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MAY 1990

REPORT OF ECOSYSTEM STUDIES CONDUCTED DURING THE 1989 EASTERN TROPICAL PACIFIC DOLPHIN SURVEY ON THE RESEARCH VESSEL *McARTHUR*

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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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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 1989, the Southwest Fisheries Center (SWFC) conducted the fourth survey of a six-year program to monitor population trends in ETP dolphin stocks (Hill *et al.* 1990). Two NOAA research vessels were used, the *McArthur* and the *David Starr Jordan* (hereafter referred to as *Jordan*). The vessels operated concurrently in the ETP from July 29 through December 7, 1989. Approximately the same area and time period are surveyed during each year of the program. As part of this monitoring program, the SWFC is also studying the physical and biological environment inhabited by the dolphins. This ecosystem approach will facilitate the interpretation of dolphin population trends detected by these surveys, and will provide information necessary for understanding the biological basis of ETP dolphin distribution and abundance.

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

This report describes the types of data collected and sampling techniques used, and summarizes data collected (including disposition of the data) for the environmental studies conducted aboard the *McArthur*. Results from the *Jordan* are available in a separate report (Lierheimer *et al.* 1990).

OBJECTIVES

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

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

STUDY AREA AND ITINERARY

The *McArthur* departed San Diego, California on 29 July 1989 and returned on 7 December 1989. The cruise was conducted in four legs of approximately 30 days each, with port calls in Hilo, Hawaii; La Libertad, Ecuador; and Puerto Caldera, Costa Rica. The cruise tracks of both vessels were chosen to maximize coverage of the known ranges of the two target species, the spotted dolphin (*Stenella attenuata*) and the spinner dolphin, (*Stenella longirostris*) in the ETP (Perrin *et al.* 1983).

The itinerary for the *McArthur* was as follows:

Leg 1

Departure	29 July	San Diego, California
Arrival	26 August	Hilo, Hawaii

Leg 2

Departure	31 August	Hilo, Hawaii
Arrival	30 September	La Libertad, Ecuador

Leg 3

Departure	5 October	La Libertad, Ecuador
Arrival	3 November	Puerto Caldera, Costa Rica

Leg 4

Departure	8 November	Puerto Caldera, Costa Rica
Arrival	7 December	San Diego, California

MATERIALS AND METHODS

Oceanography

While the ship was underway, temperature, salinity, and fluorescence of surface water were measured and recorded continuously in digital form and on strip-charts. Sea water was sampled continuously from a bow intake 3 meters below the surface. Temperature and salinity were measured with a Sea-Bird SEACAT 21 thermosalinograph[1]. *In vivo* fluorescence was measured with a Turner Designs fluorometer. These data were recorded on a data acquisition system consisting of an AI08 A/D board (Industrial Computer Source) connected to an IBM PC compatible microcomputer (Holland 1989). Discrete water samples were collected at regular intervals to verify continuous data.

Conductivity, temperature and depth (CTD) device casts were made two times per night using a Seabird 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, and pressure (depth).

---

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

meters and sensors connected to shipboard computers measured conductivity (salinity), temperature, and pressure (depth).

Eleven Niskin bottles on the CTD rosette collected water from discrete depths (20, 40, 60, 80, 100, 125, 150, 250, 350, 500 and 1000 meters). At each CTD station, surface chlorophyll was sampled from the ship's seawater intake. Eight 275 ml samples (0-150 m) were collected for chlorophyll analysis at each station. Nutrients (nitrate, nitrite, phosphate and silicate) were sampled only at evening CTD stations. Surface nutrients were sampled from the ship's seawater intake. Eleven 20 ml samples (0-500 m) were collected for nutrient analysis at each evening station. Extracted chlorophyll and phaeophytin were measured with a Turner 111 fluorometer. Nutrient samples were collected and frozen immediately for later analysis. Three 150 ml salinity samples were collected from each cast and analyzed for the purpose of CTD calibration.

Expendable bathythermograph (XBT) drops were made daily at 0000, 0800, 1200, and 1600 hours (local time). A Shipboard Environmental data Acquisition System (SEAS) was utilized. XBT data were transmitted to shore via the GOES (Geostationary Operational Environmental Satellite) every four hours. Position, time, and date for each drop were recorded on NOAA XBT logs and disks.

Six satellite-tracked drift buoys were deployed at predetermined locations. These buoys transmit signals which are received by NOAA satellites and transferred to the ARGOS service facility in Toulouse, France. The deployments, arranged by Don Hansen of AOML, were for EPOCS and TOGA investigations of surface currents.

Biological Observations

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

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

Surface organisms were sampled during evening CTD stations to collect information on the occurrence, relative abundance and distribution of flying fishes in the ETP. Two 500-watt lamps were suspended over the side of the ship to attract animals, and a long-handled dipnet 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 and ecology of sea turtles in the ETP, all sightings of marine turtles made incidental to the systematic marine mammal and seabird surveys were recorded. The angle and distance of the turtle from the track line, an estimate of the size of the turtle, and associations with birds, fish, flotsam and other turtles were also recorded. 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. Dead turtles were salvaged to obtain life history data, stomach contents, and reproductive tracts. The salvage of dead turtles in international waters is covered by Endangered Species Permit No. 691, Modification No. 1. Importation of endangered species parts is covered by CITES permit US742057.

RESULTS

Hill *et al.* (1990) reported on the dolphin assessment methods and data collected from the 1989 *McArthur* cruise.

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

Oceanography

Digital records of continuous surface data from the thermosalinograph and fluorometer are now being analyzed at the SWFC. Plots of continuous environmental data from the 1986-1988 surveys will be published in a separate report[2].

Figure 2 shows the locations of the 189 CTD casts. Analysis of discrete salinity samples for CTD calibration was performed on the *McArthur*. Uncorrected CTD temperature and salinity data are included in Appendix A.

XBT data were sent by the SEAS to the National Ocean Service, NOAA[3]. Figure 3 shows XBT deployment locations.

Discrete chlorophyll samples were analyzed at sea and data were processed at the SWFC in La Jolla. Equipment problems during Leg 2 hindered chlorophyll analysis resulting in a loss of these data. Results for legs 1, 3 and 4 are presented in Appendix A. Surface and integrated (0-150 m) chlorophyll concentrations, from both the *Jordan* and the *McArthur*, are mapped in Figures 4 and 5.

Selected frozen nutrient samples were shipped to Monterey Bay Aquarium Research Institute to be analyzed. Nutrient and chlorophyll data will be submitted to NOAA/National Oceanographic Data Center.

Table 2 lists the locations and dates of the six drifting buoy deployments. Figure 6 shows the tracks of these buoys.

---

[2] Fiedler, P.C., S.B. Reilly, S.N. Sexton, R.S. Holt, and D.P. DeMaster. 1990. Atlas of eastern tropical Pacific oceanographic variability and cetacean sightings, 1986-1988. Submitted as NOAA Technical Report NMFS.

[3] Persons wishing to receive copies of these data should write to: National Ocean Service, Universal Bldg. South, Rm. 618, 1825 Connecticut Ave., NW, Washington, D.C., 20235.

Biological Observations

A total of 1029.9 hours during 109 days was spent on effort for the seabird distribution and abundance survey. During this time, 11,045 individuals of 68 species were recorded (Table 1).

Abundance of seabirds varied according to the area surveyed, a fact evidenced by the differences in abundance of a single species for different legs. In general, the most abundant family of seabirds was Procellariidae (petrels and shearwaters), primarily represented by Juan Fernandez Petrels and Wedge-tailed Shearwaters. The second most abundant family was Oceanitidae (storm-petrels), represented in greatest abundance by Leach's and Galapagos Storm-Petrel. The Sooty Tern, a member of the family Laridae, was also an abundant species.

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

Figure 7 shows the locations of 102 dipnet stations occupied during the cruise. Table 5 summarizes data and specimens collected for each of the stations. A total of 138 flying fish, 47 *Oxyporhamphus micropterus*, 368 miscellaneous fish, and 28 (mostly juvenile) squid was collected. Specimens will be processed at SWFC; the fish will be donated to the Marine Vertebrate Collection of Scripps Institution of Oceanography and the squid will go to Santa Barbara Natural History Museum.

The locations of 110 individual sea turtle sightings are plotted in Figure 8. Sightings included 5 identified olive ridleys (including 2 dead), *Lepidochelys olivacea*; 1 loggerhead, *Caretta caretta*; 2 greens, *Chelonia mydas*; 2 leatherbacks, *Dermochelys coriacea*; and 100 unidentified sea turtles. One dead olive ridley was salvaged. Measurements were collected and the condition of the turtle was noted and photographed. No other collections were made. The cause of death was probably due to entanglement with a fishing net.

ACKNOWLEDGEMENTS

Many people contributed to the success of this cruise. We especially wish to thank the following people, whose invaluable efforts made this project possible: J. Ellingson and J. Echols of the *McArthur* for their logistical assistance and data collection, and the officers and crew of the NOAA ship *McArthur* for their considerable time and skilled efforts. The marine mammal and bird observers for their assistance with data collection on ancillary projects. C. Oliver contributed data programming support. R. Holland contributed many of the plots and assisted in procurement and computer logistics. B. Watkins provided support in procurement. W. Krug acted as a liaison between AOML, Scripps Institution of Oceanography, Pacific Marine Center and Southwest Fisheries Center. We are grateful to I. Barrett, J. Carr, and D. DeMaster for their continued support during the cruise preparations and during the cruise itself.

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

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Perrin, W.F., M.D. Scott, G.J. Walker, F.M. Ralston, D.W.K. Au. 1983. Distribution of four dolphins (*Stenella* spp. and *Delphinus delphis*) in the eastern tropical Pacific, with an annotated catalog of data sources. NOAA-TM-NMFS-SWFC-38, 65 pp.

Table 1. Summary of environmental and biological data collected, *McArthur*, 29 July - 7 December, 1989[1]

Leg	XBT	CTD	Chlor a	Nutrients	Manta Tows	Flying Fish Collected	Turtle Sightings	Bird Sightings	Bird Effort
I	118	41	397	249	19	42	24	3110	259.7 hours 9.3 avg hrs/day 28 total days
II	106	43	398	260	21	66	4	3879	240.5 hours 8.9 avg hrs/day 27 total days
III	105	55	520	356	22	13	13	2325	282.3 hours 10.1 avg hrs/day 28 total days
IV	118	50	538	345	22	13	68	1731	247.4 hours 9.5 avg hrs/day 26 total days
TOTAL	447	189	1,853	1,210	84	134	109	11045	1029.9 total hrs 9.4 avg hrs/day 109 days

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

Table 2. Deployment locations of six drift buoys, *McArthur*, 29 July - 7 December, 1989.

DATE	LATITUDE	LONGITUDE
14 August	8 34.4 N	119 27.1 W
20 August	9 59.7 N	135 14.5 W
23 September	0 0.0 S	93 59.3 W
30 October	0 0.1 N	87 58.1 W
10 November	8 59.7 N	89 0.1 W
12 November	4 0.0 N	92 39.4 W

Table 3. Number of seabirds recorded, listed by family, *McArthur*, 29 July - 7 December, 1989.

	Leg I	Leg II	Leg III	Leg IV	TOTAL
ALBATROSSES (Diomedeidae)	2	16	201	0	219
PETRELS AND SHEARWATERS (Procellariidae)	1987	2196	367	322	4872
PTERODROMA PETRELS	1505	1579	346	77	3507
OTHER PETRELS (Bulweria, Procellaria, Fulmarus, Daption)	17	8	6	2	33
SHEARWATERS (Puffinus)	465	609	15	243	1332
STORM-PETRELS (Oceanitidae)	915	472	1003	1117	3507
TROPICBIRDS (Phaethontidae)	12	22	28	21	83
PELICANS (Pelecanidae)	0	0	0	2	2
BOOBIES (Sulidae)	105	228	243	95	671
CORMORANTS (Phalacrocoracidae)	5	11	13	3	32
FRIGATEBIRDS (Fregatidae)	3	27	12	8	50
PHALAROPES (Phalaropodidae)	11	316	21	40	388
JAEGERS (Stercorariidae)	15	15	21	11	62
GULLS, TERNS AND NODDIES (Laridae)	48	425	144	91	710
GULLS (Larus)	1	13	18	87	119
TERNS (Sterna, Chlidonias, Gygis)	47	412	125	4	588
NODDIES (Anous)	0	2	1	0	3
ALCIDS (Alcidae)	0	0	0	3	3

Table 4. Identity and numbers of seabirds recorded, *McArthur*, 29 July - 7 December, 1989.

Common Name	Scientific Name	Leg I	Leg II	Leg III	Leg IV	TOTAL
Juan Fernandez Petrel	Pterodroma externa	1043	1317	84	51	2495
Leach's Storm-Petrel (White-rumped)	Oceanodroma leucorhoa	230	89	344	823	1486
Galapagos Storm-Petrel	Oceanodroma tethys	448	237	363	200	1248
Wedge-tailed Shearwater (Dark Morph)	Puffinus pacificus	324	522	3	5	854
Sooty Tern	Sterna fuscata	39	393	91	3	526
Harcourt's Storm-Petrel	Oceanodroma castro	55	28	211	65	359
Cook's Petrel	Pterodroma cookii	342	12	1	2	357
White-winged Petrel	Pterodroma leucoptera	34	52	218	3	307
Northern Phalarope	Phalaropus lobatus	0	231	2	0	233
Waved Albatross	Diomedea irrorata	0	16	201	0	217
Red-footed Booby	Sula sula	37	40	64	73	214
Masked Booby (Orange-billed Morph)	Sula dactylatra	0	66	96	11	173
Black-vented Shearwater	Puffinus opisthomelas	0	0	0	166	166
Red Phalarope	Phalaropus fulcarius	11	85	19	40	155
Wedge-tailed Shearwater (Light Morph)	Puffinus pacificus	80	15	8	23	126
Leach's Storm-Petrel (Dark-rumped)	Oceanodroma leucorhoa	117	0	0	6	123
Blue-footed Booby	Sula nebouxii	0	101	20	0	121
Tahiti Petrel	Pterodroma rostrata	35	74	1	9	119
Dark-rumped Petrel	Pterodroma phaeopygia	0	73	26	6	105
Markham's Storm-Petrel	Oceanodroma markhami	2	41	49	0	92
Masked Booby	Sula dactylatra	40	15	4	6	65
Western Gull	Larus occidentalis	0	0	0	62	62
Brown Booby	Sula leucogaster	0	0	54	1	55
Sooty Shearwater	Puffinus griseus	3	16	0	31	50
Red-billed Tropicbird	Phaethon aethereus	0	13	26	9	48
White-vented Storm-Petrel	Oceanites gracilis	0	46	1	0	47
Masked Booby (Yellow-billed Morph)	Sula dactylatra	28	6	5	3	42
New Zealand Shearwater	Puffinus bulleri	18	21	0	1	40
Pomarine Jaeger	Stercorarius pomarinus	8	9	11	10	38
Arctic Tern	Sterna paradisaea	1	15	18	0	34
Leach's Storm-Petrel	Oceanodroma leucorhoa	33	0	0	0	33
Juan Fernandez/White-necked Petrel	Pterodroma e. externa/e.cervicalis	15	15	1	2	33
Black-winged Petrel	Pterodroma nigripennis	18	12	1	1	32
Swallow-tailed Gull	Larus furcatus	0	13	16	0	29
Red-tailed Tropicbird	Phaethon rubricauda	8	8	1	12	29
White Tern	Gygis alba	7	4	15	1	27
Bulwer's Petrel	Bulweria bulweri	17	5	2	0	24
Christmas Island Shearwater	Puffinus nativitatus	8	13	0	0	21
Magnificent Frigatebird	Fregata magnificens	0	10	4	6	20
Shorebird		14	0	2	2	18
Great Frigatebird	Fregata minor	2	11	5	0	18
Stejneger's Petrel	Pterodroma longirostris	4	2	10	1	17
Bonaparte's Gull	Laurs philadelphia	0	0	0	15	15
Pink-footed Shearwater	Puffinus creatopus	4	5	2	3	14
Hornby's Storm-Petrel	Oceanodroma hornbyi	0	12	1	0	13
Audubon's Shearwater	Puffinus lherminieri	0	9	0	4	13
Kermadec Petrel	Pterodroma neglecta	5	5	3	0	13
Frigatebird	Fregata sp.	1	6	3	2	12
Townsend's Shearwater	Puffinus auricularis	8	0	0	3	11
Newell's Shearwater	Puffinus newelli	1	5	0	4	10
Cape (Pintado) Petrel	Daption capense	0	10	0	0	10
Parasitic Jaeger	Stercorarius parasiticus	0	2	6	0	8
Passerine		0	1	3	4	8
Parkinson's Petrel	Procellaria parkinsoni	0	2	4	2	8
Phoenix Petrel	Pterodroma alba	2	6	0	0	8
Herring Gull	Larus argentatus	0	0	0	6	6
Long-tailed Jaeger	Stercorarius longicaudus	6	0	0	0	6
White-necked Petrel	Pterodroma externa cervicalis	3	0	0	2	5
White-tailed Tropicbird	Phaethon lepturus	4	1	0	0	5
California Gull	Larus californicus	0	0	0	4	4
Black Storm-Petrel	Oceanodroma melania	2	0	2	0	4
White-bellied Storm-Petrel	Fregetta grallaria	0	0	4	0	4
Herald Petrel	Pterodroma heraldica	1	2	0	0	3
Collared Petrel	Pterodroma brevipes	0	3	0	0	3
Brown Noddy	Anous stolidus	0	2	1	0	3
Flesh-footed Shearwater	Puffinus carneipes	0	2	0	1	3

Table 4. Continued.

Common Name	Scientific Name	Leg I	Leg II	Leg III	Leg IV	TOTAL
Xantus' Murrelet	Synthliboramphus hypoleuca	0	0	0	2	2
Brown Pelican	Pelecanus occidentalis	0	0	0	2	2
Murphy's Petrel	Pterodroma ultima	1	0	1	0	2
Black-footed Albatross	Diomedea nigripes	2	0	0	0	2
Franklin's Gull	Larus pupixcan	0	0	2	0	2
White-throated Storm-Petrel	Nesofregetta albigularis	0	0	1	0	1
White-faced Storm-Petrel	Pelagodroma marina	1	0	0	0	1
Sabine's Gull	Larus sabini	1	0	0	0	1
Solander's Petrel	Pterodroma solandri	1	0	0	0	1
Wedge-tailed Shearwater	Puffinus pacificus	1	0	0	0	1
Rhinoceros auklet	Cerorhinca monocerata	0	0	0	1	1
TOTAL		3065	3699	2010	1689	10463

Table 5. Results of night-light dipnet sampling, McArthur, 30 July - 7 December, 1989.

Station Number[1]	Date Y/M/D	Hours of Effort	Location Latitude	Location Longitude	Sea State[2]	Moon Phase[3]	Sky Cond.[4]	SST (C)	SSS (%)	Fish Species[5]	Relative Abundance (Fish)[6]	Number Collected (Fish)	Squid Type[7]	Relative Abundance (Squid)[6]	Number Collected (Squid)
1	89-07-30	1.0	27 24 N	117 12 W	3.0	5	2		33.40	60	2	2	1	3	
1	89-07-30	1.0	27 24 N	117 12 W	3.0	5	2		33.40	100	2		2	1	
2	89-07-31	1.0	24 27 N	115 49 W	4.0	5	1	22.8	33.90				1	1	

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

- COLLECTOR: 01 - Pitman; 02 - LeDuc; 03 - Rittmaster; 04 - Smith

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

2 - Beaufort Scale

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

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

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

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

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

Table 5. continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Longitude	Sea[2] State	Moon[3] Phase	Sky[4] Cond.	SST (C)	SSS (%)	Fish[5] Species	Relative[6] Abundance (Fish)	Number Collected (Fish)	Squid[7] Type	Relative[6] Abundance (Squid)	Number Collected (Squid)
3	89-08-01	1.0	20 36 N	115 59 W	4.0	5	2	25.9	34.60	100	1		1	2	
	89-08-02		20 16 N	116 00 W						20		1			
	89-08-02		20 16 N	116 00 W						30		1			
4	89-08-02	1.0	18 36 N	113 49 W	3.0	5	2	27.5	34.50	10	1	2	1	2	
4	89-08-02	1.0	18 36 N	113 49 W	3.0	5	2	27.5	34.50	20	1	1	3	1	1
5	89-08-03	1.0	16 44 N	113 18 W	2.0	5	2	29.4	34.20	10	3	1	1	6	
5	89-08-03	1.0	16 44 N	113 18 W	2.0	5	2	29.4	34.20	20	2	1	2	1	
5	89-08-03	1.0	16 44 N	113 18 W	2.0	5	2	29.4	34.20	100	4		3	1	
5	89-08-03	1.0	16 44 N	113 18 W	2.0	5	2	29.4	34.20	300	1				
6	89-08-04	1.0	14 41 N	115 56 W	3.0	1	2	28.8	34.20	10	1	1	1	3	
6	89-08-04	1.0	14 41 N	115 56 W	3.0	1	2	28.8	34.20	20	1		2	1	
6	89-08-04	1.0	14 41 N	115 56 W	3.0	1	2	28.8	34.20	30	1				
6	89-08-04	1.0	14 41 N	115 56 W	3.0	1	2	28.8	34.20	100	1				
6	89-08-04	1.0	14 41 N	115 56 W	3.0	1	2	28.8	34.20	400	1				
7	89-08-05	1.0	12 45 N	117 09 W	2.0	5	3	28.5	33.40	10	2		2	1	
7	89-08-05	1.0	12 45 N	117 09 W	2.0	5	3	28.5	33.40	30	1	1			
7	89-08-05	1.0	12 45 N	117 09 W	2.0	5	3	28.5	33.40	100	3				
7	89-08-05	1.0	12 45 N	117 09 W	2.0	5	3	28.5	33.40	400	3				
8	89-08-06	1.0	10 51 N	114 35 W	2.0	1	2	28.0	32.90	20	1	1			
8	89-08-06	1.0	10 51 N	114 35 W	2.0	1	2	28.0	32.90	30	2	3			
8	89-08-06	1.0	10 51 N	114 35 W	2.0	1	2	28.0	32.90	100	2				
9	89-08-07	1.0	9 19 N	111 36 W	3.0	5	3	28.0	33.40	20	2	3	1	4	
9	89-08-07	1.0	9 19 N	111 36 W	3.0	5	3	28.0	33.40	30	2	2	2	1	
9	89-08-07	1.0	9 19 N	111 36 W	3.0	5	3	28.0	33.40	100	3				
10	89-08-09	1.0	4 38 N	108 38 W	3.0	2	2	27.4	34.30	20	2	2	1	5	
10	89-08-09	1.0	4 38 N	108 38 W	3.0	2	2	27.4	34.30	30	2		2	1	
10	89-08-09	1.0	4 38 N	108 38 W	3.0	2	2	27.4	34.30	100	4				
10	89-08-09	1.0	4 38 N	108 38 W	3.0	2	2	27.4	34.30	300	1				
11	89-08-10	1.0	5 34 N	111 21 W	4.0	2	2	26.5	34.40	10	1	1	1	4	
11	89-08-10	1.0	5 34 N	111 21 W	4.0	2	2	26.5	34.40	20	2	4	2	1	
11	89-08-10	1.0	5 34 N	111 21 W	4.0	2	2	26.5	34.40	30	4	9			
11	89-08-10	1.0	5 34 N	111 21 W	4.0	2	2	26.5	34.40	100	5				
12	89-08-11	1.0	6 28 N	114 19 W	4.0	5	4	27.2	34.20	10	2	2	1	2	
12	89-08-11	1.0	6 28 N	114 19 W	4.0	5	4	27.2	34.20	20	2	5	2	1	
12	89-08-11	1.0	6 28 N	114 19 W	4.0	5	4	27.2	34.20	30	2				
12	89-08-11	1.0	6 28 N	114 19 W	4.0	5	4	27.2	34.20	100	4				
	89-08-14		8 35 N	119 51 W						20		1			
13	89-08-14	1.0	9 50 N	121 53 W	4.0	1	2	27.8	33.80	10	1	1	1	4	
13	89-08-14	1.0	9 50 N	121 53 W	4.0	1	2	27.8	33.80	20	1		2	1	
13	89-08-14	1.0	9 50 N	121 53 W	4.0	1	2	27.8	33.80	30	1				
13	89-08-14	1.0	9 50 N	121 53 W	4.0	1	2	27.8	33.80	100	5				
14	89-08-15	1.0	11 23 N	124 27 W	4.0	1	2	28.3	33.30	10	1		1	2	
14	89-08-15	1.0	11 23 N	124 27 W	4.0	1	2	28.3	33.30	20	1		2	1	
14	89-08-15	1.0	11 23 N	124 27 W	4.0	1	2	28.3	33.30	100	3				
14	89-08-15	1.0	11 23 N	124 27 W	4.0	1	2	28.3	33.30	125	1	1			
15	89-08-16	1.0	12 45 N	127 13 W	2.0	1	2	28.4	33.80	10	1		1	4	
15	89-08-16	1.0	12 45 N	127 13 W	2.0	1	2	28.4	33.80	20	1				

Table 5. continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Longitude	Sea[2] State	Moon[3] Phase	Sky[4] Cond.	SST (C)	SSS (%)	Fish[5] Species	Relative[6] Abundance (Fish)	Number Collected (Fish)	Squid[7] Type	Relative[6] Abundance (Squid)	Number Collected (Squid)
15	89-08-16	1.0	12 45 N	127 13 W	2.0	1	2	28.4	33.80	30	2				
15	89-08-16	1.0	12 45 N	127 13 W	2.0	1	2	28.4	33.80	100	5				
15	89-08-16	1.0	12 45 N	127 13 W	2.0	1	2	28.4	33.80	300	1				
15	89-08-16	1.0	12 45 N	127 13 W	2.0	1	2	28.4	33.80	500	1				
16	89-08-17	1.0	13 47 N	130 24 W	4.0	1	2	27.3	33.90	30	1				
16	89-08-17	1.0	13 47 N	130 24 W	4.0	1	2	27.3	33.90	100	1				
17	89-08-18	1.0	12 27 N	132 50 W	5.0	5	2	28.0	33.90	10	2	1	1	3	
17	89-08-18	1.0	12 27 N	132 50 W	5.0	5	2	28.0	33.90	20	1				
17	89-08-18	1.0	12 27 N	132 50 W	5.0	5	2	28.0	33.90	30	2				
17	89-08-18	1.0	12 27 N	132 50 W	5.0	5	2	28.0	33.90	100	5				
18	89-08-19	1.0	9 52 N	135 22 W	4.0	5	2	27.8	33.70	10	8	7	1	5	
18	89-08-19	1.0	9 52 N	135 22 W	4.0	5	2	27.8	33.70	100	5		2	1	
18	89-08-19	1.0	9 52 N	135 22 W	4.0	5	2	27.8	33.70	300	1				
18	89-08-19	1.0	9 52 N	135 22 W	4.0	5	2	27.8	33.70	500	1				
18	89-08-19	1.0	9 52 N	135 22 W	4.0	5	2	27.8	33.70	500	1				
18	89-08-19	1.0	9 52 N	135 22 W	4.0	5	2	27.8	33.70	700	1	1			
19	89-08-20	1.0	9 40 N	137 48 W	3.0	5	3	27.8	34.00	10	1		1	3	
19	89-08-20	1.0	9 40 N	137 48 W	3.0	5	3	27.8	34.00	20	1		2	2	
19	89-08-20	1.0	9 40 N	137 48 W	3.0	5	3	27.8	34.00	100	2				
19	89-08-20	1.0	9 40 N	137 48 W	3.0	5	3	27.8	34.00	500	3				
20	89-08-21	1.0	11 14 N	140 38 W	3.0	5	2	28.3	33.80	10	1		1	2	
20	89-08-21	1.0	11 14 N	140 38 W	3.0	5	2	28.3	33.80	30	1		2	1	
20	89-08-21	1.0	11 14 N	140 38 W	3.0	5	2	28.3	33.80	100	2				
20	89-08-21	1.0	11 14 N	140 38 W	3.0	5	2	28.3	33.80	400	2	2			
20	89-08-21	1.0	11 14 N	140 38 W	3.0	5	2	28.3	33.80	500	1	1			
20	89-08-21	1.0	11 14 N	140 38 W	3.0	5	2	28.3	33.80	700	1	2			
21	89-08-22	1.0	12 57 N	143 28 W	4.0	5	2	27.4	34.30	10	1		1	3	
21	89-08-22	1.0	12 57 N	143 28 W	4.0	5	2	27.4	34.30	20	1				
21	89-08-22	1.0	12 57 N	143 28 W	4.0	5	2	27.4	34.30	100	4				
22	89-08-23	1.0	13 32 N	144 29 W	4.0	2	2	26.9	34.50	20	4	8			
22	89-08-23	1.0	13 32 N	144 29 W	4.0	2	2	26.9	34.50	700	1	2			
23	89-09-04	1.0	9 26 N	146 36 W	3.0	1	2	27.6	33.20	10	1				
23	89-09-04	1.0	9 26 N	146 36 W	3.0	1	2	27.6	33.20	30	1				
23	89-09-04	1.0	9 26 N	146 36 W	3.0	1	2	27.6	33.20	100	2				
24	89-09-05	1.0	7 20 N	144 10 W	4.0	1	2	28.2	34.50	20	2	4	1	3	
24	89-09-05	1.0	7 20 N	144 10 W	4.0	1	2	28.2	34.50	30	1	1	2	1	
24	89-09-05	1.0	7 20 N	144 10 W	4.0	1	2	28.2	34.50	100	4				
24	89-09-05	1.0	7 20 N	144 10 W	4.0	1	2	28.2	34.50	300	1				
25	89-09-06	1.0	5 49 N	141 05 W	3.0	1	2	28.0	34.70	10	1	1	1	4	
25	89-09-06	1.0	5 49 N	141 05 W	3.0	1	2	28.0	34.70	20	2	6	2	1	
25	89-09-06	1.0	5 49 N	141 05 W	3.0	1	2	28.0	34.70	30	1				
25	89-09-06	1.0	5 49 N	141 05 W	3.0	1	2	28.0	34.70	100	4				
25	89-09-06	1.0	5 49 N	141 05 W	3.0	1	2	28.0	34.70	700	1	1			
26	89-09-07	1.0	4 54 N	139 05 W	4.0	5	4	26.7	34.90	30	1		1	2	
26	89-09-07	1.0	4 54 N	139 05 W	4.0	5	4	26.7	34.90	100	2				
26	89-09-07	1.0	4 54 N	139 05 W	4.0	5	4	26.7	34.90	300	1				
27	89-09-09	1.0	5 20 N	131 44 W	4.0	2	2	27.4	34.90	10	2	2	1	4	

Table 5. continued.

