

WOCE AMS RADIOCARBON I: PACIFIC OCEAN RESULTS (P6, P16 AND P17)

ROBERT M. KEY,¹ PAUL D. QUAY,² GLENN A. JONES,³ A. P. McNICHOL,³
K. F. VON REDEN³ and ROBERT J. SCHNEIDER³

ABSTRACT. AMS radiocarbon results from the World Ocean Circulation Experiment in the Pacific Ocean show dramatic changes in the inventory and distribution of bomb-produced ^{14}C since the time of the GEOSECS survey (8/73–6/74). Near-surface $\Delta^{14}\text{C}$ values for the eastern portion of both the northern and southern subtropical gyres decreased by 25–50‰, with the change being greater in the north. Equatorial near-surface values have increased by *ca.* 25‰. Changes in the 250–750-m depth range are dramatically different between the northern and southern basins. The intermediate and mode waters of the southern basin have increased by as much as 75‰ since GEOSECS. Waters of similar density in the northern hemisphere are not exposed to the Southern Ocean circulation regime and are significantly less ventilated, showing maximum changes of *ca.* 50‰.

INTRODUCTION

This is the first in a series of papers reporting radiocarbon results from the World Ocean Circulation Experiment (WOCE). A general overview of the WOCE ^{14}C program was given by Key (1996). That paper shows WOCE Pacific Ocean cruise tracks with details of each leg, outlines the sampling strategy and method, and compares the early AMS and beta-counting results. Only results that were analyzed by accelerator mass spectrometry (AMS) are given here. We describe the AMS sampling and analysis method used during the WOCE program, present results from three sections in the Pacific Ocean, and qualitatively compare the results from one WOCE section to the GEOSECS data (Östlund and Stuiver 1980). In a companion paper, Stuiver *et al.* (1996) report on large-volume (LV) sample results from the sections discussed here.

METHODS AND PRECISION

On most Pacific WOCE legs, AMS ^{14}C sampling was limited to the upper water column (0–1200 m). Deep and bottom waters were generally sampled using LV samples that were subsequently extracted and analyzed using the β -counting technique. Full water column stations were spaced *ca.* 300 nautical miles apart (~556 km). The upper water column was sampled at one or more stations between each full depth station. On cruises that did not have a LV sampling component (*e.g.*, P6), the AMS technique was used for all samples.

As two very different techniques were used during the Pacific WOCE ^{14}C program, the accuracy of the AMS technique is just as important as the precision. This issue was addressed by Key (1996). With the data available so far, no statistically significant difference in accuracy has been found between the WOCE AMS measurements and the WOCE LV β -counting measurements. The same result was obtained when both WOCE methods were compared to GEOSECS results.

The internal precision of the AMS technique has improved from >10‰ in early 1992 to <4‰ for current measurements. The mean standard deviation of replicate samples is *ca.* 5‰. This value is still decreasing and should soon be as good as the precision obtained for the standard β -counting technique (~3‰). Details of the sample collection and analysis techniques and of the WOCE quality control procedures are given in Appendix I.

¹Ocean Tracer Laboratory, Department of Geosciences, Princeton University, Princeton, New Jersey 08544 USA

²Department of Oceanography, University of Washington, Seattle, Washington 98195 USA

³National Ocean Sciences AMS Facility, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543 USA

DATA SET

The AMS ^{14}C results measured so far for WOCE sections P6, P16 and P17 are listed in Appendix II. The location of the three sections is shown in Figure 1. Accompanying the $\Delta^{14}\text{C}$ data are pressure in decibars, temperature relative to the international temperature scale 1990, salinity relative to the Practical Salinity Scale and silicate concentration in $\mu\text{mol kg}^{-1}$. Also included are the quality control flag values assigned for the salinity, silicate and $\Delta^{14}\text{C}$ measurements. For details of the various legs that went into each section, see Key (1996).

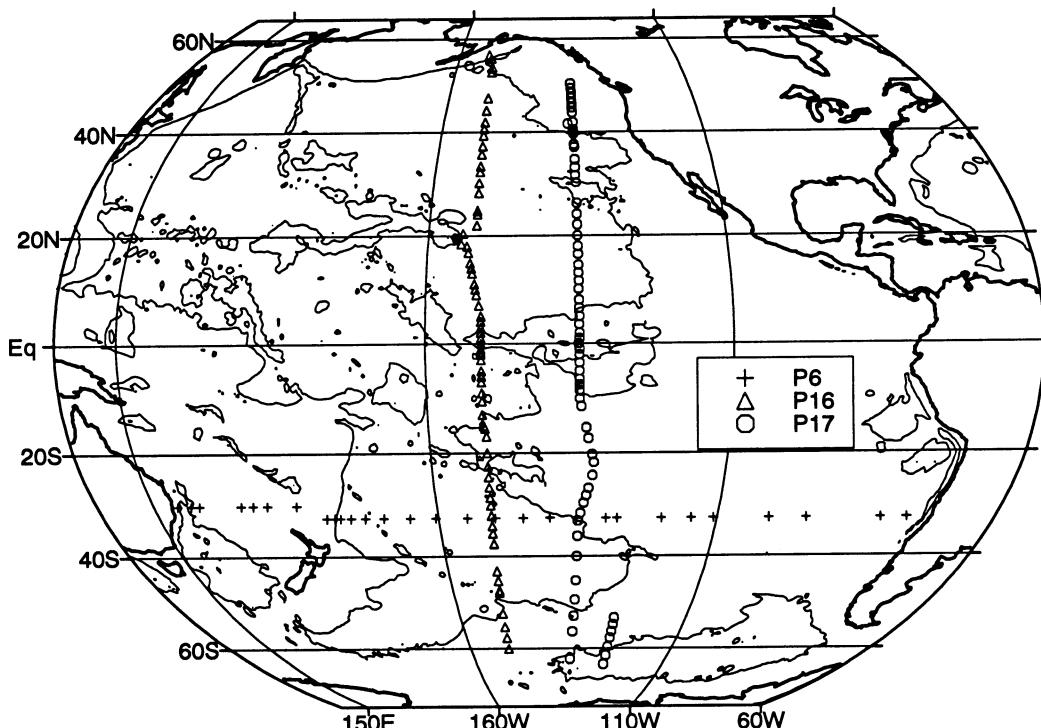


Fig. 1. Location of $\Delta^{14}\text{C}$ stations for WOCE sections P6, P16 and P17. Note that not all stations from the sections are shown, nor is data included here for all stations shown. Bathymetry shown is 4500 m.

RESULTS

Because of the sample distribution, the WOCE Pacific Ocean AMS results are used primarily to study upper ocean processes, whereas the LV samples are used to study deep and bottom water processes. The upper ocean $\Delta^{14}\text{C}$ distribution is dominated by the influx of ^{14}C generated by atmospheric nuclear weapons tests during the 1960s. If one can differentiate the bomb ^{14}C from the natural background component, then this information can be used to calibrate numerical global ocean circulation models (*e.g.*, Toggweiler, Dixon and Bryan 1989), to determine upwelling and thermocline ventilation rates (*e.g.*, Toggweiler, Dixon and Broecker 1991; Quay, Stuiver and Broecker 1983) and to estimate the transfer of CO_2 from the atmosphere to the ocean (*e.g.*, Broecker and Peng 1974; Peng, Key and Östlund 1996). An attempt to separate the bomb and natural components will be the topic of future publications.

Östlund and Rooth (1990: Fig. 2) compared adjacent vertical sections of TTO (Transient Tracers in the Ocean) and GEOSECS data for the North Atlantic Ocean. A different technique is used here to compare WOCE section P17 to GEOSECS. Comparison of GEOSECS to P16 yields very similar qualitative results and is therefore omitted. Unfortunately, it is impossible to assemble a reasonable zonal $\Delta^{14}\text{C}$ section from GEOSECS data for the South Pacific. Therefore, the major features of WOCE section P6 are simply described. Quantitative estimates for the Pacific will be carried out in the near future once the entire WOCE Pacific ^{14}C data set is available.

GEOSECS data is especially sparse in the eastern Pacific. In order to prepare the figures that follow, the Pacific GEOSECS data from approximately the dateline eastward were considered representative of an average eastern Pacific section. This average GEOSECS section is then compared to WOCE section P17 along 135°W . Property maps on density (or depth) surfaces for the Pacific clearly indicate that the primary trend of the property isolines is east to west rather than north to south, so the errors of this comparison should be reasonably small.

Figure 2 compares the surface $\Delta^{14}\text{C}$ values from the eastern Pacific GEOSECS stations (0–100m depth range, 1973–1974, stations 287, 290, 293, 296, 322, 320, 317, 326, 331, 334, 337, 343, 347, 214 and 217) and the WOCE P17 section (0–50m depth range) along 135°W (1991–1992). The GEOSECS data includes samples collected from Gerard barrels and obtained by pumping. WOCE section P17 contains data from five cruises: P17N, P17C, P16S17S, P16A17A and NOAA cruise

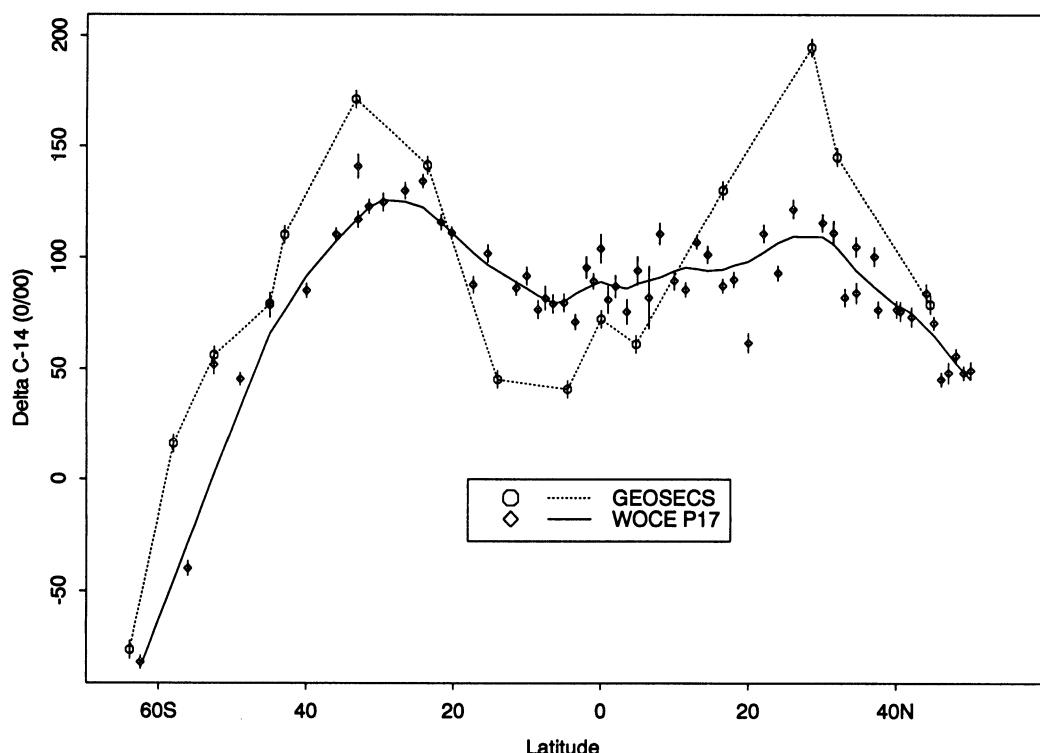


Fig. 2. Surface values from eastern Pacific GEOSECS section compared to WOCE section P17 data collected along 135°W . The values in the temperate zones of both hemispheres have decreased while the values in the tropical and equatorial latitudes have increased.

CGC-91 leg 1 (see Key 1996 for cruise details). The GEOSECS data are simply connected by a dotted line; a robust linear smoothing function was used to fit the WOCE data (solid line, data fraction per fit = 0.15; Cleveland 1979; Chambers *et al.* 1983).

During the early 1970s, the maximum $\Delta^{14}\text{C}$ values were almost always found in surface samples. GEOSECS sampling was carried out shortly after the maximum in atmospheric $\Delta^{14}\text{C}$ concentration in 1964–1965. At that time, air-sea gas exchange, forced by the large gradient between surface waters and the atmosphere, was the primary factor controlling the upper ocean ^{14}C concentration. Twenty years later, when the WOCE section was collected, the atmospheric concentration had dropped to *ca.* 25% of the 1965 maximum, and mixing and advection in the upper ocean had sufficient time to redistribute the surface signal into the interior. In the eastern Pacific WOCE sections, the maximum concentrations were frequently found below the surface at depths as great as 250 m.

The most obvious changes in surface concentration shown in Figure 2 are the mid-latitude decrease and the low-latitude equatorial increase. The mid-latitude change is greater in the North Pacific than in the South Pacific. At the time of GEOSECS, $\Delta^{14}\text{C}$ values as high as 205‰ were measured *ca.* 30°N (see also Broecker *et al.* 1985: Fig. 6). The highest North Pacific surface value measured on P17 was 122‰ at 25°N. During GEOSECS, the northern hemisphere mid-latitude surface values were higher than similar latitudes in the southern hemisphere, reflecting the fact that most of the atmospheric bomb testing was done in the north. This hemispheric difference is not apparent in the P17 WOCE data.

The Southern Ocean surface values decreased between GEOSECS and WOCE. It is possible that natural variations in the circumpolar circulation regime or differences in sampling location are responsible for the difference. A more plausible explanation is that the ^{14}C lost from the Southern Ocean surface waters has been flushed into the subsurface South Pacific.

During GEOSECS, the low-latitude eastern Pacific had a surface $\Delta^{14}\text{C}$ concentration of *ca.* 50‰. The concentration in this area increased to *ca.* 80‰ by the time of the WOCE occupation. During both surveys, the low-latitude surface minimum appears to be centered slightly south of the equator (Fig. 2). Both the equatorial $\Delta^{14}\text{C}$ increase and the displacement of the minimum south of the equator are consistent with the circulation scenario proposed by Toggweiler, Dixon and Broecker (1991). They argued that the low $\Delta^{14}\text{C}$ equatorial surface waters originated as ~15°C water that had upwelled off Peru and that the upwelled waters were, in turn, derived from the 11°–14°C thermostad water of the Equatorial Undercurrent. At the time of GEOSECS the undercurrent waters had not yet been contaminated by the bomb ^{14}C signal, but this situation changed by the time of the WOCE survey. Obviously, the partial WOCE data set presented here cannot prove this scenario.

The easiest way to visualize relative changes in the subsurface ^{14}C between GEOSECS and WOCE is to compare profiles of stations from the same area. Figure 3 shows results from two stations from each expedition. There are significant differences between the two GEOSECS profiles as well as between the GEOSECS and WOCE profiles. On average, the WOCE profiles have higher $\Delta^{14}\text{C}$ values down to a pressure of *ca.* 900 dB. The more northerly GEOSECS station (317) is significantly lower than the WOCE profiles in the 500–800 dB range, whereas the more southerly GEOSECS station is significantly lower in the 0–500 dB range. Overall, the differences are indicative of both the addition of, and redistribution of, bomb ^{14}C to the thermocline during the time interval separating the expeditions.

Figure 4 summarizes subsurface changes between GEOSECS and WOCE for the entire eastern Pacific. This section was prepared by individually gridding the eastern Pacific GEOSECS data

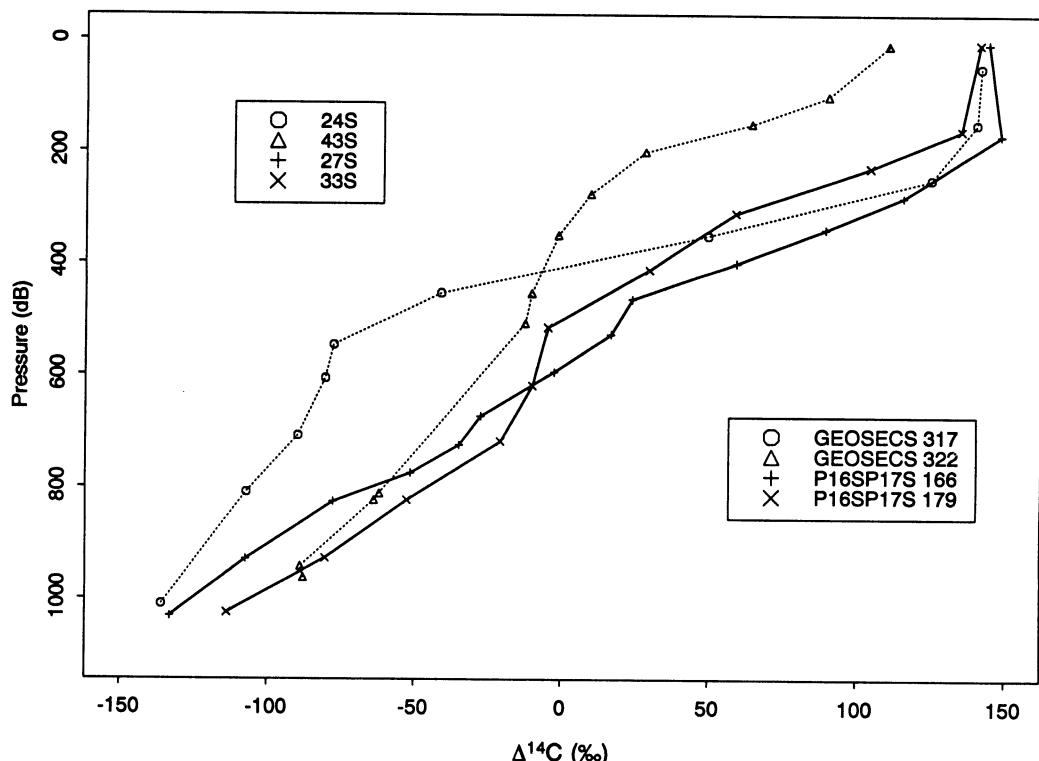


Fig. 3. Comparison of two profiles each from GEOSECS and WOCE. Although there are significant latitudinal differences in the GEOSECS stations, in general, the WOCE profiles (—) are more uniform and have higher $\Delta^{14}\text{C}$ values. All four stations are at $\sim 130^\circ\text{W}$ longitude.

(large dots) and the P17 data (small dots), then contouring the difference between the two gridded sections. The gridded values were calculated with a loess function (Chambers and Hastie 1991; Cleveland and Devlin 1988) using a smoothing parameter adjusted to compensate for the difference in data density (0.1 for WOCE; 0.2 for GEOSECS).

In Figure 4, the near-surface waters repeat the trend illustrated in Figure 2: an increase around the equator and decreases elsewhere. The decrease is larger in the northern gyre than in the southern, but the 0‰ isoline is at approximately the same depth. The equatorial near-surface increase extends down to *ca.* 150 m. In the 150–250-m zone, the waters just south of the equator show an increase in concentration, while those just north have generally decreased. A second zone of increased concentration is located in the 300–500-m depth range at the equator. This patch appears to be centered slightly north of the equator, but this offset may be an artifact of the GEOSECS sample locations and the gridding procedure.

The most remarkable feature in Figure 4 is the overall asymmetry about the equator. At the depth of mode and intermediate waters, $\Delta^{14}\text{C}$ values in the southern subtropical gyre increased by as much as 75‰. The equivalent northern gyre waters showed a maximum increase of only 50‰ and the aerial extent is significantly smaller than in the south. The difference is due to the fact that in the south, these density layers communicate freely with the circumpolar circulation regime (see Fig. 5). At the time of GEOSECS, very little, if any, of the bomb signal had penetrated the intermediate waters of

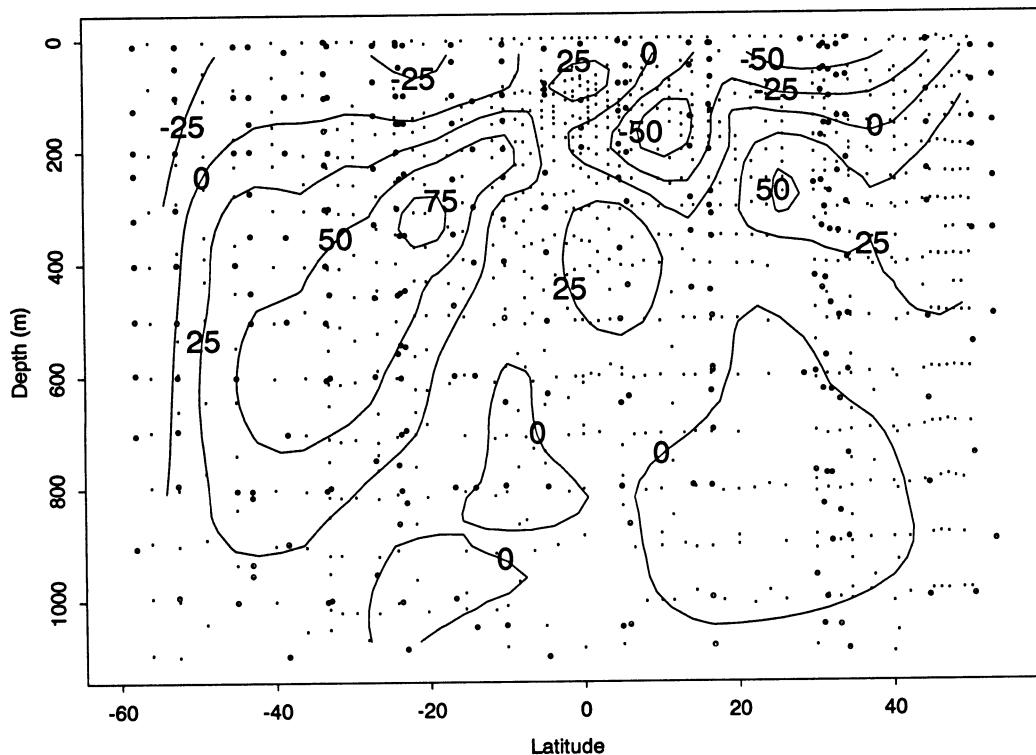


Fig. 4. Change in the $\Delta^{14}\text{C}$ (WOCE P17 (•); eastern Pacific GEOSECS (●)) from 1973 to 1992.

the southern gyre. By the early 1990s the bomb signal had penetrated northward to at least 10°S. The subtropical gyre intermediate waters in the North Pacific are not ventilated nearly so efficiently (see Talley 1993 for a detailed description). The flow pathway of the intermediate and mode waters from the circumpolar region into the subtropical gyre cannot be determined from the data now available. However, one can strongly infer the connection between the circumpolar circulation and the gyre ventilation by examining the WOCE data in density space rather than in depth space. Figure 5 shows $\Delta^{14}\text{C}$ contours for samples collected in the upper kilometer of WOCE section P17 that had a potential density ($\sigma_θ$) between 23.5 and 27.4 kg liter⁻¹. At the north end of the section only the 100‰ and 50‰ $\Delta^{14}\text{C}$ isolines intersect the ocean surface. At the southern end, contours at least as low as -50‰ outcrop. The fact that the 0‰ and -50‰ contours are essentially horizontal from the southern outcrop to ca. 25°S latitude implies that these levels can be ventilated primarily by advection. The mean trend of the deeper contours (-150‰ to 0‰) is upward to the north. As in Figure 4, there is an asymmetry about the equator. There is a distinct peak in the 50‰ and 0‰ contours centered ca. 8–10°N. This relative peak is present, but less pronounced in the deeper contours (-50‰ and -100‰) and is shifted slightly further northward than in the overlying contours. This peak in the contours represents a minimum in $\Delta^{14}\text{C}$ caused by upwelling and advection processes around the equator.

The comparison between WOCE P17 and GEOSECS described above would have been essentially the same if section P16 had been used. WOCE section P16 was a meridional section along ca. 152°W (Fig. 1). Sampling along this section involved 4 WOCE cruises: P16N, P16C, P16S17S and P16A17A (see Key 1996 for details). As with section P17, AMS sampling on P16 was restricted primarily to the upper water column and large-volume sampling was used for deep and bottom waters.

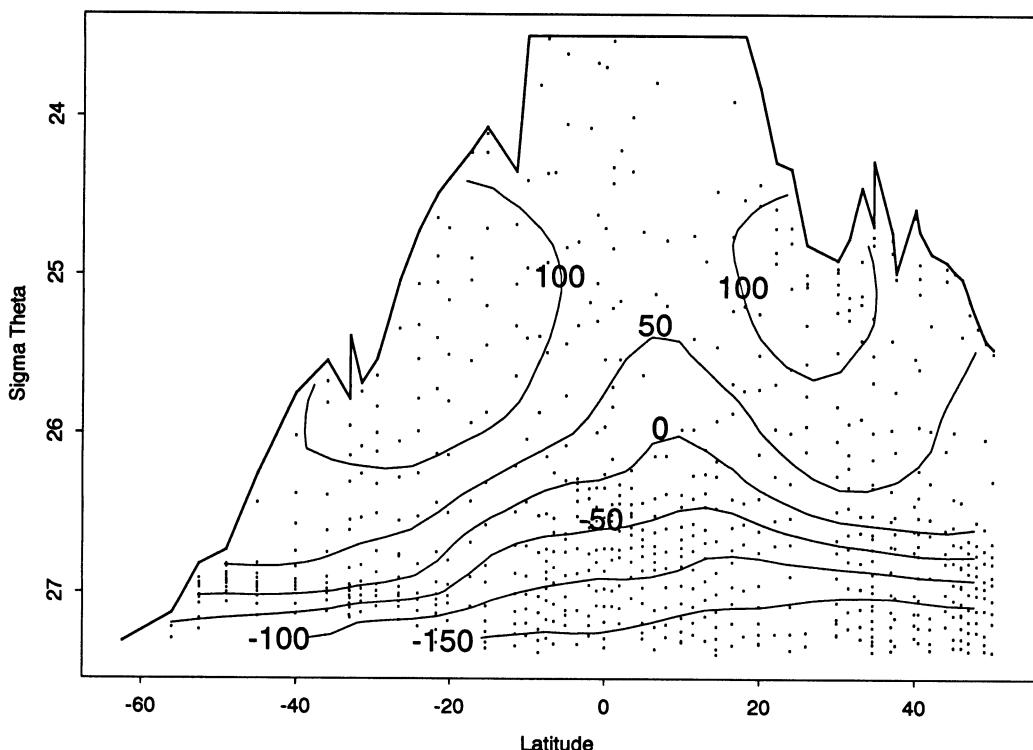


Fig. 5. $\Delta^{14}\text{C}$ contours in potential density anomaly space (σ_0) for WOCE section P17. The heavy line represents the ocean surface. A few values were clipped by the plot boundary ($23.5 \leq \sigma_0 \leq 27.4$) in the near-surface tropical waters, but no additional contour lines would have been drawn had the points not been omitted. The northernmost station was within 10 km of Kodiak Island, Alaska. The isopycnal surfaces having $\Delta^{14}\text{C}$ values of 0 or less do not outcrop at the north (at least at the time of year the samples were collected, May–June 1993).

Figure 6 shows the AMS results for section P16 contoured in potential density space. Data used in preparing the figure were limited to samples collected at pressures ≤ 1000 dB and potential densities between 23.5 and 27.4 kg liter $^{-1}$. The gridding technique was the same as for P17. One difference between Figure 5 and Figure 6 is the apparent outcrop of the 0‰ contour at the north end of P16. A detailed comparison of P16 and P17 will be presented when all of the measurements from both sections have been completed (~75% of the samples collected are reported here). Initial investigation indicates that the differences are consistent with the circulation described by Talley (1993).

WOCE section P6 (Fig. 1) was the first zonal section ever sampled for ^{14}C . This section was made up of three legs: P6E, P6C and P6W (see Key 1996 for details). Unlike most other Pacific WOCE cruises, only AMS samples were collected, ca. 70% of which have been measured. Those results are presented as a pressure section for the entire water column in Figure 7. The gridding technique was the same as for the previous sections. The contours in the upper water column are relatively flat except for a gentle eastward upslope for stations east of the dateline. This same trend exists in sections of other measured parameters (e.g., salinity, nutrients). The deep- and bottom-water contours are significantly more interesting. Additional contours were added to Figure 7 at -175‰ and -225‰ to help detail these features.

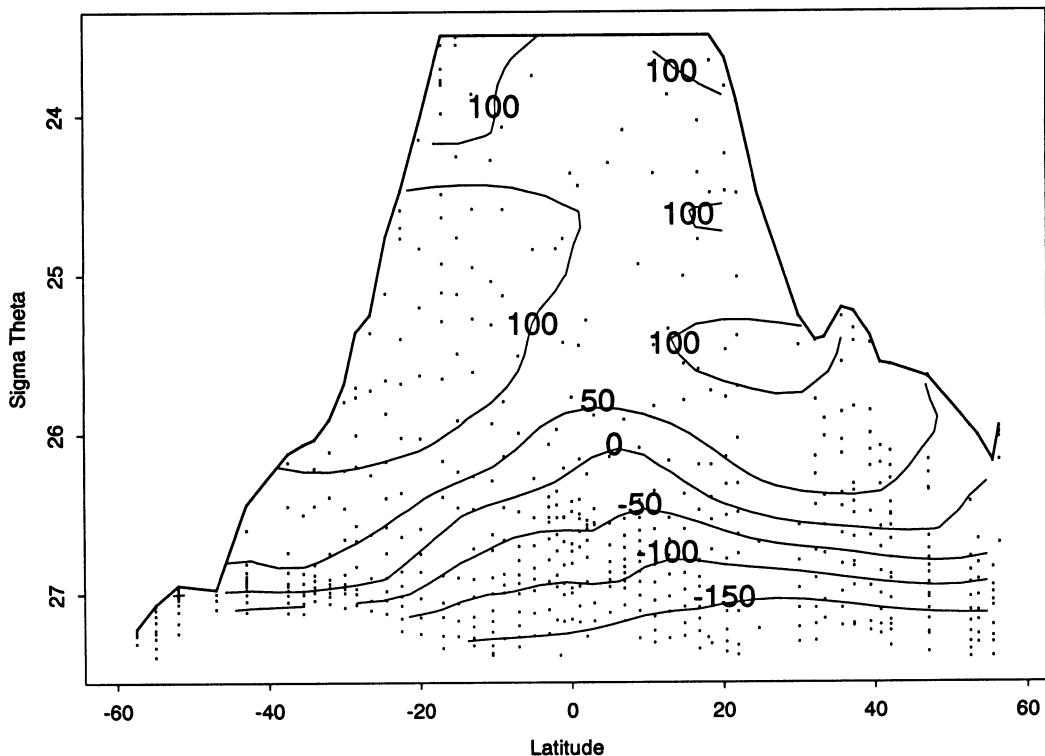


Fig. 6. $\Delta^{14}\text{C}$ contours for WOCE section P16 along ca. 152°W. The data used was limited to pressures < 1000 dB and $23.5 \leq \sigma_\theta \leq 27.4$. The heavy line is the ocean surface except near the equator where clipping eliminated a few data points. The gridding method was the same as used for Figure 1.

One prominent feature is the wedge of relatively “young” water ($\Delta^{14}\text{C} \geq -175\text{\textperthousand}$) at the seafloor between 180°W and 140°W. This is water that originates around Antarctica, subsequently passes through the Samoan Passage and eventually fills the abyssal North Pacific. Though not shown on this figure, the youngest waters in this mass are found somewhat off the bottom and against the ridge at the dateline. Two GEOSECS stations (241 & 251) sampled this water farther to the north, but the extent is much better defined here.

A second feature of the deepwater is the tongue of relatively old water ($\Delta^{14}\text{C} \leq -200\text{\textperthousand}$) extending westward from South America to ~175°E. This minimum was seen in both the eastern and western GEOSECS sections; however, those data gave no indication of the shape or extent of the tongue. What was totally missed by the GEOSECS sampling was the extreme minimum ($\Delta^{14}\text{C} \leq -225\text{\textperthousand}$) at 2000–2500 dB on the eastern side of the basin. Samples from a few WOCE stations very near the continental slope of South America have not been measured, but we now expect this mass of old water to extend to the slope. Toward the western end of this tongue (180°W–160°W), equally old values were found ($\Delta^{14}\text{C} \leq -225\text{\textperthousand}$); however, these minima were smoothed out by the gridding process. When contoured by hand, the western minima appear as discontinuous irregular blobs that are generally along the same density horizon as the minimum at the eastern side of the tongue. The current data set is insufficient to map the flow paths of these discrete minima to their origin; however, the $\Delta^{14}\text{C}$ values are sufficiently low that the water must be a mixture of deepwater from the North

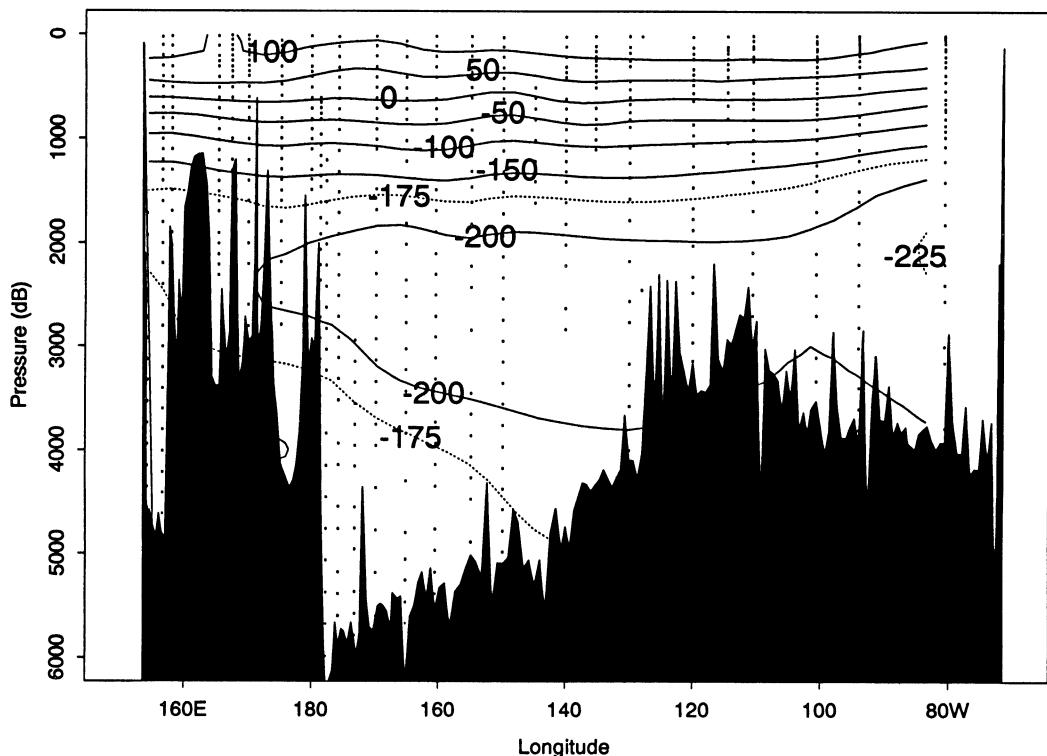


Fig. 7. $\Delta^{14}\text{C}$ on WOCE section P6 along ca. 32°S . Additional samples collected ca. 140°W and east of 80°W will eventually fill in the data gaps. The most important features to note are the relatively “young” ($>-175\text{\textperthousand}$) northward-flowing bottom waters ca. 170°W and the relatively “old” southward-flowing deepwaters ($<-225\text{\textperthousand}$) at 2500 dB east of 85°W .

Pacific with deep South Pacific water. The implication is that there are two major return pathways for North Pacific deepwater toward the circumpolar circulation regime.

A third, somewhat less prominent feature, is the near-bottom relative maximum ($\Delta^{14}\text{C} \geq -200\text{\textperthousand}$) on the eastern flank of the East Pacific Rise ($\sim 100^\circ\text{W}$). In map view, this feature appears as a northward-extending tongue. A similar tongue exists in maps of other properties (especially salinity). Data from sections P18, P19 and S4P may provide more detail about this feature.

CONCLUSION

The first published AMS results for the WOCE ^{14}C program clearly demonstrate the viability of this technique for measuring open-ocean thermocline values. Early calculations have indicated that there has been a 22% change in the bomb-produced $\Delta^{14}\text{C}$ inventory for the Northeast Pacific (Peng, Key and Östlund 1996). The figures presented here show that the changes in the Northeast Pacific have been confined to the upper 200–300 m of the water column. In the Southeast Pacific, these same isopleths have deepened by as much as 300 m, implying that changes in the bomb $\Delta^{14}\text{C}$ inventory in the South Pacific will be significantly greater than the 22% calculated for the North Pacific. In the deep- and bottom-water results from section P6, two return pathways for North Pacific deepwater are identified and the primary mass of northward-flowing water near the dateline is well delineated.

ACKNOWLEDGMENTS

The first author's portion of this work was supported by National Science Foundation grants OCE-9002485 and OCE-9120306. Both of these grants were supplemented by National Oceanographic and Atmospheric Administration funds. Additional NSF grants OCE-9002476 and OCE-9207500 were received by P. Quay. NOSAMS was supported by NSF Cooperative Agreement OCE 801015. Hydrography for the WOCE program was done primarily by the Scripps ODF group with assistance by the NOAA/PML and WHOI CTD groups. Special thanks are due the individual chief scientists for each of the legs and to W. Nowlin, who acted as coordinator for the U.S. Pacific WOCE effort. In addition to R. Key and P. Quay, ^{14}C sampling in the Pacific was carried out by R. Rotter and G. McDonald from Princeton University, and R. Sonnerup and S. King from the University of Washington.

