

NOAA Technical Memorandum NMFS



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**REPORT OF ECOSYSTEM STUDIES CONDUCTED
DURING THE 1988 EASTERN TROPICAL PACIFIC
DOLPHIN SURVEY ON THE
RESEARCH VESSEL *DAVID STARR JORDAN***

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Center

NOAA Technical Memorandum NMFS

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Lisa J. Lierheimer¹
Paul C. Fiedler¹
Stephen B. Reilly¹
Robert L. Pitman¹
Lisa T. Ballance¹
Gregg G. Thomas²
David W. Behringer²

¹ Southwest Region
National Marine Fisheries Service, NOAA
P.O. Box 271
La Jolla, California 92038

² Atlantic Oceanographic and Meteorology Laboratory
4301 Rickenbacker Causeway
Environmental Research Laboratories, NOAA
Miami, Florida 33149

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U.S. DEPARTMENT OF COMMERCE

Robert A. Mosbacher

National Oceanic and Atmospheric Administration

William E. Evans, Under Secretary for Oceans and Atmosphere

National Marine Fisheries Service

James W. Brennan, Assistant Administrator for Fisheries

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INTRODUCTION

The National Marine Fisheries Service (NMFS) has the responsibility of assessing the status of dolphin stocks affected by the tuna purse-seine fishery in the eastern tropical Pacific (ETP). In 1988, the Southwest Fisheries Center (SWFC) conducted the third survey of a six-year program to monitor population trends in ETP dolphin stocks (Sexton and Holt, 1989). Two NOAA vessels were used, the David Starr Jordan (hereafter referred to as the Jordan) and the McArthur. The vessels operated concurrently in the ETP from July 28 through December 6, 1988. Approximately the same area and time period are surveyed during each year of the program. As part of this monitoring program the SWFC is also studying the physical and biological environment inhabited by the dolphins. This ecosystem approach will facilitate the interpretation of dolphin population trends detected by these surveys, and will provide information necessary for understanding the biological basis of ETP dolphin distribution and abundance.

The physical oceanographic research of the program is being carried out jointly with NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML), as part of their contribution to the long-term Eastern Pacific Ocean Climate Study (EPOCS) and Tropical Ocean Global Atmosphere (TOGA) programs.

This report describes the types of data collected and sampling techniques used, and summarizes data collected (including disposition of the data) for the environmental studies conducted aboard the Jordan. Results from the McArthur are available in a separate data report (Lierheimer et al., 1989).

OBJECTIVES

The primary objective of the dolphin habitat monitoring portion of the program is to provide information about the effects of large-scale environmental variation on the estimates of trends in dolphin abundance. These environmental effects are monitored by examining the relationship between dolphin distribution and oceanographic patterns and processes. These phenomena are sampled concurrently with the dolphin sighting survey by measuring regional and local changes in chlorophyll, nutrients, oxygen, temperature, salinity, and the occurrence of seabirds and other animals. These parameters can fluctuate both seasonally and as a result of large scale ocean-atmosphere interactions such as the El Niño Southern

Oscillation (ENSO) phenomena. Studying oceanographic patterns and variability in the ETP concurrently with the fauna may reveal regional or local associations.

The studies of surface and subsurface physical properties which are conducted jointly with AOML also contribute to the objectives of the EPOCS and TOGA programs, which include developing the ability to forecast ENSO occurrences.

STUDY AREA AND ITINERARY

The Jordan departed San Diego, California on 28 July 1988 and returned on 6 December 1988. The cruise was conducted in four legs of approximately 30 days each, with scheduled port calls in San José, Guatemala; Rodman Naval Station, Panama; and Manzanillo, Mexico. The cruise tracks for both vessels were chosen to maximize coverage of the known ranges of the two target species, the spotted dolphin (Stenella attenuata) and the spinner dolphin, (Stenella longirostris) in the ETP (Perrin et al., 1983).

The itinerary for the Jordan was as follows:

Leg 1		
Departure	28 July	San Diego, California
Arrival	26 August	San José, Guatemala
Leg 2		
Departure	1 September	San José, Guatemala
Arrival	30 September	Rodman Naval Station, Panama
Leg 3		
Departure	4 October	Rodman Naval Station, Panama
Arrival	2 November	Manzanillo, Mexico
Leg 4		
Departure	7 November	Manzanillo, Mexico
Arrival	6 December	San Diego, California

MATERIALS AND METHODS

Oceanography

While the ship was underway, temperature, salinity, and fluorescence of surface water were measured and recorded

continuously in digital form and on strip-charts. Sea water was sampled continuously from a bow intake 3 meters below the surface. Temperature and salinity were measured with an ODEC¹ Model TSG-102 Thermosalinograph. In vivo fluorescence was measured with a Turner Designs fluorometer. These data were recorded on a data acquisition system consisting of an AI08 A/D board (Industrial Computer Source) connected to an IBM PC compatible microcomputer (Holland, 1989). Discrete water samples were collected at regular intervals to verify continuous data.

Conductivity temperature and depth (CTD) device casts were made approximately two times per night using a Neil-Brown CTD. Each CTD cast lasted approximately 60 minutes. The CTD was lowered to 1000 meters and sensors connected to shipboard computers measured conductivity (salinity), temperature, pressure (depth), and dissolved oxygen.

Eleven Niskin bottles on the CTD rosette collected water from discrete depths (20, 40, 60, 80, 100, 125, 150, 200, 350, 500 and 1000 m). At each CTD station, surface chlorophyll and nutrient samples were collected from the ship's seawater intake. Samples were collected at each CTD station for chlorophyll and nutrients (nitrate, nitrite, phosphate and silicate) in the following quantities: chlorophyll, 8 275 ml bottles/cast; nutrients, 11 20 ml bottles/cast. Extracted chlorophyll and phaeophytin were measured with a Turner 111 fluorometer. Nutrient samples were collected and frozen immediately for later analysis. Three 150 ml salinity samples and three 250 ml oxygen samples were also collected from each cast and analyzed for the purpose of CTD calibration.

Expendable bathythermograph (XBT) drops were made daily at 0000, 0800, 1200, and 1600 hours (local time). Additional XBTs were dropped at 0600, 1000, 1400 and 1800 hours (local time) in the area of the Costa Rica Dome (between lat. 6-13°N and long. 86-94°W). A Shipboard Environmental data Acquisition System (SEAS) was utilized. XBT data were transmitted to shore via the GOES (Geostationary Operational Environmental Satellite) every four hours. Position, time and date for each drop were recorded on NOAA XBT logs and disks.

An acoustic data acquisition system (ADA) was operated during the entire cruise on the Jordan. Acoustic backscatter was recorded using a 38 kHz depth sounder. Backscatter was digitized and integrated in 10-meter intervals between the surface and a depth of 500 meters. Thirty pings were averaged every fifteen minutes to reduce data volume.

Seven satellite-tracked drift buoys were deployed at predetermined locations. These buoys transmit signals which are received by NOAA satellites and transferred to the ARGOS service facility in Toulouse, France. The deployments, arranged by Don

¹ Reference to trade names does not imply endorsement by NMFS.

Hansen of AOML, were for EPOCS and TOGA investigations of surface currents.

Biological Observations

Seabird censuses were conducted using standard 300 m strip-transect methodology and hand-held binoculars. Weather permitting, bird observers stood shifts on the flying bridge throughout the daylight hours when the ship was underway. Species identification, numbers, and behaviors of birds were recorded, as well as associations with marine mammals, fish or flotsam. Flock compositions and occasionally individual identifications were verified using mounted 25X binoculars.

Manta tows were conducted each night immediately following the CTD station, using a 505 μm -mesh manta net with a mouth opening of 15 cm X 86 cm. A General Oceanics flowmeter was suspended in the center of the net mouth. The net was towed from the starboard hydrographic wire for fifteen minutes. Samples were preserved in formalin, labeled and stored.

Surface organisms were sampled during evening CTD stations to collect information on the occurrence, relative abundance and distribution of flying fishes in the ETP. Two 500-watt lamps were suspended over the side of the ship to attract animals, and a long-handled dip net was used to collect them. Other information collected during these stations included species observed, relative abundance, and pertinent environmental data (e.g. sea surface temperature and salinity, sea state, and moon phase).

As part of a long-term study of the distribution of sea turtles in the ETP (Pitman, SWFC), all sightings of marine turtles made incidental to the systematic marine mammal and seabird surveys were recorded during the cruise. Under normal field conditions, specific identification of sea turtles other than leatherbacks (*Dermochelys coriacea*) is difficult. Therefore, in order to obtain a sample of identified individuals, turtles that passed close by the ship (usually within 50 meters) were photographed with a telephoto lens for future identification.

Fish stomach contents were collected opportunistically and analyzed for a food habits study. Fish were caught by rod and reel or trolling. The fish were identified, sexed, and measured. Associations with flotsam, other fish, bird flocks or mammals were recorded. Stomach contents were identified and measured. Unidentifiable stomach contents were preserved in alcohol for later identification. Seabirds were collected opportunistically for gut content analysis.

RESULTS

Sexton and Holt (1989) reported on the dolphin assessment methods and data collected from the 1988 Jordan cruise.

The cruise track for the Jordan is plotted in Figure 1. Table 1 lists the total numbers of environmental and biological samples, by category, collected on the Jordan.

Oceanography

Digital records of continuous surface data from the thermosalinograph and fluorometer are now being analyzed at the SWFC. Plots of continuous environmental data from the 1986-1988 surveys will be published in a separate report².

Figure 2 shows the locations of the 169 CTD casts. Several problems hindered CTD data collection during leg II of the cruise, requiring special attention and processing. Casts 65-84 were to 500 m only. Uncorrected CTD temperature and salinity data are included in Appendix A.

Digital XBT data were edited by AOML. Figure 3 shows XBT deployment locations. XBT data were sent by the SEAS to the National Ocean Service, NOAA³.

Oxygen bottle data were analyzed on board using a Winkler-titration system prepared by the Ocean Chemistry Division at AOML. Reagents were systematically checked for contamination.

Discrete chlorophyll samples were analyzed at sea and data were processed at the SWFC in La Jolla. Results are presented in Appendix A. Surface and integrated (0-150 m) chlorophyll concentrations, from both the Jordan and the McArthur, are mapped in Figures 4 and 5.

Frozen nutrient samples were shipped to Monterey Bay Aquarium Research Institute to be analyzed. An addendum containing nutrient data will follow this report.⁴

Acoustical data acquisition system data were edited and processed at SWFC. An acoustic biomass profile for each leg is shown in Figure 6.

Table 2 lists the locations and dates of the seven drifting buoy deployments. Figure 7 shows the tracks of these buoys.

² Fiedler, P.C., L.J. Lierheimer, R.C. Holland, and S.B. Reilly. 1989. Continuous environmental data and marine mammal sightings in the eastern tropical Pacific, 1986-1988. In preparation.

³ Persons wishing to receive copies of these data should write to: National Ocean Service; SEAS Office; N/OS1; Rm. 103; 6001 Exec. Blvd.; Rockville, MD 20852.

⁴ Persons interested in receiving this addendum should contact the SWFC.

Biological Observations

A total of 790 hours during 106 days was spent on effort for the seabird distribution and abundance survey. During this time, 17,181 individuals of 61 species were recorded (Table 1).

Abundance of seabirds varied according to the area surveyed. In general, the most abundant group of seabirds was represented by the family Sulidae; the second most abundant group was represented by the family Procellariidae. Of this second group, gadfly petrels comprised the majority for legs I and II and shearwaters comprised the majority for legs III and IV (Table 3). The most abundant sulids were the Brown and Red-footed Boobies (Sula leucogaster and Sula sula); the most abundant gadfly petrels were Juan Fernandez Petrels (Pterodroma externa); the most abundant shearwaters were Black-Vented (Puffinus opisthomelas) and Wedge-tailed Shearwaters (Puffinus pacificus) (Table 4).

Manta tow samples have been sorted and are now being identified at SWFC.⁵

Figure 8 shows the locations of 132 dip-net stations occupied during the cruise. Table 5 summarizes data and specimens collected for each of the stations. A total of 975 flying fish, 437 Oxyporhamphus micropterus, 206 miscellaneous fish, and 139 (mostly juvenile) squid were collected. Specimens will be processed at SWFC; the fish will be donated to the Marine Vertebrate Collection of Scripps Institution of Oceanography and the squid will go to the Santa Barbara Natural History Museum.

The locations of 98 individual sea turtle sightings are plotted in Figure 9. Sightings included 21 olive ridleys (Lepidochelys olivacea), 2 loggerheads (Caretta caretta), and 75 unidentified sea turtles. In addition, 4 sightings of leatherbacks (Derموchelys coriacea) were reported by the helicopter crew.

A total of 254 fish was caught for stomach content analysis including 87 mahi mahi (Coryphaena hippurus), 161 tuna (4 spp.), and 6 wahoo (Acanthocybium solandri). A total of 63 seabirds was collected for gut content analysis. Data will be analyzed at the SWFC.

⁵ Questions concerning these samples may be addressed to Dr. Geoff Moser at SWFC.

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Many people contributed to the success of this cruise. We especially wish to thank the following people whose invaluable efforts made this project possible: the officers and crew of the NOAA ship David Starr Jordan for their considerable time and skilled efforts. J. Barlow created and modified the Acoustic Data Acquisition system. B. Watkins provided support in procurement. C. Oliver contributed data programming support. W. Krug acted as a liaison between AOML, Scripps Institution of Oceanography, Pacific Marine Center and Southwest Fisheries Center. R. Holland contributed many of the plots and assisted in procurement and computer logistics. K. Blum assisted in the final preparation and distribution of this report. We are grateful to I. Barrett, J. Carr, and D. DeMaster for their continued support during the cruise preparations and during the cruise itself.

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Table 1. Summary of environmental and biological data collected, Jordan, 28 July - 6 December, 1988

Leg	XBT	CTD	Chlor a	Nutrients	Manta Tows	Flying Fish Collected	Fish Stomachs Sampled	Bird Stomachs Sampled	Turtle Sightings	Bird Sightings	Bird Effort	
I	109	46	476	505	20	294	103	22	12	1,580	218 hours Avg. 8.4 hours/day 26 days	
II	123	38	406	417	21	268	128	41	25	3,113	208 hours Avg. 7.7 hours/day 27 days	
III	63	46	476	506	25	260	13	0	32	4,206	200 hours avg. 7.4 hours/day 27 days	
IV	116	39	412	416	16	153	11	0	30	8,282	164 hours avg. 6.3 hours/day 26 days	
TOTAL: 411											17,181	790 hours avg. 7.5 hours/day 106 days

1. Continuous sea surface fluorometry, temperature and salinity measured during all 4 legs.

Table 2. Deployment locations of seven drift buoys, Jordan,
28 July - 6 December, 1988.

<u>DATE</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>
5 September	7° 0.1 N	100° 28.4 W
24 September	6° 0.5 N	87° 20.9 W
25 September	5° 0.1 N	86° 58.4 W
26 September	3° 0.0 N	86° 46.1 W
10 October	8° 59.2 N	89° 13.9 W
15 October	12° 29.4 N	89° 59.1 W
12 November	14° 0.1 N	105° 8.4 W

Table 3. Families of seabirds and numbers recorded, Jordan, 28 July - 6 December, 1988.

	Leg I	Leg II	Leg III	Leg IV
	-----	-----	-----	-----
ALBATROSSES (Diomedidae)	1	1	0	0
PETRELS AND SHEARWATERS (Procellariidae)	988	983	1787	1768
PTERODROMA PETRELS	699	685	788	285
OTHER PETRELS (Bulweria, Procellaria, Fulmaris, Daption)	10	8	0	12
SHEARWATERS (Puffinus)	279	290	999	1471
STORM-PETRELS (Oceanitidae)	217	285	518	1186
TROPICBIRDS (Phaethontidae)	14	20	36	24
PELICANS (Pelecanidae)	0	0	0	26
BOOBIES (Sulidae)	165	1052	1007	3235
CORMORANTS (Phalacrocoracidae)	0	1	0	0
FRIGATEBIRDS (Fregatidae)	52	143	34	21
PHALAROPES (Phalaropodidae)	7	21	82	809
JAEGERS (Stercorariidae)	7	17	51	48
GULLS, TERNS AND NODDIES (Laridae)	55	470	445	1064
GULLS (Larus)	2	0	5	853
TERNS (Sterna, Chlidonias, Gygis)	53	402	433	211
NODDIES (Anous)	0	68	7	0
ALCIDS (Alcidae)	0	0	2	2

Table 4. Identity and numbers of seabird species recorded, Jordan, 28 July - 6 December, 1988.

Common Name	Scientific Name	Leg I	Leg II	Leg III	Leg IV	Total
Brown Booby	<i>Sula leucogaster</i>	2	346	402	1825	2575
Red-Footed Booby	<i>Sula sula</i>	87	614	320	827	1848
Juan Fernandez Petrel	<i>Pterodroma externa</i>	439	480	324	152	1395
Black-Vented Shearwater	<i>Puffinus opisthomelas</i>	0	0	0	1127	1127
Wedge-Tailed Shearwater (Light Morph)	<i>Puffinus pacificus</i>	115	49	752	174	1090
Masked Booby	<i>Sula dactylatra</i>	69	48	183	421	721
Sooty Tern	<i>Sterna fuscata</i>	41	185	241	200	667
Juan Fernandez/White-Necked Petrel	<i>Pterodroma e. externa/e.cervicalis</i>	132	52	443	16	643
Bonaparte's Gull	<i>Larus philadelphia</i>	0	0	0	635	635
Leach's Storm-Petrel (White-Rumped)	<i>Oceanodroma leucorhoa</i>	71	42	205	214	532
Wedge-Tailed Shearwater (Dark Morph)	<i>Puffinus pacificus</i>	84	134	100	62	380
Galapagos Storm-Petrel	<i>Oceanodroma tethys</i>	65	164	76	0	305
Leach's/Harcourt's Storm-Petrel	<i>Oceanodroma leucorhoa/castro</i>	9	18	95	65	187
Townsend's Shearwater	<i>Puffinus auricularis</i>	9	0	108	13	130
White Tern	<i>Gygis alba</i>	4	81	37	3	125
Arctic Tern	<i>Sterna paradisaea</i>	8	70	45	0	123
Tahiti Petrel	<i>Pterodroma rostrata</i>	11	63	6	30	110
Audubon's Shearwater	<i>Puffinus lherminieri</i>	49	51	4	1	105
White-Winged Petrel	<i>Pterodroma leucoptera</i>	59	41	3	0	103
Red-Billed Tropicbird	<i>Phaethon aethereus</i>	8	20	36	18	82
Sooty Shearwater	<i>Puffinus griseus</i>	0	0	1	80	81
Black Tern	<i>Chlidonias niger</i>	0	52	25	2	79
Red Phalarope	<i>Phalaropus fulcarius</i>	4	20	21	10	55
Townsend's/Newell's Shearwater	<i>Puffinus auricularis/a. newelli</i>	0	23	26	0	49
Black Storm-Petrel	<i>Oceanodroma melania</i>	15	7	10	15	47
Pomarine Jaeger	<i>Stercorarius pomarinus</i>	0	2	12	29	43
Kermadec Petrel	<i>Pterodroma neglecta</i>	15	17	7	0	39
Black Noddy	<i>Anous tenuirostris</i>	0	36	0	0	36
Cook's Petrel	<i>Pterodroma cookii</i>	13	18	0	4	35
Pink-Footed Shearwater	<i>Puffinus creatopus</i>	6	23	2	3	34
Harcourt's Storm-Petrel	<i>Oceanodroma castro</i>	0	10	23	1	34
Markham's Storm-Petrel	<i>Oceanodroma markhami</i>	19	7	5	0	31
Brown Pelican	<i>Pelecanus occidentalis</i>	0	0	0	26	26
Brown Noddy	<i>Anous stolidus</i>	0	16	6	0	22
Heerman's Gull	<i>Larus heermanni</i>	0	0	0	20	20
Christmas Island Shearwater	<i>Puffinus nativitatus</i>	4	9	4	3	20
Great Frigatebird	<i>Fregata minor</i>	13	3	0	0	16
Parasitic Jaeger	<i>Stercorarius parasiticus</i>	6	3	5	2	16
Leach's Storm-Petrel	<i>Oceanodroma leucorhoa</i>	0	12	3	0	15
Black/Markham's Storm-Petrel	<i>Oceanodroma melania/markhami</i>	3	3	1	6	13
Wedge-Tailed Shearwater	<i>Puffinus pacificus</i>	11	0	1	0	12
Northern Fulmar	<i>Fulmarus glacialis</i>	0	0	0	12	12
Least Tern	<i>Sterna albifrons</i>	0	2	10	0	12
Dark-Rumped Petrel	<i>Pterodroma phaeopygia</i>	5	6	0	0	11
Bulwer's Petrel	<i>Bulweria bulweri</i>	9	2	0	0	11
White-Faced Storm-Petrel	<i>Pelagodroma marina</i>	6	2	0	0	8
Sabine's Gull	<i>Larus sabini</i>	2	0	4	1	7
Stejneger's/Cook's Petrel	<i>Pterodroma longirostris/cookii</i>	3	0	1	3	7

Table 4. continued.

Common Name	Scientific Name	Leg I	Leg II	Leg III	Leg IV	Total
Parkinson's Petrel	<i>Procellaria parkinsoni</i>	1	6	0	0	7
Tahiti/Phoenix Petrel	<i>Pterodroma rostrata/alba</i>	7	0	0	0	7
Bridled Tern	<i>Sterna anaethetus</i>	0	5	1	0	6
Red-Tailed Tropicbird	<i>Phaethon rubricauda</i>	3	0	0	3	6
Wilson's Storm-Petrel	<i>Oceanites oceanicus</i>	0	0	0	6	6
Black-Winged Petrel	<i>Pterodroma nigripennis</i>	2	4	0	0	6
Stejneger's Petrel	<i>Pterodroma longirostris</i>	3	1	0	1	5
Common Tern	<i>Sterna hirundo</i>	0	1	2	1	4
Magnificent Frigatebird	<i>Fregata magnificens</i>	0	3	0	0	3
Northern Phalarope	<i>Phalaropus lobatus</i>	1	0	1	1	3
Leach's Storm-Petrel (Dark-Rumped)	<i>Oceanodroma leucorhoa</i>	2	0	0	1	3
White-Bellied Storm-Petrel	<i>Fregetta grallaria</i>	2	0	0	0	2
White-Throated Storm-Petrel	<i>Nesofregetta albigularis</i>	1	1	0	0	2
White-Necked Petrel	<i>Pterodroma externa cervicalis</i>	0	0	0	2	2
Laughing Gull	<i>Larus atricilla</i>	0	0	1	1	2
Xantus'/Craveri's Murrelet	<i>Synthliboramphus sp.</i>	0	0	2	0	2
Western Gull	<i>Larus occidentalis</i>	0	0	0	2	2
Long-Tailed Jaeger	<i>Stercorarius longicaudus</i>	0	1	0	0	1
Black-Footed Albatross	<i>Diomedea nigripes</i>	1	0	0	0	1
Murphy's Petrel	<i>Pterodroma ultima</i>	1	0	0	0	1
Royal Tern	<i>Sterna maximus</i>	0	1	0	0	1
Olivaceous Cormorant	<i>Phalacrocorax olivaceus</i>	0	1	0	0	1
Waved Albatross	<i>Diomedea irrorata</i>	0	1	0	0	1
*** Total ***		1420	2756	3554	6018	

Table 5. Results of night-light dip-net sampling, JORDAN, 28 July - 6 December, 1988.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
1	88-07-30	1.0	26 15 N 121 00 W	0.0	5	3	22.3	33.95	30	2		2	5	1
1	88-07-30	1.0	26 15 N 121 00 W	0.0	5	3	22.3	33.95	60	2	3			
1	88-07-30	1.0	26 15 N 121 00 W	0.0	5	3	22.3	33.95	100	3				

- VESSEL: 01 - David Starr Jordan; 02 - McArthur

- COLLECTOR: 01 - Pitman; 02 - LeDuc; 03 - Rittmaster

¹ - Records without Station numbers reflect opportunistic, or non-standard specimen collections.

² - Beaufort Scale

³ - 1 = quarter moon; 2 = half moon; 3 = 3/quarter moon; 4 = full moon; 5 = no moon; 6 = new moon.

⁴ - 1 = clear; 2 = partly cloudy; 3 = overcast; 4 = rain; 5 = other or unknown.

⁵ - 005 = Unidentified flying fish
 010 = Oxyporhamphus micropterus
 015 = Fodiator spp.
 020 = Exocetus spp.
 030 = Unidentified 4-wing flying fish
 060 = Elassichthys
 080 = Hemiramphidae (halfbeaks)
 090 = Belonidae (needlefish)
 100 = Myctophidae (lanternfish)
 125 = Vinciguerrina spp.
 200 = Scombridae (tunas)
 300 = Gempylidae (snake mackerel)
 400 = Coryphaenidae (dolphinfish)
 500 = Other
 700 = Octopoda (pelagic octopus)
 900 = Sea Snake

⁶ - 1 = "a couple" (1-3)
 2 = "a few" (4-8); uncommon
 3 = "several" (9-15); fairly common
 4 = "common" (16-50)
 5 = "abundant" (51-150)
 6 = "superabundant" (150+)
 7 = 1000's
 8 = "present"
 9 = "possibly present"

⁷ - 1 = Large (mantle length > 8 inches)
 2 = Medium (3 inches ≤ mantle length ≤ 8 inches)
 3 = Small (mantle length < 3 inches)

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
2	88-07-31	1.0	22 57 N 120 02 W	2.0	5	3	23.8	34.50	30	1		3	1	1
2	88-07-31	1.0	22 57 N 120 02 W	2.0	5	3	23.8	34.50	100	3		2	4	
2	88-07-31	1.0	22 57 N 120 02 W	2.0	5	3	23.8	34.50	60	1	2			
3	88-08-01	1.0	19 22 N 118 40 W	4.0	5	3	25.3	34.49	10	1	1	1	3	
3	88-08-01	1.0	19 22 N 118 40 W	4.0	5	3	25.3	34.49	20	2	2	2	2	
3	88-08-01	1.0	19 22 N 118 40 W	4.0	5	3	25.3	34.49	30	2	1			
3	88-08-01	1.0	19 22 N 118 40 W	4.0	5	3	25.3	34.49	700	2	5			
	88-08-01		19 05 N 118 34 W						30		1			
	88-08-02		18 56 N 118 31 W						20		1			
	88-08-02		18 56 N 118 31 W						30		6			
4	88-08-02	1.0	17 25 N 120 57 W	4.0	5	3	28.5	34.41	30	2	1	3	1	1
4	88-08-02	1.0	17 25 N 120 57 W	4.0	5	3	28.5	34.41	100	4		1	3	
	88-08-03		17 15 N 121 23 W						30		3			
5	88-08-03	1.0	16 04 N 124 15 W	5.0	5	1	26.7	34.30	20	2	4	2	2	
5	88-08-03	1.0	16 04 N 124 15 W	5.0	5	1	26.7	34.30	30	1	1			
5	88-08-03	1.0	16 04 N 124 15 W	5.0	5	1	26.7	34.30	100	4				
5	88-08-03	1.0	16 04 N 124 15 W	5.0	5	1	26.7	34.30	500	1	1			
5	88-08-03	1.0	16 04 N 124 15 W	5.0	5	1	26.7	34.30	700	1	3			
6	88-08-04	1.0	15 22 N 125 06 W	4.0	2	2	26.8	34.22	10	2	2	1	2	
6	88-08-04	1.0	15 22 N 125 06 W	4.0	2	2	26.8	34.22	20	2	2	2	2	
6	88-08-04	1.0	15 22 N 125 06 W	4.0	2	2	26.8	34.22	30	2	1			
6	88-08-04	1.0	15 22 N 125 06 W	4.0	2	2	26.8	34.22	100	2				
6	88-08-04	1.0	15 22 N 125 06 W	4.0	2	2	26.8	34.22	300	1				
6	88-08-04	1.0	15 22 N 125 06 W	4.0	2	2	26.8	34.22	700	2	6			
	88-08-04		15 52 N 124 30 W						20		1			
	88-08-04		15 52 N 124 30 W						30		1			
7	88-08-04	1.0	13 19 N 126 21 W	2.0	2	3	27.6	33.58	10	1	1	2	4	1
7	88-08-04	1.0	13 19 N 126 21 W	2.0	2	3	27.6	33.58	20	2	4			
7	88-08-04	1.0	13 19 N 126 21 W	2.0	2	3	27.6	33.58	30	1				
7	88-08-04	1.0	13 19 N 126 21 W	2.0	2	3	27.6	33.58	100	4				
7	88-08-04	1.0	13 19 N 126 21 W	2.0	2	3	27.6	33.58	400	1				
8	88-08-05	1.0	9 50 N 126 41 W	5.0	5	3	27.3	33.73	20	3	5	1	2	
8	88-08-05	1.0	9 50 N 126 41 W	5.0	5	3	27.3	33.73	30	2		2	3	1
8	88-08-05	1.0	9 50 N 126 41 W	5.0	5	3	27.3	33.73	100	3		3	1	
8	88-08-05	1.0	9 50 N 126 41 W	5.0	5	3	27.3	33.73	700	1	1			
	88-08-06		9 34 N 126 26 W						20		1			
	88-08-06		7 31 N 123 58 W						20		1			
9	88-08-06	1.0	7 30 N 123 57 W	5.0	5	3	27.4	33.65	20	8	12	1	1	
9	88-08-06	1.0	7 30 N 123 57 W	5.0	5	3	27.4	33.65	30	8	3	2	3	1
9	88-08-06	1.0	7 30 N 123 57 W	5.0	5	3	27.4	33.65	100	4				
9	88-08-06	1.0	7 30 N 123 57 W	5.0	5	3	27.4	33.65	300	1				
9	88-08-06	1.0	7 30 N 123 57 W	5.0	5	3	27.4	33.65	700	1				
10	88-08-07	1.0	5 25 N 121 19 W	5.0	5	2	26.8	34.19	10	2	2	1	3	
10	88-08-07	1.0	5 25 N 121 19 W	5.0	5	2	26.8	34.19	20	3	5	2	5	
10	88-08-07	1.0	5 25 N 121 19 W	5.0	5	2	26.8	34.19	30	3	6			
10	88-08-07	1.0	5 25 N 121 19 W	5.0	5	2	26.8	34.19	100	4				
10	88-08-07	1.0	5 25 N 121 19 W	5.0	5	2	26.8	34.19	400	2				

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
	88-08-08		5 13 N 121 06 W						30		2			
11	88-08-08	1.0	3 04 N 119 13 W	5.0	5	3	24.5	34.50	30	3	2	1	3	
11	88-08-08	1.0	3 04 N 119 13 W	5.0	5	3	24.5	34.50	100	5		2	4	2
11	88-08-08	1.0	3 04 N 119 13 W	5.0	5	3	24.5	34.50	300	1				
12	88-08-09	1.0	1 13 N 116 58 W	3.0	5	3	22.1	34.59	100	5		1	5	
13	88-08-10	1.0	1 00 N 114 36 W	4.0	5	1	23.6	34.37	20	1		1	1	
13	88-08-10	1.0	1 00 N 114 36 W	4.0	5	1	23.6	34.37	30	1	1			
13	88-08-10	1.0	1 00 N 114 36 W	4.0	5	1	23.6	34.37	100	5				
14	88-08-11	1.0	1 08 N 112 09 W	4.0	5	1	20.8	34.86	100	6		1	5	
14	88-08-11	1.0	1 08 N 112 09 W	4.0	5	1	20.8	34.86	300	1				
15	88-08-13	1.0	1 44 N 108 57 W	4.0	5	3	23.2	34.38	100	4		2	1	
15	88-08-13	1.0	1 44 N 108 57 W	4.0	5	3	23.2	34.38	300	1		3	1	
16	88-08-13	1.0	1 17 N 107 43 W	4.0	5	3	23.4	34.37	100	4		1	3	
16	88-08-13	1.0	1 17 N 107 43 W	4.0	5	3	23.4	34.37	300	1		3	1	
17	88-08-14	1.0	1 29 N 105 11 W	4.0	5	3	23.3	34.37	20	1	2	1	3	
17	88-08-14	1.0	1 29 N 105 11 W	4.0	5	3	23.3	34.37	100	4		3	1	1
17	88-08-14	1.0	1 29 N 105 11 W	4.0	5	3	23.3	34.37	400	1	1			
18	88-08-15	1.0	4 11 N 104 59 W	4.0	5	3	25.9	33.84	10	1	2	1	3	
18	88-08-15	1.0	4 11 N 104 59 W	4.0	5	3	25.9	33.84	20	1	2	2	2	
18	88-08-15	1.0	4 11 N 104 59 W	4.0	5	3	25.9	33.84	30	1	1	3	1	
18	88-08-15	1.0	4 11 N 104 59 W	4.0	5	3	25.9	33.84	100	6				
18	88-08-15	1.0	4 11 N 104 59 W	4.0	5	3	25.9	33.84	300	1				
	88-08-16		4 38 N 105 08 W						30		1	3		1
19	88-08-16	1.0	7 14 N 104 14 W	4.0	1	2	26.4	33.57	20	2	3	1	2	
19	88-08-16	1.0	7 14 N 104 14 W	4.0	1	2	26.4	33.57	30	1	1	2	2	
19	88-08-16	1.0	7 14 N 104 14 W	4.0	1	2	26.4	33.57	100	4				
19	88-08-16	1.0	7 14 N 104 14 W	4.0	1	2	26.4	33.57	300	1				
19	88-08-16	1.0	7 14 N 104 14 W	4.0	1	2	26.4	33.57	400	1				
	88-08-17		8 10 N 103 28 W						30		1			
20	88-08-17	1.0	8 48 N 102 05 W	4.0	1	2	26.9	33.22	20	2	6	1	4	
20	88-08-17	1.0	8 48 N 102 05 W	4.0	1	2	26.9	33.22	30	1	1			
20	88-08-17	1.0	8 48 N 102 05 W	4.0	1	2	26.9	33.22	100	4				
20	88-08-17	1.0	8 48 N 102 05 W	4.0	1	2	26.9	33.22	400	2				
20	88-08-17	1.0	8 48 N 102 05 W	4.0	1	2	26.9	33.22	500	1	1			
21	88-08-18	1.0	5 52 N 100 19 W	4.0	5	3	26.1	33.73	10	2	2	1	2	
21	88-08-18	1.0	5 52 N 100 19 W	4.0	5	3	26.1	33.73	20	4	12	2	4	1
21	88-08-18	1.0	5 52 N 100 19 W	4.0	5	3	26.1	33.73	30	2	2			
21	88-08-18	1.0	5 52 N 100 19 W	4.0	5	3	26.1	33.73	100	5				
21	88-08-18	1.0	5 52 N 100 19 W	4.0	5	3	26.1	33.73	400	3				
22	88-08-19	1.0	4 53 N 99 41 W	4.0	5	3	25.1	33.81	20	7	22	1	3	
22	88-08-19	1.0	4 53 N 99 41 W	4.0	5	3	25.1	33.81	30	4	21			
22	88-08-19	1.0	4 53 N 99 41 W	4.0	5	3	25.1	33.81	100	4				
22	88-08-19	1.0	4 53 N 99 41 W	4.0	5	3	25.1	33.81	300	2				
22	88-08-19	1.0	4 53 N 99 41 W	4.0	5	3	25.1	33.81	400	1				
23	88-08-19	1.0	3 19 N 98 31 W	5.0	2	2	24.4	33.92	20	2	3	1	1	
23	88-08-19	1.0	3 19 N 98 31 W	5.0	2	2	24.4	33.92	30	1		2	2	
23	88-08-19	1.0	3 19 N 98 31 W	5.0	2	2	24.4	33.92	100	4				

