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**CHEMICAL AND HYDROGRAPHIC MEASUREMENTS FROM THE EQUATORIAL
PACIFIC DURING BOREAL AUTUMN, 1992**

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REMOTE ACCESS TO DATA LISTED IN THIS REPORT

The data presented in this report is available on a computerized Remote Bulletin Board System (RBBS), Internet FTP and the World Wide Web (WWW). For information regarding electronic access to the data sets contact:

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Contoured sections of the data are also available at <http://www.pmel.noaa.gov/co2/eqpac.html>.

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Chemical and Hydrographic Measurements from the Equatorial Pacific during Boreal Autumn, 1992

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ABSTRACT. In the boreal autumn of 1992, NOAA's Climate and Global Change Program sponsored a major cooperative effort with the U.S. JGOFS Program in the central and eastern equatorial Pacific to investigate the unique role of equatorial processes on CO₂ cycling during, and following, the 1991–92 ENSO event. Data were collected meridionally along four transects, generally between 10°N and 10°S. The first leg (Leg 3) included the 140°W and 125°W transects; the second leg (Leg 4) sampled along 110°W, and the third leg (Leg 5) included stations along 95°W and three short transects extending westward from the Peru coast. Chemical parameters sampled included fCO₂, DIC, TAlk, pH, TOC, and nutrients. Ancillary measurements of salinity, temperature, and dissolved oxygen (DO) were also taken. Descriptions of sampling methods and data summaries are given in this report.

1.0 INTRODUCTION

Human activity is rapidly changing the trace gas composition of the earth's atmosphere, causing the greenhouse warming effect from excess carbon dioxide (CO₂) along with other trace gas species such as chlorofluorocarbons, methane, and nitrous oxide. These gases play a critical role in controlling the earth's climate because they increase the infrared opacity of the atmosphere, causing the planetary surface to warm. Of all the anthropogenic CO₂ that has ever been produced, only about half remains in the atmosphere; it is the "missing" CO₂ for which the global ocean is considered to be the dominant sink for the man-made increase.

The equatorial region of the Pacific Ocean (EqPac) is unique because of the huge tongue of cool surface water which is characterized by high concentrations of nutrients and CO₂. Our goal was to investigate the role of equatorial processes on CO₂ cycling during and following the 1991–92 El Niño-Southern Oscillation (ENSO) event, and to better understand the rate at which CO₂ is released by the oceans.

The National Oceanic and Atmospheric Administration's (NOAA) Ocean-Atmosphere Carbon Exchange Study (OACES) Program, in cooperation with the U.S. Joint Global Ocean Flux Study (U.S. JGOFS) Program, the Equatorial Pacific Ocean Climate Study (EPOCS) and Tropical Ocean Global Atmosphere (TOGA) Program, participated in a multifaceted oceanographic research cruise

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conducted aboard the NOAA Ship *Discoverer* from September 6 to December 8, 1992. The primary objective of this U.S. JGOFS/OACES effort was to determine the relative effects of biological fixation of carbon within equatorial upwelling, followed by vertical flux of that fixed carbon to abyssal depths, and of CO₂ outgassing. The cruise was focused on determining the concentrations of carbon species and describing ocean circulation in the upper ocean over the equatorial Pacific from 95°W to 140°W. This data report summarizes the carbon species, nutrients, dissolved oxygens, total organic carbon, and salinities from this cruise. The tabulated discrete bottle data are given in Appendix A.

1.1 Cruise Itinerary

The ship departed Hilo, Hawaii on Sept. 6, 1992 and proceeded to the first station at 10°N and 140°W. A test cast was performed during the transit to check equipment. The cruise track for the first leg (Leg 3) of the cruise started at 10°N, 140°W and proceeded south along the longitudinal line to 10°S; the ship then transited to 10°S, 125°W, and sampled north along that meridional line to 10°N; Leg 3 ended in Manzanillo, Mexico.

The second leg (Leg 4) departed Manzanillo, Mexico on Oct. 12, 1992 and began operations at 10°N, 110°W. Problems with the electrical generator forced a diversion to San Diego for repairs. Research was resumed at 8°N on Oct. 31, and stations were sampled along 110°W longitude to 10°S; additionally, stations were sampled between 2°S and 2°N along 95°W. The ship ended Leg 4 in Salinas, Ecuador on Nov. 18, 1992.

The third leg (Leg 5) departed Salinas, Ecuador on Nov. 19, 1992 and occupied stations off the coast of Peru along 5°S from 81°20'W to 82°30'W. An additional line of stations was completed between 12°51'S, 78°30'W to 12°20'S, 77°20'W, and then between 3°3'S, 81°21' to 95°W, 14°S where stations were occupied along the meridional line to 3°N, where a medical evacuation forced cessation of the sampling. The cruise ended in San Diego on Dec. 8, 1992. Station locations and dates are contained in Figure 1 and Table 1.

2.0 SAMPLING AND ANALYTICAL METHODS

2.1 CTD and Hydrographic Operations

AOML's Neil Brown™ Instrument Systems (NBIS) Mark IIIb CTD #4 and General Oceanics 24-bottle rosette were used to measure pressure, temperature, and conductivity for all casts through station 67 on Leg 4. After station 67, AOML's NBIS Mark IIIb CTD #1 and General Oceanics 12-bottle rosette were employed and two casts were completed at each station in order to similarly sample the water column. CTD data were recorded during the downcast and the upcast, and discrete water samples were collected in 10-L Niskin™ bottles during the upcast. CTD data passed through an NBIS 1150 deck unit were acquired using AOML CTD acquisition software. A personal computer displayed real-time profiles and wrote the data to hard disk. An audio backup was made to VHS tape. Data files were archived on 5.25" removable hard disk cartridges.

Pre-cruise calibrated, 1-db averaged data files were calibrated and processed at PMEL (McTaggart *et al.*, 1994). To correct for cast-dependent drifts, coefficients of a least squares fit of CTD salinities and bottle salinities to a first order polynomial were computed for groups of stations

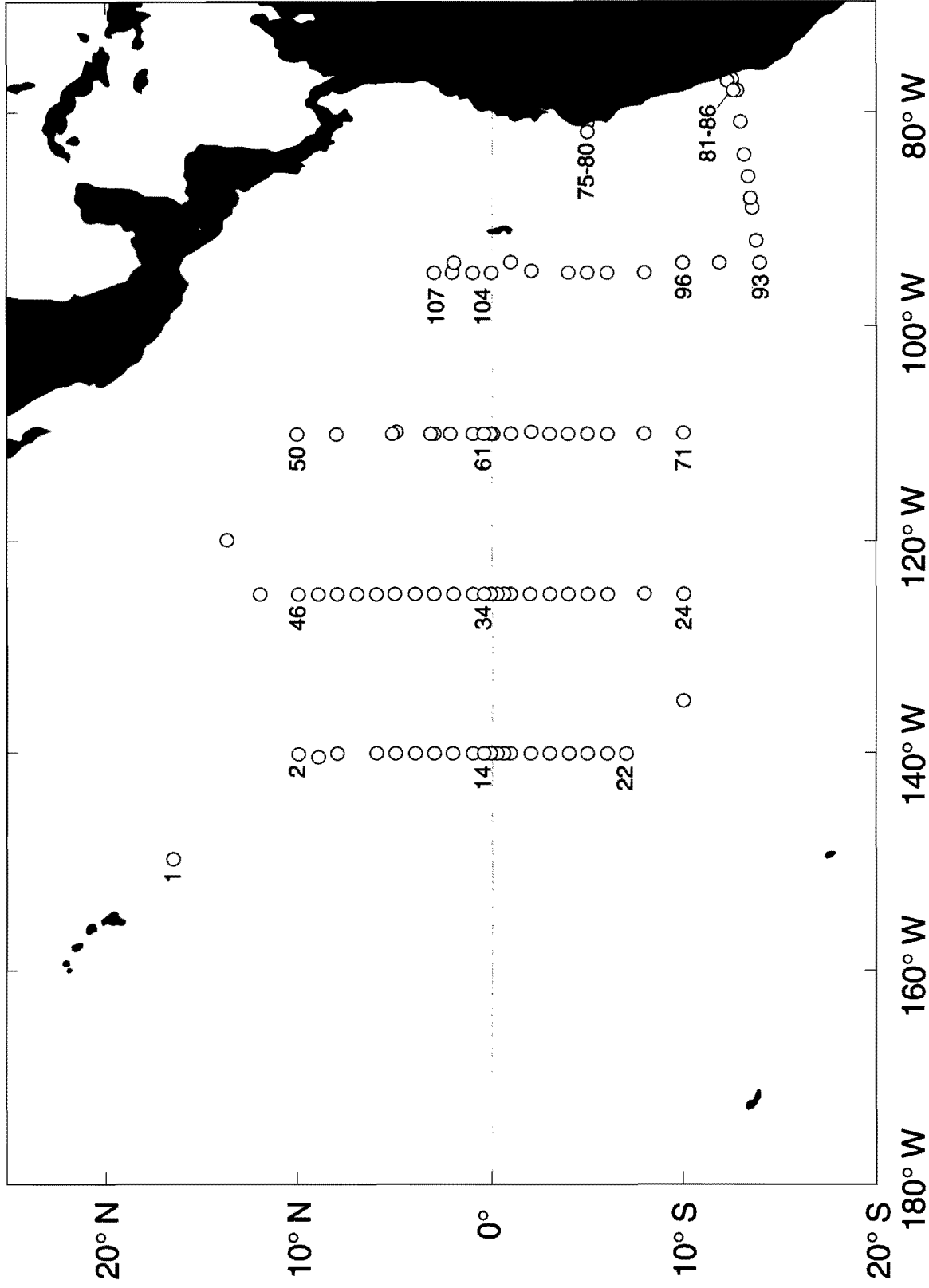


Fig. 1. Station locations (O) for the boreal autumn 1992 NOAA Equatorial Pacific Process Study. The digits beside the station locations are station numbers.

Table 1. Station locations and dates of the boreal autumn EqPac 1992 cruise.

Station	Cast	Latitude	Longitude	Date
<i>Leg 3:</i>				
1(test cast)	4	16° 29.79'N	149° 53.57'W	7-Sep-92
2	10	10° 0.38'N	139° 59.45'W	10-Sep-92
3	12	8° 57.67'N	140° 18.19'W	10-Sep-92
4	17	7° 59.98'N	139° 59.95'W	11-Sep-92
5	19	6° 0.28'N	139° 59.97'W	11-Sep-92
6	21	5° 0.39'N	140° 3.33'W	11-Sep-92
6	26	5° 0.2'N	140° 3.41'W	12-Sep-92
7	28	3° 58.3'N	140° 0.39'W	12-Sep-92
8	32	2° 59.35'N	140° 7.21'W	12-Sep-92
9	34	1° 9.64'N	140° 0.31'W	13-Sep-92
10	36	1° 0.01'N	139° 59.83'W	13-Sep-92
11	37	0° 29.67'N	140° 0.13'W	13-Sep-92
12	41	0° 0.16'N	140° 0.04'W	14-Sep-92
13	42	0° 15.04'N	139° 59.37'W	14-Sep-92
14	43	0° 15.0'S	139° 59.76'W	14-Sep-92
15	48	0° 29.73'S	139° 59.92'W	15-Sep-92
16	50	0° 59.41'S	139° 59.92'W	15-Sep-92
17	54	2° 0.56'S	140° 0.92'W	16-Sep-92
18	56	2° 59.88'S	140° 0.1'W	16-Sep-92
19	58	3° 59.62'S	140° 0.15'W	16-Sep-92
20	63	4° 58.36'S	140° 1.43'W	17-Sep-92
21	66	6° 0.13'S	140° 0.07'W	17-Sep-92
22	70	7° 0.04'S	140° 0.16'W	17-Sep-92
23	77	10° 0.09'S	135° 0.43'W	19-Sep-92
24	81	10° 0.05'S	125° 0.03'W	20-Sep-92
25	89	7° 57.6'S	125° 1.69'W	22-Sep-92
26	91	5° 59.81'S	125° 0.13'W	22-Sep-92
27	94	4° 59.99'S	125° 0.09'W	23-Sep-92
28	101	4° 0.11'S	125° 0.0'W	23-Sep-92
29	106	3° 0.0'S	125° 0.12'W	24-Sep-92
30	108	1° 59.98'S	125° 0.03'W	24-Sep-92
31	115	0° 59.9'S	124° 59.33'W	25-Sep-92
32	118	0° 29.88'S	124° 59.66'W	25-Sep-92
33	119	0° 14.93'S	124° 59.53'W	26-Sep-92
34	122	0° 1.35'N	124° 52.66'W	26-Sep-92
35	126	0° 15.33'N	124° 59.34'W	27-Sep-92
36	127	0° 30.79'N	124° 59.98'W	27-Sep-92
37	129	1° 1.47'N	124° 59.48'W	27-Sep-92
38	134	1° 59.95'N	125° 0.13'W	28-Sep-92
39	144	2° 59.86'N	125° 0.26'W	28-Sep-92
40	146	4° 0.09'N	125° 0.06'W	29-Sep-92
41	153	5° 3.12'N	125° 0.9'W	30-Sep-92
42	156	6° 0.07'N	124° 59.9'W	30-Sep-92
43	157	6° 59.85'N	124° 59.46'W	30-Sep-92
44	159	8° 3.45'N	124° 59.77'W	1-Oct-92
45	163	8° 59.82'N	124° 59.91'W	1-Oct-92
46	169	9° 59.28'N	124° 59.36'W	2-Oct-92
47	174	11° 59.37'N	125° 0.44'W	2-Oct-92
48	175	13° 42.92'N	120° 0.09'W	3-Oct-92

Table 1. (continued)

Station	Cast	Latitude	Longitude	Date
<i>Leg 4:</i>				
50	182	10° 1.08'N	109° 56.85'W	17-Oct-92
51	187	8° 0.03'N	110° 0.09'W	31-Oct-92
52	195	5° 59.78'N	109° 59.8'W	1-Nov-92
53	201	4° 58.14'N	109° 54.98'W	1-Nov-92
54	208	3° 59.02'N	109° 59.79'W	2-Nov-92
55	209	2° 59.85'N	110° 0.56'W	2-Nov-92
56	211	2° 6.75'N	110° 6.8'W	2-Nov-92
57	218	0° 59.69'N	110° 0.71'W	3-Nov-92
58	223	0° 31.14'N	110° 0.15'W	3-Nov-92
59	224	0° 15.26'N	109° 59.98'W	4-Nov-92
60	229	0° 11.64'N	110° 5.3'W	4-Nov-92
61	234	0° 0.79'N	110° 0.38'W	4-Nov-92
62	235	0° 15.19'S	110° 0.12'W	5-Nov-92
63	236	0° 30.9'S	110° 0.36'W	5-Nov-92
64	237	1° 0.0'S	109° 59.97'W	6-Nov-92
65	244	2° 5.6'S	109° 54.1'W	6-Nov-92
66	247	2° 59.51'S	110° 1.11'W	7-Nov-92
67	253	3° 59.97'S	109° 58.35'W	8-Nov-92
67	254	4° 0.04'S	109° 58.54'W	8-Nov-92
68	255	4° 59.86'S	110° 2.13'W	8-Nov-92
68	258	4° 59.95'S	110° 1.72'W	8-Nov-92
69	264	6° 0.01'S	110° 0.01'W	8-Nov-92
69	266	5° 59.9'S	110° 0.04'W	9-Nov-92
70	267	8° 0.05'S	109° 59.96'W	9-Nov-92
70	270	7° 59.68'S	110° 0.16'W	9-Nov-92
71	276	10° 0.03'S	110° 0.11'W	10-Nov-92
71	278	9° 59.91'S	109° 59.94'W	10-Nov-92
72	287	2° 0.0'S	95° 0.0'W	13-Nov-92
73	291	0° 0.86'S	95° 3.34'W	14-Nov-92
74	296	1° 57.28'N	94° 9.05'W	15-Nov-92
<i>Leg 5:</i>				
75	302	5° 0.0'S	81° 20.02'W	20-Nov-92
76	303	4° 59.95'S	81° 30.04'W	20-Nov-92
76	306	5° 0.1'S	81° 29.88'W	21-Nov-92
77	307	5° 0.03'S	81° 40.08'W	21-Nov-92
77	308	5° 0.06'S	81° 40.0'W	21-Nov-92
78	309	5° 0.01'S	81° 50.01'W	21-Nov-92
78	311	5° 0.07'S	81° 50.09'W	21-Nov-92
79	312	5° 0.02'S	81° 59.99'W	21-Nov-92
79	313	4° 59.98'S	82° 0.05'W	21-Nov-92
80	314	5° 0.02'S	82° 30.12'W	21-Nov-92
80	318	4° 59.95'S	82° 29.88'W	21-Nov-92
81	319	12° 51.0'S	78° 36.92'W	23-Nov-92
81	321	12° 51.0'S	78° 37.02'W	23-Nov-92
82	322	12° 45.24'S	78° 21.29'W	23-Nov-92
82	323	12° 44.93'S	78° 21.03'W	23-Nov-92
83	324	12° 39.02'S	78° 5.9'W	23-Nov-92
83	327	12° 38.94'S	78° 5.83'W	23-Nov-92
84	328	12° 32.0'S	77° 48.99'W	23-Nov-92

Table 1. (continued)

Station	Cast	Latitude	Longitude	Date
<i>Leg 5 (cont.):</i>				
84	332	12° 32.14'S	77° 49.0'W	23-Nov-92
85	333	12° 26.81'S	77° 35.51'W	23-Nov-92
85	337	12° 26.84'S	77° 35.6'W	23-Nov-92
86	338	12° 19.98'S	77° 19.86'W	24-Nov-92
87	340	13° 2.58'S	81° 20.74'W	24-Nov-92
87	344	13° 2.54'S	81° 20.81'W	24-Nov-92
88	345	13° 0.14'S	84° 4.6'W	25-Nov-92
88	347	13° 13.98'S	84° 4.48'W	25-Nov-92
89	348	13° 25.6'S	86° 48.3'W	25-Nov-92
89	352	13° 25.47'S	86° 8.5'W	25-Nov-92
90	353	13° 32.34'S	88° 29.81'W	26-Nov-92
91	354	13° 36.92'S	89° 32.24'W	26-Nov-92
91	356	13° 36.96'S	89° 2.18'W	26-Nov-92
92	357	13° 48.61'S	92° 15.71'W	26-Nov-92
92	361	13° 48.65'S	92° 15.98'W	26-Nov-92
93	362	14° 0.05'S	94° 59.9'W	27-Nov-92
93	364	14° 0.01'S	94° 59.98'W	27-Nov-92
95	366	11° 55.08'S	94° 59.97'W	27-Nov-92
95	369	11° 55.09'S	95° 0.0'W	28-Nov-92
96	370	10° 0.24'S	94° 59.89'W	28-Nov-92
96	372	9° 59.99'S	95° 0.0'W	28-Nov-92
97	373	8° 0.05'S	95° 0.09'W	28-Nov-92
97	377	8° 0.1'S	95° 59.75'W	28-Nov-92
98	378	6° 0.1'S	95° 0.37'W	29-Nov-92
98	380	5° 59.98'S	94° 59.96'W	29-Nov-92
99	381	5° 0.0'S	95° 0.1'W	29-Nov-92
99	383	5° 0.03'S	95° 0.06'W	29-Nov-92
100	388	4° 0.2'S	95° 0.14'W	29-Nov-92
100	390	4° 0.09'S	95° 0.14'W	30-Nov-92
101	391	4° 0.09'S	95° 0.14'W	30-Nov-92
101	393	3° 0.18'S	94° 59.97'W	30-Nov-92
102	395	1° 59.95'S	95° 0.13'W	30-Nov-92
102	399	1° 59.92'S	95° 0.17'W	30-Nov-92
103	401	1° 0.16'S	94° 59.92'W	30-Nov-92
103	403	1° 0.21'S	94° 59.57'W	30-Nov-92
104	405	0° 0.01'N	95° 0.18'W	1-Dec-92
105	410	1° 0.08'N	95° 0.2'W	1-Dec-92
105	414	0° 59.95'N	95° 0.39'W	1-Dec-92
106	416	1° 59.94'N	95° 0.31'W	1-Dec-92
106	418	2° 0.0'N	94° 0.2'W	2-Dec-92
107	423	3° 0.04'N	95° 0.06'W	2-Dec-92

Table 2. Coefficients of least squares fit of CTD and bottle salinities during Legs 3, 4, and 5 of the boreal autumn EqPac 1992 cruise.

Station	Bias	Slope	Std. Dev.	# of Pts.
1- 22	-0.1592176E-01	0.1000271E+01	0.0056	396
23- 48	0.1783609E-01	0.9993343E+00	0.0067	472
49- 67	-0.1083432E+00	0.1003059E+01	0.0042	351
67	-0.2837561E+00	0.1007903E+01	0.0049	21
68- 74	0.9982839E-01	0.9972650E+00	0.0029	71
75-107	0.3461486E-01	0.9990724E+00	0.0023	634

and applied to CTD salinities (Table 2). No additional calibrations were applied to pressure or temperature.

Samples were collected from 10-L PVC Niskin™ bottles in the following order: dissolved oxygen (DO), discrete fugacity of CO₂ (fCO₂), dissolved inorganic carbon (DIC), pH, total alkalinity (TAlk), C-13/C-12 isotope ratios, nutrients, total organic carbon (TOC), particulate organic carbon (POC), particulate organic nitrogen (PON), and salinities. In addition, underway surface fCO₂ samples were collected on a continuous basis throughout the cruise. This report does not address C-13/C-12, POC, PON or underway fCO₂ measurements.

2.2 Dissolved Oxygen (DO)

DO samples were the first to be collected from 10-L Niskin™ bottles once the CTD unit was retrieved on deck. Samples were collected in volume-calibrated 150-mL, clear, ground-glass stoppered sample bottles using Tygon™ tubing; the drawing tube was outfitted with a latex attachment to prevent the Tygon™ tubing from coming into contact with the stopcock nipple and causing TOC contamination. The sample bottles were rinsed twice and filled from the bottom to minimize bubble entrainment, and overflowed approximately half a volume. 1-mL manganous chloride (600 g MnCl₂·4H₂O in 1 L H₂O) and 1-mL alkaline sodium iodide (320 g NaOH and 600 g NaI in 1 L H₂O) were added to the sample bottles. The top depressions of the bottles were filled with fresh water to prevent intrusion of air, and samples were kept in darkness until analysis.

DO samples were titrated following the technique of Carpenter (1965) and Friederich *et al.* (1984). A computer-controlled automatic pipette was used for titration with photometric endpoint determination. Values are marked as questionable in the data tables when there were high or low photometric endpoints in the titration process due to improper light levels, or there was possible contamination during processing (air bubbles seen in bottle, etc.). The data are reported in the data tables (Appendix A) in µmol/L, but are available in the data base in both µmol/L, and µmol/kg. The density conversion was made using in-situ temperatures and measured salinity.

2.2.1 DO data quality control assessment

The most useful quality control checks with other data sets would compare deep water values. However, the maximum depth of the casts was ≤ 1000 db, and variability in DO values cannot be excluded at 1000 db. The quality of the data was evaluated by examining profiles, contour maps, replicates, property/property plots, and comparisons with other data sets.

For nearly every cast on these cruises, a second Niskin™ was tripped at the maximal depth. This gave a large set of duplicate samples which was used to assess the combined precision of the analytical technique, the Niskin™ subsampling technique, and ocean subsampling by the Niskin™ (Appendix B). Precision is here defined as the average of the relative error between the samples and it is expressed in percent. The relative error is expressed as the absolute difference divided by the mean for two samples or standard deviation divided by the mean for more than two samples.

For Leg 3 the double-trip duplicates were all sampled from 1000 db (41 pairs). The mean difference of duplicate results was 0.40% with 1.22% standard deviation if one pair (Station 45 at 9°N, 125°W) was excluded. These statistics are consistent with the statistics for a set of Niskin™ subsampling duplicates taken from 13 different Niskin™ bottles on one cast on Leg 3 (Station 12 at 0°, 140°W) which gave a standard deviation from the mean of 1.14%. On Leg 4, 20 duplicates plus one triplicate were sampled from Niskins™ tripped at 1000 db. The mean difference was 0.29% with 1.08% standard deviation. For Leg 5, 29 pairs of duplicates were sampled from Niskins™ tripped at 800 db. The mean difference was 1.65% with 3.92% standard deviation. The overall mean difference for all three legs was 0.78% difference between duplicates with 2.42% standard deviation if one pair (Station 45 at 9°N, 125°W) was excluded.

2.3 Discrete fugacity of CO₂ (fCO₂)

Samples were drawn from 10-L Niskin™ bottles into 500-mL Pyrex™ volumetric flasks using Tygon™ tubing outfitted with a latex attachment to prevent the Tygon™ tubing from coming into contact with the stopcock nipple. Bottles were rinsed once, and while taking care not to entrain air bubbles, were filled from the bottom until half the bottles' volume overflowed. Five mL of water was then withdrawn with a pipette to create a small expansion volume. A saturated HgCl₂ solution (0.2 mL) was added to the samples as a preservative. The sample bottles were then sealed with a screw cap containing a polyethylene liner and stored in darkness at room temperature for a maximum of 24 hours prior to analysis.

The AOML discrete fCO₂ system is patterned after the design described in Chipman *et al.* (1993) and is discussed in detail in Wanninkhof and Thoning (1993). The major difference between the two systems is that the AOML system uses a Licor™ (model 6262) non-dispersive infrared analyzer, while the Chipman *et al.* system utilizes a gas chromatograph with a flame ionization detector and a methanizer, which quantitatively converts CO₂ into CH₄ for analysis.

The samples were brought to a temperature of 20.00 ± 0.02 °C, using a pre-bath at 19–21 °C and a Neslab™ (model RT-220) controlled temperature bath. In the analyses, two samples are analyzed concurrently; a 60-mL headspace is created in the flasks by replacing the water using a

compressed standard gas with a CO₂ mixing ratio close to the anticipated fCO₂ of the water. The headspace is circulated in a closed loop through the infrared analyzer (IR), which measures CO₂ and water vapor levels in the sample cell. The headspaces of the two flasks are equilibrated simultaneously in channels A and B. While headspace from the flask in channel A goes through the IR analyzer, the headspace of the flask in channel B is recirculated in a closed loop. The sample in the A channel is equilibrated for 17 minutes while the air from the headspace of the flask flows through the IR analyzer. The sample in the B channel is circulated in a closed loop for 10 minutes and through the IR for 8 minutes. An expandable volume, consisting of a balloon, keeps the contents of the flasks at room pressure.

In order to maintain measurement accuracy and precision, a set of six gas standards was run through the system after every four to ten seawater samples. The standards have mixing ratios of 201.4, 352.2, 511.7, 1012.2, 1552.8, and 2019.8 ppm, which bracket the fCO₂ at 20°C (fCO₂, 20) values observed in the water column of the equatorial Pacific. The commercial CO₂ standards (supplied by Scott™ and Air Products™) in “artificial air” were calibrated against WMO (World Meteorological Organization) standards in real air supplied by Dr. Charles Keeling of Scripps Institution of Oceanography (SIO) with mixing ratios of 204.0, 350.4, 795.0, and 1504 ppm.

The determination of fCO₂ in water from the discrete analyses involves several steps. The mixing ratio and detector response for the standards were normalized for temperature and pressure. The IR voltage output for samples were normalized with regard to pressure and were corrected for the presence of water vapor and converted to a mixing ratio. The mixing ratio in the headspace was converted to fugacity and corrected to fugacity of CO₂ in the water sample prior to equilibration by accounting for change in DIC in water during the equilibration process (for details see Wanninkhof and Thoning, 1993). The change in the fCO₂ of water, (fCO_{2w}), caused by the change in DIC, was calculated using the constraint that TALK remains constant during exchange of CO₂ gas between the headspace and the water. The calculation is outlined in the appendix of Peng *et al.* (1987).

Precision of the fCO₂ analyses shown in Table 3 were determined in four different ways: from re-analyses of the same water sample; from agreement between surface mixed layer values (where mixed layer is defined as the depth of the surface layer with temperatures within 0.5°C); from duplicates of samples taken from the same Niskin™ bottle; and duplicates taken from the same depth but from different Niskin™ bottles. The precision is defined as the average of the relative

Table 3. Precision of discrete fCO₂ samples taken during Legs 3, 4 and 5 of the boreal autumn EqPac 1992.

	Leg 3		Leg 4		Leg 5	
	precision %	# of replicates	precision %	# of replicates	precision %	# of replicates
Re-analysis	0.42	35	0.12	31	0.17	50
Same depth	1.10	36	0.38	23	0.36	34
Mixed layer	3.21	39	0.77	21	1.45	26
Same Niskin™	0.99	2	N/A		N/A	

error between the samples and is expressed in percent. The percent relative error is expressed as the absolute difference divided by the mean for two samples, or standard deviation divided by the mean for more than two samples.

2.4 Dissolved Inorganic Carbon (DIC)

Samples were drawn from 10-L Niskin™ bottles into 500-mL Pyrex™ bottles using Tygon™ tubing outfitted with a latex attachment to prevent the Tygon™ tubing from coming into contact with the stopcock nipple. Bottles were rinsed once and filled from the bottom, overflowing half a volume while taking care not to entrain any bubbles. The tube was pinched off and withdrawn, creating a 5-mL headspace volume. 0.2 mL of saturated HgCl₂ solution was added as a preservative. The sample bottles were sealed with glass stoppers lightly covered with Apiezon-L™ grease, and were stored at room temperature in the dark for a maximum of 24 hours prior to analysis by coulometric determination.

DIC was analyzed by coulometry, and two analytical set-ups were used simultaneously on the cruise, each consisting of a coulometer (UIC, Inc.) coupled with a SOMMA (Single Operator Multiparameter Metabolic Analyzer) inlet system developed by Ken Johnson (Johnson, 1992; Johnson *et al.*, 1993) of Brookhaven National Laboratory (BNL). AOML-1 was supplied by the group from NOAA/AOML, and PMEL-1 was provided by the group from NOAA/PMEL.

In the coulometric analysis of DIC, all carbonate species (CO₃²⁻ and HCO₃⁻) are converted to CO₂ (gas) by addition of excess H⁺ to seawater, and includes the following steps: the 500-mL sample bottle is inserted in a water bath at 20°C and allowed to come to thermal equilibrium; water from the bottle is displaced by pressurization into a calibrated, thermostatted pipette using a headspace gas (511 ppm CO₂ in N₂). Using Ultra-Pure N₂ as the carrier gas, the sample is injected into the reaction vessel in the SOMMA which contains 1-mL 10% H₃PO₄ solution previously stripped of CO₂, and the evolved CO₂ gas from the sample is carried through a condenser and a Mg(ClO₄)₂ column to dry the gas stream, and then through an ORBO-53™ tube to remove volatile acids other than CO₂. In the titration cell of the coulometer, CO₂ reacts quantitatively with ethanolamine to form hydroxyethyl carbamic acid which is titrated with OH⁻ ions electrogenerated by the reduction of H₂O at a platinum cathode. The equivalence point is detected photometrically with thymolphthalein as indicator. The cell solution is blue at the equivalence point of 10.5 pH and colorless at pH 9.3 after the addition of CO₂ in aqueous solutions (Johnson *et al.*, 1985). CO₂ drives down the pH and raises % transmittance. As the acid is titrated, pH increases (hence, the blue color returns) and % transmittance decreases, thus causing the titration current to decrease as the equivalence point is approached and sensed by the optical detector. Therefore, the CO₂ is measured by the quantity of electrons required to reach the equivalence point, calculated by the magnitude of the current and the time of passage.

The coulometers were each calibrated by injecting aliquots of pure CO₂ (99.995%) by means of an 8-port valve outfitted with two sample loops. The loop volumes were calibrated at BNL

(Wilke, 1993) prior to, and following, the cruise, and no significant difference was found between the pre- and post-cruise calibrations. All DIC values were corrected for dilution by 0.2 mL of HgCl₂ solution assuming the solution was saturated with atmospheric CO₂ levels and total water volume was 540 mL. The correction factor used was 1.00037. No correction was made for headspace gas exchange with the sample due to the probable variability of fCO₂ at the location of sampling, and the small magnitude (<1.0 μmol/kg) of the correction. The overall accuracy and precision for both the AOML and PMEL instruments combined was determined to be within ±1.8 μmol/kg.

The instruments were calibrated at the beginning, middle and end of each coulometer cell solution with a set of the gas loop injections. Calculation of the amount of CO₂ injected was according to the DOE Handbook of Methods for the Analysis of the Various Parameters of the Carbon Dioxide System in Sea Water, Ver. 2 (1994). The set of gas loops yielded a mean calibration factor (CF) for the instrument defined as:

$$CF = \frac{\text{calculated no. of moles CO}_2 \text{ injected from gas loop}}{\text{observed moles of CO}_2 \text{ injected}}$$

The concentration of DIC in the samples was determined according to:

$$DIC (\mu\text{mol/kg}) = \frac{CF \times (\text{Counts} - \text{Blank} \times \text{Run Time}) \times 2.0728 \times 10^{-4} \mu\text{mol/count}}{\text{Pipet Volume} \times \text{Density of Sample}}$$

where “Counts” is the instrument reading at the end of the analysis, “Blank” is the counts/minute determined from blank runs performed at least once for each cell solution, “Run Time” is the length of coulometric titration (in minutes), “2.0728 × 10⁻⁴” is the conversion factor from counts to μmol.

The pipette volume was determined by taking aliquots at known temperature of distilled water dispensed from the pipette before, during, and after the cruise and weighing them ashore. No significant volume change was observed for either instrument. The weights with the appropriate densities were used to determine the volume of the pipette. Calculation of pipette volumes, density, and final CO₂ concentration were performed according to procedures outlined in the DOE Handbook (1994).

A Certified Reference Material (CRM) consisting of seawater poisoned with HgCl₂ (Batch 12) prepared by Dr. Andrew Dickson (SIO) was analyzed on both instruments over the duration of the cruise (Table 4). The absolute value was determined by the manometric technique of Dr. Charles Keeling, also of SIO. All DIC data have been corrected to the CRM values on a per instrument/per leg basis; the corrections applied are given in Table 5.

The precision of the DIC measurements was determined in three different ways: analyses of six Niskin™ bottles all tripped at ~1000 db at Station 1 (test cast) yielded a standard deviation of ±1.7 μmol/kg; CRM's (Table 4) analyzed during the cruise show that the standard deviation at the 1σ level were within ±1.9 μmol/kg (n = 138); duplicate pairs tripped at the maximal depth throughout the cruise show a mean difference of 0.1 ± 2.1 μmol/kg (n = 93).

Table 4. Certified reference material (Batch 12) analyzed during the boreal autumn EqPac 1992.

	PMEL-1 $\mu\text{mol/kg}$	AOML-1 $\mu\text{mol/kg}$
Leg 3:	$1984.1 \pm 1.8, n = 37$	$1985.6 \pm 0.8, n = 21$
Leg 4:	$1986.0 \pm 1.9, n = 20$	$1985.1 \pm 1.2, n = 22$
Leg 5:	$1983.9 \pm 0.9, n = 19$	$1986.3 \pm 0.3, n = 19$

Manometrically derived DIC = $1984.26 \pm 0.73 \mu\text{mol/kg}$ ($n = 7$). Standard deviations are given at the 1σ level.

Table 5. Corrections applied to DIC data during the boreal autumn EqPac 1992 cruise.

	PMEL-1 $\mu\text{mol/kg}$	AOML-1 $\mu\text{mol/kg}$
Leg 3:	+0.2	-1.3
Leg 4:	-1.7	-0.9
Leg 5:	+0.4	-2.0

2.5 pH

Sample cells (10-cm pathlength spectrophotometric cells, 30-cm³ volume) were filled directly from the Niskin™ bottle using a 20-cm length of Tygon™ tubing outfitted with a latex attachment to prevent the Tygon™ from coming into contact with the stopcock nipple; a flushing volume of approximately 300 mL was used. Care was taken to eliminate bubbles from the sampling system, and the sample cell was sealed with PTFE caps while ensuring that there was no head space.

All spectrophotometric pH measurements were made using the indicator m-Cresol Purple. Spectrophotometric cells were warmed to 25°C in a twelve-chambered thermostated aluminum block and subsequently cleaned and placed in the thermostated sample compartment of the spectrophotometer. Absorbance measurements were made at three wavelengths: a non-absorbing wavelength (730 nm) and wavelengths corresponding to the absorbance maxima of the alkaline (I^{2-} , 578 nm) and acidic (HI^- , 434 nm) forms of the indicator. Subsequently, one of the cell caps was removed and 0.08 cm³ of concentrated indicator (2 $\mu\text{mol/cm}^3$) was injected into the cell. The cell was capped, rapidly mixed and returned to the thermostated cell. Absorbance measurements were again made at 730 nm, 578 nm and 434 nm. Sample pH was then calculated using the equations and procedures of Clayton and Byrne (1993). The “total” pH scale is used, and pH_T is reported in mol/kg of seawater.

2.6 Total Alkalinity (TAlk)

Samples were drawn from 10-L Niskin™ bottles into 500-mL Pyrex™ bottles using Tygon™ tubing outfitted with a latex attachment to prevent the Tygon™ tubing from coming into contact with the stopcock nipple. Bottles were rinsed once and filled from the bottom, overflowing half a volume while taking care not to entrain any bubbles. The tube was pinched off and withdrawn, creating a 5-mL headspace volume. The sample bottles were sealed with glass stoppers, and were stored at room temperature in the dark for a maximum of 6 hours prior to analysis by potentiometric determination.

The TAlk titration system was similar to the one used in previous studies (Thurmond and Millero, 1982; Bradshaw and Brewer, 1988) and consisted of a Metrohm 665 Dosimat™ titrator and an Orion 720A pH meter operated by a personal computer. Both the acid titrant and the seawater sample were maintained at 25°C with a Neslab™ temperature bath. The plastic jacketed cells (volume ~200 cm³) were patterned after an earlier design of Bradshaw and Brewer (1988) except a larger volume was used to increase the precision. The cell had zero dead volume valves to increase the reproducibility of the cell volume. A GW-Basic™ program was used to control the titrant addition and read the emf of the electrodes. The titration was made by adding HCl to seawater past the carbonic acid end point. A typical titration records the emf reading after it becomes stable (0.09 mV) and adds enough acid to change the voltage by a pre-assigned increment (13 mV). The electrodes used to measure emf consisted of a ROSS™ glass pH electrode and an Orion™ double junction Ag/AgCl reference electrode.

The HCl acid solutions (20 L) were made, standardized, and stored in 500-mL glass bottles prior to the cruise. The 0.25 M HCl solutions were made with 1 M Mallinckrodt™ standard solutions in 0.45 M NaCl to yield an ionic strength equivalent to that of average seawater (0.7 M). The acid was standardized by titrating weighed amounts of Na₂CO₃ and TRIS dissolved in 0.7 M NaCl solutions. The blanks in the 0.7 M NaCl solutions were determined by coulometry and by titrations of the NaCl solutions with and without added Na₂CO₃ and TRIS. The blanks of the titrations of TRIS were determined by extrapolation to zero added salt (Goyet and Hacker, 1992).

The alkalinity blanks in the NaCl were approximately 14 ± 1 μmol. Cell volumes were determined in the laboratory by weighing the cells filled with degassed Millipore water. The density of water at the temperature of the measurements (25°C) was calculated from the international equation of state of seawater (Millero and Poisson, 1981). The nominal volumes of all the cells were about 200 cm³ and the values were determined to 0.03 cm³.

The NaCl, Na₂CO₃ and NaHCO₃ salts used to make up the solutions were Baker Analyzed™ reagent grade. Details on preparation and calibration of the seawater buffers are given in Dickson (1993) and Millero (1993). Approximately 20 L of standard carbonate solutions in 0.7 M NaCl were prepared for the calibrations of the acids. The solutions were equilibrated with air to provide an alkalinity and nearly constant DIC standard. The DIC in the blanks and carbonate solutions was

measured daily using a coulometer (see Section 2.4). The coulometer was calibrated using CO₂ gas loops and monitored with Batch #12 CRM.

The volume of HCl delivered to the cell is traditionally assumed to have small uncertainties (Dickson, 1981) due to the digital output of the titrator. Calibrations with water at 25°C of the Dosimats' burettes indicate that the systems deliver 3 cm³, a typical value for a titration of seawater, to a precision of 0.0004 cm³. This uncertainty results in an error of 0.4 μmol kg⁻¹ in TAlk. The accuracy of the volume of acid delivered by the Dosimats, however, was ten times poorer (0.004 cm³) than the precision. Since the titration systems were calibrated using standard solutions, this error in accuracy of volume delivery will be partially cancelled and included in the value assigned to the concentration of HCl and the volume of the cell.

2.7 Nutrients

Nutrient samples were collected from 10-L Niskin™ bottles in aged 60-mL linear polyethylene bottles after three complete seawater rinses, and stored in the dark at 4°C until analysis was completed (within 24 hours of sample collection). Concentrations of dissolved nitrite (NO₂⁻), dissolved nitrate (NO₃⁻), dissolved phosphate (HPO₄²⁻) and silicate (H₄SiO₄) were determined using an Alpkem™ Rapid Flow Analyzer™ (RFA/2™) Auto-Analyzer aboard ship. The water used for the preparation of standards, determination of blank and wash between samples was filtered Gulf Stream seawater obtained from the surface of the Strait of Florida. Analytical temperature was assumed to be 25 ± 1°C. The data are reported in the data tables (Appendix A) as μmol/L, but are available in the data base in both μmol/L and μmol/kg. The density conversion was made using the aforementioned analytical temperature and measured salinity.

2.7.1 Nitrite and nitrate

The automated colorimetric procedures and methodologies used in the analysis of nitrite and nitrate are similar to those described by Armstrong *et al.* (1967), with modifications described in Atlas *et al.* (1971). Standardizations were performed prior to each sample run with working solutions prepared aboard ship from pre-weighed Baker Analyzed™ reagent grade standards. Nitrite (NO₂⁻) was determined by diazotization with sulfanilamide and coupling with N- (1-naphthyl) ethylenediamine dihydrochloride to form an azo dye. The color produced is proportional to the nitrite concentration. Samples for nitrate (NO₃⁻) analysis were passed through copperized cadmium in the form of an Open Tubular Cadmium Reactor (OTCR) coil, which reduced nitrate to nitrite; the resulting nitrite concentration was then determined as described above. The detection limits for nitrite and nitrate were 0.1 μmol/L and 0.4 μmol/L, respectively. The standard deviation of the analyses of samples from two Niskin™ bottles at 1000 db were used to estimate the overall precision obtained by the sampling and analytical procedures. The percent relative error of nitrate analysis for these samples was 0.38% ± 0.37% (n = 80).

2.7.2 Phosphate

The analytical procedures and methodologies used in the analysis of phosphate are similar to those described by Armstrong *et al.* (1967), with modifications described in Grasshoff *et al.* (1983). In this method, orthophosphate in the samples was determined by reacting with molybdenum (VI) and antimony (III) in an acidic medium to form an antimonyphospho-molybdate complex. This complex was subsequently reduced with ascorbic acid to form a blue complex and the absorbance was measured at 880 nm by a filter photometer in RFA/2™ system. The method detection limit was 0.08 µmol/L. The percent relative error of phosphate analysis for samples from two Niskin™ bottles at 1000 db was 0.92% ± 0.77% (n = 76).

2.7.3 Silicate

The analytical procedures and methodologies used in the analysis of silicate are essentially similar to those described by Armstrong *et al.* (1967), with modifications described in Atlas *et al.* (1971). In this modified method, β-molybdosilicic acid was formed by reaction of the silicate contained in the sample with molybdate in an acidic solution. The β-molybdosilicic acid was then reduced by stannous chloride to form molybdenum blue. The absorbance of the molybdenum blue, measured at 660 nm, was linearly proportional to the concentration of silicate in the sample, with a detection limit of 0.4 µmol/L. The percent relative error of silicate analysis for samples from two Niskin™ bottles at 1000 db was 1.41% ± 1.24% (n = 72).

2.8 Total Organic Carbon (TOC)

All samples for total organic carbon (TOC) analysis were collected using the 10L-Niskin™ bottles on a 12- or 24-bottle CTD-rosette. The Niskin™ bottles used red silicone rubber o-rings and nylon coated stainless steel springs; stopcocks were polyethylene.

A strict sample drawing order was followed. Samples for DO, fCO₂, DIC, and pH were drawn first using sample drawing tubes with silicone rubber or surgical rubber connectors. At no time was Tygon™ tubing used in direct contact with the stopcock nipple prior to drawing the TOC samples, nor was the vial allowed to come into contact with the stopcock nipple. 30-mL samples were drawn into 40-mL Pyrex™ glass vials. The vials were rinsed prior to filling three times with sample and at no time was the vial allowed to come into contact with the Niskin™ stopcock nipple. Samples were tightly capped with teflon lined screw-caps and kept under cover to prevent excessive warming while on deck.

Immediately following collection, the samples were returned to the shipboard lab and acidified with 160 µL of 50% (w/w) H₃PO₄. Samples were NOT filtered. The samples were stored at 4°C until ready to be shipped home. At that time they were wrapped as flats of 100 vials in bubble wrap, transferred to a cooler filled with frozen “blue” ice, then hand-carried to the airport and shipped home as excess baggage. All samples were in the lab refrigerator within 48 hours of shipping.

Samples were analyzed by the high-temperature combustion/discrete injection (HTC/DI) technique (Peltzer and Brewer, 1993) using a custom built analyzer. Immediately prior to analysis the samples were sparged with CO₂-free oxygen at 500 mL/min for 6–7 minutes. Each sample was injected in triplicate into a third-generation HTC/DI analyzer consisting of a two-stage combustion system. The combustion tube contained 5% Pt on alumina catalyst (Dimatec, Essen, Germany) at 800°C in the upper catalyst zone, and copper oxide and Sulfix™ (Wako Chemical Corp., Richmond, VA) at 600°C in the lower zone. Oxygen was used as a carrier gas. The gas stream passes through a AgNO₃/H₃PO₄ bubbler, a U-tube cold trap at 1–2°C, a Mg(ClO₄)₂ drying tube and two particle filters (0.1 μm and 0.01 μm, Balston Inc., Lexington, MA) before entering a LiCor Model 6252 NDIR CO₂ analyzer. The output from the CO₂ detector is continuously monitored and recorded using TurboChrom™ 3 software operating on a 386-PC in a Windows environment. All peaks were visually checked for proper baseline integration and appropriate peak shape. Those not passing were either manually re-integrated or rejected. If only one peak of the three was acceptable, the sample run was rejected and a new run with three more injections from the same sample was made.

Stringent quality control/quality assurance protocols were followed. Peak areas were converted to organic carbon concentrations by first correcting for the instrument blank, measured with carbon-free distilled water (CFDW), then dividing the result by the instrument response factor determined with organic compound standards (glucose, KHP or glucoseamine) in seawater. The instrument response factor was measured twice daily (at the beginning and end of the day's runs using high and low TOC standards) and the instrument blank was repeatedly measured throughout the day, typically after every four to six samples. While the instrument blank exhibited a generally decreasing value throughout the lifetime of each furnace tube, the instrument response factor varied less than ±5% of the mean value over the course of the analysis period and several furnace tube lifetimes.

The CFDW used to measure the instrument blank was obtained from a Milli-Q™ water purification system (Millipore, Bedford, MA). This water was consistently found to have the lowest total blank of all the CFDWs tested in multiple direct, head-to-head comparisons. Consequently, it was assigned a residual TOC concentration of 0.0 μmol C and no back correction of the measured TOC values was required. It should be noted that even though this lot of CFDW gave the lowest total blanks, this fact does not guarantee that it did not contain some residual carbon. If at some future date it can be shown that this CFDW did contain some amount of TOC, then the values reported here would need to be revised upwards by this amount. However, such a correction could not exceed the measured total blanks, which were on the order of 6–8 μmol C/L.

TOC values are reported as μmol C/kilogram seawater (μmol/kg). The measured concentration (μmol/L) is converted to μmol/kg by dividing by the density of the sample at the time of the analysis. Sample density is calculated from the measured salinity and lab temperature using the international equation of state of seawater (Millero and Poisson, 1981). The bottle salinity was used whenever

available, otherwise the corresponding CTD salinity measured on the downcast was used. For sample temperature, the measured lab temperature at the time of analysis was used.

2.9 Salinity

Salinity samples were collected in 125-mL amber glass bottles directly from the rosette, taking care not to touch the petcock. Bottles were rinsed twice and overflowed one half volume; new caps were used for each sample.

Bottle salinities were measured using a Guildline™ 8400 Autosal and #114 standard seawater in a temperature-controlled van. Conductivity ratios were converted to salinities conforming to the PSS78 standard. If there was no bottle salinity available for a given sample position, the CTD value was used in calculations requiring a salinity measurement.

3.0 DATA TABLES

A complete listing of the CTD data is available through NOAA (McTaggart *et al.*, 1994). Discrete data are reported at all observed depths (Appendix A). Where no data is available, a null value is inserted. A quality control column is located next to most of the observed parameters; quality control flags follow the WHP Data Reporting Requirements (WOCE Operations Manual, 1991), and are listed in Table 6. In addition, Table 7 displays unique quality control flags for fCO₂. Sigma-theta ($\sigma\theta$) and potential temperature (θ) values listed in the tables were calculated using standard UNESCO algorithms (Fofonoff and Millard, 1983). Input parameters include salinities and in-situ temperatures from the CTD. Header information at the top of each page includes an operation number consisting of year, Julian date, and GMT at time-at-depth. The Sample ID listed in the data tables consists of the cast number followed by the 2 digit Niskin™ rosette position. Due to the loss

Table 6. WOCE data quality flag definitions.

2	Acceptable measurement
3	Questionable measurement
4	Bad measurement
9	Sample not drawn for measurement

Table 7. Unique quality control flag definitions for fCO₂.

Fugacity of CO ₂	
A	No DIC available for calculation
B	No sigma theta available for calculation
D	Estimated DIC used in calculation
E	Estimated sigma theta used in calculation

of the 24-position rosette during Leg 4, and the subsequent requirement to take two 12-position rosette casts per station to maintain our sampling density, those respective stations are contained in two separate data tables indicated by different cast numbers within Appendix A. To obtain the data base by remote access, please see page iii of this report.

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APPENDIX A
TABULATED DISCRETE BOTTLE DATA

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION CAST	OFS NO.	922511936	DATE	7-Sep-92	LATITUDE		LONGITUDE		Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QAik µmol/kg	pH	TOC µmol/kg
					16° 29.79 N	149° 53.57 W														
424	1016.0	-9.999	4.408	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
423	1019.3	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
422	1017.8	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
421	1017.5	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
420	1016.9	-9.999	4.408	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
419	1018.0	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
418	1018.4	-9.999	4.406	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
417	1017.4	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
416	1018.5	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
415	1016.1	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
414	1017.5	-9.999	4.406	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
413	1016.0	-9.999	4.406	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
412	1016.1	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
411	1015.5	-9.999	4.406	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
410	1015.7	-9.999	4.408	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
409	1016.0	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
408	1018.3	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
407	1016.9	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
406	1016.6	-9.999	4.408	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
405	1017.0	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
404	1018.1	-9.999	4.408	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
403	1018.5	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
402	1019.0	-9.999	4.406	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999
401	1017.3	-9.999	4.407	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.99999	-9.99999	-9.99999

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION CAST	Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	QC	QC	QC	DIC µmol/kg	QC	µatm	@20°C	QC	Talk µmol/kg	pH	TOC µmol/kg
	1024	5.0	33.882	33.878	28.795	28.794	21.296	0.0	0.0	-9.99	4	0.0	2	199.80	2	1885.1	2	259	3	2250	8.1401	74.4	
	1023	11.6	33.884	33.878	28.655	28.652	21.344	0.0	0.0	-9.99	4	0.0	2	200.00	2	1884.5	2	240	2	2239	8.1425	73.4	
	1022	20.4	33.884	33.879	28.634	28.629	21.352	0.0	0.0	-9.99	4	0.0	2	200.00	2	1884.5	2	248	2	2233	8.1442	72.0	
	1021	42.9	34.463	34.435	28.584	28.574	21.805	0.0	0.0	-9.99	4	0.0	2	206.80	2	1915.0	2	246	2	2273	8.1376	72.0	
	1020	52.9	34.523	34.507	27.751	27.739	22.123	0.0	0.0	-9.99	4	0.0	2	212.50	2	1924.6	2	260	2	2275	8.1300	70.8	
	1019	61.6	34.512	34.509	27.082	27.068	22.331	0.0	0.0	-9.99	4	0.0	2	212.80	2	1928.7	2	258	2	2284	8.1241	68.4	
	1018	82.6	34.192	34.404	23.020	23.003	23.322	0.3	0.0	-9.99	4	0.0	2	205.60	2	1975.5	3	338	2	2280	8.0534	70.3	
	1017	94.6	34.496	34.501	16.693	16.678	25.204	0.7	16.8	-9.99	2	10.1	2	104.40	2	2139.1	2	774	2	2286	7.7241	61.7	
	1016	102.3	34.557	34.547	14.916	14.901	25.653	0.9	23.2	-9.99	2	14.5	2	65.10	2	2176.4	2	1016	2	2287	7.6249	55.3	
	1015	111.7	34.572	34.567	14.179	14.163	25.823	0.0	27.1	-9.99	2	19.6	2	43.70	2	2196.2	2	1166	2	2291	7.5666	55.0	
	1014	120.7	34.590	34.589	13.516	13.499	25.975	0.0	28.8	-9.99	2	21.9	2	34.00	2	2208.6	2	1256	2	2292	7.5378	50.5	
	1013	132.3	34.650	34.646	12.962	12.944	26.134	0.0	31.1	-9.99	2	24.1	2	18.60	2	2229.6	2	1399	2	2298	7.4931	51.0	
	1012	141.2	34.688	34.669	12.610	12.591	26.233	0.0	31.6	-9.99	2	24.2	2	13.50	2	2234.4	2	1438	2	2300	7.4805	46.2	
	1011	152.0	34.666	34.662	12.207	12.187	26.294	0.0	30.7	-9.99	9	24.7	2	26.90	2	2229.2	2	1341	2	2302	7.5134	46.2	
	1010	167.8	34.689	34.684	11.752	11.731	26.399	0.0	31.8	-9.99	9	25.6	2	24.30	2	2234.7	2	1403	2	2304	7.4986	44.1	
	1009	184.3	34.729	34.704	11.471	11.448	26.483	0.0	33.3	-9.99	9	26.2	2	13.70	2	2244.9	2	1479	2	2306	7.4729	-9.9	
	1008	201.0	34.724	34.726	11.277	11.252	26.515	0.0	33.3	-9.99	2	26.8	2	11.80	2	2247.9	2	1514	2	2308	7.4657	45.0	
	1007	253.1	34.714	34.714	10.668	10.637	26.618	0.0	33.4	-9.99	2	28.9	2	9.90	2	2257.1	2	1572	2	2310	7.4498	44.6	
	1006	303.0	34.689	34.689	10.159	10.123	26.688	0.0	36.0	-9.99	2	35.5	2	7.50	2	2267.2	2	1672	2	2312	7.4242	44.3	
	1005	403.3	-9.999	-9.999	9.463	-9.999	-9.999	0.0	37.8	-9.99	2	39.7	2	6.90	2	2277.0	2	1750	2	2315	-9.9999	42.9	
	1004	601.6	34.566	34.566	7.472	7.412	27.019	0.0	38.6	-9.99	2	56.6	2	-9.99	9	2302.4	2	1897	2	2330	7.3740	-9.9	
	1003	801.8	34.540	34.538	5.810	5.739	27.222	0.0	41.5	-9.99	2	75.1	2	8.90	2	2318.1	2	1863	2	2361	7.3812	43.3	
	1002	1000.7	-9.999	-9.999	4.751	-9.999	-9.999	-9.9	-9.9	-9.99	9	-9.9	9	-9.99	9	-9.9	-9.9	-9	9	-9	-9.9999	-9.9	-9.9
	1001	1000.1	34.557	34.549	4.748	4.667	27.362	0.0	43.4	-9.99	2	-9.9	4	26.00	2	2334.5	2	1833	2	2368	7.3910	-9.9	

NOAA Equatorial Pacific Process Study

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STATION CAST	3 12	OFS NO. 922541244	LATITUDE LONGITUDE	8° 57.67 N 140° 18.19 W	DATE 10-Sep-92	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	TALK µmol/kg	pH	TOC µmol/kg
1224	5.6	-9.999	-9.999	28.360	-9.999	-9.999	0.0	0.0	0.0	2	0.00	2	0.2	2	200.40	2	1884.4	2	240	E	2237	-9.9999	-9.9
1223	14.1	33.901	33.899	28.376	28.373	21.449	0.0	0.0	0.0	2	0.00	2	0.2	2	200.30	2	1884.9	2	248	2	2231	8.1432	77.0
1222	22.9	-9.999	-9.999	28.376	-9.999	-9.999	-9.9	9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9.9	9	-9	9	-9	-9.9999	-9.9
1221	32.5	33.904	33.900	28.379	28.371	21.452	0.0	0.0	0.0	2	0.00	2	0.2	2	203.60	2	1911.5	3	244	2	2271	8.1403	70.8
1220	43.3	34.428	34.416	28.607	28.597	21.771	0.0	0.0	0.0	2	0.00	2	0.2	2	205.40	2	1921.9	2	253	2	2285	8.1418	-9.9
1219	53.1	34.614	34.637	28.441	28.428	21.966	0.0	0.0	0.0	2	0.00	2	0.2	2	204.80	2	1925.2	2	247	2	2281	8.1369	-9.9
1218	64.3	34.644	34.376	28.215	28.200	22.064	0.0	0.0	0.0	2	0.14	2	0.2	2	210.60	2	1933.4	2	274	2	2269	8.1084	-9.9
1217	82.6	34.427	34.445	25.601	25.583	22.732	0.1	0.0	0.0	2	0.16	2	0.1	2	200.30	2	1993.1	3	339	2	2281	8.0254	-9.9
1216	91.5	35.031	34.553	22.318	22.300	24.159	0.1	0.0	0.0	2	0.17	2	1.1	2	170.80	2	2071.4	3	532	2	2296	7.8925	-9.9
1215	103.0	-9.999	-9.999	18.298	-9.999	-9.999	-9.9	9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9.9	9	-9	9	-9	-9.9999	-9.9
1214	112.3	34.463	34.514	15.587	15.570	25.433	0.4	2	5.0	2	0.15	2	3.7	2	65.50	3	2179.1	3	1019	2	2282	7.6129	-9.9
1213	122.7	-9.999	-9.999	14.033	-9.999	-9.999	0.1	2	22.1	2	0.99	2	16.0	2	41.20	2	2199.4	2	1126	E	2297	-9.9999	-9.9
1212	133.1	34.605	34.632	13.429	13.410	26.005	0.2	2	27.3	2	1.24	2	21.4	2	23.30	2	2219.1	2	1326	2	2293	7.5133	-9.9
1211	142.4	34.630	34.673	13.071	13.051	26.097	0.0	2	30.9	2	1.69	2	23.3	2	12.60	2	2234.5	2	1437	2	2302	7.4811	-9.9
1210	154.4	34.678	34.731	12.554	12.533	26.236	0.0	2	31.9	2	1.84	2	23.9	2	3.80	2	2245.5	2	1522	2	2303	7.4588	-9.9
1209	167.9	34.722	34.726	12.072	12.050	26.364	0.0	2	31.5	2	1.78	2	24.6	2	7.40	2	2247.3	2	1497	2	2312	7.4583	-9.9
1208	182.1	34.729	34.722	11.588	11.565	26.461	0.0	2	31.7	2	1.90	2	25.3	2	13.70	2	2248.4	2	1502	2	2308	7.4670	-9.9
1207	203.6	-9.999	-9.999	11.169	-9.999	-9.999	-9.9	9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9.9	9	-9	9	-9	-9.9999	-9.9
1206	252.1	34.697	34.689	10.467	10.437	26.640	0.0	2	32.0	2	1.89	3	27.8	2	35.30	2	2245.1	2	1458	2	2315	7.4930	-9.9
1205	302.7	34.690	34.672	10.048	10.013	26.708	0.0	2	33.9	2	2.00	3	31.6	2	18.80	2	2267.0	2	1641	2	2315	7.4308	-9.9
1204	400.5	34.668	34.576	9.459	9.414	26.791	0.0	2	36.4	2	2.61	3	47.2	3	10.50	2	2295.4	3	1855	2	2331	7.3807	-9.9
1203	602.8	34.572	34.541	7.690	7.546	27.005	0.0	2	41.0	2	2.51	3	67.1	2	16.90	2	2323.1	3	1967	2	2348	7.3619	-9.9
1202	803.4	34.539	34.555	5.815	5.744	27.221	0.0	2	40.1	2	2.22	3	82.6	2	34.40	2	2334.3	2	1875	2	2375	7.3851	-9.9
1201	1001.2	34.556	34.555	4.742	4.660	27.362	0.0	2	41.1	2	2.29	3	81.4	2	34.00	2	2334.1	2	1885	2	2369	7.3827	-9.9

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION CAST	4 17	OPS NO 922542154 DATE 11-Sep-92	LATITUDE		LONGITUDE		Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	QC µatm	fCO2 @20°C	TAlk µmol/kg	pH	TOC µmol/kg
			7° 59.98 N	139° 59.95 W															
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	QC µatm	fCO2 @20°C	TAlk µmol/kg	pH	TOC µmol/kg			
1724	6.2	34.206	34.202	28.615	28.614	0.0	0.0	0.00	0.0	201.20	1899.6	2	411	2263	8.1453	72.7			
1723	13.0	34.198	34.195	28.441	28.438	0.0	0.0	0.00	0.0	202.70	1898.7	2	243	2253	8.1464	72.1			
1722	22.0	34.200	34.197	28.401	28.396	0.0	0.0	0.00	0.0	201.00	1898.6	2	337	2259	8.1461	70.1			
1721	42.7	34.202	34.198	28.387	28.377	0.0	0.0	0.00	0.0	201.10	1899.5	2	239	2258	8.1458	71.5			
1720	53.0	34.204	34.201	28.388	28.375	0.0	0.0	0.00	0.0	201.90	1898.5	2	303	2252	8.1458	71.0			
1719	63.0	34.207	34.202	28.390	28.375	0.0	0.0	0.00	0.0	201.10	1898.8	2	238	2261	8.1458	72.2			
1718	81.5	34.634	34.623	28.348	28.329	0.0	0.0	0.00	0.0	205.40	1924.3	2	405	2284	8.1380	68.2			
1717	92.6	34.711	34.717	27.777	27.755	0.0	0.0	0.41	0.0	202.50	1935.5	2	252	2287	8.1283	69.3			
1716	101.4	34.466	34.500	24.817	24.795	0.0	0.0	0.42	0.0	201.10	1955.1	3	351	2283	8.0866	67.9			
1715	112.8	34.521	34.529	20.646	20.625	0.4	4.7	0.35	2.9	169.30	2040.2	3	427	2288	7.9415	-9.9			
1714	121.7	34.555	34.541	17.276	17.256	0.6	9.3	0.41	5.2	148.40	2096.2	2	569	2302	7.8359	58.8			
1713	133.3	34.547	34.540	14.684	14.664	0.0	23.2	0.51	14.4	71.00	2171.9	2	1011	2286	7.6343	53.1			
1712	141.3	34.558	34.594	13.430	13.410	0.0	27.1	0.45	21.8	48.50	2196.1	2	1171	2296	7.5783	50.2			
1711	150.6	34.631	34.619	12.863	12.843	0.0	29.5	0.48	24.3	38.40	2210.1	2	1203	2294	7.5484	49.3			
1710	167.5	34.672	34.660	12.191	12.169	0.0	31.8	0.66	26.3	27.10	2226.4	2	1359	2303	7.5135	49.4			
1709	182.4	34.702	34.704	11.745	11.722	0.0	32.8	1.31	27.1	-9.99	2239.6	2	1430	2303	7.4833	47.0			
1708	202.8	34.716	34.719	11.313	11.288	0.0	33.5	1.57	27.2	15.60	2244.0	2	1463	2319	7.4750	46.0			
1707	252.5	34.682	34.685	10.414	10.384	0.0	32.1	1.70	28.3	46.50	2233.8	2	1308	2302	7.5224	-9.9			
1706	304.4	34.681	34.683	10.018	9.983	0.0	33.5	1.68	31.8	42.50	2242.3	2	1388	2299	7.5028	45.1			
1705	401.8	34.661	34.669	9.462	9.417	0.0	37.0	2.02	38.7	23.40	2263.0	2	1582	2315	7.4455	42.2			
1704	602.9	34.583	34.588	7.658	7.597	0.0	38.9	2.45	56.2	5.40	2302.5	2	1783	-9	7.3691	42.5			
1703	804.3	34.543	34.544	5.787	5.716	0.0	43.3	2.43	77.6	13.10	2328.0	2	2009	2348	7.3546	40.3			
1702	1003.8	34.554	34.556	4.759	4.677	0.0	42.6	2.22	85.4	36.50	2332.8	2	1850	2376	7.3890	41.8			
1701	1004.2	34.555	34.555	4.757	4.675	0.0	42.6	2.29	82.9	37.40	2334.0	2	1856	2366	7.3883	-9.9			

