1	22	1197	3.080	34.451	2	133.90	2	-211.6	3.3	2	11721
1	21	1393	2.614	34.523	2	142.60	2	-215.8	4.5	2	11720
1	20	1594	2.263	34.566	2	147.60	2	-229.4	2.6	2	11719

Station 66 (Continued)

		Latitude		23.833°N				Date		10/31/93	
		Longitude		149.333°E				Bottom Depth		5835	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	19	1796	2.054	34.595	2	149.50	2	-225.6	2.2	2	11718
1	18	1998	1.901	34.621	2	148.60	2	-226.1	6.2	2	11717
1	17	2196	1.785	34.633	2	150.50	2	-219.5	3.0	2	12008
1	16	2396	1.710	34.645	2	149.50	2	-237.0	4.7	2	11715
1	15	2599	1.647	34.652	2	149.80	2	-243.3	4.8	2	11714
1	14	2800	1.598	34.659	2	149.50	2	-238.8	3.3	2	11713
1	13	2986	1.562	34.665	2	148.60	2	-230.4	2.0	2	11712
1	12	3249	1.531	34.670	2	148.10	2	-226.3	3.6	2	11711
1	11	3476	1.507	34.677	2	146.60	2	-211.8	3.0	2	11710
1	10	3741	1.487	34.680	2	146.10	2	-215.7	3.4	2	11709

Station 68

		Latitude		25.167°N				Date		11/1/93	
		Longitude		149.333°E				Bottom Depth		5903	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	26.937	35.134	2	1.60	2	110.3	3.2	2	11468
1	35	50	26.890	35.133	2	1.60	2	119.0	4.4	2	11467
1	34	100	20.383	34.959	2	2.10	2	115.5	4.3	2	11466
1	33	149	18.512	34.877	2	2.80	2	119.8	4.5	2	11465
1	32	199	17.448	34.809	2	3.70	2	115.1	3.4	2	11464
1	31	249	16.758	34.762	2	4.90	2	113.0	4.0	2	11463
1	30	299	15.630	34.672	2	7.50	2	117.0	3.1	6	11462
1	29	353	14.465	34.564	2	10.60	2	97.0	3.3	2	11745
1	28	399	13.222	34.454	2	13.70	2	83.9	3.8	2	11461
1	27	498	10.716	34.273	2	22.60	2	44.8	3.6	2	11460
1	26	597	7.556	34.089	2	45.10	2	-27.0	3.2	2	11451
1	25	697	5.597	34.065	2	70.00	2	-93.3	3.2	2	11450
1	24	797	4.698	34.140	2	90.60	2	-136.5	3.1	2	11449
1	23	896	4.250	34.211	2	101.90	2	-163.5	4.8	2	11448
1	22	997	3.628	34.340	3	122.00	2	-196.2	3.0	2	11447
1	20	1398	2.614	34.512	2	146.00	2	-229.7	2.9	2	11446

Station 71

		Latitude		25.167°N		Date		11/1/93			
		Longitude		149.333°E		Bottom Depth		5903			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	26.024	35.115	2	2.00	2	116.5	3.3	2	10837
1	35	49	25.889	35.102	2	2.40	2	118.4	3.4	2	10836
1	34	99	19.812	34.913	2	2.90	2	117.0	4.1	2	10835
1	33	148	17.932	34.840	2	3.60	2	130.3	3.4	2	10834
1	32	199	17.301	34.800	2	4.30	2	124.4	3.6	2	10833
1	31	249	16.776	34.766	2	5.30	2	109.8	3.4	2	10832
1	30	299	16.277	34.724	2	6.40	2	107.4	3.6	6	10831
											11033
1	29	398	14.077	34.539	2	13.20	2	88.5	3.3	2	10830
1	28	497	11.193	34.327	2	22.90	2	42.4	3.2	2	10829
1	27	596	8.528	34.140	2	38.50	2	-6.5	3.5	2	10828
1	26	698	5.860	34.050	2	66.00	2	-83.9	3.0	2	10827
1	25	797	4.782	34.127	2	88.70	2	-129.1	4.1	6	10826
											11051
1	24	897	4.258	34.230	2	104.30	2	-158.8	3.8	2	10825
1	23	992	3.868	34.294	2	115.30	2	-177.1	2.4	2	10752
1	22	1196	3.255	34.410	2	131.60	2	-207.3	2.5	2	10751
1	21	1396	2.748	34.498	2	142.70	2	-224.6	2.4	2	10750

Station 74

		Latitude		29.158°N		Date		11/3/93			
		Longitude		149.286°E		Bottom Depth		5972			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ^a ‰	Err ‰	F	OS#
3	36	16	25.536	35.014	2	1.80	2	134.7	4.5	2	11539
3	34	95	19.857	34.855	2	3.30	2	139.4	7.2	2	11538
3	32	195	17.770	34.824	2	3.30	2	131.9	5.1	2	11537
3	30	295	17.100	34.794	2	4.10	2	113.4	6.5	2	12509
3	29	396	15.424	34.483	4	40.70	4	19.7	3.1	4	11392
3	28	495	12.692	34.441	2	17.90	2	58.0	3.9	2	11391
3	27	596	9.812	34.231	2	29.20	2	12.0	3.0	2	11390
3	26	696	7.116	34.068	2	49.30	2	-43.6	4.5	2	11389
3	25	794	5.145	34.026	2	73.70	2	-97.7	2.9	2	11388
3	24	898	4.427	34.151	2	96.40	2	-142.6	3.2	2	11387
3	23	1000	3.950	34.244	2	111.80	2	-163.9	3.0	2	11386
3	22	1187	3.254	34.367	2	132.60	2	-193.9	3.6	2	11223
3	21	1399	2.732	34.458	2	147.50	2	-219.5	2.9	2	11222
3	20	1602	2.361	34.524	2	156.40	2	-223.7	2.9	2	11221
3	19	1806	2.123	34.571	2	159.00	2	-233.0	3.0	2	11220
3	18	2007	1.950	34.599	2	160.20	2	-235.1	4.0	2	11200

Station 74 (Continued)

		Latitude		29.158°N				Date		11/3/93		
		Longitude		149.286°E				Bottom Depth		5972		
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ^a ‰	Err ‰	F	OS#	
3	17	2199	1.835	34.624	2	154.00	2	-225.3	3.8	2	11199	
3	16	2400	1.747	34.638	2	152.90	2	-237.9	3.2	2	11179	
3	15	2599	1.683	34.648	2	152.70	2	-234.1	3.6	6	11178	
											11267	
3	14	2802	1.624	34.659	3	151.40	2	-229.7	2.7	2	11177	
3	12	3253	1.550	34.670	2	150.00	2	-227.2	2.7	2	11176	
3	11	3508	1.524	34.673	2	149.80	2	-222.8	2.8	2	11175	
3	10	3751	1.505	34.678	2	148.30	2	-226.3	2.7	2	11174	
3	9	4005	1.489	34.682	2	147.00	2	-222.8	3.1	2	11173	
1	81	4351	1.492	34.686	2	146.31	2	-217.6	2.0	2		
								-217.3	4.3	2	11385	
1	82	4661	1.478	34.689	2	144.45	2	-212.5	2.1	2		
								-207.5	2.8	2	11384	
1	88	4967	1.497	34.690	2	142.03	2	-209.4	2.3	2		
								-207.6	2.6	2	11383	
3	5	4996	1.506	34.690	2	142.20	2	-207.5	2.9	2	11172	
1	92	5273	1.523	34.692	2	139.99	2	-203.0	2.2	2		
								-199.5	2.6	2	11382	
1	94	5580	1.516	34.693	2	138.31	2	-206.5	2.2	2		
								-198.0	2.8	2	11381	
3	2	5753	1.569	34.694	2	137.80	2	-203.8	3.8	2	11171	
3	1	6087	1.601	34.695	2	136.30	2	-199.7	2.7	2	11170	

a. The second number any sample with two values listed was run by AMS

Station 76

		Latitude		30.189°N				Date		11/4/93		
		Longitude		148.047°E				Bottom Depth		6181		
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#	
1	36	6	24.651	34.779	2	1.40	2	118.2	3.6	2	11087	
1	34	100	20.547	34.966	2	1.80	2	116.0	4.0	2	11086	
1	33	149	18.463	34.875	2	2.30	2	112.2	4.2	2	11085	
1	32	199	17.805	34.833	2	2.90	2	109.3	3.9	2	11084	
1	31	295	17.066	34.787	2	4.00	2	114.1	4.9	2	11083	
1	30	397	15.850	34.688	2	6.70	2	114.9	5.2	2	11082	
1	29	499	13.537	34.495	2	13.40	2	84.4	3.6	2	11073	
1	28	598	11.179	34.332	2	23.50	2	50.3	5.0	6	11072	
											11349	
1	27	693	8.479	34.151	2	39.10	2	-7.0	3.1	2	11071	
1	26	798	5.824	34.023	2	63.10	2	-52.4	4.8	2	11070	

Station 76 (Continued)

		Latitude		30.189°N		Date		11/4/93			
		Longitude		148.047°E		Bottom Depth		6181			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	25	899	4.762	34.079	2	84.60	2	-108.0	3.6	2	11069
1	24	989	4.289	34.179	2	101.00	2	-142.0	2.9	2	11068
1	23	1192	3.476	34.327	2	125.80	2	-188.8	5.4	2	11067
1	22	1394	2.906	34.427	2	142.00	2	-206.0	3.5	2	11066
1	21	1596	2.523	34.497	2	152.40	2	-225.0	2.7	2	11065

Station 78

		Latitude		31.208°N		Date		11/5/93			
		Longitude		146.761°E		Bottom Depth		6059			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	17	23.934	34.569	2	1.30	2	119.8	7.2	2	11600
1	35	62	24.024	34.687	2	1.50	2	120.9	5.5	2	11599
1	34	111	20.190	34.914	2	1.90	2	131.0	4.2	2	11598
1	33	161	18.589	34.849	2	2.60	2	120.0	3.9	2	11597
1	32	210	17.823	34.816	2	3.70	2	126.9	3.1	2	11596
1	31	260	17.323	34.789	2	4.20	2	123.0	6.8	6	11595 11686
1	30	310	16.904	34.761	2	5.30	2	118.2	3.4	2	11594
1	29	360	16.210	34.708	2	7.70	2	109.0	5.1	2	11575
1	28	409	15.097	34.626	2	11.20	2	100.6	3.9	2	11574
1	27	508	12.571	34.453	2	20.20	2	64.6	4.5	2	11573
1	26	608	10.286	34.303	2	32.20	2	27.8	3.2	2	11572
1	25	708	6.364	33.952	2	49.90	2	-35.1	3.1	2	11571
1	24	808	5.160	34.031	2	73.80	2	-85.3	3.6	2	11570
1	23	908	4.553	34.114	2	90.90	2	-101.2	3.9	2	11569
1	22	1008	4.045	34.223	2	108.30	2	-151.7	3.0	2	11436
1	20	1404	2.823	34.443	2	143.30	2	-210.2	3.0	2	11435

Station 80

		Latitude		32.230°N		Date		11/6/93			
		Longitude		145.475°E		Bottom Depth		5875			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	24.125	34.695	2	1.60	2	113.8	3.1	2	11005
1	34	94	22.013	34.770	2	2.40	2	116.2	2.8	2	11013
1	32	195	17.675	34.821	2	2.90	2	116.0	2.8	2	11012
1	30	299	17.320	34.802	2	3.30	2	126.8	4.0	2	11011
1	29	396	16.491	34.738	2	6.00	2	111.6	3.5	2	11156

Station 80 (Continued)

		Latitude		32.230°N				Date		11/6/93	
		Longitude		145.475°E				Bottom Depth		5875	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	28	492	14.720	34.596	2	11.80	2	91.8	2.8	2	11010
1	27	596	11.634	34.378	2	23.90	2	43.2	2.7	2	11009
1	26	698	8.239	34.107	2	38.70	2	-5.8	3.0	2	11008
1	23	994	4.281	34.185	2	101.40	2	-145.3	3.7	2	11007
1	22	1194	3.548	34.324	2	124.10	2	-188.8	2.3	2	11006
1	21	1392	2.998	34.414	2	139.40	2	-211.8	2.9	2	11004
1	20	1591	2.623	34.475	2	150.10	2	-222.8	2.6	2	11003
1	19	1795	2.356	34.522	2	156.50	2	-235.2	2.7	2	11002
1	18	1996	2.139	34.565	2	159.90	2	-234.6	2.4	2	11001
1	17	2194	1.998	34.596	2	157.40	3	-233.4	2.2	2	11000
1	16	2397	1.863	34.617	2	157.80	3	-258.9	2.1	4	10999
1	15	2604	1.738	34.633	2	159.20	2	-230.0	2.2	2	10998
1	14	2806	1.665	34.646	2	157.50	2	-234.3	2.6	2	10997
1	13	3004	1.618	34.655	2	156.30	2	-230.8	2.1	2	10996
1	12	3252	1.564	34.663	2	154.10	2	-228.8	2.1	2	10995
1	11	3506	1.526	34.670	2	152.70	2	-227.4	2.1	2	10994
1	10	3750	1.496	34.676	2	151.30	2	-224.3	2.2	2	10993
1	9	4004	1.482	34.681	2	149.70	2	-222.5	2.6	2	10992
1	8	4258	1.478	34.684	2	148.50	2	-215.6	2.2	2	10991
1	7	4504	1.480	34.686	2	147.30	2	-218.0	2.9	2	10990
1	6	4760	1.490	34.688	2	145.90	2	-209.9	2.2	2	10989
1	5	5003	1.504	34.690	2	144.10	2	-209.9	2.2	2	10988
1	4	5257	1.526	34.690	2	143.10	2	-209.4	2.2	2	10987
1	3	5501	1.552	34.691	2	142.20	2	-207.9	2.2	2	10986
1	2	5747	1.579	34.692	2	141.50	2	-200.7	2.2	2	10985

Station 83

		Latitude		33.667°N				Date		11/6/93	
		Longitude		143.667°E				Bottom Depth		5608	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	15	23.107	34.629	2	1.50	2	107.9	3.4	2	11169
1	35	59	22.874	34.616	2	1.50	2	119.0	3.5	2	11168
1	34	109	21.147	34.762	2	2.20	2	120.2	2.7	6	11167
											11523
1	33	149	18.823	34.849	2	2.40	2	111.8	3.5	2	11166
1	32	199	17.785	34.828	2	2.90	2	123.0	3.5	2	11165
1	31	249	17.489	34.812	2	3.10	2	119.3	3.5	2	11164
1	30	304	17.319	34.803	2	3.40	2	109.3	4.6	2	11153
1	29	403	17.086	34.793	2	4.00	2	108.3	3.4	2	11152

Station 83 (Continued)

		Latitude		33.667°N		Date		11/6/93			
		Longitude		143.667°E		Bottom Depth		5608			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	28	501	15.698	34.674	2	8.60	2	98.1	4.0	2	11151
1	27	600	13.134	34.478	2	16.20	2	70.2	3.4	2	11150
1	26	700	10.534	34.297	2	28.00	2	22.6	3.3	2	11149
1	25	800	8.337	34.211	2	47.20	2	-37.9	3.1	2	11148
1	24	901	5.839	34.151	2	74.00	2	-103.8	3.0	2	11147
1	23	1002	5.057	34.237	2	91.90	2	-139.8	2.9	2	11146
1	22	1101	4.470	34.311	2	104.80	2	-163.1	2.8	2	11145
1	21	1197	3.672	34.319	2	120.70	2	-185.8	3.2	2	11144

Station 85

		Latitude		34.169°N		Date		11/7/93			
		Longitude		142.692°E		Bottom Depth		5595			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	22	24.114	34.717	2	1.70	2	110.4	2.9	2	11966
1	35	47	24.105	34.717	2	1.80	2	119.2	4.1	2	11965
1	34	97	23.054	34.743	2	3.30	2	111.1	3.2	2	11964
1	33	147	19.395	34.857	2	2.50	2	117.8	3.7	2	11963
1	32	196	18.063	34.834	2	3.00	2	117.6	3.2	2	11962
1	31	246	17.536	34.813	2	3.20	2	114.3	3.2	2	11961
1	30	300	17.189	34.791	2	3.90	2	114.3	4.0	2	11960
1	29	400	15.385	34.648	2	9.50	2	108.1	4.2	2	11924
1	28	500	13.112	34.494	2	19.90	2	58.9	4.6	2	11931
1	27	607	10.660	34.320	2	28.90	2	30.6	4.9	6	11930
											12199
1	26	706	7.764	34.143	2	47.60	2	-23.3	5.2	2	11929
1	25	806	5.723	34.031	2	65.20	2	-63.0	3.6	2	11928
1	24	902	4.702	34.092	2	86.60	2	-115.2	5.8	6	11927
											12277
1	23	997	4.154	34.221	2	105.90	2	-165.2	3.3	2	12064
1	22	1090	3.817	34.276	2	116.00	2	-163.2	4.0	2	11925
1	20	1405	3.079	34.450	2	133.70	2	-205.2	4.1	2	11853

Station 88

		Latitude		34.725°N		Date		11/8/93			
		Longitude		141.611°E		Bottom Depth		5285			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	16	23.224	34.745	2	2.10	2	110.2	2.8	2	13903
1	32	61	21.174	34.563	2	3.90	2	103.6	4.7	2	12003
1	31	110	18.882	34.615	2	8.80	2	99.9	4.7	2	12002
1	30	160	15.855	34.604	2	14.90	2	82.8	4.6	2	12001
1	29	208	13.846	34.523	2	21.90	2	62.0	4.7	2	12000
1	28	256	11.993	34.442	2	30.20	2	35.4	5.4	2	11999
1	27	301	11.131	34.401	2	34.80	2	15.2	5.3	2	11998
1	26	391	8.790	34.303	2	50.40	2	-25.9	4.5	2	11997
1	25	503	6.045	34.271	2	80.90	2	-105.9	4.2	2	11996
1	24	608	4.416	34.282	2	104.40	2	-156.8	4.1	2	11995
1	23	715	3.689	34.315	2	119.70	2	-180.4	4.1	2	11974
1	22	828	3.296	34.361	2	130.20	2	-172.9	7.4	2	11973
1	20	1036	2.894	34.434	2	141.10	2	-191.7	5.0	2	11972
1	19	1180	2.630	34.481	2	147.40	2	-199.2	5.8	2	11971
1	18	1374	2.334	34.522	2	155.90	2	-218.8	5.2	2	11970
1	17	1562	2.149	34.557	2	159.30	2	-230.7	3.2	2	11969

Station 90

		Latitude		34.928°N		Date		11/8/93			
		Longitude		140.989°E		Bottom Depth		3304			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	20.842	34.492	2	3.30	2	101.3	2.7	2	10975
1	24	49	20.331	34.509	2	4.90	2	100.9	2.6	2	10974
1	23	97	17.470	34.641	2	11.30	2	89.6	3.6	2	10973
1	22	147	14.334	34.569	2	18.90	2	68.9	4.2	2	10960
1	21	197	12.732	34.474	2	26.70	2	41.9	3.5	2	10959
1	20	246	10.897	34.390	2	36.40	2	1.6	4.3	6	10958
											11129
1	18	345	8.832	34.303	2	50.20	2	-37.9	3.3	2	10957
1	17	396	7.650	34.270	2	60.50	2	-71.9	6.5	6	10956
											11155
1	16	496	5.458	34.245	2	85.40	2	-166.3	2.7	3	11081
1	15	596	4.410	34.319	2	105.00	2	-161.9	3.1	2	11080
1	14	696	3.683	34.327	2	119.70	2	-178.9	2.7	2	11079
1	13	796	3.433	34.365	2	125.70	2	-186.8	2.8	2	11078
1	12	897	3.111	34.394	2	134.70	2	-212.0	6.1	2	11077
1	11	996	2.852	34.425	2	142.10	2	-209.0	2.7	2	11076
1	10	1198	2.589	34.469	2	149.80	2	-212.4	2.7	2	11075
1	9	1399	2.338	34.519	2	156.00	2	-222.1	3.4	2	11074

Station 90 (Continued)

		Latitude		34.928°N				Date		11/8/93	
		Longitude		140.989°E				Bottom Depth		3304	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	8	1597	2.194	34.547	2	159.00	2	-231.9	2.6	2	11064
1	7	1798	2.040	34.577	2	160.20	2	-236.5	2.7	2	11063
1	6	1998	1.896	34.603	2	160.00	2	-235.3	3.1	2	11062
1	5	2189	1.794	34.622	2	158.90	2	-236.3	2.7	2	11061
1	4	2395	1.711	34.635	2	158.20	2	-230.4	3.6	6	11060 11805
1	3	2598	1.641	34.648	2	157.50	2	-231.4	2.8	2	11059
1	2	2883	1.549	34.662	2	154.80	2	-230.6	2.8	2	11058
1	1	3344	1.491	34.672	2	151.90	2	-223.9	2.6	2	11057

Station 92

		Latitude		35.092°N				Date		11/9/93	
		Longitude		140.892°E				Bottom Depth		1174	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	12	22.802	34.718	2	2.30	2	118.2	6.3	2	11736
1	15	56	21.892	34.766	2	3.50	2	116.1	3.7	2	11735
1	14	105	17.285	34.636	2	11.90	2	84.0	8.5	2	11734
1	13	155	13.649	34.510	2	20.30	2	60.1	4.1	2	11733
1	12	204	11.481	34.410	2	30.90	2	21.2	5.0	2	11732
1	11	253	9.944	34.321	2	38.40	2	-4.8	4.5	2	11731
1	10	304	7.801	34.209	2	54.60	2	-67.0	5.8	2	11703
1	9	353	6.106	34.097	2	66.00	2	-70.1	3.4	2	11702
1	8	402	5.220	34.071	2	77.00	2	-96.2	5.0	2	11701
1	7	504	4.715	34.085	2	85.60	2	-104.7	7.1	2	11568
1	6	604	4.285	34.114	2	95.70	2	-129.8	2.7	2	11606
1	5	705	4.256	34.201	2	102.80	2	-143.3	2.7	2	11605
1	4	802	3.849	34.242	2	113.30	2	-165.2	2.7	2	11604
1	3	903	3.506	34.330	2	124.30	2	-184.0	2.7	2	11603
1	2	1056	3.132	34.389	2	134.60	2	-203.0	4.0	2	11602
1	1	1156	3.003	34.407	2	138.30	2	-205.9	4.4	2	11601

Station 93

		Latitude		35.125°N				Date		11/9/93	
		Longitude		140.831°E				Bottom Depth		481	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	10	16	22.930	34.738	2	2.10	2	110.1	2.6	2	10981
1	8	105	18.441	34.565	2	9.70	2	87.6	2.7	2	10980

Station 93 (Continued)

		Latitude		35.125°N				Date		11/9/93	
		Longitude		140.831°E				Bottom Depth		481	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	6	204	12.965	34.483	2	24.60	2	42.2	2.6	2	10979
1	4	304	8.261	34.220	2	53.60	2	-54.2	2.5	2	10978
1	2	399	5.723	34.076	2	70.10	2	-85.5	2.4	2	10977
1	1	472	5.465	34.088	2	75.00	2	-85.4	3.2	2	10976

Station 94

		Latitude		35.167°N				Date		11/9/93	
		Longitude		140.781°E				Bottom Depth		216	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	14	118	18.388	34.445	2	9.30	2	78.6	2.6	2	10984
1	12	176	14.928	34.520	2	18.50	2	67.5	2.7	2	10982

WOCE Cruise P13 Leg 1&2
NOAA Designation CGC-92/1 & CGC-92/2
 8/4/92 - 9/15/92
 Chief Scientists: J.L. Bullister and B. Taft
 Principal Investigator for $\Delta^{14}\text{C}$: P. Quay
 NOSAMS Report 95-085 and 96-057

Stations with Surface Data Only

Station	Latitude	Longitude	Cast	Bottle	Pres. (dB)	Temp (°C)	Salt	F	Silicate ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
15	52.016°E	164.289°E	1	36	7	10.305	32.843	2	25.77	2	-8.4	3.5	2	4609
17	50.985°E	164.961°E	1	36	8	9.827	32.843	2	25.22	2	-23.3	3.4	2	4610
21	48.994°E	164.972°E	1	35	7	10.367	32.876	2	29.60	2	-10.5	3.7	2	4611
23	47.989°E	165.001°E	1	36	6	10.905	32.885	2	28.83	2	-1.4	3.7	2	4614
31	44.003°E	164.963°E	1	36	6	14.319	32.899	2	24.91	2	39.5	3.3	2	4606
33	43.008°E	165.000°E	1	36	7	15.478	32.801	2	11.64	2	2.1	3.3	2	4607
35	42.011°E	165.031°E	1	36	6	17.112	32.937	2	15.97	2	4.0	4.5	2	4612
37	41.022°E	164.990°E	1	36	7	19.175	33.711	2	3.29	2	58.7	3.4	2	4613
42	38.480°E	165.040°E	1	36	7	22.171	34.387	2	1.82	2	85.9	5.9	2	4468
52	32.698°E	165.025°E	1	36	7	26.812	34.380	2	1.33	2	131.6	5.0	2	4608
62	18.665°E	164.598°E	1	33	20	28.820	35.036	2	0.35	2	110.2	3.6	2	4615

Station 5

Latitude		54.245°N		Date		8/17/92					
Longitude		171.744°W		Bottom Depth		3269					
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	35	6	8.469	32.937	2	23.87	2	-22.1	6.8	2	2922
1	34	21	8.462	32.940	2	24.20	2	-22.3	4.3	2	2923
1	33	47	4.615	33.146	2	45.87	2	-32.5	4.1	2	2924
1	32	72	3.425	33.212	2	52.35	2	-44.1	4.3	2	2925
1	31	96	3.129	33.256	2	54.96	2	-43.5	4.2	2	2926
1	30	145	2.516	33.293	2	56.77	2	-46.4	6.0	2	2927
1	29	195	3.038	33.341	2	60.38	2	-52.9	3.7	2	2928
1	28	244	3.695	33.556	2	75.17	2	-79.5	4.3	2	3091
1	27	298	3.723	33.735	2	86.03	2	-100.5	3.5	2	3092
1	24	485	3.570	34.046	2	109.66	2	-164.1	4.2	2	3315
1	23	593	3.392	34.149	2	120.54	2	-165.9	3.1	2	3093
1	22	693	3.262	34.212	2	127.26	2	-173.2	3.0	2	3094
1	20	893	2.958	34.313	2	141.65	2	-205.9	2.8	2	3095
1	19	995	2.838	34.351	2	147.49	2	-217.5	3.0	2	3096
1	18	1095	2.706	34.386	2	152.09	2	-227.4	4.3	2	3097
1	16	1291	2.473	34.441	2	160.93	2	-233.2	5.9	2	3098
1	14	1494	2.251	34.505	2	173.99	2	-223.9	4.2	2	3101

Station 5

		Latitude		54.245°N				Date		8/17/92	
		Longitude		171.744°W				Bottom Depth		3269	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	12	1693	2.066	34.543	2	180.75	2	-247.4	7.8	2	3099
1	11	1795	1.980	34.558	2	186.72	2	-228.7	2.5	2	3100
1	10	1992	1.877	34.587	2	193.42	2	-233.5	3.8	2	3102
1	9	2192	1.785	34.602	2	198.27	2	-230.8	3.0	2	3104
1	3	3099	1.582	34.657	2	214.91	2	-229.1	4.1	2	3103

Station 14

		Latitude		54.245°N				Date		8/23/92	
		Longitude		163.587°E				Bottom Depth		5153	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	10.374	32.925	2	27.86	2	-30.6	3.2	2	7007
1	35	21	10.361	32.926	2	38.71	2	-13.2	3.3	2	6998
1	34	46	4.392	33.121	2	49.98	2	-36.2	3.2	2	6992
1	33	72	1.764	33.226	2	52.55	2	-56.4	3.1	2	7000
1	32	96	1.650	33.267	2	72.47	2	-19.6	3.6	2	6996
1	31	120	2.655	33.554	2	87.69	2	-84.9	3.3	2	6987
1	30	146	3.487	33.791	2	92.37	2	-86.4	3.3	2	6990
1	29	170	3.651	33.867	2	95.28	2	-96.5	3.1	2	6995
1	28	196	3.674	33.907	2	101.27	2	-121.2	4.9	2	6999
1	27	245	3.668	33.976	2	105.83	2	-131.3	3.9	2	6993
1	26	295	3.617	34.028	2	113.92	2	-136.5	2.7	2	6997
1	25	344	3.563	34.075	2	110.12	2	-145.9	5.0	2	6988
1	24	394	3.493	34.117	2	113.84	2	-166.7	3.2	2	6989
1	23	494	3.354	34.189	2	122.42	2	-177.7	2.8	2	7001
1	22	593	3.200	34.247	2	129.85	2	-186.6	3.2	2	6994
1	21	694	3.057	34.297	2	135.76	2	-197.0	2.9	2	6782
1	20	792	2.920	34.333	2	141.41	2	-201.2	2.8	2	6783
1	19	892	2.781	34.373	2	146.61	2	-198.6	3.9	2	6986
1	18	993	2.655	34.407	2	152.89	2	-214.3	2.9	2	6781
1	17	1196	2.401	34.465	2	160.20	2	-235.8	3.0	2	6985
1	13	1992	1.839	34.595	2	169.88	2	-238.4	3.1	2	6991

Station 19

		Latitude		49.985°N		Date		8/25/92			
		Longitude		165.002°E		Bottom Depth		5472			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	7	9.874	32.875	2	28.12	2	-10.7	3.4	2	3507
1	34	21	9.869	32.882	2	28.33	2	-17.7	5.1	2	3565
1	33	46	5.118	33.011	2	33.12	2	-12.1	4.8	2	3508
1	32	71	3.351	33.120	2	38.46	2	-25.6	5.8	2	3509
1	31	96	2.301	33.203	2	45.62	2	-25.2	3.4	2	3510
1	30	121	2.237	33.347	2	56.83	2	-50.1	4.7	2	3566
1	29	146	2.577	33.637	2	77.90	2	-78.7	5.1	2	3390
1	27	195	3.303	33.835	2	92.86	2	-99.5	3.6	2	3391
1	26	245	3.403	33.923	2	98.10	2	-125.5	3.6	2	3511
1	25	294	3.476	33.999	2	104.05	2	-141.4	3.0	2	3512
1	23	394	3.494	34.117	2	113.59	2	-156.6	5.8	2	3392
1	22	495	3.365	34.185	2	120.88	2	-176.9	2.9	2	3513
1	21	594	3.206	34.258	2	127.28	2	-192.6	2.7	2	3514
1	20	694	3.056	34.306	2	133.20	2	-195.3	2.7	2	3515
1	19	795	2.909	34.349	2	138.59	2	-210.2	3.6	2	3516
1	18	893	2.786	34.381	2	142.77	2	-202.4	2.9	2	3517
1	17	992	2.654	34.415	2	146.58	2	-206.3	3.5	2	3518
1	16	1193	2.389	34.476	2	154.31	2	-219.1	2.8	2	3519
1	15	1393	2.189	34.523	2	159.22	2	-221.4	2.8	2	3520
1	13	1794	1.901	34.583	2	163.79	2	-225.8	3.0	2	3567
1	12	1994	1.800	34.605	2	164.26	2	-227.5	2.8	2	3521
1	11	2293	1.684	34.629	2	160.76	2	-230.3	2.9	2	3522
1	10	2595	1.601	34.645	2	157.39	2	-229.2	2.9	2	3523
1	9	2895	1.541	34.657	2	153.76	2	-230.1	3.1	2	3393
1	8	3197	1.499	34.665	2	150.89	2	-223.6	2.9	2	3524
1	7	3496	1.478	34.672	2	148.60	2	-183.9	4.8	4	3525
1	6	3796	1.467	34.677	2	146.79	2	-221.7	5.4	2	3394
1	5	4098	1.469	34.679	2	146.12	2	-205.6	3.0	3	3526
1	3	4699	1.496	34.684	2	144.67	2	-223.4	3.9	2	3395
1	1	5581	1.581	34.687	2	146.17	2	-222.7	5.7	2	3396

Station 24

		Latitude		49.985°N		Date		8/25/92			
		Longitude		165.002°E		Bottom Depth		5472			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	7	11.121	32.895	2	30.00	2	-18.2	2.7	2	5954
1	34	21	9.991	32.915	2	30.36	2	-16.5	4.1	2	5959
1	33	45	4.729	33.062	2	37.60	2	-28.5	2.8	2	5828
1	32	72	2.684	33.091	2	41.42	2	-31.6	2.9	2	5963

Station 24 (Continued)

		Latitude		49.985°N				Date		8/25/92	
		Longitude		165.002°E				Bottom Depth		5472	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	31	97	2.079	33.133	2	45.61	2	-32.9	2.6	2	5955
1	30	122	1.511	33.310	2	56.86	2	-49.5	2.5	2	5957
1	29	146	2.143	33.598	2	79.18	2	-77.1	2.2	2	5826
1	27	196	2.833	33.765	2	100.43	2	-104.2	3.3	2	5956
1	25	296	3.172	33.954	2	106.94	2	-135.0	2.3	2	5825
1	24	345	3.239	34.032	2	112.65	2	-141.4	2.8	2	5964
1	23	396	3.258	34.109	2	117.48	2	-149.3	6.1	2	5961
1	22	495	3.172	34.177	2	126.05	2	-172.3	7.8	6	5960
											5827
1	21	595	3.060	34.234	2	133.34	2	-184.7	2.3	2	5953
1	20	695	2.961	34.294	2	141.57	2	-190.4	2.6	2	5958
1	19	795	2.851	34.340	2	146.91	2	-193.8	4.2	2	5962
1	18	894	2.716	34.382	2	152.14	2	-210.1	2.4	2	5830
1	17	994	2.604	34.413	2	156.05	2	-212.6	2.4	2	5829
1	16	1294	2.284	34.496	2	164.84	2	-233.4	2.5	2	5832
1	14	1893	1.889	34.591	2	170.03	2	-238.4	2.3	2	5831

Station 29

		Latitude		44.991°N				Date		8/30/92	
		Longitude		164.981°E				Bottom Depth		5830	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	6	13.474	33.208	2	18.98	2	11.4	4.8	2	3862
1	35	16	13.476	33.214	2	19.29	2	-1.7	6.4	2	3583
1	34	46	5.654	33.416	2	29.39	2	5.8	6.2	2	3863
1	33	70	4.671	33.504	2	30.30	2	2.5	5.2	2	3569
1	32	95	4.489	33.523	2	29.50	2	-11.0	5.8	2	3573
1	31	120	4.517	33.597	2	31.37	2	7.7	3.3	2	3861
1	30	145	4.953	33.643	2	34.61	2	4.2	3.4	2	3864
1	27	244	3.989	33.747	2	66.31	2	-56.3	4.4	2	3865
1	24	394	3.820	33.938	2	90.86	2	-114.0	4.0	2	3859
1	23	494	3.594	34.042	2	105.24	2	-138.3	4.1	2	3866
1	21	693	3.286	34.218	2	125.96	2	-171.5	3.2	2	3571
1	20	793	3.119	34.275	2	132.98	2	-178.8	5.4	2	3860
1	19	894	2.957	34.327	2	138.81	2	-204.0	3.9	2	3867
1	18	994	2.792	34.362	2	143.92	2	-202.4	3.7	2	3570
1	17	1191	2.522	34.424	2	156.61	2	-214.1	3.1	2	3575
1	16	1491	2.244	34.507	2	164.84	2	-229.2	4.5	2	3582
1	15	1794	2.055	34.561	2	166.53	2	-243.3	3.2	2	3581
1	14	2090	1.887	34.598	2	168.00	2	-240.3	3.2	2	3572
1	13	2394	1.741	34.627	2	166.15	2	-241.5	2.5	2	3868

Station 29 (Continued)

		Latitude		44.991°N				Date		8/30/92	
		Longitude		164.981°E				Bottom Depth		5830	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	12	2698	1.639	34.645	2	162.79	2	-241.4	2.8	2	3578
1	11	2996	1.574	34.657	2	160.06	2	-232.2	4.5	2	3576
1	10	3297	1.527	34.667	2	158.14	2	-231.8	3.4	2	3574
1	9	3597	1.499	34.672	2	156.08	2	-226.1	3.1	2	3584
1	8	3900	1.485	34.677	2	154.53	2	-216.6	2.4	2	3869
1	6	4594	1.492	34.684	2	151.48	2	-220.7	3.3	2	3580
1	5	5000	1.520	34.688	2	151.46	2	-210.6	3.9	2	3876
1	4	5398	1.561	34.688	2	152.75	2	-208.0	3.4	2	3577
1	3	5592	1.585	34.691	2	153.42	2	-205.0	3.1	2	3568
1	2	5949	1.631	34.690	6	153.19	2	-217.6	3.8	2	3579

Station 34

		Latitude		42.499°N				Date		9/1/92	
		Longitude		164.99°E				Bottom Depth		4987	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	15.464	32.792	2	16.97	2	4.6	2.4	2	6614
1	34	26	7.519	33.138	2	24.82	2	5.3	3.7	2	6620
1	33	46	5.430	33.239	2	27.91	2	29.8	8.1	2	6628
1	32	72	4.005	33.288	2	31.00	2	-13.5	2.8	2	6623
1	31	97	3.994	33.346	2	31.66	2	12.0	2.7	2	6625
1	30	121	4.028	33.442	2	36.84	2	-1.7	3.7	2	6635
1	29	146	4.091	33.547	2	44.18	2	-3.9	3.4	2	6626
1	26	196	3.589	33.715	2	66.16	2	-35.3	4.2	2	6630
1	25	246	3.432	33.785	2	76.30	2	-72.4	2.4	2	6616
1	24	294	3.624	33.855	2	86.60	2	-94.5	2.3	2	6615
1	23	345	3.570	33.923	2	94.42	2	-101.7	3.9	2	6631
1	22	395	3.471	33.983	2	103.04	2	-140.0	2.8	2	6636
1	21	494	3.463	34.099	2	114.41	2	-148.4	5.8	6	6621
											6624
1	20	595	3.415	34.191	6	122.36	2	-150.0	3.9	2	6627
1	19	693	3.204	34.255	2	130.81	2	-177.8	2.8	2	6618
1	18	793	3.025	34.304	2	137.17	2	-186.0	2.5	2	6634
1	17	894	2.864	34.353	2	143.06	2	-203.5	3.6	2	6619
1	16	993	2.742	34.391	2	147.55	2	-207.1	2.5	2	6622
1	15	1194	2.469	34.446	2	155.43	2	-217.1	2.8	2	6617
1	11	1991	1.893	34.589	2	166.84	2	-218.2	4.2	3	6629

Station 39

		Latitude				Date					
		40.015°N				9/2/92					
		Longitude				Bottom Depth					
		165.003°E				5470					
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	6	19.573	33.767	2	3.47	2	65.1	3.7	2	3886
1	35	23	19.241	33.791	2	3.84	2	66.2	5.1	2	3887
1	34	47	12.102	34.034	2	14.12	2	39.0	4.1	2	4464
1	31	120	8.646	-9	5	23.67	2	24.5	5.1	2	4470
1	30	146	7.956	33.977	2	26.31	2	28.3	3.7	2	3893
1	27	194	6.850	33.847	2	28.63	2	-11.0	3.6	2	4465
1	26	244	6.146	33.845	2	36.52	2	1.1	6.9	3	4461
1	25	295	5.436	33.906	2	57.08	2	-57.6	3.5	2	3898
1	24	344	4.947	33.909	2	66.27	2	-72.8	4.2	2	3888
1	23	394	4.643	33.936	2	75.22	2	-87.1	3.1	2	3889
1	22	495	4.297	34.067	2	91.28	2	-119.9	3.8	2	3890
1	21	594	3.963	34.156	2	105.83	2	-143.1	3.7	2	3891
1	19	794	3.529	34.305	2	125.91	2	-181.0	3.4	2	3892
1	18	895	3.183	34.358	6	134.53	2	-213.7	2.9	2	4466
1	17	994	2.867	34.388	2	144.32	2	-225.4	4.2	2	4467
1	16	1192	2.419	34.442	2	157.25	2	-225.5	3.0	2	3897
1	15	1393	2.329	34.474	2	160.02	2	-215.2	3.1	2	3894
1	12	2095	1.996	34.575	2	164.57	2	-236.0	3.2	2	3900
1	10	2697	1.657	34.646	2	163.92	2	-239.8	2.9	2	4469
1	9	2995	1.575	34.656	2	160.83	2	-228.7	5.1	3	4460
1	8	3295	1.518	34.666	2	157.85	2	-239.6	4.3	2	3896
1	7	3598	1.485	34.672	2	155.98	2	-231.1	3.3	2	3895
1	5	4197	1.470	34.682	2	153.14	2	-228.8	4.0	2	4473
1	4	4497	1.479	34.685	2	152.37	2	-221.4	3.3	2	4462
1	3	4797	1.498	34.685	2	152.51	2	-226.3	3.0	2	4471
1	2	5098	1.526	34.687	2	152.70	2	-215.1	2.8	2	3899
1	1	5574	1.582	34.688	6	153.73	2	-228.9	3.0	2	4463

