

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C001		Cast Name:		Date(GMT): 2016/06/02		Station: C001		Cast Name:		Date(GMT): 2016/06/02									
Operator: Nagasawa		Surface Temperature 22.2 °C		Operator: Toda		Surface Temperature 22.7 °C													
File Name: C001		File Name: C01R																	
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth					
Cast Start		10:08		30 13.319N		146 47.929E		6127 m		Cast Start		16:02		30 13.083N		146-47.454E		6127 m	
Bottom		12:01		Pressure <636.84 db>		Wire out 4238.0 m>		Altitude 74.09m>		Bottom		16:23		Pressure <800.76 db>		Wire out <795.0 m>		Altitude <- m>	
Cast End		13:59		30-13.04 N		146-47.634 E		6127 m		Cast End		16:49		30-12.936 N		146-47.357 E		6128 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo				
1	bottom	✓	SBE35	13	1750	✓		1	800	✓		13	200	✓					
2	6000	✓	SBE35	14	1500	✓		2	800	✓		14	200	✓					
3	5500	✓	SBE35	15	1250	✓		3	800	✓		15	200	✓					
4	5000	✓	SBE35	16	1000	✓		4	600	✓		16	150	✓					
5	4500	✓		17	800	✓		5	600	✓		17	150	✓					
6	4000	✓		18	600	✓		6	600	✓		18	150	✓					
7	3500	✓		19	400	✓		7	400	✓		19	100	✓					
8	3000	✓		20	250	✓		8	400	✓		20	100	✓					
9	2750	✓		21	100	✓		9	400	✓		21	100	✓					
10	2500	✓		22	50	✓		10	300	✓		22	50	✓					
11	2250	✓		23	20	✓		11	300	✓		23	50	✓					
12	2000	✓	SBE35	24	10	✓		12	300	✓		24	50	✓					
4500m 7-9異常 3500m 7-9異常 2500m 7-9異常				2000m 7-9異常 Stop 1212 採水 1212															

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CTD Observation Log Sheet

Station: C001		Cast Name: C01S		Date(GMT): 2016/6/2		Station: C002		Cast Name: C02S		Date(GMT): 2016/6/05									
Operator: Takeuchi		Surface Temperature		°C		Operator: Kanakubo		Surface Temperature		11.42 °C									
File Name		C01S		File Name		C02S		File Name		C02S									
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth					
Cast Start		17:23		30-12.73N		146-47.202E		6128 m		Cast Start		19:45		41-00.151N		161-00.243 E		5613 m	
Bottom		17:32		Pressure < 199.62 db>		Wire out < 197.0 m>		Altitude < - m>		Bottom		19:55		Pressure < 200.61 db>		Wire out < 197 m>		Altitude < - m>	
Cast End		17:50		30-12.606N		146-47.056E		6128 m		Cast End		20:03		41-00.225 N		161-00.258 E		5617 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	110	✓		1	200	✓		13	80	✓					
2	200	✓		14	110	✓		2	190	✓		14	70	✓					
3	180	✓		15	100	✓		3	180	✓		15	60	✓					
4	180	✓		16	100	✓		4	170	✓		16	50	✓					
5	160	✓		17	90	✓		5	160	✓		17	40	✓					
6	160	✓		18	90	✓		6	150	✓		18	30	✓					
7	140	✓		19	80	✓		7	140	✓		19	20	✓					
8	140	✓		20	80	✓		8	130	✓		20	10	✓					
9	130	✓		21	70	✓		9	120	✓		21	200	✓					
10	130	✓		22	70	✓		10	110	✓		22	200	✓					
11	120	✓		23	60	✓		11	100	✓		23	200	✓					
12	120	✓		24	60	✓		12	90	✓		24	200	✓					

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CTD Observation Log Sheet

Station: C002		Cast Name: C002		Date(GMT): 2016/06/05		Station: C003		Cast Name: C03S		Date(GMT): 2016. 6/6									
Operator: Yagi				Surface Temperature 11.8/ °C				Operator: Kakiuchi				Surface Temperature 9.1/ °C							
File Name		C002						File Name		C03S									
		Time(GMT)	Latitude		Longitude		Depth				Time(GMT)	Latitude		Longitude		Depth			
Cast Start		20:43	41-00.282 N		161-00.263 E		5616 m		Cast Start		03:10	40-53.794N		162-00.576E		5523 m			
Bottom		21:22	Pressure <200.70 db>		Wire out <1982 m>		Altitude <- m>		Bottom		03:20	Pressure <200.46 db>		Wire out <200.0 m>		Altitude <- m>			
Cast End		21:59	41-00.495 N		161-00.346 E		5611 m		Cast End		03:28	40-53.665N		162-00.926E		5526 m			
Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo	
1	2000	✓			13	350	✓			1	200	✓			13	80	✓		
2	1750	✓			14	300	✓			2	190	✓			14	70	✓		
3	1500	✓			15	250	✓			3	180	✓			15	60	✓		
4	1250	✓			16	200	✓			4	170	✓			16	50	✓		
5	1000	✓			17	175	✓			5	160	✓			17	40	✓		
6	900	✓			18	150	✓			6	150	✓			18	30	✓		
7	800	✓			19	125	✓			7	140	✓			19	20	✓		
8	700	✓			20	100	✓			8	130	✓			20	10	✓		
9	600	✓			21	75	✓			9	120	✓			21	200	✓		
10	500	✓			22	50	✓			10	110	✓			22	200	✓		
11	450	✓			23	25	✓			11	100	✓			23	200	✓		
12	400	✓			24	10	✓			12	90	✓			24	200	✓		
Down 202db. 32 21047 } 異物吸い込み?																			
208db. 31 21047 }																			
#8, #9 ミスファイヤ(セックミス)																			

11.61

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CTD Observation Log Sheet

Station: C003		Cast Name: C003		Date(GMT): 2016. 6/6		Station: C004		Cast Name: C045		Date(GMT): 2016. 6/6					
Operator: Yamada		Surface Temperature 9.0 °C		Operator: Yagi, Miyamoto		Surface Temperature 9.80 °C									
File Name		C003				File Name		C045							
		Time(GMT)	Latitude	Longitude	Depth			Time(GMT)	Latitude	Longitude	Depth				
Cast Start		03:58	40-53.632N	162-00.617E	5524 m	Cast Start		10:48	40-47.879N	162-59.988E	5308 m				
Bottom		04:42	Pressure <2000.09 db>	Wire out <1980 m>	Altitude <- m>	Bottom		10:54	Pressure <200.00 db>	Wire out <1917 m>	Altitude <- m>				
Cast End		05:18	40-53.537N	162-00.597E	5524 m	Cast End		11:02	40 44.786N	162 59.839E	m				
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	200	✓		13	80	✓	
2	1750	✓		14	300	✓		2	190	✓		14	70	✓	
3	1500	✓		15	250	✓		3	180	✓		15	60	✓	
4	1250	✓		16	200	✓		4	170	✓		16	50	✓	
5	1000	✓		17	175	✓		5	160	✓		17	40	✓	
6	900	✓		18	150	✓		6	150	✓		18	30	✓	
7	800	✓		19	125	✓		7	140	✓		19	20	✓	
8	700	✓		20	100	✓		8	130	✓		20	10	✓	
9	600	✓		21	75	✓		9	120	✓		21	200	✓	
10	500	✓		22	50	✓		10	110	✓		22	200	✓	
11	450	✓		23	25	✓		11	100	✓		23	200	✓	
12	400	✓		24	10	✓		12	90	✓		24	200	✓	

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CTD Observation Log Sheet

Station: C004		Cast Name: C004		Date(GMT): 2016/6/6		Station: C005		Cast Name: C055		Date(GMT): 2016, 6/6					
Operator: Suzuki		Surface Temperature 9.4 °C		Operator: Sasaki		Surface Temperature 12.2 °C									
File Name: C004				File Name: C055											
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth	
Cast Start		11:42		40 47.695 N		162 59.623 E		5314 m		Cast Start		18:06		40-42.140 N / 164-00.178 E 4697 m	
Bottom		12:21		Pressure < 200.72 db>		Wire out < 1981 m>		< - m>		Bottom		18:16		Pressure < 199.49 db> Wire out < 198 m> < - m>	
Cast End		12:59		40 47.712 N		162 59.545 E		5320 m		Cast End		18:24		40-42.140 N 164-00.088 E 4695 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	200	✓		13	80	✓	
2	1750	✓		14	300	✓		2	190	✓		14	70	✓	
3	1500	✓		15	250	✓		3	180	✓		15	60	✓	
4	1250	✓		16	200	✓		4	170	✓		16	50	✓	
5	1000	✓		17	175	✓		5	160	✓		17	40	✓	
6	900	✓		18	150	✓		6	150	✓		18	30	✓	
7	800	✓		19	125	✓		7	140	✓		19	20	✓	
8	700	✓		20	100	✓		8	130	✓		20	10	✓	
9	600	✓		21	75	✓		9	120	✓		21	200	✓	
10	500	✓		22	50	✓		10	110	✓		22	200	✓	
11	450	✓		23	25	✓		11	100	✓		23	200	✓	
12	400	✓		24	10	✓		12	90	✓		24	200	✓	

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CTD Observation Log Sheet

Station: C005	Cast Name: C005	Date(GMT): 2016/06/06	Station:	Cast Name: C06S	Date(GMT): 2016/6/17
Operator: Kanakubo		Surface Temperature 11.71 °C	Operator: Suzuki		Surface Temperature 10.2 °C
File Name: C005			File Name: C06S		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	18:52	40-42.054 N	164-00.090 E	4698 m	
Bottom	19:31	Pressure < 2000 db>	Wire out < 1981 m>	Altitude < m>	
Cast End	20:08	40-41.814 N	164-00.312 E	4701 m	
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	1:11	40 35: 627 N	165 00 861 E	5433 m	
Bottom	1:20	Pressure < 200.94 db>	Wire out < 198 m>	Altitude < m>	
Cast End	1:34	40-35.474 N	165 01.245 E	5432 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	200	✓		13	100	✓	
2	1750	✓		14	300	✓		2	200	✓		14	100	✓	
3	1500	✓		15	250	✓		3	200	✓		15	75	✓	
4	1250	✓		16	200	✓		4	200	✓		16	75	✓	
5	1000	✓		17	175	✓		5	150	✓		17	50	✓	
6	900	✓		18	150	✓		6	150	✓		18	50	✓	
7	800	✓		19	125	✓		7	150	✓		19	30	✓	
8	700	✓		20	100	✓		8	150	✓		20	30	✓	
9	600	✓		21	75	✓		9	125	✓		21	20	✓	
10	500	✓		22	50	✓		10	125	✓		22	20	✓	
11	450	✓		23	25	✓		11	125	✓		23	10	✓	
12	400	✓		24	10	✓		12	125	✓		24	10	✓	

Up 1635dbから SUNA データ異常 (おそらく電池切れ)

#18 #20 ミスファイアー (セリミス)

(このファストの準備の時 SUNA がつかっていたのでは?)

