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Title: Preliminary Report of The Hakuho Maru Cruise KH-05-1 Leg 2,4 Author: Atmosphere and Ocean Research Institute, The University of Tokyo

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p. 26

The article was published in "Tsukamoto, K. : Spawning of eels near a seamount. Nature, 439, p. 929, 2006."

DOI: 10.1038/439929a

Preliminary Report of The Hakuho Maru Cruise KH-05-1 Leg 2,4

Leg 1: May 29, 2005 - June 13, 2005

Leg 2: June 30, 2005 - July 15, 2005

(Eel Cruise XII)

Atmosphere and Ocean Research Institute
The University of Tokyo
2012

Preliminary Report of The Hakuho Maru Cruise KH-05-1 Leg 2,4 (EEL XII)

Leg 1: May 29, 2005 - June 13, 2005

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Atmosphere and Ocean Research Institute
The University of Tokyo
2012

By
The Scientific Members of the Expeditions

Edited by
Shun Watanabe, Kazuki Yokouchi
and Katsumi Tsukamoto

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Preface

The KH-05-1 research cruise of the R/V Hakuho Maru (Leg 2 and Leg 4) was the first research effort to increase our understanding of the spawning ecology and migration behavior of the Japanese eel using the newly developed large ORI net (so-called "Big Fish" or ORI-BF). The cruise was separated into two legs, Leg 2 (from 29 May, Naha, Okinawa to 13 June, Guam) and Leg 4 (from 30 June, Guam to 15 July, Guam). The main objectives of this cruise were (1) to confirm spawning events, and their timing and location by collecting small larvae of the Japanese eel using the ORI-BF. Because of the calm sea during the cruise, we made almost 100% of the sampling and observations that were scheduled. In addition to this, other research was successfully done during the cruise, such as (2) the oceanic environmental condition during the transportation of eel larvae, (3) distribution of the oceanic larvae and juveniles, (4) the role of olfactory sense in the migration mechanism of the adult eel, (5) microflora in a digestive organ of the eel, and (5) experimental estimation of upwelling flow in a pipe induced by a "perpetual salt fountain".

As a result of the net sampling, we could successfully collect *Anguilla japonica* preleptocephali (4 – 5 mm TL), confirming a spawning event of the Japanese eel along the southern West Mariana Ridge around the day of new moon of June 2005. This collection is the first major historical achievement since the big catch of 10 mm leptocephali during the KH-91-4 cruise, in the year 1991. A few of the small larvae that were collected were aged and estimated as 2 – 4 days old after hatching by a brief otolith aging method. Real-time PCR method was employed for species identification of collected *A. japonica* preleptocephali. It will be required to do additional age estimation to increase the sample size and to conduct more detailed genetic identification with DNA sequences after this cruise. The result of the additional experiments would help to better determine the spawning sites of the Japanese eel in combination with oceanographic current data and hydrographic conditions around the area surveyed by this cruise.

On behalf of all the scientists on board, we acknowledge the captain and his crew of the R/V Hakuho Maru, and the administrative staff of JAMSTEC for their heartful cooperation during the intensive sampling.

In the cabin of Hakuho Maru, July 14, 2005

Katsumi Tsukamoto Chief Scientist of KH-05-1

K. Tsukamoto

Station and working log.

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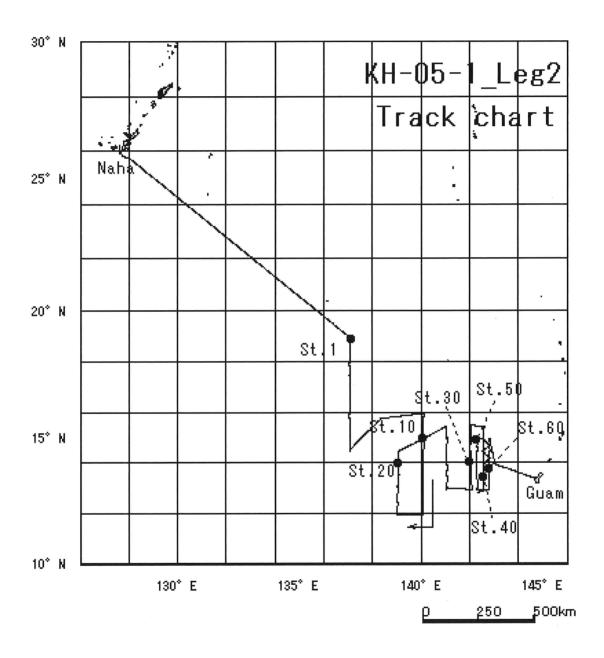
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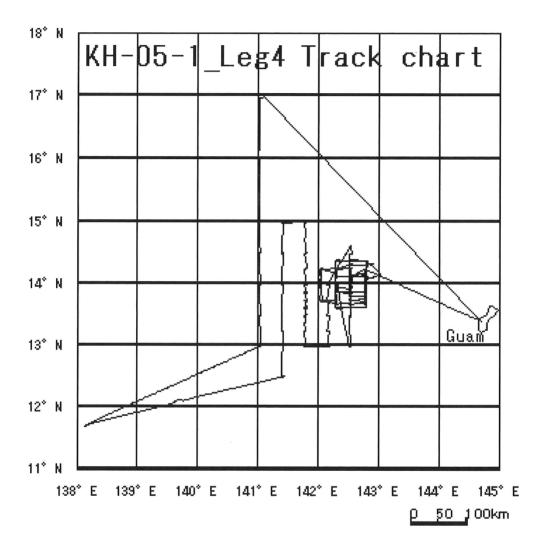
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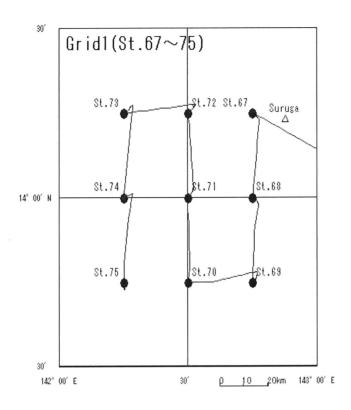
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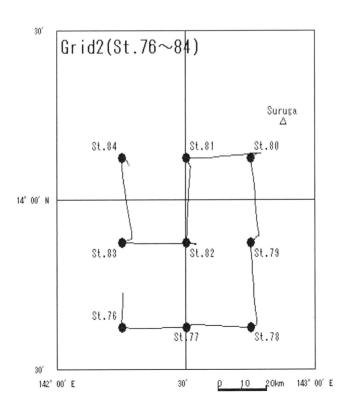
Scientists on board HAKUHO-MARU (KH-05-1)

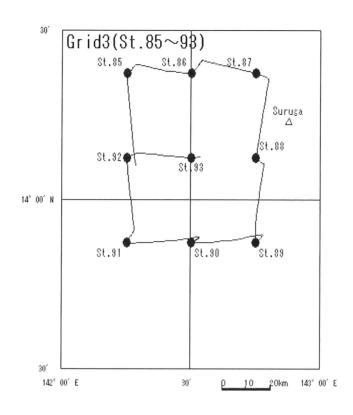
No.	Leg. 2	Leg.4	Name	Affiliation	Position
1	0	0	TSUKAMOTO Katsumi	Ocean Research Institute, The University of Tokyo	Proffesor
2	0		OTAKE Tsuguo	Ocean Research Institute, The University of Tokyo	Proffesor
3	0		KIMURA Shingo	Ocean Research Institute, The University of Tokyo	Associate Proffesor
4	0	0	AOYAMA Jun	Ocean Research Institute, The University of Tokyo	Research Associate
5	0	0	OYA Machiko	Ocean Research Institute, The University of Tokyo	Technician
6	0	0	MILLER Michael J.	Ocean Research Institute, The University of Tokyo	Research Fellow
7	0	0	WATANABE Shun	Ocean Research Institute, The University of Tokyo	Research Fellow
8	0	0	SHINODA Akira	Ocean Research Institute, The University of Tokyo	Research Fellow
9	0	0	KIM Hee-Yong	Ocean Research Institute, The University of Tokyo	Research Fellow
10	0		ITO Sachihiko	Ocean Research Institute, The University of Tokyo	Research Associate
11	0	0	KUROKI Mari	Ocean Research Institute, The University of Tokyo	Graduate Student
12	0	0	IIDA Midori	Ocean Research Institute, The University of Tokyo	Graduate Student
13	0	0	YOKOUCHI Kazuki	Ocean Research Institute, The University of Tokyo	Graduate Student
14	0	0	SUDOU Ryusuke	Ocean Research Institute, The University of Tokyo	Graduate Student
15		0	YOSHIZAWA Natsuko	Ocean Research Institute, The University of Tokyo	Graduate Student
16	0	0	FUKUDA Nobuto	Ocean Research Institute, The University of Tokyo	Graduate Student
17	0		KATO Yoshiki	Ocean Research Institute, The University of Tokyo	Graduate Student
18		0	INOUE Takashi	Ocean Research Institute, The University of Tokyo	Graduate Student
19		0	MIYAKE Yoichi	Ocean Research Institute, The University of Tokyo	Graduate Student
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21		0	MATSUMOTO Asako	The University of Tokyo	Research Fellow
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23		0	ETOH Nozomu	Tokai University	Graduate Student
24		0	TOMIYAMA Shinichi	Tokai University	Graduate Student
25	0	0	WAKI Yasutoshi	Mie University	Graduate Student
26		0	MOCHIOKA Noritaka	Kyushu University	Research Associate
27		0	YAMADA Yoshiaki	IRAGO Institute	Researcher
28	0		HORIE Noriyuki	IRAGO Institute	Sinior Researcher
29	0	0	Al Bunpei		Journalist
30		0	LEE Tae-Won	Chungnam National University	Proffesor
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32	0	0	TSUBAKI Koutaro	Tohoku University	Graduate Student
33	0	0	SATOH Tetsuya	Tohoku University	Student
34	0		NAKAI Yuki	Tohoku University	Graduate Student
35		0	TAKEDA Hiroki	Tohoku University	Graduate Student
36	0		OGUMA Kenji	Ocean Research Institute, The University of Tokyo	Technician
37		0	ISHIGAKI Hideo	Ocean Research Institute, The University of Tokyo	Technician
38	0		TAGUCHI Masaki	MARINE WORKS JAPAN LTD.	Engineer
39		0	YOKOKAWA Shinichiro	MARINE WORKS JAPAN LTD.	Engineer

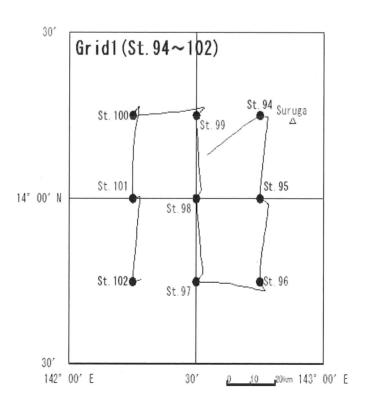


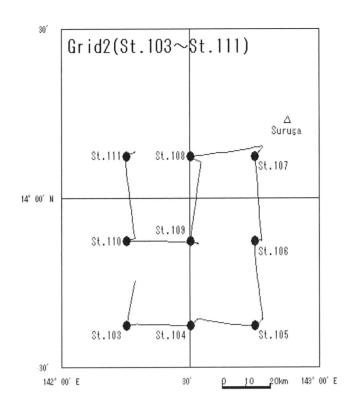


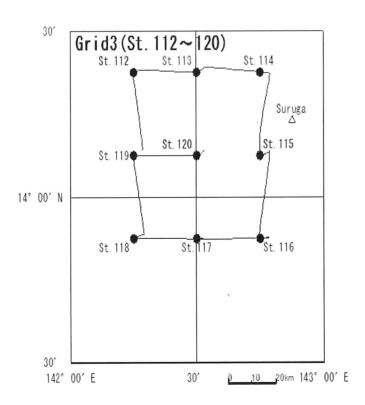


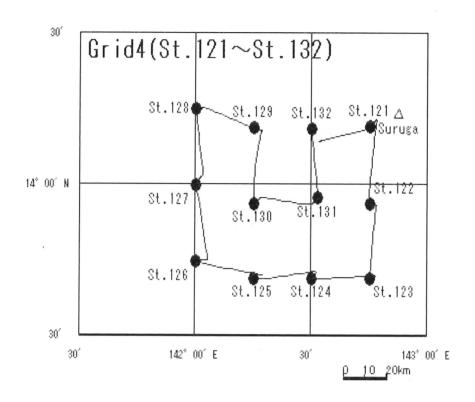


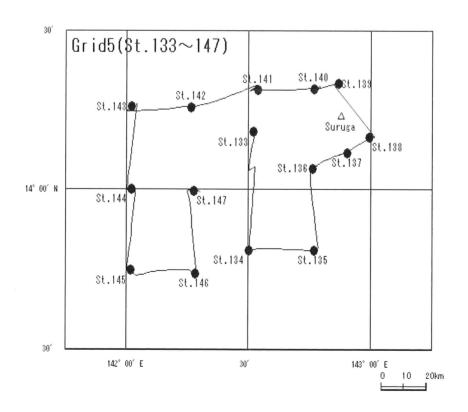


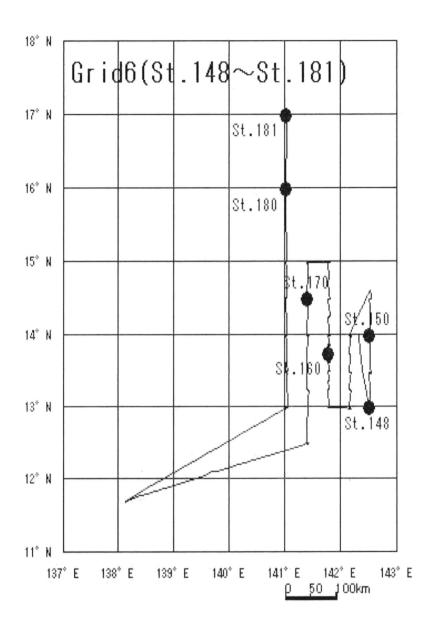


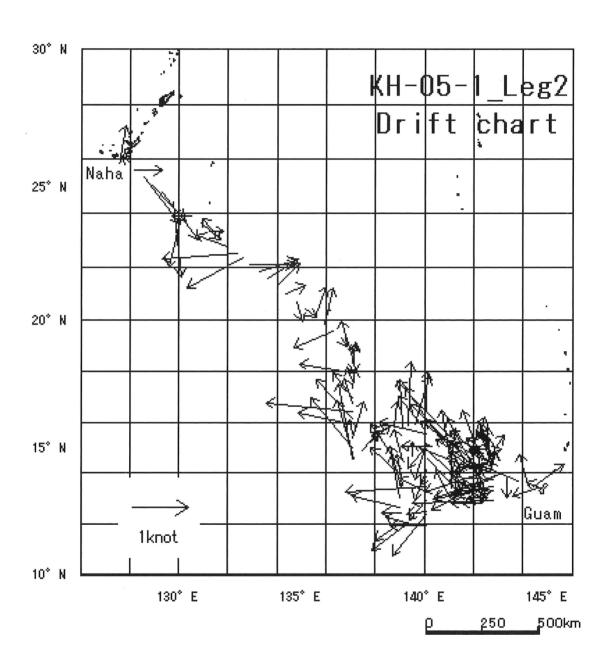


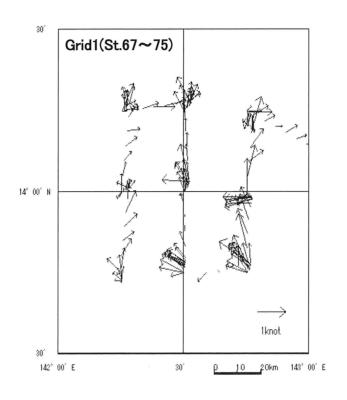


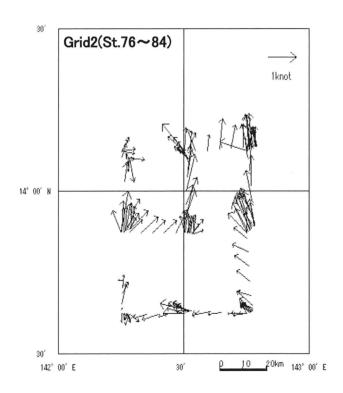


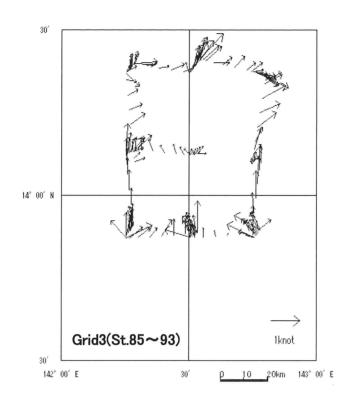


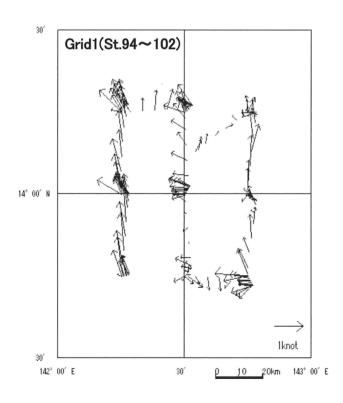


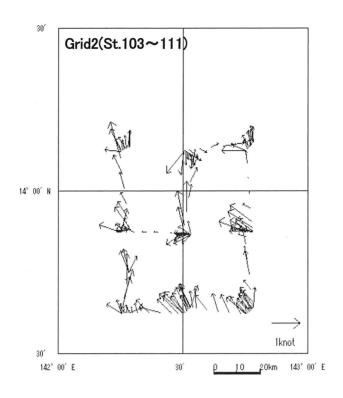


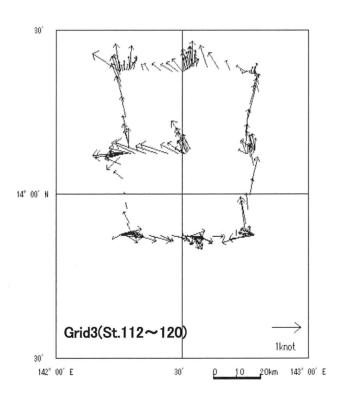


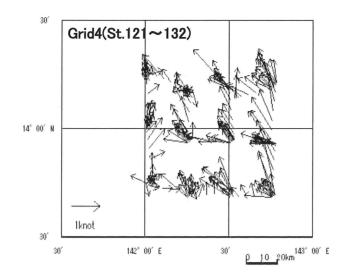


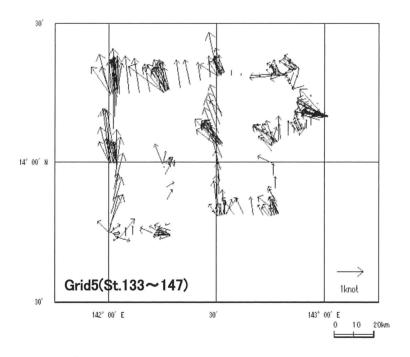












Leptocephali Collected During the KII -05-1 Cruise in the North Equatorial Current Region

All Scientists onboard

A total of 1,007 leptocephali and 11 juvenile eels of 14 families eels and their close relatives were collected between 31 May June and 12 June during Leg 2 and 1 and 14 July during Leg 4 of the KH-05-1 cruise (Table 1). These leptocephali were mostly collected in the 181 stations, using the newly designed 3-m ORI net, or when the seas were rough the Isaacs Kidd Midwater Trawl (IKMT). The 3-m ORI net had a mouth opening of 7.1 m² and the IKMT mouth opening was 8.7 m². Both nets had 0.5 mm mesh and were fished in oblique tows to depths of 500 m during both daytime and nighttime. During Leg 2 the sampling started in the western region and moved eastward until likely *Anguilla japonica* preleptocephali were collected to the west of the Suruga Seamount and then continued in north-south lines to the west of the seamount. In Leg 4, sampling began to the west of the Suruga Seamount and then expanded out to the west.

Table 1. Number and total length of leptocephali collected with the 3-m ORI net and the IKMT during the KH-05-1 cruise.

Taxa	Number of leptocephali	TL range (mm)
Anguilliformes		
Anguillidae or possible Anguilla	353	4.4 - 47.0
Chlopsidae	13	39.0 -75.7
Congridae		
Ariosoma spp.	49	98.0 -360.0
Congridae spp.	28	8.3 -72.0
Derichthyidae	49	5.4 -80.4
Moringuidae	2	58.0 -60.8
Muraenidae	50	6.8 - 80.0
Nemichthyidae	46	17.5 - 256.8
Nettastomatidae	3	9.6 -109.4
Ophichthidae	7	11.8 - 87.0
Serrivomeridae	324	3.7 -68.3
Synaphobranchidae	13	18.6 -68.0
Saccopharyngiformes		
Cyematidae	7	19.0 -34.0
Eurypharyngidae	3	7.9 - 29.0
Thalassenchelys foliaceus	3	65.0 - 251.0
Notacanthiformes	5	21.8 -157.2
Identification uncertain	52	3.5 - 13.1
Total catch	1007	3.5 - 360.0

The leptocephali of the mesopelagic eel family Serrivomeridae (N = 324) were the most abundant family, followed by the Anguillidae, for which 82 *Anguilla japonica* leptocephali that were spawned during the previous month were collected in Leg 2, and 43 *Anguilla marmorata* leptocephali were collected during both legs (Fig. 1, 2). In addition, 137 recently hatched preleptocephali with poorly developed morphological features, many of which may have been *A. japonica*, were also collected (Fig. 1). Other preleptocephali with characteristics more similar to Serrivomeridae were classified tentatively with that family in this report.

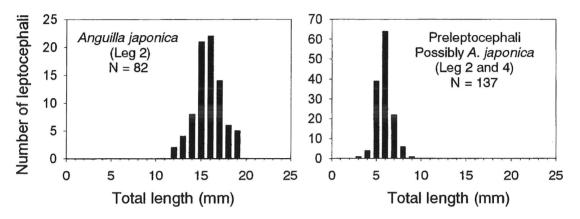


Figure 1. Length frequency plots of the approximately one month old <u>Anguilla japonica</u> leptocephali collected during Leg 2, and the recently spawned preleptocephali that may be *A. japonica*, which were collected during both Leg 2 and 4 of the KH-05-1 cruise.

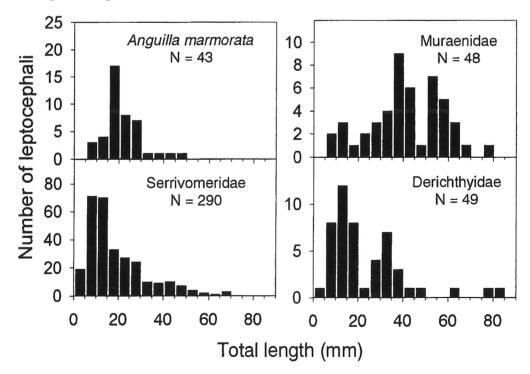


Figure 2. Length frequency plots of leptocephali of *Anguilla marmorata* and three other families of leptocephali collected during the KH-05-1 cruise.

The leptocephali of the family Congridae were the next most abundant, with those of *Ariosoma* sp. 7 being collected mostly at large sizes up to 360 mm TL (Fig. 3). Other congrid taxa such as *Gorgasia*, *Heteroconger*, *Conger* and other Congrinae were collected in smaller numbers. The leptocephali of the mesopelagic eels of the family Nemichthyidae (N = 46) were also collected, which included both *Nemichthys scolopaceus* and *Avocettina*, with most of the latter probably being *Avocettina infans*. Other leptocephali of mesopelagic eels included 49 specimens of the family Derichthyidae, which included both *Derichthys serpentinus* and *Nessorhamphus danae*, some of which were as small as 5.4 mm TL. Seven leptocephali of the meso- or bathy-pelagic eel *Cyema atrum* were also collected during the cruise (19.0 - 34.0 mm TL) as were three *Eurypharynx pelecanoides* (7.9 - 29.0 mm TL). In addition to the leptocephali of these mesopelagic eel families, 10 serrivomerid juveniles were collected and one *Nessorhamphus* elver was caught.

The leptocephali of the other families collected during the cruise included leptocephali of the shallow water eel families of the Chlopsidae (N=12) and the Muraenidae (N=50), but only a few specimens of the families Moringuidae (N=2) and Ophichthidae (N=7) were collected (Table 1). The leptocephali of the families of eels that live primarily in slope habitats included those of the subfamily Synaphobranchinae (N=12) of the family Synaphobranchide, as well as three leptocephali of the family Nettastomatidae. One small nettastomatid (9.6 mm TL) was collected near the Surga Seamount suggesting it may have resulted from spawning at the seamount. Some small congrids, muraenids and ophichthids were also collected, which may have been spawned at the seamount and then drifted offshore.

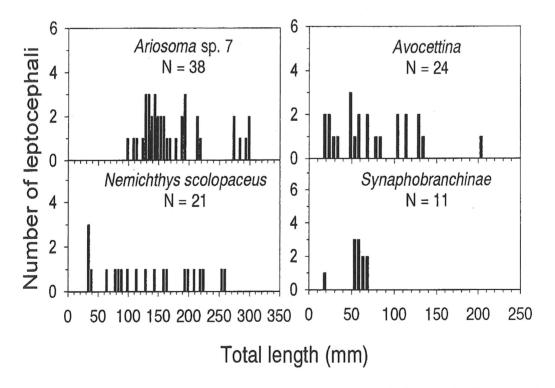


Figure 3. Length frequency plots of the most abundant taxa of leptocephali of the family Congridae, *Ariosoma* sp. 7, of the Nemichthyidae (*Nemichthys* and *Avocettina*), and of the Synaphobranchinae, collected during KH-05-1.

Characteristics of *Anguilla japonica* preleptocephali Collected During the KH-05-1 Cruise

All Scientists onboard

Several developmental stages of preleptocephali that appear to be *Anguilla japonica* were collected during Leg 2 and Leg 4 of the KH-05-1 cruise in the North Equatorial Current (NEC) region of the western North Pacific. Subsamples of these larvae were genetically confirmed to be *A. japonica* on board with realtime PCR and back in the laboratory after Leg 2 with DNA sequencing, but further analysis is needed to confirm the genetic identifications of all the specimens during both Leg 2 and 4 to distinguish between the preleptocephali of *A. japonica* and other closely related species such as of the Serrivomeridae that also spawn in the NEC region.

Several early development stages of these leptocephali were collected that ranged from very poorly developed larvae with almost no head features to others with the head almost fully developed. The youngest larvae had no teeth, a poorly developed eye without pigmentation, and a large oil globule (Fig. 1A, 2A). Older larvae had teeth and jaws and the eye was fully pigmented (Fig. 1B, 2D).

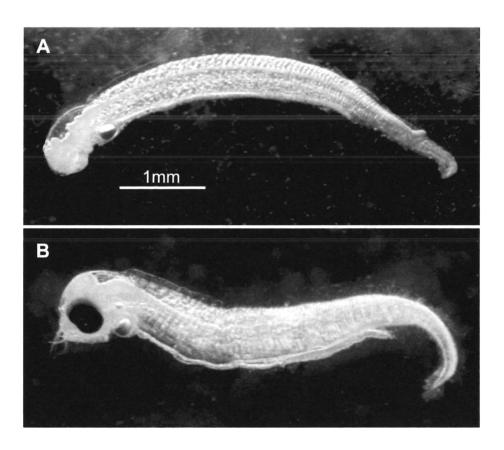


Figure 1. An early stage preleptocephalus larvae (No. 191, 5.0 mm TL) with no teeth or jaws, no eye pigmentation and a large oil globule (A), and a more developed one (No. 319, 4.2 mm TL) with teeth and a pigmented eye and a smaller oil globule (B), which were collected during Leg 2 of the KH-05-1 cruise in the North Equatorial Current region.

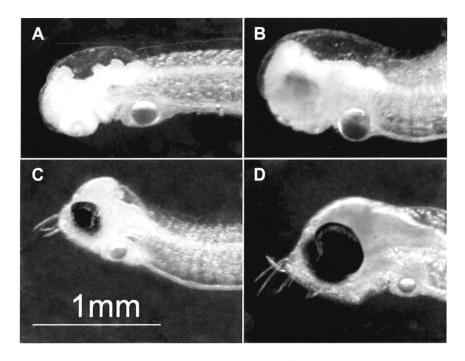


Figure 2. The head region of a 5.0 mm TL (No. 191) early stage preleptocephalus larva with no teeth or jaws, no eye pigmentation (A), a 4.7 mm TL (No. 189) larva with early eye pigmentation (B), a 5.2 mm TL larva (No. 366) with early teeth but no jaws (C), and a 4.2 mm TL (No. 319) larva with more developed teeth and early jaws (D), which were collected during Leg 2 of the KH-05-1 cruise in the North Equatorial Current region.

During Leg 2 the first preleptocephali collected were in the earlier developmental stages and then older stages were collected in subsequent days in transects just to the east of where the first larvae were collected. Several eggs that resemble *A. japonica* eggs obtained from artificially fertilized females in captivity were also collected (Fig. 3), but PCR analyses were unable to confirm if any of them were Japanese eel eggs or not. Further analyses will examine the morphology of these early stage larvae in relation to the genetic species identification results to learn more about the morphology and development of early stage Japanese eel larvae, which has previously only been known from artificially hatched and reared leptocephali.

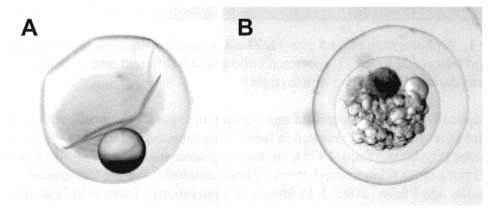


Figure 3. Two eggs that were collected in the same area as the preleptocephali, which had features that are similar to *Anguilla japonica* eggs from artificially fertilized females.

Rare Species of Leptocephali Collected in the North Equatorial Current Region During the KH-05-1 Cruise

All Scientists onboard

A variety of rare or undescribed species or types of leptocephali of the anguilliform families Chlopsidae, Muraenidae, Ophichthidae, Synaphobranchidae, and the larval genus *Thalassenchelys* were collected in the North Equatorial Current (NEC) region of the western North Pacific (WNP) during the KH-05-1 cruise. This region has been sampled during several previous cruises, but during this cruise, several species of leptocephali were collected that are very rare or have not been collected in previous sampling surveys. These specimens were photographed using the Nikon SMZ 1500 dissecting scope and a Nikon DMX1200 digital imaging system and are described briefly in this report.

The most unusual species collected were three specimens of *Thalassenchelys foliaceus*, which is a type of leptocephalus that reaches much larger sizes than most leptocephali and has no known adult form because it may reproduce shortly after metamorphosis (Castle and Raju, 1975). Two leptocephali of this species have been reported from the WNP (Castle and Raju, 1975), and the leptocephali of the other known species, *Thalassenchelys coheni*, have been reported from the offshore region of the WNP and in the eastern North Pacific (Castle and Raju, 1975; Shimokawa et al., 1995). Three specimens of *T. foliaceus* were collected during Leg 2 that were 65.0, 69.4, and 251.0 mm TL. What is unusual about the collection of these specimens is that they have not been collected in the North Equatorial Current region of the WNP during previous surveys for the leptocephali and eggs of the Japanese eel.

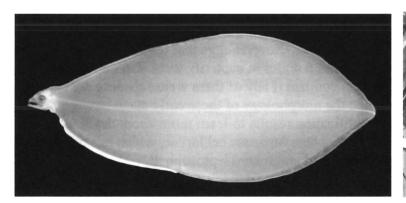




Figure 1. A photograph of a 65 mm TL *Thalassenchelys foliaceus* leptocephalus (left) and a larger 251 mm TL specimen collected at a different station being examined during the KH-05-1 cruise (right).

Historically, the body shape and morphology of these leptocephali, with a deep body and short gut (Fig. 1), resulted in them being tentatively placed in the family Chlopsidae (Castle and Raju, 1975), but recent genetic studies have shown that there likely is not a close relationship between *Thalassenchelys* and the Chlopsidae (Obermiller and Pfeiler, 2003; J. G. Inoue, in preparation). There is little data to confirm the species composition of this genus throughout the eastern Pacific, Indo-Pacific, and Indian Ocean, but the meristic data of our specimens appear to fit more closely with the species defined as *T. foliaceus* by Castle and Raju (1975). They

reported that this species had total myomeres (TM) of: 142 - 153, preanal myomeres (PAM) of: 55 - 62, and a last vertical blood vessel (LVBV) of: 50 - 58 (n = 17 - 24).

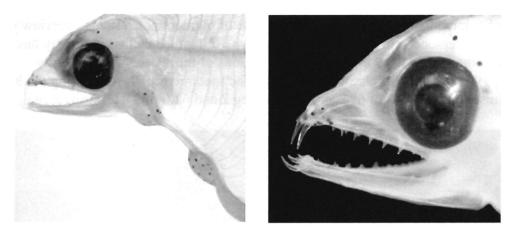


Figure 2. The anterior body region and head of an 65.0 mm TL *Thalassenchelys foliaceus* leptocephalus collected during the KH-05-1 cruise.

The other species T. *coheni* had TM: 152 - 163, PAM: 67 - 74, LVBV: 55 - 67 (n = 11 - 18). Our specimens fit best with T. *foliaceus*. These leptocephali are different from apparently all other species of leptocephali because of their combination of large size (Fig. 1), very deep body with a short gut, and much larger anterior teeth on the upper jaw (Fig. 2).

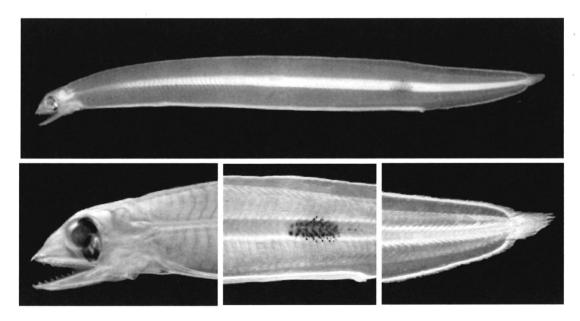
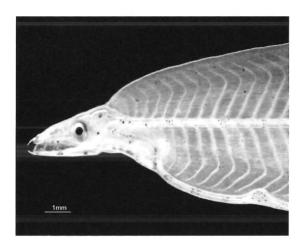


Figure 3. Photographs of of a rare species of leptocephali of the family Synaphobranchidae (67.3 mm TL) collected during the KH-05-1 cruise, which had an unusual large patch of pigmentation on the lateral surface of the body.

Another rarely collected type of leptocephalus is a species of the subfamily Synaphobranchinae of the deep slope and abyssal plane family of marine eels, the Synaphobranchidae. The leptocephali of this subfamily are distinctive in that they have a telescopic eye (Fig. 3), and a lateral band of thickened muscle tissue along the midline of the body (Tabeta and Mochioka, 1988; Smith, 1989a: Miller and

Tsukamoto, 2004). However, the rare species that was collected for the first time in the NEC region during both Leg 2 and Leg 4, had a large pigment patch near the caudal region (Fig. 3). This species has been collected before, because Castle (1984) included a drawing of a specimen with this type of pigment patch in his overview of anguilliform leptocephalus diversity, but this type of leptocephalus apparently has not been described in detail or in previous descriptions of the species of this family (Castle, 1965; Blache, 1979; Smith, 1989a). The specimens collected during the KH-05-1 cruise were at sizes of 67.3 mm during Leg 2 and 61.6 mm TL during Leg 4.



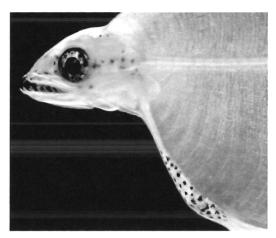
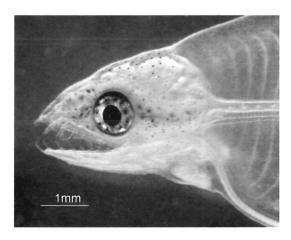


Figure 4. Photographs of a 55.0 mm TL Ophichthidae leptocephalus with pigment spots scattered all over the body (left), and a 45.0 mm TL Chlopsidae leptocephalus with unique pigment on the head and gut (right).



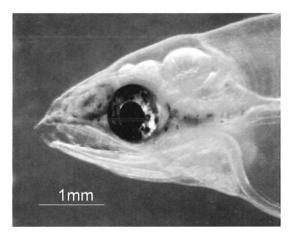


Figure 5. Photographs of a 53.1 mm TL Muraenidae leptocephalus with yellow and black pigment spots scattered all over the head (left), and a 42.3 mm TL Muraenidae leptocephalus with pigment on the middle part of the head (right).

Several other distinctive and undescribed leptocephali were collected during the cruise. A 55.0 mm TL ophichthid leptocephalus with pigment spots all over its body was collected, which has not been described in the WNA or WNP (Fig. 4). Very few of the many species of ophichthid leptocephali in the WNP have been described, but the different types of chlopsid leptocephali in the region around Japan, which includes larvae transported into the region by the Kuroshio Current, have been clearly described (Tabeta and Mochioka, 1988). This makes the collection of a 45.0 mm TL chlopsid leptocephalus with a new pattern of pigmentation an important finding (Fig.

4). This specimen had head pigmentation similar to a WNA species *Kaupichthys nuchalis*, but it also had a distinctive patch of pigmentation on the anterior portion of the gut, which has never been reported before. Therefore, it likely that this specimen is a previously unreported species of the family Chlopsidae and is the 12 th species of leptocephalus known from the WNP.

The species identification of the leptocephali of the family Muraenidae is especially difficult because of the similar features of most of their leptocephali and the overlapping number of vertebrae in most of their adults (Smith, 1989b). This has resulted in relatively few species being distinguished in regions such as around Japan (Tabeta and Mochioka, 1988), and even the WNA where the eel fauna and species identifications of most taxa of leptocephali are well known (Bohlke et al., 1989; Smith, 1989b). During the KH-05-1 cruise several species of muraenid leptocephali with distinctive head pigment were collected and photographed (Fig. 5). Similar pigment patterns are known in the genus *Muraena* in the WNA (Smith, 1989b), but one specimen in the collections during this cruise had yellow pigment spots on the head as well as the typical black spots (Fig. 5), which made it distinctive among the muraenid leptocephali that have been previously documented in the NEC region.