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STATION CAST	5 19	OPS NO. 922550918 DATE 11-Sep-92	LATITUDE LONGITUDE	6° 0.28 N 139° 59.97 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg	
1924	11.8	34.549	34.546	27.723	27.720	22.149	0.0	0.4	0.27	0.0	2.03	1932.6	259	2	2278	8.1214	72.1	
1923	23.0	34.557	34.554	27.291	27.286	22.295	0.0	1.2	0.27	0.0	2.04	1944.9	281	2	2284	8.1051	72.2	
1922	43.9	34.548	34.544	26.509	26.499	22.538	0.0	2.1	0.27	0.0	2.07	1962.1	294	2	2286	8.0767	73.3	
1921	51.8	34.556	34.553	26.416	26.404	22.574	0.1	2.0	0.27	0.0	2.07	1964.9	304	2	2282	8.0719	71.2	
1920	60.9	34.560	34.557	26.298	26.274	22.618	0.1	2.5	0.28	0.0	2.07	1967.3	301	2	2286	8.0673	70.5	
1919	83.9	34.665	34.654	25.777	25.758	22.858	0.2	3.4	0.30	0.7	2.07	1982.4	351	2	2286	8.0508	67.6	
1918	92.3	34.676	34.671	25.714	25.694	22.886	0.3	3.6	0.30	0.7	2.05	1984.5	319	4	2292	8.0474	-9.9	
1917	102.5	34.786	34.772	24.183	24.161	23.433	0.4	5.7	0.50	2.0	1.83	2020.1	371	2	2294	7.9951	60.7	
1916	111.5	34.826	34.820	23.796	23.773	23.578	0.3	6.6	0.50	2.4	1.80	2029.4	386	2	2310	7.9812	60.7	
1915	122.2	34.963	34.960	23.750	23.724	23.696	0.3	6.6	0.50	1.6	1.82	2035.4	397	2	2300	7.9845	58.8	
1914	132.7	34.991	34.982	23.719	23.691	23.727	0.4	6.4	0.51	1.7	1.82	2035.9	384	2	2315	7.9898	59.7	
1913	143.0	34.986	34.969	23.169	23.140	23.884	0.5	7.1	0.50	2.1	1.74	2042.1	414	2	2306	7.9663	60.5	
1912	153.0	34.853	34.933	22.247	22.217	24.047	0.0	8.2	0.53	2.8	1.64	2048.9	418	2	2310	7.9590	56.8	
1911	166.4	34.797	34.675	16.258	16.231	25.539	0.0	15.3	0.88	10.3	1.12	2116.2	663	2	2290	7.7867	50.2	
1910	183.1	34.625	34.629	13.364	13.338	26.035	0.0	26.2	1.47	20.8	0.52	2193.3	1087	2	2301	7.5925	48.0	
1909	203.9	34.749	34.745	12.015	11.988	26.397	0.0	31.9	1.80	25.5	0.23	2231.9	1336	2	2303	7.5051	47.4	
1908	253.9	34.735	34.735	11.058	11.027	26.565	0.0	32.3	1.85	27.9	0.27	2239.4	1389	2	2312	7.4961	45.2	
1907	302.4	34.711	34.714	10.423	10.387	26.660	0.0	33.3	1.91	30.0	0.24	2249.1	1475	2	2309	7.4720	44.2	
1906	404.8	34.678	34.679	9.604	9.558	26.775	0.0	35.5	2.03	36.1	0.13	2267.7	1670	2	2314	7.4248	43.6	
1905	605.7	34.590	34.587	7.251	7.192	27.069	0.0	40.0	2.32	56.2	0.51	2305.7	1935	2	2336	7.3626	40.4	
1904	803.8	34.553	34.552	5.637	5.567	27.254	0.0	42.2	2.39	73.3	0.28	2315.7	1874	2	2347	7.3826	38.5	
1903	1004.1	34.562	34.560	4.615	4.534	27.381	0.0	40.9	2.37	89.9	0.50	2324.8	1757	2	2373	7.4167	-9.9	
1902	1004.1	34.562	34.560	4.615	4.534	27.381	0.0	41.3	2.36	89.1	0.50	2325.2	1773	2	2367	7.4158	39.0	
1901	1002.5	34.562	34.560	4.619	4.538	27.380	0.0	41.2	2.37	89.5	0.50	2325.6	1739	2	2372	7.4162	38.7	

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STATION CAST	6 21	OPS NO DATE	922551542 11-Sep-92	POTENTIAL Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAIK µmol/kg	pH	TOC µmol/kg
2124	5.6	34.582	34.577	26.775	26.774	22.477	1.8	0.25	0.0	205.70	1961.9	292	2	2291	8.0840	-9.9
2123	12.3	34.573	34.567	26.692	26.689	22.497	2.0	0.25	0.0	205.20	1962.0	331	4	2296	8.0801	71.6
2122	22.4	34.562	34.556	26.586	26.581	22.523	2.2	0.25	0.2	205.80	1965.1	296	2	2279	8.0743	67.6
2121	43.1	34.535	34.533	26.123	26.113	22.649	2.7	0.25	0.3	206.10	1973.1	429	4	2282	8.0604	-9.9
2120	52.4	34.544	34.538	26.028	26.016	22.686	2.8	0.23	0.3	205.70	1972.7	309	2	2279	8.0588	-9.9
2119	64.0	34.566	34.561	25.937	25.923	22.732	2.9	0.25	0.4	205.00	1975.2	405	4	2284	8.0572	-9.9
2118	83.6	34.629	34.624	25.722	25.704	22.847	3.4	0.35	0.1	201.90	1983.2	318	2	2285	8.0480	-9.9
2117	93.2	34.714	34.700	24.285	24.265	23.348	5.2	0.41	1.4	185.40	2012.8	635	4	2294	8.0020	-9.9
2116	103.5	34.807	34.797	23.837	23.815	23.551	6.4	0.42	1.7	178.20	2030.8	385	2	2297	7.9808	-9.9
2115	113.3	34.857	34.853	23.736	23.712	23.620	6.5	0.35	1.7	178.20	2034.2	746	4	2300	7.9780	-9.9
2114	123.6	34.976	34.971	23.650	23.624	23.736	6.5	0.41	1.2	181.00	2038.2	-9	9	2311	7.9805	-9.9
2113	131.8	35.001	34.995	23.597	23.570	23.771	6.9	0.51	1.1	183.30	2042.2	388	2	2308	7.9792	-9.9
2112	141.3	35.004	34.997	23.445	23.416	23.818	6.8	0.35	1.9	177.00	2045.2	729	4	2314	7.9715	-9.9
2111	153.6	34.909	34.909	22.619	22.588	23.984	8.4	0.47	3.2	160.70	2051.0	419	2	2301	7.9520	-9.9
2110	167.8	34.800	34.732	17.701	17.673	25.200	13.6	0.66	8.7	118.40	2103.5	542	2	2297	7.8273	-9.9
2109	182.8	-9.999	-9.999	14.069	-9.999	-9.999	23.8	1.31	18.4	67.90	2178.6	960	E	2296	-9.9999	-9.9
2108	202.7	34.710	34.683	12.443	12.416	26.284	29.7	1.57	24.6	39.50	2221.0	1076	2	2308	7.5423	-9.9
2107	252.5	34.714	34.713	10.638	10.608	26.623	31.9	1.70	29.1	37.30	2240.7	1356	2	2310	7.5082	-9.9
2106	304.7	34.692	34.697	10.089	10.053	26.703	33.2	1.68	30.9	30.60	2251.6	1443	2	2310	7.4794	-9.9
2105	402.8	34.660	34.662	9.258	9.213	26.818	35.6	2.02	38.0	8.10	2279.9	1746	2	2319	7.4047	-9.9
2104	603.7	34.573	34.577	7.261	7.202	27.054	39.4	2.45	54.9	5.40	2310.0	1919	2	2335	7.3615	-9.9
2103	802.5	34.548	34.550	5.345	5.277	27.285	42.2	2.42	76.5	36.60	2317.9	1813	2	2361	7.3947	-9.9
2102	1004.9	34.561	34.563	4.462	4.382	27.397	41.0	2.22	95.7	56.30	2326.4	1759	2	2373	7.4271	-9.9
2101	1005.5	34.561	34.563	4.462	4.382	27.397	40.7	2.29	92.7	56.90	2327.7	1694	2	2373	7.4264	-9.9

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STATION CAST	6 26	OPS NO: 922560749 DATE: 12-Sep-92	LATITUDE LONGITUDE	5° 0.2 N 140° 3.41 W	Potential Temp °C	Temp °C	Salinity CTD	Salinity Bottle	Pressure db	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	TAlk µmol/kg	pH	TOC µmol/kg
2624	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2623	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2622	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2621	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2620	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2619	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2618	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2617	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2616	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2615	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2614	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2613	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2612	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2611	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2610	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2609	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2608	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2607	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2606	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2605	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2604	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2603	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2602	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9
2601	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.999	-9.999	-9.9	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9.9	-9	-9.9999	-9.9

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STATION CAST	7 28	OPS NO. 922561404 DATE 12-Sep-92	LATITUDE LONGITUDE		3° 58.3 N 140° 0.39 W		Potential Temp °C		Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg				
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C				
2824	5.1	34.583	34.582	27.102	27.101	22.374	0.0	2	1.1	2	0.14	2	0.0	2	-9.99	9	1950.5	2	320	4	2281	8.0968	70.8
2823	12.1	34.583	34.582	27.102	27.099	22.374	0.0	2	1.3	2	0.14	2	0.0	2	201.70	2	1950.6	2	281	2	2277	-9.9999	68.3
2822	23.0	34.585	34.581	27.069	27.064	22.387	0.1	2	1.1	2	0.17	2	0.0	2	202.30	2	1951.0	2	316	4	2278	8.0972	68.8
2821	43.2	34.655	34.636	26.722	26.712	22.551	0.1	2	1.9	2	0.27	2	0.0	2	196.70	2	1964.6	2	294	2	2283	8.0776	66.7
2820	52.7	34.653	34.649	26.213	26.201	22.711	0.1	2	3.1	2	0.27	2	0.2	2	198.60	2	1976.8	2	377	4	2293	8.0597	65.5
2819	63.7	34.646	34.651	25.991	25.977	22.775	0.0	2	2.5	2	0.26	2	0.3	2	202.00	2	1979.8	2	313	2	2285	8.0551	-9.9
2818	83.0	34.655	34.633	24.814	24.796	23.144	0.0	2	5.0	2	0.34	2	1.7	2	198.80	2	1998.9	2	375	4	2289	8.0212	61.4
2817	93.2	34.702	34.704	24.385	24.365	23.309	0.3	3	4.8	3	0.16	3	1.8	2	188.50	2	2011.1	2	360	2	2289	8.0050	-9.9
2816	103.3	34.808	34.790	23.840	23.818	23.551	0.1	2	6.7	2	0.39	2	2.2	2	179.40	2	2029.0	2	460	4	2303	7.9809	58.1
2815	121.1	34.908	34.909	23.864	23.839	23.621	0.1	2	6.2	2	0.26	2	1.6	2	182.80	2	2033.5	2	384	2	2303	7.9844	57.9
2814	121.7	34.990	34.999	23.821	23.796	23.696	0.2	2	6.5	2	0.41	2	1.4	2	183.80	2	2036.0	2	624	4	2313	7.9860	57.6
2813	132.5	34.958	34.954	23.064	23.037	23.893	0.4	2	6.1	2	0.26	2	2.3	2	173.60	2	2044.0	2	402	2	2304	7.9667	55.7
2812	141.2	34.870	34.871	22.209	22.181	24.070	0.1	2	7.5	2	0.43	2	3.4	2	160.30	2	2051.0	2	639	4	2304	7.9447	56.1
2811	152.4	34.778	34.775	18.885	18.858	24.889	0.0	2	12.5	2	0.72	2	7.8	2	124.00	2	2088.0	2	539	2	2295	7.8596	50.3
2810	167.2	34.715	34.649	14.941	14.916	25.771	0.0	2	20.4	2	1.20	2	15.9	2	89.80	2	2149.8	2	893	2	2295	7.7119	46.8
2809	183.9	34.655	34.630	12.838	12.813	26.163	0.0	2	25.8	2	1.55	2	23.2	2	66.30	2	2190.1	2	1008	2	2297	7.6167	45.8
2808	201.6	34.653	34.657	11.187	11.162	26.476	0.0	2	30.4	2	1.64	2	28.7	2	47.60	2	2222.8	2	1144	2	2304	7.5412	46.6
2807	252.0	34.676	34.682	10.193	10.163	26.671	0.0	2	33.0	2	1.64	2	30.3	2	54.60	2	2231.2	2	1271	2	2309	7.5335	43.9
2806	303.6	34.672	34.678	9.723	9.688	26.749	0.0	2	32.7	2	1.70	2	31.3	2	60.00	2	2233.2	2	1382	2	2314	7.5350	-9.9
2805	404.2	34.636	34.639	8.727	8.684	26.884	0.0	2	36.8	2	2.04	2	39.4	2	30.00	2	2267.6	2	1592	2	2317	7.4428	41.6
2804	603.6	34.564	34.570	6.764	6.707	27.116	0.0	2	41.9	2	2.36	2	58.2	2	18.70	2	2304.6	2	1872	2	2336	7.3801	41.6
2803	802.4	34.549	34.551	5.272	5.205	27.294	0.0	2	41.6	2	2.38	2	74.9	2	52.00	2	2309.1	2	1688	2	2354	7.4242	38.6
2802	994.9	34.568	34.566	4.452	4.373	27.403	0.0	2	42.1	2	2.48	2	93.3	2	52.30	2	2330.4	2	1780	2	2374	7.4164	37.9
2801	995.0	34.566	34.567	4.440	4.361	27.403	0.0	2	42.1	2	2.48	2	93.3	2	52.50	2	2331.0	2	1737	2	2373	7.4169	37.5

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STATION CAST	OPS NO	8 32	922561953 12-Sep-92	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	TAIK µmol/kg	pH	TOC µmol/kg									
	DATE			Temp °C	Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	TAIK µmol/kg	pH	TOC µmol/kg									
3224		13.2	34.559	34.571	26.921	26.918	22.414	0.1	2	1.2	2	0.16	2	0.0	2	206.00	2	1951.1	3	332	3	2307	8.0940	-9.9
3223		22.6	34.565	34.562	26.789	26.784	22.461	0.1	2	1.6	2	0.17	2	0.0	2	206.30	2	1953.9	3	284	2	2279	8.0885	71.2
3222		43.4	34.590	34.586	26.435	26.425	22.593	0.1	2	2.5	2	0.17	2	0.0	2	207.40	2	1966.8	3	318	2	2283	8.0702	-9.9
3221		53.6	34.604	34.603	26.180	26.168	22.684	0.1	2	3.0	2	0.21	2	0.5	2	205.90	2	1972.9	3	307	2	2278	8.0600	-9.9
3220		63.3	34.617	34.610	25.475	25.461	22.913	0.1	2	3.8	2	0.34	2	1.0	2	201.20	2	1985.8	3	336	2	2286	8.0388	-9.9
3219		82.6	34.840	34.838	24.448	24.430	23.394	0.2	2	5.9	2	0.39	2	1.4	2	193.00	2	2019.3	2	364	2	2299	8.0006	-9.9
3218		94.5	34.945	34.933	24.471	24.451	23.467	0.3	2	5.9	2	0.34	2	1.3	2	192.60	2	2034.7	2	404	2	2306	7.9996	-9.9
3217		103.6	34.992	34.980	23.612	23.590	23.758	0.4	2	6.5	2	0.36	2	2.0	2	181.70	2	2037.7	2	385	2	2306	7.9830	-9.9
3216		112.2	34.944	34.944	23.010	22.987	23.896	0.0	2	7.4	2	0.39	2	2.6	2	175.40	2	2041.5	2	402	2	2311	7.9669	-9.9
3215		122.4	34.877	34.859	21.915	21.891	24.156	0.0	2	8.7	2	0.46	2	4.2	2	158.00	2	2053.2	2	434	2	2297	7.9375	-9.9
3214		133.4	34.744	34.743	17.969	17.946	25.090	0.0	2	14.0	2	0.71	2	9.3	2	117.30	2	2097.8	2	579	2	2295	7.8294	-9.9
3213		144.3	34.702	34.714	16.789	16.765	25.342	0.0	2	16.3	2	0.81	2	11.7	2	107.70	2	2114.1	2	642	2	2294	7.7933	-9.9
3212		153.4	34.555	34.662	14.690	14.667	25.702	0.0	2	20.1	2	1.01	2	16.0	2	92.70	2	2144.9	2	767	2	2297	7.7222	-9.9
3211		169.4	34.669	34.626	13.376	13.352	26.066	0.0	2	25.0	2	1.42	2	21.3	2	69.70	2	2180.9	2	976	2	2295	7.6343	-9.9
3210		182.8	34.648	34.629	12.484	12.460	26.228	0.0	2	27.8	2	1.54	2	25.3	2	60.10	2	2197.9	2	1061	2	2302	7.5927	-9.9
3209		202.8	34.644	34.646	11.412	11.386	26.428	0.0	2	30.3	2	1.64	2	30.5	2	51.20	2	2214.7	2	1208	2	2302	7.5509	-9.9
3208		252.7	34.654	34.659	10.492	10.462	26.602	0.0	2	29.0	3	1.59	2	30.7	2	83.10	2	2205.4	2	1070	2	2307	7.5986	-9.9
3207		302.1	34.682	34.689	10.053	10.018	26.701	0.0	2	31.8	2	1.60	2	30.5	2	78.90	2	2214.0	2	1124	2	2313	7.5818	-9.9
3206		403.8	34.653	34.653	9.112	9.067	26.896	0.0	2	33.7	2	1.89	2	35.4	2	61.20	2	2238.1	2	1300	2	2312	7.5193	-9.9
3205		601.0	34.554	34.564	6.538	6.483	27.138	0.0	2	39.1	2	2.26	2	55.4	2	56.20	2	2276.8	2	1568	2	2335	7.4521	-9.9
3204		800.0	34.544	34.549	5.376	5.308	27.278	0.0	2	40.0	2	2.29	2	72.1	2	67.20	2	2291.3	2	1540	2	2347	7.4587	-9.9
3203		1004.5	34.559	34.562	4.449	4.369	27.396	0.0	2	41.4	2	2.46	2	92.5	2	68.90	2	2315.3	2	1603	2	2370	7.4498	-9.9
3202		1004.5	34.559	34.562	4.449	4.369	27.396	0.0	2	41.2	2	2.48	2	91.7	2	69.60	2	2316.1	2	1591	2	2369	7.4489	-9.9
3201		1004.3	34.559	34.562	4.449	4.369	27.396	0.0	2	41.4	2	2.46	2	91.7	2	69.40	2	2314.3	3	1605	2	2371	7.4487	-9.9

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STATION CAST	9 34	OPS NO. 922570755 DATE 13-Sep-92	LATITUDE LONGITUDE	1° 59.64 N 140° 0.31 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	QC	NO3 µmol/L	QC	PO4 µmol/L	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
3424	12.5	34.623	34.622	27.354	27.351	22.324	0.2	2	0.4	2	0.21	2	0.0	2	202.70	2	1944.4	2	270	2	2285	8.1067	68.9
3423	22.3	34.605	34.602	27.067	27.082	22.396	0.2	2	1.0	2	0.29	2	0.0	2	204.40	2	1951.9	2	281	2	2277	8.0947	65.1
3422	42.3	34.596	34.588	25.838	25.829	22.784	0.4	2	3.0	2	0.33	2	1.0	2	200.00	2	1978.1	2	318	2	2281	8.0507	65.5
3421	51.8	34.744	34.743	25.312	25.301	23.058	0.8	2	3.7	2	0.38	2	1.1	2	193.00	2	1999.1	2	342	2	2289	8.0259	63.8
3420	62.0	34.797	34.785	23.077	23.064	23.763	0.1	2	6.8	2	0.53	2	2.6	2	163.20	3	2028.7	2	392	2	2298	7.9745	56.5
3419	83.0	34.808	34.809	20.098	20.083	24.595	0.1	2	10.7	2	0.74	2	6.0	2	128.60	3	2074.8	2	499	2	2292	7.8846	51.0
3418	91.2	34.833	34.781	18.662	18.646	24.984	0.2	2	13.8	2	0.81	2	7.9	2	115.70	2	2094.5	2	566	2	2296	7.8419	48.5
3417	102.2	34.759	34.752	16.956	16.939	25.345	0.3	2	17.1	2	1.04	2	11.3	2	100.50	2	2127.3	2	673	2	2293	7.7725	48.2
3416	112.3	34.793	34.790	16.204	16.186	25.547	0.2	2	19.8	2	1.24	2	12.8	2	90.50	2	2142.3	2	736	2	2299	7.7415	49.6
3415	123.3	34.775	34.776	14.948	14.929	25.815	0.0	2	22.4	2	1.33	2	15.2	2	82.30	2	2160.2	2	813	2	2297	7.6995	46.9
3414	131.5	34.848	34.847	14.156	14.137	26.041	0.0	2	24.4	2	1.49	2	16.4	2	66.40	2	2180.6	2	928	2	2308	7.6546	45.2
3413	141.9	34.891	34.869	13.937	13.917	26.113	0.0	2	25.0	2	1.51	2	16.6	2	60.80	2	2186.7	2	961	2	2304	7.6391	-9.9
3412	152.2	34.912	34.912	13.512	13.491	26.226	0.0	2	26.3	2	1.64	2	17.6	2	51.40	2	2199.6	2	1037	2	2322	7.6129	48.5
3411	168.6	34.907	34.907	13.152	13.129	26.296	0.0	2	28.1	2	1.74	2	18.4	2	46.20	2	2207.1	2	1079	2	2304	7.5940	43.5
3410	183.6	34.889	34.889	12.860	12.835	26.341	0.0	2	28.6	2	1.74	2	21.3	2	41.40	2	2212.7	2	1134	2	2316	7.5778	45.6
3409	202.5	34.873	34.871	12.586	12.559	26.383	0.0	2	28.6	2	1.82	2	22.7	2	42.10	2	2215.1	2	1136	2	2307	7.5704	45.5
3408	251.3	34.827	34.829	11.930	11.897	26.475	0.0	2	29.9	2	1.82	2	24.3	2	36.90	2	2225.8	3	1242	2	2311	7.5420	42.4
3407	302.1	34.785	34.799	11.246	11.208	26.571	0.0	2	29.1	3	1.72	2	24.6	2	54.20	2	2218.5	2	1165	2	2307	7.5665	-9.9
3406	402.8	34.700	34.702	9.842	9.795	26.753	0.0	2	33.8	2	2.11	2	36.2	2	20.60	2	2261.5	2	1575	2	2315	7.4501	41.8
3405	603.1	34.565	34.565	6.586	6.530	27.140	0.0	2	33.3	2	2.34	2	54.9	2	60.60	2	2274.3	2	1516	2	2328	7.4605	42.1
3404	799.8	34.552	34.549	5.610	5.541	27.256	0.0	2	38.0	2	2.41	2	70.8	2	69.00	2	2287.5	2	1544	2	2348	7.4617	40.6
3403	1004.3	34.562	34.558	4.556	4.476	27.387	0.0	2	38.7	2	2.49	2	88.1	2	74.20	2	2309.4	2	1535	2	2364	7.4605	38.4
3402	1004.3	34.562	34.558	4.556	4.476	27.387	0.0	2	38.6	2	2.62	2	86.8	2	74.20	2	2309.2	2	1557	2	2369	7.4618	40.0
3401	1002.9	34.562	34.558	4.556	4.476	27.387	0.0	2	38.6	2	2.64	2	86.6	2	74.30	2	2311.3	3	1541	2	2362	7.4606	39.9

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STATION	10	OFS NO. 922571434	LATITUDE	1° 0.01 N	TAIK	pH	TOC																	
CAST	36	DATE 13-Sep-92	LONGITUDE	139° 59.83 W	μmol/kg		μmol/kg																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAIK μmol/kg	pH	TOC μmol/kg
3624	5.2	34.641	34.640	26.889	26.888	22.485	0.2	1.0	2	0.26	2	0.4	2	199.70	2	1959.2	2	612	4	2284	8.0873	64.9		
3623	13.4	34.643	34.640	26.895	26.892	22.485	0.3	1.0	2	0.28	2	0.0	2	199.20	2	1958.8	2	284	2	-9	8.0874	68.1		
3622	22.5	34.644	34.652	26.888	26.883	22.489	0.3	1.4	2	0.34	2	0.2	2	212.00	2	1965.2	2	295	2	2282	8.0803	66.1		
3621	42.9	34.775	34.773	24.033	24.024	23.466	0.5	5.8	2	0.48	2	1.9	2	181.00	2	2021.2	2	373	2	2301	7.9922	60.3		
3620	54.0	34.826	34.827	23.688	23.677	23.607	0.5	6.7	2	0.49	2	2.1	2	179.40	2	2029.5	2	394	2	2296	7.9816	58.7		
3619	62.6	34.840	34.840	23.612	23.599	23.640	0.4	6.7	2	0.41	2	2.3	2	177.30	2	2029.8	2	385	2	2302	7.9818	57.2		
3618	82.3	34.882	34.890	22.062	22.046	24.117	0.8	9.2	2	0.58	2	4.1	2	152.90	2	2057.4	2	446	2	2298	7.9320	59.7		
3617	92.8	34.925	34.882	21.452	21.434	24.319	1.3	10.6	2	0.69	2	5.6	2	137.40	2	2076.7	2	494	2	2301	7.8932	53.6		
3616	102.5	34.796	34.787	17.062	17.045	25.348	0.0	17.0	2	0.99	2	11.9	2	106.10	2	2124.0	2	655	2	2303	7.7888	49.3		
3615	112.1	34.776	34.783	15.348	15.331	25.727	0.0	18.9	2	1.15	2	14.3	2	102.40	2	2140.3	2	722	2	2310	7.7520	46.9		
3614	122.7	34.770	34.773	14.679	14.661	25.869	0.0	18.2	2	1.12	2	15.1	2	115.10	2	2139.5	2	704	2	2299	7.7637	45.7		
3613	132.9	34.785	34.787	13.876	13.857	26.052	0.0	19.1	2	1.15	2	16.2	2	117.90	2	2147.3	2	727	2	2309	7.7494	45.8		
3612	142.8	34.799	34.805	13.562	13.542	26.128	0.0	20.8	2	1.25	2	16.9	2	117.50	2	2157.4	2	792	2	2311	7.7223	45.1		
3611	153.7	34.821	34.829	13.480	13.458	26.162	0.0	22.1	2	1.52	2	17.1	2	108.90	2	2166.3	2	835	2	2311	7.6960	44.1		
3610	168.7	34.882	34.880	13.050	13.027	26.297	0.0	25.4	2	1.62	2	18.3	2	93.00	2	2193.0	2	982	2	2308	7.6350	45.1		
3609	183.0	34.875	34.876	12.629	12.604	26.375	0.0	26.1	3	1.49	2	20.8	2	68.10	2	2198.4	2	1000	2	2317	7.6270	45.1		
3608	202.0	34.873	34.876	12.468	12.441	26.406	0.0	25.9	2	1.49	2	21.2	2	70.30	2	2198.5	2	997	2	2310	7.6269	46.0		
3607	252.9	34.868	34.869	12.356	12.322	26.425	0.0	28.0	2	1.60	2	21.9	2	57.90	2	2209.0	2	1074	2	2313	7.5989	43.9		
3606	302.1	34.835	34.838	11.937	11.898	26.481	0.0	29.9	2	1.78	2	24.2	2	35.20	2	2229.5	2	1273	2	2310	7.5370	-9.9		
3605	402.9	34.761	34.706	9.772	9.726	26.812	0.0	33.9	2	1.80	2	33.2	2	23.40	2	2259.3	2	1543	2	2312	7.4553	-9.9		
3604	602.4	34.569	34.575	6.895	6.838	27.102	0.0	36.7	2	2.21	2	49.3	2	57.90	2	2271.5	2	1527	2	2326	7.4591	-9.9		
3603	803.3	34.541	34.545	5.472	5.403	27.264	0.0	37.5	2	2.23	2	67.3	2	79.50	2	2284.4	2	1471	2	2348	7.4797	40.5		
3602	1004.4	34.555	34.559	4.357	4.278	27.403	0.0	37.3	2	2.36	2	88.6	2	84.40	2	2307.2	2	1505	2	2365	7.4743	37.8		
3601	1002.6	34.555	34.558	4.363	4.284	27.402	0.0	37.4	2	2.38	2	88.3	2	84.70	2	2306.8	2	1492	2	2372	7.4770	41.5		

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Boreal Autumn 1992

STATION CAST	11 37	OPS NO. 922571840 DATE 13-Sep-92	LATITUDE LONGITUDE		0° 29.67 N 140° 0.13 W		Potential												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
3724	5.2	34.593	34.589	26.701	26.700	22.509	0.1	1.4	0.19	0.5	204.40	2	1955.3	2	282	2	2299	8.0885	68.8
3723	12.0	34.591	34.589	26.687	26.684	22.512	0.1	1.4	0.19	0.3	204.10	2	1956.0	2	285	2	2295	8.0892	69.3
3722	22.2	34.632	34.621	26.054	26.049	22.742	0.2	2.6	0.22	0.8	199.90	2	1971.4	2	302	2	2288	8.0659	69.9
3721	42.9	34.855	34.838	24.969	24.960	23.246	0.2	5.1	0.33	1.1	197.00	2	2004.8	2	343	2	2296	8.0279	64.1
3720	54.9	35.010	34.984	24.856	24.844	23.398	0.2	5.6	0.43	1.0	194.30	2	2012.3	2	342	2	2308	8.0239	65.0
3719	62.5	35.062	35.079	23.896	23.883	23.725	0.3	7.1	0.45	1.6	-9.99	9	2032.9	2	375	2	2311	7.9954	60.7
3718	82.6	34.972	34.928	21.230	21.214	24.416	0.5	10.6	0.59	4.9	125.00	3	2064.6	2	482	2	2310	7.9165	56.2
3717	93.2	34.840	34.836	17.696	17.680	25.229	0.1	14.3	0.73	8.8	144.10	2	2097.0	2	559	2	2299	7.8472	54.2
3716	102.2	34.819	34.818	17.292	17.275	25.311	0.1	14.7	0.76	9.6	125.60	2	2103.2	2	571	2	2302	7.8382	50.0
3715	112.8	34.765	34.787	16.014	15.996	25.569	0.1	15.7	0.93	11.4	129.40	2	2110.7	2	598	2	2301	7.8201	50.2
3714	122.1	34.791	34.783	15.316	15.297	25.746	0.0	16.4	0.88	12.2	131.70	2	2116.2	2	285	3	2305	7.8099	48.2
3713	133.2	34.850	34.841	15.044	15.024	25.852	0.0	17.0	0.91	12.6	133.20	2	2121.3	2	623	2	2306	7.8063	48.8
3712	143.3	34.847	34.838	14.312	14.291	26.008	0.0	17.8	0.94	13.4	131.60	2	2129.4	2	663	2	2309	7.7877	47.2
3711	153.5	34.938	34.940	13.866	13.844	26.173	0.0	18.5	1.13	12.1	134.30	2	2138.7	2	661	2	2315	7.7850	45.8
3710	167.2	34.846	34.848	12.988	12.965	26.281	0.0	20.9	1.22	15.5	120.60	2	2153.8	2	745	2	2315	7.7378	47.5
3709	181.9	34.839	34.844	12.690	12.665	26.395	0.0	23.8	1.51	16.8	106.10	2	2168.4	2	815	2	2312	7.7032	45.4
3708	202.2	34.861	34.863	12.538	12.511	26.383	0.0	25.6	1.49	19.5	87.10	2	2183.8	2	912	2	2316	7.6626	44.6
3707	252.7	34.864	34.867	12.291	12.257	26.435	0.0	27.3	1.62	20.6	72.80	2	2197.8	2	1006	2	2312	7.6263	47.3
3706	300.8	34.831	34.831	11.824	11.785	26.499	0.0	32.2	1.90	25.2	30.30	2	2231.9	2	1300	2	2314	7.5229	44.5
3705	403.8	34.715	34.720	10.010	9.963	26.736	0.0	34.4	2.06	32.0	37.30	2	2245.4	2	1408	2	2312	7.4888	44.5
3704	601.6	34.570	34.575	6.918	6.861	27.099	0.0	38.7	2.40	46.9	59.60	2	2267.9	2	1522	2	2327	7.4625	45.3
3703	801.7	34.544	34.547	5.467	5.398	27.267	0.0	39.6	2.40	64.6	75.30	2	2283.3	2	1477	2	2346	7.4712	43.5
3702	1008.4	34.557	34.560	4.346	4.267	27.406	0.0	39.6	2.32	89.4	83.20	2	-9.9	9	1480	D	2351	7.4745	40.3
3701	1008.0	34.555	34.559	4.347	4.268	27.404	0.0	39.6	2.32	89.7	84.10	2	2304.6	2	1439	2	2369	7.4744	40.3

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STATION CAST	12 41	OPR NO. 922580634 DATE 14-Sep-92	Potential Temp °C	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	NO3 QC	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg	
4124	5.5	34.764	34.763	25.767	25.766	22.930	0.2	3.5	3.5	2	0.37	1.2	2	208.70	2	-9.9	9	329	D	2295	8.0548	66.3
4123	12.4	34.766	34.764	25.768	25.765	22.932	0.2	3.5	3.5	2	0.41	1.2	2	209.40	2	1983.8	2	335	2	2292	8.0560	68.9
4122	22.2	34.792	34.785	25.716	25.711	22.968	0.2	3.9	3.9	2	0.45	1.0	2	208.90	2	1986.1	2	313	3	2294	8.0550	65.5
4121	42.1	35.142	35.141	25.553	25.544	23.284	0.3	5.0	5.0	2	0.47	0.7	2	203.40	2	2013.4	2	329	2	2306	8.0374	67.2
4120	53.8	35.111	35.122	24.765	24.753	23.502	0.4	5.8	5.8	2	0.59	1.5	2	191.70	2	2021.8	2	347	2	2317	8.0199	63.3
4119	65.2	35.134	35.145	23.458	23.445	23.908	0.4	7.3	7.3	2	0.59	2.5	2	166.20	2	2044.4	2	388	2	2315	7.9793	60.9
4118	81.3	-9.999	-9.999	21.817	-9.999	-9.999	-9.9	9	9	9	-9.99	9	9	-9.99	9	-9.9	9	-9	9	-9	9.9999	-9.9
4117	92.9	35.051	35.031	20.199	20.182	24.754	0.5	11.9	11.9	2	0.76	6.6	2	132.40	2	2081.2	2	489	2	2307	7.8970	55.6
4116	105.2	35.187	35.187	19.406	19.387	25.066	0.0	11.9	11.9	2	0.76	6.4	2	134.50	2	2090.7	2	489	2	2346	7.8984	50.9
4115	111.8	35.236	35.238	18.749	18.729	25.272	0.0	12.3	12.3	2	0.79	6.5	2	132.20	2	2099.1	2	-9	9	2323	7.8859	51.0
4114	122.4	35.208	35.208	18.552	18.531	25.300	0.0	12.3	12.3	2	0.76	7.1	2	132.60	2	2099.1	2	-9	9	2338	7.8830	49.0
4113	133.2	35.100	35.086	17.810	17.787	25.402	0.0	12.9	12.9	2	0.80	8.8	2	133.40	2	-9.9	9	-9	9	2314	7.8698	48.8
4112	142.9	35.220	35.217	17.633	17.609	25.538	0.0	13.2	13.2	2	0.80	7.4	2	133.10	2	2108.3	2	-9	9	2326	7.8661	49.5
4111	152.2	35.267	35.268	17.270	17.245	25.662	0.0	13.7	13.7	2	0.81	7.0	2	131.50	2	2117.9	2	-9	9	2326	7.8546	47.0
4110	164.4	35.136	35.138	16.614	16.587	25.717	0.0	14.1	14.1	2	0.81	9.0	2	134.60	2	2115.0	2	-9	9	2322	7.8462	50.5
4109	185.0	35.070	35.094	15.640	15.611	25.891	0.0	15.3	15.3	2	0.87	10.1	2	134.40	2	2123.8	2	597	2	2317	7.8261	49.7
4108	199.2	35.013	35.020	14.365	14.336	26.127	0.0	17.1	17.1	2	0.99	12.3	2	135.60	2	2134.3	2	641	2	2320	7.7988	46.4
4107	254.5	34.883	34.886	12.516	12.482	26.406	0.0	24.0	24.0	2	1.21	19.7	2	95.00	2	2179.5	2	877	2	2313	7.6797	46.2
4106	300.1	34.847	34.851	12.064	12.025	26.466	0.0	28.9	28.9	2	1.53	24.7	2	51.70	2	2215.9	2	1163	2	2312	7.5749	45.1
4105	401.3	34.720	34.730	10.024	9.977	26.738	0.0	33.5	33.5	2	1.73	32.1	2	38.90	2	2244.6	2	1411	2	2312	7.4913	47.4
4104	600.2	34.585	34.592	7.359	7.300	27.050	0.0	37.5	37.5	2	2.01	47.3	2	52.80	2	2266.7	2	1530	2	2328	7.4581	42.6
4103	802.5	34.542	34.546	5.709	5.639	27.236	0.0	38.0	38.0	2	2.08	64.3	2	80.40	2	2274.2	3	1439	2	2339	7.4824	42.2
4102	1002.1	34.552	34.556	4.530	4.450	27.382	0.0	38.8	38.8	2	2.19	86.7	2	83.00	2	2301.1	2	-9	9	2363	7.4765	39.9
4101	1002.3	34.552	34.556	4.531	4.451	27.382	0.0	38.7	38.7	2	2.18	86.7	2	86.90	2	2301.6	2	1419	2	2366	7.4755	40.1

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STATION	13	OPS NO. 922580959	LATITUDE	0° 15.04 N												
CAST	42	DATE 14-Sep-92	LONGITUDE	139° 59.37 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg
4224	6.2	34.664	34.664	25.954	25.953	22.797	0.3	2.9	0.39	1.4	2	1978.1	308	2291	8.0587	-9.9
4223	12.5	34.674	34.674	25.910	25.907	22.818	0.3	3.2	0.40	1.5	2	1978.6	-9	2287	8.0584	65.5
4222	22.5	34.724	34.741	25.771	25.766	22.900	0.3	3.6	0.50	1.6	2	1984.0	312	2295	8.0551	64.8
4221	43.0	35.130	35.135	25.041	25.032	23.432	0.3	5.5	0.56	1.6	2	2018.6	-9	2316	8.0277	-9.9
4220	53.0	35.116	35.121	24.087	24.076	23.708	0.3	6.9	0.56	2.4	2	2033.5	368	2319	8.0004	-9.9
4219	62.6	35.072	35.084	23.129	23.116	23.956	0.3	8.0	0.61	2.5	2	2042.7	-9	2313	7.9748	-9.9
4218	83.6	34.949	34.955	19.976	19.961	24.734	0.5	12.1	0.71	7.0	2	2082.2	498	2307	7.8880	-9.9
4217	93.7	35.050	35.055	18.624	18.608	25.160	0.3	12.3	0.74	7.6	2	2092.0	-9	2311	7.8783	-9.9
4216	101.9	35.105	35.103	18.151	18.133	25.321	0.0	12.3	0.77	7.8	2	2099.9	522	2320	7.8742	-9.9
4215	112.3	35.066	35.069	17.965	17.946	25.337	0.0	12.6	0.77	8.5	2	2099.0	528	2313	7.8687	-9.9
4214	121.6	35.020	35.022	17.623	17.602	25.386	0.0	12.8	0.80	9.2	2	-9.9	537	2315	7.8637	-9.9
4213	133.0	35.189	35.183	17.371	17.349	25.577	0.0	11.0	0.78	7.5	3	2108.6	539	2326	7.8625	-9.9
4212	143.2	34.996	34.993	16.228	16.205	25.698	0.0	13.7	0.87	10.4	2	2111.6	570	2317	7.8407	-9.9
4211	151.9	35.052	35.054	16.083	16.059	25.775	0.0	14.0	0.91	9.9	2	2116.7	577	2315	7.8377	-9.9
4210	166.4	34.944	34.945	15.052	15.027	25.924	0.0	15.5	0.96	12.1	2	2125.5	624	2314	7.8094	-9.9
4209	182.0	34.991	34.980	14.093	14.067	26.167	0.0	17.5	1.02	12.8	2	2140.7	682	2315	7.7807	-9.9
4208	202.5	34.875	34.875	12.735	12.708	26.355	0.0	21.2	1.25	18.7	2	2166.0	801	2325	7.7114	-9.9
4207	252.6	34.875	34.876	12.454	12.420	26.411	0.0	24.4	1.28	20.7	2	2184.1	896	2310	7.6665	-9.9
4206	303.1	34.835	34.839	11.891	11.852	26.490	0.0	28.6	1.56	25.2	2	2222.9	1208	2312	7.5553	-9.9
4205	402.9	34.707	34.710	9.797	9.751	26.766	0.0	33.9	1.83	32.5	2	2248.7	1434	2317	7.4829	-9.9
4204	803.1	34.541	34.546	5.598	5.529	27.249	0.0	38.5	2.11	66.9	2	2283.0	1495	2340	7.4700	-9.9
4203	1007.3	34.551	34.555	4.458	4.378	27.389	0.0	38.1	2.16	87.1	2	2303.4	-9	2363	7.4752	-9.9
4202	1005.9	34.549	34.554	4.459	4.379	27.387	0.0	38.1	2.18	86.1	2	2302.9	-9	2369	7.4756	-9.9
4201	1004.6	34.552	34.554	4.463	4.383	27.389	0.0	38.3	2.19	86.1	2	2302.1	1468	2363	7.4750	-9.9

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STATION CAST	STATION ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	Potential										fCO ₂ @20°C µatm	TAlk µmol/kg	pH	TOC µmol/kg		
								NO ₂ µmol/L	NO ₃ µmol/L	NO ₃ QC	PO ₄ µmol/L	H ₄ SiO ₄ µmol/L	O ₂ µmol/L	O ₂ QC	DIC µmol/kg	DIC QC	QC					QC	QC
	4324	12.5	35.133	35.132	25.427	25.424	23.314	0.1	2	5.5	0.36	2	0.5	2	207.00	2	2016.7	2	390	4	2317	8.0298	-9.9
	4323	23.1	35.125	35.124	25.319	25.314	23.342	0.1	2	5.7	0.40	2	0.5	2	199.60	2	2017.1	2	-9	9	2316	8.0273	61.4
	4322	32.4	35.120	35.095	24.775	24.768	23.504	0.1	2	6.1	0.43	2	0.8	2	192.10	2	2022.1	2	462	4	2313	8.0164	-9.9
	4321	42.9	35.103	35.109	24.090	24.081	23.697	0.3	2	7.2	0.48	2	1.2	2	175.90	2	2036.3	2	-9	9	2312	7.9896	63.8
	4320	62.7	35.195	35.192	23.797	23.784	23.855	0.5	2	7.4	0.52	2	1.6	2	166.30	2	2047.8	2	338	3	2318	7.9806	-9.9
	4319	83.5	35.179	35.180	22.909	22.892	24.102	0.3	2	8.8	0.50	2	2.6	2	152.50	2	2055.5	2	-9	9	2316	7.9595	-9.9
	4318	102.6	35.095	35.096	20.829	20.809	24.619	0.2	2	10.8	0.59	2	4.4	2	138.90	2	2073.8	2	352	3	2312	7.9185	-9.9
	4317	122.7	35.271	35.269	19.045	19.023	25.224	0.0	2	12.1	0.60	2	5.0	2	131.80	2	2097.9	2	-9	9	2312	7.8895	-9.9
	4316	132.9	35.204	35.208	18.264	18.241	25.370	0.0	2	12.7	0.69	2	6.0	2	133.40	2	2102.8	2	523	2	2323	7.8761	-9.9
	4315	142.4	35.242	35.245	17.593	17.569	25.564	0.0	2	13.5	0.72	2	5.9	2	132.00	2	2113.1	2	-9	9	2319	7.8608	-9.9
	4314	153.0	35.175	35.177	16.468	16.443	25.781	0.0	2	14.3	0.82	2	7.1	2	133.20	2	2119.9	2	-9	9	2323	7.8411	-9.9
	4313	178.6	34.977	34.971	13.418	13.393	26.296	0.0	2	18.7	1.07	2	12.4	2	126.60	2	-9.9	9	711	D	2307	7.7637	-9.9
	4312	202.8	34.912	34.908	12.816	12.788	26.368	0.0	2	22.8	1.19	2	16.5	2	108.30	2	2175.1	2	-9	9	2314	7.7119	-9.9
	4311	232.7	34.888	34.891	12.601	12.570	26.392	0.0	2	23.9	1.29	2	17.9	2	100.10	3	2204.7	2	848	3	2301	7.6920	-9.9
	4310	262.7	34.860	34.863	12.174	12.139	26.454	0.0	2	28.0	1.59	2	21.7	2	64.40	2	2332.7	2	-9	9	2312	7.6069	-9.9
	4309	293.2	34.828	34.833	11.738	11.700	26.513	0.0	2	31.8	1.82	2	24.8	2	31.20	2	2234.3	2	1319	2	2302	7.5210	-9.9
	4308	303.1	34.820	34.825	11.608	11.569	26.531	0.0	3	31.9	1.80	2	25.9	3	29.40	2	2233.6	2	-9	9	2311	7.5186	-9.9
	4307	302.8	34.846	34.825	11.560	11.521	26.560	0.0	3	32.0	1.76	2	24.8	3	31.10	2	2241.3	2	1314	2	2301	7.5183	-9.9
	4306	402.8	34.813	34.716	9.565	9.519	26.887	0.0	3	34.0	1.87	2	29.6	3	47.60	2	2270.0	2	-9	9	2314	7.5043	-9.9
	4305	602.6	34.582	34.575	6.822	6.765	27.122	0.0	2	39.3	2.21	2	50.2	2	58.00	2	2282.4	2	1535	2	2323	7.4554	-9.9
	4304	802.7	34.541	34.546	5.310	5.242	27.283	0.0	2	39.2	2.20	2	74.2	2	82.20	2	2302.8	2	-9	9	2347	7.4808	-9.9
	4303	1003.9	34.552	34.558	4.408	4.329	27.395	0.0	2	39.7	2.47	2	90.2	2	84.10	2	2302.7	2	1470	2	2365	7.4760	-9.9
	4302	1003.9	34.552	35.114	4.408	4.329	27.395	-9.9	4	-9.9	-9.9	4	-9.9	4	0.00	3	2140.6	3	-9	9	-9	7.7945	-9.9
	4301	1004.3	34.552	34.558	4.408	4.329	27.395	0.0	2	39.6	2.50	2	90.1	2	84.10	2	2303.7	2	1439	2	2361	7.4756	-9.9

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STATION	15	OPS NO. 922590832	LATITUDE	0° 29.73 S																	
CAST	48	DATE 15-Sep-92	LONGITUDE	139° 59.92 W																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg
4824	12.9	35.110	35.124	25.494	25.491	23.276	0.1	5.7	2	0.29	2	1.3	2	204.00	2	2023.3	2	-9	2305	8.0268	-9.9
4823	22.8	35.088	35.108	25.368	25.363	23.299	0.2	5.8	2	0.30	2	1.0	2	202.90	2	2023.0	2	344	2313	8.0233	63.8
4822	32.9	-9.999	-9.999	24.746	-9.999	-9.999	-9.9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9.9	9	-9	-9	-9.9999	-9.9
4821	41.9	35.071	35.068	24.617	24.608	23.515	0.2	7.0	2	0.36	2	1.3	2	193.70	2	2032.8	2	366	-9	8.0016	62.2
4820	63.7	35.258	35.247	23.956	23.943	23.855	1.6	6.5	2	0.44	2	1.6	2	174.10	2	2054.3	2	391	2314	7.9794	64.5
4819	81.4	35.456	35.460	23.128	23.111	24.249	1.7	9.0	2	0.56	2	2.5	2	144.30	2	2080.3	2	426	2335	7.9507	59.2
4818	103.5	35.532	35.529	20.733	20.713	24.978	0.1	12.3	2	0.69	2	4.2	2	122.60	2	2108.8	2	487	2331	7.9027	54.9
4817	123.3	35.271	35.261	18.113	18.092	25.458	0.0	13.3	2	0.70	2	5.6	2	133.10	2	2108.2	2	523	2323	7.8763	50.2
4816	132.6	35.219	35.218	17.551	17.529	25.556	0.0	13.9	2	0.77	2	6.0	2	134.70	2	2112.7	2	538	2315	7.8648	49.9
4815	144.6	35.240	35.248	16.444	16.421	25.836	0.0	15.3	2	0.88	2	5.8	2	129.50	2	2129.2	2	583	2325	7.8359	49.9
4814	153.7	35.072	35.071	15.244	15.220	25.980	0.0	19.6	2	0.88	2	8.5	2	134.80	2	2130.9	2	613	2310	7.8161	47.9
4813	177.4	-9.999	-9.999	13.936	-9.999	-9.999	0.0	22.3	2	1.02	2	11.0	2	123.90	2	2152.2	2	699	-9	-9.9999	48.2
4812	202.8	34.963	34.960	13.155	13.127	26.339	0.0	24.6	2	1.20	2	14.5	2	109.90	2	2166.7	2	777	2306	7.7228	45.8
4811	231.0	34.908	34.871	12.623	12.592	26.403	0.0	28.8	2	1.40	2	16.9	2	93.80	2	2182.9	2	871	2312	7.6815	44.2
4810	261.4	34.859	34.871	12.179	12.145	26.452	0.0	31.0	2	1.52	2	20.2	2	57.70	2	2212.6	2	1091	2303	7.5946	47.5
4809	292.9	34.849	34.849	11.956	11.918	26.488	0.0	33.1	2	1.54	2	22.6	2	39.50	2	2226.8	2	1243	2308	7.5466	45.6
4808	332.4	34.780	34.779	10.782	10.741	26.651	0.0	33.9	2	1.77	2	24.9	2	36.20	2	2241.0	2	1423	2302	7.5063	-9.9
4807	382.2	34.728	34.735	10.051	10.006	26.739	0.0	37.1	2	1.77	2	27.5	2	45.60	2	2243.7	2	1351	2308	7.5075	44.2
4806	453.9	34.619	34.632	8.222	8.175	26.949	0.0	38.8	2	1.97	2	35.4	2	51.50	2	2258.2	2	1498	2309	7.4755	43.7
4805	601.3	34.565	34.567	6.754	6.698	27.118	0.0	38.8	2	2.08	2	47.1	2	61.20	2	2272.8	2	1519	2324	7.4643	42.6
4804	801.2	34.540	34.545	5.213	5.146	27.294	0.0	38.8	2	2.08	2	63.2	2	86.10	2	2284.5	2	1444	2342	7.4880	38.7
4803	1002.8	34.550	34.556	4.512	4.432	27.382	0.0	39.6	2	2.31	2	84.0	2	85.30	2	2302.9	2	1486	2361	7.4782	40.3
4802	1002.8	34.550	34.556	4.512	4.432	27.382	0.0	39.3	2	2.25	2	84.0	2	86.90	2	2302.4	2	1475	2353	7.4794	41.0
4801	1002.8	34.551	34.556	4.511	4.431	27.383	0.0	39.6	2	2.31	2	84.3	2	85.70	2	2301.3	2	1452	2361	7.4783	39.5

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STATION CAST	16 50	OPS NO. 922591351 DATE 15-Sep-92	LATITUDE LONGITUDE	0° 59.41 S 139° 59.92 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 µatm @20°C	TALK µmol/kg	pH	TOC µmol/kg
5024	12.8	35.124	35.123	25.655	25.652	23.237	0.2	5.5	1.16	1.1	205.90	2019.2	340	2310	8.0296	63.2	
5023	23.2	35.120	35.126	25.544	25.539	23.269	0.2	5.5	1.12	1.1	205.60	2020.2	339	2313	8.0291	63.6	
5022	32.4	35.102	35.107	25.186	25.179	23.366	0.2	5.5	1.14	1.0	200.70	2022.9	346	2308	8.0208	65.1	
5021	42.1	35.100	35.103	24.985	24.976	23.426	0.3	5.7	1.16	1.0	198.00	2026.8	354	2314	8.0132	59.4	
5020	62.0	35.183	35.184	24.831	24.818	23.537	0.4	5.6	1.20	0.8	194.00	2032.5	356	2315	8.0115	59.1	
5019	83.3	35.167	35.165	24.395	24.377	23.657	0.6	6.1	1.27	1.3	186.40	2042.3	375	2321	7.9939	57.3	
5018	102.3	35.477	35.488	23.244	23.223	24.232	1.6	8.0	1.48	2.2	155.80	2082.5	425	2336	7.9513	62.4	
5017	122.0	35.714	35.602	20.536	20.513	25.171	1.7	10.3	1.64	3.7	134.00	2117.7	496	2349	7.8976	55.5	
5016	133.0	35.481	35.492	18.897	18.873	25.422	0.6	16.2	1.79	6.6	102.60	2150.0	620	2336	7.8181	55.1	
5015	141.5	35.436	35.379	17.573	17.549	25.718	0.0	18.6	1.90	8.2	92.40	2156.0	673	2334	7.7836	49.2	
5014	151.9	35.349	35.341	17.244	17.219	25.731	0.1	19.4	1.98	8.8	88.00	2163.9	709	2323	7.7663	50.0	
5013	178.6	35.107	35.143	14.621	14.594	26.144	0.0	21.6	2.33	12.0	88.20	2172.9	782	2321	7.7236	51.8	
5012	202.3	34.916	34.918	13.014	12.986	26.331	-9.9	-9.9	-9.99	-9.9	31.80	2219.6	1184	2301	7.5617	44.8	
5011	232.4	34.896	34.895	12.692	12.661	26.381	0.0	29.4	2.71	20.6	38.50	2216.9	1164	2308	7.5670	47.5	
5010	263.3	34.905	34.881	12.370	12.335	26.451	0.0	31.7	2.75	22.0	24.70	2232.2	1288	2301	7.5250	50.9	
5009	291.6	34.849	34.855	11.889	11.851	26.501	0.0	31.8	2.88	24.6	24.40	2236.3	1341	2309	7.5101	46.7	
5008	332.6	34.807	34.821	11.313	11.271	26.576	0.0	32.3	2.94	26.3	28.70	2240.6	1347	2303	7.4998	-9.9	
5007	381.6	34.755	34.761	10.183	10.138	26.737	0.0	34.0	2.98	29.1	30.00	2251.2	1465	2310	7.4759	47.1	
5006	451.8	34.639	34.673	8.801	8.752	26.875	0.0	37.6	3.09	44.4	26.20	2267.7	1630	2312	7.4310	44.7	
5005	602.8	34.565	34.570	6.839	6.782	27.106	0.0	37.4	3.17	62.4	27.00	2261.2	1459	2321	7.4794	41.6	
5004	802.8	-9.999	-9.999	5.270	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9	
5003	1005.5	34.553	34.553	4.386	4.307	27.398	0.0	38.2	3.36	87.3	92.80	2297.1	1433	2362	7.4914	37.9	
5002	1005.5	34.553	34.552	4.386	4.307	27.398	0.0	38.5	3.42	86.5	92.90	2296.1	1414	2363	7.4920	39.8	
5001	1003.6	34.552	34.552	4.393	4.314	27.397	0.0	39.2	3.48	88.2	93.60	2298.2	-9	2364	7.4907	37.6	

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STATION CAST	17 54	OPS NO. 922600409 DATE 16-Sep-92	LATITUDE LONGITUDE	2° 0.56 S 140° 0.92 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
5424	5.9	35.153	35.141	26.207	26.206	23.086	0.1	4.9	3	0.25	2	0.8	2	208.60	2	2010.2	3	326	2	2310	8.0413	-9.9
5423	11.6	35.152	35.142	26.205	26.202	23.087	0.1	4.5	3	0.26	2	0.8	2	209.50	2	2010.1	3	325	2	2315	8.0419	67.5
5422	22.7	35.151	35.140	26.168	26.163	23.098	0.1	5.1	3	0.33	2	0.8	2	209.10	2	2010.0	3	329	2	2320	8.0418	66.2
5421	32.9	35.146	35.137	26.088	26.081	23.120	0.2	4.2	3	0.30	2	0.9	2	209.00	2	2010.3	3	325	2	2315	8.0413	67.7
5420	42.8	35.144	35.138	26.052	26.042	23.131	0.1	5.0	3	0.30	2	0.9	2	208.80	2	2011.3	3	323	2	2310	8.0399	66.4
5419	63.2	35.162	35.152	25.852	25.838	23.208	0.2	4.7	2	0.23	2	0.9	2	204.90	2	2012.6	3	324	2	2317	8.0386	64.8
5418	83.4	35.162	35.154	25.585	25.567	23.292	0.2	2.0	3	0.40	2	0.9	3	201.70	2	2018.5	3	331	2	2311	8.0303	63.8
5417	100.4	35.101	35.084	24.597	24.575	23.548	0.4	5.9	2	0.58	2	1.2	2	124.60	3	2027.8	3	357	2	2312	8.0077	61.7
5416	121.4	35.696	35.699	21.154	21.131	24.990	1.3	7.7	2	0.58	2	1.2	2	-9.99	9	2109.5	3	460	2	2351	7.9236	56.9
5415	132.1	35.192	35.190	15.622	15.601	25.987	0.4	21.8	2	1.34	2	11.3	2	64.00	2	2187.3	2	870	2	2322	7.6832	52.9
5414	142.6	35.047	35.065	14.410	14.389	26.142	0.2	25.3	2	1.53	2	14.8	2	45.80	2	2203.1	2	1011	2	2309	7.6225	48.8
5413	152.4	34.944	34.951	13.364	13.343	26.281	0.0	28.4	2	1.53	2	17.0	2	-9.99	9	2214.3	2	1152	2	2307	7.5709	47.5
5412	177.2	34.914	34.912	12.967	12.943	26.338	0.0	29.5	2	1.63	2	20.1	2	34.80	2	2218.6	2	1189	2	2301	7.5577	47.1
5411	200.7	34.898	34.899	12.713	12.686	26.377	0.0	30.0	2	1.70	2	21.9	2	26.50	2	2224.8	2	1255	2	2305	7.5401	47.4
5410	233.4	34.888	34.885	12.485	12.454	26.415	0.0	30.0	2	1.70	2	21.9	2	25.70	2	2229.3	2	1285	2	2303	7.5282	46.1
5409	262.2	34.876	34.874	12.264	12.229	26.449	0.0	30.5	2	1.84	2	23.0	2	16.30	2	2238.0	2	1395	2	2306	7.4981	45.8
5408	292.1	34.857	34.857	11.980	11.942	26.490	0.0	30.8	2	1.89	2	22.6	2	24.90	2	2237.6	2	1359	2	2304	7.5075	45.2
5407	333.4	34.803	34.811	11.159	11.117	26.601	0.0	33.0	2	2.01	2	27.0	2	-9.99	9	2261.5	2	1626	2	2309	7.4392	-9.9
5406	381.2	34.750	34.752	10.108	10.063	26.746	0.0	34.7	2	2.20	2	31.8	2	5.70	2	2271.9	2	1708	2	2303	7.4161	44.2
5405	452.9	34.660	34.660	8.574	8.526	26.927	0.0	38.4	2	2.17	2	37.7	2	17.60	2	2276.7	2	1739	2	2312	7.4043	44.2
5404	602.7	34.568	34.573	6.603	6.547	27.140	0.0	38.7	2	2.32	2	53.3	2	49.20	2	2280.7	2	1645	2	2324	7.4314	40.2
5403	803.8	34.549	34.548	5.160	5.093	27.307	0.0	38.4	2	2.30	2	72.3	2	73.00	2	2292.8	2	1541	2	2346	7.4576	39.2
5402	1000.0	34.562	34.571	4.183	4.106	27.427	0.0	38.4	3	2.37	2	90.1	2	89.60	2	2305.2	2	1450	2	2363	7.4831	-9.9
5401	1001.4	34.562	34.560	4.183	4.106	27.427	0.0	39.7	2	2.61	2	89.4	2	90.50	2	2305.7	2	1424	2	2366	7.4835	38.8

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STATION CAST	18 56	OPS NO. 922601047 DATE 16-Sep-92	LATITUDE LONGITUDE	2° 59.88 S 140° 0.1 W	Potential	NO2	NO3	PO4	H4SiO4	O2	DIC	fCO2	TAlk	pH	TOC		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg	
5624	6.2	35.178	35.181	26.267	26.266	23.086	0.1	2	0.23	2	207.30	2	317	2	2312	8.0534	-9.9
5623	13.0	35.176	35.173	26.262	26.259	23.087	0.1	2	0.32	2	207.50	2	320	2	2317	8.0546	66.8
5622	23.2	35.177	35.174	26.269	26.264	23.086	0.1	2	0.40	2	207.80	2	316	2	2318	8.0536	-9.9
5621	32.7	35.176	35.173	26.261	26.254	23.089	0.2	2	0.32	2	207.40	2	316	2	2318	8.0528	66.0
5620	42.5	35.136	35.157	26.165	26.155	23.089	0.2	2	0.32	2	207.00	2	318	2	2326	8.0512	-9.9
5619	62.2	35.101	35.098	25.673	25.659	23.217	0.2	2	0.32	2	204.20	2	328	2	2312	8.0390	-9.9
5618	83.3	35.024	35.027	25.122	25.104	23.330	0.4	2	0.32	2	198.30	2	343	2	2300	8.0245	-9.9
5617	102.1	35.080	35.085	24.753	24.731	23.485	0.3	2	0.40	2	194.60	2	356	2	2313	8.0115	-9.9
5616	122.2	35.229	35.231	24.237	24.211	23.754	0.6	2	0.40	2	186.60	2	372	2	2320	7.9984	-9.9
5615	133.0	35.734	35.707	23.051	23.024	24.485	1.4	2	0.49	2	173.10	2	396	2	2358	7.9852	-9.9
5614	142.0	35.448	35.649	19.100	19.075	25.346	0.3	2	0.66	2	139.60	2	518	2	2351	7.8842	-9.9
5613	153.0	35.224	35.288	16.020	15.996	25.922	0.2	2	1.10	2	83.60	2	756	2	2329	7.7370	-9.9
5612	178.1	34.960	34.961	13.235	13.210	26.320	0.1	2	1.51	2	32.50	2	1158	2	2307	7.5701	-9.9
5611	202.4	34.903	34.907	12.667	12.640	26.390	0.0	2	1.76	2	30.90	2	1223	2	2309	7.5506	-9.9
5610	232.5	34.880	34.881	12.289	12.258	26.447	0.0	2	1.57	2	42.50	2	1182	2	2307	7.5635	-9.9
5609	263.3	34.861	34.860	12.015	11.981	26.485	0.0	2	1.74	2	36.80	2	1243	2	2307	7.5417	-9.9
5608	293.8	34.845	34.847	11.706	11.668	26.532	0.0	2	1.74	2	24.80	2	1378	2	2307	7.5042	-9.9
5607	333.2	34.011	34.813	11.089	11.048	25.997	0.0	2	1.62	2	0.00	3	1162	4	2310	7.5651	-9.9
5606	382.5	34.731	35.108	9.869	9.825	26.772	-9.9	4	-9.99	4	3.1	4	410	4	2315	7.9639	-9.9
5605	451.9	34.646	34.652	8.399	8.351	26.943	0.0	2	2.07	2	45.9	3	1735	2	2312	7.4111	-9.9
5604	601.9	34.567	34.572	6.661	6.605	27.132	0.0	2	2.17	2	55.9	2	1609	2	2324	7.4407	-9.9
5603	803.5	34.540	34.545	5.070	5.004	27.310	0.0	2	2.34	2	76.5	2	1474	2	2334	7.4729	-9.9
5602	1004.8	34.557	34.561	4.110	4.033	27.430	0.0	2	2.34	2	91.9	2	1446	2	2367	7.4853	-9.9
5601	1004.8	34.558	34.560	4.110	4.033	27.431	0.0	2	2.43	2	89.6	2	1394	2	2368	7.4834	-9.9

