

# Final Report (Data Book)

## Stock Assessment of Demersal Fish Species in the Republic of Ghana



February, 2003

Japan International Cooperation Agency  
Japan NUS Co., Ltd.  
Sanyo Techno-marine Co., Ltd.

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# **1. Data of Sea Survey**

## **1-1. Project team members and subject allocations**

The makeup of the survey teams and the tasks of the individual team members are shown in Table 1-1-1.

## **1-2. Specifications of survey vessel**

The specifications of chartered research vessel are shown in Table 1-1-2.

## **1-3. Specifications of survey equipment**

The configuration of trawl net is shown in Figure 1-3-1. The experimental cod end for mesh size selectivity tests are shown in Figure 1-3-2.

Two marine scales (6 kg max. with 2g resolution and 60 kg max. with 20g resolution : M series 1100 type U2) manufactured by Marel have been used for body weight measurements.

The oceanographic observations equipment is the CLOROTECH DCL1180-PDK (equipped with a 180-meter-long plumb cable).

A stereomicroscope, Nikon SMZ800, was used for the analysis of otolith and stomach contents.

## **1-4. Survey schedule**

The survey schedule is shown in Table 1-4-1.

## **1-5. Data of fishing operation and oceanographic observaion**

The date, time, coordinates etc. at each survey station is shown in Table 1-5-1.

## **1-6. Oceanographic observation data**

Oceanographic observation results at each survey station are shown in Table 1-6-1. Information on the calibration of salinity is shown in Table 1-6-2.

## **1-7. Catch data**

Catch data at each station is shown in Table 1-7-1. Density distribution ( $\text{kg}/\text{km}^2$ ) of evaluation target species and survey target species are shown in Fig. 1-7-1 and 1-7-2, respectively.

## **1-8. Measurement and analysis data of target species**

Results of length and body weight measurement of evaluation target species are shown in Table 1-8-1. Results of stomach contents analysis of evaluation target species are shown in Table 1-8-2. Results of length and body weight measurement of survey target species are shown in Table 1-8-3.

## **1-9. Mesh size selectivity tests data**

Results of length measurement of evaluation target species caught in inner net and outer net at the mesh size selectivity tests are shown in Table 1-9-1.

## **2. Data of Land Survey**

### **2-1. Project team members and subject allocations**

The makeup of the survey teams and the tasks of the individual team members are shown in Table 2-1.

### **2-2. Sites of market research**

The sites of market research are shown in Table 2-2.

### **2-3. Survey schedule**

The survey schedule is shown in Table 2-3.

### **2-4. Interview results**

Results of the interview with fishermen and industrial fishing companies are shown in Table 2-4-1 and 2-4-2, respectively.

### **2-5. Fish price data**

Prices of the fish caught by industrial fisheries and artisanal fisheries are shown in Table 2-5-1 and 2-5-2, respectively. Fish prices at the markets are shown in Table 2-5-3.

### **2-6. Results of the length measurement**

Results of the length measurement of evaluation target species and survey target species at markets are shown in Table 2-6-1 and 2-6-2, respectively. For the length measurement, landed fish were placed in the metal frame or on the rectangular plate to take photos with a digital camera (TOSHIBA PDR-M70). Length were measured by 4 points method using personal computer (COMPAQ prosignia 300 series).

### **2-7. Catch statistics**

Catch data collection forms of artisanal, semi-industrial and industrial fisheries are shown in Table 2-7-1. Annual catch quantity by species and fishery are shown in Table 2-7-2. Monthly catch quantity by species and fishery in year 1999 are shown in Table 2-7-3. Monthly gross landing by species of artisanal fisheries are shown in Table 2-7-4.

# Data of Sea Survey



**Table 1-1-1 Project team members and subject allocations**

**The 2nd survey (4 Oct. – 18 Oct. 2000)**

Member	Job title	Counterpart	Position
Dr. H. Kimoto Mr. M. Uno	Fishery Resources Survey / Stock Assessment	Mr. Johanson K. Atsu	Assistant Fisheries officer, Fisheries Department(FD)
Mr. H. Dosoden	Fishing Technology / Fishing Gear and Method	Mr. R. T. B. Ashong	Principal Technical officer, Fisheries Department(FD)
Dr. H. Ishihara	Biological survey	Ms. Comfort Yeboah	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. J. K. Teye	Principal Technical officer, Fisheries Department(FD)
Mr. T. Wada	Oceanographic survey	Mr. Emmanuel K. Dovlo	Assistant Fisheries officer, Fisheries Department(FD)

\* 1. Counterparts above are the participants of the field survey.

Ms. Anang, Dr. Koranteng, Mr. Banneman and Mr. Hawawre were also Ghanaian counterparts.

2. Mr. M. Uno replaced Dr Kimoto in the course of offshore survey from 13 to 18 Oct..

**The 3rd survey (25 Jul. – 13 Aug. 2001)**

Member	Job title	Counterpart	Position
Dr. H. Kimoto	Fishery Resources Survey / Stock Assessment	Ms. Comfort Yeboah	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. R. Pong	Technical officer, Fisheries Department(FD)
Mr. H. Dosoden	Fishing Technology / Fishing Gear and Method	Mr. R. T. B. Ashong	Principal Technical officer, Fisheries Department(FD)
Dr. H. Ishihara	Biological survey	Ms. Comfort Yeboah	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. F. Odai	Senior Technical officer, Fisheries Department(FD)
Mr. T. Wada	Oceanographic survey	Mr. Emmanuel K. Dovlo	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. E. Nii-Anme	Technical officer, Fisheries Department(FD)

**The 4th survey (29 Oct. – 16 Nov. 2001)**

Member	Job title	Counterpart	Position
Dr. H. Kimoto	Fishery Resources Survey / Stock Assessment	Ms. Comfort Yeboah	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. R. Pong	Technical officer, Fisheries Department(FD)
Mr. H. Dosoden	Fishing Technology / Fishing Gear and Method	Mr. R. T. B. Ashong	Principal Technical officer, Fisheries Department(FD)
Dr. H. Ishihara	Biological survey	Ms. Comfort Yeboah	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. S. Among	Senior Technical officer, Fisheries Department(FD)
Mr. T. Wada	Oceanographic survey	Mr. Emmanuel K. Dovlo	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. E. Nii-Anme	Technical officer, Fisheries Department(FD)

**The 5th survey (20 Jul. – 5 Aug. 2002)**

Member	Job title	Counterpart	Position
Dr. H. Kimoto	Fishery Resources Survey / Stock Assessment	Ms. Comfort Yeboah	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. R. Pong	Technical officer, Fisheries Department(FD)
Mr. H. Dosoden	Fishing Technology / Fishing Gear and Method	Mr. R. T. B. Ashong	Principal Technical officer, Fisheries Department(FD)
Dr. H. Ishihara	Biological survey	Ms. Comfort Yeboah	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. D. Adekpui	Senior Technical officer, Fisheries Department(FD)
Mr. T. Wada	Oceanographic survey	Mr. Emmanuel K. Dovlo	Assistant Fisheries officer, Fisheries Department(FD)
		Mr. E. Nii-Anme	Technical officer, Fisheries Department(FD)

**Table 1-2-1 Specification of LAIDA**

Name of Owner	Orestis Kaldelis
Year of Launching	1988
Shipbuilder	Greece
Gross Tonnage	297.6t
L x B x D (m)	37.70 x 9.50 x 4.80
Main Engine	945 ps
Auxiliary Engine	260kva x 2
Capacity of Fish Hold	350.00m <sup>3</sup>
Fuel Tank	170m <sup>3</sup>
Fresh Water Tank	20.00m <sup>3</sup>
Number of Crewmen	30 persons
Cruising Speed	8 knot
Maximum Depth of Trawling	100m
Cruising Range	110 days
Net Monitor	none
Navigation Instrument	SSB, VHF, Radar, GPS, Fish Finder

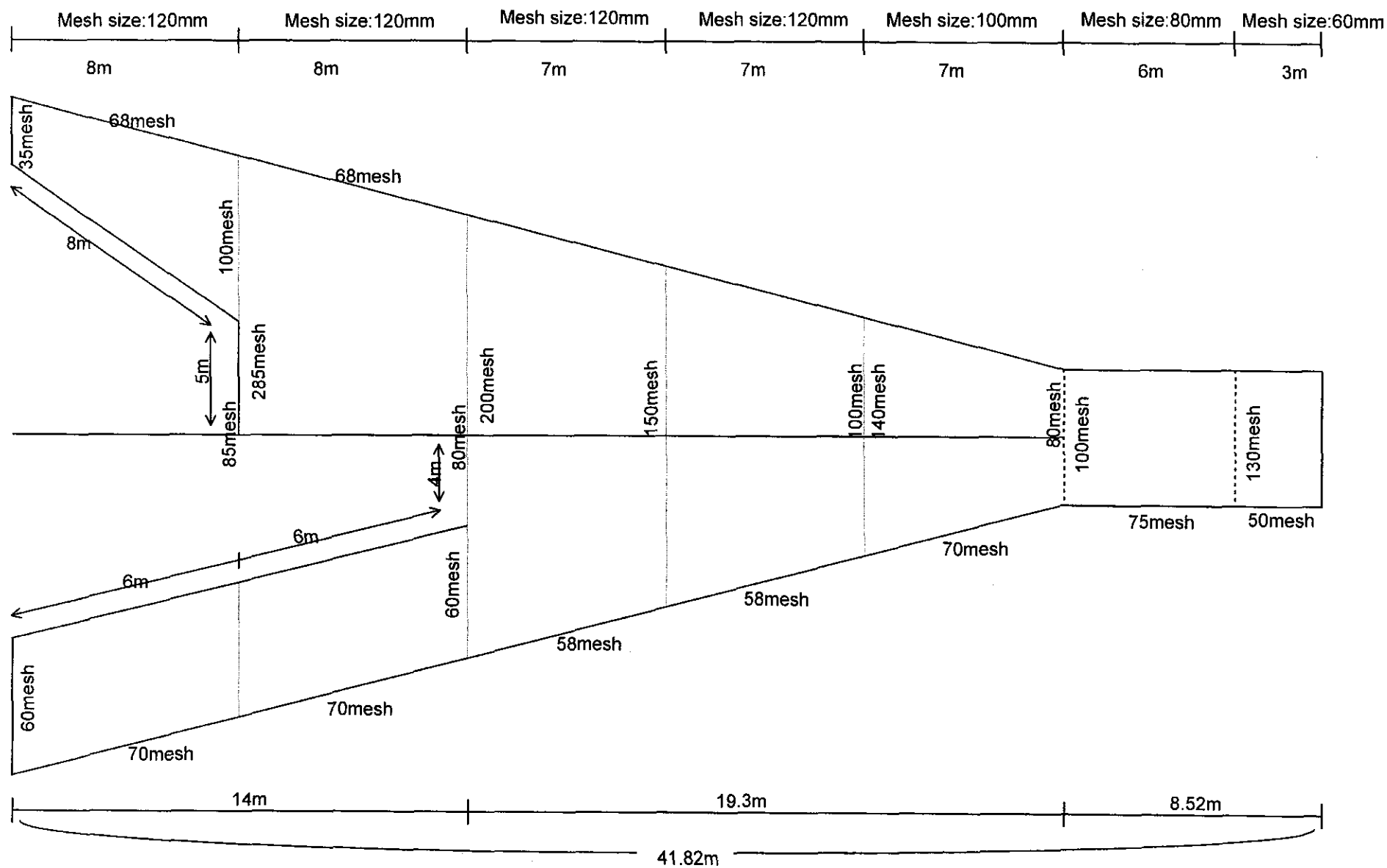


Figure 1-3-1 Plan of the trawl net

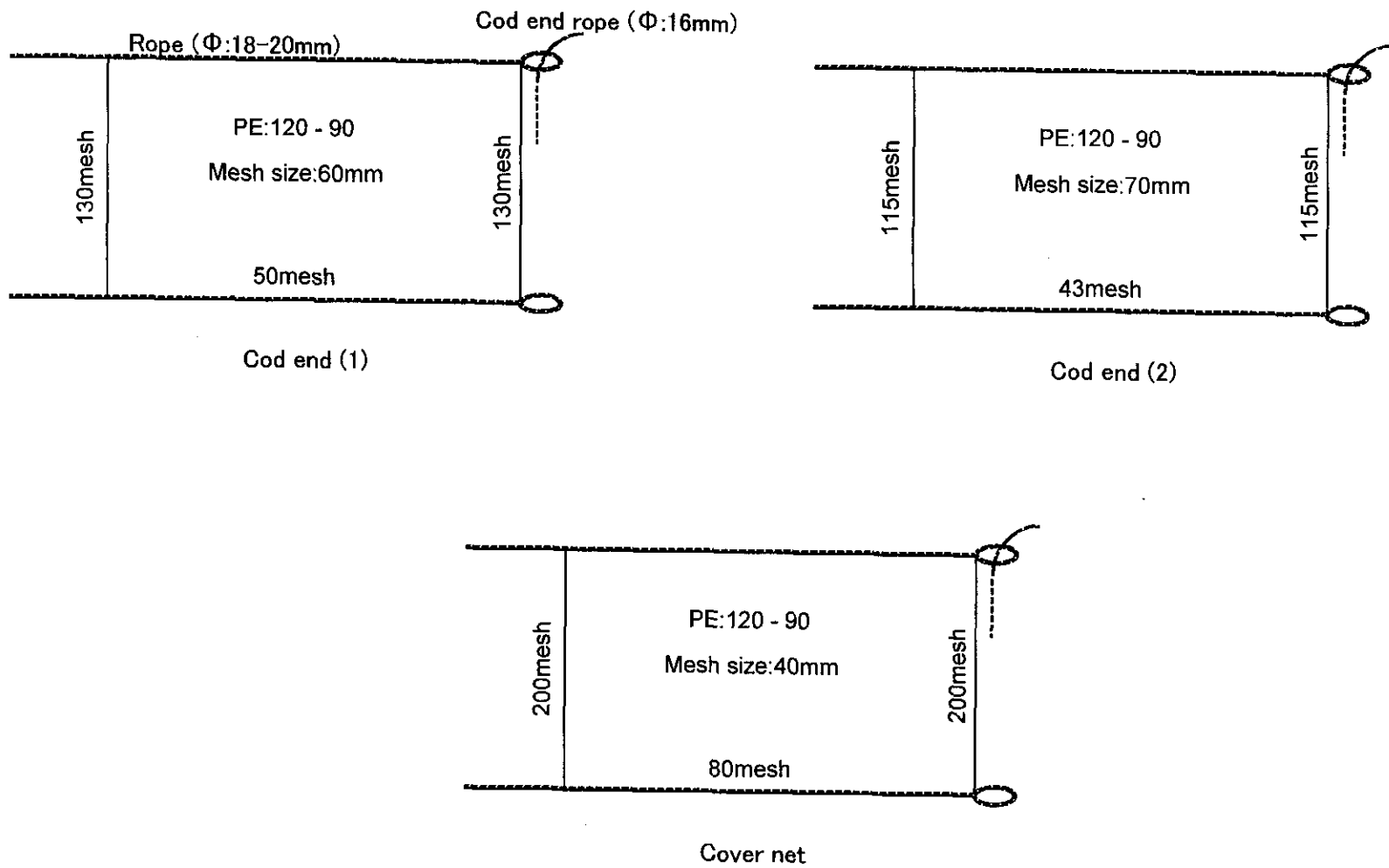


Figure 1-3-2 Plan of the cod end and the cover net

Table 1-4-1 The schedule of offshore survey

The 2nd survey (4 Oct. - 18 Oct. 2000)

Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date
1	6, Oct.	11	17, Oct.	21	15, Oct.	31	11, Oct.	41	7, Oct.
2	6, Oct.	12	17, Oct.	22	14, Oct.	32	11, Oct.	42	18, Oct.
3	7, Oct.	13	17, Oct.	23	14, Oct.	33	11, Oct.	43	5, Oct.
4	5, Oct.	14	15, Oct.	24	13, Oct.	34	11, Oct.	44	17, Oct.
5	6, Oct.	15	15, Oct.	25	13, Oct.	35	10, Oct.	45	16, Oct.
6	6, Oct.	16	15, Oct.	26	12, Oct.	36	10, Oct.	46	13, Oct.
7	4, Oct.	17	16, Oct.	27	12, Oct.	37	10, Oct.	47	11, Oct.
8	5, Oct.	18	16, Oct.	28	12, Oct.	38	9, Oct.	48	10, Oct.
9	5, Oct.	19	16, Oct.	29	12, Oct.	39	9, Oct.	49	10, Oct.
10	16, Oct.	20	15, Oct.	30	12, Oct.	40	9, Oct.	50	9, Oct.

The 3rd survey (25 Jul. - 13 Aug. 2001)

Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date
1	7, Aug.	11	3, Aug.	21	27, Jul.	31	1, Aug.	41	7, Aug.
2	7, Aug.	12	3, Aug.	22	27, Jul.	32	29, Jul.	42	8, Aug.
3	7, Aug.	13	3, Aug.	23	27, Jul.	33	29, Jul.	43	9, Aug.
4	8, Aug.	14	2, Aug.	24	27, Jul.	34	29, Jul.	44	3, Aug.
5	8, Aug.	15	2, Aug.	25	1, Aug.	35	30, Jul.	45	10, Aug.
6	8, Aug.	16	2, Aug.	26	28, Jul.	36	30, Jul.	46	1, Aug.
7	9, Aug.	17	2, Aug.	27	28, Jul.	37	30, Jul.	47	1, Aug.
8	9, Aug.	18	2, Aug.	28	28, Jul.	38	31, Jul.	48	29, Jul.
9	9, Aug.	19	10, Aug.	29	28, Jul.	39	31, Jul.	49	30, Jul.
10	3, Aug.	20	27, Jul.	30	28, Jul.	40	31, Jul.	50	31, Jul.
								M1	11, Aug.
								M2	11, Aug.
								M3	12, Aug.
								M4	12, Aug.

M-1~M-4 are the mesh selectivity test stations.

The 4th survey (29 Oct. - 16 Nov. 2001)

Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date
1	10, Nov.	11	7, Nov.	21	1, Nov.	31	3, Nov.	41	10, Nov.
2	10, Nov.	12	7, Nov.	22	1, Nov.	32	3, Nov.	42	11, Nov.
3	10, Nov.	13	13, Nov.	23	1, Nov.	33	3, Nov.	43	12, Nov.
4	11, Nov.	14	6, Nov.	24	31, Oct.	34	3, Nov.	44	13, Nov.
5	11, Nov.	15	6, Nov.	25	31, Oct.	35	4, Nov.	45	13, Nov.
6	11, Nov.	16	6, Nov.	26	2, Nov.	36	4, Nov.	46	31, Oct.
7	12, Nov.	17	6, Nov.	27	2, Nov.	37	4, Nov.	47	3, Nov.
8	12, Nov.	18	6, Nov.	28	2, Nov.	38	5, Nov.	48	4, Nov.
9	12, Nov.	19	13, Nov.	29	2, Nov.	39	5, Nov.	49	4, Nov.
10	7, Nov.	20	1, Nov.	30	2, Nov.	40	5, Nov.	50	5, Nov.
								M1	14, Nov.
								M2	14, Nov.
								M3	15, Nov.
								M4	15, Nov.