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DOI: 10.1038/439929a

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	E138-59.8	E138-58.1														
19	N 13-31.3	N 13-34.5	020605	80:00	01:39	ORIBF	0.5	Opl.	1270	0-497	1.0~0.5~0.2	2.5~1.5~2.0	45949	70348	2719	4456-4602
	E139-00.3	E139-01.7														
20	N 14-00.1	N 14-02.4	020605	03:40	04:55	ORIBF	0.5	Opl.	975	0-200	1.0~0.5~0.2	2.5~1.5~2.0	32763	50160	2719	5090-5103
	E138-59.9	E139-00.3														
21	N 14-30.9	N 14-32.3	050605	09:02	10:21	ORIBF	0.5	Opl.	1024	0-501	1.0~0.5	2.5~1.5	39027	59750	2719	4671-5254
(E139-00.1	E139-02.2	1			1	(1		1	1	1	1	į	
22	N 15-31.5	N 15-30.4	050605	20:01	21:04	ORIBF	0.5	Opl.	926	905-0	1.0~0.5~0.2	2.5~1.5~2.0	23217	35545	2719	4761-4764
CC	E140-59.3	E140-58.5	303010	66.00	7.10	במומס	L	4	0701	200	0	,	7770	7	0,10	4700
2	F140-59 9	F141-02 0	909060	00:35	1:34	OKIDA	c. 2		6701	706-0	2.0~6.0~0.1	0.5~6.1~6.2	30444	96/66	6177	4/02-4/32
	2	;														

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ζ; Ι	- 1	Location	Date -	=	Ime	Net -	Mesh	lowing	Wire	Sampl.	Reel.	Ship	. IIt	Flow-	Flow-	Sea
	Net in	Net out		Net in	Net out	lype	size (mm)	Method	out (m)	layer (m)	speed (m/s)	speed (/ /)	volume (س)	meter	meter	Depth
24	N 14-30.1	N 14-28.9	020606	04:40	05:49	ORIBF	0.5	Obl.	951	0-496	1.0~0.5~0.2	2.5~1.5~2.0	27502	42105	2719	4860-4864
I	E140-59.9	E140-58.6) : :			2) -		i :	1	5	2	
22	N 14-00.3	N 13-58.8	020606	10:07	11:07	ORIBF	0.5	Obl.	988	0-503	1.0~0.5	2.5~1.5	31378	48040	2719	4799-4821
	E141-00.2	E141-01.3														
56	N 13-30.6	N 13-30.8	020606	14:14	14:25	ORIBF	0.5	Obl.	1097	0-521	1.0~0.5	2.5~1.5	29322	44892	2719	4642-4674
ļ	E141-00.1	E141-02.3			,		,	į			,	1				
27	N 13-01.1	N 13-03.3	020606	18:59	20:18	ORIBF	0.5	Opl.	1093	0-496	1.0~0.5~0.2	2.5~1.5~2.0	38928	59598	2719	3961-4140
80	E140-59.8 N 13-00 1	N 13-00 1	050507	01.10	02.46	Jaido	C	3	1205	0.535	1 0.00 50.00	2 52.1 52.2 0	20075	02303	0770	2015 2006
2	E142-00.0	E142-02.7		-	10		?	5	503		2.0	6.3	0.000		6117	0005-5-167
29	N 13-30.0	N 13-31.8	050607	05:07	06:15	ORIBF	0.5	Obl	1100	0-547	1.0~0.5	2.5~1.5	26819	41060	2719	2371-2844
	E141-59.9	E141-59.0														
30	N 14-00.1	N 13-59.5	050607	10:17	11:12	ORIBF	0.5	Obl.	833	0-493	1.0~0.5	2.5~1.5	17566	26894	2719	4229-4240
	E141-59.1	E141-60.0														
31	N 14-30.7	N 14-33.0	050607	14:38	15:56	ORIBF	0.5	Obl.	1339	0-551	1.0~0.5	2.5~1.5	38753	59330	2719	4249-4360
	E141-59.3	E141-57.0					j	į	,		9 9 9		20 20 20 20 20 20 20 20 20 20 20 20 20 2			
32	N 15-00.7	N 15-04.0	050607	18:59	21:22	ORIBF	0.5	Obl.	1290	905-0	1.0~0.5~0.2	2.5~1.5~2.0	42010	64317	2719	4475-4508
	E141-59.6	E141-58./														
33	N 15-30.8	N 15-32.3	050607	23:15	24:36	ORIBF	0.5	Opl.	1082	0-501	1.0~0.5~0.2	2.5~1.5~2.0	36692	56175	2719	3919-4277
	E141-59.6	E142-01.8														
34	N 15-29.9	N 15-28.5	050608	02:49	04:50	ORIBF	0.5	Opl.	1232	0-200	1.0~0.5~0.2	2.5~1.5~2.0	40967	62720	2719	3943-4045
	E142-30.3	E142-32.7														
35	N 15-00.2	N 14-59.4	050608	08:31	09:33	ORIBF	0.5	Obl.	1045	0-200	1.0~0.5	2.5~1.5	25309	38748	2719	4065-4166
	E142-29.9	E142-31.4														
36	N 14-45.5	N 14-45.1	050608	11:57	12:42	ORIBF	0.5	Obl.	699	0-481	1.0~0.5	2.5~1.5	15941	24405	2719	3580-3632
	E142-44.6	E142-45.2														
37	N 14-30.5	N 14-30.1	050608	15:29	16:16	ORIBF	0.5	Obl.	269	0-494	1.0~0.5	2.5~2.0	15497	23725	2719	3480-3539
	E142-30.3	E142-29.0														
38	N 14-15.2	N 14-13.9	050608	19:00	20:16	ORIBF	0.5	Opl.	1133	0-497	1.0~0.5~0.2	2.5~1.5~2.0	30981	47432	2719	2023-2048
	E142-44.8	E142-46.4														
39	N 14-00.1	N 13-58.4	020608	22:51	24:07	ORIBF	0.5	Obl.	994	905-0	1.0~0.5~0.2	2.5~1.5~2.0	30644	46915	2719	2705-2788
	E142-30.0	E142-31.0														
40	N 13-29.7	N 13-28.2	020609	02:22	03:28	ORIBF	0.5	Obl.	1057	0-503	1.0~0.5	2.5~1.5	27786	42540	2719	2228-2467
	E142-30.2	E142-31.6														
41	N 13-00.1	N 12-59.3	020609	06:37	07:23	ORIBF	0.5	Obl.	999	0-293	1.0~0.5	2.5~1.5	17453	26720	2719	2636-3187
	E142-30.1	E142-30.9														
42	N 13-00.3	N 13-00.8	020609	14:36	15:54	ORIBF	0.5	Opl.	1281	0-200	1.0~0.5	2.5~2.0	37737	57775	2719	2367-2429
	E142-14.9	E142-17.7														
43	N 13-30.5	N 13-33.3	020609	19:05	20:21	ORIBF	0.5	Obl.	1320	0-496	1.0~0.5	2.5~1.5	36264	55520	2719	3154-3278
	E142-14.9	E142-14.4														
44	N 13-45.3	N 13-48.3	020609	21:29	22:54	ORIBF	0.5	Obl.	1402	0-491	1.0~0.5	2.5~1.5	43692	66892	2719	3066-3432
	E142-14.8	E142-12.9														
45	N 14-00.5	N 14-03.7	050610	00:56	02:19	ORIBF	0.5	Opl.	1340	0-494	1.0~0.5	2.5~1.5	39752	09809	2719	3496-3595
	E142-14.2	E142-13.3														

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۲ . ۲		Location	Date _		Ime	Net	Mesh	Lowing	Wire	Sampl.	Reel.	Ship	FIF.	Flow-	Flow-	Sea
	Net in	Net out		Net in	Net out	Type	size (mm)	Method	m (m	layer (m)	sbeed (m/s)	speed (kt)	volume (m³)	meter Revol.	meter No.	Depth (m)
46	N 13-45.3	N 13-48.7	050610	04:20	05:41	ORIBF	0.5	Obl.	1391	0-495	1.0~0.5	2.5~1.5	41408	63395	2719	3073-3438
	E142-15.0	E142-14.4														
47	N 14-15.3	N 14-19.2	050610	07:39	09:05	ORIBF	0.5	Opl.	1521	0-501	1.0~0.5	2.5~1.5	45531	20269	2719	3981-4084
α	E142-14.9	E142-14.5 N 14-33-3	050510	10.56	12.10	Jaido	LI C	3	1275	707	10.05	2 51 5	02000	69903	2710	4019 4078
P	E142-14.8	E142-16.2		2	2		?	i	27	1	5.	5.1	0.600	70066	6117	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
49	N 14-45.2	N 14-47.1	050610	13:17	14:29	ORIBF	0.5	Obl.	1150	0-502	1.0~0.5	2.5~1.5	33352	51062	2719	4302-4337
	E142-15.1	E142-16.7														
20	N 15-00.2	N 15-01.9	050610	16:49	17:58	ORIBF	0.5	Obl.	1263	0-613	1.0~0.5	2.5~1.5	28557	43720	2719	4342-4391
	E142-15.2	E142-16.1														
21	N 14-59.9	N 14-58.3	050610	19:12	20:17	ORIBF	0.5	Opl.	1061	0-493	1.0~0.5	2.5~1.5	27082	41462	2719	4092-4168
	E142-29.7	E142-31.1														
52	N 14-29.9	N 14-28.1	050610	22:26	23:29	ORIBF	0.5	0bl.	966	0-501	1.0~0.5	2.5~1.5	25595	39185	2719	3464-3566
C L	E142-30.1	E142-30.6	0			1	(-			9	1		į	į	
53	N 14-14.8	N 14-13.1	050611	00:41	01:47	ORIBF	0.5	Opl.	1095	0-497	1.0~0.5	2.5~1.5	32051	49070	2719	3382-3488
	E142-29.9	E142-30.5	1	3	9		9	2	9	9						
54	N 13-59.8	N 13-57.8	050611	03:02	04:09	ORIBF	0.5	Obl.	1103	0-501	1.0~0.5	2.5~1.5	27156	41575	2719	2739-2820
	E142-30.0	E142-30.5														
22	N 13-44.9	N 13-43.3	050611	05:22	06:20	ORIBF	0.5	Opl.	826	0-493	1.0~0.5	2.5~1.5	21996	33675	2719	2443-2532
	E142-30.0	E142-30.2														
26	N 13-30.1	N 13-28.5	050611	07:32	08:30	ORIBF	0.5	Obl.	991	0-503	1.0~0.5	2.5~1.5	22219	34017	2719	2124-2294
	E142-29.9	E142-29.5														
22	N 13-00.0	N 12-58.2	050611	10:43	11:45	ORIBF	0.5	Obl.	1004	ī	1.0~0.5	2.5~1.5	23269	35625	2719	2713-3200
	E142-30.0	E142-30.0														
28	N 13-00.8	N 13-03.1	050611	19:29	20:31	ORIBF	0.5	Opl.	1058	0-497	1.0~0.5	2.5~1.5	27237	41700	2719	3342-3443
	E142-43.9	E142-43.8														
59	N 13-29.8	N 13-29.9	050611	23:23	24:24	ORIBF	0.5	Obl.	954	0-507	1.0~0.5	2.5~1.5	21480	32885	2719	3094-3226
	E142-44.5	E142-46.0														
09	N 13-45.3	N 13-47.1	050612	02:43	03:52	ORIBF	0.5	Opl.	1117	0-501	1.0~0.5	2.5~1.5	29223	44740	2719	3011-3260
	E142-44.2	E142-44.9														
61	N 14-00.1	N 14-01.7	050612	05:04	90:90	ORIBF	0.5	Obl.	1041	0-495	1.0~0.5	2.5~1.5	26910	41199	2719	1592-1906
	E142-44.9	E142-45.4														
62	N 14-15.1	N 14-17.0	050612	08:13	09:21	ORIBF	0.5	Opl.	1161	0-501	1.0~0.5	2.5~1.5	29197	44700	2719	2036-2347
	E142-45.0	E142-45.7	,													
63	N 14-30.6	N 14-31.6	050612	12:30	13:32	ORIBF	0.5	Obl.	1075	í	1.0~0.5	2.5~1.5	29435	45065	2719	2972-3041
	E142-44.8	E142-46.7														
64	N 14-45.1	N 14-46.2	050612	14:48	15:55	ORIBF	0.5	Obl.	1132	1	1.0~0.5	2.5~1.5	29567	45267	2719	3490-3580
	E142-45.1	E142-47.1														
65	N 14-59.9	N 15-01.0	050612	18:08	19:15	ORIBF	0.5	Opl.	1088	ì	1.0~0.5	2.5~1.5	26681	40848	2719	3069-3275
	E142-44.5	E142-45.8														
29	N 14-15.0	N 14-14.1	020630	21:55	22:48	ORIBF	0.5	Obl.	835	0-497	1.0~0.5	2.5~1.5	25084	39957	1307	2006-2195
	E142-45.2	E142-46.4														
89	N 14-00.0	N 13-58.8	050701	00:11	01:13	ORIBF	0.5	Obl.	1017	0-537	1.0~0.5	2.5~1.5	21187	33750	1307	1507-1636
	E142-45.3	E142-46.3														

1	Location	Date	É	Time	Net	Mesh	Towing	Wire	Sampl.	Reel.	Ship	FIF.	Flow-	Flow-	Sea
Net in	Net out		Net in	Net out	Туре	size (mm)	Method	out (m)	layer (m)	speed (s/w)	speed (1/1)	volume	meter	meter	Depth (m)
N 13-45.1	N 13-46.5	050701	02:36	03:38	ORIBF	0.5	Obl.	1034	0-521	1.0~0.5	2.5~1.5	25245	38650	2719	3271-3455
E142-45.1	E142-46.1														
N 13-45.3	N 13-47.0	050701	05:08	60:90	ORIBF	0.5	Obl.	1034	0-502	1.0~0.5	2.5~1.5	22910	35075	2719	2283-2458
N 14-00 2	N 14-019	050701	107.24	76.90	Dalac	0	3	1075	0 503	10.01	2 5 2 . 1 5	04220	00026	0170	2710 2862
F142-30.2	F142-31 3	020701	07:24	77:00	OKID	0.0	O	10/3	706-0	0.0~0.1	£.5∼1.5	24220	37080	6172	7987-0177
N 14-15.1	N 14-16.4	050701	09:38	10:38	ORIBE	0.5	Obl	1029	0-501	1.0~0.5	25~15	26616	40748	2719	3430-3492
E142-30.0	E142-31.6) -))		ì	
N 14-15.0	N 14-16.4	050701	12:05	13:09	ORIBF	0.5	Obl.	1103	0-494	1.0~0.5	2.5~1.5	21312	32629	2719	3931-4093
E142-15.3	E142-16.8														
N 14-00.0	N 14-00.8	050701	14:38	15:39	ORIBF	0.5	Obl.	1050	0-501	1.0~0.5	2.5~1.5	24500	37509	2719	3145-3538
E142-15.1	E142-17.0														
N 13-45.0	N 13-43.8	050701	17:06	17:58	ORIBF	0.5	Obl.	873	0-497	1.0~0.5	2.5~1.5	24130	36942	2719	3094-3133
E142-15.1	E142-15.1														
N 13-37.5	N 13-37.3	050701	18:47	19:47	ORIBF	0.5	Obl.	1037	0-495	1.0~0.5	2.5~1.5	24575	37624	2719	3156-3196
E142-15.1	E142-16.9														
N 13-37.6	N 13-38.0	050701	20:59	21:52	ORIBF	0.5	Obl.	899	905-0	1.0~0.5	2.5~1.5	25044	38342	2719	2640-2742
E142-30.0	E142-31.3														
N 13-37.5	N 13-37.9	050701	23:08	24:01	ORIBF	0.5	Obl.	890	0-498	1.0~0.5	2.5~1.5	16994	26018	2719	3490-3967
E142.45.0	E142-46.3														
N 13-52.6	N 13-53.7	050702	01:27	02:25	ORIBF	0.5	Opl.	1000	0-496	1.0~0.5	2.5~2.0	27378	41915	2719	2043-2246
E142-45.0	E142-46.6														
N 14-07.6	N 14-08.4	050702	03:45	04:52	ORIBF	0.5	Obl.	1182	0-497	1.0~0.5	2.5~2.0	33073	50635	2719	1194-1956
E142-45.1	E142-47.3														
N 14-07.5	N 14-06.1	050702	06:22	07:29	ORIBF	0.5	Obl.	1166	0-520	1.0~0.5	2.5~2.0	26165	40058	2719	3119-3180
E142-29.8	E142-30.9														
N 13-52.6	N 13-52.3	050702	08:45	09:45	ORIBF	0.5	Obl.	989	0-497	1.0~0.5	2.5~2.0	26962	41279	2719	2525-2633
E142-30.1	E142-32.2														
N 13-52.5	N 13-53.1	050702	11:14	12:16	ORIBF	0.5	Obl.	1095	0-499	1.0~0.5	2.5~2.0	22033	33732	2719	3496-3533
E142-14.9	E142-17.1														
N 14-07.5	N 14-06.2	050702	13:36	14:36	ORIBF	0.5	Obl.	1042	0-495	1.0~0.5	2.5~2.0	27457	42036	2719	3667-3910
E142-15.1	E142-16.9														
N 14-22.5	N 14-24.0	050702	16:04	17:06	ORIBF	0.5	Obl.	1106	0-492	1.0~0.5	2.5~2.0	29099	44550	2719	3990-4028
E142-15.1	E142-16.9														
N 14-22.6	N 14-24.6	050702	18:14	19:26	ORIBF	0.5	Obl.	1263	0-491	1.0~0.5	2.5~2.0	36049	55190	2719	3554-3635
E142-30.2	E142-32.2														
N 14-22.5	N 14-21.6	050702	20:35	21:42	ORIBF	0.5	Obl.	1114	0-494	1.0~0.5	2.5~2.0	37999	58176	2719	2428-2657
E142-45.3	E142-47.6														
N 14-07.4	N 14-06.6	050702	23:00	23:55	ORIBF	0.5	Obl.	904	0-495	1.0~0.5	2.5~2.0	23155	35450	2719	1428-1958
E142-45.2	E142-46.6														
N 13-52.5	N 13-53.8	050703	01:18	02:19	ORIBF	0.5	Opl.	980	0-497	1.0~0.5	2.5~2.0	32822	50250	2719	2032-2237
E142-45.1	E142-46.6														
N 13-52.6	N 13-53.3	050703	03:49	04:49	ORIBF	0.5	Opl.	1073	0-503	1.0~0.5	2.5~2.0	38844	59470	2719	2530-2673
E142-30.0	E142-31.8														
	N 13-45.1 N 13-45.1 N 13-45.1 N 13-45.3 E 142-29.8 N 14-15.1 E 142-30.0 N 14-15.0 E 142-15.3 N 13-45.0 E 142-15.1 N 13-37.5 E 142-15.1 N 13-37.5 E 142-45.0 N 13-52.6 E 142-30.1 N 13-52.5 E 142-15.1 N 13-52.5 E 142-30.2 N 14-22.5 E 142-15.1 N 14-22.5 E 142-45.2 N 14-22.5 E 142-45.2 N 13-52.5 E 142-45.0 N 13-52.5 E 142-45.1 N 13-52.5 E 142-45.2 N 13-52.5 E 142-45.3 N 13-52.5 E 142-45.2		N 13-46.5 E142-46.1 N 13-47.0 E142-30.3 N 14-01.9 E142-31.3 N 14-16.4 E142-31.3 N 14-16.4 E142-31.6 N 13-43.8 E142-15.1 N 13-43.8 E142-15.1 N 13-53.2 N 13-53.2 E142-46.6 N 13-52.3 N 13-52.3 E142-46.5 N 13-52.2 N 13-52.2 N 14-06.2 E142-16.9 N 14-24.0 E142-17.1 N 14-24.0 E142-16.9 N 14-24.0 E142-16.9 N 14-24.0 E142-16.9 N 14-24.0 E142-16.9 N 14-24.0 E142-16.9 N 14-24.0 E142-16.9 N 14-24.0 E142-16.9 N 13-53.2 N 13-53.2 N 13-53.2 N 13-53.3 N 13-53.3 N 13-53.3 N 13-53.3 N 13-53.3 N 13-53.3 N 13-53.3 N 13-53.3	N 13-46.5 050701 02:36 E142-46.1 N 13-47.0 050701 05:08 E142-30.3 N 14-01.9 050701 07:24 E142-31.3 N 14-16.4 050701 07:24 E142-31.6 N 14-0.8 050701 12:05 E142-17.0 N 13-37.3 050701 18:47 E142-46.3 N 13-37.3 050701 20:59 E142-46.3 N 13-52.3 050702 03:45 E142-46.3 N 13-52.3 050702 08:45 E142-46.3 N 13-52.3 050702 08:45 E142-46.3 N 13-52.3 050702 08:45 E142-46.3 N 13-52.3 050702 13:36 E142-46.6 N 14-06.1 050702 13:36 E142-17.1 N 14-06.2 050702 18:14 E142-47.6 N 14-24.0 050702 20:35 E142-47.6 N 14-24.0 050702 23:00 E142-46.6 N 14-06.6 050702 23:00 E142-46.6 N 13-53.8 050703 03:49 E142-46.6 N 13-53.8 050703 03:49	N 13-46.5 050701 02:36 E142-46.1 N 13-47.0 050701 05:08 E142-30.3 N 14-01.9 050701 07:24 E142-31.3 N 14-16.4 050701 07:24 E142-31.6 N 14-16.4 050701 12:05 E142-16.8 N 14-00.8 050701 12:05 E142-16.9 N 13-37.3 050701 18:47 E142-46.3 N 13-37.9 050701 20:59 E142-46.3 N 13-52.3 050702 03:45 E142-46.3 N 13-52.3 050702 03:45 E142-46.3 N 13-52.3 050702 08:45 E142-46.3 N 13-52.3 050702 13:36 E142-47.3 N 14-06.2 050702 13:36 E142-17.1 N 14-06.2 050702 13:36 E142-16.9 N 14-24.0 050702 18:14 E142-16.9 N 14-24.0 050702 18:14 E142-46.6 N 14-24.0 050702 20:35 E142-47.6 N 14-24.0 050702 23:00 E142-46.6 N 13-53.8 050703 01:18 E142-46.6 N 13-53.8 050703 03:49	N 13-46.5 050701 02:36 03:38 E 142-46.1 N 13-47.0 050701 05:08 06:09 E 142-30.3 N 14-01.9 050701 07:24 08:27 E 142-31.3 N 14-16.4 050701 07:24 08:27 E 142-31.6 N 14-16.4 050701 12:05 13:09 E 142-16.8 N 14-08.8 050701 17:06 17:58 E 142-16.9 N 13-33.0 050701 18:47 19:47 E 142-46.3 N 13-33.0 050701 18:47 19:47 E 142-46.3 N 13-53.7 050702 01:27 02:25 E 142-46.3 N 13-53.7 050702 01:27 02:25 E 142-46.3 N 13-53.7 050702 03:45 04:52 E 142-46.3 N 13-53.7 050702 03:45 04:56 E 142-17.1 N 14-06.2 050702 13:36 14:36 E 142-16.9 N 14-24.0 050702 13:36 14:36 E 142-16.9 N 14-24.0 050702 18:14 19:26 E 142-16.9 N 14-24.0 050702 18:14 19:26 E 142-32.2 N 14-24.0 050702 23:00 23:55 E 142-46.6 N 14-24.0 050703 01:18 02:19 E 142-46.6 N 13-53.8 050703 03:49 04:49	N 13-46.5 050701 02:36 03:38 ORIBF E142-46.1 N 13-47.0 050701 05:08 06:09 ORIBF E142-30.3 N 14-01.9 050701 07:24 08:27 ORIBF E142-31.3 N 14-16.4 050701 07:24 08:27 ORIBF E142-16.8 N 14-16.4 050701 12:05 13:09 ORIBF E142-16.8 N 13-43.8 050701 17:06 17:58 ORIBF E142-16.9 N 13-37.3 050701 17:06 17:58 ORIBF E142-16.9 N 13-38.0 050701 18:47 19:47 ORIBF E142-16.9 N 13-38.0 050701 20:59 21:52 ORIBF E142-47.3 N 14-08.4 050702 01:27 02:25 ORIBF E142-47.3 N 14-08.1 050702 01:27 02:25 ORIBF E142-30.9 N 13-53.1 050702 03:45 09:45 ORIBF E142-30.9 N 13-53.2 050702 11:14 12:16 ORIBF E142-16.9 N 14-24.0 050702 13:36 14:36 ORIBF E142-16.9 N 14-24.0 050702 20:35 21:42 ORIBF E142-46.6 N 13-53.8 050703 01:18 02:19 ORIBF E142-46.6 N 13-53.8 050703 03:49 04:49 ORIBF E142-46.6 N 13-53.3 050703 03:49 04:49 ORIBF	N 13-46.5 O50701 O2:36 O3:38 ORIBF O.5 N 13-46.1 O50701 O5:08 O6:09 ORIBF O.5 N 14-0.1 O50701 O5:08 O6:09 ORIBF O.5 N 14-0.1 O50701 O7:24 O8:27 ORIBF O.5 N 14-16.4 O50701 O7:24 O8:27 ORIBF O.5 N 14-16.4 O50701 O5:38 ORIBF O.5 N 14-16.4 O50701 O5:38 ORIBF O.5 N 14-16.8 O50701 O5:38 ORIBF O.5 N 14-16.9 O50701 O5:39 ORIBF O.5 N 13-37.3 O50701 O5:59 ORIBF O.5 N 13-37.3 O50701 O5:59 ORIBF O.5 N 13-38.0 O50701 O5:59 ORIBF O.5 N 13-37.3 O50701 O5:59 O7:29 ORIBF O.5 N 13-37.3 O50702 O5:25 ORIBF O.5 N 14-0.6 O50702 O6:22 O7:29 ORIBF O.5 N 14-0.6 O50702 O6:22 O7:29 ORIBF O.5 N 14-24.0 O50702 O6:24 O5:26 ORIBF O.5 N 14-24.0 O50702 O6:24 O5:26 ORIBF O.5 N 14-24.0 O50702 O6:24 O7:29 ORIBF O.5 N 14-24.0 O50702 O6:24 O7:29 ORIBF O.5 N 14-24.0 O50702 O6:24 O7:26 ORIBF O.5 N 14-24.0 O50702 O6:24 O7:26 ORIBF O.5 N 14-24.0 O50702 O6:24 ORIBF O.5 N 14-24.0 O50702 O6:25 ORIBF O.5 N 14-24.0 O50702 O6:24 ORIBF O.5 O7.24 ORIBF O.5 O7.25 ORIBF O.5 O7.26 ORIBF O.5 O7.27 ORIBF O.5 O7.28 ORIBF O.5 O7.29 ORIBF O.5 O7.29 ORIBF O.5 O7.20 ORIBF O.5	N 13-46.5 050701 02:36 03:38 ORIBF 0.5 Obl. E142-30.3 N 14-01.9 050701 05:08 06:09 ORIBF 0.5 Obl. E142-30.3 N 14-01.9 050701 07:24 08:27 ORIBF 0.5 Obl. E142-31.6 N 13-43.0 O50701 07:24 08:27 ORIBF 0.5 Obl. E142-31.6 N 14-16.4 050701 09:38 10:38 ORIBF 0.5 Obl. E142-16.9 N 14-16.4 050701 12:05 13:09 ORIBF 0.5 Obl. E142-16.9 N 13-38.0 050701 12:05 13:09 ORIBF 0.5 Obl. E142-16.9 N 13-38.0 050701 13:09 07:25 ORIBF 0.5 Obl. E142-31.3 N 13-38.0 050701 20:59 21:52 ORIBF 0.5 Obl. E142-31.3 N 13-33.7 050702 01:27 02:25 ORIBF 0.5 Obl. E142-30.9 N 13-53.7 050702 01:27 02:25 ORIBF 0.5 Obl. E142-30.9 N 14-24.0 050702 01:27 02:25 ORIBF 0.5 Obl. E142-10.9 N 14-24.0 050702 11:14 12:16 ORIBF 0.5 Obl. E142-10.9 N 14-24.0 050702 16:04 17:06 ORIBF 0.5 Obl. E142-10.9 N 14-24.0 050702 16:04 17:06 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 21:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 21:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 21:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 21:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 21:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 01:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 01:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 01:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 01:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 01:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 01:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 20:35 01:42 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 01:18 02:19 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 01:18 02:19 ORIBF 0.5 Obl. E142-40.6 N 14-24.0 050702 01:18 02:19 ORIBF 0.5 Obl. E142-40.6 N 13-53.3 050703 03:49 04:49 ORIBF 0.5 Obl. E142-40.6	(mm) (m) (m) (m) (m) (m) (m) (m) (m) (m)	Chambook Chambook	N 13-46. S S S S S S S S S	Harden	N 3-46.5 050701 02:36 03:38 0888 0.5 06.1 0.04 0.521 1.0-0.5 0.5-1.5 0.5245 1.0-0.5 0.5-1.5 0.5245 1.0-0.5 0.5-1.5 0.5	Hander H

	- 1	Location	Date .	Ë	Time	Net	Mesh	Towing	Wire	Sampl.	Reel.	Ship	Filt.	Flow-	Flow-	Sea
	Net in	Net out		Net in	Net out	Type	size	Method	out	layer	peeds	speed	volume	meter	meter	Depth
-	N 13-52.7	N 13-54.6	050703	06:16	07.21	ORIBE	(mm) 0.5	Ohl	(m) 1074	(m) 0-500	(m/s)	(kt) 2 5~2 0	(m) 37625	Kevol. 57604	No.	(m) 3524-3640
	E142.15.0	E142-16.6) - - - - -			5		-		2		2		2	7705 1706
	N 14-07.6 F142-15.0	N 14-08.3 F142-17.1	050703	08:33	09:32	ORIBF	0.5	Opl.	971	0-499	1.0~0.5	2.5~2.0	26949	41258	2719	3893-3949
	N 14-07.5	N 14-07.7	050703	10:40	11:38	ORIBF	0.5	Obl.	362	0-501	1.0~0.5	2.5~2.0	26714	40899	2719	3023-3279
	E142-30.0	E142-32.1														
	N 14-15.1	N 14-14.7	050703	12:56	13:53	ORIBF	0.5	Obl.	981	905-0	1.0~0.5	2.5~2.0	24913	38142	2719	2039-2162
	E142-45.0	E142-46.8		1	9	1	1	;	9							
	N 14-00.0	N 13-59.0	050703	15:16	16:19	ORIBF	0.5	Obl.	1078	0-501	1.0~0.5	2.5~2.0	27862	42657	2719	1561-1986
	N 13-45.0	N 13-43.4	050703	17:36	18:35	ORIBE	0.5	Obl	984	0-492	1.0~0.5	25~20	25864	39597	2719	3273-3951
	E142.45.0	E142-45.1) ;			1)		- 0 0 0		2	
	N 13-45.0	N 13-46.4	050703	19:59	21:00	ORIBF	0.5	Obl.	1030	0-496	1.0~0.5	2.5~2.0	27235	41696	2719	2272-2442
	E142-29.9	E142-31.5														
	N 14-00.0	N 14-01.3	050703	22:13	23:12	ORIBF	0.5	Obl.	926	0-502	1.0~0.5	2.5~2.0	30070	46037	2719	2713-2824
	E142-30.1	E142-31.1														
	N 14-15.1	N 14-16.3	050704	00:22	01:24	ORIBF	0.5	Obl.	1081	0-498	1.0~0.5	2.5~2.0	28534	43685	2724	3420-3488
	E142-30.1	E142-31.7														
	N 14-15.1	N 14-16.5	050704	02:56	03:58	ORIBF	0.5	Obl.	1070	0-498	1.0~0.5	2.5~2.0	27953	42795	2719	4012-4092
	E142-14.9	E142-16.4														
	N 14-00.0	N 14-00.2	050704	05:26	06:25	ORIBF	0.5	Obl.	994	0-205	1.0~0.5	2.5~2.0	23348	35745	2719	3341-3529
	E142-15.0	E142-16.7														
	N 13-45.0	N 13-45.4	050704	07:47	08:47	ORIBF	0.5	Obl.	1019	0-508	1.0~0.5	2.5~2.0	24170	37004	2719	3067-3151
	E142-15.1	E142-17.0														
	N 13-37.5	N 13-37.7	050704	09:41	10:41	ORIBF	0.5	Obl.	1009	0-209	1.0~0.5	2.5~2.0	24992	38263	2719	3166-3197
	E142-15.1	E142-17.1														
	N 13-37.6	N 13-38.6	050704	11:50	12:48	ORIBF	0.5	Obl.	918	0-498	1.0~0.5	2.5~2.0	23293	35662	2719	2618-2748
	E142-29.9	E142-31.6														
	N 13-37.6	N 13-38.5	050704	14:05	15:02	ORIBF	0.5	Obl.	937	0-510	1.0~0.5	2.5~2.0	22781	34877	2719	3605-3938
	E142-45.1	E142-46.7														
	N 13-52.6	N 13-52.6	050704	16:17	17:10	ORIBF	0.5	Obl.	829	0-504	1.0~0.5	2.5~2.0	18796	28777	2719	2036-2110
	E142-45.1	E142-46.5														
	N 14-07.6	N 14-09.0	050704	18:27	19:29	ORIBF	0.5	Opl.	1048	0-200	1.0~0.5	2.5~2.0	22089	33818	2719	1740-1967
	E142-45.0	E142-46.7														
	N 14-07.3	N 14-06.6	050704	20:55	21:58	ORIBF	0.5	Opl.	1089	0-495	1.0~0.5	2.5~2.0	28853	44173	2719	3186-3249
	E142-30.1	E142-32.3														
	N 13-52.5 F142-30.0	N 13-52.1 F142-31 7	050704	23:15	24:14	ORIBF	0.5	Obl.	931	0-506	1.0~0.5	2.5~2.0	23086	35345	2719	2532-2602
	N 13-52 5	N 13-53 0	050705	01.43	02.45	OPIRE	2	40	1112	0-501	1 0~0 5	2 50.20	28585	13763	2710	2400 2521
	E142-15.0	E142-16.9	0000	? - -	25.43	OND	?	0	7		5.0	2.3~2.0	50507	43703	6177	2430-232
	N 14-07.6	N 14-08.4	050705	04:05	05:09	ORIBF	0.5	Obl.	1100	0-501	1.0~0.5	2.5~2.0	29630	45363	2719	3891-3954
	E142-15.0	E142-17.0														
	N 14-22.7	N 14-22.9	050705	06:24	07:29	ORIBF	0.5	Obl.	1082	0-504	1.0~0.5	2.5~2.0	36044	55183	2719	3971-4033
	E146-10.1	E146-11.3														

	1		1	2)				-				
	Net in	Net out		Net in	Net out	Type	size	Method	out	layer	sbeed	speed	volume	meter	meter	Depth
	1				1		(mm)		(m)	(m)	(m/s)	(kt)	(m)	Revol.	So.	(m)
113	N 14-22.6	N 14-23.5	050705	08:39	09:43	ORIBF	0.5	Obl.	1114	0-503	1.0~0.5	2.5~2.0	29650	45394	2719	3577-3637
777	N 14 22 E	N 14 22 2	050705	10.53	11.56	Jaido	0	2	1000	000	10.0	2 52.30	37905	4250	2710	7336 9636
<u>-</u>	E141-45.0	E142-47.2		2			?	5		000	2	0.35	500 77	44500	6173	7607-0707
115	N 14-07.5	N 14-08.2	050705	13:19	14:21	ORIBF	0.5	Obl.	1087	0-505	1.0~0.5	2.5~2.0	27695	42401	2719	1199-1968
	E142-45.1	E142-47.2														
116	N 13-52.5	N 13-52.7	050705	15:48	16:45	ORIBF	0.5	Obl.	938	0-494	1.0~0.5	2.5~2.0	29108	44564	2719	2035-2685
	E142-45.1	E142-46.9														
117	N 13-52.5	N 13-52.4	050705	18:09	19:15	ORIBF	0.5	Obl.	1101	0-496	1.0~0.5	2.5~2.0	28900	44245	2719	2532-2641
	E142-30.1	E142-32.6														
118	N 13-52.6	N 13-53.3	050705	20:47	21:50	ORIBF	0.5	Opl.	1060	0-497	1.0~0.5	2.5~2.0	28847	44165	2719	3468-3562
	E142-15.1	E142-17.4														
119	N 14-07.5	N 14-07.5	050705	23:07	24:05	ORIBF	0.5	Obl.	941	0-505	1.0~0.5	2.5~2.0	21227	32499	2719	3856-3914
	E142-15.0	E142-16.5														
120	N 14-07.6	N 14-08.5	050705	01:23	02:24	ORIBF	0.5	Obl.	1087	0-503	1.0~0.5	2.5~2.0	27842	42625	2719	3011-3303
	E142-30.1	E142-31.7														
121	N 14-11.3	N 14-12.9	02020	03:41	04:48	ORIBF	0.5	Obl.	1161	0-501	1.0~0.5	2.5~2.0	30169	46189	2719	1929-2122
	E142-45.0	E142-46.5														
122	N 13-56.2	N 14-00.0	02020	06:17	07:28	ORIBF	0.5	Obl.	1201	1	1.0~0.5	2.5~2.0	24922	38155	2719	1635-2126
	E142-45.0	E142-46.8														
123	N 13-41.3	N 13-42.0	02020	08:49	09:45	ORIBF	0.5	Opl.	856	0-515	1.0~0.5	2.5~2.0	20632	31588	2719	3941-4358
	E142-45.0	E142-46.5														
124	N 13-41.4	N 13-42.6	02020	11:07	12:02	ORIBF	0.5	Obl.	882	0-208	1.0~0.5	2.5~2.0	21607	33080	2719	2500-2599
	E142-29.9	E142-31.3														
125	N 13-41.3	N 13-42.2	02020	13:24	14:29	ORIBF	0.5	Opl.	1116	0-511	1.0~0.5	2.5~2.0	28505	43641	2719	3144-3229
	E142-15.0	E142-17.2											ē			
126	N 13-45.0	N 13-45.2	02020	15:57	17:08	ORIBF	0.5	Obl.	1225	0-499	1.0~0.5	2.5~2.0	31578	48346	2719	3788-3866
	E142-00.1	E142-02.9														
127	N 14-00.1	N 14-01.9	02020	18:30	19:36	ORIBF	0.5	Obl.	1115	0-494	$1.0 \sim 0.5$	2.5~2.0	27303	41800	2719	4221-4239
	E142-00.2	E142-01.8														
128	N 14-15.1	N 14-15.3	02020	20:48	21:51	ORIBF	0.5	Opl.	1043	0-498	1.0~0.5	2.5~2.0	25944	39720	2719	4316-4346
	E142-00.1	E142-02.1														
129	N 14-11.2	N 14-10.8	02020	23:03	24:06	ORIBF	0.5	Obl.	1060	0-200	1.0~0.5	2.5~2.0	27727	42450	2719	4068-4103
	E142-15.0	E142-16.9														
130	N 13-56.3	N 13-57.4	050707	01:26	02:31	ORIBF	0.5	Obl.	1106	0-542	$1.0 \sim 0.5$	2.5~2.0	28001	42869	2719	3617-3730
	E142-15.0	E142-16.7														
131	N 13-56.3	N 13-57.2	050707	03:47	04:49	ORIBF	0.5	Obl.	1032	0-512	1.0~0.5	2.5~2.0	25904	39659	2719	2731-2881
	E142-30.0	E142-31.7														
132	N 14-11.3	N 14-10.9	050707	06:05	07:02	ORIBF	0.5	Obl.	942	0-508	1.0~0.5	2.5~2.0	21529	32960	2719	2956-3377
	E142-30.0	E142-31.2														
133	N 14-03.9	N 14-04.5	050707	07:58	08:53	ORIBF	0.5	Obl.	906	0-504	1.0~0.5	2.5~2.0	21164	32402	2719	2901-2965
	E142-29.9	E142-31.3														
134	N 13-48.7	N 13-49.1	050707	10:19	11:18	ORIBF	0.5	Obl.	886	0-200	1.0~0.5	25~20	26165	40059	2719	2153-2280
								:)))		2	

