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REPORT OF ECOSYSTEM STUDIES CONDUCTED DURING THE 1987 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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CONTENTS

LIST OF TABLES

LIST OF FIGURES

REPORT OF ECOSYSTEM STUDIES CONDUCTED DURING THE 1987 EASTERN TROPICAL PACIFIC DOLPHIN SURVEY ON THE RESEARCH VESSEL *DAVID STARR JORDAN*

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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 1987, the Southwest Fisheries Center (SWFC) conducted the second survey of a 6-year survey program to monitor population trends in ETP dolphin stocks (Holt and Sexton, 1987). 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 August 8 through December 10, 1987. Approximately the same area and time period will be surveyed during subsequent years of the program. As part of this monitoring program 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 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 (Thayer et al., 1988).

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. We are monitoring these environmental effects by examining relationships between dolphin distribution and oceanographic patterns and processes. We sample these phenomena, concurrently with the dolphin sighting survey, by measuring the regional and local changes in such environmental parameters as concentration of chlorophyll, nutrients and 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 El Niño. 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 program, which include developing the ability to forecast occurrences of the El Niño Southern Oscillation phenomena.

STUDY AREA AND ITINERARY

The *Jordan* departed San Diego, California on 8 August 1987 and returned on 10 December 1987. The cruise was conducted in four legs of approximately 30 days each, with scheduled port calls in San José, Guatemala; Rodman, Panama; and Manzanillo, Mexico. The cruise tracks for both vessels (Figure 1) were chosen to maximize coverage of the known ranges of the two target species, spotted dolphin (*Stenella attenuata*) and spinner dolphins, (*Stenella longirostris*) in the eastern tropical Pacific.

The itinerary for the *Jordan* was as follows:

	Leg 1	
Departure	8 August 1987	San Diego, California
Arrival	29 August 1987	San José, Guatemala
	Leg 2	
Departure	5 September 1987	San José, Guatemala
Arrival	2 October 1987	Panama City, Panama
	Leg 3	
Departure	6 October 1987	Panama City, Panama
Arrival	4 November 1987	Manzanillo, Mexico
	Leg 4	
Departure	8 November 1987	Manzanillo, Mexico
Arrival	10 December 1987	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 ODEC[1] Model TSG-102 Thermosalinograph and recorded on the ship's CAMAC data acquisition system. *In vivo* fluorescence was measured with a Turner Designs fluorometer and recorded on a data acquisition system consisting of an AI08 A/D board (Industrial Computer Source) connected to an IBM PC compatible microcomputer. Discrete water samples were collected at regular intervals to calibrate 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, depth, pressure (depth), and dissolved oxygen.

Twelve Niskin bottles on the CTD rosette collected water from discrete depths (20, 40, 60, 80, 100, 125, 150, 200, 250, 350, 500 and 1,000 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, 8 280 ml bottles/cast; nutrients, 12 50 ml or 125 ml bottles/cast. Extracted chlorophyll and phaeophytin were measured with a Turner Designs fluorometer. Nutrient samples were collected and frozen immediately for later analysis. Salinity and oxygen samples were also collected and analyzed from each cast for the purpose of CTD calibration in the following quantities: salinity, 3 150 ml bottles/cast; and oxygen, 3 250 ml bottles/cast.

Expendable bathythermograph (XBT) drops were made daily at 0000, 0600, 1200, and 1800 hours (local time). On about half of the sea days, when the vessel was in an area of particular interest for dolphin distribution studies, additional XBTs were deployed at 0900 and 1500 hrs. A SEAS (Shipboard Environmental data Acquisition System) XBT system was utilized. XBT data were transmitted to shore via the SEAS system every four hours. Position, time and date for each drop were recorded on NOAA XBT logs and tapes.

An acoustic data acquisition system (ADA) was operated during the entire cruise on the *Jordan*. Acoustic backscatter was recorded using a 38 kHz down-looking sonar. Backscatter was digitized and integrated in 10-meter intervals between the surface and a depth of 200 meters. Thirty pings were averaged every 15 minutes to reduce data volume.

Four satellite-tracked drift buoys were deployed at predetermined locations. These buoys transmit signals which are

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

received by NOAA satellites and transferred to the ARGOS service facility in Toulouse, France. The deployments, arranged by Don Hansen of AOML, were for EPOCS and TOGA investigations of surface currents.

Biological Observations

Two concurrent visual seabird censuses were conducted during the cruise. As part of a long-term ETP seabird distribution study (R.L. Pitman), sightings of all marine birds were recorded, by selected mammal observers experienced in seabird censusing, during the first and second legs of the cruise. The seabirds were censused during and incidental to the regular dolphin survey, using pedestal-mounted 25X Fujinon binoculars. All birds seen were tallied with this method, regardless of distance from the ship. Additional information was also recorded on interspecific associations with other birds and mammals, as well as behavior, plumage, and direction of travel.

A separate seabird abundance census was conducted utilizing standard strip-transect seabird censusing methodology. Volunteer observers stood shifts for a minimum total of 6 hours a day (weather permitting) on the flying bridge. The observers used hand-held 8X Fujinon binoculars and recorded all birds which passed within 300 meters of the ship. Species, number, and behavior of birds were recorded as well as associations of seabirds with marine mammals, fish, or flotsam.

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 crane for 15 minutes. Samples were preserved in formalin, labeled and stored.

One of the authors (RLP) surveyed and sampled surface organisms during nightly CTD stations. The primary purpose of this survey was 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 (R.L. Pitman), all sightings of marine turtles made incidental to the systematic marine mammal and bird 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. Caught fish were identified, sexed, and measured. Associations with flotsam, fish, bird flocks or mammals were recorded. Stomach contents were identified and recorded. Unidentified stomach contents were preserved for later identification.

RESULTS

Holt and Sexton (1988) reported on the dolphin assessment methods and data from the 1987 *Jordan* cruise.

Table 1 lists the total numbers of oceanographic and biological samples, by category, collected on the *Jordan*.

Oceanography

Digital and strip-chart records of continuous surface data from the thermosalinograph and fluorometer are now being processed at SWFC.

Figure 2 shows the locations of the 119 CTD casts. Several problems hindered CTD data collection during the first two legs of the cruise, requiring special attention and processing. CTD operations were restored to normal for the remainder of the cruise after complete replacement of the underwater unit by AOML. Analysis of discrete salinity samples for CTD calibration had to be performed at AOML due to salinometer and air-conditioning problems encountered at sea. Preliminary uncalibrated CTD temperature and salinity data may be found in Appendix A.

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 processed at sea, and data (Appendix A) were processed at the SWFC in La Jolla. Nutrient samples (frozen) were shipped to Monterey Bay Aquarium Research Institute and are now being analyzed by Dr. Richard Barber. An addendum containing nutrient data and calibrated CTD data will be available from SWFC at a later date.[2] A forthcoming data report (Thomas and Thayer, in preparation) will detail the CTD data collected on board both the *Jordan* and the *McArthur* for 1986 and 1987.

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[2]Persons interested in receiving this addendum should contact the SWFC.

XBT data are being processed by AOML. The data were stored on computer hard disk and backed up on floppy disks. Figure 3 shows XBT deployment locations. XBT data were sent by the SEAS system daily to the National Ocean Service, NOAA[3] and are available from them through standard data transfer channels.

The acoustical depth analysis system data are now being edited and processed at SWFC.

Table 2 shows the locations and dates of the four drifting buoy deployments. Figure 4 shows the tracks of these buoys.

Biological Observations

From 8 August through 2 October, 6,143 seabirds of 52 species were seen during 142.5 effort hours of the seabird distribution survey (Table 3). During the seabird abundance survey, conducted from 8 August through 10 December, 10,662 seabirds of 47 species were sighted during 680.05 effort hours (Table 4). The most abundant species of seabirds detected during the seabird abundance survey (Table 5) were wedge-tailed shearwater (*Puffinus pacificus*), Juan Fernandez petrel (*Pterodroma* externa), leach's storm-petrel (*Oceanodroma leucorhoa*), and red-footed booby (*Sula sula*). More extensive analysis of these data will be forthcoming.

Manta tow samples have been sorted and the fauna are now being identified at THE SWFC.[4]

Figure 5 shows the location of 99 dip net stations occupied during the cruise. Approximately 1,217 flying fish of at least 12 species were collected (Table 6). These will be analyzed at SWFC and ultimately donated to the Marine Vertebrate Collection of Scripps Institution of Oceanography. Several hundred squids, mostly juveniles and subadults, were also collected. These will be identified at the SWFC, and eventually stored at the Santa Barbara Natural History Museum.

The locations of 174 individual sea turtle sightings are plotted in Figure 6. Sightings included 1 loggerhead turtle, (*Caretta caretta*), 23 olive ridleys (*Lepidochelys olivacea*) and 150 unidentified sea turtles.

A total of 65 fish was caught for stomach content analysis. Data are now being analyzed at the SWFC.

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[3]Persons wishing to receive copies of this information should write to: National Ocean Service, SEAS office, N/OS1, Rm. 103, 6001 Executive Blvd., Rockville, MD 20852.

[4]Questions concerning these samples may be addressed to Dr. H. Geoffrey Moser at the SWFC.

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Table 1. Oceanographic and biological data collected, *Jordan*, 8 August-10 December, 1987[1].

	XBT	CTD	Chlor a	Nutrients	Manta Tows	Number Flying Fish Collected	Fish Stomachs Sampled	Turtle Sightings	Abundance Survey Seabird Sightings	Distrib. Survey Seabird Sightings
LEG I	94	15	120	180	15	316	17	51	2,456	3,203
LEG II	149	25	165	270	24	275	48	52	3,257	2,940
LEG III	145	42	328	496	45	349	-	71	1,697	-
LEG IV	248	35	280	424	34	277	-	0	3,252	-
TOTALS	536	119	893	1,370	118	1,217	65	174	10,662	6,143

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

Table 2. Deployment locations of drifting buoys, *Jordan*, 8 August 10-December, 1987.

DATE	Latitude	Longitude
17 October	10° 10.8 N	89° 50.4 W
24 October	11° 00.0 N	95° 00.0 W
13 November	11° 01.2 N	99° 55.2 W
24 November	5° 10.2 N	121° 32.4 W

Table 3. Summary of seabird distribution survey, *Jordan*, 8 August-2 October, 1987.

	Leg I	Leg II	Total
Obs. hours	67.25	75/25	142.50
# birds	3,203	2,940	6,243
#Spp.	37	45	52

Table 4. Summary of seabird abundance survey, *Jordan*, 8 August-10 December, 1987.

	Leg I	Leg II	Leg III	Leg IV	Total
Obs. hours	169.10	181.40	167.45	162.10	680.05
# birds	2,456	3,257	1,697	3,252	10,662
#Spp.	28	29	28	35	47

Table 5. Summary of seabird species seen during seabird abundance survey, listed in descending order of abundance, Jordan, 8 August-10 December 1987.

Common Name	Scientific Name	Sum of Number Seen
JUAN FERNANDEZ PETREL	PTERODROMA EXTERNA	1795
WEDGE-TAILED SHEARWATER	PUFFINUS PACIFICUS	1667
LEACH'S STORM-PETREL	OCEANODROMA LEUCORHOA	1290
RED-FOOTED BOOBY	SULA SULA	1283
UNID. SHEARWATER	PUFFINUS SP.	551
MASKED BOOBY	SULA DACTYLATRA	548
SOOTY TERN	STERNA FUSCATA	478
BROWN BOOBY	SULA LEUCOGASTER	473
NORTHERN PHALAROPE	PHALAROPUS LOBATUS	374
GALAPAGOS STORM-PETREL	OCEANODROMA TETHYS	298
AUDUBON'S SHEARWATER	PUFFINUS LHERMINIERI	221
ARCTIC TERN	STERNA PARADISAEA	167
TAHITI PETREL	PTERODROMA ROSTRATA	151
UNID. PHALAROPE	PHALAROPUS FULICARIUS/LOBATUS	128
TOWNSEND'S SHEARWATER	PUFFINUS AURICULARIS	117
UNID. FRIGATEBIRD	FREGATA SP.	112
RED PHALAROPE	PHALAROPUS FULICARIUS	97
UNID. STORM-PETREL	OCEANODROMA SP.	97
SOOTY SHEARWATER	PUFFINUS GRISEUS	90
BLACK STORM-PETREL	OCEANODROMA MELANIA	86
WHITE-RUMPED STORM-PETREL	HYDROBATID SP.	62
UNID. PTERODROMA	PTERODROMA SP.	58
BLACK-VENTED SHEARWATER	PUFFINUS OPISTHOMELAS	55
PINK-FOOTED SHEARWATER	PUFFINUS CREATOPUS	49
BOOBY SP.	SULA SP.	43
COOK'S PETREL	PTERODROMA COOKII	41
PELAGIC CORMORANT	PHALACROCORAX PELAGICUS	41
RED-BILLED TROPICBIRD	PHAETHON AETHEREUS	25
WHITE TERN	GYGIS ALBA	24
KERMADEC OR HERALD PETREL	PTERODROMA NEGLECTA/HERALDICA	22
LEAST STORM-PETREL	HALOCYPTENA MICROSOMA	21
WHITE-WINGED PETREL	PTERODROMA LEUCOPTERA	21
PARKINSON'S PETREL	PROCELLARIA PARKINSONI	20
POMARINE JAEGER	STERCORARIUS POMARINUS	20
BLACK TERN	CHLIDONIAS NIGER	19
UNID. SKUA	CATHARACTA SP.	15
BRIDLED TERN	STERNA ANAETHETUS	13
LAUGHING GULL	LARUS ATRICILLA	11
UNID. TERN	STERNA (?) SP.	11
MANX-TYPE SHEARWATER	PUFFINUS SP.	10
PARASITIC JAEGER	STERCORARIUS PARASITICUS	10
UNID. TROPIC BIRD	PHAETHON SP.	8
BROWN NODDY	ANOUS STOLIDUS	6
CHRISTMAS ISLAND SHEARWATER	PUFFINUS NATIVITATUS	6
GREAT FRIGATEBIRD	FREGATA MINOR	4
UNID. NODDY TERN	ANOUS SP.	4
UNID. JAEGER	STERCORARIUS SP.	3
BULWER'S PETREL	BULWERIA BULWERI	2
RED-TAILED TROPICBIRD	PHAETHON RUBRICAUDA	2
DARK-RUMPED STORM-PETREL		2
BLACK-WINGED PETREL	PTERODROMA NIGRIPENNIS	1

Table 5. Summary of seabird species seen during seabird abundance survey, listed in descending order of abundance, Jordan, 8 August-10 December 1987.

Common Name	Scientific Name	Sum of Number Seen
BLUE-FOOTED BOOBY	SULA NEBOUXII	1
FLESH-FOOTED SHEARWATER	PUFFINUS CARNEIPES	1
FRANKLIN'S GULL	LARUS PIPIXCAN	1
MANX SHEARWATER	PUFFINUS PUFFINUS	1
MARKHAM'S STORM-PETREL	OCEANODROMA MARKHAMI	1
NEW ZEALAND SHEARWATER	PUFFINUS BULLERI	1
SABINE'S GULL	XEMA SABINI	1
SWALLOW-TAILED GULL	CREAGRUS FURCATUS	1
WHITE-THROATED STORM-PETREL	NESOFREGETTA ALBIGULARIS	1
UNID. BIRD (NON-MARINE AND NON-PASSERINE)		1

Table 6. Results of night-light dip-net sampling, JORDAN, 8 August - 10 December, 1987.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
	87-08-11		24 05 N	114 56 W						30		1			
	87-08-12		20 12 N	112 59 W						30		1			
	87-08-13		13 15 N	109 35 W						20		1			
	87-08-13		13 15 N	109 35 W						30		1			
	87-08-14		13 04 N	109 34 W						20		1			
	87-08-14		13 04 N	109 34 W						30		1			
	87-08-14		10 17 N	109 10 W						30		1			

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

- COLLECTOR: 01 - R.L. Pitman; 02 - LeDuc

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
100 = Myctophidae (lanternfish)
200 = Scombridae (tunas)
300 = Gempylidae (snake mackerel)
400 = Coryphaenidae (dolphinfish)
500 = Other

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 =
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 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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	87-08-14	1.0	10 02 N	109 09 W	1.0	2	2	28.4	33.67	5	2		2	4	
1	87-08-14	1.0	10 02 N	109 09 W	1.0	2	2	28.4	33.67	10	2	5			
1	87-08-14	1.0	10 02 N	109 09 W	1.0	2	2	28.4	33.67	20	8	3			
1	87-08-14	1.0	10 02 N	109 09 W	1.0	2	2	28.4	33.67	100	9				
1	87-08-14	1.0	10 02 N	109 09 W	1.0	2	2	28.4	33.67	400	1	2			
1	87-08-14	1.0	10 02 N	109 09 W	1.0	2	2	28.4	33.67	500	8	3			
2	87-08-15	1.0	8 27 N	110 39 W	4.0	2	2	28.1	32.99	10	2	1	1	2	
2	87-08-15	1.0	8 27 N	110 39 W	4.0	2	2	28.1	32.99	20	8	21			
2	87-08-15	1.0	8 27 N	110 39 W	4.0	2	2	28.1	32.99	30	8	1			
2	87-08-15	1.0	8 27 N	110 39 W	4.0	2	2	28.1	32.99	100	2				
	87-08-16		8 24 N	110 52 W						5		4			
	87-08-16		8 24 N	110 52 W						20		2			
	87-08-16		8 24 N	110 52 W						30		3			
3	87-08-16	1.0	7 49 N	113 55 W	2.0	5	3	29.0	33.15	10	1		3	1	2
3	87-08-16	1.0	7 49 N	113 55 W	2.0	5	3	29.0	33.15	20	1	2			
3	87-08-16	1.0	7 49 N	113 55 W	2.0	5	3	29.0	33.15	100		4			
3	87-08-16	1.0	7 49 N	113 55 W	2.0	5	3	29.0	33.15	400	2	6			
4	87-08-17	1.0	10 16 N	116 07 W	4.0	5	1	28.5	33.30	5	4		1	1	
4	87-08-17	1.0	10 16 N	116 07 W	4.0	5	1	28.5	33.30	10	2	3	2	1	1
4	87-08-17	1.0	10 16 N	116 07 W	4.0	5	1	28.5	33.30	20	4	13			
4	87-08-17	1.0	10 16 N	116 07 W	4.0	5	1	28.5	33.30	30	2	3			
	87-08-18		10 17 N	115 54 W						30		1			
5	87-08-18	1.0	10 41 N	113 01 W	3.0	5	3	28.5	33.92	5	3		2	5	7
5	87-08-18	1.0	10 41 N	113 01 W	3.0	5	3	28.5	33.92	10	2	1			
5	87-08-18	1.0	10 41 N	113 01 W	3.0	5	3	28.5	33.92	20	3	6			
5	87-08-18	1.0	10 41 N	113 01 W	3.0	5	3	28.5	33.92	30	2	3			
5	87-08-18	1.0	10 41 N	113 01 W	3.0	5	3	28.5	33.92	100	3				
5	87-08-18	1.0	10 41 N	113 01 W	3.0	5	3	28.5	33.92	300	1				
6	87-08-19	1.0	11 12 N	109 28 W	4.0	5	3	28.4	33.63	5	3		1	4	
6	87-08-19	1.0	11 12 N	109 28 W	4.0	5	3	28.4	33.63	10	2	4	2	5	1
6	87-08-19	1.0	11 12 N	109 28 W	4.0	5	3	28.4	33.63	20	3	3			
6	87-08-19	1.0	11 12 N	109 28 W	4.0	5	3	28.4	33.63	30	2	3			
6	87-08-19	1.0	11 12 N	109 28 W	4.0	5	3	28.4	33.63	100	3				
6	87-08-19	1.0	11 12 N	109 28 W	4.0	5	3	28.4	33.63	300	1				
	87-08-20		11 14 N	109 13 W						30		1			
	87-08-20	1.0	11 57 N	106 32 W	3.0	5	1	28.6	33.72	5	2		1	2	
	87-08-20	1.0	11 57 N	106 32 W	3.0	5	1	28.6	33.72	10	2		2	4	
	87-08-20	1.0	11 57 N	106 32 W	3.0	5	1	28.6	33.72	20	2	4			
	87-08-20	1.0	11 57 N	106 32 W	3.0	5	1	28.6	33.72	30	2	1			
	87-08-20	1.0	11 57 N	106 32 W	3.0	5	1	28.6	33.72	100	2				
	87-08-20	1.0	11 57 N	106 32 W	3.0	5	1	28.6	33.72	300	1				
	87-08-20	1.0	11 57 N	106 32 W	3.0	5	1	28.6	33.72	400	1				
7	87-08-21	1.0	14 43 N	104 17 W	3.0	5	1	30.2	33.83	5	4		3	8	2
7	87-08-21	1.0	14 43 N	104 17 W	3.0	5	1	30.2	33.83	10	4	16			
7	87-08-21	1.0	14 43 N	104 17 W	3.0	5	1	30.2	33.83	20	3	3			
7	87-08-21	1.0	14 43 N	104 17 W	3.0	5	1	30.2	33.83	30	3	10			
7	87-08-21	1.0	14 43 N	104 17 W	3.0	5	1	30.2	33.83	200		1			