Station 47

		Latitude				Date					
		36.013°N				9/5/92					
		Longitude				Bottom Depth					
		165.008°E				5490					
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	7	23.185	34.278	2	2.01	2	98.8	3.3	2	4588
1	34	20	20.966	34.137	2	2.33	2	83.5	3.2	2	4589
1	33	45	14.711	34.499	2	3.70	2	93.1	3.6	2	4590
1	32	71	13.787	34.514	2	9.40	2	80.6	3.5	2	4591
1	31	97	13.063	34.462	2	11.23	2	75.1	3.3	2	4592
1	29	145	12.257	34.414	2	12.72	2	55.2	3.4	2	4593
1	26	195	11.752	34.374	2	14.08	2	57.0	3.6	2	4594

Station 47 (Continued)

		Latitude		36.013°N				Date		9/5/92	
		Longitude		165.008°E				Bottom Depth		5490	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	25	245	10.993	34.306	2	17.16	2	44.6	4.2	2	4595
1	24	295	9.941	34.223	2	23.31	2	22.3	4.9	2	4596
1	23	340	8.948	34.146	2	27.68	2	7.2	3.5	2	4597
1	22	394	7.824	34.066	2	36.24	2	-15.0	5.7	2	4598
1	21	493	5.863	34.003	2	58.48	2	-61.0	4.3	2	4599
1	20	595	4.557	34.015	2	79.52	2	-101.2	3.8	2	4600
1	19	695	4.341	34.126	2	96.00	2	-136.6	2.8	2	4601
1	18	793	3.930	34.214	6	111.00	2	-167.9	2.9	2	4602
1	17	894	3.657	34.284	2	121.04	2	-183.6	2.8	2	4603
1	16	993	3.363	34.338	2	130.37	2	-194.5	4.0	2	4604
1	12	1993	1.984	34.588	2	165.21	2	-250.7	2.8	2	4605

Station 50

		Latitude		34.042°N				Date		9/7/92	
		Longitude		165.053°E				Bottom Depth		6070	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	7	26.563	34.301	2	1.33	2	109.8	3.2	2	5975
1	34	21	26.526	34.298	2	1.35	2	115.6	4.1	2	6092
1	32	72	20.449	34.729	2	4.43	2	109.6	4.1	2	5974
1	31	99	19.066	-9	1	5.95	2	118.0	4.0	2	5976
1	30	122	17.670	34.759	2	6.73	2	109.9	3.3	2	5969
1	29	146	17.145	34.710	2	9.09	2	100.7	3.4	2	5981
1	28	171	16.147	34.649	2	10.84	2	92.6	3.3	2	6090
1	27	195	15.520	34.647	2	11.50	2	81.3	4.0	2	6094
1	26	248	13.422	34.486	2	11.02	2	79.0	3.1	2	5979
1	25	295	12.637	34.419	2	14.63	2	75.6	3.4	2	5965
1	24	345	11.461	34.339	2	18.19	2	60.0	3.2	2	5988
1	23	395	10.139	34.280	2	26.86	2	27.2	3.8	2	6091
1	22	492	6.925	34.004	2	42.72	2	-19.6	3.1	2	5983
1	21	596	5.401	34.002	2	67.19	2	-112.1	2.8	2	5972
1	20	697	4.615	34.069	2	87.96	2	-130.1	2.9	2	5971
1	19	792	4.237	34.181	2	103.49	2	-147.0	2.6	2	5978
1	18	896	3.825	34.266	2	118.53	2	-177.1	2.7	2	5984
1	16	1193	2.883	34.413	2	143.58	2	-208.1	2.7	2	5967
1	15	1389	2.573	34.474	2	154.54	2	-228.5	2.9	2	5970
1	14	1694	2.201	34.552	2	161.88	2	-240.3	2.5	2	5973
1	13	1995	1.958	34.595	2	165.71	2	-243.1	3.6	2	5966
1	12	2296	1.753	34.623	2	165.74	2	-235.7	2.6	2	5987
1	9	3196	1.503	34.667	2	157.94	2	-235.9	2.6	2	5982

Station 50 (Continued)

		Latitude		34.042°N				Date		9/7/92	
		Longitude		165.053°E				Bottom Depth		6070	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	8	3597	1.476	34.681	2	154.19	2	-254.3	2.3	2	5977
1	7	4003	1.464	34.681	2	151.73	2	-215.7	2.6	2	6089
1	6	4400	1.468	34.686	2	149.60	2	-222.4	2.6	2	5968
1	5	4800	1.475	34.689	2	145.80	2	-207.1	3.3	2	6093
1	4	5100	1.487	34.691	2	142.52	2	-209.0	2.4	2	5986
1	3	5396	1.502	34.694	2	139.79	2	-201.4	3.6	2	5980
1	1	5751	1.527	34.696	6	137.69	2	-199.6	2.5	2	5985

Station 54

		Latitude		31.326°N				Date		9/9/92	
		Longitude		164.984°E				Bottom Depth		5847	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	7	27.302	34.869	2	1.46	2	119.9	5.8	2	4480
1	34	21	27.303	34.869	2	1.44	2	108.5	5.7	2	4481
1	32	71	19.789	34.869	2	1.92	2	108.8	4.1	2	4483
1	31	97	18.229	34.840	2	2.27	2	91.7	4.0	2	4482
1	30	121	17.610	34.809	2	2.92	2	103.9	3.8	2	4484
1	28	171	17.008	34.780	2	3.82	2	105.1	4.3	2	4487
1	27	199	16.694	-9	5	4.09	2	116.5	3.9	2	4485
1	26	245	16.361	-9	5	4.99	2	97.6	5.5	2	4475
1	24	344	15.055	34.628	2	8.60	2	97.0	5.0	2	4488
1	23	394	14.065	34.539	2	11.44	2	72.6	4.7	2	4477
1	22	496	11.791	34.373	2	19.58	2	48.3	5.3	2	4474
1	21	593	9.399	34.167	2	32.78	2	-2.2	3.6	2	4486
1	20	789	5.199	34.040	2	77.54	2	-122.2	3.1	2	4478
1	19	990	3.995	34.232	2	113.26	2	-180.7	3.2	2	4476
1	18	1195	3.269	34.358	6	134.37	2	-204.3	3.5	2	4472
1	17	1393	2.765	34.444	2	149.36	2	-227.9	3.0	2	4489
1	16	1694	2.329	34.538	2	161.41	2	-257.4	3.9	3	4479

Station 56

		Latitude		21.967°N				Date		9/30/92	
		Longitude		165.01°E				Bottom Depth		5264	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	27.629	35.183	2	0.34	2	117.8	3.6	2	6125
1	34	47	24.572	35.152	2	1.16	2	129.3	3.9	2	6110
1	33	71	21.089	35.128	2	1.64	2	113.2	3.8	2	6126

Station 56 (Continued)

		Latitude		21.967°N		Date		9/30/92			
		Longitude		165.01°E		Bottom Depth		5264			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	31	122	18.828	34.880	2	2.82	2	111.5	3.6	2	6097
1	30	146	17.597	34.816	2	3.38	2	107.9	3.8	2	6098
1	29	173	17.093	34.771	2	4.67	2	117.4	3.4	2	6114
1	28	196	16.650	-9	5	152.40	4	-228.2	2.8	4	6108
1	26	296	14.707	34.528	2	10.41	2	92.5	3.2	2	6116
1	25	348	12.823	34.410	2	14.66	2	81.3	3.9	2	6103
1	24	396	11.246	34.314	2	17.58	2	63.5	3.1	2	6104
1	23	496	8.597	34.135	2	34.09	2	0.6	5.4	6	6106
											6111
1	22	596	6.582	34.121	2	64.15	2	-95.2	2.8	2	6107
1	21	692	5.555	34.217	2	82.91	2	-141.5	2.8	2	6121
1	20	794	4.916	34.327	2	97.19	2	-165.6	2.8	2	6101
1	19	890	4.398	34.404	2	105.61	2	-180.7	2.7	2	6102
1	18	993	4.087	34.462	6	112.03	2	-192.6	2.7	2	6120
1	17	1193	3.492	34.517	2	122.06	2	-221.8	2.9	2	6096
1	16	1391	2.986	34.547	2	134.11	2	-218.5	2.5	2	6119
1	15	1595	2.537	34.576	2	143.22	2	-229.2	2.6	2	6117
1	14	1792	2.252	34.599	2	149.17	2	-227.9	2.9	2	6109
1	13	2094	1.960	34.624	2	153.56	2	-240.3	2.6	2	6115
1	12	2396	1.781	34.647	2	157.11	2	-234.6	3.4	2	6099
1	11	2692	1.693	34.655	2	155.54	2	-235.7	2.5	2	6113
1	10	2993	1.619	34.664	2	154.99	2	-233.1	2.5	2	6105
1	8	3595	1.508	34.677	2	154.98	2	-232.5	3.5	2	6095
1	7	3899	1.478	34.685	2	152.24	2	-214.4	2.6	2	6122
1	6	4199	1.458	34.689	2	147.45	2	-210.2	2.9	2	6123
1	5	4501	1.442	34.691	2	143.68	2	-214.5	2.5	2	6118
1	3	5099	1.430	34.693	2	138.47	2	-192.6	2.8	2	6100
1	2	5300	1.445	34.693	2	138.06	2	-201.2	2.7	2	6112
1	1	5353	1.448	34.697	6	136.61	2	-196.7	2.6	2	6124

Station 59

		Latitude		19.988°N		Date		10/1/92			
		Longitude		165.005°E		Bottom Depth		5325			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	32	96	23.501	35.228	2	1.24	2	110.5	3.6	2	4628
1	30	146	20.471	35.071	2	2.29	2	127.7	4.1	2	4673
1	29	166	19.361	34.964	2	2.88	2	119.5	3.7	2	4674
1	28	195	17.860	34.842	2	3.78	2	118.2	5.0	2	4675
1	27	246	16.059	34.693	2	6.05	2	111.3	3.4	2	4676

Station 59 (Continued)

		Latitude		19.988°N				Date		10/1/92	
		Longitude		165.005°E				Bottom Depth		5325	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	26	296	14.319	34.517	2	9.81	2	78.3	4.0	2	4677
1	24	393	11.312	34.245	2	20.65	2	37.2	3.3	2	4678
1	23	493	8.047	34.116	2	40.80	2	-45.4	6.5	2	4682
1	21	693	5.296	34.242	2	84.36	2	-153.6	2.9	2	4680
1	19	891	4.442	34.438	2	103.16	2	-194.9	3.2	2	4683
1	12	2190	1.909	34.633	2	152.83	2	-235.6	3.1	2	4966
1	11	2496	1.733	34.649	2	154.40	2	-237.8	2.9	2	4967
1	10	2795	1.640	34.659	2	154.58	2	-238.6	3.7	2	4968
1	9	3092	1.571	34.666	2	154.12	2	-231.8	3.7	2	4685
1	8	3398	1.515	34.670	2	152.44	2	-237.8	2.7	2	4687
1	7	3700	1.479	34.679	2	150.38	2	-233.7	2.7	2	4681
1	6	3997	1.455	34.689	2	148.25	2	-216.4	2.8	2	4686
1	5	4300	1.432	34.690	2	143.80	2	-217.9	3.4	2	4679
1	4	4599	1.415	34.692	2	139.59	2	-218.6	3.4	2	4688
1	2	5101	1.415	34.696	2	134.60	2	-201.9	2.9	2	4684
1	1	5415	1.439	34.697	6	133.25	2	-202.6	4.5	2	4689

Station 63

		Latitude		24.042°N				Date		10/4/92	
		Longitude		164.985°E				Bottom Depth		5403	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	8	27.233	35.154	2	1.07	2	106.1	3.7	2	4490
1	34	21	27.134	35.155	2	1.16	2	104.3	3.7	2	4491
1	32	60	25.853	-9	5	1.30	2	107.5	6.5	2	4585
1	30	122	19.811	35.151	2	2.46	2	108.1	3.8	2	4492
1	29	147	19.051	35.019	2	2.77	2	95.7	5.1	2	4493
1	28	171	17.867	34.981	2	3.19	2	115.6	3.7	2	4494
1	27	197	17.056	34.878	2	3.70	2	116.0	3.7	2	4495
1	26	221	16.768	34.811	2	4.40	2	116.3	7.1	2	4496
1	25	246	16.370	34.755	2	5.07	2	133.0	4.0	2	4497
1	24	297	15.555	34.678	2	6.84	2	117.4	3.7	2	4498
1	23	347	14.216	34.552	2	10.37	2	99.4	4.0	2	4499
1	22	386	12.820	34.423	2	13.77	2	86.1	4.1	2	4501
1	21	495	9.540	34.187	2	25.92	2	28.5	4.8	2	4502
1	20	595	7.534	34.095	2	39.86	2	-13.5	3.8	2	4503
1	19	698	5.724	34.079	2	65.07	2	-87.0	4.1	2	4586
1	18	796	4.917	34.153	2	89.92	2	-141.1	3.4	2	4587

Station 64

		Latitude				26.018°N				Date		10/5/92	
		Longitude				165.064°E				Bottom Depth		4237	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	1	-9	159.500	34.688	6	-9	5	-218.3	2.8	2			
1	36	7	26.395	35.275	2	0.59	2	128.6	3.1	2	6341		
1	34	22	26.348	35.281	2	0.61	2	108.0	3.0	2	6352		
1	32	71	23.058	35.332	2	0.70	2	114.0	4.0	2	6338		
1	31	95	22.095	35.301	2	1.24	2	105.2	6.0	2	6346		
1	30	119	20.819	35.263	2	1.43	2	123.2	3.1	2	6356		
1	29	144	19.244	35.097	2	2.05	2	113.2	3.3	2	6342		
1	28	171	18.527	34.991	2	2.45	2	129.2	3.6	2	6129		
1	27	195	17.858	34.903	2	2.95	2	129.4	3.1	2	6340		
1	25	294	15.563	34.673	2	6.38	2	107.6	3.5	2	6349		
1	22	494	10.403	34.285	2	20.25	2	45.8	2.7	6	6337		
											6354		
											6343		
1	21	589	7.908	34.123	2	33.64	2	1.3	3.7	2	6344		
1	20	686	6.117	34.038	2	57.08	2	-58.7	3.1	2	6130		
1	19	790	5.022	-9	5	80.71	2	-118.6	2.9	2	6336		
1	18	885	4.314	34.177	2	100.03	2	-152.6	3.0	2	6131		
1	17	991	3.850	34.267	2	114.53	2	-183.8	2.8	2	6335		
1	16	1091	3.468	34.341	2	125.61	2	-186.5	2.6	2	6357		
1	15	1194	3.159	34.412	2	135.88	2	-219.9	2.7	2	6333		
1	14	1292	2.960	34.452	2	141.86	2	-222.1	3.0	2	6332		
1	13	1393	2.716	34.497	2	147.30	2	-221.7	2.8	2	6351		
1	12	1593	2.379	34.544	2	153.17	2	-232.7	3.1	2	6334		
1	11	1792	2.120	34.580	2	158.79	2	-235.2	2.8	2	6353		
1	10	1995	1.954	34.612	2	159.20	2	-236.9	2.7	2	6355		
1	8	2495	1.689	34.646	2	156.68	2	-236.3	2.5	2	6339		
1	7	2793	1.605	34.657	2	156.36	2	-240.2	2.6	2	6345		
1	6	3095	1.544	34.667	2	155.64	2	-229.5	2.8	2	6132		
1	5	3397	1.507	34.673	2	154.12	2	-227.9	2.8	2	6128		
1	4	3700	1.480	34.680	2	152.08	2	-223.7	2.5	2	6350		
1	3	3999	1.463	34.686	2	146.45	2	-223.2	2.6	2	6127		
1	2	4298	1.448	34.686	2	150.63	2	-214.6	3.6	2	6347		

Station 65

		Latitude				28.034°N				Date		10/5/92	
		Longitude				164.999°E				Bottom Depth		5732	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	36	7	26.094	35.089	2	1.43	2	113.5	4.0	2	3877		
1	35	22	26.099	35.088	2	1.44	2	115.8	4.4	2	3870		

Station 65 (Continued)

		Latitude		28.034°N				Date		10/5/92	
		Longitude		164.999°E				Bottom Depth		5732	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	34	44	26.099	35.092	2	1.55	2	117.4	4.3	2	3878
1	33	71	21.590	34.794	2	1.97	2	119.1	8.2	2	3879
1	32	93	17.332	34.739	2	2.99	2	113.2	3.4	2	3871
1	31	121	16.149	34.723	2	4.79	2	97.0	4.8	2	3872
1	30	145	15.897	34.715	2	5.23	2	105.2	3.1	2	3974
1	29	169	15.681	34.701	2	5.77	2	118.6	3.1	2	3873
1	28	196	15.401	34.674	2	6.59	2	107.4	3.4	2	3975
1	27	243	14.930	34.638	2	7.76	2	110.8	4.0	2	3880
1	26	296	14.053	34.546	2	10.59	2	95.0	4.0	2	3881
1	25	345	13.592	34.487	2	12.58	2	89.0	3.5	2	3874
1	23	494	10.539	34.234	2	26.07	2	37.0	5.6	2	3882
1	22	594	7.556	34.071	2	42.93	2	-12.6	3.3	2	3875
1	19	894	4.146	34.194	2	106.85	2	-154.4	3.3	2	3883
1	18	994	3.678	34.265	6	119.82	2	-179.4	5.6	2	3884
1	17	1192	3.104	34.395	2	140.75	2	-207.9	4.5	2	3885

Station 66

		Latitude		16.009°N				Date		10/8/92	
		Longitude		164.992°E				Bottom Depth		5224	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	21	28.603	34.706	2	0.59	2	112.5	3.9	2	3284
1	34	47	28.608	34.704	2	0.57	2	104.7	3.9	2	3272
1	33	70	27.066	34.710	2	0.61	2	124.8	5.0	2	3293
1	32	95	25.595	35.104	2	0.88	2	116.6	5.0	2	3294
1	30	147	22.563	35.238	2	1.28	2	129.2	3.8	2	3277
1	29	172	19.277	34.927	2	2.91	2	118.5	4.0	2	3285
1	28	196	17.170	34.847	2	4.49	2	97.3	3.7	2	4616
1	27	246	13.740	34.496	2	11.25	2	81.8	3.7	2	3289
1	26	295	11.577	34.300	2	22.95	2	36.0	3.3	2	3270
1	24	396	8.660	34.322	2	42.54	2	-55.4	4.7	2	3292
1	23	496	7.529	-9	5	54.61	2	-115.1	3.2	2	3276
1	22	594	6.732	34.478	2	64.12	2	-137.9	3.6	2	3275
1	21	695	5.995	34.493	2	73.05	2	-159.8	3.3	2	3271
1	20	792	5.527	34.501	2	81.18	2	-165.3	4.0	2	3296
1	19	895	5.051	34.514	2	88.67	2	-163.8	4.2	3	3291
1	18	993	4.623	34.527	6	95.54	2	-169.7	3.2	3	3279
1	17	1095	4.228	34.538	2	102.74	2	-204.8	5.6	2	3274
1	16	1192	3.840	34.547	2	111.12	2	-208.1	2.8	2	3280
1	14	1493	3.034	34.581	2	118.46	4	-217.5	3.3	4	3282

Station 66 (Continued)

		Latitude		16.009°N		Date		10/8/92			
		Longitude		164.992°E		Bottom Depth		5224			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	13	1695	2.664	34.595	2	138.36	2	-233.9	3.0	2	3281
1	11	2292	1.966	34.642	2	149.96	2	-220.8	4.8	3	3290
1	10	2595	1.804	34.656	2	153.15	2	-235.0	3.1	2	3286
1	8	3196	1.589	34.671	2	155.97	2	-234.5	3.1	2	3269
1	7	3498	1.533	34.676	2	153.63	2	-227.8	3.8	2	3283
1	6	3797	1.500	34.681	2	151.11	2	-223.6	4.0	2	3295
1	5	4099	1.468	34.684	2	148.20	2	-219.0	3.3	2	3273
1	4	4400	1.438	34.690	2	144.01	2	-226.4	3.5	3	3397
1	3	4699	1.416	34.695	2	138.36	2	-195.9	2.9	2	3288
1	2	4900	1.414	34.697	2	135.56	2	-190.7	2.9	2	3278
1	1	5112	1.416	34.698	6	134.66	2	-198.8	3.8	2	3287

Station 67

		Latitude		14.008°N		Date		10/9/92			
		Longitude		164.990°E		Bottom Depth		5308			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	34	46	28.673	34.669	2	0.66	2	110.2	3.3	2	7011
1	33	71	28.007	34.719	2	0.72	2	85.8	3.4	2	7017
1	32	96	26.354	34.688	2	1.06	2	89.9	3.9	2	7010
1	31	121	25.250	35.045	2	1.05	2	104.7	3.3	2	7013
1	30	145	23.084	35.094	2	1.38	2	110.5	3.4	2	7009
1	29	169	21.232	34.982	2	2.79	2	99.3	4.7	2	7004
1	27	244	13.967	34.581	2	8.47	2	88.2	5.0	2	7002
1	26	295	10.472	34.298	2	21.64	2	10.5	3.2	2	7005
1	24	400	8.322	34.358	2	42.35	2	-91.5	2.7	2	7019
1	23	495	7.389	34.479	2	52.15	2	-135.5	14.6	6	7006 7012
1	22	593	6.664	34.480	2	63.33	2	-142.8	4.1	2	7014
1	21	693	6.085	34.496	2	72.07	2	-172.1	2.8	2	7008
1	20	793	5.519	34.504	2	79.08	2	-172.2	3.9	2	7016
1	19	893	5.005	34.517	2	87.26	2	-188.8	2.6	2	7003
1	18	993	4.672	34.533	6	95.65	2	-198.1	2.6	2	7020
1	17	1121	4.226	34.544	2	104.85	2	-214.9	2.9	2	7018
1	16	1291	3.644	34.562	2	116.07	2	-208.8	3.0	2	7015

Station 68

		Latitude		12.590°N		Date		10/9/92			
		Longitude		165.367°E		Bottom Depth		4879			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	6	28.936	34.382	2	0.57	2	110.3	4.2	2	3300
1	35	6	28.936	34.381	2	0.54	2	101.8	4.1	2	3297
1	34	22	28.972	34.500	2	0.71	2	103.3	3.9	2	3302
1	32	71	27.732	34.709	2	0.88	2	80.5	3.8	3	3304
1	30	120	23.069	34.764	2	1.08	2	106.1	4.5	2	3313
1	27	233	11.779	-9	1	19.78	2	41.1	3.5	2	3310
1	26	294	9.302	34.403	2	32.70	2	-40.6	3.6	2	3314
1	25	342	8.383	34.405	2	42.11	2	-85.0	3.5	2	3307
1	24	393	8.214	34.451	2	48.28	2	-101.7	3.2	2	3311
1	23	493	7.143	34.489	2	56.38	2	-124.1	3.3	2	3298
1	20	794	5.488	34.519	2	78.09	2	-159.0	3.1	2	3309
1	19	892	5.064	34.527	2	86.20	2	-176.7	3.0	2	3308
1	18	992	4.604	34.539	6	94.43	2	-205.7	3.3	3	3305
1	17	1094	4.242	34.553	2	101.93	2	-197.9	3.0	2	3306
1	16	1193	3.831	34.565	2	111.07	2	-209.9	3.0	2	3312
1	15	1290	3.453	34.575	2	117.82	2	-208.7	3.8	2	3299
1	14	1394	3.126	34.584	2	125.03	2	-215.0	3.0	2	3303

Station 69

		Latitude		10.008°N		Date		10/10/92			
		Longitude		165.002°E		Bottom Depth		5059			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	6	29.162	34.353	2	0.71	2	104.0	3.4	2	6745
1	31	121	19.645	34.874	2	3.73	2	100.1	3.2	2	6752
1	30	145	16.397	34.638	2	10.11	2	76.0	3.5	2	6777
1	29	171	13.905	34.471	2	18.29	2	28.4	3.0	2	6768
1	28	196	12.005	34.483	2	23.67	2	1.3	3.1	2	6769
1	27	245	10.527	34.579	2	31.45	2	-49.6	2.9	2	6750
1	26	294	9.772	34.612	2	36.01	2	-81.9	2.7	2	6767
1	25	345	9.384	34.632	2	36.76	2	-95.9	2.8	2	6751
1	24	395	9.063	34.623	2	40.14	2	-93.2	3.1	2	6759
1	23	496	8.213	34.595	2	44.07	2	-101.8	2.8	2	6758
1	22	594	7.436	34.557	2	52.07	2	-124.4	2.8	2	6778
1	21	692	6.780	34.542	2	59.96	2	-134.0	2.8	2	6757
1	20	794	6.083	34.539	2	67.79	2	-146.3	4.3	2	6772
1	19	894	5.543	34.537	2	76.62	2	-159.0	3.1	2	6780
1	18	994	5.008	34.541	2	87.05	2	-177.9	3.3	2	6753
1	17	1092	4.502	34.547	2	96.96	2	-187.3	2.6	2	6760
1	16	1189	4.041	34.560	2	104.28	2	-202.3	3.3	2	6773

Station 69 (Continued)

		Latitude		10.008°N				Date		10/10/92	
		Longitude		165.002°E				Bottom Depth		5059	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	15	1294	3.731	34.569	2	110.90	2	-205.2	2.8	2	6766
1	14	1492	3.108	34.592	2	122.98	2	-214.1	3.0	2	6779
1	13	1694	2.685	34.610	2	134.87	2	-231.0	2.5	2	6754
1	12	1995	2.244	34.633	2	144.28	2	-235.5	2.5	2	6771
1	11	2293	2.026	34.649	2	150.21	2	-238.9	2.7	2	6776
1	10	2596	1.856	34.659	2	153.27	2	-235.9	2.5	2	6770
1	9	2895	1.729	34.667	2	153.71	2	-231.3	2.5	2	6762
1	8	3195	1.616	34.673	2	151.86	2	-227.2	2.6	2	6775
1	7	3497	1.527	34.682	2	150.37	2	-218.2	2.6	2	6774
1	6	3797	1.451	34.685	2	146.11	2	-210.4	2.8	2	6756
1	5	4099	1.422	34.690	2	141.75	2	-199.3	3.0	2	6755
1	4	4375	1.417	34.692	2	138.84	2	-333.5	3.4	4	6761
1	3	4701	1.379	34.698	2	132.66	2	-188.3	3.3	2	6765
1	2	4899	1.358	34.702	2	129.56	2	-180.8	2.6	2	6763
1	1	5139	1.379	34.702	6	128.95	2	-180.3	4.5	2	6764

Station 70

		Latitude		8.014°N				Date		10/11/92	
		Longitude		165.021°E				Bottom Depth		5179	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	21	29.500	34.115	2	0.53	2	99.1	3.5	2	4617
1	34	47	29.512	34.130	2	0.56	2	84.9	3.4	2	4618
1	33	71	28.764	34.830	2	0.74	2	99.7	4.5	2	4619
1	32	96	26.433	34.777	2	1.69	2	89.0	6.5	2	4620
1	30	146	16.459	34.587	2	12.47	2	48.7	3.2	2	4621
1	28	196	11.065	34.549	2	29.66	2	-59.9	3.0	2	4623
1	27	220	10.498	34.581	2	32.69	2	-87.7	4.0	3	4622
1	26	245	10.079	34.629	2	34.36	2	-72.6	4.0	2	4624
1	22	495	8.302	34.595	2	44.47	2	-110.6	3.1	2	4625
1	21	595	7.445	34.550	2	55.09	2	-133.2	3.3	2	4626
1	20	693	6.653	34.547	2	63.52	2	-157.1	3.9	2	4627

Station 71

		Latitude		6.003°N		Date		10/12/92			
		Longitude		165.018°E		Bottom Depth		4864			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	6	29.532	34.039	2	0.38	2	88.6	3.8	2	5437
1	35	20	29.533	34.037	2	0.45	2	86.2	3.2	2	5443
1	33	70	28.921	34.781	2	0.56	2	93.1	3.0	3	5442
1	32	95	26.530	34.760	2	1.61	2	95.9	3.0	2	5433
1	31	120	22.016	34.756	2	4.42	2	95.0	3.2	2	5446
1	30	145	19.024	34.767	2	7.31	2	95.2	3.1	2	5438
1	29	170	14.947	34.570	2	14.85	2	55.5	2.9	2	5445
1	28	196	12.014	34.515	2	24.20	2	-4.3	3.8	2	5435
1	26	244	10.402	34.636	2	32.24	2	-59.5	2.7	2	5441
1	24	295	9.450	34.633	2	34.88	2	-76.9	2.9	2	5439
1	22	394	8.519	34.624	2	38.55	2	-105.2	4.5	2	5434
1	20	492	7.757	34.592	2	45.28	2	-120.2	1.8	6	5436
											5447
1	19	591	6.984	34.567	2	53.06	2	-137.2	2.6	2	5444
1	17	793	5.575	34.538	2	74.92	2	-159.1	2.9	2	5440

Station 72

		Latitude		4.001°N		Date		10/12/92			
		Longitude		165.005°E		Bottom Depth		4425			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	29.596	33.959	2	0.61	2	76.7	4.2	2	4692
1	35	22	29.570	33.962	2	0.65	2	83.2	4.2	2	4693
1	33	72	27.276	34.765	2	1.21	2	102.7	3.3	2	4694
1	32	97	23.798	34.748	2	2.61	2	90.2	3.7	2	4695
1	29	171	17.022	34.760	2	9.57	2	90.7	5.1	2	4696
1	28	195	15.438	34.707	2	14.62	2	40.3	4.1	2	4691
1	26	246	11.997	34.538	2	24.44	2	13.2	3.9	2	4697
1	25	294	10.104	34.615	2	34.19	2	-88.9	3.0	2	4698
1	22	445	8.068	34.602	2	43.55	2	-111.2	4.9	2	4699
1	21	495	7.687	34.586	2	43.93	2	-112.6	6.3	6	4700
											4701
1	20	595	6.871	34.561	2	54.57	2	-141.6	4.8	2	4702
1	19	695	6.046	34.548	2	63.45	2	-144.6	3.0	2	4969
1	18	794	5.578	34.543	6	70.15	2	-156.1	5.9	2	4703
1	17	894	5.088	34.544	2	77.97	2	-191.8	3.3	4	4704
1	16	992	4.715	34.551	2	85.56	2	-173.5	2.6	2	4705
1	14	1193	3.927	34.570	2	101.58	2	-193.6	2.6	2	4706
1	12	1393	3.434	34.585	2	114.79	2	-206.1	2.7	2	4707
1	10	1692	2.686	34.615	2	132.03	2	-231.6	2.6	2	4708

Station 72 (Continued)

		Latitude		4.001°N		Date		10/12/92			
		Longitude		165.005°E		Bottom Depth		4425			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	9	1992	2.196	34.638	2	143.48	2	-242.6	2.6	2	4709
1	8	2292	1.899	34.654	2	148.59	2	-241.1	2.8	2	4710
1	7	2594	1.757	34.662	2	150.76	2	-235.5	3.1	2	4711
1	6	2894	1.676	34.667	2	149.41	2	-228.7	2.6	2	4712
1	5	3195	1.596	34.673	2	148.25	2	-225.5	3.7	2	4970
1	4	3497	1.518	34.680	2	146.70	2	-220.3	2.9	2	4971
1	2	4099	1.476	34.686	2	142.59	2	-211.2	3.7	2	4972
1	1	4486	1.413	34.693	2	136.50	2	-204.9	3.4	2	4690

Station 73

		Latitude		3.002°N		Date		10/12/92			
		Longitude		164.993°E		Bottom Depth		4222			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	33	6	29.613	33.908	2	2.00	2	103.4	3.4	2	7021
1	31	45	29.462	33.999	2	4.63	2	92.4	3.1	2	7022
1	30	70	27.247	34.684	2	6.57	2	102.1	3.9	2	7023
1	29	96	24.665	34.947	2	10.28	2	67.1	3.6	2	7024
1	28	119	23.392	35.056	2	12.72	2	98.5	6.5	2	7025
1	27	144	21.404	34.978	2	20.16	2	91.5	7.6	2	7026
1	26	169	18.550	34.822	2	25.31	2	65.2	3.4	2	7027
1	25	197	17.354	34.713	2	29.56	2	58.1	2.9	2	7282
1	23	244	12.230	34.605	2	38.45	2	-3.8	2.6	2	7283
1	22	294	10.881	34.642	2	41.65	2	-30.6	2.6	2	7284
1	18	491	8.034	34.566	2	-9	5	-99.0	6.6	6	7285 7286
1	17	590	7.261	34.562	2	79.03	2	-171.7	4.9	3	7641
1	12	1190	3.915	34.570	2	-9	5	-200.5	2.4	2	7287

Station 74

		Latitude		1.996°N		Date		10/13/92			
		Longitude		164.990°E		Bottom Depth		4170			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	30.041	34.227	2	0.55	2	90.6	5.2	2	6359
1	35	20	29.931	34.224	2	0.62	2	102.2	6.7	2	6365
1	34	46	29.901	34.244	2	0.74	2	88.7	3.0	2	6536
1	32	96	24.233	34.951	2	5.17	2	101.6	3.5	2	6361
1	31	120	22.601	34.915	2	6.82	2	82.5	4.2	2	6538

Station 74 (Continued)

		Latitude		1.996°N		Date		10/13/92			
		Longitude		164.990°E		Bottom Depth		4170			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	30	146	20.900	34.889	2	7.97	2	86.8	5.1	2	6364
1	28	196	15.877	34.686	2	14.34	2	-16.5	6.4	3	6544
1	27	245	12.682	34.890	2	16.74	2	9.8	2.6	2	6545
1	26	295	11.716	34.841	2	19.96	2	-12.9	3.0	2	6371
1	25	344	10.702	34.767	2	24.45	2	-37.6	2.9	2	6532
1	24	396	9.870	34.708	2	27.98	2	-57.0	3.0	2	6740
1	23	444	9.121	34.655	2	30.53	2	-54.8	3.2	2	6358
1	22	495	8.208	34.586	2	37.85	2	-90.5	2.0	6	6368
											6372
1	20	694	5.974	34.546	2	59.49	2	-144.9	2.5	2	6540
1	19	792	5.438	34.539	2	66.37	2	-144.6	2.6	2	6362
1	18	892	4.899	34.544	6	76.63	2	-164.8	3.3	2	6367
1	17	992	4.602	34.548	2	83.69	2	-166.9	2.8	2	6539
1	16	1092	4.273	34.558	2	92.37	2	-180.9	2.9	2	6363
1	14	1294	3.618	34.578	2	107.66	2	-195.3	4.5	2	6366
1	12	1490	3.138	34.595	2	118.65	2	-211.6	4.7	2	6369
1	10	1790	2.536	34.621	2	132.67	2	-221.2	2.1	2	6541
1	9	1993	2.268	34.637	2	139.15	2	-230.8	2.5	2	6533
1	7	2394	1.899	34.653	2	145.41	2	-229.9	2.4	2	6537
1	6	2695	1.782	34.663	2	148.59	2	-234.9	2.6	2	6534
1	5	2994	1.669	34.669	2	148.39	2	-230.4	2.3	2	6543
1	4	3297	1.583	34.675	2	147.12	2	-224.3	2.8	2	6370
1	3	3595	1.524	34.680	2	145.85	2	-206.4	2.8	2	6360
1	2	3898	1.461	34.687	2	142.33	2	-216.3	2.4	2	6535
1	1	4225	1.324	34.698	6	132.31	2	-189.8	2.5	2	6542

Station 76

		Latitude		1.000°N		Date		10/13/92			
		Longitude		164.987°E		Bottom Depth		4316			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	30.183	34.521	2	0.80	2	88.9	2.9	2	6550
1	35	22	30.193	34.522	2	0.82	2	108.9	4.5	2	6556
1	34	46	30.207	34.592	2	0.95	2	111.5	2.9	2	6555
1	33	72	27.624	-9	5	2.16	2	124.1	5.1	2	6554
1	32	97	24.205	35.020	2	5.10	2	98.5	2.8	3	6565
1	31	120	22.304	35.035	2	6.68	2	113.5	5.1	2	6553
1	30	146	20.987	-9	5	7.24	2	89.9	2.7	2	6547
1	29	173	17.402	34.756	2	12.13	2	74.0	3.4	2	6549
1	28	195	15.368	34.820	2	14.04	2	72.7	2.8	2	6561

Station 76 (Continued)

		Latitude		1.000°N		Date		10/13/92			
		Longitude		164.987°E		Bottom Depth		4316			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	26	247	12.976	34.835	2	17.93	2	16.4	2.9	2	6563
1	25	295	12.291	34.881	2	16.95	2	10.5	3.2	2	6551
1	24	344	10.781	34.776	2	23.73	2	-34.1	2.5	2	6548
1	23	396	9.781	34.718	2	27.05	2	-46.0	2.5	2	6558
1	21	496	8.217	34.625	2	32.56	2	-74.4	5.6	6	6552
											6562
1	20	594	7.009	34.577	2	41.10	2	-104.3	2.4	2	6546
1	18	794	5.662	34.539	6	59.40	2	-141.4	2.4	2	6566

Station 78

		Latitude		0.024°N		Date		10/14/92			
		Longitude		164.908°E		Bottom Depth		4369			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	32	95	23.826	35.087	2	4.75	2	101.6	5.3	2	3244
1	29	170	17.522	35.032	2	9.52	2	72.9	3.8	2	3238
1	26	294	12.822	34.899	2	16.48	2	17.6	3.6	2	3235
1	22	494	8.823	34.645	2	31.92	2	-82.5	4.5	6	3237
											3246
1	21	592	7.340	34.574	2	42.09	2	-113.2	5.4	2	3239
1	19	793	5.656	34.540	2	62.96	2	-147.1	3.2	2	3240
1	18	891	5.069	34.540	6	71.36	2	-171.4	6.8	2	3316
1	16	1092	4.263	34.559	2	88.98	2	-185.1	2.9	2	3234
1	14	1293	3.594	34.579	2	106.39	2	-197.0	3.9	2	3233
1	9	2093	2.119	34.645	2	140.59	2	-226.2	2.8	2	3243
1	8	2291	2.000	34.653	2	142.82	2	-227.2	2.9	2	3241
1	7	2594	1.797	34.661	2	146.88	2	-223.1	4.9	2	3245
1	5	3196	1.556	34.675	2	146.92	2	-219.7	2.8	2	3236
1	2	4099	1.380	34.695	2	136.71	2	-206.1	2.9	2	3247
1	1	4429	1.333	34.700	6	131.31	2	-181.1	3.0	3	3242

Station 80

		Latitude		0.991°S		Date		10/15/92			
		Longitude		164.994°E		Bottom Depth		4422			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	30.218	34.578	2	0.99	2	72.5	3.6	2	6557
1	34	43	30.202	34.783	2	1.00	2	80.0	3.3	2	6568
1	32	96	24.217	35.078	2	4.21	2	95.5	2.9	2	6567