St.	Loc	Location	Date	Ē	me	Net	Mesh	Towing	Wire	Sampl.	Reel.	Ship	Filt.	Flow-	Flow-	Sea	
-	Net in	Net out	•	Net in	Net in Net out Type	Type	size	Method	out	layer	speed	speed	volume	meter	meter	Depth	
							(mm)		(m)	(E)	(m/s)	(kt)	(m³)	Revol.	No.	(m)	
135	135 N 13-48.8 N 13-49.2 050707 12:27 13:25 ORIBF	N 13-49.2	050707	12:27	13:25	ORIBF	0.5	Obl.	961	0-502	1.0~0.5	2.5~2.0	23820	36468	2719	3071-3573	
	E142-45.1	E142-45.1 E142-47.0															
136	N 14-03.9	N 14-03.9 N 14-04.7 050707 14:43 15:41 ORIBF	050707	14:43	15:41	ORIBF	0.5	Obl.	959	0-200	1.0~0.5	2.5~2.0	24514	37530	2719	1737-2180	
	E142-45.0	E142-46.7															
137		N 14-06.8 N 14-07.5 050707 16:30 17:33 ORIBF	050707	16:30	17:33	ORIBF	0.5	Obl.	1072	0-527	1.0~0.5	2.5~2.0	27759	42498	2719	1658-2129	
	F142-522	F142-52 7 F142-54 2															

KH-05-	-1	St	.02	Depth	493	32 m	KH-05-	-1	St	.03	Depth	471	3 m
Date:	1	2005.5.3		Lat.	18	29.40N	Date:	- 2	2005.5.3		Lat.	18	00.04N
Time:		06:50		Long.	137	00.25E	Time:		10:01		Long.	136	59.94E
	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		2	30.124	34.685	4.19	0.01			1	29.902	34.694	4.19	0.01
		3	30.039	34.683	4.19	0.01			2	29.891	34.695	4.20	0.01
		4	29.942	34.681	4.20	0.01	G.		3	29.729	34.691	4.21	0.02
		5	29.845	34.683	4.20	0.02			4	29.535	34.693	4.22	0.02
		10	29.687	34.682	4.22	0.02			5	29.534	34.695	4.23	0.02
		20	28.750	34.701	4.34	0.01			10	28.687	34.709	4.33	0.02
		30	27.809	34.664	4.48	0.02			20	28.243	34.671	4.38	0.03
	1	40	27.354	34.704	4.52	0.02			30	27.877	34.641	4.46	0.03
		50	26.775	34.717	4.56	0.03			40	27.256	34.634	4.52	0.03
		75	25.862	34.731	4.54	0.04			50	26.849	34.660	4.54	0.04
		100	25.139	34.848	4.47	0.07			75	26.111	34.708	4.55	0.04
		125	24.127	34.880	4.38	0.10			100	25.012	34.832	4.49	0.07
		150	22.791	34.978	4.17	0.16			125	23.511	34.966	4.33	0.11
		175	21.128	34.947	4.20	0.06			150	22.043	35.042	4.12	0.13
		200	20.018	34.925	4.11	0.03			175	20.664	35.000	4.21	0.03
		250	17.819	34.794	4.23	0.01			200	19.487	34.917	4.21	0.03
		300	16.394	34.692	4.22	0.01			250	17.160	34.748	4.23	0.01
		400	12.317	34.387	3.68	0.01			300	15.942	34.656	4.21	0.01
	*	500	9.279	34.259	2.74	0.02			400	12.093	34.360	3.80	0.01
		510	9.002	34.241	2.71	0.02			500	9.031	34.250	2.59	0.02
				1					518	8.663	34.255	2.37	0.02
CTD da	ata (BTL)					CTD da	ta (BTL)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹	TLO	No.	m	db	°C	(psu)	ml·l ⁻¹	120
Sur.	0	***	30.3	***	***	***	Sur.	0	***	29.5	***	***	***
1	497	500	9.286	34.259	2.71	0.02	1	507	511	8.763	34.253	2.38	0.02
2	497	501	9.287	34.259	2.71	0.02	2	499	503	8.859	34.252	2.43	0.02
4	497	501	9.293	34.259	2.72	0.02	4	485	489	9.182	34.248	2.59	0.02
5	497	501	9.297	34.259	2.72	0.02	5	474	477	9.490	34.252	2.70	0.02
6	497	501	9.299	34.259	2.73	0.02	6	462	465	9.772	34.257	2.86	0.02
7	497	501	9.301	34.259	2.73	0.01	7	449	452	10.095	34.267	3.00	0.02
8	301	303	16.355	34.684	4.21	0.01	8	437	440	10.406	34.272	3.15	0.01
10	301	303	16.349	34.684	4.21	0.01	10	424	427	10.732	34.286	3.26	0.01
11	301	303	16.343	34.685	4.21	0.01	11	412	415	11.217	34.305	3.44	0.01
12	302	304	16.340	34.685	4.21	0.01	12	401	404	11.543	34.322	3.62	0.01
13	200	201	19.771	34.920	4.15	0.02	13	200	201	19.271	34.893	4.18	0.02
14	199	201	19.822	34.924	4.14	0.02	14	386	388	12.277	34.367	3.79	0.01
16	200	202	19.740	34.917	4.15	0.02	16	370	373	13.054	34.418	3.85	0.01
17	101	102	24.881	34.853	4.44	0.07	17	99	99	25.015	34.826	4.49	0.06
18	101	101	24.893	34.854	4.45	0.07	18	357	360	13.536	34.452	3.94	0.01
19	101	102	24.886	34.855	4.44	0.07	19	347	349	14.097	34.498	3.96	0.01
20	101	102	24.884	34.856	4.44	0.07	20	335	337	14.524	34.533	3.92	0.01
22	50	50	26.831	34.704	4.57	0.03	22	323	325	15.065	34.573	4.05	0.01
23	50	50	26.840	34.706	4.57	0.03	23	311	314	15.265	34.592	4.09	0.01

KH-05-	-1	St	.04	Depth	482	.7 m	KH-05-	-1	St	.05	Depth	500	2 m
Date:		2005.5.3		Lat.	17	29.92N	- 1-1		2005.5.3		Lat.	17	00.34N
Time:		14:14	-	Long.	136	59.74E			20:23	-	Long.	137	02.52E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹		(LA		db	°C	(psu)	ml·l ⁻¹	
		1	29.658	34.602	4.21	0.02			2	29.805	34.597	4.16	0.01
		2	29.695	34.602	4.21	0.02			3	29.806	34.596	4.17	0.02
		3	29.670	34.601	4.20	0.02			4	29.807	34.596	4.17	0.02
		4	29.649	34.601	4.21	0.02			5	29.807	34.596	4.17	0.02
		5	29.647	34.602	4.20	0.02			10	29.419	34.687	4.26	0.02
		10	29.624	34.604	4.21	0.02			20	27.833	34.629	4.50	0.02
		20	28.794	34.639	4.33	0.02			30	27.238	34.623	4.52	0.02
		30	28.379	34.709	4.36	0.02			40	26.995	34.640	4.53	0.02
		40	27.558	34.693	4.47	0.02			50	26.736	34.600	4.53	0.02
		50	26.891	34.669	4.53	0.03			75	26.513	34.656	4.48	0.04
		75	26.000	34.679	4.53	0.05			100	25.752	34.667	4.38	0.06
		100	24.857	34.861	4.46	0.07			125	24.458	34.920	4.14	0.16
		125	23.653	34.999	4.25	0.16			150	22.489	34.999	4.06	0.08
		150	22.386	35.030	3.95	0.12			175	20.671	34.994	4.11	0.03
		175	20.984	34.966	4.19	0.06			200	19.748	34.954	4.10	0.02
		200	19.834	34.912	4.22	0.03			250	17.173	34.760	4.43	0.01
		250	17.764	34.792	4.32	0.01			300	15.916	34.660	4.38	0.01
		300	15.938	34.651	4.11	0.01			400	11.019	34.292	3.76	0.01
		400	11.597	34.330	3.67	0.02			500	8.220	34.253	2.17	0.02
		500	8.480	34.237	2.46	0.02			512	7.949	34.263	2.00	0.02
		510	8.303	34.234	2.36	0.02							
OTD :	. /p.=:						OTD !	L /DT	\				
	ta (BTL		-	0.1		EL O		ta (BTL		_	0.1	D0	FI O
BTL	Depth	Pres.	Temp.	Sal	DO ml·l ⁻¹	FLC	BTL	Depth	Pres.	Temp.	Sal	DO ml·l ⁻¹	FLC
No.	m	db		(psu)			No.	m	db		(psu)		
Sur.	0	***	29.8	***	***	***	Sur.	0 199	***	29.9	***	***	***
							13 17		200	19.808	34.952	4.08	0.02
							24	100 50	101	25.819	34.661	4.40 4.53	0.06
							24	30	50	26.730	34.088	4.03	0.02
										1			

KH-05-	-1	St	.06	Depth	551	0 m	KH-05-	-1	St	.07	Depth	519	06 m
Date:		2005.5.3		Lat.	16	30.01N		r i	2005.6.1		Lat.	15	30.34N
Time:		23:28		Long.	136	59.76E			07:00		Long.	136	59.83E
CTD	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹			AY)	db	°C	(psu)	ml·l ⁻¹	
		1	29.664	34.628	4.18	0.01			1	30.082	34.442	4.18	0.02
		2	29.664	34.628	4.17	0.01	1		2	30.087	34.442	4.17	0.02
		3	29.663	34.628	4.17	0.01			3	30.086	34.442	4.16	0.02
		4	29.659	34.628	4.17	0.01			4	30.084	34.442	4.17	0.02
		5	29.660	34.628	4.18	0.01			5	30.089	34.442	4.17	0.02
		10	29.662	34.628	4.19	0.01			10	30.013	34.448	4.18	0.02
		20	29.078	34.636	4.32	0.02			20	28.771	34.579	4.40	0.02
		30	27.792	34.621	4.52	0.02			30	27.748	34.634	4.51	0.02
		40	27.333	34.643	4.55	0.02			40	27.397	34.670	4.53	0.03
		50	26.758	34.600	4.54	0.03			50	27.038	34.704	4.52	0.04
		75	26.255	34.604	4.49	0.04			75	25.795	34.655	4.45	0.06
		100	25.251	34.727	4.41	0.06			100	24.864	34.897	4.31	0.13
		125	23.964	34.853	4.38	0.12			125	23.799	34.901	4.27	0.15
		150	23.288	34.900	4.28	0.11			150	22.963	34.974	4.20	0.08
		175	21.744	34.998	4.10	0.04			175	21.089	34.966	4.14	0.03
		200	20.041	34.949	4.12	0.02			200	19.382	34.899	4.14	0.02
		250	17.277	34.762	4.31	0.01			250	17.505	34.781	4.11	0.01
		300	15.987	34.656	4.30	0.01			300	16.144	34.678	4.10	0.01
		400	11.903	34.348	3.56	0.01			400	11.383	34.322	3.39	0.01
		500 515	8.832 8.539	34.252 34.250	2.46	0.02			500 507	8.153 7.938	34.243	2.17	0.02
		313	0.008	07.200	۷.٥٥	0.02			307	7.500	UT.Z40	2.00	0.02
CTD da	ıta (BTL)					CTD da	ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.8	***	***	***	Sur.	0	***	30.2	***	***	***
							3	497	501	8.089	34.245	2.13	0.02
							8	396	399	11.373	34.320	3.51	0.01
							9	198	199	19.413	34.897	3.98	0.02
							12	198	199	19.436	34.901	3.98	0.02
							13	198	199	19.423	34.899	3.98	0.02
							15	99	100	24.868	34.889	4.25	0.13
							17	100	100	24.883	34.888	4.25	0.13
							18	50	50	26.848	34.686	4.47	0.05
							21	50	50	26.839	34.689	4.47	0.05
			,				24	50	50	26.920	34.698	4.47	0.04

KH-05-	-1	St	.08	Depth	441	0 m	KH-05-	-1	St	.11	Depth	488	32 m
Date:		2005.6.1		Lat.	14	30.26N			2005.6.3	}	Lat.	13	57.53N
Time:		12:16		Long.	136	59.93E	Time:		01:17		Long.	140	02.21E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(LA	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		2	30.033	34.384	4.14	0.02			2	29.211	34.338	4.16	0.02
		3	30.035	34.385	4.14	0.02			3	29.212	34.338	4.17	0.02
		4	30.036	34.385	4.14	0.02			4	29.211	34.338	4.16	0.02
		5	30.035	34.385	4.14	0.02			5	29.209	34.337	4.16	0.02
		10	30.038	34.385	4.15	0.02			10	29.203	34.337	4.16	0.02
		20	29.903	34.510	4.15	0.03			20	29.164	34.337	4.17	0.03
9		30	29.087	34.579	4.30	0.03			30	29.160	34.337	4.17	0.03
		40	28.136	34.575	4.41	0.03			40	29.150	34.338	4.17	0.04
		50	27.563	34.602	4.46	0.04			50	29.025	34.348	4.21	0.06
		75	26.599	34.718	4.38	0.07			75	28.290	34.324	4.27	0.06
		100	25.786	34.832	4.31	0.10			100	26.945	34.533	4.18	0.11
		125	24.532	34.974	4.13	0.16			125	26.207	34.783	4.25	0.12
		150	22.748	35.080	3.98	0.07		,	150	24.820	34.936	4.03	0.08
		175	21.189	35.011	4.02	0.04			175	22.646	35.078	3.84	0.04
		200	19.899	34.939	4.14	0.02	8		200	20.107	34.955	3.68	0.02
		250	17.561	34.778	4.26	0.01			250	16.541	34.688	3.15	0.02
		300	16.022	34.658	4.16	0.01			300	13.332	34.456	3.51	0.01
		400	11.006	34.296	3.66	0.01			400	9.305	34.323	2.29	0.02
		500	7.850	34.270	1.97 0.00	0.02			500	7.328 7.236	34.359	1.63	0.02
		503	7.811	34.272	0.00	0.02			509	7.230	34.362	1.00	0.02
CTD da	ıta (BTL)					CTD da	ta (BTL)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹	. 20	No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	30.1	***	***	***	Sur.	0	***	29.4	***	***	***
1	500	504	7.812	34.271	1.90	0.02							
2	500	504	7.811	34.271	1.90	0.02							
4	500	504	7.809	34.271	1.90	0.02							
5	501	504	7.806	34.271	1.90	0.02		d					
6	501	504	7.803	34.271	1.90	0.02							
7	501	505	7.802	34.271	1.90	0.02							
8	297	299	16.017	34.650	4.12	0.01							
10	298	300	16.033	34.654	4.15	0.01							
11	298	300	16.028	34.654	4.14	0.01							
12	298	300	16.023	34.655	4.13	0.01							
13	199	200	19.861	34.926	4.14	0.02							
14	199	201	19.833	34.924	4.14	0.02							
16	200	201	19.778	34.919	4.15	0.02							
17	98	99	25.893	34.809	4.30	0.11							
18	98	99	25.900	34.808	4.33	0.09							
19	98	99	25.900	34.808	4.33	0.09							
20	98	99	25.900	34.810	4.33	0.09							
22	49	49	27.808	34.565	4.46	0.04							
23	49	49	27.811	34.564	4.45	0.04							

KH-05-	-1	St	.12	Depth	482	23 m	KH-05-	-1	St	.13	Depth	481	6 m
Date:		2005.6.3		Lat.	13	30.00N			2005.6.3		Lat.	13	00.06N
Time:		04:07		Long.	139	59.81E	Time:		08:19		Long.	139	59.84E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(L/	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		10	29.261	34.303	4.15	0.01			4	29.203	34.362	4.15	0.02
		20	29.207	34.303	4.16	∞0.02			5	29.203	34.362	4.15	0.02
		30	29.191	34.308	4.16	0.02			10	29.206	34.361	4.16	0.02
		40	29.184	34.316	4.16	0.04			20	29.126	34.359	4.17	0.03
		50	29.027	34.332	4.21	0.04			30	29.120	34.359	4.17	0.03
		75	28.379	34.299	4.26	0.06			40	29.117	34.359	4.17	0.03
		100	28.157	34.383	4.33	0.08			50	29.113	34.359	4.17	0.03
		125	26.995	34.608	4.25	0.12			75	28.535	34.312	4.28	0.05
		150	24.299	34.874	3.88	0.10			100	28.172	34.312	4.26	0.07
		175	21.330	34.902	3.50	0.04			125	27.266	34.507	4.23	0.11
		200	19.570	34.877	3.49	0.03			150	24.749	35.052	4.10	0.11
		250	15.822	34.636	3.60	0.02			175	21.994	34.987	3.70	0.06
		300	12.445	34.394	3.86	0.01			200	18.688	34.821	3.31	0.03
		400	9.215	34.365	2.11	0.02			250	15.089	34.581	4.09	0.01
		500	7.824	34.417	1.64	0.02			300	12.352	34.389	3.63	0.01
		512	7.366	34.370	1.67	0.02			400	9.079	34.414	1.84	0.02
									500	7.692	34.482	1.56	0.02
									510	7.594	34.480	1.56	0.02
_	ta (BTL		_				CTD da			-			
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO L I-1	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.5	***	***	***	Sur.	0	***	29.3	***	***	***
									-				
					,								
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KH-05-	-1	St	.14	Depth	414	15 m	KH-05-	-1	St	.15	Depth	373	13 m
Date:		2005.6.3	3	Lat.	12	30.02N	Date:		2005.6.3	}	Lat.	11	56.60N
Time:		13:00		Long.	139	59.81E	Time:		19:16		Long.	139	58.74E
	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(L/	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.105	34.324	4.16	0.02			3	29.151	34.209	4.12	0.02
		3	29.104	34.323	4.16	0.02			4	29.153	34.209	4.12	0.02
		4	29.102	34.324	4.16	0.03			5	29.155	34.209	4.12	0.02
		5	29.109	34.324	4.16	0.02			10	29.158	34.210	4.12	0.02
		10	29.100	34.324	4.15	0.03			20	29.165	34.212	4.11	0.02
1		20	29.101	34.325	4.14	0.02			30	29.148	34.217	4.11	0.02
		30	29.087	34.327	4.14	0.03			40	29.088	34.220	4.12	0.03
		40	29.067	34.330	4.15	0.03			50	29.052	34.226	4.14	0.03
		50	29.055	34.333	4.16	0.03			75	28.097	34.339	4.26	0.05
		75	28.577	34.316	4.25	0.05			100	27.704	34.422	4.25	0.07
		100	28.089	34.306	4.24	0.06			125	27.099	34.607	4.25	0.13
		125	27.805	34.383	4.25	0.10			150	23.890	34.942	4.06	0.12
		150	25.515	34.954	4.18	0.13			175	19.205	34.933	3.92	0.03
		175	22.263	35.036	3.76	0.05			200	17.795	34.814	3.86	0.02
		200	18.942	34.864	3.50	0.03			250	13.819	34.478	4.07	0.01
		250	14.724	34.557	3.44	0.02			300	10.989	34.340	3.02	0.02
		300	11.484	34.354	3.14	0.01			400	8.288	34.364	1.74	0.02
		400	9.164	34.440	1.72	0.02			500	7.093	34.436	1.56	0.02
		500	7.306	34.400	1.70	0.02			504	7.033	34.438	1.59	0.02
		507	7.261	34.402	1.70	0.02							
CTD 4	ta (BTL	\					OTD 4	ta (BTL	\				
	Depth		Т	C-I	DO	FLC				T	Sal	DO	FLC
BTL		Pres. db	Temp. ℃	Sal	ml·l ⁻¹	FLC	BTL	Depth	Pres. db	Temp.		ml·l ⁻¹	FLO
No.	m			(psu)			No.	m			(psu)		
Sur.	0	***	29.3	***	***	***	Sur.	0	***	29.2	***	***	***
								*					

KH-05	 -1	St	.16	Depth	571	0 m	KH-05-	-1	St	.17	Depth	469	11 m
Date:	Ė	2005.6.3		Lat.	12	00.05N			2005.6.4		Lat.	12	30.07N
Time:			,	Long.	138	59.99E					Long.	138	59.87E
	l dete	23:46 Pres.	Temp.	Sal	DO	FLC		data	04:04 Pres.	Temp.	Sal	DO	FLC
0.00	data AY)	db	°C	(psu)	ml·l ⁻¹	1.20		data AY)	db	°C	(psu)	ml·l ⁻¹	120
		10	29.005	34.330	4.16	0.02	· ·			29.310	34.342	4.14	0.01
		20	29.003	34.330	4.15	0.02			2	29.337	34.344	4.14	0.01
		30	29.007	34.330	4.15	0.02			3	29.334	34.344		0.01
		40	29.000	34.329	4.16	0.03		e e	4	29.344	34.344	4.15 4.14	0.01
		50	28.975	34.327	4.16	0.03			5	29.343	34.344	4.14	0.01
		75	28.594	34.303	4.21	0.04			10	29.213	34.340	4.14	0.01
		100	27.667	34.415	4.19	0.09			20	29.175	34.340	4.15	0.02
		125	26.236	34.841	4.20	0.16			30	29.163	34.340	4.14	0.02
		150	24.937	35.077	4.07	0.12			40	29.132	34.337	4.16	0.03
		175	23.022	35.129	3.90	80.0			50	29.019	34.329	4.19	0.03
		200	20.227	34.975	3.70	0.05			75	28.379	34.312	4.27	0.05
		250	14.858	34.562	3.35	0.02			100	28.185	34.312	4.24	0.07
		300	12.220	34.400	3.27	0.02			125	27.234	34.566	4.25	0.15
		400	9.045	34.371	1.87	0.02			150	24.660	35.028	4.08	0.11
		500	7.456	34.451	1.50	0.02			175	22.458	35.026	3.74	0.06
		516	7.282	34.476	1.44	0.02			200	19.360	34.875	3.55	0.03
									250	15.278	34.594	3.29	0.02
									300	12.000	34.372	3.38	0.01
									400	8.770	34.444	1.63	0.03
									500	7.342	34.466	1.65	0.02
									515	7.215	34.475	1.66	0.02
CTD da	ata (BTL	.)						ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.2	***	***	***	Sur.	0	***	29.6	***	***	***
1	193	195	20.340	34.981	3.68	0.04	1	198	200	18.819	34.847	3.58	0.02
4	194	196	20.082	34.974	3.69	0.04	3	397	400	8.824	34.446	1.62	0.03
7	194	195	20.089	34.974	3.69	0.04	4	199	200	18.783	34.848	3.59	0.02
10	100	101	27.955	34.350	4.22	0.07	7	197	198	18.838	34.849	3.59	0.02
13	100	100	27.968	34.349	4.22	0.07	9	198	199	18.824	34.850	3.59	0.02
16	100	101	27.970	34.350	4.22	0.07	10	98	99	28.170	34.308	4.25	0.06
19	50	50	28.974	34.324	4.16	0.03	13	98	98	28.167	34.308	4.25	0.06
22	50	50	28.971	34.323	4.16	0.03	15	99	99	28.160	34.313	4.24	0.06
							16	98	98	28.170	34.309	4.25	0.06
		ä.					19	50	50	28.661	34.311	4.23	0.03
							21	50	50	28.884	34.318	4.20	0.03
							22	50	50	28.896	34.318	4.20	0.03

Date: Time: CTD (LA		2005.6.4	1										
CTD				Lat.	13	00.21N	Date:		2005.6.4		Lat.	13	30.29N
		08:41		Long.	138	59.96E	Time:		13:15		Long.	138	59.99E
(LA		Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
``	Y)	db	°C	(psu)	ml·l ⁻¹		(LA	YY)	db	°C	(psu)	ml·l ⁻¹	
		4	29.344	34.274	4.14	0.02			3	29.434	34.294	4.12	0.02
		5	29.335	34.274	4.14	0.02			4	29.432	34.294	4.12	0.02
		10	29.208	34.272	4.15	0.02			5	29.435	34.294	4.12	0.02
		20	29.168	34.294	4.15	0.03			10	29.439	34.294	4.11	0.02
		30	29.100	34.305	4.17	0.03			20	29.267	34.292	4.13	0.02
		40	28.895	34.317	4.21	0.04			30	29.252	34.292	4.13	0.02
		50	28.742	34.315	4.23	0.05			40	29.229	34.301	4.14	0.03
		75	28.194	34.288	4.26	0.05	×		50	28.879	34.328	4.22	0.04
		100	27.959	34.395	4.31	0.10			75	28.238	34.362	4.29	0.06
		125	26.407	34.767	4.26	0.13			100	27.770	34.448	4.30	0.08
		150	24.643	34.993	4.04	0.09			125	26.198	34.797	4.23	0.14
		175	21.502	34.970	3.63	0.05			150	24.228	34.932	3.88	0.09
		200	18.957	34.913	3.87	0.03			175	23.063	35.061	3.81	0.06
		250	14.808	34.560	3.76	0.02			200	20.048	34.913	3.51	0.03
		300	11.517	34.389	2.80	0.02			250	16.439	34.685	3.61	0.02
		400	8.634	34.437	1.66	0.03			300	12.947	34.430	3.33	0.02
		500	7.292	34.455	1.62	0.02			400	9.452	34.454	1.80	0.02
		506	7.195	34.454	1.65	0.02			500	7.738	34.454	1.59	0.03
									503	7.726	34.455	1.60	0.02
OTD de	+- /DTI	\					OTD de	+- /DTI	\				
CTD dat	Depth		Tomp	Sal	DO	FLC	BTL	ta (BTL		Tomp	Sal	DO	FLC
No.		Pres.	Temp.	(psu)	ml·l ⁻¹	FLU	No.	Depth	Pres. db	Temp.		ml·l ⁻¹	FLC
Sur.	m 0					aladada	Sur.	m			(psu)		dalah
our.	198	***	29.4	***	***	***	our.	0 198	***	29.6 19.892	***	***	***
4	199	199	19.033	34.921 34.918	3.83	0.03	4	199	199 200	19.892	34.895 34.891	3.49	0.03
7	198	199	19.008	34.918	3.86	0.03	7	198	199	19.933	34.900	3.50	0.03
10	100	100	27.989	34.367	4.28	0.03	10	99	100	27.871	34.416	4.29	0.03
13	100	100	27.985	34.369	4.28	0.09	13	100	100	27.876	34.417	4.29	0.09
16	100	100	27.985	34.370	4.28	0.09	16	99	100	27.875	34.418	4.30	0.07
19	52	52	28.754	34.313	4.24	0.04	19	50	50	29.025	34.313	4.19	0.04
22	52	52	28.757	34.314	4.24	0.04	22	49	49	29.061	34.311	4.18	0.04
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KH-05-	-1	St	.20	Depth	504	l6 m	KH-05-	-1	St	.21	Depth	502	3 m
Date:		2005.6.4		Lat.	14	02.67N			2005.6.4		Lat.	14	30.17N
Time:		19:20		Long.	139	00.08E	Time:		22:09		Long.	139	00.02E
	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(L	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		3	29.390	34.298	4.10	0.02			2	29.279	34.369	4.13	0.02
		4	29.393	34.296	4.11	0.02			3	29.277	34.369	4.13	0.02
		5	29.395	34.291	4.10	0.02			4	29.276	34.369	4.12	0.02
		10	29.362	34.311	4.11	0.02			5	29.277	34.369	4.12	0.02
		20	29.271	34.334	4.12	0.02			10	29.273	34.369	4.12	0.02
		30	29.255	34.334	4.13	0.03			20	29.278	34.369	4.13	0.02
		40	29.217	34.332	4.13	0.03			30	29.255	34.366	4.13	0.02
		50	28.767	34.342	4.26	0.04			40	29.124	34.356	4.15	0.03
		75	27.913	34.407	4.32	0.07			50	28.671	34.316	4.24	0.03
		100	26.990	34.700	4.30	0.12			75	28.185	34.302	4.22	0.05
		125	25.887	34.927	4.18	0.11			100	27.262	34.501	4.21	0.10
		150	23.692	35.064	3.90	0.05			125	26.568	34.726	4.25	0.13
		175	21.239	35.019	3.71	0.03			150	25.546	34.878	4.14	0.09
		200	18.658	34.858	3.61	0.02			175	22.909	35.024	3.79	0.04
		250	15.976	34.662	4.28	0.01			200	19.802	34.937	3.76	0.02
		300	13.929	34.494	3.67	0.01			250	16.796	34.725	4.22	0.01
		400	9.577	34.347	2.30	0.02			300	14.276	34.524	4.11	0.01
		500	7.505	34.359	1.67	0.02			400	9.669	34.233	3.17	0.02
		505	7.444	34.362	1.66	0.02			500	7.206	34.250	1.82	0.02
									507	7.145	34.254	1.79	0.02
CTD da	ta (BTL	.)					CTD da	ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.4	***	***	***	Sur.	0	***	29.4	***	***	***
1	200	201	18.443	34.841	3.85	0.02	1	200	201	19.579	34.912	3.64	0.02
3	400	402	9.422	34.344	2.24	0.02	4	200	202	19.563	34.910	3.65	0.02
4	200	201	18.484	34.844	3.75	0.02	7	201	202	19.567	34.911	3.65	0.02
7	201	202	18.408	34.844	3.74	0.01	10	101	101	27.092	34.591	4.26	0.10
9	201	202	18.373	34.845	3.78	0.01	13	101	102	27.075	34.599	4.26	0.10
10	103	104	26.954	34.712	4.32	0.11	16	100	101	27.091	34.593	4.27	0.10
13	103	104	26.959	34.711	4.31	0.10	19	50	50	28.431	34.294	4.25	0.03
15	103	104	26.958	34.712	4.31	0.11	22	50	50	28.421	34.294	4.25	0.04
16	103	104	26.959	34.711	4.31	0.11							
19	51	51	28.644	34.343	4.29	0.04							
21	50	51	28.707	34.331	4.28	0.04							
22	51	51	28.653	34.339	4.27	0.04							
					0								
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KH-05-	-1	St	.22	Depth	475	56 m	KH-05-	-1	St	.23	Depth	473	32 m
Date:		2005.6.5	5	Lat.	15	30.54N	Date:		2005.6.5	5	Lat.	15	00.32N
Time:		09:06		Long.	140	59.68E	Time:		13:35		Long.	140	59.80E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(L/	AY)	db	°C	(psu)	ml·l ⁻¹		(L/	AY)	db	°C	(psu)	ml·l ⁻¹	
		3	29.217	34.330	4.10	0.02			2	29.216	34.315	4.09	0.02
		4	29.216	34.330	4.10	0.02			3	29.216	34.315	4.09	0.02
		5	29.216	34.331	4.10	0.02			4	29.213	34.315	4.09	0.02
		10	29.222	34.332	4.10	0.02			5	29.214	34.315	4.09	0.02
		20	29.011	34.389	4.13	0.03			10	29.214	34.315	4.09	0.02
		30	28.983	34.409	4.12	0.04			20	29.220	34.315	4.09	0.02
		40	28.978	34.409	4.12	0.03			30	29.160	34.361	4.11	0.03
		50	28.884	34.400	4.14	0.04			40	29.144	34.367	4.11	0.03
1		75	28.138	34.461	4.24	0.06			50	29.131	34.365	4.12	0.03
l		100	27.674	34.569	4.27	0.09			75	28.295	34.305	4.19	0.04
		125	26.871	34.733	4.25	0.09			100	27.708	34.413	4.24	0.10
		150	25.096	35.001	4.10	0.09			125	26.915	34.637	4.19	0.15
		175	23.383	35.114	3.89	0.06			150	25.846	34.890	4.12	0.10
		200	21.690	35.076	3.73	0.05			175	23.327	35.019	3.80	0.06
		250	17.259	34.742	3.43	0.02			200	21.111	34.977	3.59	0.04
		300	14.216	34.542	3.07	0.02			250	17.042	34.719	3.45	0.02
		400	9.831	34.300	2.58	0.02			300	13.428	34.496	3.05	0.02
		500	7.904	34.356	1.71	0.02			400	10.039	34.421	2.15	0.02
		501	7.894	34.357	1.71	0.02			500	7.733	34.357	1.72	0.02
									502	7.703	34.359	1.71	0.02
CTD da	ata (BTL	.)					CTD da	ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.2	***	***	***	Sur.	0	***	29.3	***	***	***
1	201	202	21.645	35.071	3.75	0.04	1	498	502	7.703	34.359	1.70	0.02
4	201	202	21.618	35.073	3.75	0.04	2	497	501	7.711	34.359	1.71	0.02
7	199	201	21.710	35.073	3.74	0.04	3	398	400	10.114	34.398	2.15	0.02
10	101	102	27.708	34.553	4.28	0.10	4	497	501	7.728	34.358	1.70	0.02
13	101	102	27.713	34.552	4.28	0.09	5	498	501	7.714	34.359	1.71	0.02
16	101	101	27.716	34.551	4.28	0.09	6	499	503	7.699	34.359	1.71	0.02
19	49	50	28.890	34.393	4.15	0.05	7	499	502	7.703	34.359	1.71	0.02
22	50	50	28.885	34.391	4.15	0.05	8	297	299	13.583	34.495	2.98	0.02
							9	201	202	20.155	34.933	3.56	0.03
							10	298	300	13.559	34.496	3.07	0.02
							11	298	300	13.565	34.498	3.06	0.02
							12	200	201	20.348	34.945	3.54	0.03
							13	200	201	20.324	34.944	3.54	0.03
							14	200	202	20.254	34.937	3.56	0.03
							15	99	99	27.830	34.392	4.25	0.10
							16	200	202	20.278	34.940	3.55	0.03
21	51	52	29.125	34.358	4.12	0.04	17	100	100	27.806	34.397	4.25	0.10
22	50	50	29.125	34.359	4.13	0.05	18	100	100	27.820	34.396	4.25	0.10
23	50	50	29.125	34.359	4.13	0.04	19	100	100	27.789	34.401	4.26	0.10
	51	51	29.126	34.359	4.13	0.04	20	100	100	27.838	34.394	4.25	0.10

KH-05-	-1	St	.24	Depth	486	33 m	KH-05-	-1	St	25	Depth	479	9 m
Date:	1	2005.6.5		Lat.	14	29.08N			2005.6.5		Lat.	14	00.04N
Time:		20:16		Long.	140	58.36E			23:16		Long.	141	00.00E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
2000 300 0000	AY)	db	°C	(psu)	ml·l ⁻¹		200 3000000	AY)	db	°C	(psu)	ml·l ⁻¹	
		3	29.230	34.339	4.11	0.02			1	29.156	34.334	4.09	0.02
		4	29.230	34.339	4.12	0.02			2	29.155	34.334	4.09	0.02
		5	29.229	34.339	4.12	0.02			3	29.156	34.335	4.10	0.01
		10	29.228	34.338	4.09	0.02			4	29.156	34.335	4.09	0.02
		20	29.227	34.337	4.09	0.02			5	29.158	34.335	4.09	0.02
		30	29.231	34.339	4.10	0.02			10	29.159	34.335	4.09	0.02
		40	29.232	34.338	4.10	0.02			20	29.160	34.335	4.09	0.02
		50	29.152	34.321	4.12	0.03			30	29.157	34.334	4.10	0.02
		75	28.368	34.348	4.27	0.05			40	29.155	34.334	4.10	0.02
		100	27.831	34.457	4.27	0.07			50	29.114	34.324	4.11	0.02
		125	26.618	34.740	4.24	0.12			75	28.587	34.302	4.23	0.04
		150	25.531	34.892	4.13	0.10			100	28.260	34.299	4.18	0.04
		175	23.747	35.033	3.87	0.05			125	27.918	34.377	4.21	0.08
		200	21.567	35.015	3.64	0.04			150	26.495	34.763	4.22	0.12
		250	17.773	34.777	3.31	0.03			175	24.734	34.979	3.97	0.08
		300	14.429	34.531	3.64	0.01			200	21.624	34.998	3.62	0.04
		400	10.238	34.368	2.55	0.02			250	16.637	34.694	3.50	0.02
		500	8.143	34.365	1.77	0.02			300	13.678	34.491	3.18	0.02
		504	8.139	34.369		0.02			400	9.993	34.388	2.22	0.02
									500	8.159	34.399	1.70	0.02
									511	8.147	34.414	1.67	0.02
CTD da	ata (BTL	.)					CTD da	ıta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.4	***	***	***	Sur.	0	***	29.3	***	***	***
1	501	504	8.155	34.371	1.75	0.02	8	195	197	21.883	34.995	3.65	0.04
2	502	505	8.151	34.373	1.76	0.02	12	101	102	28.210	34.300	4.19	0.04
4	501	505	8.155	34.372	1.76	0.02	13	196	197	21.981	34.996	3.64	0.04
5	501	505	8.155	34.371	1.75	0.02	17	100	101	28.212	34.300	4.19	0.05
6	502	505	8.145 _.	34.373	1.75	0.02	18	51	51	29.087	34.318	4.12	0.03
7	502	505	8.142	34.373	1.75	0.02	24	51	51	29.086	34.317	4.11	0.03
8	286	287	14.773	34.552	3.56	0.01							
10	286	288	14.769	34.553	3.56	0.01							
11	286	288	14.775	34.553	3.56	0.01							
12	286	288	14.764	34.553	3.55	0.02							
13	199	201	21.418	35.006	3.61	0.04							
14	200	201	21.481	35.010	3.63	0.04							
16	199	201	21.555	35.014	3.62	0.03							
17	100	100	27.789	34.467	4.26	0.08							
18	101	101	27.774	34.476	4.27	0.07							
19	101	101	27.782	34.473	4.27	0.08							
20	101	101	27.788	34.471	4.27	0.07							
20										1	ı	ı	1
22	51	51	28.769	34.343	4.24	0.04							
	51 51 51	51 51 51	28.769 28.970 29.036	34.343 34.333 34.331	4.24 4.18 4.17	0.04 0.04 0.04							