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CTD Observation Log Sheet

Station: C006	Cast Name: C06R	Date(GMT): 2016/6/7	Station: C006	Cast Name: C006	Date(GMT): 2016. 6/7
Operator: Suzuki		Surface Temperature 9.9 °C	Operator: Yamaguchi		Surface Temperature 10.1 °C
File Name: C06R			File Name: C006		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	2:40	40 34.960	165 02.575	5432 m	
Bottom	3:04	Pressure <1000, 68 db>	Wire out <995 m>	Altitude <- m>	
Cast End	3:33	40-34.593N	165-02.981E	5432 m	
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	3:58	40-34.549N	165-02.947E	5433 m	
Bottom	4:40	Pressure <2000, 91 db>	Wire out <1984 m>	Altitude <- m>	
Cast End	5:17	40-34.256N	165-03.069E	5436 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	1000	✓		13	600	✓		1	2000	✓		13	350	✓	
2	1000	✓		14	600	✓		2	1750	✓		14	300	✓	
3	1000	✓		15	500	✓		3	1500	✓		15	250	✓	
4	900	✓		16	500	✓		4	1250	✓		16	200	✓	
5	900	✓		17	400	✓		5	1000	✓		17	175	✓	
6	900	✓		18	400	✓		6	900	✓		18	150	✓	
7	800	✓		19	300	✓		7	800	✓		19	125	✓	
8	800	✓		20	300	✓		8	700	✓		20	100	✓	
9	800	✓		21	200	✓		9	600	✓		21	75	✓	
10	700	✓		22	200	✓		10	500	✓		22	50	✓	
11	700	✓		23	100	✓		11	450	✓		23	25	✓	
12	700	✓		24	100	✓		12	400	✓		24	10	✓	

								波の向きの75mから7.21							
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C007		Cast Name: C07S		Date(GMT): 2016/06/07		Station: C007		Cast Name: C007		Date(GMT): 2016/6/7									
Operator: Yagi		Surface Temperature 11.21 °C		Operator: Aoki		Surface Temperature 11.2 °C													
File Name		C07S		File Name		C007													
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth					
Cast Start		10:40		40-30.253N		166-00.575E		5541.3 m		Cast Start		11:28		40 30.999N 166 00.958		5552m			
Bottom		10:50		Pressure <200.16 db>		Wire out <197 m>		Altitude <- m>		Bottom		12:10		Pressure <2000 db>		Wire out <1983 m>		Altitude <- m>	
Cast End		10:59		40-30.313N		166-00.818E		5540 m		Cast End		12:46		40 31.04 N		166 01.659		5551 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓					
2	190	✓		14	70	✓		2	1750	✓		14	300	✓					
3	180	✓		15	60	✓		3	1500	✓		15	250	✓					
4	170	✓		16	50	✓		4	1250	✓		16	200	✓					
5	160	✓		17	40	✓	4-7	5	1000	✓		17	175	✓					
6	150	✓		18	30	✓		6	900	✓		18	150	✓					
7	140	✓		19	20	✓		7	800	✓		19	125	✓					
8	130	✓		20	10	✓		8	700	✓		20	100	✓					
9	120	✓		21	200	✓		9	600	✓		21	75	✓					
10	110	✓		22	200	✓		10	500	✓		22	50	✓					
11	100	✓		23	200	✓		11	450	✓		23	25	✓					
12	90	✓		24	200	✓		12	400	✓		24	10	✓					
5mからキャスト								5mからリール											

#174-7

C007終了後
バネを交換

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CTD Observation Log Sheet

Station: C008		Cast Name: C08S		Date(GMT): 2016/6/7		Station: C008		Cast Name: C008		Date(GMT): 2016/06/07	
Operator: Doi		Surface Temperature 13.9 °C		Operator: Fukuyama		Surface Temperature 12.28 °C					
File Name		C08S		File Name		C008					
	Time(GMT)	Latitude	Longitude	Depth		Time(GMT)	Latitude	Longitude	Depth		
Cast Start	18:22	40-23.960N	167-00.086E	5603 m	Cast Start	19:13	40-23.885N	167-00.165E	5605 m		
Bottom	18:32	Pressure <199.96 db>	Wire out <198 m>	Altitude <- m>	Bottom	19:54	Pressure <200.59 db>	Wire out <1987 m>	Altitude <- m>		
Cast End	18:40	40-23.840N	167-00.140E	5607 m	Cast End	20:30	40-23.495N	167-00.268E	5603 m		
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		13	350	✓	
2	190	✓		14	70	✓		14	300	✓	
3	180	✓		15	60	✓		15	250	✓	
4	170	✓		16	50	✓		16	200	✓	
5	160	✓		17	40	✓		17	175	✓	
6	150	✓		18	30	✓		18	150	✓	
7	140	✓		19	20	✓		19	125	✓	
8	130	✓		20	10	✓		20	100	✓	
9	120	✓		21	200	✓		21	75	✓	
10	110	✓		22	200	✓		22	50	✓	
11	100	✓		23	200	✓		23	25	✓	
12	90	✓		24	200	✓		24	10	✓	
10mからキャスト開始 開始前に3回取り(約2回半)								10mからキャスト開始 フレームにクラゲ			

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CTD Observation Log Sheet

Station: C009	Cast Name: C09S	Date(GMT): 2016/6/8	Station: C009	Cast Name: C009	Date(GMT): 2016/06/08
Operator: Suzuki		Surface Temperature 13.1 °C	Operator: Nagasawa		Surface Temperature 12.9 °C
File Name C09S			File Name C009		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	1:47	40 18.18N	168 00.052E	5588 m	
Bottom	1:57	Pressure < 200.09 db>	Wire out < 198 m>	Altitude < - m>	
Cast End	2:05	40 18.278N	168 00.583E	5586 m	
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	2:31	40 18.702N	168 00.886E	5591 m	
Bottom	3:11	Pressure < 2000.22 db>	Wire out < 1985 m>	Altitude < - m>	
Cast End	3:48	40-19.070N	168-01.381E	5593 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	

5m 29.4℃

5m 29.4℃

SUNA 約 900℃ 152" 気温
1000℃ 152" 電池切れ
1100℃ 152" 電池切れ
1200℃

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CTD Observation Log Sheet

Station: C010		Cast Name: C10S		Date(GMT): 2016/06/08		Station: C010		Cast Name: C010		Date(GMT): 2016/06/08	
Operator: Kanakubo		Surface Temperature 12.60 °C		Operator: Doi		Surface Temperature 12.09 °C					
File Name		C10S		File Name		C010					
	Time(GMT)	Latitude	Longitude	Depth		Time(GMT)	Latitude	Longitude	Depth		
Cast Start	08:47	40-11.735 N	169-00.131 E	5483 m	Cast Start	09:41	40-10.629 N	169-00.533 E	5562 m		
Bottom	08:56	Pressure <199.80 db>	Wire out <199 m>	Altitude <- m>	Bottom	10:27	Pressure <2001.37 db>	Wire out <2014 m>	Altitude <- m>		
Cast End	09:04	40-11.230 N	169-00.294 E	m	Cast End	11:05	40.09.144 N	169-00.462 E	5690 m		
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		13	350	✓	
2	190	✓		14	70	✓		14	300	✓	
3	180	✓		15	60	✓		15	250	✓	
4	170	✓		16	50	✓		16	200	✓	
5	160	✓		17	40	✓		17	175	✓	
6	150	✓		18	30	✓		18	150	✓	
7	140	✓		19	20	✓		19	125	✓	
8	130	✓		20	10	✓		20	100	✓	
9	120	✓		21	200	✓		21	75	✓	
10	110	✓		22	200	✓		22	50	✓	
11	100	✓		23	200	✓		23	25	✓	
12	90	✓		24	200	✓		24	10	✓	
10mからスタート #19 リーク (エアバ>ト締め不足)				10mからスタート							

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CTD Observation Log Sheet

Station:	Cast Name: C011	Date(GMT): 2016/06/09	Station: C012	Cast Name: C012	Date(GMT): 2016, 6/9						
Operator: Doi	Surface Temperature 10.50 °C		Operator: Yamada	Surface Temperature 11.8 °C							
File Name	C011				File Name	C012					
	Time(GMT)	Latitude	Longitude	Depth		Time(GMT)	Latitude	Longitude	Depth		
Cast Start	09:41	41-09.058 N	170-33.071 E	1606 m	Cast Start	16:52	40-19.017 N	170-21.064 E	1448 m		
Bottom	10:08	Pressure <1002.23 db>	Wire out <995 m>	Altitude <10.1 m>	Bottom	17:26	Pressure <1448.72 db>	Wire out <1446 m>	Altitude <10.6 m>		
Cast End	10:36	41-09.045 N	170-32.847 E	1006 m	Cast End	17:53	40-18.99 N	170-21.029 E	1446 m		
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	1602	✓	B-10	13	350	✓		1	Bottom	✓	1448
2	991	✓	B-20	14	300	✓		2	B-20	✓	1428
3	980	✓	B-30	15	250	✓		3	1300	✓	
4	950	✓		16	200	✓		4	1250	✓	
5	850	✓		17	175	✓		5	1000	✓	
6	900	✓		18	150	✓		6	900	✓	
7	800	✓		19	125	✓		7	800	✓	
8	700	✓		20	100	✓		8	700	✓	
9	600	✓		21	75	✓		9	600	✓	
10	500	✓		22	50	✓		10	500	✓	
11	450	✓		23	25	✓		11	450	✓	
12	400	✓		24	10	✓		12	400	✓	
10m 29-t				450m Second of S (C12 212h) 及 170 DO 212h 135db 2元 12 13.							