Station 80 (Continued)

		Latitude		0.991°S		Date		10/15/92			
		Longitude		164.994°E		Bottom Depth		4422			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	31	121	23.537	35.161	2	4.93	2	98.9	3.8	2	6564
1	30	146	22.359	35.211	2	5.90	2	99.8	3.0	2	6560
1	29	170	20.167	35.174	2	7.15	2	74.3	3.4	2	6574
1	28	195	18.271	35.212	2	7.83	2	61.1	5.5	2	8160
1	27	244	13.230	34.927	2	15.36	2	-1.9	5.8	2	8163
1	26	294	12.235	34.866	2	18.95	2	-5.8	3.0	2	6572
1	25	343	11.368	34.797	2	19.86	2	-27.3	3.2	2	6570
1	24	393	10.160	34.727	2	22.92	2	-65.9	5.5	2	8162
1	22	493	9.026	34.638	2	31.03	2	-80.8	2.0	6	6569
											6573
1	21	592	7.125	34.562	2	45.71	2	-114.7	3.4	2	6559
1	19	793	5.586	34.539	2	64.10	2	-148.1	2.7	2	6571

Station 82

		Latitude		1.997°S		Date		10/15/92			
		Longitude		164.925°E		Bottom Depth		4457			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	7	30.354	34.735	2	0.87	2	84.8	4.5	2	6649
1	35	22	30.354	34.741	2	0.91	2	87.6	5.5	2	6648
1	34	46	30.364	34.907	2	1.14	2	89.7	4.7	2	6651
1	33	72	29.685	35.172	2	1.23	2	92.8	3.5	2	6746
1	32	97	24.960	35.207	2	2.32	2	86.0	3.6	2	6656
1	31	121	23.562	35.197	2	3.55	2	105.0	3.4	2	6748
1	30	146	22.623	35.296	2	4.17	2	111.0	6.2	2	6647
1	29	171	21.262	-9	1	4.06	2	112.0	3.4	2	6747
1	28	197	16.209	35.269	2	7.08	2	71.2	3.5	2	6741
1	27	246	12.792	34.931	2	15.24	2	26.1	3.4	2	6655
1	26	296	11.729	34.841	2	20.13	2	-12.3	4.4	2	6743
1	25	345	10.826	34.783	2	23.67	2	-39.2	3.4	2	6641
1	24	395	10.069	34.741	2	23.85	2	-49.7	5.5	2	6645
1	22	494	8.309	34.642	2	27.00	2	-84.1	3.8	6	6652
											6653
1	21	595	7.126	34.563	2	38.71	2	-104.0	2.4	2	6633
1	20	693	6.375	34.539	2	47.59	2	-127.4	2.9	2	6749
1	19	793	5.613	34.532	2	58.58	2	-144.3	4.4	2	6654
1	18	896	5.014	34.537	6	69.35	2	-154.9	3.5	2	6644
1	17	991	4.581	34.543	2	78.13	2	-178.2	7.1	2	6646
1	16	1093	4.188	34.552	2	87.07	2	-184.6	3.3	2	6642
1	14	1293	3.604	34.578	2	103.49	2	-196.8	2.9	2	6657

Station 82 (Continued)

		Latitude		1.997°S		Date		10/15/92			
		Longitude		164.925°E		Bottom Depth		4457			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	12	1492	2.993	34.598	2	116.04	2	-205.1	2.8	2	6744
1	9	2094	2.112	34.644	2	137.30	2	-225.7	2.6	2	6742
1	8	2395	1.889	34.654	2	144.23	2	-227.8	3.5	2	6643
1	7	2696	1.754	34.662	2	146.50	2	-224.7	2.5	2	6632
1	6	2994	1.640	34.670	2	147.46	2	-226.6	2.8	2	6640
1	5	3297	1.563	34.676	2	146.51	2	-234.6	3.2	2	6637
1	4	3599	1.515	34.681	2	145.35	2	-214.0	3.7	2	6650
1	3	3899	1.444	34.688	2	140.78	2	-212.3	3.4	2	6639
1	2	4200	1.410	34.692	2	137.68	2	-207.4	2.6	2	6638

Station 83

		Latitude		2.797°S		Date		10/16/92			
		Longitude		164.913°E		Bottom Depth		4457			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	21	30.099	-9	5	0.83	2	84.7	5.8	2	5795
1	32	96	28.531	35.273	2	1.57	2	79.5	4.3	2	5800
1	31	119	24.762	35.084	2	3.27	2	90.5	4.4	2	5790
1	30	144	24.350	35.260	2	2.96	2	94.0	3.9	2	5799
1	29	170	22.537	35.541	2	2.98	2	86.2	3.4	2	5796
1	28	193	17.335	-9	5	7.00	2	63.2	3.6	2	5798
1	27	235	12.294	34.921	2	14.71	2	-1.3	3.7	2	5792
1	26	293	11.105	34.803	2	22.23	2	-28.8	2.6	2	5803
1	24	392	10.020	34.724	2	26.20	2	-60.4	3.5	2	5793
1	22	492	8.296	34.624	2	30.55	2	-91.8	5.2	6	5791
											5794
											5801
											5802
											5804
1	21	590	6.919	34.572	2	37.34	2	-113.1	2.5	2	5550
1	19	791	5.450	34.535	2	62.80	2	-145.9	4.0	2	5797

Station 86

		Latitude		3.975°S		Date		10/16/92			
		Longitude		164.358°E		Bottom Depth		2027			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	32	7	30.153	34.774	2	0.95	2	92.2	3.4	2	3260
1	31	22	30.156	34.779	2	0.97	2	86.6	3.5	2	3256
1	30	47	30.165	34.803	2	1.02	2	83.5	3.5	2	3266

Station 86 (Continued)

		Latitude		3.975°S		Date		10/1692			
		Longitude		164.358°E		Bottom Depth		2027			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	29	68	29.313	35.212	2	1.39	2	88.7	4.1	2	3253
1	28	97	27.439	35.144	2	2.03	2	88.8	3.5	2	3265
1	27	122	25.369	35.333	2	2.73	2	97.3	3.6	2	3251
1	25	172	21.295	35.615	2	4.15	2	91.5	3.5	2	3250
1	24	196	18.146	35.488	2	6.64	2	76.3	4.0	2	3264
1	23	221	14.910	35.195	2	11.72	2	37.3	5.3	2	3263
1	22	247	12.624	35.010	2	13.72	2	5.7	3.4	2	3267
1	21	295	10.325	34.771	2	21.06	2	-34.7	3.5	2	3262
1	20	345	9.803	34.725	2	23.70	2	-51.3	3.2	2	3258
1	18	444	8.370	34.626	2	29.35	2	-85.3	3.2	2	3252
1	17	496	7.884	34.604	2	32.60	2	-91.9	3.7	2	3254
1	12	793	5.585	34.537	2	59.63	2	-140.8	3.0	2	3255
1	9	992	4.518	34.544	2	79.84	2	-168.0	2.8	2	3257
1	8	1093	4.212	34.554	2	87.75	2	-180.3	2.9	2	3268
1	5	1593	2.909	34.596	2	112.97	2	-212.8	2.9	2	3249
1	3	1996	2.184	34.638	2	133.50	2	-224.5	2.8	2	3259
1	2	2086	2.075	34.645	2	136.12	2	-224.7	3.0	2	3261

WOCE Cruise P14C
EXPOCODE: 316N138/7

9/1/92 - 9/15/92

Chief Scientist: D. Roemmich

Principal Investigator for $\Delta^{14}\text{C}$: R.M. Key

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Station 5

		Latitude		34.825°S				Date		9/1/92	
		Longitude		175.187°E				Bottom Depth		1430	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	17	2	15.273	35.455	2	2.98	2	104.5	2.9	2	10065
1	19	54	15.237	35.451	2	2.90	2	97.6	2.4	2	10064
1	20	104	15.195	35.444	2	3.07	2	91.7	3.3	2	10063
1	22	203	14.877	35.403	2	3.20	2	81.9	2.9	2	10061
1	24	301	13.346	35.191	2	5.21	2	65.8	3.1	2	10060
1	26	404	11.942	35.029	2	7.21	2	45.0	2.7	2	10059
1	27	506	10.505	34.871	2	9.45	2	14.9	2.3	2	10048
1	28	605	9.353	34.746	2	12.73	2	-2.6	4.6	2	10047
1	29	705	8.250	34.634	2	16.21	2	-35.0	2.1	2	10046
1	30	801	7.309	34.543	2	19.48	2	-50.1	2.4	2	10045
1	31	902	6.465	34.498	2	26.29	2	-164.6	2.5	4	10044
1	32	1005	5.997	34.491	2	32.48	2	-92.6	2.5	2	10043
1	33	1108	5.336	34.485	2	42.18	2	-119.8	4.3	2	10042
1	34	1207	4.525	34.501	2	55.82	2	-139.3	4.1	2	10041
1	35	1310	3.930	34.538	2	70.51	2	-148.0	2.4	2	10040
1	36	1436	3.376	34.572	2	83.99	2	-167.6	2.5	2	10038

Station 8

		Latitude		33.702°S				Date		9/2/92	
		Longitude		175.382°E				Bottom Depth		2363	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	13	2	15.509	35.473	2	2.40	2	118.2	4.8	2	9903
1	14	14	15.516	35.479	2	2.57	2	117.9	5.2	2	9902
1	15	54	15.466	35.494	2	2.34	2	115.5	4.9	2	9901
1	16	105	15.470	35.495	2	2.31	2	111.1	3.5	2	9900
1	17	154	15.443	35.499	2	2.28	2	114.7	5.6	2	9899
1	18	203	14.746	35.407	2	2.65	2	108.2	5.2	2	9898
1	19	254	14.523	35.410	4	2.62	4	115.7	6.3	2	9897
1	20	304	14.111	35.318	2	3.20	2	109.8	5.0	2	9896
1	21	404	12.237	35.064	2	7.23	2	47.2	5.0	2	10152
1	22	504	10.539	34.869	2	9.63	2	21.3	3.6	2	10151
1	23	604	8.798	34.672	2	13.05	2	-29.8	4.4	2	10150
1	24	702	7.668	34.565	2	16.87	2	-27.1	2.8	2	10149

Station 8 (Continued)

		Latitude		33.702°S				Date		9/2/92	
		Longitude		175.382°E				Bottom Depth		2363	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	25	802	6.545	34.480	2	22.93	2	-52.5	5.8	2	10148
1	26	903	5.683	34.422	2	28.57	2	-83.6	4.4	2	10147
1	27	1004	5.163	34.426	2	36.86	2	-99.5	3.8	2	10146
1	28	1104	4.862	34.432	2	42.24	2	-106.7	1.9	6	10145
											10246
1	29	1203	4.613	34.504	2	55.61	2	-96.1	2.8	3	10144
1	30	1303	4.153	34.522	2	65.54	2	-147.1	6.1	2	10111
1	31	1405	3.683	34.541	2	76.10	2	-161.8	4.7	2	10110
1	32	1606	3.070	34.580	2	91.29	2	-181.6	4.2	2	10109
1	33	1799	2.657	34.607	2	103.01	2	-200.4	3.5	2	10108
1	34	2000	2.374	34.632	2	111.30	2	-206.4	2.9	2	10107
1	35	2203	2.173	34.650	2	116.29	2	-213.3	3.0	2	10106
1	36	2384	1.961	34.665	2	121.31	2	-211.3	3.0	2	10105

Station 12

		Latitude		32.180°S				Date		9/2/92	
		Longitude		175.638°E				Bottom Depth		2363	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	2	2	16.622	35.565	2	1.86	2	105.5	3.0	2	10031
1	4	57	16.177	35.526	2	2.05	2	106.1	3.0	2	10030
1	5	107	16.010	35.512	2	2.25	2	103.2	2.8	2	10029
1	7	207	14.226	35.287	2	4.20	2	85.0	2.7	2	10028
1	9	307	12.197	35.051	2	6.25	2	52.9	2.7	2	10027
1	13	509	9.136	34.694	2	11.44	2	1.2	3.7	2	10026
1	15	709	7.183	34.518	2	18.28	2	-47.0	2.6	2	10025
1	17	911	5.619	34.440	2	32.07	2	-91.2	2.5	2	10024
1	20	1213	4.106	34.526	2	67.06	2	-147.2	2.5	2	10004
1	23	1516	3.114	34.578	2	89.64	2	-171.3	3.9	2	10003
1	25	1822	2.568	34.617	2	104.78	2	-188.5	3.0	2	10002
1	28	2431	2.030	34.663	2	120.62	2	-206.4	2.4	2	10001
1	30	2837	1.865	34.678	2	124.82	2	-201.4	2.4	2	10000
1	33	3447	1.847	34.683	2	126.58	2	-206.4	2.2	2	9999
1	34	3651	1.859	34.685	2	127.36	2	-201.7	2.2	2	9998
1	36	3970	1.889	-9	5	127.46	2	-203.7	2.2	2	9997

Station 15

		Latitude		30.882°S		Date		9/3/92			
		Longitude		175.858°E		Bottom Depth		4139			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	1	1	17.179	35.590	2	2.11	2	138.4	9.2	2	9894
1	3	56	17.025	35.578	2	1.88	2	131.3	4.7	2	9893
1	4	106	16.848	35.560	2	2.07	2	129.2	3.5	2	9892
1	6	205	16.077	35.384	4	2.25	2	112.4	3.6	2	9891
1	8	306	13.840	35.113	4	4.63	2	84.4	3.5	2	9890
1	10	407	11.787	34.980	2	6.41	2	54.2	4.8	2	9889
1	11	507	10.074	34.778	2	8.20	2	39.4	3.3	2	9888
1	12	608	8.485	34.604	2	10.80	2	-6.1	4.8	2	9811
1	13	707	7.295	34.496	2	14.19	2	-28.4	4.8	2	9810
1	14	806	6.614	34.455	2	19.59	2	-54.8	3.2	2	9809
1	15	905	5.990	34.447	2	27.80	2	-78.4	3.0	2	9808
1	16	1007	5.434	34.458	2	37.21	2	-97.5	3.0	2	9807
1	19	1210	4.320	34.470	2	55.41	2	-123.1	3.2	2	9806
1	21	1400	3.434	34.527	2	77.50	2	-166.0	4.5	2	9805
1	23	1608	2.910	34.590	2	95.50	2	-176.1	5.4	2	9804
1	24	1812	2.533	34.617	2	106.31	2	-184.9	2.7	2	9803
1	25	2016	2.293	34.637	2	113.71	2	-192.9	3.7	2	9785
1	26	2219	2.120	34.652	2	118.26	2	-213.4	3.6	2	9784
1	28	2631	1.923	34.669	2	123.63	2	-203.7	3.7	2	9894
1	30	3040	1.855	34.680	2	126.10	2	-200.0	3.6	2	9783
1	31	3244	1.851	34.682	2	126.49	2	-199.3	4.2	2	9782
1	33	3652	1.862	34.684	2	126.86	2	-191.9	3.6	2	9781
1	34	3857	1.875	34.683	2	127.67	2	-204.5	7.2	2	9780
1	37	4199	1.905	34.684	2	128.04	2	-213.4	3.5	2	9779

Station 18

		Latitude		29.572°S		Date		9/4/92			
		Longitude		176.082°E		Bottom Depth		4277			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	1	2	18.154	35.657	2	1.63	2	123.1	3.5	2	9927
1	3	57	18.026	35.377	4	5.79	4	82.8	3.5	4	9926
1	4	107	17.796	35.638	2	2.17	2	103.1	3.5	2	9925
1	5	156	17.047	35.559	2	2.15	2	114.1	4.2	2	9924
1	6	204	16.795	35.541	2	2.13	2	109.9	3.4	2	9923
1	8	298	14.996	35.352	2	3.68	2	90.7	3.4	2	9938
1	10	379	13.490	35.174	2	5.04	2	67.5	4.0	2	9937
1	39	464	11.951	35.017	2	7.02	2	49.5	3.0	2	9936
1	12	545	10.414	34.846	2	9.59	2	25.9	3.0	2	9935
1	13	631	8.447	34.571	2	8.97	2	3.4	3.4	2	9934

Station 18 (Continued)

		Latitude		29.572°S		Date		9/4/92			
		Longitude		176.082°E		Bottom Depth		4277			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	14	722	7.743	34.504	2	10.75	2	-4.2	3.1	2	9933
1	15	812	6.664	34.433	2	17.11	2	-58.2	3.2	2	9932
1	16	903	5.962	34.394	2	22.68	2	-77.1	3.7	6	10205 9931
1	18	1091	4.732	34.398	2	40.59	2	-105.0	2.8	2	9930
1	19	1185	4.141	34.426	2	52.54	2	-121.4	3.0	2	9904
1	20	1281	3.694	34.466	2	64.70	2	-151.9	4.4	2	9881
1	21	1377	3.351	34.512	2	76.90	2	-167.8	6.5	2	9880
1	38	1470	3.047	34.554	2	88.74	2	-170.3	4.3	2	9871
1	23	1657	2.649	34.602	2	102.90	2	-179.0	3.6	2	9870
1	24	1854	2.418	34.623	2	109.61	2	-194.7	3.5	2	9869
1	25	2052	2.224	34.641	2	115.12	2	-195.4	3.7	2	9868
1	26	2254	2.094	34.652	2	118.59	2	-192.0	3.7	2	9867
1	27	2457	2.004	34.661	2	121.24	2	-194.6	3.6	2	9866
1	28	2658	1.935	34.668	2	123.07	2	-195.9	3.6	2	9865
1	29	2858	1.885	34.673	2	124.48	2	-196.6	5.0	2	9864
1	30	3060	1.856	34.677	2	125.48	2	-203.4	3.6	2	9863
1	31	3260	1.848	34.680	2	125.85	2	-208.1	2.4	2	9776
1	33	3669	1.861	34.679	2	127.27	2	-215.4	4.5	6	9768 9948
1	34	3875	1.872	34.682	2	127.22	2	-211.5	2.6	2	9767
1	35	4079	1.891	34.682	2	127.17	2	-212.7	2.7	2	9766
1	37	4333	1.911	34.684	2	127.54	2	-209.5	2.7	2	9765

Station 21

		Latitude		28.277°S		Date		9/5/92			
		Longitude		176.300°E		Bottom Depth		4473			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	1	1	19.085	35.691	2	1.68	2	113.8	2.4	6	10039 9764
1	4	107	17.684	35.656	2	23.44	4	112.6	3.5	2	9763
1	6	206	16.414	35.492	2	23.97	4	106.2	4.3	2	9862
1	8	307	13.930	35.243	2	25.50	4	87.1	4.2	2	9812
1	10	406	11.962	35.019	2	27.43	4	48.8	3.6	2	9802
1	11	506	10.055	34.792	2	29.61	4	20.5	4.4	2	9801
1	12	605	8.573	34.620	2	31.58	4	-5.0	3.4	2	9800
1	14	803	6.508	34.418	2	36.54	4	-51.3	3.4	2	9799
1	16	1008	5.153	34.399	2	51.15	4	-103.5	4.2	2	9798
1	20	1415	3.187	34.538	2	93.09	4	-163.4	3.5	2	9797
1	23	1820	2.475	34.617	2	112.93	4	-190.4	2.9	2	9796

Station 21 (Continued)

		Latitude		28.277°S		Date		9/5/92			
		Longitude		176.300°E		Bottom Depth		4473			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	25	2217	2.144	34.650	2	120.58	4	-201.0	3.1	2	9795
1	28	2823	1.883	34.674	2	124.67	2	-198.3	3.5	2	9794
1	31	3440	1.847	34.681	2	127.09	2	-207.2	4.6	2	9793
1	33	3853	1.865	34.683	2	128.29	2	-205.7	4.6	2	9792
1	37	4529	1.928	34.684	2	128.39	2	-197.6	3.3	2	9791

Station 24

		Latitude		26.973°S		Date		9/6/92			
		Longitude		176.522°E		Bottom Depth		4401			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	1	3	18.680	35.661	2	1.62	2	118.2	3.0	2	9996
1	4	106	17.396	35.608	2	1.76	2	120.7	5.3	2	9945
1	6	205	15.836	35.437	2	2.91	2	91.0	3.6	2	9995
1	8	305	14.050	35.231	2	4.26	2	79.9	4.8	2	9944
1	10	406	11.628	34.972	2	6.81	2	41.3	4.0	2	9943
1	11	507	9.323	34.756	2	7.78	2	11.4	3.3	6	10163 9942
1	12	607	7.988	34.540	2	10.55	2	-13.2	3.2	2	9941
1	14	804	6.157	34.402	2	19.85	2	-69.3	3.0	2	9940
1	16	1005	4.933	34.400	2	37.71	2	-111.2	6.4	6	10323 9939
1	20	1408	3.061	34.558	2	89.17	2	-161.3	3.8	6	10284 9922
1	23	1807	2.415	34.622	2	110.25	2	-185.4	2.7	2	9921
1	25	2211	2.111	34.652	2	118.05	2	-183.1	3.0	2	9920
1	28	2815	1.883	34.674	2	124.03	2	-189.2	2.9	2	9919
1	31	3422	1.835	34.682	2	126.50	2	-190.9	2.8	2	9918
1	33	3828	1.853	34.683	2	127.52	2	-189.8	4.1	2	9917
1	37	4440	1.911	34.689	4	127.89	2	-196.4	2.9	2	9916

Station 27

		Latitude		25.670°S		Date		9/6/92			
		Longitude		176.740°E		Bottom Depth		4448			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	1	2	20.761	35.643	2	1.61	2	138.3	3.6	2	9915
1	3	60	20.121	35.667	2	1.56	2	139.2	8.7	2	9914
1	4	112	19.784	35.696	2	1.53	2	135.3	3.8	2	9913
1	41	211	17.934	35.597	2	1.88	2	121.6	3.7	2	9912

Station 27 (Continued)

		Latitude		25.670°S		Date		9/6/92			
		Longitude		176.740°E		Bottom Depth		4448			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	8	311	15.374	35.374	2	3.24	2	101.4 ^a	4.0	2	99111 4316
1	10	412	12.431	35.031	2	5.39	2	72.3	3.5	2	9910
1	11	512	9.921	34.734	2	7.57	2	28.8	5.2	2	9909
1	12	612	8.242	34.552	2	9.35	2	13.1	5.6	2	9908
1	13	712	6.988	34.438	2	13.53	2	-30.6	3.4	2	9907
1	15	914	5.087	34.381	2	32.90	2	-98.6	4.3	2	9906
1	16	1016	4.407	34.414	2	47.70	2	-120.7	3.1	2	9887
1	17	1116	3.875	34.458	2	61.72	2	-129.8	5.3	2	9886
1	18	1217	3.472	34.505	2	75.37	2	-154.4	3.1	2	9885
1	19	1318	3.170	34.543	2	86.65	2	-154.3	5.2	2	9884
1	20	1418	2.947	34.569	2	94.34	2	-182.0	3.1	2	9882
1	21	1517	2.786	34.585	2	99.61	2	-181.5	4.9	2	10250
1	22	1619	2.646	34.599	2	104.28	2	-181.1	7.3	2	10249
1	23	1826	2.427	34.620	2	111.04	2	-193.9	1.9	2	10058
1	24	2027	2.271	34.636	2	115.56	2	-200.4	2.0	2	10057
1	25	2225	2.147	34.648	2	119.27	2	-202.7	1.8	2	10056
1	26	2433	2.017	34.662	2	121.96	2	-201.9	1.8	2	10055
1	27	2639	1.940	34.668	2	123.81	2	-209.3	1.8	2	10054
1	28	2842	1.881	34.676	2	125.46	2	-208.0	2.5	2	10037
1	29	3046	1.843	34.679	2	126.90	2	-209.0	2.3	2	10036
1	30	3250	1.836	34.680	2	127.29	2	-206.6	2.8	2	10035
1	31	3454	1.835	34.682	2	128.10	2	-208.8	2.6	2	10034
1	32	3659	1.844	34.683	2	128.28	2	-202.9	3.1	2	10033
1	33	3862	1.856	34.683	2	128.67	2	-205.4	2.3	2	10023
1	34	4067	1.871	34.685	2	128.85	2	-209.5	2.1	2	10022
1	35	4271	1.889	34.685	2	129.24	2	-207.3	2.3	2	10021
1	37	4491	1.909	34.684	2	129.21	2	-202.4	2.8	2	10020

a. Replicate analysis. Only one result kept

Station 30

		Latitude		24.365°S		Date		9/7/92			
		Longitude		176.955°E		Bottom Depth		4447			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	1	3	21.372	35.637	2	1.66	2	117.3	5.0	2	10104
1	4	107	20.625	35.640	2	1.41	2	120.5	3.6	2	10103
1	6	223	18.137	35.570	2	1.78	2	106.2	3.4	2	10102
1	8	325	15.482	35.336	2	3.15	2	85.6	4.9	2	10101
1	10	426	12.960	35.095	2	5.31	2	50.7	4.4	2	10100

Station 30 (Continued)

		Latitude		24.365°S		Date		9/7/92			
		Longitude		176.955°E		Bottom Depth		4447			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	11	514	10.771	34.838	2	6.90	2	17.4	3.4	2	10099
1	12	606	8.832	34.613	2	8.48	2	-6.1	3.8	2	10098
1	14	780	6.628	34.411	2	14.66	2	-57.6	6.0	2	10097
1	15	876	5.824	34.376	2	21.44	2	-82.6	5.6	2	10096
1	18	1156	3.933	34.459	2	61.21	2	-149.4	4.3	2	10095
1	21	1427	3.051	34.558	2	91.17	2	-163.4	2.4	2	10053
1	24	2009	2.304	34.624	2	113.83	2	-203.4	4.8	2	10934
1	27	2600	1.967	34.666	2	122.30	2	-205.5	2.0	2	10070
1	30	3185	1.850	34.679	2	125.39	2	-206.9	2.4	2	10069
1	33	3790	1.848	34.683	2	128.29	2	-202.2	3.8	2	10935
1	37	4474	1.906	34.683	2	128.65	2	-218.2	3.9	2	10936

Station 33

		Latitude		23.065°S		Date		9/8/92			
		Longitude		177.183°E		Bottom Depth		4334			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	2	2	22.954	31.754	2	1.13	2	120.8	19.8	2	9878
1	5	106	22.045	35.667	3	0.90	2	127.4	17.3	2	9877
1	6	155	21.865	35.639	2	0.90	2	127.6	12.6	2	9876
1	7	206	19.935	35.626	2	0.89	2	139.9	12.7	3	9875
1	9	307	17.678	35.557	2	1.67	2	87.7	11.9	2	9874
1	10	356	15.867	35.387	2	2.26	2	38.4	14.0	3	9873
1	11	407	14.186	35.201	2	3.84	2	80.8	14.9	2	9872
1	12	507	11.236	35.641	4	6.42	4	66.5	8.7	4	10077
1	13	608	8.444	34.556	2	8.61	2	-1.7	9.6	2	9775
1	14	708	6.907	34.425	2	13.38	2	-43.3	10.4	2	9774
1	15	809	5.962	34.372	2	20.14	2	-63.3	13.4	2	9946
1	16	910	5.440	34.368	2	27.50	2	-103.4	10.8	2	9773
1	17	1010	4.928	34.384	2	35.86	2	-108.9	8.2	2	9772
1	18	1110	4.427	34.417	2	48.00	2	-120.5	8.6	2	9771
1	19	1212	4.013	34.452	2	59.95	2	-176.4	9.7	3	9770
1	20	1313	3.566	34.499	2	73.93	2	-160.6	8.3	2	9769
1	22	1515	3.002	34.559	2	93.41	2	-172.1	11.9	2	10114
1	23	1617	2.859	34.578	2	98.05	2	-183.9	12.9	2	10113
1	24	1819	2.550	34.608	2	107.81	2	-186.5	11.2	2	10112
1	25	2022	2.379	34.626	2	112.30	2	-232.4	5.3	3	10052
1	26	2224	2.218	34.641	2	116.61	2	-234.9	5.6	3	10051
1	27	2427	2.078	34.654	2	120.52	2	-205.9	6.5	2	10050
1	28	2632	1.964	34.665	2	123.41	2	-200.9	5.6	2	10049

Station 33 (Continued)

		Latitude		23.065°S				Date		9/8/92			
		Longitude		177.183°E				Bottom Depth		4334			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	29	2836	1.911	34.673	2	124.64	2	-202.5	7.5	2	10076		
1	30	3040	1.869	34.677	2	125.67	2	-194.8	7.5	3	10075		
1	31	3244	1.847	34.680	2	126.69	2	-195.6	8.2	3	10074		
1	32	3447	1.837	34.681	2	127.30	2	-201.2	7.9	2	10073		
1	33	3651	1.840	34.682	2	127.90	2	-196.8	6.0	2	10072		
1	34	3854	1.849	34.684	2	128.51	2	-197.4	5.8	6	10071		
1	35	4059	1.863	34.684	2	128.70	2	-197.4	17.4	2	10366		
1	37	4397	1.897	34.685	2	128.68	2	-197.5	6.2	2	10067		

Station 37

		Latitude		21.422°S				Date		9/9/92			
		Longitude		177.463°E				Bottom Depth		3793			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	4	3	22.735	35.700	2	1.69	2	120.9	9.7	2	10162		
1	6	56	22.297	35.680	2	1.66	2	130.7	9.4	2	10161		
1	7	105	21.558	35.644	2	1.65	2	115.6	11.5	2	10143		
1	8	153	20.712	35.636	2	1.64	2	116.4	13.3	2	10142		
1	9	201	19.573	35.617	2	2.02	2	118.9	10.8	2	10141		
1	10	249	18.300	35.581	2	2.21	2	108.9	11.8	2	10140		
1	11	298	17.078	35.530	2	2.40	2	116.9	14.9	3	10139		
1	12	347	15.499	35.373	2	3.38	2	68.3	9.9	2	10138		
1	13	395	14.246	35.225	2	3.97	2	4.5	19.6	3	10137		
1	14	496	11.104	34.852	2	6.15	2	-21.2	26.8	3	10136		
1	15	600	8.397	34.553	2	9.73	2	-32.5	14.7	2	10135		
1	16	703	6.914	34.423	2	13.51	2	-35.9	11.0	2	10134		
1	17	805	5.921	34.377	2	21.88	2	-130.7	11.7	3	10118		
1	18	902	5.031	34.385	2	35.43	2	-143.2	12.9	3	10117		
1	19	1004	4.380	34.418	2	50.00	2	-215.3	14.8	3	10116		
1	20	1108	3.950	34.463	2	64.18	2	-126.7	15.7	2	10115		
1	21	1204	3.588	34.500	2	75.60	2	-151.8	7.2	2	10019		
1	22	1299	3.289	34.532	2	85.65	2	-157.7	7.1	2	10018		
1	23	1399	3.033	34.559	2	94.13	2	-201.2	7.8	3	10016		
1	24	1501	2.816	34.582	2	101.03	2	-188.2	7.0	2	10015		
1	25	1598	2.670	34.595	2	105.92	2	-180.7	6.9	2	10014		
1	26	1803	2.443	34.618	2	112.28	2	-184.7	8.5	2	10013		
1	27	2006	2.262	34.636	2	117.85	2	-208.0	6.5	3	10012		
1	28	2211	2.137	34.648	2	120.74	2	-193.4	6.6	2	10011		
1	29	2415	2.017	34.660	2	123.23	2	-196.5	6.8	2	10010		
1	30	2618	1.934	34.669	2	125.31	2	-211.2	9.8	2	10009		

Station 37 (Continued)

		Latitude		21.422°S		Date		9/9/92			
		Longitude		177.463°E		Bottom Depth		3793			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	31	2824	1.879	34.675	2	126.77	2	-220.3	9.5	3	10008
1	32	3029	1.841	34.678	2	128.23	2	-207.9	7.4	2	10007
1	33	3233	1.829	34.681	2	128.85	2	-207.1	7.5	2	10006
1	34	3439	1.832	34.681	2	129.25	2	-214.7	8.8	3	10005
1	35	3643	1.837	34.683	2	129.66	2	-201.9	8.9	2	10947
1	37	3828	1.837	34.683	2	130.49	2	-223.1	8.2	3	10119

Station 47

		Latitude		19.050°S		Date		9/11/92			
		Longitude		177.643°E		Bottom Depth		2570			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	4	2	25.044	35.663	2	1.84	2	101.0	4.8	2	9790
1	13	105	23.823	35.659	2	1.80	2	114.1	9.4	2	9789
1	15	204	20.833	35.700	2	1.96	2	120.4	5.0	2	9788
1	17	305	17.097	35.447	2	3.11	2	100.8	5.0	2	9787
1	19	405	12.887	34.987	2	6.60	2	66.2	5.5	2	9786
1	20	505	9.559	34.653	2	11.09	2	-25.6	4.5	2	9644
1	21	606	7.695	34.496	2	15.58	2	-40.2	4.3	6	10079
1	22	706	6.017	34.401	2	24.96	2	-91.3	3.4	2	9643
1	23	806	5.038	34.405	2	39.04	2	-134.3	2.6	3	9642
1	24	906	4.329	34.447	2	54.89	2	-134.8	2.7	2	9641
1	25	1005	4.022	34.471	2	63.90	2	-151.2	2.7	2	9640
1	27	1206	3.434	34.523	2	81.59	2	-177.9	3.3	2	9639
1	29	1409	2.929	34.571	2	97.63	2	-206.8	3.2	3	9638
1	32	1817	2.436	34.617	2	111.04	2	-207.5	3.5	2	9637
1	34	2217	2.126	34.648	2	119.74	2	-207.0	2.5	2	9636
1	37	2592	1.999	34.661	2	123.81	2	-235.7	2.8	3	9635

WOCE Cruise P18
EXPOCODE: 31DSCG94/2,3

2/2/94 - 4/3/94

Chief Scientists: B. Taft and G. Johnson
 Principal Investigator for $\Delta^{14}\text{C}$: P.D. Quay
 NOSAMS Report: 98-064

Station 10

		Latitude	66.995°S					Date	2/27/94			
		Longitude	103.007°W					Bottom Depth	3691			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#	
3	36	10	2.226	33.475	2	8.31	2	-34.8	5.5	2	8848	
3	35	25	2.079	33.699	2	11.84	2	-64.4	2.8	2	9280	
3	34	48	0.490	33.790	2	14.48	2	-67.9	3.0	2	9281	
3	33	78	-0.407	33.873	2	20.12	2	-58.5	2.6	2	9282	
3	30	199	1.088	34.126	2	37.45	2	-84.0	3.4	2	9283	
3	29	249	2.044	34.284	2	50.94	2	-98.6	2.7	2	9284	
3	28	291	2.117	34.346	2	57.03	2	-110.0	2.6	2	9285	
3	27	400	2.135	34.456	2	67.00	2	-138.3	2.5	2	9286	
3	26	498	2.168	34.532	2	72.82	2	-190.2	5.9	3	9287	
3	25	599	2.174	34.588	2	75.44	2	-151.6	2.7	2	9288	
3	21	706	2.144	34.634	2	78.55	2	-153.6	2.5	2	9289	
3	23	709	2.142	34.636	2	78.20	2	-150.9	2.6	2	9290	
3	19	893	2.047	34.685	2	81.38	2	-166.5	2.7	2	9291	
3	18	998	1.981	34.701	2	84.05	2	-158.6	2.8	2	9292	
3	17	1194	1.844	34.724	2	88.54	2	-155.1	3.3	2	9293	
3	16	1399	1.665	34.730	2	94.80	2	-155.7	4.0	2	9294	
3	15	1599	1.498	34.730	2	99.06	2	-156.9	2.5	2	9295	
3	14	1800	1.357	34.728	2	100.85	2	-156.0	2.8	2	9296	
3	13	1994	1.239	34.725	2	105.39	2	-166.4	2.7	2	9297	
3	12	2249	1.084	34.719	2	-9	1	-167.3	2.7	2	9298	
3	10	2748	0.847	34.710	2	120.89	2	-161.1	2.7	2	9299	
3	9	2997	0.758	34.707	2	125.07	2	-170.6	4.6	2	9300	
3	8	3289	0.628	34.705	2	126.89	2	-158.4	2.4	2	9301	
3	7	3597	0.500	34.703	2	127.43	2	-155.0	3.5	2	9302	
3	6	3892	0.422	34.702	2	130.37	2	-166.4	3.7	2	9303	
3	5	4199	0.366	34.702	2	132.12	2	-159.5	3.6	2	9304	
3	3	4497	0.349	34.704	2	138.26	2	-173.9	3.6	2	9305	
3	4	4497	0.349	34.701	2	137.85	2	-172.7	2.6	2	9306	
3	2	4810	0.357	34.702	2	-9	1	-169.8	2.4	2	9307	

Station 16

		Latitude				63.989°S				Date		3/1/94	
		Longitude				102.987°W				Bottom Depth		5018	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	36	9	2.794	33.890	2	8.18	2	-63.9	3.1	2	9309		
1	35	26	2.795	33.890	2	7.98	2	-53.9	3.0	2	9310		
1	34	49	2.793	33.891	2	8.39	2	-61.6	2.6	2	9311		
1	33	75	2.066	33.962	2	12.00	2	-57.9	2.5	2	9312		
1	32	98	1.206	34.005	2	17.79	2	-67.6	2.6	2	9313		
1	31	148	1.100	34.011	2	18.83	2	-59.8	3.5	2	9314		
1	30	207	1.003	34.018	2	22.11	2	-71.9	2.6	2	9315		
1	29	297	2.359	34.251	2	43.37	2	-100.8	6.1	6	9316		
1	28	399	2.354	34.345	2	53.87	2	-118.4	3.1	2	9317		
1	26	596	2.299	34.502	2	68.26	2	-149.4	2.9	2	9318		
1	25	701	2.226	34.561	2	73.57	2	-151.0	2.7	2	9319		
1	21	902	2.155	34.636	2	80.33	2	-153.1	3.7	2	9320		
1	18	1201	2.005	34.700	2	84.53	2	-159.4	3.2	2	9359		
1	16	1601	1.717	34.728	2	92.89	2	-159.5	2.9	2	9360		
1	14	2001	1.406	34.727	2	104.16	2	-163.5	3.5	2	9362		
1	12	2502	1.097	34.718	2	112.07	2	-165.2	2.6	2	9363		
1	10	2998	0.874	34.709	2	120.85	2	-168.3	2.7	2	9743		
1	8	3501	0.669	34.698	3	127.42	2	-163.8	2.8	2	9744		
1	6	4001	0.468	34.702	2	128.72	2	-170.3	2.8	2	9745		
1	4	4499	0.393	34.701	2	133.85	2	-164.9	2.7	2	9746		
1	2	4999	0.381	34.701	2	138.95	2	-161.8	3.8	2	9747		
1	1	5093	0.387	34.701	2	140.70	2	-155.8	2.5	2	9748		

Station 22

		Latitude				63.989°S				Date		3/1/94	
		Longitude				102.987°W				Bottom Depth		5018	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	35	26	4.438	33.924	2	0.36	2	-25.4	4.2	2	9750		
1	34	47	4.428	33.925	2	0.11	2	-24.3	2.9	2	9751		
1	32	101	3.254	34.021	2	7.49	2	-22.5	3.5	2	9752		
1	31	148	2.956	34.013	2	9.40	2	-21.7	3.3	2	9753		
1	30	199	2.614	34.008	2	12.41	2	-33.9	2.7	2	9754		
1	29	303	2.835	34.092	2	18.66	2	-39.1	2.9	2	9755		
1	28	402	3.031	34.199	2	29.37	2	-63.2	3.5	2	9756		
1	27	498	2.985	34.265	2	37.39	2	-79.2	2.8	2	9757		
1	25	701	2.683	34.383	2	53.82	2	-110.7	2.8	2	9758		
1	23	802	2.551	34.446	2	61.79	2	-121.9	3.2	2	9759		
1	21	900	2.510	34.506	2	67.66	2	-134.8	2.6	2	9760		
1	19	1001	2.375	34.543	2	71.95	2	-135.7	2.7	2	9761		

