



Title	2.THE " USHIO MARU " CRUISE 354, CRUISE 355, CRUISE 356 IN FEBRUARY - MARCH 2016
Citation	海洋調査漁業試験要報, 60, 61-72
Issue Date	2020-03-31
Doc URL	http://hdl.handle.net/2115/77714
Type	bulletin (dataset)
File Information	Data.Rec.Oceanogr.Obs.Expl.Fish.60.61.pdf



[Instructions for use](#)

THE " USHIO MARU "

CRUISE 354

CRUISE 355

CRUISE 356

IN FEBRUARY 2016

IN MARCH 2016

1.Cruise Itinerary

1. Cruise Itinerary

Cruise 354

Departure from Hakodate	Feb. 16, 2016
Start hydrographic research (US16092)	16
Finish hydrographic research (US16102)	16
Return to Hakodate	17
Total coverage 64.1 miles	

Cruise 355

Departure from Hakodate	Feb. 22, 2016
Start hydrographic research (US16103)	22
Arrival at Hakodate	23
Depart from Hakodate	24
Arrival at Muroran	25
Depart from and Arrival at Muroran	26
Depart from Muroran	27
Finish hydrographic research (US16140)	27
Return to Hakodate	28
Total coverage 419.1 miles	

Cruise 356

Departure from Hakodate	Mar. 4, 2016
Start hydrographic research (US16141)	4
Arrival at Usujiri	5
Depart from Usujiri	7
Finish hydrographic research (US16164)	8
Arrival at Usujiri	8
Depart from Usujiri	9
Return to Hakodate	10
Total coverage 399.0 miles	

2. Data on Temperature, Salinity and Computed Dynamic Depth Anomaly

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-19Plus and SBE-19). Dynamic computations were made using a desk-top computer aboard the “Ushio Maru”.

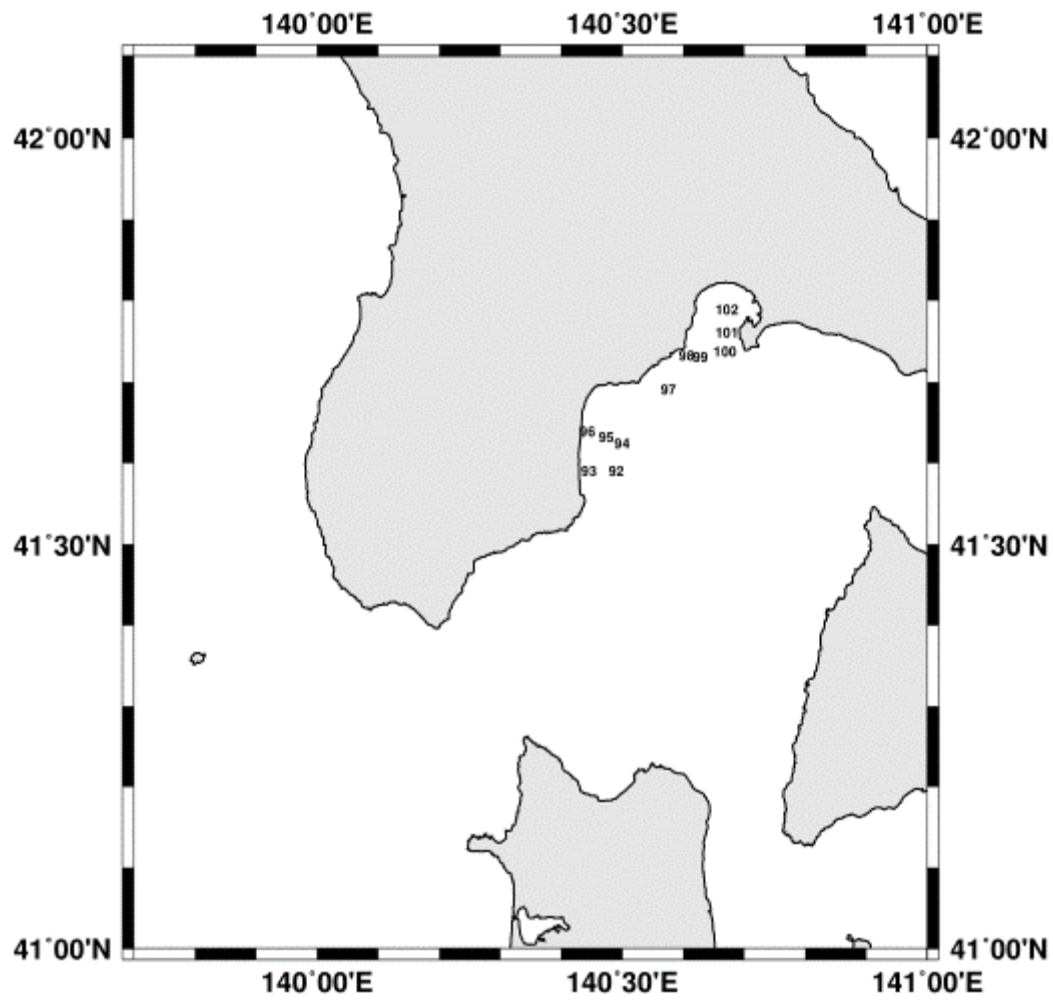


Figure 1. Oceanographic stations (Cruise 354)

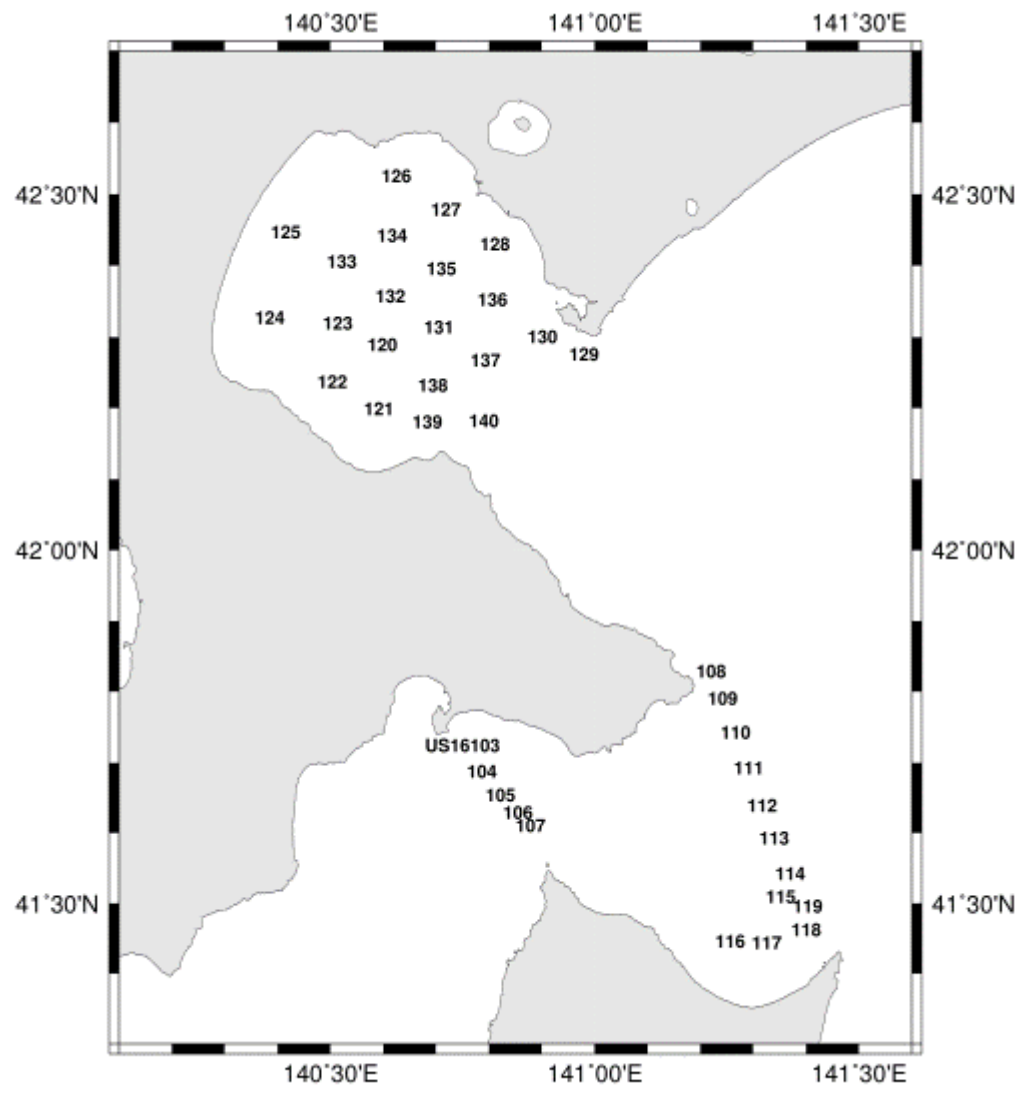


Figure 2. Oceanographic stations (Cruise 355)