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CTD Observation Log Sheet

Station: C013		Cast Name: C13S		Date(GMT): 2016/06/09		Station: C013		Cast Name: C013		Date(GMT): 2016/06/09					
Operator: Kanakubo				Surface Temperature 11.37 °C				Operator: Toda				Surface Temperature 11.90 °C			
File Name		C13S						File Name		C013					
		Time(GMT)	Latitude		Longitude		Depth			Time(GMT)	Latitude		Longitude		Depth
Cast Start		21:28	40-05.921N		170-00.102E		5648 m	Cast Start		22:42	40-05.946N		170-00.093E		5646 m
Bottom		21:38	Pressure < 200.99 db>		Wire out < 197 m>		Altitude < -m>	Bottom		23:23	Pressure < 200.8 db>		Wire out < 198.1 m>		Altitude < -m>
Cast End		21:57	40-05.816N		170-00.024E		5745 m	Cast End		23:58	40-05.891N		170-00.177E		5721 m
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	100	✓		1	2000	✓		13	350	✓	
2	200	✓		14	100	✓		2	1750	✓		14	300	✓	
3	200	✓		15	75	✓		3	1500	✓		15	250	✓	
4	200	✓		16	75	✓		4	1250	✓		16	200	✓	
5	150	✓		17	50	✓		5	1000	✓		17	175	✓	
6	150	✓		18	50	✓		6	900	✓		18	150	✓	
7	150	✓		19	30	✓		7	800	✓		19	125	✓	
8	150	✓		20	30	✓		8	700	✓		20	100	✓	
9	125	✓		21	20	✓		9	600	✓		21	75	✓	
10	125	✓		22	20	✓		10	500	✓		22	50	✓	
11	125	✓		23	10	✓		11	450	✓		23	25	✓	
12	125	✓		24	10	✓		12	400	✓		24	10	✓	
5mスタート 1波の高さのため								5mスタート							

11.57



12.10

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C014		Cast Name: C014		Date(GMT): 2016/06/10		Station: C015		Cast Name: C015		Date(GMT): 2016/06/10					
Operator: Fukuyama				Surface Temperature 13.12 °C				Operator: Suzuki				Surface Temperature 12.9 °C			
File Name		C014						File Name		C015					
		Time(GMT)	Latitude		Longitude		Depth			Time(GMT)	Latitude		Longitude		Depth
Cast Start		08:42	39-25.274N		170-00.064E		5748 m	Cast Start		14:27	39 24.775 N		170 24.688 E		6138 m
Bottom		10:34	Pressure <5959.9db>		Wire out <5842 m>		Altitude <9.4m>	Bottom		16:23	Pressure <6372.6db>		Wire out <6236 m>		Altitude <41.6m>
Cast End		12:25	39 24.621 N		170 00.525 E		5734 m	Cast End		18:20	39-24.410N		170-23.971 E		6136 m
Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo		
1	5966	✓	B-10		13	1,500	✓			1	6372	✓	B-10 ↑		
2	5,500	✓	SBE35		14	1,250	✓			2	6000	✓	SBE35		
3	5,000	✓	↑		15	1,000	✓			3	5500	✓			
4	4,500	✓			16	850	✓			4	5000	✓			
5	4,000	✓			17	700	✓			5	4500	✓			
6	3,500	✓			18	550	✓			6	4000	✓			
7	3,000	✓			19	400	✓			7	3500	✓			
8	2,750	✓			20	250	✓			8	3000	✓			
9	2,500	✓			21	100	✓			9	2750	✓			
10	2,250	✓	↓		22	50	✓			10	2500	✓			
11	2,000	✓	SBE35		23	20	✓			11	2250	✓			
12	1,750	✓			24	10	✓			12	2000	✓	SBE35 ↓		
PDR: 5757m SeaBeam: 5860m 実水深は5843mなので SBの方が近い。								Seabeamの水深に近い。							

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CTD Observation Log Sheet

Station: C016		Cast Name: C016		Date(GMT): 2016/06/10		Station: C017		Cast Name: C017		Date(GMT): 2016, 6/11					
Operator: Kanakubo		Surface Temperature 12.71 °C		Operator: Yamaguchi		Surface Temperature 13.6 °C									
File Name		C016				File Name		C017							
	Time(GMT)	Latitude		Longitude		Depth			Time(GMT)	Latitude		Longitude		Depth	
Cast Start	21:16	38-59.961N		170-25.042E		6208 m		Cast Start	6:03	38-59.832N		170-00.197E		5840 m	
Bottom	23:10	Pressure < 6445 db>		Wire out < 6339 m>		Altitude < 19.3m>		Bottom	7:54	Pressure < 5978.98db>		Wire out < 5860.0m>		Altitude < 11.1m>	
Cast End	1:08	38-59.930N		170-25.064E		628 m		Cast End	9:48	38-59.419N		170-00.636E		5760 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	6445	✓	B-15	13	1750	✓		1	5978db	✓	B-10 or 15	13	1500	✓	
2	6000	✓	SBE35	14	1500	✓		2	5500	✓		14	1250	✓	
3	5500	✓		15	1250	✓		3	5000	✓		15	1000	✓	
4	5000	✓		16	1000	✓		4	4500	✓		16	850	✓	
5	4500	✓		17	800	✓		5	4000	✓		17	700	✓	
6	4000	✓		18	600	✓		6	3500	✓		18	550	✓	
7	3500	✓		19	400	✓		7	3000	✓		19	400	✓	
8	3000	✓		20	250	✓		8	2750	✓		20	250	✓	
9	2750	✓		21	100	✓		9	2500	✓		21	100	✓	
10	2500	✓		22	50	✓		10	2250	✓		22	50	✓	
11	2250	✓		23	20	✓		11	2000	✓		23	20	✓	
12	2000	✓	SBE35	24	10	✓		12	1750	✓		24	10	✓	
1316 db : C1にスリッパ (下付)								#18 ミスワイヤ (トリガー 外れず)							
Seabeam 6336								PDR: 5779 Seabeam: 5907 実水深: 5862m Altは40mから							

1281

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C018	Cast Name: C018	Date(GMT): 2016/6/11	Station: C019	Cast Name: C019	Date(GMT): 2016/6/11
Operator: Hirano		Surface Temperature 13.7 °C	Operator: Yagi		Surface Temperature 15.85 °C
File Name: C018			File Name: C019		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	11:47	38-40.089N	170-00.028E	6148 m	
Bottom	13:44	Pressure <6397 db>	Wire out <6261 m>	Altitude <9 m>	
Cast End	15:42	38-39.614N	170-00.712E	6148 m	
Bottle	Depth	Number	Memo	Bottle	Depth
1	6397	✓	↑B-10	13	1750
2	6000	✓		14	1500
3	5500	✓		15	1250
4	5000	✓		16	1000
5	4500	✓		17	800
6	4000	✓		18	600
7	3500	✓		19	400
8	3000	✓		20	250
9	2750	✓		21	100
10	2500	✓		22	50
11	2250	✓		23	20
12	2000	✓	↓SBE35	24	10
Alt. 55m 15 反応				Alt. 90m 15 反応	
PDR 6159				PDR 1197	
Seabeam 6282				Seabeam 1197	

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CTD Observation Log Sheet

Station: C020		Cast Name: C020		Date(GMT): 2016/6/12		Station: C021		Cast Name: C021		Date(GMT): 2016/06/12	
Operator: Miyamoto				Surface Temperature 16.0°C		Operator: Doi				Surface Temperature 14.90°C	
File Name		C020				File Name		C021			
		Time(GMT)	Latitude	Longitude	Depth			Time(GMT)	Latitude	Longitude	Depth
Cast Start		01:23	38 03.299N	170 51.192E	1181 m	Cast Start		07:11	37-29.982N	170-54.772E	4643 m
Bottom		01:59	Pressure <1165 db>	Wire out <1156 m>	Altitude <10m>	Bottom		08:55	Pressure <5281 db>	Wire out <5183 m>	Altitude <10.7m>
Cast End		02:24	38 03.395N	170 51.713E	1162 m	Cast End		10:36	37-29.707N	170-53.193E	5151 m
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	b-10	✓	1165	13	350	✓		1	5281	✓	B-10
2	b-20	✓	1155	14	300	✓		2	5000	✓	
3	b-30	✓	1145	15	250	✓		3	4500	✓	
4	b-60	✓	1115	16	200	✓		4	4000	✓	SBE35
5	1000	✓		17	175	✓		5	3500	✓	
6	900	✓		18	150	✓		6	3000	✓	
7	800	✓		19	125	✓		7	2750	✓	
8	700	✓		20	100	✓		8	2500	✓	
9	600	✓		21	75	✓		9	2250	✓	
10	500	✓		22	50	✓		10	2000	✓	
11	450	✓		23	25	✓		11	1750	✓	
12	400	✓		24	10	✓		12	1500	✓	
5mより浅く 下1765mまで4ストローク 1:28~1:30 TIL4 9665				上げ 30mで ワイヤー4ストローク 2:19~2:22				5mより浅く 実水深 5189m PAR 5128m Seabeam 5218m Alt 50mから反転			