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
7	87-08-21	1.0	14 43 N	104 17 W	3.0	5	1	30.2	33.83	400	2	2			
7	87-08-21	1.0	14 43 N	104 17 W	3.0	5	1	30.2	33.83	500	8				
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	5	2		1	3	3
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	10	5	14	2	6	
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	20	1		3	5	16
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	30	1	3			
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	200	6	20			
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	300	1				
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	400	4	5			
8	87-08-22	1.0	16 09 N	101 42 W	1.0	5	1	31.0	33.94	500	6	15			
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	5	2				
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	10	4	4			
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	20	1	1			
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	30	2	10			
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	200	4	4			
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	300	2				
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	400	4	4			
9	87-08-23	1.0	15 33 N	99 04 W	2.0	5	1	31.0	33.84	500	6	10			
	87-08-23		15 33 N	99 04 W						20	8	2			
	87-08-23		15 33 N	99 04 W						30	8	71			
	87-08-23		15 33 N	99 04 W						400	8	2			
	87-08-23		15 33 N	99 04 W						500	8	1			
10	87-08-24	1.0	14 56 N	97 14 W	1.0	5	1	30.0	33.64	10	3	2	1	2	
10	87-08-24	1.0	14 56 N	97 14 W	1.0	5	1	30.0	33.64	30	2	12	2	4	6
10	87-08-24	1.0	14 56 N	97 14 W	1.0	5	1	30.0	33.64	100	1				
10	87-08-24	1.0	14 56 N	97 14 W	1.0	5	1	30.0	33.64	300	1				
10	87-08-24	1.0	14 56 N	97 14 W	1.0	5	1	30.0	33.64	400	3	1			
10	87-08-24	1.0	14 56 N	97 14 W	1.0	5	1	30.0	33.64	500	5	30			
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	5	3		1	2	
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	10	4	5	2	3	
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	20	3	6	3	2	
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	30	2	6			
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	100	2				
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	200	8	3			
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	400	2	1			
11	87-08-25	1.0	14 50 N	95 35 W	4.0	5	1	29.3	33.41	500	8	2			
	87-08-25		14 49 N	95 25 W						30		1			
12	87-08-26	1.0	13 48 N	95 25 W	1.0	5	1	31.1	33.19	10	4	5			
12	87-08-26	1.0	13 48 N	95 25 W	1.0	5	1	31.1	33.19	15	3	2			
12	87-08-26	1.0	13 48 N	95 25 W	1.0	5	1	31.1	33.19	100	6				
12	87-08-26	1.0	13 48 N	95 25 W	1.0	5	1	31.1	33.19	200	5	2			
12	87-08-26	1.0	13 48 N	95 25 W	1.0	5	1	31.1	33.19	500	5	16			
	87-08-27		14 00 N	92 18 W						15		12			
	87-08-27		14 00 N	92 18 W						30		9			
	87-08-27		14 00 N	92 18 W						500		1			
13	87-08-27	1.0	12 31 N	92 30 W	5.0	1	3	29.2	33.08	5	1		1	4	
13	87-08-27	1.0	12 31 N	92 30 W	5.0	1	3	29.2	33.08	10	3	4	2	3	

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
13	87-08-27	1.0	12 31 N	92 30 W	5.0	1	3	29.2	33.08	20	1	1			
13	87-08-27	1.0	12 31 N	92 30 W	5.0	1	3	29.2	33.08	100	2				
13	87-08-27	1.0	12 31 N	92 30 W	5.0	1	3	29.2	33.08	400	2	2			
13	87-08-27	1.0	12 31 N	92 30 W	5.0	1	3	29.2	33.08	500	8	25			
14	87-08-28	1.0	13 24 N	90 58 W	1.0	1	2	28.9	32.76	10	2	3	2	5	
14	87-08-28	1.0	13 24 N	90 58 W	1.0	1	2	28.9	32.76	15	3	5	3	3	9
14	87-08-28	1.0	13 24 N	90 58 W	1.0	1	2	28.9	32.76	30	5	52			
14	87-08-28	1.0	13 24 N	90 58 W	1.0	1	2	28.9	32.76	400	4	8			
14	87-08-28	1.0	13 24 N	90 58 W	1.0	1	2	28.9	32.76	500	8	3			
15	87-09-05	1.0	13 49 N	92 18 W	4.0	5	3	30.6	33.06	5		2	4	3	
15	87-09-05	1.0	13 49 N	92 18 W	4.0	5	3	30.6	33.06	30	5	42	3	6	12
15	87-09-05	1.0	13 49 N	92 18 W	4.0	5	3	30.6	33.06	100	6				
15	87-09-05	1.0	13 49 N	92 18 W	4.0	5	3	30.6	33.06	400	2	1			
15	87-09-05	1.0	13 49 N	92 18 W	4.0	5	3	30.6	33.06	500	3	8			
	87-09-06		13 51 N	92 42 W						20		1			
	87-09-06		13 51 N	92 42 W						30		1			
16	87-09-06	1.0	14 06 N	96 12 W	3.0	4	1	28.7	33.65	10	3	8	2	1	
16	87-09-06	1.0	14 06 N	96 12 W	3.0	4	1	28.7	33.65	30	3	7			
16	87-09-06	1.0	14 06 N	96 12 W	3.0	4	1	28.7	33.65	500	2				
	87-09-06		14 06 N	96 12 W						30		1			
	87-09-07		14 10 N	96 39 W						20		1			
17	87-09-07	1.0	14 34 N	99 38 W		4	1	30.2	33.40	5	2		2	5	
17	87-09-07	1.0	14 34 N	99 38 W		4	1	30.2	33.40	10	2		3	2	3
17	87-09-07	1.0	14 34 N	99 38 W		4	1	30.2	33.40	20	1	1			
17	87-09-07	1.0	14 34 N	99 38 W		4	1	30.2	33.40	30	2	3			
17	87-09-07	1.0	14 34 N	99 38 W		4	1	30.2	33.40	400	9				
17	87-09-07	1.0	14 34 N	99 38 W		4	1	30.2	33.40	500	9	6			
18	87-09-08	1.0	14 07 N	102 19 W	1.0	4	1	30.5	33.45	5	2		1	1	
18	87-09-08	1.0	14 07 N	102 19 W	1.0	4	1	30.5	33.45	10	3	6	2	1	
18	87-09-08	1.0	14 07 N	102 19 W	1.0	4	1	30.5	33.45	20	2	2	3	1	2
18	87-09-08	1.0	14 07 N	102 19 W	1.0	4	1	30.5	33.45	300	1				
18	87-09-08	1.0	14 07 N	102 19 W	1.0	4	1	30.5	33.45	400	2	5			
18	87-09-08	1.0	14 07 N	102 19 W	1.0	4	1	30.5	33.45	500	8	1			
	87-09-09		13 48 N	102 32 W						20		2			
19	87-09-09	1.0	11 00 N	104 20 W	4.0	5	4	29.1	33.33	5	4		1	3	
19	87-09-09	1.0	11 00 N	104 20 W	4.0	5	4	29.1	33.33	10	5	16	2	2	
19	87-09-09	1.0	11 00 N	104 20 W	4.0	5	4	29.1	33.33	20	4	9			
19	87-09-09	1.0	11 00 N	104 20 W	4.0	5	4	29.1	33.33	30	1				
19	87-09-09	1.0	11 00 N	104 20 W	4.0	5	4	29.1	33.33	100	2				
19	87-09-09	1.0	11 00 N	104 20 W	4.0	5	4	29.1	33.33	300	1	1			
	87-09-10		10 39 N	104 33 W						10		1			
	87-09-10		10 39 N	104 33 W						20		2			
	87-09-10		10 39 N	104 33 W						30		1			
20	87-09-10	1.0	8 26 N	105 58 W	7.0	5	4	28.4	33.02	10	4	3	1	3	
20	87-09-10	1.0	8 26 N	105 58 W	7.0	5	4	28.4	33.02	30	9				
21	87-09-11	1.0	7 13 N	108 06 W	4.5	5	1	28.4	32.85	5	3				
21	87-09-11	1.0	7 13 N	108 06 W	4.5	5	1	28.4	32.85	10	2	1			

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
21	87-09-11	1.0	7 13 N	108 06 W	4.5	5	1	28.4	32.85	20	2	7			
21	87-09-11	1.0	7 13 N	108 06 W	4.5	5	1	28.4	32.85	30	9	1			
21	87-09-11	1.0	7 13 N	108 06 W	4.5	5	1	28.4	32.85	100	2				
21	87-09-11	1.0	7 13 N	108 06 W	4.5	5	1	28.4	32.85	500	1	1			
22	87-09-12	1.0	5 56 N	110 53 W	4.0	5	1	27.9	33.05	5	3		1	2	
22	87-09-12	1.0	5 56 N	110 53 W	4.0	5	1	27.9	33.05	20	4	12	2	1	
22	87-09-12	1.0	5 56 N	110 53 W	4.0	5	1	27.9	33.05	30	2	2			
22	87-09-12	1.0	5 56 N	110 53 W	4.0	5	1	27.9	33.05	100	3	1			
	87-09-12		5 57 N	110 54 W						20		1			
	87-09-13		5 54 N	111 11 W						20		1			
	87-09-13		5 54 N	111 11 W						30		1			
23	87-09-13	1.0	4 40 N	113 17 W	4.5	5	1	26.5	34.31	5	4				
23	87-09-13	1.0	4 40 N	113 17 W	4.5	5	1	26.5	34.31	10	4	6			
23	87-09-13	1.0	4 40 N	113 17 W	4.5	5	1	26.5	34.31	20	4	6			
23	87-09-13	1.0	4 40 N	113 17 W	4.5	5	1	26.5	34.31	30	1				
23	87-09-13	1.0	4 40 N	113 17 W	4.5	5	1	26.5	34.31	100	4				
24	87-09-14	1.0	2 54 N	114 14 W	4.0	5	1	27.7	34.15	10	3	2	3	1	1
24	87-09-14	1.0	2 54 N	114 14 W	4.0	5	1	27.7	34.15	20	3	6			
24	87-09-14	1.0	2 54 N	114 14 W	4.0	5	1	27.7	34.15	100	3				
25	87-09-15	1.0	1 13 N	117 57 W	3.0	5	1	26.4	34.31	5	2		1	1	1
25	87-09-15	1.0	1 13 N	117 57 W	3.0	5	1	26.4	34.31	10	3	1	2	2	
25	87-09-15	1.0	1 13 N	117 57 W	3.0	5	1	26.4	34.31	100	4	1			
25	87-09-15	1.0	1 13 N	117 57 W	3.0	5	1	26.4	34.31	200	9	2			
25	87-09-15	1.0	1 13 N	117 57 W	3.0	5	1	26.4	34.31	300	1				
25	87-09-15	1.0	1 13 N	117 57 W	3.0	5	1	26.4	34.31	400	9	1			
26	87-09-16	1.0	1 26 N	116 17 W	3.0	5	1	27.1	34.31	5	2				
26	87-09-16	1.0	1 26 N	116 17 W	3.0	5	1	27.1	34.31	20	2	1			
26	87-09-16	1.0	1 26 N	116 17 W	3.0	5	1	27.1	34.31	30	2	1			
26	87-09-16	1.0	1 26 N	116 17 W	3.0	5	1	27.1	34.31	100	5				
26	87-09-16	1.0	1 26 N	116 17 W	3.0	5	1	27.1	34.31	300	3				
26	87-09-16	1.0	1 26 N	116 17 W	3.0	5	1	27.1	34.31	400	3				
27	87-09-17	1.0	2 04 N	113 14 W	4.0	5	1	26.4	34.19	5	2		1	2	1
27	87-09-17	1.0	2 04 N	113 14 W	4.0	5	1	26.4	34.19	10	2	2			
27	87-09-17	1.0	2 04 N	113 14 W	4.0	5	1	26.4	34.19	20	2				
27	87-09-17	1.0	2 04 N	113 14 W	4.0	5	1	26.4	34.19	30	1				
27	87-09-17	1.0	2 04 N	113 14 W	4.0	5	1	26.4	34.19	100	4				
27	87-09-17	1.0	2 04 N	113 14 W	4.0	5	1	26.4	34.19	300	1	1			
27	87-09-17	1.0	2 04 N	113 14 W	4.0	5	1	26.4	34.19	400	2				
28	87-09-18	1.0	2 13 N	110 22 W	3.0	5	1	26.0	34.36	5	4		1	4	1
28	87-09-18	1.0	2 13 N	110 22 W	3.0	5	1	26.0	34.36	10	5	7	2	3	
28	87-09-18	1.0	2 13 N	110 22 W	3.0	5	1	26.0	34.36	20	4	8	3	2	
28	87-09-18	1.0	2 13 N	110 22 W	3.0	5	1	26.0	34.36	30	4	5			
28	87-09-18	1.0	2 13 N	110 22 W	3.0	5	1	26.0	34.36	100	5				
28	87-09-18	1.0	2 13 N	110 22 W	3.0	5	1	26.0	34.36	300	1				
28	87-09-18	1.0	2 13 N	110 22 W	3.0	5	1	26.0	34.36	400	3	2			
29	87-09-19	1.0	1 00 S	110 12 W	3.0	5	1	24.6	34.72	5	2		1	4	
29	87-09-19	1.0	1 00 S	110 12 W	3.0	5	1	24.6	34.72	20	2	2	2	2	1

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
29	87-09-19	1.0	1 00 S	110 12 W	3.0	5	1	24.6	34.72	300	1				
30	87-09-19	1.0	1 03 S	110 11 W	4.0	5	1	24.4	34.89	5	1		1	3	
30	87-09-19	1.0	1 03 S	110 11 W	4.0	5	1	24.4	34.89	10	1		3	1	1
30	87-09-19	1.0	1 03 S	110 11 W	4.0	5	1	24.4	34.89	100	4				
31	87-09-20	1.0	2 02 S	110 00 W	3.0	5	1	24.3	34.96	5	4		1	4	
31	87-09-20	1.0	2 02 S	110 00 W	3.0	5	1	24.3	34.96	10	3	3	2	4	2
31	87-09-20	1.0	2 02 S	110 00 W	3.0	5	1	24.3	34.96	20	4	12	3	1	1
31	87-09-20	1.0	2 02 S	110 00 W	3.0	5	1	24.3	34.96	30	4	8			
31	87-09-20	1.0	2 02 S	110 00 W	3.0	5	1	24.3	34.96	100	5	1			
31	87-09-20	1.0	2 02 S	110 00 W	3.0	5	1	24.3	34.96	300	1				
	87-09-20		2 03 S	110 00 W						20		1			
32	87-09-20	1.0	1 15 S	108 23 W	3.0	5	1	24.6	34.34	5	1		1	6	13
32	87-09-20	1.0	1 15 S	108 23 W	3.0	5	1	24.6	34.34	100	6		2	1	
32	87-09-20	1.0	1 15 S	108 23 W	3.0	5	1	24.6	34.34	300	1		3	1	
33	87-09-21	1.0	0 11 N	105 33 W	3.0	5	1	24.1	34.49	10	2	1	1	5	
33	87-09-21	1.0	0 11 N	105 33 W	3.0	5	1	24.1	34.49	20	1	2	3	1	1
33	87-09-21	1.0	0 11 N	105 33 W	3.0	5	1	24.1	34.49	30	1	1			
33	87-09-21	1.0	0 11 N	105 33 W	3.0	5	1	24.1	34.49	100	5				
33	87-09-21	1.0	0 11 N	105 33 W	3.0	5	1	24.1	34.49	300	1				
34	87-09-22	1.0	1 22 N	102 50 W	3.0	5	1	25.6	33.95	5	3		1	4	4
34	87-09-22	1.0	1 22 N	102 50 W	3.0	5	1	25.6	33.95	10	3	4			
34	87-09-22	1.0	1 22 N	102 50 W	3.0	5	1	25.6	33.95	20	2	3			
34	87-09-22	1.0	1 22 N	102 50 W	3.0	5	1	25.6	33.95	30	2	4			
34	87-09-22	1.0	1 22 N	102 50 W	3.0	5	1	25.6	33.95	100	4				
34	87-09-22	1.0	1 22 N	102 50 W	3.0	5	1	25.6	33.95	300	1	1			
34	87-09-22	1.0	1 22 N	102 50 W	3.0	5	1	25.6	33.95	400	2	2			
35	87-09-23	1.0	3 01 N	99 46 W	3.0	5	3	25.4	33.92	5	2		1	4	
35	87-09-23	1.0	3 01 N	99 46 W	3.0	5	3	25.4	33.92	10	4	7	2	3	
35	87-09-23	1.0	3 01 N	99 46 W	3.0	5	3	25.4	33.92	20	2	3			
35	87-09-23	1.0	3 01 N	99 46 W	3.0	5	3	25.4	33.92	100	5				
35	87-09-23	1.0	3 01 N	99 46 W	3.0	5	3	25.4	33.92	300	1				
35	87-09-23	1.0	3 01 N	99 46 W	3.0	5	3	25.4	33.92	400	1				
	87-09-24		3 05 N	99 22 W						20		2			
	87-09-24		3 05 N	99 22 W						30		8			
36	87-09-24	1.0	4 40 N	96 35 W	4.0	5	3	27.9	32.77	5	2		1	4	
36	87-09-24	1.0	4 40 N	96 35 W	4.0	5	3	27.9	32.77	10	2	2			
36	87-09-24	1.0	4 40 N	96 35 W	4.0	5	3	27.9	32.77	20	1	3			
36	87-09-24	1.0	4 40 N	96 35 W	4.0	5	3	27.9	32.77	30	2	2			
36	87-09-24	1.0	4 40 N	96 35 W	4.0	5	3	27.9	32.77	100	4				
36	87-09-24	1.0	4 40 N	96 35 W	4.0	5	3	27.9	32.77	300	1				
	87-09-25		4 54 N	96 11 W						20		1			
	87-09-25		4 54 N	96 11 W						30		5			
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	5	3		1	6	3
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	10	4	11	2	2	
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	20	2	4	3	4	11
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	30	2	4			
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	100	6				

