



Title	1.THE " USHIO MARU " CRUISE 351, CRUISE 352, CRUISE 353 IN JANUARY - FEBRUARY 2016
Citation	海洋調査漁業試験要報, 60, 49-60
Issue Date	2020-03-31
Doc URL	<a href="http://hdl.handle.net/2115/77715">http://hdl.handle.net/2115/77715</a>
Type	bulletin (dataset)
File Information	Data.Rec.Oceanogr.Obs.Expl.Fish.60.49.pdf



[Instructions for use](#)

**1**

**THE " USHIO MARU "**

**CRUISE 351**

**CRUISE 352**

**CRUISE 353**

**IN JANUARY 2016**

**IN FEBRUARY 2016**

## 1.Cruise Itinerary

### 1. Cruise Itinerary

#### Cruise 351

Departure from Hakodate	Jan.	10, 2016
Start hydrographic research (US16001)		10
Arrival at Fukushima		10
Depart from Fukushima		11
Arrival at Hakodate		11
Depart from Hakodate		12
Arrival at Muroran		12
Depart from Muroran		13
Arrival at Muroran		13
Depart from Muroran		14
Finish hydrographic research (US16029)		14
Return to Hakodate		15
Total coverage 335.2 miles		

#### Cruise 352

Departure from Hakodate	Jan.	25, 2016
Start hydrographic research (US16030)		25
Arrival at Fukushima		25
Depart from Fukushima		26
Arrival at Usujiri		27
Depart from Usujiri		29
Finish hydrographic research (US16064)		30
Return to Hakodate		31
Total coverage 367.1 miles		

#### Cruise 353

Departure from Hakodate	Feb.	5, 2016
Arrival at Usujiri		5
Start hydrographic research (US16065)		6
Retrieval ADCP mooring system		6
Arrival at Muroran		6
Depart from Muroran		7
Set ADCP mooring system		7
Arrival at Usujiri		7
Depart from Usujiri		8
Arrival at and departure from Usujiri		8
Finish hydrographic research (US16091)		8
Return to Hakodate		8
Total coverage 305.5 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”.

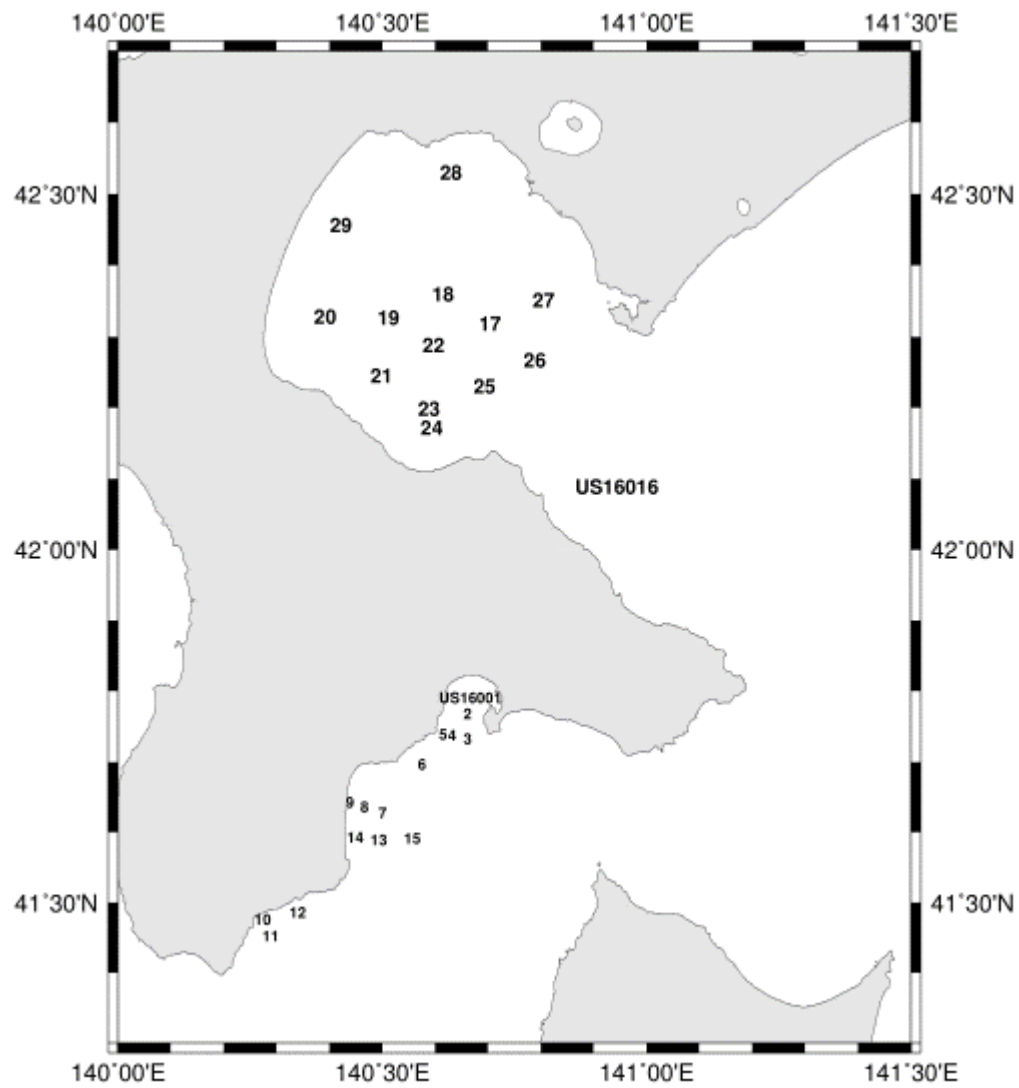


Figure 1. Oceanographic stations (Cruise 351)

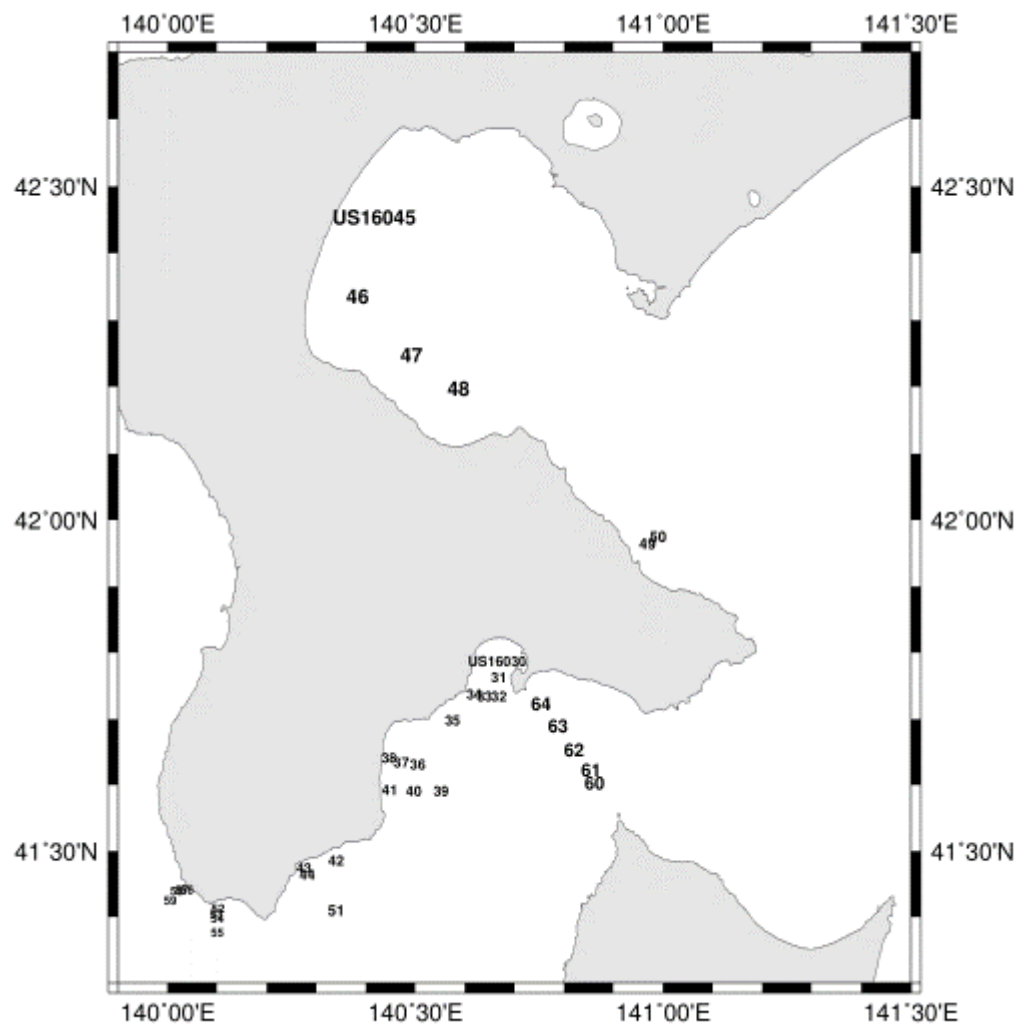


Figure 2. Oceanographic stations (Cruise 352)