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CTD Observation Log Sheet

Station: C022		Cast Name: C022		Date(GMT): 2016/6/12		Station: C023		Cast Name: C023		Date(GMT): 2016/6/13									
Operator: Nagasawa		Surface Temperature 14.8 °C		Operator: Aoki		Surface Temperature 15.7 °C													
File Name: C022				File Name: C023															
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth					
Cast Start		14:16		37-35.583N		171-34.638E		5592 m		Cast Start		0:00		37-04.897N		171-35.279E		5532 m	
Bottom		16:06		Pressure < 5773.2 db>		Wire out < 5659 m>		Altitude < 12.3 m>		Bottom		1:46		Pressure < 5718 db>		Wire out < 5622 m>		Altitude < 8.5 m>	
Cast End		17:54		37-35.975N		171-34.919E		5597 m		Cast End		3:39		37-05.819N		171-35.840E		5551 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	最深	✓	5773	13	1500	✓		1	最深	✓	5718	13	1500	✓	
2	3500	✓		14	1250	✓		2	5500	✓		14	1250	✓	
3	3000	✓		15	1000	✓		3	5000	✓		15	1000	✓	
4	4500	✓	SBE35	16	850	✓		4	4500	✓		16	850	✓	
5	4000	✓		17	700	✓		5	4000	✓		17	700	✓	
6	3500	✓		18	550	✓		6	3500	✓	SBE35	18	550	✓	
7	3000	✓		19	400	✓		7	3000	✓		19	400	✓	
8	2750	✓		20	250	✓		8	2750	✓		20	250	✓	
9	2500	✓		21	100	✓		9	2500	✓		21	100	✓	
10	2250	✓		22	50	✓		10	2250	✓		22	50	✓	
11	2000	✓		23	20	✓		11	2000	✓		23	20	✓	
12	1750	✓		24	10	✓		12	1750	✓		24	10	✓	

残り約40db付近からALT 回収				55mでSALT回収				水深5600m			
								Seabeam 安定しない			

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CTD Observation Log Sheet

Station: C024	Cast Name: C024	Date(GMT): 2016, 6/13	Station: C025	Cast Name: C025	Date(GMT): 2016, 6/13
Operator: Yamada		Surface Temperature 15.3 °C	Operator: Kanakubo		Surface Temperature 15.96 °C
File Name: C024			File Name: C025		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	5:54	36-47.032N	171-21.243	582 m	
Bottom	6:16	Pressure <578.11 db>	Wire out <595 m>	Altitude <11.0m>	
Cast End	6:29	36-47.210N	171-21.567E	582 m	
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	09:46	39-00.121N	170-55.083E	5224 m	
Bottom	11:25	Pressure <5382 db>	Wire out <5284 m>	Altitude <9.5 m>	
Cast End	13:05	36-59.631N	170-55.436E	5216 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	578	✓	Bottom	13	350	✓		1	5382	✓	B-10	13	1250	✓	
2	570	✓	B-10	14	300	✓		2	5000	✓		14	1000	✓	
3	560	✓	B-20	15	250	✓		3	4500	✓		15	850	✓	
4	550	✓	B-30	16	200	✓		4	4000	✓	SPE35	16	700	✓	
5	540	✓	B-40	17	175	✓		5	3500	✓		17	550	✓	
6	530	✓	B-50	18	150	✓		6	3000	✓		18	400	✓	
7	520	✓	B-60	19	125	✓		7	2750	✓		19	300	✓	
8	510	✓	B-70	20	100	✓		8	2500	✓		20	200	✓	
9	500	✓	B-80	21	75	✓		9	2250	✓		21	100	✓	
10	490	✓	B-90	22	50	✓		10	2000	✓		22	50	✓	
11	450	✓		23	25	✓		11	1750	✓		23	20	✓	
12	400	✓		24	10	✓		12	1500	✓		24	10	✓	

投入時刻. second の 1 異常? 設定済								水深: 5290							
seabeam 527 Bottom=589-															

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CTD Observation Log Sheet

Station: C026	Cast Name: C026	Date(GMT): 2016, 6/13	Station: C027	Cast Name: C027	Date(GMT): 2016/06/13
Operator: Doi	Surface Temperature 15.2 °C		Operator: Fukuyama	Surface Temperature 15.10 °C	
File Name	C026			File Name	C027
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	15:10	36-59,823N	170-29,857E	5223 m	
Bottom	16:52	Pressure <5382 db>	Wire out <5280 m>	Altitude <11.0 m>	
Cast End	18:32	36-59,653N	170-29,612E	5290 m	
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	20:39	36-59.948N	169-59.801E	5213 m	
Bottom	22:14	Pressure <5299.78 db>	Wire out <5201 m>	Altitude <10.4 m>	
Cast End	23:54	36-59.118N	169-59.729E	5209 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1		✓	B-10	13	1250	✓		1	5299	✓	B-10	13	1250	✓	
2	5000	✓		14	1000	✓	② 1010 db	2	5000	✓		14	1000	✓	
3	4500	✓		15	850	✓		3	4500	✓		15	850	✓	
4	4000	✓		16	700	✓		4	4000	✓		16	700	✓	
5	3500	✓		17	550	✓		5	3500	✓		17	550	✓	
6	3000	✓		18	400	✓		6	3000	✓	SPBE-35	18	400	✓	
7	2750	✓		19	300	✓		7	2750	✓		19	300	✓	
8	2500	✓	SPBE-35	20	200	✓		8	2500	✓		20	200	✓	
9	2250	✓		21	100	✓		9	2250	✓		21	100	✓	
10	2000	✓		22	50	✓		10	2000	✓		22	50	✓	
11	1750	✓		23	20	✓		11	1750	✓		23	20	✓	
12	1500	✓		24	10	✓		12	1500	✓		24	10	✓	

5291(PDR)	Agsv-DM 1504m/s 12 表 最深部	PDR: 5211	Alt: 52m 反応
5919 (seabeam)	実水深 5292m	Seabeam: 5217	Alt 観測 40 m 反応
		実水深: 5206	

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CTD Observation Log Sheet

Station: C028	Cast Name: C028	Date(GMT): 2016/06/14	Station: C029	Cast Name: C29S	Date(GMT): 2016/06/14
Operator: Aoki		Surface Temperature 17.2 °C	Operator: Kanakubo		Surface Temperature 15.03 °C
File Name: C028			File Name: C29S		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	2:12	36-59.786N	169-30.000E	5152 m	
Bottom	3:47	Pressure <5291 db>	Wire out <5145 m>	Altitude <10.2m>	
Cast End	5:25	36-58.928N	169-29.500E	5149 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1		✓	B-10 ↓ SBE35	13	1250	✓		1	200	✓		13	80	✓	
2	5000	✓		14	1000	✓		2	190	✓		14	70	✓	
3	4500	✓		15	850	✓		3	180	✓		15	60	✓	
4	4000	✓		16	700	✓		4	170	✓		16	50	✓	
5	3500	✓		17	550	✓		5	160	✓		17	40	✓	
6	3000	✓		18	400	✓		6	150	✓		18	30	✓	
7	2750	✓		19	300	✓		7	140	✓		19	20	✓	
8	2500	✓		20	200	✓		8	130	✓		20	10	✓	
9	2250	✓		21	100	✓		9	120	✓		21	200	✓	
10	2000	✓		22	50	✓		10	110	✓		22	200	✓	
11	1750	✓		23	20	✓		11	100	✓		23	200	✓	
12	1500	✓		24	10	✓		12	90	✓		24	200	✓	

Alt 50 m SBE35 5139 m (B-10) 5152 (PDR) 全水深															
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C029	Cast Name: C29R	Date(GMT): 2016/06/14	Station: C029	Cast Name: C029	Date(GMT): 2016/6/14
Operator: Yagi	Surface Temperature	— °C	Operator: Hirano	Surface Temperature	15.7 °C

File Name	C29R				File Name	C029			
	Time(GMT)	Latitude	Longitude	Depth		Time(GMT)	Latitude	Longitude	Depth
Cast Start	09:50	37-29.974N	169-59.986E	5314 m	Cast Start	11:21	37-29.939N	169-59.986E	5315 m
Bottom	10:15	Pressure <1000.8db>	Wire out <993.0 m>	Altitude <- m>	Bottom	12:04	Pressure <2001.24db>	Wire out <1982 m>	Altitude <- m>
Cast End	10:46	37-29.674N	169-59.986E	5315 m	Cast End	12:40	37-29.613N	170-00.139E	5315 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	1000	✓		13	600	✓		1	2000	✓		13	350	✓	
2	1000	✓		14	600	✓		2	1750	✓		14	300	✓	
3	1000	✓		15	500	✓		3	1500	✓		15	250	✓	
4	900	✓		16	500	✓		4	1250	✓		16	200	✓	
5	900	✓		17	400	✓		5	1000	✓		17	175	✓	
6	900	✓		18	400	✓		6	900	✓		18	150	✓	
7	800	✓		19	300	✓		7	800	✓		19	125	✓	
8	800	✓		20	300	✓		8	700	✓		20	100	✓	
9	800	✓		21	200	✓		9	600	✓		21	75	✓	
10	700	✓		22	200	✓		10	500	✓		22	50	✓	
11	700	✓		23	100	✓		11	450	✓		23	25	✓	
12	700	✓		24	100	✓		12	400	✓		24	10	✓	

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C030	Cast Name: C030	Date(GMT): 2016, 6/14	Station: C031	Cast Name: C315	Date(GMT): 2016, 06/14
Operator: Doi		Surface Temperature 16.9 °C	Operator: Doi (h)		Surface Temperature 17.0 °C
File Name: C030			File Name: C315		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	17:10	37-29.994N	169-10.104E	5251 m	
Bottom	18:48	Pressure < 5345, 6db>	Wire out < 5298 m>	Altitude < 10.5m>	
Cast End	20:30	37-30.202N	169-10.902E	5252 m	
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	22:54	37-30.262 N	168-59.592 E	5252 m	
Bottom	23:00	Pressure < 299.45 db>	Wire out < 197 m>	Altitude < - m>	
Cast End	23:14	37 30.371 N	168 59.641 E	5247 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	5345	✓	B-10	13	1250	✓		1	200	✓		13	100	✓	
2	5000	✓	SBF35	14	1000	✓		2	200	✓		14	100	✓	
3	4500	✓		15	850	✓		3	200	✓		15	75	✓	
4	4000	✓		16	700	✓		4	200	✓		16	75	✓	
5	3500	✓		17	550	✓		5	150	✓		17	50	✓	
6	3000	✓		18	400	✓		6	150	✓		18	50	✓	
7	2750	✓		19	300	✓		7	150	✓		19	30	✓	
8	2500	✓		20	200	✓		8	150	✓		20	30	✓	
9	2250	✓		21	100	✓		9	125	✓		21	20	✓	
10	2000	✓		22	50	✓		10	125	✓		22	20	✓	
11	1750	✓		23	20	✓		11	125	✓		23	10	✓	
12	1500	✓		24	10	✓		12	125	✓		24	10	✓	