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	300	1				
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	400	2	3			
37	87-09-25	1.0	6 39 N	92 59 W	3.5	5	3	28.4	33.11	500	9	1			
	87-09-26		6 52 N	92 35 W						20		2			
	87-09-26		6 52 N	92 35 W						30		2			
38	87-09-26	1.0	8 29 N	89 56 W	2.5	1	1	29.5	33.27	5	4		1	6	3
38	87-09-26	1.0	8 29 N	89 56 W	2.5	1	1	29.5	33.27	10	6	16	2	2	
38	87-09-26	1.0	8 29 N	89 56 W	2.5	1	1	29.5	33.27	20	4	8	3	1	
38	87-09-26	1.0	8 29 N	89 56 W	2.5	1	1	29.5	33.27	30	1	1			
38	87-09-26	1.0	8 29 N	89 56 W	2.5	1	1	29.5	33.27	100	5				
38	87-09-26	1.0	8 29 N	89 56 W	2.5	1	1	29.5	33.27	300	1				
	87-09-27		8 43 N	89 27 W						20	1				
	87-09-27		8 43 N	89 27 W						30	1				
39	87-09-27	1.0	7 09 N	87 57 W		1	1	28.9	32.89	5	2		1	5	
39	87-09-27	1.0	7 09 N	87 57 W		1	1	28.9	32.89	10	4	12	2	6	5
39	87-09-27	1.0	7 09 N	87 57 W		1	1	28.9	32.89	20	2				
39	87-09-27	1.0	7 09 N	87 57 W		1	1	28.9	32.89	100	5	1			
39	87-09-27	1.0	7 09 N	87 57 W		1	1	28.9	32.89	400	1				
40	87-09-28	1.0	5 20 N	86 46 W	3.0	2	2	28.5	32.70	5	1		1	5	
40	87-09-28	1.0	5 20 N	86 46 W	3.0	2	2	28.5	32.70	10	1	1	2	3	
40	87-09-28	1.0	5 20 N	86 46 W	3.0	2	2	28.5	32.70	20	1	1	3	1	3
40	87-09-28	1.0	5 20 N	86 46 W	3.0	2	2	28.5	32.70	100	4				
40	87-09-28	1.0	5 20 N	86 46 W	3.0	2	2	28.5	32.70	400	1	1			
41	87-09-29	1.0	4 20 N	83 05 W	3.0	2	3	27.8	31.79	5	2				
41	87-09-29	1.0	4 20 N	83 05 W	3.0	2	3	27.8	31.79	10	2				
41	87-09-29	1.0	4 20 N	83 05 W	3.0	2	3	27.8	31.79	20	2	4			
41	87-09-29	1.0	4 20 N	83 05 W	3.0	2	3	27.8	31.79	100	4				
41	87-09-29	1.0	4 20 N	83 05 W	3.0	2	3	27.8	31.79	500	8	2			
42	87-09-30	1.0	5 22 N	80 30 W	3.0	5	3	27.9	30.48	5	1				
42	87-09-30	1.0	5 22 N	80 30 W	3.0	5	3	27.9	30.48	10	5	7			
42	87-09-30	1.0	5 22 N	80 30 W	3.0	5	3	27.9	30.48	30	1	1			
42	87-09-30	1.0	5 22 N	80 30 W	3.0	5	3	27.9	30.48	100	5				
42	87-09-30	1.0	5 22 N	80 30 W	3.0	5	3	27.9	30.48	300	1				
42	87-09-30	1.0	5 22 N	80 30 W	3.0	5	3	27.9	30.48	400	1	1			
42	87-09-30	1.0	5 22 N	80 30 W	3.0	5	3	27.9	30.48	500	3	6			
	87-10-01		5 50 N	80 16 W						30		2			
43	87-10-01	1.0	8 12 N	79 06 W	2.0	2	2	28.1	29.50	5	4				
43	87-10-01	1.0	8 12 N	79 06 W	2.0	2	2	28.1	29.50	30	4	15			
43	87-10-01	1.0	8 12 N	79 06 W	2.0	2	2	28.1	29.50	500	6	37			
44	87-10-02	1.0	8 23 N	79 16 W	1.0	5	2	28.4	29.62	15	1	2	2	3	1
44	87-10-02	1.0	8 23 N	79 16 W	1.0	5	2	28.4	29.62	18	3	7			
44	87-10-02	1.0	8 23 N	79 16 W	1.0	5	2	28.4	29.62	30	1	2			
44	87-10-02	1.0	8 23 N	79 16 W	1.0	5	2	28.4	29.62	500	5	14			
45	87-10-02	1.5	8 26 N	79 18 W	2.0	5	2	28.4	29.62	18		6	3		2
45	87-10-02	1.5	8 26 N	79 18 W	2.0	5	2	28.4	29.62	30		1			
46	87-10-06	1.0	8 43 N	79 06 W	2.0	4	2	28.6	28.93	5	1				
46	87-10-06	1.0	8 43 N	79 06 W	2.0	4	2	28.6	28.93	30	2	3			

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
46	87-10-06	1.0	8 43 N	79 06 W	2.0	4	2	28.6	28.93	15	1				
46	87-10-06	1.0	8 43 N	79 06 W	2.0	4	2	28.6	28.93	170	1	1			
46	87-10-06	1.0	8 43 N	79 06 W	2.0	4	2	28.6	28.93	180	3				
47	87-10-09	.7	6 53 N	79 07 W	2.5	4	2	28.4	30.00	100	4			1	
47	87-10-09	.7	6 53 N	79 07 W	2.5	4	2	28.4	30.00					5	1
47	87-10-09	.7	6 53 N	79 07 W	2.5	4	2	28.4	30.00					4	
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	5	1			3	2
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	10	4	8		4	
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	20	3	5		5	
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	30	2	1			
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	140	3	4			
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	160	2				
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	170	3	3			
48	87-10-10	.8	4 54 N	80 12 W	3.0	4	2	27.8	30.79	110	3				
49	87-10-11	1.0	3 12 N	82 46 W	3.0	5	2	27.7	32.84	10	1			2	4
49	87-10-11	1.0	3 12 N	82 46 W	3.0	5	2	27.7	32.84	20	1	2		6	1
49	87-10-11	1.0	3 12 N	82 46 W	3.0	5	2	27.7	32.84	30	1	1		2	
49	87-10-11	1.0	3 12 N	82 46 W	3.0	5	2	27.7	32.84	110	4				
49	87-10-11	1.0	3 12 N	82 46 W	3.0	5	2	27.7	32.84	120	1				
49	87-10-11	1.0	3 12 N	82 46 W	3.0	5	2	27.7	32.84	140	1				
50	87-10-12	.9	4 56 N	85 49 W	2.5	5	2	28.0	32.97	10	2			1	1
50	87-10-12	.9	4 56 N	85 49 W	2.5	5	2	28.0	32.97	20	2	2		5	
50	87-10-12	.9	4 56 N	85 49 W	2.5	5	2	28.0	32.97	30	1	2		3	
50	87-10-12	.9	4 56 N	85 49 W	2.5	5	2	28.0	32.97	110	5				
50	87-10-12	.9	4 56 N	85 49 W	2.5	5	2	28.0	32.97	120	2				
50	87-10-12	.9	4 56 N	85 49 W	2.5	5	2	28.0	32.97	170	3	4			
51	87-10-13	1.0	6 10 N	87 08 W	2.0	5	2	29.2	32.97	10	5	15		4	
51	87-10-13	1.0	6 10 N	87 08 W	2.0	5	2	29.2	32.97	30	1	1		1	
51	87-10-13	1.0	6 10 N	87 08 W	2.0	5	2	29.2	32.97	110	5				
51	87-10-13	1.0	6 10 N	87 08 W	2.0	5	2	29.2	32.97	140	4	1			
52	87-10-14	.9	7 55 N	88 26 W	2.5	5	3	29.0	31.64	10	5	15		4	
52	87-10-14	.9	7 55 N	88 26 W	2.5	5	3	29.0	31.64	20	1	2		2	
52	87-10-14	.9	7 55 N	88 26 W	2.5	5	3	29.0	31.64	110	5				
52	87-10-14	.9	7 55 N	88 26 W	2.5	5	3	29.0	31.64	140	1				
53	87-10-15	1.0	5 44 N	90 52 W	4.0	5	4	28.4	32.67	5	6			1	
53	87-10-15	1.0	5 44 N	90 52 W	4.0	5	4	28.4	32.67	10	4			6	4
53	87-10-15	1.0	5 44 N	90 52 W	4.0	5	4	28.4	32.67	20	2	5			
53	87-10-15	1.0	5 44 N	90 52 W	4.0	5	4	28.4	32.67	30	1	2			
53	87-10-15	1.0	5 44 N	90 52 W	4.0	5	4	28.4	32.67	110	5				
53	87-10-15	1.0	5 44 N	90 52 W	4.0	5	4	28.4	32.67	120	2				
53	87-10-15	1.0	5 44 N	90 52 W	4.0	5	4	28.4	32.67	140	1				
54	87-10-16	.9	7 54 N	90 38 W	3.0	5	3	29.0	33.30	10	5	24		1	2
54	87-10-16	.9	7 54 N	90 38 W	3.0	5	3	29.0	33.30	20	4	18		6	
54	87-10-16	.9	7 54 N	90 38 W	3.0	5	3	29.0	33.30	110	5				
54	87-10-16	.9	7 54 N	90 38 W	3.0	5	3	29.0	33.30	120	1				
54	87-10-16	.9	7 54 N	90 38 W	3.0	5	3	29.0	33.30	140	3	1			
55	87-10-17	1.2	10 02 N	90 01 W	2.0	5	1	28.5	33.57	10	6	23		6	

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
55	87-10-17	1.2	10 02 N	90 01 W	2.0	5	1	28.5	33.57	20	4	12		4	
55	87-10-17	1.2	10 02 N	90 01 W	2.0	5	1	28.5	33.57	30	4	15			
55	87-10-17	1.2	10 02 N	90 01 W	2.0	5	1	28.5	33.57	110	2				
55	87-10-17	1.2	10 02 N	90 01 W	2.0	5	1	28.5	33.57	140	2				
55	87-10-17	1.2	10 02 N	90 01 W	2.0	5	1	28.5	33.57	160	1				
55	87-10-17	1.2	10 02 N	90 01 W	2.0	5	1	28.5	33.57	100	1				
56	87-10-18	.9	7 40 N	92 25 W	2.5	5	2	29.1	32.93	10	6	19		1	1
56	87-10-18	.9	7 40 N	92 25 W	2.5	5	2	29.1	32.93	20	3	2		5	
56	87-10-18	.9	7 40 N	92 25 W	2.5	5	2	29.1	32.93	110	3				
57	87-10-19	1.0	5 01 N	94 50 W	4.5	5	3	27.7	32.58	10	2	1		2	
57	87-10-19	1.0	5 01 N	94 50 W	4.5	5	3	27.7	32.58	20	2	3			
57	87-10-19	1.0	5 01 N	94 50 W	4.5	5	3	27.7	32.58	30	1	2			
58	87-10-20	1.0	5 23 N	95 40 W	4.0	5	2	28.0	32.67	5	1			1	
58	87-10-20	1.0	5 23 N	95 40 W	4.0	5	2	28.0	32.67	20	2	2		4	
58	87-10-20	1.0	5 23 N	95 40 W	4.0	5	2	28.0	32.67	30	2	3			
58	87-10-20	1.0	5 23 N	95 40 W	4.0	5	2	28.0	32.67	110	2				
58	87-10-20	1.0	5 23 N	95 40 W	4.0	5	2	28.0	32.67	140	1				
59	87-10-21	.8	8 22 N	94 45 W	3.0	5	2	29.2	32.78	10	5	15		2	1
59	87-10-21	.8	8 22 N	94 45 W	3.0	5	2	29.2	32.78	20	4	15		5	
59	87-10-21	.8	8 22 N	94 45 W	3.0	5	2	29.2	32.78	110	4				
59	87-10-21	.8	8 22 N	94 45 W	3.0	5	2	29.2	32.78	120	1				
59	87-10-21	.8	8 22 N	94 45 W	3.0	5	2	29.2	32.78	130	1				
60	87-10-22	1.0	11 42 N	94 01 W	4.0	5	2	29.7	33.17	10	5	18		3	
60	87-10-22	1.0	11 42 N	94 01 W	4.0	5	2	29.7	33.17	20	2	1			
60	87-10-22	1.0	11 42 N	94 01 W	4.0	5	2	29.7	33.17	30	1	1			
60	87-10-22	1.0	11 42 N	94 01 W	4.0	5	2	29.7	33.17	110	3				
60	87-10-22	1.0	11 42 N	94 01 W	4.0	5	2	29.7	33.17	140	1				
60	87-10-22	1.0	11 42 N	94 01 W	4.0	5	2	29.7	33.17	100	1				
61	87-10-23	1.0	11 24 N	94 56 W	3.0	5	3	29.5	33.18	10	4	10		3	1
61	87-10-23	1.0	11 24 N	94 56 W	3.0	5	3	29.5	33.18	20	2				
61	87-10-23	1.0	11 24 N	94 56 W	3.0	5	3	29.5	33.18	110	2				
61	87-10-23	1.0	11 24 N	94 56 W	3.0	5	3	29.5	33.18	120	1				
61	87-10-23	1.0	11 24 N	94 56 W	3.0	5	3	29.5	33.18	140	1				
62	87-10-24	1.0	9 02 N	96 34 W	4.0	5	2	28.4	33.19	10	5	18		2	2
62	87-10-24	1.0	9 02 N	96 34 W	4.0	5	2	28.4	33.19	20	5	18		4	1
62	87-10-24	1.0	9 02 N	96 34 W	4.0	5	2	28.4	33.19	30	2	3		2	
62	87-10-24	1.0	9 02 N	96 34 W	4.0	5	2	28.4	33.19	110	2				
62	87-10-24	1.0	9 02 N	96 34 W	4.0	5	2	28.4	33.19	120	1				
62	87-10-24	1.0	9 02 N	96 34 W	4.0	5	2	28.4	33.19	170	1				
63	87-10-25	1.0	6 28 N	98 33 W	3.5	5	4	28.2	32.06	10	1	1		1	2
63	87-10-25	1.0	6 28 N	98 33 W	3.5	5	4	28.2	32.06	20	2	4		3	1
63	87-10-25	1.0	6 28 N	98 33 W	3.5	5	4	28.2	32.06	30	1	1			
63	87-10-25	1.0	6 28 N	98 33 W	3.5	5	4	28.2	32.06	110	2				
63	87-10-25	1.0	6 28 N	98 33 W	3.5	5	4	28.2	32.06	120	1				
63	87-10-25	1.0	6 28 N	98 33 W	3.5	5	4	28.2	32.06	140	1	2			
64	87-10-26	1.4	9 00 N	98 49 W	4.0	1	2	27.9	32.97	10	3	2		1	
64	87-10-26	1.4	9 00 N	98 49 W	4.0	1	2	27.9	32.97	20	2			4	

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
64	87-10-26	1.4	9 00 N	98 49 W	4.0	1	2	27.9	32.97	30	2	2			
64	87-10-26	1.4	9 00 N	98 49 W	4.0	1	2	27.9	32.97	110	3				
64	87-10-26	1.4	9 00 N	98 49 W	4.0	1	2	27.9	32.97	120	1				
64	87-10-26	1.4	9 00 N	98 49 W	4.0	1	2	27.9	32.97	140	1	1			
65	87-10-27	1.0	11 01 N	99 13 W	1.0	1	1	28.9	33.67	10	3	3		1	1
65	87-10-27	1.0	11 01 N	99 13 W	1.0	1	1	28.9	33.67	20	1			2	1
65	87-10-27	1.0	11 01 N	99 13 W	1.0	1	1	28.9	33.67	30	2	4			
65	87-10-27	1.0	11 01 N	99 13 W	1.0	1	1	28.9	33.67	110	2				
65	87-10-27	1.0	11 01 N	99 13 W	1.0	1	1	28.9	33.67	140	2	1			
65	87-10-27	1.0	11 01 N	99 13 W	1.0	1	1	28.9	33.67	170	1	2			
66	87-10-28	1.0	7 42 N	100 28 W	2.0	2	1	28.1	32.72	10	1			4	
66	87-10-28	1.0	7 42 N	100 28 W	2.0	2	1	28.1	32.72	5	1				
66	87-10-28	1.0	7 42 N	100 28 W	2.0	2	1	28.1	32.72	110	4				
67	87-10-29	1.0	4 59 N	101 59 W	3.5	2	3	27.7	33.30	20	3	7		1	
67	87-10-29	1.0	4 59 N	101 59 W	3.5	2	3	27.7	33.30	30	2	1		4	
67	87-10-29	1.0	4 59 N	101 59 W	3.5	2	3	27.7	33.30	110	3				
68	87-10-30	1.0	7 47 N	101 58 W	3.5	5	3	28.2	33.04	10	1			1	1
68	87-10-30	1.0	7 47 N	101 58 W	3.5	5	3	28.2	33.04	20	3	6		4	
68	87-10-30	1.0	7 47 N	101 58 W	3.5	5	3	28.2	33.04	30	3	6			
68	87-10-30	1.0	7 47 N	101 58 W	3.5	5	3	28.2	33.04	110	4				
68	87-10-30	1.0	7 47 N	101 58 W	3.5	5	3	28.2	33.04	120	1				
68	87-10-30	1.0	7 47 N	101 58 W	3.5	5	3	28.2	33.04	130	1				
68	87-10-30	1.0	7 47 N	101 58 W	3.5	5	3	28.2	33.04	170	1				
69	87-10-31	1.0	11 19 N	101 48 W	5.0	3	1	28.6	33.62	10	1			3	2
69	87-10-31	1.0	11 19 N	101 48 W	5.0	3	1	28.6	33.62	30	2				
69	87-10-31	1.0	11 19 N	101 48 W	5.0	3	1	28.6	33.62	110	2				
69	87-10-31	1.0	11 19 N	101 48 W	5.0	3	1	28.6	33.62	130	1				
69	87-10-31	1.0	11 19 N	101 48 W	5.0	3	1	28.6	33.62	140	1	1			
70	87-11-01	1.0	13 41 N	105 03 W	3.0	3	2	29.6	33.60	10	1	1		1	1
70	87-11-01	1.0	13 41 N	105 03 W	3.0	3	2	29.6	33.60	20	4	14		2	
70	87-11-01	1.0	13 41 N	105 03 W	3.0	3	2	29.6	33.60	30	1	1			
70	87-11-01	1.0	13 41 N	105 03 W	3.0	3	2	29.6	33.60	140	2				
71	87-11-02	1.0	15 38 N	106 17 W	1.0	3	2	30.6	33.83	10	1	3		1	1
71	87-11-02	1.0	15 38 N	106 17 W	1.0	3	2	30.6	33.83	30	1	1		1	
71	87-11-02	1.0	15 38 N	106 17 W	1.0	3	2	30.6	33.83	5	1				
71	87-11-02	1.0	15 38 N	106 17 W	1.0	3	2	30.6	33.83	100	1	1			
72	87-11-03	1.0	18 53 N	104 27 W	2.0	4	2	30.2	34.09	5	1			1	1
72	87-11-03	1.0	18 53 N	104 27 W	2.0	4	2	30.2	34.09	150	3	7		4	1
72	87-11-03	1.0	18 53 N	104 27 W	2.0	4	2	30.2	34.09	160	2				
72	87-11-03	1.0	18 53 N	104 27 W	2.0	4	2	30.2	34.09	170	2	3			
72	87-11-03	1.0	18 53 N	104 27 W	2.0	4	2	30.2	34.09	100	2	3			
73	87-11-09	1.0	18 08 N	104 40 W	2.0	4	2	30.0	34.09	140	1	1		1	1
73	87-11-09	1.0	18 08 N	104 40 W	2.0	4	2	30.0	34.09	100	3	7		3	
73	87-11-09	1.0	18 08 N	104 40 W	2.0	4	2	30.0	34.09	170	1	1			
74	87-11-09	1.0	15 22 N	105 25 W	1.0	3	2	29.9	33.28	10	2	4		1	
74	87-11-09	1.0	15 22 N	105 25 W	1.0	3	2	29.9	33.28	20	2	2		4	4
74	87-11-09	1.0	15 22 N	105 25 W	1.0	3	2	29.9	33.28	30	1				

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
74	87-11-09	1.0	15 22 N	105 25 W	1.0	3	2	29.9	33.28	110	1				
75	87-11-10	1.0	13 31 N	103 30 W	4.0	5	3	29.7	33.62	10	5	27		2	
75	87-11-10	1.0	13 31 N	103 30 W	4.0	5	3	29.7	33.62	20	2	2			
75	87-11-10	1.0	13 31 N	103 30 W	4.0	5	3	29.7	33.62	30	2	3			
75	87-11-10	1.0	13 31 N	103 30 W	4.0	5	3	29.7	33.62	110	1				
75	87-11-10	1.0	13 31 N	103 30 W	4.0	5	3	29.7	33.62	120	1				
75	87-11-10	1.0	13 31 N	103 30 W	4.0	5	3	29.7	33.62	140	1				
76	87-11-11	1.1	12 30 N	100 35 W	3.5	5	2	29.3	33.74	10	6	30		4	2
76	87-11-11	1.1	12 30 N	100 35 W	3.5	5	2	29.3	33.74	20	2	1			
76	87-11-11	1.1	12 30 N	100 35 W	3.5	5	2	29.3	33.74	120	1				
76	87-11-11	1.1	12 30 N	100 35 W	3.5	5	2	29.3	33.74	130	1				
76	87-11-11	1.1	12 30 N	100 35 W	3.5	5	2	29.3	33.74	140	2	3			
76	87-11-11	1.1	12 30 N	100 35 W	3.5	5	2	29.3	33.74	160	1				
77	87-11-13	1.0	9 29 N	98 22 W	4.0	5	3	27.8	32.87	10	5	14		5	
77	87-11-13	1.0	9 29 N	98 22 W	4.0	5	3	27.8	32.87	20	5	15			
77	87-11-13	1.0	9 29 N	98 22 W	4.0	5	3	27.8	32.87	30	1	1			
77	87-11-13	1.0	9 29 N	98 22 W	4.0	5	3	27.8	32.87	110	3				
77	87-11-13	1.0	9 29 N	98 22 W	4.0	5	3	27.8	32.87	120	1				
77	87-11-13	1.0	9 29 N	98 22 W	4.0	5	3	27.8	32.87	140	1				
78	87-11-14	1.0	8 27 N	98 00 W	3.0	5	2	27.9	32.87	10	5	19		4	
78	87-11-14	1.0	8 27 N	98 00 W	3.0	5	2	27.9	32.87	20	3	3			
78	87-11-14	1.0	8 27 N	98 00 W	3.0	5	2	27.9	32.87	30	2	1			
78	87-11-14	1.0	8 27 N	98 00 W	3.0	5	2	27.9	32.87	110	2	1			
78	87-11-14	1.0	8 27 N	98 00 W	3.0	5	2	27.9	32.87	120	1				
78	87-11-14	1.0	8 27 N	98 00 W	3.0	5	2	27.9	32.87	140	1				
79	87-11-15	1.0	7 36 N	100 48 W	3.0	5	1	28.2	32.59	10	1	1		4	
79	87-11-15	1.0	7 36 N	100 48 W	3.0	5	1	28.2	32.59	20	1	1			
79	87-11-15	1.0	7 36 N	100 48 W	3.0	5	1	28.2	32.59	30	2	1			
79	87-11-15	1.0	7 36 N	100 48 W	3.0	5	1	28.2	32.59	110	2				
79	87-11-15	1.0	7 36 N	100 48 W	3.0	5	1	28.2	32.59	120	1				
79	87-11-15	1.0	7 36 N	100 48 W	3.0	5	1	28.2	32.59	140	1				
79	87-11-15	1.0	7 36 N	100 48 W	3.0	5	1	28.2	32.59	170	1	1			
80	87-11-16	1.0	6 26 N	103 44 W	5.0	5	4	28.1	32.61	10	2	4		1	
80	87-11-16	1.0	6 26 N	103 44 W	5.0	5	4	28.1	32.61	20	4	27			
80	87-11-16	1.0	6 26 N	103 44 W	5.0	5	4	28.1	32.61	30	1				
80	87-11-16	1.0	6 26 N	103 44 W	5.0	5	4	28.1	32.61	110	2				
80	87-11-16	1.0	6 26 N	103 44 W	5.0	5	4	28.1	32.61	120	1				
81	87-11-17	1.0	5 01 N	106 12 W	4.0	5	3	28.1	33.73	10	2	4		2	
81	87-11-17	1.0	5 01 N	106 12 W	4.0	5	3	28.1	33.73	20	3	11		2	2
81	87-11-17	1.0	5 01 N	106 12 W	4.0	5	3	28.1	33.73	30	2	2			
81	87-11-17	1.0	5 01 N	106 12 W	4.0	5	3	28.1	33.73	110	2				
81	87-11-17	1.0	5 01 N	106 12 W	4.0	5	3	28.1	33.73	140	1	1			
82	87-11-18	1.0	1 38 N	105 58 W	4.5	5	3	26.4	34.06	10	4	6		2	
82	87-11-18	1.0	1 38 N	105 58 W	4.5	5	3	26.4	34.06	20	1			1	
82	87-11-18	1.0	1 38 N	105 58 W	4.5	5	3	26.4	34.06	30	1				
83	87-11-19	1.0	1 55 N	109 12 W	4.5	5	1	26.4	34.09	10	1			2	1
83	87-11-19	1.0	1 55 N	109 12 W	4.5	5	1	26.4	34.09	20	1	1		1	