Station 22

		Latitude		63.989°S		Date		3/1/94			
		Longitude		102.987°W		Bottom Depth		5018			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	18	1201	2.296	34.619	2	79.30	2	-145.6	2.7	2	9762
1	17	1397	2.185	34.666	2	82.71	2	-158.2	3.7	2	10087
1	16	1600	2.073	34.698	2	85.94	2	-146.9	3.4	2	10088
1	15	1804	1.933	34.718	2	89.51	2	-151.7	2.8	2	10090
1	14	2005	1.785	34.727	2	93.90	2	-141.4	3.2	2	10086
1	13	2247	1.609	34.729	2	98.86	2	-138.6	3.1	2	10085
1	12	2499	1.422	34.726	2	104.78	2	-163.3	3.5	2	10193
1	11	2740	1.294	34.722	2	109.66	2	-169.8	5.3	2	10082
1	10	3003	1.156	34.718	2	113.81	2	-164.6	3.4	2	10194
1	9	3243	1.022	34.714	2	118.38	2	-160.5	3.3	2	10195
1	8	3501	0.887	34.710	2	123.14	2	-159.6	5.6	2	10196
1	7	3750	0.733	34.707	2	127.43	2	-166.1	6.7	2	10081
1	6	3997	0.607	34.704	2	130.79	2	-161.2	3.9	2	10083
1	5	4250	0.510	34.702	2	133.30	2	-161.8	5.6	2	10197
1	4	4499	0.447	34.701	2	135.73	2	-160.0	3.0	2	10089
1	2	4946	0.424	34.701	2	134.20	2	-162.2	6.4	2	10080
1	1	5073	0.427	34.702	2	136.37	2	-170.2	2.8	2	10084

Station 28

		Latitude		57.818°S		Date		3/5/94			
		Longitude		103.002°W		Bottom Depth		4591			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	5.427	33.963	2	2.29	2	-29.7	3.7	2	10201
1	35	26	5.426	33.963	2	2.12	2	-14.2	4.7	2	10122
1	33	77	5.410	33.966	2	2.31	2	9.5	5.3	2	10126
1	32	94	5.358	34.140	2	4.67	2	-1.8	3.6	2	10200
1	31	149	4.998	34.157	2	8.13	2	-0.0	3.5	2	10208
1	30	203	5.062	34.192	2	8.42	2	-54.9	2.9	6	10131 14753
1	29	303	4.557	34.155	2	16.32	2	1.9	3.9	2	10207
1	28	400	4.269	34.167	2	22.12	2	-22.7	5.2	2	10198
1	27	496	3.894	34.194	2	32.15	2	-158.7	2.6	4	10130
1	26	605	3.833	34.286	2	38.32	2	-70.5	3.5	2	10199
1	25	700	3.490	34.314	2	38.24	2	-81.5	3.0	2	10124
1	23	793	3.266	34.359	2	46.17	2	-97.0	2.8	2	10127
1	21	902	2.994	34.401	2	53.94	2	-101.4	5.0	2	10123
1	18	1200	2.522	34.528	2	69.60	2	-147.6	2.8	2	10133
1	16	1598	2.232	34.660	2	81.28	2	-149.0	4.2	2	10125
1	14	2000	2.043	34.710	2	87.88	2	-143.1	3.2	2	10206

Station 28

		Latitude		57.818°S		Date		3/5/94			
		Longitude		103.002°W		Bottom Depth		4591			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	12	2499	1.624	34.727	2	100.28	2	-161.7	3.2	2	10203
1	10	2996	1.280	34.722	2	107.77	2	-176.4	4.7	2	10202
1	8	3500	0.979	34.713	2	120.02	2	-158.1	6.1	2	10204
1	6	3998	0.694	34.707	2	129.40	2	-159.9	2.6	2	10128
1	2	4500	0.532	34.704	2	137.28	2	-5.5	3.3	4	10132
1	1	4734	0.523	34.704	2	135.73	2	-161.8	3.1	2	10129

Station 33

		Latitude		54.501°S		Date		3/8/94			
		Longitude		103.002°W		Bottom Depth		4086			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	14	7.911	34.255	2	5.42	2	24.3	7.7	2	13520
2	35	25	7.910	34.256	2	5.56	6	33.1	4.1	2	13967
2	34	49	7.908	34.257	2	5.83	2	30.1	5.2	2	14123
2	33	70	7.895	34.256	2	5.94	2	31.9	7.4	6	13974 13977
2	31	125	6.738	34.289	2	9.05	2	23.5	4.5	2	13522
2	30	148	6.353	34.298	2	10.26	2	25.2	6.2	2	13955
2	29	198	6.271	34.315	2	10.14	2	31.5	7.5	2	13528
2	28	249	6.125	34.311	2	10.94	2	22.1	4.7	2	13938
2	27	301	6.003	34.304	2	11.43	2	-0.2	4.2	2	13513
2	26	351	5.931	34.302	2	11.82	2	11.0	4.1	2	13975
2	25	401	5.842	34.295	2	12.02	2	7.2	5.5	2	13512
2	23	501	5.532	34.266	2	13.10	2	-9.5	4.5	2	13526
2	21	601	5.200	34.239	2	15.23	6	-4.5	3.3	6	13957 14119
2	19	700	4.846	34.236	2	20.33	2	-52.8	5.5	2	13518
2	18	797	4.553	34.270	2	26.15	2	-59.0	5.6	2	13516
2	17	904	4.131	34.290	2	32.83	2	-75.5	3.4	2	13521
2	16	1003	3.705	34.315	2	40.10	2	-82.0	9.4	2	13976
2	15	1201	3.081	34.380	2	53.69	2	-104.1	3.3	2	13965
2	14	1401	2.728	34.462	2	66.46	6	-145.3	2.9	2	13524
2	13	1598	2.517	34.543	2	75.58	2	-154.1	5.6	2	13511
2	12	1799	2.378	34.610	2	83.86	2	-153.6	4.3	2	14118
2	11	2002	2.250	34.658	2	88.12	2	-183.3	7.8	2	13517
2	10	2250	2.107	34.690	2	92.98	2	-194.1	5.4	2	13527
2	9	2499	1.886	34.706	2	102.09	2	-187.2	6.3	2	13519
2	8	2748	1.715	34.711	2	109.19	2	-178.8	4.0	2	13514
2	7	2999	1.601	34.715	2	111.80	2	-175.9	3.3	2	13964

Station 33

		Latitude		54.501°S		Date		3/8/94			
		Longitude		103.002°W		Bottom Depth		4086			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	6	3247	1.501	34.720	2	109.72	2	-176.1	4.1	2	13966
2	5	3497	1.316	34.716	2	115.79	2	-169.5	4.3	2	13525
2	4	3750	1.064	34.712	2	124.15	2	-174.1	3.8	2	13515
2	3	3999	0.860	34.708	2	131.29	2	-176.6	6.7	2	13956
2	1	4150	0.812	34.707	2	133.38	2	-170.5	6.0	2	13529

Station 37

		Latitude		54.501°S		Date		3/8/94			
		Longitude		103.002°W		Bottom Depth		4086			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	11	8.551	34.255	2	1.53	2	25.5	2.9	2	10218
2	35	25	8.520	34.255	2	1.39	2	31.9	3.0	2	10215
2	33	74	8.455	34.254	2	1.25	2	38.6	4.1	2	10408
2	32	99	7.348	34.296	2	2.41	2	29.6	2.7	2	10220
2	30	148	6.445	34.303	2	5.60	2	20.9	3.8	2	10224
2	29	198	6.349	34.312	2	6.24	2	29.8	2.9	2	10212
2	27	299	6.184	34.310	2	7.18	2	20.9	4.6	2	10213
2	25	401	6.040	34.309	2	7.61	2	10.1	3.5	2	10222
2	23	499	5.942	34.306	2	7.56	2	28.3	3.9	2	10407
2	21	600	5.516	34.261	2	9.46	2	-2.9	5.1	2	10216
2	19	701	5.080	34.238	2	14.08	2	-19.8	2.9	2	10219
2	18	798	4.842	34.271	2	20.12	2	-46.4	3.4	2	10217
2	17	900	4.427	34.295	2	27.05	2	-57.2	3.8	2	10412
2	16	1001	3.925	34.309	2	33.84	2	-85.1	2.5	2	10214
2	15	1200	3.252	34.361	2	46.81	2	-104.7	4.1	2	10223
2	13	1596	2.589	34.524	2	71.41	2	-144.4	3.4	2	10211
2	11	1998	2.281	34.652	2	81.74	2	-158.4	3.3	2	10409
2	9	2498	1.968	34.706	2	95.70	2	-171.2	3.8	2	10411
2	7	2999	1.616	34.712	2	105.25	2	-176.0	2.8	2	10221
2	5	3500	1.322	34.718	2	113.30	2	-175.8	3.5	2	10410
2	2	3999	0.847	34.708	2	126.15	2	-164.1	2.9	2	10209
2	1	4054	0.817	34.707	2	129.57	2	-163.2	2.5	2	10210

Station 41

		Latitude		49.163°S		Date		3/11/94			
		Longitude		103.000°W		Bottom Depth		4203			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	12	10.281	34.156	2	0.00	2	52.3	4.5	2	10433
1	35	25	10.251	34.157	2	0.00	2	46.6	4.4	2	10429
1	34	49	10.006	34.160	2	0.00	2	59.6	6.1	2	10419
1	33	74	9.354	34.210	2	0.05	2	71.1	4.3	2	10434
1	32	100	7.473	34.253	2	1.52	2	47.3	3.4	2	10422
1	31	124	6.991	34.272	2	2.49	2	39.8	5.4	2	10425
1	30	150	6.821	34.291	2	3.03	2	50.8	7.4	2	10418
1	29	201	6.659	34.321	2	4.21	2	51.5	4.4	2	10414
1	28	249	6.588	34.325	2	3.60	2	36.6	6.0	2	10437
1	27	301	6.569	34.325	2	3.65	2	31.1	4.0	2	10420
1	26	349	6.538	34.326	2	3.88	2	40.3	5.0	2	10417
1	25	399	6.447	34.325	2	4.44	2	33.0	3.2	2	10421
1	23	499	6.139	34.302	2	6.71	2	32.6	5.6	2	10413
1	21	600	5.721	34.280	2	8.74	2	8.1	4.3	2	10440
1	19	698	5.320	34.261	2	11.50	2	-9.2	5.0	2	10431
1	17	900	4.492	34.275	2	22.81	2	-36.0	4.0	2	10416
1	16	999	3.996	34.297	2	29.98	2	-78.4	4.6	2	10438
1	15	1201	3.305	34.368	2	46.47	2	-109.8	3.9	2	10443
1	14	1400	2.879	34.455	2	61.65	2	-129.6	4.2	2	10435
1	13	1598	2.616	34.528	2	72.39	2	-151.7	3.0	2	10426
1	12	1799	2.447	34.594	2	82.77	2	-161.4	4.4	2	10441
1	11	1999	2.291	34.643	2	89.44	2	-155.8	3.7	2	10415
1	10	2249	2.128	34.680	2	94.88	2	-168.4	4.2	2	10423
1	9	2500	1.938	34.698	2	99.86	2	-174.9	3.0	2	10428
1	8	2751	1.758	34.704	2	106.69	2	-173.1	3.7	2	10439
1	7	2984	1.655	34.708	2	110.72	2	36.9	6.7	4	10432
											14752
1	6	3249	1.530	34.713	2	113.38	2	-178.1	5.0	2	10442
1	5	3500	1.326	34.711	2	117.19	2	-182.1	3.5	2	10427
1	4	3752	1.062	34.709	2	123.79	2	-175.4	2.9	2	10424
1	2	3999	0.839	34.708	2	131.58	2	-168.4	3.8	2	10436
1	1	4287	0.767	34.706	2	133.30	2	-175.2	3.5	2	10430

Station 47

		Latitude		45.993°S		Date		3/12/94			
		Longitude		102.999°W		Bottom Depth		3907			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	12	11.246	34.124	2	4.51	2	53.6	4.2	2	10446
1	35	24	11.236	34.124	2	4.16	2	59.8	6.6	2	10631

Station 47

		Latitude		45.993°S		Date		3/12/94			
		Longitude		102.999°W		Bottom Depth		3907			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	34	51	11.114	34.127	2	4.13	2	62.6	4.3	2	10444
1	33	76	8.868	34.153	2	4.82	2	61.8	6.6	2	10630
1	32	101	7.833	34.163	2	5.89	2	55.3	3.2	2	10447
1	27	302	6.456	34.304	2	9.88	2	43.2	5.3	2	10632
1	25	399	6.231	34.302	2	10.38	2	30.6	3.2	2	10604
1	23	499	6.003	34.295	2	11.45	2	26.2	4.0	2	10448
1	21	603	5.699	34.278	2	12.68	2	16.5	4.7	2	10629
1	19	699	5.339	34.266	2	15.21	2	17.2	5.1	2	10626
1	18	806	4.901	34.265	2	21.03	2	-35.4	4.3	6	10445
											10605
1	17	900	4.521	34.279	2	27.10	2	-62.4	4.1	2	10607
1	16	1002	4.052	34.300	2	34.23	2	-63.6	3.0	2	10449
1	15	1099	3.648	34.326	2	40.93	2	-93.6	4.8	2	10628
1	14	1198	3.372	34.363	2	48.21	2	-66.5	5.1	3	10608
1	12	1599	2.703	34.534	2	78.96	2	-104.5	4.7	3	10609
1	10	2001	2.293	34.640	2	89.46	2	-162.2	3.3	2	10450
1	8	2501	1.913	34.694	2	103.24	2	-180.1	3.6	2	10606
1	6	2993	1.651	34.705	2	113.02	2	-171.5	4.2	2	10627
1	2	3752	1.145	34.707	2	123.61	2	-160.0	5.2	2	10625
1	1	3972	0.950	34.707	2	128.89	2	-163.6	2.8	2	10603

Station 53

		Latitude		43.003°S		Date		3/14/94			
		Longitude		102.998°W		Bottom Depth		3827			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	13.601	34.056	2	0.86	2	-156.8	4.2	4	10613
1	35	26	13.429	34.058	2	0.84	2	61.4	3.4	2	10899
1	33	75	10.161	34.053	2	0.78	2	58.7	3.7	2	10900
1	32	101	8.829	34.099	2	1.11	6	60.2	4.8	2	10622
1	31	123	8.238	34.147	2	1.64	2	61.1	5.4	2	10618
1	30	149	7.846	34.178	2	2.02	2	39.4	4.8	2	10895
1	29	198	6.988	34.254	2	3.66	2	39.2	6.8	2	10614
1	28	250	6.692	34.298	2	5.23	2	52.6	9.0	2	10616
1	27	300	6.556	34.313	2	6.21	2	43.1	5.1	2	10623
1	26	349	6.439	34.313	2	6.59	2	-156.9	4.6	4	10610
1	25	402	6.338	34.316	2	7.05	2	32.9	5.3	2	10617
1	23	501	6.076	34.305	2	7.91	2	35.7	5.0	2	10624
1	21	595	5.777	34.286	2	9.29	2	10.1	3.2	2	14751
1	19	699	5.391	34.270	2	12.50	2	-10.1	3.1	2	10901

Station 53

		Latitude		43.003°S		Date		3/14/94			
		Longitude		102.998°W		Bottom Depth		3827			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	18	799	4.958	34.267	2	17.53	2	-35.2	4.7	2	10619
1	17	901	4.542	34.280	2	23.76	2	-60.9	3.9	2	10904
1	16	999	4.133	34.300	2	30.41	2	-78.0	3.0	2	10897
1	15	1201	3.424	34.380	2	49.45	2	-130.4	4.3	2	10903
1	14	1399	3.034	34.470	2	67.58	6	15.1	5.0	4	10612
1	12	1801	2.452	34.595	2	86.21	2	-172.7	2.9	2	10894
1	11	2000	2.274	34.642	2	90.58	2	-169.2	4.4	2	10621
1	10	2249	2.077	34.683	2	96.03	2	-185.0	3.9	2	10906
1	9	2500	1.882	34.695	2	105.22	6	-183.7	7.1	2	10615
1	7	2997	1.655	34.704	2	113.46	2	-185.4	2.9	2	10898
1	6	3246	1.527	34.707	2	116.00	2	-183.5	3.2	2	10902
1	5	3499	1.299	34.707	2	120.52	2	-184.2	2.9	2	10896
1	2	3751	1.174	34.708	2	124.72	6	-169.7	4.2	2	10620
1	1	3863	1.086	34.709	2	127.17	2	-182.0	2.9	2	10905

Station 59

		Latitude		40.003°S		Date		3/15/94			
		Longitude		102.980°W		Bottom Depth		4053			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	11	15.733	33.998	2	2.15	2	72.6	4.0	2	10914
1	35	24	15.603	34.003	2	2.30	2	73.6	3.4	2	10907
1	34	48	13.021	34.001	2	2.37	2	85.7	3.6	2	10911
1	33	69	11.729	33.999	2	2.70	2	79.0	3.4	2	10908
1	32	97	10.967	34.115	3	2.80	2	88.0	3.5	2	10924
1	30	148	9.526	34.233	2	3.63	2	67.5	3.4	2	10912
1	29	198	8.107	34.279	2	5.35	2	47.3	4.3	2	11101
1	27	297	6.832	34.317	2	8.07	2	36.8	3.4	2	10922
1	25	398	6.453	34.330	2	9.80	2	17.0	3.3	2	10913
1	23	494	6.159	34.315	2	10.81	2	20.2	4.4	2	10920
1	21	598	5.825	34.295	2	12.63	2	3.6	3.4	2	10919
1	19	698	5.421	34.274	2	15.74	2	-8.4	3.2	2	10916
1	18	796	5.063	34.272	2	20.36	2	-38.3	3.2	2	10917
1	17	896	4.621	34.280	2	27.19	2	-69.9	4.1	2	11102
1	16	997	4.139	34.308	2	37.75	2	-84.4	3.3	2	10925
1	14	1201	3.465	34.404	2	58.75	2	-142.8	3.5	2	10923
1	11	1596	2.764	34.552	2	90.32	2	-185.4	3.0	2	10915
1	10	1998	2.262	34.627	2	101.04	2	-187.6	3.5	2	11100
1	8	2498	1.894	34.683	2	111.74	2	-194.2	4.6	2	10909
1	6	3002	1.748	34.697	2	117.11	2	-187.7	4.2	2	10910

Station 59

		Latitude		40.003°S		Date		3/15/94			
		Longitude		102.980°W		Bottom Depth		4053			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	4	3501	1.417	34.706	2	121.31	2	-184.4	5.7	2	10918
1	2	3727	1.198	34.706	2	128.37	2	-180.8	3.5	2	10921

Station 67

		Latitude		35.994°S		Date		3/17/94			
		Longitude		102.992°W		Bottom Depth		3700			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	22	50	16.316	-9	5	-9	1	114.6	3.7	2	11112
1	20	99	13.151	34.049	2	1.05	2	94.4	4.0	2	11115
1	19	200	10.117	34.319	2	2.10	2	87.0	8.1	2	11107
1	18	300	7.742	34.320	2	4.77	2	41.6	3.2	2	11116
1	17	402	6.658	34.333	2	7.08	2	34.4	3.7	2	11108
1	16	494	6.231	34.322	3	7.94	2	12.3	6.0	2	14718
1	14	697	5.444	34.274	2	11.46	2	-10.2	3.6	2	11105
1	13	798	5.076	34.267	2	15.21	2	-49.0	3.1	2	11117
1	12	887	4.648	34.272	2	21.53	2	-65.5	4.7	2	11111
1	11	991	4.203	34.301	2	30.82	2	-99.5	3.4	2	11104
1	10	1200	3.484	34.405	2	55.15	2	-145.9	4.9	2	11109
1	8	1697	2.575	34.580	2	89.77	2	-193.8	3.9	2	11113
1	7	2000	2.220	34.631	2	97.82	2	-205.2	5.0	2	11114
1	6	2295	1.942	34.669	2	109.16	2	-201.5	6.3	2	11103
1	5	2599	1.805	34.679	2	114.88	2	-205.5	3.4	2	11106
1	4	2897	1.744	34.685	2	115.30	2	-207.4	2.4	2	11118
1	2	3396	1.629	34.694	2	115.44	2	-185.6	6.1	2	14755
1	1	3648	1.541	34.698	2	118.15	2	-193.6	3.0	2	11110

Station 71

		Latitude		34.007°S		Date		3/18/94			
		Longitude		103.002°W		Bottom Depth		3667			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	10	20.943	34.303	2	3.26	2	116.1	3.7	2	11320
1	35	23	20.880	34.283	2	3.13	2	115.2	3.4	2	14719
1	34	49	18.438	34.270	2	2.95	2	122.9	4.4	2	11128
1	33	73	15.149	34.178	2	2.64	2	120.7	2.9	2	11125
1	32	103	14.297	34.227	2	2.47	2	100.2	3.8	2	11319
1	30	147	12.910	34.162	2	2.51	2	94.3	4.6	2	11322
1	29	198	12.379	34.511	2	3.06	2	108.8	4.5	2	11127

Station 71

		Latitude		34.007°S		Date		3/18/94			
		Longitude		103.002°W		Bottom Depth		3667			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	27	298	9.059	34.364	2	4.93	2	69.1	3.7	2	11130
1	25	402	6.957	34.335	2	7.54	2	28.1	4.0	2	11126
1	23	502	6.318	34.326	2	9.21	2	1.5	4.4	2	11122
1	21	599	5.889	34.297	2	10.48	2	-1.7	3.9	2	11120
1	19	699	5.522	34.277	2	12.23	2	-20.5	4.0	2	11123
											11133
1	18	800	5.040	34.265	2	16.71	2	-51.8	3.4	2	11124
1	17	897	4.584	34.272	2	23.77	2	-80.0	4.3	2	11321
1	16	995	4.115	34.306	2	34.21	2	-108.6	3.1	2	11317
1	15	1100	3.727	34.357	2	47.52	2	-121.7	4.0	2	11121
1	14	1197	3.486	34.419	2	60.93	2	-153.9	4.1	2	11318
1	12	1600	2.743	34.564	2	94.98	2	-182.4	6.0	2	11134
1	10	1998	2.172	34.634	2	106.69	2	-196.9	2.8	2	11324
1	8	2498	1.814	34.679	2	116.99	2	-186.0	5.6	2	11131
1	6	2995	1.743	34.686	2	121.93	2	-181.6	4.3	2	11132
1	2	3495	1.774	34.688	2	118.36	2	-203.5	3.4	2	11323

Station 77

		Latitude		31.000°S		Date		3/20/94			
		Longitude		103.350°W		Bottom Depth		3504			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	11	23.136	35.479	2	1.58	2	133.5	5.6	2	13958
1	35	26	23.141	35.486	2	1.61	2	135.6	6.0	2	13948
1	33	75	19.757	35.354	2	1.60	2	116.0	4.8	2	13978
1	32	96	19.101	35.300	2	1.55	2	133.3	5.4	2	13950
1	31	128	17.977	35.098	2	1.46	2	136.7	3.6	2	13943
1	30	152	17.246	34.982	2	1.41	2	127.5	3.8	2	13960
1	29	202	16.192	34.932	2	1.64	2	122.1	6.4	2	13945
1	28	252	14.230	34.751	2	1.96	2	107.8	5.0	2	14121
1	27	300	12.197	34.575	2	2.68	2	108.2	3.9	2	13971
1	26	350	10.303	34.446	2	3.75	2	75.6	4.6	2	13981
1	25	401	8.429	34.356	2	6.43	2	15.3	5.6	2	13951
1	23	501	6.684	34.327	2	9.64	2	-2.5	4.0	2	14120
1	21	600	5.944	34.299	2	10.58	2	-7.3	4.4	2	13940
1	19	701	5.495	34.276	2	12.90	2	-21.7	3.4	2	13970
1	18	802	4.999	34.265	2	18.29	2	-48.7	3.6	2	13968
1	17	904	4.557	34.285	2	27.20	2	-91.1	4.0	2	14122
1	16	999	4.120	34.329	2	37.61	2	-112.2	4.2	2	13959
1	14	1198	3.603	34.456	2	68.09	2	-158.8	3.9	2	13979

Station 77

		Latitude		31.000°S		Date		3/20/94			
		Longitude		103.350°W		Bottom Depth		3504			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	13	1298	3.418	34.497	2	77.13	2	-177.5	6.6	2	13961
1	12	1399	3.136	34.526	2	83.82	2	-189.8	4.0	2	13941
1	11	1502	2.891	34.545	2	87.54	2	-185.9	4.4	2	13969
1	10	1602	2.670	34.567	2	93.07	2	-180.1	4.5	2	13947
1	9	1799	2.346	34.607	2	101.59	2	-192.2	4.7	2	13949
1	7	2254	1.898	34.663	2	115.38	2	-192.6	3.1	2	13944
1	6	2502	1.817	34.675	2	116.95	2	-201.9	3.2	2	13973
1	5	2750	1.779	34.681	2	118.99	2	-200.2	4.4	2	13962
1	4	2999	1.777	-9	9	-9	1	-208.0	4.3	2	13972
1	2	3246	1.787	34.687	2	121.02	2	-200.3	3.2	2	13939
1	1	3478	1.798	34.688	2	121.34	2	-215.4	4.3	2	13952

Station 83

		Latitude		28.000°S		Date		3/22/94			
		Longitude		103.000°W		Bottom Depth		3089			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	10	23.713	35.788	2	1.36	2	135.4	4.9	2	11347
1	35	25	23.732	35.788	2	1.23	2	131.3	3.8	2	11328
1	34	51	23.253	35.794	2	1.16	2	123.0	3.6	2	11325
1	33	75	20.569	35.520	2	1.54	2	135.8	4.3	2	11331
1	30	151	19.248	35.448	2	1.12	2	135.8	4.5	2	11339
1	28	203	18.007	35.221	2	1.11	2	128.8	4.4	6	11341
											11344
1	25	299	14.003	-9	5	1.93	2	114.6	4.5	2	11337
1	23	398	9.335	34.382	2	5.62	2	50.4	4.3	2	11343
1	22	502	6.887	34.342	2	12.14	2	2.5	3.5	2	11342
1	21	603	6.053	34.316	2	13.38	2	-25.0	3.4	2	11329
1	20	703	5.403	34.278	2	14.27	2	-39.2	3.3	2	11346
1	19	802	5.052	34.293	2	21.01	2	-66.2	3.3	2	11336
1	18	902	4.637	34.322	2	30.91	2	-103.1	3.0	2	11345
1	17	996	4.221	34.380	3	45.24	2	-125.2	2.9	2	11334
1	16	1100	3.831	34.432	2	60.27	2	-156.7	3.0	2	11330
1	15	1201	3.549	34.488	2	73.79	2	-182.6	3.3	2	11338
1	11	1601	2.510	34.579	2	92.50	2	-192.6	3.1	2	11335
1	8	2002	2.038	34.639	2	112.29	2	-194.9	7.4	2	11327
1	6	2498	1.859	34.663	2	120.61	2	-212.0	2.9	2	11326
1	4	3000	1.847	34.674	2	118.01	2	-207.3	4.5	2	11333
1	2	3245	1.845	34.679	2	116.29	2	-204.0	4.0	2	11332
1	1	3382	1.854	34.680	2	115.84	2	-201.0	3.1	2	11340

Station 89

		Latitude		24.988°S		Date		3/29/94			
		Longitude		103.001°W		Bottom Depth		3833			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	10	24.461	36.018	2	1.35	2	117.9	5.8	2	14114
1	35	24	24.472	36.018	2	1.44	2	137.3	3.3	2	14708
1	34	50	24.319	36.006	2	1.38	2	130.3	3.5	2	14704
1	33	75	21.437	35.671	2	1.38	2	122.5	4.4	2	14124
1	32	101	20.654	35.671	2	1.29	2	143.5	6.5	2	14714
1	31	125	20.323	35.675	2	1.44	2	136.0	4.2	2	14749
1	30	150	19.825	35.589	2	1.37	2	134.6	5.7	2	14712
1	26	350	11.217	34.481	2	4.38	2	88.8	3.4	2	14715
1	25	398	9.314	34.385	2	7.86	2	45.2	3.5	2	14747
1	23	502	6.833	34.346	2	13.14	2	-11.2	3.1	2	14702
1	21	698	5.256	34.292	2	19.42	2	-55.2	4.9	2	14116
1	20	799	4.847	34.337	2	32.87	2	-101.1	3.0	2	14703
1	19	901	4.443	34.385	2	45.79	2	-144.7	8.8	2	13953
1	18	1001	4.068	34.438	2	59.81	2	-156.0	3.7	2	14705
1	17	1101	3.783	34.474	2	68.96	2	-162.0	2.9	2	14707
1	16	1202	3.487	34.512	2	77.91	2	-182.3	3.0	2	14713
1	15	1298	3.246	34.532	2	83.74	2	-200.5	3.3	2	14113
1	14	1400	2.975	34.553	2	89.89	2	-189.3	2.7	2	14709
1	13	1500	2.757	34.569	2	95.20	2	-191.2	3.3	2	14700
1	12	1600	2.590	34.585	2	100.05	2	-201.0	2.6	2	14699
1	11	1800	2.265	34.616	2	108.70	2	-202.1	6.0	2	15332
1	10	2002	2.082	34.636	2	114.83	2	-206.0	2.8	2	14717
1	9	2248	1.936	34.655	2	118.90	2	-218.3	3.9	2	14115
1	8	2500	1.872	34.665	2	120.28	2	-215.6	2.9	2	14117
1	7	2746	1.838	34.671	2	122.33	2	-210.0	2.7	2	14706
1	6	2999	1.813	34.678	2	125.69	2	-216.8	2.8	2	14711
1	5	3252	1.808	34.682	2	127.80	2	-224.8	3.8	2	14710
1	4	3498	1.827	34.683	2	129.16	2	-209.3	3.0	2	14701
1	2	3751	1.848	34.684	2	131.61	2	-219.9	2.8	2	14748
1	1	3860	1.858	34.685	2	131.31	2	-212.2	3.1	2	14716

Station 101

		Latitude		19.000°S		Date		4/1/94			
		Longitude		102.992°W		Bottom Depth		4085			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	35	24	24.253	36.335	2	1.01	2	118.4	3.0	2	11675
3	34	50	24.133	36.393	2	1.02	2	94.0	3.2	2	11519
3	33	75	23.724	36.425	3	1.06	2	97.5	3.7	2	11502
3	32	100	22.409	36.233	2	0.96	2	103.7	4.0	2	11510

Station 101

		Latitude		19.000°S		Date		4/1/94			
		Longitude		102.992°W		Bottom Depth		4085			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	31	124	21.457	36.042	2	0.91	2	111.9	4.0	2	11509
3	30	150	20.573	35.829	2	0.68	2	127.2	3.2	2	11676
3	29	201	19.318	35.575	2	0.92	2	97.7	5.6	2	11503
3	28	246	16.087	35.020	2	1.65	2	100.4	5.7	2	11504
3	27	299	12.632	34.602	2	5.22	2	80.6	3.6	2	11513
3	25	348	10.485	34.497	2	12.57	2	25.8	3.2	2	11520
3	23	500	6.743	34.395	2	20.53	2	-78.5	5.0	2	11500
3	22	599	5.973	34.408	2	29.75	2	-110.1	3.4	2	11508
3	21	698	5.470	34.443	2	42.61	2	-128.0	3.9	2	11516
3	20	800	4.987	34.476	2	54.94	2	-142.1	3.9	2	11671
3	19	898	4.623	34.496	2	64.94	2	-165.9	3.1	2	11514
3	17	1099	3.995	34.533	2	82.31	2	-196.2	4.1	2	11512
3	16	1201	3.661	34.545	2	88.49	2	-191.7	2.9	2	11522
3	15	1300	3.375	34.558	2	94.09	2	-206.1	2.9	2	11515
3	14	1400	3.137	34.559	4	99.63	2	-218.7	3.5	2	11506
3	13	1600	2.786	34.596	2	108.83	2	-221.3	3.2	2	11348
3	12	1800	2.474	34.617	2	115.01	2	-220.9	2.8	2	11517
3	11	2001	2.231	34.635	2	118.47	2	-223.7	2.6	2	11674
3	10	2248	2.008	34.652	2	120.40	2	-232.7	3.0	2	11501
3	9	2498	1.880	34.665	2	121.83	2	-224.1	2.9	2	11521
3	8	2742	1.818	34.674	2	125.11	2	-225.0	3.9	2	11511
3	7	2999	1.786	34.678	2	128.42	2	-218.4	3.0	2	11670
3	6	3244	1.773	34.682	2	129.09	2	-214.9	2.4	2	11673
3	5	3500	1.774	34.684	2	128.47	2	-209.0	2.8	2	11672
3	4	3747	1.789	34.686	2	127.85	2	-223.5	4.4	2	11507
3	2	4000	1.813	34.687	2	128.37	2	-218.2	2.9	2	11518
3	1	4142	1.829	34.686	2	129.52	2	-222.4	3.0	2	11505

Station 105

		Latitude		16.998°S		Date		4/5/94			
		Longitude		102.995°W		Bottom Depth		3928			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	10	24.470	36.283	2	-9	1	81.3	2.9	2	11679
1	35	24	24.227	36.277	2	1.73	2	101.1	5.5	2	11690
1	34	51	24.128	36.303	2	1.88	2	88.2	4.4	2	11692
1	33	74	23.637	36.275	2	2.09	2	87.6	3.4	2	11682
1	32	100	22.424	36.178	2	2.04	2	94.8	4.8	2	11694
1	30	148	21.155	35.981	2	1.78	2	115.1	3.6	2	11761
1	29	199	18.494	35.460	3	1.86	2	119.2	4.2	2	11689

Station 105

		Latitude		16.998°S		Date		4/5/94			
		Longitude		102.995°W		Bottom Depth		3928			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	27	294	11.973	-9	5	-9	1	65.5	4.2	2	11688
1	25	400	8.750	34.512	2	22.84	2	-57.6	2.8	2	11680
1	23	499	7.086	34.472	2	28.12	2	-95.2	4.1	2	11693
1	21	699	5.548	34.476	2	48.80	2	-134.6	4.6	2	11691
1	19	900	4.626	34.503	2	69.15	2	-164.6	2.6	2	11681
1	18	1001	4.216	34.521	2	80.83	2	-177.6	3.1	2	11678
1	16	1201	3.601	34.551	2	93.87	2	-196.8	3.2	2	11684
1	14	1392	3.110	34.581	2	104.35	2	-212.8	3.0	2	11685
1	12	1598	2.721	34.605	2	113.01	2	-222.8	3.0	2	11695
1	11	1798	2.425	34.624	2	118.02	2	-223.5	3.2	2	11696
1	8	2499	1.837	34.669	2	120.82	2	-218.2	3.1	2	11687
1	6	3000	1.793	34.679	2	135.02	2	-226.8	2.6	2	11677
1	4	3498	1.807	34.682	2	133.52	2	-220.0	3.2	2	11683
1	2	3750	1.821	34.684	2	128.08	2	-219.9	2.7	2	11760

Station 113

		Latitude		13.001°S		Date		4/5/94			
		Longitude		103.008°W		Bottom Depth		4252			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	10	25.591	35.992	2	6.40	2	97.1	4.4	2	11789
1	36	10	25.590	35.991	2	3.43	2	65.5	7.2	2	11777
1	34	25	25.595	35.997	2	7.33	2	63.0	3.8	2	11788
1	33	50	24.099	36.187	2	7.90	2	84.0	5.6	2	11769
1	32	78	22.692	36.285	2	8.44	2	100.9	5.6	2	11787
1	31	98	22.145	36.182	2	7.76	2	117.7	4.5	2	11778
1	30	124	20.997	35.964	2	6.90	2	92.0	5.1	2	11879
1	29	149	19.328	35.634	2	7.87	2	106.3	4.2	2	11765
1	28	199	15.469	35.043	2	12.90	2	90.3	4.5	2	11780
1	27	237	12.831	34.781	2	23.12	2	32.4	6.5	2	11880
1	26	300	10.603	35.043	4	30.80	2	-47.0	3.8	2	11783
1	25	351	9.529	34.675	2	33.69	2	-72.4	4.2	2	11784
1	23	496	7.852	34.599	2	41.94	2	-94.2	5.8	6	11762
											11772
1	22	602	6.989	34.557	2	47.34	2	-109.5	3.7	2	11767
1	21	703	6.182	34.525	2	54.06	2	-120.6	4.1	2	11781
1	20	795	5.539	34.514	2	61.90	2	-132.6	4.8	2	11773
1	19	896	4.928	34.515	2	70.68	2	-151.9	3.5	2	11775
1	17	1101	4.055	34.540	2	87.48	2	-181.0	4.0	2	11782
1	16	1199	3.708	34.554	2	94.14	2	-201.5	6.9	2	11790

Station 113

		Latitude		13.001°S		Date		4/5/94			
		Longitude		103.008°W		Bottom Depth		4252			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	15	1300	3.404	-9	5	102.78	2	-195.2	3.5	2	11779
1	13	1600	2.766	34.603	2	116.96	2	-217.7	5.0	2	11763
1	12	1801	2.447	34.623	2	124.27	2	-210.6	4.4	2	11786
1	11	1999	2.233	34.636	2	126.64	2	-218.3	3.2	2	12747
1	10	2251	1.991	34.656	2	129.19	2	-229.5	3.8	2	11768
1	9	2499	1.850	34.667	2	129.37	2	-216.6	3.2	2	11785
1	8	2748	1.792	34.673	2	133.99	2	-219.5	3.1	2	11764
1	7	2998	1.775	34.675	2	141.33	2	-207.2	3.3	2	11776
1	5	3499	1.771	34.674	2	148.82	2	-214.2	3.4	2	11774
1	3	3748	1.786	34.675	2	145.87	2	-222.5	3.3	2	11770
1	2	4000	1.808	34.675	2	145.72	2	-221.1	4.0	2	11766
1	1	4345	1.846	34.675	2	145.43	2	-228.2	2.9	2	12746

Station 117

		Latitude		11.000°S		Date		4/6/94			
		Longitude		103.013°W		Bottom Depth		4248			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	10	26.595	35.512	2	2.16	2	59.8	5.6	2	11887
1	35	25	26.604	35.511	2	2.18	2	75.8	3.5	2	11892
1	34	48	25.923	35.730	2	1.70	2	79.1	7.0	2	12371
1	33	74	22.769	36.028	2	1.49	2	82.7	3.4	2	12366
1	32	99	20.832	35.904	2	1.44	2	98.8	3.5	2	11889
1	30	150	15.808	35.079	2	5.68	2	94.1	3.3	2	12364
1	25	401	9.080	34.685	2	34.07	2	-71.5	4.0	2	11890
1	23	501	8.114	34.629	2	38.28	2	-87.5	4.5	2	11894
1	21	699	6.234	34.548	2	52.26	2	-133.4	3.6	2	11886
1	19	902	4.967	34.531	2	71.38	2	-156.1	2.8	2	12365
1	18	1000	4.496	-9	9	-9	1	-167.0	7.2	2	11882
1	16	1199	3.787	34.558	2	93.59	2	-183.6	4.4	2	11883
1	14	1400	3.251	34.582	2	105.95	2	-206.8	2.9	2	12368
1	13	1601	2.778	34.604	2	113.69	2	-223.7	3.7	2	12391
1	11	2000	2.266	34.638	2	128.33	2	-225.7	2.6	2	12367
1	9	2500	1.875	35.341	4	22.27	4	10.9	4.2	4	12369
1	7	2999	1.776	34.674	2	140.01	2	-217.2	6.8	2	11884
1	5	3496	1.772	34.675	2	142.08	2	-207.1	2.9	2	11891
1	2	3997	1.803	34.675	2	148.99	2	-202.3	2.8	2	11893
1	1	4294	1.836	-9	9	153.62	2	-216.7	3.9	2	11881