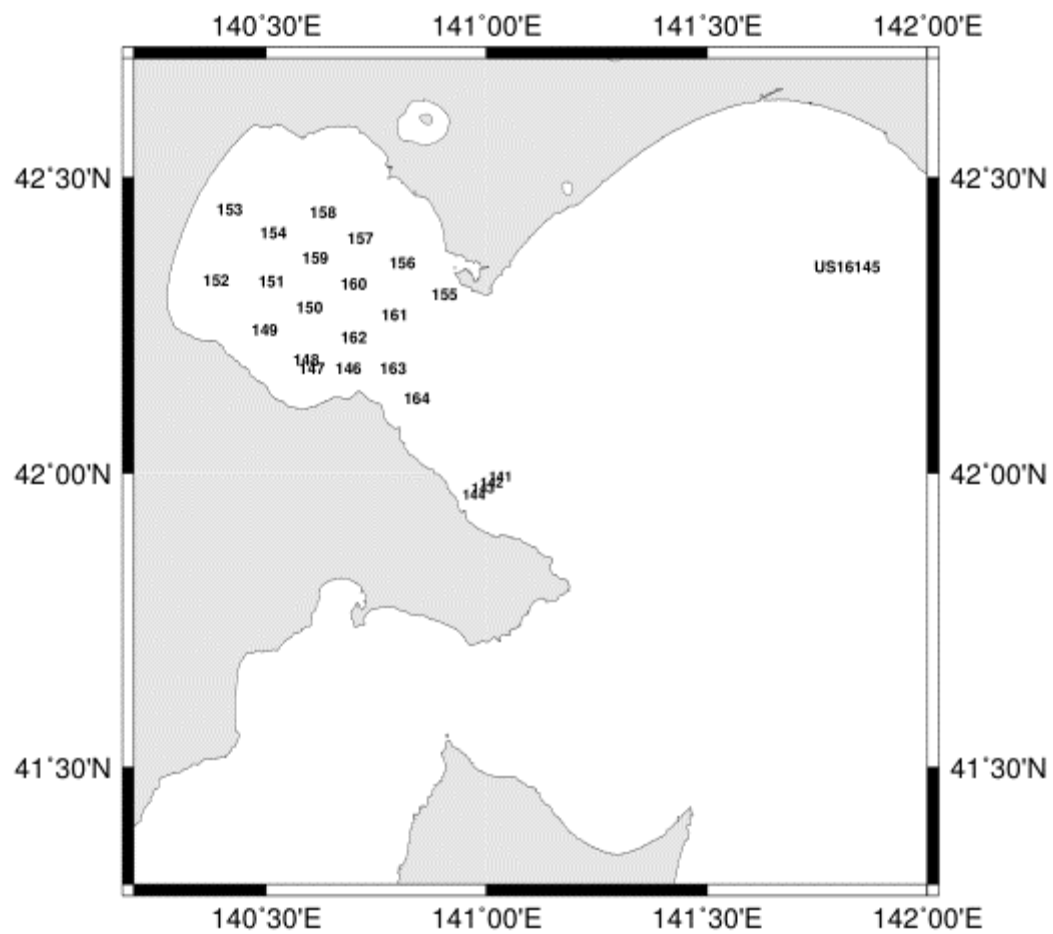


Figure 3. Oceanographic stations (Cruise 356)

Table 1. List of Oceanographic Station

Cruise 354												
station	Lat. (N)°	Long. (E)°	Date	Hour	Depth (m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.	Bar (hPa)
US16092	41-35.1	140-29.4	2/16	1020-1023	34	SW-1	SSW-2	SW-3	-2.7	8.5	s	1010.6
US16093	41-35.1	140-26.7	2/16	1048-1050	12	West-1	SSE-2	West-3	-2.8	7.6	s	1010.7
US16094	41-37.1	140-30.0	2/16	1130-1136	32	West-1	SSE-2	West-4	-1.6	8.2	s	1010.2
US16095	41-37.6	140-28.4	2/16	1204-1208	22	WSW-3	South-1	WSW-5	-1.6	8.0	s	1009.7
US16096	41-38.0	140-26.6	2/16	1220-1225	15	West-3	South-1	West-5	-3.2	7.6	s	1009.4
US16097	41-41.1	140-34.5	2/16	1330-1335	42	West-2	South-2	West-3	-0.7	8.5	c	1009.0
US16098	41-43.6	140-36.3	2/16	1358-1402	32	West-1	South-2	West-3	-0.8	8.5	s	1008.3
US16099	41-43.5	140-37.7	2/16	1421-1427	56	West-2	SSW-2	West-3	-1.3	8.4	bc	1008.6
US16100	41-43.9	140-40.1	2/16	1503-1509	61	West-1	SSW-2	West-4	-1.5	8.2	s	1008.6
US16101	41-45.3	140-40.3	2/16	1531-1536	53	WSW-2	SSW-2	WSW-4	-0.7	7.7	s	1008.6
US16102	41-47.0	140-40.3	2/16	1601-1605	20	SW-1	SSW-2	SW-3	-1.3	7.8	bc	1008.6

Table 1. List of Oceanographic Station (continued)