M-1~M-4 are the mesh selectivity test stations.

The 5th survey (20 Jul. - 5 Aug. 2002)

Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date	Station No.	Date
1	31, July.	11	28, July	21	21, July	31	26, July	41	31, July
2	31, July.	12	28, July	22	21, July	32	23, July	42	1, Aug.
3	31, July.	13	3, Aug.	23	21, July	33	23, July	43	2, Aug.
4	1, Aug.	14	27, July	24	21, July	34	23, July	44	3, Aug.
5	1, Aug.	15	27, July	25	26, July	35	24, July	45	3, Aug.
6	1, Aug.	16	27, July	26	22, July	36	24, July	46	26, July
7	2, Aug.	17	27, July	27	22, July	37	24, July	47	26, July
8	2, Aug.	18	27, July	28	22, July	38	25, July	48	23, July
9	2, Aug.	19	3, Aug.	29	22, July	39	25, July	49	24, July
10	28, July	20	21, July	30	22, July	40	25, July	50	25, July
								M1	4, Aug.
								M2	4, Aug.
								M3	4, Aug.
								M4	4, Aug.

M-1~M-4 are the mesh selectivity test stations.

Table 1-5-1 (1) Dates and locations of the fishing operations and the oceanographic observations

The 2nd survey (4 Oct. - 18 Oct. 2000)

	Station 1 Date : 6 OCTOBER				Station 2 Date : 6 OCTOBER				Station 3 Date : 7 OCTOBER				Station 4 Date : 5 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°51'08"N	05°52'38"N	05°50'34"N	-	05°47'11"N	05°48'48"N	05°46'09"N	-	05°51'41"N	05°52'19"N	05°50'47"N	-	05°43'12"N	05°44'00"N	05°42'32"N	-
Lon.	01°01'27"E	01°02'43"E	01°00'09"E	-	01°00'49"E	01°01'38"E	01°00'07"E	-	01°09'12"E	01°09'50"E	01°08'05"E	-	00°33'34"E	00°33'59"E	00°33'59"E	-
Warp L.	75m	75m	-	-	120m	120m	-	-	210m	210m	-	-	80m	80m	-	-
Depth	16m	16m	16m	-	33m	34m	34m	-	55m	56m	55m	-	22m	19m	22m	-
Time	14:45	15:15	14:30	14:39	13:35	13:55	13:15	13:24	7:05	7:25	6:11	6:46	16:55	17:15	16:35	16:43

	Station 5 Date : 6 OCTOBER				Station 6 Date : 6 OCTOBER				Station 7 Date : 4 OCTOBER				Station 8 Date : 5 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°36'17"N	05°36'31"N	05°36'35"N	-	05°36'28"N	05°37'00"N	05°36'29"N	-	05°42'05"N	05°42'58"N	05°41'46"N	-	05°40'18"N	05°40'04"N	05°40'53"N	-
Lon.	00°36'40"E	00°35'47"E	00°36'31"E	-	00°33'22"E	00°32'00"E	00°33'26"E	-	00°20'28"E	00°22'43"E	00°19'42"E	-	00°22'56"E	00°21'27"E	00°22'26"E	-
Warp L.	150m	150m	-	-	190m	190m	-	-	70m	70m	-	-	120m	120m	-	-
Depth	39m	40m	40m	-	53m	52m	53m	-	20m	21m	20m	-	40m	42m	40m	-
Time	7:00	7:30	6:34	6:46	8:45	9:15	8:14	8:31	16:00	16:30	14:44	15:17	7:24	7:54	6:35	6:49

	Station 9 Date : 5 OCTOBER				Station 10 Date : 17 OCTOBER				Station 11 Date : 17 OCTOBER				Station 12 Date : 17 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°34'52"N	05°33'50"N	05°35'12"N	-	05°27'14"N	05°27'46"N	05°27'08"N	-	05°21'57"N	05°22'28"N	05°21'47"N	-	05°20'56"N	05°21'32"N	05°21'44"N	-
Lon.	00°08'48"E	00°08'06"E	00°09'25"E	-	00°15'56"W	00°14'19"W	00°16'14"W	-	00°12'59"W	00°11'29"W	00°13'40"W	-	00°10'19"W	00°09'53"W	00°13'36"W	-
Warp L.	170m	180m	-	-	90m	90m	-	-	140m	140m	-	-	170m	170m	-	-
Depth	49m	56m	50m	-	22m	23m	21m	-	44m	45m	43m	-	53m	53m	44m	-
Time	10:30	11:00	10:07	10:15	6:30	7:00	6:00	6:08	8:44	9:14	8:10	8:17	10:20	10:50	8:18	8:32

	Station 13 Date : 17 OCTOBER				Station 14 Date : 15 OCTOBER				Station 15 Date : 15 OCTOBER				Station 16 Date : 15 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°19'31"N	05°19'33"N	05°19'16"N	-	05°13'07"N	05°12'34"N	05°13'16"N	-	05°10'09"N	05°09'53"N	05°10'12"N	-	05°04'28"N	05°04'29"N	05°04'32"N	-
Lon.	00°07'27"W	00°07'58"W	00°08'04"W	-	00°41'44"W	00°40'34"W	00°42'02"W	-	00°39'40"W	00°38'17"W	00°40'02"W	-	00°37'53"W	00°36'26"W	00°38'13"W	-
Warp L.	200m	200m	-	-	80m	80m	-	-	110m	110m	-	-	120m	120m	-	-
Depth	63m	63m	64m	-	17m	20m	17m	-	25m	28m	25m	-	36m	36m	35m	-
Time	11:58	12:05	11:28	11:46	10:36	11:01	10:24	10:29	12:05	12:35	11:40	11:50	14:15	14:45	14:00	14:06

	Station 17 Date : 16 OCTOBER				Station 18 Date : 16 OCTOBER				Station 19 Date : 16 OCTOBER				Station 20 Date : 15 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°58'37"N	04°59'07"N	04°58'29"N	-	04°53'22"N	04°53'45"N	04°45'22"N	-	04°51'13"N	04°52'07"N	04°51'00"N	-	05°07'20"N	05°07'10"N	05°07'16"N	-
Lon.	00°37'56"W	00°36'37"W	00°38'15"W	-	00°38'01"W	00°36'38"W	00°38'23"W	-	00°35'58"W	00°34'58"W	00°36'22"W	-	00°53'42"W	00°52'23"W	00°54'10"W	-
Warp L.	170m	170m	-	-	190m	190m	-	-	225m	225m	-	-	80m	80m	-	-
Depth	46m	44m	45m	-	53m	55m	53m	-	65m	65m	64m	-	20m	20m	20m	-
Time	6:30	7:00	6:15	6:20	8:50	9:20	8:20	8:40	10:30	11:00	10:15	10:23	8:05	8:35	7:49	7:55

	Station 21 Date : 15 OCTOBER				Station 22 Date : 14 OCTOBER				Station 23 Date : 14 OCTOBER				Station 24 Date : 13 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°04'10"N	05°03'59"N	05°04'14"N	-	04°52'37"N	04°53'13"N	04°52'23"N	-	04°42'20"N	04°41'58"N	04°42'51"N	-	04°32'17"N	04°32'56"N	04°32'03"N	-
Lon.	01°56'41"W	00°55'16"W	00°57'07"W	-	01°06'16"W	01°04'01"W	01°06'35"W	-	01°09'08"W	01°07'38"W	01°09'58"W	-	01°09'49"W	01°09'17"W	01°10'07"W	-
Warp L.	90m	90m	-	-	110m	110m	-	-	150m	150m	-	-	180m	180m	-	-
Depth	24m	23m	24m	-	35m	35m	35m	-	43m	43m	43m	-	54m	55m	64m	-
Time	6:35	7:05	6:09	6:14	16:35	17:05	16:23	16:27	14:10	14:40	13:47	13:55	9:34	9:54	9:14	9:45

Table 1-5-1 (2) Dates and locations of the fishing operations and the oceanographic observations

The 2nd survey (4 Oct. - 18 Oct. 2000)

	Station 25 Date : 13 OCTOBER				Station 26 Date : 12 OCTOBER				Station 27 Date : 12 OCTOBER				Station 28 Date : 12 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°27'26"N	04°28'16"N	04°27'09"N	-	04°59'16"N	04°59'29"N	04°59'14"N	-	04°57'11"N	04°57'08"N	04°57'16"N	-	04°49'54"N	04°49'58"N	04°49'58"N	-
Lon.	01°11'07"W	01°10'02"W	01°11'20"W	-	01°23'11"W	01°21'50"W	01°23'32"W	-	01°20'31"W	01°19'16"W	01°21'04"W	-	01°17'29"W	01°15'51"W	01°17'58"W	-
Warp L.	190m	190m	-	-	70m	70m	-	-	90m	90m	-	-	100m	100m	-	-
Depth	63m	61m	64m	-	20m	21m	21m	-	26m	27m	26m	-	35m	38m	35m	-
Time	7:58	8:28	7:28	7:45	6:33	7:03	6:08	6:13	7:47	8:17	7:35	7:40	9:45	10:15	9:25	9:35

	Station 29 Date : 12 OCTOBER				Station 30 Date : 12 OCTOBER				Station 31 Date : 11 OCTOBER				Station 32 Date : 11 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°41'19"N	04°41'23"N	04°41'24"N	-	04°33'58"N	04°33'31"N	04°34'12"N	-	04°22'08"N	04°22'44"N	04°21'55"N	-	04°48'25"N	04°48'11"N	04°48'40"N	-
Lon.	01°18'06"W	01°17'10"W	01°19'05"W	-	01°21'14"W	01°19'52"W	01°21'49"W	-	01°33'12"W	01°31'48"W	01°33'40"W	-	01°47'43"W	01°46'25"W	01°48'10"W	-
Warp L.	130m	130m	-	-	180m	180m	-	-	240m	240m	-	-	90m	90m	-	-
Depth	43.6m	44.2m	44m	-	52m	51m	52m	-	71m	70m	70m	-	25m	27m	23m	-
Time	12:00	12:30	11:46	11:52	14:15	14:45	13:55	14:05	15:15	15:45	14:50	15:02	7:00	7:30	6:27	6:35

	Station 33 Date : 11 OCTOBER				Station 34 Date : 11 OCTOBER				Station 35 Date : 10 OCTOBER				Station 36 Date : 10 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°44'46"N	04°44'23"N	04°45'02"N	-	04°28'24"N	04°28'12"N	04°28'30"N	-	04°49'30"N	04°50'21"N	04°49'57"N	-	04°47'17"N	04°46'35"N	04°47'28"N	-
Lon.	01°44'48"W	01°43'33"W	01°45'26"W	-	01°40'00"W	01°38'41"W	01°40'07"W	-	02°17'43"W	02°18'48"W	02°17'16"W	-	02°18'22"W	02°16'56"W	02°18'50"W	-
Warp L.	120m	120m	-	-	200m	200m	-	-	90m	90m	-	-	130m	130m	-	-
Depth	37m	38m	37m	-	60m	62m	61m	-	28m	25m	28m	-	42m	41m	41m	-
Time	8:30	9:00	8:14	8:25	11:39	12:09	11:20	11:32	7:20	7:50	6:00	6:11	8:07	8:37	7:51	7:59

	Station 37 Date : 10 OCTOBER				Station 38 Date : 9 OCTOBER				Station 39 Date : 9 OCTOBER				Station 40 Date : 9 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°40'15"N	04°39'18"N	04°40'41"N	-	05°01'07"N	05°01'01"N	05°01'02"N	-	04°58'11"N	05°57'41"N	04°58'08"N	-	04°52'42"N	04°52'40"N	04°52'34"N	-
Lon.	02°14'29"W	02°13'17"W	02°15'12"W	-	02°57'29"W	02°56'04"W	02°55'43"W	-	02°53'16"W	02°53'41"W	02°55'42"W	-	02°53'30"W	02°54'34"W	02°53'08"W	-
Warp L.	200m	200m	-	-	80m	80m	-	-	150m	150m	-	-	240m	240m	-	-
Depth	61m	63m	60m	-	25m	24m	23m	-	41m	40m	41m	-	60m	63m	60m	-
Time	10:15	10:45	9:41	10:02	6:40	7:10	6:07	6:13	8:35	9:05	8:10	8:25	10:30	11:00	10:08	10:20

	Station 41 Date : 7 OCTOBER				Station 42 Date : 18 OCTOBER				Station 43 Date : 5 OCTOBER				Station 44 Date : 17 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°50'15"N	05°47'05"N	05°15'11"N	-	-	-	05°38'51"N	-	-	-	05°29'46"N	-	05°18'56"N	05°18'34"N	05°18'56"N	-
Lon.	01°08'29"E	01°08'05"E	01°08'43"E	-	-	-	00°24'06"E	-	-	-	00°02'13"E	-	00°06'47"W	00°08'10"W	00°06'16"W	-
Warp L.	240m	240m	-	-	-	-	-	-	-	-	-	-	240m	240m	-	-
Depth	76m	77m	78m	-	-	-	78m	-	-	-	68m	-	78m	80m	79m	-
Time	8:40	8:56	8:02	8:19	-	-	8:45	9:11	-	-	12:41	12:55	14:55	15:25	14:16	14:42

	Station 45 Date : 16 OCTOBER				Station 46 Date : 13 OCTOBER				Station 47 Date : 11 OCTOBER				Station 48 Date : 10 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°55'19"N	04°56'16"N	04°54'53"N	-	04°24'38"N	04°24'02"N	04°23'27"N	-	04°21'17"N	04°20'55"N	04°21'27"N	-	04°38'48"N	04°28'35"N	04°28'58"N	-
Lon.	00°31'58"W	00°31'22"W	00°32'10"W	-	01°12'17"W	01°11'13"W	01°12'43"W	-	01°35'44"W	01°34'40"W	01°36'38"W	-	01°59'18"W	01°58'18"W	02°00'14"W	-
Warp L.	240m	240m	-	-	240m	240m	-	-	240m	240m	-	-	240m	240m	-	-
Depth	79m	85m	78m	-	76m	78m	76m	-	77m	76m	78m	-	83m	78m	82m	-
Time	12:24	12:45	11:52	12:14	6:25	6:55	6:05	6:16	13:58	14:19	13:25	13:45	15:00	15:25	14:29	14:50

Table 1-5-1 (3) Dates and locations of the fishing operations and the oceanographic observations

The 2nd survey (4 Oct. - 18 Oct. 2000)

	Station 49 Date : 10 OCTOBER				Station 50 Date : 9 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END
Lat.	04°33'32"N	04°32'50"N	04°33'41"N	-	04°48'10"N	04°48'07"N	04°47'55"N	-
Lon.	02°10'35"W	02°09'16"W	02°11'24"W	-	02°54'28"W	02°52'50"W	02°55'35"W	-
Warp L.	240m	240m	-	-	280m	280m	-	-
Depth	79m	79m	80m	-	77m	76m	79m	-
Time	12:25	12:52	11:53	12:14	12:50	13:15	11:59	12:12

The 3rd survey (25 Jul. - 13 Aug. 2001)

	Station 1 Date : 7 AUGUST				Station 2 Date : 7 AUGUST				Station 3 Date : 7 AUGUST				Station 4 Date : 8 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°51'11"N	05°52'19"N	05°50'43"N	-	05°53'07"N	05°53'22"N	05°52'37"N	-	05°51'21"N	05°51'44"N	05°51'01"N	-	05°44'18"N	05°44'19"N	05°44'22"N	-
Lon.	01°01'13"E	01°02'06"E	01°00'37"E	-	01°04'07"E	01°05'40"E	01°03'37"E	-	01°09'22"E	01°10'45"E	01°08'30"E	-	00°29'34"E	00°28'48"E	01°30'03"E	-
Warp L.	120m	120m	-	-	160m	160m	-	-	300m	300m	-	-	80m	80m	-	-
Depth	24m	26m	22m	-	36.7m	40.3m	36m	-	60.3m	71m	58m	-	21m	21.9m	21m	-
Time	6:19	6:49	5:47	5:50	7:39	8:10	7:22	7:28	9:20	9:50	9:00	9:09	6:15	6:32	5:53	5:56

	Station 5 Date : 8 AUGUST				Station 6 Date : 8 AUGUST				Station 7 Date : 9 AUGUST				Station 8 Date : 9 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°40'41"N	05°40'04"N	05°40'45"N	-	05°38'04"N	05°37'25"N	05°38'16"N	-	05°39'19"N	05°37'57"N	05°38'40"N	-	05°36'54"N	05°35'27"N	05°37'19"N	-
Lon.	00°26'25"E	00°27'42"E	00°25'44"E	-	00°28'02"E	00°26'45"E	00°28'40"E	-	00°09'15"E	00°08'22"E	00°09'49"E	-	00°07'13"E	00°06'33"E	00°07'33"E	-
Warp L.	200m	200m	-	-	300m	300m	-	-	100m	100m	-	-	150m	150m	-	-
Depth	42.1m	46.5m	40m	-	57m	66.6m	55m	-	19m	30.1m	23m	-	33.3m	38.5m	33m	-
Time	7:50	8:20	7:35	7:40	9:25	9:55	9:05	9:09	6:15	6:45	5:50	5:54	7:24	7:54	7:10	7:14

	Station 9 Date : 9 AUGUST				Station 10 Date : 3 AUGUST				Station 11 Date : 3 AUGUST				Station 12 Date : 3 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°31'27"N	05°30'15"N	05°31'29"N	-	05°27'15"N	05°25'46"N	05°27'56"N	-	05°24'13"N	05°22'49"N	05°24'39"N	-	05°18'16"N	05°17'09"N	05°18'46"N	-
Lon.	00°05'57"E	00°05'19"E	00°06'21"E	-	00°16'20"W	00°15'22"W	00°16'30"W	-	00°15'09"W	00°14'46"W	00°15'16"W	-	00°13'52"W	00°12'47"W	00°14'25"W	-
Warp L.	340m	340m	-	-	100m	100m	-	-	180m	180m	-	-	240m	240m	-	-
Depth	50.9m	55.1m	51m	-	20.2m	29.4m	17m	-	36.6m	40m	33.5m	-	54m	62.6m	52m	-
Time	8:52	9:20	8:37	8:41	6:20	6:50	5:56	6:00	7:30	8:00	7:17	7:22	9:08	9:38	8:48	8:57

	Station 13 Date : 3 AUGUST				Station 14 Date : 2 AUGUST				Station 15 Date : 2 AUGUST				Station 16 Date : 2 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°17'02"N	05°15'48"N	05°17'34"N	-	05°13'48"N	05°13'52"N	05°14'01"N	-	05°12'51"N	05°12'12"N	05°13'04"N	-	05°08'47"N	05°07'24"N	05°09'07"N	-
Lon.	00°12'18"W	00°12'56"W	00°12'19"W	-	00°37'21"W	00°35'42"W	00°38'00"W	-	00°34'43"W	00°33'17"W	00°35'16"W	-	00°31'59"W	00°31'21"W	00°32'29"W	-
Warp L.	300m	300m	-	-	100m	100m	-	-	100m	100m	-	-	120m	120m	-	-
Depth	66m	74.8m	64.5m	-	21m	22.5m	21.5m	-	25.7m	28m	25.6m	-	34.7m	38.5m	33.2m	-
Time	10:18	10:53	10:00	10:08	6:17	6:47	5:56	5:57	7:25	7:55	7:11	7:15	8:53	9:23	8:40	8:44