5240 (B-10) 実測 Alt 30カス~
 5250 (PDR)

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C031		Cast Name: C031		Date(GMT): 2016/06/14		Station: C032		Cast Name: C032		Date(GMT): 2016, 6/15	
Operator: Hirano				Surface Temperature 17.2 °C		Operator: Yamada				Surface Temperature 17.8 °C	
File Name		C031				File Name		C032			
		Time(GMT)	Latitude	Longitude	Depth			Time(GMT)	Latitude	Longitude	Depth
Cast Start		23:55	37-30.189 N	168 59.396 E	5243 m	Cast Start		3:12	37-30, 431 N	168, 39, 767 E	5214 m
Bottom		00:35	Pressure <2000.5 db>	Wire out <1984 m>	Altitude <- m>	Bottom		4:48	Pressure <5308 db>	Wire out <5210 m>	Altitude <9.5 m>
Cast End		01:11	37-30.561 N	168-59.566 E	5245 m	Cast End		6:25	37-30, 468 N	168-40, 402 E	5221 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	5308	✓	B-10	13	1250	✓	
2	1750	✓		14	300	✓		2	5000	✓	SBE35	14	1000	✓	
3	1500	✓		15	250	✓		3	4500	✓	↓	15	850	✓	
4	1250	✓		16	200	✓		4	4000	✓		16	700	✓	
5	1000	✓		17	175	✓		5	3500	✓		17	550	✓	
6	900	✓		18	150	✓		6	3000	✓		18	400	✓	
7	800	✓		19	125	✓		7	2750	✓		19	300	✓	
8	700	✓		20	100	✓		8	2500	✓		20	200	✓	
9	600	✓		21	75	✓		9	2250	✓		21	100	✓	
10	500	✓		22	50	✓		10	2000	✓		22	50	✓	
11	450	✓		23	25	✓		11	1750	✓		23	20	✓	
12	400	✓		24	10	✓		12	1500	✓		24	10	✓	

5m 以下 <1> 欠								5216 (PDR) Alt 25 m SBE 5213 (実測)							
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C033	Cast Name: C33S	Date(GMT): 2016/06/15	Station: C033	Cast Name: C033	Date(GMT): 2016/06/16
Operator: Aoki		Surface Temperature 17.9 °C	Operator: Suzuki		Surface Temperature 17.7 °C
File Name: C33S			File Name: C033		
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	23:52	37-30.134 N	168-00.101 E	5243 m	
Bottom	00:02	Pressure < 199.7 db >	Wire out < 198 m >	Altitude < - m >	
Cast End	00:09	37-30.382 N	168-00.251 E	5247 m	
	Time(GMT)	Latitude	Longitude	Depth	
Cast Start	00:34	37-30.458 N	168-00.292 E	5251 m	
Bottom	1:18	Pressure < 200.77 db >	Wire out < 198.6 m >	Altitude < - m >	
Cast End	1:56	37-30.997 N	160-00.865 E	5257 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	

5m 29 54 20								5m 29 54 20							
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C033				Cast Name: C33B				Date(GMT): 2016, 6/16				Station: C034				Cast Name: C34S				Date(GMT): 2016, 6/16			
Operator: Yamaguchi				Surface Temperature 17.9 °C				Operator: Goto				Surface Temperature 16.0 °C											
File Name				C33B				File Name				C34S											
		Time(GMT)		Latitude		Longitude		Depth				Time(GMT)		Latitude		Longitude		Depth					
Cast Start		3:59		37-32.116N		168-02.663E		5212 m		Cast Start		15:16		37-30.050N		166-59.847E		5153 m					
Bottom		5:37		Pressure <5296 db>		Wire out <5199 m>		Altitude <9.4 m>		Bottom		15:30		Pressure <200.4 db>		Wire out <198 m>		Altitude <- m>					
Cast End		7:15		37-32.405N		168-04.177E		5219 m		Cast End		15:38		37-30.086N		166-59.859E		5153 m					

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	5296	✓	B-10	13	1250	✓		1	200	✓		13	80	✓	
2	5000	✓	SBE35	14	1000	✓		2	190	✓		14	70	✓	
3	4500	✓		15	850	✓		3	180	✓		15	60	✓	
4	4000	✓		16	700	✓		4	170	✓		16	50	✓	
5	3500	✓		17	550	✓		5	160	✓		17	40	✓	
6	3000	✓		18	400	✓		6	150	✓		18	30	✓	
7	2750	✓		19	300	✓		7	140	✓		19	20	✓	
8	2500	✓		20	200	✓		8	130	✓		20	10	✓	
9	2250	✓		21	100	✓		9	120	✓		21	200	✓	
10	2000	✓		22	50	✓		10	110	✓		22	200	✓	
11	1750	✓		23	20	✓		11	100	✓		23	200	✓	
12	1500	✓		24	10	✓		12	90	✓		24	200	✓	

5m b's 77-t 5208 (PDR) 5193 (B-10)				5m 77-t 5208			
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C034		Cast Name: C034		Date(GMT): 2016/06/16		Station: C035		Cast Name: C35S		Date(GMT): 2016/06/16					
Operator: Sasaki		Surface Temperature 16.0 °C		Operator: Hirano		Surface Temperature 16.0 °C									
File Name: C034				File Name: C35S											
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth	
Cast Start		16:01 37-30.264N		166-59.852E		5153 m		Cast Start		22:52 37-29.981N		166-00.082E		4694 m	
Bottom		Pressure 16:48 <2000.67 db>		Wire out <1992 m>		Altitude <- m>		Bottom		23:02 Pressure <200 db>		Wire out <198 m>		Altitude <- m>	
Cast End		17:24 37-31.077N		166-59.664E		5192 m		Cast End		23:16 37-29.839N		166-00.015E		4694 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	200	✓		13	100	✓	
2	1750	✓		14	300	✓		2	200	✓		14	100	✓	
3	1500	✓		15	250	✓		3	200	✓		15	75	✓	
4	1250	✓		16	200	✓		4	200	✓		16	75	✓	
5	1000	✓		17	175	✓		5	150	✓		17	50	✓	
6	900	✓		18	150	✓		6	150	✓		18	50	✓	
7	800	✓		19	125	✓		7	150	✓		19	30	✓	
8	700	✓		20	100	✓		8	150	✓		20	30	✓	
9	600	✓		21	75	✓		9	125	✓		21	20	✓	
10	500	✓		22	50	✓		10	125	✓		22	20	✓	
11	450	✓		23	25	✓		11	125	✓		23	10	✓	
12	400	✓		24	10	✓		12	125	✓		24	10	✓	
5mからリリース 1740db付近でピーと鳴いた、特に異常は見られず (down) SUNAがUP castで電池切れ (1100付近)								5mよりリリース							

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C035		Cast Name: C035		Date(GMT): 2016/6/16		Station: C036		Cast Name: C36S		Date(GMT): 2016/06/17									
Operator: Suzuki		Surface Temperature 16.1 °C		Operator: Kakiuchi		Surface Temperature 16.4 °C													
File Name: C035				File Name: C36S															
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth					
Cast Start		23:50		37-29.795N		165-59.959E		4693 m		Cast Start		06:25		37-29.814N		164-59.900E		5322 m	
Bottom		00:31		Pressure <2006 db>		Wire out <1985 m>		Altitude <- m>		Bottom		6:39		Pressure <200, 42 db>		Wire out <198 m>		Altitude <- m>	
Cast End		01:06		37 29.325N		165 59.849E		4659 m		Cast End		6:41		37-29.756N		164-59.779E		5315 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo				
1	2000	✓		13	350	✓		1	200	✓		13	80	✓					
2	1750	✓		14	300	✓		2	190	✓		14	70	✓					
3	1500	✓		15	250	✓		3	180	✓		15	60	✓					
4	1250	✓		16	200	✓		4	170	✓		16	50	✓					
5	1000	✓		17	175	✓		5	160	✓		17	40	✓					
6	900	✓		18	150	✓		6	150	✓		18	30	✓					
7	800	✓		19	125	✓		7	140	✓		19	20	✓					
8	700	✓		20	100	✓		8	130	✓		20	10	✓					
9	600	✓		21	75	✓		9	120	✓		21	200	✓					
10	500	✓		22	50	✓		10	110	✓		22	200	✓					
11	450	✓		23	25	✓		11	100	✓		23	200	✓					
12	400	✓		24	10	✓		12	90	✓		24	200	✓					
5m 29<7 出								10m 29<7 出											

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C036				Cast Name: C36R				Date(GMT): 2016/06/17				Station: C036				Cast Name: C036				Date(GMT): 2016/06/17			
Operator: Fagi				Surface Temperature				— °C				Operator: Doi(h)				Surface Temperature 15.77 °C							
File Name				C36R				File Name				C036											
		Time(GMT)		Latitude		Longitude		Depth				Time(GMT)		Latitude		Longitude		Depth					
Cast Start		07:07		37-29.77 N		164-59.816 E		5318 m		Cast Start		09:43		37-29.333 N		164-59.291 E		5287 m					
Bottom		07:46		Pressure < 999 db>		Wire out < 991.0 m>		Altitude < - m>		Bottom		10:25		Pressure < 2000.8 db>		Wire out < 1981.0 m>		Altitude < - m>					
Cast End		08:20		37-29.468 N		164-59.312 E		5290 m		Cast End		11:01		37-29.118 N		164-58.882 E		5271 m					
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo				
1	1000	✓		13	600	✓		1	2000	✓		13	350	✓									
2	1000	✓		14	600	✓		2	1750	✓		14	300	✓									
3	1000	✓		15	500	✓		3	1500	✓		15	250	✓									
4	900	✓		16	500	✓		4	1250	✓		16	200	✓									
5	900	✓		17	400	✓		5	1000	✓		17	175	✓									
6	900	✓		18	400	✓		6	900	✓		18	150	✓									
7	800	✓		19	300	✓		7	800	✓		19	125	✓									
8	800	✓		20	300	✓		8	700	✓		20	100	✓									
9	800	✓		21	200	✓		9	600	✓		21	75	✓									
10	700	✓		22	200	✓		10	500	✓		22	50	✓									
11	700	✓		23	100	✓		11	450	✓		23	25	✓									
12	700	✓		24	100	✓		12	400	✓		24	10	✓									
5m start								5m start															

