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THE VENTS 1991 AND 1992 CLEFT SEGMENT PLUME MONITORING EXPERIMENT: PHYSICAL AND CHEMICAL DATA, NOAA SHIP *DISCOVERER*, JUNE 1991 AND MAY 1992

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Abstract. This report summarizes salinity, temperature, nutrient, and total suspended matter data collected during the NOAA VENTS cruise in June 1991 and May 1992. The 1991 data was collected from June 7 to June 24, 1991 over the Juan de Fuca Ridge covering an area from 44°00′N to 48°30′N and 128°30′W to 130°40′W. The 1992 data was collected from May 14 to June 11 over the Juan de Fuca Ridge covering an area from 44°00′N to 48°00′N and 126°30′W to 131°00′W.

1.0 INTRODUCTION

The National Oceanic and Atmospheric Administration (NOAA) VENTS Program was established in 1984 to study the oceanic effects of hydrothermal activity along seafloor spreading centers. VENTS Program scientists from the Pacific Marine Environmental Laboratory (PMEL) have conducted intensive oceanographic research on the Cleft Segment of the Juan de Fuca Ridge spreading center located in the northeast Pacific Ocean basin.

The Juan de Fuca Ridge is a medium rate spreading center, consisting of the Cleft, Vance, Axial, Cobb, Endeavour, and West Valley segments. The ridge is bounded on the south by the Blanco Fracture Zone and on the north by the Sovanco Fracture Zone.

As part of the continuing VENTS Program research effort, chemical oceanography cruises were conducted in June 1991 and May 1992 aboard the NOAA Ship *Discoverer* with scientists from NOAA, the University of Washington, and the University of Hawaii. These cruises concentrated on physical oceanography and geochemical studies of the neutrally buoyant hydrothermal plumes over the Cleft segment (Fig. 1) in order to quantitatively assess the impact of hydrothermal emissions on the seawater chemistry of the northeast Pacific Ocean. This report includes the complete set of hydrographic, nutrient, and total suspended matter data collected on the cruise (Appendix A) and a description of the sampling and analytical methods employed.

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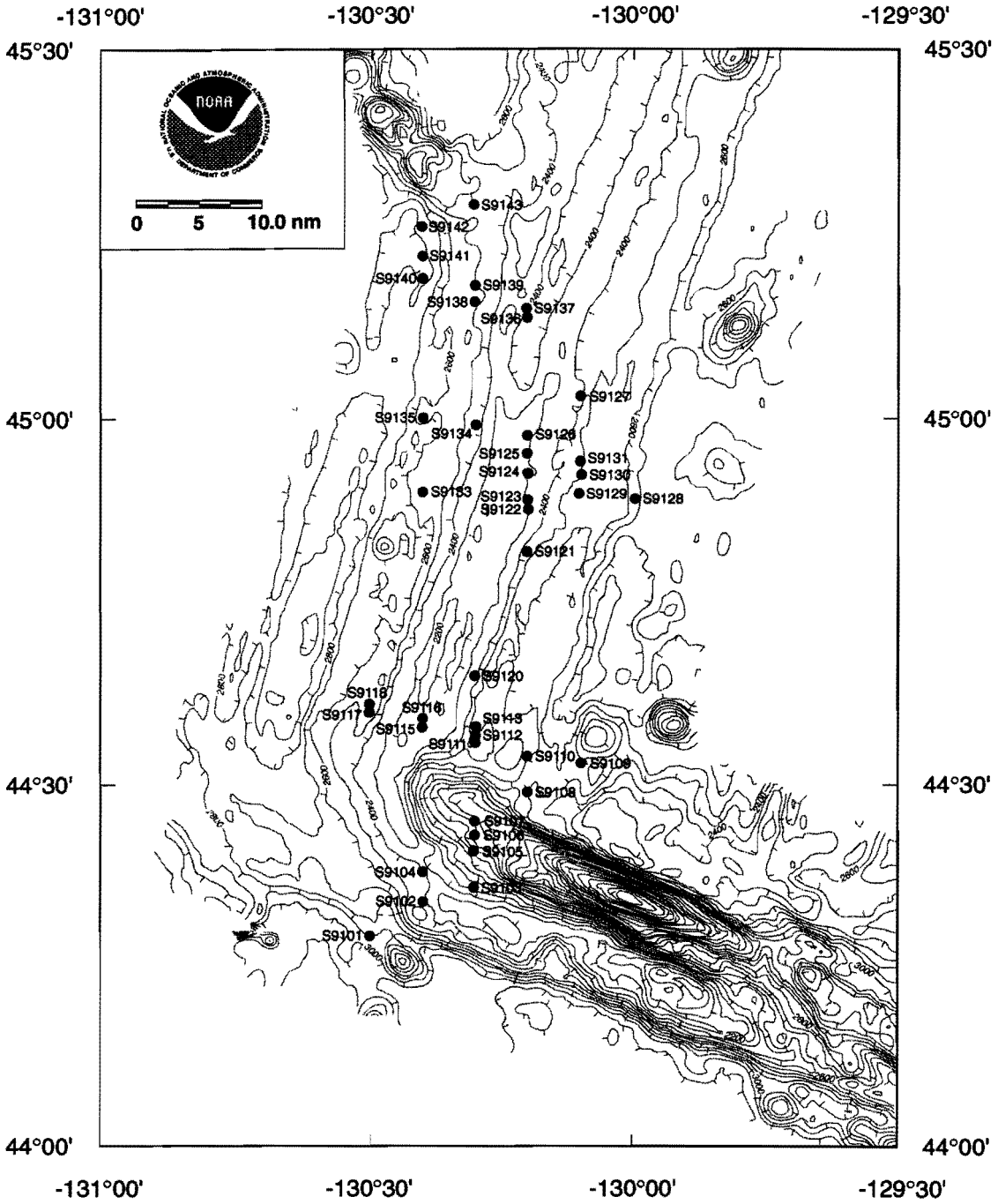

Fig. 1. Station locations south of 45°31′ for the VENTS 1991 Plume Monitoring Experiment.

2.0 SAMPLING METHODS

2.1 Sample and Data Collection

2.1.1 Seawater Samples

Seawater samples were collected in standard 30-liter Niskin™ bottles fixed to a 12-position General Oceanics™ sampling rosette. The Niskin™ bottles were internally coated with Teflon and modified with Teflon stopcocks. The sampling rosette was equipped with a CTD-transmissometer, altimeter, and pinger locator. It was lowered into the water using standard hydrographic cable. The bottles were electronically tripped at pre-determined depths via a signal from the shipboard deck unit and closed by use of silastic tubing. Upon retrieval the Niskin™ bottles were removed from the rosette and placed in a non-contaminating pressure filtration rack for sub-sampling (Feely *et al.*, 1991).

Salinity samples were collected from the Niskin™ bottle in 250-ml citrate bottles.

Nutrient samples were collected from the Niskin™ bottle in HDPE 60-ml bottles prepared by washing with 10% HCL and rinsed with deionized water. Unfiltered nutrient samples were taken directly from the Niskin™ bottle. Filtered nutrient samples were taken downline of the 0.4-μm pore size Nuclepore polycarbonate filter during the total suspended matter pressure filtration of the seawater. All nutrients were analyzed at sea within 12 hours after collection.

Total suspended matter samples were collected by 12 psi nitrogen pressure filtration of the seawater in the Niskin™ bottle through 37 mm diameter, 0.4 μm pore size Nuclepore polycarbonate filters. As described in detail in Feely *et al.*(1991) an air filter was placed in the tygon line connecting the nitrogen gas and the Niskin™ bottle to prevent contamination of the seawater sample from particulates in the gas. To ensure that all particulates were filtered out of the seawater, the filtration racks were designed to tilt the Niskin™ bottle at a 45-degree angle and during filtration the bottle was gently agitated to keep particles in suspension. The seawater filtrate was directed into pre-calibrated 20-L plastic jerricans and volumes were measured to the nearest 100 mL. Depending upon the sample's proximity to the ridge crest, it took from 2 to 8 hours to filter 20-L of seawater, or to obtain a total of 400 μg of loading on the filter. All filters were loaded and unloaded from the teflon savillex holders inside a laminar flow hood. After filtration the particulate samples were rinsed with pH 8.0 deionized water and dried in a dessicator under vacuum.

2.1.2 Conductivity-Temperature-Depth-Transmissometer Data

CTD-transmissometer data was collected using a Sea-Bird conductivity-temperature-depth (CTD) sensor and a Sea Tech 0.25-m path length beam transmissometer secured to the frame of a General Oceanics™ sampling rosette. CTD information at the sampling depths were recorded shipboard on a MicroVax data acquisition system at trip time by taking a 10-second average of the continuously collected 1-second average data.

2.2 Sample Analysis

2.2.1 Bottle Salinity

Bottle salinity analysis was conducted by NOAA Ship *Discoverer* personnel on a shipboard Guildline Autosal™. Samples were stabilized to room temperature, 18°C, before analysis. Final salinity was determined by averaging three measurements from each citrate bottle.

2.2.2 Nutrients

Silicic acid and phosphate analysis were conducted by Kathy Krogslund of the University of Washington, employing a Technicon Autoanalyzer and the techniques described by Whitledge (1981). In the analysis of silicic acid, the average precision of the replicate analyses was ±0.5 μmol/l. Alpha Inorganics™ reagent grade Na_2SiF_6 was the standard used for this analysis. The phosphate analysis had an average precision of replicate analyses of ±20.0 nmol/l. Fisher™ certified primary standard KH_2PO_4 was used for standardization.

2.2.3 Total Suspended Matter

Total suspended matter filters were weighed after desiccation on a Cahn 26™ Automatic Electrobalance which has an accuracy of ±0.005% of the true sample mass. Corrections for changes in filter weight were determined by reweighing reference filters, resulting in a net weight of particulate suspended matter. Given the net weight and volume of water filtered, total suspended matter concentrations were determined.

2.2.4 Conductivity-Temperature-Depth-Transmissometer Data

Measured conductivity was converted to salinity using standard UNESCO algorithms (Fofonoff and Millard, 1983). The conductivity data was corrected by direct comparison of bottle salinity and CTD salinity values. An average offset was determined for each cast.

Potential temperature was calculated using standard UNESCO algorithms (Fofonoff and Millard, 1983) and the CTD measured values of in situ temperature and salinity.

In situ density was calculated using standard UNESCO algorithms (Fofonoff and Millard, 1983) and the CTD measured values of in situ temperature and salinity.

Potential density was determined using standard UNESCO algorithms (Fofonoff and Millard, 1983) and the CTD measured salinity values.

Attenuation was measured and final values calculated as described in detail in Bartz *et al.* (1978).

The attenuation anomaly was calculated by determining the background value associated with each cast and subtracting that value from each discrete value.

The temperature anomaly ($\Delta\theta$) of each cast was calculated relative to the ambient water of the same potential density using the method of Lupton *et al.* (1985) with the equation

$$\Delta\theta = (\theta - k\sigma_\theta) - b$$

where θ and σ_θ are the potential temperature and potential density, respectively, and k and b are the slope and intercept, respectively, of the trend of θ as a function of σ_θ in water immediately above the hydrothermal plume where the hydrographic effect of the hydrothermal emissions is negligible. The equation used for calculating the temperature anomaly for each individual cast is listed in the bottom left-hand portion of each station table.

3.0 STATION DATA

3.1 Station Locations for VENTS 1991

The data represented in Appendix A were collected from June 07 to June 24, 1991 over the Juan de Fuca Ridge covering an area from 44°00′N to 48°30′N and 128°30′W to 130°40′W. LORAN C was used for shipboard navigation and a listing of each station's latitude, longitude, and date of occupation is given in Table 1.

Vertical CTD profiles were taken at the majority of stations. Additionally, given the dynamic nature of hydrothermal plumes, a limited number of lengthy, horizontal tows, called "tow-yos," were also conducted. Tow-yos were conducted by regularly cycling the CTD rosette package between the top and bottom of the hydrothermal plume. The ship's towing speed varied from 2–3 km/hr. NISKIN™ bottle trip positions for each tow are given in Table 3.

A bathymetric map of the cruise project area overlaid with vertical cast positions is given in Figures 1 and 2.

3.2 Station Locations for VENTS 1992

The data represented in Appendix A were collected from May 14 to June 11, 1992 over the Juan de Fuca Ridge covering an area from 44°00′N to 48°00′N and 126°30′W to 131°00′W. GPS was used for shipboard navigation and a listing of each station's latitude, longitude, and date of occupation is given in Table 2.

Vertical CTD profile stations and tow-yos were taken over the project area. NISKIN™ bottle trip positions for each tow are given in Table 4.

A bathymetric map of the cruise project area overlaid with vertical cast positions is given in Figure 3.

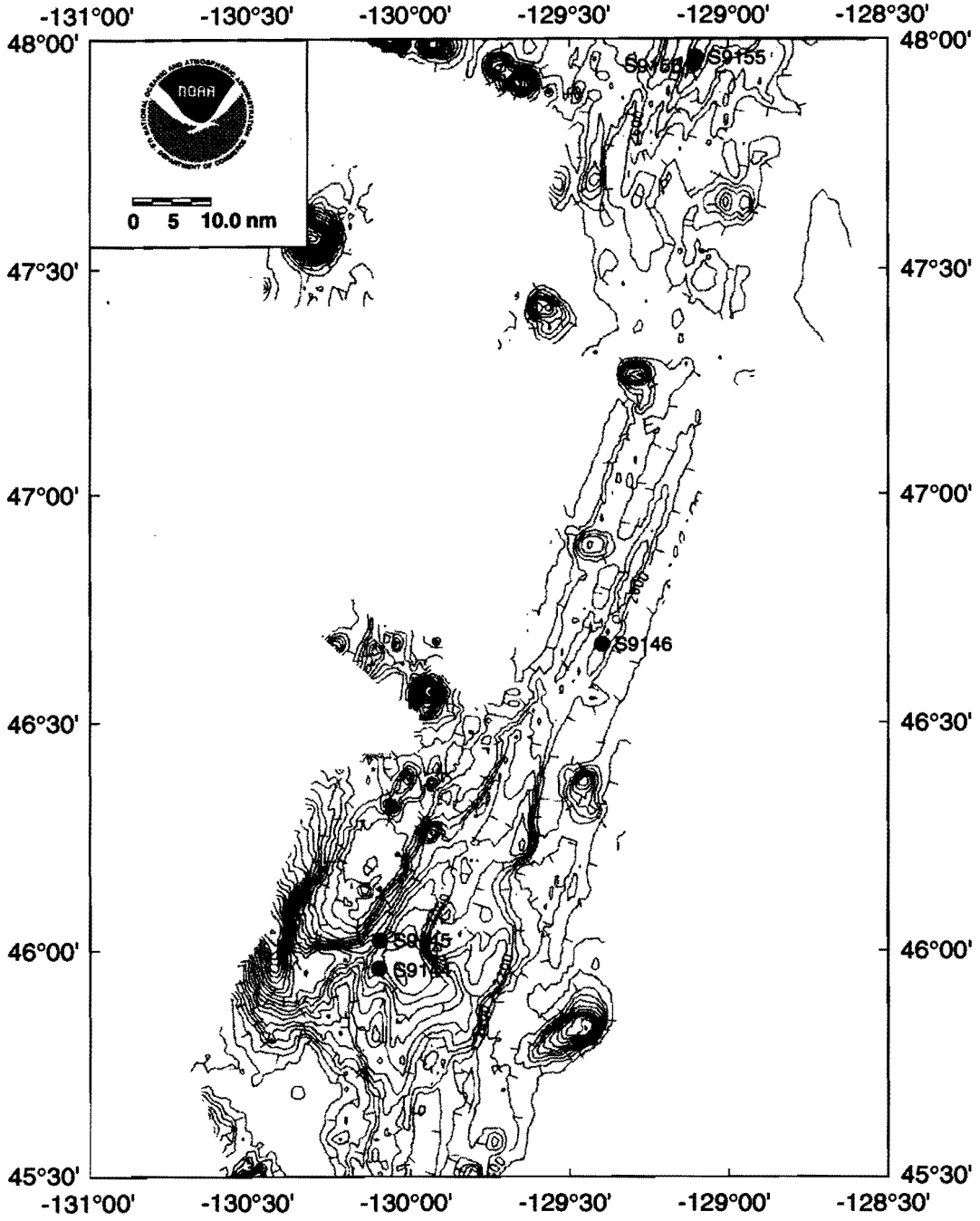

Fig. 2. Station locations north of 45°30′ for the VENTS 1991 Plume Monitoring Experiment.

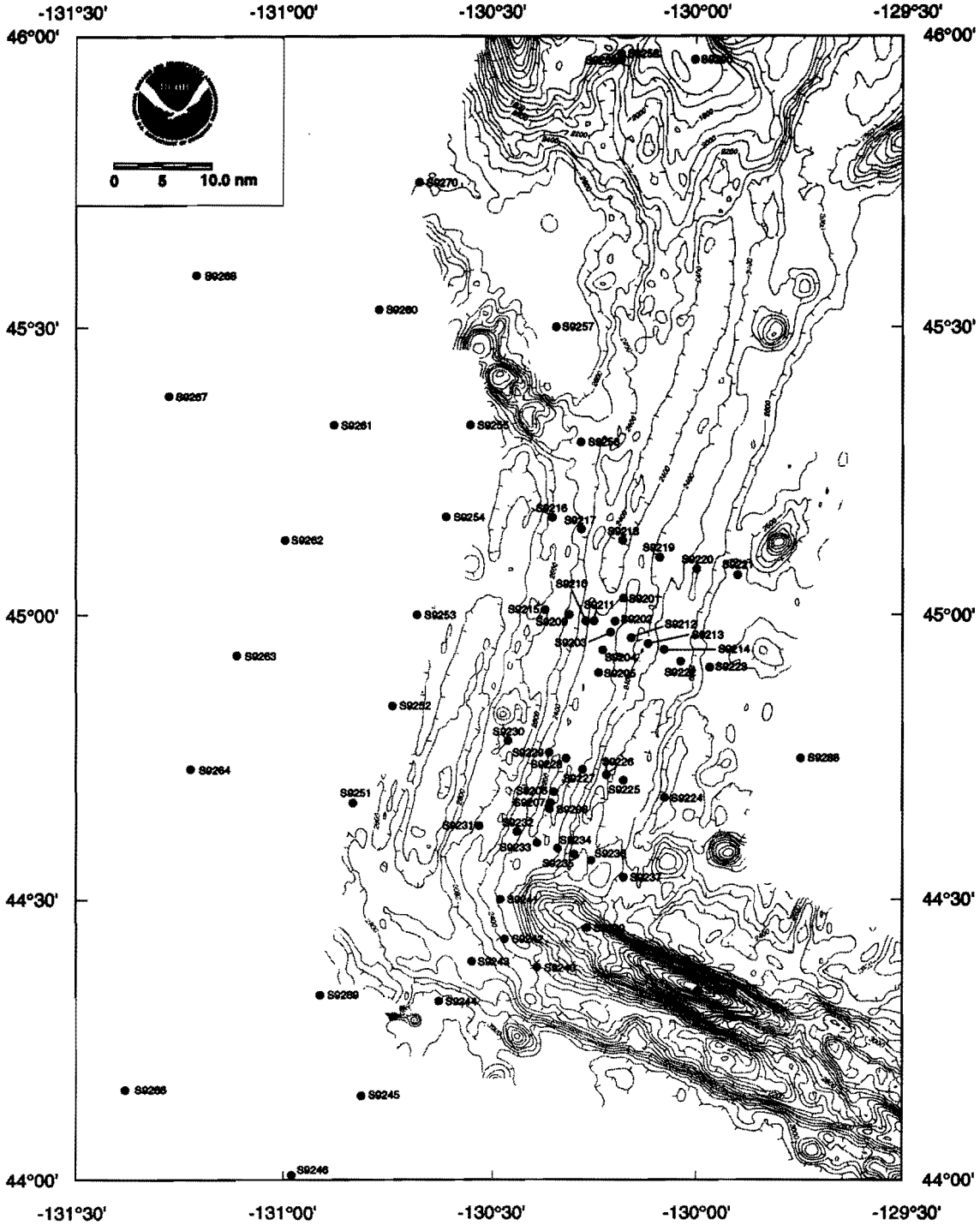

Fig. 3. Station locations for the VENTS 1992 Plume Monitoring Experiment.

TABLE 1
VENTS 1991 LEG 2
(JUNE 1991)
STATION LOCATIONS

STATION NAME	DATE OCCUPIED	LATITUDE (N)	LONGITUDE (W)
T9101C1	07 JUN 91	48°27.4′	128°42.6′
T9102C2	08 JUN 91	48°04.0′	129°03.0′
S9155C3	08 JUN 91	47°57.6′	129°06.0′
T9103C4	08 JUN 91	47°59.2′	129°00.6′
T9104C5	09 JUN 91	47°58.0′	129°11.4′
S9156C6	09 JUN 91	47°56.9′	129°08.4′
S9146C7	09 JUN 91	46°40.9′	129°24.0′
T9105C8	10 JUN 91	45°07.1′	130°09.0′
S9127C9	11 JUN 91	45°01.9′	130°10.8′
S9127C10	11 JUN 91	45°18.6′	130°10.8′
S9126C11	11 JUN 91	44°58.8′	130°13.2′
S9126C12	11 JUN 91	44°58.9′	130°13.2′
T9106C13	11 JUN 91	44°56.8′	130°05.4′
S9122C14	12 JUN 91	44°52.6′	130°15.0′
S9122C15	12 JUN 91	44°52.9′	130°14.4′
S9121C16	12 JUN 91	44°52.9′	130°16.8′
S9125C17	13 JUN 91	44°57.8′	130°13.2′
T9107C18	13 JUN 91	45°00.7′	130°05.4′
S9125C19	13 JUN 91	44°57.3′	130°13.2′
S9123C20	13 JUN 91	44°54.1′	130°25.2′
S9128C21	14 JUN 91	44°53.2′	130°03.0′
S9129C22	14 JUN 91	44°53.9′	130°06.6′
S9130C23	14 JUN 91	44°55.4′	130°09.0′
S9131C24	14 JUN 91	44°56.3′	130°10.8′
S9124C25	14 JUN 91	44°56.0′	130°13.8′
T9108C26	15 JUN 91	44°51.8′	130°07.2′
S9124C27	15 JUN 91	44°56.1′	130°13.8′
S9123C28	15 JUN 91	44°53.5′	130°16.2′
S9131C29	15 JUN 91	44°56.1′	130°10.8′
S9135C30	16 JUN 91	44°59.9′	130°24.0′
S9134C31	16 JUN 91	44°59.2′	130°21.6′
S9133C32	16 JUN 91	44°58.1′	130°17.4′
S9132C33	16 JUN 91	44°56.9′	130°15.6′
S9132C35	16 JUN 91	44°57.4′	130°14.4′
T9109C36	16 JUN 91	44°31.1′	130°27.0′
T9110C37	17 JUN 91	44°43.9′	130°19.8′
S9133C38	18 JUN 91	44°58.1′	130°17.4′
S9130C39	18 JUN 91	44°55.6′	130°09.0′
S9120C40	18 JUN 91	44°39.1′	130°22.2′
T9111C41	18 JUN 91	44°26.7′	130°27.0′
S9101C42	19 JUN 91	44°17.5′	130°31.2′
S9102C43	19 JUN 91	44°20.5′	130°28.8′
S9103C44	19 JUN 91	44°21.7′	130°22.8′
S9104C45	19 JUN 91	44°22.7′	130°24.0′
S9105C46	19 JUN 91	44°24.4′	130°22.2′

TABLE 1 (Continued)
VENTS 1991 LEG 2
(JUNE 1991)
STATION LOCATIONS

STATION NAME	DATE OCCUPIED	LATITUDE (N)	LONGITUDE (W)
S9106C47	19 JUN 91	44°26.0′	130°20.4′
S9107C48	19 JUN 91	44°27.1′	130°19.8′
S9108C49	20 JUN 91	44°29.5′	130°16.8′
S9109C50	20 JUN 91	44°31.5′	130°11.4′
S9110C51	20 JUN 91	44°32.5′	130°15.0′
S9111C52	20 JUN 91	44°33.5′	130°18.6′
S9112C53	20 JUN 91	44°34.0′	130°21.0′
S9113C54	20 JUN 91	44°34.5′	130°22.8′
S9114C55	20 JUN 91	44°34.9′	130°24.0′
S9115C56	20 JUN 91	44°34.9′	130°25.8′
S9116C57	20 JUN 91	44°35.3′	130°28.2′
S9117C58	20 JUN 91	44°35.8′	130°30.6′
S9118C59	20 JUN 91	44°36.2′	130°32.4′
S9119C60	21 JUN 91	44°36.7′	130°35.4′
S9120C61	21 JUN 91	44°39.1′	130°22.2′
S9136C62	21 JUN 91	45°08.5′	130°14.0′
S9137C63	21 JUN 91	45°09.1′	130°16.8′
S9138C64	21 JUN 91	45°09.8′	130°19.8′
S9139C65	21 JUN 91	45°10.6′	130°22.8′
S9140C66	22 JUN 91	45°11.4′	130°25.8′
S9141C67	22 JUN 91	45°13.4′	130°24.6′
S9142C68	22 JUN 91	45°15.4′	130°24.0′
S9143C69	22 JUN 91	45°17.3′	130°22.8′
T9112C70	22 JUN 91	45°16.0′	130°08.4′
T9113C71	23 JUN 91	45°55.9′	130°00.6′
S9144C73	24 JUN 91	45°57.6′	130°10.8′
S9145C74	24 JUN 91	46°01.0′	130°10.2′
T9115C75	24 JUN 91	46°00.8′	129°54.6′

TABLE 2
VENTS 1992
(MAY/JUNE 1992)
STATION LOCATIONS

STATION NAME	DATE OCCUPIED	LATITUDE (N)	LONGITUDE (W)
S9281C001	16 MAY 92	44°45.0′	125°19.8′
S9282C002	16 MAY 92	44°45.0′	125°49.8′
S9283C003	16 MAY 92	44°45.0′	126°30.0′
S9284C004	16 MAY 92	44°45.0′	127°09.0′
S9285C005	17 MAY 92	44°45.0′	127°49.8′
S9286C006	17 MAY 92	44°45.0′	128°30.0′
S9287C007	17 MAY 92	44°45.0′	129°09.6′
S9288C008	17 MAY 92	44°45.0′	129°45.0′
S9213C009	18 MAY 92	44°57.0′	130°07.2′
S9214C010	18 MAY 92	44°56.4′	130°04.8′
S9210C011	19 MAY 92	44°59.4′	130°16.2′
S9209C012	19 MAY 92	45°00.0′	130°18.6′
S9223C013	20 MAY 92	44°54.6′	129°58.2′
S9222C014	20 MAY 92	44°55.2′	130°02.4′
T9201C015	21 MAY 92	44°48.0′	130°18.0′
T9202C016	21 MAY 92	45°04.2′	130°14.4′
T9203C017	22 MAY 92	45°01.8′	130°19.2′
S9215C018	22 MAY 92	45°00.6′	130°22.2′
T9204C019	23 MAY 92	44°54.6′	130°21.0′
T9205C020	23 MAY 92	45°00.6′	130°11.4′
S9204C021	24 MAY 92	44°56.4′	130°13.8′
S9205C022	24 MAY 92	44°54.0′	130°14.4′
T9206C023	24 MAY 92	44°47.4′	130°18.6′
T9207C024	25 MAY 92	44°41.4′	130°26.4′
T9208C025	25 MAY 92	44°39.0′	130°21.6′
S9208C026	26 MAY 92	44°39.6′	130°21.6′
S9207C027	26 MAY 92	44°40.2′	130°21.6′
S9206C028	26 MAY 92	44°41.4′	130°21.0′
S9211C029	27 MAY 92	44°59.4′	130°15.0′
S9212C030	27 MAY 92	44°57.6′	130°09.6′
S9203C031	28 MAY 92	44°58.2′	130°12.6′
T9209C032	28 MAY 92	44°58.2′	130°12.6′
S9201C033	28 MAY 92	45°01.8′	130°10.8′
S9202C034	29 MAY 92	44°59.4′	130°12.0′
S9258C035	29 MAY 92	45°57.6′	130°10.8′
S9259C036	29 MAY 92	46°01.2′	130°10.2′
S9216C037	29 MAY 92	45°10.2′	130°21.0′
S9217C038	29 MAY 92	45°09.0′	130°16.8′
S9218C039	29 MAY 92	45°07.8′	130°10.8′
S9219C040	30 MAY 92	45°06.0′	130°05.4′
S9220C041	30 MAY 92	45°04.8′	130°00.0′
S9221C042	30 MAY 92	45°04.2′	129°54.0′
S9224C043	30 MAY 92	44°40.8′	130°48.0′
S9225C044	30 MAY 92	44°42.6′	130°10.8′
S9226C045	30 MAY 92	44°43.2′	130°13.2′

TABLE 2 (Continued)
VENTS 1992
(MAY/JUNE 1992)
STATION LOCATIONS

STATION NAME	DATE OCCUPIED	LATITUDE (N)	LONGITUDE (W)
S9227C046	30 MAY 92	44°43.8′	130°16.8′
S9228C047	31 MAY 92	44°45.0′	130°19.2′
S9229C048	31 MAY 92	44°45.6′	130°21.6′
S9230C049	31 MAY 92	44°46.8′	130°27.6′
S9231C050	31 MAY 92	44°37.8′	130°31.8′
S9233C051	31 MAY 92	44°36.0′	130°23.4′
S9232C052	31 MAY 92	44°37.2′	130°26.4′
S9234C053	31 MAY 92	44°35.4′	130°20.4′
S9235C054	31 MAY 92	44°34.8′	130°18.0′
S9236C055	31 MAY 92	44°34.2′	130°15.6′
S9237C056	01 JUN 92	44°32.4′	130°10.8′
S9239C057	01 JUN 92	44°27.0′	130°16.2′
S9240C058	01 JUN 92	44°22.8′	130°23.4′
S9241C059	01 JUN 92	44°30.0′	130°28.8′
S9242C060	01 JUN 92	44°25.8′	130°28.2′
S9238C061	01 JUN 92	44°20.4′	130°00.0′
S9243C062	01 JUN 92	44°23.4′	130°33.0′
S9244C063	02 JUN 92	44°19.2′	130°37.8′
S9245C064	02 JUN 92	44°09.0′	130°49.2′
S9246C065	02 JUN 92	44°00.6′	130°59.4′
S9289C066	02 JUN 92	44°19.8′	130°55.2′
S9251C067	02 JUN 92	44°40.2′	130°50.4′
S9252C068	02 JUN 92	44°50.4′	130°44.4′
S9253C069	03 JUN 92	45°00.0′	130°41.4′
S9254C070	03 JUN 92	45°10.2′	130°36.6′
S9255C071	03 JUN 92	45°19.8′	130°33.0′
S9256C072	03 JUN 92	45°18.0′	130°16.8′
S9257C073	03 JUN 92	45°30.0′	130°20.4′
S9270C074	03 JUN 92	45°45.0′	130°40.2′
S9290C075	04 JUN 92	45°57.6′	130°00.0′
S9258C076	04 JUN 92	45°58.2′	130°10.8′
S9259C077	04 JUN 92	46°01.2′	130°10.2′
S9260C078	04 JUN 92	45°31.8′	130°46.2′
S9261C079	04 JUN 92	45°19.8′	130°52.8′
S9262C080	04 JUN 92	45°07.8′	131°00.0′
S9263C081	05 JUN 92	44°55.8′	131°07.2′
S9264C082	05 JUN 92	44°43.8′	131°13.8′
S9265C083	05 JUN 92	44°56.4′	131°30.6′
S9266C084	05 JUN 92	44°09.6′	131°23.4′
S9267C085	05 JUN 92	45°22.8′	131°16.8′
S9268C086	05 JUN 92	45°35.4′	131°12.6′
S9269C087	06 JUN 92	46°04.2′	130°27.0′
S9258C088	06 JUN 92	45°57.6′	130°10.8′
S9259C089	06 JUN 92	46°01.2′	130°10.8′
S9291C090	06 JUN 92	47°22.8′	129°13.8′

TABLE 2 (Continued)
VENTS 1992
(MAY/JUNE 1992)
STATION LOCATIONS

STATION NAME	DATE OCCUPIED	LATITUDE (N)	LONGITUDE (W)
S9292C091	06 JUN 92	47°22.8′	129°09.0′
S9210C092	08 JUN 92	47°14.4′	128°03.0′
S9293C093	08 JUN 92	47°22.8′	129°03.0′
S9294C094	08 JUN 92	47°22.8′	128°58.2′
S9295C095	08 JUN 92	47°23.4′	128°50.4′
S9210C096	09 JUN 92	47°49.8′	127°43.8′
S9210C097	09 JUN 92	47°50.4′	127°37.8′
S9210C098	09 JUN 92	47°52.2′	127°37.2′
T9211C099	09 JUN 92	47°51.6′	127°35.4′
T9212C100	09 JUN 92	47°42.6′	127°46.8′
T9213C101	10 JUN 92	47°50.4′	127°43.8′
S9276C102	10 JUN 92	47°30.0′	128°19.8′
T9214C103	10 JUN 92	47°48.6′	127°33.0′
T9215C104	10 JUN 92	47°52.8′	127°45.0′
S9210C105	11 JUN 92	47°34.8′	127°51.0′
S9210C106	11 JUN 92	47°51.0′	127°36.6′
S9275C107	11 JUN 92	48°00.0′	127°37.8′
S9274C108	11 JUN 92	48°10.2′	126°37.2′

TABLE 3
VENTS 1991
(JUNE 1991)
TOW NISKIN™ TRIP POSITIONS

STATION NAME	DATE OCCUPIED	NISKIN NO.	LATITUDE (N)	LONGITUDE (W)
T9102	08 JUN 1991	27	129°03.6′	48°03.6′
		3	129°04.2′	48°02.0′
		20	129°04.2′	48°01.7′
		15	129°04.8′	48°00.1′
		21	129°05.4′	47°58.9′
		12	129°06.0′	47°57.9′
		17	129°06.6′	47°57.1′
		14	129°07.2′	47°56.2′
		25	129°07.2′	47°55.1′
		11	129°07.8′	47°54.1′
		1	129°08.4′	47°53.2′
		18	129°09.0′	47°52.4′
T9103	08 JUN 1991	9	129°00.6′	47°59.2′
		29	129°02.4′	47°59.6′
		26	129°03.6′	48°00.0′
		23	129°04.2′	48°00.1′
		12	129°04.2′	48°00.2′
		15	129°04.8′	48°00.2′
		17	129°04.8′	48°00.3′
		20	129°04.8′	48°00.4′
		3	129°05.4′	48°00.4′
		14	129°06.0′	48°06.6′
		5	129°07.2′	48°01.1′
		21	129°08.4′	48°01.3′
T9104	09 JUN 1991	10	129°09.6′	47°57.2′
		19	129°09.0′	47°57.0′
		8	129°08.4′	47°56.9′
		31	129°07.2′	47°56.4′
		24	129°06.6′	47°56.3′
		16	129°06.6′	47°56.2′
		30	129°05.4′	47°55.9′
T9105	10 JUN 1991	23	130°12.0′	45°01.0′
		1	130°13.2′	44°58.7′
		22	130°13.8′	44°58.3′
		21	130°13.8′	44°58.2′
		18	130°13.8′	44°57.7′
		3	130°13.8′	44°57.7′
		5	130°14.4′	44°57.2′
		11	130°14.4′	44°57.1′
		13	130°15.0′	44°56.3′
		2	130°15.0′	44°56.2′
		6	130°16.2′	44°53.5′
		17	130°16.2′	44°53.3′

TABLE 3 (Continued)
VENTS 1991
(JUNE 1991)
TOW NISKIN™ TRIP POSITIONS

STATION NAME	DATE OCCUPIED	NISKIN NO.	LATITUDE (N)	LONGITUDE (W)
T9106	11 JUN 1991	14	130°10.8′	44°58.2′
		15	130°11.4′	44°58.4′
		20	130°12.0′	44°58.5′
		8	130°12.0′	44°58.5′
		29	130°12.0′	44°58.6′
		5	130°12.6′	44°58.6′
		12	130°13.2′	44°58.9′
		24	130°13.8′	44°59.0′
		9	130°13.8′	44°59.0′
		19	130°14.4′	44°59.2′
		16	130°15.0′	44°59.4′
		26	130°15.0′	44°59.4′
T9107	13 JUN 1991	3	130°11.4′	45°01.6′
		18	130°11.4′	45°01.7′
		12	130°15.0′	45°02.5′
T9108	15 JUN 1991	22	130°15.6′	44°53.2′
		2	130°16.2′	44°53.5′
		13	130°16.8′	44°53.6′
		6	130°18.0′	44°53.8′
		21	130°18.6′	44°54.0′
		23	130°19.8′	44°54.3′
		27	130°20.4′	44°54.5′
		19	130°21.0′	44°54.6′
		26	130°21.6′	44°54.8′
T9109	16 JUN 1991	27	130°24.0′	44°36.5′
		16	130°23.4′	44°37.9′
		23	130°23.4′	44°38.3′
		3	130°23.4′	44°38.5′
		5	130°22.8′	44°39.1′
		2	130°22.8′	44°39.5′
		20	130°22.8′	44°39.6′
		13	130°22.2′	44°40.2′
		8	130°22.2′	44°40.7′
		25	130°22.2′	44°40.8′
T9110	17 JUN 1991	17	130°20.4′	44°44.2′
		29	130°19.2′	44°46.9′
		30	130°19.2′	44°47.2′
		12	130°15.6′	44°53.3′
		26	130°13.2′	44°59.2′

TABLE 3 (Continued)
VENTS 1991
(JUNE 1991)
TOW NISKIN™ TRIP POSITIONS

STATION NAME	DATE OCCUPIED	NISKIN NO.	LATITUDE (N)	LONGITUDE (W)
T9111	18 JUN 1991	31	130°24.6′	44°21.9′
		12	130°26.4′	44°24.1′
		24	130°27.6′	44°25.6′
		17	130°28.2′	44°26.6′
		21	130°28.8′	44°28.0′
		19	130°29.4′	44°29.0′
T9112	22 JUN 1991	17	130°10.2′	45°07.9′
		10	130°10.8′	45°05.3′
		3	130°12.6′	45°00.9′
		29	130°13.2′	44°58.9′
T9113	23 JUN 1991	3	130°01.8′	45°55.6′
		29	130°01.8′	45°55.5′
		31	130°01.2′	45°54.9′
		24	130°01.2′	45°54.5′
		17	130°01.8′	45°54.4′
T9115	24 JUN 1991	20	129°54.6′	46°01.9′
		31	129°51.6′	46°05.7′
		29	129°51.6′	46°05.8′
		3	129°51.6′	46°06.2′
		1	129°51.0′	46°07.4′
		24	129°43.2′	46°16.9′
		17	129°43.2′	46°16.9′
		15	129°43.2′	46°17.0′
		25	129°43.2′	46°17.0′
		10	129°43.2′	46°17.2′
		2	129°42.6′	46°17.5′

TABLE 4
VENTS 1992
(MAY/JUNE 1992)
TOW NISKIN™ TRIP POSITIONS

STATION NAME	DATE OCCUPIED	NISKIN #	LONGITUDE (W)	LATITUDE (N)
T9201	21 MAY 92	9	130°13.9′	44°55.4′
		10	130°13.9′	44°55.4′
		12	130°12.3′	44°59.2′
		16	130°12.1′	44°59.6′
		18	130°12.1′	44°59.6′
		2	130°11.6′	45°00.3′
		3	130°11.4′	45°00.7′
		14	130°10.7′	45°02.1′
		5	130°10.2′	45°02.8′
		6	130°06.5′	45°09.8′
T9202	21 MAY 92	17	130°11.4′	45°03.8′
		23	130°10.8′	45°03.8′
		13	130°10.8′	45°03.8′
		29	130°10.8′	45°03.8′
		27	130°10.8′	45°03.8′
		19	130°10.8′	45°03.7′
		30	130°10.8′	45°03.6′
		11	130°09.6′	45°03.4′
		24	130°08.4′	45°02.9′
T9203	22 MAY 92	9	130°19.2′	45°01.7′
		10	130°18.0′	45°01.3′
		12	130°16.2′	45°00.8′
		16	130°15.6′	45°00.7′
		18	130°15.0′	45°00.5′
		2	130°14.4′	45°00.4′
		3	130°13.8′	45°00.1′
		14	130°12.6′	44°59.8′
		5	130°10.2′	44°59.3′
		6	130°08.4′	44°58.9′
T9204	23 MAY 92	18	130°21.0′	44°54.9′
		2	130°21.0′	44°54.8′
		13	130°19.8′	44°54.6′
		23	130°19.8′	44°54.4′
		17	130°18.6′	44°54.2′
		15	130°18.0′	44°54.0′
		6	130°17.4′	44°53.8′
		5	130°16.2′	44°53.5′
		14	130°15.6′	44°53.3′
		3	130°13.8′	44°52.9′
T9205	23 MAY 92	11	130°12.0′	44°59.5′
		30	130°12.6′	44°59.2′

TABLE 4 (Continued)
VENTS 1992
(MAY/JUNE 1992)
TOW NISKIN™ TRIP POSITIONS

STATION NAME	DATE OCCUPIED	NISKIN #	LONGITUDE (W)	LATITUDE (N)
		19	130°12.6′	44°58.6′
		27	130°12.6′	44°58.0′
		29	130°12.6′	44°57.8′
		25	130°13.2′	44°56.6′
		22	130°14.4′	44°55.1′
		12	130°14.4′	44°54.2′
		26	130°15.0′	44°53.4′
		24	130°15.0′	44°53.3′
T9206	24 MAY 92	21	130°18.6′	44°46.4′
		6	130°21.0′	44°41.1′
		5	130°21.0′	44°40.9′
		3	130°21.6′	44°40.4′
		17	130°21.6′	44°39.9′
		24	130°21.6′	44°39.8′
		18	130°21.6′	44°39.1′
		2	130°22.2′	44°38.8′
		13	130°22.2′	44°38.6′
		23	130°26.4′	44°30.8′
T9207	25 MAY 92	22	130°26.4′	44°41.9′
		29	130°26.4′	44°41.9′
		12	130°25.8′	44°41.6′
		26	130°24.6′	44°41.2′
		11	130°24.0′	44°41.2′
		30	130°24.0′	44°41.1′
		19	130°23.4′	44°41.0′
		15	130°22.8′	44°40.7′
		9	130°21.6′	44°40.2′
		23	130°19.2′	44°39.2′
T9208	25 MAY 92	1	130°21.6′	44°39.3′
		2	130°21.6′	44°39.3′
		3	130°21.6′	44°39.4′
		4	130°21.6′	44°39.4′
		5	130°21.6′	44°40.7′
		6	130°21.6′	44°40.7′
		7	130°21.0′	44°40.9′
		8	130°21.0′	44°41.2′
		9	130°21.0′	44°41.2′
		10	130°21.0′	44°41.1′
T9209	28 MAY 92	10	130°12.6′	44°58.1′
		14	130°12.6′	44°58.1′
		27	130°12.6′	44°58.1′

TABLE 4 (Continued)
VENTS 1992
(MAY/JUNE 1992)
TOW NISKIN™ TRIP POSITIONS

STATION NAME	DATE OCCUPIED	NISKIN #	LONGITUDE (W)	LATITUDE (N)
		17	130°12.6′	44°58.2′
		1	130°12.6′	44°58.3′
		6	130°12.6′	44°58.3′
		24	130°13.2′	44°58.3′
		18	130°13.2′	44°58.3′
		3	130°13.2′	44°58.3′
		15	130°13.2′	44°58.3′
T9210	08 JUN 92	15	128°03.0′	47°15.7′
		23	128°03.0′	47°15.7′
		19	128°03.0′	47°16.4′
		13	128°03.0′	47°16.9′
		14	128°03.0′	47°17.0′
		16	128°03.0′	47°17.2′
		9	128°03.0′	47°17.3′
		6	128°03.0′	47°17.7′
		3	128°03.0′	47°18.2′
		30	128°03.0′	47°18.6′
T9211	09 JUN 92	27	127°35.4′	47°51.8′
		1	127°36.6′	47°51.7′
		21	127°37.2′	47°51.6′
		2	127°37.2′	47°51.5′
		25	127°37.2′	47°51.5′
		10	127°40.8′	47°50.9′
		8	127°44.4′	47°50.2′
		5	127°44.4′	47°50.1′
		11	127°45.0′	47°50.1′
		26	127°45.6′	47°49.9′
T9212	09 JUN 92	6	127°46.8′	47°42.6′
		23	127°46.8′	47°42.6′
		14	127°46.8′	47°42.6′
		16	127°46.8′	47°42.6′
		9	127°46.8′	47°42.6′
		18	127.°46.8′	47°42.6′
		30	127°48.0′	47°41.9′
		3	127°48.0′	47°41.8′
		13	127°48.0′	47°41.8′
		24	127°48.0′	47°41.8′
		17	127°48.0′	47°41.8′
		22	127°48.0′	47°41.6′
T9213	10 JUN 92	1	127°43.8′	47°50.6′
		21	127°43.8′	47°50.6′

TABLE 4 (Continued)
VENTS 1992
(MAY/JUNE 1992)
TOW NISKIN™ TRIP POSITIONS

STATION NAME	DATE OCCUPIED	NISKIN #	LONGITUDE (W)	LATITUDE (N)
		2	127°43.8′	47°50.6′
		25	127°43.8′	47°50.5′
		10	127°43.8′	47°50.5′
		11	127°44.4′	47°49.7′
		19	127°44.4′	47°49.7′
		15	127°44.4′	47°49.6′
		31	127°44.4′	47°49.6′
T9214	10 JUN 92	22	127°33.0′	47°48.8′
		27	127°34.2′	47°49.4′
		24	127°34.8′	47°49.9′
		30	127°36.0′	47°50.8′
		31	27°36.6′	47°51.3′
		13	127°37.8′	47°51.9′
		17	127°38.4′	47°52.4′
		6	127°39.0′	47°53.0′
		9	127°40.2′	47°53.5′
		23	127°40.8′	47°54.1′
T9215	10 JUN 92	20	127°44.4′	47°52.4′
		1	127°43.8′	47°50.7′
		21	127°43.8′	47°50.6′
		2	127°43.8′	47°49.9′
		12	127°43.8′	47°49.6′
		14	127°43.2′	47°49.6′
		10	127°43.2′	47°49.4′
		16	127°43.2′	47°48.6′
		29	127°43.2′	47°48.5′
		15	127°42.6′	47°47.9′

3.3 Individual Station Data

The header on the data tables in Appendix A contains the station identification and consecutive cast number, the date the station was occupied, and the latitude and longitude of the station. The data is listed in rows by Niskin™ bottle number and in 21 columns as follows:

Column 1: Niskin™ bottle number
Column 2: Depth in meters
Column 3: Depth in decibars
Column 4: In situ temperature (°C)
Column 5: Potential temperature (°C)
Column 6: Temperature anomaly (°C)
Column 7: Salinity-CTD (PSU)
Column 8: Salinity-Bottle (PSU)
Column 9: Attenuation (1/m)
Column 10: Attenuation anomaly (1/m)
Column 11: In situ density (CTD salinity)
Column 12: In situ density (Bottle salinity)
Column 13: Potential density (CTD salinity)
Column 14: Potential density (Bottle salinity)
Column 15: Filtered PO_4
Column 16: Filtered SiO_4
Column 17: Total suspended matter

The lower left portion of each table displays the equation used to calculate the station's temperature anomaly and attenuation anomaly.