	Station 17 Date : 2 AUGUST				Station 18 Date : 2 AUGUST				Station 19 Date : 10 AUGUST				Station 20 Date : 27 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°06'52"N	05°05'42"N	05°07'14"N	-	05°01'49"N	05°00'42"N	05°02'12"N	-	04°56'57"N	04°55'25"N	04°56'57"N	-	05°06'08"N	05°06'23"N	05°05'25"N	-
Lon.	00°30'57"W	00°31'19"W	00°30'49"W	-	00°30'19"W	00°29'13"W	00°31'01"W	-	00°32'31"W	00°32'37"W	00°32'01"W	-	01°04'50"W	01°05'54"W	01°04'16"W	-
Warp L.	160m	160m	-	-	240m	240m	-	-	290m	290m	-	-	100m	100m	-	-
Depth	42.6m	44m	40.8m	-	55m	58.5m	51.5m	-	59m	64.5m	63m	-	19.8m	19m	22m	-
Time	10:02	10:32	9:45	9:53	11:43	12:13	11:20	11:29	8:30	9:00	8:06	8:15	6:58	7:30	6:10	6:22



Table 1-5-1 (4) Dates and locations of the fishing operations and the oceanographic observations

The 3rd survey (25 Jul. - 13 Aug. 2001)

	Station 21 Date: 27 JULY				Station 22 Date: 27 JULY				Station 23 Date: 27 JULY				Station 24 Date: 27 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°01'36"N	05°01'16"N	05°01'41"N	-	04°54'18"N	04°53'10"N	04°54'46"N	-	04°44'09"N	04°43'06"N	04°44'36"N	-	04°33'54"N	04°33'42"N	04°43'07"N	-
Lon.	01°07'06"W	01°08'39"W	01°06'49"W	-	01°07'48"W	01°09'00"W	01°07'30"W	-	01°04'09"W	01°02'28"W	01°04'45"W	-	01°05'08"W	01°06'33"W	01°04'37"W	-
Warp L.	120m	120m	-	-	130m	130m	-	-	160m	160m	-	-	200m	200m	-	-
Depth	25.5m	25.5m	25m	-	36.1m	34.7m	33.6m	-	42.5m	41.5m	41.5m	-	51.3m	50.8m	51.5m	-
Time	8:34	9:04	8:13	8:24	10:38	11:10	10:13	10:20	12:59	13:30	12:40	12:50	15:30	16:00	15:06	15:14

	Station 25 Date: 1 AUGUST				Station 26 Date: 28 JULY				Station 27 Date: 28 JULY				Station 28 Date: 28 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°25'45"N	04°24'46"N	04°24'10"N	-	05°01'35"N	05°01'01"N	05°01'59"N	-	04°57'29"N	04°56'10"N	04°57'46"N	-	04°50'19"N	04°49'10"N	04°50'41"N	-
Lon.	01°09'15"W	01°10'17"W	01°08'44"W	-	01°20'04"W	01°22'04"W	01°19'33"W	-	01°20'34"W	01°21'42"W	01°20'15"W	-	01°25'39"W	01°26'40"W	01°25'21"W	-
Warp L.	300m	300m	-	-	80m	80m	-	-	100m	100m	-	-	130m	130m	-	-
Depth	65.7m	71.5m	65.5m	-	17m	20.8m	17m	-	26m	27.5m	26m	-	36.5m	37m	35.2m	-
Time	12:30	13:00	12:11	12:16	6:30	7:00	5:53	5:56	7:51	8:25	7:37	7:40	9:46	10:15	9:30	9:35

	Station 29 Date: 28 JULY				Station 30 Date: 28 JULY				Station 31 Date: 1 AUGUST				Station 32 Date: 29 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°41'43"N	04°40'27"N	04°42'09"N	-	04°32'02"N	04°32'16"N	04°32'51"N	-	04°24'19"N	04°23'30"N	04°24'52"N	-	04°47'42"N	04°47'28"N	04°47'46"N	-
Lon.	01°27'06"W	01°28'01"W	01°26'48"W	-	01°27'57"W	01°29'16"W	01°26'45"W	-	01°21'12"W	01°19'49"W	01°22'01"W	-	01°51'19"W	01°49'42"W	01°51'13"W	-
Warp L.	250m	250m	-	-	270m	270m	-	-	300m	300m	-	-	100m	100m	-	-
Depth	44m	46m	44m	-	54.9m	54m	53.5m	-	65m	67.7m	64m	-	24m	25.5m	24m	-
Time	11:40	12:00	11:25	11:30	13:48	14:16	13:21	13:30	6:40	7:10	6:18	6:20	6:05	6:35	5:35	5:40

	Station 33 Date: 29 JULY				Station 34 Date: 29 JULY				Station 35 Date: 30 JULY				Station 36 Date: 30 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°42'15"N	04°41'13"N	04°42'44"N	-	04°33'01"N	04°31'37"N	04°33'39"N	-	04°45'29"N	04°47'28"N	04°46'12"N	-	04°41'45"N	04°40'51"N	04°41'55"N	-
Lon.	01°49'49"W	01°51'03"W	01°49'29"W	-	01°50'46"W	01°51'18"W	01°50'41"W	-	02°08'45"W	02°10'02"W	02°08'00"W	-	02°10'05"W	02°09'25"W	02°11'02"W	-
Warp L.	200m	200m	-	-	300m	300m	-	-	120m	120m	-	-	200m	200m	-	-
Depth	43m	45.7m	42m	-	60.5m	62m	60m	-	27m	31m	21m	-	44m	44m	42m	-
Time	7:40	8:10	7:24	7:30	9:45	10:15	9:30	9:41	6:17	6:47	5:50	5:54	7:55	8:25	7:38	7:47

	Station 37 Date: 30 JULY				Station 38 Date: 31 JULY				Station 39 Date: 31 JULY				Station 40 Date: 31 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°38'46"N	04°37'51"N	04°39'19"N	-	04°57'30"N	04°56'19"N	04°58'09"N	-	04°55'16"N	04°54'31"N	04°55'18"N	-	04°50'14"N	04°49'27"N	04°50'55"N	-
Lon.	02°11'55"W	02°13'00"W	02°11'43"W	-	02°43'33"W	02°44'28"W	02°43'07"W	-	02°45'40"W	02°46'52"W	02°45'06"W	-	02°47'52"W	02°47'24"W	02°48'18"W	-
Warp L.	300m	300m	-	-	150m	150m	-	-	220m	220m	-	-	320m	320m	-	-
Depth	62m	68m	60.3m	-	27m	32m	24m	-	40m	44m	42m	-	64m	63m	59.5m	-
Time	9:45	10:15	9:21	9:30	6:19	6:49	6:00	6:03	7:38	8:08	7:24	7:30	9:23	9:42	9:00	9:07

	Station 41 Date: 7 AUGUST				Station 42 Date: 8 AUGUST				Station 43 Date: 9 AUGUST				Station 44 Date: 3 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°49'51"N	05°48'44"N	05°50'27"N	-	05°35'49"N	05°35'36"N	05°36'51"N	-	05°26'53"N	05°25'41"N	05°27'24"N	-	05°15'54"N	05°16'31"N	05°15'40"N	-
Lon.	01°09'09"E	01°08'58"E	01°09'01"E	-	00°25'11"E	00°24'39"E	00°26'17"E	-	00°04'54"E	00°04'00"E	00°05'15"E	-	00°11'16"W	00°09'39"W	00°12'11"W	-
Warp L.	360m	360m	-	-	440m	440m	-	-	400m	400m	-	-	440m	440m	-	-
Depth	75.5m	84m	76m	-	82.5m	82.5m	78m	-	80.5m	95m	77m	-	88m	103m	80m	-
Time	11:10	11:40	10:38	10:44	10:55	11:08	10:15	10:30	10:27	10:57	10:05	10:12	11:27	11:57	11:10	11:17

Table 1-5-1 (5) Dates and locations of the fishing operations and the oceanographic observations

The 3rd survey (25 Jul. - 13 Aug. 2001)

	Station 45 Date : 10 AUGUST				Station 46 Date : 1 AUGUST				Station 47 Date : 1 AUGUST				Station 48 Date : 29 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°54'26"N	04°53'34"N	04°55'09"N	-	04°24'01"N	04°24'09"N	04°24'11"N	-	04°21'14"N	04°20'24"N	04°21'39"N	-	04°24'17"N	04°23'35"N	04°24'55"N	-
Lon.	00°32'03"W	00°32'07"W	00°31'44"W	-	01°09'49"W	01°08'18"W	01°10'45"W	-	01°21'10"W	01°22'23"W	01°20'34"W	-	01°51'16"W	01°52'33"W	01°51'54"W	-
Warp L.	440m	440m	-	-	440m	440m	-	-	380m	380m	-	-	380m	380m	-	-
Depth	86m	95.3m	87m	-	87m	91.5m	81m	-	76.8m	80.5m	79.5m	-	85m	98m	82m	-
Time	9:45	10:15	9:23	9:33	11:00	11:30	10:38	10:46	8:19	8:39	7:48	7:58	11:46	12:16	11:25	11:37

	Station 49 Date : 30 JULY				Station 50 Date : 31 JULY				Station M1 Date : 11 AUGUST				Station M2 Date : 11 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°35'05"N	04°34'49"N	04°34'51"N	-	04°42'16"N	04°40'54"N	04°50'55"N	-	05°07'55"N	05°08'18"N	05°07'55"N	-	05°05'35"N	05°05'06"N	05°05'46"N	-
Lon.	02°14'51"W	02°16'13"W	02°14'20"W	-	02°47'15"W	02°46'31"W	02°47'37"W	-	00°54'10"W	00°52'04"W	00°54'49"W	-	00°43'00"W	00°45'03"W	00°48'44"W	-
Warp L.	400m	400m	-	-	380m	380m	-	-	90m	90m	-	-	120m	120m	-	-
Depth	77m	82m	78m	-	80m	91.5m	78.5m	-	18.7m	21m	19m	-	25.5m	29.2m	25.2m	-
Time	11:40	12:10	11:15	11:25	11:15	11:45	10:55	11:00	6:55	7:30	6:25	6:29	8:35	9:35	8:25	8:28

	Station M3 Date : 12 AUGUST				Station M4 Date : 12 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END
Lat.	05°13'91"N	05°13'81"N	05°15'60"N	-	05°12'28"N	05°11'12"N	05°12'45"N	-
Lon.	00°36'09"W	00°34'38"W	00°36'85"W	-	00°30'50"W	00°29'27"W	00°31'26"W	-
Warp L.	120m	120m	-	-	160m	160m	-	-
Depth	22.4m	26m	19m	-	32m	36.6m	30.5m	-
Time	6:30	7:10	6:00	6:03	8:02	8:42	7:50	7:54

The 4th survey (29 Oct. - 16 Nov. 2001)

	Station 1 Date : 10 NOVEMBER				Station 2 Date : 10 NOVEMBER				Station 3 Date : 10 NOVEMBER				Station 4 Date : 11 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°42'52"N	05°44'08"N	05°42'42"N	-	05°45'51"N	05°47'07"N	05°45'10"N	-	05°47'16"N	05°47'32"N	05°46'32"N	-	05°43'03"N	05°41'35"N	05°43'38"N	-
Lon.	00°58'09"E	00°59'04"E	00°57'28"E	-	01°00'39"E	01°01'18"E	01°00'13"E	-	01°04'37"E	01°05'50"E	01°04'13"E	-	00°37'33"E	00°37'53"E	00°37'20"E	-
Warp L.	80m	80m	-	-	140m	140m	-	-	260m	260m	-	-	80m	80m	-	-
Depth	20m	22m	20m	-	35m	37m	31m	-	52m	75m	54m	-	20m	23m	20m	-
Time	6:11	6:41	5:44	5:55	7:29	7:59	7:09	7:15	8:59	9:25	8:40	8:47	6:17	6:47	6:05	6:08

	Station 5 Date : 11 NOVEMBER				Station 6 Date : 11 NOVEMBER				Station 7 Date : 12 NOVEMBER				Station 8 Date : 12 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°37'40"N	05°36'45"N	05°37'56"N	-	05°35'58"N	05°36'05"N	05°35'47"N	-	05°41'36"N	05°41'35"N	05°41'37"N	-	05°39'46"N	05°38'52"N	05°40'12"N	-
Lon.	00°37'39"E	00°36'31"E	00°37'53"E	-	00°35'34"E	00°34'36"E	00°35'58"E	-	00°17'58"E	00°18'22"E	00°17'11"E	-	00°17'55"E	00°16'54"E	00°18'14"E	-
Warp L.	150m	150m	-	-	240m	240m	-	-	80m	80m	-	-	150m	150m	-	-
Depth	31m	39m	30m	-	50m	55m	51m	-	21m	22m	20m	-	38m	43m	33m	-
Time	7:55	8:25	7:42	7:46	9:20	9:39	8:58	9:06	6:04	6:12	5:40	5:42	7:13	7:43	6:56	7:00

	Station 9 Date : 12 NOVEMBER				Station 10 Date : 7 NOVEMBER				Station 11 Date : 7 NOVEMBER				Station 12 Date : 7 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°36'58"N	05°35'55"N	05°37'23"N	-	05°25'25"N	05°25'00"N	05°25'37"N	-	05°24'11"N	05°24'00"N	05°24'18"N	-	05°23'40"N	05°22'56"N	05°23'58"N	-
Lon.	00°16'34"E	00°15'41"E	00°16'46"E	-	00°21'23"W	00°19'52"W	00°21'53"W	-	00°18'11"W	00°16'41"W	00°18'46"W	-	00°15'02"W	00°13'28"W	00°15'34"W	-
Warp L.	260m	260m	-	-	70m	70m	-	-	90m	90m	-	-	140m	140m	-	-
Depth	59m	71m	55m	-	18m	21m	16m	-	28m	31m	27m	-	37m	41m	35m	-
Time	8:29	8:59	8:10	8:18	6:23	6:52	5:40	5:43	7:29	7:59	7:18	7:22	8:32	9:02	8:18	8:22

Table 1-5-1 (6) Dates and locations of the fishing operations and the oceanographic observations

The 4th survey (29 Oct. - 18 Nov. 2001)

	Station 13 Date : 13 NOVEMBER				Station 14 Date : 6 NOVEMBER				Station 15 Date : 6 NOVEMBER				Station 16 Date : 6 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°13'52"N	05°14'06"N	05°13'42"N	-	05°10'14"N	05°09'33"N	05°10'46"N	-	05°07'55"N	05°06'31"N	05°08'13"N	-	05°00'16"N	04°58'42"N	05°00'48"N	-
Lon.	00°18'44"W	00°17'10"W	00°20'01"W	-	00°47'35"W	00°48'41"W	00°47'22"W	-	00°48'44"W	00°48'22"W	00°49'11"W	-	00°48'08"W	00°47'50"W	00°48'14"W	-
Warp L.	250m	250m	-	-	80m	80m	-	-	100m	100m	-	-	140m	140m	-	-
Depth	53m	58m	50m	-	16m	18m	19m	-	23m	24m	21m	-	31m	35m	31m	-
Time	6:10	6:46	5:45	5:55	6:08	6:38	5:56	5:59	7:15	7:45	7:02	7:05	9:00	9:30	8:49	8:52

	Station 17 Date : 6 NOVEMBER				Station 18 Date : 6 NOVEMBER				Station 19 Date : 13 NOVEMBER				Station 20 Date : 1 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°54'40"N	04°53'15"N	04°55'08"N	-	04°50'24"N	04°49'42"N	04°50'35"N	-	05°01'16"N	05°01'03"N	05°01'16"N	-	05°06'26"N	05°05'40"N	05°07'05"N	-
Lon.	00°47'13"W	00°48'04"W	00°46'56"W	-	00°45'01"W	00°43'33"W	00°45'33"W	-	00°26'05"W	00°27'32"W	00°25'30"W	-	01°08'10"W	01°06'51"W	01°08'38"W	-
Warp L.	150m	150m	-	-	200m	200m	-	-	250m	250m	-	-	120m	120m	-	-
Depth	40m	41m	42m	-	52m	55m	51m	-	71m	63m	75m	-	17m	18m	16m	-
Time	10:28	10:58	10:15	10:19	12:04	12:34	11:45	11:50	13:09	13:40	12:46	12:57	6:40	7:10	6:10	6:13

	Station 21 Date : 1 NOVEMBER				Station 22 Date : 1 NOVEMBER				Station 23 Date : 1 NOVEMBER				Station 24 Date : 31 OCTOBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°03'58"N	05°02'38"N	05°04'25"N	-	04°55'09"N	04°53'52"N	04°55'31"N	-	04°44'13"N	04°42'52"N	04°44'52"N	-	04°31'17"N	04°32'06"N	04°30'54"N	-
Lon.	01°06'58"W	01°07'55"W	01°06'37"W	-	01°08'53"W	01°08'04"W	01°09'12"W	-	01°08'23"W	01°07'44"W	01°08'48"W	-	01°11'24"W	01°10'18"W	01°12'10"W	-
Warp L.	120m	120m	-	-	160m	160m	-	-	200m	200m	-	-	260m	260m	-	-
Depth	21m	21	22m	-	32m	33m	33m	-	42m	43m	42m	-	52m	52m	51m	-
Time	8:03	8:33	7:45	7:51	10:24	10:54	10:01	10:08	12:55	13:25	12:36	12:41	7:40	8:10	7:05	7:12

	Station 25 Date : 31 OCTOBER				Station 26 Date : 2 NOVEMBER				Station 27 Date : 2 NOVEMBER				Station 28 Date : 2 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°25'39"N	04°24'38"N	04°25'59"N	-	05°01'13"N	05°00'56"N	05°02'12"N	-	04°49'06"N	04°57'41"N	04°59'36"N	-	04°52'16"N	04°51'00"N	04°52'39"N	-
Lon.	01°11'51"W	01°13'02"W	01°11'20"W	-	01°23'11"W	01°22'10"W	01°23'18"W	-	01°22'43"W	01°23'32"W	01°22'20"W	-	01°26'03"W	01°27'12"W	01°25'37"W	-
Warp L.	300m	300m	-	-	160m	160m	-	-	140m	140m	-	-	140m	140m	-	-
Depth	66m	69m	67m	-	19m	20m	17m	-	21m	24m	22m	-	31m	33m	32m	-
Time	10:07	10:42	10:38	10:46	6:17	6:37	5:40	5:43	7:25	7:55	7:09	7:13	9:15	9:45	9:00	9:04