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STATION CAST	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 µatm	@20°C	Talk µmol/kg	pH	TOC µmol/kg
5824	6.8	35.059	35.065	25.838	25.836	23.131	0.1	4.6	0.28	0.0	207.50	2	2005.8	2	326	2	2317	8.0398	63.9
5823	13.8	35.059	35.057	25.841	25.838	23.130	0.1	4.8	0.32	0.0	210.20	2	2005.3	2	328	2	2329	8.0404	61.9
5822	23.3	35.061	35.058	25.823	25.818	23.138	0.1	4.8	0.34	0.0	207.60	2	2005.9	2	326	2	2311	8.0410	64.2
5821	33.5	35.063	35.061	25.825	25.818	23.140	0.1	4.8	0.40	0.0	207.30	2	2006.1	2	326	2	2315	8.0400	64.1
5820	42.6	35.081	35.076	25.830	25.821	23.152	0.2	4.8	0.34	0.0	206.30	2	2007.6	2	327	2	2313	8.0395	64.1
5819	63.4	35.359	35.354	26.199	26.185	23.248	0.2	4.8	0.40	0.1	201.70	2	2020.1	2	326	2	2327	8.0430	66.4
5818	81.9	35.378	35.373	26.113	26.095	23.291	0.3	4.7	0.39	0.3	199.10	2	2022.5	2	329	2	2333	8.0401	63.6
5817	103.0	35.376	35.367	25.754	25.731	23.403	0.3	5.1	0.40	0.0	193.80	2	2027.9	2	339	2	2329	8.0301	63.6
5816	122.7	35.573	35.521	24.381	24.355	23.971	0.9	5.4	0.51	0.0	177.20	2	2056.0	2	372	2	2345	7.9983	60.4
5815	133.1	35.836	35.716	23.725	23.697	24.366	1.5	4.6	0.40	0.0	173.50	2	2069.8	2	380	2	2357	7.9957	62.5
5814	142.6	35.998	35.978	21.798	21.770	25.042	1.3	4.4	0.51	0.0	171.00	2	2097.6	2	402	2	2380	7.9752	57.8
5813	153.5	35.723	35.725	20.246	20.217	25.257	0.3	8.0	0.54	0.3	155.00	2	2114.5	2	469	2	2340	7.9179	55.0
5812	179.0	35.339	35.342	16.378	16.349	25.929	0.1	17.5	0.93	7.2	92.60	2	2163.3	2	707	2	2333	7.7620	53.7
5811	202.3	35.017	35.023	13.431	13.403	26.325	0.0	24.8	1.19	16.0	70.20	2	2192.5	2	934	2	2314	7.6530	52.0
5810	231.3	34.911	34.915	12.233	12.202	26.482	0.0	25.6	1.24	18.4	90.10	2	2186.2	2	915	2	2312	7.6609	49.6
5809	263.6	34.839	34.839	11.438	11.405	26.577	0.0	27.6	1.48	21.9	82.30	2	2198.0	2	1004	2	2308	7.6296	48.4
5808	292.2	34.801	34.807	10.998	10.962	26.628	0.0	31.7	1.76	27.9	39.10	2	2234.4	2	1323	2	2309	7.5160	-9.9
5807	332.3	34.742	34.743	10.007	9.968	26.756	0.0	36.4	1.77	35.5	12.60	2	2264.2	2	1649	2	2310	7.4303	48.2
5806	382.9	34.699	34.701	9.257	9.214	26.848	0.0	38.7	2.25	49.4	11.00	2	2271.3	2	1730	2	2313	7.4095	46.7
5805	451.5	34.634	34.637	8.159	8.112	26.970	0.0	39.9	2.10	48.5	25.90	2	2272.4	2	1695	2	2311	7.4160	45.9
5804	604.3	34.569	34.574	6.756	6.699	27.121	0.0	39.9	2.14	56.2	55.40	2	2269.9	2	1574	2	2323	7.4491	42.1
5803	803.5	34.533	34.538	5.510	5.441	27.253	0.0	39.3	2.17	66.4	87.80	2	2270.1	2	1416	2	2337	7.4898	-9.9
5802	999.4	34.544	34.546	4.465	4.386	27.383	0.0	38.6	2.56	80.9	98.60	2	2286.9	2	1388	2	2360	7.4986	40.8
5801	1002.4	34.540	34.542	4.449	4.370	27.381	0.0	38.5	2.58	81.1	99.10	2	2287.7	2	1355	2	2356	7.4998	-9.9

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STATION CAST	20 63	OPS NO. 922610210 DATE 17-Sep-92	LATITUDE LONGITUDE	4° 58.36 S 140° 1.43 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	TAlk µmol/kg	pH	TOC µmol/kg
6324	6.0	-9.999	35.273	26.660	-9.999	0.1	3.8	0.48	2	0.0	2	2008.3	2	2322	8.0575	-9.9
6323	13.1	-9.999	35.273	26.627	-9.999	0.2	4.4	0.56	2	0.0	2	2007.6	2	2322	8.0592	71.2
6322	23.3	-9.999	35.283	26.537	-9.999	0.1	4.2	0.56	2	0.0	2	2008.6	2	2322	8.0595	-9.9
6321	33.1	-9.999	35.293	26.534	-9.999	0.2	4.4	0.56	2	0.0	2	2010.6	2	2323	8.0587	67.2
6320	43.6	-9.999	35.305	26.535	-9.999	0.1	4.2	0.58	2	0.0	2	2009.4	2	2326	8.0584	-9.9
6319	62.0	-9.999	35.365	26.427	-9.999	0.2	4.7	0.56	2	0.0	2	2016.3	2	2343	8.0532	-9.9
6318	82.9	-9.999	35.237	25.663	-9.999	0.2	5.2	0.56	2	0.0	2	2024.7	2	2322	8.0284	-9.9
6317	103.4	-9.999	35.764	24.720	-9.999	0.5	3.1	0.70	2	0.0	2	2052.1	2	2353	8.0389	-9.9
6316	122.8	-9.999	35.951	22.784	-9.999	2.6	2.6	0.71	2	0.0	2	2087.9	2	2379	7.9961	-9.9
6315	133.2	-9.999	35.825	21.123	-9.999	2.0	4.8	0.76	2	0.0	2	2106.8	2	2365	7.9524	-9.9
6314	143.1	-9.999	35.666	19.879	-9.999	0.7	8.7	0.94	2	0.8	2	2119.0	2	2359	7.9064	-9.9
6313	153.5	-9.999	35.569	18.785	-9.999	0.2	10.4	0.94	2	1.6	2	2126.0	2	2347	7.8792	-9.9
6312	178.5	-9.999	35.061	14.272	-9.999	0.1	21.9	1.46	2	9.7	2	2198.3	2	2316	7.6399	-9.9
6311	202.6	-9.999	34.940	12.820	-9.999	0.0	27.7	1.81	2	16.3	2	2225.9	2	2310	7.5477	-9.9
6310	233.0	-9.999	34.865	11.689	-9.999	0.0	28.5	1.81	2	19.4	2	2215.2	2	2312	7.5769	-9.9
6309	263.5	-9.999	34.811	10.995	-9.999	0.0	29.6	1.83	2	22.3	2	2221.0	2	2308	7.5601	-9.9
6308	293.1	-9.999	34.780	10.542	-9.999	0.0	32.3	1.89	2	25.5	2	2239.4	2	2311	7.5050	-9.9
6307	333.0	-9.999	34.738	9.864	-9.999	0.0	34.4	1.93	2	30.1	2	2258.9	2	2306	7.4480	-9.9
6306	383.6	-9.999	34.705	9.303	-9.999	0.0	36.9	2.10	2	32.3	2	2264.6	2	2312	7.4335	-9.9
6305	453.3	-9.999	34.654	8.442	-9.999	0.0	37.9	2.31	2	36.0	2	2268.8	2	2314	7.4272	-9.9
6304	603.0	-9.999	34.582	7.022	-9.999	0.0	38.4	2.36	2	42.7	2	2267.4	2	2320	7.4533	-9.9
6303	803.0	-9.999	34.539	5.521	-9.999	0.0	40.0	2.36	2	57.9	2	2277.5	2	2332	7.4703	-9.9
6302	1003.8	-9.999	34.550	4.343	-9.999	0.0	37.7	2.34	2	78.9	2	2295.4	2	2361	7.4870	-9.9
6301	1003.4	-9.999	34.550	4.343	-9.999	0.0	37.6	2.36	2	79.1	2	2295.8	2	2359	7.4877	-9.9

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STATION 22 OPS NO. 922611720
CAST 70 DATE 17-Sep-92

LATITUDE 7° 0.04 S
LONGITUDE 140° 0.16 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAIk μmol/kg	pH	TOC μmol/kg
7024	13.1	35.261	35.257	26.581	23.051	0.0	4.8	0.35	0.0	207.10	2	-9.9	9	315	D	2344	8.0550	65.5
7023	22.7	35.261	35.256	26.575	23.053	0.1	4.8	0.39	0.0	207.80	2	-9.9	9	316	D	2332	8.0543	65.6
7022	33.5	35.257	35.253	26.545	23.058	0.1	4.7	0.42	0.0	206.40	2	-9.9	9	316	D	2326	8.0538	64.2
7021	44.9	35.253	35.245	26.461	23.085	0.0	5.0	0.42	0.0	205.80	2	-9.9	9	319	D	2320	8.0503	63.3
7020	63.4	35.259	35.254	26.095	23.205	0.1	5.9	0.44	0.0	204.90	2	-9.9	9	336	D	2326	8.0329	64.2
7019	83.9	35.232	35.223	25.724	23.296	0.3	5.8	0.56	0.0	198.90	2	-9.9	9	352	D	2306	8.0167	61.0
7018	102.3	35.266	35.258	24.681	23.647	0.4	5.8	0.59	0.2	185.10	2	-9.9	9	369	D	2327	8.0049	60.8
7017	121.9	36.202	36.199	23.778	24.627	3.8	5.3	0.59	0.2	172.10	2	-9.9	9	363	D	2391	8.0153	60.8
7016	133.6	36.108	36.097	22.692	24.872	2.4	3.6	0.56	0.1	169.90	2	-9.9	9	-9	9	2386	7.9906	55.9
7015	141.7	36.007	36.048	21.988	24.996	1.1	4.7	0.54	0.1	169.80	2	-9.9	9	399	D	2392	7.9793	56.1
7014	151.1	35.915	35.922	21.086	25.177	0.3	6.2	0.81	0.1	165.20	2	-9.9	9	-9	9	2375	7.9577	53.5
7013	178.8	35.413	35.433	17.712	25.668	0.0	11.8	0.85	2.6	131.90	2	-9.9	9	573	D	-9	7.8434	50.0
7012	201.7	35.143	35.132	15.052	26.078	0.0	18.8	1.28	7.6	80.10	2	-9.9	9	818	D	2324	7.7045	47.7
7011	232.9	34.931	34.917	12.915	26.363	0.0	24.8	1.63	15.3	49.10	2	-9.9	9	1099	D	2308	7.5896	46.2
7010	261.8	34.871	34.880	11.872	26.520	0.0	27.7	1.66	17.2	62.10	2	-9.9	9	1085	D	2316	7.5952	43.7
7009	292.7	34.796	34.803	10.835	26.653	0.0	32.1	1.99	23.2	-9.99	9	-9.9	9	1358	D	2306	7.5053	45.9
7008	331.8	34.751	34.763	10.222	26.720	0.0	34.3	2.15	26.5	35.20	2	-9.9	9	1505	D	2317	7.4664	44.7
7007	382.8	34.714	34.721	9.632	26.798	0.0	34.7	2.20	27.7	35.50	2	-9.9	9	1480	D	2310	7.4722	41.9
7006	452.4	34.676	34.668	8.803	26.904	0.0	35.1	2.06	29.0	56.70	2	-9.9	9	1386	D	2313	7.4967	44.2
7005	604.3	34.572	34.579	7.170	27.066	0.0	37.2	2.16	38.1	72.50	2	-9.9	9	1422	D	2306	7.4891	39.1
7004	802.9	34.530	34.536	5.534	27.248	0.0	39.7	2.43	55.8	77.90	2	-9.9	9	1497	D	2337	7.4679	40.5
7003	1002.5	34.535	34.539	4.466	27.375	0.0	39.1	2.39	71.8	98.50	2	-9.9	9	-9	9	2371	7.4956	37.6
7002	1002.5	-9.999	-9.999	4.466	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	9	-9.9	9	1398	F	-9	-9.9999	-9.9
7001	1004.2	34.534	34.540	4.443	27.377	0.0	39.2	2.41	74.4	100.00	2	-9.9	9	1354	D	2356	7.4986	37.7

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STATION CAST	23 77	OPS NO: 922630025 DATE 19-Sep-92	LATITUDE LONGITUDE	10° 0.09 S 135° 0.43 W	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAlk μmol/kg	pH	TOC μmol/kg
7724	13.3	35.484	35.468	27.054	27.051	23.068	0.0	1.2	2	0.35	2	0.0	2	206.60	2	1979.3	3	262	2	2339	8.1209	-9.9
7723	22.3	35.481	35.469	26.953	26.948	23.099	0.0	1.0	2	0.32	2	0.0	2	205.20	2	1978.9	3	260	2	2333	8.1211	69.7
7722	31.6	35.626	35.613	26.865	26.858	23.237	0.0	0.7	2	0.33	2	0.0	2	207.30	2	1984.1	3	258	2	2347	8.1262	71.8
7721	-9.9	-9.999	35.778	26.746	-9.999	-9.999	0.0	0.4	2	0.33	2	0.0	2	206.40	2	1990.0	3	255	E	2364	8.1303	72.9
7720	63.1	35.863	35.843	26.730	26.716	23.461	0.0	0.4	2	0.33	2	0.0	2	204.40	2	1993.7	3	255	2	2369	8.1301	74.5
7719	83.1	36.060	36.045	26.762	26.743	23.601	0.0	0.4	2	0.28	2	0.0	2	200.10	2	2005.3	3	257	2	2379	8.1295	72.3
7718	101.7	36.507	36.476	25.209	25.187	24.425	0.3	0.4	2	0.32	2	0.0	2	191.50	2	2063.1	2	296	2	2413	8.0826	68.6
7717	121.9	36.479	36.473	23.985	23.959	24.775	2.0	0.4	2	0.34	2	0.0	2	185.50	2	2079.0	2	324	2	2409	8.0512	62.0
7716	133.5	36.432	36.432	23.675	23.647	24.832	1.6	0.2	2	0.34	2	0.0	2	183.80	2	2082.6	2	334	2	2406	8.0429	62.5
7715	143.3	36.324	36.310	22.848	22.819	24.992	0.8	2.3	2	0.47	2	0.0	2	180.40	2	2088.8	2	353	2	2400	8.0214	56.5
7714	152.4	36.230	36.220	22.294	22.263	25.080	0.0	3.1	2	0.41	2	0.0	2	179.10	2	2092.3	2	364	2	2394	8.0090	56.7
7713	178.3	36.006	36.017	21.093	21.059	25.245	0.0	3.7	2	0.41	2	0.0	2	178.50	2	2094.7	2	389	2	2379	7.9841	52.1
7712	202.7	35.764	35.756	19.743	19.706	25.423	0.0	5.8	2	0.55	2	0.0	2	170.20	2	2102.2	2	431	2	2362	7.9448	50.4
7711	232.4	35.376	35.361	17.217	17.178	25.761	0.0	10.5	2	0.83	2	1.9	2	144.80	2	2123.6	2	544	2	2337	7.8598	49.3
7710	261.4	34.996	35.004	14.308	14.270	26.128	0.0	17.0	2	1.15	2	7.6	2	100.70	2	2164.1	2	768	2	2315	7.7244	44.5
7709	293.8	34.031	34.828	12.135	12.097	25.819	0.0	24.7	2	1.62	2	16.7	2	64.50	2	2205.7	2	1075	2	2313	7.5958	45.1
7708	327.7	34.715	34.711	10.623	10.583	26.629	0.0	28.4	2	1.93	2	22.3	2	54.90	2	2226.3	3	1262	2	2307	7.5307	44.2
7707	382.3	34.667	34.666	9.266	9.223	26.822	0.0	31.2	2	1.96	2	27.4	2	76.10	2	2223.6	2	1227	2	2308	7.5446	43.4
7706	453.9	34.612	34.615	8.038	7.991	26.971	0.0	32.7	2	1.97	2	31.8	2	91.90	3	2225.5	2	1202	2	2312	7.5524	41.0
7705	603.5	34.554	34.556	6.712	6.656	27.115	0.0	36.4	2	2.23	2	43.5	2	80.90	3	2250.1	2	1387	2	2307	7.4985	39.0
7704	802.2	34.537	34.532	5.441	5.373	27.264	0.0	39.2	2	2.28	2	59.7	2	79.40	2	2274.8	2	1500	2	2337	7.4696	36.4
7703	1003.2	34.544	34.535	4.536	4.456	27.375	0.0	39.1	2	2.20	2	69.6	2	90.20	2	2287.4	2	1465	2	2351	7.4793	37.9
7702	1003.2	34.544	34.536	4.536	4.456	27.375	0.0	39.3	2	2.22	2	73.0	2	90.30	2	2288.6	2	1472	2	2351	7.4788	36.8
7701	1003.4	34.543	34.538	4.541	4.461	27.374	0.0	39.6	2	2.23	2	72.5	2	90.40	2	2289.3	2	1480	2	2350	7.4787	37.1

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STATION CAST	24 81	OPS NO DATE	922642040 20-Sep-92	POTENTIAL Temp °C	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	N ₂ μmol/L	N ₃ μmol/L	PO ₄ μmol/L	H ₄ SiO ₄ μmol/L	O ₂ μmol/L	DIC μmol/kg	fCO ₂ @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg					
				LATITUDE		LONGITUDE																	
				10° 0.05 S		125° 0.03 W																	
8124	12.5	-9.999	-9.999	26.499	-9.999	0.0	2	2.0	2	0.12	2	0.0	2	205.90	2	1992.6	2	274	E	2341	-9.9999	71.1	
8123	22.6	35.505	35.499	26.456	26.451	0.0	2	2.1	2	0.00	2	0.0	2	202.00	2	1992.0	2	274	2	2359	8.1043	69.0	
8122	32.6	35.504	35.499	26.446	26.439	0.0	2	1.5	2	0.00	2	0.0	2	206.90	2	1996.6	2	273	2	2342	8.1044	69.5	
8121	42.6	35.505	35.500	26.442	26.432	0.0	2	1.9	2	0.00	2	0.0	2	206.70	2	1995.7	2	273	2	2344	8.1019	69.2	
8120	61.9	35.507	35.501	26.437	26.423	0.0	2	0.4	2	0.00	2	0.0	2	208.70	2	1994.4	2	274	2	2342	8.1032	68.8	
8119	83.0	36.025	36.016	26.104	26.085	0.0	2	1.1	2	0.00	2	0.0	2	207.50	2	2010.4	3	263	2	2386	8.1192	72.5	
8118	100.9	36.191	36.181	25.972	25.949	0.0	2	1.1	2	0.00	2	0.0	2	200.00	2	2030.5	2	273	2	2390	8.1094	74.1	
8117	122.7	36.472	36.473	23.800	23.774	24.825	1.5	2	0.0	2	0.00	2	0.0	2	189.50	2	2093.8	2	323	2	2425	8.0524	65.4
8116	132.5	36.431	36.431	23.523	23.495	24.876	2.0	2	0.0	2	0.30	2	0.0	2	188.90	2	2095.1	2	330	2	2409	8.0456	60.9
8115	143.5	36.408	36.405	23.240	23.210	24.942	1.8	2	0.1	2	0.33	2	0.0	2	189.10	2	2089.1	2	336	2	2432	8.0392	57.5
8114	154.2	36.359	36.357	22.957	22.925	24.988	1.5	2	0.6	2	0.36	2	0.0	2	187.00	2	2089.8	2	344	2	2404	8.0323	57.9
8113	177.1	36.093	36.124	21.597	21.562	25.173	0.1	2	2.7	2	0.36	2	0.0	2	184.30	2	2093.5	2	374	2	2378	7.9999	54.7
8112	204.6	35.609	35.617	18.919	18.882	25.518	0.0	2	5.7	2	0.41	2	0.0	2	175.50	2	2101.8	2	443	2	2353	7.9387	51.1
8111	233.5	35.267	35.311	17.035	16.996	25.721	0.0	2	9.4	2	0.63	2	0.9	2	147.90	2	2125.4	2	548	2	2344	7.8579	50.4
8110	261.8	34.909	34.903	13.115	13.079	26.307	0.0	2	20.3	2	1.34	2	9.3	2	64.60	2	2194.4	2	999	2	2308	7.6262	47.1
8109	292.0	34.792	34.784	11.798	11.760	26.474	0.0	2	26.1	2	1.82	2	17.9	2	27.90	2	2238.9	2	1356	2	2302	7.4995	47.0
8108	333.7	34.759	34.764	10.762	10.721	26.638	0.0	2	29.8	2	1.82	2	22.7	2	30.50	2	2245.6	2	1432	2	2306	7.4855	44.2
8107	383.1	-9.999	-9.999	10.087	-9.999	-9.999	-9.9	4	-9.9	4	-9.99	4	-9.9	9	2067.0	3	334	4	-9	-9.9999	-9	-9.9999	-9.9
8106	452.9	34.690	34.694	9.231	9.180	26.847	0.0	2	34.3	2	1.83	2	33.1	2	40.30	2	2252.9	2	1476	2	2311	7.4744	43.1
8105	603.2	34.595	34.596	7.514	7.454	27.036	0.0	2	40.2	2	2.21	2	42.6	2	42.50	2	2270.6	2	1613	2	2308	-9.9999	41.8
8104	803.0	34.532	34.533	5.705	5.635	27.229	0.0	2	41.1	2	2.24	2	60.8	2	52.20	2	2290.2	2	1713	2	2329	7.4156	39.8
8103	1007.0	34.538	34.536	4.535	4.455	27.370	0.0	2	38.4	2	2.06	2	73.0	2	78.40	2	2299.1	2	1542	2	2347	-9.9999	40.3
8102	1007.1	34.538	34.535	4.535	4.455	27.370	0.0	2	39.9	2	2.06	2	73.1	2	78.70	2	2299.2	2	1552	2	2348	7.4547	38.1
8101	1008.0	34.537	34.535	4.534	4.453	27.370	0.0	2	41.2	2	2.28	2	72.3	2	78.70	2	2296.9	3	1526	2	2359	-9.9999	38.6

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STATION CAST	25 89	OPS NO. 922660213 DATE 22-Sep-92	LATITUDE LONGITUDE	7° 57.6 S 125° 1.69 W	Potential Temp °C	Temp °C	Salinity CTD	Salinity Bottle	Salinity	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 µatm	@20°C	TAlk µmol/kg	pH	TOC µmol/kg
8924	13.1	35.586	35.590	26.341	26.338	23.371	0.0	2	2.5	2	0.00	2	0.0	2	207.40	2	2000.7	2	277	2	2346	8.0992	69.4				
8923	21.9	35.603	35.603	26.389	26.384	23.370	0.0	2	2.1	2	0.00	2	0.0	2	207.10	2	1999.7	2	275	2	2347	8.1032	71.3				
8922	31.8	35.535	35.533	26.161	26.154	23.391	0.0	2	2.1	2	0.32	2	0.0	2	208.20	2	2003.3	2	283	2	2344	8.0913	69.9				
8921	40.9	35.541	35.540	26.165	26.156	23.395	0.0	2	2.4	2	0.38	2	0.0	2	207.70	2	2003.1	2	283	2	2343	8.0925	71.1				
8920	62.1	35.564	35.561	26.206	26.192	23.401	0.0	2	2.2	2	0.45	2	0.0	2	207.70	2	2002.3	2	280	2	2346	8.0949	69.5				
8919	83.5	36.013	35.968	25.790	25.771	23.871	0.0	2	1.2	3	0.36	3	0.0	3	197.30	2	2038.9	2	287	2	2377	8.0925	72.2				
8918	102.8	36.173	36.257	25.208	25.185	24.173	0.0	2	0.0	3	0.33	3	0.0	3	198.90	2	2038.9	2	279	2	2399	8.1014	74.6				
8917	123.0	36.278	36.266	23.128	23.103	24.875	1.7	2	2.0	2	0.38	2	0.0	2	190.60	2	2082.4	2	338	2	2400	8.0362	65.7				
8916	131.8	36.300	36.307	22.794	22.767	24.989	1.8	2	2.4	2	0.36	2	0.0	2	189.30	2	2089.4	2	346	2	2402	8.0255	62.6				
8915	141.6	36.136	36.139	21.899	21.871	25.119	1.1	2	3.2	2	0.38	2	0.0	2	189.40	2	2093.2	2	369	2	2390	8.0047	60.8				
8914	153.9	35.727	35.829	20.278	20.249	25.251	0.5	2	6.4	2	0.42	2	0.0	2	170.80	2	2105.9	2	422	2	2369	7.9518	55.2				
8913	177.1	35.450	35.492	18.432	18.401	25.518	0.0	2	9.1	2	0.57	2	0.0	2	156.00	2	2114.9	2	498	2	2344	7.8918	53.2				
8912	202.4	35.154	35.141	15.755	15.723	25.930	0.0	2	15.8	2	0.70	2	4.1	2	111.70	2	2152.7	2	689	2	2321	7.7676	48.1				
8911	231.3	34.816	34.833	12.807	12.776	26.296	0.0	2	24.0	2	1.49	2	14.6	2	42.70	2	2214.8	2	1188	2	2302	7.5578	45.1				
8910	262.8	34.806	34.811	11.596	11.562	26.522	0.0	2	29.5	2	1.77	2	21.1	2	32.40	2	2232.1	2	1324	2	2308	7.5113	47.1				
8909	291.8	34.773	34.785	10.897	10.861	26.624	0.0	2	31.0	2	1.70	2	23.5	2	42.90	2	2232.2	2	1304	2	2306	7.5223	43.3				
8908	334.5	34.736	34.739	9.950	9.911	26.761	0.0	2	33.5	2	1.96	2	28.8	2	38.80	2	2244.2	2	1422	2	2309	7.4878	43.1				
8907	380.5	34.695	34.700	9.287	9.245	26.840	0.0	2	38.2	2	1.98	2	33.2	2	38.60	2	2250.9	2	1492	2	2308	7.4718	42.9				
8906	451.8	34.654	34.663	8.650	8.602	26.911	0.0	2	42.8	3	2.03	2	38.6	2	51.10	2	2247.9	2	1429	2	2310	7.4823	41.8				
8905	604.7	34.577	34.582	7.000	6.942	27.094	-9.9	4	-9.9	4	-9.99	4	65.1	9	30.00	2	2283.8	2	1791	2	2316	7.3970	39.1				
8904	800.9	-9.999	-9.999	5.510	-9.999	-9.999	-9.9	4	-9.9	4	-9.99	4	-9.9	4	-9.99	9	-9.9	9	-9	9	-9	-9.9999	-9.9	-9	-9	-9.9999	-9.9
8903	1004.0	34.535	34.541	4.485	4.405	27.373	0.0	2	45.9	2	2.22	2	78.3	2	91.10	2	2289.7	2	1443	2	2353	7.4842	37.0				
8902	1004.2	34.535	34.542	4.485	4.405	27.373	0.0	2	42.3	2	2.24	2	76.9	2	91.70	2	2290.2	2	1462	2	2353	7.4823	36.1				
8901	1003.1	34.542	34.541	4.485	4.405	27.379	0.0	2	42.2	2	2.20	2	73.2	2	91.50	2	2289.0	2	1458	2	2350	7.4834	39.6				

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STATION CAST	26 91	OPS NO. 922661250 DATE 22-Sep-92	LATITUDE LONGITUDE	5° 59.81 S 125° 0.13 W																			
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	NO3 QC	NO2 QC	H4SiO4 µmol/L	H4SiO4 QC	PO4 µmol/L	PO4 QC	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 @20°C µatm	QC	Talk µmol/kg	pH	TOC µmol/kg
9124	6.1	35.424	35.427	26.083	26.082	23.330	0.0	2.1	2	0.0	0.0	2	0.34	2	208.50	2	2004.6	2	284	2	2336	8.0813	68.0
9123	13.2	35.425	35.427	26.083	26.080	23.331	0.0	3.3	2	0.0	0.0	2	0.36	2	207.50	2	2005.0	2	286	2	2334	8.0822	75.7
9122	22.1	35.424	35.426	26.089	26.084	23.329	0.0	3.7	2	0.0	0.0	2	0.36	2	208.20	2	2004.5	2	292	2	2336	8.0825	70.8
9121	32.0	35.425	35.427	26.092	26.085	23.329	0.0	4.0	2	0.0	0.0	2	0.38	2	207.30	2	2003.8	2	291	2	2334	8.0820	-9.9
9120	43.1	35.423	35.428	26.088	26.078	23.330	0.0	3.6	2	0.0	0.0	2	0.31	2	206.60	2	2005.2	2	292	2	2336	8.0807	66.3
9119	63.1	35.454	35.459	25.888	25.874	23.417	0.0	4.0	2	0.0	0.0	2	0.36	2	208.70	2	2013.8	2	301	2	2337	8.0699	68.3
9118	82.9	36.035	36.032	25.851	25.833	23.869	0.0	-9.9	4	0.0	0.0	4	-9.99	4	195.60	2	2033.4	2	286	2	2381	8.0914	69.2
9117	103.9	35.964	35.981	22.549	22.528	24.802	2.1	3.5	2	0.0	0.0	2	0.36	2	182.00	2	2083.8	2	361	2	2380	8.0113	62.8
9116	122.2	35.753	35.747	20.189	20.166	25.293	0.4	6.1	2	0.0	0.0	2	0.36	2	170.40	2	2108.6	2	433	2	2365	7.9426	55.2
9115	132.5	35.567	35.561	18.988	18.964	25.465	0.2	8.0	2	0.0	0.0	2	0.63	2	158.20	2	2117.5	2	485	2	2356	7.9027	55.4
9114	142.7	35.411	35.411	17.830	17.806	25.636	0.0	10.7	2	0.0	0.0	2	0.74	2	-9.99	9	2128.1	2	536	2	2340	7.8646	54.0
9113	152.4	35.158	35.157	15.787	15.763	25.924	0.0	21.0	2	0.0	0.0	2	1.14	2	86.30	2	2174.1	2	784	2	2320	7.7185	49.1
9112	177.2	34.936	34.952	13.252	13.227	26.298	0.0	34.4	2	0.0	0.0	2	1.72	2	15.70	2	2231.6	2	1281	2	2307	7.5226	50.4
9111	202.7	34.877	34.888	12.267	12.240	26.448	0.0	37.3	2	0.0	0.0	2	1.87	2	14.20	2	2242.8	2	1408	2	2307	7.4909	46.5
9110	232.1	34.845	34.855	11.642	11.612	26.543	0.0	35.2	2	0.0	0.0	2	1.90	2	22.40	2	2242.8	2	1380	2	2308	7.4962	45.6
9109	262.2	34.827	34.832	11.343	11.310	26.585	0.0	34.6	2	0.0	0.0	2	1.96	2	16.60	2	2248.6	2	1468	2	2307	7.4738	44.2
9108	292.6	34.792	34.802	10.847	10.811	26.648	0.0	35.7	2	0.0	0.0	2	2.13	2	13.00	2	2257.3	2	1551	2	2310	7.4513	-9.9
9107	333.5	34.743	34.756	10.143	10.104	26.734	0.0	36.3	2	0.0	0.0	2	2.02	2	8.50	2	2267.0	2	1457	3	2311	7.4251	42.5
9106	382.4	34.685	34.701	9.221	9.179	26.843	0.0	35.1	3	0.0	0.0	3	2.02	3	42.70	2	2248.9	3	1643	3	2310	7.4800	44.0
9105	453.1	34.638	34.644	8.245	8.198	26.960	0.0	43.6	3	0.0	0.0	2	2.24	2	25.70	2	2272.1	2	1684	2	2312	7.4198	42.1
9104	602.5	34.567	34.576	6.686	6.630	27.128	0.0	-9.9	4	0.0	0.0	2	2.41	2	33.70	2	2288.2	2	1759	2	2322	7.4012	41.5
9103	802.9	34.538	34.540	5.300	5.232	27.282	0.0	-9.9	4	0.0	0.0	2	2.35	2	75.80	2	2283.5	2	1535	2	2339	7.4628	39.7
9102	1002.7	34.538	34.549	4.394	4.315	27.385	0.0	47.7	3	0.0	0.0	2	2.33	3	89.70	2	2295.6	2	1457	2	2357	7.4824	38.5
9101	1003.8	34.540	34.549	4.391	4.312	27.387	0.0	44.2	2	0.0	0.0	2	2.22	2	88.40	2	2295.2	2	1475	2	2359	7.4812	40.8

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STATION CAST	27 94	OPS NO. 922670705 DATE 23-Sep-92	LATITUDE LONGITUDE		4° 59.99 S 125° 0.09 W																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAIK μmol/kg	pH	TOC μmol/kg
9424	13.1	35.427	35.426	25.688	25.685	23.455	0.2	4.4	2	0.36	2	0.0	2	209.60	2	2020.8	2	316	2	2336	8.0545	-9.9
9423	22.1	35.422	35.425	25.673	25.668	23.457	0.2	5.1	2	0.36	2	0.0	2	209.60	2	2021.1	2	316	2	2339	8.0555	68.8
9422	33.2	35.425	35.424	25.651	25.644	23.467	0.0	5.3	2	0.46	2	0.0	2	209.60	2	2020.7	2	314	2	2336	8.0561	-9.9
9421	42.9	35.422	35.423	25.626	25.617	23.473	0.0	5.0	2	0.32	2	0.0	2	209.60	2	2020.5	2	315	2	2335	8.0544	67.6
9420	62.2	35.269	35.270	25.079	25.065	23.526	0.2	7.6	4	0.51	4	1.3	4	212.00	2	2038.8	2	356	2	2325	8.0107	-9.9
9419	81.5	35.691	35.697	24.264	24.247	24.093	0.3	4.3	2	0.46	2	0.4	2	194.50	2	2052.7	2	339	2	2358	8.0315	-9.9
9418	103.2	35.666	35.676	20.002	19.983	25.276	1.8	6.4	2	0.63	2	0.4	2	164.50	2	2112.2	2	453	2	2359	7.9273	-9.9
9417	121.7	35.270	35.267	16.835	16.815	25.766	0.2	16.2	2	1.14	2	6.1	2	104.20	2	2160.2	2	692	2	-9	7.7691	-9.9
9416	132.9	35.063	35.062	14.820	14.800	26.065	0.1	20.3	2	1.41	2	7.8	2	68.80	2	2188.9	2	890	2	2316	7.6682	-9.9
9415	142.5	34.977	34.984	13.802	13.782	26.216	0.0	26.2	2	1.54	2	11.9	2	38.00	2	2214.7	2	1114	2	-9	7.5838	-9.9
9414	152.2	34.944	34.949	13.318	13.297	26.290	0.2	27.0	2	1.76	2	16.3	2	20.10	2	2230.4	2	1261	2	2308	7.5305	-9.9
9413	178.4	34.897	34.900	12.482	12.458	26.421	0.0	31.2	2	1.81	2	22.1	2	8.50	2	2243.7	2	1428	2	2293	7.4856	-9.9
9412	202.5	34.859	34.867	11.881	11.855	26.508	0.0	31.2	2	1.81	2	23.5	2	17.30	2	2242.2	2	1392	2	2308	7.4927	-9.9
9411	232.2	34.845	34.846	11.549	11.519	26.560	0.0	31.3	2	1.89	2	24.4	2	18.80	2	2243.3	2	1421	2	2316	7.4889	-9.9
9410	261.6	34.811	34.813	11.037	11.005	26.628	0.0	31.6	2	2.01	2	26.6	2	21.80	2	2247.6	2	-9	9	2309	7.4793	-9.9
9409	291.9	34.777	34.778	10.501	10.466	26.698	0.0	35.0	2	2.06	2	30.4	2	9.80	2	2261.2	2	1445	3	2309	7.4361	-9.9
9408	331.3	34.739	34.748	10.014	9.975	26.753	0.0	35.9	2	2.06	2	32.5	2	8.20	2	2268.1	2	1619	2	2309	7.4184	-9.9
9407	382.2	34.703	34.707	9.349	9.306	26.836	0.0	37.0	2	2.15	2	33.9	2	17.30	2	2266.6	2	1673	2	2308	7.4233	-9.9
9406	435.5	34.649	34.653	8.424	8.378	26.941	0.0	38.1	2	2.15	2	35.8	2	35.10	2	2262.3	2	1599	2	2311	7.4412	-9.9
9405	603.1	34.571	34.570	6.627	6.571	27.139	0.0	41.0	2	2.37	2	48.5	2	43.40	2	2281.2	2	1669	2	2320	7.4207	-9.9
9404	803.8	34.545	34.545	5.307	5.239	27.287	0.0	40.4	2	2.54	2	65.9	2	70.50	2	2289.1	2	1577	2	2340	7.4523	-9.9
9403	1004.0	34.557	34.550	4.360	4.281	27.404	0.0	39.6	2	2.28	2	80.5	2	91.70	2	2295.9	2	1448	2	2352	7.4859	-9.9
9402	1003.8	-9.999	-9.999	4.360	-9.999	-9.999	-9.9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9.9	9	-9	9	-9	-9.9999	-9.9
9401	1003.8	34.556	34.550	4.358	4.279	27.404	0.0	39.6	2	2.28	2	90.8	2	92.20	2	2294.4	2	1462	2	2362	7.4862	-9.9

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STATION CAST	28 101	OPS NO 922671834 DATE 23-Sep-92	POTENTIAL Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg
			Temp °C	Sigma	NO2	NO3	PO4	H4SiO4	O2	DIC	fCO2	TALK	pH	TOC
10124	6.0	35.523	25.702	23.523	0.2	2.9	0.25	0.0	205.60	2013.7	305	2343	8.0728	67.9
10123	12.6	35.514	25.631	23.539	0.1	3.1	0.27	0.0	209.50	2012.3	300	2341	8.0763	68.7
10122	22.0	35.516	25.620	23.544	0.1	3.2	0.30	0.0	208.80	2014.9	299	2343	8.0750	67.3
10121	31.9	35.516	25.619	23.545	0.1	3.1	0.28	0.0	208.60	2012.8	298	2339	8.0754	69.5
10120	42.0	35.518	25.622	23.547	0.2	3.4	0.28	0.0	209.00	2013.0	298	2332	8.0747	68.5
10119	63.1	35.555	25.650	23.567	0.1	3.0	0.27	0.0	208.00	2012.8	295	2347	8.0785	68.1
10118	81.8	35.616	20.146	25.198	1.3	8.2	0.65	1.0	153.50	2116.0	473	2354	7.9093	57.6
10117	102.8	35.279	16.365	25.638	0.2	18.1	0.89	6.6	89.90	2167.8	732	2328	7.7465	54.9
10116	122.7	35.007	13.914	26.215	0.1	27.4	1.27	16.1	41.90	2208.4	1032	2314	7.6072	46.3
10115	131.7	34.948	13.228	26.311	0.0	30.0	1.45	19.4	30.90	2220.2	1172	2309	7.5627	45.9
10114	142.7	34.921	13.028	26.331	0.0	30.4	1.43	20.4	30.20	2220.6	1172	2299	7.5559	47.6
10113	153.4	34.908	12.896	26.347	0.0	30.6	1.50	20.8	29.80	2223.2	1205	2307	7.5511	42.8
10112	178.1	34.896	12.694	26.379	0.0	31.2	1.51	21.4	27.10	2221.8	1226	2306	7.5400	46.4
10111	203.5	34.882	12.486	26.409	0.0	32.3	1.77	21.7	25.90	2226.7	1272	2309	7.5326	47.1
10110	232.2	34.873	12.259	26.447	0.0	33.2	1.76	25.8	12.60	2240.3	1400	2308	7.4903	44.3
10109	262.8	34.846	11.793	26.516	0.0	33.8	1.83	28.5	5.30	2250.9	1531	2308	7.4572	46.8
10108	292.1	34.822	11.317	26.586	0.0	32.7	1.85	26.2	25.60	2241.9	1396	2309	7.4896	44.9
10107	331.2	34.774	10.601	26.678	0.0	34.8	2.06	30.0	14.20	2258.3	-9	2309	7.4412	45.3
10106	382.6	34.714	9.523	26.816	0.0	37.2	2.07	35.5	5.40	2274.9	1767	2312	7.3985	44.3
10105	453.2	34.631	8.213	26.959	0.0	40.2	2.17	38.6	21.20	2275.7	1756	2313	7.4044	42.9
10104	601.7	34.567	6.628	27.136	0.0	39.8	2.15	49.2	53.00	2274.0	1601	2320	7.4411	42.0
10103	804.0	34.542	5.224	27.294	0.0	39.5	2.30	65.9	78.70	2283.7	1512	2344	7.4711	40.8
10102	1003.8	34.551	4.385	27.397	0.0	38.2	2.17	79.0	94.60	2293.2	1432	-9	7.4910	40.2
10101	1004.1	34.544	4.385	27.391	0.0	39.3	2.28	79.6	94.90	2293.2	1438	2359	7.4923	40.9

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STATION	29	OPS NO. 922680141	LATITUDE	3° 0 S	LONGITUDE	125° 0.12 W																
CAST	106	DATE 24-Sep-92																				
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg		
10624	12.8	35.187	35.186	25.379	25.376	23.369	0.2	6.0	2	0.22	2	1.2	2	211.30	2	2024.5	2	345	2	2319	8.0205	-9.9
10623	21.8	35.184	35.185	25.240	25.235	23.410	0.2	6.0	2	0.25	2	1.1	2	212.50	2	2024.0	2	346	2	2320	8.0245	66.5
10622	31.7	35.183	35.190	25.233	25.226	23.412	0.2	6.0	2	0.27	2	1.0	2	212.20	2	2023.4	2	346	2	2334	8.0244	-9.9
10621	41.5	35.358	35.355	25.328	25.319	23.516	0.2	5.3	2	0.27	2	0.5	2	208.90	2	2026.2	2	338	2	2314	8.0368	67.6
10620	61.3	35.471	35.488	19.655	19.644	25.216	1.0	15.9	2	0.71	2	2.9	2	138.40	2	2123.1	3	532	2	2305	7.8715	-9.9
10619	82.8	35.051	35.078	14.661	14.649	26.089	0.4	25.0	2	1.37	2	14.0	2	55.20	2	2192.8	3	959	2	2308	7.6460	-9.9
10618	102.6	34.974	34.982	13.833	13.818	26.206	0.0	26.8	2	1.41	2	16.5	2	54.60	2	2195.5	2	1000	2	2305	7.6269	-9.9
10617	122.0	34.939	34.944	13.380	13.363	26.273	0.0	27.7	2	1.42	2	18.2	2	51.90	2	2200.0	2	1037	2	2306	7.6121	-9.9
10616	133.0	34.932	34.936	13.277	13.259	26.289	0.0	28.2	2	1.43	2	18.6	2	49.50	2	2202.5	2	1056	2	2306	7.6038	-9.9
10615	142.7	34.924	34.928	13.149	13.129	26.309	0.0	29.1	2	1.41	2	19.2	2	45.30	2	2206.8	2	1081	2	2309	7.5924	-9.9
10614	151.5	34.915	34.925	13.080	13.059	26.316	0.0	29.7	2	1.42	2	21.8	2	41.60	2	2208.9	2	1119	2	2308	7.5823	-9.9
10613	178.1	34.899	34.908	12.832	12.808	26.354	0.0	30.3	2	1.79	2	22.3	2	35.10	2	2217.3	2	1169	2	2359	7.5600	-9.9
10612	202.8	34.891	34.897	12.650	12.623	26.384	0.0	31.1	2	1.82	2	22.1	2	24.70	2	2226.3	2	1270	2	2358	7.5328	-9.9
10611	234.0	34.876	34.880	12.320	12.289	26.438	0.0	32.5	2	1.94	2	24.0	2	10.80	2	2239.8	2	1421	2	2352	7.4893	-9.9
10610	261.6	34.863	34.864	12.013	11.979	26.487	0.0	33.1	2	2.11	2	25.0	2	6.80	2	2248.8	2	1496	2	2354	7.4669	-9.9
10609	292.7	34.838	34.841	11.602	11.565	26.546	0.0	33.8	2	2.02	2	27.7	2	5.70	2	2255.1	2	1567	2	2321	7.4492	-9.9
10608	333.1	34.774	34.779	10.527	10.487	26.692	0.0	34.9	2	2.26	2	34.2	2	4.10	2	2268.6	2	1690	2	2321	7.4164	-9.9
10607	381.7	34.716	34.721	9.577	9.534	26.809	0.0	37.7	2	2.43	2	37.1	2	4.30	2	2275.1	2	1778	2	2327	7.3966	-9.9
10606	451.7	34.642	34.650	8.352	8.305	26.947	0.0	39.2	2	2.43	2	39.9	2	20.00	2	2275.4	2	1740	2	2327	7.4086	-9.9
10605	601.7	34.569	34.575	6.739	6.683	27.123	0.0	40.7	2	2.37	2	49.2	2	48.30	2	2277.5	2	1628	2	2315	7.4306	-9.9
10604	801.6	34.546	34.548	5.280	5.213	27.291	0.0	40.6	2	2.54	2	71.1	2	72.00	2	2287.9	2	1553	2	2337	7.4580	-9.9
10603	1003.0	34.559	34.553	4.463	4.383	27.395	0.0	39.6	2	2.47	2	88.5	2	87.80	2	2296.7	2	1456	2	2314	9.9999	-9.9
10602	1003.0	34.559	34.555	4.463	4.383	27.395	0.0	39.5	2	2.55	2	82.7	3	87.70	2	2297.5	2	1461	2	2348	7.4812	-9.9
10601	1002.9	34.555	34.551	4.465	4.385	27.391	0.0	39.5	2	2.55	2	80.8	3	88.00	2	2291.9	3	1424	2	2366	7.4816	-9.9

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STATION CAST	30 108	OPS NO. 922680806 DATE 24-Sep-92	LATITUDE LONGITUDE	1° 59.98 S 125° 0.03 W	Potential Temp °C	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	TAlk µmol/kg	pH	TOC µmol/kg
10824	13.1	-9.999	-9.999	24.849	-9.999	35.104	35.107	24.844	23.470	0.2	6.3	0.37	1.4	206.70	2027.3	355	2314	-9.9999	62.8
10823	22.0	35.104	35.107	24.844	24.839	35.097	35.101	24.771	23.488	0.2	6.3	0.37	1.3	201.30	2027.0	356	2309	-9.9999	62.6
10822	33.0	35.097	35.101	24.771	24.764	35.088	35.092	24.704	23.502	0.5	6.8	0.44	1.4	208.60	2028.2	356	2314	8.0099	63.2
10821	41.8	35.088	35.092	24.704	24.695	35.337	35.383	23.907	23.926	1.1	13.8	0.84	1.1	207.20	2028.4	360	2311	8.0072	63.6
10820	62.0	35.337	35.383	23.920	23.907	35.396	35.413	19.223	25.272	0.0	27.2	1.46	4.9	188.70	2057.2	385	2334	7.9867	65.2
10819	83.2	35.396	35.413	19.223	19.208	34.978	34.984	13.945	26.186	-9.9	-9.9	-9.99	18.5	122.50	2196.7	587	2336	7.8340	58.3
10818	102.8	-9.999	-9.999	14.858	-9.999	34.979	34.984	13.945	26.186	0.0	27.0	1.47	18.2	56.50	2194.4	9	-9	-9.9999	-9.9
10817	122.7	34.978	34.984	13.945	13.927	34.979	34.970	13.791	26.219	0.0	27.6	1.49	18.7	58.40	2195.4	975	2308	7.6328	48.1
10816	133.2	34.979	34.970	13.791	13.772	34.948	34.951	13.479	26.256	0.0	28.0	1.57	19.1	55.60	2200.7	954	2307	7.6323	48.2
10815	141.0	34.948	34.951	13.479	13.479	34.931	34.936	13.280	26.288	0.0	29.7	1.68	20.4	51.20	2202.9	1030	2307	7.6146	46.4
10814	152.4	34.931	34.936	13.280	13.259	34.912	34.916	13.000	26.330	0.0	31.3	1.68	21.8	35.40	2215.1	1048	2310	7.6065	48.2
10813	177.5	34.912	34.916	13.000	12.976	34.896	34.902	12.756	26.367	-9.9	-9.9	-9.99	-9.9	24.70	2225.4	1217	2305	7.5643	46.9
10812	202.3	34.896	34.902	12.756	12.729	34.882	34.892	12.526	26.402	0.0	32.7	1.80	25.4	13.80	2235.1	1255	2302	7.5338	46.5
10811	232.5	34.882	34.892	12.526	12.495	34.860	34.870	12.271	26.436	0.0	33.0	1.79	24.6	32.60	2225.8	1387	2302	7.5023	50.0
10810	262.2	34.860	34.870	12.271	12.236	34.864	34.867	12.096	26.473	0.0	33.7	2.20	25.4	8.50	2244.4	1245	2306	7.5376	47.0
10809	292.3	34.864	34.867	12.096	12.058	34.827	34.835	11.500	26.557	0.0	33.7	2.14	27.1	7.00	2254.5	1489	2306	7.4744	44.6
10808	331.0	34.827	34.835	11.500	11.458	34.669	34.679	8.858	26.890	-9.9	-9.9	-9.99	-9.9	-9.99	2107.3	1592	2316	7.4489	45.2
10807	383.1	-9.999	-9.999	10.397	-9.999	34.551	34.565	6.488	27.142	-9.9	-9.9	-9.99	43.4	13.00	2275.2	566	2312	-9.9999	-9.9
10806	451.6	34.669	34.679	8.858	8.809	34.551	34.556	6.488	27.142	0.0	40.0	2.31	62.3	63.10	2269.3	1741	2312	7.4013	43.2
10805	603.6	34.551	34.565	6.488	6.433	34.538	34.544	5.214	27.292	-0.0	41.2	2.37	84.6	86.60	2278.2	1555	2324	7.4557	41.8
10804	803.0	34.538	34.544	5.214	5.147	34.551	34.556	4.397	27.396	0.0	40.8	2.31	110.2	87.60	2297.9	1443	2338	7.4860	39.1
10803	1004.0	34.551	34.556	4.397	4.318	34.553	34.555	4.397	27.397	0.0	41.7	2.29	-9.9	-9.99	2296.9	1459	2360	7.4811	38.9
10802	1004.3	-9.999	-9.999	4.397	-9.999	34.553	34.555	4.397	27.397	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
10801	1004.4	34.553	34.555	4.397	4.318	34.553	34.555	4.397	27.397	0.0	41.1	2.33	111.6	87.50	2296.9	1415	2355	7.4805	40.2

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STATION	31	OPS NO. 922690915	LATITUDE	0° 59.9 S	LONGITUDE	124° 59.33 W													
CAST	115	DATE 25-Sep-92																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	H4SiO4 μmol/L	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
11524	12.6	34.959	34.960	23.864	23.861	23.653	0.0	6.6	2	2.0	200.20	2	2034.6	3	374	2	2305	7.9891	59.0
11523	23.3	34.963	34.964	23.776	23.771	23.683	0.0	6.2	2	2.1	198.20	2	2035.9	3	375	2	2306	7.9890	61.0
11522	33.1	34.979	34.978	23.619	23.612	23.741	0.0	6.5	2	1.9	193.70	2	2036.6	3	378	2	2304	7.9858	58.8
11521	42.6	35.175	35.174	23.737	23.728	23.856	0.0	6.0	2	1.6	181.70	2	2047.7	3	387	2	2319	7.9796	62.1
11520	62.0	35.569	35.569	20.910	20.898	24.956	0.0	11.0	2	3.2	130.90	2	2118.4	3	504	2	2344	7.8869	58.3
11519	83.7	35.361	35.372	17.624	17.610	25.645	0.0	18.5	2	8.0	87.50	2	2160.6	3	689	2	2328	7.7697	55.2
11518	102.9	35.181	35.185	15.682	15.666	25.964	0.0	22.3	2	11.9	63.90	2	2185.5	3	844	2	2318	7.6870	51.0
11517	122.8	35.082	35.083	14.474	14.456	26.154	0.0	23.4	2	13.6	65.70	2	2189.4	3	901	2	2312	7.6653	44.8
11516	133.7	34.996	35.043	13.934	13.915	26.203	0.0	22.7	2	13.7	77.00	2	2182.1	3	869	2	2313	7.6784	46.2
11515	142.6	34.967	34.981	13.332	13.312	26.305	0.0	23.7	2	16.3	76.00	2	2185.2	2	913	2	2317	7.6615	46.4
11514	153.7	34.885	34.898	12.611	12.590	26.386	0.0	24.6	2	18.2	79.10	2	2187.9	2	941	2	2309	7.6481	44.7
11513	179.4	34.087	34.892	12.568	12.544	25.776	0.0	24.5	2	18.5	78.90	2	2188.9	2	952	2	2307	7.6448	45.3
11512	201.3	34.884	34.890	12.547	12.520	26.399	0.0	24.4	2	18.0	77.90	2	2189.2	2	945	2	2308	7.6449	47.1
11511	233.2	34.867	34.881	12.456	12.425	26.404	0.0	24.7	2	18.1	75.50	2	2192.1	2	975	2	2309	7.6361	48.5
11510	262.7	34.861	34.870	12.297	12.262	26.431	0.0	26.6	2	19.8	52.80	2	2210.1	2	1098	2	2307	7.5684	44.7
11509	292.6	34.833	34.835	11.807	11.769	26.504	0.0	30.6	2	22.8	28.00	2	2232.3	2	1324	2	2302	7.5157	49.4
11508	332.9	34.804	34.808	11.262	11.220	26.583	0.0	31.0	2	26.6	25.10	2	2241.1	2	1405	2	2306	7.4885	46.3
11507	382.5	34.731	34.737	10.039	9.994	26.743	0.0	32.5	2	29.9	41.80	2	2241.4	2	1398	2	2306	7.4954	45.2
11506	452.2	-9.999	-9.999	8.866	-9.999	-9.999	-9.9	-9.9	9	-9.9	-9.99	9	-9.9	9	-9	9	-9	-9.9999	-9.9
11505	603.8	34.559	34.565	6.614	6.558	27.132	0.0	36.4	2	49.2	64.80	2	2265.8	2	1502	2	2324	7.4663	41.2
11504	802.7	34.542	34.549	5.540	5.471	27.257	0.0	36.9	2	57.9	78.30	2	2276.8	2	1484	2	2339	7.4778	39.8
11503	1004.0	34.555	34.556	4.429	4.350	27.395	0.0	37.6	2	78.7	88.10	2	2298.4	2	1449	2	-9	7.4795	-9.9
11502	1003.5	34.555	34.557	4.429	4.350	27.395	0.0	37.9	2	87.8	86.10	2	2299.7	2	1485	2	2361	7.4793	40.9
11501	1003.5	34.553	34.556	4.429	4.350	27.394	0.0	37.5	2	85.1	86.00	2	2301.2	2	1474	2	2361	7.4807	40.2

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NOAA Equatorial Pacific Process Study

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STATION CAST	32 118	OPS NO. 922691534 DATE 25-Sep-92	LATITUDE LONGITUDE	0° 29.88 S 124° 59.66 W	Potential	Temp °C	Temp °C	Salinity CTD	Salinity Bottle	NO2 µmol/L	NO3 µmol/L	NO3 QC	PO4 µmol/L	PO4 QC	H4SiO4 µmol/L	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 µatm	fCO2 @20°C	Talk µmol/kg	pH	TOC µmol/kg	
11824	13.1	34.955	34.952	23.678	23.675	23.705	23.768	34.978	34.978	0.3	6.6	2	0.47	2	2.1	2	200.00	2	2032.4	2	383	2	2305	7.9831	-9.9
11823	22.3	34.978	34.978	23.523	23.518	23.768	23.873	35.015	35.013	0.3	7.0	2	0.47	2	2.1	2	194.90	2	2031.1	2	390	2	2309	7.9839	61.2
11822	32.9	35.015	35.013	23.260	23.253	23.873	23.986	35.061	35.056	0.2	6.6	2	0.53	2	2.1	2	188.50	2	2041.4	2	398	2	2310	7.9761	61.7
11821	42.6	35.061	35.056	22.992	22.983	23.986	24.559	35.323	35.255	0.4	7.3	2	0.58	2	2.0	2	181.10	2	2047.0	2	438	2	2310	7.9683	60.6
11820	63.8	35.323	35.255	21.676	21.664	24.559	25.469	35.233	35.239	0.9	8.1	2	0.57	2	2.5	2	151.70	2	2067.7	2	542	3	2323	7.9351	57.8
11819	83.0	35.233	35.239	17.943	17.929	25.469	25.671	35.294	35.287	0.0	13.3	2	0.88	2	6.2	2	126.80	2	2111.8	2	595	2	2322	7.8590	50.8
11818	102.6	35.294	35.287	17.311	17.294	25.671	26.144	34.999	35.287	0.0	15.1	2	0.98	2	6.6	2	116.50	2	2132.5	2	-9	9	2327	7.8254	49.8
11817	123.3	34.999	35.004	14.222	14.204	26.144	26.242	34.961	34.964	0.0	17.6	2	1.07	2	11.4	2	128.20	2	2141.6	2	667	2	2320	7.7825	45.5
11816	134.1	34.995	35.011	13.740	13.721	26.242	26.270	34.961	34.964	0.0	18.7	2	1.09	2	11.4	2	121.90	2	2148.2	2	702	2	2314	7.7635	-9.9
11815	142.8	34.961	34.964	13.482	13.462	26.270	26.294	34.968	34.966	0.0	19.5	2	1.17	2	12.5	2	120.30	2	2151.8	2	721	2	2327	7.7517	46.2
11814	152.5	34.968	34.966	13.391	13.370	26.294	26.356	34.927	34.930	0.0	19.9	2	1.26	2	12.8	2	112.00	2	2157.6	2	756	2	2313	7.7313	45.3
11813	178.9	34.927	34.930	12.930	12.906	26.356	26.371	34.899	34.905	0.0	23.5	2	1.33	2	15.2	2	88.80	2	2181.7	2	873	2	2316	7.6780	46.3
11812	202.3	34.899	34.905	12.749	12.722	26.371	26.389	34.884	34.888	0.0	24.3	2	1.49	2	17.5	2	91.60	2	2180.2	2	876	2	2310	7.6780	46.0
11811	231.7	34.884	34.888	12.601	12.570	26.389	26.474	34.853	34.848	0.0	24.7	2	1.48	2	18.8	2	85.20	2	2187.9	2	929	2	2318	7.6543	46.9
11810	263.3	34.853	34.848	12.042	12.008	26.474	26.531	34.824	34.824	0.0	29.7	2	1.68	2	23.0	2	36.30	2	2227.8	2	1274	2	2307	7.5331	44.8
11809	292.7	34.824	34.824	11.626	11.589	26.531	26.653	34.767	34.991	0.0	30.8	2	1.75	2	24.5	2	24.30	2	2237.5	2	1379	2	2330	7.5008	47.6
11808	331.7	34.767	34.991	10.713	10.673	26.653	26.741	34.722	34.724	0.0	32.0	2	2.01	2	26.3	2	27.80	2	2243.7	2	1457	2	2308	7.4817	45.4
11807	382.8	34.722	34.724	10.013	9.968	26.741	26.891	34.664	34.663	0.0	33.3	2	2.01	2	28.0	2	32.90	2	2247.6	2	1456	2	2313	7.4472	44.0
11806	451.8	34.664	34.663	8.827	8.778	26.891	27.108	34.569	34.573	0.0	36.5	2	2.08	2	34.6	2	31.60	2	2261.8	2	1567	2	2313	7.4472	-9.9
11805	602.2	34.569	34.573	6.851	6.794	27.108	27.253	34.548	34.549	0.0	37.4	2	2.18	2	49.0	2	61.00	2	2266.7	3	1529	2	2335	7.4622	41.7
11804	803.0	34.548	34.549	5.612	5.542	27.253	27.385	34.553	34.556	0.0	38.3	2	2.18	2	62.4	2	72.20	2	2282.6	2	1517	2	2338	7.4664	41.1
11803	1004.0	34.553	34.556	4.512	4.432	27.385	27.385	34.553	34.557	0.0	37.5	2	2.16	2	78.2	3	82.80	2	2300.2	2	1505	2	2361	7.4736	38.4
11802	1004.7	34.553	34.557	4.512	4.432	27.385	27.388	34.557	34.557	0.0	37.7	2	2.23	2	76.1	3	83.60	2	2301.2	2	1488	2	2362	7.4727	38.5
11801	1003.5	34.557	34.556	4.516	4.436	27.388	27.388	34.557	34.556	0.0	37.5	2	2.25	2	74.6	3	84.00	2	2302.7	2	1505	2	-9	7.4730	39.7

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STATION	34	OPS NO.	922701355	LATITUDE	0° 1.35 N											
CAST	122	DATE	26-Sep-92	LONGITUDE	124° 52.66 W											
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
12224	5.3	34.884	34.883	23.326	23.325	23.753	0.3	5.2	0.41	1.9	195.80	2025.4	384	2297	7.9869	61.9
12223	13.9	34.884	34.879	23.303	23.300	23.760	0.3	6.4	0.56	2.1	191.50	2031.3	385	2302	7.9856	60.4
12222	22.7	34.889	34.932	23.185	23.180	23.799	0.4	7.4	0.49	2.5	175.30	2043.4	402	2301	7.9663	59.6
12221	43.0	34.941	35.065	22.556	22.547	24.020	0.4	8.3	0.43	2.8	166.40	2057.0	417	2309	7.9526	57.0
12220	53.0	35.068	35.102	22.198	22.187	24.218	0.4	9.3	0.45	3.8	157.80	2066.7	452	2310	7.9384	53.5
12219	62.4	35.104	35.215	21.568	21.556	24.422	0.0	11.8	0.52	6.3	131.90	2102.9	515	2318	7.8802	48.4
12218	82.1	35.217	35.068	18.594	18.580	25.295	0.0	12.9	0.67	8.3	131.20	2107.0	542	2311	7.8584	48.3
12217	92.2	35.057	35.127	17.410	17.395	25.464	0.0	13.8	0.77	7.8	131.60	2118.1	566	2313	7.8430	47.9
12216	103.3	35.105	35.132	16.533	16.516	25.710	0.0	14.3	0.81	8.2	129.70	2125.6	581	2319	7.8307	48.1
12215	112.7	35.134	35.075	16.248	16.230	25.799	0.0	15.2	0.83	8.7	133.00	2126.8	603	2339	7.8200	48.6
12214	122.4	35.079	34.926	15.511	15.492	25.924	0.0	16.6	0.86	12.7	130.30	2133.8	641	2311	7.7937	49.5
12213	132.8	34.926	34.923	14.573	14.553	26.013	0.0	16.8	0.98	13.5	130.20	2136.7	656	2344	7.7871	49.2
12212	141.5	34.927	34.910	14.354	14.333	26.061	0.0	18.4	1.02	14.1	125.30	2146.2	690	2310	7.7652	45.8
12211	152.3	34.905	34.893	13.692	13.670	26.183	0.0	20.0	1.27	15.1	109.10	2157.7	750	2322	7.7354	44.2
12210	168.3	34.889	34.889	13.481	13.457	26.215	0.0	22.3	1.31	16.1	94.70	2171.8	827	2309	7.6970	43.3
12209	183.0	34.885	34.895	13.258	13.233	26.257	0.0	22.2	1.29	16.7	102.80	2170.8	813	2316	7.7045	45.1
12208	201.2	34.897	34.892	12.964	12.936	26.326	0.0	23.8	1.37	19.0	87.60	-9.9	885	2311	7.6681	43.3
12207	252.6	34.892	34.818	12.703	12.669	26.376	0.0	30.5	1.89	25.1	27.60	2233.2	1325	2318	7.5140	-9.9
12206	303.1	34.821	34.717	11.779	11.740	26.500	0.0	32.7	2.16	29.5	35.90	2249.3	1421	2308	7.4797	41.0
12205	398.5	34.717	34.573	9.894	9.848	26.757	0.0	37.0	2.43	46.3	19.10	2272.0	1549	2339	7.4544	40.9
12204	601.4	34.572	34.548	6.837	6.780	27.112	0.0	37.4	2.43	57.3	73.40	2283.6	1504	2340	7.4686	40.4
12203	800.8	34.548	34.552	5.600	5.531	27.254	0.0	38.7	2.45	85.0	84.00	2299.5	1488	2381	7.4780	37.5
12202	1006.5	34.554	34.554	4.604	4.523	27.376	0.0	37.7	2.51	85.7	84.40	2300.8	1481	2361	7.4775	37.2
12201	1005.8	34.554	34.552	4.604	4.523	27.376	0.0	37.3	2.53	78.6	84.60	2298.9	1488	2375	7.4778	38.9