Station Number[1]	Date Y/M/D	Hours of Effort	Location Latitude	Longitude	Sea State[2]	Moon Phase[3]	Sky Cond.[4]	SST (C)	SSS (%)	Fish Species[5]	Relative Abundance (Fish)[6]	Number Collected (Fish)	Squid Type[7]	Relative Abundance (Squid)[6]	Number Collected (Squid)
27	89-09-09	1.0	5 20 N	131 44 W	4.0	2	2	27.4	34.90	20	1	1	2	1	
27	89-09-09	1.0	5 20 N	131 44 W	4.0	2	2	27.4	34.90	30	1				
27	89-09-09	1.0	5 20 N	131 44 W	4.0	2	2	27.4	34.90	100	5				
27	89-09-09	1.0	5 20 N	131 44 W	4.0	2	2	27.4	34.90	300	1				
27	89-09-09	1.0	5 20 N	131 44 W	4.0	2	2	27.4	34.90	400	1				
27	89-09-09	1.0	5 20 N	131 44 W	4.0	2	2	27.4	34.90	500	1				
28	89-09-10	1.0	7 34 N	129 17 W	4.0	2	2	27.4	34.40	10	1		1	2	
28	89-09-10	1.0	7 34 N	129 17 W	4.0	2	2	27.4	34.40	100	3				
29	89-09-12	1.0	4 52 N	123 48 W	5.0	3	2	24.7	34.60	20	1	3	1	3	
29	89-09-12	1.0	4 52 N	123 48 W	5.0	3	2	24.7	34.60	100	4				
30	89-09-13	1.0	4 04 N	120 51 W	4.0	4	2	26.0	34.70	20	2	2	1	3	
30	89-09-13	1.0	4 04 N	120 51 W	4.0	4	2	26.0	34.70	30	1	1			
30	89-09-13	1.0	4 04 N	120 51 W	4.0	4	2	26.0	34.70	100	4				
31	89-09-14	1.0	3 23 N	117 57 W	4.0	4	2	25.5	34.70	10	1	1	1	5	
31	89-09-14	1.0	3 23 N	117 57 W	4.0	4	2	25.5	34.70	20	2	4			
31	89-09-14	1.0	3 23 N	117 57 W	4.0	4	2	25.5	34.70	30	1	1			
31	89-09-14	1.0	3 23 N	117 57 W	4.0	4	2	25.5	34.70	100	4				
32	89-09-15	1.0	2 40 N	115 22 W	4.0	4	1	25.4	34.40	20	4	10	1	4	
32	89-09-15	1.0	2 40 N	115 22 W	4.0	4	1	25.4	34.40	30	3	6			
32	89-09-15	1.0	2 40 N	115 22 W	4.0	4	1	25.4	34.40	100	4				
32	89-09-15	1.0	2 40 N	115 22 W	4.0	4	1	25.4	34.40	400	5	1			
33	89-09-16	1.0	2 26 N	112 33 W	5.0	4	2	24.7	34.30	30	1	1	1	2	
33	89-09-16	1.0	2 26 N	112 33 W	5.0	4	2	24.7	34.30	100	2		2	1	
34	89-09-17	1.0	2 16 N	109 51 W	5.0	5	2	25.1	34.30	10	1	2	1	1	
34	89-09-17	1.0	2 16 N	109 51 W	5.0	5	2	25.1	34.30	20	1	1	2	2	
34	89-09-17	1.0	2 16 N	109 51 W	5.0	5	2	25.1	34.30	30	2	2			
34	89-09-17	1.0	2 16 N	109 51 W	5.0	5	2	25.1	34.30	100	2				
34	89-09-17	1.0	2 16 N	109 51 W	5.0	5	2	25.1	34.30	500	1				
	89-09-18		2 17 N	109 25 W						5		1			
35	89-09-18	1.0	2 27 N	106 56 W	5.0	5	3	25.2	34.30	20	3	5	1	3	
35	89-09-18	1.0	2 27 N	106 56 W	5.0	5	3	25.2	34.30	30	3		2	1	
35	89-09-18	1.0	2 27 N	106 56 W	5.0	5	3	25.2	34.30	100	4				
35	89-09-18	1.0	2 27 N	106 56 W	5.0	5	3	25.2	34.30	300	1				
36	89-09-19	1.0	2 35 N	103 40 W	4.0	5	3	25.2	34.20	10	1	1	1	4	
36	89-09-19	1.0	2 35 N	103 40 W	4.0	5	3	25.2	34.20	20	2	3			
36	89-09-19	1.0	2 35 N	103 40 W	4.0	5	3	25.2	34.20	30	3	5			
36	89-09-19	1.0	2 35 N	103 40 W	4.0	5	3	25.2	34.20	100	4				
37	89-09-20	1.0	2 32 N	100 57 W	5.0	5	3	25.8	34.30	20	2	1	1	4	
37	89-09-20	1.0	2 32 N	100 57 W	5.0	5	3	25.8	34.30	30	2	5			
37	89-09-20	1.0	2 32 N	100 57 W	5.0	5	3	25.8	34.30	100	5				
37	89-09-20	1.0	2 32 N	100 57 W	5.0	5	3	25.8	34.30	300	1				
38	89-09-21	1.0	2 03 N	98 11 W	5.0	5	4	25.5	34.00	10	4	7	1	4	
38	89-09-21	1.0	2 03 N	98 11 W	5.0	5	4	25.5	34.00	20	2	2	3	1	
38	89-09-21	1.0	2 03 N	98 11 W	5.0	5	4	25.5	34.00	30	1	1			
38	89-09-21	1.0	2 03 N	98 11 W	5.0	5	4	25.5	34.00	100	4				
38	89-09-21	1.0	2 03 N	98 11 W	5.0	5	4	25.5	34.00	300	1				
39	89-09-22	1.0	0 41 N	95 20 W	4.0	5	1	24.5	33.90	100	5		1	5	

Table 5. continued.

Station Number[1]	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)
39	89-09-22	1.0	0 41 N	95 20 W	4.0	5	1	24.5	33.90				3	1	
40	89-09-23	1.0	0 25 S	92 56 W	5.0	5	1	19.1	34.80	100	4		1	4	
40	89-09-23	1.0	0 25 S	92 56 W	5.0	5	1	19.1	34.80	500	1	2			
41	89-09-26	1.0	3 06 S	87 50 W	4.0	5	2	19.7	35.00	100	5		1	4	
41	89-09-26	1.0	3 06 S	87 50 W	4.0	5	2	19.7	35.00	200	4	1	3	1	1
42	89-09-27	1.0	5 37 S	86 10 W	5.0	5	3	19.0	35.10	100	3		1	2	
42	89-09-27	1.0	5 37 S	86 10 W	5.0	5	3	19.0	35.10				3	1	
43	89-09-28	1.0	4 06 S	83 39 W	4.0	5	3	18.6	35.00	100	2		1	1	
44	89-09-29	1.0	2 03 S	81 35 W	3.0	5	3	23.1	33.50	20	2	1	1	2	
44	89-09-29	1.0	2 03 S	81 35 W	3.0	5	3	23.1	33.50	100	4		3	3	
44	89-09-29	1.0	2 03 S	81 35 W	3.0	5	3	23.1	33.50	300	1				
45	89-09-30	1.0	2 09 S	80 56 W	3.0	5	3	23.8		90	2				
45	89-09-30	1.0	2 09 S	80 56 W	3.0	5	3	23.8		500	2	2			
45	89-09-30	1.0	2 09 S	80 56 W	3.0	5	3	23.8		500	4	5			
45	89-09-30	1.0	2 09 S	80 56 W	3.0	5	3	23.8		500	1	1			
46	89-10-06	1.0	3 04 S	84 26 W	3.0	5	3	19.2	34.90	100	1		2	1	
46	89-10-06	1.0	3 04 S	84 26 W	3.0	5	3	19.2	34.90	300	1				
46	89-10-06	1.0	3 04 S	84 26 W	3.0	5	3	19.2	34.90	400	1				
47	89-10-07	1.0	3 01 S	87 55 W	4.0	5	3	20.2	34.70	10	2	1	1	1	
47	89-10-07	1.0	3 01 S	87 55 W	4.0	5	3	20.2	34.70	30	1				
47	89-10-07	1.0	3 01 S	87 55 W	4.0	5	3	20.2	34.70	100	3				
48	89-10-08	1.0	2 51 S	91 21 W	3.0	5	3	20.4	34.50	10	1				
48	89-10-08	1.0	2 51 S	91 21 W	3.0	5	3	20.4	34.50	100	3				
49	89-10-09	1.0	2 32 S	95 02 W	3.0	2	1	22.0	34.94	10	1		2	4	
49	89-10-09	1.0	2 32 S	95 02 W	3.0	2	1	22.0	34.94	100	3				
50	89-10-10	1.0	2 27 S	98 26 W	4.0	5	3	21.4	34.64	100	4		2	2	
51	89-10-11	1.0	2 19 S	101 57 W	4.0	3	2	21.5	34.86	100	4		1	3	
51	89-10-11	1.0	2 19 S	101 57 W	4.0	3	2	21.5	34.86	700	2				
52	89-10-12	1.0	2 06 S	105 18 W	5.0	4	2	22.2	34.90	100	2		1	3	
52	89-10-12	1.0	2 06 S	105 18 W	5.0	4	2	22.2	34.90	700	2				
53	89-10-13	1.0	1 53 S	108 45 W	5.0	4	1	22.4	34.94	100	4		1	4	
53	89-10-13	1.0	1 53 S	108 45 W	5.0	4	1	22.4	34.94	700	1				
54	89-10-14	1.0	1 53 S	111 36 W	5.0	4	1	23.0	35.00	20	3	3	2	3	
54	89-10-14	1.0	1 53 S	111 36 W	5.0	4	1	23.0	35.00	100	4		3	1	
55	89-10-15	1.0	2 01 S	114 53 W	4.0	4	1	23.6	35.11	20	1	1	1	4	
55	89-10-15	1.0	2 01 S	114 53 W	4.0	4	1	23.6	35.11	100	4		2	3	
55	89-10-15	1.0	2 01 S	114 53 W	4.0	4	1	23.6	35.11	300	1				
55	89-10-15	1.0	2 01 S	114 53 W	4.0	4	1	23.6	35.11	500	4				
56	89-10-16	1.0	1 56 S	118 21 W	4.0	5	2	24.6	35.20	5	2	1	1	4	
56	89-10-16	1.0	1 56 S	118 21 W	4.0	5	2	24.6	35.20	30	1		2	4	
56	89-10-16	1.0	1 56 S	118 21 W	4.0	5	2	24.6	35.20	100	4		3	3	
56	89-10-16	1.0	1 56 S	118 21 W	4.0	5	2	24.6	35.20	300	1				
56	89-10-16	1.0	1 56 S	118 21 W	4.0	5	2	24.6	35.20	500	1				
57	89-10-17	1.0	1 51 S	121 28 W	5.0	5	1	24.1	35.15	30	1		2	4	
57	89-10-17	1.0	1 51 S	121 28 W	5.0	5	1	24.1	35.15	100	4		3	4	
58	89-10-18	1.0	2 58 S	120 16 W	5.0	5	3	25.0	35.30	30	1		2	4	
58	89-10-18	1.0	2 58 S	120 16 W	5.0	5	3	25.0	35.30	5	3		3	3	

Table 5. continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Longitude	Sea[2] State	Moon[3] Phase	Sky[4] Cond.	SST (C)	SSS (%)	Fish[5] Species	Relative[6] Abundance (Fish)	Number Collected (Fish)	Squid[7] Type	Relative[6] Abundance (Squid)	Number Collected (Squid)
58	89-10-18	1.0	2 58 S	120 16 W	5.0	5	3	25.0	35.30	100	3				
59	89-10-19	1.0	3 32 S	117 45 W	5.0	5	2	24.1	35.14	5	1		1	3	
59	89-10-19	1.0	3 32 S	117 45 W	5.0	5	2	24.1	35.14	100	2		3	2	
59	89-10-19	1.0	3 32 S	117 45 W	5.0	5	2	24.1	35.14	300	1				
60	89-10-20	1.0	3 58 S	115 16 W	5.0	5	2	24.2	35.16	100	3		2	4	
60	89-10-20	1.0	3 58 S	115 16 W	5.0	5	2	24.2	35.16				3	2	
61	89-10-21	1.0	4 32 S	112 29 W	4.0	5	1	24.0	35.15	100	2		2	2	
61	89-10-21	1.0	4 32 S	112 29 W	4.0	5	1	24.0	35.15				3	1	
62	89-10-22	1.0	5 20 S	106 25 W	6.0	5	2	23.1	35.22	5	1		2	3	
62	89-10-22	1.0	5 20 S	106 25 W	6.0	5	2	23.1	35.22	100	2		3	3	
62	89-10-22	1.0	5 20 S	106 25 W	6.0	5	2	23.1	35.22	300	1				
63	89-10-23	1.0	5 40 S	103 36 W	6.0	5	2	22.0	34.93	5	1		1	1	
63	89-10-23	1.0	5 40 S	103 36 W	6.0	5	2	22.0	34.93	30	1		2	2	
63	89-10-23	1.0	5 40 S	103 36 W	6.0	5	2	22.0	34.93	100	3		3	3	
64	89-10-25	1.0	6 00 S	100 14 W	6.0	5	2	22.9	35.16	10	1	1	2	3	
64	89-10-25	1.0	6 00 S	100 14 W	6.0	5	2	22.9	35.16	30	2	1	3	3	
64	89-10-25	1.0	6 00 S	100 14 W	6.0	5	2	22.9	35.16	100	3				
65	89-10-26	1.0	5 20 S	96 58 W	4.0	5	3	22.1	35.18	20	1		2	2	
65	89-10-26	1.0	5 20 S	96 58 W	4.0	5	3	22.1	35.18	100	3		3	3	
66	89-10-27	1.0	4 10 S	94 49 W	4.0	5	3	21.9	34.45	30	1	1	1	2	
66	89-10-27	1.0	4 10 S	94 49 W	4.0	5	3	21.9	34.45	100	4				
67	89-10-28	1.0	2 16 S	90 55 W	4.0	5	2	21.0	34.60	100	4				
67	89-10-28	1.0	2 16 S	90 55 W	4.0	5	2	21.0	34.60	300	1				
68	89-10-29	1.0	1 01 S	88 29 W	3.0	5	3	21.8	34.34	100	4		1	3	
68	89-10-29	1.0	1 01 S	88 29 W	3.0	5	3	21.8	34.34	200	4		2	3	
69	89-10-30	1.0	2 03 N	87 32 W	5.0	5	2	26.2	33.62	10	1	1	1	1	
69	89-10-30	1.0	2 03 N	87 32 W	5.0	5	2	26.2	33.62	30	1	2	2	3	
69	89-10-30	1.0	2 03 N	87 32 W	5.0	5	2	26.2	33.62	100	5				
69	89-10-30	1.0	2 03 N	87 32 W	5.0	5	2	26.2	33.62	300	1				
69	89-10-30	1.0	2 03 N	87 32 W	5.0	5	2	26.2	33.62	500	1	1			
69	89-10-30	1.0	2 03 N	87 32 W	5.0	5	2	26.2	33.62	700	1				
70	89-10-31	1.0	5 03 N	87 06 W	6.0	5	4	27.1	33.20	10	3		1	2	
70	89-10-31	1.0	5 03 N	87 06 W	6.0	5	4	27.1	33.20	100	3		2	2	
70	89-10-31	1.0	5 03 N	87 06 W	6.0	5	4	27.1	33.20	300	1				
70	89-10-31	1.0	5 03 N	87 06 W	6.0	5	4	27.1	33.20	400	1				
71	89-11-01	1.0	6 27 N	86 35 W	5.0	1	2	26.9	33.20	5	1		2	2	
71	89-11-01	1.0	6 27 N	86 35 W	5.0	1	2	26.9	33.20	100	2				
72	89-11-02	1.0	8 58 N	85 15 W	3.0	1	2	28.0	32.94	10	6	10	2	5	
72	89-11-02	1.0	8 58 N	85 15 W	3.0	1	2	28.0	32.94	30	2	1			
72	89-11-02	1.0	8 58 N	85 15 W	3.0	1	2	28.0	32.94	100	2				
73	89-11-02	1.0	9 14 N	84 32 W	3.0	5	3	27.9	30.20	5	2	2	2	4	
73	89-11-02	1.0	9 14 N	84 32 W	3.0	5	3	27.9	30.20	15	1	1	3	2	
73	89-11-02	1.0	9 14 N	84 32 W	3.0	5	3	27.9	30.20	30	2	3			
73	89-11-02	1.0	9 14 N	84 32 W	3.0	5	3	27.9	30.20	80	3	4			
73	89-11-02	1.0	9 14 N	84 32 W	3.0	5	3	27.9	30.20	100	2				
73	89-11-02	1.0	9 14 N	84 32 W	3.0	5	3	27.9	30.20	200	4	4			
74	89-11-08	1.0	9 21 N	85 06 W	5.0	3	2	27.2	29.90	10	3	1	2	3	

Table 5. 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	89-11-08	1.0	9 21 N	85 06 W	5.0	3	2	27.2	29.90	30	2	1			
75	89-11-09	1.0	9 07 N	87 59 W	1.0	3	2	28.2	33.00	10	3		3	4	
75	89-11-09	1.0	9 07 N	87 59 W	1.0	3	2	28.2	33.00	20	2	2			
75	89-11-09	1.0	9 07 N	87 59 W	1.0	3	2	28.2	33.00	30	1				
75	89-11-09	1.0	9 07 N	87 59 W	1.0	3	2	28.2	33.00	400	1				
76	89-11-10	1.0	7 21 N	90 19 W	4.0	3	2	26.4	32.22	30	1		3	5	
77	89-11-11	1.0	5 10 N	91 52 W	6.0	4	3	26.8	33.33	30	1	1	3	4	
77	89-11-11	1.0	5 10 N	91 52 W	6.0	4	3	26.8	33.33	100	2				
78	89-11-12	1.0	2 42 N	93 33 W	2.0	4	2	26.3	33.65	20	2	3	3	4	
78	89-11-12	1.0	2 42 N	93 33 W	2.0	4	2	26.3	33.65	100	3				
78	89-11-12	1.0	2 42 N	93 33 W	2.0	4	2	26.3	33.65	500	1	1			
79	89-11-13	1.0	0 17 S	94 24 W	2.0	4	1	21.0	34.58	100	4		3	4	
79	89-11-13	1.0	0 17 S	94 24 W	2.0	4	1	21.0	34.58	300	1				
79	89-11-13	1.0	0 17 S	94 24 W	2.0	4	1	21.0	34.58	500	2				
80	89-11-14	1.0	3 12 S	94 08 W	2.0	4	1	22.1	34.71	5	1		1	2	
80	89-11-14	1.0	3 12 S	94 08 W	2.0	4	1	22.1	34.71	100	4		3	4	
80	89-11-14	1.0	3 12 S	94 08 W	2.0	4	1	22.1	34.71	400	1				
81	89-11-15	1.0	4 56 S	95 20 W	4.0	5	1	22.7	34.86	10	1		1	2	
81	89-11-15	1.0	4 56 S	95 20 W	4.0	5	1	22.7	34.86	100	2		2	3	
81	89-11-15	1.0	4 56 S	95 20 W	4.0	5	1	22.7	34.86				3	4	
82	89-11-16	1.0	4 04 S	98 38 W	5.0	5	1	22.3	34.86	100	3		1	1	
82	89-11-16	1.0	4 04 S	98 38 W	5.0	5	1	22.3	34.86	125	1		2	2	
82	89-11-16	1.0	4 04 S	98 38 W	5.0	5	1	22.3	34.86				3	4	
83	89-11-17	1.0	3 02 S	101 45 W	5.0	5	1	22.2	34.87	10	1		1	4	
83	89-11-17	1.0	3 02 S	101 45 W	5.0	5	1	22.2	34.87	30	2	2	2	3	
83	89-11-17	1.0	3 02 S	101 45 W	5.0	5	1	22.2	34.87	100	4		3	3	
84	89-11-18	1.0	2 08 S	104 45 W	5.0	5	1	22.7	34.92	10	1		1	2	
84	89-11-18	1.0	2 08 S	104 45 W	5.0	5	1	22.7	34.92	30	1		2	3	
84	89-11-18	1.0	2 08 S	104 45 W	5.0	5	1	22.7	34.92	100	4		3	4	
84	89-11-18	1.0	2 08 S	104 45 W	5.0	5	1	22.7	34.92	300	1				
85	89-11-19	1.0	1 10 S	108 06 W	4.0	5	1	22.0	34.71	5	1		1	5	
85	89-11-19	1.0	1 10 S	108 06 W	4.0	5	1	22.0	34.71	100	3		2	3	
85	89-11-19	1.0	1 10 S	108 06 W	4.0	5	1	22.0	34.71				3	5	
86	89-11-20	1.0	0 13 S	111 32 W	4.0	5	1	23.5	34.22	20	1		1	4	
86	89-11-20	1.0	0 13 S	111 32 W	4.0	5	1	23.5	34.22	30	3	1	2	4	
86	89-11-20	1.0	0 13 S	111 32 W	4.0	5	1	23.5	34.22	100	5		3	4	
87	89-11-21	1.0	0 23 N	113 27 W	4.0	5	1	23.7	34.51	20	2		1	4	
87	89-11-21	1.0	0 23 N	113 27 W	4.0	5	1	23.7	34.51	30	1		2	2	
87	89-11-21	1.0	0 23 N	113 27 W	4.0	5	1	23.7	34.51	100	5		3	3	
88	89-11-22	1.0	1 51 N	119 16 W	5.0	5	1	23.2	34.62	10	1		1	2	
88	89-11-22	1.0	1 51 N	119 16 W	5.0	5	1	23.2	34.62	20	2		2	3	
88	89-11-22	1.0	1 51 N	119 16 W	5.0	5	1	23.2	34.62	100	4				
89	89-11-23	1.0	1 58 N	122 59 W	5.0	5	1	25.4	34.57	20	1		1	2	
89	89-11-23	1.0	1 58 N	122 59 W	5.0	5	1	25.4	34.57	30	2		3	2	
89	89-11-23	1.0	1 58 N	122 59 W	5.0	5	1	25.4	34.57	100	4				
89	89-11-23	1.0	1 58 N	122 59 W	5.0	5	1	25.4	34.57	300	1				
89	89-11-23	1.0	1 58 N	122 59 W	5.0	5	1	25.4	34.57	500	1				

Table 5. continued.

