Preliminary Report
of
The Hakuho Maru Cruise
KH-94-3 Leg 1

(WESTPAC)

2 September – 23 September 1994

Studies on the Kuroshio and Deep Currents
in the Western North Pacific

Ocean Research Institute
University of Tokyo
1995

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by
The Scientific Members of the Cruise
Edited by
Keisuke TAIRA and Masaki KAWABE

CONTENTS

Preface

Leg 1 of the Cruise KH-94-3 of R/V Hakuho Maru was devoted for studies of physical oceanography. On board scientists came from Hokkaido University, Tohoku University, Tokyo Science University, Tokai University, Kobe Mercantile University, Kyushu University, Kagoshima University, and Ocean Research Institute, University of Tokyo. Data and preliminary results obtained by the cooperative studies are presented in this report.

The ocean plays an important role in environmental system of the earth. Climate variability and global warming are of great interest, and enhancement of utilization of marine resources is requisite. More observations to understand oceanic process must be made, and Global Ocean Observing System, GOOS, is proposed by Intergovernmental Oceanographic Commission of United Nations Education, Science and Culture Organization. GOOS is expected to be in operation during the first decade of the next century, and oceanographic community of Japan has discussed what are the key elements to be included in the GOOS. The proposed five subjects are (1) Volume transport and heat flux of ocean circulation, (2) Utilization of satellite data, (3) Numerical models for data assimilation and forecasting of oceanic variability, (4) Chemical analysis for carbon cycle in the ocean, and (5) New technology for data sets for biogeochemical environment, measurements of ocean currents and estimation of biomass. The subjects are investigated from 1993 to 1997 in the International Cooperative Research Programme on Global Ocean Observing System, sponsored by Ministry of Education, Science and Culture. Research activities of the present cruise are related to some of the subjects.

The data obtained by the cruise are to be widely used through Japan Oceanographic Data Center, Maritime Safety Agency.

Keisuke Taira, Chief Scientist

1. Cruise Summary

Major objectives

Study objectives of the Cruise KH-94-3 leg 1 are as follows.

1) To study volume and heat transports of the Kuroshio over the Izu Ridge
   (moored multipath inverted echo sounders and current meters at S1-4, CTD at KC01-27)

2) To measure volume and heat transports of the Kuroshio and its countercurrent at the ASUKA line off Shikoku, Japan
   (moored current meters and acoustic Doppler current profilers at CM02-10, ocean bottom electrometer and magnetometer at CM04, CTD at AS01-26)
   ASUKA: Affiliated Surveys of the Kuroshio off Cape Ashizuri

3) To observe the deep currents at the Japan Trench
   (moored current meters at TK1-2, CTD at PC01-09)

4) To study the distribution and flow of the Subtropical Mode Water in the North Pacific
   (moored current meters at SM1-3, CTD at PC01-18, XBT at X01-41)

5) To estimate variations of Kuroshio transports from a synthesis of satellite data and *in-situ* sea data
   (receiving NOAA AVHRR data at Hakuho Maru)

6) To study the effects of continental aerosol particles on background ones

$CTDO_2$, Water Sample

[Casts]

$CTDO_2$ casts were carried out at 75 stations: 18 at 34°N and at 145°E (PC01-18), 30 at the ASUKA line (AS01-26, AS1A,2A,5A,6A), and 27 over the Izu Ridge (KC01-27). These were made from the sea surface to the sea bottom, except at the stations on 145°E (PC10-18). Water samples were collected in all the casts except at KC01-27. Waters for conductivity and oxygen measurements were sampled at all the sampled stations, and waters for nutrients were sampled at 27 stations.

Unexplainable trouble occurred at Stas. PC06 and AS24. The $CTDO_2$ data stored in the onboard computer were deleted at the final stage of the cast, because the data file was overwritten by the data taken while the underwater CTD unit was lifting. We immediately made the second casts there.

[Instruments]

The CTD is Sea-Bird Electronics instrument equipped with a dissolved oxygen sensor. The conductivity sensor is manufactured by Sea-Bird Electronics Inc. (SBE 4) who claims a resolution of 0.0004 mmho/cm and an accuracy of ±0.003 mmho/cm. The temperature sensor is manufactured by Sea-Bird Electronics Inc. (SBE 3) who claims a resolution of 0.0002°C and an initial accuracy of ±0.002°C. The pressure sensor is manufactured by Paroscientific Digiquartz (Model 4xK) with a resolution of 0.001% of full scale and an accuracy of ±0.015% of full scale (6000 db range). The oxygen sensor is manufactured by Sea-Bird Electronics Inc. (SBE 13).

Waters were sampled from 12-liter Niskin bottles mounted at 24 places on a Sea-Bird Electronics Carousel

Water Sampler (SBE 32) or a General Oceanics Rosette Sampler. The former sampler was used in the first half of the cruise (PC01-18, AS19-26) and worked very well, but was replaced by the latter sampler in the second half (AS01-18, KC01-27), since mis-firing increased.

[CTD Data Collection]

Full signals of frequency, digitized 24 times per second, which were sent from the underwater CTD unit SBE 9 plus (Sea-Bird Electronics Inc.) were received with the onboard unit SBE 11 plus and converted to output sequences of IEEE-488 (GPIB). The data were collected with the Sea-Bird Electronics CTD operating software, SEASOFT Version 4.207, using an IBM-compatible personal computer JD1994DX2-66 (PROSIDE Corp.) with a 215 MByte hard disc which was connected to the onboard unit by a GPIB cable. We intended to record the full signals of frequency in a SONY digital audio tape for backup, but the recorder was out of order.

[CTDO_2 Calibration]

The conductivity and temperature sensors of CTD were calibrated at Sea-Bird Electronics Inc. just before this cruise. The obtained calibration coefficients were used in the CTD operating software SEASOFT.

The conductivity data were moreover calibrated at sea using the data from the analysis of water samples collected at each station. The ratio of conductivity from water sample to that from CTD, called cell factor (CF), was calculated for each water sample. The cell factor is close to 1, but a little changes vertically. The depth dependance was expressed by the following polynomials of pressure P (db),

$$CF = 1.000180 - 0.1032217\times10^{-6}\cdot P + 0.2681226\times10^{-10}\cdot P^2 - 0.2271697\times10^{-14}\cdot P^3$$

(for SBE Carousel Water Sampler)

$$CF = 1.000196 - 0.1809414\times10^{-6}\cdot P + 0.1130860\times10^{-9}\cdot P^2 - 0.3081989\times10^{-13}\cdot P^3 + 0.2943437\times10^{-17}\cdot P^4$$

(for General Oceanics Rosette Sampler).

Final calibration for the conductivity data were made with the cell factor computed from the above equation.

For the pressure data, the zero point was corrected; that is, the value indicated by the pressure sensor in the air was subtracted from the pressure values measured in the sea. The value in the air was -2.3 db for SBE Carousel Water Sampler and -2.0 db for General Oceanics Rosette Sampler.

The oxygen data were calibrated by fitting to the values from the water samples along the method in the WOCE Operations Manual (WOCE Hydrographic Programme Office Report WHPO 91-1, WOCE Report No. 68/91). (WOCE: World Ocean Circulation Experiment)

[Water-Sample Analysis]

Conductivities of water samples were measured with a Guildline Portasal Model 8410 salinometer which was standardized by IAPSO Standard Sea Water Batch P-124. The measurement was done in a laboratory in which air temperature was controlled (±1°C) and maintained to a little lower than water temperature in the salinometer

water bath.

Oxygens of water samples were measured using an automated titration instrument. The method of nutrient analysis is noted at Page 41 of this issue.

Mooring

[34°N at the Japan Trench and on the Izu Ridge]

The mooring at TR2 was recovered, but the recovery at TR1 failed. Moorings identical with the previous ones were deployed at TR1 and TR2.

Four moorings of multipath inverted echo sounders were deployed just east of Miyake-jima.

[145°E line]

The three moorings at SM1-3 were recovered.

[ASUKA line]

The nine moorings at CM02-10 were recovered, and identical moorings were deployed at the same place. Ocean bottom electrometer and magnetometer were deployed at CM04.

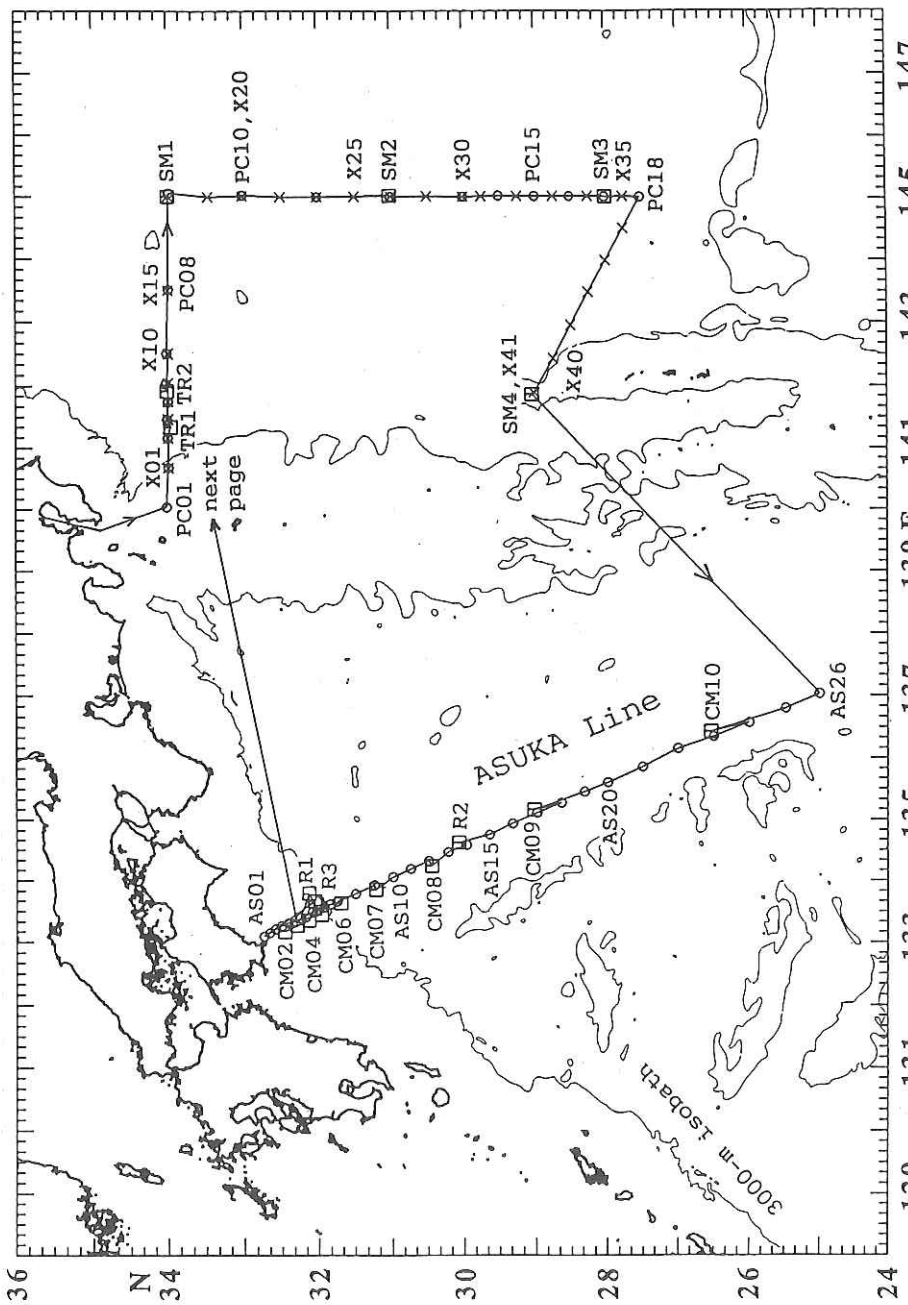
The three moorings at R1-3 were recovered, but the upper 450-m part of the R2 mooring, including a SOFAR-float receiver, was not there due to cutting of mooring rope.

2. List of Scientists Aboard

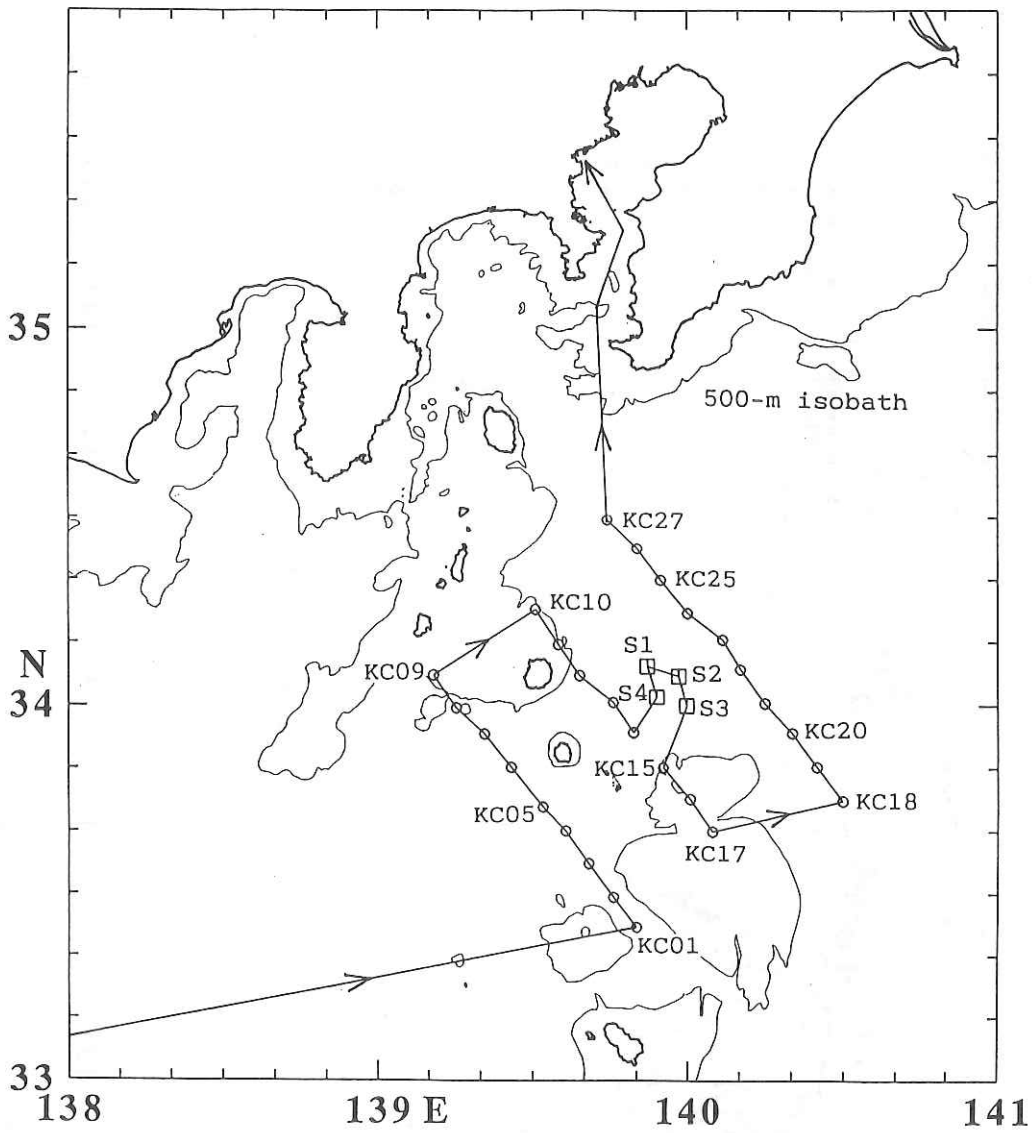
TAIRA, Keisuke	Ocean Research Institute, University of Tokyo
KAWABE, Masaki	Ocean Research Institute, University of Tokyo
FUJIO, Shinzou	Ocean Research Institute, University of Tokyo
YANAGIMOTO, Daigo	Ocean Research Institute, University of Tokyo
TOH, Hiroaki	Ocean Research Institute, University of Tokyo
KITAGAWA, Shoji	Ocean Research Institute, University of Tokyo
WATANABE, Masaharu	Ocean Research Institute, University of Tokyo
MIZUTA, Genta	Ocean Research Institute, University of Tokyo
OKA, Eitaro	Ocean Research Institute, University of Tokyo
HASHIMOTO, Tsuyoshi	Ocean Research Institute, University of Tokyo
FUKAMACHI, Yasushi	Institute of Low Temperature Science, Hokkaido Uni.
SUGA, Toshio	Faculty of Science, Tohoku University
ISHIZAKI, Shiro	Faculty of Science, Tohoku University
SUGIMOTO, Onn	Faculty of Science, Tohoku University
ISOGUCHI, Osamu	Faculty of Science, Tohoku University
TSUGE, Naoto	Faculty of Science, Science University of Tokyo
NISHINA, Ayako	School of Marine Science and Technology, Tokai Uni.
KOZAI, Katsutoshi	Kobe University of Mercantile Marine
HATANO, Takayuki	Kobe University of Mercantile Marine
IMAWAKI, Shiro	Research Institute for Applied Mechanics, Kyushu Uni.
UCHIDA, Hirosh	Research Institute for Applied Mechanics, Kyushu Uni.
SETOH, Takashi	Research Institute for Applied Mechanics, Kyushu Uni.
HASHIBE, Yuji	Research Institute for Applied Mechanics, Kyushu Uni.
ICHIKAWA, Hiroshi	Faculty of Fisheries, Kagoshima University
TASHIRO, Takayuki	Faculty of Fisheries, Kagoshima University
NINOMIYA, Mitsuhisa	Faculty of Fisheries, Kagoshima University
ICHIKAWA, Toshihiro	Faculty of Science, Kagoshima University
MATSUNAGA, Kazuhiro	Faculty of Science, Kagoshima University
KAWAMURA, Nobuko	Faculty of Science, Kagoshima University
KURIHARA, Kenji	Ocean Research Institute, co-operative researcher

3. Track Charts

○: CTD, X: XBT, □: Mooring

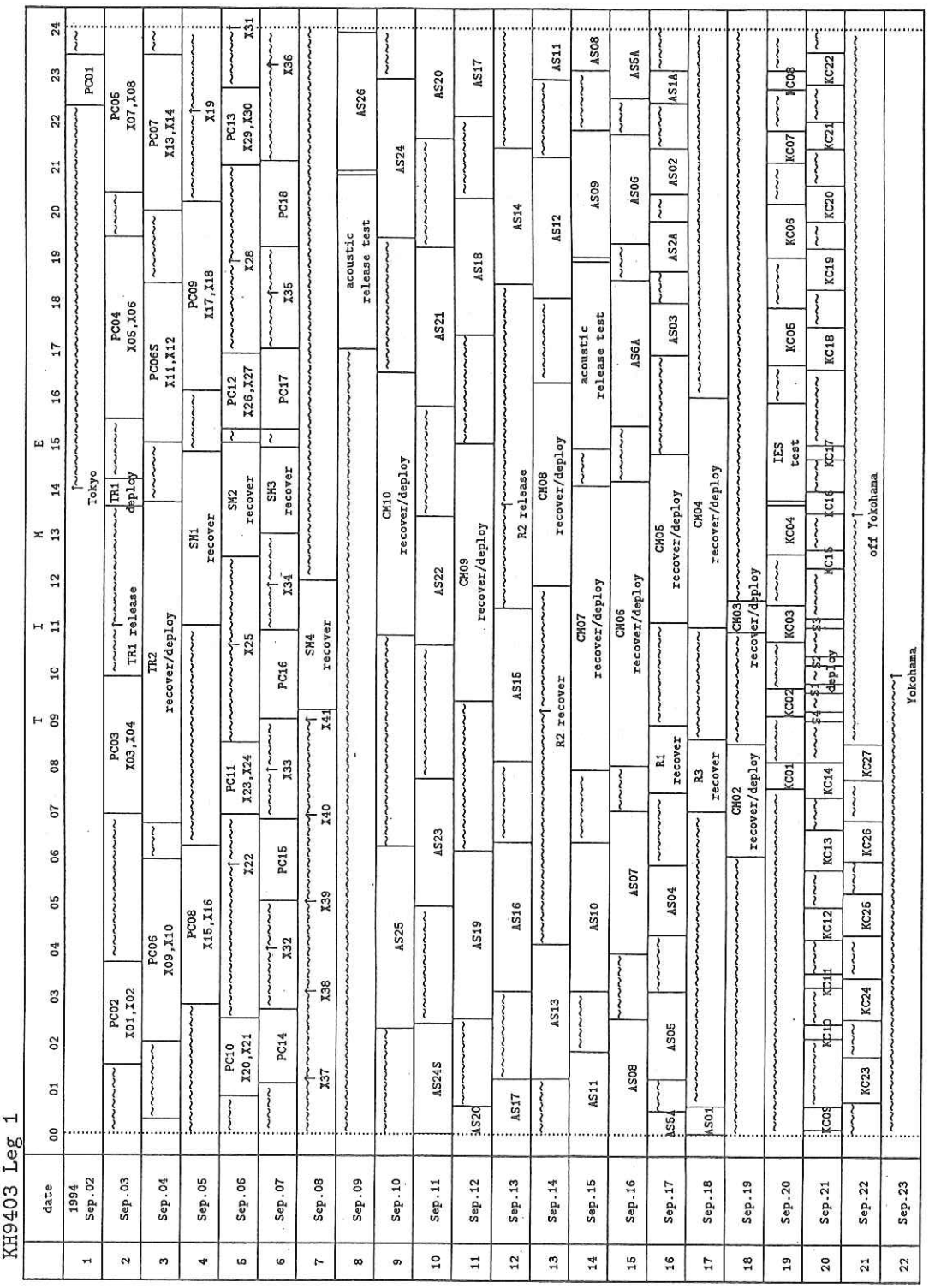


ASUKA: Affiliated Surveys of the Kuroshio off Cape Ashizuri


35
N
34
33
138
139 E
140
141
500-m isobath
KC27
KC25
KC10
KC09
S1
S2
S4
S3
KC20
KC15
KC18
KC05
KC17
KC01

4. Time Table

KH9403 Leg 1



5. Summary of observation stations

STNNBR: Station number
TYPE: CTD=CTDO only, ROS=CTDO plus Rosette water sampler
MOR=Mooring, XBT=XBT
CODE: BE=Beginning of cast or mooring deployment, BO=Bottom time for cast,
EN=Time cast completed
DE=Time mooring, or XBT was deployed, RE=Time mooring was recovered
BOTDEP: Bottom depth in meters
MAXPRS: Maximum pressure in decibars
PARAM: Sampling Parameters: S=Salinity, O=Dissolved oxygen, N=Nutrients

KH9403 Leg 1

STNNBR	TYPE	DATE	GMT	CODE	LATITUDE	LONGITUDE	BOTDEP	MAXPRS	PARAM
PC01	ROS	09/02/94	13:16	BE	34°00.62′N	140°01.31′E	1178		
PC01	ROS	09/02/94	13:45	BO	34°01.46′N	140°02.58′E	1201	1100	S,O,N
PC01	ROS	09/02/94	14:23	EN	34°02.47′N	140°03.14′E	1250		
PC02	ROS	09/02/94	16:29	BE	33°59.97′N	140°40.59′E	2505		
X01	XBT	09/02/94	16:46	DE	34°00.00′N	140°40.87′E	2534		
X02A	XBT	09/02/94	17:00	DE	33°59.96′N	140°41.09′E	2540		
PC02	ROS	09/02/94	17:28	BO	33°59.91′N	140°41.47′E	2556	2349	S,O,N
PC02	ROS	09/02/94	18:44	EN	33°59.64′N	140°42.36′E	2856		
PC03	ROS	09/02/94	21:52	BE	34°00.13′N	141°10.12′E	4497		
X03A	XBT	09/02/94	22:07	DE	34°00.11′N	141°10.22′E	4701		
X04	XBT	09/02/94	22:15	DE	34°00.21′N	141°10.11′E	4648		
PC03	ROS	09/02/94	23:16	BO	34°00.43′N	141°09.82′E	4701	4611	S,O,N
PC03	ROS	09/03/94	00:50	EN	34°00.73′N	141°09.72′E	4718		
TR1	MOR	09/03/94	04:40	BE	33°58.07′N	141°20.04′E	5575		
TR1	MOR	09/03/94	04:55	DE	33°58.08′N	141°20.44′E	5557		
PC04	ROS	09/03/94	06:23	BE	34°00.16′N	141°27.84′E	7235		
X05	XBT	09/03/94	06:33	DE	34°00.19′N	141°27.86′E	7232		
X06B	XBT	09/03/94	06:50	DE	34°00.26′N	141°27.75′E	7208		
PC04	ROS	09/03/94	08:18	BO	34°00.79′N	141°27.64′E	7231	6500	S,O,N
PC04	ROS	09/03/94	10:20	EN	34°01.77′N	141°26.93′E	7110		
PC05	ROS	09/03/94	11:14	BE	34°00.07′N	141°45.09′E	7957		
X07	XBT	09/03/94	11:44	DE	34°00.06′N	141°45.02′E	7912		
X08	XBT	09/03/94	11:56	DE	34°00.18′N	141°45.04′E	7900		
PC05	ROS	09/03/94	13:29	BO	34°00.17′N	141°44.78′E	7852	6500	S
PC05	ROS	09/03/94	15:17	EN	34°00.20′N	141°44.29′E	6706		
PC06	ROS	09/03/94	17:01	BE	34°00.20′N	142°02.81′E	7056		
X09	XBT	09/03/94	17:05	DE	34°00.24′N	142°02.75′E	7075		
X10	XBT	09/03/94	17:13	DE	34°00.38′N	142°02.70′E	7055		
PC06	ROS	09/03/94	18:56	BO	34°01.76′N	142°02.14′E	7059	6500	S,O,N
PC06	ROS	09/03/94	20:58	EN	34°02.79′N	142°02.36′E	7058		
TR2	MOR	09/03/94	21:45	BE	34°00.04′N	141°53.87′E	7051		
TR2	MOR	09/04/94	01:22	RE	34°01.26′N	141°55.07′E	7072		
TR2	MOR	09/04/94	03:08	BE	33°58.51′N	141°52.09′E	8943		
TR2	MOR	09/04/94	04:47	DE	34°01.12′N	141°55.18′E	9061		
PC06S	CTD	09/04/94	06:02	BE	34°00.11′N	142°02.89′E	9075		
X11	XBT	09/04/94	06:07	DE	34°00.14′N	142°02.83′E	9047		
X12	XBT	09/04/94	06:15	DE	34°00.23′N	142°02.80′E	9053		
PC06S	CTD	09/04/94	07:56	BO	34°00.85′N	142°02.51′E	9041	6500	
PC06S	CTD	09/04/94	09:24	EN	34°01.81′N	142°01.96′E	9051		
PC07	ROS	09/04/94	11:03	BE	34°00.06′N	142°30.27′E	7157		
X13	XBT	09/04/94	11:14	DE	34°00.28′N	142°30.36′E	6340		
X14	XBT	09/04/94	11:21	DE	34°00.40′N	142°30.40′E	6649		
PC07	ROS	09/04/94	12:51	BO	34°01.18′N	142°30.45′E	6154	6000	S,O,N
PC07	ROS	09/04/94	14:29	EN	34°01.93′N	142°30.24′E	6104		
PC08	ROS	09/04/94	17:48	BE	34°00.01′N	143°30.41′E	5409		
X15	XBT	09/04/94	18:00	DE	34°00.10′N	143°30.46′E	5413		
X16	XBT	09/04/94	18:08	DE	34°00.12′N	143°30.44′E	5416		

STNNBR	TYPE	DATE	GMT	CODE	LATITUDE	LONGITUDE	BOTDEP	MAXPRS	PARAM
PC08	ROS	09/04/94	19:31	BO	33°59.59′N	143°31.22′E	5307	5300	S,O,N
PC08	ROS	09/04/94	21:11	EN	33°59.37′N	143°31.90′E	5357		
SM1	MOR	09/05/94	02:03	BE	33°59.86′N	145°00.84′E	5816		
SM1	MOR	09/05/94	05:52	RE	33°56.92′N	145°07.44′E	5751		
PC09	ROS	09/05/94	07:09	BE	33°59.87′N	145°00.21′E	5814		
X17	XBT	09/05/94	07:22	DE	33°59.87′N	145°00.71′E	5814		
X18	XBT	09/05/94	07:32	DE	33°59.87′N	145°01.11′E	5814		
PC09	ROS	09/05/94	09:07	BO	33°59.00′N	145°04.02′E	5754	5700	S,O,N
PC09	ROS	09/05/94	11:16	EN	33°57.90′N	145°06.79′E	5810		
X19A	XBT	09/05/94	13:17	DE	33°28.20′N	145°00.00′E	5728		
PC10	ROS	09/05/94	15:50	BE	33°00.28′N	145°00.11′E	5756		
X20	XBT	09/05/94	15:50	DE	33°00.28′N	145°00.95′E	5760		
X21	XBT	09/05/94	15:57	DE	33°00.34′N	145°01.08′E	5753		
PC10	ROS	09/05/94	16:29	BO	33°00.39′N	145°01.60′E	5775	2000	S,O,N
PC10	ROS	09/05/94	17:32	EN	33°00.40′N	145°02.68′E	5776		
X22	XBT	09/05/94	20:48	DE	32°29.95′N	145°00.02′E	4748		
PC11	ROS	09/05/94	21:56	BE	31°59.94′N	144°59.92′E	5955		
X23	XBT	09/05/94	22:01	DE	31°59.90′N	144°59.88′E	5956		
X24	XBT	09/05/94	22:11	DE	31°59.87′N	144°59.87′E	5956		
PC11	ROS	09/05/94	22:34	BO	31°59.98′N	144°59.79′E	5953	2000	S,O,N
PC11	ROS	09/05/94	23:34	EN	32°00.21′N	144°59.48′E	5954		
X25	XBT	09/06/94	01:37	DE	31°29.97′N	145°00.09′E	5621		
SM2	MOR	09/06/94	03:29	BE	31°00.81′N	145°00.65′E	6047		
SM2	MOR	09/06/94	05:57	RE	31°00.19′N	144°59.15′E	6079		
PC12	ROS	09/06/94	06:15	BE	30°59.70′N	144°59.06′E	6050		
X26	XBT	09/06/94	06:20	DE	30°59.87′N	145°00.05′E	6049		
X27A	XBT	09/06/94	06:35	DE	30°59.84′N	144°59.94′E	6050		
PC12	ROS	09/06/94	06:50	BO	30°59.80′N	144°59.70′E	6051	2000	S,O,N
PC12	ROS	09/06/94	07:51	EN	30°59.96′N	144°59.18′E	6076		
X28	XBT	09/06/94	09:53	DE	30°29.95′N	145°00.03′E	5932		
PC13	ROS	09/06/94	11:58	BE	30°00.02′N	144°59.77′E	5950		
X29	XBT	09/06/94	12:06	DE	30°00.10′N	144°59.61′E	5914		
X30	XBT	09/06/94	12:14	DE	30°00.14′N	144°59.52′E	5912		
PC13	ROS	09/06/94	12:37	BO	30°00.13′N	144°59.70′E	5914	2000	S,O,N
PC13	ROS	09/06/94	13:37	EN	30°00.31′N	145°00.07′E	5916		
X31	XBT	09/06/94	14:55	DE	29°44.93′N	145°00.05′E	5847		
PC14	ROS	09/06/94	16:08	BE	29°30.01′N	145°00.07′E	5810		
PC14	ROS	09/06/94	16:45	BO	29°30.31′N	145°00.51′E	5827	2000	S
PC14	ROS	09/06/94	17:42	EN	29°30.68′N	145°00.95′E	5854		
X32	XBT	09/06/94	19:02	DE	29°14.74′N	145°00.13′E	5929		
PC15	ROS	09/06/94	20:03	BE	29°00.00′N	144°59.97′E	5951		
PC15	ROS	09/06/94	20:48	BO	29°00.11′N	145°00.06′E	5950	2000	S,O,N
PC15	ROS	09/06/94	21:48	EN	29°00.28′N	145°00.41′E	5918		
X33	XBT	09/06/94	23:00	DE	28°45.03′N	145°00.03′E	5944		
PC16	ROS	09/07/94	00:03	BE	28°30.14′N	145°00.01′E	5906		
PC16	ROS	09/07/94	00:47	BO	28°30.54′N	144°59.82′E	5921	2000	S
PC16	ROS	09/07/94	01:55	EN	28°30.55′N	144°59.85′E	5935		
X34	XBT	09/07/94	02:59	DE	28°14.82′N	145°00.07′E	5916		
SM3	MOR	09/07/94	04:02	BE	28°00.00′N	144°59.80′E	5817		
SM3	MOR	09/07/94	05:56	RE	28°00.26′N	144°58.86′E	5816		
PC17	ROS	09/07/94	06:20	BE	28°00.05′N	145°00.00′E	5818		
PC17	ROS	09/07/94	07:02	BO	28°00.44′N	144°59.55′E	5905	2000	S,O,N
PC17	ROS	09/07/94	08:01	EN	28°01.18′N	144°58.95′E	5903		
X35	XBT	09/07/94	09:17	DE	27°45.01′N	145°00.06′E	5925		
PC18	ROS	09/07/94	10:20	BE	27°30.14′N	144°59.99′E	5447		
PC18	ROS	09/07/94	11:09	BO	27°30.63′N	144°59.50′E	5472	2000	S
PC18	ROS	09/07/94	12:15	EN	27°31.18′N	144°59.64′E	5506		
X36	XBT	09/07/94	14:20	DE	27°45.13′N	144°29.02′E	4553		
X37	XBT	09/07/94	16:12	DE	28°00.08′N	143°58.20′E	6723		

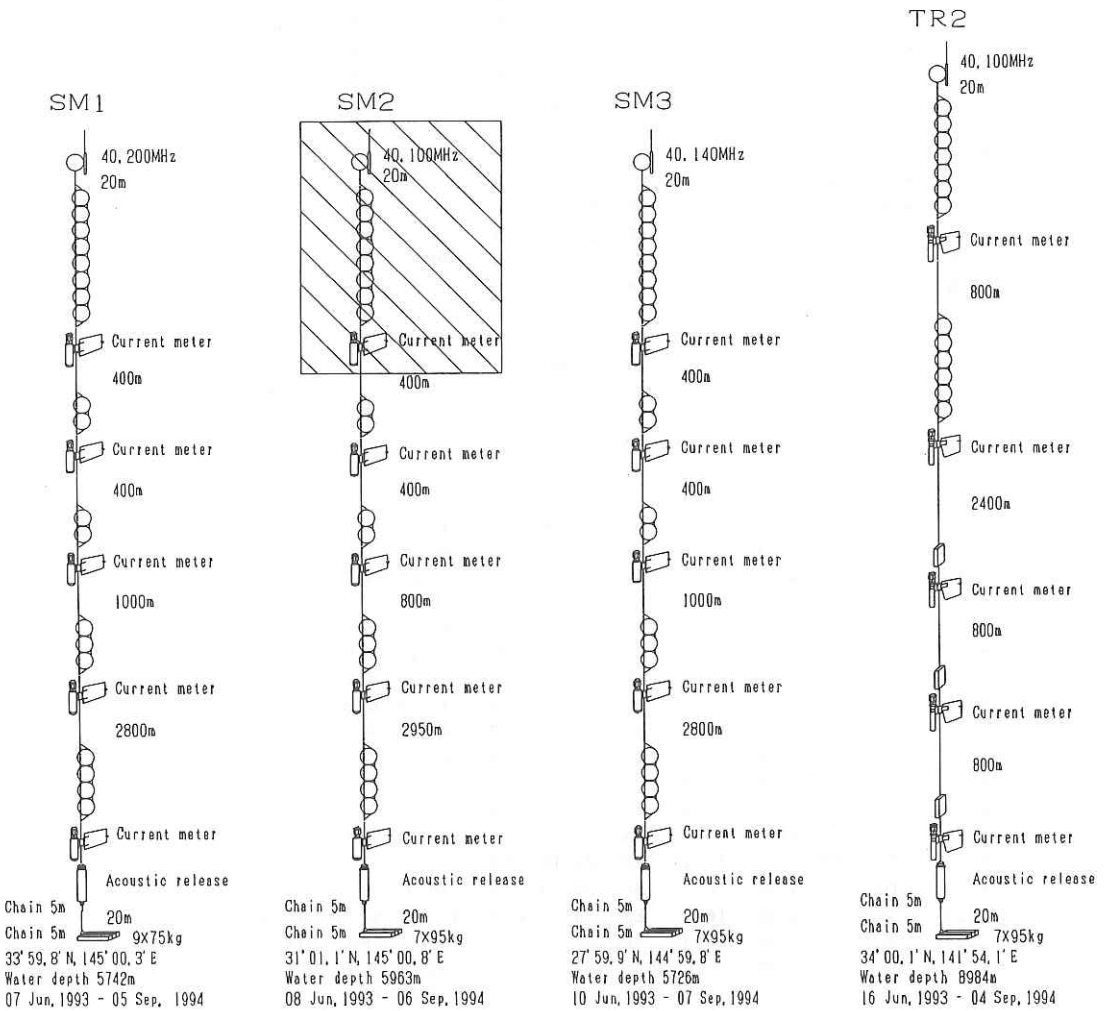
STNNBR	TYPE	DATE	GMT	CODE	LATITUDE	LONGITUDE	BOTDEP	MAXPRS	PARAM
X38	XBT	09/07/94	18:03	DE	28°15.00′N	143°27.93′E	7358		
X39	XBT	09/07/94	20:00	DE	28°30.04′N	142°56.82′E	8615		
X40	XBT	09/07/94	21:55	DE	28°45.02′N	142°25.83′E	8158		
X41	XBT	09/08/94	00:04	DE	29°00.87′N	141°53.37′E	4643		
SM4	MOR	09/08/94	00:09	BE	29°00.92′N	141°53.37′E	4643		
SM4	MOR	09/08/94	02:55	RE	29°02.84′N	141°51.92′E	2678		
AS26	ROS	09/09/94	11:54	BE	24°59.77′N	137°03.01′E	5111		
AS26	ROS	09/09/94	13:31	BO	24°59.36′N	137°02.09′E	5108	5080	S,O,N
AS26	ROS	09/09/94	14:55	EN	24°59.26′N	137°01.98′E	5410		
AS25	ROS	09/09/94	17:19	BE	25°29.87′N	136°49.10′E	5575		
AS25	ROS	09/09/94	19:13	BO	25°28.44′N	136°48.30′E	5400	5403	S,O,N
AS25	ROS	09/09/94	21:11	EN	25°27.47′N	136°47.75′E	3069		
CM10	MOR	09/10/94	01:50	BE	26°32.01′N	136°24.91′E	4988		
CM10	MOR	09/10/94	04:50	RE	26°32.43′N	136°24.81′E	2820		
CM10	MOR	09/10/94	05:43	BE	26°30.67′N	136°28.62′E	3041		
CM10	MOR	09/10/94	07:32	DE	26°31.86′N	136°26.16′E	5078		
AS24	ROS	09/10/94	10:24	BE	25°59.83′N	136°35.07′E	4833		
AS24	ROS	09/10/94	12:24	BO	25°59.52′N	136°34.62′E	4922	4700	S,O,N
AS24	ROS	09/10/94	13:54	EN	25°59.46′N	136°34.25′E	4749		
AS24S	CTD	09/10/94	15:01	BE	25°59.94′N	136°34.93′E	4858		
AS24S	CTD	09/10/94	16:25	BO	25°59.89′N	136°34.99′E	4850	4650	
AS24S	CTD	09/10/94	17:26	EN	25°59.97′N	136°35.29′E	4828		
AS23	ROS	09/10/94	19:57	BE	26°29.98′N	136°20.98′E	4807		
AS23	ROS	09/10/94	21:30	BO	26°29.68′N	136°21.18′E	4750	4770	S,O,N
AS23	ROS	09/10/94	22:44	EN	26°29.41′N	136°20.67′E	4922		
AS22	ROS	09/11/94	01:36	BE	27°00.00′N	136°05.94′E	6502		
AS22	ROS	09/11/94	02:54	BO	27°00.00′N	136°09.88′E	4457	4495	S,O,N
AS22	ROS	09/11/94	04:21	EN	27°00.48′N	136°05.55′E	4515		
AS21	ROS	09/11/94	06:50	BE	27°30.05′N	135°51.99′E	5268		
AS21	ROS	09/11/94	08:29	BO	27°30.17′N	135°51.79′E	5275	5300	S,O,N
AS21	ROS	09/11/94	10:14	EN	27°30.33′N	135°51.60′E	5230		
AS20	ROS	09/11/94	12:36	BE	27°59.94′N	135°36.93′E	5258		
AS20	ROS	09/11/94	14:04	BO	27°59.78′N	135°36.72′E	5276	5302	S,O,N
AS20	ROS	09/11/94	15:37	EN	27°59.35′N	135°36.39′E	5265		
AS19	ROS	09/11/94	17:30	BE	28°19.95′N	135°26.97′E	5042		
AS19	ROS	09/11/94	19:07	BO	28°19.32′N	135°27.62′E	5027	5050	S,O,N
AS19	ROS	09/11/94	21:07	EN	28°18.49′N	135°28.61′E	5051		
CM09	MOR	09/12/94	00:27	BE	29°01.91′N	135°11.12′E	4864		
CM09	MOR	09/12/94	02:36	RE	29°01.91′N	135°11.93′E	4846		
CM09	MOR	09/12/94	04:32	BE	29°01.28′N	135°13.74′E	4988		
CM09	MOR	09/12/94	06:05	DE	29°02.15′N	135°10.44′E	4956		
AS18	ROS	09/12/94	08:20	BE	28°39.89′N	135°16.97′E	4971		
AS18	ROS	09/12/94	09:50	BO	28°39.28′N	135°17.05′E	4983	5000	S,O,N
AS18	ROS	09/12/94	11:20	EN	28°38.72′N	135°17.53′E	5004		
AS17	ROS	09/12/94	13:07	BE	29°00.01′N	135°07.01′E	4930		
AS17	ROS	09/12/94	14:31	BO	28°59.80′N	135°07.24′E	4942	5000	S,O,N
AS17	ROS	09/12/94	16:13	EN	28°59.59′N	135°07.80′E	4975		
AS16	ROS	09/12/94	18:09	BE	29°19.91′N	134°56.05′E	4857		
AS16	ROS	09/12/94	19:40	BO	29°19.99′N	134°57.08′E	4877	4900	S,O,N
AS16	ROS	09/12/94	21:19	EN	29°20.20′N	134°57.68′E	4873		
AS15	ROS	09/12/94	23:07	BE	29°39.91′N	134°46.03′E	4794		
AS15	ROS	09/13/94	00:31	BO	29°39.77′N	134°45.99′E	4792	4870	S,O,N
AS15	ROS	09/13/94	02:25	EN	29°38.71′N	134°45.48′E	4785		
R2	MOR	09/13/94	04:43	BE	30°05.14′N	134°38.16′E	4624		
AS14	ROS	09/13/94	09:23	BE	29°59.92′N	134°35.82′E	4626		
AS14	ROS	09/13/94	10:55	BO	29°58.81′N	134°35.62′E	4606	4617	S,O,N
AS14	ROS	09/13/94	12:25	EN	29°57.96′N	134°35.26′E	4676		
AS13	ROS	09/13/94	16:15	BE	30°15.00′N	134°28.00′E	4531		
AS13	ROS	09/13/94	17:41	BO	30°13.99′N	134°28.47′E	4504	4543	S,O,N