KH-05-	-1	St	.26	Depth	468	81 m	KH-05-	-1	St	27	Depth	383	35 m
Date:	1	2005.6.6		Lat.	13	30.17N		T	2005.6.6		Lat.	13	00.17N
Time:		03:25		Long.	141	00.00E	Time:		07:58		Long.	141	00.14E
CTD	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(L/	AY)	db	°C	(psu)	ml·l ⁻¹		(L/	AY)	db	°C	(psu)	ml·l ⁻¹	
		1	29.220	34.251	4.09	0.02			2	29.155	34.210	4.09	0.02
		2	29.222	34.251	4.09	0.01			3	29.158	34.210	4.09	0.02
		3	29.225	34.251	4.09	0.01			4	29.157	34.211	4.10	0.02
		4	29.221	34.251	4.09	0.01			5	29.166	34.211	4.10	0.03
		5	29.238	34.251	4.09	0.01			10	29.077	34.208	4.10	0.02
		10	29.172	34.255	4.09	0.01			20	29.037	34.219	4.10	0.02
		20	29.153	34.263	4.09	0.01			30	29.017	34.219	4.10	0.02
		30	29.111	34.316	4.11	0.02			40	29.006	34.227	4.11	0.02
		40	28.923	34.322	4.13	0.02			50	28.963	34.233	4.12	0.03
		50	28.705	34.306	4.17	0.03			75	28.290	34.324	4.22	0.04
		75	28.172	34.345	4.26	0.06			100	27.875	34.348	4.21	0.08
		100	27.654	34.447	4.26	0.10			125	25.884	34.825	4.15	0.18
		125	26.405	34.771	4.16	0.12			150	24.397	35.061	4.00	0.11
		150	24.529	35.019	3.97	0.08			175	21.866	35.110	3.83	0.06
		175	21.933	34.995	3.66	0.04			200	19.982	35.006	3.86	0.03
		200	20.073	34.937	3.55	0.03			250	16.455	34.700	4.14	0.01
		250	15.253	34.592	3.37	0.02			300	13.648	34.470	3.79	0.01
		300	13.106	34.460	3.13	0.02			400	9.662	34.346	2.27	0.02
		400	9.630	34.362	2.11	0.02			500	7.636	34.437	1.61	0.02
		500	7.807	34.436	1.64	0.02			500	7.636	34.437	1.61	0.02
		518	7.497	34.417	1.67	0.03							
CTD da	ıta (BTL)					CTD da	ta (BTL)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹	120	No.	m	db	°C	(psu)	ml·l ⁻¹	120
Sur.	0	***	29.4	***	***	***	Sur.	0	***	29.3	***	***	***
8	199	200	20.011	34.937	3.56	0.03	1	500	503	7.592	34.437	1.61	0.02
12	99	100	27.732	34.417	4.27	0.08	2	500	503	7.585	34.437	1.61	0.02
13	198	200	20.012	34.938	3.56	0.03	4	500	504	7.570	34.437	1.61	0.02
17	100	101	27.731	34.421	4.27	0.08	5	501	504	7.566	34.437	1.61	0.02
18	50	50	28.689	34.302	4.18	0.03	6	501	505	7.561	34.437	1.61	0.02
24	50	50	28.705	34.303	4.17	0.03	7	501	505	7.569	34.436	1.61	0.02
					9		8	298	300	13.543	34.457	3.73	0.01
							10	299	301	13.547	34.459	3.74	0.01
							11	300	302	13.542	34.460	3.74	0.01
							12	300	302	13.548	34.461	3.74	0.01
							13	199	200	20.003	35.001	3.88	0.03
							14	199	200	20.008	35.002	3.88	0.03
				e e			16	199	201	20.010	35.003	3.88	0.03
							17	100	100	27.857	34.347	4.22	0.07
							18	100	101	27.855	34.348	4.22	0.07
							19	101	102	27.842	34.351	4.22	0.07
							20	101	102	27.835	34.353	4.22	0.07
							22	50	50	28.872	34.247	4.16	0.04
							23	50	51	28.862	34.250	4.15	0.05
							24	50	51	28.860	34.250	4.16	0.04

KH-05-	-1	St	.28	Depth	295	54 m	KH-05-	-1	St	.29	Depth	268	84 m
Date:	Τ	2005.6.6		Lat.	12	59.94N			2005.6.6		Lat.	13	31.82N
Time:	· ·	14:30		Long.	141	59.96E			20:36		Long.	141	58.82E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹			AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.123	34.222	4.07	0.02			2	28.939	34.341	4.10	0.02
		3	29.124	34.223	4.07	0.02			3	28.940	34.341	4.09	0.03
		4	29.124	34.222	4.07	0.02			4	28.941	34.341	4.09	0.02
		5	29.125	34.222	4.07	0.02			5	28.941	34.341	4.09	0.02
		10	29.121	34.223	4.07	0.02			10	28.942	34.341	4.08	0.02
		20	29.124	34.222	4.07	0.02			20	28.938	34.348	4.09	0.03
		30	29.102	34.242	4.08	0.02			30	28.913	34.375	4.11	0.03
		40	28.947	34.309	4.13	0.03			40	28.905	34.386	4.12	0.03
		50	28.664	34.337	4.20	0.04			50	28.368	34.394	4.18	0.03
		75	27.778	34.432	4.23	0.06			75	27.793	34.433	4.20	0.04
		100	27.335	34.618	4.25	0.08			100	27.022	34.616	4.20	0.10
		125	26.699	34.789	4.23	0.11			125	25.845	34.867	4.16	0.15
		150	25.789	34.961	4.13	0.15			150	23.938	35.124	3.92	0.07
		175	24.381	35.100	3.99	0.09			175	21.265	35.079	3.85	0.03
		200	21.648	35.098	3.83	0.04			200	19.726	34.980	3.95	0.02
		250	17.791	34.822	3.96	0.01			250	16.277	34.680	4.11	0.01
		300	14.577	34.540	3.76	0.01			300	13.496	34.459	3.84	0.01
		400	9.447	34.267	2.64	0.02			400	9.136	34.272	2.43	0.02
		500	7.853	34.390	1.58	0.02			500	7.479	34.371	1.61	0.02
		501	7.826	34.390	1.58	0.02			510	7.355	34.379	1.65	0.03
	. /						077	. /					
	ata (BTL		_					ta (BTL					
BTL	Depth	Pres.	Temp.	Sal	DO L I-1	FLC	BTL	Depth	Pres.	Temp.	Sal	DO1	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.3	***	***	***	Sur.	0	***	29.1	***	***	***
1	198	199	21.755	35.094	3.83	0.04	1	200	201	19.485	34.956	3.95	0.02
4	198	200	21.739	35.097	3.83	0.04	4	200	201	19.526	34.961	3.95	0.02
7	198	200	21.752	35.100	3.83	0.04	7	200	202	19.517	34.962	3.95	0.02
10	99	100	27.315	34.619	4.26	0.07	10	100	100	27.006	34.615	4.21	0.10
13	99	100	27.313	34.620	4.27	0.07	13	100	101	27.008	34.616	4.21	0.10
16	99 50	100	27.311	34.621	4.26	0.07	16	99 50	100	27.030	34.610	4.21	0.09
19 22	50	51	28.703	34.324	4.19	0.04	19 22	50	50	28.649	34.381	4.16	0.04
	30	50	28.708	34.324	4.20	0.04	22	30	50	28.669	34.381	4.14	0.04
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KH-05-	-1	St	.30	Depth	422	24 m	KH-05-	-1	St	.31	Depth	424	7 m
Date:		2005.6.6		Lat.	13	59.97N	1		2005.6.7		Lat.	14	30.11N
Time:		23:25		Long.	141	59.71E	Time:		03:37		Long.	142	00.03E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(LA	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	YY)	db	°C	(psu)	ml·l ⁻¹	
		2	28.932	34.436	4.10	0.04			3	29.223	34.244	4.07	0.01
		3	28.930	34.436	4.10	0.02			4	29.231	34.245	4.07	0.01
		4	28.931	34.436	4.10	0.02			5	29.226	34.244	4.07	0.01
		5	28.933	34.436	4.10	0.02			10	29.206	34.244	4.07	0.01
		10	28.928	34.436	4.11	0.03			20	29.087	34.254	4.07	0.01
		20	28.922	34.436	4.11	0.02			30	29.044	34.278	4.08	0.02
		30	28.915	34.438	4.11	0.04			40	28.979	34.281	4.09	0.02
		40	28.661	34.492	4.17	0.05			50	28.887	34.315	4.13	0.03
		50	28.491	34.526	4.19	0.06			75	28.162	34.379	4.20	0.04
		75	27.512	34.625	4.26	0.05			100	27.813	34.454	4.19	0.05
		100	26.391	34.855	4.25	0.09			125	27.437	34.526	4.21	0.08
		125	25.706	34.964	4.19	0.12			150	25.747	34.865	4.15	0.17
		150	24.035	35.032	4.00	0.10			175	23.749	35.020	3.94	0.07
		175	21.507	35.092	3.83	0.04			200	21.962	35.046	3.75	0.05
		200	19.863	34.997	3.90	0.02			250	18.033	34.835	4.02	0.02
		250	16.634	34.713	4.09	0.01			300	15.696	34.630	4.05	0.01
		300	13.509	34.460	3.73	0.01			400	10.709	34.298	3.09	0.02
		400	9.359	34.250	2.67	0.02			500	8.658	34.336	1.98	0.02
		500	7.803	34.369	1.61	0.02			511	8.396	34.347	1.84	0.02
		514	7.756	34.392		0.03							
OTD 1	+ /DTI	\					OTD 4-	+- /DTI	`				
	ta (BTL		-		DO	FI O		ta (BTL		т	C-I	DO	FI O
BTL	Depth	Pres.	Temp.	Sal	DO ml·l ⁻¹	FLC	BTL	Depth	Pres.	Temp.	Sal	ml·l ⁻¹	FLC
No.	m	db		(psu)			No.	m	db		(psu)		statute
Sur.	100	***	29.1	***	***	***	Sur.	0 199	***	29.5	***	***	***
3	199 397	200	19.615	34.966	3.93	0.02	4	199	201	21.654 21.659	35.031 35.034	3.72 3.72	0.04
4	198	400	9.399	34.247	2.65	0.02	7	199					0.04
7	198	200 199	19.803	34.986 34.990	3.91	0.02	10	100	201 101	21.666	35.035 34.451	3.73 4.21	0.04
9	198	200	19.809		3.92	0.02	13	100	101	27.763	34.452	4.21	0.05
10	100	100	26.501	34.990 34.805	4.24	0.02	16	101	101	27.764	34.453	4.21	0.05
13	99	100	26.511	34.808	4.25	0.09	19	50	51	28.846	34.327	4.14	0.03
15	99	100	26.504	34.808	4.25	0.08	22	50	51	28.846	34.328	4.14	0.03
16	99	100	26.503	34.813	4.25	0.08							
19	50	50	28.361	34.530	4.21	0.05							
21	50	51	28.345	34.533	4.20	0.04							
22	50	51	28.328	34.533	4.21	0.06							

KH-05-	-1	St	.32	Depth	451	3 m	KH-05-	-1	St	.33	Depth	404	12 m
Date:		2005.6.7	7	Lat.	15	00.10N	Date:		2005.6.7	1	Lat.	15	30.18N
Time:		08:03		Long.	141	59.88E	Time:		12:27		Long.	141	59.87E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(L	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.075	34.372	4.09	0.02			2	29.240	34.419	4.07	0.02
		3	29.074	34.372	4.09	0.02			3	29.240	34.419	4.07	0.02
		4	29.075	34.372	4.09	0.02			4	29.241	34.419	4.07	0.02
		5	29.077	34.372	4.09	0.01			5	29.241	34.419	4.07	0.02
		10	29.019	34.370	4.07	0.02			10	29.240	34.419	4.08	0.02
		20	28.850	34.373	4.08	0.02			20	29.187	34.416	4.09	0.02
		30	28.837	34.374	4.08	0.02			30	29.125	34.415	4.10	0.02
		40	28.824	34.375	4.09	0.02			40	29.080	34.411	4.12	0.03
		50	28.762	34.369	4.09	0.02			50	28.899	34.389	4.17	0.04
		75	28.616	34.372	4.12	0.02			75	27.995	34.421	4.27	0.05
		100	27.831	34.421	4.21	0.04			100	27.128	34.552	4.24	0.09
		125	26.895	34.726	4.23	0.10			125	26.501	34.719	4.24	0.14
		150	25.817	34.908	4.14	0.13			150	25.079	34.979	4.06	0.08
		175	23.646	35.139	3.89	0.07			175	23.700	35.131	3.94	0.05
		200	21.196	35.073	3.83	0.04			200	21.568	35.085	3.86	0.04
		250	17.606	34.799	4.24	0.01			250	17.982	34.832	4.17	0.02
		300	15.848	34.645	4.08	0.01			300	15.677	34.635	4.19	0.01
		400	10.751	34.316	2.94	0.01			400	11.424	34.368	3.08	0.01
		500	8.511	34.341	1.87	0.02			500	8.802	34.344	2.00	0.02
		502	8.504	34.343		0.02			504	8.708	34.342	0.00	0.02
	ata (BTL			,			CTD da						
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO1	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.2	***	***	***	Sur.	0	***	29.3	***	***	***
1	199	201	21.015	35.061	3.85	0.03	1	196	198	21.608	35.084	3.86	0.03
4	199	200	21.017	35.062	3.85	0.03	4	196	197	21.729	35.088	3.85	0.03
7	199	200	21.019	35.064	3.85	0.03	7	197	198	21.496	35.084	3.86	0.03
10	100	100	27.818	34.417	4.21	0.04	10	97	98	27.191	34.531	4.26	0.08
13 16	100	100	27.818	34.418	4.22	0.04	13 16	98 97	98	27.185	34.533	4.26	0.08
19	49	100	27.819	34.418	4.21	0.03	19	49	98	27.205	34.531 34.384	4.26	0.08
22	50	49 50	28.732 28.734	34.366 34.366	4.10 4.09	0.02	22	49	49 49	28.893	34.384	4.18 4.17	0.04
	- 55	30	20.734	J7.J00	T.UJ	0.02		75	40	20.311	U7.U0/	7.17	0.00

KH-05-	-1	St	.34	Depth	395	2 m	KH-05-	-1	St	.35	Depth	415	9 m
Date:		2005.6.7	7	Lat.	15	28.50N	Date:		2005.6.7	,	Lat.	15	00.04N
Time:		18:45		Long.	142	32.64E	Time:		21:39		Long.	142	29.97E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(L/	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	YY)	db	°C	(psu)	ml·l ⁻¹	
		4	29.176	34.390	4.08	0.02			2	28.975	34.393	4.07	0.02
		5	29.176	34.390	4.08	0.02			3	28.975	34.393	4.08	0.02
		10	29.175	34.390	4.08	0.02			4	28.975	34.393	4.08	0.02
		20	29.177	34.390	4.08	0.03			5	28.976	34.393	4.07	0.01
		30	29.177	34.390	4.08	0.03			10	28.976	34.393	4.07	0.01
		40	29.142	34.380	4.09	0.02			20	28.975	34.393	4.07	0.02
	×	50	28.982	34.359	4.15	0.03			30	28.841	34.402	4.12	0.03
		75	28.099	34.412	4.30	0.05			40	28.195	34.380	4.24	0.04
		100	27.216	34.574	4.26	0.08			50	27.844	34.431	4.24	0.04
		125	26.730	34.696	4.21	0.12			75	27.327	34.619	4.23	0.06
		150	25.603	34.851	4.22	0.07			100	26.865	34.748	4.24	0.09
		175	24.063	35.028	3.96	0.05			125	26.298	34.857	4.18	0.11
		200	22.342	35.074	3.79	0.03			150	25.534	34.948	4.11	0.12
		250	18.329	34.858	4.14	0.02			175	23.594	35.107	3.91	0.06
		300	16.187	34.677	4.16	0.01			200	20.908	35.056	3.86	0.03
		400	10.986	34.325	3.08	0.02			250	17.560	34.795	4.03	0.02
		500	8.481	34.376	1.69	0.02			300	15.523	34.615	4.00	0.01
		503	8.417	34.380	0.00	0.02			400	10.919	34.321	3.03	0.01
									500	8.298	34.379	1.69	0.02
									511	8.252	34.394	1.64	0.02
OTD 1	, /DTI	\					OTD I	. /DTI	\				
	ta (BTL		_	C 1	D0	EL O		ta (BTL		T	C-1	D0	EL O
BTL No.	Depth	Pres.	Temp.	Sal	DO ml·l ⁻¹	FLC	BTL	Depth	Pres.	Temp.	Sal	DO ml·l ⁻¹	FLC
	m			(psu)			No.	m			(psu)		
Sur.	0 196	***	29.3	***	***	***	Sur.	0 198	***	29.1	***	***	***
4	195	197	22.583	35.059	3.85	0.03	4	197	199	20.912	35.047 35.062	3.86	0.03
7	196	197		35.062 35.064			7	197	198				0.03
10	99	197	22.914	34.576	3.86	0.03	10	100	198	21.034	35.060 34.730	3.86	0.03
13	99	100	27.184		4.26	0.08	13	99	100	0.01.01.01.01.01.01		4.24	0.08
16	99	100	27.187 27.188	34.576 34.577	4.26 4.26	0.08	16	99	100	26.917	34.731 34.731	4.24	0.08
19	50	50	28.951	34.577	4.26	0.08	19	50	50	27.991	34.731	4.24	0.09
22	49	49	28.979	34.355	4.15	0.04	22	50	50	27.989	34.402	4.25	0.04
	,,,	70	20.070	J-1.000	7.10	0.04			- 00	27.000	3-T#UL	7.20	0.04

KH-05-	-1	St	.36	Depth	358	35 m	KH-05-	-1	St	.37	Depth	345	i7 m
Date:		2005.6.8	3	Lat.	14	45.17N	Date:		2005.6.8	3	Lat.	14	29.97N
Time:		01:15		Long.	142	44.83E	Time:		04:33		Long.	142	30.26E
	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(L/	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		1	28.998	34.384	4.09	0.01			2	29.196	34.213	4.07	0.01
		2	28.995	34.384	4.08	0.01			3	29.194	34.214	4.07	0.01
		3	28.993	34.384	4.08	0.01			4	29.199	34.214	4.07	0.01
		4	28.977	34.384	4.07	0.01			5	29.204	34.213	4.07	0.01
		5	28.972	34.383	4.07	0.01			10	29.116	34.214	4.07	0.01
		10	28.981	34.383	4.06	0.01			20	29.024	34.233	4.06	0.01
		20	28.959	34.384	4.07	0.01			30	28.948	34.338	4.09	0.02
		30	28.952	34.384	4.08	0.02			40	28.685	34.345	4.11	0.02
	9	40	28.864	34.376	4.09	0.02			50	28.507	34.366	4.15	0.03
		50	28.802	34.373	4.11	0.03			75	27.849	34.394	4.20	0.03
		75	28.282	34.422	4.21	0.03			100	27.608	34.438	4.18	0.05
		100	27.554	34.614	4.24	0.06			125	26.622	34.761	4.18	0.14
		125	26.882	34.746	4.23	0.10			150	25.689	34.933	4.10	0.14
		150	25.478	34.934	4.18	0.12			175	23.460	35.032	3.91	0.07
		175	23.467	35.092	3.88	0.05			200	21.659	35.095	3.81	0.04
		200	21.408	35.063	3.83	0.04			250	18.126	34.845	4.03	0.01
		250	18.720	34.897	3.97	0.02			300	15.960	34.651	4.13	0.01
		300	15.736	34.630	4.06	0.01			400	10.703	34.272	3.52	0.01
		400	10.857	34.305	3.27	0.01			500	7.716	34.329	1.66	0.02
		500	7.830	34.318	1.78	0.02			513	7.585	34.337	1.60	0.02
		530	7.603	34.336	1.64	0.02							
CTD da	ita (BTL)					CTD da	ta (BTL)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.2	***	***	***	Sur.	0	***	29.4	***	***	***
							1	198	199	21.637	35.087	3.82	0.03
							4	198	200	21.630	35.087	3.82	0.03
							7	198	199	21.639	35.087	3.82	0.03
							10	101	102	27.595	34.438	4.18	0.05
							13	102	102	27.583	34.443	4.18	0.05
							16	102	102	27.582	34.444	4.19	0.05
							19	50	50	28.508	34.363	4.15	0.03
							22	51	51	28.471	34.368	4.14	0.03
									l .				

KH-05-	-1	St	.38	Depth	203	1 m	KH-05-	-1	St	.39	Depth	270	18 m
Date:	r	2005.6.8		Lat.	14	15.15N	Date:		2005.6.8	3	Lat.	14	00.10N
Time:		08:09		Long.	142	44.92E	Time:		12:05		Long.	142	30.15E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(LA	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		3	29.193	34.273	4.06	0.01			2	29.337	34.360	4.06	0.02
		4	29.182	34.274	4.06	0.02			3	29.340	34.360	4.05	0.04
		5	29.178	34.274	4.06	0.02			4	29.341	34.360	4.06	0.03
		10	29.070	34.276	4.08	0.02			5	29.341	34.360	4.06	0.03
		20	28.716	34.286	4.12	0.02			10	29.339	34.360	4.06	0.11
		30	28.728	34.369	4.13	0.02			20	29.278	34.346	4.06	0.02
		40	28.604	34.371	4.14	0.02			30	29.013	34.311	4.09	0.02
		50	28.481	34.368	4.15	0.03			40	28.764	34.378	4.10	0.03
		75	27.949	34.339	4.18	0.04			50	28.564	34.450	4.13	0.03
		100	27.383	34.578	4.20	0.07			75	27.903	34.491	4.20	0.04
		125	26.560	34.793	4.17	0.13			100	27.448	34.550	4.19	0.06
		150	26.015	34.867	4.14	0.13			125	26.256	34.805	4.17	0.15
		175	23.389	35.016	3.91	0.06			150	25.167	34.956	4.08	0.16
		200	21.350	35.000	3.69	0.04			175	23.575	35.089	3.87	0.07
		250	18.247	34.844	3.92	0.02			200	22.225	35.116	3.81	0.05
		300	14.721	34.549	3.97	0.01			250	18.693	34.895	3.94	0.02
		400	10.135	34.249	3.19	0.01			300	15.983	34.655	4.12	0.01
		500	7.669	34.317	1.71	0.02			400	11.234	34.298	3.59	0.01
}		500	7.669	34.317	1.71	0.02			500	8.202	34.311	1.91	0.02
									504	8.179	34.314		0.02
	ta (BTL							ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.4	***	***	***	Sur.	0	***	29.3	***	***	***
1	497	500	7.658	34.318	1.69	0.02	1	199	200	22.154	35.113	3.81	0.04
4	497	500	7.659	34.318	1.69	0.02	4	199	200	22.151	35.114	3.82	0.04
7	497	500	7.656	34.318	1.69	0.02	7	199	200	22.152	35.116	3.82	0.04
10	298	300	14.714	34.544	3.96	0.01	10	97	97	27.485	34.536	4.19	0.06
13	298	300	14.715	34.545	3.96	0.01	13	97	98	27.472	34.540	4.19	0.06
16	298	300	14.715	34.545	3.96	0.01	16	97	98	27.481	34.538	4.19	0.06
19	99	100	27.278	34.596	4.20	0.07	19	49	49	28.590	34.444	4.13	0.03
22	99	100	27.275	34.596	4.20	0.07	22	49	49	28.615	34.440	4.13	0.03
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									V				
												2	

KH-05	-1	St	.40	Depth	227	77 m	KH-05-	-1	St	.41	Depth	298	3 m
Date:		2005.6.8	3	Lat.	13	28.06N	Date:		2005.6.8	}	Lat.	12	59.30N
Time:		17:48		Long.	142	31.53E	Time:		21:44		Long.	142	30.77E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(L	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.272	34.340	4.06	0.02			4	29.379	34.293	4.01	0.02
		3	29.275	34.340	4.06	0.02			5	29.378	34.293	4.01	0.02
		4	29.273	34.340	4.05	0.02			10	29.378	34.294	4.01	0.02
		5	29.272	34.340	4.05	0.02			20	29.368	34.298	4.03	0.02
		10	29.243	34.338	4.05	0.02			30	29.028	34.334	4.08	0.03
		20	29.143	34.338	4.06	0.02			40	28.877	34.328	4.10	0.03
		30	29.046	34.334	4.08	0.03			50	28.774	34.346	4.13	0.04
		40	28.928	34.362	4.13	0.06			75	28.307	34.341	4.17	0.05
		50	28.234	34.403	4.17	0.04			100	27.581	34.482	4.18	0.07
		75	27.696	34.440	4.19	0.05			125	26.600	34.805	4.17	0.11
		100	27.047	34.642	4.19	0.09			150	24.994	35.030	4.02	0.10
		125	25.919	34.918	4.17	0.15			175	23.236	35.083	3.82	0.06
		150	24.561	34.981	4.01	0.10			200	20.865	35.064	3.78	0.03
		175	22.461	35.026	3.74	0.06			250	16.043	34.662	3.98	0.01
		200	20.909	34.956	3.55	0.04			300	13.612	34.464	3.93	0.01
		250	17.125	34.758	4.00	0.01			400	9.103	34.292	2.34	0.02
		300	15.421	34.603	3.98	0.01			500	7.629	34.403	1.58	0.02
		400	9.839	34.270	2.81	0.02			516	7.338	34.401	0.00	0.02
1		500	7.914	34.323	1.74	0.02							
		502	7.920	34.323	0.00	0.02							
1													
CTD da	ata (BTL	.)					CTD da	ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	28.4	***	***	***	Sur.	0	***	29.8	***	***	***
1	198	199	20.897	34.950	3.54	0.04							
4	198	199	20.894	34.953	3.54	0.04				-			
7	197	199	20.890	34.953	3.54	0.03							
10	98	99	27.061	34.629	4.18	0.08							
13	98	99	27.060	34.630	4.18	80.0							
16	98	99	27.054	34.631	4.19	80.0							
19	50	51	27.990	34.383	4.18	0.03							
22	50	51	27.999	34.384	4.19	0.03							

KH-05-	-1	St	.42	Depth	227	'5 m	KH-05-	-1	St	.43	Depth	316	0 m
Date:		2005.6.9)	Lat.	13	00.07N	Date:		2005.6.9)	Lat.	13	30.03N
Time:		03:43		Long.	142	14.90E	Time:		08:11		Long.	142	14.96E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
, (L	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		1	29.468	34.242	4.03	0.01			3	29.227	34.344	4.05	0.02
		2	29.432	34.240	4.04	0.01			4	29.200	34.343	4.05	0.02
		3	29.357	34.240	4.04	0.01			5	29.169	34.345	4.05	0.02
		4	29.341	34.241	4.04	0.01			10	29.138	34.344	4.05	0.02
		5	29.337	34.241	4.04	0.01			20	29.109	34.362	4.06	0.03
		10	29.315	34.242	4.02	0.01			30	29.056	34.407	4.08	0.16
		20	29.289	34.295	4.03	0.01			40	29.025	34.415	4.09	0.03
		30	29.219	34.334	4.07	0.02			50	28.919	34.447	4.13	0.05
		40	28.973	34.368	4.12	0.03			75	28.208	34.534	4.19	0.05
		50	28.895	34.368	4.14	0.04			100	27.662	34.599	4.22	0.07
		75	28.351	34.368	4.22	0.05			125	26.460	34.762	4.15	0.13
		100	27.524	34.509	4.19	0.08			150	24.921	35.053	3.98	0.12
		125	25.785	34.946	4.09	0.17			175	22.530	35.117	3.80	0.06
		150	23.963	35.110	3.88	0.08			200	20.719	35.052	3.76	0.03
		175	21.260	35.095	3.79	0.04			250	16.919	34.738	3.93	0.01
		200	19.258	34.944	3.90	0.02			300	14.430	34.515	3.99	0.01
		250	16.146	34.671	3.99	0.01			400	9.304	34.258	2.58	0.02
		300	12.484	34.387	3.71	0.01			500	7.775	34.304	1.77	0.02
		400	8.690	34.314	2.05	0.02			502	7.746	34.307	1.74	0.02
		500	7.706	34.381	1.63	0.02							
		511	7.652	34.388	1.61	0.02							
	ata (BTL	.)						ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.6	***	***	***	Sur.	0	***	29.4	***	***	***
1	201	202	18.932	34.917	3.96	0.01	1	199	201	20.310	35.019	3.79	0.03
4	201	202	18.920	34.916	3.96	0.02	4	199	201	20.309	35.021	3.78	0.03
7	201	202	18.898	34.914	3.96	0.02	7	199	200	20.319	35.022	3.79	0.03
10	101	101	27.521	34.500	4.19	0.07	10	100	100	27.668	34.591	4.23	0.06
13	100	101	27.519	34.502	4.20	0.07	13	99	100	27.688	34.588	4.22	0.06
16	100	101	27.519	34.504	4.19	0.07	16	100	100	27.671	34.592	4.23	0.06
19	50	51	28.909	34.365	4.13	0.03	19	51	51	28.896	34.452	4.13	0.07
22	50	51	28.909	34.365	4.13	0.06	22	51	51	28.897	34.452	4.12	0.05
		_											
									<u> </u>				

KH-05	-1	St	45	Depth	357	75 m	KH-05-	-1	St	:.48	Depth	408	9 m
Date:	T	2005.6.9		Lat.	13	59.96N			2005.6.1		Lat.	14	30.13N
Time:	<u> </u>	14:06		Long.	142	14.85E		<u> </u>	00:05		Long.	142	15.03E
) data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹			AY)	db	°C	(psu)	ml·l ⁻¹	
		1	29.306	34.327	4.02	0.04			2	29.288	34.217	4.01	0.01
		2	29.309	34.326	4.02	0.03			3	29.311	34.217	4.02	0.01
		3	29.309	34.326	4.02	0.04			4	29.325	34.217	4.01	0.01
		4	29.308	34.326	4.02	0.02			5	29.328	34.217	4.01	0.01
		5	29.306	34.327	4.02	0.02			10	29.182	34.211	4.02	0.01
		10	29.244	34.352	4.03	0.02			20	28.900	34.255	4.05	0.01
		20	29.170	34.388	4.06	0.03			30	28.838	34.268	4.06	0.02
		30	29.024	34.401	4.10	0.04			40	28.849	34.295	4.06	0.02
		40	28.859	34.427	4.11	0.07			50	28.714	34.355	4.09	0.02
		50	28.703	34.444	4.12	0.04			75	27.948	34.432	4.14	0.04
		75	27.749	34.483	4.18	0.06			100	26.827	34.707	4.14	0.10
		100	26.913	34.671	4.15	0.09			125	25.923	34.857	4.10	0.17
		125	26.104	34.878	4.14	0.13			150	23.667	35.051	3.86	0.06
		150	25.352	34.997	4.07	0.15			175	22.580	35.129	3.78	0.04
		175	23.691	35.077	3.85	0.07			200	21.483	35.075	3.78	0.03
		200	21.951	35.111	3.80	0.05			250	18.291	34.858	3.97	0.01
		250	18.022	34.834	3.97	0.01			300	15.194	34.581	3.99	0.01
		300	15.145	34.583	4.03	0.01			400	10.845	34.317	3.17	0.01
		400	9.987	34.298	2.69	0.02			500	7.909	34.349	1.67	0.02
		500	7.806	34.352	1.62	0.03			514	7.747	34.367	1.07	0.02
		503	7.806	34.353	0.00	0.02				,,,,,	- 11007		
CTD da	ata (BTL	.)					CTD da	ıta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.4	***	***	***	Sur.	0	***	29.5	***	***	***
1	197	198	22.067	35.107	3.79	0.04	1	199	200	21.459	35.066	3.80	0.03
4	197	198	22.119	35.117	3.80	0.04	4	199	200	21.462	35.067	3.80	0.03
7	197	198	22.108	35.118	3.80	0.04	7	199	200	21.450	35.066	3.80	0.03
10	99	99	26.931	34.663	4.16	0.07	10	100	101	26.736	34.705	4.16	0.09
13	99	100	26.924	34.667	4.16	0.08	13	100	101	26.765	34.708	4.15	0.09
16	99	100	26.928	34.667	4.16	0.08	16	100	100	26.856	34.701	4.16	0.09
19	49	50	28.578	34.434	4.13	0.04	19	51	51	28.629	34.348	4.10	0.02
22	49	50	28.655	34.436	4.12	0.04	22	51	51	28.632	34.350	4.10	0.02

KH-05-	-1	St	50	Depth	433	88 m	KH-05-	-1	St	.58	Depth	345	i2 m
Date:		2005.6.1		Lat.	15	00.11N			2005.6.1		Lat.	13	00.18N
Time:		05:50		Long.	142	15.14E			08:37	×	Long.	142	44.62E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹		(LA		db	°C	(psu)	ml·l ⁻¹	
		2	29.550	34.401	4.00	0.01			2	29.395	34.252	3.99	0.01
		3	29.557	34.401	4.00	0.01			3	29.390	34.253	3.98	0.01
		4	29.541	34.400	4.00	0.01			4	29.388	34.254	3.98	0.02
		5	29.549	34.400	4.01	0.01			5	29.385	34.255	3.98	0.01
		10	29.234	34.398	4.06	0.01			10	29.239	34.278	4.00	0.01
		20	29.150	34.398	4.04	0.02			20	29.031	34.284	4.01	0.02
		30	29.134	34.401	4.05	0.02			30	28.976	34.292	4.01	0.02
		40	29.099	34.403	4.07	0.03			40	28.960	34.310	4.01	0.02
		50	28.703	34.373	4.20	0.05			50	28.848	34.329	4.03	0.02
		75	27.632	34.501	4.17	0.06			75	27.999	34.455	4.14	0.04
		100	27.129	34.660	4.17	0.11			100	26.960	34.662	4.12	0.10
		125	26.699	34.787	4.16	0.12			125	26.059	34.915	4.10	0.16
		150	25.508	34.950	4.04	0.12			150	25.146	35.004	3.99	0.11
		175	23.997	35.085	3.87	0.07			175	23.039	35.023	3.75	0.06
		200	21.971	35.113	3.78	0.04			200	19.507	34.950	3.65	0.03
		250	18.416	34.866	3.95	0.02			250	15.792	34.637	3.99	0.01
		300	15.969	34.655	3.97	0.01			300	13.391	34.455	3.80	0.01
		400	11.571	34.350	3.17	0.02			400	8.863	34.287	2.24	0.02
		500	8.580	34.370	1.80	0.03			500	7.250	34.390	1.43	0.02
1		510	8.372	34.394	1.66	0.02			509	7.069	34.403	0.00	0.02
CTD da	ta (BTL)					CTD da	ta (BTI)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.6	***	***	***	Sur.	0	***	29.4	***	***	***
1	199	200	21.615	35.094	3.79	0.03							
4	199	201	21.745	35.095	3.79	0.03							
7	199	200	21.837	35.103	3.80	0.03							
10	99	100	27.154	34.645	4.17	0.10							
13	99	100	27.153	34.645	4.17	0.10							
16	99	100	27.150	34.646	4.18	0.10							
19	50	51	28.693	34.369	4.19	0.05							
22	50	51	28.688	34.370	4.20	0.05							
										*			
									1			1	

KH-05-	-1	St	.59	Depth	310	02 m	KH-05-	-1	St	.60	Depth	318	7 m
Date:		2005.6.1		Lat.	13	29.86N			2005.6.1		Lat.	13	44.97N
Time:		12:39		Long.	142	44.83E			15:41		Long.	142	44.75E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹			AY)	db	°C	(psu)	ml·l ⁻¹	
		30	28.939	34.337	4.02	0.02			4	29.287	34.355	3.98	0.01
		40	28.899	34.352	4.03	0.02			5	29.287	34.355	3.97	0.01
		50	28.796	34.357	4.04	0.02			10	29.284	34.356	3.98	0.02
		75	28.274	34.369	4.10	0.04			20	29.115	34.347	3.99	0.02
		100	27.858	34.416	4.12	0.05			30	28.832	34.337	4.01	0.02
		125	27.197	34.653	4.15	0.09			40	28.771	34.364	4.02	0.02
		150	26.692	34.761	4.11	0.15			50	28.740	34.379	4.02	0.02
		175	25.480	34.929	4.00	0.14			75	28.241	34.468	4.12	0.04
		200	22.442	35.043	3.72	0.05			100	27.436	34.596	4.16	0.07
		250	16.750	34.715	3.81	0.01			125	26.779	34.758	4.12	0.12
		300	14.328	34.524	3.83	0.01			150	25.701	34.911	4.02	0.15
		400	9.852	34.264	2.89	0.01			175	24.041	35.067	3.87	0.08
		500	7.665	34.309	1.69	0.02			200	22.322	35.046	3.71	0.05
		505	7.590	34.320	1.66	0.02			250	17.719	34.782	3.49	0.02
									300	14.584	34.537	3.93	0.01
									400	9.939	34.282	2.66	0.02
									500	7.520	34.314	1.64	0.02
									508	7.380	34.325		0.02
CTD da	ita (BTL)					CTD da	ıta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.3	***	***	***	Sur.	0	***	29.4	***	***	***
			,										

KH-05-	-1	St	.61	Depth	196	60 m	KH-05-	-1	St.	62	Depth	205	4 m
Date:		2005.6.1		Lat.	14	01.85N			2005.6.1		Lat.	14	15.17N
Time:		20:28		Long.	142	45.12E			23:58		Long.	142	44.78E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
	YY)	db	°C	(psu)	ml·l ⁻¹			AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.095	34.332	4.00	0.01			1	29.274	34.407	3.98	0.01
		3	29.094	34.332	4.00	0.02			2	29.275	34.407	3.99	0.01
		4	29.096	34.332	4.00	0.01			3	29.285	34.407	3.99	0.01
		5	29.098	34.331	3.99	0.02			4	29.284	34.407	4.00	0.01
		10	29.086	34.330	3.98	0.02			5	29.280	34.407	3.99	0.01
		20	28.897	34.337	4.01	0.01			10	29.198	34.405	3.99	0.01
		30	28.822	34.404	4.03	0.02			20	29.145	34.403	4.00	0.01
		40	28.762	34.410	4.03	0.02			30	28.934	34.386	4.01	0.02
l		50	28.726	34.412	4.03	0.02			40	28.848	34.402	4.03	0.02
		75	27.938	34.430	4.14	0.03			50	28.741	34.419	4.04	0.03
		100	27.590	34.579	4.17	0.06			75	27.821	34.414	4.13	0.04
		125	26.670	34.783	4.14	0.12			100	27.342	34.558	4.14	0.06
		150	25.753	34.939	4.03	0.10			125	26.964	34.720	4.13	0.11
		175	24.812	35.028	3.92	0.07			150	25.683	34.909	4.09	0.13
		200	22.705	35.102	3.75	0.03			175	24.407	35.075	3.88	0.07
		250	17.563	34.791	3.81	0.02			200	22.469	35.121	3.77	0.04
		300	14.100	34.489	3.99	0.01			250	18.372	34.864	3.90	0.01
		400	9.958	34.250	3.00	0.02			300	15.433	34.611	3.85	0.01
		500	7.265	34.338	1.54	0.02			400	10.958	34.307	3.17	0.01
		512	7.073	34.353	1.47	0.02			500	7.662	34.300	1.73	0.02
									510	7.555	34.311		0.02
CTD da	ta (BTL	.)						ta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.0	***	***	***	Sur.	0	***	29.2	***	***	***
													0

KH-05-	-1	St	.63	Depth	299	06 m	KH-05-	-1	St	.65	Depth	301	5 m
Date:		2005.6.1		Lat.	14	30.11N			2005.6.1		Lat.	14	59.80N
Time:		01:46		Long.	142	44.95E			07:15		Long.	142	44.83E
CTD	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(L	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.102	34.370	3.99	0.01			20	29.387	34.426	3.98	0.02
		3	29.103	34.371	3.99	0.01			30	29.356	34.425	3.98	0.02
		4	29.101	34.370	3.99	0.01			40	29.324	34.419	3.99	0.02
		5	29.089	34.370	4.00	0.01			50	29.203	34.395	4.02	0.03
		10	29.070	34.369	4.00	0.01			75	28.117	34.410	4.20	0.05
		20	28.956	34.398	4.03	0.02			100	27.267	34.586	4.19	9.08
		30	28.949	34.414	4.02	0.03			125	26.294	34.769	4.11	0.13
		40	28.893	34.416	4.03	0.02			150	25.271	34.929	3.96	0.11
		50	28.759	34.414	4.09	0.03			175	23.979	35.041	3.87	0.05
		75	27.900	34.524	4.16	0.05			200	21.421	35.080	3.78	0.03
		100	27.258	34.626	4.15	0.08			250	19.104	34.925	3.98	0.02
		125	26.625	34.794	4.14	0.12			300	16.951	34.739	4.06	0.01
		150	25.781	34.913	4.12	0.11			400	11.469	34.353	3.05	0.02
		175	24.324	35.056	3.88	0.07			500	8.567	34.356	1.84	0.02
		200	22.741	35.117	3.76	0.04			506	8.425	34.362	1.77	0.02
		250	18.842	34.898	3.91	0.02							
		300	15.053	34.569	3.96	0.01							
		400	9.680	34.241	2.89	0.02							
		500	7.362	34.318	1.61	0.02							
		511	7.254	34.323		0.02							
CTD da	ata (BTL	.)					CTD da	ıta (BTL	.)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	i	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.5	***	***	***	Sur.	0	***	29.7	***	***	***
,													
		1		I	l		I	ı		1	I	1	