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
83	87-11-19	1.0	1 55 N	109 12 W	4.5	5	1	26.4	34.09	30	1				
83	87-11-19	1.0	1 55 N	109 12 W	4.5	5	1	26.4	34.09	110	2				
83	87-11-19	1.0	1 55 N	109 12 W	4.5	5	1	26.4	34.09	120	1				
83	87-11-19	1.0	1 55 N	109 12 W	4.5	5	1	26.4	34.09	140	1				
84	87-11-20	1.0	3 28 N	112 24 W	3.0	5	2	25.7	34.46	10	1			4	
84	87-11-20	1.0	3 28 N	112 24 W	3.0	5	2	25.7	34.46	20	1			1	
84	87-11-20	1.0	3 28 N	112 24 W	3.0	5	2	25.7	34.46	30	2				
84	87-11-20	1.0	3 28 N	112 24 W	3.0	5	2	25.7	34.46	110	4				
84	87-11-20	1.0	3 28 N	112 24 W	3.0	5	2	25.7	34.46	120	1				
85	87-11-21	1.0	4 42 N	115 48 W	4.0	5	2	28.3	34.29	10	1			3	
85	87-11-21	1.0	4 42 N	115 48 W	4.0	5	2	28.3	34.29	20	3	6			
85	87-11-21	1.0	4 42 N	115 48 W	4.0	5	2	28.3	34.29	30	1	1			
85	87-11-21	1.0	4 42 N	115 48 W	4.0	5	2	28.3	34.29	110	4				
85	87-11-21	1.0	4 42 N	115 48 W	4.0	5	2	28.3	34.29	130	1				
85	87-11-21	1.0	4 42 N	115 48 W	4.0	5	2	28.3	34.29	100	1				
86	87-11-22		5 04 N	116 56 W				27.8	34.43	10		1			
86	87-11-22		5 04 N	116 56 W				27.8	34.43	30		9			
87	87-11-22	1.0	5 17 N	119 01 W	4.0	5	3	27.4	34.50	10	2	3		1	
87	87-11-22	1.0	5 17 N	119 01 W	4.0	5	3	27.4	34.50	20	2	3		3	
87	87-11-22	1.0	5 17 N	119 01 W	4.0	5	3	27.4	34.50	30	3	6		1	
87	87-11-22	1.0	5 17 N	119 01 W	4.0	5	3	27.4	34.50	110	4				
87	87-11-22	1.0	5 17 N	119 01 W	4.0	5	3	27.4	34.50	100	1				
88	87-11-23	1.0	5 51 N	121 21 W	5.5	5	3	28.2	34.40	10	2	1		2	
88	87-11-23	1.0	5 51 N	121 21 W	5.5	5	3	28.2	34.40	20	4	7		1	
88	87-11-23	1.0	5 51 N	121 21 W	5.5	5	3	28.2	34.40	30	1				
88	87-11-23	1.0	5 51 N	121 21 W	5.5	5	3	28.2	34.40	110	2				
89	87-11-24	1.0	9 29 N	120 36 W	4.0	1	3	28.3	33.20	10	2	2		4	
89	87-11-24	1.0	9 29 N	120 36 W	4.0	1	3	28.3	33.20	20	2	1			
89	87-11-24	1.0	9 29 N	120 36 W	4.0	1	3	28.3	33.20	30	1	1			
89	87-11-24	1.0	9 29 N	120 36 W	4.0	1	3	28.3	33.20	110	2				
89	87-11-24	1.0	9 29 N	120 36 W	4.0	1	3	28.3	33.20	120	1				
89	87-11-24	1.0	9 29 N	120 36 W	4.0	1	3	28.3	33.20	140	2	1			
89	87-11-24	1.0	9 29 N	120 36 W	4.0	1	3	28.3	33.20	170	1	1			
90	87-11-25	1.0	12 28 N	119 16 W	4.0	5	4	28.1	33.37	10	2	2		1	1
90	87-11-25	1.0	12 28 N	119 16 W	4.0	5	4	28.1	33.37	20	2	3		2	
90	87-11-25	1.0	12 28 N	119 16 W	4.0	5	4	28.1	33.37	30	1	2			
90	87-11-25	1.0	12 28 N	119 16 W	4.0	5	4	28.1	33.37	110	2				
90	87-11-25	1.0	12 28 N	119 16 W	4.0	5	4	28.1	33.37	130	1				
90	87-11-25	1.0	12 28 N	119 16 W	4.0	5	4	28.1	33.37	140	1	1			
91	87-11-26	1.0	15 20 N	118 01 W	4.0	2	2	26.8	34.37	10	1			2	
91	87-11-26	1.0	15 20 N	118 01 W	4.0	2	2	26.8	34.37	20	3	6			
91	87-11-26	1.0	15 20 N	118 01 W	4.0	2	2	26.8	34.37	30	3	7			
91	87-11-26	1.0	15 20 N	118 01 W	4.0	2	2	26.8	34.37	110	1				
91	87-11-26	1.0	15 20 N	118 01 W	4.0	2	2	26.8	34.37	140	1	1			
91	87-11-26	1.0	15 20 N	118 01 W	4.0	2	2	26.8	34.37	170	1	1			
92	87-11-27	1.0	16 00 N	116 16 W	4.0	5	3	27.8	33.83	10	1			2	
92	87-11-27	1.0	16 00 N	116 16 W	4.0	5	3	27.8	33.83	20	2	3			

Table 6. Continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Location 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)
92	87-11-27	1.0	16 00 N	116 16 W	4.0	5	3	27.8	33.83	30	2	3			
92	87-11-27	1.0	16 00 N	116 16 W	4.0	5	3	27.8	33.83	110	2				
93	87-11-28	1.0	14 09 N	113 47 W	3.5	2	1	28.4	33.33	20	3	9		3	1
93	87-11-28	1.0	14 09 N	113 47 W	3.5	2	1	28.4	33.33	30	2	2			
93	87-11-28	1.0	14 09 N	113 47 W	3.5	2	1	28.4	33.33	110	2				
94	87-11-29	1.0	13 42 N	111 14 W	2.0	2	2	28.7	33.45	20	1	1		3	
94	87-11-29	1.0	13 42 N	111 14 W	2.0	2	2	28.7	33.45	30	1	2			
94	87-11-29	1.0	13 42 N	111 14 W	2.0	2	2	28.7	33.45	110	1				
94	87-11-29	1.0	13 42 N	111 14 W	2.0	2	2	28.7	33.45	140	3				
95	87-11-30	1.0	15 47 N	109 04 W	1.0	2	2	29.2	33.82	20	2	1		2	
95	87-11-30	1.0	15 47 N	109 04 W	1.0	2	2	29.2	33.82	30	1				
96	87-12-01	1.0	17 02 N	112 39 W	5.0	3	4	27.8	34.28	20	2	2			
96	87-12-01	1.0	17 02 N	112 39 W	5.0	3	4	27.8	34.28	30	2	1			
96	87-12-01	1.0	17 02 N	112 39 W	5.0	3	4	27.8	34.28	120	1				
96	87-12-01	1.0	17 02 N	112 39 W	5.0	3	4	27.8	34.28	140	1				
97	87-12-02	1.0	18 03 N	116 21 W	5.0	4	2	27.3	33.96	10	1	1		2	
97	87-12-02	1.0	18 03 N	116 21 W	5.0	4	2	27.3	33.96	20	1	2			
97	87-12-02	1.0	18 03 N	116 21 W	5.0	4	2	27.3	33.96	30	2	4			
98	87-12-03	1.0	18 43 N	117 30 W	4.0	4	1	25.9	34.18	10	1			1	
98	87-12-03	1.0	18 43 N	117 30 W	4.0	4	1	25.9	34.18	20	1	1			
98	87-12-03	1.0	18 43 N	117 30 W	4.0	4	1	25.9	34.18	30	1	2			
98	87-12-03	1.0	18 43 N	117 30 W	4.0	4	1	25.9	34.18	110	2				
98	87-12-03	1.0	18 43 N	117 30 W	4.0	4	1	25.9	34.18	140	2				
98	87-12-03	1.0	18 43 N	117 30 W	4.0	4	1	25.9	34.18	170	1	1			

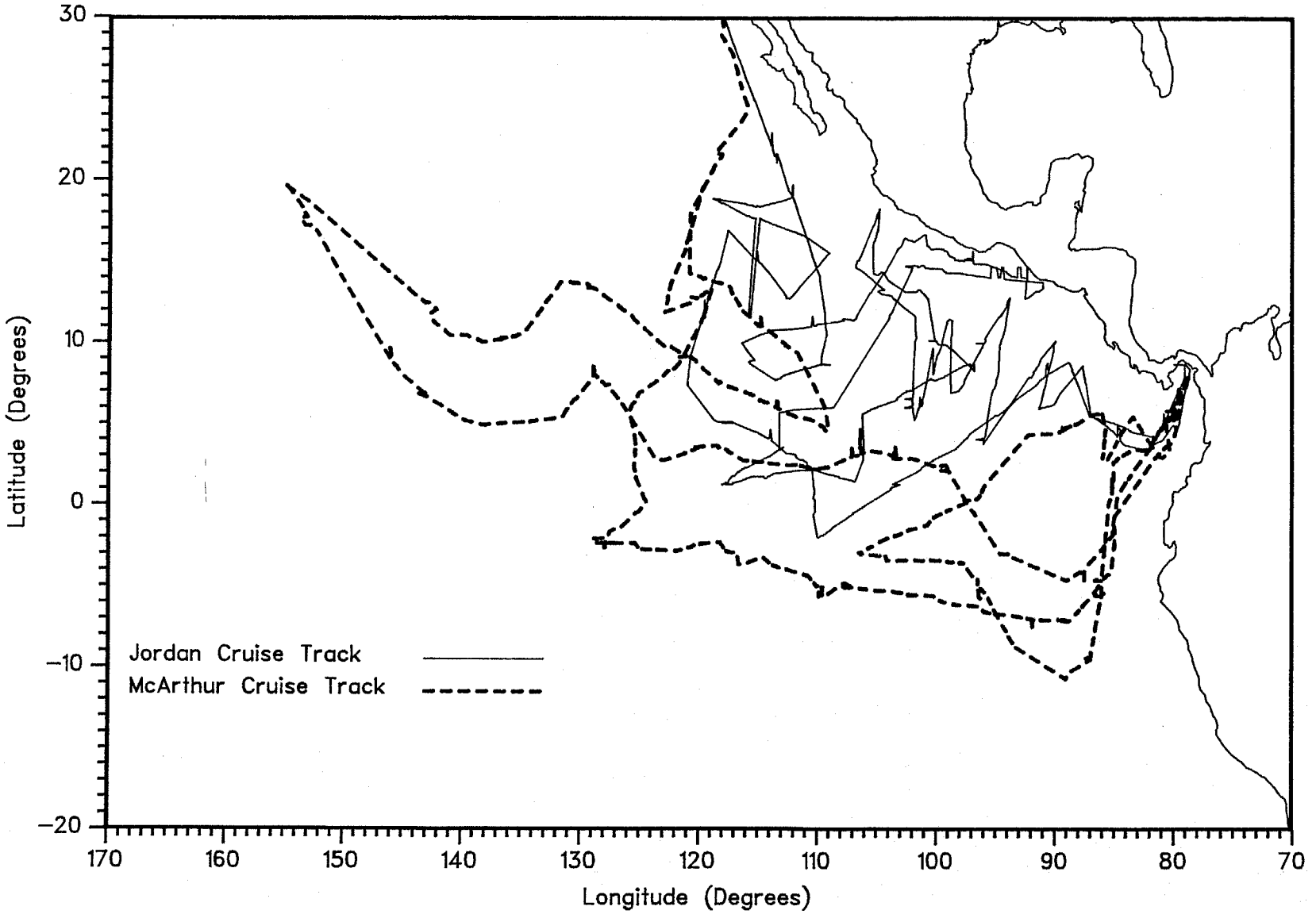

Figure 1. Cruise tracks, *Jordan* and *McArthur*, 8 August-10 December, 1987.

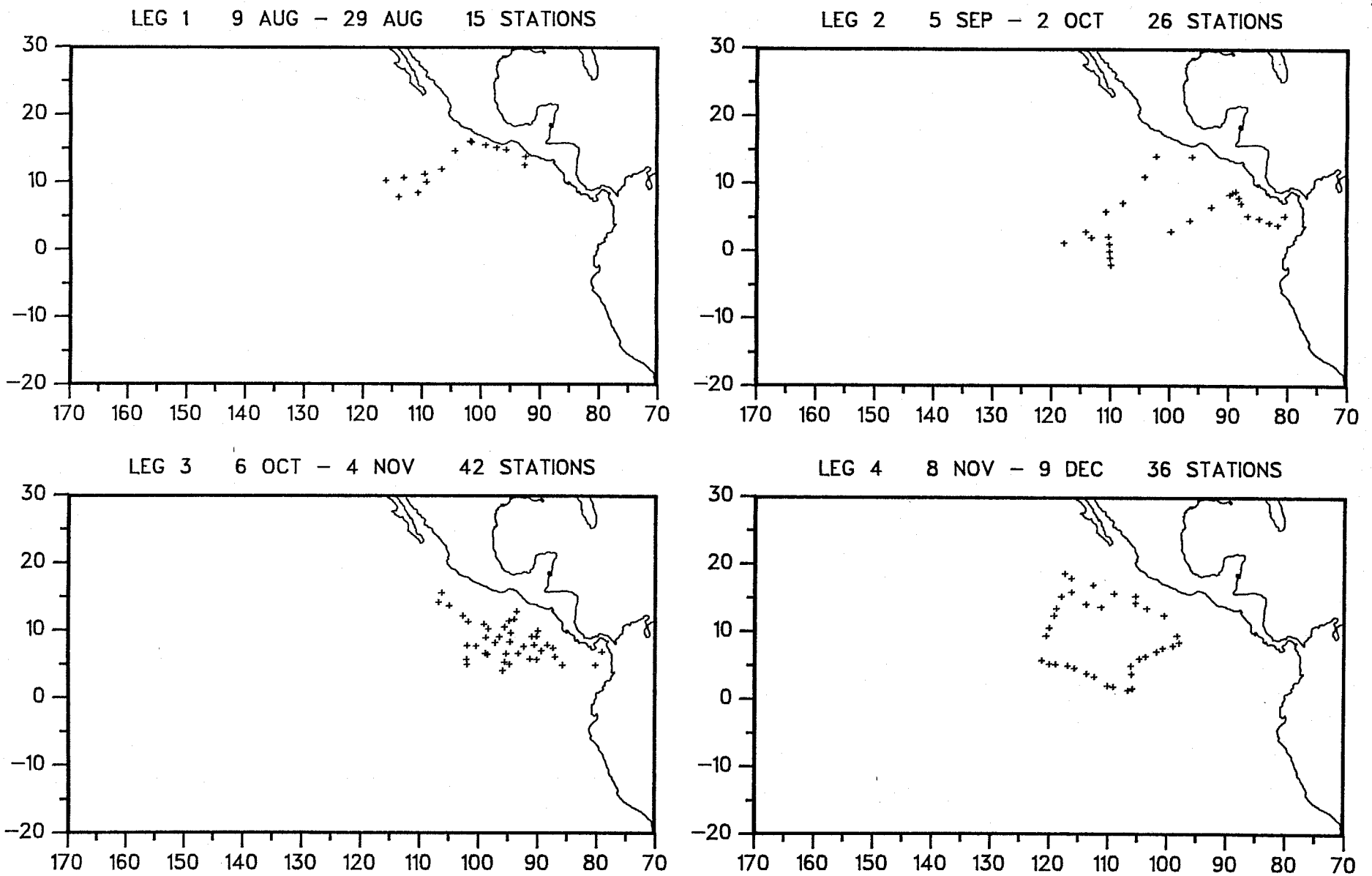

Figure 2. CTD stations by leg, *Jordan*, 8 August-10 December, 1987.

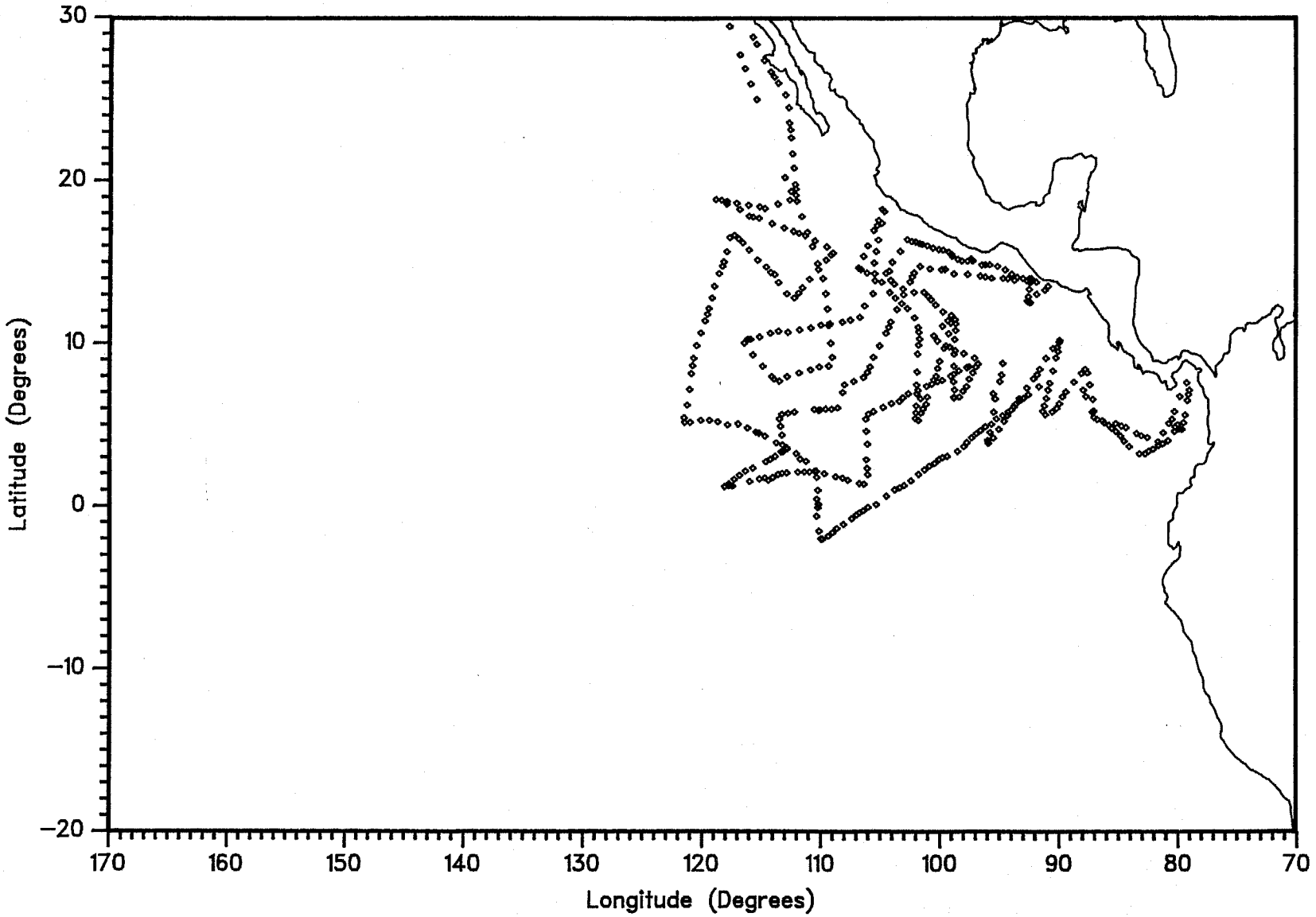

Figure 3. XBT deployments, *Jordan*, 8 August-10 December, 1987.