REFERENCES

- Broecker, W. S. and Peng, T.-H. 1974 Gas exchange rates between air and sea. *Tellus* 26: 21–35.
- Broecker, W. S., Peng, T.-H., Östlund, G. and Stuiver, M. 1985 The distribution of bomb radiocarbon in the ocean. *Journal of Geophysical Research*. 90(C4): 6953–6970.
- Broecker, W. S., Sutherland, S., Smethie, W., Peng, T.-H. and Östlund, G. 1995 Oceanic radiocarbon: Separation of the natural and bomb components. *Global Biogeochemical Cycles* 9(2): 263–288.
- Chambers, J. M. and Hastie, T. J. 1991 *Statistical Models in S. Pacific Grove*, California, Wadsworth & Brooks: 608 p.
- Chambers, J. M., Cleveland, W. S., Kleiner, B. and Tukey, P. A. 1983 *Graphical Methods for Data Analysis*. Belmont, California, Wadsworth: 395 p.
- Cleveland, W. S. 1979 Robust locally weighted regression and smoothing scatterplots. *Journal of the American Statistical Association* 74: 829–836.
- Cleveland, W. S. and Devlin, S. J. 1988 Locally-weighted regression: An approach to regression analysis by local fitting. *Journal of the American Statistical Association* 83: 596–610.
- Key, R. M. 1991 Radiocarbon. In *WOCE Operations Manual*. WHP Office Report WHPO91-1. Woods Hole, Massachusetts, Woods Hole Oceanographic Institute.
- Key, R. M. 1991b Large volume sampling. In *WOCE Operations Manual*. WHP Office Report WHPO91-1. Woods Hole, Massachusetts, Woods Hole Oceanographic Institute.
- Key, R. M. 1996 WOCE Pacific radiocarbon program. *Radiocarbon*, this issue.
- McNichol, A. P., Gagnon, A. R., Jones, G. A. and Osborne, E. A. 1992 Illumination of a black box: Gas composition changes during graphite target preparation for AMS. In Long, A. and Kra, R. S., eds., *Proceedings of the 14th International ^{14}C Conference. Radiocarbon* 34(3): 321–329.
- McNichol, A. P., Jones, G. A., Hutton, D. L. Gagnon, A. R. and Key, R. M. 1994 The rapid preparation of seawater ΣCO_2 for radiocarbon analysis at the National Ocean Sciences AMS Facility. *Radiocarbon* 36(2): 273–246.
- Osborne, E. A., McNichol, A. P., Gagnon, A. R., Hutton, D. L. and Jones, G. A. 1994 Internal and external checks in the NOSAMS Sample Preparation Laboratory for target quality and homogeneity. *Nuclear Instruments and Methods in Physics Research* B92: 158–161.
- Östlund, H. G. and Rooth, C. G. H. 1990 The North Atlantic tritium and radiocarbon transients 1972–1983. *Journal of Geophysical Research* 95(C11): 20,147–20,165.
- Östlund, H. G. and Stuiver, M. 1980 GEOSECS Pacific radiocarbon. *Radiocarbon* 22(1): 25–53.
- Peng, T.-H., Key, R. M. and Östlund, H. G. 1996 Temporal variations of bomb radiocarbon inventory in the Pacific Ocean. *Marine Chemistry*, in press.
- Quay, P. D., Stuiver, M. and Broecker, W. S. 1983 Upwelling rates for the equatorial Pacific Ocean derived from the bomb ^{14}C distribution. *Journal of Marine Research* 41: 769–792.
- Schneider, R. J., McNichol, A. P., Nadeau, M. J. and von Reden, K. F. 1995 Measurements of the Oxalic Acid I / Oxalic Acid II ratio as a quality control parameter at NOSAMS. In Cook, G. T., Harkness, D. D., Miller, B. F. and Scott, E. M., eds., *Proceedings of the 15th International ^{14}C Conference. Radiocarbon* 37(2): 693–696.
- Stuiver, M. 1980 Workshop on ^{14}C reporting. In Stuiver, M. and Kra, R. S., eds., *Proceedings of the 10th International ^{14}C Conference. Radiocarbon* 22(3): 964–966.
- Stuiver, M. and Robinson, S. W. 1974 University of Washington GEOSECS North Atlantic carbon-14 results. *Earth and Planetary Science Letters* 23: 87–90.
- Stuiver, M., Robinson, S. W., Östlund, H. G. and Dorsey, H. G. 1974 Carbon-14 calibration between the University of Washington and the University of Miami

- GEOSECS laboratories. *Earth and Planetary Science Letters* 23: 65–68.
- Stuiver, M., Östlund, G., Key, R. M. and Reimer, P. J. Large-volume WOCE radiocarbon sampling in the Pacific Ocean. *Radiocarbon*, this issue.
- Talley, L. 1993 Distribution and formation of North Pacific Intermediate Water. *Journal of Physical Oceanography* 23: 517–537.
- Toggweiler, J. R., Dixon, K. and Bryan, K. 1989 Simulations of radiocarbon in a coarse-resolution world ocean model I. Steady state pre-bomb distributions. *Journal of Geophysical Research* 94(C6): 8217–8242.
- Toggweiler, J. R., Dixon, K. and Broecker, W. S. 1991 The Peru upwelling and the ventilation of the South Pacific thermocline. *Journal of Geophysical Research* 96(C11): 20,467–20,497.
- Vogel, J. S., Suthon, J. R. and Nelson, D. E. 1987 ^{14}C background levels in an accelerator mass spectrometry system. *Radiocarbon* 29: 323–333.

APPENDIX I: DETAILED DESCRIPTION OF METHODS

Small-volume water samples collected for AMS ^{14}C analysis were taken directly from 12-liter Niskin-type bottles used on Rosette/CTD casts. The samples were drawn into 500-ml borosilicate glass bottles with ground glass stoppers. The bottle was rinsed three times with sample water prior to filling (total rinse volume ~500 ml). A small headspace was left in the bottle for expansion. After filling, the water sample was poisoned with 0.1 ml of saturated HgCl_2 solution. On some cruises, the air temperature in the sampling area was low enough that a significant fraction of the HgCl_2 precipitated from the stock solution. In these cases, twice as much poison was added. The ground glass joint was wiped dry, then lubricated with Apiezon M® prior to sealing. After warming to room temperature, the bottles were wiped dry of condensation and the stopper further secured with a large rubber band. The sample bottles were stored and shipped in insulated plastic cases. Once filled with samples, each case was tied closed with an inventory list enclosed. The sample cases were always shipped via surface transportation with special care taken to avoid freezing conditions. All of the AMS samples collected by investigators in the U.S. are being analyzed at the National Ocean Sciences AMS Facility (NOSAMS) at Woods Hole Oceanographic Institution.

When WOCE samples arrive at NOSAMS, they are inventoried, assigned a receipt number, and placed in an analysis queue. Individual boxes of samples are transferred to the sample preparation laboratory, where the samples are acidified and stripped of CO_2 on an automated preparation line according to the method described in McNichol *et al.* (1994). CO_2 is extracted directly from the collection bottle after placing a stripping probe into the bottle while both are in a N_2 -filled glove bag. Acid is added by syringe through a septum and CO_2 is stripped out by bubbling with N_2 gas on a glass vacuum line. The extracted, purified CO_2 is converted to a filamentous carbon/Fe mixture (referred to as graphite) by a catalytic hydrogen reduction (McNichol *et al.* 1994; Vogel *et al.* 1987). Prior to graphite reduction, a small portion of the CO_2 is removed for stable isotope analysis on a VG Optima mass spectrometer. Target quality is checked by a variety of means (Osborne *et al.* 1994). To introduce the samples to the AMS, the graphite is compressed to a target in an aluminum target holder using an automated press. Forty-three WOCE targets are loaded onto one AMS sample wheel, with the remaining positions occupied by standards and blanks. Each target is analyzed in the accelerator for nine 5-min runs, and the data are collected and analyzed according to published procedures (Schneider *et al.* 1995). *Ca.* 14% of the samples analyzed are standards or blanks.

As measurements are completed, NOSAMS submits quarterly data reports to the PI responsible for the samples. In addition to the $\Delta^{14}\text{C}$ data, the reports contain measured values for total inorganic carbon (TCO_2) and $\delta^{13}\text{C}$. The TCO_2 and $\delta^{13}\text{C}$ data are provided for quality control purposes. These TCO_2 measurements are not of sufficient quality to be useful as an oceanographic measurement. High-precision carbon system measurements were carried out, however, on all WOCE cruises on which ^{14}C samples were collected. The carbon measurements were made as part of the Department of Energy sponsored Global Survey of CO_2 in the Ocean, which was in turn a part of the National Science Foundation Joint Global Ocean Flux Study (JGOFS). These data will be published elsewhere by the various PIs in that survey. The $\delta^{13}\text{C}$ measurements are sufficiently precise to be useful for oceanographic work. All of the $\delta^{13}\text{C}$ results made as part of the AMS ^{14}C program were done either by NOSAMS or by P. Quay. As with the carbon system measurements, the $\delta^{13}\text{C}$ results will be reported elsewhere.

As part of the WOCE program, one or more “experts” is chosen to assure that the quality of each measurement meets the WOCE standards. The end result is that each hydrographic measurement is assigned a quality control flag. The WOCE quality control flag values relevant to the $\Delta^{14}\text{C}$ measurements are summarized in Table 1. Interpretation of these flags is unambiguous except for values 3 and 4. The following approach was used to assign these two flags:

- On a station-by-station basis, $\Delta^{14}\text{C}$ was plotted against pressure. Any points not lying on a generally “smooth” trend were noted.
- $\Delta^{14}\text{C}$ was next plotted against silicate concentration (see Broecker *et al.* 1995 for rationale) and deviant points noted. If a datum deviated from both the depth and silicate plots by more than twice the expected error or *ca.* 10‰, it was flagged 3. Any datum that was obviously very bad ($> \text{ca. } 3$ standard deviations from the trend) was flagged 4. Flag values of 3 were occasionally degraded to 4 if other measured values from the same Niskin bottle were also flagged 3 or 4.
- Wherever possible, data from depths > 1000 m were checked against GEOSECS data (Östlund and Stuiver 1980).
- Whenever possible, crossover points from different cruises were checked against each other.
- Neighboring stations were always checked against each other.
- Vertical sections against depth were prepared and manually contoured. If a datum that had been noted in the above steps, but not flagged 3 or 4, was also anomalous on the section plot, then that datum flag was degraded from 2 to 3.

TABLE 1. WOCE Quality Control Flag Values for ^{14}C Data

Flag value	Meaning
1	Sample was collected
2	Nominal result
3	Questionable result
4	Bad result
5	No result reported
6	Result of replicate analysis
9	No sample collected

This method is somewhat subjective. In general, the criteria used to judge the ^{14}C data were more lenient than for other measurements because of the difficulty and expense involved (any samples known to be bad at the time of collection were not analyzed or were at least noted on the sample collection sheets). All results, regardless of the final quality-control flag, have been left in the final reported data set so that anyone using the data can override the original quality-control decision. It is our belief that more points are flagged 2 that should be flagged 3 or 4 than *vice versa*. For replicate analyses (flag value 6), the value reported is the error-weighted mean. The uncertainty reported with replicates is the larger of the error-weighted standard deviation of the mean and the normal standard deviation.

When the WOCE Pacific sampling program began, NOSAMS was barely operational. The facility was planned and built for high-precision routine analysis of seawater samples, but in 1991 their “routine” precision, ultimate precision and real-world sample throughput were unknown. These were the primary reasons that the initial WOCE AMS sampling was restricted to the upper portion of the water column where the $\Delta^{14}\text{C}$ gradients were known to be relatively large. As the Pacific fieldwork progressed, NOSAMS demonstrated dramatic improvement in sample precision. In early 1992 the precision at NOSAMS was 16‰. This uncertainty had decreased to $< 6\%$ by early 1993. By January, 1996, the exponentially decreasing trend in estimated precision was asymptotically approaching $\sim 2.5\%$. This estimate includes components for counting, background and blank. A more realistic estimate can be obtained by comparing the results from duplicate samples. A recent compilation of all WOCE AMS replicates indicated a mean precision $\leq 5\%$. This estimate includes all error sources and should be a reliable mean precision estimate for the individual analyses reported here. The specific reason for the difference between the calculated estimate and the replicate estimate is unknown, but must be due to sample collection, sample storage or gas extraction.

APPENDIX II: WOCE CRUISE DATA, SECTIONS P6, P16 AND P17

WOCE Cruises P6E, P6C, P6W
5/2/92 - 5/26/92, 5/30/92 - 6/7/92, 6/13/92 - 6/30/92
H. Bryden, M. McCartney, J. Toole

Station 17

Latitude			32.500°S			Date			5/7/92		
Longitude			76.002°W			Bottom depth			4170		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	10.1	17.848	34.071	2	0.00	2	70.33	3.57	2	3684
1	35	27.0	17.849	34.070	2	0.00	2	85.58	3.37	2	3683
1	34	52.5	17.954	34.160	2	0.00	2	68.40	4.61	2	3682
1	33	77.3	13.147	34.043	2	0.00	2	98.59	3.33	2	3980
1	32	103.1	11.695	33.994	2	1.34	2	81.85	3.50	2	3979
1	31	131.2	11.120	34.152	2	5.17	2	75.75	3.40	2	3978
1	30	152.3	10.443	34.191	2	6.68	2	64.90	3.83	2	3681
1	29	203.0	10.884	34.556	2	20.69	2	-1.41	4.54	2	3669
1	28	253.1	9.749	34.520	2	20.85	2	-19.99	3.34	2	3668
1	27	302.9	9.043	34.518	2	22.69	2	-45.53	3.54	2	3667
1	26	403.3	7.485	34.436	2	22.03	2	-45.64	3.43	2	3666
1	25	502.2	6.362	34.361	2	19.02	2	-37.71	2.94	2	3665
1	24	602.6	5.444	34.294	2	16.99	2	-43.37	5.33	2	3686
1	23	707.8	4.786	34.290	2	24.19	2	-78.63	3.98	2	3664
1	22	808.3	4.296	34.326	2	35.70	2	-95.53	3.05	2	3663
1	21	808.3	4.296	34.326	2	35.69	2	NA	NA	5	
1	20	1007.9	3.736	34.438	2	62.55	2	-162.84	2.70	2	3662
1	19	1007.9	3.736	34.440	2	62.55	2	-158.92	3.15	2	3685
1	18	1197.2	3.321	34.511	2	81.21	2	-190.31	3.35	2	3684
1	17	1197.2	3.321	34.511	2	81.55	2	-194.51	4.33	2	3683
1	16	1403.9	2.943	34.560	3	94.88	2	-187.93	2.78	2	3682
1	15	1499.1	2.814	34.577	2	100.04	2	-211.60	3.50	2	3980
1	14	1600.7	2.682	34.589	2	103.87	2	-217.44	2.62	2	3978
1	13	1600.7	2.682	34.589	2	103.69	2	-215.85	2.57	2	3979
1	12	1710.5	2.543	34.602	2	107.85	2	-200.21	5.21	2	3681
1	11	1906.2	2.330	34.623	2	113.68	2	-196.76	6.43	2	3680
1	10	1906.2	2.330	34.622	2	113.50	2	-189.95	10.02	2	3679
1	9	2202.0	2.241	34.630	2	115.00	2	-206.75	3.79	2	3678
1	8	2250.4	2.064	34.660	2	121.50	2	-233.77	10.51	2	3673
1	7	2753.2	1.853	34.669	2	122.98	2	-227.30	7.62	2	3677
1	5	3007.9	1.800	34.675	2	124.63	2	-210.28	2.70	2	3676
1	3	3596.1	1.653	34.690	2	123.62	2	-206.16	4.21	2	3675

Station 24

Latitude				32.500°S				Date				5/10/92	
Longitude				80.655°W				Bottom depth				3920	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
1	36	11.1	18.711	34.596	2	0.12	2	94.42	3.14	2	3709		
1	35	28.3	18.723	34.596	2	0.13	2	104.92	3.39	2	3708		
1	34	53.8	18.720	34.595	2	0.13	2	91.08	4.20	2	4160		
1	33	83.3	14.825	34.303	2	0.13	2	98.24	3.40	2	4158		
1	32	130.5	13.258	34.149	2	0.29	2	100.38	3.42	2	4159		
1	31	149.4	12.662	34.153	2	0.64	2	96.01	4.30	2	4161		
1	30	209.4	10.630	34.137	2	2.12	2	100.69	3.17	2	3707		
1	29	256.1	9.723	34.282	2	7.42	2	56.22	10.54	2	3706		
1	28	301.6	9.071	34.379	2	13.05	2	24.18	9.88	2	3705		
1	27	382.9	7.544	34.395	2	16.70	2	-15.31	5.48	2	3704		
1	26	453.8	6.474	34.335	2	14.22	2	-4.21	2.76	2	3703		
1	25	535.9	5.877	34.307	2	13.73	2	-20.29	2.70	2	3702		
1	24	614.6	5.322	34.274	2	14.56	2	-22.02	3.23	2	3701		
1	23	658.9	5.106	34.270	2	16.55	2	-39.41	2.78	2	3700		
1	22	708.2	4.848	34.273	2	20.53	3	-53.89	6.51	2	3699		
1	21	729.2	4.758	34.283	2	20.70	2	-56.68	5.58	2	3687		
1	20	804.3	4.436	34.310	2	31.14	2	-88.69	2.96	2	3768		
1	19	870.3	4.198	34.353	2	40.42	2	-120.85	2.77	2	3724		
1	18	918.6	4.089	34.392	2	49.19	2	-145.56	2.65	2	3723		
1	17	982.8	3.889	34.418	3	56.83	2	-151.38	3.31	2	3722		
1	16	1071.0	3.694	34.470	2	69.42	2	-169.86	2.43	2	3721		
1	15	1213.5	3.331	34.512	2	81.52	2	-184.28	2.36	2	3720		
1	13	1419.5	3.003	34.561	2	95.62	2	-203.88	2.34	2	3718		
1	12	1628.5	2.691	34.599	4	103.42	2	-215.21	3.05	2	3717		
1	11	1822.1	2.450	34.611	2	110.72	2	-217.44	2.97	2	3716		
1	9	2207.9	2.088	34.645	2	118.04	2	-227.70	2.28	2	3715		
1	8	2406.7	1.980	34.655	2	119.70	2	-232.51	2.27	2	3719		
1	7	2560.7	1.914	34.665	2	121.20	2	-225.87	2.75	2	3714		
1	5	3000.1	1.809	34.678	2	124.05	2	-224.17	2.68	2	3713		
1	4	3157.2	1.777	34.682	2	124.40	2	-219.13	3.09	2	3712		
1	2	3787.6	1.637	34.694	2	123.84	2	-195.08	3.21	2	3711		
1	1	3962.4	1.634	34.695	2	123.93	2	-191.47	2.45	2	3710		

Station 44

Latitude				32.503°S				Date				5/16/92	
Longitude				94.001°W				Bottom depth				3935	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
1	36	9.5	18.160	34.541	2	0.22	2	102.49	3.45	2	3782		
1	35	21.2	18.165	34.540	2	0.22	2	116.10	4.95	2	4187		

Station 44 (continued)

Latitude			32.503°S			Date			5/16/92		
Longitude			94.001°W			Bottom depth			3935		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	33	46.5	18.166	34.540	2	0.22	2	121.00	3.74	2	3781
1	31	76.4	16.774	34.591	2	0.22	2	115.81	3.32	2	3804
1	30	97.3	15.247	34.453	2	0.37	2	121.03	3.71	2	3780
1	29	110.5	15.398	34.525	4	0.36	2	124.46	3.75	2	3779
1	28	131.3	14.291	34.326	2	0.36	2	112.08	3.72	2	3778
1	27	150.5	13.847	34.295	2	0.52	2	118.34	4.01	2	3777
1	26	177.4	13.338	34.349	2	0.67	2	106.18	3.65	2	3776
1	25	201.8	12.374	34.341	2	0.99	2	106.89	3.62	2	3775
1	24	249.8	10.789	34.291	2	1.60	2	97.24	5.55	2	3774
1	23	300.6	8.701	34.271	2	3.48	2	67.78	6.39	2	3773
1	22	399.9	6.727	34.305	2	7.07	2	25.56	2.81	2	3772
1	21	502.5	6.088	34.301	2	8.32	2	10.15	2.81	2	3771
1	20	651.9	5.443	34.267	2	10.97	2	-7.55	3.71	2	3770
1	19	777.5	4.824	34.260	2	17.83	2	-49.97	3.05	2	3798
1	18	852.3	4.491	34.277	2	24.24	2	-83.36	3.37	2	3797
1	17	953.4	4.026	34.317	2	35.47	2	-118.57	2.89	2	3796
1	16	1101.2	3.551	34.396	2	54.51	2	-141.51	3.21	2	3795
1	15	1205.1	3.343	34.463	2	68.86	2	-162.86	2.81	2	3794
1	14	1502.5	2.857	34.563	2	93.67	2	-197.05	3.32	2	3793
1	13	1601.8	2.660	34.579	2	97.73	2	-213.21	8.07	2	3792
1	12	1801.9	2.355	34.611	2	102.72	2	-213.31	2.67	2	3791
1	11	2002.8	2.152	34.631	2	107.24	2	-199.77	2.74	2	3790
1	10	2205.4	1.984	34.653	2	111.76	2	-199.18	3.25	2	3789
1	9	2401.9	1.858	34.670	2	115.03	2	-209.85	2.63	2	3788
1	8	2605.7	1.790	34.673	3	115.82	2	-213.11	3.27	2	3787
1	7	2808.1	1.761	34.685	2	117.69	2	-204.11	2.66	2	3786
1	6	3013.1	1.748	34.687	2	118.31	2	-208.58	2.67	2	3785
1	4	3394.6	1.747	34.691	2	119.40	2	-201.11	2.66	2	3784
1	3	3601.8	1.758	34.691	2	119.70	2	-197.87	2.37	2	3769
1	2	3802.7	1.771	34.692	2	119.70	2	-202.21	4.39	2	3783

Station 54

Latitude			32.499°S			Date			5/19/92		
Longitude			100.666°W			Bottom depth			3523		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	36	12.8	19.645	35.171	2	0.46	2	156.92	5.33	2	3944
1	34	57.3	19.637	35.176	2	0.46	2	156.15	5.18	2	3943
1	33	82.5	19.582	35.166	2	0.45	2	151.07	3.50	2	3942

Station 54 (continued)

Latitude				32.499°S			Date				5/19/92	
Longitude				100.666°W			Bottom depth				3523	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM	
1	31	131.4	17.092	34.955	2	0.45	2	159.74	3.67	2	3941	
1	30	157.1	16.370	34.845	2	0.45	2	143.58	4.34	2	3940	
1	29	205.1	15.440	34.717	2	0.44	2	114.46	3.59	2	3809	
1	28	253.2	13.552	34.544	2	0.93	2	114.57	4.26	2	3808	
1	27	303.7	10.900	34.383	2	2.08	2	82.81	4.73	2	3807	
1	26	354.9	9.026	34.353	2	3.88	2	55.27	3.49	2	3806	
1	25	405.5	7.647	34.319	2	5.52	2	16.82	5.57	2	3976	
1	24	454.8	6.867	34.319	2	7.17	2	14.56	4.35	2	3805	
1	23	505.7	6.486	34.323	2	7.81	2	5.39	3.78	2	3803	
1	22	555.6	6.180	34.310	2	8.47	2	0.18	3.04	2	3802	
1	21	605.4	5.931	34.295	2	8.96	2	-4.21	3.67	2	3801	
1	20	657.4	5.701	34.282	2	9.78	2	-4.32	6.17	2	3800	
1	19	705.4	5.503	34.270	2	10.76	2	-12.09	3.51	2	3799	
1	18	756.6	5.283	34.261	2	12.40	2	-17.60	6.28	2	3960	
1	17	805.8	5.085	34.258	2	14.21	2	-35.17	2.80	2	3959	
1	16	905.5	4.597	34.272	2	22.91	2	-76.28	3.15	2	3958	
1	15	1006.5	4.050	34.323	2	36.70	2	-115.47	2.82	2	3957	
1	14	1129.9	3.626	34.403	2	54.92	2	-147.10	4.59	2	3956	
1	13	1251.1	3.473	34.467	2	70.19	2	-161.43	2.79	2	3955	
1	12	1352.3	3.274	34.513	2	80.21	2	-167.86	3.00	2	3954	
1	11	1499.3	2.942	34.547	2	89.73	2	-178.42	2.53	2	3953	
1	10	1701.7	2.573	34.584	2	98.26	2	-188.55	2.47	2	3952	
1	8	2100.8	2.065	34.645	2	108.91	2	-196.53	2.47	2	3951	
1	7	2301.0	1.926	34.666	2	111.69	2	-196.60	2.47	2	3950	
1	6	2504.4	1.818	34.680	2	114.97	2	-192.71	2.53	2	3949	
1	5	2700.0	1.752	34.683	2	117.10	2	-188.32	2.49	2	3948	
1	3	3101.2	1.728	34.690	2	118.07	2	-192.79	2.56	2	3947	
1	2	3330.9	1.736	34.691	2	118.39	2	-188.89	2.52	2	3946	
1	1	3567.7	1.749	34.691	2	118.39	2	-181.42	2.61	2	3945	

Station 69

Latitude				32.500°S			Date				5/23/92	
Longitude				110.667°W			Bottom depth				3005	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM	
1	36	12.0	18.971	34.749	2	0.00	2	117.59	3.29	2	3981	
1	34	56.9	18.913	34.745	2	0.17	2	123.47	3.13	2	3967	
1	32	107.5	16.076	34.801	2	0.17	2	129.00	3.36	2	3966	
1	31	131.2	15.129	34.649	2	0.17	2	119.65	3.39	2	3965	
1	28	206.6	12.946	34.539	2	0.68	2	112.98	3.14	2	3964	

Station 69 (continued)

Latitude			32.500°S			Date			5/23/92		
Longitude			110.667°W			Bottom depth			3005		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	27	255.2	10.607	34.419	2	1.53	2	88.48	4.13	2	3963
1	23	456.8	6.975	34.369	2	6.13	2	28.64	3.55	2	3961
1	21	557.8	6.463	34.350	2	7.32	2	15.01	5.24	2	3997
1	20	608.3	6.280	34.334	2	8.17	2	8.29	4.78	2	3996
1	19	657.3	6.031	34.328	2	9.19	2	-5.17	3.05	2	3995
1	18	707.8	5.801	34.307	2	10.38	2	-15.87	4.12	2	3994
1	16	807.4	5.345	34.284	2	14.30	2	-48.97	2.96	2	3993
1	15	910.4	4.834	34.288	2	20.94	2	-79.45	4.07	2	3992
1	14	1009.3	4.323	34.318	2	30.14	2	-101.35	3.00	2	3991
1	13	1135.5	3.713	34.368	2	45.47	2	-127.37	3.26	2	3990
1	12	1211.4	3.452	34.408	2	53.64	2	-134.25	2.81	2	3989
1	10	1413.4	2.927	34.509	2	73.05	2	-168.99	3.03	2	3988
1	8	1692.5	2.385	34.597	2	92.29	2	-185.81	2.87	2	3987
1	6	2091.7	1.959	34.664	4	113.41	2	-209.37	4.47	2	3986
1	5	2295.2	1.840	34.664	2	118.87	2	-208.46	3.20	2	3985
1	4	2498.3	1.799	34.668	2	119.89	2	-213.77	2.78	2	3984
1	3	2704.0	1.781	34.673	2	120.23	2	-215.52	3.65	2	3983
1	1	3039.7	1.785	34.676	2	120.42	2	-203.85	2.90	2	3982

Station 85

Latitude			32.501°S			Date			6/4/92		
Longitude			119.992°W			Bottom depth			3161		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	23.9	19.834	35.200	2	0.16	2	124.31	9.65	2	4013
1	33	122.4	17.588	35.158	2	0.07	2	119.78	4.32	2	4012
1	31	182.7	15.829	35.087	2	0.33	2	116.90	3.60	2	4011
1	30	232.7	14.550	34.968	2	0.78	2	116.48	4.75	2	4010
1	28	331.4	11.197	34.672	2	2.17	2	80.84	6.95	2	4009
1	27	382.3	9.908	34.560	2	2.94	2	58.97	5.02	2	4008
1	26	431.7	8.431	34.446	2	4.04	2	57.90	4.03	2	4007
1	25	482.3	7.420	34.378	2	5.61	2	25.34	2.49	2	4006
1	24	562.2	6.714	34.358	2	6.86	2	12.49	5.64	2	4005
1	23	636.7	6.264	34.332	2	7.96	2	-5.52	3.31	2	4004
1	20	862.9	5.160	34.287	2	15.88	2	-65.57	3.18	2	4003
1	19	964.4	4.707	34.301	2	23.70	2	-83.50	4.52	2	4002
1	18	1063.9	4.202	34.327	2	32.95	2	-105.37	6.26	2	4001
1	16	1265.1	3.362	34.424	2	55.78	2	-139.31	2.83	2	4000
1	14	1469.8	2.841	34.509	2	72.35	2	-168.20	2.72	2	3999

Station 85 (continued)

Latitude			32.501°S			Date			6/4/92		
Longitude			119.992°W			Bottom depth			3161		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	12	1671.8	2.493	34.578	2	87.79	2	-177.31	2.98	2	3998
1	11	1772.1	2.375	34.603	2	94.14	2	-185.04	3.23	2	4063
1	10	1873.4	2.224	34.625	2	102.25	2	-197.64	2.27	2	4062
1	9	2024.3	2.100	34.636	2	108.45	2	-203.84	2.23	2	4061
1	7	2327.0	1.926	34.654	2	115.55	2	-208.21	3.00	2	4060
1	6	2480.5	1.826	34.661	2	119.50	2	-211.61	5.71	2	4059
1	4	2783.6	1.739	34.672	2	121.64	2	-209.42	2.53	2	3977
1	3	2959.8	1.723	34.674	2	121.59	2	-206.71	2.82	2	4015
1	2	3137.8	1.707	34.681	2	122.50	2	-205.12	12.32	2	4014

Station 100

Latitude			32.501°S			Date			6/8/92		
Longitude			130.001°W			Bottom depth			4086		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	35	17.8	19.485	35.264	2	0.21	2	140.04	3.67	2	4087
1	33	118.0	16.077	35.118	2	0.40	2	135.87	3.58	2	4086
1	31	175.4	15.014	35.030	2	0.58	2	130.72	3.16	2	4085
1	29	250.4	13.059	34.896	2	1.64	2	107.40	3.01	2	4084
1	28	303.2	10.931	34.705	2	2.70	2	83.63	3.23	2	4083
1	25	447.4	7.364	34.409	2	5.70	2	40.64	2.80	2	4082
1	24	522.7	6.827	34.378	2	6.76	2	18.18	2.98	2	4081
1	23	598.1	6.476	34.357	2	7.99	2	5.35	2.90	2	4080
1	22	669.3	6.186	34.374	4	9.40	2	-14.08	4.50	2	4079
1	21	741.9	5.834	34.325	3	11.51	2	-32.53	4.62	2	4078
1	20	811.6	5.492	34.304	2	14.85	2	-50.81	3.79	2	4077
1	19	885.6	5.129	34.301	2	19.07	2	-63.21	3.74	2	4076
1	17	1082.9	4.104	34.338	2	36.30	2	-106.01	3.73	2	4075
1	16	1230.3	3.473	34.401	2	51.41	2	-131.33	3.67	2	4074
1	15	1374.8	2.986	34.476	2	66.87	2	-153.11	4.05	2	4073
1	14	1580.4	2.545	34.562	2	86.02	2	-173.17	2.36	2	4072
1	13	1782.6	2.305	34.607	2	99.37	2	-192.23	3.65	2	4095
1	11	2174.7	1.962	34.642	2	116.23	2	-209.24	2.91	2	4094
1	9	2565.1	1.774	34.663	2	121.14	2	-212.09	2.38	2	4093
1	8	2764.7	1.726	34.667	2	121.67	2	-205.53	4.42	2	4092
1	6	3168.5	1.631	34.676	2	122.19	2	-200.09	2.74	2	4091
1	5	3370.3	1.607	34.681	2	122.36	2	-203.51	2.65	2	4090
1	4	3575.5	1.577	34.684	2	122.01	2	-201.95	3.14	2	4089
1	2	3994.9	1.564	34.690	2	121.77	2	-197.98	2.38	2	4088

Station 127

Latitude			32.501°S			Date			6/19/92		
Longitude			149.827°W			Bottom depth			5088		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	30.1	17.947	35.332	2	0.43	2	112.98	5.34	2	2461
1	34	119.9	16.832	35.418	2	0.71	2	123.19	3.68	2	2232
1	32	218.4	14.255	35.098	2	1.01	2	85.60	9.06	2	2260
1	30	318.3	11.149	34.804	2	3.01	2	37.30	5.03	2	2231
1	28	417.5	8.686	34.559	2	4.87	2	30.00	5.51	2	1980
1	27	518.9	7.510	34.452	2	5.73	2	5.88	7.25	2	2257
1	26	616.1	6.951	34.405	2	7.17	2	-0.09	3.28	2	1979
1	25	715.6	6.461	34.364	2	9.02	2	-47.64	6.22	2	2256
1	24	817.6	5.899	34.331	2	12.61	2	-57.19	2.85	6	1902,2144
1	23	918.2	5.285	34.316	2	19.06	2	-84.45	7.05	6	1903,1952
1	22	1015.9	4.715	34.325	2	27.08	2	-102.19	5.16	2	1904
1	21	1115.9	4.157	34.348	2	36.67	2	-123.36	7.46	2	1905
1	20	1316.3	3.320	34.428	2	56.16	2	-149.29	3.39	6	1906,1951
1	19	1517.6	2.793	34.523	2	77.65	2	-170.11	3.38	2	2929
1	18	1725.0	2.452	34.587	2	94.84	2	-204.73	10.56	2	1877
1	17	1931.3	2.247	34.621	2	107.00	2	-196.48	30.85	6	1907,2141
1	16	2134.9	2.102	34.638	2	114.03	2	-203.33	2.47	2	1878
1	15	2337.7	1.985	34.651	2	120.04	2	-231.49	7.08	2	1876
1	14	2540.5	1.881	34.661	2	124.63	2	-222.72	5.90	2	1879
1	13	2744.8	1.799	34.667	2	127.93	2	-230.94	5.47	6	1908,1949
1	12	2950.0	1.733	34.675	2	128.21	2	-206.21	2.64	2	1880
1	11	3151.8	1.663	34.682	2	127.36	2	-198.40	2.93	2	1881
1	10	3355.0	1.574	34.688	2	125.06	2	-212.14	6.58	2	1882
1	9	3557.5	1.480	34.695	2	122.77	2	-205.37	7.07	2	1883
1	8	3760.2	1.418	34.699	2	121.77	2	-209.08	8.70	2	2251
1	7	3966.1	1.361	34.702	2	121.20	2	-195.96	3.17	2	2262
1	6	4168.4	1.311	34.703	2	120.48	2	-170.39	4.40	2	2238
1	5	4369.9	1.276	34.707	2	120.20	2	-179.74	2.90	2	2237
1	4	4571.6	1.233	34.709	2	119.34	2	-179.15	4.14	2	2236
1	3	4775.9	1.202	34.710	2	119.06	2	-166.70	2.96	2	2235
1	2	4978.6	1.162	34.712	2	119.20	2	-160.56	3.25	2	2234
1	1	5176.0	1.144	34.713	2	119.50	2	-163.00	2.60	2	2233

Station 133

Latitude				32.503°S			Date			6/20/92	
Longitude				154.842°W			Bottom depth			5007	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	18.4	18.324	35.367	2	0.37	2	100.32	6.48	2	2254
1	34	108.0	18.067	35.311	2	0.37	2	138.63	6.08	2	1997
1	33	157.4	15.451	35.254	2	0.64	2	89.51	5.06	3	1996
1	32	208.0	14.246	35.119	2	1.06	2	112.33	9.08	2	1994
1	31	257.7	12.766	34.962	2	2.02	2	88.01	2.96	2	2044
1	29	357.9	9.881	34.681	2	3.97	2	55.85	2.74	2	2050
1	28	408.1	8.580	34.556	2	4.95	2	28.68	4.41	2	1998
1	27	509.0	7.726	34.471	2	5.91	2	13.70	4.21	2	1471
1	26	610.4	6.931	34.402	2	7.44	2	-3.28	4.13	2	2020
1	23	911.6	5.282	34.319	2	19.13	2	-72.62	3.16	2	1469
1	22	1012.7	4.660	34.328	2	27.63	2	-92.18	3.11	2	1468
1	21	1162.2	3.867	34.370	2	42.40	2	-118.30	3.05	2	1467
1	20	1315.6	3.334	34.428	2	55.63	2	-126.09	2.99	2	1466
1	19	1466.7	2.878	34.512	2	72.76	2	-165.80	3.03	2	1465
1	18	1617.3	2.616	34.569	2	87.38	2	-173.31	2.96	2	1464
1	17	1821.2	2.349	34.614	2	103.67	2	-197.95	2.81	2	1472
1	16	2023.4	2.183	34.634	2	112.57	2	-195.14	2.86	2	1463
1	15	2227.6	2.053	34.646	2	120.51	2	-206.91	2.85	2	1462
1	14	2431.3	1.958	34.654	2	124.97	2	-211.31	2.84	2	1461
1	12	2838.3	1.807	34.668	2	129.14	2	-209.16	2.83	2	1460
1	9	3449.5	1.604	34.692	2	123.97	2	-197.92	2.86	2	1459
1	8	3652.9	1.530	34.700	2	120.48	2	-187.04	2.47	2	2230
1	7	3858.0	1.456	34.709	2	116.99	2	-187.91	2.94	2	2228
1	6	4059.2	1.363	34.710	2	116.71	2	-169.61	2.81	2	2227
1	5	4261.2	1.263	34.713	2	116.01	2	-179.15	2.77	2	1981
1	4	4468.3	1.189	34.712	2	117.68	2	-167.01	2.15	2	2226
1	3	4675.3	1.158	34.712	2	117.95	2	-191.91	4.61	3	2255
1	2	4881.0	1.124	34.712	2	118.78	2	-174.12	5.11	2	2003
1	1	5092.3	1.140	34.717	4	118.92	2	-172.10	3.22	2	2229