4.0 ACKNOWLEDGMENTS

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APPENDIX A:

Station Data Tables
VENTS 1991

VENTS 1991 - LEG II
Station T9101 Cast 1 7 JUNE 1991
LAT: 48 27.4N LONG: 128 42.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
10	2389.3	2423.5	1.770	1.601		34.624	34.624	0.383	0.013	27.688	27.688	27.701	27.701
8	2364.5	2398.2	1.776	1.609		34.623	34.620	0.381	0.011	27.687	27.685	27.700	27.697
31	2345.6	2378.9	1.785	1.620		34.622	34.622	0.382	0.012	27.686	27.686	27.698	27.698
16	2339.9	2373.1	1.783	1.618		34.622	34.623	0.387	0.017	27.686	27.687	27.698	27.699
26	2396.0	2430.4	1.760	1.590		34.626	34.605	0.384	0.014	27.691	27.674	27.703	27.687
22	2366.5	2400.3	1.768	1.601		34.623	34.624	0.377	0.007	27.688	27.688	27.700	27.701
24	2335.6	2368.7	1.780	1.616		34.620	34.620	0.372	0.002	27.684	27.684	27.697	27.697
6	2305.7	2338.3	1.786	1.624		34.618	34.618	0.372	0.002	27.682	27.682	27.695	27.694
2	2251.7	2283.2	1.806	1.649		34.613	34.611	0.373	0.003	27.677	27.675	27.689	27.687
19	2205.2	2235.8	1.818	1.665		34.609	34.611	0.371	0.001	27.673	27.674	27.684	27.686
29	2105.3	2134.0	1.858	1.713		34.602	34.602	0.372	0.002	27.664	27.664	27.675	27.675
30	2008.3	2035.2	1.892	1.754		34.594	34.596	0.370	0.000	27.655	27.657	27.665	27.667

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
10	2.850	182.433	24.15
8	2.866	182.286	22.22
31	2.871	182.471	21.93
16	2.877	182.129	21.25
26	2.877	180.645	26.72
22	2.869	181.561	21.57
24	2.855	180.444	16.73
6	2.868	179.773	12.27
2	2.876	178.564	14.24
19	2.863	178.660	10.77
29	2.909	176.917	10.88
30	2.905	175.895	12.99

Atten-Anom = Atten - 0.37

VENTS 1991 - LEG II
Station T9102 Cast 2 8 JUNE 1991
LAT: 48 4.0N LONG: 129 3.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
27	2075.4	2103.5	1.866	1.723	0.034	34.608	34.608	0.382	0.005	27.668	27.668	27.679	27.679
3	2116.4	2145.2	1.872	1.725	0.036	34.608	34.608	0.382	0.005	27.668	27.668	27.679	27.679
20	2049.1	2076.7	1.927	1.785	0.050	34.602	34.602	0.393	0.016	27.659	27.659	27.670	27.670
15	1926.9	1952.3	1.977	1.845	0.076	34.599	34.600	0.417	0.040	27.652	27.653	27.663	27.663
21	1888.2	1912.9	1.994	1.865	0.104	34.603	34.603	0.436	0.059	27.654	27.654	27.664	27.664
12	1848.7	1872.7	1.997	1.871	0.076	34.595	34.595	0.414	0.037	27.647	27.647	27.657	27.657
17	2044.2	2071.7	1.947	1.805	0.074	34.605	34.606	0.404	0.027	27.659	27.660	27.670	27.671
14	2042.0	2069.4	1.918	1.777	0.057	34.605	34.608	0.393	0.016	27.662	27.664	27.673	27.675
25	2057.8	2085.5	1.865	1.724	0.031	34.607	34.604	0.382	0.005	27.667	27.665	27.678	27.676
11	2059.5	2087.3	1.864	1.722	0.038	34.609	34.609	0.382	0.005	27.669	27.669	27.680	27.680
1	2166.1	2195.9	1.824	1.674	0.035	34.616	34.615	0.383	0.006	27.678	27.677	27.689	27.688
18	2014.4	2041.4	1.897	1.759	0.022	34.599	34.598	0.380	0.003	27.659	27.658	27.669	27.668

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
27			13.80
3	2.905	179.153	19.13
20	2.882	178.848	23.57
15	2.870	180.612	41.58
21	2.853	182.632	39.46
12	2.876	179.697	28.90
17	2.856	180.519	29.41
14	2.884	180.043	22.28
25	2.872	177.731	19.75
11	2.869	178.271	26.17
1	2.881	179.501	14.66
18	2.903	176.466	13.54

D-Theta = (ptemp + (4.8884 * pden)) - 136.995
Atten-Anom = Atten - 0.377

VENTS 1991 - LEG II
Station S9155 Cast 3 8 JUNE 1991
LAT: 47 57.6N LONG: 129 6.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
30	2155.2	2184.7	1.930	1.779	0.065	34.608	34.609	0.407	0.031	27.663	27.664	27.675	27.676
26	2122.9	2151.8	1.941	1.793	0.069	34.607	34.603	0.418	0.042	27.661	27.658	27.673	27.670
2	2097.6	2126.0	1.954	1.808	0.075	34.606	34.603	0.406	0.030	27.660	27.657	27.671	27.669
10	2047.4	2075.0	1.960	1.818	0.077	34.605	34.606	0.408	0.032	27.658	27.659	27.669	27.670
19	2030.0	2057.2	1.972	1.831	0.086	34.605	34.604	0.411	0.035	27.657	27.657	27.668	27.668
8	1998.8	2025.5	1.967	1.829	0.076	34.603	34.603	0.412	0.036	27.656	27.656	27.667	27.667
31	1951.2	1977.0	1.981	1.847	0.076	34.600	34.601	0.414	0.038	27.653	27.654	27.663	27.664
16	1899.1	1924.0	1.994	1.864	0.079	34.598	34.598	0.412	0.036	27.650	27.650	27.660	27.660
22	1849.6	1873.6	1.989	1.863	0.043	34.589	34.588	0.395	0.019	27.643	27.642	27.653	27.652
24	1797.1	1820.2	2.023	1.901	-3e-04	34.572	34.572	0.378	0.002	27.627	27.627	27.637	27.637
6	1699.5	1720.9	2.155	2.040	-0.001	34.550	34.550	0.378	0.002	27.599	27.599	27.608	27.608
13	1600.5	1620.3	2.230	2.122	0.010	34.540	34.539	0.378	0.002	27.585	27.584	27.593	27.593

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
30	2.907	180.206	23.70
26	2.892	179.313	
2	2.889	179.945	29.53
10	2.888	180.565	36.04
19	2.872	174.208	49.86
8	2.887	180.131	37.17
31	2.895	180.012	41.98
16	2.902	179.707	63.45
22	2.945	175.843	20.00
24	2.979	171.706	13.15
6	3.025	168.594	18.00
13	3.056	166.777	10.04

D-Theta = (ptemp + (4.8884 * pden)) - 137
Atten-Anom = Atten - 0.376

VENTS 1991 - LEG II
Station T9103 Cast 4 8 JUNE 1991
LAT: 47 59.2N LONG: 129 0.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	1997.3	2023.9	1.935	1.798	0.057	34.603	34.602	0.397	0.021	27.659	27.658	27.669	27.669
29	1995.1	2021.7	1.957	1.819	0.074	34.604	34.604	0.408	0.032	27.658	27.658	27.669	27.669
26	1989.7	2016.2	1.958	1.821	0.079	34.605	34.604	0.408	0.032	27.659	27.658	27.669	27.668
23	1999.9	2026.6	1.967	1.829	0.084	34.605	34.604	0.441	0.065	27.658	27.657	27.669	27.668
12	2133.7	2162.8	1.887	1.739	0.047	34.610	34.611	0.385	0.009	27.668	27.669	27.679	27.680
15	2025.1	2052.2	1.938	1.798	0.061	34.604	34.604	0.399	0.023	27.659	27.659	27.670	27.670
17	1961.1	1987.1	1.953	1.818	0.066	34.602	34.603	0.404	0.028	27.657	27.657	27.667	27.668
20	1929.2	1954.6	1.952	1.820	0.055	34.599	34.599	0.399	0.023	27.654	27.654	27.664	27.664
3	1997.5	2024.1	1.939	1.802	0.059	34.603	34.604	0.399	0.023	27.658	27.659	27.669	27.670
14	2001.5	2028.2	1.937	1.799	0.062	34.604	34.604	0.399	0.023	27.659	27.659	27.670	27.670
5	2026.6	2053.8	1.898	1.759	0.040	34.605	34.604	0.384	0.008	27.663	27.662	27.674	27.673
21	2061.8	2089.6	1.864	1.722	0.025	34.607	34.606	0.380	0.004	27.667	27.667	27.678	27.678

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.877	178.388	24.08
29	2.898	179.699	39.63
26	2.885	179.665	41.52
23	2.833	179.838	39.84
12	2.895	178.190	17.22
15	2.899	178.926	27.23
17	2.876	179.337	31.59
20	2.917	178.013	29.92
3	2.934	178.955	25.20
14	2.882	179.137	31.50
5	2.880	177.661	17.06
21	2.875	176.988	15.30

D-Theta = (ptemp + (4.8884 * pden)) - 137
Atten-Anom = Atten - 0.376

VENTS 1991 - LEG II
Station T9104 Cast 5 9 JUNE 1991
LAT: 47 58.0N LONG: 129 11.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
10	2022.7	2049.8	1.926	1.787	0.046	34.602	34.603	0.393	0.017	27.659	27.659	27.669	27.670
19	2023.0	2050.1	1.931	1.791	0.053	34.603	34.604	0.396	0.020	27.659	27.660	27.670	27.671
8	2046.4	2074.0	1.942	1.800	0.074	34.607	34.606	0.460	0.084	27.661	27.661	27.672	27.672
31	1992.4	2019.0	1.933	1.796	0.060	34.604	34.604	0.398	0.022	27.660	27.660	27.670	27.670
24	2067.2	2095.1	1.880	1.737	0.039	34.608	34.608	0.384	0.008	27.667	27.667	27.678	27.678
16	1991.9	2018.5	1.923	1.786	0.030	34.598	34.598	0.385	0.009	27.656	27.656	27.666	27.666
30	2074.0	2102.1	1.870	1.727	0.036	34.609	34.607	0.381	0.005	27.669	27.667	27.680	27.678

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
10	2.925	178.978	21.62
19	2.829	179.388	29.03
8	2.779	180.798	44.00
31	2.903	179.718	15.60
24	2.934	178.771	15.49
16	2.940	177.445	16.18
30	2.947	178.454	11.50

D-Theta = (ptemp + (4.8884 * pden)) - 137
Atten-Anom = Atten - 0.376

VENTS 1991 - LEG II
Station S9156 Cast 6 9 JUNE 1991
LAT: 47 56.9N LONG: 129 8.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	2166.6	2196.4	1.914	1.762	0.054	34.608	34.609	0.393	0.0175	27.664	27.665	27.676	27.677
29	2125.7	2154.7	1.915	1.767	0.057	34.608	34.608	0.397	0.0215	27.664	27.664	27.676	27.676
12	2097.8	2126.3	1.915	1.769	0.058	34.608	34.608	0.397	0.0215	27.664	27.664	27.676	27.676
17	2076.5	2104.6	1.914	1.770	0.059	34.608	34.608	0.396	0.0205	27.664	27.664	27.675	27.675
26	2051.0	2078.6	1.920	1.778	0.060	34.607	34.607	0.396	0.0205	27.663	27.663	27.674	27.674
6	2025.1	2052.2	1.934	1.794	0.055	34.603	34.603	0.396	0.0205	27.659	27.659	27.670	27.670
13	1999.0	2025.7	1.941	1.803	0.049	34.600	34.600	0.393	0.0175	27.656	27.656	27.667	27.667
27	1949.3	1975.0	1.949	1.816	0.029	34.593	34.593	0.387	0.0115	27.650	27.650	27.660	27.660
25	1900.7	1925.6	1.960	1.830	0.018	34.588	34.586	0.381	0.0055	27.645	27.643	27.655	27.653
11	1796.8	1819.9	2.036	1.914	-2e-04	34.570	34.569	0.377	0.0015	27.624	27.624	27.634	27.633
18	1702.7	1724.2	2.110	1.995	-0.001	34.557	34.557	0.377	0.0015	27.608	27.608	27.617	27.617
2	1601.0	1620.8	2.199	2.091	0.003	34.543	34.541	0.378	0.0025	27.590	27.588	27.598	27.597

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.932	178.911	19.49
29	2.921	179.292	19.55
12	2.915	179.481	26.03
17	2.917	179.737	20.96
26	2.932	179.590	22.04
6	2.908	179.397	24.19
13	2.948	178.273	22.15
27	2.977	176.901	17.57
25	2.974	175.427	13.14
11	3.026	172.730	10.13
18	3.041	171.054	13.86
2			

D-Theta = (ptemp + (4.8884 * pden)) - 137
Atten-Anom = Atten - 0.3755

VENTS 1991 - LEG II
Station S9146 Cast 7 9 JUNE 1991
LAT: 46 40.9N LONG: 129 23.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	2384.3	2418.0	1.828	1.658	0.009	34.621	34.621	0.380	0.006	27.681	27.681	27.694	27.694
23	2382.1	2415.8	1.820	1.651	0.008	34.622	34.622	0.379	0.005	27.683	27.683	27.696	27.696
21	2349.3	2382.3	1.826	1.660	0.010	34.621	34.621	0.381	0.007	27.682	27.682	27.694	27.694
22	2323.9	2356.5	1.830	1.666	0.014	34.621	34.620	0.383	0.009	27.681	27.681	27.694	27.693
1	2301.5	2333.7	1.832	1.670	0.012	34.620	34.619	0.381	0.007	27.680	27.680	27.693	27.692
3	2302.1	2334.2	1.831	1.669	0.012	34.620	34.619	0.382	0.008	27.680	27.680	27.693	27.692
25	2275.1	2306.7	1.835	1.675	0.012	34.619	34.618	0.380	0.006	27.679	27.679	27.692	27.691
18	2249.6	2280.7	1.840	1.682	0.009	34.617	34.617	0.379	0.005	27.677	27.677	27.689	27.689
11	2226.0	2256.6	1.844	1.688	0.009	34.616	34.616	0.378	0.004	27.676	27.676	27.688	27.688
2	2200.5	2230.7	1.846	1.692	0.004	34.614	34.614	0.377	0.003	27.674	27.674	27.686	27.686
15	2174.1	2203.8	1.856	1.705	4e-04	34.611	34.611	0.376	0.002	27.671	27.671	27.683	27.683
14	2100.4	2128.6	1.904	1.758	4e-04	34.602	34.603	0.376	0.002	27.660	27.661	27.672	27.672

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.930	180.257	12.51
23			
21	2.928	180.003	10.71
22	2.928	180.632	13.15
1	2.933	180.244	12.43
3			
25	2.929	179.690	17.14
18	2.954	179.423	9.54
11	2.937	178.880	10.17
2	2.953	178.634	9.53
15	2.954	178.190	11.32
14	2.981	176.958	8.81

D-Theta = (ptemp + (4.762 * pden)) - 133.53
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station T9105 Cast 8 10 JUNE 1991
LAT: 45 7.1N LONG: 130 9.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
23	2092.3	2120.1	1.895	1.750	0.014	34.608	34.608	0.384	0.008	27.666	27.666	27.677	27.677
1	2072.4	2099.9	1.906	1.763	0.019	34.607	34.607	0.391	0.015	27.664	27.664	27.675	27.675
22	2227.3	2257.6	1.900	1.743	0.024	34.612	34.613	0.384	0.008	27.669	27.670	27.681	27.682
21	2071.1	2098.6	1.915	1.772	0.043	34.612	34.612	0.389	0.013	27.668	27.668	27.679	27.679
18	2091.7	2119.5	1.912	1.767	0.040	34.612	34.610	0.388	0.012	27.668	27.666	27.679	27.677
3	2241.9	2272.5	1.915	1.757	0.037	34.613	34.613	0.386	0.010	27.668	27.668	27.681	27.681
5	2139.0	2167.7	1.896	1.747	0.023	34.611	34.612	0.385	0.009	27.668	27.669	27.680	27.680
11	2242.9	2273.6	1.900	1.742	0.024	34.612	34.612	0.383	0.007	27.669	27.669	27.681	27.681
13	2108.5	2136.6	1.884	1.738	0.010	34.609	34.609	0.380	0.004	27.668	27.668	27.679	27.679
2	2238.4	2269.0	1.888	1.730	0.012	34.611	34.612	0.380	0.004	27.669	27.670	27.681	27.682
6	2101.7	2129.7	1.886	1.740	0.008	34.608	34.608	0.381	0.005	27.667	27.667	27.678	27.678
17	2231.2	2261.6	1.889	1.732	0.010	34.610	34.610	0.382	0.006	27.668	27.668	27.680	27.680

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
23	2.923	178.106	18.42
1	2.912	178.018	26.04
22	2.913	179.013	19.94
21	2.905	179.811	27.90
18	2.888	179.351	33.36
3	2.902	179.919	23.22
5	2.896	179.481	27.41
11	2.915	179.337	20.25
13	2.922	178.713	12.10
2	2.921	179.324	12.96
6	2.937	178.415	13.86
17	2.924	179.026	15.62

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.376

VENTS 1991 - LEG II
Station S9127 Cast 9 11 JUNE 1991
LAT: 45 1.9N LONG: 130 10.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	2264.0	2295.0	1.875	1.715	0.014	34.614	34.615	0.379	0.005	27.672	27.673	27.684	27.685
26	2227.2	2257.6	1.878	1.722	0.021	34.615	34.615	0.379	0.005	27.673	27.673	27.685	27.685
20	2198.6	2228.4	1.878	1.724	0.019	34.614	34.614	0.381	0.007	27.672	27.672	27.684	27.684
19	2176.4	2205.7	1.877	1.725	0.016	34.613	34.614	0.381	0.007	27.671	27.672	27.683	27.684
31	2151.5	2180.4	1.883	1.733	0.018	34.612	34.613	0.386	0.012	27.670	27.671	27.682	27.682
27	2127.4	2155.9	1.881	1.733	0.011	34.610	34.610	0.380	0.006	27.669	27.669	27.680	27.680
16	2098.9	2126.9	1.891	1.746	0.004	34.606	34.606	0.379	0.005	27.665	27.665	27.676	27.676
8	2075.3	2102.8	1.902	1.759	0.002	34.603	34.603	0.376	0.002	27.661	27.661	27.672	27.672
10	2056.9	2084.0	1.912	1.770	0.002	34.601	34.601	0.376	0.002	27.659	27.659	27.670	27.670
30	2001.5	2027.6	1.936	1.798	0.002	34.596	34.597	0.375	0.001	27.653	27.654	27.664	27.665
29	1901.3	1925.6	1.987	1.857	0.003	34.586	34.586	0.375	0.001	27.641	27.641	27.651	27.651
12	1801.7	1824.4	2.065	1.942	0.007	34.572	34.571	0.375	0.001	27.624	27.623	27.633	27.633

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.888	179.518	13.98
26	2.880	180.206	15.34
20	2.895	180.646	15.81
19	2.887	180.672	15.18
31	2.890	180.988	13.89
27	2.889	180.031	17.09
16	2.891	179.431	12.61
8	2.918	177.966	10.28
10	2.914	178.112	9.33
30	2.925	177.079	8.95
29	2.947	175.986	
12	2.978	173.846	

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9127 Cast 10 11 JUNE 1991
LAT: 45 1.9N LONG: 130 10.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2279.7	2311.1	1.875	1.714	0.013	34.614	34.615	0.379	0.005	27.672	27.673	27.685	27.685
17	2251.3	2282.1	1.873	1.715	0.013	34.614	34.612	0.378	0.004	27.672	27.671	27.685	27.683
11	2200.7	2230.5	1.876	1.722	0.014	34.613	34.614	0.379	0.005	27.671	27.672	27.683	27.684
2	2149.1	2178.0	1.886	1.736	0.013	34.610	34.611	0.380	0.006	27.668	27.669	27.680	27.680
21	2162.7	2191.8	1.891	1.740	0.026	34.613	34.613	0.382	0.008	27.670	27.670	27.682	27.682
13	2099.3	2127.3	1.898	1.752	0.005	34.605	34.605	0.377	0.003	27.663	27.663	27.674	27.674
18	1998.6	2024.7	1.945	1.807	5e-04	34.594	34.594	0.375	0.001	27.651	27.651	27.661	27.661
3	1899.9	1924.3	2.009	1.879	0.003	34.582	34.582	0.374	0.000	27.636	27.636	27.646	27.646

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.945	178.682	
17	2.955	178.462	
11	2.939	178.497	
2	2.892	177.409	
21	2.939	178.653	
13	2.932	176.949	
18	3.006	176.632	
3	2.975	173.939	

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9126 Cast 11 11 JUNE 1991
LAT: 44 58.8N LONG: 130 13.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2236.9	2267.4	1.881	1.724	0.016	34.614	34.613	0.378	0.004	27.672	27.671	27.684	27.683
17	2198.8	2228.5	1.897	1.743	0.025	34.613	34.612	0.383	0.009	27.670	27.669	27.682	27.681
23	2175.5	2204.9	1.902	1.750	0.026	34.612	34.613	0.385	0.011	27.669	27.669	27.680	27.681
11	2151.5	2180.4	1.917	1.767	0.037	34.612	34.612	0.394	0.020	27.667	27.667	27.679	27.679
2	2127.1	2155.6	1.920	1.772	0.040	34.612	34.612	0.396	0.022	27.667	27.667	27.679	27.679
1	2129.1	2157.6	1.919	1.771	0.039	34.612	34.612	0.396	0.022	27.667	27.667	27.679	27.679
21	2101.0	2128.9	1.918	1.772	0.040	34.612		0.397	0.023	27.667		27.679	
13	2082.6	2110.3	1.918	1.774	0.041	34.612	34.613	0.399	0.025	27.667	27.668	27.678	27.679
22	2047.2	2074.2	1.905	1.764	0.013	34.606	34.606	0.385	0.011	27.664	27.664	27.674	27.674
18	1996.5	2022.6	1.924	1.787	0.002	34.599	34.599	0.376	0.002	27.656	27.656	27.667	27.667
3	1896.2	1920.5	1.969	1.840	1e-04	34.589	34.589	0.375	0.001	27.645	27.645	27.655	27.655

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.926	180.305	18.37
17	2.890	180.356	23.81
23	2.905	180.569	31.28
11	2.880	180.664	32.38
2	2.820	182.258	40.72
1	2.890	180.534	50.60
21	2.869	181.261	41.03
13	2.918	178.192	20.78
22	2.925	177.069	25.17
18	2.943	175.553	11.27
3	2.988	174.326	18.50

D-Theta = (ptemp + (4.5643 * pden)) - 128.065
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9126 Cast 12 11 JUNE 1991
LAT: 44 58.9N LONG: 130 13.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2233.6	2264.1	1.894	1.737	0.024	34.614	34.614	0.380	0.006	27.671	27.671	27.683	27.683
15	2201.9	2231.7	1.899	1.744	0.029	34.614	34.613	0.381	0.007	27.670	27.670	27.682	27.681
8	2176.6	2206.0	1.902	1.750	0.028	34.613	34.613	0.384	0.010	27.669	27.669	27.681	27.681
29	2151.4	2180.3	1.904	1.754	0.031	34.613	34.613	0.387	0.013	27.669	27.669	27.681	27.681
12	2113.4	2141.6	1.917	1.770	0.042	34.613	34.614	0.403	0.029	27.668	27.669	27.680	27.680
24	2050.6	2077.6	1.902	1.761	0.014	34.607	34.607	0.384	0.010	27.665	27.665	27.675	27.675
19	1999.1	2025.2	1.911	1.774	0.004	34.602	34.602	0.377	0.003	27.660	27.660	27.670	27.670
6	1903.3	1927.7	1.950	1.820	0.001	34.593	34.593	0.375	0.001	27.650	27.650	27.660	27.660

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.946	179.073	
15	2.939	179.464	
8	2.954	179.831	
29	2.953	179.213	
12	2.904	180.356	
24	2.905	178.329	
19	2.897	176.644	
6	2.886	176.257	

D-Theta = (ptemp + (4.5643 * pden)) - 128.066
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station T9106 Cast 13 11 JUNE 1991
LAT: 44 56.8N LONG: 130 5.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2114.7	2142.9	1.898	1.751	0.022	34.610	34.610	0.386	0.012	27.667	27.667	27.679	27.679
15	2060.2	2087.4	1.908	1.766	0.028	34.609	34.609	0.394	0.020	27.666	27.666	27.677	27.677
20	2284.1	2315.5	1.880	1.719	0.012	34.613	34.610	0.379	0.005	27.671	27.669	27.683	27.681
8	2074.3	2101.8	1.914	1.770	0.042	34.612	34.612	0.396	0.022	27.668	27.668	27.679	27.679
29	2261.2	2292.2	1.884	1.724	0.016	34.613	34.612	0.379	0.005	27.671	27.670	27.683	27.682
5	2061.5	2088.8	1.918	1.775	0.042	34.611	34.611	0.399	0.025	27.666	27.666	27.678	27.678
12	2232.8	2263.2	1.903	1.746	0.030	34.613	34.613	0.381	0.007	27.669	27.669	27.681	27.681
24	2112.2	2140.4	1.907	1.760	0.032	34.611	34.611	0.389	0.015	27.667	27.667	27.679	27.679
9	2076.9	2104.4	1.909	1.765	0.028	34.609	34.609	0.394	0.020	27.666	27.666	27.677	27.677
19	2164.3	2193.4	1.899	1.748	0.024	34.611	34.612	0.385	0.011	27.668	27.669	27.680	27.680
16	2269.2	2300.3	1.877	1.717	0.015	34.614	34.614	0.380	0.006	27.672	27.672	27.684	27.684
26	2155.6	2184.6	1.905	1.754	0.024	34.610	34.610	0.390	0.016	27.667	27.667	27.678	27.678

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.864	179.715	25.52
15	2.875	179.655	32.05
20	2.902	179.411	15.44
8	2.878	180.116	40.97
29	2.893	179.512	15.61
5	2.876	183.696	38.96
12	2.900	179.556	27.27
24	2.898	179.870	32.82
9	2.881	179.707	31.22
19	2.893	180.049	22.17
16	2.884	179.840	14.23
26	2.875	179.539	32.64

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9122 Cast 14 12 JUNE 1991
LAT: 44 52.6N LONG: 130 15.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2254.9	2285.7	1.875	1.716	0.010	34.613	34.613	0.378	0.004	27.671	27.671	27.684	27.684
27	2226.6	2256.9	1.873	1.717	0.011	34.613	34.613	0.378	0.004	27.672	27.672	27.684	27.684
2	2202.0	2231.8	1.871	1.717	0.011	34.613	34.613	0.378	0.004	27.672	27.672	27.684	27.684
1	2177.3	2206.6	1.878	1.726	0.013	34.612	34.612	0.378	0.004	27.670	27.670	27.682	27.682
10	2149.1	2177.9	1.879	1.729	0.008	34.610	34.610	0.378	0.004	27.669	27.669	27.680	27.680
17	2124.3	2152.7	1.883	1.736	0.008	34.609	34.609	0.378	0.004	27.668	27.668	27.679	27.679
11	2100.4	2128.3	1.885	1.740	0.004	34.607	34.607	0.377	0.003	27.666	27.666	27.677	27.677
23	2077.4	2104.9	1.889	1.746	0.004	34.606	34.606	0.376	0.002	27.665	27.665	27.676	27.676
13	2045.6	2072.5	1.905	1.764	0.001	34.602	34.602	0.376	0.002	27.660	27.660	27.671	27.671
21	2025.7	2052.2	1.919	1.780	0.004	34.600	34.600	0.376	0.002	27.658	27.658	27.668	27.668
30	1948.2	1973.3	1.955	1.822	0.002	34.592	34.592	0.375	0.001	27.648	27.648	27.659	27.659
31	1855.4	1879.0	1.994	1.868	0.003	34.584	34.584	0.375	0.001	27.639	27.639	27.649	27.649

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.885	181.695	
27	2.882	181.475	17.38
2	2.895	181.565	22.49
1	2.914	181.310	15.72
10	2.868	180.522	
17	2.914	180.683	13.88
11	2.900	180.033	15.76
23	2.929	179.221	10.33
13	2.918	179.357	12.34
21	2.923	177.734	13.32
30	2.929	177.012	10.49
31	2.949	175.676	2.49

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9122 Cast 15 12 JUNE 1991
LAT: 44 52.9N LONG: 130 14.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2255.3	2286.2	1.880	1.721	0.015	34.614	34.613	0.378	0.004	27.672	27.671	27.684	27.683
18	2196.2	2225.9	1.876	1.722	0.009	34.612	34.613	0.377	0.003	27.671	27.671	27.682	27.683
22	2152.7	2181.6	1.878	1.728	0.009	34.611	34.611	0.378	0.004	27.670	27.670	27.681	27.681
29	2118.4	2146.7	1.884	1.737	0.011	34.610	34.610	0.380	0.006	27.668	27.668	27.680	27.680
5	2099.0	2126.9	1.886	1.741	0.006	34.608	34.608	0.379	0.005	27.667	27.667	27.678	27.678
16	1998.3	2024.4	1.920	1.783	7e-04	34.599	34.598	0.375	0.001	27.657	27.656	27.667	27.667
15	1900.2	1924.6	1.969	1.839	9e-04	34.589	34.589	0.378	0.004	27.645	27.645	27.655	27.655

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.878	176.934	
18	2.887	175.113	
22	2.901	174.973	
29	2.881	175.959	
5	2.894	176.631	
16	2.932	175.082	
15	2.907	174.139	

D-Theta = (ptemp + (4.5643 * pden)) - 128.064
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9121 Cast 16 12 JUNE 1991
LAT: 44 49.3N LONG: 130 17.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2268.6	2299.7	1.888	1.728	0.018	34.613	34.614	0.377	0.003	27.670	27.671	27.683	27.684
18	2198.6	2228.3	1.885	1.731	0.020	34.613	34.611	0.378	0.004	27.671	27.669	27.682	27.681
14	2172.9	2202.1	1.882	1.730	0.020	34.613	34.613	0.379	0.005	27.671	27.671	27.683	27.683
22	2144.1	2172.9	1.882	1.733	0.018	34.612	34.611	0.379	0.005	27.670	27.669	27.682	27.681
16	2122.9	2151.2	1.879	1.732	0.006	34.609	34.609	0.376	0.002	27.668	27.668	27.679	27.679
24	2098.5	2126.4	1.882	1.737	0.002	34.607	34.607	0.375	0.001	27.666	27.666	27.677	27.677
20	2073.0	2100.4	1.888	1.745	0.004	34.606	34.606	0.375	0.001	27.665	27.665	27.676	27.676
5	2051.4	2078.4	1.891	1.750	0.003	34.605	34.605	0.375	0.001	27.664	27.664	27.675	27.675
8	2026.8	2053.4	1.902	1.763	0.004	34.603	34.603	0.375	0.001	27.661	27.661	27.672	27.672
29	1979.3	2005.0	1.918	1.782	0.003	34.599	34.599	0.375	0.001	27.657	27.657	27.667	27.667
15	1901.0	1925.3	1.956	1.827	0.002	34.591	34.590	0.375	0.001	27.647	27.647	27.658	27.657
10	1800.5	1823.1	2.025	1.903	0.004	34.578	34.578	0.374	0.000	27.632	27.632	27.641	27.641

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.877	181.672	11.63
18	2.865	181.836	11.67
14	2.847	182.199	11.98
22	2.857	182.000	15.56
16	2.867	180.645	9.41
24	2.864	179.954	8.73
20	2.858	179.706	9.80
5	2.871	179.956	9.22
8	2.909	179.599	6.84
29	2.953	178.854	8.72
15	2.990	178.107	7.61
10	3.012	176.598	7.81

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9125 Cast 17 13 JUNE 1991
LAT: 44 57.8N LONG: 130 13.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2257.8	2288.7	1.900	1.741	0.017	34.609	34.609	0.382	0.008	27.666	27.666	27.679	27.679
18	2203.4	2233.3	1.898	1.743	0.022	34.610	34.610	0.382	0.008	27.667	27.667	27.679	27.679
14	2152.0	2180.9	1.908	1.758	0.035	34.611	34.608	0.384	0.010	27.667	27.665	27.679	27.676
2	2119.2	2147.5	1.915	1.767	0.045	34.612	34.612	0.385	0.011	27.668	27.668	27.679	27.679
16	2100.8	2128.8	1.913	1.767	0.041	34.611	34.610	0.385	0.011	27.667	27.666	27.678	27.677
24	2051.2	2078.3	1.902	1.761	0.019	34.606	34.606	0.382	0.008	27.664	27.664	27.675	27.675
20	1999.6	2025.7	1.915	1.778	8e-04	34.598	34.597	0.375	0.001	27.656	27.656	27.667	27.666
5	1900.9	1925.3	1.961	1.831	0.003	34.589	34.590	0.375	0.001	27.646	27.646	27.656	27.656

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.891	179.538	
18	2.891	179.391	
14	2.877	179.875	
2	2.878	180.180	
16	2.867	180.269	
24	2.897	178.616	
20	2.913	176.986	
5	2.941	175.569	

D-Theta = (ptemp + (4.5643 * pden)) - 128.057
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station T9107 Cast 18 13 JUNE 1991
LAT: 45 00.7N LONG: 130 5.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2114.9	2143.2	1.891	1.744	0.016	34.609	34.609	0.381	0.007	27.667	27.667	27.678	27.678
18	2135.2	2163.8	1.886	1.738	0.019	34.611	34.611	0.390	0.016	27.669	27.669	27.680	27.680
12	2157.2	2186.2	1.888	1.738	0.015	34.610	34.610	0.380	0.006	27.668	27.668	27.680	27.680

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.889	180.361	17.64
18	2.890	180.848	16.80
12	2.883	180.273	18.31

D-Theta = (ptemp + (4.5643 * pden)) - 128.06
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9125 Cast 19 13 JUNE 1991
LAT: 44 57.3N LONG: 130 13.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
8	2257.7	2288.6	1.903	1.743	0.024	34.612	34.613	0.381	0.007	27.668	27.669	27.681	27.682
29	2222.9	2253.1	1.908	1.751	0.029	34.612	34.612	0.382	0.008	27.668	27.668	27.680	27.680
15	2202.9	2232.8	1.911	1.756	0.032	34.612	34.612	0.383	0.009	27.668	27.668	27.680	27.680
14	2178.1	2207.5	1.910	1.757	0.029	34.611	34.611	0.384	0.010	27.667	27.667	27.679	27.679
2	2150.5	2179.4	1.910	1.760	0.031	34.611	34.611	0.385	0.011	27.667	27.667	27.679	27.679
22	2125.6	2154.1	1.909	1.761	0.028	34.610	34.610	0.385	0.011	27.666	27.666	27.678	27.678
16	2098.7	2126.6	1.907	1.761	0.024	34.609	34.609	0.384	0.010	27.666	27.666	27.677	27.677
24	2073.6	2101.1	1.905	1.762	0.024	34.609	34.609	0.383	0.009	27.666	27.666	27.677	27.677
19	2049.7	2076.8	1.904	1.763	0.014	34.606	34.605	0.381	0.007	27.664	27.663	27.674	27.674
20	2002.6	2028.8	1.912	1.775	0.004	34.601	34.601	0.376	0.002	27.659	27.659	27.670	27.670
5	1903.5	1927.9	1.968	1.838	0.001	34.589	34.589	0.375	0.001	27.645	27.645	27.655	27.655
26	1789.8	1812.3	2.057	1.935	0.002	34.572	34.572	0.374	0.000	27.624	27.624	27.634	27.634

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
8	2.884	178.474	20.78
29	2.888	179.162	21.77
15	2.883	179.418	21.22
14	2.885	179.096	22.28
2	2.890	179.218	24.01
22	2.889	178.814	26.47
16	2.889	179.092	27.50
24	2.885	179.160	31.54
19	2.889	178.141	22.44
20	2.908	176.755	15.76
5	2.995	174.812	9.47
26	2.964	173.677	9.67

D-Theta = (ptemp + (4.5643 * pden)) - 128.063
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9123 Cast 20 13 JUNE 1991
LAT: 44 54.1N LONG: 130 25.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
30	2256.5	2287.3	1.885	1.726	0.016	34.612	34.613	0.376	0.002	27.670	27.671	27.682	27.683
21	2201.2	2231.0	1.891	1.737	0.023	34.612	34.610	0.381	0.007	27.669	27.668	27.681	27.680
13	2148.1	2176.9	1.903	1.753	0.034	34.612	34.612	0.386	0.012	27.668	27.668	27.680	27.680
1	2112.3	2140.5	1.909	1.762	0.043	34.613	34.612	0.392	0.018	27.669	27.668	27.680	27.679
9	2051.1	2078.1	1.895	1.754	0.001	34.603	34.605	0.376	0.002	27.662	27.663	27.673	27.674
17	2000.2	2026.3	1.911	1.774	-1e-04	34.599	34.600	0.375	0.001	27.657	27.658	27.668	27.669
11	1950.6	1975.9	1.946	1.812	0.003	34.593	34.593	0.375	0.001	27.650	27.650	27.660	27.660
31	1900.8	1925.1	2.001	1.871	7e-04	34.582	34.582	0.374	0.000	27.637	27.637	27.647	27.647
19	5.8	5.8	12.339	12.338	-3.497	32.503	32.503	0.576	0.202	24.587	24.587	24.587	24.587

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
30	2.941	179.249	
21	2.937	178.159	
13	2.976	178.075	
1	2.935	178.497	
9	2.956	175.512	
17	2.972	174.998	
11	3.006	174.889	
31	2.973	174.744	
19			

D-Theta = (ptemp + (4.5643 * pden)) - 128.059
Atten-Anom = Atten - 0.374

VENTS 1991 - LEG II
Station S9128 Cast 21 14 JUNE 1991
LAT: 44 53.1N LONG: 130 3.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
30	2503.5	2539.2	1.799	1.619	0.006	34.625	34.625	0.384		27.687	27.687	27.700	27.700
21	2400.3	2433.9	1.797	1.626	0.003	34.623	34.624	0.382		27.685	27.686	27.698	27.699
6	2300.7	2332.4	1.807	1.645	2e-04	34.619	34.620	0.381		27.682	27.682	27.694	27.695
13	2251.2	2282.0	1.824	1.666	0.003	34.616	34.617	0.383		27.678	27.679	27.690	27.691
1	2201.9	2231.7	1.835	1.682	0.001	34.613	34.613	0.384		27.675	27.675	27.686	27.686
23	2148.6	2177.4	1.856	1.707	0.003	34.609	34.610	0.384		27.670	27.671	27.681	27.682
9	2100.2	2128.1	1.874	1.729	0.005	34.606	34.607	0.380		27.666	27.667	27.677	27.678
10	2050.7	2077.8	1.901	1.760	0.003	34.600	34.601	0.379		27.659	27.660	27.670	27.671
5	2000.0	2026.1	1.925	1.788	0.006	34.596	34.594	0.381		27.654	27.652	27.665	27.663
11	1900.3	1924.6	1.983	1.853	0.003	34.584	34.585	0.385		27.640	27.641	27.650	27.651
31	1748.5	1770.2	2.100	1.981	0.009	34.564	34.562	0.382		27.614	27.613	27.624	27.622
27	1499.0	1516.8	2.423	2.321	0.047	34.518	34.517	0.380		27.551	27.550	27.560	27.559

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
30	2.848	182.320	13.66
21	2.850	181.596	12.48
6	2.845	180.079	10.51
13			9.25
1	2.878	179.318	10.25
23	2.884	178.663	11.16
9	2.894	178.009	13.72
10	2.920	177.330	11.42
5	2.907	175.425	8.60
11	2.926	174.924	10.46
31	2.981	171.864	9.39
27	3.042	163.883	11.09

D-Theta = (ptemp + (4.689 * pden)) - 131.501

VENTS 1991 - LEG II
Station S9129 Cast 22 14 JUNE 1991
LAT: 44 53.9N LONG: 130 6.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2504.9	2540.6	1.805	1.625	6e-04	34.624	34.623	0.368	0.008	27.686	27.685	27.699	27.698
12	2401.4	2435.0	1.804	1.633	0.002	34.623	34.623	0.366	0.006	27.685	27.685	27.698	27.698
2	2300.9	2332.6	1.824	1.662	-0.001	34.617	34.616	0.363	0.003	27.679	27.678	27.691	27.690
19	2250.6	2281.3	1.839	1.681	0.003	34.615	34.615	0.363	0.003	27.676	27.676	27.688	27.688
20	2199.5	2229.3	1.850	1.697	-0.002	34.611	34.611	0.363	0.003	27.672	27.672	27.683	27.683
24	2149.7	2178.6	1.868	1.719	0.001	34.608		0.362	0.002	27.668		27.679	
16	2099.4	2127.3	1.894	1.749	-0.002	34.602	34.602	0.362	0.002	27.661	27.661	27.672	27.672
22	2050.2	2077.2	1.926	1.784	0.006	34.598	34.598	0.362	0.002	27.655	27.655	27.666	27.666
29	1994.4	2020.4	1.948	1.811	0.004	34.593	34.594	0.362	0.002	27.650	27.651	27.660	27.661
15	1901.9	1926.3	1.991	1.861	0.002	34.584	34.585	0.361	0.001	27.639	27.640	27.649	27.650
26	1750.6	1772.4	2.110	1.991	-0.002	34.561	34.561	0.362	0.002	27.611	27.611	27.621	27.621
14	1499.3	1517.1	2.413	2.311	0.039	34.519	34.519	0.363	0.003	27.553	27.553	27.561	27.561

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.873	182.177	14.29
12	2.844	180.779	11.21
2	2.854	179.191	10.54
19	2.869	178.586	10.56
20	2.865	178.109	10.00
24			
16	2.902	177.290	10.08
22	2.902	176.635	10.12
29	2.917	175.910	11.31
15	2.953	174.793	7.94
26	2.983	172.363	9.36
14	3.064	164.587	7.28

D-Theta = (ptemp + (4.689 * pden)) - 131.506
Atten-Anom = Atten - 0.36

VENTS 1991 - LEG II
Station S9130 Cast 23 14 JUNE 1991
LAT: 44 55.5N LONG: 130 8.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
17	2354.2	2386.9	1.832	1.665	8e-04	34.619	34.620	0.372	0.011	27.680	27.680	27.692	27.693
18	2302.0	2333.8	1.835	1.673	-0.002	34.617	34.617	0.368	0.007	27.678	27.678	27.690	27.690
8	2249.4	2280.2	1.843	1.685	-6e-04	34.615	34.617	0.369	0.008	27.676	27.677	27.688	27.689
9	2205.0	2234.9	1.851	1.697	-0.004	34.612	34.612	0.367	0.006	27.673	27.673	27.684	27.684
10	2149.4	2178.3	1.873	1.724	0.003	34.609	34.609	0.366	0.005	27.668	27.668	27.680	27.680
24	2098.7	2126.6	1.887	1.742	-1e-04	34.605	34.605	0.364	0.003	27.664	27.664	27.675	27.675
1	2049.5	2076.5	1.912	1.771	-0.003	34.599	34.599	0.364	0.003	27.657	27.657	27.668	27.668
11	2001.2	2027.3	1.932	1.794	-0.002	34.595	34.595	0.364	0.003	27.653	27.653	27.663	27.663
5	1904.4	1928.9	1.969	1.839	0.001	34.588	34.588	0.363	0.002	27.644	27.644	27.654	27.654
31	1749.4	1771.2	2.099	1.980	0.004	34.564	34.564	0.364	0.003	27.615	27.615	27.624	27.624
23	1501.1	1518.9	2.403	2.301	0.046	34.520	34.520	0.365	0.004	27.554	27.554	27.563	27.563
27	1252.7	1266.8	2.801	2.714	0.109	34.468	34.468	0.365	0.004	27.478	27.478	27.486	27.486