Cruise 355												
station	Lat. (N)°	Long. (E)°	Date	Hour	Depth (m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.	Bar (hPa)
US16103	41-42.9	140-45.0	2/22	1817-1827	84	West-2	SW-1	West-4	0.2	8.6	o	1031.1
US16104	41-40.7	140-47.2	2/22	1847-1907	225	West-2	SW-1	West-4	0.4	9.6	o	1031.2
US16105	41-38.7	140-49.3	2/22	1925-1946	343	West-2	SW-1	West-4	0.9	9.6	bc	1031.1
US16106	41-37.2	140-51.3	2/22	2042-2052	103	West-2	SW-1	West-4	1.0	9.6	bc	1030.8
US16107	41-36.1	140-52.7	2/22	2105-2111	49	West-2	SW-1	West-4	1.3	9.5	bc	1030.7
US16108	41-49.2	141-13.2	2/22	2302-2318	170	West-2	NW-1	West-4	0.5	5.7	bc	1029.6
US16109	41-46.9	141-14.5	2/22	2357-0015	199	NW-1	NW-1	NW-2	0.2	5.7	bc	1029.2
US16110	41-44.0	141-16.0	2/23	0037-0056	228	West-1	West-1	West-2	0.5	6.8	bc	1028.8
US16111	41-41.0	141-17.5	2/23	0118-0138	232	SSW-1	West-1	SSW-4	1.5	8.4	bc	1028.3
US16112	41-37.8	141-19.0	2/23	0202-0221	215	SW-2	SSW-1	SW-5	2.5	8.9	bc	1027.8
US16113	41-35.0	141-20.4	2/23	0245-0310	310	SSW-2	SSW-1	SSW-4	2.2	9.1	bc	1026.7
US16114	41-32.0	141-22.2	2/23	0334-0354	254	SSW-1	SSW-1	SSW-4	2.0	8.8	bc	1026.5
US16115	41-30.0	141-21.1	2/23	0450-0510	224	South-3	SSE-1	South-5	2.4	9.3	o	1025.0
US16116	41-26.2	141-15.4	2/23	0849-0857	77	South-3	South-1	South-5	3.0	9.6	bc	1022.1
US16117	41-26.1	141-19.5	2/23	0949-0956	73	SSW-3	South-1	SSW-5	4.2	9.5	c	1021.6
US16118	41-27.2	141-24.0	2/23	1021-1026	48	SSW-2	South-1	SSW-4	4.2	9.4	c	1021.1
US16119	41-29.2	141-24.2	2/23	1043-1051	83	South-2	South-1	South-4	4.4	9.5	c	1021.0
US16120	42-16.8	140-35.9	2/25	0623-0628	91	West-3	WNW-1	West-5	-3.7	4.3	c	1026.8
US16121	42-11.4	140-35.5	2/25	0801-0806	82	WSW-3	West-1	WSW-5	-3.6	4.1	bc	1026.7
US16122	42-13.7	140-30.2	2/25	0910-0916	77	West-1	West-1	West-3	-2.9	4.4	bc	1026.7
US16123	42-18.6	140-30.8	2/25	1011-1018	92	West-2	West-1	West-4	-2.6	4.1	s	1026.6
US16124	42-19.1	140-23.1	2/25	1111-1113	54	West-2	West-1	West-5	-2.7	3.9	s	1026.3
US16125	42-26.3	140-24.9	2/25	1213-1216	59	West-2	West-1	West-5	-3.6	4.2	s	1025.2
US16126	42-31.0	140-37.5	2/25	1329-1333	62	West-1	NW-1	West-4	-2.1	3.7	s	1024.7
US16127	42-28.2	140-43.1	2/25	1415-1418	60	WNW-2	SW-1	WNW-4	-2.9	3.9	s	1024.3
US16128	42-25.3	140-48.7	2/25	1500-1504	44	West-3	WSW-2	West-5	-2.0	5.3	c	1024.3
US16129	42-16.0	140-58.8	2/26	0651-0655	64	WNW-2	West-1	WNW-6	-2.6	4.0	bc	1023.6
US16130	42-17.5	140-54.1	2/26	0731-0734	57	WNW-3	West-2	WNW-5	-2.1	4.4	bc	1023.4
US16131	42-18.3	140-42.3	2/26	0937-0941	63	West-3	West-1	West-5	-2.0	4.7	bc	1024.1
US16132	42-20.9	140-36.8	2/26	1020-1025	86	West-3	West-1	West-5	-2.1	4.2	bc	1014.1
US16133	42-23.8	140-31.3	2/26	1109-1114	95	West-3	West-1	West-5	-2.0	3.9	bc	1024.1
US16134	42-26.0	140-37.0	2/26	1155-1200	83	West-3	West-1	West-4	-1.0	4.1	bc	1024.0
US16135	42-23.2	140-42.6	2/26	1241-1245	61	West-2	West-1	West-5	-1.9	4.6	bc	1023.2
US16136	42-20.6	140-48.4	2/26	1226-1231	55	West-2	West-1	West-5	-1.8	4.9	bc	1023.2
US16137	42-15.5	140-47.6	2/27	1502-1506	71	WNW-3	West-3	WNW-6	-0.8	4.8	bc	1026.1
US16138	42-13.4	140-41.6	2/27	1547-1551	89	West-2	West-2	West-5	-1.2	4.1	bc	1027.0
US16139	42-10.3	140-41.0	2/27	1627-1631	86	West-1	West-1	West-4	-1.4	4.0	bc	1027.3
US16140	42-10.4	140-47.4	2/27	1712-1717	92	NW-1	NW-1	NW-4	-0.7	4.7	bc	1027.2

Table 1. List of Oceanographic Station (continued)

Cruise 356												
station	Lat. (N)°	Long. (E)°	Date	Hour	Depth (m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.	Bar (hPa)
US16141	41-59.2	141-01.9	3/4	1237-1242	101	NNW-1	East-1	NNW-4	1.7	5.2	bc	1034.0
US16142	41-58.6	141-00.7	3/4	1251-1256	94	NNW-2	East-1	NNW-4	2.3	5.1	bc	1033.6
US16143	41-58.0	140-59.5	3/4	1304-1308	86	NNW-2	East-1	NNW-3	2.5	5.6	bc	1033.6
US16144	41-57.4	140-58.3	3/4	1318-1322	79	NNW-2	East-1	NNW-3	2.8	5.6	bc	1033.6
US16145	42-20.4	140-48.7	3/4	2111-2125	312	NNW-3	NNW-1	NNW-5	0.6	3.7	bc	1035.7
US16146	42-10.1	140-41.2	3/7	0913-0917	84	NW-3	ENE-1	NW-5	5.1	4.1	bc	1021.6
US16147	42-10.1	140-36.2	3/7	0953-0957	75	NW-2	East-1	NW-4	5.0	4.0	bc	1021.7
US16148	42-11.0	140-35.4	3/7	1020-1025	80	NW-2	East-1	NW-5	5.5	4.0	bc	1022.1
US16149	42-14.0	140-29.8	3/7	1135-1140	77	NW-1	East-1	NW-4	6.0	4.1	bc	1021.8
US16150	42-16.3	140-35.9	3/7	1235-1240	92	NW-1	NNW-1	NW-4	7.4	4.3	bc	1021.6
US16151	42-18.9	140-30.7	3/7	1414-1419	93	WNW-2	West-1	WNW-5	6.4	4.4	bc	1021.1
US16152	42-19.0	140-23.2	3/7	1507-1512	55	WNW-2	WNW-1	WNW-5	5.6	4.1	c	1021.3
US16153	42-26.2	140-25.0	3/7	1607-1611	61	WNW-2	ESE-1	West-3	6.0	4.1	o	1021.6
US16154	42-23.8	140-31.0	3/7	1652-1656	95	WNW-1	WNW-1	WNW-3	5.6	4.2	o	1021.7
US16155	42-17.6	140-54.3	3/8	0613-0616	56	East-2	East-1	East-3	3.7	3.7	o	1015.6
US16156	42-20.8	140-48.5	3/8	0716-0720	52	Calm	East-1	Calm	3.7	3.9	c	1015.7
US16157	42-23.3	140-42.8	3/8	0800-0804	60	NNE-1	East-1	NNE-2	3.7	4.3	o	1014.6
US16158	42-25.9	140-37.7	3/8	0843-0848	82	Calm	East-1	Calm	4.9	4.6	o	1014.6
US16159	42-21.3	140-36.7	3/8	0931-0936	87	ESE-2	ESE-1	ESE-4	5.0	4.0	c	1014.1
US16160	42-18.7	140-41.9	3/8	1017-1023	70	East-2	ESE-1	East-4	5.6	4.5	c	1012.6
US16161	42-15.5	140-47.5	3/8	1110-1114	71	East-2	ESE-1	East-4	5.8	4.6	c	1012.0
US16162	42-13.3	140-41.9	3/8	1201-1206	89	ESE-1	ESE-1	ESE-3	7.8	4.4	c	1012.1
US16163	42-10.1	140-47.3	3/8	1252-1257	95	calm	East-1	calm	8.3	4.5	c	1010.6
US16164	42-07.1	140-50.5	3/8	1336-1340	73	NW-1	East-2	NW-3	8.8	4.6	bc	1009.4

Table 2. Oceanographic data

STATION US16092			
LATITUDE	41-35.1	N	
LONGITUDE	140-29.4	E	
DEPTH (m)	34		
Press.	Temp.	Salinity	Sigma-T
5	8.7681	33.8869	26.283
10	8.8007	33.8908	26.281
20	8.8065	33.8889	26.2785
30	8.8335	33.893	26.2775
31	8.835	33.893	26.2773