Station 126

		Latitude		7.312°S		Date		4/8/94			
		Longitude		106.943°W		Bottom Depth		3175			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	7	27.658	36.818	4	1.71	2	62.7	3.6	2	12388
2	34	50	25.625	35.449	3	3.12	2	59.1	3.4	2	12390
2	33	74	21.002	35.405	2	5.50	2	69.1	3.2	2	12396
2	32	99	17.928	35.334	2	7.44	2	66.9	8.9	2	12376
2	31	124	14.555	35.051	2	16.10	2	46.6	3.4	2	12397
2	30	150	13.642	34.980	2	19.51	2	20.7	3.2	2	12370
2	29	175	12.906	34.936	2	21.81	2	3.1	3.4	2	12379
2	28	203	12.356	34.900	2	24.81	2	-23.1	4.2	2	12373
2	27	214	12.185	34.889	2	25.14	2	-23.6	3.2	2	12389
2	25	300	11.169	34.820	2	30.66	2	-46.7	3.2	2	12385
2	23	351	10.560	34.778	2	34.84	2	-64.8	4.7	2	12377
2	22	403	9.694	34.722	2	37.46	2	-89.4	3.7	2	12374
2	21	500	8.076	34.628	2	43.73	2	-100.5	3.5	2	12387
2	20	600	6.784	34.570	2	52.75	2	-122.7	3.0	2	12403
2	19	698	5.799	34.542	2	60.47	2	-140.0	3.1	2	12386
2	16	1001	4.462	34.543	2	81.17	2	-165.4	2.9	2	12381
2	15	1098	4.170	34.550	2	87.15	2	-180.6	2.8	2	12395
2	14	1197	3.792	34.563	2	96.61	2	-182.2	2.9	2	12375
2	13	1302	3.518	34.573	2	103.46	2	-195.9	3.1	2	12378
2	11	1500	2.970	34.598	2	117.47	2	-215.7	2.8	2	12392
2	10	1588	2.788	34.608	2	121.81	2	-210.1	3.0	2	12383
2	9	1800	2.465	34.626	2	130.48	2	-226.4	2.7	2	12372
2	6	2400	1.935	34.661	2	145.41	2	-225.3	2.6	2	12394
2	4	2801	1.798	34.672	2	143.76	2	-219.9	2.9	2	12382
2	2	3000	1.760	34.674	2	145.11	2	-223.8	8.1	6	12380 12384
2	1	3190	1.772	34.674	2	146.32	6	-226.5	2.7	2	12393

Station 134

		Latitude		4.003°S		Date		4/10/94			
		Longitude		110.329°W		Bottom Depth		3841			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	26	27.711	34.774	2	3.45	2	70.3	4.0	2	12744
1	34	49	17.655	35.081	2	11.21	2	26.8	7.3	2	12399
1	33	76	14.380	34.996	2	16.84	6	15.3	5.8	2	12753
1	31	124	13.525	34.950	2	19.10	2	14.3	3.3	2	12405
1	30	152	13.318	34.941	2	19.49	2	11.4	7.3	2	12749
1	28	198	12.847	34.906	2	21.21	2	-11.2	3.8	2	12751
1	25	299	12.320	34.881	2	25.47	2	-26.8	3.8	2	12748

Station 134

		Latitude		4.003°S		Date		4/10/94			
		Longitude		110.329°W		Bottom Depth		3841			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	22	404	9.892	34.737	2	35.80	2	-116.7	3.1	3	12401
1	21	501	8.348	34.649	2	43.98	2	-107.0	2.0	6	12742
											12743
1	20	548	7.714	34.617	2	47.06	6	-109.1	4.2	2	12750
1	19	600	7.266	34.600	2	50.78	2	-123.9	2.9	2	12400
1	18	699	6.499	34.572	2	56.18	2	-132.9	2.7	2	12740
1	17	799	5.711	34.546	2	61.42	2	-131.7	2.9	2	12754
1	16	898	4.962	34.538	2	69.33	2	-159.7	3.8	2	12752
1	13	1399	3.214	34.593	2	111.73	2	-217.1	2.8	2	12404
1	12	1601	2.808	34.612	2	121.07	2	-220.8	2.6	2	12741
1	10	1995	2.244	34.644	2	138.82	2	-225.6	2.7	2	12408
1	9	2250	2.066	34.652	2	141.31	6	-231.7	4.3	2	12406
1	6	2999	1.661	34.676	2	143.14	2	-224.6	2.6	2	12402
1	1	3908	1.511	34.689	2	144.76	6	-207.3	3.1	2	12407

Station 138

		Latitude		2.333°S		Date		4/11/94			
		Longitude		110.334°W		Bottom Depth		3987			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	26.673	35.074	2	4.60	2	75.4	3.1	2	12755
1	35	25	23.153	35.091	2	7.09	2	68.9	3.0	2	12745
1	34	50	15.462	35.054	2	15.89	2	34.5	3.0	2	12761
1	30	149	13.023	34.914	2	22.10	2	3.0	2.9	2	12759
1	29	173	12.916	34.909	2	22.61	2	9.4	3.8	2	12756
1	26	303	12.356	34.882	2	26.31	2	-22.7	3.1	2	12758
1	23	402	10.739	34.786	2	33.16	2	-63.2	4.1	2	12760
1	22	499	8.692	34.667	2	41.95	2	-98.9	3.1	2	12762
1	19	798	5.760	34.558	2	65.32	2	-143.4	3.8	2	12757

Station 142

		Latitude		1.002°S		Date		4/13/94			
		Longitude		110.328°W		Bottom Depth		4070			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	25.688	35.156	2	3.57	2	91.7	4.1	2	8025
1	35	25	25.339	35.150	2	3.92	2	55.2	6.0	2	8026
1	33	75	15.386	35.141	2	14.38	2	24.3	3.6	2	8027
1	32	99	13.188	34.921	2	17.35	2	3.8	4.8	2	8028

Station 142

		Latitude		1.002°S		Date		4/13/94			
		Longitude		110.328°W		Bottom Depth		4070			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	31	124	13.079	34.910	2	18.38	2	17.5	3.6	2	8029
1	30	150	13.023	34.906	2	18.47	2	19.0	3.6	2	8030
1	29	176	12.911	34.899	2	19.71	2	2.4	5.5	2	8031
1	28	198	12.868	34.897	2	20.18	2	-2.6	4.2	2	8032
1	27	222	12.770	34.897	2	20.70	2	-4.7	6.8	2	8033
1	26	250	12.665	34.890	2	22.28	2	-7.6	3.5	2	8034
1	25	299	12.366	34.874	2	24.74	2	-22.2	3.3	2	8035
1	23	400	9.866	34.731	2	31.66	2	-66.0	5.0	2	8036
1	22	498	8.370	34.636	2	38.40	2	-90.9	4.1	2	8037
1	21	599	7.120	34.581	2	48.07	2	-110.5	7.1	2	8038
1	20	702	6.240	34.555	2	56.49	2	-141.2	3.0	2	8040
1	19	799	5.570	34.909	4	25.71	4	-20.0	5.5	4	8041
1	18	898	5.049	34.545	2	73.88	2	-161.9	2.9	2	8042
1	17	1003	4.574	34.554	2	84.40	2	-175.1	3.0	2	8043
1	16	1060	4.327	34.559	2	89.24	2	-189.9	5.7	2	8044
1	15	1199	3.878	34.569	2	98.54	2	-194.7	3.5	2	8391
1	14	1399	3.215	34.599	3	116.98	2	-223.5	3.9	2	8045
1	13	1598	2.915	34.607	2	123.60	2	-217.5	2.7	2	8046
1	12	1801	2.475	34.631	2	135.66	2	-241.0	3.9	2	8047
1	10	2252	2.007	34.655	2	143.15	2	-254.8	4.1	2	8127
1	9	2500	1.862	34.662	2	143.24	2	-242.4	3.8	2	8128
1	8	2749	1.766	34.669	2	145.22	2	-238.5	3.6	2	8129
1	7	3000	1.703	34.672	2	145.78	2	-221.6	3.5	2	8130
1	6	3249	1.607	34.678	2	147.73	2	-233.2	3.4	2	8131
1	5	3500	1.534	34.684	2	149.69	2	-221.7	4.2	2	8132
1	4	3749	1.453	34.690	2	148.20	2	-238.6	3.2	2	8413
1	2	4002	1.471	34.690	2	145.53	2	-223.7	5.0	2	8133
1	1	4118	1.485	34.690	2	144.90	2	-216.2	4.1	2	8134

Station 145

		Latitude		0.003°S		Date		4/13/94			
		Longitude		110.334°W		Bottom Depth		3785			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	36	9	24.723	35.134	2	4.71	2	54.4	4.5	2	8135
3	34	52	17.479	34.859	2	12.69	2	63.2	4.3	2	8136
3	32	102	14.707	34.952	2	14.83	2	37.7	6.2	2	8137
3	28	195	13.135	34.883	2	19.59	2	13.9	4.5	2	8138
3	22	399	9.475	34.699	2	34.46	2	-68.3	4.8	2	8144
3	18	800	5.669	34.558	3	66.43	2	-137.0	4.0	2	8145

Station 148

		Latitude		1.001°N		Date		4/14/94			
		Longitude		110.333°W		Bottom Depth		3675			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	8	25.256	34.904	2	3.19	2	75.7	4.7	2	8146
1	35	25	24.486	34.968	2	3.89	2	69.0	5.1	2	8139
1	34	49	17.735	34.859	2	11.32	2	46.2	4.5	2	8140
1	33	74	15.301	34.951	2	14.97	2	32.1	4.9	2	8141
1	30	151	13.445	34.913	2	19.31	2	7.2	7.7	2	8142
1	28	201	12.743	34.888	2	21.64	2	-0.3	4.8	2	8143
1	26	301	11.604	34.714	4	39.24	4	-70.2	3.9	2	8147
1	23	400	9.854	34.713	2	34.40	2	-69.7	3.6	2	8148
1	22	500	8.356	34.635	2	41.28	2	-103.3	4.8	2	8149

Station 152

		Latitude		2.333°N		Date		4/15/94			
		Longitude		110.333°W		Bottom Depth		3701			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	25	27.057	34.501	2	3.90	2	40.9	7.0	2	8150
1	34	50	18.835	34.814	2	10.62	2	47.4	4.3	2	8151
1	32	101	14.955	34.956	2	17.32	2	33.6	4.8	2	8152
1	30	153	13.634	34.932	2	21.00	2	2.9	6.3	2	8153
1	25	302	11.266	34.774	2	29.96	2	-43.2	3.8	2	8155
1	22	402	9.276	34.671	2	40.23	2	-93.6	4.4	2	8156

Station 156

		Latitude		4.002°N		Date		4/16/94			
		Longitude		110.335°W		Bottom Depth		3930			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	27.964	34.452	2	1.65	2	71.8	4.5	2	8157
1	35	25	25.979	34.424	2	2.49	2	79.8	8.0	2	8158
1	34	51	19.717	34.723	2	10.37	2	51.8	4.3	2	8159
1	33	76	15.960	34.924	2	15.92	2	32.5	5.8	2	8154
1	32	100	14.494	34.947	2	17.54	2	34.3	3.9	2	8369
1	30	149	13.687	34.930	2	19.80	2	14.8	4.5	2	8370
1	29	169	13.462	34.919	2	21.27	2	2.5	4.3	2	8371
1	28	198	13.133	34.901	2	22.78	2	-3.9	8.0	2	8372
1	27	250	12.449	34.853	2	25.66	2	-22.6	3.1	2	8373
1	25	350	10.952	34.750	2	28.70	2	-63.1	5.7	2	8374
1	23	400	10.253	34.713	2	32.49	2	-73.9	5.9	2	8375
1	22	499	8.428	34.643	2	46.12	2	-117.9	3.4	2	8376

Station 156

		Latitude		4.002°N		Date		4/16/94			
		Longitude		110.335°W		Bottom Depth		3930			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	21	602	7.322	34.590	2	49.10	2	-126.9	2.6	2	8377
1	20	699	6.566	34.563	2	55.12	2	-152.6	5.0	2	8378
1	19	802	6.010	34.557	2	62.86	2	-141.9	2.5	2	8379
1	17	1002	4.847	34.555	2	85.38	2	-184.0	2.5	2	8380
1	16	1101	4.473	34.563	2	97.05	2	-194.1	2.5	2	8381
1	14	1301	3.692	34.583	2	112.89	2	-202.4	2.8	2	8382
1	12	1601	2.941	34.614	2	129.79	2	-220.9	3.1	2	8383
1	11	1802	2.561	34.630	2	135.64	2	-237.8	3.4	2	8384
1	10	2000	2.320	34.640	2	141.93	2	-232.4	3.2	2	8385
1	9	2240	2.076	34.653	2	150.37	2	-242.3	2.6	2	8386
1	8	2501	1.876	34.664	2	156.15	2	-238.6	2.4	2	8387
1	6	2999	1.763	34.672	2	155.31	2	-228.7	2.3	2	8388
1	5	3252	1.617	34.678	2	154.73	2	-230.7	2.4	2	8389
1	4	3500	1.494	34.686	2	153.44	2	-229.3	2.4	2	8390
1	2	3751	1.465	34.688	2	151.02	2	-221.2	2.5	2	8392

Station 163

		Latitude		7.498°N		Date		4/18/94			
		Longitude		110.335°W		Bottom Depth		3939			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	28.928	33.936	2	1.23	2	79.4	5.3	2	8393
1	35	25	28.935	33.937	2	1.24	2	82.5	3.1	2	8394
1	34	50	27.231	34.022	2	1.32	2	78.4	3.6	2	8395
1	33	75	14.944	34.736	2	19.69	2	26.0	2.7	2	8396
1	32	100	13.163	34.818	3	22.49	2	11.9	3.5	2	8397
1	30	151	11.977	34.784	2	26.02	2	-24.3	2.7	2	8398
1	28	200	11.286	34.750	2	27.75	2	-43.5	2.6	2	8399
1	26	301	10.426	34.719	2	31.33	2	-64.4	2.9	2	8400
1	23	401	9.589	34.671	2	38.86	2	-95.3	3.5	2	8401
1	22	499	8.224	34.619	2	51.37	2	-117.0	4.0	2	8402
1	21	600	7.183	34.586	2	59.96	2	-130.5	3.2	2	8403
1	20	701	6.384	34.570	2	69.32	2	-151.8	2.4	2	8405
1	19	801	5.733	34.562	2	78.46	2	-152.7	2.4	2	8404
1	18	899	5.184	34.560	2	87.04	2	-174.9	8.4	6	8406 8406
1	17	1001	4.741	34.562	2	92.15	2	-174.6	2.4	2	8407
1	16	1200	4.028	34.574	2	105.97	2	-212.2	3.5	2	8412
1	15	1398	3.430	34.593	2	121.61	2	-221.9	3.5	2	8408
1	14	1600	3.004	34.610	2	130.38	2	-229.2	4.8	2	8409

Station 163

		Latitude		7.498°N		Date		4/18/94			
		Longitude		110.335°W		Bottom Depth		3939			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	12	2000	2.339	34.635	2	144.42	2	-234.2	2.9	2	8410
1	10	2401	1.904	34.663	2	155.79	2	-240.3	2.5	2	8453
1	7	3000	1.690	34.675	2	160.36	2	-248.5	6.1	2	8414
1	5	3401	1.567	34.682	2	157.01	2	-235.8	6.0	2	8415
1	1	3984	1.547	34.686	2	154.15	2	-233.7	2.6	2	8416

Station 168

		Latitude		10.000°N		Date		4/19/94			
		Longitude		110.001°W		Bottom Depth		3310			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	36	9	28.821	33.995	2	0.42	2	74.7	3.1	2	8417
3	35	24	28.744	34.003	2	0.42	2	78.6	3.5	2	8418
3	34	50	28.236	34.095	2	0.73	2	55.3	4.2	2	8419
3	33	74	23.671	34.235	3	5.34	2	53.9	3.6	2	8420
3	31	125	14.265	34.783	2	21.63	2	21.3	3.5	2	8421
3	29	174	12.181	34.785	2	26.12	2	-3.8	4.4	2	8422
3	28	194	11.884	34.774	2	26.73	2	-18.3	5.4	2	8423
3	27	249	11.284	34.749	2	28.55	2	-59.5	3.3	2	8424
3	26	300	10.767	34.725	2	30.13	2	-65.1	2.8	2	8425
3	25	349	10.308	34.700	2	33.75	2	-89.2	2.8	2	8426
3	23	399	9.815	34.674	2	37.51	2	-106.3	3.4	2	8428
3	22	500	8.544	34.603	2	47.90	2	-134.8	3.5	2	8429
3	21	600	7.228	34.569	2	61.52	2	-154.9	3.4	2	8430
3	20	699	6.402	34.559	2	70.43	2	-155.0	7.2	2	8431
3	19	799	5.710	34.550	2	78.49	2	-169.6	4.7	2	14312
3	17	999	4.779	34.556	2	92.49	2	-188.8	3.6	2	14314
											9278
3	16	1100	4.341	34.564	2	99.27	2	-204.8	4.7	2	8435
3	15	1199	3.998	34.574	2	105.34	2	-208.5	3.9	2	8436
3	14	1299	3.671	34.583	2	110.89	2	-217.6	5.0	2	14313
3	13	1398	3.483	-9	5	-9	9	-230.5	5.2	2	14315
3	12	1498	3.239	34.598	2	123.34	2	-224.0	3.7	2	8438
3	11	1599	2.996	34.606	2	132.70	2	-230.7	2.8	2	8820
3	10	1798	2.637	34.626	2	140.90	2	-233.7	2.8	2	8439
3	9	1997	2.298	34.641	2	147.50	2	-236.9	4.3	2	8440
3	8	2193	2.043	34.654	2	151.69	2	-233.9	3.8	2	8441
3	7	2399	1.923	34.661	2	153.38	2	-242.4	2.5	2	8442
3	6	2601	1.837	34.666	2	152.31	2	-243.0	2.3	2	8443
3	5	2801	1.766	34.670	2	151.81	2	-241.9	2.5	2	8444

Station 168

		Latitude		10.000°N		Date		4/19/94			
		Longitude		110.001°W		Bottom Depth		3310			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	4	2999	1.718	34.674	2	150.83	2	-242.8	3.5	2	8445
3	2	3196	1.683	34.676	2	153.18	2	-241.1	4.1	2	8446
3	1	3342	1.651	34.679	2	157.09	2	-236.7	4.0	2	8447

Station 174

		Latitude		14.002°N		Date		4/21/94			
		Longitude		109.998°W		Bottom Depth		3275			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	28.503	33.893	2	0.15	2	62.0	4.4	2	8448
1	34	25	28.409	33.905	2	0.23	2	82.5	4.2	2	8449
1	33	49	28.158	33.886	2	0.10	2	80.7	5.4	2	8450
1	32	74	27.191	33.939	2	0.59	2	75.4	4.5	2	8451
1	31	99	22.052	34.388	2	4.91	2	55.8	5.0	2	8452
1	29	148	14.038	34.776	2	23.03	2	-27.1	3.0	2	9279
1	27	200	12.319	34.759	2	26.98	2	-41.8	2.3	2	8805
1	25	301	10.687	34.688	2	32.59	2	-75.3	2.6	2	8806
1	22	400	9.597	34.630	2	39.82	2	-93.9	2.4	2	8807
1	21	500	8.435	34.576	2	47.38	2	-107.3	2.7	2	8808
1	20	601	7.463	34.545	2	57.19	2	-126.2	2.1	2	8809
1	19	701	6.654	34.528	2	66.04	2	-157.9	3.1	2	8810
1	18	800	5.942	-9	5	79.38	2	-177.6	3.9	2	8811
1	17	898	5.381	34.541	2	86.01	2	-181.6	2.7	2	8813
1	16	1000	4.818	34.545	2	95.83	2	-196.9	2.3	2	8814
1	14	1201	4.062	34.565	2	110.96	2	-207.9	2.3	2	8815
1	12	1400	3.517	34.584	2	123.77	2	-215.6	2.9	2	8816
1	11	1599	2.925	34.608	2	136.82	2	-227.8	2.2	2	8817
1	10	1802	2.543	34.624	2	145.69	2	-236.4	3.2	2	8818
1	9	1999	2.256	34.640	2	149.32	2	-230.0	2.9	2	8819
1	7	2399	1.959	34.658	2	154.25	2	-240.0	2.7	2	8821
1	4	3002	1.727	34.674	2	156.39	6	-236.5	3.1	2	8822
1	1	3316	1.671	34.675	2	154.94	2	-235.7	3.3	2	8823

Station 178

		Latitude		16.017°N		Date		4/22/94			
		Longitude		110.331°W		Bottom Depth		3307			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	34	25	25.170	34.498	2	0.00	2	87.1	3.1	2	12774
1	33	48	24.156	34.503	2	0.00	2	68.9	3.5	2	12781
1	32	73	21.469	34.338	3	0.54	2	68.9	4.8	2	12778
1	31	101	16.774	34.254	2	9.58	2	48.5	3.1	2	12771
1	28	175	12.463	34.745	2	27.36	2	-26.5	6.7	2	12779
1	26	251	11.259	34.706	2	31.81	2	-74.3	3.0	2	12471
1	25	302	10.795	34.693	2	33.22	2	-75.8	2.8	2	12782
1	23	349	9.979	34.649	2	37.85	2	-87.9	4.1	2	12775
1	22	400	9.166	34.616	2	44.66	2	-110.8	3.9	2	12776
1	21	449	8.524	34.579	2	50.40	2	-112.1	4.5	2	12765
1	20	499	7.873	34.553	2	56.07	2	-117.5	2.9	2	12766
1	19	600	6.783	34.537	2	67.75	2	-134.9	4.4	2	12773
1	18	683	6.102	34.531	2	75.01	2	-152.2	3.1	2	12769
1	17	800	5.377	34.533	2	83.94	2	-173.8	3.7	2	12468
1	16	903	4.946	34.538	2	90.12	2	-181.4	3.0	2	12764
1	15	998	4.472	34.547	2	98.07	2	-201.2	4.1	2	12770
1	14	1100	4.091	34.556	2	104.99	2	-193.9	3.0	2	12777
1	13	1300	3.615	34.576	2	117.93	2	-219.1	2.6	2	12780
1	12	1500	3.073	34.599	2	132.12	2	-226.3	3.9	2	12768
1	11	1699	2.721	34.616	2	137.30	2	-236.7	2.7	2	12472
1	10	1901	2.348	34.634	2	143.16	2	-240.7	2.7	2	12767
1	9	2100	2.096	34.647	2	147.87	2	-246.2	3.0	2	12467
1	8	2298	1.933	34.657	2	154.16	2	-240.1	3.0	2	12470
1	7	2500	1.802	34.665	2	158.80	2	-233.3	2.8	2	12763
1	5	2897	1.697	34.672	2	156.70	2	-230.8	3.7	2	12469
1	4	3099	1.682	34.674	2	154.42	6	-223.8	5.8	2	12772
1	1	3307	1.678	34.676	2	158.08	2	-248.4	4.5	2	12473

Station 182

		Latitude		17.998°N		Date		4/23/94			
		Longitude		110.327°W		Bottom Depth		3269			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	9	25.513	34.574	2	0.00	2	65.8	4.8	2	8824
1	34	24	25.334	34.556	2	0.00	2	74.6	3.0	2	8825
1	33	48	24.776	34.527	2	0.00	2	76.1	5.7	2	8826
1	32	74	23.157	34.367	2	0.00	2	72.4	3.1	2	8827
1	31	98	18.556	34.168	2	4.40	2	63.5	2.8	2	8828
1	30	124	14.818	34.241	2	13.56	2	33.8	3.2	2	8829
1	29	150	13.604	34.481	3	22.11	2	4.5	3.1	2	8830

Station 182

		Latitude		17.998°N		Date		4/23/94			
		Longitude		110.327°W		Bottom Depth		3269			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	26	300	10.667	34.665	2	36.52	2	-76.5	2.4	2	8831
1	23	399	9.055	34.592	2	49.44	2	-106.9	1.8	6	8832
											8833
1	22	500	7.707	34.530	2	61.73	2	-129.9	2.3	2	8834
1	21	599	6.628	34.519	2	72.74	2	-153.9	2.4	2	8835
1	20	694	5.942	34.521	2	78.85	2	-165.7	2.3	2	8836
1	19	802	5.362	34.525	2	88.85	2	-179.5	2.1	2	8837
1	18	902	4.857	34.530	2	98.81	2	-189.8	2.1	2	8838
1	17	1001	4.470	34.540	2	106.11	2	-193.1	2.7	2	8839
1	15	1200	3.780	34.570	2	118.42	2	-205.6	2.1	2	8840
1	13	1401	3.252	34.588	2	128.03	2	-210.3	3.2	2	8841
1	11	1600	2.801	34.610	2	140.38	2	-214.7	2.7	2	8842
1	10	1801	2.469	34.628	2	143.60	2	-213.0	3.8	2	8843
1	9	1999	2.204	34.642	2	149.13	2	-215.8	2.3	2	8844
1	7	2400	1.873	34.661	2	160.56	2	-218.9	2.3	2	8845
1	4	3000	1.703	-9	5	161.31	6	-216.3	2.2	2	8846
1	1	3298	1.705	34.675	2	156.54	2	-216.3	3.6	2	8847

Station 190

		Latitude		21.998°N		Date		4/25/94			
		Longitude		110.316°W		Bottom Depth		3165			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	35	23	20.685	34.318	2	1.19	2	62.3	3.8	2	13489
1	34	51	18.842	34.098	2	3.48	2	58.2	5.6	2	13497
1	33	75	18.263	34.123	2	5.41	2	39.3	3.8	2	13508
1	32	99	15.277	34.623	4	17.00	2	24.4	3.3	2	13498
1	28	199	11.646	34.686	2	33.56	2	-68.4	3.8	2	13500
1	26	301	10.020	34.586	2	41.81	2	-84.1	2.9	2	13502
1	23	399	8.529	34.519	2	51.95	2	-110.5	4.1	2	13499
1	22	500	7.355	34.490	2	64.30	2	-145.2	2.5	2	13925
1	21	598	6.539	34.487	2	76.49	2	-147.5	4.1	2	13501
1	20	701	5.842	34.487	2	86.61	2	-172.6	2.5	2	13488
1	19	805	5.222	34.502	2	96.13	2	-178.5	3.0	2	13505
1	18	896	4.824	34.517	2	102.00	2	-191.7	4.5	2	13490
1	17	997	4.425	34.535	2	108.89	2	-201.5	5.5	2	13503
1	15	1198	3.818	34.557	2	125.01	2	-219.3	2.1	2	13496
1	14	1400	3.168	34.592	2	140.92	2	-226.8	2.9	2	13506
1	12	1574	2.931	34.603	2	138.79	2	-233.7	5.8	2	13509
1	10	1800	2.482	34.314	4	147.60	2	-245.6	2.4	2	13487

Station 190

		Latitude		21.998°N		Date		4/25/94			
		Longitude		110.316°W		Bottom Depth		3165			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	9	2001	2.184	34.640	2	151.94	2	-244.4	2.5	2	13504
1	7	2401	1.889	34.657	2	154.47	2	-243.0	3.6	2	13507
1	4	2999	1.686	34.670	2	162.06	6	-236.9	3.1	2	14750
1	2	3099	1.668	34.672	2	165.58	2	-241.1	3.3	2	13510

WOCE Cruise P19C
EXPOCODE: 316N138/12
 2/22/93 - 4/13/93
 Chief Scientist: L.D. Talley
 Principal Investigator for $\Delta^{14}\text{C}$: R.M. Key
 NOSAMS Reports: 94-109 & 97-128

Station 236

		Latitude		53.111°S		Date		2/23/93			
		Longitude		75.024°W		Bottom Depth		1437			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	51	2	9.914	33.745	2	2.30	2	63.1	5.0	2	10738
1	30	104	8.453	33.948	2	3.91	2	50.1	4.2	2	10737
1	71	204	6.529	34.118	2	7.89	2	42.6	3.0	2	10736
1	28	355	5.355	34.192	2	8.78	2	20.2	3.0	2	10735
1	67	455	5.160	34.211	2	10.20	2	18.0	6.3	2	10734
1	61	656	4.750	34.223	2	14.52	2	-11.6	4.0	2	10733
1	58	806	4.218	34.239	2	23.44	2	-42.7	5.5	2	10714
1	29	1206	2.916	34.430	2	62.32	2	-132.9	4.0	2	10713

Station 238

		Latitude		53.200°S		Date		2/24/93			
		Longitude		75.494°W		Bottom Depth		2011			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	51	12	10.469	33.599	2	1.78	2	62.5	3.6	2	8237
1	30	88	8.071	33.962	2	4.12	2	56.6	3.9	2	8236
1	70	180	7.102	34.149	2	8.82	2	25.1	4.9	2	8235
1	28	279	5.738	34.172	2	8.27	2	52.7	4.1	2	8234
1	68	381	5.387	34.212	2	9.53	2	42.4	4.3	2	8233
1	67	480	5.203	34.225	2	10.79	2	14.2	8.2	2	8232
1	33	579	5.042	34.224	2	11.52	2	11.3	4.9	2	8231
1	66	679	4.814	34.222	2	13.51	2	-9.2	5.2	2	8230
1	32	779	4.436	34.224	2	18.59	2	-18.8	3.8	2	8229
1	65	879	4.086	34.248	2	26.03	2	-44.5	4.9	2	8228
1	64	978	3.689	34.281	2	35.11	2	-70.8	5.2	2	8227
1	62	1177	3.115	34.387	2	55.28	2	-128.3	4.1	2	8226
1	61	1377	2.851	34.486	2	73.32	2	-163.7	3.6	2	8225
1	58	1579	2.608	34.553	2	85.41	2	-197.5	3.6	2	8224
1	56	1782	2.403	34.601	2	96.46	2	-179.7	4.4	2	8223
1	53	2014	2.110	34.649	2	109.47	2	-198.0	4.5	2	8222

Station 241

		Latitude		53.342°S		Date		2/25/93			
		Longitude		76.584°W		Bottom Depth		4105			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	52	2	9.664	33.951	2	1.42	2	14.2	3.6	2	7066
2	30	106	6.252	34.087	2	6.17	2	36.0	3.1	2	7722
2	26	131	5.902	34.115	2	6.68	2	31.1	3.2	2	7721
2	74	156	5.742	34.147	2	6.48	2	25.0	3.1	2	7720
2	73	181	5.559	34.175	2	7.89	2	16.0	3.1	2	7719
2	72	206	5.482	34.188	2	8.23	2	23.0	2.9	2	7718
2	71	256	5.367	34.199	2	8.56	2	22.9	3.5	2	7717
2	70	305	5.342	34.209	2	8.90	2	22.8	3.9	2	7716
2	36	354	5.261	34.217	2	9.41	2	17.3	3.0	2	7715
2	28	404	5.143	34.220	2	10.47	2	-22.7	2.9	3	7714
2	35	503	4.976	34.221	2	11.16	2	11.9	3.2	2	7713
2	68	602	4.756	34.223	2	14.20	2	-11.8	2.6	2	7712
2	34	703	4.381	34.222	2	18.48	2	-26.6	2.6	2	7711
2	67	802	4.042	34.245	2	25.65	2	-46.8	2.6	2	7710
2	33	903	3.573	34.286	2	36.23	2	-79.5	3.7	2	7709
4	26	1010	3.266	34.345	2	47.95	2	-105.2	5.8	2	7721

Station 244

		Latitude		53.723°S		Date		2/25/93			
		Longitude		78.536°W		Bottom Depth		4253			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	9.174	33.956	2	1.85	2	38.9	2.8	2	11621
1	31	56	8.253	34.014	2	3.27	2	38.7	4.0	2	11620
1	30	106	5.812	34.096	2	6.67	2	27.2	3.6	2	11619
1	74	156	5.371	34.114	2	6.64	2	19.2	2.8	2	11618
1	73	181	5.348	34.120	2	6.62	2	-15.5	2.7	3	11617
1	72	206	5.401	34.151	2	7.15	2	17.4	3.4	2	10600
1	71	257	5.421	34.193	2	7.85	2	22.8	3.1	2	10599
1	70	308	5.232	34.197	2	8.74	2	16.3	2.9	2	10598
1	22	358	5.245	34.221	2	10.35	2	9.4	3.0	2	10597
1	28	407	5.160	34.222	2	10.69	2	14.3	4.5	2	10596
1	35	507	5.012	34.221	2	11.40	2	-11.8	2.9	2	10595
1	68	605	4.722	34.214	2	13.91	2	-5.1	2.9	2	10594
1	18	704	4.417	34.216	2	17.68	2	-26.6	2.8	2	10593
1	16	908	3.705	34.265	2	32.62	2	-68.5	2.8	2	10592
1	15	1009	3.413	34.302	2	40.72	2	-92.6	2.7	2	10591
1	14	1210	2.987	34.417	2	60.75	2	-128.3	2.6	2	10590

Station 248

		Latitude		53.997°S		Date		2/26/93			
		Longitude		81.580°W		Bottom Depth		4683			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	9.161	34.049	2	2.03	2	39.8	3.3	2	10380
1	32	106	5.562	34.158	2	7.36	2	30.7	3.5	2	10379
1	31	132	5.500	34.181	2	7.35	2	28.0	3.5	2	10378
1	30	156	5.443	34.188	2	7.51	2	31.7	3.6	2	10377
1	29	181	5.444	34.197	2	7.67	2	21.1	3.1	2	10321
1	28	205	5.479	34.209	2	7.66	2	16.4	2.9	2	10320
1	27	255	5.411	34.205	2	8.00	2	20.9	3.1	2	10319
1	26	303	5.356	34.211	2	8.70	2	20.6	2.9	2	10318
1	24	500	4.992	34.211	2	12.44	2	-0.6	3.1	2	10317
1	23	600	4.827	34.218	2	13.86	2	-11.6	2.8	2	10316
1	22	702	4.566	34.222	2	17.61	2	-20.5	2.9	2	10315
1	21	805	4.159	34.237	2	24.42	2	-47.3	2.7	2	10314
1	20	906	3.735	34.269	2	33.01	2	-80.2	2.6	2	10313
1	19	1007	3.440	34.302	2	40.52	2	-86.3	2.8	2	10312
1	18	1107	3.164	34.351	2	49.48	2	-114.5	3.7	2	10493
1	15	1713	2.461	34.590	2	88.32	2	-149.4	2.9	2	10311

Station 253

		Latitude		54.004°S		Date		2/28/93			
		Longitude		85.544°W		Bottom Depth		5045			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	3	8.878	34.093	2	1.95	2	44.9	4.3	2	10497
1	33	105	5.697	34.173	2	6.63	2	22.9	6.3	2	10496
1	32	156	5.541	34.199	2	7.35	2	26.4	3.8	2	10953
1	31	206	5.533	34.210	2	7.16	2	22.0	3.0	2	10406
1	30	256	5.545	34.218	2	7.16	2	27.3	4.3	2	10405
1	29	305	5.444	34.208	2	7.33	2	26.4	4.5	2	10404
1	28	356	5.412	34.215	2	8.59	2	18.4	4.2	2	10403
1	27	458	5.202	34.217	2	10.57	2	12.0	3.8	2	10402
1	26	507	5.111	34.217	2	10.93	2	14.8	4.5	2	10401
1	25	558	5.057	34.226	2	12.54	2	13.0	6.0	2	10400
1	24	608	4.908	34.225	2	14.16	2	-1.7	3.4	2	10391
1	23	709	4.499	34.223	2	19.20	2	-25.7	3.3	2	10390
1	22	810	4.176	34.247	2	26.40	2	-52.5	5.4	2	10389
1	21	909	3.743	34.265	2	32.88	2	-64.7	3.2	2	10388
1	20	1010	3.451	34.295	2	39.54	2	-82.9	3.1	2	10387
1	19	1210	3.010	34.391	2	55.76	2	-122.7	3.1	2	10386

Station 256

		Latitude		53.999°S		Date		3/1/93			
		Longitude		88.008°W		Bottom Depth		5045			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	3	8.546	34.166	2	2.47	2	13.5	3.6	2	10749
1	33	84	6.145	34.246	2	6.24	2	30.8	3.0	2	10748
1	31	157	6.044	34.262	2	7.13	2	25.0	3.9	2	10747
1	30	200	6.020	34.269	2	7.48	2	23.3	3.0	2	10746
1	28	307	5.656	34.228	2	7.46	2	28.5	2.9	2	10742
1	27	407	5.542	34.237	2	9.62	2	12.2	2.7	2	10741
1	26	506	5.277	34.230	2	12.50	2	-3.0	2.9	2	10740
1	25	602	5.004	34.233	2	14.84	2	-6.3	2.9	2	10739
1	24	700	4.642	34.242	2	20.24	2	-34.5	2.6	2	8587
1	23	801	4.183	34.261	2	27.63	2	-41.7	4.4	2	8767
1	21	1000	3.419	34.313	2	41.87	2	-82.5	2.7	2	8586
1	20	1202	2.939	34.391	2	56.12	2	-111.4	2.7	2	8585
1	19	1405	2.671	34.482	2	68.58	2	-138.1	2.3	2	8584
1	18	1608	2.468	34.558	2	77.26	2	-147.2	2.5	2	8583
1	17	1761	2.379	34.606	2	81.96	2	-138.2	2.4	2	8766
1	16	1915	2.283	34.645	2	86.12	2	-149.8	5.9	2	8582
1	15	2119	2.158	34.676	2	93.57	2	-172.9	2.6	2	8581
1	14	2325	2.014	34.692	2	101.06	2	-180.2	3.2	2	8580
1	13	2528	1.907	34.706	2	103.05	2	-173.2	2.3	2	8579
1	12	2681	1.804	34.712	2	105.24	2	-175.3	2.3	2	8578
1	11	2833	1.702	34.714	2	108.16	2	-174.4	2.3	2	8577
1	10	3038	1.608	34.719	2	108.50	2	-171.2	2.7	2	8576
1	9	3240	1.480	34.720	2	110.51	2	-169.6	3.0	2	8575
1	8	3445	1.335	34.720	2	113.82	2	-169.8	4.5	2	8574

Station 258

		Latitude		53.000°S		Date		3/1/93			
		Longitude		88.016°W		Bottom Depth		4940			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	8.702	34.123	2	2.17	2	26.6	3.9	2	10731
1	33	93	5.770	34.194	2	6.47	2	21.6	3.4	2	10730
1	31	165	5.601	34.212	2	7.90	2	21.2	5.1	2	10729
1	29	202	5.628	34.224	2	7.73	2	18.8	4.3	2	10728
1	27	292	5.545	34.222	2	7.37	2	30.3	4.0	2	10727
1	26	390	5.347	34.221	2	9.87	2	11.1	3.8	2	10726
1	25	496	5.139	34.220	2	11.66	2	-36.8	3.3	3	10725
1	24	583	4.945	34.250	4	21.29	4	-28.7	3.5	2	10724
1	23	681	4.738	34.235	2	18.62	2	-17.2	3.3	2	10723
1	22	777	4.318	34.237	2	23.25	2	-39.9	3.2	2	10722

Station 258 (Continued)

		Latitude		53.000°S				Date		3/1/93	
		Longitude		88.016°W				Bottom Depth		4940	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	21	873	3.845	34.238	2	28.60	2	-49.5	3.3	2	10720
1	20	972	3.566	34.288	2	37.84	2	-82.7	3.1	2	10719
1	19	1169	3.070	34.376	2	53.72	2	-106.5	3.4	2	10718
1	18	1380	2.770	34.473	2	68.18	2	-134.0	3.8	2	10717
1	17	1570	2.572	34.542	2	77.65	2	-151.0	3.7	2	10716
1	15	1945	2.291	34.635	2	92.20	2	-170.3	3.1	2	10715

