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**THE " USHIO MARU "**

**CRUISE 318**

**CRUISE 319**

**CRUISE 320**

**IN AUGUST 2014**

**IN SEPTEMBER 2014**

## 1. Cruise Itinerary

### Cruise 318

Departure from Hakodate	Aug.	28, 2014
Start hydrographic research (US14399)		28
Arrival at Mori		28
Departure from Mori		29
Sampling by trawl net		29
Retrieval ADCP mooring system		29
Sampling by trawl net		30
Arrival at Mori		30
Departure from Mori		31
Setting ADCP mooring system		31
Arrival at Muroran		31
Departure from Muroran	Sep.	1
Arrival at and departure from Mori		1
Arrival at and departure from Hakodate		2
Arrival at Hakodate		3
Departure from Hakodate		6
Sampling by squid jigging		7
Sampling by frame trawl net		8
Sampling by squid jigging		8
Finish hydrographic research (US14457)		8
Return to Hakodate		9
Total coverage 803.7 miles		

### Cruise 319

Departure from Hakodate	Sep.	13, 2014
Start hydrographic research (US14458)		14
Arrival at Nemuro		14
Departure from Nemuro		15
Arrival at Nemuro		16
Departure from Nemuro		17
Finish hydrographic research (US1495)		18
Return to Hakodate		20
Total coverage 994.1 miles		

### Cruise 320

Departure from Hakodate	Sep.	24, 2014
Arrival at Hakodate		25
Departure from Hakodate		26
Start hydrographic research (US14496)		28
Sampling by drift longline		28
Sampling by drift longline		29
Finish hydrographic research (US14504)		29
Return to Hakodate		30
Total coverage 422.2 miles		

## 2. Data on Temperature, Salinity and Pressure

Hydrographic work on deck and the data processing were made by the deck officers, crews, research staff and cadets of the “Ushio Maru”. Temperature and salinity were measured by CTD (Seabird SBE-9Plus and SBE-19).

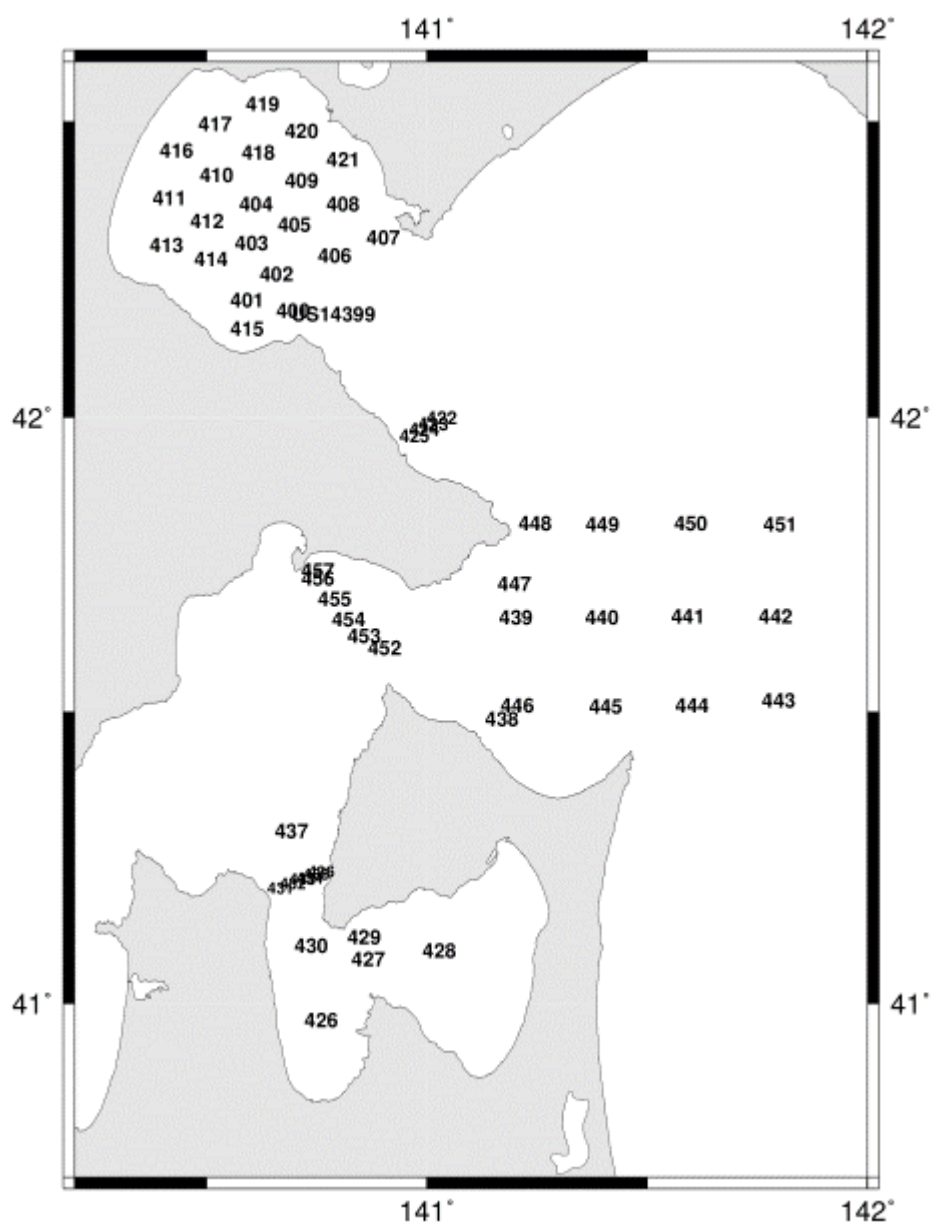


Figure 1. Oceanographic stations (Cruise 318)