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
17	2.837	179.892	18.79
18	2.853	179.069	13.02
8	2.860	179.252	13.78
9	2.866	178.255	11.15
10	2.874	178.242	10.43
24	2.879	177.627	10.64
1	2.902	176.640	9.89
11	2.898	175.966	10.12
5	2.916	175.107	9.37
31	2.967	171.546	9.25
23	3.050	164.613	10.24
27	3.112	152.730	10.15

D-Theta = (ptemp + (4.5643 * pden)) - 128.06
Atten-Anom = Atten - 0.361

VENTS 1991 - LEG II
Station S9131 Cast 24 14 JUNE 1991
LAT: 44 56.3N LONG: 130 10.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2300.2	2331.9	1.864	1.701	0.004	34.615	34.615	0.370	0.008	27.674	27.674	27.686	27.686
16	2202.4	2232.3	1.872	1.718	0.011	34.614	34.615	0.369	0.007	27.672	27.673	27.684	27.685
12	2175.1	2204.4	1.874	1.722	0.014	34.614	34.613	0.369	0.007	27.672	27.672	27.684	27.683
26	2149.1	2177.9	1.875	1.726	0.016	34.614	34.612	0.370	0.008	27.672	27.671	27.684	27.682
2	2124.8	2153.2	1.889	1.741	0.016	34.611	34.611	0.371	0.009	27.669	27.669	27.680	27.680
19	2101.7	2129.6	1.887	1.741	0.008	34.609	34.609	0.369	0.007	27.667	27.667	27.678	27.678
9	2076.5	2104.0	1.888	1.745	0.003	34.607	34.607	0.369	0.007	27.666	27.666	27.677	27.677
21	2049.3	2076.3	1.899	1.758	0.004	34.605	34.605	0.368	0.006	27.663	27.663	27.674	27.674
13	1998.5	2024.6	1.922	1.785	1e-05	34.599	34.599	0.366	0.004	27.657	27.657	27.667	27.667
30	1899.8	1924.2	1.965	1.835	5e-05	34.590	34.590	0.364	0.002	27.646	27.646	27.656	27.656
29	1754.9	1776.8	2.093	1.974	0.001	34.566	34.566	0.364	0.002	27.617	27.617	27.626	27.626
32	1497.3	1515.0	2.425	2.323	0.050	34.519	34.519	0.365	0.003	27.552	27.552	27.560	27.560

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.923	178.142	16.69
16	2.907	178.703	16.38
12	2.916	178.771	20.33
26	2.917	178.598	17.26
2	2.897	178.367	21.79
19	2.907	177.736	14.72
9	2.913	177.562	13.39
21	2.927	176.942	9.57
13	2.945	176.218	9.08
30	2.963	175.196	
29	3.009	171.389	10.46
32	3.070	163.845	7.71

D-Theta = (ptemp + (4.5643 * pden)) - 128.066
Atten-Anom = Atten - 0.362

VENTS 1991 - LEG II
Station S9124 Cast 25 14 JUNE 1991
LAT: 44 56.0N LONG: 130 14.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	2245.5	2276.2	1.893	1.735	0.021	34.613	34.613	0.372	0.008	27.670	27.670	27.682	27.682
5	2226.5	2256.8	1.891	1.734	0.020	34.613	34.615	0.373	0.009	27.670	27.672	27.682	27.684
18	2195.6	2225.3	1.889	1.735	0.021	34.613	34.612	0.373	0.009	27.670	27.670	27.682	27.681
14	2172.8	2202.1	1.900	1.748	0.026	34.612	34.613	0.378	0.014	27.669	27.670	27.680	27.681
15	2150.4	2179.3	1.913	1.763	0.039	34.613	34.613	0.384	0.020	27.668	27.668	27.680	27.680
10	2124.4	2152.8	1.915	1.767	0.042	34.613	34.612	0.386	0.022	27.668	27.668	27.680	27.679
24	2099.7	2127.6	1.914	1.768	0.039	34.612	34.611	0.386	0.022	27.668	27.667	27.679	27.678
1	2049.3	2076.3	1.912	1.771	0.037	34.611	34.611	0.386	0.022	27.667	27.667	27.678	27.678
31	2024.1	2050.6	1.908	1.769	0.025	34.608	34.608	0.388	0.024	27.665	27.665	27.676	27.676
11	2014.1	2040.5	1.906	1.768	0.016	34.606	34.605	0.388	0.024	27.663	27.663	27.674	27.673
23	1896.7	1921.0	1.961	1.832	0.003	34.591	34.590	0.383	0.019	27.647	27.646	27.657	27.656
27	1896.7	1921.0	1.961	1.832	0.003	34.591		0.376	0.012	27.647		27.657	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.860	179.175	16.91
5	2.846	179.046	16.71
18	2.836	177.789	17.81
14	2.851	178.814	23.71
15	2.833	179.769	35.48
10	2.862	180.147	35.27
24	2.834	180.181	38.11
1	2.837	179.359	38.12
31	2.845	179.070	27.93
11	2.833	178.006	19.19
23	2.895	175.525	8.07
27			

D-Theta = (ptemp + (4.5643 * pden)) - 128.064
Atten-Anom = Atten - 0.364

VENTS 1991 - LEG II
Station T9108 Cast 26 15 JUNE 1991
LAT: 44 51.9N LONG: 130 7.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
22	2098.4	2126.3	1.915	1.769	0.041	34.612	34.612	0.373	0.013	27.668	27.668	27.679	27.679
2	2067.9	2095.3	1.914	1.771	0.043	34.612	34.612	0.373	0.013	27.668	27.668	27.679	27.679
13	2063.6	2090.9	1.912	1.769	0.042	34.612	34.613	0.372	0.012	27.668	27.669	27.679	27.680
6	2195.6	2225.3	1.899	1.745	0.022	34.611	34.610	0.359	-0.001	27.668	27.667	27.680	27.679
21	2138.8	2167.4	1.901	1.752	0.027	34.611	34.609	0.362	0.002	27.668	27.666	27.679	27.678
23	2122.8	2151.1	1.887	1.740	0.015	34.610	34.609	0.355	-0.005	27.668	27.667	27.679	27.679
27	2180.0	2209.4	1.886	1.734	0.015	34.611	34.610	0.354	-0.006	27.669	27.668	27.681	27.680
19	2134.8	2163.4	1.898	1.749	0.018	34.609	34.608	0.355	-0.005	27.666	27.666	27.678	27.677
26	2220.9	2251.1	1.886	1.730	0.012	34.611	34.611	0.353	-0.007	27.669	27.669	27.681	27.681

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
22	2.836	180.809	41.81
2	2.831	180.722	49.74
13	2.835	180.705	46.53
6	2.868	179.531	24.50
21	2.857	179.407	32.07
23	2.871	178.700	22.85
27	2.871	178.787	16.43
19	2.869	178.886	19.63
26	2.862	178.749	18.26

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.36

VENTS 1991 - LEG II
Station S9124 Cast 27 15 JUNE 1991
LAT: 44 56.1N LONG: 130 14.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2227.8	2258.2	1.885	1.728	0.022	34.614	34.614	0.347	-0.012	27.671	27.671	27.683	27.683
9	2198.0	2227.8	1.882	1.728	0.018	34.613	34.614	0.343	-0.016	27.671	27.672	27.683	27.683
5	2150.5	2179.4	1.888	1.738	0.025	34.613	34.613	0.367	0.008	27.670	27.670	27.682	27.682
18	2127.9	2156.3	1.901	1.753	0.034	34.613	34.613	0.372	0.013	27.669	27.669	27.681	27.681
14	2099.8	2127.8	1.892	1.747	0.023	34.611	34.611	0.371	0.012	27.669	27.669	27.680	27.680
15	2047.2	2074.2	1.901	1.760	0.006	34.604	34.604	0.367	0.008	27.662	27.662	27.673	27.673
29	1999.5	2025.6	1.912	1.775	0.001	34.600	34.600	0.363	0.004	27.658	27.658	27.669	27.669
30	1903.4	1927.8	1.951	1.821	0.002	34.592	34.592	0.362	0.003	27.649	27.649	27.659	27.659

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.880	180.411	
9	2.883	179.566	
5	2.891	179.604	
18	2.879	180.547	
14	2.881	180.326	
15	2.899	178.883	
29	2.918	178.969	
30	2.924	178.100	

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.359

VENTS 1991 - LEG II
Station S9123 Cast 28 15 JUNE 1991
LAT: 44 53.4N LONG: 130 15.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	2236.9	2267.4	1.905	1.747	0.023	34.611	34.607	0.390	0.0085	27.668	27.664	27.680	27.676
9	2197.7	2227.5	1.906	1.752	0.026	34.611	34.611	0.393	0.0115	27.667	27.667	27.679	27.679
1	2174.0	2203.3	1.908	1.756	0.033	34.612	34.610	0.395	0.0135	27.668	27.666	27.680	27.678
5	2150.3	2179.2	1.910	1.760	0.035	34.612	34.612	0.397	0.0155	27.668	27.668	27.679	27.679
18	2118.5	2146.8	1.909	1.762	0.033	34.611	34.611	0.397	0.0155	27.667	27.667	27.679	27.679
10	2099.4	2127.3	1.907	1.761	0.033	34.611	34.611	0.396	0.0145	27.667	27.667	27.679	27.679
14	2078.2	2105.8	1.899	1.755	0.018	34.608	34.609	0.391	0.0095	27.666	27.666	27.677	27.677
15	2050.6	2077.7	1.905	1.764	0.019	34.607	34.608	0.393	0.0115	27.664	27.665	27.675	27.676
31	2027.1	2053.7	1.905	1.766	0.010	34.604	34.603	0.388	0.0065	27.662	27.661	27.673	27.672
29	2005.6	2031.8	1.904	1.766	0.007	34.603	34.603	0.385	0.0035	27.661	27.661	27.672	27.672
30	1899.5	1923.9	1.966	1.837	0.001	34.589	34.589	0.383	0.0015	27.645	27.645	27.655	27.655
24	1799.2	1821.8	2.056	1.934	-0.002	34.571	34.572	0.383	0.0015	27.624	27.624	27.633	27.634

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	2.921	180.373	36.51
9	2.911	180.418	36.27
1	2.890	179.517	36.86
5	2.871	181.118	42.85
18	2.894	181.023	38.59
10	2.899	181.116	39.11
14	2.900	180.237	29.02
15	2.889	180.643	31.61
31	2.910	178.912	24.16
29	2.939	178.712	11.65
30	2.943	176.639	9.78
24	2.979	173.936	40.23

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.3815

VENTS 1991 - LEG II
Station S9131 Cast 29 15 JUNE 1991
LAT: 44 56.1N LONG: 130 11.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2250.2	2281.0	1.875	1.717	0.011	34.613	34.614	0.385	0.005	27.671	27.672	27.684	27.684
19	2199.6	2229.4	1.869	1.715	0.010	34.613	34.614	0.386	0.006	27.672	27.673	27.684	27.684
17	2148.1	2177.0	1.868	1.719	0.012	34.613	34.612	0.385	0.005	27.672	27.671	27.683	27.683
23	2120.5	2148.8	1.875	1.728	0.015	34.612	34.611	0.386	0.006	27.671	27.670	27.682	27.681
26	2102.3	2130.2	1.874	1.729	0.004	34.609	34.609	0.384	0.004	27.668	27.668	27.679	27.679
27	2054.1	2081.2	1.904	1.762	0.004	34.603	34.603	0.383	0.003	27.661	27.661	27.672	27.672
25	2000.3	2026.4	1.924	1.787	0.005	34.599		0.382	0.002	27.656		27.667	
8	1897.6	1921.9	1.981	1.851	0.003	34.587	34.587	0.382	0.002	27.642	27.642	27.652	27.652

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.967	179.570	
19	2.945	179.328	
17	2.940	179.329	
23	2.940	178.387	
26	2.952	178.285	
27	2.954	177.274	
25			
8	2.996	175.158	

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9135 Cast 30 16 JUNE 1991
LAT: 44 59.9N LONG: 130 23.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
22	2515.9	2551.9	1.798	1.617	-7e-04	34.627	34.626	0.388	0.008	27.689	27.688	27.702	27.701
19	2397.8	2431.5	1.825	1.654	0.002	34.621	34.622	0.384	0.004	27.682	27.683	27.695	27.695
6	2350.3	2383.0	1.840	1.673	-1e-04	34.617	34.616	0.382	0.002	27.677	27.677	27.690	27.689
17	2301.8	2333.6	1.850	1.687	0.002	34.615	34.616	0.382	0.002	27.675	27.676	27.687	27.688
23	2253.8	2284.6	1.862	1.704	0.001	34.612	34.610	0.383	0.003	27.672	27.670	27.684	27.682
21	2203.0	2232.8	1.876	1.722	-0.001	34.608	34.609	0.384	0.004	27.667	27.668	27.679	27.680
26	2151.6	2180.5	1.884	1.734	-4e-04	34.606	34.606	0.382	0.002	27.665	27.665	27.677	27.677
8	2099.5	2127.5	1.906	1.760	-0.002	34.601	34.602	0.381	0.001	27.659	27.660	27.671	27.671
2	2045.4	2072.3	1.932	1.791	-2e-04	34.596	34.594	0.381	0.001	27.653	27.652	27.664	27.663
25	2002.1	2028.3	1.954	1.816	0.002	34.592	34.594	0.382	0.002	27.648	27.650	27.659	27.661
27	1746.0	1767.7	2.140	2.021	0.009	34.558	34.558	0.382	0.002	27.606	27.606	27.616	27.616
13	1746.5	1768.2	2.139	2.020	0.009	34.558	34.558	0.382	0.002	27.606	27.606	27.616	27.616

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
22	2.893	179.366	19.03
19	2.899	180.237	15.27
6	2.905	179.482	14.21
17	2.935	179.109	10.84
23	2.924	178.935	12.48
21	2.919	178.446	12.22
26	2.947	178.248	11.42
8	2.928	177.597	10.04
2	2.959	176.562	9.85
25	2.988	176.248	13.52
27	3.023	161.459	23.71
13	3.024	171.379	9.75

D-Theta = (ptemp + (4.5643 * pden)) - 128.059
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9134 Cast 31 16 JUNE 1991
LAT: 44 59.2N LONG: 130 21.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	2437.6	2472.0	1.821	1.647	0.008	34.624	34.622	0.387	0.007	27.684	27.683	27.698	27.696
20	2347.0	2379.7	1.833	1.667	0.003	34.619	34.618	0.383	0.003	27.680	27.679	27.692	27.691
1	2251.9	2282.7	1.841	1.683	0.003	34.616	34.615	0.382	0.002	27.676	27.676	27.688	27.688
10	2198.8	2228.6	1.850	1.697	0.004	34.614	34.614	0.382	0.002	27.674	27.674	27.686	27.686
16	2149.3	2178.2	1.872	1.723	-7e-04	34.608	34.609	0.382	0.002	27.668	27.668	27.679	27.680
12	2092.1	2119.9	1.889	1.744	-0.001	34.604	34.605	0.383	0.003	27.663	27.664	27.674	27.675
11	2050.0	2077.0	1.920	1.778	0.007	34.600	34.600	0.381	0.001	27.658	27.658	27.668	27.668
18	2002.6	2028.8	1.929	1.791	3e-04	34.596	34.597	0.382	0.002	27.654	27.654	27.664	27.665
15	1903.7	1928.2	1.973	1.843	1e-03	34.587	34.588	0.382	0.002	27.643	27.644	27.653	27.654
14	1800.2	1822.9	2.042	1.920	0.003	34.574	34.575	0.381	0.001	27.627	27.628	27.637	27.638
3	1699.3	1720.2	2.150	2.035	0.011	34.556	34.557	0.382	0.002	27.604	27.605	27.613	27.614
31	1499.5	1517.2	2.427	2.325	0.054	34.518	34.519	0.383	0.003	27.551	27.552	27.559	27.560

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.906	180.741	15.00
20	2.914	180.194	10.27
1	2.928	179.578	11.90
10	2.948	179.483	9.50
16	2.935	178.889	9.72
12	2.907	177.550	11.01
11	2.958	176.874	10.12
18	2.951	176.302	8.92
15	2.970	175.370	9.63
14	3.013	173.577	8.27
3	3.053	170.991	9.43
31	3.086	163.716	8.36

D-Theta = (ptemp + (4.5643 * pden)) - 128.059
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9133 Cast 32 16 JUNE 1991
LAT: 44 58.1N LONG: 130 17.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
24	2297.9	2329.5	1.861	1.699	0.010	34.616	34.616	0.388	-0.001	27.675	27.675	27.687	27.687
5	2250.5	2281.3	1.859	1.701	0.008	34.615	34.614	0.387	-0.002	27.674	27.673	27.686	27.686
8	2185.3	2214.8	1.878	1.725	0.009	34.611	34.612	0.388	-0.001	27.670	27.670	27.681	27.682
2	2150.7	2179.6	1.884	1.734	0.011	34.610	34.610	0.388	-0.001	27.668	27.668	27.680	27.680
27	2101.9	2129.9	1.892	1.746	0.005	34.606	34.607	0.386	-0.003	27.665	27.665	27.676	27.677
13	2049.8	2076.9	1.909	1.768	1e-04	34.601	34.602	0.384	-0.005	27.659	27.660	27.670	27.671
25	1998.5	2024.6	1.933	1.796	9e-05	34.596	34.597	0.383	-0.006	27.653	27.654	27.664	27.665
26	1948.4	1973.6	1.949	1.816	-0.002	34.592	34.592	0.383	-0.006	27.649	27.649	27.659	27.659
23	1901.4	1925.8	1.973	1.843	0.002	34.588	34.587	0.382	-0.007	27.644	27.643	27.654	27.653
17	1751.2	1773.0	2.098	1.979	0.005	34.565	34.565	0.383	-0.006	27.615	27.615	27.625	27.625
29	1497.2	1514.9	2.414	2.312	0.047	34.519	34.519	0.384	-0.005	27.553	27.553	27.561	27.561
30	1251.6	1265.7	2.846	2.759	0.115	34.463	34.463	0.384	-0.005	27.470	27.470	27.478	27.478

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
24	2.929	179.849	20.65
5	2.922	179.215	15.63
8	2.881	178.430	18.13
2	2.919	178.153	18.46
27	2.908	177.623	31.66
13	2.938	176.816	22.77
25	2.951	175.085	35.85
26	2.949	175.662	24.62
23	2.972	175.387	17.08
17	3.007	171.311	16.98
29	3.076	164.048	18.18
30	3.166	151.567	19.34

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.389

VENTS 1991 - LEG II
Station S9132 Cast 33 16 JUNE 1991
LAT: 44 56.9N LONG: 130 15.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
10	2149.9	2178.8	1.898	1.748	0.023	34.612	34.609	0.390	0.010	27.669	27.666	27.680	27.678
9	2124.5	2152.9	1.896	1.748	0.023	34.612	34.612	0.390	0.010	27.669	27.669	27.680	27.680
1	2098.6	2126.6	1.893	1.748	0.022	34.612	34.612	0.390	0.010	27.669	27.669	27.680	27.680
21	2074.4	2101.8	1.893	1.750	0.020	34.611	34.611	0.390	0.010	27.668	27.668	27.679	27.679
6	2054.5	2081.6	1.893	1.751	0.017	34.610	34.610	0.389	0.009	27.668	27.668	27.679	27.679
19	2023.7	2050.3	1.895	1.756	0.006	34.606	34.605	0.385	0.005	27.664	27.663	27.675	27.674
22	1995.2	2021.2	1.903	1.766	0.002	34.603	34.602	0.382	0.002	27.661	27.660	27.672	27.671
11	1900.1	1924.4	1.953	1.824	0.002	34.593	34.593	0.381	0.001	27.649	27.649	27.659	27.659
18	1800.4	1823.0	2.041	1.919	0.002	34.576	34.575	0.381	0.001	27.629	27.628	27.638	27.638
15	1700.9	1721.9	2.111	1.996	3e-05	34.562	34.563	0.381	0.001	27.612	27.613	27.621	27.622
14	1600.1	1619.4	2.243	2.135	0.015	34.542	34.543	0.382	0.002	27.585	27.586	27.594	27.595
31	1499.9	1517.6	2.431	2.328	0.049	34.518	34.519	0.382	0.002	27.550	27.551	27.559	27.560

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
10	2.934	179.657	49.78
9	2.944	179.556	56.95
1	2.931	179.159	18.89
21	2.907	179.445	26.12
6	2.939	178.799	24.34
19	2.966	177.891	11.67
22	2.979	177.438	10.33
11	3.005	176.053	8.44
18	3.052	174.090	
15	3.060	172.046	7.91
14	3.089	168.151	7.40
31	3.134	163.780	7.05

D-Theta = (ptemp + (4.5643 * pden)) - 128.067
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9132 Cast 35 16 JUNE 1991
LAT: 44 57.4N LONG: 130 14.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
27	2157.4	2186.4	1.896	1.745	0.025	34.613	34.614	0.390	0.001	27.670	27.671	27.681	27.682
16	2119.8	2148.1	1.896	1.749	0.023	34.612	34.612	0.391	0.002	27.669	27.669	27.680	27.680
3	2098.4	2126.3	1.892	1.747	0.018	34.611	34.611	0.390	0.001	27.669	27.669	27.680	27.680
5	2073.2	2100.6	1.888	1.745	0.013	34.610	34.610	0.389	0.000	27.668	27.668	27.679	27.679
20	2049.7	2076.7	1.892	1.751	0.006	34.607	34.607	0.386	-0.003	27.665	27.665	27.676	27.676
13	2001.1	2027.3	1.913	1.776	4e-04	34.601	34.601	0.382	-0.007	27.659	27.659	27.669	27.669
25	1952.3	1977.6	1.944	1.810	0.001	34.595	34.593	0.382	-0.007	27.652	27.650	27.662	27.660
26	1900.3	1924.7	1.971	1.841	0.003	34.590	34.590	0.382	-0.007	27.646	27.646	27.656	27.656

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
27	2.922	180.012	
16	2.937	179.540	
3	2.927	179.593	
5	2.917	178.901	
20	2.913	178.303	
13	2.929	177.190	
25	2.932	176.172	
26	2.929	175.784	

D-Theta = (ptemp + (4.5643 * pden)) - 128.067
Atten-Anom = Atten - 0.389

VENTS 1991 - LEG II
Station T9109 Cast 36 16 JUNE 1991
LAT: 44 31.1N LONG: 130 27.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
27	2058.0	2085.1	1.890	1.748	0.013	34.607	34.605	0.390	0.0095	27.665	27.664	27.676	27.675
16	2109.4	2137.4	1.891	1.745	0.011	34.607	34.608	0.389	0.0085	27.665	27.666	27.677	27.677
23	2192.4	2221.9	1.895	1.741	0.013	34.608	34.608	0.389	0.0085	27.666	27.666	27.678	27.678
3	2066.6	2093.8	1.901	1.758	0.024	34.608	34.609	0.404	0.0235	27.665	27.666	27.676	27.677
5	2085.3	2112.8	1.891	1.747	0.013	34.607	34.606	0.387	0.0065	27.665	27.665	27.676	27.676
2	2116.8	2145.0	1.891	1.744	0.014	34.608	34.608	0.387	0.0065	27.666	27.666	27.677	27.677
20	2201.0	2230.7	1.894	1.740	0.012	34.608	34.608	0.387	0.0065	27.666	27.666	27.678	27.678
13	2091.1	2118.8	1.895	1.750	0.015	34.607	34.607	0.388	0.0075	27.665	27.665	27.676	27.676
8	2105.9	2133.8	1.891	1.745	0.011	34.607	34.608	0.388	0.0075	27.665	27.666	27.677	27.677
25	2214.6	2244.6	1.903	1.747	0.020	34.609		0.387	0.0065	27.666		27.678	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
27	2.832	180.287	13.00
16	2.832	180.287	18.24
23	2.823	180.547	20.56
3	2.752	181.239	49.72
5	2.833	180.073	12.72
2	2.834	179.869	13.33
20	2.827	179.913	11.80
13	2.758	179.903	15.42
8	2.828	179.677	14.16
25			

D-Theta = (ptemp + (4.5643 * pden)) - 128.058
Atten-Anom = Atten - 0.3805

VENTS 1991 - LEG II
Station T9110 Cast 37 17 JUNE 1991
LAT: 44 43.9N LONG: 130 19.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
17	2125.8	2154.2	1.891	1.743	0.013	34.609	34.607	0.386	0.006	27.667	27.665	27.678	27.677
24	2125.8	2154.2	1.891	1.743	0.013	34.609	34.609	0.386	0.006	27.667	27.667	27.678	27.678
29	2139.9	2168.5	1.890	1.741	0.011	34.609	34.601	0.389	0.009	27.667	27.661	27.679	27.672
30	2128.0	2156.4	1.884	1.736	0.008	34.609	34.603	0.384	0.004	27.668	27.663	27.679	27.674
12	2124.2	2152.5	1.890	1.742	0.016	34.610	34.610	0.386	0.006	27.668	27.668	27.679	27.679
26	2111.5	2139.6	1.912	1.765	0.034	34.611	34.611	0.402	0.022	27.667	27.667	27.678	27.678

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
17	2.872	179.038	13.22
24	2.861	179.134	13.06
29	2.896	177.080	9.34
30	2.885	177.728	10.09
12	2.872	179.191	10.56
26	2.826	180.358	41.16

D-Theta = (ptemp + (4.5643 * pden)) - 128.063
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9133 Cast 38 18 JUNE 1991
LAT: 44 58.1N LONG: 130 17.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
13	2412.7	2446.6	1.836	1.664	0.003	34.620	34.620	0.388	0.008	27.680	27.680	27.693	27.693
3	2198.5	2228.2	1.882	1.728	0.012	34.611	34.611	0.383	0.003	27.669	27.669	27.681	27.681
16	2115.2	2143.4	1.893	1.746	0.020	34.610	34.610	0.387	0.007	27.668	27.668	27.679	27.679
9	2000.6	2026.7	1.913	1.776	0.003	34.600	34.600	0.389	0.009	27.658	27.658	27.669	27.669

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
13	2.860	179.700	
3	2.880	178.427	
16	2.860	178.936	
9	2.889	176.925	

D-Theta = (ptemp + (4.5643 * pden)) - 128.061
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9130 Cast 39 18 JUNE 1991
LAT: 44 55.6N LONG: 130 8.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
8	2362.9	2395.8	1.848	1.680	0.008	34.618	34.617	0.387	0.007	27.678	27.677	27.690	27.690
13	2301.9	2333.7	1.847	1.684	0.004	34.616	34.616	0.386	0.006	27.676	27.676	27.688	27.688
2	2303.7	2335.5	1.847	1.684	0.003	34.616		0.386	0.006	27.676		27.688	
20	2253.7	2284.5	1.849	1.691	4e-04	34.614	34.614	0.383	0.003	27.674	27.674	27.686	27.686
3	2202.2	2232.0	1.858	1.704	0.002	34.612	34.612	0.382	0.002	27.672	27.672	27.684	27.684
5	2151.3	2180.2	1.866	1.716	0.003	34.610	34.611	0.382	0.002	27.670	27.671	27.681	27.682
16	2101.4	2129.4	1.885	1.740	-6e-04	34.605	34.605	0.381	0.001	27.664	27.664	27.675	27.675
27	2099.5	2127.5	1.886	1.741	2e-04	34.605		0.381	0.001	27.664		27.675	
10	1998.4	2024.4	1.925	1.788	0.002	34.597	34.598	0.381	0.001	27.655	27.656	27.665	27.666
9	1904.3	1928.7	1.988	1.858	-4e-04	34.584	34.585	0.381	0.001	27.639	27.640	27.650	27.650

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
8	2.836	178.497	
13	2.831	179.094	
2			
20	2.856	179.245	
3	2.841	178.309	
5	2.869	178.776	
16	2.850	177.372	
27			
10	2.883	177.163	
9	2.911	174.684	

D-Theta = (ptemp + (4.5643 * pden)) - 128.059
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9120 Cast 40 18 JUNE 1991
LAT: 44 39.1N LONG: 130 22.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
8	2212.8	2242.8	1.898	1.743	0.018	34.609	34.609	0.386	0.006	27.666	27.666	27.678	27.678
13	2200.3	2230.1	1.898	1.744	0.019	34.609	34.609	0.387	0.007	27.666	27.666	27.678	27.678
2	2179.9	2209.3	1.895	1.742	0.018	34.609	34.609	0.389	0.009	27.667	27.667	27.678	27.678
30	2149.1	2177.9	1.892	1.742	0.014	34.608	34.608	0.385	0.005	27.666	27.666	27.678	27.678
3	2124.7	2153.0	1.890	1.742	0.011	34.607	34.607	0.385	0.005	27.665	27.665	27.677	27.677
23	2099.0	2126.9	1.890	1.745	0.012	34.607		0.386	0.006	27.665		27.677	
5	2093.7	2121.4	1.891	1.746	0.013	34.607	34.607	0.386	0.006	27.665	27.665	27.677	27.677
16	2050.8	2077.8	1.889	1.748	0.011	34.606	34.607	0.386	0.006	27.665	27.666	27.676	27.676
27	2024.9	2051.4	1.892	1.753	0.014	34.606	34.607	0.388	0.008	27.665	27.665	27.675	27.676
10	2001.2	2027.3	1.907	1.770	0.007	34.601	34.602	0.384	0.004	27.659	27.660	27.670	27.671
9	1949.0	1974.1	1.917	1.784	0.005	34.598	34.598	0.383	0.003	27.656	27.656	27.666	27.666
29	1902.3	1926.7	1.953	1.823	0.001	34.590	34.590	0.381	0.001	27.647	27.647	27.657	27.657

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
8	2.841	179.496	14.88
13	2.848	178.566	17.38
2	2.845	178.303	17.00
30	2.873	178.304	13.54
3	2.865	178.156	11.42
23			
5	2.870	177.945	14.07
16	2.861	178.019	13.73
27	2.845	177.967	16.02
10	2.888	177.334	8.51
9	2.879	176.764	8.66
29	2.908	175.646	6.89

D-Theta = (ptemp + (4.5643 * pden)) - 128.057
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station T9111 Cast 41 18 JUNE 1991
LAT: 44 26.7N LONG: 130 26.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2061.8	2088.9	1.876	1.734	5e-04	34.606	34.606	0.382	0.002	27.666	27.666	27.677	27.677
12	2048.0	2074.9	1.868	1.727	-2e-04	34.607	34.606	0.382	0.002	27.667	27.666	27.678	27.677
24	2040.1	2066.8	1.883	1.743	-0.001	34.604	34.606	0.382	0.002	27.664	27.665	27.674	27.676
17	2041.8	2068.6	1.875	1.735	1e-03	34.606	34.606	0.382	0.002	27.666	27.666	27.677	27.677
21	2070.6	2097.9	1.880	1.737	0.003	34.606	34.605	0.382	0.002	27.665	27.665	27.676	27.676
19	2077.7	2105.1	1.876	1.733	0.003	34.607	34.606	0.383	0.003	27.667	27.666	27.678	27.677

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.875	177.627	8.66
12	2.861	177.395	7.50
24	2.862	177.290	8.97
17	2.850	177.417	8.33
21	2.848	177.312	10.19
19	2.842	177.829	9.26

D-Theta = (ptemp + (4.5643 * pden)) - 128.058
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9101 Cast 42 19 JUNE 1991
LAT: 44 17.5N LONG: 130 31.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2862.1	2905.3	1.675	1.464		34.646	34.646	0.383		27.713	27.713	27.729	27.729
10	2398.2	2431.7	1.800	1.630		34.625	34.626	0.381		27.687	27.688	27.700	27.701
11	2302.5	2334.1	1.818	1.656		34.621	34.621	0.383		27.682	27.682	27.695	27.695
15	2195.6	2225.2	1.835	1.682		34.616	34.617	0.382		27.677	27.678	27.689	27.689
6	2094.2	2121.9	1.875	1.730		34.608	34.608	0.381		27.667	27.667	27.679	27.679
22	2000.2	2026.2	1.940	1.802		34.597	34.594	0.381		27.654	27.651	27.664	27.662
18	1898.3	1922.5	2.012	1.882		34.588	34.589	0.381		27.641	27.641	27.651	27.652
14	1741.6	1763.2	2.191	2.072		34.564	34.563	0.382		27.607	27.606	27.617	27.616
23	1493.5	1511.0	2.568	2.464		34.523	34.524	0.382		27.543	27.544	27.552	27.552

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.757	179.194	
10	2.855	180.521	
11	2.840	180.424	
15	2.859	179.938	
6	2.883	179.139	
22	2.906	176.236	
18	2.943	174.358	
14	2.987	169.825	
23	3.084	159.777	

VENTS 1991 - LEG II
Station S9102 Cast 43 19 JUNE 1991
LAT: 44 20.5N LONG: 130 29.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2765.3	2806.4	1.694	1.491		34.643	34.642	0.385		27.709	27.709	27.724	27.724
10	2399.2	2432.7	1.826	1.655		34.621	34.621	0.382		27.682	27.682	27.695	27.695
11	2302.5	2334.1	1.831	1.669		34.619	34.619	0.382		27.680	27.680	27.692	27.692
15	2200.6	2230.3	1.842	1.689		34.615	34.615	0.382		27.676	27.676	27.687	27.687
6	2103.1	2130.9	1.869	1.724		34.610	34.611	0.381		27.670	27.670	27.681	27.681
22	1995.1	2021.0	1.911	1.774		34.601	34.601	0.381		27.659	27.659	27.670	27.670
18	1899.7	1924.0	1.998	1.868		34.587	34.587	0.381		27.641	27.641	27.651	27.651
14	1748.7	1770.3	2.154	2.035		34.567	34.566	0.382		27.612	27.612	27.622	27.621
23	1501.3	1519.0	2.506	2.402		34.526	34.525	0.382		27.550	27.550	27.559	27.558

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.767	180.197	13.06
10	2.863	181.131	8.38
11	2.864	181.186	10.36
15	2.879	180.500	8.09
6	2.892	179.576	8.21
22	2.928	177.824	10.60
18	2.962	176.073	9.08
14	2.999	171.886	8.20
23	3.082	162.251	8.47

VENTS 1991 - LEG II
Station S9103 Cast 44 19 JUNE 1991
LAT: 44 21.6N LONG: 130 22.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
2	2535.2	2571.4	1.817	1.634		34.624	34.623	0.382		27.685	27.684	27.699	27.698
21	2404.9	2438.5	1.822	1.651		34.621	34.622	0.382		27.682	27.683	27.695	27.696
17	2299.3	2330.8	1.837	1.675		34.616	34.617	0.382		27.677	27.678	27.689	27.690
8	2206.1	2235.9	1.850	1.696		34.613	34.613	0.382		27.673	27.673	27.685	27.685
3	2103.8	2131.7	1.883	1.737		34.607	34.607	0.380		27.666	27.666	27.677	27.677
16	2000.4	2026.4	1.910	1.773		34.602	34.602	0.381		27.660	27.660	27.670	27.670
5	1901.2	1925.4	1.984	1.854		34.589	34.590	0.381		27.644	27.644	27.654	27.655
30	1750.8	1772.5	2.142	2.022		34.571	34.571	0.381		27.617	27.617	27.626	27.626
27	1500.8	1518.6	2.472	2.369		34.527	34.527	0.382		27.554	27.554	27.563	27.563

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
2	2.873	180.900	
21	2.897	180.813	
17	2.882	180.373	
8	2.904	179.619	
3	2.916	178.641	
16	2.921	177.447	
5	2.954	175.641	
30	2.993	171.149	
27	3.082	162.468	

VENTS 1991 - LEG II
Station S9104 Cast 45 19 JUNE 1991
LAT: 44 22.7N LONG: 130 24.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
2	2389.1	2422.5	1.815	1.645		34.623	34.622	0.382		27.684	27.683	27.697	27.696
21	2302.0	2333.6	1.825	1.663		34.620	34.620	0.381		27.681	27.681	27.693	27.693
17	2199.5	2229.2	1.836	1.683		34.616	34.616	0.383		27.677	27.677	27.689	27.689
8	2149.5	2178.2	1.842	1.693		34.614	34.614	0.383		27.675	27.675	27.686	27.686
3	2098.8	2126.6	1.846	1.701		34.613	34.613	0.382		27.674	27.674	27.685	27.685
16	2001.5	2027.6	1.912	1.775		34.599	34.599	0.381		27.657	27.657	27.668	27.668
5	1900.1	1924.4	1.990	1.860		34.587	34.588	0.381		27.642	27.642	27.652	27.653
30	1749.9	1771.6	2.160	2.040		34.565	34.559	0.381		27.610	27.606	27.620	27.615
27	1501.8	1519.6	2.509	2.405		34.526	34.527	0.383		27.550	27.551	27.559	27.560

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
2	2.871	179.734	10.21
21	2.851	179.224	11.19
17	2.847	178.530	11.49
8	2.865	178.453	11.15
3	2.860	177.964	10.70
16	2.891	176.208	8.74
5	2.924	174.928	8.24
30	2.971	170.474	8.36
27	3.054	161.316	8.76

VENTS 1991 - LEG II
Station S9105 Cast 46 19 JUNE 1991
LAT: 44 24.4N LONG: 130 21.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
10	2486.4	2521.6	1.813	1.634		34.625	34.625	0.384		27.686	27.686	27.699	27.699
6	2400.4	2433.9	1.817	1.646		34.623	34.623	0.394		27.684	27.684	27.697	27.697
23	2301.6	2333.2	1.831	1.669		34.619	34.619	0.382		27.680	27.680	27.692	27.692
11	2200.1	2229.8	1.857	1.703		34.612	34.612	0.381		27.672	27.672	27.684	27.684
14	2101.1	2128.9	1.892	1.746		34.604	34.604	0.381		27.663	27.663	27.674	27.674
15	2000.4	2026.4	1.923	1.786		34.597	34.597	0.381		27.655	27.655	27.665	27.665
18	1896.4	1920.6	1.996	1.866		34.586	34.586	0.381		27.640	27.640	27.650	27.650
13	1747.4	1769.1	2.121	2.002		34.567	34.567	0.381		27.615	27.615	27.625	27.625
9	1500.0	1517.7	2.460	2.357		34.531	34.531	0.382		27.558	27.558	27.567	27.567

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
10	2.830	182.590	12.78
6	2.846	181.502	9.60
23	2.931	180.931	8.72
11	2.839	179.335	13.62
14	2.855	177.929	9.78
15	2.859	177.263	8.96
18	2.922	175.255	6.97
13	2.942	171.776	12.70
9	3.031	162.679	8.81

VENTS 1991 - LEG II
Station S9106 Cast 47 19 JUNE 1991
LAT: 44 26.0N LONG: 130 20.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2841.7	2884.4	1.841	1.628		34.627	34.627	0.385		27.685	27.685	27.701	27.701
22	2394.6	2428.0	1.815	1.645		34.624	34.623	0.383		27.685	27.684	27.698	27.697
26	2295.5	2327.0	1.828	1.666		34.619	34.619	0.382		27.680	27.680	27.692	27.692
29	2202.4	2232.1	1.859	1.705		34.613	34.613	0.382		27.673	27.673	27.684	27.684
1	2101.5	2129.3	1.895	1.749		34.606	34.606	0.381		27.664	27.664	27.675	27.675
19	2004.6	2030.7	1.941	1.803		34.597	34.597	0.381		27.653	27.653	27.664	27.664
24	1899.8	1924.1	1.985	1.855		34.589	34.586	0.381		27.644	27.641	27.654	27.651
12	1756.3	1778.1	2.115	1.995		34.568	34.568	0.381		27.616	27.616	27.626	27.626
31	1505.2	1522.9	2.467	2.364		34.526	34.527	0.382		27.554	27.555	27.562	27.563

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.835	181.661	
22	2.845	180.915	
26	2.849	179.776	
29	2.855	178.560	
1	2.856	177.282	
19	2.891	176.705	
24	2.926	174.946	
12	2.963	171.815	
31	3.037	163.108	

VENTS 1991 - LEG II
Station S9107 Cast 48 19 JUNE 1991
LAT: 44 27.1N LONG: 130 19.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	3174.6	3224.9	1.871	1.624		34.628	34.627	0.385		27.684	27.683	27.703	27.702
22	2398.0	2431.5	1.816	1.645		34.622	34.622	0.383		27.683	27.683	27.696	27.696
26	2299.9	2331.5	1.829	1.667		34.618	34.617	0.382		27.679	27.678	27.691	27.691
29	2200.0	2229.7	1.854	1.700		34.613	34.613	0.381		27.673	27.673	27.685	27.685
1	2101.4	2129.3	1.886	1.740		34.607	34.607	0.381		27.666	27.666	27.677	27.677
5	2000.9	2027.0	1.932	1.794		34.598	34.599	0.381		27.655	27.656	27.666	27.666
3	1896.3	1920.5	1.980	1.851		34.589	34.590	0.381		27.644	27.645	27.654	27.655
12	1748.6	1770.3	2.136	2.017		34.565	34.566	0.381		27.612	27.613	27.622	27.623
27	1481.7	1499.2	2.568	2.465		34.519	34.519	0.383		27.540	27.540	27.548	27.548

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.841	183.328	13.12
22	2.836	181.790	10.45
26	2.837	180.687	11.77
29	2.851	179.146	9.35
1	2.872	178.105	9.50
5	2.888	176.631	8.61
3	2.928	175.327	6.98
12	2.972	171.207	10.95
27	3.066	159.439	10.61

VENTS 1991 - LEG II
Station S9108 Cast 49 20 JUNE 1991
LAT: 44 29.5N LONG: 130 16.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2808.6	2850.6	1.837	1.627		34.626	34.626	0.383		27.685	27.685	27.701	27.701
10	2400.9	2434.5	1.814	1.643		34.623	34.624	0.383		27.684	27.685	27.697	27.698
23	2299.7	2331.3	1.826	1.664		34.619	34.618	0.382		27.680	27.679	27.692	27.692
11	2201.1	2230.9	1.849	1.695		34.614	34.614	0.381		27.674	27.674	27.686	27.686
14	2099.8	2127.7	1.870	1.725		34.608	34.609	0.381		27.668	27.669	27.679	27.680
15	1998.5	2024.5	1.921	1.784		34.598	34.598	0.381		27.656	27.656	27.666	27.666
18	1897.2	1921.4	1.977	1.848		34.588	34.588	0.381		27.643	27.643	27.654	27.654
30	1746.1	1767.8	2.140	2.021		34.564	34.565	0.381		27.611	27.612	27.621	27.622
31	1510.5	1528.4	2.506	2.402		34.525	34.525	0.382		27.550	27.550	27.558	27.558

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.811	183.549	
10	2.829	182.048	
23	2.819	180.816	
11	2.849	179.811	
14	2.858	178.795	
15	2.899	177.821	
18	2.897	176.265	
30	2.952	172.086	
31	3.034	161.517	

VENTS 1991 - LEG II
Station S9109 Cast 50 20 JUNE 1991
LAT: 44 31.5N LONG: 130 11.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2675.0	2714.2	1.814	1.618		34.628	34.621	0.387		27.688	27.683	27.703	27.697
10	2398.4	2431.9	1.811	1.640		34.623	34.623	0.383		27.684	27.684	27.697	27.697
23	2300.8	2332.4	1.815	1.653		34.621	34.628	0.382		27.682	27.688	27.695	27.700
11	2203.0	2232.8	1.846	1.692		34.614	34.614	0.381		27.674	27.674	27.686	27.686
14	2100.5	2128.4	1.900	1.754		34.605	34.604	0.381		27.663	27.662	27.674	27.673
15	2001.5	2027.6	1.930	1.792		34.598	34.598	0.381		27.655	27.655	27.666	27.666
18	1899.3	1923.6	2.016	1.886		34.584	34.584	0.381		27.637	27.637	27.647	27.647
30	1746.6	1768.3	2.155	2.036		34.563	34.563	0.382		27.609	27.609	27.619	27.619
31	1503.1	1520.8	2.521	2.417		34.525	34.525	0.382		27.548	27.548	27.557	27.557

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.847	183.858	
10	2.869	181.943	
23	2.855	181.812	
11	2.891	180.628	
14	2.900	178.733	
15	2.916	177.688	
18	2.946	174.996	
30	2.982	172.004	
31	3.055	161.612	

VENTS 1991 - LEG II
Station S9110 Cast 51 20 JUNE 1991
LAT: 44 32.5N LONG: 130 14.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2448.4	2482.9	1.811	1.636		34.624	34.624	0.385		27.685	27.685	27.698	27.698
10	2401.1	2434.7	1.806	1.635		34.625	34.625	0.385		27.686	27.686	27.699	27.699
23	2298.5	2330.1	1.808	1.646		34.623	34.622	0.383		27.685	27.684	27.697	27.696
11	2200.9	2230.6	1.850	1.696		34.613	34.613	0.381		27.673	27.673	27.685	27.685
14	2103.2	2131.1	1.882	1.736		34.606	34.606	0.381		27.665	27.665	27.676	27.676
15	2005.0	2031.1	1.927	1.789		34.596	34.596	0.381		27.654	27.654	27.664	27.664
18	1901.0	1925.3	2.000	1.870		34.583	34.582	0.381		27.638	27.637	27.648	27.647
30	1746.0	1767.6	2.121	2.002		34.561	34.561	0.381		27.610	27.610	27.620	27.620
31	1500.7	1518.4	2.470	2.367		34.520	34.521	0.382		27.549	27.549	27.557	27.558