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STATION CAST	35 126	OPS NO. 922710610 DATE 27-Sep-92	LATITUDE LONGITUDE		0° 15.33 N 124° 59.34 W	Potential		NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	TAIk μmol/kg	pH	TOC μmol/kg	
			Temp °C	Temp °C		Sigma Theta	Salinity Bottle													Salinity CTD
12624	6.6	34.821	34.815	23.012	23.011	23.796	0.3	2	7.0	2	0.78	2	2.6	2	2030.0	2	386	2	7.9797	-9.9
12623	13.4	34.826	34.823	22.798	22.795	23.862	0.4	2	7.0	2	0.49	2	2.8	2	2033.9	2	393	2	7.9743	62.9
12622	23.1	34.893	34.851	22.270	22.265	24.063	0.3	2	7.7	2	0.64	2	3.0	2	2037.2	2	397	2	7.9683	60.9
12621	43.2	34.979	34.983	21.268	21.260	24.408	0.3	2	11.9	2	0.71	2	4.8	2	2062.0	2	440	2	7.9345	-9.9
12620	53.0	34.964	34.946	19.990	19.980	24.741	0.4	2	10.7	2	0.87	2	6.6	2	2076.6	2	480	2	7.9001	-9.9
12619	63.6	34.903	34.885	18.070	18.059	25.184	0.2	2	14.1	2	0.85	2	8.8	2	2093.4	2	545	2	7.8557	-9.9
12618	83.4	35.241	35.241	18.352	18.337	25.374	0.0	2	13.0	3	0.81	2	6.3	2	2101.5	2	519	2	7.8759	-9.9
12617	91.2	35.120	35.077	17.307	17.292	25.538	0.0	2	14.8	2	0.87	2	9.1	2	2104.0	2	546	2	7.8570	-9.9
12616	103.8	34.944	34.973	16.069	16.053	25.693	0.0	2	15.4	2	1.12	2	10.8	2	2112.4	2	592	2	7.8321	-9.9
12615	112.9	35.044	35.037	15.743	15.725	25.845	0.0	2	15.8	2	1.12	2	9.8	3	2118.9	2	596	2	7.8247	-9.9
12614	121.9	35.060	35.061	15.697	15.678	25.868	0.0	2	15.8	2	1.14	2	10.5	2	2119.5	2	594	2	7.8227	-9.9
12613	132.6	34.973	34.981	14.956	14.936	25.966	0.0	2	17.0	2	1.27	2	12.3	2	2127.1	2	631	2	7.8031	-9.9
12612	143.2	34.860	34.874	14.255	14.234	26.030	0.0	2	19.4	2	1.28	2	14.6	2	2136.8	2	683	2	7.7703	-9.9
12611	153.1	34.844	34.847	13.685	13.663	26.137	0.0	2	20.4	2	1.37	2	16.2	2	2144.2	2	716	2	7.7532	-9.9
12610	168.1	34.890	34.886	13.361	13.338	26.240	0.0	2	22.9	2	1.41	2	18.3	2	2166.6	2	822	2	7.6976	-9.9
12609	182.2	34.891	34.893	12.887	12.862	26.337	0.0	2	25.7	2	1.89	2	19.4	2	2185.6	2	944	2	7.6478	-9.9
12608	202.8	34.893	34.896	12.797	12.769	26.357	0.0	3	24.0	3	1.45	3	17.8	3	2175.3	2	860	2	7.6819	-9.9
12607	253.2	34.831	34.836	12.011	11.978	26.463	0.0	2	34.1	2	1.97	2	25.5	2	2228.4	2	1300	2	7.5242	-9.9
12606	299.5	34.797	34.802	11.243	11.205	26.581	0.0	2	33.1	2	2.13	2	29.5	2	2241.4	2	1406	2	7.4874	-9.9
12605	403.1	34.678	34.686	9.313	9.268	26.823	0.0	2	36.6	2	2.55	2	35.9	2	2259.1	2	1582	2	7.4454	-9.9
12604	604.6	34.571	34.579	6.884	6.827	27.105	0.0	2	39.1	2	2.59	2	49.2	2	2270.2	2	1554	2	7.4509	-9.9
12603	805.0	34.545	34.550	5.561	5.492	27.256	0.0	2	40.0	2	2.71	2	68.4	2	2282.6	2	1526	2	7.4652	-9.9
12602	1000.5	34.550	34.555	4.693	4.612	27.363	0.0	2	39.3	2	2.88	2	88.4	2	2297.4	2	1494	2	7.4727	-9.9
12601	998.7	34.550	34.554	4.691	4.610	27.363	0.0	2	39.3	2	2.82	1	82.8	2	2296.9	2	1511	2	7.4728	-9.9

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STATION CAST	36 127	OPS NO. 922710919 DATE 27-Sep-92	LATITUDE LONGITUDE	0° 30.79 N 124° 59.98 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TALK µmol/kg	pH	TOC µmol/kg
12724	13.2	34.782	34.778	23.073	23.070	23.750	0.4	7.3	0.51	2.5	2	191.90	2	2030.8	2	2298	7.9746	65.6
12723	22.3	34.791	34.788	22.620	22.616	23.887	0.4	8.2	0.73	3.3	2	183.10	2	2037.8	2	2318	7.9639	61.6
12722	42.6	34.864	34.868	21.089	21.081	24.370	0.6	9.9	0.81	5.5	2	154.00	2	2063.7	2	2300	7.9200	55.7
12721	53.4	34.804	34.834	18.671	18.662	24.958	0.8	14.4	1.04	8.7	2	118.50	2	2098.7	2	2299	7.8397	51.2
12720	62.9	34.863	34.861	17.533	17.522	25.285	0.2	15.0	1.02	10.2	2	122.70	2	2106.0	2	2305	7.8355	49.8
12719	81.9	34.971	35.003	16.904	16.891	25.519	0.0	14.7	1.12	10.6	2	131.40	2	2110.0	2	2337	7.8455	49.5
12718	95.3	34.862	34.868	15.700	15.685	25.714	0.0	16.4	1.14	12.8	2	127.70	2	2118.5	2	2304	7.8140	46.7
12717	107.1	34.849	34.853	14.638	14.622	25.939	0.0	18.1	1.29	13.8	2	123.40	2	2133.3	2	2313	7.7812	46.6
12716	109.7	-9.999	-9.999	14.605	-9.999	-9.999	0.0	18.6	1.18	14.0	2	120.60	2	2137.3	2	2306	-9.9999	46.7
12715	123.6	34.839	34.847	14.374	14.356	25.988	0.0	21.1	1.32	16.4	2	108.10	2	2149.1	2	2321	7.7458	-9.9
12714	130.3	34.858	34.861	14.206	14.187	26.039	0.0	21.7	1.41	16.8	2	97.40	2	2159.7	2	2308	7.7188	47.0
12713	141.4	34.887	34.889	13.706	13.686	26.166	0.0	23.8	1.70	16.8	2	84.30	2	2173.3	2	2330	7.6849	47.7
12712	151.0	34.884	34.900	13.413	13.392	26.232	0.0	25.0	1.70	17.3	2	77.60	2	2181.4	2	2312	7.6654	47.0
12711	169.4	34.907	34.911	13.177	13.154	26.291	0.0	27.7	1.74	19.4	2	57.80	2	2198.6	2	2325	7.6206	45.5
12710	183.0	34.902	34.901	12.934	12.909	26.336	0.0	28.2	1.87	21.8	2	56.80	2	2202.1	2	2312	7.6109	48.7
12709	199.9	34.881	34.887	12.742	12.715	26.358	0.0	27.2	1.82	20.6	3	64.80	2	2198.1	2	2328	7.6248	-9.9
12708	250.8	34.826	34.832	11.965	11.932	26.467	0.0	31.4	2.11	24.9	2	27.40	2	2232.8	2	2310	7.5168	48.1
12707	299.7	34.769	34.778	11.202	11.165	26.566	0.0	31.8	2.22	26.6	2	34.10	2	2236.2	2	2323	7.5123	45.5
12706	399.5	34.661	34.671	9.007	8.963	26.859	0.0	36.3	2.57	34.9	2	27.90	2	2262.5	2	2317	7.4442	-9.9
12705	603.1	34.565	34.571	6.701	6.645	27.125	0.0	38.7	2.57	48.1	2	59.90	2	2272.1	2	2353	7.4567	39.4
12704	805.7	34.541	34.550	5.414	5.345	27.271	0.0	39.3	2.59	70.0	2	76.10	2	2283.4	2	2348	7.4722	42.0
12703	1001.0	34.552	34.558	4.554	4.474	27.379	0.0	39.6	2.65	87.3	3	80.30	2	2303.0	2	2397	7.4710	40.0
12702	1001.1	34.552	34.558	4.554	4.474	27.379	0.0	40.2	2.74	82.5	3	81.40	2	2302.6	2	2367	7.4706	40.4
12701	999.9	-9.999	-9.999	4.555	-9.999	-9.999	0.0	40.2	2.74	80.9	3	81.80	2	2303.1	2	2396	-9.9999	40.0

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Boreal Autumn 1992

STATION CAST	37 129	OPS NO. 922711503 DATE 27-Sep-92	LATITUDE LONGITUDE		1° 1.47 N 124° 59.48 W																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 @20°C QC	TAalk μmol/kg	pH	TOC μmol/kg
12924	12.3	34.684	34.681	23.695	23.692	23.494	0.4	7.0	2	0.56	2	2.8	2	201.40	2	2019.9	2	378	2	2290	7.9821	64.7
12923	21.7	34.683	34.680	23.695	23.690	23.494	0.4	7.3	2	0.56	2	2.8	2	200.60	2	2022.9	2	378	2	2293	7.9854	63.7
12922	43.7	34.698	34.694	23.388	23.379	23.597	0.7	7.5	2	0.56	2	3.1	2	188.00	2	2030.0	2	398	2	2303	7.9665	63.8
12921	52.4	34.734	34.745	22.698	22.687	23.823	0.7	9.1	2	0.72	2	4.6	2	172.70	2	2052.0	2	433	2	2306	7.9375	58.9
12920	62.8	34.809	34.783	21.710	21.698	24.158	0.7	11.1	2	0.87	2	5.3	2	164.60	2	2063.2	2	469	2	2306	7.9080	60.4
12919	83.2	34.790	34.810	17.590	17.576	25.216	0.6	16.8	2	1.08	2	11.0	2	113.60	2	2116.5	2	629	2	2310	7.8009	51.6
12918	93.6	34.811	34.831	15.909	15.894	25.627	0.1	19.0	2	1.08	2	13.1	2	107.30	2	2130.5	2	678	2	2311	7.7732	48.6
12917	103.9	34.842	34.841	15.684	15.668	25.702	0.0	20.9	2	1.32	2	14.7	2	91.60	2	2141.9	2	742	2	2312	7.7348	48.3
12916	113.2	34.893	34.891	15.336	15.319	25.820	0.0	22.0	2	1.67	2	14.7	2	81.50	2	2162.0	2	803	2	2312	7.7077	48.4
12915	122.0	34.938	34.939	14.512	14.494	26.035	0.0	24.0	2	1.67	2	15.1	2	72.60	2	2176.3	2	871	2	2315	7.6769	48.2
12914	132.5	34.943	34.944	14.211	14.192	26.103	0.0	24.3	2	1.57	3	16.0	2	73.10	2	2178.8	2	880	2	2343	7.6742	46.7
12913	142.4	34.934	34.939	13.955	13.935	26.151	0.0	25.6	2	1.70	2	17.6	2	66.00	2	2183.6	2	926	2	2370	7.6526	47.4
12912	153.9	34.932	34.934	13.722	13.700	26.198	0.0	25.2	2	1.76	2	17.1	2	66.90	2	2186.9	2	938	2	2319	7.6509	46.3
12911	167.9	34.924	34.924	13.446	13.422	26.249	0.0	26.5	2	1.65	3	17.6	2	60.60	2	2192.6	2	984	2	2320	7.6312	45.8
12910	183.1	34.907	34.910	13.169	13.144	26.293	0.0	28.2	2	1.84	2	20.0	2	54.00	2	2199.3	2	1037	2	2298	7.6116	47.8
12909	202.8	34.891	34.896	12.916	12.888	26.331	0.0	28.1	2	1.91	2	20.9	2	47.70	2	2207.2	2	1092	2	2309	7.5921	47.4
12908	252.6	34.855	34.859	12.389	12.355	26.409	0.0	30.8	2	2.08	2	23.0	2	29.20	2	2225.8	2	1258	2	2343	7.5330	48.5
12907	302.5	34.782	34.788	11.371	11.333	26.545	0.0	31.9	2	2.06	2	25.2	2	36.90	2	2231.1	2	1293	2	2335	7.5235	44.3
12906	401.9	34.675	34.678	9.330	9.285	26.818	0.0	36.9	2	2.44	2	37.9	2	18.10	2	2269.0	2	1649	2	2328	7.4277	44.8
12905	601.6	34.570	34.575	6.875	6.818	27.105	0.0	40.0	2	2.67	2	49.8	2	59.00	2	2267.2	2	1526	2	2327	7.4594	41.1
12904	802.8	34.549	34.551	5.676	5.606	27.246	0.0	38.4	3	2.73	2	62.7	2	70.80	2	2282.8	2	1531	2	2328	7.4630	41.2
12903	1004.0	34.556	34.557	4.530	4.450	27.385	0.0	39.4	2	2.77	3	81.5	2	79.00	2	2305.1	2	1515	2	2361	7.4679	40.9
12902	1004.2	34.556	34.558	4.530	4.450	27.385	0.0	39.3	2	2.59	2	80.0	2	78.90	2	2304.9	2	1511	2	2351	7.4674	38.6
12901	1004.9	34.562	34.558	4.537	4.457	27.389	0.0	39.3	2	2.76	2	90.7	2	79.20	2	2305.2	2	1477	2	-9	7.4680	39.1

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Boreal Autumn 1992

STATION 38
 CAST 134
 OPS NO. 922720912
 DATE 28-Sep-92
 LATTITUDE 1° 59.95 N
 LONGITUDE 125° 0.13 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	QC	TAlk μmol/kg	pH	TOC μmol/kg
13424	12.1	-9.999	-9.999	24.533	-9.999	-9.9	-9.9	-9.9	-9.9	-9.99	-9.9	-9	9	9	-9	-9.9999	-9.9
13423	22.1	34.544	34.539	24.538	23.139	0.1	3.9	0.44	1.3	210.70	1983.3	323	2	2	2305	8.0410	68.7
13422	42.8	34.590	34.583	24.377	23.221	0.2	4.6	0.44	1.8	210.10	1992.8	334	2	2	2286	8.0295	67.9
13421	53.0	34.613	34.608	24.274	23.269	0.2	5.1	0.60	2.0	206.60	1998.9	343	2	2	2313	8.0162	68.6
13420	60.6	34.635	34.648	23.845	23.416	0.4	6.5	0.68	2.7	190.20	2017.6	378	2	2	2290	7.9860	64.1
13419	82.9	34.864	34.870	18.011	25.170	1.1	17.2	1.13	9.5	111.70	2122.8	644	2	2	2302	7.7905	53.6
13418	91.5	34.852	34.876	17.038	25.396	0.9	19.4	1.25	12.2	96.00	2140.1	719	2	2	2304	7.7512	51.6
13417	102.4	34.881	34.879	16.566	25.530	0.7	19.9	1.34	12.8	91.20	2147.4	-9	9	9	2312	7.7360	51.2
13416	112.3	34.936	34.905	15.070	25.912	0.3	22.7	1.59	14.4	76.00	2166.2	737	3	3	2307	7.6921	51.3
13415	122.3	34.952	34.948	14.181	26.116	0.0	24.0	1.44	15.2	78.60	2174.7	838	2	2	2327	7.6838	47.7
13414	131.0	34.953	34.947	13.966	26.163	0.0	23.5	1.55	16.4	80.80	2172.5	857	2	2	2313	7.6856	47.5
13413	143.0	34.946	34.942	13.779	26.197	0.0	24.2	1.53	16.9	80.60	2176.2	872	2	2	2344	7.6764	47.9
13412	152.5	34.945	34.939	13.741	26.204	0.0	24.2	1.72	16.4	77.00	2179.2	886	2	2	2314	7.6723	46.7
13411	168.8	34.925	34.920	13.427	26.254	0.0	26.1	1.61	17.2	61.60	2191.8	973	2	2	2323	7.6354	46.3
13410	183.0	34.915	34.916	13.304	26.271	0.0	26.2	1.74	18.1	63.70	2190.4	978	2	2	2312	7.6350	44.8
13409	200.7	34.908	34.904	13.106	26.307	0.0	28.9	2.00	20.3	-9.99	2201.6	1039	2	2	2331	7.6064	44.7
13408	253.0	34.859	34.854	12.366	26.416	0.0	29.8	2.14	23.0	31.60	2224.2	1243	2	2	2309	7.5397	44.3
13407	302.7	34.795	34.793	11.430	26.545	0.0	31.1	1.95	24.4	35.80	2230.8	1287	2	2	2313	7.5235	43.8
13406	401.5	34.711	34.699	9.755	26.776	0.0	35.6	2.23	33.7	17.60	2262.6	1610	2	2	2315	7.4387	43.0
13405	602.4	34.575	34.570	6.873	27.110	0.0	38.0	2.44	55.2	61.80	2267.1	1498	2	2	2328	7.4669	41.1
13404	800.5	-9.999	-9.999	5.552	-9.999	-9.9	39.0	-9.99	-9.9	-9.99	-9.9	-9	9	9	-9	-9.9999	-9.9
13403	1002.0	34.568	34.555	4.602	27.387	0.0	40.0	2.80	86.4	73.70	2306.0	1568	2	2	2363	7.4582	37.8
13402	1001.8	34.568	34.555	4.602	27.387	0.0	40.0	2.59	81.8	73.30	2306.5	1551	2	2	2365	7.4579	39.6
13401	1002.0	34.568	34.555	4.602	27.387	0.0	39.6	2.57	82.7	73.70	2302.6	1562	2	2	2381	7.4583	38.5

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Boreal Autumn 1992

STATION CAST	39 144	OPS NO. 92272252 DATE 28-Sep-92	LATITUDE LONGITUDE	2° 59.86 N 125° 0.26 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	TALK µmol/kg	pH	TOC µmol/kg	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C												
14424	13.2	34.363	34.361	25.780	25.777	22.624	0.0	1.4	0.31	0.0	209.90	1946.7	291	2273	8.0797	-9.9	
14423	22.0	34.375	34.367	25.683	25.678	22.663	0.0	1.8	0.34	0.0	171.40	1949.7	291	2290	8.0794	71.3	
14422	42.8	34.447	34.434	25.517	25.508	22.770	0.1	2.3	0.37	0.7	171.00	1961.4	299	2280	8.0637	69.0	
14421	52.2	34.465	34.455	25.272	25.261	22.859	0.2	2.6	0.37	0.8	98.50	1964.8	304	2316	8.0584	-9.9	
14420	63.2	34.491	34.481	25.116	25.102	22.927	0.2	2.8	0.37	0.8	208.00	1969.8	306	2300	8.0533	-9.9	
14419	82.9	34.765	34.757	23.183	23.166	23.709	0.6	8.5	0.69	2.9	207.70	2036.3	418	2322	7.9481	-9.9	
14418	92.6	34.843	34.825	21.749	21.731	24.175	0.6	10.6	0.94	4.3	198.50	2061.3	449	2310	7.9160	-9.9	
14417	102.4	34.812	34.805	18.131	18.113	25.101	0.8	17.9	1.03	11.9	210.20	2121.8	666	2323	7.7761	-9.9	
14416	112.4	34.772	34.764	16.296	16.278	25.509	0.2	20.5	1.17	14.8	83.40	2141.6	737	2311	7.7318	-9.9	
14415	123.6	34.838	34.803	14.174	14.156	26.030	0.0	24.4	1.45	18.1	77.10	2170.5	879	2331	7.6715	-9.9	
14414	132.6	34.893	34.890	13.753	13.734	26.161	0.0	27.6	1.45	18.5	59.90	2185.7	949	2332	7.6343	-9.9	
14413	141.8	34.897	34.887	13.372	13.352	26.242	0.0	28.3	1.51	21.0	56.00	2193.6	1015	2363	7.6154	-9.9	
14412	153.3	34.909	34.907	13.154	13.133	26.296	0.0	28.5	1.51	22.9	52.90	2199.1	1029	2366	7.6081	-9.9	
14411	168.5	34.900	34.893	12.906	12.883	26.339	0.0	28.9	1.56	23.0	46.60	2203.1	1096	2382	7.5894	-9.9	
14410	183.4	34.884	34.881	12.717	12.692	26.365	0.0	29.6	1.63	22.9	42.20	2210.7	1113	2250	7.5728	-9.9	
14409	202.1	34.866	34.862	12.451	12.424	26.404	0.0	30.5	1.72	22.9	35.90	2219.9	1211	2284	7.5494	-9.9	
14408	253.4	34.813	34.813	11.718	11.685	26.504	0.0	31.7	1.85	25.2	32.00	2229.0	1269	2283	7.5198	-9.9	
14407	302.9	34.758	34.756	10.850	10.813	26.621	0.0	30.0	1.63	25.2	30.50	2207.9	1108	2296	7.5859	-9.9	
14406	401.6	34.673	34.671	9.387	9.342	26.807	0.0	36.2	1.92	38.9	32.50	2253.2	1484	2291	7.4634	-9.9	
14405	597.2	34.575	34.572	6.743	6.687	27.127	0.0	41.2	2.26	63.0	36.20	2287.3	1721	2295	7.4109	-9.9	
14404	802.9	34.559	34.552	5.371	5.303	27.290	0.0	40.6	2.33	77.1	64.40	2292.1	1512	2297	7.4433	-9.9	
14403	1004.0	34.570	34.561	4.513	4.433	27.398	0.0	40.7	2.29	83.9	74.10	2307.6	1554	2290	7.4573	-9.9	
14402	1003.5	34.570	34.562	4.513	4.433	27.398	0.0	42.0	2.26	94.1	74.30	2307.2	1526	2298	7.4574	-9.9	
14401	1003.6	34.570	34.560	4.514	4.434	27.398	0.0	41.8	2.34	102.3	74.10	2305.3	1565	2365	7.4586	-9.9	

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Boreal Autumn 1992

STATION CAST	40 146	OPS NO DATE	922730500 29-Sep-92	LATITUDE LONGITUDE	4° 0.09 N 125° 0.06 W	Potential Temp °C	Temp °C	Salinity CTD	Salinity Bottle	Salinity	Pressure db	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
14624	12.5	34.408	34.406	25.964	25.961	22.601	0.0	2	1.2	2	0.00	2	0.0	2	208.90	2	1949.4	2	280	2	2272	8.0838	71.9
14623	22.1	34.415	34.411	25.973	25.968	22.604	0.0	2	1.3	2	0.36	2	0.0	2	209.50	2	1950.0	2	283	2	2286	8.0856	72.3
14622	42.1	34.438	34.436	25.972	25.963	22.623	0.0	2	1.5	2	0.28	2	0.0	2	208.60	2	1950.6	2	284	2	2272	8.0821	71.1
14621	51.3	34.441	34.438	25.930	25.919	22.639	0.0	2	1.5	2	0.31	2	0.5	2	208.90	2	1952.9	2	287	2	2307	8.0828	73.4
14620	60.5	34.423	34.419	25.831	25.818	22.657	0.1	2	3.9	2	0.32	2	1.0	2	208.60	2	1954.9	2	288	2	2288	8.0781	68.4
14619	82.0	34.769	34.688	23.994	23.977	23.475	0.3	2	6.8	2	0.53	2	3.8	2	191.50	2	2020.4	2	380	2	2307	7.9816	61.0
14618	92.5	34.878	34.815	22.078	22.060	24.110	1.6	2	9.7	2	0.75	2	5.8	2	145.20	3	2060.7	2	461	2	2298	7.9108	58.5
14617	100.5	34.831	34.824	21.059	21.040	24.356	0.9	2	11.7	2	0.75	2	-9.9	4	153.00	2	2078.5	2	499	2	2320	7.8838	56.7
14616	111.5	34.816	34.819	19.857	19.837	24.666	1.0	2	13.8	2	0.89	2	9.1	2	137.30	2	2093.3	2	538	2	2313	7.8534	54.9
14615	122.9	34.665	34.670	15.202	15.183	25.674	0.0	2	20.9	2	1.15	2	19.4	2	88.70	2	2147.1	2	777	2	2329	7.7182	49.3
14614	133.0	34.649	34.644	14.032	14.013	25.914	0.0	2	24.3	2	1.33	2	22.4	2	76.90	2	2165.4	2	871	2	2351	7.6643	51.2
14613	141.9	34.648	34.641	13.042	13.023	26.116	0.0	2	26.9	2	1.46	2	25.7	2	58.70	2	2193.2	2	1058	2	2389	7.6004	46.4
14612	151.8	34.657	34.648	12.411	12.391	26.248	0.0	2	28.4	2	1.60	2	27.6	2	53.30	2	2203.9	2	1092	2	2261	7.5757	46.5
14611	167.6	34.669	34.667	11.528	11.507	26.425	0.0	2	30.9	2	1.60	2	30.6	2	49.10	2	2217.7	2	1193	2	2273	7.5490	45.9
14610	182.2	34.675	34.673	11.141	11.118	26.501	0.0	2	30.8	2	1.69	2	33.4	2	54.70	2	2216.7	2	1170	2	2276	7.5522	43.7
14609	202.8	34.685	34.677	10.754	10.729	26.579	0.0	2	30.8	2	1.69	2	34.2	2	56.80	2	2219.8	2	1217	2	2299	7.5480	-9.9
14608	253.2	34.727	34.722	10.456	10.426	26.666	0.0	2	30.9	2	1.69	2	32.7	2	65.00	2	2220.1	2	1169	2	2275	7.5586	42.6
14607	303.4	34.688	34.684	9.879	9.844	26.735	0.0	2	32.6	2	1.78	2	33.2	2	60.60	2	2229.8	2	1259	2	2285	7.5353	-9.9
14606	402.9	34.646	34.644	8.873	8.829	26.868	0.0	2	37.8	2	1.92	2	41.2	2	27.40	2	2264.6	2	1579	2	2291	7.4384	42.2
14605	602.2	34.566	34.563	6.570	6.514	27.143	0.0	2	41.2	2	2.23	2	60.5	2	42.00	2	2288.2	2	1690	2	2308	7.4204	40.3
14604	804.4	34.551	34.548	5.278	5.210	27.295	0.0	2	41.6	2	2.28	2	83.6	2	53.10	2	2306.8	2	1634	2	2297	7.4251	38.7
14603	1004.0	34.563	34.560	4.420	4.341	27.403	0.0	2	41.3	2	2.25	2	96.2	2	64.10	2	2318.4	2	1644	2	2330	7.4376	39.8
14602	1004.1	34.563	34.559	4.420	4.341	27.403	0.0	2	41.3	2	2.27	2	92.9	2	64.90	2	2320.3	2	1607	2	2357	7.4368	37.9
14601	1004.2	34.564	34.559	4.420	4.341	27.403	0.0	2	41.7	2	2.23	2	91.6	2	63.90	2	2319.3	2	1644	2	2370	7.4379	40.6

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Boreal Autumn 1992

STATION CAST	41 153	OPS NO. 922740111 DATE 30-Sep-92	LATITUDE LONGITUDE	5° 3.12 N 125° 0.9 W																			
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg	
15324	13.1	-9.999	-9.999	26.505	-9.999	-9.999	0.0	0.5	2	0.00	2	0.0	2	208.10	2	1935.4	2	275	E	2273	-9.9999	-9.9	
15323	21.9	34.377	34.371	26.509	26.504	22.408	0.0	0.5	2	0.00	2	0.0	2	208.40	2	1935.3	2	270	2	2288	8.1049	73.9	
15322	41.4	34.376	34.369	26.427	26.418	22.434	0.0	0.5	2	0.00	2	0.0	2	207.80	2	1936.5	2	268	2	2270	8.1038	73.0	
15321	52.7	34.374	34.369	26.416	26.404	22.437	0.0	0.5	2	-9.99	4	0.0	2	207.30	2	1938.2	2	268	2	2273	8.1032	-9.9	
15320	62.2	34.372	34.366	26.401	26.387	22.441	0.0	0.6	2	0.00	2	0.0	2	207.00	2	1935.7	2	268	2	2298	8.1026	-9.9	
15319	82.9	34.550	34.525	25.204	25.186	22.946	0.2	4.3	2	0.36	2	0.5	2	190.10	3	1989.3	3	333	2	2309	8.0263	-9.9	
15318	91.2	34.856	34.807	23.757	23.738	23.611	0.4	7.9	2	0.49	2	1.8	2	165.50	3	2040.7	2	402	2	2300	7.9557	-9.9	
15317	102.0	34.842	34.802	22.140	22.120	24.066	1.4	9.8	2	0.72	2	3.4	2	143.50	3	2062.8	2	465	2	2318	7.9084	-9.9	
15316	112.4	34.791	34.785	20.376	20.355	24.510	0.8	12.1	2	0.72	2	4.9	2	123.30	3	2083.6	2	513	2	2308	7.8675	-9.9	
15315	121.2	34.659	34.714	16.122	16.103	25.463	0.0	25.6	2	1.41	2	14.6	2	48.60	3	2175.5	3	970	2	2325	7.6323	-9.9	
15314	131.9	34.780	34.776	14.308	14.289	25.957	0.0	31.6	2	1.82	2	21.2	2	10.60	2	2224.8	2	1292	2	2315	7.5148	-9.9	
15313	143.4	34.814	34.807	13.289	13.269	26.195	0.0	32.5	2	1.87	2	21.7	2	7.00	2	2232.1	2	1362	2	2389	7.4918	-9.9	
15312	151.0	34.802	34.801	12.774	12.754	26.289	0.0	32.5	2	1.84	2	21.3	2	12.30	2	2234.8	2	1379	2	2375	7.4975	-9.9	
15311	166.7	34.800	34.794	12.421	12.399	26.357	0.0	32.2	2	1.93	2	21.7	2	16.80	2	2238.7	2	1334	2	2270	7.5038	-9.9	
15310	181.8	34.783	34.781	11.855	11.832	26.453	0.0	33.0	2	1.82	2	23.1	2	20.70	2	2240.4	2	1382	2	2265	7.4984	-9.9	
15309	203.1	34.761	34.758	11.432	11.406	26.516	0.0	32.6	2	1.91	2	26.6	2	32.00	2	2233.1	2	1320	2	2294	7.5134	-9.9	
15308	252.0	34.699	34.696	10.166	10.136	26.694	0.0	31.1	2	1.78	2	28.9	2	68.40	2	2219.9	2	1188	2	2279	7.5580	-9.9	
15307	304.5	34.693	34.694	9.896	9.861	26.736	0.0	32.3	2	1.82	2	28.9	2	57.50	2	2230.9	2	1253	2	2299	7.5305	-9.9	
15306	401.8	34.665	34.660	9.179	9.134	26.835	0.0	35.7	2	2.21	2	46.3	3	29.90	2	2261.2	2	1560	2	2292	7.4501	-9.9	
15305	600.9	34.592	34.590	7.399	7.340	27.050	0.0	41.6	2	2.39	2	48.9	2	22.70	2	2297.9	2	1848	2	2310	7.3787	-9.9	
15304	801.8	-9.999	-9.999	5.457	-9.999	-9.999	-9.9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9.9	9	-9	9	-9	-9	-9.9999	-9.9
15303	1003.0	34.569	34.566	4.336	4.257	27.416	0.0	43.2	2	2.57	2	106.3	2	54.60	2	2330.3	2	1704	2	2298	7.4187	-9.9	
15302	1003.8	-9.999	-9.999	4.336	-9.999	-9.999	-9.9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9.9	9	-9	9	-9	-9	-9.9999	-9.9
15301	1003.3	34.568	34.564	4.338	4.259	27.415	0.0	42.5	2	2.63	2	108.4	2	54.80	2	2327.7	2	1709	2	2320	7.4184	-9.9	

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STATION CAST	42 156	OPS NO DATE	922740725 30-Sep-92	LATITUDE LONGITUDE	6° 0.07 N 124° 59.9 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	Talk µmol/kg	pH	TOC µmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	Talk µmol/kg	pH	TOC µmol/kg	
15624	12.7	34.231	34.229	27.116	27.113	22.105	0.0	-9.9	-9.99	-9.9	4	203.50	1917.7	255	2262	8.1198	73.0	
15623	23.1	34.233	34.227	27.120	27.115	22.106	0.0	-9.9	-9.99	-9.9	4	204.10	1918.2	255	2274	8.1228	71.5	
15622	43.0	34.234	34.230	27.113	27.103	22.110	0.0	-9.9	-9.99	-9.9	4	204.00	1918.3	256	2273	8.1212	73.4	
15621	53.7	34.329	34.327	26.699	26.687	22.314	0.0	-9.9	-9.99	-9.9	4	197.60	1941.0	278	2306	8.0915	71.8	
15620	62.9	34.420	34.407	26.354	26.340	22.492	0.2	1.7	0.37	0.5	2	192.40	1958.9	298	2294	8.0679	68.1	
15619	83.6	34.627	34.620	24.066	24.048	23.346	0.4	6.2	0.55	2.0	2	183.80	2017.9	375	2308	7.9839	61.1	
15618	91.4	34.736	34.708	23.196	23.177	23.684	0.8	8.1	0.73	2.9	2	174.40	2042.0	422	2304	7.9459	58.1	
15617	101.5	34.780	34.752	22.498	22.478	23.918	1.3	9.0	0.79	4.4	2	150.00	2056.8	457	2319	7.9145	57.6	
15616	111.3	34.742	34.734	19.377	19.357	24.734	0.7	13.1	0.91	6.6	2	113.50	2097.7	580	2312	7.8294	56.5	
15615	122.5	34.710	34.710	17.834	17.813	25.097	0.1	17.8	1.54	10.1	2	90.90	2129.0	695	2335	7.7544	55.2	
15614	133.4	34.641	34.699	15.396	15.376	25.613	0.1	24.1	1.67	14.9	2	50.90	2177.3	974	2355	7.6293	50.9	
15613	143.1	34.760	34.785	14.301	14.280	25.943	0.0	30.5	2.04	18.7	2	6.00	2226.2	1335	2388	7.5003	50.4	
15612	153.0	34.830	34.809	13.387	13.366	26.188	0.0	31.3	2.04	20.3	2	6.70	2230.4	1391	2247	7.4933	48.6	
15611	168.3	34.799	34.794	12.564	12.541	26.329	0.0	31.6	2.08	22.1	2	13.20	2231.6	1357	2266	7.4980	48.4	
15610	182.3	34.790	34.787	12.307	12.283	26.372	0.0	31.6	2.10	22.3	2	16.20	2232.9	1386	2271	7.4959	45.9	
15609	201.7	34.776	34.773	11.885	11.859	26.442	0.0	31.8	2.01	23.4	2	24.10	2230.4	1326	2293	7.5072	46.9	
15608	252.1	34.750	34.751	11.182	11.151	26.554	0.0	32.7	1.97	24.9	2	34.00	2233.0	1342	2279	7.5089	46.6	
15607	303.1	34.708	34.712	10.421	10.385	26.658	0.0	32.7	2.06	27.5	2	29.80	2244.8	1424	2296	7.4801	45.8	
15606	405.1	34.661	34.662	9.349	9.304	26.804	0.0	34.9	2.36	35.3	2	5.40	2278.1	1780	2291	7.3974	43.3	
15605	600.3	34.572	34.574	6.979	6.922	27.093	0.0	39.4	2.65	62.0	2	3.90	2309.7	1965	2308	7.3483	41.8	
15604	802.2	34.553	34.553	5.385	5.317	27.284	0.0	42.3	2.77	78.6	2	24.80	2325.6	1933	2302	7.3697	41.7	
15603	1002.0	34.561	34.562	4.393	4.314	27.404	0.0	40.7	2.75	94.9	2	55.50	2327.6	1692	2337	7.4204	40.0	
15602	1002.0	34.561	34.562	4.393	4.314	27.404	0.0	40.3	2.68	93.8	2	56.00	2328.3	1714	2366	7.4202	40.2	
15601	1001.8	34.562	34.562	4.395	4.316	27.404	0.0	40.2	2.68	94.2	2	55.50	2327.8	1605	2372	7.4208	37.2	

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STATION CAST	43 157	OPS NO. 922741315 DATE 30-Sep-92	LATITUDE LONGITUDE	6° 59.85 N 124° 59.46 W	Potential Temp °C	Temp °C	Salinity db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 µmol/L	QC	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	TAik µmol/kg	pH	TOC µmol/kg	
15724					10.217	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15723					9.977	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15722					9.735	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15721					9.475	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15720					9.213	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15719					9.059	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15718					8.795	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15717					8.289	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15716					7.553	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15715					7.352	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15714					7.091	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15713					6.771	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15712					6.347	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15711					6.002	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15710					5.869	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15709					5.667	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15708					5.628	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15707					5.315	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15706					5.262	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15705					5.040	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15704					4.895	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15703					4.749	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15702					4.574	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999
15701					4.527	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999	-9.999

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STATION CAST	44 159	OPS NO. 92275051 DATE 1-Oct-92	LATITUDE LONGITUDE	8° 3.45 N 124° 59.77 W	Potential Temp °C	Temp °C	Salinity CTD	Salinity Bottle	Salinity	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 µatm	QC	QC	TAIK µmol/kg	pH	TOC µmol/kg
15924	12.2	33.999	33.998	27.829	27.826	21.701	0.0	2	0.0	2	0.00	2	0.0	2	202.30	2	1898.2	2	2250	8.1330	71.6
15923	22.9	33.999	33.995	27.836	27.831	21.699	0.0	2	0.0	2	0.00	2	0.0	2	201.60	2	1897.7	2	2246	8.1353	70.9
15922	42.6	34.001	33.997	27.839	27.829	21.701	0.0	2	0.0	2	0.00	2	0.0	2	202.00	2	1898.4	2	2245	8.1348	72.3
15921	52.9	34.032	34.019	27.667	27.655	21.781	0.0	2	0.0	2	0.00	2	0.0	2	202.80	2	1900.8	2	2243	8.1319	73.1
15920	61.4	34.232	34.230	26.396	26.382	22.337	0.0	2	0.0	2	0.00	2	0.0	2	212.10	2	1932.3	2	2265	8.1039	76.6
15919	81.6	34.629	34.588	18.746	18.732	24.807	0.2	2	20.2	2	1.39	2	9.4	2	64.90	3	2147.7	3	815	7.6963	56.4
15918	92.6	34.591	34.609	15.505	15.491	25.549	0.6	2	20.4	2	1.27	2	14.1	2	81.70	2	2159.0	2	2292	7.6840	51.9
15917	101.3	34.626	34.634	14.546	14.531	25.786	0.2	2	25.0	2	1.63	2	18.1	2	2181.7	2	1314	3	2293	7.6235	51.9
15916	112.0	34.682	34.681	13.753	13.737	25.997	0.0	2	30.1	2	1.72	2	23.9	2	2213.8	2	1192	2	2296	7.5399	48.7
15915	123.0	34.722	34.725	12.916	12.899	26.198	0.0	2	31.1	2	1.72	2	28.6	2	2226.9	2	998	3	2300	7.5163	48.0
15914	131.8	34.747	34.740	12.687	12.669	26.263	0.0	2	31.1	2	1.74	2	27.2	2	2229.4	2	1319	2	2301	7.5095	44.7
15913	141.6	34.796	34.798	12.579	12.560	26.323	0.0	2	32.2	2	1.95	2	26.2	2	2241.7	2	1454	2	2306	7.4754	47.6
15912	151.2	34.793	34.792	12.306	12.286	26.374	0.0	2	32.1	2	1.97	2	26.0	2	2242.8	2	1443	2	2305	7.4749	62.2
15911	166.7	34.782	34.778	11.925	11.903	26.439	0.0	2	32.5	2	1.99	2	26.9	2	2244.2	2	1464	2	2291	7.4785	49.2
15910	181.1	34.760	34.761	11.592	11.569	26.485	0.0	2	32.6	2	2.02	2	28.1	2	2243.8	2	1431	2	2308	7.4780	44.2
15909	201.3	34.753	34.756	11.397	11.372	26.516	0.0	2	32.6	2	2.06	2	28.6	2	2245.7	2	1467	2	2308	7.4751	45.2
15908	252.6	34.719	34.721	10.745	10.714	26.608	0.0	2	32.7	2	2.06	2	30.2	2	2245.6	2	1422	2	2310	7.4770	45.2
15907	301.2	34.701	34.704	10.273	10.237	26.678	0.0	2	34.0	2	2.18	2	33.0	2	2263.3	2	1644	2	2313	7.4310	44.1
15906	403.1	34.667	34.664	9.337	9.292	26.811	0.0	2	35.7	2	2.43	2	39.1	2	2278.1	2	1614	2	2318	7.4016	42.4
15905	603.2	34.584	34.582	7.164	7.105	27.077	0.0	2	39.7	2	2.93	2	59.0	2	2310.1	2	1909	2	2341	7.3538	43.9
15904	801.7	-9.999	-9.999	5.691	-9.999	-9.999	-9.9	9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9	9	-9	-9.9999	-9.9
15903	1004.0	34.562	34.559	4.692	4.611	27.372	0.0	2	43.5	2	2.91	2	102.1	2	2332.0	2	1801	2	2366	7.3920	38.8
15902	1003.9	-9.999	-9.999	4.692	-9.999	-9.999	-9.9	9	-9.9	9	-9.99	9	-9.9	9	-9.99	9	-9	9	-9	-9.9999	-9.9
15901	1003.5	34.565	34.558	4.690	4.609	27.375	0.0	2	43.6	2	3.12	2	102.5	2	2332.9	2	1756	2	2369	7.3934	39.2

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STATION CAST	45 163	OPS NO. 922751557 DATE 1-Oct-92	LATITUDE LONGITUDE	8° 59.82 N 124° 59.91 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAlk μmol/kg	pH	TOC μmol/kg
16324	13.4	33.755	33.747	27.463	27.460	21.635	0.0	0.0	2	0.00	2	0.0	2	202.70	2	1890.2	2	257	2	2229	8.1289	-9.9
16323	21.6	33.785	33.764	27.506	27.501	21.645	0.0	0.0	2	0.00	2	0.0	2	202.80	2	1889.9	2	249	2	2230	8.1304	76.1
16322	42.4	33.977	33.963	27.700	27.690	21.728	0.0	0.0	2	0.00	2	0.0	2	202.70	2	1901.4	2	251	2	2244	8.1273	74.4
16321	54.0	34.061	34.049	25.516	25.504	22.480	0.0	0.0	2	0.00	2	0.0	2	208.10	2	1931.5	2	274	2	2261	8.0950	-9.9
16320	62.7	34.386	34.379	21.400	21.388	23.922	0.3	5.0	2	0.00	2	2.5	2	165.30	2	2052.0	3	438	2	2287	7.9245	-9.9
16319	89.0	34.654	34.636	15.812	15.799	25.528	1.1	24.4	2	1.36	2	15.0	2	47.70	3	2187.4	3	1040	2	2290	7.6048	-9.9
16318	93.4	34.610	34.621	14.133	14.120	25.861	0.3	27.5	2	1.63	2	19.4	2	43.90	2	2196.8	2	1110	2	2293	7.5792	-9.9
16317	102.3	34.662	34.668	13.407	13.393	26.052	0.1	30.6	2	1.76	2	23.8	2	24.00	2	2220.3	2	1306	2	2295	7.5189	-9.9
16316	112.6	34.731	34.733	12.884	12.869	26.211	0.0	32.7	2	1.77	2	24.8	2	15.10	2	2232.9	2	1285	2	2301	7.4949	-9.9
16315	122.3	34.764	34.757	12.626	12.610	26.288	0.0	32.6	2	1.79	2	24.8	2	10.70	2	2236.8	2	1416	2	2304	7.4843	-9.9
16314	130.7	34.766	34.766	12.402	12.385	26.334	0.2	33.2	2	1.79	2	24.9	2	11.10	2	2238.0	2	1394	2	2308	7.4859	-9.9
16313	143.2	34.756	34.761	12.037	12.018	26.397	0.1	34.0	2	1.89	2	25.8	2	13.50	2	2239.7	2	1422	2	2304	7.4847	-9.9
16312	154.0	34.764	34.763	11.890	11.870	26.431	0.0	33.3	2	1.83	2	25.8	2	11.70	2	2242.6	2	1435	2	2303	7.4794	-9.9
16311	167.3	34.747	34.750	11.688	11.667	26.456	0.0	33.1	2	1.83	2	26.1	2	19.40	2	2238.5	2	1406	2	2306	7.4906	-9.9
16310	182.8	34.745	34.747	11.499	11.476	26.490	0.0	33.8	2	1.84	2	26.5	2	17.80	2	2242.5	2	1421	2	2308	7.4829	-9.9
16309	201.3	34.717	34.719	11.077	11.052	26.546	0.0	27.8	4	2.02	4	27.1	2	34.20	2	2235.6	2	1346	2	2310	7.5082	-9.9
16308	252.9	34.710	34.715	10.624	10.594	26.623	0.0	33.1	2	1.91	2	28.5	2	30.40	2	2244.9	2	1412	2	2311	7.4872	-9.9
16307	302.2	34.699	34.702	10.255	10.219	26.680	0.0	35.5	2	1.99	2	31.9	2	21.90	2	2255.7	2	1520	2	2313	7.4582	-9.9
16306	403.7	34.654	34.656	9.328	9.283	26.802	0.0	37.0	2	2.09	2	41.4	2	5.30	2	2280.6	3	1769	2	2317	7.3965	-9.9
16305	603.2	34.546	34.553	6.984	6.926	27.072	0.0	41.2	2	2.38	2	61.6	2	3.70	2	2316.2	3	2004	2	2339	-9.9999	-9.9
16304	802.7	34.539	34.685	5.454	5.385	27.265	-9.9	-9.9	4	-9.99	4	-9.9	4	22.30	2	2260.5	3	1523	2	2315	7.4366	-9.9
16303	1002.0	34.559	34.561	4.500	4.420	27.391	0.0	43.1	2	2.40	2	99.0	2	37.70	2	2340.5	2	1860	2	2373	7.3884	-9.9
16302	1004.5	34.559	34.552	4.500	4.420	27.391	0.0	43.1	2	2.48	2	-9.9	2	15.10	2	2326.7	3	1946	2	2350	-9.9999	-9.9
16301	1002.8	34.558	34.560	4.501	4.421	27.390	0.0	43.4	2	2.43	2	99.2	2	37.50	2	2340.0	2	1852	2	2373	7.3878	-9.9

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STATION 46
CAST 169

OPS NO. 922760037
DATE 2-Oct-92

LATITUDE
LONGITUDE

9° 59.28 N
124° 59.36 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Salinity	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
16924	13.3	-9.999	-9.999	27.715	-9.999	-9.999	0.0	0.0	0.0	0.0	0.0	204.40	2	1893.0	2	261	2215	-9.9999	82.4
16923	22.9	33.627	33.619	27.683	27.678	21.469	0.0	0.0	0.0	0.0	0.0	204.10	2	1893.9	3	258	2224	8.1213	81.4
16922	41.4	34.330	34.309	23.228	23.220	23.364	0.0	0.0	0.0	0.33	1.2	195.60	2	2006.1	3	362	-9	8.0025	74.8
16921	53.6	34.316	34.399	19.689	19.679	24.325	0.4	10.3	2	0.79	4.9	136.50	2	2088.2	2	560	2286	7.8418	65.7
16920	62.2	34.661	34.647	16.824	16.814	25.299	0.7	25.0	2	1.56	13.9	43.60	3	2187.2	3	1055	2294	7.5960	57.6
16919	84.8	34.763	34.766	13.872	13.860	26.034	0.1	31.9	2	1.79	20.9	4.40	2	2229.5	2	1420	2299	7.4844	48.3
16918	91.2	34.794	34.788	13.429	13.416	26.150	0.1	32.5	2	1.81	21.9	0.60	2	2236.8	2	1429	2302	7.4807	48.4
16917	101.5	34.787	34.788	13.006	12.992	26.230	0.0	33.4	2	1.89	24.5	2.00	2	2237.6	2	1459	2302	7.4741	48.0
16916	112.0	34.801	34.797	12.791	12.776	26.284	0.0	33.9	2	1.89	25.8	3.40	2	2240.6	2	1465	2301	7.4740	47.4
16915	123.0	34.793	34.796	12.573	12.557	26.321	0.0	33.5	2	1.89	25.3	3.40	2	2240.5	2	1473	2305	7.4725	46.4
16914	133.3	34.789	34.790	12.397	12.379	26.353	0.2	33.3	2	1.89	25.2	5.20	2	2241.2	2	1464	2305	7.4743	47.1
16913	142.8	34.785	34.785	12.199	12.180	26.388	0.1	33.6	2	1.86	25.4	7.70	2	2241.5	2	1458	2303	7.4752	45.4
16912	152.6	34.774	34.775	12.071	12.051	26.404	0.0	33.8	2	1.87	25.4	9.70	2	2242.0	2	1442	2305	7.4767	46.7
16911	165.6	34.779	34.779	11.923	11.902	26.437	0.0	33.6	2	1.89	25.9	9.70	2	2243.2	2	1476	2307	7.4735	45.6
16910	182.1	34.765	34.768	11.710	11.687	26.466	0.0	33.4	2	1.92	26.7	10.10	2	2243.8	2	1472	2307	7.4720	46.1
16909	199.8	34.753	34.753	11.448	11.423	26.506	0.0	33.9	2	2.01	27.7	11.50	2	2245.1	2	1497	2308	7.4663	44.6
16908	251.5	34.729	34.731	10.893	10.862	26.590	0.0	34.6	2	1.96	29.6	7.30	2	2255.9	2	1595	2309	7.4402	44.3
16907	301.7	34.708	34.715	10.407	10.371	26.660	0.0	35.5	2	2.09	33.3	5.40	2	2263.3	2	1655	2311	7.4262	-9.9
16906	401.2	-9.999	-9.999	9.352	-9.999	-9.999	-9.9	-9.9	4	-9.99	-9.9	-9.99	9	2065.6	3	509	-9	-9.9999	-9.9
16905	606.0	34.541	34.548	6.929	6.871	27.075	0.0	40.5	2	2.38	66.8	3.50	2	2317.1	2	2029	2338	7.3488	40.9
16904	805.8	34.535	34.537	5.357	5.289	27.273	0.0	43.8	2	2.58	84.9	20.10	2	2331.1	2	1908	2355	7.3623	39.3
16903	999.4	34.554	34.555	4.524	4.444	27.384	0.0	43.6	2	2.53	97.8	41.60	2	2337.1	2	1892	2374	7.3953	39.9
16902	999.4	34.554	34.555	4.524	4.444	27.384	0.0	43.7	2	2.56	97.1	41.60	2	2336.1	2	1817	2370	7.3962	39.9
16901	1000.7	34.554	34.556	4.521	4.441	27.385	0.0	43.8	2	2.63	95.9	42.50	2	2333.8	3	1826	2373	7.3967	40.4

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STATION	47	OPS NO. 922761321	LATITUDE	11° 59.37 N												
CAST	174	DATE 2-Oct-92	LONGITUDE	125° 0.44 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
17423	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17422	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17421	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17420	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17419	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17418	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17417	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17416	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17415	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17414	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17413	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17412	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17411	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17410	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17409	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17408	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17407	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17406	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17405	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17404	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17403	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17402	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9
17401	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.9	-9	-9	-9.9999	-9.9

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STATION CAST	48 175	OPS NO 922771131 DATE 3-Oct-92	LATITUDE LONGITUDE	13° 42.92 N 120° 0.09 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg	
17524	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17523	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17522	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17521	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17520	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17519	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17518	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17517	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17516	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17515	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17514	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17513	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17512	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17511	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17510	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17509	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17508	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17507	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17506	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17505	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17504	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17503	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17502	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9
17501	-9.9	-9.999	-9.999	-9.900	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.99	-9.9	-9	-9	-9.9999	-9.9

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STATION 50
CAST 182

OPS NO. 922910430
DATE 17-Oct-92

LATITUDE 10° 1.08 N
LONGITUDE 109° 56.85 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
18224	6.7	33.080	33.171	27.447	27.445	21.133	0.0	0.0	0.0	0.0	-9.99	2	1859.0	2	243	2	2204	-9.9999	76.3
18223	13.8	33.189	33.359	27.559	27.556	21.179	0.0	0.0	0.0	0.0	204.40	3	1869.6	2	244	2	2198	-9.9999	75.0
18222	23.1	33.357	33.686	27.611	27.606	21.289	0.0	0.0	0.0	0.0	199.10	3	1902.7	2	263	2	2225	-9.9999	77.3
18221	53.5	33.689	34.054	26.782	26.770	21.806	0.0	3.7	0.32	2.0	166.00	3	1984.5	3	358	2	2252	-9.9999	73.5
18220	53.0	34.039	34.448	24.621	24.610	22.735	0.0	3.2	0.54	2.2	166.40	3	1984.6	2	358	2	2253	-9.9999	73.1
18219	63.1	34.537	34.050	19.975	19.963	24.419	0.1	20.3	1.19	9.9	60.20	3	2126.3	3	757	2	2273	-9.9999	61.8
18218	83.5	34.652	34.648	15.572	15.559	25.580	0.4	27.8	1.79	22.2	7.40	3	2222.1	3	1336	2	2292	-9.9999	50.1
18217	93.1	34.706	34.697	14.657	14.643	25.824	0.8	28.0	1.87	24.0	2.70	2	2232.8	2	1417	2	2302	-9.9999	50.0
18216	103.5	34.731	34.727	14.098	14.083	25.962	0.0	28.4	1.75	24.0	3.00	2	2237.4	2	1448	2	2295	-9.9999	52.7
18215	113.8	34.763	34.759	13.741	13.725	26.062	0.0	28.8	1.85	25.5	2.20	2	2240.8	2	1469	2	2285	-9.9999	49.5
18214	122.9	34.774	34.772	13.254	13.237	26.171	0.0	29.6	1.85	26.9	1.40	2	2243.9	2	1484	2	2305	-9.9999	48.6
18213	133.2	34.778	34.784	12.601	12.583	26.304	0.0	32.2	1.85	26.4	2.10	2	2246.1	2	1506	2	2308	-9.9999	48.8
18212	143.7	34.783	34.778	12.339	12.320	26.360	0.0	31.0	1.83	27.4	1.80	2	2248.2	2	1522	2	2297	-9.9999	48.0
18211	153.2	34.775	34.771	12.171	12.151	26.386	0.0	31.7	1.86	28.5	1.80	2	2249.3	2	1538	2	2303	-9.9999	45.6
18210	168.5	34.757	34.764	11.881	11.859	26.428	0.1	33.1	1.81	30.3	3.90	2	2249.2	2	1526	2	2299	-9.9999	48.1
18209	183.5	34.752	34.751	11.584	11.561	26.480	0.0	34.1	1.94	31.5	5.00	2	2250.3	2	1544	2	2312	-9.9999	48.4
18208	203.6	34.744	34.740	11.277	11.252	26.531	0.0	34.1	1.92	30.7	6.30	2	2254.7	2	1574	2	2304	-9.9999	46.4
18207	253.5	34.716	34.714	10.589	10.559	26.634	0.0	34.6	2.06	32.7	4.60	2	2264.9	2	1670	2	2307	-9.9999	45.2
18206	303.4	34.680	34.681	9.917	9.882	26.723	0.0	33.9	2.29	38.1	3.30	2	2276.1	2	1745	2	2319	-9.9999	44.2
18205	403.9	34.604	34.603	8.538	8.495	26.888	0.0	33.4	2.48	53.7	3.20	2	2298.0	2	1906	2	2320	-9.9999	44.4
18204	603.3	34.561	34.562	6.412	6.357	27.160	0.0	40.9	2.66	73.0	2.30	2	2328.3	2	2019	2	2342	-9.9999	-9.9
18203	803.5	34.555	34.555	5.075	5.009	27.322	0.0	43.9	2.56	90.7	14.50	2	2343.7	2	2047	2	2368	-9.9999	-9.9
18202	1004.8	34.569	34.567	4.283	4.205	27.422	0.0	43.8	2.56	-9.9	30.70	2	2352.8	2	1943	2	2369	-9.9999	43.1
18201	1004.8	34.569	34.567	4.281	4.203	27.422	0.0	43.4	-9.99	105.4	30.50	2	2350.6	2	1964	4	2375	-9.9999	42.8

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STATION CAST	51 187	OPS NO. 923051200 DATE 31-Oct-92	LATITUDE LONGITUDE	8° 0.03 N 110° 0.09 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	TAalk µmol/kg	pH	TOC µmol/kg			
18724	5.9	33.279	33.278	28.068	28.067	21.082	0.0	0.0	0.0	0.0	2.03.70	3	1866.1	2	242	2	2198	-9.9999	77.2
18723	13.3	33.316	33.313	28.048	28.045	21.116	0.0	0.0	0.0	0.0	2.04.00	3	1867.6	2	242	2	2198	-9.9999	77.0
18722	22.9	33.402	33.402	27.814	27.809	21.258	0.0	0.0	0.0	0.0	2.05.40	3	1874.4	2	244	2	2210	-9.9999	78.0
18721	41.4	33.753	33.760	27.133	27.124	21.742	0.0	0.0	0.0	0.0	2.03.80	3	1908.1	2	263	2	2237	-9.9999	79.1
18720	53.6	33.930	33.916	26.357	26.345	22.121	0.0	0.0	0.0	0.0	2.197.40	3	1933.8	2	289	2	2242	-9.9999	77.6
18719	62.2	34.344	34.323	23.101	23.088	23.412	0.3	5.1	0.33	2.5	2.156.80	3	2030.7	3	422	2	2281	-9.9999	70.9
18718	84.8	34.680	34.680	17.444	17.430	25.167	0.2	26.9	1.38	2.16.4	2.26.60	3	2186.8	3	1078	2	2290	-9.9999	53.3
18717	91.2	34.762	34.766	15.292	15.278	25.728	0.0	28.7	1.67	2.20.7	2.6.40	3	2219.6	2	1312	2	2292	-9.9999	52.7
18716	101.5	34.799	34.807	14.167	14.152	26.000	0.0	29.7	1.76	2.23.0	2.3.60	2	2230.2	2	1390	2	2299	-9.9999	48.2
18715	112.0	34.827	34.826	13.441	13.425	26.173	0.0	31.2	1.83	2.24.2	2.1.80	2	2236.2	2	1416	2	2303	-9.9999	48.1
18714	123.0	34.822	34.819	12.971	12.954	26.265	0.0	32.0	1.67	2.24.7	2.6.20	2	2235.2	2	1411	2	2299	-9.9999	48.2
18713	133.3	34.799	34.797	12.435	12.417	26.353	0.0	33.3	1.76	2.27.9	2.9.40	2	2237.4	2	1419	2	2307	-9.9999	48.9
18712	142.8	34.792	34.791	12.310	12.291	26.372	0.0	32.8	1.80	2.29.8	2.9.80	2	2239.1	2	1437	2	2305	-9.9999	48.2
18711	152.6	-9.999	-9.999	12.104	-9.999	-9.999	0.0	32.1	1.70	2.28.9	2.9.90	2	2240.0	2	1439	E	2308	-9.9999	45.9
18710	165.6	34.771	34.772	11.809	11.788	26.452	0.0	30.8	1.85	2.28.6	2.16.00	2	2239.5	2	1416	2	2303	-9.9999	48.9
18709	182.1	34.763	34.762	11.551	11.528	26.495	0.0	33.0	1.59	2.29.1	2.22.60	2	2236.8	2	1387	2	2305	-9.9999	45.6
18708	199.8	34.751	34.750	11.325	11.300	26.527	0.0	33.8	1.68	2.30.7	2.24.30	2	2238.8	2	1398	2	2307	-9.9999	44.9
18707	251.5	34.722	34.722	10.661	10.631	26.626	0.0	35.1	2.02	2.36.7	2.10.70	2	2256.7	2	1579	2	2308	-9.9999	45.0
18706	301.7	34.706	34.706	10.302	10.266	26.677	0.0	33.2	3	1.82	2.13.90	2	2259.9	2	1600	2	2310	-9.9999	47.8
18705	401.2	34.648	34.648	9.217	9.172	26.815	0.0	34.9	2.21	2.45.5	2.1.90	2	2283.6	2	1822	2	2316	-9.9999	46.3
18704	607.1	34.558	34.564	6.579	6.523	27.136	0.0	41.3	2.62	2.62.0	2.6.10	2	2316.7	2	2009	2	2336	-9.9999	43.4
18703	805.8	34.556	34.555	5.239	5.171	27.303	0.0	44.9	2.75	2.78.2	2.19.90	2	2333.4	2	1972	2	2357	-9.9999	-9.9
18702	998.9	34.573	34.567	4.493	4.414	27.403	0.0	43.5	2.41	2.93.8	2.35.10	2	2340.5	2	1849	2	2371	-9.9999	40.5
18701	1000.7	34.573	34.569	4.493	4.413	27.403	0.0	43.4	2.47	2.93.8	2.35.10	2	2341.0	2	1827	2	2368	-9.9999	-9.9

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STATION CAST 52 195 OPS NO. 923060401 DATE 1-Nov-92 LATITUDE 5° 59.78 N LONGITUDE 109° 59.8 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	TA/kg μmol/kg	pH	TOC μmol/kg
19524	6.4	33.875	33.875	26.945	26.944	21.891	0.0	0.0	0.00	0.0	206.70	3	1900.7	2	252	2234	-9.9999	72.4
19523	6.6	33.875	33.873	26.939	26.937	21.893	0.0	0.0	0.00	0.0	206.40	3	1903.4	2	252	2239	-9.9999	72.0
19522	13.0	33.881	33.875	26.957	26.954	21.892	0.0	0.0	0.00	0.0	206.30	3	1899.1	2	252	2235	-9.9999	74.6
19521	23.1	33.888	33.885	26.968	26.963	21.894	0.0	0.0	0.00	0.0	206.70	3	1900.7	2	252	2237	-9.9999	74.3
19520	43.7	33.921	33.918	26.966	26.956	21.921	0.0	0.0	0.00	0.0	206.60	3	1902.7	2	252	2237	-9.9999	71.1
19519	62.4	33.965	33.956	26.896	26.882	21.978	0.0	0.0	0.00	0.0	206.10	3	1904.5	2	252	2241	-9.9999	70.0
19518	83.6	34.134	34.130	26.192	26.173	22.328	0.1	0.5	0.30	0.0	215.80	3	1931.5	2	274	2251	-9.9999	68.7
19517	93.7	34.354	34.355	23.464	23.445	23.317	0.6	15.3	0.84	4.2	131.00	3	2038.5	3	452	2266	-9.9999	61.7
19516	103.8	34.586	34.525	19.993	19.974	24.454	0.9	18.3	1.20	9.0	77.10	3	2117.6	3	686	2276	-9.9999	59.0
19515	113.4	34.727	34.728	15.605	15.587	25.632	0.2	29.5	1.89	17.6	17.80	3	2208.5	2	1198	2292	-9.9999	52.8
19514	122.7	34.719	34.715	13.832	13.814	26.009	0.0	30.0	1.95	20.2	29.90	3	2211.3	2	1208	2295	-9.9999	48.2
19513	132.8	34.734	34.718	12.961	12.943	26.199	0.0	30.9	1.90	21.9	37.40	2	2212.1	2	1192	2298	-9.9999	46.3
19512	143.2	34.735	34.739	12.398	12.379	26.311	0.0	31.7	1.81	23.6	32.00	2	2222.7	2	1276	2302	-9.9999	49.4
19511	151.8	34.771	34.774	12.274	12.254	26.363	0.0	33.1	1.97	25.9	20.50	2	2229.6	2	1340	2302	-9.9999	48.4
19510	169.3	34.770	34.772	11.876	11.854	26.439	0.0	31.4	1.90	26.0	37.50	2	2224.0	2	1253	2304	-9.9999	48.5
19509	182.5	34.745	34.748	11.490	11.467	26.492	0.0	31.5	1.89	26.4	44.30	2	2223.1	2	1228	2308	-9.9999	-9.9
19508	202.9	34.733	34.732	11.107	11.082	26.553	0.0	30.9	1.87	26.8	56.20	2	2219.4	2	1193	2307	-9.9999	45.7
19507	252.4	34.732	34.733	10.683	10.652	26.630	0.0	33.7	2.10	29.1	38.30	2	2238.7	2	1348	2307	-9.9999	46.1
19506	302.9	34.714	34.720	10.311	10.275	26.682	0.0	35.5	2.13	31.3	23.10	2	2253.0	2	1515	2308	-9.9999	47.9
19505	403.3	34.663	34.667	9.185	9.140	26.832	0.0	38.2	2.37	39.9	5.70	2	2281.9	2	1771	2319	-9.9999	46.1
19504	604.1	34.569	34.572	6.754	6.697	27.121	0.0	42.4	2.77	62.3	4.50	2	2318.3	2	2019	2339	-9.9999	41.9
19503	803.7	-9.999	34.558	5.302	-9.999	-9.999	0.0	44.1	2.74	76.8	34.70	2	2320.2	2	1842	2351	-9.9999	40.3
19502	1005.4	34.566	34.566	4.437	4.357	27.403	0.0	43.9	2.59	101.4	49.20	2	2329.8	2	1770	2373	-9.9999	42.2
19501	1005.4	34.566	34.567	4.437	4.357	27.403	0.0	44.0	2.66	99.6	48.80	2	2330.7	2	1688	2370	-9.9999	41.6