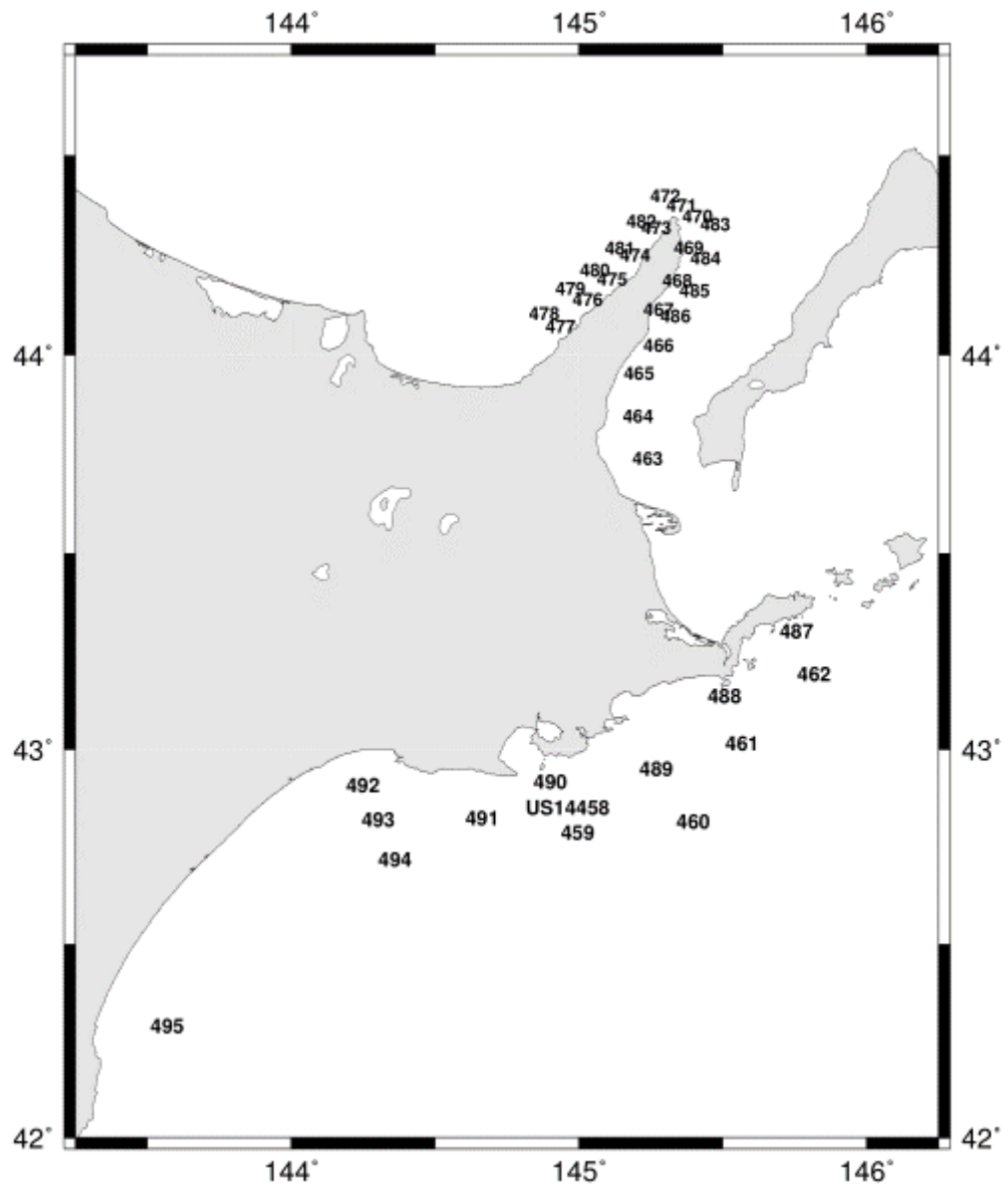


Figure 2. Oceanographic stations (Cruise 319)

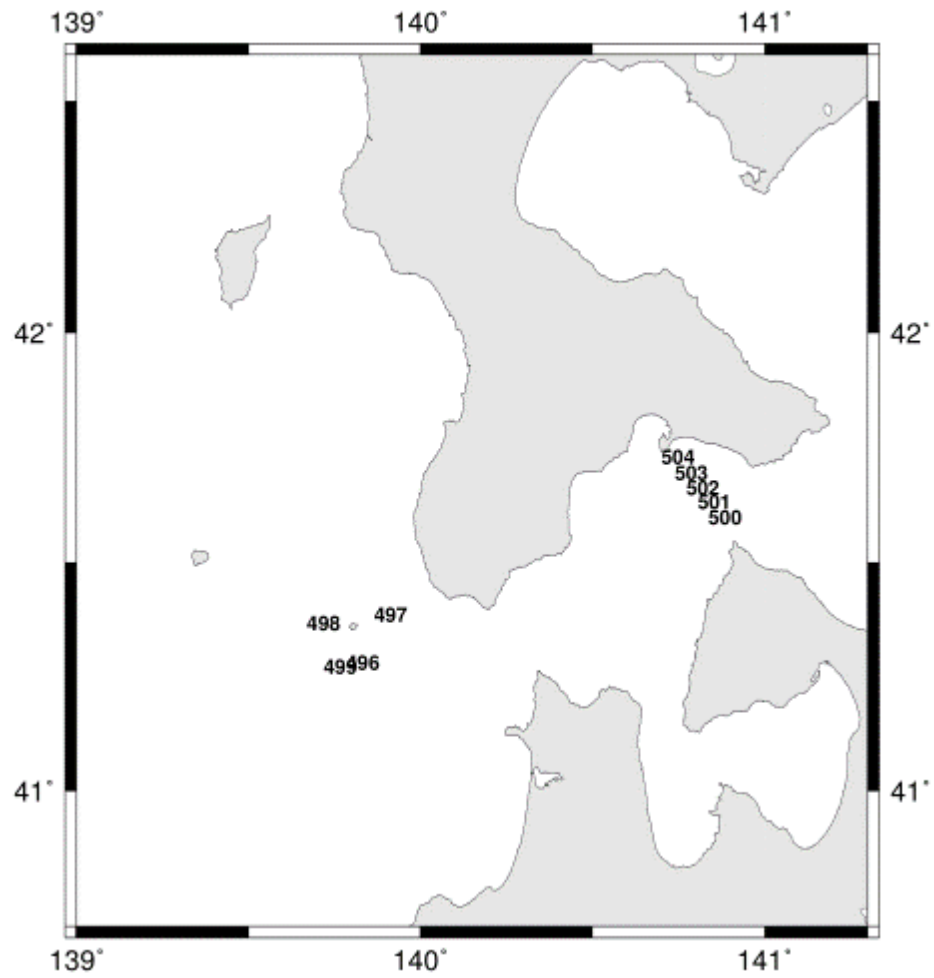


Figure 3. Oceanographic stations (Cruise 320)