Station[1] Number	Date Y/M/D	Hours of Effort	Location Latitude	Longitude	Sea[2] State	Moon[3] Phase	Sky[4] Cond.	SST (C)	SSS (%)	Fish[5] Species	Relative[6] Abundance (Fish)	Number Collected (Fish)	Squid[7] Type	Relative[6] Abundance (Squid)	Number Collected (Squid)
90	89-11-24	1.0	2 18 N	125 25 W	5.0	5	3	26.0	34.58	20	3		3	2	
90	89-11-24	1.0	2 18 N	125 25 W	5.0	5	3	26.0	34.58	30	3	1			
90	89-11-24	1.0	2 18 N	125 25 W	5.0	5	3	26.0	34.58	100	3				
91	89-11-25	1.0	3 48 N	122 46 W	6.0	5	3	26.4	34.64	10	1		2	3	
91	89-11-25	1.0	3 48 N	122 46 W	6.0	5	3	26.4	34.64	30	2	1			
91	89-11-25	1.0	3 48 N	122 46 W	6.0	5	3	26.4	34.64	100	4				
92	89-11-26	1.0	5 51 N	122 02 W	5.0	5	3	27.1	34.71	10	2	1	2	2	
92	89-11-26	1.0	5 51 N	122 02 W	5.0	5	3	27.1	34.71	20	1				
92	89-11-26	1.0	5 51 N	122 02 W	5.0	5	3	27.1	34.71	30	1				
92	89-11-26	1.0	5 51 N	122 02 W	5.0	5	3	27.1	34.71	100	3				
92	89-11-26	1.0	5 51 N	122 02 W	5.0	5	3	27.1	34.71	300	1				
93	89-11-27	1.0	8 14 N	124 45 W	2.0	5	2	27.8	33.79	10	1	1	2	2	
93	89-11-27	1.0	8 14 N	124 45 W	2.0	5	2	27.8	33.79	20	2	3			
93	89-11-27	1.0	8 14 N	124 45 W	2.0	5	2	27.8	33.79	100	3				
93	89-11-27	1.0	8 14 N	124 45 W	2.0	5	2	27.8	33.79	400	1	1			
94	89-11-28	1.0	10 07 N	124 40 W	2.0	5	3	27.5	33.43	10	1		1	1	
94	89-11-28	1.0	10 07 N	124 40 W	2.0	5	3	27.5	33.43	20	1	1	2	2	
94	89-11-28	1.0	10 07 N	124 40 W	2.0	5	3	27.5	33.43	100	4		3	2	
95	89-11-29	1.0	11 57 N	122 03 W	5.0	5	4	27.4	33.38	10	1	1	2	2	
95	89-11-29	1.0	11 57 N	122 03 W	5.0	5	4	27.4	33.38	30	1		3	2	
95	89-11-29	1.0	11 57 N	122 03 W	5.0	5	4	27.4	33.38	100	3				
96	89-11-30	1.0	14 55 N	123 46 W	6.0	1	2	26.6	34.04	10	1		1	3	
96	89-11-30	1.0	14 55 N	123 46 W	6.0	1	2	26.6	34.04	20	1		2	3	
96	89-11-30	1.0	14 55 N	123 46 W	6.0	1	2	26.6	34.04	30	1				
96	89-11-30	1.0	14 55 N	123 46 W	6.0	1	2	26.6	34.04	100	3				
96	89-11-30	1.0	14 55 N	123 46 W	6.0	1	2	26.6	34.04	300	1				
97	89-12-01	1.0	17 44 N	122 15 W	7.0	1	2	25.2	34.40	30	1		2	2	
97	89-12-01	1.0	17 44 N	122 15 W	7.0	1	2	25.2	34.40	100	3		3	2	
97	89-12-01	1.0	17 44 N	122 15 W	7.0	1	2	25.2	34.40	500	2				
98	89-12-02	1.0	20 42 N	120 02 W	5.0	1	2	23.4	34.95	100	2		1	1	
98	89-12-02	1.0	20 42 N	120 02 W	5.0	1	2	23.4	34.95	500	2		2	3	
99	89-12-03	1.0	22 26 N	117 58 W	5.0	1	2	21.4	33.99	5	1		1	3	
99	89-12-03	1.0	22 26 N	117 58 W	5.0	1	2	21.4	33.99	100	3		2	2	
99	89-12-03	1.0	22 26 N	117 58 W	5.0	1	2	21.4	33.99				3	2	
100	89-12-04	1.0	25 50 N	116 13 W	5.0	2	2	19.9	33.82	100	2		1	4	
100	89-12-04	1.0	25 50 N	116 13 W	5.0	2	2	19.9	33.82				2	2	
100	89-12-04	1.0	25 50 N	116 13 W	5.0	2	2	19.9	33.82				3	3	
101	89-12-05	1.0	28 39 N	115 47 W	3.0	2	2	18.0	33.48	100	2		1	4	
101	89-12-05	1.0	28 39 N	115 47 W	3.0	2	2	18.0	33.48				2	3	
101	89-12-05	1.0	28 39 N	115 47 W	3.0	2	2	18.0	33.48				3	3	
102	89-12-06	1.0	31 15 N	116 48 W	2.0	2	2	17.0	33.44	125	4				
102	89-12-06	1.0	31 15 N	116 48 W	2.0	2	2	17.0	33.44	500	1				

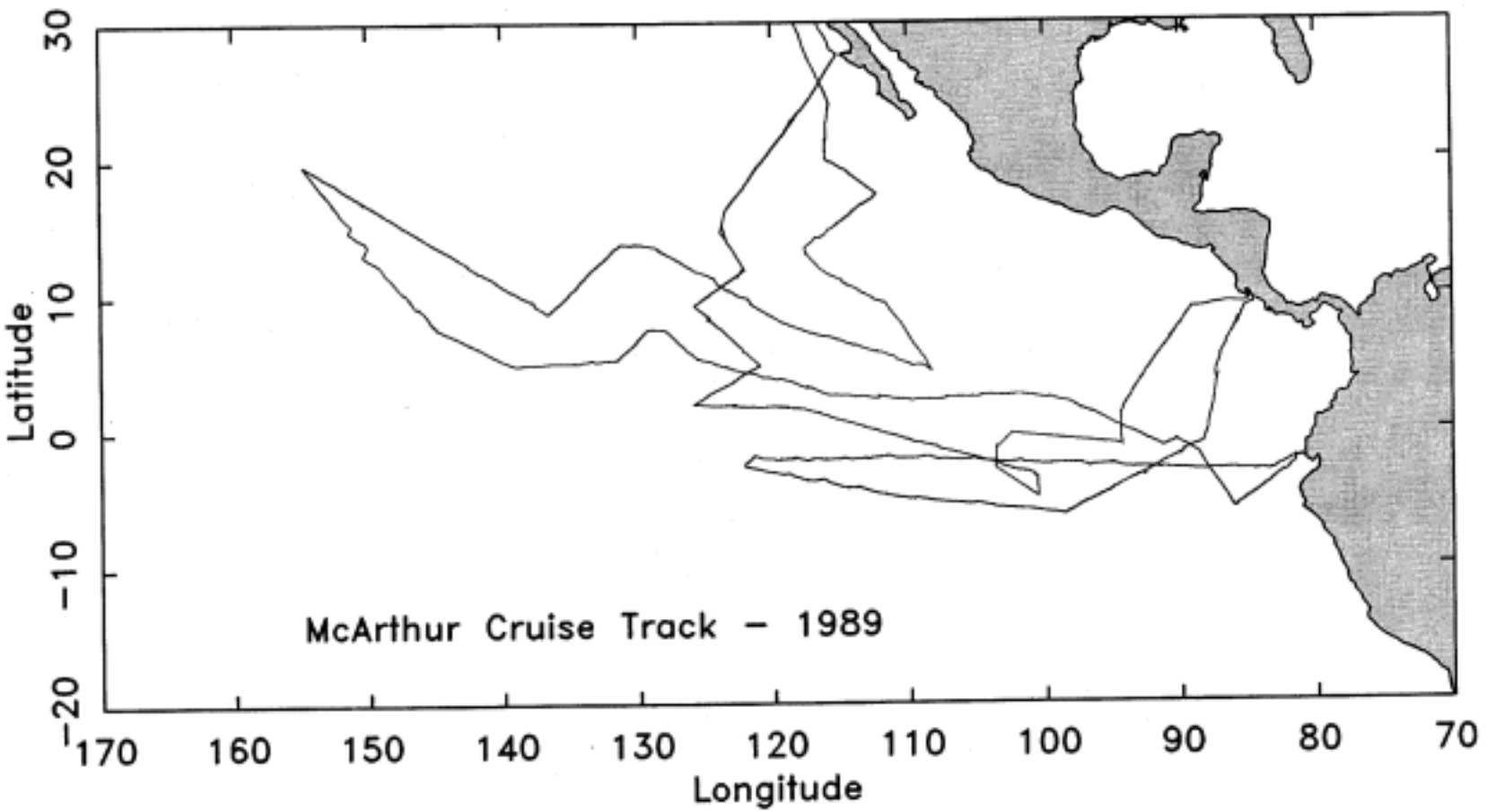

Figure 1. Cruise track, *McArthur*, 29 July - 7 December, 1989

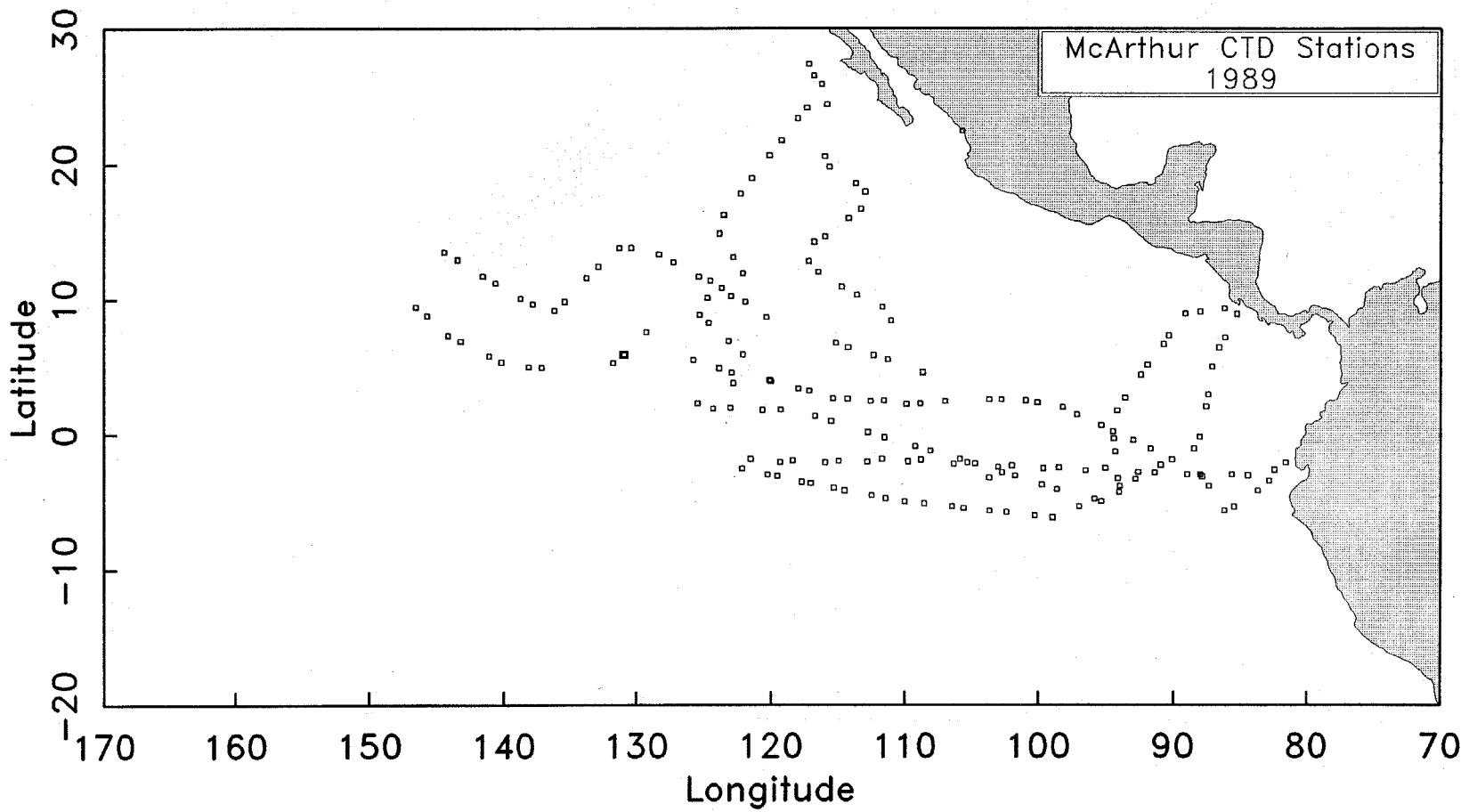

Figure 2. CTD stations, *McArthur*, 29 July - 7 December, 1989

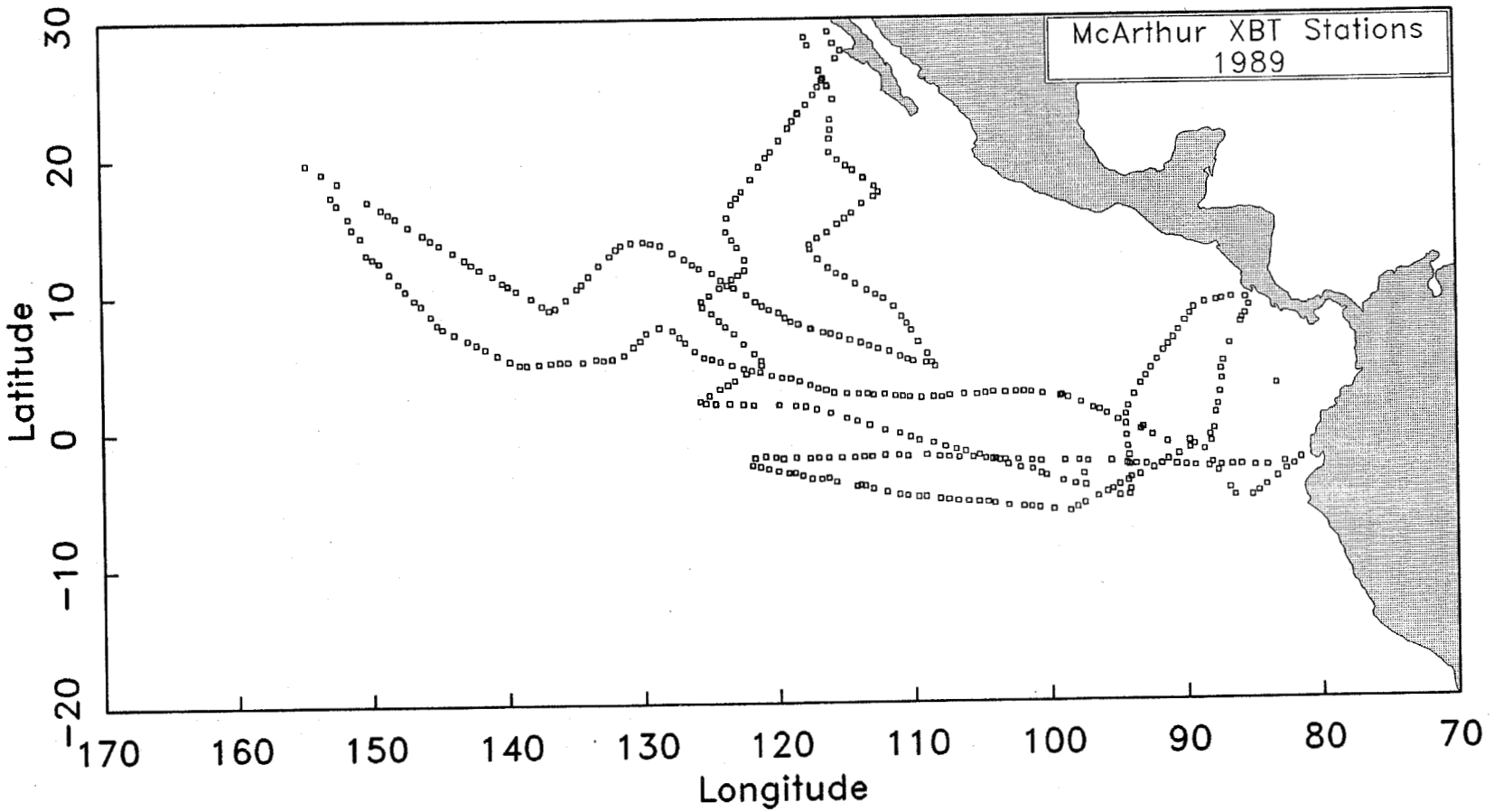

Figure 3. XBT deployments, *McArthur*, 29 July - 7 December, 1989

Surface chlorophyll, MOPS89

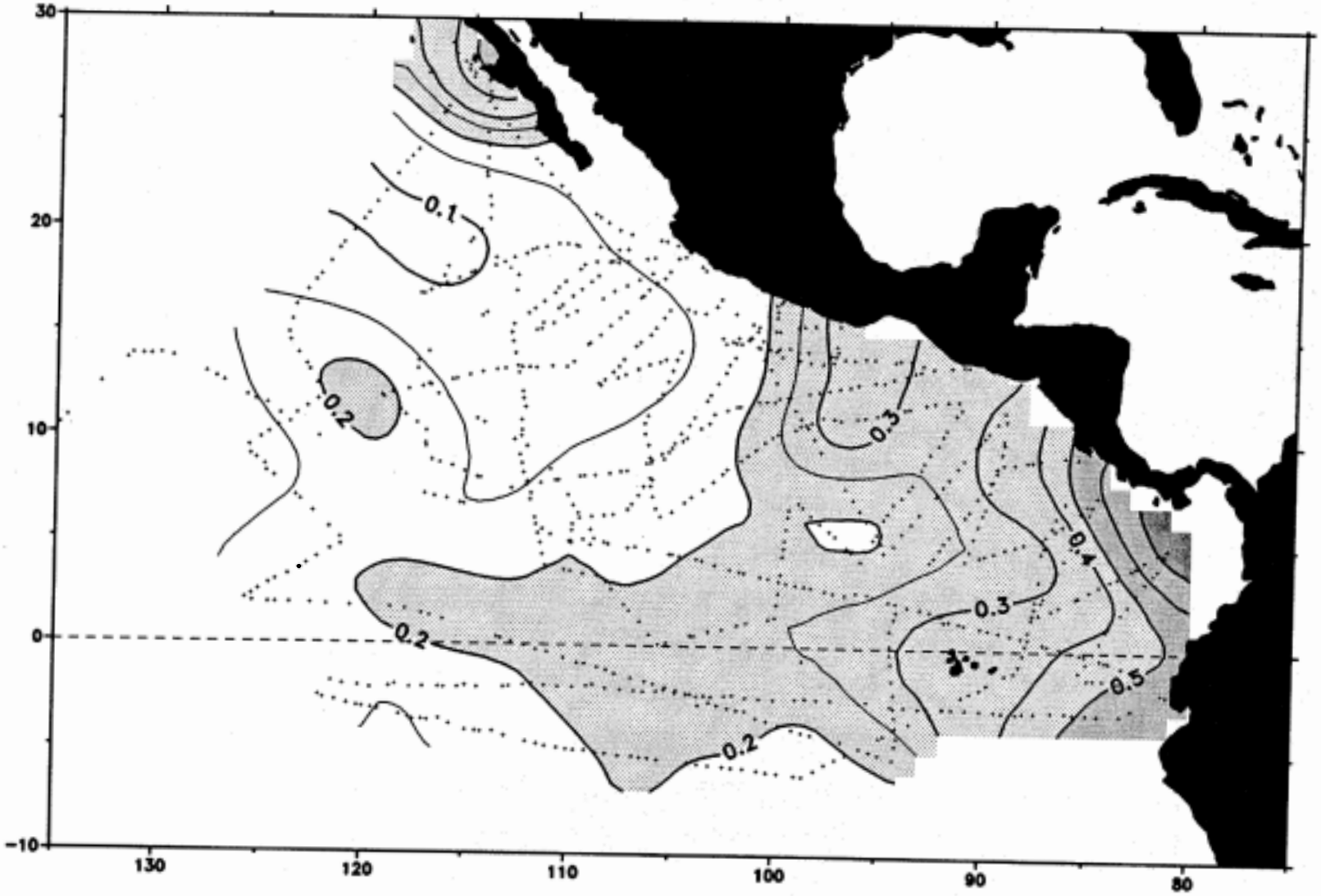

Figure 4. Surface chlorophyll (mg · m^{-3}), *Jordan* and *McArthur*, 29 July - 7 December, 1989

Integrated chlorophyll, MOPS89

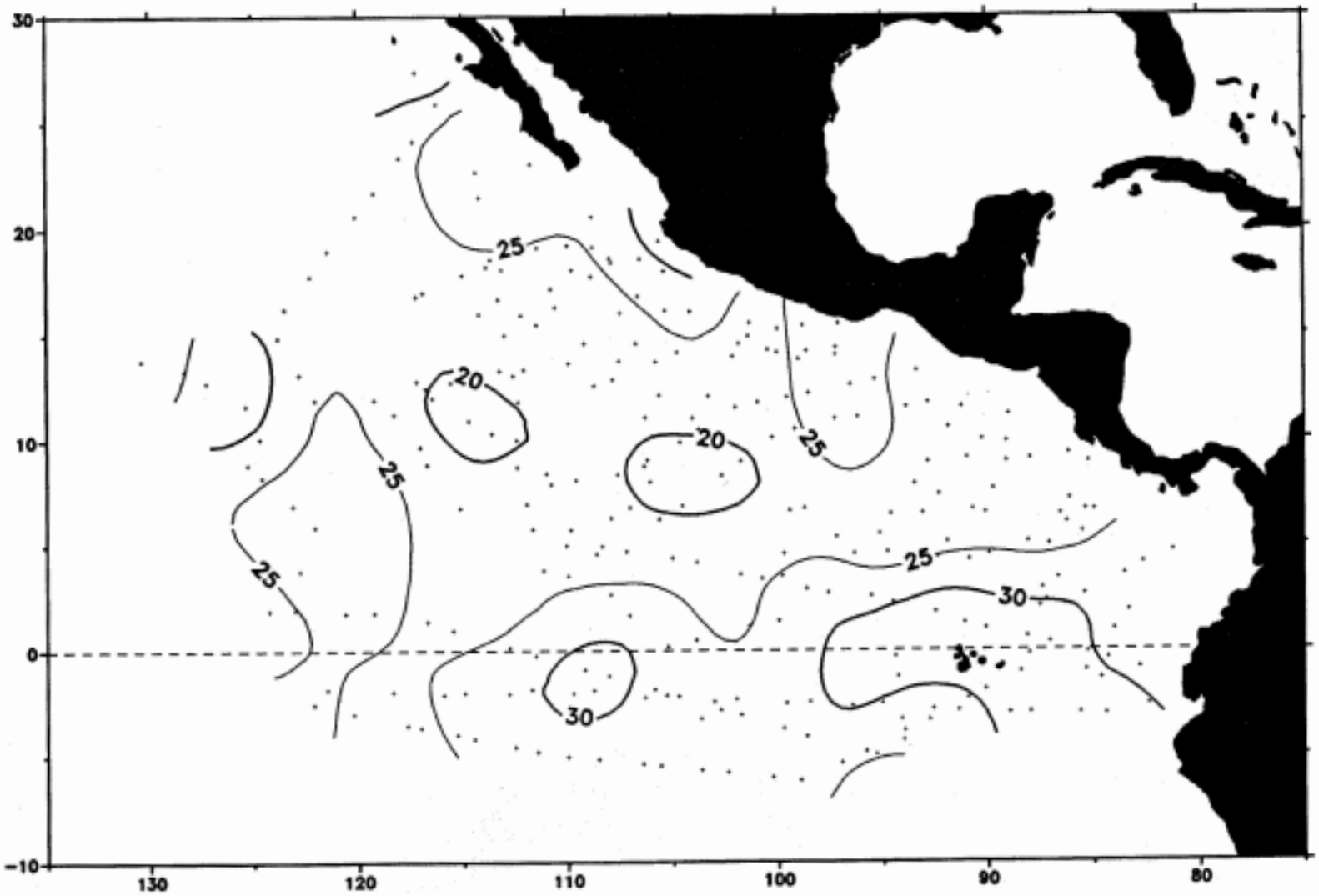

Figure 5. Integrated chlorophyll (mg · m^{-2}, 0-150 m), *Jordan* and *McArthur*, 29 July - 7 December, 1989