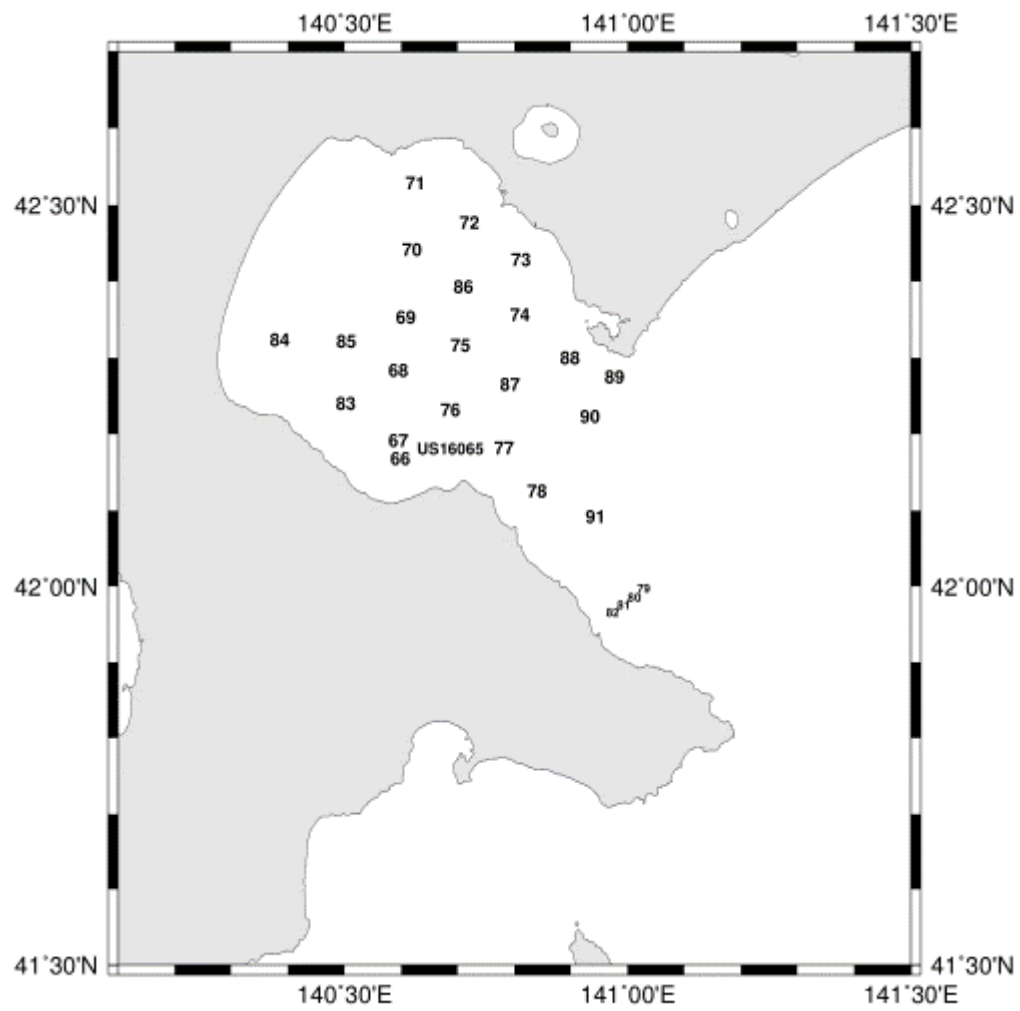


Figure 3. Oceanographic stations (Cruise 353)

Table 1. List of Oceanographic Station

Cruise 351

station	Lat. (N)°	Long. (E)°	Date	Hour	Depth (m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.	Bar (hPa)
US16001	41-47.0	140-40.0	1/10	0825-0826	20	NNW-1	NNW-1	NNW-4	-1.3	7.7	c	1014.6
US16002	41-45.6	140-39.7	1/10	0848-0852	38	NNW-1	NNW-1	NNW-2	-1.0	7.7	c	1014.7
US16003	41-43.5	140-39.7	1/10	0916-0922	62	NNW-1	NNW-1	NNW-3	-0.7	10.0	s	1015.1
US16004	41-43.8	140-37.9	1/10	0942-0948	56	WNW-1	NW-1	WNW-2	-0.2	9.7	s	1015.1
US16005	41-43.9	140-36.9	1/10	0955-0959	38	WNW-1	NW-1	WNW-3	-0.5	9.8	s	1015.0
US16006	41-41.3	140-34.5	1/10	1039-1042	41	West-1	SW-1	West-4	1.4	9.7	bc	1014.5
US16007	41-37.2	140-30.0	1/10	1126-1129	31	West-2	SSW-2	West-5	1.6	9.2	s	1013.7
US16008	41-37.7	140-28.0	1/10	1153-1157	19	West-2	SE-1	West-5	0.6	9.6	s	1014.1
US16009	41-38.1	140-26.3	1/10	1212-1216	13	West-2	SE-1	West-4	1.2	8.3	bc	1013.8
US16010	41-28.1	140-16.4	1/11	0701-0706	25	West-2	South-1	West-4	-4.4	9.6	c	1019.6
US16011	41-26.7	140-17.3	1/11	0728-0734	62	WNW-2	South-1	WNW-4	-3.4	9.6	s	1020.3
US16012	41-28.7	140-20.4	1/11	0818-0824	62	West-2	South-2	West-4	-3.8	9.6	c	1020.3
US16013	41-34.9	140-29.6	1/11	0934-0940	43	WSW-1	South-1	WSW-4	-2.7	9.8	c	1019.8
US16014	41-35.1	140-26.9	1/11	1008-1011	15	West-1	South-1	West-4	-3.9	9.7	c	1019.8
US16015	41-35.0	140-33.4	1/11	1051-1056	58	WSW-2	SW-1	WSW-5	-3.1	9.8	c	1019.6
US16016	42-04.7	140-56.6	1/12	1153-1200	85	WNW-2	WNW-2	WNW-4	-2.6	8.8	s	1014.1
US16017	42-18.5	140-42.2	1/13	0713-0719	65	WNW-3	WNW-1	WNW-4	-2.5	6.6	o	1013.5
US16018	42-21.0	140-36.9	1/13	0801-0807	86	WNW-2	WNW-1	West-4	-2.2	7.0	o	1013.6
US16019	42-19.0	140-30.7	1/13	0853-0900	93	West-2	West-1	West-4	-2.7	6.7	s	1013.9
US16020	42-19.1	140-23.5	1/13	0952-0956	56	WNW-1	West-1	WNW-3	-3.1	6.9	s	1014.0
US16021	42-14.1	140-29.9	1/13	1048-1052	76	NW-1	West-1	NW-3	-2.4	6.6	s	1014.0
US16022	42-16.7	140-35.8	1/13	1141-1150	91	NNW-1	West-1	NNW-3	-1.7	6.9	s	1014.0
US16023	42-11.3	140-35.3	1/13	1244-1251	80	WNW-1	WNW-1	WNW-3	-1.7	6.9	c	1012.6
US16024	42-09.7	140-35.6	1/13	1335-1341	72	West-1	WNW-1	West-2	-1.0	7.1	bc	1012.1
US16025	42-13.2	140-41.6	1/13	1431-1437	89	NW-1	WNW-1	NW-2	-0.6	7.3	bc	1012.3
US16026	42-15.4	140-47.3	1/13	1530-1534	72	West-1	West-1	West-2	-0.1	7.5	bc	1012.1
US16027	42-20.5	140-48.3	1/13	1614-1619	54	WNW-1	West-1	WNW-4	0.0	6.8	c	1011.6
US16028	42-31.2	140-37.8	1/14	0932-0937	60	WNW-3	WNW-2	WNW-6	-2.5	7.1	bc	1012.1
US16029	42-26.8	140-25.3	1/14	1050-1056	61	West-2	West-1	West-4	-3.9	7.2	bc	1012.6