CTD Observation Log Sheet

The University of Tokyo Atmosphere and Ocean Research Institute

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C038		Cast Name: C38S		Date(GMT): 2016/06/17		Station: C038		Cast Name: C038		Date(GMT): 2016/06/17	
Operator: Kanakubo		Surface Temperature 16.84°C		Operator: Toda		Surface Temperature 16.60°C					
File Name		C38S		File Name		C038					
		Time(GMT)	Latitude	Longitude	Depth			Time(GMT)	Latitude	Longitude	Depth
Cast Start		22:03	37-30.070 N	162-59.998 E	3869 m	Cast Start		22:44	37-30.321 N	162-59.765 E	3872 m
Bottom		22:12	Pressure <200.78 db>	Wire out <198 m>	Altitude <-m>	Bottom		23:28	Pressure <260 db>	Wire out <2017 m>	Altitude <-m>
Cast End		22:20	37-30.292 N	162-59.967 E	3869 m	Cast End		00:04	37-31.109 N	162-59.695 E	3866 m
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓	
2	190	✓		14	70	✓		2	1750	✓	
3	180	✓		15	60	✓		3	1500	✓	
4	170	✓		16	50	✓		4	1250	✓	
5	160	✓		17	40	✓		5	1000	✓	
6	150	✓		18	30	✓		6	900	✓	
7	140	✓		19	20	✓		7	800	✓	
8	130	✓		20	10	✓		8	700	✓	
9	120	✓		21	200	✓		9	600	✓	
10	110	✓		22	200	✓		10	500	✓	
11	100	✓		23	200	✓		11	450	✓	
12	90	✓		24	200	✓		12	400	✓	
5m 29-t				5m 29-t							

16.94

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: 039	Cast Name: C39S	Date(GMT): 2016. 06. 18	Station: C039	Cast Name: C039	Date(GMT): 2016. 6/18				
Operator: Doi	Surface Temperature 15.8 °C	Operator: Kakiuchi	Surface Temperature 15.7 °C						
File Name	C39S		File Name	C039					
Time(GMT)	Latitude	Longitude	Depth	Time(GMT)	Latitude	Longitude	Depth		
Cast Start	5:02	37-29.963N	161-59.892E	4298 m	Cast Start	5:42	37-29.999N	161-59.993E	4292 m
Bottom	5:14	Pressure <199.99 db>	Wire out <197 m>	Altitude <- m>	Bottom	6:23	Pressure <2000.61 db>	Wire out <1981 m>	Altitude <- m>
Cast End	5:21	37-29.957N	161-59.892E	4298 m	Cast End	6:59	37-30.031 N	161-59.963 E	4290 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10.	✓	

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C040	Cast Name: C40S	Date(GMT): 2016/6/18	Station: C040	Cast Name: C040	Date(GMT): 2016, 6, 18		
Operator: Aoki		Surface Temperature 15.9 °C	Operator: Kakiuchi		Surface Temperature 16.1 °C		
File Name C40S			File Name C040				
Time(GMT)	Latitude	Longitude	Depth	Time(GMT)	Latitude	Longitude	Depth
Cast Start 12:01	37 29.951 N	160 59.955 E	4764 m	Cast Start 15:42	37-29.236 N	161-01.064 E	4761 m
Bottom 12:11	Pressure < 200.3 db>	Wire out < 197 m>	Altitude < - m>	Bottom 16:22	Pressure < 1999.79 db>	Wire out < 1983 m>	Altitude < - m>
Cast End 12:18	37-29.922 N	161 00.020 E	4763 m	Cast End 17:00	37-29.216 N	161-01.282 E	4764 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	

5m 24 < 4 出.

#12 11-7
10m 25 < 7 出.
SUNA upcast 電池切れ
ボトル交換 (12070 → 12001)

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C041		Cast Name: C041		Date(GMT): 2016, 6/19		Station: C041		Cast Name: C41S		Date(GMT): 2016, 6/19	
Operator: Sasaki		Surface Temperature 16.0 °C		Operator: Doi		Surface Temperature 16.0 °C					
File Name		C041		File Name		C41S					
Time(GMT)		Latitude		Longitude		Depth					
Cast Start		15:08 37-30.516N		159-59.482E		4145 m					
Bottom		15:52 Pressure <2002.21 db>		Wire out <1982 m>		Altitude <-m>					
Cast End		16:29 37-30.581N		159-59.258E		4163 m					
Time(GMT)		Latitude		Longitude		Depth					
Cast Start		17:25 37-30.543N		159-59.368E		4152 m					
Bottom		17:36 Pressure <199.98 db>		Wire out <197 m>		Altitude <-m>					
Cast End		17:44 37-30.647N		159-59.395E		4163 m					

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	200	✓		13	80	✓	
2	1750	✓		14	300	✓		2	190	✓		14	70	✓	
3	1500	✓		15	250	✓		3	180	✓		15	60	✓	
4	1250	✓		16	200	✓		4	170	✓		16	50	✓	
5	1000	✓		17	175	✓		5	160	✓		17	40	✓	
6	900	✓		18	150	✓		6	150	✓		18	30	✓	
7	800	✓		19	125	✓		7	140	✓		19	20	✓	
8	700	✓		20	100	✓		8	130	✓		20	10	✓	
9	600	✓		21	75	✓		9	120	✓		21	200	✓	
10	500	✓		22	50	✓		10	110	✓		22	200	✓	
11	450	✓		23	25	✓		11	100	✓		23	200	✓	
12	400	✓		24	10	✓		12	90	✓		24	200	✓	

10mからくり出し

10mからくり出し

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C042		Cast Name: C42S		Date(GMT): 2016/06/19		Station: C042		Cast Name: C042		Date(GMT): 2016/06/19									
Operator: Fukuyama				Surface Temperature 16.70 °C				Operator: Kanakubo				Surface Temperature 17.0 °C							
File Name		C42S						File Name		C042									
		Time(GMT)	Latitude		Longitude		Depth			Time(GMT)	Latitude		Longitude		Depth				
Cast Start		21:40	37-30.141N		158-59.905E		4468 m	Cast Start		22:25	37-30.090N		158-59.506E		4459 m				
Bottom		21:50	Pressure < 200.18 db >		Wire out < 197 m >		Altitude < - m >	Bottom		23:05	Pressure < 200.3 db >		Wire out < 1990 m >		Altitude < - m >				
Cast End		21:58	37-30.269N		158-59.699E		4480 m	Cast End		23:41	37-30.319N		158-59.336E		4458 m				
Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo		Bottle	Depth	Number	Memo	
1	200	✓			13	80	✓			1	2000	✓			13	350	✓		
2	190	✓			14	70	✓			2	1750	✓			14	300	✓		
3	180	✓			15	60	✓			3	1500	✓			15	250	✓		
4	170	✓			16	50	✓			4	1250	✓			16	200	✓		
5	160	✓			17	40	✓			5	1000	✓			17	175	✓		
6	150	✓			18	30	✓			6	900	✓			18	150	✓		
7	140	✓			19	20	✓			7	800	✓			19	125	✓		
8	130	✓			20	10	✓			8	700	✓			20	100	✓		
9	120	✓			21	200	✓			9	600	✓			21	75	✓		
10	110	✓			22	200	✓			10	500	✓			22	50	✓		
11	100	✓			23	200	✓			11	450	✓			23	25	✓		
12	90	✓			24	200	✓			12	400	✓			24	10	✓		
5m 0.5 27-1																			

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C043		Cast Name: C43S		Date(GMT): 2016, 6/20		Station: C043		Cast Name: C043		Date(GMT): 2016, 6/20	
Operator: Yamoda				Surface Temperature 18.8 °C		Operator: Kakiuchi				Surface Temperature 18.9 °C	
File Name		C43S				File Name		C043			
		Time(GMT)	Latitude	Longitude	Depth			Time(GMT)	Latitude	Longitude	Depth
Cast Start		4:32	37-30.119N	157-59.871E	5280 m	Cast Start		5:29	37-30.385N	157-59.578E	5270 m
Bottom		4:43	Pressure <199.59 db>	Wire out <198 m>	Altitude <- m>	Bottom		6:10	Pressure <199.79 db>	Wire out <1982 m>	Altitude <- m>
Cast End		4:57	37-30.357N	157-59.578E	5273 m	Cast End		6:46	37-30.149N	157-59.237E	5259 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	100	✓		1	2000	✓		13	350	✓	
2	200	✓		14	100	✓		2	1750	✓		14	300	✓	
3	200	✓		15	75	✓		3	1500	✓		15	250	✓	
4	200	✓		16	75	✓		4	1250	✓		16	200	✓	
5	150	✓		17	50	✓		5	1000	✓		17	175	✓	
6	150	✓		18	50	✓		6	900	✓		18	150	✓	
7	150	✓		19	30	✓		7	800	✓		19	125	✓	
8	150	✓		20	30	✓		8	700	✓		20	100	✓	
9	125	✓		21	20	✓		9	600	✓		21	75	✓	
10	125	✓		22	20	✓		10	500	✓		22	50	✓	
11	125	✓		23	10	✓		11	450	✓		23	25	✓	
12	125	✓		24	10	✓		12	400	✓		24	10	✓	