MCARTHUR DEPLOYMENTS, 1989

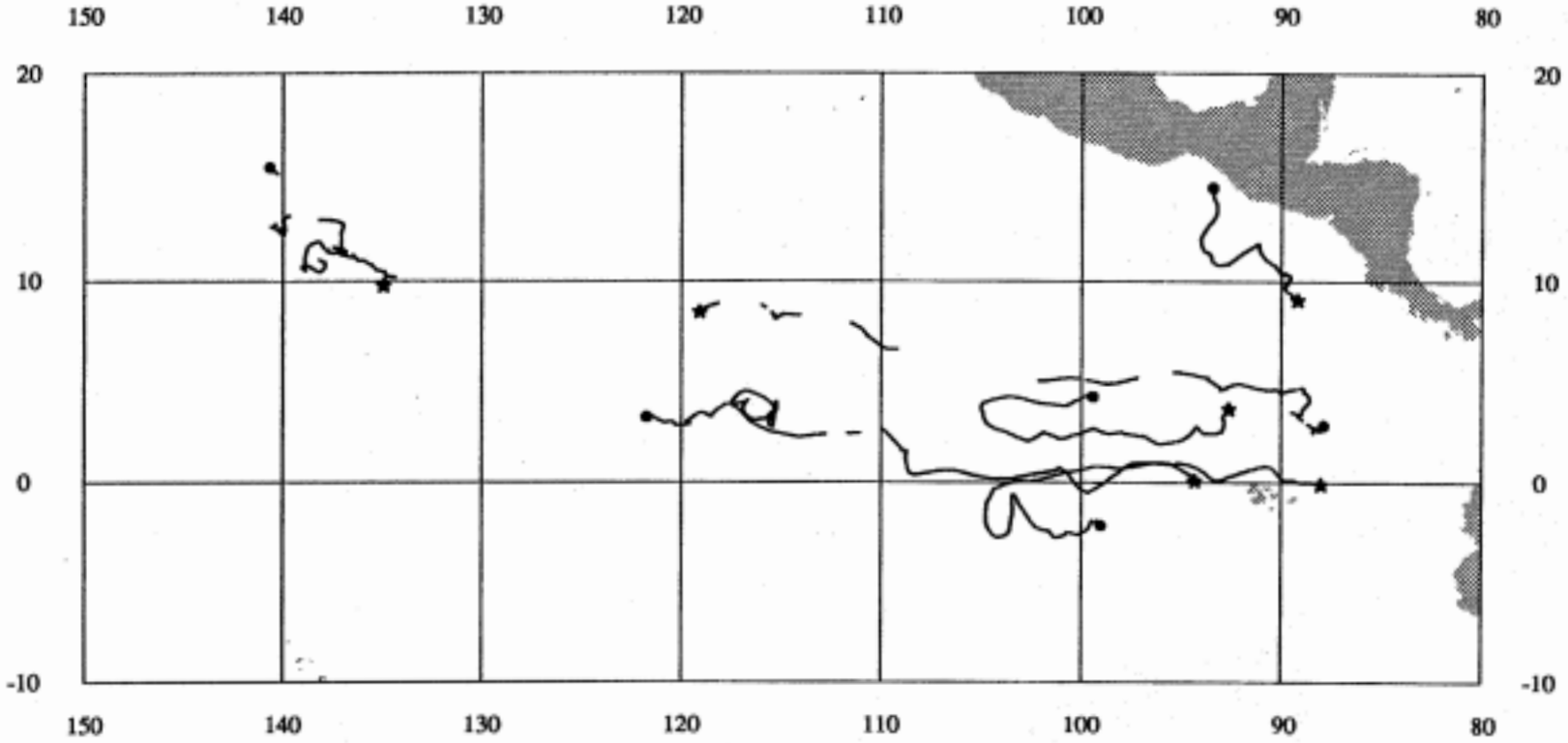

Figure 6. Tracks of seven drifting buoys, *McArthur*, 29 July - 7 December, 1989

• Location of buoy deployment
● Location of last signal from buoy

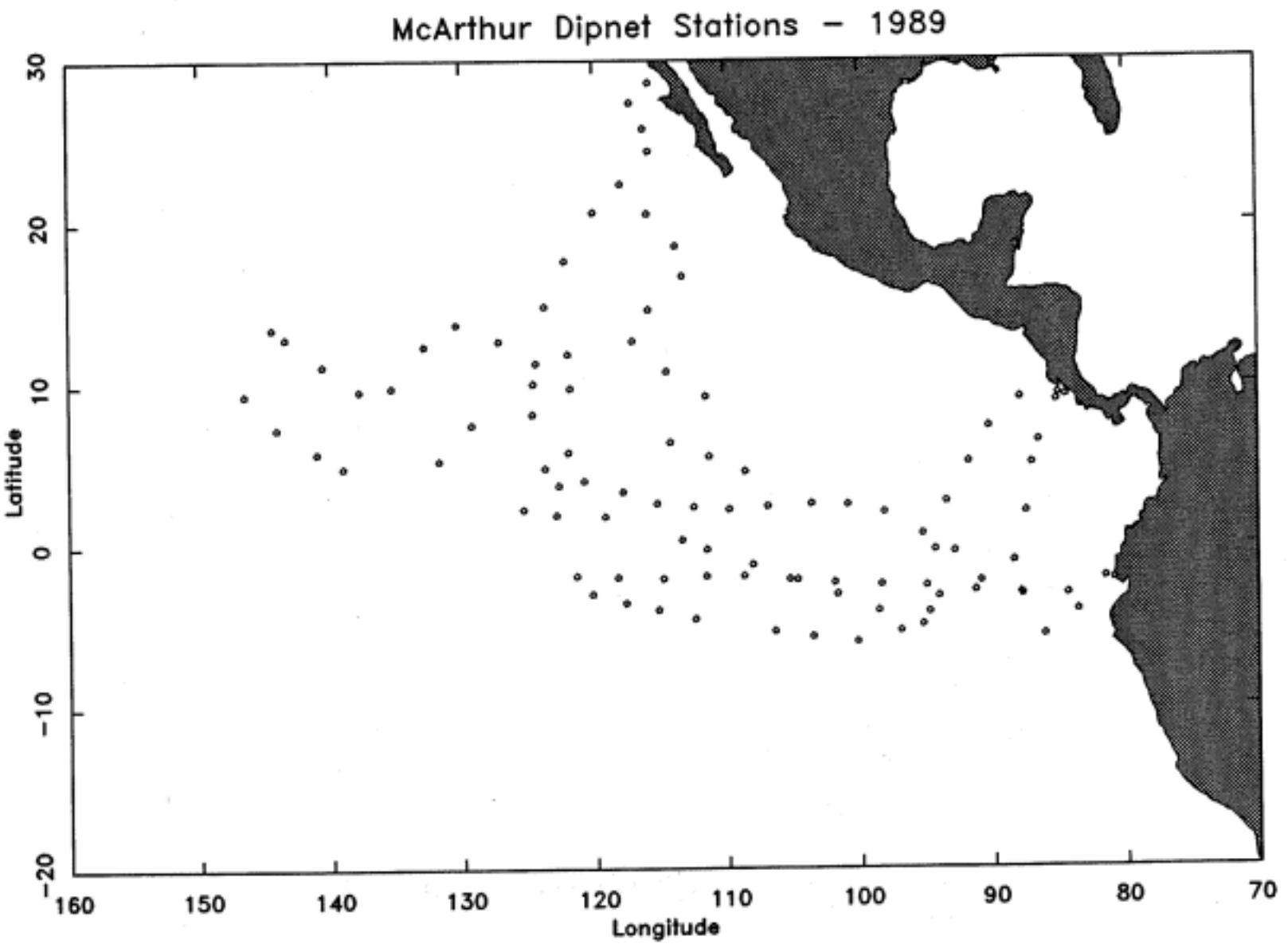

Figure 7. Locations of dipnet stations, *McArthur*, 29 July - 7 December, 1989

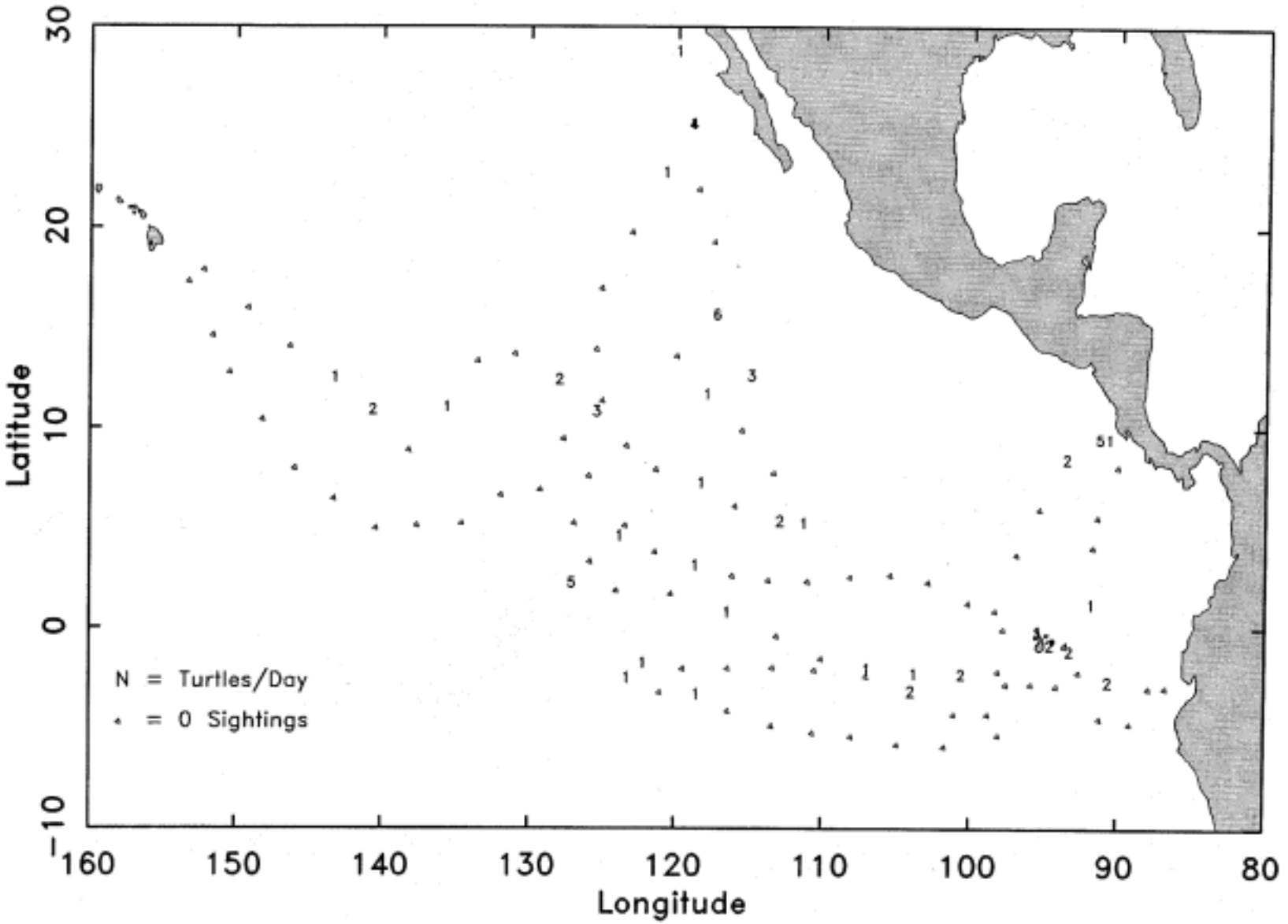

Figure 8. Locations of turtle sightings, *McArthur*, 29 July - 7 December 1989

APPENDIX A

Station No.	1-001	Date - GMT	31 JUL 89
Station Name	M891-001	Time - GMT	0340
Latitude	27.23.0 N	Date - LOC	30 JUL 89
Longitude	117.11.4 W	Time - LOC	2040

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.82	33.37	0.09	0.00
20	19.47	33.08	0.11	0.00
40	18.55	32.06	0.15	0.00
60	14.96	32.77	0.22	0.00
80	13.75	32.69	--	--
100	12.60	32.89	0.21	0.00
125	11.81	33.24	0.05	0.00
150	11.39	33.22	--	--
200	12.36	33.59	--	--
250	10.59	33.28	--	--
350	9.52	33.16	--	--
500	7.86	33.07	--	--
1000	5.65	33.11	--	--

Station No.	1-002	Date - GMT	31 JUL 89
Station Name	M891-002	Time - GMT	1232
Latitude	26.32.0 N	Date - LOC	31 JUL 89
Longitude	116.48.8 W	Time - LOC	0532

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.50	33.46	--	--
20	18.02	33.11	--	--
40	15.61	33.03	0.25	0.00
60	14.07	32.99	0.71	0.00
80	12.94	33.12	0.52	0.00
100	11.82	33.31	0.15	0.00
125	10.95	33.23	--	--
150	10.51	33.32	0.02	0.02
200	10.36	33.62	--	--
250	10.21	33.65	--	--
350	9.48	33.67	--	--
500	7.71	33.34	--	--
1000	5.19	33.29	--	--

Station No.	1-003	Date - GMT	1 AUG 89
Station Name	M891-003	Time - GMT	0323
Latitude	24.25.8 N	Date - LOC	31 JUL 89
Longitude	115.48.4 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.84	33.89	--	--
20	22.24	33.83	--	--
40	20.34	33.65	0.08	0.00
60	18.78	33.46	0.15	0.00
80	16.37	33.34	0.15	0.06
100	14.77	33.48	0.25	0.13
125	13.79	33.43	0.15	0.01
150	12.40	33.54	0.03	0.05
200	11.36	33.74	--	--
250	11.06	33.92	--	--
350	9.09	33.47	--	--
500	7.82	33.56	--	--
1000	5.00	33.69	--	--

Station No.	1-004	Date - GMT	2 AUG 89
Station Name	M891-004	Time - GMT	0323
Latitude	20.34.2 N	Date - LOC	1 AUG 89
Longitude	115.59.0 W	Time - LOC	2023

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.05	34.41	--	--
20	24.18	34.37	--	--
40	22.49	33.29	0.09	0.00
60	20.16	33.92	0.17	0.00
80	18.15	33.74	0.15	0.00
100	16.70	33.82	0.24	0.16
125	14.78	33.89	0.12	0.12
150	13.80	33.98	0.05	0.10
200	11.50	33.87	--	--
250	11.48	33.65	--	--
350	10.13	33.61	--	--
500	8.05	33.65	--	--
1000	5.19	33.75	--	--

Station No.	1-005	Date - GMT	2 AUG 89
Station Name	M891-005	Time - GMT	1225
Latitude	19.48.2 N	Date - LOC	2 AUG 89
Longitude	115.38.3 W	Time - LOC	0525

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.59	34.40	--	--
20	26.16	34.44	--	--
40	23.68	34.20	0.10	0.00
60	22.09	34.06	0.14	0.00
80	18.19	33.60	0.24	0.10
100	17.46	33.43	0.34	0.17
125	15.15	33.62	0.11	0.12
150	13.39	33.58	0.05	0.05
200	12.91	34.01	--	--
250	11.85	33.73	--	--
350	10.60	33.55	--	--
500	8.35	33.10	--	--
1000	5.44	33.33	--	--

Station No.	1-006	Date - GMT	3 AUG 89
Station Name	M891-006	Time - GMT	0319
Latitude	18.35.5 N	Date - LOC	2 AUG 89
Longitude	113.40.3 W	Time - LOC	2019

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.26	34.47	0.08	0.00
20	27.32	34.37	0.09	0.00
40	24.34	34.28	0.11	0.00
60	20.30	33.84	0.31	0.00
80	17.09	33.74	0.32	0.16
100	15.29	33.75	0.15	0.14
125	14.75	33.87	0.10	0.18
150	13.86	34.03	0.02	0.05
200	12.73	34.10	--	--
250	11.94	34.06	--	--
350	10.43	33.85	--	--
500	8.69	33.65	--	--
1000	5.51	33.34	--	--

Station No.	1-007	Date - GMT	3 AUG 89
Station Name	M891-007	Time - GMT	1216
Latitude	17.58.0 N	Date - LOC	3 AUG 89
Longitude	112.58.7 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.68	34.48	--	--
20	27.70	34.36	--	--
40	23.15	34.12	--	--
60	20.02	33.95	0.20	0.06
80	16.90	33.89	0.14	0.00
100	15.78	33.88	0.13	0.19
125	14.63	34.03	0.07	0.07
150	13.98	34.08	0.04	0.06
200	12.56	34.08	--	--
250	11.78	33.96	--	--
350	10.72	33.76	--	--
500	8.81	33.59	--	--
1000	5.49	33.16	--	--

Station No.	1-008	Date - GMT	4 AUG 89
Station Name	M891-008	Time - GMT	0312
Latitude	16.42.0 N	Date - LOC	3 AUG 89
Longitude	113.17.3 W	Time - LOC	2012

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.96	34.24	--	--
20	27.44	34.59	0.11	0.00
40	22.70	34.12	0.20	0.00
60	18.83	34.73	0.38	0.09
80	16.13	34.08	0.16	0.00
100	14.64	34.90	0.48	0.02
125	13.86	34.03	0.02	0.01
150	13.31	34.11	0.01	0.03
200	12.32	34.04	--	--
250	11.73	33.26	--	--
350	9.20	33.98	--	--
500	8.42	33.58	--	--
1000	5.50	33.44	--	--

Station No.	1-009	Date - GMT	4 AUG 89
Station Name	M891-009	Time - GMT	1252
Latitude	16. 0.6 N	Date - LOC	4 AUG 89
Longitude	114.12.3 W	Time - LOC	0552

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.41	34.25	0.11	0.00
20	28.78	34.16	0.07	0.00
40	24.72	34.24	0.11	0.00
60	20.97	33.98	0.24	0.03
80	19.34	33.76	--	--
100	15.32	34.16	0.07	0.11
125	13.92	34.20	0.02	0.04
150	13.17	34.07	0.01	0.12
200	12.39	34.07	--	--
250	11.66	33.92	--	--
350	10.48	33.79	--	--
500	7.72	33.67	--	--
1000	5.46	33.56	--	--

Station No.	1-010	Date - GMT	5 AUG 89
Station Name	M891-010	Time - GMT	0316
Latitude	14.38.6 N	Date - LOC	4 AUG 89
Longitude	115.58.4 W	Time - LOC	2016

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.53	34.17	--	--
20	27.46	34.32	--	--
40	26.01	34.20	0.08	0.00
60	23.90	34.20	0.35	0.07
80	20.18	34.03	0.17	0.06
100	16.99	34.00	0.09	0.14
125	14.68	33.97	0.04	0.04
150	13.65	33.94	0.00	0.03
200	12.64	33.89	--	--
250	12.25	33.71	--	--
350	11.99	33.68	--	--
500	8.95	33.34	--	--
1000	5.60	33.29	--	--

Station No.	1-011	Date - GMT	5 AUG 89
Station Name	M891-011	Time - GMT	1225
Latitude	14.15.0 N	Date - LOC	5 AUG 89
Longitude	116.47.4 W	Time - LOC	0525

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.44	33.98	--	--
20	28.61	34.19	--	--
40	27.58	34.21	0.09	0.00
60	26.01	34.22	0.18	0.00
80	23.38	34.11	0.29	0.22
100	19.52	34.05	0.19	0.06
125	14.84	33.72	0.08	0.11
150	14.22	34.10	0.00	0.08
200	12.60	34.10	--	--
250	12.12	33.88	--	--
350	11.38	33.40	--	--
500	9.17	33.39	--	--
1000	5.76	33.40	--	--

Station No.	1-012	Date - GMT	6 AUG 89
Station Name	M891-012	Time - GMT	0313
Latitude	12.48.9 N	Date - LOC	5 AUG 89
Longitude	117.11.3 W	Time - LOC	2013

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.21	33.40	--	--
20	28.08	34.76	0.11	0.00
40	26.14	34.07	--	--
60	22.29	34.16	0.39	0.25
80	19.64	34.14	0.17	0.31
100	15.34	34.20	0.08	0.16
125	13.60	34.08	0.03	0.08
150	13.04	34.19	0.01	0.07
200	12.34	34.03	--	--
250	11.61	33.02	--	--
350	10.57	33.85	--	--
500	9.14	33.74	--	--
1000	5.87	33.42	--	--

Station No.	1-013	Date - GMT	6 AUG 89
Station Name	M891-013	Time - GMT	1216
Latitude	12. 1.9 N	Date - LOC	6 AUG 89
Longitude	116.28.3 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.02	33.52	0.14	0.01
20	28.18	33.52	0.15	0.00
40	25.98	34.04	0.24	0.00
60	21.55	34.16	0.25	0.22
80	18.04	34.30	0.17	0.01
100	15.05	34.24	0.01	0.25
125	13.81	34.26	0.01	0.06
150	13.03	34.02	--	--
200	11.92	34.00	--	--
250	11.60	33.88	--	--
350	10.79	33.86	--	--
500	9.17	33.67	--	--
1000	5.46	33.41	--	--

Station No.	1-014	Date - GMT	7 AUG 89
Station Name	M891-014	Time - GMT	0251
Latitude	10.56.0 N	Date - LOC	6 AUG 89
Longitude	114.42.4 W	Time - LOC	1951

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.75	32.93	0.11	0.00
20	27.59	34.91	0.11	0.00
40	27.73	33.37	0.23	0.00
60	24.51	34.22	0.38	0.33
80	19.01	34.29	0.20	0.18
100	15.72	34.25	0.02	0.42
125	13.85	34.21	0.03	0.08
150	13.13	34.16	--	--
200	12.10	33.99	--	--
250	11.52	34.99	--	--
350	10.72	33.87	--	--
500	9.21	33.58	--	--
1000	5.85	33.47	--	--

Station No.	1-015	Date - GMT	7 AUG 89
Station Name	M891-015	Time - GMT	1216
Latitude	10.20.5 N	Date - LOC	7 AUG 89
Longitude	113.36.2 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.81	33.26	--	--
20	27.76	33.33	0.11	0.00
40	27.78	33.58	0.13	0.00
60	24.73	34.15	0.39	0.24
80	22.25	34.08	0.31	0.26
100	15.25	34.19	0.01	0.31
125	14.15	34.26	0.02	0.16
150	12.79	34.25	0.01	0.00
200	12.24	33.91	--	--
250	11.80	33.93	--	--
350	11.10	33.47	--	--
500	9.36	33.49	--	--
1000	5.62	33.21	--	--

Station No.	1-016	Date - GMT	8 AUG 89
Station Name	M891-016	Time - GMT	0249
Latitude	9.26.0 N	Date - LOC	7 AUG 89
Longitude	111.41.3 W	Time - LOC	1949

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.72	33.43	--	--
20	27.92	33.61	--	--
40	27.80	34.64	--	--
60	22.95	34.23	0.27	0.34
80	18.30	34.12	--	--
100	15.65	34.25	0.04	0.16
125	14.14	34.34	0.02	0.03
150	13.12	34.04	--	--
200	12.24	34.04	--	--
250	11.99	33.95	--	--
350	11.14	33.66	--	--
500	9.37	33.52	--	--
1000	5.61	33.36	--	--

Station No.	1-017	Date - GMT	8 AUG 89
Station Name	M891-017	Time - GMT	1216
Latitude	8.26.5 N	Date - LOC	8 AUG 89
Longitude	111. 0.2 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.30	33.23	0.15	0.00
20	27.39	33.25	--	--
40	27.49	33.47	0.18	0.00
60	26.15	34.15	0.29	0.21
80	23.35	34.20	0.12	0.08
100	18.68	34.23	0.07	0.10
125	14.86	34.19	0.04	0.08
150	13.27	34.32	0.05	0.11
200	12.49	34.18	--	--
250	11.64	34.06	--	--
350	10.86	33.88	--	--
500	8.86	33.65	--	--
1000	5.46	33.28	--	--

Station No.	1-018	Date - GMT	10 AUG 89
Station Name	M891-018	Time - GMT	0303
Latitude	4.35.9 N	Date - LOC	9 AUG 89
Longitude	108.37.1 W	Time - LOC	2003

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.46	34.28	--	--
20	24.50	34.27	0.20	0.00
40	24.42	34.25	0.22	0.00
60	23.01	34.32	0.23	0.03
80	23.15	34.49	--	--
100	22.98	34.54	0.16	0.08
125	22.87	34.42	0.14	0.02
150	16.81	34.29	0.10	0.04
200	12.16	34.01	--	--
250	11.84	33.03	--	--
350	--	--	--	--
500	--	--	--	--
1000	--	--	--	--

Station No.	1-019	Date - GMT	11 AUG 89
Station Name	M891-019	Time - GMT	0247
Latitude	5.32.2 N	Date - LOC	10 AUG 89
Longitude	111.15.4 W	Time - LOC	1947

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.50	34.43	0.22	0.00
20	26.47	34.44	--	--
40	26.43	34.42	--	--
60	26.38	34.44	--	--
80	26.33	34.51	--	--
100	23.57	34.49	--	--
125	15.33	34.41	--	--
150	13.42	34.41	--	--
200	12.12	34.34	--	--
250	11.50	34.29	--	--
350	10.54	34.13	--	--
500	9.54	33.79	--	--
1000	6.02	33.20	--	--

Station No.	1-020	Date - GMT	11 AUG 89
Station Name	M891-020	Time - GMT	1214
Latitude	5.52.4 N	Date - LOC	11 AUG 89
Longitude	112.20.3 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.17	33.68	--	--
20	27.21	33.68	--	--
40	27.21	33.77	--	--
60	26.19	34.46	--	--
80	25.33	34.66	--	--
100	20.35	34.59	--	--
125	16.28	34.42	--	--
150	14.08	34.35	--	--
200	12.62	34.15	--	--
250	11.78	34.12	--	--
350	10.81	34.01	--	--
500	9.32	33.70	--	--
1000	5.67	33.31	--	--

Station No.	1-021	Date - GMT	12 AUG 89
Station Name	M891-021	Time - GMT	0246
Latitude	6.25.7 N	Date - LOC	11 AUG 89
Longitude	114.14.8 W	Time - LOC	1946

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.14	34.20	--	--
20	27.26	34.18	--	--
40	27.20	34.22	--	--
60	27.22	34.22	0.27	0.00
80	25.53	34.70	0.24	0.25
100	21.86	34.64	0.20	0.29
125	16.13	34.28	0.07	0.14
150	13.60	34.24	0.02	0.04
200	12.74	34.05	--	--
250	12.16	33.01	--	--
350	10.97	33.51	--	--
500	9.59	33.32	--	--
1000	6.03	33.37	--	--

Station No.	1-022	Date - GMT	12 AUG 89
Station Name	M891-022	Time - GMT	1212
Latitude	6.46.6 N	Date - LOC	12 AUG 89
Longitude	115. 8.9 W	Time - LOC	0512

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.19	33.82	0.11	0.00
20	27.25	33.76	0.10	0.00
40	27.49	34.09	0.24	0.00
60	27.42	34.40	0.07	0.13
80	24.59	34.54	0.30	0.22
100	17.73	34.28	0.14	0.18
125	15.44	34.10	0.05	0.10
150	13.45	33.94	0.01	0.01
200	12.57	34.17	--	--
250	12.20	34.00	--	--
350	10.97	33.52	--	--
500	8.56	33.54	--	--
1000	5.72	33.12	--	--

Station No.	1-023	Date - GMT	14 AUG 89
Station Name	M891-023	Time - GMT	1214
Latitude	8.41.1 N	Date - LOC	14 AUG 89
Longitude	120.19.0 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.40	33.50	--	--
20	27.50	33.53	0.20	0.00
40	27.55	33.60	--	--
60	26.09	33.82	--	--
80	17.85	33.86	--	--
100	15.55	33.55	0.06	0.15
125	14.24	33.36	0.02	0.03
150	13.43	33.37	--	--
200	12.66	33.43	--	--
250	12.12	33.44	--	--
350	11.22	33.61	--	--
500	9.52	33.55	--	--
1000	6.10	32.85	--	--

Station No.	1-024	Date - GMT	15 AUG 89
Station Name	M891-024	Time - GMT	0316
Latitude	9.50.2 N	Date - LOC	14 AUG 89
Longitude	121.53.2 W	Time - LOC	2016

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.71	33.77	--	--
20	27.75	33.76	--	--
40	27.72	33.99	--	--
60	19.77	34.40	0.24	0.17
80	15.63	34.26	0.15	0.00
100	14.07	34.35	0.10	0.07
125	13.06	34.44	0.06	0.04
150	12.77	34.32	0.18	0.04
200	12.09	33.83	--	--
250	11.72	33.82	--	--
350	11.32	33.45	--	--
500	9.79	33.14	--	--
1000	5.69	32.81	--	--

Station No.	1-025	Date - GMT	15 AUG 89
Station Name	M891-025	Time - GMT	1315
Latitude	10.15.0 N	Date - LOC	15 AUG 89
Longitude	122.56.5 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.61	33.65	--	--
20	27.65	33.64	--	--
40	27.49	33.84	0.20	0.00
60	17.68	34.37	0.20	0.20
80	14.90	34.19	0.16	0.03
100	13.54	34.39	0.04	0.11
125	13.41	34.10	0.06	0.04
150	12.96	33.82	--	--
200	12.23	33.81	--	--
250	12.04	33.84	--	--
350	11.19	33.76	--	--
500	9.50	33.31	--	--
1000	6.66	32.49	--	--

Station No.	1-026	Date - GMT	16 AUG 89
Station Name	M891-026	Time - GMT	0350
Latitude	11.24.3 N	Date - LOC	15 AUG 89
Longitude	124.27.1 W	Time - LOC	1950

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.88	33.32	--	--
20	27.98	33.35	--	--
40	26.80	34.60	0.25	0.00
60	17.48	34.20	0.16	0.11
80	15.09	34.15	0.13	0.11
100	13.57	34.09	0.09	0.08
125	12.92	34.32	0.01	0.05
150	12.52	34.31	--	--
200	11.88	34.13	--	--
250	11.11	34.01	--	--
350	10.08	34.09	--	--
500	8.91	33.36	--	--
1000	6.03	32.66	--	--

Station No.	1-027	Date - GMT	16 AUG 89
Station Name	M891-027	Time - GMT	1302
Latitude	11.40.8 N	Date - LOC	16 AUG 89
Longitude	125.19.6 W	Time - LOC	0502

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.93	33.75	0.16	0.00
20	27.93	33.75	0.15	0.01
40	27.79	33.93	--	--
60	20.00	34.45	0.28	0.12
80	14.46	33.89	0.16	0.04
100	14.12	34.30	0.09	0.07
125	12.78	34.24	0.01	0.04
150	12.36	34.38	--	--
200	11.89	34.18	--	--
250	11.41	33.96	--	--
350	10.65	33.61	--	--
500	9.23	33.27	--	--
1000	5.66	33.30	--	--

Station No.	1-028	Date - GMT	17 AUG 89
Station Name	M891-028	Time - GMT	0343
Latitude	12.45.0 N	Date - LOC	16 AUG 89
Longitude	127.12.1 W	Time - LOC	1943

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.25	33.79	0.11	0.00
20	27.82	33.87	0.14	0.00
40	22.60	34.37	0.28	0.04
60	20.02	34.37	0.21	0.10
80	16.18	34.08	0.17	0.10
100	13.61	34.99	0.07	0.06
125	12.71	34.14	--	--
150	12.98	34.15	0.13	0.00
200	11.30	34.09	--	--
250	10.68	34.16	--	--
350	9.32	34.00	--	--
500	8.28	33.30	--	--
1000	4.92	33.96	--	--

Station No.	1-029	Date - GMT	17 AUG 89
Station Name	M891-029	Time - GMT	1307
Latitude	13.19.4 N	Date - LOC	17 AUG 89
Longitude	128.17.7 W	Time - LOC	0507

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.77	33.89	--	--
20	27.73	33.99	0.15	0.00
40	27.66	34.07	--	--
60	21.62	34.32	0.25	0.09
80	18.28	34.32	0.13	0.12
100	15.54	34.13	0.06	0.09
125	13.46	33.60	--	--
150	13.10	33.79	0.02	0.03
200	12.33	33.79	--	--
250	12.02	33.47	--	--
350	10.41	33.46	--	--
500	8.63	33.29	--	--
1000	5.59	33.30	--	--

Station No.	1-030	Date - GMT	18 AUG 89
Station Name	M891-030	Time - GMT	0406
Latitude	13.49.5 N	Date - LOC	17 AUG 89
Longitude	130.23.4 W	Time - LOC	2006

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.53	33.91	0.11	0.00
20	27.21	33.92	0.11	0.00
40	26.67	34.99	0.22	0.00
60	18.88	34.11	0.25	0.12
80	15.94	34.31	0.14	0.13
100	13.43	34.07	0.06	0.17
125	12.77	34.99	0.03	0.04
150	12.34	34.31	--	--
200	11.98	33.93	--	--
250	11.21	33.72	--	--
350	10.21	33.70	--	--
500	8.55	33.18	--	--
1000	4.71	34.96	--	--

Station No.	1-031	Date - GMT	18 AUG 89
Station Name	M891-031	Time - GMT	1309
Latitude	13.48.2 N	Date - LOC	18 AUG 89
Longitude	131.16.5 W	Time - LOC	0509

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.38	33.81	0.15	0.00
20	27.36	33.81	0.14	0.00
40	26.81	34.18	--	--
60	17.84	34.19	0.24	0.09
80	15.27	33.95	--	--
100	13.57	33.60	0.05	0.03
125	13.07	33.71	--	--
150	12.75	33.76	--	--
200	12.02	33.66	--	--
250	11.43	33.50	--	--
350	10.41	33.42	--	--
500	8.82	33.38	--	--
1000	5.62	33.18	--	--

Station No.	1-032	Date - GMT	19 AUG 89
Station Name	M891-032	Time - GMT	0416
Latitude	12.25.9 N	Date - LOC	18 AUG 89
Longitude	132.50.5 W	Time - LOC	2016

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.66	33.86	0.11	0.00
20	27.68	33.80	0.10	0.00
40	17.44	34.20	0.30	0.12
60	14.58	34.02	0.13	0.00
80	13.80	34.13	0.08	0.16
100	13.06	34.31	0.04	0.10
125	--	--	--	--
150	12.68	34.19	--	--
200	11.73	34.13	--	--
250	11.85	33.96	--	--
350	10.64	33.97	--	--
500	9.16	33.98	--	--
1000	5.61	33.58	--	--

Station No.	1-033	Date - GMT	19 AUG 89
Station Name	M891-033	Time - GMT	1335
Latitude	11.36.7 N	Date - LOC	19 AUG 89
Longitude	133.44.0 W	Time - LOC	0535

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.51	33.84	--	--
20	27.53	33.81	--	--
40	15.75	34.22	--	--
60	13.95	34.16	0.12	0.14
80	13.22	34.29	0.17	0.04
100	12.73	34.35	0.05	0.11
125	12.62	34.22	0.02	0.03
150	12.07	34.34	--	--
200	11.53	34.06	--	--
250	11.39	33.82	--	--
350	10.80	33.74	--	--
500	9.38	33.64	--	--
1000	5.93	32.85	--	--