Cruise 352

station	Lat. (N)°	Long. (E)°	Date	Hour	Depth (m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.	Bar (hPa)
US16030	41-46.8	140-39.9	1/25	0815-0819	21	NNW-2	NW-1	NNW-5	-1.9	8.2	bc	1010.5
US16031	41-45.3	140-40.1	1/25	0839-0843	45	NNW-2	NW-1	NNW-4	-2.1	9.6	bc	1011.0
US16032	41-43.6	140-40.1	1/25	0903-0910	66	NNW-2	NW-1	NNW-4	-1.7	10.0	bc	1011.4
US16033	41-43.6	140-38.4	1/25	0930-0936	58	NNW-2	NW-1	NNW-4	-1.3	10.0	bc	1012.1
US16034	41-43.8	140-37.1	1/25	0944-0952	45	NNW-1	NW-1	NNW-2	-1.3	10.0	bc	1012.3
US16035	41-41.4	140-34.5	1/25	1018-1034	41	NNW-1	NW-1	NNW-3	-0.8	10.0	bc	1013.1
US16036	41-37.4	140-30.3	1/25	1112-1118	32	NW-1	SE-1	NW-3	-0.2	9.1	bc	1013.5
US16037	41-37.6	140-28.3	1/25	1144-1148	22	NNW-1	SE-1	NNW-2	-0.8	9.9	bc	1013.6
US16038	41-38.0	140-26.8	1/25	1200-1207	15	WNW-1	SE-1	WNW-3	-0.5	8.7	c	1014.1
US16039	41-35.0	140-33.1	1/25	1302-1309	58	WNW-1	SE-1	WNW-3	-1.0	10.6	s	1014.3
US16040	41-35.0	140-29.8	1/25	1341-1347	44	WNW-1	ESE-1	WNW-3	-1.6	10.5	s	1014.5
US16041	41-35.1	140-26.9	1/25	1406-1412	16	NW-1	SE-1	NW-3	-1.4	10.2	s	1014.6
US16042	41-28.7	140-20.4	1/25	1531-1539	61	West-3	SW-2	West-5	-0.4	10.7	s	1016.2
US16043	41-28.0	140-16.5	1/26	0708-0713	29	West-2	South-2	West-4	2.3	10.4	c	1020.7
US16044	41-27.4	140-16.9	1/26	0747-0755	44	West-2	South-2	West-4	2.5	10.5	c	1021.1
US16045	42-26.6	140-25.0	1/27	0646-0652	60	WNW-2	NW-1	NW-4	0.5	6.0	bc	1019.1
US16046	42-19.5	140-23.0	1/27	0747-0754	53	WNW-2	NW-1	WNW-4	-0.3	6.0	bc	1020.3
US16047	42-14.2	140-29.5	1/27	0853-0900	75	West-2	WNW-1	West-5	0.1	5.5	bc	1020.7
US16048	42-11.2	140-35.2	1/27	0949-0955	80	West-3	WNW-1	West-5	0.7	6.0	bc	1021.6
US16049	41-57.4	140-58.1	1/29	0703-0707	78	West-2	NW-1	West-4	-3.0	3.8	bc	1029.5
US16050	41-58.0	140-59.4	1/29	0718-0723	87	West-2	NW-1	West-4	-2.7	3.8	bc	1029.6
US16051	41-24.1	140-20.4	1/29	1340-1352	93	NW-1	SW-2	NW-4	-0.6	10.2	c	1028.8
US16052	41-24.4	140-06.1	1/30	0658-0705	55	NNE-1	WSW-1	NNE-3	-2.1	9.5	c	1025.1
US16053	41-23.9	140-05.9	1/30	0720-0730	85	NE-1	West-1	NE-3	-1.9	9.4	o	1025.1
US16054	41-23.5	140-06.0	1/30	0743-0754	95	NNE-1	West-1	NNE-2	-1.4	9.5	o	1025.5
US16055	41-22.2	140-06.0	1/30	0820-0827	119	East-1	West-1	East-2	-1.2	9.5	c	1025.4
US16056	41-26.1	140-02.4	1/30	0904-0911	38	North-1	West-1	North-2	-1.3	9.5	bc	1025.5
US16057	41-26.1	140-01.7	1/30	0923-0930	57	NW-1	West-1	NW-2	-0.8	9.3	bc	1025.5
US16058	41-26.0	140-01.1	1/30	0943-0949	80	NW-1	West-1	NW-2	-0.6	9.4	bc	1025.5
US16059	41-25.1	140-00.3	1/30	1008-1019	105	NW-1	West-1	NW-1	0.1	9.7	bc	1025.5
US16060	41-35.6	140-51.7	1/30	1416-1424	54	Calm	East-1	Calm	-0.7	10.5	c	1023.7
US16061	41-36.8	140-51.3	1/30	1434-1443	85	Calm	East-1	Calm	-0.2	10.5	bc	1023.6
US16062	41-38.6	140-49.2	1/30	1502-1516	325	Calm	East-1	Calm	-0.2	10.4	bc	1023.6
US16063	41-40.8	140-47.3	1/30	1536-1546	222	West-1	East-1	West-3	0.1	10.3	bc	1023.1
US16064	41-28.8	140-45.2	1/30	1605-1610	84	SW-1	East-1	SW-1	0.0	10.4	bc	1022.6

Table 1. List of Oceanographic Station (continued)

Cruise 353

station	Lat. (N)°	Long. (E)°	Date	Hour	Depth (m)	Wave	Swell	Wind	Air Temp.	Sea Temp.	Wr.	Bar (hPa)
US16065	42-10.4	140-41.2	2/6	0646-0651	86	WNW-2	NW-1	WNW-5	-2.2	4.8	c	1014.8
US16066	42-09.6	140-35.9	2/6	0742-0745	72	West-2	NW-1	West-5	-2.1	4.3	c	1014.8
US16067	42-11.0	140-35.7	2/6	0827-0831	79	WNW-2	NW-1	WNW-5	-2.7	5.3	c	1015.5
US16068	42-16.5	140-35.7	2/6	0940-0945	91	WNW-3	WNW-1	WNW-5	-2.9	5.5	bc	1015.6
US16069	42-20.7	140-36.5	2/6	1104-1109	88	WNW-3	WNW-1	WNW-6	-1.0	5.2	bc	1014.6
US16070	42-26.0	140-37.1	2/6	1156-1202	84	WSW-3	West-1	WSW-6	-0.6	5.0	bc	1014.5
US16071	42-31.2	140-37.5	2/6	1249-1253	61	WNW-3	SW-1	WNW-5	-0.7	4.4	bc	1014.3
US16072	42-28.1	140-43.2	2/6	1349-1353	60	WNW-1	West-2	WNW-3	-2.0	5.0	bc	1014.4
US16073	42-25.2	140-48.7	2/6	1435-1437	43	NW-1	West-2	NW-4	-2.1	4.5	c	1014.3
US16074	42-20.9	140-48.6	2/7	0652-0656	52	WNW-3	WNW-1	NW-6	-3.6	4.3	bc	1016.5
US16075	42-18.5	140-42.3	2/7	0740-0745	64	WNW-3	WNW-1	WNW-5	-4.2	4.5	bc	1016.8
US16076	42-13.4	140-41.2	2/7	0907-0912	88	NW-2	NW-1	NW-4	-3.9	4.5	bc	1017.6
US16077	42-10.4	140-46.9	2/7	1002-1007	94	West-3	NW-1	West-5	-3.5	5.0	s	1017.1
US16078	42-07.0	140-50.4	2/7	1049-1053	68	WNW-3	NW-1	WNW-5	-3.1	5.2	bc	1017.1
US16079	41-59.5	141-01.7	2/7	1209-1215	100	WNW-3	NW-1	WNW-5	-1.6	5.4	bc	1015.6
US16080	41-58.8	141-00.7	2/7	1224-1230	94	NW-3	NW-1	NW-5	-1.4	5.5	bc	1014.8
US16081	41-58.2	140-59.6	2/7	1239-1244	87	NW-3	NW-1	NW-5	-1.3	5.5	bc	1014.6
US16082	41-57.6	140-58.4	2/7	1254-1259	81	WNW-3	NW-1	WNW-5	-1.2	5.3	bc	1014.2
US16083	42-13.9	140-30.1	2/8	0746-0751	78	NW-3	NW-1	NW-5	-1.6	5.1	bc	1020.6
US16084	42-18.9	140-23.1	2/8	0848-0854	53	NW-1	NW-1	NW-2	-1.5	5.0	bc	1020.8
US16085	42-18.8	140-30.2	2/8	0938-0944	92	West-1	NW-1	West-3	-0.6	5.1	bc	1021.1
US16086	42-23.1	140-42.6	2/8	1102-1107	61	NW-1	NW-1	NW-3	-0.4	4.4	b	1020.7
US16087	42-15.4	140-47.5	2/8	1217-1220	72	NNW-1	NW-1	NNW-2	0.1	4.4	b	1020.1
US16088	42-17.5	140-53.9	2/8	1305-1310	57	North-1	NW-1	North-3	0.6	4.4	b	1019.1
US16089	42-16.0	140-58.6	2/8	1345-1350	64	NNW-1	West-1	NNW-2	1.6	4.9	b	1019.0
US16090	42-12.9	140-56.0	2/8	1424-1429	69	NNW-1	WNW-1	NNW-2	0.3	4.5	bc	1018.8
US16091	42-05.0	140-56.6	2/8	1529-1534	84	Calm	WNW-1	Calm	0.6	5.4	bc	1019.0