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
24	88-08-20	1.0	2 27 N 97 59 W	5.0	5	3	23.2	34.12	20	2	1	1	4	
24	88-08-20	1.0	2 27 N 97 59 W	5.0	5	3	23.2	34.12	30	2	3	2	5	
24	88-08-20	1.0	2 27 N 97 59 W	5.0	5	3	23.2	34.12	100	5		3	1	1
24	88-08-20	1.0	2 27 N 97 59 W	5.0	5	3	23.2	34.12	500	3	1			
25	88-08-20	1.0	4 21 N 97 13 W	4.0	5	3	26.3	33.37	10	1		1	4	
25	88-08-20	1.0	4 21 N 97 13 W	4.0	5	3	26.3	33.37	20	5	35	2	4	
25	88-08-20	1.0	4 21 N 97 13 W	4.0	5	3	26.3	33.37	30	4	10	3	2	3
25	88-08-20	1.0	4 21 N 97 13 W	4.0	5	3	26.3	33.37	100	5				
25	88-08-20	1.0	4 21 N 97 13 W	4.0	5	3	26.3	33.37	400	2				
25	88-08-20	1.0	4 21 N 97 13 W	4.0	5	3	26.3	33.37	500	1				
	88-08-20		4 41 N 97 03 W						30		2			
	88-08-21		5 00 N 96 51 W						30		1			
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	10	2	3	1	3	
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	20	3	3	2	3	
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	30	2				
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	31	2	3			
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	100	4				
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	300	1				
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	400	1				
26	88-08-21	1.0	5 28 N 96 41 W	4.0	5	2	26.4	33.34	500	1				
27	88-08-21	1.0	7 28 N 95 49 W	4.0	5	3	26.9	33.16	10	1	1	1	5	
27	88-08-21	1.0	7 28 N 95 49 W	4.0	5	3	26.9	33.16	20	2	2	2	3	
27	88-08-21	1.0	7 28 N 95 49 W	4.0	5	3	26.9	33.16	30	4	12	3	1	1
27	88-08-21	1.0	7 28 N 95 49 W	4.0	5	3	26.9	33.16	31	3				
27	88-08-21	1.0	7 28 N 95 49 W	4.0	5	3	26.9	33.16	100	5				
27	88-08-21	1.0	7 28 N 95 49 W	4.0	5	3	26.9	33.16	300	1				
27	88-08-21	1.0	7 28 N 95 49 W	4.0	5	3	26.9	33.16	400	2				
28	88-08-22	1.0	8 34 N 95 24 W	4.0	5	3	27.2	33.32	10	4	7	1	4	
28	88-08-22	1.0	8 34 N 95 24 W	4.0	5	3	27.2	33.32	20	3	6	2	1	1
28	88-08-22	1.0	8 34 N 95 24 W	4.0	5	3	27.2	33.32	30	2	2	3	2	3
29	88-08-22	1.0	8 26 N 94 36 W	4.0	5	4	27.1	33.19	10	4	10	1	5	
29	88-08-22	1.0	8 26 N 94 36 W	4.0	5	4	27.1	33.19	20	1	1	2	2	
29	88-08-22	1.0	8 26 N 94 36 W	4.0	5	4	27.1	33.19	30	2				
29	88-08-22	1.0	8 26 N 94 36 W	4.0	5	4	27.1	33.19	100	3				
29	88-08-22	1.0	8 26 N 94 36 W	4.0	5	4	27.1	33.19	300	1				
29	88-08-22	1.0	8 26 N 94 36 W	4.0	5	4	27.1	33.19	500	3	9			
	88-08-23		8 02 N 94 23 W						20		3			
30	88-08-23	1.0	10 02 N 92 59 W	5.0	3	2	27.6	33.29	10	4	12	1	2	
30	88-08-23	1.0	10 02 N 92 59 W	5.0	3	2	27.6	33.29	20	2		2	4	1
30	88-08-23	1.0	10 02 N 92 59 W	5.0	3	2	27.6	33.29	30	1	1			
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	10	4	9	1	2	
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	20	2	2	2	4	5
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	30	1		3	1	1
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	100	3				
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	300	1				
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	500	5				
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	500	1	1			

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
31	88-08-24	1.0	12 03 N 91 46 W	1.0	4	2	28.4	33.45	700	1	2			
32	88-08-25	1.0	13 50 N 90 16 W	3.0	5	3	29.7	32.18	15	5	25			
32	88-08-25	1.0	13 50 N 90 16 W	3.0	5	3	29.7	32.18	30	2	5			
32	88-08-25	1.0	13 50 N 90 16 W	3.0	5	3	29.7	32.18	500	8	6			
33	88-08-25	1.0	13 41 N 90 49 W	3.0	5	3	29.8	32.60	15	1				
33	88-08-25	1.0	13 41 N 90 49 W	3.0	5	3	29.8	32.60	30	2	6			
33	88-08-25	1.0	13 41 N 90 49 W	3.0	5	3	29.8	32.60	100	1				
33	88-08-25	1.0	13 41 N 90 49 W	3.0	5	3	29.8	32.60	500	2	1			
33	88-08-25	1.0	13 41 N 90 49 W	3.0	5	3	29.8	32.60	500	3	6			
34	88-08-26	1.0	13 42 N 90 41 W	2.0	4	2	29.7	32.55	15	1				
34	88-08-26	1.0	13 42 N 90 41 W	2.0	4	2	29.7	32.55	30	1	1			
34	88-08-26	1.0	13 42 N 90 41 W	2.0	4	2	29.7	32.55	500	1	3			
35	88-08-26	1.0	13 48 N 90 43 W	2.0	4	2	29.4	31.47	15	2				
35	88-08-26	1.0	13 48 N 90 43 W	2.0	4	2	29.4	31.47	30	1				
35	88-08-26	1.0	13 48 N 90 43 W	2.0	4	2	29.4	31.47	500	2	4			
	88-08-26		13 49 N 90 44 W				29.4	31.47	15		19			
	88-08-26		13 49 N 90 44 W				29.4	31.47	30		9			
	88-08-26		13 49 N 90 44 W				29.4	31.47	500		20			
36	88-08-31	1.0	13 55 N 90 47 W	2.0	5	3	29.0	NA	15	1	1			
36	88-08-31	1.0	13 55 N 90 47 W	2.0	5	3	29.0	NA	30	3	2			
36	88-08-31	1.0	13 55 N 90 47 W	2.0	5	3	29.0	NA	500	6	3			
	88-09-02		13 41 N 92 23 W						30		1			
	88-09-03		13 54 N 95 01 W						20		1			
	88-09-03		13 54 N 95 01 W						30		1			
	88-09-03		14 10 N 97 25 W						20		2			
	88-09-04		14 12 N 98 01 W						30		1			
	88-09-05		14 13 N 101 22 W						30		1			
37	88-09-05	1.0	12 17 N 103 26 W	5.0	5	4	27.0	32.99	10	2	3	2	3	1
37	88-09-05	1.0	12 17 N 103 26 W	5.0	5	4	27.0	32.99	20	2	4	3	2	5
37	88-09-05	1.0	12 17 N 103 26 W	5.0	5	4	27.0	32.99	30	2	2			
37	88-09-05	1.0	12 17 N 103 26 W	5.0	5	4	27.0	32.99	100	1				
37	88-09-05	1.0	12 17 N 103 26 W	5.0	5	4	27.0	32.99	300	1				
37	88-09-05	1.0	12 17 N 103 26 W	5.0	5	4	27.0	32.99	400	1				
38	88-09-06	1.0	11 23 N 104 02 W	4.0	5	3	26.9	33.29	10	2	1	1	1	
38	88-09-06	1.0	11 23 N 104 02 W	4.0	5	3	26.9	33.29	20	4		2	1	
38	88-09-06	1.0	11 23 N 104 02 W	4.0	5	3	26.9	33.29	30	1	1	3	4	12
38	88-09-06	1.0	11 23 N 104 02 W	4.0	5	3	26.9	33.29	100	1				
38	88-09-06	1.0	11 23 N 104 02 W	4.0	5	3	26.9	33.29	400	1				
	88-09-06		11 59 N 103 40 W									3		3
39	88-09-06	1.0	9 40 N 105 04 W	4.0	5	3	27.3	33.17	10	4	4	1	2	
39	88-09-06	1.0	9 40 N 105 04 W	4.0	5	3	27.3	33.17	20	4	6	2	4	
39	88-09-06	1.0	9 40 N 105 04 W	4.0	5	3	27.3	33.17	100	3		3	1	2
39	88-09-06	1.0	9 40 N 105 04 W	4.0	5	3	27.3	33.17	300	1				
39	88-09-06	1.0	9 40 N 105 04 W	4.0	5	3	27.3	33.17	500	1	1			
40	88-09-07	1.0	8 42 N 105 42 W	3.0	1	5	27.0	33.01	10	4	7	1	2	
40	88-09-07	1.0	8 42 N 105 42 W	3.0	1	5	27.0	33.01	20	1		2	4	1
40	88-09-07	1.0	8 42 N 105 42 W	3.0	1	5	27.0	33.01	30	1	1	3	1	1

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
40	88-09-07	1.0	8 42 N 105 42 W	3.0	1	5	27.0	33.01	100	3				
40	88-09-07	1.0	8 42 N 105 42 W	3.0	1	5	27.0	33.01	125	8	1			
40	88-09-07	1.0	8 42 N 105 42 W	3.0	1	5	27.0	33.01	400	1				
41	88-09-07	1.0	7 01 N 106 58 W	3.0	5	2	27.1	32.91	20	4	11	1	4	
41	88-09-07	1.0	7 01 N 106 58 W	3.0	5	2	27.1	32.91	30	1	1	2	4	1
41	88-09-07	1.0	7 01 N 106 58 W	3.0	5	2	27.1	32.91	100	4				
41	88-09-07	1.0	7 01 N 106 58 W	3.0	5	2	27.1	32.91	400	1	1			
41	88-09-07	1.0	7 01 N 106 58 W	3.0	5	2	27.1	32.91	500	1				
42	88-09-08	1.0	6 19 N 107 51 W	3.0	5	1	27.1	32.96	10	4	12	1	6	
42	88-09-08	1.0	6 19 N 107 51 W	3.0	5	1	27.1	32.96	20	4	12	2	5	
42	88-09-08	1.0	6 19 N 107 51 W	3.0	5	1	27.1	32.96	30	1	1	3	1	1
42	88-09-08	1.0	6 19 N 107 51 W	3.0	5	1	27.1	32.96	100	4				
42	88-09-08	1.0	6 19 N 107 51 W	3.0	5	1	27.1	32.96	300	1				
43	88-09-08	1.0	6 19 N 109 46 W	4.0	5	2	27.0	33.05	10	3	5	1	5	
43	88-09-08	1.0	6 19 N 109 46 W	4.0	5	2	27.0	33.05	20	4	22	2	4	
43	88-09-08	1.0	6 19 N 109 46 W	4.0	5	2	27.0	33.05	30	1	1			
43	88-09-08	1.0	6 19 N 109 46 W	4.0	5	2	27.0	33.05	100	4				
43	88-09-08	1.0	6 19 N 109 46 W	4.0	5	2	27.0	33.05	400	1				
44	88-09-09	1.0	6 16 N 110 55 W	4.0	5	2	26.8	33.26	10	5	16	1	8	
44	88-09-09	1.0	6 16 N 110 55 W	4.0	5	2	26.8	33.26	20	5	17	2	8	
44	88-09-09	1.0	6 16 N 110 55 W	4.0	5	2	26.8	33.26	30	1		3	1	1
44	88-09-09	1.0	6 16 N 110 55 W	4.0	5	2	26.8	33.26	100	3				
44	88-09-09	1.0	6 16 N 110 55 W	4.0	5	2	26.8	33.26	300	1				
44	88-09-09	1.0	6 16 N 110 55 W	4.0	5	2	26.8	33.26	400	1				
45	88-09-09	1.0	5 54 N 112 58 W	3.0	5	2	26.6	33.71	10	4	4	1	4	
45	88-09-09	1.0	5 54 N 112 58 W	3.0	5	2	26.6	33.71	20	3	6	2	2	
45	88-09-09	1.0	5 54 N 112 58 W	3.0	5	2	26.6	33.71	30	3	3			
45	88-09-09	1.0	5 54 N 112 58 W	3.0	5	2	26.6	33.71	100	4				
45	88-09-09	1.0	5 54 N 112 58 W	3.0	5	2	26.6	33.71	400	5				
	88-09-09		5 54 N 112 55 W						30		2			
46	88-09-10	1.0	5 50 N 114 03 W	4.0	5	4	26.4	33.68	10	1	1	1	5	
46	88-09-10	1.0	5 50 N 114 03 W	4.0	5	4	26.4	33.68	20	2	4	2	4	
46	88-09-10	1.0	5 50 N 114 03 W	4.0	5	4	26.4	33.68	30	3	2	3	1	1
46	88-09-10	1.0	5 50 N 114 03 W	4.0	5	4	26.4	33.68	100	2				
46	88-09-10	1.0	5 50 N 114 03 W	4.0	5	4	26.4	33.68	300	1				
46	88-09-10	1.0	5 50 N 114 03 W	4.0	5	4	26.4	33.68	400	1				
47	88-09-10	1.0	5 37 N 116 22 W	5.0	5	3	26.3	33.71	10	2	1	1	1	
47	88-09-10	1.0	5 37 N 116 22 W	5.0	5	3	26.3	33.71	20	3	7	2	4	
47	88-09-10	1.0	5 37 N 116 22 W	5.0	5	3	26.3	33.71	30	4	8			
47	88-09-10	1.0	5 37 N 116 22 W	5.0	5	3	26.3	33.71	100	4				
47	88-09-10	1.0	5 37 N 116 22 W	5.0	5	3	26.3	33.71	400	3				
	88-09-10		5 30 N 116 10 W						20		1			
49	88-09-11	1.0	4 58 N 115 33 W	6.0	5	3	26.2	33.68	20	2	1	1	3	
49	88-09-11	1.0	4 58 N 115 33 W	6.0	5	3	26.2	33.68	30	3		2	4	
49	88-09-11	1.0	4 58 N 115 33 W	6.0	5	3	26.2	33.68	100	3				
49	88-09-11	1.0	4 58 N 115 33 W	6.0	5	3	26.2	33.68	400	2				
49	88-09-11	1.0	4 58 N 115 33 W	6.0	5	3	26.2	33.68	500	1	1			

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
	88-09-11		4 17 N 113 38 W						20		1			
50	88-09-11	1.0	4 16 N 113 37 W	5.0	5	2	26.5	33.63	10	1		1	4	
50	88-09-11	1.0	4 16 N 113 37 W	5.0	5	2	26.5	33.63	30	1	1	2	4	
50	88-09-11	1.0	4 16 N 113 37 W	5.0	5	2	26.5	33.63	100	4				
50	88-09-11	1.0	4 16 N 113 37 W	5.0	5	2	26.5	33.63	300	1				
51	88-09-12	1.0	3 54 N 112 34 W	4.0	5	2	23.3	34.32	20	2	1	1	3	
51	88-09-12	1.0	3 54 N 112 34 W	4.0	5	2	23.3	34.32	30	1		2	4	
51	88-09-12	1.0	3 54 N 112 34 W	4.0	5	2	23.3	34.32	100	5		3	2	1
51	88-09-12	1.0	3 54 N 112 34 W	4.0	5	2	23.3	34.32	300	1				
	88-09-12		4 07 N 113 14 W						20		1			
	88-09-12		4 07 N 113 14 W						30		1			
52	88-09-12	1.0	3 16 N 110 52 W	4.0	5	3	23.9	34.17	10	2	1	1	4	
52	88-09-12	1.0	3 16 N 110 52 W	4.0	5	3	23.9	34.17	20	2	4	2	5	1
52	88-09-12	1.0	3 16 N 110 52 W	4.0	5	3	23.9	34.17	30	2	1			
52	88-09-12	1.0	3 16 N 110 52 W	4.0	5	3	23.9	34.17	100	5				
52	88-09-12	1.0	3 16 N 110 52 W	4.0	5	3	23.9	34.17	300	1				
53	88-09-13	1.0	1 08 N 110 08 W	4.0	1	2	22.7	34.44	10	1	1	1	4	
53	88-09-13	1.0	1 08 N 110 08 W	4.0	1	2	22.7	34.44	20	1		2	2	
53	88-09-13	1.0	1 08 N 110 08 W	4.0	1	2	22.7	34.44	30	1	1	3	1	
53	88-09-13	1.0	1 08 N 110 08 W	4.0	1	2	22.7	34.44	100	5				
	88-09-14		2 00 S 110 00 W									3	0	2
54	88-09-15	1.0	2 18 S 108 13 W	4.0	1	2	21.8	34.81	100	6		1	5	
54	88-09-15	1.0	2 18 S 108 13 W	4.0	1	2	21.8	34.81	300	1		2	3	
54	88-09-15	1.0	2 18 S 108 13 W	4.0	1	2	21.8	34.81				3	1	1
55	88-09-16	1.0	0 36 S 105 36 W	3.0	1	2	20.0	34.72	100	4		1	5	
55	88-09-16	1.0	0 36 S 105 36 W	3.0	1	2	20.0	34.72	300	1		2	5	
55	88-09-16	1.0	0 36 S 105 36 W	3.0	1	2	20.0	34.72				3	1	
56	88-09-17	1.0	0 48 N 103 30 W	4.0	2	2	20.0	34.49	100	4	3	1	2	
56	88-09-17	1.0	0 48 N 103 30 W	4.0	2	2	20.0	34.49				2	1	
56	88-09-17	1.0	0 48 N 103 30 W	4.0	2	2	20.0	34.49				3	1	
57	88-09-18	1.0	2 09 N 100 58 W	4.0	5	3	24.3	33.99	10	4	5	1	2	
57	88-09-18	1.0	2 09 N 100 58 W	4.0	5	3	24.3	33.99	20	2	2	2	3	
57	88-09-18	1.0	2 09 N 100 58 W	4.0	5	3	24.3	33.99	30	2				
57	88-09-18	1.0	2 09 N 100 58 W	4.0	5	3	24.3	33.99	100	5				
57	88-09-18	1.0	2 09 N 100 58 W	4.0	5	3	24.3	33.99	300	1				
	88-09-19		2 19 N 100 37 W						30		1			
58	88-09-19	1.0	4 04 N 97 57 W	4.0	5	3	25.9	33.50	10	1	1	1	3	
58	88-09-19	1.0	4 04 N 97 57 W	4.0	5	3	25.9	33.50	20	3	8	2	4	
58	88-09-19	1.0	4 04 N 97 57 W	4.0	5	3	25.9	33.50	30	2	2			
58	88-09-19	1.0	4 04 N 97 57 W	4.0	5	3	25.9	33.50	100	5				
58	88-09-19	1.0	4 04 N 97 57 W	4.0	5	3	25.9	33.50	300	1				
59	88-09-20	1.0	4 47 N 96 58 W	5.0	5	3	26.2	33.42	10	4	2	1	2	
59	88-09-20	1.0	4 47 N 96 58 W	5.0	5	3	26.2	33.42	20	3	3	2	3	
59	88-09-20	1.0	4 47 N 96 58 W	5.0	5	3	26.2	33.42	30	2	2	3	1	1
59	88-09-20	1.0	4 47 N 96 58 W	5.0	5	3	26.2	33.42	100	3				
59	88-09-20	1.0	4 47 N 96 58 W	5.0	5	3	26.2	33.42	400	1				
59	88-09-20	1.0	4 47 N 96 58 W	5.0	5	3	26.2	33.42	500	1	1			

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
59	88-09-20	1.0	4 47 N 96 58 W	5.0	5	3	26.2	33.42	500	1	3			
	88-09-20		4 17 N 97 34 W						30		1			
60	88-09-20	1.0	6 10 N 94 56 W	5.0	2	2	26.6	33.33	20	2	3	1	5	
60	88-09-20	1.0	6 10 N 94 56 W	5.0	2	2	26.6	33.33	30	1	2	2	1	
60	88-09-20	1.0	6 10 N 94 56 W	5.0	2	2	26.6	33.33	100	4	2			
61	88-09-21	1.0	6 54 N 93 59 W	2.0	5	3	26.2	33.10	10	3	8	1	5	
61	88-09-21	1.0	6 54 N 93 59 W	2.0	5	3	26.2	33.10	20	3	4	2	3	3
61	88-09-21	1.0	6 54 N 93 59 W	2.0	5	3	26.2	33.10	30	3	5	3	1	1
61	88-09-21	1.0	6 54 N 93 59 W	2.0	5	3	26.2	33.10	100	4				
61	88-09-21	1.0	6 54 N 93 59 W	2.0	5	3	26.2	33.10	400	4				
61	88-09-21	1.0	6 54 N 93 59 W	2.0	5	3	26.2	33.10	500	2				
	88-09-21		6 25 N 94 35 W						30		1			
62	88-09-21	1.0	8 22 N 92 13 W	2.0	2	3	26.2	32.97	10	4	33	1	5	
62	88-09-21	1.0	8 22 N 92 13 W	2.0	2	3	26.2	32.97	20	4	19	2	3	
62	88-09-21	1.0	8 22 N 92 13 W	2.0	2	3	26.2	32.97	30	3	8	3	1	1
62	88-09-21	1.0	8 22 N 92 13 W	2.0	2	3	26.2	32.97	100	4	1			
62	88-09-21	1.0	8 22 N 92 13 W	2.0	2	3	26.2	32.97	400	1				
62	88-09-21	1.0	8 22 N 92 13 W	2.0	2	3	26.2	32.97	500	1	1			
63	88-09-22	1.0	9 09 N 91 06 W	3.0	5	2	26.0	33.18	10	5	17	1	4	
63	88-09-22	1.0	9 09 N 91 06 W	3.0	5	2	26.0	33.18	20	2	2	2	4	8
63	88-09-22	1.0	9 09 N 91 06 W	3.0	5	2	26.0	33.18	30	3	4	3	2	3
63	88-09-22	1.0	9 09 N 91 06 W	3.0	5	2	26.0	33.18	300	1				
63	88-09-22	1.0	9 09 N 91 06 W	3.0	5	2	26.0	33.18	400	1				
64	88-09-22	1.0	10 16 N 89 26 W	3.0	3	2	26.9	33.13	10	1	1	1	5	
64	88-09-22	1.0	10 16 N 89 26 W	3.0	3	2	26.9	33.13	20	2	2	2	5	1
64	88-09-22	1.0	10 16 N 89 26 W	3.0	3	2	26.9	33.13	30	4	6			
64	88-09-22	1.0	10 16 N 89 26 W	3.0	3	2	26.9	33.13	100	3				
64	88-09-22	1.0	10 16 N 89 26 W	3.0	3	2	26.9	33.13	400	1				
	88-09-23		10 17 N 88 17 W						10		1			
	88-09-23		10 17 N 88 17 W						30		3			
65	88-09-23	1.0	8 05 N 88 06 W	3.0		5	26.4	33.07	10	4	10	1	5	1
65	88-09-23	1.0	8 05 N 88 06 W	3.0		5	26.4	33.07	20	2	2	2	3	
65	88-09-23	1.0	8 05 N 88 06 W	3.0		5	26.4	33.07	30	3	4			
65	88-09-23	1.0	8 05 N 88 06 W	3.0		5	26.4	33.07	100	3				
65	88-09-23	1.0	8 05 N 88 06 W	3.0		5	26.4	33.07	300	1				
65	88-09-23	1.0	8 05 N 88 06 W	3.0		5	26.4	33.07	500	4	4			
66	88-09-24	1.0	6 55 N 87 44 W	4.0	5	4	26.6	33.05	20	2	1	1	4	
66	88-09-24	1.0	6 55 N 87 44 W	4.0	5	4	26.6	33.05	30	2	2	2	5	1
66	88-09-24	1.0	6 55 N 87 44 W	4.0	5	4	26.6	33.05	100	3		3	1	1
66	88-09-24	1.0	6 55 N 87 44 W	4.0	5	4	26.6	33.05	300	1				
67	88-09-24	1.0	5 34 N 87 03 W	0.0	4	2	26.0	33.47	500	6	5			
67	88-09-24	1.0	5 34 N 87 03 W	0.0	4	2	26.0	33.47	500	3				
67	88-09-24	1.0	5 34 N 87 03 W	0.0	4	2	26.0	33.47	500	4				
68	88-09-25	1.0	3 48 N 86 51 W	4.0	5	3	25.9	33.57	10	3	3	1	4	
68	88-09-25	1.0	3 48 N 86 51 W	4.0	5	3	25.9	33.57	20	3	6	2	2	
68	88-09-25	1.0	3 48 N 86 51 W	4.0	5	3	25.9	33.57	30	4	10			
68	88-09-25	1.0	3 48 N 86 51 W	4.0	5	3	25.9	33.57	100	4	1			

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
68	88-09-25	1.0	3 48 N 86 51 W	4.0	5	3	25.9	33.57	300	1				
68	88-09-25	1.0	3 48 N 86 51 W	4.0	5	3	25.9	33.57	400	1				
69	88-09-26	1.0	2 47 N 86 45 W	4.0	5	4	25.5	33.55	20	3	5	1	5	
69	88-09-26	1.0	2 47 N 86 45 W	4.0	5	4	25.5	33.55	30	4	6	2	3	1
69	88-09-26	1.0	2 47 N 86 45 W	4.0	5	4	25.5	33.55	100	5				
69	88-09-26	1.0	2 47 N 86 45 W	4.0	5	4	25.5	33.55	500	1	1			
70	88-09-26	1.0	3 16 N 84 25 W	4.0	5	3	25.9	33.62	20	2	3	1	6	
70	88-09-26	1.0	3 16 N 84 25 W	4.0	5	3	25.9	33.62	30	3	5	2	1	
70	88-09-26	1.0	3 16 N 84 25 W	4.0	5	3	25.9	33.62	100	5	2	3	1	
70	88-09-26	1.0	3 16 N 84 25 W	4.0	5	3	25.9	33.62	300	1				
	88-09-27		3 28 N 83 56 W				26.0		30		2			
71	88-09-27	1.0	4 07 N 81 27 W	3.0	4	2	26.3	33.27	100	5		1	6	
71	88-09-27	1.0	4 07 N 81 27 W	3.0	4	2	26.3	33.27	300	1		3	1	1
72	88-09-28	1.0	5 57 N 78 37 W	3.0	5	2	28.0	29.04	10	4	22	1	5	
72	88-09-28	1.0	5 57 N 78 37 W	3.0	5	2	28.0	29.04	20	3	4	2	4	
72	88-09-28	1.0	5 57 N 78 37 W	3.0	5	2	28.0	29.04	30	2	2	3	1	2
72	88-09-28	1.0	5 57 N 78 37 W	3.0	5	2	28.0	29.04	100	4				
72	88-09-28	1.0	5 57 N 78 37 W	3.0	5	2	28.0	29.04	300	1				
72	88-09-28	1.0	5 57 N 78 37 W	3.0	5	2	28.0	29.04	500	2	6			
	88-09-29		6 00 N 78 32 W				29.0		30		4			
73	88-09-29	.5	6 02 N 78 31 W	3.0	5	3	30.8	29.08	10	2		1	2	
73	88-09-29	.5	6 02 N 78 31 W	3.0	5	3	30.8	29.08	400	1		2	4	
73	88-09-29	.5	6 02 N 78 31 W	3.0	5	3	30.8	29.08	500	4	8			
74	88-10-05	1.0	5 18 N 79 26 W	3.0	5	3	26.6	30.54	10	4	10	1	4	
74	88-10-05	1.0	5 18 N 79 26 W	3.0	5	3	26.6	30.54	20	1	1	2	4	
74	88-10-05	1.0	5 18 N 79 26 W	3.0	5	3	26.6	30.54	30	2	2	3	3	4
74	88-10-05	1.0	5 18 N 79 26 W	3.0	5	3	26.6	30.54	100	5				
74	88-10-05	1.0	5 18 N 79 26 W	3.0	5	3	26.6	30.54	400	4	3			
75	88-10-06	1.0	4 11 N 81 54 W	5.0	5	3	26.3	33.40	10	2	2	1	6	
75	88-10-06	1.0	4 11 N 81 54 W	5.0	5	3	26.3	33.40	30	1	1	2	4	
75	88-10-06	1.0	4 11 N 81 54 W	5.0	5	3	26.3	33.40	100	6		3	1	1
75	88-10-06	1.0	4 11 N 81 54 W	5.0	5	3	26.3	33.40	300	1				
76	88-10-07	1.0	6 42 N 83 14 W	4.0	5	3	26.7	32.51	10	2	1	1	5	
76	88-10-07	1.0	6 42 N 83 14 W	4.0	5	3	26.7	32.51	20	3	4	2	6	
76	88-10-07	1.0	6 42 N 83 14 W	4.0	5	3	26.7	32.51	100	4		3	3	2
76	88-10-07	1.0	6 42 N 83 14 W	4.0	5	3	26.7	32.51	300	1				
76	88-10-07	1.0	6 42 N 83 14 W	4.0	5	3	26.7	32.51	500	8	2			
77	88-10-08	1.0	7 30 N 83 06 W	5.0	5	2	26.9	32.18	20	2	2	1	3	
77	88-10-08	1.0	7 30 N 83 06 W	5.0	5	2	26.9	32.18	30	2	1	2	4	
77	88-10-08	1.0	7 30 N 83 06 W	5.0	5	2	26.9	32.18	100	2				
77	88-10-08	1.0	7 30 N 83 06 W	5.0	5	2	26.9	32.18	500	1	1			
78	88-10-08	1.0	8 15 N 85 03 W	5.0	5	4	26.7	32.67	10	3	4	1	5	
78	88-10-08	1.0	8 15 N 85 03 W	5.0	5	4	26.7	32.67	20	3	7	2	4	
78	88-10-08	1.0	8 15 N 85 03 W	5.0	5	4	26.7	32.67	30	4	9	3	3	
78	88-10-08	1.0	8 15 N 85 03 W	5.0	5	4	26.7	32.67	100	3				
78	88-10-08	1.0	8 15 N 85 03 W	5.0	5	4	26.7	32.67	400	2	1			
79	88-10-09	1.0	8 57 N 88 12 W	3.0	5	3	25.8	33.32	10	3	4	1	5	