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STATION CAST	53 201	OPS NO DATE	923061647 1-Nov-92	LATITUDE LONGITUDE	4° 58.14 N 109° 54.98 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAIk μmol/kg	pH	TOC μmol/kg
20124	3.0	33.801	33.807	26.920	26.919	21.843	21.843	0.0	0.0	0.0	0.0	0.0	206.20	1897.0	252	2230	-9.9999	76.1
20123	12.6	33.801	33.799	26.876	26.873	21.857	21.857	0.0	0.0	0.0	0.0	0.0	206.50	1896.1	253	2233	-9.9999	78.6
20122	23.3	33.861	33.862	26.599	26.594	21.991	21.991	0.0	0.0	0.0	0.0	0.0	207.20	1904.1	257	2239	-9.9999	73.6
20121	42.6	33.921	33.920	26.098	26.089	22.194	22.194	0.0	0.0	0.0	0.0	0.0	208.40	1920.8	264	2240	-9.9999	73.8
20120	54.0	33.940	33.937	25.987	25.975	22.244	22.244	0.0	0.0	0.0	0.0	0.0	208.50	1916.9	266	2243	-9.9999	-9.9
20119	61.9	33.961	33.957	25.899	25.885	22.287	22.287	0.0	0.0	0.0	0.0	0.0	208.50	1918.3	269	2245	-9.9999	-9.9
20118	81.9	34.008	34.142	25.752	25.734	22.369	22.369	0.7	0.7	0.0	0.0	0.0	207.50	1927.2	276	2245	-9.9999	-9.9
20117	93.1	34.357	34.001	24.781	24.761	22.929	22.929	2.7	2.7	0.0	0.0	1.0	199.10	1952.6	304	2254	-9.9999	-9.9
20116	101.8	34.571	34.532	22.296	22.276	23.816	23.816	12.0	12.0	0.69	0.69	4.8	138.10	2059.2	487	2281	-9.9999	-9.9
20115	111.4	34.740	34.724	19.893	19.873	24.598	24.598	18.5	18.5	0.98	0.98	8.1	108.70	2112.9	632	2290	-9.9999	-9.9
20114	122.5	34.843	34.832	18.218	18.197	25.104	25.104	20.7	20.7	1.05	1.05	10.1	101.40	2132.6	688	2296	-9.9999	-9.9
20113	131.1	34.840	34.841	17.744	17.722	25.219	25.219	22.0	22.0	1.06	1.06	10.9	94.50	2140.5	716	2299	-9.9999	-9.9
20112	143.8	34.661	34.731	15.051	15.029	25.705	25.705	28.9	28.9	1.39	1.39	18.2	40.90	2192.4	1056	2296	-9.9999	-9.9
20111	151.4	34.767	34.765	13.343	13.322	26.148	26.148	32.9	32.9	1.79	1.79	22.2	19.30	2224.7	1301	2310	-9.9999	-9.9
20110	168.3	34.761	34.764	12.337	12.315	26.343	26.343	32.2	32.2	1.33	1.33	23.2	35.40	2222.2	1235	2301	-9.9999	-9.9
20109	180.5	34.772	34.772	12.043	12.019	26.409	26.409	32.6	32.6	1.76	1.76	23.6	35.20	2226.5	1252	2301	-9.9999	-9.9
20108	203.5	34.743	34.724	11.285	11.260	26.529	26.529	33.6	33.6	1.83	1.83	24.5	46.10	2227.4	1243	2305	-9.9999	-9.9
20107	254.1	34.721	34.744	10.541	10.511	26.646	26.646	33.7	33.7	1.93	1.93	26.6	45.20	2237.2	1314	2308	-9.9999	-9.9
20106	304.1	34.703	34.705	10.065	10.030	26.715	26.715	37.4	37.4	2.16	2.16	30.4	18.20	2262.0	1578	2308	-9.9999	-9.9
20105	406.2	34.646	34.654	8.843	8.799	26.873	26.873	38.8	38.8	2.55	2.55	39.0	5.70	2288.8	1823	2317	-9.9999	-9.9
20104	603.8	34.569	34.568	6.342	6.287	27.175	27.175	46.2	46.2	2.52	2.52	63.3	11.40	2319.5	1985	-9	-9.9999	-9.9
20103	801.7	34.559	34.565	5.075	5.009	27.325	27.325	46.2	46.2	2.57	2.57	87.0	37.80	2325.4	1830	2355	-9.9999	-9.9
20102	1002.0	34.570	34.573	4.225	4.147	27.429	27.429	44.5	44.5	2.53	2.53	97.5	55.40	2332.8	1699	2373	-9.9999	-9.9
20101	1002.0	34.570	34.574	4.225	4.147	27.429	27.429	44.4	44.4	2.55	2.55	98.8	56.30	2333.7	1696	2383	-9.9999	-9.9

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STATION CAST	54 208	OPS NO. 923070040 DATE 2-Nov-92	LATITUDE LONGITUDE		3° 59.02 N 109° 59.79 W	Potential										fCO ₂ @20°C µatm	QC	TAIk µmol/kg	pH	TOC µmol/kg					
			NO2 µmol/L	NO3 µmol/L		PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	DIC µmol/kg	QC										
20824	5.5	33.974	33.970	25.905	25.904	22.291	0.0	2	0.0	2	0.00	2	0.0	2	0.0	2	207.50	3	1916.2	2	267	2	2241	-9.9999	73.2
20823	13.0	33.974	33.969	25.882	25.879	22.299	0.0	2	0.0	2	0.00	2	0.0	2	0.0	2	207.40	3	1916.1	2	267	2	2244	-9.9999	71.9
20822	23.7	33.974	33.971	25.817	25.812	22.320	0.0	2	0.0	2	0.00	2	0.0	2	0.0	2	207.30	3	1915.5	2	269	2	2241	-9.9999	73.6
20821	42.8	33.979	33.978	25.768	25.759	22.340	0.0	2	0.0	2	0.39	3	0.0	2	0.0	2	206.60	3	1920.3	3	270	2	2245	-9.9999	79.6
20820	52.5	33.988	33.984	25.741	25.729	22.356	0.0	2	0.0	2	0.00	2	0.0	2	0.0	2	206.00	3	1919.6	2	271	2	2245	-9.9999	76.6
20819	62.3	33.993	33.988	25.724	25.710	22.365	0.0	2	0.0	2	0.00	2	0.0	2	0.0	2	205.60	3	1921.9	2	272	2	2243	-9.9999	74.2
20818	82.9	34.379	34.295	24.214	24.196	23.115	0.3	2	2.0	2	0.45	2	0.5	2	0.5	2	203.00	3	1970.3	2	321	2	2267	-9.9999	73.0
20817	93.6	34.688	34.679	22.419	22.400	23.870	0.3	2	8.3	2	0.50	2	3.1	2	198.40	2	2032.5	2	2061.3	2	401	2	2293	-9.9999	62.7
20816	102.0	34.729	34.759	21.079	21.059	24.273	0.3	2	10.0	2	0.55	2	5.0	2	180.80	2	2061.3	2	2061.3	2	456	2	2290	-9.9999	55.8
20815	111.0	34.855	34.849	19.419	19.399	24.809	1.2	2	16.2	2	0.73	2	10.6	2	129.60	2	2109.0	2	2109.0	2	595	2	2300	-9.9999	53.3
20814	122.0	34.811	34.830	18.872	18.850	24.916	0.0	2	16.6	2	0.73	2	10.6	2	-9.99	9	2119.4	2	2119.4	2	632	2	2298	-9.9999	54.8
20813	133.4	34.894	34.898	16.935	16.913	25.454	0.6	2	20.7	2	1.15	2	13.7	2	89.20	2	2147.3	2	2147.3	2	739	2	2304	-9.9999	52.5
20812	141.4	34.718	34.717	14.912	14.891	25.779	0.0	2	23.3	2	1.35	2	20.2	2	80.10	2	2159.2	2	2159.2	2	833	2	2299	-9.9999	47.4
20811	152.1	34.840	34.834	13.907	13.885	26.088	0.0	2	25.6	2	1.45	2	21.1	2	69.40	2	2179.4	2	2179.4	2	920	2	2304	-9.9999	47.1
20810	165.5	34.895	34.893	13.536	13.513	26.208	0.0	2	27.8	2	1.74	2	21.3	2	58.20	2	2192.1	2	2192.1	2	992	2	2309	-9.9999	48.6
20809	183.5	34.888	34.889	13.164	13.139	26.279	0.0	2	28.3	2	1.69	2	22.1	2	52.20	2	2200.5	2	2200.5	2	1045	2	2309	-9.9999	46.1
20808	202.4	34.871	34.865	12.789	12.761	26.341	0.0	2	29.8	2	1.72	2	25.2	2	52.50	2	2203.5	2	2203.5	2	1064	2	2308	-9.9999	44.8
20807	252.6	34.751	34.754	11.241	11.209	26.544	0.0	2	31.7	2	1.77	2	29.6	2	59.10	2	2214.6	2	2214.6	2	1150	2	2307	-9.9999	48.0
20806	302.1	34.727	34.726	10.568	10.532	26.647	0.0	2	31.8	2	1.82	2	35.3	2	56.50	2	2224.4	2	2224.4	2	1216	2	2311	-9.9999	45.6
20805	402.0	34.676	34.678	9.370	9.325	26.812	0.0	2	38.7	2	-9.99	9	45.0	2	9.50	2	2274.5	2	2274.5	2	1730	2	2318	-9.9999	44.2
20804	602.3	34.577	34.578	6.667	6.611	27.139	0.0	2	42.4	2	2.42	2	68.8	2	16.30	2	2307.3	2	2307.3	2	1913	2	2335	-9.9999	41.2
20803	805.1	34.555	34.561	5.229	5.162	27.304	0.0	2	44.5	2	2.51	2	89.5	2	35.20	2	2320.0	2	2320.0	2	1840	2	2355	-9.9999	43.5
20802	1003.0	34.570	34.569	4.290	4.212	27.422	0.0	2	40.1	4	2.42	4	101.7	3	55.60	2	2328.2	2	2328.2	2	1711	2	2375	-9.9999	42.6
20801	1003.0	34.570	34.568	4.290	4.212	27.422	0.0	2	43.7	2	2.59	2	102.9	2	54.20	2	2329.8	2	2329.8	2	1721	2	2373	-9.9999	43.9

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STATION CAST	55 209	OPS NO. 923070633 DATE 2-Nov-92	LATITUDE LONGITUDE	2° 59.85 N 110° 0.56 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	NO3 QC	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 @20°C µatm	fCO2 QC	TAlk µmol/kg	pH	TOC µmol/kg		
20924	6.6	33.970	33.969	25.727	25.726	22.343	0.0	0.0	2	0.00	0.0	2	207.70	3	1915.7	2	268	2	2243	-9.9999	74.2	
20923	12.4	33.970	33.969	25.727	25.724	22.344	0.0	0.0	2	0.00	0.0	2	207.90	3	1916.4	2	268	2	2243	-9.9999	-9.9	
20922	21.7	33.971	33.970	25.722	25.717	22.347	0.0	0.0	2	0.00	0.0	2	207.90	3	1916.9	2	269	2	2246	-9.9999	73.8	
20921	42.7	33.989	33.988	25.642	25.633	22.386	0.0	0.0	2	0.29	0.0	2	207.10	3	1919.6	2	273	2	2245	-9.9999	-9.9	
20920	53.1	34.020	34.022	25.479	25.467	22.460	0.0	0.0	2	0.00	0.0	2	206.90	3	1925.7	2	278	2	2247	-9.9999	-9.9	
20919	61.7	34.130	34.099	25.019	25.006	22.684	0.0	0.9	2	0.36	0.0	2	206.60	3	1944.1	2	289	2	2254	-9.9999	-9.9	
20918	81.6	34.707	34.668	22.296	22.280	23.918	0.2	7.6	2	0.55	2	3.4	2	194.40	2	2037.5	2	403	2	2293	-9.9999	-9.9
20917	92.4	34.746	34.741	21.163	21.145	24.262	0.6	10.9	2	0.78	2	5.4	2	173.00	2	2068.1	2	473	2	2301	-9.9999	-9.9
20916	101.2	34.826	34.858	17.967	17.950	25.152	0.7	18.0	2	1.13	2	10.0	2	113.50	2	2130.1	2	657	2	2300	-9.9999	-9.9
20915	112.6	34.938	34.936	15.234	15.217	25.877	0.0	23.9	2	1.42	2	14.6	2	73.60	2	2171.7	2	845	2	2307	-9.9999	-9.9
20914	123.2	34.975	34.963	14.621	14.603	26.040	0.0	23.9	2	1.44	2	14.9	2	75.20	2	2176.6	2	851	2	2304	-9.9999	-9.9
20913	132.1	34.944	34.955	14.284	14.265	26.089	0.0	24.8	2	1.56	2	15.6	2	70.90	2	2180.6	2	881	2	2308	-9.9999	-9.9
20912	143.0	34.924	34.925	13.788	13.768	26.178	0.0	26.5	2	1.56	2	17.4	2	59.20	2	2192.8	2	971	2	-9	-9.9999	-9.9
20911	152.1	34.924	34.924	13.604	13.582	26.216	0.0	27.6	2	1.70	2	18.4	2	54.50	2	2197.9	2	1003	2	-9	-9.9999	-9.9
20910	166.6	34.922	34.922	13.436	13.413	26.249	0.0	27.3	2	1.65	2	20.3	2	58.30	2	2196.6	2	1001	2	2308	-9.9999	-9.9
20909	182.9	34.922	34.921	13.395	13.369	26.258	0.0	27.5	2	1.72	2	19.8	2	56.90	2	2197.2	2	999	2	-9	-9.9999	-9.9
20908	205.6	34.911	34.911	13.191	13.162	26.292	0.0	28.2	2	1.88	2	20.3	2	52.40	2	2203.7	2	1045	2	2316	-9.9999	-9.9
20907	255.9	34.869	34.872	12.558	12.524	26.387	0.0	31.2	2	1.89	2	23.4	2	32.90	2	2218.2	2	1213	2	2306	-9.9999	-9.9
20906	305.1	34.821	34.822	11.925	11.885	26.472	0.0	31.9	2	1.96	2	25.4	2	34.60	2	2226.2	2	1273	2	2309	-9.9999	-9.9
20905	404.8	34.681	34.693	9.734	9.687	26.756	0.0	35.8	2	2.19	2	34.7	2	21.80	2	2259.8	2	1561	2	2313	-9.9999	-9.9
20904	604.7	34.561	34.566	6.537	6.481	27.143	0.0	39.9	2	2.46	2	52.3	2	54.90	2	2276.2	2	1582	2	2328	-9.9999	-9.9
20903	812.1	34.549	34.555	5.333	5.264	27.287	0.0	41.6	2	2.75	2	71.7	2	55.10	2	2299.9	2	1661	2	2349	-9.9999	-9.9
20902	991.7	34.559	34.563	4.418	4.340	27.400	0.0	41.4	2	2.52	2	89.3	2	70.30	2	2314.1	2	1589	2	2369	-9.9999	-9.9
20901	991.7	34.559	34.563	4.418	4.340	27.400	0.0	41.4	2	2.58	2	89.4	2	70.50	2	2311.9	2	1585	2	2368	-9.9999	-9.9

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STATION CAST	56 211	OPS NO. 923071243 DATE 2-Nov-92	LATITUDE LONGITUDE	2° 6.75 N 110° 6.8 W	Potential	NO2	NO3	PO4	H4SiO4	O2	DIC	fCO2	TAlk	pH	TOC
Sample ID	Pressure ·db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	µmol/L	µmol/L	µmol/L	µmol/L	µmol/L	µmol/kg	@20°C µatm	µmol/kg		µmol/kg
21124	5.8	33.920	33.921	25.912	25.911	0.0	0.0	0.00	0.0	206.70	1910.5	263	2242	-9.9999	73.0
21123	5.8	33.920	33.920	25.912	25.911	0.0	0.0	0.00	0.0	207.10	1910.5	263	2239	-9.9999	75.6
21122	12.9	-9.999	-9.999	25.908	-9.999	0.0	0.0	0.00	0.0	206.80	1908.7	263	2242	-9.9999	75.1
21121	22.5	33.925	33.919	25.896	25.891	0.0	0.0	0.00	0.0	206.60	1909.8	264	2244	-9.9999	72.0
21120	44.1	33.985	33.981	25.543	25.533	0.0	0.0	0.00	0.0	207.20	1920.0	274	2245	-9.9999	71.2
21119	51.6	34.316	34.308	24.111	24.100	0.0	4.1	0.34	1.7	202.20	1973.6	328	2266	-9.9999	66.7
21118	61.2	34.367	34.358	23.815	23.802	0.0	4.6	0.45	2.1	200.80	1982.0	339	2272	-9.9999	65.0
21117	81.3	34.784	34.785	18.849	18.835	0.5	18.2	0.97	12.2	127.90	2114.5	630	2300	-9.9999	52.7
21116	91.3	34.918	34.895	16.632	16.617	0.2	22.9	1.19	16.2	84.80	2149.7	763	2304	-9.9999	54.5
21115	102.1	34.936	34.934	15.264	15.248	0.0	25.4	1.29	19.8	72.00	2166.9	847	2307	-9.9999	-9.9
21114	112.8	34.961	34.959	14.699	14.692	0.0	25.4	1.30	19.9	72.90	2173.0	859	2312	-9.9999	46.1
21113	122.8	34.956	34.954	14.390	14.372	0.0	25.8	1.30	19.9	72.30	2174.7	872	2312	-9.9999	47.0
21112	133.3	34.951	34.951	14.203	14.184	0.0	25.8	1.37	21.4	74.30	2176.9	870	2311	-9.9999	49.4
21111	142.5	34.947	34.945	14.000	13.979	0.0	26.1	1.37	21.9	74.40	2177.9	880	2312	-9.9999	48.7
21110	151.8	34.929	34.939	13.841	13.819	0.0	26.7	1.49	21.6	69.00	2182.5	915	2314	-9.9999	47.2
21109	168.0	34.928	34.930	13.641	13.617	0.0	27.7	1.48	23.5	65.20	2184.7	949	2310	-9.9999	47.0
21108	182.6	34.919	34.920	13.409	13.383	0.0	28.7	1.62	24.4	56.90	2191.6	1004	2310	-9.9999	46.8
21107	202.1	34.907	34.908	13.136	13.108	0.0	30.1	1.63	25.1	49.20	2201.2	1061	2309	-9.9999	47.2
21106	252.5	34.836	34.854	12.306	12.272	0.0	33.2	1.73	31.9	30.20	2222.4	1252	2308	-9.9999	46.9
21105	300.8	34.766	34.768	11.204	11.166	0.0	33.2	1.89	35.4	43.70	2227.3	1259	2307	-9.9999	45.5
21104	403.1	34.658	34.661	8.888	8.844	0.0	40.2	2.28	53.5	3	2276.4	1764	2318	-9.9999	43.1
21103	602.8	34.575	34.580	6.919	6.862	0.0	42.5	2.28	64.9	2	2272.7	1608	2326	-9.9999	42.3
21102	804.4	34.548	34.553	5.551	5.482	0.0	42.9	2.52	91.3	2	2289.9	1576	2342	-9.9999	42.5
21101	1000.6	34.558	34.562	4.613	4.532	0.0	43.7	2.53	91.4	2	2308.1	1569	2362	-9.9999	38.1

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STATION CAST	57 218	OFS NO. 923081333 DATE 3-Nov-92	LATITUDE		LONGITUDE		Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	QC	QC	TALK μmol/kg	pH	TOC μmol/kg
			0° 59.69 N	110° 0.71 W																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C																
21824	6.2	34.012	34.006	24.601	24.600	22.717	0.0	0.8	0.28	0.0	2.10.30	3	1925.2	2	276	2	2246	-9.9999	78.7		
21823	12.7	34.056	34.057	24.420	24.417	22.805	0.0	1.4	0.33	0.0	2.10.50	3	1932.5	2	287	2	2248	-9.9999	73.8		
21822	21.8	34.326	34.306	23.241	23.237	23.356	0.0	4.5	0.43	1.7	2.07.20	3	1976.3	2	334	2	2267	-9.9999	68.5		
21821	42.3	34.640	34.665	21.880	21.872	23.982	0.0	8.8	0.62	5.3	2.192.70	2	2038.5	2	418	2	2289	-9.9999	63.4		
21820	53.0	34.726	34.727	20.870	20.860	24.325	0.2	11.0	0.73	6.1	2.175.10	2	2058.5	2	463	2	2298	-9.9999	60.1		
21819	61.6	34.930	34.905	18.844	18.833	25.011	0.3	14.4	0.94	8.4	2.155.30	2	2095.5	2	541	2	2307	-9.9999	54.1		
21818	82.9	34.944	34.937	15.850	15.837	25.743	0.3	23.5	1.35	15.9	2.84.90	3	2083.4	3	780	3	2306	-9.9999	49.5		
21817	92.6	34.951	34.947	14.671	14.657	26.010	0.0	23.0	1.32	17.8	2.73.90	2	2170.5	2	855	2	2310	-9.9999	47.7		
21816	102.7	34.928	34.925	14.135	14.120	26.107	0.0	24.7	1.43	21.3	2.63.60	2	2181.4	2	930	2	2312	-9.9999	45.9		
21815	111.4	34.935	34.929	13.936	13.920	26.154	0.0	27.5	1.55	20.3	2.63.40	2	2184.5	2	942	2	2309	-9.9999	46.2		
21814	121.9	34.938	34.932	13.802	13.785	26.185	0.0	27.9	1.57	20.8	2.62.60	2	2184.8	2	948	2	2310	-9.9999	45.4		
21813	132.2	34.931	34.929	13.615	13.596	26.219	0.0	28.1	1.74	21.9	2.61.80	2	2188.8	2	973	2	2311	-9.9999	47.6		
21812	141.7	34.931	34.927	13.573	13.553	26.228	0.5	25.3	1.49	21.4	2.58.80	2	2190.3	2	983	2	2311	-9.9999	-9.9		
21811	152.4	34.926	34.926	13.455	13.434	26.248	0.5	27.8	1.72	22.7	2.57.10	2	2192.5	2	1001	2	2308	-9.9999	-9.9		
21810	168.5	34.917	34.909	13.254	13.231	26.283	0.4	25.9	1.57	22.7	2.51.70	2	2198.3	2	1043	2	2310	-9.9999	-9.9		
21809	179.2	34.911	34.914	13.159	13.134	26.298	0.2	27.7	1.67	23.8	2.48.10	2	2203.1	2	1071	2	2308	-9.9999	-9.9		
21808	201.3	34.897	34.805	12.909	12.881	26.337	0.3	27.4	1.66	24.9	2.41.90	2	2210.4	2	1129	2	2307	-9.9999	-9.9		
21807	251.8	34.807	34.894	11.609	11.577	26.520	0.0	34.1	1.99	30.0	2.30.30	2	2231.6	2	1333	2	2308	-9.9999	-9.9		
21806	302.6	34.721	34.732	10.494	10.458	26.655	0.0	35.7	2.01	35.7	3.35.90	2	2240.3	2	1390	2	2307	-9.9999	-9.9		
21805	402.3	34.650	34.649	8.482	8.440	26.933	0.0	41.3	2.22	46.0	3.29.40	2	2265.1	2	1633	2	2314	-9.9999	-9.9		
21804	601.8	34.572	34.575	6.489	6.434	27.158	0.0	43.9	2.50	59.1	2.41.40	2	2286.4	2	1702	2	2334	-9.9999	-9.9		
21803	801.8	34.558	34.553	5.344	5.276	27.293	0.0	43.1	2.47	72.2	2.67.60	2	2288.3	2	1568	2	2350	-9.9999	-9.9		
21802	1002.4	34.572	34.560	4.532	4.452	27.398	0.0	43.3	2.49	88.4	2.75.70	2	2301.2	2	1522	2	2360	-9.9999	-9.9		
21801	1002.4	34.572	34.560	4.532	4.452	27.398	0.0	43.4	2.52	89.8	2.76.30	2	2301.4	2	1501	2	2363	-9.9999	-9.9		

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STATION	58	OPS NO. 923082007	LATITUDE	0° 31.14 N																		
CAST	223	DATE 3-Nov-92	LONGITUDE	110° 0.15 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
22324	6.2	34.815	34.812	21.762	21.761	24.145	0.2	9.7	2	0.61	2	5.1	2	190.70	2	2044.0	2	421	2	2301	-9.9999	59.9
22323	13.9	34.800	34.800	21.567	21.564	24.188	0.2	10.0	2	0.72	2	5.2	2	188.80	2	2044.5	2	424	2	2303	-9.9999	-9.9
22322	22.7	34.791	34.784	21.428	21.424	24.220	0.0	9.6	2	0.52	2	5.6	2	187.60	2	2045.1	2	428	2	2299	-9.9999	66.0
22321	43.4	34.770	34.767	21.291	21.283	24.243	0.2	10.0	2	0.72	2	5.6	2	185.60	2	2046.7	2	432	2	2298	-9.9999	-9.9
22320	52.6	34.762	34.755	21.242	21.232	24.251	0.3	10.3	2	0.71	2	5.9	2	184.90	2	2047.9	2	436	2	2298	-9.9999	-9.9
22319	61.2	34.846	34.860	19.680	19.669	24.732	0.4	13.7	2	0.87	2	7.9	2	168.60	2	2081.3	2	509	2	2304	-9.9999	-9.9
22318	82.2	34.917	34.910	15.412	15.399	25.820	0.2	25.2	2	1.32	2	18.1	2	76.80	2	2160.9	2	831	2	2305	-9.9999	-9.9
22317	93.6	34.917	34.914	14.843	14.829	25.946	0.0	26.1	2	1.37	2	19.1	2	73.60	2	2166.9	2	860	2	2307	-9.9999	-9.9
22316	102.6	34.938	34.933	14.561	14.546	26.024	0.0	26.5	2	1.35	2	19.6	2	72.90	2	2170.6	2	873	2	2309	-9.9999	-9.9
22315	111.7	34.960	34.948	14.173	14.157	26.124	0.0	26.5	2	1.44	2	20.4	2	75.00	2	2173.9	2	873	2	2314	-9.9999	-9.9
22314	123.8	34.930	34.935	13.770	13.752	26.186	0.0	26.9	2	1.39	2	21.0	2	74.50	2	2177.3	2	897	2	2313	-9.9999	-9.9
22313	131.9	34.937	34.934	13.558	13.539	26.235	0.0	27.3	2	1.42	2	20.9	2	74.00	2	2180.2	2	910	2	2311	-9.9999	-9.9
22312	143.5	34.916	34.913	13.221	13.201	26.288	0.0	29.5	2	1.47	2	23.2	2	60.60	2	2190.8	2	999	2	2310	-9.9999	-9.9
22311	152.7	34.914	34.911	13.182	13.161	26.294	0.0	29.9	2	1.50	2	23.2	2	57.60	2	2195.4	2	1021	2	2315	-9.9999	-9.9
22310	168.0	34.903	34.900	13.035	13.012	26.316	-9.9	-9.9	9	-9.99	9	-9.9	9	51.40	2	2200.5	2	1063	2	2312	-9.9999	-9.9
22309	181.9	34.840	34.890	12.890	12.865	26.297	-9.9	-9.9	9	-9.99	9	-9.9	9	43.30	2	2208.9	2	1130	2	2310	-9.9999	-9.9
22308	202.4	34.881	34.879	12.678	12.651	26.371	0.0	32.5	2	1.77	2	26.6	2	41.10	2	2212.0	2	1153	2	2310	-9.9999	-9.9
22307	251.7	34.848	34.847	12.166	12.133	26.446	0.0	34.3	2	1.77	2	28.4	2	35.20	2	2221.7	2	1181	2	2310	-9.9999	-9.9
22306	301.7	34.796	34.795	11.305	11.267	26.568	0.0	36.9	2	1.97	2	33.8	2	19.40	2	2241.8	2	1441	2	-9	-9.9999	-9.9
22305	402.7	34.658	34.658	8.696	8.653	26.906	0.0	41.3	2	2.25	2	46.8	2	27.50	2	2264.4	2	1638	2	2326	-9.9999	-9.9
22304	602.6	34.588	34.588	6.998	6.940	27.103	0.0	42.4	2	2.30	2	53.6	2	40.40	2	2279.5	2	1679	2	2327	-9.9999	-9.9
22303	802.8	34.552	34.553	5.298	5.230	27.293	0.0	43.8	2	2.50	2	76.3	2	0.00	2	2291.2	2	1559	2	2346	-9.9999	-9.9
22302	1004.8	34.560	34.559	4.388	4.309	27.404	0.0	42.6	2	2.47	2	90.2	2	82.70	2	2299.7	2	1491	2	2368	-9.9999	-9.9
22301	1004.8	34.560	34.559	4.388	4.309	27.404	0.0	42.7	2	2.64	2	92.8	2	82.70	2	2302.4	2	1475	2	2364	-9.9999	-9.9

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STATION CAST	59 224	OPS NO. 923090128 DATE 4-Nov-92	LATITUDE LONGITUDE	0° 15.26 N 109° 59.98 W																
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
22424	6.1	34.849	34.847	21.670	21.669	24.197	0.3	8.8	2	0.52	3.8	188.10	2	2049.3	2	422	2	2301	-9.9999	61.8
22423	6.1	34.849	34.845	21.670	21.669	24.197	0.3	9.1	2	0.54	3.8	187.40	2	2049.5	2	423	2	2302	-9.9999	-9.9
22422	12.4	34.836	34.832	21.274	21.272	24.296	0.3	9.4	2	0.55	4.2	182.90	2	2051.1	2	428	2	2300	-9.9999	66.8
22421	23.2	34.808	34.821	20.809	20.805	24.402	0.3	10.0	2	0.63	4.6	178.00	2	2056.2	2	442	2	2300	-9.9999	-9.9
22420	42.8	34.804	34.800	20.521	20.513	24.477	0.4	10.3	2	0.68	5.3	174.50	2	2059.6	2	453	2	2300	-9.9999	-9.9
22419	52.9	34.805	34.799	20.415	20.405	24.507	0.4	10.9	2	0.68	5.4	173.90	2	2062.8	2	463	2	2301	-9.9999	-9.9
22418	83.3	34.862	34.860	15.006	14.993	25.868	0.0	21.4	2	1.11	13.8	99.80	2	2144.9	2	730	2	2306	-9.9999	-9.9
22417	90.6	34.871	34.867	14.881	14.867	25.902	0.0	20.7	2	1.19	14.4	102.00	2	2145.9	2	728	2	2305	-9.9999	-9.9
22416	102.6	34.884	34.879	14.683	14.668	25.956	0.0	23.3	2	1.19	14.6	91.30	2	2154.8	2	777	2	2308	-9.9999	-9.9
22415	112.5	34.914	34.923	14.244	14.228	26.073	0.0	25.1	2	1.32	15.5	74.10	2	2175.2	2	879	2	2309	-9.9999	-9.9
22414	121.8	34.924	34.917	13.899	13.882	26.154	0.0	24.9	2	1.29	16.1	75.70	2	2175.0	2	883	2	2309	-9.9999	-9.9
22413	132.0	34.906	34.908	13.416	13.398	26.240	0.0	25.4	2	1.34	16.6	76.20	2	2182.3	2	911	2	2313	-9.9999	-9.9
22412	142.6	34.902	34.904	13.205	13.185	26.280	0.0	26.6	2	1.44	17.9	72.00	2	2185.7	2	938	2	2313	-9.9999	-9.9
22411	152.0	34.901	34.902	13.096	13.075	26.302	0.0	26.0	2	1.40	17.5	74.70	2	2186.7	2	936	2	2312	-9.9999	-9.9
22410	168.5	34.892	34.891	12.755	12.732	26.363	0.0	26.8	2	1.44	17.8	76.50	2	2187.9	2	943	2	2312	-9.9999	-9.9
22409	183.1	34.885	34.883	12.595	12.570	26.390	0.0	27.6	2	1.55	19.4	66.90	2	2197.8	2	1007	2	2312	-9.9999	-9.9
22408	202.9	34.880	34.881	12.497	12.470	26.406	0.0	28.2	2	1.50	19.3	64.40	2	2196.4	2	1027	2	2312	-9.9999	-9.9
22407	251.2	34.856	34.856	12.151	12.118	26.455	0.0	31.8	2	1.77	22.6	35.20	2	2222.1	2	1246	2	2310	-9.9999	-9.9
22406	301.5	34.772	34.771	10.822	10.785	26.637	0.0	35.2	2	1.94	28.9	16.20	2	2249.7	2	1509	2	2310	-9.9999	-9.9
22405	402.5	34.661	34.661	8.755	8.712	26.899	0.0	39.1	2	2.14	35.9	26.60	2	2264.4	2	1633	2	2317	-9.9999	-9.9
22404	603.0	34.578	34.580	6.802	6.745	27.121	0.0	41.2	2	2.39	49.8	46.40	2	2276.8	2	1629	2	2328	-9.9999	-9.9
22403	803.7	34.550	34.552	5.323	5.255	27.289	0.0	40.6	2	2.36	59.0	71.40	2	2287.1	2	1551	2	2348	-9.9999	-9.9
22402	1004.3	34.556	34.557	4.463	4.383	27.392	0.0	40.1	2	2.38	69.9	83.60	2	2299.8	2	1503	2	2365	-9.9999	-9.9
22401	1004.3	34.556	34.557	4.463	4.383	27.392	0.0	40.1	2	2.33	70.0	84.00	2	2297.4	2	1503	2	2363	-9.9999	-9.9

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STATION CAST	60 229	OPS NO. 923090944 DATE 4-Nov-92	LATITUDE LONGITUDE	0° 11.64 N 110° 5.3 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg	
22924	6.7	-9.999	-9.999	21.580	-9.999	0.0	9.2	0.62	4.3	185.20	2053.4	437	E	2301	-9.9999	-9.9	
22923	12.6	34.841	34.845	21.281	21.279	0.2	9.4	0.67	4.5	181.70	2054.8	439	2	2301	-9.9999	-9.9	
22922	22.5	34.830	34.826	20.881	20.877	0.2	9.3	0.70	4.6	176.40	2058.1	444	2	2299	-9.9999	-9.9	
22921	43.4	34.808	34.805	20.151	20.151	0.2	11.1	0.84	5.5	169.00	2070.8	476	2	2298	-9.9999	-9.9	
22920	52.3	34.947	34.821	19.483	19.474	0.4	12.0	0.81	6.3	164.70	2080.6	496	2	2301	-9.9999	-9.9	
22919	62.6	34.865	34.860	18.307	18.296	0.5	15.4	0.94	9.0	132.10	2109.4	591	2	-9	-9.9999	-9.9	
22918	82.2	34.852	34.847	15.597	15.584	0.0	20.1	1.19	13.0	97.60	2143.1	722	2	2303	-9.9999	-9.9	
22917	92.5	34.869	34.869	14.848	14.834	0.0	20.5	1.18	13.4	101.60	2148.1	733	2	2307	-9.9999	-9.9	
22916	101.9	34.881	34.879	14.694	14.679	0.0	21.9	1.27	14.4	93.10	2157.7	772	2	2306	-9.9999	-9.9	
22915	113.0	34.887	34.885	14.476	14.459	0.0	22.3	1.27	14.9	90.50	2161.7	791	2	2307	-9.9999	-9.9	
22914	122.8	34.916	34.906	14.186	14.168	0.0	23.0	1.35	15.1	84.60	2169.7	825	2	2307	-9.9999	-9.9	
22913	134.1	34.921	34.924	13.905	13.886	0.0	24.4	1.41	15.3	74.90	2179.5	888	2	2311	-9.9999	-9.9	
22912	142.5	34.912	34.912	13.501	13.481	0.0	25.1	1.41	15.8	74.60	2182.8	908	2	2313	-9.9999	-9.9	
22911	152.9	34.885	34.906	13.270	13.249	0.0	26.1	1.52	17.4	70.50	2188.3	946	2	2309	-9.9999	-9.9	
22910	163.7	34.893	34.895	12.928	12.906	0.0	26.9	1.49	19.2	72.90	2190.5	950	2	2306	-9.9999	-9.9	
22909	183.2	34.886	34.887	12.690	12.665	0.0	27.5	1.52	18.7	64.90	2198.9	1010	2	2309	-9.9999	-9.9	
22908	202.4	34.884	34.885	12.518	12.491	0.0	26.5	1.49	17.4	67.80	2199.3	1007	2	2309	-9.9999	-9.9	
22907	251.8	34.862	34.863	12.224	12.191	0.0	30.0	1.74	20.7	39.60	2222.4	1208	2	2313	-9.9999	-9.9	
22906	304.4	34.736	34.738	10.269	10.233	0.0	35.3	2.07	29.0	18.90	2256.6	1542	2	2314	-9.9999	-9.9	
22905	404.3	34.661	34.660	8.713	8.670	0.0	37.8	2.26	35.1	27.00	2268.2	1638	2	2314	-9.9999	-9.9	
22904	603.4	34.566	34.573	6.573	6.517	0.0	40.5	2.34	51.2	52.80	2279.5	1609	2	2328	-9.9999	-9.9	
22903	803.4	34.548	34.552	5.305	5.237	0.0	40.1	2.40	71.0	72.70	2290.5	1546	2	2350	-9.9999	-9.9	
22902	1001.1	34.556	34.561	4.402	4.323	0.0	39.8	2.42	85.0	82.60	2298.0	1500	2	2365	-9.9999	-9.9	
22901	1001.1	34.556	34.560	4.402	4.323	0.0	39.7	2.43	83.0	83.40	2304.9	1513	2	2368	-9.9999	-9.9	

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STATION	61	OPS NO. 923092110	LATITUDE	0° 0.79 N																		
CAST	234	DATE 4-Nov-92	LONGITUDE	110° 0.38 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 $\mu\text{mol/L}$	NO3 $\mu\text{mol/L}$	NO3 QC	PO4 $\mu\text{mol/L}$	PO4 QC	H4SiO4 $\mu\text{mol/L}$	H4SiO4 QC	O2 $\mu\text{mol/L}$	O2 QC	DIC $\mu\text{mol/kg}$	DIC QC	fCO2 @20°C μatm	QC	TALK $\mu\text{mol/kg}$	pH	TOC $\mu\text{mol/kg}$
23424	5.0	34.909	34.904	21.867	21.866	24.188	0.0	9.1	2	0.61	2	3.5	2	189.10	2	2047.9	2	422	2	2306	-9.9999	63.9
23423	11.5	34.897	34.896	21.327	21.325	24.328	0.0	9.6	2	0.69	2	3.8	2	181.20	2	2057.3	2	433	2	2306	-9.9999	58.0
23422	21.8	34.885	34.879	20.395	20.391	24.572	0.0	11.0	2	0.72	2	4.7	2	169.30	2	2068.4	2	462	2	2306	-9.9999	59.6
23421	41.4	34.877	34.866	18.902	18.895	24.955	0.6	13.2	2	0.88	2	7.6	2	146.50	2	2091.8	2	528	2	2303	-9.9999	56.4
23420	52.6	34.855	34.856	17.889	17.880	25.192	0.0	17.0	2	0.99	2	9.5	2	123.10	2	2117.1	2	616	2	2304	-9.9999	52.5
23419	60.9	34.886	34.879	17.040	17.030	25.421	0.0	16.3	2	0.84	2	10.1	2	117.80	2	2122.4	2	630	2	2304	-9.9999	50.2
23418	86.2	34.885	34.887	15.626	15.613	25.748	0.0	16.8	2	1.00	2	11.6	2	120.20	2	2123.3	2	638	2	2306	-9.9999	48.2
23417	90.8	35.066	35.048	15.592	15.578	25.895	0.0	16.7	4	1.02	4	9.3	4	126.70	2	2128.6	2	621	2	2318	-9.9999	48.5
23416	100.8	34.928	34.930	14.927	14.912	25.937	0.0	18.4	2	1.05	2	12.7	2	119.20	2	2136.7	2	670	2	2311	-9.9999	48.7
23415	112.1	34.915	34.912	14.540	14.523	26.011	0.0	19.6	2	1.19	2	13.6	2	111.20	2	2145.5	2	713	2	2314	-9.9999	49.0
23414	120.8	34.902	34.900	14.165	14.147	26.081	0.0	21.4	2	1.27	2	14.4	2	99.20	2	2158.3	2	772	2	2308	-9.9999	47.8
23413	132.0	34.914	34.913	13.772	13.753	26.173	0.0	24.4	2	1.37	2	15.7	2	79.90	2	2178.0	2	874	2	2309	-9.9999	48.6
23412	140.2	34.905	34.905	13.285	13.265	26.266	0.0	24.7	2	1.37	2	16.1	2	82.60	2	2181.4	2	886	2	2314	-9.9999	45.6
23411	150.9	34.894	34.895	12.945	12.924	26.327	0.0	27.1	2	1.48	2	18.7	2	64.20	2	2190.6	2	998	2	2307	-9.9999	45.2
23410	162.1	34.892	34.891	12.812	12.790	26.352	0.0	26.2	2	1.44	2	18.2	2	74.40	2	2187.3	2	955	2	2314	-9.9999	47.2
23409	181.9	34.887	34.889	12.595	12.571	26.391	0.0	26.5	2	1.44	2	17.9	2	73.40	2	2190.0	2	975	2	2315	-9.9999	48.4
23408	202.3	34.881	34.880	12.503	12.476	26.405	0.0	27.9	2	1.57	2	19.0	2	63.70	2	2198.1	2	1034	2	2311	-9.9999	47.3
23407	252.6	34.838	34.837	11.851	11.818	26.498	0.0	34.3	2	1.90	2	25.0	2	21.30	2	2234.4	2	1378	2	2306	-9.9999	44.7
23406	304.1	34.767	34.764	10.746	10.709	26.647	0.0	34.9	2	1.96	2	27.6	2	16.40	2	2249.1	2	1534	2	2313	-9.9999	43.6
23405	401.3	34.669	34.670	8.968	8.924	26.871	0.0	37.8	2	2.07	2	34.0	2	24.90	2	2262.9	2	1629	2	2314	-9.9999	43.2
23404	603.4	34.574	34.549	6.824	6.767	27.115	0.0	39.7	2	2.32	2	50.4	2	50.10	2	2272.2	2	1615	2	2327	-9.9999	40.6
23403	802.4	34.547	34.578	5.262	5.195	27.294	0.0	40.4	2	2.37	2	66.4	2	75.00	2	2287.1	2	1523	2	2351	-9.9999	39.5
23402	1005.3	34.553	34.556	4.570	4.489	27.378	0.0	40.3	2	2.35	2	81.7	2	80.50	2	2302.6	2	1534	2	2366	-9.9999	39.4
23401	1005.3	34.553	34.556	4.570	4.489	27.378	0.0	40.7	2	2.38	2	84.9	2	80.50	2	2295.9	2	1547	2	2363	-9.9999	38.7

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STATION CAST	62 235	OPS NO. 923100756 DATE 5-Nov-92	LATITUDE LONGITUDE	0° 15.19 S 110° 0.12 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	fO ₂ μmol/L	NO ₃ μmol/L	PO ₄ μmol/L	H ₄ SiO ₄ μmol/L	O ₂ μmol/L	DIC μmol/kg	fCO ₂ @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
23524	2.2	34.923	34.921	22.238	22.238	24.094	0.3	8.5	0.62	2.9	193.50	2048.9	417	2303	-9.9999	64.4
23523	9.7	34.893	34.923	21.830	21.828	24.186	0.3	9.0	0.71	3.4	186.00	2053.7	424	2307	-9.9999	-9.9
23522	20.1	34.919	34.928	20.790	20.786	24.492	0.3	10.4	0.74	3.9	171.50	2064.0	450	2303	-9.9999	60.3
23521	29.4	34.964	34.963	19.976	19.971	24.743	0.2	11.6	0.81	5.1	159.00	2077.9	479	2310	-9.9999	-9.9
23520	40.8	34.975	34.972	19.516	19.509	24.872	0.2	11.9	0.81	5.6	154.00	2083.3	492	2309	-9.9999	-9.9
23519	61.1	35.224	35.182	18.470	18.459	25.330	0.0	13.2	0.85	5.6	135.50	2103.9	524	2324	-9.9999	-9.9
23518	80.1	35.097	35.099	17.006	16.993	25.591	0.0	14.4	0.90	7.9	130.50	2112.7	558	2320	-9.9999	-9.9
23517	99.3	35.106	35.110	15.935	15.919	25.848	0.0	17.3	1.05	9.0	118.10	2134.4	632	2321	-9.9999	-9.9
23516	119.8	34.969	34.977	14.519	14.501	26.057	0.0	18.2	1.14	12.2	124.00	2139.4	663	2313	-9.9999	-9.9
23515	129.9	34.931	34.931	14.208	14.189	26.095	0.0	19.8	1.14	13.7	113.90	2148.5	715	2314	-9.9999	-9.9
23514	140.5	34.904	34.897	13.775	13.755	26.165	0.0	22.1	1.33	15.8	98.90	2162.5	782	2309	-9.9999	-9.9
23513	149.7	34.907	34.909	13.254	13.233	26.274	0.0	22.3	1.33	16.4	101.00	2167.8	805	2312	-9.9999	-9.9
23512	175.5	34.898	34.901	12.754	12.730	26.368	0.0	25.0	1.46	17.8	86.90	2182.5	890	2315	-9.9999	-9.9
23511	201.0	34.883	34.885	12.514	12.487	26.405	0.0	27.5	1.66	20.0	64.10	2201.5	1027	2312	-9.9999	-9.9
23510	228.6	34.852	34.857	12.096	12.066	26.462	0.0	32.1	1.87	23.3	30.60	2230.0	1278	2310	-9.9999	-9.9
23509	259.2	34.853	34.854	12.022	11.988	26.478	0.0	32.2	1.95	24.8	25.40	2235.3	1325	2310	-9.9999	-9.9
23508	289.7	34.814	34.813	11.297	11.261	26.584	0.0	34.8	2.01	27.9	12.00	2252.6	1509	2313	-9.9999	-9.9
23507	331.0	34.736	34.740	10.214	10.175	26.716	0.0	35.9	2.19	33.2	23.70	2255.4	1517	2312	-9.9999	-9.9
23506	378.8	34.708	34.712	9.640	9.597	26.792	0.0	36.1	2.17	34.3	34.00	2253.8	1492	2311	-9.9999	-9.9
23505	450.7	34.661	34.665	8.785	8.736	26.895	0.0	38.5	2.33	38.6	26.40	2268.4	1638	2323	-9.9999	-9.9
23504	599.4	34.553	34.585	7.033	6.975	27.070	0.0	41.2	2.38	47.9	54.60	2270.7	1555	2326	-9.9999	-9.9
23503	798.5	34.545	34.552	5.394	5.326	27.276	0.0	41.2	2.46	76.6	73.50	2288.5	1540	2344	-9.9999	-9.9
23502	998.9	34.556	34.560	4.394	4.315	27.400	0.0	40.7	2.46	97.1	83.40	2304.7	1505	2366	-9.9999	-9.9
23501	998.9	34.556	34.561	4.394	4.315	27.400	0.0	39.6	2.40	93.5	84.80	2305.1	1511	2369	-9.9999	-9.9

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STATION	63	OPS NO. 923101119	LATITUDE	0° 30.9 S	TAik	QC	pH	TOC													
CAST	236	DATE 5-Nov-92	LONGITUDE	110° 0.36 W	μmol/kg	μmol/kg		μmol/kg													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAik μmol/kg	pH	TOC μmol/kg
23624	2.2	34.914	34.915	22.371	22.371	24.050	0.3	8.1	2	0.50	2	2.9	197.30	2	2045.7	2	413	2	2307	-9.9999	65.1
23623	9.0	34.922	34.931	22.186	22.184	24.108	0.2	8.3	2	0.59	2	3.3	190.90	2	2050.0	2	419	2	2309	-9.9999	-9.9
23622	20.3	34.948	34.949	21.650	21.646	24.278	0.4	9.0	2	0.70	2	3.8	179.90	2	2056.1	2	431	2	2311	-9.9999	61.6
23621	28.8	34.928	34.946	21.040	21.034	24.431	0.3	9.7	2	0.63	2	4.2	170.90	2	2063.5	2	446	2	2308	-9.9999	-9.9
23620	49.7	35.172	35.166	19.995	19.986	24.898	0.5	12.0	2	0.94	2	5.1	143.10	2	-9.0	9	502	D	2323	-9.9999	-9.9
23619	58.8	35.359	35.342	20.048	20.037	25.027	1.3	12.1	2	0.76	2	4.9	129.40	2	2114.5	2	535	2	2334	-9.9999	-9.9
23618	80.5	35.313	35.343	17.372	17.359	25.670	0.4	19.5	2	1.26	2	8.2	83.50	2	2166.0	2	720	2	2332	-9.9999	-9.9
23617	100.3	35.150	35.151	15.884	15.868	25.894	0.0	18.5	2	1.24	2	9.9	102.80	2	2149.3	2	686	2	2324	-9.9999	-9.9
23616	120.8	35.023	35.045	14.699	14.681	26.060	0.0	17.2	2	1.09	2	10.5	126.60	2	2138.4	2	650	2	2318	-9.9999	-9.9
23615	128.7	34.939	34.944	14.168	14.149	26.109	0.0	18.6	2	1.11	2	13.5	123.60	2	2139.9	2	684	2	2315	-9.9999	-9.9
23614	140.1	34.901	34.905	13.758	13.738	26.166	0.0	21.1	2	1.31	2	15.5	106.50	2	2157.2	2	759	2	2314	-9.9999	-9.9
23613	150.4	34.911	34.906	13.333	13.312	26.261	0.0	21.5	2	1.37	2	15.3	110.60	2	2160.9	2	766	2	2313	-9.9999	-9.9
23612	175.6	34.917	34.914	12.906	12.882	26.353	0.0	23.9	2	1.41	2	17.5	94.50	2	2175.3	2	851	2	2316	-9.9999	-9.9
23611	199.6	34.897	34.899	12.684	12.657	26.382	0.0	25.2	2	1.52	2	18.7	83.30	2	2185.0	2	915	2	2315	-9.9999	-9.9
23610	231.6	34.867	34.876	12.372	12.341	26.421	0.0	28.9	2	1.86	2	21.4	49.50	2	2211.3	2	1122	2	2310	-9.9999	-9.9
23609	259.8	34.853	34.858	12.066	12.032	26.469	0.0	32.2	2	1.91	2	23.3	29.40	2	2227.0	2	1291	2	2310	-9.9999	-9.9
23608	291.1	34.788	34.788	10.960	10.924	26.625	0.0	34.8	2	2.05	2	29.1	13.20	2	2251.6	2	1528	2	2313	-9.9999	-9.9
23607	329.6	34.743	34.749	10.373	10.334	26.694	0.0	35.2	2	2.08	2	31.4	20.40	2	2253.1	2	1528	2	2311	-9.9999	-9.9
23606	378.2	34.645	34.699	9.399	9.357	26.783	0.0	36.2	2	2.11	2	32.3	33.90	2	2251.9	2	1512	2	2317	-9.9999	-9.9
23605	451.2	34.661	34.664	8.786	8.737	26.895	0.0	38.8	2	2.35	2	36.5	27.10	2	2264.4	2	1627	2	2314	-9.9999	-9.9
23604	601.9	34.581	34.587	7.119	7.061	27.081	0.0	38.9	2	2.35	2	44.5	54.80	2	2266.4	2	1554	2	2326	-9.9999	-9.9
23603	795.5	34.549	34.554	5.695	5.626	27.243	0.0	39.9	2	2.61	2	65.3	69.00	2	2281.7	2	1554	2	2336	-9.9999	-9.9
23602	1001.5	34.549	34.555	4.594	4.514	27.373	0.0	40.2	2	2.71	2	84.3	85.90	2	2294.8	2	1467	2	2365	-9.9999	-9.9
23601	1001.5	34.549	34.555	4.594	4.514	27.373	0.0	39.8	2	2.55	2	79.8	86.40	2	2294.7	2	1481	2	2361	-9.9999	-9.9

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STATION 64
CAST 237

OPS NO. 923110546
DATE 6-Nov-92

LATITUDE 1° 0 S
LONGITUDE 109° 59.97 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2		DIC μmol/kg	fCO2 @20°C μatm	TAIik μmol/kg	pH	TOC μmol/kg			
											QC μmol/L	QC μmol/L								
23724	2.7	34.880	34.877	22.764	22.763	23.912	0.2	7.9	0.31	2.1	2	206.20	2	2039.3	2	405	2	2307	-9.9999	67.9
23723	10.0	34.880	34.879	22.690	22.688	23.934	0.2	7.9	0.40	2.1	2	205.10	2	2040.7	2	406	2	2307	-9.9999	62.4
23722	19.5	34.907	34.897	22.414	22.410	24.033	0.1	7.7	0.40	2.3	2	199.50	2	2041.4	2	408	2	2309	-9.9999	65.6
23721	30.1	34.975	34.972	21.977	21.971	24.208	0.3	8.8	0.40	2.8	2	187.70	2	2052.2	2	422	2	2310	-9.9999	59.0
23720	39.2	35.074	35.072	21.876	21.868	24.312	0.3	9.0	0.46	2.9	2	183.90	2	2061.0	2	433	2	2318	-9.9999	57.0
23719	60.0	35.195	35.189	21.450	21.438	24.524	0.7	10.1	0.63	3.2	2	160.30	2	2085.9	2	473	2	2327	-9.9999	57.3
23718	78.8	35.175	35.177	15.673	15.661	25.960	0.0	13.6	1.35	11.2	2	63.30	2	2179.2	2	861	2	2322	-9.9999	48.6
23717	100.9	35.077	35.083	14.504	14.489	26.143	0.0	21.0	1.39	11.3	2	103.20	2	2157.0	2	735	2	2322	-9.9999	47.7
23716	119.9	34.988	34.990	13.877	13.860	26.208	0.0	20.3	1.19	13.1	2	117.80	2	2148.6	2	709	2	2320	-9.9999	46.4
23715	129.6	34.973	34.974	13.683	13.665	26.237	0.0	20.3	1.19	13.2	2	118.20	2	2150.0	2	718	2	2314	-9.9999	47.7
23714	139.8	34.945	34.947	13.487	13.467	26.256	0.0	20.3	1.19	13.9	2	118.70	2	2153.3	2	723	2	2316	-9.9999	47.2
23713	149.7	34.939	34.941	13.329	13.308	26.284	0.0	21.3	1.35	14.1	2	111.30	2	2156.4	2	760	2	2317	-9.9999	44.9
23712	176.4	34.917	34.919	12.876	12.852	26.359	0.0	25.2	1.74	16.8	2	82.90	2	2180.9	2	904	2	2309	-9.9999	-9.9
23711	199.5	34.893	34.896	12.643	12.616	26.387	0.0	26.3	1.78	17.8	2	74.90	2	2194.8	2	958	2	2313	-9.9999	-9.9
23710	229.6	34.864	34.886	12.532	12.501	26.387	0.0	26.0	1.96	19.7	2	64.40	2	2198.4	2	1025	2	2312	-9.9999	-9.9
23709	259.5	34.875	34.878	12.418	12.383	26.419	0.0	29.3	2.09	21.3	2	50.50	2	2211.5	2	1116	2	2313	-9.9999	-9.9
23708	289.7	34.855	34.853	11.980	11.942	26.488	0.0	32.0	2.33	24.0	2	25.00	2	2234.0	2	1334	2	2313	-9.9999	-9.9
23707	330.9	34.775	34.776	10.638	10.598	26.673	0.0	33.8	2.46	27.2	2	29.30	2	2245.8	2	1436	2	2313	-9.9999	-9.9
23706	379.5	34.706	34.712	9.527	9.484	26.809	0.0	35.4	2.57	29.8	2	40.00	2	2248.7	2	1450	2	2317	-9.9999	-9.9
23705	448.2	34.659	34.663	8.766	8.718	26.896	0.0	38.3	2.76	36.0	2	27.00	2	2266.5	2	1631	2	2319	-9.9999	-9.9
23704	599.3	34.589	34.594	7.279	7.220	27.064	0.0	40.1	2.83	44.9	2	49.60	2	-9.0	9	1577	D	2322	-9.9999	-9.9
23703	798.5	34.541	34.546	5.613	5.544	27.247	0.0	39.1	2.81	64.1	2	81.60	2	2275.3	3	1463	2	2354	-9.9999	-9.9
23702	1005.8	34.558	34.563	4.249	4.171	27.417	0.0	40.0	2.76	91.1	2	84.40	2	2306.7	2	1511	2	2369	-9.9999	-9.9
23701	1005.8	34.558	34.564	4.249	4.171	27.417	0.0	39.8	2.72	89.2	2	84.90	2	2306.2	2	1511	2	2373	-9.9999	-9.9

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION CAST 65 244
 OPS NO. 923112331
 DATE 6-Nov-92

LATITUDE 2° 5.6 S
 LONGITUDE 109° 54.1 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	TAik μmol/kg	pH	TOC μmol/kg		
																			QC	QC
24424	3.3	34.830	34.829	23.300	23.299	23.720	0.2	7.5	0.26	2.4	2	213.40	2	2034.3	2	389	2	2300	-9.9999	65.0
24423	9.0	34.825	34.825	22.985	22.983	23.807	0.2	7.4	0.33	2.4	2	212.80	2	2032.6	2	388	2	2303	-9.9999	66.3
24422	20.5	34.821	34.824	22.840	22.836	23.847	0.2	7.4	0.33	2.4	2	211.30	2	2032.7	2	388	2	2301	-9.9999	68.3
24420	28.7	34.831	34.829	22.629	22.623	23.915	0.2	7.3	0.40	2.5	2	207.20	2	2032.4	2	391	2	2303	-9.9999	64.6
24421	39.2	34.853	34.851	22.328	22.320	24.018	0.3	7.5	0.40	2.8	2	200.20	2	2039.3	2	400	2	2304	-9.9999	62.0
24419	58.9	35.106	35.093	21.945	21.933	24.319	0.3	9.8	0.55	2.7	2	190.50	2	2070.1	2	441	2	2315	-9.9999	59.0
24418	79.9	35.147	35.136	16.400	16.387	25.772	0.9	21.5	1.06	11.6	2	79.70	2	2170.2	2	795	2	2322	-9.9999	51.4
24417	100.0	35.045	35.051	14.634	14.619	26.090	0.2	24.8	1.33	15.2	2	67.50	2	2183.6	2	888	2	2318	-9.9999	47.0
24416	118.7	35.000	35.000	14.069	14.052	26.177	0.0	24.3	1.35	16.3	2	74.70	2	2180.6	2	878	2	2315	-9.9999	48.0
24415	129.5	34.977	34.980	13.764	13.746	26.223	0.0	25.0	1.35	16.9	2	71.90	2	2184.7	2	908	2	2314	-9.9999	49.9
24414	151.3	34.959	34.960	13.523	13.502	26.260	0.0	25.8	1.37	17.7	2	70.80	2	2186.4	2	928	2	2318	-9.9999	46.9
24413	174.0	34.930	34.934	13.266	13.242	26.290	0.0	27.8	1.41	19.5	2	54.40	2	2200.6	2	1038	2	2315	-9.9999	50.2
24412	198.3	34.924	34.924	13.088	13.061	26.322	0.0	30.5	1.63	21.4	2	31.40	2	2217.2	2	1191	2	2308	-9.9999	47.4
24411	230.6	34.909	34.911	12.848	12.817	26.360	0.0	31.1	1.65	22.6	2	21.60	2	2227.0	2	1275	2	2310	-9.9999	46.3
24410	260.2	34.888	34.890	12.423	12.388	26.428	0.0	32.3	1.91	25.6	2	9.10	2	2241.8	2	1426	2	2311	-9.9999	46.9
24409	289.8	34.874	34.876	12.187	12.149	26.463	0.0	33.3	1.93	26.4	2	6.00	2	2246.7	2	1481	2	2305	-9.9999	45.5
24408	329.6	34.808	34.814	11.176	11.135	26.602	0.0	34.4	2.11	31.7	2	5.70	2	2260.7	2	1613	2	2313	-9.9999	44.6
24407	380.3	34.725	34.726	9.694	9.650	26.797	0.0	37.2	2.24	36.4	2	11.60	2	2269.4	2	1699	2	2309	-9.9999	45.7
24406	450.6	34.632	34.639	8.277	8.230	26.950	0.0	37.8	2.37	42.2	2	39.80	3	2262.9	2	1564	2	2319	-9.9999	42.8
24405	598.0	34.589	34.592	7.333	7.274	27.057	0.0	38.0	2.37	46.2	2	58.40	2	2261.9	2	1507	2	2324	-9.9999	40.4
24404	799.8	34.543	34.549	5.546	5.477	27.257	0.0	40.0	2.48	70.1	2	76.60	2	2280.7	2	1516	2	2337	-9.9999	39.9
24403	1000.6	34.555	34.560	4.565	4.485	27.381	0.0	40.8	2.57	93.6	2	76.00	2	2304.5	2	1565	2	2364	-9.9999	37.8
24402	1000.5	34.555	34.560	4.564	4.484	27.381	0.0	40.9	2.66	94.1	2	75.60	2	2304.5	2	1558	2	2366	-9.9999	39.5
24401	1000.5	34.555	34.560	4.564	4.484	27.381	0.0	40.3	2.63	93.2	2	75.70	2	2304.8	2	1564	2	2359	-9.9999	-9.9

NOAA Equatorial Pacific Process Study Boreal Autumn 1992

STATION CAST	66 247	OPS NO. 923120909 DATE 7-Nov-92	LATITUDE LONGITUDE	2° 59.51 S 110° 1.11 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 µatm	QC	QC	QC	QC	QC	QC	Talk µmol/kg	pH	TOC µmol/kg
24724	2.9	34.789	34.790	22.990	22.989	23.778	0.2	7.1	0.00	2.2	2.2	212.30	2026.7	385	2	2	2	2	2	2300	-9.9999	61.2	
24723	10.0	34.789	34.789	22.976	22.974	23.783	0.2	7.3	0.00	2.2	2.2	211.90	2028.7	384	2	2	2	2	2	2296	-9.9999	-9.9	
24722	20.1	34.795	34.788	22.964	22.960	23.791	0.2	7.3	0.30	2.3	2.3	212.00	2027.0	381	2	2	2	2	2	2300	-9.9999	62.6	
24721	29.9	34.794	34.791	22.826	22.820	23.831	0.2	7.6	0.32	2.3	2.3	209.40	2027.3	386	2	2	2	2	2	2296	-9.9999	-9.9	
24720	38.7	34.802	34.801	22.640	22.632	23.890	0.2	7.7	0.36	2.4	2.4	206.40	2031.7	391	2	2	2	2	2	2300	-9.9999	-9.9	
24719	59.3	35.165	35.161	21.439	21.427	24.504	0.5	11.0	0.60	2.3	3.5	175.60	2089.0	479	2	2	2	2	2	2324	-9.9999	-9.9	
24718	79.8	35.096	35.097	16.189	16.176	25.782	0.9	21.6	0.84	2	11.6	82.00	2170.4	797	2	2	2	2	2	2315	-9.9999	-9.9	
24717	100.8	35.011	35.007	14.405	14.390	26.114	0.3	24.1	1.07	2	14.6	74.30	2176.8	864	2	2	2	2	2	2316	-9.9999	-9.9	
24716	121.0	34.981	34.984	14.115	14.097	26.153	0.0	24.1	1.11	2	15.3	78.10	2175.8	859	2	2	2	2	2	2314	-9.9999	-9.9	
24715	129.2	34.978	34.979	14.026	14.007	26.169	0.0	24.3	1.16	2	15.6	79.50	2175.8	861	2	2	2	2	2	2311	-9.9999	-9.9	
24714	138.6	34.981	34.982	13.974	13.954	26.183	0.0	24.7	1.18	2	15.7	75.90	2179.2	874	2	2	2	2	2	2318	-9.9999	-9.9	
24713	149.5	34.973	34.973	13.878	13.857	26.197	0.0	24.9	1.20	2	15.8	76.80	2177.4	881	2	2	2	2	2	2315	-9.9999	-9.9	
24712	173.7	34.957	34.958	13.613	13.588	26.240	0.0	25.5	1.29	2	16.6	75.10	2181.0	901	2	2	2	2	2	2310	-9.9999	-9.9	
24711	199.8	34.987	34.942	13.337	13.309	26.321	0.0	26.4	1.34	2	17.6	66.60	2190.2	960	2	2	2	2	2	2315	-9.9999	-9.9	
24710	229.4	34.914	34.914	12.927	12.896	26.348	0.0	31.5	-9.99	4	21.7	20.70	2227.2	1287	2	2	2	2	2	2307	-9.9999	-9.9	
24709	258.9	34.900	34.904	12.714	12.679	26.380	0.0	32.4	1.94	2	22.6	11.30	2235.4	1376	2	2	2	2	2	2311	-9.9999	-9.9	
24708	289.7	34.879	34.883	12.307	12.268	26.444	0.0	33.4	2.05	2	24.3	7.50	2242.7	1453	2	2	2	2	2	2315	-9.9999	-9.9	
24707	331.8	34.827	34.825	11.305	11.263	26.593	0.0	34.1	2.25	2	29.3	6.60	2256.3	1578	2	2	2	2	2	2312	-9.9999	-9.9	
24706	381.1	34.724	34.752	10.133	10.088	26.722	0.0	37.2	2.27	2	32.9	11.30	2263.3	1654	2	2	2	2	2	2316	-9.9999	-9.9	
24705	447.1	34.662	34.667	8.607	8.559	26.923	0.0	40.5	2.59	2	39.1	11.50	2277.5	1812	2	2	2	2	2	2317	-9.9999	-9.9	
24704	598.6	34.573	34.580	6.852	6.795	27.111	0.0	41.1	2.65	2	49.7	51.90	2270.1	1591	2	2	2	2	2	2323	-9.9999	-9.9	
24703	801.2	34.543	34.551	5.342	5.274	27.281	0.0	41.9	2.74	2	69.3	70.90	2285.6	1563	2	2	2	2	2	2348	-9.9999	-9.9	
24702	1007.5	34.546	34.554	4.352	4.273	27.396	0.0	40.5	2.61	2	84.7	93.00	2295.3	1437	2	2	2	2	2	2365	-9.9999	-9.9	
24701	1007.5	34.546	34.554	4.352	4.273	27.396	0.0	40.2	2.61	2	88.0	92.70	2289.2	1453	2	2	2	2	2	2362	-9.9999	-9.9	