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.808	181.986	
10	2.826	182.503	
23	2.811	181.508	
11	2.850	179.951	
14	2.829	178.597	
15	2.869	177.326	
18	2.903	175.675	
30	2.904	172.013	
31	3.019	163.570	

VENTS 1991 - LEG II
Station S9111 Cast 52 20 JUNE 1991
LAT: 44 33.6N LONG: 130 18.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2479.0	2514.1	1.813	1.635		34.624	34.624	0.387		27.685	27.685	27.699	27.699
10	2398.0	2431.5	1.811	1.640		34.623	34.623	0.385		27.684	27.684	27.697	27.697
23	2301.6	2333.3	1.827	1.665		34.618	34.619	0.382		27.679	27.680	27.691	27.692
11	2200.5	2230.2	1.839	1.686		34.615	34.615	0.382		27.676	27.676	27.688	27.688
24	2099.5	2127.3	1.874	1.729		34.607	34.607	0.381		27.667	27.667	27.678	27.678
15	2000.5	2026.6	1.928	1.791		34.596	34.597	0.381		27.654	27.654	27.664	27.665
18	1898.5	1922.7	1.972	1.843		34.587	34.588	0.381		27.643	27.644	27.653	27.654
30	1749.7	1771.4	2.101	1.982		34.565	34.565	0.381		27.615	27.615	27.625	27.625
31	1499.5	1517.3	2.410	2.308		34.527	34.527	0.382		27.559	27.559	27.568	27.568

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.838	182.621	
10	2.827	181.667	
23	2.833	179.636	
11	2.836	179.730	
24	2.857	178.745	
15	2.872	177.126	
18	2.907	175.940	
30	2.970	173.083	
31	3.053	165.179	

VENTS 1991 - LEG II
Station S9112 Cast 53 20 JUNE 1991
LAT: 44 34.0N LONG: 130 20.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2277.9	2309.1	1.834	1.674		34.618	34.619	0.386		27.679	27.679	27.691	27.692
10	2248.3	2278.9	1.836	1.678		34.618	34.617	0.385		27.678	27.678	27.690	27.690
23	2199.3	2229.0	1.837	1.684		34.616	34.617	0.383		27.677	27.678	27.688	27.689
11	2146.6	2175.3	1.852	1.703		34.613	34.613	0.382		27.673	27.673	27.685	27.685
24	2097.3	2125.1	1.876	1.731		34.607	34.599	0.381		27.667	27.660	27.678	27.671
15	1998.5	2024.5	1.908	1.771		34.601	34.600	0.381		27.659	27.658	27.670	27.669
18	1898.7	1923.0	1.947	1.818		34.592	34.592	0.381		27.649	27.649	27.659	27.659
30	1744.9	1766.5	2.065	1.947		34.570	34.570	0.381		27.622	27.622	27.631	27.631
9	1498.0	1515.7	2.393	2.291		34.526	34.527	0.382		27.560	27.561	27.568	27.569

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.821	180.478	12.29
10	2.838	180.070	11.43
23	2.838	179.777	12.96
11	2.851	178.876	8.48
24	2.863	178.006	8.75
15	2.857	177.409	
18	2.886	176.394	7.68
30	2.925	173.566	
9	3.024	165.314	

VENTS 1991 - LEG II
Station S9113 Cast 54 20 JUNE 1991
LAT: 44 34.5N LONG: 130 22.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2101.6	2129.5	1.861	1.716		34.612	34.612	0.383		27.672	27.672	27.683	27.683
19	2072.7	2100.1	1.863	1.720		34.612	34.612	0.383		27.672	27.672	27.682	27.682
31	2048.9	2075.8	1.872	1.731		34.609	34.609	0.383		27.668	27.668	27.679	27.679
12	2000.2	2026.2	1.889	1.752		34.605	34.604	0.383		27.664	27.663	27.674	27.674
16	1899.0	1923.3	1.953	1.824		34.592	34.591	0.382		27.649	27.648	27.659	27.658
3	1750.1	1771.8	2.030	1.912		34.576	34.576	0.381		27.630	27.630	27.639	27.639
8	1510.2	1528.1	2.402	2.299		34.522	34.523	0.381		27.556	27.557	27.565	27.565

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.883	179.482	14.05
19	2.872	179.513	12.13
31	2.884	179.065	10.60
12	2.896	178.379	8.64
16	2.916	176.953	7.88
3	2.956	174.738	8.27
8	3.028	165.370	7.91

VENTS 1991 - LEG II
Station S9114 Cast 55 20 JUNE 1991
LAT: 44 34.9N LONG: 130 24.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2211.1	2241.0	1.859	1.704	0.004	34.614	34.614	0.384	0.004	27.673	27.673	27.685	27.685
22	2174.7	2204.0	1.865	1.713	0.007	34.613	34.613	0.383	0.003	27.672	27.672	27.684	27.684
26	2151.1	2179.9	1.870	1.720	0.008	34.612	34.613	0.383	0.003	27.671	27.672	27.682	27.683
29	2122.8	2151.1	1.869	1.722	0.009	34.612	34.613	0.382	0.002	27.671	27.672	27.682	27.683
17	2099.3	2127.2	1.868	1.723	0.009	34.612	34.612	0.383	0.003	27.671	27.671	27.682	27.682
2	2001.7	2027.8	1.909	1.772	8e-04	34.601	34.602	0.381	0.001	27.659	27.660	27.670	27.671
1	1901.8	1926.1	1.938	1.809	-7e-04	34.594	34.593	0.381	0.001	27.651	27.651	27.661	27.661
5	1749.5	1771.2	2.075	1.956	0.003	34.569	34.569	0.381	0.001	27.620	27.620	27.630	27.630
27	1498.7	1516.4	2.460	2.357	0.062	34.516	34.515	0.381	0.001	27.546	27.546	27.555	27.554

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.850	180.128	11.21
22	2.880	179.387	10.54
26	2.862	179.553	11.32
29	2.863	179.783	10.50
17	2.878	179.760	10.30
2	2.902	177.630	10.27
1	2.917	176.899	7.76
5	2.954	173.463	7.93
27	3.071	163.485	7.09

D-Theta = (ptemp + (4.5643 * pden)) - 128.064
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9115 Cast 56 20 JUNE 1991
LAT: 44 34.9N LONG: 130 26.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
18	2157.0	2185.9	1.869	1.719		34.612	34.612	0.382		27.671	27.671	27.683	27.683
24	2123.6	2151.9	1.867	1.720		34.612	34.612	0.383		27.671	27.671	27.683	27.683
10	2099.5	2127.3	1.866	1.721		34.612	34.611	0.383		27.671	27.671	27.682	27.682
11	2076.3	2103.7	1.867	1.724		34.611	34.612	0.383		27.670	27.671	27.681	27.682
21	2050.3	2077.3	1.887	1.746		34.606	34.606	0.381		27.665	27.665	27.676	27.676
6	2000.0	2026.1	1.902	1.765		34.603	34.603	0.381		27.661	27.661	27.672	27.672
30	1901.5	1925.8	1.955	1.826		34.592	34.592	0.380		27.648	27.648	27.658	27.658
15	1750.1	1771.9	2.068	1.950		34.571	34.570	0.380		27.623	27.622	27.632	27.631
23	1501.7	1519.4	2.445	2.342		34.519	34.519	0.381		27.550	27.550	27.559	27.559

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
18	2.892	179.003	10.59
24	2.883	178.950	9.84
10	2.897	178.732	11.06
11	2.888	178.608	9.39
21	2.915	177.976	16.83
6	2.890	177.436	9.25
30	2.960	175.882	5.91
15	3.002	173.012	7.15
23	3.091	163.977	8.82

VENTS 1991 - LEG II
Station S9116 Cast 57 20 JUNE 1991
LAT: 44 35.4N LONG: 130 28.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2293.7	2325.2	1.853	1.691		34.617	34.616	0.384		27.676	27.676	27.689	27.688
9	2249.6	2280.3	1.857	1.699		34.615	34.615	0.383		27.674	27.674	27.686	27.686
19	2200.2	2230.0	1.861	1.707		34.614	34.614	0.383		27.673	27.673	27.685	27.685
3	2148.6	2177.4	1.862	1.713		34.613	34.611	0.383		27.672	27.671	27.684	27.682
12	2099.8	2127.6	1.867	1.722		34.611	34.611	0.383		27.670	27.670	27.682	27.682
16	1999.5	2025.6	1.897	1.760		34.604	34.604	0.381		27.663	27.663	27.673	27.673
8	1896.0	1920.2	1.944	1.815		34.594	34.596	0.381		27.651	27.652	27.661	27.662
25	1749.7	1771.4	2.093	1.974		34.568		0.381		27.618		27.628	
31	1499.3	1517.0	2.493	2.390		34.521	34.521	0.383		27.548	27.548	27.556	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.897	179.940	
9	2.906	179.303	
19	2.899	179.647	
3	2.881	179.229	
12	2.904	179.094	
16	2.926	177.871	
8	2.954	176.260	
25			
31	3.096	162.160	

VENTS 1991 - LEG II
Station S9117 Cast 58 20 JUNE 1991
LAT: 44 35.8N LONG: 130 30.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2526.4	2562.5	1.800	1.618		34.626	34.627	0.382		27.688	27.688	27.701	27.702
9	2398.7	2432.3	1.823	1.652		34.621	34.619	0.381		27.682	27.680	27.695	27.693
19	2300.6	2332.2	1.835	1.673		34.618	34.618	0.381		27.679	27.679	27.691	27.691
3	2198.9	2228.6	1.847	1.694		34.613	34.613	0.383		27.674	27.674	27.685	27.685
12	2098.8	2126.6	1.872	1.727		34.607	34.607	0.381		27.667	27.667	27.678	27.678
16	2001.0	2027.0	1.929	1.791		34.596	34.597	0.381		27.654	27.654	27.664	27.665
8	1899.8	1924.1	1.991	1.861		34.586	34.587	0.381		27.641	27.642	27.651	27.652
26	1749.7	1771.4	2.136	2.017		34.562	34.563	0.381		27.610	27.611	27.619	27.620
31	1501.3	1519.1	2.478	2.375		34.520	34.520	0.381		27.548	27.548	27.557	27.557

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.866	180.457	
9	2.902	180.603	
19	2.880	180.352	
3	2.891	179.592	
12	2.917	178.642	
16	2.924	176.985	
8	2.986	175.566	
26	3.038	172.022	
31	3.117	162.764	

VENTS 1991 - LEG II
Station S9118 Cast 59 20 JUNE 1991
LAT: 44 36.2N LONG: 130 32.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2418.3	2452.3	1.824	1.651		34.622	34.622	0.382		27.683	27.683	27.696	27.696
9	2349.4	2382.0	1.833	1.666		34.619	34.620	0.381		27.680	27.680	27.692	27.693
19	2301.3	2332.9	1.835	1.673		34.618	34.618	0.381		27.679	27.679	27.691	27.691
3	2199.3	2229.0	1.848	1.695		34.615	34.615	0.381		27.675	27.675	27.687	27.687
12	2099.0	2126.8	1.880	1.735		34.608	34.608	0.380		27.667	27.667	27.678	27.678
16	1997.9	2023.9	1.930	1.793		34.600	34.600	0.381		27.657	27.657	27.667	27.667
8	1898.0	1922.3	1.993	1.863		34.588	34.588	0.380		27.642	27.642	27.652	27.652
26	1752.3	1774.1	2.115	1.996		34.569	34.568	0.382		27.617	27.616	27.627	27.626
31	1497.7	1515.4	2.466	2.363		34.521	34.522	0.381		27.550	27.551	27.558	27.559

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.880	179.921	
9	2.877	179.472	
19	2.892	179.721	
3	2.889	178.916	
12	2.914	178.257	
16	2.930	176.973	
8	2.983	175.509	
26	3.020	172.302	
31	3.105	163.790	

VENTS 1991 - LEG II
Station S9119 Cast 60 21 JUNE 1991
LAT: 44 36.6N LONG: 130 35.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2568.7	2605.7	1.766	1.581		34.633	34.634	0.382		27.696	27.697	27.710	27.711
9	2402.9	2436.5	1.816	1.645		34.624	34.624	0.380		27.685	27.685	27.698	27.698
19	2301.7	2333.4	1.837	1.675		34.619	34.618	0.381		27.679	27.678	27.692	27.691
5	2201.4	2231.1	1.851	1.697		34.615	34.615	0.381		27.675	27.675	27.687	27.687
3	2100.7	2128.6	1.885	1.740		34.607	34.608	0.381		27.666	27.667	27.677	27.678
12	1999.8	2025.9	1.912	1.775		34.602	34.602	0.381		27.660	27.660	27.670	27.670
16	1900.0	1924.3	1.972	1.842		34.591	34.591	0.381		27.646	27.646	27.656	27.656
1	1751.7	1773.5	2.085	1.966		34.575	34.573	0.381		27.624	27.623	27.634	27.632
8	1753.7	1775.5	2.083	1.964		34.575	34.575	0.381		27.625	27.625	27.634	27.634
26	1755.7	1777.5	2.082	1.963		34.576	34.576	0.381		27.625	27.625	27.635	27.635
31	1499.2	1517.0	2.424	2.322		34.525	34.525	0.382		27.557	27.557	27.565	27.565

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.859	181.994	
9	2.897	181.333	
19	2.905	181.029	
5	2.926	180.537	
3	2.934	179.509	
12	2.946	178.597	
16	2.983	177.370	
1	3.010	174.013	
8	3.004	174.014	
26	2.991	174.014	
31	3.108	165.055	

VENTS 1991 - LEG II
Station S9120 Cast 61 21 JUNE 1991
LAT: 44 39.1N LONG: 130 21.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2193.6	2223.2	1.878	1.725	0.009	34.611	34.611	0.383	0.003	27.670	27.670	27.681	27.681
9	2174.5	2203.7	1.875	1.723	0.008	34.611	34.611	0.383	0.003	27.670	27.670	27.681	27.681
19	2150.6	2179.4	1.875	1.725	0.009	34.611	34.611	0.384	0.004	27.670	27.670	27.681	27.681
5	2125.2	2153.6	1.879	1.732	0.009	34.610	34.610	0.385	0.005	27.669	27.669	27.680	27.680
3	2100.3	2128.2	1.879	1.734	0.007	34.609	34.609	0.384	0.004	27.668	27.668	27.679	27.679
12	2075.2	2102.6	1.884	1.741	0.008	34.608	34.608	0.384	0.004	27.667	27.667	27.678	27.678
16	2050.3	2077.3	1.892	1.751	0.007	34.606	34.605	0.383	0.003	27.665	27.664	27.675	27.675
18	2025.8	2052.3	1.894	1.755	0.006	34.605	34.604	0.383	0.003	27.664	27.663	27.674	27.673
6	2002.1	2028.2	1.904	1.767	0.003	34.602	34.601	0.382	0.002	27.660	27.660	27.671	27.670
15	1900.0	1924.3	1.976	1.846	1e-04	34.587	34.588	0.381	0.001	27.643	27.644	27.653	27.654
31	1750.4	1772.2	2.093	1.974	0.006	34.566	34.566	0.381	0.001	27.617	27.617	27.626	27.626
10	1501.6	1519.4	2.444	2.341	0.058	34.517	34.516	0.382	0.002	27.548	27.548	27.557	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.937	181.125	11.68
9	2.935	180.855	11.56
19	2.918	180.740	12.26
5	2.928	180.793	13.65
3	2.917	180.356	11.90
12	2.932	180.034	13.09
16	2.930	179.629	10.55
18	2.932	179.213	10.12
6	2.955	179.006	18.88
15	2.975	176.729	7.42
31	3.020	169.200	9.68
10	3.123	164.490	12.22

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9136 Cast 62 21 JUNE 1991
LAT: 45 8.5N LONG: 130 14.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
10	2221.1	2251.4	1.862	1.706	0.008	34.614	34.615	0.384	0.004	27.673	27.674	27.685	27.686
22	2201.0	2230.9	1.866	1.712	0.011	34.614	34.614	0.384	0.004	27.673	27.673	27.685	27.685
11	2175.2	2204.6	1.865	1.713	0.012	34.614	34.615	0.384	0.004	27.673	27.674	27.685	27.685
20	2149.3	2178.2	1.864	1.715	0.009	34.613	34.613	0.384	0.004	27.672	27.672	27.684	27.684
2	2098.3	2126.3	1.878	1.733	0.003	34.608	34.608	0.382	0.002	27.667	27.667	27.678	27.678
8	1999.3	2025.4	1.938	1.800	0.003	34.596	34.594	0.381	0.001	27.653	27.651	27.664	27.662
21	1898.9	1923.3	1.994	1.864	7e-04	34.584	34.586	0.381	0.001	27.639	27.640	27.649	27.651
23	1748.2	1770.0	2.137	2.018	0.012	34.560	34.559	0.381	0.001	27.608	27.607	27.618	27.617
17	1498.8	1516.6	2.368	2.266	0.041	34.525	34.525	0.382	0.002	27.561	27.561	27.570	27.570

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
10	2.913	179.344	11.80
22	2.927	179.355	13.08
11	2.932	179.603	12.68
20	2.932	179.491	11.02
2	2.943	178.186	10.21
8	2.961	176.241	7.99
21	2.992	175.008	8.33
23	3.044	171.398	9.05
17	3.123	165.750	9.89

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9137 Cast 63 21 JUNE 1991
LAT: 45 9.1N LONG: 130 16.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
29	2434.1	2468.5	1.842	1.668	0.003	34.620	34.620	0.388	0.008	27.680	27.680	27.693	27.693
14	2349.6	2382.3	1.864	1.697	0.011	34.617	34.616	0.386	0.006	27.676	27.675	27.688	27.687
6	2300.4	2332.2	1.873	1.710	0.013	34.615	34.614	0.385	0.005	27.673	27.672	27.686	27.685
18	2200.4	2230.2	1.871	1.717	0.006	34.612	34.611	0.384	0.004	27.671	27.670	27.683	27.682
24	2099.8	2127.8	1.897	1.751	-4e-04	34.604	34.604	0.381	0.001	27.663	27.663	27.674	27.674
9	1999.8	2025.9	1.940	1.802	-2e-04	34.595	34.595	0.381	0.001	27.652	27.652	27.663	27.663
19	1901.1	1925.5	1.991	1.861	0.001	34.585	34.585	0.381	0.001	27.640	27.640	27.650	27.650
12	1751.8	1773.7	2.091	1.972	0.003	34.566	34.565	0.381	0.001	27.617	27.616	27.626	27.625
30	1500.8	1518.7	2.400	2.298	0.045	34.521	34.521	0.382	0.002	27.555	27.555	27.564	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
29	2.879	181.266	12.69
14	2.865	179.429	14.46
6	2.878	180.440	12.37
18	2.889	179.819	13.13
24	2.904	178.988	9.53
9	2.950	177.284	7.15
19	2.982	175.962	5.15
12	3.002	173.393	6.38
30	3.094	165.445	6.74

D-Theta = (ptemp + (4.5643 * pden)) - 128.063
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9138 Cast 64 21 JUNE 1991
LAT: 45 9.8N LONG: 130 19.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
2	2551.4	2588.2	1.809	1.624	-0.003	34.627	34.626	0.387	0.0065	27.688	27.687	27.702	27.701
15	2398.8	2432.5	1.850	1.679	0.004	34.619	34.619	0.386	0.0055	27.678	27.678	27.691	27.691
21	2298.0	2329.7	1.867	1.704	0.010	34.616	34.615	0.386	0.0055	27.674	27.674	27.687	27.686
27	2200.5	2230.3	1.876	1.722	0.010	34.613	34.613	0.387	0.0065	27.671	27.671	27.683	27.683
13	2094.4	2122.3	1.900	1.755	0.017	34.609	34.608	0.394	0.0135	27.666	27.665	27.677	27.677
17	2001.7	2027.9	1.928	1.790	2e-05	34.598	34.598	0.382	0.0015	27.655	27.655	27.666	27.666
8	1900.5	1924.9	1.993	1.863	-4e-04	34.585	34.585	0.382	0.0015	27.640	27.640	27.650	27.650
3	1748.4	1770.2	2.091	1.972	0.004	34.567	34.567	0.382	0.0015	27.618	27.618	27.627	27.627
23	1496.9	1514.6	2.374	2.272	0.040	34.525	34.525	0.383	0.0025	27.561	27.561	27.569	27.569

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
2	2.879	181.604	14.76
15	2.905	180.737	13.66
21	2.900	180.583	14.53
27	2.905	180.283	14.75
13	2.895	179.602	25.02
17	2.948	177.579	8.37
8	2.978	175.928	7.71
3	3.018	173.503	7.51
23	3.098	166.309	8.51

D-Theta = (ptemp + (4.5643 * pden)) - 128.066
Atten-Anom = Atten - 0.3805

VENTS 1991 - LEG II
Station S9139 Cast 65 21 JUNE 1991
LAT: 45 10.6N LONG: 130 22.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	2696.7	2736.5	1.754	1.557	-0.011	34.637	34.637	0.385	0.005	27.700	27.700	27.715	27.715
26	2397.6	2431.3	1.836	1.665	0.006	34.622	34.622	0.381	0.001	27.682	27.682	27.695	27.695
22	2299.5	2331.2	1.856	1.694	0.003	34.616	34.616	0.384	0.004	27.675	27.675	27.688	27.688
20	2199.9	2229.7	1.887	1.733	0.010	34.611	34.611	0.388	0.008	27.669	27.669	27.681	27.681
16	2135.9	2164.6	1.898	1.749	0.010	34.608	34.606	0.390	0.010	27.666	27.664	27.677	27.675
11	1999.4	2025.6	1.942	1.804	-0.002	34.595	34.595	0.381	0.001	27.652	27.652	27.662	27.662
10	1898.7	1923.1	2.004	1.874	-6e-04	34.583	34.583	0.381	0.001	27.637	27.637	27.647	27.647
25	1749.5	1771.3	2.124	2.005	0.007	34.562	34.563	0.382	0.002	27.611	27.612	27.620	27.621
31	1499.5	1517.3	2.417	2.315	0.049	34.520	34.520	0.383	0.003	27.553	27.553	27.562	27.562

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.859	181.413	
26	2.891	180.564	10.08
22	2.915	179.922	11.67
20	2.910	179.270	14.01
16	2.917	179.339	17.79
11	2.952	177.426	8.62
10	2.944	176.246	
25	3.029	172.712	
31	3.111	165.338	

D-Theta = (ptemp + (4.5643 * pden)) - 128.066
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9140 Cast 66 22 JUNE 1991
LAT: 45 11.4N LONG: 130 25.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	2741.3	2782.1	1.748	1.547	-0.010	34.638	34.638	0.387	0.007	27.701	27.701	27.716	27.716
30	2399.5	2433.2	1.833	1.662	0.004	34.621	34.621	0.383	0.003	27.681	27.681	27.694	27.694
24	2298.9	2330.7	1.841	1.679	6e-04	34.617	34.617	0.383	0.003	27.677	27.677	27.690	27.690
12	2199.9	2229.8	1.862	1.708	0.005	34.613	34.613	0.384	0.004	27.672	27.672	27.684	27.684
19	2144.0	2172.8	1.871	1.722	0.007	34.611	34.611	0.385	0.005	27.670	27.670	27.682	27.682
9	2000.5	2026.6	1.925	1.788	0.002	34.598	34.597	0.381	0.001	27.656	27.655	27.666	27.665
10	1899.1	1923.5	1.993	1.863	0.004	34.585	34.585	0.381	0.001	27.640	27.640	27.650	27.650
25	1751.0	1772.9	2.101	1.982	0.003	34.564		0.381	0.001	27.614		27.624	
31	1500.1	1517.9	2.407	2.305	0.057	34.523	34.522	0.382	0.002	27.556	27.556	27.565	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.856	181.630	
30	2.899	180.699	
24	2.934	180.046	
12	2.917	178.981	11.20
19	2.921	178.949	11.24
9	2.942	176.921	8.50
10	2.979	175.151	
25			
31	3.110	164.880	

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9141 Cast 67 22 JUNE 1991
LAT: 45 13.4N LONG: 130 24.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	2766.8	2808.1	1.748	1.544	-0.012	34.638	34.638	0.388	0.008	27.701	27.701	27.716	27.716
30	2303.1	2335.0	1.846	1.683	0.007	34.618	34.618	0.384	0.004	27.678	27.678	27.690	27.690
24	2200.4	2230.3	1.866	1.712	0.008	34.613	34.613	0.382	0.002	27.672	27.672	27.684	27.684
17	2152.0	2181.0	1.878	1.728	0.011	34.611	34.610	0.385	0.005	27.670	27.669	27.681	27.680
14	2098.7	2126.7	1.887	1.742	0.009	34.608	34.608	0.386	0.006	27.667	27.667	27.678	27.678
2	2048.7	2075.7	1.902	1.761	0.003	34.603	34.603	0.383	0.003	27.661	27.661	27.672	27.672
10	2001.6	2027.8	1.923	1.786	8e-04	34.598	34.598	0.382	0.002	27.656	27.656	27.666	27.666
25	1749.4	1771.3	2.105	1.986	0.006	34.564	34.564	0.381	0.001	27.614	27.614	27.623	27.623
29	1502.6	1520.5	2.425	2.322	0.050	34.518	34.519	0.381	0.001	27.551	27.552	27.559	27.560

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.855	180.720	14.52
30	2.921	179.676	11.82
24	2.926	178.538	9.76
17	2.910	178.694	13.82
14	2.930	178.311	15.27
2	2.942	177.711	11.41
10	2.938	176.843	8.65
25	3.029	172.116	7.45
29	3.108	163.211	7.08

D-Theta = (ptemp + (4.5643 * pden)) - 128.062
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9142 Cast 68 22 JUNE 1991
LAT: 45 15.4N LONG: 130 24.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
21	2737.6	2778.3	1.759	1.558	-0.007	34.637	34.636	0.386	0.006	27.700	27.699	27.715	27.714
18	2298.5	2330.2	1.867	1.704	0.009	34.615	34.615	0.384	0.004	27.674	27.674	27.686	27.686
6	2251.2	2282.0	1.877	1.718	0.015	34.614	34.614	0.385	0.005	27.672	27.672	27.684	27.684
11	2203.0	2232.9	1.888	1.734	0.013	34.611	34.611	0.388	0.008	27.669	27.669	27.681	27.681
8	2153.6	2182.6	1.895	1.745	0.017	34.610	34.610	0.390	0.010	27.667	27.667	27.679	27.679
15	2102.9	2130.9	1.895	1.749	0.013	34.608	34.608	0.390	0.010	27.666	27.666	27.677	27.677
16	2050.0	2077.0	1.913	1.772	0.005	34.602	34.602	0.383	0.003	27.660	27.660	27.671	27.671
22	2000.8	2027.0	1.942	1.804	0.001	34.595	34.596	0.381	0.001	27.652	27.653	27.662	27.663
23	1497.9	1515.6	2.449	2.346	0.057	34.516	34.518	0.382	0.002	27.547	27.549	27.556	27.557

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
21	2.843	181.452	13.91
18	2.923	179.859	12.95
6	2.912	179.561	15.59
11	2.909	179.418	18.25
8	2.919	179.172	19.15
15	2.904	178.875	18.57
16	2.947	177.991	13.44
22	2.961	176.481	10.97
23	3.115	163.840	8.18

D-Theta = (ptemp + (4.5643 * pden)) - 128.063
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station S9143 Cast 69 22 JUNE 1991
LAT: 45 17.4N LONG: 130 22.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2476.7	2511.9	1.842	1.664	0.002	34.621	34.620	0.386	0.006	27.680	27.680	27.694	27.693
31	2300.3	2332.1	1.862	1.699	0.004	34.615	34.615	0.384	0.004	27.674	27.674	27.686	27.686
12	2248.6	2279.3	1.878	1.720	0.006	34.612	34.612	0.385	0.005	27.670	27.670	27.683	27.683
19	2203.3	2233.2	1.890	1.736	0.009	34.610	34.610	0.385	0.005	27.668	27.668	27.680	27.680
9	2151.0	2180.0	1.903	1.753	0.006	34.606	34.606	0.385	0.005	27.664	27.664	27.675	27.675
13	2100.2	2128.2	1.919	1.773	0.004	34.602	34.602	0.384	0.004	27.659	27.659	27.670	27.670
27	2049.9	2077.0	1.933	1.791	0.002	34.598	34.599	0.381	0.001	27.655	27.656	27.666	27.667
25	2000.5	2026.7	1.949	1.811	0.004	34.595	34.595	0.381	0.001	27.651	27.651	27.662	27.662
26	1502.4	1520.3	2.415	2.312	0.044	34.519	34.519	0.381	0.001	27.553	27.553	27.561	27.561

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.901	180.573	10.92
31	2.903	179.884	14.65
12	2.924	179.473	11.57
19	2.919	179.319	13.22
9	2.917	178.805	13.42
13	2.954	178.004	10.44
27	2.952	177.521	7.48
25	2.948	177.069	8.58
26	3.105	164.561	7.28

D-Theta = (ptemp + (4.5643 * pden)) - 128.065
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station T9112 Cast 70 22 JUNE 1991
LAT: 45 16.0N LONG: 130 8.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
17	2212.3	2242.4	1.870	1.715	0.010	34.614	34.613	0.385	0.005	27.673	27.672	27.684	27.684
10	2285.3	2316.8	1.880	1.718	0.020	34.616	34.615	0.385	0.005	27.673	27.673	27.686	27.685
3	2158.3	2187.4	1.875	1.725	0.020	34.615	34.613	0.385	0.005	27.673	27.671	27.685	27.683
29	2177.4	2206.8	1.893	1.741	0.031	34.615	34.613	0.390	0.010	27.672	27.670	27.683	27.682

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
17	2.894	178.993	11.06
10	2.897	179.064	12.42
3	2.879	178.722	13.69
29	2.888	178.836	14.03

D-Theta = (ptemp + (4.5643 * pden)) - 128.065
Atten-Anom = Atten - 0.38

VENTS 1991 - LEG II
Station T9113 Cast 71 23 JUNE 1991
LAT: 45 55.9N LONG: 130 00.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
3	1519.1	1537.3	2.426	2.322		34.528	34.528	0.430	0.049	27.559	27.559	27.568	27.568
29	1532.9	1551.3	2.370	2.265		34.531	34.532	0.430	0.049	27.566	27.567	27.575	27.575
31	1482.6	1500.2	2.408	2.307		34.526	34.526	0.405	0.024	27.559	27.559	27.567	27.567
24	1441.2	1458.2	2.429	2.331		34.521	34.521	0.420	0.039	27.553	27.553	27.561	27.561
17	1473.2	1490.7	2.415	2.315		34.526	34.526	0.459	0.078	27.558	27.558	27.566	27.566

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
3	3.085	168.925	38.03
29	3.083	167.703	22.08
31	3.081	166.234	18.36
24	3.088	165.422	18.72
17	3.088	166.829	29.45

Atten-Anom = Atten - 0.381

VENTS 1991 - LEG II
Station T9113 Cast 73 24 JUNE 1991
LAT: 45 57.6N LONG: 130 10.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	1933.2	1958.3	2.032	1.899		34.581	34.582	0.381		27.633	27.634	27.644	27.645
22	1899.5	1924.0	2.043	1.912		34.579	34.579	0.381		27.631	27.631	27.641	27.641
19	1800.9	1823.7	2.143	2.019		34.562	34.562	0.381		27.609	27.609	27.619	27.619
30	1699.2	1720.4	2.194	2.078		34.555	34.555	0.382		27.600	27.600	27.609	27.609
12	1594.2	1613.6	2.283	2.175		34.541	34.540	0.381		27.581	27.580	27.590	27.589
9	1497.0	1514.9	2.406	2.304		34.523	34.522	0.381		27.556	27.556	27.565	27.564
27	1402.2	1418.6	2.576	2.480		34.499	34.499	0.381		27.523	27.523	27.531	27.531
13	1299.1	1314.0	2.792	2.702		34.475	34.475	0.381		27.485	27.485	27.493	27.493
26	1201.7	1215.2	3.019	2.934		34.449	34.450	0.381		27.444	27.444	27.451	27.452

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.976	173.869	12.80
22	2.964	173.621	14.75
19	3.021	171.141	13.92
30	3.030	170.751	10.18
12	3.076	167.606	10.82
9	3.077	164.244	10.26
27	3.123	159.848	12.96
13	3.155	153.404	9.59
26	3.175	146.631	14.34

VENTS 1991 - LEG II
Station S9145 Cast 74 24 JUNE 1991
LAT: 46 1.0N LONG: 130 10.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
21	2154.5	2183.7	1.935	1.784		34.599	34.599	0.382		27.656	27.656	27.667	27.667
18	1900.9	1925.5	2.065	1.934		34.576	34.576	0.383		27.627	27.627	27.637	27.637
6	1799.6	1822.4	2.107	1.984		34.568	34.568	0.382		27.617	27.617	27.627	27.627
11	1701.0	1722.1	2.185	2.069		34.555	34.555	0.383		27.600	27.600	27.610	27.610
8	1599.9	1619.4	2.337	2.227		34.533	34.533	0.393		27.570	27.570	27.579	27.579
16	1500.9	1518.9	2.422	2.319		34.521	34.521	0.382		27.554	27.554	27.562	27.562
14	1401.2	1417.6	2.574	2.478		34.500	34.500	0.381		27.524	27.524	27.532	27.532
23	1295.4	1310.3	2.814	2.724		34.473	34.474	0.382		27.481	27.482	27.489	27.490
2	13.2	13.3	12.442	12.440		32.526	32.525	0.446		24.585	24.585	24.586	24.585

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
21	2.894	177.304	13.69
18	2.924	173.882	10.20
6	2.944	172.727	8.71
11	2.979	170.346	6.45
8	3.012	166.522	9.93
16	3.060	165.100	8.25
14	3.067	159.740	4.89
23	3.117	152.980	
2			

VENTS 1991 - LEG II
Station T9115 Cast 75 24 JUNE 1991
LAT: 46 00.8N LONG: 129 54.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2170.5	2199.9	1.957	1.804		34.600	34.599	0.385	0.003	27.655	27.654	27.666	27.666
31	2039.2	2066.2	1.957	1.816		34.596	34.596	0.384	0.002	27.651	27.651	27.662	27.662
29	1902.2	1926.8	2.001	1.871		34.586	34.586	0.383	0.001	27.640	27.640	27.650	27.650
3	1508.3	1526.3	2.368	2.265		34.527	34.526	0.383	0.001	27.563	27.562	27.571	27.571
1	1952.6	1978.1	1.996	1.862		34.589	34.589	0.386	0.004	27.643	27.643	27.653	27.653
24	2173.2	2202.7	1.932	1.779		34.604	34.604	0.387	0.005	27.660	27.660	27.672	27.672
17	2115.6	2144.1	1.933	1.785		34.601	34.601	0.384	0.002	27.657	27.657	27.669	27.669
15	2049.2	2076.4	1.955	1.813		34.595	34.595	0.384	0.002	27.651	27.651	27.662	27.662
25	1996.7	2022.9	1.967	1.829		34.592	34.583	0.383	0.001	27.647	27.640	27.658	27.651
10	1749.9	1771.9	2.125	2.006		34.562	34.562	0.382	0.000	27.611	27.611	27.620	27.620
2	1503.9	1521.9	2.454	2.351		34.517	34.504	0.383	0.001	27.548	27.537	27.556	27.546

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.935	176.613	9.09
31	2.949	176.310	12.22
29	2.957	174.315	9.26
3	3.073	163.989	8.94
1	2.951	175.123	
24	2.910	177.004	13.73
17	2.935	175.953	8.71
15	2.938	175.281	9.75
25	2.951	172.766	8.96
10	3.001	171.092	
2	3.138	162.146	

Atten-Anom = Atten - 0.382

APPENDIX B:

Station Data Tables
VENTS 1992

VENTS 1992 - LEG I
Station S9281 Cast 1 16 MAY 1992
LAT: 44 45.1N LONG: 125 19.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	1701.6	1722.5	2.203	2.087		34.569		0.361		27.610		27.620	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1			

VENTS 1992 - LEG I
Station S9282 Cast 2 16 MAY 1992
LAT: 44 44.9N LONG: 125 50.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	1004.4	1015.1	3.474	3.401		34.418		0.356		27.376		27.383	
2	1004.2	1014.9	3.475	3.402		34.418		0.356		27.376		27.383	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1			
2			

VENTS 1992 - LEG I
Station S9283 Cast 3 16 MAY 1992
LAT: 44 44.8N LONG: 126 30.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	1002.8	1013.4	3.642	3.568		34.391		0.356		27.338		27.345	
2	503.6	508.4	5.253	5.212		34.087		0.360		26.922		26.927	
3	249.3	251.5	7.261	7.237		33.948		0.366		26.554		26.558	
5	8.4	8.5	13.201	13.200		32.413		0.426		24.350		24.351	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	3.221	132.826	
2	2.916	83.104	
3	2.267	46.525	
5	0.417	4.494	

VENTS 1992 - LEG I
Station S9284 Cast 4 16 MAY 1992
LAT: 44 46.4N LONG: 127 08.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	1000.6	1011.3	3.629	3.555		34.401		0.355		27.347		27.354	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1			

VENTS 1992 - LEG I
Station S9285 Cast 5 17 MAY 1992
LAT: 44 45.0N LONG: 127 50.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2003.1	2029.3	1.898	1.761		34.601		0.351		27.660		27.671	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	3.002	179.533	

VENTS 1992 - LEG I
Station S9286 Cast 6 17 MAY 1992
LAT: 44 45.0N LONG: 128 29.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	1002.4	1013.1	3.49	3.417		34.409		0.361		27.367		27.374	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1			

VENTS 1992 - LEG I
Station S9287 Cast 7 17 MAY 1992
LAT: 44 45.0 N LONG: 129 09.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	988.1	998.5	3.490	3.419		34.409		0.361		27.367		27.374	
2	2775.7	2817.0	1.731	1.527		34.646		0.361		27.709		27.724	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1			
2	2.848	187.439	

VENTS 1992 - LEG I
Station S9288 Cast 8 17 MAY 1992
LAT: 44 44.9N LONG: 129 45.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	999.5	1010.1	3.335	3.264		34.396		0.36		27.372		27.379	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	3.305	137.678	

VENTS 1992 - LEG I
Station S9213 Cast 9 18 MAY 1992
LAT: 44 56.8N LONG: 130 07.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2373.7	2406.9	1.821	1.652	0.002	34.622	34.630	0.356	0.003	27.683	27.689	27.696	27.702
17	2300.7	2332.5	1.825	1.663	0.001	34.620	34.622	0.355	0.002	27.681	27.683	27.693	27.695
3	2198.1	2227.9	1.861	1.707	7e-04	34.612	34.619	0.352	-0.001	27.672	27.677	27.683	27.689
14	2170.3	2199.6	1.872	1.721	0.002	34.610	34.615	0.353	0.000	27.669	27.673	27.681	27.685
5	2148.5	2177.3	1.873	1.724	0.004	34.610	34.612	0.352	-0.001	27.669	27.671	27.681	27.682
6	2119.0	2147.2	1.874	1.727	0.002	34.609	34.610	0.352	-0.001	27.668	27.669	27.680	27.680
19	2102.4	2130.3	1.875	1.730	3e-04	34.608	34.608	0.352	-0.001	27.667	27.667	27.679	27.679
8	2076.1	2103.6	1.882	1.739	0.006	34.608	34.606	0.352	-0.001	27.667	27.665	27.678	27.676
30	2054.1	2081.2	1.891	1.749	0.002	34.605	34.600	0.352	-0.001	27.664	27.660	27.675	27.671
10	2000.7	2026.8	1.911	1.774	-5e-04	34.600	34.588	0.352	-0.001	27.658	27.649	27.669	27.659
11	1899.9	1924.3	1.962	1.833	5.55e-04	34.590	34.571	0.351	-0.002	27.646	27.631	27.656	27.641
12	1748.8	1770.5	2.079	1.961	0.001	34.568	34.631	0.350	-0.003	27.619	27.670	27.629	27.679

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1			16.54
17	2.935	181.602	15.93
3	2.949	179.187	14.46
14	2.948	178.391	12.52
5	2.940	178.532	12.89
6	2.946	179.463	16.55
19	2.942	179.394	12.47
8	2.965	179.091	32.84
30	2.962	178.861	
10	2.972	177.803	13.05
11	2.991	176.509	16.58
12	3.056	173.767	18.97

D-Theta = (ptemp + (4.60841 * pden)) - 129.28349
Atten-Anom = Atten - 0.353

VENTS 1992 - LEG I
Station S9214 Cast 10 18 MAY 1992
LAT: 44 56.1N LONG: 130 05.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
2	2473.7	2508.8	1.814	1.636	0.002	34.624	34.630	0.358	0.004	27.685	27.690	27.698	27.703
13	2399.1	2432.8	1.807	1.636	-0.002	34.623	34.626	0.357	0.003	27.685	27.687	27.698	27.700
24	2300.3	2332.0	1.823	1.661	-0.001	34.619	34.622	0.353	-0.001	27.680	27.683	27.693	27.695
15	2203.7	2233.5	1.838	1.684	-7e-04	34.615	34.615	0.352	-0.002	27.676	27.676	27.688	27.688
16	2148.2	2177.0	1.860	1.711	0.002	34.611	34.612	0.353	-0.001	27.671	27.672	27.682	27.683
27	2128.2	2156.6	1.868	1.720	4e-04	34.609	34.608	0.352	-0.002	27.669	27.668	27.680	27.679
18	2103.0	2130.9	1.875	1.730	0.003	34.608	34.604	0.352	-0.002	27.667	27.664	27.679	27.675
25	2073.8	2101.2	1.888	1.745	0.001	34.605	34.599	0.352	-0.002	27.664	27.659	27.675	27.670
22	2051.4	2078.4	1.894	1.753	-1e-03	34.603	34.589	0.352	-0.002	27.662	27.651	27.673	27.662
26	2003.1	2029.2	1.919	1.781	-1e-03	34.598	34.564	0.351	-0.003	27.656	27.629	27.667	27.639
23	1899.3	1923.7	1.974	1.844	0.002	34.588		0.352	-0.002	27.644		27.654	
21	1755.4	1777.2	2.082	1.963	4.34e-05	34.567		0.351	-0.003	27.618		27.628	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
2			16.21
13	2.890	181.645	14.59
24			16.43
15	2.920	180.535	11.12
16	2.932	179.806	11.48
27	2.929	179.447	32.14
18	2.932	179.007	9.46
25	2.941	178.244	10.65
22	2.954	178.578	11.31
26	2.963	178.045	12.49
23	3.007	176.519	11.00
21	3.064	174.150	

D-Theta = (ptemp + (4.63945 * pden)) - 130.1403
Atten-Anom = Atten - 0.354

VENTS 1992 - LEG I
Station S9210 Cast 11 19 MAY 1992
LAT: 44 59.1N LONG: 130 16.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2200.3	2230.1	1.903	1.749	0.028	34.614	34.614	0.367	0.012	27.670	27.670	27.682	27.682
2	2180.7	2210.1	1.901	1.748	0.028	34.614	34.614	0.367	0.012	27.670	27.670	27.682	27.682
13	2166.3	2195.5	1.905	1.754	0.028	34.613	34.614	0.368	0.013	27.669	27.670	27.681	27.682
24	2149.7	2178.6	1.904	1.754	0.028	34.613	34.614	0.368	0.013	27.669	27.670	27.681	27.682
15	2122.5	2150.9	1.906	1.758	0.031	34.613	34.614	0.369	0.014	27.669	27.670	27.680	27.681
26	2098.7	2126.6	1.904	1.758	0.016	34.609	34.611	0.362	0.007	27.666	27.668	27.677	27.679
23	2055.1	2082.3	1.908	1.766	0.007	34.605	34.607	0.359	0.004	27.662	27.664	27.673	27.675
18	2001.9	2028.0	1.918	1.781	0.005	34.602	34.603	0.355	0.000	27.659	27.660	27.670	27.671
25	2370.7	2403.8	1.965	1.795	-0.727	34.401	34.592	0.353	-0.002	27.495	27.648	27.508	27.661
22	1749.3	1771.1	2.086	1.967	-1e-04	34.568	34.570	0.354	-0.001	27.619	27.620	27.628	27.630

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.944	180.976	41.92
2	2.940	181.535	28.13
13			37.78
24	2.946	181.001	41.03
15	2.955	180.937	41.23
26	2.960	180.919	22.68
23	2.964	179.290	27.46
18	2.982	178.225	13.48
25			
22	3.056	173.173	13.53

D-Theta = (ptemp + (4.59857 * pden)) - 129.01754
Atten-Anom = Atten - 0.355

VENTS 1992 - LEG I
Station S9209 Cast 12 19 MAY 1992
LAT: 44 59.8N LONG: 130 18.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
12	2364.7	2397.7	1.852	1.684	0.004	34.618	34.626	0.357	0.002	27.677	27.684	27.690	27.696
17	2300.2	2331.9	1.868	1.705	0.007	34.615	34.620	0.357	0.002	27.674	27.678	27.686	27.690
3	2200.8	2230.6	1.883	1.729	0.011	34.612	34.616	0.361	0.006	27.670	27.673	27.682	27.685
14	2143.7	2172.4	1.901	1.752	0.026	34.612		0.368	0.013	27.669		27.680	
5	2125.8	2154.2	1.897	1.749	0.018	34.610	34.616	0.366	0.011	27.667	27.672	27.679	27.684
6	2100.1	2128.0	1.902	1.756	0.022	34.610	34.615	0.366	0.011	27.667	27.671	27.678	27.682
19	2044.8	2071.7	1.908	1.767	0.011	34.605	34.614	0.359	0.004	27.662	27.670	27.673	27.681
8	2005.6	2031.9	1.915	1.777	0.003	34.601	34.606	0.353	-0.002	27.659	27.663	27.669	27.673
9	1903.6	1928.0	1.972	1.842	-0.002	34.588	34.594	0.352	-0.003	27.644	27.649	27.654	27.659
10	1748.8	1770.5	2.097	1.978	-0.001	34.564	34.570	0.353	-0.002	27.615	27.619	27.624	27.629