KH-05-	-1	St.	66	Depth	428	84 m	KH-05-	·1			Depth		
Date:		2005.6.1		Lat.	13	59.95N					Lat.		
Time:		13:35		Long.	142	59.85E	_				Long.		
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(LA		db	°C	(psu)	ml·l ⁻¹		(LA		db	°C	(psu)	ml·l ⁻¹	
		2	29.394	34.405	3.98	0.02							
		3	29.394	34.405	3.98	0.02							
		4	29.395	34.405	3.98	0.02							
		5	29.395	34.405	3.98	0.02							
		10	29.396	34.405	3.98	0.02							
		20	29.378	34.404	3.99	0.02							
		30	29.177	34.393	4.01	0.02							
		40	29.109	34.393	4.02	0.03					9		
		50	29.075	34.392	4.02	0.03							
		75	28.508	34.347	4.13	0.05							
		100	27.746	34.470	4.13	0.08							
		125	26.838	34.724	4.11	0.13							
		150	25.981	34.903	4.03	0.14							
		175	24.678	35.056	3.87	0.06							
		200	22.775	35.090	3.77	0.03							
		250	18.318	34.846	3.58	0.02							
		300	15.434	34.602	3.74	0.01							
		400	11.635	34.349	3.30	0.01							
		500	8.256	34.311	1.89	0.02							
		504	8.182	34.310		0.02							
CTD da	ta (BTL)					CTD da	ta (RTI)				
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹	1 20	No.	m	db	°C	(psu)	ml·l ⁻¹	1 20
Sur.	0	***	29.2	***	***	***	Sur.		***		***	***	***
- Juli			20.2				our.						
							*						

KH-05-	1 l eg4	St	138	Depth	342	.0 m	KH-05-	1 l eø4	S+	148	Depth	271	15m
Date:		2005.7.7		Lat.	14	10.06N			2005.7.8	170	Lat.	12	59.89N
Time:	<u> </u>	09:05		Long.	142	59.54E		· ·	12:52		Long.	142	29.80E
_	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹			AY)	db	°C	(psu)	ml·l ⁻¹	
		3	29.660	34.194	3.77	N.D			1	29.629	34.272	3.80	0.03
		4	29.660	34.195	3.77	N.D			2	29.627	34.272	3.81	0.02
		5	29.661	34.195	3.77	N.D			3	29.630	34.272	3.81	0.02
		10	29.659	34.194	3.78	N.D			4	29.632	34.272	3.81	0.02
1		20	29.666	34.194	3.78	N.D			5	29.630	34.272	3.81	0.02
		30	29.541	34.188	3.79	N.D			10	29.635	34.272	3.81	0.02
l		40	29.511	34.250	3.82	N.D			20	29.591	34.275	3.82	0.02
		50	29.547	34.407	3.87	N.D			30	29.500	34.278	3.85	0.03
l		75	29.057	34.470	3.94	N.D			40	29.344	34.305	3.87	0.03
		100	27.969	34.567	4.01	N.D			50	29.245	34.301	3.88	0.03
l		125	27.349	34.660	3.97	N.D			75	28.787	34.343	3.92	0.04
		150	26.483	34.823	3.87	N.D			100	28.101	34.427	3.97	0.05
		175	25.295	34.998	3.77	N.D			125	27.253	34.587	3.97	0.09
		200	22.984	35.074	3.60	N.D			150	25.402	34.901	3.84	0.16
l		250	17.317	34.756	3.27	N.D			175	21.932	35.051	3.53	0.07
		300	14.233	34.551	2.73	N.D			200	19.065	34.914	3.40	0.04
		400	10.241	34.341	2.32	N.D			250	15.507	34.618	3.08	0.02
		500	8.166	34.354	1.64	N.D			300	12.631	34.412	2.99	0.02
		502	8.130	34.350	1.64	N.D			400	9.408	34.415	1.59	0.02
									500	7.848	34.504	1.37	0.03
									502	7.828	34.504	1.37	0.03
CTD dat	a (BTL)						CTD dat	ta (BTL)					
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.7	***	***	***	Sur.	0	***	29.6	***	***	***
1	498	501	8.134	34.351	1.64	N.D	1	499	503	7.788	34.503	1.37	0.02
2	498	501	8.132	34.351	1.64	N.D	2	499	502	7.788	34.503	1.38	0.02
3	397	400	10.214	34.337	2.33	N.D	3	396	399	9.235	34.419	1.52	0.03
4	300	302	14.197	34.545	2.73	N.D	4	297	299	11.997	34.372	2.96	0.02
5	300	302	14.164	34.544	2.73	N.D	5	297	299	12.094	34.379	2.98	0.01
6	199	201	22.414	35.077	3.62	N.D	6	199	200	18.957	34.898	3.41	0.03
7	200	201	22.313	35.079	3.62	N.D	7		200	18.918	34.899	3.42	0.03
8	200	201	22.371	35.078	3.61	N.D	8		200	18.931	34.899	3.42	0.03
9	99	100	28.088	34.549	4.03	N.D	9	99	100	28.099	34.421	3.99	0.04
10		100	28.085	34.550	4.03	N.D	10	99	100	28.096	34.422	3.99	0.04
11 12	100 99	100	28.078	34.551	4.03	N.D	11 12	100	100	28.144	34.415	3.99	0.04
13	99	100	28.092	34.549	4.03	N.D	13	100	100	28.202	34.406	3.99	0.04
14	50	100	28.089	34.549	4.03	N.D	14		49	28.205	34.406	3.98	0.04
15	50	50 50	29.547 29.547	34.426	3.88	N.D N.D	15	49	49	29.268	34.299	3.89	0.03
16	50	50	29.547	34.424	3.88	N.D	16	49	49	29.259	34.300	3.89	0.03
17	50	50	29.544	34.424	3.88	N.D	17	49	49	29.270	34.300	3.89	0.03
18	50	50	29.542	34.423	3.88	N.D	18	49	49	29.270	34.300	3.88	0.03
19	50	50	29.544	34.422	3.88	N.D	19	49	49	29.264	34.300	3.88	0.03
20	50	50	29.544	34.420	3.89	N.D	20	49	50	29.269	34.300	3.88	0.03
21	50	51	29.545	34.420	3.88	N.D	21	50	50	29.267	34.300	3.88	0.04
	50	51	29.545	34.421	3.89	N.D	22	49	49	29.267	34.300	3.88	0.03
791		U I	40.070	UT.721	0.00	14.17	- 44	1 10	70	20.207	07.000	0.00	0.00
22	50	50	29 5/15	34 410	3 88	ИЪ	22	49	50	29 267	34 300	3 88	0.03
22 23 24	50 50	50 50	29.545 29.545	34.418 34.416	3.88	N.D N.D	23 24	49 49	50 50	29.267 29.270	34.300 34.300	3.88	0.03

Date: 2005.7.8 Lat. 14 00.12N Date: 2005.7.9 Lat. 13 00.65 Time: CTD data (L→Y) Pres. Temp. Sal DO FLC Time: 19:03 Long. 141 46.80 CTD data (L→Y) Pres. Temp. Sal DO FLC CTD data (L→Y) Pres. Temp. Sal DO FLC db °C (spsu) mi-1" mi-1" 2 29:567 34.397 3.84 0.02 4 29:645 34:240 3.81 0.02 4 29:648 34:241 3.81 0.02 4 29:566 34:396 3.84 0.02 20 29:652 34:246 3.81 0.02 5 29:668 34:396 3.84 0.02 20 29:566 34:396 3.84 0.02 20 29:568 34:396 3.84 0.02 20 29:568 34:397 3.84 0.02 20 29:568 34:397	1111 00	1_Leg4	St.	150	Depth	27	10m	KH-05-	1_Leg4	St.	157	Depth	330	00m
Pers														00.65N
CLAY	Time:		20:38		Long.	142	29.86E	Time:		19:03		Long.	141	46.80E
			Pres.	Temp.	Sal	DO	FLC			Pres.	Temp.	Sal	DO	FLC
	(LA	AY)	db	°C	(psu)	ml·l ⁻¹		(L	AY)	db	°C	(psu)	ml·l ⁻¹	
			3	29.642	34.234	3.81	0.02	l		2	29.567	34.397	3.84	0.02
10			4	29.645	34.240	3.81	0.02			3	29.566	34.397	3.84	0.02
Part			5	29.643	34.235	3.81	0.02			4	29.566	34.396	3.84	0.02
Part			10	29.648	34.241	3.81	0.02	l		5	29.566	34.396	3.84	0.02
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Sur. O					2.000									
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CTD data (BTL)			002	7.004	04.007	1,00	0.02							
BTL Depth Pres. Temp. Sal DO FLC BTL Depth Pres. Temp. Sal DO FLC No. m db °C (psu) ml·l ⁻¹ No. m db °C (psu) ml·l ⁻¹ Sur. O *** 29.7 *** *** *** *** Sur. O *** 29.6 ***										002	7.702	0 1.000	1.01	0.00
BTL Depth Pres. Temp. Sal DO FLC BTL Depth Pres. Temp. Sal DO FLC No. m db °C (psu) ml·l ⁻¹ No. m db °C (psu) ml·l ⁻¹ Sur. O *** 29.7 *** *** *** *** Sur. O *** 29.6 ***														
No. m db °C (psu) ml·l⁻l No. m db °C (psu) ml·l⁻l Sur. 0 **** 29.7 **** **** **** Sur. 0 **** 29.6 **** **** **** 1 494 498 7.595 34.343 1.54 0.02 1 497 501 7.772 34.505 1.31 0.02 2 494 498 7.599 34.344 1.54 0.02 2 497 501 7.777 34.504 1.31 0.02 3 399 401 9.120 34.270 2.33 0.02 3 399 402 9.232 34.458 1.59 0.02 4 298 300 12.625 34.414 3.34 0.01 4 298 300 12.477 34.424 2.66 0.02 5 299 301 12.623 34.94 3.37 0.03<	CTD dat	a (BTL)						CTD dat	a (BTL)					
Sur. 0 **** 29.7 **** **** **** Sur. 0 **** 29.6 **** **** **** 1 494 498 7.595 34,343 1.54 0.02 1 497 501 7.772 34,505 1.31 0.02 2 494 498 7.599 34,344 1.54 0.02 2 497 501 7.777 34,504 1.31 0.02 3 399 401 9.120 34,270 2.33 0.02 3 399 402 9.232 34,458 1.59 0.02 4 298 300 12,625 34,414 3.34 0.01 4 298 300 12,477 34,424 2.66 0.02 5 299 301 12,623 34,414 3.33 0.01 5 297 299 12,462 34,425 2.66 0.01 7 198 199 20,481 <t< td=""><td>BTL</td><td>Depth</td><td>Pres.</td><td>Temp.</td><td>Sal</td><td>DO</td><td>FLC</td><td>BTL</td><td>Depth</td><td>Pres.</td><td>Temp.</td><td>Sal</td><td>DO</td><td>FLC</td></t<>	BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
1 494 498 7.595 34,343 1.54 0.02 1 497 501 7.772 34,505 1.31 0.02 2 494 498 7.599 34,344 1.54 0.02 2 497 501 7.777 34,504 1.31 0.02 3 399 401 9.120 34,270 2.33 0.02 3 399 402 9.232 34,458 1.59 0.02 4 298 300 12,625 34,414 3.34 0.01 4 298 300 12,477 34,424 2.66 0.02 5 299 301 12,623 34,414 3.33 0.01 5 297 299 12,462 34,425 2.66 0.01 6 198 199 20,481 34,929 3.36 0.04 6 199 200 21,166 35,023 3.52 0.04 7 198 199 20,489	No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
2 494 498 7.599 34.344 1.54 0.02 2 497 501 7.777 34.504 1.31 0.02 3 399 401 9.120 34.270 2.33 0.02 3 399 402 9.232 34.458 1.59 0.02 4 298 300 12.625 34.414 3.34 0.01 4 298 300 12.477 34.424 2.66 0.02 5 299 301 12.623 34.414 3.33 0.01 5 297 299 12.462 34.425 2.66 0.01 6 198 199 20.481 34.929 3.36 0.04 6 199 200 21.166 35.023 3.50 0.04 7 198 199 20.489 34.932 3.37 0.03 8 199 200 21.174 35.036 3.52 0.04 9 99 27.615 34.494	Sur.	0	***	29.7	***	***	***	Sur.	0	***	29.6	***	***	***
3 399 401 9.120 34.270 2.33 0.02 3 399 402 9.232 34.458 1.59 0.02 4 298 300 12.625 34.414 3.34 0.01 4 298 300 12.477 34.424 2.66 0.02 5 299 301 12.623 34.414 3.33 0.01 5 297 299 12.462 34.425 2.66 0.01 6 198 199 20.481 34.929 3.36 0.04 6 199 200 21.136 35.023 3.50 0.04 7 198 199 20.531 34.934 3.37 0.03 7 199 200 21.166 35.032 3.52 0.04 8 198 199 20.489 34.932 3.37 0.03 8 199 200 21.174 35.036 3.52 0.04 10 99 99 27.615	1	494	498	7.595	34.343	1.54	0.02	1	497	501	7.772	34.505	1.31	0.02
4 298 300 12,625 34,414 3.34 0.01 4 298 300 12,477 34,424 2.66 0.02 5 299 301 12,623 34,414 3.33 0.01 5 297 299 12,462 34,425 2.66 0.01 6 198 199 20,481 34,929 3.36 0.04 6 199 200 21,136 35,023 3.50 0.04 7 198 199 20,531 34,934 3.37 0.03 7 199 200 21,166 35,032 3.52 0.04 8 198 199 20,489 34,932 3.37 0.03 8 199 200 21,174 35,036 3.52 0.04 9 99 99 27,615 34,494 4.02 0.04 10 100 101 27,458 34,521 4.03 0.06 11 99 100 27,637	2	494	498	7.599	34.344	1.54	0.02	2	497	501	7.777	34.504	1.31	0.02
5 299 301 12,623 34,414 3,33 0.01 5 297 299 12,462 34,425 2,66 0.01 6 198 199 20,481 34,929 3,36 0.04 6 199 200 21,136 35,023 3,50 0.04 7 198 199 20,531 34,934 3,37 0.03 7 199 200 21,166 35,032 3,52 0.04 8 198 199 20,489 34,932 3,37 0.03 8 199 200 21,174 35,036 3,52 0.04 9 99 99 27,615 34,494 4,02 0.04 10 100 101 27,458 34,521 4,03 0.06 10 99 99 27,639 34,490 4,02 0.04 11 99 100 27,458 34,521 4,03 0.06 11 99 100 27,637	3	399	401	9.120	34.270	2.33	0.02	3	399	402	9.232	34.458	1.59	0.02
6 198 199 20.481 34.929 3.36 0.04 6 199 200 21.136 35.023 3.50 0.04 7 198 199 20.531 34.934 3.37 0.03 7 199 200 21.166 35.023 3.52 0.04 8 198 199 20.489 34.932 3.37 0.03 8 199 200 21.174 35.036 3.52 0.04 9 99 99 27.615 34.494 4.02 0.04 9 99 100 27.458 34.521 4.03 0.06 10 99 99 27.639 34.490 4.02 0.04 10 100 101 27.465 34.521 4.03 0.06 11 99 100 27.637 34.490 4.02 0.04 11 99 100 27.467 34.518 4.03 0.06 12 99 99 27.642		298	300	12.625	34.414	3.34	0.01		298	300	12.477	34.424	2.66	0.02
7 198 199 20.531 34.934 3.37 0.03 7 199 200 21.166 35.032 3.52 0.04 8 198 199 20.489 34.932 3.37 0.03 8 199 200 21.174 35.036 3.52 0.04 9 99 99 27.615 34.494 4.02 0.04 9 99 100 27.458 34.521 4.03 0.06 10 99 99 27.639 34.490 4.02 0.04 10 100 101 27.465 34.521 4.03 0.06 11 99 100 27.637 34.490 4.02 0.04 11 99 100 27.467 34.517 4.03 0.06 12 99 99 27.634 34.492 4.02 0.04 12 99 100 27.467 34.518 4.03 0.06 13 99 100 27.642			301	12.623	34.414	3.33	0.01	5						0.04
8 198 199 20.489 34.932 3.37 0.03 8 199 200 21.174 35.036 3.52 0.04 9 99 99 27.615 34.494 4.02 0.04 9 99 100 27.458 34.521 4.03 0.06 10 99 99 27.639 34.490 4.02 0.04 10 100 101 27.465 34.520 4.03 0.06 11 99 100 27.637 34.490 4.02 0.04 11 99 100 27.467 34.517 4.03 0.06 12 99 99 27.634 34.492 4.02 0.04 12 99 100 27.467 34.518 4.03 0.06 13 99 100 27.642 34.490 4.02 0.04 13 100 101 27.469 34.518 4.03 0.06 14 50 50 28.693			199	20 481					297	299	12.462	34.425	2.66	0.01
9 99 99 27.615 34.494 4.02 0.04 9 99 100 27.458 34.521 4.03 0.06 10 99 99 27.639 34.490 4.02 0.04 10 100 101 27.465 34.520 4.03 0.06 11 99 100 27.637 34.490 4.02 0.04 11 99 100 27.472 34.517 4.03 0.06 12 99 99 27.634 34.492 4.02 0.04 12 99 100 27.467 34.518 4.03 0.06 13 99 100 27.642 34.490 4.02 0.04 13 100 101 27.469 34.518 4.03 0.06 14 50 50 28.693 34.351 3.96 0.03 15 50 50 29.076 34.393 3.93 0.03 15 50 50 28.709	7	198							199	200	21.136	35.023	3.50	0.04
10 99 99 27.639 34.490 4.02 0.04 10 100 101 27.465 34.520 4.03 0.06 11 99 100 27.637 34.490 4.02 0.04 11 99 100 27.472 34.517 4.03 0.06 12 99 99 27.634 34.492 4.02 0.04 12 99 100 27.467 34.518 4.03 0.06 13 99 100 27.642 34.490 4.02 0.04 13 100 101 27.469 34.518 4.03 0.06 14 50 50 28.693 34.351 3.96 0.03 14 50 50 29.076 34.393 3.93 0.03 15 50 50 28.698 34.351 3.96 0.03 16 51 51 29.055 34.394 3.93 0.03 17 50 50 28.709		467		20.531	34.934	3.37	0.03	7	199 199	200 200	21.136 21.166	35.023 35.032	3.50 3.52	0.04
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19 50 50 28.715 34.350 3.96 0.02 19 50 51 29.068 34.394 3.93 0.03 20 50 51 28.721 34.350 3.96 0.03 20 50 50 29.077 34.394 3.93 0.03 21 50 50 28.720 34.350 3.96 0.03 21 51 51 29.044 34.395 3.94 0.03 22 50 50 28.729 34.349 3.96 0.03 22 50 51 29.072 34.394 3.93 0.03	9 10 11 12 13 14 15	99 99 99 99 99 50 50	199 99 99 100 99 100 50 50	20.531 20.489 27.615 27.639 27.637 27.634 27.642 28.693 28.698 28.709	34.934 34.932 34.494 34.490 34.490 34.492 34.351 34.351	3.37 4.02 4.02 4.02 4.02 4.02 3.96 3.96 3.96	0.03 0.04 0.04 0.04 0.04 0.04 0.03 0.03	7 8 9 10 11 12 13 14 15	199 199 199 99 100 99 99 100 50 50	200 200 200 100 101 100 100 101 50 50	21.136 21.166 21.174 27.458 27.465 27.472 27.467 27.469 29.076 29.066 29.055	35.023 35.032 35.036 34.521 34.520 34.517 34.518 34.393 34.394 34.394	3.50 3.52 3.52 4.03 4.03 4.03 4.03 4.03 3.93 3.94 3.93	0.04 0.04 0.06 0.06 0.06 0.06 0.06 0.06 0.03 0.03
20 50 51 28.721 34.350 3.96 0.03 20 50 50 29.077 34.394 3.93 0.03 21 50 50 28.720 34.350 3.96 0.03 21 51 51 29.044 34.395 3.94 0.03 22 50 50 28.729 34.349 3.96 0.03 22 50 51 29.072 34.394 3.93 0.03	9 10 11 12 13 14 15 16	99 99 99 99 99 50 50 50	199 99 99 100 99 100 50 50	20.531 20.489 27.615 27.639 27.634 27.634 27.642 28.693 28.709 28.709	34.934 34.932 34.494 34.490 34.492 34.490 34.351 34.351 34.350	3.37 4.02 4.02 4.02 4.02 4.02 3.96 3.96 3.96	0.03 0.04 0.04 0.04 0.04 0.04 0.03 0.03 0.03	7 8 9 10 11 12 13 14 15 16	199 199 199 99 100 99 99 100 50 50 51	200 200 200 100 101 100 100 101 50 50 51	21.136 21.166 21.174 27.458 27.465 27.472 27.467 29.076 29.076 29.055 29.075	35.023 35.032 35.036 34.521 34.520 34.517 34.518 34.393 34.394 34.394	3.50 3.52 3.52 4.03 4.03 4.03 4.03 4.03 3.93 3.94 3.93	0.04 0.04 0.06 0.06 0.06 0.06 0.06 0.03 0.03 0.03
21 50 50 28.720 34.350 3.96 0.03 21 51 51 29.044 34.395 3.94 0.03 22 50 50 28.729 34.349 3.96 0.03 22 50 51 29.072 34.394 3.93 0.03	9 10 11 12 13 14 15 16 17	99 99 99 99 99 50 50 50	199 99 99 100 99 100 50 50 50	20.531 20.489 27.615 27.639 27.634 27.634 27.642 28.693 28.698 28.709 28.709	34.934 34.932 34.494 34.490 34.490 34.351 34.351 34.350 34.350 34.350	3.37 4.02 4.02 4.02 4.02 4.02 3.96 3.96 3.96 3.96 3.96	0.03 0.04 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.03	7 8 9 10 11 12 13 14 15 16 17	199 199 199 99 100 99 99 100 50 50 51 49	200 200 100 101 100 101 50 50 51	21.136 21.166 21.174 27.458 27.465 27.467 27.469 29.076 29.066 29.055 29.075	35.032 35.036 34.521 34.520 34.517 34.518 34.518 34.393 34.394 34.394 34.394	3.50 3.52 3.52 4.03 4.03 4.03 4.03 4.03 3.93 3.93 3.93 3.93	0.04 0.04 0.06 0.06 0.06 0.06 0.06 0.03 0.03 0.03 0.03
22 50 50 28.729 34.349 3.96 0.03 22 50 51 29.072 34.394 3.93 0.03	9 10 11 12 13 14 15 16 17 18	99 99 99 99 99 50 50 50 50	199 99 99 100 99 100 50 50 50 50	20.531 20.489 27.615 27.639 27.637 27.634 27.642 28.693 28.698 28.709 28.709 28.707 28.715	34.934 34.932 34.490 34.490 34.490 34.351 34.351 34.350 34.350 34.351 34.350	3.37 4.02 4.02 4.02 4.02 4.02 3.96 3.96 3.96 3.96 3.96 3.96	0.03 0.04 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.03 0.02 0.04	7 8 9 10 11 12 13 14 15 16 17 18	199 199 199 99 100 99 100 50 50 51 49 51	200 200 200 100 101 100 101 50 50 51 51	21.136 21.166 21.174 27.458 27.465 27.472 27.467 29.076 29.055 29.075 29.069 29.068	35.032 35.036 34.521 34.520 34.517 34.518 34.518 34.393 34.394 34.394 34.394 34.394	3.50 3.52 3.52 4.03 4.03 4.03 4.03 4.03 3.93 3.93 3.93 3.93 3.93	0.04 0.04 0.06 0.06 0.06 0.06 0.03 0.03 0.03 0.03 0.03
	9 10 11 12 13 14 15 16 17 18 19	99 99 99 99 99 50 50 50 50 50	199 99 99 100 99 100 50 50 50 51	20.531 20.489 27.615 27.639 27.637 27.634 27.642 28.693 28.709 28.709 28.709 28.715 28.721	34.934 34.932 34.490 34.490 34.490 34.351 34.351 34.350 34.350 34.350 34.350 34.350	3.37 3.37 4.02 4.02 4.02 4.02 4.02 3.96 3.96 3.96 3.96 3.96 3.96 3.96	0.03 0.04 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.03 0.02 0.04	7 8 9 10 11 12 13 14 15 16 17 18	199 199 199 99 100 99 100 50 51 49 51 50	200 200 200 100 101 100 101 50 50 51 51 51	21.136 21.166 21.174 27.458 27.465 27.472 27.469 29.076 29.066 29.055 29.075 29.068 29.077	35.023 35.036 34.521 34.520 34.517 34.518 34.518 34.393 34.394 34.394 34.394 34.394 34.394 34.394	3.50 3.52 3.52 4.03 4.03 4.03 4.03 3.93 3.94 3.93 3.93 3.93 3.93 3.93	0.04 0.04 0.06 0.06 0.06 0.06 0.06 0.03 0.03 0.03 0.03 0.03 0.03
	9 10 11 12 13 14 15 16 17 18 19 20	99 99 99 99 50 50 50 50 50 50	199 99 99 100 99 100 50 50 50 50 51 50	20.531 20.489 27.615 27.639 27.637 27.634 27.642 28.693 28.709 28.709 28.707 28.715 28.721 28.720	34.934 34.494 34.490 34.490 34.490 34.351 34.351 34.350 34.350 34.350 34.350 34.350	3.37 3.37 4.02 4.02 4.02 4.02 4.02 3.96 3.96 3.96 3.96 3.96 3.96 3.96 3.96 3.96	0.03 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.03 0.02 0.04 0.02 0.03	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	199 199 199 99 100 99 99 100 50 50 51 49 51 50 50	200 200 100 101 100 101 50 51 51 50 51	21.136 21.166 21.174 27.458 27.465 27.472 27.469 29.076 29.066 29.055 29.075 29.069 29.068 29.077	35.023 35.032 35.036 34.521 34.520 34.518 34.518 34.393 34.394 34.394 34.394 34.394 34.394 34.394 34.394	3.50 3.52 3.52 4.03 4.03 4.03 4.03 3.93 3.94 3.93 3.93 3.93 3.93 3.93 3.9	0.04 0.04 0.06 0.06 0.06 0.06 0.06 0.03 0.03 0.03 0.03 0.03 0.03 0.03
24 50 50 28.712 34.351 3.96 0.02 24 50 51 29.075 34.395 3.93 0.03	9 10 11 12 13 14 15 16 17 18 19 20 21	99 99 99 99 99 50 50 50 50 50 50	199 99 99 100 50 50 50 51 50 51 50 51	20.531 20.489 27.615 27.639 27.637 27.634 27.642 28.693 28.698 28.709 28.707 28.715 28.721 28.720 28.729	34.934 34.494 34.490 34.490 34.490 34.351 34.351 34.350 34.350 34.350 34.350 34.350 34.350 34.350 34.350	3.37 4.02 4.02 4.02 4.02 3.96 3.96 3.96 3.96 3.96 3.96 3.96 3.96	0.03 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.02 0.04 0.02 0.03	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	199 199 199 99 100 99 99 100 50 50 51 49 51 50 50 51	200 200 100 101 100 101 50 51 51 50 51 51 50	21.136 21.166 21.174 27.458 27.465 27.472 27.469 29.076 29.066 29.055 29.075 29.069 29.068 29.077 29.044 29.072	35.023 35.032 35.036 34.521 34.520 34.517 34.518 34.393 34.394 34.394 34.394 34.394 34.394 34.394 34.394 34.394 34.394	3.50 3.52 3.52 4.03 4.03 4.03 4.03 3.93 3.94 3.93 3.93 3.93 3.93 3.93 3.9	0.04 0.04 0.06 0.06 0.06 0.06 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03

KH-05-	1_Leg4	St.	164	Depth	44	74m	KH-05-	1_Leg4	St.	168	Depth	454	16m
Date:		2005.7.10		Lat.	13	59.61N	Date:		2005.7.10		Lat.	15	00.44N
Time:		09:57		Long.	141	46.92E	Time:		20:25		Long.	141	47.37E
CTD	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
	AY)	db	°C	(psu)	ml·l ⁻¹			AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.836	34.275	3.84	0.02			2	29.729	34.312	3.81	0.02
		3	29.837	34.276	3.84	0.01			3	29.729	34.312	3.81	0.02
		4	29.842	34.275	3.84	0.02			4	29.729	34.312	3.82	0.02
		5	29.832	34.275	3.83	0.02			5	29.728	34.312	3.81	0.02
		10	29.760	34.271	3.83	0.02			10	29.727	34.313	3.82	0.02
		20	29.629	34.265	3.85	0.02			20	29.731	34.316	3.82	0.02
		30	29.623	34.295	3.86	0.02			30	29.685	34.359	3.83	0.02
		40	29.606	34.342	3.88	0.03			40	29.659	34.387	3.85	0.02
		50	29.547	34.364	3.89	0.04			50	29.451	34.618	3.87	0.03
		75	28.564	34.408	4.06	0.06			75	28.403	34.621	4.04	0.04
		100	27.986	34.468	4.07	0.08			100	27.346	34.735	4.07	0.06
		125	26.809	34.733	3.99	0.14			125	26.114	34.906	3.94	0.10
		150	25.154	34.998	3.76	0.11			150	24.920	35.025	3.81	0.11
		175	22.225	35.100	3.61	0.04			175	22.960	35.070	3.60	0.05
		200	20.123	34.999	3.67	0.02			200	21.042	35.044	3.64	0.03
		250	16.671	34.718	3.82	0.01			250	17.944	34.823	3.77	0.01
		300	14.026	34.496	3.57	0.01			300	15.731	34.633	3.82	0.01
		400	10.217	34.301	2.63	0.02			400	10.858	34.307	3.01	0.02
		500	7.902	34.352	1.60	0.02			500	8.128	34.314	1.76	0.02
		502	7.894	34.353	N.D	0.02			503	8.054	34.307	1.74	0.02
	·							/· \					
CTD dat		_	_	2.3			CTD dat				100 4		
BTL	Depth	Pres.	Temp.	Sal	DO1	FLC	BTL	Depth	Pres.	Temp.	Sal	DO L I=1	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.8	***	***	***	Sur.	0	***	29.7	***	***	***
1	499 500	503	7.878	34.355	1.58	0.02	1	497	500	8.133	34.313	1.74	0.02
3	396	503	7.876	34.355	1.58	0.02	2	497 397	500	8.128	34.313	1.74	0.02
4	297	399	10.028	34.287	2.56	0.02	3	298	400	10.616	34.299	3.83	0.01
5	297	299	13.621	34.466	3.54	0.01	5	298	300	15.759	34.630	con account	0.01
6	197	299 199	13.800	34.477	3.55	0.01	6	198	300 199	15.761 20.574	34.632 35.021	3.84	0.01
7	198	199	20.077	34.989	3.70	0.02	7	198	200	20.621	35.019	3.66	0.02
8	198	199	20.077	34.990	3.70	0.02	8	198	200	20.570	35.020	3.66	0.02
9	99	100	27.768	34.501	4.05	0.08	9	100	101	27.470	34.703	4.09	0.06
10	99	100	27.764	34.506	4.06	0.08	10	100	100	27.504	34.699	4.09	0.06
11	99	100	27.766	34.507	4.06	0.07	11	99	100	27.534	34.694	4.09	0.06
12	100	100	27.770	34.507	4.06	0.07	12	99	100	27.535	34.694	4.09	0.06
13	100	100	27.763	34.509	4.06	0.07	13	99	100	27.545	34.693	4.09	0.05
14	49	49	29.522	34.369	3.89	0.04	14	50	50	29.496	34.556	3.88	0.03
15	49	50	29.523	34.369	3.89	0.04	15	50	50	29.469	34.553	3.87	0.03
16	50	50	29.521	34.370	3.89	0.03	16	50	50	29.543	34.545	3.87	0.03
17	50	50	29.524	34.369	3.89	0.04	17	50	50	29.494	34.553	3.88	0.03
18	50	50	29.527	34.368	3.89	0.04	18	50	50	29.504	34.550	3.86	0.03
19	50	50	29.524	34.370	3.88	0.04	19	50	50	29.529	34.548	3.86	0.03
20	50	50	29.522	34.370	3.89	0.04	20	50	50	29.478	34.554	3.88	0.03
21	50	50	29.522	34.370	3.89	0.04	21	50	50	29.472	34.557	3.87	0.03
22	50	50	29.517	34.372	3.88	0.04	22	50	50	29.476	34.554	3.87	0.03
	EO	50	29.523	34.370	3.88	0.04	23	50	50	29.486	34.554	3.87	0.03
23	50	- 00	20.020	011070	0.00	0.04	20		- 00	23.700	04.004	0.07	0,00

RH-05-	1 Leg4	St.	174	Depth	490	01m	KH-05-	1 Leg4	St.	175	Depth	373	38m
Date:		005.7.12		Lat.	11	42.15N	Date:		2005.7.12		Lat.	13	01.15N
Time:		06:28		Long.	138	06.43E	Time:		20:33		Long.	141	02.20E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(LA	AY)	db	°C	(psu)	ml·l ⁻¹		(L/	AY)	db	°C	(psu)	ml·l ⁻¹	
1		1	30.164	34.226	3.80	0.01			2	29.793	34.424	3.81	0.02
1		2	30.190	34.228	3.81	0.01			3	29.793	34.424	3.81	0.02
1		3	30.170	34.226	3.81	0.01			4	29.792	34.424	3.80	0.01
		4	30.161	34.225	3.81	0.01			5	29.794	34.424	3.80	0.01
		5	29.972	34.211	3.82	0.01			10	29.797	34.423	3.82	0.02
		10	29.781	34.199	3.83	0.01			20	29.726	34.420	3.84	0.02
1		20	29.680	34.239	3.83	0.02			30	29.657	34.417	3.84	0.02
		30	29.531	34.292	3.85	0.02			40	29.538	34.414	3.86	0.02
		40	29.371	34.294	3.88	0.02			50	29.282	34.419	3.90	0.02
1		50	28.946	34.347	3.98	0.02			75	28.293	34.394	4.00	0.03
		75	28.220	34.417	4.02	0.03			100	27.798	34.445	3.98	0.04
1		100	27.421	34.582	4.01	0.06			125	26.797	34.775	4.00	0.11
		125	26.144	34.855	3.92	0.17			150	25.494	34.912	3.85	0.12
		150	24.304	35.025	3.73	0.12			175	23.529	35.073	3.67	0.07
		175	22.210	34.998	3.53	0.06			200	21.600	35.030	3.47	0.05
		200	18.604	34.878	3.66	0.02			250	17.245	34.751	3.17	0.03
		250	15.260	34.586	3.83	0.01			300	14.110	34.520	3.22	0.02
		300	12.101	34.411	3.03	0.01			400	9.440	34.259	2.57	0.02
		400	8.544	34.412	1.63	0.02			500	7.854	34.446	1.49	0.02
		500	6.879	34.367	1.46	0.02			501	7.807	34.443	1.50	0.02
		502	6.870	34.367	1.45	0.02			150000				
CTD dat	a (BTL)						CTD dat	a (BTL)					
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	29.7	***	***	***	Sur.	0	***	29.8	***	***	***
1	0						1	498	502	7.694	34.430	1.52	0.02
2	0						2	498	501	7.699	34.429	1.53	0.02
3	0						3	397	400	9.431	34.262	2.52	0.02
4	0						4	298	300	13.554	34.471	3.42	0.01
5	0			111	; —		5	298	300	13.584	34.476	3.42	0.01
6	0		_ ,	十十			6	198	199	21.697	35.038	3.52	0.04
7	0			151	_		7	198	199	21.882	35.042	3.52	0.04
8	0		_	フ レ	. —		8	198	200	21.887	35.045	3.52	0.04
9	0			ハ	_		9	99	100	27.744	34.449	4.00	0.04
10	0			`			10	99	100	27.793	34.439	4.00	0.03
11	0			4			11	99	100	27.772	34.447	4.00	0.03
12	0			卅			12	99	100	27.781	34.445	3.99	0.03
13	0		_ '				13	99	100	27.773	34.447	3.99	0.03
14	0						14	49	49	29.245	34.416	3.90	0.02
15	0						15	49	50	29.256	34.415	3.89	0.02
16	0						16	49	50	29.262	34.416	3.90	0.02
17	0						17	49	49	29.269	34.417	3.89	0.03
18	0						18	49	49	29.249	34.418	3.90	0.02
19	0						19	49	49	29.270	34.416	3.89	0.02
20	0						20	49	49	29.274	34.417	3.89	0.02
21	0		_ ı	1			21	49	49	29.275	34.417	3.89	0.02
22	0						22	49	50	29.281	34.417	3.89	0.02
23	0						23	49	50	29.281	34.417	3.89	0.03
							24	49	49	29.284	34.417	3.89	0.02
24	0												