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION 67
 CAST 253

OPS NO. 923130454
 DATE 8-Nov-92

LATITUDE 3° 59.97 S
 LONGITUDE 109° 58.35 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	O2 QC μmol/L	DIC μmol/kg	DIC QC μmol/kg	fCO2 @20°C μatm	TAIk μmol/kg	pH	TOC μmol/kg	
																				Potential
25312	173.5	34.931	34.919	13.172	13.148	26.310	0.0	29.0	2	1.35	2	17.3	2	2202.4	2	1158	2	2316	-9.9999	48.4
25311	199.7	34.921	34.930	13.017	12.990	26.334	0.0	30.3	2	1.73	2	17.9	2	2213.0	2	1226	2	2310	-9.9999	49.6
25310	228.5	34.909	34.909	12.823	12.792	26.365	0.0	31.4	2	1.86	2	19.2	2	2220.6	2	1308	2	2312	-9.9999	49.0
25309	257.9	34.902	34.898	12.605	12.570	26.403	0.0	32.1	2	1.86	2	22.1	2	2229.1	2	1407	2	2313	-9.9999	49.6
25308	288.2	34.878	34.875	12.176	12.138	26.468	0.0	32.3	2	2.04	2	23.6	2	2239.2	2	1489	2	2311	-9.9999	47.5
25307	328.9	34.855	34.850	11.707	11.665	26.541	0.0	32.4	2	2.15	2	24.1	2	2246.6	2	1543	2	2312	-9.9999	-9.9
25306	378.2	34.786	34.781	10.573	10.527	26.694	0.0	33.7	2	2.18	2	28.2	2	2252.8	2	1688	2	2312	-9.9999	-9.9
25305	450.0	34.711	34.712	9.420	9.369	26.832	0.0	38.8	2	2.29	2	31.4	2	2266.9	2	1771	2	2314	-9.9999	-9.9
25304	597.8	34.580	34.582	6.876	6.819	27.113	0.0	40.8	2	2.56	2	46.6	2	2275.1	2	1744	2	2336	-9.9999	-9.9
25303	800.2	34.541	34.542	5.307	5.240	27.283	0.0	39.4	2	2.51	2	60.7	2	2280.7	2	1514	2	2345	-9.9999	-9.9
25302	1000.7	-9.999	-9.999	4.224	-9.999	-9.999	-9.9	-9.9	9	-9.99	9	-9.9	9	2281.5	2	-9	9	-9	-9.9999	-9.9
25301	1000.4	34.554	34.557	4.226	4.148	27.416	0.0	38.5	2	2.51	2	83.0	2	2297.1	2	1436	2	2369	-9.9999	-9.9

NOAA Equatorial Pacific Process Study Boreal Autumn 1992

STATION CAST	67 254	OPS NO. 923130649 DATE 8-Nov-92	LATITUDE LONGITUDE	4° 0.04 S 109° 58.54 W	Potential Temp °C	Temp °C	Salinity CTD	Salinity Bottle	Salinity	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	TAIk µmol/kg	pH	TOC µmol/kg
25412	2.3	34.776	34.778	23.110	23.110	23.734	0.0	2	7.2	2	0.47	2	2.5	2	213.00	2	2030.9	2	383	2	2297	-9.9999	64.6
25411	95.0	34.776	34.778	23.105	23.086	23.741	0.0	2	6.8	2	0.43	2	2.6	2	213.20	2	2030.2	2	383	2	2300	-9.9999	65.4
25410	20.4	34.776	34.777	23.058	23.054	23.750	0.0	2	6.9	2	0.43	2	2.6	2	212.90	2	2046.2	3	383	2	2299	-9.9999	68.1
25409	29.6	34.793	34.789	22.996	22.990	23.781	0.0	2	7.6	2	0.45	2	2.6	2	212.60	2	2053.2	3	387	2	2308	-9.9999	64.8
25408	37.9	34.982	34.960	23.093	23.085	23.897	0.0	2	8.1	2	0.51	2	2.5	2	212.70	2	2042.7	2	396	2	2313	-9.9999	-9.9
25407	59.0	35.366	35.253	18.125	18.115	25.525	0.9	2	16.6	2	0.99	2	6.6	2	105.10	2	2150.7	2	669	2	2334	-9.9999	60.1
25406	79.7	35.041	35.051	14.755	14.743	26.061	0.8	2	24.6	2	1.53	2	13.1	2	58.80	2	2192.2	2	942	2	2317	-9.9999	52.9
25405	99.3	34.992	34.993	14.076	14.062	26.169	0.3	2	25.5	2	1.53	2	14.4	2	63.80	2	2189.6	2	942	2	2322	-9.9999	50.1
25404	119.3	34.974	34.973	13.783	13.766	26.217	0.0	2	25.8	2	1.53	2	15.1	2	65.10	2	2189.2	2	952	2	2314	-9.9999	51.8
25403	129.7	34.964	34.964	13.657	13.639	26.235	0.0	2	26.1	2	1.62	2	15.5	2	62.90	2	2192.0	2	969	2	2313	-9.9999	53.5
25402	139.0	34.961	34.962	13.583	13.563	26.249	0.0	2	27.6	2	1.73	2	16.1	2	50.50	2	2201.3	2	1044	2	2311	-9.9999	55.6
25401	150.6	34.952	34.954	13.479	13.458	26.263	0.0	2	27.7	2	1.80	2	17.0	2	51.80	2	2203.9	2	1058	2	2311	-9.9999	52.5

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STATION CAST	68 255	OPS NO. 923131154 DATE 8-Nov-92	LATITUDE LONGITUDE	4° 59.86 S 110° 2.13 W																			
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	NO3 QC	PO4 µmol/L	PO4 QC	H4SiO4 µmol/L	H4SiO4 QC	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 @20°C µatm	fCO2 QC	TAlk µmol/kg	TAlk QC	pH	TOC µmol/kg
25512	175.4	34.884	34.883	12.315	12.292	26.443	0.0	30.8	2	0.89	4	20.2	2	29.80	2	2225.4	2	1262	2	2311	2	-9.9999	-9.9
25511	200.9	34.876	34.876	12.172	12.146	26.465	0.0	30.9	2	1.46	2	21.2	2	35.20	2	2223.5	2	1245	2	2310	2	-9.9999	-9.9
25510	230.0	34.864	34.864	11.929	11.899	26.503	0.0	31.2	2	1.77	2	22.0	2	33.00	2	2226.9	2	1286	2	2307	2	-9.9999	-9.9
25509	259.0	34.853	34.852	11.668	11.635	26.545	0.0	30.1	2	1.64	2	20.6	2	47.60	2	2220.2	2	1207	2	2309	2	-9.9999	-9.9
25508	287.8	34.826	34.831	11.302	11.266	26.592	0.0	31.9	2	1.80	2	22.4	2	32.80	2	2233.4	2	1346	2	2312	2	-9.9999	-9.9
25507	329.1	34.784	34.783	10.583	10.543	26.689	0.0	35.0	2	1.93	2	27.4	2	0.00	3	2251.3	2	1557	2	2308	2	-9.9999	-9.9
25506	379.3	34.741	34.740	9.875	9.831	26.779	0.0	37.0	2	2.09	2	30.9	2	8.90	2	2264.2	2	1701	2	2313	2	-9.9999	-9.9
25505	449.7	34.687	34.686	8.972	8.923	26.886	0.0	38.7	2	2.31	2	33.4	2	12.70	2	2276.0	2	1750	2	2312	2	-9.9999	-9.9
25504	599.7	34.580	34.579	6.780	6.724	27.126	0.0	42.6	2	2.60	2	45.4	2	26.70	2	2286.3	3	1832	2	2326	2	-9.9999	-9.9
25503	798.6	34.537	34.543	5.207	5.140	27.292	0.0	40.4	2	2.44	2	65.2	2	75.80	2	2285.0	3	1541	2	2342	2	-9.9999	-9.9
25502	1000.1	34.549	34.552	4.299	4.221	27.404	0.0	39.5	2	2.42	2	82.5	2	96.50	2	2291.2	2	1417	3	2363	2	-9.9999	-9.9
25501	1000.6	34.551	34.552	4.298	4.220	27.406	0.0	39.0	2	2.44	2	87.0	2	97.70	2	2288.2	2	1402	3	2355	2	-9.9999	-9.9

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STATION CAST	68 258	OPS NO. 923131345 DATE 8-Nov-92	LATITUDE LONGITUDE	4° 59.95 S 110° 1.72 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	Talk µmol/kg	pH	TOC µmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	Talk µmol/kg	pH	TOC µmol/kg	
25812	3.0	35.112	-9.999	23.688	-9.999	0.1	8.3	0.35	0.9	217.10	2043.8	383	E	2320	-9.9999	67.1	
25811	10.2	35.111	35.105	23.691	-9.999	0.1	8.2	0.45	0.9	217.20	2045.2	382	E	2317	-9.9999	-9.9	
25810	20.3	35.111	35.104	23.693	-9.999	0.1	8.2	0.47	1.0	216.90	2044.1	384	E	2319	-9.9999	66.5	
25809	30.4	35.172	35.153	23.685	-9.999	0.1	8.2	0.53	0.9	216.80	2045.6	386	E	2322	-9.9999	-9.9	
25808	40.5	35.183	35.176	23.669	-9.999	0.2	8.4	0.44	0.8	216.10	2048.5	387	E	2324	-9.9999	-9.9	
25807	60.8	35.552	35.389	21.610	-9.999	0.2	6.7	0.50	0.8	201.40	2054.6	378	E	2336	-9.9999	-9.9	
25806	80.0	35.485	35.411	18.881	-9.999	1.7	12.6	0.91	3.2	117.10	2143.3	611	E	2340	-9.9999	-9.9	
25805	99.6	35.162	35.170	15.891	-9.999	0.4	19.5	1.25	6.8	72.30	2180.2	845	E	2323	-9.9999	-9.9	
25804	120.3	35.011	35.010	13.603	-9.999	0.0	27.7	1.59	16.1	37.30	2211.1	1113	E	2312	-9.9999	-9.9	
25803	130.1	34.962	34.964	13.180	-9.999	0.0	29.4	1.55	18.0	28.80	2217.3	1196	E	2313	-9.9999	-9.9	
25802	140.9	35.001	34.927	12.901	-9.999	0.0	30.4	1.71	19.7	25.40	2222.4	1250	E	2302	-9.9999	-9.9	
25801	150.9	34.913	34.914	12.726	-9.999	0.0	30.8	1.89	28.2	26.50	2224.0	1267	E	2306	-9.9999	-9.9	

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STATION CAST	69 264	OPS NO DATE	923132339 8-Nov-92	LATITUDE LONGITUDE	6° 0.01 S 110° 0.01 W																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Potential	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
26412	173.3	34.895	34.897	12.233	12.210		12.210	26.468	0.0	28.2	2	1.86	19.3	29.60	2	2230.9	2	1298	2	2313	-9.9999	44.2
26411	198.3	34.832	34.873	11.878	11.852		11.852	26.487	0.0	29.8	2	1.90	19.9	39.30	2	2226.5	2	1253	2	2314	-9.9999	44.5
26410	229.0	34.831	34.830	11.255	11.226		11.226	26.603	0.0	30.4	2	1.92	22.2	43.50	2	2229.5	2	1272	2	2314	-9.9999	47.4
26409	259.8	34.801	34.798	10.822	10.790		10.790	26.659	0.0	33.2	2	1.96	26.5	21.50	2	2251.2	2	1485	2	2316	-9.9999	45.2
26408	290.7	34.760	34.779	10.509	10.474		10.474	26.683	0.0	34.9	2	2.14	30.3	14.00	2	2260.8	2	1594	2	2319	-9.9999	46.2
26407	327.6	34.760	34.759	10.188	10.149		10.149	26.739	0.0	35.3	2	-9.99	31.8	12.30	2	2263.2	2	1652	2	2313	-9.9999	47.3
26406	378.3	34.728	34.728	9.662	9.619		9.619	26.804	0.0	37.2	2	2.23	33.6	8.90	2	2270.4	2	1731	2	2318	-9.9999	48.9
26405	451.5	34.670	34.667	8.589	8.541		8.541	26.933	0.0	40.8	2	2.41	36.1	6.20	2	2283.9	2	1880	2	2316	-9.9999	-9.9
26404	598.5	34.585	34.584	6.827	6.770		6.770	27.124	0.0	42.7	2	2.42	50.6	24.70	2	2290.4	2	1868	2	2326	-9.9999	45.9
26403	798.7	34.543	34.545	5.370	5.302		5.302	27.278	0.0	39.9	2	2.40	63.5	73.00	2	2284.2	2	1543	2	2341	-9.9999	39.9
26402	1000.2	34.547	34.550	4.426	4.347		4.347	27.389	0.0	39.6	2	2.36	78.7	87.20	2	2296.3	2	1484	D	2363	-9.9999	39.9
26401	1001.3	34.547	34.550	4.411	4.332		4.332	27.391	0.0	40.8	2	2.51	85.8	88.10	2	2296.2	2	1472	2	2358	-9.9999	-9.9

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STATION CAST	69 266	OPS NO. 923140128 DATE 9-Nov-92	LATITUDE LONGITUDE	5° 59.9 S 110° 0.04 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
26612	1.5	35.322	35.324	24.245	24.245	23.814	0.0	5.8	2	0.28	2	0.0	2	216.60	2	2030.0	2	339	2	2335	-9.9999	70.8
26611	9.8	35.324	35.324	24.244	24.242	23.816	0.0	5.8	2	0.40	2	0.0	2	216.30	2	2030.9	2	339	2	2335	-9.9999	68.0
26610	19.8	35.320	35.319	24.217	24.213	23.822	0.0	6.1	2	0.44	2	0.0	2	216.50	2	2030.4	2	339	2	2338	-9.9999	72.2
26609	29.1	35.328	35.318	24.211	24.205	23.831	0.0	6.0	2	0.44	2	0.0	2	216.30	2	2031.0	2	339	2	2335	-9.9999	72.5
26608	40.1	35.307	35.308	24.149	24.141	23.834	0.1	5.9	2	0.49	2	0.0	2	216.60	2	2031.2	2	340	2	2337	-9.9999	69.0
26607	59.1	35.306	35.307	24.137	24.125	23.838	0.1	6.2	2	0.40	2	0.0	2	215.70	2	2030.5	2	342	2	2333	-9.9999	66.8
26606	78.8	35.675	35.675	22.407	22.391	24.622	0.6	4.7	2	0.54	2	0.0	2	190.00	3	2073.6	2	377	2	2366	-9.9999	68.2
26605	98.7	35.608	35.628	19.552	19.534	25.349	1.4	7.1	2	0.61	2	0.5	2	161.30	3	2108.1	2	479	2	2362	-9.9999	67.2
26604	119.9	35.204	35.224	16.344	16.325	25.831	0.0	17.7	2	1.12	2	5.1	2	86.90	2	2172.8	2	773	2	2328	-9.9999	54.5
26603	129.4	35.070	35.067	14.880	14.861	26.057	0.0	24.5	2	1.53	2	10.2	2	33.00	2	2216.2	2	1119	2	2316	-9.9999	53.6
26602	139.8	34.992	34.999	13.825	13.805	26.222	0.0	26.9	2	-9.99	9	14.0	2	17.50	2	2232.0	2	1286	2	2317	-9.9999	51.1
26601	150.4	34.946	34.951	13.167	13.146	26.322	0.0	28.5	2	1.95	2	16.5	2	14.90	2	2238.7	2	1366	2	2316	-9.9999	47.9

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STATION CAST	70 267	OPS NO. 923141029 DATE 9-Nov-92	LATITUDE LONGITUDE	8° 0.05 S 109° 59.96 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
26712	172.0	34.911	34.909	12.502	12.479	26.428	0.0	30.1	2	1.43	2	18.7	2	18.40	2	2233.0	2	1359	2	2312	-9.9999	49.5
26711	201.2	34.889	34.888	12.136	12.110	26.482	0.0	29.9	2	1.67	2	19.3	2	34.30	2	2225.9	2	1258	2	2310	-9.9999	52.2
26710	228.0	34.859	34.858	11.718	11.689	26.539	0.0	32.5	2	1.72	2	21.8	2	24.20	2	2237.3	2	1377	2	2312	-9.9999	46.1
26709	257.4	34.838	34.837	11.386	11.354	26.585	0.0	33.3	2	1.84	2	24.2	2	18.10	2	2244.2	2	1447	2	2311	-9.9999	48.4
26708	287.5	34.814	34.815	11.079	11.043	26.623	0.0	34.1	2	1.99	2	26.9	2	15.00	2	2246.8	2	1520	2	2313	-9.9999	47.9
26707	332.2	34.785	34.783	10.570	10.530	26.693	0.0	34.9	2	2.02	2	28.4	2	10.90	2	2257.2	2	1615	2	2313	-9.9999	45.2
26706	380.0	34.749	34.749	10.016	9.972	26.761	0.0	36.1	2	2.25	2	31.5	2	7.10	2	2266.8	2	1718	2	2312	-9.9999	-9.9
26705	445.7	34.708	34.706	9.331	9.281	26.844	0.0	37.7	2	2.22	2	32.3	2	10.00	2	2271.9	2	1757	2	2312	-9.9999	-9.9
26704	597.5	34.602	34.601	7.430	7.371	27.053	0.0	41.7	2	2.32	2	40.8	2	19.50	2	2282.6	2	1850	2	2320	-9.9999	-9.9
26703	798.4	34.543	34.544	5.602	5.533	27.250	0.0	42.1	2	2.32	2	59.3	2	57.30	2	2286.2	2	1657	2	2335	-9.9999	-9.9
26702	1000.9	34.545	34.546	4.548	4.468	27.374	0.0	40.7	2	2.26	2	75.1	2	77.10	2	2296.0	2	1558	2	2358	-9.9999	-9.9
26701	1000.2	34.542	34.546	4.557	4.477	27.371	0.0	41.1	2	2.30	2	74.5	2	76.00	2	2297.7	2	1551	2	2354	-9.9999	-9.9

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STATION OPS NO 923141219 LATTITUDE 7° 59.68 S
 CAST 270 DATE 9-Nov-92 LONGITUDE 110° 0.16 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC μmol/kg	DIC μmol/kg	QC μatm	fCO2 @20°C	TALK μmol/kg	pH	TOC μmol/kg
27012	2.5	35.236	35.234	24.083	24.082	23.797	0.1	8.5	0.35	0.6	-9.99	2041.9	2041.9	-9	2333	-9.9999	69.0	
27011	9.1	35.236	35.235	24.088	24.086	23.796	0.2	8.3	0.35	0.6	217.20	2041.2	2041.2	366	2330	-9.9999	71.6	
27010	20.0	35.235	35.233	24.077	24.073	23.799	0.2	8.7	0.36	0.6	218.20	2042.7	2042.7	366	2330	-9.9999	67.3	
27009	28.8	35.236	35.235	24.091	24.085	23.797	0.2	8.8	0.36	0.8	216.80	2041.1	2041.1	366	2331	-9.9999	67.9	
27008	39.7	35.230	35.228	22.952	22.944	24.126	0.2	8.8	0.41	0.7	216.90	2121.7	2121.7	368	2329	-9.9999	65.1	
27007	59.0	35.234	35.230	23.860	23.848	23.865	0.2	8.5	0.41	0.9	215.90	2041.8	2041.8	370	2327	-9.9999	64.3	
27006	79.7	35.801	35.800	21.876	21.860	24.867	0.7	3.3	-9.99	0.0	192.60	2076.7	2076.7	373	2374	-9.9999	67.1	
27005	102.9	35.616	35.620	19.599	19.580	25.343	1.2	6.5	0.43	0.0	171.80	2108.9	2108.9	463	2360	-9.9999	56.6	
27004	116.8	35.346	35.361	17.616	17.596	25.637	0.5	14.9	0.74	3.2	117.80	2147.1	2147.1	633	2340	-9.9999	55.6	
27003	129.2	35.173	35.166	16.127	16.106	25.857	0.2	16.6	0.89	4.9	106.00	2156.9	2156.9	714	2326	-9.9999	53.1	
27002	140.2	35.043	35.049	14.883	14.862	26.036	0.0	24.4	1.37	9.9	35.90	2211.0	2211.0	1109	2316	-9.9999	51.5	
27001	149.5	34.985	34.988	13.970	13.948	26.187	0.0	27.6	1.50	13.9	15.40	2229.9	2229.9	1306	2312	-9.9999	50.5	

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STATION	71	OPS NO. 923150233	LATITUDE	10° 0.03 S												
CAST	276	DATE 10-Nov-92	LONGITUDE	110° 0.11 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
27612	172.8	34.953	34.954	14.516	14.490	26.047	0.0	18.4	0.83	6.4	84.80	2175.5	866	2314	-9.9999	45.6
27611	198.8	34.824	34.830	12.688	12.661	26.325	0.0	26.6	1.46	17.9	8.40	2245.0	1494	2310	-9.9999	48.1
27610	228.8	34.813	34.806	11.695	11.666	26.508	0.0	30.0	1.61	22.3	18.80	2244.6	1469	2314	-9.9999	44.3
27609	259.1	34.805	34.778	10.903	10.871	26.647	0.0	32.5	1.56	23.8	38.40	2233.9	1331	2313	-9.9999	46.3
27608	289.9	34.776	34.799	10.479	10.444	26.701	0.0	33.8	1.62	26.6	33.80	2242.5	1416	2314	-9.9999	41.8
27607	330.6	34.746	34.746	9.995	9.957	26.761	0.0	36.3	1.80	31.0	13.90	2263.2	1645	2313	-9.9999	41.5
27606	378.9	34.722	34.720	9.593	9.550	26.811	0.0	37.1	1.92	32.5	14.70	2266.5	1688	2315	-9.9999	41.6
27605	449.8	34.674	34.673	8.798	8.749	26.903	0.0	39.4	1.96	34.4	21.60	2268.1	1699	2314	-9.9999	43.5
27604	599.0	34.596	34.593	7.289	7.230	27.069	0.0	42.7	2.09	46.0	23.20	2284.7	1837	2319	-9.9999	39.7
27603	799.2	34.544	34.541	5.722	5.652	27.236	0.0	44.4	2.13	60.8	49.20	2290.6	1738	2331	-9.9999	39.8
27602	1003.1	34.538	34.540	4.661	4.580	27.357	0.0	42.9	2.06	76.5	72.30	2300.2	1598	2351	-9.9999	35.6
27601	1002.4	34.538	34.539	4.663	4.582	27.356	0.0	43.1	2.07	75.5	73.80	2298.5	1588	2353	-9.9999	35.9

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STATION CAST	71 278	OFS NO 923150422 DATE 10-Nov-92	LATITUDE LONGITUDE	9° 59.91 S 109° 59.94 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
27812	3.1	35.094	35.092	23.890	23.889	23.747	0.2	9.5	0.51	0.6	219.30	2042.9	379	2	2324	-9.9999	68.3
27811	9.5	35.095	35.092	23.885	23.883	23.750	0.2	9.3	0.50	0.5	219.20	2043.0	380	2	2321	-9.9999	68.5
27810	19.2	35.093	35.091	23.888	23.884	23.748	0.2	9.5	0.51	0.7	219.30	2043.6	380	2	2325	-9.9999	65.3
27809	30.1	35.085	35.084	23.765	23.759	23.779	0.3	9.5	0.54	0.6	219.50	2044.3	383	2	2323	-9.9999	67.6
27808	39.1	35.096	35.091	23.587	23.579	23.840	0.3	9.8	0.48	0.8	219.40	2048.9	387	2	2320	-9.9999	64.8
27807	58.5	-9.999	-9.999	23.293	-9.999	-9.999	-9.9	-9.9	-9.99	-9.9	-9.99	-9.0	-9	9	-9	-9.9999	-9.9
27806	80.5	35.001	35.034	21.196	21.181	24.447	0.4	12.5	0.80	4.1	185.50	2089.8	488	2	2320	-9.9999	58.6
27805	98.0	35.658	35.567	21.073	21.054	24.982	1.3	5.9	0.59	0.6	177.00	2102.6	443	2	2360	-9.9999	64.5
27804	120.4	35.578	35.584	19.498	19.476	25.341	1.9	6.9	0.63	0.4	170.20	2116.5	474	2	2359	-9.9999	61.2
27803	129.2	35.522	35.527	19.112	19.089	25.399	1.3	8.5	0.63	0.6	164.70	2119.2	494	2	2356	-9.9999	57.2
27802	139.3	35.404	35.416	18.225	18.201	25.533	0.3	10.3	0.66	1.0	155.50	2123.0	530	2	2347	-9.9999	55.3
27801	149.9	35.297	35.311	17.297	17.272	25.678	0.0	10.8	0.70	1.4	152.50	2127.0	551	2	2340	-9.9999	-9.9

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Boreal Autumn 1992

STATION 72 OPS NO. 923182110 LATITUDE 2° 0 S
 CAST 287 DATE 13-Nov-92 LONGITUDE 95° 0 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	fCO2 @20°C μatm	TAIk μmol/kg	pH	TOC μmol/kg
28712	4.7	34.930	34.932	21.167	-9.999	-9.999	0.2	11.0	0.51	5.0	213.80	2	2065.0	-9	-9	-9	66.0
28711	22.4	34.978	34.973	20.144	-9.999	-9.999	0.2	12.8	0.66	5.5	187.90	2	2084.1	-9	-9	-9	-9.9
28710	42.1	35.052	35.047	15.371	-9.999	-9.999	0.7	22.3	1.19	12.9	84.00	2	2166.1	-9	-9	-9	52.4
28709	61.2	35.001	35.003	13.962	-9.999	-9.999	0.1	24.5	1.09	14.9	81.30	2	2176.7	-9	-9	-9	-9.9
28708	82.8	34.949	34.947	13.433	-9.999	-9.999	0.0	24.2	1.13	16.1	91.50	2	2171.7	-9	-9	-9	-9.9
28707	102.5	34.933	34.929	13.236	-9.999	-9.999	0.0	26.7	1.25	19.0	67.80	2	2191.1	-9	-9	-9	-9.9
28706	122.7	34.927	34.929	13.144	-9.999	-9.999	-9.9	9	-9.99	-9.9	9	9	-9.0	-9	-9	-9	-9.9
28705	153.5	34.918	34.911	12.982	-9.999	-9.999	0.0	26.4	1.36	18.3	75.80	2	2187.3	-9	-9	-9	-9.9
28704	203.2	34.902	34.834	12.734	-9.999	-9.999	0.0	28.4	1.44	20.2	58.00	2	2204.0	-9	-9	-9	-9.9
28703	332.7	34.807	34.803	11.037	-9.999	-9.999	0.0	34.6	1.90	28.6	6.90	2	2261.1	-9	-9	-9	-9.9
28702	1003.2	34.557	34.565	4.561	-9.999	-9.999	0.0	41.8	2.13	93.1	69.80	2	2307.2	-9	-9	-9	-9.9
28701	1003.5	34.564	34.566	4.544	-9.999	-9.999	0.0	42.0	2.18	99.2	70.70	2	2308.1	-9	-9	-9	-9.9

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STATION CAST	73 291	OPS NO. 923192335 DATE 14-Nov-92	LATITUDE LONGITUDE	0° 0.86 S 95° 3.34 W	Potential												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	Talk μmol/kg	pH	TOC μmol/kg
29112	3.2	34.684	34.678	20.707	-9.999	-9.999	0.1	8.8	0.58	4.2	206.90	2043.4	-9	9	2302	-9.9999	70.5
29111	19.7	34.853	34.788	18.635	-9.999	-9.999	0.2	12.0	0.88	6.3	175.60	2075.4	-9	9	2302	-9.9999	-9.9
29110	39.3	34.950	34.942	16.489	-9.999	-9.999	0.4	17.2	0.91	9.4	126.00	2124.4	-9	9	2320	-9.9999	54.0
29109	60.2	35.029	34.996	15.272	-9.999	-9.999	0.0	17.1	0.99	9.7	125.20	2130.4	-9	9	2319	-9.9999	-9.9
29108	79.7	35.013	35.006	14.932	-9.999	-9.999	0.0	18.3	1.09	10.9	119.30	2137.6	-9	9	2319	-9.9999	-9.9
29107	99.7	34.973	34.978	14.540	-9.999	-9.999	0.0	19.9	1.12	11.8	110.00	2148.6	-9	9	2315	-9.9999	-9.9
29106	118.8	34.959	34.952	13.972	-9.999	-9.999	0.0	20.8	1.36	12.9	110.30	2153.7	-9	9	2315	-9.9999	-9.9
29105	151.9	34.936	34.931	13.352	-9.999	-9.999	0.0	23.0	1.38	14.3	97.80	2166.6	-9	9	2321	-9.9999	-9.9
29104	202.6	34.918	34.913	13.005	-9.999	-9.999	0.0	26.0	1.46	16.2	77.20	2186.4	-9	9	2318	-9.9999	-9.9
29103	331.8	34.759	34.763	10.502	-9.999	-9.999	0.0	36.5	2.29	29.9	7.80	2263.2	-9	9	2315	-9.9999	-9.9
29102	603.0	34.596	34.594	7.083	-9.999	-9.999	0.0	40.2	2.35	44.4	42.20	2278.5	-9	9	2328	-9.9999	-9.9
29101	1002.9	34.558	34.558	4.615	-9.999	-9.999	0.0	40.3	2.49	81.1	79.50	2299.5	-9	9	2361	-9.9999	-9.9

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STATION CAST	74 296	OPS NO DATE	923202029 15-Nov-92	LATITUDE LONGITUDE	1° 57.28 N 94° 9.05 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	QC μatm	fCO2 @20°C	TAIk μmol/kg	pH	TOC μmol/kg
29612	3.2	33.797	-9.999	24.907	-9.999	-9.999	0.0	0.0	0.00	0.0	213.50	1908.9	2	-9	2245	-9.9999	81.8
29611	21.0	33.808	-9.999	24.871	-9.999	-9.999	0.0	0.0	0.00	0.0	213.30	1908.5	2	-9	2240	-9.9999	-9.9
29610	39.8	33.861	-9.999	24.373	-9.999	-9.999	0.0	0.8	0.00	0.0	212.40	1921.5	2	-9	2240	-9.9999	76.5
29609	59.2	34.823	-9.999	18.289	-9.999	-9.999	0.2	13.4	0.68	6.5	141.70	2071.0	2	-9	2296	-9.9999	-9.9
29608	80.5	35.022	-9.999	15.906	-9.999	-9.999	0.0	22.2	1.22	11.1	85.00	2154.8	2	-9	2311	-9.9999	-9.9
29607	99.8	35.015	-9.999	15.466	-9.999	-9.999	0.0	21.6	1.12	11.5	93.80	2150.2	2	-9	2316	-9.9999	-9.9
29606	119.7	34.995	-9.999	14.804	-9.999	-9.999	0.0	24.3	-9.99	12.7	75.50	2169.0	2	-9	2292	-9.9999	-9.9
29605	150.0	34.982	-9.999	14.240	-9.999	-9.999	0.0	24.5	1.37	14.3	76.80	2174.1	2	-9	2315	-9.9999	-9.9
29604	200.0	34.943	-9.999	13.601	-9.999	-9.999	0.0	25.6	1.33	14.9	79.10	2176.6	2	-9	2315	-9.9999	-9.9
29603	330.7	34.743	-9.999	10.492	-9.999	-9.999	0.0	35.1	2.16	28.5	21.80	2250.1	2	-9	2316	-9.9999	-9.9
29602	600.2	34.607	-9.999	7.141	-9.999	-9.999	0.0	42.1	2.38	52.0	30.90	2285.3	2	-9	2332	-9.9999	-9.9
29601	1001.0	34.565	-9.999	4.612	-9.999	-9.999	0.0	42.1	2.67	84.5	69.00	2308.4	2	-9	2370	-9.9999	-9.9

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STATION CAST	75 302	OPS NO. 923252010 DATE 20-Nov-92	LATITUDE LONGITUDE	5° 0 S 81° 20.02 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	NO3 QC	PO4 µmol/L	PO4 QC	H4SiO4 µmol/L	H4SiO4 QC	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 @20°C µatm	fCO2 QC	TAlk µmol/kg	pH	TOC µmol/kg
30212	2.1	34.946	34.912	18.104	18.104	25.206	0.3	5.2	2	0.66	2	2.4	2	247.90	2	2049.1	3	377	2	2332	7.9839	-9.9
30211	8.9	34.941	34.944	18.030	18.028	25.221	0.3	6.6	2	0.67	2	2.4	2	235.90	2	2059.6	3	399	3	2321	7.9618	111.0
30210	19.2	34.996	34.992	16.002	15.999	25.746	0.5	20.5	2	1.30	2	9.5	2	89.40	2	2168.1	2	798	2	2318	7.7112	65.8
30209	29.3	35.019	35.020	15.209	15.205	25.942	0.9	24.5	2	1.35	2	13.3	2	52.70	2	2194.3	2	965	3	2313	7.6370	-9.9
30208	39.7	35.012	35.020	15.194	15.188	25.941	0.9	24.6	2	1.46	2	13.3	2	52.10	2	2196.4	2	975	2	2316	7.6352	-9.9
30207	48.5	35.020	35.020	15.154	15.147	25.956	0.9	24.5	2	1.55	2	14.5	2	48.10	2	2198.0	2	-9	9	2311	7.6274	-9.9
30206	48.3	35.021	35.020	15.159	15.152	25.956	1.0	25.5	2	1.52	2	14.0	2	47.00	2	2199.4	2	996	2	-9	7.6273	-9.9
30205	59.3	35.022	35.022	15.060	15.051	25.978	0.9	24.8	2	1.52	2	15.1	2	45.00	2	2201.0	2	-9	9	2317	7.6230	-9.9
30204	59.3	35.022	35.021	15.059	15.050	25.979	0.9	24.6	2	1.65	2	15.0	2	44.30	2	2199.1	2	-9	9	2313	7.6230	-9.9
30203	59.7	35.021	35.023	15.058	15.049	25.978	1.0	24.9	2	1.65	2	14.6	2	44.90	2	2201.6	2	-9	9	2314	7.6234	-9.9
30202	59.9	35.022	35.022	15.056	15.047	25.979	1.0	24.7	2	1.72	2	15.0	2	44.50	2	2199.5	2	1005	2	2314	7.6246	-9.9
30201	59.4	35.021	35.024	15.052	15.043	25.979	1.0	24.8	2	1.68	2	14.8	2	45.60	2	2199.2	2	1004	2	2317	7.6236	-9.9

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STATION CAST	76 303	OPS NO. 923252202 DATE 20-Nov-92	LATITUDE LONGITUDE	4° 59.95 S 81° 30.04 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	QC	QC	QC	QC	QC	TAik µmol/kg	pH	TOC µmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	QC	QC	QC	QC	QC	TAik µmol/kg	pH	TOC µmol/kg
30312	1.6	34.903	34.888	17.353	17.353	25.356	0.3	15.9	0.93	4.9	162.40	2116.1	594	2	2	2	2	2	2	2312	7.8230	-9.9
30311	9.2	34.909	34.910	16.997	16.995	25.446	0.3	17.2	1.08	6.3	139.30	2126.3	650	2	2	2	2	2	2	2314	7.7975	67.1
30310	19.1	35.044	35.042	15.187	15.184	25.966	0.5	27.3	1.42	13.9	33.80	2204.5	1060	2	2	2	2	2	2	2312	7.6029	50.0
30309	29.9	35.027	35.033	14.901	14.897	26.016	0.1	28.0	1.63	15.1	28.90	2208.6	1092	2	2	2	2	2	2	2315	7.5907	-9.9
30308	39.9	35.017	35.017	14.720	14.714	26.048	0.2	26.6	1.61	15.5	41.00	2201.2	1017	2	2	2	2	2	2	2312	7.6157	-9.9
30307	49.6	35.014	35.014	14.698	14.691	26.051	0.3	26.6	1.47	14.9	44.50	2198.3	1007	2	2	2	2	2	2	2316	7.6237	-9.9
30306	64.4	35.011	35.011	14.658	14.648	26.058	0.2	26.5	1.58	16.1	45.50	2198.1	1000	2	2	2	2	2	2	2311	7.6260	-9.9
30305	79.1	34.997	34.997	14.415	14.403	26.100	0.0	27.4	1.47	16.5	40.80	2205.1	1046	2	2	2	2	2	2	2314	7.6089	-9.9
30304	93.2	34.994	34.994	14.365	14.351	26.109	0.0	27.3	1.60	16.9	39.70	2203.8	1049	2	2	2	2	2	2	2311	7.6057	-9.9
30303	108.8	34.980	34.980	14.140	14.124	26.146	0.0	27.9	1.84	18.0	33.20	2211.1	1110	2	2	2	2	2	2	2314	7.5850	-9.9
30302	123.8	34.978	34.978	14.104	14.086	26.153	0.0	27.9	1.76	16.6	35.50	2209.4	1093	2	2	2	2	2	2	-9	7.5925	-9.9
30301	140.2	34.973	34.974	14.007	13.987	26.170	0.0	28.3	1.72	16.8	36.90	2210.2	1097	2	2	2	2	2	2	2309	7.5904	-9.9

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STATION CAST	76 306	OPS NO. 923260000 DATE 21-Nov-92	LATITUDE LONGITUDE	5° 0.1 S 81° 29.88 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	QC μatm @20°C	fCO2 μatm @20°C	TAlk μmol/kg	pH	TOC μmol/kg
30612	159.4	34.963	34.960	13.849	13.826	26.196	0.0	29.2	1.70	18.9	27.00	2215.6	2	1170	2311	7.5653	-9.9
30611	179.5	34.953	34.950	13.689	13.663	26.222	0.0	29.6	1.92	20.2	24.20	2218.8	2	1202	2311	7.5556	-9.9
30610	199.6	34.943	34.946	13.519	13.491	26.250	0.0	30.3	1.95	19.9	19.50	2223.7	2	1240	2312	7.5400	-9.9
30609	228.9	34.933	34.931	13.314	13.282	26.285	0.0	31.1	2.09	22.2	12.70	2230.8	2	1318	2311	7.5172	-9.9
30608	259.7	34.910	34.909	12.882	12.846	26.355	0.0	31.3	2.05	24.5	8.00	2240.2	2	1396	2313	7.4935	-9.9
30607	288.7	34.893	34.891	12.570	12.531	26.404	0.0	32.0	2.08	24.6	7.10	2245.4	2	1451	2311	7.4795	-9.9
30606	330.2	34.811	34.808	11.109	11.068	26.617	0.0	34.2	2.22	32.4	4.00	2261.3	2	1621	2319	7.4363	-9.9
30605	379.7	34.719	34.718	9.538	9.495	26.818	0.0	37.5	2.21	38.7	5.80	2278.0	2	1779	2319	7.3986	-9.9
30604	449.6	34.681	34.681	8.832	8.783	26.903	0.0	39.5	2.44	41.4	7.40	2283.0	2	1816	2322	7.3911	-9.9
30603	598.6	34.638	34.637	7.908	7.847	27.013	0.0	40.8	2.42	48.2	16.70	2287.9	2	1822	2320	7.3900	-9.9
30602	801.1	34.583	34.584	6.127	6.054	27.216	0.0	42.6	2.39	71.0	-9.99	2301.7	2	1772	2346	7.4033	-9.9
30601	802.0	34.579	34.583	6.116	6.043	27.215	0.0	42.4	2.48	78.0	38.00	2300.7	2	1778	2343	7.4027	-9.9

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Boreal Autumn 1992

STATION 77 OPS NO. 923260138
 CAST 307 DATE 21-Nov-92

LATITUDE 5° 0.03 S
 LONGITUDE 81° 40.08 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	fCO2 @20°C μatm	QC	TAIK μmol/kg	pH	TOC μmol/kg
30712	2.6	34.810	34.807	18.744	18.744	24.942	0.3	9.9	0.63	0.0	216.40	2	2060.4	2	453	2308	7.9288	-9.9
30711	9.2	34.824	34.822	18.443	18.441	25.029	0.2	11.8	0.68	0.0	196.10	2	2080.9	2	498	2306	7.8911	70.4
30710	19.9	34.987	34.961	15.710	15.707	25.805	0.3	21.3	1.06	10.3	92.50	2	2163.5	2	808	2311	7.7049	-9.9
30709	29.9	35.034	35.032	14.936	14.932	26.014	0.0	28.6	1.70	15.2	25.90	2	2208.2	2	1109	2309	7.5855	47.9
30708	39.5	35.033	35.030	14.850	14.844	26.032	0.0	29.5	1.64	14.9	26.50	2	2208.5	2	1102	2312	7.5870	-9.9
30707	49.2	35.017	35.019	14.626	14.619	26.069	0.0	29.1	1.93	15.9	24.10	2	2211.2	2	1134	2311	7.5772	-9.9
30706	63.6	35.012	35.011	14.442	14.433	26.105	0.0	28.4	1.89	16.1	32.00	2	2206.4	2	1087	2313	7.5915	-9.9
30705	79.9	34.998	34.998	14.271	14.259	26.131	0.0	28.4	1.78	16.0	34.20	2	2207.4	2	1089	2314	7.5931	-9.9
30704	96.5	34.990	34.991	14.198	14.184	26.141	0.0	28.2	1.71	16.1	37.80	2	2206.1	2	1064	2309	7.6001	-9.9
30703	111.1	34.979	34.979	14.054	14.038	26.164	0.0	28.6	1.73	17.3	38.80	2	2206.7	2	1077	2307	7.5977	-9.9
30702	124.4	34.973	34.974	13.965	13.947	26.178	0.0	28.4	1.80	17.3	37.60	2	2208.0	2	1090	2312	7.5939	-9.9
30701	139.8	34.965	34.966	13.880	13.860	26.190	0.0	28.6	1.64	17.0	37.70	2	2208.9	2	1102	2316	7.5897	-9.9

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STATION	77	OPS NO	923260314	LATITUDE	5° 0.06 S												
CAST	308	DATE	21-Nov-92	LONGITUDE	81° 40 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
30812	160.1	34.950	34.950	13.648	13.625	26.227	0.0	30.2	1.56	19.8	22.40	2221.7	1216	2	2309	7.5507	-9.9
30811	180.0	34.949	34.947	13.578	13.553	26.242	0.0	30.2	1.78	20.6	21.60	2223.7	1233	2	2309	7.5449	-9.9
30810	199.4	34.933	34.933	13.326	13.298	26.281	0.0	30.8	1.89	22.3	14.50	2230.7	1300	2	2308	7.5220	-9.9
30809	229.9	34.924	34.922	13.104	13.072	26.320	0.0	31.1	2.14	22.0	13.40	2233.8	1336	2	2307	7.5117	-9.9
30808	260.2	34.891	34.894	12.476	12.441	26.420	0.0	31.6	2.14	24.4	3.00	2248.3	1491	2	2309	7.4680	-9.9
30807	290.1	34.857	34.855	11.911	11.873	26.503	0.0	33.2	2.17	26.8	4.80	2251.8	1538	2	2313	7.4567	-9.9
30806	329.2	34.799	34.798	10.920	10.879	26.641	0.0	33.7	2.52	32.2	1.70	2267.4	1684	2	2314	7.4195	-9.9
30805	379.7	34.728	34.729	9.690	9.647	26.800	0.0	37.1	2.61	38.3	4.00	2278.2	1778	2	2319	7.3988	-9.9
30804	449.3	34.674	34.674	8.657	8.609	26.925	0.0	39.8	2.63	42.8	4.30	2286.5	1876	2	2318	7.3764	-9.9
30803	598.9	34.618	34.620	7.501	7.441	27.056	0.0	43.1	2.62	51.9	9.00	2296.5	1944	2	2328	7.3613	-9.9
30802	799.5	34.571	34.573	5.808	5.738	27.247	0.0	43.8	2.62	68.6	34.00	2304.8	1835	2	2344	7.3878	-9.9
30801	798.9	34.570	34.574	5.822	5.752	27.244	0.0	43.9	2.63	65.9	35.10	2305.4	1843	2	2342	7.3880	-9.9

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STATION	78	OPS NO. 923260515	LATITUDE	5° 0.01 S													
CAST	309	DATE 21-Nov-92	LONGITUDE	81° 50.01 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
30912	158.7	34.955	34.955	13.709	13.686	26.219	0.0	27.6	1.79	17.7	30.60	2212.6	1155	2	2314	7.5730	46.4
30911	179.5	34.938	34.938	13.388	13.363	26.272	0.0	29.0	1.84	20.8	14.50	2228.3	1315	2	2313	7.5236	45.1
30910	198.4	34.929	34.930	13.219	13.191	26.300	0.0	29.4	1.84	19.9	13.80	2229.2	1317	2	2313	7.5203	44.9
30909	229.5	34.905	34.904	12.678	12.647	26.390	0.0	29.7	2.12	24.3	2.20	2245.8	1495	2	2309	7.4698	46.6
30908	257.8	34.876	34.875	12.218	12.184	26.458	0.0	30.7	2.32	26.1	2.60	2251.0	1540	2	2314	7.4584	44.8
30907	289.5	34.835	34.836	11.569	11.532	26.550	0.0	32.2	2.19	27.1	4.40	2256.9	1590	2	2311	7.4451	44.8
30906	329.0	34.776	34.780	10.604	10.564	26.679	0.0	34.5	2.39	33.6	2.90	2267.9	1697	2	2317	7.4187	46.6
30905	380.2	34.734	34.734	9.821	9.777	26.782	0.0	34.6	2.43	37.3	3.70	2275.4	1760	2	2315	7.4019	42.7
30904	449.9	34.693	34.694	9.097	9.047	26.870	0.0	36.1	2.48	38.8	3.80	2283.4	1846	2	2319	7.3850	43.9
30903	599.3	34.617	34.618	7.443	7.384	27.063	0.0	40.4	2.79	47.4	8.10	2297.9	1958	2	2326	7.3602	-9.9
30902	799.8	34.569	34.568	5.656	5.586	27.264	0.0	42.0	2.73	63.9	32.90	2308.8	1876	2	2346	7.3816	40.1
30901	799.5	34.567	34.567	5.685	5.615	27.259	0.0	42.3	2.82	67.1	33.10	2299.9	1869	3	2343	7.3825	-9.9

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STATION CAST	78 311	OPF NO. 923260658 DATE 21-Nov-92	LATITUDE LONGITUDE	5° 0.07 S 81° 50.09 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TALK μmol/kg	pH	TOC μmol/kg
31112	2.1	34.803	34.805	19.253	19.253	24.807	0.2	7.6	2	0.51	2	0.0	2	237.90	2	2044.7	2	407	2	2310	7.9622	85.3
31111	9.4	34.817	34.818	18.501	18.499	25.009	0.4	9.8	2	0.70	2	0.0	2	206.90	2	2066.7	2	461	2	2312	7.9228	-9.9
31110	19.9	35.014	35.012	15.906	15.903	25.781	1.3	22.3	2	1.28	2	2.2	2	66.00	2	2189.3	2	958	2	2314	7.6429	64.8
31109	29.2	35.019	35.020	14.985	14.981	25.992	0.4	25.5	2	1.41	2	13.5	2	37.20	2	2202.2	2	1052	2	2315	7.6068	51.3
31108	39.3	35.024	35.026	14.805	14.799	26.035	0.3	26.7	2	1.74	2	14.8	2	30.30	2	2207.8	2	1105	2	2315	-9.9999	51.6
31107	49.4	35.022	35.021	14.669	14.662	26.064	0.1	27.4	2	1.55	2	14.7	2	25.40	2	2210.2	2	1127	2	2314	7.5788	48.4
31106	65.0	35.010	35.010	14.525	14.515	26.086	0.0	27.6	2	1.68	2	14.7	2	38.30	2	2201.7	2	1055	2	2312	7.6055	48.3
31105	79.2	35.007	35.006	14.428	14.416	26.105	0.0	26.8	2	1.74	2	15.3	2	36.40	2	2201.3	2	1072	2	2314	7.5998	-9.9
31104	94.9	34.997	34.998	14.300	14.286	26.125	0.0	27.8	2	1.76	2	15.7	2	37.30	2	2203.8	2	1073	2	2312	7.5987	46.3
31103	109.5	34.990	34.989	14.115	14.099	26.159	0.0	27.4	2	1.74	2	16.5	2	34.40	2	2206.7	2	1099	2	2315	7.5902	43.5
31102	124.9	34.983	34.984	14.029	14.011	26.172	0.0	26.4	2	1.84	2	16.6	2	30.30	2	2210.8	2	1135	2	2312	7.5778	44.8
31101	139.1	34.978	34.978	13.978	13.958	26.180	0.0	27.4	2	1.89	2	16.2	2	34.40	2	2208.8	2	1114	2	2313	7.5848	45.5

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STATION CAST	79 312	OPS NO. 923260905 DATE 21-Nov-92	LATITUDE LONGITUDE	5° 0.02 S 81° 59.99 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	QC	fCO2 @20°C µatm	TAlk µmol/kg	pH	TOC µmol/kg
31212	158.7	34.941	34.938	13.428	13.406	26.266	0.0	29.9	1.84	19.0	13.70	2231.3	2	1305	2306	7.5234	-9.9
31211	178.6	34.932	34.930	13.221	13.196	26.301	0.0	31.5	1.92	20.3	10.80	2233.3	2	1352	2311	7.5111	-9.9
31210	199.7	34.919	34.913	12.960	12.933	26.344	0.0	30.3	2.07	21.5	7.30	2242.1	2	1412	2309	7.4922	-9.9
31209	229.7	34.902	34.898	12.613	12.582	26.401	0.0	29.5	2.13	23.0	1.70	2251.4	2	1502	2312	7.4659	-9.9
31208	259.1	34.870	34.869	12.124	12.090	26.471	0.0	30.7	2.13	24.6	3.00	2255.6	2	1558	2306	7.4529	-9.9
31207	290.2	34.839	34.837	11.620	11.583	26.543	0.0	31.9	2.43	26.0	3.40	2259.0	2	1596	2313	7.4437	-9.9
31206	329.4	34.797	34.796	10.937	10.896	26.637	0.0	32.7	2.22	28.9	3.70	2265.6	2	1655	2310	7.4280	-9.9
31205	380.4	34.740	34.740	9.945	9.901	26.766	0.0	35.4	2.52	34.6	3.30	2276.6	2	1751	2315	7.4044	-9.9
31204	450.7	34.704	34.704	9.283	9.233	26.849	0.0	37.1	2.54	39.2	3.70	2282.5	2	1819	2320	7.3892	-9.9
31203	598.6	34.627	34.626	7.671	7.611	27.039	0.0	40.7	2.53	52.1	8.00	2296.0	2	1930	2319	7.3641	-9.9
31202	801.0	34.569	34.569	5.722	5.652	27.256	0.0	42.1	2.61	70.8	31.60	2310.9	2	1875	2342	7.3793	-9.9
31201	800.9	34.569	34.569	5.723	5.653	27.256	0.0	42.2	2.61	67.3	4 31.50	2310.7	2	1873	2342	7.3803	-9.9

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STATION CAST	79 313	OPS NO. 923261039 DATE 21-Nov-92	LATITUDE LONGITUDE	4° 59.98 S 82° 0.05 W	Potential Temp °C	Temp °C	Salinity CTD	Salinity Bottle	Salinity	Temp °C	Sigma Theta	NO2 µmol/L	QC	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	TAIk µmol/kg	pH	TOC µmol/kg
31312	2.7	34.931	34.933	18.100	18.100	25.196	1.1	2	11.6	2	0.77	2	0.0	2	178.30	2	2096.9	2	526	2	2318	7.8703	-9.9					
31311	9.3	34.848	34.883	18.956	18.954	24.918	0.8	2	9.4	2	0.59	2	0.0	2	202.60	2	2073.4	2	464	2	2317	7.9180	71.4					
31310	18.9	35.023	35.020	15.368	15.365	25.910	0.3	2	26.7	2	1.59	2	12.6	2	35.90	2	2204.9	2	1091	2	2310	7.5920	-9.9					
31309	29.0	35.018	35.016	14.916	14.912	26.006	0.2	2	27.5	2	1.63	2	17.1	2	24.60	2	2206.6	2	1123	2	2312	7.5804	50.8					
31308	39.1	35.012	35.009	14.770	14.764	26.034	0.2	2	27.5	2	1.56	2	18.1	2	30.90	2	2205.3	2	1090	2	2309	7.5936	-9.9					
31307	49.6	35.004	35.003	14.660	14.653	26.052	0.2	2	28.1	2	1.62	2	19.7	2	30.10	2	2206.9	2	1100	2	2313	7.5892	-9.9					
31306	66.0	35.003	35.001	14.610	14.600	26.062	0.0	2	28.3	2	1.63	2	18.6	2	27.30	2	2209.2	2	1115	2	2309	7.5849	-9.9					
31305	79.6	34.995	34.994	14.377	14.365	26.106	0.0	2	29.8	2	1.74	2	19.8	2	15.30	2	2219.0	2	1218	2	2312	7.5496	-9.9					
31304	94.8	34.974	34.974	14.085	14.071	26.153	0.0	2	28.7	2	1.85	2	19.6	2	24.20	2	2215.7	2	1172	2	2305	7.5644	-9.9					
31303	109.5	34.968	34.967	13.960	13.944	26.175	0.0	2	29.1	2	1.70	2	19.4	2	26.50	2	2216.4	2	1171	2	2307	7.5638	-9.9					
31302	124.3	34.963	34.963	13.873	13.873	26.186	0.0	2	29.2	2	1.87	2	19.8	2	19.90	2	2219.6	2	1216	2	2306	7.5505	-9.9					
31301	139.5	34.952	34.956	13.709	13.689	26.216	0.0	2	29.7	2	1.98	2	21.2	2	17.10	2	2227.4	2	1255	2	2311	7.5363	-9.9					

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STATION CAST	80 314	OPS NO DATE	923261338 21-Nov-92	LATITUDE LONGITUDE	5° 0.02 S 82° 30.12 W																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
31412	159.5	34.938	34.936	13.291	13.269	26.291	0.0	31.4	2	1.57	2	23.6	2	7.50	2	2236.0	2	1365	2	2310	7.5039	-9.9
31411	180.3	34.925	34.924	13.048	13.023	26.331	0.0	30.9	2	1.73	2	24.2	2	3.20	2	2242.5	2	1440	2	2312	7.4821	-9.9
31410	199.9	34.923	34.918	12.942	12.915	26.351	0.0	30.9	2	1.85	2	24.0	2	3.60	2	2245.6	2	1457	2	2308	7.4783	-9.9
31409	228.5	34.900	34.897	12.597	12.566	26.402	0.0	31.9	2	1.87	2	25.5	2	4.70	2	2247.3	2	1469	2	2312	7.4731	-9.9
31408	258.0	34.889	34.887	12.443	12.408	26.425	0.0	31.4	2	1.89	2	27.6	2	3.40	2	2251.2	2	1514	2	2314	7.4636	-9.9
31407	288.9	34.870	34.868	12.119	12.081	26.473	0.0	32.0	2	1.89	2	29.5	2	3.10	2	2254.0	2	1547	2	2312	7.4540	-9.9
31406	330.9	34.842	34.838	11.654	11.611	26.540	0.0	32.4	2	2.07	2	30.8	2	2.80	2	2259.6	2	1602	2	2315	7.4411	-9.9
31405	379.1	34.786	34.784	10.720	10.674	26.668	0.0	33.4	2	2.16	2	42.0	2	2.20	2	2271.5	2	1710	2	2317	7.4136	-9.9
31404	449.4	34.704	34.704	9.285	9.235	26.849	0.0	37.5	2	2.33	2	44.8	2	1.80	2	2285.1	2	1853	2	2317	7.3802	-9.9
31403	598.0	34.610	34.611	7.277	7.218	27.081	0.0	42.9	2	2.38	2	56.3	2	9.90	2	2301.0	2	1944	2	2327	7.3593	-9.9
31402	800.5	34.559	34.561	5.235	5.168	27.306	0.0	43.7	2	2.41	2	79.7	2	42.20	2	2312.6	2	1805	2	2343	7.3926	-9.9
31401	802.6	34.559	34.561	5.234	5.167	27.306	0.0	43.9	2	2.43	2	80.8	2	42.90	2	2312.0	2	1772	2	2348	7.3936	-9.9

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STATION CAST	80 318	OPS NO. 923261456 DATE 21-Nov-92	LATITUDE LONGITUDE		4° 59.95 S 82° 29.88 W	Potential																	
			Sample ID	Pressure db			Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAIk μmol/kg	pH	TOC μmol/kg		
31812	1.8	34.992	34.993	19.543	19.543	24.877	0.3	2	5.7	2	0.40	2	0.0	2	239.40	2	2037.6	2	370	2	2325	7.9989	-9.9
31811	9.3	34.972	34.976	19.173	19.171	24.957	0.4	2	7.5	2	0.54	2	0.0	2	218.30	2	2061.1	2	413	2	2324	7.9612	70.1
31810	19.6	35.038	35.037	16.184	16.181	25.736	0.9	2	22.6	2	1.09	2	11.7	2	81.10	2	2179.6	2	859	2	2317	7.6830	56.8
31809	29.4	35.018	35.015	14.960	14.956	25.996	0.0	2	29.0	2	1.39	2	20.0	2	26.70	2	2207.4	2	1102	2	2312	7.5885	-9.9
31808	38.9	35.009	35.008	14.775	14.769	26.030	0.0	2	29.3	2	1.39	2	22.1	2	24.00	2	2211.1	2	1130	2	2313	7.5790	-9.9
31807	49.5	35.008	35.008	14.682	14.675	26.050	0.0	2	29.8	2	1.41	2	23.9	2	19.70	2	2215.9	2	1163	2	2312	7.5675	-9.9
31806	65.4	34.991	34.992	14.383	14.373	26.102	0.0	2	30.1	2	1.40	2	23.4	2	21.40	2	2215.8	2	1171	2	2313	7.5643	-9.9
31805	78.9	34.980	34.978	14.220	14.209	26.128	0.0	2	29.8	2	1.44	2	22.9	2	25.20	2	2213.3	2	1157	2	2313	7.5683	-9.9
31804	94.7	34.974	34.972	14.110	14.096	26.147	0.0	2	30.2	2	1.45	2	23.4	2	24.70	2	2216.3	2	1172	2	2308	7.5653	-9.9
31803	109.0	34.974	34.971	14.054	14.038	26.160	0.0	2	29.9	2	1.41	2	22.9	2	27.10	2	2215.2	2	1156	2	2312	7.5696	-9.9
31802	125.1	34.969	34.964	13.834	13.816	26.202	0.0	2	30.2	2	1.63	2	23.6	2	23.30	2	2217.6	2	1195	2	2310	7.5574	-9.9
31801	139.9	34.949	34.949	13.580	13.560	26.240	0.0	2	31.3	2	1.63	2	24.8	2	16.10	2	2226.0	2	1273	2	2314	7.5309	-9.9

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STATION	81	OPS NO. 923280450	LATITUDE	12° 51 S														
CAST	319	DATE 23-Nov-92	LONGITUDE	78° 36.92 W														
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Potential	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
31912	161.0	34.897	34.897	12.976	12.954		26.323	6.7	12.2	2.14	25.4	2.70	2262.9	1549	2	2318	7.4444	-9.9
31911	179.8	34.893	34.890	12.664	12.640		26.382	5.6	17.2	1.90	24.7	2.00	2261.3	1573	2	2315	7.4407	-9.9
31910	199.1	34.868	34.867	12.358	12.332		26.423	4.7	19.1	2.05	24.9	2.60	2263.9	1638	2	2314	7.4316	-9.9
31909	229.6	34.850	34.849	11.877	11.847		26.502	4.8	23.2	2.12	26.2	2.00	2264.1	1689	2	2311	7.4178	-9.9
31908	259.3	34.825	34.826	11.465	11.432		26.561	4.8	25.1	2.11	26.2	1.80	2267.4	1730	2	2308	7.4091	-9.9
31907	290.2	34.785	34.784	10.857	10.821		26.641	2.4	29.4	2.24	27.0	1.40	2271.4	1774	2	2312	7.3987	-9.9
31906	330.9	34.763	34.760	10.359	10.320		26.712	0.0	34.1	2.22	29.7	0.80	2272.2	1768	2	2311	7.3992	-9.9
31905	378.2	34.718	34.713	9.651	9.608		26.798	0.0	36.8	2.24	31.7	1.80	2278.0	1843	2	2312	7.3827	-9.9
31904	450.3	34.661	34.659	8.648	8.600		26.916	0.0	40.3	2.51	40.3	1.80	2287.7	1918	2	2314	7.3635	-9.9
31903	598.6	34.597	34.598	7.327	7.288		27.064	0.0	44.5	2.55	47.2	3.90	2299.7	2044	2	2322	7.3404	-9.9
31902	799.6	34.540	34.541	5.652	5.583		27.241	0.0	46.4	2.57	59.1	22.90	2311.3	2012	2	2337	7.3497	-9.9
31901	799.4	34.538	34.541	5.651	5.582		27.240	0.0	46.3	2.64	59.2	24.00	2310.4	2010	2	2335	7.3492	-9.9

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Boreal Autumn 1992

STATION CAST	81 321	OPS NO. 923280633 DATE 23-Nov-92	LATITUDE LONGITUDE	12° 51 S 78° 37.02 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
32112	2.2	35.303	35.302	20.105	20.105	24.967	0.2	7.3	0.52	0.0	246.80	2075.7	405	2	2345	7.9680	-9.9
32111	9.2	35.304	35.303	20.115	20.113	24.965	0.2	7.3	0.67	0.0	246.80	2077.1	403	2	2345	7.9683	70.0
32110	19.2	35.297	35.298	19.846	19.842	25.031	0.2	7.3	0.67	0.0	248.80	2077.1	408	2	2344	7.9653	72.1
32109	29.2	35.284	35.284	18.577	18.572	25.348	0.3	8.5	0.69	0.0	242.60	2096.9	453	2	2338	7.9250	-9.9
32108	39.8	35.322	35.322	18.027	18.020	25.515	0.3	8.5	0.87	0.0	231.90	2106.5	480	2	2343	7.9069	-9.9
32107	50.5	35.372	35.362	17.878	17.869	25.590	0.8	9.6	0.82	1.4	225.20	2113.4	495	2	2345	7.8945	-9.9
32106	63.7	35.352	35.353	17.750	17.739	25.607	1.4	9.7	0.73	1.2	218.50	2113.9	503	2	2341	7.8915	-9.9
32105	78.8	35.249	35.248	17.200	17.187	25.662	0.1	13.1	0.93	1.4	212.10	2126.6	561	2	2339	7.8492	-9.9
32104	93.8	35.000	35.009	15.541	15.526	25.856	0.1	17.0	1.03	5.0	139.20	2160.0	748	3	2317	7.8188	-9.9
32103	110.3	34.818	34.810	13.873	13.857	26.077	0.1	21.3	1.67	12.7	58.00	2212.7	1159	2	2306	7.5685	-9.9
32102	125.0	34.903	34.903	13.674	13.656	26.185	2.8	14.3	2.07	24.7	1.40	2262.2	1569	2	2314	7.4513	-9.9
32101	139.9	34.905	34.903	13.242	13.223	26.275	7.3	9.2	1.97	25.2	3.50	2266.1	1609	2	2320	7.4417	-9.9