Table 1. List of Oceanographic Station

Station	Lat. (N)*	Long. (E)*	Date	S.M.T.	Depth(m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.
US14399	42-09.8	140-47.2	8/28	1452-1458	92	SE-1	SE-1	SE-4	21.3	21.0	bc
US14400	42-10.1	140-41.7	8/28	1523-1529	82	SE-1	SE-1	SE-4	20.2	21.2	bc
US14401	42-11.2	140-35.5	8/29	1619-1625	80	East-2	ENE-1	East-4	19.0	20.2	bc
US14402	42-13.8	140-39.5	8/29	0800-0804	87	East-2	East-1	East-3	19.9	20.7	bc
US14403	42-17.0	140-36.1	8/29	0918-0924	89	East-2	East-1	East-4	20.3	20.9	bc
US14404	42-20.9	140-36.7	8/29	1148-1153	85	East-2	ESE-1	East-4	20.3	20.3	bc
US14405	42-18.8	140-41.9	8/29	1314-1317	68	East-2	ESE-1	East-5	21.4	20.8	bc
US14406	42-15.7	140-47.4	8/29	1446-1444	69	East-2	ESE-1	ESE-5	20.7	20.9	c
US14407	42-17.5	140-54.0	8/29	1527-1529	55	East-2	ESE-1	East-5	20.6	21.0	c
US14408	42-20.9	140-48.5	8/30	0533-0536	51	East-2	ESE-1	East-4	20.0	20.7	c
US14409	42-23.3	140-42.9	8/30	0610-0614	59	East-2	ESE-1	East-4	19.9	20.8	c
US14410	42-23.8	140-31.3	8/30	0708-0713	95	East-2	ESE-1	East-4	20.6	20.8	c
US14411	42-21.5	140-24.9	8/30	0842-0845	68	East-2	ESE-1	East-5	21.5	20.7	c
US14412	42-19.2	140-30.0	8/30	1015-1020	91	East-2	ESE-1	East-5	20.8	20.4	c
US14413	42-16.8	140-24.5	8/30	1128-1132	54	SE-2	ESE-1	SE-5	21.2	21.0	c
US14414	42-15.3	140-30.6	8/30	1209-1214	85	ESE-3	East-1	ESE-5	20.8	20.8	c
US14415	42-08.3	140-35.5	8/31	0558-0604	57	Calm	ENE-1	Calm	18.2	19.6	bc
US14401-2	42-10.9	140-35.5	8/31	0623-0630	78	East-2	ENE-1	East-3	20.1	20.0	bc
US14403-2	42-16.5	140-36.1	8/31	0704-0712	89	East-2	ENE-1	East-4	20.6	20.8	bc
US14404-2	42-21.0	140-36.6	8/31	0750-0759	86	East-3	ENE-1	East-4	20.8	20.8	bc
US14416	42-26.3	140-25.9	8/31	0858-0902	67	ESE-2	ESE-1	ESE-3	22.0	20.6	bc
US14417	42-29.0	140-31.1	8/31	0930-0934	73	SE-3	ESE-1	SE-4	21.3	20.6	bc
US14418	42-26.1	140-37.0	8/31	1007-1012	82	SE-3	ESE-1	SE-4	21.7	20.9	bc
US14419	42-31.0	140-37.6	8/31	1049-1053	61	SSE-3	SSE-1	SSE-4	21.3	20.9	bc
US14420	42-28.3	140-42.9	8/31	1124-1127	59	SSE-3	SSE-1	SSE-4	21.8	21.0	bc
US14421	42-25.4	140-48.6	8/31	1158-1200	43	SSE-3	SSE-1	SSE-5	21.8	21.4	bc
US14422	41-59.3	141-02.0	9/1	1211-1216	99	ESE-2	ESE-1	ESE-4	21.5	20.7	c
US14423	41-58.7	141-00.8	9/1	1226-1231	93	ESE-2	ESE-1	ESE-4	22.1	20.7	c
US14424	41-58.1	140-59.6	9/1	1240-1244	86	ESE-2	ESE-1	ESE-4	22.5	20.6	bc
US14425	41-57.5	140-58.3	9/1	1253-1257	78	ESE-2	ESE-1	ESE-4	22.5	20.5	bc
US14426	40-57.5	140-45.6	9/3	0458-0506	50	East-2	East-1	East-4	21.0	22.4	bc
US14427	41-03.8	140-52.0	9/3	0603-0610	50	East-2	East-1	East-4	21.0	22.1	bc
US14428	41-04.7	141-01.7	9/3	0656-0702	47	ESE-2	East-1	ESE-4	21.0	22.5	bc
US14429	41-06.1	140-51.4	9/3	0843-0844	51	East-2	ESE-1	East-4	23.5	22.0	bc
US14430	41-05.2	140-44.2	9/3	0920-0928	59	East-3	ESE-1	East-5	22.1	22.4	bc
US14431	41-11.3	140-40.0	9/3	1007-1013	53	ESE-2	ESE-1	ESE-4	22.0	22.2	bc
US14432	41-11.8	140-41.7	9/3	1025-1031	73	SE-2	ESE-1	SE-4	22.5	22.3	bc
US14433	41-12.2	140-43.0	9/3	1039-1046	72	East-2	ESE-1	East-4	23.0	22.4	bc
US14434	41-12.3	140-44.0	9/3	1053-1101	69	SE-2	ESE-1	SE-4	22.7	22.4	bc
US14435	41-12.7	140-44.9	9/3	1107-1113	66	SE-2	ESE-1	SE-4	23.9	22.5	bc
US14436	41-13.0	140-45.6	9/3	1120-1125	64	SE-2	ESE-1	SE-4	23.1	22.5	bc
US14437	41-17.0	140-41.5	9/3	1158-1209	147	SE-2	SE-1	SE-3	23.8	22.5	c
US14438	41-28.5	141-10.2	9/6	1910-1915	102	WSW-2	WNW-1	WSW-4	22.5	21.5	c
US14439	41-38.9	141-12.1	9/7	0652-0701	202	NW-1	ENE-1	NW-2	21.7	22.3	bc
US14440	41-38.9	141-23.8	9/7	0752-0806	279	West-1	East-1	West-3	23.7	23.1	bc
US14441	41-39.0	141-35.5	9/7	0852-0857	110	NW-1	East-1	NW-3	23.3	22.1	bc
US14442	41-39.0	141-47.5	9/7	0949-1010	1014	West-1	ESE-1	West-3	24.6	22.0	bc
US14443	41-30.4	141-47.9	9/7	1116-1134	910	West-1	ESE-1	West-3	22.4	21.9	bc
US14444	41-29.9	141-36.1	9/7	1234-1246	369	Calm	SSE-1	Calm	24.0	22.0	bc
US14445	41-29.8	141-24.3	9/7	1408-1412	99	East-1	SSE-1	East-2	24.6	23.1	bc
US14446	41-29.9	141-12.3	9/7	1505-1514	262	NW-1	WNW-1	NE-3	25.3	21.9	bc
US14447	41-42.3	141-11.9	9/7	1818-1826	202	NW-1	SW-1	NW-3	19.8	18.7	c
US14448	41-48.5	141-14.7	9/8	0547-0555	207	NW-3	ESE-1	NW-3	20.3	20.9	bc
US14449	41-48.4	141-23.9	9/8	0638-0649	300	NW-3	ESE-1	NW-4	20.6	20.4	bc
US14450	41-48.5	141-35.9	9/8	0742-0803	615	North-2	ESE-1	North-4	20.9	19.3	bc
US14451	41-48.4	141-48.1	9/8	0849-0911	801	North-2	North-2	North-4	21.2	21.2	bc
US14452	41-35.8	140-54.2	9/8	1513-1517	72	East-1	East-1	East-3	23.7	23.4	bc
US14453	41-37.0	140-51.4	9/8	1541-1546	96	East-2	East-1	East-3	23.2	23.6	bc
US14454	41-38.7	140-49.3	9/8	1608-1622	342	East-1	East-1	East-3	23.4	23.7	bc
US14455	41-40.8	140-47.4	9/8	1644-1654	224	East-1	East-1	East-3	23.1	24.5	bc
US14456	41-42.9	140-45.1	9/8	1716-1720	83	East-1	East-1	East-3	22.9	24.7	bc
US14457	41-43.7	140-45.1	9/8	1806-1810	72	ESE-2	SE-1	ESE-2	23.0	24.3	bc

Table 1 (Continued)