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
12			17.02
17	2.937	181.110	13.16
3	2.935	180.717	20.51
14	2.960	180.716	40.62
5	2.941	181.433	26.56
6	2.967	179.733	32.66
19	2.971	178.484	18.38
8	2.981	177.998	17.65
9	3.000	175.939	10.29
10	3.044	173.637	9.24

D-Theta = (ptemp + (4.53702 * pden)) - 127.31043
Atten-Anom = Atten - 0.355

VENTS 1992 - LEG I
Station S9223 Cast 13 20 MAY 1992
LAT: 44 54.4N LONG: 129 58.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
29	2643.3	2681.9	1.792	1.599	0.008	34.632	34.630	0.354	0.003	27.693	27.691	27.708	27.706
16	2505.0	2540.7	1.791	1.611	0.005	34.629	34.622	0.353	0.002	27.691	27.685	27.704	27.699
3	2309.7	2341.5	1.812	1.649	3e-04	34.621	34.619	0.350	-0.001	27.683	27.681	27.695	27.693
17	2250.6	2281.4	1.823	1.665	-3e-04	34.618	34.615	0.350	-0.001	27.679	27.677	27.691	27.689
9	2195.0	2224.7	1.838	1.685	0.001	34.615	34.612	0.350	-0.001	27.676	27.674	27.688	27.685
23	2148.1	2176.9	1.857	1.708	0.001	34.611	34.610	0.350	-0.001	27.671	27.670	27.683	27.682
18	2123.6	2152.0	1.947	1.799	-0.273	34.521	34.608	0.349	-0.003	27.592	27.662	27.604	27.673
10	2101.6	2129.6	1.875	1.730	8e-04	34.607	34.606	0.349	-0.003	27.667	27.666	27.678	27.677
26	2050.7	2077.8	1.891	1.750	-9e-04	34.603	34.600	0.349	-0.003	27.662	27.660	27.673	27.671
12	2003.7	2029.9	1.912	1.774	2.74e-04	34.599	34.588	0.349	-0.003	27.657	27.649	27.668	27.659
25	1893.7	1917.9	1.969	1.840	-0.002	34.587	34.571	0.349	-0.003	27.643	27.630	27.653	27.640
22	1748.4	1770.2	2.130	2.011	0.044	34.570	34.631	0.351	-0.002	27.617	27.666	27.626	27.675

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
29	2.866	183.013	
16	2.866	180.218	
3	2.879	180.379	
17	2.884	180.194	
9	2.908	179.504	
23	2.930	178.710	9.15
18	2.919	178.594	10.64
10	2.929	178.341	
26	2.933	177.409	8.68
12	2.965	176.546	
25	3.033	173.130	
22	2.866	184.581	

D-Theta = (ptemp + (4.6204 * pden)) - 129.6112
Atten-Anom = Atten - (0.344 + 0.004377*Theta)

VENTS 1992 - LEG I
Station S9222 Cast 14 20 MAY 1992
LAT: 44 55.3N LONG: 130 02.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2474.1	2509.3	1.792	1.615	0.007	34.628	34.630	0.357	0.006	27.690	27.691	27.703	27.705
2	2400.0	2433.6	1.796	1.626	0.002	34.625	34.626	0.352	0.001	27.687	27.688	27.700	27.701
24	2299.9	2331.6	1.807	1.645	5e-04	34.621	34.622	0.351	0.000	27.683	27.684	27.695	27.696
15	2201.2	2231.1	1.839	1.686	6e-04	34.614	34.615	0.350	-0.001	27.675	27.676	27.687	27.688
14	2149.5	2178.3	1.856	1.707	0.003	34.611	34.612	0.351	0.000	27.671	27.672	27.683	27.684
5	2100.7	2128.7	1.875	1.730	0.003	34.607	34.608	0.350	-0.001	27.667	27.667	27.678	27.679
6	2047.8	2074.8	1.899	1.758	0.007	34.603	34.604	0.350	-0.001	27.662	27.662	27.672	27.673
19	2001.1	2027.2	1.923	1.786	0.006	34.598	34.599	0.350	-0.001	27.656	27.656	27.666	27.667
11	1899.9	1924.3	1.975	1.845	0.003	34.587	34.589	0.351	0.000	27.643	27.644	27.653	27.654
13	1750.4	1772.2	2.107	1.988	0.005	34.563	34.564	0.349	-0.002	27.613	27.614	27.623	27.623

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.885	182.467	
2	2.916	181.746	
24	2.904	180.421	
15	2.924	179.609	11.75
14	2.923	179.185	10.24
5	2.931	178.899	9.76
6	2.926	178.544	
19	2.972	178.658	
11	2.974	175.984	
13	3.058	173.595	

D-Theta = (ptemp + (4.64435 * pden)) - 130.27168
Atten-Anom = Atten - 0.351

VENTS 1992 - LEG I
Station T9201 Cast 15 21 MAY 1992
LAT: 44 48.0N LONG: 130 18.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	2137.6	2166.2	1.905	1.756	0.033	34.614	34.615	0.362	0.014	27.670	27.671	27.681	27.682
10	2136.4	2165.0	1.904	1.755	0.032	34.614	34.614	0.362	0.014	27.670	27.670	27.681	27.681
12	2057.3	2084.4	1.900	1.758	0.020	34.610	34.610	0.362	0.014	27.667	27.667	27.678	27.678
16	2099.7	2127.6	1.912	1.766	0.036	34.613	36.614	0.363	0.015	27.669	29.273	27.680	29.285
18	2100.5	2128.4	1.911	1.765	0.035	34.613	34.613	0.362	0.014	27.669	27.669	27.680	27.680
2	2103.1	2131.0	1.897	1.751	0.011	34.609	34.609	0.361	0.014	27.667	27.667	27.678	27.678
3	2103.6	2131.6	1.902	1.756	0.015	34.609	34.609	0.360	0.012	27.666	27.666	27.677	27.677
14	2177.3	2206.7	1.881	1.729	0.011	34.613	34.613	0.353	0.005	27.671	27.671	27.683	27.683
5	2236.2	2266.6	1.884	1.727	0.013	34.614	34.614	0.354	0.006	27.672	27.672	27.684	27.684
6	2089.4	2117.1	1.891	1.746	-0.002	34.605	34.606	0.349	8e-04	27.664	27.665	27.675	27.676

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.872	180.221	27.77
10	2.864	180.226	29.86
12	2.883	179.185	22.22
16	2.886	180.791	23.01
18	2.882	181.094	23.68
2	2.897	179.328	22.05
3	2.885	179.921	19.73
14	2.868	180.175	13.25
5	2.879	180.105	14.52
6	2.921	177.700	31.35

D-Theta = (ptemp + (4.5052 * pden)) - 126.4335
Atten-Anom = Atten - 0.3355

VENTS 1992 - LEG I
Station T9202 Cast 16 21 MAY 1992
LAT: 45 04.3N LONG: 130 14.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
15	2102.1	2130.1	1.902	1.756	0.020	34.609	34.610	0.365	0.016	27.666	27.667	27.677	27.678
17	2116.6	2144.9	1.895	1.748	0.018	34.610	34.610	0.362	0.013	27.667	27.667	27.679	27.679
23	2101.8	2129.8	1.901	1.755	0.019	34.609	34.609	0.362	0.013	27.666	27.666	27.677	27.677
13	2090.0	2117.8	1.904	1.759	0.018	34.608	34.608	0.363	0.014	27.665	27.665	27.676	27.676
29	2072.9	2100.3	1.902	1.759	0.018	34.608	34.608	0.362	0.013	27.665	27.665	27.676	27.676
27	2083.0	2110.7	1.902	1.758	0.017	34.608	34.607	0.362	0.013	27.665	27.665	27.676	27.676
19	2075.0	2102.5	1.898	1.755	0.019	34.609	34.609	0.363	0.014	27.666	27.666	27.677	27.677
30	2074.9	2102.4	1.905	1.761	0.016	34.607	34.607	0.361	0.012	27.664	27.664	27.675	27.675
11	2124.6	2153.0	1.894	1.746	0.017	34.610	34.609	0.357	0.007	27.668	27.667	27.679	27.678
24	2099.4	2127.3	1.892	1.747	0.002	34.606	34.604	0.348	-0.002	27.665	27.663	27.676	27.674

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
15	2.931	180.675	30.10
17	2.925	180.971	22.32
23	2.921	181.138	23.52
13	2.923	181.510	23.40
29	2.927	181.585	26.10
27	2.927	180.615	25.83
19	2.919	181.007	25.07
30	2.928	180.227	24.12
11	2.925	179.805	22.05
24	2.940	178.918	9.17

D-Theta = (ptemp + (4.5819 * pden)) - 128.5515
Atten-Anom = Atten - 0.3495

VENTS 1992 - LEG I
Station T9203 Cast 17 22 MAY 1992
LAT: 45 01.5N LONG: 130 19.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	2115.7	2144.0	1.898	1.751	0.019	34.612	34.612	0.362	0.013	27.669	27.669	27.680	27.680
10	2204.9	2234.8	1.899	1.744	0.018	34.613	34.612	0.361	0.012	27.670	27.669	27.681	27.681
12	2168.9	2198.1	1.914	1.762	0.026	34.612	34.611	0.364	0.015	27.668	27.667	27.679	27.679
16	2116.6	2144.8	1.907	1.760	0.028	34.613	34.612	0.364	0.015	27.669	27.668	27.680	27.679
18	2089.3	2117.0	1.898	1.753	0.013	34.610	34.609	0.364	0.015	27.667	27.666	27.678	27.678
2	2208.4	2238.4	1.900	1.745	0.015	34.612	34.611	0.355	0.006	27.669	27.668	27.681	27.680
3	2162.8	2191.9	1.892	1.741	0.016	34.613	34.612	0.355	0.006	27.670	27.669	27.682	27.681
14	2154.7	2183.7	1.863	1.713	0.005	34.615	34.614	0.352	0.003	27.674	27.673	27.685	27.685
5	2124.6	2153.0	1.878	1.731	-0.009	34.608	34.615	0.348	-0.001	27.667	27.673	27.678	27.684
6	2112.6	2140.8	1.874	1.728	-0.011	34.608	34.609	0.348	-0.001	27.668	27.668	27.679	27.680

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.905	181.983	28.08
10	2.909	180.950	24.50
12	2.906	181.197	31.22
16	2.898	181.692	34.12
18	2.911	180.206	26.44
2	2.897	181.138	17.15
3	2.896	181.493	15.29
14	2.891	180.428	13.96
5	2.893	181.224	11.01
6	2.902	179.820	10.43

D-Theta = (ptemp + (4.504 * pden)) - 126.4035
Atten-Anom = Atten - 0.3490

VENTS 1992 - LEG I
Station S9215 Cast 18 22 MAY 1992
LAT: 45 00.5N LONG: 130 22.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2206.0	2235.9	1.852	1.698	0.015	34.615	34.615	0.359	-0.002	27.675	27.675	27.687	27.687
1	2154.3	2183.2	1.870	1.720	0.018	34.612	34.611	0.358	-0.003	27.671	27.670	27.682	27.682
26	2105.7	2133.8	1.885	1.739	0.018	34.609	34.608	0.358	-0.003	27.667	27.667	27.679	27.678

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.858	181.808	11.62
1	2.875	178.850	11.99
26	2.895	180.254	12.15

D-Theta = (ptemp + (4.87836 * pden)) - 136.74774
Atten-Anom = Atten - 0.361

VENTS 1992 - LEG I
Station T9204 Cast 19 23 MAY 1992
LAT: 44 54.6N LONG: 130 21.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
18	2106.0	2134.6	1.893	1.747	0.019	34.612	34.611	0.361	0.013	27.669	27.668	27.680	27.680
2	2101.0	2129.5	1.892	1.746	0.019	34.611	34.609	0.358	0.010	27.669	27.667	27.680	27.678
13	2099.0	2127.0	1.885	1.740	0.011	34.610	34.609	0.362	0.014	27.668	27.667	27.679	27.679
23	2095.1	2122.9	1.898	1.753	0.023	34.611	34.608	0.360	0.012	27.668	27.666	27.679	27.677
17	2102.5	2130.5	1.892	1.746	0.022	34.612	34.610	0.358	0.010	27.669	27.668	27.681	27.679
15	2096.4	2124.3	1.886	1.741	0.022	34.613	34.610	0.356	0.007	27.671	27.668	27.682	27.679
6	2099.6	2127.6	1.883	1.738	0.009	34.610	34.608	0.352	0.004	27.668	27.667	27.680	27.678
5	2090.4	2118.1	1.898	1.753	0.033	34.614	34.612	0.362	0.014	27.670	27.669	27.682	27.680
14	2093.9	2121.7	1.882	1.737	0.008	34.610	34.607	0.351	0.003	27.669	27.666	27.680	27.677
3	2155.6	2184.6	1.849	1.699	3e-04	34.615	34.613	0.348	-5e-04	27.675	27.673	27.686	27.685

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
18	2.887	179.893	22.16
2	2.896	180.261	19.64
13	2.896	179.868	23.04
23	2.896	180.281	31.57
17	2.896	180.533	21.77
15	2.903	180.894	18.23
6	2.899	179.523	14.88
5	2.874	181.720	35.38
14	2.888	179.679	12.96
3	2.888	180.286	11.61

D-Theta = (ptemp + (4.4947 * pden)) - 126.1397
Atten-Anom = Atten - 0.3485

VENTS 1992 - LEG I
Station T9205 Cast 20 23 MAY 1992
LAT: 45 00.6N LONG: 130 11.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2146.5	2175.3	1.883	1.734	0.011	34.612	34.612	0.353	0.004	27.670	27.670	27.681	27.681
30	2135.1	2163.7	1.883	1.735	0.008	34.611	34.612	0.352	0.003	27.669	27.670	27.681	27.681
19	2149.3	2178.1	1.893	1.743	0.021	34.613	34.614	0.354	0.005	27.670	27.671	27.682	27.682
27	2128.2	2156.7	1.898	1.750	0.022	34.612	34.611	0.356	0.006	27.669	27.668	27.680	27.679
29	2155.5	2184.5	1.900	1.750	0.025	34.613	34.613	0.356	0.006	27.670	27.670	27.681	27.681
25	2141.5	2170.2	1.910	1.761	0.029	34.612	34.612	0.361	0.012	27.668	27.668	27.679	27.679
22	2148.4	2177.2	1.881	1.731	0.006	34.611	34.603	0.352	0.003	27.669	27.663	27.681	27.674
12	2171.9	2201.2	1.880	1.728	0.011	34.613	34.614	0.352	0.003	27.671	27.672	27.683	27.683
26	2162.5	2191.6	1.883	1.732	0.021	34.615	34.615	0.353	0.004	27.672	27.672	27.684	27.684
24	2164.2	2193.4	1.883	1.732	0.021	34.615		0.353	0.004	27.672		27.684	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.894	179.629	14.69
30	2.888	179.588	14.36
19	2.912	181.036	17.83
27	2.897	179.269	18.02
29	2.904	180.553	20.64
25	2.875	180.827	26.82
22	2.879	178.555	17.18
12	2.882	180.012	17.14
26	2.878	180.433	
24			

D-Theta = (ptemp + (4.3915 * pden)) - 123.2858
Atten-Anom = Atten - 0.3495

VENTS 1992 - LEG I
Station S9204 Cast 21 24 MAY 1992
LAT: 44 56.1N LONG: 130 13.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
24	2245.7	2276.4	1.878	1.720	0.010	34.614	34.615	0.352	0.005	27.672	27.673	27.684	27.685
18	2199.8	2229.6	1.872	1.718	0.009	34.614	34.616	0.352	0.005	27.672	27.674	27.684	27.686
2	2152.6	2181.5	1.877	1.727	0.004	34.611	34.611	0.351	0.004	27.670	27.670	27.681	27.681
13	2101.4	2129.4	1.889	1.743	0.008	34.609	34.609	0.353	0.006	27.667	27.667	27.678	27.678
23	2071.5	2098.9	1.900	1.757	0.010	34.607	34.607	0.354	0.007	27.665	27.665	27.676	27.676
17	2050.4	2077.4	1.900	1.759	0.008	34.606	34.607	0.355	0.008	27.664	27.665	27.675	27.676
3	2025.5	2052.1	1.904	1.765	0.008	34.605	34.605	0.354	0.007	27.663	27.663	27.674	27.674
14	2004.1	2030.3	1.911	1.773	0.003	34.602	34.602	0.350	0.003	27.660	27.660	27.670	27.670
5	1951.4	1976.7	1.937	1.804	0.002	34.596	34.597	0.348	4e-04	27.653	27.654	27.663	27.664
6	1802.0	1824.6	2.036	1.914	4e-04	34.575	34.575	0.346	-0.002	27.628	27.628	27.638	27.638

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
24	2.900	181.314	14.30
18	2.886	180.443	18.61
2	2.879	180.193	11.26
13	2.898	180.062	16.08
23	2.917	180.530	17.82
17	2.917	180.950	17.43
3	2.917	180.540	17.16
14	2.933	179.730	14.08
5	2.940	178.057	10.25
6	3.007	175.035	7.09

D-Theta = (ptemp + (4.41325 * pden)) - 123.8866
Atten-Anom = Atten - (0.3346 + 0.007184*Theta)

VENTS 1992 - LEG I
Station S9205 Cast 22 24 MAY 1992
LAT: 44 53.9N LONG: 130 14.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2246.4	2277.1	1.888	1.730	0.025	34.615	34.615	0.352	0.004	27.672	27.672	27.684	27.684
2	2201.1	2230.9	1.883	1.729	0.021	34.614	34.615	0.352	0.004	27.672	27.672	27.683	27.684
3	2148.3	2177.1	1.881	1.731	0.022	34.614	34.614	0.352	0.004	27.672	27.672	27.683	27.683
4	2126.7	2155.1	1.878	1.730	0.007	34.610	34.612	0.350	0.002	27.669	27.670	27.680	27.682
5	2101.8	2129.7	1.882	1.737	0.008	34.609	34.609	0.351	0.003	27.668	27.668	27.679	27.679
6	2075.1	2102.5	1.892	1.749	0.008	34.607	34.607	0.352	0.004	27.665	27.665	27.676	27.676
7	2050.6	2077.6	1.898	1.757	0.006	34.605	34.605	0.349	9e-04	27.663	27.663	27.674	27.674
8	2004.3	2030.5	1.915	1.777	0.002	34.600	34.600	0.347	-0.001	27.658	27.658	27.669	27.669
9	1949.1	1974.3	1.948	1.815	5e-04	34.593	34.593	0.346	-0.002	27.650	27.650	27.660	27.660
10	1802.9	1825.6	2.030	1.908	-8e-04	34.576	34.575	0.346	-0.003	27.630	27.629	27.639	27.638

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.891	180.998	17.29
2	2.881	180.686	16.53
3	2.897	108.562	12.74
4	2.894	179.561	18.43
5	2.883	179.620	13.94
6	2.885	179.498	13.33
7	2.887	179.179	15.95
8	2.896	178.215	10.17
9	2.917	177.071	9.03
10	2.969	175.627	6.38

D-Theta = (ptemp + (4.5352 * pden)) - 127.25805
Atten-Anom = Atten - (0.3426 + 0.003148*Theta)

VENTS 1992 - LEG I
Station T9206 Cast 23 24 MAY 1992
LAT: 44 47.5N LONG: 130 18.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
21	2153.1	2182.0	1.889	1.739	0.019	34.614	34.614	0.355	0.008	27.671	27.671	27.683	27.683
6	2188.6	2218.2	1.904	1.751	0.029	34.613	34.612	0.354	0.007	27.669	27.668	27.681	27.680
5	2149.8	2178.6	1.901	1.751	0.026	34.612	34.612	0.354	0.007	27.669	27.669	27.680	27.680
3	2063.1	2090.3	1.910	1.767	0.033	34.611	34.611	0.384	0.037	27.667	27.667	27.678	27.678
17	2182.3	2211.7	1.912	1.759	0.031	34.612	34.611	0.367	0.020	27.668	27.667	27.680	27.679
24	2062.1	2089.3	1.905	1.763	0.026	34.610	34.609	0.366	0.019	27.667	27.666	27.678	27.677
18	2074.3	2101.7	1.904	1.761	0.028	34.611	34.608	0.365	0.018	27.668	27.665	27.679	27.676
2	2172.5	2201.7	1.902	1.750	0.025	34.612	34.609	0.359	0.012	27.669	27.666	27.680	27.678
13	2056.4	2083.6	1.898	1.756	0.026	34.611	34.611	0.361	0.014	27.668	27.668	27.679	27.679
23	2210.2	2240.2	1.850	1.696	0.004	34.616		0.349	0.002	27.676		27.688	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
21	2.866	181.203	16.35
6	2.868	180.148	33.74
5	2.874	180.567	20.22
3	2.877	181.384	58.81
17	2.901	181.205	37.53
24	2.904	180.848	36.25
18	2.879	180.696	29.59
2	2.873	180.070	24.15
13	2.857	180.577	41.79
23			

D-Theta = (ptemp + (4.6923 * pden)) - 131.6086
Atten-Anom = Atten - 0.3470

VENTS 1992 - LEG I
Station T9207 Cast 24 25 MAY 1992
LAT: 44 41.8N LONG: 130 26.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
22	2072.6	2100.0	1.881	1.738	2.004	34.608	34.608	0.347	0.001	27.667	27.667	27.678	27.678
29	2060.5	2087.6	1.886	1.744	2.007	34.608	34.601	0.350	0.004	27.667	27.661	27.677	27.672
12	2063.9	2091.2	1.885	1.743	2.010	34.609	34.605	0.352	0.006	27.667	27.664	27.678	27.675
26	2118.6	2146.9	1.900	1.753	2.024	34.611	34.608	0.360	0.014	27.668	27.665	27.679	27.677
11	2047.2	2074.1	1.898	1.757	2.023	34.610	34.604	0.365	0.019	27.667	27.662	27.678	27.673
30	2188.7	2218.2	1.903	1.750	2.022	34.611	34.609	0.360	0.014	27.668	27.666	27.679	27.678
19	2057.0	2084.1	1.911	1.769	2.035	34.611	34.608	0.373	0.027	27.667	27.665	27.678	27.676
15	2022.8	2049.3	1.908	1.769	2.035	34.611	34.605	0.385	0.039	27.667	27.662	27.678	27.673
9	2042.4	2069.3	1.909	1.768	2.031	34.610		0.392	0.046	27.666		27.677	
23	2088.1	2115.7	1.868	1.724	2.002	34.610	34.605	0.346	0.000	27.670	27.666	27.681	27.677

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
22	2.902	178.141	10.82
29	2.873	179.249	13.68
12	2.869	178.564	15.98
26	2.861	180.247	27.69
11	2.854	180.579	34.91
30	2.865	180.858	28.61
19	2.866	181.061	40.92
15	2.861	181.110	68.37
9	2.861	180.583	76.50
23	2.897	178.826	9.91

D-Theta = (ptemp + (4.6277 * pden)) - 127.8196
Atten-Anom = Atten - 0.3460

VENTS 1992 - LEG I
Station T9208 Cast 25 25 MAY 1992
LAT: 44 39.3N LONG: 130 21.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2183.3	2212.7	1.902	1.749	0.023	34.612	34.604	0.355	0.008	27.669	27.662	27.680	27.674
2	2019.5	2046.0	1.899	1.760	0.020	34.609	34.607	0.365	0.018	27.666	27.665	27.677	27.675
3	2183.3	2212.8	1.902	1.749	0.023	34.612	34.611	0.355	0.008	27.669	27.668	27.680	27.680
4	2017.6	2044.0	1.899	1.760	0.020	34.609	34.607	0.364	0.017	27.666	27.665	27.677	27.675
5	2189.7	2219.3	1.902	1.749	0.019	34.611		0.356	0.009	27.668		27.680	
6	2039.7	2066.4	1.905	1.765	0.023	34.609	34.606	0.369	0.022	27.666	27.664	27.677	27.674
7	2103.9	2131.9	1.905	1.759	0.022	34.610	34.608	0.364	0.017	27.667	27.665	27.678	27.676
8	2195.8	2225.4	1.909	1.755	0.020	34.610	34.608	0.356	0.009	27.666	27.665	27.678	27.677
9	2091.8	2119.5	1.903	1.758	0.018	34.609	34.607	0.361	0.014	27.666	27.664	27.677	27.676
10	1725.4	1746.7	2.110	1.993	0.005	34.563	34.560	0.344	-0.003	27.613	27.610	27.622	27.620

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.887	180.086	26.04
2	2.897	179.944	39.93
3	2.899	180.347	25.31
4	2.897	179.738	34.43
5			
6	2.885	180.013	43.76
7	2.891	180.409	36.89
8	2.889	180.588	29.71
9	2.893	179.876	32.26
10	3.002	172.430	8.95

D-Theta = (ptemp + (4.5005 * pden)) - 126.3011
Atten-Anom = Atten - 0.3470

VENTS 1992 - LEG I
Station S9208 Cast 26 26 MAY 1992
LAT: 44 39.5N LONG: 130 21.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
9	2184.2	2213.6	1.900	1.747	0.034	34.612		0.356	0.009	27.669		27.680	
30	2152.5	2181.3	1.904	1.754	0.035	34.611		0.362	0.016	27.668		27.679	
23	2127.1	2155.5	1.907	1.759	0.038	34.611		0.366	0.019	27.667		27.679	
19	2100.6	2128.5	1.907	1.761	0.036	34.610		0.369	0.022	27.667		27.678	
29	2074.0	2101.4	1.906	1.763	0.037	34.610		0.372	0.025	27.667		27.678	
12	2049.1	2076.0	1.906	1.765	0.038	34.610		0.377	0.030	27.667		27.678	
26	2023.3	2049.8	1.908	1.769	0.034	34.608		0.378	0.032	27.665		27.676	
11	2001.3	2027.4	1.908	1.771	0.024	34.605		0.357	0.010	27.662		27.673	
22	1931.7	1956.6	1.938	1.806	0.010	34.595		0.346	-5e-04	27.652		27.662	
13	1797.2	1819.7	2.025	1.903	0.010	34.578		0.344	-0.003	27.632		27.641	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
9	2.865	178.260	22.63
30	2.885	178.655	31.98
23	2.863	178.393	39.42
19	2.856	179.105	41.76
29	2.856	178.921	50.00
12	2.867	179.288	52.22
26	2.869	178.910	53.77
11	2.860	178.669	24.42
22	2.888	177.129	12.42
13	2.935	174.180	7.87

D-Theta = (ptemp + (4.60238 * pden)) - 129.10886
Atten-Anom = Atten - 0.3465

VENTS 1992 - LEG I
Station S9207 Cast 27 26 MAY 1992
LAT: 44 40.4N LONG: 130 21.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2196.6	2226.2	1.909	1.755	0.031	34.612	34.608	0.358	0.011	27.668	27.665	27.680	27.677
2	2152.3	2181.2	1.911	1.761	0.031	34.611	34.611	0.363	0.016	27.667	27.667	27.679	27.679
7	2122.5	2150.7	1.907	1.759	0.027	34.610	34.603	0.367	0.020	27.667	27.661	27.678	27.672
24	2095.5	2123.3	1.908	1.763	0.033	34.611	34.608	0.370	0.023	27.667	27.665	27.678	27.676
25	2070.9	2098.2	1.904	1.761	0.028	34.610	34.606	0.367	0.020	27.667	27.664	27.678	27.675
15	2048.5	2075.5	1.902	1.761	0.028	34.610	34.607	0.368	0.021	27.667	27.665	27.678	27.675
16	2023.6	2050.1	1.901	1.762	0.025	34.609	34.604	0.365	0.018	27.666	27.662	27.677	27.673
1	1996.3	2022.3	1.899	1.762	0.021	34.608	34.606	0.364	0.017	27.666	27.664	27.676	27.674
31	1949.8	1975.0	1.917	1.784	0.005	34.600	34.596	0.349	0.002	27.658	27.655	27.668	27.665
18	1799.3	1821.9	2.011	1.889	0.002	34.581	34.579	0.345	-0.002	27.635	27.634	27.645	27.643

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.595	178.260	28.55
2	2.884	178.655	36.90
7	2.863	178.727	40.91
24	2.855	179.102	44.67
25	2.856	178.921	40.89
15	2.867	179.296	37.73
16	2.869	178.910	36.67
1	2.862	178.669	37.68
31	2.888	177.129	19.26
18	2.935	174.180	8.34

D-Theta = (ptemp + (4.66139 * pden)) - 130.75019
Atten-Anom = Atten - 0.347

VENTS 1992 - LEG I
Station S9206 Cast 28 26 MAY 1992
LAT: 44 41.4N LONG: 130 20.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2205.7	2235.5	1.911	1.756	0.025	34.611	34.609	0.355	0.009	27.667	27.665	27.679	27.677
10	2151.0	2179.9	1.907	1.757	0.025	34.611	34.609	0.354	0.008	27.667	27.666	27.679	27.677
17	2101.3	2129.2	1.902	1.756	0.025	34.611	34.607	0.357	0.011	27.668	27.665	27.679	27.676
8	2076.8	2104.2	1.900	1.756	0.021	34.610	34.608	0.357	0.011	27.667	27.665	27.678	27.677
21	2051.7	2078.7	1.896	1.755	0.013	34.608	34.607	0.352	0.006	27.666	27.665	27.677	27.676
3	2001.6	2027.7	1.910	1.773	0.010	34.604	34.602	0.354	0.008	27.662	27.660	27.672	27.670
6	1950.4	1975.6	1.932	1.799	8e-04	34.597	34.596	0.347	0.001	27.654	27.653	27.664	27.664
5	1802.3	1824.9	2.007	1.885	-0.003	34.581	34.580	0.344	-0.002	27.635	27.635	27.645	27.644

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.881	180.686	22.55
10	2.895	180.562	21.24
17	2.883	179.620	28.38
8	2.885	179.498	28.56
21	2.886	179.179	20.14
3	2.896	178.215	24.71
6	2.917	177.071	12.84
5	2.969	175.627	10.82

D-Theta = (ptemp + (4.6125 * pden)) - 129.40038
Atten-Anom = Atten - 0.346

VENTS 1992 - LEG I
Station S9211 Cast 29 27 MAY 1992
LAT: 44 59.2N LONG: 130 14.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2238.9	2269.4	1.907	1.749	16.652	34.614		0.356	0.010	27.670		27.682	
27	2204.0	2233.8	1.906	1.751	16.648	34.613	34.610	0.358	0.012	27.669	27.667	27.681	27.679
10	2177.4	2206.8	1.905	1.753	16.649	34.613	34.611	0.358	0.012	27.669	27.668	27.681	27.679
14	2148.9	2177.8	1.907	1.757	16.652	34.613	34.611	0.361	0.015	27.669	27.667	27.681	27.679
15	2093.4	2121.2	1.898	1.753	16.636	34.610	34.608	0.354	0.008	27.667	27.666	27.678	27.677
18	2047.0	2074.0	1.901	1.760	16.617	34.605	34.607	0.349	0.003	27.663	27.665	27.674	27.675
24	1994.4	2020.5	1.913	1.776	16.613	34.602	34.598	0.348	0.002	27.660	27.656	27.670	27.667
25	1947.4	1972.6	1.941	1.808	16.604	34.596	34.591	0.346	0.000	27.653	27.649	27.663	27.659
2	1797.9	1820.5	2.042	1.920	16.577	34.576	34.572	0.344	-0.002	27.629	27.625	27.638	27.635
31	1747.2	1769.0	2.106	1.987	16.579	34.568	34.564	0.344	-0.002	27.617	27.614	27.627	27.623

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1			
27	2.868	180.771	33.88
10	2.875	180.290	30.30
14	2.868	181.128	33.05
15	2.879	180.065	21.39
18	2.883	179.606	14.71
24	2.878	177.680	14.53
25	2.900	177.273	11.97
2	2.947	167.683	7.80
31	2.957	172.363	9.50

D-Theta = (ptemp + (5.62418 * pden)) - 140.78535
Atten-Anom = Atten - 0.346

VENTS 1992 - LEG I
Station S9212 Cast 30 27 MAY 1992
LAT: 44 57.3N LONG: 130 09.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2334.3	2366.7	1.861	1.695	0.009	34.617	34.615	0.350	0.003	27.676	27.674	27.688	27.687
17	2251.3	2282.0	1.861	1.703	0.014	34.617	34.613	0.349	0.002	27.676	27.673	27.688	27.685
26	2197.8	2227.5	1.862	1.708	0.014	34.616	34.614	0.349	0.002	27.675	27.673	27.687	27.685
16	2176.3	2205.6	1.861	1.709	0.011	34.615	34.614	0.348	0.001	27.674	27.673	27.686	27.685
12	2152.1	2181.0	1.857	1.708	0.006	34.614	34.611	0.347	5e-04	27.674	27.671	27.685	27.683
13	2100.7	2128.6	1.870	1.725	-4e-04	34.609	34.606	0.345	-0.002	27.669	27.666	27.680	27.677
11	2051.1	2078.1	1.892	1.751	0.002	34.605	34.602	0.345	-0.002	27.664	27.661	27.675	27.672
22	2000.0	2026.1	1.907	1.770	5e-04	34.601	34.598	0.345	-0.002	27.659	27.657	27.670	27.667
8	1951.1	1976.4	1.928	1.795	0.002	34.597	34.593	0.344	-0.003	27.654	27.651	27.665	27.662
5	1800.4	1823.1	2.014	1.892	-0.002	34.578	34.577	0.344	-0.003	27.633	27.632	27.642	27.641

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.895	179.643	16.02
17	2.858	179.939	14.55
26	2.856	180.544	16.65
16	2.872	179.967	16.26
12	2.914	180.730	13.36
13	2.903	179.746	9.62
11	2.919	179.485	8.91
22	2.917	179.544	8.81
8	2.959	178.100	8.20
5	2.970	175.960	8.40

D-Theta = (ptemp + (4.49454 * pden)) - 126.13289
Atten-Anom = Atten - 0.3465

VENTS 1992 - LEG I
Station S9203 Cast 31 28 MAY 1992
LAT: 44 58.2N LONG: 130 12.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
21	2237.2	2267.7	1.872	1.715	0.014	34.615	34.614	0.351	0.006	27.673	27.672	27.685	27.685
9	2198.5	2228.2	1.872	1.718	0.013	34.614	34.675	0.351	0.006	27.672	27.721	27.684	27.733
30	2173.0	2202.3	1.876	1.724	0.009	34.612	34.609	0.350	0.005	27.671	27.668	27.682	27.680
23	2151.4	2180.2	1.883	1.733	0.011	34.611	34.608	0.352	0.007	27.669	27.667	27.681	27.678
19	2126.7	2155.2	1.885	1.737	0.007	34.609	34.605	0.351	0.006	27.667	27.664	27.679	27.676
29	2101.9	2129.9	1.887	1.741	0.002	34.607	34.604	0.349	0.004	27.666	27.663	27.677	27.674
13	2051.8	2078.9	1.896	1.755	0.011	34.607	34.603	0.353	0.008	27.665	27.662	27.676	27.673
11	2001.9	2028.1	1.904	1.767	0.004	34.603	34.599	0.348	0.003	27.661	27.658	27.672	27.669
22	1949.1	1974.3	1.923	1.790	0.001	34.598	34.594	0.347	0.002	27.656	27.652	27.666	27.663
8	1800.6	1823.2	2.044	1.922	-8e-04	34.574	34.570	0.346	2e-04	27.627	27.624	27.637	27.633

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
21	2.923	180.080	16.71
9	2.907	179.830	13.59
30	2.903	178.950	12.31
23	2.913	178.730	15.18
19	2.937	178.860	13.92
29	2.920	178.040	10.47
13	2.915	178.222	15.83
11	2.929	173.109	10.59
22	2.944	176.767	10.14
8	3.015	173.892	9.46

D-Theta = (ptemp + (4.5471 * pden)) - 127.5887
Atten-Anom = Atten - (0.3395 + 0.003289*Theta)

VENTS 1992 - LEG I
Station T9209 Cast 32 28 MAY 1992
LAT: 44 58.2N LONG: 130 12.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
10	2176.0	2205.4	1.881	1.729	0.014	34.613	34.618	0.349	0.004	27.671	27.675	27.683	27.687
14	2174.5	2203.8	1.882	1.730	0.008	34.611	34.612	0.349	0.004	27.669	27.670	27.681	27.682
27	2176.8	2206.1	1.894	1.742	0.030	34.615	34.615	0.348	0.003	27.672	27.672	27.683	27.683
17	2175.2	2204.5	1.890	1.738	0.009	34.610	34.611	0.350	0.005	27.668	27.669	27.680	27.680
1	2174.2	2203.5	1.903	1.751	0.025	34.612	34.612	0.352	0.007	27.668	27.668	27.680	27.680
6	2245.3	2275.9	1.890	1.732	0.020	34.614	34.616	0.348	0.003	27.671	27.673	27.683	27.685
24	2202.1	2231.9	1.893	1.739	0.017	34.612	34.607	0.349	0.004	27.669	27.665	27.681	27.677
18	2175.2	2204.5	1.893	1.741	0.015	34.611	34.612	0.350	0.005	27.668	27.669	27.680	27.681
3	2150.4	2179.3	1.899	1.749	0.017	34.610	34.610	0.352	0.007	27.667	27.667	27.679	27.679
15	2101.1	2129.1	1.895	1.749	0.013	34.609	34.610	0.353	0.008	27.667	27.667	27.678	27.679

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
10	2.928	179.522	14.40
14	2.928	179.522	13.73
27	2.928	179.522	16.31
17	2.928	179.522	14.45
1	2.928	179.522	20.15
6	2.932	180.194	14.14
24	2.923	179.606	16.22
18	2.937	179.368	16.09
3	2.943	180.104	18.89
15	2.938	179.098	20.18

D-Theta = (ptemp + (4.4671 * pden)) - 125.3758
Atten-Anom = Atten - 0.3450

VENTS 1992 - LEG I
Station S9201 Cast 33 28 MAY 1992
LAT: 45 02.0N LONG: 130 10.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2252.9	2283.7	1.891	1.732	0.033	34.614	34.616	0.351	0.006	27.671	27.673	27.683	27.685
10	2197.7	2227.5	1.893	1.739	0.029	34.612	34.613	0.353	0.008	27.669	27.670	27.681	27.682
27	2148.3	2177.2	1.895	1.745	0.033	34.612	34.614	0.357	0.011	27.669	27.671	27.681	27.682
15	2124.3	2152.7	1.903	1.755	0.035	34.611	34.612	0.359	0.013	27.668	27.668	27.679	27.680
3	2102.0	2130.0	1.904	1.758	0.033	34.610	34.610	0.364	0.018	27.667	27.667	27.678	27.678
6	2074.0	2101.5	1.906	1.763	0.032	34.609	34.610	0.363	0.017	27.666	27.667	27.677	27.678
18	2055.1	2082.3	1.906	1.764	0.029	34.608	34.609	0.363	0.017	27.665	27.666	27.676	27.677
13	2006.9	2033.1	1.920	1.782	0.008	34.600	34.600	0.346	4e-04	27.658	27.658	27.668	27.668
17	1952.5	1977.8	1.933	1.800	0.003	34.596	34.596	0.344	-0.002	27.653	27.653	27.664	27.664
24	1800.7	1823.4	2.042	1.920	-0.002	34.576	34.578	0.343	-0.003	27.629	27.630	27.638	27.640

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.867	179.317	15.25
10	2.873	179.388	21.26
27	2.868	179.561	27.42
15	2.877	179.160	28.56
3	2.877	179.400	31.81
6	2.887	178.680	32.52
18	2.887	179.820	32.28
13	2.919	177.854	12.87
17	2.915	175.728	13.27
24	2.956	173.025	10.79

D-Theta = (ptemp + (4.94818 * pden)) - 138.68068
Atten-Anom = Atten - (0.3401 + 0.003105*Theta)

VENTS 1992 - LEG I
Station S9202 Cast 34 29 MAY 1992
LAT: 44 59.5N LONG: 130 12.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2229.0	2259.4	1.901	1.744	0.030	34.613		0.353	0.008	27.669		27.681	
29	2201.4	2231.2	1.902	1.747	0.029	34.612	34.613	0.355	0.010	27.669	27.669	27.680	27.681
30	2176.8	2206.2	1.901	1.749	0.026	34.611	34.613	0.356	0.011	27.668	27.669	27.680	27.681
25	2150.5	2179.4	1.901	1.751	0.023	34.610	34.611	0.358	0.013	27.667	27.668	27.679	27.679
12	2124.0	2152.4	1.904	1.756	0.031	34.611	34.615	0.357	0.012	27.668	27.671	27.679	27.682
16	2099.8	2127.7	1.899	1.753	0.021	34.609	34.598	0.355	0.010	27.666	27.658	27.678	27.669
2	2049.3	2076.3	1.903	1.762	0.019	34.607	34.604	0.354	0.009	27.664	27.662	27.675	27.673
22	1999.9	2026.0	1.909	1.772	0.011	34.603	34.578	0.352	0.007	27.661	27.641	27.671	27.651
8	1950.0	1975.2	1.925	1.792	0.002	34.597	34.610	0.344	-8e-04	27.655	27.665	27.665	27.675
11	1801.1	1823.8	2.027	1.905	-1e-04	34.577	34.606	0.344	-0.001	27.631	27.654	27.640	27.664

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19			
29	2.891	178.961	24.09
30	2.884	178.680	26.19
25	2.895	179.233	26.57
12	2.884	180.066	24.47
16	2.891	179.117	22.24
2	2.905	178.361	20.60
22	2.906	177.750	17.10
8	2.921	176.859	8.64
11	2.964	174.014	5.96

D-Theta = (ptemp + (4.63604 * pden)) - 130.0464
Atten-Anom = Atten - (0.3357 + 0.005077*Theta)

VENTS 1992 - LEG I
Station S9258 Cast 35 29 MAY 1992
LAT: 45 57.7N LONG: 130 10.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	1925.5	1950.5	2.000	1.868		34.587	34.587	0.353		27.641	27.641	27.651	27.651
31	1902.5	1927.1	2.031	1.900		34.582	34.582	0.347		27.634	27.634	27.645	27.645
26	1869.7	1893.7	2.061	1.933		34.576	34.577	0.347		27.627	27.628	27.637	27.638
21	1852.3	1876.0	2.069	1.942		34.575	34.576	0.345		27.626	27.627	27.636	27.637
9	1801.4	1824.3	2.096	1.973		34.569	34.570	0.344		27.619	27.620	27.629	27.629
6	1751.3	1773.3	2.126	2.007		34.564	34.566	0.345		27.612	27.614	27.622	27.623
23	1702.6	1723.8	2.179	2.063		34.555	34.557	0.351		27.601	27.602	27.610	27.612
19	1600.8	1620.4	2.270	2.161		34.540	34.541	0.345		27.581	27.582	27.590	27.591
18	1500.4	1518.3	2.359	2.257		34.524	34.525	0.353		27.561	27.562	27.570	27.570
13	1398.6	1414.9	2.509	2.414		34.498	34.498	0.344		27.528	27.528	27.536	27.536
17	1249.1	1263.2	2.769	2.683		34.453	34.454	0.346		27.469	27.470	27.477	27.478
24	1002.0	1012.7	3.210	3.140		34.375	34.376	0.347		27.367	27.368	27.373	27.374

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.963	175.563	
31	2.967	174.946	
26	2.982	173.815	
21	2.985	173.662	
9	3.001	173.556	
6	3.000	171.970	
23	3.028	170.933	
19	3.057	168.987	
18	3.088	165.942	
13	3.130	161.748	
17	3.168	153.585	
24	3.197	139.836	

VENTS 1992 - LEG I
Station S9259 Cast 36 29 MAY 1992
LAT: 46 01.1N LONG: 130 10.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2117.5	2146.0	1.925	1.777		34.601	34.602	0.348		27.658	27.659	27.669	27.670
26	2001.2	2027.5	1.955	1.817		34.595	34.595	0.346		27.651	27.651	27.661	27.661
13	1899.7	1924.2	1.989	1.859		34.588	34.588	0.345		27.642	27.642	27.653	27.653
17	1852.0	1875.7	2.010	1.884		34.584	34.584	0.344		27.638	27.638	27.648	27.648
24	1800.5	1823.3	2.053	1.931		34.576	34.578	0.344		27.628	27.629	27.637	27.639
5	1751.0	1773.0	2.108	1.989		34.566	34.567	0.345		27.615	27.616	27.625	27.626
31	1703.2	1724.4	2.146	2.030		34.560	34.562	0.344		27.608	27.609	27.617	27.618
18	1598.4	1617.9	2.225	2.117		34.546	34.548	0.345		27.590	27.591	27.599	27.600
21	1499.8	1517.7	2.333	2.232		34.528	34.530	0.347		27.567	27.568	27.575	27.577
9	1398.9	1415.2	2.455	2.360		34.506	34.508	0.346		27.539	27.540	27.547	27.548
6	1250.3	1264.5	2.779	2.693		34.450	34.452	0.346		27.466	27.468	27.474	27.475
23	999.9	1010.7	3.203	3.133		34.371	34.372	0.347		27.364	27.365	27.371	27.372