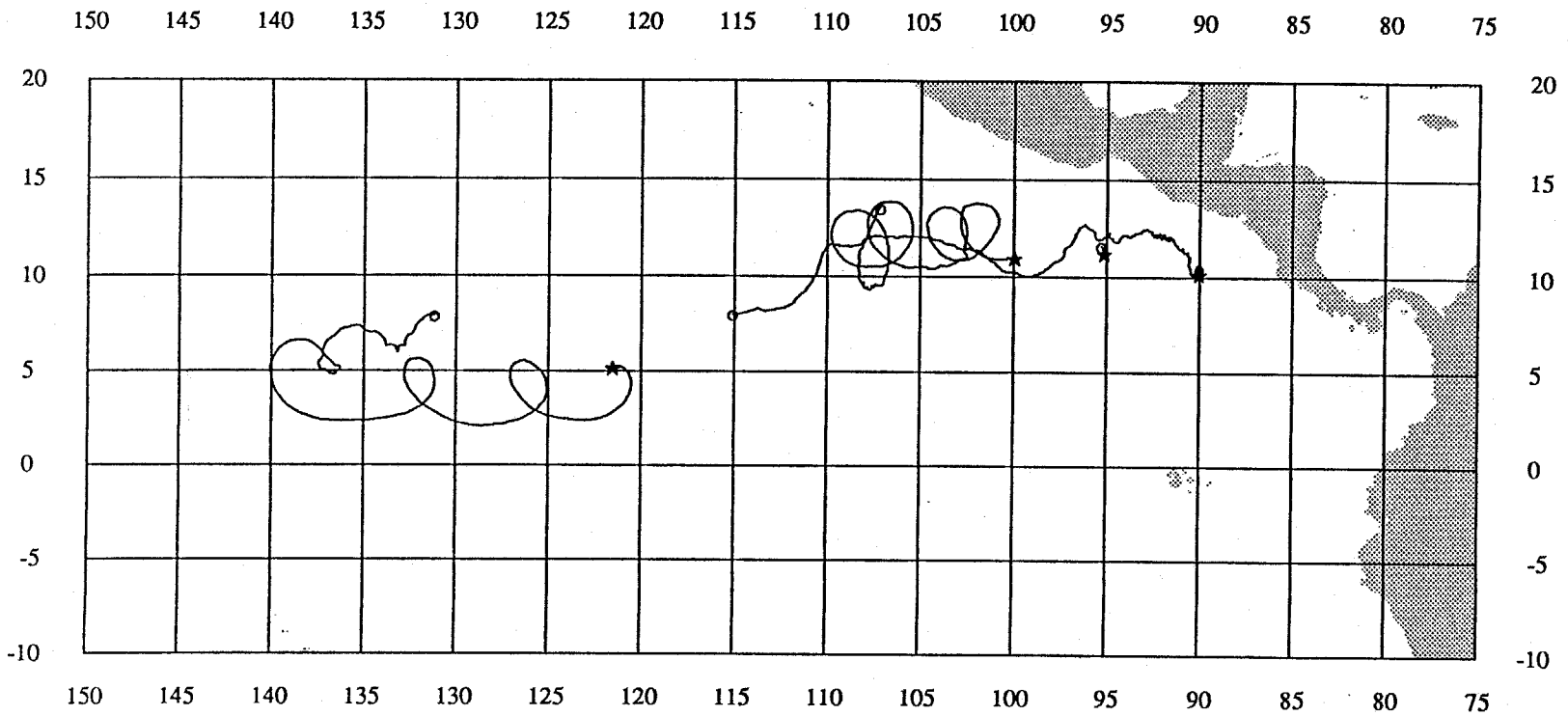

Figure 4. Tracks of four drifting buoys, *Jordan*, 8 August-10 December, 1987.

*-Location of buoy deployment

o-Location of last signal from buoy

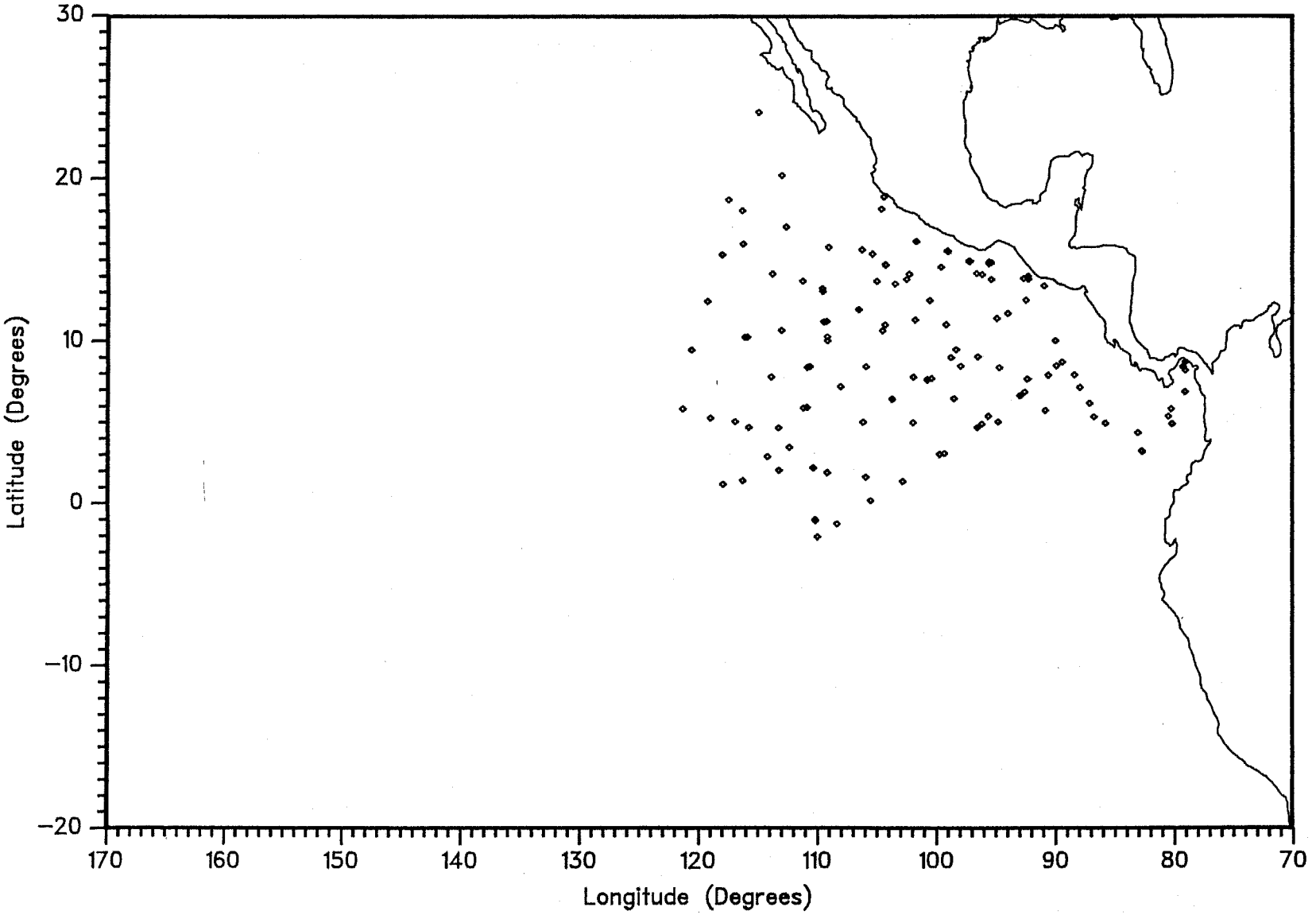

Figure 5. Locations of dip-net stations, *Jordan*, 8 August-10 December, 1987.

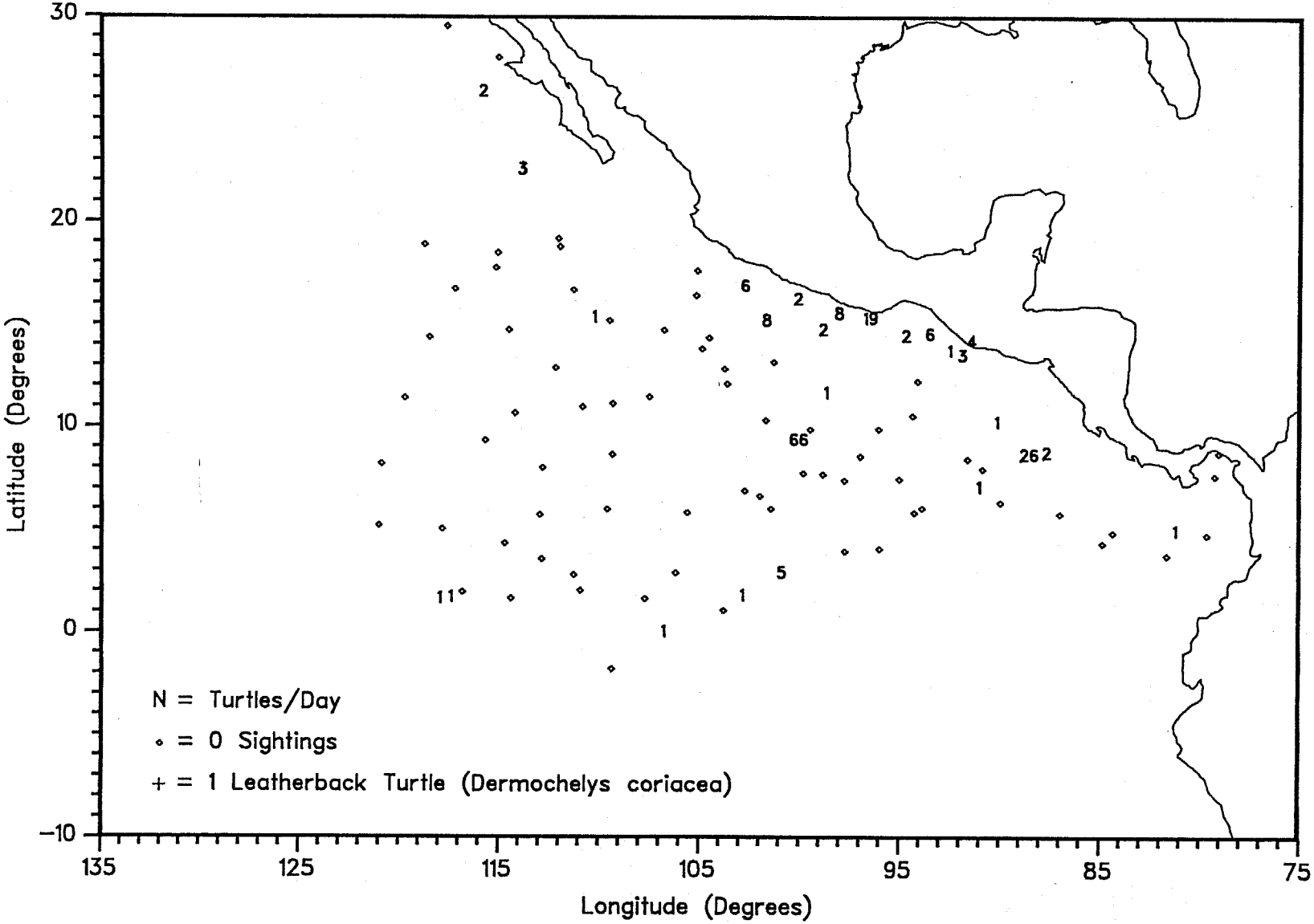

Figure 6. Locations of turtle sightings, *Jordan*, 8 August-10 December, 1987.

APPENDIX A

Station No.	1-001	Date - GMT	15 AUG 87
Station Name	DSJ871-001	Time - GMT	0523
Latitude	10 01.40N	Date - LOC	14 AUG 87
Longitude	109 08.90W	Time - LOC	2223

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.128	0.061	--
20	--	--	0.155	0.060	--
40	--	--	0.214	0.073	--
60	--	--	0.291	0.351	--
80	--	--	0.152	0.236	--
100	--	--	0.070	0.134	--
125	--	--	0.015	0.065	--
150	--	--	0.005	0.038	--

Station No.	1-002	Date - GMT	16 AUG 87
Station Name	DSJ871-002	Time - GMT	0426
Latitude	8 26.60N	Date - LOC	15 AUG 87
Longitude	110 39.20W	Time - LOC	2126

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.084	0.044	--
20	--	--	0.076	0.034	--
40	--	--	0.093	0.053	--
60	--	--	0.283	0.246	--
80	--	--	0.179	0.270	--
100	--	--	0.086	0.163	--
125	--	--	0.052	0.129	--
150	--	--	0.010	0.058	--

Station No.	1-003	Date - GMT	17 AUG 87
Station Name	DSJ871-003	Time - GMT	0525
Latitude	7 49.10N	Date - LOC	16 AUG 87
Longitude	113 55.10W	Time - LOC	2125

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.064	0.029	--
20	--	--	0.062	0.023	--
40	--	--	0.068	0.023	--
60	--	--	0.238	0.101	--
80	--	--	0.390	0.326	--
100	--	--	0.192	0.265	--
125	--	--	0.071	0.138	--
150	--	--	0.039	0.078	--

Station No.	1-004	Date - GMT	18 AUG 87
Station Name	DSJ871-004	Time - GMT	0426
Latitude	10 15.90N	Date - LOC	17 AUG 87
Longitude	116 07.20W	Time - LOC	2126

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.069	0.041	--
20	--	--	0.113	0.044	--
40	--	--	0.122	0.045	--
60	--	--	0.329	0.195	--
80	--	--	0.254	0.325	--
100	--	--	0.120	0.238	--
125	--	--	0.032	0.095	--
150	--	--	0.008	0.062	--

Station No.	1-005	Date - GMT	19 AUG 87
Station Name	DSJ871-005	Time - GMT	0427
Latitude	10 41.40N	Date - LOC	18 AUG 87
Longitude	113 00.60W	Time - LOC	2127

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.116	0.059	--
20	--	--	0.074	0.039	--
40	--	--	0.133	0.049	--
60	--	--	0.262	0.146	--
80	--	--	0.291	0.309	--
100	--	--	0.144	0.244	--
125	--	--	0.009	0.206	--
150	--	--	0.007	0.045	--

Station No.	1-006	Date - GMT	20 AUG 87
Station Name	DSJ871-006	Time - GMT	0424
Latitude	11 12.10N	Date - LOC	19 AUG 87
Longitude	109 27.90W	Time - LOC	2124

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.133	0.052	--
20	--	--	0.062	0.033	--
40	--	--	0.103	0.049	--
60	--	--	0.454	0.317	--
80	--	--	0.203	0.273	--
100	--	--	0.067	0.264	--
125	--	--	0.004	0.300	--
150	--	--	0.000	0.241	--

Station No.	1-007	Date - GMT	21 AUG 87
Station Name	DSJ871-007	Time - GMT	0326
Latitude	11 57.30N	Date - LOC	20 AUG 87
Longitude	106 31.60W	Time - LOC	2026

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.078	0.034	--
20	--	--	0.062	0.025	--
40	--	--	0.088	0.034	--
60	--	--	0.144	0.083	--
80	--	--	0.633	0.446	--
100	--	--	0.227	0.310	--
125	--	--	0.000	0.501	--
150	--	--	0.008	0.397	--

Station No.	1-008	Date - GMT	22 AUG 87
Station Name	DSJ871-008	Time - GMT	0330
Latitude	14 43.00N	Date - LOC	21 AUG 87
Longitude	104 16.00W	Time - LOC	2130

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.066	0.028	--
20	--	--	0.099	0.043	--
40	--	--	0.214	0.098	--
60	--	--	0.701	0.492	--
80	--	--	0.128	0.119	--
100	--	--	0.057	0.144	--
125	--	--	0.011	0.102	--
150	--	--	0.003	0.045	--

Station No.	1-009	Date - GMT	23 AUG 87
Station Name	DSJ871-009	Time - GMT	0300
Latitude	16 08.80N	Date - LOC	22 AUG 87
Longitude	101 42.10W	Time - LOC	2100

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.063	0.019	--
20	--	--	0.070	0.022	--
40	--	--	0.146	0.050	--
60	--	--	0.794	0.477	--
80	--	--	0.409	0.390	--
100	--	--	0.078	0.147	--
125	--	--	0.030	0.246	--
150	--	--	0.002	0.240	--

Station No.	1-010	Date - GMT	23 AUG 87
Station Name	DSJ871-010	Time - GMT	1103
Latitude	16 00.90N	Date - LOC	23 AUG 87
Longitude	101 29.00W	Time - LOC	0503

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.106	0.055	--
20	--	--	0.106	0.042	--
40	--	--	0.121	0.053	--
60	--	--	0.490	0.285	--
80	--	--	0.184	0.190	--
100	--	--	0.071	0.120	--
125	--	--	0.008	0.079	--
150	--	--	0.014	0.215	--

Station No.	1-011	Date - GMT	24 AUG 87
Station Name	DSJ871-011	Time - GMT	0241
Latitude	15 32.90N	Date - LOC	23 AUG 87
Longitude	99 04.00W	Time - LOC	2041

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.063	0.028	--
20	--	--	0.070	0.035	--
40	--	--	0.147	0.074	--
60	--	--	0.861	0.523	--
80	--	--	0.198	0.257	--
100	--	--	0.054	0.117	--
125	--	--	0.026	0.082	--
150	--	--	0.004	0.061	--

Station No.	1-012	Date - GMT	25 AUG 87
Station Name	DSJ871-012	Time - GMT	0238
Latitude	15 08.40N	Date - LOC	24 AUG 87
Longitude	97 14.50W	Time - LOC	2038

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.174	0.041	--
20	--	--	0.143	0.042	--
40	--	--	0.321	0.156	--
60	--	--	0.326	0.352	--
80	--	--	0.099	0.118	--
100	--	--	0.047	0.074	--
125	--	--	0.007	0.043	--
150	--	--	0.005	0.033	--

Station No.	1-013	Date - GMT	26 AUG 87
Station Name	DSJ871-013	Time - GMT	0228
Latitude	14 50.20N	Date - LOC	25 AUG 87
Longitude	95 35.00W	Time - LOC	2128

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.321	0.101	--
20	--	--	0.321	0.071	--
40	--	--	0.267	0.069	--
60	--	--	0.203	0.177	--
80	--	--	0.118	0.301	--
100	--	--	0.069	0.111	--
125	--	--	0.034	0.059	--
150	--	--	0.006	0.033	--

Station No.	1-014	Date - GMT	27 AUG 87
Station Name	DSJ871-014	Time - GMT	0211
Latitude	13 47.50N	Date - LOC	26 AUG 87
Longitude	92 17.50W	Time - LOC	2111

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.385	0.062	--
20	--	--	0.355	0.099	--
40	--	--	0.342	0.259	--
60	--	--	0.464	0.493	--
80	--	--	0.048	0.145	--
100	--	--	0.041	0.135	--
125	--	--	0.019	0.072	--
150	--	--	0.045	0.060	--

Station No.	1-015	Date - GMT	28 AUG 87
Station Name	DSJ871-015	Time - GMT	0129
Latitude	12 31.40N	Date - LOC	27 AUG 87
Longitude	92 29.90W	Time - LOC	2029

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.240	0.074	--
20	--	--	0.275	0.072	--
40	--	--	0.667	0.238	--
60	--	--	0.692	0.535	--
80	--	--	0.208	0.243	--
100	--	--	0.082	0.129	--
125	--	--	0.030	0.072	--
150	--	--	0.008	0.029	--