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
79	88-10-09	1.0	8 57 N 88 12 W	3.0	5	3	25.8	33.32	20	2	1	2	4	
79	88-10-09	1.0	8 57 N 88 12 W	3.0	5	3	25.8	33.32	30	4	6	3	3	7
79	88-10-09	1.0	8 57 N 88 12 W	3.0	5	3	25.8	33.32	400	4				
79	88-10-09	1.0	8 57 N 88 12 W	3.0	5	3	25.8	33.32	500	8				
80	88-10-10	1.0	6 38 N 89 04 W	3.0	5	3	26.5	32.46	10	3	2	1	5	
80	88-10-10	1.0	6 38 N 89 04 W	3.0	5	3	26.5	32.46	20	4	6	2	3	
80	88-10-10	1.0	6 38 N 89 04 W	3.0	5	3	26.5	32.46	30	4	6	3	4	9
80	88-10-10	1.0	6 38 N 89 04 W	3.0	5	3	26.5	32.46	100	5				
81	88-10-11	1.0	4 06 N 90 35 W	6.0	5	3	26.4	33.24	10	3	3	2	2	
81	88-10-11	1.0	4 06 N 90 35 W	6.0	5	3	26.4	33.24	20	3	6	3	2	2
81	88-10-11	1.0	4 06 N 90 35 W	6.0	5	3	26.4	33.24	30	3	1			
81	88-10-11	1.0	4 06 N 90 35 W	6.0	5	3	26.4	33.24	100	4				
82	88-10-12	1.0	5 26 N 91 26 W	4.0	5	2	26.5	33.18	10	2	2	1	2	
82	88-10-12	1.0	5 26 N 91 26 W	4.0	5	2	26.5	33.18	20	1	2	2	4	
82	88-10-12	1.0	5 26 N 91 26 W	4.0	5	2	26.5	33.18	30	2	3	3	2	2
82	88-10-12	1.0	5 26 N 91 26 W	4.0	5	2	26.5	33.18	100	4				
82	88-10-12	1.0	5 26 N 91 26 W	4.0	5	2	26.5	33.18	300	1				
82	88-10-12	1.0	5 26 N 91 26 W	4.0	5	2	26.5	33.18	400	1	1			
83	88-10-13	1.0	8 27 N 90 24 W	2.0	5	2	26.2	32.98	10	2	1	1	5	
83	88-10-13	1.0	8 27 N 90 24 W	2.0	5	2	26.2	32.98	20	2	3	2	4	3
83	88-10-13	1.0	8 27 N 90 24 W	2.0	5	2	26.2	32.98	30	3	7	3	2	2
83	88-10-13	1.0	8 27 N 90 24 W	2.0	5	2	26.2	32.98	100	4				
83	88-10-13	1.0	8 27 N 90 24 W	2.0	5	2	26.2	32.98	300	1				
83	88-10-13	1.0	8 27 N 90 24 W	2.0	5	2	26.2	32.98	400	1				
84	88-10-14	1.0	11 48 N 90 10 W	1.0	1	1	28.2	33.03	5	8	2	2	4	
84	88-10-14	1.0	11 48 N 90 10 W	1.0	1	1	28.2	33.03	100	2		3	3	1
84	88-10-14	1.0	11 48 N 90 10 W	1.0	1	1	28.2	33.03	200	4	10			
84	88-10-14	1.0	11 48 N 90 10 W	1.0	1	1	28.2	33.03	300	1				
84	88-10-14	1.0	11 48 N 90 10 W	1.0	1	1	28.2	33.03	400	4	3			
84	88-10-14	1.0	11 48 N 90 10 W	1.0	1	1	28.2	33.03	500	8	4			
85	88-10-15	1.0	10 32 N 91 13 W	2.0	1	2	26.1	33.37	10	4	8	1	2	
85	88-10-15	1.0	10 32 N 91 13 W	2.0	1	2	26.1	33.37	20	3	5	2	5	
85	88-10-15	1.0	10 32 N 91 13 W	2.0	1	2	26.1	33.37	30	4	12	3	2	
85	88-10-15	1.0	10 32 N 91 13 W	2.0	1	2	26.1	33.37	100	4				
85	88-10-15	1.0	10 32 N 91 13 W	2.0	1	2	26.1	33.37	200	4				
85	88-10-15	1.0	10 32 N 91 13 W	2.0	1	2	26.1	33.37	300	1				
85	88-10-15	1.0	10 32 N 91 13 W	2.0	1	2	26.1	33.37	400	2	1			
86	88-10-16	1.0	7 45 N 92 31 W	2.0	1	2	27.3	32.42	5	1	2	1	6	
86	88-10-16	1.0	7 45 N 92 31 W	2.0	1	2	27.3	32.42	10	2	4	2	4	1
86	88-10-16	1.0	7 45 N 92 31 W	2.0	1	2	27.3	32.42	20	1		3	4	4
86	88-10-16	1.0	7 45 N 92 31 W	2.0	1	2	27.3	32.42	30	3	5			
86	88-10-16	1.0	7 45 N 92 31 W	2.0	1	2	27.3	32.42	100	5				
87	88-10-17	1.0	6 31 N 93 42 W	2.0	5	2	27.1	32.40	10	2	2	1	3	
87	88-10-17	1.0	6 31 N 93 42 W	2.0	5	2	27.1	32.40	20	2	3	2	3	
87	88-10-17	1.0	6 31 N 93 42 W	2.0	5	2	27.1	32.40	30	2	2			
87	88-10-17	1.0	6 31 N 93 42 W	2.0	5	2	27.1	32.40	100	4				
87	88-10-17	1.0	6 31 N 93 42 W	2.0	5	2	27.1	32.40	300	1				

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
87	88-10-17	1.0	6 31 N 93 42 W	2.0	5	2	27.1	32.40	400	3				
88	88-10-18	1.0	9 38 N 93 37 W	2.0	2	2	27.1	33.29	10	6	17	2	5	
88	88-10-18	1.0	9 38 N 93 37 W	2.0	2	2	27.1	33.29	20	2	2			
88	88-10-18	1.0	9 38 N 93 37 W	2.0	2	2	27.1	33.29	30	4	10			
88	88-10-18	1.0	9 38 N 93 37 W	2.0	2	2	27.1	33.29	100	3				
88	88-10-18	1.0	9 38 N 93 37 W	2.0	2	2	27.1	33.29	200	4				
89	88-10-19	1.0	12 59 N 93 38 W	4.0	2	2	26.8	33.33	10	4	7	2	5	
89	88-10-19	1.0	12 59 N 93 38 W	4.0	2	2	26.8	33.33	20	3	5			
89	88-10-19	1.0	12 59 N 93 38 W	4.0	2	2	26.8	33.33	30	4	13			
89	88-10-19	1.0	12 59 N 93 38 W	4.0	2	2	26.8	33.33	100	2				
	88-10-20		12 41 N 93 53 W						20		1			
90	88-10-20	1.0	10 12 N 95 38 W	3.0	2	2	25.5	33.69	10	4	17			
90	88-10-20	1.0	10 12 N 95 38 W	3.0	2	2	25.5	33.69	20	2	4			
90	88-10-20	1.0	10 12 N 95 38 W	3.0	2	2	25.5	33.69	30	1	1			
90	88-10-20	1.0	10 12 N 95 38 W	3.0	2	2	25.5	33.69	100	3				
90	88-10-20	1.0	10 12 N 95 38 W	3.0	2	2	25.5	33.69	300	1				
90	88-10-20	1.0	10 12 N 95 38 W	3.0	2	2	25.5	33.69	400	1	1			
91	88-10-21	.5	7 24 N 97 34 W	3.0	2	2	27.3	32.94	10	2	3	2	4	1
91	88-10-21	.5	7 24 N 97 34 W	3.0	2	2	27.3	32.94	30	2	2			
91	88-10-21	.5	7 24 N 97 34 W	3.0	2	2	27.3	32.94	100	4				
91	88-10-21	.5	7 24 N 97 34 W	3.0	2	2	27.3	32.94	400	1	1			
92	88-10-22	1.0	6 15 N 98 37 W	4.0	3	2	26.6	32.64	10	1		2	4	
92	88-10-22	1.0	6 15 N 98 37 W	4.0	3	2	26.6	32.64	20	1	2			
92	88-10-22	1.0	6 15 N 98 37 W	4.0	3	2	26.6	32.64	30	2	1			
92	88-10-22	1.0	6 15 N 98 37 W	4.0	3	2	26.6	32.64	100	4				
93	88-10-23	1.0	9 30 N 98 07 W	3.0	4	2	27.6	33.21	10	2	5			
93	88-10-23	1.0	9 30 N 98 07 W	3.0	4	2	27.6	33.21	20	1	1			
93	88-10-23	1.0	9 30 N 98 07 W	3.0	4	2	27.6	33.21	30	1	2			
93	88-10-23	1.0	9 30 N 98 07 W	3.0	4	2	27.6	33.21	100	2				
93	88-10-23	1.0	9 30 N 98 07 W	3.0	4	2	27.6	33.21	300	1				
93	88-10-23	1.0	9 30 N 98 07 W	3.0	4	2	27.6	33.21	400	1	4			
93	88-10-23	1.0	9 30 N 98 07 W	3.0	4	2	27.6	33.21	500	5				
	88-10-24		6 51 N 98 29 W						20		1			
94	88-10-24	1.0	8 05 N 99 43 W	5.0	4	2	27.1	32.87	10	1	1	2	4	
94	88-10-24	1.0	8 05 N 99 43 W	5.0	4	2	27.1	32.87	20	3	7			
94	88-10-24	1.0	8 05 N 99 43 W	5.0	4	2	27.1	32.87	30	1				
94	88-10-24	1.0	8 05 N 99 43 W	5.0	4	2	27.1	32.87	100	5				
	88-10-25		7 45 N 99 55 W						20		2			
	88-10-25		7 45 N 99 55 W						30		2			
95	88-10-25	1.0	5 28 N 101 30 W	4.0	4	2	26.5	32.94	10	1	2	2	4	
95	88-10-25	1.0	5 28 N 101 30 W	4.0	4	2	26.5	32.94	20	1	1			
95	88-10-25	1.0	5 28 N 101 30 W	4.0	4	2	26.5	32.94	30	1	1			
95	88-10-25	1.0	5 28 N 101 30 W	4.0	4	2	26.5	32.94	100	4				
95	88-10-25	1.0	5 28 N 101 30 W	4.0	4	2	26.5	32.94	400	1				
96	88-10-26	1.0	7 02 N 101 59 W	4.0	5	3	26.9	32.84	20	2	5	2	4	
96	88-10-26	1.0	7 02 N 101 59 W	4.0	5	3	26.9	32.84	30	2	1			
96	88-10-26	1.0	7 02 N 101 59 W	4.0	5	3	26.9	32.84	100	5				

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
96	88-10-26	1.0	7 02 N 101 59 W	4.0	5	3	26.9	32.84	400	1				
97	88-10-27	1.0	10 39 N 101 48 W	1.0	5	2	28.3	33.02	10	6	16	2	4	
97	88-10-27	1.0	10 39 N 101 48 W	1.0	5	2	28.3	33.02	20	2	3			
97	88-10-27	1.0	10 39 N 101 48 W	1.0	5	2	28.3	33.02	30	1	1			
97	88-10-27	1.0	10 39 N 101 48 W	1.0	5	2	28.3	33.02	100	5				
97	88-10-27	1.0	10 39 N 101 48 W	1.0	5	2	28.3	33.02	200	1	1			
97	88-10-27	1.0	10 39 N 101 48 W	1.0	5	2	28.3	33.02	300	1				
97	88-10-27	1.0	10 39 N 101 48 W	1.0	5	2	28.3	33.02	400	5				
98	88-10-28	1.0	12 22 N 104 23 W	5.0	5	2	28.3	33.06	10	4	13	2	4	
98	88-10-28	1.0	12 22 N 104 23 W	5.0	5	2	28.3	33.06	20	2	2			
98	88-10-28	1.0	12 22 N 104 23 W	5.0	5	2	28.3	33.06	30	1	1			
98	88-10-28	1.0	12 22 N 104 23 W	5.0	5	2	28.3	33.06	100	4				
98	88-10-28	1.0	12 22 N 104 23 W	5.0	5	2	28.3	33.06	300	1				
98	88-10-28	1.0	12 22 N 104 23 W	5.0	5	2	28.3	33.06	400	2				
98	88-10-28	1.0	12 22 N 104 23 W	5.0	5	2	28.3	33.06	500	5				
99	88-10-29	1.0	13 25 N 108 04 W	5.0	5	4	27.6	32.56	10	4	12			
99	88-10-29	1.0	13 25 N 108 04 W	5.0	5	4	27.6	32.56	20	2	2			
99	88-10-29	1.0	13 25 N 108 04 W	5.0	5	4	27.6	32.56	30	3	7			
99	88-10-29	1.0	13 25 N 108 04 W	5.0	5	4	27.6	32.56	100	3				
99	88-10-29	1.0	13 25 N 108 04 W	5.0	5	4	27.6	32.56	500	1				
100	88-10-30	1.0	15 26 N 106 06 W	3.0	5	2	28.5	33.96	10	5	14	2	5	
100	88-10-30	1.0	15 26 N 106 06 W	3.0	5	2	28.5	33.96	20	4	11			
100	88-10-30	1.0	15 26 N 106 06 W	3.0	5	2	28.5	33.96	30	4	14			
100	88-10-30	1.0	15 26 N 106 06 W	3.0	5	2	28.5	33.96	100	4				
100	88-10-30	1.0	15 26 N 106 06 W	3.0	5	2	28.5	33.96	200	6				
100	88-10-30	1.0	15 26 N 106 06 W	3.0	5	2	28.5	33.96	300	1	1			
100	88-10-30	1.0	15 26 N 106 06 W	3.0	5	2	28.5	33.96	400	1	2			
101	88-10-31	1.0	17 45 N 107 01 W	0.0	5	1	28.0	33.99	10	4	8	2	4	
101	88-10-31	1.0	17 45 N 107 01 W	0.0	5	1	28.0	33.99	20	3				
101	88-10-31	1.0	17 45 N 107 01 W	0.0	5	1	28.0	33.99	30	3	8			
101	88-10-31	1.0	17 45 N 107 01 W	0.0	5	1	28.0	33.99	400	1	1			
102	88-11-01	1.0	18 16 N 103 32 W	3.0	5	2	28.1	33.59	10	1		2	5	
102	88-11-01	1.0	18 16 N 103 32 W	3.0	5	2	28.1	33.59	20	1		3	3	3
102	88-11-01	1.0	18 16 N 103 32 W	3.0	5	2	28.1	33.59	30	5	46			
102	88-11-01	1.0	18 16 N 103 32 W	3.0	5	2	28.1	33.59	80	4	2			
102	88-11-01	1.0	18 16 N 103 32 W	3.0	5	2	28.1	33.59	200	6	21			
102	88-11-01	1.0	18 16 N 103 32 W	3.0	5	2	28.1	33.59	500	3	1			
102	88-11-01	1.0	18 16 N 103 32 W	3.0	5	2	28.1	33.59	500	1	1			
103	88-11-02	1.0	19 00 N 104 22 W	2.0	2	1	26.5	33.87	15	1	2			
103	88-11-02	1.0	19 00 N 104 22 W	2.0	2	1	26.5	33.87	90	2				
103	88-11-02	1.0	19 00 N 104 22 W	2.0	2	1	26.5	33.87	500	6	10			
103	88-11-02	1.0	19 00 N 104 22 W	2.0	2	1	26.5	33.87	900	2				
104	88-11-07	1.0	18 43 N 104 09 W	1.0	5	1	28.6	33.90	20	2	1	1	3	
104	88-11-07	1.0	18 43 N 104 09 W	1.0	5	1	28.6	33.90	30	4	13	2	3	
104	88-11-07	1.0	18 43 N 104 09 W	1.0	5	1	28.6	33.90	80	1	1	3	1	1
104	88-11-07	1.0	18 43 N 104 09 W	1.0	5	1	28.6	33.90	200	1	1			

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
104	88-11-07	1.0	18 43 N 104 09 W	1.0	5	1	28.6	33.90	400	2	2			
104	88-11-07	1.0	18 43 N 104 09 W	1.0	5	1	28.6	33.90	500	5	4			
104	88-11-07	1.0	18 43 N 104 09 W	1.0	5	1	28.6	33.90	900	1				
105	88-11-08	1.0	16 32 N 101 16 W	2.0	5	1	29.6	33.99	10	6	12	1	3	
105	88-11-08	1.0	16 32 N 101 16 W	2.0	5	1	29.6	33.99	30	4	11	3	1	2
105	88-11-08	1.0	16 32 N 101 16 W	2.0	5	1	29.6	33.99	100	3				
105	88-11-08	1.0	16 32 N 101 16 W	2.0	5	1	29.6	33.99	900	1				
106	88-11-09	1.0	14 40 N 98 23 W	2.0	5	1	29.1	33.41	10	6	12	3	2	4
106	88-11-09	1.0	14 40 N 98 23 W	2.0	5	1	29.1	33.41	30	4	17			
106	88-11-09	1.0	14 40 N 98 23 W	2.0	5	1	29.1	33.41	100	3				
106	88-11-09	1.0	14 40 N 98 23 W	2.0	5	1	29.1	33.41	200	6				
106	88-11-09	1.0	14 40 N 98 23 W	2.0	5	1	29.1	33.41	400	5	2			
107	88-11-10	1.0	14 35 N 101 06 W	0.0	5	1	30.4	33.49	10	6	13	3	2	1
107	88-11-10	1.0	14 35 N 101 06 W	0.0	5	1	30.4	33.49	20	5	20			
107	88-11-10	1.0	14 35 N 101 06 W	0.0	5	1	30.4	33.49	30	2	1			
107	88-11-10	1.0	14 35 N 101 06 W	0.0	5	1	30.4	33.49	500	1				
108	88-11-11	1.0	14 40 N 102 25 W	0.0	5	1	28.6	34.02	10	5	5	2	3	
108	88-11-11	1.0	14 40 N 102 25 W	0.0	5	1	28.6	34.02	20	4	6	3	1	1
108	88-11-11	1.0	14 40 N 102 25 W	0.0	5	1	28.6	34.02	30	3	2			
108	88-11-11	1.0	14 40 N 102 25 W	0.0	5	1	28.6	34.02	100	3	1			
108	88-11-11	1.0	14 40 N 102 25 W	0.0	5	1	28.6	34.02	200	3	3			
	88-11-12		14 13 N 104 57 W						20		2			
	88-11-12		14 13 N 104 57 W						30		2			
109	88-11-12	.8	11 48 N 107 07 W	6.0	5	4	28.3	33.30	5	1		2	1	
109	88-11-12	.8	11 48 N 107 07 W	6.0	5	4	28.3	33.30	10	4	7			
109	88-11-12	.8	11 48 N 107 07 W	6.0	5	4	28.3	33.30	20	1	1			
109	88-11-12	.8	11 48 N 107 07 W	6.0	5	4	28.3	33.30	30	1				
109	88-11-12	.8	11 48 N 107 07 W	6.0	5	4	28.3	33.30	300	1				
110	88-11-14	1.0	10 21 N 109 49 W	5.0	5	4	27.0	32.81	10	2	3			
110	88-11-14	1.0	10 21 N 109 49 W	5.0	5	4	27.0	32.81	30	1	1			
110	88-11-14	1.0	10 21 N 109 49 W	5.0	5	4	27.0	32.81	100	2				
110	88-11-14	1.0	10 21 N 109 49 W	5.0	5	4	27.0	32.81	500	1				
111	88-11-15	1.0	10 30 N 113 54 W	4.0	2	2	27.0	33.20	10	1	2	2	4	
111	88-11-15	1.0	10 30 N 113 54 W	4.0	2	2	27.0	33.20	30	2	3			
111	88-11-15	1.0	10 30 N 113 54 W	4.0	2	2	27.0	33.20	100	4				
	88-11-16		10 32 N 114 24 W						20		1			
	88-11-16		10 32 N 114 24 W						30		1			
112	88-11-16	1.0	10 28 N 117 31 W	4.0	2	2	27.3	32.91	10	1		2	4	
112	88-11-16	1.0	10 28 N 117 31 W	4.0	2	2	27.3	32.91	20	3	5			
112	88-11-16	1.0	10 28 N 117 31 W	4.0	2	2	27.3	32.91	30	1	1			
112	88-11-16	1.0	10 28 N 117 31 W	4.0	2	2	27.3	32.91	100	2				
	88-11-17		10 14 N 117 29 W						5		1			
113	88-11-17	1.0	8 44 N 115 26 W	2.0	5	2	27.2	33.43	20	1		2	4	
113	88-11-17	1.0	8 44 N 115 26 W	2.0	5	2	27.2	33.43	100	4				
113	88-11-17	1.0	8 44 N 115 26 W	2.0	5	2	27.2	33.43	400	4	1			
114	88-11-18	.5	8 06 N 111 46 W	4.0	5	4	27.0	33.28	5	1		2	3	
114	88-11-18	.5	8 06 N 111 46 W	4.0	5	4	27.0	33.28	100	2				

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude	Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
	88-11-19		8 14 N 111 15 W						30		1			
115	88-11-19	1.0	8 46 N 108 10 W	0.0	3	2	27.2	32.70	10	1		2	5	
115	88-11-19	1.0	8 46 N 108 10 W	0.0	3	2	27.2	32.70	20	1	1			
115	88-11-19	1.0	8 46 N 108 10 W	0.0	3	2	27.2	32.70	30	1				
115	88-11-19	1.0	8 46 N 108 10 W	0.0	3	2	27.2	32.70	100	4				
116	88-11-20	1.0	10 43 N 109 17 W	3.0	4	2	27.0	32.95	5	1	1	2	4	
116	88-11-20	1.0	10 43 N 109 17 W	3.0	4	2	27.0	32.95	30	2	3			
116	88-11-20	1.0	10 43 N 109 17 W	3.0	4	2	27.0	32.95	100	4				
116	88-11-20	1.0	10 43 N 109 17 W	3.0	4	2	27.0	32.95	300	1				
116	88-11-20	1.0	10 43 N 109 17 W	3.0	4	2	27.0	32.95	400	1	1			
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	5	1		2	4	
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	10	1				
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	20	2	2			
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	30	1				
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	100	3				
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	300	1				
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	400	6				
117	88-11-21	1.0	13 31 N 110 19 W	3.0	4	2	27.6	33.21	500	6				
118	88-11-22	1.0	12 41 N 114 00 W	5.0	4	2	26.8	32.88	10	1	2	2	4	
118	88-11-22	1.0	12 41 N 114 00 W	5.0	4	2	26.8	32.88	20	1				
118	88-11-22	1.0	12 41 N 114 00 W	5.0	4	2	26.8	32.88	30	2	1			
118	88-11-22	1.0	12 41 N 114 00 W	5.0	4	2	26.8	32.88	100	4				
118	88-11-22	1.0	12 41 N 114 00 W	5.0	4	2	26.8	32.88	500	1	1			
119	88-11-23	1.0	14 17 N 112 34 W	4.0	4	1	27.3	32.99	10	2	7	2	4	
119	88-11-23	1.0	14 17 N 112 34 W	4.0	4	1	27.3	32.99	20	2	5	3	1	1
119	88-11-23	1.0	14 17 N 112 34 W	4.0	4	1	27.3	32.99	30	2	2			
119	88-11-23	1.0	14 17 N 112 34 W	4.0	4	1	27.3	32.99	100	4				
119	88-11-23	1.0	14 17 N 112 34 W	4.0	4	1	27.3	32.99	300	1				
120	88-11-24	1.0	16 32 N 110 05 W	3.0	4	2	27.2	33.68	20	2	4	2	6	
120	88-11-24	1.0	16 32 N 110 05 W	3.0	4	2	27.2	33.68	30	2	6			
120	88-11-24	1.0	16 32 N 110 05 W	3.0	4	2	27.2	33.68	100	5				
120	88-11-24	1.0	16 32 N 110 05 W	3.0	4	2	27.2	33.68	300	1				
120	88-11-24	1.0	16 32 N 110 05 W	3.0	4	2	27.2	33.68	500	1	1			
121	88-11-25	1.0	18 52 N 108 07 W	3.0	2	2	26.2	34.46	10	1		1	4	
121	88-11-25	1.0	18 52 N 108 07 W	3.0	2	2	26.2	34.46	20	1	2	2	6	
121	88-11-25	1.0	18 52 N 108 07 W	3.0	2	2	26.2	34.46	30	2	4			
122	88-11-26	1.0	19 18 N 110 47 W	2.0	5	2	25.6	34.30	30	6	12			
122	88-11-26	1.0	19 18 N 110 47 W	2.0	5	2	25.6	34.30	80	5				
123	88-11-27	1.0	17 46 N 112 46 W	4.0	5	2	25.4	34.34	10	1	3	2	4	
123	88-11-27	1.0	17 46 N 112 46 W	4.0	5	2	25.4	34.34	20	2	6			
123	88-11-27	1.0	17 46 N 112 46 W	4.0	5	2	25.4	34.34	30	2	3			
123	88-11-27	1.0	17 46 N 112 46 W	4.0	5	2	25.4	34.34	100	3				
123	88-11-27	1.0	17 46 N 112 46 W	4.0	5	2	25.4	34.34	300	1				
124	88-11-28	1.0	17 01 N 116 25 W	5.0	5	2	24.2	34.57	30	2	2	2	4	
124	88-11-28	1.0	17 01 N 116 25 W	5.0	5	2	24.2	34.57	100	2		3	1	1
125	88-11-29	1.0	16 52 N 117 30 W	3.0	5	4	23.7	34.48	30	3	2			
126	88-11-29	1.0	18 23 N 116 04 W	3.0	5	3	24.2	34.47	5	2		2	3	

Table 5. continued.

Station ¹ Number	Date Y/M/D	Hours of Effort	Location Latitude Longitude		Sea ² State	Moon ³ Phase	Sky ⁴ Cond.	SST (C)	SSS (%)	Fish ⁵ Species	Relative ⁶ Abundance (Fish)	Number Collected (Fish)	Squid ⁷ Type	Relative ⁶ Abundance (Squid)	Number Collected (Squid)
126	88-11-29	1.0	18 23 N	116 04 W	3.0	5	3	24.2	34.47	300	1				
127	88-11-30	1.0	21 03 N	113 52 W	2.0	5	2	24.3	34.37	10	1	2	2	4	
127	88-11-30	1.0	21 03 N	113 52 W	2.0	5	2	24.3	34.37	20	1	2			
127	88-11-30	1.0	21 03 N	113 52 W	2.0	5	2	24.3	34.37	30	1	1			
127	88-11-30	1.0	21 03 N	113 52 W	2.0	5	2	24.3	34.37	300	1				
127	88-11-30	1.0	21 03 N	113 52 W	2.0	5	2	24.3	34.37	400	1	3			
127	88-11-30	1.0	21 03 N	113 52 W	2.0	5	2	24.3	34.37	500	1				
128	88-12-01	1.0	24 01 N	111 58 W	1.0	5	1	20.6	34.05	500	1	1			
129	88-12-02	1.0	25 48 N	112 51 W	0.0	5	1	19.0	33.94	15		1			
129	88-12-02	1.0	25 48 N	112 51 W	0.0	5	1	19.0	33.94	500	3				
130	88-12-03	1.0	27 36 N	114 59 W	3.0	5	1	17.9	33.66	5	1	1	2	3	
130	88-12-03	1.0	27 36 N	114 59 W	3.0	5	1	17.9	33.66	30	1				
	88-12-04		28 18 N	115 34 W						30		1			
	88-12-04		28 18 N	115 34 W						500		1			
131	88-12-04	1.0	28 28 N	115 32 W	2.0	5	1	15.4	33.44	30	1	1			
131	88-12-04	1.0	28 28 N	115 32 W	2.0	5	1	15.4	33.44	500	1	2			
132	88-12-05	1.0	31 48 N	116 55 W	3.0	5	1	14.3	33.46	500	6	5			

DSJ 1988

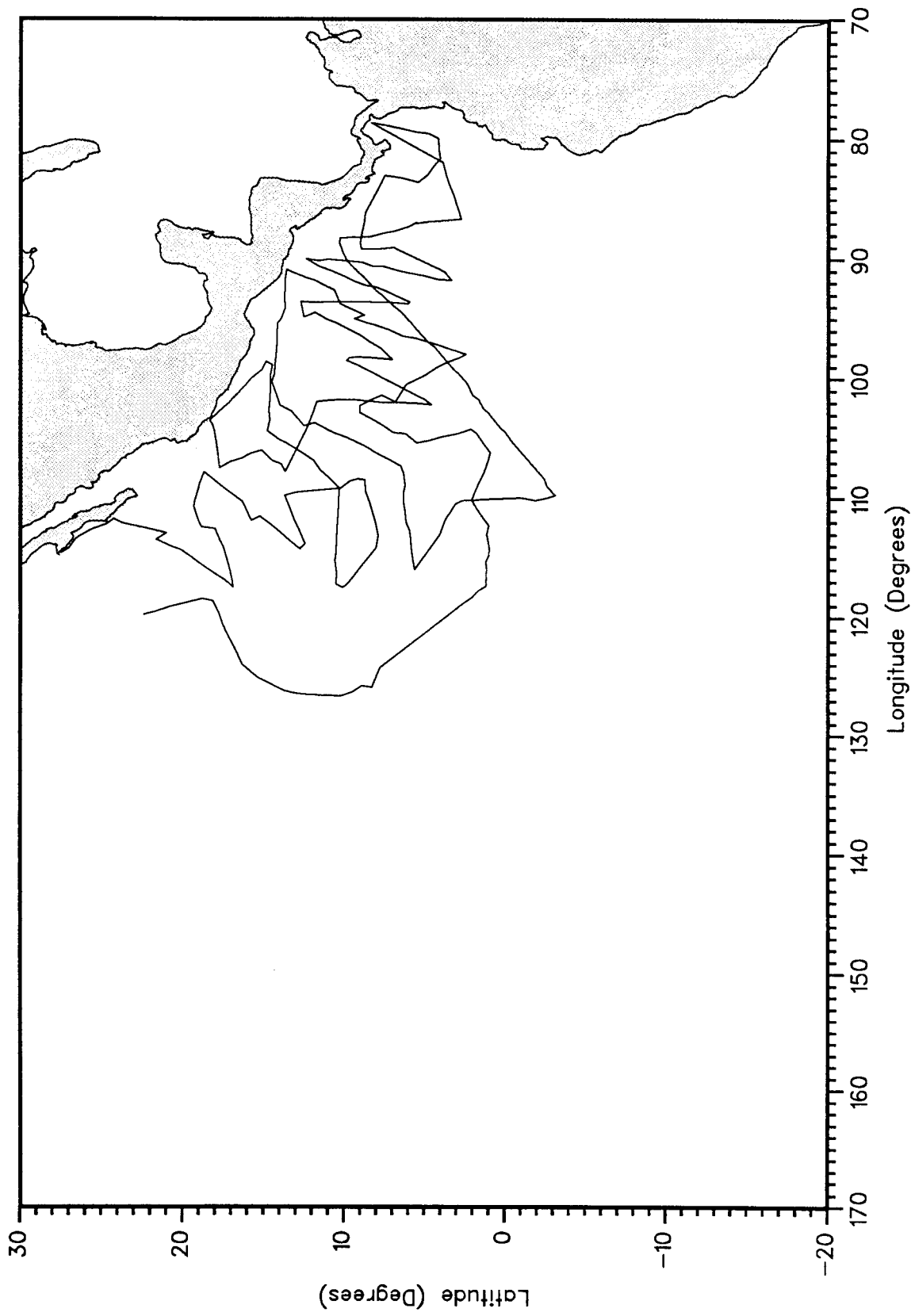


Figure 1. Cruise track, Jordan, 28 July - 6 December, 1988.

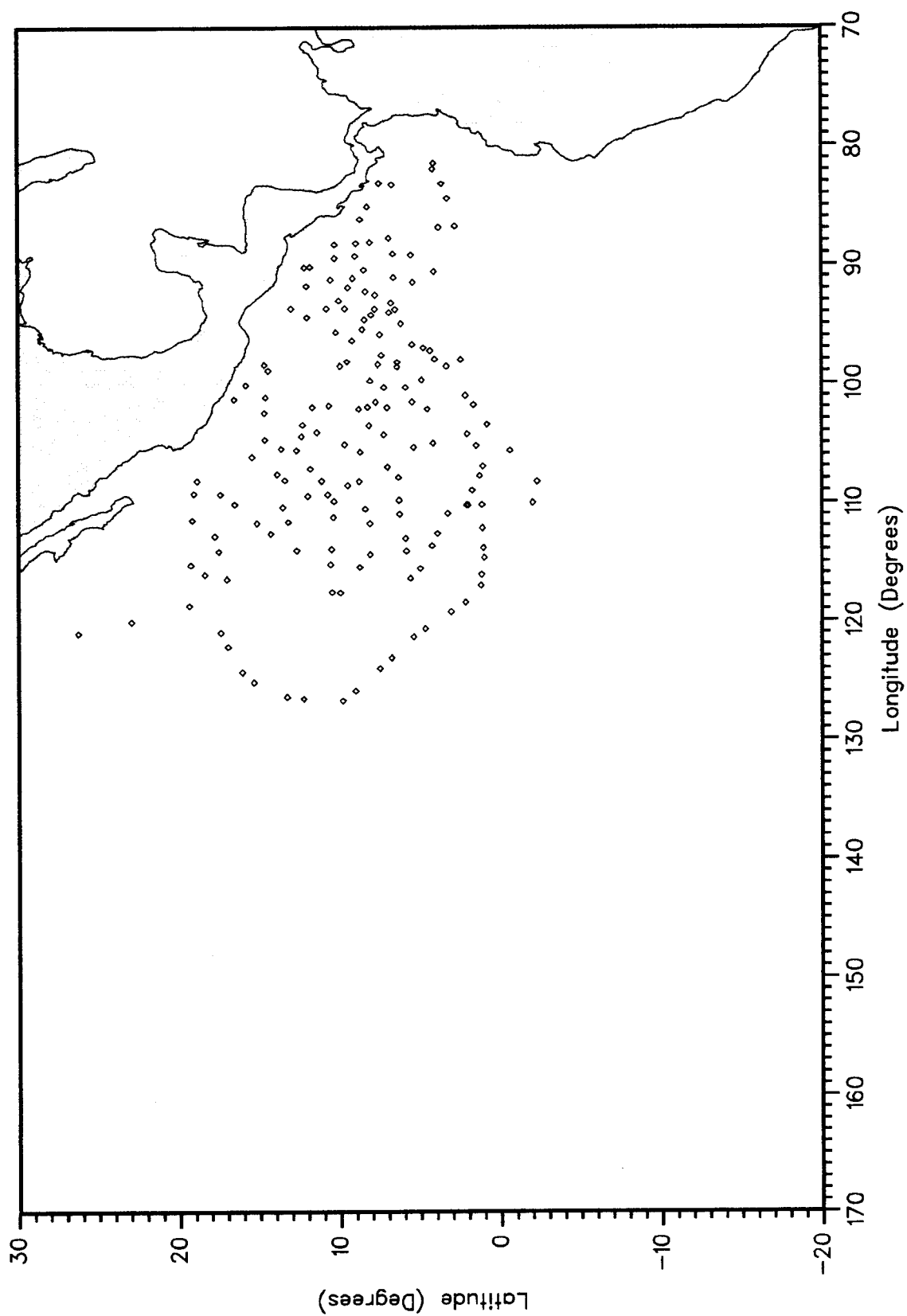


Figure 2. CTD stations, Jordan, 28 July - 6 December, 1988.