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.914	176.223	
26	2.940	178.014	
13	2.898	176.791	
17	2.940	176.018	
24	2.951	175.044	
5	2.973	174.438	
31	2.984	172.276	
18	3.011	170.257	
21	3.047	167.277	
9	3.071	163.358	
6	3.117	154.075	
23	3.127	140.566	

VENTS 1992 - LEG I
Station S9216 Cast 37 29 MAY 1992
LAT: 45 10.0N LONG: 130 21.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2476.9	2512.2	1.803	1.625	0.006	34.627	34.635	0.345	-1e-04	27.688	27.695	27.702	27.708
26	2302.0	2333.8	1.835	1.673	0.007	34.619	34.621	0.344	-0.001	27.679	27.681	27.692	27.693
13	2203.0	2232.9	1.850	1.696	0.007	34.615	34.616	0.344	-0.001	27.675	27.676	27.687	27.688
17	2175.5	2204.9	1.859	1.707	0.007	34.613	34.614	0.344	-0.001	27.673	27.673	27.684	27.685
24	2150.8	2179.8	1.867	1.717	0.006	34.611	34.612	0.343	-0.002	27.670	27.671	27.682	27.683
5	2125.2	2153.7	1.878	1.731	0.003	34.608	34.609	0.343	-0.002	27.667	27.668	27.679	27.679
31	2102.6	2130.6	1.885	1.739	0.005	34.607	34.608	0.344	-0.001	27.666	27.667	27.677	27.678
18	2049.7	2076.8	1.906	1.765	0.003	34.602	34.603	0.344	-0.001	27.660	27.661	27.671	27.672
21	2004.0	2030.2	1.920	1.782	0.003	34.599	34.600	0.343	-0.002	27.657	27.658	27.667	27.668
9	1950.8	1976.1	1.949	1.815	0.002	34.593	34.594	0.343	-0.002	27.650	27.650	27.660	27.661
6	1805.0	1827.8	2.063	1.940	-9e-04	34.571	34.572	0.343	-0.003	27.623	27.624	27.633	27.634
23	1501.1	1518.9	2.474	2.371	0.092	34.524	34.525	0.344	-0.002	27.552	27.552	27.560	27.561

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.860	181.957	
26	2.879	179.754	
13	2.881	179.777	11.00
17	2.895	179.461	10.82
24	2.895	178.253	10.65
5	2.910	178.874	
31	2.915	179.272	
18	2.919	178.088	
21	2.915	177.443	
9	2.941	176.599	
6	2.984	173.411	
23	3.084	163.076	

D-Theta = (ptemp + (4.66041 * pden)) - 130.7207
Atten-Anom = Atten - (0.3426 + 0.001547*Theta)

VENTS 1992 - LEG I
Station S9217 Cast 38 29 MAY 1992
LAT: 45 09.0N LONG: 130 17.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2459.5	2494.4	1.833	1.656	0.008	34.623	34.623	0.351	0.005	27.683	27.683	27.696	27.696
26	2303.9	2335.8	1.867	1.704	0.013	34.616	34.616	0.350	0.004	27.674	27.674	27.687	27.687
14	2200.5	2230.4	1.878	1.724	0.011	34.612	34.613	0.350	0.004	27.670	27.671	27.682	27.683
10	2175.5	2204.8	1.884	1.732	0.012	34.611	34.611	0.351	0.005	27.669	27.669	27.681	27.681
27	2148.5	2177.4	1.894	1.744	0.017	34.610	34.614	0.354	0.008	27.668	27.671	27.679	27.682
5	2126.2	2154.6	1.895	1.747	0.018	34.610	34.611	0.356	0.010	27.667	27.668	27.679	27.680
31	2100.8	2128.8	1.896	1.750	0.021	34.610	34.610	0.357	0.011	27.667	27.667	27.679	27.679
18	2050.7	2077.7	1.903	1.762	0.017	34.607	34.607	0.356	0.010	27.664	27.664	27.675	27.675
21	2000.2	2026.4	1.910	1.773	0.009	34.603	34.603	0.350	0.004	27.661	27.661	27.671	27.671
9	1950.1	1975.4	1.936	1.803	-0.002	34.595	34.595	0.344	-0.002	27.652	27.652	27.663	27.663
6	1799.2	1821.9	2.048	1.926	0.002	34.575	34.576	0.343	-0.003	27.627	27.628	27.637	27.638
23	1499.0	1516.8	2.390	2.288	0.026	34.521	34.521	0.345	-0.001	27.556	27.556	27.565	27.565

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.880	181.919	
26	2.904	181.137	
14	2.924	179.684	
10	2.932	179.870	
27	2.916	180.291	23.11
5	2.929	181.043	24.22
31	2.934	180.840	25.11
18	2.924	179.977	
21	2.947	179.326	
9	2.959	177.674	
6	3.008	174.505	
23	3.115	165.969	

D-Theta = (ptemp + (4.6757 * pden)) - 131.14669
Atten-Anom = Atten - 0.346

VENTS 1992 - LEG I
Station S9218 Cast 39 29 MAY 1992
LAT: 45 07.5N LONG: 130 11.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2363.6	2396.6	1.858	1.690	0.019	34.619	34.619	0.348	0.002	27.678	27.678	27.690	27.690
26	2302.1	2333.9	1.854	1.691	0.017	34.618	34.618	0.348	0.002	27.677	27.677	27.689	27.689
14	2201.3	2231.1	1.856	1.702	0.008	34.614	34.614	0.347	0.002	27.674	27.674	27.685	27.685
10	2175.5	2204.8	1.859	1.707	0.008	34.613	34.613	0.345	-5e-04	27.673	27.673	27.684	27.684
12	2150.3	2179.2	1.863	1.714	0.004	34.611	34.612	0.344	-0.002	27.671	27.672	27.682	27.683
25	2123.1	2151.5	1.870	1.723	0.003	34.609	34.609	0.344	-0.002	27.669	27.669	27.680	27.680
36	2098.5	2126.5	1.881	1.736	0.004	34.607	34.607	0.344	-0.002	27.666	27.666	27.677	27.677
18	2048.2	2075.2	1.906	1.765	0.011	34.604	34.604	0.349	0.003	27.662	27.662	27.673	27.673
21	2000.9	2027.1	1.920	1.783	0.003	34.599	34.599	0.345	-5e-04	27.657	27.657	27.667	27.667
9	1950.2	1975.5	1.937	1.804	0.002	34.595	34.595	0.344	-0.002	27.652	27.652	27.663	27.663
6	1801.6	1824.3	2.029	1.907	-0.005	34.576	34.576	0.343	-0.003	27.630	27.630	27.639	27.639
23	1500.6	1518.4	2.411	2.309	0.074	34.531	34.531	0.344	-0.002	27.562	27.562	27.571	27.571

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.894	180.296	
26	2.889	180.328	
14	2.889	179.972	
10	2.899	179.299	
12	2.910	179.014	16.78
25	2.917	178.014	12.36
36	2.922	177.237	11.78
18	2.927	177.479	
21	2.939	176.457	
9	2.948	176.629	
6	2.972	174.096	
23	3.093	164.504	

D-Theta = (ptemp + (4.72152 * pden)) - 132.4112
Atten-Anom = Atten - 0.3455

VENTS 1992 - LEG I
Station S9219 Cast 40 30 MAY 1992
LAT: 45 06.2N LONG: 130 05.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2402.8	2436.5	1.823	1.652	0.001	34.621	34.620	0.350	0.005	27.682	27.681	27.695	27.694
26	2299.4	2331.2	1.835	1.673	3e-05	34.617	34.617	0.344	-0.001	27.678	27.678	27.690	27.690
14	2203.9	2233.8	1.853	1.699	0.002	34.613	34.613	0.344	-0.001	27.673	27.673	27.685	27.685
10	2172.5	2201.8	1.859	1.708	0.004	34.612	34.611	0.344	-0.001	27.672	27.671	27.683	27.683
13	2150.1	2179.0	1.866	1.717	0.006	34.611	34.610	0.344	-0.001	27.671	27.670	27.682	27.681
17	2126.0	2154.4	1.876	1.729	-7e-04	34.607	34.606	0.343	-0.002	27.667	27.666	27.678	27.677
24	2101.6	2129.6	1.887	1.741	4e-04	34.605	34.605	0.344	-0.001	27.664	27.664	27.675	27.675
18	2051.2	2078.2	1.907	1.766	0.001	34.601	34.601	0.343	-0.002	27.659	27.659	27.670	27.670
21	2000.4	2026.6	1.921	1.784	-0.002	34.597	34.597	0.343	-0.002	27.655	27.655	27.666	27.666
9	1950.2	1975.4	1.934	1.801	-0.002	34.594	34.595	0.343	-0.002	27.652	27.652	27.662	27.663
6	1800.6	1823.2	2.028	1.906	-6e-04	34.576	34.575	0.343	-0.002	27.630	27.629	27.639	27.639
23	1502.0	1519.8	2.384	2.282	0.015	34.516	34.516	0.344	-0.001	27.553	27.553	27.561	27.561

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.855	180.354	
26	2.880	179.313	
14	2.896	179.071	
10	2.883	178.984	
13	2.882	179.183	10.48
17	2.879	178.405	10.56
24	2.896	178.568	11.80
18	2.908	178.302	
21	2.908	177.059	
9	2.931	177.020	
6	2.970	174.931	
23	3.088	166.162	

D-Theta = (ptemp + (4.6115 * pden)) - 129.36559
Atten-Anom = Atten - 0.345

VENTS 1992 - LEG I
Station S9220 Cast 41 30 MAY 1992
LAT: 45 05.0N LONG: 130 00.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2576.1	2613.3	1.814	1.627	-8e-05	34.625	34.626	0.348	0.003	27.686	27.687	27.700	27.701
26	2302.1	2333.8	1.828	1.666	-1e-04	34.618	34.619	0.343	-0.002	27.679	27.680	27.691	27.692
14	2203.4	2233.3	1.845	1.691	0.002	34.614	34.615	0.343	-0.002	27.675	27.675	27.686	27.687
10	2172.8	2202.1	1.850	1.699	0.003	34.613	34.613	0.343	-0.002	27.673	27.673	27.685	27.685
3	2150.8	2179.7	1.860	1.711	4e-07	34.610	34.611	0.343	-0.002	27.670	27.671	27.682	27.682
31	2124.6	2153.0	1.874	1.727	0.003	34.608	34.608	0.343	-0.002	27.668	27.668	27.679	27.679
5	2100.6	2128.6	1.892	1.746	0.005	34.605	34.606	0.343	-0.002	27.664	27.665	27.675	27.676
18	2049.6	2076.7	1.916	1.774	0.005	34.600	34.607	0.346	0.001	27.658	27.663	27.669	27.674
21	2004.5	2030.8	1.937	1.799	0.003	34.595	34.596	0.342	-0.003	27.652	27.653	27.663	27.664
9	1948.5	1973.7	1.959	1.825	0.002	34.590	34.591	0.342	-0.003	27.646	27.647	27.657	27.658
6	1801.2	1823.9	2.068	1.945	-0.001	34.568	34.570	0.343	-0.002	27.620	27.622	27.630	27.632
23	1504.2	1522.1	2.415	2.312	0.018	34.510	34.512	0.344	-0.001	27.545	27.547	27.554	27.555

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.906	182.779	
26	2.922	180.725	
14	2.936	179.747	
10	2.928	178.685	
3	2.929	178.867	9.07
31	2.917	178.172	9.30
5	2.930	176.469	9.66
18	2.954	175.869	
21	2.953	175.149	
9	2.963	174.157	
6	3.028	171.159	
23	3.115	162.389	

D-Theta = (ptemp + (4.5665 * pden)) - 128.11869
Atten-Anom = Atten - 0.345

VENTS 1992 - LEG I
Station S9221 Cast 42 30 MAY 1992
LAT: 45 04.0N LONG: 129 54.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2723.4	2763.8	1.783	1.583	0.022	34.635	34.636	0.350	0.007	27.696	27.697	27.711	27.712
26	2299.8	2331.5	1.805	1.643	0.007	34.621	34.622	0.342	-0.002	27.683	27.684	27.695	27.696
14	2197.7	2227.5	1.829	1.676	0.008	34.616	34.616	0.342	-0.002	27.677	27.677	27.689	27.689
10	2174.2	2203.5	1.838	1.687	0.008	34.614	34.614	0.342	-0.002	27.675	27.675	27.687	27.687
12	2151.0	2179.9	1.854	1.705	0.007	34.611	34.611	0.342	-0.002	27.671	27.671	27.683	27.683
25	2125.4	2153.8	1.867	1.720	0.005	34.608	34.609	0.342	-0.002	27.668	27.669	27.679	27.680
30	2102.2	2130.2	1.876	1.731	0.004	34.606	34.607	0.341	-0.003	27.666	27.667	27.677	27.678
18	2047.3	2074.3	1.905	1.764	0.002	34.600	34.601	0.342	-0.002	27.659	27.659	27.670	27.670
21	2001.7	2027.9	1.931	1.793	0.002	34.595	34.596	0.343	-0.001	27.653	27.653	27.663	27.664
9	1953.3	1978.6	1.956	1.822	4e-04	34.590	34.591	0.342	-0.003	27.647	27.647	27.657	27.658
6	1801.9	1824.6	2.065	1.942	-0.002	34.570	34.570	0.342	-0.003	27.622	27.622	27.632	27.632
23	1501.4	1519.2	2.454	2.351	0.043	34.517	34.518	0.344	-0.003	27.548	27.548	27.556	27.557

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.858	185.925	
26	2.889	181.305	
14	2.917	180.767	
10	2.919	180.170	
12	2.930	179.947	7.45
25	2.932	179.467	7.86
30	2.913	179.314	8.11
18	2.935	177.945	
21	2.948	177.324	
9	2.967	177.229	
6	3.005	174.515	
23	3.099	164.795	

D-Theta = (ptemp + (4.8241 * pden)) - 135.2423
Atten-Anom = Atten - (0.3366 + 0.00435*Theta)

VENTS 1992 - LEG I
Station S9224 Cast 43 30 MAY 1992
LAT: 44 41.0N LONG: 130 04.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2866.6	2909.9	1.778	1.564		34.639	34.639	0.350		27.700	27.700	27.716	27.716
26	2299.1	2330.7	1.812	1.650		34.622	34.620	0.343		27.684	27.682	27.696	27.694
14	2201.6	2231.4	1.836	1.683		34.616	34.614	0.342		27.677	27.675	27.689	27.687
10	2174.6	2203.8	1.842	1.691		34.614	34.614	0.342		27.675	27.675	27.686	27.686
13	2149.6	2178.4	1.851	1.702		34.612	34.611	0.342		27.673	27.672	27.684	27.683
17	2125.7	2154.0	1.864	1.717		34.610	34.610	0.342		27.670	27.670	27.681	27.681
24	2101.4	2129.4	1.875	1.730		34.607	34.607	0.342		27.667	27.667	27.678	27.678
18	2050.8	2077.8	1.892	1.751		34.603	34.603	0.342		27.662	27.662	27.673	27.673
21	2000.8	2026.9	1.916	1.779		34.599	34.598	0.342		27.657	27.656	27.668	27.667
9	1950.6	1975.8	1.938	1.805		34.594	34.594	0.342		27.651	27.651	27.662	27.662
6	1800.9	1823.6	2.053	1.931		34.574	34.574	0.342		27.626	27.626	27.636	27.636
23	1500.5	1518.2	2.387	2.285		34.519	34.518	0.344		27.555	27.554	27.563	27.563

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.891	186.508	
26	2.886	181.758	
14	2.932	181.026	
10	2.939	180.701	8.62
13	2.950	180.236	8.51
17	2.955	180.084	8.23
24	2.960	180.165	
18	2.955	179.619	
21	2.972	178.771	
9	2.981	178.340	
6	3.027	175.053	
23	3.126	166.191	

VENTS 1992 - LEG I
Station S9225 Cast 44 30 MAY 1992
LAT: 44 42.6N LONG: 130 10.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2609.0	2646.8	1.799	1.609	0.010	34.630	34.630	0.349	0.005	27.691	27.691	27.705	27.705
26	2304.1	2335.8	1.803	1.641	9e-04	34.622	34.622	0.343	-0.001	27.684	27.684	27.696	27.696
14	2200.2	2230.0	1.828	1.675	3e-04	34.616	34.616	0.343	-0.001	27.677	27.677	27.689	27.689
31	2172.7	2201.9	1.841	1.690	0.003	34.614	34.614	0.343	-0.001	27.675	27.675	27.686	27.686
5	2151.2	2180.0	1.847	1.698	2e-04	34.612	34.612	0.342	-0.002	27.673	27.673	27.684	27.684
3	2123.5	2151.8	1.857	1.710	6e-04	34.610	34.610	0.343	-0.001	27.670	27.670	27.682	27.682
24	2101.8	2129.8	1.869	1.724	0.002	34.608	34.608	0.343	-0.002	27.668	27.668	27.679	27.679
18	2051.5	2078.5	1.890	1.749	-6e-04	34.603	34.604	0.343	-0.002	27.662	27.663	27.673	27.674
21	2002.9	2029.1	1.908	1.771	0.002	34.600	34.601	0.343	-0.002	27.658	27.659	27.669	27.670
9	1912.2	1936.8	1.969	1.838	6e-04	34.588	34.589	0.343	-0.002	27.644	27.645	27.654	27.655
6	1797.5	1820.1	2.048	1.926	0.004	34.574	34.574	0.343	-0.002	27.627	27.627	27.636	27.636
23	1503.0	1520.8	2.367	2.265	0.017	34.521	34.522	0.344	-0.003	27.558	27.559	27.567	27.567

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.907	184.350	
26	2.913	181.738	
14	2.919	180.495	
31	2.913	180.043	9.37
5	2.909	179.613	8.28
3	2.932	179.474	9.65
24	2.925	179.196	
18	2.941	178.813	
21	2.948	178.140	
9	2.963	176.793	
6	2.988	174.564	
23	3.093	166.308	

D-Theta = (ptemp + (4.6817 * pden)) - 131.3066
Atten-Anom = Atten - (0.3374 + 0.00412*Theta)

VENTS 1992 - LEG I
Station S9226 Cast 45 30 MAY 1992
LAT: 44 43.3N LONG: 130 13.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2543.6	2580.1	1.806	1.622	0.008	34.626	34.627	0.349	0.006	27.687	27.688	27.701	27.702
26	2298.8	2330.5	1.816	1.654	0.002	34.619	34.620	0.343	-2e-04	27.681	27.682	27.693	27.694
14	2200.1	2229.8	1.838	1.685	0.002	34.614	34.616	0.342	-0.001	27.675	27.677	27.687	27.688
12	2175.1	2204.3	1.846	1.695	0.005	34.613	34.614	0.342	-0.001	27.674	27.674	27.685	27.686
25	2148.7	2177.5	1.853	1.704	0.003	34.611	34.612	0.342	-0.002	27.672	27.672	27.683	27.684
30	2122.8	2151.1	1.861	1.714	0.002	34.609	34.610	0.342	-0.002	27.669	27.670	27.681	27.681
24	2099.7	2127.6	1.868	1.723	-5e-05	34.607	34.609	0.342	-0.002	27.667	27.669	27.678	27.680
18	2052.9	2079.9	1.893	1.752	0.003	34.603	34.604	0.342	-0.002	27.662	27.663	27.673	27.674
21	2002.4	2028.5	1.913	1.776	-0.001	34.598	34.600	0.342	-0.002	27.656	27.658	27.667	27.669
9	1950.5	1975.7	1.938	1.805	-0.002	34.593	34.595	0.342	-0.002	27.651	27.652	27.661	27.662
6	1800.2	1822.8	2.050	1.928	0.002	34.574	34.576	0.342	-0.003	27.626	27.628	27.636	27.638
23	1500.6	1518.4	2.410	2.308	0.048	34.525	34.527	0.343	-0.004	27.558	27.559	27.566	27.568

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.871	182.865	
26	2.883	180.435	
14	2.912	180.145	
12	2.909	179.809	12.45
25	2.931	179.717	16.44
30	2.900	179.543	8.56
24	2.920	179.614	
18	2.926	178.883	
21	2.915	178.512	
9	2.943	177.699	
6	2.988	175.189	
23	3.079	165.503	

D-Theta = (ptemp + (4.7941 * pden)) - 134.4154
Atten-Anom = Atten - (0.3325 + 0.00648*Theta)

VENTS 1992 - LEG I
Station S9227 Cast 46 30 MAY 1992
LAT: 44 44.0N LONG: 130 16.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2246.8	2277.5	1.849	1.691	0.006	34.616	34.609	0.348	0.005	27.676	27.670	27.688	27.682
26	2226.7	2257.0	1.851	1.695	0.009	34.616	34.608	0.348	0.005	27.676	27.669	27.688	27.681
14	2201.3	2231.1	1.858	1.704	0.015	34.616	34.607	0.348	0.004	27.675	27.668	27.687	27.680
10	2175.2	2204.5	1.861	1.709	0.011	34.614	34.606	0.347	0.003	27.673	27.667	27.685	27.678
13	2150.7	2179.6	1.860	1.711	0.008	34.613	34.605	0.344	4e-04	27.673	27.666	27.684	27.678
17	2125.8	2154.2	1.860	1.713	0.006	34.612	34.604	0.343	-6e-04	27.672	27.665	27.683	27.677
24	2100.6	2128.5	1.868	1.723	0.005	34.610	34.602	0.344	3e-04	27.670	27.663	27.681	27.674
18	2049.2	2076.1	1.887	1.746	0.002	34.605	34.597	0.343	-8e-04	27.664	27.658	27.675	27.669
21	1999.2	2025.2	1.907	1.770	-6e-04	34.600	34.592	0.343	-1e-03	27.659	27.652	27.669	27.663
9	1951.4	1976.6	1.928	1.795	-0.003	34.595	34.588	0.342	-0.002	27.653	27.647	27.663	27.658
6	1799.6	1822.2	2.017	1.895	3e-04	34.578	34.570	0.342	-0.003	27.632	27.626	27.642	27.635
23	1499.0	1516.7	2.427	2.325	0.094	34.529	34.523	0.343	-0.005	27.560	27.555	27.568	27.563

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.904	182.159	
26	2.893	181.842	
14	2.900	181.913	
10	2.909	181.667	
13	2.907	181.432	
17	2.910	180.472	11.16
24	2.905	180.495	13.00
18	2.923	179.277	8.88
21	2.933	178.832	
9	2.947	178.317	
6	2.979	175.974	
23	3.085	165.388	

D-Theta = (ptemp + (4.5563 * pden)) - 127.8393
Atten-Anom = Atten - (0.3325 + 0.00648*Theta)

VENTS 1992 - LEG I
Station S9228 Cast 47 31 MAY 1992
LAT: 44 45.0N LONG: 130 19.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2213.7	2243.7	1.893	1.738	0.020	34.612	34.605	0.348	0.004	27.669	27.664	27.681	27.676
26	2197.7	2227.4	1.892	1.738	0.020	34.612	34.604	0.348	0.004	27.669	27.663	27.681	27.675
14	2173.8	2203.1	1.891	1.739	0.014	34.610	34.604	0.349	0.005	27.668	27.663	27.679	27.675
10	2151.2	2180.1	1.889	1.739	0.021	34.612	34.603	0.350	0.006	27.670	27.662	27.681	27.674
13	2125.3	2153.6	1.896	1.748	0.020	34.610	34.602	0.354	0.010	27.667	27.661	27.679	27.672
11	2102.3	2130.2	1.895	1.749	0.020	34.610	34.602	0.355	0.011	27.667	27.661	27.679	27.672
3	2075.1	2102.6	1.899	1.756	0.021	34.609	34.600	0.356	0.012	27.666	27.659	27.677	27.670
5	2051.6	2078.6	1.900	1.759	0.019	34.608	34.600	0.357	0.013	27.665	27.659	27.676	27.670
21	2000.5	2026.6	1.906	1.769	0.011	34.604	34.596	0.351	0.007	27.662	27.655	27.672	27.666
9	1949.7	1974.9	1.915	1.782	0.005	34.600	34.592	0.346	0.002	27.658	27.652	27.668	27.662
6	1798.5	1821.1	2.025	1.903	0.002	34.578	34.569	0.342	-0.003	27.632	27.624	27.641	27.634
23	1500.5	1518.3	2.395	2.293	0.060	34.527	34.519	0.343	-0.003	27.561	27.554	27.569	27.563

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.909	180.140	
26	2.918	180.200	
14	2.902	180.319	
10	2.893	180.332	
13	2.912	180.310	
11	2.903	180.217	25.41
3	2.901	179.808	27.52
5	2.912	180.032	26.58
21	2.916	179.399	
9	2.916	178.684	
6	2.980	175.410	
23	3.071	166.137	

D-Theta = (ptemp + (4.6014 * pden)) - 129.0897
Atten-Anom = Atten - (0.3394 + 0.00286*Theta)

VENTS 1992 - LEG I
Station S9229 Cast 48 31 MAY 1992
LAT: 44 45.7N LONG: 130 21.8W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2298.3	2329.9	1.848	1.686	0.007	34.617	34.608	0.346	0.002	27.677	27.670	27.689	27.682
26	2276.7	2308.0	1.847	1.687	0.008	34.617	34.607	0.346	0.002	27.677	27.669	27.689	27.681
14	2199.8	2229.6	1.857	1.703	0.007	34.614	34.606	0.346	0.002	27.674	27.667	27.685	27.679
10	2147.8	2176.6	1.867	1.718	0.009	34.612	34.603	0.346	0.002	27.671	27.664	27.683	27.675
13	2123.8	2152.1	1.873	1.726	0.011	34.611	34.603	0.347	0.003	27.670	27.664	27.681	27.675
12	2095.6	2123.4	1.881	1.736	0.010	34.609	34.601	0.347	0.003	27.668	27.661	27.679	27.672
29	2048.0	2075.0	1.893	1.752	0.001	34.604	34.596	0.344	-4e-04	27.663	27.656	27.674	27.667
1	1998.3	2024.3	1.922	1.785	4e-06	34.598	34.590	0.343	-0.002	27.656	27.649	27.666	27.660
21	1946.0	1971.1	1.945	1.812	-0.001	34.593	34.584	0.343	-0.002	27.650	27.643	27.660	27.653
9	1800.5	1823.2	2.056	1.934	0.009	34.575	34.567	0.343	-0.002	27.627	27.620	27.636	27.630
6	1495.8	1513.5	2.445	2.343	0.066	34.522	34.514	0.344	-0.003	27.552	27.546	27.561	27.555
23	1001.8	1012.4	3.338	3.267	0.101	34.386	34.379	0.347	-0.005	27.364	27.358	27.370	27.365

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.875	182.124	
26	2.878	181.380	
14	2.875	180.613	
10	2.870	180.469	
13	2.872	180.361	13.46
12	2.885	179.882	13.27
29	2.905	178.671	8.43
1	2.913	178.071	
21	2.936	177.136	
9	2.974	174.534	
6	3.086	163.789	
23	3.160	137.562	

D-Theta = (ptemp + (4.6649 * pden)) - 130.8456
Atten-Anom = Atten - (0.3356 + 0.00501*Theta)

VENTS 1992 - LEG I
Station S9230 Cast 49 31 MAY 1992
LAT: 44 46.9N LONG: 130 27.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2601.2	2638.9	1.800	1.611	0.024	34.629	34.620	0.343	-6e-04	27.690	27.683	27.704	27.697
26	2302.7	2334.4	1.828	1.666	0.016	34.619	34.610	0.343	-8e-04	27.680	27.673	27.692	27.685
14	2201.1	2230.9	1.843	1.689	0.018	34.616	34.607	0.343	-9e-04	27.676	27.669	27.688	27.681
10	2175.7	2205.0	1.850	1.699	0.020	34.615	34.605	0.343	-1e-03	27.675	27.667	27.687	27.679
25	2149.6	2178.4	1.854	1.705	0.019	34.614	34.605	0.343	-1e-03	27.674	27.667	27.685	27.678
30	2122.4	2150.7	1.857	1.710	0.018	34.613	34.602	0.343	-0.001	27.673	27.664	27.684	27.675
15	2102.6	2130.6	1.862	1.717	0.014	34.611	34.603	0.342	-0.002	27.671	27.664	27.682	27.676
1	2052.8	2079.8	1.871	1.730	0.014	34.609	34.599	0.342	-0.002	27.669	27.661	27.679	27.671
21	2001.3	2027.4	1.896	1.759	0.010	34.604	34.595	0.342	-0.002	27.663	27.655	27.673	27.666
9	1951.2	1976.5	1.921	1.788	0.007	34.599	34.590	0.342	-0.002	27.657	27.649	27.667	27.660
6	1802.4	1825.0	2.060	1.937	5.93e-04	34.576	34.567	0.343	-0.002	27.627	27.620	27.637	27.630
23	1497.8	1515.6	2.491	2.388	0.045	34.524	34.515	0.344	-0.003	27.550	27.543	27.559	27.552

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.831	182.250	
26	2.855	181.764	
14	2.862	181.112	
10	2.871	180.211	
25	2.864	179.891	
30	2.869	179.892	
15	2.869	180.106	10.23
1	2.886	179.525	9.08
21	2.885	178.731	8.80
9	2.913	177.700	
6	2.960	173.384	
23	3.049	162.735	

D-Theta = (ptemp + (5.1989 * pden)) - 145.6184
Atten-Anom = Atten - (0.3374 + 0.00386*Theta)

VENTS 1992 - LEG I
Station S9231 Cast 50 31 MAY 1992
LAT: 44 38.0N LONG: 130 31.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2470.5	2505.5	1.829	1.651		34.623	34.614	0.346	0.003	27.683	27.676	27.696	27.689
26	2297.6	2329.2	1.830	1.668		34.620	34.610	0.343	-3e-04	27.681	27.673	27.693	27.685
14	2201.8	2231.6	1.847	1.693		34.615	34.606	0.343	-5e-04	27.675	27.668	27.687	27.680
10	2175.1	2204.3	1.854	1.703		34.614	34.605	0.343	-5e-04	27.674	27.667	27.685	27.678
25	2149.4	2178.2	1.858	1.709		34.613	34.604	0.343	-5e-04	27.673	27.666	27.684	27.677
30	2125.0	2153.3	1.863	1.716		34.612	34.603	0.343	-6e-04	27.672	27.664	27.683	27.676
18	2100.1	2128.0	1.874	1.729		34.609	34.601	0.342	-0.002	27.668	27.662	27.679	27.673
24	2048.9	2075.8	1.896	1.755		34.606	34.597	0.342	-0.002	27.664	27.657	27.675	27.668
17	2001.6	2027.7	1.910	1.773		34.603	34.594	0.342	-0.002	27.661	27.653	27.671	27.664
9	1950.1	1975.3	1.945	1.812		34.598	34.589	0.342	-0.002	27.654	27.647	27.664	27.657
6	1800.9	1823.5	2.045	1.923		34.580	34.571	0.342	-0.003	27.632	27.624	27.641	27.634
23	1501.3	1519.1	2.451	2.348		34.523	34.514	0.344	-0.003	27.553	27.545	27.561	27.554

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.861	181.014	
26	2.868	180.564	
14	2.889	180.245	
10	2.871	180.067	
25	2.888	180.173	
30	2.892	180.102	
18	2.888	179.226	8.54
24	2.910	178.397	8.60
17	2.918	178.207	9.32
9	2.922	177.686	
6	2.966	174.145	
23	3.079	164.082	

Atten-Anom = Atten - (0.3355 + 0.0047*Theta)

VENTS 1992 - LEG I
Station S9233 Cast 51 31 MAY 1992
LAT: 44 36.0N LONG: 130 23.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2195.3	2225.0	1.893	1.739	0.033	34.613	34.604	0.350	0.005	27.670	27.663	27.682	27.675
26	2179.6	2208.9	1.902	1.749	0.035	34.612	34.603	0.352	0.007	27.669	27.661	27.680	27.673
14	2150.4	2179.2	1.900	1.750	0.036	34.612	34.613	0.352	0.007	27.669	27.670	27.680	27.681
10	2125.0	2153.3	1.898	1.750	0.036	34.612	34.613	0.353	0.008	27.669	27.670	27.680	27.681
25	2101.2	2129.1	1.899	1.753	0.038	34.612	34.612	0.354	0.009	27.669	27.669	27.680	27.680
30	2076.2	2103.6	1.898	1.754	0.035	34.611	34.612	0.357	0.012	27.668	27.669	27.679	27.680
13	2050.8	2077.7	1.896	1.755	0.031	34.610	34.610	0.355	0.010	27.667	27.667	27.678	27.678
12	2027.9	2054.4	1.897	1.758	0.025	34.608	34.609	0.352	0.007	27.666	27.667	27.676	27.677
29	2002.3	2028.4	1.908	1.771	0.014	34.603	34.604	0.347	0.002	27.661	27.662	27.671	27.672
9	1949.8	1974.9	1.930	1.797	0.007	34.597	34.598	0.344	-7e-04	27.654	27.655	27.665	27.665
6	1800.4	1823.0	2.038	1.916	0.004	34.577	34.578	0.342	-0.003	27.630	27.631	27.639	27.640
23	1499.7	1517.4	2.384	2.282	0.008	34.520	34.520	0.344	-0.002	27.556	27.556	27.564	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.857	180.951	
26	2.862	181.064	
14	2.870	181.081	
10	2.864	180.813	
25	2.880	180.854	
30			
13	2.878	180.299	19.62
12			18.67
29	2.893	178.421	14.48
9	2.911	177.735	
6	2.965	174.641	
23	3.061	165.923	

D-Theta = (ptemp + (4.8365 * pden)) - 135.5897
Atten-Anom = Atten - (0.3402 + 0.00251*Theta)

VENTS 1992 - LEG I
Station S9232 Cast 52 31 MAY 1992
LAT: 44 37.0N LONG: 130 26.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2331.0	2363.2	1.853	1.688	0.013	34.617	34.621	0.346	0.001	27.676	27.680	27.689	27.692
26	2296.7	2328.3	1.852	1.690	0.014	34.617	34.618	0.346	0.001	27.676	27.677	27.689	27.690
14	2201.4	2231.1	1.845	1.691	0.011	34.616	34.616	0.345	0.000	27.676	27.676	27.688	27.688
10	2175.3	2204.5	1.850	1.699	0.012	34.615	34.615	0.344	-0.001	27.675	27.675	27.687	27.687
11	2149.5	2178.3	1.854	1.705	0.009	34.613	34.613	0.344	-0.001	27.673	27.673	27.684	27.684
30	2120.8	2149.1	1.861	1.714	0.007	34.611	34.612	0.343	-0.002	27.671	27.672	27.682	27.683
1	2100.3	2128.2	1.866	1.721	0.008	34.610	34.610	0.343	-0.002	27.670	27.670	27.681	27.681
21	2051.6	2078.6	1.885	1.744	0.003	34.605	34.606	0.343	-0.002	27.664	27.665	27.675	27.676
15	2001.6	2027.7	1.906	1.769	0.004	34.601	34.601	0.342	-0.003	27.659	27.659	27.670	27.670
9	1949.3	1974.5	1.933	1.800	0.001	34.595	34.596	0.342	-0.003	27.653	27.653	27.663	27.664
6	1800.3	1822.8	2.026	1.904	-0.001	34.577	34.578	0.342	-0.003	27.631	27.632	27.640	27.641
3	1499.2	1516.9	2.435	2.332	0.067	34.525	34.526	0.344	-0.001	27.556	27.556	27.564	27.565

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.879	181.032	
26	2.870	180.600	
14	2.873	180.497	
10	2.883	180.077	
11	2.870	179.526	
30	2.885	179.552	
1	2.902	179.614	11.54
21	2.880	178.461	10.92
15	2.918	177.909	10.42
9	2.902	177.226	
6	2.955	174.858	
3	3.066	164.400	

D-Theta = (ptemp + (4.7333 * pden)) - 132.735
Atten-Anom = Atten - 0.345

VENTS 1992 - LEG I
Station S9234 Cast 53 31 MAY 1992
LAT: 44 35.1N LONG: 130 20.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2257.3	2288.1	1.847	1.688	0.006	34.619	34.618	0.348	0.005	27.678	27.678	27.690	27.690
26	2195.2	2224.8	1.849	1.696	0.004	34.617	34.616	0.344	9e-04	27.677	27.676	27.688	27.688
14	2161.3	2190.3	1.863	1.713	0.003	34.614	34.613	0.344	7e-04	27.673	27.672	27.685	27.684
10	2149.3	2178.1	1.864	1.715	0.005	34.614	34.612	0.344	7e-04	27.673	27.671	27.685	27.683
11	2128.3	2156.7	1.866	1.718	0.004	34.613	34.612	0.344	7e-04	27.672	27.671	27.683	27.683
30	2110.6	2138.7	1.871	1.725	0.004	34.612	34.610	0.344	7e-04	27.671	27.669	27.682	27.681
17	2075.4	2102.8	1.883	1.740	0.003	34.609	34.606	0.343	-4e-04	27.668	27.665	27.679	27.676
18	2050.2	2077.2	1.897	1.756	-0.002	34.605	34.603	0.342	-0.002	27.663	27.662	27.674	27.673
8	1997.3	2023.3	1.921	1.784	-0.002	34.600	34.598	0.342	-0.002	27.657	27.656	27.668	27.666
9	1947.3	1972.4	1.940	1.807	-0.001	34.596	34.594	0.342	-0.002	27.653	27.651	27.663	27.661
6	1800.9	1823.5	2.024	1.902	0.001	34.580	34.578	0.342	-0.003	27.633	27.632	27.643	27.641
3	1500.8	1518.5	2.421	2.318	0.084	34.531	34.530	0.343	-0.004	27.562	27.561	27.570	27.569

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.881	180.365	
26	2.890	180.272	
14	2.900	180.014	
10	2.903	179.216	
11	2.893	179.298	
30	2.885	178.935	
17	2.886	178.747	9.36
18	2.913	177.304	8.77
8	2.914	177.598	6.30
9	2.920	177.047	
6	2.955	174.807	
3	3.067	166.280	

D-Theta = (ptemp + (4.5902 * pden)) - 128.7873
Atten-Anom = Atten - (0.3317 + 0.00675*Theta)

VENTS 1992 - LEG I
Station S9235 Cast 54 31 MAY 1992
LAT: 44 34.7N LONG: 130 18.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2501.9	2537.5	1.820	1.640	0.005	34.623	34.621	0.348	0.006	27.684	27.682	27.697	27.696
26	2306.9	2338.7	1.825	1.662	0.008	34.620	34.614	0.347	0.005	27.681	27.676	27.693	27.688
14	2201.4	2231.1	1.843	1.689	0.006	34.615	34.609	0.343	6e-04	27.676	27.671	27.687	27.682
10	2176.2	2205.5	1.850	1.699	0.004	34.613	34.607	0.344	0.002	27.673	27.669	27.685	27.680
11	2152.7	2181.5	1.857	1.708	0.002	34.611	34.606	0.343	5e-04	27.671	27.667	27.683	27.679
30	2127.3	2155.7	1.868	1.721	0.003	34.609	34.603	0.343	4e-04	27.669	27.664	27.680	27.675
13	2103.4	2131.3	1.870	1.725	0.005	34.609	34.602	0.343	4e-04	27.669	27.663	27.680	27.674
12	2050.0	2076.9	1.888	1.747	0.004	34.605	34.599	0.343	2e-04	27.664	27.659	27.675	27.670
29	1998.2	2024.3	1.913	1.776	0.004	34.600	34.595	0.342	-0.001	27.658	27.654	27.669	27.665
9	1951.4	1976.6	1.938	1.805	-0.001	34.594	34.588	0.342	-0.001	27.651	27.647	27.662	27.657
6	1798.7	1821.2	2.052	1.930	0.001	34.574	34.568	0.342	-0.002	27.626	27.621	27.636	27.631
3	1501.3	1519.1	2.497	2.394	0.079	34.520	34.514	0.343	-0.005	27.546	27.542	27.555	27.550

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.887	183.537	
26	2.890	180.772	
14	2.908	179.964	
10	2.899	179.823	
11	2.902	179.014	
30	2.921	179.318	
13	2.912	179.458	10.22
12	2.931	178.626	9.86
29	2.943	178.461	8.77
9	2.965	177.547	
6	3.108	162.826	
3	2.992	175.063	

D-Theta = (ptemp + (4.7776 * pden)) - 133.962
Atten-Anom = Atten - (0.329 + 0.00791*Theta)

VENTS 1992 - LEG I
Station S9236 Cast 55 31 MAY 1992
LAT: 44 34.1N LONG: 130 15.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2513.2	2549.1	1.813	1.632	0.013	34.625	34.619	0.347	0.003	27.686	27.681	27.700	27.695
26	2293.5	2325.0	1.819	1.658	0.006	34.619	34.613	0.342	-0.002	27.681	27.676	27.693	27.688
14	2203.4	2233.2	1.845	1.691	0.008	34.614	34.608	0.342	-0.002	27.675	27.670	27.686	27.681
10	2174.5	2203.8	1.853	1.702	0.007	34.612	34.606	0.341	-0.003	27.672	27.668	27.684	27.679
11	2150.2	2179.0	1.857	1.708	0.007	34.611	34.606	0.342	-0.002	27.671	27.667	27.683	27.679
30	2124.0	2152.3	1.862	1.715	0.007	34.610	34.605	0.342	-0.002	27.670	27.666	27.681	27.677
24	2099.6	2127.5	1.879	1.734	0.008	34.607	34.601	0.343	-0.001	27.666	27.662	27.677	27.673
2	2051.2	2078.1	1.900	1.759	0.008	34.603	34.597	0.342	-0.002	27.661	27.657	27.672	27.668
16	2003.0	2029.1	1.914	1.777	-4e-04	34.598	34.593	0.342	-0.002	27.656	27.652	27.667	27.663
9	1951.4	1976.6	1.940	1.807	0.003	34.594	34.588	0.341	-0.003	27.651	27.646	27.661	27.657
6	1799.9	1822.5	2.062	1.939	0.005	34.573	34.567	0.342	-0.002	27.625	27.620	27.634	27.630
3	1501.7	1519.5	2.399	2.297	0.048	34.528	34.523	0.343	-0.001	27.561	27.557	27.570	27.566

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.872	181.777	
26	2.886	180.257	
14	2.902	179.520	
10	2.906	179.169	
11	2.904	179.402	
30	2.902	179.239	10.50
24	2.914	178.852	11.17
2	2.940	177.975	16.02
16	2.940	177.671	
9	2.942	177.144	
6	2.990	174.431	
3	3.086	165.331	

D-Theta = (ptemp + (4.8416 * pden)) - 135.7294
Atten-Anom = Atten - 0.344

VENTS 1992 - LEG I
Station S9237 Cast 56 01 JUNE 1992
LAT: 44 32.6N LONG: 130 10.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
19	2573.6	2610.7	1.795	1.609		34.630	34.624	0.347	0.004	27.691	27.686	27.705	27.700
26	2299.9	2331.5	1.816	1.654		34.622	34.616	0.343	-3e-04	27.683	27.678	27.695	27.691
14	2197.9	2227.6	1.841	1.688		34.616	34.610	0.343	-4e-04	27.676	27.672	27.688	27.683
10	2175.7	2204.9	1.846	1.695		34.614	34.608	0.342	-0.001	27.674	27.670	27.686	27.681
11	2146.5	2175.2	1.856	1.707		34.612	34.606	0.342	-0.001	27.672	27.667	27.683	27.679
8	2128.0	2156.4	1.860	1.713		34.611	34.604	0.342	-0.002	27.671	27.665	27.682	27.677
18	2102.3	2130.2	1.862	1.717		34.609	34.603	0.342	-0.002	27.669	27.664	27.680	27.676
17	2051.5	2078.4	1.884	1.743		34.606	34.600	0.342	-0.002	27.665	27.660	27.676	27.671
16	2000.8	2026.9	1.909	1.772		34.601	34.595	0.342	-0.002	27.659	27.654	27.670	27.665
9	1949.4	1974.6	1.928	1.795		34.596	34.590	0.342	-0.002	27.654	27.649	27.664	27.659
6	1801.3	1823.9	2.036	1.914		34.575	34.569	0.341	-0.003	27.628	27.624	27.638	27.633
3	1496.7	1514.4	2.364	2.262		34.522	34.517	0.343	-0.003	27.559	27.555	27.568	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
19	2.883	184.150	
26	2.897	181.614	
14	2.913	180.134	
10	2.902	180.040	
11	2.917	179.594	
8	2.908	179.465	9.30
18	2.915	178.878	8.22
17	2.935	178.795	8.83
16	2.953	177.985	
9	2.940	177.469	
6	2.987	174.827	
3	3.108	166.478	

Atten-Anom = Atten - (0.336 + 0.00439*Theta)

VENTS 1992 - LEG I
Station S9239 Cast 57 01 JUNE 1992
LAT: 44 26.9N LONG: 130 16.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
26	3318.9	3372.6	1.887	1.625		34.628	34.621	0.343		27.683	27.677	27.702	27.697
19	2800.3	2842.1	1.836	1.627		34.627	34.621	0.343		27.686	27.681	27.701	27.697
14	2501.0	2536.6	1.821	1.641		34.624	34.619	0.343		27.684	27.680	27.698	27.694
10	2199.1	2228.8	1.872	1.718		34.611	34.604	0.342		27.670	27.664	27.682	27.676
11	2149.7	2178.4	1.878	1.728		34.609	34.603	0.342		27.668	27.663	27.679	27.675
29	2100.4	2128.2	1.892	1.746		34.606	34.600	0.342		27.665	27.660	27.676	27.671
12	2052.7	2079.7	1.903	1.761		34.603	34.596	0.342		27.661	27.656	27.672	27.667
13	2004.9	2031.0	1.928	1.790		34.598	34.592	0.342		27.655	27.650	27.666	27.661
16	1952.6	1977.8	1.960	1.826		34.593	34.587	0.341		27.649	27.644	27.659	27.654
9	1792.1	1814.5	2.071	1.949		34.574	34.574	0.342		27.625	27.625	27.634	27.634
6	1501.8	1519.6	2.410	2.308		34.517	34.518	0.343		27.551	27.552	27.560	27.561
3	1001.0	1011.6	3.387	3.315		34.386	34.388	0.345		27.359	27.360	27.366	27.367