Station No.	2-016	Date - GMT	07 SEP 87
Station Name	DSJ872-016	Time - GMT	0230
Latitude	14 05.60N	Date - LOC	06 SEP 87
Longitude	96 11.80W	Time - LOC	2030

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	--	--	--
20	--	--	--	--	--
40	--	--	--	--	--
60	--	--	--	--	--
80	--	--	--	--	--
100	--	--	--	--	--
125	--	--	--	--	--
150	--	--	--	--	--

Station No.	2-017	Date - GMT	09 SEP 87
Station Name	DSJ872-017	Time - GMT	0244
Latitude	14.07.20N	Date - LOC	08 SEP 87
Longitude	102 19.40W	Time - LOC	2044

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	--	--	--
20	--	--	--	--	--
40	--	--	--	--	--
60	--	--	--	--	--
80	--	--	--	--	--
100	--	--	--	--	--
125	--	--	--	--	--
150	--	--	--	--	--

Station No.	2-018	Date - GMT	10 SEP 87
Station Name	DSJ872-018	Time - GMT	0229
Latitude	11 00.20N	Date - LOC	09 SEP 87
Longitude	104 20.40W	Time - LOC	2029

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	--	--	--
20	--	--	--	--	--
40	--	--	--	--	--
60	--	--	--	--	--
80	--	--	--	--	--
100	--	--	--	--	--
125	--	--	--	--	--
150	--	--	--	--	--

Station No.	2-019	Date - GMT	12 SEP 87
Station Name	DSJ872-019	Time - GMT	0337
Latitude	7 13.00N	Date - LOC	11 SEP 87
Longitude	108 04.80W	Time - LOC	2137

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.095	0.044	--
20	--	--	--	--	--
40	--	--	--	--	--
60	--	--	--	--	--
80	--	--	--	--	--
100	--	--	--	--	--
125	--	--	--	--	--
150	--	--	--	--	--

Station No.	2-020	Date - GMT	13 SEP 87
Station Name	DSJ872-020	Time - GMT	0347
Latitude	5 55.60N	Date - LOC	12 SEP 87
Longitude	110 52.70W	Time - LOC	2047

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.003	0.150	--
20	--	--	0.117	0.065	--
40	--	--	0.117	0.058	--
60	--	--	0.361	0.221	--
80	--	--	0.350	0.234	--
100	--	--	0.240	0.327	--
125	--	--	0.259	0.297	--
150	--	--	0.139	0.189	--

Station No.	2-021	Date - GMT	15 SEP 87
Station Name	DSJ872-021	Time - GMT	0343
Latitude	2 53.90N	Date - LOC	14 SEP 83
Longitude	114 13.70W	Time - LOC	2043

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.152	0.061	--
20	--	--	--	--	--
40	--	--	--	--	--
60	--	--	--	--	--
80	--	--	--	--	--
100	--	--	--	--	--
125	--	--	--	--	--
150	--	--	--	--	--

Station No.	2-022	Date - GMT	16 SEP 87
Station Name	DSJ872-022	Time - GMT	0348
Latitude	1 13.40N	Date - LOC	15 SEP 87
Longitude	117 57.20W	Time - LOC	2048

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.071	0.033	--
20	--	--	0.240	0.093	--
40	--	--	0.334	0.222	--
60	--	--	0.347	0.317	--
80	--	--	0.286	0.364	--
100	--	--	0.216	0.307	--
125	--	--	0.060	0.098	--
150	--	--	0.036	0.071	--

Station No.	2-023	Date - GMT	18 SEP 87
Station Name	DSJ872-023	Time - GMT	0330
Latitude	2 04.10N	Date - LOC	17 SEP 87
Longitude	113 14.10W	Time - LOC	2030

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.174	0.071	--
20	--	--	0.206	0.081	--
40	--	--	0.246	0.104	--
60	--	--	0.318	0.128	--
80	--	--	0.315	0.167	--
100	--	--	0.286	0.397	--
125	--	--	0.176	0.229	--
150	--	--	0.076	0.150	--

Station No.	2-024	Date - GMT	19 SEP 87
Station Name	DSJ872-024	Time - GMT	0330
Latitude	2 12.60N	Date - LOC	18 SEP 87
Longitude	110 21.60W	Time - LOC	2030

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.118	0.045	--
20	--	--	0.176	0.063	--
40	--	--	0.290	0.154	--
60	--	--	0.275	0.168	--
80	--	--	0.267	0.242	--
100	--	--	0.187	0.190	--
125	--	--	0.136	0.175	--
150	--	--	0.082	0.135	--

Station No.	2-025	Date - GMT	19 SEP 87
Station Name	DSJ872-025	Time - GMT	1216
Latitude	1 00.00N	Date - LOC	19 SEP 87
Longitude	110 12.10W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.200	0.103	--
20	--	--	0.248	0.093	--
40	--	--	--	--	--
60	--	--	0.222	0.090	--
80	--	--	0.195	0.169	--
100	--	--	0.152	0.250	--
125	--	--	0.099	0.168	--
150	--	--	0.043	0.108	--

Station No.	2-026	Date - GMT	19 SEP 87
Station Name	DSJ872-026	Time - GMT	2030
Latitude	0 04.50S	Date - LOC	19 SEP 87
Longitude	110 12.80W	Time - LOC	1330

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.190	0.075	--
20	--	--	0.286	0.133	--
40	--	--	0.264	0.151	--
60	--	--	0.251	0.173	--
80	--	--	0.163	0.341	--
100	--	--	0.060	0.090	--
125	--	--	0.028	0.049	--
150	--	--	0.017	0.070	--

Station No.	2-027	Date - GMT	20 SEP 87
Station Name	DSJ872-027	Time - GMT	0342
Latitude	1 00.00S	Date - LOC	19 SEP 87
Longitude	110 09.00W	Time - LOC	2042

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.155	0.067	--
20	--	--	0.171	0.066	--
40	--	--	0.230	0.118	--
60	--	--	0.334	0.195	--
80	--	--	0.425	0.217	--
100	--	--	0.192	0.135	--
125	--	--	0.052	0.068	--
150	--	--	--	--	--

Station No.	2-028	Date - GMT	20 SEP 87
Station Name	DSJ872-028	Time - GMT	1048
Latitude	2 01.60S	Date - LOC	20 SEP 87
Longitude	109 59.00W	Time - LOC	0348

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.155	0.087	--
20	--	--	0.184	0.069	--
40	--	--	0.174	0.088	--
60	--	--	0.198	0.138	--
80	--	--	0.166	0.217	--
100	--	--	0.163	0.217	--
125	--	--	--	--	--
150	--	--	0.073	0.086	--

Station No.	2-029	Date - GMT	24 SEP 87
Station Name	DSJ872-029	Time - GMT	0212
Latitude	3 01.40N	Date - LOC	23 SEP 87
Longitude	99 46.30W	Time - LOC	2012

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.184	0.077	--
20	--	--	0.235	0.084	--
40	--	--	0.299	0.161	--
60	--	--	0.270	0.163	--
80	--	--	0.216	0.252	--
100	--	--	0.216	0.304	--
125	--	--	0.122	0.131	--
150	--	--	0.027	0.042	--

Station No.	2-030	Date - GMT	25 SEP 87
Station Name	DSJ872-030	Time - GMT	0217
Latitude	4 39.60N	Date - LOC	24 SEP 87
Longitude	96 35.10W	Time - LOC	2017

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.087	0.048	--
20	--	--	0.095	0.027	--
40	--	--	0.100	0.036	--
60	--	--	0.246	0.143	--
80	--	--	0.315	0.263	--
100	--	--	0.160	0.209	--
125	--	--	0.044	0.083	--
150	--	--	0.015	0.062	--

Station No.	2-031	Date - GMT	26 SEP 87
Station Name	DSJ872-031	Time - GMT	0211
Latitude	6 38.90N	Date - LOC	25 SEP 87
Longitude	92 59.40W	Time - LOC	2011

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.100	0.034	--
20	--	--	0.112	0.039	--
40	--	--	0.633	0.429	--
60	--	--	0.523	0.643	--
80	--	--	0.171	0.234	--
100	--	--	0.107	0.177	--
125	--	--	0.065	0.127	--
150	--	--	0.018	0.065	--

Station No.	2-032	Date - GMT	27 SEP 87
Station Name	DSJ872-032	Time - GMT	0212
Latitude	8 28.70N	Date - LOC	26 SEP 87
Longitude	89 55.80W	Time - LOC	2012

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.147	0.057	--
20	--	--	0.323	0.159	--
40	--	--	0.397	0.491	--
60	--	--	0.192	0.367	--
80	--	--	0.115	0.172	--
100	--	--	0.056	0.092	--
125	--	--	0.025	0.075	--
150	--	--	0.012	0.040	--

Station No.	2-033	Date - GMT	27 SEP 87
Station Name	DSJ872-033	Time - GMT	0614
Latitude	8 43.30N	Date - LOC	27 SEP 87
Longitude	89 27.30W	Time - LOC	0014

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.148	0.058	--
20	--	--	0.315	0.186	--
40	--	--	0.397	0.709	--
60	--	--	0.144	0.206	--
80	--	--	0.081	0.130	--
100	--	--	0.042	0.082	--
125	--	--	0.012	0.060	--
150	--	--	0.007	0.046	--

Station No.	2-034	Date - GMT	27 SEP 87
Station Name	DSJ872-034	Time - GMT	1049
Latitude	8 53.00N	Date - LOC	27 SEP 87
Longitude	88 54.50W	Time - LOC	0549

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.166	0.080	--
20	--	--	0.297	0.205	--
40	--	--	0.305	0.420	--
60	--	--	0.195	0.458	--
80	--	--	0.100	0.180	--
100	--	--	0.025	0.062	--
125	--	--	0.018	0.058	--
150	--	--	0.003	0.042	--

Station No.	2-035	Date - GMT	27 SEP 87
Station Name	DSJ872-035	Time - GMT	1906
Latitude	7 57.40N	Date - LOC	27 SEP 87
Longitude	88 21.70W	Time - LOC	1406

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.113	0.036	--
20	--	--	0.219	0.073	--
40	--	--	0.971	0.561	--
60	--	--	0.810	0.913	--
80	--	--	0.192	0.306	--
100	--	--	0.062	0.085	--
125	--	--	0.011	0.051	--
150	--	--	0.010	0.043	--

Station No.	2-036	Date - GMT	28 SEP 87
Station Name	DSJ872-036	Time - GMT	0112
Latitude	7 09.10N	Date - LOC	27 SEP 87
Longitude	87 56.70W	Time - LOC	2012

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.141	0.041	--
20	--	--	0.160	0.054	--
40	--	--	0.350	0.129	--
60	--	--	0.557	0.714	--
80	--	--	0.346	0.577	--
100	--	--	0.025	0.074	--
125	--	--	--	--	--
150	--	--	0.012	0.041	--

Station No.	2-037	Date - GMT	29 SEP 87
Station Name	DSJ872-037	Time - GMT	0111
Latitude	5 20.40N	Date - LOC	28 SEP 87
Longitude	86 46.50W	Time - LOC	2011

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.100	0.034	--
20	--	--	0.131	0.052	--
40	--	--	0.549	0.209	--
60	--	--	0.583	0.453	--
80	--	--	0.583	0.575	--
100	--	--	0.227	0.266	--
125	--	--	0.046	0.084	--
150	--	--	0.041	0.059	--

Station No.	2-038	Date - GMT	29 SEP 87
Station Name	DSJ872-038	Time - GMT	1314
Latitude	4 56.80N	Date - LOC	28 SEP 87
Longitude	84 49.50W	Time - LOC	0814

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.138	0.070	--
20	--	--	0.153	0.047	--
40	--	--	0.313	0.180	--
60	--	--	0.398	0.357	--
80	--	--	0.289	0.364	--
100	--	--	0.118	0.137	--
125	--	--	0.042	0.088	--
150	--	--	0.008	0.026	--

Station No.	2-039	Date - GMT	30 SEP 87
Station Name	DSJ872-039	Time - GMT	0113
Latitude	4 20.50N	Date - LOC	29 SEP 87
Longitude	83 05.30W	Time - LOC	2013

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.281	0.116	--
20	--	--	0.273	0.110	--
40	--	--	0.574	0.871	--
60	--	--	0.166	0.217	--
80	--	--	0.176	0.198	--
100	--	--	0.084	0.109	--
125	--	--	0.048	0.053	--
150	--	--	0.096	0.079	--

Station No.	2-040	Date - GMT	30 SEP 87
Station Name	DSJ872-040	Time - GMT	1230
Latitude	3 57.60N	Date - LOC	30 SEP 87
Longitude	81 38.60W	Time - LOC	0730

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.182	0.088	--
20	--	--	0.190	0.080	--
40	--	--	0.419	0.255	--
60	--	--	0.334	0.388	--
80	--	--	0.086	0.099	--
100	--	--	0.029	0.038	--
125	--	--	0.010	0.028	--
150	--	--	0.006	0.026	--

Station No.	2-041	Date - GMT	01 OCT 87
Station Name	DSJ872-041	Time - GMT	0114
Latitude	5 21.70N	Date - LOC	30 SEP 87
Longitude	80 29.80W	Time - LOC	2014

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.171	0.074	--
20	--	--	0.222	0.078	--
40	--	--	0.507	0.477	--
60	--	--	0.222	0.244	--
80	--	--	0.142	0.117	--
100	--	--	0.028	0.030	--
125	--	--	0.011	0.031	--
150	--	--	0.011	0.023	--

Station No.	3-042	Date - GMT	10 OCT 87
Station Name	DSJ873-042	Time - GMT	0107
Latitude	6 53.20N	Date - LOC	9 OCT 87
Longitude	79 06.80W	Time - LOC	2007

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.40	--	0.143	0.051	--
20	--	--	0.473	0.667	--
40	--	--	0.273	0.457	--
60	--	--	0.142	0.236	--
80	--	--	0.096	0.161	--
100	--	--	0.015	0.052	--
125	--	--	0.006	0.036	--
150	--	--	0.005	0.028	--

Station No.	3-043	Date - GMT	11 OCT 87
Station Name	DSJ873-043	Time - GMT	0105
Latitude	4 54.30N	Date - LOC	10 OCT 87
Longitude	80 12.40W	Time - LOC	2005

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.119	0.046	--
20	27.84	51.585	0.150	0.065	--
40	25.16	52.479	0.701	0.431	--
60	21.16	48.702	0.422	0.535	--
80	18.53	46.380	0.374	0.039	--
100	16.53	44.449	0.095	0.171	--
125	15.74	43.632	0.038	0.042	--
150	14.82	42.776	0.003	0.025	--

Station No.	3-044	Date - GMT	13 OCT 87
Station Name	DSJ873-044	Time - GMT	0104
Latitude	4 56.40N	Date - LOC	12 OCT 87
Longitude	85 49.00W	Time - LOC	2004

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.00	--	0.608	0.141	--
20	27.62	53.236	0.208	0.062	--
40	21.71	49.169	0.735	0.536	--
60	18.94	46.744	0.989	0.774	--
80	17.63	45.500	0.908	0.855	--
100	16.58	44.527	0.329	0.733	--
125	15.90	43.892	0.099	0.190	--
150	15.66	43.665	0.069	0.178	--

Station No.	3-045	Date - GMT	13 OCT 87
Station Name	DSJ873-045	Time - GMT	0105
Latitude	4 56.40N	Date - LOC	12 OCT 87
Longitude	85 49.00W	Time - LOC	2005

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.00	--	0.115	0.028	--
20	27.72	52.933	0.000	0.446	--
40	21.45	49.269	0.684	0.665	--
60	18.84	46.810	0.498	0.590	--
80	16.22	44.077	0.160	0.206	--
100	15.39	43.319	0.094	0.148	--
125	14.79	42.739	0.046	0.155	--
150	14.38	42.335	0.020	0.049	--

Station No.	3-046	Date - GMT	14 OCT 87
Station Name	DSJ873-046	Time - GMT	0106
Latitude	6 10.00N	Date - LOC	13 OCT 87
Longitude	87 07.60W	Time - LOC	2006

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.20	--	--	--	--
20	--	--	--	--	--
40	--	--	0.374	0.562	--
60	--	--	0.374	0.480	--
80	--	--	--	--	--
100	--	--	0.136	0.109	--
125	--	--	0.013	0.041	--
150	--	--	0.000	0.035	--

Station No.	3-047	Date - GMT	14 OCT 87
Station Name	DSJ873-047	Time - GMT	1023
Latitude	7 27.70N	Date - LOC	14 OCT 87
Longitude	87 26.50W	Time - LOC	0523

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.00	--	0.127	0.045	--
20	27.32	33.518	0.321	0.000	3.701
40	20.94	34.645	0.534	0.705	1.878
60	17.28	34.875	0.214	0.392	1.489
80	16.31	34.497	--	--	1.409
100	14.97	34.928	0.035	0.063	1.175
125	14.29	34.916	0.011	0.037	1.117
150	13.74	34.907	0.005	0.026	1.070

Station No.	3-048	Date - GMT	15 OCT 87
Station Name	DSJ873-048	Time - GMT	0126
Latitude	7 54.60N	Date - LOC	14 OCT 87
Longitude	88 25.80W	Time - LOC	2026

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.50	--	0.136	0.036	--
20	27.96	33.170	0.138	0.053	3.564
40	22.56	34.824	0.695	0.490	2.514
60	17.56	34.864	0.240	0.310	1.615
80	15.85	34.896	0.080	0.113	1.381
100	14.93	34.921	0.054	0.115	1.214
125	14.51	34.915	0.014	0.049	1.101
150	13.83	34.904	0.004	0.038	1.091

Station No.	3-049	Date - GMT	15 OCT 87
Station Name	DSJ873-049	Time - GMT	1025
Latitude	7 01.30N	Date - LOC	15 OCT 87
Longitude	89 26.50W	Time - LOC	0525

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.70	--	--	--	--
20	26.91	33.646	0.454	0.179	3.581
40	20.91	34.701	0.668	0.709	2.294
60	18.62	34.793	--	--	1.780
80	16.63	34.871	--	--	1.379
100	15.42	34.878	0.044	0.102	1.264
125	14.57	34.906	0.017	0.052	1.167
150	13.93	34.891	0.007	0.042	1.109

Station No.	3-050	Date - GMT	16 OCT 87
Station Name	DSJ873-050	Time - GMT	0127
Latitude	5 43.60N	Date - LOC	15 OCT 87
Longitude	90 12.30W	Time - LOC	2027

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.40	--	0.133	0.042	--
20	28.26	32.766	0.149	0.049	3.517
40	24.63	34.401	0.481	0.000	2.667
60	17.06	34.886	0.294	0.560	1.346
80	15.56	34.916	0.267	0.311	1.395
100	14.84	34.942	0.092	0.151	1.544
125	14.28	34.943	0.050	0.086	1.309
150	13.85	34.931	0.004	0.033	1.231

Station No.	3-051	Date - GMT	16 OCT 87
Station Name	DSJ873-051	Time - GMT	1007
Latitude	5 50.20N	Date - LOC	16 OCT 87
Longitude	91 22.30W	Time - LOC	0507

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.30	--	0.160	0.033	--
20	28.25	32.965	0.187	0.006	3.596
40	22.60	34.604	0.321	0.230	2.381
60	16.83	34.880	0.187	0.226	1.236
80	15.15	34.924	0.107	0.169	1.048
100	14.35	34.937	0.279	0.905	1.267
125	13.97	34.938	0.043	0.138	1.234
150	13.57	34.922	0.011	0.125	1.277

Station No.	3-052	Date - GMT	17 OCT 87
Station Name	DSJ873-052	Time - GMT	0131
Latitude	7 54.20N	Date - LOC	16 OCT 87
Longitude	90 38.20W	Time - LOC	2031

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.00	--	0.267	0.063	--
20	21.30	34.541	0.454	0.262	1.971
40	16.17	34.749	0.534	0.650	1.487
60	14.77	34.829	0.240	0.366	1.387
80	14.16	34.872	0.160	0.225	1.339
100	13.78	34.898	0.080	0.168	1.290
125	13.51	34.905	0.092	0.187	1.295
150	13.26	34.894	0.035	0.159	1.269

Station No.	3-053	Date - GMT	17 OCT 87
Station Name	DSJ873-053	Time - GMT	1022
Latitude	9 08.20N	Date - LOC	17 OCT 87
Longitude	90 14.80W	Time - LOC	0522

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.50	--	--	--	--
20	27.66	33.678	--	--	1.637
40	15.06	34.864	--	--	1.271
60	14.14	34.897	--	--	1.209
80	13.78	34.891	--	--	1.178
100	13.39	34.892	--	--	1.239
125	13.13	34.876	--	--	1.299
150	12.69	34.851	--	--	1.147