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C044	Cast Name: C44S	Date(GMT): 2016/06/20	Station: C044	Cast Name: C044	Date(GMT): 2016/06/20										
Operator: Aoki		Surface Temperature 18.0 °C	Operator: Hirano		Surface Temperature 18.0 °C										
File Name: C44S			File Name: C044												
Time(GMT)	Latitude	Longitude	Depth	Time(GMT)	Latitude	Longitude	Depth								
Cast Start	11:25	37-30.024N	156-59.748E	5696 m	Cast Start	12:10	37-30.037N	156-59.759E	5696 m						
Bottom	11:35	Pressure < 200 db>	Wire out < 203 m>	Altitude < - m>	Bottom	12:51	Pressure < 1999.9 db>	Wire out < 2003 m>	Altitude < - m>						
Cast End	11:42	37-30.022N	156-59.626E	5696 m	Cast End	13:26	37-30.351	156-59.437	5695 m						
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	
								SUNA の 1 区 小 4 2 2 2 1 3							

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C045		Cast Name: C45S		Date(GMT): 2016/06/20		Station: C045		Cast Name: C045		Date(GMT): 2016/06/20									
Operator: sasaki		Surface Temperature 17.6 °C		Operator: Doi(h)		Surface Temperature 17.31 °C													
File Name: C45S				File Name: C045															
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth					
Cast Start		18:24		37-30.006N		156-00.006E		5702 m		Cast Start		19:07		37-29.973 N		156-00.096 E		5701 m	
Bottom		18:33		Pressure <199.28 db>		Wire out <197 m>		Altitude <-m>		Bottom		19:46		Pressure <2000.63 db>		Wire out <1982 m>		Altitude <-m>	
Cast End		18:40		37-30.099N		156-00.079E		5701 m		Cast End		20:22		37-30.065 N		156-00.221 E		5700 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓					
2	190	✓		14	70	✓		2	1750	✓		14	300	✓					
3	180	✓		15	60	✓		3	1500	✓		15	250	✓					
4	170	✓		16	50	✓		4	1250	✓		16	200	✓					
5	160	✓		17	40	✓		5	1000	✓		17	175	✓					
6	150	✓		18	30	✓		6	900	✓		18	150	✓					
7	140	✓		19	20	✓		7	800	✓		19	125	✓					
8	130	✓		20	10	✓		8	700	✓		20	100	✓					
9	120	✓		21	200	✓		9	600	✓		21	75	✓					
10	110	✓		22	200	✓		10	500	✓		22	50	✓					
11	100	✓		23	200	✓		11	450	✓		23	25	✓					
12	90	✓		24	200	✓		12	400	✓		24	10	✓					

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C046	Cast Name: C046	Date(GMT): 2016/06/21	Station: C046	Cast Name: C046	Date(GMT):				
Operator: H. Yano		Surface Temperature 17.7 °C	Operator: AOKI		Surface Temperature 17.8 °C				
File Name	C46S			File Name	C046				
Time(GMT)	Latitude	Longitude	Depth	Time(GMT)	Latitude	Longitude	Depth		
Cast Start	01:22	37-30.030N	154 59.825E	5764 m	Cast Start	2:05	37-30.138N	154-59.531E	5775 m
Bottom	01:32	Pressure < 200.1 db>	Wire out < 199 m>	Altitude < - m>	Bottom	2:44	Pressure < 200.95 db>	Wire out < 1980 m>	Altitude < - m>
Cast End	01:38	37-30.111N	154 59.598E	5778 m	Cast End	3:21	37-30.177N	154-59.366E	5782 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	

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CTD Observation Log Sheet

Station: C047		Cast Name: C47S		Date(GMT): 2016/06/21		Station: C047		Cast Name: C047		Date(GMT): 2016/06/21	
Operator: Kanakubo				Surface Temperature 16.3 °C		Operator: Fukuyama				Surface Temperature 16.31 °C	
File Name		C47S				File Name		C047			
		Time(GMT)	Latitude	Longitude	Depth			Time(GMT)	Latitude	Longitude	Depth
Cast Start		07:54	37-29.979N	153-59.942E	5797 m	Cast Start		09:02	37-29.975N	153-59.925E	5796 m
Bottom		08:04	Pressure < 200.03db>	Wire out < 198 m>	Altitude < - m>	Bottom		09:42	Pressure < 2000.01 db>	Wire out < 1981 m>	Altitude < - m>
Cast End		08:12	37-29.907N	153-59.972E	5796 m	Cast End		10:18	37-29.987N	154-00.024E	5797 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	

波が高いため 5m からスタート								波が高いため 5m からスタート #7 ミスワイヤ (エグザセットミス?)							
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C048		Cast Name: C048		Date(GMT): 2016/06/21		Station: C048		Cast Name: C048		Date(GMT): 2016/06/22									
Operator: Aoki		Surface Temperature 19.6 °C		Operator: Hirano		Surface Temperature 19.6 °C													
File Name: C048				File Name: C488															
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth					
Cast Start		23:53		37-29.693N		153-00.81E		5719 m		Cast Start		01:54		37-29.465N		153-00.429E		5728 m	
Bottom		0036		Pressure < 2000.1 db>		Wire out < 1981 m>		Altitude < - m>		Bottom		2:04		Pressure < 200.5 db>		Wire out < 199 m>		Altitude < - m>	
Cast End		01:13		37-29.743N		153-00.399E		5716 m		Cast End		02:13		37-29.394N		153-00.429		5737 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	200	✓		13	80	✓					
2	1750	✓		14	300	✓		2	190	✓		14	70	✓					
3	1500	✓		15	250	✓		3	180	✓		15	60	✓					
4	1250	✓		16	200	✓		4	170	✓		16	50	✓					
5	1000	✓		17	175	✓		5	160	✓		17	40	✓					
6	900	✓		18	150	✓		6	150	✓		18	30	✓					
7	800	✓		19	125	✓		7	140	✓		19	20	✓					
8	700	✓		20	100	✓		8	130	✓		20	10	✓					
9	600	✓		21	75	✓		9	120	✓		21	24	✓					
10	500	✓		22	50	✓		10	110	✓		22	24	✓					
11	450	✓		23	25	✓		11	100	✓		23	24	✓					
12	400	✓		24	10	✓		12	90	✓		24	24	✓					
5mより浅く #21 上がはまっている								5mより浅く SUNA 上がはまっているのに 値がでる											

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C049 Cast Name: C49S Date(GMT): 2016/06/22				Station: C049 Cast Name: C049 Date(GMT): 2016/06/22			
Operator: Fukuyama Surface Temperature 18.80 °C				Operator: Doi (h) Surface Temperature 18.51 °C			
File Name C49S				File Name C049			
Time(GMT)		Latitude		Longitude		Depth	
Cast Start 07:18		37-29.986N		151-59.947E		5829 m	
Bottom 07:28		Pressure <206.07 db>		Wire out <197.0 m>		Altitude <- m>	
Cast End 07:49		37-29.888N		151-59.893E		5828 m	
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	100	✓	
2	200	✓		14	100	✓	
3	200	✓		15	75	✓	
4	200	✓		16	75	✓	
5	150	✓		17	50	✓	
6	150	✓		18	50	✓	
7	150	✓		19	30	✓	
8	150	✓		20	30	✓	
9	125	✓		21	20	✓	
10	125	✓		22	20	✓	
11	125	✓		23	10	✓	
12	125	✓		24	10	✓	
波が高いため5mから開始				5mより開始			

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C050		Cast Name: C050		Date(GMT): 2016/6/22		Station: C50S		Cast Name: C50S		Date(GMT): 2016/06/22					
Operator: Yamada		Surface Temperature 18.1 °C		Operator: Doi (h)		Surface Temperature 17.82 °C									
File Name: C050				File Name: C50S											
Time(GMT)		Latitude		Longitude		Depth		Time(GMT)		Latitude		Longitude		Depth	
Cast Start		16:46		37-30.185N		150-59.329E		5922 m		Cast Start		18:55		37-30.098 N 150-59.459 E 5958 m	
Bottom		17:32		Pressure <199.78 db>		Wire out <1984 m>		Altitude <-m>		Bottom		19:05		Pressure <200.10 db> Wire out <198 m> Altitude <-m>	
Cast End		18:09		37-30.032N		150-59.209E		5988 m		Cast End		19:12		37-30.151 N 150-59.405 E 5919 m	

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	200	✓		13	80	✓	
2	1750	✓		14	300	✓		2	190	✓		14	70	✓	
3	1500	✓		15	250	✓		3	180	✓		15	60	✓	
4	1250	✓		16	200	✓		4	170	✓		16	50	✓	
5	1000	✓		17	175	✓		5	160	✓		17	40	✓	
6	900	✓		18	150	✓		6	150	✓		18	30	✓	
7	800	✓		19	125	✓		7	140	✓		19	20	✓	
8	700	✓		20	100	✓		8	130	✓		20	10	✓	
9	600	✓		21	75	✓		9	120	✓		21	200	✓	
10	500	✓		22	50	✓		10	110	✓		22	200	✓	
⑪	450	✓	460	23	25	✓		11	100	✓		23	200	✓	
12	400	✓		24	10	✓		12	90	✓		24	200	✓	

荒天のため 10mから <9> 出し 450 → 460で開始 (㊦)				10mより開始			
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C051	Cast Name: C51S	Date(GMT): 2016/06/22	Station: C051	Cast Name: C051	Date(GMT): 2016/06/22				
Operator: Aoki		Surface Temperature 18.2 °C	Operator: Ito		Surface Temperature 18.5 °C				
File Name: C51S			File Name: C051						
Time(GMT)	Latitude	Longitude	Depth	Time(GMT)	Latitude	Longitude	Depth		
Cast Start	23:08	37-29.970 N	149-59.961 E	5950 m	Cast Start	23:42	37-29.829 N	149-59.964 E	5950 m
Bottom	23:18	Pressure < 200.3 db>	Wire out < 198 m>	Altitude < - m>	Bottom	0:24	Pressure < 200.0 db>	Wire out < 199 m>	Altitude < - m>
Cast End	23:24	37-29.850 N	149-59.901 E	5948 m	Cast End	01:01	37-29.767 N	149-59.495 E	5948 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	