Cruise 319											
Station	Lat. (N)*	Long. (E)*	Date	S.M.T.	Depth(m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.
US14458	42-50.0	144-57.6	9/14	0551-0557	103	North-4	East-1	North-4	14.2	15.0	o
US14459	42-46.1	144-59.7	9/14	0625-0630	143	North-2	East-1	North-4	14.6	15.0	c
US14460	42-47.8	145-23.8	9/14	0824-0843	931	NNW-2	ENE-1	NNW-4	15.1	14.1	o
US14461	42-59.9	145-34.0	9/14	1018-1024	97	NE-2	NE-2	NE-4	15.4	14.8	c
US14462	43-10.5	145-49.0	9/14	1206-1210	80	NE-2	NE-2	NE-4	16.6	14.7	c
US14463	43-43.4	145-14.3	9/15	0820-0824	17	SSW-1	NW-1	SSW-2	16.1	17.7	bc
US14464	43-49.8	145-12.3	9/15	0903-0906	44	South-1	NW-1	South-2	17.2	18.2	bc
US14465	43-56.3	145-12.5	9/15	0944-0950	80	South-1	NW-1	South-2	18.1	18.1	bc
US14466	44-00.5	145-16.6	9/15	1024-1040	429	South-1	NW-1	South-3	17.8	18.0	bc
US14467	44-05.9	145-16.6	9/15	1114-1127	385	South-1	South-1	South-3	19.3	17.9	bc
US14468	44-10.3	145-20.5	9/15	1201-1207	151	South-1	South-1	SW-3	19.2	17.9	bc
US14469	44-15.2	145-22.9	9/15	1244-1253	276	South-2	South-1	South-3	20.2	18.3	bc
US14470	44-19.9	145-24.7	9/15	1325-1344	894	South-2	South-1	South-3	19.0	18.3	bc
US14471	44-21.6	145-21.4	9/15	1402-1407	66	SE-2	South-1	SE-4	17.5	18.6	bc
US14472	44-23.0	145-18.0	9/15	1425-1445	689	ESE-2	SE-1	ESE-4	18.3	19.4	bc
US14473	44-18.2	145-16.1	9/15	1522-1528	176	West-1	NNW-1	West-2	19.5	19.0	bc
US14474	44-14.1	145-11.7	9/15	1603-1607	117	SE-2	NNE-1	SE-4	19.7	18.5	bc
US14475	44-10.5	145-06.9	9/15	1642-1647	155	East-2	NNE-1	East-3	19.3	18.9	bc
US14476	44-07.4	145-01.8	9/15	1722-1727	93	SSE-3	NNE-1	SSE-5	18.2	19.1	bc
US14477	44-03.4	144-56.1	9/15	1806-1810	55	East-1	NNE-1	East-2	18.0	19.2	bc
US14478	44-05.3	144-52.7	9/15	1859-1905	186	SE-2	NNE-1	SE-4	17.9	19.0	bc
US14479	44-09.1	144-58.2	9/15	1937-1947	317	SE-2	NNE-1	SE-4	18.2	19.0	bc
US14480	44-11.8	145-03.3	9/15	2011-2026	470	Calm	NNE-1	Calm	17.9	16.9	c
US14481	44-15.1	145-08.5	9/15	2050-2107	475	SE-2	NNE-1	SE-4	17.3	18.6	c
US14482	44-19.2	145-13.0	9/15	2133-2152	725	East-1	NNE-1	East-2	17.7	19.0	c
US14483	44-18.7	145-28.4	9/16	0509-0540	1540	South-4	SE-1	South-4	16.7	18.0	c
US14484	44-13.7	145-26.4	9/16	0633-0649	1578	SSW-2	SSE-1	SSW-4	16.9	18.0	c
US14485	44-08.8	145-24.1	9/16	0723-0740	1479	SSW-3	SE-1	SSW-3	17.0	18.0	c
US14486	44-05.0	145-20.1	9/16	0814-0833	750	SSW-1	SE-1	SSW-3	17.5	18.3	c
US14487	43-17.0	145-45.3	9/17	0755-0758	33	South-2	South-1	South-3	15.7	16.3	bc
US14488	43-07.1	145-30.3	9/17	0934-0937	38	SW-2	South-1	SW-4	16.6	16.3	bc
US14489	42-56.0	145-16.1	9/17	1108-1113	89	SW-3	South-1	SW-4	17.1	15.5	bc
US14490	42-54.0	144-54.0	9/17	1252-1255	63	SW-3	SW-1	SW-4	17.4	16.4	bc
US14491	42-48.4	144-39.8	9/17	1409-1413	105	SW-2	SW-1	SW-3	16.6	16.0	c
US14492	42-53.4	144-14.9	9/17	1608-1612	62	SSW-3	SSW-1	West-4	17.8	17.3	bc
US14493	42-48.1	144-18.1	9/17	1649-1705	612	WSW-2	SSW-1	WSW-3	16.5	15.6	bc
US14494	42-42.0	144-21.6	9/18	0616-0634	658	West-2	West-1	West-3	14.9	16.3	bc
US14495	42-16.2	143-34.1	9/18	1832-1838	101	SSE-1	South-1	SSE-2	17.0	16.5	bc

Cruise 320											
Station	Lat. (N)*	Long. (E)*	Date	S.M.T.	Depth(m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.
US14496	41-15.9	139-49.9	9/28	1032-1040	860	West-3	SW-1	West-4	21.2	22.5	bc
US14497	41-22.2	139-54.8	9/28	1206-1211	123	WSW-2	SW-1	WSW-4	23.6	21.8	bc
US14498	41-21.1	139-43.1	9/29	0947-0953	763	NW-2	NW-1	NW-2	20.2	21.3	c
US14499	41-15.4	139-46.0	9/29	1056-1102	1302	WNW-2	NW-1	WNW-2	20.9	21.3	c
US14500	41-35.0	140-53.1	9/29	1828-1830	38	ENE-1	ENE-1	ENE-2	18.8	21.6	c
US14501	41-37.0	140-51.2	9/29	1846-1850	91	ENE-2	ENE-1	ENE-3	19.2	21.7	c
US14502	41-38.8	140-49.2	9/29	1906-1917	348	ENE-2	ENE-1	East-2	19.3	20.9	c
US14503	41-40.8	140-47.2	9/29	1933-1941	219	Calm	ENE-1	Calm	19.5	21.7	c
US14504	41-42.9	140-44.9	9/29	1958-2002	83	NW-1	ESE-1	NW-2	18.6	22.2	c

(\*): Fixed position by Global Positioning System

S.M.T.: Ship's mean time

Wr.: Weather in WMO Code 4501

Table 2. Oceanographic data

STATION US14399				STATION US14400				STATION US14401			
LATITUDE 42-09.8 N				LATITUDE 42-10.1 N				LATITUDE 42-11.2 N			
LONGITUI 140-47.2 E				LONGITUI 140-41.7 E				LONGITUI 140-35.5 E			
DEPTH (m) 92				DEPTH (m) 82				DEPTH (m) 80			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.101	31.324	21.671	5	20.778	31.200	21.663	5	20.321	31.258	21.827
10	20.743	31.408	21.830	10	20.534	31.432	21.903	10	20.332	31.345	21.890
20	17.155	32.358	23.451	20	17.488	32.556	23.524	20	17.116	32.310	23.423
30	12.716	32.574	24.569	30	11.589	32.399	24.645	30	11.723	32.054	24.353
40	6.394	32.244	25.327	40	7.236	32.136	25.132	40	7.253	32.156	25.145
50	5.136	32.394	25.595	50	5.966	32.517	25.595	50	6.496	32.577	25.576
75	4.590	32.939	26.086	75	4.708	32.831	25.988	75	4.953	32.935	26.044
STATION US14402				STATION US14403				STATION US14404			
LATITUDE 42-13.8 N				LATITUDE 42-17.0 N				LATITUDE 42-20.9 N			
LONGITUI 140-39.5 E				LONGITUI 140-36.1 E				LONGITUI 140-36.7 E			
DEPTH (m) 87				DEPTH (m) 89				DEPTH (m) 85			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	20.805	31.082	21.566	5	20.882	30.975	21.465	5	20.963	31.198	21.612
10	20.813	31.090	21.570	10	20.895	31.182	21.618	10	20.924	31.200	21.624
20	19.489	32.352	22.875	20	19.675	31.989	22.550	20	20.589	31.552	21.980
30	16.445	32.993	24.103	30	17.906	32.566	23.431	30	16.928	32.334	23.486
40	10.982	32.855	25.109	40	7.970	32.039	24.953	40	8.904	32.064	24.835
50	7.991	32.785	25.536	50	5.674	32.420	25.553	50	5.924	32.499	25.586
75	5.342	33.161	26.178	75	5.510	33.171	26.166	75	5.465	33.107	26.121
STATION US14405				STATION US14406				STATION US14407			
LATITUDE 42-18.8 N				LATITUDE 42-15.7 N				LATITUDE 42-17.5 N			
LONGITUI 140-41.9 E				LONGITUI 140-47.4 E				LONGITUI 140-54.0 E			
DEPTH (m) 68				DEPTH (m) 69				DEPTH (m) 55			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.112	31.248	21.610	5	21.069	31.218	21.599	5	20.860	31.649	21.983
10	20.959	31.376	21.749	10	20.929	31.359	21.744	10	20.290	32.153	22.516
20	20.849	31.447	21.832	20	18.903	32.257	22.950	20	17.057	32.891	23.883
30	17.157	32.299	23.405	30	14.890	32.514	24.080	30	16.357	33.560	24.558
40	9.500	32.032	24.716	40	12.801	33.476	25.252	40	13.443	33.556	25.185
50	8.006	32.733	25.493	50	9.946	33.288	25.625	50	11.144	33.417	25.517
STATION US14408				STATION US14409				STATION US14410			
LATITUDE 42-20.9 N				LATITUDE 42-23.3 N				LATITUDE 42-23.8 N			
LONGITUI 140-48.5 E				LONGITUI 140-42.9 E				LONGITUI 140-31.3 E			
DEPTH (m) 51				DEPTH (m) 59				DEPTH (m) 95			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	20.848	31.275	21.701	5	20.918	31.189	21.618	5	20.797	31.270	21.711
10	20.849	31.274	21.701	10	20.903	31.190	21.622	10	20.805	31.278	21.715
20	20.637	31.404	21.855	20	20.263	31.628	22.123	20	19.531	31.973	22.575
30	17.016	32.420	23.531	30	14.962	32.485	24.042	30	16.300	32.403	23.682
40	12.753	33.444	25.236	40	8.152	32.249	25.092	40	9.538	32.200	24.842
50	10.533	33.413	25.622	50	10.267	33.365	25.630	50	6.136	32.586	25.628
STATION US14411				STATION US14412				STATION US14413			
LATITUDE 42-21.5 N				LATITUDE 42-19.2 N				LATITUDE 42-16.8 N			
LONGITUI 140-24.9 E				LONGITUI 140-30.0 E				LONGITUI 140-24.5 E			
DEPTH (m) 68				DEPTH (m) 91				DEPTH (m) 54			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	20.769	31.102	21.591	5	20.707	31.503	21.912	5	21.098	30.787	21.264
10	20.562	31.434	21.897	10	20.703	31.501	21.911	10	20.401	31.639	22.096
20	18.556	32.397	23.143	20	18.925	32.648	23.243	20	18.011	32.294	23.198
30	12.652	32.039	24.168	30	13.168	32.147	24.150	30	11.230	32.045	24.435
40	10.177	32.726	25.147	40	8.264	32.346	25.152	40	8.443	32.558	25.292
50	6.941	32.785	25.682	50	5.567	32.578	25.691	50	7.003	32.660	25.575
STATION US14414				STATION US14415				STATION US14416			
LATITUDE 42-15.3 N				LATITUDE 42-08.3 N				LATITUDE 42-26.3 N			
LONGITUI 140-30.6 E				LONGITUI 140-35.5 E				LONGITUI 140-25.9 E			
DEPTH (m) 85				DEPTH (m) 57				DEPTH (m) 67			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	20.676	31.189	21.681	5	19.792	31.938	22.481	5	20.777	31.171	21.641
10	20.294	31.666	22.144	10	18.932	32.156	22.866	10	20.742	31.342	21.780
20	18.723	32.675	23.315	20	16.411	32.120	23.440	20	19.421	32.141	22.731
30	13.175	32.187	24.177	30	12.019	32.134	24.360	30	14.779	32.105	23.788
40	7.128	32.419	25.369	40	7.584	32.135	25.083	40	12.230	32.911	24.924
50	6.506	32.746	25.708	50	6.000	32.297	25.417	50	8.983	32.898	25.475
75	4.647	33.187	26.277								