STATION US16093			
LATITUDE	41-35.1	N	
LONGITUDE	140-26.7	E	
DEPTH (m)	12		
Press.	Temp.	Salinity	Sigma-T
5	8.6991	33.8331	26.2515
10	8.7978	33.854	26.2526
11	8.7776	33.8465	26.2498

STATION US16094			
LATITUDE	41-37.1	N	
LONGITUDE	140-30.0	E	
DEPTH (m)	32		
Press.	Temp.	Salinity	Sigma-T
5	8.6301	33.8408	26.2682
10	8.6413	33.8433	26.2685
20	8.6376	33.8416	26.2678
30	8.6686	33.8497	26.2693
32	8.6692	33.8499	26.2694

STATION US16095			
LATITUDE	41-37.6	N	
LONGITUDE	140-28.4	E	
DEPTH (m)	22		
Press.	Temp.	Salinity	Sigma-T
5	8.2563	33.7279	26.2367
10	8.3882	33.7671	26.2475
20	8.6097	33.812	26.2488
21	8.6064	33.8108	26.2484

STATION US16096			
LATITUDE	41-38.0	N	
LONGITUDE	140-26.6	E	
DEPTH (m)	15		
Press.	Temp.	Salinity	Sigma-T
5	8.2643	33.6717	26.1913
10	8.3912	33.7168	26.2076
15	8.482	33.7626	26.2297

STATION US16097			
LATITUDE	41-41.1	N	
LONGITUDE	140-34.5	E	
DEPTH (m)	42		
Press.	Temp.	Salinity	Sigma-T
5	8.8411	33.9024	26.2837
10	8.8433	33.9024	26.2834
20	8.8464	33.9016	26.2822
30	8.847	33.9022	26.2826
40	8.8588	33.9614	26.3272
40	8.8588	33.9614	26.3272

STATION US16098			
LATITUDE	41-43.6	N	
LONGITUDE	140-36.3	E	
DEPTH (m)	32		
Press.	Temp.	Salinity	Sigma-T
5	7.9642	33.4335	26.0489
10	8.8185	33.7991	26.2063
20	9.0195	33.9583	26.2993
30	8.9062	33.9625	26.3205
39	8.8664	33.9659	26.3295

STATION US16099			
LATITUDE	41-43.5	N	
LONGITUDE	140-37.7	E	
DEPTH (m)	56		
Press.	Temp.	Salinity	Sigma-T
5	7.8213	33.4582	26.0891
10	8.3221	33.6356	26.1543
18	8.9517	33.9532	26.306

STATION US16100			
LATITUDE	41-43.9	N	
LONGITUDE	140-40.1	E	
DEPTH (m)	61		
Press.	Temp.	Salinity	Sigma-T
5	8.0753	33.5644	26.1353
10	9.0011	33.9325	26.2819
20	9.0376	33.9625	26.2997
30	8.9842	33.9645	26.3098
40	8.8407	33.9638	26.3319
50	8.6731	33.9729	26.3651
59	8.5606	33.9834	26.3907

STATION US16101			
LATITUDE	41-45.3	N	
LONGITUDE	140-40.3	E	
DEPTH (m)	53		
Press.	Temp.	Salinity	Sigma-T
5	7.9642	33.4335	26.0489
10	8.8185	33.7991	26.2063
20	9.0195	33.9583	26.2993
30	8.9062	33.9625	26.3205
39	8.8664	33.9659	26.3295

STATION US16102			
LATITUDE	41-47.0	N	
LONGITUDE	140-40.3	E	
DEPTH (m)	20		
Press.	Temp.	Salinity	Sigma-T
5	7.8213	33.4582	26.0891
10	8.3221	33.6356	26.1543
18	8.9517	33.9532	26.306

STATION US16103			
LATITUDE	41-42.9	N	
LONGITUDE	140-45.0	E	
DEPTH (m)	84		
Press.	Temp.	Salinity	Sigma-T
1	9.981	33.9222	26.1136
2	9.995	33.9224	26.1114
3	10.0014	33.9222	26.1101
4	10.0027	33.922	26.1097
5	9.9993	33.9223	26.1106
10	9.9877	33.923	26.113
20	9.9215	33.9284	26.1284
30	9.7694	33.9327	26.1572
40	9.7695	33.9341	26.1583
50	9.7017	33.9317	26.1677
70	9.2337	33.9116	26.2285

STATION US16104			
LATITUDE	41-40.7	N	
LONGITUDE	140-47.2	E	
DEPTH (m)	225		
Press.	Temp.	Salinity	Sigma-T
5	9.9594	33.9206	26.1159
10	9.964	33.9202	26.1149
20	9.9652	33.9199	26.1144
30	9.9661	33.9198	26.1142
40	9.9544	33.9202	26.1165
50	9.9429	33.9207	26.1188
75	9.8419	33.9292	26.1424
100	9.779	33.9341	26.1567
125	9.6859	33.9398	26.1766
150	9.6035	33.9423	26.1923
175	9.239	33.9577	26.2637
200	9.0924	33.9706	26.2973
211	9.1003	33.9684	26.2943

STATION US16105			
LATITUDE	41-38.7	N	
LONGITUDE	140-49.3	E	
DEPTH (m)	343		
Press.	Temp.	Salinity	Sigma-T
5	9.8789	33.8452	26.0706
10	9.9197	33.9089	26.1135
20	9.9248	33.9097	26.1133
30	9.9242	33.9095	26.1132
40	9.9178	33.9094	26.1142
50	9.9136	33.9095	26.115
75	9.8271	33.9128	26.132
100	9.8823	33.9389	26.1432
125	9.891	33.9419	26.1441
150	9.8207	33.9469	26.1598
175	9.6029	33.9414	26.1917
200	9.5685	33.9402	26.1964
250	9.5105	33.9446	26.2094
300	9.513	33.9489	26.2123
320	9.4162	33.9599	26.2367

STATION US16105-2			
LATITUDE	41-38.6	N	
LONGITUDE	140-49.7	E	
DEPTH (m)	318		
Press.	Temp.	Salinity	Sigma-T
5	9.8839	33.915	26.1243
10	9.8933	33.9126	26.1208
20	9.8878	33.9102	26.1199
30	9.8874	33.9104	26.1201
40	9.8832	33.9097	26.1202
50	9.884	33.9095	26.12
75	9.8681	33.9085	26.1218
100	9.8046	33.9297	26.149
125	9.8347	33.9473	26.1578
150	9.8349	33.9495	26.1594
175	9.6311	33.9402	26.186
200	9.5969	33.9417	26.1929
250	9.5319	33.9413	26.2032
291	9.5502	33.9442	26.2026

STATION US16106			
LATITUDE 41-37.2 N			
LONGITUE 140-51.3 E			
DEPTH (m) 103			
Press.	Temp.	Salinity	Sigma-T
5	9.8682	33.9205	26.1312
10	9.8532	33.9143	26.1289
20	9.8317	33.9109	26.1298
30	9.8409	33.9111	26.1285
40	9.8354	33.9105	26.1289
50	9.8361	33.9086	26.1273
75	9.8313	33.9081	26.1277
97	9.8354	33.9076	26.1267

STATION US16107			
LATITUDE 41-36.1 N			
LONGITUE 140-52.7 E			
DEPTH (m) 49			
Press.	Temp.	Salinity	Sigma-T
5	9.8145	33.6984	25.9667
10	9.8916	33.9077	26.1173
20	9.8756	33.9176	26.1277
30	9.7649	33.9286	26.1548
40	9.7078	33.9364	26.1704