Station 261

		Latitude		52.003°S				Date		3/2/93	
		Longitude		87.994°W				Bottom Depth		4750	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	3	9.153	34.135	2	1.65	2	30.6	3.5	2	8619
1	32	91	5.977	34.182	2	5.18	2	27.8	2.8	2	8618
1	30	181	5.881	34.235	2	6.56	2	23.8	2.8	2	8617
1	29	232	5.815	34.244	2	7.09	2	31.5	3.5	2	8616
1	28	307	5.573	34.234	2	8.69	2	22.2	2.8	2	8615
1	27	408	5.388	34.236	2	10.29	2	21.3	4.2	2	8614
1	26	508	5.179	34.232	2	11.17	2	7.5	4.9	2	8613
1	25	609	4.939	34.232	2	13.86	2	-2.4	2.9	2	8612
1	24	709	4.581	34.231	2	18.34	2	-30.7	3.2	2	8611
1	23	810	4.235	34.247	2	24.63	2	-52.9	3.0	2	8610
1	22	911	3.843	34.270	2	31.99	2	-74.1	3.2	2	8609
1	21	1012	3.547	34.304	2	39.54	2	-88.3	3.8	2	8608
1	20	1212	3.078	34.404	2	57.37	2	-130.2	2.8	2	8607
1	19	1414	2.784	34.489	2	71.26	2	-152.0	1.9	6	8606 9237
1	18	1616	2.589	34.558	2	83.58	2	-171.9	3.0	2	8605
1	17	1718	2.494	34.585	2	88.11	2	-175.3	2.5	2	8604

Station 264

		Latitude		50.007°S				Date		3/3/93	
		Longitude		88.007°W				Bottom Depth		4625	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	4	9.669	34.084	2	2.27	2	30.4	3.1	2	7086
2	33	68	8.497	34.123	2	2.79	2	25.4	3.6	2	7085
2	32	82	6.768	34.112	2	4.04	2	23.3	3.0	2	7084
2	31	130	6.222	34.162	2	5.11	2	33.9	3.1	2	7083

Station 264 (Continued)

		Latitude		50.007°S				Date		3/3/93		
		Longitude		88.007°W				Bottom Depth		4625		
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#	
2	30	181	5.925	34.187	2	5.82	2	25.7	3.2	2	7082	
2	29	231	5.854	34.236	2	7.62	2	22.0	3.1	2	7081	
2	28	307	5.707	34.252	2	8.69	2	11.1	2.6	6	7233 7347	
2	27	406	5.512	34.249	2	9.94	2	17.0	4.1	2	7080	
2	26	500	5.302	34.244	2	11.37	2	-0.4	2.8	2	7079	
2	25	594	5.081	34.240	2	13.17	2	0.9	2.9	2	7078	
2	24	697	4.724	34.235	2	17.12	2	-39.5	2.9	2	7077	
2	23	802	4.322	34.250	2	24.31	2	-59.2	3.0	2	7076	
2	22	903	3.916	34.279	2	32.58	2	-79.1	3.0	2	7075	
2	21	1000	3.629	34.311	2	39.77	2	-91.0	3.0	2	7074	
2	6	3723	1.118	34.715	2	122.33	2	-166.4	2.8	2	7073	
2	4	4135	0.813	34.711	2	131.99	2	-169.3	2.8	2	7072	

Station 267

		Latitude		48.507°S				Date		3/4/93		
		Longitude		87.991°W				Bottom Depth		4565		
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#	
1	36	2	10.259	34.063	2	2.23	2	42.2	3.2	2	10681	
1	32	108	6.382	34.148	2	4.85	2	31.4	4.3	2	12823	
1	31	158	5.830	34.182	2	6.43	2	27.0	2.9	2	10668	
1	30	209	5.681	34.226	2	8.19	2	17.1	2.9	2	10667	
1	29	259	5.578	34.235	2	8.71	2	17.1	3.6	2	10666	
1	28	309	5.504	34.240	2	9.23	2	24.0	3.0	2	10665	
1	27	360	5.448	34.245	2	10.11	2	13.8	4.0	2	10664	
1	26	409	5.359	34.244	2	10.45	2	15.7	3.4	2	10653	
1	25	510	5.167	34.241	2	12.03	2	0.0	3.6	2	10652	
1	24	610	4.827	34.231	2	15.02	2	-8.0	3.8	2	10651	
1	23	710	4.563	34.238	2	19.43	2	-30.8	3.3	2	10650	
1	22	811	4.243	34.259	2	26.30	2	-54.6	4.1	2	10649	
1	21	911	3.886	34.290	2	34.05	2	-79.0	3.0	2	10654	
1	20	1011	3.537	34.326	2	42.15	2	-119.8	3.0	3	10648	
1	19	1164	3.163	34.398	2	55.91	2	-128.2	2.9	2	10647	
1	18	1315	2.950	34.482	2	72.71	2	-168.6	2.4	2	11648	

Station 270

		Latitude				47.002°S				Date		3/5/93	
		Longitude				88.008°W				Bottom Depth		4025	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	36	3	11.029	34.034	2	3.02	2	42.2	5.8	2	10712		
1	33	97	7.059	34.119	2	4.03	2	39.6	4.7	2	10711		
1	31	157	6.187	34.157	2	5.22	2	39.6	4.7	2	10710		
1	29	219	5.827	34.215	2	6.95	2	31.9	4.7	2	10709		
1	28	258	5.846	34.252	2	8.16	2	32.9	4.8	2	10708		
1	27	308	5.747	34.261	2	8.85	2	24.7	6.1	2	10707		
1	26	408	5.561	34.258	2	9.88	2	20.1	4.8	2	10698		
1	25	508	5.311	34.248	2	11.63	2	3.6	6.1	2	10697		
1	24	607	5.004	34.239	2	13.54	2	-5.9	5.1	2	10696		
1	23	708	4.692	34.240	2	18.10	2	-32.9	4.7	2	10695		
1	22	809	4.336	34.254	2	24.42	2	-60.9	4.8	2	10694		
1	21	910	3.992	34.289	2	32.85	2	-72.8	2.9	2	13248		
1	20	1011	3.605	34.326	2	41.63	2	-98.1	6.0	2	10692		
1	19	1111	3.321	34.377	2	51.83	2	-116.7	3.2	2	11230		
1	18	1212	3.137	34.425	2	60.98	2	-142.8	2.6	2	13209		
1	17	1363	2.907	34.488	2	73.34	2	-182.6	7.1	2	10690		

Station 274

		Latitude				45.015°S				Date		3/6/93	
		Longitude				88.003°W				Bottom Depth		4020	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
2	36	4	12.363	33.984	2	2.49	2	60.4	3.2	2	7105		
2	68	55	11.646	33.990	2	2.47	2	48.9	3.0	2	7106		
2	33	80	9.200	34.043	2	2.81	2	45.6	4.4	2	7104		
2	32	105	7.612	34.095	2	3.14	2	44.9	4.5	2	7103		
2	31	156	6.726	34.152	2	4.53	2	34.0	3.0	2	7102		
2	29	201	6.220	34.230	2	6.62	2	27.4	2.9	2	7101		
2	27	295	5.937	34.275	2	8.34	2	28.5	3.6	2	7100		
2	26	344	5.822	34.273	2	9.03	2	22.6	3.2	2	7099		
2	25	392	5.732	34.274	2	9.54	2	20.0	3.0	2	7098		
2	24	490	5.475	34.260	2	10.57	2	8.3	3.8	2	7097		
2	23	587	5.227	34.255	2	12.84	2	-6.9	3.0	2	7096		
2	22	688	4.913	34.254	2	16.70	2	-37.5	2.8	2	7095		
2	21	788	4.518	34.267	2	23.72	2	-64.1	3.5	2	7094		
2	20	888	4.130	34.291	2	31.27	2	-110.1	4.0	3	7093		
2	19	988	3.729	34.327	2	40.40	2	-108.2	2.7	2	7092		

Station 278

		Latitude		43.007°S		Date		3/7/93			
		Longitude		88.006°W		Bottom Depth		3718			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	13.372	33.954	2	2.38	2	45.4	4.6	2	7948
1	31	128	7.873	34.030	2	3.20	2	48.4	4.5	2	7949
1	29	175	7.117	34.123	2	4.78	2	51.6	10.0	2	12586
1	28	199	6.809	34.171	2	5.65	2	48.3	3.8	2	13061
1	26	292	6.113	34.247	2	7.94	2	29.9	3.8	2	7963
1	25	342	5.930	34.268	2	8.46	2	30.7	4.8	2	7964
1	24	389	5.786	34.269	2	9.34	2	29.6	3.4	2	7965
1	23	482	5.568	34.265	2	10.39	2	17.2	3.5	2	7954
1	22	576	5.296	34.254	2	11.98	2	-5.8	4.5	2	11989
1	21	670	4.999	34.248	2	15.00	2	-14.3	3.8	2	7958
1	20	763	4.629	34.249	2	20.33	2	-44.6	3.9	2	7959
1	19	855	4.305	34.274	2	27.44	2	-70.0	4.5	2	7960
1	18	949	3.904	34.307	2	36.33	2	-102.2	5.0	2	7950
1	17	1096	3.461	34.367	2	49.86	2	-121.8	3.8	2	7951
1	16	1246	3.178	34.442	2	65.36	2	-156.7	3.3	2	7952
1	15	1392	2.975	34.505	2	79.48	2	-173.7	7.2	2	7953

Station 281

		Latitude		41.516°S		Date		3/8/93			
		Longitude		88.008°W		Bottom Depth		4201			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	3	14.693	33.933	2	1.83	2	80.4	3.2	2	10682
2	32	107	9.477	34.038	2	1.95	2	39.3	3.3	2	10679
2	28	208	7.049	34.180	2	4.89	2	42.2	3.8	2	10678
2	27	258	6.473	34.231	2	6.64	2	37.6	4.5	2	10677
2	26	308	6.174	34.270	2	7.68	2	40.1	3.1	2	10676
2	25	357	6.049	34.283	2	8.55	2	32.5	3.6	2	10675
2	24	408	5.816	34.274	2	8.89	2	32.0	3.2	2	10674
2	23	509	5.507	34.263	2	10.46	2	20.6	2.9	2	10673
2	22	609	5.252	34.254	2	12.03	2	9.3	3.5	2	10671
2	21	709	4.879	34.249	2	16.60	2	-23.0	2.9	2	10670
2	20	811	4.480	34.261	2	23.46	2	-58.2	2.7	2	10669
2	19	910	4.045	34.294	2	32.79	2	-86.7	3.1	2	11647
2	18	1011	3.642	34.340	2	43.71	2	-111.0	2.4	2	11646
2	17	1160	3.278	34.413	2	59.23	2	-142.5	3.2	2	11645
2	16	1310	3.047	34.486	2	75.14	2	-170.0	3.1	2	11644
2	15	1461	2.869	34.487	4	87.94	2	-186.8	2.2	2	11643

Station 284

		Latitude		40.008°S		Date		3/9/93			
		Longitude		88.002°W		Bottom Depth		4132			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	16.039	34.701	4	1.96	2	87.7	3.3	2	7036
2	32	108	10.005	33.993	2	2.24	2	76.8	3.7	2	7035
2	31	133	9.443	34.035	2	2.57	2	74.4	3.2	2	7034
2	30	156	8.994	34.078	2	2.90	2	72.1	3.8	2	7033
2	29	180	8.430	34.138	2	3.24	2	73.5	4.9	2	7032
2	28	204	7.775	34.166	2	4.44	2	64.5	5.2	2	7031
2	27	252	6.803	34.194	2	5.83	2	48.0	3.2	2	7030
2	26	303	6.500	34.266	2	8.08	2	34.8	3.0	2	7029
2	25	352	6.126	34.270	2	8.41	2	25.4	3.3	2	7028
2	24	400	5.947	34.275	2	8.57	2	26.5	2.9	2	13211
2	23	494	5.664	34.269	2	10.12	2	7.2	5.8	2	6899
2	22	591	5.369	34.258	2	11.68	2	7.0	4.8	2	6898
2	21	692	5.033	34.248	2	14.45	2	-11.4	3.9	2	6897
2	20	791	4.652	34.252	2	20.38	2	-29.5	3.7	2	6896
2	19	894	4.214	34.276	2	28.74	2	-60.0	3.4	2	6895
2	18	996	3.760	34.324	2	39.91	2	-92.2	3.3	2	6894

Station 287

		Latitude		38.502°S		Date		3/10/93			
		Longitude		88.002°W		Bottom Depth		3777			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	17.307	33.968	2	2.20	2	80.2	4.7	2	11616
1	32	106	12.047	34.032	2	1.92	2	81.0	2.8	2	11615
1	28	205	9.358	34.151	2	2.67	2	72.6	5.2	2	11614
1	26	307	7.051	34.250	2	6.43	2	31.7	3.2	2	11613
1	24	406	6.233	34.285	2	9.15	2	21.7	3.8	2	11612
1	23	505	5.790	34.278	2	9.82	2	4.6	2.7	2	11611
1	22	606	5.434	34.262	2	11.18	2	-7.5	2.7	2	11610
1	21	705	5.141	34.252	2	13.41	2	-44.1	3.9	2	11609
1	20	806	4.700	34.253	2	19.45	2	-73.2	4.5	2	11608
1	19	906	4.278	34.276	2	27.93	2	-72.0	2.8	2	10601
1	18	1006	3.888	34.319	2	38.49	2	-101.4	2.8	2	10584
1	17	1155	3.434	34.408	2	58.27	2	-141.7	2.6	2	10583
1	16	1305	3.139	34.481	2	74.97	2	-166.0	2.5	2	10582
1	15	1453	2.924	34.533	2	87.21	2	-220.8	2.3	3	10581
1	14	1603	2.711	34.572	2	97.07	2	-198.5	4.4	2	10580
1	13	1754	2.510	34.599	2	104.50	2	-208.8	2.5	2	10579

Station 291

		Latitude				36.504°S				Date		3/10/93	
		Longitude				88.001°W				Bottom Depth		4225	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	36	3	19.030	34.104	2	1.21	2	93.5	4.2	2	7629		
1	32	106	12.127	34.025	2	1.12	2	66.1	5.2	2	7627		
1	29	206	9.458	34.141	2	2.79	2	77.4	5.8	2	7628		
1	28	257	8.043	34.208	2	5.72	2	53.5	3.3	2	7626		
1	27	307	7.220	34.257	2	8.30	2	28.2	4.8	2	7625		
1	25	407	6.196	34.289	2	9.64	2	17.1	4.9	2	7624		
1	24	506	5.785	34.282	2	9.62	2	13.1	5.5	2	7623		
1	23	605	5.402	34.263	2	11.50	2	-10.6	4.6	2	7729		
1	22	704	5.013	34.252	2	14.95	2	-13.0	4.7	2	7728		
1	21	803	4.637	34.257	2	20.99	2	-49.3	3.1	2	7727		
1	20	903	4.195	34.283	2	30.34	2	-84.1	3.5	2	7726		
1	19	1004	3.731	34.340	2	43.84	2	-120.4	1.9	2	7725		
1	18	1153	3.312	34.429	2	63.27	2	-169.0	2.8	2	7640		
1	17	1304	3.090	34.501	2	80.34	2	-176.0	3.4	2	9446		
1	16	1506	2.832	34.557	2	94.55	2	-197.5	2.8	2	9445		

Station 295

		Latitude				34.499°S				Date		3/12/93	
		Longitude				87.995°W				Bottom Depth		3949	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	36	3	20.504	34.180	2	1.57	2	113.5	3.3	2	10567		
1	30	107	13.856	34.229	2	1.32	2	103.9	4.5	2	10566		
1	27	167	12.190	34.197	2	1.46	2	93.5	3.0	2	10565		
1	26	208	11.096	34.217	2	1.61	2	94.0	4.2	2	10564		
1	25	268	9.071	34.234	2	5.06	2	68.5	3.7	2	10512		
1	24	339	7.333	34.280	2	8.50	2	37.4	5.2	2	10511		
1	23	409	6.446	34.292	2	9.00	2	23.7	3.5	2	10510		
1	22	508	5.888	34.287	2	10.02	2	24.6	3.1	2	10509		
1	21	609	5.454	34.265	2	11.73	2	8.1	3.5	2	10508		
1	20	710	5.001	34.252	2	15.52	2	-19.2	4.1	2	10504		
1	19	811	4.613	34.261	2	22.25	2	-50.0	3.1	2	10503		
1	18	912	4.102	34.299	2	33.83	2	-94.4	6.2	2	10502		
1	17	1013	3.746	34.344	2	44.71	2	-121.5	3.5	2	10501		
1	16	1164	3.401	34.437	2	65.32	2	-148.7	5.7	2	10500		
1	15	1315	3.176	34.521	2	85.69	2	-180.5	2.8	2	10499		
1	14	1468	2.938	34.559	2	95.14	2	-189.1	4.2	2	10498		

Station 299

		Latitude		32.503°S		Date		3/13/93			
		Longitude		87.994°W		Bottom Depth		3737			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	22.638	34.788	2	0.86	2	120.2	3.5	6	12585 7222
2	30	108	15.089	34.455	2	0.86	2	119.6	4.4	2	7766
2	28	137	14.182	34.340	2	0.86	2	111.2	3.4	2	7765
2	27	177	13.005	34.197	2	0.86	2	91.7	5.1	2	7221
2	26	217	11.974	34.161	2	1.21	2	96.7	4.0	2	7220
2	25	258	10.793	34.231	2	2.41	2	80.7	4.4	2	7219
2	24	307	9.457	34.306	2	9.31	2	45.8	3.2	2	7218
2	23	359	8.415	34.368	2	14.31	2	12.6	3.0	2	7217
2	22	409	7.542	34.371	2	16.21	2	-7.6	2.9	2	7216
2	21	508	6.141	34.303	2	11.38	2	-1.9	3.6	2	7488
2	20	609	5.556	34.276	2	12.58	2	-8.8	3.0	2	7215
2	19	710	5.155	34.262	2	15.17	2	-20.9	2.5	2	7214
2	18	811	4.696	34.271	2	22.93	2	-66.9	2.4	2	7213
2	17	912	4.214	34.315	2	35.51	2	-104.9	3.0	2	7212
2	16	1013	3.811	34.380	2	51.20	2	-139.3	2.6	2	7211

Station 303

		Latitude		30.499°S		Date		3/14/93			
		Longitude		87.992°W		Bottom Depth		3706			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	23.435	35.093	2	1.83	2	114.3	3.5	2	10767
1	30	105	16.794	34.820	2	1.46	2	134.4	3.1	2	10762
1	27	176	14.678	34.497	2	1.37	2	123.5	4.6	2	10761
1	26	216	13.386	34.358	2	1.53	2	117.1	2.9	2	10760
1	25	256	11.379	34.237	2	3.31	2	93.5	3.0	2	10759
1	24	306	10.064	34.333	2	8.91	2	61.5	4.5	2	10758
1	23	357	9.004	34.425	2	16.74	2	0.8	3.0	2	10757
1	22	407	8.102	34.416	2	18.31	2	-14.0	1.8	6	10756 10983
1	21	508	6.521	34.342	2	16.25	2	-15.4	4.0	2	10755
1	20	608	5.624	34.290	2	14.59	2	-12.5	2.7	2	10754
1	19	709	4.984	34.270	2	19.19	2	-82.9	3.0	3	10753
1	18	809	4.486	34.290	2	29.04	2	-81.3	2.6	2	10745
1	17	910	4.062	34.365	2	46.15	2	-121.9	2.8	2	10744
1	16	1010	3.689	34.432	2	63.68	2	-141.4	3.5	2	11231
1	15	1161	3.445	34.477	2	75.17	2	-164.5	2.8	2	10743
1	14	1311	3.215	34.510	2	83.44	2	-186.1	2.6	2	10732

Station 307

		Latitude				28.499°S				Date		3/14/93	
		Longitude				88.001°W				Bottom Depth		2920	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	36	3	23.703	35.445	2	1.70	2	105.9	3.2	2	10578		
1	30	106	17.633	34.999	2	1.22	2	118.4	4.5	2	10577		
1	27	155	16.059	34.738	2	1.18	2	112.8	3.8	2	10563		
1	25	206	14.493	34.509	2	1.15	2	114.8	3.8	2	10562		
1	23	267	11.701	34.349	2	2.97	2	91.6	3.6	2	10561		
1	22	306	10.380	34.331	2	7.08	2	61.0	6.0	2	10519		
1	21	357	9.013	34.416	2	16.13	2	-4.6	5.4	2	10518		
1	20	407	8.025	34.404	2	17.35	2	-13.9	5.4	2	10517		
1	19	508	6.568	34.343	2	15.68	2	-24.2	4.9	2	10516		
1	18	608	5.739	34.343	4	15.04	2	-23.0	3.9	2	10515		
1	17	709	5.213	34.286	2	19.34	2	-38.6	3.9	2	10514		
1	16	809	4.667	34.310	2	30.45	2	-80.3	3.2	2	10513		
1	15	911	4.209	34.373	2	47.52	2	-124.8	2.8	2	10764		
1	14	1011	3.884	34.435	2	62.54	2	-156.2	4.0	2	10763		
1	13	1162	3.515	34.506	2	80.88	2	-175.1	2.8	2	10507		

Station 311

		Latitude				26.504°S				Date		3/15/93	
		Longitude				88.337°W				Bottom Depth		3367	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	36	3	23.293	35.421	2	1.86	2	133.7	4.2	2	8502		
1	30	105	17.731	35.045	2	1.24	2	114.2	4.7	2	8501		
1	27	155	16.753	34.906	2	1.24	2	122.2	7.1	2	8500		
1	25	205	15.199	34.648	2	1.24	2	123.0	4.3	2	8499		
1	24	255	12.554	34.336	2	2.06	2	128.1	3.8	2	8498		
1	23	306	10.641	34.339	2	7.62	2	83.7	4.3	2	8497		
1	22	355	9.538	34.471	2	18.33	2	-2.0	4.2	2	8496		
1	21	405	8.320	34.453	2	20.60	2	-31.7	3.4	2	8768		
1	20	505	6.801	34.390	2	20.59	2	-44.6	3.7	2	8495		
1	19	604	5.907	34.351	2	22.65	2	-34.2	2.8	2	8913		
1	18	704	5.356	34.362	2	31.70	2	-76.0	4.2	2	8912		
1	17	803	4.964	34.403	2	44.67	2	-106.9	2.7	2	8911		
1	16	903	4.523	34.444	2	58.46	2	-143.1	3.6	2	8910		
1	15	1003	4.144	34.476	2	69.16	2	-168.1	5.3	6	8812		
1	14	1153	3.720	34.511	2	80.30	2	-178.7	4.1	2	8909		
1	13	1303	3.351	34.536	2	88.14	2	-186.4	2.2	2	8908		

Station 317

		Latitude		24.330°S		Date		3/17/93			
		Longitude		88.004°W		Bottom Depth		4135			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	23.642	35.699	2	1.68	2	119.4	5.9	2	7242
2	35	37	23.143	35.675	2	1.67	2	114.9	4.4	2	7244
2	68	67	19.312	35.170	2	1.44	2	117.8	3.6	2	7243
2	32	107	18.394	35.190	2	1.43	2	127.1	3.3	2	7241
2	30	147	17.253	35.042	2	1.41	2	117.4	3.4	2	7486
2	28	197	14.873	34.641	2	1.60	2	110.7	3.6	2	7240
2	27	258	11.943	34.395	2	5.06	2	85.2	5.5	2	7239
2	26	307	10.052	34.458	2	15.48	2	14.6	6.1	2	7238
2	25	408	7.981	34.438	2	20.37	2	-39.8	3.6	2	7237
2	24	509	6.572	34.380	2	21.38	2	-41.8	3.4	2	7236
2	23	609	5.705	34.350	2	25.45	2	-74.5	4.7	2	7235
2	22	709	5.226	34.371	2	35.26	2	-111.1	2.5	6	7234
											7483
2	21	809	4.786	34.410	2	48.13	2	-136.4	3.3	2	7226
2	20	910	4.371	34.449	2	60.61	2	-163.3	2.7	2	7225
2	19	1011	4.022	34.490	2	72.49	2	-174.6	3.2	2	7224
2	18	1213	3.526	34.531	2	85.83	2	-196.2	2.6	2	7223

Station 322

		Latitude		21.999°S		Date		3/18/93			
		Longitude		88.004°W		Bottom Depth		4108			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	3	23.137	35.648	2	1.69	2	120.1	4.0	2	7981
1	33	83	19.148	35.341	2	1.64	2	118.2	4.3	2	7980
1	32	109	18.461	35.281	2	1.62	2	120.8	3.9	2	7979
1	29	210	13.604	34.570	2	3.82	2	85.5	3.1	2	8126
1	27	289	10.955	34.585	2	20.92	2	-10.8	4.6	2	12824
1	26	359	9.467	34.569	2	25.39	2	-45.7	4.0	2	12588
1	25	409	8.240	34.512	2	26.39	2	-62.6	4.7	2	7997
1	24	508	6.815	34.436	2	27.18	2	-76.6	4.9	2	7996
1	23	606	6.006	34.425	2	33.89	2	-96.6	3.7	2	7995
1	22	705	5.483	34.443	2	45.08	2	-134.9	4.3	2	7994
1	21	805	5.019	34.456	2	54.23	2	-140.5	3.2	2	7993
1	20	907	4.632	34.486	2	66.04	2	-166.2	3.5	2	7992
1	19	1005	4.265	34.504	2	73.97	2	-173.9	4.6	2	7991
1	18	1154	3.737	34.527	2	84.37	2	-182.2	3.0	2	7990
1	17	1305	3.359	34.553	2	92.95	2	-194.7	4.5	2	7989
1	16	1453	3.006	34.574	2	100.93	2	-224.3	5.2	2	7988

Station 326

		Latitude		19.996°S		Date		3/19/93			
		Longitude		88.431°W		Bottom Depth		4310			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	23.028	35.587	2	1.86	2	114.3	3.1	2	7259
2	32	107	18.144	35.238	2	1.36	2	106.8	4.2	2	7257
2	31	147	17.883	35.254	2	1.34	2	117.2	3.6	2	7256
2	30	183	15.722	34.853	2	1.94	2	105.1	3.4	2	7255
2	29	208	13.575	34.543	2	3.96	2	98.9	3.9	2	7254
2	28	258	11.077	34.519	2	16.41	2	19.0	2.9	2	7253
2	27	332	9.617	34.549	2	23.14	2	-40.7	4.3	2	7487
2	26	434	7.558	34.459	2	24.34	2	-70.2	2.7	2	7252
2	25	534	6.448	34.435	2	30.25	2	-105.8	3.8	2	7251
2	24	634	5.875	34.452	2	40.04	2	-127.3	2.9	2	7250
2	23	735	5.324	34.479	2	55.36	2	-151.4	5.2	2	7768
2	22	835	4.873	34.490	2	64.13	2	-144.4	3.7	2	7249
2	21	936	4.433	34.502	2	72.51	2	-157.1	4.8	2	7248
2	20	1036	4.084	34.517	2	80.28	2	-160.3	3.8	2	7247
2	19	1161	3.665	34.538	2	88.48	2	-176.6	4.0	2	7246
2	18	1313	3.257	34.562	2	98.34	2	-197.4	3.3	2	7245

Station 330

		Latitude		18.198°S		Date		3/20/93			
		Longitude		87.081°W		Bottom Depth		4381			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	3	24.608	37.916	4	2.48	2	65.6	4.6	2	10706
1	32	106	18.895	37.465	4	1.61	2	109.3	5.3	2	10705
1	29	206	13.463	34.690	2	8.44	2	63.9	4.9	2	10704
1	28	257	11.144	34.593	2	19.14	2	-7.2	4.4	2	10703
1	27	330	9.614	34.609	2	27.42	2	-70.2	4.7	2	10702
1	26	405	8.436	34.575	2	31.65	2	-93.5	4.5	2	10701
1	25	502	7.252	34.527	2	35.88	2	-116.9	6.8	2	10700
1	24	600	6.387	34.507	2	43.76	2	-119.2	6.1	2	10699
1	23	699	5.686	34.482	2	49.61	2	-132.2	3.1	2	10689
1	22	797	5.155	34.487	2	59.72	2	-145.8	3.5	2	10688
1	21	898	4.646	34.502	2	70.04	2	-162.0	2.6	2	10687
1	20	996	4.266	34.524	2	80.38	2	-171.1	3.5	2	10686
1	19	1096	3.913	34.536	2	87.89	2	-186.4	2.8	2	10685
1	18	1246	3.433	34.554	2	96.45	2	-200.5	3.9	2	10684
1	17	1397	3.107	34.578	2	106.68	2	-205.2	3.0	2	10683

Station 334

		Latitude		16.376°S		Date		3/21/93			
		Longitude		86.181°W		Bottom Depth		4540			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	24.268	35.882	2	3.07	2	78.6	4.8	2	10663
1	32	107	18.701	35.486	2	3.59	2	101.1	4.8	2	10662
1	29	183	13.923	34.822	2	13.07	2	68.0	4.1	2	10661
1	28	232	12.495	34.802	2	26.03	2	1.6	3.7	2	10660
1	27	306	10.991	34.750	2	29.66	2	-56.4	4.0	2	10659
1	26	357	9.982	34.691	2	31.86	2	-61.2	4.2	2	10658
1	25	408	9.167	34.653	2	34.07	2	-78.5	3.8	2	10657
1	24	508	7.878	34.575	2	37.48	2	-93.2	3.6	2	10656
1	23	609	6.886	34.536	2	44.15	2	-104.9	3.5	2	10655
1	22	708	6.170	34.519	2	52.22	2	-139.3	4.8	2	11640
1	21	809	5.358	34.519	2	58.48	2	-170.9	4.5	3	11639
1	20	911	4.830	34.507	2	70.21	2	-167.6	3.0	2	11638
1	19	1061	4.175	34.533	2	85.63	2	-193.9	3.9	2	11637
1	18	1211	3.679	34.552	2	95.99	2	-205.5	2.5	2	11636
1	17	1413	3.179	34.581	2	110.31	2	-230.8	2.4	2	11635
1	16	1617	2.777	34.607	2	122.05	2	-225.0	2.4	2	11634

Station 338

		Latitude		14.537°S		Date		3/22/93			
		Longitude		85.826°W		Bottom Depth		4709			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	25.341	35.841	2	2.23	2	54.0	5.4	2	7369
2	32	101	17.541	35.286	2	5.20	2	79.3	6.6	2	7368
2	31	127	14.649	34.906	2	9.67	2	74.5	6.7	2	7367
2	30	154	13.583	34.920	2	23.14	2	37.0	2.8	2	7366
2	29	188	12.916	34.909	2	26.39	2	-1.4	2.7	2	7365
2	28	240	12.182	34.863	2	28.00	2	-21.5	4.1	2	7364
2	27	288	11.426	34.813	2	28.79	2	-43.3	2.7	2	7363
2	26	339	10.605	34.766	2	31.01	2	-72.4	3.0	2	7362
2	25	396	9.938	34.718	2	34.05	2	-85.5	2.7	2	7272
2	24	452	8.996	34.661	2	37.09	2	-90.2	3.2	2	7266
2	23	534	7.953	34.610	2	40.95	2	-109.8	7.8	6	7265
											7508
2	22	618	6.985	34.556	2	45.43	2	-114.8	2.6	2	7264
2	21	705	6.225	34.529	2	51.95	2	-130.2	3.0	2	7263
2	20	790	5.603	34.522	2	61.33	2	-145.0	2.0	6	7262
											7361

Station 338 (Continued)

		Latitude		14.537°S		Date		3/22/93			
		Longitude		85.826°W		Bottom Depth		4709			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	19	874	5.160	34.521	2	68.47	2	-154.1	4.2	6	7261 7360
2	18	1029	4.494	34.535	2	82.19	2	-178.0	4.8	2	7260

Station 342

		Latitude		12.489°S		Date		3/23/93			
		Longitude		85.835°W		Bottom Depth		4408			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	26.194	35.844	2	2.44	2	48.2	6.8	2	10766
2	32	107	16.622	35.180	2	8.90	2	52.0	3.8	2	10505
2	29	186	12.839	34.904	2	26.67	2	-7.4	2.9	2	10765
2	28	226	11.997	34.855	2	27.67	2	-44.0	2.7	2	10399
2	27	267	11.419	34.823	2	28.88	2	-79.8	5.4	2	10398
2	26	306	10.940	34.796	2	29.06	2	-56.9	3.1	2	10952
2	25	357	10.249	34.748	2	31.50	2	-73.9	5.8	2	10396
2	24	406	9.571	34.709	2	34.55	2	-88.7	3.2	2	10395
2	23	507	8.378	34.637	2	39.45	2	-104.3	3.2	2	10394
2	22	607	7.033	34.566	2	47.63	2	-122.9	3.1	2	10393
2	20	806	5.511	34.526	2	63.60	2	-137.9	3.2	2	10392
2	19	907	4.925	34.526	2	72.42	2	-159.2	2.9	2	10494
2	18	1009	4.514	34.534	2	80.22	2	-173.0	3.0	2	10383
2	17	1210	3.727	34.561	2	98.58	2	-199.7	3.0	2	10382
2	16	1411	3.188	34.586	2	112.50	2	-213.8	3.8	2	10381

Station 346

		Latitude		10.493°S		Date		3/24/93			
		Longitude		85.834°W		Bottom Depth		4317			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	27.385	35.623	2	2.67	2	65.8	2.7	2	11642
1	32	108	15.923	35.082	2	10.00	2	95.5	3.2	2	11641
1	29	196	12.270	34.880	2	26.04	2	-27.6	2.9	2	11633
1	28	225	11.805	34.855	2	27.87	2	-44.9	2.7	2	11697
1	27	254	11.404	34.833	2	28.05	2	-57.4	2.7	2	11632
1	26	283	11.053	34.808	2	30.51	2	-61.4	2.8	2	11631
1	25	331	10.491	34.772	2	32.55	2	-72.7	2.8	2	11630
1	24	401	9.586	34.716	2	35.83	2	-85.4	2.8	2	11629
1	23	500	8.295	34.638	2	40.14	2	-98.3	2.7	2	11628

Station 346 (Continued)

		Latitude		10.493°S		Date		3/24/93			
		Longitude		85.834°W		Bottom Depth		4317			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	22	597	7.064	34.577	2	49.01	2	-118.4	6.6	6	11627 11850
1	20	793	5.618	34.542	2	65.92	2	-144.1	2.6	2	11626
1	19	892	5.012	34.541	2	75.42	2	-147.8	3.8	2	11625
1	18	992	4.601	34.547	2	83.28	2	-174.9	3.1	2	11624
1	17	1193	3.838	34.566	2	98.66	2	-195.8	2.5	2	11623
1	16	1396	3.290	34.586	2	111.20	2	-214.8	2.3	2	11622

Station 351

		Latitude		8.009°S		Date		3/26/93			
		Longitude		85.836°W		Bottom Depth		4188			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	27.515	34.833	2	1.92	2	55.3	3.8	2	2570
1	32	108	14.141	34.992	2	22.16	2	22.6	6.7	2	2448
1	30	167	13.562	34.959	2	22.53	2	9.0	3.7	2	2447
1	29	197	13.302	34.945	2	23.55	2	3.4	3.1	2	2446
1	28	227	12.976	34.925	2	26.64	2	-18.4	2.7	2	2445
1	27	268	12.553	34.900	2	27.44	2	-21.5	3.1	2	2444
1	26	308	11.978	34.867	2	28.46	2	-42.5	4.0	2	2443
1	25	358	11.117	34.812	2	31.75	2	-61.4	3.2	2	2442
1	24	408	10.163	34.750	2	35.45	2	-86.2	3.7	2	2569
1	23	509	8.231	34.645	2	46.40	2	-123.1	2.5	2	2441
1	22	609	7.275	34.599	2	51.35	2	-117.3	2.9	2	2440
1	21	709	6.296	34.560	2	58.78	2	-145.2	2.6	2	2439
1	20	809	5.503	34.548	2	69.12	2	-166.1	2.7	2	2438
1	19	911	4.938	34.550	2	78.84	2	-171.1	2.4	2	2437
1	18	1011	4.498	34.555	2	87.54	2	-183.2	2.4	2	2436
1	17	1112	4.066	34.563	2	95.84	2	-187.1	2.6	2	2435
1	16	1212	3.724	34.573	2	102.71	2	-210.3	3.9	2	2428
1	15	1414	3.110	34.600	2	119.28	2	-215.9	2.6	2	2427
1	14	1616	2.774	34.619	2	130.27	2	-221.3	2.7	2	2433
1	13	1818	2.502	34.635	2	137.94	2	-224.5	2.4	2	2434
1	12	2018	2.288	34.648	2	144.15	2	-227.5	2.9	2	2432
1	11	2219	2.094	34.658	2	147.35	2	-240.7	2.8	2	2431
1	10	2420	1.935	34.667	2	147.53	2	-233.1	2.4	2	2430
1	9	2620	1.853	34.672	2	148.35	2	-235.0	2.7	2	2426
1	8	2821	1.804	34.676	2	148.96	2	-227.7	3.1	2	2425
1	7	3022	1.784	34.679	2	147.83	2	-231.1	2.4	2	2429
1	6	3224	1.785	34.681	2	147.14	2	-231.5	2.5	2	2424

Station 351 (Continued)

		Latitude		8.009°S		Date		3/26/93			
		Longitude		85.836°W		Bottom Depth		4188			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	5	3427	1.789	34.682	2	145.80	2	-254.6	4.6	3	2423
1	4	3628	1.795	34.684	2	144.67	2	-232.3	3.2	2	2422
1	3	3829	1.800	34.686	2	144.20	2	-194.7	6.5	3	2568
1	70	4031	1.804	34.687	2	142.00	2	-208.1	4.9	2	2801
1	71	4254	1.807	34.689	2	138.52	2	-206.4	6.1	2	2800

Station 353

		Latitude		7.001°S		Date		3/26/93			
		Longitude		85.830°W		Bottom Depth		3955			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	28.046	35.048	2	2.71	2	57.9	3.9	2	2481
1	32	66	15.076	35.045	2	18.55	2	19.8	3.4	2	2606
1	31	96	14.322	35.006	2	20.39	2	1.6	4.0	2	2480
1	30	130	13.695	34.966	2	22.64	2	13.6	5.2	2	2479
1	29	175	13.262	34.939	2	24.48	2	-6.5	5.8	2	2478
1	28	246	12.566	34.900	2	27.35	2	-22.5	4.5	2	2477
1	27	306	11.769	34.845	2	28.56	2	-57.2	6.3	2	2476
1	26	357	10.998	34.802	2	31.64	2	-77.1	4.9	2	2475
1	25	407	9.896	34.733	2	38.03	2	-81.9	4.3	2	2474
1	24	507	7.835	34.628	2	50.00	2	-109.2	4.1	2	2473
1	23	608	6.855	34.588	2	56.59	2	-139.2	3.3	2	2453
1	22	708	6.107	34.558	2	60.49	2	-148.3	4.4	2	2452
1	21	808	5.451	34.547	2	69.99	2	-145.7	3.3	2	2451
1	20	909	4.877	34.545	2	77.63	2	-175.7	6.4	2	2450
1	19	1010	4.449	34.554	2	88.19	2	-172.5	2.8	2	2449
1	18	1160	3.866	34.568	2	100.24	2	-180.2	4.6	2	2571

Station 357

		Latitude		5.004°S		Date		3/28/93			
		Longitude		85.829°W		Bottom Depth		3560			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	1	28.987	33.368	2	2.94	2	77.5	3.9	2	2305
2	30	113	14.267	35.007	2	19.15	2	32.4	4.3	2	2304
2	26	203	13.072	34.929	2	24.60	2	-6.6	3.7	2	2303
2	25	253	12.588	34.903	2	26.41	2	-25.5	3.7	2	2302
2	24	303	11.710	34.847	2	30.06	2	-52.5	3.6	2	2301
2	23	364	10.455	34.773	2	37.16	2	-82.7	3.3	2	2300

Station 357 (Continued)