KH-05-	1_Leg4	St.	176	Depth	468	39m	KH-05-	1_Leg4	St.	177	Depth	479	99m
Date:	2	2005.7.12	2	Lat.	13	29.76N	Date:	2	2005.7.1	3	Lat.	14	00.05N
Time:	-	23:31		Long.	140	59.90E	Time:		03:37		Long.	140	59.89E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(L	AY)	db	°C	(psu)	ml·l ⁻¹		(L	AY)	db	°C	(psu)	ml·l ⁻¹	
		2	29.854	34.291	3.81	0.01	1		1	29.953	34.281	3.76	0.02
		3	29.856	34.291	3.81	0.01			2	30.049	34.278	3.86	0.01
		4	29.844	34.290	3.80	0.01			3	30.015	34.278	3.81	0.01
		5	29.831	34.287	3.80	0.01			4	29.971	34.280	3.81	0.01
		10	29.586	34.196	3.81	0.01	1		5	29.963	34.281	3.81	0.01
		20	29.625	34.263	3.82	0.02	1		10	29.916	34.286	3.82	0.01
		30	29.320	34.321	3.90	0.09			20	29.849	34.353	3.84	0.01
		40	28.763	34.417	3.97	0.02	1		30	29.843	34.410	3.85	0.02
		50	28.554	34.430	3.99	0.03			40	29.725	34,415	3.88	0.02
		75	27.788	34.458	3.99	0.04			50	29,008	34.419	4.02	0.03
		100	27.335	34.560	4.00	0.07			75	27.894	34.481	4.09	0.06
		125	26.711	34.763	3.96	0.11			100	26.973	34.735	4.01	0.10
		150	26.149	34.871	3.87	0.14			125	26.393	34.836	3.91	0.19
		175	24.352	35.061	3.68	0.06			150	25.012	35.027	3.74	0.08
		200	22.102	35.094	3.60	0.03			175	23.210	35.122	3.66	0.03
		250	17.914	34.820	3.75	0.02			200	20.942	35,049	3.63	0.02
		300	14.663	34.542	3.68	0.01			250	16.518	34.702	3.69	0.01
		400	10.245	34.294	2.74	0.01			300	14.353	34.524	3.56	0.01
		500	7.524	34.322	1.56	0.02			400	10.035	34.276	2.78	0.02
		501	7.514	34.323	1.55	0.02			500	7.829	34.311	1.67	0.02
		001	7.014	04.020	1.00	0.02			501	7.829	34.312	1.66	0.02
									- 001	7.020	04.012	1.00	0.02
CTD dat	a (BTL)						CTD dat	a (BTL)					
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹	120	No.	m	db	°C	(psu)	ml·l ⁻¹	120
Sur.	0	***	30.2	***	***	***	Sur.	0	***	30.4	***	akakek	***
1	498	502	7.508	34.325	1.54	0.02	1	497	501	7.829	34.311	1.66	0.02
2	498	502	7.507	34.325	1.54	0.02	2	497	501	7.832	34.310	1.66	0.02
3	396	399	10.042	34.291	2.60	0.01	3	398	400	9.928	34.271	2.67	0.01
4	298	299	14.478	34.517	3.69	0.01	4	298	300	13.698	34.474	3.51	0.01
5	298	300	14.514	34.529	3.70	0.01	5	298	300	13.846	34.480	3.51	0.01
6	198	199	22.093	35.087	3.62	0.03	6	199	201	20.922	35.039	3.66	0.02
7	198	200	22.089	35.087	3.62	0.02	7	199	200	20.944	35.044	3.65	0.02
8	198	200	22.078	35.087	3.62	0.02	8	199	200	20.941	35.046	3.65	0.02
9	99	100	27.320	34.559	4.01	0.06	9	99	100	26.895	34.744	4.01	0.10
10	99	100	27.319	34.559	4.01	0.06	10	99	100	26.897	34.744	4.00	0.10
11	100	100	27.318	34.560	4.01	0.06	11	99	100	26.929	34.739	4.01	0.10
12	100	100	27.311	34.561	4.01	0.06	12	99	100	26.980	34.725	4.03	0.09
13	100	100	27.317		4.00	0.06	13	99	100	26.975		4.02	0.09
14	50	50	28.530	34.424	3.98	0.03	14	50	50	29.121	34.420	4.02	0.03
15	50	50	28.529	34.425	3.98	0.03	15	50	50	29.181	34.419	4.00	0.03
16	50	50	28.535	34.425	3.98	0.03	16	50	50	29.187	34.419	4.00	0.03
17	50	50	28.529	34.425	3.98	0.03	17	50	50	29.169	34.419	4.00	0.03
18	50	50	28.528	34.426	3.97	0.03	18	50	50	29.190	34.420	3.99	0.03
19	50	50	28.527	34.426	3.98	0.03	19	50	50	29.143	34.421	4.00	0.03
20	50	50	28.526	34.426	3.97	0.03	20	50	50	29.176	34.421	3.98	0.03
21	50	50	28.528	34.426	3.98	0.03	21	50	50	29.192	34.420	3.99	0.03
22	50	50	28.532	34.426	3.98	0.03	22	50	50	29.191	34.422	3.98	0.03
23	50	50	28.533	34.426	3.97	0.03	23	50	50	29.178	34.421	3.99	0.03
24	50	50	28.533	34.427	3.97	0.03	24	50	50	29.178	34.421	3.99	0.03
4	-00	00	20.000	JT.74.1	0.37	0.00		50	00	20.170	07.741	0.00	0,00

KH-05-	1 Leg4	St.	178	Depth	480	60m	KH-05-	1 Leg4	St.	179	Depth	473	32m
Date:		2005.7.1		Lat.	14	30.20N	Date:		005.7.1		Lat.	15	00.06N
Time:		07:43		Long.	140	59.86E	Time:		11:45		Long.	140	59.87E
CTD	data	Pres.	Temp.	Sal	DO	FLC	CTD	data	Pres.	Temp.	Sal	DO	FLC
(LA	AY)	db	°C	(psu)	ml·l ⁻¹		(L	AY)	db	°C	(psu)	ml·l ⁻¹	
1		1	30.263	34.470	3.80	0.02			1	30.201	34.385	3.84	0.02
I		2	30.228	34.475	3.80	0.02			2	30.209	34.383	3.84	0.02
		3	30.181	34.478	3.80	0.02			3	30.219	34.382	3.84	0.02
l		4	30.171	34.480	3.80	0.02			4	30.215	34.382	3.84	0.02
l .		5	30.165	34.480	3.81	0.02			5	30.218	34.382	3.84	0.02
		10	30.079	34.473	3.81	0.02			10	30.000	34.403	3.85	0.02
		20	29.729	34.570	3.84	0.02			20	29.935	34.450	3.86	0.02
		30	29.639	34.564	3.85	0.02			30	29.824	34.457	3.87	0.03
		40	29.581	34.598	3.87	0.02			40	29.711	34.514	3.91	0.03
		50	29.436	34.597	3.90	0.03			50	29.556	34.594	3.93	0.04
		75	27.933	34.700	4.09	0.05			75	28.049	34.611	4.12	0.05
		100	26.486	34.790	4.02	0.12	4		100	26.987	34.740	4.06	0.08
		125	25.479	34.985	3.88	0.15			125	26.066	34.889	3.96	0.14
		150	23.879	35.089	3.73	0.05			150	25.087	35.024	3.87	0.16
		175	22.198	35.099	3.65	0.03			175	22.407	35.111	3.66	0.04
		200	20.298	35.009	3.66	0.02			200	20.472	35.028	3.69	0.02
		250	16.725	34.712	3.46	0.01			250	17.666	34.804	3.92	0.01
		300	13.608	34.471	3.32	0.01			300	14.872	34.557	3.76	0.01
		400	9.396	34.259	2.59	0.02			400	10.285	34.307	2.75	0.02
		500	7.685	34.389	1.51	0.02			500	7.999	34.335	1.68	0.02
		501	7.664	34.392	1.50	0.02			502	7.988	34.335	1.68	0.02
CTD dat	a (BTL)						CTD dat	a (BTL)					
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	30.3	***	***	***	Sur.	0	***	30.4	***	***	***
1	498	501	7.631	34.393	1.49	0.02	1	498	502	7.996	34.334	1.67	0.02
2	498	502	7.629	34.393	1.49	0.02	2	397	399	10.347	34.306	2.75	0.02
3	397	400	9.105	34.262	2.38	0.02	3	397	400	10.343	34.306	2.75	0.02
4	298	300	13.026	34.424	3.30	0.01	4	297	299	15.023	34.565	3.80	0.01
5	299	301	12.933	34.420	3.30	0.01	5	298	300	15.193	34.573	3.81	0.01
6	199	200	20.436	35.016	3.68	0.01	6	197	199	20.648	35.031	3.69	0.02
7	199	201	20.370	35.012	3.68	0.01	7	198	199	20.625	35.032	3.69	0.02
8	200	201	20.377	35.012	3.68	0.01	8	197	199	20.652	35.034	3.69	0.02
9	99	100	26.405	34.824	3.99	0.10	9	99	99	27.163	34.748	4.11	0.07
10	99	100	26.405	34.825	4.00	0.10	10	99	100	27.155	34.753	4.11	0.07
11	99	100	26.410	34.825	3.99	0.10	11	99	99	27.182	34.750	4.11	0.07
12	99	100	26.410	34.825	3.99	0.10	12	99	99	27.207	34.736	4.11	0.07
13	99	99	26.398	34.828	3.99	0.10	13	N.D	N.D	N.D	N.D	N.D	N.D
14	50	50	29.111	34.629	3.97	0.03	14	49	49	29.570	34.542	3.95	0.03
15	49	50	29.124	34.630	3.97	0.04	15	49	49	29.572	34.542	3.95	0.03
16	49	50	29.107	34.629	3.97	0.03	16	49	49	29.575	34.542	3.95	0.03
17	50	50	29.086	34.630	3.97	0.04	17	49	50	29.575	34.542	3.95	0.03
18	49	50	29.110	34.630	3.97	0.03	18	49	49	29.575	34.543	3.95	0.04
19	50	50	29.097	34.630	3.97	0.04	19	49	49	29.576	34.542	3.95	0.04
20	50	50	29.091	34.630	3.96	0.04	20	49	49	29.572	34.543	3.95	0.04
21	50	50	29.097	34.630	3.96	0.04	21	49	49	29.574	34.543	3.96	0.04
22	50	50	29.088	34.630	3.97	0.03	22	49	49	29.574	34.543	3.95	0.04
23	49	50	29.092	34.630	3.97	0.04	23	49	49	29.573	34.544	3.95	0.04
24	50	50	29.097	34.630	3.97	0.04	24	49	49	29.573	34.544	3.95	0.03
			20.007	5500	5.57	0.07				20.070	3344	5.50	5.50

KH-05-	1_Leg4	St.	180	Depth	470)9m	KH-05-	1_Leg4	St.	181	Depth	474	13m
Date:		005.7.13		Lat.	16	02.10N			005.7.14		Lat.	16	59.82N
Time:		19:14		Long.	140	59.27E	Time:		00:03		Long.	141	00.18E
	data	Pres.	Temp.	Sal	DO	FLC		data	Pres.	Temp.	Sal	DO	FLC
(L/	AY)	db	°C	(psu)	ml·l ⁻¹		(LA	AY)	db	°C	(psu)	ml·l ⁻¹	
		1	30.263	34.450	3.82	0.03			1	30.268	34.401	3.81	0.05
		2	30.291	34.452	3.82	0.02			2	30.271	34.401	3.81	0.06
		3	30.283	34.452	3.81	0.02			3	30.260	34.401	3.82	0.06
		4	30.269	34.450	3.80	0.02			4	30.256	34.399	3.82	0.08
		5	30.238	34.450	3.81	0.02			5	30.249	34.400	3.82	0.07
		10	30.033	34.439	3.82	0.02			10	30.147	34.386	3.85	0.04
		20	29.865	34.441	3.85	0.03			20 30	30.035 29.955	34.386 34.375	3.89	0.09
		30 40	29.644	34.433 34.428	3.89	0.03			40	29.837	34.366	3.96	0.13
		50	29.073	34.428	4.01	0.04			50	29.756	34.368	3.94	0.15
		75	27.895	34.445	4.04	0.03			75	29.329	34.372	3.95	0.08
		100	27.417	34.592	3.97	0.14			100	28.024	34.401	4.01	0.10
		125	26.620	34.743	3.87	0.13			125	27.106	34.633	3.95	0.13
		150	25.769	34.927	3.80	0.05			150	26.256	34.806	3.84	0.08
l		175	24.013	35.089	3.66	0.03			175	25.216	34.954	3.74	0.04
		200	22.308	35.119	3.60	0.02			200	23.761	35.080	3.63	0.02
		250	18.096	34.839	3.88	0.02			250	19.426	34.889	3.28	0.02
		300	16.508	34.703	3.96	0.01			300	15.382	34.597	3.29	0.02
		400	11.342	34.357	2.79	0.02			400	11.536	34.371	2.89	0.01
		500	8.959	34.367	1.88	0.02			500	8.577	34.213	2.49	0.02
		501	8.950	34.368	1.86	0.02			501	8.504	34.215	2.46	0.02
							OTD data (BTL)						
CTD dat	a (BTL)						CTD dat						
BTL	Depth	Pres.	Temp.	Sal	DO	FLC	BTL	Depth	Pres.	Temp.	Sal	DO	FLC
No.	m	db	°C	(psu)	ml·l ⁻¹		No.	m	db	°C	(psu)	ml·l ⁻¹	
Sur.	0	***	30.5	***	***	***	Sur.	0	***	30.4	***	. ***	***
1	500	503	8.924	34.373	1.81	0.02	1	498	502	8.486	34.215	2.42	0.02
2	396	399	11.319	34.352	2.77	0.01	2	397					0
3	397 297		11 014	04.050	077				399	11.539	34.369	2.81	0.02
5		399	11.314	34.353	2.77	0.02	3	397	400	11.545	34.371	2.81	0.01
ال ا		299	16.305	34.674	3.95	0.02 0.01	3	397 298	400 300	11.545 15.325	34.371 34.583	2.81 3.38	0.01 0.01
	298	299 299	16.305 16.304	34.674 34.684	3.95 3.96	0.02 0.01 0.01	3 4 5	397 298 298	400 300 300	11.545 15.325 15.308	34.371 34.583 34.588	2.81 3.38 3.34	0.01 0.01 0.01
6		299 299 199	16.305 16.304 21.601	34.674 34.684 35.075	3.95 3.96 3.60	0.02 0.01 0.01 0.02	3 4 5 6	397 298	400 300	11.545 15.325 15.308 23.175	34.371 34.583	2.81 3.38	0.01 0.01
	298 198	299 299	16.305 16.304	34.674 34.684	3.95 3.96	0.02 0.01 0.01	3 4 5	397 298 298 198	400 300 300 200	11.545 15.325 15.308	34.371 34.583 34.588 35.061	2.81 3.38 3.34 3.59	0.01 0.01 0.01 0.02
6 7	298 198 198	299 299 199 200	16.305 16.304 21.601 22.087	34.674 34.684 35.075 35.098	3.95 3.96 3.60 3.60	0.02 0.01 0.01 0.02 0.02	3 4 5 6 7	397 298 298 198	400 300 300 200 200	11.545 15.325 15.308 23.175 23.704	34.371 34.583 34.588 35.061 35.074	2.81 3.38 3.34 3.59 3.63	0.01 0.01 0.01 0.02 0.02
6 7 8	298 198 198 198	299 299 199 200 199	16.305 16.304 21.601 22.087 22.009	34.674 34.684 35.075 35.098 35.105	3.95 3.96 3.60 3.60 3.60	0.02 0.01 0.01 0.02 0.02 0.02	3 4 5 6 7 8	397 298 298 198 198 199	400 300 300 200 200 200	11.545 15.325 15.308 23.175 23.704 23.666	34.371 34.583 34.588 35.061 35.074 35.075	2.81 3.38 3.34 3.59 3.63 3.63	0.01 0.01 0.01 0.02 0.02 0.02
6 7 8 9	298 198 198 198 99	299 299 199 200 199 99	16.305 16.304 21.601 22.087 22.009 27.491	34.674 34.684 35.075 35.098 35.105 34.580	3.95 3.96 3.60 3.60 3.60 3.98	0.02 0.01 0.01 0.02 0.02 0.02 0.12	3 4 5 6 7 8 9	397 298 298 198 198 199	400 300 300 200 200 200 100	11.545 15.325 15.308 23.175 23.704 23.666 27.737	34.371 34.583 34.588 35.061 35.074 35.075 34.477	2.81 3.38 3.34 3.59 3.63 3.63 4.05	0.01 0.01 0.01 0.02 0.02 0.02 0.10
6 7 8 9	298 198 198 198 198 99	299 299 199 200 199 99	16.305 16.304 21.601 22.087 22.009 27.491 27.504	34.674 34.684 35.075 35.098 35.105 34.580	3.95 3.96 3.60 3.60 3.98 3.99	0.02 0.01 0.01 0.02 0.02 0.02 0.12	3 4 5 6 7 8 9	397 298 298 198 198 199 99	400 300 300 200 200 200 100	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415	2.81 3.38 3.34 3.59 3.63 3.63 4.05	0.01 0.01 0.01 0.02 0.02 0.02 0.10 0.10
6 7 8 9 10	298 198 198 198 99 99	299 299 199 200 199 99 100	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512	34.674 34.684 35.075 35.098 35.105 34.580 34.580	3.95 3.96 3.60 3.60 3.98 3.99 3.98	0.02 0.01 0.01 0.02 0.02 0.02 0.12 0.13	3 4 5 6 7 8 9 10	397 298 298 198 198 199 99	400 300 300 200 200 200 100 100	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415	2.81 3.38 3.34 3.59 3.63 3.63 4.05 4.04	0.01 0.01 0.02 0.02 0.02 0.10 0.10
6 7 8 9 10 11	298 198 198 198 99 99	299 299 199 200 199 99 100 100	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580	3.95 3.96 3.60 3.60 3.98 3.99 3.98 3.99	0.02 0.01 0.01 0.02 0.02 0.02 0.12 0.12 0.13 0.12	3 4 5 6 7 8 9 10 11	397 298 298 198 198 199 99 99	400 300 300 200 200 200 100 100 100	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.418	2.81 3.38 3.34 3.59 3.63 3.63 4.05 4.04 4.04	0.01 0.01 0.02 0.02 0.02 0.10 0.10 0.10
6 7 8 9 10 11 12	298 198 198 198 99 99 99	299 299 199 200 199 99 100 100 100	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580	3.95 3.96 3.60 3.60 3.98 3.99 3.98 3.99	0.02 0.01 0.01 0.02 0.02 0.02 0.12 0.13 0.13	3 4 5 6 7 8 9 10 11 12	397 298 298 198 198 199 99 99 99	400 300 300 200 200 200 100 100 100	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 27.932	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.421 34.430	2.81 3.38 3.34 3.59 3.63 3.63 4.05 4.04 4.04 4.04	0.01 0.01 0.02 0.02 0.02 0.10 0.10 0.10 0.10
6 7 8 9 10 11 12 13	298 198 198 198 99 99 99 99	299 299 199 200 199 99 100 100 100 49	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508 27.521 28.935	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580 34.580 34.379	3.95 3.96 3.60 3.60 3.98 3.99 3.98 3.99 3.99 4.04	0.02 0.01 0.01 0.02 0.02 0.12 0.12 0.13 0.12 0.04	3 4 5 6 7 8 9 10 11 12 13	397 298 298 198 198 199 99 99 99	400 300 300 200 200 200 100 100 100 100 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 27.932 29.748	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.418 34.421 34.430	2.81 3.38 3.34 3.59 3.63 3.63 4.05 4.04 4.04 4.04 4.04 3.93	0.01 0.01 0.02 0.02 0.02 0.10 0.10 0.10 0.10 0.14
6 7 8 9 10 11 12 13 14	298 198 198 198 99 99 99 99 99 49	299 299 199 200 199 99 100 100 100 49 50	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508 27.521 28.935 29.035	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580 34.379 34.384	3.95 3.96 3.60 3.60 3.98 3.99 3.98 3.99 3.99 4.04	0.02 0.01 0.01 0.02 0.02 0.12 0.13 0.12 0.13 0.04	3 4 5 6 7 8 9 10 11 12 13 14 15 16	397 298 298 198 198 199 99 99 99 99 49 49 49	400 300 200 200 200 100 100 100 100 49 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 27.932 29.748 29.773	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.418 34.421 34.430 34.365 34.365	2.81 3.38 3.34 3.59 3.63 4.05 4.04 4.04 4.04 4.04 3.93 3.94	0.01 0.01 0.02 0.02 0.02 0.10 0.10 0.10 0.10 0.10 0.14 0.18
6 7 8 9 10 11 12 13 14 15	298 198 198 198 99 99 99 99 49 49	299 299 199 200 199 99 100 100 100 49 50	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508 27.521 28.935 29.035	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580 34.384 34.384	3.95 3.96 3.60 3.60 3.98 3.99 3.99 3.99 4.04 4.00 4.01	0.02 0.01 0.02 0.02 0.02 0.12 0.12 0.13 0.12 0.13 0.04 0.04	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	397 298 298 198 198 199 99 99 99 99 49 49 49 48 49	400 300 200 200 200 100 100 100 100 49 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 27.932 29.748 29.773 29.766	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.421 34.430 34.365 34.365	2.81 3.38 3.34 3.59 3.63 4.05 4.04 4.04 4.04 4.04 3.93 3.94 3.95	0.01 0.01 0.02 0.02 0.02 0.10 0.10 0.10 0.10 0.10 0.11 0.14 0.18
6 7 8 9 10 11 12 13 14 15 16 17 18	298 198 198 198 99 99 99 99 49 49 50 49	299 299 199 200 199 99 100 100 100 49 50 50	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508 27.521 28.935 29.035	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580 34.379 34.384 34.384	3.95 3.96 3.60 3.60 3.98 3.99 3.99 3.99 4.04 4.00 4.01	0.02 0.01 0.01 0.02 0.02 0.12 0.12 0.13 0.12 0.13 0.04 0.04	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	397 298 298 198 198 199 99 99 99 99 49 49 49 49	400 300 300 200 200 100 100 100 100 49 49 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 29.748 29.773 29.766 29.761 29.772	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.421 34.430 34.365 34.366 34.366	2.81 3.38 3.34 3.59 3.63 4.05 4.04 4.04 4.04 3.93 3.94 3.95	0.01 0.01 0.02 0.02 0.02 0.10 0.10 0.10
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	298 198 198 198 99 99 99 99 49 49 50 49 50	299 299 199 200 199 99 100 100 100 49 50 50 50	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508 27.521 28.935 29.035 29.035 29.036 29.060 29.060	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.379 34.384 34.384 34.385 34.384 34.386	3.95 3.96 3.60 3.60 3.98 3.99 3.98 3.99 4.04 4.00 4.01 4.01 4.00 4.00 4.00	0.02 0.01 0.02 0.02 0.02 0.12 0.13 0.12 0.13 0.04 0.04 0.04 0.04 0.04	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	397 298 298 198 198 199 99 99 99 99 49 49 49 49 49	400 300 200 200 200 100 100 100 100 49 49 49 49 49 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 29.778 29.778 29.766 29.761 29.772 29.772	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.421 34.430 34.365 34.366 34.366 34.366 34.366	2.81 3.38 3.34 3.59 3.63 4.05 4.04 4.04 4.04 4.04 3.93 3.95 3.95 3.95 3.95	0.01 0.01 0.01 0.02 0.02 0.02 0.10 0.10
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	298 198 198 198 99 99 99 99 49 49 50 49 50 50	299 299 199 200 199 99 100 100 100 49 50 50 50 50	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508 27.521 28.935 29.035 29.035 29.060 29.060 29.063	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580 34.380 34.384 34.384 34.385 34.384 34.386 34.386	3.95 3.96 3.60 3.60 3.98 3.99 3.99 3.99 4.04 4.00 4.01 4.01 4.00 4.00 4.00	0.02 0.01 0.02 0.02 0.02 0.12 0.13 0.12 0.13 0.04 0.04 0.04 0.04 0.04	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	397 298 298 198 198 199 99 99 99 49 49 49 49 49 49	400 300 300 200 200 100 100 100 49 49 49 49 49 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 29.748 29.773 29.766 29.761 29.772 29.772 29.775 29.776	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.421 34.430 34.365 34.366 34.366 34.366 34.366 34.366	2.81 3.38 3.34 3.59 3.63 4.05 4.04 4.04 4.04 4.04 3.93 3.95 3.95 3.95 3.95	0.01 0.01 0.01 0.02 0.02 0.02 0.10 0.10
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	298 198 198 198 198 99 99 99 99 49 49 50 50 50	299 299 199 200 199 99 100 100 100 49 50 50 50 50 50	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.521 28.935 29.035 29.035 29.026 29.060 29.060 29.061	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580 34.384 34.384 34.385 34.384 34.386 34.386 34.386	3.95 3.96 3.60 3.60 3.98 3.99 3.99 4.04 4.00 4.01 4.01 4.00 4.00 4.00 4.00 4.00	0.02 0.01 0.01 0.02 0.02 0.12 0.13 0.12 0.13 0.04 0.04 0.04 0.04 0.04 0.04 0.04	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	397 298 298 198 198 199 99 99 99 49 49 49 49 49 49	400 300 300 200 200 100 100 100 100 49 49 49 49 49 49 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 29.778 29.776 29.761 29.772 29.772 29.775 29.776	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.421 34.430 34.365 34.366 34.366 34.366 34.366 34.366 34.366	2.81 3.38 3.34 3.59 3.63 4.05 4.04 4.04 4.04 4.04 3.93 3.95 3.95 3.95 3.95 3.95	0.01 0.01 0.01 0.02 0.02 0.02 0.10 0.10
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	298 198 198 198 99 99 99 99 49 49 50 49 50 50	299 299 199 200 199 99 100 100 100 49 50 50 50 50	16.305 16.304 21.601 22.087 22.009 27.491 27.504 27.512 27.508 27.521 28.935 29.035 29.035 29.060 29.060 29.063	34.674 34.684 35.075 35.098 35.105 34.580 34.580 34.580 34.580 34.380 34.384 34.384 34.385 34.384 34.386 34.386	3.95 3.96 3.60 3.60 3.98 3.99 3.99 3.99 4.04 4.00 4.01 4.01 4.00 4.00 4.00	0.02 0.01 0.02 0.02 0.02 0.12 0.13 0.12 0.13 0.04 0.04 0.04 0.04 0.04	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	397 298 298 198 198 199 99 99 99 49 49 49 49 49 49	400 300 300 200 200 100 100 100 49 49 49 49 49 49	11.545 15.325 15.308 23.175 23.704 23.666 27.737 27.983 27.971 27.978 29.748 29.773 29.766 29.761 29.772 29.772 29.775 29.776	34.371 34.583 34.588 35.061 35.074 35.075 34.477 34.415 34.421 34.430 34.365 34.366 34.366 34.366 34.366 34.366	2.81 3.38 3.34 3.59 3.63 4.05 4.04 4.04 4.04 4.04 3.93 3.95 3.95 3.95 3.95	0.01 0.01 0.01 0.02 0.02 0.02 0.10 0.10

Working Log 29.May.05 10:10 25 27.710N 128 25.529E 5559m SUNSET 20:30 23 42.799N 130 47.174E 5146m **SUNRISE** 30.May.05 09:49 21 33.983N 133 38.670E 5432m SUNSET PUT CLOCKS AN HOUR AHEAD IN150-00E 12:02 21 11.157N 134 08.673E 5756m 20:16 19 46.477N 135 59.601E 4077m SUNRISE 31.May.05 ST-1 01:38 18 59.412N 137 00.425E 4852m 3M ORI NET STARTED ST-1 01:58 18 58.643N 137 00.742E 4655m 3M ORI NET DEEPEST ST-1 02:49 18 57.639N 137 01.215E 4702m 3M ORI NET FINISHED ST-2 05:03 18 30.193N 136 59.910E 4882m 3M ORI NET STARTED ST-2 05:37 18 29.399N 137 00.128E 4932m 3M ORI NET DEEPEST ST-2 06:12 18 29.104N 137 00.113E 4943m 3M ORI NET FINISHED ST-2 137 00.222E 4935m CTD STARTED 06:44 18 29.353N ST-2 07:08 18 29.571N 137 00.260E 4925m CTD DEEPEST ST-2 07:30 18 29.796N 137 00.192E 4903m CTD FINISHED 09:24 18 05.634N 136 59.993E 4884m SUNSET ST-3 09:59 18 00.035N 136 59.947E 4724m CTD STARTED ST-3 10:19 18 00.074N 136 59.971E 4713m CTD DEEPEST 10:34 18 00.121N 136 59.865E 4733m ST-3 CTD FINISHED ST-3 10:40 18 00.083N 136 59.793E 4805m 3M ORI NET STARTED ST-3 11:12 17 58.991N 136 59.538E 4971m 3M ORI NET DEEPEST ST-3 11:57 17 58.225N 136 59.032E 4748m 3M ORI NET FINISHED ST-4 CTD STARTED 14:08 17 29.909N 136 59.797E 4826m ST-4 14:30 17 30.012N 136 59.521E 4850m CTD DEEPEST 136 59.477E ST-4 14:43 17 30.066N 4855m CTD FINISHED ST-4 14:50 17 30.096N 136 59.398E 4905m 3M ORI NET STARTED ST-4 3M ORI NET DEEPEST ST-4 16:12 17 30.415N 137 01.368E 4594m 3M ORI NET FINISHED ST-5 18:40 16 59.996N 136 59.948E 4700m 3M ORI NET STARTED ST-5 19:15 17 00.022N 137 01.127E 4954m 3M ORI NET DEEPEST ST-5 20:11 17 00.280N 137 02.445E 5008m 3M ORI NET FINISHED 20:17 17 00.302N 137 02.502E 5005m SUNRISE ST-5 20:21 17 00.330N 137 02.523E 4995m CTD STARTED ST-5 20:43 17 00.414N 137 02.509E 5001m CTD DEEPEST ST-5 21:03 17 00.474N 137 02.374E 5007m CTD FINISHED ST-6 23:27 16 30.003N 136 59.800E 5510m CTD STARTED ST-6 23:46 16 30.136N 136 59.695E 5512m CTD DEEPEST ST-6 23:58 16 30.218N 136 59.635E 5514m CTD FINISHED 1.Jun.05 ST-6 00:10 16 30.279N 136 59.718E 5513m 3M ORI NET STARTED ST-6 00:34 16 30.281N 137 00.477E 5515m 3M ORI NET DEEPEST

3M ORI NET FINISHED

01:11 16 30.470N 137 00.964E 5527m

ST-6

ST-7	03:36 16 00.129N	136 59.737E	5154m	CTD STARTED
ST-7				CTD DEEPEST
ST-7	03:59 16 00.252N	136 59.485E	5122m	CTD FINISHED
ST-7	06:58 15 30.369N	136 59.848E	5196m	CTD STARTED
ST-7	07:27 15 30.623N	136 59.785E	5198m	CTD DEEPEST
ST-7	07:49 15 30.717N	136 59.671E	5196m	CTD FINISHED
	09:18 15 12.194N	136 59.941E	4885m	SUNSET
ST-8	12:16 14 30.264N	136 59.937E	4410m	CTD STARTED
ST-8	12:33 14 30.527N	136 59.890E	4403m	CTD DEEPEST
ST-8	12:53 14 30.774N	136 59.853E	4370m	CTD FINISHED
ST-8	12:59 14 30.920N	136 59.887E	4366m	3M ORI NET STARTED
ST-8	13:38 14 32.453N	137 01.216E	4425m	3M ORI NET DEEPEST
ST-8	14:47 14 34.467N	137 02.361E	4454m	3M ORI NET FINISHED
	20:19 15 30.403N	137 58.744E	4108m	SUNRISE
2.Jun.05				
	09:15 16 00.301N	140 01.538E	5181m	SUNSET
ST-9	09:57 15 59.892N	140 00.414E	5110m	3M ORI NET STARTED
ST-9	10:46 15 59.401N	140 01.839E	5096m	3M ORI NET DEEPEST
ST-9	11:26 15 59.354N	140 02.511E	4715m	3M ORI NET FINISHED
ST-10	17:13 14 59.769N	140 00.470E	4870m	IKMT NET STARTED
ST-10	18:00 14 58.868N	140 02.366E	4914m	IKMT NET DEEPEST
ST-10	19:14 14 57.499N	140 04.857E	4947m	IKMT NET FINISHED
	20:09 14 48.275N	140 04.123E	4574m	SUNRISE
ST-11	23:22 13 59.941N	140 00.167E	4972m	IKMT NET STARTED
ST-11	23:55 13 58.877N	140 01.215E	4932m	IKMT NET DEEPEST
3.Jun.05				
ST-11	00:44 13 57.542N	140 02.432E	4879m	IKMT NET FINISHED
ST-11	01:16 13 57.531N	140 02.225E	4883m	CTD STARTED
ST-11	01:40 13 57.450N	140 02.044E	4875m	CTD DEEPEST
ST-11	01:50 13 57.397N	140 02.038E	4873m	CTD FINISHED
	04:06 13 29.992N	139 59.834E	4823m	CTD STARTED
ST-12	04:29 13 30.100N	139 59.621E	4862m	CTD DEEPEST
ST-12	04:41 13 30.095N	139 59.562E	4863m	CTD FINISHED
ST-12	04:55 13 30.154N	139 59.345E	4827m	IKMT NET STARTED
ST-12	05:27 13 29.682N	140 00.110E	4756m	IKMT NET DEEPEST
ST-12	06:02 13 29.502N	140 00.746E	4816m	IKMT NET FINISHED
ST-13	08:17 13 00.060N	139 59.848E	4815m	CTD STARTED
ST-13	08:42 13 00.193N	139 59.686E	4818m	CTD DEEPEST
ST-13	08:56 13 00.282N	139 59.607E	4818m	CTD FINISHED
ST-13	09:07 13 00.353N	139 59.515E	4817m	IKMT NET STARTED
	09:07 13 00.353N	139 59.516E	4816m	SUNRISE
ST-13	09:46 12 59.813N	140 00.668E	4770m	IKMT NET DEEPEST
ST-13	10:46 12 59.902N	140 02.593E	4754m	IKMT NET FINISHED
ST-14	12:59 12 30.016N	139 59.807E	4146m	CTD STARTED
ST-14	13:19 12 30.029N	139 59.599E	4150m	CTD DEEPEST

ST-14	13:30 12 30.068N	139 59.527E	4154m	CTD FINISHED
ST-14	13:43 12 30.094N	139 59.362E	4165m	IKMT NET STARTED
ST-14	14:17 12 28.685N	139 59.542E	4160m	IKMT NET DEEPEST
ST-14	15:28 12 25.849N	139 59.888E	4288m	IKMT NET FINISHED
ST-15	17:20 11 59.945N	139 59.962E	3671m	IKMT NET STARTED
ST-15	17:53 11 58.670N	139 59.763E	3642m	IKMT NET DEEPEST
ST-15	18:55 11 56.658N	139 58.998E	3558m	IKMT NET FINISHED
ST-15	19:11 11 56.586N	139 58.784E	3734m	CTD STARTED
ST-15	19:32 11 56.763N	139 58.502E	3736m	CTD DEEPEST
ST-15	19:45 11 56.897N	139 58.281E	3725m	CTD FINISHED
	20:14 11 57.435N	139 54.611E	3198m	SUNRISE
ST-16	23:43 12 00.055N	139 00.001E	5694m	CTD STARTED
4.Jun.05				
ST-16	00:03 12 00.062N	138 59.801E	5784m	CTD DEEPEST
ST-16	00:21 12 00.058N	138 59.727E	5688m	CTD FINISHED
ST-16	00:34 12 00.068N	138 59.480E	5708m	3M ORI NET STARTED
ST-16				3M ORI NET DEEPEST
ST-16	01:44 12 00.489N	138 57.155E	5778m	3M ORI NET FINISHED
ST-17	04:02 12 30.063N	138 59.883E	4701m	CTD STARTED
ST-17	04:21 12 30.085N	138 59.764E	4692m	CTD DEEPEST
ST-17	04:42 12 30.050N	138 59.645E	4694m	CTD FINISHED
ST-17	04:55 12 30.124N	138 59.542E	4696m	3M ORI NET STARTED
ST-17	05:42 12 30.262N	138 57.386E	4580m	3M ORI NET DEEPEST
ST-17	06:26 12 30.595N	138 55.985E	4587m	3M ORI NET FINISHED
ST-18	08:38 13 00.165N	138 59.954E	5324m	CTD STARTED
ST-18	09:02 13 00.464N	138 59.914E	5218m	CTD DEEPEST
	09:08 13 00.507N	138 59.933E	5277m	SUNSET
ST-18	09:23 13 00.774N	138 59.878E	5181m	CTD FINISHED
ST-18	09:35 13 01.013N	138 59.820E	4857m	3M ORI NET STARTED
ST-18	10:15 13 02.615N	138 59.082E	4753m	3M ORI NET DEEPEST
ST-18	11:19 13 04.705N	138 58.073E	4517m	3M ORI NET FINISHED
ST-19	13:14 13 30.266N	138 59.984E	4311m	CTD STARTED
ST-19	13:31 13 30.522N	138 59.999E	4256m	CTD DEEPEST
ST-19	13:44 13 30.616N	139 00.012E	4267m	CTD FINISHED
ST-19	13:55 13 30.820N	139 00.000E	42 96m	3M ORI NET STARTED
ST-19	14:41 13 32.602N	139 01.067E	4642m	3M ORI NET DEEPEST
ST-19	15:45 13 34.657N	139 01.780E	3979m	3M ORI NET FINISHED
ST-20	17:34 14 00.002N	138 59.919E	5133m	3M ORI NET STARTED
ST-20	18:12 14 01.133N	139 00.390E	5176m	3M ORI NET DEEPEST
ST-20	19:02 14 02.523N	139 00.273E	5084m	3M ORI NET FINISHED
ST-20	19:17 14 02.663N	139 00.097E	5065m	CTD STARTED
ST-20	19:43 14 02.895N	138 59.887E	5058m	CTD DEEPEST
ST-20	20:03 14 03.013N	138 59.798E	4980m	CTD FINISHED
	20:14 14 03.124N	138 59.715E	4985m	SUNRISE
ST-21	22:07 14 30.139N	139 00.021E	5002m	CTD STARTED

ST-21	22:33 14 30.425N	139 00.032E	5016m	CTD DEEPEST
ST-21	22:49 14 30.632N	139 00.024E	4949m	CTD FINISHED
ST-21	22:59 14 30.809N	139 00.028E	5387m	3M ORI NET STARTED
ST-21	23:46 14 31.681N	139 01.565E	4902m	3M ORI NET DEEPEST
5.Jun.05				
ST-21	00:32 14 32.482N	139 02.427E	4574m	3M ORI NET FINISHED
ST-22	09:02 15 30.447N	140 59.729E	4756m	CTD STARTED
	09:04 15 30.476N	140 59.715E	4742m	SUNSET
ST-22	09:25 15 31.001N	140 59.489E	4757m	CTD DEEPEST
ST-22	09:43 15 31.187N	140 59.517E	4758m	CTD FINISHED
ST-22	09:56 15 31.509N	140 59.362E	4757m	3M ORI NET STARTED
ST-22	10:25 15 30.853N	140 58.963E	4760m	3M ORI NET DEEPEST
ST-22	11:09 15 30.397N	140 58.551E	4764m	3M ORI NET FINISHED
ST-23	13:32 15 00.277N	140 59.822E	4732m	CTD STARTED
ST-23	13:55 15 00.593N	140 59.775E	4733m	CTD DEEPEST
ST-23	14:16 15 00.834N	140 59.770E	4732m	CTD FINISHED
ST-23	14:26 15 01.021N	140 59.777E	4732m	3M ORI NET STARTED
ST-23	15:05 15 01.524N	141 00.999E	4718m	3M ORI NET DEEPEST
ST-23	15:59 15 02.587N	141 02.127E	4702m	3M ORI NET FINISHED
ST-24	18:34 14 30.098N	141 00.025E	4854m	3M ORI NET STARTED
ST-24	19:07 14 29.373N	140 59.400E	4860m	3M ORI NET DEEPEST
ST-24	19:56 14 28.894N	140 58.473E	4871m	3M ORI NET FINISHED
	20:05 14 28.957N	140 58.385E	4864m	SUNRISE
ST-24	20:10 14 29.038N	140 58.370E	5030m	CTD STARTED
ST-24	20:33 14 29.277N	140 58.432E	4863m	CTD DEEPEST
ST-24	20:55 14 29.441N	140 58.529E	4862m	CTD FINISHED
ST-25	23:14 14 00.032N	141 00.003E	4797m	CTD STARTED
ST-25	23:34 14 00.089N	141 00.119E	4799m	CTD DEEPEST
ST-25	23:51 14 00.209N	141 00.196E	4800m	CTD FINISHED
6.Jun.05				
ST-25	00:02 14 00.304N	141 00.197E	4798m	3M ORI NET STARTED
ST-25	00:34 13 59.411N	141 00.822E	4813m	3M ORI NET DEEPEST
ST-25	01:13 13 58.709N	141 01.357E	4826m	3M ORI NET FINISHED
ST-26	03:23 13 30.146N	141 00.007E	4682m	CTD STARTED
ST-26	03:41 13 30.312N	141 00.046E	4679m	CTD DEEPEST
ST-26	03:59 13 30.440N	141 00.043E	4676m	CTD FINISHED
ST-26	04:09 13 30.582N	141 00.028E	4679m	3M ORI NET STARTED
ST-26	04:48 13 30.721N	141 01.462E	4668m	3M ORI NET DEEPEST
ST-26	05:29 13 30.799N	141 02.354E	4641m	3M ORI NET FINISHED
ST-27	07:53 13 00.144N	141 00.060E	3836m	CTD STARTED
ST-27	08:18 13 00.532N	140 59.894E	3858m	CTD DEEPEST
ST-27	08:40 13 00.784N	140 59.864E	3906m	CTD FINISHED
ST-27	08:52 13 00.992N	140 59.725E	3959m	3M ORI NET STARTED
	09:00 13 01.138N	140 59.764E	3962m	SUNSET
ST-27	09:26 13 01.724N	141 00.595E	4130m	3M ORI NET DEEPEST