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Boreal Autumn 1992

STATION CAST	82 322	OPS NO. 923280853 DATE 23-Nov-92	LATITUDE LONGITUDE	12° 45.24 S 78° 21.29 W																				
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Potential	Temp °C	Sigma Theta	NO2 µmol/L	QC	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	TALK µmol/kg	pH	TOC µmol/kg
32212	158.7	34.919	34.920	13.100	13.078		13.078	26.315	7.4	2	14.1	2	2.05	2	25.4	2	2.40	2	2260.6	2	1565	2318	7.4503	-9.9
32211	181.8	34.876	34.874	12.628	12.604		12.604	26.376	4.6	2	16.9	2	2.14	2	24.4	2	1.90	2	2264.2	2	1609	2317	7.4380	-9.9
32210	199.8	34.871	34.868	12.391	12.364		12.364	26.419	4.8	2	18.7	2	2.01	2	23.9	2	3.10	2	2265.0	2	1640	2316	7.4310	-9.9
32209	229.8	34.841	34.838	11.915	11.885		11.885	26.488	3.1	2	23.6	2	2.10	2	24.9	2	1.30	2	2265.8	2	1684	2313	7.4208	-9.9
32208	260.4	34.820	34.816	11.513	11.480		11.480	26.548	2.8	2	26.1	2	2.15	2	25.7	2	1.60	2	2267.5	2	1725	2313	7.4104	-9.9
32207	288.9	34.803	34.802	11.197	11.161		11.161	26.593	3.0	2	27.8	2	2.12	2	25.3	2	1.50	2	2270.4	2	1750	2312	7.4053	-9.9
32206	331.0	34.772	34.772	10.624	10.584		10.584	26.673	1.2	2	31.6	2	2.15	2	28.7	2	2.20	2	2272.3	2	1776	2313	7.3980	-9.9
32205	377.9	34.733	34.733	9.949	9.905		9.905	26.760	0.0	2	35.2	2	2.27	2	32.5	2	1.30	2	2277.6	2	1815	2315	7.3876	-9.9
32204	449.3	34.672	34.673	8.884	8.835		8.835	26.888	0.0	2	38.8	2	2.35	2	37.5	2	2.40	2	2287.6	2	1913	2316	7.3674	-9.9
32203	599.9	34.563	34.562	7.057	6.999		6.999	27.075	0.0	2	42.8	2	2.48	2	40.9	2	13.60	2	2293.9	2	1995	2317	7.3496	-9.9
32202	799.1	34.523	34.524	5.469	5.401		5.401	27.250	0.0	2	44.7	2	2.62	2	58.6	2	30.00	2	2307.6	2	1945	2334	7.3570	-9.9
32201	799.8	34.523	34.524	5.469	5.401		5.401	27.250	0.0	2	45.0	2	2.77	2	58.6	2	30.60	2	2308.1	2	1927	2333	7.3565	-9.9

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Boreal Autumn 1992

STATION CAST	82 323	OPS NO. 923281041 DATE 23-Nov-92	LATITUDE LONGITUDE	12° 44.93 S 78° 21.03 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
32312	3.0	35.286	35.284	19.776	19.775	25.040	0.3	7.5	2	0.71	2	0.0	2	243.90	2	2085.9	2	419	2	2345	7.9545	-9.9
32311	10.6	35.283	35.282	19.741	19.739	25.048	0.3	7.6	2	0.70	2	0.0	2	244.50	2	2081.5	2	420	2	2345	7.9523	68.6
32310	19.5	35.247	35.246	19.342	19.338	25.124	0.3	7.7	2	0.70	2	0.0	2	247.40	2	2082.1	2	432	2	2344	7.9446	-9.9
32309	29.4	35.311	35.308	18.468	18.463	25.396	0.3	8.5	2	0.88	2	0.0	2	242.80	2	2095.7	2	456	2	2347	7.9243	71.0
32308	40.2	35.374	35.372	17.935	17.928	25.577	0.5	9.6	2	0.84	2	1.4	2	226.80	2	2111.5	2	490	2	2347	7.9002	-9.9
32307	49.4	35.359	35.360	17.812	17.804	25.597	1.2	10.1	2	0.95	2	1.5	2	220.90	2	2113.9	2	506	2	2344	7.8900	-9.9
32306	63.4	35.230	35.241	17.199	17.188	25.647	0.3	13.1	2	1.03	2	1.9	2	202.70	2	2127.6	2	570	2	2337	7.8445	-9.9
32305	80.4	34.902	34.903	14.566	14.554	25.994	0.1	20.0	2	1.46	2	8.8	2	88.60	2	2193.1	2	982	2	2274	7.6343	-9.9
32304	95.3	34.941	34.936	13.832	13.818	26.180	1.1	22.1	2	1.88	2	20.1	2	1.80	2	2247.5	2	1468	2	2316	7.4752	-9.9
32303	111.4	34.947	34.946	13.556	13.540	26.243	3.6	20.5	2	1.89	2	23.4	2	2.70	2	2251.1	2	1467	2	2315	7.4744	-9.9
32302	124.7	34.930	34.932	13.390	13.373	26.264	6.6	13.9	4	2.03	2	24.6	2	2.90	2	2258.1	2	1526	2	2319	7.4614	-9.9
32301	136.3	34.932	34.933	13.290	13.271	26.286	5.5	17.5	2	1.95	2	23.7	2	3.30	2	2255.5	2	1515	2	2315	7.4635	-9.9

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Boreal Autumn 1992

STATION	83	OPS NO. 923281253	LATITUDE	12° 39.02 S																		
CAST	324	DATE 23-Nov-92	LONGITUDE	78° 5.9 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
32412	161.0	34.908	34.907	12.905	12.883	26.346	6.5	15.6	2	2.00	2	23.8	2	3.10	2	2261.2	2	1579	2	2317	7.4459	-9.9
32411	180.7	34.902	34.894	12.680	12.656	26.386	5.6	18.1	2	2.02	2	24.6	2	3.60	2	2260.5	2	1597	2	2316	7.4408	-9.9
32410	200.3	34.886	34.883	12.409	12.382	26.427	2.9	23.7	2	2.05	2	25.2	2	1.90	2	2258.1	2	1605	2	2312	7.4400	-9.9
32409	230.2	34.856	34.854	11.994	11.964	26.485	3.4	24.2	2	2.04	2	24.7	2	2.00	2	2264.0	2	1665	2	2313	7.4227	-9.9
32408	260.3	34.828	34.831	11.613	11.580	26.535	3.0	27.4	2	2.04	2	24.8	2	2.20	2	2265.2	2	1705	2	2316	7.4142	-9.9
32407	290.4	34.810	34.809	11.149	11.113	26.608	0.3	31.7	2	2.04	2	27.5	2	1.60	2	2262.3	2	1711	2	2313	7.4160	-9.9
32406	329.5	34.782	34.781	10.735	10.695	26.661	0.2	32.9	2	2.20	2	28.4	2	1.10	2	2270.3	2	1744	2	2310	7.4054	-9.9
32405	380.0	34.722	34.720	9.944	9.900	26.752	0.1	35.0	2	2.29	2	28.9	2	1.30	2	2271.1	2	1836	2	2312	7.3836	-9.9
32404	450.2	34.660	34.657	8.853	8.804	26.883	0.0	39.3	2	2.29	2	33.6	2	2.90	2	2282.8	2	1929	2	2306	7.3639	-9.9
32403	599.3	34.568	34.567	7.169	7.111	27.063	0.0	43.8	2	2.59	2	42.3	2	13.00	2	2292.9	2	1986	2	2317	7.3509	-9.9
32402	800.1	34.536	34.536	5.528	5.459	27.253	0.0	45.7	2	2.65	2	64.9	2	26.70	2	2309.7	2	1968	2	2325	7.3535	-9.9
32401	800.2	34.535	34.535	5.528	5.459	27.252	0.0	45.9	2	2.70	2	63.6	2	27.30	2	2309.8	2	1940	2	2327	7.3533	-9.9

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Boreal Autumn 1992

STATION CAST	83 327	OPS NO. 923281414 DATE 23-Nov-92	LATITUDE LONGITUDE	12° 38.94 S 78° 5.83 W	Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	QC	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
32712	2.5	35.006	35.001	19.863	19.863	24.804	0.0	2	0.0	2	0.31	2	0.0	2	0.0	2	0.31	2	0.0	2	283.30	3	2003.0	3	286	2	2343	8.0906	-9.9
32711	9.6	35.073	35.053	19.560	19.558	24.934	0.0	2	0.0	2	0.33	2	0.0	2	0.0	2	0.33	2	0.0	2	284.00	3	2020.0	3	311	2	2342	8.0587	92.9
32710	19.3	35.177	35.125	18.738	18.735	25.225	0.1	2	3.9	2	0.69	2	0.0	2	0.0	2	0.69	2	0.0	2	263.90	3	2069.6	2	399	2	2345	7.9737	78.7
32709	29.3	35.310	35.305	18.277	18.272	25.443	0.5	2	9.6	2	0.78	2	0.7	2	0.7	2	0.78	2	0.7	2	235.70	2	2106.4	2	482	2	2345	7.9055	-9.9
32708	39.9	35.344	35.291	17.924	17.917	25.557	0.3	2	9.2	2	0.85	2	0.0	2	0.0	2	0.85	2	0.0	2	225.40	2	2117.1	2	515	2	2349	7.8822	-9.9
32707	50.2	35.229	35.238	17.131	17.123	25.662	0.3	2	13.2	2	1.04	2	1.8	2	1.8	2	1.04	2	1.8	2	205.20	2	2128.5	2	578	2	2335	7.8394	-9.9
32706	65.1	35.019	35.058	15.828	15.818	25.805	0.2	2	17.6	2	1.22	2	2.8	2	2.8	2	1.22	2	2.8	2	178.20	2	2157.8	2	790	2	2326	7.7480	-9.9
32705	79.9	34.946	34.946	14.757	14.745	25.987	0.1	2	23.0	2	1.93	2	11.6	2	11.6	2	1.93	2	11.6	2	52.90	2	2229.6	2	1257	2	2312	7.5362	-9.9
32704	94.5	34.946	34.945	14.197	14.183	26.107	2.2	2	20.1	2	1.93	2	17.5	2	17.5	2	1.93	2	17.5	2	1.80	2	2251.8	2	1474	2	2318	7.4722	-9.9
32703	108.8	34.938	34.937	13.735	13.720	26.199	4.2	2	16.1	2	1.93	2	19.8	2	19.8	2	1.93	2	19.8	2	2.00	2	2255.2	2	1493	2	2320	7.4691	-9.9
32702	124.2	34.930	34.932	13.420	13.403	26.258	5.6	2	15.2	2	1.94	2	21.9	2	21.9	2	1.94	2	21.9	2	2.80	2	2256.1	2	1515	2	2320	7.4625	-9.9
32701	141.2	34.916	34.916	13.165	13.145	26.299	5.3	2	16.1	2	2.00	2	22.1	2	22.1	2	2.00	2	22.1	2	2.80	2	2258.3	2	1543	2	2319	7.4558	-9.9

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Boreal Autumn 1992

STATION CAST	84 328	OFS NO DATE	923281645 23-Nov-92	LATITUDE LONGITUDE	12° 32 S 77° 48.99 W	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C													
32812	160.7	34.894	34.900	12.705	12.683	26.375	6.4	16.4	1.98	24.9	1.90	2.263.0	1600	2	2314	7.4401	-9.9	
32811	179.5	34.877	34.880	12.380	12.356	26.425	4.1	21.3	1.90	23.6	1.70	2.262.3	1618	2	2316	7.4337	-9.9	
32810	200.2	34.874	34.876	12.187	12.161	26.461	1.1	27.4	1.99	24.4	1.40	2.256.9	1606	2	2311	7.4383	-9.9	
32809	230.2	34.859	34.861	11.964	11.934	26.493	2.3	26.7	1.98	26.7	2.00	2.259.4	1638	2	2314	7.4302	-9.9	
32808	260.1	34.842	34.846	11.687	11.654	26.532	1.6	28.4	1.97	26.0	1.50	2.260.7	1661	2	2309	7.4243	-9.9	
32807	289.3	34.826	34.830	11.429	11.392	26.569	0.8	30.9	2.18	26.2	1.30	2.261.8	1684	2	2313	7.4174	-9.9	
32806	330.5	34.791	34.789	10.762	10.722	26.663	0.0	33.2	2.20	28.6	1.20	2.266.2	1724	2	2313	7.4087	-9.9	
32805	377.9	34.747	34.749	10.197	10.152	26.729	0.0	34.2	2.17	30.8	0.90	2.273.6	1775	2	2317	7.3934	-9.9	
32804	450.0	34.671	34.674	9.021	8.972	26.865	0.0	38.4	2.45	34.8	2.00	2.281.2	1904	2	2310	7.3677	-9.9	
32803	597.2	34.576	34.577	7.024	6.967	27.090	0.0	43.4	2.58	47.2	9.30	2.297.8	2023	2	2321	7.3424	-9.9	
32802	799.9	34.533	34.537	5.312	5.245	27.277	0.0	45.7	2.56	67.4	30.50	2.313.4	1934	2	2342	7.3593	-9.9	
32801	798.4	34.534	34.536	5.314	5.247	27.277	0.0	45.4	2.63	72.0	31.10	2.311.7	1924	2	2341	7.3590	-9.9	

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STATION CAST	84 332	OPS NO 923281849 DATE 23-Nov-92	LATITUDE LONGITUDE	12° 32.14 S 77° 49 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	QC	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
33212	2.8	35.043	35.046	20.235	20.234	24.734	0.2	2.7	0.33	0.0	259.50	2045.5	2	350	2344	8.0206	-9.9
33211	9.5	35.043	35.041	19.930	19.928	24.815	0.2	2.7	0.41	0.0	260.30	2051.1	2	360	2345	8.0096	75.2
33210	19.5	35.088	35.092	17.395	17.392	25.489	0.9	9.5	0.89	0.6	212.90	2126.7	2	566	2334	7.8456	-9.9
33209	29.4	35.126	35.123	16.961	16.956	25.622	1.3	12.8	1.00	1.5	189.70	2157.9	3	644	2332	7.7953	65.7
33208	40.0	35.144	35.123	16.727	16.720	25.692	0.9	16.0	1.00	2.1	192.10	2147.9	2	665	2325	7.7854	-9.9
33207	49.9	35.045	35.052	16.126	16.118	25.756	1.0	17.8	1.64	5.2	139.00	2182.0	2	837	2325	7.6951	-9.9
33206	63.4	34.980	34.982	15.193	15.183	25.917	0.5	22.7	1.64	10.2	72.10	2216.9	2	1139	2310	7.5765	-9.9
33205	80.5	34.947	34.944	14.412	14.400	26.062	0.5	24.7	1.90	14.7	13.90	2242.7	2	1411	2314	7.4900	-9.9
33204	95.4	34.930	34.928	13.747	13.733	26.189	2.8	17.4	1.98	21.4	2.40	2256.5	2	1497	2318	7.4670	-9.9
33203	110.0	34.930	34.932	13.441	13.426	26.253	4.8	16.5	1.98	22.8	2.20	2274.5	3	1497	2320	7.4660	-9.9
33202	123.7	34.924	34.926	13.210	13.193	26.296	6.6	15.3	1.89	24.5	2.60	2259.1	2	1537	2318	7.4554	-9.9
33201	139.6	34.910	34.912	12.969	12.950	26.334	7.0	14.7	1.94	25.3	3.20	2261.8	2	1569	2322	7.4466	-9.9

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION CAST	85 333	OPS NO. 923282052 DATE 23-Nov-92	LATITUDE LONGITUDE	12° 26.81 S 77° 35.51 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
33312	158.7	34.917	34.919	12.997	12.975	26.334	4.4	19.5	2.26	23.9	1.90	2257.2	1537	2	2316	7.4577	53.1
33311	180.6	34.908	34.909	12.773	12.748	26.372	2.6	23.8	2.15	23.0	1.70	2255.3	1543	2	2318	7.4538	49.0
33310	200.6	34.900	34.900	12.646	12.619	26.392	3.0	23.8	2.19	23.3	3.90	2257.3	1570	2	2312	7.4482	48.7
33309	229.1	34.887	34.885	12.380	12.349	26.435	2.9	24.5	2.22	25.5	2.00	2259.5	1593	2	2317	7.4410	46.1
33308	259.5	34.872	34.871	12.178	12.144	26.463	2.8	25.4	2.25	24.7	1.30	2261.6	1619	2	2312	7.4343	48.3
33307	289.6	34.823	34.826	11.429	11.392	26.566	0.7	30.7	2.31	26.3	1.50	2265.6	1671	2	2313	7.4191	44.8
33306	329.1	34.772	34.772	10.580	10.540	26.681	0.0	34.4	2.36	28.6	1.20	2272.4	1754	2	2316	7.4024	44.1
33305	379.7	34.725	34.727	9.858	9.814	26.769	0.8	34.1	2.47	31.5	3.10	2280.3	1838	2	2317	7.3810	45.2
33304	449.4	34.652	34.655	8.705	8.657	26.900	0.0	39.4	2.63	35.9	3.00	2286.9	1910	2	2321	7.3628	44.5
33303	500.3	34.627	34.629	8.172	8.120	26.963	0.0	40.8	2.66	38.6	4.60	2290.9	1922	2	2312	7.3548	42.6
33302	499.6	34.625	34.629	8.162	8.110	26.963	0.0	41.2	2.71	39.8	4.90	2290.4	-9	9	2313	7.3545	44.5
33301	500.6	34.629	34.630	8.161	8.109	26.966	0.0	40.9	2.67	39.2	5.90	2291.6	-9	9	2316	7.3536	-9.9

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Boreal Autumn 1992

STATION OPS NO. 923282224 LATTITUDE 12° 26.84 S
 CAST 337 DATE 23-Nov-92 LONGITUDE 77° 35.6 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC μmol/kg	QC μmol/kg	QC μmol/kg	QC μmol/kg	fCO2 @20°C μatm	QC μmol/kg	TAlk μmol/kg	pH	TOC μmol/kg
33712	2.0	35.038	35.035	20.402	20.402	24.685	0.0	2.2	0.48	0.0	257.90	3	2057.5	2	371	2	2341	7.9965	83.2	
33711	8.4	35.026	35.041	20.192	20.190	24.732	0.0	3.1	0.59	0.0	256.20	3	2061.0	2	380	2	2338	7.9885	78.2	
33710	19.6	35.051	35.051	17.429	17.426	25.452	0.6	9.7	0.93	0.0	218.50	2	2118.1	2	564	2	2337	7.8476	67.1	
33709	30.2	35.023	35.027	16.770	16.765	25.588	0.6	11.3	1.14	0.9	194.10	2	2151.0	2	658	2	2331	7.7891	64.9	
33708	39.5	35.078	35.109	16.209	16.203	25.762	0.4	18.4	1.29	3.8	164.70	2	2165.4	2	750	2	2329	7.7374	58.7	
33707	49.4	35.020	35.034	15.504	15.496	25.878	0.0	25.2	1.84	9.6	51.60	2	2219.7	2	1167	2	2317	7.5683	53.4	
33706	63.8	34.988	34.982	15.004	14.994	25.965	0.1	25.4	1.97	12.0	30.00	2	2233.6	2	1900	2	2314	7.5238	53.5	
33705	78.9	34.936	34.935	14.252	14.241	26.088	0.0	23.2	2.14	16.7	1.30	2	2245.5	2	1497	2	2316	7.4684	49.6	
33704	95.3	34.953	34.952	13.884	13.870	26.179	3.3	18.4	2.19	21.0	1.30	2	2251.9	2	1467	2	2320	7.4770	50.9	
33703	108.9	34.955	34.953	13.702	13.687	26.219	3.4	20.1	2.14	21.9	1.30	2	2249.9	2	1458	2	-9	7.4772	49.3	
33702	126.1	34.938	34.938	13.390	13.372	26.270	5.4	17.3	2.25	24.4	2.70	2	2255.3	2	1509	2	2320	7.4638	49.0	
33701	139.1	34.932	34.932	13.269	13.250	26.290	6.5	15.5	2.20	25.8	3.40	2	2259.0	2	1511	2	2319	7.4606	53.6	

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STATION CAST	86 338	OPS NO. 923290027 DATE 24-Nov-92	LATITUDE LONGITUDE	12° 19.98 S 77° 19.86 W	Potential												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg		
33812	2.5	35.010	35.011	19.572	24.883	0.2	5.0	0.65	2.6	243.80	2090.0	458	2336	7.9206	-9.9		
33811	9.9	35.054	35.054	17.537	25.428	0.5	12.2	0.92	1.9	202.30	2131.0	593	2336	7.8267	65.8		
33810	18.6	35.077	35.073	16.723	25.640	0.6	16.7	1.40	3.7	168.50	2160.9	725	2320	7.7500	-9.9		
33809	30.4	35.024	35.025	15.366	25.910	0.1	26.4	1.78	11.2	40.90	2225.2	1222	2319	7.5460	55.2		
33808	39.2	35.012	35.001	14.993	25.985	0.1	27.4	2.00	14.2	18.60	2237.3	1353	2314	7.5067	-9.9		
33807	49.0	34.981	34.980	14.548	26.058	0.1	26.7	1.89	16.7	5.40	2242.8	1400	2318	7.4929	-9.9		
33806	65.5	34.974	34.975	14.265	26.112	0.8	25.6	2.04	18.5	5.20	2242.9	1409	2312	7.4907	-9.9		
33805	79.4	34.947	34.947	13.547	26.241	6.4	15.6	2.04	26.7	2.40	2255.7	1498	2324	7.4680	-9.9		
33804	94.8	34.944	34.944	13.502	26.251	7.6	13.2	2.04	26.9	2.80	2258.4	1506	2321	7.4639	-9.9		
33803	108.6	34.942	34.942	13.455	26.256	7.9	12.7	2.20	27.4	2.60	2258.4	1509	2324	7.4629	-9.9		
33802	125.9	34.930	34.931	13.221	26.295	10.3	7.5	2.06	30.9	4.00	2264.8	1545	2325	7.4512	-9.9		
33801	139.0	34.928	34.926	13.174	26.307	11.2	2.2	2.15	34.0	4.00	2272.9	1570	2331	7.4430	-9.9		

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Boreal Autumn 1992

STATION	87	OPS NO. 923291632	LATITUDE	13° 2.58 S																		
CAST	340	DATE 24-Nov-92	LONGITUDE	81° 20.74 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAik μmol/kg	pH	TOC μmol/kg
34012	159.1	34.924	34.924	13.277	13.255	26.283	6.9	13.1	2.09	2.09	2.09	24.2	24.2	2.20	2.20	2260.5	2260.5	1537	1537	2321	7.4554	-9.9
34011	179.3	34.906	34.906	12.949	12.924	26.396	7.3	13.4	2.09	2.09	2.09	24.5	24.5	2.60	2.60	2256.3	2256.3	1583	1583	2323	7.4443	-9.9
34010	198.5	34.885	34.882	12.518	12.491	26.405	5.5	18.5	2.12	2.12	2.12	24.6	24.6	2.30	2.30	2262.3	2262.3	1612	1612	2316	7.4356	-9.9
34009	230.3	34.856	34.855	12.023	11.993	26.479	3.6	24.6	2.12	2.12	2.12	24.2	24.2	1.70	1.70	2262.8	2262.8	1658	1658	2315	7.4241	-9.9
34008	260.0	34.834	34.831	11.547	11.514	26.552	3.1	27.2	2.22	2.22	2.22	25.8	25.8	2.00	2.00	2266.4	2266.4	1685	1685	2312	7.4142	-9.9
34007	289.8	34.813	34.813	11.254	11.218	26.591	1.7	30.2	2.30	2.30	2.30	26.1	26.1	1.90	1.90	2266.6	2266.6	1719	1719	2312	7.4108	-9.9
34006	329.5	34.751	34.751	10.491	10.451	26.680	0.0	33.9	2.31	2.31	2.31	27.7	27.7	1.40	1.40	2271.2	2271.2	1790	1790	2311	7.3955	-9.9
34005	378.9	34.713	34.713	9.762	9.718	26.776	0.0	36.3	2.34	2.34	2.34	31.5	31.5	0.90	0.90	2278.5	2278.5	1857	1857	2310	7.3785	-9.9
34004	449.0	34.654	34.655	8.818	8.769	26.884	0.0	40.0	2.50	2.50	2.50	33.6	33.6	4.40	4.40	2282.1	2282.1	1907	1907	2312	7.3684	-9.9
34003	599.7	34.556	34.555	6.948	6.891	27.084	0.0	44.8	2.66	2.66	2.66	44.7	44.7	17.40	17.40	2291.6	2291.6	1982	1982	2316	7.3530	-9.9
34002	802.0	34.524	34.526	5.472	5.403	27.250	0.0	46.8	2.75	2.75	2.75	59.4	59.4	30.10	30.10	2307.5	2307.5	1952	1952	2333	7.3578	-9.9
34001	801.4	34.524	34.526	5.474	5.405	27.250	0.0	46.8	2.75	2.75	2.75	64.8	64.8	30.30	30.30	2305.0	2305.0	1971	1971	2340	7.3579	-9.9

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STATION CAST	87 344	OPS NO. 923291815 DATE 24-Nov-92	LATITUDE LONGITUDE	13° 2.54 S 81° 20.81 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
34412	2.3	35.324	35.321	20.922	20.922	24.763	0.1	7.2	0.51	0.0	237.90	2078.8	410	2	2351	7.9600	-9.9
34411	9.0	35.357	35.355	20.283	20.281	24.961	0.1	7.1	0.53	0.0	239.80	2077.9	406	2	2353	7.9645	72.7
34410	18.6	35.450	35.446	20.001	19.998	25.107	0.2	7.3	0.53	0.0	243.20	2078.9	399	2	2355	7.9679	70.5
34409	29.6	35.409	35.405	18.709	18.704	25.410	0.2	9.2	0.66	0.6	246.80	2093.9	443	2	2351	7.9325	-9.9
34408	40.4	35.401	35.401	18.451	18.444	25.470	0.3	9.7	0.66	0.9	243.60	2097.2	451	2	2349	7.9236	-9.9
34407	49.6	35.398	35.397	18.297	18.288	25.506	0.3	10.1	0.81	0.9	239.90	2100.7	462	2	2348	7.9179	-9.9
34406	64.5	35.392	35.391	18.153	18.142	25.538	0.3	10.0	0.70	1.1	235.20	2104.7	467	2	2348	7.9107	-9.9
34405	79.4	35.369	35.368	17.880	17.866	25.589	0.4	9.5	0.66	1.4	227.70	2109.8	485	2	2349	7.8999	-9.9
34404	94.7	35.341	35.348	17.657	17.641	25.622	1.0	9.9	0.87	1.9	214.70	2114.7	498	2	2346	7.8866	-9.9
34403	110.4	35.078	35.080	15.546	15.529	25.915	0.0	22.5	1.39	9.7	73.40	-9.0	1004	D	-9	7.6221	-9.9
34402	123.4	34.948	34.948	14.368	14.350	26.073	0.0	21.7	1.97	16.6	1.50	2251.9	1480	2	2323	7.4686	-9.9
34401	139.7	34.931	34.933	13.792	13.772	26.182	3.7	16.7	2.26	22.0	3.70	2256.2	1490	2	2322	7.4666	-9.9

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Boreal Autumn 1992

STATION	88	OPS NO. 923300500	LATITUDE	13° 14 S																	
CAST	345	DATE 25-Nov-92	LONGITUDE	84° 4.6 W																	
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAIk μmol/kg	pH	TOC μmol/kg
34512	159.8	34.903	34.907	12.897	12.875	26.343	2.6	21.7	2	1.81	24.2	2	1.40	2	2254.0	2	1529	2	2316	7.4565	-9.9
34511	179.7	34.893	34.892	12.601	12.577	26.395	2.7	22.8	2	1.93	26.2	2	2.30	2	2259.4	2	1587	2	2319	7.4447	-9.9
34510	200.6	34.869	34.869	12.113	12.087	26.471	0.0	29.6	2	2.07	26.0	2	2.50	2	2256.8	2	1565	2	2317	7.4446	-9.9
34509	228.7	34.839	34.842	11.716	11.687	26.524	0.0	31.2	2	2.12	27.3	2	3.40	2	2258.5	2	1600	2	2316	7.4393	-9.9
34508	261.9	34.820	34.819	11.283	11.250	26.590	0.0	32.7	2	2.15	28.9	2	4.40	2	2261.5	2	1626	2	2314	7.4316	-9.9
34507	291.0	34.789	34.790	10.885	10.849	26.639	0.0	33.4	2	2.16	29.5	2	1.90	2	2268.8	2	1711	2	2314	7.4117	-9.9
34506	330.0	34.755	34.756	10.321	10.282	26.713	0.0	35.5	2	2.12	31.0	2	2.30	2	2270.9	2	1750	2	2314	7.4008	-9.9
34505	378.9	34.720	34.721	9.748	9.704	26.784	0.0	37.3	2	2.16	33.8	2	5.10	2	2274.1	2	1776	2	2316	7.3977	-9.9
34504	450.2	34.660	34.661	8.768	8.719	26.897	0.0	39.5	2	2.49	37.0	2	11.90	2	2276.7	2	1794	2	2315	7.3889	-9.9
34503	601.2	34.567	34.568	7.051	6.993	27.079	0.0	44.1	2	2.66	46.6	2	12.90	2	2313.6	2	1993	2	2319	7.3502	-9.9
34502	793.3	34.529	34.530	5.636	5.567	27.235	0.0	46.2	2	2.88	65.8	2	28.90	2	2302.4	2	1961	2	2331	7.3585	-9.9
34501	794.5	34.529	34.531	5.628	5.559	27.236	0.0	46.5	2	2.89	72.2	3	28.90	2	2306.2	2	1964	2	2336	7.3583	-9.9

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Boreal Autumn 1992

STATION	88	OPS NO	923300630	LATITUDE	13° 13.98 S													
CAST	347	DATE	25-Nov-92	LONGITUDE	84° 4.48 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAIk μmol/kg	pH	TOC μmol/kg
34712	2.7	35.500	35.499	20.138	20.137	25.108	0.3	9.7	2	0.42	2	2307.7	3	395	2	2353	7.9717	-9.9
34711	9.0	35.497	35.500	20.139	20.137	25.106	0.3	9.4	2	0.57	2	2074.1	2	397	D	2353	7.9726	68.7
34710	18.6	35.498	35.497	20.085	20.082	25.121	0.3	9.5	2	0.66	2	2072.7	2	396	2	2351	7.9729	69.4
34709	29.1	35.501	35.500	19.863	19.858	25.183	0.4	9.5	2	0.49	2	2076.2	2	402	2	2351	7.9684	-9.9
34708	39.7	35.499	35.499	19.843	19.836	25.187	0.4	9.5	2	0.69	2	2073.4	2	402	2	2354	7.9660	-9.9
34707	49.6	35.501	35.499	19.781	19.772	25.205	0.4	9.7	2	0.68	2	2080.0	2	409	2	2351	7.9620	-9.9
34706	64.2	35.499	35.499	19.530	19.518	25.270	0.4	9.4	2	0.54	2	2084.9	2	420	2	2352	7.9527	-9.9
34705	78.7	35.542	35.547	19.156	19.142	25.400	0.7	7.6	2	0.68	2	2090.1	2	426	2	2355	7.9480	-9.9
34704	94.0	35.464	35.482	18.398	18.382	25.534	0.7	7.0	2	0.55	2	2096.9	2	433	2	2356	7.9404	-9.9
34703	108.5	35.164	35.179	16.635	16.617	25.732	0.2	15.9	2	0.88	2	2146.6	2	658	2	-9	7.7658	-9.9
34702	124.2	34.953	34.956	14.647	14.629	26.017	0.1	24.0	2	1.45	2	2220.0	2	1202	3	2333	7.5499	-9.9
34701	140.5	34.950	34.946	14.005	13.985	26.152	0.1	24.1	2	1.81	2	2245.4	2	1440	2	2314	7.4795	-9.9

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Boreal Autumn 1992

STATION CAST	89 348	OFS NO. 923301738 DATE 25-Nov-92	LATITUDE LONGITUDE	13° 25.6 S 86° 48.3 W															
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	TALK μmol/kg	pH	TOC μmol/kg
34812	158.9	34.820	34.823	13.292	13.270	26.200	0.0	20.4	2	1.89	18.2	15.50	2	2246.2	2	1450	2308	7.4775	49.4
34811	179.6	34.848	34.848	12.824	12.800	26.316	0.2	19.6	2	1.89	22.9	2.20	2	2262.6	2	1584	2309	7.4419	47.4
34810	199.2	34.807	34.817	12.189	12.163	26.409	0.5	21.9	2	1.93	24.7	1.00	2	2265.6	2	1653	2322	7.4264	46.5
34809	229.4	34.786	34.789	11.690	11.661	26.488	0.1	25.7	2	2.04	26.0	1.30	2	2266.5	2	1702	2313	7.4125	45.5
34808	258.6	34.766	34.766	11.238	11.206	26.556	0.0	28.9	2	2.09	26.5	1.90	2	2270.3	2	1747	2310	7.4022	46.1
34807	289.2	34.740	34.742	10.639	10.604	26.644	0.0	32.7	2	2.11	27.9	1.30	2	2272.9	2	1788	2310	7.3901	44.5
34806	329.2	34.702	34.703	9.953	9.915	26.734	0.0	34.7	2	2.27	30.5	3.30	2	2277.0	2	1842	2309	7.3820	45.5
34805	380.6	34.664	34.669	9.417	9.374	26.795	0.0	38.4	2	2.15	33.1	7.00	2	2279.4	2	1842	2309	7.3805	41.7
34804	448.0	34.609	34.611	8.200	8.154	26.944	0.0	41.0	2	2.20	35.8	13.80	2	2281.1	2	1882	2311	7.3727	40.7
34803	599.5	34.537	34.538	6.537	6.482	27.124	0.0	44.4	2	2.42	47.8	24.20	2	2288.3	2	1933	2320	7.3617	41.3
34802	798.1	34.519	34.523	5.230	5.163	27.275	0.0	45.5	2	2.45	69.8	36.30	2	2308.0	2	1904	2336	7.3668	39.4
34801	798.4	34.520	34.524	5.226	5.159	27.276	0.0	46.2	2	2.51	73.0	36.90	2	2306.3	2	1887	2347	7.3671	40.6

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STATION	89	OPS NO. 923301922	LATITUDE	13° 25.47 S													
CAST	352	DATE 25-Nov-92	LONGITUDE	86° 8.5 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
35212	2.6	35.641	35.609	20.499	20.499	25.119	0.1	3.6	0.38	0.0	242.20	2054.3	342	2	2364	8.0291	80.3
35211	9.4	35.638	35.635	20.383	20.381	25.148	0.1	3.6	0.42	0.0	242.60	2052.1	342	2	2364	8.0281	76.3
35210	19.4	35.616	35.634	20.322	20.318	25.148	0.1	3.6	0.40	0.0	242.50	2054.4	342	2	2364	8.0252	77.1
35209	29.3	35.632	35.632	20.260	20.255	25.178	0.1	3.7	0.47	0.0	241.50	2056.3	344	2	2364	8.0244	76.7
35208	38.9	35.629	35.624	20.106	20.099	25.217	0.1	4.0	0.49	0.0	238.00	2058.8	353	2	2361	8.0165	74.7
35207	50.1	35.593	35.599	19.678	19.669	25.303	0.2	5.5	0.52	0.0	229.40	2075.5	384	2	2360	7.9848	67.6
35206	63.6	35.597	35.596	19.463	19.451	25.362	0.4	4.5	0.60	0.0	223.00	2076.8	390	2	2360	7.9807	64.7
35205	80.2	35.579	35.574	19.258	19.244	25.402	0.4	4.4	0.40	0.0	227.20	2079.0	393	2	2361	7.9785	65.5
35204	95.0	35.484	35.495	18.789	18.772	25.450	1.0	4.2	0.55	0.0	212.60	2088.3	416	2	2356	7.9577	60.8
35203	110.1	35.362	35.365	18.050	18.031	25.543	0.2	6.9	0.53	0.6	198.40	2102.4	459	2	-9	7.9215	56.8
35202	123.6	35.130	35.125	16.416	16.396	25.757	0.0	11.6	0.77	1.9	178.10	2119.7	562	2	2349	7.8479	54.7
35201	141.1	34.798	34.810	14.271	14.250	25.979	0.0	14.7	1.18	4.4	136.00	2147.5	732	2	2329	7.7455	49.7

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STATION CAST	90 353	OPS NO. 923310337 DATE 26-Nov-92	LATITUDE LONGITUDE	13° 32.34 S 88° 29.81 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
35312	2002.5	34.640	34.641	2.255	2.114	27.674	-9.9	-9.9	-9.99	-9.9	9	2339.6	2	2420	7.5108	-9.9
35311	2001.8	34.641	34.642	2.254	2.113	27.675	-9.9	-9.9	-9.99	-9.9	9	2338.4	2	2421	7.5109	-9.9
35310	2001.5	34.641	34.641	2.255	2.115	27.675	-9.9	-9.9	-9.99	-9.9	9	2338.8	2	2417	7.5112	-9.9
35309	2001.1	34.641	34.641	2.255	2.115	27.675	-9.9	-9.9	-9.99	-9.9	9	2339.4	2	2417	7.5109	-9.9
35308	2001.1	34.640	34.642	2.255	2.115	27.674	-9.9	-9.9	-9.99	-9.9	9	2339.5	2	2417	7.5113	-9.9
35307	2001.8	34.641	34.642	2.255	2.114	27.675	-9.9	-9.9	-9.99	-9.9	9	2339.5	2	2415	7.5115	-9.9
35306	2002.0	34.641	34.641	2.255	2.114	27.675	-9.9	-9.9	-9.99	-9.9	9	2342.8	2	2416	7.5111	-9.9
35305	2001.7	34.641	34.640	2.256	2.115	27.675	-9.9	-9.9	-9.99	-9.9	9	2341.0	3	2417	7.5107	-9.9
35304	2002.3	34.640	34.640	2.256	2.115	27.674	-9.9	-9.9	-9.99	-9.9	9	2337.5	3	2418	7.5110	-9.9
35303	2002.1	34.640	34.641	2.256	2.115	27.674	-9.9	-9.9	-9.99	-9.9	9	2337.2	2	2415	7.5110	-9.9
35302	2002.7	34.641	34.640	2.256	2.115	27.675	-9.9	-9.9	-9.99	-9.9	9	2338.1	2	2417	7.5108	-9.9
35301	2002.0	34.641	34.641	2.257	2.116	27.675	-9.9	-9.9	-9.99	-9.9	9	2336.1	2	2418	7.5105	-9.9

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STATION CAST	91 354	OPS NO. 923310850 DATE 26-Nov-92	LATITUDE LONGITUDE	13° 36.92 S 89° 32.24 W	Potential Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	QC	QC	QC	QC	QC	TALK µmol/kg	pH	TOC µmol/kg
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Salinity	Temp °C	Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	QC	QC	QC	QC	QC	TALK µmol/kg	pH	TOC µmol/kg
35412	160.9	34.871	34.871	34.871	13.062	13.040	26.286	2.3	17.2	2.00	21.0	2.50	2260.9	1562	2	2	2	2	2	2	2318	7.4474	-9.9
35411	179.1	34.866	34.867	34.867	12.667	12.643	26.361	4.0	17.1	2.20	23.3	2.40	2265.2	1580	2	2	2	2	2	2	2319	7.4395	-9.9
35410	198.8	34.849	34.849	34.849	12.276	12.250	26.424	2.7	21.0	2.28	23.1	3.10	2264.0	1668	3	2	2	2	2	2	2320	7.4328	-9.9
35409	229.3	34.827	34.829	34.829	11.850	11.820	26.489	1.4	25.8	2.26	22.8	1.40	2263.6	1617	2	2	2	2	2	2	2315	7.4235	-9.9
35408	258.8	34.799	34.799	34.799	11.332	11.299	26.565	0.0	30.2	2.25	23.8	2.00	2265.9	1678	3	2	2	2	2	2	2313	7.4151	-9.9
35407	289.7	34.774	34.774	34.774	10.829	10.794	26.637	0.0	33.0	2.26	24.6	4.40	2267.0	1713	3	2	2	2	2	2	2310	7.4108	-9.9
35406	328.5	34.716	34.719	34.719	10.121	10.082	26.716	0.0	34.9	2.31	27.2	3.60	2273.2	1810	2	2	2	2	2	2	2310	7.3880	-9.9
35405	378.4	34.677	34.678	34.678	9.362	9.320	26.814	0.0	37.7	2.39	29.3	6.10	2276.1	1843	2	2	2	2	2	2	2310	7.3811	-9.9
35404	448.7	34.620	34.626	34.626	8.349	8.302	26.930	0.0	40.9	2.39	32.7	10.80	2281.3	1888	2	2	2	2	2	2	2309	7.3718	-9.9
35403	599.9	34.555	34.556	34.556	6.884	6.827	27.092	0.0	44.3	2.58	43.3	17.80	2291.6	1971	2	2	2	2	2	2	2318	7.3547	-9.9
35402	802.4	34.521	34.522	34.522	5.433	5.365	27.253	0.0	45.6	2.60	58.4	33.40	2305.1	1931	2	2	2	2	2	2	2330	7.3649	-9.9
35401	801.5	34.519	34.523	34.523	5.434	5.366	27.251	0.0	46.5	2.63	57.6	34.30	2304.9	1938	2	2	2	2	2	2	2330	7.3647	-9.9

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STATION CAST	91 356	OPS NO. 923311021 DATE 26-Nov-92	LATITUDE LONGITUDE		13° 36.96 S 89° 2.18 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAik μmol/kg	pH	TOC μmol/kg							
35612	2.4	35.653	35.652	20.530	20.530	25.120	0.2	2	5.6	2	0.61	2	0.0	2	231.40	2	2067.1	2	368	2	2361	8.0001	-9.9
35611	10.4	35.652	35.652	20.529	20.527	25.120	0.2	2	5.3	2	0.61	2	0.0	2	231.30	2	2068.2	2	368	2	2361	7.9994	69.1
35610	19.4	35.652	35.653	20.537	20.533	25.118	0.2	2	5.3	2	0.60	2	0.0	2	231.10	2	2067.8	2	368	2	2360	8.0014	68.0
35609	29.4	35.654	35.651	20.519	20.513	25.125	0.2	2	5.1	2	0.46	2	0.0	2	230.80	2	2068.4	2	368	2	2361	8.0000	-9.9
35608	39.7	35.611	35.620	20.256	20.249	25.163	0.2	2	6.1	2	0.69	4	0.0	2	231.70	2	2070.3	2	379	2	2359	7.9908	-9.9
35607	49.3	35.611	35.611	20.227	20.218	25.171	0.3	2	6.8	2	0.53	2	0.7	2	231.40	2	2072.2	2	383	2	2359	7.9861	-9.9
35606	63.9	35.608	35.610	20.180	20.168	25.182	0.3	2	6.6	2	0.61	2	0.7	2	229.50	2	2073.7	2	385	2	2356	7.9863	-9.9
35605	80.1	35.519	35.518	19.726	19.711	25.235	0.4	2	9.6	2	0.82	2	1.4	2	223.90	2	2088.4	2	426	2	2353	7.9477	-9.9
35604	93.7	35.480	35.480	19.376	19.359	25.297	1.5	2	10.8	2	0.84	2	1.7	2	205.70	2	2099.9	2	467	2	2346	7.9163	-9.9
35603	109.7	35.218	35.370	17.743	17.724	25.508	0.4	2	14.7	2	1.05	2	2.9	2	162.80	2	2128.4	2	563	2	2341	7.8483	-9.9
35602	124.5	34.941	34.945	15.069	15.050	25.916	0.0	2	14.2	2	0.95	2	3.7	2	136.70	2	2143.4	2	679	2	2317	7.7725	-9.9
35601	140.8	34.870	34.880	13.999	13.979	26.092	0.0	2	22.8	2	1.78	2	11.5	2	37.10	2	2223.7	2	1241	2	2311	7.5413	-9.9

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STATION 92 OPS NO. 923312132 LATITUDE 13° 48.61 S
 CAST 357 DATE 26-Nov-92 LONGITUDE 92° 15.71 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
35712	159.2	35.038	35.037	15.376	25.924	0.0	28.5	1.71	14.0	13.50	2	2228.5	2	2313	7.5367	-9.9
35711	179.5	34.954	34.942	13.945	26.169	0.0	26.9	2.02	18.5	6.60	2	2240.1	2	2309	7.4962	-9.9
35710	199.4	34.945	34.947	13.433	26.269	2.7	25.1	2.01	23.5	1.90	2	2248.0	2	2312	7.4795	-9.9
35709	231.7	34.906	34.906	12.708	26.385	4.0	24.4	2.05	26.3	1.40	2	2255.4	2	2312	7.4554	-9.9
35708	261.1	34.859	34.860	11.984	26.490	2.3	27.2	2.17	28.5	1.10	2	2262.2	2	-9	7.4336	-9.9
35707	285.0	34.810	34.824	11.498	26.543	1.9	28.6	2.20	28.2	2.50	2	2266.6	2	2300	7.4186	-9.9
35706	331.8	34.742	34.741	10.597	26.654	0.0	32.4	2.35	27.9	3.00	2	2273.5	2	2311	7.3925	-9.9
35705	378.0	34.704	34.703	9.864	26.752	0.0	35.6	2.40	30.2	2.50	2	-9.0	9	2309	7.3814	-9.9
35704	452.9	34.654	34.657	8.920	26.868	0.0	39.2	2.43	32.9	8.50	2	2278.8	2	2312	7.3794	-9.9
35703	597.9	34.565	34.564	7.106	27.070	0.0	43.8	2.71	43.8	18.50	2	2290.2	2	2316	7.3616	-9.9
35702	801.9	34.518	34.519	5.490	27.244	0.0	45.4	2.71	58.5	34.20	2	2305.8	2	2332	7.3647	-9.9
35701	802.9	34.517	34.519	5.490	27.243	0.0	45.8	2.69	57.3	34.60	2	2301.6	4	2330	7.3645	-9.9

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STATION	92	OPS NO. 923312300	LATITUDE	13° 48.65 S																		
CAST	361	DATE 26-Nov-92	LONGITUDE	92° 15.98 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAlk μmol/kg	pH	TOC μmol/kg
36112	2.7	35.622	35.608	21.728	21.727	24.768	0.4	6.2	2	0.58	2	0.5	2	228.90	2	2052.0	2	358	2	2356	8.0175	-9.9
36111	9.9	35.622	35.621	21.714	21.712	24.773	0.5	6.0	2	0.57	2	0.6	2	228.90	2	2052.8	2	356	2	2357	8.0167	71.6
36110	19.8	35.617	35.621	21.661	21.657	24.784	0.4	6.1	2	0.63	2	0.6	2	229.10	2	2052.2	2	352	2	2356	8.0171	69.3
36109	30.1	35.621	35.619	21.606	21.600	24.803	0.5	6.2	2	0.63	2	0.8	2	228.80	2	2052.3	2	352	2	2356	8.0182	-9.9
36108	40.6	35.619	35.619	21.590	21.582	24.806	0.5	6.1	2	0.63	2	0.5	2	228.80	2	2054.2	2	350	2	2355	8.0163	-9.9
36107	49.8	35.622	35.618	21.528	21.518	24.826	0.5	6.1	2	0.63	2	0.8	2	229.10	2	2054.5	2	352	2	2357	8.0139	-9.9
36106	64.3	35.672	35.667	20.997	20.985	25.173	0.5	2.9	2	0.50	2	0.0	2	228.60	2	2062.7	2	349	2	2363	8.0183	-9.9
36105	79.9	35.693	35.707	19.889	19.874	25.325	0.2	0.7	2	0.44	2	0.0	2	230.60	2	2097.0	2	356	3	2373	8.0143	-9.9
36104	95.5	35.660	35.663	19.527	19.510	25.395	0.3	0.9	2	0.46	2	0.0	2	227.40	2	2075.5	3	363	2	2370	8.0041	-9.9
36103	109.4	35.641	35.639	19.407	19.387	25.413	-9.9	-9.9	9	-9.99	9	-9.9	9	228.20	2	2077.7	2	369	2	2368	8.0004	-9.9
36102	123.8	35.571	35.572	19.070	19.048	25.447	1.7	0.7	2	0.63	2	0.0	2	219.90	2	2082.7	2	389	2	2362	7.9804	-9.9
36101	140.1	35.359	35.368	18.005	17.981	25.553	0.9	6.2	2	0.71	2	0.5	2	184.70	2	2103.7	2	465	2	2347	7.9149	-9.9

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STATION CAST	93 362	OPS NO. 923321005 DATE 27-Nov-92	LATITUDE LONGITUDE	14° 0.05 S 94° 59.9 W																			
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAlk μmol/kg	TAlk QC	pH	TOC μmol/kg
36212	159.8	35.207	35.206	17.141	17.114	25.647	0.0	10.0	2	0.89	2	1.0	2	166.70	2	2120.4	2	539	2	2336	2	7.8572	54.0
36211	178.9	35.003	35.011	15.664	15.636	25.833	0.0	11.1	2	0.92	2	1.8	2	158.00	2	2123.4	2	589	2	2322	2	7.8257	48.4
36210	199.7	34.812	34.814	14.093	14.064	26.029	0.0	15.1	2	1.25	2	5.1	2	122.70	2	2152.9	2	761	2	2309	2	7.7303	47.3
36209	229.4	34.777	34.773	12.498	12.467	26.326	0.0	22.2	2	2.10	2	20.1	2	14.20	2	2253.1	2	1530	2	2309	2	7.4591	46.2
36208	259.7	34.773	34.772	11.834	11.800	26.451	0.0	25.8	2	2.13	2	22.5	2	5.50	2	2264.6	2	1644	2	2309	2	7.4258	41.8
36207	289.9	34.758	34.756	11.219	11.183	26.554	0.0	30.5	2	2.27	2	25.6	2	4.20	2	2269.1	2	1705	2	2310	2	7.4077	45.1
36206	328.5	34.727	34.727	10.469	10.430	26.665	0.0	32.9	2	2.32	2	28.4	2	3.80	2	2272.8	2	1787	2	2308	2	7.3940	42.2
36205	379.4	34.688	34.687	9.714	9.671	26.764	0.0	35.3	2	2.35	2	29.6	2	8.80	2	2275.9	2	1798	2	2311	2	7.3878	43.2
36204	448.2	34.637	34.635	8.627	8.579	26.901	0.0	40.0	2	2.50	2	33.6	2	14.80	2	2277.4	2	1821	2	2312	2	7.3850	44.4
36203	600.3	34.553	34.554	7.068	7.010	27.065	0.0	42.0	2	2.51	2	40.6	2	34.40	2	2277.9	2	1798	2	2315	2	7.3929	40.0
36202	799.7	34.513	34.515	5.365	5.297	27.254	0.0	46.1	2	2.81	2	56.5	2	39.40	2	2302.1	2	1888	2	-9	2	7.3748	38.4
36201	799.7	34.515	34.514	5.362	5.294	27.256	0.0	45.5	2	2.83	2	60.8	2	40.40	2	2302.2	2	1893	2	2333	2	7.3744	40.3

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STATION CAST	93 364	OPS NO. 923321144 DATE 27-Nov-92	LATITUDE LONGITUDE	14° 0.01 S 94° 59.98 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	QC	PO4 µmol/L	QC	H4SiO4 µmol/L	QC	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
36412	1.5	35.811	35.814	21.721	21.721	24.914	0.0	0.6	2	0.20	2	0.0	2	227.40	2	2040.1	2	309	2	2373	8.0629	76.7
36411	9.6	35.812	35.810	21.712	21.710	24.918	0.0	0.6	2	0.28	2	0.0	2	227.60	2	2041.0	2	308	2	2373	8.0638	-9.9
36410	19.6	35.811	35.810	21.723	21.719	24.914	0.0	0.7	2	0.28	2	0.0	2	227.30	2	2042.5	2	310	2	2373	8.0628	75.7
36409	29.5	35.812	35.809	21.720	21.714	24.917	0.0	0.7	2	0.28	2	0.0	2	227.20	2	2040.0	2	309	2	2368	8.0629	82.1
36408	40.6	35.812	35.810	21.727	21.719	24.915	0.0	0.7	2	0.28	2	0.0	2	227.30	2	2047.1	3	309	2	2371	8.0629	72.7
36407	49.6	35.812	35.811	21.726	21.716	24.916	0.0	0.7	2	0.28	2	0.0	2	227.30	2	2039.5	2	310	2	2374	8.0621	73.6
36406	64.9	35.854	35.858	21.230	21.217	25.086	0.0	0.0	9	0.35	2	0.0	2	230.40	2	2048.2	2	316	2	2379	8.0572	68.3
36405	78.5	35.828	35.829	20.935	20.920	25.148	0.2	0.3	2	0.35	2	0.0	2	224.10	2	2054.3	2	326	2	2377	8.0460	66.7
36404	94.3	35.826	35.824	20.808	20.790	25.181	0.3	0.4	2	0.38	2	0.0	2	222.60	2	2057.2	2	331	2	2378	8.0416	67.6
36403	110.3	35.671	35.669	19.874	19.854	25.314	1.9	1.5	2	0.50	2	0.0	2	203.70	2	2084.3	2	389	2	2366	7.9820	60.0
36402	124.5	35.456	35.455	18.744	18.722	25.442	0.8	5.8	2	0.74	2	0.0	2	187.80	2	2103.8	2	465	2	2353	7.9206	57.1
36401	140.4	35.354	35.354	18.114	18.090	25.522	0.3	7.9	2	0.79	2	0.0	2	178.40	2	2111.5	2	506	2	2345	7.8905	56.8

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STATION 95 OPS NO. 92332344 LATITUDE 11° 55.08 S
 CAST 366 DATE 27-Nov-92 LONGITUDE 94° 59.97 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC μmol/L	DIC μmol/kg	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
36612	159.9	34.938	34.937	14.305	26.080	0.0	21.8	1.57	8.6	48.80	2	2207.5	1095	2310	7.5909	53.5
36611	179.6	34.837	34.837	13.274	26.217	0.0	23.4	1.89	12.3	23.80	2	2232.0	1350	2305	7.5072	53.0
36610	199.1	34.813	34.811	12.617	26.350	0.0	23.1	2.06	17.5	5.90	2	2254.6	1566	2310	7.4486	49.6
36609	230.4	34.808	34.811	11.973	26.451	0.0	27.7	2.06	19.3	3.50	2	2255.7	1597	2311	7.4384	51.8
36608	259.6	34.778	34.777	11.200	26.573	0.0	31.1	2.15	20.8	11.30	2	2253.7	1587	2311	7.4424	43.1
36607	290.3	34.754	34.753	10.614	26.660	0.0	33.2	2.15	24.8	5.00	2	2266.4	1726	2311	7.4073	42.4
36606	329.5	34.746	34.746	10.171	26.731	0.0	34.6	2.16	24.4	19.90	2	2255.0	1579	2309	7.4459	44.5
36605	379.6	34.714	34.716	9.630	26.799	0.0	36.0	2.23	27.0	22.70	2	2258.1	1607	2311	7.4393	41.5
36604	449.5	34.676	34.677	8.966	26.878	0.0	37.8	2.32	30.2	19.70	2	2267.4	1709	2318	7.4129	42.1
36603	607.0	34.583	34.584	7.303	27.056	0.0	41.5	2.52	37.1	25.00	2	2278.8	1892	-9	7.3857	42.3
36602	807.3	34.523	34.526	5.719	27.220	0.0	43.2	2.54	51.3	50.60	2	2285.4	1727	2340	7.4066	-9.9
36601	804.1	34.525	34.526	5.741	27.219	0.0	43.2	2.54	49.7	50.50	2	2285.6	1713	2338	7.4061	39.4

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STATION CAST	95 369	OPS NO. 923330112 DATE 28-Nov-92	LATITUDE LONGITUDE	11° 55.09 S 95° 0 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
36912	2.0	35.701	35.701	21.972	21.972	24.760	0.2	3.4	2	0.35	2	0.0	2	227.30	2	2042.1	2	326	2	2363	8.0443	80.0
36911	9.3	35.703	35.701	21.971	21.969	24.762	0.2	3.4	2	0.35	2	0.0	2	227.50	2	2042.0	2	326	2	2363	8.0433	69.1
36910	19.8	35.688	35.688	21.851	21.847	24.785	0.2	3.7	2	0.37	2	0.0	2	227.80	2	2044.7	2	329	2	2361	8.0396	75.3
36909	29.2	35.681	35.680	21.767	21.761	24.804	0.2	4.0	2	0.47	2	0.0	2	227.60	2	2044.3	3	331	2	2360	8.0369	69.6
36908	39.9	35.680	35.678	21.153	21.145	24.973	0.2	4.0	2	0.48	2	0.0	2	227.30	2	2045.9	2	333	2	2360	8.0359	68.2
36907	49.8	35.674	35.673	21.675	21.665	24.825	0.2	4.1	2	0.48	2	0.0	2	226.40	2	2048.6	2	335	2	2362	8.0320	68.8
36906	63.7	35.774	35.770	21.087	21.075	25.064	0.2	0.5	4	0.37	4	0.0	4	221.30	2	2047.9	2	323	2	2374	8.0494	66.6
36905	79.9	35.742	35.746	20.365	20.350	25.236	0.2	1.3	2	0.39	2	0.0	2	221.60	2	2063.8	2	347	2	2376	8.0237	63.6
36904	94.0	35.704	35.707	20.138	20.120	25.268	0.4	1.5	2	0.39	2	0.0	2	217.30	2	2069.0	2	359	2	2371	8.0118	61.6
36903	109.1	35.661	35.664	19.888	19.868	25.302	1.1	2.2	2	0.41	2	0.0	2	209.70	2	2075.6	2	379	2	2365	7.9921	58.4
36902	123.5	35.362	35.377	18.198	18.177	25.507	0.4	6.8	2	0.58	2	0.0	2	184.30	2	2105.5	2	478	2	2346	7.9080	55.3
36901	141.4	35.112	35.120	16.336	16.313	25.762	0.0	13.9	2	0.97	2	2.3	2	134.50	2	2147.9	2	671	2	2325	7.7806	49.6

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STATION CAST	96 370	OPS NO. 923330931 DATE 28-Nov-92	LATITUDE LONGITUDE	10° 0.24 S 94° 59.89 W																
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	NO3 QC	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 @20°C µatm	fCO2 QC	TAIk µmol/kg	pH	TOC µmol/kg
37012	159.4	34.968	34.965	13.636	13.613	26.244	0.0	27.8	2	1.83	2	1.50	2	2242.1	2	1414	2	2311	7.4893	45.9
37011	179.0	34.929	34.929	12.909	12.885	26.362	0.0	29.8	2	1.87	2	4.90	2	2243.6	2	1439	2	2309	7.4819	43.7
37010	200.7	34.906	34.906	12.541	12.514	26.417	0.0	30.7	2	1.87	2	7.70	2	2245.1	2	1458	2	2310	7.4767	43.5
37009	229.7	34.882	34.881	13.131	13.099	26.282	0.0	31.7	2	1.90	2	10.30	2	2247.0	2	1465	2	2308	7.4734	-9.9
37008	260.4	34.862	34.862	11.847	11.813	26.518	0.0	32.3	2	1.90	2	9.00	2	2250.1	2	1521	2	2309	7.4600	42.1
37007	292.8	34.843	34.841	11.545	11.508	26.561	0.0	32.6	2	1.90	2	6.80	2	2256.1	2	1581	2	2312	7.4458	44.1
37006	327.8	34.819	34.819	11.176	11.135	26.611	0.0	33.6	2	1.94	2	9.20	2	2255.4	2	1576	2	2309	7.4458	44.2
37005	377.6	34.781	34.781	10.603	10.557	26.685	0.0	34.5	2	2.00	2	5.20	2	2266.5	2	1681	2	2312	7.4193	41.9
37004	447.5	34.713	34.712	9.540	9.489	26.814	0.0	36.5	2	2.22	2	5.00	2	2277.0	2	1808	2	2317	7.3886	41.3
37003	599.3	34.595	34.597	7.516	7.456	27.036	0.0	42.5	2	2.45	2	8.10	2	2293.3	2	1982	2	-9	7.3516	39.6
37002	803.1	34.537	34.539	5.564	5.495	27.250	0.0	44.4	2	2.55	2	30.40	2	2304.2	2	1918	2	2336	7.3645	-9.9
37001	803.4	34.540	34.539	5.564	5.495	27.252	0.0	44.6	2	2.56	2	31.50	2	2316.4	2	1894	2	2334	7.3638	-9.9

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STATION CAST	OPS NO. 923331106 DATE 28-Nov-92	96 372	LATITUDE		LONGITUDE		Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	QC	DIC µmol/kg	QC	fCO2 @20°C µatm	QC	Talk µmol/kg	pH	TOC µmol/kg
			9° 59.99 S	95° 0 W																	
37212			2.5	35.579	35.578	22.496	22.495	24.519	0.3	5.2	0.41	0.7	223.50	2	2044.5	2	340	2	2352	8.0284	69.3
37211			9.6	35.579	35.579	22.493	22.491	24.520	0.3	5.3	0.42	0.7	225.90	2	2044.6	2	338	2	2350	8.0278	66.9
37210			20.0	35.579	35.578	22.499	22.495	24.519	0.3	5.5	0.46	0.7	223.70	2	2045.8	2	340	2	2352	8.0278	71.0
37209			29.7	35.580	35.579	22.503	22.497	24.519	0.3	5.3	0.42	0.7	223.40	2	2044.8	2	339	2	2355	8.0277	67.7
37208			40.0	35.590	35.574	22.458	22.450	24.540	0.3	5.3	0.46	0.7	223.40	2	2044.5	2	340	2	2349	8.0284	66.8
37207			49.7	35.563	35.562	22.322	22.312	24.559	0.3	5.3	0.47	0.7	222.30	2	2045.8	2	343	2	2349	8.0239	70.8
37206			64.3	35.557	35.558	22.179	22.166	24.596	0.4	5.4	0.46	0.7	220.30	2	2046.8	2	347	2	2349	8.0243	65.7
37205			78.4	35.539	35.543	19.654	19.640	25.269	1.4	3.1	0.43	0.0	198.20	2	2088.4	2	415	2	2358	7.9623	59.9
37204			94.0	35.334	35.340	17.905	17.889	25.556	1.4	11.2	0.89	1.9	141.70	2	2140.9	2	594	2	2342	7.8292	55.3
37203			109.7	35.157	35.146	16.202	16.185	25.827	0.4	18.4	1.18	5.1	85.50	2	2178.0	2	825	2	2323	7.7031	52.8
37202			124.8	35.018	35.026	14.858	14.839	26.022	0.2	24.6	1.60	10.3	28.90	2	2220.5	2	1171	2	2314	7.5634	49.6
37201			140.8	34.954	34.956	13.771	13.751	26.204	0.2	27.0	1.83	16.1	2.50	2	2241.9	2	1424	2	2310	7.4859	48.1