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
26	2.886	184.594	
19	2.885	184.342	
14	2.889	181.504	
10	2.911	180.571	
11	2.910	180.246	9.77
29	2.915	179.253	9.31
12	2.914	178.939	8.77
13	2.932	177.873	
16	2.948	177.833	
9	2.982	174.760	
6	3.102	165.416	
3	3.205	136.202	

VENTS 1992 - LEG I
Station S9240 Cast 58 01 JUNE 1992
LAT: 44 23.0N LONG: 130 23.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
26	2360.8	2393.6	1.833	1.665		34.621	34.621	0.343		27.681	27.681	27.694	27.694
30	2311.0	2342.8	1.829	1.666		34.621	34.621	0.343		27.681	27.681	27.694	27.694
14	2199.5	2229.1	1.833	1.680		34.618	34.619	0.343		27.679	27.680	27.690	27.691
10	2174.4	2203.6	1.837	1.686		34.617	34.618	0.343		27.678	27.678	27.689	27.690
19	2150.4	2179.2	1.841	1.692		34.616	34.617	0.343		27.676	27.677	27.688	27.689
24	2125.7	2154.0	1.845	1.698		34.615	34.615	0.342		27.675	27.675	27.687	27.687
2	2099.5	2127.3	1.849	1.704		34.614	34.614	0.343		27.674	27.674	27.685	27.685
13	2045.0	2071.8	1.872	1.732		34.610	34.610	0.342		27.669	27.669	27.680	27.680
16	1997.2	2023.2	1.917	1.780		34.602	34.602	0.342		27.659	27.659	27.670	27.670
15	1943.1	1968.1	1.945	1.812		34.596	34.597	0.342		27.652	27.653	27.663	27.663
6	1798.3	1820.8	2.052	1.930		34.577	34.577	0.342		27.629	27.629	27.638	27.638
3	1499.4	1517.1	2.389	2.287		34.523	34.524	0.343		27.558	27.559	27.566	27.567

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
26	2.884	182.003	
30	2.886	181.400	
14	2.892	181.530	
10	2.891	181.435	
19	2.915	181.187	
24	2.898	180.880	11.92
2	2.903	180.844	9.04
13	2.912	180.040	9.28
16	2.909	178.728	
15	2.939	177.983	
6	2.995	174.956	
3	3.090	166.183	

VENTS 1992 - LEG I
Station S9241 Cast 59 01 JUNE 1992
LAT: 44 30.1N LONG: 130 28.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	2182.9	2212.2	1.848	1.696		34.616	34.616	0.346		27.676	27.676	27.688	27.688
30	2161.8	2190.8	1.847	1.697		34.616	34.615	0.346		27.676	27.675	27.687	27.687
14	2126.4	2154.7	1.849	1.702		34.614	34.613	0.345		27.674	27.673	27.685	27.685
10	2100.6	2128.4	1.849	1.704		34.612	34.585	0.343		27.673	27.651	27.684	27.662
19	2076.2	2103.6	1.864	1.721		34.609	34.608	0.342		27.669	27.668	27.680	27.679
8	2050.1	2077.0	1.883	1.742		34.605	34.605	0.342		27.664	27.664	27.675	27.675
18	2023.6	2050.0	1.895	1.756		34.602	34.602	0.342		27.661	27.661	27.672	27.672
17	1998.8	2024.8	1.897	1.760		34.602	34.602	0.343		27.661	27.661	27.671	27.671
16	1946.7	1971.8	1.925	1.792		34.596	34.596	0.342		27.654	27.654	27.664	27.664
15	1896.6	1920.9	1.961	1.832		34.589	34.595	0.342		27.646	27.650	27.656	27.660
6	1797.4	1819.9	2.047	1.925		34.573	34.573	0.342		27.626	27.626	27.636	27.636
3	1494.9	1512.5	2.478	2.375		34.519	34.518	0.343		27.547	27.546	27.556	27.555

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.914	180.996	
30	2.924	180.724	
14	2.924	180.334	
10	2.921	176.403	
19	2.958	179.212	8.68
8	2.947	179.223	9.11
18	2.960	178.868	8.91
17	2.956	178.655	
16	2.982	177.781	
15	2.985	177.060	
6	3.026	174.792	
3	3.144	163.825	

VENTS 1992 - LEG I
Station S9242 Cast 60 01 JUNE 1992
LAT: 44 26.0N LONG: 130 28.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	2335.4	2367.7	1.832	1.667		34.619	34.618	0.345		27.680	27.679	27.692	27.691
30	2251.4	2282.0	1.829	1.671		34.618	34.618	0.344		27.679	27.679	27.691	27.691
14	2201.3	2231.0	1.836	1.683		34.616	34.616	0.343		27.677	27.677	27.689	27.689
10	2177.0	2206.2	1.836	1.685		34.616	34.615	0.345		27.677	27.676	27.688	27.688
26	2149.3	2178.0	1.851	1.702		34.613	34.612	0.343		27.673	27.673	27.685	27.684
11	2123.3	2151.6	1.858	1.711		34.612	34.611	0.343		27.672	27.671	27.683	27.682
29	2100.7	2128.5	1.870	1.725		34.610	34.610	0.343		27.669	27.669	27.681	27.681
17	2051.9	2078.9	1.907	1.765		34.602	34.602	0.343		27.660	27.660	27.671	27.671
16	1998.3	2024.3	1.937	1.800		34.596	34.596	0.342		27.653	27.653	27.664	27.664
15	1950.5	1975.7	1.958	1.824		34.592	34.592	0.341		27.648	27.648	27.659	27.659
6	1798.1	1820.6	2.082	1.959		34.570	34.569	0.343		27.621	27.620	27.630	27.630
3	1500.5	1518.2	2.466	2.363		34.516	34.517	0.343		27.546	27.547	27.554	27.555

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.875	181.244	
30	2.893	181.208	
14	2.895	180.755	
10	2.895	180.719	
26	2.905	179.721	
11	2.909	179.823	
29	2.910	179.752	9.61
17	2.945	178.916	9.49
16	2.947	177.778	8.15
15	2.960	177.312	
6	3.005	173.766	
3	3.109	163.735	

VENTS 1992 - LEG I
Station S9238 Cast 61 01 JUNE 1992
LAT: 44 20.5N LONG: 130 00.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
26	4832.5	4927.9	2.068	1.624		34.629	34.628	0.343		27.669	27.668	27.703	27.703
30	4500.4	4585.7	2.025	1.624		34.629	34.627	0.342		27.672	27.671	27.703	27.702
14	4003.1	4074.3	1.964	1.624		34.629	34.628	0.342		27.677	27.677	27.703	27.703
10	3500.4	3558.5	1.907	1.625		34.629	34.626	0.343		27.682	27.679	27.703	27.701
5	2800.0	2841.8	1.846	1.637		34.626	34.624	0.344		27.684	27.683	27.700	27.698
11	2497.0	2532.5	1.842	1.662		34.621	34.622	0.343		27.680	27.681	27.694	27.695
25	2201.5	2231.2	1.865	1.711		34.613	34.612	0.343		27.672	27.671	27.684	27.683
24	2098.9	2126.7	1.882	1.737		34.609	34.608	0.342		27.668	27.667	27.679	27.678
2	2000.0	2026.0	1.916	1.779		34.603	34.601	0.343		27.660	27.659	27.671	27.669
15	1800.4	1823.0	2.010	1.888		34.586	34.584	0.343		27.639	27.638	27.649	27.647

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
26	2.836	183.707	
30	2.873	183.534	
14	2.834	183.012	
10	2.852	183.338	
5	2.843	182.028	
11	2.875	181.368	
25	2.876	180.023	16.43
24	2.879	179.386	9.08
2	2.909	178.193	7.76
15	2.922	175.688	

VENTS 1992 - LEG I
Station S9243 Cast 62 01 JUNE 1992
LAT: 44 23.6N LONG: 130 33.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
26	2664.4	2703.3	1.733	1.539		34.638	34.630	0.344		27.702	27.696	27.717	27.710
30	2305.6	2337.3	1.824	1.662		34.622	34.621	0.342		27.683	27.682	27.695	27.694
14	2199.9	2229.5	1.851	1.697		34.617	34.615	0.343		27.677	27.675	27.688	27.687
10	2175.7	2204.9	1.864	1.712		34.614	34.613	0.343		27.673	27.672	27.685	27.684
5	2150.7	2179.5	1.870	1.720		34.613	34.612	0.343		27.672	27.671	27.683	27.682
11	2124.9	2153.2	1.880	1.733		34.611	34.610	0.343		27.669	27.669	27.681	27.680
29	2100.4	2128.2	1.886	1.741		34.609	34.608	0.343		27.667	27.667	27.679	27.678
17	2048.5	2075.3	1.916	1.775		34.605	34.604	0.343		27.662	27.661	27.673	27.672
16	1999.0	2025.0	1.930	1.793		34.602	34.600	0.343		27.658	27.657	27.669	27.667
15	1947.6	1972.7	1.978	1.844		34.595	34.595	0.343		27.649	27.649	27.659	27.659

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
26	2.813	180.119	
30	2.885	179.464	
14	2.885	178.763	
10	2.875	178.424	
5	2.891	178.459	
11	2.892	178.319	7.88
29	2.897	177.606	8.68
17	2.913	178.377	7.29
16	2.918	177.454	
15	2.948	176.180	

VENTS 1992 - LEG I
Station S9244 Cast 63 02 JUNE 1992
LAT: 44 19.0N LONG: 130 37.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
26	2964.6	3010.1	1.643	1.422		34.653	34.651	0.343		27.721	27.720	27.737	27.736
30	2301.5	2333.1	1.836	1.674		34.621	34.620	0.340		27.681	27.680	27.693	27.692
14	2202.3	2232.0	1.864	1.710		34.616	34.613	0.340		27.675	27.672	27.686	27.684
10	2173.0	2202.1	1.869	1.718		34.613	34.612	0.340		27.672	27.671	27.683	27.683
5	2149.5	2178.2	1.877	1.727		34.611	34.610	0.340		27.670	27.669	27.681	27.680
19	2124.0	2152.2	1.888	1.741		34.610	34.610	0.340		27.668	27.668	27.679	27.679
8	2091.5	2119.1	1.901	1.756		34.608	34.606	0.340		27.665	27.664	27.677	27.675
18	2049.4	2076.3	1.923	1.781		34.604	34.601	0.340		27.660	27.658	27.671	27.669
16	1997.3	2023.2	1.938	1.801		34.601		0.341		27.657		27.668	
15	1947.5	1972.6	1.966	1.832		34.597	34.599	0.341		27.652	27.653	27.662	27.664

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
26	2.972	176.209	
30	2.941	177.885	
14	2.922	177.336	
10	2.916	178.567	
5	2.916	179.435	9.12
19	2.901	179.389	9.24
8	2.903	179.730	11.08
18	2.872	179.732	
16	2.874	180.507	
15	2.739	180.860	

VENTS 1992 - LEG I
Station S9245 Cast 64 02 JUNE 1992
LAT: 44 09.3N LONG: 130 49.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
26	3104.5	3153.1	1.596	1.362		34.660	34.660	0.342		27.730	27.730	27.747	27.747
30	2509.4	2545.0	1.762	1.582		34.633	34.633	0.338		27.696	27.696	27.710	27.710
14	2201.9	2231.5	1.857	1.703		34.616	34.618	0.340		27.675	27.677	27.687	27.689
10	2151.2	2179.9	1.867	1.717		34.612	34.615	0.339		27.671	27.674	27.683	27.685
11	2101.1	2128.9	1.893	1.747		34.610	34.605	0.340		27.668	27.664	27.679	27.675
29	2051.2	2078.1	1.921	1.779		34.607	34.601	0.340		27.663	27.658	27.674	27.669
17	2001.3	2027.3	1.948	1.810		34.602	34.601	0.340		27.657	27.656	27.668	27.667
25	1948.1	1973.2	1.974	1.840		34.599	34.596	0.340		27.652	27.650	27.663	27.661
24	1798.8	1821.3	2.095	1.972		34.582		0.340		27.629		27.639	
2	1498.0	1515.7	2.509	2.406		34.526	34.522	0.342		27.550	27.547	27.559	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
26	2.731	180.196	
30	2.851	180.942	
14	2.899	180.093	
10	2.922	179.208	6.83
11	2.936	178.533	8.11
29	2.940	177.521	8.83
17	2.945	176.404	
25	2.930	176.743	
24			
2	3.121	161.926	

VENTS 1992 - LEG I
Station S9246 Cast 65 02 JUNE 1992
LAT: 44 00.3N LONG: 130 59.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
26	3503.5	3561.6	1.538	1.265		34.674	34.671	0.352		27.746	27.743	27.765	27.763
30	2308.0	2339.7	1.823	1.660		34.623	34.618	0.340		27.683	27.679	27.696	27.692
14	2195.3	2224.8	1.854	1.701		34.616	34.613	0.340		27.675	27.673	27.687	27.685
12	2147.5	2176.1	1.869	1.720		34.613	34.610	0.340		27.672	27.670	27.683	27.681
3	2124.6	2152.8	1.879	1.732		34.612	34.613	0.340		27.670	27.671	27.682	27.682
8	2101.4	2129.1	1.892	1.746		34.604	34.610	0.340		27.663	27.668	27.674	27.679
17	2050.9	2077.8	1.921	1.779		34.605	34.606	0.340		27.661	27.662	27.672	27.673
25	1998.1	2024.0	1.944	1.806		34.601	34.599	0.340		27.656	27.655	27.667	27.666
24	1946.5	1971.5	1.982	1.848		34.595	34.596	0.341		27.649	27.649	27.659	27.660
2	1796.5	1818.9	2.107	1.984		34.575	34.576	0.341		27.623	27.623	27.632	27.633
5	1499.8	1517.5	2.525	2.421		34.522	34.523	0.343		27.546	27.546	27.554	27.555
19	497.9	502.5	4.781	4.742		34.030	34.032	0.349		26.931	26.933	26.935	26.937

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
26	2.631	181.352	
30	2.871	180.729	
14	2.876	178.998	
12	2.889	178.849	
3	2.903	178.781	
8	2.910	178.586	
17	2.920	178.056	7.97
25	2.890	176.649	9.13
24	2.959	176.627	7.06
2	2.993	172.311	
5	3.089	161.069	
19	2.862	83.206	

VENTS 1992 - LEG I
Station S9289 Cast 66 02 JUNE 1992
LAT: 44 20.0N LONG: 130 55.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	3209.9	3261.0	1.553	1.310		34.667	34.668	0.343		27.739	27.740	27.757	27.757
29	2303.3	2334.9	1.820	1.658		34.623	34.623	0.340		27.684	27.684	27.696	27.696
15	2201.8	2231.5	1.856	1.702		34.615	34.616	0.340		27.675	27.675	27.686	27.687
10	2173.9	2203.1	1.863	1.712		34.614	34.614	0.340		27.673	27.673	27.685	27.685
13	2150.8	2179.6	1.871	1.721		34.613	34.613	0.340		27.672	27.672	27.683	27.683
9	2125.2	2153.5	1.880	1.733		34.611	34.612	0.340		27.669	27.670	27.681	27.682
16	2100.3	2128.2	1.893	1.747		34.609	34.602	0.340		27.667	27.661	27.678	27.672
22	2049.5	2076.4	1.916	1.775		34.605	34.606	0.342		27.662	27.663	27.673	27.674
18	1999.0	2025.0	1.947	1.809		34.600	34.600	0.340		27.655	27.655	27.666	27.666
6	1948.4	1973.5	1.980	1.846		34.595	34.588	0.340		27.649	27.643	27.659	27.654
21	1799.0	1821.5	2.113	1.990		34.574	34.575	0.342		27.621	27.622	27.631	27.632
11	1498.7	1516.4	2.506	2.403		34.521	34.522	0.343		27.546	27.547	27.555	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.665	179.830	
29	2.854	180.657	
15	2.881	179.995	
10	2.872	179.996	
13	2.881	179.601	
9	2.886	179.218	
16	2.899	178.882	7.50
22	2.907	178.324	8.37
18	2.913	177.511	6.98
6	2.922	176.977	
21	2.982	173.243	
11	3.079	162.919	

VENTS 1992 - LEG I
Station S9251 Cast 67 02 JUNE 1992
LAT: 44 40.2N LONG: 130 50.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2620.8	2658.9	1.710	1.521		34.641	34.641	0.344		27.707	27.707	27.721	27.721
29	2300.0	2331.6	1.816	1.654		34.624	34.624	0.340		27.685	27.685	27.697	27.697
15	2197.8	2227.5	1.840	1.687		34.618	34.618	0.340		27.678	27.678	27.690	27.690
10	2173.1	2202.4	1.852	1.701		34.616	34.616	0.340		27.676	27.676	27.687	27.687
13	2149.1	2177.9	1.859	1.710		34.615	34.614	0.341		27.674	27.673	27.686	27.685
9	2123.9	2152.3	1.867	1.720		34.613	34.613	0.342		27.672	27.672	27.683	27.683
24	2100.3	2128.2	1.879	1.734		34.610	34.610	0.341		27.669	27.669	27.680	27.680
2	2055.0	2082.1	1.910	1.768		34.605	34.605	0.341		27.662	27.662	27.673	27.673
17	2000.5	2026.6	1.925	1.788		34.603	34.603	0.340		27.660	27.660	27.670	27.670
6	1949.8	1975.0	1.952	1.818		34.598	34.598	0.341		27.653	27.653	27.664	27.664
21	1798.6	1821.2	2.080	1.957		34.577	34.578	0.341		27.626	27.627	27.636	27.637
11	1493.4	1511.0	2.475	2.372		34.519	34.519	0.343		27.547	27.547	27.556	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.797	181.092	
29	2.891	181.116	
15	2.862	182.016	
10	2.885	179.909	
13	2.896	179.738	
9	2.882	179.371	
24	2.903	179.084	9.50
2	2.906	178.015	7.73
17	2.922	177.545	5.54
6	2.974	177.052	
21	2.954	173.378	
11	3.089	162.815	

VENTS 1992 - LEG I
Station S9252 Cast 68 02 JUNE 1992
LAT: 44 50.2N LONG: 130 44.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2856.9	2900.1	1.721	1.509		34.643	34.643	0.344		27.707	27.707	27.723	27.723
29	2297.9	2329.6	1.823	1.661		34.621	34.623	0.341		27.682	27.683	27.694	27.696
15	2201.6	2231.4	1.846	1.692		34.616	34.616	0.342		27.676	27.676	27.688	27.688
10	2175.5	2204.9	1.852	1.701		34.615	34.615	0.342		27.675	27.675	27.686	27.686
13	2151.5	2180.4	1.860	1.711		34.613	34.613	0.342		27.673	27.673	27.684	27.684
9	2126.5	2154.9	1.866	1.719		34.611	34.612	0.342		27.671	27.671	27.682	27.683
16	2101.9	2129.8	1.879	1.734		34.609	34.609	0.342		27.668	27.668	27.679	27.679
22	2049.3	2076.3	1.883	1.742		34.608	34.607	0.341		27.667	27.666	27.678	27.677
18	2000.7	2026.9	1.913	1.776		34.602	34.602	0.341		27.660	27.660	27.670	27.670
6	1950.5	1975.7	1.948	1.814		34.596	34.596	0.342		27.652	27.652	27.662	27.662
21	1802.4	1825.0	2.085	1.962		34.575	34.574	0.341		27.624	27.624	27.634	27.633
11	1500.6	1518.3	2.468	2.365		34.526	34.528	0.353		27.554	27.555	27.562	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.827	184.411	
29	2.903	182.725	
15	2.925	181.693	
10	2.922	181.645	
13	2.918	181.289	
9	2.912	180.885	9.11
16	2.922	181.123	7.46
22	2.936	179.817	9.35
18	2.937	178.463	
6	2.949	177.584	
21	2.998	173.987	
11	3.107	163.764	

VENTS 1992 - LEG I
Station S9253 Cast 69 03 JUNE 1992
LAT: 44 59.9N LONG: 130 41.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2825.8	2868.3	1.757	1.547		34.638	34.647	0.347		27.701	27.708	27.716	27.723
29	2306.0	2337.8	1.833	1.670		34.620	34.620	0.342		27.680	27.680	27.693	27.693
15	2199.1	2228.9	1.850	1.697		34.616	34.616	0.341		27.676	27.676	27.687	27.687
10	2172.8	2202.1	1.855	1.704		34.615	34.616	0.342		27.675	27.675	27.686	27.687
13	2148.0	2176.8	1.862	1.713		34.613	34.613	0.341		27.672	27.672	27.684	27.684
17	2122.5	2150.8	1.873	1.726		34.611	34.612	0.342		27.670	27.671	27.681	27.682
2	2097.3	2125.2	1.882	1.737		34.609	34.610	0.342		27.668	27.669	27.679	27.680
24	2050.5	2077.5	1.903	1.762		34.605	34.606	0.341		27.663	27.664	27.674	27.675
18	1998.8	2024.9	1.928	1.791		34.601	34.602	0.342		27.658	27.659	27.668	27.669
6	1948.6	1973.8	1.962	1.828		34.595	34.595	0.342		27.650	27.650	27.661	27.661
21	1798.6	1821.2	2.085	1.962		34.575	34.576	0.342		27.624	27.625	27.634	27.635
11	1499.7	1517.5	2.495	2.392		34.523	34.525	0.344		27.549	27.551	27.558	27.559

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.843	183.225	
29	2.907	181.473	
15	2.918	180.489	
10	2.916	180.274	
13	2.919	179.779	
17	2.932	181.136	7.17
2	2.941	179.290	8.35
24	2.940	178.748	14.58
18	2.949	178.428	
6	2.954	176.989	
21	3.005	173.510	
11	3.114	162.760	

VENTS 1992 - LEG I
Station S9254 Cast 70 03 JUNE 1992
LAT: 45 09.9N LONG: 130 36.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2609.6	2647.5	1.764	1.575		34.635	34.640	0.347		27.698	27.702	27.712	27.716
29	2300.1	2331.9	1.835	1.673		34.619	34.620	0.341		27.679	27.680	27.692	27.692
15	2200.9	2230.8	1.853	1.699		34.615	34.614	0.341		27.675	27.674	27.686	27.686
10	2149.7	2178.6	1.872	1.723		34.612	34.613	0.342		27.671	27.672	27.682	27.683
13	2099.2	2127.2	1.884	1.739		34.609	34.610	0.342		27.668	27.668	27.679	27.679
9	2050.6	2077.7	1.897	1.756		34.605	34.606	0.342		27.663	27.664	27.674	27.675
16	2001.6	2027.8	1.924	1.786		34.601	34.601	0.342		27.658	27.658	27.669	27.669
22	1950.0	1975.3	1.959	1.825		34.595	34.599	0.341		27.650	27.654	27.661	27.664
18	1801.8	1824.5	2.093	1.970		34.574	34.575	0.341		27.623	27.624	27.633	27.634
6	1501.4	1519.2	2.495	2.392		34.523	34.524	0.343		27.549	27.550	27.558	27.558
21	1000.8	1011.5	3.389	3.317		34.393	34.393	0.344		27.364	27.364	27.371	27.371
11	502.4	507.1	4.564	4.526		34.032	34.033	0.348		26.957	26.957	26.961	26.962

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.845	182.577	
29	2.897	181.047	
15	2.912	180.294	
10	2.936	179.784	8.17
13	2.925	179.691	8.65
9	2.943	179.101	8.19
16	2.948	178.301	
22	2.963	176.841	
18	3.003	173.701	
6	3.114	162.541	
21	3.204	136.466	
11	2.921	87.943	

VENTS 1992 - LEG I
Station S9255 Cast 71 03 JUNE 1992
LAT: 45 20.0N LONG: 130 33.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2722.0	2762.4	1.794	1.594		34.632	34.633	0.347		27.693	27.694	27.708	27.709
29	2299.9	2331.7	1.839	1.677		34.618	34.619	0.343		27.678	27.679	27.691	27.691
15	2202.0	2231.9	1.845	1.691		34.616	34.617	0.343		27.676	27.677	27.688	27.689
17	2175.4	2204.8	1.846	1.695		34.616	34.616	0.343		27.676	27.676	27.688	27.688
24	2149.8	2178.8	1.850	1.701		34.615	34.616	0.343		27.675	27.676	27.686	27.687
25	2124.7	2153.1	1.855	1.708		34.613	34.613	0.343		27.673	27.673	27.684	27.684
16	2101.1	2129.2	1.866	1.721		34.610	34.611	0.342		27.670	27.671	27.681	27.682
22	2049.5	2076.6	1.889	1.748		34.605	34.606	0.343		27.664	27.665	27.675	27.676
18	2001.4	2027.6	1.911	1.774		34.601	34.602	0.343		27.659	27.660	27.670	27.670
6	1951.3	1976.6	1.934	1.801		34.596	34.597	0.342		27.653	27.654	27.664	27.664
21	1800.2	1823.0	2.042	1.920		34.581	34.582	0.341		27.633	27.633	27.642	27.643
11	1500.8	1518.6	2.442	2.339		34.528	34.529	0.342		27.557	27.558	27.566	27.567

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.866	182.348	
29	2.902	180.991	
15	2.913	182.361	
17	2.916	180.314	
24	2.921	180.373	
25	2.922	180.386	
16	2.931	179.616	10.21
22	2.935	178.732	8.11
18	2.941	177.618	9.55
6	2.955	176.492	
21	2.981	173.997	
11	3.098	163.585	

VENTS 1992 - LEG I
Station S9256 Cast 72 03 JUNE 1992
LAT: 45 18.0N LONG: 130 17.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2411.4	2445.3	1.850	1.678		34.619	34.622	0.347		27.678	27.681	27.691	27.694
29	2300.3	2332.0	1.850	1.688		34.617	34.618	0.346		27.677	27.677	27.689	27.690
15	2200.7	2230.6	1.863	1.709		34.613	34.615	0.344		27.672	27.674	27.684	27.686
17	2176.3	2205.7	1.866	1.714		34.612	34.616	0.344		27.671	27.675	27.683	27.686
24	2151.9	2180.8	1.868	1.718		34.612	34.612	0.344		27.671	27.671	27.683	27.683
25	2124.3	2152.7	1.875	1.728		34.610	34.610	0.344		27.669	27.669	27.680	27.680
10	2101.6	2129.6	1.883	1.738		34.608	34.608	0.344		27.667	27.667	27.678	27.678
13	2050.2	2077.3	1.900	1.759		34.603	34.604	0.344		27.661	27.662	27.672	27.673
9	2000.8	2027.1	1.928	1.790		34.597	34.598	0.342		27.654	27.655	27.665	27.666
6	1952.6	1977.9	1.951	1.817		34.593	34.594	0.342		27.649	27.650	27.660	27.661
21	1799.6	1822.3	2.070	1.947		34.572	34.573	0.341		27.623	27.624	27.633	27.634
11	1500.9	1518.7	2.390	2.288		34.519	34.520	0.343		27.555	27.555	27.563	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.871	181.541	
29	2.877	181.238	
15	2.881	180.294	
17	2.881	180.471	
24	2.878	180.454	
25	2.894	180.174	
10	2.891	179.769	12.27
13	2.906	178.861	9.75
9	2.924	177.840	8.58
6	2.932	177.116	
21	2.980	174.063	
11	3.081	165.645	

VENTS 1992 - LEG I
Station S9257 Cast 73 03 JUNE 1992
LAT: 45 30.0N LONG: 130 20.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2711.8	2752.0	1.746	1.547		34.636	34.637	0.353		27.700	27.701	27.715	27.715
29	2301.2	2333.1	1.853	1.690		34.617	34.618	0.344		27.676	27.677	27.689	27.690
15	2201.0	2230.9	1.880	1.726		34.611	34.612	0.344		27.669	27.670	27.681	27.682
17	2172.9	2202.3	1.887	1.735		34.610	34.611	0.345		27.668	27.669	27.680	27.681
24	2149.8	2178.8	1.892	1.742		34.609	34.609	0.345		27.667	27.667	27.678	27.678
26	2122.9	2151.3	1.902	1.754		34.606	34.608	0.347		27.664	27.665	27.675	27.677
18	2100.0	2128.0	1.909	1.763		34.604	34.604	0.344		27.662	27.662	27.673	27.673
22	2048.8	2075.9	1.927	1.785		34.600	34.601	0.343		27.657	27.658	27.668	27.669
16	1999.5	2025.8	1.943	1.805		34.596	34.596	0.342		27.653	27.653	27.663	27.663
6	1949.8	1975.1	1.961	1.827		34.592	34.593	0.342		27.648	27.649	27.658	27.659
21	1801.3	1824.1	2.076	1.953		34.569	34.570	0.341		27.620	27.621	27.630	27.631
11	1497.7	1515.5	2.396	2.294		34.516	34.517	0.343		27.552	27.553	27.560	27.561

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.794	180.661	
29	2.868	179.523	
15	2.863	178.685	
17	2.895	177.859	17.19
24	2.907	177.436	13.88
26	2.915	177.035	16.21
18	2.919	177.142	
22	2.928	176.305	
16	2.936	175.883	
6	2.944	175.162	
21	2.977	171.886	
11	3.058	163.730	

VENTS 1992 - LEG I
Station S9270 Cast 74 03 JUNE 1992
LAT: 45 45.0N LONG: 130 39.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
31	2749.2	2790.3	1.731	1.529		34.638	34.639	0.348		27.703	27.703	27.718	27.718
29	2306.4	2338.4	1.849	1.686		34.617	34.618	0.343		27.677	27.677	27.689	27.690
15	2204.9	2234.9	1.870	1.716		34.612	34.613	0.344		27.671	27.672	27.683	27.684
8	2176.3	2205.8	1.874	1.722		34.611	34.612	0.344		27.670	27.671	27.682	27.682
5	2149.9	2178.9	1.878	1.728		34.610	34.612	0.344		27.669	27.670	27.680	27.682
19	2124.8	2153.4	1.885	1.737		34.608	34.610	0.343		27.667	27.668	27.678	27.680
14	2101.8	2129.9	1.889	1.743		34.607	34.609	0.344		27.666	27.667	27.677	27.678
22	2045.8	2072.9	1.909	1.768		34.602	34.608	0.343		27.660	27.665	27.671	27.676
16	1999.4	2025.7	1.930	1.793		34.598	34.605	0.342		27.655	27.661	27.666	27.671
6	1950.7	1976.1	1.959	1.825		34.592	34.600	0.341		27.648	27.654	27.658	27.665
21	1799.8	1822.5	2.056	1.934		34.573	34.593	0.342		27.625	27.641	27.635	27.651
11	1500.1	1518.0	2.429	2.326		34.510	34.514	0.343		27.544	27.547	27.553	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
31	2.805	180.607	
29	2.837	180.596	
15	2.855	178.797	
8	2.872	178.428	
5	2.851	178.232	10.51
19	2.858	178.139	10.50
14	2.855	178.347	11.03
22	2.865	177.897	
16	2.865	177.113	
6	2.892	177.009	
21	2.957	173.687	
11	3.058	164.024	

VENTS 1992 - LEG I
Station S9290 Cast 75 04 JUNE 1992
LAT: 45 57.4N LONG: 130 00.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	1511.6	1529.7	2.377	2.274		34.523	34.527	0.358		27.559	27.562	27.567	27.571
30	1478.3	1495.9	2.375	2.275		34.523	34.523	0.353		27.559	27.559	27.567	27.567
18	1451.8	1469.0	2.386	2.288		34.521	34.523	0.353		27.557	27.558	27.565	27.566
10	1425.7	1442.5	2.409	2.313		34.517	34.518	0.354		27.551	27.552	27.559	27.560
13	1398.0	1414.4	2.447	2.352		34.509	34.510	0.349		27.542	27.543	27.550	27.551
9	1377.2	1393.2	2.456	2.363		34.508	34.508	0.349		27.540	27.540	27.548	27.548
16	1355.5	1371.3	2.516	2.424		34.497	34.500	0.348		27.526	27.529	27.534	27.537
3	1328.5	1343.8	2.537	2.447		34.493	34.494	0.346		27.521	27.522	27.529	27.530
12	606.3	612.2	4.280	4.234		34.150	34.150	0.347		27.081	27.081	27.086	27.086
6	549.7	555.0	4.440	4.398		34.116	34.118	0.348		27.037	27.038	27.041	27.043
22	501.5	506.3	4.666	4.627		34.078	34.077	0.348		26.982	26.981	26.986	26.985
21	449.3	453.6	4.779	4.744		34.027	34.027	0.351		26.929	26.929	26.933	26.933

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	3.074	166.971	
30	3.099	166.974	17.62
18	3.089	166.633	19.56
10	3.074	166.173	20.24
13	3.111	164.693	
9	3.100	163.260	
16	3.128	161.341	
3	3.138	160.633	
12	3.087	101.528	
6	3.066	96.061	
22	2.977	88.695	
21	2.909	82.743	

VENTS 1992 - LEG I
Station S9258 Cast 76 04 JUNE 1992
LAT: 45 57.7N LONG: 130 11.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	1935.1	1960.2	2.036	1.902		34.581	34.582	0.348		27.633	27.634	27.644	27.644
23	1904.9	1929.5	2.059	1.928		34.576	34.578	0.345		27.627	27.629	27.638	27.639
19	1874.6	1898.7	2.063	1.934		34.575	34.576	0.346		27.626	27.627	27.636	27.637
17	1849.7	1873.4	2.063	1.936		34.575	34.576	0.345		27.626	27.627	27.636	27.637
13	1799.8	1822.6	2.104	1.981		34.568	34.569	0.345		27.617	27.618	27.627	27.628
9	1748.3	1770.2	2.154	2.035		34.559	34.560	0.345		27.606	27.607	27.616	27.616
26	1697.0	1718.1	2.181	2.065		34.554	34.555	0.345		27.600	27.601	27.609	27.610
3	1597.3	1616.8	2.278	2.169		34.538	34.538	0.344		27.579	27.579	27.588	27.588
12	1500.3	1518.2	2.398	2.296		34.517	34.518	0.344		27.552	27.553	27.561	27.562
6	1400.9	1417.3	2.520	2.424		34.496	34.497	0.344		27.525	27.526	27.533	27.534
22	1246.0	1260.1	2.745	2.659		34.457	34.459	0.344		27.475	27.476	27.482	27.484
8	994.3	1005.0	3.297	3.227		34.353	34.353	0.345		27.341	27.341	27.348	27.348

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.975	175.741	
23	2.996	175.217	
19	3.011	174.563	
17	2.984	174.323	
13	2.995	172.555	
9	3.008	171.496	
26	3.002	171.196	
3	3.026	168.194	
12	3.070	165.048	
6	3.108	161.082	
22	3.155	154.493	
8	3.178	136.381	

VENTS 1992 - LEG I
Station S9259 Cast 77 04 JUNE 1992
LAT: 46 01.1N LONG: 130 10.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2162.1	2191.4	1.927	1.776		34.601	34.602	0.349		27.658	27.659	27.669	27.670
23	2127.3	2156.0	1.942	1.793		34.598	34.599	0.347		27.654	27.655	27.666	27.667
19	2098.3	2126.4	1.973	1.826		34.592	34.592	0.346		27.647	27.647	27.658	27.658
17	2048.3	2075.4	1.999	1.856		34.588	34.589	0.345		27.642	27.643	27.653	27.654
13	1998.3	2024.6	2.012	1.873		34.585	34.584	0.344		27.638	27.637	27.649	27.648
9	1947.7	1973.1	2.024	1.890		34.582	34.582	0.343		27.635	27.635	27.645	27.645
26	1898.4	1923.0	2.043	1.912		34.578	34.578	0.343		27.630	27.630	27.640	27.640
3	1848.1	1871.7	2.073	1.946		34.573	34.571	0.343		27.624	27.622	27.634	27.632
12	1798.5	1821.3	2.096	1.973		34.568	34.568	0.343		27.618	27.618	27.628	27.628
6	1748.8	1770.8	2.122	2.003		34.564	34.564	0.343		27.613	27.613	27.622	27.622
22	1703.6	1724.8	2.171	2.055		34.556	34.556	0.344		27.602	27.602	27.612	27.612
8	1498.6	1516.5	2.426	2.324		34.512	34.513	0.344		27.546	27.547	27.555	27.555

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.896	178.174	
23	2.899	178.162	
19	2.901	177.845	
17	2.914	176.680	
13	2.938	175.349	
9	2.945	175.326	
26	2.940	176.246	
3	2.956	174.550	
12	2.953	174.469	
6	2.987	172.774	
22	3.004	171.232	
8	3.057	163.920	

VENTS 1992 - LEG I
Station S9260 Cast 78 04 JUNE 1992
LAT: 45 32.0N LONG: 130 46.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2725.3	2765.8	1.723	1.524		34.641	34.641	0.348		27.706	27.706	27.720	27.720
23	2299.3	2331.1	1.844	1.682		34.618	34.618	0.343		27.678	27.678	27.690	27.690
19	2202.2	2232.2	1.862	1.708		34.614	34.614	0.344		27.673	27.673	27.685	27.685
17	2177.2	2206.7	1.866	1.714		34.613	34.613	0.344		27.672	27.672	27.684	27.684
13	2151.0	2180.0	1.875	1.725		34.611	34.611	0.344		27.670	27.670	27.681	27.681
9	2122.6	2151.1	1.881	1.734		34.609	34.610	0.343		27.668	27.669	27.679	27.680
26	2100.2	2128.3	1.890	1.745		34.608	34.608	0.345		27.666	27.666	27.677	27.677
3	2049.0	2076.1	1.904	1.763		34.604	34.604	0.344		27.662	27.662	27.673	27.673
12	2000.7	2027.0	1.920	1.783		34.601	34.601	0.343		27.658	27.658	27.669	27.669
6	1953.2	1978.6	1.941	1.807		34.597	34.600	0.342		27.653	27.656	27.664	27.666
22	1795.0	1817.6	2.068	1.946		34.578	34.578	0.342		27.628	27.628	27.638	27.638
8	1501.5	1519.4	2.462	2.359		34.526	34.527	0.343		27.554	27.555	27.563	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.820	181.712	
23	2.895	180.342	
19	2.887	179.986	
17	2.886	179.223	
13	2.897	179.276	
9	2.893	179.306	
26	2.907	179.103	
3	2.921	178.107	
12	2.940	177.799	
6	2.929	175.802	10.65
22	2.974	173.293	
8	3.074	162.897	

VENTS 1992 - LEG I
Station S9261 Cast 79 04 JUNE 1992
LAT: 45 20.0N LONG: 130 53.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2794.4	2836.4	1.696	1.491		34.645	34.645	0.350		27.711	27.711	27.726	27.726
23	2306.6	2338.6	1.834	1.671		34.620	34.619	0.341		27.680	27.679	27.693	27.692
19	2199.2	2229.1	1.857	1.703		34.615	34.614	0.341		27.674	27.674	27.686	27.685
17	2175.0	2204.4	1.862	1.710		34.614	34.613	0.341		27.673	27.672	27.685	27.684
13	2148.8	2177.7	1.868	1.719		34.612	34.612	0.342		27.671	27.671	27.683	27.683
10	2120.5	2148.9	1.873	1.726		34.611	34.611	0.341		27.670	27.670	27.681	27.681
18	2099.6	2127.7	1.880	1.735		34.610	34.609	0.341		27.669	27.668	27.680	27.679
21	2046.1	2073.2	1.899	1.758		34.606	34.605	0.342		27.664	27.663	27.675	27.674
12	1996.1	2022.2	1.926	1.789		34.601	34.600	0.341		27.658	27.657	27.668	27.668
6	1949.2	1974.4	1.949	1.816		34.596	34.596	0.341		27.652	27.652	27.662	27.662
22	1796.9	1819.6	2.081	1.958		34.575	34.575	0.342		27.625	27.625	27.634	27.634
8	1499.2	1517.1	2.482	2.379		34.520	34.520	0.343		27.548	27.548	27.556	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.770	183.784	
23	2.879	181.131	
19	2.903	180.709	
17	2.909	179.816	
13	2.931	179.820	
10	2.945	179.468	
18	2.942	179.658	8.75
21	2.947	179.330	9.88
12	2.959	178.853	7.41
6	2.973	176.802	
22	3.014	172.727	
8	3.130	162.281	

VENTS 1992 - LEG I
Station S9262 Cast 80 04 JUNE 1992
LAT: 45 08.0N LONG: 131 00.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2759.8	2800.9	1.694	1.492		34.645	34.646	0.349		27.711	27.712	27.726	27.727
23	2289.8	2321.4	1.824	1.663		34.621	34.621	0.342		27.682	27.682	27.694	27.694
19	2202.1	2232.0	1.842	1.688		34.617	34.618	0.341		27.677	27.678	27.689	27.690
17	2183.9	2213.4	1.849	1.697		34.616	34.617	0.341		27.676	27.677	27.687	27.688
13	2150.8	2179.8	1.859	1.710		34.614	34.615	0.341		27.673	27.674	27.685	27.686
10	2124.8	2153.2	1.865	1.718		34.613	34.613	0.341		27.672	27.672	27.683	27.683
3	2099.3	2127.3	1.871	1.726		34.611	34.611	0.341		27.670	27.670	27.681	27.681
26	2049.8	2076.8	1.890	1.749		34.607	34.608	0.342		27.665	27.666	27.676	27.677
9	2000.6	2026.8	1.922	1.785		34.602	34.602	0.342		27.659	27.659	27.670	27.670
6	1948.3	1973.5	1.955	1.822		34.596	34.596	0.342		27.652	27.652	27.662	27.662
22	1799.0	1821.7	2.057	1.935		34.579	34.594	0.343		27.630	27.642	27.640	27.652
8	1501.8	1519.6	2.451	2.348		34.523	34.524	0.344		27.553	27.553	27.561	27.562

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.789	182.703	
23	2.866	181.682	
19	2.876	180.987	
17	2.878	181.302	
13	2.864	180.212	
10	2.786	178.820	12.96
3	2.882	179.914	9.64
26	2.908	179.440	13.80
9	2.902	177.990	
6	2.928	177.273	
22	2.931	176.381	
8	3.033	163.573	

VENTS 1992 - LEG I
Station S9263 Cast 81 05 JUNE 1992
LAT: 44 56.0N LONG: 131 07.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2860.3	2903.6	1.639	1.428		34.652	34.652	0.345		27.721	27.721	27.736	27.736
23	2300.1	2331.8	1.822	1.660		34.621	34.621	0.341		27.682	27.682	27.694	27.694
19	2200.7	2230.5	1.846	1.692		34.616	34.620	0.342		27.676	27.679	27.688	27.691
17	2174.7	2204.0	1.857	1.706		34.614	34.614	0.342		27.674	27.674	27.685	27.685
13	2148.7	2177.5	1.861	1.712		34.613	34.612	0.342		27.673	27.672	27.684	27.683
25	2121.8	2150.1	1.871	1.724		34.611	34.611	0.342		27.670	27.670	27.681	27.681
2	2096.3	2124.1	1.881	1.736		34.609	34.608	0.343		27.668	27.667	27.679	27.678
14	2046.6	2073.6	1.899	1.758		34.605	34.606	0.343		27.663	27.664	27.674	27.675
9	1999.3	2025.4	1.920	1.783		34.601	34.601	0.342		27.658	27.658	27.669	27.669
5	1941.6	1966.7	1.957	1.824		34.595	34.595	0.342		27.651	27.651	27.661	27.661
22	1802.4	1825.1	2.076	1.953		34.577	34.579	0.342		27.627	27.628	27.637	27.638
8	1501.6	1519.4	2.457	2.354		34.527	34.527	0.344		27.555	27.555	27.564	27.564

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.761	179.965	
23	2.881	180.334	
19	2.895	179.583	
17	2.906	178.930	
13	2.894	179.015	
25	2.903	179.412	13.35
2	2.921	179.113	9.75
14	2.909	178.786	9.60
9	2.940	177.890	
5	2.949	176.738	
22	2.976	174.049	
8	3.103	163.684	

VENTS 1992 - LEG I
Station S9264 Cast 82 05 JUNE 1992
LAT: 44 44.1N LONG: 131 13.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	3255.3	3307.6	1.562	1.314		34.666	34.665	0.343		27.738	27.737	27.755	27.755
23	2300.3	2331.9	1.835	1.673		34.619	34.619	0.341		27.679	27.679	27.692	27.692
19	2196.8	2226.5	1.854	1.701		34.615	34.615	0.342		27.675	27.675	27.686	27.686
17	2176.5	2205.8	1.859	1.707		34.614	34.613	0.341		27.673	27.673	27.685	27.684
13	2151.1	2179.9	1.864	1.715		34.612	34.613	0.342		27.671	27.672	27.683	27.684
10	2127.1	2155.5	1.869	1.722		34.611		0.342		27.670		27.682	
3	2098.6	2126.5	1.881	1.736		34.609	34.609	0.342		27.668	27.668	27.679	27.679
26	2050.5	2077.5	1.898	1.757		34.605	34.605	0.342		27.663	27.663	27.674	27.674
9	2002.5	2028.7	1.918	1.780		34.601	34.600	0.342		27.658	27.658	27.669	27.668
15	1951.6	1976.9	1.948	1.814		34.595	34.594	0.342		27.651	27.651	27.662	27.661
22	1802.0	1824.6	2.069	1.946		34.574	34.573	0.342		27.625	27.624	27.635	27.634
8	1500.4	1518.1	2.461	2.358		34.518	34.518	0.344		27.548	27.548	27.556	27.556