Station No.	1-034	Date - GMT	20 AUG 89
Station Name	M891-034	Time - GMT	0416
Latitude	9.50.9 N	Date - LOC	19 AUG 89
Longitude	135.23.7 W	Time - LOC	2016

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.60	33.70	--	--
20	27.62	33.67	--	--
40	17.75	34.13	0.26	0.04
60	14.25	34.27	0.24	0.15
80	13.44	34.38	0.08	0.17
100	12.88	34.35	0.02	0.17
125	12.23	34.39	0.02	0.03
150	11.79	34.34	0.01	0.01
200	11.19	34.36	--	--
250	11.25	33.60	--	--
350	10.51	33.70	--	--
500	9.92	33.41	--	--
1000	6.15	33.93	--	--

Station No.	1-035	Date - GMT	20 AUG 89
Station Name	M891-035	Time - GMT	1339
Latitude	9.10.7 N	Date - LOC	20 AUG 89
Longitude	136. 9.0 W	Time - LOC	0539

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.49	--	--	--
20	27.75	33.89	0.12	0.00
40	27.35	34.13	--	--
60	21.21	34.53	0.18	0.01
80	15.95	34.02	0.25	0.17
100	13.71	34.27	0.14	0.09
125	12.66	34.37	--	--
150	11.98	34.19	--	--
200	11.29	34.16	--	--
250	10.75	34.01	--	--
350	10.15	34.02	--	--
500	9.07	33.51	--	--
1000	6.45	32.92	--	--

Station No.	1-036	Date - GMT	21 AUG 89
Station Name	M891-036	Time - GMT	0412
Latitude	9.39.9 N	Date - LOC	20 AUG 89
Longitude	137.46.9 W	Time - LOC	2012

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.69	33.99	--	--
20	27.55	33.99	0.08	0.00
40	24.26	34.46	0.13	0.00
60	19.78	34.33	0.21	0.04
80	15.13	34.02	0.19	0.11
100	13.89	34.21	0.05	0.24
125	12.99	34.36	0.03	0.05
150	12.31	34.27	--	--
200	11.57	34.22	--	--
250	11.23	34.17	--	--
350	10.47	33.94	--	--
500	9.29	33.64	--	--
1000	6.16	33.21	--	--

Station No.	1-037	Date - GMT	21 AUG 89
Station Name	M891-037	Time - GMT	1259
Latitude	10. 4.1 N	Date - LOC	21 AUG 89
Longitude	138.44.3 W	Time - LOC	0459

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.66	34.20	--	--
20	27.75	34.15	--	--
40	26.39	34.31	--	--
60	20.46	34.42	0.15	0.01
80	15.00	34.08	0.21	0.21
100	13.42	34.32	0.03	0.25
125	13.04	33.83	0.02	0.01
150	12.78	33.88	--	--
200	11.98	33.81	--	--
250	11.46	33.86	--	--
350	11.32	33.47	--	--
500	9.56	33.47	--	--
1000	5.68	33.44	--	--

Station No.	1-038	Date - GMT	22 AUG 89
Station Name	M891-038	Time - GMT	0446
Latitude	11.12.8 N	Date - LOC	21 AUG 89
Longitude	140.37.2 W	Time - LOC	1946

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.87	33.79	--	--
20	27.42	33.85	--	--
40	22.85	34.44	0.09	0.00
60	19.94	34.27	0.17	0.00
80	17.12	34.15	0.20	0.07
100	14.16	34.29	0.10	0.15
125	13.44	34.31	0.04	0.21
150	12.76	34.22	0.01	0.00
200	12.02	34.30	--	--
250	11.26	34.27	--	--
350	10.62	33.98	--	--
500	9.65	33.36	--	--
1000	5.52	33.63	--	--

Station No.	1-039	Date - GMT	22 AUG 89
Station Name	M891-039	Time - GMT	1414
Latitude	11.44.0 N	Date - LOC	22 AUG 89
Longitude	141.35.0 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.74	34.22	--	--
20	27.71	34.19	0.12	0.00
40	26.48	34.43	--	--
60	21.15	34.58	0.41	0.21
80	18.47	34.44	0.14	0.14
100	14.61	34.08	--	--
125	12.82	34.17	--	--
150	12.38	33.18	--	--
200	11.80	33.94	--	--
250	11.21	33.70	--	--
350	10.69	33.36	--	--
500	9.53	32.90	--	--
1000	6.15	33.20	--	--

Station No.	1-040	Date - GMT	23 AUG 89
Station Name	M891-040	Time - GMT	0450
Latitude	12.56.3 N	Date - LOC	22 AUG 89
Longitude	143.27.9 W	Time - LOC	1950

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.47	34.32	--	--
20	27.50	34.36	--	--
40	27.23	34.38	0.07	0.00
60	23.62	34.47	0.11	0.00
80	20.61	34.66	0.24	0.10
100	18.25	34.42	0.17	0.19
125	13.81	33.02	0.06	0.03
150	12.60	33.94	--	--
200	10.94	33.81	--	--
250	10.93	34.15	--	--
350	9.39	33.02	--	--
500	8.19	33.23	--	--
1000	4.93	33.54	--	--

Station No.	1-041	Date - GMT	23 AUG 89
Station Name	M891-041	Time - GMT	1414
Latitude	13.31.0 N	Date - LOC	23 AUG 89
Longitude	144.28.9 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.93	34.48	--	--
20	26.98	34.45	--	--
40	26.96	34.43	--	--
60	24.21	34.59	--	--
80	21.68	34.70	--	--
100	20.21	34.66	0.27	0.24
125	18.21	34.47	0.10	0.07
150	14.90	34.09	0.05	0.04
200	11.09	33.94	--	--
250	10.73	34.06	--	--
350	9.46	33.70	--	--
500	8.05	33.41	--	--
1000	5.28	33.28	--	--

Station No.	2-042	Date - GMT	5 SEP 89
Station Name	M892-042	Time - GMT	0448
Latitude	9.27.1 N	Date - LOC	4 SEP 89
Longitude	146.35.1 W	Time - LOC	1948

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.60	33.15	--	--
20	27.88	33.64	--	--
40	27.03	34.44	--	--
60	22.10	34.70	--	--
80	17.25	34.29	--	--
100	14.82	34.11	--	--
125	12.67	34.26	--	--
150	12.19	34.26	--	--
200	11.41	34.14	--	--
250	10.08	34.17	--	--
350	10.48	33.82	--	--
500	9.44	33.60	--	--
1000	5.54	33.25	--	--

Station No.	2-043	Date - GMT	5 SEP 89
Station Name	M892-043	Time - GMT	1424
Latitude	8.47.3 N	Date - LOC	5 SEP 89
Longitude	145.44.6 W	Time - LOC	0524

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.82	33.58	--	--
20	28.19	34.10	--	--
40	27.14	34.45	--	--
60	26.40	34.58	--	--
80	20.99	34.56	--	--
100	15.30	34.07	--	--
125	13.63	34.14	--	--
150	12.40	34.17	--	--
200	11.52	34.27	--	--
250	11.30	33.67	--	--
350	10.98	33.29	--	--
500	9.70	33.24	--	--
1000	6.17	33.87	--	--

Station No.	2-044	Date - GMT	6 SEP 89
Station Name	M892-044	Time - GMT	0446
Latitude	7.20.5 N	Date - LOC	5 SEP 89
Longitude	144.11.3 W	Time - LOC	1946

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.23	34.51	--	--
20	28.30	34.43	--	--
40	28.19	34.47	--	--
60	27.99	34.64	--	--
80	26.42	34.72	--	--
100	22.12	34.72	--	--
125	15.62	34.28	--	--
150	12.62	34.24	--	--
200	11.14	34.21	--	--
250	10.66	34.10	--	--
350	10.58	33.50	--	--
500	9.39	33.67	--	--
1000	5.56	33.87	--	--

Station No.	2-045	Date - GMT	6 SEP 89
Station Name	M892-045	Time - GMT	1411
Latitude	6.54.7 N	Date - LOC	6 SEP 89
Longitude	143.13.8 W	Time - LOC	0511

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.13	34.59	--	--
20	28.21	34.60	--	--
40	28.21	34.59	--	--
60	28.06	34.65	--	--
80	27.02	34.73	--	--
100	25.17	34.84	--	--
125	19.13	34.22	--	--
150	15.35	33.55	--	--
200	12.11	33.76	--	--
250	11.33	33.62	--	--
350	10.70	33.52	--	--
500	9.37	33.39	--	--
1000	5.58	33.69	--	--

Station No.	2-046	Date - GMT	7 SEP 89
Station Name	M892-046	Time - GMT	0451
Latitude	5.48.8 N	Date - LOC	6 SEP 89
Longitude	141. 4.8 W	Time - LOC	1951

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	28.07	34.57	--	--
20	27.81	34.61	--	--
40	27.81	34.62	--	--
60	27.71	34.82	--	--
80	27.17	34.91	--	--
100	25.73	34.89	--	--
125	23.20	34.71	--	--
150	15.56	34.46	--	--
200	12.14	33.60	--	--
250	11.23	34.02	--	--
350	10.81	33.47	--	--
500	9.30	33.46	--	--
1000	5.19	33.88	--	--

Station No.	2-047	Date - GMT	7 SEP 89
Station Name	M892-047	Time - GMT	1349
Latitude	5.21.6 N	Date - LOC	7 SEP 89
Longitude	140.11.0 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.68	34.69	--	--
20	27.69	34.83	--	--
40	27.64	34.85	--	--
60	27.57	34.90	--	--
80	27.56	34.88	--	--
100	26.24	34.80	--	--
125	22.83	34.70	--	--
150	17.19	34.46	--	--
200	11.50	34.12	--	--
250	10.74	34.11	--	--
350	9.79	34.11	--	--
500	8.81	33.07	--	--
1000	5.41	33.78	--	--

Station No.	2-048	Date - GMT	8 SEP 89
Station Name	M892-048	Time - GMT	0417
Latitude	4.59.8 N	Date - LOC	7 SEP 89
Longitude	138. 5.0 W	Time - LOC	1917

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.75	34.52	--	--
20	26.58	34.88	--	--
40	26.50	34.85	--	--
60	26.30	34.91	--	--
80	25.55	34.97	--	--
100	25.02	34.90	--	--
125	24.47	34.90	--	--
150	23.61	34.87	--	--
200	12.71	34.30	--	--
250	11.26	33.30	--	--
350	10.48	33.87	--	--
500	9.33	33.78	--	--
1000	5.08	33.94	--	--

Station No.	2-049	Date - GMT	8 SEP 89
Station Name	M892-049	Time - GMT	1347
Latitude	4.58.0 N	Date - LOC	8 SEP 89
Longitude	137. 6.1 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.07	34.60	--	--
20	27.04	34.83	--	--
40	26.42	34.85	--	--
60	25.69	34.93	--	--
80	25.28	34.95	--	--
100	25.00	34.84	--	--
125	24.85	34.94	--	--
150	22.54	34.51	--	--
200	12.95	33.79	--	--
250	11.58	33.71	--	--
350	10.53	33.76	--	--
500	9.11	33.89	--	--
1000	5.32	33.52	--	--

Station No.	2-050	Date - GMT	10 SEP 89
Station Name	M892-050	Time - GMT	0345
Latitude	5.18.5 N	Date - LOC	9 SEP 89
Longitude	131.44.0 W	Time - LOC	1945

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.39	34.78	--	--
20	27.44	34.75	--	--
40	27.37	34.77	--	--
60	27.36	34.74	--	--
80	27.24	34.77	--	--
100	23.79	34.68	--	--
125	17.81	34.37	--	--
150	12.91	34.37	--	--
200	11.81	33.93	--	--
250	11.08	33.80	--	--
350	10.20	33.74	--	--
500	8.66	33.74	--	--
1000	5.08	33.74	--	--

Station No.	2-051	Date - GMT	10 SEP 89
Station Name	M892-051	Time - GMT	1314
Latitude	5.56.4 N	Date - LOC	10 SEP 89
Longitude	130.55.2 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.29	34.77	--	--
20	27.34	34.75	--	--
40	27.36	34.73	--	--
60	27.33	34.79	--	--
80	27.08	34.82	--	--
100	25.73	34.75	--	--
125	16.57	34.49	--	--
150	13.85	34.45	--	--
200	11.24	34.26	--	--
250	10.93	34.23	--	--
350	9.94	34.07	--	--
500	8.62	33.92	--	--
1000	5.61	33.40	--	--

Station No.	2-052	Date - GMT	11 SEP 89
Station Name	M892-052	Time - GMT	0348
Latitude	7.34.3 N	Date - LOC	10 SEP 89
Longitude	129.14.6 W	Time - LOC	1948

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.47	33.26	--	--
20	27.51	34.42	--	--
40	27.43	34.42	--	--
60	27.51	34.74	--	--
80	27.15	34.73	--	--
100	23.53	33.83	--	--
125	15.24	34.36	--	--
150	12.96	34.41	--	--
200	11.92	34.37	--	--
250	11.26	34.30	--	--
350	10.56	34.17	--	--
500	9.28	34.10	--	--
1000	5.21	33.87	--	--

Station No.	2-053	Date - GMT	12 SEP 89
Station Name	M892-053	Time - GMT	1244
Latitude	5.31.5 N	Date - LOC	12 SEP 89
Longitude	125.43.7 W	Time - LOC	0444

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.54	34.70	--	--
20	25.47	34.78	--	--
40	24.47	34.67	--	--
60	23.84	34.71	--	--
80	22.80	34.71	--	--
100	22.26	34.74	--	--
125	20.73	34.62	--	--
150	18.89	34.60	--	--
200	13.87	34.36	--	--
250	12.15	34.30	--	--
350	11.05	33.97	--	--
500	9.62	33.64	--	--
1000	5.46	33.81	--	--

Station No.	2-054	Date - GMT	13 SEP 89
Station Name	M892-054	Time - GMT	0313
Latitude	4.53.7 N	Date - LOC	12 SEP 89
Longitude	123.48.3 W	Time - LOC	1913

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.75	34.56	--	--
20	24.80	34.51	--	--
40	24.82	34.52	--	--
60	24.79	34.50	--	--
80	24.04	34.50	--	--
100	23.07	34.61	--	--
125	22.87	34.59	--	--
150	21.83	34.58	--	--
200	14.55	34.60	--	--
250	13.60	34.45	--	--
350	11.88	34.08	--	--
500	9.67	33.70	--	--
1000	5.49	33.67	--	--

Station No.	2-055	Date - GMT	13 SEP 89
Station Name	M892-055	Time - GMT	1246
Latitude	4.35.3 N	Date - LOC	13 SEP 89
Longitude	122.53.3 W	Time - LOC	0446

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.72	34.57	--	--
20	24.80	34.50	--	--
40	24.86	34.53	--	--
60	24.82	34.52	--	--
80	24.81	34.53	--	--
100	23.77	34.57	--	--
125	23.65	34.68	--	--
150	22.46	34.65	--	--
200	15.76	34.32	--	--
250	13.06	34.34	--	--
350	11.53	33.90	--	--
500	9.60	33.64	--	--
1000	5.66	33.77	--	--

Station No.	2-056	Date - GMT	14 SEP 89
Station Name	M892-056	Time - GMT	0314
Latitude	4. 2.0 N	Date - LOC	13 SEP 89
Longitude	120. 5.1 W	Time - LOC	1914

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.06	34.53	--	--
20	26.05	34.68	--	--
40	25.82	34.64	--	--
60	24.23	34.56	--	--
80	23.69	34.76	--	--
100	23.08	34.86	--	--
125	21.31	34.66	--	--
150	16.09	34.41	--	--
200	11.42	34.26	--	--
250	11.03	34.26	--	--
350	10.18	34.09	--	--
500	8.37	34.04	--	--
1000	5.32	33.80	--	--

Station No.	2-057	Date - GMT	14 SEP 89
Station Name	M892-057	Time - GMT	1247
Latitude	3.57.4 N	Date - LOC	14 SEP 89
Longitude	119.59.8 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.77	34.38	--	--
20	26.79	34.50	--	--
40	26.79	34.57	--	--
60	26.36	34.56	--	--
80	23.36	34.70	--	--
100	19.76	34.60	--	--
125	14.46	34.25	--	--
150	12.76	34.13	--	--
200	11.80	33.34	--	--
250	11.25	34.13	--	--
350	10.44	33.91	--	--
500	8.88	33.49	--	--
1000	5.36	33.39	--	--

Station No.	2-058	Date - GMT	15 SEP 89
Station Name	M892-058	Time - GMT	0317
Latitude	3.23.7 N	Date - LOC	14 SEP 89
Longitude	117.57.7 W	Time - LOC	1917

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.62	34.63	--	--
20	25.62	34.63	--	--
40	25.61	34.63	--	--
60	25.40	34.63	--	--
80	23.38	34.68	--	--
100	19.64	34.48	--	--
125	14.69	34.11	--	--
150	12.97	34.02	--	--
200	12.15	34.14	--	--
250	11.73	34.10	--	--
350	10.62	33.67	--	--
500	8.23	33.80	--	--
1000	5.10	33.79	--	--

Station No.	2-059	Date - GMT	15 SEP 89
Station Name	M892-059	Time - GMT	1213
Latitude	3.12.6 N	Date - LOC	15 SEP 89
Longitude	117. 8.0 W	Time - LOC	0513

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.92	34.20	--	--
20	25.96	34.31	--	--
40	25.88	34.35	--	--
60	25.64	34.41	--	--
80	22.49	34.37	--	--
100	16.01	34.41	--	--
125	14.61	34.33	--	--
150	14.22	34.24	--	--
200	13.20	34.29	--	--
250	12.66	33.88	--	--
350	10.88	33.86	--	--
500	8.63	33.46	--	--
1000	5.63	33.27	--	--

Station No.	2-060	Date - GMT	16 SEP 89
Station Name	M892-060	Time - GMT	0243
Latitude	2.40.5 N	Date - LOC	15 SEP 89
Longitude	115.22.3 W	Time - LOC	1943

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.46	34.30	--	--
20	25.51	34.37	--	--
40	24.64	34.46	--	--
60	24.03	34.52	--	--
80	19.13	34.49	--	--
100	15.66	34.57	--	--
125	14.52	34.55	--	--
150	14.47	34.33	--	--
200	13.88	34.36	--	--
250	13.31	34.23	--	--
350	11.57	34.29	--	--
500	8.53	34.04	--	--
1000	5.18	33.81	--	--

Station No.	2-061	Date - GMT	16 SEP 89
Station Name	M892-061	Time - GMT	1217
Latitude	2.37.2 N	Date - LOC	16 SEP 89
Longitude	114.17.6 W	Time - LOC	0517

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.49	34.52	--	--
20	24.63	34.54	--	--
40	23.79	34.54	--	--
60	22.37	34.71	--	--
80	21.19	34.54	--	--
100	15.29	34.62	--	--
125	14.65	34.68	--	--
150	14.14	34.51	--	--
200	13.72	34.29	--	--
250	13.04	34.13	--	--
350	11.47	34.00	--	--
500	9.67	33.56	--	--
1000	5.90	33.23	--	--

Station No.	2-062	Date - GMT	17 SEP 89
Station Name	M892-062	Time - GMT	0229
Latitude	2.27.0 N	Date - LOC	16 SEP 89
Longitude	112.33.7 W	Time - LOC	1929

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.88	34.23	--	--
20	23.52	34.37	--	--
40	21.61	34.66	--	--
60	21.80	34.66	--	--
80	21.51	34.75	--	--
100	14.91	34.58	--	--
125	14.50	34.32	--	--
150	13.68	34.53	--	--
200	13.31	34.55	--	--
250	12.59	34.35	--	--
350	11.11	34.32	--	--
500	9.08	34.01	--	--
1000	5.29	33.79	--	--

Station No.	2-063	Date - GMT	17 SEP 89
Station Name	M892-063	Time - GMT	1144
Latitude	2.29.7 N	Date - LOC	17 SEP 89
Longitude	111.33.8 W	Time - LOC	0444

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.01	34.18	--	--
20	25.07	34.23	--	--
40	24.06	34.34	--	--
60	21.88	34.53	--	--
80	21.88	34.62	--	--
100	15.44	34.60	--	--
125	14.27	34.33	--	--
150	13.98	34.39	--	--
200	13.60	34.25	--	--
250	12.86	34.31	--	--
350	11.30	33.80	--	--
500	9.06	33.71	--	--
1000	5.57	33.41	--	--

Station No.	2-064	Date - GMT	18 SEP 89
Station Name	M892-064	Time - GMT	0215
Latitude	2.14.4 N	Date - LOC	17 SEP 89
Longitude	109.50.9 W	Time - LOC	1915

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.17	34.31	--	--
20	25.27	34.23	--	--
40	25.05	34.27	--	--
60	22.59	34.43	--	--
80	20.13	34.67	--	--
100	14.87	34.35	--	--
125	14.33	34.32	--	--
150	14.01	34.27	--	--
200	13.22	34.17	--	--
250	12.42	34.15	--	--
350	11.17	33.75	--	--
500	9.09	33.43	--	--
1000	5.80	33.24	--	--

Station No.	2-065	Date - GMT	18 SEP 89
Station Name	M892-065	Time - GMT	1144
Latitude	2.17.7 N	Date - LOC	18 SEP 89
Longitude	108.47.7 W	Time - LOC	0444

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.14	34.25	--	--
20	25.26	34.25	--	--
40	25.24	34.27	--	--
60	22.59	34.49	--	--
80	16.34	34.52	--	--
100	14.70	34.55	--	--
125	14.09	34.40	--	--
150	13.73	34.39	--	--
200	13.34	34.23	--	--
250	12.62	34.23	--	--
350	11.13	34.20	--	--
500	9.13	33.70	--	--
1000	5.35	33.34	--	--

Station No.	2-066	Date - GMT	19 SEP 89
Station Name	M892-066	Time - GMT	0213
Latitude	2.27.1 N	Date - LOC	18 SEP 89
Longitude	106.56.2 W	Time - LOC	1913

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.36	34.18	--	--
20	25.33	34.21	--	--
40	25.30	34.19	--	--
60	22.04	34.54	--	--
80	16.06	34.64	--	--
100	14.36	34.63	--	--
125	13.68	34.56	--	--
150	13.30	34.48	--	--
200	13.31	34.27	--	--
250	13.07	34.19	--	--
350	11.46	33.72	--	--
500	9.10	33.45	--	--
1000	5.17	33.79	--	--

Station No.	2-067	Date - GMT	19 SEP 89
Station Name	M892-067	Time - GMT	1114
Latitude	22.28.0 N	Date - LOC	19 SEP 89
Longitude	105.41.3 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.36	34.03	--	--
20	25.51	34.14	--	--
40	25.54	34.15	--	--
60	23.30	34.32	--	--
80	15.93	34.47	--	--
100	14.93	34.31	--	--
125	14.48	34.35	--	--
150	13.83	34.13	--	--
200	13.67	34.02	--	--
250	12.77	34.04	--	--
350	11.74	33.62	--	--
500	8.85	33.53	--	--
1000	5.89	33.19	--	--

Station No.	2-068	Date - GMT	20 SEP 89
Station Name	M892-068	Time - GMT	0143
Latitude	2.35.0 N	Date - LOC	19 SEP 89
Longitude	103.39.7 W	Time - LOC	1943

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.26	34.21	--	--
20	25.29	--	--	--
40	23.50	--	--	--
60	21.81	--	--	--
80	15.05	--	--	--
100	13.90	--	--	--
125	13.60	--	--	--
150	13.89	--	--	--
200	13.62	--	--	--
250	13.15	--	--	--
350	11.53	--	--	--
500	9.32	--	--	--
1000	5.19	--	--	--

Station No.	2-069	Date - GMT	20 SEP 89
Station Name	M892-069	Time - GMT	1113
Latitude	2.34.6 N	Date - LOC	20 SEP 89
Longitude	102.45.6 W	Time - LOC	0513

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.46	34.17	--	--
20	25.52	34.15	--	--
40	25.48	34.19	--	--
60	20.78	34.65	--	--
80	14.51	34.55	--	--
100	14.09	34.54	--	--
125	13.81	34.44	--	--
150	13.72	34.55	--	--
200	13.70	34.57	--	--
250	13.17	34.40	--	--
350	11.85	33.94	--	--
500	9.20	33.66	--	--
1000	5.38	33.68	--	--

Station No.	2-070	Date - GMT	21 SEP 89
Station Name	M892-070	Time - GMT	0141
Latitude	2.31.5 N	Date - LOC	20 SEP 89
Longitude	100.57.2 W	Time - LOC	1941

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.85	34.06	--	--
20	25.88	34.25	--	--
40	25.92	34.22	--	--
60	17.05	34.60	--	--
80	14.91	34.54	--	--
100	14.46	34.47	--	--
125	14.00	34.57	--	--
150	13.85	34.52	--	--
200	13.69	34.22	--	--
250	13.63	34.20	--	--
350	12.24	34.06	--	--
500	8.98	33.57	--	--
1000	5.24	33.71	--	--

Station No.	2-071	Date - GMT	21 SEP 89
Station Name	M892-071	Time - GMT	1114
Latitude	2.22.5 N	Date - LOC	21 SEP 89
Longitude	100. 4.4 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.58	33.86	--	--
20	25.62	34.18	--	--
40	25.64	34.17	--	--
60	17.05	34.60	--	--
80	15.97	34.63	--	--
100	14.84	34.60	--	--
125	14.29	34.62	--	--
150	14.00	34.60	--	--
200	13.55	34.66	--	--
250	13.39	34.45	--	--
350	11.50	34.13	--	--
500	8.69	33.66	--	--
1000	5.43	33.67	--	--

Station No.	2-072	Date - GMT	22 SEP 89
Station Name	M892-072	Time - GMT	0142
Latitude	2. 3.0 N	Date - LOC	21 SEP 89
Longitude	98.11.4 W	Time - LOC	1942

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.54	33.95	--	--
20	25.58	33.96	--	--
40	25.61	33.95	--	--
60	15.47	33.44	--	--
80	14.78	34.22	--	--
100	14.89	34.35	--	--
125	14.44	34.19	--	--
150	14.32	34.07	--	--
200	13.71	34.13	--	--
250	12.71	34.05	--	--
350	10.91	33.96	--	--
500	9.52	32.99	--	--
1000	5.14	33.89	--	--

Station No.	2-073	Date - GMT	22 SEP 89
Station Name	M892-073	Time - GMT	1114
Latitude	1.29.6 N	Date - LOC	22 SEP 89
Longitude	97. 7.5 W	Time - LOC	0514

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.05	33.67	--	--
20	25.06	33.80	--	--
40	25.06	34.77	--	--
60	14.70	34.64	--	--
80	14.48	34.43	--	--
100	14.51	34.54	--	--
125	14.39	34.28	--	--
150	14.39	34.22	--	--
200	14.10	34.16	--	--
250	13.32	34.12	--	--
350	11.52	33.13	--	--
500	9.25	33.82	--	--
1000	5.47	33.38	--	--

Station No.	2-074	Date - GMT	23 SEP 89
Station Name	M892-074	Time - GMT	0232
Latitude	0.41.0 N	Date - LOC	22 SEP 89
Longitude	95.19.6 W	Time - LOC	2032

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.61	33.86	--	--
20	24.60	33.84	--	--
40	16.27	34.67	--	--
60	14.49	34.58	--	--
80	14.27	34.59	--	--
100	14.00	34.63	--	--
125	14.01	34.57	--	--
150	13.81	34.50	--	--
200	13.65	34.56	--	--
250	13.43	34.57	--	--
350	11.93	34.08	--	--
500	9.52	33.56	--	--
1000	5.78	33.23	--	--

Station No.	2-075	Date - GMT	23 SEP 89
Station Name	M892-075	Time - GMT	1104
Latitude	0.14.8 N	Date - LOC	23 SEP 89
Longitude	94.28.5 W	Time - LOC	0504

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.52	33.87	--	--
20	20.13	34.47	--	--
40	15.26	34.64	--	--
60	14.06	34.54	--	--
80	14.02	34.58	--	--
100	13.94	34.65	--	--
125	14.00	34.56	--	--
150	13.79	34.61	--	--
200	13.81	34.31	--	--
250	13.33	33.78	--	--
350	11.28	33.83	--	--
500	9.56	33.25	--	--
1000	5.52	33.61	--	--