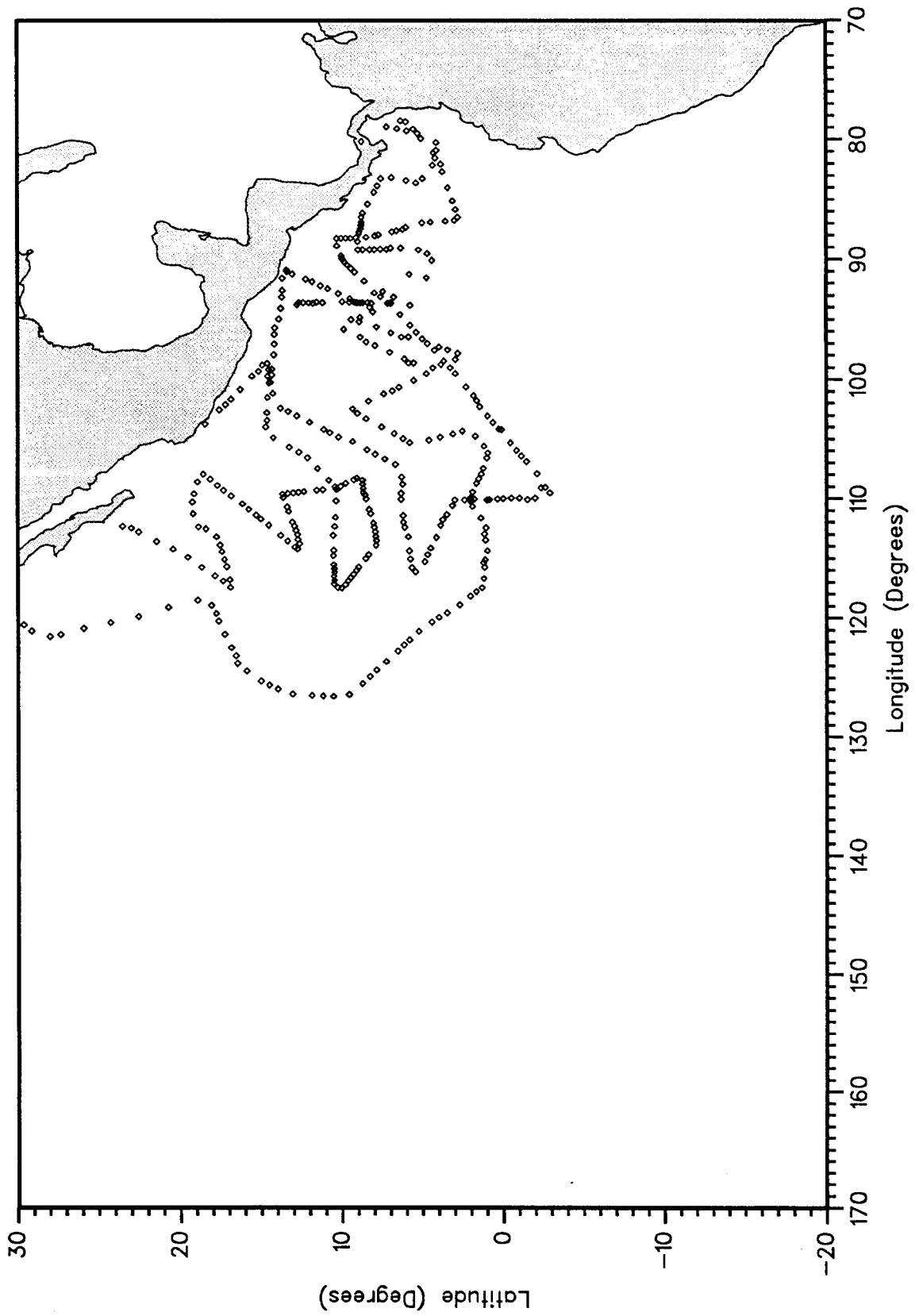


Figure 3. XBT deployments, Jordan, 28 July - 6 December, 1988.

Surface chlorophyll, MOPS88

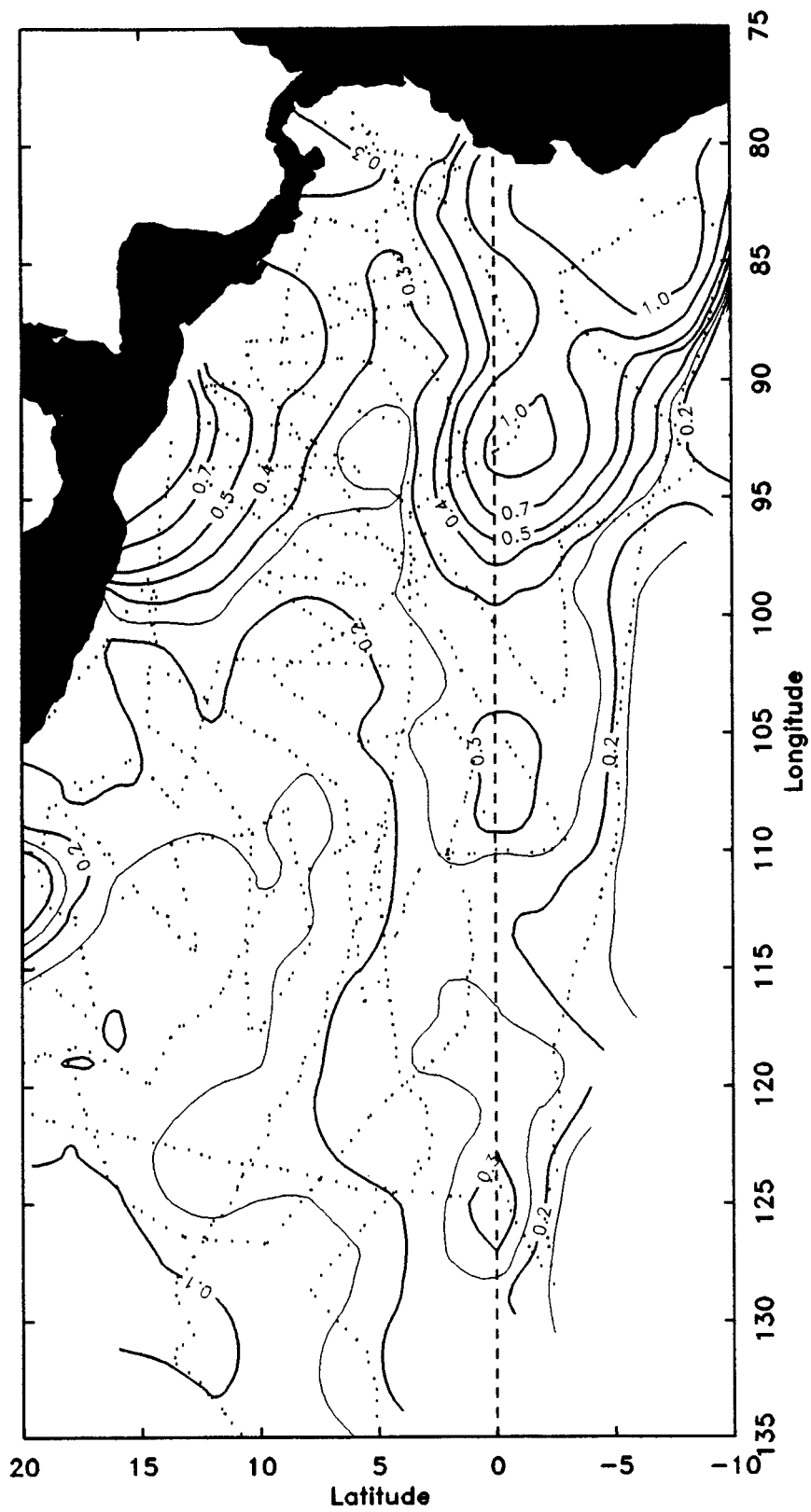


Figure 4. Surface chlorophyll (mg m^{-3}), Jordan and McArthur, 28 July - 6 December, 1988.

Integrated chlorophyll, MOPS88

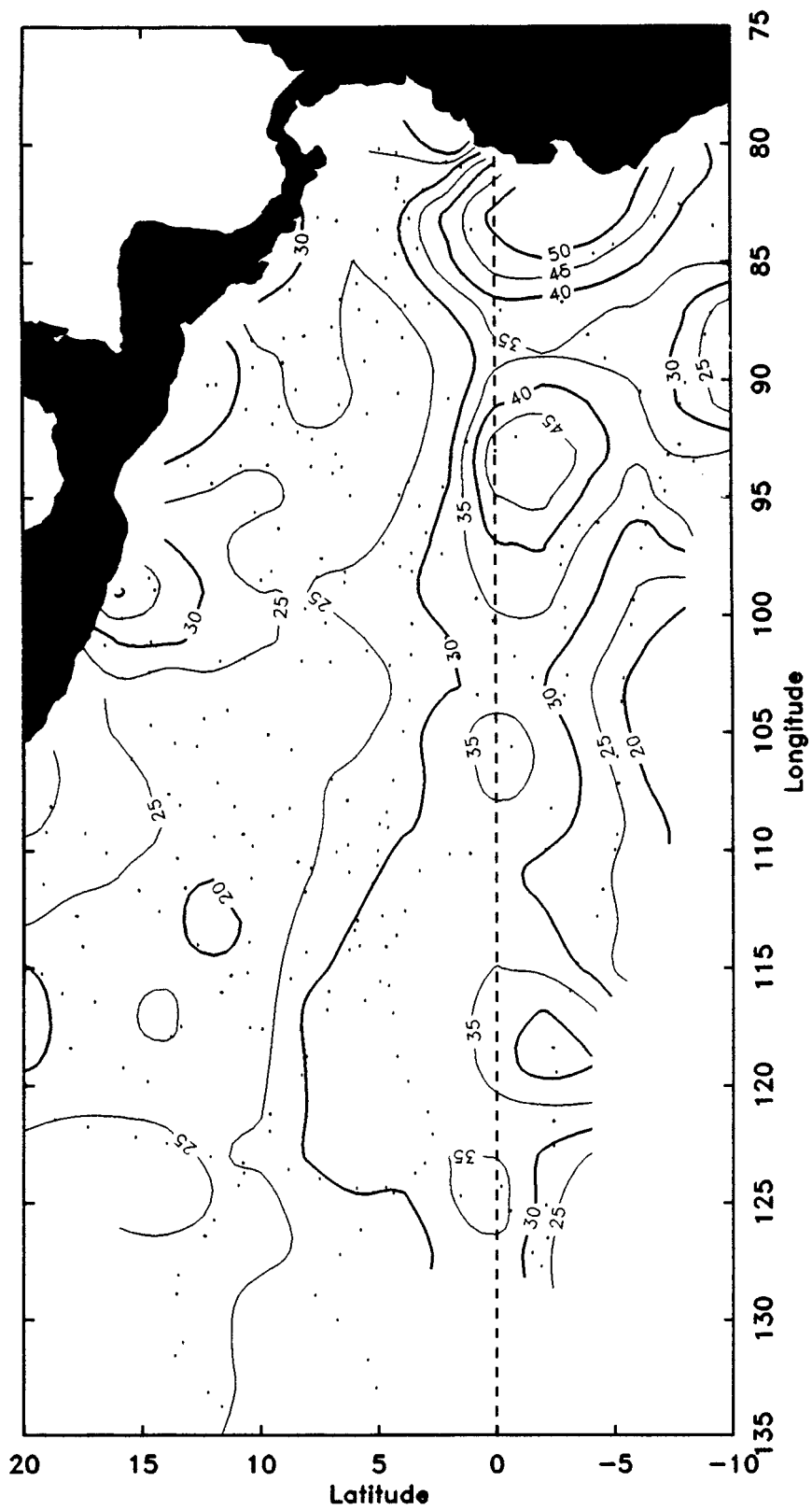


Figure 5. Integrated chlorophyll (mg m^{-2} , 0-150 m), Jordan and McArthur, 28 July - 6 December, 1988.

MOPS88 Leg 1 Acoustic Biomass: 29 July - 27 August

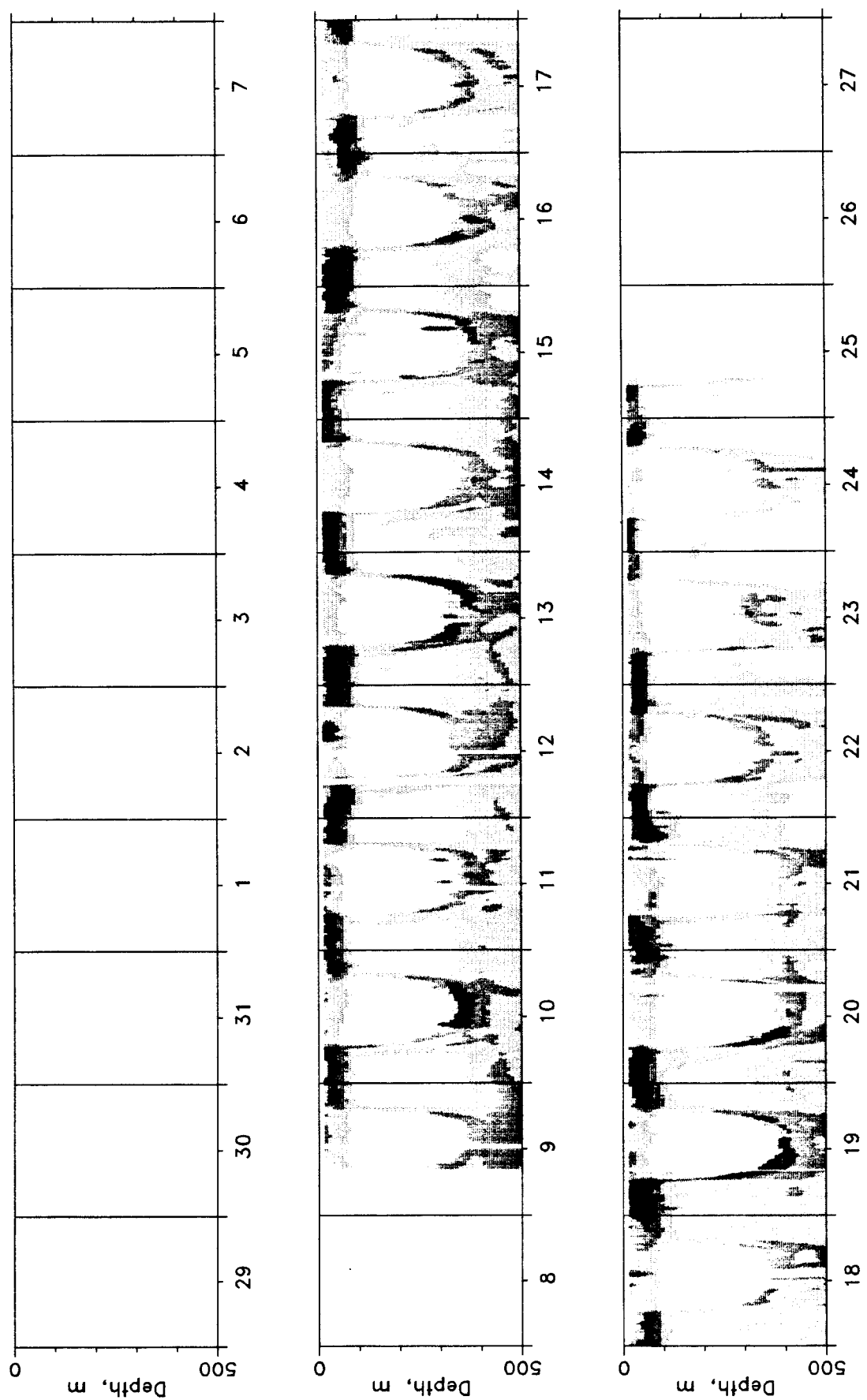


Figure 6a. Acoustic backscatter (relative intensity), Leg I, Jordan, 28 July - 26 August, 1988. Shading at 3dB intervals, starting at 3dB above background. Data are not displayed where bottom depth is < 500 m.

MOPS88 Leg 2 Acoustic Biomass: 1-30 September

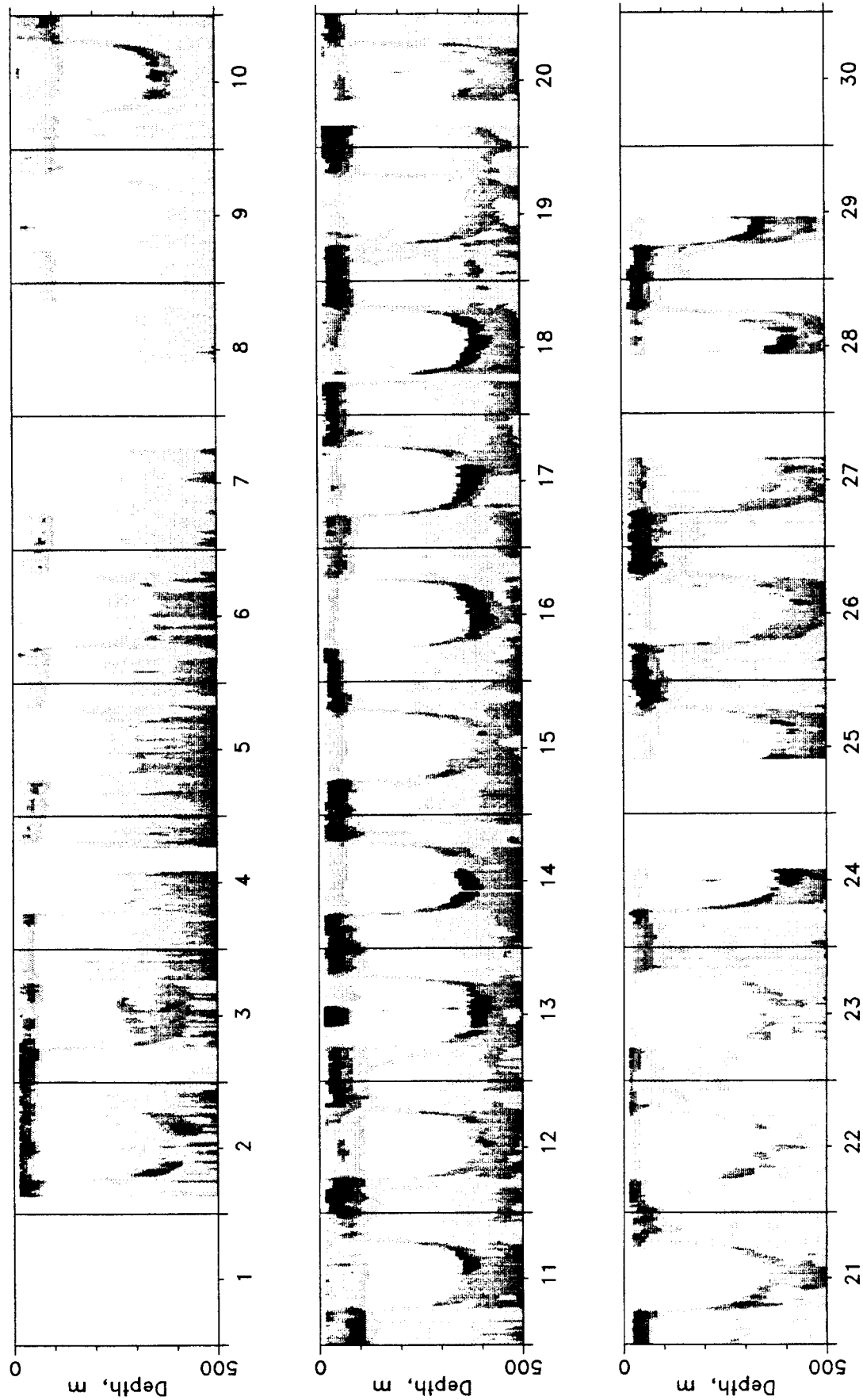


Figure 6b. Acoustic backscatter (relative intensity), Leg II, Jordan, 1 - 30 September, 1988. Shading at 3dB intervals, starting at 3dB above background. Data are not displayed where bottom depth is < 500 m.

MOPS88 Leg 3 Acoustic Biomass: 5 October - 3 November

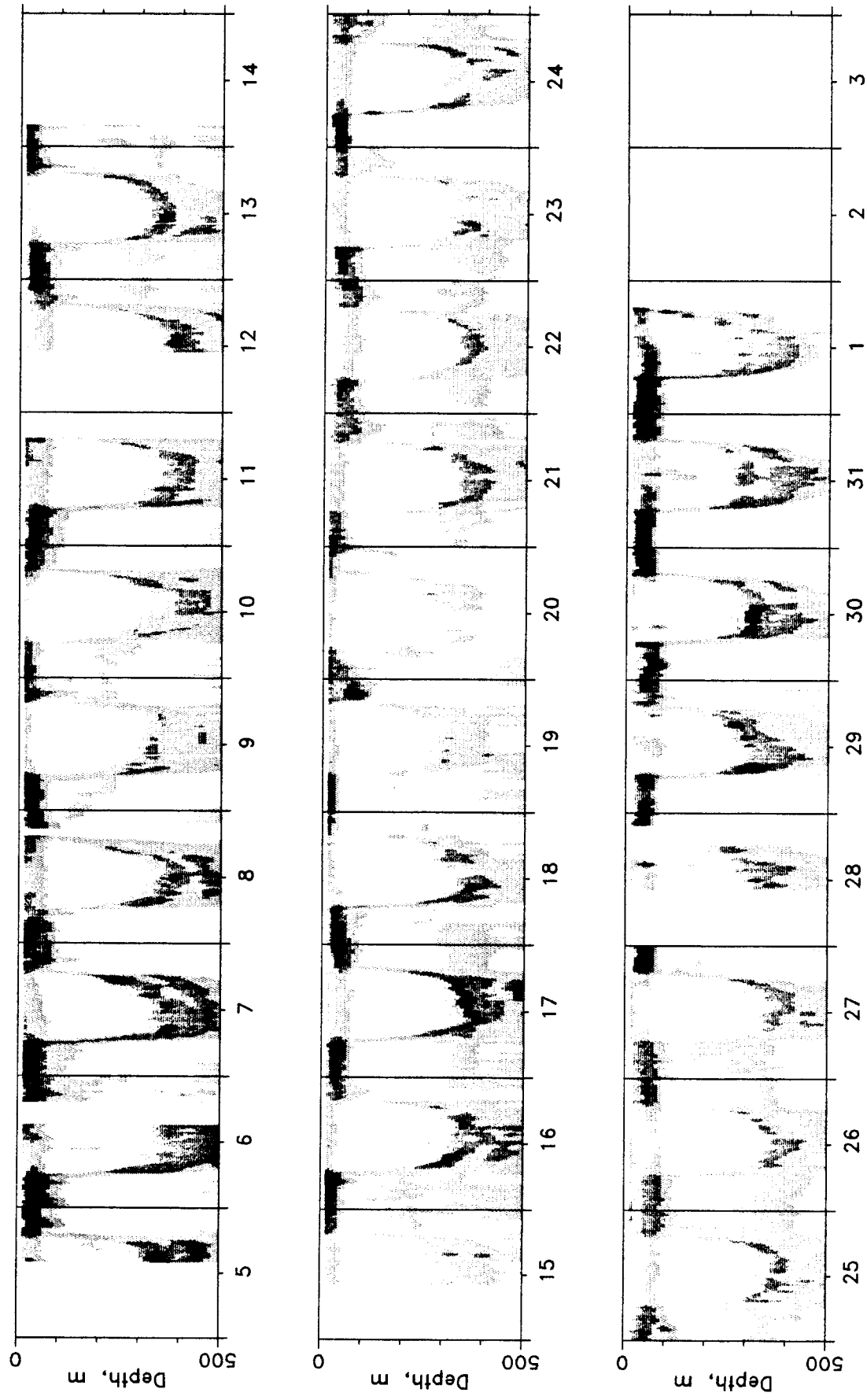


Figure 6c. Acoustic backscatter (relative intensity), Leg III, Jordan, 4 October - 2 November, 1988. Shading at 3dB intervals, starting at 3dB above background. Data are not displayed where bottom depth is < 500 m.

MOPS88 Leg 4 Acoustic Biomass: 8 November - 7 December

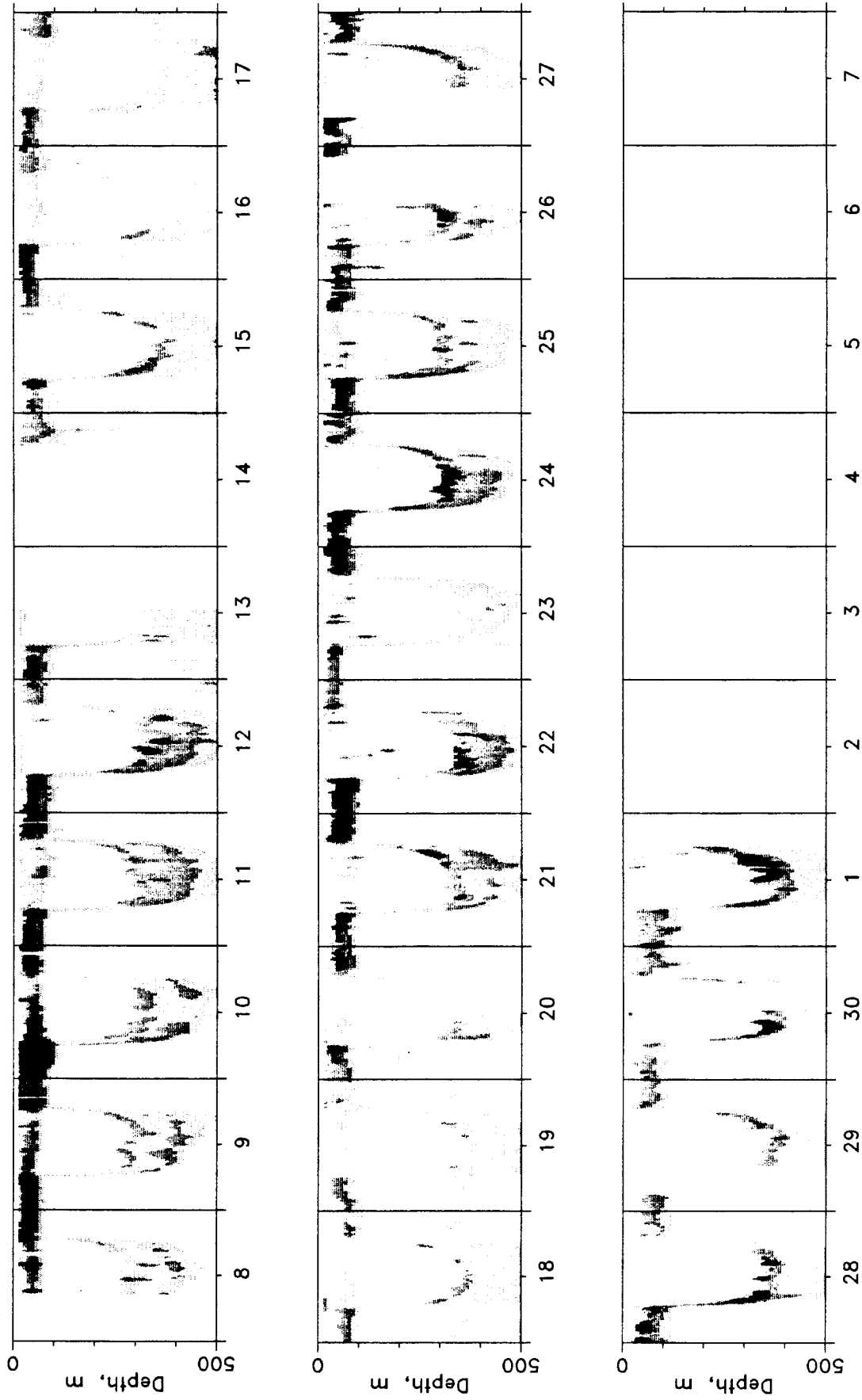


Figure 6d. Acoustic backscatter (relative intensity), Leg IV, Jordan, 7 November - 6 December, 1988. Shading at 3dB intervals, starting at 3dB above background. Data are not displayed where bottom depth is < 500 m.

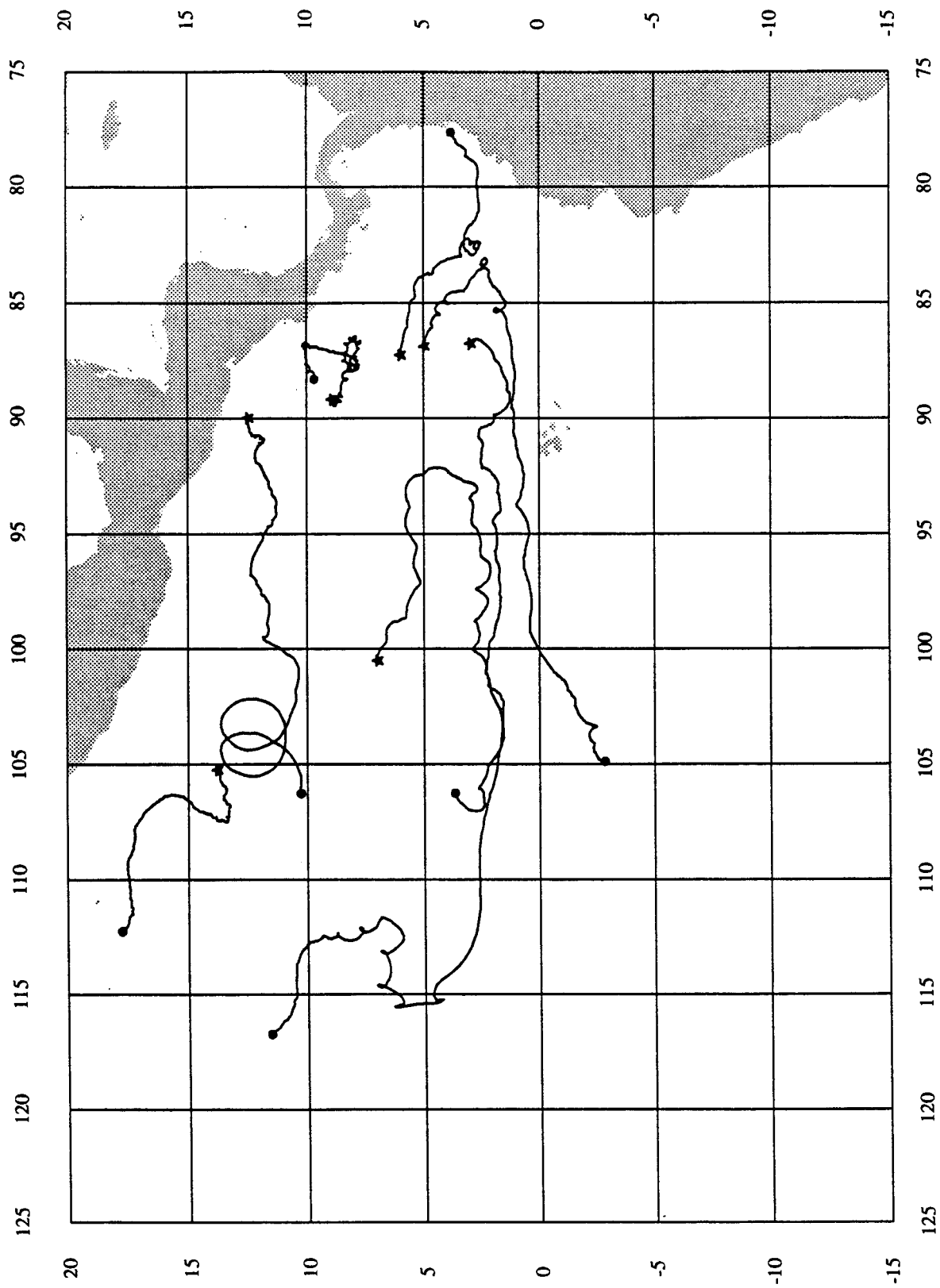


Figure 7. Tracks of seven drifting buoys, Jordan, 28 July - 6 December, 1988.