STNNBR	TYPE	DATE	GMT	CODE	LATITUDE	LONGITUDE	BOTDEP	MAXPRS	PARAM
AS13	ROS	09/13/94	19:11	EN	30°13.30′N	134°28.77′E	4568		
R2	MOR	09/14/94	00:15	RE	30°00.25′N	134°38.76′E	4649		
CM08	MOR	09/14/94	02:57	BE	30°27.87′N	134°14.80′E	4543		
CM08	MOR	09/14/94	05:24	RE	30°28.17′N	134°15.23′E	4542		
CM08	MOR	09/14/94	06:01	BE	30°27.21′N	134°12.29′E	4525		
CM08	MOR	09/14/94	07:19	DE	30°27.42′N	134°14.73′E	4544		
AS12	ROS	09/14/94	09:12	BE	30°30.09′N	134°20.08′E	4542		
AS12	ROS	09/14/94	10:39	BO	30°30.22′N	134°19.98′E	4543	4570	S,O,N
AS12	ROS	09/14/94	12:18	EN	30°30.42′N	134°18.52′E	4533		
AS11	ROS	09/14/94	13:59	BE	30°44.96′N	134°11.77′E	4464		
AS11	ROS	09/14/94	15:18	BO	30°45.09′N	134°11.71′E	4464	4515	S,O,N
AS11	ROS	09/14/94	16:46	EN	30°45.27′N	134°11.45′E	4462		
AS10	ROS	09/14/94	18:05	BE	31°00.01′N	134°04.02′E	4434		
AS10	ROS	09/14/94	19:38	BO	30°59.87′N	134°03.63′E	4438	4470	S,O,N
AS10	ROS	09/14/94	21:15	EN	30°59.73′N	134°02.86′E	4451		
CM07	MOR	09/14/94	22:51	BE	31°13.14′N	133°50.84′E	4572		
CM07	MOR	09/14/94	22:51	BE	31°13.14′N	133°50.84′E	4572		
CM07	MOR	09/15/94	01:14	RE	31°14.46′N	133°50.51′E	4563		
CM07	MOR	09/15/94	03:34	BE	31°12.07′N	133°48.36′E	4577		
CM07	MOR	09/15/94	05:06	DE	31°13.85′N	133°51.43′E	4572		
AS09	ROS	09/15/94	09:59	BE	31°15.09′N	133°55.96′E	4545		
AS09	ROS	09/15/94	11:20	BO	31°15.32′N	133°55.96′E	4545	4580	S,O,N
AS09	ROS	09/15/94	12:50	EN	31°15.55′N	133°55.85′E	4553		
AS08	ROS	09/15/94	14:05	BE	31°30.07′N	133°47.93′E	4851		
AS08	ROS	09/15/94	15:39	BO	31°30.73′N	133°47.35′E	4868	4920	S,O,N
AS08	ROS	09/15/94	17:30	EN	31°31.46′N	133°46.92′E	4873		
AS07	ROS	09/15/94	18:54	BE	31°44.97′N	133°40.03′E	4567		
AS07	ROS	09/15/94	20:23	BO	31°45.52′N	133°40.06′E	4457	4490	S,O,N
AS07	ROS	09/15/94	21:58	EN	31°45.91′N	133°39.76′E	4428		
CM06	MOR	09/15/94	23:03	BE	31°41.06′N	133°36.02′E	4802		
CM06	MOR	09/16/94	01:22	RE	31°41.86′N	133°35.57′E	4599		
CM06	MOR	09/16/94	03:31	BE	31°39.79′N	133°33.72′E	4782		
CM06	MOR	09/16/94	05:16	DE	31°42.54′N	133°38.64′E	4788		
AS6A	ROS	09/16/94	06:27	BE	31°50.10′N	133°36.90′E	3640		
AS6A	ROS	09/16/94	08:11	BO	31°51.07′N	133°37.29′E	3795	3813	S,O,N
AS6A	ROS	09/16/94	09:35	EN	31°51.45′N	133°37.40′E	3805		
AS06	ROS	09/16/94	10:18	BE	31°55.20′N	133°34.00′E	2990		
AS06	ROS	09/16/94	11:15	BO	31°56.20′N	133°34.34′E	3002	2932	S,O,N
AS06	ROS	09/16/94	12:44	EN	31°57.54′N	133°34.84′E	2607		
AS5A	ROS	09/16/94	13:30	BE	32°00.04′N	133°32.23′E	2288		
AS5A	ROS	09/16/94	14:15	BO	32°00.38′N	133°32.50′E	2265	2275	S,O,N
AS5A	ROS	09/16/94	15:29	EN	32°00.75′N	133°33.04′E	2247		
AS05	ROS	09/16/94	16:14	BE	32°04.98′N	133°29.14′E	1978		
AS05	ROS	09/16/94	17:06	BO	32°05.64′N	133°30.15′E	1817	1819	S,O,N
AS05	ROS	09/16/94	18:07	EN	32°06.81′N	133°31.36′E	1830		
AS04	ROS	09/16/94	19:17	BE	32°15.06′N	133°23.13′E	1163		
AS04	ROS	09/16/94	19:50	BO	32°15.53′N	133°23.56′E	1173	1140	S,O,N
AS04	ROS	09/16/94	20:47	EN	32°16.09′N	133°24.91′E	1128		
R1	MOR	09/16/94	22:21	BE	32°08.69′N	133°47.71′E	2379		
R1	MOR	09/16/94	23:53	RE	32°09.68′N	133°48.87′E	2415		
CM05	MOR	09/17/94	02:02	BE	31°58.19′N	133°27.08′E	2504		
CM05	MOR	09/17/94	04:10	RE	31°59.70′N	133°28.31′E	2460		
CM05	MOR	09/17/94	04:52	BE	31°58.76′N	133°27.52′E	2408		
CM05	MOR	09/17/94	05:44	DE	31°58.21′N	133°27.08′E	2511		
AS03	ROS	09/17/94	07:48	BE	32°25.16′N	133°18.20′E	945		
AS03	ROS	09/17/94	08:09	BO	32°25.69′N	133°18.81′E	935	850	S,O,N
AS03	ROS	09/17/94	08:52	EN	32°26.87′N	133°19.84′E	815		
AS2A	ROS	09/17/94	09:36	BE	32°30.14′N	133°15.61′E	793		
AS2A	ROS	09/17/94	09:54	BO	32°30.60′N	133°16.11′E	679	630	S,O,N

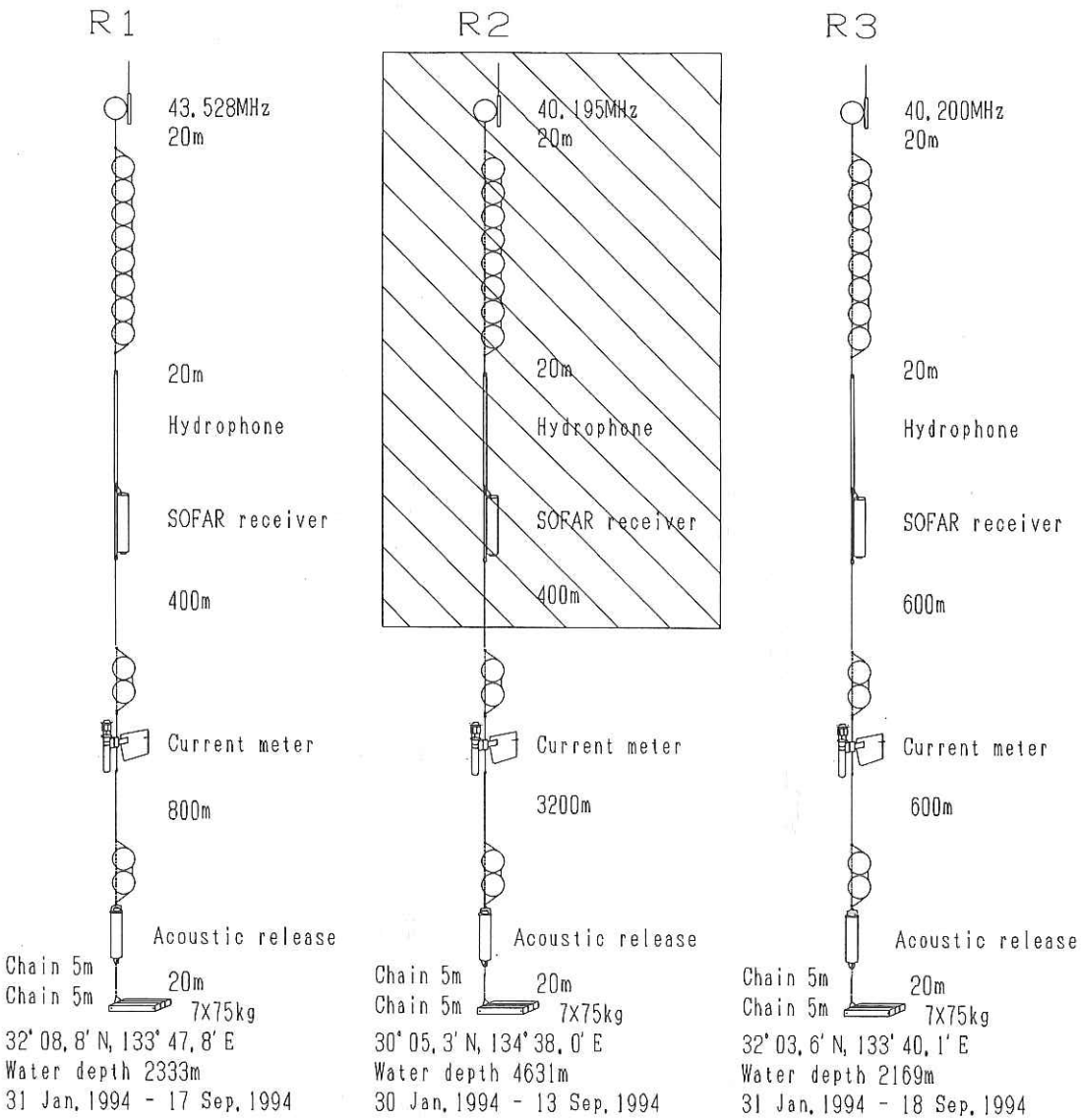
STNNBR	TYPE	DATE	GMT	CODE	LATITUDE	LONGITUDE	BOTDEP	MAXPRS	PARAM
AS2A	ROS	09/17/94	10:44	EN	32°31.98′N	133°17.45′E	845		
AS02	ROS	09/17/94	11:19	BE	32°35.11′N	133°12.16′E	850		
AS02	ROS	09/17/94	11:41	BO	32°35.45′N	133°12.86′E	679	790	S,O,N
AS02	ROS	09/17/94	12:18	EN	32°35.85′N	133°13.70′E	618		
AS1A	ROS	09/17/94	13:21	BE	32°40.03′N	133°09.25′E	320		
AS1A	ROS	09/17/94	13:32	BO	32°40.02′N	133°09.45′E	323	270	S,O,N
AS1A	ROS	09/17/94	13:54	EN	32°40.11′N	133°09.96′E	360		
AS01	ROS	09/17/94	15:00	BE	32°45.00′N	133°06.00′E	150		
AS01	ROS	09/17/94	15:08	BO	32°44.81′N	133°05.81′E	113	120	S,O,N
AS01	ROS	09/17/94	15:20	EN	32°44.65′N	133°05.89′E	200		
R3	MOR	09/17/94	22:02	BE	32°03.71′N	133°40.41′E	2337		
R3	MOR	09/17/94	23:41	RE	32°05.53′N	133°42.54′E	2307		
CM04	MOR	09/18/94	02:02	BE	32°08.02′N	133°21.05′E	1591		
CM04	MOR	09/18/94	04:09	RE	32°11.86′N	133°24.45′E	1366		
CM04	MOR	09/18/94	06:31	BE	32°08.56′N	133°21.59′E	1616		
CM04	MOR	09/18/94	07:03	DE	32°08.37′N	133°21.38′E	1608		
CM02	MOR	09/18/94	21:01	BE	32°27.97′N	133°09.81′E	829		
CM02	MOR	09/18/94	22:30	RE	32°28.19′N	133°10.66′E	819		
CM02	MOR	09/18/94	23:05	BE	32°27.67′N	133°09.37′E	847		
CM02	MOR	09/18/94	23:33	DE	32°27.99′N	133°10.55′E	824		
CM03	MOR	09/19/94	00:43	BE	32°18.16′N	133°16.09′E	1203		
CM03	MOR	09/19/94	01:41	RE	32°19.45′N	133°17.63′E	1207		
CM03	MOR	09/19/94	02:04	BE	32°18.16′N	133°16.19′E	1208		
CM03	MOR	09/19/94	02:28	DE	32°18.21′N	133°16.51′E	1205		
KC01	CTD	09/19/94	22:32	BE	33°25.00′N	139°49.70′E	526		
KC01	CTD	09/19/94	22:53	BO	33°24.63′N	139°50.32′E	523		
KC01	CTD	09/19/94	23:06	EN	33°24.40′N	139°50.52′E	519		
KC02	CTD	09/20/94	00:10	BE	33°29.84′N	139°45.27′E	613		
KC02	CTD	09/20/94	00:29	BO	33°29.51′N	139°45.89′E	608		
KC02	CTD	09/20/94	00:45	EN	33°29.51′N	139°45.89′E	610		
KC03	CTD	09/20/94	01:47	BE	33°35.00′N	139°40.45′E	1255		
KC03	CTD	09/20/94	02:16	BO	33°34.86′N	139°41.15′E	1200	1098	
KC03	CTD	09/20/94	02:35	EN	33°34.71′N	139°41.62′E	1135		
KC04	CTD	09/20/94	03:44	BE	33°39.98′N	139°34.78′E	1604		
KC04	CTD	09/20/94	04:27	BO	33°40.09′N	139°36.65′E	1572	1520	
KC04	CTD	09/20/94	04:50	EN	33°39.90′N	139°37.31′E	1554		
KC05	CTD	09/20/94	07:46	BE	33°44.69′N	139°30.46′E	1711		
KC05	CTD	09/20/94	08:31	BO	33°43.93′N	139°32.23′E	1656	1560	
KC05	CTD	09/20/94	08:58	EN	33°43.34′N	139°33.17′E	1643		
KC06	CTD	09/20/94	10:05	BE	33°50.01′N	139°24.79′E	1646		
KC06	CTD	09/20/94	10:49	BO	33°50.21′N	139°26.13′E	1678	1616	
KC06	CTD	09/20/94	11:16	EN	33°50.29′N	139°26.82′E	1650		
KC07	CTD	09/20/94	12:13	BE	33°55.20′N	139°20.09′E	1214		
KC07	CTD	09/20/94	12:39	BO	33°55.50′N	139°20.96′E	1152	1005	
KC07	CTD	09/20/94	12:54	EN	33°55.52′N	139°21.32′E	1153		
KC08	CTD	09/20/94	13:48	BE	33°59.81′N	139°15.03′E	543		
KC08	CTD	09/20/94	14:05	BO	33°59.66′N	139°15.51′E	616	500	
KC08	CTD	09/20/94	14:14	EN	33°59.06′N	139°15.61′E	460		
KC09	CTD	09/20/94	15:08	BE	34°04.89′N	139°10.29′E	508		
KC09	CTD	09/20/94	15:28	BO	34°04.85′N	139°11.04′E	441	406	
KC09	CTD	09/20/94	15:37	EN	34°04.78′N	139°11.19′E	141		
KC10	CTD	09/20/94	17:10	BE	34°15.09′N	139°30.32′E	450		
KC10	CTD	09/20/94	17:21	BO	34°15.20′N	139°30.83′E	468	430	
KC10	CTD	09/20/94	17:30	EN	34°15.16′N	139°30.90′E	468		
KC11	CTD	09/20/94	18:18	BE	34°09.85′N	139°35.05′E	250		
KC11	CTD	09/20/94	18:25	BO	34°09.67′N	139°35.22′E	259	220	
KC11	CTD	09/20/94	18:30	EN	34°09.59′N	139°35.17′E	316		
KC12	CTD	09/20/94	19:14	BE	34°04.74′N	139°39.96′E	760		
KC12	CTD	09/20/94	19:40	BO	34°04.76′N	139°39.41′E	712	641	

STNNBR	TYPE	DATE	GMT	CODE	LATITUDE	LONGITUDE	BOTDEP	MAXPRS	PARAM
KC12	CTD	09/20/94	19:55	EN	34°04.80′N	139°39.45′E	713		
KC13	CTD	09/20/94	20:43	BE	34°00.19′N	139°44.78′E	1053		
KC13	CTD	09/20/94	21:15	BO	34°00.57′N	139°45.96′E	1111	1050	
KC13	CTD	09/20/94	21:34	EN	34°00.73′N	139°46.29′E	1115		
KC14	CTD	09/20/94	22:18	BE	33°55.15′N	139°49.80′E	1211		
KC14	CTD	09/20/94	22:52	BO	33°55.77′N	139°49.91′E	1209	1150	
KC14	CTD	09/20/94	23:08	EN	33°56.07′N	139°49.80′E	1210		
S4	MOR	09/21/94	00:00	BE	34°01.33′N	139°54.31′E	1209		
S4	MOR	09/21/94	00:04	DE	34°01.42′N	139°54.40′E	1211		
S1	MOR	09/21/94	00:38	BE	34°06.10′N	139°52.52′E	1158		
S1	MOR	09/21/94	00:42	DE	34°06.22′N	139°52.59′E	1157		
S2	MOR	09/21/94	01:15	BE	34°04.73′N	139°58.47′E	1232		
S2	MOR	09/21/94	01:17	DE	34°04.68′N	139°58.61′E	1232		
S3	MOR	09/21/94	01:59	BE	34°00.00′N	140°00.15′E	1128		
S3	MOR	09/21/94	02:02	DE	34°00.00′N	140°00.18′E	1131		
KC15	CTD	09/21/94	03:18	BE	33°50.40′N	139°55.19′E	470		
KC15	CTD	09/21/94	03:29	BO	33°50.17′N	139°55.62′E	450	380	
KC15	CTD	09/21/94	03:35	EN	33°50.23′N	139°55.95′E	301		
KC16	CTD	09/21/94	04:25	BE	33°45.05′N	140°00.53′E	513		
KC16	CTD	09/21/94	04:44	BO	33°45.17′N	140°00.82′E	529	500	
KC16	CTD	09/21/94	04:53	EN	33°45.20′N	140°00.80′E	532		
KC17	CTD	09/21/94	05:35	BE	33°39.92′N	140°05.09′E	278		
KC17	CTD	09/21/94	05:47	BO	33°39.98′N	140°05.11′E	242	220	
KC17	CTD	09/21/94	05:51	EN	33°40.02′N	140°05.07′E	245		
KC18	CTD	09/21/94	07:30	BE	33°44.97′N	140°30.05′E	1511		
KC18	CTD	09/21/94	08:01	BO	33°44.88′N	140°30.21′E	1573	1458	
KC18	CTD	09/21/94	08:26	EN	33°44.78′N	140°30.31′E	1547		
KC19	CTD	09/21/94	09:13	BE	33°50.09′N	140°25.06′E	1324		
KC19	CTD	09/21/94	09:43	BO	33°50.26′N	140°25.32′E	1347	1290	
KC19	CTD	09/21/94	10:05	EN	33°50.55′N	140°25.27′E	1352		
KC20	CTD	09/21/94	10:43	BE	33°55.19′N	140°20.06′E	1259		
KC20	CTD	09/21/94	11:11	BO	33°55.66′N	140°20.63′E	1310	1218	
KC20	CTD	09/21/94	11:31	EN	33°55.82′N	140°20.70′E	1320		
KC21	CTD	09/21/94	12:17	BE	34°00.05′N	140°14.93′E	1186		
KC21	CTD	09/21/94	12:40	BO	34°00.39′N	140°15.34′E	1217	1022	
KC21	CTD	09/21/94	12:55	EN	34°00.51′N	140°15.57′E	1233		
KC22	CTD	09/21/94	13:40	BE	34°05.10′N	140°10.09′E	1323		
KC22	CTD	09/21/94	14:04	BO	34°05.73′N	140°10.63′E	1358	1190	
KC22	CTD	09/21/94	14:24	EN	34°05.82′N	140°11.09′E	1371		
KC23	CTD	09/21/94	15:40	BE	34°10.00′N	140°05.66′E	1465		
KC23	CTD	09/21/94	16:16	BO	34°10.39′N	140°07.19′E	1508	1420	
KC23	CTD	09/21/94	16:38	EN	34°10.43′N	140°07.81′E	1516		
KC24	CTD	09/21/94	17:30	BE	34°15.01′N	140°00.06′E	1451		
KC24	CTD	09/21/94	18:08	BO	34°14.59′N	140°00.36′E	1447	1408	
KC24	CTD	09/21/94	18:26	EN	34°14.38′N	140°00.56′E	1447		
KC25	CTD	09/21/94	19:18	BE	34°20.10′N	139°55.00′E	1510		
KC25	CTD	09/21/94	19:51	BO	34°19.87′N	139°55.12′E	1503	1450	
KC25	CTD	09/21/94	20:13	EN	34°19.71′N	139°55.22′E	1413		
KC26	CTD	09/21/94	20:57	BE	34°25.07′N	139°50.06′E	1435		
KC26	CTD	09/21/94	21:32	BO	34°25.05′N	139°50.62′E	1452	1400	
KC26	CTD	09/21/94	21:52	EN	34°25.08′N	139°50.80′E	1463		
KC27	CTD	09/21/94	22:43	BE	34°29.92′N	139°44.64′E	1432		
KC27	CTD	09/21/94	23:10	BO	34°29.67′N	139°44.81′E	1417	1375	
KC27	CTD	09/21/94	23:32	EN	34°29.57′N	139°44.79′E	1413		

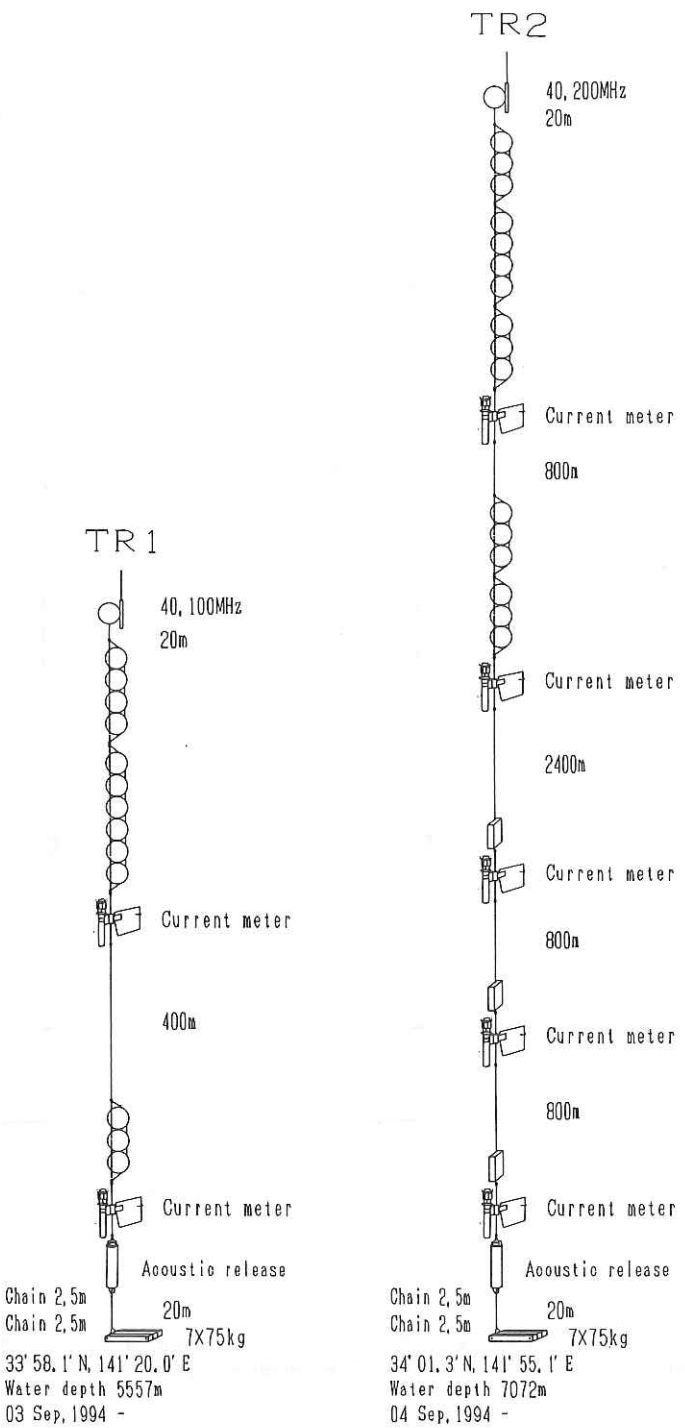
6. Mooring Systems



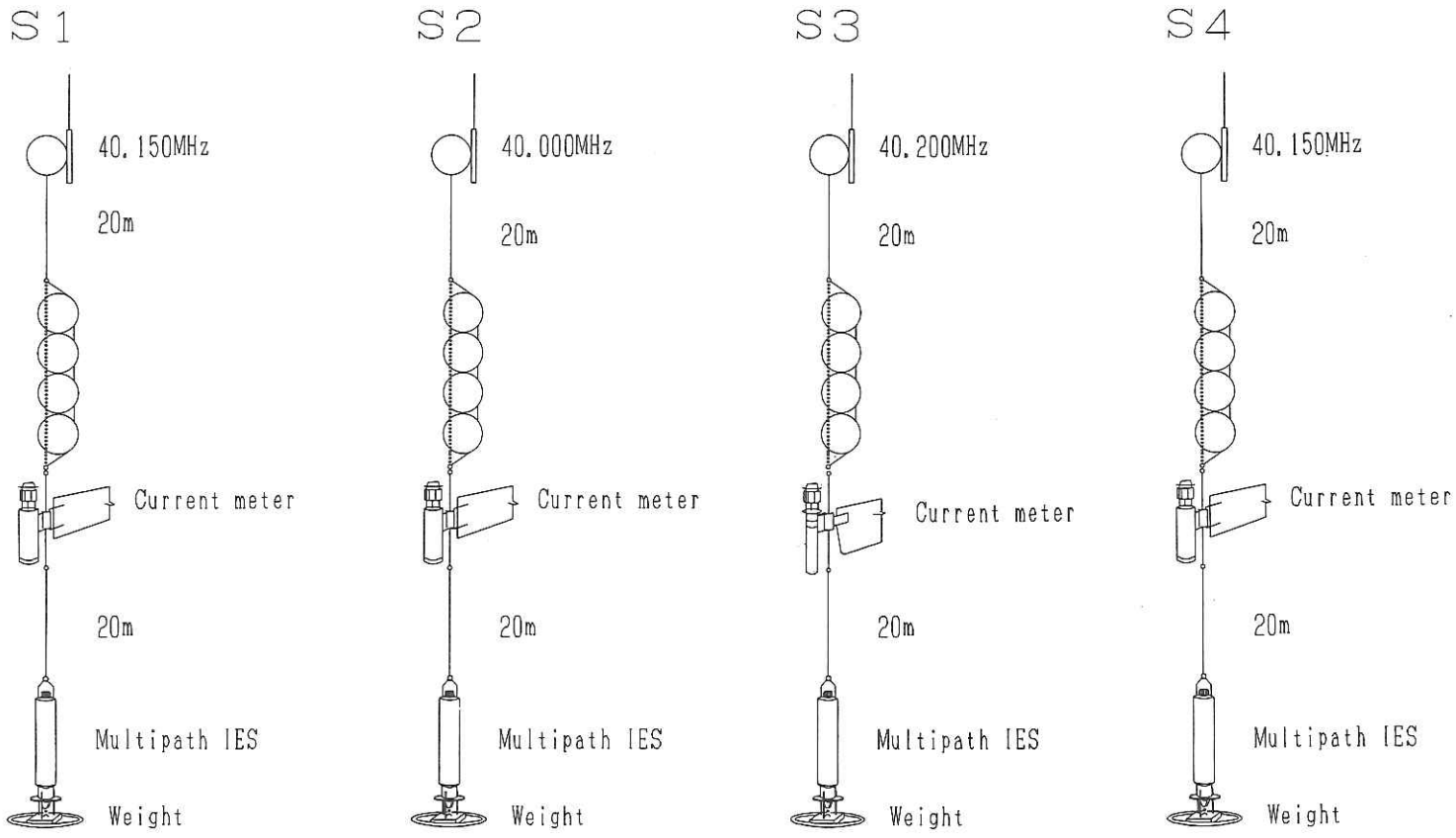
Moorings of current meters recovered at the Japan Trench and 145°E.
The shaded part had been recovered before this cruise.



Moorings of acoustic receivers for SOFAR floats and current meters recovered at the ASUKA line. The shaded part was not recovered.



Moorings of current meters deployed at the Japan Trench.



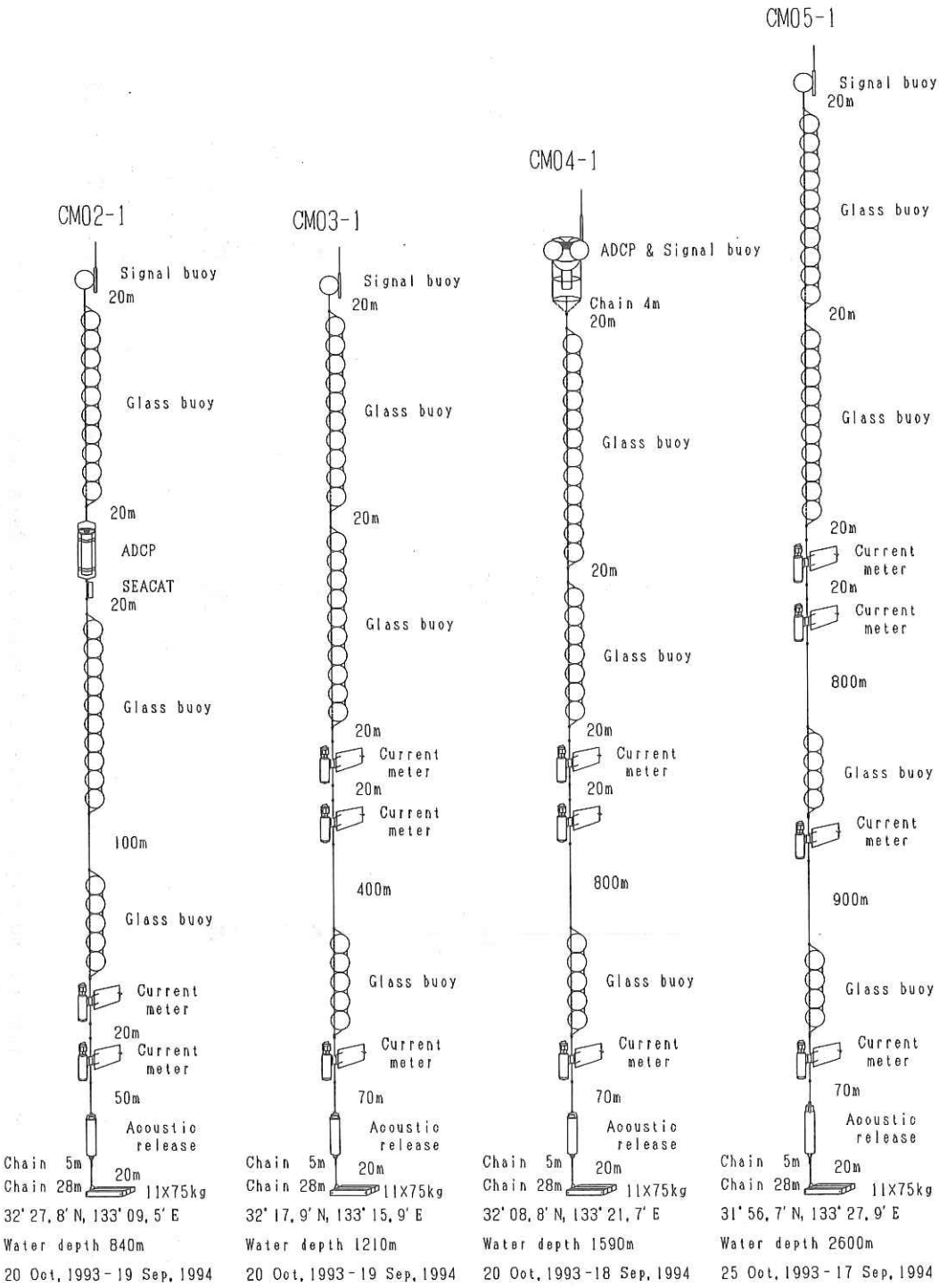
34° 06.2′ N, 139° 52.6′ E
Water depth 1157m
21 Sep. 1994 - 20 Jan. 1995

34° 04.7′ N, 139° 58.6′ E
Waterr depth 1232m
21 Sep. 1994 - 20 Jan. 1995

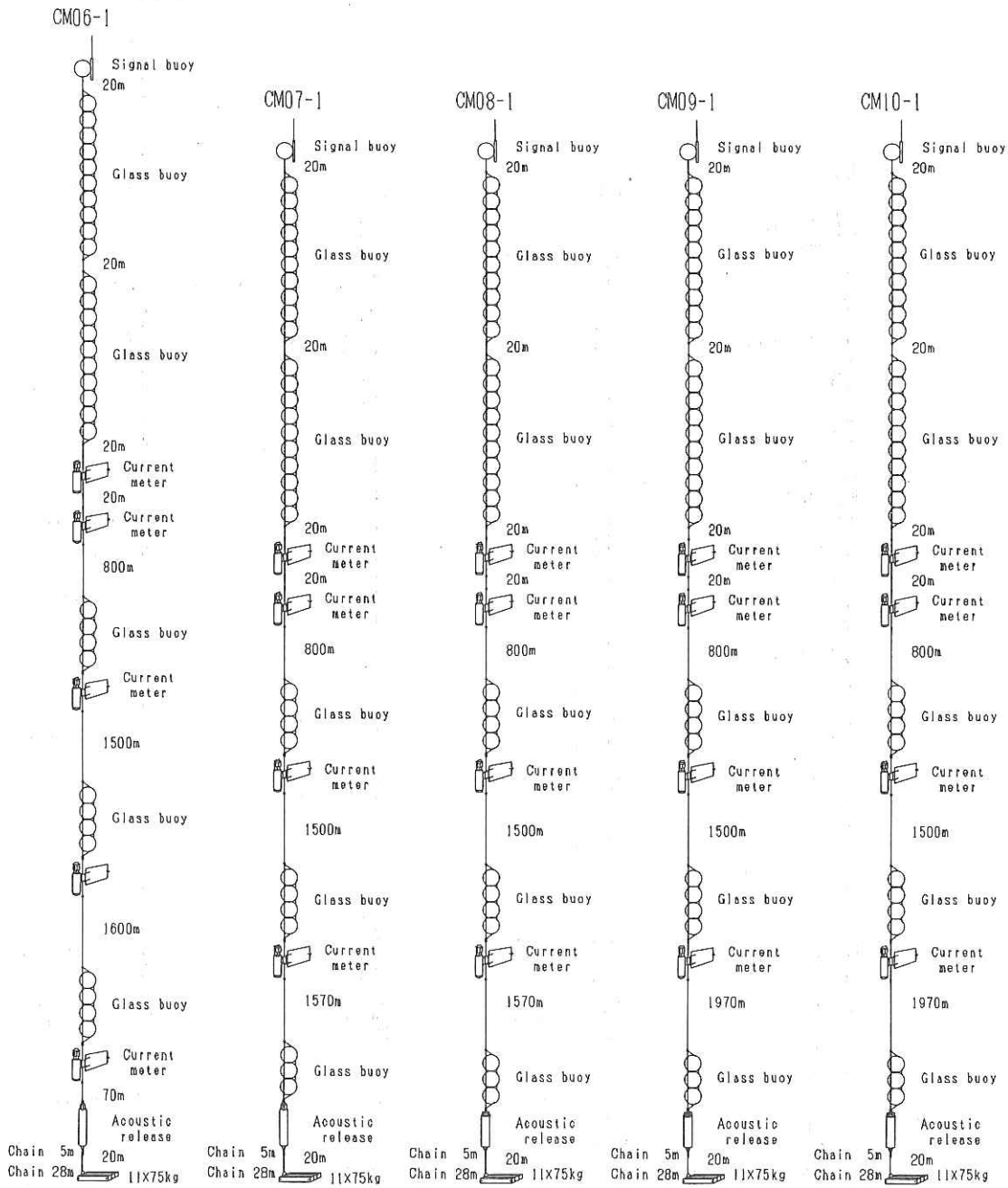
34° 00.0′ N, 140° 00.2′ E
Water depth 1131m
21 Sep. 1994 - 20 Jan. 1995

34° 01.4′ N, 139° 54.4′ E
Water depth 1211m
21 Sep. 1994 - 20 Jan. 1995

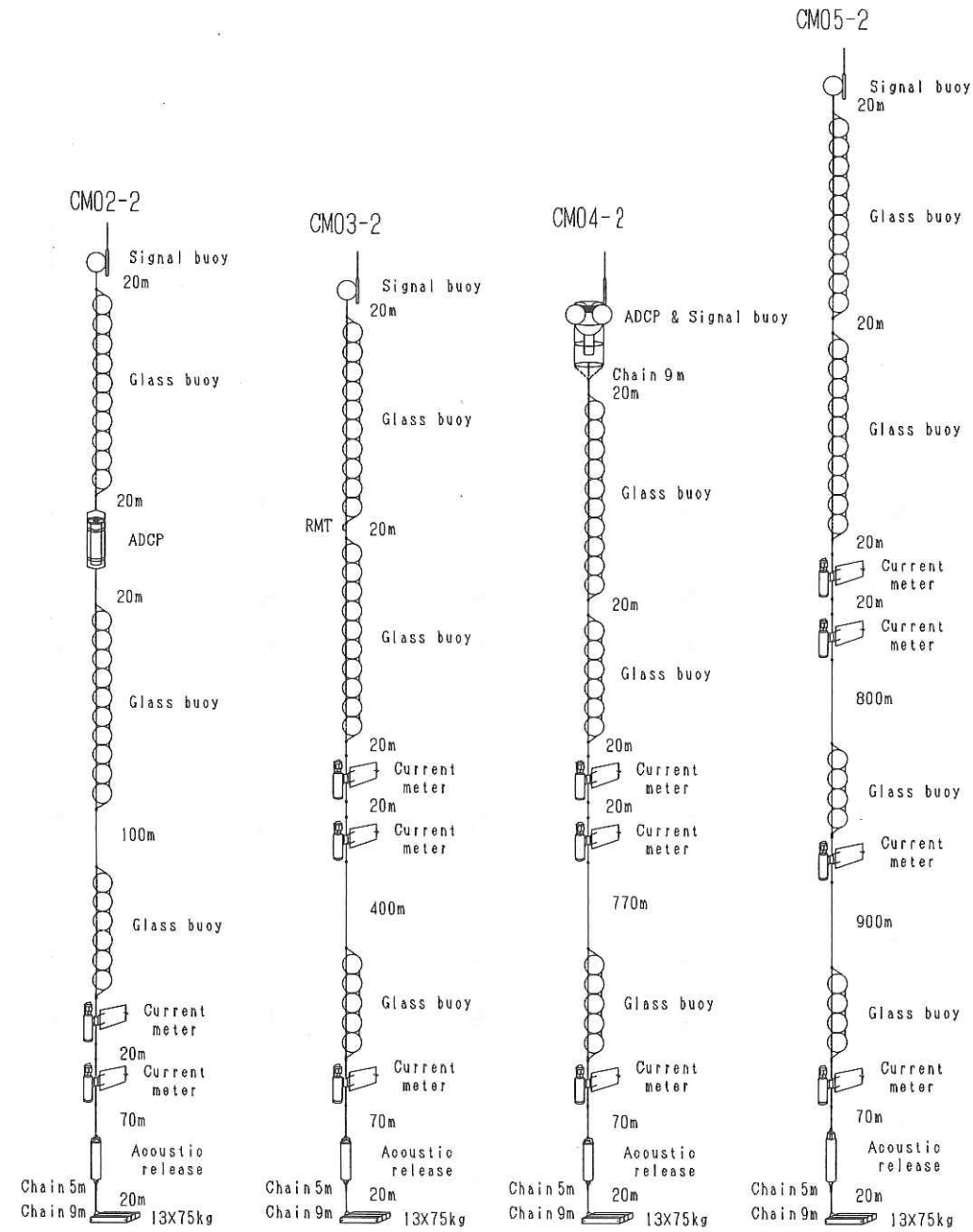
Moorings of multipath inverted echo sounders and current meters deployed east of Miyake-jima on the Izu Ridge.