		Latitude		5.004°S		Date		3/28/93			
		Longitude		85.829°W		Bottom Depth		3560			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	22	414	9.323	34.700	2	43.65	2	-95.7	4.4	2	2299
2	21	514	7.957	34.635	2	49.53	2	-116.9	3.1	2	2298
2	20	614	6.972	34.599	2	58.87	2	-131.1	3.0	2	2297
2	19	715	6.037	34.575	2	68.42	2	-145.0	3.2	2	2296
2	18	816	5.236	34.560	2	77.78	2	-161.6	3.1	2	2295
2	17	916	4.644	34.560	2	87.57	2	-177.5	3.3	2	2294
2	16	1017	4.280	34.568	2	95.94	2	-184.9	3.1	2	2293
2	15	1118	3.988	34.576	2	103.11	2	-194.5	3.1	2	2292
2	14	1219	3.693	34.585	2	109.69	2	-200.8	3.1	2	2291
2	13	1421	3.158	34.606	2	123.36	2	-217.4	3.2	2	2290

Station 361

		Latitude		2.997°S		Date		3/28/93			
		Longitude		85.829°W		Bottom Depth		3227			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	29.142	34.142	2	2.49	2	69.8	3.8	2	2591
2	28	86	16.211	35.065	2	13.76	2	46.6	5.1	2	2590
2	27	126	14.799	35.023	2	15.97	2	34.6	3.8	2	2589
2	26	171	14.156	34.997	2	18.19	2	29.3	6.7	2	2588
2	25	201	13.778	34.965	2	19.38	2	-6.7	3.6	2	2587
2	24	256	13.361	34.940	2	21.80	2	-12.0	4.8	2	2586
2	23	302	12.453	34.880	2	28.88	2	-34.9	6.9	2	2585
2	22	331	10.735	34.786	2	36.37	2	-77.2	3.8	2	2584
2	21	382	9.607	34.722	2	41.82	2	-48.3	7.1	3	2583
2	20	457	8.428	34.658	2	47.28	2	-112.6	8.3	2	2582
2	19	556	7.324	34.612	2	54.77	2	-145.6	8.6	2	2581
2	18	656	6.589	34.589	2	61.85	2	-156.5	4.3	2	2580
2	17	757	5.695	34.569	2	72.80	2	-162.8	3.7	2	2579
2	16	858	4.930	34.567	2	85.20	2	-164.0	3.4	2	2578
2	15	958	4.600	34.569	2	91.30	2	-163.8	3.5	2	2577
2	14	1060	4.263	34.576	2	98.22	2	-176.7	6.7	2	2576

Station 364

		Latitude		1.999°S		Date		3/29/93			
		Longitude		85.833°W		Bottom Depth		2742			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	28.407	34.544	2	2.13	2	69.7	3.6	2	2619
1	28	106	14.929	35.023	2	15.96	2	34.3	3.4	2	2618
1	24	205	13.869	34.969	2	21.21	2	25.5	4.9	2	2595
1	22	304	11.970	34.864	2	29.55	2	-48.2	3.4	2	2617
1	21	354	10.483	34.769	2	36.48	2	-72.5	3.3	2	2616
1	20	404	8.997	34.683	2	42.38	2	-90.1	3.3	2	2615
1	19	455	8.709	34.670	2	44.20	2	-96.9	3.4	2	2614
1	18	555	7.883	34.635	2	50.52	2	-108.3	4.7	2	2613
1	17	656	6.704	34.592	2	60.72	2	-124.6	4.0	2	2612
1	16	757	5.696	34.571	2	72.97	2	-150.8	3.9	2	2611
1	15	857	4.954	34.568	2	84.84	2	-168.2	4.8	2	2610
1	14	957	4.566	34.574	2	93.24	2	-197.2	2.9	2	2609
1	13	1057	4.281	34.578	2	98.98	2	-201.1	6.1	2	2608
1	12	1158	3.794	34.586	2	108.47	2	-195.6	5.5	2	2594
1	11	1259	3.506	34.601	2	118.21	2	-222.9	8.6	2	2593
1	10	1360	3.415	34.605	2	120.48	2	-191.5	3.4	2	2592

Station 371

		Latitude		0.334°S		Date		3/30/93			
		Longitude		85.832°W		Bottom Depth		3030			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	1	27.527	34.580	2	3.60	2	66.6	5.1	2	2634
1	28	105	15.418	35.026	2	15.49	2	32.2	3.4	2	2633
1	25	215	13.053	34.914	2	24.56	2	-14.2	3.7	2	2632
1	23	304	11.109	34.790	2	33.43	2	-63.8	3.7	2	2631
1	21	425	9.084	34.688	2	43.10	2	-113.8	3.3	2	2630
1	20	506	8.020	34.638	2	50.37	2	-124.4	3.5	2	2629
1	19	581	7.322	34.611	2	55.20	2	-137.1	3.2	2	2628
1	18	656	6.683	34.592	2	61.26	2	-137.5	3.3	2	2627
1	17	732	6.107	34.578	2	68.12	2	-142.2	3.2	2	2626
1	16	807	5.538	34.571	2	75.80	2	-154.1	3.1	2	2625
1	15	883	5.244	34.568	2	80.24	2	-164.0	5.0	2	2624
1	14	959	4.837	34.570	2	88.14	2	-174.1	4.7	2	2623
1	13	1059	4.423	34.575	2	95.86	2	-178.6	5.3	2	2622
1	12	1210	3.767	34.594	2	112.82	2	-189.9	4.4	2	2621
1	11	1360	3.350	34.606	2	122.09	2	-194.8	3.0	2	2620
1	10	1511	3.169	34.612	2	125.39	2	-207.8	2.7	2	3040

Station 373

		Latitude		0.004°N		Date		3/31/93			
		Longitude		85.835°W		Bottom Depth		2874			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	26.826	34.430	2	3.26	2	59.1	5.7	2	2575
1	68	45	21.592	34.949	2	6.67	2	127.1	4.7	2	2574
1	32	65	17.762	35.089	2	11.11	2	86.2	4.9	2	2573
1	30	85	16.462	35.007	2	13.93	2	49.2	3.7	2	2572
1	28	115	15.343	35.012	2	15.33	2	35.7	4.1	2	2492
1	27	145	14.885	34.991	2	16.32	2	37.5	4.0	2	2491
1	26	175	14.257	34.973	2	20.16	2	18.9	5.0	2	2490
1	25	206	13.653	34.950	2	20.34	2	12.8	4.0	2	2489
1	24	245	12.771	34.895	2	26.21	2	-19.4	4.1	2	2488
1	23	286	12.378	34.863	2	28.21	2	-35.1	3.2	2	2607
1	22	336	10.722	34.777	2	34.08	2	-62.6	5.5	2	2487
1	21	387	9.754	34.722	2	40.35	2	-89.5	4.5	2	2486
1	20	437	9.046	34.686	2	43.37	2	-101.4	3.9	2	2485
1	19	487	8.655	34.667	2	46.19	2	-105.5	4.0	2	2484
1	18	547	7.580	34.621	2	53.48	2	-139.4	3.2	2	2483
1	17	607	6.936	34.598	2	58.74	2	-132.0	3.3	2	2482
1	16	707	6.399	34.584	2	64.21	2	-133.4	2.6	2	10589
1	15	809	5.600	34.571	2	75.38	2	-149.6	2.7	2	10588
1	14	909	5.166	34.568	2	81.06	2	-164.0	3.6	2	10587
1	13	1009	4.727	34.572	2	89.61	2	-175.3	6.6	6	10586
											10926
1	12	1109	4.250	34.578	2	99.62	2	-183.8	3.2	2	10948
1	11	1211	3.818	34.588	2	109.68	2	-186.4	2.8	2	10585
1	10	1312	3.521	34.602	2	118.14	2	-198.7	2.5	2	10576
1	9	1414	3.317	34.606	2	122.27	2	-197.9	2.5	2	10575
1	8	1515	3.137	34.612	2	126.62	2	-206.9	2.5	2	10574
1	7	1718	2.662	34.635	2	139.42	2	-216.8	2.6	2	10573
1	6	1920	2.377	34.649	2	147.69	2	-220.7	2.7	2	10572
1	5	2125	2.148	34.660	2	154.11	2	-224.9	2.7	2	10571
1	4	2327	2.084	34.664	2	154.08	2	-224.7	3.2	2	10570
1	70	2733	2.030	34.668	2	155.96	2	-212.5	3.0	2	10569
1	71	2925	2.038	34.669	2	156.14	2	-224.1	2.6	2	10568

Station 379

		Latitude		1.004°N		Date		3/31/93			
		Longitude		85.836°W		Bottom Depth		2792			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	36	2	27.248	34.189	2	1.99	2	69.2	3.7	2	2716
3	30	106	15.020	34.989	2	15.74	2	44.4	3.6	2	2715

Station 379 (Continued)

		Latitude		1.004°N		Date		3/31/93			
		Longitude		85.836°W		Bottom Depth		2792			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
3	27	156	14.845	34.993	2	16.13	2	35.8	3.6	2	2714
3	25	206	14.173	34.974	2	18.75	2	17.9	3.8	2	2647
3	24	256	12.730	34.878	2	24.21	2	-7.4	3.7	2	2646
3	23	307	10.873	34.785	2	34.53	2	-54.3	3.5	2	2645
3	22	356	9.870	34.725	2	39.98	2	-81.3	3.5	2	2644
3	21	407	9.125	34.688	2	42.81	2	-101.7	3.5	2	2643
3	19	507	8.459	34.657	2	46.84	2	-107.8	3.2	2	2642
3	17	607	7.133	34.603	2	56.54	2	-122.5	3.5	2	2641
3	16	708	6.619	34.589	2	62.40	2	-135.3	4.7	2	2640
3	15	809	5.794	34.572	2	72.52	2	-151.8	4.1	2	2639
3	14	910	4.946	34.568	2	85.31	2	-178.6	3.7	2	2638
3	13	1011	4.450	34.574	2	95.28	2	-183.3	6.0	2	2637
3	12	1111	4.127	34.584	2	103.44	2	-183.4	4.4	2	2636
3	11	1212	3.792	34.590	2	111.02	2	-197.2	5.4	2	2635

Station 380

		Latitude		1.340°N		Date		3/31/93			
		Longitude		85.831°W		Bottom Depth		3006			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	27.938	34.345	2	2.73	2	80.9	4.9	2	2814
1	30	116	14.893	34.993	2	16.30	2	61.7	3.8	2	2813
1	26	204	14.204	34.977	2	18.90	2	35.3	3.7	2	2812
1	24	305	12.116	34.846	2	28.41	2	-17.5	3.5	2	2811
1	22	404	9.465	34.705	2	41.99	2	-99.4	3.5	2	2728
1	20	503	8.337	34.652	2	47.84	2	-118.1	4.2	2	2727
1	19	603	7.128	34.604	2	56.56	2	-127.8	3.4	2	2726
1	18	703	6.351	34.583	2	65.28	2	-150.4	3.3	2	2725
1	17	802	5.588	34.569	2	75.64	2	-167.0	3.3	2	2724
1	16	902	4.988	34.567	2	84.59	2	-160.1	3.1	2	2723
1	15	1002	4.664	34.570	2	91.92	2	-169.6	4.2	2	2722
1	14	1103	4.209	34.579	2	101.31	2	-173.0	3.8	2	2721
1	13	1254	3.689	34.592	2	113.03	2	-189.3	3.1	2	2720
1	11	1555	3.061	34.616	2	130.02	2	-205.6	3.0	2	2719
1	9	1808	2.548	34.639	2	143.67	2	-214.4	3.0	2	2718
1	7	2013	2.235	34.655	2	152.59	2	-214.1	3.0	2	2717

Station 382

		Latitude		2.002°N		Date		4/1/93			
		Longitude		85.840°W		Bottom Depth		2601			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	1	28.641	33.428	2	1.14	2	83.6	3.9	2	2818
1	28	91	15.090	34.996	2	16.64	2	56.4	3.7	2	2817
1	25	206	14.009	34.963	2	19.03	2	0.5	4.4	2	2890
1	22	304	11.293	34.799	2	31.92	2	-36.3	3.5	2	2816
1	20	427	8.976	34.680	2	44.82	2	-79.7	3.4	2	2815
1	19	491	8.407	34.654	2	48.03	2	-107.5	3.0	2	2809
1	18	575	7.685	34.625	2	54.28	2	-115.3	3.2	2	2808
1	14	944	4.944	34.569	2	85.18	2	-169.8	2.7	2	2807
1	13	1068	4.379	34.575	2	96.75	2	-184.8	2.7	2	2806
1	12	1193	3.959	34.590	2	108.38	2	-193.2	2.8	2	2805
1	11	1294	3.643	34.597	2	115.76	2	-194.0	2.8	2	2804
1	10	1392	3.314	34.607	2	123.59	2	-190.3	2.7	2	2803
1	9	1490	3.090	34.614	2	128.34	2	-190.3	2.9	2	2802

Station 386

		Latitude		3.500°N		Date		4/2/93			
		Longitude		85.842°W		Bottom Depth		2910			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	29.709	32.162	2	1.83	2	90.3	3.7	2	2833
2	28	80	15.647	34.960	2	16.29	2	39.1	3.6	2	2832
2	27	105	15.262	35.008	2	16.27	2	33.5	3.7	2	2830
2	25	164	14.151	34.949	2	20.07	2	16.7	3.6	2	2829
2	24	203	13.608	34.921	2	22.28	2	4.1	3.6	2	2828
2	21	374	10.467	34.753	2	38.01	2	-21.3	3.8	3	2827
2	20	455	9.339	34.695	2	44.47	2	-78.1	3.4	2	2826
2	19	530	8.251	34.645	2	51.75	2	-99.9	3.4	2	2825
2	18	654	6.795	34.600	2	64.71	2	-139.5	3.8	2	2824
2	17	728	6.044	34.583	2	73.42	2	-154.0	3.3	2	2823
2	16	803	5.584	34.576	2	78.90	2	-162.3	3.3	2	2822
2	15	876	5.205	34.573	2	84.58	2	-183.1	3.4	2	2891
2	14	950	4.965	34.577	2	89.46	2	-172.9	3.6	2	2821
2	13	1050	4.479	34.581	2	99.06	2	-187.9	3.2	2	2820
2	11	1248	3.779	34.593	2	113.22	2	-194.4	3.2	2	2819

Station 395

		Latitude		6.715°N		Date		4/4/93			
		Longitude		88.779°W		Bottom Depth		3450			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	1	29.325	32.904	2	1.02	2	62.6	3.4	2	2892
2	28	95	15.780	34.928	2	16.03	2	31.9	5.0	2	2847
2	26	155	14.086	34.927	2	19.89	2	15.1	6.4	2	2846
2	24	204	13.051	34.877	2	23.75	2	-13.8	4.6	2	2845
2	23	254	12.157	34.821	2	26.80	2	-33.8	5.0	2	2844
2	22	304	11.489	34.788	2	31.67	2	-59.6	9.7	2	2843
2	21	380	10.213	34.725	2	39.19	2	-90.3	3.6	2	2842
2	20	456	8.761	34.657	2	49.16	2	-112.7	3.3	2	2841
2	19	531	7.814	34.624	2	54.65	2	-121.5	3.4	2	2840
2	18	632	6.963	34.596	2	62.39	2	-133.3	3.4	2	2839
2	51	732	6.200	34.581	2	70.75	2	-147.9	3.2	2	2838
2	16	833	5.582	34.577	2	79.94	2	-159.0	3.2	2	2837
2	15	934	4.950	34.571	2	90.17	2	-176.0	3.1	2	2836
2	14	1035	4.555	34.576	2	97.36	2	-181.2	3.1	2	2835
2	13	1160	4.131	34.588	2	107.67	2	-192.3	3.8	2	2834
2	12	1312	3.649	34.598	2	118.25	2	-212.7	3.7	2	2831

Station 398

		Latitude		7.728°N		Date		4/5/93			
		Longitude		89.897°W		Bottom Depth		3458			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	28.686	-9	5	2.49	2	64.0	3.9	2	2906
1	28	100	13.328	34.844	2	23.78	2	-5.4	3.0	2	2905
1	26	175	12.088	34.804	2	27.21	2	-26.5	3.1	2	2904
1	25	256	11.284	34.767	2	29.84	2	-47.1	3.3	2	3106
1	24	331	10.429	34.719	2	35.52	2	-71.9	2.8	2	3105
1	23	431	9.121	34.658	2	45.69	2	-100.0	2.9	2	2903
1	22	530	7.700	34.609	2	58.92	2	-122.3	3.4	2	2902
1	21	630	6.764	34.590	2	66.25	2	-134.9	2.8	2	2901
1	20	732	5.913	34.571	2	76.85	2	-152.8	3.7	2	2900
1	19	831	5.357	34.569	2	85.23	2	-168.7	6.2	2	2899
1	18	930	4.838	34.573	2	94.24	2	-182.1	3.4	2	2898
1	51	1030	4.399	34.579	2	102.46	2	-188.3	2.8	2	2897
1	16	1131	4.040	34.589	2	110.30	2	-197.7	3.1	2	2896
1	15	1230	3.698	34.595	2	117.76	2	-206.3	2.6	2	2895
1	14	1330	3.368	34.606	2	124.84	2	-209.0	2.6	2	2894
1	13	1430	3.181	34.614	2	129.24	2	-219.2	3.4	2	2893

Station 403

		Latitude		9.432°N		Date		4/6/93			
		Longitude		91.754°W		Bottom Depth		3717			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	36	2	28.883	33.921	2	1.42	2	76.9	7.1	2	2921
1	28	104	13.472	34.844	2	22.85	2	23.6	7.8	2	2920
1	26	183	12.295	34.808	2	26.63	2	-17.4	4.3	2	2919
1	24	277	11.124	34.754	2	31.22	2	-53.7	4.3	2	2918
1	23	327	10.399	34.717	2	35.63	2	-88.5	6.2	2	2917
1	22	403	9.283	34.665	2	45.47	2	-110.7	4.0	2	2916
1	21	503	7.752	34.604	2	59.56	2	-143.4	8.1	2	2915
1	20	604	6.761	34.577	2	67.60	2	-139.4	3.8	2	2914
1	19	704	6.005	34.567	2	75.46	2	-144.9	3.4	2	2913
1	18	805	5.446	34.564	2	83.53	2	-155.7	5.9	2	2912
1	51	906	4.900	34.562	2	93.25	2	-203.5	5.9	3	3041
1	16	1007	4.454	34.569	2	101.37	2	-198.9	3.1	2	2911
1	15	1108	4.088	34.576	2	109.12	2	-193.8	2.6	2	2910
1	14	1258	3.639	34.587	2	117.93	2	-202.7	2.8	2	2909
1	13	1410	3.322	34.599	2	124.53	2	-215.4	2.7	2	2908
1	12	1612	2.916	34.614	2	133.67	2	-233.5	2.8	2	2907

Station 413

		Latitude		13.029°N		Date		4/9/93			
		Longitude		91.760°W		Bottom Depth		6224			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	36	2	29.728	33.670	2	1.95	2	68.2	3.9	2	2944
2	35	38	23.816	34.330	2	5.90	2	36.5	5.2	2	2943
2	68	74	16.066	34.790	2	19.61	2	18.4	4.4	2	2942
2	33	109	13.892	34.830	2	23.56	2	-4.0	3.7	2	2941
2	32	169	12.956	34.836	2	26.12	2	-16.1	3.4	2	2940
2	31	228	12.388	34.812	2	28.29	2	-39.6	3.0	2	2939
2	30	310	11.398	34.760	2	32.44	2	-50.9	3.0	2	2938
2	29	410	9.811	34.679	2	44.17	2	-86.2	4.2	2	2937
2	27	611	7.210	34.585	2	67.09	2	-132.9	2.8	2	2936
2	26	711	6.034	34.562	2	80.26	2	-161.0	3.3	2	2935
2	25	812	5.514	34.558	2	87.06	2	-171.8	3.4	2	2934
2	24	912	5.024	34.564	2	94.87	2	-176.3	3.9	2	2933
2	23	1114	4.237	34.572	2	109.81	2	-190.1	3.0	2	2932
2	22	1315	3.544	34.592	2	124.29	2	-213.1	3.1	2	2931
2	21	1518	3.044	34.610	2	134.81	2	-230.3	3.8	2	2930

Station 420

		Latitude		13.488°N		Date		4/10/93			
		Longitude		91.596°W		Bottom Depth		830			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	18	22	26.514	34.181	2	1.54	2	13.8	3.0	2	2954
1	13	144	13.859	34.838	2	23.66	2	-0.5	3.1	2	2953
1	11	223	13.441	34.842	2	24.64	2	-9.6	4.8	2	2952
1	8	354	11.031	34.744	2	34.80	2	-82.9	9.7	2	2951
1	7	405	10.200	34.698	2	40.98	2	-118.3	10.7	2	2950
1	6	455	9.361	34.663	2	46.77	2	-125.9	10.0	2	2949
1	4	556	7.807	34.600	2	61.54	2	-116.3	3.6	2	2948
1	3	604	7.309	34.586	2	66.74	2	-135.9	3.6	2	2947
1	70	704	6.686	34.573	2	72.53	2	-132.1	2.8	2	2946
1	71	826	5.643	34.562	2	84.16	2	-158.2	2.8	2	2945

Station 422

		Latitude		13.536°N		Date		4/10/93			
		Longitude		91.576°W		Bottom Depth		200			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	10	2	29.223	34.123	2	0.27	2	47.5	3.4	2	2960
1	7	62	16.577	34.781	2	19.48	2	-3.7	3.1	2	2955
1	6	82	14.971	34.822	2	23.28	2	1.1	3.7	2	2959
1	5	101	14.560	34.829	2	23.29	2	8.0	3.1	2	2958
1	4	125	14.272	34.833	2	23.49	2	7.8	3.6	2	2957
1	3	149	13.845	34.832	2	24.50	2	-5.4	3.1	2	2956

WOCE Cruise S4P
EXPOCODE: 90KDIOFFE6/1

2/24/92 - 4/6/92

Mikhail H. Koshlyakov and James G. Richman

Principal Investigator for $\Delta^{14}\text{C}$: P. Schlosser

NOSAMS Report: 98-122

Station 682

		Latitude	67.468°S			Date	2/22/92				
		Longitude	70.089°W			Bottom Depth	236				
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	8	13	-0.090	33.314	2	63.40	2	-122.8	2.7	2	13190
1	6	53	-1.112	33.759	2	71.89	2	-123.7	2.5	2	13187
1	4	103	-1.532	34.025	2	77.06	2	-124.6	3.3	2	13184
1	3	154	-0.201	34.332	2	91.41	2	-120.4	3.1	2	13172
1	1	218	0.979	34.593	2	104.30	2	-145.2	3.1	2	13183

Station 683

		Latitude	67.166°S			Date	2/22/92				
		Longitude	70.089°W			Bottom Depth	453				
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	19	13	0.262	33.523	2	58.26	2	-113.8	2.5	2	13189
1	18	29	0.067	33.702	2	58.46	2	-111.4	3.2	2	13188
1	17	59	-1.693	33.937	2	72.15	2	-121.1	2.5	2	13186
1	16	78	-1.633	33.967	2	73.67	2	-120.4	2.6	2	13185
1	15	104	-1.542	34.048	2	75.17	2	-125.8	3.0	2	15453
1	14	154	-0.580	34.254	2	85.63	2	-118.7	2.9	2	13171
1	13	205	0.302	34.433	2	94.13	2	-129.7	2.7	2	13170
1	12	255	0.911	34.569	2	99.81	2	-137.0	3.2	2	13168
1	11	305	1.217	34.645	2	102.87	2	-146.0	3.2	6	12803
											12821
1	10	381	1.294	34.682	2	107.92	2	-147.4	5.7	6	12937
											12950
1	9	439	1.321	34.705	2	116.74	2	-153.8	2.6	6	13035
											13049

Station 684

		Latitude	66.895°S			Date	2/23/92				
		Longitude	71.998°W			Bottom Depth	445				
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	11	11	-0.176	33.546	2	64.36	2	-111.2	4.3	2	12948
1	10	46	-1.464	33.867	2	74.37	2	-114.6	3.6	2	12947

Station 684

		Latitude		66.895°S		Date		2/23/92			
		Longitude		71.998°W		Bottom Depth		445			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	8	92	-1.645	33.990	2	74.49	2	-118.6	3.1	2	12946
1	7	126	-1.238	34.091	2	84.51	2	-123.9	3.7	2	12945
1	6	162	-0.707	34.208	3	83.58	2	-125.1	3.3	2	12934
1	5	202	0.122	34.400	2	91.64	2	-139.7	3.0	2	12933
1	4	253	0.784	34.544	2	99.72	2	-147.7	3.6	2	12932
1	2	363	1.256	34.661	3	107.99	2	-156.2	3.6	2	12931
1	1	417	1.291	34.682	2	119.47	2	-156.0	4.3	2	12930

Station 685

		Latitude		66.800°S		Date		2/23/92			
		Longitude		72.250°W		Bottom Depth		831			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	14	13	0.462	33.587	2	59.75	2	-101.2	2.9	2	12071
1	13	43	-0.077	33.783	2	58.86	2	-104.3	2.9	2	12070
1	12	99	-1.420	34.062	2	70.67	2	-123.2	3.1	2	12069
1	11	154	-0.674	34.243	2	84.24	2	-130.2	3.0	2	12068
1	10	205	0.244	34.412	2	87.01	2	-139.9	3.3	2	12067
1	9	253	1.077	34.544	2	88.06	2	-149.4	3.0	2	12066
1	8	313	1.549	34.641	2	90.40	2	-151.5	2.5	2	13114
1	7	378	1.537	34.679	2	95.57	2	-155.7	3.0	2	12054
1	6	454	1.601	34.709	2	96.62	2	-155.2	3.0	2	12929
1	5	530	1.522	34.721	2	99.20	2	-152.0	3.5	2	12928
1	4	605	1.315	34.722	2	105.90	2	-153.4	3.1	2	12927
1	3	681	1.090	34.715	2	111.76	2	-158.6	3.1	2	12926
1	2	756	1.086	34.717	2	112.95	2	-161.1	4.1	2	12925
1	1	812	1.076	34.717	2	113.13	2	-152.7	5.4	2	12818

Station 686

		Latitude		66.782°S		Date		2/23/92			
		Longitude		72.264°W		Bottom Depth		1571			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	18	14	0.402	33.586	2	60.29	2	-95.0	3.9	2	13306
1	17	45	0.277	33.784	2	57.29	2	-95.3	2.8	2	13305
1	16	88	-1.490	34.043	2	70.89	2	-116.2	4.2	2	13304
1	15	126	-1.001	34.181	2	75.01	2	-119.4	2.7	2	13303
1	14	192	0.591	34.438	2	81.29	2	-126.7	2.7	2	13302
1	12	356	1.731	34.682	2	90.18	2	-147.1	3.1	2	13317

Station 686

		Latitude		66.782°S		Date		2/23/92			
		Longitude		72.264°W		Bottom Depth		1571			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	11	430	1.734	34.704	2	91.94	2	-148.1	3.0	2	13316
1	10	504	1.673	34.713	2	94.57	2	-149.9	2.8	2	13315
1	9	599	1.592	34.718	2	97.21	2	-155.0	2.4	2	13314
1	8	695	1.488	34.720	2	100.28	2	-158.2	4.2	2	12053
1	7	790	1.412	34.722	2	102.48	2	-160.7	3.6	2	12052
1	6	885	1.282	34.722	2	106.65	2	-157.4	3.0	2	12051
1	5	1030	1.123	34.720	2	111.49	2	-164.0	4.9	2	12065
1	4	1176	1.034	34.717	2	114.15	2	-163.2	2.6	6	12050
											12361
1	3	1324	0.962	34.713	2	116.59	2	-161.8	3.0	2	12049
1	2	1426	0.908	34.712	2	118.38	2	-168.5	3.2	2	12048
1	1	1524	0.866	34.711	2	119.95	2	-166.2	2.9	2	12047

Station 687

		Latitude		66.732°S		Date		2/24/92			
		Longitude		72.238°W		Bottom Depth		2430			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
2	21	13	0.363	33.563	2	60.36	2	-94.4	4.0	2	12817
2	19	58	-1.119	33.906	2	51.47	2	-96.8	3.8	2	12816
2	17	151	0.787	34.382	2	71.72	2	-113.9	8.6	2	12815
2	14	287	1.903	34.637	2	84.45	2	-131.6	4.0	2	12814
2	11	603	1.673	34.717	2	95.71	2	-140.5	4.1	2	12812
2	7	1207	1.161	34.727	3	111.51	2	-160.4	2.6	2	13313
2	6	1357	1.053	34.719	2	114.94	2	-161.3	2.4	2	13312
2	5	1613	0.927	34.713	2	118.37	2	-163.6	5.0	6	13600
											14875
2	4	1815	0.812	34.711	2	122.47	2	-164.9	3.0	2	13015
2	3	2017	0.664	34.706	2	126.80	2	-153.6	2.9	2	13311
2	2	2221	0.561	34.704	2	129.60	2	-158.0	2.3	2	13310
2	1	2410	0.474	34.700	3	132.85	2	-159.1	4.4	2	13234

Station 688

		Latitude		66.685°S		Date		2/24/92			
		Longitude		72.265°W		Bottom Depth		3098			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	16	0.702	33.756	2	49.23	2	-81.6	2.1	6	13651 16373
1	23	45	0.684	33.775	2	51.14	2	-90.2	3.1	6	13650 16372
1	22	76	-1.251	33.994	2	55.18	2	-101.5	3.4	2	16371
1	21	116	-0.358	34.201	2	65.19	2	-113.6	2.7	6	13648 16370
1	20	156	0.463	34.357	2	73.29	2	-138.0	2.1	6	13647 16232
1	19	206	1.449	34.514	2	78.62	2	-136.7	1.9	6	13646 16231
1	18	257	1.702	34.582	2	81.82	2	-144.7	2.6	6	13645 16230
1	17	306	1.818	34.622	2	83.74	2	-152.5	2.8	2	16229
1	16	381	1.891	34.664	2	85.87	2	-163.8	2.7	2	16228
1	15	456	1.907	34.693	2	87.58	2	-160.5	5.0	2	16227
1	14	531	1.868	34.706	2	89.50	2	-163.2	3.5	2	16226
1	12	757	1.674	34.726	2	95.49	2	-164.4	9.4	2	13628
1	11	907	1.543	34.729	2	99.14	2	-169.4	3.7	6	13627 16224
1	10	1110	1.358	34.727	2	104.73	2	-165.2	4.0	2	16223
1	9	1310	1.206	34.723	2	109.70	2	-167.5	3.0	2	16187
1	8	1512	1.070	34.719	2	114.24	2	-164.6	2.3	2	16186
1	7	1712	0.938	34.714	2	118.14	2	-164.9	2.6	2	16185
1	6	1913	0.807	34.710	2	122.49	2	-165.5	2.8	2	16184
1	5	2166	0.654	34.706	2	127.08	2	-164.8	2.8	2	16183
1	4	2420	0.511	34.703	2	131.68	2	-167.8	2.4	2	16182
1	3	2675	0.433	34.701	2	134.76	2	-174.7	2.4	2	16181
1	2	2933	0.401	34.701	2	137.18	2	-171.6	2.7	2	16180
1	1	3087	0.403	34.701	2	137.84	2	-166.2	2.5	2	16179

Station 691

		Latitude		65.906°S		Date		2/24/92			
		Longitude		75.013°W		Bottom Depth		4037			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	23	47	0.085	33.730	2	37.84	2	-78.4	2.8	2	13074
1	22	87	-1.335	33.981	2	46.39	2	-82.7	3.7	2	13062
1	21	128	-0.894	34.091	2	52.53	2	-94.4	3.0	2	13073
1	20	168	0.247	34.218	2	58.67	2	-99.0	5.7	2	13058
1	19	208	1.252	34.368	2	66.80	2	-113.6	7.2	2	13057

Station 691

		Latitude		65.906°S		Date		2/24/92			
		Longitude		75.013°W		Bottom Depth		4037			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	18	259	1.566	34.443	2	71.64	2	-124.4	3.3	2	13056
1	17	309	1.854	34.514	2	75.82	2	-131.7	4.1	2	12206
1	16	410	1.976	34.589	2	80.45	2	-142.9	3.6	2	12205
1	15	511	2.039	34.635	2	82.87	2	-145.0	3.6	2	12204
1	14	659	2.007	34.677	2	85.74	2	-144.7	3.6	2	12203
1	13	811	1.915	34.704	2	88.83	2	-156.7	3.4	2	12202
1	12	1012	1.775	34.719	3	93.70	2	-147.3	3.5	2	12201
1	11	1263	1.577	34.727	3	99.47	2	-147.5	4.8	2	12200
1	10	1516	1.380	34.724	3	105.70	2	-151.1	3.7	2	12198
1	9	1770	1.212	34.718	3	111.06	2	-153.6	4.0	2	12197
1	8	2024	1.061	34.714	3	116.21	2	-150.0	3.1	2	12196
1	6	2635	0.751	34.704	3	126.12	2	-160.6	3.0	2	12195
1	5	2940	0.611	34.699	3	129.97	2	-159.7	3.1	2	12194
1	4	3242	0.484	34.697	3	133.61	2	-166.1	3.2	2	12193
1	3	3546	0.420	34.696	3	137.71	2	-161.6	3.4	2	12192
1	2	3849	0.390	34.700	2	139.55	2	-159.1	3.2	2	12191
1	1	4066	0.360	34.697	3	142.53	2	-161.8	3.2	2	12189

Station 698

		Latitude		66.998°S		Date		2/26/92			
		Longitude		82.233°W		Bottom Depth		4262			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	46	0.669	33.756	2	28.71	2	-62.9	3.1	2	13039
1	23	95	-1.347	33.892	2	34.68	2	-65.1	2.9	2	13038
1	22	147	-0.734	34.020	2	42.16	2	-75.9	2.8	2	13037
1	21	186	-0.044	34.123	2	49.42	2	-90.7	3.3	2	13036
1	20	246	1.005	34.274	2	59.69	2	-108.7	2.8	2	13034
1	19	306	1.624	34.390	2	67.18	2	-123.7	3.5	2	13033
1	18	407	1.971	34.510	2	74.88	2	-133.3	3.6	2	13032
1	17	508	1.973	34.561	2	78.51	2	-139.4	3.1	2	13031
1	16	608	1.987	34.609	2	81.49	2	-141.1	3.0	2	13030
1	15	809	2.026	34.679	2	86.20	2	-148.3	3.0	2	13029
1	14	1012	1.909	34.711	2	89.83	2	-146.1	3.0	2	13028
1	13	1213	1.770	34.724	2	94.34	2	-149.8	3.1	2	13027
1	12	1415	1.606	34.730	2	98.85	2	-152.4	3.1	2	13026
1	11	1719	1.379	34.725	2	106.42	2	-159.7	3.7	2	13055
1	10	2025	1.191	34.721	2	112.28	2	-164.8	4.8	2	13054
1	9	2330	1.017	34.715	2	117.72	2	-161.7	3.8	2	13053
1	8	2635	0.853	34.710	2	123.39	2	-155.2	3.6	2	13052

Station 698

		Latitude		66.998°S		Date		2/26/92			
		Longitude		82.233°W		Bottom Depth		4262			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	7	2942	0.717	34.706	2	127.55	2	-164.6	4.1	2	13051
1	6	3248	0.572	34.704	2	131.28	2	-161.3	2.9	2	13025
1	5	3554	0.474	34.702	2	135.24	2	-165.9	3.2	2	13024
1	4	3810	0.441	34.700	2	137.88	2	-159.1	4.8	2	13023
1	3	4067	0.412	34.701	2	140.08	2	-164.6	4.1	2	13022
1	2	4296	0.375	34.700	2	144.54	2	-158.9	4.0	2	13021

Station 703

		Latitude		67.001°S		Date		2/28/92			
		Longitude		88.534°W		Bottom Depth		4437			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	52	0.735	33.785	2	28.07	2	-60.3	2.8	2	13162
1	23	104	-1.111	33.946	2	38.92	2	-82.6	2.6	6	13161
											16615
1	22	156	-0.485	34.076	2	47.43	2	-84.8	3.2	6	13105
											16614
1	21	204	0.548	34.213	2	55.54	2	-107.4	4.7	2	16613
1	20	204	0.565	34.341	4	68.73	4	-117.4	1.8	6	13103
											16612
1	19	279	1.500	34.374	2	66.38	2	-128.2	3.3	2	16611
1	18	354	1.870	34.480	2	72.93	2	-146.9	2.3	2	16610
1	17	455	1.905	34.555	2	78.30	2	-148.2	2.4	2	13100
1	16	606	1.984	34.636	2	82.59	2	-162.5	6.7	2	16608
1	15	806	1.970	34.688	2	86.40	2	-160.1	5.6	2	16607
1	14	1008	1.862	34.715	2	90.51	2	-160.1	3.8	2	16606
1	13	1213	1.720	34.726	2	94.71	2	-154.3	2.6	6	13760
											13761
											16617
1	12	1415	1.568	34.729	2	99.20	2	-155.3	3.4	6	13644
											16460
1	11	1618	1.431	34.727	2	103.80	2	-162.7	2.7	2	16459
1	10	1819	1.294	34.724	2	108.29	2	-161.0	2.4	2	16458
1	9	2025	1.170	34.720	2	112.20	2	-163.8	2.3	2	16457
1	8	2330	1.000	34.714	2	117.78	2	-164.7	2.5	2	16456
1	6	2940	0.739	34.706	2	126.08	2	-160.8	3.5	2	16455
1	5	3248	0.595	34.703	2	129.60	2	-162.1	1.9	6	13638
											16454
1	4	3550	0.501	34.702	2	133.32	2	-161.7	2.2	2	16453
1	3	3858	0.431	34.700	2	135.96	2	-166.6	2.3	6	15074
											16452

Station 703

		Latitude	67.001°S			Date	2/28/92				
		Longitude	88.534°W			Bottom Depth	4437				
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	2	4167	0.394	34.700	2	137.23	2	-161.0	2.3	6	13635 16451
1	7	4478	0.362	34.700	2	144.36	2	-156.9	2.2	6	13634 16374

Station 710

		Latitude	66.987°S			Date	3/2/92				
		Longitude	99.980°W			Bottom Depth	4718				
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	13	0.770	33.813	2	22.67	2	-60.4	3.2	2	12922
1	23	54	0.634	33.810	2	24.38	2	-61.8	3.4	2	13019
1	22	84	0.165	33.843	2	25.53	2	-56.1	3.2	2	12944
1	21	129	-0.391	33.989	2	34.89	2	-63.6	3.2	2	12943
1	20	185	0.081	34.094	2	44.45	2	-82.0	3.3	2	12942
1	19	256	1.694	34.342	2	60.34	2	-106.1	3.0	2	12941
1	18	356	1.864	34.466	2	70.71	2	-127.8	3.7	2	12940
1	17	455	1.915	34.545	2	76.49	2	-138.2	3.1	2	12939
1	16	556	1.909	34.591	2	79.77	2	-143.9	2.5	2	12938
1	15	656	1.997	34.638	2	82.13	2	-140.8	3.8	2	13112
1	14	756	2.010	34.668	2	83.84	2	-149.3	2.5	2	12936
1	13	903	1.947	34.697	2	86.79	2	-157.4	4.9	2	13113
1	12	1195	1.749	34.726	2	93.02	2	-153.0	3.2	2	12924
1	26	1488	1.532	34.728	2	100.07	2	-157.6	3.7	2	12923
1	10	1841	1.307	34.725	2	106.98	2	-153.4	3.7	2	12920
1	8	2563	0.920	34.712	2	120.11	2	-160.2	2.4	2	13099
1	7	2920	0.772	34.706	2	125.14	2	-166.1	2.8	2	13081
1	6	3271	0.629	34.703	2	128.39	2	-164.8	2.5	2	13080
1	5	3629	0.504	34.702	2	132.95	2	-180.4	2.7	2	13079
1	4	3988	0.434	34.701	2	136.79	2	-170.0	2.5	2	13078
1	3	4298	0.391	34.700	2	138.66	2	-164.1	2.4	2	13077
1	2	4617	0.353	34.700	2	146.59	2	-161.9	3.3	2	13076
1	1	4780	0.356	34.701	2	144.32	2	-158.8	2.6	2	13075