- * Location of buoy deployment
- o Location of last signal from buoy

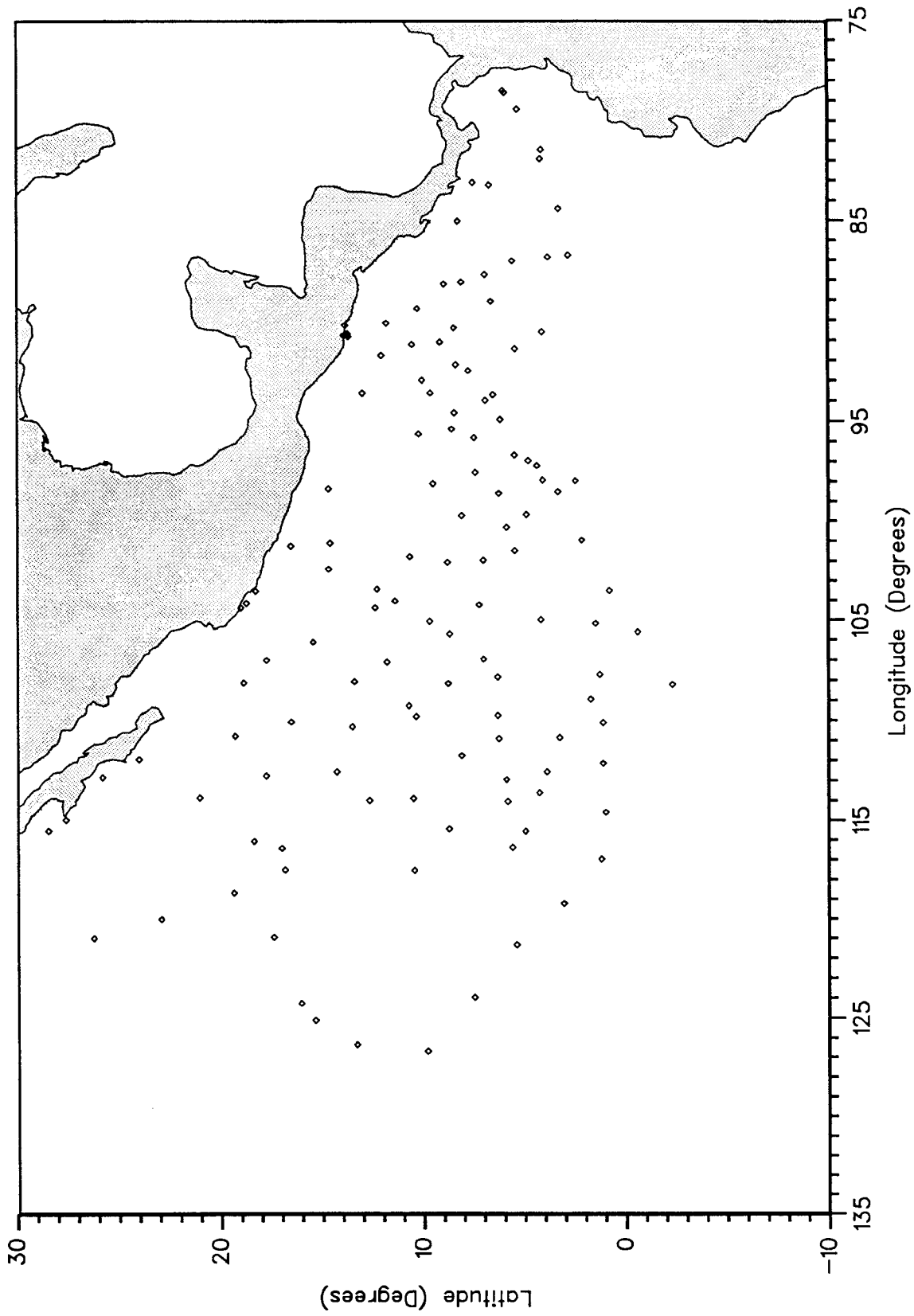


Figure 8. Locations of dip-net stations, Jordan, 28 July - 6 December, 1988.

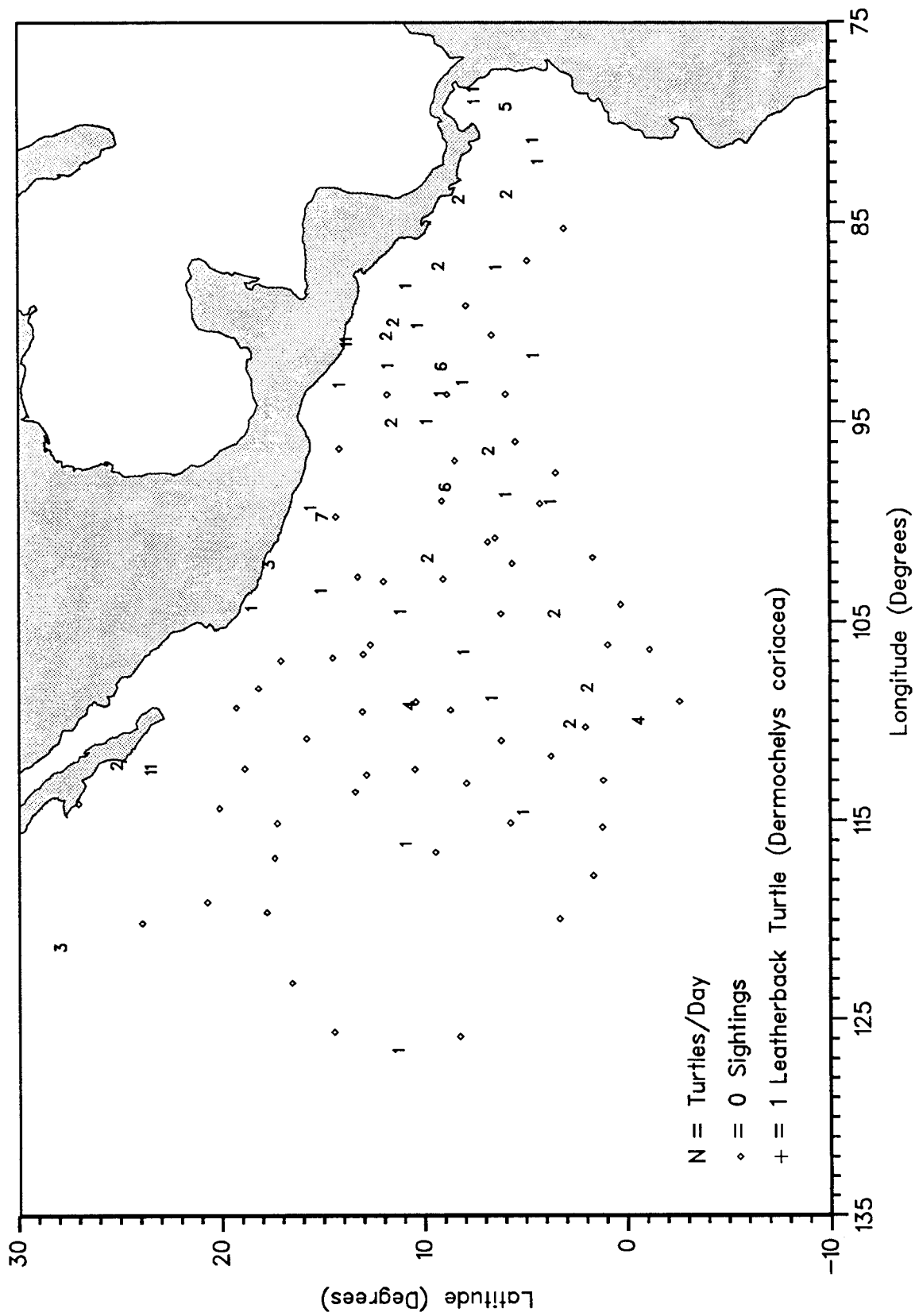


Figure 9. Locations of turtle sightings, Jordan, 28 July - 6 December, 1988.

APPENDIX A

Station No.	1-001	Date - GMT	31 JUL 88
Station Name	D881-001	Time - GMT	0426
Latitude	26.15.1 N	Date - LOC	30 JUL 88
Longitude	120.59.8 W	Time - LOC	2126

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.00	--	0.15	0.03	--
20	20.53	33.79	0.20	0.07	--
40	19.47	33.81	0.28	0.15	--
60	18.15	33.71	0.15	0.17	--
80	16.48	33.59	0.12	0.09	--
100	15.44	33.57	0.06	0.11	--
125	14.47	33.73	0.04	0.12	--
150	12.80	33.72	--	--	--
200	10.75	33.95	--	--	--
350	8.34	34.27	--	--	--
500	6.72	34.32	--	--	--
1000	3.99	34.45	--	--	--

Station No.	1-002	Date - GMT	1 AUG 88
Station Name	D881-002	Time - GMT	0357
Latitude	22.56.9 N	Date - LOC	31 JUL 88
Longitude	120. 2.5 W	Time - LOC	2057

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.10	--	0.11	0.01	--
20	20.66	33.74	0.10	0.02	--
40	22.05	34.49	0.13	0.04	--
60	21.12	34.44	0.21	0.06	--
80	18.79	34.14	0.13	0.11	--
100	17.61	34.13	0.09	0.14	--
125	15.66	34.03	0.13	0.29	--
150	13.67	33.97	0.07	0.15	--
200	11.33	34.17	--	--	--
350	9.27	34.45	--	--	--
500	7.25	34.42	--	--	--
1000	4.27	33.48	--	--	--

Station No.	1-003	Date - GMT	2 AUG 88
Station Name	D881-003	Time - GMT	0348
Latitude	19.21.9 N	Date - LOC	1 AUG 88
Longitude	118.39.9 W	Time - LOC	2048

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.70	--	0.11	0.05	--
20	24.77	34.56	0.09	0.02	--
40	24.31	34.55	0.10	0.03	--
60	22.05	34.46	0.18	0.07	--
80	19.80	34.20	0.26	0.11	--
100	17.70	34.02	0.20	0.28	--
125	15.22	34.03	0.21	0.27	--
150	13.35	34.29	0.05	0.10	--
200	11.65	34.51	--	--	--
350	9.85	34.60	--	--	--
500	7.67	34.49	--	--	--
1000	4.38	34.51	--	--	--

Station No.	1-004	Date - GMT	3 AUG 88
Station Name	D881-004	Time - GMT	0338
Latitude	17.25.1 N	Date - LOC	2 AUG 88
Longitude	120.57.1 W	Time - LOC	2038

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.90	--	0.09	0.02	--
20	25.84	34.50	--	--	--
40	23.65	34.64	0.19	0.00	--
60	22.05	34.47	0.16	0.06	--
80	19.49	34.24	0.27	0.12	--
100	17.86	34.18	0.24	0.24	--
125	14.91	34.02	0.18	0.29	--
150	13.04	34.12	0.08	0.17	--
200	11.40	34.43	--	--	--
350	9.49	34.56	--	--	--
500	7.47	34.48	--	--	0.30
1000	4.34	34.52	--	--	0.56

Station No.	1-005	Date - GMT	3 AUG 88
Station Name	D881-005	Time - GMT	1153
Latitude	16.58.2 N	Date - LOC	3 AUG 88
Longitude	122. 7.1 W	Time - LOC	0453

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.12	0.05	--
20	26.87	34.18	0.14	0.03	5.46
40	26.68	34.19	0.14	0.02	--
60	24.36	34.34	0.16	0.16	--
80	23.16	34.47	0.30	0.09	--
100	21.22	34.53	0.23	0.25	--
125	20.08	34.61	0.15	0.31	--
150	16.48	34.29	0.08	0.17	--
200	12.90	34.48	--	--	--
350	9.24	34.53	--	--	--
500	7.81	34.51	--	--	0.32
1000	4.48	34.52	--	--	0.56

Station No.	1-006	Date - GMT	4 AUG 88
Station Name	D881-006	Time - GMT	0359
Latitude	16. 3.9 N	Date - LOC	3 AUG 88
Longitude	124.14.5 W	Time - LOC	2059

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.09	0.01	--
20	26.74	34.40	0.08	0.01	5.43
40	24.90	34.55	0.11	0.02	--
60	22.62	34.58	0.20	0.08	--
80	20.73	34.68	0.25	0.11	--
100	20.14	34.78	--	--	--
125	17.86	34.43	0.20	0.32	--
150	15.10	34.20	0.08	0.16	--
200	11.23	34.25	--	--	--
350	9.16	34.51	--	--	--
500	7.18	34.46	--	--	0.28
1000	4.36	34.53	--	--	0.59

Station No.	1-007	Date - GMT	4 AUG 88
Station Name	D881-007	Time - GMT	1154
Latitude	15.21.7 N	Date - LOC	4 AUG 88
Longitude	125. 5.8 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.10	0.03	--
20	26.94	34.26	0.10	0.02	5.45
40	25.80	34.35	0.18	0.05	--
60	24.27	34.53	0.26	0.19	--
80	21.35	34.51	0.17	0.20	--
100	19.25	34.47	0.18	0.30	--
125	17.50	34.48	0.12	0.16	--
150	14.44	34.32	0.03	0.05	--
200	11.87	34.43	--	--	--
350	9.56	34.59	--	--	--
500	7.78	34.51	--	--	0.30
1000	4.32	34.53	--	--	0.65

Station No.	1-008	Date - GMT	5 AUG 88
Station Name	D881-008	Time - GMT	0352
Latitude	13.18.8 N	Date - LOC	4 AUG 88
Longitude	126.21.2 W	Time - LOC	2052

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.90	--	0.15	0.04	--
20	27.64	33.73	0.14	0.07	5.45
40	27.32	33.90	0.36	0.11	--
60	20.81	34.49	0.32	0.33	--
80	16.49	34.60	0.20	0.22	--
100	13.51	34.46	0.06	0.09	--
125	12.70	34.58	0.02	0.03	--
150	12.07	34.62	0.01	0.02	--
200	11.55	34.73	--	--	--
350	9.17	34.60	--	--	--
500	7.47	--	--	--	0.22
1000	4.25	34.55	--	--	0.81

Station No.	1-009	Date - GMT	5 AUG 88
Station Name	D881-009	Time - GMT	1153
Latitude	12.16.0 N	Date - LOC	5 AUG 88
Longitude	126.30.2 W	Time - LOC	0453

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.10	0.04	--
20	26.95	33.86	0.14	0.02	5.41
40	25.18	34.17	0.17	0.05	--
60	21.50	34.67	0.23	0.14	--
80	19.52	34.54	0.50	0.43	--
100	15.91	34.27	0.20	0.21	--
125	14.40	34.88	0.04	0.14	--
150	12.75	34.77	0.01	0.10	--
200	11.61	34.76	--	--	--
350	9.61	34.65	--	--	--
500	7.57	34.54	--	--	0.23
1000	4.24	34.55	--	--	0.92

Station No.	1-010	Date - GMT	6 AUG 88
Station Name	D881-010	Time - GMT	0341
Latitude	9.49.7 N	Date - LOC	5 AUG 88
Longitude	126.41.0 W	Time - LOC	2041

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.13	0.04	--
20	27.36	33.84	0.13	0.04	5.56
40	27.33	33.85	0.16	0.06	--
60	27.01	34.08	0.26	0.13	--
80	22.98	34.44	0.34	0.27	--
100	16.73	34.55	0.24	0.35	--
125	13.19	34.69	0.02	0.25	--
150	12.41	34.76	0.03	0.07	--
200	11.46	34.76	--	--	--
350	10.06	34.70	--	--	--
500	8.53	34.61	--	--	0.43
1000	4.47	34.55	--	--	1.03

Station No.	1-011	Date - GMT	6 AUG 88
Station Name	D881-011	Time - GMT	1150
Latitude	9. 2.3 N	Date - LOC	6 AUG 88
Longitude	125.51.5 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.10	0.02	--
20	27.24	33.65	0.10	0.01	5.50
40	27.12	33.86	0.13	0.07	--
60	24.98	34.34	0.35	0.13	--
80	17.94	34.51	0.33	0.42	--
100	14.05	34.47	0.17	0.19	--
125	13.18	34.75	0.04	0.30	--
150	12.47	34.77	0.02	0.06	--
200	11.60	34.76	--	--	--
350	10.09	34.70	--	--	--
500	8.38	34.60	--	--	0.37
1000	4.45	34.56	--	--	1.01

Station No.	1-012	Date - GMT	7 AUG 88
Station Name	D881-012	Time - GMT	0340
Latitude	7.31.0 N	Date - LOC	6 AUG 88
Longitude	123.57.5 W	Time - LOC	2040

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.70	--	0.11	0.05	--
20	27.54	33.75	0.11	0.06	5.35
40	26.03	34.44	0.31	0.13	--
60	21.44	34.83	0.26	0.28	--
80	17.42	34.70	0.39	0.33	--
100	13.94	34.71	0.10	0.13	--
125	13.20	34.82	0.05	0.10	--
150	12.14	34.76	0.02	0.05	--
200	10.82	34.70	--	--	--
350	9.81	34.69	--	--	--
500	8.42	34.63	--	--	0.32
1000	4.53	34.56	--	--	1.02

Station No.	1-013	Date - GMT	7 AUG 88
Station Name	D881-013	Time - GMT	1151
Latitude	6.47.3 N	Date - LOC	7 AUG 88
Longitude	123. 4.9 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.60	--	0.19	0.07	--
20	26.50	34.36	0.17	0.07	5.50
40	26.52	34.38	0.18	0.09	--
60	23.80	34.80	0.28	0.19	--
80	19.54	34.87	0.20	0.26	--
100	14.84	34.73	0.13	0.29	--
125	13.22	34.78	0.08	0.14	--
150	12.20	34.76	0.02	0.03	--
200	11.47	34.77	--	--	--
350	9.97	34.70	--	--	--
500	8.46	34.63	--	--	0.39
1000	4.17	34.57	--	--	1.17

Station No.	1-014	Date - GMT	8 AUG 88
Station Name	D881-014	Time - GMT	0340
Latitude	5.25.0 N	Date - LOC	7 AUG 88
Longitude	121.18.9 W	Time - LOC	2040

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.34	0.07	--
20	26.92	34.31	0.32	0.06	5.21
40	26.52	34.43	0.44	0.20	--
60	22.80	34.71	0.40	0.34	--
80	19.92	34.84	0.11	0.07	--
100	15.84	34.73	0.07	0.08	--
125	13.04	34.76	0.02	0.04	--
150	12.34	34.82	0.01	0.02	--
200	11.15	34.74	--	--	--
350	9.45	34.68	--	--	--
500	7.98	34.62	--	--	0.27
1000	4.44	34.56	--	--	1.50

Station No.	1-015	Date - GMT	8 AUG 88
Station Name	D881-015	Time - GMT	1157
Latitude	4.41.3 N	Date - LOC	8 AUG 88
Longitude	120.38.0 W	Time - LOC	0457

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.50	--	0.34	0.12	--
20	24.37	34.63	0.33	0.11	5.08
40	24.34	34.64	0.35	0.12	--
60	24.24	34.64	0.41	0.11	--
80	24.22	34.64	0.31	0.15	--
100	22.78	34.79	0.20	0.14	--
125	16.10	34.77	0.08	0.11	--
150	12.61	34.64	0.02	0.03	--
200	10.85	34.68	--	--	--
350	9.58	34.68	--	--	--
500	7.75	34.61	--	--	0.32
1000	4.36	34.56	--	--	1.29

Station No.	1-016	Date - GMT	9 AUG 88
Station Name	D881-016	Time - GMT	0343
Latitude	3. 3.9 N	Date - LOC	8 AUG 88
Longitude	119.13.0 W	Time - LOC	2043

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.60	--	0.29	0.09	--
20	24.60	34.60	0.26	0.10	5.13
40	20.92	34.73	0.33	0.21	--
60	16.45	34.84	0.26	0.24	--
80	14.18	34.94	0.17	0.28	--
100	13.90	34.94	0.10	0.12	--
125	13.63	34.94	0.06	0.07	--
150	13.34	34.92	0.04	0.03	--
200	12.60	34.88	--	--	--
350	10.30	34.73	--	--	--
500	7.93	34.62	--	--	0.99
1000	4.44	34.56	--	--	1.78

Station No.	1-017	Date - GMT	9 AUG 88
Station Name	D881-017	Time - GMT	1154
Latitude	2.11.0 N	Date - LOC	9 AUG 88
Longitude	118.24.6 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	21.80	--	0.28	0.08	--
20	21.54	34.95	0.27	0.09	4.93
40	21.10	34.99	0.33	0.19	--
60	20.13	34.91	0.24	0.26	--
80	15.52	34.97	0.24	0.17	--
100	14.86	34.96	0.19	0.11	--
125	13.53	34.92	0.11	0.10	--
150	13.17	34.92	0.03	0.04	--
200	12.47	34.88	--	--	--
350	10.32	34.74	--	--	--
500	8.09	34.63	--	--	1.20
1000	4.46	34.56	--	--	1.96

Station No.	1-018	Date - GMT	10 AUG 88
Station Name	D881-018	Time - GMT	0342
Latitude	1.12.5 N	Date - LOC	9 AUG 88
Longitude	116.58.1 W	Time - LOC	2042

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	22.50	--	0.27	0.09	--
20	20.86	34.85	0.31	0.15	4.65
40	20.03	34.96	0.44	0.28	--
60	15.52	34.97	0.21	0.27	--
80	14.33	34.92	0.15	0.21	--
100	14.24	34.92	0.15	0.21	--
125	13.60	34.88	0.06	0.08	--
150	13.18	34.89	0.04	0.04	--
200	12.87	34.90	--	--	--
350	10.60	34.76	--	--	--
500	8.99	34.68	--	--	0.79
1000	4.56	34.55	--	--	1.96

Station No.	1-019	Date - GMT	10 AUG 88
Station Name	D881-019	Time - GMT	1151
Latitude	1.10.5 N	Date - LOC	10 AUG 88
Longitude	116. 6.1 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	22.70	--	0.31	0.07	--
20	22.30	34.66	0.28	0.13	4.89
40	20.36	34.75	0.22	0.22	--
60	17.55	34.97	0.24	0.20	--
80	15.33	34.94	0.27	0.18	--
100	14.95	34.91	0.20	0.34	--
125	14.34	34.91	0.17	0.20	--
150	13.54	34.92	0.06	0.05	--
200	12.94	34.91	--	--	--
350	10.40	34.75	--	--	--
500	8.38	34.65	--	--	--
1000	4.31	34.56	--	--	2.01

Station No.	1-020	Date - GMT	11 AUG 88
Station Name	D881-020	Time - GMT	0340
Latitude	0.59.8 N	Date - LOC	10 AUG 88
Longitude	114.36.3 W	Time - LOC	2040

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.90	--	0.20	0.09	--
20	23.46	34.48	0.25	0.05	5.17
40	21.74	34.84	0.19	0.17	--
60	16.94	35.10	0.24	0.26	--
80	14.98	34.97	0.21	0.26	--
100	14.62	34.97	0.20	0.29	--
125	13.95	34.95	0.04	0.08	--
150	13.27	34.92	0.01	0.02	--
200	12.28	34.85	--	--	--
350	10.35	34.73	--	--	--
500	7.40	34.59	--	--	1.32
1000	4.48	34.55	--	--	1.91

Station No.	1-021	Date - GMT	11 AUG 88
Station Name	D881-021	Time - GMT	1152
Latitude	1. 3.7 N	Date - LOC	11 AUG 88
Longitude	113.48.3 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.32	0.10	--
20	23.42	34.52	0.29	0.08	5.36
40	21.33	34.89	0.25	0.08	--
60	15.34	34.97	0.26	0.32	--
80	14.58	34.94	0.17	0.30	--
100	14.24	34.96	0.12	0.19	--
125	13.82	34.95	0.04	0.06	--
150	13.45	34.94	0.01	0.03	--
200	12.85	34.90	--	--	--
350	10.25	34.73	--	--	--
500	7.43	34.59	--	--	1.39
1000	4.56	34.55	--	--	1.97

Station No.	1-022	Date - GMT	12 AUG 88
Station Name	D881-022	Time - GMT	0324
Latitude	1. 7.4 N	Date - LOC	11 AUG 88
Longitude	112. 7.9 W	Time - LOC	2024

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	21.10	--	0.26	0.07	--
20	20.59	34.97	0.25	0.07	4.99
40	20.52	34.96	0.26	0.13	--
60	17.66	34.99	0.25	0.14	--
80	15.00	34.95	0.28	0.36	--
100	14.44	34.95	0.11	0.31	--
125	13.70	34.94	0.07	0.06	--
150	13.13	34.91	0.01	0.04	--
200	12.32	34.87	--	--	--
350	10.54	34.72	--	--	--
500	7.69	34.60	--	--	1.14
1000	4.49	34.54	--	--	2.04

Station No.	1-023	Date - GMT	12 AUG 88
Station Name	D881-023	Time - GMT	2156
Latitude	2. 6.2 N	Date - LOC	12 AUG 88
Longitude	110.10.3 W	Time - LOC	1556

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.32	0.10	--
20	21.36	34.65	0.29	0.14	4.77
40	19.97	34.80	0.36	0.10	--
60	18.97	34.86	0.39	0.27	--
80	15.50	34.94	0.30	0.40	--
100	13.98	34.96	0.14	0.31	--
125	13.47	34.92	0.04	0.04	--
150	13.08	34.90	0.01	0.04	--
200	12.44	34.86	--	--	--
350	9.03	34.67	--	--	--
500	7.76	34.61	--	--	1.09
1000	4.54	34.55	--	--	1.87

Station No.	1-024	Date - GMT	13 AUG 88
Station Name	D881-024	Time - GMT	1054
Latitude	1.44.1 N	Date - LOC	13 AUG 88
Longitude	108.57.3 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.40	--	0.30	0.10	--
20	23.29	34.49	0.26	0.13	5.27
40	19.99	34.79	0.35	0.30	--
60	17.44	34.91	0.35	0.40	--
80	15.86	34.96	0.16	0.38	--
100	14.26	34.95	0.15	0.30	--
125	13.54	34.94	0.05	0.07	--
150	12.64	34.89	0.01	0.03	--
200	12.30	34.87	--	--	--
350	9.54	34.70	--	--	--
500	8.13	34.62	--	--	0.94
1000	4.29	34.56	--	--	1.71

Station No.	1-025	Date - GMT	14 AUG 88
Station Name	D881-025	Time - GMT	0226
Latitude	1.16.7 N	Date - LOC	13 AUG 88
Longitude	107.43.3 W	Time - LOC	2026

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.50	--	0.36	0.08	--
20	23.49	34.47	0.38	0.07	5.28
40	19.60	34.77	0.71	0.39	--
60	17.49	34.91	0.46	0.57	--
80	15.35	34.96	0.24	0.43	--
100	14.48	34.97	0.13	0.39	--
125	13.88	34.95	0.12	0.07	--
150	13.44	34.93	0.04	0.05	--
200	12.70	34.90	--	--	--
350	10.10	34.72	--	--	--
500	8.71	34.66	--	--	0.72
1000	4.34	34.56	--	--	1.78

Station No.	1-026	Date - GMT	14 AUG 88
Station Name	D881-026	Time - GMT	1052
Latitude	1. 4.9 N	Date - LOC	14 AUG 88
Longitude	106.54.6 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.50	--	0.30	0.13	--
20	23.39	34.51	0.31	0.10	5.31
40	20.61	34.71	0.48	0.20	--
60	16.80	34.96	0.47	0.55	--
80	14.61	34.98	0.15	0.27	--
100	14.26	34.97	0.10	0.20	--
125	13.71	34.94	0.06	0.09	--
150	13.47	34.93	0.06	0.05	--
200	12.77	34.90	--	--	--
350	10.47	34.74	--	--	--
500	8.92	34.67	--	--	0.69
1000	4.30	34.56	--	--	1.97

Station No.	1-027	Date - GMT	15 AUG 88
Station Name	D881-027	Time - GMT	0223
Latitude	1.29.4 N	Date - LOC	14 AUG 88
Longitude	105.11.9 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.50	--	0.38	0.11	--
20	20.70	34.80	0.32	0.16	4.85
40	19.58	34.82	0.68	0.46	--
60	16.43	34.96	0.41	0.48	--
80	14.86	34.99	0.16	0.24	--
100	14.68	34.97	0.11	0.18	--
125	14.18	34.98	0.07	0.14	--
150	13.67	34.94	0.02	0.04	--
200	13.05	34.91	--	--	--
350	10.43	34.73	--	--	--
500	8.03	34.62	--	--	1.03
1000	4.39	34.56	--	--	1.81

Station No.	1-028	Date - GMT	15 AUG 88
Station Name	D881-028	Time - GMT	1051
Latitude	2. 3.1 N	Date - LOC	15 AUG 88
Longitude	104.12.6 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.32	0.15	--
20	23.02	34.47	0.31	0.11	5.35
40	19.32	34.94	0.42	0.28	--
60	18.26	34.85	0.60	0.39	--
80	16.78	34.82	0.37	0.33	--
100	14.62	34.97	0.15	0.18	--
125	14.09	34.97	0.05	0.11	--
150	13.81	34.95	0.02	0.05	--
200	13.20	34.93	--	--	--
350	10.43	34.73	--	--	--
500	8.17	34.63	--	--	1.01
1000	4.38	34.57	--	--	1.66

Station No.	1-029	Date - GMT	16 AUG 88
Station Name	D881-029	Time - GMT	0224
Latitude	4.11.1 N	Date - LOC	15 AUG 88
Longitude	104.59.1 W	Time - LOC	2024

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.00	--	0.33	0.09	--
20	25.85	34.00	0.32	0.11	5.27
40	24.44	34.48	0.47	0.26	--
60	22.38	34.66	0.34	0.42	--
80	17.50	34.76	0.20	0.33	--
100	14.17	34.79	0.04	0.12	--
125	12.68	34.76	0.01	0.04	--
150	12.05	34.74	0.00	0.03	--
200	10.96	34.72	--	--	--
350	9.39	34.68	--	--	--
500	7.88	34.62	--	--	0.32
1000	4.65	34.57	--	--	1.17

Station No.	1-030	Date - GMT	16 AUG 88
Station Name	D881-030	Time - GMT	1048
Latitude	5.23.4 N	Date - LOC	16 AUG 88
Longitude	105.19.5 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.20	--	0.24	0.08	--
20	26.12	33.80	0.26	0.07	5.17
40	25.74	34.09	0.42	0.12	--
60	24.10	34.36	0.31	0.23	--
80	17.55	34.96	0.20	0.45	--
100	14.05	34.84	0.09	0.17	--
125	13.02	34.86	0.01	0.04	--
150	12.63	34.85	0.00	0.03	--
200	11.54	34.78	--	--	--
350	9.49	34.69	--	--	--
500	7.39	34.96	--	--	0.25
1000	4.47	34.57	--	--	1.18

Station No.	1-031	Date - GMT	17 AUG 88
Station Name	D881-031	Time - GMT	0221
Latitude	7.14.1 N	Date - LOC	16 AUG 88
Longitude	104.14.9 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.60	--	0.26	0.06	--
20	26.51	33.71	0.25	0.07	5.19
40	26.50	33.71	0.26	0.09	--
60	26.30	33.86	0.30	0.31	--
80	19.66	34.63	0.31	0.52	--
100	16.08	34.72	0.14	0.42	--
125	13.26	34.81	0.03	0.09	--
150	12.52	34.81	0.01	0.02	--
200	11.80	34.78	--	--	--
350	10.05	34.71	--	--	--
500	7.91	34.61	--	--	0.18
1000	4.45	34.57	--	--	0.93

Station No.	1-032	Date - GMT	17 AUG 88
Station Name	D881-032	Time - GMT	1049
Latitude	8. 9.7 N	Date - LOC	17 AUG 88
Longitude	103.28.4 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.17	0.08	--
20	27.01	33.38	0.17	0.08	5.08
40	27.01	33.38	0.17	0.08	--
60	25.37	34.22	0.57	0.54	--
80	18.20	34.65	0.19	0.45	--
100	15.79	34.72	0.06	0.29	--
125	13.34	34.80	0.02	0.12	--
150	12.32	34.79	0.00	0.04	--
200	11.56	34.77	--	--	--
350	9.97	34.70	--	--	--
500	8.07	34.62	--	--	0.19
1000	4.18	34.57	--	--	0.97

Station No.	1-033	Date - GMT	18 AUG 88
Station Name	D881-033	Time - GMT	0222
Latitude	8.48.2 N	Date - LOC	17 AUG 88
Longitude	102. 5.3 W	Time - LOC	2022

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.14	0.06	--
20	26.96	33.35	0.14	0.07	5.34
40	26.90	33.35	0.18	0.09	--
60	26.65	34.04	0.40	0.25	--
80	18.94	34.65	0.22	0.45	--
100	14.21	34.83	0.10	0.15	--
125	13.01	34.78	0.00	0.04	--
150	12.31	34.79	0.00	0.03	--
200	11.54	34.76	--	--	--
350	10.00	34.70	--	--	--
500	7.85	34.58	--	--	0.43
1000	4.32	34.56	--	--	0.74

Station No.	1-034	Date - GMT	18 AUG 88
Station Name	D881-034	Time - GMT	1050
Latitude	7.44.6 N	Date - LOC	18 AUG 88
Longitude	101.30.5 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.15	0.10	--
20	26.76	33.48	0.16	0.06	5.35
40	26.75	33.49	0.19	0.13	--
60	25.58	34.27	0.31	0.36	--
80	18.83	34.79	0.19	0.49	--
100	14.37	34.83	0.08	0.22	--
125	13.23	34.84	0.04	0.08	--
150	12.61	34.81	0.00	0.05	--
200	11.91	34.82	--	--	--
350	10.06	34.71	--	--	--
500	8.11	34.62	--	--	0.30
1000	4.54	34.57	--	--	1.06

Station No.	1-035	Date - GMT	19 AUG 88
Station Name	D881-035	Time - GMT	0219
Latitude	5.52.7 N	Date - LOC	18 AUG 88
Longitude	100.19.7 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.28	0.10	--
20	26.22	33.85	0.28	0.11	5.23
40	26.22	33.88	0.26	0.12	--
60	23.96	34.35	0.43	0.26	--
80	20.68	34.71	0.18	0.22	--
100	19.86	34.85	0.18	0.19	--
125	14.41	34.78	0.10	0.13	--
150	12.86	34.77	0.04	0.06	--
200	12.13	34.81	--	--	--
350	10.28	34.72	--	--	--
500	8.42	34.64	--	--	0.23
1000	4.67	34.57	--	--	1.17

Station No.	1-036	Date - GMT	19 AUG 88
Station Name	D881-036	Time - GMT	1053
Latitude	4.52.9 N	Date - LOC	19 AUG 88
Longitude	99.40.7 W	Time - LOC	0453

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.10	--	0.39	0.13	--
20	24.90	34.04	0.37	0.07	5.27
40	23.32	34.35	0.30	0.13	--
60	22.78	34.37	0.31	0.16	--
80	20.22	34.62	0.21	0.22	--
100	17.25	34.92	0.12	0.21	--
125	14.44	34.84	0.09	0.25	--
150	13.30	34.87	0.03	0.06	--
200	12.29	34.82	--	--	--
350	10.15	34.71	--	--	--
500	8.32	34.64	--	--	0.36
1000	4.73	34.56	--	--	1.37

Station No.	1-037	Date - GMT	20 AUG 88
Station Name	D881-037	Time - GMT	0223
Latitude	3.19.8 N	Date - LOC	19 AUG 88
Longitude	98.31.8 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.60	--	0.34	0.14	--
20	24.48	34.10	0.33	0.16	5.40
40	23.71	34.24	0.41	0.17	--
60	21.31	34.49	0.28	0.19	--
80	19.25	34.85	0.21	0.15	--
100	14.79	34.97	0.09	0.23	--
125	14.34	34.96	0.06	0.20	--
150	13.97	34.97	0.03	0.09	--
200	13.37	34.93	--	--	--
350	10.60	34.73	--	--	--
500	8.03	34.63	--	--	0.43
1000	4.78	34.56	--	--	1.55