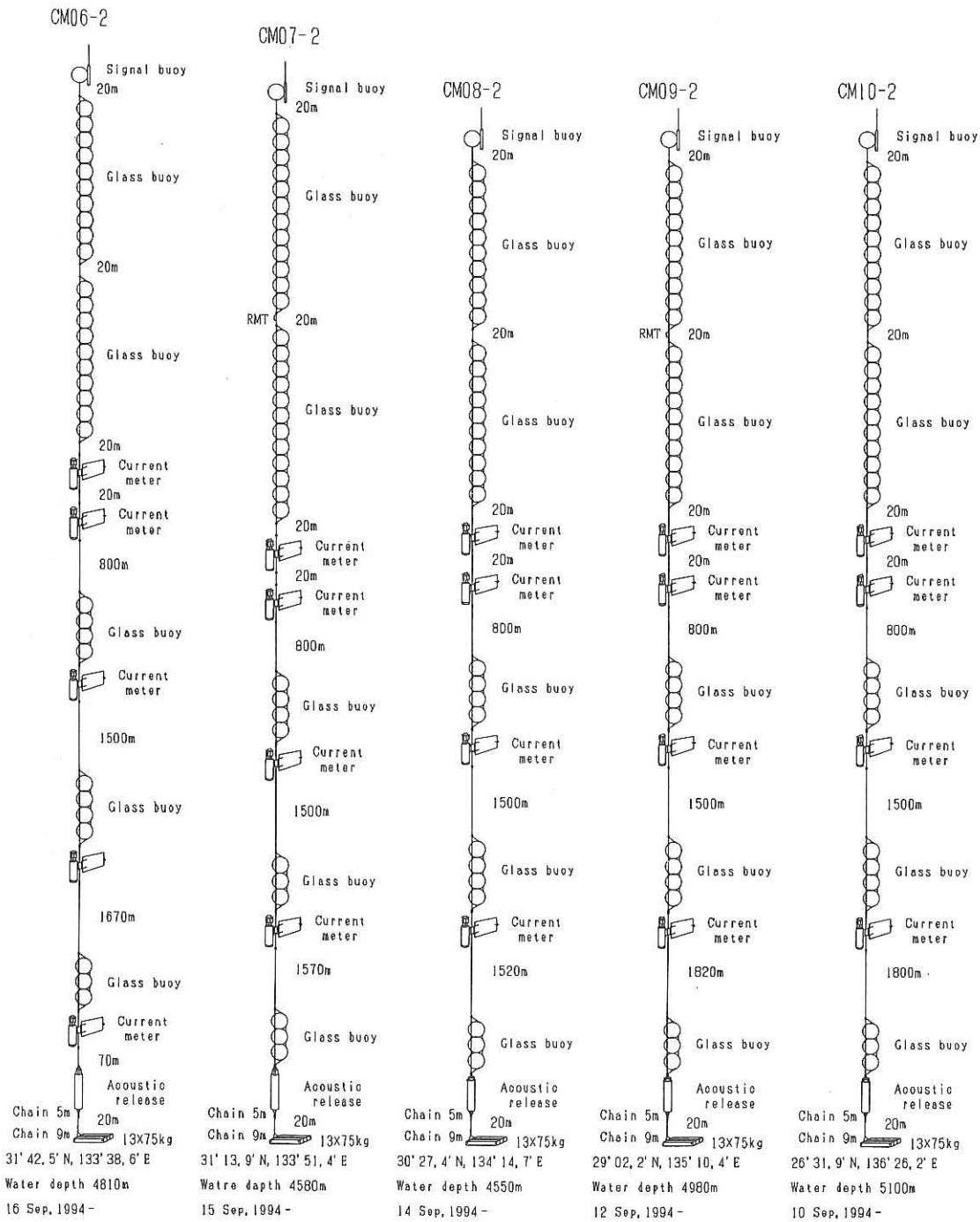
Moorings of current meters and acoustic Doppler current profilers recovered at the ASUKA line.



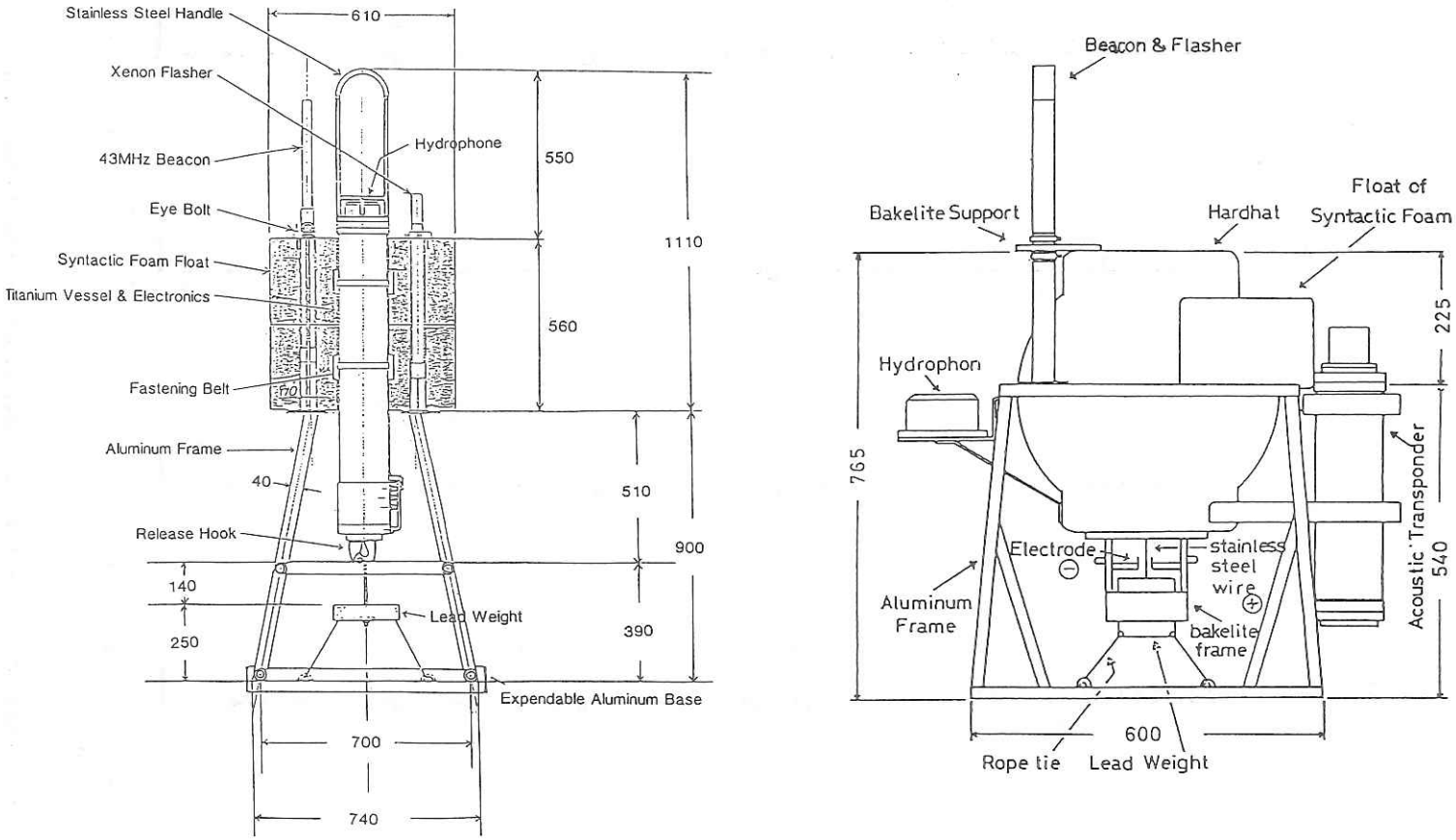
Moorings of current meters recovered at the ASUKA line.



Moorings of current meters and acoustic Doppler current profilers deployed at the ASUKA line.



Moorings of current meters deployed at the ASUKA line.



Ocean bottom electrometer (left) and ocean bottom magnetometer (right) deployed at CM04 (32°08'N, 133°22'E) on the ASUKA line. They were recovered on 23 November 1994 (KT-94-18).

7. CTDO$_2$ Data

KH9403 September 2, 1994
PC01 34°01.46′N, 140°02.58′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.4391	34.2262	9.9900
20.0	28.3868	34.2426	9.9900
30.0	28.3427	34.2507	9.9900
50.0	27.0220	34.3162	5.3480
75.0	24.3077	34.5241	4.9415
100.0	21.1067	34.7452	4.9392
150.0	17.8645	34.8035	5.1886
200.0	14.8554	34.6255	4.6154
300.0	10.7585	34.4053	3.9136
400.0	8.5644	34.2876	3.4286
500.0	8.0323	34.2598	3.3312
600.0	6.4744	34.2210	2.6559
700.0	5.5260	34.2724	2.1317
800.0	4.6800	34.3112	1.8848
900.0	4.0914	34.3594	1.7008
1000.0	3.6206	34.4076	1.7512
1100.0	3.4488	34.4253	1.7563
1105.0	3.4498	34.4251	1.7566

KH9403 September 2, 1994
PC02 33°59.91′N, 140°41.47′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.8143	34.3707	4.8636
20.0	28.8172	34.3726	4.6228
30.0	28.3297	34.3402	4.5905
50.0	26.0315	34.3887	4.7061
75.0	24.1600	34.7723	4.4991
100.0	21.9150	34.8367	4.8220
150.0	20.1590	34.8826	4.9952
200.0	18.6685	34.8731	4.8300
300.0	17.4334	34.8025	4.6281
400.0	15.6432	34.6745	4.1621
500.0	12.6059	34.4934	3.4834
600.0	7.1462	34.2768	2.1021
700.0	5.7526	34.2848	1.9677
800.0	4.6315	34.3181	1.6601
900.0	3.9043	34.3632	1.5302
1000.0	3.5058	34.3902	1.4000
1100.0	3.2197	34.4201	1.3524
1200.0	2.9277	34.4533	1.2704
1300.0	2.7100	34.4776	1.2736
1400.0	2.5126	34.5013	1.2659
1500.0	2.3324	34.5295	1.3136
1600.0	2.2205	34.5485	1.4403
1700.0	2.1404	34.5621	1.5651
1800.0	2.0774	34.5742	1.6410
1900.0	2.0227	34.5844	1.7284
2000.0	1.9344	34.6011	1.9332
2357.0	1.7336	34.6331	2.3689

KH9403 September 2, 1994
PC03 34°00.43′N, 141°09.82′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3964	34.5509	5.0370
20.0	28.0699	34.5780	5.0357
30.0	26.4479	34.6264	5.2529
50.0	24.5374	34.6850	5.0365
75.0	22.1537	34.8417	4.7642
100.0	21.0586	34.8786	5.0186
150.0	19.4971	34.9184	5.2730
200.0	18.5993	34.8927	5.2342
300.0	17.3014	34.8014	4.8305
400.0	14.9284	34.6240	4.3409
500.0	12.0920	34.4266	4.0135
600.0	8.8341	34.2824	3.1769
700.0	6.7632	34.1923	2.7293
800.0	4.8303	34.0842	2.1377
900.0	4.2313	34.1967	1.4038
1000.0	3.8071	34.2903	1.4126
1100.0	3.5077	34.3439	1.1804
1200.0	3.1367	34.3903	1.0536
1300.0	2.9200	34.4342	1.0905
1400.0	2.7379	34.4698	1.3515
1500.0	2.5332	34.5002	1.2586
1600.0	2.4319	34.5180	1.3477
1700.0	2.2854	34.5406	1.4149
1800.0	2.1712	34.5587	1.6409
1900.0	2.0806	34.5748	1.7579
2000.0	2.0118	34.5879	1.8675
2500.0	1.7104	34.6394	2.5906
3000.0	1.5486	34.6646	2.9960
3500.0	1.4860	34.6766	3.2869
4000.0	1.4604	34.6845	3.4072
4500.0	1.4685	34.6892	3.5259
4609.0	1.4735	34.6900	

KH9403 September 3, 1994
PC04 34°00.79′N, 141°27.64′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3026	34.5900	9.9900
20.0	28.3007	34.5907	5.2637
30.0	27.4691	34.6192	5.2671
50.0	24.5451	34.6873	9.9900
75.0	21.8905	34.8690	5.6507
100.0	20.7088	34.8509	5.4406
150.0	18.8976	34.8772	5.4056
200.0	18.2100	34.8764	5.5783
300.0	17.2290	34.8182	5.1807
400.0	15.3485	34.6472	4.4695
500.0	12.8266	34.4664	4.3467
600.0	10.1130	34.2868	3.9900
700.0	7.0511	34.0946	3.5658
800.0	5.3108	34.0859	2.4032
900.0	4.5021	34.1707	1.6606
1000.0	4.0932	34.2354	1.3864
1100.0	3.6540	34.3023	1.1890
1200.0	3.3439	34.3560	1.1435
1300.0	3.2333	34.4130	1.4414
1400.0	2.9711	34.4630	1.5473
1500.0	2.7047	34.4877	1.4425
1600.0	2.4975	34.5055	1.3815
1700.0	2.3509	34.5285	1.4524
1800.0	2.2124	34.5526	1.5583
1900.0	2.1372	34.5672	1.7295
2000.0	2.0534	34.5826	1.8778
2500.0	1.7331	34.6363	2.5984
3000.0	1.5804	34.6609	2.9721
3500.0	1.5075	34.6745	3.3322
4000.0	1.4756	34.6832	3.5037
4500.0	1.4836	34.6880	3.5767
5000.0	1.5162	34.6907	3.6397
5500.0	1.5642	34.6920	3.6570
6000.0	1.6235	34.6923	3.6412
6500.0	1.6907	34.6918	3.6931
6507.0	1.6919	34.6918	3.6937

KH9403 September 3, 1994
PC05 34°00.17′N, 141°44.78′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2656	34.0433	9.9900
20.0	28.2943	33.8112	9.9900
30.0	28.0716	34.5488	9.9900
50.0	24.3152	34.6610	4.7596
75.0	21.7288	34.8138	5.6004
100.0	20.4417	34.8657	5.2993
150.0	19.0106	34.8426	4.9213
200.0	17.7557	34.7604	4.8844
300.0	16.2339	34.7037	4.8744
400.0	14.4062	34.5826	4.5150
500.0	11.9245	34.4212	4.2571
600.0	9.4635	34.2686	3.8327
700.0	7.9076	34.1805	3.4874
800.0	5.7136	34.1000	2.7034
900.0	4.8688	34.1669	1.9160
1000.0	4.1499	34.2511	1.4808
1100.0	3.6974	34.3167	1.3408
1200.0	3.3321	34.3584	1.1939
1300.0	3.1004	34.4003	1.0943
1400.0	2.9414	34.4493	1.3253
1500.0	2.7416	34.4825	1.4848
1600.0	2.5496	34.5048	1.6029
1700.0	2.3554	34.5270	1.3712
1800.0	2.2587	34.5439	1.6109
1900.0	2.1549	34.5642	1.7213
2000.0	2.0736	34.5795	1.8759
2500.0	1.7471	34.6339	2.6224
3000.0	1.5872	34.6604	3.0743
3500.0	1.5086	34.6746	3.3689
4000.0	1.4786	34.6831	3.5846
4500.0	1.4833	34.6881	3.7259
5000.0	1.5126	34.6910	3.7827
5500.0	1.5644	34.6920	3.8202
6000.0	1.6235	34.6922	3.8585
6500.0	1.6901	34.6917	3.8447
6506.0	1.6909	34.6918	3.8453

KH9403 September 3, 1994
PC06 34°01.76′N, 142°02.14′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.1910	34.5664	4.7783
20.0	28.1710	34.5786	4.8476
30.0	27.8927	34.5890	4.9376
50.0	26.8288	34.6028	5.1266
75.0	23.2187	34.7137	5.5219
100.0	21.5801	34.7886	5.1978
150.0	19.6684	34.8325	4.4453
200.0	18.3287	34.7688	4.4160
300.0	15.9315	34.6782	4.3949
400.0	14.1041	34.5631	4.1145
500.0	12.0750	34.4304	3.9822
600.0	10.0504	34.2970	3.7561
700.0	7.5546	34.1275	3.5478
800.0	5.9875	34.0957	2.7827
900.0	5.0652	34.1586	2.0433
1000.0	4.4747	34.2505	1.6522
1100.0	3.7550	34.2871	1.2994
1200.0	3.4273	34.3503	1.1782
1300.0	3.1887	34.3932	1.2438
1400.0	2.9408	34.4320	1.1991
1500.0	2.7194	34.4608	1.1582
1600.0	2.5486	34.4902	1.1655
1700.0	2.4200	34.5149	1.2294
1800.0	2.3207	34.5362	1.3749
1900.0	2.2068	34.5565	1.4991
2000.0	2.1220	34.5696	1.6343
2500.0	1.7822	34.6311	2.4661
3000.0	1.6023	34.6588	2.9727
3500.0	1.5226	34.6732	3.2935
4000.0	1.4855	34.6825	3.4916
4500.0	1.4821	34.6883	3.6432
5000.0	1.5141	34.6908	3.7151
5500.0	1.5657	34.6919	3.7154
5806.0	1.6019	34.6919	3.3859

KH9403 September 4, 1994
PC07 34°01.18′N, 142°30.45′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.5878	34.3686	4.3393
20.0	28.3525	34.4929	4.3647
30.0	25.4160	34.6259	4.9874
50.0	23.0438	34.7858	4.8938
75.0	21.1065	34.8725	4.6043
100.0	20.2985	34.8961	4.8524
150.0	19.2445	34.8910	4.9067
200.0	18.3842	34.8865	5.1053
300.0	17.3261	34.8443	5.1713
400.0	16.6188	34.7589	4.4863
500.0	14.2961	34.5553	4.0811
600.0	11.6002	34.3862	3.9339
700.0	8.4755	34.1562	3.6330
800.0	6.1063	34.0512	3.0306
900.0	5.2662	34.1367	2.2506
1000.0	4.4756	34.1998	1.6638
1100.0	4.0840	34.2911	1.4584
1200.0	3.6592	34.3690	1.4048
1300.0	3.2481	34.3904	1.1706
1400.0	2.9894	34.4229	1.1515
1500.0	2.7833	34.4562	1.1249
1600.0	2.6147	34.4809	1.1861
1700.0	2.4630	34.5066	1.2451
1800.0	2.3260	34.5312	1.3711
1900.0	2.2334	34.5488	1.4742
2000.0	2.1426	34.5658	1.6269
2500.0	1.7838	34.6282	2.4226
3000.0	1.6202	34.6573	2.9211
3500.0	1.5265	34.6730	3.3065
4000.0	1.4908	34.6820	3.5466
4500.0	1.4940	34.6871	3.6905
5000.0	1.5189	34.6904	3.7691
5500.0	1.5619	34.6921	3.8563
6000.0	1.6171	34.6928	3.8485
6009.0	1.6183	34.6927	

KH9403 September 4, 1994
PC08 33°59.59′N, 143°31.22′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.0964	34.5941	5.1785
20.0	28.0926	34.5965	5.0294
30.0	27.9533	34.6159	4.9175
50.0	23.2461	34.8406	5.5398
75.0	20.3657	34.9251	5.2231
100.0	19.2739	34.8832	4.6456
150.0	18.2558	34.8683	4.8111
200.0	17.7396	34.8667	4.9787
300.0	17.0353	34.8015	4.5173
400.0	15.5364	34.6625	4.0263
500.0	13.1076	34.4947	3.9579
600.0	10.7234	34.3750	3.3791
700.0	9.1275	34.2641	3.4273
800.0	6.5418	34.0791	3.1014
900.0	5.1217	34.0835	2.3249
1000.0	5.0202	34.2854	1.7400
1100.0	4.1128	34.3304	1.5872
1200.0	3.5924	34.3772	1.4415
1300.0	3.2379	34.4165	1.4602
1400.0	3.0098	34.4381	1.2249
1500.0	2.7733	34.4564	1.0471
1600.0	2.5915	34.4851	1.1748
1700.0	2.4437	34.5108	1.3065
1800.0	2.3272	34.5317	1.3782
1900.0	2.2110	34.5531	1.4856
2000.0	2.1201	34.5690	1.6571
2500.0	1.7780	34.6287	2.3459
3000.0	1.5982	34.6585	2.8984
3500.0	1.5066	34.6744	3.2539
4000.0	1.4773	34.6827	3.5319
4500.0	1.4733	34.6886	3.6773
5000.0	1.4992	34.6919	3.7791
5304.0	1.5274	34.6930	3.8455

KH9403 September 5, 1994
PC09 33°59.00′N, 145°04.02′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3270	34.5145	5.2388
20.0	28.2683	34.5065	5.1196
30.0	27.8274	34.5359	5.0792
50.0	25.9280	34.5988	5.1153
75.0	23.5323	34.7487	4.9913
100.0	21.7277	34.8434	4.9697
150.0	19.9681	34.8930	4.6800
200.0	18.4925	34.8490	4.5992
300.0	17.1331	34.7656	4.3961
400.0	13.8716	34.5561	3.8186
500.0	11.1878	34.3912	3.6223
600.0	8.2986	34.2610	3.2169
700.0	6.6240	34.2422	2.6578
800.0	5.2461	34.2921	1.9164
900.0	3.9509	34.2525	1.3609
1000.0	3.6266	34.3139	1.2401
1100.0	3.4482	34.3805	1.2875
1200.0	2.9725	34.3885	1.1623
1300.0	3.0118	34.4429	1.3750
1400.0	2.7518	34.4689	1.2597
1500.0	2.5595	34.4945	1.2856
1600.0	2.4112	34.5198	1.3831
1700.0	2.3117	34.5341	1.4465
1800.0	2.1890	34.5541	1.5649
1900.0	2.1173	34.5682	1.6721
2000.0	2.0147	34.5873	1.8330
2500.0	1.7283	34.6362	2.5314
3000.0	1.5777	34.6610	3.0130
3500.0	1.5038	34.6745	3.3395
4000.0	1.4761	34.6828	3.4920
4500.0	1.4796	34.6880	3.6314
5000.0	1.5078	34.6911	3.6893
5500.0	1.5548	34.6924	3.8160
5699.0	1.5767	34.6926	3.8371

KH9403 September 5, 1994
PC10 33°00.39′N, 145°01.60′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.4807	34.5804	9.9900
20.0	28.4819	34.5804	9.9900
30.0	26.4113	34.5420	5.5311
50.0	22.8422	34.7624	5.7800
75.0	21.0246	34.8650	5.5451
100.0	20.0860	34.8690	5.1978
150.0	18.8984	34.8721	5.0062
200.0	18.1544	34.8563	5.1680
300.0	17.3368	34.8210	5.1438
400.0	16.8259	34.7740	4.9872
500.0	14.8869	34.5884	4.4622
600.0	12.3708	34.4151	4.2275
700.0	9.5823	34.2075	3.9979
800.0	6.2933	33.9782	3.5182
900.0	5.1618	34.0474	2.6649
1000.0	4.3916	34.1145	1.8251
1100.0	3.9851	34.2327	1.5085
1200.0	3.6399	34.2909	1.3010
1300.0	3.3552	34.3480	1.2314
1400.0	3.0874	34.3944	1.2544
1500.0	2.8447	34.4195	1.2540
1600.0	2.6909	34.4493	1.1818
1700.0	2.5114	34.4747	1.3016
1800.0	2.3561	34.5034	1.3707
1900.0	2.2494	34.5242	1.4812
2000.0	2.1631	34.5409	1.4815
2002.0	2.1604	34.5414	1.4798

KH9403 September 5, 1994
PC11 31°59.98′N, 144°59.79′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.4764	34.4820	4.6840
20.0	28.3161	34.5716	4.7529
30.0	26.8239	34.7091	4.8972
50.0	23.4731	34.7439	5.2570
75.0	20.9720	34.8654	5.0394
100.0	19.9773	34.8804	4.7137
150.0	18.3946	34.8881	4.7668
200.0	17.7712	34.8617	4.9546
300.0	17.2187	34.8360	4.9974
400.0	16.7239	34.7854	4.6224
500.0	14.5771	34.5931	4.1616
600.0	12.1426	34.4240	3.9752
700.0	9.5363	34.2384	3.6024
800.0	7.0159	34.0894	3.2235
900.0	5.9219	34.1760	2.2941
1000.0	4.7847	34.2028	1.8919
1100.0	4.0084	34.2459	1.4731
1200.0	3.5822	34.3182	1.2625
1300.0	3.2920	34.3662	1.2087
1400.0	2.9953	34.4140	1.1548
1500.0	2.7951	34.4462	1.1105
1600.0	2.6068	34.4788	1.1519
1700.0	2.4457	34.5081	1.1914
1800.0	2.3367	34.5290	1.3309
1900.0	2.2472	34.5468	1.4169
2000.0	2.1354	34.5680	1.5681
2004.0	2.1284	34.5692	1.6023

KH9403 September 6, 1994
PC12 30°59.80′N, 144°59.70′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.1787	34.7200	5.0132
20.0	27.6323	34.7804	5.0795
30.0	27.6942	34.8550	5.0800
50.0	25.6771	34.9308	5.2318
75.0	19.8371	34.9321	5.9271
100.0	18.7199	34.9024	5.4380
150.0	17.4291	34.8368	4.8975
200.0	17.0103	34.7987	4.9123
300.0	15.9375	34.6970	4.4707
400.0	13.8881	34.5344	4.3500
500.0	11.6949	34.3738	4.4090
600.0	9.0829	34.1665	4.2868
700.0	6.5621	34.0478	3.5991
800.0	5.0710	34.0374	2.5491
900.0	4.5798	34.1410	1.6907
1000.0	4.0340	34.2367	1.3262
1100.0	3.6486	34.3069	1.2339
1200.0	3.3132	34.3634	1.1104
1300.0	3.0114	34.4107	1.0820
1400.0	2.8121	34.4454	1.0485
1500.0	2.6248	34.4757	1.0709
1600.0	2.4583	34.5042	1.1372
1700.0	2.3061	34.5309	1.2480
1800.0	2.2048	34.5519	1.3585
1900.0	2.1118	34.5689	1.4418
2000.0	2.0193	34.5859	1.6816
2006.0	2.0169	34.5860	1.5862

KH9403 September 6, 1994

PC13 30°00.13′N, 144°59.70′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.1752	34.6662	4.7881
20.0	28.2580	34.8080	4.8042
30.0	28.1217	34.8322	4.8075
50.0	22.5785	35.0272	5.4811
75.0	19.6952	34.8977	5.3130
100.0	18.6452	34.8932	4.9484
150.0	17.8689	34.8595	4.8759
200.0	17.5103	34.8556	4.9223
300.0	16.8365	34.7969	4.6529
400.0	14.6637	34.5958	4.2898
500.0	12.0326	34.4169	4.0063
600.0	9.1537	34.2063	3.8229
700.0	6.6068	34.0691	3.3380
800.0	5.0486	34.0593	2.7055
900.0	4.4096	34.1624	1.9020
1000.0	3.9315	34.2548	1.3904
1100.0	3.4841	34.3352	1.2203
1200.0	3.1560	34.3890	1.1106
1300.0	2.9379	34.4303	1.0690
1400.0	2.7015	34.4681	1.0719
1500.0	2.5283	34.4911	1.1762
1600.0	2.3934	34.5139	1.2029
1700.0	2.2772	34.5364	1.3136
1800.0	2.1577	34.5582	1.4443
1900.0	2.0641	34.5757	1.5041
2000.0	1.9876	34.5895	1.6126
2007.0	1.9765	34.5918	

KH9403 September 6, 1994

PC14 29°30.31′N, 145°00.51′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3209	34.7323	4.7024
20.0	28.3282	34.7320	4.7866
30.0	28.3233	34.7352	4.7770
50.0	22.8759	34.8086	5.5096
75.0	20.4091	34.9156	5.3428
100.0	19.2647	34.9072	4.9396
150.0	18.1350	34.8762	4.8894
200.0	17.5416	34.8488	4.8933
300.0	16.6691	34.7701	4.4653
400.0	14.7168	34.6008	4.1529
500.0	11.9908	34.4072	4.0864
600.0	9.3270	34.2123	3.8365
700.0	6.6276	34.0585	3.4666
800.0	5.1570	34.0582	2.7825
900.0	4.4411	34.1468	1.9397
1000.0	3.9108	34.2610	1.4015
1100.0	3.5720	34.3305	1.2059
1200.0	3.2295	34.3854	1.1072
1300.0	3.0253	34.4293	1.1201
1400.0	2.7877	34.4613	1.0774
1500.0	2.6261	34.4851	1.1689
1600.0	2.4908	34.5163	1.3696
1700.0	2.3475	34.5428	1.4971
1800.0	2.2262	34.5611	1.6509
1900.0	2.1071	34.5795	1.7354
2000.0	2.0221	34.5929	1.8700
2004.0	2.0220	34.5926	1.8957

KH9403 September 6, 1994

PC15 29°00.11′N, 145°00.06′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2343	34.8963	4.8034
20.0	28.2316	34.8967	4.8578
30.0	24.7301	34.8771	5.2867
50.0	20.7214	34.9332	5.4997
75.0	19.4355	34.9195	5.0598
100.0	18.7497	34.9042	4.9116
150.0	17.8651	34.8723	5.0460
200.0	17.5515	34.8567	5.0626
300.0	17.1463	34.8243	4.8731
400.0	15.9532	34.6955	4.2409
500.0	13.1236	34.4781	4.1745
600.0	10.2845	34.2849	4.0466
700.0	7.2833	34.0902	3.7295
800.0	5.5555	34.0477	3.0168
900.0	4.6495	34.1151	2.2553
1000.0	4.1816	34.2045	1.6554
1100.0	3.7759	34.2801	1.3304
1200.0	3.3784	34.3502	1.1813
1300.0	3.0580	34.4088	1.0919
1400.0	2.8680	34.4500	1.1367
1500.0	2.6978	34.4809	1.1561
1600.0	2.5566	34.4999	1.2193
1700.0	2.3895	34.5339	1.4402
1800.0	2.2445	34.5534	1.4982
1900.0	2.1425	34.5727	1.7050
2000.0	2.0596	34.5863	1.9120
2003.0	2.0594	34.5865	

KH9403 September 7, 1994

PC16 28°30.54′N, 144°59.82′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2215	34.8505	4.4266
20.0	27.5727	34.8498	4.5926
30.0	23.9753	34.9653	5.0449
50.0	21.0431	34.9971	5.3255
75.0	19.4613	34.9409	5.1514
100.0	18.5303	34.9006	4.9694
150.0	17.6581	34.8573	4.8436
200.0	17.2955	34.8378	4.8047
300.0	16.8890	34.8049	4.5345
400.0	15.1272	34.6335	4.1573
500.0	13.1929	34.4835	4.0559
600.0	9.9407	34.2346	3.8045
700.0	7.0041	34.0791	3.2854
800.0	5.4753	34.0502	2.8624
900.0	4.7423	34.1180	2.1577
1000.0	4.2901	34.2090	1.5792
1100.0	3.8681	34.2807	1.2323
1200.0	3.4727	34.3566	1.1179
1300.0	3.1395	34.4178	1.0786
1400.0	2.8366	34.4549	1.1107
1500.0	2.6349	34.4909	1.1094
1600.0	2.4088	34.5167	1.1823
1700.0	2.2598	34.5438	1.3281
1800.0	2.1398	34.5676	1.4702
1900.0	2.0632	34.5847	1.7224
2000.0	1.9836	34.5987	1.8204
2009.0	1.9756	34.5994	1.8531

KH9403 September 7, 1994
PC17 28°00.44'N, 144°59.55'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2296	34.7491	4.7250
20.0	28.1823	34.8127	4.7938
30.0	25.1612	34.9135	5.1439
50.0	21.7454	34.9317	5.5627
75.0	19.7093	34.9117	5.3179
100.0	18.6526	34.8986	5.0632
150.0	17.7374	34.8628	4.9557
200.0	17.3313	34.8390	5.0479
300.0	16.9156	34.8063	4.7140
400.0	15.2646	34.6431	4.1628
500.0	12.4726	34.4206	4.3279
600.0	9.2758	34.1935	4.2245
700.0	6.6211	34.0557	4.0377
800.0	5.4637	34.0495	3.5163
900.0	4.6020	34.1569	2.3255
1000.0	4.0880	34.2467	1.5439
1100.0	3.6572	34.3196	1.1576
1200.0	3.3262	34.3837	1.0932
1300.0	3.0427	34.4263	1.1016
1400.0	2.8315	34.4633	1.0965
1500.0	2.6297	34.4929	1.2179
1600.0	2.4561	34.5210	1.2904
1700.0	2.3021	34.5480	1.4525
1800.0	2.1624	34.5683	1.5883
1900.0	2.0589	34.5843	1.7042
2000.0	1.9804	34.5965	1.9130
2003.0	1.9736	34.5975	1.9062

KH9403 September 7, 1994
PC18 27°30.63'N, 144°59.50'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.0299	34.7782	4.6254
20.0	27.5816	34.8483	4.7278
30.0	26.2030	34.8686	4.8938
50.0	22.6118	34.9846	5.2898
75.0	20.5234	34.9711	5.1420
100.0	19.1400	34.9296	4.8918
150.0	17.8867	34.8606	4.7379
200.0	17.3961	34.8301	4.7620
300.0	16.7123	34.7699	4.3218
400.0	13.1635	34.4900	4.1331
500.0	10.8370	34.3202	3.9758
600.0	8.2865	34.1424	3.7568
700.0	6.0697	34.0442	3.2081
800.0	4.9352	34.1046	2.6327
900.0	4.3050	34.2023	1.9610
1000.0	3.7999	34.2929	1.4923
1100.0	3.3977	34.3634	1.1977
1200.0	3.1411	34.4065	1.1041
1300.0	2.9125	34.4420	1.0702
1400.0	2.7080	34.4779	1.1444
1500.0	2.5042	34.5135	1.3096
1600.0	2.3517	34.5376	1.4346
1700.0	2.2469	34.5552	1.5253
1800.0	2.1136	34.5761	1.6524
1900.0	2.0075	34.5928	1.8286
2000.0	1.9165	34.6067	2.0013
2007.0	1.9100	34.6078	1.9536

KH9403 September 9, 1994
AS26 24°59.36'N, 137°02.09'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3488	34.8327	9.9900
20.0	28.1719	34.8448	9.9900
30.0	27.9559	34.9239	9.9900
50.0	27.1650	34.9633	9.9900
75.0	23.8630	35.0014	9.9900
100.0	22.1730	35.0373	5.7766
150.0	19.5360	34.9708	5.4014
200.0	18.3604	34.8833	5.3365
300.0	16.7706	34.7698	5.2608
400.0	14.6543	34.5918	5.1247
500.0	11.7911	34.3844	4.9398
600.0	9.1056	34.2102	3.9470
700.0	6.9256	34.1077	2.9847
800.0	5.5192	34.1221	2.3350
900.0	4.5134	34.2085	1.7550
1000.0	4.0561	34.2997	1.5318
1100.0	3.5896	34.3636	1.4153
1200.0	3.2836	34.4094	1.3737
1300.0	3.0673	34.4558	1.5678
1400.0	2.8477	34.4851	1.6741
1500.0	2.6406	34.5109	1.7722
1600.0	2.4607	34.5381	1.9700
1700.0	2.3008	34.5582	2.0597
1800.0	2.1861	34.5773	2.2480
1900.0	2.0617	34.5966	2.4548
2000.0	2.0023	34.6061	2.5448
2500.0	1.7680	34.6445	3.0210
3000.0	1.6525	34.6601	3.3344
3500.0	1.5663	34.6735	3.4610
4000.0	1.5325	34.6815	3.6963
4500.0	1.5693	34.6835	3.7026
5000.0	1.6254	34.6838	3.7237
5118.0	1.6403	34.6839	3.7326

KH9403 September 9, 1994
AS25 25°28.44'N, 136°48.30'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3866	34.7923	4.9708
20.0	28.3570	34.7948	4.9341
30.0	27.5495	34.8443	4.9910
50.0	25.8351	34.7219	5.0993
75.0	22.5713	34.8940	5.2834
100.0	20.6146	34.9611	4.9838
150.0	18.9862	34.9365	4.7324
200.0	18.1824	34.8905	4.7650
300.0	17.1620	34.8027	4.3784
400.0	15.0792	34.6271	4.0173
500.0	11.8856	34.3869	3.8926
600.0	8.9072	34.1931	3.5386
700.0	7.1042	34.1080	3.0273
800.0	5.4350	34.1275	2.1125
900.0	4.5606	34.2041	1.6315
1000.0	4.0227	34.2845	1.4213
1100.0	3.6028	34.3568	1.3145
1200.0	3.2415	34.4157	1.3141
1300.0	2.9581	34.4623	1.4665
1400.0	2.7221	34.4987	1.6377
1500.0	2.5592	34.5228	1.7679
1600.0	2.3971	34.5459	1.8661
1700.0	2.2408	34.5660	2.0388
1800.0	2.1524	34.5809	2.1758
1900.0	2.0719	34.5953	2.3554
2000.0	2.0154	34.6054	2.5370
2500.0	1.7660	34.6438	2.9588
3000.0	1.6291	34.6621	3.2334
3500.0	1.5670	34.6731	3.4145
4000.0	1.5518	34.6800	3.5527
4500.0	1.5752	34.6829	3.5810
5000.0	1.6262	34.6837	3.6770
5406.0	1.6772	34.6833	3.6625