Table 2. (Continued)

STATION US14417				STATION US14418				STATION US14419			
LATITUDE 42-29.0 N				LATITUDE 42-26.1 N				LATITUDE 42-31.0 N			
LONGITUI 140-31.1 E				LONGITUI 140-37.0 E				LONGITUI 140-37.6 E			
DEPTH (m) 73				DEPTH (m) 82				DEPTH (m) 61			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	20.815	31.396	21.802	5	21.069	31.310	21.669	5	21.001	31.252	21.643
10	20.775	31.412	21.824	10	20.991	31.308	21.688	10	20.840	31.382	21.785
20	20.440	31.612	22.065	20	20.624	31.549	21.969	20	20.566	31.573	22.002
30	17.808	32.504	23.407	30	18.542	32.797	23.452	30	16.207	32.528	23.800
40	11.247	32.267	24.604	40	11.395	32.043	24.404	40	9.490	32.256	24.893
50	9.698	33.075	25.499	50	7.378	32.469	25.374	50	9.298	33.186	25.650
				75	6.043	33.256	26.170				
STATION US14420				STATION US14421				STATION US14422			
LATITUDE 42-28.3 N				LATITUDE 42-25.4 N				LATITUDE 41-59.3 N			
LONGITUI 140-42.9 E				LONGITUI 140-48.6 E				LONGITUI 141-02.0 E			
DEPTH (m) 59				DEPTH (m) 43				DEPTH (m) 99			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.308	30.951	21.333	5	21.219	31.012	21.403	5	20.795	32.802	22.877
10	21.185	30.977	21.385	10	21.097	31.095	21.498	10	20.666	32.961	23.032
20	19.848	31.674	22.266	20	20.053	32.546	22.877	20	19.053	33.157	23.600
30	18.564	33.151	23.718	30	16.400	33.007	24.124	30	15.456	33.613	24.803
40	14.361	33.312	24.808					40	13.271	33.734	25.358
50	11.911	33.424	25.382					50	12.925	33.965	25.606
								75	11.605	33.983	25.873
STATION US14423				STATION US14424				STATION US14425			
LATITUDE 41-58.7 N				LATITUDE 41-58.1 N				LATITUDE 41-57.5 N			
LONGITUI 141-00.8 E				LONGITUI 140-59.6 E				LONGITUI 140-58.3 E			
DEPTH (m) 93				DEPTH (m) 86				DEPTH (m) 78			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	20.727	32.585	22.729	5	20.618	32.578	22.753	5	20.539	32.559	22.760
10	20.608	32.617	22.786	10	20.589	32.579	22.762	10	20.366	32.702	22.914
20	20.088	33.234	23.392	20	20.268	33.191	23.313	20	19.696	33.181	23.454
30	15.804	33.621	24.731	30	15.919	33.531	24.636	30	15.057	33.011	24.426
40	14.307	33.800	25.195	40	9.387	32.447	25.059	40	8.971	32.210	24.939
50	13.057	33.888	25.520	50	8.189	32.646	25.397	50	6.047	32.410	25.500
75	11.494	33.906	25.833	75	5.326	32.850	25.934				
STATION US14426				STATION US14427				STATION US14428			
LATITUDE 40-57.5 N				LATITUDE 41-03.8 N				LATITUDE 41-04.7 N			
LONGITUI 140-45.6 E				LONGITUI 140-52.0 E				LONGITUI 141-01.7 E			
DEPTH (m) 50				DEPTH (m) 50				DEPTH (m) 47			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	22.277	33.220	22.789	5	21.666	33.259	22.988	5	22.634	32.601	22.219
10	22.295	33.228	22.790	10	21.693	33.278	22.995	10	22.633	32.614	22.230
20	21.936	33.539	23.126	20	21.723	33.551	23.194	20	22.665	32.644	22.243
30	21.016	34.052	23.768	30	20.882	33.889	23.681	30	20.435	33.729	23.678
40	19.522	34.150	24.238	40	19.350	34.060	24.213	40	17.252	33.751	24.496
STATION US14429				STATION US14430				STATION US14431			
LATITUDE 41-06.1 N				LATITUDE 41-05.2 N				LATITUDE 41-11.3 N			
LONGITUI 140-51.4 E				LONGITUI 140-44.2 E				LONGITUI 140-40.0 E			
DEPTH (m) 51				DEPTH (m) 59				DEPTH (m) 53			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	22.367	33.390	22.893	5	22.241	33.124	22.726	5	22.576	33.319	22.780
10	22.372	33.410	22.907	10	22.242	33.123	22.725	10	22.388	33.440	22.925
20	21.965	33.523	23.106	20	22.294	33.228	22.790	20	21.728	33.926	23.477
30	21.507	33.760	23.413	30	19.968	33.976	23.989	30	20.227	34.145	24.050
40	18.927	33.947	24.235	40	18.391	34.095	24.483	40	18.763	34.284	24.534
				50	17.145	34.145	24.823	50	16.753	34.357	25.079
STATION US14432				STATION US14433				STATION US14434			
LATITUDE 41-11.8 N				LATITUDE 41-12.2 N				LATITUDE 41-12.3 N			
LONGITUI 140-41.7 E				LONGITUI 140-43.0 E				LONGITUI 140-44.0 E			
DEPTH (m) 73				DEPTH (m) 72				DEPTH (m) 69			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	22.415	33.240	22.766	5	22.401	33.164	22.711	5	22.542	33.176	22.681
10	22.400	33.241	22.770	10	22.384	33.240	22.774	10	22.492	33.172	22.692
20	22.452	33.598	23.026	20	22.361	33.465	22.951	20	22.067	33.447	23.020
30	20.713	34.023	23.827	30	20.715	34.071	23.863	30	20.774	34.084	23.857
40	17.579	34.331	24.862	40	18.175	34.276	24.675	40	17.945	34.229	24.695
50	16.627	34.389	25.133	50	16.282	34.300	25.144	50	16.302	34.317	25.153