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STATION	97	OPS NO. 923331940	LATITUDE	8° 0.05 S													
CAST	373	DATE 28-Nov-92	LONGITUDE	95° 0.09 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TAIK μmol/kg	pH	TOC μmol/kg
37312	160.1	34.905	34.908	12.536	12.515	26.416	0.0	31.4	1.80	21.2	6.20	2244.6	1456	2	2311	7.4767	-9.9
37311	178.7	34.894	34.895	12.363	12.339	26.442	0.0	32.1	1.81	21.7	7.60	2243.6	1462	2	2312	7.4750	-9.9
37310	198.5	34.876	34.877	12.063	12.037	26.486	0.0	32.6	1.82	23.6	10.70	2247.2	1496	2	2311	7.4659	-9.9
37309	229.4	34.858	34.859	11.789	11.759	26.525	0.0	32.8	1.87	24.8	8.30	2249.4	1509	2	2311	7.4605	-9.9
37308	258.2	34.840	34.842	11.516	11.483	26.563	0.0	33.6	1.90	25.4	7.40	2253.0	1559	2	2311	7.4497	-9.9
37307	290.1	34.806	34.818	11.125	11.089	26.609	0.0	34.0	1.99	27.1	5.40	2260.0	1631	2	2310	7.4329	-9.9
37306	329.5	34.789	34.792	10.734	10.694	26.667	0.0	35.0	2.11	29.1	3.30	2264.8	1686	2	2312	7.4187	-9.9
37305	379.5	34.750	34.686	10.130	10.085	26.743	0.0	35.9	2.12	31.0	3.20	2271.9	1757	2	2311	7.4011	-9.9
37304	453.7	34.681	34.753	9.028	8.978	26.872	0.0	38.5	2.33	35.3	3.50	2281.6	1876	2	2314	7.3739	-9.9
37303	598.3	34.584	34.589	6.985	6.928	27.101	0.0	45.2	2.47	49.2	6.60	2300.9	2042	2	2323	7.3391	-9.9
37302	796.0	34.544	34.547	5.473	5.405	27.266	0.0	45.4	2.42	68.5	37.40	2303.9	1833	2	2337	7.3811	-9.9
37301	798.8	34.541	34.540	5.440	5.372	27.268	0.0	45.2	2.62	71.2	40.70	2302.8	1791	2	2338	7.3863	-9.9

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STATION CAST	97 377	OPS NO. 923332116 DATE 28-Nov-92	LATITUDE LONGITUDE	8° 0.1 S 95° 59.75 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
37712	2.8	-9.999	-9.999	22.992	-9.999	-9.999	0.3	8.4	2	0.50	2	1.2	2	222.30	2	2050.0	2	370	E	2338	8.0905	73.4
37711	9.8	35.352	35.351	22.988	22.986	24.206	0.2	8.4	2	0.50	2	1.1	2	222.20	2	2050.5	2	370	2	2337	7.9964	64.1
37710	19.5	35.348	35.349	22.841	22.837	24.246	0.2	8.4	2	0.54	2	1.1	2	222.50	2	2050.6	2	370	2	2338	7.9970	65.5
37709	29.5	35.348	35.349	22.818	22.812	24.253	0.2	8.4	2	0.51	2	1.1	2	222.40	2	2050.3	2	369	2	2335	7.9975	63.0
37708	39.5	35.350	35.348	22.807	22.799	24.259	0.2	8.5	2	0.51	2	1.1	2	222.80	2	2049.6	2	371	2	2336	7.9962	62.0
37707	48.8	35.349	35.352	22.786	22.776	24.264	0.3	8.5	2	0.50	2	1.2	2	222.60	2	2053.0	2	372	2	2337	7.9929	61.3
37706	63.0	35.413	35.413	22.153	22.140	24.494	0.4	10.8	2	0.60	2	1.5	2	220.30	2	2064.6	2	403	2	2339	7.9691	61.3
37705	79.2	35.382	35.372	19.995	19.980	25.060	1.2	12.7	2	0.85	2	4.0	2	-9.99	9	2109.5	2	510	2	-9	7.8773	58.9
37704	94.0	35.232	35.220	17.100	17.084	25.673	1.0	21.4	2	1.25	2	5.8	2	68.10	2	2186.6	2	877	2	2325	7.6777	53.7
37703	110.0	34.985	35.041	14.784	14.768	26.012	0.2	28.1	2	1.81	2	11.7	2	7.20	3	2232.0	2	1315	2	-9	7.5187	51.4
37702	124.1	34.973	34.978	14.039	14.021	26.163	0.0	28.0	2	1.73	2	15.5	2	3.30	2	2239.3	2	1393	2	2311	7.4944	49.6
37701	141.0	34.942	34.946	13.374	13.354	26.277	0.0	28.3	2	1.79	2	17.7	2	3.30	2	2243.1	2	1436	2	2312	7.4815	46.9

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION 98
 CAST 378
 OPS NO. 923340550
 DATE 29-Nov-92

LATITUDE 6° 0.1 S
 LONGITUDE 95° 0.37 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	Potential										fCO2 @20°C μ atm	TAIK μ mol/kg	pH	TOC μ mol/kg		
							NO2 μ mol/L	NO3 μ mol/L	QC	PO4 μ mol/L	QC	H4SiO4 μ mol/L	QC	O2 μ mol/L	QC	DIC μ mol/kg					QC	
37812	158.4	34.938	34.940	12.899	12.877	26.370	0.0	30.8	2	1.79	2	18.0	2	28.50	2	2224.9	2	1225	2	2313	7.5464	45.3
37811	179.1	34.917	34.915	12.624	12.600	26.409	0.0	31.0	2	1.79	2	18.8	2	28.60	2	2227.4	2	1258	2	2313	7.5356	44.7
37810	199.6	34.901	34.901	12.459	12.432	26.429	0.0	31.4	2	1.94	2	20.5	2	22.20	2	2233.6	2	1322	2	2311	7.5164	45.0
37809	229.2	34.873	34.878	12.132	12.102	26.472	0.0	32.3	2	2.04	2	22.2	2	14.50	2	2240.8	2	1417	2	2310	7.4877	43.1
37808	259.7	34.859	34.859	11.828	11.794	26.519	0.0	32.6	2	2.10	2	22.4	2	13.20	2	2246.7	2	1470	2	2310	7.4733	46.9
37807	290.0	34.850	34.849	11.653	11.616	26.546	0.0	32.6	2	2.10	2	22.6	2	18.00	2	2244.2	2	1431	2	2310	7.4829	44.0
37806	328.6	34.821	34.822	11.206	11.165	26.607	0.0	33.5	2	2.12	2	23.8	2	12.60	2	2253.4	2	1536	2	2312	7.4563	44.4
37805	378.8	34.774	34.776	10.509	10.463	26.696	0.0	34.2	2	2.39	2	28.8	2	2.60	2	2271.0	2	1714	2	2313	7.4083	42.5
37804	448.2	34.691	34.694	9.095	9.045	26.869	0.0	37.7	2	2.42	2	36.6	2	2.20	2	2286.3	2	1890	2	2316	7.3712	42.8
37803	597.1	34.592	34.594	7.074	7.016	27.095	0.0	44.1	2	2.51	2	46.4	2	13.00	2	2297.4	2	1941	2	2323	7.3601	40.5
37802	810.6	34.549	34.551	5.409	5.340	27.278	0.0	43.7	2	2.63	2	69.8	2	47.30	2	2301.1	2	1749	2	2343	7.4043	39.1
37801	805.0	34.549	34.551	5.441	5.372	27.274	0.0	43.7	2	2.63	2	68.8	2	44.10	2	2302.8	2	1755	2	2354	7.3971	41.9

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STATION CAST	98 380	OPS NO. 923340727 DATE 29-Nov-92	LATITUDE LONGITUDE	5° 59.98 S 94° 59.96 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
38012	2.3	34.710	34.710	22.407	22.407	23.885	0.1	5.9	2	0.37	2	1.5	2	228.30	2	2018.0	4	361	2	2301	8.0020	68.4
38011	8.9	34.710	34.709	22.408	22.406	23.885	0.2	5.9	2	0.35	2	1.5	2	228.00	2	2015.7	2	361	2	2299	8.0016	70.4
38010	19.5	34.710	34.709	22.407	22.403	23.886	0.2	5.9	2	0.35	2	1.4	2	228.00	2	2017.6	2	362	2	2305	8.0012	69.5
38009	30.0	34.724	34.724	22.415	22.409	23.895	0.2	6.0	2	0.47	2	1.4	2	227.50	2	2019.9	2	361	2	2297	8.0001	68.5
38008	39.2	35.322	35.308	22.858	22.850	24.223	0.4	8.1	2	0.47	2	0.7	2	222.60	2	2050.2	2	373	2	2336	7.9933	68.1
38007	48.0	35.391	35.384	22.564	22.554	24.360	0.4	7.9	2	0.63	2	0.7	2	219.50	2	2052.2	2	376	2	2338	7.9917	65.3
38006	63.9	35.340	35.379	20.787	20.775	24.815	1.9	9.8	2	0.79	2	1.3	2	172.50	2	2095.5	2	467	2	2339	7.9143	63.6
38005	78.6	35.266	35.266	17.733	17.720	25.546	2.0	18.1	2	1.20	2	3.8	2	88.90	2	2174.5	2	771	2	2333	7.7269	57.9
38004	93.8	35.096	35.098	15.351	15.337	25.972	0.3	25.3	2	1.76	2	9.6	2	37.50	2	2208.9	2	1051	2	2320	7.6058	51.8
38003	111.7	35.040	35.038	14.268	14.252	26.165	0.0	27.3	2	1.78	2	12.2	2	25.70	2	2219.6	2	1163	2	2315	7.5661	47.3
38002	121.3	35.023	35.025	13.972	13.955	26.215	0.0	27.8	2	1.77	2	13.0	2	29.50	2	2218.7	2	1150	2	2316	7.5712	47.9
38001	140.5	34.971	34.973	13.259	13.239	26.323	0.0	29.9	2	1.79	2	16.5	2	28.00	2	2221.3	2	1198	2	2315	7.5548	45.8

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STATION	99	OPS NO	923341225	LATITUDE	5° 0 S												
CAST	381	DATE	29-Nov-92	LONGITUDE	95° 0.1 W												
Sample ID	Pressure	Salinity	Salinity	Temp	Potential	Temp	Sigma	NO2	NO3	PO4	H4SiO4	O2	DIC	fCO2	TALK	pH	TOC
	db	CTD	Bottle	°C	°C	Theta	µmol/L	µmol/L	µmol/L	µmol/L	µmol/L	µmol/L	µmol/kg	µatm	µmol/kg		µmol/kg
38112	160.2	34.949	34.952	13.193	13.171	26.320	0.0	31.5	1.72	18.6	18.10	2227.9	1275	2320	7.5306	-9.9	
38111	179.0	34.921	34.921	12.900	12.876	26.357	0.0	32.8	1.76	21.1	11.80	2235.5	1355	2314	7.5055	-9.9	
38110	200.1	34.915	34.912	12.766	12.739	26.380	0.0	32.7	1.96	22.2	14.00	2235.3	1350	2316	7.5071	-9.9	
38109	230.0	34.896	34.896	12.507	12.476	26.417	0.0	32.6	1.82	22.4	16.30	2237.0	1348	2313	7.5070	-9.9	
38108	258.0	34.884	34.861	12.229	12.195	26.462	0.0	32.8	1.96	23.2	11.50	2240.0	1438	2313	7.4825	-9.9	
38107	289.4	34.862	34.828	11.847	11.809	26.519	0.0	32.8	1.96	24.3	17.90	2245.7	1421	2316	7.4864	-9.9	
38106	328.7	34.829	34.883	11.330	11.289	26.590	0.0	33.8	2.10	26.9	7.50	2257.1	1572	2315	7.4461	-9.9	
38105	378.7	34.759	34.761	10.300	10.255	26.720	0.0	34.0	2.20	32.2	1.60	2276.1	1770	2321	7.3981	-9.9	
38104	449.8	34.674	34.674	8.796	8.747	26.903	0.0	39.8	2.45	39.4	3.10	2286.0	1895	2319	7.3691	-9.9	
38103	600.5	34.583	34.584	6.878	6.821	27.115	0.0	43.5	2.52	50.8	27.90	2288.7	1813	2327	7.3884	-9.9	
38102	802.3	34.542	34.545	5.502	5.433	27.261	0.0	41.0	2.48	62.8	71.40	-9.0	1539	2341	7.4550	-9.9	
38101	801.9	34.544	34.546	5.510	5.441	27.262	0.0	41.0	2.48	63.6	71.50	2282.8	1521	2344	7.4562	-9.9	

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Boreal Autumn 1992

STATION	99	OPS NO. 923341356	LATITUDE	5° 0.03 S														
CAST	383	DATE 29-Nov-92	LONGITUDE	95° 0.06 W														
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
38312	2.4	34.718	34.719	22.219	22.219	23.944	0.1	6.6	0.36	1.5	222.90	2023.0	2	373	2	2306	7.9898	66.8
38311	10.1	34.718	34.718	22.214	22.212	23.946	0.1	6.6	0.38	1.5	223.10	-9.0	9	373	D	2304	7.9891	65.2
38310	19.5	34.718	34.717	22.215	22.211	23.946	0.0	6.7	0.38	1.5	222.90	2022.0	2	374	2	2300	7.9893	68.8
38309	29.6	34.719	34.716	22.216	22.210	23.947	0.1	6.6	0.48	1.6	222.80	2022.6	2	373	2	2302	7.9891	67.3
38308	39.7	34.707	34.703	21.937	21.929	24.016	0.2	6.8	0.48	2.2	219.70	2025.6	2	382	2	2303	7.9812	64.3
38307	49.5	34.719	34.717	21.028	21.019	24.276	0.2	8.5	0.62	3.8	208.60	2044.8	2	423	2	2301	7.9455	61.5
38306	63.5	34.944	34.902	20.084	20.072	24.701	0.4	12.0	0.65	4.3	183.50	2084.6	2	499	2	2315	7.8867	59.8
38305	80.0	35.123	35.109	17.337	17.324	25.532	1.2	20.9	1.18	8.3	79.60	2167.8	2	798	2	2321	7.7117	55.6
38304	94.2	35.107	35.104	16.429	16.414	25.735	1.2	23.8	1.35	10.8	58.70	2183.8	2	900	2	2321	7.6660	51.6
38303	109.9	35.020	35.027	14.542	14.526	26.091	0.0	27.4	1.39	14.4	43.30	2200.8	2	1023	2	2317	7.6157	47.1
38302	124.8	34.995	34.996	14.102	14.084	26.166	0.0	28.7	1.58	16.1	43.40	2202.1	2	1045	2	2319	7.6065	47.3
38301	140.2	34.961	34.972	13.767	13.747	26.211	0.0	29.7	1.56	18.4	31.80	2213.4	2	1143	2	2313	7.5722	51.0

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Boreal Autumn 1992

STATION CAST	100 388	OPS NO DATE	923342310 29-Nov-92	LATITUDE LONGITUDE	4° 0.2 S 95° 0.14 W												
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
38812	160.7	34.947	34.948	13.483	13.460	26.259	0.0	32.3	1.82	21.8	15.80	2228.2	2	2	2307	7.5296	47.3
38811	179.3	34.934	34.935	13.214	13.189	26.304	0.0	32.6	1.82	22.6	6.90	2237.0	2	2	2310	7.5009	45.2
38810	200.4	34.928	34.931	13.103	13.075	26.323	0.0	32.9	1.82	21.7	12.70	2234.7	2	2	2310	7.5099	46.2
38809	231.1	34.914	34.920	12.782	12.751	26.377	0.0	33.4	1.83	23.3	13.00	2238.6	2	2	2310	7.5034	44.7
38808	259.6	34.890	34.876	12.366	12.331	26.440	0.0	34.0	1.95	25.9	12.30	2243.7	2	2	2313	7.4891	47.3
38807	290.7	34.870	34.891	12.080	12.042	26.481	0.0	33.6	1.88	25.4	17.70	2242.0	2	2	2310	7.4944	45.0
38806	328.1	34.832	34.830	11.369	11.328	26.585	0.0	34.4	1.96	29.7	4.70	2262.5	2	2	2313	7.4365	43.6
38805	379.4	34.750	34.672	10.102	10.057	26.747	0.0	36.2	2.33	36.7	1.20	2277.7	2	2	2315	7.3967	42.0
38804	448.8	34.669	34.751	8.679	8.631	26.918	0.0	41.3	2.37	45.8	5.30	2286.5	2	2	2320	7.3762	40.8
38803	599.7	34.583	34.586	6.982	6.925	27.101	0.0	42.7	2.34	53.0	45.80	2276.6	2	2	2327	7.4272	41.4
38802	797.5	34.553	34.555	5.570	5.501	27.262	0.0	43.3	2.56	76.8	62.60	2292.2	2	2	2342	7.4354	40.3
38801	797.1	34.552	34.556	5.570	5.501	27.261	0.0	43.2	2.50	78.3	62.70	2288.1	3	3	2342	7.4361	40.2

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STATION CAST	100 390	OPS NO. 923350038 DATE 30-Nov-92	LATITUDE LONGITUDE	4° 0.09 S 95° 0.14 W	Potential Temp °C	Temp °C	Salinity CTD	Salinity Bottle	Salinity	Pressure db	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
39012	3.4	34.767	34.768	22.337	22.337	22.338	34.767	34.768	34.768	3.4	0.2	7.0	0.35	1.5	236.60	2023.9	370	2	2302	7.9920	69.1
39011	9.4	34.765	34.766	22.301	22.301	22.303	34.765	34.766	34.766	9.4	0.2	7.0	0.35	1.4	236.60	2024.4	370	2	2301	7.9923	66.8
39010	18.2	34.760	34.762	22.134	22.134	22.138	34.760	34.762	34.762	18.2	0.2	7.0	0.35	1.5	236.90	2023.4	371	2	2304	7.9919	69.1
39009	28.4	34.763	34.743	21.421	21.421	21.426	34.763	34.743	34.743	28.4	0.1	7.9	0.45	3.1	228.60	2032.8	392	2	2299	7.9741	66.5
39008	40.0	35.102	34.993	18.466	18.466	18.473	35.102	34.993	34.993	40.0	0.3	15.9	0.77	7.7	160.20	2109.4	575	2	2316	7.8363	54.4
39007	49.6	35.040	35.055	17.449	17.449	17.457	35.040	35.055	35.055	49.6	0.8	19.9	1.02	8.9	111.60	2147.7	715	2	2314	7.7546	64.9
39006	64.5	35.063	35.072	15.468	15.468	15.478	35.063	35.072	35.072	64.5	0.8	26.4	1.32	14.0	54.50	2187.9	938	2	2316	7.6505	48.7
39005	79.6	35.033	35.038	14.831	14.831	14.843	35.033	35.038	35.038	79.6	0.0	28.0	1.37	15.9	49.60	2195.5	992	2	2313	7.6307	49.0
39004	95.3	35.017	35.023	14.571	14.571	14.585	35.017	35.023	35.023	95.3	0.0	28.7	1.53	16.9	47.20	2198.0	1015	2	2312	7.6200	48.7
39003	108.8	35.003	35.008	14.326	14.326	14.342	35.003	35.008	35.008	108.8	0.0	28.2	1.51	17.9	42.60	2203.1	1050	2	2315	7.6064	46.3
39002	124.2	34.984	34.987	14.027	14.027	14.045	34.984	34.987	34.987	124.2	0.0	30.1	1.53	18.7	32.00	2212.7	1136	2	2311	7.5762	50.4
39001	139.2	34.962	34.967	13.773	13.773	13.753	34.962	34.967	34.967	139.2	0.0	31.5	1.61	20.5	24.70	2218.3	1205	2	2312	7.5533	50.2

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STATION CAST	101 391	OPS NO. 923350537 DATE 30-Nov-92	LATITUDE LONGITUDE	3° 0.06 S 95° 0.1 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAlk µmol/kg	pH	TOC µmol/kg
39112	158.9	34.924	34.929	13.134	13.112	26.312	0.0	24.6	1.37	18.6	87.30	2182.3	888	2	2316	7.6709	-9.9
39111	179.4	34.918	34.918	13.013	12.988	26.332	0.0	25.1	1.49	20.6	80.70	2187.8	922	2	2313	7.6560	-9.9
39110	200.0	34.909	34.910	12.938	12.911	26.341	0.0	26.1	1.51	21.3	76.10	2191.5	957	2	2312	7.6428	-9.9
39109	228.3	34.907	34.906	12.889	12.858	26.350	0.0	26.8	1.49	21.0	70.40	2196.1	992	2	2313	7.6288	-9.9
39108	258.8	34.899	34.900	12.730	12.695	26.376	0.0	29.8	1.97	25.2	43.80	2216.3	1152	2	2312	7.5703	-9.9
39107	289.0	34.891	34.891	12.594	12.555	26.397	0.0	29.5	1.74	24.0	40.80	2219.8	1178	2	2311	7.5596	-9.9
39106	328.4	34.866	34.866	12.085	12.042	26.478	0.0	31.9	1.86	28.6	7.90	2248.8	1493	2	2311	7.4676	-9.9
39105	378.8	34.788	34.800	10.828	10.781	26.650	0.0	34.2	2.13	35.7	6.70	2261.6	1626	2	2312	7.4349	-9.9
39104	450.1	34.688	34.709	9.399	9.348	26.818	0.0	36.4	2.23	42.8	8.70	2277.3	1779	2	2317	7.3971	-9.9
39103	599.8	34.607	34.609	7.428	7.369	27.058	0.0	39.4	2.40	51.9	32.40	2282.3	1727	2	2324	7.4081	-9.9
39102	799.9	34.560	34.562	5.857	5.786	27.232	0.0	39.6	2.59	71.5	62.10	2289.1	1609	2	2342	7.4389	-9.9
39101	801.0	34.560	34.563	5.854	5.783	27.232	0.0	39.6	2.54	67.3	61.00	2288.3	1593	2	2339	7.4390	-9.9

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STATION CAST	101 393	OPS NO. 923350632 DATE 30-Nov-92	LATITUDE LONGITUDE	3° 0.18 S 94° 59.97 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	PO4 µmol/L	H4SiO4 µmol/L	O2 µmol/L	DIC µmol/kg	fCO2 @20°C µatm	QC	TAik µmol/kg	pH	TOC µmol/kg
39312	3.1	34.709	34.708	21.776	21.775	24.061	0.2	8.0	0.53	3.7	222.50	2037.8	404	2	2301	7.9619	64.5
39311	9.3	34.717	34.713	21.756	21.754	24.073	0.1	8.1	0.53	3.8	224.40	2039.0	406	2	2298	7.9593	66.7
39310	19.4	34.795	34.781	21.571	21.567	24.184	0.2	9.2	0.68	4.3	219.40	2049.6	423	2	2306	7.9460	62.3
39309	28.7	34.988	34.959	20.503	20.498	24.622	0.3	11.9	0.72	5.2	202.90	2082.2	485	2	2313	7.8982	58.9
39308	40.8	35.006	35.035	17.091	17.084	25.500	0.4	18.0	1.01	10.3	128.00	2136.9	658	2	2316	7.7856	54.0
39307	49.8	35.054	35.055	16.789	16.781	25.609	0.5	19.1	1.23	11.5	109.40	2151.1	712	2	2320	7.7534	51.1
39306	64.0	35.063	35.064	15.223	15.213	25.974	0.6	21.7	1.29	13.5	85.60	2172.7	813	2	2318	7.7059	50.0
39305	80.2	35.028	35.030	14.372	14.360	26.133	0.3	22.9	1.25	14.9	87.10	2175.4	829	2	2319	7.6970	47.1
39304	94.3	34.955	34.963	13.627	13.614	26.234	0.0	22.8	1.23	16.9	78.80	2183.2	896	2	2315	7.6684	48.1
39303	109.5	34.949	34.953	13.492	13.477	26.257	0.0	24.6	1.39	18.4	99.50	2170.6	814	2	2317	7.7030	43.9
39302	123.8	34.930	34.936	13.360	13.343	26.270	0.0	24.8	1.43	18.7	81.60	2183.3	899	2	-9	7.6661	44.8
39301	140.1	34.929	34.934	13.221	13.202	26.298	0.0	24.2	1.38	18.6	89.70	2180.3	872	2	2313	7.6780	44.6

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STATION CAST	102 395	OPS NO. 923351404 DATE 30-Nov-92	LATITUDE LONGITUDE	1° 59.95 S 95° 0.13 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
39512	159.8	34.926	34.924	13.149	13.127	26.311	0.0	26.3	2	1.52	2	17.3	2	72.70	2	2174.2	2	955	2	2316	7.6427	45.1
39511	180.3	34.918	34.918	13.047	13.022	26.326	0.0	29.2	2	1.62	2	19.5	2	46.10	2	2193.3	2	1112	2	2315	7.5843	43.4
39510	199.9	34.912	34.911	12.906	12.879	26.350	0.0	30.2	2	1.68	2	20.8	2	37.40	2	2212.6	3	1178	2	2312	7.5619	46.8
39509	230.3	34.896	34.899	12.748	12.717	26.369	0.0	30.6	2	1.62	2	20.3	2	42.70	2	2219.1	3	1162	2	2311	7.5685	45.2
39508	259.7	34.889	34.782	12.588	12.553	26.396	0.0	30.8	2	1.80	2	21.1	2	41.30	2	2212.7	3	1175	2	2313	7.5623	44.6
39507	287.0	34.872	34.868	12.182	12.144	26.463	0.0	34.0	2	1.94	2	25.2	2	11.10	2	2219.0	2	1442	D	2309	7.4797	45.1
39506	328.3	34.770	34.869	10.800	10.760	26.640	0.0	35.7	2	1.99	2	29.0	2	8.60	2	2260.4	2	1612	2	2315	7.4374	41.9
39505	378.9	34.731	34.731	9.922	9.878	26.763	0.0	36.7	2	2.11	2	30.7	2	22.60	2	2259.5	3	1572	2	2313	7.4477	43.7
39504	449.3	34.658	34.663	8.691	8.643	26.907	0.0	37.9	2	2.12	2	34.6	2	39.50	2	2258.9	3	1540	2	2318	7.4550	42.6
39503	599.1	34.590	34.592	7.223	7.165	27.073	0.0	40.5	2	2.46	2	45.1	2	52.00	2	2265.5	3	1576	2	2324	7.4461	41.7
39502	799.7	34.557	34.558	5.688	5.618	27.250	0.0	41.4	2	2.70	2	60.5	2	65.00	2	2288.0	3	1580	2	2344	7.4454	40.0
39501	799.6	34.557	34.559	5.690	5.620	27.250	0.0	41.1	2	2.63	2	59.5	2	65.20	2	2285.7	2	1569	2	2346	7.4448	-9.9

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STATION CAST	102 399	OPS NO. 923351533 DATE 30-Nov-92	LATITUDE LONGITUDE	1° 59.92 S 95° 0.17 W													
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
39912	2.7	34.942	34.941	21.535	21.534	24.305	0.2	10.7	-9.99	4.2	220.50	2065.7	446	2	2315	7.9265	60.3
39911	9.3	34.941	34.939	21.450	21.448	24.328	0.3	10.7	0.49	4.1	220.10	2066.6	446	2	-9	7.9249	57.5
39910	20.1	34.941	34.939	21.360	21.356	24.353	0.2	10.9	0.59	4.3	219.00	2067.4	448	2	2313	7.9252	59.2
39909	29.7	34.952	34.939	21.022	21.016	24.454	0.3	11.1	0.73	4.5	211.20	2069.9	456	2	2313	7.9190	57.8
39908	39.9	35.021	34.991	19.926	19.919	24.800	0.3	12.4	0.59	4.9	181.40	2086.7	495	2	2314	7.8895	56.0
39907	49.4	35.086	35.084	19.008	18.999	25.088	0.6	15.8	0.78	6.8	141.60	2119.2	592	2	2319	7.8254	54.1
39906	64.4	35.066	35.066	16.592	16.582	25.665	0.7	21.1	1.05	10.6	95.30	2159.6	757	2	2320	7.7308	51.0
39905	79.7	35.023	35.021	14.773	14.761	26.043	0.8	23.8	1.26	13.8	75.50	2177.7	866	2	2319	7.6806	48.0
39904	95.3	34.999	35.001	14.180	14.166	26.152	0.3	25.0	-9.99	15.0	74.80	2177.7	892	2	2315	7.6675	46.1
39903	110.4	34.946	34.991	13.905	13.889	26.169	0.2	25.4	1.29	15.2	76.00	2181.0	897	2	2319	7.6656	47.2
39902	125.5	34.952	34.958	13.462	13.444	26.266	0.0	24.1	1.43	15.9	92.50	2181.5	846	2	2314	7.6880	44.8
39901	140.1	34.937	34.939	13.314	13.294	26.285	0.0	23.9	1.48	15.9	95.00	2175.4	844	2	2316	7.6893	43.8

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STATION CAST	103 401	OPS NO. 92335222J DATE 30-Nov-92	LATITUDE LONGITUDE	1° 0.16 S 94° 59.92 W	Potential	NO2	NO3	PO4	H4SiO4	O2	DIC	fCO2 @20°C	TAlk	pH	TOC						
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
40112	158.3	34.935	34.935	13.226	13.204	26.302	0.0	24.4	1.25	16.2	2176.2	826	2315	7.6952	-9.9						
40111	179.2	34.932	34.932	13.197	13.172	26.306	0.0	25.2	1.09	16.6	2176.4	843	2316	7.6903	-9.9						
40110	199.8	34.930	34.930	13.187	13.159	26.307	0.0	25.2	-9.99	16.9	2179.1	849	2314	7.6865	-9.9						
40109	228.8	34.896	34.894	12.698	12.667	26.379	0.0	31.1	1.97	22.3	2216.6	1152	2313	7.5701	-9.9						
40108	258.6	34.882	34.881	12.486	12.451	26.411	0.0	31.8	1.96	23.9	2226.0	1214	2309	7.5458	-9.9						
40107	287.8	34.818	34.817	11.439	11.403	26.561	0.0	35.6	1.97	30.1	2252.1	1527	2313	7.4582	-9.9						
40106	328.3	34.785	34.784	10.914	10.874	26.631	0.0	36.6	2.00	31.5	2259.2	1591	2312	7.4411	-9.9						
40105	379.7	34.725	34.725	9.830	9.786	26.774	0.0	39.0	1.96	35.9	2267.3	1670	2313	7.4217	-9.9						
40104	448.8	34.669	34.669	8.821	8.772	26.895	0.0	40.0	2.02	41.4	2267.2	1667	2320	7.4231	-9.9						
40103	600.4	34.603	34.604	7.407	7.348	27.057	0.0	41.3	2.25	48.6	2273.8	1646	2323	7.4308	-9.9						
40102	799.3	34.556	34.552	5.600	5.531	27.260	0.0	41.4	2.25	67.9	2288.5	1554	2345	7.4547	-9.9						
40101	798.8	34.550	34.555	5.608	5.539	27.255	0.0	42.0	2.25	73.5	2285.0	1565	2336	7.4548	-9.9						

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STATION CAST	103 403	OPS NO 923352351 DATE 30-Nov-92	LATITUDE LONGITUDE	1° 0.21 S 94° 59.57 W																			
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	QC	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
40312	2.8	34.397	34.382	22.180	22.179	23.711	0.2	2	6.1	2	0.34	2	2.8	2	208.00	3	1999.6	2	360	2	2279	7.9996	67.6
40311	9.8	34.629	34.610	21.342	21.340	24.120	0.2	2	8.2	2	0.41	2	3.8	2	206.30	2	2050.1	3	400	2	2289	7.9647	63.8
40310	19.0	34.855	34.839	21.367	21.363	24.286	0.2	2	10.2	2	0.52	2	4.6	2	213.30	2	2054.2	2	429	2	2312	7.9389	61.1
40309	28.6	34.892	34.894	19.649	19.644	24.774	0.3	2	12.6	2	0.70	2	6.3	2	182.30	2	2077.8	2	486	2	2309	7.8948	56.0
40308	39.2	34.929	34.924	17.825	17.818	25.263	0.6	2	15.0	2	1.13	2	8.5	2	144.30	2	2102.8	3	650	3	2309	7.8450	54.4
40307	49.2	34.973	34.965	16.340	16.332	25.651	0.6	2	18.6	2	1.13	2	11.5	2	117.20	2	2131.2	3	559	4	2319	7.7863	50.2
40306	63.5	35.049	35.040	16.440	16.430	25.687	0.5	2	18.9	2	1.13	2	10.1	2	111.30	2	2139.4	2	658	2	2324	7.7824	50.1
40305	80.0	35.186	35.186	16.070	16.057	25.878	0.3	2	20.9	2	1.00	2	9.6	2	92.70	2	2158.2	3	724	2	2331	7.7512	45.7
40304	93.3	35.090	35.092	15.049	15.035	26.034	0.1	2	20.7	2	0.99	2	11.2	2	105.00	2	2156.9	3	710	2	2323	7.7557	44.4
40303	108.0	35.058	35.060	14.797	14.781	26.065	0.2	2	20.0	2	1.08	2	11.8	2	111.30	2	2153.0	2	701	2	2318	7.7618	44.0
40302	123.4	35.033	35.033	14.447	14.429	26.122	0.0	2	20.5	2	1.13	2	11.9	2	112.00	2	2154.3	2	709	2	2321	7.7552	46.5
40301	142.0	35.009	35.011	13.976	13.956	26.204	0.0	2	22.8	2	1.18	2	13.5	2	102.10	2	2165.6	2	764	2	2318	7.7279	51.0

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STATION CAST	104 405	OPS NO. 923360643 DATE 1-Dec-92	LATITUDE LONGITUDE	0° 0.01 N 95° 0.13 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 QC	TAik μmol/kg	pH	TOC μmol/kg
40512	158.3	34.940	34.941	13.395	13.373	26.271	0.0	22.4	2	1.28	2	13.7	2	100.50	2	2167.3	2	800	2	2319	7.7102	44.8
40511	178.3	34.929	34.932	13.262	13.237	26.291	0.0	23.2	2	1.34	3	14.9	2	94.20	2	2173.5	2	834	2	2313	7.6946	46.5
40510	201.2	34.929	34.930	13.197	13.169	26.304	0.0	23.7	2	1.11	3	14.8	2	90.60	2	2177.6	2	858	2	2316	7.6856	43.8
40509	230.5	34.926	34.927	13.177	13.145	26.307	0.0	24.2	2	1.29	2	15.1	2	84.00	2	2184.6	2	890	2	2313	7.6704	45.3
40508	260.5	34.912	34.911	12.951	12.915	26.342	0.0	26.5	2	1.33	2	17.3	2	68.20	2	2196.3	3	984	2	2314	7.6326	44.7
40507	288.0	34.848	34.844	11.919	11.882	26.494	0.0	32.9	2	1.49	2	22.8	2	18.10	2	2242.8	2	1406	2	2309	7.4935	45.0
40506	329.7	34.804	34.802	11.275	11.234	26.581	0.0	34.6	2	1.65	2	27.0	2	11.20	2	2255.3	2	1531	2	2314	7.4580	43.0
40505	378.9	34.736	34.737	9.999	9.955	26.754	0.0	37.0	2	2.33	2	32.1	2	9.90	2	2269.9	2	1677	2	2315	7.4223	-9.9
40504	449.7	34.698	34.698	9.349	9.298	26.834	0.0	38.6	2	2.36	2	34.7	2	9.80	2	2275.9	2	1740	2	2318	7.4069	42.3
40503	602.9	34.609	34.610	7.497	7.437	27.049	0.0	40.3	2	2.33	2	44.3	2	34.10	2	2280.6	2	1693	2	2326	7.4186	41.4
40502	793.6	34.572	34.573	6.001	5.930	27.224	0.0	41.2	2	2.36	2	61.3	2	50.00	2	2293.1	2	1663	2	2344	7.4263	40.3
40501	796.8	34.570	34.573	5.987	5.916	27.224	0.0	41.0	2	2.40	2	66.5	2	49.80	2	2294.6	2	1663	2	2341	7.4248	40.1

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STATION	104	OPS NO. 923360828	LATITUDE 0° 0.1 N																			
CAST	408	DATE 1-Dec-92	LONGITUDE 95° 0.18 W																			
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	PO4 μmol/L	PO4 QC	H4SiO4 μmol/L	H4SiO4 QC	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	fCO2 @20°C QC	TALK μmol/kg	pH	TOC μmol/kg
40812	1.7	34.239	34.239	22.643	22.643	23.460	0.2	2.8	2	0.34	2	1.5	2	216.50	3	1971.6	2	325	2	2269	8.0362	75.0
40811	8.2	34.239	34.239	22.648	22.648	23.459	0.2	3.2	2	0.34	2	1.4	2	216.60	3	1972.8	2	327	2	2268	8.0352	70.0
40810	18.9	34.655	34.655	19.894	19.891	24.529	0.2	10.1	2	0.70	2	4.7	2	180.60	2	2052.4	2	448	2	2296	7.9246	64.0
40809	27.8	34.812	34.814	19.501	19.496	24.751	0.3	11.9	2	0.73	2	5.0	2	184.40	2	2073.7	2	479	2	2303	7.9023	55.6
40808	40.0	34.925	34.814	16.307	16.301	25.622	0.6	17.7	2	1.07	2	9.2	2	125.80	2	2129.8	2	651	2	2313	7.7891	48.9
40807	50.1	34.921	34.926	15.184	15.176	25.873	0.6	22.0	2	1.08	2	11.8	2	93.80	2	2154.1	2	765	2	2312	7.7256	45.5
40806	65.2	34.945	34.946	14.680	14.670	26.002	0.5	23.3	2	1.41	2	13.3	2	76.80	2	2170.0	2	846	2	2312	7.6882	46.3
40805	79.8	34.971	34.965	14.350	14.338	26.094	0.3	24.9	2	1.49	2	14.0	2	67.30	2	2179.4	2	895	2	2312	7.6661	48.1
40804	94.2	34.935	34.938	13.933	13.919	26.154	0.1	23.4	2	1.49	2	14.1	2	86.70	2	2170.5	2	831	2	2311	7.6949	46.0
40803	109.8	34.928	34.931	13.641	13.625	26.210	0.2	22.0	2	1.28	2	13.7	2	104.00	2	2161.5	2	772	2	2318	7.7226	44.0
40802	124.3	34.937	34.937	13.550	13.532	26.236	0.0	21.6	2	1.29	2	13.4	2	106.20	2	2161.4	2	770	2	2314	7.7240	43.9
40801	139.2	34.954	34.958	13.505	13.485	26.259	0.0	21.8	2	1.23	2	13.7	2	104.00	2	2164.4	2	780	2	2318	7.7192	46.5

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STATION CAST	105 410	OPS NO. 923361520 DATE 1-Dec-92	LATITUDE LONGITUDE	1° 0.08 N 95° 0.2 W																
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	NO3 QC	NO2 QC	H4SiO4 μmol/L	O2 μmol/L	O2 QC	DIC μmol/kg	DIC QC	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
41012	159.5	34.928	34.927	13.190	13.168	26.304	0.0	22.8	2	0.0	14.1	94.50	2	2173.1	2	836	2	2315	7.6944	-9.9
41011	178.9	34.921	34.920	13.080	13.055	26.321	0.0	23.3	2	1.06	14.4	85.80	2	2180.7	2	881	2	2317	7.6744	-9.9
41010	200.4	34.920	34.919	13.068	13.040	26.323	0.0	23.5	2	1.33	14.4	83.90	2	2183.3	2	893	2	2313	7.6684	-9.9
41009	227.7	34.910	34.909	12.947	12.916	26.341	0.0	25.9	2	1.28	15.0	73.60	2	2189.6	2	948	2	2313	7.6451	-9.9
41008	260.6	34.895	34.892	12.709	12.674	26.377	0.0	28.7	2	1.54	17.0	51.10	2	2207.9	2	1095	2	2309	7.5881	-9.9
41007	290.5	34.819	34.822	11.777	11.739	26.498	0.0	32.6	2	1.91	21.9	25.50	2	2234.3	2	1352	2	2313	7.5068	-9.9
41006	326.0	34.786	34.784	10.959	10.919	26.624	0.0	33.9	2	1.90	25.0	10.30	2	2255.2	2	1551	2	2314	7.4488	-9.9
41005	380.3	34.735	34.734	10.008	9.964	26.752	0.0	36.4	2	2.10	29.8	7.50	2	2268.7	2	1693	2	2317	7.4163	-9.9
41004	449.9	34.675	34.683	9.108	9.058	26.855	0.0	37.2	2	2.16	31.9	14.40	3	2272.4	2	1715	2	2319	7.4114	-9.9
41003	598.1	34.605	34.605	7.351	7.292	27.067	0.0	39.2	2	2.40	40.9	31.00	2	2283.1	2	1733	2	2329	7.4103	-9.9
41002	802.5	34.568	34.569	5.673	5.603	27.261	0.0	39.5	2	2.45	57.2	52.30	2	2293.9	2	1671	2	2347	7.4249	-9.9
41001	801.4	34.567	34.569	5.685	5.615	27.259	0.0	39.6	2	2.50	63.1	52.10	2	2298.3	2	1683	2	2353	7.4251	-9.9

NOAA Equatorial Pacific Process Study

Boreal Autumn 1992

STATION 105 OPS NO. 923361645 LATITUDE 0° 59.95 N
 CAST 414 DATE 1-Dec-92 LONGITUDE 95° 0.39 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC μmol/L	QC μmol/L	DIC μmol/kg	QC μmol/kg	fCO2 @20°C μatm	QC μmol/kg	TAlk μmol/kg	pH	TOC μmol/kg
41412	1.9	34.075	34.071	23.224	23.224	23.169	0.0	1.5	0.47	0.0	218.40	2	1949.7	2	303	2	2260	8.0599	74.7	
41411	9.7	34.076	34.067	23.206	23.204	23.176	0.0	1.7	0.47	0.0	218.40	3	1949.6	2	302	2	2262	8.0605	72.4	
41410	19.9	34.075	34.071	23.186	23.182	23.181	0.0	1.7	0.48	0.0	218.30	3	1950.5	2	302	2	2257	8.0597	75.4	
41409	28.3	34.076	34.068	23.174	23.174	23.184	0.0	1.8	0.49	0.0	218.70	3	1950.1	2	302	2	2252	8.0599	72.0	
41408	39.1	34.534	34.503	20.324	20.317	24.324	0.1	8.9	0.52	4.0	181.70	3	2039.9	2	414	2	2287	7.9483	60.6	
41407	48.2	34.798	34.786	18.743	18.735	24.935	0.2	13.3	0.77	6.3	157.70	2	2084.0	2	513	2	2306	7.8722	58.3	
41406	64.3	34.939	34.938	16.446	16.436	25.601	0.5	17.1	0.88	9.6	125.50	2	2128.4	2	636	2	2310	7.7950	50.6	
41405	78.6	34.966	34.965	14.884	14.872	25.975	0.0	24.0	-9.99	13.4	86.20	2	2164.5	2	804	2	2316	7.7071	46.7	
41404	93.9	34.967	34.965	14.504	14.490	26.058	0.0	25.0	1.24	14.2	66.00	2	2180.1	2	896	2	2314	7.6652	47.9	
41403	108.9	34.950	34.954	14.117	14.101	26.128	0.0	25.5	1.37	14.8	64.60	2	2185.5	2	922	2	2314	7.6544	46.4	
41402	124.0	34.946	34.948	13.918	13.900	26.167	0.0	26.3	1.51	15.8	59.30	2	2191.0	2	961	2	2315	7.6390	47.4	
41401	140.2	34.946	34.948	13.853	13.833	26.181	0.0	26.0	1.41	15.6	62.70	2	2189.7	2	949	2	2312	7.6438	44.5	

NOAA Equatorial Pacific Process Study Boreal Autumn 1992

STATION	106	OPS NO. 923362326	LATITUDE	1° 59.94 N																
CAST	416	DATE 1-Dec-92	LONGITUDE	95° 0.31 W																
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TALK μmol/kg	pH	TOC μmol/kg
41612	159.6	34.930	34.928	13.636	13.613	26.214	0.0	27.9	2	1.07	17.0	54.20	2	2195.4	2	998	2	2313	7.6209	43.8
41611	160.0	34.928	34.927	13.635	13.612	26.213	0.0	28.0	2	1.25	18.3	55.10	2	2194.7	2	1006	2	2309	7.6216	-9.9
41610	198.7	34.916	34.914	13.448	13.420	26.243	0.0	29.0	2	1.40	18.8	47.60	2	2202.6	2	1058	2	2309	7.6005	46.6
41609	230.6	34.880	34.878	12.885	12.853	26.330	0.0	25.4	3	1.38	18.5	35.30	2	-9.0	9	1178	D	2310	7.5606	44.6
41608	259.9	34.850	34.848	12.482	12.447	26.387	0.0	31.9	2	1.56	22.5	23.50	2	2218.5	2	1282	2	2306	7.5227	46.1
41607	287.6	34.805	34.802	11.610	11.573	26.519	0.0	32.5	2	1.65	24.0	31.80	2	2231.7	2	1317	2	2310	7.5168	45.8
41606	328.6	34.761	34.758	10.763	10.723	26.640	0.0	34.9	2	1.73	28.1	17.40	2	2254.9	2	1520	2	2311	7.4602	46.0
41605	379.2	34.710	34.711	9.863	9.819	26.757	0.0	36.7	2	1.79	32.9	12.30	2	2267.0	2	1657	2	2314	7.4265	46.4
41604	450.9	34.645	34.646	8.440	8.392	26.936	0.0	39.0	2	2.05	38.2	21.80	2	2274.1	2	1707	2	2315	7.4152	44.1
41603	599.8	34.609	34.608	7.415	7.356	27.061	0.0	41.0	2	2.15	46.8	26.90	2	2285.4	2	1766	2	2325	7.4032	44.8
41602	800.7	34.567	34.567	5.615	5.546	27.267	0.0	41.7	2	2.18	67.1	54.70	2	2296.9	2	1661	2	2343	7.4301	39.9
41601	801.4	34.565	34.568	5.612	5.543	27.266	0.0	41.8	2	2.16	66.1	55.10	2	2296.8	2	1664	2	2349	7.4309	40.0

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Boreal Autumn 1992

STATION 106 OPS NO. 923370052
 CAST 418 DATE 2-Dec-92

LATITUDE 2° 0 N
 LONGITUDE 94° 59.78 W

Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	PO4 μmol/L	H4SiO4 μmol/L	O2 μmol/L	DIC μmol/kg	QC	fCO2 @20°C μatm	TAlk μmol/kg	pH	TOC μmol/kg
41812	3.4	33.428	33.424	25.633	25.632	21.963	0.0	0.0	0.00	0.0	209.60	1884.7	2	261	2214	8.1087	77.3
41811	9.6	33.428	33.423	25.636	25.634	21.963	0.0	0.0	0.00	0.0	211.90	1885.2	2	261	2215	8.1074	75.5
41810	19.0	33.429	33.423	25.643	25.639	21.962	0.0	0.0	0.00	0.0	209.80	1884.9	2	260	2214	8.1072	80.5
41809	29.7	33.427	33.422	25.619	25.612	21.968	0.0	0.0	0.00	0.0	209.30	1884.7	2	259	2213	8.1086	81.3
41808	38.4	33.428	33.422	25.591	25.583	21.978	0.0	0.0	0.00	0.0	208.80	1887.7	2	260	2212	8.1070	77.2
41807	48.4	34.194	34.106	22.369	22.359	23.506	0.1	7.1	0.45	2.8	171.30	1991.8	2	375	2257	7.9811	67.4
41806	64.3	34.947	34.960	16.652	16.642	25.559	0.2	19.5	1.22	11.3	83.50	2151.2	2	753	2310	7.7281	51.3
41805	79.7	34.968	34.969	15.821	15.809	25.768	0.6	19.1	1.04	10.8	114.00	2137.7	2	678	2314	7.7731	50.0
41804	94.6	34.943	34.943	15.415	15.400	25.840	0.3	18.2	1.03	12.2	106.60	2144.8	2	709	2310	7.7542	52.4
41803	109.5	34.942	34.943	14.956	14.940	25.941	0.0	22.5	1.16	14.2	96.80	2154.2	2	761	2314	7.7274	48.6
41802	123.8	34.949	34.957	14.439	14.421	26.059	0.0	24.6	1.32	15.4	77.60	2172.1	2	849	2316	7.6857	-9.9
41801	141.0	34.945	34.947	13.972	13.952	26.155	0.0	26.9	1.41	16.5	59.10	2189.2	2	960	2315	7.6390	45.9

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Boreal Autumn 1992

STATION CAST	107 421	OPS NO. 923370933 DATE 2-Dec-92	LATITUDE LONGITUDE	2° 59.62 N 95° 0.2 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 μmol/L	NO3 μmol/L	QC	PO4 μmol/L	QC	H4SiO4 μmol/L	QC	O2 μmol/L	QC	DIC μmol/kg	QC	fCO2 @20°C μatm	QC	TAlk μmol/kg	pH	TOC μmol/kg
42112	158.4	34.940	34.942	14.027	14.004	26.141	0.0	23.5	2	1.05	4	14.7	2	81.70	2	2173.6	2	913	3	2316	7.6851	-9.9
42111	178.0	34.933	34.933	13.546	13.521	26.236	0.0	24.8	2	1.43	2	15.5	2	73.60	2	2183.1	2	850	2	2316	7.6602	-9.9
42110	200.5	34.925	34.922	13.330	13.302	26.274	0.0	26.1	2	1.53	2	16.2	2	65.20	2	2193.8	2	977	2	2315	7.6343	-9.9
42109	229.7	34.911	34.909	13.110	13.078	26.309	0.0	27.3	2	1.66	2	17.4	2	52.90	2	2203.1	2	1051	2	2297	7.6051	-9.9
42108	259.3	34.885	34.883	12.815	12.780	26.348	0.0	29.0	2	1.81	2	18.8	2	39.90	2	2215.9	2	1153	2	2312	7.5679	-9.9
42107	289.6	34.835	34.840	12.246	12.208	26.422	0.0	30.9	2	1.84	2	21.0	2	22.80	2	2231.2	2	1310	2	2309	7.5176	-9.9
42106	328.8	34.770	34.769	11.195	11.154	26.569	0.0	34.5	2	1.86	2	27.6	2	11.40	2	2251.9	2	1525	2	2313	7.4568	-9.9
42105	378.8	34.688	34.686	9.518	9.475	26.797	0.0	35.7	2	2.10	2	37.7	2	9.80	2	2274.8	2	1724	2	2318	7.4103	-9.9
42104	450.5	34.627	34.630	8.134	8.087	26.968	0.0	38.4	2	2.39	2	42.9	2	17.50	2	2283.8	2	1787	2	2324	7.3960	-9.9
42103	597.9	34.603	34.604	7.182	7.124	27.089	0.0	40.4	2	2.45	2	51.0	2	18.70	2	2296.1	2	1855	2	2332	7.3826	-9.9
42102	799.3	34.561	34.563	5.856	5.785	27.233	0.0	41.1	2	2.50	2	62.7	2	38.80	2	2302.9	2	1771	2	2348	7.4015	-9.9
42101	800.2	34.562	34.563	5.852	5.781	27.234	0.0	41.1	2	2.45	2	61.9	2	39.60	2	2303.1	2	1779	2	2345	7.4018	-9.9

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Boreal Autumn 1992

STATION CAST	107 423	OPS NO. 923371103 DATE 2-Dec-92	LATITUDE LONGITUDE	3° 0.04 N 95° 0.06 W																		
Sample ID	Pressure db	Salinity CTD	Salinity Bottle	Temp °C	Potential Temp °C	Sigma Theta	NO2 µmol/L	NO3 µmol/L	NO3 QC	NO2 QC	NO3 QC	H4SiO4 µmol/L	O2 µmol/L	O2 QC	DIC µmol/kg	DIC QC	fCO2 µatm	@20°C	QC	TAlk µmol/kg	pH	TOC µmol/kg
42312	2.0	33.489	33.487	26.241	26.241	21.821	0.0	0.0	2	0.0	2	0.0	2	207.10	3	-9.9	9	258	D	2217	8.1163	76.5
42311	9.0	33.489	33.485	26.241	26.239	21.822	0.0	0.0	2	0.0	2	0.0	2	206.90	3	-9.9	9	256	D	2215	8.1151	73.8
42310	19.7	33.488	33.483	26.243	26.239	21.821	0.0	0.0	2	0.0	2	0.0	2	206.70	3	-9.9	9	256	D	2210	8.1156	76.6
42309	29.7	33.489	33.485	26.239	26.232	21.824	0.0	0.0	2	0.0	2	0.0	2	206.40	3	-9.9	9	255	D	2215	8.1157	73.4
42308	38.5	33.489	33.484	26.241	26.232	21.824	0.0	0.0	2	0.0	2	0.0	2	207.00	3	1884.8	2	255	2	2214	8.1161	-9.9
42307	48.1	33.528	33.515	26.107	26.096	21.895	0.1	0.3	2	0.0	2	0.0	2	205.40	3	1890.7	2	259	2	2218	8.1085	76.0
42306	65.3	34.906	34.887	17.287	17.276	25.377	0.2	16.5	2	10.2	2	10.2	2	96.00	2	2138.2	2	693	2	2302	7.7617	53.0
42305	79.6	34.934	34.950	16.479	16.466	25.590	0.6	16.1	2	0.92	2	10.7	2	124.50	2	2127.9	2	634	2	2314	7.7966	53.0
42304	93.7	34.952	34.954	16.115	16.100	25.689	0.3	17.1	2	0.99	2	10.8	2	119.70	2	2135.0	2	660	2	2314	7.7842	50.3
42303	110.4	34.955	34.954	15.316	15.299	25.872	0.0	19.5	2	1.15	2	11.9	2	108.40	2	2145.2	2	710	2	2314	7.7554	46.7
42302	124.0	34.991	34.992	15.047	15.028	25.960	0.0	21.8	2	1.27	2	13.0	2	85.00	2	2162.1	2	785	2	2315	7.7140	47.9
42301	140.1	34.992	34.994	14.717	14.696	26.033	0.0	21.8	2	1.37	2	13.0	2	90.50	2	2164.2	2	779	2	2313	7.7188	47.2

APPENDIX B
DISSOLVED OXYGEN DUPLICATES

Appendix B: Dissolved oxygen duplicates of the boreal autumn EqPac 1992 cruise.

Date	Latitude (°N)	Longitude (°W)	Sta #	Pressure (db)	O ₂ (μmol/L)	% deviation from 1st
<i>Samples collected from 13 separate Niskin™ bottles on same cast</i>						
LEG 3:						
9/16/92	0	140	12	1000	86.2	
9/16/92	0	140	12	1000	82.8	
9/16/92	0	140	12	1000	83.9	
9/16/92	0	140	12	1000	83.1	
9/16/92	0	140	12	1000	82.9	
9/16/92	0	140	12	1000	83.3	
9/16/92	0	140	12	1000	82.7	
9/16/92	0	140	12	1000	83.0	
9/16/92	0	140	12	1000	83.2	
9/16/92	0	140	12	1000	83.5	
9/16/92	0	140	12	1000	82.7	
9/16/92	0	140	12	1000	83.0	
9/16/92	0	140	12	1000	82.5	
					83.3	Mean of 13
					0.9	Std. Dev.
					1.1	% Rel. Error

Double-trip Duplicates

LEG 3:						
9/12/92	9	140	3	1000	34.0	
9/12/92		140	3	1000	34.4	-1.18
9/12/92	8	140	4	1000	37.4	
9/12/92		140	4	1000	36.5	2.41
9/13/92	6	140	5	1000	50.5	
9/13/92		140	5	1000	50.5	0.00
9/13/92	5	140	6	1000	56.9	
9/13/92		140	6	1000	56.3	1.05
9/13/92	4	140	7	1000	52.5	
9/13/92		140	7	1000	52.3	0.38
9/14/92	3	140	8	1000	69.4	
9/14/92		140	8	1000	69.6	-0.29
9/14/92	2	140	9	1000	74.3	
9/14/92		140	9	1000	74.2	0.13
9/14/92	1	140	10	1000	84.7	
9/14/92		140	10	1000	84.4	0.35
9/15/92	0.50	140	11	1000	84.1	
9/15/92		140	11	1000	83.2	1.07
9/15/92	0	140	12	1000	86.9	
9/15/92		140	12	1000	83.0	4.49
9/15/92	0.25	140	13	1000	83.9	
9/15/92		140	13	1000	83.1	0.95
9/16/92	-0.50	140	15	1000	85.7	
9/16/92		140	15	1000	86.9	-1.40
9/16/92	-1	140	16	1000	93.6	

Appendix B: Dissolved oxygen duplicates. (continued)

Date	Latitude (°N)	Longitude (°W)	Sta #	Pressure (db)	O ₂ (μmol/L)	% deviation from 1st
LEG 3 (continued):						
9/16/92		140	16	1000	92.9	0.75
9/17/92	-2	140	17	1000	90.5	
9/17/92		140	17	1000	89.6	0.99
9/17/92	-3	140	18	1000	91.3	
9/17/92		140	18	1000	91.4	-0.11
9/18/92	-4	140	19	1000	99.1	
9/18/92		140	19	1000	98.6	0.50
9/19/92	-5	140	20	1000	92.7	
9/19/92		140	20	1000	92.2	0.54
9/21/92	-6	140	21	1000	90.7	
9/21/92		140	21	1000	90.5	0.22
9/21/92	-7	140	22	1000	100.0	
9/21/92		140	22	800	98.5	1.50
9/23/92	-10	140	23	1000	90.4	
9/23/92		125	23	1000	90.3	0.11
9/23/92	-10	125	24	1000	78.7	
9/23/92		125	24	1000	78.7	0.00
9/23/92	-7	125	25	1000	91.5	
9/23/92		125	25	1000	91.7	-0.22
9/24/92	-6	125	26	1000	88.4	
9/24/92		125	26	1000	89.7	-1.47
9/25/92	-5	125	27	1000	92.2	
9/25/92		125	27	800	91.7	0.54
9/25/92	-4	125	28	1000	94.9	
9/25/92		125	28	1000	94.6	0.32
9/26/92	-3	125	29	1000	88.0	
9/26/92		125	29	1000	87.7	0.34
9/26/92	-2	125	30	1000	87.5	
9/26/92		125	30	800	87.6	-0.11
9/27/92	-1	125	31	1000	86.0	
9/27/92		125	31	1000	86.1	-0.12
9/27/92	-0.50	125	32	1000	84.0	
9/27/92		125	32	1000	83.6	0.48
9/27/92	-0.25	125	33	1000	84.5	
9/27/92		125	33	1000	84.2	0.36
9/28/92	0	125	34	1000	84.6	
9/28/92		125	34	1000	84.4	0.24
9/28/92	0.25	125	35	1000	80.7	
9/28/92		125	35	1000	81.9	-1.49
9/29/92	0.50	125	36	1000	81.8	
9/29/92		125	36	1000	81.4	0.49
9/29/92	1	125	37	1000	79.2	
9/29/92		125	37	1000	78.9	0.38
9/30/92	2	125	38	1000	73.7	
9/30/92		125	38	1000	73.3	0.54
10/1/92	3	125	39	1000	74.1	
10/1/92		125	39	1000	74.3	-0.27
10/1/92	4	125	40	1000	63.9	
10/1/92		125	40	1000	64.9	-1.56

Appendix B: Dissolved oxygen duplicates. (continued)

Date	Latitude (°N)	Longitude (°W)	Sta #	Pressure (db)	O ₂ (μmol/L)	% deviation from 1st	
LEG 3 (continued):							
10/1/92	5	125	41	1000	54.8		
10/1/92		125	41	800	54.6	0.36	
10/5/92	6	125	42	1000	55.5		
10/5/92		125	42	1000	56.0	-0.90	
10/5/92	8	125	44	1000	41.3		
10/5/92		125	44	800	39.7	3.87	
10/6/92	9	125	45	1000	37.5		
10/6/92		125	45	1000	15.1	59.73	
10/6/92	10	125	46	1000	42.5		
10/6/92		125	46	1000	41.6	2.12	
						1.81	Mean % deviation
						9.23	Std. Dev. %
LEG 4:							
10/29/92	10	110	50	1000	30.5		
10/29/92		110		1000	30.7	-0.66	
11/1/92	8	110	51	1000	35.1		
11/1/92		110		1000	35.1	0.00	
11/2/92	6	110	52	1000	48.8		
11/2/92		110		1000	49.2	-0.82	
11/2/92	5	110	53	1000	56.3		
11/2/92		110		1000	55.4	1.60	
11/3/92	4	110	54	1000	54.2		
11/3/92		110		1000	55.6	-2.58	
11/3/92	3	110	55	1000	70.5		
11/3/92		110		1000	70.3	0.28	
11/4/92	1	110	57	1000	76.3		
11/4/92		110		1000	75.7	0.79	
11/4/92	0.5	110	58	1000	82.7		
11/4/92		110		1000	82.7	0.00	
11/5/92	0.25	110	59	1000	84.0		
11/5/92		110		1000	83.6	0.48	
11/5/92	0.18	110	60	1000	83.4		
11/5/92		110		1000	82.6	0.96	
11/6/92	0	110	61	1000	80.5		
11/6/92		110		1000	80.5	0.00	
11/7/92	-0.25	110	62	1000	84.8		
11/7/92		110		1000	83.4	1.65	
11/8/92	-0.5	110	63	1000	86.4		
11/8/92		110		1000	85.9	0.58	
11/8/92	-1	110	64	1000	84.9		
11/8/92		110		1000	84.4	0.59	
11/8/92	-2	110	65	1000	75.7		
11/8/92		110		1000	75.6	0.13	
11/8/92		110		1000	76.0	-0.40	
11/9/92	-3	110	66	1000	92.7		
11/9/92		110		1000	93.0	-0.32	
11/11/92	-5	110	68	1000	97.7		
11/11/92		110		1000	96.5	1.23	

Appendix B: Dissolved oxygen duplicates. (continued)

Date	Latitude (°N)	Longitude (°W)	Sta #	Pressure (db)	O ₂ (μmol/L)	% deviation from 1st	
LEG 4 (continued):							
11/12/92	-6	110	69	1000	88.1		
11/12/92		110		1000	87.2	1.02	
11/12/92	-8	110	70	1000	76.0		
11/12/92		110		1000	77.1	-1.45	
11/14/92	-10	110	71	1000	73.8		
11/14/92		110		1000	72.3	2.03	
11/15/92	-2	110	72	1000	70.7		
11/15/92		110	72	1000	69.8	1.27	
						0.29	Mean % deviation
						1.08	Std. Dev. %
LEG 5:							
11/22/92	-5	82	77	800	35.1		
11/22/92		82	77	800	34.0	3.13	
11/22/92	-5	82	78	800	33.1		
11/22/92		82	78	800	32.9	0.60	
11/22/92	-5	82	79	800	31.5		
11/22/92		82	79	800	31.6	-0.32	
11/22/92	-5	82	80	800	42.9		
11/23/92		82	80	800	42.2	1.63	
11/23/92	-13	78	78	800	24.0		
11/23/92		78	81	800	22.9	4.58	
11/24/92	-13	78	82	800	30.6		
11/24/92		78	82	800	30.0	1.96	
11/24/92	-13	78	83	800	27.3		
11/24/92		78	83	800	26.7	2.20	
11/25/92	-12	78	84	800	31.1		
11/25/92		78	84	800	30.5	1.93	
11/25/92	-12	78	85	800	5.9		
11/25/92		78	85	800	4.9	16.95	
11/26/92	-13	81	87	800	30.3		
11/26/92		81	87	800	30.1	0.66	
11/27/92	-13	84	88	800	28.9		
11/27/92		84	88	800	28.9	0.00	
11/27/92	-13	86	89	800	36.9		
11/27/92		86	89	800	36.3	1.63	
11/28/92	-13	89	91	800	34.3		
11/28/92		89	91	800	33.4	2.62	
11/28/92	-14	92	92	800	34.6		
11/28/92		92	92	800	34.2	1.16	
11/28/92	-14	95	93	800	40.4		
11/28/92		95	93	800	39.4	2.48	
11/29/92	-12	95	95	800	50.5		
11/29/92		95	95	800	50.6	-0.20	
11/29/92	-10	95	96	800	31.5		
11/29/92		95	96	800	30.4	3.49	
11/29/92	-8	95	97	800	40.7		
11/29/92		95	97	800	37.4	8.11	
11/30/92	-6	95	98	800	44.1		

Appendix B: Dissolved oxygen duplicates. (continued)

Date	Latitude (°N)	Longitude (°W)	Sta #	Pressure (db)	O ₂ (μmol/L)	% deviation from 1st	
LEG 5 (continued):							
11/30/92		95	98	800	47.3	-7.26	
11/30/92	-5	95	99	800	71.5		
11/30/92		95	99	800	71.4	0.14	
12/1/92	-4	95	100	800	62.7		
12/1/92		95	100	800	62.6	0.16	
12/1/92	-3	95	101	800	61.0		
12/1/92		95	101	800	62.1	-1.80	
12/1/92	-2	95	102	800	65.2		
12/1/92		95	102	800	65.0	0.31	
12/2/92	-1	95	103	800	68.1		
12/2/92		95	103	800	68.1	0.00	
12/2/92	0	95	104	800	49.8		
12/2/92		95	104	800	50.0	-0.40	
12/3/92	1	95	105	800	52.1		
12/3/92		95	105	800	52.3	-0.38	
12/4/92	2	95	106	800	55.1		
12/4/92		95	106	800	54.7	0.73	
12/4/92	3	95	107	800	39.6		
12/4/92		95	107	800	38.8	2.02	
						1.65	Mean % deviation
						3.92	Std. Dev. %