Station No.	3-054	Date - GMT	18 OCT 87
Station Name	DSJ873-054	Time - GMT	0108
Latitude	10 00.80N	Date - LOC	17 OCT 87
Longitude	90 02.40W	Time - LOC	2008

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.50	--	--	--	--
20	20.32	34.751	--	--	1.973
40	17.20	34.817	--	--	1.529
60	15.42	34.841	--	--	1.309
80	13.98	34.862	--	--	1.068
100	13.50	34.879	--	--	1.046
125	13.06	34.860	--	--	0.989
150	12.55	34.826	--	--	1.098

Station No.	3-055	Date - GMT	18 OCT 87
Station Name	DSJ873-055	Time - GMT	1020
Latitude	9 06.30N	Date - LOC	18 OCT 87
Longitude	91 04.90W	Time - LOC	0520

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.70	--	--	--	--
20	19.68	34.732	--	--	1.878
40	15.23	34.884	--	--	1.297
60	14.50	34.894	--	--	1.292
80	14.02	34.889	--	--	1.345
100	13.77	34.911	--	--	1.307
125	13.26	34.879	--	--	1.194
150	12.06	34.852	--	--	1.222

Station No.	3-056	Date - GMT	19 OCT 87
Station Name	DSJ873-056	Time - GMT	0126
Latitude	7 39.60N	Date - LOC	18 OCT 87
Longitude	92 25.10W	Time - LOC	2026

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.10	--	--	--	--
20	27.73	33.725	--	--	3.075
40	18.95	34.634	--	--	1.564
60	15.93	34.781	--	--	1.479
80	14.64	34.782	--	--	1.359
100	14.41	34.937	--	--	1.331
125	14.04	34.926	--	--	1.196
150	13.77	34.928	--	--	1.292

Station No.	3-057	Date - GMT	19 OCT 87
Station Name	DSJ873-057	Time - GMT	1021
Latitude	6 37.40N	Date - LOC	19 OCT 87
Longitude	93 20.30W	Time - LOC	0521

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	--	--	--
20	28.23	32.903	--	--	3.810
40	23.72	34.848	--	--	2.564
60	18.20	34.785	--	--	1.700
80	15.36	34.917	--	--	1.447
100	14.44	34.931	--	--	1.376
125	13.97	34.932	--	--	1.338
150	13.71	34.924	--	--	1.304

Station No.	3-058	Date - GMT	20 OCT 87
Station Name	DSJ873-058	Time - GMT	0139
Latitude	5 00.90N	Date - LOC	19 OCT 87
Longitude	94 50.40W	Time - LOC	2039

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.70	--	--	--	--
20	27.78	33.000	--	--	3.872
40	27.04	33.926	--	--	3.871
60	23.10	34.577	--	--	2.362
80	17.70	34.727	--	--	1.334
100	15.16	34.600	--	--	1.463
125	14.43	34.855	--	--	1.460
150	13.42	34.873	--	--	1.245

Station No.	3-059	Date - GMT	20 OCT 87
Station Name	DSJ873-059	Time - GMT	1025
Latitude	4 03.00N	Date - LOC	20 OCT 87
Longitude	95 59.90W	Time - LOC	0525

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	--	--	--
20	27.35	33.537	--	--	3.647
40	27.34	33.539	--	--	4.150
60	26.45	34.062	--	--	3.979
80	20.08	34.803	--	--	2.355
100	16.01	34.737	--	--	1.572
125	14.40	34.912	--	--	1.318
150	13.55	34.898	--	--	1.255

Station No.	3-060	Date - GMT	21 OCT 87
Station Name	DSJ873-060	Time - GMT	0126
Latitude	5 22.50N	Date - LOC	20 OCT 87
Longitude	95 39.70W	Time - LOC	2026

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.00	--	--	--	--
20	27.86	32.787	--	--	4.082
40	25.48	34.296	--	--	4.193
60	24.29	34.451	--	--	3.634
80	18.14	34.715	--	--	1.591
100	14.60	34.842	--	--	1.529
125	14.22	34.928	--	--	1.172
150	13.61	34.943	--	--	1.145

Station No.	3-061	Date - GMT	21 OCT 87
Station Name	DSJ873-061	Time - GMT	1021
Latitude	6 36.40N	Date - LOC	21 OCT 87
Longitude	95 23.30W	Time - LOC	0521

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.00	--	--	--	--
20	28.26	32.742	--	--	3.786
40	24.56	34.475	--	--	2.774
60	17.81	34.727	--	--	1.489
80	14.66	34.818	--	--	1.346
100	13.94	34.930	--	--	1.105
125	13.71	34.919	--	--	1.221
150	13.46	34.919	--	--	1.219

Station No.	3-062	Date - GMT	22 OCT 87
Station Name	DSJ873-062	Time - GMT	0130
Latitude	8 22.30N	Date - LOC	21 OCT 87
Longitude	94 44.50W	Time - LOC	2030

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.20	--	--	--	--
20	26.39	32.956	--	--	4.101
40	21.60	34.672	--	--	1.725
60	14.74	34.782	--	--	1.542
80	13.80	34.855	--	--	1.441
100	13.60	34.880	--	--	1.320
125	13.21	34.851	--	--	1.280
150	12.83	34.851	--	--	1.328

Station No.	3-063	Date - GMT	22 OCT 87
Station Name	DSJ873-063	Time - GMT	1022
Latitude	9 40.90N	Date - LOC	22 OCT 87
Longitude	94 37.60W	Time - LOC	0522

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.30	--	--	--	--
20	27.87	33.604	--	--	3.260
40	18.76	34.762	--	--	1.510
60	15.58	34.889	--	--	1.221
80	14.30	34.884	--	--	1.138
100	13.56	34.846	--	--	1.187
125	13.00	34.818	--	--	1.232
150	12.71	34.828	--	--	1.091

Station No.	3-064	Date - GMT	23 OCT 87
Station Name	DSJ873-064	Time - GMT	0130
Latitude	11 41.70N	Date - LOC	22 OCT 87
Longitude	94 01.40W	Time - LOC	2030

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.70	--	--	--	--
20	29.38	33.263	--	--	3.087
40	25.91	34.204	--	--	3.036
60	22.41	34.605	--	--	2.456
80	17.43	34.880	--	--	1.467
100	14.78	34.867	--	--	1.183
125	13.72	34.869	--	--	1.271
150	13.42	34.885	--	--	1.097

Station No.	3-065	Date - GMT	23 OCT 87
Station Name	DSJ873-065	Time - GMT	1023
Latitude	12 50.70N	Date - LOC	23 OCT 87
Longitude	93 37.70W	Time - LOC	0523

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.00	--	--	--	--
20	26.76	33.265	--	--	3.611
40	18.62	34.754	--	--	1.397
60	15.59	34.826	--	--	1.251
80	14.72	34.825	--	--	1.201
100	13.96	34.846	--	--	1.095
125	13.43	34.848	--	--	1.198
150	13.11	34.836	--	--	1.108

Station No.	3-066	Date - GMT	24 OCT 87
Station Name	DSJ873-066	Time - GMT	0127
Latitude	11 24.10N	Date - LOC	23 OCT 87
Longitude	94 56.20W	Time - LOC	2027

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.50	--	--	--	--
20	29.29	33.303	--	--	3.900
40	25.21	34.269	--	--	2.757
60	21.18	34.738	--	--	1.824
80	17.04	34.815	--	--	1.429
100	14.68	34.932	--	--	1.185
125	13.94	34.869	--	--	1.169
150	13.26	34.859	--	--	1.203

Station No.	3-067	Date - GMT	24 OCT 87
Station Name	DSJ873-067	Time - GMT	1122
Latitude	10 29.80N	Date - LOC	24 OCT 87
Longitude	95 40.90W	Time - LOC	0522

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.70	--	--	--	--
20	28.53	33.177	--	--	3.457
40	19.88	34.788	--	--	1.676
60	15.20	34.806	--	--	1.131
80	14.11	34.842	--	--	1.137
100	13.60	34.857	--	--	1.109
125	13.23	34.860	--	--	1.153
150	12.87	34.846	--	--	1.144

Station No.	3-068	Date - GMT	25 OCT 87
Station Name	DSJ873-068	Time - GMT	0222
Latitude	9 02.10N	Date - LOC	24 OCT 87
Longitude	96 33.80W	Time - LOC	2022

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.40	--	--	--	--
20	18.77	34.661	--	--	1.600
40	15.13	34.902	--	--	1.251
60	14.47	34.901	--	--	1.250
80	13.82	34.910	--	--	1.361
100	13.60	34.912	--	--	1.358
125	13.29	34.895	--	--	1.271
150	13.03	34.882	--	--	1.183

Station No.	3-069	Date - GMT	25 OCT 87
Station Name	DSJ873-069	Time - GMT	1121
Latitude	8 12.70N	Date - LOC	25 OCT 87
Longitude	97 16.10W	Time - LOC	0521

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	0.203	0.093	--
20	27.82	33.172	0.304	0.114	3.574
40	18.69	34.691	0.295	0.392	1.811
60	15.33	34.756	0.371	0.508	1.501
80	13.58	34.826	0.203	0.311	1.338
100	13.24	34.888	0.144	0.292	1.242
125	12.90	34.875	0.003	0.007	1.191
150	12.50	34.840	0.002	0.003	1.176

Station No.	3-070	Date - GMT	26 OCT 87
Station Name	DSJ873-070	Time - GMT	0221
Latitude	6 27.90N	Date - LOC	25 OCT 87
Longitude	98 32.50W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	--	--	--
20	28.02	32.714	--	--	3.739
40	25.00	34.770	--	--	3.014
60	16.48	34.722	--	--	1.881
80	13.78	34.785	--	--	1.551
100	13.27	34.885	--	--	1.375
125	12.92	34.884	--	--	1.402
150	12.64	34.866	--	--	1.274

Station No.	3-071	Date - GMT	26 OCT 87
Station Name	DSJ873-071	Time - GMT	1120
Latitude	6.41.70N	Date - LOC	26 OCT 87
Longitude	98 53.20W	Time - LOC	0520

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	--	--	--
20	28.19	32.820	--	--	3.918
40	23.31	34.803	--	--	2.695
60	17.22	34.703	--	--	1.484
80	13.75	34.689	--	--	1.660
100	13.02	34.787	--	--	1.308
125	12.52	34.795	--	--	1.432
150	12.15	34.786	--	--	1.397

Station No.	3-072	Date - GMT	27 OCT 87
Station Name	DSJ873-072	Time - GMT	0242
Latitude	8 59.80N	Date - LOC	26 OCT 87
Longitude	98.49.00W	Time - LOC	2042

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.90	--	--	--	--
20	27.62	33.345	--	--	3.732
40	15.63	34.770	--	--	1.122
60	13.43	34.738	--	--	1.293
80	12.69	34.750	--	--	1.273
100	12.50	34.769	--	--	1.244
125	12.21	34.782	--	--	1.227
150	11.76	34.748	--	--	1.357

Station No.	3-073	Date - GMT	27 OCT 87
Station Name	DSJ873-073	Time - GMT	1118
Latitude	10 16.60N	Date - LOC	27 OCT 87
Longitude	98 24.40W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	--	--	--
20	27.23	33.701	--	--	3.114
40	18.33	34.658	--	--	1.287
60	15.02	34.796	--	--	1.214
80	13.94	34.833	--	--	1.208
100	13.26	34.825	--	--	1.147
125	12.60	34.817	--	--	1.124
150	12.20	34.804	--	--	1.183

Station No.	3-074	Date - GMT	28 OCT 87
Station Name	DSJ873-074	Time - GMT	0209
Latitude	10 56.40N	Date - LOC	27 OCT 87
Longitude	99 09.30W	Time - LOC	2009

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.90	--	--	--	--
20	28.13	33.740	--	--	3.781
40	22.66	34.561	--	--	1.700
60	16.15	34.764	--	--	1.104
80	14.04	34.815	--	--	1.198
100	13.51	34.828	--	--	1.140
125	12.91	34.815	--	--	1.194
150	12.52	34.798	--	--	1.123

Station No.	3-075	Date - GMT	29 OCT 87
Station Name	DSJ873-075	Time - GMT	0203
Latitude	7 41.50N	Date - LOC	28 OCT 87
Longitude	100 28.10W	Time - LOC	2003

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.10	--	0.127	0.039	--
20	24.04	34.252	0.346	0.167	3.185
40	15.87	34.700	0.236	0.260	1.796
60	13.43	34.806	0.068	0.159	1.078
80	12.89	34.833	--	--	1.080
100	12.44	34.815	0.002	0.005	1.099
125	12.10	34.793	0.003	0.002	1.093
150	11.83	34.783	0.002	0.005	1.075

Station No.	3-076	Date - GMT	30 OCT 87
Station Name	DSJ873-076	Time - GMT	0223
Latitude	4 58.90N	Date - LOC	29 OCT 87
Longitude	101 59.00W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.70	--	--	--	--
20	27.61	33.376	--	--	4.188
40	27.60	33.555	--	--	3.983
60	25.03	34.500	--	--	4.020
80	21.43	34.711	--	--	2.493
100	16.03	34.717	--	--	1.206
125	13.77	34.785	--	--	1.174
150	12.42	34.744	--	--	1.248

Station No.	3-077	Date - GMT	30 OCT 87
Station Name	DSJ873-077	Time - GMT	1126
Latitude	5 45.60N	Date - LOC	30 OCT 87
Longitude	102 04.50W	Time - LOC	0526

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.50	--	0.051	0.019	--
20	27.52	33.337	0.059	0.011	3.889
40	27.62	33.545	0.068	0.037	3.877
60	24.42	34.567	0.177	0.110	2.975
80	20.18	34.886	0.144	0.161	2.182
100	15.54	34.653	0.076	0.116	1.387
125	12.55	34.704	0.034	0.045	1.264
150	11.86	34.739	0.010	0.019	1.255

Station No.	3-078	Date - GMT	31 OCT 87
Station Name	DSJ873-078	Time - GMT	0202
Latitude	7 47.40N	Date - LOC	30 OCT 87
Longitude	101 58.20W	Time - LOC	2002

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	0.076	0.028	--
20	24.25	34.241	0.220	0.059	3.059
40	17.03	34.748	0.160	0.153	1.061
60	14.28	34.752	0.101	0.125	1.197
80	12.90	34.695	0.059	0.071	1.552
100	12.36	34.743	0.253	0.443	1.397
125	11.85	34.748	0.004	0.003	1.658
150	11.46	34.734	0.002	0.003	1.770

Station No.	3-079	Date - GMT	01 NOV 87
Station Name	DSJ873-079	Time - GMT	0223
Latitude	11 19.00N	Date - LOC	31 OCT 87
Longitude	101 47.80W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.60	--	--	--	--
20	27.81	33.745	--	--	3.903
40	23.12	34.560	--	--	1.606
60	16.46	34.810	--	--	1.069
80	14.41	34.788	--	--	1.078
100	13.70	34.822	--	--	1.081
125	13.13	34.832	--	--	1.125
150	12.60	34.823	--	--	1.089

Station No.	3-080	Date - GMT	01 NOV 87
Station Name	DSJ873-080	Time - GMT	1126
Latitude	12 11.10N	Date - LOC	01 NOV 87
Longitude	102 43.80W	Time - LOC	0526

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.50	--	0.190	0.086	--
20	29.14	33.632	0.198	0.081	4.017
40	28.65	33.695	0.417	0.277	3.905
60	28.32	33.759	0.427	0.360	3.607
80	25.49	34.149	0.273	0.311	2.163
100	17.38	34.708	0.168	0.272	0.864
125	14.04	34.790	0.051	0.225	0.898
150	12.94	34.808	0.016	0.240	0.878

Station No.	3-081	Date - GMT	02 NOV 87
Station Name	DSJ873-081	Time - GMT	0224
Latitude	13 41.10N	Date - LOC	01 NOV 87
Longitude	105 02.80W	Time - LOC	2024

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.60	--	0.093	0.029	--
20	29.42	33.627	0.144	0.048	4.260
40	29.16	33.554	0.245	0.112	4.209
60	28.99	33.559	0.422	0.222	4.014
80	26.40	34.252	0.431	0.353	3.352
100	21.17	34.588	0.169	0.266	1.456
125	16.34	34.775	0.059	0.089	0.488
150	14.21	34.793	0.025	0.392	0.477

Station No.	3-082	Date - GMT	02 NOV 87
Station Name	DSJ873-082	Time - GMT	1118
Latitude	14 12.90N	Date - LOC	02 NOV 87
Longitude	106 49.40W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	30.00	--	0.076	0.028	--
20	29.43	33.605	0.068	0.028	3.501
40	28.85	33.955	0.093	0.038	3.985
60	25.06	34.401	0.194	0.119	3.841
80	21.11	34.450	0.144	0.161	2.328
100	17.54	34.565	0.068	0.115	0.836
125	14.70	34.753	0.017	0.148	0.657
150	13.61	34.830	0.008	0.209	0.682

Station No.	3-083	Date - GMT	03 NOV 87
Station Name	DSJ873-083	Time - GMT	0225
Latitude	15 37.80N	Date - LOC	02 NOV 87
Longitude	106 16.50W	Time - LOC	2025

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	30.60	--	--	--	--
20	30.25	33.870	--	--	4.287
40	30.22	33.877	--	--	4.286
60	27.84	34.096	--	--	3.654
80	23.29	34.497	--	--	2.343
100	17.11	34.623	--	--	1.091
125	14.38	34.781	--	--	0.960
150	13.29	34.825	--	--	0.964

Station No.	4-084	Date - GMT	10 NOV 87
Station Name	DSJ874-084	Time - GMT	0205
Latitude	15 22.10N	Date - LOC	09 NOV 87
Longitude	105 25.10W	Time - LOC	2005

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.90	--	0.267	0.091	--
20	30.24	33.772	0.240	0.063	3.765
40	29.98	33.850	0.347	0.148	3.835
60	28.18	34.125	0.721	0.380	3.613
80	24.17	34.386	0.561	0.734	2.545
100	18.86	34.589	0.214	0.447	1.417
125	14.95	34.745	0.042	0.123	1.064
150	13.72	34.788	0.017	0.296	1.028

Station No.	4-085	Date - GMT	10 NOV 87
Station Name	DSJ874-085	Time - GMT	1105
Latitude	14 18.30N	Date - LOC	10 NOV 87
Longitude	105 26.80W	Time - LOC	0505

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.90	--	0.051	0.019	--
20	29.87	33.608	0.068	0.011	3.445
40	29.88	33.609	0.076	0.037	3.534
60	29.61	33.731	0.169	0.092	3.522
80	28.53	33.939	0.203	0.189	3.614
100	24.11	34.246	0.240	0.255	2.425
125	19.82	34.540	0.187	0.281	1.590
150	15.02	34.747	0.080	0.333	0.402

Station No.	4-086	Date - GMT	11 NOV 87
Station Name	DSJ874-086	Time - GMT	0203
Latitude	13 30.90N	Date - LOC	10 NOV 87
Longitude	103 30.40W	Time - LOC	2003

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.70	--	0.068	0.020	--
20	--	--	0.068	0.011	--
40	--	--	0.110	0.030	--
60	29.28	33.599	0.186	0.084	4.110
80	28.56	33.847	0.346	0.159	4.061
100	24.69	34.470	0.186	0.136	3.349
125	17.02	34.695	0.084	0.107	0.715
150	13.90	34.811	0.034	0.184	0.650

Station No.	4-087	Date - GMT	12 NOV 87
Station Name	DSJ874-087	Time - GMT	0221
Latitude	12 29.80N	Date - LOC	11 NOV 87
Longitude	100 34.50W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	29.30	--	0.152	0.057	--
20	29.10	33.763	0.160	0.057	3.965
40	28.74	33.775	0.220	0.111	3.691
60	29.03	33.832	0.186	0.093	3.645
80	27.14	33.855	0.068	0.046	3.612
100	26.54	33.899	0.051	0.000	3.348
125	25.48	33.998	0.017	0.009	2.950
150	21.51	34.491	0.042	0.000	1.479

Station No.	4-088	Date - GMT	14 NOV 87
Station Name	DSJ874-088	Time - GMT	0221
Latitude	9 28.50N	Date - LOC	13 NOV 87
Longitude	98 22.40W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.084	0.029	--
20	25.94	33.662	0.101	0.029	2.632
40	16.51	34.773	0.203	0.276	1.096
60	14.46	34.850	0.152	0.153	0.874
80	13.77	34.885	0.084	0.124	0.649
100	13.18	34.847	0.042	0.036	0.995
125	12.42	34.786	0.034	0.027	1.199
150	12.02	34.785	0.003	0.004	1.178

Station No.	4-089	Date - GMT	15 NOV 87
Station Name	DSJ874-089	Time - GMT	0225
Latitude	8 26.90N	Date - LOC	14 NOV 87
Longitude	98 00.00W	Time - LOC	2025