KH9403 September 10, 1994
AS24 25°59.52′N, 136°34.62′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3272	34.8162	4.8694
20.0	28.0347	34.8490	4.8691
30.0	27.9215	34.8793	4.8498
50.0	26.2575	34.8107	5.0205
75.0	24.3860	34.8889	5.0713
100.0	21.7617	34.9771	5.1527
150.0	19.5917	34.9598	4.5879
200.0	18.4748	34.9027	4.6811
300.0	16.6471	34.7519	4.2335
400.0	14.7273	34.5948	4.1728
500.0	12.0966	34.3919	4.0343
600.0	9.6266	34.2237	3.6795
700.0	7.5166	34.1285	3.1157
800.0	5.9229	34.1270	2.4036
900.0	4.8631	34.1785	1.9207
1000.0	4.3509	34.2801	1.5374
1100.0	3.7969	34.3505	1.4510
1200.0	3.4203	34.3936	1.3988
1300.0	3.1164	34.4358	1.4390
1400.0	2.8388	34.4747	1.4911
1500.0	2.6433	34.5043	1.6255
1600.0	2.4715	34.5309	1.7751
1700.0	2.3392	34.5518	1.9635
1800.0	2.2034	34.5735	2.1017
1900.0	2.1161	34.5885	2.2782
2000.0	2.0581	34.5987	2.4073
2500.0	1.7492	34.6433	2.9941
3000.0	1.6460	34.6602	3.2030
3500.0	1.5699	34.6726	3.4018
4000.0	1.5420	34.6806	3.5756
4500.0	1.5745	34.6829	3.6386
4656.0	1.5908	34.6829	3.7545

KH9403 September 11, 1994
AS22 27°00.00′N, 136°09.88′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.0760	34.7058	4.5891
20.0	27.8290	34.7148	4.6630
30.0	27.2219	34.7168	4.7384
50.0	25.8165	34.8246	4.9018
75.0	22.0359	35.0034	5.1521
100.0	20.2871	34.9891	4.8592
150.0	19.0037	34.9428	4.7330
200.0	18.3638	34.8982	4.7416
300.0	17.2695	34.8172	4.5911
400.0	15.5756	34.6596	4.1767
500.0	13.5951	34.5099	3.9690
600.0	10.7077	34.3189	3.7508
700.0	8.3581	34.1898	3.4783
800.0	6.2477	34.1720	2.6214
900.0	5.0196	34.1899	2.1724
1000.0	4.3022	34.2916	1.8215
1100.0	3.7997	34.3513	1.6194
1200.0	3.4494	34.3950	1.5674
1300.0	3.1215	34.4445	1.5431
1400.0	2.9083	34.4696	1.6090
1500.0	2.6677	34.5057	1.7098
1600.0	2.4990	34.5298	1.8982
1700.0	2.3210	34.5578	2.0331
1800.0	2.2234	34.5725	2.2366
1900.0	2.1287	34.5868	2.3204
2000.0	2.0323	34.6017	2.4622
2500.0	1.7825	34.6414	2.9406
3000.0	1.6257	34.6617	3.2389
3500.0	1.5518	34.6745	3.4299
4000.0	1.5485	34.6802	3.5543
4495.0	1.5786	34.6822	3.6484

KH9403 September 10, 1994
AS23 26°29.68′N, 136°21.18′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2269	34.7606	5.0479
20.0	28.2299	34.7649	5.0112
30.0	28.2416	34.8335	4.9562
50.0	26.4730	34.8121	5.1202
75.0	23.8615	34.8839	5.2316
100.0	20.7300	34.9420	5.1968
150.0	18.9502	34.9068	4.9252
200.0	18.4364	34.9005	4.9631
300.0	17.1550	34.8032	4.6633
400.0	15.1303	34.6345	4.1978
500.0	12.0695	34.3950	3.9815
600.0	9.4352	34.2220	3.6880
700.0	7.1671	34.1306	3.1470
800.0	6.1068	34.1198	2.6241
900.0	4.7297	34.1946	1.8365
1000.0	4.1931	34.2608	1.5996
1100.0	3.7663	34.3300	1.4245
1200.0	3.4172	34.3897	1.4136
1300.0	3.1659	34.4327	1.4670
1400.0	2.8766	34.4726	1.5711
1500.0	2.6362	34.5055	1.7163
1600.0	2.4876	34.5266	1.7977
1700.0	2.3620	34.5464	1.8920
1800.0	2.2188	34.5699	2.1081
1900.0	2.1189	34.5872	2.3683
2000.0	2.0503	34.5990	2.4752
2500.0	1.7943	34.6384	2.9832
3000.0	1.6085	34.6631	3.3554
3500.0	1.5502	34.6745	3.5874
4000.0	1.5382	34.6808	3.7402
4500.0	1.5719	34.6830	3.7621
4765.0	1.6030	34.6829	3.7650

KH9403 September 11, 1994
AS21 27°30.17′N, 135°51.79′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2105	34.7477	5.0269
20.0	28.1512	34.7458	5.0293
30.0	27.2298	34.7310	5.1252
50.0	25.3374	34.8221	5.3842
75.0	22.5777	34.9804	5.4638
100.0	20.8881	34.9809	5.2611
150.0	19.2586	34.9312	4.9738
200.0	18.4439	34.9027	5.0643
300.0	17.2672	34.8152	4.7627
400.0	15.5722	34.6648	4.4411
500.0	13.0149	34.4629	4.3133
600.0	10.2679	34.2622	4.0979
700.0	8.1183	34.1820	3.6495
800.0	6.5397	34.1627	2.9443
900.0	5.3000	34.2084	2.4366
1000.0	4.3838	34.2581	1.9608
1100.0	3.8225	34.3287	1.7313
1200.0	3.5236	34.3843	1.6642
1300.0	3.1569	34.4364	1.6723
1400.0	2.8993	34.4710	1.7269
1500.0	2.7032	34.4995	1.8177
1600.0	2.5188	34.5274	1.9320
1700.0	2.3802	34.5495	2.1464
1800.0	2.2563	34.5684	2.2540
1900.0	2.1749	34.5819	2.3744
2000.0	2.0524	34.5996	2.5464
2500.0	1.8136	34.6360	3.0028
3000.0	1.6382	34.6601	3.3515
3500.0	1.5644	34.6728	3.5548
4000.0	1.5358	34.6811	3.6640
4500.0	1.5745	34.6828	3.7495
5000.0	1.6307	34.6833	3.7675
5305.0	1.6687	34.6832	3.7081

KH9403 September 11, 1994
AS20 27°59.78′N, 135°36.72′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.4483	34.6662	5.1645
20.0	28.4294	34.6689	5.0482
30.0	28.2969	34.6679	4.9953
50.0	25.6232	34.7182	5.3338
75.0	22.5937	34.9658	5.4144
100.0	20.8165	34.9974	5.1092
150.0	19.2551	34.9465	4.6735
200.0	18.4225	34.8962	4.7714
300.0	17.1612	34.7956	4.7183
400.0	15.3506	34.6500	4.4348
500.0	13.2338	34.4869	3.9905
600.0	10.4468	34.3183	3.6682
700.0	8.0597	34.1708	3.2876
800.0	6.2327	34.1328	2.7069
900.0	5.1943	34.1951	2.2734
1000.0	4.3619	34.2636	1.7861
1100.0	3.9599	34.3477	1.6431
1200.0	3.4884	34.3904	1.6045
1300.0	3.2039	34.4282	1.5156
1400.0	2.9437	34.4678	1.5844
1500.0	2.7333	34.4990	1.7217
1600.0	2.5571	34.5246	1.8219
1700.0	2.3782	34.5496	1.9855
1800.0	2.2500	34.5686	2.2161
1900.0	2.1285	34.5863	2.3652
2000.0	2.0364	34.6006	2.4943
2500.0	1.7713	34.6401	3.0470
3000.0	1.6097	34.6628	3.3510
3500.0	1.5338	34.6761	3.5658
4000.0	1.5318	34.6816	3.6623
4500.0	1.5758	34.6827	3.7238
5000.0	1.6289	34.6833	3.7484
5307.0	1.6678	34.6831	

KH9403 September 11, 1994
AS19 28°19.32′N, 135°27.62′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.4261	34.7470	4.5565
20.0	28.3638	34.7461	4.5546
30.0	27.1420	34.7679	4.7010
50.0	25.3628	34.8322	4.8371
75.0	22.7574	34.9561	4.9298
100.0	21.0327	34.9736	4.8130
150.0	19.4161	34.9614	4.5453
200.0	18.3565	34.8860	4.4627
300.0	17.1823	34.8022	4.3387
400.0	15.8313	34.6871	4.0987
500.0	13.5402	34.5072	3.9115
600.0	10.8193	34.3164	3.7152
700.0	8.8331	34.2350	3.1322
800.0	7.1755	34.1995	2.6740
900.0	5.4823	34.1950	2.1244
1000.0	4.4086	34.2622	1.6902
1100.0	4.0760	34.3061	1.5542
1200.0	3.6846	34.3876	1.5641
1300.0	3.3495	34.4287	1.6034
1400.0	3.0080	34.4677	1.6541
1500.0	2.8079	34.4969	1.7617
1600.0	2.5567	34.5260	1.8424
1700.0	2.4179	34.5451	1.9776
1800.0	2.2975	34.5621	2.1076
1900.0	2.1819	34.5788	2.2820
2000.0	2.0801	34.5946	2.4012
2500.0	1.7808	34.6396	2.9575
3000.0	1.6216	34.6621	3.2912
3500.0	1.5469	34.6749	3.5553
4000.0	1.5353	34.6813	3.7133
4500.0	1.5750	34.6828	3.7406
5000.0	1.6297	34.6832	3.7570
5055.0	1.6361	34.6833	3.7627

KH9403 September 12, 1994
AS18 28°39.28′N, 135°17.05′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.6892	34.5726	4.3541
20.0	28.2893	34.7090	4.4244
30.0	28.2050	34.7698	4.4270
50.0	25.8711	34.7279	4.7199
75.0	23.1062	34.8844	4.8641
100.0	21.1319	34.9825	4.6426
150.0	19.3922	34.9412	4.4012
200.0	18.6085	34.9113	4.6022
300.0	17.4227	34.8226	4.4982
400.0	15.9799	34.6987	4.1471
500.0	14.0043	34.5419	4.1671
600.0	11.7322	34.3724	4.2077
700.0	9.0910	34.2041	3.9430
800.0	6.8283	34.1100	3.1106
900.0	5.6163	34.1733	2.3010
1000.0	4.7566	34.2285	1.8343
1100.0	3.9820	34.3209	1.5847
1200.0	3.6137	34.3753	1.6267
1300.0	3.2647	34.4327	1.6503
1400.0	3.0372	34.4615	1.6884
1500.0	2.8009	34.4927	1.7326
1600.0	2.6046	34.5224	1.8444
1700.0	2.4530	34.5431	1.9765
1800.0	2.3192	34.5612	2.0948
1900.0	2.2151	34.5763	2.2118
2000.0	2.1170	34.5908	2.3332
2500.0	1.7999	34.6378	2.9312
3000.0	1.6246	34.6623	3.2368
3500.0	1.5467	34.6756	3.5112
4000.0	1.5475	34.6807	3.6043
4500.0	1.5793	34.6832	3.6865
5000.0	1.6345	34.6848	3.6735
5003.0	1.6347	34.6850	

KH9403 September 12, 1994
AS17 28°59.80′N, 135°07.24′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.4570	34.6967	4.8650
20.0	28.4465	34.7253	4.8903
30.0	27.2013	34.8027	5.0325
50.0	25.9146	34.8499	5.1239
75.0	22.8486	34.9537	5.2813
100.0	20.6159	34.9273	5.0761
150.0	19.1856	34.9138	4.9126
200.0	18.5169	34.9006	5.0328
300.0	17.5213	34.8172	4.7760
400.0	16.3004	34.7268	4.6246
500.0	14.2377	34.5601	4.3653
600.0	11.4231	34.3540	4.1853
700.0	8.7790	34.1955	3.7553
800.0	7.0080	34.1995	3.0471
900.0	5.4825	34.2037	2.6509
1000.0	4.5042	34.3107	2.2532
1100.0	3.9658	34.3522	2.1226
1200.0	3.4340	34.4025	1.8822
1300.0	3.1845	34.4435	1.8147
1400.0	2.9414	34.4795	1.8220
1500.0	2.7364	34.5061	1.8905
1600.0	2.5638	34.5294	2.0181
1700.0	2.4046	34.5481	2.1162
1800.0	2.2877	34.5639	2.1982
1900.0	2.1225	34.5887	2.3965
2000.0	2.0676	34.5976	2.4947
2500.0	1.7768	34.6405	3.0277
3000.0	1.6258	34.6627	3.3427
3500.0	1.5409	34.6761	3.6227
4000.0	1.5445	34.6809	3.6881
4500.0	1.5805	34.6830	3.7791
5000.0	1.6320	34.6850	3.8261
5005.0	1.6327	34.6850	3.8324

KH9403 September 12, 1994
AS16 29°19.99′N, 134°57.08′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.5977	34.6165	4.6089
20.0	28.5940	34.6153	4.6563
30.0	26.9927	34.6123	4.8219
50.0	24.4239	34.7600	5.0756
75.0	21.7237	34.9019	5.0689
100.0	20.6707	34.9270	4.8502
150.0	19.4333	34.9199	4.7181
200.0	18.7048	34.8942	4.7662
300.0	17.6924	34.8312	4.5614
400.0	16.2833	34.7184	4.3101
500.0	14.1979	34.5544	4.1314
600.0	11.7978	34.4002	3.8330
700.0	9.1310	34.2618	3.4229
800.0	7.1161	34.2191	2.8528
900.0	5.5686	34.2453	2.3585
1000.0	4.3975	34.2971	2.0775
1100.0	3.7431	34.3696	1.9849
1200.0	3.4461	34.4072	1.9091
1300.0	3.1615	34.4439	1.9117
1400.0	2.9051	34.4798	1.9543
1500.0	2.7091	34.5092	1.9454
1600.0	2.5066	34.5340	2.0738
1700.0	2.4014	34.5497	2.0915
1800.0	2.2503	34.5711	2.2682
1900.0	2.1607	34.5837	2.3665
2000.0	2.0853	34.5953	2.4646
2500.0	1.7718	34.6415	2.9535
3000.0	1.5908	34.6659	3.3587
3500.0	1.5348	34.6768	3.5193
4000.0	1.5484	34.6807	3.6708
4500.0	1.5921	34.6820	3.7281
4904.0	1.6254	34.6840	3.8042

KH9403 September 13, 1994
AS15 29°39.77′N, 134°45.99′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.6392	34.6572	4.6286
20.0	28.6386	34.6568	4.6301
30.0	28.5112	34.6447	4.6180
50.0	23.9499	34.7708	5.1339
75.0	21.3602	34.8990	5.1145
100.0	20.5098	34.9241	4.8300
150.0	19.6344	34.9244	4.7534
200.0	18.8944	34.9075	4.8125
300.0	18.0206	34.8646	4.6952
400.0	16.6220	34.7465	4.4164
500.0	14.8710	34.6132	4.2041
600.0	12.0413	34.4072	4.0626
700.0	9.7253	34.2676	3.7058
800.0	7.3838	34.2220	3.0593
900.0	5.5256	34.2558	2.4846
1000.0	4.5784	34.3157	2.2115
1100.0	3.9750	34.3638	2.0901
1200.0	3.4664	34.4173	1.9971
1300.0	3.2085	34.4433	1.8954
1400.0	2.9252	34.4794	1.8929
1500.0	2.7746	34.5003	1.8983
1600.0	2.6087	34.5231	1.9561
1700.0	2.4414	34.5447	2.0806
1800.0	2.3149	34.5609	2.1397
1900.0	2.2069	34.5779	2.2736
2000.0	2.0998	34.5934	2.4130
2500.0	1.7948	34.6389	2.9147
3000.0	1.6091	34.6635	3.2437
3500.0	1.5407	34.6760	3.5107
4000.0	1.5568	34.6797	3.6179
4500.0	1.5941	34.6820	3.6624
4873.0	1.6246	34.6839	

KH9403 September 13, 1994
AS14 29°58.81′N, 134°35.62′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.6003	34.6732	4.9482
20.0	28.5951	34.6730	4.9269
30.0	28.5434	34.6692	4.9003
50.0	24.6632	34.7278	5.2864
75.0	21.5781	34.8939	5.3704
100.0	20.7379	34.9222	5.0843
150.0	19.7543	34.9243	4.8718
200.0	18.9557	34.9061	4.8626
300.0	18.2179	34.8852	4.7838
400.0	16.9628	34.7681	4.3716
500.0	15.1031	34.6256	4.1529
600.0	11.8686	34.3968	3.9591
700.0	9.6873	34.2922	3.6195
800.0	7.2292	34.2118	2.9993
900.0	5.8305	34.2329	2.4351
1000.0	4.8711	34.2879	1.9683
1100.0	3.8442	34.3807	1.7469
1200.0	3.4210	34.4255	1.6879
1300.0	3.1768	34.4582	1.7205
1400.0	2.9085	34.4876	1.7567
1500.0	2.7087	34.5126	1.8110
1600.0	2.5421	34.5339	1.9533
1700.0	2.3963	34.5522	2.0409
1800.0	2.2572	34.5691	2.1631
1900.0	2.1606	34.5834	2.2525
2000.0	2.0725	34.5967	2.3915
2500.0	1.7592	34.6417	2.9122
3000.0	1.5946	34.6652	3.2264
3500.0	1.5353	34.6765	3.4637
4000.0	1.5507	34.6804	3.5246
4500.0	1.5903	34.6823	3.5623
4624.0	1.5979	34.6829	

KH9403 September 13, 1994
AS13 30°13.99′N, 134°28.47′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2345	34.6445	4.7454
20.0	28.1883	34.6449	4.7570
30.0	26.2434	34.6344	4.9670
50.0	22.4148	34.8734	5.3013
75.0	20.7617	34.9249	5.0454
100.0	20.2146	34.9372	4.8808
150.0	19.6761	34.9334	4.8705
200.0	19.0524	34.9128	4.8615
300.0	18.2174	34.8894	4.9302
400.0	17.6732	34.8316	4.5788
500.0	15.4669	34.6589	4.2901
600.0	12.8508	34.4651	4.1798
700.0	9.8327	34.2760	3.9011
800.0	7.5473	34.2159	3.3523
900.0	5.9464	34.2141	2.8589
1000.0	4.8606	34.2883	2.3702
1100.0	3.9783	34.3654	2.0563
1200.0	3.5373	34.4119	1.9180
1300.0	3.2377	34.4476	1.7983
1400.0	2.9597	34.4816	1.8106
1500.0	2.7701	34.5049	1.8834
1600.0	2.5637	34.5311	2.0041
1700.0	2.4337	34.5483	2.0763
1800.0	2.2820	34.5688	2.2105
1900.0	2.1824	34.5815	2.2733
2000.0	2.0932	34.5941	2.3987
2500.0	1.7591	34.6409	2.8963
3000.0	1.5835	34.6660	3.2471
3500.0	1.5253	34.6776	3.4686
4000.0	1.5439	34.6810	3.5301
4500.0	1.5800	34.6828	3.5751
4557.0	1.5814	34.6833	

KH9403 September 14, 1994
AS12 30°30.22′N, 134°19.98′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.3595	34.6735	5.2043
20.0	28.3569	34.6740	5.1521
30.0	27.7470	34.6459	5.1790
50.0	23.2742	34.8290	5.5534
75.0	20.5196	34.9490	5.3770
100.0	20.1709	34.9492	5.2214
150.0	19.6829	34.9428	5.0983
200.0	18.7432	34.9139	5.0862
300.0	18.1788	34.8926	5.0940
400.0	18.0599	34.8782	4.8991
500.0	15.8857	34.6872	4.3999
600.0	12.8539	34.4678	4.4390
700.0	9.9474	34.2898	4.0810
800.0	7.3310	34.2009	3.1413
900.0	5.8287	34.2150	2.3239
1000.0	4.7843	34.2967	1.8500
1100.0	4.0519	34.3600	1.7261
1200.0	3.5911	34.4059	1.6752
1300.0	3.2004	34.4521	1.7486
1400.0	2.9293	34.4851	1.8189
1500.0	2.6899	34.5147	1.9313
1600.0	2.5458	34.5335	2.0038
1700.0	2.3896	34.5535	2.1092
1800.0	2.2754	34.5688	2.2518
1900.0	2.1587	34.5843	2.3009
2000.0	2.0678	34.5971	2.4579
2500.0	1.7569	34.6414	2.9544
3000.0	1.5803	34.6667	3.3385
3500.0	1.5277	34.6774	3.4494
4000.0	1.5461	34.6809	3.5823
4500.0	1.5782	34.6831	3.6483
4574.0	1.5834	34.6835	

KH9403 September 14, 1994
AS11 30°45.09′N, 134°11.71′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	28.2688	34.6614	4.6595
20.0	28.2710	34.6615	4.6680
30.0	28.2553	34.6610	4.6862
50.0	24.4399	34.7633	5.0290
75.0	21.7427	34.8806	5.1958
100.0	20.9461	34.9098	4.8159
150.0	19.7786	34.9271	4.7819
200.0	18.9693	34.9044	4.8233
300.0	18.0625	34.8624	4.7560
400.0	16.7565	34.7549	4.4282
500.0	14.8612	34.6103	4.2471
600.0	12.3269	34.4382	4.0081
700.0	9.5682	34.2682	3.7601
800.0	7.4261	34.1626	3.3121
900.0	5.9155	34.2440	2.5804
1000.0	4.6213	34.3136	2.2291
1100.0	3.8885	34.3781	2.0797
1200.0	3.4971	34.4186	2.0325
1300.0	3.1803	34.4535	1.9348
1400.0	2.9235	34.4856	1.9541
1500.0	2.7454	34.5078	1.9682
1600.0	2.5859	34.5284	2.0368
1700.0	2.4335	34.5485	2.1365
1800.0	2.3063	34.5654	2.2310
1900.0	2.2022	34.5791	2.3678
2000.0	2.0976	34.5935	2.4558
2500.0	1.7104	34.6467	3.0429
3000.0	1.5585	34.6689	3.4057
3500.0	1.5205	34.6780	3.6761
4000.0	1.5440	34.6809	3.7514
4500.0	1.5785	34.6830	3.7934
4521.0	1.5811	34.6829	3.7513

KH9403 September 14, 1994
AS10 30°59.87′N, 134°03.63′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.7779	34.6402	4.6409
20.0	27.7792	34.6402	4.6043
30.0	27.7765	34.6400	4.6485
50.0	24.9159	34.7316	4.8449
75.0	21.9255	34.8851	5.0463
100.0	20.7320	34.9099	4.7566
150.0	19.8342	34.9395	4.6800
200.0	18.9873	34.9002	4.6961
300.0	18.0492	34.8645	4.6089
400.0	16.5315	34.7370	4.2577
500.0	14.4220	34.5796	4.0415
600.0	11.9059	34.4002	3.8889
700.0	9.3333	34.2575	3.5450
800.0	7.2886	34.2327	2.8915
900.0	5.5819	34.2456	2.4026
1000.0	4.5421	34.3187	2.0739
1100.0	3.9490	34.3655	1.9706
1200.0	3.4771	34.4196	1.9093
1300.0	3.2266	34.4493	1.8599
1400.0	2.9987	34.4749	1.9042
1500.0	2.7776	34.5037	1.8984
1600.0	2.6020	34.5260	1.9790
1700.0	2.4434	34.5464	2.0892
1800.0	2.3131	34.5639	2.2153
1900.0	2.2069	34.5787	2.3032
2000.0	2.1141	34.5920	2.4512
2500.0	1.7558	34.6418	2.9545
3000.0	1.5716	34.6678	3.3538
3500.0	1.5206	34.6779	3.5646
4000.0	1.5469	34.6806	3.6601
4474.0	1.5882	34.6820	3.7086

KH9403 September 15, 1994
AS09 31°15.32′N, 133°55.96′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.7482	34.6674	4.9046
20.0	27.7594	34.6693	4.8968
30.0	27.7600	34.6694	4.8760
50.0	27.2535	34.6985	4.9064
75.0	23.9158	34.8259	5.1961
100.0	20.9813	34.9105	5.0487
150.0	19.8047	34.9204	4.8499
200.0	18.8618	34.9039	4.9343
300.0	17.9601	34.8563	4.7445
400.0	16.4570	34.7310	4.4272
500.0	14.4150	34.5779	4.3239
600.0	11.2134	34.3583	4.2775
700.0	8.7056	34.2235	4.0818
800.0	6.7325	34.2200	3.3224
900.0	5.3467	34.2601	2.5498
1000.0	4.3839	34.3079	1.9787
1100.0	3.8317	34.3683	1.7554
1200.0	3.4492	34.4241	1.6986
1300.0	3.1963	34.4532	1.7171
1400.0	2.9521	34.4822	1.7599
1500.0	2.7669	34.5048	1.8439
1600.0	2.6233	34.5232	1.8966
1700.0	2.4557	34.5453	2.0555
1800.0	2.3114	34.5641	2.1766
1900.0	2.2131	34.5778	2.2511
2000.0	2.1104	34.5924	2.3838
2500.0	1.7833	34.6386	2.8965
3000.0	1.5863	34.6659	3.2646
3500.0	1.5371	34.6763	3.4136
4000.0	1.5582	34.6795	3.4973
4500.0	1.5970	34.6817	3.5474
4585.0	1.6045	34.6819	

KH9403 September 15, 1994
AS08 31°30.73′N, 133°47.35′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.9733	34.6772	4.6261
20.0	27.9850	34.6777	4.6088
30.0	27.9885	34.6775	4.6429
50.0	25.8428	34.7642	4.8457
75.0	23.0906	34.9590	5.1630
100.0	20.9121	34.9462	4.9709
150.0	19.3523	34.9193	4.6961
200.0	18.6232	34.8961	4.7971
300.0	17.7863	34.8401	4.6464
400.0	16.2803	34.7176	4.3094
500.0	13.9674	34.5470	4.0773
600.0	11.3990	34.3545	4.0112
700.0	8.9272	34.2646	3.4306
800.0	6.5947	34.1881	2.7695
900.0	5.2657	34.2439	2.3446
1000.0	4.2089	34.3270	2.0571
1100.0	3.6487	34.4072	2.0673
1200.0	3.3074	34.4417	2.0129
1300.0	3.0749	34.4700	2.0226
1400.0	2.9306	34.4883	2.0119
1500.0	2.7303	34.5121	2.0221
1600.0	2.5715	34.5318	2.0966
1700.0	2.4550	34.5467	2.1565
1800.0	2.3492	34.5613	2.2786
1900.0	2.2476	34.5770	2.4121
2000.0	2.1732	34.5877	2.4501
2500.0	1.8346	34.6320	2.8999
3000.0	1.6471	34.6592	3.2597
3500.0	1.5618	34.6735	3.5507
4000.0	1.5643	34.6787	3.7203
4500.0	1.6009	34.6811	3.7432
4925.0	1.6433	34.6830	3.7579

KH9403 September 15, 1994
AS07 31°45.52′N, 133°40.06′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.8904	34.7691	4.6592
20.0	27.8995	34.7691	4.6074
30.0	27.9019	34.7692	4.6214
50.0	25.8656	34.7629	4.8824
75.0	22.6919	34.8974	5.1964
100.0	21.0671	34.9562	5.0481
150.0	19.6352	34.9630	4.8004
200.0	18.5970	34.9064	4.7442
300.0	17.3227	34.8047	4.5585
400.0	15.6874	34.6726	4.2179
500.0	13.2210	34.4916	4.0081
600.0	10.7688	34.3315	3.7029
700.0	7.8805	34.2136	3.1709
800.0	6.1141	34.1426	2.8511
900.0	5.1006	34.2225	2.2682
1000.0	4.2498	34.3281	1.9742
1100.0	3.6789	34.3990	1.9572
1200.0	3.2621	34.4504	2.0044
1300.0	3.0318	34.4733	1.9464
1400.0	2.8445	34.4949	1.9789
1500.0	2.6838	34.5146	2.0326
1600.0	2.5406	34.5343	2.1135
1700.0	2.4180	34.5499	2.1798
1800.0	2.3094	34.5641	2.2809
1900.0	2.2168	34.5773	2.3691
2000.0	2.1392	34.5881	2.4953
2500.0	1.7999	34.6363	2.9818
3000.0	1.6252	34.6614	3.3991
3500.0	1.5377	34.6760	3.6662
4000.0	1.5551	34.6797	3.7259
4495.0	1.6002	34.6809	3.7816

KH9403 September 16, 1994
AS6A 31°51.07′N, 133°37.29′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.8448	34.6844	4.6400
20.0	27.8733	34.7094	4.6353
30.0	27.9012	34.7267	4.6292
50.0	25.2674	34.7362	4.8694
75.0	22.0954	34.9006	5.0953
100.0	20.6610	34.9172	4.8242
150.0	19.6878	34.9209	4.7408
200.0	18.7167	34.9081	4.8629
300.0	17.6054	34.8268	4.6344
400.0	15.9154	34.6944	4.4626
500.0	13.2859	34.5009	4.1336
600.0	10.3267	34.3156	3.8954
700.0	7.6513	34.1972	3.5535
800.0	5.7977	34.1632	3.2294
900.0	4.8968	34.2303	2.7707
1000.0	4.0691	34.3352	1.5497
1100.0	3.5787	34.4112	1.6015
1200.0	3.2045	34.4511	1.7203
1300.0	2.9829	34.4779	1.7543
1400.0	2.8290	34.4964	1.8803
1500.0	2.6787	34.5177	1.9300
1600.0	2.5335	34.5353	2.0160
1700.0	2.3842	34.5542	2.1274
1800.0	2.2875	34.5670	2.2401
1900.0	2.1815	34.5818	2.3762
2000.0	2.0788	34.5959	2.5099
2500.0	1.7503	34.6419	3.0298
3000.0	1.5627	34.6682	3.4048
3500.0	1.5279	34.6770	3.5986
3814.0	1.5473	34.6782	

KH9403 September 16, 1994
AS06 31°56.20′N, 133°34.34′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.7306	34.6450	4.5742
20.0	27.7325	34.6469	4.5880
30.0	27.7118	34.6485	4.6009
50.0	25.8574	34.7251	4.7695
75.0	22.1755	34.8868	4.9877
100.0	20.6168	34.9264	4.7428
150.0	19.6664	34.9305	4.6557
200.0	18.6751	34.9050	4.7547
300.0	17.4369	34.8090	4.4481
400.0	15.4190	34.6516	4.1880
500.0	12.4311	34.4248	3.9136
600.0	9.4419	34.2790	3.4679
700.0	6.7868	34.1455	3.0906
800.0	5.5870	34.1754	2.5031
900.0	4.8435	34.2857	2.1523
1000.0	4.0096	34.3412	1.9100
1100.0	3.5149	34.4208	1.9338
1200.0	3.2185	34.4495	1.9691
1300.0	2.9905	34.4780	1.9837
1400.0	2.8086	34.5024	2.0019
1500.0	2.6393	34.5201	2.0628
1600.0	2.5020	34.5385	2.0991
1700.0	2.3591	34.5568	2.2374
1800.0	2.2502	34.5716	2.3449
1900.0	2.1284	34.5885	2.4365
2000.0	2.0492	34.5996	2.5710
2500.0	1.7348	34.6436	3.1094
2955.0	1.6152	34.6619	

KH9403 September 16, 1994
AS5A 32°00.38′N, 133°32.50′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.6256	34.6051	4.6070
20.0	27.6782	34.6579	4.6088
30.0	27.6681	34.6614	4.6511
50.0	25.5574	34.7273	4.8778
75.0	22.5488	34.8711	5.1345
100.0	20.7787	34.9224	4.8712
150.0	19.5667	34.9281	4.7571
200.0	18.6061	34.9070	4.9034
300.0	17.2637	34.8018	4.6130
400.0	14.9434	34.6212	4.3461
500.0	12.1235	34.4208	4.1054
600.0	9.0827	34.2650	3.5520
700.0	6.5235	34.1543	3.1323
800.0	5.2677	34.1900	2.4554
900.0	4.6444	34.2832	2.2149
1000.0	3.8699	34.3644	2.0546
1100.0	3.4634	34.4185	2.1479
1200.0	3.1978	34.4523	2.1025
1300.0	2.9914	34.4803	2.1613
1400.0	2.7943	34.5004	2.1327
1500.0	2.6698	34.5162	2.1360
1600.0	2.5179	34.5356	2.2223
1700.0	2.3914	34.5535	2.3467
1800.0	2.2692	34.5695	2.4235
1900.0	2.1348	34.5875	2.5498
2000.0	2.0383	34.6008	2.7294
2276.0	1.8671	34.6251	2.9232

KH9403 September 16, 1994
AS04 32°15.53′N, 133°23.56′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.4983	34.4071	4.6406
20.0	27.5025	34.4113	4.6540
30.0	27.3932	34.5079	4.5558
50.0	25.3861	34.5464	4.5504
75.0	23.8838	34.6919	4.5748
100.0	21.5766	34.9003	5.0423
150.0	19.5859	34.9396	4.8139
200.0	18.4632	34.8949	4.9106
300.0	16.4680	34.7376	4.5188
400.0	13.2823	34.5019	4.1431
500.0	9.9493	34.3070	3.7904
600.0	7.1845	34.1803	3.2499
700.0	5.5634	34.1707	2.6784
800.0	4.6949	34.3040	2.2779
900.0	3.8182	34.3760	2.1866
1000.0	3.4913	34.4170	2.2706
1100.0	3.2735	34.4448	2.3143
1143.0	3.1510	34.4593	2.3358

KH9403 September 17, 1994
AS2A 32°30.60′N, 133°16.11′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.3571	34.1681	4.4621
20.0	27.3240	34.1776	4.4709
30.0	27.2925	34.2070	4.4549
50.0	26.7642	34.3448	4.3695
75.0	24.8307	34.6031	4.3044
100.0	23.0586	34.7924	4.2565
150.0	20.4722	34.9032	4.2191
200.0	16.8622	34.6871	3.8584
300.0	12.4882	34.4850	3.7671
400.0	9.4390	34.2716	3.4359
500.0	5.8314	34.2208	2.5412
600.0	5.1002	34.2800	2.2598
664.0	4.5980	34.2950	2.2496

KH9403 September 16, 1994
AS05 32°05.64′N, 133°30.15′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.5585	34.6487	4.6914
20.0	27.5636	34.6481	4.6951
30.0	27.5649	34.6485	4.7200
50.0	25.4547	34.7429	4.9953
75.0	22.9660	34.8704	5.2025
100.0	21.0972	34.9163	4.9813
150.0	19.4840	34.9277	4.8485
200.0	18.5181	34.9158	5.0150
300.0	17.1611	34.7931	4.6358
400.0	14.7165	34.6033	4.3312
500.0	11.4416	34.3777	4.1041
600.0	8.4476	34.2325	3.5746
700.0	6.1636	34.1480	3.0117
800.0	5.0998	34.2012	2.4176
900.0	4.3654	34.2757	2.1490
1000.0	3.7213	34.3721	2.1208
1100.0	3.3615	34.4325	2.1589
1200.0	3.1566	34.4622	2.2000
1300.0	2.9758	34.4814	2.2408
1400.0	2.8057	34.5018	2.2695
1500.0	2.6650	34.5191	2.2207
1600.0	2.5251	34.5370	2.3557
1700.0	2.3906	34.5539	2.4276
1800.0	2.3287	34.5625	2.4191
1854.0	2.2446	34.5734	2.4960

KH9403 September 17, 1994
AS03 32°25.69′N, 133°18.81′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.3972	34.1986	4.7168
20.0	27.4424	34.2333	4.6421
30.0	27.6818	34.3823	4.5743
50.0	26.6702	34.4394	4.5134
75.0	24.3438	34.7292	4.5050
100.0	23.0243	34.8193	4.4473
150.0	20.8464	34.8752	4.4547
200.0	18.1140	34.7810	4.1959
300.0	14.2655	34.5610	4.0012
400.0	9.7924	34.2735	3.9372
500.0	7.1867	34.1807	3.4766
600.0	5.5483	34.1753	2.9615
700.0	4.3848	34.3047	2.6904
800.0	3.9377	34.3601	2.6313
894.0	3.6852	34.3951	

KH9403 September 17, 1994
AS02 32°35.45′N, 133°12.86′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.2788	34.3579	4.5463
20.0	27.2826	34.3578	4.5303
30.0	26.9023	34.3225	4.5604
50.0	26.2564	34.3868	4.3723
75.0	24.1401	34.4813	4.2072
100.0	23.1213	34.6521	4.1565
150.0	20.2692	34.7636	4.1164
200.0	17.1772	34.7372	3.9482
300.0	9.8764	34.3665	3.2684
400.0	7.2088	34.2471	2.9875
500.0	6.2612	34.2595	2.6532
600.0	5.2480	34.2788	2.3624
700.0	4.2465	34.3449	2.2710
791.0	3.9525	34.3699	2.3029

KH9403 September 17, 1994
AS1A 32°40.02'N, 133°09.45'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.1025	34.2770	4.6628
20.0	25.2343	34.2914	4.7219
30.0	25.2050	34.2897	4.6305
50.0	24.6970	34.3053	4.5602
75.0	23.0425	34.4310	4.1488
100.0	18.9084	34.6895	4.1987
150.0	16.7886	34.6907	4.0300
200.0	13.0396	34.5258	3.8787
277.0	10.3662	34.3897	3.0479

KH9403 September 19, 1994
KC01 33°24.63'N, 139°50.32'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.3542	34.6116	9.9900
20.0	27.3590	34.6111	9.9900
30.0	27.3629	34.6110	9.9900
50.0	27.2154	34.6342	5.2254
75.0	22.8739	34.8134	5.0312
100.0	21.2528	34.8807	5.0644
150.0	19.9990	34.8965	4.9513
200.0	19.0853	34.8910	5.0994
300.0	17.7581	34.8331	4.9917
400.0	16.4505	34.7283	4.6456
500.0	13.8647	34.5410	4.3201
509.0	13.8574	34.5408	4.3320

KH9403 September 20, 1994
KC03 33°34.86'N, 139°41.15'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.0540	34.3089	4.7122
20.0	27.1578	34.4381	4.4983
30.0	25.7741	34.5316	4.4831
50.0	23.3550	34.8128	4.3473
75.0	21.9242	34.9074	4.3730
100.0	21.2179	34.9070	4.4337
150.0	19.8157	34.9153	4.6691
200.0	18.5850	34.8876	4.8142
300.0	17.4411	34.8032	4.4504
400.0	15.0563	34.6295	4.2916
500.0	11.9043	34.4286	3.8791
600.0	8.2866	34.2396	3.1183
700.0	5.7260	34.2622	2.1363
800.0	4.5528	34.3171	1.8877
900.0	3.8628	34.3769	1.7491
1000.0	3.5176	34.4143	1.7326
1100.0	3.3235	34.4389	1.7523
1107.0	3.2825	34.4427	

KH9403 September 17, 1994
AS01 32°44.81'N, 133°05.81'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	25.5127	34.2794	4.7342
20.0	24.9697	34.2952	4.7104
30.0	24.6036	34.3108	4.5347
50.0	22.8759	34.4432	4.4304
75.0	20.1415	34.6990	4.1645
100.0	19.0012	34.6815	4.1866
123.0	17.1767	34.6721	

KH9403 September 20, 1994
KC02 33°29.51'N, 139°45.89'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.1430	34.4302	4.8590
20.0	27.2133	34.4866	4.7472
30.0	27.3603	34.6400	4.5792
50.0	24.6489	34.6639	4.6004
75.0	22.6176	34.8543	4.4661
100.0	20.9561	34.9049	4.6331
150.0	19.7070	34.9132	4.8804
200.0	19.0127	34.9064	4.8869
300.0	18.1066	34.8524	4.6317
400.0	15.6733	34.6759	4.3604
500.0	14.2756	34.5663	4.0418
513.0	12.6981	34.4784	

KH9403 September 20, 1994
KC04 33°40.09'N, 139°36.65'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.2803	34.6082	4.6376
20.0	27.2287	34.6170	4.5844
30.0	25.6336	34.7018	4.6239
50.0	23.7491	34.7520	4.5634
75.0	21.8665	34.8999	4.3934
100.0	20.2244	34.9312	4.6393
150.0	18.9398	34.9076	4.6596
200.0	18.0011	34.8660	4.5878
300.0	16.3447	34.7236	4.1638
400.0	15.0045	34.6255	3.9618
500.0	11.8206	34.4368	3.5238
600.0	7.8292	34.2782	2.9595
700.0	5.6370	34.2655	2.2770
800.0	4.4286	34.3275	1.8136
900.0	3.8448	34.3806	1.6747
1000.0	3.4472	34.4206	1.7446
1100.0	3.2413	34.4480	1.7532
1200.0	3.0418	34.4701	1.7755
1300.0	2.9071	34.4873	1.8324
1400.0	2.7254	34.5105	1.8644
1500.0	2.6162	34.5246	1.9672
1523.0	2.5923	34.5278	