Table 2. (Continued)

STATION US14435				STATION US14436				STATION US14437			
LATITUDE 41-12.7 N				LATITUDE 41-13.0 N				LATITUDE 41-17.0 N			
LONGITUI 140-44.9 E				LONGITUI 140-45.6 E				LONGITUI 140-41.5 E			
DEPTH (m) 66				DEPTH (m) 64				DEPTH (m) 147			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	22.520	33.188	22.696	5	22.422	33.167	22.708	5	22.640	33.704	23.054
10	22.524	33.187	22.694	10	22.351	33.163	22.725	10	22.653	33.696	23.044
20	22.322	33.157	22.729	20	22.288	33.237	22.799	20	21.561	34.037	23.608
30	20.407	33.961	23.862	30	19.282	34.073	24.241	30	19.719	34.214	24.235
40	17.718	34.238	24.757	40	17.284	34.239	24.862	40	17.670	34.296	24.814
50	16.317	34.304	25.140	50	16.627	34.242	25.020	50	16.616	34.374	25.124
								75	16.016	34.399	25.282
								100	15.114	34.409	25.492
								125	13.932	34.357	25.705
STATION US14438				STATION US14439				STATION US14440			
LATITUDE 41-28.5 N				LATITUDE 41-38.9 N				LATITUDE 41-38.9 N			
LONGITUI 141-10.2 E				LONGITUI 141-12.1 E				LONGITUI 141-23.8 E			
DEPTH (m) 102				DEPTH (m) 202				DEPTH (m) 279			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.602	33.934	23.518	5	22.454	33.891	23.248	5	23.112	33.920	23.082
10	21.556	33.934	23.531	10	22.443	33.889	23.250	10	22.156	33.943	23.372
20	21.210	33.935	23.626	20	22.152	33.886	23.329	20	21.931	33.955	23.443
30	20.912	33.939	23.710	30	21.985	33.896	23.383	30	21.477	33.956	23.570
40	20.651	33.925	23.770	40	19.817	33.998	24.045	40	20.517	33.999	23.861
50	20.306	33.885	23.831	50	19.703	34.034	24.103	50	20.342	34.015	23.921
75	15.040	34.284	25.411	75	19.122	34.110	24.310	75	17.491	34.108	24.712
				100	13.317	34.086	25.621	100	15.728	34.158	25.161
				125	11.003	33.919	25.933	125	12.825	34.011	25.662
				150	9.126	33.877	26.219	150	11.063	34.036	26.014
				175	6.979	33.666	26.371	175	9.871	33.975	26.173
								200	7.659	33.769	26.357
								250	4.425	33.563	26.599
STATION US14441				STATION US14442				STATION US14443			
LATITUDE 41-39.0 N				LATITUDE 41-39.0 N				LATITUDE 41-30.4 N			
LONGITUI 141-35.5 E				LONGITUI 141-47.5 E				LONGITUI 141-47.9 E			
DEPTH (m) 110				DEPTH (m) 1014				DEPTH (m) 910			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.510	33.638	23.319	5	21.750	33.939	23.482	5	21.591	33.823	23.437
10	21.511	33.737	23.394	10	21.658	33.940	23.507	10	21.521	33.826	23.458
20	21.339	33.843	23.521	20	21.629	33.941	23.516	20	21.491	33.831	23.470
30	21.306	33.862	23.544	30	21.614	33.942	23.521	30	21.462	33.828	23.476
40	21.249	33.899	23.588	40	21.610	33.940	23.521	40	21.442	33.829	23.483
50	21.109	33.962	23.674	50	21.395	33.944	23.583	50	21.211	33.815	23.535
75	20.592	33.994	23.838	75	19.314	34.094	24.249	75	19.722	33.901	23.997
100	17.064	34.188	24.876	100	17.237	34.161	24.814	100	18.322	34.037	24.455
				125	16.416	34.165	25.010	125	14.936	34.063	25.263
				150	15.262	34.192	25.292	150	13.350	33.993	25.542
				175	13.764	34.044	25.497	175	12.461	34.094	25.797
				200	12.161	33.964	25.754	200	11.565	34.043	25.928
				250	6.109	33.503	26.356	250	10.025	34.004	26.170
				300	2.959	33.526	26.712	300	5.108	33.451	26.435
				400	3.239	33.925	27.005	400	3.257	33.723	26.842
				500	3.420	34.100	27.128	500	3.263	33.939	27.014
STATION US14444				STATION US14445				STATION US14446			
LATITUDE 41-29.9 N				LATITUDE 41-29.8 N				LATITUDE 41-29.9 N			
LONGITUI 141-36.1 E				LONGITUI 141-24.3 E				LONGITUI 141-12.3 E			
DEPTH (m) 369				DEPTH (m) 99				DEPTH (m) 262			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.824	33.657	23.246	5	22.652	33.890	23.192	5	21.126	33.932	23.647
10	21.650	33.721	23.344	10	22.381	33.892	23.269	10	21.066	33.937	23.667
20	21.652	33.795	23.399	20	22.036	33.889	23.364	20	20.677	33.986	23.809
30	20.864	33.841	23.648	30	21.908	33.883	23.395	30	20.387	33.966	23.871
40	20.568	33.895	23.769	40	19.323	33.948	24.135	40	18.926	34.020	24.291
50	20.317	33.900	23.839	50	17.373	34.160	24.781	50	17.660	34.107	24.671
75	19.638	33.957	24.060	75	14.496	34.274	25.521	75	15.344	34.269	25.333
100	17.780	34.068	24.612					100	15.080	34.323	25.433
125	16.206	34.083	24.995					125	14.580	34.359	25.568
150	12.705	33.988	25.667					150	13.662	34.344	25.751
175	9.692	33.895	26.141					175	12.725	34.301	25.906
200	8.534	33.801	26.252					200	12.255	34.281	25.982
250	4.968	33.495	26.486								
300	2.988	33.637	26.798								

Table 2 (Continued)

STATION US14447				STATION US14448				STATION US14449			
LATITUDE 41-42.3 N				LATITUDE 41-48.5 N				LATITUDE 41-48.4 N			
LONGITUI 141-11.9 E				LONGITUI 141-14.7 E				LONGITUI 141-23.9 E			
DEPTH (m) 202				DEPTH (m) 207				DEPTH (m) 300			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	18.226	34.139	24.557	5	20.757	32.212	22.438	5	20.158	34.069	24.010
10	17.015	34.223	24.914	10	20.817	32.348	22.525	10	19.538	34.096	24.192
20	16.348	34.263	25.101	20	20.388	32.606	22.835	20	16.804	34.233	24.972
30	15.712	34.267	25.249	30	20.771	33.628	23.512	30	16.665	34.273	25.035
40	14.778	34.233	25.429	40	17.151	33.738	24.510	40	16.335	34.264	25.104
50	13.334	34.120	25.644	50	13.332	33.956	25.518	50	14.977	34.167	25.335
75	9.206	33.904	26.227	75	10.826	34.070	26.082	75	10.481	33.609	25.784
100	8.047	33.813	26.335	100	9.099	33.862	26.211	100	10.675	33.742	25.854
125	6.356	33.629	26.424	125	6.434	33.580	26.375	125	10.860	34.017	26.035
150	4.960	33.508	26.497	150	5.441	33.530	26.459	150	9.048	33.926	26.269
175	4.487	33.480	26.527	175	4.225	33.427	26.512	175	5.879	33.544	26.417
								200	3.966	33.425	26.537
								250	3.024	33.509	26.693