	Station 29 Date : 2 NOVEMBER				Station 30 Date : 2 NOVEMBER				Station 31 Date : 3 NOVEMBER				Station 32 Date : 3 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°43'13"N	04°42'28"N	04°43'25"N	-	04°36'26"N	04°35'19"N	04°36'57"N	-	04°27'02"N	04°26'01"N	04°27'22"N	-	04°52'43"N	04°52'01"N	04°53'49"N	-
Lon.	01°27'22"W	01°26'03"W	01°27'42"W	-	01°27'12"W	01°28'13"W	01°26'37"W	-	01°33'04"W	01°32'21"W	01°33'24"W	-	01°42'15"W	01°41'45"W	01°43'27"W	-
Warp L.	180m	180m	-	-	200m	200m	-	-	240m	240m	-	-	120m	120m	-	-
Depth	42m	46m	44m	-	53m	55m	52m	-	60m	61m	60m	-	24m	25m	23m	-
Time	11:23	11:53	11:10	11:15	13:17	13:47	12:59	13:05	13:02	13:38	12:41	12:50	6:12	6:42	5:47	5:50

	Station 33 Date : 3 NOVEMBER				Station 34 Date : 3 NOVEMBER				Station 35 Date : 4 NOVEMBER				Station 36 Date : 4 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°48'15"N	04°47'05"N	04°48'40"N	-	04°35'52"N	04°35'11"N	04°36'17"N	-	04°42'10"N	04°42'10"N	04°42'28"N	-	04°41'08"N	04°40'04"N	04°41'31"N	-
Lon.	01°41'05"W	01°41'07"W	01°41'49"W	-	01°41'22"W	01°40'24"W	01°41'31"W	-	02°03'49"W	02°02'43"W	02°04'07"W	-	02°03'19"W	02°04'44"W	02°04'07"W	-
Warp L.	140m	140m	-	-	190m	190m	-	-	120m	120m	-	-	160m	160m	-	-
Depth	34m	36m	34m	-	53m	53m	52m	-	26m	29m	27m	-	35m	43m	34m	-
Time	7:57	8:27	7:37	7:42	10:43	11:13	10:26	10:31	6:20	6:50	5:47	5:51	7:32	8:02	7:18	7:22

Table 1-5-1 (7) Dates and locations of the fishing operations and the oceanographic observations

The 4th survey (29 Oct. - 18 Nov. 2001)

	Station 37 Date : 4 NOVEMBER				Station 38 Date : 5 NOVEMBER				Station 39 Date : 5 NOVEMBER				Station 40 Date : 5 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°38'29"N	04°37'31"N	04°38'46"N	-	04°56'49"N	04°55'39"N	04°57'24"N	-	04°55'05"N	04°54'04"N	04°55'26"N	-	04°49'51"N	04°49'08"N	04°50'20"N	-
Lon.	02°06'22"W	02°07'37"W	02°05'49"W	-	02°39'31"W	02°40'14"W	02°39'08"W	-	02°40'02"W	02°38'57"W	02°40'34"W	-	02°38'57"W	02°38'04"W	02°39'17"W	-
Warp L.	200m	200m	-	-	140m	140m	-	-	200m	200m	-	-	250m	250m	-	-
Depth	55m	68m	52m	-	27m	32m	23m	-	37m	41m	36m	-	54m	54m	52m	-
Time	9:05	9:35	8:45	8:53	6:15	6:45	5:47	5:51	7:25	7:55	7:06	7:11	9:06	9:25	8:45	8:50

	Station 41 Date : 10 NOVEMBER				Station 42 Date : 11 NOVEMBER				Station 43 Date : 12 NOVEMBER				Station 44 Date : 13 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°49'13"N	05°49'55"N	05°48'37"N	-	05°36'08"N	05°36'19"N	05°36'01"N	-	05°35'05"N	05°34'16"N	05°35'22"N	-	05°13'53"N	05°14'25"N	05°13'25"N	-
Lon.	01°07'34"E	01°08'35"E	01°06'53"E	-	00°32'38"E	00°32'20"E	00°33'07"E	-	00°15'58"E	00°14'41"E	00°16'17"E	-	00°13'59"W	00°12'36"W	00°15'00"W	-
Warp L.	300m	300m	-	-	300m	300m	-	-	300m	300m	-	-	300m	300m	-	-
Depth	76m	90m	78m	-	82m	100m	82m	-	78m	86m	75m	-	86m	93m	80m	-
Time	10:33	11:03	10:09	10:20	10:58	11:13	10:34	10:45	9:54	10:24	9:27	9:38	7:45	8:15	7:21	7:31

	Station 45 Date : 13 NOVEMBER				Station 46 Date : 31 OCTOBER				Station 47 Date : 3 NOVEMBER				Station 48 Date : 4 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°00'13"N	04°58'55"N	05°03'42"N	-	04°23'11"N	04°22'55"N	04°23'19"N	-	04°23'10"N	04°21'58"N	04°23'36"N	-	04°29'07"N	04°28'08"N	04°29'36"N	-
Lon.	00°25'02"W	00°25'48"W	00°25'48"W	-	01°12'38"W	01°11'11"W	01°13'20"W	-	01°33'06"W	01°34'14"W	01°32'37"W	-	02°00'55"W	01°59'44"W	02°01'45"W	-
Warp L.	300m	300m	-	-	370m	370m	-	-	280m	280m	-	-	340m	340m	-	-
Depth	98m	100m	86m	-	97m	113m	82m	-	76m	78m	75m	-	86m	87m	81m	-
Time	11:30	12:00	11:05	11:13	11:50	12:20	11:24	11:32	14:43	15:13	14:16	14:26	13:00	13:30	12:36	12:42

	Station 49 Date : 4 NOVEMBER				Station 50 Date : 5 NOVEMBER				Station M1 Date : 14 NOVEMBER				Station M2 Date : 14 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°35'17"N	04°34'17"N	04°35'39"N	-	04°43'46"N	04°42'33"N	04°44'01"N	-	05°06'08"N	05°05'47"N	05°07'13"N	-	05°04'10"N	05°03'24"N	05°05'12"N	-
Lon.	02°07'38"W	02°06'39"W	02°08'02"W	-	02°39'23"W	02°38'31"W	02°39'50"W	-	01°07'52"W	01°06'18"W	01°07'04"W	-	00°55'41"W	00°53'29"W	01°04'40"W	-
Warp L.	280m	280m	-	-	280m	280m	-	-	70m	70m	-	-	140m	140m	-	-
Depth	77m	80m	75m	-	76m	78m	76m	-	18m	18m	16m	-	22m	24m	20m	-
Time	10:33	11:03	10:11	10:20	11:12	11:42	10:51	10:59	6:18	6:48	5:50	5:53	9:20	10:05	7:25	7:27

	Station M3 Date : 15 NOVEMBER				Station M4 Date : 15 NOVEMBER			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END
Lat.	05°20'37"N	05°20'49"N	05°22'45"N	-	05°21'11"N	05°22'11"N	05°20'49"N	-
Lon.	00°23'43"W	00°22'11"W	00°26'23"W	-	00°20'34"W	00°19'23"W	00°21'10"W	-
Warp L.	120m	120m	-	-	150m	150m	-	-
Depth	27m	28m	17m	-	32m	31m	31m	-
Time	7:05	7:35	5:43	5:46	8:15	8:45	8:01	8:05

The 5th survey (20 Jul. - 5 Aug. 2002)

	Station 1 Date : 31 JULY				Station 2 Date : 31 JULY				Station 3 Date : 31 JULY				Station 4 Date : 1 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°57'29"N	05°56'04"N	05°57'59"N	-	05°55'23"N	05°54'01"N	05°55'51"N	-	05°48'47"N	05°47'39"N	05°49'13"N	-	05°44'25"N	05°43'01"N	05°44'53"N	-
Lon.	01°05'04"E	01°04'49"E	01°05'05"E	-	01°04'45"E	01°04'15"E	01°04'59"E	-	01°06'01"E	01°05'25"E	01°05'59"E	-	00°29'49"E	00°29'35"E	00°30'02"E	-
Warp L.	100m	100m	-	-	140m	140m	-	-	200m	200m	-	-	90m	90m	-	-
Depth	25m	29m	24m	-	33m	35m	32m	-	52m	60m	51m	-	20m	24m	20m	-
Time	5:57	6:23	5:38	5:44	7:02	7:32	6:38	6:52	8:55	9:25	8:30	8:41	5:57	6:27	5:38	5:41

Table 1-5-1 (8) Dates and locations of the fishing operations and the oceanographic observations

The 5th survey (20 Jul. - 5 Aug. 2002)

	Station 5 Date : 1 AUGUST				Station 6 Date : 1 AUGUST				Station 7 Date : 2 AUGUST				Station 8 Date : 2 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°40'27"N	05°39'04"N	05°40'54"N	-	05°38'32"N	05°37'50"N	05°38'46"N	-	05°39'28"N	05°38'29"N	05°39'53"N	-	05°37'26"N	05°36'22"N	05°37'49"N	-
Lon.	00°29'43"E	00°29'17"E	00°29'46"E	-	00°28'50"E	00°27'32"E	00°29'23"E	-	00°09'35"E	00°08'53"E	00°09'52"E	-	00°07'36"E	00°06'47"E	00°07'53"E	-
Warp L.	140m	140m	-	-	190m	190m	-	-	80m	80m	-	-	125m	125m	-	-
Depth	42m	49m	40m	-	51m	62m	51m	-	22m	28m	20m	-	31m	35m	31m	-
Time	7:10	7:40	6:57	7:03	8:15	8:45	7:55	8:05	6:05	6:30	5:42	5:45	7:15	7:45	6:54	7:05

	Station 9 Date : 2 AUGUST				Station 10 Date : 28 JULY				Station 11 Date : 28 JULY				Station 12 Date : 28 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°32'04"N	05°31'17"N	05°32'28"N	-	05°26'48"N	05°26'24"N	05°27'00"N	-	05°26'26"N	05°26'07"N	05°26'28"N	-	05°21'50"N	05°21'28"N	05°21'01"N	-
Lon.	00°06'26"E	00°05'53"E	00°06'46"E	-	00°18'56"W	00°17'34"W	00°19'28"W	-	00°16'19"W	00°14'53"W	00°16'58"W	-	00°13'05"W	00°12'13"W	00°14'26"W	-
Warp L.	200m	200m	-	-	90m	90m	-	-	120m	120m	-	-	150m	150m	-	-
Depth	51m	53m	50m	-	17m	21m	17m	-	24m	27m	22m	-	50m	55m	50m	-
Time	8:52	9:16	8:37	8:43	6:00	6:30	5:35	5:38	7:22	7:52	7:08	7:15	8:20	8:50	8:05	8:10

	Station 13 Date : 3 AUGUST				Station 14 Date : 27 JULY				Station 15 Date : 27 JULY				Station 16 Date : 27 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°03'59"N	05°05'28"N	05°03'19"N	-	05°18'25"N	05°14'13"N	05°15'59"N	-	05°13'32"N	05°12'14"N	05°13'59"N	-	05°10'50"N	05°09'22"N	05°11'18"N	-
Lon.	00°23'57"W	00°23'56"W	00°24'02"W	-	00°36'59"W	00°35'51"W	00°36'00"W	-	00°35'32"W	00°35'18"W	00°35'41"W	-	00°34'44"W	00°34'14"W	00°35'01"W	-
Warp L.	260m	260m	-	-	100m	100m	-	-	120m	120m	-	-	140m	140m	-	-
Depth	68m	60m	73m	-	19m	21m	19m	-	24m	26m	24m	-	31m	32m	30m	-
Time	10:33	11:03	10:13	10:21	6:04	6:30	5:42	5:45	6:55	7:25	6:43	6:47	8:02	8:32	7:47	7:53

	Station 17 Date : 27 JULY				Station 18 Date : 27 JULY				Station 19 Date : 3 AUGUST				Station 20 Date : 21 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°05'45"N	05°04'41"N	05°06'11"N	-	05°02'25"N	05°01'13"N	05°02'46"N	-	04°56'33"N	04°55'17"N	04°57'05"N	-	05°07'23"N	05°07'32"N	05°07'31"N	-
Lon.	00°32'12"W	00°31'34"W	00°32'29"W	-	00°30'00"W	00°29'01"W	00°30'19"W	-	00°32'20"W	00°32'30"W	00°32'07"W	-	00°55'18"W	00°56'49"W	00°54'46"W	-
Warp L.	160m	160m	-	-	190m	190m	-	-	240m	240m	-	-	90m	90m	-	-
Depth	42m	44m	41m	-	52m	57m	50m	-	61m	68m	60m	-	19m	19m	19m	-
Time	9:25	9:55	9:15	9:20	10:40	11:10	10:25	10:32	6:12	6:42	5:57	6:04	5:45	6:15	5:23	5:25

	Station 21 Date : 21 JULY				Station 22 Date : 21 JULY				Station 23 Date : 21 JULY				Station 24 Date : 21 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°06'29"N	05°04'57"N	05°06'13"N	-	04°58'15"N	04°56'54"N	04°59'00"N	-	04°49'15"N	04°48'04"N	04°49'49"N	-	04°42'08"N	04°41'07"N	04°42'43"N	-
Lon.	00°57'35"W	00°57'57"W	00°57'16"W	-	00°58'03"W	00°58'05"W	00°58'01"W	-	00°57'38"W	00°57'37"W	00°57'40"W	-	00°54'27"W	00°53'49"W	00°54'52"W	-
Warp L.	110m	110m	-	-	140m	140m	-	-	170m	170m	-	-	200m	200m	-	-
Depth	22m	26m	21m	-	31m	32m	31m	-	42m	43m	41m	-	51m	55m	51m	-
Time	7:07	7:43	6:50	6:54	9:00	9:30	8:40	8:46	11:05	11:35	10:49	10:55	13:02	13:32	12:41	12:50

	Station 25 Date : 26 JULY				Station 26 Date : 22 JULY				Station 27 Date : 22 JULY				Station 28 Date : 22 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°26'40"N	04°27'56"N	04°26'07"N	-	05°01'24"N	05°00'10"N	05°01'52"N	-	04°59'16"N	04°58'05"N	04°59'41"N	-	04°54'47"N	04°53'33"N	04°55'20"N	-
Lon.	01°02'50"W	01°02'02"W	01°03'09"W	-	01°22'12"W	01°22'14"W	01°22'11"W	-	01°22'25"W	01°22'32"W	01°22'01"W	-	01°23'08"W	01°23'11"W	01°23'02"W	-
Warp L.	300m	300m	-	-	90m	90m	-	-	110m	110m	-	-	140m	140m	-	-
Depth	68m	64m	73m	-	19m	20m	18m	-	22m	24m	21m	-	31m	32m	31m	-
Time	12:07	12:37	11:50	11:58	5:45	6:15	5:10	5:13	6:49	7:19	6:34	6:37	8:20	8:50	8:01	8:08

Table 1-5-1 (9) Dates and locations of the fishing operations and the oceanographic observations

The 5th survey (20 Jul. - 5 Aug. 2002)

	Station 29 Date: 22 JULY				Station 30 Date: 22 JULY				Station 31 Date: 26 JULY				Station 32 Date: 23 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°45'11"N	04°44'02"N	04°45'41"N	-	04°37'44"N	04°36'32"N	04°38'32"N	-	04°27'50"N	04°26'20"N	04°28'26"N	-	04°48'26"N	04°48'16"N	04°48'55"N	-
Lon.	01°23'29"W	01°23'28"W	01°23'32"W	-	01°23'56"W	01°24'19"W	01°23'55"W	-	01°17'33"W	01°17'30"W	01°17'26"W	-	01°49'53"W	01°49'32"W	01°50'00"W	-
Warp L.	170m	170m	-	-	200m	200m	-	-	200m	200m	-	-	90m	90m	-	-
Depth	41m	43m	41m	-	50m	53m	50m	-	60m	65m	52m	-	23m	24m	22m	-
Time	10:40	11:10	10:15	10:27	12:50	13:20	12:20	12:24	6:03	6:33	5:45	5:56	6:15	6:25	5:45	5:50

	Station 33 Date: 23 JULY				Station 34 Date: 23 JULY				Station 35 Date: 24 JULY				Station 36 Date: 24 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°46'04"N	04°44'37"N	04°46'33"N	-	04°38'55"N	04°37'27"N	04°39'38"N	-	04°47'35"N	04°47'22"N	04°48'00"N	-	04°45'55"N	04°44'43"N	04°46'26"N	-
Lon.	01°49'43"W	01°49'58"W	01°49'40"W	-	01°49'51"W	01°49'51"W	01°50'00"W	-	02°14'29"W	02°14'45"W	02°13'55"W	-	02°15'17"W	02°15'19"W	02°15'17"W	-
Warp L.	110m	110m	-	-	200m	200m	-	-	110m	110m	-	-	140m	140m	-	-
Depth	32m	35m	30m	-	51m	55m	51m	-	30m	30m	26m	-	42m	48m	40m	-
Time	7:25	7:55	7:04	7:12	9:23	9:53	8:55	9:06	6:30	6:40	6:03	6:07	7:52	8:22	7:39	7:44

	Station 37 Date: 24 JULY				Station 38 Date: 25 JULY				Station 39 Date: 25 JULY				Station 40 Date: 25 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°42'56"N	04°41'43"N	04°43'28"N	-	04°59'15"N	04°58'08"N	04°59'49"N	-	04°57'03"N	04°55'38"N	04°57'39"N	-	04°52'54"N	04°52'18"N	04°53'24"N	-
Lon.	02°15'02"W	02°15'02"W	02°15'04"W	-	02°47'40"W	02°48'13"W	02°47'38"W	-	02°48'18"W	02°48'10"W	02°48'08"W	-	02°47'14"W	02°46'36"W	02°47'45"W	-
Warp L.	170m	170m	-	-	110m	110m	-	-	140m	140m	-	-	200m	200m	-	-
Depth	53m	59	51m	-	23m	30m	21m	-	37m	42m	33m	-	50m	53m	51m	-
Time	9:00	9:30	8:44	8:51	6:05	6:35	5:46	5:50	7:13	7:43	6:55	7:03	8:35	8:50	8:15	8:23

	Station 41 Date: 31 JULY				Station 42 Date: 1 AUGUST				Station 43 Date: 2 AUGUST				Station 44 Date: 3 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	05°47'04"N	05°46'10"N	05°47'19"N	-	05°36'41"N	05°36'49"N	05°37'01"N	-	05°27'50"N	05°27'06"N	05°28'13"N	-	05°01'18"N	05°02'07"N	05°00'20"N	-
Lon.	01°04'56"E	01°04'16"E	01°05'15"E	-	00°25'56"E	00°25'32"E	00°26'37"E	-	00°05'15"E	00°04'40"E	00°05'47"E	-	00°24'30"W	00°23'52"W	00°24'58"W	-
Warp L.	260m	260m	-	-	260m	260m	-	-	260m	260m	-	-	300m	300m	-	-
Depth	77m	77m	76m	-	77m	78m	76m	-	76m	92m	75m	-	96m	97m	91m	-
Time	10:15	10:43	9:53	9:59	9:28	9:45	9:09	9:16	10:15	10:37	9:59	10:06	9:30	9:55	9:13	9:19