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.732	179.428	
23	2.918	180.557	
19	2.937	179.748	
17	2.918	179.548	
13	2.923	178.973	
10	2.916	178.676	62.69
3	2.925	178.683	9.17
26	2.923	178.038	11.22
9	2.939	177.601	
15	2.954	176.664	
22	2.995	173.783	
8	3.110	163.779	

VENTS 1992 - LEG I
Station S9265 Cast 83 05 JUNE 1992
LAT: 44 56.6N LONG: 131 30.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	3401.2	3457.1	1.544	1.281		34.672	34.670	0.352		27.744	27.742	27.763	27.761
23	2300.1	2331.8	1.826	1.664		34.621	34.620	0.341		27.682	27.681	27.694	27.693
19	2201.0	2230.8	1.848	1.694		34.615	34.615	0.342		27.675	27.675	27.687	27.687
17	2174.6	2203.9	1.856	1.705		34.614	34.614	0.342		27.674	27.674	27.685	27.685
13	2148.8	2177.6	1.865	1.716		34.612	34.612	0.343		27.671	27.671	27.683	27.683
2	2136.6	2165.2	1.864	1.716		34.612	34.610	0.342		27.671	27.670	27.683	27.681
25	2098.9	2126.8	1.880	1.735		34.609	34.608	0.343		27.668	27.667	27.679	27.678
14	2050.2	2077.2	1.907	1.766		34.604	34.603	0.342		27.662	27.661	27.673	27.672
21	1999.4	2025.5	1.931	1.794		34.599	34.598	0.342		27.656	27.655	27.666	27.666
15	1949.8	1975.0	1.956	1.822		34.593	34.593	0.342		27.649	27.649	27.659	27.659
22	1800.8	1823.5	2.064	1.941		34.573	34.572	0.342		27.625	27.624	27.634	27.633
8	1499.1	1516.9	2.431	2.329		34.516	34.515	0.345		27.549	27.548	27.557	27.557

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.667	180.620	
23	2.881	180.109	
19	2.903	179.248	
17	2.882	179.249	
13	2.900	178.130	
2	2.908	178.050	
25	2.902	178.199	19.22
14	2.929	177.431	11.46
21	2.940	176.365	10.85
15	2.932	175.541	
22	2.977	172.798	
8	3.085	162.048	

VENTS 1992 - LEG I
Station S9266 Cast 84 05 JUNE 1992
LAT: 45 09.6N LONG: 131 23.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	3175.7	3226.0	1.577	1.337		34.663	34.662	0.350		27.734	27.733	27.751	27.751
23	2298.3	2329.8	1.814	1.652		34.622	34.622	0.342		27.683	27.683	27.696	27.696
19	2198.0	2227.6	1.837	1.684		34.617	34.618	0.342		27.678	27.678	27.689	27.690
16	2175.3	2204.5	1.846	1.695		34.615	34.627	0.342		27.675	27.685	27.687	27.696
13	2152.1	2180.8	1.854	1.705		34.613	34.612	0.342		27.673	27.672	27.684	27.684
2	2125.3	2153.6	1.860	1.713		34.612	34.611	0.342		27.672	27.671	27.683	27.682
31	2102.8	2130.7	1.867	1.722		34.610	34.609	0.342		27.670	27.669	27.681	27.680
10	2045.4	2072.2	1.887	1.746		34.606	34.605	0.343		27.665	27.664	27.676	27.675
3	1998.9	2024.8	1.902	1.765		34.602	34.601	0.343		27.661	27.660	27.671	27.670
15	1950.2	1975.3	1.942	1.809		34.595	34.595	0.343		27.652	27.652	27.662	27.662
22	1791.7	1814.0	2.065	1.943		34.572	34.571	0.343		27.624	27.623	27.633	27.632
8	1500.9	1518.5	2.470	2.367		34.523	34.522	0.345		27.551	27.550	27.560	27.559

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.673	179.311	
23	2.841	180.241	
19	2.850	179.206	
16	2.837	178.642	
13	2.857	178.725	
2	2.860	178.821	
31	2.865	178.272	10.41
10	2.868	179.296	9.67
3	2.876	177.375	14.61
15	2.926	176.531	
22	2.945	173.052	
8	3.054	163.782	

VENTS 1992 - LEG I
Station S9267 Cast 85 05 JUNE 1992
LAT: 45 22.6N LONG: 131 16.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2960.9	3006.5	1.645	1.424		34.652	34.654	0.347		27.720	27.722	27.736	27.738
23	2296.1	2327.8	1.833	1.671		34.620	34.619	0.342		27.680	27.680	27.693	27.692
19	2199.5	2229.4	1.849	1.696		34.615	34.612	0.343		27.675	27.673	27.687	27.684
16	2174.9	2204.3	1.856	1.705		34.614	34.613	0.343		27.674	27.673	27.685	27.684
13	2149.4	2178.4	1.859	1.710		34.613	34.611	0.343		27.673	27.671	27.684	27.682
2	2124.7	2153.2	1.865	1.718		34.612	34.611	0.343		27.671	27.671	27.683	27.682
25	2099.9	2127.9	1.871	1.726		34.609	34.607	0.343		27.669	27.667	27.680	27.678
14	2047.8	2074.9	1.882	1.741		34.606	34.604	0.343		27.665	27.664	27.676	27.674
21	1999.0	2025.1	1.911	1.772		35.142	34.599	0.343		28.093	27.657	28.104	27.668
15	1949.2	1974.5	1.938	1.805		34.597	34.596	0.343		27.654	27.653	27.664	27.663
22	1800.3	1823.1	2.037	1.915		34.580	34.578	0.343		27.632	27.631	27.642	27.640
8	1500.7	1518.5	2.399	2.297		34.528	34.528	0.344		27.561	27.561	27.570	27.570

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.761	179.267	
23	2.889	179.457	
19	2.894	179.846	
16	2.915	177.887	
13	2.910	178.250	
2	2.921	178.293	
25	2.912	178.296	10.55
14	2.930	176.977	9.04
21	2.940	176.259	9.00
15	2.946	176.009	
22	2.989	172.967	
8	3.086	163.393	

VENTS 1992 - LEG I
Station S9268 Cast 86 05 JUNE 1992
LAT: 45 35.5N LONG: 131 12.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2719.0	2759.4	1.726	1.527		34.640	34.638	0.351		27.705	27.703	27.719	27.718
23	2298.1	2329.9	1.834	1.672		34.619	34.618	0.344		27.679	27.679	27.692	27.691
19	2200.6	2230.5	1.858	1.704		34.614	34.614	0.344		27.674	27.674	27.685	27.685
16	2145.5	2174.4	1.869	1.720		34.611	34.611	0.344		27.670	27.670	27.682	27.682
13	2101.1	2129.2	1.883	1.738		34.609	34.608	0.344		27.668	27.667	27.679	27.678
2	2053.4	2080.6	1.905	1.763		34.604	34.604	0.344		27.662	27.662	27.673	27.673
31	2001.8	2028.1	1.927	1.789		34.600	34.600	0.343		27.657	27.657	27.668	27.668
10	1951.0	1976.3	1.961	1.827		34.595	34.594	0.342		27.650	27.650	27.661	27.660
3	2177.0	2206.5	1.864	1.712		34.613	34.612	0.344		27.672	27.671	27.684	27.683
15	2125.4	2153.9	1.877	1.730		34.609	34.608	0.344		27.668	27.667	27.679	27.679
22	1801.1	1823.8	2.061	1.938		34.573	34.572	0.343		27.625	27.624	27.634	27.634
8	1500.5	1518.4	2.402	2.300		34.522	34.522	0.344		27.556	27.556	27.565	27.565

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.806	180.886	
23	2.852	179.512	
19	2.901	178.581	
16	2.885	178.175	12.05
13	2.910	177.983	11.43
2	2.913	176.450	10.04
31	2.931	175.856	
10	2.934	175.397	
3	2.890	178.723	
15	2.902	177.956	
22	2.985	172.385	
8	3.092	163.945	

VENTS 1992 - LEG I
Station S9269 Cast 87 06 JUNE 1992
LAT: 46 04.0N LONG: 130 27.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	541.0	546.2	4.375	4.334		34.145	34.144	0.357		27.067	27.066	27.071	27.070
19	524.7	529.7	4.392	4.352		34.146	34.146	0.356		27.066	27.066	27.070	27.070
14	500.5	505.3	4.604	4.566		34.095	34.095	0.356		27.002	27.002	27.006	27.006
31	473.6	478.1	4.852	4.815		34.039	34.037	0.356		26.930	26.929	26.934	26.933
3	451.8	456.0	4.917	4.881		34.008	34.007	0.360		26.898	26.898	26.902	26.902
22	423.2	427.1	4.895	4.862		33.958	33.957	0.359		26.861	26.860	26.865	26.864

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	3.067	100.074	
19	3.059	99.706	
14	2.991	92.174	
31	2.889	82.758	
3	2.826	79.441	
22	2.716	75.389	

VENTS 1992 - LEG I
Station S9258 Cast 88 06 JUNE 1992
LAT: 45 57.6N LONG: 130 10.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	1921.8	1946.7	2.022	1.890		34.583	34.583	0.348		27.636	27.636	27.646	27.646
23	1892.0	1916.4	2.049	1.919		34.578	34.579	0.346		27.630	27.631	27.640	27.641
19	1874.4	1898.4	2.059	1.930		34.576	34.575	0.346		27.627	27.627	27.637	27.637
13	1850.1	1873.8	2.057	1.930		34.576	34.575	0.345		27.627	27.627	27.637	27.637
14	1801.5	1824.4	2.113	1.990		34.567	34.566	0.345		27.616	27.615	27.626	27.625
16	1748.8	1770.8	2.138	2.019		34.562	34.561	0.345		27.610	27.609	27.619	27.619
9	1701.2	1722.4	2.165	2.049		34.557	34.556	0.345		27.604	27.603	27.613	27.612
6	1600.3	1619.8	2.276	2.167		34.538	34.537	0.344		27.579	27.579	27.588	27.587
3	1500.3	1518.2	2.378	2.276		34.522	34.521	0.344		27.558	27.557	27.566	27.566
2	1399.9	1416.3	2.528	2.432		34.494	34.494	0.345		27.523	27.523	27.531	27.531

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.961	175.248	
23	2.964	174.356	
19	2.966	173.625	
13	2.976	174.003	
14	2.987	172.273	
16	2.995	172.380	
9	2.999	171.203	
6	3.039	167.879	
3	3.046	164.311	
2	3.087	160.635	

VENTS 1992 - LEG I
Station S9259 Cast 89 06 JUNE 1992
LAT: 46 00.9N LONG: 130 10.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	1933.8	1958.9	2.040	1.907		34.580	34.579	0.345		27.632	27.631	27.643	27.642
23	1899.2	1923.7	2.057	1.926		34.576	34.575	0.345		27.627	27.627	27.638	27.637
19	1874.5	1898.6	2.075	1.946		34.573	34.572	0.355		27.624	27.623	27.634	27.633
13	1849.8	1873.5	2.090	1.963		34.570	34.562	0.346		27.620	27.614	27.630	27.624
14	1825.1	1848.4	2.111	1.986		34.567	34.566	0.344		27.616	27.615	27.626	27.625
16	1801.0	1823.8	2.125	2.002		34.564	34.563	0.344		27.612	27.612	27.622	27.621
9	1750.2	1772.2	2.152	2.032		34.560	34.559	0.345		27.607	27.606	27.617	27.616
6	1696.9	1718.0	2.201	2.085		34.552	34.550	0.345		27.597	27.595	27.606	27.604
3	1597.6	1617.1	2.268	2.159		34.540	34.539	0.345		27.582	27.581	27.590	27.590
2	1497.3	1515.2	2.435	2.333		34.510	34.509	0.345		27.544	27.543	27.552	27.551

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.970	174.794	
23	2.974	174.685	
19	2.980	173.645	
13	2.990	173.496	
14	2.979	173.241	
16	2.994	172.519	
9	2.989	171.997	
6	3.019	170.289	
3	3.019	169.632	
2	3.063	163.887	

VENTS 1992 - LEG I
Station S9291 Cast 90 06 JUNE 1992
LAT: 47 23.1N LONG: 129 14.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2618.2	2656.9	1.759	1.569		34.631	34.630	0.351		27.695	27.694	27.709	27.708
23	2300.9	2333.2	1.801	1.639		34.621	34.619	0.344		27.684	27.682	27.696	27.694
19	2200.3	2230.6	1.837	1.684		34.612	34.611	0.344		27.674	27.673	27.685	27.684
13	2174.5	2204.3	1.843	1.692		34.609	34.607	0.343		27.671	27.669	27.682	27.681
14	2149.8	2179.1	1.852	1.703		34.607	34.606	0.343		27.668	27.668	27.680	27.679
16	2124.6	2153.5	1.861	1.714		34.605	34.603	0.344		27.666	27.665	27.677	27.676
9	2099.2	2127.6	1.876	1.731		34.602	34.601	0.343		27.663	27.662	27.674	27.673
6	2050.5	2078.0	1.900	1.759		34.597	34.595	0.343		27.657	27.655	27.668	27.666
3	2000.1	2026.7	1.918	1.781		34.593	34.593	0.343		27.652	27.652	27.663	27.663
2	1746.7	1768.9	2.110	1.991		34.557	34.557	0.344		27.608	27.608	27.617	27.617

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.847	180.076	
23	2.897	179.061	
19	2.942	177.246	
13	2.951	176.817	
14	2.933	176.762	
16	2.962	177.159	
9	2.969	176.543	
6	2.977	176.154	
3	2.988	175.765	10.68
2	3.074	171.701	10.78

VENTS 1992 - LEG I
Station S9292 Cast 91 06 JUNE 1992
LAT: 47 23.0N LONG: 129 08.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
11	2632.0	2671.0	1.727	1.536		34.635	34.634	0.349		27.700	27.700	27.715	27.714
23	2304.8	2337.1	1.791	1.629		34.622	34.621	0.344		27.685	27.684	27.697	27.697
19	2199.9	2230.2	1.834	1.681		34.613	34.612	0.343		27.675	27.674	27.686	27.685
13	2172.9	2202.7	1.855	1.704		34.609	34.610	0.343		27.670	27.671	27.681	27.682
14	2152.0	2181.3	1.866	1.716		34.607	34.606	0.343		27.667	27.667	27.679	27.678
16	2125.2	2154.1	1.873	1.726		34.604	34.604	0.343		27.664	27.664	27.676	27.676
9	2099.4	2127.8	1.880	1.735		34.602	34.602	0.343		27.662	27.662	27.673	27.673
6	2047.4	2074.9	1.896	1.755		34.599	34.598	0.343		27.659	27.658	27.669	27.669
3	1998.9	2025.5	1.907	1.770		34.596	34.595	0.343		27.655	27.655	27.666	27.665
30	1951.1	1976.8	1.927	1.794		34.592	34.591	0.344		27.651	27.650	27.661	27.660
15	1799.6	1822.6	2.057	1.935		34.567	34.566	0.343		27.620	27.619	27.630	27.629
10	1500.4	1518.5	2.440	2.337		34.496	34.495	0.344		27.532	27.531	27.541	27.540

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
11	2.838	180.581	
23	2.889	178.612	
19	2.911	177.907	
13	2.930	177.735	
14	2.928	177.457	
16	2.920	176.606	
9	2.945	175.995	
6	2.949	175.903	
3	2.949	175.890	
30	2.966	175.399	
15	3.017	172.563	
10	3.133	163.245	

VENTS 1992 - LEG I
Station T9210 Cast 92 08 JUNE 1992
LAT: 47 14.5N LONG: 128 03.2W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
15	2655.3	2694.7	1.777	1.583	0.035	34.639	34.641	0.353	0.008	27.700	27.701	27.714	27.716
23	2527.9	2564.7	1.782	1.600	0.016	34.631	34.630	0.344	-8e-04	27.693	27.692	27.707	27.706
19	2410.7	2445.1	1.789	1.618	0.013	34.627	34.626	0.344	-9e-04	27.689	27.688	27.702	27.701
13	2227.6	2258.4	1.810	1.655	0.004	34.618	34.617	0.344	-0.001	27.680	27.680	27.692	27.691
14	2186.6	2216.6	1.847	1.695	0.004	34.611	34.610	0.344	-0.001	27.672	27.671	27.684	27.683
16	2222.1	2252.8	1.816	1.661	0.004	34.617	34.616	0.344	-0.001	27.679	27.678	27.691	27.690
9	2174.4	2204.1	1.825	1.674	0.001	34.614	34.613	0.344	-0.001	27.676	27.675	27.688	27.687
6	2267.7	2299.2	1.800	1.641	0.006	34.621	34.621	0.344	-0.001	27.684	27.684	27.696	27.696
3	2513.3	2549.8	1.785	1.604	0.015	34.630	34.629	0.343	-0.002	27.692	27.691	27.706	27.705
30	2640.9	2680.0	1.778	1.585	0.037	34.639	34.638	0.352	0.007	27.700	27.699	27.714	27.713

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
15	2.889	192.082	15.74
23	2.813	188.260	8.72
19	2.891	185.010	8.02
13	2.900	182.531	8.33
14	2.946	180.786	8.00
16	2.860	181.463	7.64
9	2.861	181.489	9.49
6	2.850	184.112	7.65
3	2.856	187.377	7.94
30	2.883	194.313	17.74

D-Theta = (ptemp + (4.648783 * pden)) -130.386176
Atten-Anom = Atten - 0.3355

VENTS 1992 - LEG I
Station S9293 Cast 93 08 JUNE 1992
LAT: 47 23.0N LONG: 129 03.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2562.2	2599.7	1.734	1.550		34.633	34.633	0.349		27.698	27.698	27.712	27.712
27	2302.0	2334.3	1.810	1.648		34.619	34.618	0.345		27.681	27.680	27.694	27.693
26	2201.6	2231.9	1.837	1.684		34.613	34.612	0.345		27.674	27.674	27.686	27.685
8	2174.2	2204.0	1.849	1.698		34.610	34.610	0.345		27.671	27.671	27.683	27.683
11	2151.2	2180.5	1.858	1.709		34.608	34.608	0.344		27.669	27.669	27.680	27.680
10	2125.3	2154.2	1.872	1.725		34.606	34.606	0.345		27.666	27.666	27.677	27.677
21	2102.7	2131.1	1.890	1.744		34.603	34.603	0.346		27.662	27.662	27.673	27.673
2	2050.9	2078.4	1.923	1.781		34.596	34.596	0.346		27.654	27.654	27.665	27.665
25	1998.6	2025.2	1.953	1.815		34.589	34.588	0.345		27.646	27.645	27.657	27.656
5	1948.9	1974.5	1.982	1.848		34.582	34.581	0.343		27.638	27.637	27.649	27.648
22	1800.3	1823.4	2.067	1.944		34.565	34.567	0.344		27.618	27.619	27.628	27.629
18	1498.6	1516.7	2.416	2.314		34.501	34.501	0.346		27.538	27.538	27.547	27.547

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.856	181.627	
27	2.906	181.966	
26	2.919	180.729	
8	2.925	180.565	
11	2.921	180.061	
10	2.932	179.979	
21	2.933	179.380	
2	2.944	178.346	
25	2.959	176.074	
5	2.990	175.271	
22	3.009	172.538	
18	3.125	164.258	

VENTS 1992 - LEG I
Station S9294 Cast 94 08 JUNE 1992
LAT: 47 22.9N LONG: 128 58.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2643.0	2682.2	1.765	1.573		34.632	34.633	0.353		27.695	27.696	27.710	27.710
27	2310.5	2343.0	1.794	1.632		34.622	34.621	0.347		27.685	27.684	27.697	27.696
26	2199.6	2229.9	1.828	1.675		34.613	34.614	0.345		27.675	27.676	27.687	27.688
8	2175.5	2205.3	1.842	1.691		34.610	34.611	0.345		27.672	27.672	27.683	27.684
11	2150.6	2179.9	1.854	1.705		34.609	34.609	0.346		27.670	27.670	27.681	27.681
10	2125.9	2154.8	1.870	1.723		34.606	34.606	0.346		27.666	27.666	27.677	27.677
21	2101.6	2130.0	1.880	1.735		34.604	34.603	0.346		27.664	27.663	27.675	27.674
2	2048.0	2075.5	1.908	1.767		34.598	34.598	0.346		27.657	27.657	27.668	27.668
25	2002.3	2029.0	1.937	1.799		34.592	34.592	0.346		27.650	27.650	27.660	27.660
5	1949.1	1974.7	1.970	1.836		34.585	34.585	0.344		27.642	27.642	27.652	27.652
18	1500.2	1518.3	2.446	2.343		34.507	34.506	0.345		27.540	27.540	27.549	27.548

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.846	183.898	
27	2.898	183.686	
26	2.910	181.237	
8	2.924	181.740	
11	2.940	180.004	
10	2.949	180.601	
21	2.944	180.241	
2	2.961	179.894	
25	2.966	178.225	
5	2.972	176.258	
18	3.118	164.335	

VENTS 1992 - LEG I
Station S9295 Cast 95 08 JUNE 1992
LAT: 47 23.2N LONG: 128 50.3W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2618.4	2657.1	1.772	1.582		34.635	34.621	0.368		27.697	27.686	27.711	27.700
27	2305.4	2337.7	1.782	1.620		34.623	34.622	0.346		27.687	27.686	27.699	27.698
26	2203.0	2233.3	1.818	1.665		34.614	34.614	0.346		27.677	27.677	27.688	27.688
8	2176.9	2206.7	1.828	1.677		34.612	34.612	0.345		27.674	27.674	27.686	27.686
11	2150.7	2180.1	1.839	1.690		34.610	34.610	0.346		27.672	27.672	27.683	27.683
10	2125.4	2154.3	1.854	1.707		34.606	34.606	0.345		27.667	27.667	27.679	27.679
21	2100.7	2129.1	1.863	1.718		34.604	34.605	0.345		27.665	27.666	27.676	27.677
2	2048.6	2076.1	1.887	1.746		34.599	34.599	0.345		27.659	27.659	27.670	27.670
25	1998.7	2025.2	1.925	1.788		34.593	34.593	0.345		27.652	27.652	27.662	27.662
5	1948.5	1974.1	1.961	1.827		34.585	34.587	0.345		27.642	27.644	27.653	27.654
22	1800.8	1823.8	2.086	1.963		34.563	34.563	0.345		27.615	27.615	27.625	27.625
18	1499.1	1517.2	2.463	2.360		34.504	34.504	0.345		27.536	27.536	27.545	27.545

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.889	189.168	
27	2.871	182.875	
26	2.886	180.316	
8	2.893	179.923	
11	2.909	178.569	
10	2.894	178.501	
21	2.899	179.042	
2	2.925	178.568	
25	2.909	177.416	
5	2.924	177.077	
22	2.977	173.273	
18	3.064	163.636	

VENTS 1992 - LEG I
Station S92101 Cast 96 09 JUNE 1992
LAT: 47 49.8N LONG: 127 44.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2626.2	2665.1	1.787	1.596	0.049	34.639	34.639	0.359	0.015	27.699	27.699	27.713	27.713
27	2605.0	2643.5	1.785	1.596	0.049	34.639	34.639	0.359	0.015	27.699	27.699	27.713	27.713
26	2584.7	2622.8	1.783	1.596	0.049	34.639	34.640	0.358	0.014	27.699	27.700	27.713	27.714
8	2564.3	2601.9	1.781	1.596	0.049	34.639	34.639	0.354	0.010	27.700	27.700	27.713	27.713
11	2544.6	2581.9	1.779	1.595	0.041	34.637	34.638	0.348	0.004	27.698	27.699	27.712	27.713
10	2525.9	2562.8	1.779	1.597	0.043	34.637	34.637	0.345	8e-04	27.698	27.698	27.712	27.712
21	2505.2	2541.7	1.775	1.595	0.038	34.636	34.636	0.344	-1e-04	27.698	27.698	27.711	27.711
2	2485.2	2521.2	1.772	1.594	0.029	34.634	34.635	0.343	-0.001	27.696	27.697	27.710	27.710
25	2465.7	2501.3	1.771	1.595	0.030	34.634	34.633	0.342	-0.002	27.696	27.695	27.710	27.709
5	2444.6	2479.9	1.770	1.596	0.023	34.632	34.632	0.342	-0.002	27.695	27.695	27.708	27.708

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.939	195.155	19.47
27	2.950	195.319	20.43
26	2.939	194.965	19.91
8	2.924	194.910	17.20
11	2.942	194.475	12.30
10	2.945	193.944	10.04
21	2.934	192.515	10.57
2	2.931	190.364	8.16
25	2.933	189.670	8.50
5	2.928	188.172	7.93

D-Theta = (ptemp + (4.7101 * pden)) - 132.0797
Atten-Anom = Atten - (0.3215 + 0.01419*Theta)

VENTS 1992 - LEG I
Station S92100 Cast 97 09 JUNE 1992
LAT: 47 50.6N LONG: 127 37.5W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2623.9	2662.8	1.783	1.592	0.049	34.639	34.640	0.358	0.014	27.699	27.700	27.714	27.715
23	2591.6	2629.8	1.778	1.590	0.047	34.639	34.640	0.357	0.013	27.700	27.701	27.714	27.715
14	2560.5	2598.1	1.772	1.587	0.042	34.638	34.639	0.348	0.004	27.699	27.700	27.713	27.714
16	2531.6	2568.6	1.772	1.590	0.032	34.635	34.636	0.342	-0.002	27.697	27.698	27.711	27.711
9	2499.9	2536.2	1.772	1.593	0.030	34.634	34.634	0.342	-0.002	27.696	27.696	27.710	27.710
6	2467.2	2502.8	1.774	1.598	0.022	34.631	34.632	0.342	-0.002	27.694	27.694	27.707	27.708
3	2441.4	2476.6	1.777	1.603	0.022	34.630	34.631	0.343	-9e-04	27.693	27.693	27.706	27.706
30	2411.5	2446.1	1.782	1.611	0.020	34.628	34.628	0.343	-1e-03	27.691	27.691	27.704	27.704
18	2380.2	2414.1	1.787	1.618	0.017	34.626	34.627	0.342	-0.002	27.689	27.689	27.701	27.702
13	2350.7	2384.0	1.792	1.626	0.018	34.625	34.626	0.343	-0.001	27.687	27.688	27.700	27.701

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.861	194.584	20.79
23	2.875	194.133	21.79
14	2.850	192.529	17.54
16	2.842	189.451	10.60
9	2.843	187.863	7.82
6	2.848	186.226	7.74
3	2.836	185.415	8.00
30	2.856	184.769	8.70
18	2.867	183.849	7.59
13	2.855	183.722	7.41

D-Theta = (ptemp + (4.6683 * pden)) - 130.9194
Atten-Anom = Atten - (0.32 + 0.01489*Theta)

VENTS 1992 - LEG I
Station S92102 Cast 98 09 JUNE 1992
LAT: 47 52.3N LONG: 127 37.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
22	2630.9	2670.0	1.787	1.595	0.051	34.637	34.639	0.353	0.009	27.697	27.699	27.712	27.713
29	2601.4	2639.9	1.783	1.594	0.050	34.637	34.639	0.353	0.009	27.698	27.699	27.712	27.714
17	2566.2	2603.9	1.782	1.596	0.048	34.636	34.637	0.350	0.006	27.697	27.698	27.711	27.712
24	2529.9	2566.8	1.784	1.602	0.039	34.633	34.634	0.345	0.001	27.694	27.695	27.708	27.709
12	2494.1	2530.3	1.781	1.602	0.032	34.631	34.633	0.343	-8e-04	27.693	27.695	27.707	27.708
19	2461.8	2497.4	1.778	1.602	0.028	34.630	34.631	0.342	-0.002	27.693	27.693	27.706	27.707
15	2424.8	2459.6	1.779	1.607	0.023	34.628	34.630	0.342	-0.002	27.691	27.692	27.704	27.705
31	2389.2	2423.3	1.780	1.611	0.022	34.627	34.629	0.342	-0.002	27.690	27.692	27.703	27.704

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
22	2.892	192.728	18.65
29	2.890	193.006	25.45
17	2.886	191.663	14.67
24	2.876	188.758	11.92
12	2.883	187.594	10.22
19	2.888	186.244	6.67
15	2.865	185.385	7.41
31	2.868	184.419	7.53

D-Theta = (ptemp + (4.8808 * pden)) - 136.8005
Atten-Anom = Atten - (0.3289 + 0.009293*Theta)

VENTS 1992 - LEG I
Station T9211 Cast 99 09 JUNE 1992
LAT: 47 51.8N LONG: 127 35.4W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
27	2625.1	2664.1	1.784	1.593	0.039	34.638	34.640	0.359	0.016	27.698	27.700	27.713	27.714
1	2611.1	2649.7	1.781	1.591	0.042	34.639	34.641	0.357	0.013	27.700	27.701	27.714	27.715
21	2600.4	2638.8	1.778	1.589	0.040	34.639	34.641	0.354	0.011	27.700	27.701	27.714	27.716
2	2520.2	2557.0	1.779	1.598	0.031	34.635	34.637	0.348	0.004	27.696	27.698	27.710	27.712
25	2405.0	2439.4	1.773	1.602	0.023	34.632	34.625	0.344	5e-04	27.695	27.689	27.707	27.702
10	2630.9	2670.0	1.782	1.590	0.041	34.639	34.640	0.353	0.010	27.699	27.700	27.714	27.715
8	2631.4	2670.5	1.788	1.596	0.041	34.638	34.640	0.357	0.013	27.698	27.700	27.713	27.714
5	2522.5	2559.3	1.778	1.597	0.034	34.636	34.640	0.348	0.004	27.697	27.701	27.711	27.714
11	2578.3	2616.3	1.783	1.596	0.019	34.632	34.634	0.343	-5e-04	27.694	27.695	27.708	27.709
26	2632.3	2671.4	1.788	1.596	0.041	34.638	34.640	0.357	0.013	27.698	27.700	27.713	27.714

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
27	2.871	194.133	
1	2.873	195.860	
21	2.876	194.304	
2	2.856	190.663	
25	2.868	186.166	
10	2.856	193.292	
8	2.859	194.013	
5	2.864	192.285	
11	2.847	187.889	
26	2.851	194.435	

D-Theta = (ptemp + (4.6134 * pden)) - 129.4043
Atten-Anom = Atten - 0.3435

VENTS 1992 - LEG I
Station T9212 Cast 100 09 JUNE 1992
LAT: 47 42.6N LONG: 127 46.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
6	2641.8	2681.0	1.787	1.594	0.036	34.637	34.640	0.361	0.017	27.697	27.700	27.712	27.714
23	2625.2	2664.2	1.786	1.595	0.037	34.637	34.638	0.359	0.015	27.698	27.698	27.712	27.713
14	2610.6	2649.2	1.786	1.596	0.038	34.637	34.638	0.359	0.015	27.698	27.698	27.712	27.713
16	2592.3	2630.5	1.785	1.597	0.038	34.637	34.638	0.359	0.015	27.698	27.698	27.712	27.713
9	2579.9	2617.9	1.784	1.597	0.035	34.636	34.637	0.357	0.013	27.697	27.698	27.711	27.712
18	2493.0	2529.1	1.776	1.597	0.020	34.632	34.633	0.345	0.001	27.694	27.695	27.708	27.709
30	2630.2	2669.2	1.788	1.596	0.038	34.637	34.636	0.359	0.015	27.697	27.697	27.712	27.711
3	2599.0	2637.3	1.786	1.597	0.038	34.637	34.638	0.358	0.014	27.698	27.698	27.712	27.713
13	2573.9	2611.8	1.780	1.594	0.029	34.635	34.634	0.349	0.005	27.696	27.696	27.710	27.710
24	2549.6	2587.0	1.779	1.595	0.026	34.634	34.634	0.346	0.002	27.696	27.696	27.709	27.709
17	2523.9	2560.7	1.777	1.595	0.023	34.633	34.632	0.345	0.001	27.695	27.694	27.709	27.708
22	2499.0	2535.3	1.776	1.597	0.016	34.631	34.631	0.345	0.001	27.693	27.693	27.707	27.707

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
6	2.895	194.713	
23	2.898	194.588	
14	2.890	194.805	
16	2.887	195.035	
9	2.905	195.549	
18	2.892	190.250	
30	2.907	194.659	
3	2.923	194.860	
13	2.929	193.162	
24	2.918	192.051	
17	2.918	191.222	
22	2.917	189.869	

D-Theta = (ptemp + (4.5907 * pden)) - 128.7751
Atten-Anom = Atten - 0.3440

VENTS 1992 - LEG I
Station T9213 Cast 101 10 JUNE 1992
LAT: 47 50.5N LONG: 127 43.7W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
1	2590.0	2628.2	1.785	1.597	0.040	34.638	34.636	0.358	0.014	27.698	27.697	27.713	27.711
21	2572.2	2610.1	1.783	1.597	0.040	34.638	34.636	0.358	0.014	27.699	27.697	27.713	27.711
2	2560.2	2597.8	1.782	1.597	0.040	34.638	34.636	0.358	0.014	27.699	27.697	27.713	27.711
25	2423.0	2457.7	1.778	1.606	0.013	34.629	34.625	0.343	-0.001	27.692	27.689	27.705	27.701
10	2388.7	2422.8	1.781	1.612	0.009	34.627	34.633	0.343	-0.001	27.690	27.695	27.703	27.707
11	2590.4	2628.6	1.782	1.595	-0.366	34.528	34.632	0.351	0.007	27.610	27.694	27.624	27.708
19	2574.0	2611.8	1.780	1.594	-0.336	34.536	34.632	0.350	0.006	27.617	27.694	27.631	27.708
15	2559.5	2597.1	1.779	1.595	-0.325	34.539	34.631	0.349	0.005	27.619	27.693	27.633	27.707
31	2543.4	2580.6	1.777	1.594	-0.289	34.549	34.630	0.347	0.003	27.628	27.693	27.641	27.706

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
1	2.886	195.048	
21	2.896	195.068	
2	2.897	195.183	
25	2.868	185.149	
10			
11	2.882	192.071	
19	2.890	192.278	
15	2.900	191.450	
31	2.898	190.487	

D-Theta = (ptemp + (4.5765 * pden)) - 128.3835
Atten-Anom = Atten - 0.3440

VENTS 1992 - LEG I
Station S9276 Cast 102 10 JUNE 1992
LAT: 47 30.0N LONG: 128 20.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
18	2644.8	2684.1	1.769	1.576		34.639	34.636	0.363		27.700	27.698	27.715	27.712
26	2620.6	2659.4	1.783	1.592		34.637	34.634	0.356		27.698	27.695	27.712	27.710
25	2594.9	2633.1	1.785	1.597		34.636	34.632	0.351		27.697	27.694	27.711	27.708
5	2571.6	2609.4	1.782	1.596		34.634	34.631	0.347		27.695	27.693	27.709	27.707
8	2520.5	2557.1	1.777	1.596		34.631	34.629	0.345		27.693	27.692	27.707	27.705
12	2417.4	2451.9	1.779	1.607		34.627	34.623	0.343		27.690	27.687	27.703	27.700
27	2299.0	2331.2	1.796	1.635		34.620	34.616	0.344		27.683	27.680	27.695	27.692
6	2200.0	2230.3	1.831	1.678		34.611	34.610	0.345		27.673	27.672	27.685	27.684
9	2097.6	2126.0	1.874	1.729		34.602	34.598	0.345		27.663	27.660	27.674	27.671
23	1999.2	2025.8	1.929	1.792		34.592	34.588	0.344		27.650	27.647	27.661	27.658
16	1001.3	1012.2	3.209	3.139		34.341	34.338	0.349		27.340	27.337	27.346	27.344
14	499.8	504.7	4.796	4.757		34.061	34.057	0.352		26.954	26.951	26.958	26.955

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
18	2.828	192.492	
26	2.855	195.503	
25	2.889	195.395	
5	2.887	193.661	
8	2.868	190.521	
12	2.847	187.341	
27	2.843	183.288	
6	2.858	181.409	
9	2.872	178.835	
23	2.906	177.803	
16	3.113	139.039	
14	2.918	86.835	

VENTS 1992 - LEG I
Station T9214 Cast 103 10 JUNE 1992
LAT: 47 48.8N LONG: 127 33.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
22	2618.6	2657.4	1.781	1.591		34.638		0.360		27.699		27.713	
27	2616.2	2654.9	1.782	1.592		34.637		0.360		27.698		27.712	
24	2609.3	2647.9	1.783	1.593		34.637		0.359		27.698		27.712	
30	2616.2	2655.0	1.781	1.591		34.637		0.357		27.698		27.712	
3	2617.1	2655.9	1.782	1.592		34.637		0.358		27.698		27.712	
13	2625.7	2664.6	1.790	1.599		34.634		0.350		27.695		27.709	
17	2619.0	2657.8	1.783	1.592		34.637		0.356		27.698		27.712	
6	2627.9	2666.9	1.783	1.592		34.637		0.356		27.698		27.712	
9	2632.1	2671.2	1.787	1.595		34.637		0.356		27.697		27.712	
23	2640.0	2679.3	1.788	1.595		34.637		0.356		27.697		27.712	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
22	2.902	196.223	
27	2.890	195.951	
24	2.879	195.497	
30	2.882	195.278	
3	2.882	195.698	
13	2.885	191.505	
17	2.929	194.193	
6	2.885	194.871	
9	2.887	195.388	
23	2.907	194.957	

VENTS 1992 - LEG I
Station T9215 Cast 104 10 JUNE 1992
LAT: 47 52.5N LONG: 127 45.0W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
20	2620.2	2659.1	1.785	1.594	0.037	34.637		0.356	0.011	27.698		27.712	
1	2614.6	2653.3	1.785	1.595	0.037	34.637		0.352	0.007	27.698		27.712	
21	2459.3	2494.8	1.778	1.602	0.024	34.632		0.345	0.000	27.694		27.707	
2	2509.9	2546.4	1.777	1.597	0.028	34.634		0.347	0.002	27.696		27.709	
12	2504.1	2540.5	1.775	1.595	0.034	34.636		0.346	0.001	27.698		27.711	
14	2559.8	2597.4	1.781	1.596	0.042	34.638		0.357	0.012	27.699		27.713	
10	2618.1	2656.9	1.785	1.594	0.041	34.638		0.357	0.012	27.698		27.713	
16	2631.8	2670.9	1.788	1.596	0.038	34.637		0.358	0.013	27.697		27.712	
29	2501.3	2537.7	1.774	1.595	0.026	34.634		0.344	-0.001	27.696		27.710	
15	2639.8	2679.0	1.789	1.596	0.042	34.638		0.359	0.014	27.698		27.713	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
20	2.898	193.517	
1	2.889	193.732	
21	2.867	188.766	
2	2.878	190.690	
12	2.912	193.643	
14	2.903	195.464	
10	2.911	195.238	
16	2.892	195.048	
29	2.888	190.291	
15	2.919	195.629	

D-Theta = (ptemp + (4.5576 * pden)) - 127.8574
Atten-Anom = Atten - 0.3450

VENTS 1992 - LEG I
Station S92103 Cast 105 11 JUNE 1992
LAT: 47 35.0N LONG: 127 51.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
24	2659.2	2698.8	1.776	1.582	0.046	34.639		0.363	0.017	27.700		27.714	
23	2646.4	2685.7	1.778	1.585	0.048	34.639		0.361	0.015	27.700		27.714	
6	2629.7	2668.7	1.785	1.593	0.045	34.637		0.356	0.010	27.698		27.712	
3	2604.8	2643.3	1.785	1.596	0.047	34.637		0.355	0.009	27.698		27.712	
27	2581.5	2619.5	1.782	1.595	0.043	34.636		0.351	0.005	27.697		27.711	
11	2555.2	2592.6	1.775	1.591	0.032	34.634		0.348	0.002	27.696		27.710	
19	2531.1	2568.0	1.766	1.584	0.020	34.632		0.347	0.001	27.695		27.709	
31	2490.0	2526.0	1.774	1.596	0.028	34.632		0.345	-9e-04	27.694		27.708	
9	2451.0	2486.3	1.776	1.601	0.024	34.630		0.343	-0.003	27.693		27.706	
22	2348.2	2381.4	1.787	1.621	0.014	34.624		0.343	-0.003	27.687		27.700	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
24	2.848	192.127	
23	2.860	192.934	
6	2.889	193.418	
3	2.883	194.466	
27	2.883	193.404	
11	2.881	190.892	
19	2.859	186.363	
31	2.858	189.051	
9	2.878	186.928	
22	2.882	184.549	

D-Theta = (ptemp + (4.7662 * pden)) - 133.629
Atten-Anom = Atten - (0.3312 + 0.009186*Theta)

VENTS 1992 - LEG I
Station S92104 Cast 106 11 JUNE 1992
LAT: 47 51.1N LONG: 127 36.6W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
13	2616.0	2654.8	1.782	1.592	0.048	34.638		0.359	0.013	27.699		27.713	
8	2600.0	2638.5	1.780	1.591	0.047	34.638		0.359	0.013	27.699		27.713	
30	2581.3	2619.3	1.777	1.590	0.043	34.637		0.353	0.007	27.698		27.712	
17	2559.3	2596.9	1.776	1.591	0.040	34.636		0.347	0.001	27.698		27.711	
18	2532.4	2569.4	1.775	1.593	0.033	34.634		0.345	-8e-04	27.696		27.710	
26	2509.8	2546.3	1.775	1.595	0.031	34.633		0.344	-0.002	27.695		27.709	
25	2485.8	2521.9	1.774	1.596	0.028	34.632		0.344	-0.002	27.694		27.708	
5	2446.3	2481.5	1.774	1.600	0.022	34.630		0.344	-0.002	27.693		27.706	
21	2405.8	2440.3	1.775	1.604	0.018	34.628		0.343	-0.003	27.691		27.704	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
13	2.880	194.844	
8	2.888	194.843	
30	2.872	192.346	
17	2.890	191.581	
18	2.880	190.366	
26	2.866	189.643	
25	2.863	188.032	
5	2.859	186.735	
21	2.862	185.370	

D-Theta = (ptemp + (4.7568 * pden)) - 133.369
Atten-Anom = Atten - (0.3331 + 0.007996*Theta)

VENTS 1992 - LEG I
Station S9275 Cast 107 11 JUNE 1992
LAT: 48 00.0N LONG: 127 37.9W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
14	2619.1	2658.0	1.780	1.589		34.638		0.358		27.699		27.713	
29	2605.9	2644.5	1.781	1.592		34.638		0.358		27.699		27.713	
16	2588.7	2627.0	1.778	1.590		34.638		0.353		27.699		27.713	
10	2565.5	2603.2	1.775	1.590		34.636		0.347		27.698		27.712	
15	2539.6	2576.8	1.772	1.589		34.634		0.345		27.696		27.710	
1	2514.8	2551.5	1.772	1.591		34.633		0.344		27.695		27.709	
12	2489.9	2526.0	1.772	1.594		34.632		0.344		27.695		27.708	
9	2450.2	2485.6	1.772	1.597		34.630		0.344		27.693		27.706	
24	2409.4	2444.0	1.776	1.605		34.628		0.344		27.691		27.704	
27	2309.6	2342.1	1.793	1.631		34.622		0.344		27.685		27.697	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
14	2.869	194.222	
29	2.864	195.150	
16	2.885	193.831	
10	2.873	191.677	
15	2.860	189.308	
1	2.861	189.025	
12	2.851	186.952	
9	2.845	186.076	
24	2.859	185.026	
27	2.860	182.966	

VENTS 1992 - LEG I
Station S9274 Cast 108 11 JUNE 1992
LAT: 48 10.0N LONG: 126 37.1W

Niskin #	Depth (m)	Depth (db)	Insitu Temp.	Pottemp	Temp. Anom.	Salinity (CTD)	Salinity (Bottle)	Atten. (1/m)	Atten. Anom	Sigma-t (CTD)	Sigma-t (Bottle)	Sigma-Theta (CTD)	Sigma-Theta (Bottle)
5	2472.0	2507.8	1.772	1.595		34.638		0.395		27.699		27.713	
21	2300.4	2332.8	1.765	1.604		34.631		0.367		27.694		27.706	
2	2199.8	2230.3	1.782	1.630		34.625		0.373		27.688		27.700	
3	2100.4	2129.0	1.808	1.664		34.618		0.370		27.681		27.692	
23	1999.4	2026.1	1.865	1.729		34.607		0.372		27.667		27.678	
6	1899.5	1924.4	1.924	1.795		34.595		0.373		27.653		27.663	
31	1497.0	1515.2	2.564	2.460		34.512		0.377		27.534		27.543	
11	999.8	1010.7	3.481	3.409		34.366		0.372		27.334		27.341	
19	499.9	504.7	4.948	4.908		34.069		0.379		26.943		26.948	
22	297.4	300.2	6.019	5.993		33.953		0.383		26.723		26.726	
25	18.9	19.0	13.287	13.284		32.208		0.520		24.175		24.175	

Niskin #	PO4 (umol/l)	SiO4 (umol/l)	TSM (ug/l)
5	2.938	197.106	
21	2.910	186.531	
2	2.912	186.898	
3	2.922	184.063	
23	2.933	182.372	
6	2.970	180.041	
31	3.122	161.588	
11	3.204	133.434	
19	2.941	85.029	
22	2.479	57.855	
25	0.407	2.648	

*U.S. GOVERNMENT PRINTING OFFICE:1994-573-013/00003