ST-27	10:24 13 03.387N	141 01.488E	4201m	3M ORI NET FINISHED
	11:23 13 02.272N	141 14.550E	4207m	ENTERD IN EEZ OF USA
ST-28	14:26 12 59.929N	141 59.983E	2953m	CTD STARTED
ST-28	14:46 13 00.013N	141 59.984E	2962m	CTD DEEPEST
ST-28	15:01 13 00.060N	141 59.975E	2968m	CTD FINISHED
ST-28	15:12 13 00.132N	141 59.923E	2977m	3M ORI NET STARTED
ST-28				3M ORI NET DEEPEST
ST-28	16:53 13 00.122N	142 02.849E	2903m	3M ORI NET FINISHED
ST-29	19:01 13 29.970N	141 59.956E	2843m	3M ORI NET STARTED
ST-29	19:36 13 31.021N	141 59.431E	2372m	3M ORI NET DEEPEST
	20:03 13 31.542N	141 59.112E	2464m	SUNRISE
ST-29	20:20 13 31.820N	141 58.933E	2695m	3M ORI NET FINISHED
ST-29	20:33 13 31.820N	141 58.829E	2698m	CTD STARTED
ST-29	20:54 13 31.861N	141 58.831E	2706m	CTD DEEPEST
ST-29	21:14 13 31.986N	141 58.686E	2765m	CTD FINISHED
ST-30	23:23 13 59.962N	141 59.761E	4225m	CTD STARTED
ST-30	23:42 14 00.036N	141 59.465E	4228m	CTD DEEPEST
7.Jun.05				
ST-30	00:01 14 00.023N	141 59.338E	4227m	CTD FINISHED
ST-30	00:13 14 00.094N	141 59.148E	4235m	3M ORI NET STARTED
ST-30	00:45 13 59.684N	141 59.745E	4222m	3M ORI NET DEEPEST
ST-30	01:18 13 59.478N	141 59.969E	4230m	3M ORI NET FINISHED
ST-31	03:35 14 30.098N	142 00.050E	4249m	CTD STARTED
ST-31	03:53 14 30.224N	141 59.924E	4241m	CTD DEEPEST
ST-31	04:11 14 30.297N	141 59.858E	4241m	CTD FINISHED
ST-31	04:28 14 30.504N	141 59.557E	4258m	3M ORI NET STARTED
ST-31	05:12 14 31.854N	141 58.029E	4331m	3M ORI NET DEEPEST
ST-31	06:01 14 33.076N	141 56.927E	4368m	3M ORI NET FINISHED
ST-32	08:01 15 00.071N	141 59.900E	4512m	CTD STARTED
ST-32	08:25 15 00.304N	141 59.815E	4513m	CTD DEEPEST
ST-32	08:42 15 00.371N	141 59.771E	4515m	CTD FINISHED
ST-32	08:53 15 00.542N	141 59.686E	4509m	3M ORI NET STARTED
	08:59 15 00.708N	141 59.608E	4511m	SUNSET
ST-32	09:25 15 01.951N	141 59.354E	4490m	3M ORI NET DEEPEST
ST-32	10:28 15 04.168N	141 58.667E	4479m	3M ORI NET FINISHED
ST-33	12:23 15 30.145N	141 59.886E	4046m	CTD STARTED
ST-33	12:41 15 30.352N	141 59.795E	4219m	CTD DEEPEST
ST-33	12:58 15 30.542N	141 59.677E	4276m	CTD FINISHED
ST-33	13:10 15 30.707N	141 59.587E	4280m	3M ORI NET STARTED
ST-33	13:45 15 31.558N	142 00.611E	4191m	3M ORI NET DEEPEST
ST-33	14:41 15 32.306N	142 01.929E	4000m	3M ORI NET FINISHED
ST-34	16:40 15 30.000N	142 30.121E	4044m	3M ORI NET STARTED
ST-34	17:25 15 29.143N	142 31.647E	4041m	3M ORI NET DEEPEST
ST-34	18:26 15 28.409N	142 32.781E	3939m	3M ORI NET FINISHED
ST-34	18:40 15 28.485N	142 32.670E	3948m	CTD STARTED

ST-34 19.02 15 28.550N 142 32.576E 395m CTD DEPEST ST-34 19.21 15 28.567N 142 32.477E 395m CTD FINISHED ST-35 21.36 15 00.041N 142 29.980E 4158m CTD STARTED ST-35 21.59 15 00.057N 142 29.887E 4158m CTD DEPEST ST-35 22.17 15 00.159N 142 29.819E 4166m 3M ORI NET STARTED ST-35 22.38 14 59.744N 142 30.784E 4130m 3M ORI NET STARTED ST-36 22.38 14 59.410N 142 31.520E 406m 3M ORI NET STARTED ST-36 01.31 14 45.148N 142 44.731E 355m CTD STARTED ST-36 01.43 14 45.308N 142 44.731E 355m CTD DEEPEST ST-36 01.43 14 45.308N 142 44.733E 359m 3M ORI NET STARTED ST-36 01.51 14 45.491N 142 44.733E 359m 3M ORI NET STARTED ST-37 01.51 14 45.491N 142 45.220E 3581m 3M ORI NET STARTED ST-37 02.51 14 30.100N 142 30.264E 345m <					
ST-35 21:36 15 20:041N 142 29:960E 415 8m CTD STARTED ST-35 21:59 15 00:057N 142 30:026E 4158m CTD DEEPEST ST-35 21:59 15 00:057N 142 29:887E 415m CTD DEEPEST ST-35 22:26 15 00:223N 142 29:887E 415m CTD DEEPEST ST-35 22:38 14 59:44N 142 30:784E 410m 3M ORI NET DEEPEST ST-35 22:38 14 59:44N 142 31:520E 406m 3M ORI NET DEEPEST ST-36 01:13 14 45:148N 142 44:831E 355m CTD DEEPEST ST-36 01:43 14 45:308N 142 44:781E 369m CTD DEEPEST ST-36 01:51 14 45:048N 142 44:781E 369m CTD DEEPEST ST-36 01:51 14 45:048N 142 44:781E 369m MORI NET DEEPEST ST-36 01:51 14 45:048N 142 40:732E 359m 3M ORI NET DEEPEST ST-37 01:51 14 45:048N 142 40:732E 359m 3M ORI NET DEEPEST ST-36 02:14 14 50:01N 142 40:732E 359m 3M ORI NET	ST-34	19:02 15 28.550N	142 32.554E	3956m	CTD DEEPEST
ST-35 21:36 15 00.041N 142 29.960E 4158m CTD STARTED ST-35 21:59 15 00.057N 142 30.026E 4158m CTD DEEPEST ST-35 22:17 15 00.159N 142 29.819E 4166m 3M ORI NET STARTED ST-35 22:26 15 00.223N 142 29.819E 4166m 3M ORI NET DEEPEST ST-35 22:38 14 59.744N 142 30.784E 4130m 3M ORI NET DEEPEST ST-36 23:38 14 59.410N 142 31.520E 406m 3M ORI NET DEEPEST ST-36 01:31 14 45.148N 142 44.838E 3584m CTD STARTED ST-36 01:31 14 45.148N 142 44.734E 360m CTD DEEPEST ST-36 01:43 14 45.39N 142 44.734E 359m 3M ORI NET STARTED ST-37 01:43 14 45.91N 142 44.733E 359m 3M ORI NET STARTED ST-36 01:41 45.01N 142 44.733E 359m 3M ORI NET STARTED ST-37 02:46 14 55.10N 142 30.20E 345m OTD STARTED ST-37 05:52 14 30.15SN 142 30.20E 345m <	ST-34	19:21 15 28.567N	142 32.477E	3957m	CTD FINISHED
ST-35 21:59 15 00.057N 142 30.026E 4158M CTD DEPEST ST-35 22:17 15 00.159N 142 29.88TE 4166M 3M ORI NET STARTED ST-35 22:26 15 00.223N 142 29.819E 4166M 3M ORI NET DEEPEST ST-35 23:38 14 59.410N 142 31.520E 4066M 3M ORI NET FINISHED BJun.05 7 143 14 45.348N 142 44.838E 3584M ORD STARTED ST-36 01:34 14 45.349N 142 44.743E 3693M OTD FINISHED ST-36 01:43 14 45.349N 142 44.73E 3693M OTD FINISHED ST-36 01:51 14 45.691N 142 44.73E 3693M OTD FINISHED ST-36 02:46 14 45.102N 142 45.22E 3881M 3M ORI NET STARTED ST-37 04:31 14 29.955N 142 30.310E 3459M OTD STARTED ST-37 04:50 14 30.139N 142 30.310E 3459M OTD STARTED ST-37 05:52 14 30.155N 142 30.310E 3459M OTD STARTED ST-37 05:52 14 30.155N 142 30.315E 3459M<		19:58 15 22.616N	142 31.654E	3996m	SUNRISE
ST-35 22:17 15 00.159N 142 29.887E 4159M CTD FINISHED ST-35 22:26 15 00.223N 142 29.819E 4166M 3M ORI NET STARTED ST-35 22:58 14 59.744N 142 30.784E 4130M 3M ORI NET DEEPEST ST-36 23:38 14 59.410N 142 31.520E 4066M 3M ORI NET FINISHED 8.Jun.05 8.Jun.05 CTD CTD STARTED ST-36 01:31 14 45.308N 142 44.781E 3595m CTD DEEPEST ST-36 01:43 14 45.901N 142 44.666E 3620M MORI NET STARTED ST-36 01:51 14 45.901N 142 44.732E 3603m OTD STARTED ST-36 01:51 14 45.901N 142 44.732E 3597m 3M ORI NET STARTED ST-37 02:19 14 45.061N 142 42.022E 3581m 3M ORI NET STARTED ST-37 04:31 14 29.955N 142 30.310E 3459m CTD STARTED ST-37 04:50 14 30.100N 142 30.310E 3459m CTD STARTED ST-37 05:52 14 30.155N 142 30.317E 3459m OTD FINISHED </td <td>ST-35</td> <td>21:36 15 00.041N</td> <td>142 29.960E</td> <td>4158m</td> <td>CTD STARTED</td>	ST-35	21:36 15 00.041N	142 29.960E	4158m	CTD STARTED
ST-35 22:26 15 00.223N 142 29.819E 4166M 3M ORI NET STARTED ST-35 22:58 14 59.744N 142 30.784E 4130M 3M ORI NET DEEPEST ST-36 23:38 14 59.410N 142 31.520E 4066M 3M ORI NET FINISHED 8.Jun.05 V V CTD STARTED ST-36 01:31 14 45.348N 142 44.838E 3584M CTD STARTED ST-36 01:43 14 45.378N 142 44.743E 3603M OTD DEEPEST ST-36 01:51 14 45.491N 142 44.733E 3693M OTD STARTED ST-36 01:51 14 45.691N 142 44.733E 3597M 3M ORI NET STARTED ST-36 02:19 14 45.601N 142 42.20E 3581M 3M ORI NET STARTED ST-37 04:31 14 29.955N 142 30.310E 3459M OTD STARTED ST-37 04:50 14 30.102N 142 30.310E 3459M OTD STARTED ST-37 05:52 14 30.150N 142 29.593E 3506m OTD FINISHED ST-37 05:52 14 30.150N 142 49.955E 2031m OTD STARTED	ST-35	21:59 15 00.057N	142 30.026E	4158m	CTD DEEPEST
ST-35 22:58 14 59.744N 142 30.784E 4130M MORI NET DEEPEST ST-36 23:38 14 59.410N 142 31.520E 4066M MORI NET FINISHED 8.Jun.05 V V V V ST-36 01:31 14 45.148N 142 44.838E 3584M CTD DEEPEST ST-36 01:43 14 45.93N 142 44.781E 3595M CTD DEEPEST ST-36 01:51 14 45.94N 142 44.738E 3603M CTD FINISHED ST-36 02:19 14 45.06N 142 44.738E 3597M 3M ORI NET STARTED ST-37 02:46 14 45.010N 142 45.220E 3581M 3M ORI NET STARTED ST-37 04:51 14 30.100N 142 30.264E 3459M CTD DEEPEST ST-37 04:50 14 30.100N 142 30.310E 3454M CTD DEEPEST ST-37 05:52 14 30.155N 142 29.593E 3506M 3M ORI NET FINISHED ST-37 05:52 14 30.155N 142 29.593E 2031M OTD STARTED ST-38 08:04 14 15.137N 142 44.935E 2031M OTD STARTED	ST-35	22:17 15 00.159N	142 29.887E	4159m	CTD FINISHED
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ST-36 01:13 14 45:148N 142 44:838E 3584m CTD STARTED ST-36 01:34 14 45:308N 142 44:781E 395m CTD DEEPEST ST-36 01:43 14 45:379N 142 44:743E 3603m CTD FINISHED ST-36 01:51 14 45:491N 142 44:666E 3620m 3M ORI NET STARTED ST-36 02:46 14 45:102N 142 45:220E 3581m 3M ORI NET FINISHED ST-37 04:31 14 29:955N 142 30:264E 3459m CTD STARTED ST-37 04:50 14 30:100N 142 30:311E 3454m CTD DEEPEST ST-37 05:09 14 30:233N 142 30:317E 3450m CTD FINISHED ST-37 05:02 14 30:155N 142 29:593E 3506m 3M ORI NET FINISHED ST-37 05:52 14 30:155N 142 29:593E 3506m 3M ORI NET FINISHED ST-38 08:04 14 15:137N 142 44:935E 2031m CTD STARTED ST-38 08:26 14 15:164N 142 44:93E 2046m CTD FINISHED ST-38 08:26 14 15:247N 142 44:71E 2066m <td< td=""><td>ST-35</td><td>23:38 14 59.410N</td><td>142 31.520E</td><td>4066m</td><td>3M ORI NET FINISHED</td></td<>	ST-35	23:38 14 59.410N	142 31.520E	4066m	3M ORI NET FINISHED
ST-36 01:34 14 45:308N 142 44.781E 3595M CTD DEEPEST ST-36 01:43 14 45:379N 142 44.743E 3603M CTD FINISHED ST-36 01:51 14 45:491N 142 44.666E 3620M 3M ORI NET STARTED ST-36 02:46 14 45:001N 142 45:220E 3581M 3M ORI NET FINISHED ST-37 04:31 14 29:955N 142 30:264E 3459M CTD STARTED ST-37 04:50 14 30:100N 142 30:310E 3454M CTD DEEPEST ST-37 05:09 14 30:233N 142 30:317E 3450M CTD FINISHED ST-37 05:52 14 30:155N 142 29:593E 3506m 3M ORI NET FINISHED ST-37 05:52 14 30:155N 142 29:593E 3506m 3M ORI NET FINISHED ST-38 08:04 14 15:164N 142 44:805E 2031m CTD STARTED ST-38 08:26 14 15:164N 142 44:805E 2036m CTD DEEPEST ST-38 08:26 14 15:24N 142 44:77E 2060m 3M ORI NET STARTED ST-38 08:26 14 15:24N 142 45:608E 2031m	8.Jun.05				
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ST-36 02:19 14 45.061N 142 44.733E 3597M 3M ORI NET DEEPEST ST-36 02:46 14 45.102N 142 45.220E 3581M 3M ORI NET FINISHED ST-37 04:31 14 29.955N 142 30.264E 3459M CTD STARTED ST-37 05:09 14 30.233N 142 30.310E 3454M CTD DEEPEST ST-37 05:02 14 30.155N 142 29.593E 3506M 3M ORI NET STARTED ST-37 05:52 14 30.155N 142 29.593E 3504M 3M ORI NET FINISHED ST-37 06:21 14 30.102N 142 28.922E 3534M 3M ORI NET FINISHED ST-38 08:04 14 15.137N 142 44.935E 2031m CTD STARTED ST-38 08:26 14 15.164N 142 44.867E 2036m CTD DEEPEST ST-38 08:26 14 15.247N 142 44.977E 2060m 3M ORI NET STARTED ST-38 08:26 14 15.247N 142 44.77E 2060m 3M ORI NET STARTED ST-38 09:27 14 14.587N 142 46.473E 2056m 3M ORI NET STARTED ST-39 12:20 14 00.191N 142 30.135E	ST-36	01:43 14 45.379N	142 44.743E	3603m	CTD FINISHED
ST-36 02:46 14 45.102N 142 45.220E 3581m 3M ORI NET FINISHED ST-37 04:31 14 29.955N 142 30.264E 3459m CTD STARTED ST-37 04:50 14 30.100N 142 30.310E 3454m CTD DEEPEST ST-37 05:09 14 30.233N 142 30.317E 3450m CTD FINISHED ST-37 05:52 14 30.155N 142 29.593E 3506m 3M ORI NET FINISHED ST-37 06:21 14 30.102N 142 28.922E 3534m 3M ORI NET FINISHED ST-38 08:04 14 15.137N 142 44.935E 2031m CTD STARTED ST-38 08:26 14 15.164N 142 44.867E 2036m CTD DEEPEST ST-38 08:26 14 15.247N 142 44.877E 2060m 3M ORI NET STARTED ST-38 08:24 14 15.247N 142 44.777E 2060m 3M ORI NET STARTED ST-38 09:27 14 14.587N 142 45.608E 2031m 3M ORI NET STARTED ST-39 12:20 14 00.191N 142 30.175E 2604m CTD STARTED ST-39 12:20 14 00.191N 142 30.948E 2702m </td <td>ST-36</td> <td>01:51 14 45.491N</td> <td>142 44.666E</td> <td>3620m</td> <td>3M ORI NET STARTED</td>	ST-36	01:51 14 45.491N	142 44.666E	3620m	3M ORI NET STARTED
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ST-37 04:50 14 30.100N 142 30.310E 3454m CTD DEEPEST ST-37 05:09 14 30.233N 142 30.277E 3450m CTD FINISHED ST-37 05:23 14 30.428N 142 30.317E 3453m 3M ORI NET STARTED ST-37 05:52 14 30.155N 142 29.593E 3506m 3M ORI NET FINISHED ST-37 06:21 14 30.102N 142 28.922E 3534m 3M ORI NET FINISHED ST-38 08:04 14 15.137N 142 44.935E 2031m CTD STARTED ST-38 08:26 14 15.164N 142 44.867E 2036m CTD DEEPEST ST-38 08:44 14 15.199N 142 44.816E 2046m CTD FINISHED ST-38 08:56 14 15.247N 142 45.608E 2031m 3M ORI NET STARTED ST-38 10:21 14 13.854N 142 46.473E 2056m 3M ORI NET FINISHED ST-39 12:00 14 00.076N 142 30.175E 2604m CTD STARTED ST-39 12:26 14 00.191N 142 30.011E 2702m CTD DEEPEST ST-39 12:36 14 00.157N 142 29.866E 2703m	ST-36	02:46 14 45.102N	142 45.220E	3581m	3M ORI NET FINISHED
ST-37 05:09 14 30.233N 142 30.277E 3450M CTD FINISHED ST-37 05:23 14 30.428N 142 30.317E 3453M 3M ORI NET STARTED ST-37 05:52 14 30.155N 142 29.593E 3506M 3M ORI NET FINISHED ST-37 06:21 14 30.102N 142 28.922E 3534M 3M ORI NET FINISHED ST-38 08:04 14 15.137N 142 44.935E 2031M CTD STARTED ST-38 08:26 14 15.164N 142 44.867E 2036M CTD DEEPEST ST-38 08:56 14 15.247N 142 44.777E 2060M 3M ORI NET STARTED ST-38 08:56 14 15.247N 142 45.608E 2031M 3M ORI NET STARTED ST-38 09:27 14 14.587N 142 45.608E 2031m 3M ORI NET DEEPEST ST-38 10:21 14 13.854N 142 46.473E 2056M 3M ORI NET FINISHED ST-39 12:20 14 00.191N 142 30.011E 2702m CTD DEEPEST ST-39 12:36 14 00.157N 142 29.959E 2703m 3M ORI NET STARTED ST-39 12:46 14 00.185N 142 30.583E	ST-37	04:31 14 29.955N	142 30.264E	3459m	CTD STARTED
ST-37 05:23 14 30.428N 142 30.317E 3453m 3M ORI NET STARTED ST-37 05:52 14 30.155N 142 29.593E 3506m 3M ORI NET FINISHED ST-37 06:21 14 30.102N 142 28.922E 3534m 3M ORI NET FINISHED ST-38 08:04 14 15.137N 142 44.935E 2031m CTD STARTED ST-38 08:26 14 15.164N 142 44.816E 2046m CTD FINISHED ST-38 08:56 14 15.247N 142 44.777E 2060m 3M ORI NET STARTED ST-38 08:56 14 15.247N 142 44.77E 2060m 3M ORI NET STARTED ST-38 09:27 14 14.587N 142 46.473E 2056m 3M ORI NET STARTED ST-38 10:21 14 13.854N 142 46.473E 2056m 3M ORI NET STARTED ST-39 12:00 14 00.076N 142 30.175E 2604m CTD STARTED ST-39 12:26 14 00.185N 142 29.986E 2703m CTD FINISHED ST-39 12:36 14 00.185N 142 30.583E 2788m 3M ORI NET STARTED ST-39 13:25 13 59.193N 142 30.988E	ST-37	04:50 14 30.100N	142 30.310E	3454m	CTD DEEPEST
ST-37 05:52 14 30.155N 142 29.593E 3506m 3M ORI NET FINISHED ST-37 06:21 14 30.102N 142 28.922E 3534m 3M ORI NET FINISHED ST-38 08:04 14 15.137N 142 44.935E 2031m CTD STARTED ST-38 08:26 14 15.164N 142 44.816E 2036m CTD DEEPEST ST-38 08:44 14 15.199N 142 44.816E 2046m CTD FINISHED ST-38 08:56 14 15.247N 142 44.777E 2060m 3M ORI NET STARTED ST-38 09:27 14 14.587N 142 46.473E 2056m 3M ORI NET DEEPEST ST-38 10:21 14 13.854N 142 46.473E 2056m 3M ORI NET FINISHED ST-39 12:00 14 00.076N 142 30.017E 2604m CTD STARTED ST-39 12:20 14 00.157N 142 29.959E 2703m CTD DEEPEST ST-39 12:46 14 00.185N 142 29.866E 2703m 3M ORI NET STARTED ST-39 13:25 13 59.193N 142 30.988E 2782m 3M ORI NET DEEPEST ST-39 14:13 13 58.317N 142 30.988E	ST-37	05:09 14 30.233N	142 30.277E	3450m	CTD FINISHED
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ST-38 09:27 14 14.587N 142 45.608E 2031m 3M ORI NET DEEPEST ST-38 10:21 14 13.854N 142 46.473E 2056m 3M ORI NET FINISHED ST-39 12:00 14 00.076N 142 30.175E 2604m CTD STARTED ST-39 12:20 14 00.191N 142 30.011E 2702m CTD DEEPEST ST-39 12:36 14 00.157N 142 29.959E 2703m CTD FINISHED ST-39 12:46 14 00.185N 142 29.866E 2703m 3M ORI NET STARTED ST-39 13:25 13 59.193N 142 30.583E 2788m 3M ORI NET DEEPEST ST-39 14:13 13 58.317N 142 30.988E 2782m 3M ORI NET FINISHED ST-40 16:15 13 29.855N 142 30.134E 2313m 3M ORI NET STARTED ST-40 16:52 13 28.851N 142 31.093E 2469m 3M ORI NET FINISHED ST-40 17:34 13 28.063N 142 31.549E 2254m 3M ORI NET FINISHED ST-40 18:09 13 28.067N 142 31.341E 2341m CTD DEEPEST ST-40 18:27 13 28.092N 142 30.246E	ST-38	08:44 14 15.199N	142 44.816E	2046m	CTD FINISHED
ST-38 10:21 14 13.854N 142 46.473E 2056m 3M ORI NET FINISHED ST-39 12:00 14 00.076N 142 30.175E 2604m CTD STARTED ST-39 12:20 14 00.191N 142 30.011E 2702m CTD DEEPEST ST-39 12:36 14 00.185N 142 29.959E 2703m CTD FINISHED ST-39 12:46 14 00.185N 142 29.866E 2703m 3M ORI NET STARTED ST-39 13:25 13 59.193N 142 30.583E 2782m 3M ORI NET DEEPEST ST-39 14:13 13 58.317N 142 30.988E 2782m 3M ORI NET FINISHED ST-40 16:15 13 29.855N 142 30.134E 2313m 3M ORI NET STARTED ST-40 16:52 13 28.851N 142 31.093E 2469m 3M ORI NET FINISHED ST-40 17:34 13 28.063N 142 31.634E 2254m 3M ORI NET FINISHED ST-40 17:46 13 28.062N 142 31.549E 2269m CTD STARTED ST-40 18:09 13 28.067N 142 31.341E 2341m CTD FINISHED ST-40 18:07 13 28.092N 142 30.246E <t< td=""><td>ST-38</td><td>08:56 14 15.247N</td><td>142 44.777E</td><td>2060m</td><td>3M ORI NET STARTED</td></t<>	ST-38	08:56 14 15.247N	142 44.777E	2060m	3M ORI NET STARTED
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ST-40 18:09 13 28.067N 142 31.409E 2308m CTD DEEPEST ST-40 18:27 13 28.092N 142 31.341E 2341m CTD FINISHED 20:02 13 06.562N 142 30.246E 3848m SUNRISE ST-41 20:31 13 00.211N 142 30.049E 2622m 3M ORI NET STARTED ST-41 21:00 12 59.608N 142 30.646E 3183m 3M ORI NET DEEPEST ST-41 21:28 12 59.225N 142 30.940E 2745m 3M ORI NET FINISHED	ST-40	17:34 13 28.063N	142 31.634E	2254m	3M ORI NET FINISHED
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ST-41 21:00 12 59.608N 142 30.646E 3183m 3M ORI NET DEEPEST ST-41 21:28 12 59.225N 142 30.940E 2745m 3M ORI NET FINISHED		20:02 13 06.562N	142 30.246E	3848m	SUNRISE
ST-41 21:28 12 59.225N 142 30.940E 2745m 3M ORI NET FINISHED	ST-41	20:31 13 00.211N	142 30.049E	2622m	3M ORI NET STARTED
	ST-41	21:00 12 59.608N	142 30.646E	3183m	3M ORI NET DEEPEST
ST-41 21:42 12 59.292N 142 30.796E 2981m CTD STARTED	ST-41	21:28 12 59.225N	142 30.940E	2745m	3M ORI NET FINISHED
	ST-41	21:42 12 59.292N	142 30.796E	2981m	CTD STARTED

ST-41	22:02 12 59.424N	142 30 622F	3026m	CTD DEEPEST
ST-41	22:17 12 59.368N	142 30.608E		CTD FINISHED
ST-41	23:39 12 59.425N			STARTED SETTING OF UPWELLING SYSTEM
9.Jun.05	20.00 12 00.12011	1 12 20.7202	2071111	07/11/12B 021/11/14 07 01 7/122E11/4 07/07/E
ST-41	02:03 12 59.503N	142 29.000E	3271m	FINISHED SETTING OF UPWELLING SYSTEM
ST-42	03:41 13 00.066N	142 14.918E		CTD STARTED
ST-42	04:01 13 00.181N	142 14.821E		CTD DEEPEST
ST-42	04:17 13 00.288N			CTD FINISHED
ST-42	04:30 13 00.313N	142 14.831E		3M ORI NET STARTED
ST-42	05:12 13 00.515N	142 16.485E		3M ORI NET DEEPEST
ST-42	05:58 13 00.807N	142 17.757E		3M ORI NET FINISHED
ST-43	08:06 13 30.006N	142 14.966E	3160m	CTD STARTED
ST-43	08:30 13 30.150N			CTD DEEPEST
ST-43	08:49 13 30.276N	142 14.999E	3160m	CTD FINISHED
01 40	08:57 13 30.342N	142 14.984E	3152m	SUNSET
ST-43	08:59 13 30.380N	142 14.974E	3152m	3M ORI NET STARTED
ST-43	09:36 13 31.885N	142 14.754E	3182m	3M ORI NET DEEPEST
ST-43	10:27 13 33.466N	142 14.391E		3M ORI NET FINISHED
ST-44	11:25 13 45.144N	142 14.888E	3074m	3M ORI NET STARTED
ST-44	12:09 13 46.998N	142 13.838E	3420m	3M ORI NET DEEPEST
ST-44	13:00 13 48.479N	142 12.832E	3442m	3M ORI NET FINISHED
ST-45	14:01 13 59.913N	142 14.919E	3577m	CTD STARTED
ST-45	14:23 14 00.131N	142 14.646E	3564m	CTD DEEPEST
ST-45	14:38 14 00.213N	142 14.520E	3568m	CTD FINISHED
ST-45	14:51 14 00.388N	142 14.312E		3M ORI NET STARTED
ST-45	15:33 14 02.232N	142 13.860E	3498m	3M ORI NET DEEPEST
ST-45	16:24 14 03.848N	142 13.203E	3676m	3M ORI NET FINISHED
ST-46	18:18 13 45.185N	142 15.001E		3M ORI NET STARTED
ST-46	18:55 13 47.044N	142 14.801E		3M ORI NET DEEPEST
ST-46				3M ORI NET FINISHED
	20:02 13 50.703N			
ST-47				3M ORI NET STARTED
ST-47				3M ORI NET DEEPEST
ST-47				3M ORI NET FINISHED
10.Jun.05				
ST-48	00:03 14 30.089N	142 15.039E	4092m	CTD STARTED
ST-48	00:23 14 30.309N			CTD DEEPEST
ST-48	00:39 14 30.469N			CTD FINISHED
ST-48	00:51 14 30.611N			3M ORI NET STARTED
ST-48	01:27 14 31.984N			3M ORI NET DEEPEST
ST-48				3M ORI NET FINISHED
ST-49	03:12 14 45.117N			3M ORI NET STARTED
ST-49				3M ORI NET DEEPEST
ST-49				3M ORI NET FINISHED
ST-50	05:48 15 00.101N			

ST-50	06:13 15 00.156N	142 15.203E	4340m	CTD DEEPEST
ST-50	06:32 15 00.143N			
ST-50				3M ORI NET STARTED
ST-50	07:16 15 01.032N	142 15.772E	4392m	3M ORI NET DEEPEST
ST-50	08:03 15 01.963N	142 16.126E	4340m	3M ORI NET FINISHED
	08:59 15 00.122N	142 28.943E	4164m	SUNSET
ST-51	09:07 14 59.994N	142 29.651E	4168m	3M ORI NET STARTED
ST-51	09:41 14 59.034N	142 30.456E	4148m	3M ORI NET DEEPEST
ST-51	10:23 14 58.198N	142 31.133E	4094m	3M ORI NET FINISHED
ST-52	12:20 14 30.004N	142 30.044E	3462m	3M ORI NET STARTED
ST-52				3M ORI NET DEEPEST
ST-52	13:34 14 27.955N	142 30.617E	3554m	3M ORI NET FINISHED
ST-53	14:36 14 14.919N	142 29.899E	3502m	3M ORI NET STARTED
ST-53	15:09 14 13.817N	142 30.305E	3426m	3M ORI NET DEEPEST
ST-53	15:52 14 13.007N	142 30.554E	3372m	3M ORI NET FINISHED
ST-54	16:59 13 59.888N	142 30.037E	2732m	3M ORI NET STARTED
ST-54	17:31 13 58.782N	142 30.345E	2801m	3M ORI NET DEEPEST
ST-54	18:14 13 57.760N	142 30.451E	2817m	3M ORI NET FINISHED
ST-55	19:15 13 45.003N	142 29.978E	2436m	3M ORI NET STARTED
ST-55	19:47 13 44.043N	142 30.222E	2452m	3M ORI NET DEEPEST
	20:01 13 43.752N	142 30.214E	2505m	SUNRISE
ST-55	20:25 13 43.271N	142 30.142E	2583m	3M ORI NET FINISHED
ST-56	21:26 13 30.197N	142 29.971E	2267m	3M ORI NET STARTED
ST-56	21:58 13 29.151N	142 29.862E	2282m	3M ORI NET DEEPEST
ST-56	22:36 13 28.361N	142 29.513E	2140m	3M ORI NET FINISHED
11.Jun.05				
ST-57	00:36 13 00.081N	142 29.976E	2637m	3M ORI NET STARTED
ST-57	01:12 12 58.982N	142 30.164E	3198m	3M ORI NET DEEPEST
ST-57	01:52 12 58.077N	142 29.904E	3049m	3M ORI NET FINISHED
	03:23 12 51.764N	142 18.397E	3754m	STARTED RETRIEVING OF UPWELLING SYSTEM
	04:00 12 51.765N	142 18.211E	3715m	BUOY ON DECK
	05:42 12 52.015N	142 17.950E	3781m	STARTED SETTING OF UPWELLING SYSTEM
	06:12 12 52.124N	142 17.961E	3792m	FINISHED SETTING OF UPWELLING SYSTEM
ST-58	08:34 13 00.142N	142 44.670E	3453m	CTD STARTED
	08:55 13 00.412N			
ST-58	09:00 13 00.478N			
ST-58	09:14 13 00.621N			
ST-58				3M ORI NET STARTED
ST-58	09:56 13 01.926N			
ST-58				3M ORI NET FINISHED
ST-59	12:35 13 29.870N			
ST-59	12:53 13 29.834N			
ST-59	13:06 13 29.820N			
ST-59				3M ORI NET STARTED
ST-59	13:51 13 29.958N	142 45.412E	3096m	3M ORI NET DEEPEST

ST-59	14:29 13 29.911N	142 46.037E	3208m	3M ORI NET FINISHED
ST-60	15:46 13 44.961N	142 44.800E	3208m	CTD STARTED
ST-60	16:08 13 45.100N	142 44.512E	3054m	CTD DEEPEST
ST-60	16:23 13 45.160N	142 44.406E	3028m	CTD FINISHED
ST-60	16:36 13 45.220N	142 44.213E	3066m	3M ORI NET STARTED
ST-60	17:15 13 46.239N	142 44.804E	3260m	3M ORI NET DEEPEST
ST-60	17:57 13 47.111N	142 44.868E	3157m	3M ORI NET FINISHED
ST-61	18:58 13 59.956N	142 44.923E	1591m	3M ORI NET STARTED
ST-61	19:32 14 00.894N	142 45.296E	1682m	3M ORI NET DEEPEST
	20:00 14 01.536N	142 45.387E	1815m	SUNRISE
ST-61	20:12 14 01.804N	142 45.399E	1929m	3M ORI NET FINISHED
ST-61	20:26 14 01.834N	142 45.177E	1952m	CTD STARTED
ST-61	20:48 14 01.890N	142 44.924E	1992m	CTD DEEPEST
ST-61	21:00 14 01.910N	142 44.812E	2026m	CTD FINISHED
ST-62	22:09 14 14.983N	142 44.977E	2053m	3M ORI NET STARTED
ST-62				3M ORI NET DEEPEST
ST-62	23:25 14 17.098N	142 45.661E	2303m	3M ORI NET FINISHED
ST-62	23:56 14 15.158N	142 44.827E	2042m	CTD STARTED
12.Jun.05				
ST-62	00:15 14 15.318N	142 44.597E	2184m	CTD DEEPEST
ST-62	00:26 14 15.379N	142 44.444E	2146m	CTD FINISHED
ST-63	01:44 14 30.083N	142 44.968E	2972m	CTD STARTED
ST-63	02:03 14 30.320N	142 44.919E	3004m	CTD DEEPEST
ST-63	02:14 14 30.419N	142 44.881E	3038m	CTD FINISHED
ST-63	02:24 14 30.535N	142 44.774E	3034m	3M ORI NET STARTED
ST-63	02:56 14 31.073N	142 45.879E	2979m	3M ORI NET DEEPEST
ST-63	03:37 14 31.621N	142 46.793E	2972m	3M ORI NET FINISHED
ST-64	04:42 14 45.004N	142 45.050E	3581m	3M ORI NET STARTED
ST-64	05:17 14 45.538N	142 46.353E	3490m	3M ORI NET DEEPEST
ST-64	05:59 14 46.296N	142 47.191E	3528m	3M ORI NET FINISHED
ST-65	07:12 14 59.809N	142 44.888E	3010m	CTD STARTED
ST-65	07:38 14 59.833N	142 44.766E	3037m	CTD DEEPEST
ST-65	07:51 14 59.839N	142 44.675E	3051m	CTD FINISHED
ST-65	08:03 14 59.810N	142 44.543E	3057m	3M ORI NET STARTED
ST-65	08:38 15 00.499N	142 45.289E	3213m	3M ORI NET DEEPEST
	08:59 15 00.789N	142 45.556E	3273m	SUNSET
ST-65	09:20 15 01.084N	142 45.789E	3276m	3M ORI NET FINISHED
ST-66	13:30 13 59.962N	142 59.875E	4284m	CTD STARTED
ST-66	13:49 13 59.957N	142 59.811E	4286m	CTD DEEPEST
ST-66	14:04 13 59.964N	142 59.706E	4288m	CTD FINISHED
	19:55 13 32.979N	144 18.101E	3156m	SUNRISE