Table 2. Oceanographic data

STATION		US16001	
LATITUDE	41-47.0	N	
LONGITUDE	140-40.0	E	
DEPTH (m)	20		
Press.	Temp.	Salinity	Sigma-T
5	10.1711	33.8988	26.063
10	10.1709	33.8986	26.0629
20	10.1661	33.8977	26.063
30	10.1081	33.8861	26.0638
40	10.0292	33.8726	26.0667
50	9.9676	33.8803	26.0831
55	10.056	33.9164	26.0964

STATION		US16002	
LATITUDE	41-45.6	N	
LONGITUDE	140-39.7	E	
DEPTH (m)	38		
Press.	Temp.	Salinity	Sigma-T
5	9.9808	33.8855	26.085
10	9.9839	33.8854	26.0843
20	10.0825	33.9077	26.0851
30	10.0973	33.9094	26.0839
37	10.0945	33.9106	26.0853

STATION		US16003	
LATITUDE	41-43.5	N	
LONGITUDE	140-39.7	E	
DEPTH (m)	62		
Press.	Temp.	Salinity	Sigma-T
5	10.2704	33.9278	26.0686
10	10.2543	33.931	26.0739
20	10.2392	33.9325	26.0776
30	10.2354	33.9336	26.0791
40	10.1936	33.9377	26.0895
50	10.073	33.9455	26.1162
62	9.9687	33.9566	26.1425

STATION		US16004	
LATITUDE	41-43.8	N	
LONGITUDE	140-37.9	E	
DEPTH (m)	56		
Press.	Temp.	Salinity	Sigma-T
5	6.473	33.534	26.334
10	6.480	33.536	26.335
20	6.488	33.538	26.336
30	6.484	33.539	26.336
40	6.458	33.548	26.347
50	6.432	33.549	26.352

STATION		US16005	
LATITUDE	41-43.9	N	
LONGITUDE	140-36.9	E	
DEPTH (m)	38		
Press.	Temp.	Salinity	Sigma-T
5	10.1091	33.9106	26.0828
10	10.1245	33.9137	26.0826
20	10.128	33.9165	26.0842
30	10.1351	33.925	26.0896
37	10.1205	33.924	26.0913

STATION		US16006	
LATITUDE	41-41.3	N	
LONGITUDE	140-34.5	E	
DEPTH (m)	41		
Press.	Temp.	Salinity	Sigma-T
5	10.089	33.9279	26.0998
10	10.0947	33.9285	26.0992
20	10.0896	33.9281	26.0998
30	10.0599	33.9267	26.1037
40	9.8761	33.9242	26.1328

STATION		US16007	
LATITUDE	41-37.2	N	
LONGITUDE	140-30.0	E	
DEPTH (m)	31		
Press.	Temp.	Salinity	Sigma-T
5	10.7367	33.8989	25.9649
10	10.7381	33.8986	25.9644
20	10.2741	33.9163	26.059
29	9.5313	33.8836	26.1583

STATION		US16008	
LATITUDE	41-37.7	N	
LONGITUDE	140-28.0	E	
DEPTH (m)	19		
Press.	Temp.	Salinity	Sigma-T
5	8.8972	33.8184	26.2091
10	8.9111	33.8242	26.2115
18	8.9398	33.8337	26.2144

STATION		US16009	
LATITUDE	41-38.1	N	
LONGITUDE	140-26.3	E	
DEPTH (m)	13		
Press.	Temp.	Salinity	Sigma-T
5	8.2844	33.7151	26.2225
10	8.316	33.7306	26.2298
12	8.2697	33.7228	26.2307

STATION		US16010	
LATITUDE	41-28.1	N	
LONGITUDE	140-16.4	E	
DEPTH (m)	25		
Press.	Temp.	Salinity	Sigma-T
5	9.9745	33.9353	26.1249
10	9.9552	33.9355	26.1283
20	9.9778	33.9349	26.124
24	9.9702	33.9347	26.1251

STATION		US16011	
LATITUDE	41-26.7	N	
LONGITUDE	140-17.3	E	
DEPTH (m)	62		
Press.	Temp.	Salinity	Sigma-T
5	9.9421	33.9722	26.1592
10	9.9527	33.9723	26.1574
20	9.9503	33.9725	26.158
30	9.958	33.9726	26.1567
40	9.9539	33.9726	26.1575
50	9.9515	33.9725	26.1578
57	9.9505	33.9724	26.1579

STATION		US16012	
LATITUDE	41-28.7	N	
LONGITUDE	140-20.4	E	
DEPTH (m)	62		
Press.	Temp.	Salinity	Sigma-T
5	10.201	33.9546	26.1014
10	10.2056	33.9542	26.1003
20	10.0852	33.9589	26.1245
30	9.9958	33.9588	26.1397
40	9.8716	33.96	26.1615
50	9.8529	33.9611	26.1655
57	9.8577	33.9611	26.1647

STATION		US16013	
LATITUDE	41-34.9	N	
LONGITUDE	140-29.6	E	
DEPTH (m)	43		
Press.	Temp.	Salinity	Sigma-T
5	10.0831	33.9516	26.1192
10	10.0911	33.9508	26.1172
20	10.0869	33.9509	26.118
30	10.0293	33.9551	26.131
40	9.7829	33.9672	26.182
42	9.7767	33.9689	26.1843

STATION		US16014	
LATITUDE	41-35.1	N	
LONGITUDE	140-26.9	E	
DEPTH (m)	15		
Press.	Temp.	Salinity	Sigma-T
5	10.1136	33.9262	26.0942
10	10.1217	33.9273	26.0937
14	10.1254	33.9278	26.0934

STATION		US16015	
LATITUDE	41-35.0	N	
LONGITUDE	140-33.4	E	
DEPTH (m)	58		
Press.	Temp.	Salinity	Sigma-T
5	10.2454	33.9424	26.0843
10	10.2528	33.9428	26.0833
20	10.2093	33.947	26.0941
30	10.2098	33.9473	26.0943
40	10.2085	33.9469	26.0942
50	10.1472	33.9535	26.1098
56	10.0584	33.9594	26.1294



STATION		US16016	
LATITUDE	42-04.7	N	
LONGITUDE	140-56.6	E	
DEPTH (m)	85		
Press.	Temp.	Salinity	Sigma-T
5	9.0123	33.8837	26.2421
10	9.0215	33.8836	26.2405
20	9.0305	33.8834	26.239
30	9.0317	33.8827	26.2382
40	9.0317	33.883	26.2384
50	9.0152	33.8818	26.2401
75	7.8575	33.8126	26.3622
81	7.8041	33.8148	26.3718

STATION		US16017	
LATITUDE	42-18.5	N	
LONGITUDE	140-42.2	E	
DEPTH (m)	65		
Press.	Temp.	Salinity	Sigma-T
5	7.6521	33.8363	26.4107
10	7.6532	33.8353	26.4097
20	7.5608	33.822	26.4125
30	7.4472	33.8105	26.4196
40	7.1852	33.7839	26.4353
50	7.1421	33.7841	26.4414
62	7.1017	33.7789	26.4429

STATION		US16018	
LATITUDE	42-21.0	N	
LONGITUDE	140-36.9	E	
DEPTH (m)	86		
Press.	Temp.	Salinity	Sigma-T
5	7.498	33.826	26.4246
10	7.5081	33.8258	26.4229
20	7.5097	33.8255	26.4225
30	7.5087	33.8258	26.4229
40	7.5079	33.8256	26.4228
50	7.5083	33.8256	26.4228
75	7.5093	33.8256	26.4227
83	7.5111	33.8255	26.4223

STATION		US16019	
LATITUDE	42-19.0	N	
LONGITUDE	140-30.7	E	
DEPTH (m)	93		
Press.	Temp.	Salinity	Sigma-T
5	7.0444	33.7386	26.4191
10	7.0287	33.7379	26.4207
20	7.0338	33.7382	26.4202
30	7.0389	33.7381	26.4194
40	7.0504	33.7379	26.4177
50	7.054	33.7375	26.4169
75	7.0554	33.7369	26.4163
91	7.0566	33.7371	26.4162