Station 140

Latitude				32.495°S			Date			6/23/92	
Longitude				160.494°W			Bottom depth			5521	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	21.3	17.533	35.421	2	0.42	2	111.06	3.58	2	1478
1	34	111.7	17.069	35.370	2	0.43	2	117.43	3.82	2	1477
1	32	210.8	14.390	35.185	2	1.49	2	106.55	10.63	2	2004
1	31	310.6	11.230	34.846	2	3.14	2	80.03	6.40	2	2022
1	30	408.4	8.829	34.575	2	4.35	2	49.03	3.47	2	1475

Station 140 (continued)

Latitude			32.495°S			Date			6/23/92		
Longitude			160.494°W			Bottom depth			5521		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	28	612.3	7.146	34.427	2	6.91	2	14.90	3.35	2	1474
1	27	711.7	6.732	34.388	2	8.26	2	-6.86	3.33	2	1473
1	26	813.9	6.136	34.347	2	11.42	2	-43.22	4.17	2	1691
1	24	1100.1	4.510	34.338	2	31.25	2	-113.15	5.55	2	1690
1	22	1492.2	2.917	34.503	2	71.79	2	-155.83	4.89	2	1688
1	21	1694.2	2.571	34.580	2	91.76	2	-174.32	4.24	2	1687
1	20	1894.1	2.374	34.613	2	103.93	2	-190.78	2.84	2	1686
1	19	2101.7	2.198	34.632	2	114.15	2	-208.56	3.55	2	1685
1	18	2304.8	2.080	34.645	2	120.17	2	-213.70	2.91	2	1684
1	17	2507.1	1.989	34.652	2	124.38	2	-219.96	7.52	2	1683
1	16	2709.1	1.913	34.659	2	127.24	2	-219.65	7.19	2	1682
1	15	2909.5	1.837	34.666	2	129.22	2	-232.22	4.85	2	1821
1	14	3108.1	1.759	34.674	2	129.07	2	-218.97	3.07	2	1681
1	13	3313.2	1.691	34.684	2	125.93	2	-216.42	3.50	2	1680
1	12	3526.5	1.621	34.698	2	120.23	2	-192.81	2.89	2	1679
1	11	3729.7	1.541	34.710	2	114.38	2	-179.90	2.93	2	1678
1	10	3932.7	1.436	34.716	2	112.15	2	-169.03	2.91	2	1677
1	9	4133.9	1.317	34.717	2	112.91	2	-168.85	7.65	2	2002
1	8	4343.2	1.182	34.715	2	115.92	2	-161.01	2.34	2	2049
1	7	4549.4	1.096	34.712	2	118.49	2	-181.82	6.51	4	1995
1	6	4759.2	1.061	34.710	2	120.01	2	-160.02	2.47	2	2048
1	5	4965.8	1.053	34.709	2	120.91	2	-155.79	2.53	2	2047
1	4	5173.2	1.066	34.708	2	121.08	2	-157.87	2.49	2	2046
1	3	5377.8	1.086	34.708	2	121.25	2	-154.39	2.39	2	2045
1	1	5622.8	1.117	34.709	2	120.87	2	-159.21	4.67	2	1993

Station 148

Latitude			32.500°S			Date			6/25/92		
Longitude			165.166°W			Bottom depth			6329		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	35	63.2	16.574	35.380	2	0.61	2	102.05	5.63	2	1959
1	34	113.3	15.286	35.306	2	0.91	2	103.15	6.15	2	1958
1	33	212.6	12.705	35.044	2	2.57	2	84.62	4.07	2	1957
1	32	413.3	8.799	34.585	2	4.98	2	32.97	3.52	2	1956
1	31	513.4	7.798	34.480	2	5.88	2	27.34	3.11	2	1963
1	30	613.7	7.098	34.419	2	6.94	2	10.55	3.02	2	1962
1	29	714.5	6.535	34.371	2	9.35	2	-33.67	4.32	2	1961
1	28	815.2	5.963	34.338	2	12.81	2	-42.81	4.64	2	1960
1	27	1017.8	4.902	34.351	2	28.41	2	-79.28	2.89	2	1922,2114

Station 148 (continued)

Latitude				32.500°S				Date				6/25/92	
Longitude				165.166°W				Bottom depth				6329	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
1	26	1218.0	3.675	34.389	2	47.33	2	-112.07	2.93	2	1921		
1	25	1218.1	3.675	34.385	2	45.68	2	-107.91	2.92	2	1920		
1	23	1814.5	2.428	34.606	2	102.23	2	-198.74	2.98	2	1926		
1	22	2014.1	2.268	34.626	2	111.38	2	-196.35	2.70	2	1925		
1	21	2362.4	2.048	34.645	2	122.03	2	-224.54	5.34	6	1924,2145		
1	20	2518.8	1.975	34.652	2	125.19	2	-222.63	2.53	2	1954		
1	19	2770.6	1.881	34.661	2	128.64	2	-230.75	3.35	2	2142		
1	18	3023.9	1.790	34.672	2	129.25	2	-215.21	2.59	2	1913		
1	17	3226.4	1.713	34.686	2	124.60	2	-206.99	2.73	2	1912		
1	16	3432.6	1.629	34.698	2	119.95	2	-199.01	2.29	6	1911,1950		
1	15	3636.9	1.541	34.712	2	113.95	2	-184.28	3.91	2	1910		
1	13	3838.6	1.428	34.718	2	111.57	2	-177.91	3.43	2	2143		
1	14	3838.6	1.428	34.717	2	111.86	2	-167.05	2.85	3	1915		
1	12	4040.5	1.280	34.715	4	116.67	2	-155.83	2.72	4	1914		
1	11	4292.9	1.120	34.710	4	119.82	2	-166.96	2.54	2	1784		
1	9	4794.6	1.003	34.709	2	121.18	2	-164.10	2.88	2	1789		
1	8	5049.1	1.009	34.707	2	121.63	2	-163.11	2.59	2	1788		
1	7	5247.0	1.026	34.708	2	121.94	2	-162.55	2.33	2	1787		
1	6	5457.6	1.051	34.706	2	121.94	2	-159.79	3.16	2	1786		
1	5	5664.9	1.078	34.707	2	121.94	2	-154.26	2.67	2	1785		
1	3	6069.3	1.132	34.706	2	122.11	2	-153.06	3.38	2	1783		
1	24	6458.8	1.187	34.706	2	122.32	2	-161.93	3.67	2	1955		
1	1	6459.0	1.187	34.707	2	122.42	2	-152.57	2.58	2	1782		

Station 157

Latitude				32.492°S				Date				6/27/92	
Longitude				169.845°W				Bottom depth				5601	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
1	36	18.2	16.690	35.515	2	-0.06	2	109.04	3.77	2	1704		
1	34	107.0	16.089	35.472	2	0.14	2	102.76	3.77	2	1703		
1	33	208.0	13.033	35.103	2	1.71	2	50.10	4.33	2	1702		
1	32	308.4	10.771	34.816	2	3.62	2	47.14	9.86	2	1701		
1	31	406.8	8.710	34.591	2	5.36	2	51.96	7.22	2	1700		
1	30	507.6	7.758	34.487	2	5.38	2	33.66	4.63	2	1699		
1	29	607.2	7.187	34.434	2	6.61	2	7.10	3.56	2	1698		
1	28	707.3	6.658	34.386	2	8.52	2	-21.07	7.38	6	1354,1697		
1	27	806.8	6.054	34.347	2	12.14	2	-30.52	2.87	2	2193		
1	26	907.4	5.567	34.341	2	18.17	2	-51.13	2.88	2	2192		
1	25	1004.7	4.955	34.345	2	26.25	2	-95.18	5.03	2	2191		

Station 157 (continued)

Latitude			32.492°S			Date			6/27/92		
Longitude			169.845°W			Bottom depth			5601		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	24	1099.5	4.349	34.356	2	35.02	2	-112.97	4.61	2	2223
1	22	1486.2	2.945	34.513	2	73.47	2	-179.86	6.31	2	2466
1	21	1687.2	2.572	34.585	2	93.39	2	-223.46	4.99	2	2221
1	20	1889.2	2.372	34.616	2	105.09	2	-191.96	6.11	3	2122
1	19	2092.9	2.214	34.633	2	113.35	2	-208.72	3.54	2	2465
1	18	2300.4	2.099	34.643	2	120.25	2	-222.81	3.45	2	2464
1	17	2508.6	2.003	34.654	2	124.22	2	-227.31	3.21	2	2121
1	16	2718.8	1.922	34.659	2	126.67	2	-201.13	2.76	2	2190
1	15	2928.1	1.846	34.665	2	128.41	2	-196.35	2.52	2	2189
1	14	3134.2	1.767	34.677	2	127.25	2	-193.83	3.01	2	2188
1	13	3341.3	1.691	34.692	2	120.77	2	-192.32	2.84	2	2222
1	12	3543.4	1.608	34.708	2	114.11	2	-191.56	5.49	2	2463
1	11	3749.6	1.482	34.719	2	109.17	2	-164.47	3.07	2	2117
1	10	3954.7	1.326	34.720	2	110.24	2	-155.95	5.51	2	2120
1	8	4362.1	1.091	34.712	2	117.35	2	-160.72	3.09	2	2116
1	7	4566.2	1.045	34.711	2	118.76	2	-201.04	5.32	4	2220
1	6	4770.5	1.027	34.709	2	120.00	2	-163.58	5.24	2	2119
1	4	5177.3	1.039	34.709	2	121.10	2	-169.36	3.20	2	2118
1	2	5590.2	1.086	34.708	2	121.35	2	-164.57	6.21	2	2462
1	1	5705.1	1.100	34.708	2	121.15	2	-163.55	3.11	2	2115

Station 165

Latitude			32.499°S			Date			6/29/92		
Longitude			173.173°W			Bottom depth			5827		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	16	2942.0	1.825	34.675	2	126.04	2	-221.16	5.01	2	2209
1	15	3147.0	1.737	34.689	2	121.04	2	-214.97	4.76	2	2208
1	14	3346.7	1.660	34.707	2	114.05	2	-185.72	3.69	2	2207
1	13	3552.0	1.544	34.719	2	109.22	2	-175.71	4.39	2	2206
1	12	3753.3	1.425	34.721	2	109.73	2	-168.64	2.82	2	2205
1	11	3953.7	1.299	34.721	2	111.74	2	-172.06	3.40	2	2204
1	10	4150.1	1.193	34.717	2	114.40	2	-166.56	3.42	2	2203
1	9	4351.5	1.112	34.712	2	116.91	2	-183.28	2.94	4	2198
1	8	4551.0	1.067	34.712	2	118.57	2	-165.44	3.02	2	1696
1	7	4753.4	1.048	34.710	2	119.91	2	-155.50	2.55	2	2035
1	6	4953.7	1.040	34.708	2	120.58	2	-155.20	5.34	2	1353
1	5	5155.2	1.041	34.708	2	121.41	2	-173.89	3.47	4	1694
1	4	5358.3	1.054	34.705	2	121.59	2	-155.25	2.42	2	2034
1	3	5566.9	1.073	34.708	2	122.25	2	-149.80	8.02	2	2023

Station 165 (continued)

Latitude				32.499°S			Date			6/29/92	
Longitude				173.173°W			Bottom depth			5827	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	2	5778.3	1.099	34.708	2	122.26	2	-163.46	3.29	2	1693
1	1	5938.4	1.118	34.710	2	122.11	2	-161.45	3.66	2	1692

Station 171

Latitude				32.501°S			Date			7/1/92	
Longitude				175.750°W			Bottom depth			5868	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	24.7	16.588	35.555	2	1.08	2	114.34	3.85	2	2274
1	34	115.4	14.969	35.367	2	2.41	2	103.88	4.03	2	2273
1	33	213.1	13.107	35.127	2	4.07	2	63.77	7.19	2	2272
1	32	315.5	11.458	34.934	2	5.24	2	40.15	8.69	2	2271
1	31	413.0	9.814	34.736	2	6.57	2	33.12	3.40	2	2270
1	30	514.7	8.688	34.618	2	8.56	2	18.20	4.13	2	2269
1	29	615.9	7.645	34.507	2	10.06	2	-5.01	3.22	2	2268
1	28	717.0	6.839	34.437	2	12.39	2	-33.28	3.47	2	2218
1	27	815.5	6.287	34.404	2	17.38	2	-53.27	2.87	2	2217
1	26	914.7	5.444	34.349	2	21.38	2	-74.37	3.90	2	2267
1	25	1115.4	4.209	34.390	2	41.84	2	-125.62	4.13	2	2266
1	24	1318.3	3.423	34.471	2	63.65	2	-151.73	4.29	2	2265
1	23	1516.3	2.943	34.539	2	80.93	2	-173.91	3.44	2	2264
1	22	1715.9	2.655	34.583	2	94.72	2	-190.63	2.81	2	3725
1	21	1913.7	2.444	34.611	2	105.28	2	-215.56	5.04	2	2225
1	20	2113.9	2.314	34.626	2	111.29	2	-235.58	4.31	2	2224
1	19	2314.4	2.208	34.636	2	115.80	2	-214.36	2.65	2	2212
1	18	2513.1	2.104	34.646	2	119.82	2	-210.21	2.76	2	2211
1	17	2715.1	1.972	34.661	2	122.99	2	-209.09	3.71	2	2210
1	16	2913.7	1.856	34.687	2	114.85	2	-185.71	3.50	2	2216
1	15	3110.5	1.742	34.703	2	110.87	2	-171.33	3.52	2	2215
1	14	3311.9	1.635	34.718	2	106.21	2	-164.98	2.65	2	2214
1	13	3519.9	1.487	34.725	2	106.73	2	-155.76	2.65	2	2213
1	11	3934.5	1.200	34.717	2	113.44	2	-161.63	2.84	2	2798
1	10	4134.3	1.108	34.715	2	116.11	2	-164.92	3.61	2	2197
1	8	4545.1	1.040	34.709	2	119.49	2	-152.36	2.64	2	2196
1	7	4756.1	1.025	34.711	3	120.50	2	-154.97	2.69	2	2195
1	6	4965.5	1.032	34.708	2	121.19	2	-146.34	2.96	3	2194
1	5	5172.6	1.043	34.708	2	121.54	2	-170.60	2.60	2	2202
1	4	5381.4	1.060	34.709	2	121.39	2	-176.84	2.98	2	2201
1	3	5590.1	1.083	34.706	2	121.25	2	-174.56	2.63	2	2200
1	1	5981.1	1.132	34.708	2	121.63	2	-168.46	3.27	2	2199

Station 175

Latitude			32.500°S				Date			7/2/92	
Longitude			177.667°W				Bottom depth			7310	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	24	1206.9	3.835	34.421	2	52.30	2	-130.27	6.30	2	2470
1	23	1410.3	3.183	34.502	2	72.90	2	-181.98	3.18	2	2394
1	22	1611.8	2.797	34.566	2	91.13	2	-183.84	3.31	2	2393
1	21	1814.8	2.551	34.596	2	101.54	2	-196.41	5.28	2	2469
1	20	2015.1	2.383	34.617	2	109.98	2	-214.09	3.42	2	2412
1	19	2219.9	2.268	34.630	2	114.70	2	-197.02	3.12	2	2397
1	18	2423.1	2.154	34.640	2	119.62	2	-217.56	6.15	2	2396
1	17	2623.8	2.053	34.648	2	123.75	2	-211.97	4.51	2	2799
1	16	2828.7	1.923	34.661	2	127.11	3	-218.01	5.62	2	2409
1	15	3031.4	1.837	34.673	2	125.75	3	-206.26	3.09	2	2395
1	14	3231.3	1.765	34.705	2	110.06	2	-174.58	5.61	2	2400
1	13	3531.4	1.536	34.723	2	106.34	2	-198.44	5.80	3	2605
1	12	3838.8	1.244	34.720	2	112.63	2	-151.58	4.55	2	2399
1	11	4144.6	1.066	34.712	2	118.14	2	-152.32	6.33	2	2398
1	10	4451.3	1.032	34.709	2	120.12	2	-157.52	6.17	2	2468
1	9	4756.3	1.022	34.709	2	121.12	2	-164.85	3.31	2	2392
1	8	5058.9	1.037	34.707	2	121.52	2	-163.30	3.14	2	2391
1	7	5365.4	1.061	34.707	2	121.93	2	-159.29	6.40	2	2390
1	6	5671.3	1.092	34.706	2	122.14	2	-169.47	5.84	2	2389
1	5	5982.2	1.127	34.706	2	122.16	2	-156.74	4.75	2	2388
1	4	6292.0	1.166	34.706	2	122.36	2	-178.46	7.02	2	2387
1	3	6498.2	1.193	34.706	2	122.38	2	-162.51	3.26	2	2467
1	2	6709.9	1.220	34.706	2	122.39	2	-177.20	4.64	2	2386
1	1	6904.1	1.250	34.709	3	122.50	2	-165.46	4.90	2	2385

Station 179

Latitude			32.499°S				Date			7/3/92	
Longitude			178.648°W				Bottom depth			3455	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	24	605.1	7.925	34.521	2	7.94	2	19.55	3.64	2	1484
1	23	654.9	7.647	34.498	2	9.87	2	-7.14	3.48	2	1483
1	22	705.1	7.112	34.444	2	9.68	2	-12.97	3.45	2	1482
1	21	757.1	6.950	34.449	2	13.55	2	-42.57	3.22	2	1481
1	20	806.2	6.560	34.425	2	15.68	2	-56.12	5.21	2	3586
1	18	958.0	5.770	34.418	2	25.94	2	-85.41	3.04	2	1480
1	17	1059.4	5.134	34.416	2	34.45	2	-103.39	3.00	2	1479
1	16	1161.1	4.633	34.427	2	43.15	2	-122.19	5.16	2	2416
1	15	1261.9	4.238	34.442	2	51.08	2	-148.62	6.23	2	2415
1	14	1364.0	3.831	34.473	2	61.53	2	-147.70	5.98	2	2414

Station 179 (continued)

Latitude			32.499°S			Date			7/3/92		
Longitude			178.648°W			Bottom depth			3455		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	13	1464.2	3.532	34.498	2	68.10	2	-144.53	4.36	2	2413
1	12	1614.8	3.105	34.550	2	83.19	2	-146.07	8.15	2	2406
1	11	1766.9	2.832	34.590	2	94.97	2	-160.39	6.15	2	2405
1	10	1916.4	2.649	34.608	2	101.16	2	-207.36	5.26	2	2411
1	9	2067.0	2.432	34.624	2	108.11	2	-195.76	4.69	2	2410
1	8	2217.4	2.264	34.640	2	113.33	2	-214.71	12.42	2	2404
1	7	2367.3	2.206	34.646	2	115.25	2	-209.15	5.21	2	2403
1	6	2518.8	1.960	34.665	2	120.08	2	-230.94	5.73	3	2472
1	5	2720.7	1.802	34.703	2	108.66	2	-178.61	4.19	2	2402
1	4	2920.7	1.652	34.719	2	105.17	2	-161.14	4.87	2	2401
1	3	3123.3	1.447	34.726	2	106.71	2	-165.89	4.79	2	2408
1	2	3326.0	1.271	34.723	2	110.57	2	-173.58	9.15	2	2407
1	1	3477.2	1.218	34.722	2	112.61	2	-168.69	4.68	2	2471

Station 182

Latitude			32.500°S			Date			7/3/92		
Longitude			179.918°E			Bottom depth			2914		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	17.7	16.518	35.593	2	1.29	2	95.95	9.61	2	1873
1	33	128.2	15.534	35.420	2	1.48	2	105.56	3.30	2	1900
1	31	207.7	13.750	35.245	2	3.56	2	66.88	4.04	6	1901,1948
1	29	306.8	12.128	35.035	2	4.70	2	62.54	3.24	2	1874
1	28	356.9	11.286	34.926	2	5.65	2	37.69	3.07	2	1875
1	27	406.5	10.524	34.835	2	6.60	2	51.33	3.15	2	1871
1	25	506.3	8.847	34.624	2	7.74	2	34.74	4.08	2	1899
1	24	606.7	7.421	34.472	2	9.83	2	-3.95	3.18	2	1872
1	23	707.2	6.950	34.437	2	11.93	2	-30.09	3.36	2	1458
1	22	807.5	6.399	34.408	2	15.94	2	-54.32	3.31	2	1457
1	21	906.2	5.865	34.389	2	21.08	2	-70.24	3.26	2	1456
1	20	1002.3	5.368	34.390	2	28.14	2	-89.87	3.17	2	1455
1	19	1100.6	4.772	34.399	2	37.67	2	-111.85	5.51	2	1454
1	17	1297.5	3.765	34.452	2	58.66	2	-141.91	4.90	2	1453
1	16	1395.0	3.413	34.488	2	68.97	2	-151.63	2.99	2	2019
1	15	1492.1	3.086	34.528	2	80.41	2	-173.54	2.97	2	1451

Station 194

Latitude			30.081°S			Date			7/15/92		
Longitude			175.168°E			Bottom depth			4136		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	35	60.4	19.714	35.716	2	0.69	2	121.37	3.36	2	4032
1	34	109.6	18.967	35.641	2	1.05	2	117.74	3.49	2	4031
1	33	158.1	17.573	35.566	2	1.60	2	122.56	3.87	2	4030
1	32	206.8	16.962	35.537	2	1.79	2	116.53	4.14	2	4029
1	30	305.1	15.308	35.390	2	2.70	2	96.76	5.69	2	4028
1	28	402.1	13.452	35.186	2	4.16	2	83.51	5.39	2	4027
1	26	479.2	11.763	34.977	2	5.62	2	57.98	6.63	2	4026
1	25	585.7	9.874	34.757	2	7.82	2	18.54	4.12	2	4025
1	23	802.1	7.266	34.492	2	13.14	2	-18.39	4.56	2	4024
1	22	893.0	6.599	34.446	2	17.36	2	-57.60	3.20	2	4023
1	21	993.5	5.680	34.379	2	22.68	2	-80.08	2.96	2	4022
1	20	1094.7	5.124	34.381	2	30.58	2	-99.69	2.78	2	4021
1	19	1196.3	4.576	34.407	2	41.41	2	-118.80	2.79	2	4020
1	18	1296.5	4.012	34.457	2	55.73	2	-137.83	2.99	2	4019
1	17	1397.7	3.485	34.506	2	71.16	2	-163.09	2.69	2	4018
1	16	1499.2	3.211	34.544	2	81.43	2	-167.90	2.71	2	4017
1	15	1599.1	3.027	34.566	2	88.03	2	-180.87	2.75	2	4225
1	14	1699.7	2.801	34.591	2	95.38	2	-201.83	2.86	3	4224
1	13	1796.9	2.624	34.609	2	101.07	2	-187.50	5.21	2	4223
1	12	1983.9	2.382	34.629	2	108.60	2	-192.66	3.68	2	4222
1	11	2186.1	2.189	34.648	2	114.28	2	-201.20	2.65	2	4221
1	10	2390.1	2.056	34.660	3	117.59	2	-209.31	3.18	2	4220
1	9	2584.1	1.960	34.669	2	119.97	2	-199.73	5.10	2	4219
1	8	2789.0	1.903	34.673	2	121.62	2	-198.82	2.81	2	4218

Station 205

Latitude			30.080°S			Date			7/17/92		
Longitude			169.997°E			Bottom depth			2945		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	24	9.0	18.423	35.662	2	0.62	2	109.59	3.37	2	4047
1	23	49.9	18.435	35.661	2	0.62	2	114.71	3.65	2	4046
1	22	99.5	18.416	35.660	2	0.81	2	101.45	3.33	2	4045
1	21	149.4	18.236	35.645	2	1.00	2	116.72	3.31	2	4044
1	20	199.2	16.794	35.494	2	1.76	2	107.73	3.51	2	4043
1	19	250.3	15.674	35.408	2	2.33	2	101.83	3.71	2	4058
1	18	300.0	14.770	35.320	2	4.95	2	82.40	3.44	2	4042
1	17	349.5	13.796	35.225	2	5.52	2	71.17	3.41	2	4041
1	16	399.6	13.067	35.155	2	4.58	2	62.58	3.80	2	4175
1	15	499.3	11.582	34.984	2	6.28	2	34.41	3.12	2	4174

Station 205 (continued)

Latitude			30.080°S			Date			7/17/92		
Longitude			169.997°E			Bottom depth			2945		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	14	600.8	9.329	34.726	2	10.41	2	-7.14	4.45	2	4173
1	13	700.9	8.315	34.627	2	13.99	2	-19.98	3.99	2	4172
1	12	801.2	7.436	34.573	2	18.87	2	-44.01	3.09	2	4171
1	11	1003.5	5.595	34.492	2	37.27	2	-96.11	3.19	2	4057
1	10	1204.7	4.413	34.490	2	55.30	2	-130.92	3.05	2	4056
1	9	1405.0	3.588	34.536	2	73.51	2	-149.18	3.61	2	4055
1	8	1598.4	3.127	34.570	2	86.47	2	-169.66	3.42	2	4054
1	7	1801.6	2.646	34.613	2	101.68	2	-182.59	2.67	2	4053
1	6	2004.2	2.379	34.632	2	109.01	2	-189.90	2.68	2	4052
1	5	2206.2	2.177	34.649	2	114.26	2	-196.05	2.74	2	4051
1	3	2601.3	1.995	34.664	2	119.73	2	-199.23	2.76	2	4050
1	2	2803.5	1.916	34.674	2	122.17	2	-205.14	3.09	2	4049
1	1	2967.0	1.855	34.680	2	124.05	2	-209.03	2.84	2	4048

Station 210

Latitude			30.082°S			Date			7/18/92		
Longitude			167.498°E			Bottom depth			1305		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	15	9.9	18.740	35.633	2	0.78	2	96.89	3.44	2	4201
1	14	49.4	18.750	35.638	2	0.78	2	76.88	3.89	2	4200
1	13	99.9	18.648	35.632	2	0.98	2	79.93	3.51	2	4199
1	12	149.9	18.222	35.578	2	1.16	2	81.36	3.62	2	4198
1	11	204.6	17.059	35.517	2	1.90	2	70.01	3.66	2	4197
1	10	253.0	16.252	35.454	2	2.28	2	96.63	5.00	2	4196
1	9	307.8	15.067	35.357	2	3.02	2	84.00	5.77	2	4195
1	8	354.3	14.173	35.270	2	3.58	2	72.26	3.55	2	4194
1	7	407.9	13.089	35.172	2	4.69	2	60.59	3.35	2	4040
1	6	507.3	10.981	34.917	2	7.47	2	37.55	3.92	2	4039
1	5	605.3	9.222	34.719	2	11.72	2	3.16	3.05	2	4038
1	4	806.7	7.420	34.590	2	20.60	2	-45.11	3.43	2	4037
1	3	999.7	5.650	34.460	2	33.53	2	-92.71	2.88	2	4036
1	2	1202.8	4.709	34.502	2	53.49	2	-122.80	2.85	2	4035
1	1	1307.9	3.902	34.542	2	70.78	2	-148.80	2.23	6	4033,4034

Station 214

Latitude			30.077°S			Date			7/19/92		
Longitude			165.408°E			Bottom depth			3374		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	17.1	18.909	35.607	2	0.76	2	111.92	4.73	2	4182
1	34	108.4	18.891	35.613	2	0.77	2	94.99	5.08	2	4181
1	32	208.9	17.301	35.534	2	1.69	2	95.60	5.68	2	4180
1	31	257.0	16.660	35.482	2	2.06	2	100.30	5.03	2	4179
1	30	307.0	15.687	35.405	2	2.79	2	87.79	3.83	2	4178
1	29	407.2	13.619	35.224	2	3.89	2	68.40	3.54	2	4177
1	28	510.5	11.610	35.003	2	5.53	2	43.69	3.82	2	4176
1	27	607.4	9.752	34.767	2	9.00	2	14.10	5.08	2	4170
1	26	709.6	8.284	34.612	2	13.74	2	-27.80	2.92	2	4169
1	25	810.4	7.182	34.532	2	19.04	2	-48.83	2.83	2	4168
1	24	910.1	6.355	34.484	2	25.80	2	-78.82	2.95	2	4167
1	23	1013.0	5.512	34.462	2	35.84	2	-102.65	2.76	2	4166
1	22	1111.7	4.933	34.466	2	45.15	2	-124.08	2.70	2	4165
1	21	1211.2	4.424	34.496	2	56.83	2	-135.93	2.70	2	4164
1	20	1314.9	4.070	34.518	2	65.06	2	-157.61	2.72	2	4163
1	19	1410.9	3.603	34.548	2	76.74	2	-166.99	2.71	2	4162
1	18	1508.9	3.314	34.566	2	84.06	2	-165.79	4.00	2	4193
1	17	1604.9	3.095	34.583	2	90.27	2	-177.00	2.64	2	4192
1	16	1701.7	2.882	34.600	2	95.58	2	-190.80	2.87	2	4191
1	14	1906.4	2.539	34.628	2	103.64	2	-193.51	2.81	2	4190
1	13	2006.3	2.410	34.641	2	106.02	2	-209.97	2.80	2	4186
1	12	2108.8	2.296	34.650	2	108.59	2	-201.22	2.80	2	4185
1	11	2211.7	2.204	34.659	2	110.43	2	-200.51	2.82	2	4184
1	10	2313.0	2.138	34.665	2	111.91	2	-197.63	2.90	2	4183

Station 229

Latitude			30.085°S			Date			7/22/92		
Longitude			158.001°E			Bottom depth			2015		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	18	19.4	20.590	35.535	2	0.68	2	108.88	3.49	2	4217
1	16	109.5	20.271	35.567	2	0.84	2	123.69	3.34	2	4216
1	15	209.6	17.922	35.526	2	1.91	2	124.82	4.74	2	4215
1	14	307.3	15.062	35.342	2	3.18	2	96.84	3.25	2	4214
1	13	408.7	12.708	35.101	2	5.16	2	49.29	6.13	2	4212
1	12	508.4	10.631	34.877	2	7.33	2	16.60	3.13	2	4211
1	11	605.5	9.103	34.692	2	10.41	2	1.52	4.57	2	4210
1	10	704.6	7.894	34.580	2	14.76	2	-28.74	3.15	2	4209
1	9	803.9	6.942	34.507	2	20.75	2	-88.33	3.16	2	4208
1	8	902.0	6.107	34.476	2	28.55	2	-96.68	4.32	2	4207

Station 229 (continued)

Latitude				30.085°S			Date			7/22/92	
Longitude				158.001°E			Bottom depth			2015	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	6	1099.4	4.817	34.480	2	48.19	2	-135.44	5.55	2	4206
1	5	1301.2	3.739	34.525	2	72.01	2	-158.82	3.15	2	4205
1	4	1499.4	3.098	34.579	2	88.39	2	-189.69	2.57	2	4204
1	3	1698.9	2.642	34.626	2	94.76	2	-185.99	4.80	2	4203
1	2	1900.0	2.394	34.655	2	96.40	2	-191.55	5.42	2	4202
1	1	2025.5	2.237	34.678	2	94.89	2	-181.84	3.17	2	4213

Station 234

Latitude				30.083°S			Date			7/23/92	
Longitude				156.530°E			Bottom depth			4821	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	26.9	20.275	35.551	2	0.78	2	109.87	3.36	2	3063
1	34	101.1	20.287	35.551	2	0.82	2	118.96	5.18	2	3317
1	33	201.8	18.985	35.563	2	1.50	2	105.65	4.40	2	3062
1	31	300.3	16.106	35.407	2	2.88	2	82.03	3.30	2	3061
1	30	401.9	13.199	35.209	3	4.12	2	76.69	4.33	2	3045
1	29	501.5	11.103	35.010	4	5.95	2	47.48	3.71	2	3044
1	28	602.3	9.474	34.729	2	9.70	2	-12.66	6.03	2	3056
1	27	702.0	8.114	34.601	2	13.83	2	-37.98	3.01	2	3055
1	25	802.9	6.918	34.507	2	20.63	2	-68.79	2.96	2	3054
1	24	902.0	6.040	34.472	2	29.33	2	-98.18	3.96	2	3053
1	23	1003.4	5.431	34.468	2	38.13	2	-107.74	2.87	2	3052
1	22	1103.4	4.798	34.477	2	48.84	2	-124.60	2.86	2	3060
1	21	1204.1	4.221	34.498	2	60.96	2	-159.35	2.76	2	3059
1	20	1302.3	3.753	34.529	2	73.45	2	-157.06	2.77	2	3058
1	19	1403.9	3.423	34.553	2	81.91	2	-172.32	3.00	2	3057
1	18	1605.7	2.925	34.598	2	93.25	2	-169.84	3.74	2	3389
1	17	1802.8	2.614	34.630	2	98.44	2	-189.55	3.55	2	3051
1	16	2004.2	2.390	34.660	2	94.67	2	-173.34	3.00	2	3050
1	15	2200.1	2.225	34.685	2	94.21	2	-171.73	2.94	2	3049
1	14	2402.8	2.056	34.707	2	95.14	2	-168.53	3.28	2	3043
1	13	2607.2	1.875	34.721	2	98.24	2	-167.55	2.95	2	3042
1	12	2802.0	1.702	34.725	2	102.48	2	-154.72	4.36	2	2971
1	10	3002.2	1.538	34.724	2	106.45	2	-160.76	3.12	2	2970
1	9	3203.5	1.397	34.722	2	109.96	2	-160.76	3.50	2	2969
1	8	3406.5	1.289	34.720	2	113.05	2	-159.76	4.28	2	2968
1	7	3603.9	1.230	34.718	2	114.87	2	-155.68	4.58	2	2967
1	6	3801.4	1.179	34.719	2	116.51	2	-168.03	4.15	2	2966
1	5	4004.9	1.162	34.718	2	117.64	2	-166.14	4.94	2	2965

Station 234 (continued)

Latitude			30.083°S			Date			7/23/92		
Longitude			156.530°E			Bottom depth			4821		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	4	4206.2	1.168	34.718	2	118.21	2	-172.07	4.14	2	2964
1	3	4412.0	1.176	34.716	2	118.47	2	-174.23	4.10	2	2963
1	2	4611.7	1.184	34.721	4	118.63	2	-167.08	4.19	2	2962
1	1	4899.1	1.204	34.716	2	118.82	2	-173.62	3.89	2	2961

Station 239

Latitude			30.085°S			Date			7/24/92		
Longitude			154.163°E			Bottom depth			4590		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	16	1723.0	2.771	34.610	2	94.52	2	-182.56	2.57	2	4297
1	15	1924.7	2.469	34.644	2	96.30	2	-193.31	3.81	2	4629
1	14	2123.5	2.275	34.675	2	94.68	2	-173.02	2.83	2	4296
1	13	2322.7	2.108	34.701	2	94.14	2	-173.00	2.31	2	4295
1	12	2520.3	1.953	34.715	2	96.28	2	-164.07	2.37	2	4294
1	11	2720.0	1.800	34.722	2	99.68	2	-183.25	2.09	2	4293
1	10	2920.9	1.626	34.727	2	103.80	2	-182.28	2.70	2	4292
1	9	3124.6	1.466	34.724	2	108.27	2	-174.28	2.15	2	4291
1	8	3327.5	1.322	34.722	2	111.66	2	-173.63	2.70	2	4290
1	7	3531.8	1.231	34.718	2	114.16	2	-169.59	2.49	2	4289
1	6	3735.7	1.176	34.718	2	115.95	2	-174.99	1.87	2	4288
1	5	3940.9	1.152	34.716	2	117.01	2	-176.69	2.72	2	4287
1	4	4145.4	1.148	34.715	2	117.55	2	-167.97	2.12	2	4286
1	3	4349.6	1.154	34.717	2	118.08	2	-176.35	1.85	2	4285
1	2	4556.2	1.159	34.713	2	118.62	2	-166.60	2.15	2	4284
1	1	4670.3	1.164	34.714	2	118.91	2	-175.77	2.56	2	4283

WOCE Cruise P16N

3/7/91 – 4/8/91

J. Bullister

Station 17

Latitude			20.397°N				Date			3/8/91	
Longitude			154.236°W				Bottom depth			5455	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	23	6.9	23.773	34.915	2	2.45	2	104.6	3.4	2	3153
1	18	49.2	23.448	35.017	2	2.44	2	110.2	4.0	2	3152
1	14	101.1	22.640	35.262	2	2.23	2	120.2	4.0	2	3151
1	13	124.2	22.057	35.347	2	2.22	2	122.8	4.4	2	3149
1	11	203.3	16.209	34.686	2	5.50	2	121.4	6.0	2	3143
1	10	245.6	13.953	34.434	2	8.40	2	100.8	5.9	2	3142
1	9	302.9	11.152	34.209	2	13.42	2	78.4	7.8	2	3141
1	8	349.2	9.805	34.132	2	20.58	2	52.1	9.3	2	3148
1	7	403.4	8.593	34.132	2	36.29	2	-25.0	3.5	2	3147
1	6	498.3	7.077	34.198	2	56.71	2	-117.4	8.9	2	3146
1	5	599.5	5.949	34.283	2	74.91	2	-142.8	5.2	2	3145
1	4	685.5	5.728	34.395	2	80.00	2	-162.2	4.7	2	3139
1	3	800.1	5.053	34.437	2	91.62	2	-185.5	6.3	2	3144
1	2	898.5	4.635	34.468	2	99.73	2	-200.9	4.5	2	3138
1	1	997.5	4.220	34.491	2	107.67	2	-187.4	8.9	2	3140
2	23	1302.4	3.442	34.551	2	124.46	2	-223.0	4.4	2	3150