Station No.	1-038	Date - GMT	20 AUG 88
Station Name	D881-038	Time - GMT	1049
Latitude	2.26.6 N	Date - LOC	20 AUG 88
Longitude	97.58.8 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.50	--	0.31	0.14	--
20	23.37	34.30	0.23	0.20	5.21
40	23.08	34.33	0.31	0.29	--
60	20.72	34.64	0.25	0.19	--
80	16.74	34.98	0.25	0.50	--
100	14.35	34.97	0.12	0.16	--
125	14.03	34.97	0.01	0.04	--
150	13.77	34.95	0.02	0.03	--
200	13.49	34.94	--	--	--
350	10.36	34.82	--	--	--
500	7.91	34.62	--	--	0.98
1000	4.48	34.57	--	--	1.48

Station No.	1-039	Date - GMT	21 AUG 88
Station Name	D881-039	Time - GMT	0220
Latitude	4.21.1 N	Date - LOC	20 AUG 88
Longitude	97.12.7 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.19	0.06	--
20	26.39	33.56	0.19	0.08	5.25
40	26.28	33.73	0.30	0.14	--
60	24.98	34.22	0.50	0.58	--
80	19.22	34.61	0.36	0.73	--
100	13.64	34.79	0.05	0.16	--
125	12.54	34.74	0.01	0.05	--
150	12.58	34.83	0.00	0.03	--
200	11.73	34.76	--	--	--
350	9.67	34.70	--	--	--
500	7.48	34.61	--	--	0.29
1000	4.56	34.56	--	--	1.57

Station No.	1-040	Date - GMT	21 AUG 88
Station Name	D881-040	Time - GMT	1050
Latitude	5.28.0 N	Date - LOC	21 AUG 88
Longitude	96.41.0 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.50	--	0.20	0.07	--
20	26.48	33.52	0.17	0.10	5.20
40	26.39	33.57	0.23	0.09	--
60	26.06	33.86	0.30	0.23	--
80	18.63	34.63	0.31	0.68	--
100	14.01	34.77	0.11	0.32	--
125	12.51	34.73	0.02	0.07	--
150	11.64	34.70	0.00	0.03	--
200	11.04	34.77	--	--	--
350	9.44	34.67	--	--	--
500	7.64	34.63	--	--	0.30
1000	4.62	34.58	--	--	1.16

Station No.	1-041	Date - GMT	22 AUG 88
Station Name	D881-041	Time - GMT	0222
Latitude	7.28.4 N	Date - LOC	21 AUG 88
Longitude	95.49.3 W	Time - LOC	2022

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.20	--	0.19	0.06	--
20	27.00	33.33	0.25	0.06	5.19
40	26.91	33.36	0.31	0.14	--
60	20.49	34.75	0.75	0.69	--
80	15.43	34.86	0.62	0.73	--
100	14.34	34.65	0.09	0.21	--
125	12.94	34.74	0.02	0.08	--
150	11.86	34.66	0.00	0.08	--
200	11.78	34.81	--	--	--
350	10.48	34.73	--	--	--
500	8.02	34.63	--	--	0.19
1000	4.65	34.57	--	--	0.99

Station No.	1-042	Date - GMT	22 AUG 88
Station Name	D881-042	Time - GMT	1050
Latitude	8.34.0 N	Date - LOC	22 AUG 88
Longitude	95.24.3 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.18	0.06	--
20	27.33	33.55	0.19	0.08	5.18
40	20.75	34.68	0.76	0.66	--
60	16.14	34.78	0.23	0.37	--
80	14.10	34.84	0.09	0.15	--
100	12.96	34.77	0.06	0.15	--
125	12.45	34.78	0.02	0.08	--
150	12.28	34.82	0.01	0.05	--
200	11.71	34.80	--	--	--
350	10.24	34.73	--	--	--
500	8.13	34.63	--	--	0.13
1000	4.64	34.58	--	--	0.91

Station No.	1-043	Date - GMT	23 AUG 88
Station Name	D881-043	Time - GMT	0221
Latitude	8.25.7 N	Date - LOC	22 AUG 88
Longitude	94.35.5 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.31	0.05	--
20	26.94	33.46	0.30	0.08	5.08
40	18.29	34.77	0.60	0.86	--
60	15.12	34.84	0.38	0.53	--
80	14.14	34.90	0.12	0.48	--
100	13.15	34.78	0.06	0.25	--
125	12.34	34.69	0.02	0.20	--
150	12.40	34.84	0.02	0.11	--
200	11.75	34.77	--	--	--
350	10.44	34.74	--	--	--
500	8.36	34.65	--	--	0.17
1000	4.71	34.57	--	--	0.83

Station No.	1-044	Date - GMT	23 AUG 88
Station Name	D881-044	Time - GMT	1051
Latitude	8. 0.4 N	Date - LOC	23 AUG 88
Longitude	94.10.8 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.27	0.14	--
20	26.99	33.55	0.29	0.12	4.98
40	17.36	34.75	0.61	0.53	--
60	14.36	34.77	0.25	0.24	--
80	13.90	34.65	0.09	0.16	--
100	13.71	34.90	0.06	0.09	--
125	13.51	34.92	0.02	0.08	--
150	13.23	34.91	0.02	0.09	--
200	12.60	34.86	--	--	--
350	10.57	34.75	--	--	--
500	8.41	34.64	--	--	0.26
1000	4.72	34.57	--	--	0.98

Station No.	1-045	Date - GMT	24 AUG 88
Station Name	D881-045	Time - GMT	0220
Latitude	10. 2.1 N	Date - LOC	23 AUG 88
Longitude	92.58.9 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.47	0.19	--
20	21.58	34.42	1.67	0.49	4.55
40	16.04	34.86	0.79	0.64	--
60	14.32	34.89	0.06	0.18	--
80	13.80	34.87	0.03	0.08	--
100	13.43	34.87	0.01	0.10	--
125	12.96	34.85	0.01	0.04	--
150	12.44	34.82	0.01	0.04	--
200	11.76	34.82	--	--	--
350	9.82	34.70	--	--	--
500	7.55	34.60	--	--	0.15
1000	4.46	34.57	--	--	0.88

Station No.	1-046	Date - GMT	25 AUG 88
Station Name	D881-046	Time - GMT	0217
Latitude	12. 2.6 N	Date - LOC	24 AUG 88
Longitude	91.45.5 W	Time - LOC	2017

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.70	--	0.27	0.13	--
20	--	--	6.74	1.14	4.42
40	--	--	0.46	0.73	--
60	--	--	0.07	0.17	--
80	--	--	0.05	0.11	--
100	--	--	0.02	0.06	--
125	--	--	0.01	0.04	--
150	--	--	0.00	0.04	--
200	--	--	--	--	--
350	--	--	--	--	--
500	--	--	--	--	0.19
1000	--	--	--	--	0.45

Station No.	2-047	Date - GMT	6 SEP 88
Station Name	D882-047	Time - GMT	0220
Latitude	12.16.8 N	Date - LOC	5 SEP 88
Longitude	103.25.5 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.32	0.11	--
20	27.08	33.12	0.35	0.13	5.25
40	23.94	34.51	0.39	0.49	--
60	19.78	34.51	0.14	0.33	--
80	15.55	34.74	0.03	0.12	--
100	14.19	34.80	0.01	0.11	--
125	13.23	34.81	0.00	0.15	--
150	12.85	34.81	0.00	0.15	--
200	12.00	34.78	--	--	--
350	9.65	34.64	--	--	--
500	7.30	--	--	--	0.24
1000	4.19	34.55	--	--	0.71

Station No.	2-048	Date - GMT	6 SEP 88
Station Name	D882-048	Time - GMT	1050
Latitude	11.23.3 N	Date - LOC	6 SEP 88
Longitude	104. 2.5 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.26	0.16	--
20	26.99	33.42	0.23	0.17	5.32
40	27.00	33.43	0.25	0.16	--
60	22.72	34.49	0.41	0.43	--
80	17.88	34.59	0.13	0.20	--
100	--	34.71	0.04	0.11	--
125	15.37	34.81	0.00	0.18	--
150	12.47	34.79	0.00	0.13	--
200	11.51	34.74	--	--	--
350	9.75	34.65	--	--	--
500	7.59	34.55	--	--	0.28
1000	4.18	34.55	--	--	0.84

Station No.	2-049	Date - GMT	7 SEP 88
Station Name	D882-049	Time - GMT	0218
Latitude	9.40.3 N	Date - LOC	6 SEP 88
Longitude	105. 3.9 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.13	0.07	--
20	27.31	33.28	0.14	0.05	5.23
40	27.26	33.31	0.27	0.14	--
60	22.73	34.40	0.40	0.74	--
80	18.00	34.62	0.18	0.40	--
100	15.38	34.74	0.06	0.24	--
125	13.15	34.78	0.00	0.20	--
150	12.32	34.77	0.00	0.04	--
200	11.63	34.74	--	--	--
350	9.84	34.66	--	--	--
500	7.72	34.56	--	--	0.25
1000	4.23	34.54	--	--	0.78

Station No.	2-050	Date - GMT	7 SEP 88
Station Name	D882-050	Time - GMT	1050
Latitude	8.42.2 N	Date - LOC	7 SEP 88
Longitude	105.41.9 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.14	0.06	--
20	27.06	33.14	0.15	0.05	5.26
40	27.06	33.14	0.13	0.07	--
60	26.42	33.82	0.18	0.79	--
80	19.43	34.56	0.21	0.74	--
100	15.42	34.72	0.13	0.24	--
125	12.84	34.76	0.03	0.08	--
150	12.26	34.77	0.00	0.06	--
200	11.55	34.74	--	--	--
350	9.81	34.66	--	--	--
500	8.17	34.57	--	--	0.30
1000	4.32	34.55	--	--	0.75

Station No.	2-051	Date - GMT	8 SEP 88
Station Name	D882-051	Time - GMT	0218
Latitude	7. 0.5 N	Date - LOC	7 SEP 88
Longitude	106.58.1 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.12	0.04	--
20	27.11	33.04	0.12	0.07	5.64
40	27.10	33.09	0.31	0.13	--
60	21.88	34.57	0.53	0.66	--
80	17.29	34.78	0.19	0.48	--
100	14.88	34.84	0.16	0.17	--
125	13.45	34.84	0.04	0.05	--
150	12.99	34.85	0.01	0.04	--
200	12.08	34.77	--	--	--
350	10.26	34.69	--	--	--
500	8.26	34.60	--	--	0.51
1000	4.38	34.54	--	--	1.51

Station No.	2-052	Date - GMT	8 SEP 88
Station Name	D882-052	Time - GMT	1051
Latitude	6.19.6 N	Date - LOC	8 SEP 88
Longitude	107.51.0 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.14	0.02	--
20	26.95	33.07	0.12	0.06	5.52
40	26.88	33.05	0.15	0.08	--
60	25.99	33.75	0.55	0.31	--
80	20.62	34.81	0.31	0.49	--
100	17.30	34.78	0.19	0.36	--
125	14.02	34.84	0.09	0.11	--
150	13.10	34.86	0.02	0.03	--
200	12.28	34.80	--	--	--
350	10.14	34.70	--	--	--
500	7.92	34.60	--	--	0.37
1000	4.46	34.55	--	--	1.36

Station No.	2-053	Date - GMT	9 SEP 88
Station Name	D882-053	Time - GMT	0219
Latitude	6.18.8 N	Date - LOC	8 SEP 88
Longitude	109.45.9 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.08	0.02	--
20	27.08	33.18	0.09	0.01	5.57
40	27.00	33.19	0.12	0.04	--
60	26.98	33.19	0.23	0.06	--
80	25.68	34.07	0.66	0.29	--
100	15.98	34.76	0.18	0.27	--
125	13.68	34.84	0.07	0.19	--
150	12.93	34.85	0.01	0.05	--
200	12.00	34.97	--	--	--
350	10.08	34.70	--	--	--
500	7.73	34.59	--	--	0.47
1000	4.37	34.55	--	--	1.36

Station No.	2-054	Date - GMT	9 SEP 88
Station Name	D882-054	Time - GMT	1054
Latitude	6.15.5 N	Date - LOC	9 SEP 88
Longitude	110.55.4 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.11	0.04	--
20	26.93	33.40	0.12	0.02	5.53
40	26.90	33.45	0.14	0.07	--
60	26.83	33.46	0.26	0.09	--
80	21.70	34.55	0.43	0.45	--
100	15.93	34.79	0.19	0.28	--
125	13.55	34.84	0.06	0.17	--
150	12.87	34.86	0.00	0.05	--
200	11.86	34.79	--	--	--
350	9.86	34.69	--	--	--
500	8.04	34.61	--	--	0.37
1000	4.34	34.56	--	--	1.55

Station No.	2-055	Date - GMT	10 SEP 88
Station Name	D882-055	Time - GMT	0318
Latitude	5.53.8 N	Date - LOC	9 SEP 88
Longitude	112.58.3 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.20	0.06	--
20	26.64	33.84	0.21	0.10	5.63
40	26.05	33.83	0.35	0.17	--
60	25.76	33.95	0.37	0.22	--
80	25.41	34.09	0.29	0.29	--
100	18.15	35.03	0.18	0.34	--
125	13.33	34.84	0.03	0.08	--
150	13.01	34.85	0.01	0.04	--
200	11.67	34.76	--	--	--
350	9.54	34.67	--	--	--
500	8.09	34.60	--	--	0.30
1000	4.37	34.54	--	--	1.41

Station No.	2-056	Date - GMT	10 SEP 88
Station Name	D882-056	Time - GMT	1151
Latitude	5.50.3 N	Date - LOC	10 SEP 88
Longitude	114. 2.6 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.60	--	0.13	0.06	--
20	26.55	33.83	0.14	0.05	5.60
40	26.52	33.86	0.22	0.08	--
60	26.40	34.00	0.26	0.22	--
80	26.17	34.27	0.31	0.20	--
100	20.31	34.71	0.30	0.34	--
125	13.58	34.77	0.03	0.10	--
150	12.23	34.76	0.01	0.04	--
200	11.33	34.75	--	--	--
350	9.84	34.69	--	--	--
500	7.85	34.60	--	--	0.40
1000	4.36	34.56	--	--	1.53

Station No.	2-057	Date - GMT	11 SEP 88
Station Name	D882-057	Time - GMT	0323
Latitude	5.36.8 N	Date - LOC	10 SEP 88
Longitude	116.21.7 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.40	--	0.28	0.09	--
20	26.41	33.86	0.28	0.10	5.45
40	26.41	33.87	0.30	0.10	--
60	26.38	33.87	0.36	0.15	--
80	25.95	34.16	0.35	0.35	--
100	23.40	34.62	0.29	0.41	--
125	15.12	34.78	0.05	0.16	--
150	13.28	34.88	0.02	0.05	--
200	12.08	34.79	--	--	--
350	9.85	34.69	--	--	--
500	8.04	34.63	--	--	0.27
1000	4.10	34.56	--	--	1.54

Station No.	2-058	Date - GMT	11 SEP 88
Station Name	D882-058	Time - GMT	1155
Latitude	4.58.9 N	Date - LOC	11 SEP 88
Longitude	115.33.3 W	Time - LOC	0455

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.30	--	0.34	0.10	--
20	26.30	33.85	0.34	0.12	5.27
40	26.31	33.85	0.29	0.11	--
60	26.31	33.85	0.29	0.10	--
80	23.60	34.54	0.45	0.60	--
100	17.97	34.77	0.15	0.29	--
125	13.43	34.85	0.04	0.07	--
150	12.98	34.85	0.02	0.04	--
200	12.13	34.80	--	--	--
350	10.11	34.70	--	--	--
500	8.10	34.61	--	--	0.31
1000	4.35	34.55	--	--	1.48

Station No.	2-059	Date - GMT	12 SEP 88
Station Name	D882-059	Time - GMT	0318
Latitude	4.16.0 N	Date - LOC	11 SEP 88
Longitude	113.36.6 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.60	--	0.23	0.04	--
20	26.62	33.75	0.21	0.07	5.24
40	26.62	33.76	0.23	0.04	--
60	24.21	34.49	0.64	0.54	--
80	21.82	34.75	0.48	0.45	--
100	20.55	34.73	0.28	0.41	--
125	16.96	34.80	0.09	0.18	--
150	13.67	34.85	0.01	0.08	--
200	11.69	34.74	--	--	--
350	9.77	34.68	--	--	--
500	8.22	34.62	--	--	0.35
1000	4.38	34.56	--	--	1.39

Station No.	2-060	Date - GMT	12 SEP 88
Station Name	D882-060	Time - GMT	1150
Latitude	3.54.6 N	Date - LOC	12 SEP 88
Longitude	112.34.8 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.60	--	0.22	0.11	--
20	23.38	34.43	0.24	0.09	5.41
40	23.10	34.46	0.25	0.14	--
60	22.74	34.49	0.26	0.17	--
80	21.87	34.59	0.29	0.18	--
100	20.43	34.81	0.23	0.21	--
125	18.69	34.94	0.26	0.25	--
150	14.22	34.96	0.07	0.12	--
200	13.17	34.91	--	--	--
350	10.45	34.72	--	--	--
500	8.38	34.63	--	--	0.41
1000	4.26	34.56	--	--	1.19

Station No.	2-061	Date - GMT	13 SEP 88
Station Name	D882-061	Time - GMT	0323
Latitude	3.16.8 N	Date - LOC	12 SEP 88
Longitude	110.52.3 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.10	--	0.24	0.03	--
20	23.96	34.24	0.24	0.05	5.22
40	22.66	34.46	0.41	0.13	--
60	20.79	34.59	0.39	0.19	--
80	19.87	34.70	0.27	0.22	--
100	18.88	34.81	0.22	0.19	--
125	15.35	34.95	0.09	0.24	--
150	14.14	34.93	0.05	0.11	--
200	13.15	34.90	--	--	--
350	11.03	34.75	--	--	--
500	8.56	34.64	--	--	0.37
1000	4.68	34.54	--	--	1.23

Station No.	2-062	Date - GMT	13 SEP 88
Station Name	D882-062	Time - GMT	1917
Latitude	2. 0.5 N	Date - LOC	13 SEP 88
Longitude	110. 9.9 W	Time - LOC	1217

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.90	--	0.25	0.05	--
20	23.70	34.30	0.25	0.05	4.22
40	22.80	34.46	0.30	0.16	--
60	20.94	34.60	0.32	0.28	--
80	19.86	34.89	0.31	0.23	--
100	15.74	34.96	0.22	0.26	--
125	14.22	34.95	0.08	0.19	--
150	13.76	34.94	0.03	0.08	--
200	13.10	34.91	--	--	--
350	11.21	34.77	--	--	--
500	8.34	34.65	--	--	0.40
1000	4.38	34.56	--	--	1.33

Station No.	2-063	Date - GMT	14 SEP 88
Station Name	D882-063	Time - GMT	0323
Latitude	1. 8.6 N	Date - LOC	13 SEP 88
Longitude	110. 8.8 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	23.00	--	0.21	0.09	--
20	22.78	34.55	0.22	0.08	5.40
40	22.66	34.54	0.27	0.11	--
60	18.23	34.84	0.26	0.22	--
80	16.06	34.93	0.33	0.34	--
100	14.96	34.99	0.18	0.42	--
125	13.81	34.93	0.09	0.12	--
150	13.31	34.92	0.03	0.05	--
200	13.03	34.91	--	--	--
350	11.56	34.81	--	--	--
500	8.46	34.65	--	--	0.80
1000	4.28	34.56	--	--	2.00

Station No.	2-064	Date - GMT	15 SEP 88
Station Name	D882-064	Time - GMT	0419
Latitude	2. 1.9 S	Date - LOC	14 SEP 88
Longitude	109.58.7 W	Time - LOC	2119

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	21.70	--	0.27	0.07	--
20	20.57	34.75	0.31	0.12	4.91
40	20.19	34.84	0.39	0.16	--
60	17.93	35.20	0.41	0.44	--
80	13.91	34.97	0.16	0.27	--
100	13.40	34.95	0.07	0.10	--
125	13.04	34.93	0.05	0.08	--
150	12.64	34.90	0.01	0.03	--
200	12.48	34.90	--	--	--
350	10.80	34.80	--	--	--
500	8.48	34.65	--	--	0.96
1000	4.64	34.55	--	--	2.03

Station No.	2-065	Date - GMT	16 SEP 88
Station Name	D882-065	Time - GMT	0313
Latitude	2.18.0 S	Date - LOC	15 SEP 88
Longitude	108.13.4 W	Time - LOC	2013

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	22.20	--	--	--	--
20	21.85	34.92	0.31	0.12	--
40	20.55	34.88	0.62	0.49	--
60	15.14	35.10	0.32	0.29	--
80	13.35	34.94	0.09	0.12	--
100	12.97	34.92	0.03	0.05	--
125	12.69	34.89	0.01	0.02	--
150	12.62	34.88	0.01	0.03	--
200	12.42	34.87	--	--	--
350	10.44	34.77	--	--	--
500	8.46	34.65	--	--	--
1000	--	--	--	--	--

Station No.	2-066	Date - GMT	17 SEP 88
Station Name	D882-066	Time - GMT	0315
Latitude	0.36.4 S	Date - LOC	16 SEP 88
Longitude	105.36.6 W	Time - LOC	2015

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	20.30	--	0.38	0.08	--
20	19.53	34.87	0.46	0.06	--
40	19.28	35.01	0.58	0.26	--
60	19.37	34.93	0.60	0.41	--
80	14.00	34.95	0.30	0.11	--
100	--	--	0.11	0.08	--
125	13.47	34.92	0.05	0.06	--
150	13.07	34.89	0.03	0.03	--
200	12.69	34.89	--	--	--
350	10.50	34.76	--	--	--
500	8.66	34.65	--	--	--
1000	--	--	--	--	--

Station No.	2-067	Date - GMT	18 SEP 88
Station Name	D882-067	Time - GMT	0321
Latitude	0.48.4 N	Date - LOC	17 SEP 88
Longitude	103.24.7 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	20.10	--	0.32	0.13	--
20	18.96	34.72	0.39	0.18	--
40	15.90	34.94	0.46	0.52	--
60	14.48	34.90	0.21	0.36	--
80	14.06	34.93	0.12	0.20	--
100	13.61	34.91	0.06	0.08	--
125	13.03	34.90	0.02	0.04	--
150	12.94	34.89	0.01	0.03	--
200	12.87	34.89	--	--	--
350	9.94	34.72	--	--	--
500	8.45	34.64	--	--	--
1000	4.66	34.55	--	--	--

Station No.	2-068	Date - GMT	18 SEP 88
Station Name	D882-068	Time - GMT	1819
Latitude	1.39.0 N	Date - LOC	18 SEP 88
Longitude	101.46.9 W	Time - LOC	1219

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.28	0.03	--
20	24.30	34.27	0.26	0.07	--
40	24.19	34.30	0.24	0.11	--
60	17.38	34.84	0.38	0.23	--
80	14.33	34.95	0.18	0.30	--
100	13.77	34.93	0.02	0.26	--
125	13.48	34.92	0.05	0.07	--
150	13.19	34.91	0.01	0.05	--
200	13.04	34.89	--	--	--
350	10.19	34.72	--	--	--
500	7.86	34.60	--	--	--
1000	--	--	--	--	--

Station No.	2-069	Date - GMT	19 SEP 88
Station Name	D882-069	Time - GMT	0209
Latitude	2. 9.3 N	Date - LOC	18 SEP 88
Longitude	100.58.0 W	Time - LOC	2009

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.40	--	0.31	0.12	--
20	24.40	34.16	0.30	0.11	--
40	24.22	34.19	0.30	0.15	--
60	18.25	35.46	0.42	0.32	--
80	15.00	34.93	0.25	0.30	--
100	14.07	34.95	0.08	0.10	--
125	13.83	34.94	0.02	0.05	--
150	13.32	34.91	0.03	0.06	--
200	13.13	34.91	--	--	--
350	10.60	34.73	--	--	--
500	8.04	34.61	--	--	--
1000	--	--	--	--	--

Station No.	2-070	Date - GMT	20 SEP 88
Station Name	D882-070	Time - GMT	0212
Latitude	4. 4.3 N	Date - LOC	19 SEP 88
Longitude	97.56.5 W	Time - LOC	2012

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.10	--	0.26	0.08	--
20	25.99	33.65	0.26	0.09	--
40	25.97	33.67	0.27	0.08	--
60	19.49	34.84	0.26	0.28	--
80	16.32	34.98	0.20	0.32	--
100	14.58	34.95	0.14	0.23	--
125	13.72	34.94	0.03	0.06	--
150	13.55	34.93	0.01	0.03	--
200	12.92	34.89	--	--	--
350	10.92	34.74	--	--	--
500	8.40	34.63	--	--	--
1000	--	--	--	--	--

Station No.	2-071	Date - GMT	20 SEP 88
Station Name	D882-071	Time - GMT	1045
Latitude	4.46.6 N	Date - LOC	20 SEP 88
Longitude	96.57.7 W	Time - LOC	0445

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.40	--	0.18	0.10	--
20	26.30	33.60	0.20	0.06	--
40	26.29	33.60	0.18	0.09	--
60	23.53	34.41	0.32	0.23	--
80	17.38	34.72	0.21	0.37	--
100	13.83	34.71	0.10	0.25	--
125	12.87	34.81	0.03	0.07	--
150	12.32	34.82	0.01	0.04	--
200	11.49	34.76	--	--	--
350	9.74	34.68	--	--	--
500	7.30	34.58	--	--	--
1000	--	--	--	--	--

Station No.	2-072	Date - GMT	21 SEP 88
Station Name	D882-072	Time - GMT	0209
Latitude	6. 9.7 N	Date - LOC	20 SEP 88
Longitude	94.56.1 W	Time - LOC	2009

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.36	0.13	--
20	26.68	33.46	0.39	0.08	--
40	20.36	34.61	0.48	0.71	--
60	15.07	34.76	0.05	0.15	--
80	14.13	34.88	0.04	0.10	--
100	13.74	34.90	0.02	0.04	--
125	13.36	34.88	0.00	0.05	--
150	12.97	34.85	0.01	0.03	--
200	11.80	34.80	--	--	--
350	10.25	34.70	--	--	--
500	7.77	34.60	--	--	--
1000	--	--	--	--	--

Station No.	2-073	Date - GMT	21 SEP 88
Station Name	D882-073	Time - GMT	1043
Latitude	6.54.5 N	Date - LOC	21 SEP 88
Longitude	93.59.1 W	Time - LOC	0443

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.60	--	0.48	0.20	--
20	26.39	33.28	0.49	0.19	--
40	16.81	34.81	0.29	0.97	--
60	14.13	34.81	0.11	0.36	--
80	13.63	34.90	0.01	0.04	--
100	13.42	34.88	0.01	0.06	--
125	13.13	34.88	0.00	0.03	--
150	12.91	34.87	0.00	0.03	--
200	12.18	34.81	--	--	--
350	9.97	34.69	--	--	--
500	7.43	34.59	--	--	--
1000	--	--	--	--	--

Station No.	2-074	Date - GMT	22 SEP 88
Station Name	D882-074	Time - GMT	0209
Latitude	8.21.8 N	Date - LOC	21 SEP 88
Longitude	92.13.1 W	Time - LOC	2009

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.60	--	0.41	0.19	--
20	25.84	33.23	0.48	0.25	--
40	15.30	34.82	0.26	0.46	--
60	14.14	34.81	0.12	0.29	--
80	13.68	34.82	0.05	0.09	--
100	13.66	34.90	0.02	0.06	--
125	13.32	34.90	0.01	0.04	--
150	13.12	34.88	0.00	0.04	--
200	12.66	34.84	--	--	--
350	11.07	34.75	--	--	--
500	8.59	34.62	--	--	--
1000	--	--	--	--	--

Station No.	2-075	Date - GMT	22 SEP 88
Station Name	D882-075	Time - GMT	1045
Latitude	9. 9.3 N	Date - LOC	22 SEP 88
Longitude	91. 6.8 W	Time - LOC	0445

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.40	--	0.47	0.15	--
20	21.61	34.34	0.51	0.34	--
40	15.55	34.76	0.17	0.60	--
60	13.79	34.72	0.12	0.24	--
80	13.40	34.83	0.06	0.09	--
100	13.02	34.82	0.03	0.05	--
125	12.62	34.82	0.01	0.04	--
150	12.24	34.80	0.00	0.03	--
200	11.76	34.78	--	--	--
350	10.27	34.70	--	--	--
500	8.05	34.60	--	--	--
1000	--	--	--	--	--

Station No.	2-076	Date - GMT	23 SEP 88
Station Name	D882-076	Time - GMT	0207
Latitude	10.16.3 N	Date - LOC	22 SEP 88
Longitude	89.25.7 W	Time - LOC	2007

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.36	0.14	--
20	16.50	34.79	1.09	0.63	--
40	14.96	34.84	0.17	0.40	--
60	14.39	34.88	0.08	0.25	--
80	14.00	34.87	0.05	0.10	--
100	13.78	34.88	0.04	0.08	--
125	13.24	34.83	0.01	0.04	--
150	12.96	34.82	0.01	0.04	--
200	12.43	34.81	--	--	--
350	10.73	34.72	--	--	--
500	8.55	34.60	--	--	--
1000	--	--	--	--	--

Station No.	2-077	Date - GMT	23 SEP 88
Station Name	D882-077	Time - GMT	1047
Latitude	10.17.4 N	Date - LOC	23 SEP 88
Longitude	88.17.4 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.45	0.11	--
20	15.83	34.83	0.45	0.44	--
40	14.58	34.90	0.24	0.48	--
60	14.06	34.89	0.08	0.15	--
80	13.69	34.90	0.01	0.05	--
100	13.50	34.89	0.01	0.07	--
125	13.26	34.88	0.01	0.03	--
150	13.13	34.88	0.00	0.03	--
200	12.59	34.84	--	--	--
350	11.02	34.74	--	--	--
500	8.93	34.63	--	--	--
1000	--	--	--	--	--

Station No.	2-078	Date - GMT	24 SEP 88
Station Name	D882-078	Time - GMT	0108
Latitude	8. 4.6 N	Date - LOC	23 SEP 88
Longitude	88. 5.7 W	Time - LOC	2008

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.80	--	0.76	0.17	--
20	26.22	33.41	0.69	0.28	--
40	15.93	34.81	0.27	0.70	--
60	14.80	34.88	0.15	0.23	--
80	14.37	34.92	0.05	0.06	--
100	13.94	34.92	0.01	0.06	--
125	13.70	34.91	0.01	0.04	--
150	13.32	34.88	0.00	0.03	--
200	12.79	34.86	--	--	--
350	10.60	34.72	--	--	--
500	7.92	34.60	--	--	--
1000	--	--	--	--	--

Station No.	2-079	Date - GMT	24 SEP 88
Station Name	D882-079	Time - GMT	0945
Latitude	6.55.1 N	Date - LOC	24 SEP 88
Longitude	87.43.9 W	Time - LOC	0445

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.32	0.12	--
20	26.69	33.27	0.27	0.13	--
40	18.43	34.88	0.31	0.32	--
60	16.12	34.90	0.21	0.25	--
80	15.24	34.93	0.09	0.18	--
100	14.85	34.93	0.03	0.11	--
125	14.39	34.93	0.02	0.07	--
150	13.76	34.92	0.00	0.05	--
200	13.24	34.89	--	--	--
350	10.60	34.73	--	--	--
500	7.99	34.61	--	--	--
1000	--	--	--	--	--

Station No.	2-080	Date - GMT	26 SEP 88
Station Name	D882-080	Time - GMT	0107
Latitude	3.48.4 N	Date - LOC	25 SEP 88
Longitude	86.51.0 W	Time - LOC	2007

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.90	--	0.29	0.05	--
20	25.93	33.69	0.27	0.09	--
40	25.92	33.72	0.36	0.63	--
60	19.73	34.68	0.28	0.42	--
80	16.88	34.93	0.15	0.32	--
100	15.63	34.95	0.03	0.12	--
125	14.65	34.95	0.00	0.05	--
150	13.88	34.92	0.00	0.03	--
200	13.26	34.90	--	--	--
350	10.47	34.73	--	--	--
500	8.38	34.64	--	--	--
1000	--	--	--	--	--

Station No.	2-081	Date - GMT	26 SEP 88
Station Name	D882-081	Time - GMT	0941
Latitude	2.47.4 N	Date - LOC	26 SEP 88
Longitude	86.44.6 W	Time - LOC	0441

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.50	--	0.19	0.10	--
20	25.55	33.77	--	--	--
40	25.53	33.77	0.24	0.11	--
60	15.98	35.00	0.32	0.50	--
80	15.41	34.99	0.14	0.34	--
100	14.96	34.99	0.11	0.23	--
125	14.53	34.97	0.03	0.08	--
150	13.86	34.94	0.00	0.03	--
200	13.06	34.89	--	--	--
350	9.91	34.70	--	--	--
500	8.28	34.89	--	--	--
1000	--	--	--	--	--

Station No.	2-082	Date - GMT	27 SEP 88
Station Name	D882-082	Time - GMT	0107
Latitude	3.16.4 N	Date - LOC	26 SEP 88
Longitude	84.24.5 W	Time - LOC	2007

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.10	--	0.30	0.13	--
20	25.96	33.76	0.32	0.09	--
40	25.70	33.81	0.36	0.25	--
60	17.10	34.81	0.37	0.82	--
80	15.72	34.98	0.12	0.38	--
100	15.11	34.99	0.09	0.16	--
125	14.70	34.97	0.04	0.06	--
150	14.33	34.97	0.01	0.04	--
200	13.55	34.92	--	--	--
350	9.90	34.72	--	--	--
500	7.99	34.63	--	--	--
1000	--	--	--	--	--