KH9403 September 20, 1994
KC05 33°43.93'N, 139°32.23'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.0336	34.6326	4.7472
20.0	27.0331	34.6328	4.7262
30.0	27.0290	34.6339	4.6918
50.0	24.3802	34.7780	4.8609
75.0	21.2902	34.9014	4.9436
100.0	20.4421	34.9241	4.6845
150.0	19.7360	34.9240	4.6352
200.0	18.5898	34.9065	4.6091
300.0	17.4219	34.8120	4.3424
400.0	15.7418	34.6769	4.0657
500.0	12.0866	34.4258	3.7650
600.0	8.6397	34.3092	3.1084
700.0	5.9625	34.2180	2.5536
800.0	4.7633	34.3063	2.0041
900.0	4.0740	34.3588	1.7372
1000.0	3.4732	34.4205	1.7613
1100.0	3.1788	34.4529	1.7629
1200.0	3.0517	34.4691	1.7732
1300.0	2.9040	34.4877	1.8297
1400.0	2.6976	34.5140	1.9137
1500.0	2.5062	34.5381	2.0487
1557.0	2.4369	34.5475	1.9406

KH9403 September 20, 1994
KC06 33°50.21'N, 139°26.13'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.3060	34.6819	4.3218
20.0	27.3080	34.6815	4.3189
30.0	27.3080	34.6812	4.2556
50.0	27.3132	34.6813	4.2613
75.0	25.0826	34.7613	4.4580
100.0	21.8294	34.8132	4.2075
150.0	20.4768	34.9109	4.2421
200.0	18.9398	34.8609	4.2041
300.0	17.5171	34.7988	4.1033
400.0	14.2093	34.5784	3.4791
500.0	8.7576	34.3240	2.8444
600.0	6.0559	34.2511	2.5279
700.0	5.0218	34.2874	2.1835
800.0	4.4003	34.3284	1.9376
900.0	3.8746	34.3774	1.7170
1000.0	3.4029	34.4240	1.7405
1100.0	3.1296	34.4600	1.7604
1200.0	2.9512	34.4810	1.7784
1300.0	2.8252	34.4968	1.8383
1400.0	2.7260	34.5099	1.8746
1500.0	2.5548	34.5324	1.9994
1600.0	2.3848	34.5548	2.0799
1622.0	2.3802	34.5550	

KH9403 September 20, 1994
KC07 33°55.50'N, 139°20.96'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.1600	34.5916	4.1516
20.0	27.1618	34.5920	4.1346
30.0	27.1661	34.5938	4.1409
50.0	26.6673	34.7007	4.1126
75.0	24.2391	34.7740	4.2498
100.0	23.5503	34.7953	4.1260
150.0	20.2284	34.8886	4.2504
200.0	18.7019	34.8650	4.2462
300.0	16.5663	34.7490	3.8058
400.0	10.3884	34.4034	2.8827
500.0	7.0930	34.2784	2.5992
600.0	5.7418	34.2627	2.4039
700.0	4.5569	34.3098	2.0978
800.0	4.1040	34.3531	1.9294
900.0	3.7455	34.3915	1.7106
1000.0	3.4273	34.4231	1.6765
1010.0	3.4212	34.4236	

KH9403 September 20, 1994
KC08 33°59.66'N, 139°15.51'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.9694	34.6328	4.1747
20.0	26.9720	34.6355	4.1708
30.0	26.9688	34.6358	4.1708
50.0	26.6456	34.5872	4.0946
75.0	24.2076	34.7510	4.1989
100.0	22.6868	34.7975	3.9873
150.0	19.5157	34.7827	3.9935
200.0	18.6230	34.7340	3.7478
300.0	12.5322	34.4819	3.3243
400.0	8.9006	34.3450	3.0556
500.0	7.5958	34.2911	2.8441
505.0	7.5733	34.2886	

KH9403 September 20, 1994
KC09 34°04.85'N, 139°11.04'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.1045	34.5983	4.1759
20.0	27.0662	34.5943	4.1720
30.0	27.0823	34.5954	4.1665
50.0	27.0495	34.5918	4.0721
75.0	25.4333	34.6153	4.0162
100.0	22.5687	34.7472	3.9913
150.0	20.4170	34.8259	3.9984
200.0	18.8767	34.7845	3.7472
300.0	11.6664	34.4494	3.1357
400.0	7.7920	34.2959	2.7162
406.0	7.7121	34.2920	2.5590

KH9403 September 20, 1994
KC10 34°15.20'N, 139°30.83'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.9656	34.4670	4.2924
20.0	26.9640	34.4672	4.2453
30.0	26.9381	34.4653	4.2198
50.0	26.2171	34.4928	4.2263
75.0	25.4228	34.5959	4.0779
100.0	22.8808	34.6327	3.8619
150.0	18.2232	34.6894	3.8508
200.0	17.5154	34.6708	3.8651
300.0	13.2112	34.5264	3.3860
400.0	8.9226	34.3462	2.9647
432.0	7.9916	34.3108	3.2683

KH9403 September 20, 1994
KC11 34°09.67′N, 139°35.22′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.2884	34.4734	4.1659
20.0	25.9837	34.5085	4.1680
30.0	25.1732	34.5765	4.2079
50.0	24.9499	34.5899	4.1552
75.0	24.5345	34.6342	4.1654
100.0	24.0717	34.6712	3.9847
150.0	20.3333	34.7113	3.7587
200.0	17.0040	34.6877	3.7643
225.0	16.4551	34.6609	

KH9403 September 20, 1994
KC12 34°04.76′N, 139°39.41′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.8213	34.4457	3.6314
20.0	26.6884	34.4981	3.9008
30.0	26.6777	34.4785	4.1398
50.0	25.7602	34.5280	4.1053
75.0	24.6778	34.6050	4.0250
100.0	23.5786	34.7064	3.9559
150.0	20.2747	34.8840	4.2433
200.0	18.4205	34.8280	3.8981
300.0	13.0326	34.5182	3.3468
400.0	10.0389	34.3809	2.9273
500.0	5.9868	34.2791	2.2766
600.0	4.6023	34.3162	2.1738
671.0	4.5519	34.3182	

KH9403 September 20, 1994
KC13 34°00.57′N, 139°45.96′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.3257	34.6533	3.6945
20.0	27.3279	34.6668	3.9912
30.0	27.3319	34.6687	4.1651
50.0	27.2341	34.6695	4.0471
75.0	26.3510	34.6515	4.1539
100.0	25.1484	34.7474	4.1602
150.0	21.8339	34.8722	4.0284
200.0	18.8302	34.8845	3.9349
300.0	13.3789	34.5399	3.3787
400.0	11.9983	34.4662	2.9921
500.0	7.2495	34.2770	2.6309
600.0	6.6900	34.2702	2.5040
700.0	4.7651	34.3077	2.2801
800.0	4.0066	34.3640	2.1643
900.0	3.5397	34.4049	1.8238
1000.0	3.4404	34.4195	1.6065
1053.0	3.2363	34.4407	1.6473

KH9403 September 20, 1994
KC14 33°55.77′N, 139°49.91′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.6119	34.6437	4.0400
20.0	26.6116	34.6453	4.1629
30.0	26.6121	34.6297	4.1304
50.0	26.5735	34.6438	3.9525
75.0	26.2079	34.6744	3.9091
100.0	21.4052	34.8924	4.2025
150.0	19.4313	34.8762	4.0116
200.0	18.3191	34.8391	3.9357
300.0	17.3095	34.7846	3.6868
400.0	13.1795	34.5008	3.5333
500.0	9.2336	34.3229	2.9303
600.0	8.0895	34.2858	2.7854
700.0	5.4760	34.2581	2.2730
800.0	4.5689	34.3167	2.0999
900.0	3.7707	34.3861	1.9481
1000.0	3.3826	34.4301	1.7455
1100.0	3.1854	34.4533	1.6940
1154.0	3.1443	34.4579	

KH9403 September 21, 1994
KC15 33°50.17′N, 139°55.62′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.4124	34.7127	4.8276
20.0	27.3745	34.7118	4.8085
30.0	27.3667	34.7107	4.7870
50.0	27.3589	34.7100	4.7538
75.0	27.1892	34.7134	4.7237
100.0	22.2345	34.9138	5.1485
150.0	19.2640	34.9207	4.7977
200.0	17.4870	34.8233	4.7577
300.0	13.8249	34.5621	4.2249
386.0	11.3584	34.4107	3.7264

KH9403 September 21, 1994
KC16 33°45.17′N, 140°00.82′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.1653	34.6499	4.3577
20.0	26.8051	34.6577	4.3640
30.0	26.5687	34.6649	4.2843
50.0	24.4437	34.7794	4.3792
75.0	21.0385	34.9083	4.4818
100.0	20.5251	34.9252	4.4976
150.0	19.7537	34.9123	4.3953
200.0	18.6902	34.8953	4.3544
300.0	16.5260	34.7440	4.1949
400.0	15.2806	34.6522	4.0147
500.0	14.5111	34.5913	3.9822
503.0	14.5201	34.5918	

KH9403 September 21, 1994
KC17 33°39.98′N, 140°05.11′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.3773	34.6333	4.2917
20.0	27.2064	34.6357	4.2734
30.0	27.2021	34.6356	4.2445
50.0	25.9909	34.6500	4.2012
75.0	23.4841	34.8061	4.1326
100.0	21.5632	34.8913	4.0946
150.0	20.3432	34.9199	4.4471
200.0	19.1256	34.9110	4.3983
224.0	18.2805	34.8851	

KH9403 September 21, 1994
KC18 33°44.88′N, 140°30.21′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.2297	34.3337	4.4878
20.0	27.0359	34.3352	4.4796
30.0	26.9180	34.3309	4.3802
50.0	25.7267	34.5357	4.3097
75.0	23.7337	34.7403	4.2215
100.0	21.8469	34.8808	4.3619
150.0	20.5357	34.8992	4.5008
200.0	19.5110	34.8921	4.3488
300.0	17.3067	34.7792	4.0658
400.0	15.6458	34.6712	3.9386
500.0	12.4048	34.4847	3.6284
600.0	7.6040	34.2836	3.4147
700.0	5.1773	34.2665	3.4183
800.0	4.6163	34.2988	2.5089
900.0	3.9263	34.3168	1.5959
1000.0	3.4988	34.3620	1.4796
1100.0	3.3399	34.4260	1.5552
1200.0	2.9975	34.4634	1.6080
1300.0	2.6446	34.4731	1.2695
1400.0	2.4364	34.5021	1.3712
1461.0	2.4221	34.5054	1.3997

KH9403 September 21, 1994
KC19 33°50.26′N, 140°25.32′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.0414	34.3500	4.1900
20.0	26.8360	34.3760	4.1487
30.0	26.6500	34.4123	4.1001
50.0	24.6782	34.5758	4.0414
75.0	23.0048	34.8283	3.8851
100.0	21.6231	34.8807	4.0339
150.0	19.4143	34.8644	4.2239
200.0	18.8719	34.8998	4.2699
300.0	17.9397	34.8334	4.0919
400.0	16.3421	34.7234	3.8139
500.0	10.9961	34.3985	3.4197
600.0	7.6728	34.2809	2.8789
700.0	5.6625	34.2682	2.4697
800.0	4.8349	34.2957	2.2312
900.0	4.2247	34.3175	1.9088
1000.0	3.5414	34.3267	1.5092
1100.0	3.3569	34.4273	1.6774
1200.0	2.9932	34.4473	1.5328
1294.0	2.8367	34.4687	1.4867

KH9403 September 21, 1994
KC20 33°55.66′N, 140°20.63′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.9344	34.6394	4.0485
20.0	27.0701	34.6462	4.0201
30.0	27.0727	34.6471	3.9933
50.0	23.5650	34.8076	4.2672
75.0	22.2237	34.8758	4.3508
100.0	21.1651	34.9042	4.1838
150.0	19.1306	34.9092	4.1127
200.0	18.2289	34.8859	4.1389
300.0	16.1805	34.7187	3.9324
400.0	15.7189	34.6805	3.8517
500.0	10.9766	34.3860	3.2617
600.0	8.2284	34.2790	2.9768
700.0	6.3372	34.2511	2.6625
800.0	4.8350	34.2731	2.3458
900.0	4.4138	34.3292	2.1468
1000.0	3.7219	34.3503	1.8552
1100.0	3.4563	34.4184	1.7154
1200.0	3.3166	34.4334	1.7224
1208.0	3.2902	34.4358	1.7533

KH9403 September 21, 1994
KC21 34°00.39′N, 140°15.34′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.1254	34.6649	4.0109
20.0	26.8394	34.5996	4.0097
30.0	26.6026	34.6252	4.0132
50.0	26.5580	34.6517	4.0554
75.0	25.7260	34.7019	4.1524
100.0	23.5958	34.8211	4.2456
150.0	19.7672	34.9456	4.0331
200.0	18.3684	34.9084	4.0766
300.0	15.6952	34.6844	3.8556
400.0	12.6793	34.4944	3.5348
500.0	10.0887	34.3578	3.2610
600.0	8.5766	34.2948	3.0631
700.0	5.7730	34.2608	2.5402
800.0	4.5214	34.2909	2.3505
900.0	4.0175	34.3149	2.2126
1000.0	3.6985	34.3852	2.0814
1026.0	3.6359	34.4020	

KH9403 September 21, 1994
KC22 34°05.73′N, 140°10.63′E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.1552	34.6739	4.0540
20.0	26.7632	34.6655	4.0875
30.0	26.7002	34.6609	4.0812
50.0	26.7197	34.6691	4.0594
75.0	23.4134	34.8483	4.3029
100.0	21.7551	34.8843	4.2519
150.0	20.0171	34.8657	4.1356
200.0	18.6427	34.8565	4.1654
300.0	15.1599	34.6405	3.8992
400.0	12.0546	34.4430	3.5479
500.0	9.5820	34.3543	3.0791
600.0	6.3870	34.2292	2.6853
700.0	5.8296	34.2617	2.5127
800.0	4.7544	34.3044	2.3034
900.0	4.0531	34.3588	2.3118
1000.0	3.7145	34.3939	2.2765
1100.0	3.3014	34.4409	1.9695
1181.0	3.2196	34.4481	

KH9403 September 21, 1994

KC23 34°10.39'N, 140°07.19'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.9001	34.2780	4.2154
20.0	27.0010	34.5269	4.1767
30.0	26.8627	34.5392	4.1690
50.0	26.2057	34.6076	4.1461
75.0	24.8287	34.6819	4.0673
100.0	21.6447	34.8179	4.1140
150.0	19.5143	34.8375	4.1621
200.0	18.3445	34.8341	4.1851
300.0	13.4903	34.5282	3.6292
400.0	10.2641	34.3841	3.1432
500.0	8.1231	34.2896	2.9086
600.0	6.3525	34.2572	2.6168
700.0	5.2376	34.2795	2.3467
800.0	4.3542	34.3303	2.3082
900.0	3.7047	34.3954	2.3671
1000.0	3.3003	34.4105	2.1122
1100.0	2.9998	34.4398	1.7066
1200.0	2.8539	34.4558	1.4840
1300.0	2.6136	34.4758	1.3835
1400.0	2.5467	34.4884	1.3773
1422.0	2.5353	34.4898	1.3935

KH9403 September 21, 1994

KC24 34°14.59'N, 140°00.36'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	27.1430	34.6448	3.8447
20.0	26.9768	34.6120	3.8143
30.0	26.7612	34.5417	3.7963
50.0	25.7792	34.5474	3.7960
75.0	25.3335	34.6216	3.6561
100.0	23.0564	34.6596	3.6272
150.0	18.9192	34.7053	3.5637
200.0	17.9229	34.7109	3.5750
300.0	12.1253	34.4776	3.1756
400.0	9.0135	34.3333	2.8604
500.0	7.0207	34.2747	2.5145
600.0	5.6493	34.2703	2.2662
700.0	4.8073	34.2962	2.0787
800.0	4.1388	34.3257	2.0251
900.0	3.6343	34.3755	2.0048
1000.0	3.1715	34.4132	1.8574
1100.0	3.0387	34.4518	1.6777
1200.0	2.7829	34.4589	1.4158
1300.0	2.6755	34.4706	1.3201
1400.0	2.5005	34.4940	1.3002
1411.0	2.5002	34.4943	

KH9403 September 21, 1994

KC25 34°19.87'N, 139°55.12'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.8988	34.3344	3.9882
20.0	25.9599	34.4572	4.0183
30.0	25.8851	34.5216	3.9690
50.0	25.4622	34.6435	3.9530
75.0	23.7647	34.7044	3.7816
100.0	21.0039	34.6847	3.7219
150.0	18.2665	34.7110	3.6519
200.0	15.8154	34.6269	3.6335
300.0	11.8522	34.4566	3.4740
400.0	9.7470	34.3577	2.9717
500.0	6.6216	34.2651	2.4489
600.0	5.1984	34.2749	2.2210
700.0	4.4539	34.3306	2.1419
800.0	3.9030	34.3708	2.1278
900.0	3.6269	34.3950	2.1332
1000.0	3.2380	34.4338	2.0083
1100.0	3.0088	34.4542	1.7529
1200.0	2.6782	34.4652	1.4048
1300.0	2.5345	34.4851	1.3902
1400.0	2.4009	34.5085	1.4086
1454.0	2.3928	34.5111	1.3418

KH9403 September 21, 1994

KC26 34°25.05'N, 139°50.62'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	26.7130	34.3824	4.0466
20.0	26.3955	34.3951	3.9940
30.0	25.8190	34.5001	3.9570
50.0	23.7546	34.6482	3.8973
75.0	21.2368	34.7883	3.8887
100.0	19.6615	34.7746	3.8374
150.0	16.7096	34.6623	3.6994
200.0	14.9782	34.5930	3.5610
300.0	11.6915	34.4479	3.2934
400.0	9.0071	34.3411	2.7745
500.0	6.1229	34.1875	2.6201
600.0	5.1658	34.2857	2.1122
700.0	4.2562	34.3452	2.0475
800.0	3.8193	34.3685	2.0742
900.0	3.6227	34.3900	2.1460
1000.0	3.4039	34.4202	2.0837
1100.0	3.1905	34.4376	1.8536
1200.0	2.9245	34.4591	1.4912
1300.0	2.5659	34.4715	1.2826
1400.0	2.4641	34.5001	1.3830
1404.0	2.3839	34.5151	

KH9403 September 21, 1994

KC27 34°29.67'N, 139°44.81'E

P(db)	T(°C)	S(psu)	O(ml/l)
10.0	25.7416	34.4552	4.0885
20.0	25.7058	34.4427	3.8890
30.0	23.5641	34.5675	3.9298
50.0	22.3542	34.6448	3.7728
75.0	19.5574	34.6927	3.8556
100.0	18.6845	34.7293	3.8660
150.0	16.0864	34.6467	3.6228
200.0	13.2420	34.5233	3.4620
300.0	12.0984	34.4637	3.3056
400.0	8.2909	34.3189	2.8462
500.0	6.0546	34.2410	2.4796
600.0	4.9529	34.2773	2.1605
700.0	4.3904	34.3284	2.1090
800.0	3.8424	34.3767	2.1314
900.0	3.4833	34.3713	2.1157
1000.0	3.2804	34.4183	2.2674
1100.0	2.9870	34.4356	2.0049
1200.0	2.7209	34.4621	1.5762
1300.0	2.5303	34.4928	1.4294
1377.0	2.4790	34.5000	1.4981

8. Nutrients Data

Data on phosphate, nitrate, nitrite, and silicate

The sea water samples for the nutrient analyses were collected from various depths from surface to near bottom at 27 selected stations. Nitrate, nitrite, and silicate were determined by the automatic analysis using a Technicon autoanalyzer, and phosphate was measured by spectrophotometric method. Most of the analyses were carried out on board immediately after sampling. Nitrate and nitrite at AS stations were determined by spectrophotometric method in the shore laboratory. All of the nutrient analyses were done by T. Ichikawa, K. Matsunaga, and N. Kawamura.

P C 0 1

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.2	0.01	0.0	0.0
13	0.2	0.02	0.0	0.0
21	0.2	0.04	0.0	0.0
54	0.2	0.03	0.8	0.6
79	0.4	0.03	1.8	2.0
102	0.5	0.06	3.4	3.7
155	0.6	0.03	5.3	6.6
200	0.9	0.02	10.1	13.7
249	1.1	0.00	14.1	21.0
300	1.6	0.00	18.7	33.2
349	1.8	0.00	22.0	43.7
401	1.9	0.00	23.7	47.7
453	2.0	0.02	24.2	50.1
502	2.1	0.02	25.0	52.6
555	2.3	0.04	28.0	63.0
604	2.5	0.03	29.5	68.7
656	2.7	0.03	31.0	75.0
704	2.9	0.02	34.3	90.3
753	2.9	0.01	35.5	96.5
804	3.0	0.01	36.1	99.1
852	2.9	0.01	36.8	103.1
903	3.0	0.01	37.2	108.8
954	3.0	0.01	37.9	115.2
1004	2.9	0.01	38.1	118.2
1103	3.0	0.02	37.9	120.5

P C 0 2

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.1	0.01	0.0	0.0
13	0.0	0.01	0.0	0.0
22	0.0	0.03	0.0	0.0
53	0.2	0.18	0.2	0.0
79	0.1	0.18	0.7	0.0
103	0.2	0.14	0.9	0.0
155	0.2	0.02	1.6	0.0
204	0.3	0.00	2.8	0.0
250	0.4	0.00	4.6	0.5
303	0.5	0.00	5.2	1.6
404	0.9	0.01	9.3	7.3
502	1.2	0.01	14.6	17.9
602	2.3	0.01	30.6	65.6
701	2.6	0.02	35.8	87.7
802	2.8	0.02	38.1	100.6
902	3.0	0.01	40.0	111.4
1003	2.9	0.01	41.0	121.3
1103	3.1	0.02	41.8	129.5
1203	3.1	0.02	42.4	137.6
1301	3.1	0.01	42.5	143.1
1402	3.0	0.00	42.8	148.8
1604	2.9	0.00	42.3	154.3
1807	2.8	0.01	41.7	154.8
2007	2.8	0.01	40.8	154.6
2353	2.8	0.01	39.1	152.6

P C 0 3

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.2	0.02	0.0	0.0
15	0.0	0.01	0.0	0.0
24	0.0	0.00	0.0	0.0
54	0.2	0.09	0.7	0.0
103	0.3	0.07	1.4	0.0
205	0.4	0.01	2.6	0.0
310	0.5	0.01	5.2	1.5
409	0.8	0.01	10.0	7.1
511	1.3	0.02	16.3	18.8
604	1.9	0.02	24.5	40.9
706	2.2	0.02	30.3	59.9
806	2.9	0.02	36.8	81.6
906	3.0	0.03	40.3	102.0
1006	3.0	0.02	41.6	113.5
1205	2.9	0.02	43.6	133.4
1404	3.2	0.02	43.6	143.1
1604	3.2	0.00	43.6	150.4
1802	3.2	0.01	42.5	153.4
2002	3.0	0.00	42.0	154.1
2501	2.8	0.00	39.4	151.9
3004	2.7	0.00	38.6	150.4
3506	2.6	0.00	37.8	148.2
4005	2.6	0.00	37.0	145.8
4501	2.6	0.01	36.4	143.4
4614	2.7	0.01	36.2	142.8

P C 0 5

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.3	0.04	0.0	0.0
13	0.0	0.04	0.0	0.0
24	0.0	0.04	0.0	0.0
53	0.2	0.04	0.0	0.0
102	0.2	0.08	1.6	0.0
203	0.2	0.05	2.9	0.0
302	0.5	0.04	5.0	0.5
403	0.9	0.04	9.7	6.1
553	1.4	0.04	18.4	22.1
703	2.3	0.02	28.3	47.5
854	2.8	0.03	36.3	73.1
1004	2.9	0.03	40.6	93.8
1205	3.2	0.04	42.6	112.0
1404	3.1	0.04	41.6	117.1
1603	3.1	0.04	42.5	130.8
1804	3.3	0.02	42.4	153.5
2004	3.0	0.01	41.3	153.7
2504	2.7	0.01	39.4	152.5
3004	2.8	0.01	38.1	150.8
3502	2.6	0.01	37.2	147.8
4002	2.5	0.01	36.5	144.9
4501	2.7	0.00	36.1	143.4
5001	2.6	0.00	35.8	141.1
5500	2.5	0.00	35.7	139.7
6506	2.5	0.00	35.5	137.3

P C 0 6

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.03	0.0	0.0
27	0.0	0.03	0.0	0.0
55	0.1	0.03	0.0	0.0
104	0.1	0.11	0.0	0.0
203	0.4	0.03	4.4	2.6
303	0.7	0.02	7.2	5.2
403	0.8	0.01	11.9	12.3
553	1.4	0.02	19.3	28.7
703	1.9	0.01	25.1	44.4
853	2.4	0.02	33.8	78.8
1004	2.7	0.03	39.2	98.8
1204	3.0	0.03	42.0	123.1
1404	3.0	0.02	43.0	136.7
1603	3.0	0.02	42.9	144.7
1803	3.1	0.01	42.8	150.7
2003	2.9	0.03	42.0	152.9
2504	2.7	0.00	39.7	150.0
3004	2.8	0.00	38.3	148.0
3505	2.5	0.01	37.4	146.4
4004	2.4	0.02	36.7	143.6
4505	2.5	0.03	36.3	140.7
5003	2.3	0.01	36.0	138.9
5503	2.4	0.02	35.9	137.8
6506	2.4	0.02	35.7	136.6

P C 0 7

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.1	0.04	0.0	0.0
13	0.1	0.04	0.0	0.0
22	0.1	0.04	0.0	0.0
53	0.2	0.06	0.0	0.0
104	0.2	0.06	2.3	0.0
204	0.3	0.04	2.8	0.0
303	0.4	0.02	3.6	1.0
403	0.5	0.02	7.6	4.8
553	1.1	0.00	15.3	17.0
703	1.8	0.00	24.0	37.6
853	2.4	0.00	34.9	69.3
1002	2.7	0.01	39.6	90.2
1203	2.9	0.02	44.8	110.8
1401	3.0	0.02	44.0	127.3
1602	3.0	0.02	44.1	135.1
1801	3.0	0.01	43.5	140.3
2002	2.9	0.01	42.1	142.8
2502	2.7	0.01	39.9	141.6
3000	2.7	0.01	38.4	137.5
3502	2.5	0.02	37.3	136.5
4001	2.5	0.02	36.7	133.5
4499	2.6	0.02	36.2	130.7
5001	2.3	0.02	35.9	129.4
5497	2.4	0.02	35.7	127.4
6013	2.4	0.02	35.5	126.2

PC09

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.1	0.00	0.0	0.0
14	0.1	0.01	2.0	0.0
24	0.1	0.01	2.0	1.0
54	0.1	0.01	2.1	1.5
105	0.2	0.03	3.8	2.6
204	0.4	0.02	6.3	4.4
303	0.6	0.01	9.8	8.5
405	1.1	0.01	17.9	20.5
555	1.7	0.01	29.1	44.6
706	2.3	0.01	39.8	70.5
855	2.9	0.01	49.5	105.6
1006	3.1	0.01	52.7	123.2
1207	3.2	0.01	53.7	143.4
1407	3.1	0.01	53.0	148.5
1803	3.1	0.01	52.2	162.3
2005	3.0	0.01	50.8	163.6
2504	2.8	0.01	48.0	161.3
3004	2.7	0.01	46.0	159.4
3505	2.6	0.01	44.6	156.5
4004	2.6	0.01	43.1	148.0
4504	2.6	0.00	42.1	134.6
5005	2.5	0.00	41.2	131.4
5502	2.5	0.00	40.4	129.2
5703	2.5	0.00	39.7	127.6

PC11

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.00	0.0	0.0
12	0.0	0.00	0.0	1.1
22	0.0	0.01	0.0	1.3
54	0.0	0.00	0.0	1.8
79	0.2	0.02	0.0	2.3
104	0.2	0.03	2.7	3.1
153	0.2	0.01	4.0	4.0
205	0.3	0.01	4.0	4.1
254	0.3	0.01	4.6	4.6
305	0.3	0.01	4.5	4.7
404	0.5	0.01	6.8	6.8
504	1.0	0.00	13.4	15.0
603	1.2	0.00	19.9	26.0
703	1.7	0.00	25.7	39.1
804	2.2	0.00	35.1	62.8
905	2.5	0.00	40.7	80.5
1004	2.9	0.00	46.6	100.8
1103	3.0	0.00	50.1	114.2
1203	3.1	0.00	51.1	123.9
1304	3.1	0.00	51.2	130.4
1404	3.1	0.00	51.3	135.4
1504	3.1	0.00	51.7	138.8
1604	3.1	0.00	51.7	141.4
1804	3.1	0.00	51.0	143.5
2004	3.0	0.00	49.6	143.3

P C 1 2

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.00	0.0	0.0
12	0.0	0.00	0.0	0.0
23	0.0	0.00	0.0	0.0
55	0.0	0.00	0.0	0.0
79	0.1	0.01	0.0	0.0
104	0.1	0.00	0.0	0.0
152	0.3	0.04	3.7	1.0
202	0.4	0.01	4.8	1.5
255	0.5	0.01	5.8	2.6
305	0.6	0.00	8.1	4.8
404	0.8	0.02	12.5	11.7
503	1.2	0.01	16.4	19.6
602	1.6	0.00	21.9	32.1
703	2.2	0.00	30.9	58.0
803	2.6	0.00	37.2	80.5
903	2.8	0.00	42.3	98.2
1004	3.1	0.00	43.8	116.2
1104	3.1	0.00	44.7	127.7
1204	3.2	0.00	45.5	136.1
1303	3.2	0.00	45.6	144.8
1404	-	-	-	-
1504	3.2	0.00	46.0	156.3
1604	3.1	0.00	45.9	160.6
1803	3.1	0.00	44.8	165.1
2004	3.0	0.00	43.7	151.6

P C 1 3

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.03	0.0	0.0
13	0.0	0.02	0.0	0.0
23	0.0	-	0.0	0.0
54	0.1	0.01	0.0	0.0
79	0.2	0.01	0.0	0.0
103	0.2	0.02	2.9	0.9
154	0.3	0.01	3.0	1.5
203	0.3	0.01	3.3	1.5
254	0.5	0.02	9.1	16.7
303	0.7	0.02	4.5	-
503	1.2	0.01	14.5	21.3
603	1.6	0.03	19.5	35.1
703	2.2	0.02	24.7	57.1
802	2.6	0.03	30.5	82.0
903	2.9	0.01	33.4	100.7
1001	3.1	-	37.2	117.6
1103	3.1	-	33.4	132.3
1203	3.2	-	41.4	140.2
1302	3.2	-	40.7	147.2
1402	3.2	-	37.8	153.6
1502	3.2	-	38.2	157.5
1602	3.2	-	40.1	161.0
1802	3.1	-	39.2	164.4
2009	3.0	-	39.2	165.5

P C 1 5

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.03	0.0	0.0
12	0.0	0.01	0.0	0.0
22	0.0	0.01	0.0	0.0
53	0.0	0.01	0.0	0.0
77	0.1	0.03	0.0	0.1
102	0.2	0.03	2.4	0.7
153	0.2	0.01	3.4	1.4
203	0.2	0.01	1.9	1.5
253	0.2	0.01	2.0	1.5
304	0.3	0.01	3.0	1.7
403	0.6	0.01	7.4	6.6
504	0.9	0.02	11.7	15.9
604	1.4	0.02	25.2	30.8
704	1.9	0.01	26.2	52.0
803	2.3	0.01	32.0	73.1
904	2.7	0.01	34.9	94.1
1003	-	-	-	-
1102	2.9	0.01	39.2	124.2
1202	2.9	0.02	41.8	133.8
1303	3.0	0.02	41.1	143.2
1404	2.9	0.01	43.4	147.2
1504	2.9	0.01	45.0	151.3
1603	2.9	0.01	45.0	155.3
1803	2.8	0.01	39.0	160.3
2003	2.7	0.01	42.0	159.8

P C 1 7

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.00	0.0	0.0
13	0.0	0.00	0.0	0.0
23	0.0	0.00	0.0	0.0
54	0.0	0.00	0.0	0.0
80	0.1	0.00	0.0	0.0
104	0.1	0.10	1.1	0.0
154	0.2	0.02	4.3	0.0
203	0.3	0.01	4.9	1.4
255	0.3	-	5.1	2.0
305	0.3	0.01	5.2	2.3
404	0.7	0.00	11.2	8.6
511	1.0	0.00	16.4	17.5
605	1.5	0.00	24.1	33.0
704	2.1	0.00	32.9	58.5
804	2.4	0.00	37.8	77.1
904	2.8	0.00	43.8	99.0
1004	2.9	0.00	46.4	115.1
1103	3.0	0.00	47.9	128.9
1205	3.0	0.00	48.2	139.1
1304	3.0	0.00	48.6	147.2
1404	3.0	0.00	48.3	151.1
1503	3.0	0.00	47.9	155.6
1604	2.9	0.00	47.6	159.4
1804	2.9	0.00	46.5	162.2
1994	2.8	0.00	45.1	163.8

A S 2 6

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.01	0.1	0.0
13	0.0	0.04	0.0	0.0
25	0.0	0.02	0.1	0.0
54	0.1	0.01	0.1	0.0
104	0.1	0.08	0.4	0.0
204	0.4	0.03	5.4	2.0
303	0.5	0.01	9.9	4.8
403	0.8	0.03	15.2	12.0
503	1.4	0.02	20.4	24.6
603	1.6	0.02	25.8	36.5
702	2.1	0.01	37.8	56.8
853	2.7	0.02	49.8	91.7
1002	3.0	0.02	54.5	113.3
1202	3.0	0.03	53.9	135.0
1401	2.9	0.02	49.0	141.3
1603	2.8	0.00	39.8	146.1
1802	2.8	0.01	46.3	149.0
2001	-	-	-	-
2503	2.6	0.01	44.4	146.6
3001	2.6	0.02	44.9	146.0
3502	2.5	0.01	44.1	144.2
4001	2.5	0.00	46.3	143.8
4501	2.4	0.01	41.9	142.9
5004	2.4	0.02	42.8	142.2
5081	2.4	0.01	42.2	141.7

A S 2 4

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.04	0.0	0.0
14	0.0	0.01	0.0	0.0
26	0.0	0.03	0.3	0.0
54	0.0	0.03	0.3	0.0
106	0.5	0.02	0.8	9.5
205	0.3	0.03	4.6	3.6
304	0.5	0.03	7.7	6.4
404	0.8	0.02	10.0	10.9
504	1.1	0.00	14.0	19.7
605	1.5	0.02	18.7	31.2
705	1.9	0.04	23.0	46.1
803	2.3	0.01	28.6	69.5
903	2.6	0.01	31.9	87.8
1005	2.8	0.02	32.7	101.9
1204	3.0	0.01	33.0	123.2
1404	3.0	0.02	39.6	136.5
1603	2.9	0.02	38.5	141.9
1805	2.9	0.00	31.0	142.4
2006	2.7	0.02	32.1	141.9
2503	2.6	0.00	32.8	141.3
3004	2.5	0.02	36.3	140.4
3505	2.5	0.02	37.0	140.1
3996	2.4	0.02	31.3	139.0
4498	2.4	0.00	33.9	138.2
4708	2.4	0.02	33.2	137.6

A S 2 2

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.05	0.0	0.0
14	0.0	0.03	0.0	0.0
23	0.0	0.07	0.0	0.0
55	0.0	0.03	0.0	0.0
103	0.0	0.07	0.0	0.0
154	0.1	0.05	2.2	0.0
203	0.2	0.04	3.6	3.1
303	0.3	0.06	6.9	4.6
402	0.6	0.01	10.4	7.9
501	1.0	0.04	15.6	16.4
604	1.4	0.04	25.4	30.9
703	1.8	0.05	30.7	46.5
804	2.3	0.05	37.7	64.3
904	2.6	0.06	46.0	104.5
1003	2.9	0.04	46.4	106.1
1203	2.9	0.03	49.2	121.5
1403	2.9	0.07	49.1	133.9
1604	2.9	0.03	48.0	139.8
1803	2.8	0.03	45.0	139.4
2003	2.7	0.06	43.8	139.7
2502	2.5	0.05	48.0	140.5
3002	2.6	0.03	39.7	140.8
3505	2.5	0.07	40.7	139.0
4001	2.4	0.03	42.2	138.4
4497	2.4	0.02	43.6	137.6

A S 2 0

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.00	0.0	0.0
14	0.0	0.01	0.0	0.0
25	0.0	0.00	0.0	0.0
53	0.0	0.01	0.0	0.0
105	0.0	0.01	0.0	0.0
204	0.2	0.00	3.0	3.1
304	0.4	0.00	6.6	5.1
405	0.6	0.01	8.5	8.1
503	1.0	0.01	16.1	18.0
604	1.4	0.00	21.9	32.2
703	2.0	0.00	30.5	52.6
854	2.6	0.00	38.1	84.0
1004	2.8	0.01	41.0	107.6
1203	2.9	0.00	47.5	123.1
1404	-	-	-	-
1604	2.9	0.01	43.5	138.8
1803	2.7	0.00	43.6	141.4
2003	2.6	0.00	36.3	142.0
2503	2.5	0.00	43.0	140.6
3002	2.5	0.00	39.2	140.9
3502	2.4	0.00	40.7	140.1
4003	2.5	0.00	40.6	139.8
4502	2.4	0.00	37.8	139.1
5001	2.4	0.01	31.9	139.6
5306	2.4	0.01	41.9	139.0

A S 1 7

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.00	0.0	0.0
23	0.0	0.01	0.0	0.0
53	0.0	0.00	0.0	0.0
105	0.0	0.02	0.5	2.6
204	0.2	0.03	3.1	3.0
305	0.4	0.00	4.6	4.6
406	0.5	0.04	7.0	7.4
504	0.9	0.03	12.3	14.5
604	-	-	-	-
704	1.8	0.01	22.7	43.6
804	2.2	0.01	22.9	65.0
904	2.5	0.00	29.5	83.1
1004	2.7	0.01	33.5	104.2
1204	2.8	0.01	37.7	123.8
1404	2.8	0.01	39.9	130.9
1604	2.8	0.01	31.9	136.1
1804	2.7	0.01	40.6	139.7
2004	2.7	0.00	31.2	140.5
2504	2.6	0.00	24.4	139.7
3004	2.5	0.00	28.0	139.9
3505	2.4	0.00	43.3	138.9
4005	2.4	0.01	58.8	137.7
4501	2.4	0.01	57.8	136.9
5006	2.4	0.01	37.5	136.0

A S 1 4

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.01	0.0	0.0
13	0.0	0.00	0.0	0.0
23	0.0	0.01	0.0	0.0
52	0.0	0.01	0.0	0.0
102	0.0	0.03	0.4	0.0
202	0.2	0.05	2.9	1.8
302	0.2	0.04	3.7	2.6
403	0.7	0.03	7.7	5.8
503	0.7	0.05	12.1	10.6
604	1.1	0.04	17.6	20.9
705	1.6	0.02	21.0	38.4
804	2.2	0.04	30.2	62.8
905	2.4	0.01	34.8	78.6
1005	2.7	0.00	38.1	95.7
1204	2.8	0.06	40.4	120.5
1406	2.8	0.02	33.2	130.4
1603	2.8	0.00	40.7	135.5
1804	2.8	0.04	41.9	140.6
2004	2.7	0.03	41.9	140.5
2503	2.6	0.01	38.9	139.7
3003	2.5	0.03	33.3	138.4
3502	2.5	0.02	35.8	138.0
3999	2.4	0.00	34.0	138.1
4500	2.4	0.05	34.3	136.9
4621	2.3	0.02	33.7	136.5

A S 1 2

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.2	0.00	0.0	0.0
13	0.0	0.01	0.0	0.0
25	0.0	0.01	0.0	0.0
57	0.0	0.02	0.1	0.0
107	0.1	0.01	2.6	0.0
208	0.2	0.01	35.9	82.6
905	2.5	0.01	40.7	99.4
1005	2.7	0.01	41.4	119.4
1205	2.8	0.01	43.3	131.4
1405	2.8	0.01	42.0	139.0
1802	2.7	0.02	43.5	141.3
2002	2.7	0.02	38.9	140.9
2502	2.6	0.01	40.2	140.2
3002	2.4	0.01	37.5	138.7
3500	2.4	0.01	40.7	137.4
4000	2.5	0.01	39.5	136.7
4568	2.4	0.02	40.2	136.5

A S 1 0

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.00	0.0	0.0
13	0.0	0.01	0.0	0.0
23	0.0	0.01	0.0	0.0
104	-	0.01	0.0	0.0
153	0.1	0.01	1.6	0.0
204	0.2	0.04	3.2	0.0
303	0.3	0.01	4.5	2.5
403	0.5	0.01	7.7	6.1
503	0.8	0.00	12.9	12.5
603	1.2	0.01	18.7	22.8
703	1.6	0.00	22.7	36.5
803	2.1	0.01	30.7	58.5
904	2.5	0.00	36.3	84.3
1003	2.7	0.00	38.1	101.3
1204	2.8	0.00	45.3	123.0
1404	2.8	0.00	37.5	132.7
1604	2.8	0.00	42.6	137.8
1803	2.8	0.00	41.8	140.8
2003	2.7	0.00	40.7	142.2
2503	2.6	0.00	37.2	141.9
3003	2.5	0.00	38.6	140.8
3503	2.5	0.00	37.8	140.8
4003	2.4	0.00	36.2	140.2
4473	2.4	0.00	35.2	140.2

A S 0 7

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.1	0.00	0.1	0.0
14	0.0	0.00	0.0	0.0
24	0.0	0.00	0.0	0.0
53	0.0	0.04	0.0	0.0
104	0.0	0.01	0.6	0.0
153	0.1	0.01	1.0	0.0
204	0.2	0.07	1.5	1.3
304	0.4	0.00	5.4	3.7
403	0.7	0.00	8.8	8.1
503	1.0	0.00	13.2	17.3
604	1.6	0.01	15.8	35.1
704	2.1	0.00	28.5	54.5
804	2.4	0.09	29.9	74.5
1002	2.8	0.00	42.4	110.3
1203	2.9	0.01	41.0	128.2
1603	2.8	0.01	39.2	136.6
1803	2.7	0.01	45.0	141.7
2003	2.7	0.01	41.0	142.6
3004	2.5	0.00	40.4	141.9
3503	2.5	0.00	34.9	140.8
4003	2.4	0.00	39.5	140.5

A S 0 5 a

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.01	0.0	0.0
13	0.0	0.01	0.0	0.0
27	0.0	0.01	0.0	0.0
103	0.1	0.01	0.1	0.0
156	0.2	0.01	1.2	0.0
254	0.3	0.01	2.7	1.9
303	0.4	0.01	5.4	3.6
404	0.8	0.00	8.8	10.1
703	2.3	0.01	28.9	65.9
803	2.6	0.00	34.9	83.8
1301	2.8	0.00	36.5	131.3
2002	2.6	0.00	37.3	141.4

A S 0 5

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.01	0.0	0.0
12	0.0	0.00	0.0	0.0
23	0.0	0.01	0.0	0.0
53	0.1	0.01	0.0	0.0
78	0.1	0.01	0.0	0.0
103	0.1	0.01	0.0	0.0
153	0.2	0.03	1.6	0.0
404	0.8	0.02	11.7	10.9
710	2.3	0.03	33.3	67.7
914	2.8	0.05	40.6	104.8
1011	2.8	0.01	42.3	117.1
1113	2.8	0.02	45.3	124.9
1819	2.7	0.01	40.7	139.0

A S 0 3

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.0	0.01	0.4	0.0
12	0.0	0.01	0.0	0.0
24	0.0	0.01	0.0	0.0
53	0.1	0.03	0.0	0.0
79	0.1	0.05	0.2	0.0
105	0.2	0.04	1.6	0.0
153	0.4	0.02	3.0	3.8
203	0.5	0.00	4.8	6.4
306	1.1	0.01	11.1	19.4
404	1.5	0.01	19.4	33.8
506	2.1	0.01	24.9	59.0
604	2.5	0.01	33.9	81.7
702	2.7	0.00	43.6	104.9
801	2.8	0.01	39.2	114.1
850	2.7	0.00	37.8	118.1

A S 0 2

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.1	0.01	3.0	0.0
22	0.1	0.01	0.0	0.0
54	0.2	0.10	1.4	2.5
257	1.4	0.01	20.4	36.6
306	1.7	0.02	23.9	43.6
404	2.2	0.01	31.0	63.9
604	2.5	0.02	40.1	89.9
697	2.7	0.01	40.7	107.6

A S 0 1 a

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.1	0.03	0.0	0.0
13	0.1	0.04	0.2	2.0
23	0.1	0.04	0.7	2.2

A S 0 1

Press (db)	PO_4-P	NO_2-N	NO_3-N	SiO_2-Si
		(μg-atoms/l)		
0	0.3	0.04	0.5	0.0
13	0.2	0.04	1.3	2.3
24	0.1	0.04	1.0	2.3
33	0.1	0.05	1.2	2.7
43	0.2	0.07	1.6	3.2
53	0.3	0.10	2.7	4.0
64	0.4	0.04	4.4	5.2
82	0.5	0.03	6.1	7.5
123	0.7	0.01	9.9	11.2

9. XBT Data

The depth of XBT probe during the measurement was computed using the equation provided by the XBT manufacturer which is

$$z = 6.828 \cdot t - 0.00182 \cdot t^2$$

where z is the depth in meters, and t is the elapse time in seconds after the probe is deployed.