Station 20

Latitude			21.916°N				Date			3/10/91	
Longitude			152.000°W				Bottom depth			5691	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	13	8.9	23.138	35.015	2	2.14	2	107.1	5.6	2	449
1	9	61.5	23.145	35.021	2	1.95	2	113.3	3.9	2	439
1	7	103.4	21.830	35.283	2	2.14	2	99.3	5.5	2	438
1	5	151.3	19.535	35.164	2	2.73	2	122.8	3.9	2	437
1	3	202.4	17.200	34.878	2	3.90	2	127.0	3.9	2	436
1	2	251.9	14.547	34.511	2	6.24	2	110.4	3.9	2	435
1	1	308.8	11.769	34.208	2	11.89	2	83.5	7.7	2	434
2	24	349.8	9.689	34.102	2	21.25	2	65.7	4.8	2	447
2	23	400.7	8.435	34.075	2	34.13	2	4.7	4.5	2	446
2	22	450.7	7.273	34.034	2	44.30	2	-43.8	5.9	2	445
2	21	497.7	6.383	34.037	2	58.43	2	-67.7	3.5	2	448
2	20	497.7	6.383	34.037	2	58.62	2	-78.9	3.7	2	444
2	18	698.9	4.846	34.263	2	95.20	2	-159.2	3.1	2	442
2	19	698.9	4.846	34.263	2	95.21	2	-172.0	3.9	2	443

Station 20 (continued)

Latitude			21.916°N				Date			3/10/91	
Longitude			152.000°W				Bottom depth			5691	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	17	900.3	4.414	34.466	2	104.57	2	-190.5	3.1	2	441
2	16	997.8	4.082	34.494	2	111.78	2	-200.7	3.0	2	440

Station 22

Latitude			23.997°N				Date			3/12/91	
Longitude			151.979°W				Bottom depth			5617	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	23	5.1	21.065	35.375	1	2.25	2	12.5	5.0	2	1650
1	19	40.5	21.041	35.377	1	1.85	2	114.8	5.3	2	1649
1	13	100.0	18.959	35.133	1	2.82	2	135.7	5.3	2	1648
1	12	126.6	17.891	35.003	1	3.41	2	129.0	6.7	2	1647
1	10	177.8	15.322	34.644	1	5.16	2	115.1	6.5	2	1646
1	9	199.9	13.853	34.427	1	7.32	2	114.7	5.2	2	1645
1	8	251.9	11.622	34.220	1	11.44	2	83.7	5.1	2	1644
1	7	300.3	10.667	34.181	1	14.77	2	77.3	7.6	2	1643
1	6	348.8	9.536	34.121	1	21.24	2	56.0	16.3	2	1640
1	5	399.0	8.439	34.064	1	29.89	2	23.5	4.9	2	1639
1	4	500.1	6.578	34.016	1	53.53	2	-59.3	5.3	2	1638
1	3	598.5	5.380	34.081	1	77.32	2	-126.9	4.4	2	1651
1	2	750.8	4.486	34.259	1	103.34	2	-176.5	4.2	2	1642
1	1	908.5	3.908	34.387	1	118.48	2	-201.0	4.1	2	1641

Station 28

Latitude			28.022°N				Date			3/15/91	
Longitude			151.988°W				Bottom depth			5404	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	18	7.0	20.027	35.367	3	2.81	2	122.9	6.4	2	385
2	15	60.9	18.887	35.245	3	2.80	2	120.1	6.0	2	384
2	13	101.9	18.438	35.162	3	3.00	2	121.8	5.7	2	392
2	11	153.7	17.866	35.036	3	3.40	2	134.7	7.3	2	383
2	8	199.5	15.666	34.662	3	5.39	2	115.8	6.3	2	381
2	9	252.0	13.598	34.421	3	7.79	2	115.9	9.7	2	382
2	7	299.6	11.994	34.285	3	11.38	2	83.5	6.3	2	380
1	23	399.6	9.958	34.200	3	14.13	2	77.7	5.2	2	379
1	22	447.0	8.706	34.077	3	27.72	2	33.6	4.5	2	378
1	21	494.0	7.842	34.038	3	36.21	2	-3.0	6.6	2	2455
1	20	494.0	7.842	34.038	3	36.20	2	-3.8	9.0	2	391

Station 28 (continued)

Latitude			28.022°N				Date			3/15/91	
Longitude			151.988°W				Bottom depth			5404	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	19	701.3	4.785	34.079	3	88.52	2	-140.8	5.3	2	390
1	18	701.3	4.785	34.080	3	88.72	2	-145.0	3.8	2	389
1	17	899.9	4.008	34.293	3	116.40	2	-199.9	4.7	2	388
1	16	998.8	3.799	34.365	3	123.54	2	-201.0	9.1	2	387
1	15	1099.6	3.565	34.424	3	129.47	2	-207.8	4.3	2	386

Station 31

Latitude			30.000°N				Date			3/16/91	
Longitude			152.009°W				Bottom depth			5400	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	24	51.3	18.869	35.261	2	2.64	2	123.5	11.7	6	5,11
2	22	151.8	16.974	34.885	2	3.91	2	109.0	3.3	6	605,3039
2	18	498.8	7.689	34.038	2	37.84	2	11.8	2.8	2	2771
2	17	601.1	5.867	34.008	2	63.86	2	-97.5	16.2	2	10
2	16	700.3	4.846	34.072	2	86.54	2	-120.1	9.4	2	57
2	15	799.8	4.355	34.163	2	102.47	2	-160.5	8.6	2	9
2	14	898.0	4.032	34.274	2	115.17	2	-175.0	18.5	6	56,2770
2	13	998.1	3.714	34.347	2	125.34	2	-192.3	8.6	2	14
2	11	1599.8	2.479	34.567	2	154.93	2	-238.8	8.6	6	6,8
2	10	1900.0	2.088	34.605	2	163.92	2	-265.8	2.4	6	55,2253
2	9	1900.0	2.088	34.606	2	163.92	2	-263.1	5.4	6	4,12,69
2	4	4407.6	1.483	34.688	2	158.83	2	-230.3	4.0	6	303,304,305

Station 34

Latitude			32.168°N				Date			3/18/91	
Longitude			152.004°W				Bottom depth			5262	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	11	81.2	16.639	34.747	2	4.16	2	123.4	4.8	2	1770
2	7	124.4	16.633	34.747	2	4.15	2	109.6	4.6	2	1769
2	5	176.2	13.066	34.228	2	7.14	2	88.6	4.6	2	1768
2	4	249.1	11.083	34.194	2	12.54	2	82.3	4.7	2	1767
2	3	300.4	10.296	34.161	2	15.74	2	73.2	5.0	2	2457
1	23	550.6	6.244	33.993	2	55.23	2	-62.9	4.8	2	1765
1	21	650.8	5.014	34.018	2	78.65	2	-104.0	3.5	2	2456
1	19	798.8	4.163	34.140	2	104.51	2	-172.4	3.5	2	1775
1	18	899.1	3.849	34.229	2	117.66	2	-184.5	3.5	2	1771
1	17	999.0	3.592	34.326	2	128.81	2	-197.5	3.9	2	1772

Station 34 (continued)

Latitude			32.168°N					Date			3/18/91	
Longitude			152.004°W					Bottom depth			5262	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM	
1	16	1098.8	3.384	34.389	2	135.86	2	-213.9	4.8	2	1774	
1	15	1298.1	2.967	34.486	2	147.34	2	-225.6	3.3	2	1773	
1	14	1298.1	2.967	34.486	2	147.32	2	-227.9	3.4	2	1764	
1	13	1897.8	2.055	34.600	2	171.00	2	-245.5	3.6	2	1763	

Station 36

Latitude			33.333°N					Date			3/18/91	
Longitude			152.000°W					Bottom depth			5563	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM	
1	24	31.6	15.523	34.396	2	5.52	2	100.2	6.0	2	1722	
1	22	152.2	12.053	34.127	2	9.08	2	83.1	4.6	2	1724	
1	21	175.6	11.638	34.166	2	11.26	2	79.1	4.1	2	1723	
1	20	175.6	11.638	34.166	2	11.25	2	78.2	4.1	2	1572	
1	18	350.5	9.324	34.123	2	22.15	2	54.2	3.9	2	1733	
1	17	450.6	7.672	34.035	2	36.06	2	6.6	4.1	2	1732	
1	16	550.2	6.123	33.991	2	56.80	2	-50.8	4.0	2	2458	
1	15	550.2	6.123	33.991	2	56.78	2	-64.3	3.7	2	1725	
1	14	750.7	4.299	34.094	2	97.64	2	-157.3	4.7	2	789	
1	13	849.7	3.899	34.192	2	113.92	2	-179.5	2.7	2	1726	
1	12	1000.7	3.530	34.318	2	129.92	2	-197.8	2.7	2	1727	
1	11	1000.7	3.530	34.319	2	129.89	2	-202.6	2.7	2	1728	
1	9	1246.5	3.029	34.455	2	146.22	2	-223.4	2.6	2	1729	
1	7	1372.8	2.814	34.493	2	152.22	2	-238.1	3.1	2	1721	
1	8	1372.8	2.814	34.493	2	152.25	2	-231.2	2.6	2	1730	

Station 39

Latitude			35.608°N					Date			3/20/91	
Longitude			152.007°W					Bottom depth			5705	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM	
1	19	6.0	14.721	33.930	2	4.37	2	105.5	5.5	2	622	
1	18	75.6	14.614	33.967	2	4.35	2	96.1	4.2	2	621	
1	17	123.4	13.366	33.998	2	5.32	2	99.1	10.6	2	620	
1	16	151.0	11.515	33.945	2	8.46	2	86.4	6.1	2	619	
1	15	176.1	10.646	33.966	2	10.82	2	98.1	10.5	2	618	
1	14	199.7	10.267	33.992	2	12.77	2	86.9	5.6	2	617	
1	13	301.5	9.076	34.050	2	20.86	2	59.7	3.6	2	616	
1	12	351.0	8.445	34.032	2	26.18	2	39.6	3.4	2	615	

Station 39 (continued)

Latitude			35.608°N				Date			3/20/91	
Longitude			152.007°W				Bottom depth			5705	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	11	453.2	7.056	33.990	2	43.40	2	3.8	4.9	2	614
1	10	547.0	5.562	33.990	2	66.26	2	-71.5	5.9	2	613
1	9	646.7	4.535	34.061	2	91.09	2	-121.2	6.5	2	612
1	8	747.9	4.089	34.132	2	105.19	2	-153.2	3.7	2	2459
1	7	847.2	3.691	34.222	2	120.81	2	-181.9	8.7	2	610
1	6	1073.0	3.223	34.370	2	140.48	2	-203.0	5.5	2	609
1	5	1175.4	3.080	34.441	2	148.70	2	-225.0	9.6	2	608
1	4	4006.2	1.475	34.683	2	162.60	2	-228.6	6.5	2	607

Station 41

Latitude			37.183°N				Date			3/21/91	
Longitude			151.967°W				Bottom depth			5572	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
4	22	8.6	14.433	-9	9	-9	9	92.0	3.3	6	279,280
4	12	62.1	13.987	33.894	2	4.73	2	99.8	4.2	2	278
4	8	101.6	14.009	34.000	2	5.29	2	100.7	5.7	2	277
4	6	151.2	11.866	33.986	2	8.00	2	100.9	6.9	2	276
4	3	306.0	9.245	34.069	2	20.50	2	62.2	10.2	2	275
4	2	350.5	8.680	34.040	2	24.41	2	45.1	10.0	2	274
4	1	395.7	8.146	34.029	2	30.08	2	17.3	5.7	2	273
3	23	499.4	6.918	33.996	2	44.20	2	-4.8	8.7	2	272
3	21	599.9	5.666	33.989	2	65.29	2	-69.5	8.8	2	271
3	19	699.1	4.740	34.039	2	85.31	2	-116.7	3.4	2	270
3	17	899.4	3.739	34.210	2	119.23	2	-176.7	3.0	2	269

Station 44

Latitude			39.350°N				Date			3/22/96	
Longitude			151.987°W				Bottom depth			5412	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	23	8.6	12.888	33.662	2	4.14	2	95.4	7.4	2	1058
1	21	77.2	12.625	33.657	2	3.75	2	90.6	6.3	2	1014
1	20	127.0	10.926	33.798	2	7.88	2	79.3	6.2	2	1013
1	19	151.5	10.343	33.848	2	10.44	2	72.0	5.7	2	1011
1	18	177.0	10.172	33.944	2	13.20	2	69.4	5.7	2	1017
1	17	201.5	10.118	34.059	2	15.75	2	76.1	6.0	2	1015
1	16	201.5	10.118	34.058	2	15.75	2	75.8	6.2	2	1016
1	14	349.4	8.128	34.015	2	27.37	2	33.3	6.0	2	1005

Station 44 (continued)

Latitude			39.350°N					Date			3/22/96	
Longitude			151.987°W					Bottom depth			5412	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM	
1	15	349.4	8.128	34.015	2	27.37	2	36.8	6.0	2	1010	
1	13	450.2	6.911	33.985	2	64.96	2	-74.1	2.9	2	1097	
1	12	651.8	4.727	34.041	2	84.29	2	-109.2	4.3	2	997	
1	11	651.8	4.727	34.042	2	84.27	2	-110.9	4.4	2	998	
1	10	819.4	3.665	34.194	2	115.51	2	-170.3	3.1	6	999,1358	
1	9	924.4	3.556	34.243	2	124.44	2	-181.7	5.2	2	1000	
1	7	1074.9	3.194	34.332	2	139.15	2	-198.7	2.6	6	1001,1357	
1	8	1074.9	3.194	34.331	2	138.56	2	-197.9	4.1	2	1002	

Station 46

Latitude			40.674°N					Date			3/23/91	
Longitude			152.022°W					Bottom depth			5021	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM	
1	24	31.8	11.366	33.512	2	4.15	2	71.3	4.2	2	1064	
1	22	126.7	10.068	33.891	2	12.53	2	70.0	4.7	2	1065	
1	21	150.0	9.799	33.966	2	15.52	2	72.5	3.9	2	1066	
1	20	199.6	9.368	34.047	2	20.31	2	42.0	5.9	2	1091	
1	18	350.7	7.233	33.974	2	35.49	2	21.8	9.3	2	1068	
1	17	449.1	6.162	33.955	2	52.52	2	-29.4	9.1	2	1069	
1	16	548.9	5.211	33.997	2	72.86	2	-82.5	5.8	2	1070	
1	15	648.0	4.486	34.073	2	92.31	2	-125.3	5.2	2	1071	
1	14	749.5	4.059	34.150	2	106.99	2	-154.3	8.2	2	1072	
1	13	849.2	3.711	34.218	2	119.30	2	-173.1	3.1	2	1061	
1	12	923.1	3.503	34.262	2	126.92	2	-181.0	4.6	2	1062	
1	11	1072.5	3.164	34.335	2	139.98	2	-196.7	3.0	2	1063	
1	10	1175.5	2.938	34.381	2	148.11	2	-218.7	5.9	2	1080	
1	9	1375.9	2.634	34.452	2	159.23	2	-216.9	4.4	2	792	
1	8	1502.2	2.481	34.486	2	164.06	2	-233.8	5.8	2	1082	

Station 48

Latitude			41.998°N					Date			3/23/91	
Longitude			151.987°W					Bottom depth			5117	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM	
4	22	8.1	10.047	33.231	2	6.56	2	59.1	6.8	2	194	
4	17	103.2	9.002	33.708	2	15.55	2	58.7	8.0	2	193	
4	16	127.8	8.908	33.811	2	17.31	2	53.3	5.6	6	267,268	
4	15	151.0	8.687	33.864	2	19.76	2	41.3	6.4	2	192	

Station 48 (continued)

Latitude			41.998°N				Date			3/23/91	
Longitude			151.987°W				Bottom depth			5117	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
4	13	202.5	8.478	34.013	2	24.64	2	56.3	4.2	2	195
4	12	250.7	7.881	33.984	2	27.68	2	21.2	10.4	2	196
4	11	298.9	7.244	33.968	2	34.23	2	16.0	5.7	2	197
4	10	350.3	6.402	33.930	2	43.32	2	-3.5	5.9	2	198
4	8	449.0	5.489	33.931	2	59.85	2	-36.0	3.9	2	199
4	6	552.4	4.773	33.991	2	80.29	2	-93.1	3.3	2	191
4	4	648.8	4.313	34.089	2	97.39	2	-131.2	3.5	2	190
1	18	798.3	3.698	34.220	2	119.48	2	-173.8	3.2	2	189
1	17	849.4	3.559	34.247	2	124.47	2	-180.5	4.4	2	200
1	15	997.7	3.208	34.321	2	137.76	2	-199.4	2.8	2	188
1	14	1247.6	2.768	34.416	2	154.85	2	-220.8	3.2	2	187
1	13	1499.5	2.422	34.493	2	166.09	2	-234.4	3.8	2	186

Station 51

Latitude			44.419°N				Date			3/25/91	
Longitude			151.997°W				Bottom depth			5201	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	22	8.4	8.613	32.994	3	10.95	2	55.8	7.8	6	1179,1251
1	20	78.8	8.582	33.003	3	11.31	2	47.0	8.7	2	1057
1	19	126.7	7.178	33.515	3	22.52	2	29.4	14.0	2	1056
1	18	152.6	7.756	33.754	3	23.87	2	38.2	3.7	2	1054
1	17	176.6	7.992	33.952	3	26.60	2	19.4	10.1	2	1053
1	15	202.4	7.482	33.967	3	31.27	2	10.8	8.2	2	1050
1	14	349.4	5.420	33.952	3	74.35	2	-99.7	7.7	2	1052
1	13	548.8	4.456	34.047	3	90.46	2	-146.5	3.8	2	2454
1	12	648.7	4.121	34.124	3	103.86	2	-119.2	4.8	2	1051
1	11	749.1	3.794	34.194	3	115.91	2	-173.4	11.4	2	1055
1	10	847.6	3.516	34.253	3	125.99	2	-178.5	4.8	2	977
1	9	922.6	3.339	34.289	3	132.04	2	-195.0	6.9	2	976
1	7	1172.9	2.863	34.394	3	151.19	2	-206.5	4.6	2	1049
1	6	1374.9	2.593	34.457	3	160.85	2	-228.8	3.9	2	1048
1	5	1498.5	2.423	34.489	3	165.97	2	-235.1	9.6	2	1047
1	4	1998.9	1.974	34.581	3	176.77	2	-252.4	5.1	2	1046

Station 55

Latitude			47.000°N				Date			3/27/91	
Longitude			152.000°W				Bottom depth			5167	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	19	5.2	7.564	32.844	2	13.21	2	41.5	6.4	6	632,1652
1	13	42.2	7.566	32.847	2	13.41	2	40.7	3.8	2	631
1	9	101.1	6.473	33.313	2	23.19	2	37.0	3.7	2	630
1	8	126.8	6.446	33.415	2	24.16	2	36.2	3.7	2	629
1	7	150.8	6.434	33.547	2	27.78	2	27.0	4.3	2	628
1	5	202.9	5.762	33.807	2	41.47	2	0.4	3.6	2	627
1	4	251.7	5.151	33.817	2	51.84	2	-22.3	3.6	2	626
1	3	302.6	4.745	33.893	2	66.21	2	-68.7	6.8	2	625
1	2	350.6	4.446	33.906	2	75.30	2	-75.6	5.9	2	624
1	1	402.8	4.351	33.968	2	83.52	2	-88.3	4.1	2	2460
4	23	500.8	4.118	34.029	2	96.52	2	-120.5	3.6	2	638
4	21	599.4	3.913	34.118	2	108.15	2	-148.0	4.5	2	637
4	19	648.5	3.810	34.187	2	117.92	2	-163.3	3.0	2	636
4	17	797.8	3.438	34.257	2	128.08	2	-179.4	3.0	2	635
4	15	997.1	3.054	34.347	2	142.54	2	-194.9	3.6	2	634
4	13	1250.1	2.666	34.436	2	157.78	2	-212.3	3.6	2	633

Station 58

Latitude			53.495°N				Date			3/30/91	
Longitude			152.001°W				Bottom depth			4714	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	23	34.7	4.045	32.776	2	33.47	2	34.7	3.2	2	926
1	22	63.6	4.033	32.776	2	33.46	2	29.9	3.8	2	921
1	21	101.1	4.083	33.595	2	39.99	2	10.6	3.1	2	919
1	20	149.0	4.186	33.797	2	77.14	2	-68.5	2.9	2	931
1	19	202.1	4.022	33.901	2	88.79	2	-88.7	2.8	2	932
1	18	297.6	3.855	34.008	2	101.93	2	-123.3	2.4	2	917
1	17	401.8	3.728	34.110	2	113.31	2	-150.0	2.4	2	916
1	16	495.7	3.591	34.171	2	120.44	2	-161.4	2.5	2	922
1	15	600.9	3.357	34.252	2	130.90	2	-188.7	4.6	2	1012
1	14	697.2	3.183	34.297	2	137.69	2	-187.0	2.7	2	924
1	12	950.8	2.790	34.389	2	150.73	2	-213.3	2.2	2	918
1	11	1200.4	2.490	34.460	2	160.97	2	-224.6	3.3	2	925
1	10	1447.3	2.280	34.508	2	167.68	2	-228.4	2.2	2	920
1	9	1693.4	2.113	34.545	2	172.51	2	-240.9	2.2	2	935

Station 60

Latitude			55.445°N				Date			3/31/91	
Longitude			152.628°W				Bottom depth			5158	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
4	21	7.8	3.139	32.861	2	35.27	2	13.3	6.1	2	3135
4	18	33.5	3.121	32.861	2	35.42	2	6.8	5.9	2	3136
4	15	61.5	3.053	32.860	2	35.36	2	7.2	5.9	2	3134
4	13	82.6	3.035	32.859	2	35.13	2	13.7	7.4	2	3133
4	8	140.8	4.127	33.821	2	80.79	2	-82.7	4.7	2	3132
4	5	201.2	4.044	33.950	2	93.11	2	-102.4	15.0	2	3131
4	4	247.8	3.989	34.000	2	99.01	2	-117.2	5.3	2	3130
4	2	350.0	3.843	34.088	2	108.96	2	-150.6	4.0	6	2772,3129
4	1	350.0	3.843	34.089	2	109.09	2	-149.8	4.9	2	3137
3	23	499.7	3.556	34.205	2	123.64	2	-145.4	8.3	2	3128
3	21	599.7	3.389	34.257	2	131.16	2	-213.1	18.1	3	3127
3	19	700.9	3.233	34.299	2	137.24	2	-173.6	7.0	2	3126
3	17	901.0	2.916	34.367	2	147.73	2	-195.7	6.7	2	3125
3	15	1074.7	2.651	34.425	2	156.79	2	-214.0	4.0	2	3124
3	13	1498.3	2.161	34.532	2	170.35	2	-233.3	3.9	2	3123

Station 64

Latitude			56.295°N				Date			4/1/91	
Longitude			153.233°W				Bottom depth			272	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	12	7.1	3.695	32.659	2	33.00	2	19.7	3.1	2	915
1	10	29.2	3.717	32.667	2	32.96	2	9.3	3.1	2	897
1	9	51.4	3.744	32.686	2	33.34	2	132.2	3.4	4	896
1	8	77.6	3.658	32.697	2	33.72	2	23.5	3.1	2	895
1	7	97.8	3.714	32.714	2	34.30	2	16.4	3.1	2	914
1	5	125.5	4.055	32.786	2	34.66	2	23.2	3.0	2	894
1	3	199.6	5.333	33.137	2	42.23	2	7.3	3.0	2	893
1	1	238.9	5.124	33.765	2	64.06	2	-36.6	2.9	2	892

Station 66

Latitude			52.491°N				Date			4/2/91	
Longitude			152.020°W				Bottom depth			4431	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	24	31.9	4.106	32.714	2	-9	9	24.1	4.8	2	359
1	22	105.7	4.360	33.332	2	53.83	2	-25.1	4.3	2	356
1	21	131.4	4.345	33.766	2	71.52	2	-49.2	3.3	2	358
1	20	151.7	4.118	33.844	2	81.38	2	-75.0	3.9	2	355

Station 66 (continued)

Latitude		52.491°N					Date		4/2/91		
Longitude		152.020°W					Bottom depth		4431		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	19	203.3	3.943	33.912	2	90.87	2	-93.5	4.1	2	360
1	18	298.8	3.784	34.009	2	102.60	2	-122.0	4.0	2	354
1	17	399.0	3.743	34.108	2	111.77	2	-138.0	3.6	2	353
1	16	499.0	3.553	34.178	2	120.78	2	-157.7	4.1	2	352
1	15	600.1	3.384	34.238	2	128.42	2	-180.1	5.0	2	351
1	14	701.2	3.197	34.291	2	136.29	2	-191.1	4.5	2	350
1	13	803.2	3.036	34.331	2	141.94	2	-201.0	3.0	2	349
1	12	898.9	2.889	34.368	2	146.99	2	-214.3	3.0	2	348
1	10	1201.2	2.542	34.450	2	159.22	2	-225.2	2.9	2	376
1	9	1447.8	2.292	34.506	2	167.03	2	-203.0	4.4	3	375
1	8	1697.9	2.113	34.544	2	170.91	2	-236.8	4.8	2	346

WOCE Cruise P16S17S

7/16/91 – 8/25/91

J. Swift

Station 125

Latitude			6.512°S				Date			7/22/91	
Longitude			135.012°W				Bottom depth			4474	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.4	27.461	35.241	2	2.54	2	79.50	4.01	2	1602
1	4	97.8	27.400	35.277	2	2.44	2	78.27	4.01	2	1601
1	6	128.4	24.424	36.096	2	1.95	2	77.52	4.08	2	1600
1	9	206.9	13.624	34.970	2	22.08	2	-2.15	4.81	2	1599
1	10	267.7	11.742	34.858	2	25.02	2	-35.74	4.75	2	1598
1	11	307.9	11.113	34.819	2	27.66	2	-51.24	7.26	2	1597
1	12	368.5	10.170	34.758	2	32.35	2	-69.20	3.67	2	1596
1	13	430.7	9.311	34.703	2	34.11	2	-84.30	4.56	2	1595
1	14	492.1	8.455	34.651	2	37.53	2	-105.84	5.31	2	1594
1	15	552.5	7.686	34.606	2	39.29	2	-80.92	3.79	4	1593
1	16	613.9	7.133	34.578	2	42.03	2	-114.36	5.25	2	1592
1	17	734.6	6.137	34.549	2	54.06	2	-143.30	3.96	2	1591
1	18	918.5	4.896	34.536	2	71.85	2	-170.99	8.97	2	1590
1	19	1121.3	4.094	34.556	2	90.42	2	-204.68	10.17	3	1589

Station 127

Latitude			7.522°S				Date			7/22/91	
Longitude			135.003°W				Bottom depth			4387	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	10.3	27.648	35.162	2	2.34	2	81.93	5.25	2	1813
1	4	93.3	26.733	35.938	2	2.15	2	83.29	6.90	2	1812
1	6	126.7	24.448	36.114	2	1.76	2	94.89	8.90	2	1811
1	7	154.5	22.300	36.026	2	1.76	2	118.04	3.80	2	1810
1	8	185.8	18.786	35.537	2	3.52	2	118.97	3.63	2	1809
1	9	227.1	14.387	35.042	2	9.87	2	51.36	10.12	2	1818
1	10	277.3	11.799	34.835	2	19.45	2	-26.77	7.64	2	2021
1	11	327.8	10.275	34.764	2	25.41	2	-58.94	2.94	2	1820
1	12	373.3	9.625	34.720	2	29.32	2	-74.56	3.07	2	1819
1	13	418.7	9.049	34.686	2	32.35	2	-91.93	2.82	2	1808
1	14	465.2	8.635	34.656	2	33.53	2	-95.83	2.66	2	1807
1	15	511.8	8.083	34.624	2	35.29	2	-96.68	2.65	2	1806
1	16	588.7	7.380	34.590	2	40.08	2	-108.74	3.24	2	1805
1	17	714.3	6.219	34.548	2	51.22	2	-131.45	2.77	2	1804
1	18	863.9	5.191	34.534	2	66.37	2	-154.84	2.89	2	1816
1	19	1114.1	4.055	34.551	2	87.10	2	-174.17	2.69	2	1815

Station 129

Latitude			8.513°S				Date			7/2391	
Longitude			134.892°W				Bottom depth			4507	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	0.2	27.686	35.307	2	1.88	2	76.96	4.04	2	1992
2	3	67.5	27.741	36.120	2	1.67	2	65.81	6.34	2	2418
2	4	97.9	26.325	36.147	2	1.66	2	59.85	9.65	2	1991
2	6	144.7	22.232	36.050	2	2.03	2	104.16	5.45	2	2042
2	7	185.3	19.742	35.720	2	2.22	2	123.25	3.07	2	2043
2	8	227.1	16.228	35.219	2	5.91	2	82.52	3.73	2	1990
2	10	288.4	11.561	34.791	2	23.41	2	-43.56	3.58	2	1989
2	11	349.4	10.031	34.737	2	27.30	2	-56.92	3.16	2	2041
2	12	411.2	9.144	34.685	2	30.40	2	-113.26	4.43	3	2259
2	13	488.7	8.278	34.634	2	35.26	2	-118.11	6.31	3	2258
2	37	563.7	7.609	34.598	2	38.94	2	-126.08	4.11	2	2000
2	15	666.9	6.587	34.552	2	46.72	2	-144.86	5.49	2	1988
2	16	768.5	5.657	34.533	2	58.03	2	-161.50	5.40	2	1987
2	17	871.9	5.046	34.531	2	67.01	2	-168.41	5.72	2	1986
2	18	974.2	4.424	34.537	2	77.97	2	-165.43	2.81	2	2040
2	19	1128.9	3.882	34.555	2	88.79	2	-180.51	2.30	2	2039

Station 132

Latitude			10.055°S				Date			7/24/91	
Longitude			134.957°W				Bottom depth			4444	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	0.2	27.402	35.790	2	1.46	2	91.73	4.02	2	1360
2	4	85.4	27.521	36.125	2	1.46	2	77.56	3.98	2	1363
2	6	125.6	24.610	36.240	2	1.85	2	88.91	4.00	2	1362
2	7	150.6	22.512	36.152	2	1.46	2	111.51	4.06	2	1361
2	8	192.7	19.722	35.730	2	1.86	2	124.29	6.62	2	1447
2	9	244.9	15.142	35.114	2	6.06	2	93.72	6.23	2	1446
2	10	292.0	11.634	34.700	2	16.81	2	4.02	4.14	2	1445
2	11	336.8	9.962	34.668	2	24.73	2	-59.53	4.01	2	1444
2	12	407.4	8.607	34.628	2	29.91	2	-73.64	3.68	2	1443
2	13	485.8	7.636	34.590	2	35.68	2	-82.97	2.66	2	2033
2	37	587.0	6.768	34.553	2	42.62	2	-108.43	4.53	2	1985
2	15	710.3	5.948	34.532	2	52.40	2	-135.80	3.70	2	1709
2	16	813.3	5.277	34.528	2	62.66	2	-150.74	7.13	2	1708
2	17	914.6	4.844	34.528	2	69.80	2	-193.70	8.34	3	1707
2	18	1017.3	4.399	34.536	2	78.50	2	-171.19	3.59	2	1706
2	19	1119.5	4.044	34.546	2	85.73	2	-170.34	7.90	2	1705

Station 135

Latitude			11.487°S				Date			7/25/91	
Longitude			134.700°W				Bottom depth			4277	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	27.188	35.846	4	1.86	4	86.37	3.13	2	5936
1	4	101.6	24.992	36.320	2	1.76	2	94.72	2.76	2	5935
1	5	122.5	23.775	36.277	2	2.44	2	98.84	2.72	2	5934
1	6	153.6	22.000	36.095	2	1.86	2	109.33	3.10	2	5933
1	7	183.6	20.293	35.824	2	1.86	2	115.06	2.88	2	5929
1	8	214.3	17.828	35.415	2	3.03	2	108.14	2.84	2	5928
1	9	267.2	13.325	34.833	2	11.83	2	44.07	3.17	2	5927
1	10	317.3	11.367	34.714	2	21.50	2	-25.25	5.04	2	5926
1	12	370.0	9.958	34.662	2	25.61	2	-56.98	3.22	2	5925
1	13	429.8	8.718	34.631	2	30.01	2	-81.19	2.54	2	5924
1	37	512.4	7.695	34.593	2	36.66	2	-114.38	2.44	2	5923
1	15	615.2	6.612	34.550	2	45.75	2	-118.41	4.09	2	5922
1	16	716.6	5.902	34.531	2	53.37	2	-135.99	2.65	2	5921
1	17	820.2	5.332	34.523	2	59.92	2	-142.80	2.32	2	5920
1	18	922.6	4.730	34.529	2	71.36	2	-162.08	3.10	2	5919
1	19	1025.3	4.371	34.538	2	79.37	2	-168.63	2.29	2	5918

Station 138

Latitude			12.933°S				Date			7/26/91	
Longitude			134.383°W				Bottom depth			4398	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	1.9	26.825	36.260	2	1.90	2	79.94	2.82	2	6977
1	3	85.6	26.853	36.839	2	1.69	2	86.90	3.20	2	6976
1	4	106.4	25.119	36.348	2	1.69	2	97.62	3.39	2	6975
1	5	127.1	24.529	36.409	2	1.69	2	113.29	3.77	2	6974
1	6	168.0	22.923	36.283	2	1.68	2	118.84	3.24	2	6973
1	7	208.6	20.896	35.963	2	1.68	2	129.30	3.09	2	6972
1	8	259.8	17.82	35.424	2	2.06	2	131.79	2.99	2	6971
1	9	336.1	11.819	34.697	2	16.32	2	24.86	3.21	2	6970
1	10	413.3	9.459	34.623	2	26.34	2	-69.93	2.64	2	6969
1	12	535.6	7.590	34.563	2	32.49	2	-100.41	3.25	2	6968
1	13	617.7	6.596	34.522	2	38.46	2	-111.00	2.58	2	6967
1	37	719.9	5.890	34.510	2	47.91	2	-122.30	2.50	2	6966
1	15	822.8	5.280	34.502	2	55.64	2	-141.38	2.53	2	6965
1	16	924.7	4.749	34.506	2	63.56	2	-147.74	2.49	2	6964
1	17	1026.8	4.297	34.521	2	72.87	2	-166.62	2.40	2	6963
1	18	1130.4	3.888	34.535	2	82.40	2	-178.29	2.48	2	6962

Station 143

Latitude			15.377°S				Date			7/28/91	
Longitude			133.893°W				Bottom depth			4221	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
3	1	2.9	26.565	36.606	2	1.44	2	101.81	3.88	2	3213
3	4	121.4	25.761	36.473	2	1.40	2	103.56	3.84	2	3212
3	5	144.3	23.854	36.337	2	1.39	2	124.27	3.92	2	3211
3	6	172.8	22.501	36.506	4	1.38	4	100.47	3.83	4	3210
3	7	200.0	21.657	36.144	2	1.37	2	125.07	4.24	2	3209
3	8	246.6	19.634	35.757	2	1.36	2	129.40	3.85	2	3208
3	9	294.9	16.129	35.186	2	2.68	2	104.94	6.36	2	3220
3	10	345.3	12.341	34.715	2	8.04	2	53.66	3.23	2	3203
3	11	397.1	10.164	34.545	2	16.26	2	-21.59	3.01	2	3202
3	12	448.4	8.446	34.514	2	24.11	2	-86.29	3.62	2	3201
3	13	498.1	7.722	34.510	2	26.78	2	-91.64	3.73	2	3200
3	37	602.7	6.625	34.506	2	36.16	2	-111.55	3.18	2	3219
3	15	710.2	5.816	34.498	2	46.89	2	-128.82	4.94	2	3199
3	16	812.7	5.270	34.496	2	54.76	2	-136.27	3.82	2	3198
3	17	918.3	4.768	34.506	2	64.56	2	-166.96	3.48	2	3197
3	18	1023.6	4.350	34.519	2	73.82	2	-175.36	3.51	2	3364

Station 147

Latitude			17.348°S				Date			7/29/91	
Longitude			133.470°W				Bottom depth			4384	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	3.1	26.035	36.576	2	1.57	2	87.90	3.71	2	6877
1	3	106.7	25.970	36.561	2	1.00	2	102.17	5.15	2	6876
1	5	157.4	23.695	36.281	2	1.20	2	51.70	3.49	4	6875
1	6	182.5	23.083	36.287	2	1.01	2	126.33	3.80	2	6874
1	7	209.0	22.486	36.239	2	1.02	2	136.36	3.91	2	6873
1	9	285.1	18.706	35.574	2	1.41	2	131.68	4.05	2	6872
1	10	337.5	15.547	35.096	2	2.38	2	126.36	4.79	2	6871
1	11	389.0	11.389	34.632	2	7.78	2	57.83	3.57	2	6870
1	12	439.2	9.106	34.462	2	13.37	2	-9.08	3.44	2	6869
1	13	495.7	7.440	34.415	2	19.15	2	-57.17	3.23	2	6868
1	37	556.8	6.488	34.375	2	20.12	2	-48.81	5.13	3	6867
1	15	618.0	5.905	34.390	2	27.44	2	-83.07	3.76	2	6866
1	16	720.5	5.473	34.454	2	43.83	2	-123.60	2.60	2	6984
1	17	823.6	5.081	34.481	2	54.26	2	-143.40	3.40	2	6983
1	18	926.0	4.678	34.496	2	62.58	2	-156.10	2.90	2	6982
1	19	1079.5	4.135	34.517	2	74.22	2	-170.70	2.80	2	6981