STATION		US16020	
LATITUDE	42-19.1	N	
LONGITUDE	140-23.5	E	
DEPTH (m)	56		
Press.	Temp.	Salinity	Sigma-T
5	7.2239	33.7493	26.4027
10	7.2272	33.7493	26.4023
20	7.2288	33.7486	26.4015
30	7.2285	33.7486	26.4015
40	7.2324	33.7498	26.402
50	7.2349	33.7514	26.4029
53	7.1852	33.748	26.4071

STATION		US16021	
LATITUDE	42-14.1	N	
LONGITUDE	140-29.9	E	
DEPTH (m)	76		
Press.	Temp.	Salinity	Sigma-T
5	7.0281	33.7328	26.4167
10	7.0301	33.7318	26.4157
20	7.0457	33.7343	26.4155
30	7.0473	33.7346	26.4155
40	7.0413	33.7337	26.4156
50	7.0427	33.7337	26.4154
73	7.0358	33.7326	26.4156

STATION		US16022	
LATITUDE	42-16.7	N	
LONGITUDE	140-35.8	E	
DEPTH (m)	91		
Press.	Temp.	Salinity	Sigma-T
5	7.4623	33.8086	26.416
10	7.461	33.8096	26.4169
20	7.4227	33.8023	26.4166
30	7.3965	33.7975	26.4165
40	7.399	33.7984	26.4168
50	7.3986	33.7978	26.4165
75	7.4796	33.8109	26.4153
87	7.458	33.8066	26.415

STATION		US16023	
LATITUDE	42-11.3	N	
LONGITUDE	140-35.3	E	
DEPTH (m)	80		
Press.	Temp.	Salinity	Sigma-T
5	6.9605	33.7365	26.4289
10	6.9612	33.7357	26.4282
20	6.9623	33.7358	26.4281
30	6.9642	33.7361	26.428
40	6.9558	33.7345	26.4279
50	6.9419	33.7327	26.4284
75	6.8095	33.7178	26.4346
79	6.7739	33.7147	26.4368

STATION		US16024	
LATITUDE	42-09.7	N	
LONGITUDE	140-35.6	E	
DEPTH (m)	72		
Press.	Temp.	Salinity	Sigma-T
5	7.3285	33.799	26.4273
10	7.329	33.799	26.4272
20	7.3272	33.7988	26.4273
30	7.3233	33.7983	26.4274
40	7.3083	33.7969	26.4284
50	7.2894	33.7941	26.4289
68	7.2631	33.7905	26.4297

STATION		US16025	
LATITUDE	42-13.2	N	
LONGITUDE	140-41.6	E	
DEPTH (m)	89		
Press.	Temp.	Salinity	Sigma-T
5	7.5468	33.808	26.4035
10	7.5505	33.8076	26.4026
20	7.5514	33.8074	26.4023
30	7.551	33.8069	26.402
40	7.5498	33.807	26.4023
50	7.5498	33.8074	26.4026
75	7.5378	33.8056	26.4029
86	7.3934	33.793	26.4134

STATION		US16026	
LATITUDE	42-15.4	N	
LONGITUDE	140-47.3	E	
DEPTH (m)	72		
Press.	Temp.	Salinity	Sigma-T
5	7.9344	33.8513	26.3813
10	7.8898	33.8433	26.3816
20	7.7554	33.8271	26.3885
30	7.7439	33.8262	26.3894
40	7.7294	33.8243	26.3901
50	7.7249	33.8238	26.3903
70	7.6323	33.8134	26.3955

STATION		US16027	
LATITUDE	42-20.5	N	
LONGITUDE	140-48.3	E	
DEPTH (m)	54		
Press.	Temp.	Salinity	Sigma-T
5	7.1161	33.7569	26.4236
10	7.1257	33.7568	26.4223
20	7.128	33.7554	26.4208
30	7.1338	33.7552	26.4198
40	7.1327	33.7542	26.4192
50	7.1342	33.7543	26.4191
52	7.1325	33.7541	26.4192

STATION		US16028	
LATITUDE	42-31.2	N	
LONGITUDE	140-37.8	E	
DEPTH (m)	60		
Press.	Temp.	Salinity	Sigma-T
5	7.3634	33.7962	26.4201
10	7.3738	33.7972	26.4195
20	7.3942	33.7998	26.4187
30	7.3841	33.7984	26.419
40	7.3838	33.7976	26.4184
50	7.3904	33.799	26.4185
57	7.3924	33.7999	26.419

STATION		US16029	
LATITUDE	42-26.8	N	
LONGITUDE	140-25.3	E	
DEPTH (m)	61		
Press.	Temp.	Salinity	Sigma-T
5	7.1474	33.7566	26.4191
10	7.1683	33.7592	26.4182
20	7.2252	33.7684	26.4176
30	7.2281	33.769	26.4176
40	7.201	33.7633	26.4169
50	7.1978	33.7637	26.4177
58	7.1993	33.7648	26.4183

STATION		US16030	
LATITUDE	41-46.8	N	
LONGITUDE	140-39.9	E	
DEPTH (m)	21		
Press.	Temp.	Salinity	Sigma-T
5	8.7271	33.7212	26.1595
10	8.7383	33.7194	26.1564
20	8.7281	33.7196	26.1582
20	8.7281	33.7196	26.1582

STATION	US16031		
LATITUDE	41-45.3	N	
LONGITUDE	140-40.1	E	
DEPTH (m)	45		
Press.	Temp.	Salinity	Sigma-T
5	10.0995	33.9346	26.1031
10	10.0929	33.9349	26.1045
20	10.1055	33.9346	26.1022
30	10.0977	33.9349	26.1037
40	10.1091	33.9349	26.1018
42	10.1072	33.9349	26.102

STATION	US16032		
LATITUDE	41-43.6	N	
LONGITUDE	140-40.1	E	
DEPTH (m)	66		
Press.	Temp.	Salinity	Sigma-T
5	10.3782	33.9482	26.066
10	10.3755	33.9462	26.0649
20	10.3836	33.9456	26.063
30	10.3825	33.9455	26.0631
40	10.3286	33.9419	26.0696
50	10.2882	33.9415	26.0762
63	10.2583	33.9405	26.0806

STATION	US16033		
LATITUDE	41-43.6	N	
LONGITUDE	140-38.4	E	
DEPTH (m)	58		
Press.	Temp.	Salinity	Sigma-T
5	10.2819	33.9457	26.0806
10	10.2843	33.9456	26.0801
20	10.2909	33.9456	26.079
30	10.2754	33.9435	26.08
40	10.2605	33.9432	26.0824
50	10.2454	33.9409	26.0832
56	10.2123	33.938	26.0865

STATION	US16034		
LATITUDE	41-43.8	N	
LONGITUDE	140-37.1	E	
DEPTH (m)	45		
Press.	Temp.	Salinity	Sigma-T
5	10.0848	33.9406	26.1104
10	10.0783	33.9391	26.1103
20	10.0833	33.9396	26.1098
30	10.0762	33.9386	26.1103
40	9.8893	33.9175	26.1253
42	9.8441	33.9131	26.1295

STATION	US16035		
LATITUDE	41-41.4	N	
LONGITUDE	140-34.5	E	
DEPTH (m)	41		
Press.	Temp.	Salinity	Sigma-T
5	10.2463	33.9489	26.0893
10	10.2383	33.9478	26.0897
20	10.2181	33.946	26.0918
30	10.0223	33.925	26.1088
39	9.737	33.8939	26.1323

STATION	US16036		
LATITUDE	41-37.4	N	
LONGITUDE	140-30.3	E	
DEPTH (m)	32		
Press.	Temp.	Salinity	Sigma-T
5	10.4128	33.9369	26.0512
10	10.4182	33.9358	26.0494
20	10.3568	33.9329	26.0577
30	9.3967	33.8947	26.189
30	9.3967	33.8947	26.189

STATION	US16037		
LATITUDE	41-37.6	N	
LONGITUDE	140-28.3	E	
DEPTH (m)	22		
Press.	Temp.	Salinity	Sigma-T
5	9.953	33.9168	26.1141
10	9.9332	33.9121	26.1138
20	9.0558	33.8727	26.2265

STATION	US16038		
LATITUDE	41-38.0	N	
LONGITUDE	140-26.8	E	
DEPTH (m)	15		
Press.	Temp.	Salinity	Sigma-T
5	8.4978	33.7858	26.2455
10	8.5308	33.8042	26.2549
14	8.5382	33.806	26.2551