X01 KH9403
September 02, 1994
34°00'N, 140°41'E

z(m)	T(°C)
0	28.80
10	28.79
20	28.78
30	28.76
50	26.35
75	24.21
100	22.12
150	20.18
200	18.68
300	17.40
400	15.72
500	12.98
600	7.09
700	5.71
800	4.57
900	3.80
1000	3.37
1100	3.15
1200	2.87
1300	2.62
1400	2.41
1500	2.26
1600	2.15
1700	2.08
1800	2.02

X02 KH9403
September 02, 1994
33°60'N, 140°41'E

z(m)	T(°C)
0	28.78
10	28.78
20	28.75
30	28.34
50	25.80
75	23.92
100	22.06
150	20.25
200	18.86
300	17.37
400	15.71
500	13.07
600	7.35
700	5.83
800	4.62
900	3.94
1000	3.48
1100	3.24
1200	2.91
1300	2.73
1400	2.50
1500	2.32
1600	2.22
1700	2.15
1800	2.08

X03 KH9403
September 02, 1994
34°00'N, 141°10'E

z(m)	T(°C)
0	28.30
10	28.30
20	28.26
30	27.22
50	24.63
75	22.29
100	21.01
150	19.46
200	18.53
300	17.24
400	14.89
500	12.21
600	8.94
700	6.88
800	4.76
900	4.16
1000	3.83
1100	3.47
1200	3.10
1300	2.89
1400	2.71
1500	2.53
1600	2.45
1700	2.31
1800	2.19

X04 KH9403
September 02, 1994
34°00'N, 141°10'E

z(m)	T(°C)
0	28.32
10	28.32
20	28.00
30	26.39
50	24.63
75	22.23
100	21.12
150	19.60
200	18.64
300	17.43
400	15.14
500	12.33
600	9.40
700	7.09
800	4.81
900	4.16
1000	3.86
1100	3.47
1200	3.10
1300	2.91
1400	2.71
1500	2.54
1600	2.43
1700	2.28
1800	2.16

X05 KH9403
September 03, 1994
34°00′N, 141°28′E

z(m)	T(°C)
0	28.34
10	28.31
20	28.26
30	27.79
50	24.96
75	21.98
100	20.82
150	18.98
200	18.22
300	17.26
400	15.38
500	12.91
600	10.26
700	7.22
800	5.36
900	4.57
1000	4.14
1100	3.67
1200	3.36
1300	3.27
1400	3.03
1500	2.74
1600	2.52
1700	2.38
1800	2.28

X06 KH9403
September 03, 1994
34°00′N, 141°28′E

z(m)	T(°C)
0	28.23
10	28.23
20	28.23
30	27.77
50	24.33
75	21.84
100	20.75
150	18.96
200	18.19
300	17.27
400	15.53
500	12.88
600	10.16
700	7.05
800	5.25
900	4.49
1000	4.09
1100	3.68
1200	3.48
1300	3.41
1400	3.18
1500	2.98
1600	2.79
1700	2.67
1800	2.58

X07 KH9403
September 03, 1994
34°00′N, 141°45′E

z(m)	T(°C)
0	28.25
10	28.27
20	28.27
30	28.10
50	24.56
75	21.82
100	20.56
150	18.99
200	17.75
300	16.24
400	14.39
500	11.71
600	9.42
700	7.74
800	5.65
900	4.84
1000	4.17
1100	3.72
1200	3.39
1300	3.16
1400	3.00
1500	2.80
1600	2.60
1700	2.41
1800	2.30

X08 KH9403
September 03, 1994
34°00′N, 141°45′E

z(m)	T(°C)
0	28.30
10	28.27
20	28.24
30	27.43
50	24.24
75	21.97
100	20.44
150	18.91
200	17.64
300	16.23
400	14.36
500	11.74
600	9.46
700	7.75
800	5.59
900	4.83
1000	4.09
1100	3.64
1200	3.31
1300	3.10
1400	2.93
1500	2.70
1600	2.52
1700	2.32

X09 KH9403
September 03, 1994
34°00′N, 142°03′E

z(m)	T(°C)
0	28.13
10	28.14
20	28.10
30	27.96
50	24.58
75	21.81
100	20.55
150	19.10
200	18.11
300	16.78
400	14.93
500	12.71
600	10.11
700	7.77
800	5.78
900	5.24
1000	4.71
1100	3.96
1200	3.65
1300	3.48
1400	3.33
1500	3.22
1600	3.10
1700	3.00
1800	2.88

X10 KH9403
September 03, 1994
34°00′N, 142°03′E

z(m)	T(°C)
0	28.18
10	28.17
20	28.14
30	28.12
50	25.25
75	22.21
100	20.86
150	19.15
200	18.19
300	16.85
400	14.98
500	12.65
600	10.11
700	7.62
800	5.74
900	5.28
1000	4.57
1100	3.76
1200	3.45
1300	3.33
1400	3.20
1500	3.08
1600	2.94
1700	2.80
1800	2.67

X11 KH9403
September 04, 1994
34°00′N, 142°03′E

z(m)	T(°C)
0	28.30
10	28.18
20	28.10
30	27.83
50	26.19
75	23.23
100	21.74
150	19.70
200	18.38
300	15.97
400	14.18
500	12.26
600	10.16
700	7.51
800	5.96
900	4.98
1000	4.36
1100	3.65
1200	3.38
1300	3.13
1400	2.88
1500	2.67
1600	2.51
1700	2.38
1800	2.29

X12 KH9403
September 04, 1994
34°00′N, 142°03′E

z(m)	T(°C)
0	28.18
10	28.16
20	28.11
30	27.92
50	26.02
75	23.13
100	21.52
150	19.60
200	18.27
300	15.92
400	14.09
500	12.07
600	10.07
700	7.63
800	5.99
900	5.03
1000	4.44
1100	3.72
1200	3.42
1300	3.19
1400	3.00
1500	2.80
1600	2.62
1700	2.46
1800	2.35

X13 KH9403

September 04, 1994
34°00′N, 142°30′E

z(m)	T(°C)
0	28.54
10	28.53
20	28.27
30	25.66
50	23.05
75	21.20
100	20.26
150	19.23
200	18.35
300	17.26
400	16.61
500	14.31
600	11.64
700	8.93
800	6.23
900	5.29
1000	4.55
1100	4.13
1200	3.76
1300	3.29
1400	3.02
1500	2.80
1600	2.65
1700	2.54
1800	2.43

X14 KH9403

September 04, 1994
34°00′N, 142°30′E

z(m)	T(°C)
0	28.56
10	28.53
20	28.32
30	26.52
50	23.32
75	21.61
100	20.49
150	19.35
200	18.43
300	17.30
400	16.62
500	14.36
600	11.59
700	8.66
800	6.12
900	5.18
1000	4.44
1100	4.05
1200	3.60
1300	3.18
1400	2.97
1500	2.76
1600	2.60
1700	2.45
1800	2.32

X15 KH9403

September 04, 1994
34°00′N, 143°30′E

z(m)	T(°C)
0	28.20
10	28.11
20	28.09
30	28.00
50	23.30
75	20.46
100	19.29
150	18.26
200	17.72
300	17.03
400	15.68
500	13.30
600	10.93
700	9.48
800	6.88
900	5.57
1000	5.24
1100	4.32
1200	3.92
1300	3.63
1400	3.27
1500	3.08
1600	2.90
1700	2.72
1800	2.58

X16 KH9403

September 04, 1994
34°00′N, 143°30′E

z(m)	T(°C)
0	28.20
10	28.17
20	28.12
30	27.95
50	22.90
75	20.40
100	19.32
150	18.27
200	17.77
300	17.13
400	15.66
500	13.27
600	10.77
700	9.17
800	6.59
900	5.14
1000	5.15
1100	4.09
1200	3.69
1300	3.47
1400	3.11
1500	2.94
1600	2.75
1700	2.60
1800	2.45

X17 KH9403

September 05, 1994
33°60′N, 145°01′E

z(m)	T(°C)
0	28.42
10	28.43
20	28.34
30	28.20
50	26.12
75	23.90
100	21.77
150	20.19
200	18.63
300	17.13
400	13.99
500	11.30
600	8.41
700	6.69
800	5.29
900	4.03
1000	3.74
1100	3.49
1200	2.99
1300	3.00
1400	2.73
1500	2.60
1600	2.43
1700	2.31
1800	2.20

X18 KH9403

September 05, 1994
33°60′N, 145°01′E

z(m)	T(°C)
0	28.25
10	28.27
20	28.25
30	28.22
50	26.44
75	24.12
100	21.77
150	20.25
200	18.68
300	17.13
400	13.87
500	11.13
600	8.33
700	6.55
800	5.27
900	3.94
1000	3.63
1100	3.38
1200	2.99
1300	3.01
1400	2.80
1500	2.63
1600	2.48
1700	2.38
1800	2.28

X19 KH9403

September 05, 1994
33°28′N, 145°00′E

z(m)	T(°C)
0	28.32
10	28.31
20	28.34
30	27.35
50	24.56
75	22.26
100	20.84
150	19.50
200	18.40
300	17.44
400	16.31
500	13.91
600	11.75
700	8.89
800	6.74
900	5.71

X20 KH9403

September 05, 1994
33°00′N, 145°01′E

z(m)	T(°C)
0	28.54
10	28.62
20	28.51
30	26.64
50	22.99
75	21.06
100	20.08
150	18.87
200	18.08
300	17.33
400	16.78
500	14.63
600	11.98
700	9.41
800	6.33
900	5.17
1000	4.45
1100	4.01
1200	3.63
1300	3.31
1400	3.07
1500	2.79
1600	2.63
1700	2.45
1800	2.32

X21 KH9403

September 05, 1994
33°00′N, 145°01′E

z(m)	T(°C)
0	28.54
10	28.50
20	28.47
30	26.70
50	23.16
75	21.29
100	20.16
150	18.89
200	18.20
300	17.36
400	16.91
500	15.10
600	12.56
700	9.89
800	6.59
900	5.42
1000	4.73
1100	4.21
1200	3.81
1300	3.47
1400	3.23
1500	2.96
1600	2.76
1700	2.57
1800	2.41

X22 KH9403

September 05, 1994
32°30′N, 145°00′E

z(m)	T(°C)
0	28.25
10	28.26
20	28.25
30	27.23
50	24.00
75	21.91
100	20.47
150	19.19
200	18.44
300	17.52
400	16.94
500	15.15
600	12.59
700	10.03
800	7.09
900	5.40

X23 KH9403

September 05, 1994
31°60′N, 144°60′E

z(m)	T(°C)
0	28.39
10	28.42
20	28.35
30	27.23
50	23.56
75	21.11
100	19.98
150	18.39
200	17.75
300	17.18
400	16.69
500	14.55
600	12.07
700	9.20
800	6.84
900	5.90
1000	4.64
1100	3.94
1200	3.54
1300	3.23
1400	2.96
1500	2.74
1600	2.56
1700	2.41
1800	2.32

X24 KH9403

September 05, 1994
31°60′N, 144°60′E

z(m)	T(°C)
0	28.42
10	28.44
20	28.22
30	26.17
50	23.43
75	21.07
100	20.05
150	18.45
200	17.78
300	17.20
400	16.72
500	14.57
600	12.21
700	9.87
800	7.00
900	6.13
1000	4.77
1100	4.05
1200	3.62
1300	3.30
1400	2.99
1500	2.78
1600	2.60
1700	2.43
1800	2.32

X25 KH9403

September 06, 1994
31°30′N, 145°00′E

z(m)	T(°C)
0	28.56
10	28.45
20	28.19
30	27.82
50	27.29
75	22.16
100	20.31
150	18.01
200	17.47
300	16.90
400	15.46
500	12.96
600	10.23
700	7.52
800	5.48
900	4.58

X26 KH9403

September 06, 1994
30°60′N, 145°00′E

z(m)	T(°C)
0	28.20
10	28.13
20	27.77
30	27.64
50	24.83
75	19.84
100	18.85
150	17.45
200	16.98
300	15.99
400	13.87
500	11.86
600	9.38
700	6.72
800	5.40
900	4.86
1000	4.28
1100	3.90
1200	3.55
1300	3.27
1400	3.07
1500	2.86
1600	2.70
1700	2.54
1800	2.47

X27 KH9403

September 06, 1994
30°60′N, 144°60′E

z(m)	T(°C)
0	28.08
10	28.10
20	27.58
30	27.66
50	22.76
75	19.75
100	18.70
150	17.40
200	16.98
300	15.95
400	13.86
500	11.76
600	9.21
700	6.75
800	5.17
900	4.60
1000	4.05
1100	3.63
1200	3.29
1300	2.99
1400	2.79
1500	2.59
1600	2.43
1700	2.28
1800	2.17

X28 KH9403

September 06, 1994
30°30′N, 145°00′E

z(m)	T(°C)
0	28.30
10	28.28
20	28.12
30	27.59
50	22.74
75	19.59
100	18.35
150	17.50
200	17.16
300	16.37
400	14.72
500	12.46
600	9.42
700	6.87
800	5.26
900	4.51

X29 KH9403

September 06, 1994
30°00′N, 144°60′E

z(m)	T(°C)
0	28.20
10	28.19
20	28.23
30	28.15
50	23.18
75	19.68
100	18.68
150	17.81
200	17.46
300	16.85
400	14.93
500	12.17
600	9.23
700	6.66
800	5.05
900	4.39
1000	3.92
1100	3.47
1200	3.12
1300	2.91
1400	2.67
1500	2.50
1600	2.35
1700	2.23

X30 KH9403

September 06, 1994
30°00′N, 144°60′E

z(m)	T(°C)
0	28.18
10	28.19
20	28.20
30	28.13
50	22.84
75	19.63
100	18.53
150	17.82
200	17.46
300	16.83
400	14.74
500	12.00
600	9.19
700	6.65
800	5.05
900	4.42
1000	3.94
1100	3.47
1200	3.13
1300	2.90
1400	2.68
1500	2.50
1600	2.37
1700	2.23
1800	2.13

X31 KH9403

September 06, 1994
29°45′N, 145°00′E

z(m)	T(°C)
0	28.25
10	28.26
20	28.22
30	28.01
50	22.15
75	19.90
100	18.87
150	17.82
200	17.34
300	16.55
400	14.51
500	11.87
600	8.93
700	6.68
800	5.07
900	4.49

X32 KH9403

September 06, 1994
29°15′N, 145°00′E

z(m)	T(°C)
0	28.30
10	28.30
20	28.27
30	27.36
50	22.06
75	19.92
100	18.80
150	17.92
200	17.54
300	16.97
400	15.61
500	13.37
600	10.52
700	8.23
800	6.17
900	5.05

X33 KH9403

September 06, 1994
28°45′N, 145°00′E

z(m)	T(°C)
0	28.04
10	27.98
20	27.89
30	25.60
50	21.46
75	19.34
100	18.49
150	17.79
200	17.35
300	17.00
400	15.73
500	12.92
600	10.32
700	7.06
800	6.26
900	5.55

X34 KH9403

September 07, 1994
28°15′N, 145°00′E

z(m)	T(°C)
0	28.18
10	28.20
20	28.08
30	26.59
50	21.88
75	19.30
100	18.49
150	17.64
200	17.37
300	17.00
400	15.81
500	13.31
600	10.57
700	7.38
800	5.60
900	4.57

X35 KH9403

September 07, 1994
27°45′N, 145°00′E

z(m)	T(°C)
0	28.04
10	28.03
20	27.99
30	27.63
50	23.81
75	20.42
100	19.11
150	17.81
200	17.32
300	16.45
400	14.80
500	12.27
600	9.54
700	6.93
800	4.94
900	4.40

X36 KH9403

September 07, 1994
27°45′N, 144°29′E

z(m)	T(°C)
0	27.94
10	28.00
20	27.93
30	27.93
50	25.57
75	20.91
100	19.34
150	17.95
200	17.42
300	16.41
400	14.49
500	11.65
600	8.45
700	6.23
800	4.95
900	4.36

X37 KH9403
September 07, 1994
28°00′N, 143°58′E

z(m)	T(°C)
0	27.85
10	27.85
20	27.77
30	27.53
50	22.58
75	20.32
100	19.30
150	18.00
200	17.47
300	16.55
400	14.23
500	11.69
600	9.00
700	6.47
800	5.17
900	4.34

X38 KH9403
September 07, 1994
28°15′N, 143°28′E

z(m)	T(°C)
0	28.11
10	28.11
20	28.10
30	28.08
50	24.45
75	21.09
100	19.28
150	17.92
200	17.47
300	16.91
400	15.41
500	12.79
600	9.92
700	7.32
800	5.08
900	4.48

X39 KH9403
September 07, 1994
28°30′N, 142°57′E

z(m)	T(°C)
0	28.25
10	28.20
20	28.19
30	28.23
50	27.00
75	24.03
100	22.05
150	20.29
200	18.72
300	17.09
400	15.35
500	12.59
600	10.64
700	7.81
800	5.54
900	4.44

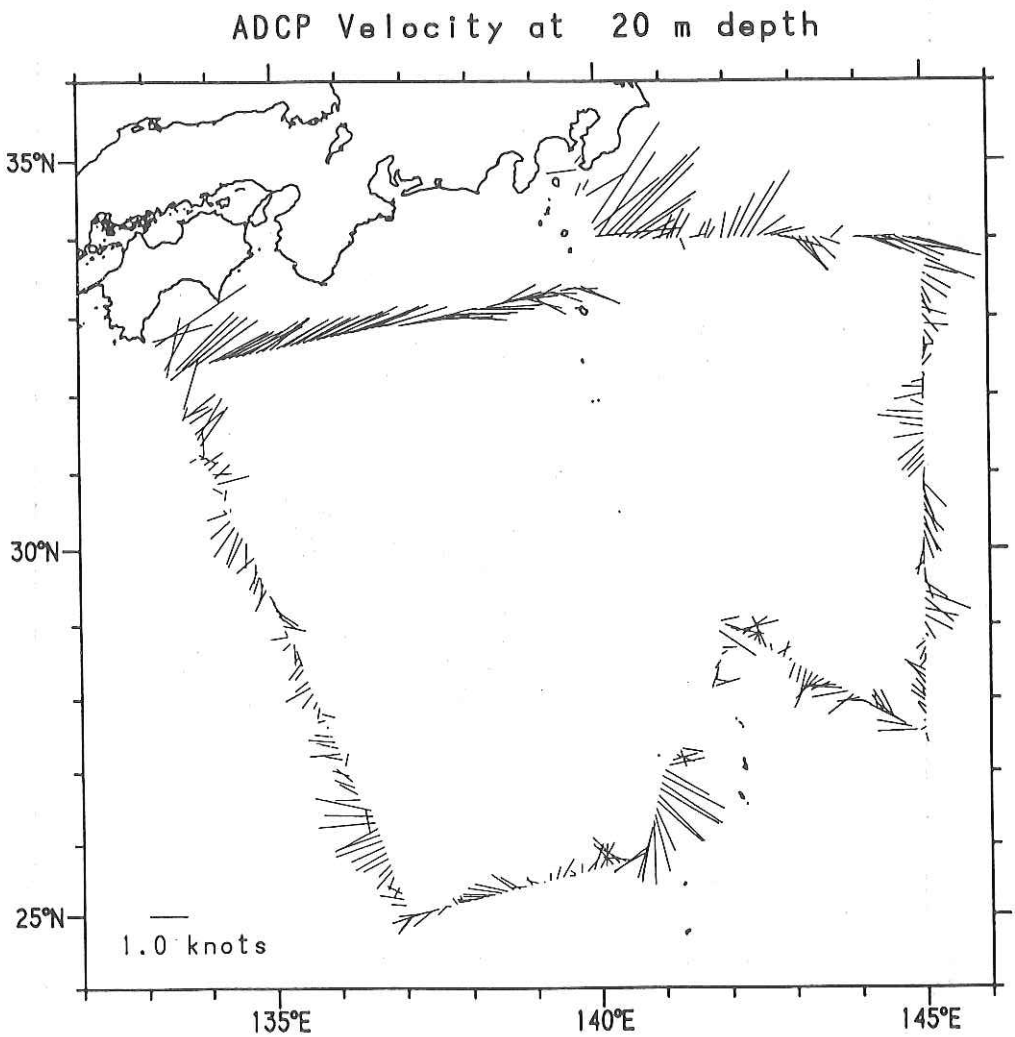
X40 KH9403
September 07, 1994
28°45′N, 142°26′E

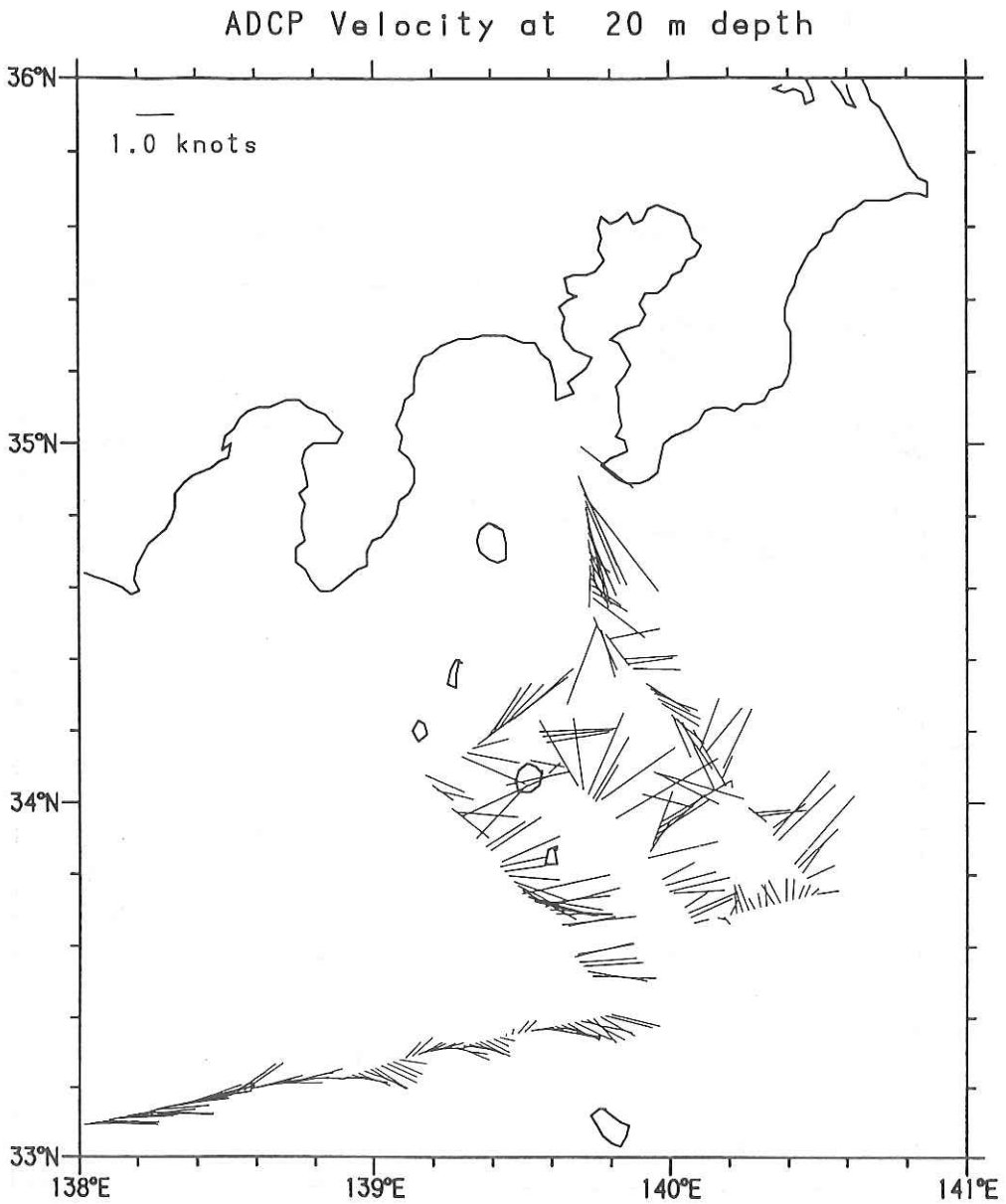
z(m)	T(°C)
0	28.20
10	28.20
20	28.15
30	27.85
50	26.68
75	22.62
100	20.44
150	19.09
200	18.15
300	16.90
400	14.85
500	12.50
600	9.57
700	7.09
800	5.48
900	4.47

X41 KH9403
September 08, 1994
29°01′N, 141°53′E

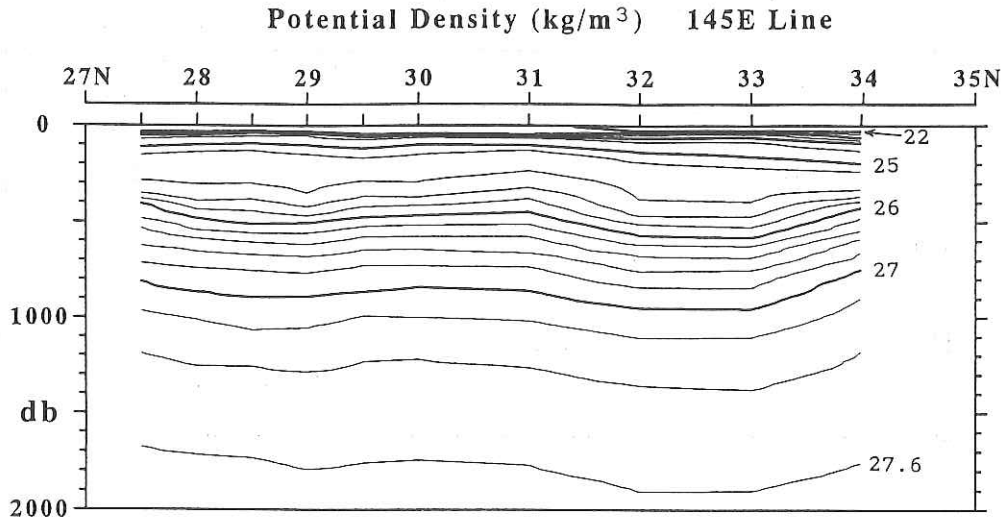
z(m)	T(°C)
0	28.51
10	28.43
20	28.32
30	28.25
50	24.68
75	22.32
100	20.13
150	18.45
200	17.83
300	16.50
400	14.14
500	11.52
600	8.85
700	6.44
800	4.82
900	4.15
1000	3.80
1100	3.38
1200	3.08
1300	2.80
1400	2.60
1500	2.39
1600	2.28
1700	2.21
1800	2.07

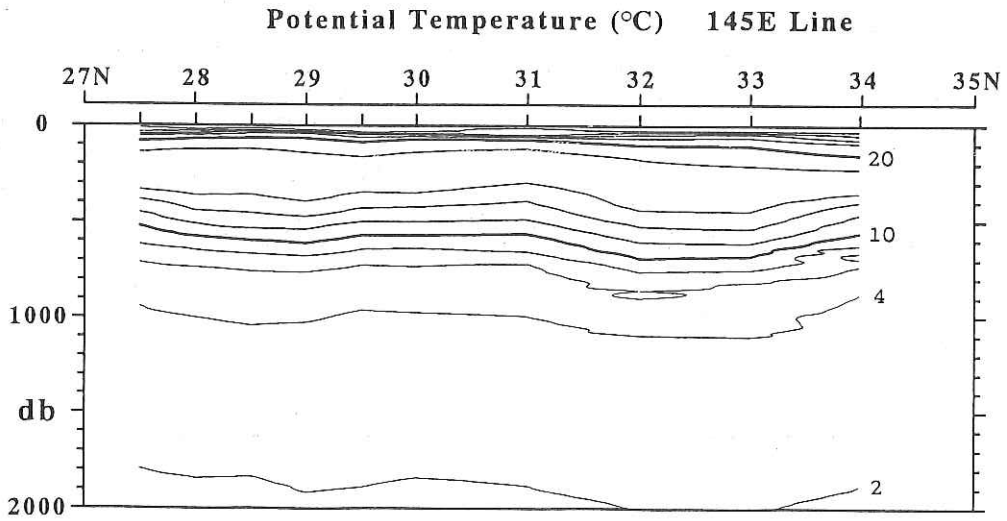
10. Charts of Surface Currents



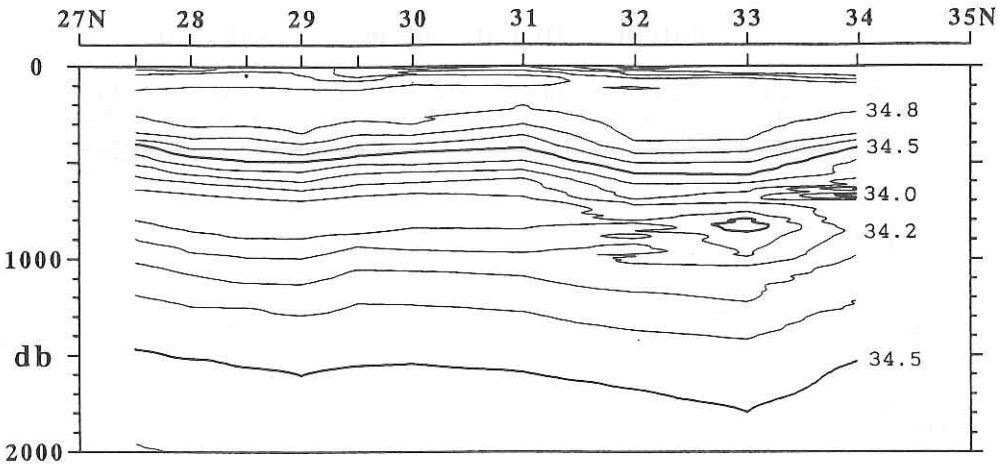

ADCP Velocity at 20 m depth
1.0 knots
36°N
35°N
34°N
33°N
138°E
139°E
140°E
141°E