Station 153

Latitude			20.282°S			Date			7/3091		
Longitude			132.827°W			Bottom depth			4414		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	2.8	25.183	36.420	2	1.66	2	80.69	9.19	3	3230
2	4	132.1	24.922	36.347	2	1.46	2	118.38	9.47	2	3229
2	5	157.6	23.327	36.129	2	1.46	2	121.11	6.01	2	3228
2	7	209.4	21.555	36.062	2	1.46	2	149.00	5.68	2	3227
2	8	260.7	19.016	35.625	2	1.47	2	127.53	4.77	2	3226
2	9	311.8	16.744	35.281	2	1.47	2	107.45	4.78	2	3225
2	10	373.4	14.174	34.967	2	3.22	2	82.59	4.82	2	3224
2	11	435.0	10.965	34.626	2	6.26	2	28.97	4.69	2	3223
2	12	496.1	8.180	34.419	2	11.05	2	0.13	4.64	2	3222
2	13	556.6	6.785	34.361	2	14.66	2	-48.00	4.41	2	3221
2	37	628.6	6.062	34.331	2	16.23	2	-70.39	3.34	2	3218
2	15	690.0	5.700	34.333	2	21.02	2	-89.68	3.30	2	3217
2	17	823.1	5.185	34.397	2	38.42	2	-124.33	3.52	2	3216
2	19	1028.0	4.277	34.486	2	64.42	2	-162.85	3.04	2	3215
2	20	1233.8	3.450	34.529	2	82.80	2	-184.61	2.98	2	3214

Station 156

Latitude			21.768°S			Date			7/3191		
Longitude			132.532°W			Bottom depth			3822		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	2.5	24.281	36.227	2	1.48	2	115.99	3.66	2	6893
1	4	140.7	23.296	36.033	2	1.07	2	108.35	4.74	2	6892
1	5	166.5	22.286	35.971	2	1.07	2	135.55	3.72	2	6891
1	6	198.2	21.602	35.930	2	1.06	2	136.89	3.79	2	6890
1	7	250.0	19.617	35.689	2	1.05	2	146.46	4.35	2	6889
1	8	310.8	17.369	35.371	2	1.43	2	148.69	4.03	2	6888
1	9	373.8	14.338	35.002	2	2.58	2	118.70	4.28	2	6887
1	10	434.5	11.522	34.674	2	5.29	2	90.05	4.93	2	6886
1	11	496.0	8.689	34.453	2	8.96	2	26.82	4.51	2	6885
1	12	568.1	6.879	34.357	2	12.25	2	-20.08	3.44	2	6884
1	13	627.9	6.161	34.332	2	15.14	2	-46.46	3.23	2	6883
1	37	669.1	5.817	34.321	2	17.27	2	-56.47	3.40	2	6882
1	15	708.3	5.524	34.321	2	20.95	2	-72.42	3.27	2	6881
1	16	768.6	5.116	34.331	2	27.14	2	-101.41	7.85	2	6880
1	17	870.0	4.646	34.394	2	44.21	2	-126.82	3.07	2	6879
1	18	970.2	4.367	34.453	2	58.01	2	-149.96	3.81	2	6878

Station 161

Latitude			24.212°S				Date			8/2/91	
Longitude			132.675°W				Bottom depth			3810	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	4.1	22.082	35.704	3	1.27	2	134.37	3.06	2	6722
1	3	87.0	22.099	35.695	2	1.25	2	124.62	3.13	2	6721
1	7	139.3	20.645	35.605	2	1.01	2	129.04	2.93	2	6720
1	9	169.0	19.568	35.569	2	0.98	2	130.32	3.81	2	6719
1	10	207.6	18.410	35.466	2	0.97	2	126.86	3.22	2	6718
1	11	255.4	17.054	35.359	2	1.35	2	120.97	2.92	2	6717
1	12	301.5	15.752	35.225	2	1.73	2	116.60	2.90	2	6716
1	13	350.1	13.833	35.025	2	2.50	2	83.98	2.93	2	6706
1	37	403.2	11.241	34.720	2	4.25	2	54.58	3.02	2	6705
1	15	506.1	8.092	34.435	2	7.57	2	5.33	3.08	2	6704
1	16	607.3	6.411	34.368	2	9.13	2	-12.22	4.18	2	6703
1	17	713.7	5.661	34.299	2	13.82	2	-51.87	2.71	2	6702
1	18	818.2	5.057	34.299	2	21.65	2	-87.13	4.52	2	6701
1	19	918.2	4.470	34.341	2	36.34	2	-117.07	3.48	2	6613
1	20	1012.6	4.032	34.399	2	51.64	2	-133.33	3.20	2	6612

Station 166

Latitude			23.643°S				Date			8/3/91	
Longitude			133.295°W				Bottom depth			4037	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	61	7.6	20.626	35.581	2	1.17	2	143.99	4.24	2	3333
2	5	170.6	19.153	35.460	2	0.98	2	148.24	4.12	2	3332
2	7	282.1	15.429	35.213	2	1.27	2	115.41	4.07	2	3331
2	68	340.3	13.720	35.030	2	2.05	2	89.33	3.91	2	3330
2	69	400.1	11.308	34.769	2	3.62	2	59.21	3.78	2	3329
2	70	464.4	8.845	34.519	2	5.38	2	23.98	3.68	2	3328
2	11	526.7	7.400	34.414	2	6.45	2	16.73	3.91	2	3327
2	12	594.3	6.735	34.372	2	7.63	2	-2.54	3.71	2	3326
2	13	671.9	6.198	34.333	2	9.58	2	-27.50	4.63	2	3325
2	37	723.7	5.956	34.319	2	11.15	2	-34.85	3.77	2	3324
2	15	774.3	5.595	34.304	2	13.69	2	-51.37	3.62	2	3323
2	16	825.8	5.263	34.297	2	17.01	2	-77.66	3.60	2	3322
2	17	928.7	4.651	34.314	2	28.84	2	-107.30	3.47	2	3321
2	18	1031.3	4.179	34.352	2	40.57	2	-132.95	3.40	2	3320
2	19	1131.9	3.716	34.408	2	54.36	2	-144.97	3.98	2	3319
2	21	1375.8	2.987	34.512	2	80.26	2	-175.42	3.39	2	3318
2	31	3380.6	1.572	34.681	2	125.21	2	-210.34	2.12	2	4270
2	32	3588.2	1.537	34.684	2	125.40	2	-196.27	2.17	2	4271

Station 166 (continued)

Latitude				23.643°S				Date				8/3/91	
Longitude				133.295°W				Bottom depth				4037	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
2	33	3796.3	1.531	34.686	2	125.11	2	-189.98	3.07	2	4272		
2	38	4099.8	1.544	34.688	2	125.11	2	-176.04	2.97	2	4273		

Station 169

Latitude				28.102°S				Date				8/5/91	
Longitude				133.680°W				Bottom depth				4192	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
1	61	2.8	19.591	35.544	2	1.53	2	126.23	3.00	2	6961		
1	5	106.6	18.859	35.445	2	1.12	2	130.56	2.96	2	6960		
1	6	142.8	17.780	35.381	2	1.12	2	121.57	2.92	2	6959		
1	7	177.8	16.943	35.361	2	1.50	2	125.56	3.09	2	6958		
1	68	220.0	15.955	35.281	2	1.50	2	112.37	3.74	2	6957		
1	69	260.8	14.851	35.166	2	1.69	2	107.20	4.22	2	6956		
1	70	337.2	12.085	34.844	2	3.25	2	71.80	2.88	2	6955		
1	11	413.5	9.286	34.564	2	5.39	2	39.25	3.67	2	6954		
1	12	489.6	7.783	34.432	2	6.75	2	21.06	3.80	2	6953		
1	13	566.0	6.835	34.369	2	7.92	2	0.59	2.85	2	6952		
1	37	668.9	6.087	34.322	2	10.65	2	-28.16	2.67	2	6951		
1	15	771.7	5.517	34.296	2	15.13	2	-57.23	3.36	2	6950		
1	16	873.3	4.944	34.300	2	23.13	2	-80.37	2.58	2	6949		
1	17	976.0	4.427	34.328	2	33.09	2	-104.65	2.91	2	6948		
1	18	1027.2	4.229	34.344	2	37.77	2	-101.35	2.74	3	6947		
1	19	1079.0	3.950	34.371	2	45.00	2	-131.22	2.57	2	6739		
1	30	3083.4	1.651	34.674	2	126.98	2	-219.65	3.35	2	4329		
1	32	3504.1	1.553	34.683	2	125.95	2	-209.15	2.09	2	4328		
1	34	3925.0	1.508	34.690	2	124.72	2	-201.39	2.19	2	4327		
1	38	4252.5	1.518	34.692	2	124.50	2	-197.78	2.12	2	4324		

Station 172

Latitude				29.560°S				Date				8/5/91	
Longitude				134.065°W				Bottom depth				4177	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
2	61	3.5	18.164	35.403	2	1.47	2	125.05	3.95	2	3347		
2	5	117.7	17.468	35.307	2	1.27	2	131.75	4.41	2	3346		
2	6	149.2	16.605	35.291	2	1.37	2	124.07	4.33	2	3345		
2	7	180.2	15.792	35.257	2	1.56	2	116.01	4.22	2	3344		
2	68	210.5	14.906	35.152	2	1.56	2	99.94	4.14	2	3365		

Station 172 (continued)

Latitude			29.560°S				Date			8/5/91	
Longitude			134.065°W				Bottom depth			4177	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	69	262.3	13.391	35.000	2	2.93	2	89.03	3.72	2	3343
2	70	313.0	11.734	34.817	2	3.52	2	67.68	4.87	2	3342
2	11	387.2	9.270	34.566	2	5.47	2	38.57	4.76	2	3341
2	12	462.2	7.744	34.438	2	6.26	2	34.22	4.24	2	3340
2	13	538.9	6.918	34.385	2	7.63	2	-9.84	3.82	2	3366
2	37	615.0	6.422	34.349	2	9.09	2	-6.36	3.62	2	3339
2	15	718.6	6.002	34.321	2	11.24	2	-27.09	3.56	2	3338
2	16	822.9	5.310	34.298	2	17.50	2	-73.96	3.54	2	3337
2	18	1030.1	4.141	34.345	2	39.20	2	-122.92	4.49	2	3336
2	19	1133.1	3.704	34.392	2	51.52	2	-145.15	3.31	2	3335
2	21	1287.4	3.160	34.470	2	69.51	2	-172.74	3.14	2	3334
2	30	3093.0	1.643	34.675	2	127.55	2	-207.87	2.99	2	4274
2	31	3299.6	1.585	34.680	2	126.87	2	-221.33	4.48	2	4275
2	33	3705.4	1.496	34.688	2	125.01	2	-223.14	2.45	2	4276
2	35	4114.6	1.492	34.693	2	124.52	2	-208.20	2.08	2	4277

Station 176

Latitude			31.510°S				Date			8/7/91	
Longitude			134.617°W				Bottom depth			4303	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	61	2.8	16.809	35.170	2	1.47	2	123.20	3.14	2	6738
1	6	159.7	16.421	35.115	2	0.78	2	116.10	3.13	2	6737
1	68	211.6	14.746	35.063	2	1.17	2	112.10	2.92	2	6727
1	69	260.8	13.440	34.930	2	2.15	2	101.55	3.01	2	6726
1	70	312.2	11.239	34.734	2	3.32	2	63.39	3.56	2	6725
1	12	412.6	8.186	34.463	2	5.08	2	38.94	3.68	2	6724
1	37	516.5	7.140	34.402	2	6.75	2	22.35	4.61	2	6723
1	15	619.6	6.549	34.357	2	8.31	2	-2.49	2.85	2	6732
1	16	722.5	6.030	34.323	2	10.75	2	-37.15	2.65	2	6731
1	17	824.7	5.594	34.303	2	14.08	2	-64.41	2.63	2	6730
1	18	926.3	4.996	34.302	2	22.19	2	-78.63	2.49	2	6729
1	19	1030.3	4.406	34.328	2	32.46	2	-104.99	2.46	2	6728
1	20	1133.0	3.866	34.362	2	43.51	2	-131.41	2.68	2	6736
1	21	1286.2	3.221	34.445	2	62.76	2	-156.88	2.56	2	6735
1	22	1439.7	2.853	34.502	2	75.47	2	-170.76	3.05	2	6734
1	23	1645.1	2.503	34.569	2	92.67	2	-189.48	2.29	2	6733
1	30	3068.7	1.667	34.673	2	127.16	2	-213.27	2.22	2	4334
1	32	3470.8	1.580	34.682	2	126.09	2	-203.19	2.09	2	4333

Station 176 (continued)

Latitude				31.510°S				Date				8/7/91	
Longitude				134.617°W				Bottom depth				4303	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
1	34	3877.7	1.439	34.693	2	124.42	2	-193.90	3.37	2	4331		
1	35	4126.9	1.354	34.701	2	122.76	2	-200.65	2.05	2	4330		

Station 179

Latitude				33.015°S				Date				8/8/91	
Longitude				135.028°W				Bottom depth				4468	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
2	61	8.1	16.480	35.199	2	1.05	2	140.98	5.30	2	3405		
2	5	161.9	15.352	35.075	2	0.99	2	134.84	5.68	2	3404		
2	7	229.3	13.244	34.945	2	2.14	2	104.26	5.78	2	3403		
2	69	311.4	10.498	34.664	2	3.29	2	58.80	4.08	2	3355		
2	11	412.2	7.989	34.451	2	5.23	2	29.73	4.23	2	3354		
2	13	514.4	6.902	34.381	2	7.16	2	-4.65	3.84	2	3353		
2	37	618.2	6.403	34.347	2	8.72	2	-9.86	4.64	2	3352		
2	15	717.2	6.010	34.321	2	10.67	2	-20.73	3.63	2	3402		
2	16	823.1	5.481	34.301	2	14.99	2	-52.56	3.90	2	3401		
2	17	927.2	4.889	34.308	2	24.03	2	-80.23	4.06	2	3400		
2	18	1025.0	4.311	34.328	2	33.47	2	-113.60	3.42	2	3399		
2	19	1127.8	3.763	34.368	2	44.68	2	-127.17	3.58	2	3398		
2	20	1287.1	3.208	34.434	2	59.07	2	-145.49	3.74	2	3351		
2	21	1445.3	2.827	34.502	2	73.31	2	-168.31	3.18	2	3350		
2	22	1642.5	2.521	34.567	2	89.42	2	-187.94	3.12	2	3349		
2	23	1846.0	2.296	34.607	2	102.03	2	-198.03	3.11	2	3348		
2	28	2883.6	1.709	34.670	2	126.08	2	-206.53	3.32	2	3411		
2	29	3089.6	1.655	34.673	2	126.25	2	-212.00	3.03	2	3410		
2	30	3292.9	1.615	34.680	2	125.81	2	-211.41	3.28	2	3409		
2	32	3716.0	1.487	34.692	2	124.72	2	-197.17	4.18	2	3408		
2	33	3920.3	1.401	34.698	2	123.46	2	-197.60	3.28	2	3407		
2	35	4333.1	1.307	34.705	2	121.76	2	-169.92	3.65	2	3406		

Station 180

Latitude				37.513°S				Date				8/12/91	
Longitude				150.517°W				Bottom depth				5527	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM		
2	61	4.2	13.384	34.746	2	1.47	2	108.32	4.15	2	3367		
2	4	132.1	12.963	34.702	2	1.17	2	90.78	4.74	2	3368		
2	5	172.7	11.184	34.619	2	1.76	2	69.77	3.83	2	3369		

Station 180 (continued)

Latitude			37.513°S				Date			8/12/91	
Longitude			150.517°W				Bottom depth			5527	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
2	7	233.1	9.280	34.566	2	3.52	2	60.28	3.84	2	3370
2	69	314.9	8.119	34.493	2	4.89	2	43.03	5.18	2	3371
2	70	392.6	7.740	34.468	2	5.67	2	76.69	4.47	4	3372
2	11	469.4	7.411	34.442	2	6.84	2	37.25	3.76	2	3431
2	12	546.0	7.115	34.414	2	7.63	2	23.83	3.57	2	3430
2	13	621.7	6.760	34.385	2	8.80	2	11.45	6.21	2	3429
2	37	724.9	6.325	34.352	2	11.24	2	-27.64	4.39	2	3428
2	15	827.8	5.844	34.328	2	14.96	2	-50.44	4.95	2	3427
2	16	931.5	5.266	34.326	2	21.80	2	-77.59	3.76	2	3426
2	17	1033.6	4.618	34.329	2	30.11	2	-110.83	5.43	2	3425
2	18	1187.8	3.857	34.363	2	43.11	2	-121.54	3.51	2	3424
2	19	1341.4	3.255	34.426	2	57.48	2	-142.94	3.26	2	3423
2	20	1543.5	2.823	34.527	2	78.01	2	-175.30	3.73	2	3422
2	21	1799.4	2.513	34.597	2	98.24	2	-193.79	3.68	2	3373
2	22	2052.0	2.311	34.623	2	109.48	2	-200.22	3.18	2	3374
2	23	2297.6	2.135	34.641	2	117.00	2	-208.43	3.09	2	3375
2	24	2555.0	2.008	34.653	2	122.86	2	-218.11	4.07	2	3376
2	25	2809.1	1.899	34.662	2	127.85	2	-208.41	3.60	2	3377
2	26	3050.8	1.814	34.671	2	128.24	2	-212.16	5.03	2	3378
2	27	3291.1	1.740	34.685	2	125.11	2	-165.52	4.31	4	3379
2	28	3528.9	1.683	34.701	2	117.58	2	-188.05	3.78	2	3380
2	29	3778.7	1.547	34.713	2	114.16	2	-190.58	3.37	2	3381
2	30	4023.2	1.407	34.714	2	114.75	2	-189.31	3.24	2	3382
2	31	4278.0	1.265	34.714	2	117.39	2	-193.33	3.16	3	3383
2	32	4546.9	1.180	34.712	2	119.24	2	-190.74	3.23	3	3384
2	33	4810.4	1.141	34.710	2	120.32	2	-176.40	3.31	2	3385
2	34	5111.7	1.116	34.709	2	121.98	2	-182.83	3.46	3	3386
2	35	5381.0	1.125	34.708	2	122.76	2	-167.21	3.78	2	3387
2	38	5641.6	1.153	34.709	2	122.96	2	-167.68	4.47	2	3388

Station 184

Latitude			35.485°S				Date			8/13/91	
Longitude			150.508°W				Bottom depth			5372	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	61	6.7	14.298	34.918	2	1.27	2	107.38	3.80	2	5224
1	5	190.0	11.343	34.724	2	2.05	2	75.98	3.92	2	5223
1	68	352.2	8.107	34.497	2	5.28	2	54.34	4.15	2	5222
1	70	485.1	7.372	34.439	2	6.65	2	32.64	4.08	2	5221
1	12	639.2	6.711	34.381	2	8.99	2	2.77	5.40	2	5201

Station 184 (continued)

Latitude			35.485°S				Date			8/13/91	
Longitude			150.508°W				Bottom depth			5372	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	13	720.0	6.365	34.354	2	11.05	2	-13.52	4.08	2	5200
1	37	818.8	5.774	34.326	2	15.45	2	-36.32	4.28	2	5199
1	15	917.3	5.167	34.319	2	22.68	2	-74.83	4.30	2	5198
1	16	1019.1	4.551	34.330	2	31.29	2	-80.88	5.74	2	5197
1	18	1269.6	3.392	34.402	2	52.99	2	-125.71	4.44	2	5194
1	19	1418.7	2.944	34.486	2	69.70	2	-148.34	3.68	2	5193
1	20	1609.6	2.665	34.563	2	87.98	2	-164.99	3.92	2	5192
1	21	1798.3	2.464	34.598	2	100.00	2	-179.23	3.72	2	5191
1	22	1992.0	2.264	34.624	2	109.67	2	-201.72	3.34	2	5190
1	23	2186.7	2.115	34.639	2	116.32	2	-207.54	3.42	2	5189
1	24	2376.5	2.000	34.650	2	122.28	2	-215.02	4.34	2	5188
1	29	3636.8	1.528	34.695	2	123.06	2	-193.26	2.97	2	3416
1	31	4149.9	1.312	34.708	2	118.46	2	-187.65	3.34	2	3415
1	33	4649.0	1.155	34.709	2	120.51	2	-167.10	2.97	2	3414
1	35	5163.8	1.116	34.708	2	122.76	2	-165.86	4.61	2	3413
1	38	5439.3	1.139	34.708	2	122.76	2	-164.68	3.80	2	3412

Station 187

Latitude			34.008°S				Date			8/15/91	
Longitude			150.522°W				Bottom depth			5303	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	61	3.0	15.054	35.091	2	1.27	2	117.62	3.49	2	3484
2	6	190.4	13.861	34.986	2	1.17	2	93.68	4.21	2	3485
2	68	250.2	12.304	34.881	2	2.35	2	83.05	3.22	2	3486
2	70	373.1	8.714	34.548	2	4.69	2	41.12	4.32	2	3487
2	11	445.7	8.018	34.492	2	5.28	2	33.67	3.14	2	3488
2	12	513.2	7.612	34.460	2	5.87	2	42.56	3.65	2	3489
2	13	615.1	7.095	34.415	2	7.23	2	23.03	3.19	2	3490
2	37	719.3	6.541	34.366	2	9.29	2	0.43	4.57	2	3440
2	15	822.7	5.905	34.327	2	13.30	2	-47.35	4.29	2	3439
2	17	1023.3	4.720	34.321	2	28.35	2	-87.44	4.09	2	3438
2	18	1122.7	4.119	34.346	2	38.42	2	-109.97	4.04	2	3437
2	19	1270.8	3.493	34.397	2	51.72	2	-136.32	3.92	2	3436
2	20	1422.2	3.036	34.466	2	66.48	2	-148.31	4.00	2	3435
2	21	1630.8	2.628	34.559	2	87.19	2	-169.58	4.44	2	3434
2	22	1828.2	2.382	34.609	2	104.20	2	-186.98	8.62	2	3433
2	23	2009.4	2.214	34.630	2	112.02	2	-209.18	3.42	2	3432
2	29	3478.7	1.580	34.690	2	127.06	2	-200.97	3.09	2	3421
2	31	3988.9	1.362	34.706	2	121.30	2	-191.64	3.10	2	3420

Station 187 (continued)

Latitude			34.008°S					Date		8/15/91	
Longitude			150.522°W					Bottom depth		5303	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	33	4507.8	1.194	34.710	2	120.22	2	-165.40	3.19	2	3419
2	35	5124.9	1.135	34.709	2	122.66	2	-164.14	3.25	2	3418
2	38	5398.3	1.152	34.709	2	122.27	2	-168.96	3.17	2	3417

Station 191

Latitude			31.997°S					Date		8/16/91	
Longitude			150.500°W					Bottom depth		5167	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	61	3.3	16.519	35.359	2	1.27	2	137.77	2.95	2	5673
1	64	170.5	15.090	35.193	2	1.42	2	112.24	4.22	2	5672
1	6	254.5	13.151	35.026	2	2.59	2	78.35	4.66	2	5671
1	68	363.9	9.781	34.678	2	4.77	2	40.09	2.66	2	5670
1	70	484.4	7.711	34.467	2	5.74	2	24.12	2.81	2	5669
1	11	544.9	7.344	34.436	2	6.73	2	30.15	2.62	3	5668
1	12	604.9	7.009	34.405	2	8.12	2	-5.40	2.61	2	5667
1	13	675.2	6.574	34.369	2	9.11	2	-13.14	4.20	2	5301
1	37	757.1	6.213	34.344	2	11.30	2	-38.49	3.05	2	5300
1	15	838.0	5.734	34.326	2	15.30	2	-62.30	2.90	2	5299
1	17	1012.1	4.767	34.324	2	28.33	2	-108.19	3.46	2	5298
1	19	1214.5	3.648	34.384	2	48.82	2	-128.30	2.57	2	5297
1	20	1370.4	3.094	34.464	2	66.96	2	-142.17	2.74	2	5296
1	21	1524.0	2.744	34.530	2	81.53	2	-165.87	2.50	2	5295
1	22	1730.7	2.453	34.588	2	98.87	2	-183.64	4.42	2	5294
1	23	1939.0	2.216	34.624	2	111.83	2	-212.54	2.44	2	5293
1	28	3187.5	1.642	34.680	2	131.19	2	-204.50	3.81	2	3602
1	29	3449.0	1.533	34.690	2	127.40	2	-206.79	4.30	2	3601
1	31	3971.3	1.353	34.700	2	124.67	2	-192.83	4.12	2	3600
1	33	4488.0	1.250	34.707	2	121.53	2	-167.13	4.48	2	3599
1	39	5013.4	1.162	34.706	4	121.73	4	-166.27	5.59	2	3598
1	38	5257.0	1.176	34.709	2	121.73	2	-161.33	4.19	2	3597

Station 195

Latitude			30.013°S					Date		8/17/91	
Longitude			150.487°W					Bottom depth		4412	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	61	1.3	18.003	35.532	2	1.61	2	123.55	2.72	2	5688
1	5	143.6	17.112	35.392	2	1.31	2	110.30	3.04	2	5687

Station 195 (continued)

Latitude			30.013°S				Date			8/17/91	
Longitude			150.487°W				Bottom depth			4412	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	7	241.9	14.617	35.206	2	2.47	2	93.30	2.75	2	5686
1	68	299.7	12.692	34.997	2	3.05	2	79.37	2.67	2	5685
1	69	355.9	10.698	34.769	2	4.63	2	63.49	4.05	2	5684
1	11	471.7	8.090	34.500	2	6.39	2	21.24	2.70	2	5683
1	12	536.4	7.365	34.438	2	6.97	2	25.21	2.85	2	5682
1	13	614.4	6.879	34.395	2	8.15	2	-8.51	2.64	2	5678
1	37	691.4	6.506	34.363	2	9.33	2	-18.31	2.53	2	5677
1	16	868.8	5.522	34.323	2	15.32	2	-56.32	2.49	2	5676
1	17	1019.2	4.589	34.327	2	30.38	2	-99.19	2.96	2	5675
1	18	1168.5	3.807	34.385	2	48.28	2	-124.70	2.49	2	5674
1	19	1367.7	3.136	34.470	2	67.64	2	-159.63	3.36	2	5681
1	20	1570.0	2.657	34.551	2	87.31	2	-194.99	3.77	3	5694
1	21	1771.9	2.385	34.599	2	103.06	2	-191.15	2.23	2	5680
1	22	1981.0	2.199	34.626	2	113.56	2	-202.72	2.20	2	5679
1	28	3015.2	1.670	34.675	2	132.66	3	-213.77	3.83	2	4957
1	29	3228.4	1.582	34.681	2	129.48	2	-203.48	3.47	2	4956
1	31	3648.4	1.426	34.698	2	125.87	2	-196.11	2.52	2	4955
1	33	3863.7	1.355	34.698	2	124.37	2	-185.09	2.53	2	4954
1	39	4278.4	1.299	34.701	2	123.70	2	-176.46	3.35	2	4953
1	38	4442.3	1.284	34.702	2	123.47	2	-176.40	3.08	2	4952

Station 198

Latitude			28.497°S				Date			8/18/91	
Longitude			150.497°W				Bottom depth			4948	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	61	0.8	19.427	35.584	2	1.22	2	117.43	4.24	2	3506
2	5	154.6	17.779	35.484	2	1.01	2	120.52	5.76	2	3505
2	6	185.8	17.431	35.452	2	1.01	2	122.87	5.79	2	3504
2	7	227.4	16.286	35.405	2	1.62	2	107.54	5.22	2	3503
2	68	268.9	15.029	35.291	2	2.03	2	109.34	4.92	2	3502
2	70	359.8	11.718	34.898	2	4.06	2	61.81	4.18	2	3501
2	11	412.0	10.547	34.744	2	4.87	2	49.97	4.25	2	3500
2	12	488.4	8.702	34.556	2	5.88	2	27.42	5.87	2	3499
2	37	643.4	6.863	34.392	2	8.73	2	-7.09	5.25	2	3498
2	15	719.6	6.427	34.360	2	10.55	2	-31.38	4.26	2	3497
2	16	822.3	5.660	34.324	2	16.24	2	-60.60	3.31	2	3496
2	18	1028.0	4.613	34.339	2	32.28	2	-112.66	3.53	2	3495
2	20	1284.3	3.333	34.418	3	55.88	2	-137.18	7.05	2	3494
2	21	1439.5	2.877	34.509	2	77.74	2	-161.96	2.75	2	3493

Station 198 (continued)

Latitude			28.497°S				Date			8/18/91	
Longitude			150.497°W				Bottom depth			4948	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	22	1645.8	2.545	34.573	2	95.23	2	-181.21	2.74	2	3492
2	24	1851.9	2.259	34.619	2	109.96	2	-203.27	2.68	2	3491
2	25	2057.9	2.094	34.638	2	119.80	2	-215.47	3.74	2	3596
2	27	2574.8	1.827	34.662	2	131.84	2	-219.87	3.59	2	3595
2	29	3092.6	1.664	34.677	2	132.92	2	-217.67	3.69	2	3594
2	30	3352.6	1.555	34.685	2	129.74	2	-214.22	3.93	2	3593
2	31	3613.9	1.447	34.692	2	126.15	2	-206.79	3.36	2	3592
2	32	3872.6	1.361	34.698	2	125.10	2	-190.97	3.39	2	3591
2	33	4185.8	1.316	34.702	2	124.69	2	-181.70	3.38	2	3590
2	34	4497.3	1.315	34.702	2	124.06	2	-185.58	3.84	2	3589
2	39	4759.6	1.336	34.704	2	123.65	2	-187.68	3.83	2	3588
2	38	5030.2	1.368	34.704	2	124.08	2	-179.89	3.27	2	3587

Station 202

Latitude			26.510°S				Date			8/20/91	
Longitude			150.497°W				Bottom depth			4739	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	61	2.0	19.898	35.603	2	1.37	2	144.52	4.38	2	5179
1	5	164.0	19.331	35.544	2	1.27	2	133.19	2.94	2	4942
1	6	204.6	17.769	35.499	2	1.47	2	127.09	3.67	2	4941
1	68	306.5	14.471	35.203	2	2.25	2	87.02	3.25	2	4940
1	70	408.9	11.023	34.803	2	4.59	2	60.73	3.98	2	4939
1	12	553.6	7.747	34.462	2	6.65	2	21.20	3.80	2	4938
1	37	675.0	6.308	34.365	4	9.78	4	-16.20	3.32	2	4936
1	13	675.0	6.914	34.370	4	9.19	4	-20.52	6.39	2	4937
1	15	777.7	5.895	34.325	2	13.88	2	-45.81	2.84	2	4935
1	16	870.6	5.323	34.315	2	19.94	2	-76.13	2.82	2	4934
1	18	1072.1	4.280	34.361	2	40.57	2	-104.80	2.49	2	4933
1	19	1225.9	3.580	34.435	2	60.12	2	-137.63	2.43	2	4932
1	21	1632.9	2.507	34.575	2	99.41	2	-181.99	2.31	2	4931
1	23	2048.3	2.082	34.635	2	119.84	2	-211.66	2.41	2	4930
1	25	2466.3	1.871	34.657	2	129.22	2	-218.02	2.28	2	4929
1	27	2865.7	1.762	34.665	2	131.07	2	-216.51	2.35	2	4928
1	28	3073.4	1.678	34.672	2	130.10	2	-209.55	2.35	2	4951
1	30	3592.9	1.543	34.685	2	127.46	2	-199.60	3.21	2	4947
1	32	4013.0	1.392	34.696	2	125.40	2	-185.68	2.32	2	4946
1	33	4226.4	1.330	34.700	2	124.72	2	-178.13	2.34	2	4945
1	39	4641.2	1.315	34.703	2	123.35	2	-174.83	2.51	2	4944
1	38	4824.0	1.334	34.704	2	123.74	2	-176.41	2.74	2	4943

Station 206

Latitude			24.495°S				Date			8/21/91	
Longitude			150.485°W				Bottom depth			4917	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	61	2.8	21.888	35.670	2	1.37	2	130.56	4.26	2	5187
1	5	180.0	20.365	35.578	2	1.37	2	139.18	4.93	2	5186
1	7	256.3	18.123	35.530	2	1.37	2	128.75	4.90	2	5185
1	68	287.6	17.053	35.460	2	1.56	2	127.54	4.14	2	5184
1	69	326.2	15.197	35.297	2	2.34	2	105.81	4.12	2	5183
1	70	376.5	13.205	35.042	2	3.13	2	87.94	4.89	2	5182
1	11	430.8	11.068	34.753	2	4.79	2	58.92	5.35	2	5181
1	12	483.1	9.325	34.576	2	6.45	2	26.70	3.11	2	4965
1	13	553.6	7.567	34.428	2	8.11	2	-8.60	3.75	2	4964
1	37	635.1	6.553	34.360	2	9.97	2	-30.93	3.61	2	4963
1	15	715.9	5.877	34.321	2	13.88	2	-57.43	3.70	2	4962
1	16	817.4	5.141	34.317	2	22.88	2	-95.12	2.86	2	4961
1	18	1018.5	4.057	34.393	2	49.37	2	-133.90	2.75	2	4960
1	20	1276.3	3.080	34.505	2	79.18	2	-167.87	2.66	2	4959
1	22	1626.8	2.410	34.592	2	105.08	2	-197.08	4.12	2	5180
1	24	2032.4	2.071	34.636	2	121.30	2	-215.37	2.51	2	4958
1	26	2430.0	1.888	34.646	4	127.07	2	-224.59	2.63	2	3645
1	30	3454.4	1.548	34.682	2	126.77	2	-216.23	3.49	2	3644
1	31	3720.7	1.508	34.688	2	127.06	2	-214.30	2.68	2	3643
1	32	3987.5	1.449	34.693	2	126.97	2	-208.12	2.65	2	3642
1	33	4247.3	1.395	34.697	2	125.30	2	-187.66	3.81	2	4950
1	34	4504.3	1.370	34.700	2	123.74	2	-180.47	2.38	2	4949
1	38	4983.0	1.388	34.702	2	124.13	2	-176.01	3.03	2	4948

Station 210

Latitude			22.503°S				Date			8/22/91	
Longitude			150.513°W				Bottom depth			4463	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	61	0.8	23.551	35.924	2	1.76	2	107.55	3.37	2	3629
2	3	72.6	23.055	35.885	2	1.56	2	132.58	3.36	2	3628
2	64	102.8	22.448	35.792	2	1.46	2	129.57	3.65	2	3627
2	5	126.1	21.979	35.707	2	1.47	2	116.18	3.39	2	3626
2	7	202.5	19.316	35.584	2	1.47	2	129.47	4.90	2	3625
2	68	254.9	17.867	35.474	2	1.47	2	105.42	4.10	2	3624
2	69	305.6	15.873	35.299	2	2.05	2	108.39	5.52	2	3623
2	70	367.3	13.186	34.999	2	3.71	2	78.27	3.20	2	3622
2	11	438.7	10.573	34.715	2	5.47	2	14.42	3.09	2	3621
2	12	507.3	8.060	34.471	2	7.33	2	-4.06	8.35	2	3620
2	13	569.3	6.915	34.375	2	9.78	2	-13.81	6.80	2	3619

Station 210 (continued)

Latitude			22.503°S				Date			8/22/91	
Longitude			150.513°W				Bottom depth			4463	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	37	644.0	6.098	34.326	2	12.61	2	-41.48	3.36	2	3618
2	15	731.7	5.527	34.313	2	18.58	2	-67.27	3.87	2	3617
2	16	824.9	4.946	34.330	2	28.16	2	-95.12	2.59	2	3616
2	17	913.1	4.538	34.368	2	40.08	2	-130.43	4.11	2	3604
2	19	1135.9	3.616	34.466	2	67.55	2	-171.23	5.68	2	3603
2	20	1266.6	3.137	34.517	2	81.82	2	-203.88	2.50	3	3641
2	21	1416.9	2.816	34.554	2	94.04	2	-191.24	2.76	2	3640
2	23	1723.3	2.346	34.604	2	109.87	2	-216.75	2.64	2	3639
2	25	2029.6	2.114	34.632	2	118.86	2	-222.16	2.68	2	3638
2	27	2443.2	1.889	34.652	2	126.58	2	-219.35	2.70	2	3637
2	29	2854.7	1.733	34.666	2	126.68	2	-212.51	2.76	2	3636
2	30	3062.9	1.656	34.673	2	128.63	2	-212.88	2.68	2	3635
2	32	3534.1	1.531	34.683	2	126.38	2	-220.34	2.69	2	3634
2	33	3793.6	1.460	34.689	2	124.62	2	-193.02	4.32	2	3633
2	34	4054.2	1.411	34.693	2	124.42	2	-216.24	3.00	2	3632
2	39	4316.3	1.370	34.697	2	124.13	2	-203.27	3.94	2	3631
2	38	4529.2	1.369	34.699	2	123.25	2	-189.40	2.72	2	3630