	Station 45 Date: 3 AUGUST				Station 46 Date: 26 JULY				Station 47 Date: 26 JULY				Station 48 Date: 23 JULY			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°54'31"N	04°53'37"N	04°55'08"N	-	04°24'21"N	04°24'49"N	04°24'01"N	-	04°23'41"N	04°23'40"N	04°23'50"N	-	04°28'04"N	04°26'48"N	04°28'46"N	-
Lon.	00°32'07"W	00°32'16"W	00°32'04"W	-	01°05'29"W	01°04'32"W	01°06'04"W	-	01°14'17"W	01°15'19"W	01°14'47"W	-	01°53'51"W	01°54'06"W	01°53'41"W	-
Warp L.	280m	280m	-	-	290m	290m	-	-	280m	280m	-	-	260m	260m	-	-
Depth	85m	93m	78m	-	93m	94m	98m	-	79m	84m	75m	-	76m	79m	76m	-
Time	7:15	7:32	6:55	7:03	10:50	11:20	10:38	10:45	8:30	8:43	8:15	8:21	12:00	12:30	11:44	11:51

	Station 49 Date: 24 JULY				Station 50 Date: 25 JULY				Station M1 Date: 4 AUGUST				Station M2 Date: 4 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END	START	END	START	END	START	END	START	END
Lat.	04°36'59"N	04°35'36"N	04°37'39"N	-	04°44'22"N	04°42'58"N	04°45'14"N	-	05°21'43"N	05°21'22"N	05°21'50"N	-	05°20'10"N	05°19'47"N	05°20'23"N	-
Lon.	02°17'50"W	02°17'56"W	02°17'36"W	-	02°48'10"W	02°47'40"W	02°48'37"W	-	00°25'50"W	00°24'19"W	00°26'29"W	-	00°21'11"W	00°19'43"W	00°21'55"W	-
Warp L.	260m	260m	-	-	260m	260m	-	-	100m	100m	-	-	120m	120m	-	-
Depth	78m	81m	76m	-	77m	77m	76m	-	22m	24m	19m	-	32m	37m	30m	-
Time	10:50	11:20	10:31	10:38	10:36	11:05	10:17	10:23	6:05	6:35	5:42	5:46	7:20	7:50	7:05	7:11

Table 1-5-1 (10) Dates and locations of the fishing operations and the oceanographic observations

The 5th survey (20 Jul. - 5 Aug. 2002)

	Station M3 Date : 4 AUGUST				Station M4 Date : 4 AUGUST			
	FISHING OPERATION		OCEAN. OBS.		FISHING OPERATION		OCEAN. OBS.	
	START	END	START	END	START	END	START	END
Lat.	05°20'40"N	05°22'19"N	05°19'58"N	-	05°24'31"N	05°25'08"N	05°23'41"N	-
Lon.	00°18'27"W	00°18'16"W	00°18'38"W	-	00°16'41"W	00°15'11"W	00°17'56"W	-
Warp L.	110m	110m	-	-	120m	120m	-	-
Depth	37m	33m	37m	-	31m	31m	31m	-
Time	9:19	9:49	9:05	9:09	10:55	11:25	10:14	10:19





Table 1-6-1 (2) Oceanographic data

The 2nd survey (4 Oct. - 18 Oct. 2000)

## Station 13

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	32.76	26.50	2.87	51.50	226.15	21.19	21.20
5	35.51	26.32	0.10	55.16	0.22	23.32	23.34
10	35.53	26.19	0.11	55.04	0.24	23.38	23.42
15	35.54	26.17	0.13	55.02	0.25	23.39	23.45
20	35.56	26.12	0.15	55.02	0.28	23.42	23.50
25	35.55	26.08	0.16	54.97	0.27	23.43	23.54
30	35.67	24.79	0.55	53.75	0.30	23.91	24.04
35	35.72	24.54	0.65	53.56	0.37	24.02	24.17
40	35.72	24.54	0.60	53.56	0.38	24.02	24.20
45	35.80	21.73	0.56	50.71	0.33	24.90	25.10
50	35.85	20.56	0.47	49.54	0.25	25.26	25.48
55	35.90	19.74	0.38	48.77	0.20	25.52	25.76

## Station 14

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.47	26.24	0.27	55.01	24.03	23.32	23.32
5	35.50	26.23	0.17	55.05	0.60	23.34	23.36
10	35.50	26.02	0.25	54.83	0.70	23.41	23.45

## Station 15

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.49	26.34	0.23	55.15	31.59	23.30	23.31
5	35.54	26.30	0.13	55.16	0.31	23.35	23.37
10	35.54	26.06	0.16	54.93	0.30	23.42	23.47
15	35.55	25.95	0.18	54.82	0.32	23.47	23.53
20	35.62	25.41	0.53	54.33	0.71	23.68	23.77

## Station 16

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	33.07	26.00	36.81	51.40	220.05	21.58	21.59
5	35.48	25.99	0.11	54.77	0.19	23.41	23.43
10	35.47	25.76	0.12	54.51	0.18	23.46	23.51
15	35.48	25.64	0.16	54.40	0.20	23.51	23.57
20	35.59	24.42	0.58	53.25	0.59	23.96	24.05
25	35.61	24.30	0.76	53.14	0.70	24.01	24.12
30	35.62	24.20	0.79	53.07	0.82	24.06	24.19

## Station 17

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	34.70	26.09	1.38	53.79	68.20	22.78	22.79
5	35.43	26.11	0.13	54.81	0.20	23.32	23.34
10	35.43	26.10	0.15	54.81	0.15	23.33	23.37
15	35.69	25.48	0.24	54.50	0.25	23.72	23.78
20	35.63	24.70	0.41	53.61	0.36	23.91	24.00
25	35.67	24.27	0.49	53.21	1.11	24.07	24.18
30	35.67	24.21	0.48	53.14	1.68	24.09	24.22
35	35.68	23.71	0.51	52.63	11.22	24.25	24.40
40	35.72	23.05	0.55	51.99	0.53	24.47	24.64

## Station 18

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	34.35	26.26	0.82	53.47	83.21	22.47	22.47
5	35.42	26.30	0.10	55.00	0.20	23.26	23.28
10	35.42	26.28	0.13	54.99	0.20	23.26	23.31
15	35.45	26.27	0.15	55.01	0.20	23.30	23.36
20	35.68	25.57	0.22	54.60	0.25	23.68	23.77
25	35.74	24.70	0.37	53.76	0.30	23.99	24.10
30	35.69	23.91	0.63	52.85	0.30	24.19	24.32
35	35.70	23.25	0.64	52.16	0.29	24.39	24.55
40	35.77	21.80	0.49	50.74	0.30	24.86	25.04
45	35.79	21.45	0.48	50.40	0.38	24.96	25.16
50	35.79	21.40	0.50	50.34	0.44	24.98	25.20

## Station 19

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	33.29	26.50	35.73	52.21	151.17	21.60	21.60
5	35.42	26.48	0.10	55.20	2.88	23.20	23.22
10	35.43	26.40	0.10	55.13	0.20	23.23	23.27
15	35.53	26.25	0.16	55.12	0.23	23.36	23.42
20	35.67	25.59	0.22	54.60	0.26	23.67	23.75
25	35.76	24.60	0.39	53.67	0.30	24.04	24.15
30	35.68	23.54	0.79	52.44	0.37	24.29	24.42
35	35.67	22.85	0.76	51.71	0.30	24.49	24.64
40	35.73	22.02	0.57	50.93	0.22	24.77	24.95
45	35.78	20.51	0.45	49.41	0.20	25.22	25.42
50	35.82	20.31	0.45	49.26	0.30	25.31	25.53
55	35.82	19.94	0.46	48.88	0.31	25.41	25.65
60	35.84	18.98	0.39	47.91	0.34	25.67	25.93

## Station 20

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.35	26.11	13.78	54.71	59.30	23.26	23.26
5	35.44	26.13	0.16	54.85	0.31	23.33	23.35
10	35.44	26.12	0.21	54.84	0.30	23.33	23.37
15	35.44	26.11	0.21	54.84	0.33	23.34	23.40

## Station 21

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	34.31	26.04	0.39	53.19	3.98	22.50	22.50
5	35.40	26.12	0.17	54.80	0.20	23.30	23.33
10	35.41	26.12	0.18	54.81	0.20	23.31	23.35
15	35.42	26.11	0.20	54.81	0.20	23.32	23.38
20	35.50	25.71	0.51	54.49	0.61	23.50	23.59

## Station 22

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.50	25.69	0.18	54.47	22.29	23.51	23.51
5	35.59	25.66	0.18	54.56	-0.02	23.59	23.61
10	35.58	25.44	0.20	54.32	0.23	23.65	23.69
15	35.64	24.50	0.53	53.40	30.35	23.97	24.04
20	35.73	23.56	1.46	52.54	0.86	24.33	24.42
25	35.78	23.08	1.55	52.08	0.85	24.50	24.61
30	35.85	22.06	1.48	51.11	1.00	24.85	24.98

Table 1-6-1 (3) Oceanographic data

The 2nd survey (4 Oct. - 18 Oct. 2000)

Station 23

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.17	26.02	24.18	54.36	228.60	23.15	23.16
5	35.59	25.88	0.42	54.80	0.29	23.52	23.54
10	35.63	25.40	4.25	54.35	2.84	23.70	23.74
15	35.67	25.16	1.35	54.14	0.50	23.80	23.86
20	35.74	24.31	1.26	53.39	0.55	24.11	24.19
25	35.81	22.12	1.06	51.12	0.59	24.80	24.91
30	35.87	21.07	0.97	50.10	0.70	25.14	25.27
35	35.90	20.62	0.95	49.68	0.78	25.29	25.44

Station 24

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	32.25	25.93	6.09	50.15	125.64	20.99	20.99
5	35.55	25.87	0.38	54.73	0.61	23.49	23.51
10	35.54	25.79	0.30	54.63	0.50	23.51	23.55
15	35.49	24.93	0.37	53.65	0.47	23.73	23.80
20	35.58	23.16	0.42	51.91	0.42	24.33	24.42
25	35.78	21.26	0.45	50.18	0.30	25.02	25.13
30	35.89	19.83	0.54	48.89	0.29	25.49	25.62
35	35.82	18.07	0.44	46.93	0.28	25.88	26.04
40	35.80	17.83	0.53	46.67	0.40	25.93	26.11
45	35.78	17.77	0.66	46.59	0.50	25.93	26.13

Station 25

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.47	25.65	4.40	54.39	69.22	23.50	23.50
5	35.50	25.62	0.65	54.40	0.69	23.53	23.55
10	35.54	23.14	0.73	51.84	0.65	24.30	24.35
15	35.79	20.99	0.50	49.92	0.39	25.10	25.16
20	35.77	20.57	0.47	49.45	0.45	25.20	25.29
25	35.85	19.51	0.50	48.45	0.30	25.54	25.65
30	35.85	19.31	0.51	48.26	0.26	25.59	25.73
35	35.85	18.92	0.49	47.85	0.25	25.70	25.85
40	35.76	17.55	0.45	46.34	0.30	25.97	26.15
45	35.74	17.24	0.42	46.01	0.31	26.03	26.23
50	35.74	17.16	0.38	45.92	0.32	26.04	26.26
55	35.75	17.08	0.37	45.85	0.39	26.07	26.31

Station 26

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.58	23.29	0.81	52.05	1.38	24.29	24.30
5	35.70	23.08	0.73	51.98	1.00	24.45	24.47
10	35.77	22.67	1.82	51.64	1.25	24.61	24.66
15	35.85	20.79	3.36	49.78	1.87	25.20	25.26

Station 27

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.56	23.96	0.52	52.73	170.04	24.08	24.08
5	35.83	23.44	0.52	52.53	0.63	24.43	24.45
10	35.84	22.10	2.60	51.14	1.20	24.83	24.87
15	35.89	20.40	1.76	49.43	1.16	25.33	25.40
20	35.93	20.24	1.16	49.32	1.28	25.41	25.50

Station 28

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.72	24.71	1.11	53.72	19.98	23.97	23.98
5	35.69	23.54	0.37	52.46	0.51	24.30	24.32
10	35.77	21.70	0.56	50.62	0.43	24.88	24.93
15	35.85	20.98	0.71	49.97	0.48	25.15	25.21
20	35.90	20.32	0.91	49.34	0.69	25.36	25.45
25	35.96	19.76	0.73	48.83	0.77	25.56	25.67
30	35.96	19.72	0.68	48.80	0.81	25.57	25.70

Station 29

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.61	25.20	5.99	54.10	82.59	23.74	23.74
5	35.67	24.17	0.32	53.10	0.53	24.10	24.12
10	35.72	21.57	0.66	50.43	0.50	24.89	24.93
15	35.85	19.63	0.56	48.57	1.07	25.51	25.57
20	35.91	19.34	0.73	48.34	0.30	25.63	25.72
25	35.91	19.32	0.79	48.33	0.32	25.64	25.75
30	35.94	19.26	0.71	48.30	0.45	25.68	25.81
35	35.93	19.06	0.61	48.09	0.46	25.72	25.87
40	35.92	18.94	0.54	47.96	0.58	25.74	25.92

Station 30

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	34.72	25.85	0.53	53.55	16.98	22.87	22.87
5	35.76	24.87	0.35	53.95	0.51	23.96	23.98
10	35.63	21.67	1.03	50.42	0.45	24.79	24.83
15	35.90	19.19	0.59	48.18	0.25	25.66	25.73
20	35.88	18.86	0.60	47.82	0.23	25.73	25.82
25	35.88	18.78	0.57	47.74	0.21	25.75	25.86
30	35.88	18.70	0.53	47.65	0.25	25.77	25.91
35	35.91	18.74	0.54	47.73	0.40	25.78	25.94
40	35.90	18.64	0.50	47.62	0.48	25.80	25.98
45	35.89	18.51	0.41	47.47	0.50	25.83	26.03

Station 31

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.53	25.00	0.35	53.78	125.14	23.74	23.75
5	35.56	24.32	0.45	53.11	0.50	23.98	24.00
10	35.57	23.31	1.26	52.06	0.72	24.28	24.32
15	35.62	22.08	1.00	50.84	0.56	24.67	24.74
20	35.84	19.86	0.85	48.81	0.41	25.44	25.53
25	35.90	19.42	0.73	48.42	0.30	25.60	25.71
30	35.90	19.05	0.64	48.04	0.21	25.70	25.83
35	35.87	18.54	0.54	47.48	0.20	25.80	25.95
40	35.82	18.15	0.48	47.02	0.20	25.86	26.04
45	35.80	17.91	0.42	46.77	0.18	25.91	26.11
50	35.79	17.68	0.34	46.51	0.18	25.96	26.18
55	35.79	17.60	0.32	46.43	0.20	25.98	26.22
60	35.77	17.43	0.34	46.25	0.18	26.01	26.27

Station 32

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.64	22.25	4.52	51.03	48.80	24.63	24.64
5	35.85	21.29	4.01	50.30	2.10	25.06	25.09
10	35.90	20.73	3.24	49.78	1.66	25.26	25.30
15	35.92	20.23	1.40	49.28	0.78	25.40	25.47

Table 1-6-1 (4) Oceanographic data

The 2nd survey (4 Oct. - 18 Oct. 2000)

## Station 33

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.36	22.66	1.28	51.10	29.19	24.31	24.31
5	35.82	22.10	1.86	51.10	0.85	24.81	24.83
10	35.91	20.67	2.58	49.72	0.80	25.28	25.33
15	35.92	20.11	0.84	49.15	0.51	25.44	25.50
20	35.91	19.83	0.81	48.85	0.47	25.51	25.59
25	35.90	19.56	0.62	48.56	0.84	25.57	25.68
30	35.89	19.32	0.51	48.31	1.03	25.62	25.75

## Station 34

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.10	24.16	0.46	52.32	71.25	23.68	23.68
5	35.64	23.84	0.60	52.70	0.62	24.17	24.19
10	35.70	22.94	0.83	51.84	0.51	24.49	24.53
15	35.74	22.41	1.00	51.33	0.50	24.66	24.73
20	35.91	19.71	0.62	48.73	0.28	25.54	25.63
25	35.92	19.12	0.58	48.13	0.25	25.69	25.80
30	35.93	18.94	0.58	47.96	0.34	25.75	25.88
35	35.91	18.79	0.48	47.79	0.31	25.77	25.92
40	35.89	18.52	0.48	47.48	0.30	25.82	26.00
45	35.85	18.33	0.44	47.24	0.22	25.84	26.04
50	35.83	18.06	0.38	46.95	0.20	25.89	26.12

## Station 35

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.34	23.42	1.73	51.88	0.78	24.07	24.08
5	35.35	23.42	1.65	51.89	0.63	24.08	24.10
10	35.35	23.35	1.82	51.81	0.68	24.10	24.15
15	35.38	23.07	2.23	51.56	0.76	24.20	24.27
20	35.78	19.73	1.40	48.60	3.59	25.43	25.52
25	35.85	19.02	0.75	47.95	7.53	25.67	25.78

## Station 36

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.14	23.53	1.14	51.72	28.41	23.89	23.89
5	35.33	23.34	1.65	51.77	0.70	24.09	24.11
10	35.44	22.76	2.60	51.31	0.71	24.34	24.38
15	35.61	21.69	2.65	50.41	0.95	24.77	24.83
20	35.79	20.00	2.34	48.89	1.17	25.37	25.46
25	35.89	19.30	0.60	48.28	1.29	25.63	25.73
30	35.87	19.18	0.57	48.13	2.03	25.64	25.77
35	35.87	19.03	0.53	47.98	2.68	25.67	25.83

## Station 37

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.30	23.76	1.61	52.17	5.63	23.94	23.95
5	35.31	23.70	2.10	52.13	0.77	23.96	23.99
10	35.38	23.22	2.67	51.71	0.74	24.16	24.20
15	35.49	22.77	2.64	51.39	0.72	24.38	24.44
20	35.66	21.87	2.24	50.67	0.72	24.76	24.85
25	35.82	20.78	1.41	49.72	0.71	25.18	25.28
30	35.95	19.59	0.39	48.66	0.30	25.59	25.73
35	35.92	19.27	0.34	48.29	0.24	25.65	25.81
40	35.90	19.05	0.31	48.04	0.30	25.69	25.87
45	35.87	18.79	0.28	47.74	0.20	25.74	25.94

## Station 38

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	34.96	23.30	2.87	51.25	12.56	23.82	23.82
5	35.11	23.21	3.14	51.35	1.49	23.96	23.98
10	35.81	20.16	3.11	49.07	0.99	25.34	25.38
15	35.82	19.49	1.06	48.39	1.28	25.52	25.59
20	35.84	18.80	0.72	47.70	1.89	25.71	25.80