Station No.	2-076	Date - GMT	24 SEP 89
Station Name	M892-076	Time - GMT	0117
Latitude	0.25.3 S	Date - LOC	23 SEP 89
Longitude	92.55.8 W	Time - LOC	1917

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.23	34.50	--	--
20	18.96	--	--	--
40	15.85	--	--	--
60	14.86	--	--	--
80	14.50	--	--	--
100	14.13	--	--	--
125	14.00	--	--	--
150	13.87	--	--	--
200	13.77	--	--	--
250	13.56	--	--	--
350	11.44	--	--	--
500	8.80	--	--	--
1000	5.33	--	--	--

Station No.	2-077	Date - GMT	24 SEP 89
Station Name	M892-077	Time - GMT	1112
Latitude	1. 3.2 S	Date - LOC	24 SEP 89
Longitude	91.39.6 W	Time - LOC	0512

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	18.23	34.68	--	--
20	16.60	34.66	--	--
40	15.45	34.50	--	--
60	15.49	34.61	--	--
80	14.61	34.50	--	--
100	14.76	34.40	--	--
125	14.66	34.29	--	--
150	14.55	34.48	--	--
200	14.42	34.39	--	--
250	13.73	34.20	--	--
350	11.09	34.11	--	--
500	8.74	33.77	--	--
1000	5.56	33.60	--	--

Station No.	2-078	Date - GMT	27 SEP 89
Station Name	M892-078	Time - GMT	0111
Latitude	3. 5.9 S	Date - LOC	26 SEP 89
Longitude	87.50.3 W	Time - LOC	1911

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.85	34.99	--	--
20	20.01	34.85	--	--
40	19.48	34.87	--	--
60	15.34	34.69	--	--
80	14.79	34.73	--	--
100	14.31	34.62	--	--
125	14.10	34.58	--	--
150	13.87	34.48	--	--
200	13.30	34.47	--	--
250	12.91	34.52	--	--
350	11.20	34.20	--	--
500	8.72	33.26	--	--
1000	5.49	33.81	--	--

Station No.	2-079	Date - GMT	27 SEP 89
Station Name	M892-079	Time - GMT	1015
Latitude	3.47.2 S	Date - LOC	27 SEP 89
Longitude	87.21.7 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.80	35.08	--	--
20	19.94	34.89	--	--
40	19.83	34.96	--	--
60	16.09	34.73	--	--
80	14.50	34.66	--	--
100	14.21	34.56	--	--
125	14.06	34.60	--	--
150	13.97	34.55	--	--
200	13.68	34.50	--	--
250	12.99	34.47	--	--
350	11.02	34.35	--	--
500	8.54	33.93	--	--
1000	5.42	33.71	--	--

Station No.	2-080	Date - GMT	28 SEP 89
Station Name	M892-080	Time - GMT	0043
Latitude	5.36.7 S	Date - LOC	27 SEP 89
Longitude	86.10.1 W	Time - LOC	1943

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.09	35.10	--	--
20	19.22	34.93	--	--
40	15.69	34.71	--	--
60	14.43	34.62	--	--
80	14.27	34.62	--	--
100	14.13	34.57	--	--
125	13.84	34.53	--	--
150	13.57	34.55	--	--
200	13.67	34.07	--	--
250	12.86	34.21	--	--
350	11.16	33.79	--	--
500	8.92	33.38	--	--
1000	5.07	33.60	--	--

Station No.	2-081	Date - GMT	28 SEP 89
Station Name	M892-081	Time - GMT	1017
Latitude	5.20.9 S	Date - LOC	28 SEP 89
Longitude	85.27.2 W	Time - LOC	0517

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.32	34.84	--	--
20	19.26	34.91	--	--
40	16.92	34.78	--	--
60	15.03	34.70	--	--
80	14.56	34.67	--	--
100	14.62	34.42	--	--
125	14.79	34.36	--	--
150	14.07	34.27	--	--
200	13.72	34.14	--	--
250	12.70	33.96	--	--
350	11.02	33.63	--	--
500	9.09	33.46	--	--
1000	5.26	33.74	--	--

Station No.	2-082	Date - GMT	29 SEP 89
Station Name	M892-082	Time - GMT	0044
Latitude	4. 8.4 S	Date - LOC	28 SEP 89
Longitude	83.40.6 W	Time - LOC	1944

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	18.62	35.04	--	--
20	18.73	34.90	--	--
40	18.62	34.75	--	--
60	14.92	34.68	--	--
80	14.73	34.66	--	--
100	14.50	34.64	--	--
125	14.77	34.30	--	--
150	14.37	34.38	--	--
200	14.01	34.20	--	--
250	13.42	34.16	--	--
350	11.34	34.04	--	--
500	9.31	33.61	--	--
1000	5.14	33.95	--	--

Station No.	2-083	Date - GMT	29 SEP 89
Station Name	M892-083	Time - GMT	1013
Latitude	3.25.9 S	Date - LOC	29 SEP 89
Longitude	82.49.3 W	Time - LOC	0513

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.05	34.60	--	--
20	18.89	34.65	--	--
40	17.72	34.76	--	--
60	15.14	34.57	--	--
80	14.84	34.61	--	--
100	14.55	34.64	--	--
125	14.14	34.60	--	--
150	13.99	34.55	--	--
200	13.49	34.43	--	--
250	12.46	34.40	--	--
350	11.00	33.82	--	--
500	9.08	33.42	--	--
1000	5.69	33.18	--	--

Station No.	2-084	Date - GMT	30 SEP 89
Station Name	M892-084	Time - GMT	0018
Latitude	2. 3.2 S	Date - LOC	29 SEP 89
Longitude	81.35.1 W	Time - LOC	1918

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.08	33.56	--	--
20	22.92	33.59	--	--
40	17.04	34.72	--	--
60	15.41	34.69	--	--
80	14.79	34.66	--	--
100	14.47	34.57	--	--
125	14.34	34.58	--	--
150	13.97	34.46	--	--
200	13.60	34.46	--	--
250	13.11	34.34	--	--
350	11.04	33.86	--	--
500	9.47	33.42	--	--
1000	5.83	33.28	--	--

Station No.	3-085	Date - GMT	6 OCT 89
Station Name	M893-085	Time - GMT	1011
Latitude	2.35.6 S	Date - LOC	6 OCT 89
Longitude	82.25.5 W	Time - LOC	0511

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.34	33.47	--	--
20	22.37	33.59	0.63	0.00
40	18.30	34.62	0.51	0.09
60	16.83	34.74	0.38	0.06
80	14.99	34.65	0.08	0.04
100	14.44	34.63	0.01	0.03
125	14.25	34.62	0.02	0.02
150	14.09	34.47	--	--
200	13.78	34.52	--	--
250	13.16	34.48	--	--
350	10.89	34.13	--	--
500	9.00	33.52	--	--
1000	5.22	33.69	--	--

Station No.	3-086	Date - GMT	7 OCT 89
Station Name	M893-086	Time - GMT	0048
Latitude	3. 1.2 S	Date - LOC	6 OCT 89
Longitude	84.25.0 W	Time - LOC	1948

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.38	34.82	1.23	0.00
20	19.66	34.47	--	--
40	19.49	34.55	0.77	0.00
60	19.03	34.62	0.46	0.00
80	15.86	34.42	0.11	0.01
100	15.38	34.15	0.06	0.07
125	15.30	34.40	0.05	0.02
150	15.00	33.96	0.01	0.04
200	14.42	34.07	--	--
250	13.56	33.96	--	--
350	11.45	33.83	--	--
500	9.70	33.63	--	--
1000	5.49	33.69	--	--

Station No.	3-087	Date - GMT	7 OCT 89
Station Name	M893-087	Time - GMT	1025
Latitude	2.57.7 S	Date - LOC	7 OCT 89
Longitude	85.37.9 W	Time - LOC	0525

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.26	34.53	0.84	0.00
20	18.33	34.71	0.34	0.07
40	18.37	34.72	0.36	0.09
60	18.11	34.79	--	--
80	15.09	34.65	0.15	0.12
100	14.62	34.58	0.05	0.08
125	14.02	34.45	0.05	0.05
150	13.90	34.56	0.01	0.04
200	13.67	34.52	--	--
250	12.67	34.39	--	--
350	11.53	33.91	--	--
500	9.49	33.62	--	--
1000	5.69	33.31	--	--

Station No.	3-088	Date - GMT	8 OCT 89
Station Name	M893-088	Time - GMT	0044
Latitude	2.56.7 S	Date - LOC	7 OCT 89
Longitude	87.58.9 W	Time - LOC	1944

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.15	34.66	0.28	0.03
20	20.22	34.54	0.49	0.01
40	18.79	34.63	0.45	0.06
60	15.97	34.67	0.34	0.14
80	15.14	34.71	0.25	0.15
100	14.56	34.55	0.11	0.10
125	14.40	34.43	0.04	0.05
150	14.36	34.33	0.02	0.05
200	14.16	34.04	--	--
250	13.34	34.12	--	--
350	12.03	33.96	--	--
500	9.43	33.68	--	--
1000	5.46	33.64	--	--

Station No.	3-089	Date - GMT	8 OCT 89
Station Name	M893-089	Time - GMT	1016
Latitude	2.57.6 S	Date - LOC	8 OCT 89
Longitude	88.57.8 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.30	34.66	0.63	0.00
20	20.28	34.53	--	--
40	18.46	34.71	0.43	0.12
60	15.90	34.75	0.43	0.14
80	15.24	34.68	0.27	0.14
100	14.98	34.62	0.11	0.15
125	14.55	34.54	0.11	0.04
150	14.01	34.57	--	--
200	14.31	34.05	--	--
250	13.78	34.00	--	--
350	11.51	33.84	--	--
500	9.11	33.41	--	--
1000	5.30	33.75	--	--

Station No.	3-090	Date - GMT	8 OCT 89
Station Name	M893-090	Time - GMT	0046
Latitude	2.49.6 S	Date - LOC	8 OCT 89
Longitude	91.22.3 W	Time - LOC	1946

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.49	34.48	0.41	0.01
20	20.22	34.14	0.41	0.02
40	15.76	34.22	0.37	0.04
60	14.82	34.34	0.18	0.12
80	15.06	34.07	0.08	0.07
100	14.72	34.28	0.06	0.05
125	14.63	34.21	0.04	0.05
150	14.75	33.95	0.01	0.04
200	14.12	34.19	--	--
250	13.32	34.18	--	--
350	11.48	33.64	--	--
500	9.47	33.46	--	--
1000	5.63	33.48	--	--

Station No.	3-091	Date - GMT	9 OCT 89
Station Name	M893-091	Time - GMT	1015
Latitude	2.46.7 S	Date - LOC	9 OCT 89
Longitude	92.35.2 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.70	34.72	0.53	0.00
20	19.82	34.61	0.48	0.00
40	17.09	34.72	0.37	0.21
60	14.73	34.67	0.29	0.19
80	14.62	34.64	0.15	0.14
100	14.48	34.65	0.10	0.08
125	14.20	34.59	0.04	0.03
150	14.11	34.60	0.02	0.03
200	14.11	34.25	--	--
250	13.42	34.15	--	--
350	11.67	33.85	--	--
500	8.97	33.90	--	--
1000	5.42	33.73	--	--

Station No.	3-092	Date - GMT	10 OCT 89
Station Name	M893-092	Time - GMT	0112
Latitude	2.30.1 S	Date - LOC	9 OCT 89
Longitude	95. 2.4 W	Time - LOC	2012

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.01	34.65	--	--
20	19.76	34.58	0.42	0.03
40	16.59	34.55	0.28	0.15
60	14.53	34.43	0.10	0.19
80	14.32	34.31	0.09	0.09
100	13.85	34.52	0.03	0.03
125	13.68	34.56	0.05	0.03
150	13.63	34.50	0.01	0.03
200	13.30	34.54	--	--
250	13.26	34.23	--	--
350	11.57	34.18	--	--
500	9.22	34.00	--	--
1000	5.44	33.34	--	--

Station No.	3-093	Date - GMT	10 OCT 89
Station Name	M893-093	Time - GMT	1115
Latitude	2.38.5 S	Date - LOC	10 OCT 89
Longitude	96.29.0 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.05	34.79	--	--
20	19.49	34.67	1.04	0.00
40	18.38	34.69	0.54	0.00
60	14.69	34.60	0.34	0.10
80	14.01	34.49	0.16	0.04
100	13.87	34.53	0.05	0.07
125	14.12	34.10	--	--
150	13.72	34.33	0.01	0.02
200	13.65	33.96	--	--
250	13.25	34.00	--	--
350	12.32	33.92	--	--
500	9.66	33.52	--	--
1000	5.47	33.61	--	--

Station No.	3-094	Date - GMT	11 OCT 89
Station Name	M893-094	Time - GMT	0146
Latitude	2.26.3 S	Date - LOC	10 OCT 89
Longitude	98.27.7 W	Time - LOC	1946

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.02	34.89	0.19	0.07
20	21.01	34.70	0.25	0.03
40	19.64	34.76	0.32	0.25
60	14.77	34.63	0.28	0.32
80	14.30	34.36	0.13	0.20
100	13.66	34.46	0.08	0.06
125	13.56	34.55	--	--
150	13.50	34.53	0.01	0.01
200	13.48	34.49	--	--
250	13.12	34.46	--	--
350	11.63	33.95	--	--
500	9.56	33.82	--	--
1000	5.56	33.57	--	--

Station No.	3-095	Date - GMT	11 OCT 89
Station Name	M893-095	Time - GMT	1118
Latitude	2.30.3 S	Date - LOC	11 OCT 89
Longitude	99.36.7 W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.83	--	--	--
20	20.91	34.74	0.23	0.13
40	20.60	34.79	--	--
60	19.36	34.52	0.27	0.20
80	14.31	34.44	0.22	0.29
100	14.00	34.34	0.09	0.27
125	13.68	34.54	0.08	0.09
150	13.55	34.54	0.03	0.10
200	13.60	34.46	--	--
250	13.30	34.40	--	--
350	12.02	33.53	--	--
500	9.21	33.13	--	--
1000	5.17	33.93	--	--

Station No.	3-096	Date - GMT	12 OCT 89
Station Name	M893-096	Time - GMT	0144
Latitude	2.18.0 S	Date - LOC	11 OCT 89
Longitude	101.58.8 W	Time - LOC	1944

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.29	34.87	0.24	0.09
20	21.34	34.79	0.23	0.08
40	19.61	34.81	0.34	0.12
60	14.96	34.68	0.25	0.18
80	14.05	34.60	0.18	0.23
100	13.85	34.53	0.14	0.19
125	13.63	34.55	0.05	0.05
150	13.31	34.50	0.02	0.03
200	13.35	34.22	--	--
250	13.47	34.22	--	--
350	11.56	34.30	--	--
500	9.33	33.89	--	--
1000	5.27	33.28	--	--

Station No.	3-097	Date - GMT	12 OCT 89
Station Name	M893-097	Time - GMT	1118
Latitude	2.25.0 S	Date - LOC	12 OCT 89
Longitude	103. 1.5 W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.42	34.85	0.42	0.00
20	21.38	34.76	0.21	0.05
40	17.04	34.56	0.30	0.24
60	15.74	34.40	0.44	0.01
80	13.76	34.44	0.18	0.15
100	13.54	34.48	0.05	0.02
125	13.39	34.43	--	--
150	13.38	34.46	0.01	0.01
200	13.21	34.40	--	--
250	13.12	34.28	--	--
350	11.57	34.01	--	--
500	9.73	33.55	--	--
1000	5.44	33.80	--	--

Station No.	3-098	Date - GMT	13 OCT 89
Station Name	M893-098	Time - GMT	0220
Latitude	2. 5.3 S	Date - LOC	12 OCT 89
Longitude	105.17.9 W	Time - LOC	2020

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.07	34.90	0.37	0.00
20	22.06	34.81	0.23	0.04
40	21.29	34.55	0.31	0.11
60	15.50	34.53	0.33	0.09
80	14.52	34.59	0.30	0.14
100	13.62	34.52	0.16	0.12
125	13.51	34.48	0.06	0.05
150	13.44	34.52	0.02	0.05
200	13.14	34.44	--	--
250	12.89	34.44	--	--
350	11.61	34.28	--	--
500	8.86	34.00	--	--
1000	5.22	33.70	--	--

Station No.	3-099	Date - GMT	13 OCT 89
Station Name	M893-099	Time - GMT	1116
Latitude	2.11.3 S	Date - LOC	13 OCT 89
Longitude	106.19.3 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.99	34.82	0.25	0.00
20	22.09	34.72	0.33	0.00
40	21.97	34.75	0.29	0.00
60	15.81	34.49	0.25	0.12
80	14.20	34.32	0.25	0.12
100	13.86	34.45	0.19	0.15
125	13.68	34.30	0.07	0.01
150	13.50	34.39	--	--
200	13.35	34.56	--	--
250	13.18	34.15	--	--
350	12.45	33.85	--	--
500	9.02	33.58	--	--
1000	5.42	33.16	--	--

Station No.	3-100	Date - GMT	14 OCT 89
Station Name	M893-100	Time - GMT	0206
Latitude	1.52.4 S	Date - LOC	13 OCT 89
Longitude	108.45.3 W	Time - LOC	2006

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.15	34.94	0.33	0.00
20	22.31	34.63	0.23	0.03
40	22.25	34.58	0.27	0.09
60	17.00	34.85	0.58	0.00
80	15.32	34.66	0.14	0.20
100	14.74	34.31	0.17	0.25
125	13.95	34.02	0.09	0.08
150	13.53	34.03	0.06	0.02
200	13.28	33.93	--	--
250	13.25	33.78	--	--
350	12.87	33.78	--	--
500	9.16	33.36	--	--
1000	5.62	33.07	--	--

Station No.	3-101	Date - GMT	14 OCT 89
Station Name	M893-101	Time - GMT	1219
Latitude	2. 0.2 S	Date - LOC	14 OCT 89
Longitude	109.44.2 W	Time - LOC	0519

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.43	34.81	0.23	0.02
20	22.40	34.82	0.32	0.00
40	22.56	34.62	0.29	0.05
60	17.23	34.69	0.61	0.08
80	15.00	34.64	0.25	0.20
100	14.50	34.16	0.22	0.18
125	13.92	34.11	--	--
150	13.24	34.22	0.01	0.02
200	13.47	33.94	--	--
250	13.01	33.96	--	--
350	12.53	33.74	--	--
500	9.06	33.71	--	--
1000	5.20	33.53	--	--

Station No.	3-102	Date - GMT	15 OCT 89
Station Name	M893-102	Time - GMT	0244
Latitude	1.49.9 S	Date - LOC	14 OCT 89
Longitude	111.42.5 W	Time - LOC	1944

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.88	35.00	0.21	0.00
20	23.06	34.81	0.22	0.02
40	22.88	34.73	0.35	0.00
60	16.98	34.37	0.31	0.32
80	14.81	34.68	0.25	0.28
100	14.70	34.45	0.15	0.28
125	13.74	34.43	--	--
150	13.30	34.16	0.02	0.03
200	13.33	34.20	--	--
250	12.74	34.18	--	--
350	11.42	34.07	--	--
500	8.57	33.58	--	--
1000	5.75	33.52	--	--

Station No.	3-103	Date - GMT	15 OCT 89
Station Name	M893-103	Time - GMT	1218
Latitude	2. 1.0 S	Date - LOC	15 OCT 89
Longitude	112.48.2 W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.79	34.97	0.22	0.00
20	22.85	34.96	0.32	0.00
40	22.86	34.97	0.23	0.04
60	18.50	34.94	0.34	0.14
80	14.78	34.69	0.57	0.00
100	13.85	34.52	0.02	0.23
125	13.62	34.23	0.05	0.05
150	13.57	34.17	0.02	0.03
200	13.41	34.03	--	--
250	13.25	33.98	--	--
350	11.91	33.90	--	--
500	9.66	33.20	--	--
1000	5.43	33.72	--	--

Station No.	3-104	Date - GMT	16 OCT 89
Station Name	M893-104	Time - GMT	0245
Latitude	1.58.4 S	Date - LOC	15 OCT 89
Longitude	114.57.3 W	Time - LOC	1945

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.39	35.11	0.19	0.02
20	23.42	35.03	0.28	0.00
40	23.22	35.04	0.34	0.03
60	22.98	34.85	0.29	0.21
80	14.99	34.26	0.26	0.33
100	13.70	34.53	0.15	0.05
125	13.34	34.43	0.10	0.00
150	13.14	34.39	0.01	0.01
200	12.86	34.46	--	--
250	12.96	34.35	--	--
350	11.10	34.29	--	--
500	8.48	33.53	--	--
1000	5.23	33.81	--	--

Station No.	3-105	Date - GMT	16 OCT 89
Station Name	M893-105	Time - GMT	1222
Latitude	2. 4.9 S	Date - LOC	16 OCT 89
Longitude	115.57.5 W	Time - LOC	0522

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.76	35.00	0.15	0.06
20	23.82	35.04	0.20	0.03
40	23.79	34.99	0.23	0.01
60	23.30	34.80	0.23	0.05
80	19.38	34.79	0.43	0.02
100	14.78	34.69	0.24	0.28
125	13.74	34.21	0.10	0.15
150	13.59	34.29	0.01	0.24
200	13.04	34.45	--	--
250	12.58	34.39	--	--
350	11.34	33.81	--	--
500	9.03	33.39	--	--
1000	5.48	33.57	--	--

Station No.	3-106	Date - GMT	17 OCT 89
Station Name	M893-106	Time - GMT	0251
Latitude	1.56.1 S	Date - LOC	16 OCT 89
Longitude	118.22.1 W	Time - LOC	1951

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.50	35.20	0.10	0.07
20	24.51	35.14	0.14	0.04
40	24.45	35.15	0.15	0.06
60	23.37	35.02	0.25	0.21
80	16.95	34.64	0.20	0.20
100	14.00	34.52	0.14	0.29
125	13.30	34.55	--	--
150	13.08	34.53	0.03	0.02
200	12.63	34.43	--	--
250	12.65	34.23	--	--
350	11.38	34.07	--	--
500	8.64	33.71	--	--
1000	5.19	33.72	--	--

Station No.	3-107	Date - GMT	17 OCT 89
Station Name	M893-107	Time - GMT	1218
Latitude	2. 3.6 S	Date - LOC	17 OCT 89
Longitude	119.18.1 W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.53	35.24	--	--
20	24.60	35.17	--	--
40	24.51	35.21	0.14	0.02
60	24.48	35.16	--	--
80	22.78	35.01	0.08	0.07
100	14.14	34.58	0.12	0.23
125	13.51	34.45	0.05	0.10
150	13.26	34.52	0.04	0.01
200	12.96	34.39	--	--
250	12.91	34.15	--	--
350	11.78	33.78	--	--
500	8.84	33.68	--	--
1000	5.15	33.68	--	--

Station No.	3-108	Date - GMT	18 OCT 89
Station Name	M893-108	Time - GMT	0304
Latitude	1.49.9 S	Date - LOC	17 OCT 89
Longitude	121.28.9 W	Time - LOC	2004

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.22	35.11	0.18	0.02
20	24.23	35.02	0.23	0.00
40	24.18	35.05	--	--
60	23.62	35.01	0.23	0.05
80	19.70	34.69	0.20	0.20
100	14.43	34.56	0.14	0.16
125	13.34	34.54	0.08	0.10
150	13.04	34.29	0.01	0.03
200	12.92	34.38	--	--
250	12.93	34.03	--	--
350	11.67	34.09	--	--
500	9.29	33.42	--	--
1000	5.26	33.44	--	--

Station No.	3-109	Date - GMT	18 OCT 89
Station Name	M893-109	Time - GMT	1227
Latitude	2.32.5 S	Date - LOC	18 OCT 89
Longitude	122. 6.8 W	Time - LOC	0527

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.03	34.99	0.22	0.00
20	24.29	34.84	--	--
40	24.33	34.72	0.20	0.01
60	23.93	34.81	0.26	0.07
80	23.24	34.82	0.29	0.08
100	16.90	34.41	0.17	0.21
125	14.27	34.16	0.22	0.03
150	13.72	34.11	0.04	0.07
200	13.33	33.90	--	--
250	13.30	33.88	--	--
350	12.24	33.47	--	--
500	10.12	33.32	--	--
1000	5.66	33.02	--	--

Station No.	3-110	Date - GMT	19 OCT 89
Station Name	M893-110	Time - GMT	0258
Latitude	2.59.2 S	Date - LOC	18 OCT 89
Longitude	120.13.9 W	Time - LOC	1958

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.70	35.24	0.11	0.04
20	24.78	35.12	0.16	0.02
40	24.80	35.04	0.20	0.04
60	24.73	35.11	0.20	0.05
80	20.87	34.87	0.27	0.30
100	15.42	34.43	0.14	0.32
125	14.14	34.13	--	--
150	13.89	34.19	0.02	0.03
200	13.28	34.12	--	--
250	12.99	34.02	--	--
350	11.62	33.86	--	--
500	9.08	33.40	--	--
1000	5.69	33.25	--	--

Station No.	3-111	Date - GMT	19 OCT 89
Station Name	M893-111	Time - GMT	1220
Latitude	3. 4.4 S	Date - LOC	19 OCT 89
Longitude	119.30.6 W	Time - LOC	0520

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.03	34.90	0.14	0.03
20	24.27	34.73	0.19	0.00
40	24.29	34.71	0.17	0.02
60	24.00	34.99	--	--
80	19.18	34.60	--	--
100	15.26	34.17	--	--
125	14.42	34.09	--	--
150	14.15	33.93	--	--
200	13.51	33.88	--	--
250	13.04	33.83	--	--
350	11.81	33.63	--	--
500	9.50	33.03	--	--
1000	5.76	33.11	--	--

Station No.	3-112	Date - GMT	20 OCT 89
Station Name	M893-112	Time - GMT	0247
Latitude	3.31.5 S	Date - LOC	19 OCT 89
Longitude	117.40.8 W	Time - LOC	1947

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.83	35.08	0.13	0.05
20	24.07	34.86	0.18	0.22
40	23.89	34.91	0.09	0.15
60	23.91	34.80	0.02	0.04
80	18.73	34.76	0.04	0.07
100	14.56	34.19	0.01	0.02
125	14.28	34.16	0.04	0.02
150	14.06	34.09	0.00	0.02
200	13.51	33.98	--	--
250	13.31	34.00	--	--
350	11.28	33.61	--	--
500	9.16	33.00	--	--
1000	6.10	33.21	--	--

Station No.	3-113	Date - GMT	20 OCT 89
Station Name	M893-113	Time - GMT	1217
Latitude	3.36.9 S	Date - LOC	20 OCT 89
Longitude	117. 2.5 W	Time - LOC	0517

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.14	35.07	0.20	0.04
20	--	--	--	--
40	--	--	0.23	0.00
60	--	--	0.22	0.13
80	16.76	34.16	--	--
100	15.28	34.04	0.25	0.13
125	14.27	34.15	--	--
150	14.11	33.90	0.04	0.07
200	13.98	33.96	--	--
250	13.25	33.94	--	--
350	12.20	33.67	--	--
500	9.29	33.30	--	--
1000	6.26	33.16	--	--

Station No.	3-114	Date - GMT	21 OCT 89
Station Name	M893-114	Time - GMT	0244
Latitude	3.57.5 S	Date - LOC	20 OCT 89
Longitude	115.18.1 W	Time - LOC	1944

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.03	35.14	--	--
20	24.22	34.89	0.15	0.01
40	23.60	34.85	0.22	0.03
60	20.13	34.66	0.32	0.21
80	15.23	34.23	0.19	0.31
100	14.24	34.06	0.14	0.20
125	13.96	33.91	--	--
150	13.83	33.94	0.02	0.02
200	13.63	33.75	--	--
250	13.39	33.76	--	--
350	12.28	33.64	--	--
500	9.49	33.12	--	--
1000	6.25	32.91	--	--

Station No.	3-115	Date - GMT	21 OCT 89
Station Name	M893-115	Time - GMT	1220
Latitude	4. 9.2 S	Date - LOC	21 OCT 89
Longitude	114.30.1 W	Time - LOC	0520