Station 215

Latitude			20.008°S				Date			8/24/91	
Longitude			150.505°W				Bottom depth			3729	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	61	1.5	25.470	36.112	2	1.22	2	106.44	5.85	6	5575,5762
1	64	123.9	24.754	35.961	2	0.58	2	109.94	10.86	6	5574,5761
1	6	177.7	22.325	35.918	2	0.57	2	125.88	2.85	2	5573
1	68	223.9	20.701	35.806	2	0.56	2	129.93	2.28	6	5572,5760
1	70	296.4	18.218	35.519	2	1.81	2	122.65	5.67	2	5759
1	11	351.2	15.425	35.171	2	2.64	2	87.03	4.63	2	5570
1	13	457.0	10.724	34.686	2	6.60	2	16.86	2.12	6	5569,5757, 6943,6944
1	37	506.7	9.110	34.540	2	8.06	2	-11.41	7.00	6	5568,5756
1	15	552.6	7.921	34.446	2	10.14	2	-21.52	3.08	2	5551
1	16	655.4	6.453	34.400	2	21.83	2	-71.82	6.35	6	5703,5704
1	17	759.3	5.543	34.410	2	33.52	2	-99.02	2.02	6	5701,5702
1	18	861.7	4.791	34.428	2	46.06	2	-136.35	9.71	6	5699,5700
1	20	1062.8	3.876	34.484	2	66.55	2	-163.50	6.20	6	5697,5698
1	21	1215.8	3.339	34.518	2	79.98	2	-184.68	3.06	6	5693,5696
1	22	1422.0	2.799	34.564	2	94.75	2	-205.91	6.82	6	6945,6946
1	24	1819.1	2.320	34.615	2	110.86	2	-220.79	3.54	6	5689,5690

WOCE Cruise P16A17A

10/6/92 – 11/26/92

J. Reid

Station 14

Latitude			42.995°S				Date			10/16/92	
Longitude			150.501°W				Bottom depth			5198	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	2	54.6	9.7551	34.2848	2	2.20	2	68.33	2.65	2	4313
2	3	94.3	8.9572	34.3245	2	2.38	2	55.79	3.37	2	4312
2	5	159.7	8.2804	34.4583	2	4.49	2	41.89	3.16	2	4311
2	7	209.0	7.9445	34.4623	2	5.05	2	39.92	2.34	2	4310
2	8	258.2	7.7115	34.4487	2	5.61	2	36.67	2.34	2	4309
2	9	308.7	7.5476	34.4393	2	6.18	2	32.72	4.24	2	4630
2	10	359.0	7.4586	34.4410	2	6.36	2	37.56	5.06	2	4305
2	11	433.5	7.2177	34.4198	2	7.13	2	17.61	2.81	2	4304
2	12	508.2	7.0677	34.4056	2	7.50	2	16.23	6.16	2	4306
2	13	608.6	6.7478	34.3781	2	8.85	2	3.14	4.17	2	4303
2	14	709.7	6.3459	34.3475	2	11.18	2	-21.85	6.35	2	4302
2	15	808.3	5.8581	34.3257	2	15.26	2	-49.59	4.81	2	4301
2	16	907.5	5.2573	34.3194	2	21.88	2	-52.03	3.58	2	4300
2	17	1007.7	4.6824	34.3278	2	29.28	2	-72.81	5.55	2	5195
2	18	1107.8	4.1016	34.3377	2	36.88	2	-89.84	2.69	2	4299
2	19	1257.5	3.4909	34.3780	2	48.20	2	-119.76	2.63	2	4298
2	20	1408.5	3.0850	34.4346	2	59.14	2	-129.24	2.20	2	4318
2	21	1609.9	2.7292	34.5216	2	73.04	2	-152.85	3.06	2	4317
2	22	1811.2	2.5212	34.5896	2	86.02	2	-166.78	2.15	2	4316
2	23	2012.0	2.3423	34.6258	2	101.24	2	-195.63	2.13	2	4315
2	24	2214.4	2.1904	34.6431	2	110.18	2	-202.09	2.41	2	4314
2	25	2418.3	2.0714	34.6558	2	114.76	2	-208.19	3.54	2	4631
2	26	2619.2	1.9625	34.6667	2	118.16	2	-215.18	2.99	2	4308
2	27	2823.6	1.8745	34.6757	2	119.54	2	-217.74	3.27	2	4307

Station 22

Latitude			47.003°S				Date			10/18/92	
Longitude			150.488°W				Bottom depth			4882	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	24	601.9	6.7163	34.3733	2	8.74	2	26.01	4.66	2	4344
1	25	699.2	6.3656	34.3466	2	10.70	2	3.93	5.65	2	4343
1	26	802.5	5.9489	34.3247	2	14.22	2	-19.50	5.21	2	4342
1	27	904.0	5.4294	34.3196	2	19.90	2	-49.54	3.32	2	4341
1	28	1005.1	4.9088	34.3221	2	26.56	2	-63.86	5.42	2	4340
1	29	1209.6	3.8247	34.3468	2	41.27	2	-93.11	2.69	2	4339

Station 22 (continued)

Latitude			47.003°S				Date			10/18/92	
Longitude			150.488°W				Bottom depth			4882	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	30	1412.7	3.1533	34.4170	2	56.77	2	-122.90	2.74	2	4338
1	31	1616.3	2.8256	34.5095	2	72.50	2	-146.32	2.60	2	4337
1	32	1815.9	2.5968	34.5748	2	85.72	2	-169.32	2.43	2	4336
1	33	2011.3	2.4280	34.6170	2	96.62	2	-183.98	2.18	2	4335
1	34	2203.7	2.2761	34.6391	2	105.37	2	-185.89	2.83	2	4441
1	35	2404.6	2.1572	34.6558	2	109.36	2	-192.20	2.93	2	4440
1	36	2607.2	2.0593	34.6739	2	109.34	2	-190.25	2.70	2	4439
1	2	3004.3	1.8436	34.6962	2	113.53	2	-198.51	2.79	2	4438
1	3	3209.9	1.7536	34.7139	2	108.10	2	-182.48	3.27	2	4437
1	4	3409.8	1.6517	34.7231	2	106.08	2	-169.37	2.83	2	4436
1	5	3614.2	1.5069	34.7237	2	108.07	2	-173.42	2.84	2	4435

Station 23

Latitude			47.496°S				Date			10/19/92	
Longitude			150.490°W				Bottom depth			4667	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	10	4267.8	1.1812	34.7164	2	118.07	2	-166.58	2.89	2	4434
1	11	4497.4	1.1712	34.7158	2	119.24	2	-163.74	3.29	2	4433

Station 32

Latitude			51.986°S				Date			10/22/92	
Longitude			150.485°W				Bottom depth			4383	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	10.3	7.3529	34.4195	4	11.13	4	12.03	3.32	4	4431
1	2	43.1	7.2929	34.4458	2	6.70	2	29.74	3.33	2	4432
1	4	108.3	7.0491	34.4184	2	6.69	2	22.87	3.26	2	4430
1	6	208.3	6.9142	34.4030	2	6.69	2	23.87	3.32	2	4429
1	8	317.8	6.6204	34.3668	2	7.26	2	27.29	3.72	2	4428
1	10	433.3	6.2297	34.3220	2	9.17	2	5.43	3.17	2	4427
1	12	516.9	5.7801	34.2791	2	11.67	2	-11.49	3.70	2	4426
1	13	547.3	5.8820	34.3067	2	13.40	2	-25.98	3.30	2	4425
1	14	566.4	5.9789	34.3340	2	15.51	2	-36.67	7.95	2	4424
1	15	610.8	5.4403	34.2862	2	17.05	2	-43.86	3.11	2	4423
1	16	689.2	5.1586	34.3058	2	22.24	2	-42.09	3.33	2	4350
1	17	787.7	4.6590	34.3241	2	29.17	2	-54.67	3.05	2	4349
1	18	888.7	3.9096	34.3016	2	34.56	2	-67.62	2.88	2	4348
1	19	1037.6	3.4311	34.3517	2	45.35	2	-94.37	2.94	2	4347

Station 32 (continued)

Latitude			51.986°S				Date			10/22/92	
Longitude			150.485°W				Bottom depth			4383	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	20	1185.5	3.0774	34.4117	2	55.96	2	-119.09	4.04	2	4346
1	21	1385.2	2.8466	34.5050	2	71.24	2	-146.42	3.99	2	4345
1	22	1575.9	2.5798	34.5635	2	78.22	2	-165.99	3.16	2	4450
1	23	1780.2	2.4140	34.6178	2	80.16	2	-165.97	4.03	2	4451
1	24	1985.1	2.2931	34.6649	2	84.82	2	-162.57	2.84	2	4445
1	25	2191.1	2.1842	34.6975	2	86.38	2	-165.25	3.94	2	4444
1	26	2394.1	2.0853	34.7195	2	87.93	2	-166.17	3.94	2	5695
1	27	2596.1	1.9335	34.7339	2	91.84	2	-159.96	2.85	2	4443
1	28	2800.6	1.7716	34.7376	2	95.94	2	-156.71	2.87	2	4442

Station 38

Latitude			54.982°S				Date			10/24/92	
Longitude			150.509°W				Bottom depth			3782	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	7.1	2.8604	33.9587	2	11.40	2	-24.63	3.74	2	4632
2	3	107.2	2.7637	33.9557	2	11.40	2	-22.50	3.68	2	4457
2	4	157.3	2.7655	33.9575	2	11.39	2	-32.91	4.15	2	4456
2	5	206.9	2.8384	34.0004	2	13.71	2	-31.56	3.45	2	4455
2	6	257.5	3.7272	34.1481	2	19.91	2	-43.46	3.21	2	4454
2	7	308.8	3.6907	34.1933	2	25.33	2	-57.13	3.16	2	4453
2	8	359.3	3.4253	34.2209	2	29.59	2	-55.66	3.36	2	4422
2	9	389.1	3.1439	34.2131	2	32.31	2	-49.22	3.93	2	5196
2	10	429.7	2.9200	34.2296	2	36.57	2	-75.41	3.02	2	4421
2	11	510.1	3.0391	34.3102	2	44.32	2	-106.13	3.54	2	4459
2	12	611.1	2.7204	34.3479	2	52.09	2	-116.88	3.29	2	4458
2	13	711.6	2.5937	34.4092	2	59.86	2	-122.80	5.09	2	4452
2	14	812.0	2.5146	34.4680	2	65.69	2	-129.67	3.05	2	4449
2	15	912.7	2.4296	34.5368	2	71.93	2	-137.09	3.05	2	4448
2	16	1014.4	2.3829	34.5763	2	74.65	2	-136.81	3.05	2	4447
2	17	1114.8	2.3468	34.6133	2	77.58	2	-148.73	2.87	2	4446
2	18	1215.9	2.2876	34.6412	2	79.53	2	-145.21	3.38	2	4648
2	19	1317.6	2.2363	34.6622	2	80.90	2	-147.25	3.29	2	4647
2	20	1418.7	2.1763	34.6836	2	82.07	2	-147.98	2.99	2	4646
2	21	1519.8	2.1197	34.7032	2	83.82	2	-170.83	2.98	4	4645
2	22	1619.6	2.0336	34.7166	2	85.98	2	-151.82	3.04	2	4644
2	23	1770.3	1.9299	34.7307	2	89.31	2	-151.38	2.89	2	4643
2	24	1920.6	1.7818	34.7374	2	93.43	2	-153.40	2.98	2	4642
2	25	2173.2	1.6009	34.7368	2	98.75	2	-156.95	3.05	2	4641

Station 43

Latitude			57.494°S				Date		10/26/92		
Longitude			150.497°W				Bottom depth		3117		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	6	6.8	0.5538	33.9403	2	26.22	2	-60.19	4.34	2	4664
2	7	56.5	0.5379	33.9403	2	26.22	2	-47.21	4.07	2	4663
2	8	80.9	0.4829	33.9484	2	26.79	2	-61.58	3.18	2	4547
2	9	106.8	0.4360	33.9662	2	28.14	2	-58.62	4.46	2	4662
2	10	131.1	0.4370	33.9826	2	30.26	2	-62.64	4.15	2	4661
2	11	157.3	0.8126	34.0719	2	37.59	2	-72.41	7.92	2	4660
2	13	227.7	2.2252	34.3129	2	53.63	2	-95.11	3.09	2	4658
2	14	268.0	2.2562	34.3764	2	59.63	2	-108.57	3.23	2	4657
2	15	307.1	2.3351	34.4329	2	63.89	2	-123.23	3.31	2	4656
2	16	358.7	2.3241	34.4715	2	67.57	2	-119.26	3.22	2	4655
2	17	434.2	2.2801	34.5321	2	72.61	2	-134.97	3.31	2	4654
2	18	508.2	2.2671	34.5771	2	75.52	2	-147.35	2.90	2	4653
2	19	610.4	2.2272	34.6312	2	79.02	2	-141.65	3.69	2	4652
2	20	711.6	2.1812	34.6572	2	80.77	2	-146.66	3.43	2	4650
2	21	813.2	2.1273	34.6844	2	82.72	2	-148.51	3.24	2	4649
2	22	912.3	2.0593	34.7051	2	84.47	2	-152.92	2.92	2	4640
2	23	1014.7	1.9944	34.7167	2	85.83	2	-150.48	3.07	2	4639
2	24	1114.3	1.9155	34.7267	2	88.17	2	-155.33	2.90	2	4638
2	25	1266.3	1.8116	34.7346	2	91.10	2	-152.96	3.03	2	4637
2	26	1419.0	1.6737	34.7378	2	95.22	2	-154.77	2.97	2	4636
2	27	1568.6	1.5628	34.7390	2	98.55	2	-149.89	3.10	2	4635
2	28	1720.3	1.4419	34.7351	2	102.68	2	-157.59	3.10	2	4634
2	29	1823.9	1.3740	34.7337	2	104.85	2	-162.58	3.33	2	4633

Station 48

Latitude			59.996°S				Date		10/27/92		
Longitude			150.538°W				Bottom depth		2833		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	14	116.7	-1.1473	34.1954	2	64.58	2	-94.68	4.13	3	5054
2	16	157.4	0.7916	34.5536	2	83.19	2	-142.58	3.12	2	4554
2	18	207.2	1.6667	34.6885	2	88.02	2	-139.61	2.96	2	4553
2	19	257.7	1.7397	34.7115	2	88.58	2	-145.18	4.22	2	5053
2	20	307.4	1.6737	34.7199	2	90.32	2	-149.37	2.86	2	4552
2	21	406.7	1.5688	34.7244	2	93.62	2	-144.86	2.91	2	4551
2	22	505.6	1.5039	34.7313	2	97.33	2	-151.04	2.73	2	4550
2	23	603.6	1.3920	34.7313	2	100.05	2	-148.99	2.86	2	4549
2	24	754.3	1.2761	34.7289	2	103.97	2	-158.96	2.78	2	4548
2	25	904.7	1.1752	34.7267	2	107.49	2	-162.73	3.47	2	4546
2	26	1055.8	1.0593	34.7226	2	110.83	2	-156.37	4.17	2	4672

Station 48 (continued)

Latitude			59.996°S				Date			10/27/92	
Longitude			150.538°W				Bottom depth			2833	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	27	1208.6	0.9434	34.7175	2	114.17	2	-157.21	4.68	2	4671
2	28	1413.6	0.8146	34.7124	2	118.92	2	-161.34	4.11	2	4670
2	29	1615.5	0.7067	34.7079	2	124.08	2	-163.48	7.41	2	5052
2	30	1818.4	0.6567	34.7061	2	127.66	2	-167.39	4.13	2	4669

Station 56

Latitude			62.444°S				Date			111/1/92	
Longitude			135.098°W				Bottom depth			4755	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	57.7	-0.3753	33.9976	2	45.12	2	-82.04	3.05	2	4568
2	4	177.3	1.3408	34.3706	2	67.14	2	-120.66	4.00	2	4567
2	5	226.6	1.4364	34.4876	2	75.30	2	-128.76	2.94	2	4566
2	6	305.7	1.9068	34.6054	2	80.88	2	-134.07	3.08	2	4565
2	7	353.0	1.9663	34.6333	2	82.66	2	-142.32	3.02	2	4564
2	8	402.2	1.9639	34.6567	2	83.65	2	-145.79	3.58	2	4563
2	9	496.9	1.9247	34.6901	2	86.44	2	-149.27	2.99	2	4562
2	10	642.6	1.8136	34.7137	2	89.64	2	-153.23	3.07	2	4561
2	11	783.4	1.6938	34.7235	2	93.04	2	-159.26	2.94	2	4560
2	13	926.0	1.5756	34.7302	2	97.04	2	-153.70	2.97	3	4559
2	14	1070.7	1.4402	34.7304	2	101.67	2	-159.63	3.57	2	4558
2	15	1213.7	1.3159	34.7292	2	106.30	2	-154.17	3.06	3	4557
2	16	1357.8	1.2131	34.7265	2	109.33	2	-158.47	5.29	2	4556
2	17	1503.5	1.1146	34.7226	2	112.77	2	-164.47	3.23	2	4555
2	18	1646.9	1.0207	34.7192	2	115.61	2	-162.44	2.75	2	5383

Station 73

Latitude			56.034°S				Date			11/792	
Longitude			135.028°W				Bottom depth			3195	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	2.6	1.9514	33.9524	2	18.58	2	-39.72	3.32	2	4584
2	4	85.3	0.4759	33.9409	2	31.09	2	-59.37	5.43	2	4583
2	9	206.7	1.3331	34.0974	2	40.48	2	-72.86	3.24	2	4582
2	11	306.8	2.5998	34.3474	2	52.99	2	-104.91	3.23	2	4581
2	13	406.8	2.4540	34.4332	2	62.60	2	-112.72	3.17	2	4580
2	14	507.5	2.4290	34.5086	2	69.07	2	-126.77	5.37	2	4579
2	15	606.6	2.3820	34.5570	2	72.81	2	-137.13	3.94	2	4578
2	16	705.4	2.3091	34.6049	2	76.35	2	-147.81	4.16	2	4577

Station 73 (continued)

Latitude			56.034°S				Date			11/792	
Longitude			135.028°W				Bottom depth			3195	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	17	806.3	2.2412	34.6301	2	78.71	2	-139.42	5.19	2	4576
2	18	905.2	2.2092	34.6635	2	80.69	2	-148.00	3.54	2	4575
2	19	1005.9	2.1343	34.6867	2	82.66	2	-154.73	2.88	2	4574
2	20	1107.4	2.0843	34.7015	2	84.04	2	-151.03	2.89	2	4573
2	21	1209.0	2.0224	34.7139	2	85.82	2	-156.74	3.10	2	4572
2	22	1307.3	1.9674	34.7233	2	87.41	2	-154.91	2.93	2	4571
2	23	1409.5	1.9085	34.7297	2	89.19	2	-148.25	2.90	2	4570
2	24	1509.6	1.8346	34.7344	2	90.98	2	-156.07	2.91	2	4569

Station 80

Latitude			52.521°S				Date			11/9/92	
Longitude			135.000°W				Bottom depth			4325	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	8.7	8.0740	34.4407	2	4.82	2	51.88	4.37	2	5025
2	5	108.8	7.5318	34.4499	2	5.59	2	49.06	3.18	2	5024
2	7	222.3	7.1550	34.4168	2	7.00	2	30.83	5.81	2	5023
2	8	293.3	6.8831	34.3851	2	7.80	2	21.47	2.84	2	5022
2	10	382.1	6.6619	34.3676	2	7.78	2	15.77	2.89	2	5021
2	12	538.7	6.0739	34.3269	2	13.06	2	-19.32	2.75	2	5020
2	13	600.5	5.4430	34.2533	2	14.06	2	-13.75	2.99	2	5019
2	14	667.5	5.1861	34.2609	2	16.69	2	-40.53	4.06	2	5018
2	15	810.8	4.6868	34.3071	2	27.65	2	-68.35	3.75	2	5017
2	16	911.0	4.1487	34.3232	2	34.34	2	-75.62	2.67	2	5016
2	17	1011.5	3.7728	34.3463	2	41.64	2	-89.75	2.56	2	5015
2	18	1110.2	3.3796	34.3665	2	47.93	2	-107.30	2.60	2	5014
2	19	1210.5	3.1021	34.3998	2	54.42	2	-136.27	5.00	3	5013
2	20	1308.4	2.9753	34.4520	2	62.34	2	-127.27	2.57	2	5012
2	21	1506.9	2.6240	34.5220	2	71.09	2	-135.96	2.59	2	5011
2	22	1705.8	2.4572	34.5957	2	79.85	2	-151.90	2.55	2	5010

Station 87

Latitude			49.000°S				Date			11/11/92	
Longitude			134.957°W				Bottom depth			4985	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	3.8	8.4019	34.3899	2	3.59	2	45.30	2.92	2	5043
2	3	58.4	7.9572	34.4142	2	3.54	2	53.99	2.93	2	5042
2	4	108.3	7.8708	34.4213	2	3.94	2	32.78	3.32	2	5041

Station 87 (continued)

Latitude			49.000°S				Date			11/11/92	
Longitude			134.957°W				Bottom depth			4985	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	5	157.7	7.7054	34.4399	2	4.75	2	29.87	6.36	2	5040
2	7	208.0	7.5716	34.4394	2	5.13	2	36.20	6.12	2	5036
2	9	267.6	7.4734	34.4452	2	5.30	2	34.53	5.43	2	5035
2	10	354.6	7.4096	34.4498	2	5.49	2	34.08	3.59	2	5034
2	11	393.0	7.3478	34.4421	2	5.68	2	34.34	3.17	2	5033
2	12	434.0	7.2470	34.4266	2	6.07	2	31.27	3.15	2	5032
2	13	501.9	7.1119	34.4141	2	6.47	2	29.01	3.16	2	5031
2	14	650.2	6.6384	34.3620	2	8.13	2	18.47	3.24	2	5030
2	16	780.4	6.0708	34.3026	2	9.13	2	11.45	3.21	2	5029
2	17	899.8	5.6775	34.3185	2	17.06	2	-33.04	6.75	2	5028
2	18	1051.6	4.8601	34.3238	2	26.67	2	-54.03	3.06	2	5382
2	19	1202.8	4.1732	34.3322	2	35.03	2	-79.81	3.06	2	5027
2	20	1404.9	3.3401	34.3963	2	51.57	2	-109.00	2.89	2	5026

Station 95

Latitude			45.004°S				Date			11/13/92	
Longitude			134.979°W				Bottom depth			5010	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	9.6	10.1800	34.1483	2	2.63	2	78.87	5.53	2	4759
2	3	88.0	9.2825	34.1847	2	2.41	2	74.40	3.31	2	4758
2	5	177.6	7.7166	34.3615	2	4.45	2	53.43	3.44	2	4757
2	6	228.2	7.4368	34.4003	2	5.67	2	50.71	2.83	2	4756
2	7	279.0	7.2589	34.4017	2	6.27	2	45.54	2.77	2	4755
2	8	368.1	7.0281	34.3915	2	7.29	2	34.33	3.21	2	5051
2	9	455.3	6.8652	34.3823	2	7.69	2	24.91	3.55	2	5050
2	10	552.7	6.6484	34.3659	2	8.30	2	11.47	3.10	2	5049
2	11	650.1	6.3616	34.3436	2	9.72	2	-1.45	3.42	2	5047
2	12	747.4	5.9449	34.3165	2	12.58	2	-23.36	3.82	2	5046
2	13	845.5	5.4034	34.2979	2	17.67	2	-36.84	3.06	2	5045
2	14	945.1	4.8059	34.3036	2	25.42	2	-67.93	2.76	2	5044
2	15	945.1	4.8059	34.3040	2	25.41	2	-77.53	3.25	4	5048
2	16	1140.8	3.8647	34.3403	2	39.90	2	-110.20	2.90	2	5039
2	17	1240.5	3.4391	34.3741	2	48.46	2	-125.67	2.83	2	5038
2	18	1365.8	3.1134	34.4226	2	57.24	2	-132.83	2.56	2	5037

Station 105

Latitude			40.009°S				Date			11/16/92	
Longitude			134.988°W				Bottom depth			5033	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
3	1	4.5	12.9005	34.1459	2	1.55	2	85.30	3.04	2	4774
3	3	66.2	11.5392	34.1510	2	1.28	2	83.04	2.84	2	4773
3	5	126.8	10.0870	34.2865	2	1.42	2	68.67	2.88	2	4772
3	6	156.8	9.1926	34.3375	2	1.80	2	74.33	2.98	2	4771
3	7	186.8	8.3332	34.3817	2	3.01	2	50.06	4.17	2	4770
3	8	226.4	7.7656	34.4011	2	3.60	2	52.41	2.86	2	4769
3	9	306.9	7.3199	34.4196	2	5.22	2	41.68	3.12	2	4768
3	10	407.5	7.0601	34.4004	2	5.81	2	40.82	3.26	2	4767
3	11	508.4	6.7993	34.3804	2	7.85	2	25.45	2.90	2	4766
3	12	608.7	6.4885	34.3563	2	9.27	2	11.63	2.83	2	4765
3	14	809.8	5.4993	34.3093	2	18.75	2	-48.11	2.65	2	4764
3	15	910.0	4.9767	34.3126	2	24.73	2	-65.80	2.67	2	4763
3	16	1011.2	4.4392	34.3248	2	32.16	2	-88.47	2.96	2	4762
3	17	1162.4	3.6698	34.3600	2	44.58	2	-115.07	2.55	2	4761
3	18	1315.2	3.1084	34.4226	2	58.05	2	-139.56	2.78	2	4760

Station 113

Latitude			35.999°S				Date			11/1992	
Longitude			134.997°W				Bottom depth			4783	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	4.2	15.1566	34.4952	2	1.96	2	110.44	2.98	2	4790
2	3	57.2	14.6937	34.5293	2	1.75	2	101.29	3.93	2	4789
2	5	97.4	14.1679	34.5593	2	1.76	2	102.97	2.97	2	4788
2	7	208.3	11.8810	34.7084	2	2.62	2	73.78	2.79	2	4787
2	8	259.0	10.0101	34.5607	2	3.69	2	52.03	2.80	2	4786
2	9	307.5	8.9048	34.5030	2	4.33	2	49.59	2.81	2	4785
2	10	408.8	7.5038	34.4325	2	6.04	2	32.85	2.84	2	4784
2	11	487.9	7.0931	34.4068	2	6.90	2	26.78	2.73	2	4783
2	12	607.4	6.6504	34.3723	2	8.61	2	17.39	4.41	2	4782
2	13	709.4	6.2587	34.3433	2	10.53	2	-7.11	2.92	2	4781
2	14	812.2	5.7251	34.3178	2	14.80	2	-39.02	2.62	2	4780
2	15	912.6	5.1116	34.3129	2	21.83	2	-73.75	3.49	2	4779
2	16	1064.1	4.1924	34.3368	2	36.12	2	-111.00	2.54	2	4778
2	17	1214.7	3.4790	34.3911	2	50.41	2	-132.14	2.50	2	4777
2	18	1214.7	3.4790	34.3909	2	50.41	2	-130.36	2.48	2	4776
2	19	1519.0	2.7327	34.5295	2	78.41	2	-170.98	2.76	2	4775

Station 119

Latitude			33.000°S				Date			11/20/92	
Longitude			135.000°W				Bottom depth			4472	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	2.7	17.7857	35.0857	2	2.54	2	117.21	3.73	2	5063
2	4	105.1	16.3631	35.0574	2	2.06	2	108.84	3.93	2	5062
2	7	206.0	14.2999	35.0130	2	2.21	2	103.54	3.52	2	5061
2	9	305.5	11.1644	34.7336	2	3.83	2	71.10	4.44	2	5060
2	11	407.2	8.2992	34.5851	4	5.67	2	58.43	4.95	2	5059
2	13	557.9	6.8612	34.3822	2	8.34	2	27.13	3.61	2	5058
2	14	658.0	6.4076	34.3502	2	9.78	2	-3.74	3.32	2	5057
2	15	759.2	5.8390	34.3160	2	12.68	2	-19.54	3.67	2	5056
2	16	859.2	5.2485	34.3044	2	18.91	2	-51.64	3.44	2	5055
2	17	959.9	4.7719	34.3120	2	26.19	2	-86.43	2.76	2	4797
2	18	1061.4	4.2094	34.3377	2	36.60	2	-110.69	2.72	2	4796
2	19	1212.8	3.5290	34.3949	2	51.39	2	-126.40	2.64	2	4795
2	20	1364.2	3.0194	34.4692	2	66.63	2	-149.23	2.53	2	4794
2	21	1516.5	2.7097	34.5294	2	79.39	2	-166.48	2.91	2	4793
2	22	1719.0	2.4140	34.5890	2	95.35	2	-186.76	4.63	2	4792
2	23	1922.8	2.2192	34.6214	2	106.11	2	-202.56	2.34	2	4791
2	29	3144.0	1.6467	34.6781	2	124.22	2	-221.98	3.22	2	5072
2	30	3348.7	1.6138	34.6815	2	124.18	2	-209.93	3.47	2	5079
2	31	3552.0	1.5828	34.7107	4	124.36	2	-199.31	3.73	2	5078
2	32	3756.8	1.5249	34.6903	2	123.47	2	-186.91	3.70	2	5077
2	33	3961.6	1.4360	34.6982	2	122.58	2	-196.96	4.68	2	5076
2	34	4166.3	1.3540	34.7052	2	121.04	2	-190.17	3.39	2	5075
2	35	4371.4	1.3201	34.7070	2	120.80	2	-180.59	2.86	2	5074
2	36	4540.1	1.3261	34.7078	2	120.55	2	-192.27	2.86	2	5073

Woce Cruise P16C
12/4/92 – 1/22/93
J. Swift

Station 222

Latitude			17.510°S				Date			9/1/91	
Longitude			150.481°W				Bottom depth			3600	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	4.2	26.663	35.977	2	0.87	2	116.95	3.82	2	6516
1	35	32.0	26.547	36.122	2	0.88	2	101.89	3.60	2	6515
1	34	56.8	26.264	36.092	2	0.89	2	105.01	3.10	2	6514
1	33	82.2	26.186	36.081	2	0.90	2	88.56	3.27	2	6513
1	32	108.4	26.157	36.080	2	0.91	2	117.45	3.61	2	6512
1	31	132.8	25.619	36.091	2	0.92	2	121.68	3.03	2	6270
1	30	157.9	23.988	36.103	2	1.12	2	124.95	3.24	2	6269
1	29	183.5	23.567	36.132	2	0.94	2	119.41	6.43	2	6268
1	28	209.5	22.432	36.079	2	1.14	2	122.30	4.13	2	6267
1	27	234.4	21.492	35.967	2	1.15	2	149.63	7.61	2	6266
1	26	258.2	20.248	35.759	2	1.56	2	142.82	7.93	2	6265
1	25	309.2	17.989	35.472	2	2.17	2	119.23	3.29	2	6503
1	24	358.2	14.677	35.143	2	4.55	2	92.52	3.66	2	6264
1	23	408.7	11.893	34.702	2	9.51	2	29.42	4.98	2	6263
1	22	507.7	7.910	34.475	2	21.21	2	-72.27	2.77	2	6262
1	21	601.8	6.478	34.439	2	24.59	2	-88.53	3.85	2	6261
1	20	698.1	5.739	34.438	2	36.30	2	-126.52	2.67	2	6260
1	19	793.6	4.913	34.463	2	49.60	2	-146.22	3.34	2	6259
1	18	890.0	4.362	34.480	2	60.14	2	-149.30	6.00	2	6258
1	17	988.1	3.874	34.500	2	70.28	2	-171.54	2.59	2	6257
1	15	1187.4	3.320	34.535	2	84.42	2	-185.30	2.83	2	6256

Station 226

Latitude			14.999°S				Date			9/3/91	
Longitude			150.835°W				Bottom depth			4528	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	5.8	27.424	36.231	2	1.61	2	108.10	2.99	2	6487
1	35	47.8	27.398	36.213	2	1.60	2	106.26	2.93	2	6486
1	34	88.2	27.434	36.292	2	1.80	2	107.84	3.64	2	6485
1	33	128.6	25.244	36.297	2	1.79	2	110.88	2.86	2	6484
1	32	168.2	23.457	36.256	2	1.98	2	138.51	4.60	2	6483
1	31	209.1	21.963	36.155	2	1.57	2	158.74	3.65	2	6482
1	30	260.5	19.075	35.622	2	2.76	2	152.39	2.92	2	6481
1	29	311.7	16.112	35.233	2	4.55	2	114.93	3.10	2	6511
1	28	361.4	13.495	34.907	2	9.15	2	70.18	3.72	2	6575

Station 226 (continued)

Latitude			14.999°S				Date			9/3/91	
Longitude			150.835°W				Bottom depth			4528	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	27	412.4	11.388	34.670	2	14.56	2	-8.75	3.19	2	6495
1	25	514.2	8.042	34.518	2	26.38	2	-93.37	2.68	2	6494
1	23	617.3	6.585	34.466	2	35.62	2	-114.92	2.66	2	6493
1	21	718.3	5.721	34.465	2	43.08	2	-127.81	2.83	2	6492
1	19	808.3	5.019	34.480	2	55.57	2	-147.96	2.95	2	6491
1	17	1025.3	4.018	34.512	2	72.73	2	-168.41	2.66	2	6490
1	16	1230.9	3.358	34.553	2	88.27	2	-181.11	2.25	2	6489
1	11	2261.5	1.993	34.651	2	125.02	2	-214.96	2.23	2	6488
1	6	3347.8	1.596	34.685	2	128.97	2	-191.99	2.28	3	6480

Station 230

Latitude			12.993°S				Date			9/4/91	
Longitude			151.003°W				Bottom depth			4595	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	5.0	28.209	36.172	2	1.42	2	75.14	3.61	2	5227
1	35	46.3	28.111	36.234	2	1.62	2	79.09	3.63	2	5226
1	34	85.1	27.738	36.341	2	1.23	2	83.40	3.63	2	5225
1	33	124.8	26.664	36.368	2	1.23	2	114.16	4.07	2	5220
1	32	167.0	24.208	36.314	2	1.23	2	113.76	3.75	2	5219
1	31	207.6	22.288	36.058	2	1.24	2	120.09	3.84	2	5218
1	30	248.6	20.039	35.667	2	1.84	2	134.26	4.90	2	5211
1	29	289.5	17.196	35.167	2	4.61	2	117.78	4.15	2	5210
1	28	331.0	13.333	34.907	2	8.38	2	67.43	4.43	2	5209
1	27	370.7	11.539	34.720	2	13.73	2	12.90	4.05	2	5208
1	26	410.9	9.841	34.653	2	17.90	2	-26.36	4.09	2	5207
1	25	461.6	8.463	34.612	2	23.84	2	-66.20	4.69	2	5206
1	24	512.8	7.435	34.558	2	26.03	2	-89.02	2.43	2	6293
1	23	614.4	6.215	34.510	2	35.55	2	-110.79	2.59	2	6294
1	22	717.6	5.575	34.487	2	42.89	2	-124.80	2.29	2	6295
1	21	814.5	5.025	34.492	2	52.60	2	-136.45	2.25	2	6296
1	20	912.4	4.662	34.502	2	60.34	2	-153.77	2.28	2	6297
1	19	1015.7	4.249	34.521	2	71.83	2	-162.91	2.60	2	6298
1	18	1120.7	3.885	34.533	2	78.37	2	-174.25	2.83	2	6299
1	10	2567.6	1.895	34.665	2	131.11	2	-227.23	2.67	2	6300

Station 235*

Latitude			10.508°S				Date			9/691	
Longitude			150.988°W				Bottom depth			4910	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
4	36	4.0	28.556	35.834	2	0.60	2	95.02	3.77	2	5230
4	35	49.8	28.545	35.834	2	0.45	2	81.50	2.78	2	5718
4	34	99.7	28.123	35.929	2	0.88	2	82.35	2.97	2	5717
4	33	150.0	25.364	36.377	2	0.93	2	98.04	2.98	2	5716
4	32	201.6	22.380	36.208	2	0.59	2	105.88	3.00	2	5715
4	31	240.4	19.701	35.599	2	1.79	2	120.88	2.81	2	5714
4	30	281.7	15.786	35.163	2	4.72	2	91.73	2.78	2	5713
4	29	322.6	12.880	34.825	2	10.71	2	43.80	4.27	2	5712
4	28	363.5	10.383	34.659	2	18.25	2	-30.88	2.54	2	5711
4	27	388.9	9.830	34.665	2	23.09	2	-61.05	3.86	2	5710
4	26	439.6	8.609	34.626	2	27.57	2	-84.58	2.58	2	5709
4	25	491.2	7.719	34.586	2	33.00	2	-100.56	3.26	2	5229
4	24	592.9	6.733	34.547	2	41.69	2	-120.70	4.09	2	5228
4	23	693.5	6.080	34.525	2	50.76	2	-139.27	3.16	2	5708
4	22	797.8	5.499	34.518	2	57.35	2	-151.83	2.48	2	5707
4	21	899.3	4.812	34.522	2	67.21	2	-156.02	3.38	2	5205
4	20	999.1	4.375	34.533	2	74.18	2	-167.23	3.29	2	5204
4	19	1203.9	3.642	34.555	2	88.84	2	-188.85	3.68	2	5203

*The Gerard casts on this station were run by the AMS technique as well as by the normal β counting technique.