11. Vertical Sections of $CTDO_2$ Data

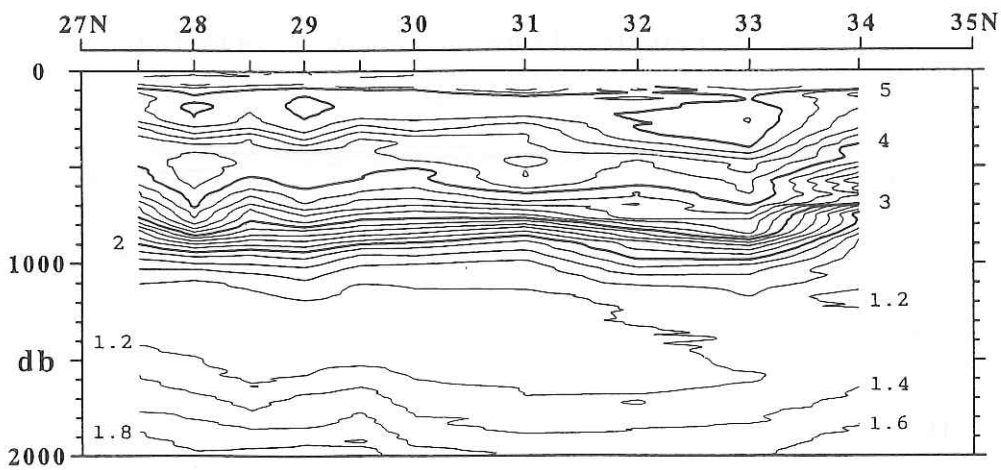




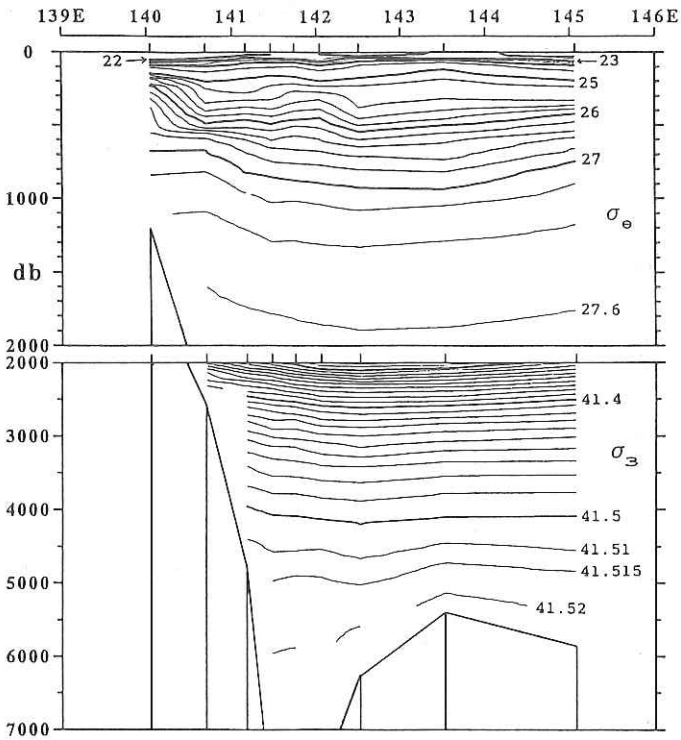
Salinity (psu) 145E Line



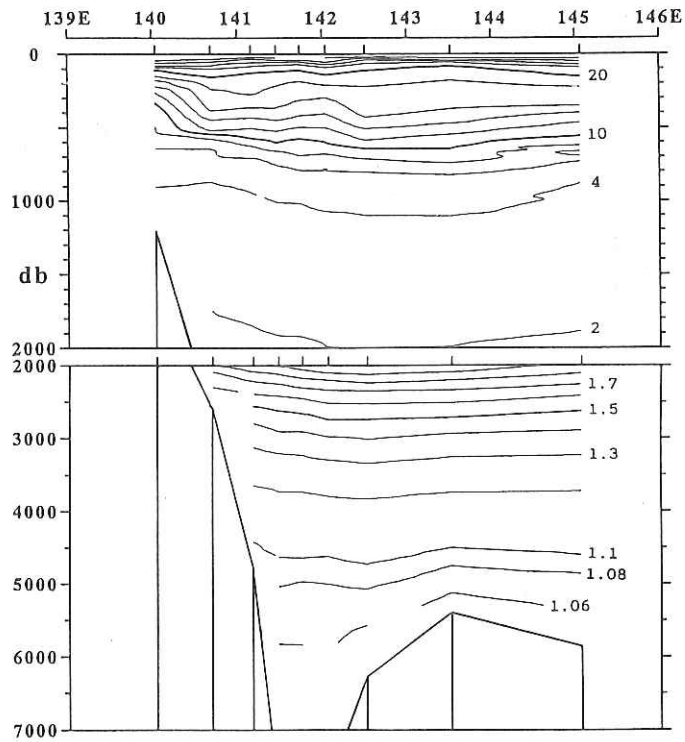
Dissolved Oxygen (ml/l) 145E Line



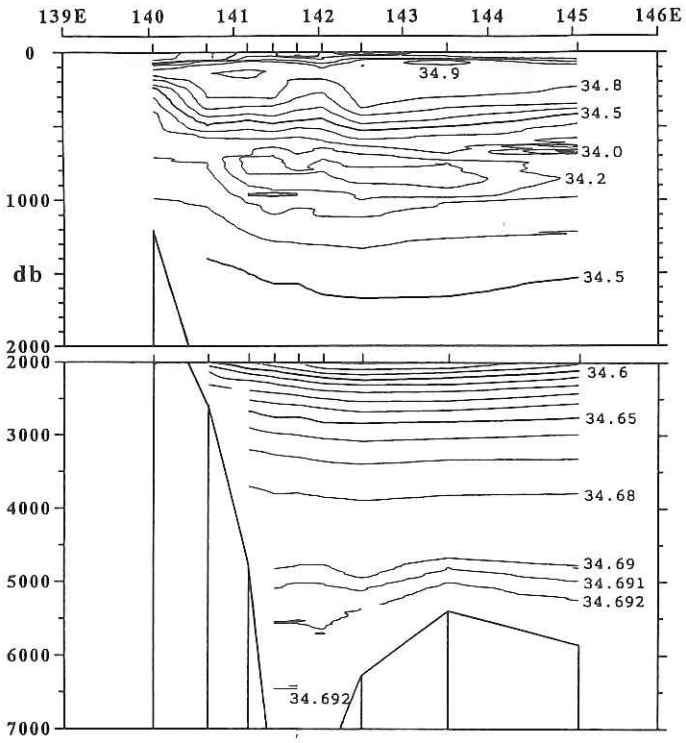
Potential Density (kg/m^3) 34N Line



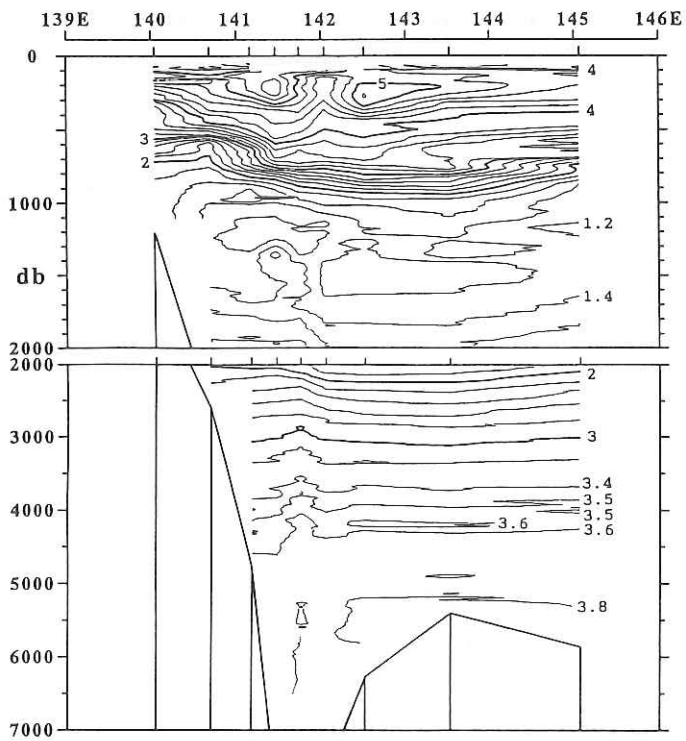
Potential Temperature (°C) 34N Line



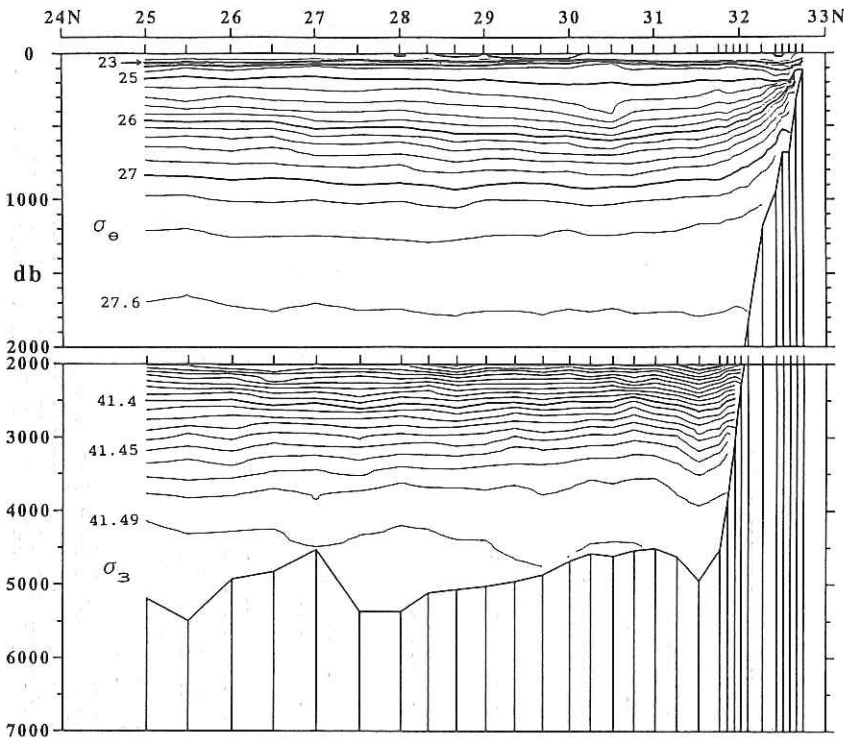
Salinity (psu) 34N Line



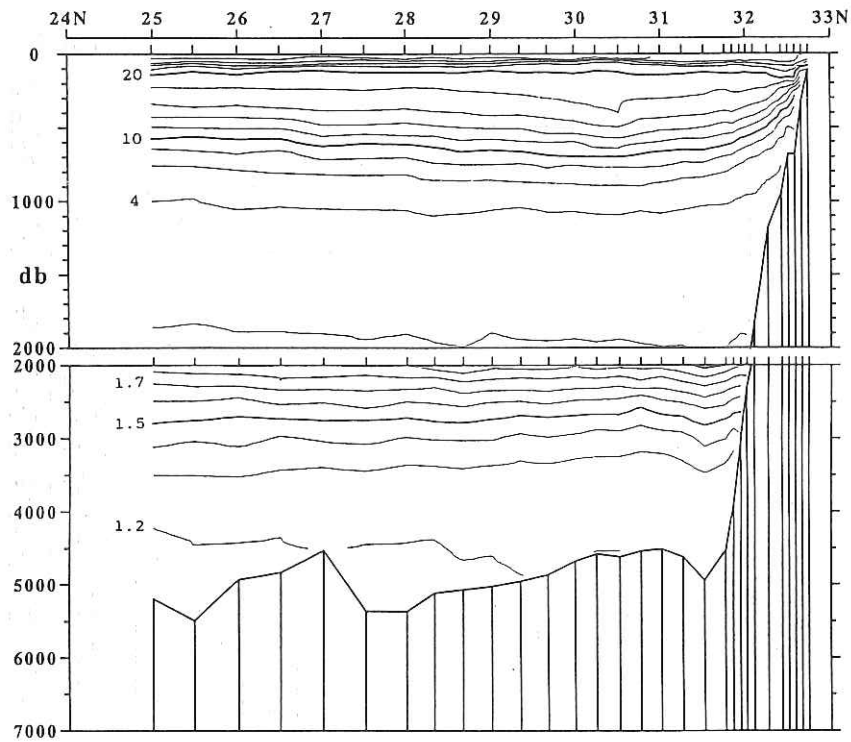
Dissolved Oxygen (ml/l) 34N Line



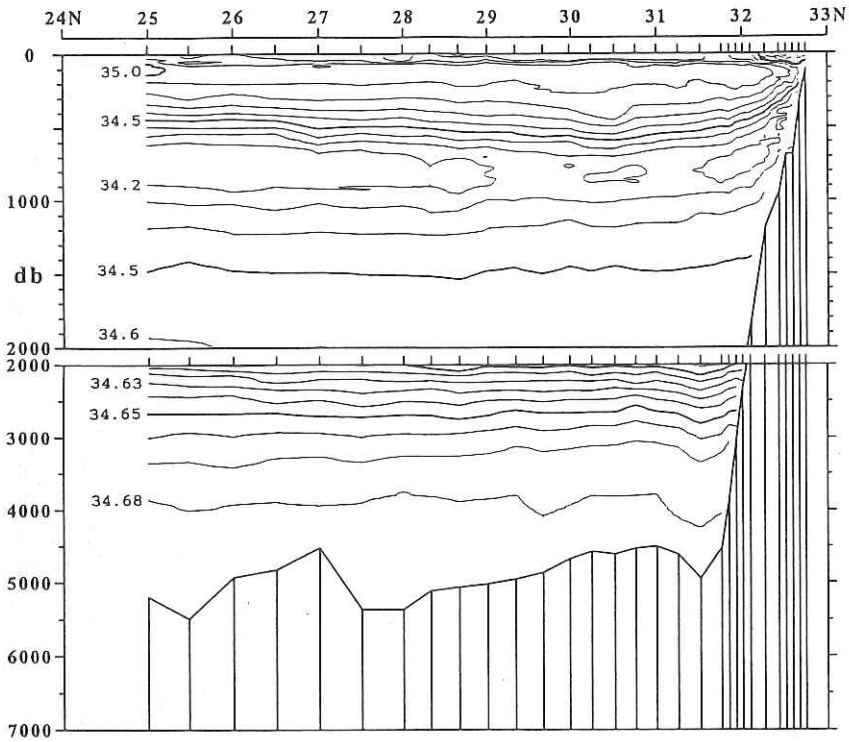
Potential Density (kg/m3) ASUKA Line



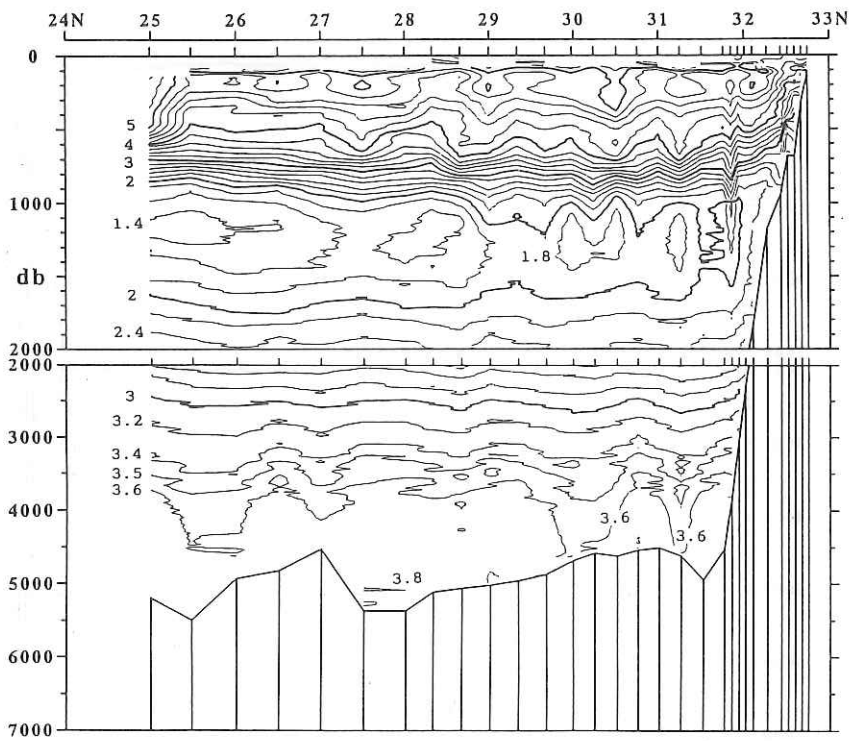
Potential Temperature (°C) ASUKA Line



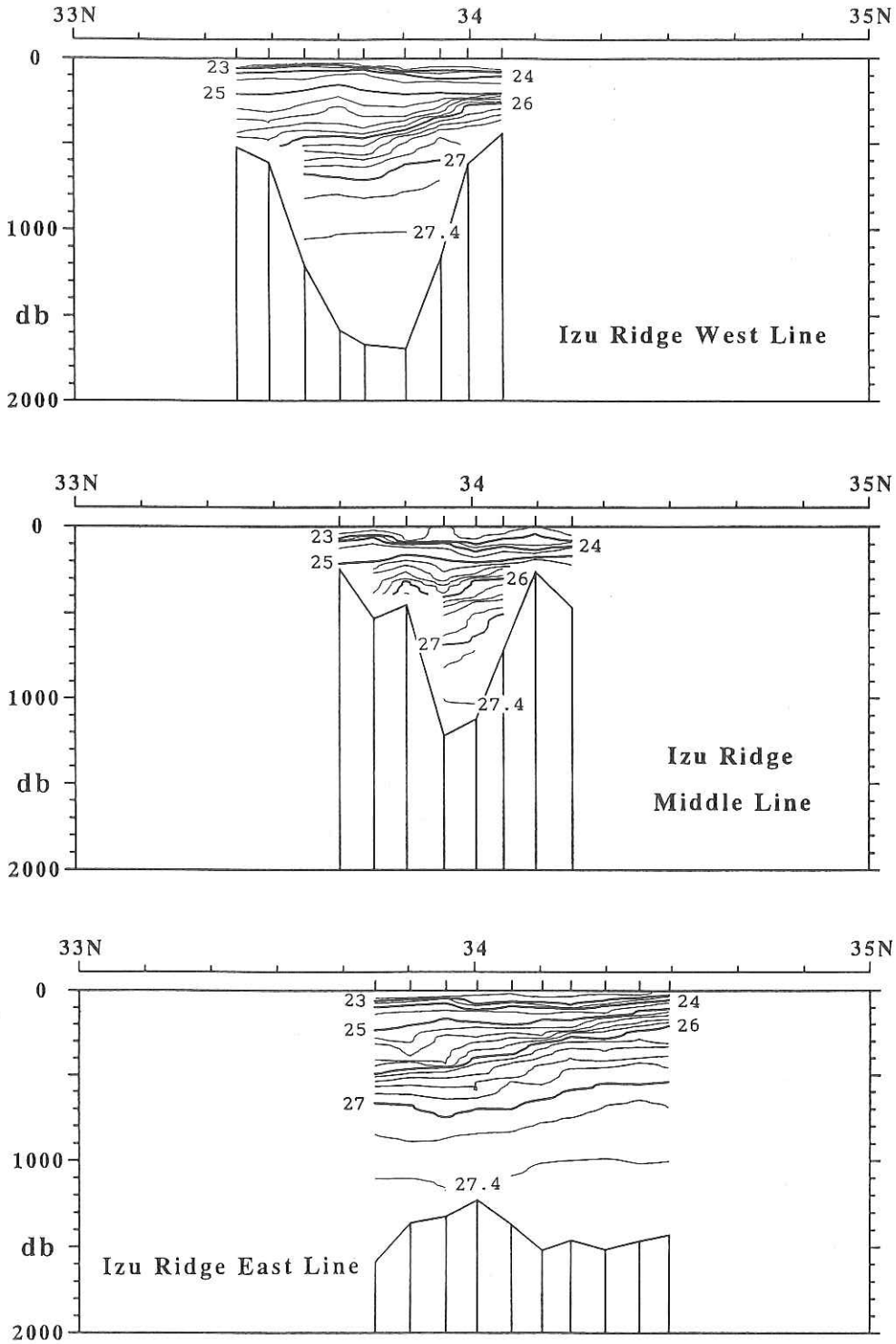
Salinity (psu) ASUKA Line



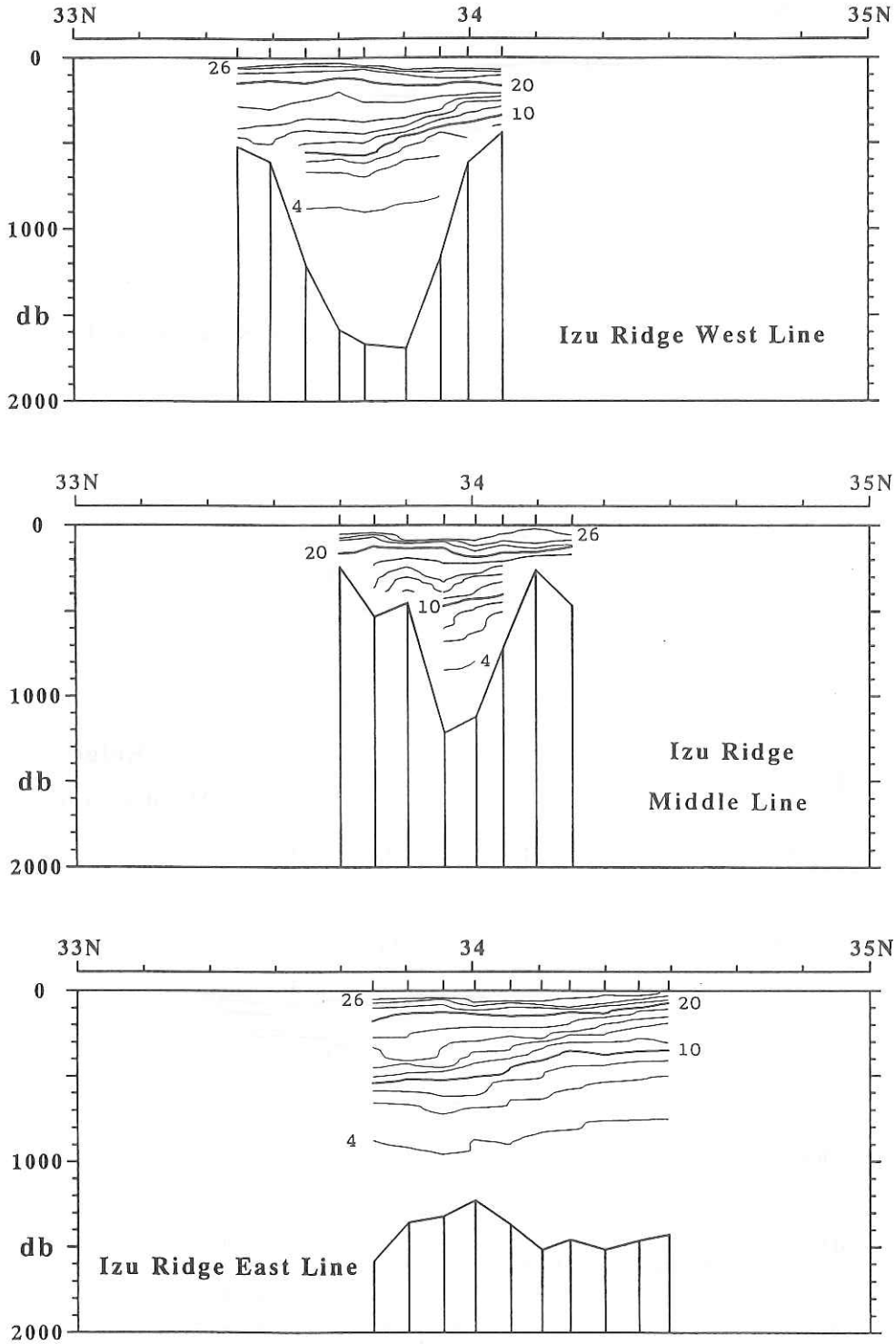
Dissolved Oxygen (ml/l) ASUKA Line



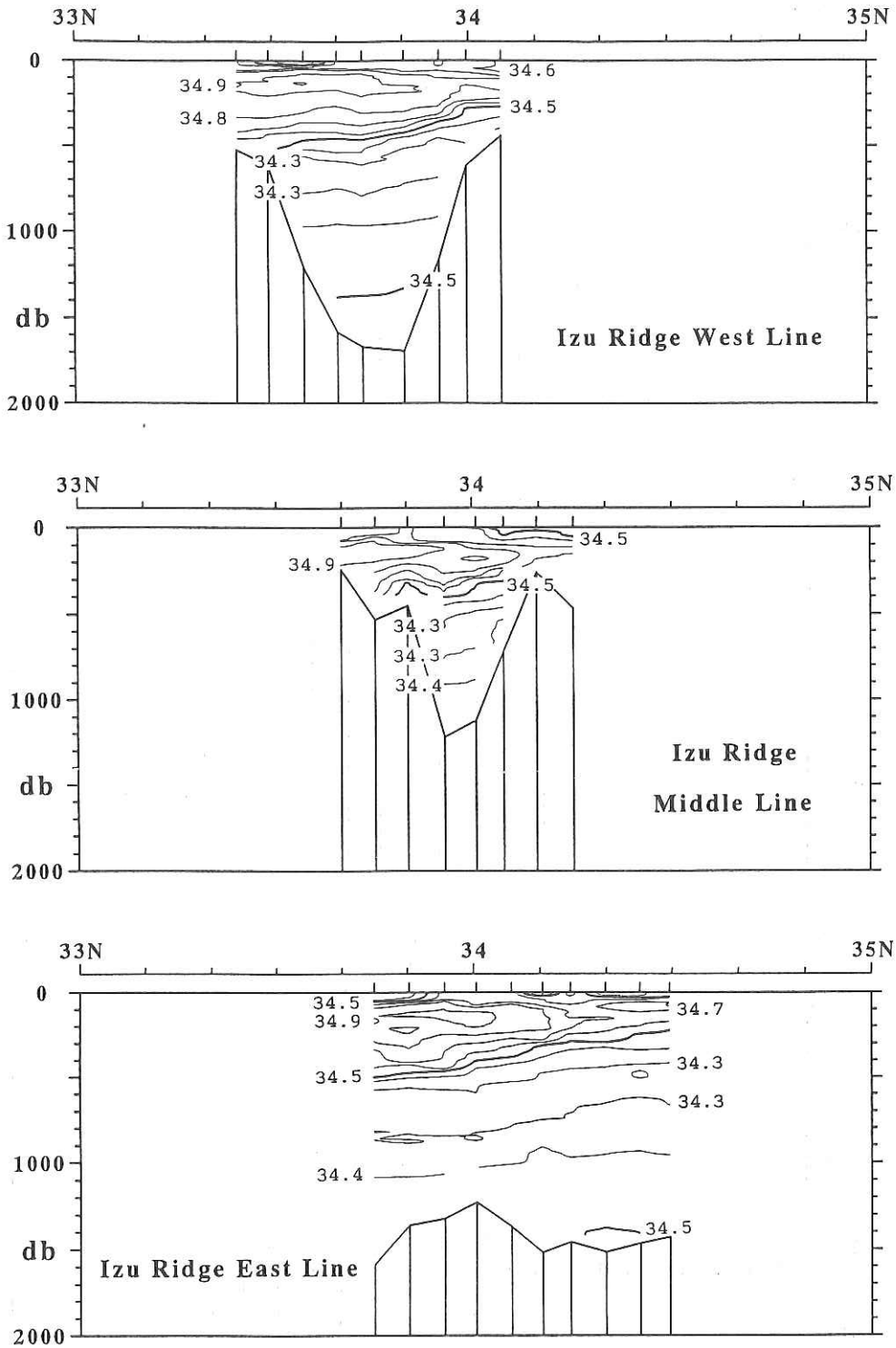
Potential Density (kg/m^3)



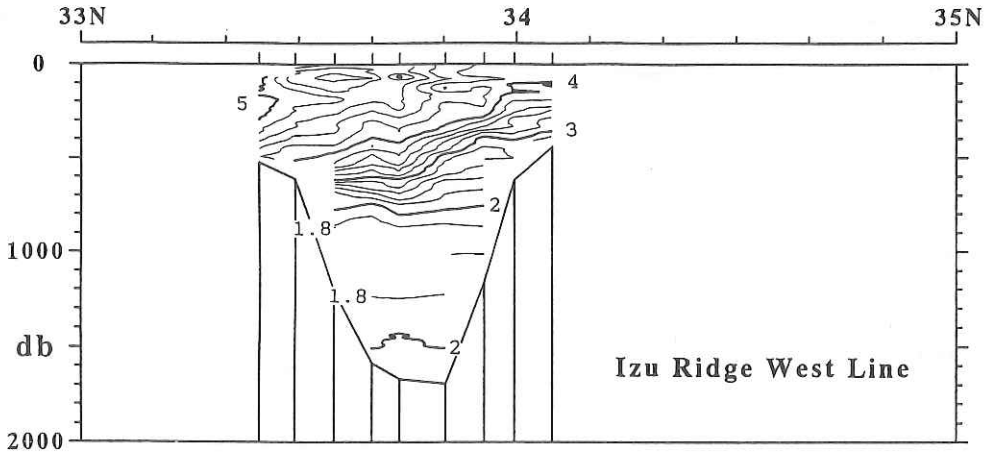
Potential Temperature (°C)

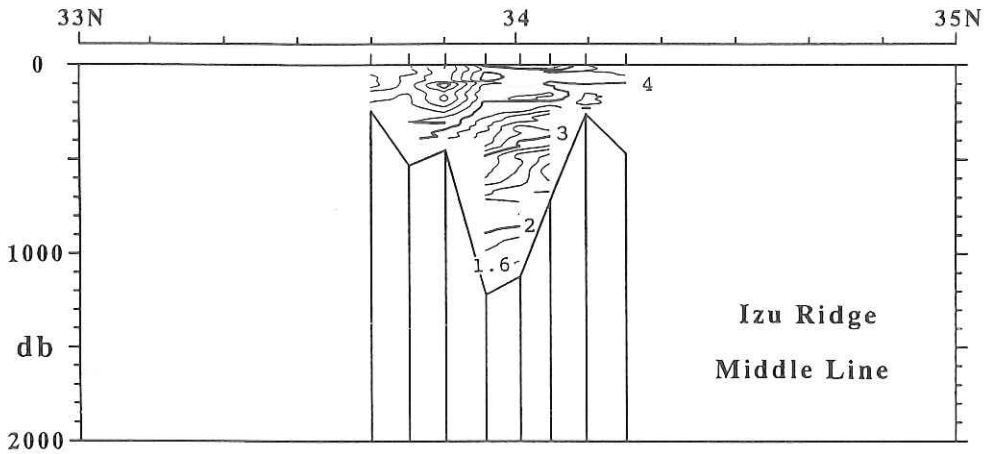


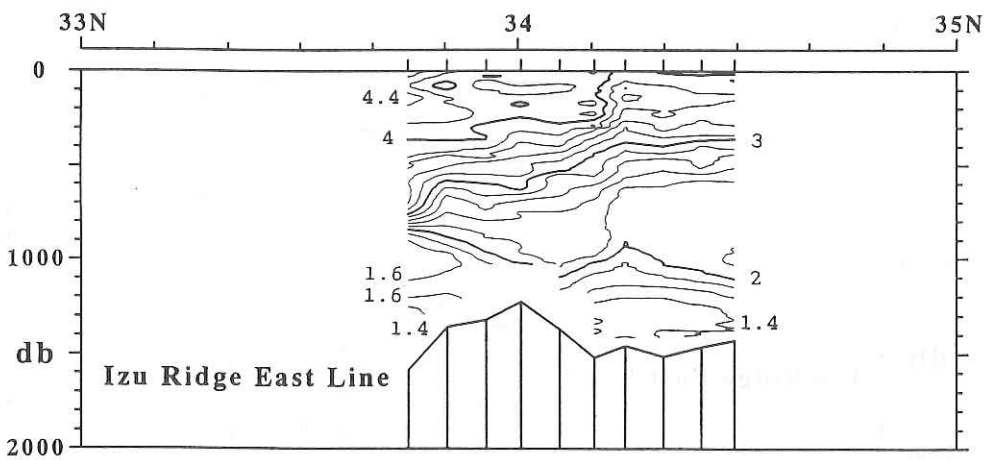
Salinity (psu)



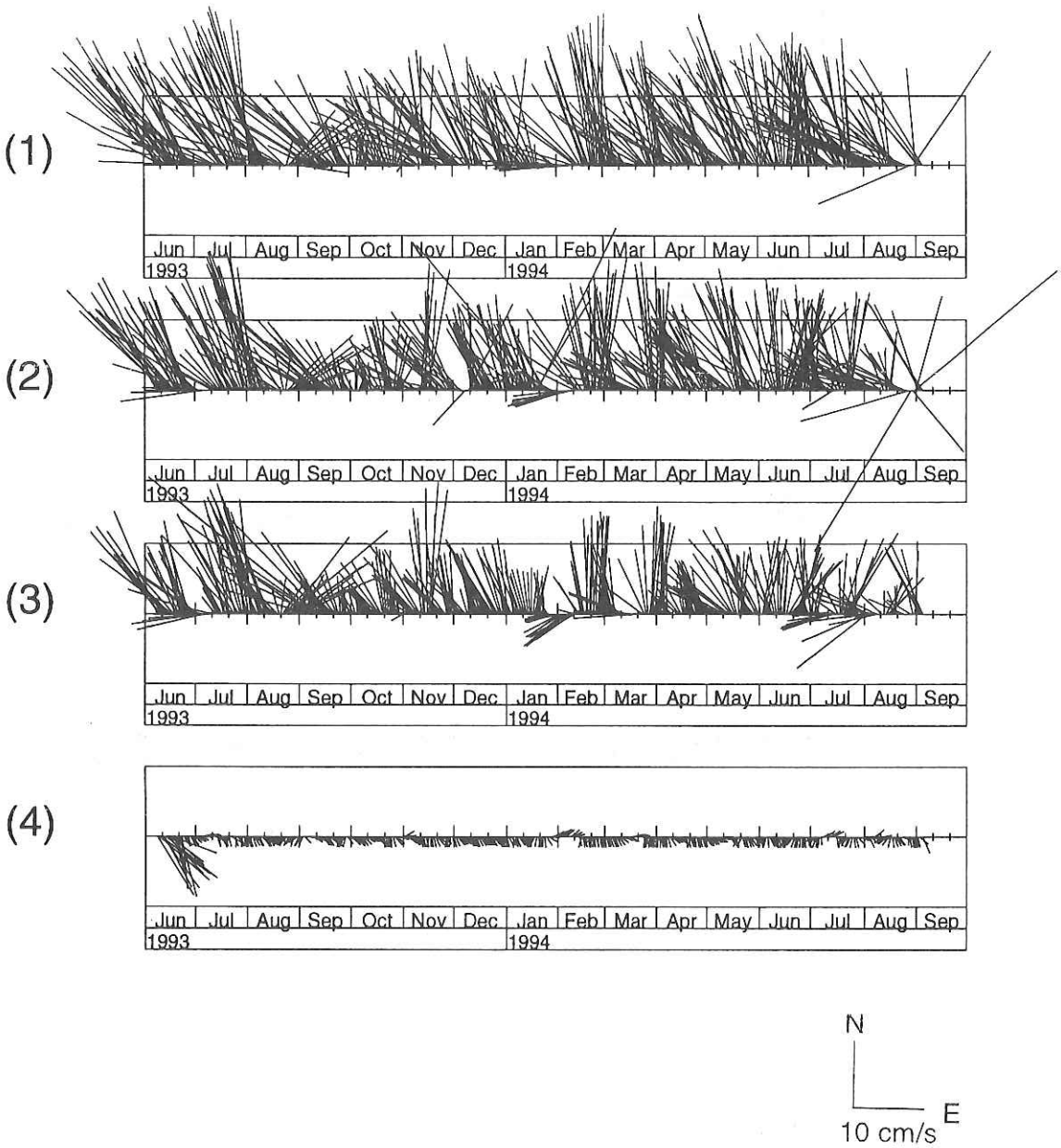
Dissolved Oxygen (ml/l)



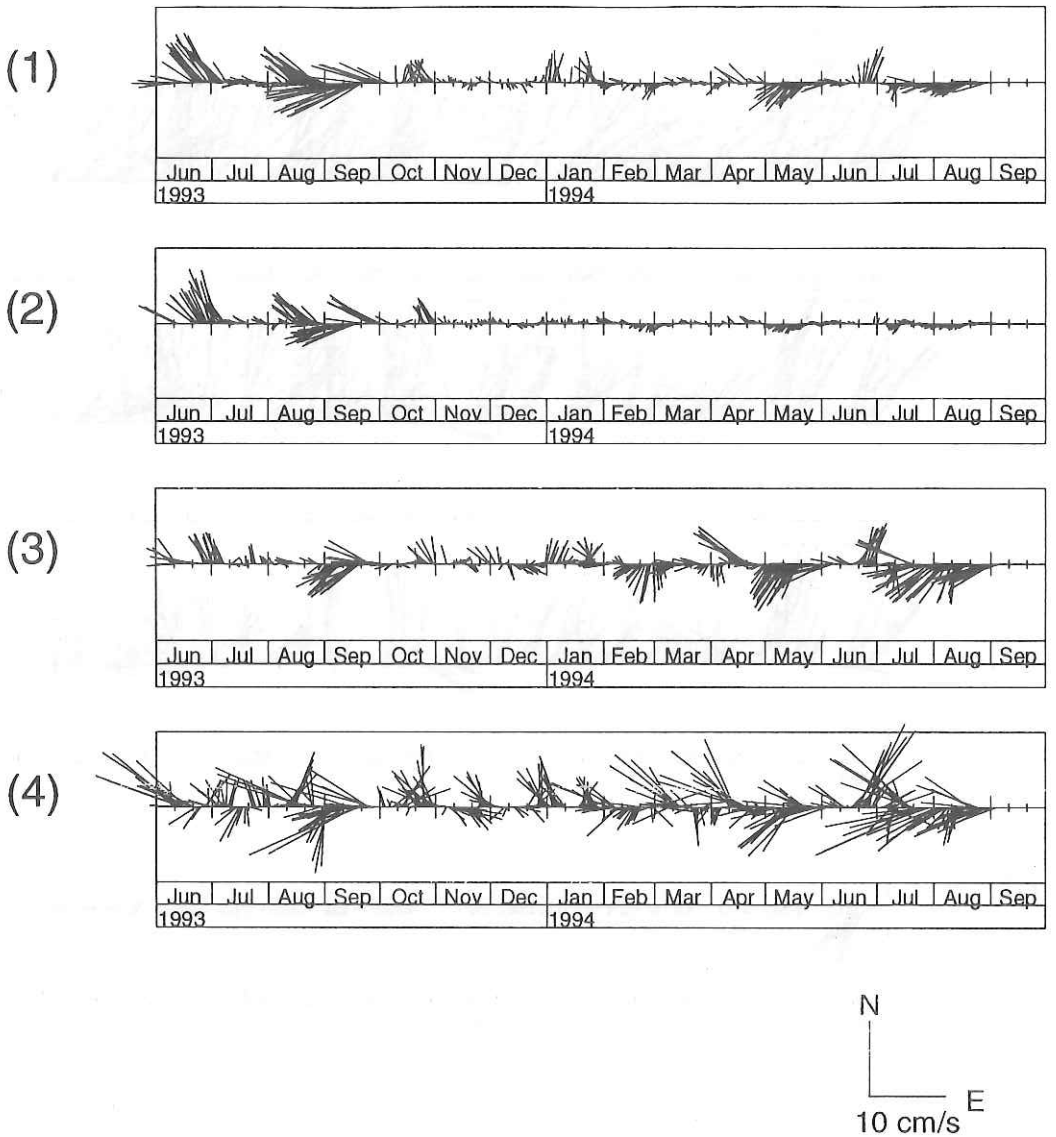




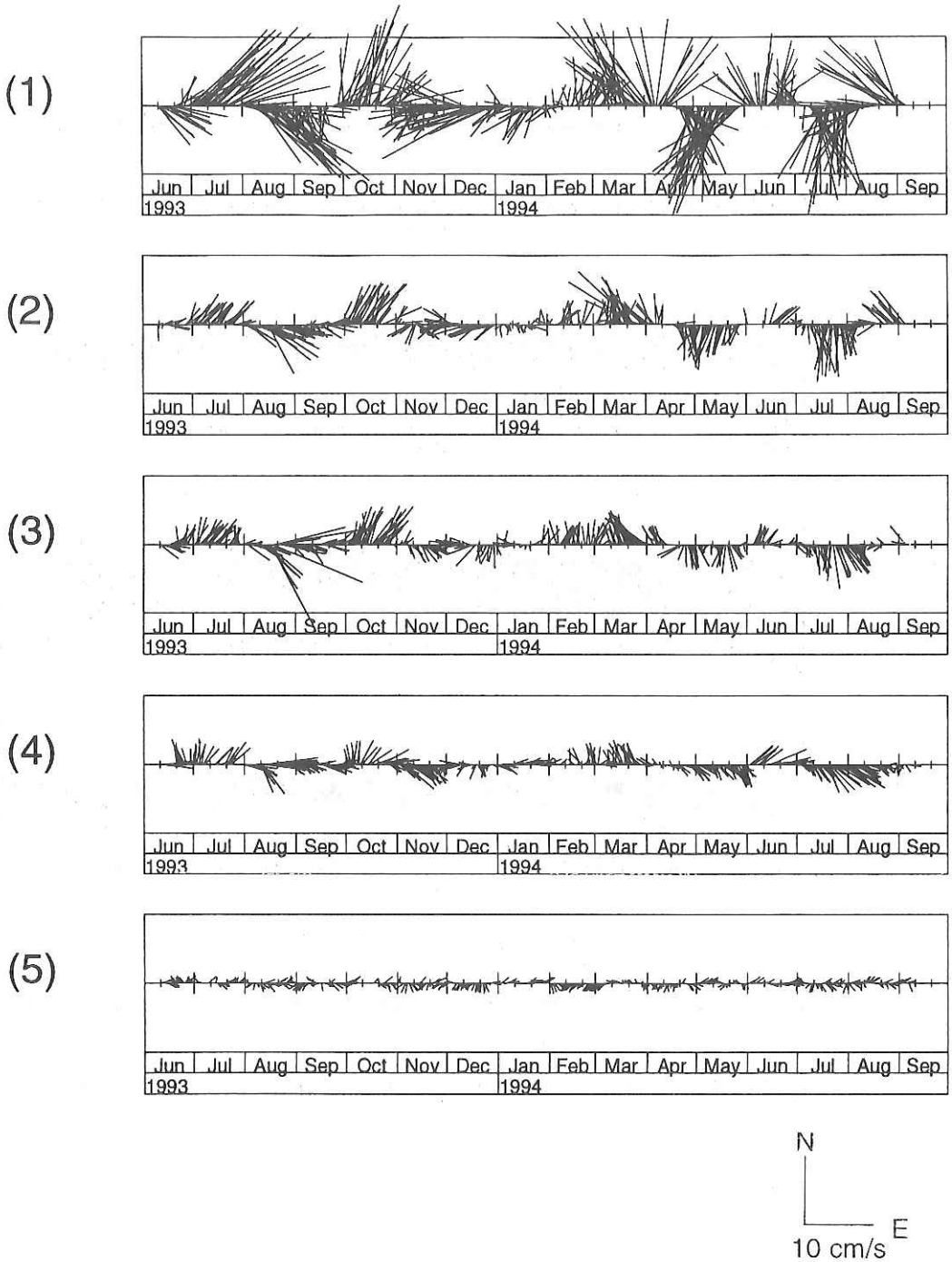
12. Results of Moored Current Meters



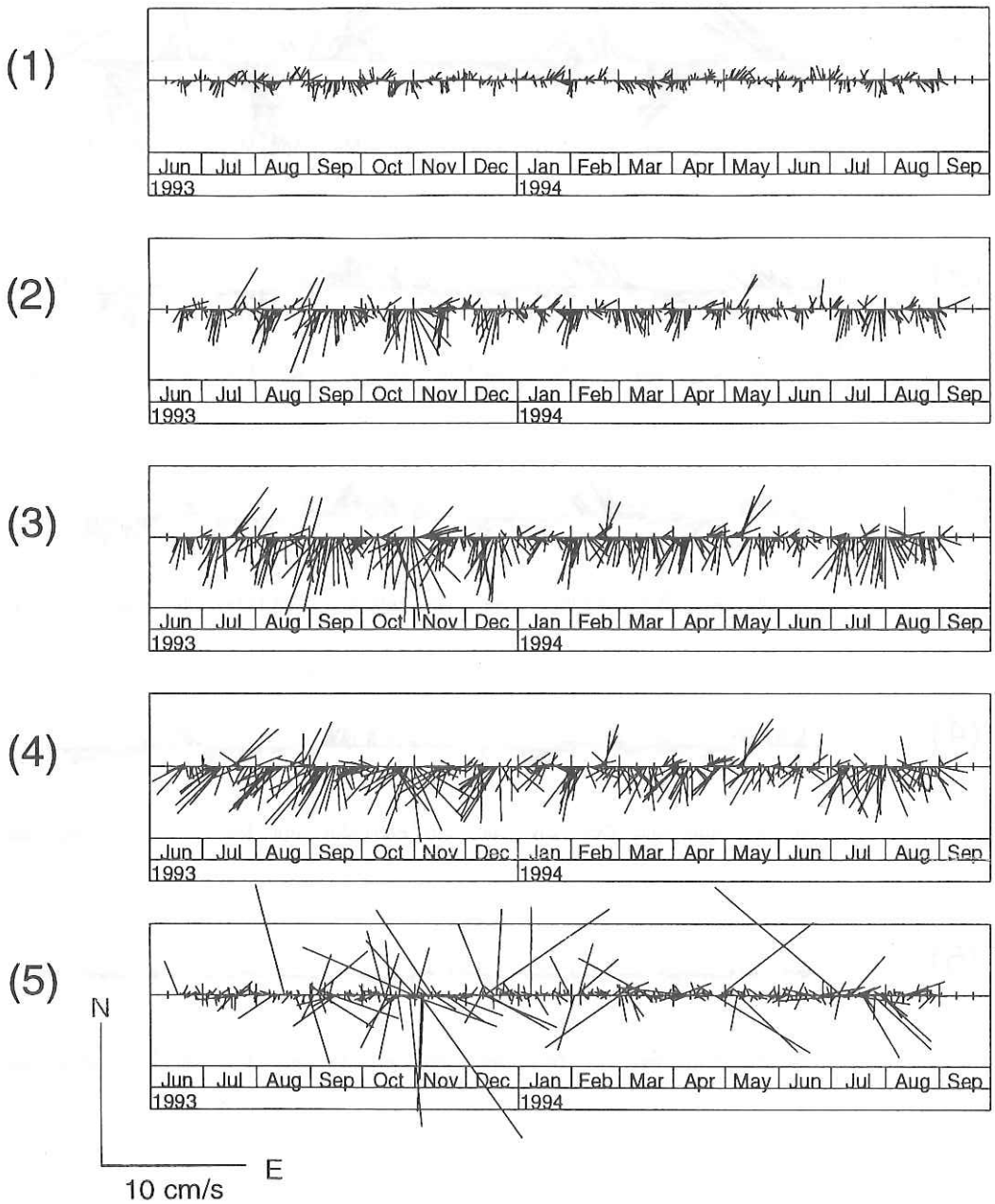
Station SM1 : 33°59.8'N, 145°00.3'E, water depth = 5742m
Moored from 7 June 1993 to 5 September 1994
(1) at 1500m, (2) at 1900m, (3) at 2900m and (4) at 5700m (nominal depth).