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.02	35.01	0.14	0.00
20	24.14	34.87	0.18	0.00
40	24.13	34.90	0.01	0.16
60	24.25	34.97	0.01	0.18
80	19.80	34.70	0.52	0.00
100	15.17	34.24	0.31	0.15
125	14.11	34.10	0.24	0.05
150	13.97	34.09	0.04	0.05
200	13.56	33.96	--	--
250	13.38	33.98	--	--
350	12.48	33.92	--	--
500	9.55	33.52	--	--
1000	5.97	33.04	--	--

Station No.	3-116	Date - GMT	22 OCT 89
Station Name	M893-116	Time - GMT	0244
Latitude	4.31.2 S	Date - LOC	21 OCT 89
Longitude	112.30.1 W	Time - LOC	1944

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.77	35.07	--	--
20	23.90	34.86	0.15	0.00
40	23.86	34.90	0.16	0.01
60	23.57	35.07	0.18	0.07
80	19.11	34.92	0.21	0.20
100	15.38	34.34	0.24	0.26
125	14.28	34.16	0.06	0.12
150	13.83	34.11	0.01	0.03
200	13.55	34.05	--	--
250	13.17	33.98	--	--
350	11.87	33.85	--	--
500	9.29	33.37	--	--
1000	5.98	33.19	--	--

Station No.	3-117	Date - GMT	22 OCT 89
Station Name	M893-117	Time - GMT	1145
Latitude	4.44.8 S	Date - LOC	22 OCT 89
Longitude	111.25.3 W	Time - LOC	0445

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.19	34.86	0.23	0.00
20	23.23	34.68	0.17	0.09
40	23.36	34.72	0.21	0.04
60	23.43	34.86	0.19	0.01
80	22.15	34.84	0.26	0.05
100	17.34	34.64	0.17	0.28
125	14.38	34.24	0.12	0.14
150	14.00	34.06	0.07	0.07
200	13.43	34.04	--	--
250	13.05	33.90	--	--
350	11.65	33.64	--	--
500	9.66	33.58	--	--
1000	5.98	32.92	--	--

Station No.	3-118	Date - GMT	22 OCT 89
Station Name	M893-118	Time - GMT	2238
Latitude	4.58.6 S	Date - LOC	22 OCT 89
Longitude	109.59.1 W	Time - LOC	1538

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.92	35.24	0.14	0.03
20	24.04	34.94	0.18	0.03
40	24.01	34.97	0.23	0.03
60	23.75	34.96	0.31	0.13
80	17.56	34.46	0.24	0.26
100	15.34	34.22	0.20	0.29
125	14.25	34.16	0.08	0.17
150	13.88	34.10	0.03	0.04
200	13.45	34.01	--	--
250	13.13	33.87	--	--
350	12.06	33.73	--	--
500	9.72	33.33	--	--
1000	5.87	32.90	--	--

Station No.	3-119	Date - GMT	23 OCT 89
Station Name	M893-119	Time - GMT	1147
Latitude	5. 7.6 S	Date - LOC	23 OCT 89
Longitude	108.30.4 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.22	35.01	0.14	0.06
20	23.48	34.86	0.14	0.08
40	23.48	34.77	0.19	0.04
60	23.49	34.87	0.19	0.11
80	19.46	34.85	0.26	0.24
100	16.21	34.36	0.20	0.12
125	14.45	34.13	0.07	0.06
150	13.51	33.95	0.02	0.02
200	13.23	33.76	--	--
250	12.87	33.56	--	--
350	11.67	33.36	--	--
500	9.91	33.24	--	--
1000	5.77	33.15	--	--

Station No.	3-120	Date - GMT	24 OCT 89
Station Name	M893-120	Time - GMT	0215
Latitude	5.19.8 S	Date - LOC	23 OCT 89
Longitude	106.25.9 W	Time - LOC	1915

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.22	35.11	0.33	0.00
20	23.43	34.97	0.15	0.14
40	23.53	34.96	0.16	0.13
60	23.49	34.89	0.23	0.11
80	23.37	34.84	0.29	0.09
100	19.49	34.82	0.21	0.31
125	16.15	34.26	0.20	0.07
150	14.55	34.00	0.03	0.03
200	13.29	33.77	--	--
250	12.63	33.60	--	--
350	11.48	33.55	--	--
500	9.57	33.09	--	--
1000	6.07	32.89	--	--

Station No.	3-121	Date - GMT	24 OCT 89
Station Name	M893-121	Time - GMT	1119
Latitude	5.27.0 S	Date - LOC	24 OCT 89
Longitude	105.34.6 W	Time - LOC	0519

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.23	35.10	0.29	0.00
20	23.31	35.00	0.18	0.04
40	23.47	35.01	--	--
60	23.39	35.02	0.21	0.02
80	20.35	34.81	0.35	0.11
100	17.57	34.56	0.30	0.00
125	14.76	34.21	0.05	0.08
150	14.04	34.13	0.05	0.00
200	12.71	33.93	--	--
250	12.45	33.80	--	--
350	11.08	33.56	--	--
500	9.06	33.22	--	--
1000	5.76	33.16	--	--

Station No.	3-122	Date - GMT	25 OCT 89
Station Name	M893-122	Time - GMT	0152
Latitude	5.38.8 S	Date - LOC	24 OCT 89
Longitude	103.38.7 W	Time - LOC	1952

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.18	34.92	0.10	0.05
20	22.40	34.60	0.12	0.04
40	22.10	34.57	0.19	0.01
60	19.20	34.68	0.22	0.16
80	16.55	34.45	0.15	0.32
100	14.88	34.17	0.34	0.00
125	13.79	34.00	0.02	0.03
150	13.42	34.20	0.01	0.01
200	13.14	34.03	--	--
250	12.83	33.90	--	--
350	11.72	33.72	--	--
500	9.67	33.27	--	--
1000	6.05	33.31	--	--

Station No.	3-123	Date - GMT	25 OCT 89
Station Name	M893-123	Time - GMT	1115
Latitude	5.45.1 S	Date - LOC	25 OCT 89
Longitude	102.23.4 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.48	34.92	0.28	0.02
20	22.75	34.93	0.38	0.00
40	22.76	34.87	0.24	0.03
60	22.66	34.86	0.28	0.03
80	17.66	34.62	0.22	0.16
100	14.70	34.36	0.12	0.21
125	13.92	34.36	0.11	0.01
150	13.24	34.31	0.03	0.00
200	13.14	34.11	--	--
250	12.79	34.20	--	--
350	11.92	34.06	--	--
500	9.50	33.71	--	--
1000	5.44	33.48	--	--

Station No.	3-124	Date - GMT	26 OCT 89
Station Name	M893-124	Time - GMT	0146
Latitude	5.59.6 S	Date - LOC	25 OCT 89
Longitude	100.15.5 W	Time - LOC	1946

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.77	35.10	0.07	0.13
20	22.90	34.91	0.21	0.02
40	22.89	34.98	0.10	0.21
60	22.88	34.93	0.20	0.08
80	20.80	34.94	0.28	0.25
100	15.76	34.39	0.13	0.25
125	14.05	34.30	0.03	0.06
150	13.22	34.19	0.01	0.03
200	12.32	34.17	--	--
250	12.23	33.82	--	--
350	10.74	33.95	--	--
500	8.97	33.30	--	--
1000	5.85	33.15	--	--

Station No.	3-125	Date - GMT	26 OCT 89
Station Name	M893-125	Time - GMT	1116
Latitude	6. 8.9 S	Date - LOC	26 OCT 89
Longitude	98.55.9 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.05	34.97	0.25	0.00
20	22.23	34.87	0.18	0.02
40	22.19	34.88	0.20	0.01
60	22.15	34.86	0.33	0.00
80	20.85	34.60	0.30	0.08
100	16.86	34.73	0.27	0.16
125	14.49	34.45	0.08	0.10
150	13.45	34.39	0.06	0.03
200	12.92	34.13	--	--
250	12.53	34.10	--	--
350	11.41	33.93	--	--
500	9.06	33.52	--	--
1000	5.49	33.35	--	--

Station No.	3-126	Date - GMT	27 OCT 89
Station Name	M893-126	Time - GMT	0145
Latitude	5.19.5 S	Date - LOC	26 OCT 89
Longitude	96.58.4 W	Time - LOC	1945

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.05	35.09	0.12	0.08
20	22.21	34.97	0.16	0.06
40	22.17	34.99	0.28	0.00
60	19.33	34.68	0.22	0.19
80	16.02	34.51	0.17	0.23
100	15.18	34.50	0.16	0.26
125	14.36	34.42	0.05	0.13
150	14.06	34.42	0.02	0.05
200	13.51	34.21	--	--
250	13.16	34.22	--	--
350	11.77	34.01	--	--
500	9.28	33.61	--	--
1000	5.64	33.25	--	--

Station No.	3-127	Date - GMT	27 OCT 89
Station Name	M893-127	Time - GMT	1047
Latitude	4.46.7 S	Date - LOC	27 OCT 89
Longitude	95.48.3 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.72	34.43	0.24	0.00
20	21.75	34.42	0.22	0.00
40	21.70	34.48	0.21	0.00
60	20.82	34.79	0.27	0.14
80	15.93	34.48	0.31	0.23
100	14.95	34.26	0.18	0.05
125	14.36	34.24	0.11	0.03
150	14.14	34.21	--	--
200	13.69	33.98	--	--
250	13.49	34.05	--	--
350	12.08	33.56	--	--
500	9.38	33.16	--	--
1000	5.78	33.06	--	--

Station No.	3-128	Date - GMT	28 OCT 89
Station Name	M893-128	Time - GMT	0113
Latitude	3.47.2 S	Date - LOC	27 OCT 89
Longitude	93.57.8 W	Time - LOC	1913

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.53	34.29	0.12	0.02
20	21.38	34.19	0.15	0.02
40	18.82	34.60	0.32	0.00
60	15.53	34.56	0.22	0.23
80	14.86	34.46	0.20	0.22
100	14.62	34.28	0.15	0.17
125	14.28	34.39	0.04	0.05
150	13.77	34.18	0.02	0.03
200	13.89	34.24	--	--
250	13.46	34.33	--	--
350	12.02	34.02	--	--
500	9.48	33.70	--	--
1000	5.47	33.24	--	--

Station No.	3-129	Date - GMT	28 OCT 89
Station Name	M893-129	Time - GMT	1047
Latitude	3.18.0 S	Date - LOC	28 OCT 89
Longitude	92.45.7 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.40	34.29	--	--
20	21.48	34.23	0.24	0.00
40	19.06	34.47	0.46	0.00
60	15.61	34.33	0.25	0.19
80	15.14	34.30	0.15	0.20
100	14.93	34.35	0.18	0.02
125	14.65	34.15	0.11	0.03
150	14.47	34.21	--	--
200	14.03	34.12	--	--
250	13.78	34.11	--	--
350	11.58	33.86	--	--
500	9.77	33.56	--	--
1000	5.55	33.46	--	--

Station No.	3-130	Date - GMT	29 OCT 89
Station Name	M893-130	Time - GMT	0115
Latitude	2.15.5 S	Date - LOC	28 OCT 89
Longitude	90.55.7 W	Time - LOC	1915

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.85	34.45	0.24	0.02
20	20.75	34.32	0.36	0.00
40	16.88	34.53	0.27	0.08
60	14.66	34.32	0.08	0.04
80	14.44	34.25	0.07	0.06
100	14.32	34.24	0.04	0.04
125	14.01	34.38	0.05	0.08
150	14.14	34.32	0.01	0.03
200	14.05	34.28	--	--
250	13.90	34.27	--	--
350	10.98	34.92	--	--
500	9.18	33.71	--	--
1000	5.90	33.26	--	--

Station No.	3-131	Date - GMT	29 OCT 89
Station Name	M893-131	Time - GMT	1047
Latitude	1.51.3 S	Date - LOC	29 OCT 89
Longitude	90. 4.9 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.31	34.49	0.41	0.00
20	19.35	34.36	0.63	0.00
40	15.46	34.39	0.59	0.00
60	15.08	34.48	0.10	0.00
80	14.82	34.40	0.06	0.07
100	14.35	34.40	0.04	0.03
125	14.49	34.11	0.06	0.01
150	14.68	34.00	0.05	0.01
200	14.34	34.02	--	--
250	13.34	34.28	--	--
350	11.26	33.91	--	--
500	9.54	33.54	--	--
1000	5.76	33.39	--	--

Station No.	3-132	Date - GMT	30 OCT 89
Station Name	M893-132	Time - GMT	0115
Latitude	1. 1.3 S	Date - LOC	29 OCT 89
Longitude	88.27.0 W	Time - LOC	1915

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.68	34.20	0.39	0.00
20	18.50	34.44	0.54	0.03
40	16.77	34.56	0.65	0.40
60	15.26	34.41	0.05	0.10
80	15.05	34.42	0.07	0.08
100	14.98	34.48	0.07	0.07
125	14.90	34.38	--	--
150	14.71	34.36	0.06	0.03
200	14.14	34.13	--	--
250	12.76	33.72	--	--
350	11.23	33.88	--	--
500	9.48	33.68	--	--
1000	5.91	33.22	--	--

Station No.	3-133	Date - GMT	30 OCT 89
Station Name	M893-133	Time - GMT	1047
Latitude	0.10.0 S	Date - LOC	30 OCT 89
Longitude	88. 2.9 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.45	33.31	0.30	0.00
20	23.60	33.31	0.31	0.00
40	17.23	34.37	0.40	0.13
60	15.80	34.41	0.23	0.18
80	15.31	34.38	0.21	0.22
100	15.10	34.41	0.26	0.02
125	15.20	34.48	0.16	0.04
150	15.05	34.38	0.04	0.03
200	13.95	34.39	--	--
250	12.41	33.99	--	--
350	11.17	33.92	--	--
500	9.32	33.62	--	--
1000	5.78	33.41	--	--

Station No.	3-134	Date - GMT	31 OCT 89
Station Name	M893-134	Time - GMT	0117
Latitude	2. 4.3 N	Date - LOC	30 OCT 89
Longitude	87.32.6 W	Time - LOC	1917

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.89	33.52	0.40	0.00
20	26.04	33.48	0.24	0.12
40	25.94	33.37	0.23	0.13
60	15.92	34.42	0.29	0.35
80	15.60	34.30	0.18	0.26
100	15.56	34.30	0.12	0.27
125	15.36	34.41	0.12	0.17
150	14.89	34.38	0.04	0.12
200	14.44	34.19	--	--
250	13.62	34.13	--	--
350	11.57	33.75	--	--
500	8.97	33.63	--	--
1000	5.83	33.36	--	--

Station No.	3-135	Date - GMT	31 OCT 89
Station Name	M893-135	Time - GMT	1048
Latitude	2.58.5 N	Date - LOC	31 OCT 89
Longitude	87.24.3 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.24	33.39	--	--
20	26.36	33.27	0.19	0.00
40	24.11	33.66	--	--
60	18.37	34.26	0.11	0.37
80	16.94	34.33	--	--
100	15.63	34.20	0.08	0.18
125	14.83	34.18	0.01	0.04
150	14.40	34.10	--	--
200	14.22	34.10	--	--
250	13.42	34.08	--	--
350	11.07	33.75	--	--
500	8.73	33.44	--	--
1000	5.87	33.20	--	--

Station No.	3-136	Date - GMT	1 NOV 89
Station Name	M893-136	Time - GMT	0032
Latitude	5. 3.0 N	Date - LOC	31 OCT 89
Longitude	87. 6.2 W	Time - LOC	1832

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.86	32.90	0.31	0.00
20	26.91	33.17	0.20	0.03
40	23.18	33.96	0.29	0.16
60	18.26	34.48	0.14	0.12
80	16.66	34.43	0.12	0.11
100	15.43	34.24	0.05	0.11
125	14.82	34.27	0.03	0.05
150	14.49	34.33	0.02	0.05
200	13.82	34.19	--	--
250	13.26	34.15	--	--
350	11.79	34.01	--	--
500	8.60	33.93	--	--
1000	--	--	--	--

Station No.	3-137	Date - GMT	2 NOV 89
Station Name	M893-137	Time - GMT	0118
Latitude	6.27.7 N	Date - LOC	1 NOV 89
Longitude	86.34.6 W	Time - LOC	1918

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.21	33.09	0.25	0.03
20	27.33	33.08	0.24	0.04
40	23.53	33.83	0.31	0.17
60	17.06	34.26	0.24	0.31
80	15.27	34.31	0.09	0.11
100	14.97	34.34	0.04	0.04
125	14.53	34.30	0.00	0.03
150	14.28	34.24	0.00	0.02
200	13.57	34.22	--	--
250	13.04	34.02	--	--
350	11.35	33.81	--	--
500	8.82	33.56	--	--
1000	5.72	33.31	--	--

Station No.	3-138	Date - GMT	2 NOV 89
Station Name	M893-138	Time - GMT	1050
Latitude	7.11.2 N	Date - LOC	2 NOV 89
Longitude	86. 8.2 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.46	32.80	0.27	0.13
20	27.61	32.97	0.27	0.11
40	24.46	33.82	0.07	0.42
60	18.04	34.24	0.13	0.15
80	16.38	34.26	0.13	0.16
100	15.48	34.24	0.04	0.12
125	14.90	34.17	0.02	0.04
150	14.47	34.04	0.01	0.02
200	13.91	34.03	--	--
250	13.27	33.85	--	--
350	11.55	33.67	--	--
500	9.22	33.56	--	--
1000	5.96	33.17	--	--

Station No.	3-139	Date - GMT	3 NOV 89
Station Name	M893-139	Time - GMT	0025
Latitude	8.57.6 N	Date - LOC	2 NOV 89
Longitude	85.13.8 W	Time - LOC	1825

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.85	32.92	0.33	0.01
20	27.98	32.92	0.23	0.13
40	21.47	34.06	0.35	0.36
60	16.96	34.28	0.07	0.14
80	15.53	34.29	--	--
100	14.93	34.32	0.03	0.14
125	14.63	34.13	0.03	0.06
150	14.16	34.18	0.01	0.06
200	13.46	34.16	--	--
250	12.92	34.11	--	--
350	11.45	33.78	--	--
500	9.15	33.56	--	--
1000	5.82	33.45	--	--

Station No.	4-140	Date - GMT	9 NOV 89
Station Name	M894-140	Time - GMT	1050
Latitude	9.22.2 N	Date - LOC	9 NOV 89
Longitude	86.10.3 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.79	32.84	0.38	0.05
20	24.90	34.64	0.42	0.00
40	18.39	34.43	--	--
60	17.09	34.37	0.40	0.00
80	15.55	34.41	0.16	0.16
100	14.97	34.38	0.04	0.04
125	14.51	34.38	0.01	0.03
150	14.03	34.34	0.01	0.03
200	13.29	34.11	--	--
250	12.61	34.00	--	--
350	11.12	33.67	--	--
500	9.16	33.57	--	--
1000	5.71	33.31	--	--

Station No.	4-141	Date - GMT	10 NOV 89
Station Name	M894-141	Time - GMT	0050
Latitude	9. 7.3 N	Date - LOC	9 NOV 89
Longitude	87.58.6 W	Time - LOC	1850

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.70	32.94	0.39	0.00
20	19.53	34.29	0.46	0.41
40	16.62	34.27	0.30	0.21
60	15.74	34.34	0.07	0.10
80	15.01	34.28	0.08	0.10
100	14.43	34.42	0.02	0.03
125	14.24	34.38	0.02	0.04
150	13.88	34.40	0.07	0.00
200	13.34	34.31	--	--
250	12.92	34.19	--	--
350	11.82	34.09	--	--
500	9.35	33.88	--	--
1000	5.51	33.58	--	--

Station No.	4-142	Date - GMT	10 NOV 89
Station Name	M894-142	Time - GMT	1047
Latitude	8.59.2 N	Date - LOC	10 NOV 89
Longitude	89. 6.0 W	Time - LOC	0447

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.78	32.63	0.43	0.00
20	22.68	34.13	0.29	0.06
40	17.73	34.33	0.33	0.15
60	16.16	34.39	0.13	0.12
80	15.32	34.38	0.14	0.10
100	14.78	34.36	0.05	0.07
125	14.55	34.35	0.01	0.04
150	14.31	34.23	0.01	0.03
200	13.60	34.15	--	--
250	12.95	34.17	--	--
350	10.98	33.94	--	--
500	9.06	33.73	--	--
1000	5.63	33.38	--	--

Station No.	4-143	Date - GMT	11 NOV 89
Station Name	M894-143	Time - GMT	0054
Latitude	7.21.1 N	Date - LOC	10 NOV 89
Longitude	90.18.3 W	Time - LOC	1854

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.15	33.15	0.42	0.06
20	21.87	34.22	0.48	0.14
40	16.35	34.29	0.16	0.20
60	14.34	34.14	0.06	0.07
80	13.82	34.20	0.05	0.09
100	13.61	34.30	0.05	0.01
125	13.28	34.24	--	--
150	13.26	34.13	--	--
200	12.72	34.09	--	--
250	12.42	34.02	--	--
350	11.03	33.95	--	--
500	8.77	33.65	--	--
1000	5.43	33.55	--	--

Station No.	4-144	Date - GMT	11 NOV 89
Station Name	M894-144	Time - GMT	1049
Latitude	6.42.6 N	Date - LOC	11 NOV 89
Longitude	90.42.1 W	Time - LOC	0449

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.97	33.06	0.25	0.15
20	26.57	33.02	0.35	0.04
40	19.12	34.14	0.31	0.23
60	15.52	34.10	0.11	0.15
80	14.45	34.00	0.11	0.18
100	13.54	34.01	0.06	0.04
125	13.24	33.91	0.02	0.02
150	13.07	33.97	0.01	0.03
200	12.52	34.05	--	--
250	12.14	34.00	--	--
350	11.02	33.90	--	--
500	8.81	33.71	--	--
1000	5.76	33.52	--	--

Station No.	4-145	Date - GMT	12 NOV 89
Station Name	M894-145	Time - GMT	0106
Latitude	5. 9.4 N	Date - LOC	11 NOV 89
Longitude	91.54.2 W	Time - LOC	1906

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.67	33.28	0.34	0.00
20	26.80	34.17	0.24	0.03
40	23.55	34.12	0.33	0.19
60	18.81	34.35	0.16	0.29
80	15.72	34.27	0.15	0.23
100	14.87	34.39	0.10	0.10
125	14.46	34.34	0.08	0.03
150	13.93	34.23	0.03	0.00
200	13.01	34.23	--	--
250	12.43	34.11	--	--
350	11.15	33.96	--	--
500	8.75	33.59	--	--
1000	5.51	33.83	--	--

Station No.	4-146	Date - GMT	12 NOV 89
Station Name	M894-146	Time - GMT	1118
Latitude	4.26.0 N	Date - LOC	12 NOV 89
Longitude	92.23.7 W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.51	33.28	0.31	0.00
20	26.65	33.25	0.20	0.06
40	26.60	33.23	0.33	0.11
60	20.94	34.24	--	--
80	15.79	34.17	0.18	0.31
100	13.72	34.11	0.18	0.38
125	12.99	34.07	0.16	0.04
150	12.99	34.30	0.02	0.02
200	12.58	34.21	--	--
250	12.29	34.12	--	--
350	11.06	33.89	--	--
500	9.24	33.72	--	--
1000	5.52	33.46	--	--

Station No.	4-147	Date - GMT	13 NOV 89
Station Name	M894-147	Time - GMT	0139
Latitude	2.42.7 N	Date - LOC	12 NOV 89
Longitude	93.33.2 W	Time - LOC	1939

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.05	33.57	--	--
20	26.09	33.51	--	--
40	26.16	33.48	0.30	0.02
60	16.64	34.53	0.31	0.02
80	15.56	34.53	0.21	0.15
100	15.35	34.41	0.20	0.09
125	14.78	34.41	0.09	0.06
150	14.27	34.31	0.02	0.03
200	13.82	34.29	--	--
250	13.03	34.22	--	--
350	11.41	33.93	--	--
500	8.91	33.58	--	--
1000	5.71	33.56	--	--

Station No.	4-148	Date - GMT	13 NOV 89
Station Name	M894-148	Time - GMT	1118
Latitude	1.46.4 N	Date - LOC	13 NOV 89
Longitude	94. 8.5 W	Time - LOC	0518

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.30	33.34	0.37	0.00
20	25.41	33.41	0.30	0.02
40	25.10	33.48	0.35	0.23
60	15.96	34.34	0.44	0.07
80	14.91	34.32	0.23	0.10
100	14.39	34.22	0.09	0.04
125	14.25	34.32	--	--
150	14.09	34.39	--	--
200	14.09	34.25	--	--
250	13.27	34.17	--	--
350	10.89	34.04	--	--
500	9.22	33.41	--	--
1000	5.76	33.36	--	--

Station No.	4-149	Date - GMT	14 NOV 89
Station Name	M894-149	Time - GMT	0114
Latitude	0.16.9 S	Date - LOC	13 NOV 89
Longitude	94.24.4 W	Time - LOC	1914

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.05	34.53	0.42	0.00
20	20.60	34.40	0.49	0.00
40	19.38	34.52	0.49	0.06
60	17.58	34.71	0.44	0.23
80	15.31	34.51	0.21	0.13
100	14.56	34.38	0.13	0.04
125	13.93	34.38	0.03	0.04
150	13.87	34.37	0.02	0.03
200	13.80	34.32	--	--
250	13.37	34.36	--	--
350	10.46	33.97	--	--
500	8.79	33.64	--	--
1000	5.41	33.46	--	--

Station No.	4-150	Date - GMT	14 NOV 89
Station Name	M894-150	Time - GMT	1120
Latitude	1.15.0 S	Date - LOC	14 NOV 89
Longitude	94.17.5 W	Time - LOC	0520

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.90	34.63	0.35	0.10
20	20.11	34.34	0.44	0.12
40	19.24	34.44	0.45	0.14
60	15.14	34.37	0.10	0.08
80	14.32	34.31	0.09	0.08
100	14.06	34.31	0.04	0.03
125	14.03	34.23	0.01	0.02
150	13.93	34.21	0.01	0.03
200	13.61	34.32	--	--
250	13.53	34.17	--	--
350	11.43	34.02	--	--
500	9.29	33.52	--	--
1000	5.77	33.51	--	--

Station No.	4-151	Date - GMT	15 NOV 89
Station Name	M894-151	Time - GMT	0125
Latitude	3.15.4 S	Date - LOC	14 NOV 89
Longitude	94. 6.5 W	Time - LOC	1925

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.85	34.62	0.29	0.06
20	21.72	34.47	0.33	0.08
40	18.63	34.61	0.45	0.08
60	15.32	34.36	0.30	0.18
80	14.29	34.33	0.39	0.11
100	14.05	34.34	0.12	0.08
125	14.00	34.27	--	--
150	13.80	34.28	0.01	0.02
200	13.78	34.39	--	--
250	13.63	34.26	--	--
350	11.34	33.95	--	--
500	8.92	33.67	--	--
1000	5.41	33.44	--	--

Station No.	4-152	Date - GMT	15 NOV 89
Station Name	M894-152	Time - GMT	1112
Latitude	4.15.8 S	Date - LOC	15 NOV 89
Longitude	94. 0.6 W	Time - LOC	0512

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.95	34.50	0.26	0.00
20	22.17	34.44	0.30	0.00
40	20.18	34.77	0.36	0.01
60	15.80	34.64	0.21	0.11
80	14.77	34.30	0.21	0.12
100	14.27	34.31	0.07	0.10
125	14.07	34.15	0.02	0.04
150	13.68	34.18	0.01	0.03
200	13.67	34.20	--	--
250	13.20	34.12	--	--
350	11.58	34.02	--	--
500	9.25	33.60	--	--
1000	5.59	33.30	--	--

Station No.	4-153	Date - GMT	16 NOV 89
Station Name	M894-153	Time - GMT	0117
Latitude	4.56.1 S	Date - LOC	15 NOV 89
Longitude	95.20.1 W	Time - LOC	1917

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.61	34.73	0.16	0.02
20	22.56	34.72	0.24	0.01
40	22.16	34.83	0.26	0.16
60	16.10	34.68	0.19	0.25
80	14.88	34.59	0.19	0.26
100	14.26	34.39	0.08	0.11
125	14.18	34.44	--	--
150	13.73	34.37	0.01	0.02
200	13.26	34.33	--	--
250	12.86	34.23	--	--
350	11.92	34.02	--	--
500	9.03	33.73	--	--
1000	5.52	33.73	--	--