STATION US16108			
LATITUDE 41-49.2 N			
LONGITUE 141-13.2 E			
DEPTH (m) 170			
Press.	Temp.	Salinity	Sigma-T
5	6.1073	33.4129	26.2852
10	6.1103	33.4131	26.285
20	6.1188	33.4146	26.2851
30	6.1118	33.4125	26.2843
40	6.1156	33.4135	26.2846
50	6.1443	33.4193	26.2856
75	6.2115	33.4319	26.2871
100	6.6531	33.5228	26.3016
125	6.3042	33.4735	26.3081
150	6.2193	33.472	26.3177
160	6.2101	33.471	26.3181

STATION US16108-2			
LATITUDE 41-49.0 N			
LONGITUE 141-13.3 E			
DEPTH (m) 170			
Press.	Temp.	Salinity	Sigma-T
5	6.0846	33.4118	26.2871
10	6.116	33.4129	26.2841
20	6.1123	33.4117	26.2836
30	6.1169	33.4117	26.283
40	6.1121	33.4105	26.2827
50	6.1121	33.4101	26.2824
75	6.1153	33.4119	26.2834
100	6.3332	33.4609	26.2944
125	6.3753	33.4774	26.302
150	6.2708	33.48	26.3175
160	6.2503	33.4799	26.3201

STATION US16109			
LATITUDE 41-46.9 N			
LONGITUE 141-14.5 E			
DEPTH (m) 199			
Press.	Temp.	Salinity	Sigma-T
5	6.135	33.4179	26.2857
10	6.139	33.4174	26.2848
20	6.1406	33.4175	26.2847
30	6.1458	33.4187	26.2849
40	6.1538	33.4198	26.2848
50	6.1566	33.4199	26.2846
75	6.1637	33.4206	26.2842
100	6.1565	33.4197	26.2844
125	6.1752	33.4232	26.2848
150	6.302	33.4553	26.294
175	6.4307	33.5285	26.3352
192	6.4423	33.5395	26.3424

STATION US16110			
LATITUDE 41-44.0 N			
LONGITUE 141-16.0 E			
DEPTH (m) 228			
Press.	Temp.	Salinity	Sigma-T
5	7.6731	33.7081	26.3069
10	7.551	33.6762	26.2992
20	7.6667	33.7023	26.3032
30	7.713	33.7097	26.3024
40	7.7769	33.7237	26.3041
50	7.7345	33.7132	26.302
75	7.767	33.7212	26.3036
100	7.6422	33.6946	26.3007
125	7.9298	33.7499	26.3024
150	8.1008	33.7866	26.306
175	6.8915	33.6427	26.3643
200	6.4931	33.6343	26.4105
215	5.9091	33.5856	26.4463

STATION US16111			
LATITUDE 41-41.0 N			
LONGITUE 141-17.5 E			
DEPTH (m) 232			
Press.	Temp.	Salinity	Sigma-T
5	8.8956	33.9363	26.3017
10	8.8875	33.9336	26.3009
20	8.8881	33.9333	26.3005
30	8.8913	33.9335	26.3002
40	8.8811	33.9326	26.3011
50	8.8829	33.9327	26.3008
75	8.8848	33.9329	26.3007
100	8.8813	33.9326	26.301
125	8.8151	33.9249	26.3054
150	8.2305	33.881	26.3606
175	7.428	33.8233	26.4323
200	5.461	33.6364	26.5408
220	5.3964	33.6423	26.5531

STATION US16112			
LATITUDE 41-37.8 N			
LONGITUE 141-19.0 E			
DEPTH (m) 215			
Press.	Temp.	Salinity	Sigma-T
5	9.3765	33.9273	26.2177
10	9.388	33.9267	26.2154
20	9.3931	33.9265	26.2144
30	9.389	33.9252	26.214
40	9.3804	33.9243	26.2147
50	9.3676	33.923	26.2158
75	9.0191	33.8961	26.2507
100	8.6746	33.8762	26.2891
125	8.3939	33.8622	26.3212
150	7.9896	33.8321	26.3581
175	6.8713	33.7812	26.4762
200	4.9367	33.6486	26.611
205	4.866	33.6545	26.6236

STATION US16113			
LATITUDE 41-35.0 N			
LONGITUE 141-20.4 E			
DEPTH (m) 310			
Press.	Temp.	Salinity	Sigma-T
5	9.413	33.9308	26.2145
10	9.4161	33.9298	26.2132
20	9.4144	33.93	26.2136
30	9.4183	33.9296	26.2127
40	9.4097	33.9291	26.2137
50	9.4164	33.9284	26.2121
75	9.4208	33.9286	26.2115
100	9.166	33.9092	26.2375
125	9.0551	33.9024	26.2499
150	8.9504	33.8945	26.2603
175	8.8978	33.8929	26.2673
200	8.4884	33.8626	26.3071
250	7.9116	33.8302	26.3681
300	5.4725	33.7094	26.5971
301	5.4634	33.7148	26.6026

STATION US16114			
LATITUDE 41-32.0 N			
LONGITUE 141-22.2 E			
DEPTH (m) 254			
Press.	Temp.	Salinity	Sigma-T
5	9.5113	33.5264	25.8823
10	9.6945	33.8909	26.137
20	9.7055	33.9292	26.1651
30	9.7037	33.9302	26.1662
40	9.6841	33.9281	26.1678
50	9.6263	33.9233	26.1736
75	9.5678	33.9207	26.1813
100	9.6036	33.9354	26.1868
125	9.3404	33.903	26.2045
150	9.3466	33.924	26.2199
175	9.2913	33.9202	26.2259
200	8.6491	33.8616	26.2816
241	8.5015	33.8727	26.313

STATION US16114-2			
LATITUDE 41-32.4 N			
LONGITUE 141-23.0 E			
DEPTH (m) 235			
Press.	Temp.	Salinity	Sigma-T
5	9.6028	33.7082	26.0094
10	9.6793	33.9127	26.1566
20	9.6824	33.9257	26.1662
30	9.6648	33.9254	26.1689
40	9.6196	33.9273	26.1779
50	9.602	33.9301	26.183
75	9.5992	33.9296	26.1831
100	9.2792	33.8952	26.2084
125	9.2975	33.9152	26.2211
150	9.2532	33.9153	26.2283
175	8.7138	33.8607	26.271
200	8.5863	33.877	26.3033
215	8.5646	33.8767	26.3065

STATION US16115			
LATITUDE 41-30.0 N			
LONGITUE 141-21.1 E			
DEPTH (m) 224			
Press.	Temp.	Salinity	Sigma-T
5	9.6071	33.5386	25.8761
10	9.6952	33.862	26.1143
20	9.7176	33.9286	26.1627
30	9.7119	33.9272	26.1625
40	9.7108	33.9276	26.1629
50	9.722	33.9291	26.1624
75	9.6981	33.9268	26.1645
100	9.6652	33.9237	26.1675
125	9.6616	33.9263	26.1702
150	9.663	33.929	26.1721
175	9.6516	33.9282	26.1733
200	9.6594	33.924	26.1687
209	9.6606	33.9228	26.1676

STATION US16116			
LATITUDE 41-26.2 N			
LONGITUE 141-15.4 E			
DEPTH (m) 77			
Press.	Temp.	Salinity	Sigma-T
5	9.8687	33.9067	26.1203
10	9.8737	33.9193	26.1294
20	9.8726	33.9194	26.1296
30	9.8783	33.9193	26.1286
40	9.8801	33.9187	26.1278
50	9.8765	33.9181	26.1279
66	9.8264	33.916	26.1347

STATION US16116-2			
LATITUDE 41-26.2 N			
LONGITUE 141-15.5 E			
DEPTH (m) 78			
Press.	Temp.	Salinity	Sigma-T
5	9.8814	33.9201	26.1287
10	9.8865	33.919	26.127
20	9.8864	33.9193	26.1272
30	9.8831	33.9192	26.1277
40	9.8628	33.9174	26.1296
50	9.8512	33.9166	26.131
64	9.8163	33.9141	26.1349