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.90	--	0.059	0.019	--
20	24.14	34.639	0.144	0.057	2.627
40	17.20	34.703	0.118	0.117	1.382
60	14.48	34.701	0.068	0.098	1.510
80	13.44	34.825	0.042	0.071	1.337
100	12.93	34.838	0.003	0.004	1.486
125	12.57	34.851	0.001	0.001	1.151
150	12.33	34.834	--	--	1.135

Station No.	4-090	Date - GMT	15 NOV 87
Station Name	DSJ874-090	Time - GMT	1124
Latitude	8 00.60N	Date - LOC	15 NOV 87
Longitude	99 05.60W	Time - LOC	0524

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.00	--	0.093	0.038	--
20	25.79	33.982	0.177	0.075	3.249
40	21.67	34.524	0.152	0.083	1.821
60	16.00	34.724	0.101	0.134	1.120
80	13.81	34.729	0.076	0.098	1.056
100	12.91	34.815	0.068	0.063	1.165
125	12.39	34.783	--	--	1.158
150	12.10	34.812	0.001	0.002	1.114

Station No.	4-091	Date - GMT	16 NOV 87
Station Name	DSJ874-091	Time - GMT	0221
Latitude	7 36.40N	Date - LOC	15 NOV 87
Longitude	100 48.10W	Time - LOC	2021

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	0.068	0.011	--
20	28.04	32.745	0.144	0.039	3.594
40	18.43	34.862	0.160	0.127	1.190
60	15.10	34.760	0.101	0.125	1.210
80	12.85	34.745	0.051	0.080	1.675
100	12.19	34.719	--	--	1.817
125	12.10	34.808	0.002	0.000	1.547
150	11.90	34.806	0.004	0.001	0.966

Station No.	4-092	Date - GMT	16 NOV 87
Station Name	DSJ874-092	Time - GMT	1124
Latitude	7 07.90N	Date - LOC	16 NOV 87
Longitude	101 51.80W	Time - LOC	0524

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	0.068	0.011	--
20	28.09	32.745	0.059	0.011	3.594
40	23.91	34.574	0.186	0.084	2.576
60	15.04	34.670	0.084	0.107	0.738
80	13.67	34.823	0.051	0.089	0.707
100	12.35	34.722	0.042	0.045	1.490
125	11.93	34.771	0.002	0.003	1.299
150	11.39	34.728	0.000	0.003	1.385

Station No.	4-093	Date - GMT	17 NOV 87
Station Name	DSJ874-093	Time - GMT	0223
Latitude	6 25.80N	Date - LOC	16 NOV 87
Longitude	103 43.90W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.10	--	0.034	0.018	--
20	28.69	33.358	0.042	0.010	3.870
40	26.01	34.550	0.135	0.056	3.310
60	17.88	34.768	0.177	0.119	1.553
80	14.14	34.740	0.101	0.099	1.434
100	12.77	34.688	0.110	0.064	1.943
125	12.69	34.826	0.034	0.018	1.724
150	12.22	34.811	0.002	0.004	1.244

Station No.	4-094	Date - GMT	17 NOV 87
Station Name	DSJ874-094	Time - GMT	1120
Latitude	6 04.70N	Date - LOC	17 NOV 87
Longitude	104 46.80W	Time - LOC	0520

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	--	--	--
20	28.09	33.361	--	--	3.870
40	28.10	33.370	--	--	3.704
60	22.93	34.830	--	--	2.751
80	17.22	34.767	--	--	1.714
100	14.85	34.823	--	--	1.488
125	13.60	34.888	--	--	1.055
150	13.14	34.873	--	--	1.066

Station No.	4-095	Date - GMT	18 NOV 87
Station Name	DSJ874-095	Time - GMT	0220
Latitude	5 00.60N	Date - LOC	17 NOV 87
Longitude	106 12.10W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.10	--	--	--	--
20	27.76	34.204	0.042	0.000	3.550
40	27.93	34.008	--	--	4.123
60	27.99	34.158	0.093	0.029	3.929
80	25.57	34.597	0.211	0.120	3.131
100	18.01	34.715	0.118	0.126	1.639
125	14.08	34.782	0.051	0.071	1.245
150	12.12	34.719	0.042	0.027	1.079

Station No.	4-096	Date - GMT	18 NOV 87
Station Name	DSJ874-096	Time - GMT	1121
Latitude	3 48.80N	Date - LOC	18 NOV 87
Longitude	106 05.30W	Time - LOC	0521

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.90	--	0.051	0.010	--
20	27.76	34.207	0.042	0.010	3.523
40	27.29	34.206	0.076	0.020	3.720
60	26.92	34.163	0.127	0.047	3.527
80	20.78	34.798	0.118	0.134	2.453
100	18.10	34.745	0.101	0.116	2.081
125	14.17	34.773	0.059	0.098	1.534
150	13.63	34.916	0.034	0.053	1.230

Station No.	4-097	Date - GMT	19 NOV 87
Station Name	DSJ874-097	Time - GMT	0224
Latitude	1 37.70N	Date - LOC	18 NOV 87
Longitude	105.57.80W	Time - LOC	2024

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.40	--	0.084	0.020	--
20	25.85	--	0.084	0.037	--
40	18.49	34.250	0.135	0.048	3.590
60	15.76	34.984	0.169	0.136	2.360
80	14.96	34.961	0.144	0.109	1.960
100	14.55	34.998	0.076	0.081	1.910
125	14.26	34.986	0.084	0.072	1.970
150	13.10	34.983	0.017	0.027	1.740

Station No.	4-098	Date - GMT	19 NOV 87
Station Name	DSJ874-098	Time - GMT	1105
Latitude	1 23.80N	Date - LOC	19 NOV 87
Longitude	106 42.60W	Time - LOC	0505

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.30	--	0.076	0.028	--
20	--	--	0.084	0.037	--
40	26.20	34.050	0.093	0.029	3.610
60	17.25	34.948	0.177	0.136	1.900
80	15.19	34.971	0.110	0.090	1.830
100	14.76	34.994	0.059	0.063	1.770
125	14.34	34.978	0.025	0.027	1.930
150	13.93	34.962	0.118	0.021	1.580

Station No.	4-099	Date - GMT	20 NOV 87
Station Name	DSJ874-099	Time - GMT	0206
Latitude	1 55.10N	Date - LOC	19 NOV 87
Longitude	109 12.40W	Time - LOC	2006

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.40	--	0.076	0.020	--
20	26.30	34.113	0.076	0.028	4.130
40	26.17	34.128	0.093	0.029	4.030
60	23.81	34.517	0.135	0.074	3.340
80	16.12	35.043	0.160	0.136	2.200
100	15.45	35.018	0.084	0.098	2.170
125	14.74	34.995	0.034	0.045	1.910
150	13.90	34.961	0.042	0.036	1.620

Station No.	4-100	Date - GMT	20 NOV 87
Station Name	DSJ874-100	Time - GMT	1049
Latitude	2 05.60N	Date - LOC	20 NOV 87
Longitude	110 11.80W	Time - LOC	0349

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.90	--	0.076	0.028	--
20	25.83	34.062	0.076	0.037	3.690
40	24.72	34.318	0.110	0.064	3.490
60	23.40	34.883	0.144	0.083	3.470
80	16.98	34.921	0.152	0.161	1.680
100	15.04	34.950	0.093	0.046	1.540
125	14.16	34.936	0.034	0.036	1.600
150	13.66	34.930	0.025	0.009	1.590

Station No.	4-101	Date - GMT	21 NOV 87
Station Name	DSJ874-101	Time - GMT	0308
Latitude	3 27.70N	Date - LOC	20 NOV 87
Longitude	112 24.30W	Time - LOC	2008

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.70	--	0.068	0.020	--
20	24.58	34.685	0.076	0.046	3.940
40	24.09	34.766	0.127	0.021	3.930
60	23.16	34.852	0.169	0.084	3.740
80	21.61	34.769	0.152	0.118	3.080
100	16.31	34.811	0.110	0.151	1.780
125	14.59	34.958	0.076	0.098	1.640
150	13.82	34.955	0.080	0.113	1.540

Station No.	4-102	Date - GMT	21 NOV 87
Station Name	DSJ874-102	Time - GMT	1208
Latitude	3 53.40N	Date - LOC	21 NOV 87
Longitude	113 44.70W	Time - LOC	0508

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.90	--	0.068	0.046	--
20	27.75	34.386	0.076	0.028	3.560
40	27.15	34.365	0.101	0.038	3.620
60	26.27	34.282	0.127	0.065	3.490
80	24.10	34.633	0.110	0.064	3.340
100	17.62	34.666	0.093	0.107	1.820
125	13.18	34.723	0.025	0.036	1.530
150	12.97	34.843	--	--	1.130

Station No.	4-103	Date - GMT	22 NOV 87
Station Name	DSJ874-103	Time - GMT	0304
Latitude	4 41.60N	Date - LOC	21 NOV 87
Longitude	115 48.10W	Time - LOC	2004

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.30	--	0.051	0.019	--
20	28.18	34.322	0.059	0.019	3.870
40	28.14	34.347	0.068	0.020	4.010
60	27.77	34.522	0.127	0.047	3.770
80	25.27	34.801	0.160	0.118	3.140
100	17.81	34.662	0.118	0.117	1.770
125	13.57	34.739	0.034	0.071	0.790
150	12.39	34.717	--	--	0.910

Station No.	4-104	Date - GMT	22 NOV 87
Station Name	DSJ874-104	Time - GMT	1201
Latitude	5 04.30N	Date - LOC	22 NOV 87
Longitude	116 56.10W	Time - LOC	0501

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.084	0.046	--
20	27.69	34.448	0.093	0.038	3.570
40	27.69	34.488	0.093	0.046	3.590
60	25.93	34.721	0.169	0.075	3.620
80	24.88	34.855	0.118	0.056	3.700
100	22.67	34.744	0.127	0.108	2.710
125	14.98	34.696	0.051	0.054	0.750
150	13.18	34.835	0.025	0.053	0.620

Station No.	4-105	Date - GMT	23 NOV 87
Station Name	DSJ874-105	Time - GMT	0305
Latitude	5 16.60N	Date - LOC	22 NOV 87
Longitude	119 00.50W	Time - LOC	2005

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.40	--	0.084	0.020	--
20	27.23	34.529	0.084	0.029	3.740
40	27.00	34.512	0.101	0.038	3.990
60	26.47	34.400	0.110	0.047	4.000
80	26.25	34.400	0.101	0.047	3.910
100	25.01	34.772	0.110	0.073	3.530
125	22.88	34.769	0.101	0.099	2.770
150	14.92	34.693	0.127	0.065	0.830

Station No.	4-106	Date - GMT	23 NOV 87
Station Name	DSJ874-106	Time - GMT	1200
Latitude	5 18.10N	Date - LOC	23 NOV 87
Longitude	120 04.70W	Time - LOC	0500

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.00	--	0.076	0.020	--
20	27.89	34.392	0.068	0.028	3.450
40	27.56	34.504	0.127	0.056	3.600
60	27.06	34.587	0.152	0.074	3.680
80	26.04	34.553	0.101	0.055	3.770
100	25.80	34.603	0.101	0.073	3.560
125	23.38	34.788	0.084	0.064	2.810
150	17.10	34.698	0.076	0.046	1.830

Station No.	4-107	Date - GMT	24 NOV 87
Station Name	DSJ874-107	Time - GMT	0304
Latitude	5 50.70N	Date - LOC	23 NOV 87
Longitude	121 21.00W	Time - LOC	2004

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.20	--	0.076	0.011	--
20	28.14	34.428	0.076	0.020	3.720
40	28.15	34.429	0.076	0.020	3.880
60	27.80	34.448	0.118	0.038	3.980
80	26.80	34.457	0.101	0.038	4.090
100	25.95	34.496	0.110	0.030	3.920
125	24.81	34.753	0.127	0.091	3.270
150	15.44	34.674	0.076	0.063	1.770

Station No.	4-108	Date - GMT	25 NOV 87
Station Name	DSJ874-108	Time - GMT	0303
Latitude	9 28.60N	Date - LOC	24 NOV 87
Longitude	120 36.40W	Time - LOC	2003

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.30	--	0.059	0.028	--
20	28.30	33.629	0.084	0.037	3.620
40	25.03	34.643	0.160	0.075	3.180
60	16.82	34.786	0.194	0.206	0.850
80	13.63	34.778	0.051	0.097	0.840
100	12.91	34.783	0.034	0.053	0.860
125	12.66	34.798	0.025	0.036	0.790
150	12.07	34.777	0.068	0.028	0.970

Station No.	4-109	Date - GMT	25 NOV 87
Station Name	DSJ874-109	Time - GMT	1200
Latitude	10 39.70N	Date - LOC	25 NOV 87
Longitude	120 05.20W	Time - LOC	0500

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.30	--	0.068	0.037	--
20	28.19	33.400	0.101	0.029	3.500
40	25.43	34.336	0.177	0.093	2.990
60	16.30	34.646	0.110	0.151	1.030
80	13.72	34.730	0.059	0.115	0.800
100	12.92	34.784	0.025	0.062	0.790
125	12.18	34.769	0.003	0.004	0.840
150	11.72	34.761	0.003	0.003	0.860

Station No.	4-110	Date - GMT	26 NOV 87
Station Name	DSJ874-110	Time - GMT	0305
Latitude	12 27.70N	Date - LOC	25 NOV 87
Longitude	119 16.20W	Time - LOC	2005

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.10	--	0.076	0.037	--
20	27.90	33.810	0.084	0.037	3.960
40	26.51	34.428	0.135	0.056	3.910
60	22.12	34.462	0.177	0.101	4.130
80	19.42	34.456	0.169	0.110	3.550
100	15.09	34.330	0.084	0.116	1.320
125	14.04	34.747	0.034	0.062	0.910
150	13.31	34.763	0.042	0.019	0.820

Station No.	4-111	Date - GMT	26 NOV 87
Station Name	DSJ874-111	Time - GMT	1203
Latitude	13 32.60N	Date - LOC	26 NOV 87
Longitude	118 53.50W	Time - LOC	0503

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.144	0.048	--
20	27.78	33.495	0.135	0.056	3.600
40	26.52	34.460	0.177	0.101	3.620
60	22.31	34.469	0.177	0.171	2.220
80	18.26	34.386	0.093	0.151	2.040
100	15.53	34.534	0.042	0.097	1.110
125	13.53	34.718	0.008	0.079	0.810
150	12.35	34.723	0.008	0.035	0.760

Station No.	4-112	Date - GMT	27 NOV 87
Station Name	DSJ874-112	Time - GMT	0303
Latitude	15 19.90N	Date - LOC	26 NOV 87
Longitude	118 00.50W	Time - LOC	2003

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	26.80	--	0.051	0.010	--
20	26.72	34.393	0.059	0.019	3.910
40	24.27	34.544	0.101	0.038	4.180
60	22.21	34.400	0.118	0.056	4.210
80	19.01	34.163	0.144	0.126	3.940
100	16.35	34.145	0.110	0.117	2.520
125	14.09	34.415	0.042	0.071	1.260
150	13.20	34.622	0.025	0.027	0.950

Station No.	4-113	Date - GMT	28 NOV 87
Station Name	DSJ874-113	Time - GMT	0301
Latitude	15 59.60N	Date - LOC	27 NOV 87
Longitude	116 16.10W	Time - LOC	2001

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.084	0.037	--
20	27.74	33.890	0.093	0.029	4.010
40	27.53	34.088	0.110	0.047	3.810
60	24.58	34.436	0.186	0.206	3.080
80	21.80	34.433	0.152	0.153	3.180
100	17.54	34.415	0.076	0.107	1.780
125	13.92	34.460	0.051	0.054	1.330
150	13.02	34.665	0.287	0.244	0.960

Station No.	4-114	Date - GMT	29 NOV 87
Station Name	DSJ874-114	Time - GMT	0306
Latitude	14 08.80N	Date - LOC	28 NOV 87
Longitude	113 46.80W	Time - LOC	2006

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.40	--	0.084	0.037	--
20	28.17	33.342	0.093	0.038	3.880
40	28.15	33.353	0.110	0.056	3.860
60	26.96	34.229	0.177	0.084	3.890
80	23.07	34.407	0.295	0.314	3.320
100	18.82	34.555	0.144	0.179	1.090
125	15.06	34.692	0.042	0.123	0.760
150	13.81	34.752	0.118	0.213	0.730

Station No.	4-115	Date - GMT	30 NOV 87
Station Name	DSJ874-115	Time - GMT	0302
Latitude	13 42.20N	Date - LOC	29 NOV 87
Longitude	111 13.60W	Time - LOC	2002

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	28.70	--	--	--	--
20	28.52	33.464	--	--	3.890
40	28.67	33.677	--	--	3.800
60	26.23	34.162	--	--	3.080
80	19.91	34.506	--	--	1.570
100	16.01	34.628	--	--	0.980
125	13.79	34.727	--	--	0.940
150	13.12	34.758	--	--	0.870

Station No.	4-116	Date - GMT	01 DEC 87
Station Name	DSJ874-116	Time - GMT	0301
Latitude	15 46.80N	Date - LOC	30 NOV 87
Longitude	109 03.70W	Time - LOC	2001

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	--	--	0.042	0.027	--
20	28.97	33.841	0.076	0.037	3.840
40	28.71	33.888	0.118	0.047	3.850
60	25.15	34.332	0.481	0.311	2.830
80	19.17	34.560	0.186	0.215	1.220
100	15.45	34.701	0.034	0.140	0.990
125	13.90	34.744	0.042	0.175	0.930
150	13.20	34.821	0.008	0.200	0.870

Station No.	4-117	Date - GMT	02 DEC 87
Station Name	DSJ874-117	Time - GMT	0303
Latitude	17 01.50N	Date - LOC	01 DEC 87
Longitude	112 38.60W	Time - LOC	2003

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.80	--	0.042	0.027	--
20	27.65	34.308	0.051	0.010	3.760
40	27.48	34.388	0.068	0.028	3.740
60	21.46	34.442	0.253	0.130	2.780
80	17.02	34.407	0.084	0.142	1.480
100	14.52	34.563	0.025	0.079	0.980
125	13.76	34.711	0.008	0.096	0.830
150	12.94	34.761	0.000	0.148	0.800

Station No.	4-118	Date - GMT	03 DEC 87
Station Name	DSJ874-118	Time - GMT	0300
Latitude	18 02.60N	Date - LOC	02 DEC 87
Longitude	116 20.80W	Time - LOC	2000

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	27.30	--	0.076	0.046	--
20	27.19	33.977	0.084	0.037	3.940
40	27.17	33.986	0.093	0.029	3.920
60	24.95	34.412	0.177	0.101	4.000
80	20.58	34.345	0.101	0.116	3.870
100	16.63	34.073	0.084	0.072	3.000
125	13.91	34.320	0.034	0.045	1.120
150	13.26	34.596	0.002	0.004	0.840

Station No.	4-119	Date - GMT	04 DEC 87
Station Name	DSJ874-119	Time - GMT	0404
Latitude	18 43.40N	Date - LOC	03 DEC 87
Longitude	117 29.90W	Time - LOC	2004

Depth (m)	Temp (deg C)	Salinity (ppt)	Chloro (mg/m3)	Phaeo (mg/m3)	Oxygen (ml/L)
0	25.90	--	0.051	0.010	--
20	25.61	34.239	0.068	0.011	3.740
40	24.86	34.449	0.068	0.028	3.820
60	20.60	34.114	0.110	0.073	4.250
80	18.49	34.116	0.144	0.126	3.880
100	15.71	34.074	0.051	0.071	2.480
125	13.68	34.130	0.025	0.044	1.980
150	12.75	34.346	0.062	0.219	1.130

APPENDIX B

SCIENTIFIC PERSONNEL

Cruise Leaders	Leg
Marc Webber, SWFC	1-2
Al Jackson, SWFC	3-4
Environmental Data Collection	
Gregg Thomas, AOML	1-4
Victoria Thayer, SWFC	1-2
Julie Ellingson, NOAA ship *McArthur*	3-4
Seabird Observations	
Susan Chivers, SWFC	1
Karen Bluth, Yale Univ.	2-3
John Gill, Yale Univ.	2-3
Larry O'Brien, SWFC	4
Linda Hannigan, SWFC	4
Robert Pitman, SWFC	1-2
Victoria Thayer, SWFC	1-2
Marine Mammal Identification Experts	
Robert Pitman, SWFC	1-2
Scott Sinclair, SWFC	1-2
Rick LeDuc, SWFC	3-4
Marc Webber, SWFC	3-4
Marine Mammal Observers	
Sallie Beavers, SWFC	1-2
Carrie Fried, SWFC	1-2
Bill Irwin, SWFC	1-2
Keith Rittmaster, SWFC	1-2
Scott Benson, SWFC	3-4
Carla Bisbee, SWFC	3-4
Joe Raffetto, SWFC	3-4
David Skordal, SWFC	3-4

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