Station 238

Latitude			9.000°N				Date			9/791	
Longitude			150.996°W				Bottom depth			3840	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	4.5	28.449	35.792	2	0.70	2	77.26	3.91	2	6531
1	34	58.6	28.348	35.860	2	0.74	2	79.34	3.36	2	6530
1	33	82.5	28.289	35.895	2	0.95	2	81.89	3.84	2	6529
1	32	109.5	27.862	35.976	2	0.96	2	90.13	3.55	2	6605
1	31	135.0	25.702	36.240	2	1.17	2	96.38	3.10	2	6604
1	30	158.9	24.325	36.366	2	1.00	2	110.39	3.04	2	6603
1	29	198.4	21.576	36.026	2	1.20	2	129.30	3.29	2	6602
1	28	239.4	17.792	35.601	2	2.38	2	120.19	3.18	2	6601
1	27	278.7	14.682	35.112	2	8.39	2	69.52	4.44	2	6600
1	26	320.4	12.064	34.835	2	16.96	2	-15.42	2.77	2	6599
1	25	361.8	10.569	34.745	2	22.01	2	-51.71	3.21	2	6598
1	24	413.6	9.045	34.690	2	25.91	2	-80.64	2.69	2	6597
1	23	464.2	8.364	34.639	2	30.78	2	-96.59	2.80	2	6596
1	22	516.1	7.889	34.611	2	34.29	2	-98.08	3.66	2	6595

Station 238 (continued)

Latitude			9.000°N				Date			9/791	
Longitude			150.996°W				Bottom depth			3840	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	21	617.8	6.779	34.580	4	38.97	2	-117.00	2.69	2	6594
1	20	720.1	5.902	34.583	4	49.46	2	-128.82	2.76	2	6593
1	19	821.8	5.234	34.527	2	61.92	2	-157.27	2.74	2	6592
1	17	1027.2	4.188	34.541	2	79.23	2	-176.69	2.49	2	6591
1	15	1231.7	3.587	34.573	2	94.81	2	-202.55	3.02	2	5706

Station 242

Latitude			7.018°S				Date			9/891	
Longitude			151.003°W				Bottom depth			5182	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	5.3	28.274	35.309	2	1.07	2	77.24	2.95	2	6582
1	35	48.8	28.286	35.346	2	1.07	2	74.52	3.17	2	6581
1	34	108.8	28.591	36.023	2	0.89	2	86.90	3.76	2	6580
1	32	209.4	19.120	35.661	2	3.20	2	112.19	3.31	2	6579
1	31	250.9	15.067	35.033	2	11.10	2	45.36	2.81	2	6578
1	30	290.8	11.879	34.823	2	17.66	2	-11.33	2.93	2	6577
1	29	331.1	10.289	34.734	2	23.26	2	-45.93	2.71	2	6576
1	28	371.6	9.520	34.678	2	26.16	2	-84.92	2.97	2	6528
1	27	411.6	8.824	34.651	2	27.91	2	-87.85	2.00	6	6526,6527
1	26	461.7	8.297	34.614	2	31.97	2	-100.26	3.33	2	6525
1	25	509.9	7.723	34.590	2	34.68	2	-101.77	2.66	2	6524
1	24	600.2	6.797	34.569	2	44.92	2	-119.96	2.67	2	6523
1	23	699.7	5.985	34.543	2	53.04	2	-138.94	2.73	2	6522
1	22	802.5	5.372	34.536	2	61.74	2	-142.32	2.69	2	6521
1	21	906.0	4.862	34.538	2	69.68	2	-156.81	2.81	2	6520
1	20	1004.8	4.434	34.545	2	78.57	2	-173.44	2.56	2	6519
1	19	1199.7	3.758	34.562	2	90.58	2	-199.14	3.60	2	6518
1	12	2618.6	1.856	34.667	2	138.12	2	-221.08	2.56	3	6517

Station 246

Latitude			5.013°S				Date			9/10/91	
Longitude			151.005°W				Bottom depth			4985	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	36	5.9	28.199	35.403	2	1.48	2	87.71	2.79	2	5938
2	35	58.3	28.042	35.399	2	1.49	2	86.10	2.77	2	5937
2	34	96.9	27.706	35.435	2	1.69	2	84.22	4.45	2	5932
2	33	135.5	26.858	36.297	2	1.09	2	94.97	4.15	2	5931

Station 246 (continued)

Latitude			5.013°S				Date			9/10/91	
Longitude			151.005°W				Bottom depth			4985	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	32	174.5	22.348	35.933	2	1.30	2	123.76	4.82	2	5930
2	30	254.6	13.473	34.963	2	16.24	2	3.31	4.31	2	6590
2	29	305.9	11.779	34.850	2	19.89	2	-25.24	3.00	2	6589
2	28	356.8	10.459	34.766	2	26.96	2	-73.45	3.04	2	6588
2	27	408.3	9.481	34.732	2	32.82	2	-94.37	2.84	2	6587
2	26	460.9	8.835	34.687	2	36.04	2	-96.59	3.18	2	6586
2	25	511.3	8.134	34.642	2	34.25	2	-101.50	3.23	2	6585
2	23	630.1	6.856	34.589	2	40.91	2	-104.67	2.88	2	6584
2	21	813.5	5.477	34.541	2	59.08	2	-152.24	2.70	2	6583

Station 250

Latitude			3.007°S				Date			9/11/91	
Longitude			151.013°W				Bottom depth			4765	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	4.5	27.580	35.421	2	1.62	2	90.04	2.80	2	6472
1	35	59.2	27.353	35.449	2	1.62	2	83.64	3.38	2	6471
1	34	106.8	27.282	35.442	2	1.83	2	90.02	3.89	2	6469
1	32	164.2	14.955	35.094	2	15.16	2	26.90	2.57	2	6470
1	31	195.2	12.771	34.930	2	21.73	2	-19.61	2.98	2	5948
1	30	226.5	12.287	34.889	2	22.32	2	-24.95	2.44	2	5947
1	29	259.4	11.728	34.837	2	23.53	2	-31.56	2.72	2	5946
1	28	311.7	11.482	34.815	2	24.33	2	-32.97	2.48	2	5945
1	26	414.9	10.602	34.743	2	30.91	2	-85.61	3.69	2	6012
1	25	465.1	9.516	34.674	2	38.07	2	-102.74	4.50	2	5943
1	24	516.2	8.490	34.632	2	42.26	2	-106.84	2.58	2	5942
1	22	618.8	6.950	34.577	2	50.03	2	-123.92	3.39	2	5941
1	20	822.3	5.678	34.555	2	66.35	2	-144.07	2.40	2	5940
1	18	1026.3	4.481	34.553	2	83.28	2	-165.61	2.60	2	5939

Station 256

Latitude			1.998°S				Date			9/12/91	
Longitude			150.991°W				Bottom depth			4749	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	4.9	27.584	35.426	2	3.07	2	88.99	3.08	2	6064
1	35	47.4	27.543	35.422	2	2.87	2	92.23	2.92	2	6063
1	34	85.8	27.262	35.422	2	3.45	2	85.00	3.11	2	6062
1	33	116.0	26.919	35.469	2	3.26	2	87.54	3.03	2	6061

Station 256 (continued)

Latitude			1.998°S			Date			9/12/91		
Longitude			150.991°W			Bottom depth			4749		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	32	146.8	21.642	35.670	2	5.54	2	102.10	2.73	2	6468
1	31	178.5	14.888	34.958	2	21.04	2	1.52	2.96	2	6467
1	30	209.6	12.799	34.894	2	23.88	2	-16.46	2.64	2	6466
1	29	249.7	12.290	34.873	2	23.31	2	-37.28	2.60	2	6465
1	28	310.9	11.713	34.835	2	27.28	2	-45.58	3.07	2	6464
1	27	360.9	10.918	34.781	2	25.01	2	-64.50	4.55	2	6463
1	26	412.0	10.039	34.714	2	31.63	2	-75.92	2.63	2	6462
1	25	462.1	8.902	34.667	2	36.16	2	-94.58	3.14	2	6461
1	24	514.2	8.248	34.632	2	37.48	2	-98.99	2.61	2	6460
1	21	719.8	6.307	34.554	2	57.88	2	-134.36	2.60	2	6459
1	18	1026.2	4.514	34.553	2	84.70	2	-175.39	2.52	2	6458

Station 262

Latitude			1.007°S			Date			9/14/91		
Longitude			150.997°W			Bottom depth			4720		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	5.4	27.915	35.421	2	3.60	2	88.89	3.20	2	6715
1	35	47.1	27.093	35.419	2	3.60	2	92.30	2.88	2	6714
1	34	76.4	26.537	35.361	2	4.00	2	88.97	2.84	2	6713
1	33	105.2	26.222	35.581	2	3.80	2	83.51	2.80	2	6712
1	32	135.3	22.130	35.765	2	4.99	2	91.11	3.96	2	6075
1	31	166.1	19.140	35.561	2	7.36	2	84.06	2.93	2	6074
1	30	208.3	14.186	35.074	2	16.10	2	16.61	2.73	2	6072
1	29	260.5	11.969	34.892	2	22.04	2	-21.62	3.54	2	6071
1	28	310.5	11.723	34.838	2	24.62	2	-24.38	2.72	2	6070
1	27	361.9	10.647	34.776	2	31.38	2	-58.67	2.77	2	6069
1	26	412.8	9.644	34.743	2	34.15	2	-73.89	2.80	2	6068
1	25	463.0	8.663	34.688	2	37.92	2	-94.96	2.60	2	6067
1	24	514.7	8.029	34.654	2	40.71	2	-101.98	2.61	2	6066
1	21	719.3	6.298	34.562	2	56.59	2	-136.05	2.60	2	6065
1	18	1024.6	4.496	34.555	2	85.75	2	-178.20	2.46	2	6073

Station 268

Latitude		0.005°S					Date		9/15/91		
Longitude		150.999°W					Bottom depth		4340		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	7.2	27.123	34.884	2	3.70	2	-16.12	3.91	4	6479
1	35	41.7	26.179	35.031	2	3.71	2	102.77	2.83	2	6478
1	34	71.9	26.017	35.091	2	4.32	2	97.83	2.97	2	6477
1	33	102.1	25.198	35.166	2	5.12	2	101.94	2.70	2	6476
1	32	141.4	22.152	35.237	2	7.30	2	98.96	2.80	2	6711
1	31	186.2	15.938	34.999	2	12.46	2	63.45	3.15	2	6710
1	29	269.5	12.486	34.892	2	19.23	2	-8.44	4.46	2	6709
1	28	307.9	11.998	34.853	2	22.40	2	-22.11	4.45	2	6708
1	27	350.5	10.620	34.789	2	29.75	2	-51.43	3.80	2	6707
1	26	390.2	10.126	34.736	2	34.72	2	-71.79	3.67	2	6611
1	25	432.2	9.528	34.704	2	35.52	2	-81.01	3.19	2	6610
1	24	472.7	8.178	34.630	2	42.48	2	-101.25	3.61	2	6609
1	23	513.5	7.881	34.613	2	44.08	2	-109.68	2.79	2	6608
1	20	717.4	6.348	34.555	2	58.60	2	-141.11	4.95	2	6607
1	17	1025.3	4.661	34.554	2	84.42	2	-177.31	2.53	2	6606

Station 274

Latitude		0.993°N					Date		9/16/91		
Longitude		150.998°W					Bottom depth		3803		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	35	5.1	27.442	34.836	2	3.00	2	74.86	4.05	3	5246
1	34	36.5	26.707	34.869	2	3.20	2	92.97	3.65	2	5245
1	33	65.8	26.362	35.033	2	3.79	2	94.05	3.96	2	5244
1	32	92.1	26.063	35.138	2	4.01	2	92.32	3.59	2	5243
1	31	122.0	21.234	35.004	2	7.73	2	110.46	3.88	2	5242
1	30	153.2	16.712	34.805	2	14.59	2	64.65	4.68	2	5241
1	29	195.9	13.373	34.783	2	20.48	2	18.36	3.50	2	5240
1	28	236.4	12.337	34.840	2	22.25	2	-5.36	3.75	2	5239
1	27	277.1	11.839	34.836	2	24.21	2	-29.21	4.33	2	5238
1	26	313.1	11.637	34.825	2	25.97	2	-35.89	3.96	2	5237
1	25	352.7	11.057	34.792	2	29.31	2	-53.86	3.43	2	5236
1	36	391.9	10.355	34.754	2	-9	9	-70.95	3.87	2	5235
1	22	469.5	8.280	34.636	2	41.66	2	-113.12	4.10	2	5234
1	20	596.4	7.096	34.576	2	51.26	2	-132.28	3.22	2	5233
1	19	696.7	6.217	34.556	2	58.70	2	-141.23	3.29	2	5232
1	16	1006.2	4.703	34.555	2	83.56	2	-163.45	3.11	2	5231

Station 280

Latitude			1.996°N			Date			9/1791		
Longitude			151.002°W			Bottom depth			4409		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	6.0	27.624	34.744	2	1.91	2	98.64	2.82	2	6314
1	35	44.9	27.531	34.739	2	1.91	2	103.30	2.82	2	6313
1	34	75.7	26.592	34.875	2	2.69	2	91.13	2.90	2	6312
1	33	105.3	26.181	34.862	2	4.26	2	98.45	2.82	2	6475
1	32	146.8	17.045	34.707	2	16.42	2	37.45	2.66	2	6474
1	31	188.0	12.728	34.737	2	22.30	2	4.09	2.98	2	6473
1	29	269.4	11.511	34.810	2	26.03	2	-37.50	3.51	2	6507
1	28	309.9	11.293	34.794	2	28.19	2	-54.11	3.01	2	6506
1	27	360.9	11.066	34.768	2	29.76	2	-54.33	3.49	2	6505
1	26	411.5	10.399	34.712	2	30.16	2	-64.38	2.92	2	6509
1	25	463.4	9.562	34.662	2	36.63	2	-92.72	5.52	2	6508
1	24	565.7	8.373	34.615	2	42.13	2	-110.27	2.96	2	6510
1	20	822.0	5.436	34.544	2	68.02	2	-157.43	2.45	2	6700
1	17	1180.0	4.069	34.570	2	98.99	2	-198.88	2.61	2	6504

Station 286

Latitude			2.978°N			Date			9/18/91		
Longitude			151.003°W			Bottom depth			5087		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	35	5.3	27.624	34.755	2	2.50	2	90.98	2.86	2	6327
1	34	58.4	27.506	34.743	2	2.50	2	95.54	3.03	2	6326
1	33	108.6	25.524	34.950	2	3.89	2	91.67	3.14	2	6325
1	32	134.2	24.941	34.903	2	4.70	2	86.32	3.06	2	6324
1	31	159.6	14.478	34.727	2	13.39	2	59.01	2.50	2	6323
1	30	185.3	11.915	34.761	3	6.29	3	63.97	2.81	3	6322
1	29	210.7	11.665	34.755	2	24.08	2	-35.98	5.65	2	6321
1	28	236.5	11.456	34.817	2	25.27	2	-31.76	2.77	2	6320
1	27	261.5	11.216	34.778	2	24.68	2	-34.45	2.58	2	6319
1	26	312.2	10.898	34.764	2	26.87	2	-79.42	2.42	3	6318
1	24	619.0	7.350	34.596	2	50.83	2	-125.32	2.55	2	6390
1	23	721.2	6.325	34.564	2	58.03	2	-128.56	2.70	2	6316
1	20	1028.7	4.650	34.554	2	85.80	2	-169.12	2.41	2	6315

Station 290

Latitude			4.996°N				Date			9/20/91	
Longitude			151.003°W				Bottom depth			5060	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	36	5.8	28.901	34.483	2	2.02	2	96.00	4.17	2	6402
1	35	39.5	28.721	34.801	2	2.43	2	72.68	7.48	2	6401
1	34	79.3	27.694	34.977	2	2.85	2	88.08	3.80	2	6400
1	33	118.3	26.567	34.925	2	4.06	2	99.93	2.78	2	6399
1	32	157.8	20.963	34.718	2	13.64	2	65.77	1.92	6	6397,6398
1	31	204.4	12.833	34.625	2	24.61	2	-10.71	3.38	2	6396
1	30	247.4	10.468	34.594	2	30.61	2	-38.59	2.49	2	6395
1	29	295.5	9.956	34.655	2	30.62	2	-48.93	2.54	2	6394
1	28	352.7	9.348	34.657	2	33.02	2	-63.55	2.50	2	6393
1	27	410.1	8.890	34.645	2	35.62	2	-81.02	2.54	2	6392
1	26	461.4	8.510	34.627	2	37.43	2	-96.62	2.54	2	6391
1	25	512.4	8.182	34.618	2	41.03	2	-98.35	2.70	2	6330
1	22	718.2	6.739	34.566	2	57.03	2	-136.31	2.98	2	6329
1	19	1024.7	4.697	34.559	2	89.77	2	-179.44	3.80	2	6328

Station 294

Latitude			6.959°N				Date			9/21/91	
Longitude			151.348°W				Bottom depth			5384	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	36	8.1	28.881	33.934	2	2.01	2	94.95	3.06	2	6059
1	35	56.8	28.888	33.985	2	1.83	2	97.53	3.01	2	6060
1	34	107.3	22.086	34.858	2	5.61	2	98.57	3.06	2	6058
1	33	148.0	13.960	34.621	2	18.35	2	26.06	2.94	2	6057
1	32	189.0	10.993	34.676	2	30.08	2	-56.86	2.64	2	6056
1	31	230.6	10.436	34.685	2	31.68	2	-64.37	2.66	2	6055
1	30	270.9	9.988	34.683	2	32.48	2	-70.90	2.95	2	6054
1	29	310.8	9.537	34.677	2	33.49	2	-78.64	3.59	2	6053
1	28	362.2	9.155	34.657	2	34.89	2	-78.16	2.75	2	6052
1	27	411.6	8.870	34.646	2	36.28	2	-90.31	3.05	2	6050
1	26	462.4	8.495	34.637	2	39.27	2	-92.86	2.97	2	6049
1	25	512.5	8.112	34.620	2	43.85	2	-109.58	3.56	2	5952
1	24	613.3	7.145	34.580	2	51.99	2	-124.62	3.01	2	5951
1	23	712.9	6.304	34.560	2	65.12	2	-145.27	2.95	2	5950
1	20	1014.7	4.707	34.560	2	89.75	2	-188.97	2.52	2	5949

Station 298

Latitude		8.943°N				Date		9/22/91			
Longitude		151.755°W				Bottom depth		5056			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	13.9	28.455	33.797	2	1.73	2	107.79	3.05	2	5262
1	35	47.0	27.306	34.442	2	1.92	2	102.93	3.58	2	5261
1	34	76.3	17.959	34.544	2	6.07	2	84.74	4.36	2	5260
1	33	108.9	12.869	34.563	2	24.45	2	-15.50	3.78	2	5259
1	32	138.9	11.756	34.703	2	28.59	2	-58.94	3.96	2	5258
1	31	169.1	11.199	34.718	2	30.76	2	-69.12	3.70	2	5257
1	30	210.6	10.700	34.705	2	32.53	2	-79.17	3.61	2	5256
1	29	250.3	10.271	34.693	2	33.71	2	-92.02	3.39	2	5255
1	28	291.5	9.866	34.689	2	35.09	2	-85.68	5.14	2	5254
1	27	341.3	9.336	34.655	2	39.83	2	-99.87	3.27	2	5253
1	26	392.5	8.870	34.636	2	42.58	2	-102.36	3.22	2	5252
1	25	453.0	8.293	34.601	2	48.51	2	-115.58	3.15	2	5248
1	24	512.2	7.553	34.576	2	54.43	2	-129.49	3.24	2	5251
1	23	612.4	6.752	34.556	2	63.31	2	-140.99	3.21	2	5250
1	21	815.3	5.340	34.543	2	80.68	2	-162.49	3.66	2	5249
1	19	1016.6	4.439	34.560	2	96.66	2	-185.42	2.70	2	6051

Station 302

Latitude		10.907°N				Date		9/2391			
Longitude		152.112°W				Bottom depth		5345			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	6.4	28.419	33.818	2	1.99	2	88.79	3.44	2	5292
1	35	33.0	26.830	34.378	2	1.96	2	99.34	3.75	2	5291
1	34	58.7	20.020	34.480	2	3.50	2	89.59	3.31	2	5290
1	33	83.9	16.766	34.826	2	3.87	2	110.69	3.44	2	5289
1	32	109.4	13.618	34.422	2	10.74	2	67.31	2.87	2	5288
1	30	160.8	11.087	34.474	2	28.44	2	-34.58	8.70	6	5286, 5287
1	29	211.0	10.271	34.597	2	34.53	2	-77.56	3.27	2	5285
1	28	263.1	9.543	34.602	2	38.04	2	-85.07	4.87	2	5284
1	27	313.6	8.896	34.591	2	41.96	2	-113.99	2.86	2	5910
1	26	415.7	8.032	34.558	2	51.20	2	-113.89	2.66	2	5283
1	25	517.9	7.093	34.533	2	60.24	2	-137.31	4.13	2	5282
1	24	620.3	6.253	34.518	2	70.67	2	-152.15	4.85	2	5281
1	23	722.9	5.599	34.526	2	80.70	2	-180.10	3.72	2	5280
1	22	825.1	5.066	34.537	2	88.76	2	-175.02	3.43	2	5279
1	20	1029.7	4.177	34.562	2	104.49	2	-200.42	4.48	2	5247

Station 306

Latitude			12.865°N				Date			9/2591	
Longitude			152.503°W				Bottom depth			5561	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	7.3	28.268	34.093	2	1.99	2	106.35	3.78	2	6253
1	35	38.8	27.851	34.271	2	1.99	2	101.28	3.44	2	6088
1	34	68.4	22.543	34.742	2	1.99	2	100.41	3.38	2	6087
1	33	109.2	16.761	34.689	2	4.56	2	108.88	3.42	2	6086
1	32	160.5	11.440	34.314	2	23.51	2	1.42	3.09	2	6085
1	31	211.1	10.446	34.546	2	34.17	2	-65.30	3.15	2	6084
1	30	262.1	9.880	34.594	2	37.73	2	-81.49	3.45	2	6083
1	29	313.7	9.194	34.576	2	42.08	2	-98.77	2.76	2	6082
1	28	414.9	8.311	34.551	2	50.37	2	-117.51	2.20	6	6080,6081
1	27	517.9	7.238	34.527	2	59.27	2	-137.51	2.46	2	6079
1	26	619.2	6.515	34.524	2	68.56	2	-152.02	2.50	2	6078
1	24	825.6	5.246	34.528	2	85.18	2	-177.56	3.31	2	6077
1	22	1028.1	4.250	34.549	2	101.02	2	-198.84	2.44	2	6076
1	20	1439.5	3.096	34.590	2	126.36	2	-223.55	2.38	2	5278

Station 310

Latitude			14.839°N				Date			9/26/91	
Longitude			152.891°W				Bottom depth			5815	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	36	6.9	27.863	34.158	2	2.36	2	100.47	3.81	2	6457
1	35	58.5	24.818	34.468	2	2.35	2	96.31	3.04	2	6414
1	34	109.9	18.269	34.736	2	3.13	2	104.92	3.04	2	6413
1	33	136.2	15.355	34.556	2	6.84	2	100.46	3.01	2	6412
1	32	161.1	13.354	34.306	2	14.36	2	59.26	3.04	2	6411
1	31	212.6	11.257	34.539	2	30.18	2	-40.47	2.75	2	6410
1	30	263.4	10.066	34.551	2	34.52	2	-82.38	3.83	2	6409
1	29	313.4	9.419	34.560	2	38.47	2	-91.32	8.76	6	6407,6408
1	28	415.3	8.385	34.553	2	45.79	2	-111.85	2.41	2	6406
1	27	515.8	7.446	34.506	2	57.25	2	-129.71	2.80	2	6405
1	26	617.2	6.602	34.496	2	69.72	2	-149.33	2.34	2	6404
1	25	719.1	5.820	34.503	2	80.80	2	-171.41	2.27	2	6403
1	24	818.6	5.220	34.510	2	90.05	2	-189.52	2.56	2	6255
1	22	1018.8	4.319	34.540	2	105.87	2	-207.90	2.54	2	6254

Station 314

Latitude		16.802°N				Date		9/28/91			
Longitude		153.267°W				Bottom depth		5185			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	36	7.5	26.800	34.572	2	2.08	2	92.91	2.91	2	5277
2	34	74.6	24.330	34.863	2	2.09	2	111.37	3.08	2	5276
2	33	105.4	22.625	34.982	2	2.09	2	113.67	2.89	2	5275
2	32	134.6	21.184	34.880	2	2.72	2	108.47	2.95	2	5274
2	31	164.9	19.125	34.712	2	5.19	2	111.61	3.49	2	5273
2	30	214.7	14.502	34.355	2	13.83	2	80.33	3.61	2	5272
2	29	266.9	11.232	34.295	2	27.17	2	-7.16	3.32	2	5271
2	28	317.0	8.984	34.168	2	40.55	2	-33.65	3.80	2	5270
2	27	358.8	7.820	34.353	2	45.89	2	-76.80	2.73	2	5269
2	26	400.0	8.581	34.486	2	48.35	2	-106.10	3.96	2	5268
2	25	441.3	7.865	34.484	2	53.28	2	-114.41	2.60	2	5267
2	24	482.0	7.374	34.473	2	57.19	2	-117.00	2.56	2	5266
2	23	575.2	6.503	34.483	2	67.05	2	-127.79	2.59	2	5265
2	22	675.5	5.887	34.479	2	77.14	2	-151.29	2.58	2	5264
2	21	777.2	5.273	34.480	2	87.42	2	-162.02	2.54	2	5263
2	20	932.5	4.591	34.517	2	100.37	2	-193.25	2.70	2	6252
2	19	1085.7	3.972	34.538	2	112.70	2	-214.68	2.76	2	6251
2	18	1289.9	3.443	34.563	2	124.41	2	-232.87	2.52	2	6250

Station 319

Latitude		18.400°N				Date		9/29/91			
Longitude		154.474°W				Bottom depth		5162			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	36	7.2	26.617	34.775	2	2.29	2	101.07	4.29	2	6286
1	34	90.2	23.554	34.846	2	2.04	2	112.83	6.00	2	6285
1	33	130.6	20.588	34.833	2	3.23	2	110.97	6.08	2	6284
1	31	210.8	13.574	34.284	2	12.84	2	101.70	6.42	2	6283
1	30	262.4	10.613	34.152	2	19.86	2	38.29	5.12	2	6282
1	29	312.3	9.272	34.123	2	28.50	2	12.96	7.39	2	6281
1	28	363.6	8.231	34.098	2	40.57	2	-31.58	2.04	6	6276, 6277, 6278, 6279, 6280
1	27	413.9	7.181	34.144	2	49.60	2	-67.90	4.23	2	6275
1	26	525.6	5.978	34.252	2	74.37	2	-136.52	4.00	2	6274
1	25	617.4	5.427	34.385	2	85.81	2	-194.37	2.81	4	6273
1	23	821.7	4.647	34.486	2	100.08	2	-196.51	3.82	2	6272
1	21	1025.3	4.023	34.520	2	111.13	2	-212.35	3.24	2	6271

WOCE Cruise P17C
 5/31/91 – 7/11/91
 M. Tsuchiya

Station 1

Latitude			36.172°N				Date			6/2/91	
Longitude			121.737°W				Bottom depth			557	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	19	2.1	10.124	33.733	2	27.97	2	28.30	7.50	2	2786
1	20	11.0	9.896	33.790	2	28.66	2	25.87	4.29	2	2707
1	21	16.3	9.421	33.818	2	30.03	2	19.27	3.57	2	2706
1	22	41.9	9.099	33.871	2	31.69	2	18.31	3.74	2	2785
1	23	66.8	8.805	33.928	2	33.54	2	7.55	3.46	2	2705
1	24	92.7	8.678	33.971	2	35.79	2	7.71	3.09	2	2784
1	25	117.1	8.590	33.998	2	37.06	2	-6.42	3.56	2	2704
1	26	141.4	8.489	34.029	2	38.24	2	-9.08	3.11	2	2783
1	27	166.6	8.391	34.060	2	39.80	2	-13.49	13.69	2	2848
1	28	190.7	8.175	34.076	2	42.63	2	-21.44	3.47	2	2703
1	29	242.6	8.002	34.093	2	44.30	2	-35.10	6.82	2	2782
1	31	292.7	7.759	34.106	2	48.01	2	-58.68	10.73	2	2781
1	30	292.7	7.759	34.106	2	48.11	2	-76.63	8.40	3	2702
1	32	394.1	7.279	34.135	2	55.15	2	-65.27	4.19	4	2701
1	33	442.7	6.647	34.135	3	66.49	2	-117.08	4.19	2	2700
1	34	491.7	6.371	34.216	3	72.06	2	-142.76	10.57	2	2780

Station 5

Latitude			35.548°N				Date			6/3/91	
Longitude			122.863°W				Bottom depth			3403	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	2	39.6	11.222	33.120	2	7.17	2	68.55	3.03	2	2031
1	3	65.6	11.103	33.223	2	8.72	2	49.16	2.87	2	2032
1	5	112.4	8.695	33.415	2	20.55	2	50.18	2.87	2	2030
1	7	167.4	8.097	33.884	2	32.36	2	19.70	4.70	2	8773
1	10	261.0	7.269	34.030	2	47.46	2	-33.95	2.59	2	6916
1	13	404.1	5.816	34.076	2	70.11	2	-96.43	2.44	2	6917
1	14	455.7	5.519	34.099	2	76.69	2	-125.40	4.60	2	8769
1	15	506.9	5.605	34.214	2	82.68	2	-134.50	8.30	2	8770
1	17	604.7	5.151	34.280	2	92.73	2	-161.90	4.90	2	8771
1	19	705.3	4.689	34.334	2	103.37	2	-180.00	2.20	2	2029
1	20	805.3	4.413	34.387	2	109.75	2	-202.85	3.77	2	2001
1	21	909.4	4.152	34.414	2	115.74	2	-196.01	2.17	2	2028
1	23	1109.0	3.545	34.471	2	129.46	2	-213.49	2.15	2	2027

Station 10

Latitude			34.582°N				Date			6/5/91	
Longitude			126.400°W				Bottom depth			4682	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	1.5	14.809	33.065	2	2.58	2	85.98	2.76	2	1117
1	4	86.1	12.644	32.966	2	3.50	2	69.96	3.10	2	1116
1	5	111.1	11.026	-9	5	-9	5	-75.76	2.73	4	1115
1	6	136.4	9.437	-9	5	-9	5	-189.75	2.44	4	1114
1	7	161.9	8.696	33.477	2	22.59	2	46.72	3.03	2	1113
1	8	188.4	8.526	33.709	2	26.97	2	34.21	2.99	2	1112
1	9	214.3	8.290	33.876	2	30.58	2	24.12	2.64	2	1111
1	10	253.2	7.777	33.976	2	36.11	2	4.65	4.09	2	1110
1	11	303.9	7.131	34.025	2	47.56	2	-31.88	2.63	2	1109
1	12	358.9	6.492	34.034	2	56.71	2	-51.54	2.72	2	1108
1	13	407.4	5.938	34.045	2	66.24	2	-80.36	2.33	2	1107
1	14	506.4	5.446	34.150	2	81.31	2	-127.61	2.22	2	1106
1	15	602.6	5.046	34.241	2	92.55	2	-157.90	2.14	2	1105
1	16	706.3	4.592	34.304	2	103.41	2	-178.66	2.69	2	1104
1	17	807.3	4.274	34.371	2	111.97	2	-188.68	2.15	2	1103
1	19	1010.9	3.685	34.449	2	125.27	2	-211.76	2.70	2	1102

Station 14

Latitude			34.585°N				Date			6/7/91	
Longitude			131.320°W				Bottom depth			5135	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	2	29.7	15.344	33.034	2	2.82	2	78.02	3.52	2	2713
1	3	48.7	14.433	32.930	2	2.83	2	76.79	3.00	6	2712, 2797
1	5	101.5	12.478	33.103	2	4.61	2	84.99	3.55	2	2711
1	6	121.9	11.573	33.096	2	6.38	2	76.20	3.56	2	2710
1	7	138.1	10.419	33.119	2	8.74	2	52.85	8.57	2	2709
1	8	163.6	8.715	33.190	2	14.24	2	46.18	3.26	2	2796
1	9	216.5	8.239	33.771	2	27.76	2	35.74	3.09	2	2795
1	10	232.1	8.368	33.919	2	32.08	2	13.08	3.21	2	2794
1	11	268.6	7.888	33.971	2	31.68	2	17.30	3.07	2	2793
1	12	397.2	6.105	33.964	2	57.94	2	-38.60	2.80	2	2792
1	14	600.0	4.817	34.138	2	93.13	2	-143.16	2.60	2	2790
1	15	698.3	4.510	34.234	2	104.65	2	-162.19	2.53	2	2789
1	16	796.8	4.320	34.324	4	112.46	2	-188.44	2.72	2	2788
1	18	993.7	3.674	34.416	4	128.06	2	-207.61	2.76	2	2787
1	19	1202.8	3.235	34.491	4	138.00	2	-222.57	2.82	2	2708
1	13	5225.4	1.590	34.675	4	157.15	2	-213.17	2.69	3	2791

Station 17

Latitude			34.598°N			Date			6/8/91		
Longitude			134.963°W			Bottom depth			5129		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	1.3	15.915	33.068	2	3.23	2	84.33	4.40	6	2699,2779
2	3	78.8	13.785	33.155	2	3.13	2	83.88	5.48	2	2698
2	6	152.4	9.795	33.105	2	10.18	2	75.15	5.32	2	2697
2	8	203.0	8.356	33.433	2	18.39	2	78.09	2.99	2	2778
2	9	252.8	8.009	33.809	2	23.67	2	46.77	3.44	2	2696
2	10	302.4	7.699	33.972	2	37.55	2	7.18	4.08	2	2777
2	11	353.9	6.886	33.975	2	46.65	2	-17.56	3.39	2	2695
2	12	404.7	6.291	33.997	2	57.31	2	-50.36	2.81	2	2776
2	13	502.6	5.187	34.023	2	77.16	2	-105.75	3.14	2	2694
2	14	606.7	4.682	34.089	2	91.43	2	-148.85	3.16	2	2693
2	15	705.4	4.358	34.187	2	104.23	2	-163.94	2.99	2	2692
2	16	808.3	4.107	34.299	2	114.88	2	-176.95	2.50	2	2775
2	17	907.0	3.879	34.370	2	121.62	2	-194.98	2.51	2	2774
2	18	1009.7	3.642	34.434	2	127.48	2	-209.19	3.13	2	2691
2	19	1212.0	3.200	34.497	2	137.25	2	-213.84	2.65	2	2773

Station 20

Latitude			33.065°N			Date			6/9/91		
Longitude			134.997°W			Bottom depth			4761		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	1.5	17.240	33.682	2	3.63	2	82.33	3.87	2	1220
1	2	71.8	17.332	34.309	2	3.20	2	89.81	21.00	2	1261
1	4	137.9	17.264	34.571	2	3.39	2	110.67	3.87	2	1218
1	5	153.6	16.500	34.408	2	3.58	2	112.73	5.14	2	1217
1	6	174.9	14.430	34.108	2	4.81	2	104.27	4.95	2	1216
1	8	228.0	10.553	33.780	2	11.60	2	80.69	5.46	2	3356
1	10	306.7	8.616	33.982	3	24.36	2	43.98	3.68	2	1215
1	11	353.6	7.741	33.982	2	34.24	2	25.69	4.36	2	1214
1	12	405.9	7.069	33.992	2	44.93	2	-21.86	6.19	2	1213
1	14	507.8	5.767	34.019	2	66.28	2	-78.55	3.36	2	1212
1	15	607.4	4.870	34.089	2	87.64	2	-139.65	3.15	2	1211
1	16	709.7	4.445	34.195	2	102.39	2	-166.07	3.23	2	1210
1	17	812.3	4.155	34.291	2	112.80	2	-200.76	5.98	2	1263
1	18	905.2	3.936	34.362	2	120.74	2	-215.13	4.89	2	1208
1	20	1008.9	3.722	34.408	2	126.12	2	-210.29	4.18	2	1207
1	22	1618.8	2.513	34.560	2	153.63	2	-241.33	4.21	2	1206

Station 23

Latitude			31.532°N				Date			6/10/91	
Longitude			135.002°W				Bottom depth			4562	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	1.2	17.553	34.196	2	3.49	2	111.13	5.44	2	1163
1	3	80.6	16.320	34.300	2	3.64	2	123.50	4.00	2	1249
1	4	111.7	16.269	34.382	2	3.82	2	124.37	7.17	2	1161
1	5	131.4	15.737	34.308	2	4.00	2	119.71	4.31	2	1160
1	6	181.0	10.933	33.906	2	8.87	2	86.07	4.21	2	1159
1	7	223.3	9.948	33.929	2	12.91	2	95.58	7.23	2	1157
1	8	244.2	9.644	33.974	2	15.73	2	81.90	4.01	2	1156
1	9	275.4	8.965	33.986	2	20.38	2	65.42	4.63	2	1155
1	10	320.8	8.264	34.014	2	30.93	2	39.60	3.97	2	1154
1	11	405.7	6.872	33.976	2	45.10	2	-21.58	5.57	6	1158,1250
1	12	461.2	6.247	33.981	2	56.86	2	-47.80	3.69	2	1153
1	13	506.2	5.721	34.000	2	65.97	2	-79.77	14.43	2	1152
1	14	605.4	4.889	34.082	2	87.46	2	-128.71	3.45	2	1151
1	15	710.7	4.332	34.200	2	106.71	2	-167.70	3.29	2	1150
1	16	810.3	4.054	34.297	2	116.85	2	-182.13	3.95	6	1149,1256
1	18	1002.7	3.647	34.427	2	128.93	2	-216.79	5.73	2	1148