STATION US16117			
LATITUDE 41-26.1 N			
LONGITUE 141-19.5 E			
DEPTH (m) 73			
Press.	Temp.	Salinity	Sigma-T
5	9.7932	33.9204	26.1437
10	9.7997	33.918	26.1407
20	9.7924	33.9154	26.1399
30	9.7905	33.915	26.14
40	9.7913	33.9152	26.1399
50	9.7823	33.9151	26.1413
60	9.725	33.9131	26.1493

STATION US16118			
LATITUDE 41-27.2 N			
LONGITUE 141-24.0 E			
DEPTH (m) 48			
Press.	Temp.	Salinity	Sigma-T
5	9.7514	33.8531	26.098
10	9.8036	33.9209	26.1424
20	9.8042	33.9198	26.1414
30	9.8088	33.9205	26.1412
35	9.7701	33.9162	26.1442

STATION US16119			
LATITUDE 41-29.2 N			
LONGITUE 141-24.2 E			
DEPTH (m) 83			
Press.	Temp.	Salinity	Sigma-T
5	9.8119	33.9197	26.14
10	9.827	33.9284	26.1442
20	9.8035	33.9265	26.1467
30	9.7898	33.9262	26.1487
40	9.7844	33.9264	26.1498
50	9.7865	33.9265	26.1495
70	9.7825	33.927	26.1506

STATION US16120			
LATITUDE 42-16.8 N			
LONGITUE 140-35.9 E			
DEPTH (m) 91			
Press.	Temp.	Salinity	Sigma-T
5	4.7527	33.5115	26.5227
10	4.767	33.5117	26.5213
20	4.7814	33.5184	26.5251
30	4.6135	33.6126	26.6181
40	4.732	33.6642	26.6462
50	4.7109	33.6599	26.6451
75	4.8008	33.6779	26.6494
90	4.8949	33.6949	26.6526

STATION US16121			
LATITUDE 42-11.4 N			
LONGITUE 140-35.5 E			
DEPTH (m) 82			
Press.	Temp.	Salinity	Sigma-T
5	4.5053	33.6351	26.6477
10	4.5078	33.6341	26.6467
20	4.5149	33.6345	26.6462
30	4.5128	33.6346	26.6465
40	4.5139	33.6345	26.6463
50	4.5139	33.6343	26.6462
75	4.5227	33.6383	26.6484
80	4.5214	33.6385	26.6487

STATION US16122			
LATITUDE 42-13.7 N			
LONGITUE 140-30.2 E			
DEPTH (m) 77			
Press.	Temp.	Salinity	Sigma-T
5	4.5238	33.6115	26.627
10	4.503	33.6135	26.6308
20	4.5056	33.6134	26.6304
30	4.5064	33.6133	26.6303
40	4.5005	33.6134	26.631
50	4.5008	33.6136	26.6312
75	4.5004	33.616	26.6331
75	4.5004	33.616	26.6331

STATION US16123			
LATITUDE 42-18.6 N			
LONGITUE 140-30.8 E			
DEPTH (m) 92			
Press.	Temp.	Salinity	Sigma-T
5	4.5092	33.6076	26.6255
10	4.5147	33.6071	26.6245
20	4.5219	33.6084	26.6248
30	4.5319	33.6106	26.6254
40	4.6197	33.627	26.629
50	4.6355	33.6327	26.6317
75	4.9807	33.7061	26.6517
90	5.1324	33.7369	26.6587

STATION US16124			
LATITUDE 42-19.1 N			
LONGITUE 140-23.1 E			
DEPTH (m) 54			
Press.	Temp.	Salinity	Sigma-T
5	4.4736	33.6117	26.6326
10	4.4763	33.6126	26.6329
20	4.4823	33.6144	26.6338
30	4.4816	33.6139	26.6334
40	4.4834	33.6142	26.6335
50	4.4847	33.6144	26.6335
53	4.4854	33.6146	26.6336

STATION US16125			
LATITUDE 42-26.3 N			
LONGITUE 140-24.9 E			
DEPTH (m) 59			
Press.	Temp.	Salinity	Sigma-T
5	4.3753	33.5738	26.6129
10	4.3902	33.5727	26.6104
20	4.4727	33.5892	26.6148
30	4.5464	33.6031	26.6179
40	4.7001	33.6341	26.6258
50	5.0357	33.706	26.6453
56	5.0912	33.7145	26.6457

STATION US16126			
LATITUDE 42-31.0 N			
LONGITUE 140-37.5 E			
DEPTH (m) 62			
Press.	Temp.	Salinity	Sigma-T
5	4.284	33.4099	26.4923
10	4.3666	33.4312	26.5005
20	4.6749	33.4972	26.5199
30	4.7561	33.5421	26.5467
36	4.8885	33.6289	26.6008

STATION US16127			
LATITUDE 42-28.2 N			
LONGITUE 140-43.1 E			
DEPTH (m) 60			
Press.	Temp.	Salinity	Sigma-T
5	4.4475	33.454	26.5102
10	4.6101	33.5081	26.5356
20	4.576	33.5204	26.5491
30	4.5547	33.5243	26.5545
40	4.5745	33.5406	26.5653
50	4.6352	33.5727	26.5842
59	4.6578	33.59	26.5955

STATION US16128			
LATITUDE 42-25.3 N			
LONGITUE 140-48.7 E			
DEPTH (m) 44			
Press.	Temp.	Salinity	Sigma-T
5	5.5338	33.5255	26.4443
10	5.511	33.524	26.4459
20	5.5173	33.5253	26.4461
30	5.3109	33.498	26.4489
40	4.8	33.4396	26.4605
43	4.7641	33.4421	26.4664

STATION US16129			
LATITUDE 42-16.0 N			
LONGITUE 140-58.8 E			
DEPTH (m) 64			
Press.	Temp.	Salinity	Sigma-T
5	5.0118	33.3815	26.3909
10	5.014	33.3808	26.39
20	5.007	33.3792	26.3896
30	5.0051	33.3794	26.3899
40	5.0087	33.3795	26.3897
50	4.9707	33.3782	26.3928
64	4.7195	33.3565	26.4034

STATION US16130			
LATITUDE 42-17.5 N			
LONGITUE 140-54.1 E			
DEPTH (m) 57			
Press.	Temp.	Salinity	Sigma-T
5	4.9114	33.3791	26.4002
10	4.9167	33.3777	26.3985
20	4.9148	33.3773	26.3984
30	4.9178	33.3776	26.3983
40	4.9658	33.3875	26.4008
50	4.8779	33.4074	26.4264
55	4.8762	33.4136	26.4315

STATION US16131			
LATITUDE 42-18.3 N			
LONGITUE 140-42.3 E			
DEPTH (m) 63			
Press.	Temp.	Salinity	Sigma-T
5	5.0966	33.4985	26.474
10	5.0944	33.4983	26.474
20	5.093	33.4989	26.4746
30	5.0646	33.5083	26.4854
40	5.0754	33.6858	26.6248
50	4.8132	33.6804	26.65
61	4.8873	33.6957	26.6539

STATION US16132			
LATITUDE 42-20.9 N			
LONGITUE 140-36.8 E			
DEPTH (m) 86			
Press.	Temp.	Salinity	Sigma-T
5	4.5691	33.5436	26.5682
10	4.5687	33.5437	26.5684
20	4.5765	33.5468	26.57
30	4.5875	33.5505	26.5717
40	4.694	33.6396	26.6308
50	4.7188	33.6665	26.6495
75	4.7406	33.67	26.6498
83	4.8216	33.6856	26.6532

STATION US16133			
LATITUDE	42-23.8	N	
LONGITUD	140-31.3	E	
DEPTH (m)	95		
Press.	Temp.	Salinity	Sigma-T
5	4.2198	33.5134	26.5811
10	4.2186	33.5145	26.5822
20	4.2328	33.5199	26.585
30	4.2462	33.5233	26.5863
40	4.2904	33.5338	26.59
50	4.3608	33.5508	26.5961
75	4.8636	33.6942	26.6554
93	4.89	33.7006	26.6575