## Station 39

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.19	23.24	2.59	51.19	1.15	23.84	23.84
5	35.18	22.56	3.76	50.76	1.07	24.20	24.22
10	35.82	19.50	0.86	48.40	0.32	25.52	25.56
15	35.84	19.15	0.74	48.06	0.41	25.62	25.69
20	35.84	18.71	0.69	47.61	0.25	25.74	25.82
25	35.82	18.49	0.51	47.36	0.34	25.78	25.89
30	35.83	18.27	0.67	47.16	0.20	25.84	25.97
35	35.83	18.17	0.90	47.06	0.21	25.86	26.02

## Station 40

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.13	23.30	2.22	51.47	0.80	23.95	23.95
5	35.17	23.04	2.44	51.26	0.86	24.05	24.08
10	35.51	20.07	1.63	48.61	0.66	25.13	25.17
15	35.84	18.85	0.93	47.75	0.37	25.70	25.77
20	35.85	18.67	0.74	47.58	0.27	25.76	25.84
25	35.84	18.60	1.37	47.49	0.23	25.77	25.88
30	35.84	18.50	0.63	47.40	0.20	25.79	25.92
35	35.83	18.30	0.56	47.18	0.20	25.83	25.99
40	35.83	18.23	0.53	47.11	0.20	25.85	26.03
45	35.83	18.18	0.50	47.07	0.20	25.86	26.06
50	35.83	18.17	0.46	47.06	0.20	25.87	26.09

## Station 41

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	34.00	25.89	0.55	52.63	6.66	22.32	22.32
5	34.34	25.83	0.62	53.02	6.42	22.59	22.61
10	35.62	25.51	0.47	54.45	2.40	23.66	23.70
15	35.54	24.46	0.41	53.23	1.27	23.92	23.98
20	35.65	22.77	0.43	51.60	0.65	24.49	24.58
25	35.69	22.41	0.47	51.26	0.78	24.62	24.73
30	35.95	20.58	0.44	49.69	0.54	25.33	25.46
35	35.90	19.45	0.48	48.46	0.38	25.60	25.75
40	35.86	18.68	0.49	47.62	0.30	25.77	25.95
45	35.85	18.35	0.43	47.27	0.30	25.84	26.04
50	35.83	18.13	0.38	47.02	0.52	25.88	26.10
55	35.81	17.85	0.34	46.71	0.67	25.93	26.17
60	35.77	17.46	0.31	46.26	0.97	26.00	26.26
65	35.76	17.31	0.27	46.12	0.95	26.03	26.31

Table 1-6-1 (5) Oceanographic data

The 2nd survey (4 Oct. - 18 Oct. 2000)

## Station 42

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	30.47	26.17	0.59	47.69	202.91	19.58	19.58
5	35.54	26.18	0.11	55.05	0.26	23.39	23.41
10	35.54	26.12	0.11	54.98	0.27	23.40	23.45
15	35.54	26.11	0.14	54.97	0.24	23.40	23.47
20	35.54	26.09	0.15	54.95	0.21	23.41	23.50
25	35.58	25.96	0.17	54.88	0.20	23.49	23.60
30	35.58	25.88	0.22	54.78	0.21	23.51	23.64
35	35.55	25.32	0.43	54.16	0.27	23.66	23.82
40	35.55	24.57	0.66	53.36	0.38	23.89	24.06
45	35.68	23.02	0.60	51.91	0.37	24.45	24.64
50	35.82	20.54	0.42	49.49	0.47	25.25	25.47
55	35.87	19.86	0.35	48.85	0.30	25.47	25.71
60	35.87	19.66	0.34	48.64	0.30	25.51	25.78
65	35.88	19.61	0.33	48.61	0.32	25.53	25.82
70	35.86	19.24	0.33	48.21	0.52	25.62	25.93

## Station 43

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.63	24.87	0.24	53.78	2.54	23.86	23.86
5	35.65	24.78	0.25	53.70	0.26	23.90	23.92
10	35.65	24.73	0.28	53.66	0.28	23.91	23.96
15	35.66	24.58	0.33	53.51	0.25	23.97	24.04
20	35.62	23.66	0.63	52.50	0.34	24.21	24.30
25	35.87	20.83	0.74	49.85	0.25	25.21	25.32
30	35.92	20.31	0.72	49.37	0.30	25.38	25.51
35	35.93	19.56	0.75	48.60	0.30	25.59	25.75
40	35.94	19.45	0.69	48.50	0.30	25.63	25.80
45	35.93	19.20	0.69	48.24	0.32	25.68	25.88
50	35.89	18.55	0.53	47.52	0.25	25.82	26.04
55	35.88	18.34	0.49	47.29	0.21	25.87	26.11
60	35.87	18.19	0.49	47.13	0.49	25.89	26.15

## Station 44

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.44	26.82	4.53	55.58	75.00	23.11	23.11
5	35.51	26.67	0.11	55.53	0.25	23.21	23.23
10	35.53	26.27	0.11	55.12	0.25	23.35	23.39
15	35.54	26.18	0.15	55.06	0.25	23.39	23.45
20	35.66	26.08	0.17	54.97	0.25	23.43	23.52
25	35.52	25.62	0.31	54.44	0.29	23.55	23.65
30	35.70	24.73	0.72	53.73	0.33	23.95	24.08
35	35.72	24.50	0.72	53.50	0.38	24.04	24.19
40	35.76	22.13	0.66	51.08	0.41	24.76	24.93
45	35.83	21.00	0.59	49.98	0.43	25.13	25.33
50	35.84	20.56	0.49	49.55	0.27	25.26	25.48
55	35.88	19.72	0.43	48.72	0.20	25.51	25.75
60	35.88	19.35	0.34	48.33	0.19	25.60	25.87
65	35.85	18.62	0.29	47.55	0.28	25.77	26.06
70	35.86	18.33	0.28	47.27	0.20	25.85	26.16
75	35.84	18.25	0.28	47.17	0.44	25.86	26.19

## Station 45

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	32.83	26.81	21.03	51.88	194.46	21.15	21.15
5	35.41	26.62	0.11	55.33	0.20	23.15	23.17
10	35.43	26.45	0.11	55.18	0.20	23.22	23.26
15	35.59	26.05	0.16	54.97	0.25	23.46	23.53
20	35.71	25.20	0.27	54.24	0.30	23.82	23.90
25	35.74	24.89	0.38	53.96	0.30	23.93	24.04
30	35.67	23.75	0.84	52.65	0.35	24.22	24.35
35	35.72	23.05	0.79	51.99	0.31	24.47	24.62
40	35.76	22.20	0.62	51.15	0.30	24.75	24.92
45	35.81	20.69	0.47	49.62	0.20	25.20	25.39
50	35.82	20.23	0.44	49.16	0.20	25.32	25.54
55	35.81	20.16	0.43	49.09	0.20	25.35	25.58
60	35.83	20.04	0.38	48.99	0.28	25.39	25.65
65	35.86	19.27	0.39	48.24	0.30	25.61	25.90
70	35.86	18.65	0.38	47.59	0.42	25.76	26.08

## Station 46

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.53	25.86	0.45	54.69	2.42	23.47	23.48
5	35.53	25.86	0.44	54.70	21.17	23.48	23.50
10	35.36	24.42	0.62	52.95	19.37	23.79	23.84
15	35.62	20.79	0.72	49.49	26.29	25.02	25.08
20	35.86	19.64	0.65	48.60	0.54	25.52	25.60
25	35.80	19.24	0.59	48.12	0.51	25.58	25.68
30	35.85	18.61	0.65	47.53	25.25	25.78	25.91
35	35.84	18.33	0.71	47.22	0.45	25.83	25.99
40	35.80	17.95	0.55	46.79	0.29	25.90	26.07
45	35.76	17.34	0.34	46.13	0.24	26.01	26.21
50	35.75	17.02	0.36	45.80	0.64	26.09	26.31
55	35.75	16.97	0.34	45.75	29.45	26.10	26.34
60	35.74	16.98	0.33	45.75	24.31	26.09	26.36
65	35.74	16.98	0.32	45.75	0.83	26.09	26.38

## Station 47

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.49	26.16	0.38	54.96	0.47	23.35	23.36
5	35.54	23.72	0.46	52.45	0.45	24.13	24.15
10	35.61	22.55	0.89	51.31	0.44	24.53	24.57
15	35.82	20.55	0.95	49.49	2.19	25.24	25.31
20	35.92	19.47	0.71	48.48	0.48	25.60	25.69
25	35.91	19.35	0.67	48.36	0.29	25.63	25.74
30	35.90	19.10	0.61	48.09	0.22	25.68	25.81
35	35.90	18.89	0.58	47.87	0.75	25.74	25.89
40	35.85	18.29	0.60	47.19	0.32	25.85	26.03
45	35.81	18.00	0.49	46.86	0.25	25.89	26.09
50	35.81	17.81	0.40	46.67	0.19	25.94	26.16
55	35.77	17.52	0.35	46.32	0.15	25.98	26.22
60	35.76	17.22	0.25	46.02	0.20	26.05	26.31
65	35.74	17.00	0.22	45.77	0.14	26.09	26.37
70	35.75	16.98	0.20	45.76	0.20	26.09	26.40

Table 1-6-1 (6) Oceanographic data

The 2nd survey (4 Oct. - 18 Oct. 2000)

Station 48

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	35.37	24.56	2.36	53.10	17.40	23.76	23.76
5	35.35	24.45	0.71	52.96	0.59	23.78	23.80
10	35.45	23.43	1.70	52.02	0.64	24.16	24.20
15	35.64	22.14	1.27	50.92	11.65	24.67	24.73
20	35.92	19.46	0.46	48.48	0.26	25.60	25.69
25	35.94	19.19	0.43	48.23	0.20	25.69	25.80
30	35.93	18.79	0.40	47.81	0.20	25.78	25.92
35	35.93	18.65	0.39	47.67	0.20	25.82	25.98
40	35.89	18.36	0.37	47.31	0.20	25.86	26.04
45	35.89	18.33	0.34	47.30	2.12	25.88	26.07
50	35.90	18.34	0.33	47.31	91.23	25.88	26.10
55	35.85	18.10	0.31	47.03	0.22	25.90	26.14

Station 49

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	34.20	24.41	1.20	51.35	52.17	22.92	22.92
5	35.32	24.04	1.27	52.48	0.64	23.87	23.89
10	35.36	23.59	1.55	52.07	0.61	24.04	24.08
15	35.55	22.70	1.97	51.39	0.63	24.44	24.50
20	35.71	21.77	1.58	50.62	0.60	24.82	24.91
25	35.90	19.89	0.97	48.90	0.52	25.48	25.59
30	35.89	19.58	0.43	48.58	0.29	25.56	25.69
35	35.88	19.04	0.39	48.01	0.20	25.68	25.84
40	35.92	18.73	0.36	47.73	0.20	25.80	25.97

Station 50

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.5	33.74	23.79	2.15	50.09	56.69	22.76	22.76
5	35.24	23.35	3.49	51.66	0.83	24.02	24.04
10	35.66	20.21	1.77	48.94	0.55	25.21	25.26
15	35.85	18.86	0.66	47.78	0.21	25.71	25.78
20	35.85	18.69	0.81	47.60	0.21	25.75	25.84
25	35.83	18.47	0.62	47.36	0.20	25.79	25.90
30	35.83	18.35	0.59	47.25	0.21	25.82	25.96
35	35.83	18.32	0.60	47.21	0.27	25.83	25.99
40	35.83	18.23	0.63	47.11	0.22	25.85	26.03
45	35.84	18.04	0.50	46.93	0.20	25.90	26.10
50	35.84	17.99	0.48	46.89	0.20	25.92	26.14
55	35.82	17.88	0.42	46.75	0.20	25.93	26.17
60	35.81	17.78	0.35	46.64	0.17	25.95	26.22
65	35.79	17.72	0.34	46.56	0.18	25.95	26.24
70	35.79	17.66	0.34	46.50	0.20	25.96	26.27

The 3rd survey (25 Jul. - 13 Aug. 2001)

Station 1

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.36	21.13	0.89	49.51	6.30	24.74	24.74
5	35.63	20.39	0.86	49.10	3.90	25.14	25.16
10	35.83	19.67	0.74	48.69	2.50	25.49	25.53
15	35.83	19.46	0.50	48.37	1.35	25.54	25.60
20	35.83	19.31	0.60	48.23	2.75	25.58	25.67

Station 2

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.37	21.50	0.76	49.91	5.63	24.63	24.64
5	35.46	21.39	0.75	49.91	5.09	24.74	24.77
10	35.71	21.05	0.55	49.87	2.04	25.02	25.07
15	35.76	20.76	0.49	49.63	0.86	25.14	25.21
20	35.80	20.44	0.50	49.35	0.64	25.26	25.35
25	35.82	19.51	0.43	48.41	0.30	25.52	25.63
30	35.83	19.14	0.49	48.05	1.89	25.62	25.75
35	35.82	19.00	0.48	47.89	1.70	25.65	25.81

Station 3

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.75	35.04	21.88	0.50	49.88	2.07	24.28	24.29
5	35.18	21.76	0.58	49.93	1.57	24.42	24.44
10	35.54	21.60	0.58	50.23	0.72	24.74	24.78
15	35.76	20.27	0.74	49.13	0.46	25.28	25.34
20	35.80	19.93	0.65	48.83	0.75	25.40	25.48
25	35.82	19.74	0.52	48.64	0.35	25.45	25.56
30	35.81	19.15	0.44	48.03	0.25	25.60	25.74
35	35.80	18.40	0.33	47.26	0.26	25.79	25.94
40	35.79	18.19	0.29	47.03	0.20	25.83	26.01
45	35.79	18.09	0.27	46.93	0.26	25.85	26.05
50	35.75	17.77	0.34	46.56	0.75	25.91	26.13
55	35.72	17.12	0.32	45.87	2.72	26.04	26.28

Station 4

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.78	21.51	5.08	50.44	1.59	24.95	24.95
5	35.78	21.51	5.30	50.44	1.61	24.95	24.97
10	35.79	21.13	3.68	50.05	2.14	25.06	25.11
15	35.79	21.00	2.18	49.92	2.00	25.10	25.16
20	35.80	20.21	1.09	49.12	9.64	25.32	25.41

Station 5

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.79	21.63	3.68	50.58	1.10	24.92	24.93
5	35.79	21.62	3.52	50.56	1.08	24.92	24.95
10	35.79	21.46	3.10	50.40	1.03	24.97	25.01
15	35.75	20.96	1.51	49.84	0.81	25.08	25.14
20	35.81	20.17	0.81	49.09	0.97	25.33	25.42
25	35.79	19.77	0.63	48.65	2.73	25.43	25.54
30	35.80	19.55	0.59	48.44	2.99	25.49	25.62
35	35.81	19.39	0.60	48.28	3.67	25.54	25.70
40	35.77	18.72	0.54	47.55	4.84	25.68	25.86

Table 1-6-1 (7) Oceanographic data

The 3rd survey (25 Jul. - 13 Aug. 2001)

## Station 6

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.65	35.78	21.93	0.42	50.87	19.59	24.83	24.84
5	35.78	21.81	0.55	50.74	0.66	24.86	24.88
10	35.78	21.60	0.78	50.54	0.61	24.92	24.97
15	35.73	21.25	0.90	50.11	0.60	24.98	25.05
20	35.81	19.55	1.19	48.44	0.47	25.50	25.59
25	35.80	19.08	0.51	47.94	0.35	25.61	25.72
30	35.77	18.63	0.37	47.45	0.35	25.71	25.84
35	35.79	18.49	0.33	47.34	0.87	25.76	25.91
40	35.79	18.45	0.36	47.31	1.35	25.77	25.95
45	35.76	18.30	0.45	47.11	3.48	25.79	25.98
50	35.72	17.42	0.63	46.16	6.53	25.97	26.19
55	35.72	17.27	0.97	46.02	9.10	26.00	26.24

## Station 7

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.78	20.79	3.93	49.69	1.71	25.15	25.15
5	35.79	20.60	4.28	49.51	1.20	25.21	25.23
10	35.78	20.36	2.72	49.24	1.35	25.26	25.31
15	35.80	20.04	2.16	48.94	1.81	25.36	25.43
20	35.80	19.82	1.67	48.71	2.62	25.43	25.52

## Station 8

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.95	35.80	20.70	4.22	49.62	1.15	25.18	25.18
5	35.80	20.70	4.50	49.62	1.10	25.18	25.21
10	35.80	20.69	4.20	49.61	1.15	25.18	25.23
15	35.80	20.36	2.29	49.27	0.88	25.28	25.35
20	35.82	19.72	1.20	48.63	1.19	25.46	25.55
25	35.82	19.53	0.79	48.42	1.56	25.51	25.62
30	35.81	19.43	0.68	48.32	1.33	25.53	25.66

## Station 9

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.80	21.32	0.34	50.26	1.30	25.01	25.02
5	35.79	21.30	0.39	50.23	0.53	25.01	25.04
10	35.80	20.87	1.87	49.79	0.80	25.14	25.19
15	35.80	20.74	2.21	49.66	0.63	25.17	25.24
20	35.78	19.75	1.48	48.61	0.63	25.42	25.51
25	35.81	19.58	1.33	48.47	0.52	25.49	25.60
30	35.78	19.22	0.97	48.07	0.56	25.57	25.70
35	35.80	18.71	0.79	47.58	0.74	25.71	25.86
40	35.79	18.35	0.50	47.20	0.50	25.79	25.97
45	35.77	18.15	1.08	46.97	0.97	25.83	26.03
50	35.77	18.09	1.91	46.91	2.30	25.84	26.06

## Station 10

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.77	20.94	0.95	49.83	1.58	25.10	25.10
5	35.77	20.53	0.93	49.41	1.78	25.21	25.23
10	35.78	20.11	1.08	48.99	2.58	25.33	25.38
15	35.80	19.22	1.14	48.09	4.71	25.57	25.64

## Station 11

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.68	21.67	0.86	50.48	0.87	24.84	24.84
5	35.73	20.68	0.82	49.51	0.70	25.14	25.16
10	35.81	19.44	0.68	48.32	0.75	25.53	25.57
15	35.78	18.83	0.59	47.66	0.48	25.66	25.73
20	35.77	18.47	0.48	47.28	0.58	25.74	25.83
25	35.77	18.37	0.50	47.19	1.03	25.77	25.88
30	35.76	17.96	0.49	46.76	2.91	25.87	26.00

## Station 12

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.7	35.57	22.51	0.54	51.22	0.47	24.51	24.51
5	35.57	22.43	0.59	51.14	0.40	24.53	24.55
10	35.78	19.88	0.55	48.75	0.30	25.39	25.43
15	35.80	19.03	0.44	47.89	0.20	25.63	25.69
20	35.79	18.50	0.32	47.33	0.20	25.75	25.84
25	35.78	18.31	0.35	47.14	0.20	25.79	25.91
30	35.77	17.87	0.28	46.68	0.21	25.90	26.03
35	35.75	17.48	0.27	46.25	0.20	25.97	26.13
40	35.73	17.32	0.27	46.08	0.36	26.00	26.18
45	35.73	17.15	0.23	45.91	0.29	26.04	26.24
50	35.73	17.11	0.23	45.86	0.45	26.05	26.27