Station No.	2-083	Date - GMT	27 SEP 88
Station Name	D882-083	Time - GMT	0947
Latitude	3.38.0 N	Date - LOC	27 SEP 88
Longitude	83. 9.5 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.00	--	0.26	0.18	--
20	25.99	33.71	0.31	0.12	--
40	25.72	33.74	0.40	0.18	--
60	17.09	34.87	0.33	0.79	--
80	16.03	34.96	0.24	0.29	--
100	15.11	34.99	0.12	0.24	--
125	14.57	34.96	0.05	0.07	--
150	14.20	34.95	0.01	0.05	--
200	13.51	34.92	--	--	--
350	10.38	34.74	--	--	--
500	8.24	34.64	--	--	--
1000	--	--	--	--	--

Station No.	2-084	Date - GMT	28 SEP 88
Station Name	D882-084	Time - GMT	0118
Latitude	4. 7.1 N	Date - LOC	27 SEP 88
Longitude	81.26.5 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.40	--	0.22	0.14	--
20	26.36	33.47	0.37	0.37	2.99
40	18.19	34.81	0.22	0.47	--
60	16.14	34.98	0.13	0.23	--
80	15.37	34.99	0.06	0.17	--
100	14.89	34.98	0.03	0.08	1.49
125	14.57	34.97	0.01	0.04	--
150	14.21	34.95	0.00	0.05	--
200	13.38	34.91	--	--	0.71
350	10.09	34.75	--	--	0.17
500	7.81	34.62	--	--	0.33
1000	4.54	34.57	--	--	1.20

Station No.	3-085	Date - GMT	8 OCT 88
Station Name	D883-085	Time - GMT	0116
Latitude	4.11.0 N	Date - LOC	7 OCT 88
Longitude	81.53.5 W	Time - LOC	2016

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.50	--	0.45	0.17	--
20	26.45	33.53	0.44	0.19	--
40	21.67	34.21	0.89	0.53	--
60	17.21	34.90	0.40	0.56	--
80	15.71	34.99	0.15	0.31	--
100	14.99	34.96	0.05	0.12	--
125	14.68	34.94	0.03	0.07	--
150	14.36	34.93	0.01	0.05	--
200	13.30	34.88	--	--	--
350	10.34	34.72	--	--	--
500	8.09	34.61	--	--	--
1000	--	--	--	--	--

Station No.	3-086	Date - GMT	8 OCT 88
Station Name	D882-086	Time - GMT	0125
Latitude	6.41.7 N	Date - LOC	7 OCT 88
Longitude	83.14.3 W	Time - LOC	2025

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.47	0.29	--
20	25.94	32.87	0.47	0.29	4.74
40	22.98	34.11	0.37	0.45	--
60	18.44	34.80	0.11	0.23	--
80	14.86	34.91	0.03	0.15	--
100	14.23	34.91	0.01	0.11	--
125	13.79	34.91	0.02	0.06	--
150	13.30	34.87	0.01	0.08	--
200	12.66	34.86	--	--	--
350	10.17	34.72	--	--	--
500	8.16	34.62	--	--	0.17
1000	4.42	34.56	--	--	1.05

Station No.	3-087	Date - GMT	8 OCT 88
Station Name	D883-087	Time - GMT	0954
Latitude	7.30.0 N	Date - LOC	8 OCT 88
Longitude	83. 5.9 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.34	0.25	--
20	25.90	33.52	0.60	0.48	4.33
40	20.36	34.54	0.34	0.71	--
60	17.18	34.82	0.18	0.35	--
80	15.42	34.89	0.06	0.16	--
100	14.37	34.91	0.02	0.10	--
125	14.04	34.91	0.00	0.09	--
150	13.75	34.89	0.01	0.08	--
200	12.73	34.84	--	--	--
350	10.35	34.72	--	--	--
500	8.02	34.62	--	--	0.16
1000	4.39	34.56	--	--	1.07

Station No.	3-088	Date - GMT	9 OCT 88
Station Name	D883-088	Time - GMT	0137
Latitude	8.15.0 N	Date - LOC	8 OCT 88
Longitude	85. 3.3 W	Time - LOC	2037

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.80	--	0.44	0.22	--
20	26.68	33.01	0.40	0.26	5.09
40	19.44	34.64	0.43	0.72	--
60	16.92	34.86	0.36	0.53	--
80	15.47	34.90	0.17	0.51	--
100	14.66	34.91	0.08	0.16	--
125	14.07	34.90	0.02	0.07	--
150	13.74	34.89	0.01	0.06	--
200	12.97	34.86	--	--	--
350	10.38	34.72	--	--	--
500	8.06	34.61	--	--	0.31
1000	4.45	34.56	--	--	0.97

Station No.	3-089	Date - GMT	9 OCT 88
Station Name	D883-089	Time - GMT	0953
Latitude	8.41.1 N	Date - LOC	9 OCT 88
Longitude	86. 8.1 W	Time - LOC	0453

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.90	--	0.69	0.50	--
20	22.47	34.30	0.47	0.31	3.22
40	15.64	34.91	0.40	0.52	--
60	14.60	34.91	0.11	0.25	--
80	14.22	34.90	0.04	0.13	--
100	13.94	34.89	0.02	0.09	--
125	13.50	34.88	0.00	0.06	--
150	13.26	34.88	0.00	0.05	--
200	12.54	34.83	--	--	--
350	9.87	34.68	--	--	--
500	7.74	34.61	--	--	0.38
1000	4.60	34.56	--	--	0.65

Station No.	3-090	Date - GMT	10 OCT 88
Station Name	D883-090	Time - GMT	0126
Latitude	8.56.2 N	Date - LOC	9 OCT 88
Longitude	88.11.3 W	Time - LOC	2026

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.20	--	0.64	0.13	--
20	16.22	34.82	0.49	0.62	1.55
40	14.51	34.90	0.26	0.47	--
60	14.09	34.91	0.11	0.17	--
80	13.77	34.90	0.05	0.01	--
100	13.62	34.90	0.00	0.04	--
125	13.37	34.89	0.01	0.03	--
150	13.06	34.87	0.01	0.03	--
200	12.56	34.83	--	--	--
350	10.63	34.70	--	--	--
500	7.99	34.62	--	--	0.27
1000	4.56	34.56	--	--	0.90

Station No.	3-091	Date - GMT	10 OCT 88
Station Name	D883-091	Time - GMT	0954
Latitude	8.59.8 N	Date - LOC	10 OCT 88
Longitude	89.14.6 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.20	--	0.44	0.18	--
20	15.15	34.84	0.46	1.07	1.10
40	14.23	34.90	0.20	0.66	--
60	13.77	34.92	0.10	0.16	--
80	13.66	34.89	0.03	0.05	--
100	13.52	34.89	0.01	0.04	--
125	13.27	34.88	0.00	0.04	--
150	13.07	34.86	0.01	0.04	--
200	12.68	34.83	--	--	--
350	11.19	34.76	--	--	--
500	9.23	34.65	--	--	0.58
1000	4.59	34.55	--	--	1.27

Station No.	3-092	Date - GMT	11 OCT 88
Station Name	D883-092	Time - GMT	0125
Latitude	6.38.4 N	Date - LOC	10 OCT 88
Longitude	89. 3.8 W	Time - LOC	2025

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.34	0.18	--
20	22.49	34.20	0.41	0.31	3.82
40	17.36	34.80	0.33	0.44	--
60	15.05	34.92	0.14	0.28	--
80	14.27	34.84	0.05	0.08	--
100	14.00	34.92	0.01	0.05	--
125	13.70	--	0.01	0.03	--
150	13.41	34.90	0.01	0.03	--
200	12.95	34.87	--	--	--
350	10.47	34.72	--	--	--
500	8.28	34.63	--	--	0.30
1000	4.55	34.56	--	--	1.04

Station No.	3-093	Date - GMT	11 OCT 88
Station Name	D883-093	Time - GMT	0955
Latitude	5.31.9 N	Date - LOC	11 OCT 88
Longitude	89.11.0 W	Time - LOC	0455

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.80	--	0.26	0.18	--
20	26.65	33.33	0.25	0.15	4.93
40	19.80	34.81	0.35	0.40	--
60	16.69	34.93	0.24	0.36	--
80	15.81	34.95	0.15	0.24	--
100	--	34.91	0.06	0.16	--
125	14.21	34.93	0.01	0.06	--
150	13.66	34.91	0.00	0.04	--
200	13.30	34.90	--	--	--
350	10.32	34.72	--	--	--
500	8.62	34.64	--	--	0.35
1000	4.70	34.56	--	--	1.09

Station No.	3-094	Date - GMT	12 OCT 88
Station Name	D883-094	Time - GMT	0123
Latitude	4. 6.3 N	Date - LOC	11 OCT 88
Longitude	90.34.9 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.50	--	0.26	0.10	--
20	26.50	33.46	0.28	0.09	5.00
40	26.34	33.47	0.26	0.16	--
60	17.34	34.94	0.28	0.58	--
80	15.77	34.88	0.14	0.32	--
100	14.87	34.93	0.08	0.22	--
125	14.22	34.90	0.04	0.13	--
150	13.32	34.89	0.02	0.06	--
200	13.30	34.89	--	--	--
350	9.99	34.73	--	--	--
500	8.14	34.62	--	--	0.56
1000	4.44	34.56	--	--	1.34

Station No.	3-095	Date - GMT	13 OCT 88
Station Name	D883-095	Time - GMT	0130
Latitude	5.25.7 N	Date - LOC	12 OCT 88
Longitude	91.26.5 W	Time - LOC	2030

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.70	--	0.19	0.09	--
20	26.59	33.36	0.20	0.07	4.93
40	23.59	34.35	0.53	0.32	--
60	18.32	34.76	0.41	0.35	--
80	16.12	34.88	0.17	0.30	--
100	14.88	34.88	0.12	0.25	--
125	13.99	34.87	0.04	0.17	--
150	13.65	34.89	0.03	0.08	--
200	12.64	34.84	--	--	--
350	10.07	34.71	--	--	--
500	8.05	34.63	--	--	0.29
1000	4.53	34.57	--	--	1.10

Station No.	3-096	Date - GMT	13 OCT 88
Station Name	D883-096	Time - GMT	0950
Latitude	6.36.6 N	Date - LOC	13 OCT 88
Longitude	91. 2.4 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.80	--	0.24	0.13	--
20	26.62	33.18	0.22	0.16	5.51
40	18.73	34.69	0.36	0.56	--
60	14.56	34.77	0.16	0.35	--
80	14.32	34.91	0.11	0.23	--
100	13.70	34.91	0.04	0.07	--
125	13.50	34.90	0.01	0.03	--
150	--	34.84	0.00	0.03	--
200	12.66	34.85	--	--	--
350	10.29	34.71	--	--	--
500	7.54	34.60	--	--	1.33
1000	4.42	34.56	--	--	0.98

Station No.	3-097	Date - GMT	14 OCT 88
Station Name	D883-097	Time - GMT	0119
Latitude	8.26.9 N	Date - LOC	13 OCT 88
Longitude	90.23.9 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.50	--	0.39	0.20	--
20	17.87	34.74	0.81	0.74	5.31
40	14.35	34.76	0.35	0.42	--
60	13.60	34.78	0.10	0.21	--
80	13.16	34.82	0.07	0.06	--
100	13.01	34.84	0.04	0.07	--
125	12.58	34.83	0.01	0.06	--
150	12.52	34.83	0.01	0.06	--
200	12.34	34.83	--	--	--
350	10.57	34.73	--	--	--
500	7.81	34.60	--	--	0.47
1000	4.51	34.56	--	--	1.36

Station No.	3-098	Date - GMT	15 OCT 88
Station Name	D883-098	Time - GMT	0142
Latitude	11.48.4 N	Date - LOC	14 OCT 88
Longitude	90. 9.8 W	Time - LOC	2042

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.40	--	0.20	0.09	--
20	20.37	34.90	0.38	0.18	1.68
40	15.70	34.86	0.17	0.37	--
60	14.08	34.86	0.05	0.17	--
80	13.59	34.85	0.03	0.09	--
100	13.44	34.88	0.01	0.12	--
125	13.14	34.87	0.01	0.04	--
150	12.84	34.85	0.00	0.04	--
200	12.30	34.82	--	--	--
350	10.31	34.72	--	--	--
500	7.69	34.59	--	--	0.66
1000	4.54	34.56	--	--	0.91

Station No.	3-099	Date - GMT	15 OCT 88
Station Name	D883-099	Time - GMT	0955
Latitude	12. 9.7 N	Date - LOC	15 OCT 88
Longitude	90.11.7 W	Time - LOC	0455

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.50	--	0.19	0.09	--
20	28.16	32.90	0.37	0.29	6.13
40	15.63	34.86	0.14	0.34	--
60	14.37	34.89	0.13	0.63	--
80	13.81	34.87	0.03	0.18	--
100	13.42	34.85	0.01	0.09	--
125	13.19	34.87	0.01	0.06	--
150	12.88	34.91	0.01	0.07	--
200	12.24	34.80	--	--	--
350	10.38	34.71	--	--	--
500	8.22	34.62	--	--	0.54
1000	4.51	34.56	--	--	0.78

Station No.	3-100	Date - GMT	16 OCT 88
Station Name	D883-100	Time - GMT	0117
Latitude	10.32.2 N	Date - LOC	15 OCT 88
Longitude	91.13.9 W	Time - LOC	2017

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.23	0.19	--
20	16.88	34.79	0.71	0.62	2.06
40	15.20	34.85	0.14	0.34	--
60	14.03	34.88	0.10	0.37	--
80	13.62	34.84	0.04	0.14	--
100	13.24	34.85	0.01	0.06	--
125	12.78	34.84	0.01	0.07	--
150	12.54	34.84	0.00	0.11	--
200	11.93	34.80	--	--	--
350	10.12	34.71	--	--	--
500	8.05	34.60	--	--	0.63
1000	4.52	34.56	--	--	1.09

Station No.	3-101	Date - GMT	16 OCT 88
Station Name	D883-101	Time - GMT	0951
Latitude	9.26.3 N	Date - LOC	16 OCT 88
Longitude	91.51.3 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.80	--	0.44	0.23	--
20	15.37	33.01	0.62	0.89	3.56
40	14.14	34.81	0.13	0.67	--
60	13.59	34.83	0.10	0.27	--
80	13.20	34.83	0.08	0.10	--
100	12.81	34.82	0.06	0.07	--
125	12.44	34.80	0.02	0.06	--
150	12.19	34.77	0.01	0.06	--
200	11.64	34.77	--	--	--
350	10.03	34.70	--	--	--
500	8.20	34.60	--	--	0.41
1000	4.58	34.56	--	--	1.12

Station No.	3-102	Date - GMT	17 OCT 88
Station Name	D883-102	Time - GMT	0122
Latitude	7.45.4 N	Date - LOC	16 OCT 88
Longitude	92.31.0 W	Time - LOC	2022

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.14	0.04	--
20	26.84	33.10	0.48	0.28	3.37
40	15.61	34.71	0.41	0.26	--
60	14.36	34.80	0.16	0.24	--
80	13.82	--	0.17	0.23	--
100	13.47	34.89	0.10	0.15	--
125	13.23	34.87	0.05	0.08	--
150	--	--	0.03	0.07	--
200	12.55	34.85	--	--	--
350	10.94	34.75	--	--	--
500	10.24	34.72	--	--	0.36
1000	4.54	34.56	--	--	0.98

Station No.	3-103	Date - GMT	17 OCT 88
Station Name	D883-103	Time - GMT	0956
Latitude	6.46.9 N	Date - LOC	17 OCT 88
Longitude	93. 9.7 W	Time - LOC	0456

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.16	0.06	--
20	26.77	32.87	0.34	0.47	1.78
40	19.40	34.72	0.16	0.29	--
60	15.22	34.78	0.11	0.25	--
80	14.02	34.87	0.07	0.15	--
100	13.54	34.80	0.06	0.09	--
125	13.44	--	0.02	0.06	--
150	12.45	34.79	0.01	0.03	--
200	12.04	34.80	--	--	--
350	10.34	34.72	--	--	--
500	8.13	34.63	--	--	0.39
1000	4.62	34.56	--	--	1.00

Station No.	3-104	Date - GMT	18 OCT 88
Station Name	D883-104	Time - GMT	0118
Latitude	6.31.8 N	Date - LOC	17 OCT 88
Longitude	93.42.6 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.16	0.05	--
20	26.87	32.58	0.23	0.16	3.96
40	20.89	34.66	0.46	0.50	--
60	15.47	34.83	0.21	0.36	--
80	14.40	34.93	0.11	0.22	--
100	13.68	34.91	0.04	0.09	--
125	12.61	34.80	0.01	0.06	--
150	12.16	34.81	0.00	0.06	--
200	11.36	34.75	--	--	--
350	9.60	34.68	--	--	--
500	7.88	34.62	--	--	0.41
1000	4.64	34.56	--	--	1.17

Station No.	3-105	Date - GMT	18 OCT 88
Station Name	D883-105	Time - GMT	0951
Latitude	7.47.8 N	Date - LOC	18 OCT 88
Longitude	93.40.6 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.19	0.07	--
20	26.99	32.67	0.22	0.10	4.98
40	15.36	34.82	0.29	0.31	--
60	13.60	34.79	0.12	0.29	--
80	13.35	34.87	0.03	0.08	--
100	13.22	34.89	0.00	0.05	--
125	12.95	34.88	0.00	0.03	--
150	12.65	34.85	0.01	0.02	--
200	12.10	34.83	--	--	--
350	10.34	34.72	--	--	--
500	8.29	34.64	--	--	0.40
1000	4.51	34.56	--	--	0.99

Station No.	3-106	Date - GMT	19 OCT 88
Station Name	D883-106	Time - GMT	0117
Latitude	9.38.2 N	Date - LOC	18 OCT 88
Longitude	93.37.2 W	Time - LOC	2017

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.59	0.18	--
20	17.73	34.66	0.46	1.22	0.59
40	14.60	34.91	0.50	0.21	--
60	14.04	34.89	0.15	0.13	--
80	13.55	34.89	0.08	0.08	--
100	13.31	34.87	0.02	0.08	--
125	12.93	34.85	0.01	0.05	--
150	12.52	34.82	0.02	0.06	--
200	11.76	34.78	--	--	--
350	10.05	34.70	--	--	--
500	8.07	34.61	--	--	0.17
1000	4.54	34.56	--	--	0.84

Station No.	3-107	Date - GMT	19 OCT 88
Station Name	D883-107	Time - GMT	0950
Latitude	10.46.8 N	Date - LOC	19 OCT 88
Longitude	93.38.6 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.64	0.28	--
20	16.87	34.80	0.41	0.24	0.71
40	14.15	34.82	0.16	0.28	--
60	13.80	34.88	0.10	0.18	--
80	13.53	34.88	0.05	0.13	--
100	13.16	34.87	0.00	0.07	--
125	12.71	34.84	0.00	0.08	--
150	12.34	34.80	0.00	0.07	--
200	11.70	34.81	--	--	--
350	9.51	34.66	--	--	--
500	7.43	34.59	--	--	0.15
1000	4.59	34.57	--	--	0.46

Station No.	3-108	Date - GMT	20 OCT 88
Station Name	D883-108	Time - GMT	0117
Latitude	12.59.4 N	Date - LOC	19 OCT 88
Longitude	93.37.5 W	Time - LOC	2017

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.31	0.16	--
20	17.03	34.71	0.42	0.34	1.86
40	14.71	34.76	0.36	0.31	--
60	13.72	34.78	0.10	0.22	--
80	13.34	34.82	0.02	0.19	--
100	13.21	34.88	0.00	0.06	--
125	12.66	34.80	0.01	0.07	--
150	12.39	34.81	0.00	0.05	--
200	11.82	34.77	--	--	--
350	9.97	34.71	--	--	--
500	7.85	34.61	--	--	0.32
1000	4.48	34.56	--	--	0.50

Station No.	3-109	Date - GMT	20 OCT 88
Station Name	D883-109	Time - GMT	1000
Latitude	11.59.9 N	Date - LOC	20 OCT 88
Longitude	94.23.4 W	Time - LOC	0500

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.20	--	0.19	0.14	--
20	15.60	34.79	0.64	0.33	1.10
40	14.13	34.77	0.41	0.24	--
60	13.94	34.90	0.13	0.24	--
80	13.56	34.87	0.03	0.17	--
100	13.23	34.86	0.01	0.07	--
125	12.77	34.84	0.01	0.05	--
150	12.37	34.81	0.01	0.06	--
200	11.71	34.78	--	--	--
350	9.38	34.66	--	--	--
500	7.53	34.58	--	--	0.64
1000	4.41	34.57	--	--	0.75

Station No.	3-110	Date - GMT	21 OCT 88
Station Name	D883-110	Time - GMT	0220
Latitude	10.11.9 N	Date - LOC	20 OCT 88
Longitude	95.38.1 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.70	--	0.49	0.20	--
20	17.63	34.72	0.92	0.58	1.20
40	15.58	34.91	0.31	0.34	--
60	14.79	34.92	0.13	0.22	--
80	14.19	34.91	0.07	0.12	--
100	13.77	34.94	0.03	0.12	--
125	13.19	34.87	0.00	0.05	--
150	12.69	34.83	0.01	0.07	--
200	12.10	34.81	--	--	--
350	10.13	34.70	--	--	--
500	7.99	34.60	--	--	0.13
1000	4.43	34.56	--	--	0.52

Station No.	3-111	Date - GMT	21 OCT 88
Station Name	D883-111	Time - GMT	1052
Latitude	9.11.4 N	Date - LOC	21 OCT 88
Longitude	96.19.3 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.21	0.08	--
20	23.71	34.12	0.25	0.26	1.39
40	14.99	34.78	0.16	0.39	--
60	13.93	34.80	0.19	0.33	--
80	13.07	34.75	0.09	0.14	--
100	12.40	34.70	0.04	0.08	--
125	12.06	34.81	0.01	0.05	--
150	11.63	34.74	0.00	0.06	--
200	11.43	34.78	--	--	--
350	10.15	34.72	--	--	--
500	8.36	34.61	--	--	0.19
1000	4.49	34.99	--	--	0.85

Station No.	3-112	Date - GMT	22 OCT 88
Station Name	D883-112	Time - GMT	0221
Latitude	7.23.6 N	Date - LOC	21 OCT 88
Longitude	97.34.2 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.17	0.07	--
20	21.14	34.83	0.42	0.23	3.69
40	20.59	34.78	0.20	0.36	--
60	14.06	34.90	0.09	0.20	--
80	13.79	34.92	0.05	0.07	--
100	13.40	34.91	0.01	0.06	--
125	13.21	34.89	0.00	0.05	--
150	12.90	34.87	0.01	0.03	--
200	12.01	34.78	--	--	--
350	10.26	34.71	--	--	--
500	8.55	34.64	--	--	0.21
1000	4.50	34.56	--	--	1.00

Station No.	3-113	Date - GMT	22 OCT 88
Station Name	D883-113	Time - GMT	1050
Latitude	6.23.3 N	Date - LOC	22 OCT 88
Longitude	98. 9.9 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.70	--	0.18	0.07	--
20	26.97	33.01	0.25	0.20	5.20
40	23.61	34.30	0.46	0.39	--
60	17.62	34.82	0.38	0.35	--
80	--	34.86	0.12	0.36	--
100	13.86	34.90	0.07	0.20	--
125	13.54	34.91	0.01	0.05	--
150	13.22	34.90	0.00	0.04	--
200	12.41	34.84	--	--	--
350	10.24	34.64	--	--	--
500	7.81	34.61	--	--	0.29
1000	4.43	34.57	--	--	1.57

Station No.	3-114	Date - GMT	23 OCT 88
Station Name	D883-114	Time - GMT	0218
Latitude	6.24.5 N	Date - LOC	22 OCT 88
Longitude	98.36.1 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.19	0.06	--
20	26.84	32.98	0.21	0.07	4.87
40	22.30	34.57	0.47	0.44	--
60	18.48	34.84	0.39	0.50	--
80	16.54	34.96	0.23	0.41	--
100	14.76	34.91	0.11	0.32	--
125	13.89	34.92	0.06	0.16	--
150	13.30	34.90	0.00	0.06	--
200	12.56	34.85	--	--	--
350	10.45	34.72	--	--	--
500	8.09	34.63	--	--	0.29
1000	4.43	34.57	--	--	1.21

Station No.	3-115	Date - GMT	23 OCT 88
Station Name	D883-115	Time - GMT	1052
Latitude	7.35.6 N	Date - LOC	23 OCT 88
Longitude	98.22.4 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.19	0.11	--
20	26.68	33.30	0.35	0.17	0.85
40	20.04	34.61	0.42	0.47	--
60	16.37	34.63	0.34	0.39	--
80	14.42	34.78	0.16	0.22	--
100	13.21	34.71	0.06	0.16	--
125	12.70	34.78	0.01	0.08	--
150	12.32	34.80	0.00	0.03	--
200	11.61	34.78	--	--	--
350	9.88	34.69	--	--	--
500	8.31	34.63	--	--	0.29
1000	4.60	34.57	--	--	0.86

Station No.	3-116	Date - GMT	24 OCT 88
Station Name	D883-116	Time - GMT	0216
Latitude	9.30.5 N	Date - LOC	23 OCT 88
Longitude	98. 7.4 W	Time - LOC	2016

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.18	0.04	--
20	27.48	33.45	0.25	0.08	4.81
40	18.32	34.70	0.26	0.43	--
60	14.37	34.79	0.10	0.32	--
80	13.42	34.80	0.08	0.20	--
100	12.62	34.83	0.02	0.09	--
125	12.26	34.79	0.01	0.07	--
150	11.90	34.78	0.00	0.07	--
200	11.35	34.77	--	--	--
350	9.75	34.68	--	--	--
500	7.82	34.60	--	--	0.16
1000	4.35	34.56	--	--	0.76

Station No.	3-117	Date - GMT	24 OCT 88
Station Name	D883-117	Time - GMT	1051
Latitude	9.56.3 N	Date - LOC	24 OCT 88
Longitude	98.29.8 W	Time - LOC	0451

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.70	--	0.14	0.08	--
20	27.00	33.31	0.82	0.91	0.55
40	16.54	34.74	0.37	0.90	--
60	14.89	34.79	0.07	0.51	--
80	13.80	34.79	0.05	0.21	--
100	13.00	34.83	0.01	0.17	--
125	12.53	34.80	0.01	0.09	--
150	12.06	34.78	0.01	0.06	--
200	11.09	34.74	--	--	--
350	9.37	34.66	--	--	--
500	7.61	34.59	--	--	0.13
1000	4.18	34.57	--	--	0.71

Station No.	3-118	Date - GMT	25 OCT 88
Station Name	D883-118	Time - GMT	0219
Latitude	8. 4.8 N	Date - LOC	24 OCT 88
Longitude	99.43.2 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.30	0.08	--
20	27.18	33.06	0.26	0.18	4.79
40	18.84	34.61	0.52	0.49	--
60	16.09	34.66	0.20	0.43	--
80	13.60	34.80	0.13	0.28	--
100	13.18	34.84	0.06	0.13	--
125	12.65	34.82	0.02	0.07	--
150	12.25	34.61	0.01	0.05	--
200	11.75	34.78	--	--	--
350	9.88	34.70	--	--	--
500	8.23	34.63	--	--	0.12
1000	4.50	34.57	--	--	0.83

Station No.	3-119	Date - GMT	25 OCT 88
Station Name	D883-119	Time - GMT	1052
Latitude	7.12.9 N	Date - LOC	25 OCT 88
Longitude	100.18.9 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.90	--	0.12	0.07	--
20	26.86	32.86	0.12	0.06	4.72
40	24.61	34.15	0.45	0.30	--
60	18.94	34.68	0.50	0.60	--
80	15.03	34.77	0.18	0.40	--
100	14.00	34.84	0.07	0.22	--
125	12.94	34.82	0.02	0.06	--
150	12.46	34.80	0.00	0.05	--
200	12.08	34.82	--	--	--
350	10.14	34.71	--	--	--
500	8.68	34.66	--	--	0.17
1000	4.60	34.99	--	--	0.85

Station No.	3-120	Date - GMT	26 OCT 88
Station Name	D883-120	Time - GMT	0217
Latitude	5.27.9 N	Date - LOC	25 OCT 88
Longitude	101.30.2 W	Time - LOC	2017

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.60	--	0.13	0.06	--
20	26.57	33.11	0.13	0.06	5.66
40	26.54	33.12	0.19	0.06	--
60	25.64	33.69	0.50	0.55	--
80	15.83	34.85	0.12	0.37	--
100	13.45	34.85	0.07	0.20	--
125	12.60	34.81	0.01	0.06	--
150	11.89	34.79	0.00	0.05	--
200	11.19	34.75	--	--	--
350	9.77	34.69	--	--	--
500	7.87	34.63	--	--	0.95
1000	4.40	34.56	--	--	1.95

Station No.	3-121	Date - GMT	26 OCT 88
Station Name	D883-121	Time - GMT	1052
Latitude	4.31.6 N	Date - LOC	26 OCT 88
Longitude	102. 8.0 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.00	--	0.17	0.05	--
20	25.94	33.46	0.16	0.05	5.64
40	25.58	33.74	0.32	0.20	--
60	22.24	34.22	0.37	0.47	--
80	16.64	34.79	0.20	0.41	--
100	14.07	34.77	0.11	0.29	--
125	13.00	34.78	0.04	0.08	--
150	12.41	34.74	0.02	0.04	--
200	11.75	34.72	--	--	--
350	9.76	34.69	--	--	--
500	7.76	34.61	--	--	0.76
1000	4.44	34.56	--	--	2.06

Station No.	3-122	Date - GMT	27 OCT 88
Station Name	D883-122	Time - GMT	0223
Latitude	7. 1.7 N	Date - LOC	26 OCT 88
Longitude	101.59.0 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.15	0.06	--
20	27.04	33.01	0.18	0.03	5.50
40	26.70	33.36	0.37	0.10	--
60	22.83	34.56	0.48	0.62	--
80	15.13	34.87	0.07	0.42	--
100	13.29	34.82	0.05	0.13	--
125	12.72	34.84	0.01	0.07	--
150	12.41	34.83	0.01	0.05	--
200	11.46	34.76	--	--	--
350	9.90	34.71	--	--	--
500	7.70	34.60	--	--	0.81
1000	4.46	34.57	--	--	1.69

Station No.	3-123	Date - GMT	27 OCT 88
Station Name	D883-123	Time - GMT	1054
Latitude	8.13.9 N	Date - LOC	27 OCT 88
Longitude	101.55.8 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.20	--	0.18	0.10	--
20	27.05	32.94	0.31	0.22	5.36
40	26.15	34.17	0.23	0.48	--
60	16.88	34.74	0.09	0.29	--
80	14.41	34.82	0.04	0.14	--
100	13.12	34.82	0.02	0.07	--
125	12.74	34.82	0.00	0.05	--
150	12.26	34.77	0.01	0.04	--
200	11.31	34.77	--	--	--
350	9.95	34.70	--	--	--
500	7.82	34.61	--	--	0.84
1000	4.48	34.56	--	--	1.52

Station No.	3-124	Date - GMT	28 OCT 88
Station Name	D883-124	Time - GMT	0219
Latitude	10.39.0 N	Date - LOC	27 OCT 88
Longitude	101.47.9 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.50	--	0.25	0.02	--
20	27.62	33.29	0.19	0.08	5.40
40	24.60	34.40	0.28	0.20	--
60	17.80	34.74	0.30	0.27	--
80	15.13	34.81	0.31	0.54	--
100	13.34	34.80	0.05	0.53	--
125	12.78	34.79	0.05	0.26	--
150	12.06	34.77	0.02	0.14	--
200	11.50	34.77	--	--	--
350	10.03	34.70	--	--	--
500	7.76	34.57	--	--	0.37
1000	4.36	34.57	--	--	0.93

Station No.	3-125	Date - GMT	28 OCT 88
Station Name	D883-125	Time - GMT	1052
Latitude	11.40.8 N	Date - LOC	28 OCT 88
Longitude	101.55.8 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.30	--	0.23	0.11	--
20	28.22	33.18	0.20	0.17	5.26
40	27.49	33.35	0.37	0.22	--
60	19.51	34.70	0.50	0.76	--
80	15.87	34.35	0.11	0.23	--
100	14.17	34.55	0.05	0.27	--
125	13.37	34.85	0.04	0.11	--
150	12.98	34.84	0.01	0.11	--
200	12.29	34.73	--	--	--
350	10.03	34.83	--	--	--
500	8.11	34.59	--	--	0.50
1000	4.47	34.56	--	--	1.19

Station No.	3-126	Date - GMT	29 OCT 88
Station Name	D883-126	Time - GMT	0219
Latitude	12.21.7 N	Date - LOC	28 OCT 88
Longitude	104.23.1 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.50	--	0.23	0.14	--
20	28.43	33.43	0.26	0.16	4.96
40	22.08	34.70	0.73	0.46	--
60	16.16	34.83	0.17	0.46	--
80	14.11	34.80	0.04	0.23	--
100	13.41	34.83	0.00	0.39	--
125	12.86	34.83	0.01	0.08	--
150	12.39	34.81	0.01	0.19	--
200	12.01	34.77	--	--	--
350	9.96	34.68	--	--	--
500	7.94	34.61	--	--	0.24
1000	4.30	34.57	--	--	0.71

Station No.	3-127	Date - GMT	29 OCT 88
Station Name	D883-127	Time - GMT	1053
Latitude	12.40.0 N	Date - LOC	29 OCT 88
Longitude	105.33.8 W	Time - LOC	0453