Station No.	4-154	Date - GMT	16 NOV 89
Station Name	M894-154	Time - GMT	1120
Latitude	3.12.5 S	Date - LOC	16 NOV 89
Longitude	103.40.2 W	Time - LOC	0520

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.16	34.61	0.21	0.00
20	22.33	34.51	0.30	0.00
40	21.34	34.69	0.52	0.16
60	17.86	34.55	0.24	0.24
80	15.42	34.57	0.28	0.22
100	14.80	34.25	0.14	0.21
125	14.39	34.33	0.07	0.04
150	14.13	34.15	0.01	0.03
200	13.55	34.36	--	--
250	13.07	34.30	--	--
350	11.91	34.03	--	--
500	9.47	33.46	--	--
1000	5.62	33.48	--	--

Station No.	4-155	Date - GMT	17 NOV 89
Station Name	M894-155	Time - GMT	0144
Latitude	4. 3.9 S	Date - LOC	16 NOV 89
Longitude	98.37.5 W	Time - LOC	1944

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.25	34.74	0.12	0.04
20	22.45	34.67	0.13	0.03
40	21.34	34.53	0.28	0.05
60	17.62	34.62	0.37	0.28
80	15.63	34.50	0.35	0.25
100	15.10	34.53	0.29	0.25
125	14.52	34.37	0.07	0.13
150	14.14	34.32	0.03	0.03
200	13.67	34.23	--	--
250	13.22	34.25	--	--
350	11.26	34.15	--	--
500	9.12	33.70	--	--
1000	5.49	33.46	--	--

Station No.	4-156	Date - GMT	17 NOV 89
Station Name	M894-156	Time - GMT	1146
Latitude	3.42.0 S	Date - LOC	17 NOV 89
Longitude	99.44.3 W	Time - LOC	0446

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.11	34.73	0.21	0.00
20	22.26	34.63	0.14	0.06
40	22.11	34.57	0.20	0.03
60	18.15	34.60	0.25	0.26
80	16.54	34.63	0.31	0.19
100	14.95	34.44	0.18	0.25
125	14.27	34.45	0.10	0.20
150	13.71	34.26	0.01	0.02
200	13.24	34.24	--	--
250	12.78	34.20	--	--
350	11.00	33.90	--	--
500	9.14	33.63	--	--
1000	5.34	33.36	--	--

Station No.	4-157	Date - GMT	18 NOV 89
Station Name	M894-157	Time - GMT	0216
Latitude	3. 2.0 S	Date - LOC	17 NOV 89
Longitude	101.45.3 W	Time - LOC	1916

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.94	34.82	0.20	0.03
20	22.08	34.64	0.23	0.02
40	22.01	34.65	0.25	0.05
60	16.89	34.66	0.25	0.26
80	14.82	34.53	--	--
100	13.96	34.27	0.15	0.18
125	13.80	34.21	0.07	0.08
150	13.81	34.20	0.02	0.03
200	13.46	34.21	--	--
250	13.32	34.29	--	--
350	11.75	34.04	--	--
500	8.86	33.56	--	--
1000	5.49	33.51	--	--

Station No.	4-158	Date - GMT	18 NOV 89
Station Name	M894-158	Time - GMT	1150
Latitude	2.48.0 S	Date - LOC	18 NOV 89
Longitude	102.43.2 W	Time - LOC	0450

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.05	34.69	0.17	0.05
20	22.13	34.72	0.28	0.03
40	21.83	34.57	0.26	0.11
60	14.37	34.43	0.17	0.18
80	14.04	34.26	--	--
100	13.86	34.29	0.11	0.09
125	13.64	34.47	0.05	0.02
150	13.59	34.32	0.01	0.02
200	13.33	34.29	--	--
250	13.26	34.36	--	--
350	12.21	34.13	--	--
500	9.14	33.67	--	--
1000	5.35	33.34	--	--

Station No.	4-159	Date - GMT	19 NOV 89
Station Name	M894-159	Time - GMT	0216
Latitude	2. 8.2 S	Date - LOC	18 NOV 89
Longitude	104.43.7 W	Time - LOC	1916

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.50	34.82	0.22	0.00
20	22.70	34.63	0.28	0.00
40	22.66	34.70	0.25	0.02
60	19.33	34.61	0.44	0.22
80	15.42	34.46	0.39	0.27
100	13.96	34.34	0.24	0.17
125	13.99	34.14	0.07	0.04
150	13.71	34.03	0.05	0.04
200	13.30	34.25	--	--
250	13.03	34.18	--	--
350	11.70	34.10	--	--
500	9.06	33.61	--	--
1000	5.23	33.60	--	--

Station No.	4-160	Date - GMT	19 NOV 89
Station Name	M894-160	Time - GMT	1148
Latitude	1.49.7 S	Date - LOC	19 NOV 89
Longitude	105.51.0 W	Time - LOC	0448

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.03	34.78	0.05	0.58
20	22.20	34.62	0.28	0.12
40	22.25	34.57	0.29	0.11
60	16.47	34.50	0.08	0.09
80	13.84	34.27	0.10	0.07
100	13.65	34.28	0.02	0.03
125	13.54	34.19	0.03	0.01
150	13.41	34.23	0.01	0.02
200	13.34	34.20	--	--
250	12.91	34.16	--	--
350	11.68	33.99	--	--
500	8.83	33.55	--	--
1000	5.54	33.51	--	--

Station No.	4-161	Date - GMT	20 NOV 89
Station Name	M894-161	Time - GMT	0220
Latitude	1.12.2 S	Date - LOC	19 NOV 89
Longitude	108. 2.9 W	Time - LOC	1920

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.77	34.63	0.30	0.01
20	21.76	34.49	0.43	0.02
40	21.41	34.44	0.59	0.00
60	20.87	34.63	--	--
80	18.10	34.74	0.37	0.21
100	14.74	34.46	0.13	0.26
125	13.69	34.33	0.10	0.13
150	13.19	34.32	0.03	0.02
200	13.00	34.22	--	--
250	13.03	34.14	--	--
350	12.25	34.03	--	--
500	8.84	33.57	--	--
1000	5.46	33.60	--	--

Station No.	4-162	Date - GMT	20 NOV 89
Station Name	M894-162	Time - GMT	1215
Latitude	0.53.2 S	Date - LOC	20 NOV 89
Longitude	109.11.1 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.54	34.42	0.28	0.05
20	21.34	34.35	0.32	0.16
40	20.18	34.44	0.38	0.20
60	19.91	34.79	0.44	0.20
80	17.54	34.80	0.21	0.33
100	14.85	34.48	0.11	0.11
125	14.04	34.36	0.04	0.02
150	13.36	34.26	0.03	0.02
200	13.28	34.24	--	--
250	13.10	34.16	--	--
350	12.27	34.04	--	--
500	8.45	33.71	--	--
1000	5.70	33.50	--	--

Station No.	4-163	Date - GMT	21 NOV 89
Station Name	M894-163	Time - GMT	0220
Latitude	0.13.2 S	Date - LOC	20 NOV 89
Longitude	111.31.5 W	Time - LOC	1920

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.39	34.07	0.25	0.06
20	22.64	34.13	0.38	0.08
40	20.11	34.44	0.47	0.08
60	17.16	34.52	0.10	0.05
80	15.33	34.43	0.10	0.05
100	15.00	34.42	0.08	0.01
125	14.56	34.44	0.04	0.02
150	13.96	34.38	0.03	0.03
200	13.29	34.27	--	--
250	13.25	34.18	--	--
350	11.66	34.00	--	--
500	9.20	33.68	--	--
1000	5.52	33.53	--	--

Station No.	4-164	Date - GMT	21 NOV 89
Station Name	M894-164	Time - GMT	1217
Latitude	0. 9.7 N	Date - LOC	21 NOV 89
Longitude	112.45.6 W	Time - LOC	0517

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.81	34.00	0.23	0.00
20	23.22	34.22	0.23	0.06
40	20.70	34.42	0.35	0.17
60	15.84	34.22	0.16	0.08
80	14.86	34.27	0.13	0.10
100	14.61	34.22	0.07	0.03
125	14.48	34.39	0.04	0.02
150	13.97	34.29	0.02	0.02
200	13.28	34.24	--	--
250	13.03	34.20	--	--
350	11.72	33.99	--	--
500	9.02	33.65	--	--
1000	5.24	33.37	--	--

Station No.	4-165	Date - GMT	22 NOV 89
Station Name	M894-165	Time - GMT	0248
Latitude	0.59.1 N	Date - LOC	21 NOV 89
Longitude	115.30.8 W	Time - LOC	1948

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.44	34.39	0.28	0.00
20	23.34	34.33	0.30	0.00
40	22.74	34.60	0.02	0.26
60	16.87	34.44	0.20	0.15
80	15.00	34.37	0.26	0.15
100	14.19	34.25	0.06	0.04
125	13.72	34.27	0.04	0.01
150	13.48	34.32	0.01	0.01
200	12.90	34.22	--	--
250	12.98	34.04	--	--
350	11.51	33.95	--	--
500	9.20	33.71	--	--
1000	5.54	33.53	--	--

Station No.	4-166	Date - GMT	22 NOV 89
Station Name	M894-166	Time - GMT	1216
Latitude	1.22.6 N	Date - LOC	22 NOV 89
Longitude	116.43.6 W	Time - LOC	0516

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.59	34.86	0.15	0.03
20	22.69	34.70	0.24	0.00
40	22.55	34.62	0.20	0.04
60	21.81	34.47	0.18	0.21
80	14.95	34.28	0.16	0.20
100	14.57	34.16	0.13	0.12
125	14.05	34.17	0.01	0.02
150	13.49	34.27	0.02	0.04
200	12.85	34.17	--	--
250	12.68	34.20	--	--
350	11.27	33.97	--	--
500	9.11	33.50	--	--
1000	5.75	33.56	--	--

Station No.	4-167	Date - GMT	23 NOV 89
Station Name	M894-167	Time - GMT	0246
Latitude	1.49.7 N	Date - LOC	22 NOV 89
Longitude	119.15.9 W	Time - LOC	1946

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	22.90	34.53	--	--
20	23.04	34.47	0.25	0.00
40	23.00	34.36	0.25	0.00
60	21.97	34.31	0.34	0.19
80	15.40	34.31	0.31	0.21
100	14.57	34.24	0.20	0.13
125	14.07	34.24	0.04	0.03
150	13.95	34.07	0.04	0.01
200	13.30	34.14	--	--
250	12.65	34.17	--	--
350	10.78	33.74	--	--
500	9.03	33.67	--	--
1000	5.72	33.42	--	--

Station No.	4-168	Date - GMT	23 NOV 89
Station Name	M894-168	Time - GMT	1258
Latitude	1.48.1 N	Date - LOC	23 NOV 89
Longitude	120.36.8 W	Time - LOC	0458

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.49	34.32	0.24	0.00
20	23.65	34.21	0.27	0.00
40	23.66	34.21	0.19	0.03
60	23.15	34.41	0.19	0.20
80	16.51	34.14	0.22	0.18
100	14.91	34.28	0.21	0.18
125	14.41	34.16	0.05	0.02
150	14.12	34.20	0.01	0.02
200	13.53	34.01	--	--
250	12.88	33.96	--	--
350	10.83	33.95	--	--
500	9.13	33.36	--	--
1000	5.58	33.15	--	--

Station No.	4-169	Date - GMT	24 NOV 89
Station Name	M894-169	Time - GMT	0314
Latitude	1.58.0 N	Date - LOC	23 NOV 89
Longitude	122.59.4 W	Time - LOC	1914

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.61	34.48	--	--
20	25.73	34.42	0.18	0.02
40	25.72	34.40	0.20	0.02
60	23.19	34.55	0.35	0.11
80	16.87	34.34	0.22	0.11
100	14.94	34.18	0.12	0.13
125	14.50	34.20	0.05	0.08
150	14.24	34.20	0.02	0.03
200	13.61	34.18	--	--
250	13.36	34.03	--	--
350	11.67	33.84	--	--
500	9.24	33.50	--	--
1000	5.57	33.35	--	--

Station No.	4-170	Date - GMT	24 NOV 89
Station Name	M894-170	Time - GMT	1315
Latitude	1.55.3 N	Date - LOC	24 NOV 89
Longitude	124.14.4 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.90	34.57	0.17	0.06
20	25.97	34.51	0.06	0.01
40	25.94	34.49	0.20	0.06
60	24.39	34.54	0.22	0.38
80	17.74	34.46	0.04	0.53
100	14.71	34.35	0.10	0.20
125	14.28	34.28	0.05	0.07
150	13.87	34.36	0.01	0.02
200	13.34	34.26	--	--
250	12.96	34.24	--	--
350	11.38	34.03	--	--
500	9.06	33.74	--	--
1000	5.49	33.59	--	--

Station No.	4-171	Date - GMT	25 NOV 89
Station Name	M894-171	Time - GMT	0319
Latitude	2.18.3 N	Date - LOC	24 NOV 89
Longitude	125.24.7 W	Time - LOC	1919

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.83	34.54	0.13	0.04
20	25.95	34.42	0.15	0.03
40	25.95	34.51	0.20	0.03
60	25.42	34.48	0.28	0.16
80	22.14	34.50	0.18	0.17
100	17.68	34.49	--	--
125	15.11	34.34	--	--
150	14.07	34.27	0.04	0.02
200	13.46	34.29	--	--
250	12.77	34.21	--	--
350	11.48	33.98	--	--
500	9.23	33.67	--	--
1000	5.91	33.29	--	--

Station No.	4-172	Date - GMT	26 NOV 89
Station Name	M894-172	Time - GMT	0313
Latitude	3.48.0 N	Date - LOC	25 NOV 89
Longitude	122.46.4 W	Time - LOC	1913

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.15	34.52	0.24	0.00
20	26.25	34.56	0.31	0.00
40	26.23	34.54	0.23	0.00
60	26.20	34.51	0.37	0.13
80	25.17	34.40	0.28	0.22
100	22.27	34.46	0.21	0.29
125	17.49	34.09	0.06	0.14
150	13.71	34.10	0.04	0.03
200	12.88	33.86	--	--
250	11.97	34.01	--	--
350	10.68	33.66	--	--
500	9.29	33.58	--	--
1000	5.57	33.61	--	--

Station No.	4-173	Date - GMT	27 NOV 89
Station Name	M894-173	Time - GMT	0316
Latitude	5.54.9 N	Date - LOC	26 NOV 89
Longitude	122. 2.6 W	Time - LOC	1916

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.88	34.59	--	--
20	27.06	34.56	0.28	0.00
40	27.04	34.56	0.22	0.01
60	26.93	34.54	0.42	0.00
80	26.93	34.55	0.24	0.01
100	23.96	34.47	0.34	0.15
125	20.17	34.29	0.12	0.18
150	14.84	34.06	0.04	0.07
200	12.69	33.72	--	--
250	11.68	33.68	--	--
350	10.76	33.75	--	--
500	8.98	33.42	--	--
1000	5.35	33.46	--	--

Station No.	4-174	Date - GMT	27 NOV 89
Station Name	M894-174	Time - GMT	1317
Latitude	6.54.0 N	Date - LOC	27 NOV 89
Longitude	123. 5.8 W	Time - LOC	0517

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.52	33.94	0.11	0.05
20	27.66	33.95	0.15	0.02
40	27.70	33.94	0.11	0.04
60	27.85	34.60	0.20	0.25
80	26.14	34.62	0.24	0.20
100	22.29	34.38	0.17	0.26
125	18.18	34.07	0.09	0.25
150	14.36	33.98	0.04	0.12
200	12.30	33.94	--	--
250	11.90	33.92	--	--
350	10.75	33.80	--	--
500	8.78	33.56	--	--
1000	5.30	33.60	--	--

Station No.	4-175	Date - GMT	28 NOV 89
Station Name	M894-175	Time - GMT	0315
Latitude	8.15.5 N	Date - LOC	27 NOV 89
Longitude	124.34.6 W	Time - LOC	1915

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.63	33.73	0.10	0.02
20	27.76	33.66	0.10	0.03
40	27.78	34.20	0.19	0.00
60	27.14	34.70	0.35	0.18
80	22.08	34.48	0.52	0.03
100	19.10	34.19	0.21	0.20
125	15.87	33.91	0.13	0.23
150	13.79	33.94	0.05	0.12
200	12.17	33.83	--	--
250	11.60	33.75	--	--
350	10.66	33.69	--	--
500	9.18	33.58	--	--
1000	5.60	33.40	--	--

Station No.	4-176	Date - GMT	28 NOV 89
Station Name	M894-176	Time - GMT	1313
Latitude	8.51.4 N	Date - LOC	28 NOV 89
Longitude	125.15.2 W	Time - LOC	0513

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.37	33.12	0.15	0.02
20	27.78	33.41	0.20	0.00
40	27.77	33.75	0.12	0.04
60	24.99	34.45	0.19	0.22
80	18.82	34.21	0.20	0.24
100	14.94	33.88	0.14	0.25
125	13.54	33.93	0.06	0.15
150	12.55	34.10	0.02	0.03
200	11.82	33.82	--	--
250	11.41	33.91	--	--
350	10.57	33.84	--	--
500	8.60	33.43	--	--
1000	5.45	33.45	--	--

Station No.	4-177	Date - GMT	29 NOV 89
Station Name	M894-177	Time - GMT	0314
Latitude	10. 6.6 N	Date - LOC	28 NOV 89
Longitude	124.40.6 W	Time - LOC	1914

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.39	33.06	0.14	0.00
20	27.71	33.54	0.17	0.00
40	22.41	34.41	0.24	0.10
60	16.86	33.92	0.13	0.16
80	14.59	34.03	0.18	0.12
100	13.34	34.06	0.08	0.11
125	12.93	34.09	0.02	0.03
150	12.53	33.88	0.05	0.00
200	12.06	34.05	--	--
250	11.36	34.00	--	--
350	10.59	33.83	--	--
500	9.23	33.49	--	--
1000	5.58	33.53	--	--

Station No.	4-178	Date - GMT	29 NOV 89
Station Name	M894-178	Time - GMT	1311
Latitude	10.50.2 N	Date - LOC	29 NOV 89
Longitude	123.37.3 W	Time - LOC	0511

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.00	32.06	--	--
20	27.23	33.00	--	--
40	21.77	34.12	0.27	0.19
60	18.12	33.79	0.14	0.31
80	15.33	34.06	0.13	0.30
100	14.17	34.12	0.04	0.21
125	13.48	34.17	0.02	0.08
150	13.61	33.93	0.01	0.07
200	12.55	34.00	--	--
250	11.98	33.63	--	--
350	11.02	33.71	--	--
500	9.12	33.52	--	--
1000	5.67	33.30	--	--

Station No.	4-179	Date - GMT	30 NOV 89
Station Name	M894-179	Time - GMT	0313
Latitude	11.56.0 N	Date - LOC	29 NOV 89
Longitude	122. 2.3 W	Time - LOC	1913

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	27.28	33.33	0.27	0.00
20	27.45	33.21	--	--
40	22.51	34.16	0.59	0.00
60	17.28	33.88	0.36	0.29
80	15.09	34.00	0.14	0.26
100	14.05	34.01	0.05	0.12
125	13.45	33.95	0.04	0.08
150	12.94	33.91	0.02	0.04
200	12.01	33.77	--	--
250	11.42	33.87	--	--
350	10.36	33.82	--	--
500	8.65	33.60	--	--
1000	5.24	33.59	--	--

Station No.	4-180	Date - GMT	30 NOV 89
Station Name	M894-180	Time - GMT	1309
Latitude	13. 7.7 N	Date - LOC	30 NOV 89
Longitude	122.45.4 W	Time - LOC	0509

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.73	33.63	0.32	0.00
20	26.89	33.61	0.20	0.05
40	23.75	34.17	0.27	0.16
60	19.37	34.03	0.12	0.26
80	16.05	33.96	0.14	0.27
100	14.16	34.08	0.06	0.19
125	13.63	34.10	0.06	0.12
150	12.83	34.08	0.01	0.04
200	12.19	33.95	--	--
250	11.48	33.97	--	--
350	10.70	33.58	--	--
500	8.83	33.55	--	--
1000	5.70	33.34	--	--

Station No.	4-181	Date - GMT	1 DEC 89
Station Name	M894-181	Time - GMT	0314
Latitude	14.52.8 N	Date - LOC	30 NOV 89
Longitude	123.46.9 W	Time - LOC	1914

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	26.29	33.97	0.23	0.02
20	26.31	33.82	0.21	0.05
40	26.32	33.89	0.23	0.03
60	20.16	34.17	0.17	0.29
80	16.54	33.94	0.11	0.33
100	14.48	33.61	0.04	0.17
125	13.69	33.81	0.03	0.05
150	12.19	34.04	0.01	0.02
200	11.56	33.78	--	--
250	11.12	33.69	--	--
350	9.74	33.60	--	--
500	8.02	33.43	--	--
1000	5.14	33.53	--	--

Station No.	4-182	Date - GMT	1 DEC 89
Station Name	M894-182	Time - GMT	1315
Latitude	16.15.1 N	Date - LOC	1 DEC 89
Longitude	123.27.9 W	Time - LOC	0515

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.47	34.23	0.09	0.06
20	25.62	34.32	0.11	0.05
40	25.70	34.22	0.11	0.04
60	22.27	33.90	0.33	0.19
80	19.22	33.75	0.24	0.26
100	16.70	33.60	0.14	0.30
125	14.45	33.41	0.10	0.16
150	13.53	33.76	0.02	0.06
200	12.22	33.68	--	--
250	11.53	33.64	--	--
350	10.62	33.64	--	--
500	8.56	33.36	--	--
1000	5.80	33.09	--	--

Station No.	4-183	Date - GMT	2 DEC 89
Station Name	M894-183	Time - GMT	0319
Latitude	17.48.6 N	Date - LOC	1 DEC 89
Longitude	122.14.0 W	Time - LOC	1919

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	25.28	34.25	0.12	0.00
20	25.47	34.29	--	--
40	24.59	34.48	0.11	0.02
60	24.20	34.45	0.17	0.00
80	21.47	34.04	0.26	0.13
100	20.20	34.03	0.52	0.13
125	17.31	33.80	0.13	0.27
150	14.79	33.61	0.06	0.14
200	12.45	33.40	--	--
250	11.81	33.61	--	--
350	10.20	33.45	--	--
500	8.46	33.33	--	--
1000	5.34	33.22	--	--

Station No.	4-184	Date - GMT	2 DEC 89
Station Name	M894-184	Time - GMT	1312
Latitude	18.58.8 N	Date - LOC	2 DEC 89
Longitude	121.24.0 W	Time - LOC	0512

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	24.55	34.36	0.12	0.00
20	24.70	34.48	0.11	0.03
40	24.71	34.48	0.10	0.04
60	22.89	34.16	0.03	0.22
80	20.22	33.99	0.23	0.22
100	17.91	33.91	0.19	0.28
125	15.65	33.69	0.01	0.26
150	13.54	33.42	0.04	0.08
200	12.44	33.61	--	--
250	11.13	33.69	--	--
350	9.78	33.67	--	--
500	8.30	33.56	--	--
1000	5.38	33.51	--	--

Station No.	4-185	Date - GMT	3 DEC 89
Station Name	M894-185	Time - GMT	0314
Latitude	20.38.6 N	Date - LOC	2 DEC 89
Longitude	120. 5.2 W	Time - LOC	1914

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	23.16	34.29	0.09	0.01
20	23.32	34.37	0.11	0.02
40	23.30	34.36	0.09	0.03
60	--	--	--	--
80	20.78	33.84	0.15	0.02
100	18.58	33.75	0.23	0.22
125	16.44	33.54	0.14	0.23
150	13.51	33.37	0.04	0.10
200	11.88	33.55	--	--
250	11.15	33.64	--	--
350	9.63	33.66	--	--
500	8.24	33.46	--	--
1000	5.49	33.33	--	--

Station No.	4-186	Date - GMT	3 DEC 89
Station Name	M894-186	Time - GMT	1317
Latitude	21.44.7 N	Date - LOC	3 DEC 89
Longitude	119.12.0 W	Time - LOC	0517

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.53	33.85	0.09	0.02
20	21.70	33.89	0.11	0.03
40	21.83	33.87	0.08	0.03
60	20.41	33.55	0.17	0.02
80	17.67	33.44	0.21	0.04
100	16.90	33.48	0.20	0.24
125	15.00	33.28	0.16	0.27
150	13.20	33.05	0.06	0.12
200	11.60	33.43	--	--
250	10.62	33.53	--	--
350	9.25	33.42	--	--
500	7.88	33.38	--	--
1000	5.32	33.44	--	--

Station No.	4-187	Date - GMT	4 DEC 89
Station Name	M894-187	Time - GMT	0313
Latitude	23.23.3 N	Date - LOC	3 DEC 89
Longitude	117.59.0 W	Time - LOC	1913

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	21.48	33.86	0.09	0.02
20	21.47	33.78	0.09	0.03
40	21.41	33.83	0.09	0.03
60	21.37	33.78	0.11	0.04
80	16.28	33.23	0.22	0.26
100	15.17	33.07	0.31	0.19
125	13.30	33.24	0.14	0.17
150	12.76	33.50	0.02	0.04
200	12.02	33.50	--	--
250	10.47	33.50	--	--
350	9.52	33.10	--	--
500	7.77	33.42	--	--
1000	4.99	33.56	--	--

Station No.	4-188	Date - GMT	4 DEC 89
Station Name	M894-188	Time - GMT	1312
Latitude	24. 9.3 N	Date - LOC	4 DEC 89
Longitude	117.20.0 W	Time - LOC	0512

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	20.98	33.75	--	--
20	21.22	33.69	0.11	0.03
40	21.19	33.73	0.11	0.04
60	17.76	33.38	0.33	0.00
80	17.22	33.24	0.22	0.18
100	15.90	33.25	0.40	0.26
125	13.58	33.11	0.10	0.23
150	12.40	33.46	0.10	0.00
200	12.50	33.90	--	--
250	11.87	33.71	--	--
350	10.91	33.55	--	--
500	8.80	33.49	--	--
1000	5.51	33.25	--	--

Station No.	4-189	Date - GMT	5 DEC 89
Station Name	M894-189	Time - GMT	0315
Latitude	25.53.7 N	Date - LOC	4 DEC 89
Longitude	116.13.3 W	Time - LOC	1915

Depth (m)	Temp (deg C)	Salinity (psu)	Chloro (mg/m3)	Phaeo (mg/m3)
0	19.78	33.79	0.13	0.03
20	19.88	33.51	0.19	0.00
40	19.83	33.53	0.19	0.02
60	16.29	33.07	0.71	0.22
80	14.17	33.21	0.19	0.15
100	13.62	33.49	0.04	0.05
125	13.19	33.56	0.01	0.04
150	12.78	33.70	0.02	0.02
200	12.23	33.88	--	--
250	11.47	33.56	--	--
350	10.03	33.28	--	--
500	8.24	33.31	--	--
1000	5.49	33.23	--	--

APPENDIX B

SCIENTIFIC PERSONNEL

Cruise Leaders	Leg
Elizabeth Edwards, SWFC	1&4
Scott Hill, SWFC	2-3
Environmental Data Collection	
Jennifer Echols, NOAA ship *McArthur*	1-4
Julie Ellingson, NOAA ship *McArthur*	1-4
Bird Observers	
Donald Roberson, Contractor	1-4
Robin Roberson, Contractor	1-4
Marine Mammal Identification experts	
Scott Benson, SWFC	1-2
Rick LeDuc, SWFC	1-2
Gary Friedrichsen, SWFC	3-4
Scott Sinclair, SWFC	3-4
Marine Mammal Observers	
Jim Carretta, SWFC	1-2
Jim Cotton, SWFC	1-2
Carrie Fried, SWFC	1-2
Richard Rowlett, SWFC	1-2
Sallie Beavers, SWFC	3-4
William Irwin, SWFC	3-4
Susan Kruse, SWFC	3-4
Brian Smith, SWFC	3-4
Other Scientific Crew Members	
Monica Echegaray, Peru	3

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