STATION US14450				STATION US14451				STATION US14452			
LATITUDE 41-48.5 N				LATITUDE 41-48.4 N				LATITUDE 41-35.8 N			
LONGITUI 141-35.9 E				LONGITUI 141-48.1 E				LONGITUI 140-54.2 E			
DEPTH (m) 615				DEPTH (m) 801				DEPTH (m) 72			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	19.578	33.737	23.908	5	21.368	33.926	23.576	5	23.309	33.948	23.047
10	17.833	34.093	24.618	10	20.992	34.010	23.743	10	22.486	33.994	23.317
20	17.619	34.173	24.732	20	20.588	34.051	23.883	20	20.995	34.104	23.813
30	17.546	34.187	24.760	30	20.567	34.060	23.895	30	19.485	34.183	24.273
40	17.189	34.190	24.848	40	19.421	34.086	24.215	40	18.415	34.234	24.583
50	15.928	34.204	25.151	50	17.702	34.179	24.716	50	18.228	34.256	24.646
75	14.449	34.303	25.553	75	15.998	34.259	25.178				
100	12.830	34.206	25.812	100	15.061	34.241	25.373				
125	12.347	34.196	25.898	125	13.866	34.201	25.598				
150	11.121	34.110	26.060	150	11.949	34.103	25.902				
175	10.348	34.007	26.117	175	10.050	33.920	26.100				
200	6.858	33.725	26.433	200	9.021	33.894	26.249				
250	2.982	33.477	26.671	250	3.410	33.338	26.521				
300	2.808	33.578	26.767	300	2.925	33.473	26.673				
400	3.033	33.762	26.894	400	2.978	33.712	26.859				
500	3.279	33.925	27.001	500	3.261	33.924	27.002				

STATION US14453				STATION US14454				STATION US14455			
LATITUDE 41-37.0 N				LATITUDE 41-38.7 N				LATITUDE 41-40.8 N			
LONGITUI 140-51.4 E				LONGITUI 140-49.3 E				LONGITUI 140-47.4 E			
DEPTH (m) 96				DEPTH (m) 342				DEPTH (m) 224			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	23.566	33.923	22.953	5	24.382	33.865	22.669	5	24.286	33.829	22.670
10	23.307	33.921	23.027	10	24.163	33.901	22.762	10	23.846	33.880	22.839
20	22.948	33.943	23.147	20	23.444	33.896	22.969	20	23.371	33.928	23.014
30	20.247	34.183	24.074	30	22.316	33.983	23.357	30	21.116	34.052	23.741
40	18.547	34.282	24.587	40	19.583	34.085	24.173	40	19.621	34.209	24.258
50	18.082	34.304	24.719	50	17.864	34.215	24.704	50	17.593	34.325	24.854
75	14.813	34.392	25.544	75	14.663	34.256	25.472	75	13.765	34.296	25.692
				100	13.050	34.322	25.858	100	12.811	34.294	25.883
				125	13.050	34.319	25.855	125	11.801	34.270	26.060
				150	12.763	34.304	25.900	150	11.392	34.258	26.127
				175	13.039	34.326	25.863	175	11.222	34.252	26.153
				200	12.951	34.320	25.876	200	10.901	34.242	26.203
				250	12.864	34.321	25.894				
				300	12.580	34.317	25.947				

STATION US14456				STATION US14457				STATION US14458			
LATITUDE 41-42.9 N				LATITUDE 41-43.7 N				LATITUDE 42-50.0 N			
LONGITUI 140-45.1 E				LONGITUI 140-45.1 E				LONGITUI 144-57.6 E			
DEPTH (m) 83				DEPTH (m) 72				DEPTH (m) 103			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	22.841	33.918	23.159	5	24.048	33.907	22.800	5	15.626	33.296	24.521
10	22.730	33.953	23.217	10	23.536	33.892	22.939	10	15.624	33.296	24.521
20	21.788	34.008	23.523	20	22.293	33.975	23.357	20	15.490	33.271	24.532
30	20.235	34.151	24.053	30	20.982	34.104	23.817	30	15.111	33.318	24.651
40	17.705	34.270	24.785	40	18.261	34.254	24.637	40	14.071	33.316	24.871
50	16.804	34.307	25.028	50	15.778	34.312	25.269	50	13.836	33.324	24.926
75	13.536	34.312	25.751					75	9.563	33.195	25.615





Table 2 (Continued)

STATION US14483				STATION US14484				STATION US14485			
LATITUDE 44-18.7 N				LATITUDE 44-13.7 N				LATITUDE 44-08.8 N			
LONGITUI 145-28.4 E				LONGITUI 145-26.4 E				LONGITUI 145-24.1 E			
DEPTH (m) 1540				DEPTH (m) 1578				DEPTH (m) 1479			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	18.118	33.488	24.086	5	18.178	33.430	24.026	5	18.314	33.531	24.070
10	18.116	33.488	24.086	10	18.175	33.432	24.028	10	18.307	33.530	24.071
20	18.088	33.528	24.124	20	17.871	33.630	24.255	20	18.268	33.527	24.079
30	17.917	33.599	24.219	30	16.605	33.605	24.536	30	16.359	33.564	24.561
40	16.658	33.652	24.560	40	16.254	33.660	24.659	40	15.570	33.608	24.773
50	16.111	33.640	24.676	50	15.265	33.643	24.868	50	14.637	33.648	25.008
75	12.298	33.654	25.487	75	12.688	33.695	25.443	75	11.500	33.672	25.651
100	10.619	33.620	25.768	100	9.368	33.604	25.966	100	7.691	33.591	26.212
125	5.205	33.167	26.199	125	3.083	33.008	26.287	125	6.576	33.567	26.346
150	0.868	33.003	26.448	150	0.472	33.019	26.483	150	4.930	33.486	26.483
175	0.353	33.100	26.555	175	0.119	33.098	26.565	175	3.981	33.442	26.549
200	0.185	33.160	26.611	200	-0.041	33.154	26.618	200	3.083	33.443	26.635
250	1.099	33.261	26.641	250	-0.142	33.251	26.701	250	2.167	33.410	26.685
300	0.057	33.305	26.735	300	1.136	33.358	26.717	300	1.427	33.360	26.699
400	1.226	33.475	26.805	400	1.234	33.505	26.828	400	1.112	33.487	26.822
500	1.466	33.655	26.933								
600	1.944	33.887	27.084								
700	2.208	34.063	27.205								
800	2.271	34.154	27.272								
900	2.301	34.239	27.338								