5mより浅く								5mより浅く							
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Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C052	Cast Name: C52S	Date(GMT): 2016, 6/23	Station: C052	Cast Name: C052	Date(GMT): 2016, 6/23				
Operator: Sasaki	Surface Temperature 22.5°C		Operator: Fukuyama	Surface Temperature 21.60 °C					
File Name	C52S		File Name	C052					
Time(GMT)	Latitude	Longitude	Depth	Time(GMT)	Latitude	Longitude	Depth		
Cast Start	6:17	37-29.885N	149-00.053E	5831 m	Cast Start	06:48	37-29.575N	149-00.741E	5828 m
Bottom	6:26	Pressure <200.08 db>	Wire out <197 m>	Altitude <- m>	Bottom	07:36	Pressure <2000.09 db>	Wire out <2033 m>	Altitude <- m>
Cast End	6:34	37-29.727N	149-00.446E	5827 m	Cast End	08:14	37-28.849N	149-01.565E	5833 m

Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	

10mスタート
1980db 操船のため繰り出し一時停止(下げ)
上げに判断されているので処理注意

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C053	Cast Name: C53S	Date(GMT): 2016/06/23	Station: C053	Cast Name: C053	Date(GMT): 2016/06/23										
Operator: Hiko		Surface Temperature 22.6 °C	Operator: Doi (H)		Surface Temperature 22.92 °C										
File Name: C53S			File Name: C053												
	Time(GMT)	Latitude	Longitude	Depth											
Cast Start	13:57	37-30.315 N	148-00.238 E	5645 m											
Bottom	1408	Pressure < 201.71 db>	Wire out < 198 m>	Altitude < - m>											
Cast End	1431	37-30.923 N	148-00.659 E	5646 m											
	Time(GMT)	Latitude	Longitude	Depth											
Cast Start	21:38	37-30.431 N	148-00.532 E	5649 m											
Bottom	22:20	Pressure < 2000.73 db>	Wire out < 1984 m>	Altitude < - m>											
Cast End	22:57	37-31.203 N	148-01.237 E	5642 m											
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓		13	350	✓	
2	190	✓		14	70	✓		2	1750	✓		14	300	✓	
3	180	✓		15	60	✓		3	1500	✓		15	250	✓	
4	170	✓		16	50	✓		4	1250	✓		16	200	✓	
5	160	✓		17	40	✓		5	1000	✓		17	175	✓	
6	150	✓		18	30	✓		6	900	✓		18	150	✓	
7	140	✓		19	20	✓		7	800	✓		19	125	✓	
8	130	✓		20	10	✓		8	700	✓		20	100	✓	
9	120	✓		21	200	✓		9	600	✓		21	75	✓	
10	110	✓		22	200	✓		10	500	✓		22	50	✓	
11	100	✓		23	200	✓		11	450	✓		23	25	✓	
12	90	✓		24	200	✓		12	400	✓		24	10	✓	
上げのとき、スト、70 採水のため								10m 29-h							

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C054		Cast Name: C54S		Date(GMT): 2016/06/24		Station: C054		Cast Name: C054		Date(GMT): 2016/6/24	
Operator: Kakinchi		Surface Temperature 18.7 °C		Operator: Doi(s)		Surface Temperature 18.8 °C					
File Name		C54S				File Name		C054			
		Time(GMT)	Latitude	Longitude	Depth			Time(GMT)	Latitude	Longitude	Depth
Cast Start		03:14	37-29.942 N	146-59.924 E	5658 m	Cast Start		3:49	37-29.820 N	146-59.752 E	5656 m
Bottom		03:25	Pressure <199.69 db>	Wire out <200 m>	Altitude <-m>	Bottom		4:30	Pressure <2000.31 db>	Wire out <1982 m>	Altitude <-m>
Cast End		3:32	37-29.808 N	146-59.730 E	5656 m	Cast End		5:07	37-29.757 N	146-59.601 E	5657 m
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	80	✓		1	2000	✓	
2	190	✓		14	70	✓		2	1750	✓	
3	180	✓		15	60	✓		3	1500	✓	
4	170	✓		16	50	✓		4	1250	✓	
5	160	✓		17	40	✓		5	1000	✓	
6	150	✓		18	30	✓		6	900	✓	
7	140	✓		19	20	✓		7	800	✓	
8	130	✓		20	10	✓		8	700	✓	
9	120	✓		21	200	✓		9	600	✓	
10	110	✓		22	200	✓		10	500	✓	
11	100	✓		23	200	✓		11	450	✓	
12	90	✓		24	200	✓		12	400	✓	
								5m 15 () 26			

Cruise KH- 16 -3

CTD Observation Log Sheet

Station: C055	Cast Name: C55S	Date(GMT): 2016/06/24	Station: C055	Cast Name: C055	Date(GMT): 2016/06/24										
Operator: Fukuyama		Surface Temperature 20.42°C	Operator: Suzuki		Surface Temperature 21.3 °C										
File Name C55S			File Name C055												
	Time(GMT)	Latitude	Longitude	Depth											
Cast Start	09:57	37-29.943N	145-59.996E	5520 m											
Bottom	10:07	Pressure < 200.19 db>	Wire out < 198 m>	Altitude < - m>											
Cast End	10:23	37-29.670 N	145-59.826 E	5520 m											
	Time(GMT)	Latitude	Longitude	Depth											
Cast Start	10:57	37-29.955 N	145-59.972E	5521 m											
Bottom	11:40	Pressure < 1999.9 db>	Wire out < 1987 m>	Altitude < - m>											
Cast End	12:16	37-29.352 N	145-59.731E	5521 m											
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	200	✓		13	100	✓		1	2000	✓		13	350	✓	
2	200	✓		14	100	✓		2	1750	✓		14	300	✓	
3	200	✓		15	75	✓		3	1500	✓		15	250	✓	
4	200	✓		16	75	✓		4	1250	✓		16	200	✓	
5	150	✓		17	50	✓		5	1000	✓		17	175	✓	
6	150	✓		18	50	✓		6	900	✓		18	150	✓	
7	150	✓		19	30	✓		7	800	✓		19	125	✓	
8	150	✓		20	30	✓		8	700	✓		20	100	✓	
9	125	✓		21	20	✓		9	600	✓		21	75	✓	
10	125	✓		22	20	✓		10	500	✓		22	50	✓	
11	125	✓		23	10	✓		11	450	✓		23	25	✓	
12	125	✓		24	10	✓		12	400	✓		24	10	✓	

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CTD Observation Log Sheet

Station: C056				Cast Name: C56S				Date(GMT): 2016, 6/24				Station: C056				Cast Name: C056				Date(GMT): 2016, 6/24			
Operator: Kikuchi				Surface Temperature 21.1 °C				Operator: Yamada				Surface Temperature 21.1 °C											
File Name		C56S						File Name		C056													
		Time(GMT)		Latitude		Longitude		Depth				Time(GMT)		Latitude		Longitude		Depth					
Cast Start		17:28		37-29.845 N		144-59.884 E		5634 m		Cast Start		18:09		37-29.613 N		144-59.774 E		5641 m					
Bottom		17:40		Pressure < 200.32 db>		Wire out < 198 m>		Altitude < - m>		Bottom		18:51		Pressure < 199.39 db>		Wire out < 1980 m>		Altitude < - m>					
Cast End		17:47		37-29.724 N		144-59.843 E		5638 m		Cast End		19:27		37-29.207 N		144-59.525 E		5676 m					
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo				
1	200	✓		13	80	✓		1	2000	✓		13	350	✓									
2	190	✓		14	70	✓		2	1750	✓		14	300	✓									
3	180	✓		15	60	✓		3	1500	✓		15	250	✓									
4	170	✓		16	50	✓		4	1250	✓		16	200	✓									
5	160	✓		17	40	✓		5	1000	✓		17	175	✓									
6	150	✓		18	30	✓		6	900	✓		18	150	✓									
7	140	✓		19	20	✓		7	800	✓		19	125	✓									
8	130	✓		20	10	✓		8	700	✓		20	100	✓									
9	120	✓		21	200	✓		9	600	✓		21	75	✓									
10	110	✓		22	200	✓		10	500	✓		22	50	✓									
11	100	✓		23	200	✓		11	450	✓		23	25	✓									
12	90	✓		24	200	✓		12	400	✓		24	10	✓									

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CTD Observation Log Sheet

Station: C057		Cast Name: C057		Date(GMT): 2016/06/27		Station: C058		Cast Name: C058		Date(GMT): 2016/06/27					
Operator: Yanaguchi		Surface Temperature 22.2 °C		Operator: Miyamoto		Surface Temperature 21.3 °C									
File Name		C057		File Name		C058									
Time(GMT)		Latitude		Longitude		Depth									
Cast Start		6:07 37-30.062 N		143-59.811 E		5281 m									
Bottom		6:48 Pressure <200.95 db>		Wire out <2023 m>		Altitude < m>									
Cast End		07:25 37-31.276 N		143-58.713 E		6763 m									
Time(GMT)		Latitude		Longitude		Depth									
Cast Start		11:48 37-30.051 N		142-59.921 E		3339 m									
Bottom		12:32 Pressure <2000.9 db>		Wire out <2007 m>		Altitude < m>									
Cast End		13:09 37-30.722 N		142-59.309 E		3295 m									
Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo	Bottle	Depth	Number	Memo
1	2000	✓		13	350	✓		1	2000	✓		13	350	✓	
2	1750	✓		14	300	✓		2	1750	✓		14	300	✓	
3	1500	✓		15	250	✓		3	1500	✓		15	250	✓	
4	1250	✓		16	200	✓		4	1250	✓		16	200	✓	
5	1000	✓		17	175	✓		5	1000	✓		17	175	✓	
6	900	✓		18	150	✓		6	900	✓		18	150	✓	
7	800	✓		19	125	✓		7	800	✓		19	125	✓	
8	700	✓		20	100	✓		8	700	✓		20	100	✓	
9	600	✓		21	75	✓		9	600	✓		21	75	✓	
10	500	✓		22	50	✓		10	500	✓		22	50	✓	
11	450	✓		23	25	✓		11	450	✓		23	25	✓	
12	400	✓		24	10	✓		12	400	✓		24	10	✓	
								LADCP 7L							