STATION	US16039		
LATITUDE	41-35.0	N	
LONGITUDE	140-33.1	E	
DEPTH (m)	58		
Press.	Temp.	Salinity	Sigma-T
5	10.917	33.9133	25.9441
10	10.9234	33.9127	25.9425
20	10.9156	33.9122	25.9436
30	10.8601	33.9165	25.9567
40	10.8139	33.9194	25.9672
50	10.7821	33.9236	25.9761
57	10.7794	33.9243	25.9771

STATION	US16040		
LATITUDE	41-35.0	N	
LONGITUDE	140-29.8	E	
DEPTH (m)	44		
Press.	Temp.	Salinity	Sigma-T
5	10.9805	33.9011	25.9233
10	10.9811	33.9005	25.9227
20	10.957	33.9011	25.9275
30	10.8624	33.9062	25.9483
40	10.7986	33.9188	25.9694
44	10.7993	33.9181	25.9688

STATION	US16041		
LATITUDE	41-35.1	N	
LONGITUDE	140-26.9	E	
DEPTH (m)	16		
Press.	Temp.	Salinity	Sigma-T
5	10.4737	33.9381	26.0415
10	10.432	33.9329	26.0447
14	9.3635	33.8393	26.151

STATION	US16042		
LATITUDE	41-28.7	N	
LONGITUDE	140-20.4	E	
DEPTH (m)	61		
Press.	Temp.	Salinity	Sigma-T
5	10.9866	33.8972	25.9191
10	10.9934	33.8969	25.9177
20	10.9778	33.897	25.9205
30	11.0054	33.897	25.9156
40	10.9996	33.8973	25.9169
50	10.9612	33.9037	25.9288
58	10.9514	33.9061	25.9324

STATION	US16043		
LATITUDE	41-28.0	N	
LONGITUDE	140-16.5	E	
DEPTH (m)	29		
Press.	Temp.	Salinity	Sigma-T
5	10.7349	33.9091	25.9732
10	10.7484	33.9092	25.9709
20	10.7212	33.9076	25.9744
27	10.7024	33.9068	25.9772

STATION	US16044		
LATITUDE	41-27.4	N	
LONGITUDE	140-16.9	E	
DEPTH (m)	44		
Press.	Temp.	Salinity	Sigma-T
5	10.8088	33.9101	25.9609
10	10.817	33.9106	25.9598
20	10.8423	33.9093	25.9543
30	10.8424	33.9086	25.9537
40	10.8414	33.9085	25.9538
41	10.8407	33.9082	25.9538

STATION	US16045		
LATITUDE	42-26.6	N	
LONGITUDE	140-25.0	E	
DEPTH (m)	60		
Press.	Temp.	Salinity	Sigma-T
5	6.329	33.7768	26.5443
10	6.3239	33.7764	26.5446
20	6.3155	33.7765	26.5458
30	6.3211	33.7769	26.5454
40	6.2722	33.7729	26.5485
50	6.262	33.7727	26.5496
58	6.2536	33.7719	26.5501

STATION		US16046	
LATITUDE		42-19.5	N
LONGITUDE		140-23.0	E
DEPTH (m)		53	
Press.	Temp.	Salinity	Sigma-T
5	6.1819	33.7686	26.5567
10	6.1917	33.769	26.5557
20	6.1931	33.7689	26.5554
30	6.2035	33.77	26.555
40	6.1996	33.7732	26.558
50	6.1302	33.774	26.5675
52	6.1294	33.7741	26.5677

STATION		US16047	
LATITUDE		42-14.2	N
LONGITUDE		140-29.5	E
DEPTH (m)		75	
Press.	Temp.	Salinity	Sigma-T
5	5.7259	33.717	26.5727
10	5.7159	33.7144	26.5718
20	5.7222	33.7159	26.5723
30	5.7219	33.7154	26.5719
40	5.7302	33.7164	26.5717
50	5.7288	33.7162	26.5717
73	5.8341	33.7356	26.5742

STATION		US16048	
LATITUDE		42-11.2	N
LONGITUDE		140-35.2	E
DEPTH (m)		80	
Press.	Temp.	Salinity	Sigma-T
5	6.3004	33.7574	26.5326
10	6.31	33.7586	26.5324
20	6.3166	33.7589	26.5318
30	6.2846	33.7555	26.5331
40	6.2764	33.7547	26.5336
50	6.2592	33.7536	26.5349
75	6.1625	33.7435	26.5393
78	6.039	33.73	26.5442

STATION		US16049	
LATITUDE		41-57.4	N
LONGITUDE		140-58.1	E
DEPTH (m)		78	
Press.	Temp.	Salinity	Sigma-T
5	4.2499	32.9763	26.1513
10	4.2559	32.9764	26.1507
20	4.2668	32.9786	26.1514
30	4.5776	33.0353	26.1639
40	5.5101	33.2439	26.2243
50	6.7215	33.5866	26.3429
75	6.5914	33.734	26.4763
76	6.6481	33.7565	26.4865

STATION		US16050	
LATITUDE		41-58.0	N
LONGITUDE		140-59.4	E
DEPTH (m)		87	
Press.	Temp.	Salinity	Sigma-T
5	4.2359	32.9631	26.1422
10	4.2392	32.9634	26.1421
20	4.2819	32.9715	26.1442
30	4.2419	32.9626	26.1413
40	4.4985	33.0196	26.1598
50	5.2702	33.2052	26.2214
75	7.0494	33.6526	26.3507
83	6.8113	33.6724	26.3985

STATION		US16051	
LATITUDE		41-24.1	N
LONGITUDE		140-20.4	E
DEPTH (m)		93	
Press.	Temp.	Salinity	Sigma-T
5	10.5655	33.9235	26.0142
10	10.581	33.9226	26.0107
20	10.5694	33.9217	26.012
30	10.3328	33.9306	26.0601
40	10.0884	33.9435	26.112
50	10.0229	33.9478	26.1264
75	9.7234	33.9617	26.1876
90	8.9388	33.9996	26.3444

STATION		US16052	
LATITUDE		41-24.4	N
LONGITUDE		140-06.1	E
DEPTH (m)		55	
Press.	Temp.	Salinity	Sigma-T
5	9.8315	33.9517	26.1617
10	9.8291	33.952	26.1623
20	9.7895	33.9555	26.1717
30	9.7322	33.9602	26.1849
40	9.6514	33.9623	26.2
50	9.4083	33.9756	26.2503
55	9.3761	33.9809	26.2596

STATION		US16053	
LATITUDE		41-23.9	N
LONGITUDE		140-05.9	E
DEPTH (m)		85	
Press.	Temp.	Salinity	Sigma-T
5	9.6655	33.9522	26.1897
10	9.6679	33.952	26.1892
20	9.6625	33.9503	26.1888
30	9.6562	33.9514	26.1907
40	9.5435	33.9672	26.2216
50	9.399	33.9772	26.253
75	8.5005	34.0248	26.4325
82	8.4457	34.0281	26.4434

STATION		US16054	
LATITUDE		41-23.5	N
LONGITUDE		140-06.0	E
DEPTH (m)		95	
Press.	Temp.	Salinity	Sigma-T
5	9.7759	33.9535	26.1724
10	9.7851	33.9533	26.1707
20	9.7659	33.9534	26.174
30	9.4926	33.9704	26.2325
40	9.3974	33.9764	26.2526
50	9.3389	33.9798	26.2649
75	8.9377	33.9952	26.3412
92	8.3728	34.0322	26.4578

STATION		US16055	
LATITUDE		41-22.2	N
LONGITUDE		140-06.0	E
DEPTH (m)		119	
Press.	Temp.	Salinity	Sigma-T
5	9.8379	33.9393	26.1509
10	9.8418	33.9395	26.1504
20	9.8422	33.9391	26.1501
30	9.8371	33.9379	26.15
40	9.8399	33.9368	26.1487
50	9.8322	33.9409	26.1531
75	9.1743	33.9783	26.2902
100	8.2451	34.0165	26.4649
116	7.9166	34.032	26.5259

STATION		US16056	
LATITUDE		41-26.1	N
LONGITUDE		140-02.4	E
DEPTH (m)		38	
Press.	Temp.	Salinity	Sigma-T
5	9.5913	33.9513	26.2013
10	9.5529	33.9541	26.2098
20	9.5206	33.958	26.2181
30	9.5329	33.9569	26.2153
35	9.5182	33.9583	26.2188

STATION		US16057	
LATITUDE		41-26.1	N
LONGITUDE		140-01.7	E
DEPTH (m)		57	
Press.	Temp.	Salinity	Sigma-T
5	9.5917	33.9529	26.2025
10	9.5761	33.9528	26.205
20	9.5619	33.9532	26.2076
30	9.5264	33.9547	26.2146
40	9.5502	33.9528	26.2092
50	9.5365	33.9547	26.213
53	9.5363	33.9547	26.213