## Station 13

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.49	22.91	0.33	51.53	0.32	24.33	24.34
5	35.49	22.21	0.46	50.80	0.33	24.53	24.55
10	35.76	20.09	0.41	48.94	0.24	25.32	25.37
15	35.79	19.69	0.42	48.57	0.24	25.45	25.52
20	35.83	19.30	0.43	48.20	0.21	25.58	25.67
25	35.81	18.84	0.39	47.71	0.20	25.68	25.79
30	35.78	18.37	0.30	47.20	0.20	25.78	25.91
35	35.78	18.01	0.27	46.83	0.20	25.87	26.02
40	35.75	17.70	0.29	46.48	0.20	25.92	26.10
45	35.73	17.22	0.25	45.98	0.22	26.02	26.22
50	35.73	17.10	0.22	45.85	0.21	26.05	26.27
55	35.70	16.77	0.22	45.49	0.27	26.11	26.35
60	35.68	16.50	0.18	45.19	0.30	26.15	26.42
65	35.67	16.42	0.83	45.11	8.24	26.16	26.45

## Station 14

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.65	35.73	21.17	0.99	50.01	1.56	25.00	25.01
5	35.72	21.10	0.95	49.93	1.56	25.02	25.04
10	35.81	19.34	0.88	48.23	0.58	25.55	25.60
15	35.80	19.19	0.94	48.05	1.14	25.58	25.65
20	35.80	19.03	0.87	47.90	4.30	25.63	25.71

## Station 15

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.71	21.38	0.69	50.21	0.80	24.93	24.94
5	35.70	21.09	0.83	49.89	0.70	25.00	25.02
10	35.72	20.05	0.65	48.85	0.60	25.30	25.35
15	35.82	19.53	0.60	48.43	0.47	25.51	25.58
20	35.81	19.20	0.70	48.09	0.46	25.59	25.68
25	35.80	18.77	0.58	47.62	1.81	25.69	25.80







Table 1-6-1 (10) Oceanographic data

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Station 36

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.06	22.51	0.57	50.55	0.60	24.12	24.12
5	35.10	22.39	0.59	50.49	0.70	24.19	24.21
10	35.20	22.16	0.58	50.39	0.93	24.32	24.37
15	35.50	21.11	0.59	49.68	2.05	24.85	24.91
20	35.75	19.99	0.56	48.83	3.16	25.34	25.43
25	35.80	19.16	0.51	48.03	1.62	25.59	25.71
30	35.79	18.71	0.40	47.56	0.63	25.69	25.83
35	35.79	18.76	0.41	47.61	0.57	25.69	25.84

Station 37

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.14	22.46	0.68	50.61	1.05	24.19	24.20
5	35.16	22.38	0.60	50.56	0.56	24.24	24.26
10	35.41	21.49	0.63	49.95	0.70	24.67	24.71
15	35.80	19.89	0.63	48.78	1.11	25.40	25.47
20	35.81	19.65	0.61	48.54	1.16	25.48	25.56
25	35.79	19.50	0.54	48.37	1.03	25.50	25.61
30	35.80	19.00	0.43	47.87	0.44	25.63	25.77
35	35.79	18.68	0.35	47.53	0.30	25.71	25.86
40	35.77	18.00	0.28	46.81	0.29	25.86	26.04
45	35.76	17.79	0.27	46.59	0.67	25.91	26.11
50	35.75	17.73	0.30	46.52	1.11	25.92	26.14
55	35.74	17.71	0.30	46.49	1.92	25.91	26.16

Station 38

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
5	34.16	22.82	1.21	49.70	1.37	23.35	23.37
10	35.78	20.70	0.66	49.59	2.15	25.17	25.22
15	35.78	20.48	0.55	49.37	1.96	25.23	25.30
20	35.79	19.90	0.52	48.78	1.32	25.39	25.48

Station 39

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
5	33.87	23.13	0.97	49.65	0.83	23.05	23.07
10	35.44	21.16	0.58	49.65	0.58	24.79	24.83
15	35.78	19.88	0.48	48.74	0.35	25.39	25.45
20	35.78	19.77	0.53	48.64	0.40	25.42	25.51
25	35.81	19.31	0.49	48.19	0.33	25.56	25.67
30	35.80	18.54	0.35	47.40	1.31	25.75	25.88
35	35.79	18.52	0.38	47.37	2.92	25.75	25.90
40	35.79	18.51	0.38	47.35	3.07	25.76	25.93

Station 40

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	34.52	23.38	0.65	50.75	0.60	23.46	23.46
5	34.51	23.20	0.64	50.56	0.40	23.50	23.53
10	35.47	20.11	0.57	48.61	0.42	25.10	25.14
15	35.81	19.16	0.58	48.03	0.38	25.60	25.66
20	35.80	19.09	1.23	47.96	0.46	25.62	25.70
25	35.80	18.97	0.69	47.84	0.36	25.65	25.76
30	35.79	18.84	0.59	47.69	0.34	25.67	25.80
35	35.78	18.71	0.62	47.55	0.32	25.69	25.85
40	35.77	18.20	0.44	47.02	0.30	25.81	25.99
45	35.76	18.10	0.39	46.90	0.25	25.83	26.03
50	35.77	18.00	0.35	46.82	0.50	25.86	26.08
55	35.77	17.97	0.33	46.79	0.66	25.87	26.11

Station 41

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.95	35.10	22.02	0.33	50.11	1.65	24.29	24.30
5	35.17	21.88	0.43	50.06	1.49	24.38	24.41
10	35.60	21.51	0.58	50.22	0.59	24.82	24.86
15	35.80	20.20	0.80	49.10	0.44	25.32	25.39
20	35.81	19.83	0.76	48.74	0.34	25.43	25.52
25	35.81	19.20	0.51	48.08	0.25	25.59	25.70
30	35.77	18.56	0.44	47.37	0.26	25.72	25.85
35	35.80	18.24	0.39	47.09	0.20	25.82	25.98
40	35.73	17.96	0.33	46.73	0.29	25.84	26.02
45	35.75	17.66	0.30	46.44	0.50	25.94	26.14
50	35.73	17.31	0.28	46.07	1.04	26.00	26.22
55	35.69	17.01	0.23	45.72	0.40	26.05	26.29
60	35.62	16.14	0.18	44.76	0.70	26.19	26.46
65	35.63	15.98	0.15	44.61	0.30	26.24	26.53
70	35.62	15.87	0.15	44.50	0.54	26.26	26.57
75	35.57	15.65	0.16	44.22	0.68	26.26	26.60

Station 42

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.75	35.78	21.95	0.38	50.90	0.60	24.83	24.83
5	35.77	21.73	0.52	50.66	0.60	24.88	24.90
10	35.77	21.68	1.07	50.59	0.70	24.90	24.94
15	35.78	21.49	0.71	50.42	0.60	24.95	25.02
20	35.70	20.98	1.36	49.79	0.66	25.03	25.12
25	35.82	19.73	1.66	48.65	0.52	25.46	25.57
30	35.82	19.62	0.73	48.53	0.38	25.49	25.62
35	35.81	19.31	0.78	48.21	0.42	25.56	25.72
40	35.79	19.16	0.92	48.03	0.32	25.59	25.76
45	35.79	18.92	0.50	47.78	0.30	25.64	25.84
50	35.79	18.71	0.68	47.57	0.30	25.70	25.92
55	35.78	18.45	0.44	47.29	0.35	25.75	26.00
60	35.78	18.18	0.39	47.02	0.58	25.83	26.09
65	35.76	17.79	0.28	46.60	0.68	25.91	26.20
70	35.73	17.30	0.28	46.07	0.86	26.00	26.31

Station 43

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.79	21.69	0.43	50.63	0.68	24.90	24.91
5	35.76	21.53	0.66	50.43	0.70	24.93	24.95
10	35.77	21.04	2.07	49.94	1.27	25.07	25.12
15	35.77	20.23	1.08	49.09	0.70	25.29	25.36
20	35.82	19.15	0.77	48.04	0.52	25.61	25.70
25	35.80	18.76	0.49	47.62	0.46	25.69	25.80
30	35.80	18.65	0.47	47.52	0.44	25.72	25.86
35	35.79	18.32	0.41	47.16	0.41	25.80	25.95
40	35.79	18.27	0.39	47.11	0.41	25.81	25.98
45	35.78	18.15	0.42	46.97	0.55	25.83	26.03
50	35.73	17.66	0.62	46.42	1.66	25.91	26.13
55	35.70	16.99	0.33	45.72	1.01	26.06	26.30
60	35.70	16.74	0.29	45.45	0.68	26.12	26.38
65	35.62	16.21	0.24	44.84	0.53	26.18	26.47
70	35.62	15.87	0.21	44.48	0.60	26.25	26.56
75	35.56	15.44	0.21	44.00	0.68	26.30	26.63

Table 1-6-1 (11) Oceanographic data

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## Station 44

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.44	23.33	0.27	51.91	0.31	24.18	24.18
5	35.41	23.12	0.30	51.65	0.30	24.22	24.24
10	35.47	22.23	0.43	50.79	0.30	24.51	24.55
15	35.79	19.89	0.33	48.77	0.20	25.40	25.46
20	35.81	19.28	0.35	48.17	0.20	25.57	25.66
25	35.82	19.05	0.37	47.94	0.20	25.64	25.75
30	35.78	18.36	0.28	47.19	0.20	25.78	25.92
35	35.75	18.03	0.29	46.82	0.21	25.85	26.00
40	35.74	17.54	0.29	46.31	0.20	25.96	26.13
45	35.73	17.37	0.28	46.12	0.20	25.99	26.19
50	35.73	17.20	0.27	45.95	0.20	26.03	26.25
55	35.72	17.05	0.22	45.80	0.20	26.06	26.30
60	35.71	16.81	0.21	45.53	0.21	26.11	26.37

## Station 45

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.31	23.15	0.39	51.55	4.40	24.13	24.13
5	35.31	23.12	0.38	51.51	0.30	24.14	24.16
10	35.38	22.53	0.49	50.99	0.31	24.36	24.40
15	35.77	19.47	0.65	48.31	0.44	25.49	25.56
20	35.79	18.49	0.49	47.33	0.29	25.75	25.84
25	35.78	18.21	0.42	47.03	0.24	25.82	25.93
30	35.79	18.09	0.43	46.93	0.25	25.86	25.99
35	35.78	17.96	0.37	46.78	0.24	25.88	26.03
40	35.75	17.71	0.43	46.50	0.20	25.92	26.10
45	35.74	17.42	0.39	46.19	0.20	25.99	26.19
50	35.72	17.02	0.22	45.75	0.25	26.06	26.28
55	35.71	16.93	0.22	45.66	0.29	26.08	26.32

## Station 46

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	35.17	24.33	0.20	52.59	0.28	23.68	23.68
5	35.16	24.19	0.25	52.44	0.26	23.71	23.73
10	35.23	23.27	0.45	51.57	0.30	24.03	24.08
15	35.58	20.98	0.52	49.64	0.51	24.94	25.00
20	35.77	19.46	0.67	48.29	0.52	25.49	25.58
25	35.76	18.58	0.55	47.39	0.30	25.71	25.82
30	35.77	18.33	0.55	47.14	0.29	25.78	25.91
35	35.77	17.98	0.33	46.78	0.20	25.87	26.02
40	35.76	17.74	0.29	46.53	0.20	25.92	26.09
45	35.73	17.31	0.23	46.06	0.20	26.00	26.20
50	35.71	16.97	0.20	45.70	0.20	26.07	26.29
55	35.71	16.87	0.19	45.60	0.20	26.09	26.33
60	35.71	16.76	0.18	45.48	0.20	26.12	26.38
65	35.69	16.64	0.18	45.35	0.23	26.13	26.42
70	35.68	16.56	0.18	45.26	0.20	26.14	26.45
75	35.64	16.29	0.17	44.94	0.22	26.18	26.51
80	35.65	16.11	0.14	44.77	0.29	26.22	26.58

## Station 47

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.65	35.21	24.13	0.17	52.43	0.25	23.76	23.76
5	35.21	24.11	0.18	52.41	0.25	23.76	23.79
10	35.22	23.44	0.28	51.74	0.25	23.98	24.02
15	35.49	21.70	0.51	50.27	0.45	24.67	24.74
20	35.80	19.46	0.66	48.34	0.48	25.51	25.60
25	35.79	18.45	0.56	47.29	0.30	25.76	25.87
30	35.78	18.07	0.49	46.89	0.25	25.86	25.99
35	35.73	17.71	0.30	46.47	0.20	25.91	26.06
40	35.72	17.22	0.21	45.96	0.20	26.01	26.19
45	35.70	16.91	0.20	45.62	0.20	26.07	26.27
50	35.69	16.59	0.15	45.29	0.20	26.14	26.36
55	35.67	16.38	0.16	45.05	0.20	26.17	26.42
60	35.63	16.11	0.14	44.74	0.20	26.21	26.47
65	35.62	15.95	0.13	44.58	0.30	26.24	26.53
70	35.61	15.94	0.13	44.56	0.30	26.23	26.55
75	35.62	15.92	0.14	44.56	0.32	26.24	26.58
80	35.62	15.92	0.15	44.56	0.35	26.24	26.60

## Station 48

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.55	34.95	23.57	0.41	51.51	0.59	23.73	23.73
5	35.04	23.16	0.50	51.21	0.50	23.92	23.94
10	35.52	22.01	0.63	50.62	0.50	24.61	24.66
15	35.81	19.83	0.68	48.78	0.41	25.41	25.48
20	35.79	19.62	0.67	48.49	0.31	25.46	25.55
25	35.80	19.19	0.57	48.07	0.32	25.59	25.70
30	35.78	18.43	0.43	47.26	0.28	25.77	25.90
35	35.77	17.98	0.37	46.79	0.24	25.87	26.02
40	35.74	17.60	0.27	46.37	0.20	25.94	26.12
45	35.74	17.56	0.28	46.32	0.22	25.95	26.15

## Station 49

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.85	35.06	22.93	0.54	50.99	2.15	24.00	24.01
5	35.06	22.91	0.61	50.97	0.48	24.00	24.02
10	35.16	22.56	0.59	50.75	0.50	24.18	24.23
15	35.41	21.61	0.54	50.08	0.45	24.64	24.70
20	35.82	19.73	0.44	48.63	0.30	25.46	25.55
25	35.81	19.67	0.42	48.57	0.45	25.46	25.58
30	35.80	19.14	0.36	48.02	0.34	25.60	25.73
35	35.78	18.56	0.33	47.40	0.48	25.73	25.89
40	35.77	18.08	0.30	46.89	0.26	25.84	26.02
45	35.74	17.60	0.24	46.36	0.20	25.94	26.14

Table 1-6-1 (12) Oceanographic data

The 3rd survey (25 Jul. - 13 Aug. 2001)

Station 50

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
5	34.75	23.53	0.40	51.22	0.30	23.60	23.62
10	35.10	22.46	0.53	50.56	0.31	24.16	24.21
15	35.83	19.58	0.65	48.49	0.45	25.50	25.57
20	35.81	19.21	0.60	48.10	0.36	25.59	25.68
25	35.78	19.03	0.49	47.88	0.30	25.61	25.72
30	35.80	18.56	0.46	47.42	0.35	25.75	25.88
35	35.78	18.30	0.43	47.13	0.30	25.80	25.95
40	35.78	18.20	0.38	47.03	0.30	25.82	26.00
45	35.76	17.88	0.39	46.68	0.24	25.89	26.08
50	35.75	17.82	0.37	46.62	0.23	25.89	26.12
55	35.74	17.67	0.36	46.44	0.23	25.91	26.16
60	35.74	17.51	0.35	46.29	0.20	25.95	26.22
65	35.70	17.33	0.30	46.06	0.20	25.97	26.26
70	35.71	17.04	0.25	45.79	0.30	26.05	26.36
75	35.70	16.96	0.22	45.70	0.45	26.06	26.39
80	35.70	16.93	0.27	45.66	0.60	26.07	26.42

The 4th survey (29 Oct. - 16 Nov. 2001)

Station 1

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	32.69	28.13	0.85	53.04	8.59	20.62	20.62
5	34.63	28.25	0.17	55.96	1.38	22.04	22.06
10	34.90	26.90	0.40	54.92	2.40	22.67	22.72
15	34.93	26.56	0.37	54.60	2.00	22.81	22.87

Station 2

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	33.28	27.67	0.61	53.42	42.10	21.21	21.22
5	34.71	26.75	0.15	54.50	0.98	22.59	22.61
10	34.86	26.34	0.13	54.27	0.46	22.82	22.87
15	34.89	26.31	0.16	54.29	0.40	22.86	22.92
20	34.96	26.26	0.33	54.34	0.55	22.92	23.01

Station 3

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	31.44	27.76	0.69	50.87	65.57	19.80	19.81
5	34.33	27.36	0.14	54.59	1.17	22.10	22.12
10	35.09	27.05	0.04	55.95	0.43	22.77	22.82
15	35.06	26.71	0.06	54.94	0.37	22.86	22.92
20	35.08	26.57	0.10	54.83	0.34	22.92	23.00
25	35.08	26.56	0.12	54.81	0.30	22.92	23.03
30	35.09	26.53	0.14	54.79	0.30	22.94	23.07
35	35.05	26.39	0.30	54.61	0.33	22.95	23.10
40	35.05	26.34	0.33	54.57	0.34	22.97	23.14
45	35.06	26.19	0.38	54.41	0.49	23.02	23.22
50	35.07	26.13	0.39	54.38	0.75	23.04	23.26

Station 4

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	34.99	28.23	0.17	56.45	6.92	22.32	22.32
5	35.02	28.21	0.12	56.47	0.61	22.34	22.36
10	35.02	28.11	0.12	56.37	0.60	22.38	22.42
15	35.05	27.65	0.15	55.92	0.56	22.54	22.61
20	35.06	27.12	0.33	55.39	1.20	22.73	22.81

Station 5

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.01	27.87	0.12	56.10	18.70	22.45	22.45
5	35.03	27.87	0.00	56.13	0.30	22.46	22.49
10	35.04	27.87	0.00	56.13	0.21	22.47	22.51
15	35.04	27.75	0.01	56.02	0.23	22.51	22.57
20	35.03	27.35	0.06	55.58	0.27	22.63	22.71
25	35.07	26.63	0.20	54.89	0.48	22.89	23.00

Station 6

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.02	27.95	0.69	56.19	108.22	22.43	22.43
5	35.04	27.91	0.01	56.18	0.33	22.46	22.48
10	35.04	27.89	0.01	56.16	0.27	22.46	22.50
15	35.03	27.85	0.01	56.11	0.27	22.47	22.54
20	35.04	27.58	0.04	55.84	0.23	22.56	22.65
25	35.05	27.11	0.06	55.37	0.30	22.73	22.83
30	35.12	26.64	0.08	54.96	0.20	22.93	23.06
35	35.15	26.33	0.15	54.69	0.24	23.04	23.20
40	35.18	26.18	0.25	54.57	0.29	23.12	23.29
45	35.18	26.10	0.50	54.49	0.48	23.14	23.34