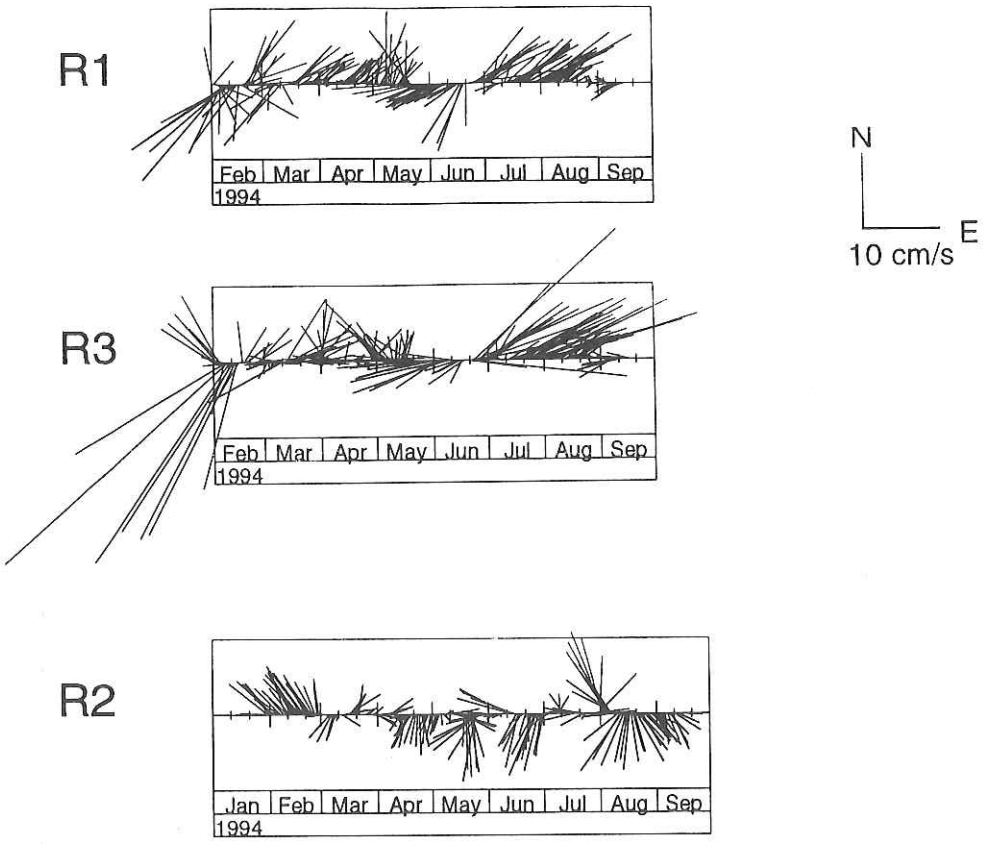
Station SM2 : 31°01.1'N, 145°00.8'E, water depth = 5963m
Moored from 8 June 1993 to 6 September 1994
(1) at 1600m, (2) at 2000m, (3) at 3000m and (4) at 5930m (nominal depth).



Station SM3 : 27°59.8'N, 144°59.8'E, water depth = 5726m
Moored from 10 June 1993 to 7 September 1994
(1) at 1100m, (2) at 1500m, (3) at 1900m, (4) at 2900m and (5) at 5700m (nominal depth).



Station TR2 : 34°00.1'N, 141°54.1'E, water depth = 8984m
Moored from 16 June 1993 to 4 September 1994
(1) at 3170m, (2) at 3970m, (3) at 6370m, (4) at 8170m and (5) at 8970m (nominal depth).



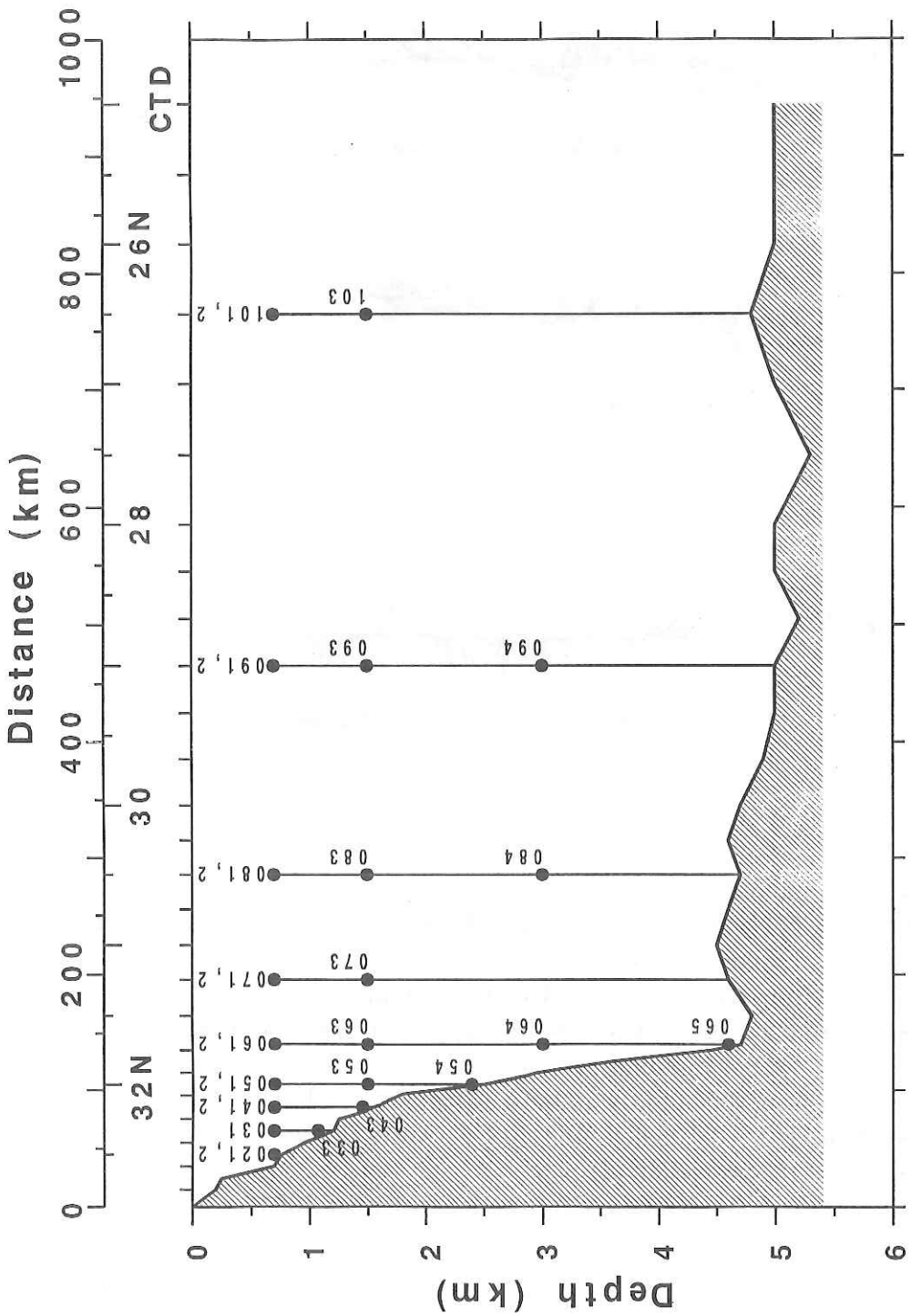
SOFAR Float Receiver Stations

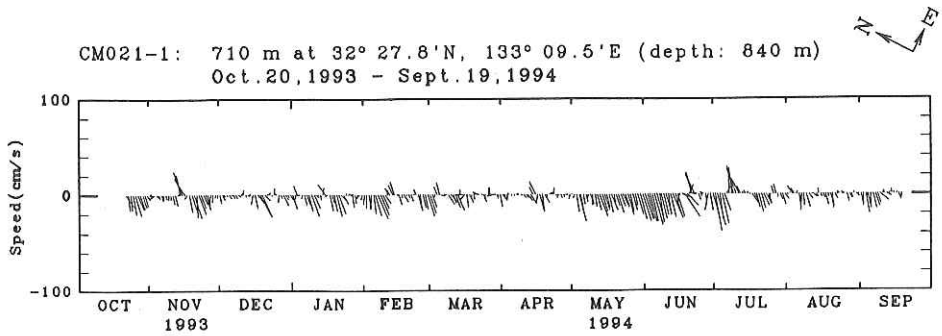
Station R1 : 32°08.8'N, 133°47.8'E, water depth = 2333m, current meter depth = 1500m (nominal)
Moored from 31 January 1994 to 17 September 1994

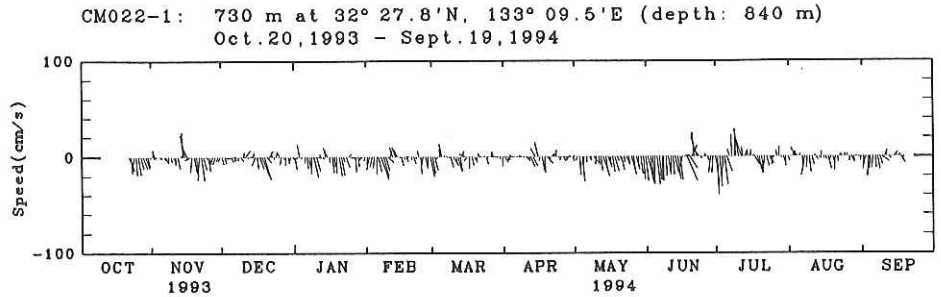
Station R2 : 30°05.4'N, 134°38.0'E, water depth = 4602m, current meter depth = 1370m (nominal)
Moored from 30 January 1994 to 13 September 1994

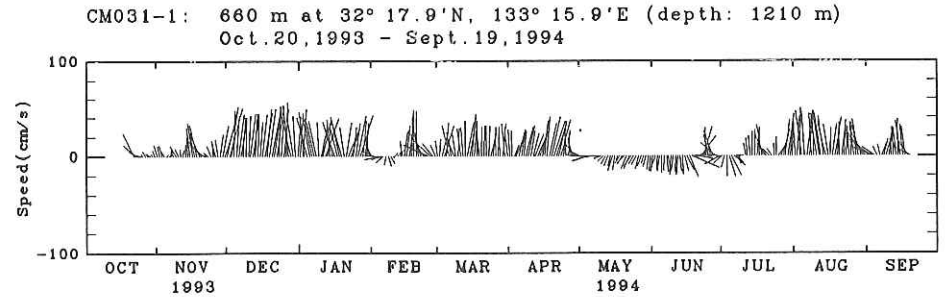
Station R3 : 32°03.6'N, 133°40.1'E, water depth = 2167m, current meter depth = 1535m (nominal)
Moored from 31 January 1994 to 18 September 1994

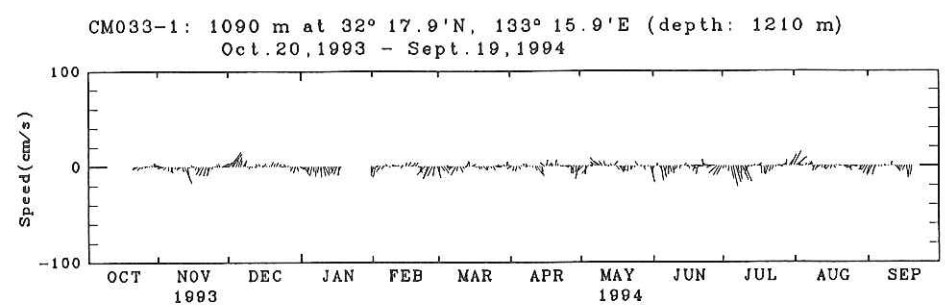
ASUKA line

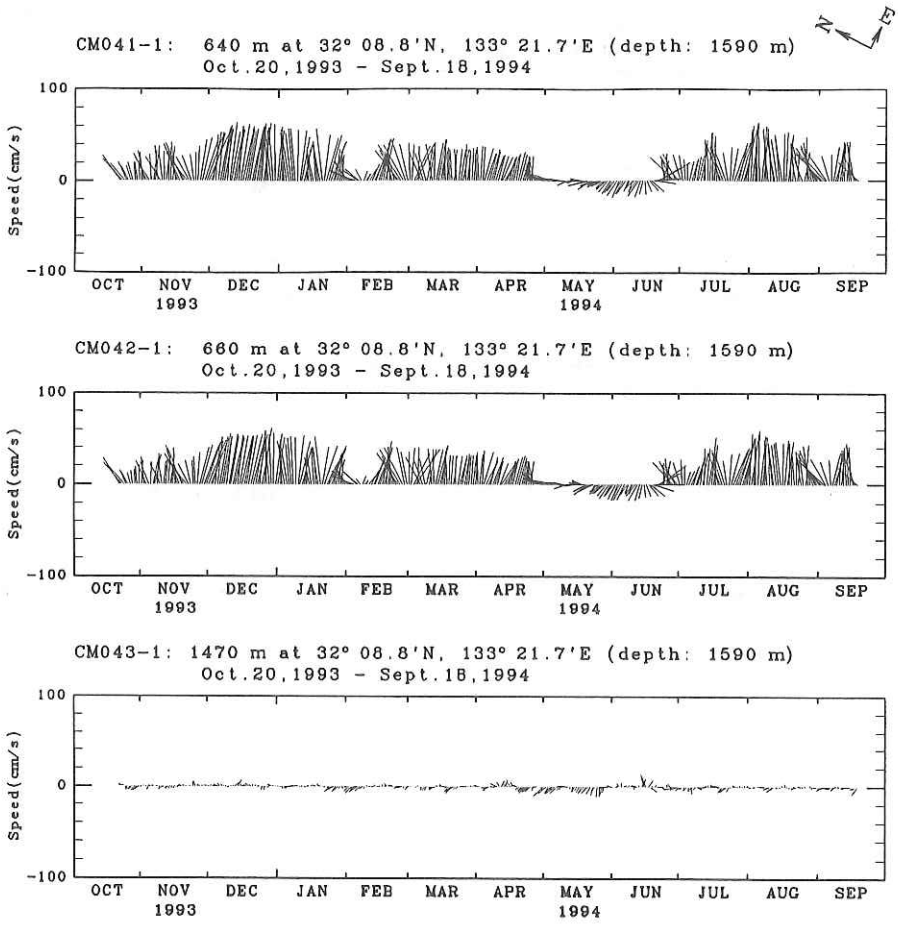

Distance (km)
0
200
400
600
800
1000
32N
30
28
26N
CTD
Depth (km)
0
1
2
3
4
5
6
021, 2
031
041, 2
051, 2
061, 2
071, 2
081, 2
091, 2
101, 2
033
043
053
054
063
064
065
073
083
084
093
094
103

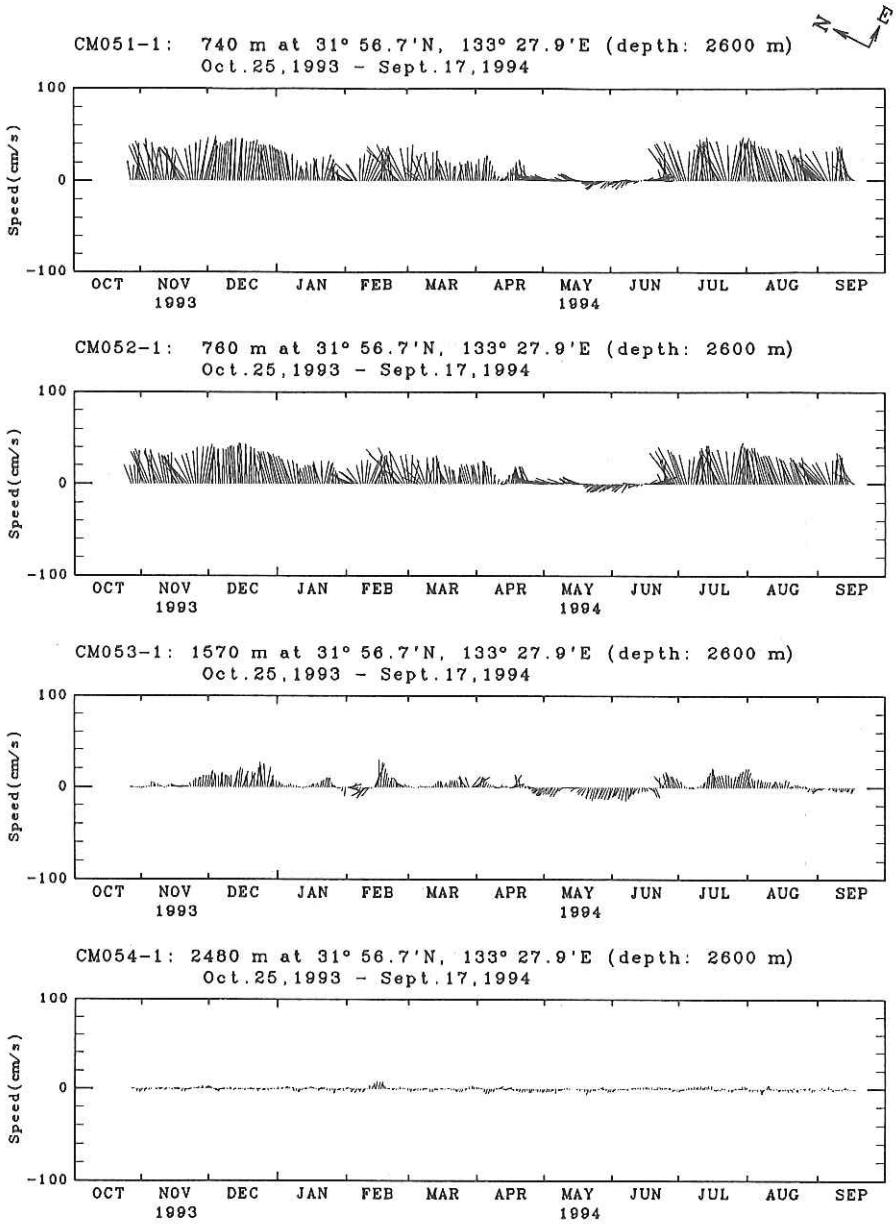

CM021-1: 710 m at 32° 27.8'N, 133° 09.5'E (depth: 840 m)
Oct.20,1993 - Sept.19,1994
N
E
100
0
-100
Speed(cm/s)
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP


CM022-1: 730 m at 32° 27.8'N, 133° 09.5'E (depth: 840 m)
Oct.20,1993 - Sept.19,1994
100
0
-100
Speed(cm/s)
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP

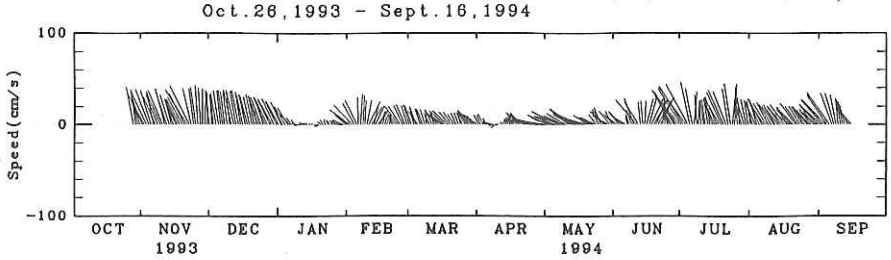

CM031-1: 660 m at 32° 17.9'N, 133° 15.9'E (depth: 1210 m)
Oct.20,1993 - Sept.19,1994
100
0
-100
Speed(cm/s)
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP


CM033-1: 1090 m at 32° 17.9'N, 133° 15.9'E (depth: 1210 m)
Oct.20,1993 - Sept.19,1994
100
0
-100
Speed(cm/s)
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP

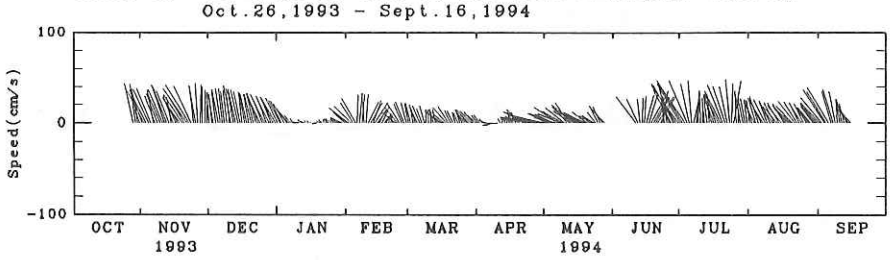

CM041-1: 640 m at 32° 08.8'N, 133° 21.7'E (depth: 1590 m)
Oct.20,1993 - Sept.18,1994
N
E
Speed(cm/s)
100
0
-100
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP
CM042-1: 660 m at 32° 08.8'N, 133° 21.7'E (depth: 1590 m)
Oct.20,1993 - Sept.18,1994
Speed(cm/s)
100
0
-100
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP
CM043-1: 1470 m at 32° 08.8'N, 133° 21.7'E (depth: 1590 m)
Oct.20,1993 - Sept.18,1994
Speed(cm/s)
100
0
-100
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP


CM051-1: 740 m at 31° 56.7'N, 133° 27.9'E (depth: 2600 m)
Oct.25,1993 - Sept.17,1994
CM052-1: 760 m at 31° 56.7'N, 133° 27.9'E (depth: 2600 m)
Oct.25,1993 - Sept.17,1994
CM053-1: 1570 m at 31° 56.7'N, 133° 27.9'E (depth: 2600 m)
Oct.25,1993 - Sept.17,1994
CM054-1: 2480 m at 31° 56.7'N, 133° 27.9'E (depth: 2600 m)
Oct.25,1993 - Sept.17,1994
Speed(cm/s)
100
0
-100
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP
N
E

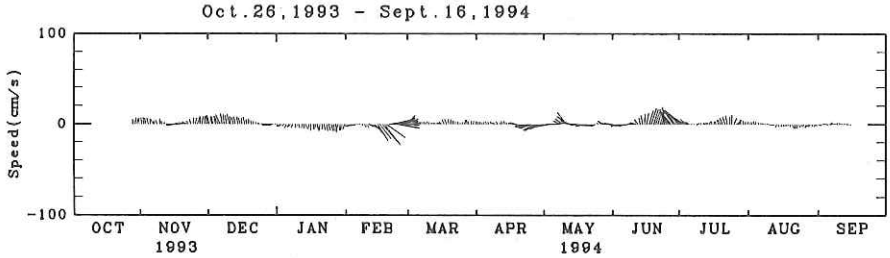
CM061-1: 740 m at 31° 40.7'N, 133° 35.6'E (depth: 4800 m)
Oct.26,1993 - Sept.16,1994



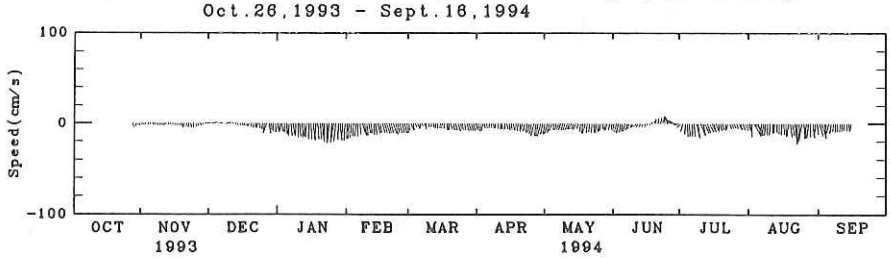
CM062-1: 760 m at 31° 40.7'N, 133° 35.6'E (depth: 4800 m)
Oct.26,1993 - Sept.16,1994



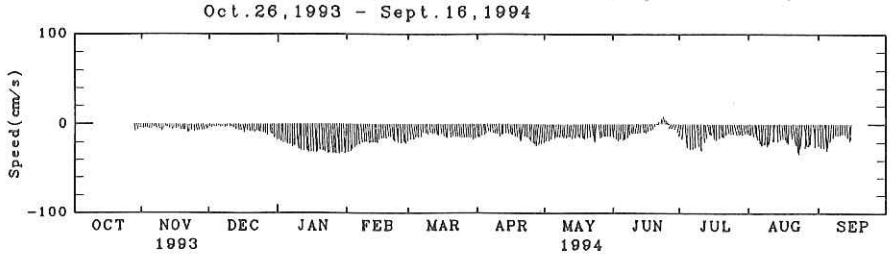
CM063-1: 1570 m at 31° 40.7'N, 133° 35.6'E (depth: 4800 m)
Oct.26,1993 - Sept.16,1994

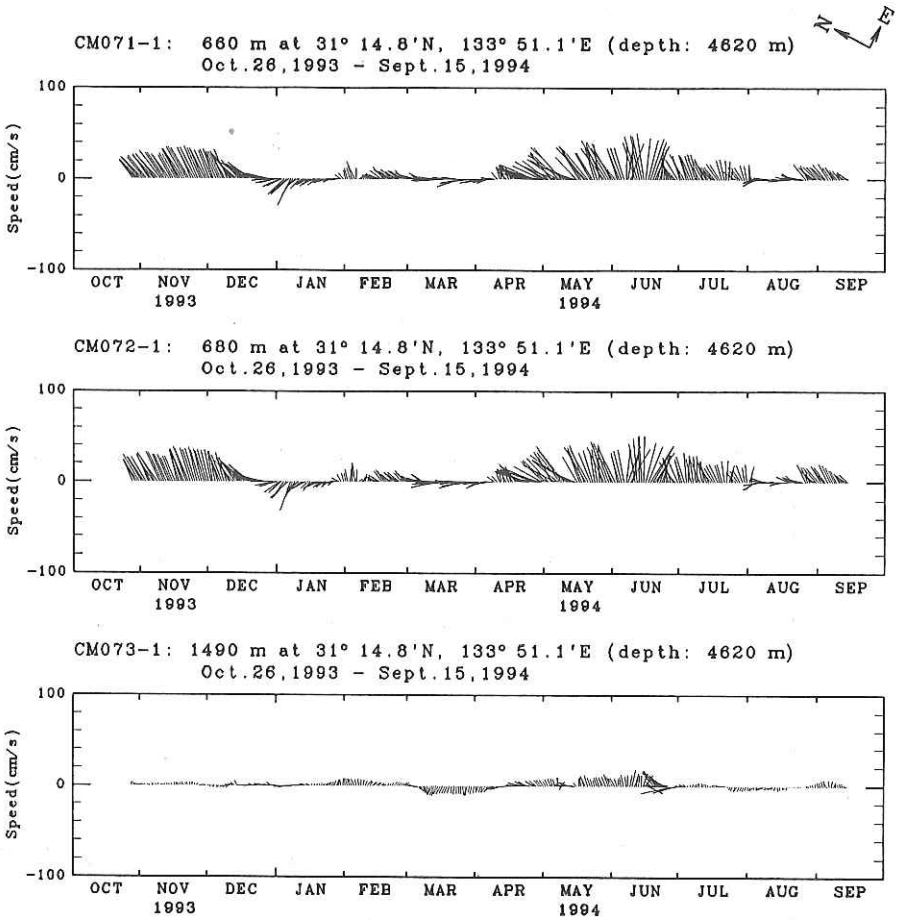


CM064-1: 3070 m at 31° 40.7'N, 133° 35.6'E (depth: 4800 m)
Oct.26,1993 - Sept.16,1994

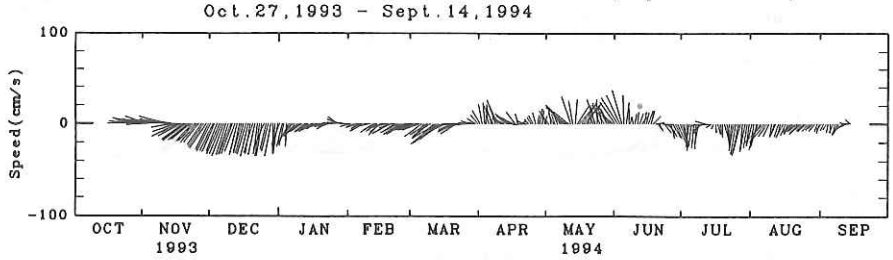


CM065-1: 4680 m at 31° 40.7'N, 133° 35.6'E (depth: 4800 m)
Oct.26,1993 - Sept.16,1994

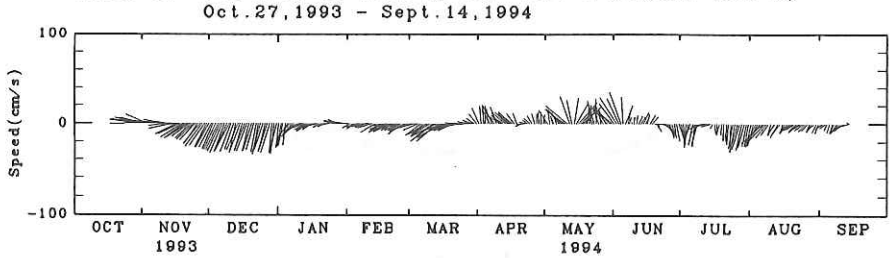



CM071-1: 660 m at 31° 14.8'N, 133° 51.1'E (depth: 4620 m)
Oct.26,1993 - Sept.15,1994
N
E
Speed(cm/s)
100
0
-100
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP
CM072-1: 680 m at 31° 14.8'N, 133° 51.1'E (depth: 4620 m)
Oct.26,1993 - Sept.15,1994
Speed(cm/s)
100
0
-100
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP
CM073-1: 1490 m at 31° 14.8'N, 133° 51.1'E (depth: 4620 m)
Oct.26,1993 - Sept.15,1994
Speed(cm/s)
100
0
-100
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP

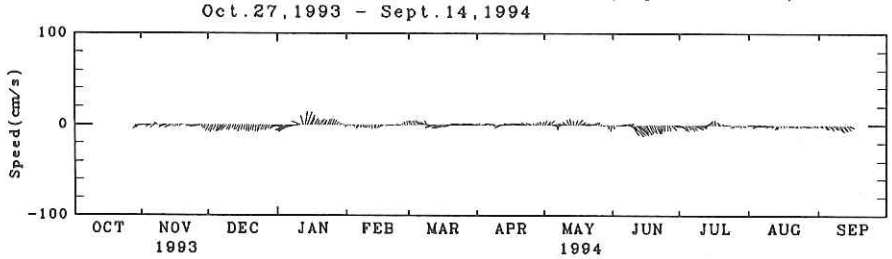
CM081-1: 620 m at 30° 28.4'N, 134° 16.9'E (depth: 4580 m)
Oct.27,1993 - Sept.14,1994



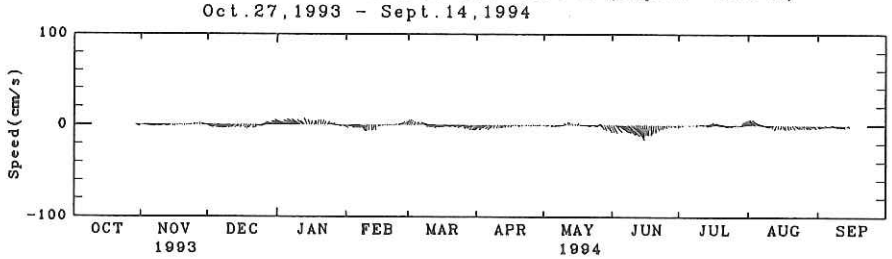
CM082-1: 640 m at 30° 28.4'N, 134° 16.9'E (depth: 4580 m)
Oct.27,1993 - Sept.14,1994



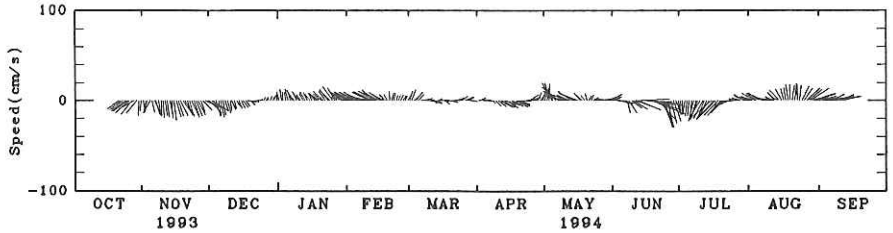
CM083-1: 1450 m at 30° 28.4'N, 134° 16.9'E (depth: 4580 m)
Oct.27,1993 - Sept.14,1994



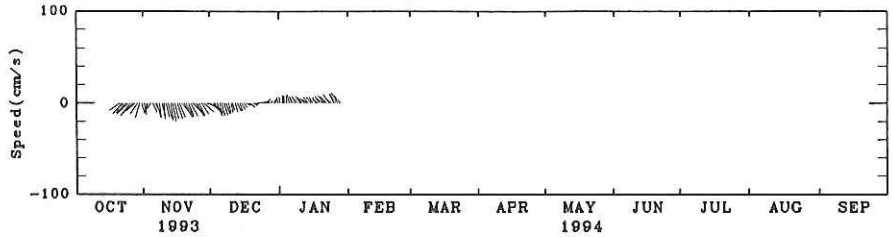
CM084-1: 2950 m at 30° 28.4'N, 134° 16.9'E (depth: 4580 m)
Oct.27,1993 - Sept.14,1994



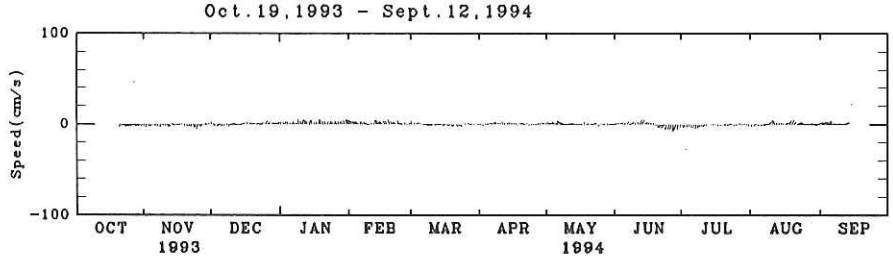
CM091-1: 530 m at 29° 02.3'N, 135° 11.0'E (depth: 4890 m)
Oct.19,1993 - Sept.12,1994



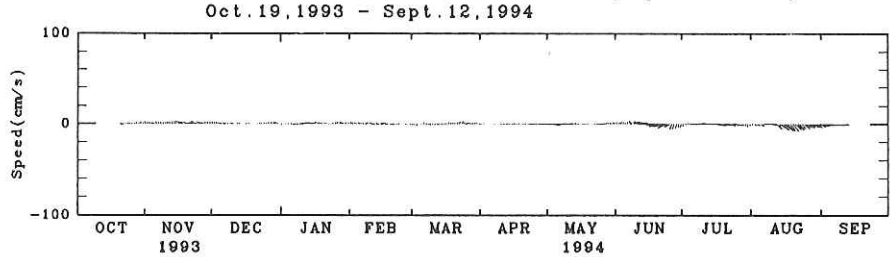
CM092-1: 550 m at 29° 02.3'N, 135° 11.0'E (depth: 4890 m)
Oct.19,1993 - Sept.12,1994

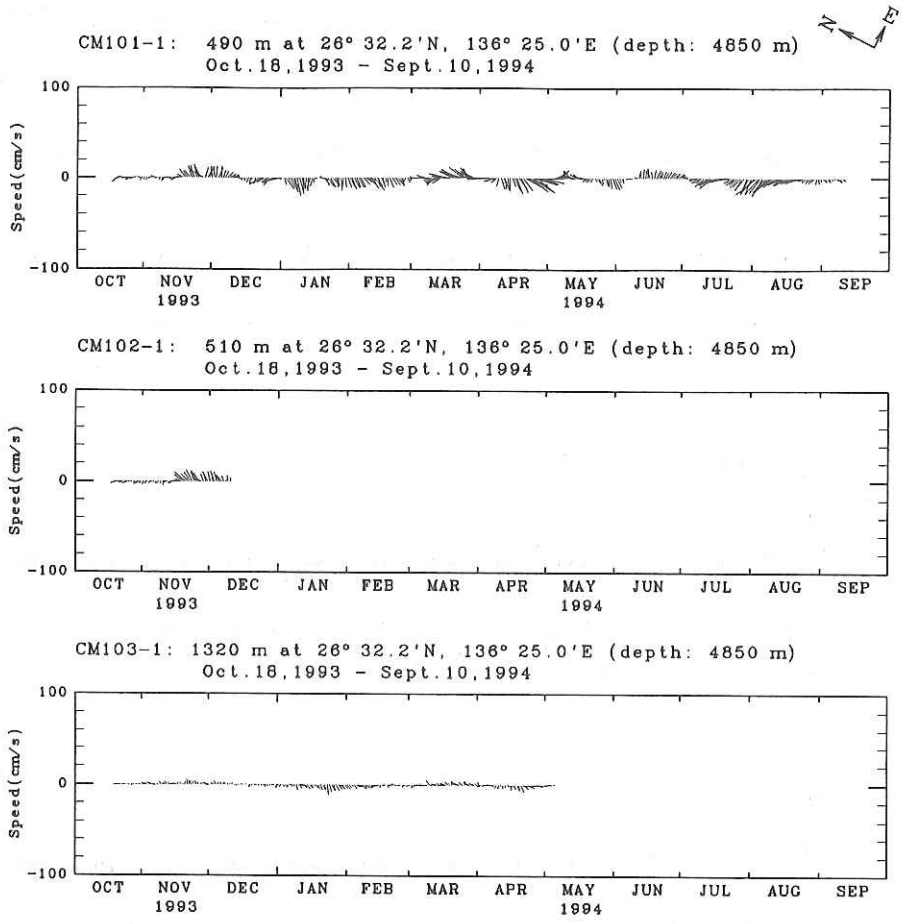


CM093-1: 1360 m at 29° 02.3'N, 135° 11.0'E (depth: 4890 m)
Oct.19,1993 - Sept.12,1994



CM094-1: 2860 m at 29° 02.3'N, 135° 11.0'E (depth: 4890 m)
Oct.19,1993 - Sept.12,1994




CM101-1: 490 m at 26° 32.2'N, 136° 25.0'E (depth: 4850 m)
Oct.18,1993 - Sept.10,1994
N
E
100
0
-100
Speed(cm/s)
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP
CM102-1: 510 m at 26° 32.2'N, 136° 25.0'E (depth: 4850 m)
Oct.18,1993 - Sept.10,1994
100
0
-100
Speed(cm/s)
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP
CM103-1: 1320 m at 26° 32.2'N, 136° 25.0'E (depth: 4850 m)
Oct.18,1993 - Sept.10,1994
100
0
-100
Speed(cm/s)
OCT
NOV
1993
DEC
JAN
FEB
MAR
APR
MAY
1994
JUN
JUL
AUG
SEP