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.80	--	0.14	0.07	--
20	28.82	33.90	0.16	0.06	5.16
40	21.49	34.43	0.54	0.66	--
60	17.10	34.65	0.15	0.35	--
80	15.00	34.76	0.03	0.15	--
100	13.81	34.82	0.01	0.59	--
125	12.91	34.83	0.00	0.13	--
150	12.38	34.79	0.00	0.07	--
200	11.66	34.76	--	--	--
350	10.00	34.69	--	--	--
500	7.70	34.59	--	--	0.46
1000	4.45	34.56	--	--	0.99

Station No.	3-128	Date - GMT	30 OCT 88
Station Name	D883-128	Time - GMT	0216
Latitude	13.24.7 N	Date - LOC	29 OCT 88
Longitude	108. 3.6 W	Time - LOC	2016

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.22	0.11	--
20	28.10	33.31	0.25	0.10	4.88
40	26.80	34.32	0.35	0.06	--
60	22.12	34.50	0.35	0.42	--
80	16.41	34.68	0.11	0.34	--
100	15.42	34.69	0.05	0.27	--
125	13.41	34.83	--	--	--
150	12.90	34.80	0.01	0.21	--
200	11.92	34.78	--	--	--
350	9.86	34.65	--	--	--
500	7.44	34.56	--	--	0.45
1000	4.34	34.55	--	--	0.67

Station No.	3-129	Date - GMT	30 OCT 88
Station Name	D883-129	Time - GMT	1050
Latitude	13.51.9 N	Date - LOC	30 OCT 88
Longitude	107.34.2 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	0.26	0.16	--
20	28.15	33.84	0.26	0.14	5.03
40	26.25	34.26	0.29	0.27	--
60	18.22	34.50	0.29	0.53	--
80	16.09	34.60	0.12	0.42	--
100	15.00	34.71	0.04	0.24	--
125	13.92	34.75	0.00	0.34	--
150	13.17	34.80	0.00	0.33	--
200	12.25	34.78	--	--	--
350	9.64	34.65	--	--	--
500	7.38	34.58	--	--	0.38
1000	4.36	34.56	--	--	0.68

Station No.	3-130	Date - GMT	31 OCT 88
Station Name	D883-130	Time - GMT	0219
Latitude	15.26.5 N	Date - LOC	30 OCT 88
Longitude	106. 6.2 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.70	--	0.21	0.08	--
20	28.49	34.09	0.23	0.18	5.12
40	22.04	34.40	0.22	0.17	--
60	16.87	34.60	0.81	0.91	--
80	14.82	34.62	0.03	0.28	--
100	13.97	34.68	0.01	0.25	--
125	13.18	34.77	0.00	0.44	--
150	12.78	34.76	0.00	0.28	--
200	11.94	34.76	--	--	--
350	9.95	34.67	--	--	--
500	7.72	34.56	--	--	0.47
1000	4.20	34.55	--	--	0.82

Station No.	4-131	Date - GMT	9 NOV 88
Station Name	D884-131	Time - GMT	0222
Latitude	16.32.3 N	Date - LOC	8 NOV 88
Longitude	101.15.6 W	Time - LOC	2022

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.90	--	0.12	0.05	--
20	29.10	34.15	0.20	0.09	5.08
40	22.19	34.49	0.82	1.18	--
60	17.12	34.71	0.13	0.45	--
80	15.00	34.77	--	--	--
100	13.95	34.83	0.02	0.30	--
125	13.22	34.84	0.01	0.17	--
150	12.59	34.82	0.01	0.17	--
200	12.14	34.80	--	--	--
350	10.16	34.70	--	--	--
500	7.94	34.59	--	--	0.18
1000	4.61	34.55	--	--	0.37

Station No.	4-132	Date - GMT	9 NOV 88
Station Name	D884-132	Time - GMT	1045
Latitude	15.48.8 N	Date - LOC	9 NOV 88
Longitude	100. 7.1 W	Time - LOC	0445

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.60	--	0.19	0.07	--
20	26.50	34.07	0.18	0.07	5.03
40	22.80	34.26	1.35	1.58	--
60	17.68	34.77	0.14	0.31	--
80	15.23	34.80	0.05	0.21	--
100	14.59	34.83	0.04	0.12	--
125	13.78	34.84	0.02	0.29	--
150	13.04	34.84	0.01	0.07	--
200	12.34	34.81	--	--	--
350	10.42	34.70	--	--	--
500	8.10	34.59	--	--	0.25
1000	4.28	34.55	--	--	0.40

Station No.	4-133	Date - GMT	10 NOV 88
Station Name	D884-133	Time - GMT	0232
Latitude	14.39.9 N	Date - LOC	9 NOV 88
Longitude	98.23.3 W	Time - LOC	2032

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.30	--	0.20	0.08	--
20	27.65	33.66	1.01	0.92	5.40
40	24.75	33.94	0.52	0.28	--
60	20.64	34.38	0.22	0.20	--
80	16.51	34.74	0.11	0.14	--
100	14.82	34.83	0.04	0.20	--
125	--	--	0.01	0.15	--
150	13.24	34.84	0.02	0.11	--
200	12.48	34.81	--	--	--
350	10.50	34.74	--	--	--
500	8.89	34.59	--	--	0.30
1000	4.65	34.55	--	--	0.42

Station No.	4-134	Date - GMT	10 NOV 88
Station Name	D884-134	Time - GMT	1056
Latitude	14.25.7 N	Date - LOC	10 NOV 88
Longitude	98.53.2 W	Time - LOC	0456

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.00	--	0.39	0.26	--
20	27.44	33.64	0.92	0.73	5.82
40	25.06	33.86	0.33	0.35	--
60	22.54	34.23	0.09	0.17	--
80	17.84	34.72	0.08	0.19	--
100	14.94	34.80	0.02	0.12	--
125	13.74	34.87	0.03	0.14	--
150	--	--	0.04	0.13	--
200	12.80	34.83	--	--	--
350	10.86	34.74	--	--	--
500	8.28	34.62	--	--	0.37
1000	4.27	34.56	--	--	0.51

Station No.	4-135	Date - GMT	11 NOV 88
Station Name	D884-135	Time - GMT	0220
Latitude	14.35.2 N	Date - LOC	10 NOV 88
Longitude	101. 6.0 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	30.00	--	0.14	0.07	--
20	29.54	33.59	0.20	0.08	5.06
40	23.17	34.45	1.36	1.26	--
60	17.39	34.64	0.17	0.38	--
80	15.05	34.75	0.01	0.18	--
100	14.10	34.81	0.03	0.15	--
125	13.31	34.83	0.02	0.15	--
150	12.82	34.83	0.00	0.05	--
200	12.25	34.81	--	--	--
350	10.18	34.70	--	--	--
500	7.92	34.59	--	--	0.29
1000	4.41	34.56	--	--	0.57

Station No.	4-136	Date - GMT	11 NOV 88
Station Name	D884-136	Time - GMT	1049
Latitude	14.39.7 N	Date - LOC	11 NOV 88
Longitude	102.25.2 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.30	--	0.11	0.05	--
20	28.99	34.00	0.12	0.04	4.96
40	26.48	34.25	0.19	0.10	--
60	18.88	34.57	0.28	0.37	--
80	16.09	34.68	0.12	0.31	--
100	14.30	34.76	0.01	0.25	--
125	13.46	34.80	0.00	0.65	--
150	12.91	34.82	0.00	0.28	--
200	12.27	34.80	--	--	--
350	10.26	34.70	--	--	--
500	7.89	34.59	--	--	0.22
1000	4.46	34.56	--	--	0.45

Station No.	4-137	Date - GMT	12 NOV 88
Station Name	D884-137	Time - GMT	0220
Latitude	14.37.8 N	Date - LOC	11 NOV 88
Longitude	104.39.4 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.90	--	0.10	0.05	--
20	28.54	34.14	0.11	0.04	4.95
40	23.79	34.43	0.29	0.24	--
60	19.81	34.55	0.29	0.57	--
80	15.96	34.72	0.05	0.43	--
100	14.34	34.75	0.00	0.39	--
125	13.35	34.80	0.00	0.31	--
150	12.67	34.79	0.00	0.17	--
200	12.05	34.78	--	--	--
350	9.96	34.68	--	--	--
500	7.88	34.58	--	--	0.25
1000	4.45	34.54	--	--	0.43

Station No.	4-138	Date - GMT	12 NOV 88
Station Name	D884-138	Time - GMT	1049
Latitude	13.36.6 N	Date - LOC	12 NOV 88
Longitude	105.26.3 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.60	--	0.19	0.06	--
20	28.48	33.66	0.22	0.07	4.94
40	26.12	34.19	0.30	0.21	--
60	22.29	34.40	0.35	0.44	--
80	17.55	34.58	0.12	0.39	--
100	14.72	34.74	0.06	0.14	--
125	13.77	34.81	0.02	0.12	--
150	12.89	34.80	0.00	0.11	--
200	11.97	34.77	--	--	--
350	9.94	34.67	--	--	--
500	7.85	34.58	--	--	0.20
1000	4.45	34.55	--	--	0.68

Station No.	4-139	Date - GMT	13 NOV 88
Station Name	D884-139	Time - GMT	0222
Latitude	11.48.5 N	Date - LOC	12 NOV 88
Longitude	107. 6.6 W	Time - LOC	2022

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.50	--	0.23	0.11	--
20	28.31	33.45	0.22	0.07	5.15
40	26.57	33.34	0.45	0.21	--
60	20.71	34.57	0.26	0.28	--
80	14.85	34.73	0.04	0.19	--
100	13.44	34.77	0.01	0.18	--
125	12.66	34.84	0.02	0.07	--
150	12.27	34.76	0.00	0.05	--
200	11.49	34.75	--	--	--
350	9.64	34.65	--	--	--
500	7.72	34.55	--	--	0.24
1000	4.20	34.56	--	--	0.83

Station No.	4-140	Date - GMT	13 NOV 88
Station Name	D884-140	Time - GMT	1054
Latitude	11. 6.0 N	Date - LOC	13 NOV 88
Longitude	108. 6.5 W	Time - LOC	0454

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.90	--	0.15	0.10	--
20	27.63	33.06	0.16	0.07	5.30
40	26.88	34.34	0.15	0.11	--
60	23.44	34.60	0.62	0.07	--
80	18.92	34.59	0.18	0.34	--
100	15.36	34.74	0.07	0.20	--
125	13.76	34.79	0.04	0.19	--
150	12.86	34.80	0.02	0.10	--
200	11.96	34.76	--	--	--
350	9.67	34.65	--	--	--
500	7.57	34.57	--	--	0.35
1000	4.20	34.56	--	--	0.90

Station No.	4-141	Date - GMT	15 NOV 88
Station Name	D884-141	Time - GMT	0319
Latitude	10.20.6 N	Date - LOC	14 NOV 88
Longitude	109.48.9 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.17	0.07	--
20	27.30	33.00	0.25	0.12	5.19
40	23.24	34.53	0.29	0.32	--
60	20.18	34.66	0.26	0.34	--
80	16.89	34.78	0.26	0.36	--
100	13.94	34.78	0.07	0.17	--
125	12.75	34.80	0.03	0.08	--
150	12.22	34.78	0.01	0.04	--
200	11.60	34.76	--	--	--
350	9.87	34.69	--	--	--
500	7.93	34.58	--	--	0.32
1000	4.27	34.56	--	--	0.92

Station No.	4-142	Date - GMT	15 NOV 88
Station Name	D884-142	Time - GMT	1146
Latitude	10.23.2 N	Date - LOC	15 NOV 88
Longitude	111.10.1 W	Time - LOC	0446

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.13	0.09	--
20	27.46	32.94	0.16	0.09	5.09
40	24.52	34.52	0.34	0.26	--
60	18.33	34.59	0.31	0.47	--
80	16.51	34.68	0.34	0.35	--
100	14.67	34.79	0.16	0.42	--
125	12.59	34.80	0.09	0.27	--
150	12.16	34.79	0.04	0.07	--
200	11.44	34.76	--	--	--
350	9.79	34.68	--	--	--
500	8.10	34.58	--	--	0.37
1000	4.16	34.56	--	--	0.95

Station No.	4-143	Date - GMT	16 NOV 88
Station Name	D884-143	Time - GMT	0320
Latitude	10.30.1 N	Date - LOC	15 NOV 88
Longitude	113.53.6 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.13	0.07	--
20	24.47	34.40	0.31	0.11	4.76
40	17.24	34.46	0.26	0.16	--
60	14.54	34.74	0.08	0.43	--
80	13.23	34.74	0.11	0.20	--
100	12.54	34.76	0.05	0.08	--
125	12.20	34.77	0.01	0.05	--
150	11.77	34.76	0.00	0.05	--
200	11.15	34.75	--	--	--
350	9.82	34.68	--	--	--
500	8.11	34.57	--	--	--
1000	4.29	34.55	--	--	0.78

Station No.	4-144	Date - GMT	16 NOV 88
Station Name	D884-144	Time - GMT	1148
Latitude	10.34.3 N	Date - LOC	16 NOV 88
Longitude	115.10.7 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.15	0.05	--
20	26.62	33.77	0.19	0.05	4.98
40	20.91	34.56	0.31	0.34	--
60	15.24	34.59	0.22	0.45	--
80	13.77	34.36	0.07	0.50	--
100	13.18	34.80	0.03	0.25	--
125	12.28	34.71	0.03	0.12	--
150	11.88	34.76	0.01	0.05	--
200	11.18	34.74	--	--	--
350	9.83	34.69	--	--	--
500	8.08	34.58	--	--	0.28
1000	4.24	34.56	--	--	0.91

Station No.	4-145	Date - GMT	17 NOV 88
Station Name	D884-145	Time - GMT	0318
Latitude	10.28.4 N	Date - LOC	16 NOV 88
Longitude	117.30.9 W	Time - LOC	2018

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.60	--	0.10	0.02	--
20	21.94	34.68	0.31	0.12	4.41
40	16.59	34.62	0.24	0.34	--
60	13.69	34.73	0.19	0.31	--
80	12.72	34.79	0.05	0.17	--
100	12.33	34.79	0.03	0.08	--
125	11.66	34.76	0.00	0.06	--
150	11.47	34.75	0.00	0.05	--
200	11.01	34.83	--	--	--
350	9.71	34.68	--	--	--
500	8.07	34.58	--	--	0.31
1000	4.19	34.56	--	--	0.85

Station No.	4-146	Date - GMT	17 NOV 88
Station Name	D884-146	Time - GMT	1152
Latitude	9.56.8 N	Date - LOC	17 NOV 88
Longitude	117.33.7 W	Time - LOC	0452

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.15	0.04	--
20	26.73	34.26	0.18	0.06	5.02
40	19.09	34.60	0.23	0.24	--
60	15.01	34.75	0.05	0.54	--
80	12.98	34.81	0.05	0.16	--
100	12.72	34.82	0.05	0.07	--
125	12.06	34.78	0.00	0.04	--
150	11.54	34.75	0.01	0.03	--
200	10.94	34.73	--	--	--
350	9.79	34.69	--	--	--
500	8.16	34.59	--	--	0.15
1000	4.27	34.55	--	--	0.90

Station No.	4-147	Date - GMT	18 NOV 88
Station Name	D884-147	Time - GMT	0325
Latitude	8.44.5 N	Date - LOC	17 NOV 88
Longitude	115.25.8 W	Time - LOC	2025

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.14	0.05	--
20	27.36	33.71	0.16	0.07	4.83
40	25.89	34.68	0.31	0.22	--
60	21.47	34.74	0.31	0.33	--
80	15.82	34.57	0.22	0.33	--
100	13.90	34.75	0.06	0.16	--
125	13.14	34.80	0.04	0.05	--
150	12.52	34.79	0.01	0.03	--
200	11.60	34.76	--	--	--
350	10.11	34.70	--	--	--
500	8.06	34.59	--	--	0.24
1000	4.13	34.57	--	--	1.06

Station No.	4-148	Date - GMT	18 NOV 88
Station Name	D884-148	Time - GMT	1147
Latitude	8. 6.1 N	Date - LOC	18 NOV 88
Longitude	114.19.2 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.10	0.07	--
20	27.12	34.27	0.13	0.05	5.03
40	25.35	34.38	0.12	0.07	--
60	21.19	34.88	0.20	0.07	--
80	16.29	34.70	0.31	0.25	--
100	14.10	34.81	0.32	0.35	--
125	12.74	34.79	0.17	0.31	--
150	12.02	34.77	0.04	0.05	--
200	11.18	34.75	--	--	--
350	9.81	34.69	--	--	--
500	8.23	34.61	--	--	0.21
1000	4.40	34.56	--	--	1.00

Station No.	4-149	Date - GMT	19 NOV 88
Station Name	D884-149	Time - GMT	0321
Latitude	8. 6.5 N	Date - LOC	18 NOV 88
Longitude	111.45.3 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.14	0.07	--
20	27.11	33.53	0.16	0.06	4.87
40	26.33	34.33	0.29	0.20	--
60	19.30	34.90	0.24	0.35	--
80	16.30	34.66	0.13	0.30	--
100	14.75	34.74	0.13	0.17	--
125	12.80	34.80	0.02	0.13	--
150	12.01	34.78	0.00	0.05	--
200	11.33	34.75	--	--	--
350	9.86	34.69	--	--	--
500	7.87	34.59	--	--	0.20
1000	4.21	34.56	--	--	1.02

Station No.	4-150	Date - GMT	19 NOV 88
Station Name	D884-150	Time - GMT	1148
Latitude	8.24.8 N	Date - LOC	19 NOV 88
Longitude	110.28.8 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.00	--	0.14	0.06	--
20	27.30	33.34	0.15	0.05	4.82
40	24.32	34.62	0.29	0.20	--
60	18.12	34.72	0.22	0.35	--
80	14.62	34.75	0.08	0.25	--
100	13.35	34.79	0.05	0.13	--
125	12.66	34.79	0.03	0.05	--
150	12.13	34.77	0.00	0.05	--
200	11.14	34.73	--	--	--
350	9.81	34.69	--	--	--
500	8.01	34.59	--	--	0.23
1000	4.34	34.56	--	--	1.02

Station No.	4-151	Date - GMT	20 NOV 88
Station Name	D884-151	Time - GMT	0323
Latitude	8.46.4 N	Date - LOC	19 NOV 88
Longitude	108.10.5 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.60	--	0.09	0.04	--
20	27.10	32.87	0.14	0.07	4.98
40	21.26	34.67	0.40	0.40	--
60	17.75	34.70	0.27	0.40	--
80	14.86	34.74	0.11	0.18	--
100	13.63	34.77	0.06	0.18	--
125	12.60	34.79	0.02	0.10	--
150	12.17	34.77	0.00	0.06	--
200	11.56	34.75	--	--	--
350	9.41	34.66	--	--	--
500	7.27	34.57	--	--	0.11
1000	4.14	34.57	--	--	0.91

Station No.	4-152	Date - GMT	20 NOV 88
Station Name	D884-152	Time - GMT	1148
Latitude	9.29.3 N	Date - LOC	20 NOV 88
Longitude	108.31.3 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.11	0.05	--
20	27.43	33.55	0.09	0.06	4.88
40	23.53	34.57	0.15	0.05	--
60	14.63	34.79	0.35	0.43	--
80	13.17	34.79	0.07	0.21	--
100	12.80	34.78	0.03	0.18	--
125	12.42	34.79	0.01	0.08	--
150	11.91	34.77	0.00	0.06	--
200	11.25	34.75	--	--	--
350	9.60	34.68	--	--	--
500	7.24	34.58	--	--	0.15
1000	4.19	34.57	--	--	0.91

Station No.	4-153	Date - GMT	21 NOV 88
Station Name	D884-153	Time - GMT	0322
Latitude	10.42.9 N	Date - LOC	20 NOV 88
Longitude	109.17.3 W	Time - LOC	2022

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.11	0.07	--
20	27.55	33.03	0.15	0.07	4.83
40	24.93	34.35	0.26	0.33	--
60	19.39	34.65	0.25	0.31	--
80	15.10	34.59	0.07	0.17	--
100	13.87	34.77	0.01	0.15	--
125	12.70	34.78	0.00	0.07	--
150	12.12	34.78	0.00	0.06	--
200	11.55	34.76	--	--	--
350	9.82	34.67	--	--	--
500	7.67	34.58	--	--	0.17
1000	4.30	34.56	--	--	0.71

Station No.	4-154	Date - GMT	21 NOV 88
Station Name	D884-154	Time - GMT	1148
Latitude	11.57.7 N	Date - LOC	21 NOV 88
Longitude	109.24.7 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.60	--	0.10	0.07	--
20	27.46	32.93	0.10	0.06	5.15
40	27.45	32.93	0.11	0.06	--
60	24.02	34.41	0.35	0.33	--
80	17.01	34.64	0.28	0.42	--
100	15.26	34.76	0.04	0.21	--
125	13.76	34.78	0.00	0.22	--
150	13.14	34.78	0.03	0.19	--
200	11.61	34.76	--	--	--
350	9.67	34.66	--	--	--
500	7.63	34.57	--	--	0.21
1000	4.17	34.57	--	--	0.89

Station No.	4-155	Date - GMT	22 NOV 88
Station Name	D884-155	Time - GMT	0319
Latitude	13.31.1 N	Date - LOC	21 NOV 88
Longitude	110.18.8 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.12	0.06	--
20	27.64	33.27	0.13	0.06	5.20
40	27.71	33.90	0.17	0.07	--
60	21.62	34.49	0.38	0.54	--
80	18.03	34.61	0.18	0.48	--
100	14.83	34.74	0.06	0.16	--
125	13.19	34.80	0.03	0.08	--
150	12.71	34.80	0.01	0.06	--
200	11.88	34.79	--	--	--
350	9.94	34.69	--	--	--
500	7.75	34.58	--	--	0.22
1000	4.32	34.56	--	--	0.57

Station No.	4-156	Date - GMT	22 NOV 88
Station Name	D884-156	Time - GMT	1148
Latitude	13.11.4 N	Date - LOC	22 NOV 88
Longitude	111.35.4 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.60	--	0.13	0.06	--
20	27.53	33.15	0.13	0.07	4.97
40	27.53	33.15	0.12	0.07	--
60	26.51	34.13	0.24	0.14	--
80	19.66	34.69	0.25	0.43	--
100	15.51	34.79	0.08	0.18	--
125	13.08	34.81	0.00	0.11	--
150	12.63	34.81	0.00	0.13	--
200	11.83	34.79	--	--	--
350	9.85	34.67	--	--	--
500	7.65	34.57	--	--	0.16
1000	4.20	34.56	--	--	0.58

Station No.	4-157	Date - GMT	23 NOV 88
Station Name	D884-157	Time - GMT	0321
Latitude	12.40.9 N	Date - LOC	22 NOV 88
Longitude	113.59.6 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.10	--	0.10	0.06	--
20	26.96	32.97	0.11	0.05	5.02
40	21.32	34.50	0.32	0.27	--
60	15.83	33.71	0.09	0.51	--
80	14.26	34.73	0.01	0.32	--
100	13.35	34.77	0.00	0.26	--
125	12.66	34.78	0.00	0.26	--
150	12.20	34.77	0.01	0.20	--
200	11.58	34.77	--	--	--
350	9.74	34.66	--	--	--
500	7.81	34.58	--	--	0.19
1000	4.33	34.56	--	--	0.50

Station No.	4-158	Date - GMT	24 NOV 88
Station Name	D884-158	Time - GMT	0323
Latitude	14.17.0 N	Date - LOC	23 NOV 88
Longitude	112.33.6 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.60	--	0.11	0.01	--
20	27.43	33.07	0.08	0.05	4.82
40	25.32	34.29	0.44	0.19	--
60	20.40	34.44	0.44	0.52	--
80	16.25	34.27	0.08	0.34	--
100	14.90	34.59	0.07	0.22	--
125	13.65	34.72	0.02	0.09	--
150	12.76	34.76	0.01	0.22	--
200	11.78	34.76	--	--	--
350	9.54	34.65	--	--	--
500	7.46	34.56	--	--	0.13
1000	4.21	34.56	--	--	0.80

Station No.	4-159	Date - GMT	24 NOV 88
Station Name	D884-159	Time - GMT	1150
Latitude	15. 8.3 N	Date - LOC	24 NOV 88
Longitude	111.41.5 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.20	--	0.16	0.07	--
20	27.06	34.05	0.17	0.06	4.95
40	20.24	34.35	0.47	0.44	--
60	17.42	34.45	0.34	0.45	--
80	15.20	34.55	0.16	0.27	--
100	13.72	34.73	0.03	0.13	--
125	13.29	34.76	0.03	0.35	--
150	12.62	34.77	0.02	0.23	--
200	11.64	34.77	--	--	--
350	9.48	34.64	--	--	--
500	7.48	34.58	--	--	0.14
1000	4.12	34.56	--	--	0.52

Station No.	4-160	Date - GMT	25 NOV 88
Station Name	D884-160	Time - GMT	0321
Latitude	16.31.8 N	Date - LOC	24 NOV 88
Longitude	110. 4.7 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.11	0.05	--
20	27.22	33.57	0.14	0.06	4.90
40	27.17	33.83	0.67	0.48	--
60	21.52	34.42	0.24	0.47	--
80	17.84	34.50	0.05	0.17	--
100	14.47	34.58	0.00	0.09	--
125	12.93	34.70	0.02	0.16	--
150	12.17	34.75	0.01	0.17	--
200	11.66	34.76	--	--	--
350	9.46	34.64	--	--	--
500	7.47	34.55	--	--	0.44
1000	4.32	34.55	--	--	0.51

Station No.	4-161	Date - GMT	25 NOV 88
Station Name	D884-161	Time - GMT	1149
Latitude	17.24.6 N	Date - LOC	25 NOV 88
Longitude	109.15.9 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.19	0.03	--
20	27.23	34.25	--	--	--
40	25.65	34.26	0.32	0.13	--
60	21.03	34.35	0.60	0.69	--
80	16.22	34.57	0.12	0.30	--
100	14.25	34.73	0.00	0.39	--
125	13.69	34.77	0.01	0.57	--
150	13.21	34.78	0.04	0.45	--
200	12.13	34.78	--	--	--
350	10.15	34.69	--	--	--
500	8.01	34.59	--	--	0.20
1000	4.50	34.55	--	--	0.42

Station No.	4-162	Date - GMT	26 NOV 88
Station Name	D884-162	Time - GMT	0320
Latitude	18.51.9 N	Date - LOC	25 NOV 88
Longitude	108. 7.4 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.50	--	0.17	0.06	--
20	26.21	34.47	0.17	0.06	5.11
40	20.82	33.95	0.29	0.12	--
60	18.69	34.15	0.49	0.36	--
80	16.47	34.57	0.20	0.34	--
100	14.16	34.38	0.12	0.10	--
125	13.62	34.75	0.01	0.07	--
150	12.93	34.77	0.01	0.13	--
200	12.02	34.77	--	--	--
350	9.85	34.65	--	--	--
500	7.41	34.55	--	--	0.27
1000	4.36	34.54	--	--	0.44

Station No.	4-163	Date - GMT	26 NOV 88
Station Name	D884-163	Time - GMT	1148
Latitude	19. 3.4 N	Date - LOC	26 NOV 88
Longitude	109.12.3 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.70	--	0.15	0.05	--
20	25.52	34.51	0.16	0.04	5.23
40	22.44	34.35	0.51	0.43	--
60	17.32	34.47	0.37	0.29	--
80	15.28	34.44	0.12	0.20	--
100	13.97	34.71	0.02	0.12	--
125	13.22	34.76	0.01	0.51	--
150	12.69	34.81	0.02	0.27	--
200	11.79	34.76	--	--	--
350	10.00	34.67	--	--	--
500	7.90	34.54	--	--	0.23
1000	4.38	34.55	--	--	0.48

Station No.	4-164	Date - GMT	27 NOV 88
Station Name	D884-164	Time - GMT	0803
Latitude	19.10.3 N	Date - LOC	27 NOV 88
Longitude	111.26.6 W	Time - LOC	0103

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.80	--	0.22	0.15	--
20	25.63	34.41	0.25	0.18	5.04
40	21.31	34.50	0.74	0.69	--
60	15.68	34.46	0.35	0.35	--
80	14.19	34.57	0.06	0.11	--
100	13.50	34.67	0.02	0.08	--
125	12.92	34.73	0.00	0.06	--
150	12.29	34.71	0.00	0.05	--
200	11.46	34.72	--	--	--
350	9.17	34.57	--	--	--
500	7.44	34.53	--	--	0.30
1000	4.44	34.55	--	--	0.39

Station No.	4-165	Date - GMT	28 NOV 88
Station Name	D884-165	Time - GMT	0321
Latitude	17.46.0 N	Date - LOC	27 NOV 88
Longitude	112.45.6 W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.60	--	0.15	0.07	--
20	25.42	34.43	0.16	0.07	4.93
40	22.08	34.12	0.30	0.16	--
60	17.18	34.17	0.36	0.46	--
80	14.46	34.39	0.08	0.19	--
100	13.73	34.64	0.03	0.08	--
125	12.61	34.73	0.01	0.04	--
150	11.93	34.72	0.00	0.06	--
200	11.30	34.72	--	--	--
350	9.04	34.59	--	--	--
500	7.44	34.53	--	--	0.25
1000	4.30	34.66	--	--	0.58

Station No.	4-166	Date - GMT	28 NOV 88
Station Name	D884-166	Time - GMT	1150
Latitude	17.31.4 N	Date - LOC	28 NOV 88
Longitude	114. 4.2 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.40	--	0.15	0.06	--
20	25.28	34.47	0.16	0.06	5.08
40	24.38	34.40	0.23	0.21	--
60	19.34	34.08	0.34	0.41	--
80	15.87	34.28	0.14	0.26	--
100	14.20	33.96	0.06	0.17	--
125	12.95	34.58	0.02	0.04	--
150	12.41	34.68	0.00	0.04	--
200	11.71	34.71	--	--	--
350	9.30	34.60	--	--	--
500	7.13	34.52	--	--	0.15
1000	4.07	34.55	--	--	0.59

Station No.	4-167	Date - GMT	29 NOV 88
Station Name	D884-167	Time - GMT	0323
Latitude	17. 1.2 N	Date - LOC	28 NOV 88
Longitude	116.24.8 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.40	--	0.09	0.02	--
20	24.30	34.64	--	--	--
40	24.26	34.66	0.10	0.02	--
60	20.57	34.27	0.19	0.04	--
80	17.66	34.17	0.31	0.39	--
100	15.55	34.08	0.28	0.31	--
125	13.42	34.19	0.06	0.11	--
150	12.26	34.39	0.01	0.04	--
200	11.93	34.71	--	--	--
350	9.31	34.60	--	--	--
500	7.26	34.52	--	--	0.27
1000	4.15	34.55	--	--	0.58

Station No.	4-168	Date - GMT	30 NOV 88
Station Name	D884-168	Time - GMT	0320
Latitude	18.23.4 N	Date - LOC	29 NOV 88
Longitude	116. 3.8 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.50	--	0.13	0.02	--
20	24.32	34.54	0.13	0.03	4.94
40	24.33	33.03	0.13	0.05	--
60	20.51	34.16	0.26	0.17	--
80	16.84	33.97	0.34	0.46	--
100	15.05	34.03	0.20	0.29	--
125	13.99	34.44	0.05	0.13	--
150	12.97	34.64	0.01	0.04	--
200	12.06	34.72	--	--	--
350	9.63	34.60	--	--	--
500	7.62	34.53	--	--	0.19
1000	4.16	34.54	--	--	0.50

Station No.	4-169	Date - GMT	30 NOV 88
Station Name	D884-169	Time - GMT	1149
Latitude	19.15.0 N	Date - LOC	30 NOV 88
Longitude	115.13.5 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	24.00	--	0.09	0.06	--
20	24.08	33.01	0.11	0.03	4.95
40	23.95	34.54	0.11	0.04	--
60	19.16	33.84	0.19	0.07	--
80	15.34	33.87	0.27	0.40	--
100	14.76	34.17	0.13	0.37	--
125	13.16	34.25	0.04	0.13	--
150	12.88	34.60	0.01	0.06	--
200	11.64	34.65	--	--	--
350	9.21	34.57	--	--	--
500	7.23	34.49	--	--	0.17
1000	4.13	34.55	--	--	0.46

APPENDIX B

SCIENTIFIC PERSONNEL

<u>Cruise Leaders</u>	<u>Leg</u>
Al Jackson, SWFC	1
Rennie Holt, SWFC	2
Aleta Hohn, SWFC	3
Elizabeth Edwards, SWFC	4
 <u>Ocenographers</u>	
Lisa Lierheimer, SWFC	1-3
Gregg Thomas, AOML	1-4
Paul Fiedler, SWFC	4
 <u>Seabird Observers</u>	
Lisa Ballance, SWFC	1
Robert Pitman, SWFC	1-2
James Gilardi, Contractor	2-4
James Caretta, Contractor	3-4
 <u>Marine Mammal Identification Experts</u>	
Rick LeDuc, SWFC	1-2
Marc Webber, SWFC	1-2
Michael Newcomber, SWFC	3
Scott Sinclair, SWFC	3-4
 <u>Marine Mammal Observers</u>	
Scott Benson, SWFC	1-2
Carrie Fried, SWFC	1-2
Joseph Raffetto, SWFC	1-2
David Skordal, SWFC	1-2
Sallie Beavers, SWFC	3-4
Bill Irwin, SWFC	3-4
Keith Rittmaster, SWFC	3-4
Victoria Thayer, SWFC	3-4
Peter Boveng, SWFC	4
 <u>Photogrammetrists</u>	
Jay Barlow, SWFC	1
Morgan Lynn, NOAA Corps, SWFC	1-2, 4
James Gilpatrick, SWFC	2-3
Mark Lowry, SWFC	4
 <u>Helicopter Support</u>	
Carl Anderson, OAO	1, 3
Dave Gardiner, OAO	1
Bud Christman, NOAA Corps, OAO	2
John Crona, OAO	2, 4
Bill Hines, NOAA Corps, OAO	3-4

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