Table 1-6-1 (13) Oceanographic data

The 4th survey (29 Oct. - 16 Nov. 2001)

## Station 7

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	35.15	27.58	0.69	55.98	4.11	22.65	22.65
5	35.16	27.58	0.56	56.00	1.39	22.66	22.68
10	35.18	27.35	0.27	55.78	1.00	22.74	22.79
15	35.17	26.93	0.36	55.84	1.11	22.87	22.94

## Station 8

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	35.12	27.38	0.31	55.74	25.59	22.69	22.69
5	35.16	27.39	0.16	55.80	0.60	22.72	22.74
10	35.16	27.38	0.15	55.80	0.60	22.72	22.76
15	35.16	27.37	0.15	55.78	0.60	22.72	22.78
20	35.15	27.03	0.14	55.42	0.50	22.82	22.91
25	35.16	26.44	0.11	54.81	0.34	23.02	23.13
30	35.17	26.36	0.15	54.74	0.43	23.05	23.18

## Station 9

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	35.11	27.50	0.06	55.85	1.71	22.65	22.65
5	35.12	27.49	0.03	55.85	0.30	22.65	22.68
10	35.13	27.45	0.05	55.83	0.30	22.67	22.72
15	35.12	27.40	0.05	55.76	0.30	22.68	22.75
20	35.13	27.17	0.08	55.54	0.30	22.77	22.86
25	35.16	26.85	0.09	55.23	0.30	22.89	22.99
30	35.18	26.51	0.12	54.92	0.26	23.01	23.14
35	35.16	26.09	0.22	54.44	0.25	23.13	23.28
40	35.18	25.99	0.27	54.37	0.24	23.18	23.35
45	35.20	25.94	0.31	54.34	0.29	23.21	23.40
50	35.25	25.85	0.36	54.31	0.74	23.27	23.49

## Station 10

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	34.49	28.22	0.49	55.72	2.88	21.94	21.95
5	34.89	28.27	0.16	56.36	1.58	22.23	22.25
10	34.90	28.27	0.16	56.37	1.61	22.24	22.28
15	34.90	28.27	0.17	56.38	1.57	22.23	22.30

## Station 11

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	34.89	28.22	0.38	56.30	9.63	22.24	22.25
5	34.91	28.23	0.04	56.32	0.33	22.25	22.27
10	34.91	28.23	0.04	56.33	0.32	22.25	22.30
15	34.90	28.23	0.03	56.33	0.30	22.25	22.32
20	35.10	27.50	0.17	55.83	0.44	22.63	22.72
25	35.17	27.07	0.19	55.49	0.45	22.83	22.93

## Station 12

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	34.89	28.15	0.03	56.22	1.40	22.27	22.27
5	34.89	28.15	0.01	56.22	0.25	22.26	22.29
10	34.89	28.15	0.03	56.22	0.25	22.26	22.31
15	34.89	28.15	0.02	56.22	0.29	22.26	22.33
20	34.90	28.13	0.04	56.22	0.35	22.28	22.37
25	35.13	27.42	0.05	55.80	0.26	22.68	22.79
30	35.13	27.23	0.07	55.60	0.27	22.74	22.88
35	35.16	26.59	0.16	54.98	0.26	22.97	23.12

## Station 13

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	35.13	27.99	0.15	56.40	35.61	22.49	22.49
5	35.17	28.00	0.10	56.46	0.40	22.52	22.54
10	35.17	28.00	0.10	56.47	0.37	22.52	22.56
15	35.16	27.81	0.06	56.26	0.30	22.58	22.64
20	35.25	26.77	0.06	55.27	0.28	22.98	23.07
25	35.25	26.45	0.09	54.93	0.28	23.08	23.19
30	35.23	26.32	0.11	54.79	0.22	23.11	23.24
35	35.27	26.14	0.25	54.65	0.26	23.19	23.35
40	35.28	25.93	0.36	54.44	0.30	23.27	23.45

## Station 14

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	35.00	28.26	0.25	56.51	2.88	22.31	22.31
5	35.00	28.28	0.24	56.53	2.87	22.31	22.33
10	35.00	28.28	0.26	56.53	2.89	22.31	22.35
15	35.01	28.28	0.28	56.54	3.89	22.31	22.38
20	35.01	28.28	0.31	56.54	3.40	22.31	22.40

## Station 15

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	34.97	28.22	0.16	56.42	4.66	22.31	22.31
5	34.98	28.23	0.17	56.44	1.16	22.31	22.33
10	34.99	28.23	0.16	56.45	1.23	22.32	22.36
15	34.99	28.23	0.21	56.45	1.28	22.31	22.38
20	34.99	28.23	0.17	56.45	1.48	22.31	22.40

## Station 16

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	34.91	28.08	0.90	56.17	39.80	22.30	22.30
5	34.99	28.09	0.00	56.31	0.28	22.36	22.38
10	34.99	28.08	0.01	56.30	0.25	22.36	22.41
15	35.00	27.93	0.03	56.15	0.28	22.42	22.49
20	35.12	27.40	0.10	55.76	0.31	22.68	22.77
25	35.12	27.41	0.16	55.78	0.45	22.68	22.79
30	36.14	27.41	0.22	55.80	0.57	22.69	22.82

## Station 17

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m <sup>3</sup> ]	Density[Kg/m <sup>3</sup> ]
0.6	35.03	28.07	2.22	56.34	33.12	22.40	22.40
5	35.04	28.03	-0.03	56.32	0.31	22.42	22.44
10	35.05	27.96	0.00	56.25	0.28	22.45	22.49
15	35.05	27.95	0.00	56.24	0.27	22.45	22.51
20	35.06	27.82	0.01	56.12	0.25	22.50	22.59
25	35.17	27.40	0.03	55.83	0.25	22.72	22.83
30	35.17	27.12	0.09	55.54	0.30	22.81	22.94
35	35.17	27.03	0.13	55.44	0.33	22.84	22.99
40	35.17	26.94	0.22	55.36	0.44	22.87	23.04

Table 1-6-1 (14) Oceanographic data

The 4th survey (29 Oct. - 16 Nov. 2001)

## Station 18

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.04	28.14	-0.01	56.42	0.32	22.38	22.38
5	35.04	28.11	-0.02	56.40	0.38	22.40	22.42
10	35.05	27.90	0.00	56.18	0.26	22.46	22.50
15	35.04	27.78	-0.01	56.05	0.25	22.50	22.57
20	35.10	27.30	0.00	55.63	0.25	22.70	22.79
25	35.15	27.20	0.05	55.59	0.25	22.77	22.88
30	35.18	27.13	0.05	55.57	0.23	22.82	22.95
35	35.20	26.94	0.09	55.39	0.25	22.89	23.04
40	35.13	26.50	0.12	54.83	0.28	22.97	23.15
45	35.16	26.39	0.17	54.71	0.30	23.05	23.25
50	35.21	26.18	0.48	54.60	0.56	23.13	23.35

## Station 19

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.17	28.24	0.29	56.71	125.01	22.44	22.45
5	35.19	28.15	-0.01	56.64	0.31	22.49	22.51
10	35.17	27.95	-0.01	56.42	0.28	22.54	22.58
15	35.17	27.91	0.00	56.37	0.29	22.55	22.61
20	35.15	27.80	0.00	56.23	0.28	22.57	22.66
25	35.11	27.58	0.06	55.95	0.25	22.62	22.73
30	35.07	26.56	0.06	54.80	0.23	22.92	23.04
35	35.18	26.21	0.14	54.59	0.18	23.10	23.26
40	35.27	25.94	0.15	54.43	0.22	23.26	23.43
45	35.29	25.66	0.22	54.16	0.31	23.36	23.55
50	35.33	25.21	0.49	53.75	0.24	23.53	23.75
55	35.43	24.73	0.54	53.38	0.27	23.74	23.98
60	35.43	24.11	0.47	52.74	0.29	23.94	24.20
65	35.47	23.44	0.43	52.09	0.35	24.16	24.44
70	35.61	21.87	0.39	50.63	0.59	24.72	25.03

## Station 20

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.10	27.72	0.23	56.06	15.58	22.56	22.56
5	36.10	27.71	0.19	56.07	0.65	22.57	22.59
10	35.17	27.72	0.22	56.18	0.68	22.62	22.66
15	35.36	27.45	0.41	56.16	0.67	22.85	22.91

## Station 21

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	34.98	27.70	0.15	55.88	23.35	22.48	22.48
5	35.05	27.69	0.12	55.97	0.46	22.54	22.56
10	35.34	27.50	0.06	56.18	0.34	22.82	22.86
15	35.35	27.49	0.16	56.18	0.47	22.83	22.89
20	35.36	27.46	0.27	56.17	0.57	22.84	22.93

## Station 22

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.17	27.99	8.49	56.44	48.87	22.52	22.53
5	35.26	27.62	0.03	56.20	0.31	22.71	22.74
10	35.27	27.60	0.04	56.19	0.29	22.73	22.78
15	35.30	27.57	0.08	56.18	0.38	22.76	22.83
20	35.34	27.49	0.05	56.17	0.28	22.82	22.91
25	35.39	27.50	0.07	56.25	0.28	22.85	22.96
30	35.39	27.43	0.05	56.18	0.30	22.88	23.01

## Station 23

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.22	27.86	0.52	56.38	7.64	22.61	22.61
5	35.22	27.54	0.00	56.05	0.26	22.72	22.74
10	35.21	27.41	0.00	55.90	0.29	22.75	22.79
15	35.21	27.38	0.00	55.87	0.29	22.76	22.82
20	35.21	27.37	0.03	55.85	0.30	22.76	22.85
25	35.24	27.35	0.04	55.88	0.30	22.78	22.89
30	35.30	27.40	0.09	56.02	0.29	22.82	22.95
35	35.38	27.23	0.27	55.97	0.44	22.93	23.08
40	35.40	27.14	0.38	55.89	0.50	22.98	23.15

## Station 24

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.33	27.37	0.06	56.02	0.38	22.85	22.86
5	35.33	27.37	0.05	56.02	0.27	22.85	22.88
10	35.33	27.36	0.06	56.02	0.24	22.85	22.90
15	35.33	27.37	0.07	56.03	0.25	22.85	22.92
20	35.34	27.37	0.05	56.04	0.25	22.86	22.94
25	35.35	27.36	0.07	56.04	0.22	22.87	22.97
30	35.34	27.28	0.08	55.95	0.26	22.88	23.01
35	35.39	26.85	0.25	55.55	0.30	23.06	23.21
40	35.39	26.65	0.33	55.37	0.36	23.13	23.30
45	35.39	26.60	0.37	55.30	0.34	23.14	23.34
50	35.40	26.54	0.37	55.25	0.45	23.17	23.38

## Station 25

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.23	27.44	0.03	55.96	0.45	22.75	22.75
5	35.23	27.39	0.02	55.90	0.30	22.77	22.79
10	35.25	27.38	0.04	55.91	0.28	22.78	22.83
15	35.27	27.37	0.05	55.94	0.28	22.81	22.87
20	35.30	27.32	0.05	55.93	0.26	22.84	22.93
25	35.31	27.20	0.09	55.82	0.28	22.89	23.00
30	35.32	27.11	0.11	55.74	0.30	22.93	23.06
35	35.33	27.06	0.16	55.71	0.30	22.95	23.10
40	35.36	26.87	0.29	55.55	0.30	23.04	23.21
45	35.40	26.85	0.32	55.57	0.30	23.07	23.26
50	35.40	26.54	0.45	55.26	0.30	23.17	23.38
55	35.39	26.01	0.55	54.68	0.37	23.32	23.56
60	35.41	25.54	0.48	54.21	0.42	23.49	23.75
65	35.67	21.26	0.44	50.07	0.55	24.93	25.22

## Station 26

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	34.82	27.94	0.23	55.90	1.34	22.28	22.29
5	34.83	27.93	0.22	55.89	0.51	22.29	22.31
10	35.32	27.60	0.53	56.25	1.80	22.77	22.81
15	35.36	27.48	0.41	56.18	1.19	22.84	22.90

## Station 27

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	34.71	27.87	1.21	55.67	61.07	22.22	22.22
5	35.17	27.86	0.05	56.31	0.32	22.57	22.59
10	35.36	27.54	0.06	56.24	0.29	22.81	22.86
15	35.38	27.46	0.05	56.19	0.24	22.86	22.92
20	35.38	27.38	0.21	56.11	0.32	22.89	22.97

Table 1-6-1 (15) Oceanographic data

The 4th survey (29 Oct. - 16 Nov. 2001)

Station 28

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.38	27.81	0.10	56.57	5.60	22.74	22.75
5	35.38	27.79	0.01	56.55	0.30	22.75	22.77
10	35.38	27.75	0.01	56.50	0.29	22.77	22.81
15	35.38	27.74	0.02	56.49	0.26	22.77	22.83
20	35.36	27.55	0.03	56.27	0.27	22.81	22.90
25	35.39	27.37	0.13	56.10	0.30	22.89	23.00
30	35.40	27.29	0.33	56.04	0.50	22.93	23.06

Station 29

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.24	27.73	0.04	56.28	1.09	22.67	22.67
5	35.24	27.48	-0.01	56.01	0.25	22.75	22.77
10	35.24	27.42	0.00	55.95	0.27	22.77	22.81
15	35.25	27.41	0.00	55.96	0.30	22.78	22.84
20	35.28	27.43	0.00	56.02	0.28	22.79	22.88
25	35.37	27.50	0.04	56.23	0.30	22.84	22.94
30	35.38	27.47	0.06	56.21	0.31	22.86	22.99
35	35.39	27.42	0.12	56.17	0.34	22.88	23.03
40	35.40	27.41	0.16	56.17	0.44	22.89	23.06

Station 30

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.23	27.95	0.00	56.48	4.00	22.58	22.59
5	35.22	27.56	0.00	56.08	0.30	22.71	22.73
10	35.22	27.52	0.00	56.03	0.30	22.72	22.76
15	35.23	27.49	0.00	56.00	0.29	22.73	22.80
20	35.23	27.43	0.03	55.96	0.30	22.76	22.84
25	35.23	27.31	0.05	55.81	0.30	22.79	22.90
30	35.25	27.25	0.07	55.78	0.30	22.82	22.96
35	35.35	27.31	0.16	55.99	0.39	22.89	23.04
40	35.36	27.30	0.21	56.00	0.44	22.90	23.07
45	35.37	27.30	0.23	56.00	0.41	22.90	23.10
50	35.37	27.29	0.26	56.01	0.50	22.90	23.12

Station 31

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.21	27.88	0.02	56.39	30.38	22.59	22.60
5	35.21	27.86	-0.01	56.37	0.28	22.60	22.62
10	35.23	27.54	0.01	56.07	0.27	22.72	22.76
15	35.25	27.50	0.01	56.05	0.30	22.75	22.81
20	35.26	27.43	0.05	56.00	0.27	22.78	22.87
25	35.33	27.25	0.08	55.91	0.28	22.89	23.00
30	35.35	27.22	0.13	55.90	0.31	22.91	23.04
35	35.37	27.22	0.17	55.91	0.32	22.93	23.08
40	35.39	27.15	0.34	55.89	0.32	22.97	23.14
45	35.41	26.06	0.60	54.76	0.36	23.33	23.52
50	35.41	25.63	0.56	54.31	0.30	23.46	23.68
55	35.46	24.71	0.65	53.41	0.32	23.78	24.02
60	35.68	22.06	0.67	50.90	0.56	24.72	24.98

Station 32

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.32	27.87	0.04	56.54	8.83	22.68	22.68
5	35.32	27.88	0.03	56.55	0.28	22.67	22.70
10	35.32	27.87	0.03	56.55	0.26	22.68	22.73
15	35.31	27.77	0.06	56.43	0.28	22.70	22.77
20	35.37	27.45	0.10	56.16	0.29	22.85	22.94

Station 33

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.7	35.27	27.61	0.01	56.18	33.91	22.73	22.73
5	35.27	27.61	0.00	56.19	0.28	22.72	22.75
10	35.27	27.61	0.02	56.20	0.28	22.73	22.77
15	35.27	27.61	0.04	56.20	0.30	22.73	22.80
20	35.28	27.61	0.04	56.22	0.28	22.74	22.82
25	35.34	27.55	0.10	56.24	0.30	22.80	22.91
30	35.39	27.35	0.22	56.09	0.60	22.90	23.03

Station 34

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.22	27.71	0.68	56.23	11.42	22.65	22.65
5	35.23	27.66	0.00	56.19	0.25	22.68	22.71
10	35.22	27.54	0.00	56.05	0.25	22.71	22.75
15	35.22	27.49	0.00	55.99	0.28	22.72	22.79
20	35.22	27.48	0.02	55.99	0.29	22.74	22.82
25	35.25	27.45	0.04	56.00	0.29	22.76	22.87
30	35.29	27.44	0.05	56.05	0.30	22.79	22.92
35	35.33	27.43	0.10	56.09	0.28	22.83	22.98
40	35.39	27.39	0.16	56.14	0.30	22.89	23.06
45	35.40	27.31	0.22	56.07	0.33	22.92	23.12
50	35.38	26.96	0.35	55.67	0.45	23.02	23.24

Station 35

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.23	28.06	0.11	56.61	1.18	22.55	22.55
5	35.23	28.07	0.10	56.62	0.47	22.55	22.57
10	35.23	28.08	0.10	56.64	0.45	22.54	22.59
15	35.31	28.13	0.07	56.80	0.34	22.59	22.65
20	35.25	27.78	0.44	56.35	1.71	22.65	22.74
25	35.30	27.49	0.72	56.12	6.73	22.79	22.90

Station 36

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.6	35.20	28.03	0.17	56.53	8.04	22.54	22.54
5	35.20	28.01	0.10	56.53	0.34	22.55	22.57
10	35.29	27.96	0.06	56.59	0.26	22.63	22.67
15	35.29	27.95	0.05	56.59	0.30	22.64	22.70
20	35.30	27.94	0.06	56.58	0.29	22.65	22.73
25	35.31	27.88	0.16	56.55	0.55	22.67	22.77
30	35.31	27.63	0.43	56.28	2.98	22.75	22.88

Station 37

Depth[m]	Salinity	Temp[°C]	Choloro[ppb]	Cond[mS/cm]	Turb[ppm]	SigmaT[Kg/m3]	Density[Kg/m3]
0.7	35.25	27.80	0.08	56.36	9.04	22.65	22.65
5	35.25	27.80	0.01	56.37	0.31	22.65	22.67
10	35.25	27.79	0.01	56.36	0.26	22.65	22.70
15	35.25	27.79	0.05	56.36	0.25	22.65	22.72
20	35.26	27.78	0.04	56.36	0.25	22.66	22.75
25	35.26	27.78	0.05	56.37	0.25	22.66	22.77
30	35.26	27.79	0.05	56.38	0.25	22.66	22.79
35	35.29	27.80	0.08	56.43	0.24	22.68	22.83
40	35.36	27.55	0.32	56.26	0.71	22.81	22.98
45	35.37	27.49	0.38	56.22	0.85	22.84	23.03
50	35.37	27.37	0.44	56.09	0.90	22.88	23.09