STATION US16134			
LATITUDE	42-26.0	N	
LONGITUD	140-37.0	E	
DEPTH (m)	83		
Press.	Temp.	Salinity	Sigma-T
5	4.4635	33.541	26.5775
10	4.4548	33.5434	26.5803
20	4.4494	33.5472	26.5839
30	4.4731	33.5796	26.6071
40	4.4783	33.5952	26.619
50	4.7932	33.6736	26.6469
75	4.9552	33.7091	26.6569
81	4.959	33.71	26.6572

STATION US16135			
LATITUDE	42-23.2	N	
LONGITUD	140-42.6	E	
DEPTH (m)	61		
Press.	Temp.	Salinity	Sigma-T
5	4.8371	33.547	26.5416
10	4.8024	33.5429	26.5421
20	4.7451	33.5427	26.5484
30	4.6003	33.541	26.5628
40	4.5709	33.55	26.5731
50	4.581	33.5676	26.586
59	4.8471	33.6406	26.6147

STATION US16136			
LATITUDE	42-20.6	N	
LONGITUD	140-48.4	E	
DEPTH (m)	55		
Press.	Temp.	Salinity	Sigma-T
5	5.17	33.491	26.4596
10	5.1705	33.4907	26.4593
20	5.1671	33.4902	26.4593
30	5.1704	33.4902	26.459
40	5.1336	33.4878	26.4612
50	5.1246	33.4871	26.4617
50	5.1246	33.4871	26.4617

STATION US16137			
LATITUDE	42-15.5	N	
LONGITUD	140-47.6	E	
DEPTH (m)	71		
Press.	Temp.	Salinity	Sigma-T
5	5.8153	33.5891	26.4606
10	5.8159	33.5892	26.4606
20	5.8138	33.5896	26.4612
30	5.579	33.5615	26.4675
40	4.6119	33.5827	26.5946
50	4.7677	33.6631	26.6414
69	4.9523	33.704	26.6532

STATION US16138			
LATITUDE	42-13.4	N	
LONGITUD	140-41.6	E	
DEPTH (m)	89		
Press.	Temp.	Salinity	Sigma-T
5	4.5326	33.5952	26.6131
10	4.5343	33.5947	26.6125
20	4.5377	33.5944	26.612
30	4.5105	33.6033	26.6219
40	4.4787	33.611	26.6314
50	4.4728	33.6113	26.6323
75	4.488	33.618	26.636
86	4.5048	33.6241	26.6391

STATION US16139			
LATITUDE	42-10.3	N	
LONGITUD	140-41.0	E	
DEPTH (m)	86		
Press.	Temp.	Salinity	Sigma-T
5	4.309	33.5629	26.6112
10	4.3279	33.567	26.6125
20	4.3317	33.571	26.6153
30	4.3529	33.5799	26.6201
40	4.3841	33.585	26.6208
50	4.3942	33.5896	26.6234
75	4.3902	33.5864	26.6213
83	4.4688	33.6098	26.6315

STATION US16140			
LATITUDE	42-10.4	N	
LONGITUD	140-47.4	E	
DEPTH (m)	92		
Press.	Temp.	Salinity	Sigma-T
5	4.9882	33.5551	26.5311
10	4.9914	33.5544	26.5302
20	4.9925	33.5538	26.5296
30	4.9904	33.5532	26.5294
40	4.9897	33.5526	26.529
50	4.9953	33.5535	26.529
75	4.7592	33.6668	26.6452
90	4.7674	33.6685	26.6457

STATION US16141			
LATITUDE	41-59.2	N	
LONGITUD	141-01.9	E	
DEPTH (m)	101		
Press.	Temp.	Salinity	Sigma-T
5	5.4597	33.4722	26.4109
10	5.3957	33.4687	26.4157
20	5.4093	33.4855	26.4274
30	5.3557	33.4891	26.4366
40	5.3407	33.491	26.4398
50	5.3216	33.4916	26.4426
75	5.059	33.5465	26.5162
97	5.0379	33.5568	26.5268

STATION US16142			
LATITUDE	41-58.6	N	
LONGITUD	141-00.7	E	
DEPTH (m)	94		
Press.	Temp.	Salinity	Sigma-T
5	5.9001	33.5309	26.4042
10	5.855	33.5308	26.4096
20	5.7483	33.5293	26.4216
30	5.5494	33.534	26.4493
40	5.4045	33.5262	26.4602
50	5.3153	33.5285	26.4725
75	5.1037	33.5448	26.5098
91	5.0998	33.5565	26.5195

STATION US16143			
LATITUDE	41-58.0	N	
LONGITUD	140-59.5	E	
DEPTH (m)	86		
Press.	Temp.	Salinity	Sigma-T
5	5.9598	33.5327	26.3983
10	5.8983	33.53	26.4037
20	5.8373	33.5296	26.4109
30	5.8195	33.5305	26.4138
40	5.7376	33.5286	26.4223
50	5.5596	33.5273	26.4427
75	5.3384	33.5504	26.4871
83	5.0678	33.5473	26.5159

STATION US16144			
LATITUDE	41-57.4	N	
LONGITUD	140-58.3	E	
DEPTH (m)	79		
Press.	Temp.	Salinity	Sigma-T
5	5.8951	33.5076	26.3864
10	5.8312	33.5123	26.398
20	5.7791	33.5229	26.4127
30	5.6657	33.5103	26.4165
40	5.6027	33.5258	26.4364
50	5.533	33.5401	26.456
75	5.1212	33.566	26.5247
76	5.1224	33.5663	26.5247

STATION US16145			
LATITUDE	42-20.4	N	
LONGITUD	140-48.7	E	
DEPTH (m)	312		
Press.	Temp.	Salinity	Sigma-T
5	4.2792	33.1436	26.2812
10	4.6125	33.2138	26.3018
20	4.8519	33.2654	26.3167
30	5.1527	33.3293	26.3335
40	5.1298	33.3244	26.3323
50	5.1222	33.3231	26.3321
75	5.1088	33.3233	26.3338
100	5.0938	33.3241	26.3361
125	5.3379	33.3777	26.3505
150	5.5255	33.434	26.373
175	5.459	33.4456	26.39
200	5.6068	33.5012	26.4164
250	5.4039	33.488	26.43
300	5.0192	33.5086	26.4908
302	5.0064	33.5121	26.495

STATION US16146			
LATITUDE	42-10.1	N	
LONGITUD	140-41.2	E	
DEPTH (m)	84		
Press.	Temp.	Salinity	Sigma-T
5	4.4444	33.602	26.6279
10	4.4362	33.6025	26.6292
20	4.4175	33.6032	26.6318
30	4.4206	33.6116	26.6381
40	4.4374	33.6219	26.6445
50	4.4341	33.6226	26.6454
75	4.4505	33.6259	26.6463
82	4.4527	33.6261	26.6462

STATION US16147			
LATITUDE	42-10.1	N	
LONGITUD	140-36.2	E	
DEPTH (m)	75		
Press.	Temp.	Salinity	Sigma-T
5	4.381	33.5371	26.5831
10	4.3568	33.5531	26.5984
20	4.4257	33.6072	26.6341
30	4.4375	33.618	26.6414
40	4.4457	33.6208	26.6428
50	4.4516	33.6217	26.6428
72	4.4489	33.6229	26.644

STATION	US16148		
LATITUDE	42-11.0	N	
LONGITUD	140-35.4	E	
DEPTH (m)	80		
Press.	Temp.	Salinity	Sigma-T
5	4.4708	33.5877	26.6138
10	4.4499	33.5863	26.6149
20	4.4157	33.5877	26.6196
30	4.448	33.6193	26.6414
40	4.4489	33.6198	26.6416
50	4.4511	33.6207	26.6421
75	4.4573	33.6225	26.6429
78	4.4583	33.6225	26.6427