Station 26

Latitude			30.033°N				Date			6/11/91	
Longitude			134.952°W				Bottom depth			5181	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	1.4	18.452	34.669	2	3.51	2	115.73	3.99	2	1203
2	2	65.4	18.515	34.751	2	3.31	2	100.85	9.03	2	1204
2	3	86.1	18.426	34.751	2	2.91	2	115.34	4.14	2	1205
2	4	111.0	18.290	34.801	2	2.92	2	127.59	3.94	2	1202
2	5	141.2	18.101	34.818	2	2.93	2	122.10	3.98	2	1201
2	6	177.0	17.162	34.671	2	3.54	2	106.80	4.41	2	1200
2	7	207.8	14.903	34.339	2	4.36	2	122.01	3.97	2	1199
2	8	242.6	12.454	34.129	2	8.03	2	105.00	4.23	2	1198
2	9	276.6	10.886	34.028	2	11.90	2	93.98	4.02	2	1197
2	10	327.1	9.597	34.028	2	19.02	2	58.46	4.91	2	1196
2	11	403.5	8.147	34.019	2	32.43	2	26.76	3.79	2	1195
2	12	485.7	6.832	34.012	2	50.52	2	-31.03	3.19	6	1194,1265
2	13	611.2	5.489	34.093	2	77.74	2	-111.84	3.58	2	1193
2	14	704.7	4.794	34.193	2	95.41	2	-147.78	3.24	2	1192
2	15	815.0	4.362	34.295	2	109.01	2	-187.54	3.46	2	1229
2	16	917.0	4.129	34.365	2	116.52	2	-219.41	11.57	2	1264

Station 29

Latitude			28.498°S			Date			6/12/91		
Longitude			134.997°W			Bottom depth			3843		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	1	1.6	18.462	34.633	2	3.29	2	NA	NA	5	--
1	2	81.4	18.462	34.805	2	3.05	2	NA	NA	5	--
1	3	127.2	18.364	34.854	2	2.81	2	131.60	3.50	2	7068
1	5	176.7	18.027	34.808	2	2.53	2	124.80	3.60	2	7067
1	6	203.2	16.415	34.524	2	3.49	2	NA	NA	5	--
1	8	253.3	11.95	34.008	2	9.65	2	86.20	2.80	2	7706
1	10	316.5	9.449	34.018	2	21.24	2	NA	NA	5	--
1	12	413.5	7.633	34.014	2	38.08	2	5.50	2.60	2	7705
1	14	607.9	5.004	34.062	2	83.72	2	NA	NA	5	--
1	21	1467.1	2.818	34.556	2	144.28	2	-233.50	2.20	2	7704
1	25	2076.2	1.960	34.627	2	166.68	2	NA	NA	5	--
1	26	2230.6	1.837	34.634	2	169.31	2	-258.00	3.50	2	7686
1	27	2376.0	1.749	34.642	2	170.12	2	NA	NA	5	--
1	28	2532.5	1.683	34.648	2	170.53	2	NA	NA	5	--
1	29	2690.2	1.629	34.654	2	169.93	2	NA	NA	5	--
1	30	2837	1.594	34.659	2	169.94	2	NA	NA	5	--

Station 32

Latitude			27.000°S			Date			6/13/91		
Longitude			134.998°W			Bottom depth			4127		
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	1	1.2	19.829	35.076	2	3.25	2	NA	NA	5	--
1	2	74.4	19.338	34.972	2	3.23	2	112.60	3.60	2	7370
1	3	115.2	18.308	34.817	2	3.20	2	121.30	5.00	2	7271
1	4	151.0	17.154	34.648	2	3.78	2	127.90	5.30	2	7270
1	5	175.6	15.345	34.369	2	5.57	2	NA	NA	5	--
1	6	202.0	12.971	34.073	2	8.35	2	93.90	4.00	3	7269
1	7	228.9	11.254	34.008	2	11.53	2	105.30	4.40	2	7268
1	8	252.1	10.568	34.017	2	14.31	2	91.80	3.20	2	7267
1	9	275.5	9.766	34.042	2	17.89	2	NA	NA	5	--
1	10	312.7	8.962	34.043	2	24.87	2	51.40	3.40	2	7089
1	11	348.4	8.377	34.033	2	30.65	2	40.70	3.10	2	7088
1	12	378.1	7.856	34.024	2	36.82	2	4.40	2.50	2	7195
1	13	404.7	7.372	34.025	2	43.98	2	-15.80	3.10	2	7087
1	14	470.5	6.214	34.047	2	62.54	2	-84.10	3.10	2	7194
1	15	640.7	4.946	34.201	2	92.86	2	-161.70	2.60	2	7193
1	16	704.1	4.680	34.258	2	99.99	2	-210.6	4.80	3	7108

Station 34

Latitude			26.040°N				Date			6/14/91	
Longitude			134.970°W				Bottom depth			4571	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	13	0.9	20.131	35.105	2	2.64	2	121.96	4.19	2	3114
2	14	107.0	19.393	35.092	2	2.83	2	115.20	3.12	2	3113
2	15	128.2	19.015	35.033	2	2.83	2	112.35	3.35	2	3112
2	16	152.8	18.421	34.867	2	3.03	2	123.83	3.14	2	3111
2	17	175.3	16.767	34.659	2	4.20	2	115.85	3.12	2	3110
2	18	202.4	14.859	34.420	2	5.57	2	105.80	3.31	2	3109
2	19	227.0	12.914	34.159	2	7.63	2	94.35	3.89	2	3108
2	20	253.3	11.379	34.027	2	10.27	2	83.74	3.25	2	3068
2	21	278.2	10.371	33.998	2	14.47	2	69.70	4.18	2	3107
2	22	303.9	9.652	34.032	2	19.66	2	52.20	4.20	2	7091
2	23	354.1	8.482	34.027	2	29.92	2	20.20	3.00	2	7090
2	26	507.2	6.032	34.072	2	67.18	2	-91.70	4.70	2	7071
2	27	603.4	5.232	34.159	2	84.38	2	-143.60	2.70	2	7070
2	28	704.5	4.745	34.273	2	98.85	2	-176.30	3.40	2	7069
2	29	806.9	4.507	34.392	2	106.07	2	-189.94	2.95	2	5585
2	30	907.3	4.068	34.436	2	114.09	2	-202.33	2.81	2	5584
2	31	1009.7	3.862	34.485	2	118.09	2	-200.53	3.01	2	5583
2	32	1212.7	3.452	34.526	2	127.08	2	-219.04	2.93	2	5582
2	33	1417.9	3.002	34.558	2	137.63	2	-246.69	2.83	2	5581
2	34	1614.8	2.652	34.580	2	146.43	2	-246.87	3.38	2	5580
2	35	1819.2	2.369	34.600	2	152.39	2	-252.52	3.66	2	5579
2	36	2022.0	2.110	34.616	2	158.25	2	-259.51	2.30	2	5578
2	1	2223.0	1.938	34.632	2	164.11	2	-257.70	3.10	2	5577
2	2	2431.6	1.772	34.643	2	167.53	2	-256.49	2.41	2	5576

Station 38

Latitude			23.998°N				Date			6/15/91	
Longitude			135.000°W				Bottom depth			4851	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.6	21.359	34.911	2	2.80	2	92.99	3.38	2	5755
1	2	78.4	20.029	34.926	2	2.80	2	95.84	3.40	2	5754
1	3	102.4	19.985	35.033	2	2.80	2	105.96	3.52	2	5753
1	5	153.1	18.456	34.890	2	3.60	2	106.81	3.03	2	5752
1	7	203.3	14.275	34.301	2	6.80	2	100.49	3.35	2	5751
1	9	254.2	11.264	34.055	2	12.99	2	68.51	3.36	2	5750
1	10	303.2	9.444	34.059	2	21.78	2	40.18	3.13	2	5749
1	11	358.5	8.108	34.069	2	37.35	2	-14.84	6.09	2	5748
1	12	413.5	7.149	34.104	2	52.32	2	-65.58	3.64	2	5593
1	13	510.2	6.036	34.170	2	71.66	2	-132.29	3.43	2	5592

Station 38 (continued)

Latitude			23.998°N				Date			6/1591	
Longitude			135.000°W				Bottom depth			4851	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	14	605.3	5.390	34.311	2	87.00	2	-159.24	3.63	2	5591
1	16	802.5	4.858	34.450	2	97.71	2	-188.30	3.31	2	5590
1	18	992.6	4.243	34.492	2	109.22	2	-205.15	2.97	2	5589
1	19	1208.7	3.681	34.532	2	121.74	2	-226.23	3.99	2	5588
1	20	1419.6	3.173	34.555	2	132.86	2	-235.32	2.81	2	5587
1	21	1614.6	2.776	34.581	2	142.57	2	-241.36	3.81	2	5586

Station 42

Latitude			22.037°N				Date			6/16/91	
Longitude			134.997°W				Bottom depth			5225	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	0.5	21.478	34.899	2	2.82	2	110.75	3.97	2	5777
1	2	54.8	20.753	35.024	2	2.45	2	107.03	3.03	2	5776
1	3	84.5	20.350	35.042	2	2.62	2	116.90	4.83	2	5775
1	4	109.2	19.778	35.039	2	2.62	2	113.04	4.68	2	5774
1	5	129.8	19.506	35.035	2	2.43	2	107.76	3.33	2	5773
1	7	225.0	13.944	34.336	2	8.53	2	97.02	2.22	6	5771,5772
1	8	254.1	11.461	34.069	2	15.00	2	34.99	4.85	2	5770
1	9	297.8	10.087	34.135	2	23.26	2	28.95	5.94	2	5769
1	10	356.9	8.251	34.116	2	39.61	2	-44.16	7.68	2	5768
1	11	405.7	7.309	34.142	2	52.18	2	-80.06	2.64	2	5767
1	15	809.5	4.972	34.469	2	94.69	2	-192.09	2.46	2	5766
1	17	1015.9	4.181	34.507	2	109.38	2	-206.00	2.39	2	5765
1	19	1418.1	3.085	34.567	2	133.58	2	-240.48	2.58	2	5764
1	21	1821.1	2.390	34.604	2	148.97	2	-256.32	2.47	2	5763

Station 46

Latitude			19.982°N				Date			6/18/91	
Longitude			135.017°W				Bottom depth			5257	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	0.4	22.655	34.727	2	2.83	2	61.69	4.47	2	3083
2	3	77.7	21.059	34.931	2	2.83	2	87.33	3.64	2	3082
2	4	102.0	20.588	34.933	2	2.64	2	100.87	3.71	2	3081
2	5	127.3	19.941	34.905	2	2.44	2	84.67	3.64	3	3080
2	6	178.7	16.668	34.539	2	4.40	2	107.39	3.61	2	3079
2	7	203.1	14.593	34.279	2	7.14	2	111.07	3.46	2	3078
2	8	221.8	13.113	34.159	2	10.36	2	97.17	3.23	2	3077

Station 46 (continued)

Latitude		19.982°N				Date		6/18/91			
Longitude		135.017°W				Bottom depth		5257			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	9	258.3	10.477	34.046	2	20.05	2	52.12	3.12	2	3076
2	10	304.0	9.083	34.105	2	31.00	2	7.31	9.15	2	3075
2	11	355.2	8.290	34.208	2	45.17	2	-58.30	3.97	2	3074
2	12	406.6	7.800	34.287	2	54.07	2	-81.87	2.89	2	3073
2	13	503.7	6.868	34.378	2	66.77	2	-121.85	2.91	2	3072
2	14	606.1	6.099	34.420	2	77.92	2	-147.24	3.57	2	3071
2	15	708.7	5.457	34.454	2	88.08	2	-154.98	2.91	2	3070
2	16	811.5	5.000	34.475	2	95.70	2	-184.57	3.50	6	3231,3357
2	17	908.8	4.594	34.494	2	103.52	2	-194.74	2.62	2	3069

Station 50

Latitude		18.000°N				Date		6/19/91			
Longitude		135.005°W				Bottom depth		5028			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	24.429	34.500	2	3.72	2	68.77	5.30	2	6979
1	2	26.0	24.418	34.499	2	3.54	2	90.11	3.31	2	6912
1	3	114.2	20.442	34.834	2	3.73	2	101.84	4.71	2	6913
1	4	154.1	16.837	34.528	2	6.66	2	97.13	3.54	2	6914
1	5	179.7	13.242	34.205	2	13.98	2	61.69	3.61	2	6915
1	7	232.2	10.47	34.248	2	29.53	2	-10.51	3.01	2	7150
1	8	263.3	9.688	34.268	2	34.83	2	-22.33	3.64	2	6902
1	9	303.3	9.368	34.367	2	40.50	2	-54.87	3.59	2	7040
1	10	354.1	8.496	34.348	2	47.63	2	-88.42	3.26	2	6901
1	11	405.0	7.757	34.383	2	56.58	2	-140.51	5.21	3	6978
1	12	504.0	6.874	34.417	2	67.54	2	-120.28	3.42	2	7065
1	13	606.8	6.069	34.439	2	78.31	2	-161.44	2.64	2	6980
1	15	813.8	4.972	34.483	2	96.20	2	-168.06	3.38	2	7064
1	17	1009.0	4.185	34.518	2	111.34	2	-209.86	3.04	2	6911
1	19	1417.1	3.049	34.576	2	134.51	2	-225.02	4.40	2	7063

Station 53

Latitude		16.500°N				Date		6/20/91			
Longitude		135.000°W				Bottom depth		4849			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.9	25.257	34.499	2	2.39	2	87.40	3.05	2	5567
1	3	88.7	22.352	34.711	2	2.02	2	96.94	4.28	2	5566
1	5	134.7	18.869	34.601	2	2.76	2	100.94	4.17	2	5565

Station 53 (continued)

Latitude			16.500°N				Date			6/20/91	
Longitude			135.000°W				Bottom depth			4849	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	6	151.6	16.424	34.441	2	5.07	2	102.64	2.78	2	5564
1	7	178.8	13.702	34.269	2	14.43	2	44.44	2.88	2	5563
1	8	191.0	12.853	34.286	2	18.23	2	26.84	2.57	2	5562
1	9	252.6	10.600	34.435	2	32.59	2	-47.09	2.47	2	5561
1	10	303.4	9.932	34.517	2	38.43	2	-76.89	2.55	2	5560
1	11	354.4	9.026	34.504	2	45.20	2	-104.72	2.38	2	5559
1	12	405.9	8.465	34.490	2	49.37	2	-107.17	3.27	2	5558
1	13	506.6	7.253	34.458	2	61.88	2	-132.65	3.15	2	5557
1	14	602.9	6.441	34.455	2	71.99	2	-146.69	2.64	2	5556
1	15	707.7	5.633	34.482	2	84.13	2	-165.23	2.39	2	5555
1	17	912.7	4.685	34.516	2	99.71	2	-195.86	2.21	2	5554
1	19	1216.6	3.689	34.556	2	119.74	2	-221.59	2.69	2	5553
1	21	1618.1	2.761	34.599	2	139.78	2	-240.57	2.13	2	5552

Station 57

Latitude			14.462°N				Date			6/21/91	
Longitude			134.978°W				Bottom depth			4983	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	0.2	25.923	34.501	2	2.96	2	101.29	3.92	2	3207
2	2	42.5	24.363	34.456	2	2.94	2	94.00	4.87	2	3206
2	3	62.2	24.087	34.479	2	2.91	2	92.76	3.76	2	3205
2	4	102.3	19.470	34.435	2	4.75	2	87.58	5.05	2	3204
2	5	122.0	15.145	34.370	2	16.31	2	51.44	3.73	2	3194
2	6	142.3	12.780	34.333	2	21.51	2	22.61	5.01	2	3193
2	7	161.4	11.424	34.322	2	25.60	2	6.47	3.19	2	3122
2	8	182.3	11.198	34.393	2	29.49	2	-13.77	3.18	2	3121
2	9	221.6	10.739	34.540	2	34.69	2	-50.84	3.60	2	3120
2	10	301.6	9.516	34.533	2	42.32	2	-86.13	3.95	2	3196
2	11	401.8	8.128	34.509	2	53.32	2	-109.14	3.47	2	3195
2	12	503.6	7.036	34.479	2	64.69	2	-130.39	3.92	2	3119
2	13	605.7	6.239	34.487	2	75.50	2	-154.07	8.69	2	3118
2	14	706.2	5.555	34.498	2	85.00	2	-172.76	4.01	2	3117
2	15	805.4	5.053	34.516	2	92.07	2	-185.37	2.50	2	3116
2	16	913.8	4.586	34.532	2	100.26	2	-197.74	2.74	2	3115

Station 60

Latitude			13.002°N				Date			6/22/91	
Longitude			135.003°W				Bottom depth			4907	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	26.962	34.237	2	2.33	2	106.88	2.95	2	5722
1	3	41.9	24.442	34.479	2	2.12	2	104.50	3.02	2	5721
1	5	95.9	17.790	34.459	2	6.92	2	85.48	2.78	2	5720
1	7	136.7	12.505	34.491	2	23.95	2	-3.85	2.74	2	5719
1	8	156.5	11.954	34.555	2	26.72	2	-17.72	3.48	2	5789
1	9	176.9	11.601	34.623	2	28.75	2	-44.05	3.07	2	5788
1	10	201.1	11.359	34.674	2	30.04	2	-50.58	3.52	2	5787
1	11	253.5	10.362	34.625	2	34.66	2	-70.30	3.37	2	5786
1	12	303.3	9.839	34.617	2	37.25	2	-87.57	3.32	2	5785
1	13	381.8	9.421	34.648	2	39.28	2	-102.49	2.64	2	5784
1	14	502.8	7.951	34.540	2	53.73	2	-111.95	2.94	2	5783
1	15	604.9	7.007	34.515	2	64.67	2	-138.76	3.05	2	5782
1	16	708.7	6.217	34.518	2	72.63	2	-153.29	3.03	2	5781
1	18	907.4	5.034	34.527	2	92.45	2	-181.88	2.53	2	5780
1	20	1208.8	3.922	34.564	2	111.17	2	-205.25	2.39	2	5779
1	22	1612.5	2.943	34.600	2	131.18	2	-229.33	3.16	2	5778

Station 63

Latitude			11.503°N				Date			6/23/91	
Longitude			135.000°W				Bottom depth			4893	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	27.962	34.039	2	2.35	2	85.72	3.04	2	5738
1	4	76.2	18.782	34.569	2	5.96	2	90.10	2.69	2	5737
1	5	87.2	15.793	34.487	2	11.54	2	53.29	2.68	2	5736
1	6	107.9	13.377	34.553	2	24.05	2	-7.26	2.76	2	5735
1	7	128.8	12.450	34.690	2	28.64	2	-47.40	2.49	2	5734
1	8	151.6	11.816	34.721	2	29.71	2	-50.85	2.51	2	5733
1	9	217.3	11.001	34.727	2	31.96	2	-68.48	2.46	2	5732
1	10	263.4	10.546	34.712	2	33.82	2	-73.85	2.43	2	5731
1	11	355.0	9.811	34.676	2	38.80	2	-86.18	2.63	2	5730
1	12	457.7	8.793	34.612	2	45.16	2	-104.20	3.55	2	5729
1	13	555.1	7.763	34.561	2	54.84	2	-132.12	5.09	2	5728
1	14	656.7	6.713	34.525	2	66.28	2	-141.33	3.78	2	5727
1	15	759.7	5.938	34.525	2	77.62	2	-177.88	2.81	2	5726
1	16	856.6	5.391	34.533	2	85.24	2	-164.09	3.31	2	5725
1	17	1010.4	4.664	34.546	2	96.77	2	-181.90	2.44	2	5724
1	18	1216.3	3.945	34.569	2	110.07	2	-197.20	2.25	2	5723

Station 66

Latitude			9.965°N				Date			6/24/91	
Longitude			135.057°W				Bottom depth			4811	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
2	1	0.2	28.330	33.852	2	2.29	2	89.59	4.00	2	1748
2	3	52.4	25.070	34.484	2	4.16	2	96.10	4.47	2	1747
2	6	93.4	13.589	34.615	2	24.75	2	-4.72	3.76	2	1746
2	7	127.8	11.958	34.725	2	29.56	2	-49.31	3.59	2	1745
2	8	152.7	11.589	34.728	2	29.75	2	-39.54	4.57	2	791
2	9	202.5	10.828	34.711	2	32.16	2	-69.24	3.97	2	1743
2	10	253.7	10.367	34.705	2	33.83	2	-89.43	3.43	2	1742
2	11	304.3	9.976	34.689	2	35.49	2	-84.50	3.48	2	1741
2	12	354.6	9.601	34.671	2	38.27	2	-83.57	5.65	2	1740
2	13	404.4	9.103	34.650	2	41.42	2	-101.20	3.46	2	1739
2	14	507.5	8.040	34.593	2	51.96	2	-147.14	3.27	2	1738
2	15	603.9	7.006	34.548	2	62.32	2	-142.29	3.26	2	1737
2	16	708.3	6.263	34.541	2	70.27	2	-159.74	5.45	2	790
2	17	809.5	5.593	34.539	2	78.95	2	-169.99	3.16	2	1736
2	18	911.0	5.079	34.549	2	85.97	2	-180.06	3.13	2	1735
2	19	1009.0	4.702	34.554	2	91.87	2	-179.52	3.14	2	1734

Station 70

Latitude			8.000°N				Date			6/25/91	
Longitude			134.998°W				Bottom depth			4743	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	0.4	28.251	33.775	2	2.75	2	110.73	4.80	2	1762
1	3	33.4	27.793	34.054	2	2.54	2	99.41	4.37	2	3585
1	5	55.7	18.679	34.577	2	5.55	2	104.86	6.15	2	1761
1	6	66.4	16.692	34.485	2	10.01	2	76.83	4.75	2	1760
1	8	91.7	12.751	34.606	2	25.39	2	-10.90	4.27	2	3358
1	9	120.9	11.999	34.727	2	28.95	2	-33.98	4.18	2	1759
1	10	182.6	10.774	34.711	2	30.89	2	-58.41	4.18	2	1758
1	12	299.7	9.847	34.689	2	34.80	2	-66.49	3.80	2	1757
1	13	400.9	9.097	34.662	2	41.22	2	-94.63	3.80	2	1756
1	14	504.8	8.045	34.607	2	51.56	2	-112.42	3.69	2	1755
1	15	605.9	6.889	34.560	2	63.15	2	-135.88	3.60	2	1754
1	16	708.9	5.947	34.542	2	75.27	2	-154.02	3.64	2	1753
1	17	811.5	5.319	34.546	2	83.09	2	-168.92	3.55	2	1752
1	19	1010.8	4.456	34.564	2	98.54	2	-191.39	3.54	2	1751
1	21	1411.9	3.185	34.600	2	125.02	2	-226.59	3.46	2	1750

Station 73

Latitude			6.523°N				Date			6/26/91	
Longitude			135.000°W				Bottom depth			4638	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	28.986	34.244	2	2.72	2	82.27	13.91	2	1045
1	3	51.8	28.050	34.777	2	2.68	2	93.86	7.85	2	981
1	4	77.1	23.028	34.813	2	5.73	2	93.56	5.24	2	980
1	5	102.5	17.686	34.696	2	12.77	2	58.10	4.43	2	979
1	6	128.6	12.897	34.647	2	25.79	2	-5.33	5.14	2	1044
1	7	150.9	11.623	34.670	2	29.21	2	-37.37	3.83	2	1043
1	8	172.4	11.198	34.707	2	30.09	2	-50.01	3.53	2	1042
1	9	201.9	10.568	34.695	2	31.16	2	-58.97	3.62	2	1041
1	10	252.5	10.060	34.691	2	32.77	2	-66.98	6.95	2	1040
1	11	303.2	9.747	34.683	2	33.47	2	-60.18	6.11	2	1028
1	12	358.2	9.325	34.664	2	35.99	2	-90.81	7.38	2	1039
1	13	409.5	8.959	34.649	2	38.87	2	-94.82	6.77	2	1038
1	14	509.9	7.872	34.606	2	51.17	2	-133.04	5.61	3	1037
1	15	609.5	6.823	34.571	2	60.94	2	-123.72	3.25	2	1036
1	16	709.8	5.920	34.557	2	72.70	2	-160.61	3.96	2	1035
1	18	914.3	4.759	34.558	2	88.97	2	-179.61	6.67	2	1034

Station 76

Latitude			4.992°N				Date			6/2791	
Longitude			134.972°W				Bottom depth			4578	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	0.2	28.566	34.400	2	3.07	2	94.13	6.41	2	1178
2	3	81.0	27.934	34.837	2	3.21	2	91.52	7.43	2	1177
2	4	110.5	24.505	34.869	2	4.81	2	89.33	4.63	2	1176
2	5	121.2	19.501	34.777	2	8.90	2	84.76	4.46	2	1190
2	6	142.7	15.393	34.672	2	19.08	2	23.49	4.55	2	1189
2	7	167.4	11.358	34.644	2	30.15	2	-37.57	4.30	2	1188
2	8	206.5	10.480	34.653	2	31.74	2	-44.06	4.09	2	1184
2	9	231.2	10.141	34.656	2	32.62	2	-47.24	4.49	2	1183
2	10	257.4	9.934	34.664	2	33.32	2	-71.90	5.80	2	1175
2	11	307.9	9.611	34.676	2	33.48	2	-72.77	4.20	2	1174
2	12	357.9	9.305	34.664	2	35.61	2	-102.03	8.10	3	1248
2	13	408.0	8.944	34.651	2	38.82	2	-95.46	2.99	6	1172,1246
2	14	503.4	8.078	34.618	2	46.50	2	-87.22	3.38	2	1171
2	15	603.4	7.204	34.582	2	54.71	2	-130.77	2.94	2	1170
2	16	730.3	6.098	34.553	2	65.79	2	-150.64	2.90	2	1169
2	17	785.8	5.591	34.551	2	74.19	2	-159.56	3.77	2	1255

Station 79

Latitude			3.517°N				Date			6/28/91	
Longitude			135.002°W				Bottom depth			4311	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	1	0.2	28.489	34.597	2	2.86	2	75.94	5.51	2	992
1	2	49.3	28.225	34.617	2	2.86	2	64.99	4.88	2	1182
1	3	96.2	26.505	34.796	2	3.94	2	85.73	8.49	2	990
1	4	111.7	22.310	34.826	2	7.18	2	83.23	6.20	2	989
1	5	122.3	20.965	34.786	2	9.89	2	68.53	4.69	2	988
1	6	142.7	13.326	34.875	2	22.16	2	-0.67	4.56	2	987
1	7	162.4	12.829	34.887	2	24.32	2	-17.29	5.66	2	986
1	8	202.2	12.137	34.843	2	25.22	2	-27.29	5.27	2	1009
1	9	228.0	11.763	34.821	2	27.38	2	-37.26	5.18	2	1008
1	10	253.0	11.625	34.813	2	27.19	2	-45.57	5.51	2	1006
1	11	304.8	11.096	34.776	2	27.91	2	-58.46	16.49	2	1004
1	12	344.2	10.719	34.747	2	28.99	2	-63.15	5.23	2	1003
1	13	398.5	10.084	34.709	2	31.51	2	-75.04	4.06	2	1181
1	14	452.2	9.354	34.664	2	35.12	2	-68.60	4.48	2	984
1	15	504.1	8.627	34.637	2	42.51	2	-104.91	3.79	2	3359
1	16	584.8	7.486	34.591	2	52.07	2	-121.78	5.52	2	982

Station 86

Latitude			2.000°N				Date			6/29/91	
Longitude			134.990°W				Bottom depth			4510	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (\textperthousand)	Err. (\textperthousand)	F	OSNUM
1	12	0.2	27.550	34.865	2	2.90	2	87.20	4.87	2	788
1	1	65.9	26.654	34.835	2	2.89	2	93.95	7.26	2	1073
1	2	82.1	23.432	34.794	3	4.95	2	76.49	5.22	2	1076
1	3	92.4	21.465	34.793	2	9.66	2	69.27	5.23	2	1077
1	4	102.8	17.646	34.741	2	14.19	2	48.46	5.60	2	1078
1	5	118.5	16.049	34.736	2	17.77	2	33.43	3.68	2	1079
1	6	158.6	12.871	34.868	2	23.23	2	-10.56	5.29	2	1074
1	7	178.3	12.536	34.868	2	24.35	2	-24.84	10.08	2	1075
1	8	209.0	12.172	34.845	2	25.47	2	-25.66	4.64	2	1083
1	9	262.0	11.643	34.816	2	25.83	2	-41.40	6.70	2	1084
1	10	323.6	10.970	34.772	2	29.41	2	-77.37	7.48	2	1085
1	11	384.8	10.103	34.730	2	34.51	2	-71.92	3.95	2	1086
1	13	421.0	9.636	34.688	2	33.92	2	-78.68	5.71	2	1089
1	14	507.1	8.198	34.623	2	43.56	2	-119.76	4.90	2	1090
1	15	604.5	6.888	34.569	2	53.00	2	-125.41	5.28	2	1092
1	16	705.9	6.038	34.550	2	60.93	2	-140.89	5.69	2	1088

Station 92

Latitude		0.990°N				Date		6/30/91			
Longitude		135.000°W				Bottom depth		4260			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	27.280	35.043	2	2.84	2	81.28	5.94	2	408
1	3	78.1	24.215	34.931	2	5.22	2	88.54	4.34	2	406
1	4	92.6	21.343	34.889	2	7.44	2	96.63	5.97	2	405
1	5	103.1	20.947	34.878	2	8.17	2	95.08	6.00	2	404
1	6	111.1	19.295	34.847	2	9.83	2	91.12	5.73	2	403
1	7	123.6	17.584	34.779	2	12.06	2	70.23	5.69	2	402
1	8	133.0	15.480	34.793	2	15.58	2	38.78	5.28	2	401
1	9	143.8	14.774	34.753	2	17.43	2	39.62	5.57	2	400
1	10	154.3	13.219	34.751	2	20.78	2	15.31	5.30	2	399
1	11	198.9	12.181	34.853	2	22.62	2	-44.92	5.60	2	398
1	12	250.6	11.758	34.833	2	26.71	2	-42.20	4.62	2	397
1	13	301.6	11.483	34.815	2	26.88	2	-36.91	5.01	2	396
1	14	365.5	10.101	34.721	2	32.47	2	-75.21	5.48	2	395
1	15	409.8	9.567	34.696	2	36.56	2	-92.32	4.95	2	394
1	16	511.5	7.941	34.613	2	42.90	2	-107.75	4.79	2	393
1	17	600.7	7.057	34.581	2	49.42	2	-125.83	3.64	2	407

Station 98

Latitude		0.003°N				Date		7/19/91			
Longitude		135.157°W				Bottom depth		4317			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
2	1	0.2	27.431	35.346	2	3.13	2	104.00	6.46	2	3360
2	2	67.0	26.058	35.429	2	3.71	2	85.97	3.80	2	930
2	3	72.8	24.835	35.393	2	5.18	2	94.39	3.61	2	929
2	4	84.8	21.235	35.356	2	6.55	2	87.64	5.18	2	928
2	5	113.0	19.277	35.126	2	8.99	2	117.21	6.44	3	1033
2	6	143.6	17.705	35.244	2	8.60	2	57.85	11.25	2	1026
2	7	176.9	15.167	35.024	2	13.09	2	45.82	12.04	2	1018
2	8	208.6	13.340	34.906	2	17.49	2	27.27	4.08	2	1019
2	9	234.3	13.080	34.948	2	17.30	2	-7.00	5.69	2	995
2	10	309.1	11.662	34.825	2	27.95	2	-55.89	8.93	2	1024
2	11	363.3	10.214	34.744	2	34.60	2	-52.18	5.12	2	1032
2	12	434.6	9.063	34.679	2	39.39	2	-96.37	3.61	2	1031
2	13	505.8	8.106	34.631	2	43.30	2	-120.97	6.32	2	1030
2	14	606.7	7.059	34.582	2	49.85	2	-138.12	3.83	2	1029
2	15	708.8	6.160	34.558	2	60.12	2	-131.30	4.85	2	996
2	16	807.8	5.275	34.550	2	72.04	2	-166.31	5.95	2	994

Station 104

Latitude			0.993°S				Date			7/3/91	
Longitude			135.002°W				Bottom depth			4479	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	0.2	27.439	35.356	2	2.83	2	89.40	3.39	2	1802
1	2	51.4	26.898	35.388	2	3.03	2	93.87	3.43	2	1803
1	3	73.9	25.208	35.508	2	3.52	2	88.95	3.71	2	1814
1	4	94.4	22.417	35.677	2	3.91	2	84.67	3.45	2	1800
1	5	104.2	20.827	35.665	2	5.66	2	100.07	3.01	2	1801
1	6	113.0	19.821	35.625	2	5.76	2	80.24	3.31	2	1799
1	7	140.3	15.519	35.173	2	10.94	2	18.84	7.98	2	1999
1	8	177.6	13.165	34.969	2	17.00	2	-4.43	6.68	2	3361
1	9	202.9	12.165	34.868	2	22.97	2	3.32	3.64	2	1792
1	10	228.9	12.015	34.850	2	24.24	2	-3.65	4.76	2	1791
1	11	275.7	11.487	34.815	2	28.44	2	-30.42	2.80	2	1790
1	12	306.2	11.201	34.803	2	28.64	2	-44.68	3.40	2	1798
1	13	355.3	10.156	34.742	2	34.31	2	-86.51	2.72	2	1793
1	14	415.3	9.496	34.700	2	37.63	2	-88.03	2.82	2	1797
1	15	505.7	7.965	34.620	2	43.69	2	-102.41	2.78	2	1796
1	16	605.9	7.086	34.581	2	47.90	2	-115.97	2.84	2	1795

Station 110

Latitude			1.973°S				Date			7/4/91	
Longitude			135.002°W				Bottom depth			4435	
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si ($\mu\text{mol/kg}$)	F	$\Delta^{14}\text{C}$ (‰)	Err. (‰)	F	OSNUM
1	1	0.2	27.729	35.374	2	2.76	2	95.52	4.80	2	786
1	4	76.2	27.509	35.363	2	2.90	2	96.68	4.80	2	785
1	5	97.0	23.225	35.260	2	4.62	2	63.28	4.76	2	3362
1	6	110.8	19.596	35.394	2	6.91	2	82.10	4.73	2	783
1	7	153.2	12.988	34.933	2	23.05	2	-10.48	6.93	2	782
1	8	178.7	12.548	34.901	2	24.57	2	-19.44	4.34	2	781
1	10	279.7	11.447	34.816	2	27.43	2	-25.19	10.02	2	780
1	11	312.3	11.218	34.806	2	27.60	2	-48.83	4.28	2	779
1	12	368.9	10.005	34.739	2	27.39	2	-56.53	4.18	2	778
1	13	424.9	9.163	34.693	2	34.30	2	-83.12	5.61	2	777
1	14	485.3	8.307	34.642	2	37.55	2	-98.46	4.11	2	776
1	15	554.9	7.390	34.593	2	43.69	2	-95.62	6.68	3	3363
1	16	644.9	6.484	34.560	2	51.94	2	-123.33	4.11	2	774
1	17	710.8	5.964	34.551	2	59.43	2	-135.37	6.50	2	773
1	18	812.7	5.375	34.544	2	67.29	2	-147.64	5.24	2	828

Station 118

Latitude		3.488°S				Date		7/5/91			
Longitude		135.002°W				Bottom depth		4672			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	27.761	35.320	2	3.02	2	71.34	3.47	2	1132
1	2	79.1	27.750	35.318	2	3.21	2	79.54	3.51	2	1131
1	4	99.6	26.425	35.440	2	3.02	2	68.23	2.63	2	1130
1	6	121.3	21.563	35.586	2	4.91	2	83.61	2.89	2	1129
1	7	132.0	18.761	35.303	2	10.21	2	61.78	2.63	2	1128
1	8	142.8	13.389	34.958	2	21.56	2	-2.94	2.47	2	1127
1	9	152.6	13.111	34.924	2	23.26	2	-4.23	2.47	2	1126
1	10	177.3	12.833	34.905	2	23.83	2	-15.91	2.57	2	1125
1	11	220.6	12.395	34.880	2	25.34	2	-27.54	2.70	2	1124
1	12	281.6	11.799	34.854	2	28.93	2	-46.38	3.09	2	1123
1	13	353.4	10.320	34.768	2	34.42	2	-82.04	6.21	2	1122
1	14	425.5	8.985	34.686	2	40.66	2	-93.43	4.23	2	1121
1	16	606.8	6.863	34.580	2	52.20	2	-124.62	3.36	2	1120
1	19	907.6	4.996	34.552	2	77.93	2	-160.39	2.27	2	1119
1	23	1718.3	2.632	34.619	2	125.97	2	-222.91	2.09	2	1118

Station 121

Latitude		5.008°S				Date		7/6/91			
Longitude		135.008°W				Bottom depth		4658			
Cast	Bot.	Pres. (dB)	Temp. (°C)	Salt	F	Si (μmol/kg)	F	Δ ¹⁴ C (‰)	Err. (‰)	F	OSNUM
1	1	0.2	27.647	35.111	2	3.03	2	79.98	3.96	2	912
1	2	57.2	27.639	35.162	2	3.03	2	78.63	4.53	2	913
1	3	76.7	25.413	35.517	2	3.22	2	72.33	4.14	2	911
1	4	91.2	24.020	35.540	2	3.61	2	77.40	4.97	2	910
1	5	111.4	21.170	35.490	2	4.30	2	76.85	3.65	2	909
1	6	129.2	18.991	35.534	2	5.08	2	101.48	4.64	2	908
1	7	141.3	16.908	35.294	2	8.70	2	68.14	7.00	2	993
1	8	161.8	14.979	35.121	2	11.14	2	59.13	4.86	2	906
1	9	192.8	13.307	34.949	2	18.67	2	-1.92	3.91	2	1020
1	10	279.7	11.016	34.808	2	27.27	2	-43.54	2.87	2	904
1	11	305.0	10.737	34.787	2	27.66	2	-48.54	2.87	2	903
1	12	362.7	10.101	34.747	2	35.38	2	-77.76	2.80	2	902
1	13	452.1	8.901	34.680	2	37.44	2	-102.97	4.64	2	901
1	14	559.2	7.641	34.609	2	44.08	2	-107.30	4.70	2	900
1	15	656.6	6.811	34.572	2	48.58	2	-125.67	2.66	2	899
1	16	763.0	5.944	34.548	2	57.97	2	-130.85	2.83	2	898