30.0uri.03				
	08:58 13°57.109N	143°26.206E	3458m	SUNSET
ST-67	11:50 14°15.073N	142°45.147E	2064m	3M ORI NET STARTED
ST-67	12:20 14°14.516N	142°45.864E	2000m	3M ORI NET DEEPEST
ST-67	12:54 14°14.008N	142°46.459E	1996m	3M ORI NET FINISHED
ST-68	14:03 13°59.964N	142°45.093E	1546m	3M ORI NET STARTED
ST-68	14:43 13°59.285N	142°46.075E	1637m	3M ORI NET DEEPEST
ST-68	15:19 13°58.697N	142°46.258E	1578m	3M ORI NET FINISHED
ST-69	16:29 13°45.081N	142°45.086E	3277m	3M ORI NET STARTED
ST-69	17:02 13°45.757N	142°45.758E	3293m	3M ORI NET DEEPEST
ST-69	17:43 13°46.619N	142°46.044E	3428m	3M ORI NET FINISHED
ST-70	19:01 13°45.136N	142°29.794E	2469m	3M ORI NET STARTED
ST-70	19:34 13°46.218N	142°30.163E	2331m	3M ORI NET DEEPEST
ST-70	20:15 13°47.079N	142°30.270E	2280m	3M ORI NET FINISHED
ST-71	21:18 14°00.147N	142°30.207E	2708m	3M ORI NET STARTED
ST-71	21:50 14°01.059N	142°30.908E	2753m	3M ORI NET DEEPEST
ST-71	22:33 14°01.972N	142°31.248E	2868m	3M ORI NET FINISHED
ST-72	23:34 14°14.997N	142°29.983E	3490m	3M ORI NET STARTED
1.Jul.05				
ST-72	00:04 14°15.738N	142°30.896E	3484m	3M ORI NET DEEPEST
ST-72	00:43 14°16.493N	142°31.641E	3434m	3M ORI NET FINISHED
ST-73	02:00 14°14.936N	142°15.202E	4090m	3M ORI NET STARTED
ST-73	02:31 14°15.626N	142°16.165E	4078m	3M ORI NET DEEPEST
ST-73	03:13 14°16.456N	142°16.910E	3976m	3M ORI NET FINISHED
ST-74	04:32 14°00.058N	142°15.073E	3529m	3M ORI NET STARTED
ST-74	05:03 14°00.406N	142°16.118E	3381m	3M ORI NET DEEPEST
ST-74	05:45 14°00.820N	142°16.977E	3122m	3M ORI NET FINISHED
ST-75	07:01 13°45.070N	142°15.018E	3087m	3M ORI NET STARTED
ST-75	07:29 13°44.248N	142°15.185E	3131m	3M ORI NET DEEPEST
ST-75	08:04 13°43.607N	142°15.174E	3134m	3M ORI NET FINISHED
ST-76	08:42 13°37.545N	142°14.963E	3210m	3M ORI NET STARTED
	09:03 13°37.510N	142°15.681E	3200m	SUNSET
ST-76	09:12 13°37.486N	142°16.078E	3178m	3M ORI NET DEEPEST
ST-76	09:52 13°37.319N	142°16.937E	3163m	3M ORI NET FINISHED
ST-77	10:54 13°37.539N	142°29.925E	2747m	3M ORI NET STARTED
ST-77	11:22 13°37.814N	142°30.777E	2684m	3M ORI NET DEEPEST
ST-77	11:58 13°38.047N	142°31.288E	2639m	3M ORI NET FINISHED
ST-78	13:03 13°37.498N	142°44.918E	3973m	3M ORI NET STARTED
ST-78	13:30 13°37.734N	142°45.766E	3754m	3M ORI NET DEEPEST
ST-78	14:06 13°37.979N	142°46.329E	3491m	3M ORI NET FINISHED
ST-79	15:18 13°52.530N	142°44.989E	2046m	3M ORI NET STARTED
ST-79	15:52 13°53.098N	142°45.808E	2088m	3M ORI NET DEEPEST
ST-79	16:30 13°53.724N	142°46.722E	2263m	3M ORI NET FINISHED
ST-80	17:38 14°07.523N	142°45.045E	1974m	3M ORI NET STARTED
ST-80	18:11 14°08.117N	142°46.098E	1760m	3M ORI NET DEEPEST
ST-80	18:57 14°08.411N	142°47.344E	1177m	3M ORI NET FINISHED

	20:05 14°07.560N	142°31.332E	3209m	SUNRISE
ST-81	20:16 14°07.535N	142°29.849E	3178m	3M ORI NET STARTED
ST-81	20:49 14°06.707N	142°30.494E	3180m	3M ORI NET DEEPEST
ST-81	21:34 14°06.049N	142°30.948E	3114m	3M ORI NET FINISHED
ST-82	22:40 13°52.587N	142°30.035E	2526m	3M ORI NET STARTED
ST-82	23:11 13°52.450N	142°31.101E	2588m	3M ORI NET DEEPEST
ST-82	23:50 13°52.334N	142°32.248E	2632m	3M ORI NET FINISHED
2.Jul.05				
ST-83	01:09 13°52.486N	142°14.936E	3495m	3M ORI NET STARTED
ST-83	01:39 13°52.846N	142°15.929E	3527m	3M ORI NET DEEPEST
ST-83	02:22 13°53.157N	142°17.203E	3534m	3M ORI NET FINISHED
ST-84	03:30 14°07.510N	142°15.057E	3912m	3M ORI NET STARTED
ST-84	04:01 14°07.055N	142°16.115E	3815m	3M ORI NET DEEPEST
ST-84	04:43 14°06.050N	142°16.934E	3665m	3M ORI NET FINISHED
ST-85	06:00 14°22.485N	142°15.019E	4033m	3M ORI NET STARTED
ST-85	06:29 14°23.077N	142°15.978E	4026m	3M ORI NET DEEPEST
ST-85	07:11 14°24.024N	142°17.012E	3984m	3M ORI NET FINISHED
ST-86	08:09 14°22.538N	142°30.048E	3636m	3M ORI NET STARTED
ST-86	08:44 14°23.566N	142°31.204E	3617m	3M ORI NET DEEPEST
31 00	09:03 14°24.037N	142°31.641E	3597m	SUNSET
ST-86	09:32 14°24.703N	142°32.334E	3549m	3M ORI NET FINISHED
ST-87	10:30 14°22.507N	142°32.334E	2641m	3M ORI NET STARTED
ST-87	11:04 14°22.081N	142 45.044E 142°46.431E	2537m	3M ORI NET DEEPEST
	11:47 14°21.575N	142 40.431E 142°47.774E		
ST-87			2481m	3M ORI NET FINISHED
ST-88	12:55 14°07.503N	142°45.065E	1978m	3M ORI NET STARTED
ST-88	13:25 14°06.936N	142°45.929E	1746m	3M ORI NET DEEPEST
ST-88	14:01 14°06.561N	142°46.757E	1353m	3M ORI NET FINISHED
ST-89	15:12 13°52.516N	142°45.014E	2043m	3M ORI NET STARTED
ST-89	15:45 13°53.042N	142°45.853E	2086m	3M ORI NET DEEPEST
ST-89	16:24 13°53.829N	142°46.610E	2295m	3M ORI NET FINISHED
ST-90	17:44 13°52.516N	142°29.995E	2534m	3M ORI NET STARTED
ST-90	18:16 13°52.911N	142°31.009E	2650m	3M ORI NET DEEPEST
ST-90	18:54 13°53.380N	142°31.819E	2682m	3M ORI NET FINISHED
	20:06 13°52.371N	142°15.051E	3476m	SUNRISE
ST-91	20:10 13°52.562N	142°14.897E	3509m	3M ORI NET STARTED
ST-91	20:45 13°53.646N	142°15.893E	3586m	3M ORI NET DEEPEST
ST-91	21:28 13°54.698N	142°16.713E	3640m	3M ORI NET FINISHED
ST-92	22:29 14°07.548N	142°15.003E	3915m	3M ORI NET STARTED
ST-92	23:00 14°07.971N	142°16.047E	3892m	3M ORI NET DEEPEST
ST-92	23:38 14°08.353N	142°17.224E	3948m	3M ORI NET FINISHED
3.Jul.05				
ST-93	00:36 14°07.532N	142°29.955E	3183m	3M ORI NET STARTED
ST-93	01:06 14°07.593N	142°31.005E	3239m	3M ORI NET DEEPEST
ST-93	01:44 14°07.684N	142°32.190E	3016m	3M ORI NET FINISHED
ST-94	02:51 14°15.028N	142°44.981E	2045m	3M ORI NET STARTED
ST-94	03:20 14°14.902N	142°45.835E	2163m	3M ORI NET DEEPEST

ST-94	03:58 14°14.742N	142°46.823E	2040m	3M ORI NET FINISHED
ST-95	05:10 14°00.022N	142°45.011E	1568m	3M ORI NET STARTED
ST-95	05:43 13°59.517N	142°46.021E	1646m	3M ORI NET DEEPEST
ST-95	06:25 13°58.965N	142°46.944E	1985m	3M ORI NET FINISHED
ST-96	07:31 13°45.069N	142°44.975E	3276m	3M ORI NET STARTED
ST-96	08:03 13°44.259N	142°45.479E	3479m	3M ORI NET DEEPEST
ST-96	08:42 13°43.369N	142°46.148E	3964m	3M ORI NET FINISHED
	09:01 13°43.702N	142°43.359E	2987m	SUNSET
ST-97	09:55 13°44.963N	142°29.893E	2454m	3M ORI NET STARTED
ST-97	10:26 13°45.658N	142°30.785E	2348m	3M ORI NET DEEPEST
ST-97	11:05 13°46.475N	142°31.583E	2258m	3M ORI NET FINISHED
ST-98	12:09 13°59.993N	142°30.035E	2719m	3M ORI NET STARTED
ST-98	12:41 14°00.719N	142°30.668E	2748m	3M ORI NET DEEPEST
ST-98	13:17 14°01.448N	142°31.129E	2850m	3M ORI NET FINISHED
ST-99	14:17 14°15.011N	142°30.049E	3489m	3M ORI NET STARTED
ST-99	14:48 14°15.601N	142°30.906E	3482m	3M ORI NET DEEPEST
ST-99	15:31 14°16.277N	142°31.777E	3346m	3M ORI NET FINISHED
ST-100	16:50 14°15.049N	142°14.909E	4089m	3M ORI NET STARTED
ST-100	17:22 14°15.783N	142°15.680E	4066m	3M ORI NET DEEPEST
ST-100	18:03 14°16.561N	142°16.506E	4005m	3M ORI NET FINISHED
ST-101	19:21 14°00.011N	142°15.000E	3564m	3M ORI NET STARTED
ST-101	19:51 14°00.146N	142°15.870E	3434m	3M ORI NET DEEPEST
	20:06 14°00.185N	142°16.245E	3350m	SUNRISE
ST-101	20:30 14°00.240N	142°16.730E	3294m	3M ORI NET FINISHED
ST-102	21:42 13°44.953N	142°15.004E	3095m	3M ORI NET STARTED
ST-102	22:13 13°45.123N	142°16.067E	3067m	3M ORI NET DEEPEST
ST-102	22:52 13°45.444N	142°17.029E	3152m	3M ORI NET FINISHED
ST-103	23:37 13°37.523N	142°15.032E	3198m	3M ORI NET STARTED
4.Jul.05				
ST-103	00:08 13°37.647N	142°16.079E	3180m	3M ORI NET DEEPEST
ST-103	00:45 13°37.755N	142°17.161E	3171m	3M ORI NET FINISHED
ST-104	01:45 13°37.562N	142°29.889E	2750m	3M ORI NET STARTED
ST-104	02:17 13°37.994N	142°30.788E	2689m	3M ORI NET DEEPEST
ST-104	02:54 13°38.659N	142°31.645E	2614m	3M ORI NET FINISHED
ST-105	04:00 13°37.508N	142°45.029E	3960m	3M ORI NET STARTED
ST-105	04:30 13°38.009N	142°45.917E	3638m	3M ORI NET DEEPEST
ST-105	05:07 13°38.584N	142°46.737E	3615m	3M ORI NET FINISHED
ST-106	06:12 13°52.558N	142°45.004E	2048m	3M ORI NET STARTED
ST-106	06:42 13°52.675N	142°45.918E	2066m	3M ORI NET DEEPEST
ST-106	07:15 13°52.585N	142°46.562E	2118m	3M ORI NET FINISHED
ST-107	08:22 14°07.556N	142°45.004E	1988m	3M ORI NET STARTED
ST-107	08:54 14°08.292N	142°45.892E	1829m	3M ORI NET DEEPEST
	09:01 14°08.437N	142°46.046E	1780m	SUNSET
ST-107	09:34 14°09.126N	142°46.783E	1717m	3M ORI NET FINISHED
ST-108	10:50 14°07.357N	142°30.005E	3219m	3M ORI NET STARTED
ST-108	11:22 14°06.924N	142°31.174E	3246m	3M ORI NET DEEPEST

ST-108	12:04 14°06.523N	142°32.411E	3025m	3M ORI NET FINISHED
ST-109	13:11 13°52.551N	142°29.993E	2530m	3M ORI NET STARTED
ST-109	13:42 13°52.283N	142°30.946E	2539m	3M ORI NET DEEPEST
ST-109	14:20 13°52.024N	142°31.724E	2601m	3M ORI NET FINISHED
ST-110	15:37 13°52.517N	142°14.941E	3494m	3M ORI NET STARTED
ST-110	16:09 13°52.796N	142°15.963E	3517m	3M ORI NET DEEPEST
ST-110	16:51 13°53.005N	142°16.991E	3521m	3M ORI NET FINISHED
ST-111	17:59 14°07.581N	142°14.954E	3922m	3M ORI NET STARTED
ST-111	18:32 14°07.985N	142°15.996E	3890m	3M ORI NET DEEPEST
ST-111	19:14 14°08.451N	142°17.125E	3958m	3M ORI NET FINISHED
	20:08 14°20.754N	142°15.189E	3968m	SUNRISE
ST-112	20:19 14°22.621N	142°15.026E	4032m	3M ORI NET STARTED
ST-112	20:53 14°22.802N	142°16.204E	4012m	3M ORI NET DEEPEST
ST-112	21:35 14°22.944N	142°17.347E	3972m	3M ORI NET FINISHED
ST-113	22:34 14°22.534N	142°29.963E	3640m	3M ORI NET STARTED
ST-113	23:06 14°22.980N	142°31.100E	3609m	3M ORI NET DEEPEST
ST-113	23:48 14°23.543N	142°32.176E	3573m	3M ORI NET FINISHED
5.Jul.05				
ST-114	00:48 14°22.516N	142°44.973E	2633m	3M ORI NET STARTED
ST-114	01:19 14°22.375N	142°46.034E	2629m	3M ORI NET DEEPEST
ST-114	02:01 14°22.247N	142°47.245E	2698m	3M ORI NET FINISHED
ST-115	03:14 14°07.503N	142°45.030E	1977m	3M ORI NET STARTED
ST-115	03:45 14°07.753N	142°46.082E	1680m	3M ORI NET DEEPEST
ST-115	04:26 14°08.212N	142°47.190E	1219m	3M ORI NET FINISHED
ST-116	05:49 13°52.515N	142°45.141E	2023m	3M ORI NET STARTED
ST-116	06:13 13°52.563N	142°46.061E	2071m	3M ORI NET DEEPEST
ST-116	06:50 13°52.675N	142°46.954E	2314m	3M ORI NET FINISHED
ST-117	08:06 13°52.503N	142°30.016E	2534m	3M ORI NET STARTED
ST-117	08:38 13°52.434N	142°31.427E	2605m	3M ORI NET DEEPEST
	09:02 13°52.387N	142°32.220E	2639m	SUNSET
ST-117	09:20 13°52.317N	142°32.717E	2644m	3M ORI NET FINISHED
ST-118	10:42 13°52.626N	142°15.042E	3477m	3M ORI NET STARTED
ST-118	11:14 13°52.945N	142°16.212E	3474m	3M ORI NET DEEPEST
ST-118	11:55 13°53.267N	142°17.466E	3568m	3M ORI NET FINISHED
ST-119	13:02 14°07.502N	142°14.999E	3916m	3M ORI NET STARTED
ST-119	13:32 14°07.536N	142°15.816E	3857m	3M ORI NET DEEPEST
ST-119	14:10 14°07.480N	142°16.468E	3859m	3M ORI NET FINISHED
ST-120	15:18 14°07.552N	142°30.028E	3232m	3M ORI NET STARTED
ST-120	15:48 14°07.806N	142°30.938E	3303m	3M ORI NET DEEPEST
ST-120	16:30 14°08.569N	142°31.732E	2994m	3M ORI NET FINISHED
ST-121	17:36 14°11.288N	142°44.986E	2097m	3M ORI NET STARTED
ST-121	18:09 14°12.100N	142°45.758E	1950m	3M ORI NET DEEPEST
ST-121	18:53 14°12.981N	142°46.545E	1977m	3M ORI NET FINISHED
	20:08 13°56.519N	142°44.921E	1640m	SUNRISE
ST-122	20:12 13°56.208N	142°44.975E	1631m	3M ORI NET STARTED
ST-122	20:47 13°56.074N	142°46.014E	1940m	3M ORI NET DEEPEST

ST-122	21:33 13°55.981N	142°46.763E	2124m	3M ORI NET FINISHED
ST-123	22:44 13°41.281N	142°44.985E	3938m	3M ORI NET STARTED
ST-123	23:16 13°41.596N	. 142°45.801E	4190m	3M ORI NET DEEPEST
ST-123	23:50 13°41.987N	142°46.525E	4359m	3M ORI NET FINISHED
6.Jul.05				
ST-124	01:03 13°41.331N	142°29.934E	2601m	3M ORI NET STARTED
ST-124	01:32 13°41.915N	142°30.585E	2534m	3M ORI NET DEEPEST
ST-124	02:08 13°42.674N	142°31.233E	2507m	3M ORI NET FINISHED
ST-125	03:20 13°41.248N	142°14.977E	3229m	3M ORI NET STARTED
ST-125	03:51 13°41.855N	142°15.928E	3166m	3M ORI NET DEEPEST
ST-125	04:34 13°42.219N	142°17.220E	3142m	3M ORI NET FINISHED
ST-126	05:52 13°45.002N	142°00.097E	3873m	3M ORI NET STARTED
ST-126	06:27 13°45.090N	142°01.542E	3920m	3M ORI NET DEEPEST
ST-126	07:12 13°45.215N	142°03.022E	3779m	3M ORI NET FINISHED
ST-127	08:27 14°00.058N	142°00.183E	4230m	3M ORI NET STARTED
ST-127	08:59 14°01.172N	142°00.822E	4239m	3M ORI NET DEEPEST
	09:05 14°01.305N	142°00.942E	4242m	SUNSET
ST-127	09:41 14°01.959N	142°01.816E	4219m	3M ORI NET FINISHED
ST-128	10:43 14°15.024N	142°00.029E	4345m	3M ORI NET STARTED
ST-128	11:16 14°15.150N	142°01.122E	4324m	3M ORI NET DEEPEST
ST-128	11:56 14°15.299N	142°02.149E	4315m	3M ORI NET FINISHED
ST-129	12:58 14°11.262N	142°14.912E	4102m	3M ORI NET STARTED
ST-129	13:30 14°10.960N	142°15.969E	4096m	3M ORI NET DEEPEST
ST-129	14:12 14°10.733N	142°16.913E	4054m	3M ORI NET FINISHED
ST-130	15:22 13°56.277N	142°15.023E	3732m	3M ORI NET STARTED
ST-130	15:53 13°56.769N	142°15.832E	3704m	3M ORI NET DEEPEST
ST-130	16:36 13°57.501N	142°16.659E	3620m	3M ORI NET FINISHED
ST-131	17:42 13°56.263N	142°29.999E	2884m	3M ORI NET STARTED
ST-131	18:12 13°56.730N	142°30.808E	2766m	3M ORI NET DEEPEST
ST-131	18:55 13°57.211N	142°31.715E	2734m	3M ORI NET FINISHED
ST-132	20:00 14°11.241N	142°29.938E	3381m	3M ORI NET STARTED
	20:07 14°11.242N	142°29.988E	3371m	SUNRISE
ST-132	20:30 14°11.101N	142°30.681E	3149m	3M ORI NET DEEPEST
ST-132	21:07 14°10.924N	142°31.251E	2909m	3M ORI NET FINISHED
ST-133	21:53 14°03.824N	142°29.903E	2900m	3M ORI NET STARTED
ST-133	22:23 14°04.122N	142°30.647E	2927m	3M ORI NET DEEPEST
ST-133	22:59 14°04.523N	142°31.339E	2971m	3M ORI NET FINISHED
7.Jul.05				
ST-134	00:14 13°48.693N	142°30.029E	2210m	3M ORI NET STARTED
ST-134	00:45 13°48.856N	142°31.064E	2146m	3M ORI NET DEEPEST
ST-134	01:23 13°49.118N	142°32.145E	2285m	3M ORI NET FINISHED
ST-135	02:23 13°48.780N	142°45.037E	3040m	3M ORI NET STARTED
ST-135	02:52 13°48.965N	142°46.007E	3419m	3M ORI NET DEEPEST
ST-135	03:30 13°49.209N	142°46.966E	3573m	3M ORI NET FINISHED
ST-136	04:38 14°03.818N	142°44.990E	2182m	3M ORI NET STARTED
ST-136	05:08 14°04.305N	142°45.769E	2024m	3M ORI NET DEEPEST

ST-136	05:47 14°04.720N	142°46.682E	1738m	3M ORI NET FINISHED
ST-137	06:24 14°06.767N	142°52.164E	1652m	3M ORI NET STARTED
ST-137	06:57 14°07.130N	142°53.290E		3M ORI NET DEEPEST
ST-137	07:39 14°07.487N	142°54.286E	2161m	3M ORI NET FINISHED
ST-138	09:01 14°10.071N	142°59.524E	3397m	CTD STARTED
	09:01 14°10.071N	142°59.524E	3379m	SUNSET
ST-138	09:22 14°10.200N	142°59.371E	3368m	CTD DEEPEST
ST-138	09:45 14°10.303N	142°59.277E	3285m	CTD FINISHED
ST-138	09:57 14°10.368N	142°59.088E	3211m	3M ORI NET STARTED
ST-138	10:28 14°10.240N	142°59.944E	3582m	3M ORI NET DEEPEST
ST-138	11:03 14°10.114N	143°00.716E	3973m	3M ORI NET FINISHED
ST-139	12:07 14°19.894N	142°50.758E	2133m	3M ORI NET STARTED
ST-139	12:38 14°20.189N	142°51.724E	2245m	3M ORI NET DEEPEST
ST-139	13:16 14°20.507N	142°52.590E	2158m	3M ORI NET FINISHED
ST-140	13:57 14°18.695N	142°45.031E	2437m	3M ORI NET STARTED
ST-140	14:29 14°19.015N	142°46.168E	2420m	3M ORI NET DEEPEST
ST-140	15:19 14°19.426N	142°47.439E	2424m	3M ORI NET FINISHED
ST-141	16:38 14°18.785N	142°30.008E	3559m	3M ORI NET STARTED
ST-141	17:09 14°19.159N	142°30.919E	3523m	3M ORI NET DEEPEST
ST-141	17:53 14°19.670N	142°31.953E	3526m	3M ORI NET FINISHED
ST-142	19:13 14°15.201N	142°14.936E	4096m	3M ORI NET STARTED
ST-142	19:43 14°15.586N	142°15.751E	4068m	3M ORI NET DEEPEST
	20:08 14°15.857N	142°16.310E	4061m	SUNRISE
ST-142	20:21 14°16.042N	142°16.553E	4021m	3M ORI NET FINISHED
ST-143	21:35 14°15.121N	141°59.989E	4347m	3M ORI NET STARTED
ST-143	22:13 14°15.561N	142°01.248E	4321m	3M ORI NET DEEPEST
ST-143	22:57 14°16.239N	142°02.345E	4322m	3M ORI NET FINISHED
8.Jul.05				
ST-144	00:14 14°00.079N	142°00.053E	4237m	3M ORI NET STARTED
ST-144	00:48 14°00.057N	142°01.160E	4204m	3M ORI NET DEEPEST
ST-144	01:24 14°00.107N	142°02.055E	4184m	3M ORI NET FINISHED
ST-145	02:36 13°45.037N	142°00.076E	3873m	3M ORI NET STARTED
ST-145	03:07 13°44.661N	142°01.234E	3896m	3M ORI NET DEEPEST
ST-145	03:49 13°43.984N	142°02.328E	3774m	3M ORI NET FINISHED
ST-146	04:51 13°45.010N	142°15.003E	3090m	3M ORI NET STARTED
ST-146	05:24 13°44.661N	142°16.022E	3080m	3M ORI NET DEEPEST
ST-146	06:02 13°44.319N	142°16.996E	3129m	3M ORI NET FINISHED
ST-147	07:15 14°00.014N	142°14.992E	3536m	3M ORI NET STARTED
ST-147	07:52 13°59.910N	142°16.536E	3445m	3M ORI NET DEEPEST
ST-147	08:38 13°59.774N	142°18.003E	3247m	3M ORI NET FINISHED
	09:08 13°54.053N	142°18.981E	3456m	SUNSET
ST-148	12:47 12°59.913N	142°29.854E	2715m	CTD-CMS STARTED
ST-148	13:06 12°59.854N	142°29.674E	2727m	CTD-CMS DEEPEST
ST-148	13:27 12°59.888N	142°29.656E	2769m	CTD-CMS FINISHED
ST-148	13:37 12°59.842N	142°29.524E	2896m	3M ORI NET STARTED
ST-148	14:09 13°00.252N	142°30.227E	2745m	3M ORI NET DEEPEST

ST-148	14:47 12	2°59.821N	142°30.937E	3241m	3M ORI NET FINISHED
ST-149	16:58 13	3°29.980N	142°29.994E	2376m	3M ORI NET STARTED
ST-149	17:32 13	3°29.191N	142°30.752E	2505m	3M ORI NET DEEPEST
ST-149	18:12 13	3°28.249N	142°31.400E	2369m	3M ORI NET FINISHED
	20:07 13	3°56.601N	142°29.940E	2858m	SUNRISE
ST-150	20:32 14	l°00.086N	142°29.903E	2710m	CTD STARTED
ST-150	21:00 14	l°00.349N	142°29.596E	2712m	CTD DEEPEST
ST-150	21:27 14	l°00.609N	142°29.394E	2729m	CTD FINISHED
ST-150	21:39 14	l°00.669N	142°29.223E	2740m	3M ORI NET STARTED
ST-150	22:11 14	°00.688N	142°30.221E	2706m	3M ORI NET DEEPEST
ST-150	22:48 14	°00.766N	142°31.082E	2757m	3M ORI NET FINISHED
9.Jul.05					
ST-151	00:46 14	°30.033N	142°29.984E	3465m	3M ORI NET STARTED
ST-151	01:21 14	°30.207N	142°31.140E	3412m	3M ORI NET DEEPEST
ST-151	02:02 14	°30.381N	142°32.167E	3377m	3M ORI NET FINISHED
ST-152	05:30 13	°59.963N	142°07.693E	4010m	3M ORI NET STARTED
ST-152	05:56 13	°59.780N	142°08.750E	3976m	3M ORI NET DEEPEST
ST-152	06:35 13	°59.538N	142°09.766E	3921m	3M ORI NET FINISHED
ST-153	07:44 13	°44.977N	142°07.441E	3428m	3M ORI NET STARTED
ST-153	08:15 13	°44.722N	142°08.441E	3490m	3M ORI NET DEEPEST
ST-153		°44.443N	142°09.486E	3202m	3M ORI NET FINISHED
ST-154		°29.959N	142°07.580E	3073m	3M ORI NET STARTED
ST-154		°29.826N	142°08.750E	3124m	3M ORI NET DEEPEST
ST-154		°29.675N	142°09.904E	3092m	3M ORI NET FINISHED
ST-155		°14.993N	142°07.544E	2717m	3M ORI NET STARTED
ST-155		°14.893N	142°08.649E	2649m	3M ORI NET DEEPEST
ST-155		°14.756N	142°09.771E	2636m	3M ORI NET FINISHED
ST-156		°59.950N	142°07.495E	1911m	3M ORI NET STARTED
ST-156		°59.780N	142°08.506E	2156m	3M ORI NET DEEPEST
ST-156		°59.566N	142°09.517E	2006m	3M ORI NET FINISHED
ST-150		°00.050N	141°44.950E	3350m	3M ORI NET STARTED
ST-157		°00.030N	141°45.945E	3314m	3M ORI NET DEEPEST
		°00.232N	141°46.986E		
ST-157		°00.581N		3294m	3M ORI NET FINISHED
ST-157		°00.828N	141°46.827E	3314m	CTD STARTED
ST-157			141°46.660E	3314m	CTD DEEPEST
ST-157		°00.972N	141°46.487E	3329m	CTD FINISHED
		°02.279N	141°46.164E	3381m	SUNRISE
ST-158		14.979N	141°44.991E	3618m	3M ORI NET STARTED
ST-158		15.426N	141°45.813E	3604m	3M ORI NET DEEPEST
ST-158		°15.789N	141°46.448E	3589m	3M ORI NET FINISHED
ST-159		°22.429N	141°45.001E	3654m	3M ORI NET STARTED
ST-159	23:26 13	°23.077N	141°45.805E	3635m	3M ORI NET DEEPEST
10.Jul.05					
ST-159		°23.787N	141°46.479E	3580m	3M ORI NET FINISHED
ST-160		°29.951N	141°45.060E	2983m	3M ORI NET STARTED
ST-160	01:09 13	°30.372N	141°46.043E	2964m	3M ORI NET DEEPEST

ST-160	01:45	13°30.634N	141°46.993E	3129m	3M ORI NET FINISHED
ST-161	02:27	13°37.530N	141°44.978E	4206m	3M ORI NET STARTED
ST-161	02:58	13°37.364N	141°46.122E	4206m	3M ORI NET DEEPEST
ST-161	03:39	13°37.032N	141°47.386E	4183m	3M ORI NET FINISHED
ST-162	04:25	13°45.009N	141°45.083E	4325m	3M ORI NET STARTED
ST-162	04:57	13°44.765N	141°46.334E	4300m	3M ORI NET DEEPEST
ST-162	05:41	13°44.040N	141°47.492E	4303m	3M ORI NET FINISHED
ST-163	06:28	13°52.497N	141°44.939E	4491m	3M ORI NET STARTED
ST-163	07:03	13°52.280N	141°46.060E		3M ORI NET DEEPEST
ST-163	07:42	13°51.993N	141°47.077E	4412m	3M ORI NET FINISHED
ST-164	08:30	14°00.076N	141°44.998E	4606m	3M ORI NET STARTED
ST-164	09:04	13°59.812N	141°46.032E	4517m	3M ORI NET DEEPEST
	09:06	13°59.798N	141°46.066E	4520m	SUNSET
ST-164	09:43	13°59.512N	141°46.861E	4476m	3M ORI NET FINISHED
ST-164	09:50	13°59.570N	141°46.924E	4474m	CTD STARTED
ST-164	10:12	13°59.695N	141°46.848E	4477m	CTD DEEPEST
ST-164	10:34	13°59.804N	141°46.761E	4481m	CTD FINISHED
ST-165	11:48	14°15.021N	141°45.070E	4492m	3M ORI NET STARTED
ST-165	12:21	14°15.492N	141°46.246E	4212m	3M ORI NET DEEPEST
ST-165	13:02	14°15.894N	141°47.504E	4472m	3M ORI NET FINISHED
ST-166	14:05	14°30.034N	141°44.997E	4550m	3M ORI NET STARTED
ST-166	14:37	14°30.284N	141°46.004E	4532m	3M ORI NET DEEPEST
ST-166	15:18	14°30.462N	141°47.093E	4532m	3M ORI NET FINISHED
ST-167	16:28	14°45.064N	141°45.019E	4552m	3M ORI NET STARTED
ST-167	16:59	14°45.808N	141°45.808E	4540m	3M ORI NET DEEPEST
ST-167	17:43	14°46.652N	141°46.566E	4541m	3M ORI NET FINISHED
ST-168	18:52	15°00.020N	141°44.929E	4554m	3M ORI NET STARTED
ST-168	19:25	15°00.248N	141°46.119E	4547m	3M ORI NET DEEPEST
	20:09	15°00.397N	141°47.303E	4547m	SUNRISE
ST-168	20:11	15°00.398N	141°47.353E	4546m	3M ORI NET FINISHED
ST-168	20:19	15°00.435N	141°47.393E	4547m	CTD STARTED
ST-168	20:42	15°00.554N	141°47.367E	4546m	CTD DEEPEST
ST-168	21:09	15°00.533N	141°47.161E	4549m	CTD FINISHED
ST-169	23:01	14°59.912N	141°22.490E	4327m	3M ORI NET STARTED
ST-169	23:34	14°59.011N	141°22.987E	4645m	3M ORI NET DEEPEST
11.Jul.05					
ST-169	00:12	14°58.073N	141°23.403E	4658m	3M ORI NET FINISHED
ST-170	02:07	14°29.973N	141°22.502E	4705m	3M ORI NET STARTED
ST-170	02:41	14°30.538N	141°23.366E	4700m	3M ORI NET DEEPEST
ST-170	03:24	14°31.338N	141°23.825E	4701m	3M ORI NET FINISHED
ST-171	05:42	14°00.023N	141°22.562E	4726m	3M ORI NET STARTED
ST-171	06:11	14°00.624N	141°23.511E	4738m	3M ORI NET DEEPEST
ST-171	06:54	14°01.376N	141°24.480E	4751m	3M ORI NET FINISHED
	09:06	13°28.697N	141°22.440E	4375m	SUNSET
ST-172	10:04	13°15.027N	141°22.517E	4296m	3M ORI NET STARTED
ST-172	10:36	13°14.817N	141°23.544E	4234m	3M ORI NET DEEPEST

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ST-172
         11:13 13°14.599N 141°24.307E 4061m 3M ORI NET FINISHED
         14:13 12°30.005N
ST-173
                          141°22.509E
                                     2013m
                                             3M ORI NET STARTED
ST-173
         14:46 12°30.621N
                          141°23.478E
                                     2095m
                                             3M ORI NET DEEPEST
         15:30 12°31.416N
ST-173
                          141°24.451E
                                      2188m
                                             3M ORI NET FINISHED
          20:20 12°12 833N
                          140°06.910E
                                      3983m
                                             SUNRISE
12.Jul.05
         03:54 11°42.521N 138°07.134E 4531m
                                             STARTED RETRIEVING OF UPWELLING SYSTEM
         05:55 11°42.233N
                          138°06.527E
                                     4784m
                                             FINISHED RETRIEVING OF UPWELLING SYSTEM
ST-174
         06:22 11°42.162N
                         138°06.422E
                                      4909m
                                             CTD STARTED
ST-174
         06:43 11°42.177N
                         138°06.295E
                                      4900m
                                             CTD DEEPEST
ST-174
         06:57 11°42.224N
                          138°06.240E
                                      4898m
                                             CTD FINISHED
         09:15 11°56.009N
                         138°34.887E
                                      4836m
                                             SUNSET
         19:04 13°00.060N
ST-175
                          141°00.034E
                                     3834m
                                             3M ORI NET STARTED
ST-175
         19:42 13°00.635N
                          141°01.197E
                                     4038m
                                             3M ORI NET DEEPEST
         20:16 13°01.067N 141°02.118E
                                     3804m
                                             SUNRISE
         20:21 13°01.117N 141°02.216E 3718m
ST-175
                                             3M ORI NET FINISHED
ST-175
         20:28 13°01.151N
                         141°02.233E
                                     4020m
                                             CTD STARTED
         20:50 13°01.199N 141°02.097E
ST-175
                                     3844m CTD DEEPEST
ST-175
         21:12 13°01.293N
                         141°02.047E
                                     4009m
                                             CTD FINISHED
ST-176
         23:27 13°29.783N
                         140°59.930E
                                     4688m
                                             CTD STARTED
ST-176
         23:47 13°29.718N
                         140°59.936E
                                     4688m
                                             CTD DEEPEST
13.Jul.05
ST-176
         00:07 13°29.615N 140°59.878E 4686m CTD FINISHED
ST-176
         00:16 13°29.536N
                         140°59.822E
                                     4686m
                                             3M ORI NET STARTED
ST-176
         00:47 13°29.975N
                         141°00.621E
                                     4690m
                                             3M ORI NET DEEPEST
ST-176
         01:22 13°30.451N 141°01.407E 4675m 3M ORI NET FINISHED
ST-177
         03:30 14°00.037N 140°59.934E
                                     4799m
                                             CTD STARTED
ST-177
         03:54 14°00.085N 140°59.816E
                                     4802m CTD DEEPEST
ST-177
         04:17 14°00.075N 140°59.655E
                                     4807m CTD FINISHED
ST-177
         04:25 14°00.041N 140°59.530E 4815m
                                             3M ORI NET STARTED
ST-177
         04:54 14°00.172N
                         141°00.217E
                                     4798m
                                            3M ORI NET DEEPEST
ST-177
         05:33 14°00.417N
                         141°01.182E
                                     4813m
                                             3M ORI NET FINISHED
ST-178
         07:37 14°30.164N 140°59.891E
                                     4860m
                                             CTD STARTED
ST-178
         07:59 14°30.452N 140°59.689E 4858m
                                            CTD DEEPEST
         08:19 14°30.638N
ST-178
                         140°59.462E
                                             CTD FINISHED
                                     4858m
ST-178
         08:24 14°30.687N
                         140°59.401E
                                     4858m
                                             3M ORI NET STARTED
ST-178
         08:56 14°30.969N
                         141°00.147E 4861m
                                             3M ORI NET DEEPEST
         09:08 14°31.050N
                         141°00.393E 4861m
                                             SUNSET
         09:31 14°31.106N
ST-178
                         141°00.873E 4831m
                                            3M ORI NET FINISHED
ST-179
         11:41 15°00.053N
                         140°59.898E
                                     4731m
                                             CTD STARTED
ST-179
         12:00 15°00.128N
                         140°59.686E 4732m
                                             CTD DEEPEST
         12:22 15°00.183N
                         140°59.449E 4681m CTD FINISHED
ST-179
         12:31 15°00.206N
ST-179
                         140°59.346E
                                     4672m
                                             3M ORI NET STARTED
ST-179
         13:02 15°01.085N
                         140°59.805E
                                     4732m
                                             3M ORI NET DEEPEST
ST-179
         13:57 15°02.481N
                         141°00.586E
                                     4721m
                                             3M ORI NET FINISHED
ST-180
         17:43 16°00.016N 140°59.957E
                                     4666m
                                            3M ORI NET STARTED
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ST-180	18:20 16°01.132N	140°59.585E	4692m	3M ORI NET DEEPEST
ST-180	18:59 16°02.099N	140°59.338E	4708m	3M ORI NET FINISHED
ST-180	19:10 16°02.094N	140°59.281E	4709m	CTD STARTED
ST-180	19:33 16°02.072N	140°59.116E	4710m	CTD DEEPEST
ST-180	19:55 16°02.060N	140°59.048E	4711m	CTD FINISHED
	20:11 16°02.310N	140°58.911E	4714m	SUNRISE
ST-181	23:57 16°59.872N	141°00.154E	4744m	CTD STARTED
14.Jul.05				
ST-181	00:18 16°59.709N	141°00.274E	4741m	CTD DEEPEST
ST-181	00:40 16°59.566N	141°00.347E	4741m	CTD FINISHED
ST-181	00:45 16°59.506N	141°00.417E	4743m	3M ORI NET STARTED
ST-181	01:16 16°59.163N	141°01.541E	4806m	3M ORI NET DEEPEST
ST-181	01:54 16°58.774N	141°02.717E	4722m	3M ORI NET FINISHED