Station 716

		Latitude		67.003°S		Date		3/4/92			
		Longitude		88.534°		Bottom Depth		4388			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	13	0.408	33.757	2	41.37	2	-78.1	4.0	2	13633
1	23	54	0.337	33.779	2	43.43	2	-85.5	3.1	2	15455
1	22	74	-0.536	33.886	2	44.99	2	-84.8	3.4	2	13623
1	21	124	-1.143	34.054	2	53.29	2	-97.3	2.6	2	13622
1	20	164	-0.400	34.182	2	58.76	2	-101.0	2.6	2	13621
1	19	204	0.957	34.372	2	68.63	2	-123.3	3.8	2	13620
1	18	254	1.490	34.477	2	74.39	2	-131.7	4.2	2	13619
1	17	304	1.732	34.540	2	77.81	2	-142.5	3.4	2	13906
1	16	404	1.896	34.606	2	81.13	2	-141.7	3.3	2	13448
1	15	505	1.954	34.684	4	83.18	2	-143.0	2.6	2	13218
1	14	606	1.947	34.684	2	85.82	2	-146.7	2.9	2	13217
1	13	707	1.909	34.703	2	87.77	2	-143.8	2.9	2	13196
1	12	908	1.776	34.724	2	92.17	2	-148.8	2.5	2	13195
1	26	1212	1.546	34.730	2	98.91	2	-158.1	2.9	2	13194
1	10	1513	1.336	34.727	2	105.95	2	-157.4	2.5	2	13193
1	27	1866	1.119	34.720	2	112.69	2	-162.9	2.7	2	13192
1	8	2116	0.970	34.715	2	117.48	2	-154.0	2.6	2	13182
1	7	2462	0.809	34.709	2	123.54	2	-156.1	3.3	2	13181
1	6	2818	0.669	34.705	2	127.26	2	-147.7	2.6	2	13180
1	5	3180	0.521	34.703	2	131.66	2	-149.8	3.1	2	13179
1	4	3539	0.430	34.702	2	136.35	2	-155.5	2.8	2	13178
1	3	3899	0.370	34.701	2	135.96	2	-151.3	3.0	2	13177
1	2	4260	0.328	34.701	2	139.96	2	-153.0	13.5	6	13176 15454
1	1	4434	0.325	34.700	2	144.75	2	-152.9	2.9	2	13175

Station 722

		Latitude		67.002°S		Date		3/7/92			
		Longitude		120.46°W		Bottom Depth		4555			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	13	0.763	33.676	2	23.87	2	-62.1	3.7	2	12459
1	23	53	0.747	33.677	2	24.06	2	-62.5	3.0	2	15458
1	22	79	-0.656	33.877	2	37.06	2	-74.4	2.8	2	13334
1	21	103	-0.775	33.946	2	41.26	2	-85.4	3.7	2	12529
1	20	134	-0.632	34.014	2	45.27	2	-94.4	3.4	2	15457
1	19	204	0.732	34.281	2	61.15	2	-118.7	4.2	2	12527
1	18	254	1.462	34.430	2	71.11	2	-130.6	4.0	2	12526
1	17	304	1.722	34.509	2	75.71	2	-135.7	3.6	2	12525
1	16	404	1.880	34.587	2	80.12	2	-133.7	5.3	2	12524

Station 722

		Latitude		67.002°S		Date		3/7/92			
		Longitude		120.46°W		Bottom Depth		4555			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	15	505	1.943	34.642	2	83.19	2	-136.2	5.8	2	12523
1	14	605	1.955	34.676	2	85.49	2	-143.3	3.0	2	12952
1	13	807	1.869	34.711	2	89.35	2	-151.7	7.1	2	12515
1	12	1008	1.722	34.726	2	93.99	2	-163.4	3.8	2	12514
1	26	1311	1.476	34.729	2	101.17	2	-160.8	3.9	2	12513
1	10	1612	1.262	34.724	2	108.20	2	-161.8	4.0	2	12512
1	27	1915	1.077	34.718	2	114.30	2	-166.4	3.3	2	12511
1	8	2271	0.895	34.710	2	120.63	2	-171.9	4.0	2	13618
1	7	2628	0.741	34.706	2	125.81	2	-163.3	3.0	2	13617
1	6	2984	0.595	34.703	2	129.21	2	-155.9	3.0	2	15456
1	5	3341	0.461	34.701	2	132.03	2	-167.4	3.2	2	13615
1	4	3700	0.385	34.700	2	135.87	2	-167.0	2.7	2	13614
1	3	4059	0.338	34.700	2	139.13	2	-166.9	2.6	2	13613
1	2	4423	0.315	34.700	2	139.72	2	-162.9	5.0	2	13612
1	1	4600	0.296	34.700	2	140.32	2	-158.6	2.7	2	13611

Station 726

		Latitude		66.982°S		Date		3/7/92			
		Longitude		127.236°W		Bottom Depth		4465			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	12	0.453	33.473	2	50.74	2	-80.9	6.2	2	13215
1	23	42	0.219	33.510	2	51.09	2	-77.4	6.3	2	13228
1	22	83	-1.598	33.991	2	50.28	2	-92.1	4.8	2	11993
1	21	113	-1.580	34.035	2	53.13	2	-104.0	4.2	2	11991
1	20	154	-0.746	34.183	2	60.95	2	-106.0	4.2	2	11990
1	19	204	0.353	34.356	2	70.12	2	-116.0	7.2	2	11988
1	18	254	1.280	34.535	2	79.60	2	-123.1	4.3	2	11987
1	17	306	1.732	34.623	2	84.29	2	-130.3	4.1	2	11985
1	16	405	1.858	34.678	2	87.09	2	-145.4	2.6	2	11984
1	15	606	1.804	34.715	2	90.92	2	-141.2	2.6	2	11983
1	14	807	1.658	34.726	2	95.54	2	-149.9	3.0	2	13233
1	13	1008	1.493	34.729	2	101.34	2	-152.1	2.7	2	13232
1	12	1312	1.270	34.725	2	107.76	2	-153.7	2.5	2	13231
1	26	1612	1.082	34.718	2	113.82	2	-153.6	2.6	2	13230
1	10	1912	0.929	34.714	2	119.13	2	-156.8	2.7	2	13229
1	27	2215	0.792	34.707	2	123.67	2	-160.2	2.7	2	13216
1	8	2512	0.671	34.705	2	127.44	2	-151.1	2.8	6	13214 13897
1	7	2801	0.567	34.703	2	130.02	2	-159.9	2.6	2	13213

Station 726

		Latitude		66.982°S		Date		3/7/92			
		Longitude		127.236°W		Bottom Depth		4465			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	6	3087	0.473	34.701	2	133.42	2	-158.1	3.0	2	13207
1	5	3390	0.421	34.701	2	136.23	2	-159.5	2.6	2	13206
1	4	3702	0.378	34.700	2	137.61	2	-158.7	2.6	2	13205
1	3	4009	0.345	34.700	2	138.39	2	-153.8	2.6	2	13204
1	2	4319	0.318	34.699	2	139.99	2	-154.7	2.7	2	13203
1	1	4547	0.307	34.700	2	139.33	2	-161.9	3.4	2	13197

Station 732

		Latitude		67.000°S		Date		3/9/92			
		Longitude		135.834°W		Bottom Depth		4661			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	12	0.797	33.478	2	25.43	2	-73.1	3.8	2	12086
1	23	47	0.731	33.496	2	25.42	2	-74.7	3.9	2	12088
1	22	92	-1.583	33.925	2	45.16	2	-79.9	3.6	2	12211
1	21	134	-1.165	34.017	2	48.57	2	-84.7	3.7	2	12210
1	20	153	-0.747	34.097	2	53.12	2	-96.6	3.6	2	12209
1	18	254	1.515	34.533	2	78.04	2	-133.1	3.3	2	12208
1	17	304	1.714	34.587	2	80.70	2	-137.3	3.3	2	12207
1	16	403	1.860	34.653	2	83.93	2	-140.3	3.4	2	12187
1	15	502	1.871	34.689	2	86.79	2	-144.2	4.3	2	12186
1	14	603	1.839	34.705	2	88.88	2	-154.1	3.3	2	12185
1	13	806	1.715	34.724	2	93.10	2	-153.0	3.3	2	12184
1	12	1008	1.534	34.729	2	98.67	2	-154.2	2.9	2	12091
1	26	1310	1.301	34.726	2	105.64	2	-159.0	3.3	2	12090
1	10	1667	1.069	34.718	2	112.65	2	-160.5	3.0	2	12089
1	27	2022	0.883	34.710	2	119.91	2	-156.4	2.8	2	12087
1	8	2376	0.743	34.706	2	125.04	2	-140.2	4.1	2	11982
1	7	2731	0.610	34.702	2	128.01	2	-142.4	4.3	2	11981
1	6	3086	0.478	34.700	2	130.60	2	-155.2	4.0	2	11980
1	5	3443	0.382	34.700	2	133.19	2	-156.8	3.0	2	11979
1	4	3802	0.308	34.700	2	135.18	2	-168.2	5.5	2	11978
1	3	4164	0.260	34.699	2	133.14	2	-168.5	6.5	2	15080
1	2	4524	0.220	34.698	2	126.10	2	-156.2	7.7	2	15079
1	1	4720	0.215	34.698	2	123.69	2	-147.9	3.6	2	11975
											15459

Station 736

		Latitude		66.991°S		Date		3/10/92			
		Longitude		135.834°W		Bottom Depth		4175			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	13	0.736	33.625	2	29.53	2	-69.8	3.0	2	13087
1	23	53	0.596	33.636	2	30.67	2	-71.5	2.5	2	13086
1	22	84	-1.680	33.910	2	48.13	2	-77.3	2.6	2	13085
1	21	113	-1.734	33.984	2	54.59	2	-88.2	3.1	2	13084
1	20	154	-0.706	34.169	2	62.20	2	-100.8	3.0	2	13083
1	19	193	0.463	34.435	2	77.07	2	-129.1	2.7	2	13082
1	18	254	1.544	34.624	2	85.11	2	-144.3	3.1	2	13050
1	17	354	1.724	34.693	2	88.95	2	-149.2	3.6	2	13048
1	16	453	1.652	34.715	2	92.81	2	-138.9	3.3	2	12544
1	15	604	1.522	34.725	2	98.22	2	-143.1	3.5	2	12543
1	14	753	1.394	34.727	2	102.49	2	-151.7	4.7	2	12542
1	13	904	1.271	34.726	2	107.17	2	-149.2	4.0	2	12541
1	12	1104	1.134	34.721	2	112.07	2	-149.0	3.2	2	12540
1	26	1305	1.011	34.716	2	116.01	2	-153.3	3.8	2	12539
1	10	1611	0.842	34.710	2	121.36	2	-154.7	4.8	2	12538
1	27	1916	0.715	34.705	2	125.75	2	-154.2	3.5	2	12458
1	8	2222	0.603	34.703	2	128.16	2	-154.0	5.6	2	12457
1	7	2527	0.487	34.700	2	130.18	2	-159.1	2.9	2	12456
1	6	2834	0.394	34.700	2	132.81	2	-148.9	8.2	2	15078
1	5	3190	0.306	34.700	2	134.44	2	-117.9	5.9	3	15995
1	28	3550	0.222	34.698	2	131.81	2	-119.5	4.0	3	12535 15994
1	3	3857	0.156	34.698	2	124.19	2	-105.4	3.9	3	15462
1	2	4062	0.148	34.698	2	122.40	2	-108.3	5.3	3	15461
1	1	4223	0.154	34.697	2	122.01	2	-105.1	7.4	3	15460

Station 740

		Latitude		67.007°S		Date		3/12/92			
		Longitude		147.483°W		Bottom Depth		4457			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	13	0.684	33.729	2	40.88	2	-73.0	4.2	2	12570
1	23	53	0.615	33.750	2	41.47	2	-73.7	3.4	2	12569
1	22	85	-1.728	33.976	2	54.28	2	-89.0	3.2	2	12568
1	21	126	-1.664	34.067	2	61.90	2	-96.9	3.8	2	12567
1	20	176	-0.404	34.331	2	76.55	2	-116.8	3.8	2	12566
1	19	236	0.959	34.635	2	97.06	2	-142.5	3.2	2	12565
1	18	306	1.302	34.718	2	105.27	2	-150.1	3.3	2	12564
1	17	407	1.255	34.724	2	108.98	2	-143.7	3.7	2	12563
1	16	508	1.183	34.724	2	111.42	2	-149.9	3.7	2	12562

Station 740

		Latitude		67.007°S		Date		3/12/92			
		Longitude		147.483°W		Bottom Depth		4457			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	15	607	1.115	34.722	2	112.99	2	-152.2	3.6	2	12561
1	14	807	0.990	34.718	2	116.11	2	-148.3	3.8	2	12560
1	13	1011	0.869	34.713	2	119.63	2	-158.9	3.6	2	12559
1	12	1312	0.731	34.709	2	124.03	2	-158.7	3.4	2	12558
1	26	1618	0.620	34.702	4	127.94	4	-165.9	3.1	2	12557
1	10	1924	0.505	34.701	2	128.72	2	-164.7	4.3	2	12556
1	27	2228	0.397	34.700	2	130.97	2	-160.4	3.2	2	12545
1	8	2531	0.314	34.700	2	132.83	2	-153.1	2.7	2	13047
1	7	2835	0.243	34.699	2	131.95	2	-157.8	3.3	2	13046
1	6	3144	0.159	34.698	2	127.65	2	-161.1	4.4	2	13045
1	5	3449	0.106	34.697	2	121.00	2	-154.9	4.2	2	13044
1	28	3753	0.104	34.697	2	119.83	2	-150.7	2.9	2	13043
1	3	4059	0.124	34.699	3	120.03	2	-163.6	4.3	3	15996
1	2	4365	0.150	34.697	2	120.81	2	-152.4	2.8	2	13041
1	1	4498	0.164	34.697	2	120.91	2	-154.1	3.4	2	13040

Station 744

		Latitude		66.967°S		Date		3/13/92			
		Longitude		154.328°W		Bottom Depth		4251			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	12	0.460	33.779	2	54.67	2	-84.7	2.7	2	13167
1	23	42	0.460	33.779	2	54.87	2	-89.4	2.8	2	13166
1	22	77	-1.438	34.184	2	61.31	2	-112.8	2.6	2	13165
1	21	123	-0.168	34.394	2	75.38	2	-125.5	2.7	2	13164
1	20	163	0.774	34.559	2	85.53	2	-139.9	2.7	2	13163
1	19	203	1.335	34.670	2	92.66	2	-150.8	2.7	2	13098
1	18	251	1.466	34.707	2	96.57	2	-149.9	2.5	2	13097
1	17	299	1.444	34.719	2	99.30	2	-154.3	2.8	2	13096
1	16	401	1.366	34.724	2	103.41	2	-155.3	3.3	2	13610
1	15	498	1.300	34.726	2	106.24	2	-155.4	2.5	2	13609
1	14	594	1.234	34.725	2	108.98	2	-158.7	3.0	2	13608
1	13	781	1.101	34.722	2	112.60	2	-163.4	2.4	2	13593
1	12	979	0.980	34.718	2	116.11	2	-164.3	3.0	2	13592
1	26	1292	0.799	34.702	4	122.76	4	-154.1	4.6	2	13590
1	10	1602	0.670	34.702	2	128.43	2	-166.6	2.4	6	13589
											15998
1	27	1901	0.560	34.702	2	127.94	2	-148.8	7.2	2	15997
1	8	2200	0.447	34.699	4	126.87	4	-155.2	2.4	2	13444
1	7	2557	0.340	34.699	2	131.85	2	-164.0	2.4	2	13443

Station 744

		Latitude	66.967°S		Date		3/13/92				
		Longitude	154.328°W		Bottom Depth		4251				
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	6	2907	0.254	34.699	2	132.05	2	-166.4	2.8	2	13442
1	5	3246	0.174	34.698	2	127.84	2	-158.2	2.4	2	13441
1	28	3579	0.104	34.696	2	119.44	2	-147.3	2.4	2	13440
1	3	3852	0.098	34.696	2	118.17	2	-143.3	2.4	2	13439
1	2	4065	0.114	34.696	2	118.07	2	-149.1	2.7	2	13438
1	1	4286	0.136	34.697	2	118.66	2	-146.5	2.5	2	13437

Station 748

		Latitude	66.983°S		Date		3/15/92				
		Longitude	160.290°W		Bottom Depth		4172				
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si $\mu\text{mol/kg}$	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	24	10	0.299	33.883	2	64.46	2	-102.2	3.1	2	13446
1	23	51	0.288	33.883	2	64.44	2	-104.0	3.7	2	13445
1	22	75	-1.633	34.193	2	68.64	2	-104.6	3.4	2	13436
1	21	123	-0.671	34.384	2	76.91	2	-118.7	2.8	2	13435
1	20	204	1.096	34.652	2	94.75	2	-143.9	3.7	2	13434
1	19	253	1.349	34.707	2	100.64	2	-152.2	2.7	2	13433
1	18	304	1.368	34.722	2	103.27	2	-148.8	2.8	2	13432
1	17	404	1.294	34.725	2	106.98	2	-150.9	2.8	2	13431
1	16	506	1.222	34.724	2	109.61	2	-158.2	2.8	2	13430
1	15	606	1.156	34.723	2	111.63	2	-157.9	2.5	2	13429
1	14	807	1.024	34.718	2	115.10	2	-151.4	2.3	2	13428
1	13	1008	0.899	34.714	2	119.18	2	-161.5	3.0	2	13427
1	12	1211	0.793	34.710	2	121.89	2	-162.8	2.4	2	13418
1	26	1413	0.704	34.706	2	125.15	2	-156.5	2.3	2	13417
1	10	1717	0.583	34.702	2	127.27	2	-155.7	2.5	2	13416
1	27	2023	0.469	34.700	2	129.68	2	-169.1	2.7	2	13095
1	8	2329	0.372	34.699	2	131.75	2	-164.9	3.1	2	13094
1	7	2630	0.290	34.699	2	132.76	2	-166.3	3.5	2	13093
1	6	2936	0.212	34.698	2	131.25	2	-158.7	2.6	2	13208
1	5	3236	0.124	34.696	2	123.47	2	-156.1	3.0	2	13091
1	28	3582	0.095	34.696	2	119.28	2	-151.8	2.5	2	13090
1	3	3832	0.108	34.696	2	119.04	2	-154.1	2.4	2	13089
1	2	4034	0.127	34.695	2	119.00	2	-150.8	2.3	2	13415
1	1	4201	0.144	34.696	2	119.17	2	-151.1	2.3	2	13088

Station 754

		Latitude		66.983°S		Date		3/15/92			
		Longitude		160.290°W		Bottom Depth		4172			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	19	0.301	33.836	2	49.45	2	-94.7	4.4	2	12038
1	23	47	0.191	33.878	2	50.63	2	-96.4	4.8	2	12026
1	22	78	-1.301	34.246	2	70.19	2	-112.3	3.0	2	12027
1	21	109	-0.490	34.368	2	76.02	2	-115.8	2.8	2	12028
1	20	159	0.750	34.569	2	85.92	2	-133.1	2.8	2	12029
1	19	210	1.294	34.658	2	90.56	2	-144.0	2.9	2	12030
1	18	259	1.449	34.694	2	92.97	2	-138.8	2.8	2	12031
1	17	308	1.471	34.709	2	94.97	2	-143.6	2.9	2	12037
1	16	410	1.403	34.722	2	99.63	2	-154.7	2.4	2	13414
1	15	511	1.339	34.724	2	102.46	2	-147.4	4.4	2	13668
1	14	613	1.268	34.724	2	104.89	2	-152.2	3.1	2	13412
1	13	813	1.130	34.721	2	109.78	2	-153.2	2.7	2	13327
1	12	1013	0.998	34.716	2	114.08	2	-149.4	2.7	2	13326
1	26	1214	0.884	34.712	2	118.18	2	-150.6	2.8	2	13325
1	10	1414	0.778	34.709	2	121.67	2	-147.6	2.9	2	13324
1	27	1617	0.681	34.705	2	124.35	2	-150.7	3.1	2	13323
1	8	1818	0.574	34.700	2	125.14	2	-159.0	3.3	2	13322
1	7	2122	0.459	34.699	2	127.61	2	-146.6	3.4	2	13321
1	6	2426	0.347	34.698	2	128.62	2	-152.5	3.3	2	13320
1	5	2725	0.241	34.697	2	127.32	2	-152.8	3.3	2	13319
1	28	3028	0.156	34.696	2	122.69	2	-160.9	2.5	2	13318
1	3	3181	0.153	34.696	2	122.02	2	-139.8	3.4	2	13309
1	2	3337	0.161	34.695	2	121.78	2	-144.3	4.8	2	13308
1	1	3423	0.164	34.695	2	121.53	2	-151.4	2.9	2	13307

Station 760

		Latitude		66.973°S		Date		3/18/92			
		Longitude		175.628°W		Bottom Depth		2831			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	12	0.619	33.789	2	43.44	2	-104.5	3.0	2	12058
1	23	52	0.238	33.831	2	43.85	2	-96.5	3.1	2	12057
1	22	86	-1.438	34.229	2	65.19	2	-110.9	3.1	2	12056
1	21	128	0.097	34.434	2	78.00	2	-112.3	2.8	2	12007
1	20	183	0.986	34.583	2	85.03	2	-127.8	2.4	2	12006
1	19	242	1.440	34.676	2	90.47	2	-138.7	3.1	2	12005
1	18	324	1.523	34.706	2	93.31	2	-144.2	2.8	2	12046
1	17	403	1.491	34.717	2	96.15	2	-144.5	2.9	2	12045
1	16	503	1.389	34.718	2	97.58	2	-144.4	2.9	2	12044
1	15	603	1.256	34.714	2	99.41	2	-153.1	3.2	2	12043

Station 760

		Latitude		66.973°S		Date		3/18/92			
		Longitude		175.628°W		Bottom Depth		2831			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	14	702	1.204	34.717	2	102.07	2	-154.3	3.0	2	12042
1	13	801	1.143	34.719	2	105.33	2	-155.0	2.9	2	12040
1	10	1145	0.954	34.715	2	113.14	2	-164.1	3.9	2	12183
1	27	1296	0.855	34.710	2	115.42	2	-160.5	3.3	2	12182
1	8	1494	0.741	34.706	2	119.34	2	-152.1	3.4	2	12009
1	7	1696	0.619	34.702	2	122.46	2	-149.0	3.7	2	12010
1	6	1893	0.541	34.699	2	124.76	2	-158.0	2.7	2	12011
1	5	2091	0.497	34.698	2	125.81	2	-154.5	4.1	2	12012
1	28	2287	0.405	34.697	2	126.04	2	-152.5	3.6	2	12013
1	3	2480	0.323	34.696	2	126.48	2	-150.6	3.2	2	12014
1	2	2675	0.242	34.695	2	124.83	2	-152.9	2.5	2	12015
1	1	2837	0.215	34.695	2	123.81	2	-158.5	2.8	2	12016

Station 764

		Latitude		67.037°S		Date		3/20/92			
		Longitude		179.231°E		Bottom Depth		37471			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	10	0.234	33.815	2	45.71	2	-103.7	3.4	2	12188
1	23	40	0.404	33.858	2	45.90	2	-100.5	3.8	2	12085
1	22	68	-1.224	34.213	2	71.62	2	-107.4	2.9	2	12084
1	21	114	0.393	34.484	2	80.60	2	-125.2	6.1	2	12082
1	20	164	1.093	34.616	2	88.41	2	-143.2	4.0	2	12081
1	18	254	1.727	34.710	2	89.20	2	-146.4	4.1	2	12080
1	17	312	1.631	34.721	2	90.40	2	-154.9	5.3	2	12079
1	16	400	1.196	34.698	2	93.81	2	-138.2	2.4	3	12034 15999
1	15	493	1.361	34.724	2	100.67	2	-152.9	2.9	2	12035
1	14	690	1.181	34.718	2	106.95	2	-148.4	2.9	2	12036
1	13	883	1.086	34.719	2	112.03	2	-149.9	3.1	2	12033
1	12	1072	0.955	34.715	2	115.70	2	-151.2	2.8	2	12032
1	26	1262	0.870	34.713	2	118.77	2	-159.9	2.9	2	12025
1	10	1456	0.777	34.709	2	122.06	2	-161.6	3.0	2	12024
1	27	1700	0.675	34.706	2	125.36	2	-162.3	4.4	2	12023
1	8	1951	0.578	34.703	2	127.21	2	-158.2	4.5	2	12022
1	7	2250	0.471	34.702	2	129.49	2	-159.4	2.9	2	12021
1	6	2553	0.386	34.701	2	131.77	2	-163.3	2.9	2	12020
1	29	2856	0.297	34.699	2	130.30	2	-155.5	2.9	2	12019
1	28	3159	0.209	34.696	2	124.47	2	-159.6	3.1	2	12018

Station 764

		Latitude	67.037°S		Date	3/20/92					
		Longitude	179.231°E		Bottom Depth	37471					
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	3	3459	0.117	34.694	2	118.28	2	-148.3	2.8	2	12017
1	1	3777	0.064	34.696	2	114.16	2	-157.8	4.5	2	12074

Station 768

		Latitude	67.049°S		Date	3/21/92					
		Longitude	174.319°E		Bottom Depth	3179					
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	16	-0.234	33.760	2	54.24	2	-88.3	8.6	2	12503
1	23	47	-0.240	33.761	2	54.23	2	-114.3	3.5	2	12501
1	22	81	-1.207	34.331	2	76.23	2	-122.6	3.5	2	12500
1	21	108	0.546	34.540	2	87.17	2	-131.7	3.6	2	12499
1	20	160	1.270	34.678	2	95.09	2	-139.5	3.5	2	12498
1	19	208	1.332	34.696	2	97.31	2	-140.9	3.3	2	12497
1	18	257	1.337	34.708	2	99.54	2	-148.2	3.5	2	12226
1	17	309	1.319	34.714	2	101.36	2	-157.8	3.6	2	12225
1	16	402	1.272	34.718	2	104.83	2	-154.8	4.7	2	12078
1	15	504	1.201	34.719	2	107.89	2	-153.3	4.5	2	12077
1	14	597	1.142	34.719	2	110.13	2	-160.2	3.6	2	12076
1	13	693	1.082	34.718	2	111.97	2	-155.8	2.8	2	12073
1	12	781	1.031	34.717	2	114.21	2	-155.7	2.8	2	12063
1	26	950	0.949	34.716	2	117.09	2	-152.3	2.8	2	12062
1	10	1132	0.842	34.708	3	123.51	3	-160.9	3.0	2	12061
1	27	1407	0.727	34.708	2	124.11	2	-160.8	2.8	2	12060
1	8	1679	0.623	34.706	2	127.02	2	-161.2	5.2	6	12059
											15447
1	7	1938	0.522	34.703	2	128.88	2	-178.5	2.1	3	13626
											15450
1	6	2203	0.424	34.701	2	130.12	2	-176.2	5.0	3	13625
											15449
1	29	2476	0.337	34.698	2	128.62	2	-162.2	3.4	6	13018
											15448
1	28	2744	0.243	34.697	2	124.62	2	-148.2	2.9	2	12949
1	3	2971	0.160	34.695	2	121.27	2	-143.7	2.9	2	13174
1	2	3131	0.089	34.695	2	117.72	2	-148.1	3.0	2	13020
1	1	3216	0.053	34.696	2	114.59	2	-153.8	2.8	2	12072

Station 772

		Latitude				68.703°S				Date		3/22/92	
		Longitude				171.441°E				Bottom Depth		3312	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	24	15	-1.173	33.874	2	67.48	2	-107.2	6.2	2	12522		
1	23	46	-1.162	33.909	3	68.27	2	-114.8	7.0	2	12521		
1	22	76	0.464	34.574	2	89.74	2	-136.4	3.8	2	12520		
1	21	105	0.945	34.644	2	93.62	2	-142.5	3.3	2	13449		
1	20	155	1.250	34.694	2	97.92	2	-147.3	5.2	2	12518		
1	19	206	1.257	34.704	2	99.53	2	-143.3	3.5	2	12502		
1	18	257	1.277	34.713	2	102.60	2	-162.3	2.9	6	12517 16001		
1	17	307	1.254	34.717	2	104.43	2	-166.8	5.4	2	16000		
1	16	407	1.196	34.719	2	107.30	2	-151.6	2.8	2	13225		
1	15	609	1.073	34.717	2	112.26	2	-146.3	2.7	2	13224		
1	14	811	0.952	34.715	2	115.98	2	-155.8	2.6	2	13301		
1	13	1012	0.838	34.711	2	119.50	2	-151.0	3.7	2	13300		
1	12	1213	0.754	34.708	2	122.61	2	-156.5	2.9	2	13299		
1	26	1415	0.664	34.705	2	124.67	2	-155.1	2.9	2	13298		
1	10	1616	0.597	34.703	2	126.74	2	-162.5	3.3	2	13297		
1	27	1816	0.530	34.703	2	127.97	2	-165.2	2.6	2	13296		
1	8	2019	0.447	34.702	2	129.41	2	-161.9	2.7	2	13295		
1	7	2221	0.372	34.700	2	128.95	2	-162.9	2.8	2	13294		
1	6	2425	0.300	34.697	2	125.95	2	-149.8	3.4	2	13236		
1	29	2631	0.238	34.695	2	122.76	2	-155.7	2.9	2	13235		
1	28	2835	0.178	34.694	2	119.58	2	-143.6	2.7	2	13223		
1	3	3089	0.100	34.695	2	113.91	2	-139.0	2.7	2	13222		
1	2	3191	0.053	34.694	2	111.79	2	-135.8	2.8	2	13221		
1	1	3299	0.021	34.696	2	110.93	2	-139.2	2.6	2	13220		

Station 775

		Latitude				69.933°S				Date		3/22/92	
		Longitude				169.3441°E				Bottom Depth		2731	
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#		
1	24	11	-1.543	34.239	2	73.32	2	-110.9	3.8	2	12510		
1	23	61	-1.536	34.239	2	73.32	2	-115.4	3.9	2	12506		
1	22	122	-1.524	34.240	2	73.53	2	-109.0	4.6	2	12505		
1	21	183	-1.470	34.255	2	73.73	2	-115.6	3.7	2	12504		
1	20	243	-1.299	34.300	2	75.99	2	-123.4	3.6	2	12223		
1	30	273	-0.716	34.475	2	85.66	2	-134.4	3.8	2	12222		
1	17	404	-0.068	34.589	2	93.30	2	-144.3	3.5	2	12220		

Station 775

		Latitude		69.933°S		Date		3/22/92			
		Longitude		169.3441°E		Bottom Depth		2731			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	16	505	0.434	34.655	2	102.62	2	-143.8	4.2	2	12789
1	15	606	0.578	34.679	2	109.08	2	-148.2	3.3	2	12951
1	14	756	0.583	34.693	2	116.62	2	-147.2	4.6	2	12788
1	13	908	0.454	34.690	2	118.30	2	-153.7	1.9	6	12787 12959 13335
1	12	1060	0.188	34.674	2	110.96	2	-137.5	5.9	2	12786
1	26	1210	0.209	34.683	2	112.63	2	-140.5	4.6	2	12785
1	10	1363	0.199	34.697	2	111.80	2	-137.4	5.5	2	12784
1	27	1512	0.147	34.702	2	108.45	2	-143.1	3.7	2	12783
1	8	1712	-0.037	34.705	2	106.57	2	-142.6	3.2	2	12579
1	7	1910	-0.172	34.705	2	102.83	2	-134.0	3.4	2	12578
1	6	2113	-0.316	34.716	2	99.92	2	-139.4	3.2	2	12577
1	29	2266	-0.431	34.719	2	97.01	2	-135.3	3.1	2	12576
1	28	2419	-0.479	34.721	2	95.98	2	-133.3	3.1	2	12575
1	3	2567	-0.479	34.721	2	95.98	2	-132.3	3.1	2	12574
1	2	2657	-0.491	34.723	2	95.36	2	-132.1	3.1	2	12573
1	1	2707	-0.516	34.724	2	95.36	2	-127.2	4.3	2	12572

Station 777

		Latitude		70.411°S		Date		3/23/92			
		Longitude		168.496°E		Bottom Depth		1722			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	$\Delta^{14}\text{C}$ ‰	Err ‰	F	OS#
1	24	12	-1.735	34.104	2	75.70	2	-107.9	2.4	2	13426
1	22	103	-1.456	34.224	2	75.88	2	-107.7	2.8	2	13425
1	21	153	-1.284	34.281	2	76.29	2	-119.8	2.4	2	13424
1	20	203	-1.183	34.311	2	76.27	2	-121.1	3.7	2	13669
1	30	253	-1.098	34.364	2	77.72	2	-122.2	2.5	2	13423
1	18	334	-1.265	34.428	2	81.06	2	-122.4	2.6	2	13422
1	17	375	-0.796	34.485	2	84.40	2	-136.7	2.3	2	13421
1	16	404	-0.577	34.519	2	86.27	2	-134.1	2.7	2	13420

Station 777

		Latitude		70.411°S		Date		3/23/92			
		Longitude		168.496°E		Bottom Depth		1722			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	15	504	-0.393	34.577	2	91.72	2	-135.1	2.7	2	13419
1	14	562	-0.091	34.619	2	98.86	2	-140.2	3.3	2	13333
1	13	648	0.289	34.667	2	110.48	2	-151.6	3.0	2	13332
1	12	694	0.278	34.671	2	111.96	2	-147.8	2.8	2	13331
1	26	838	-0.100	34.649	2	103.04	2	-144.4	2.7	2	13330
1	10	941	-0.077	34.667	2	105.14	2	-141.0	2.9	2	13329
1	27	1047	-0.124	34.673	2	103.43	2	-142.2	2.9	2	13328
1	8	1157	-0.274	34.662	2	100.67	2	-135.7	2.8	2	13227
1	7	1251	-0.155	34.680	2	-9.00	1	-148.8	2.8	2	13594
1	6	1310	-0.266	34.671	2	99.39	2	-130.1	6.8	2	16003
1	29	1411	-0.159	34.686	2	102.33	2	-149.1	2.6	2	13586
1	28	1510	-0.183	34.691	2	102.11	2	-144.1	2.5	2	13585
1	3	1610	-0.209	34.701	2	101.25	2	-135.7	3.2	2	13584
1	2	1642	-0.213	34.701	2	101.24	2	-140.6	3.8	2	13447
1	1	1695	-0.305	34.702	2	100.59	2	-142.4	11.0	6	13670 16002

Station 778

		Latitude		70.451°S		Date		3/23/92			
		Longitude		168.414°E		Bottom Depth		1058			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	14	11	-1.639	34.216	2	73.23	2	-113.0	3.6	2	13607
1	13	51	-1.389	34.268	2	74.89	2	-117.4	3.4	2	13606
1	12	112	-1.315	34.292	2	75.28	2	-123.2	2.6	2	13605
1	26	172	-1.319	34.327	3	75.28	3	-121.2	2.5	2	13599
1	10	243	-1.220	34.397	4	77.04	2	-129.0	3.9	2	12224
1	27	303	-1.191	34.358	2	77.23	2	-128.8	3.6	2	12221
1	8	362	-0.993	34.415	2	80.56	2	-127.9	2.4	2	13595
1	7	440	-0.925	34.487	2	82.41	2	-132.7	3.6	2	12219
1	6	549	-0.843	34.528	2	84.56	2	-135.6	3.8	2	12218
1	29	628	-0.617	34.567	2	88.66	2	-139.7	6.1	2	12217

Station 778

		Latitude		70.451°S		Date		3/23/92			
		Longitude		168.414°E		Bottom Depth		1058			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	28	696	-0.557	34.601	2	92.47	2	-135.2	3.5	2	12216
1	3	795	-0.253	34.638	2	98.33	2	-147.3	3.4	2	12215
1	2	905	-0.504	34.623	2	93.54	2	-137.0	3.5	2	12214
1	1	1011	-0.434	34.643	2	95.01	2	-143.5	3.3	2	12213

Station 779

		Latitude		70.493°S		Date		3/23/92			
		Longitude		168.308°E		Bottom Depth		386			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	17	11	-1.613	34.217	2	72.99	2	-110.3	4.7	2	12796
1	15	41	-1.583	34.221	2	73.20	2	-116.8	4.4	2	12795
1	13	71	-1.395	34.248	2	73.40	2	-117.3	4.0	2	12794
1	26	101	-1.379	34.270	2	73.61	2	-105.0	4.7	2	12793
1	27	151	-1.302	34.291	2	74.23	2	-110.2	4.0	2	12792
1	7	206	-1.130	34.331	2	75.47	2	-121.6	4.2	2	12791
1	29	261	-1.049	34.347	2	76.72	2	-121.5	3.9	2	12790
1	3	321	-1.076	34.348	2	77.34	2	-131.1	4.0	2	12571
1	1	368	-1.110	34.355	2	78.17	2	-126.1	4.0	2	12958

Station 780

		Latitude		70.648°S		Date		3/23/92			
		Longitude		168.066°E		Bottom Depth		209			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	7	11	-1.479	34.282	2	74.02	2	-120.4	3.2	2	12919
1	6	41	-1.294	34.304	2	74.23	2	-120.0	3.3	2	12918
1	29	67	-1.203	34.325	2	75.68	2	-117.2	4.2	2	12820
1	28	101	-1.195	34.328	2	75.89	2	-119.5	5.4	2	12819
1	3	132	-1.144	34.335	2	76.09	2	-120.9	5.7	2	12799
1	2	172	-1.150	34.345	2	77.13	2	-117.1	5.1	2	12798
1	1	193	-1.093	34.368	2	79.41	2	-118.2	4.8	2	12797

Station 790

		Latitude		66.022°S		Date		3/29/92			
		Longitude		164.803°E		Bottom Depth		2814			
Cast	Bot.	Pres. dB	Temp °C	Salt	F	Si μmol/kg	F	Δ ¹⁴ C ‰	Err ‰	F	OS#
1	24	10	-1.052	33.866	2	63.41	2	-112.5	2.6	2	13657
1	23	33	-1.060	33.868	2	63.40	2	-110.0	3.3	2	13656
1	21	97	-0.456	34.530	2	90.69	2	-146.6	3.1	2	13655
1	20	147	0.687	34.651	2	96.16	2	-145.3	2.9	2	13654
1	30	198	0.880	34.677	2	98.89	2	-150.5	2.6	2	13653
1	18	245	0.969	34.693	2	100.99	2	-155.4	2.4	2	13597
1	17	294	0.969	34.698	2	102.88	2	-150.9	2.4	2	13596
1	16	396	0.953	34.701	2	105.63	2	-150.0	3.5	2	12555
1	15	499	1.017	34.715	2	108.80	2	-147.9	3.4	2	12554
1	14	597	0.964	34.715	2	111.12	2	-154.3	3.3	2	12553
1	13	694	0.916	34.714	2	113.88	2	-157.3	3.4	2	12552
1	12	849	0.806	34.710	2	116.86	2	-154.8	3.3	2	12551
1	26	999	0.722	34.707	2	119.63	2	-155.6	6.0	2	12550
1	10	1193	0.614	34.703	2	122.40	2	-160.1	3.3	2	12549
1	27	1394	0.525	34.700	2	124.32	2	-160.3	3.1	2	12548
1	8	1597	0.433	34.700	2	125.59	2	-155.7	3.1	2	12547
1	7	1791	0.355	34.698	2	126.00	2	-160.6	3.3	2	12546
1	6	1999	0.275	34.698	2	124.69	2	-161.4	3.4	2	12465
1	29	2200	0.194	34.698	2	120.58	2	-155.7	3.0	2	12464
1	28	2397	0.107	34.696	2	115.63	2	-149.4	3.3	2	12463
1	3	2600	0.036	34.696	2	111.55	2	-140.3	2.9	2	12462
1	2	2695	0.010	34.697	2	109.82	2	-142.1	4.6	2	12461
1	1	2767	-0.032	34.697	2	108.52	2	-142.0	3.1	2	12460