STATION	US16149		
LATITUDE	42-14.0	N	
LONGITUD	140-29.8	E	
DEPTH (m)	77		
Press.	Temp.	Salinity	Sigma-T
5	4.5186	33.5796	26.6022
10	4.4795	33.5801	26.6068
20	4.4486	33.5837	26.613
30	4.4539	33.6057	26.6298
40	4.4463	33.6123	26.636
50	4.4353	33.6153	26.6395
75	4.2098	33.6008	26.6517
76	4.2115	33.6017	26.6521

STATION	US16150		
LATITUDE	42-16.3	N	
LONGITUD	140-35.9	E	
DEPTH (m)	92		
Press.	Temp.	Salinity	Sigma-T
5	4.6946	33.5507	26.5602
10	4.4486	33.5779	26.6084
20	4.3944	33.586	26.6205
30	4.3325	33.5844	26.6258
40	4.3028	33.5867	26.6308
50	4.2986	33.5885	26.6326
75	4.2933	33.5926	26.6364
90	4.3065	33.6119	26.6503

STATION	US16151		
LATITUDE	42-18.9	N	
LONGITUD	140-30.7	E	
DEPTH (m)	93		
Press.	Temp.	Salinity	Sigma-T
5	4.5782	33.5796	26.5959
10	4.5682	33.5796	26.5969
20	4.5005	33.5803	26.6048
30	4.4865	33.5857	26.6105
40	4.4829	33.5888	26.6133
50	4.4812	33.5902	26.6147
75	4.4711	33.5996	26.6232
91	4.4672	33.6038	26.627

STATION	US16152		
LATITUDE	42-19.0	N	
LONGITUD	140-23.2	E	
DEPTH (m)	55		
Press.	Temp.	Salinity	Sigma-T
5	4.3652	33.5061	26.5602
10	4.3792	33.5346	26.5813
20	4.3613	33.5667	26.6088
30	4.3698	33.5827	26.6205
40	4.3693	33.5863	26.6234
50	4.3641	33.5862	26.6239
52	4.3632	33.5863	26.6241

STATION	US16153		
LATITUDE	42-26.2	N	
LONGITUD	140-25.0	E	
DEPTH (m)	61		
Press.	Temp.	Salinity	Sigma-T
5	4.6464	33.1155	26.2202
10	4.5978	33.4578	26.497
20	4.4762	33.4897	26.5354
30	4.4608	33.5023	26.5471
40	4.4647	33.506	26.5496
50	4.4326	33.5135	26.5589
59	4.3507	33.549	26.5958

STATION	US16154		
LATITUDE	42-23.8	N	
LONGITUD	140-31.0	E	
DEPTH (m)	95		
Press.	Temp.	Salinity	Sigma-T
5	4.6405	33.5476	26.5637
10	4.5979	33.5531	26.5727
20	4.509	33.5793	26.6031
30	4.5085	33.5847	26.6073
40	4.5069	33.5863	26.6088
50	4.4993	33.5883	26.6112
75	4.5	33.5934	26.6152
93	4.4496	33.6088	26.6328

STATION	US16155		
LATITUDE	42-17.6	N	
LONGITUD	140-54.3	E	
DEPTH (m)	56		
Press.	Temp.	Salinity	Sigma-T
5	3.7232	32.8759	26.1237
10	3.8526	32.9464	26.1673
20	4.0063	33.1008	26.2749
30	4.0588	33.1331	26.2953
40	4.082	33.1381	26.297
50	4.1528	33.1695	26.3147
54	4.2779	33.2223	26.3438

STATION	US16156		
LATITUDE	42-20.8	N	
LONGITUD	140-48.5	E	
DEPTH (m)	52		
Press.	Temp.	Salinity	Sigma-T
5	4.2493	33.1523	26.2912
10	4.3005	33.1688	26.2989
20	4.2513	33.2256	26.3493
30	4.2522	33.2261	26.3495
40	4.2533	33.2259	26.3493
50	4.254	33.2262	26.3494
51	4.2567	33.2268	26.3497

STATION	US16157		
LATITUDE	42-23.3	N	
LONGITUD	140-42.8	E	
DEPTH (m)	60		
Press.	Temp.	Salinity	Sigma-T
5	4.6682	33.3004	26.3645
10	4.6612	33.3	26.365
20	4.8333	33.3387	26.3768
30	4.9163	33.3542	26.3799
40	4.9209	33.3559	26.3807
50	4.8902	33.3631	26.3898
59	4.4266	33.5755	26.6088

STATION	US16158		
LATITUDE	42-25.9	N	
LONGITUD	140-37.7	E	
DEPTH (m)	82		
Press.	Temp.	Salinity	Sigma-T
5	4.9344	33.3959	26.4109
10	4.9151	33.3974	26.4143
20	4.6981	33.5108	26.5282
30	4.6637	33.5529	26.5654
40	4.5975	33.5575	26.5762
50	4.5376	33.5634	26.5874
75	4.4975	33.5711	26.5978
80	4.5009	33.5718	26.598

STATION	US16159		
LATITUDE	42-21.3	N	
LONGITUD	140-36.7	E	
DEPTH (m)	87		
Press.	Temp.	Salinity	Sigma-T
5	5.1454	33.4062	26.3952
10	5.1421	33.4066	26.3959
20	4.9205	33.4136	26.4265
30	4.7785	33.4771	26.4926
40	4.8576	33.5079	26.5083
50	4.8478	33.5306	26.5274
75	4.3449	33.5938	26.632
84	4.3193	33.6092	26.6469

STATION	US16160		
LATITUDE	42-18.7	N	
LONGITUD	140-41.9	E	
DEPTH (m)	70		
Press.	Temp.	Salinity	Sigma-T
5	4.8395	33.4618	26.4738
10	4.7761	33.4759	26.4919
20	4.7677	33.525	26.5318
30	4.6831	33.5399	26.5529
40	4.5544	33.5766	26.596
50	4.5332	33.5936	26.6118
69	4.2986	33.6058	26.6464

STATION	US16161		
LATITUDE	42-15.5	N	
LONGITUD	140-47.5	E	
DEPTH (m)	71		
Press.	Temp.	Salinity	Sigma-T
5	4.5898	33.2097	26.301
10	4.6032	33.2339	26.3187
20	4.8942	33.3269	26.3607
30	5.119	33.3762	26.3745
40	5.0628	33.3788	26.383
50	4.6253	33.523	26.5458
69	4.2799	33.6058	26.6484

STATION	US16162		
LATITUDE	42-13.3	N	
LONGITUD	140-41.9	E	
DEPTH (m)	89		
Press.	Temp.	Salinity	Sigma-T
5	4.6334	33.5822	26.5919
10	4.566	33.5865	26.6026
20	4.4608	33.6036	26.6274
30	4.435	33.6152	26.6394
40	4.4259	33.6174	26.6422
50	4.4237	33.6185	26.6433
75	4.4098	33.6227	26.648
86	4.4085	33.6233	26.6487

STATION	US16163		
LATITUDE	42-10.1	N	
LONGITUD	140-47.3	E	
DEPTH (m)	95		
Press.	Temp.	Salinity	Sigma-T
5	4.8373	33.523	26.5225
10	4.7545	33.5264	26.5344
20	4.4477	33.5812	26.6111
30	4.386	33.5981	26.6311
40	4.3537	33.603	26.6384
50	4.3184	33.6049	26.6436
75	4.2601	33.6086	26.6526
93	4.2622	33.6091	26.6528

STATION	US16164		
LATITUDE	42-07.1	N	
LONGITUD	140-50.5	E	
DEPTH (m)	73		
Press.	Temp.	Salinity	Sigma-T
5	4.848	33.5678	26.5569
10	4.7398	33.5631	26.5652
20	4.504	33.5991	26.6193
30	4.4502	33.6189	26.6408
40	4.4478	33.6249	26.6458
50	4.448	33.6254	26.6462
71	4.4492	33.6256	26.6462