STATION US14486				STATION US14487				STATION US14488			
LATITUDE 44-05.0 N				LATITUDE 43-17.0 N				LATITUDE 43-07.1 N			
LONGITUI 145-20.1 E				LONGITUI 145-45.3 E				LONGITUI 145-30.3 E			
DEPTH (m) 750				DEPTH (m) 33				DEPTH (m) 38			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	18.422	33.570	24.073	5	16.528	33.048	24.126	5	16.333	33.063	24.182
10	18.418	33.569	24.073	10	16.430	33.063	24.161	10	16.120	33.119	24.274
20	18.018	33.594	24.191	20	16.073	33.099	24.269	20	15.717	33.194	24.422
30	16.748	33.565	24.472	30	15.773	33.135	24.364	30	15.114	33.204	24.563
40	15.967	33.593	24.673								
50	15.031	33.608	24.893								
75	11.750	33.695	25.623								
100	8.420	33.618	26.126								
125	6.249	33.509	26.343								
150	4.540	33.457	26.503								
175	3.501	33.436	26.591								
200	3.026	33.439	26.637								
250	1.738	33.412	26.719								
300	1.431	33.404	26.734								
400	1.172	33.480	26.812								

STATION US14489				STATION US14490				STATION US14491			
LATITUDE 42-56.0 N				LATITUDE 42-54.0 N				LATITUDE 42-48.4 N			
LONGITUI 145-16.1 E				LONGITUI 144-54.0 E				LONGITUI 144-39.8 E			
DEPTH (m) 89				DEPTH (m) 63				DEPTH (m) 105			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	15.762	33.246	24.452	5	16.295	33.087	24.209	5	16.189	33.166	24.295
10	15.607	33.261	24.498	10	15.374	32.992	24.343	10	15.944	33.134	24.325
20	14.722	33.231	24.669	20	15.054	33.020	24.435	20	15.487	33.202	24.479
30	14.277	33.270	24.793	30	15.291	33.243	24.554	30	15.354	33.254	24.549
40	13.717	33.302	24.933	40	14.343	33.252	24.765	40	14.738	33.278	24.701
50	12.721	33.290	25.123	50	12.359	33.248	25.160	50	13.783	33.300	24.918
75	7.942	33.167	25.843					75	9.667	33.219	25.616

STATION US14492				STATION US14493				STATION US14494			
LATITUDE 42-53.4 N				LATITUDE 42-48.1 N				LATITUDE 42-42.0 N			
LONGITUI 144-14.9 E				LONGITUI 144-18.1 E				LONGITUI 144-21.6 E			
DEPTH (m) 62				DEPTH (m) 612				DEPTH (m) 658			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	16.713	33.075	24.104	5	15.741	32.818	24.128	5	16.325	33.141	24.244
10	16.399	33.234	24.299	10	16.426	33.194	24.262	10	16.328	33.141	24.244
20	16.084	33.304	24.425	20	15.859	33.283	24.459	20	15.642	33.230	24.467
30	15.796	33.298	24.485	30	15.603	33.303	24.532	30	15.297	33.298	24.595
40	15.327	33.333	24.616	40	14.582	33.313	24.761	40	14.206	33.323	24.848
50	14.169	33.311	24.847	50	13.558	33.294	24.960	50	12.211	33.259	25.197
				75	8.948	33.124	25.657	75	5.351	32.865	25.943
				100	6.359	33.338	26.194	100	4.797	33.247	26.308
				125	5.063	33.370	26.376	125	3.523	33.220	26.417
				150	4.091	33.345	26.460	150	3.358	33.271	26.473
				175	3.043	33.306	26.529	175	3.623	33.380	26.535
				200	1.866	33.276	26.600	200	3.435	33.405	26.572
				250	2.259	33.383	26.656	250	2.469	33.468	26.708
				300	2.629	33.565	26.772	300	2.894	33.578	26.760
				400	2.728	33.699	26.870	400	3.511	33.854	26.923

Table 2 (Continued)

STATION US14495				STATION US14496				STATION US14497			
LATITUDE 42-16.2 N				LATITUDE 41-15.9 N				LATITUDE 41-22.2 N			
LONGITUI 143-34.1 E				LONGITUI 139-49.9 E				LONGITUI 139-54.8 E			
DEPTH (m) 101				DEPTH (m) 860				DEPTH (m) 123			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	16.650	32.911	23.993	5	22.541	33.671	23.056	5	21.854	33.651	23.234
10	16.470	33.081	24.165	10	22.523	33.669	23.060	10	21.793	33.645	23.246
20	14.337	33.180	24.711	20	22.513	33.669	23.063	20	21.732	33.647	23.265
30	11.238	33.185	25.320	30	22.489	33.665	23.067	30	21.244	33.812	23.524
40	10.478	33.221	25.482	40	21.067	33.837	23.591	40	16.297	34.236	25.092
50	8.736	33.159	25.718	50	17.807	34.169	24.683	50	14.244	34.341	25.626
75	6.233	33.327	26.201	75	12.123	34.253	25.985	75	9.337	34.149	26.397
				100	9.104	34.151	26.436	100	5.093	33.982	26.857
				125	7.083	34.068	26.673				
STATION US14498				STATION US14499				STATION US14500			
LATITUDE 41-21.1 N				LATITUDE 41-15.4 N				LATITUDE 41-35.0 N			
LONGITUI 139-43.1 E				LONGITUI 139-46.0 E				LONGITUI 140-53.1 E			
DEPTH (m) 763				DEPTH (m) 1302				DEPTH (m) 38			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.363	33.640	23.360	5	21.599	33.662	23.312	5	21.817	33.859	23.402
10	21.233	33.653	23.406	10	21.526	33.655	23.327	10	21.772	33.865	23.419
20	20.971	33.738	23.541	20	21.407	33.647	23.353	20	21.683	33.875	23.451
30	20.697	33.789	23.654	30	21.397	33.658	23.365	30	21.581	33.884	23.487
40	18.605	33.836	24.231	40	20.533	33.932	23.806				
50	10.474	33.905	26.016	50	16.261	34.244	25.106				
75	6.050	34.007	26.762	75	13.058	34.259	25.808				
100	4.690	34.020	26.933	100	7.169	33.975	26.588				
125	3.418	34.017	27.062	125	4.838	34.013	26.911				
STATION US14501				STATION US14502				STATION US14503			
LATITUDE 41-37.0 N				LATITUDE 41-38.8 N				LATITUDE 41-40.8 N			
LONGITUI 140-51.2 E				LONGITUI 140-49.2 E				LONGITUI 140-47.2 E			
DEPTH (m) 91				DEPTH (m) 348				DEPTH (m) 219			
Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T	Press.	Temp.	Salinity	Sigma-T
5	21.593	33.842	23.451	5	20.947	33.834	23.620	5	22.349	33.796	23.206
10	21.342	33.860	23.533	10	20.886	33.841	23.643	10	22.131	33.837	23.298
20	21.142	33.878	23.602	20	20.772	33.860	23.688	20	21.134	33.920	23.636
30	19.694	34.043	24.112	30	20.477	33.883	23.784	30	20.839	34.059	23.821
40	18.683	34.204	24.493	40	20.060	33.926	23.927	40	19.410	34.141	24.260
50	17.659	34.317	24.832	50	17.935	34.075	24.580	50	15.462	34.234	25.279
75	15.274	34.360	25.418	75	15.044	34.365	25.473	75	13.780	34.278	25.675
				100	12.671	34.287	25.906	100	12.284	34.286	25.980
				125	11.784	34.254	26.050	125	11.751	34.262	26.063
				150	10.935	34.239	26.194	150	11.153	34.241	26.157
				175	10.386	34.228	26.283	175	10.449	34.240	26.281
				200	10.185	34.217	26.309	200	10.037	34.215	26.332
				250	9.923	34.202	26.342				
				300	9.705	34.194	26.372				
STATION US14504											
LATITUDE 41-42.9 N											
LONGITUI 140-44.9 E											
DEPTH (m) 83											
Press.	Temp.	Salinity	Sigma-T								
5	22.402	33.808	23.200								
10	22.403	33.807	23.198								
20	20.992	33.796	23.580								
30	19.538	33.915	24.054								
40	17.138	34.048	24.751								
50	15.911	34.163	25.124								
75	11.900	34.217	26.000								