STATION		US16058	
LATITUDE		41-26.0	N
LONGITUDE		140-01.1	E
DEPTH (m)		80	
Press.	Temp.	Salinity	Sigma-T
5	9.8935	33.9466	26.1473
10	9.8324	33.9436	26.1553
20	9.7507	33.9463	26.171
30	9.7675	33.9461	26.168
40	9.7565	33.947	26.1706
50	9.7141	33.9461	26.1769
75	9.7207	33.9505	26.1793
78	9.7183	33.9505	26.1797

STATION		US16059	
LATITUDE		41-25.1	N
LONGITUDE		140-00.3	E
DEPTH (m)		105	
Press.	Temp.	Salinity	Sigma-T
5	10.0752	33.9495	26.1189
10	10.071	33.9492	26.1194
20	10.0465	33.9475	26.1222
30	10.0435	33.9476	26.1228
40	9.9744	33.9455	26.1328
50	9.8016	33.946	26.1623
75	9.5058	33.9453	26.2107
100	7.533	34.0372	26.5856
102	7.4597	34.0399	26.5983

STATION		US16060	
LATITUDE		41-35.6	N
LONGITUDE		140-51.7	E
DEPTH (m)		54	
Press.	Temp.	Salinity	Sigma-T
5	10.86	33.8158	25.8784
10	10.8555	33.8163	25.8795
20	10.787	33.8635	25.9285
30	10.7894	33.871	25.9339
40	10.7918	33.8714	25.9337
46	10.7927	33.8716	25.9337

STATION US16061			
LATITUDE	41-36.8	N	
LONGITUDE	140-51.3	E	
DEPTH (m)	85		
Press.	Temp.	Salinity	Sigma-T
5	10.8446	33.8236	25.8872
10	10.8151	33.8285	25.8962
20	10.7828	33.8382	25.9094
30	10.7638	33.8535	25.9247
40	10.7587	33.8619	25.9322
50	10.7637	33.8664	25.9348
75	10.7667	33.8671	25.9348
83	10.7676	33.867	25.9346

STATION US16062			
LATITUDE	41-38.6	N	
LONGITUDE	140-49.2	E	
DEPTH (m)	325		
Press.	Temp.	Salinity	Sigma-T
5	10.6898	33.8542	25.9384
10	10.6948	33.856	25.9389
20	10.6717	33.9156	25.9894
30	10.4996	33.9132	26.0177
40	10.5054	33.9138	26.0171
50	10.3567	33.8993	26.0315
75	10.269	33.8892	26.0387
100	10.2203	33.901	26.0564
125	10.2223	33.9057	26.0596
150	10.239	33.9057	26.0568
175	10.2399	33.8991	26.0515
200	10.1715	33.9282	26.0859
250	10.1508	33.9502	26.1066
300	10.1441	33.9525	26.1095
307	10.1375	33.9529	26.111

STATION US16063			
LATITUDE	41-40.8	N	
LONGITUDE	140-47.3	E	
DEPTH (m)	222		
Press.	Temp.	Salinity	Sigma-T
5	10.6891	33.8678	25.9491
10	10.6737	33.8877	25.9672
20	10.6814	33.911	25.984
30	10.6487	33.9091	25.9884
40	10.6465	33.9123	25.9912
50	10.6197	33.9096	25.9938
75	10.618	33.9107	25.995
100	10.4715	33.9151	26.024
125	10.4018	33.9201	26.04
150	10.294	33.9242	26.0618
175	10.2384	33.9374	26.0816
200	10.1683	33.9422	26.0974
205	10.1603	33.9457	26.1015

STATION US16064			
LATITUDE	41-28.8	N	
LONGITUDE	140-45.2	E	
DEPTH (m)	84		
Press.	Temp.	Salinity	Sigma-T
5	10.6031	33.8884	25.9802
10	10.6032	33.8884	25.9802
20	10.6103	33.8888	25.9792
30	10.5921	33.892	25.9849
40	10.5019	33.8999	26.0068
50	10.1939	33.8868	26.0497
75	10.1606	33.9168	26.0788
81	10.1841	33.926	26.0821

STATION US16065			
LATITUDE	42-10.4	N	
LONGITUDE	140-41.2	E	
DEPTH (m)	86		
Press.	Temp.	Salinity	Sigma-T
5	5.2933	33.7088	26.6178
10	5.3136	33.711	26.6172
20	5.3989	33.7313	26.6232
30	5.4091	33.7329	26.6233
40	5.3869	33.7319	26.6251
50	5.3786	33.733	26.627
75	5.298	33.7366	26.6393
84	5.3107	33.7388	26.6395

STATION US16066			
LATITUDE	42-09.6	N	
LONGITUDE	140-35.9	E	
DEPTH (m)	72		
Press.	Temp.	Salinity	Sigma-T
5	4.8196	33.6743	26.6445
10	4.8536	33.679	26.6444
20	4.9509	33.6958	26.6469
30	4.8218	33.6736	26.6437
40	4.8468	33.6813	26.647
50	4.9826	33.7038	26.6496
70	5.1396	33.7366	26.6577

STATION US16067			
LATITUDE	42-11.0	N	
LONGITUDE	140-35.7	E	
DEPTH (m)	79		
Press.	Temp.	Salinity	Sigma-T
5	5.5685	33.7818	26.643
10	5.5746	33.7812	26.6418
20	5.5777	33.7808	26.6411
30	5.577	33.7807	26.6411
40	5.5761	33.7806	26.6411
50	5.5713	33.7791	26.6405
75	5.4118	33.7705	26.6527
78	5.2834	33.7632	26.662

STATION US16068			
LATITUDE	42-16.5	N	
LONGITUDE	140-35.7	E	
DEPTH (m)	91		
Press.	Temp.	Salinity	Sigma-T
5	5.6778	33.7868	26.6338
10	5.6814	33.7864	26.6329
20	5.6842	33.7864	26.6326
30	5.6843	33.7861	26.6324
40	5.6854	33.7864	26.6325
50	5.6865	33.7867	26.6326
75	5.6893	33.7862	26.6319
89	5.6843	33.7863	26.6325

STATION US16069			
LATITUDE	42-20.7	N	
LONGITUDE	140-36.5	E	
DEPTH (m)	88		
Press.	Temp.	Salinity	Sigma-T
5	5.5245	33.7495	26.6227
10	5.525	33.7486	26.6219
20	5.5248	33.7485	26.6218
30	5.5265	33.7493	26.6224
40	5.5195	33.748	26.6221
50	5.576	33.7589	26.6239
75	5.5865	33.7605	26.624
86	5.5895	33.7608	26.6238

STATION US16070			
LATITUDE	42-26.0	N	
LONGITUDE	140-37.1	E	
DEPTH (m)	84		
Press.	Temp.	Salinity	Sigma-T
5	5.5077	33.6886	26.5765
10	5.5088	33.6888	26.5765
20	5.5071	33.6879	26.576
30	5.5044	33.6875	26.5761
40	5.4975	33.6874	26.5768
50	5.4971	33.6873	26.5767
75	5.6553	33.7552	26.6115
81	5.6548	33.7554	26.6117

STATION US16071			
LATITUDE	42-31.2	N	
LONGITUDE	140-37.5	E	
DEPTH (m)	61		
Press.	Temp.	Salinity	Sigma-T
5	5.0632	33.6189	26.5732
10	5.067	33.62	26.5736
20	5.0703	33.6205	26.5736
30	5.074	33.6211	26.5737
40	5.0745	33.621	26.5735
50	5.0847	33.6229	26.5739
59	4.9925	33.6149	26.578

STATION US16072			
LATITUDE	42-28.1	N	
LONGITUDE	140-43.2	E	
DEPTH (m)	60		
Press.	Temp.	Salinity	Sigma-T
5	4.9643	33.4729	26.4686
10	4.9568	33.4763	26.4722
20	5.1087	33.5229	26.4919
30	5.2096	33.5603	26.5099
40	5.3969	33.6419	26.5527
50	5.5446	33.6759	26.562
58	5.5294	33.675	26.5631

STATION US16073			
LATITUDE	42-25.2	N	
LONGITUDE	140-48.7	E	
DEPTH (m)	43		
Press.	Temp.	Salinity	Sigma-T
5	4.7492	33.3368	26.3845
10	4.7486	33.3362	26.3842
20	4.7491	33.3355	26.3835
30	4.7732	33.3541	26.3957
40	4.881	33.4083	26.4267
41	4.908	33.4314	26.442

STATION US16074			
LATITUDE	42-20.9	N	
LONGITUDE	140-48.6	E	
DEPTH (m)	52		
Press.	Temp.	Salinity	Sigma-T
5	4.6237	33.2828	26.3554
10	4.6294	33.2821	26.3542
20	4.6245	33.283	26.3555
30	5.0387	33.4481	26.4406
40	5.4161	33.6252	26.5372
49	5.4265	33.6408	26.5483

STATION US16075			
LATITUDE	42-18.5	N	
LONGITUDE	140-42.3	E	
DEPTH (m)	64		
Press.	Temp.	Salinity	Sigma-T
5	4.9148	33.5678	26.5494
10	4.959	33.5754	26.5505
20	5.2286	33.6659	26.5914
30	5.3088	33.7002	26.6092
40	5.3355	33.7103	26.6141
50	5.3562	33.72	26.6194
62	5.3877	33.7267	26.6209

STATION US16076			
LATITUDE		42-13.4	N
LONGITUDE		140-41.2	E
DEPTH (m)		88	
Press.	Temp.	Salinity	Sigma-T
5	4.8513	33.5994	26.5816
10	4.86	33.5994	26.5806
20	4.8532	33.5989	26.5809
30	5.2243	33.7117	26.6281
40	5.2451	33.712	26.626
50	5.2743	33.7183	26.6276
75	5.2977	33.7322	26.6358
86	5.2944	33.7323	26.6364

STATION US16077			
LATITUDE		42-10.4	N
LONGITUDE		140-46.9	E
DEPTH (m)		94	
Press.	Temp.	Salinity	Sigma-T
5	5.3005	33.6252	26.5508
10	5.3088	33.625	26.5497
20	5.3175	33.6258	26.5493
30	5.319	33.6264	26.5496
40	5.3217	33.6292	26.5515
50	5.3391	33.6427	26.5602
75	5.4312	33.6912	26.5877
92	5.354	33.6978	26.602

STATION US16078			
LATITUDE		42-07.0	N
LONGITUDE		140-50.4	E
DEPTH (m)		68	
Press.	Temp.	Salinity	Sigma-T
5	5.7022	33.3996	26.3246
10	5.708	33.4013	26.3252
20	5.7229	33.4059	26.327
30	5.8914	33.5775	26.4421
40	5.6335	33.5954	26.4877
50	5.3661	33.5909	26.5159
60	5.405	33.6243	26.5378

STATION US16079			
LATITUDE		41-59.5	N
LONGITUDE		141-01.7	E
DEPTH (m)		100	
Press.	Temp.	Salinity	Sigma-T
5	5.8042	33.3411	26.266
10	5.7978	33.3411	26.2667
20	5.8053	33.3418	26.2664
30	5.8102	33.3426	26.2664
40	5.8086	33.342	26.2662
50	5.7936	33.3439	26.2695
75	5.7872	33.3764	26.2959
96	5.5047	33.5416	26.4606

STATION US16080			
LATITUDE		41-58.8	N
LONGITUDE		141-00.7	E
DEPTH (m)		94	
Press.	Temp.	Salinity	Sigma-T
5	5.8549	33.3489	26.2659
10	5.8542	33.3492	26.2662
20	5.8535	33.3488	26.266
30	5.8595	33.35	26.2662
40	5.8376	33.3485	26.2678
50	5.5827	33.3296	26.2836
75	5.6977	33.3906	26.318
91	5.5091	33.5343	26.4542

STATION US16081			
LATITUDE		41-58.2	N
LONGITUDE		140-59.6	E
DEPTH (m)		87	
Press.	Temp.	Salinity	Sigma-T
5	5.553	33.2985	26.2625
10	5.5543	33.2985	26.2623
20	5.5597	33.2993	26.2624
30	5.5617	33.2991	26.2619
40	5.644	33.3174	26.2666
50	5.8359	33.3636	26.2799
75	6.0772	33.4635	26.3289
84	5.5375	33.5417	26.4568

STATION US16082			
LATITUDE		41-57.6	N
LONGITUDE		140-58.4	E
DEPTH (m)		81	
Press.	Temp.	Salinity	Sigma-T
5	5.7638	33.3317	26.2635
10	5.7665	33.3317	26.2631
20	5.7654	33.3313	26.2629
30	5.7293	33.3311	26.2672
40	5.6206	33.3344	26.2828
50	5.4525	33.3277	26.2975
75	5.6558	33.4902	26.4019
77	5.6041	33.4955	26.4122

STATION US16083			
LATITUDE		42-13.9	N
LONGITUDE		140-30.1	E
DEPTH (m)		78	
Press.	Temp.	Salinity	Sigma-T
5	5.4541	33.7483	26.6302
10	5.4546	33.749	26.6306
20	5.4568	33.7497	26.6309
30	5.4615	33.7499	26.6306
40	5.4703	33.7505	26.63
50	5.4686	33.7504	26.63
75	5.4896	33.7663	26.6402
77	5.4916	33.7669	26.6405

STATION US16084			
LATITUDE		42-18.9	N
LONGITUDE		140-23.1	E
DEPTH (m)		53	
Press.	Temp.	Salinity	Sigma-T
5	5.3427	33.7605	26.653
10	5.3347	33.7597	26.6533
20	5.3311	33.7592	26.6533
30	5.3333	33.7598	26.6535
40	5.2417	33.7518	26.6579
50	5.199	33.7542	26.6648
51	5.1887	33.7543	26.666

STATION US16085			
LATITUDE		42-18.8	N
LONGITUDE		140-30.2	E
DEPTH (m)		92	
Press.	Temp.	Salinity	Sigma-T
5	5.4743	33.7351	26.6173
10	5.4746	33.7356	26.6176
20	5.4789	33.7363	26.6177
30	5.482	33.7368	26.6177
40	5.4776	33.7358	26.6175
50	5.4934	33.7387	26.6179
75	5.5293	33.7453	26.6188
90	5.3968	33.774	26.6573

STATION US16086			
LATITUDE		42-23.1	N
LONGITUDE		140-42.6	E
DEPTH (m)		61	
Press.	Temp.	Salinity	Sigma-T
5	4.7791	33.4651	26.483
10	4.7581	33.464	26.4845
20	4.8756	33.5136	26.5108
30	4.9904	33.5493	26.5262
40	5.3071	33.6629	26.5798
50	5.5683	33.7328	26.6043
59	5.5839	33.7434	26.6108

STATION US16087			
LATITUDE		42-15.4	N
LONGITUDE		140-47.5	E
DEPTH (m)		72	
Press.	Temp.	Salinity	Sigma-T
5	4.9389	33.4135	26.4244
10	4.9088	33.4149	26.4288
20	4.8098	33.5081	26.5137
30	4.831	33.534	26.5319
40	5.1567	33.653	26.5895
50	5.3604	33.721	26.6196
71	5.3756	33.7408	26.6335

STATION US16088			
LATITUDE		42-17.5	N
LONGITUDE		140-53.9	E
DEPTH (m)		57	
Press.	Temp.	Salinity	Sigma-T
5	5.1977	33.3748	26.3644
10	5.1562	33.3715	26.3665
20	5.1173	33.3733	26.3724
30	5.0296	33.3772	26.3854
40	5.0412	33.3956	26.3987
50	5.0143	33.4626	26.4549
55	5.4195	33.7273	26.6176

STATION US16089			
LATITUDE		42-16.0	N
LONGITUDE		140-58.6	E
DEPTH (m)		64	
Press.	Temp.	Salinity	Sigma-T
5	5.1898	33.341	26.3385
10	5.1489	33.3394	26.342
20	5.2287	33.3875	26.3709
30	5.1665	33.3849	26.376
40	5.0883	33.3828	26.3832
50	5.1108	33.3946	26.39
63	5.1592	33.4267	26.41

STATION US16090			
LATITUDE		42-12.9	N
LONGITUDE		140-56.0	E
DEPTH (m)		69	
Press.	Temp.	Salinity	Sigma-T
5	5.1813	33.3062	26.312
10	5.1441	33.325	26.3311
20	5.2202	33.3427	26.3363
30	5.3394	33.3723	26.346
40	5.1701	33.3625	26.3578
50	5.2699	33.3879	26.3664
68	5.4335	33.71	26.6023

STATION US16091			
LATITUDE		42-05.0	N
LONGITUDE		140-56.6	E
DEPTH (m)		84	
Press.	Temp.	Salinity	Sigma-T
5	5.6106	33.3404	26.2888
10	5.6074	33.3407	26.2894
20	5.5347	33.3354	26.2938
30	5.5046	33.334	26.2963
40	5.5146	33.3367	26.2972
50	5.5161	33.3374	26.2976
75	5.3564	33.3851	26.3542
82	5.3068	33.4588	26.4183