NOAA Technical Memorandum NMFS

JANUARY 1996

REPORT OF A CETACEAN, SEABIRD, MARINE TURTLE AND FLYING FISH SURVEY OF THE WESTERN TROPICAL INDIAN OCEAN ABOARD THE RESEARCH VESSEL *MALCOLM BALDRIGE,* MARCH 21 - JULY 26, 1995

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Michael P. Force

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

NOAA Technical Memorandum NMFS

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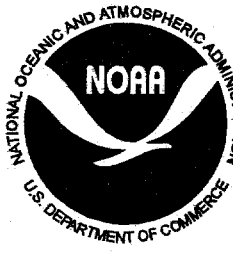

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CONTENTS

LIST OF TABLES

LIST OF FIGURES

REPORT OF A CETACEAN, SEABIRD, MARINE TURTLE AND FLYINGFISH SURVEY OF THE WESTERN TROPICAL INDIAN OCEAN ABOARD THE RESEARCH VESSEL *MALCOLM BALDRIGE* MARCH 21 - JULY 26, 1995

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INTRODUCTION

The Indian Ocean was declared a whale sanctuary by the International Whaling Commission (IWC) in October of 1979 (IWC 1980). Since then, with the exception of the coasts of South Africa, Sri Lanka and Australia, there has been little directed research on cetaceans in this part of the world (Leatherwood and Donovan 1991). This is particularly true for species that inhabit pelagic waters, offshore of the continental shelf. In October 1992, the Indian Ocean Marine Affairs Cooperation convened an International Scientific Workshop in Colombo, Sri Lanka, in order to, among other things, suggest projects in conjunction with the Indian Ocean Sanctuary. The following research priorities were identified:

- Identify crucial habitats for marine mammals and turtles in the Indian Ocean

- Identify areas of special scientific interest; monitor the recovery of depleted whale stocks

- Develop long-term research programs to estimate population size, abundance and distribution of Indian Ocean marine mammals and turtles

- Develop a program where oceanographic ships operating in the region could be used opportunistically to collect sightings data on marine mammals and turtles, either by recording any observations or by carrying dedicated observers

In 1995, the NOAA Ship *Malcolm Baldrige* (hereafter referred to as the *Baldrige*) embarked on an around the world cruise, much of which was to be spent in the Indian Ocean conducting oceanographic research as part of the World Ocean Climate Experiment (WOCE) and Global Ocean Ecosystems Dynamics (GLOBEC) projects. This provided us with a unique and valuable opportunity to address the research needs outlined above by using the *Baldrige* as a ship of opportunity for a survey of Indian Ocean cetaceans, seabirds, marine turtles and flyingfish.

In this report, we describe the methodology and types of data that we collected for these faunal surveys, and present a summary of our results.

OBJECTIVES

The primary objective of this project was to collect information on species identity, distribution and numbers of cetaceans present in the western tropical Indian Ocean. Secondary objectives were to obtain information on distribution patterns and relative abundance of other marine vertebrates. Specific objectives were as follows:

1. Cetacean Survey
   collect data on distribution and abundance; identify any dolphin interactions with commercially important tunas and seabirds

2. Cetacean Biopsy
   collect skin samples from free-ranging cetaceans for genetic analysis

3. Seabirds
   a) collect data on distribution and abundance of seabirds and feeding flocks
   b) collect specimens for DNA analysis, studies of wing morphology, and museum collections

4. Flyingfish
   collect data on species identity, distribution and abundance

5. Marine Turtles
   collect data on species identity, distribution and abundance

METHODS

The *Baldrige* is a National Oceanic and Atmospheric Administration research vessel commissioned in 1970. The ship is 85 m in length, has a beam of 15.5 m and a draft of 5.5 m.

Throughout the survey, the *Baldrige* followed predetermined Track lines in accordance with WOCE and GLOBEC project needs (Figure 1). The itinerary included four legs as follows:

Leg I (WOCE) Durban, South Africa, to Colombo, Sri Lanka	21 March - 21 April, 1995
Leg II (GLOBEC) Colombo, Sri Lanka, to Muscat, Oman	27 April - 24 May, 1995
Leg III (WOCE) Muscat, Oman, to Victoria, Seychelles	31 May - 30 June, 1995
Leg IV (transit leg) Victoria, Seychelles, to Muscat, Oman	12 July - 24 July, 1995

During WOCE legs, the ship conducted Conductivity, Temperature, Depth (CTD) casts every 2 to 5 hours around the clock. During the GLOBEC leg, the ship conducted sampling stations lasting from 1 h to 3 days on an irregular schedule. Leg IV was spent entirely in transit. Ship's speed through the water averaged approximately 25 km/h when in transit.

Three scientific personnel were aboard during all four legs in order to collect the survey data detailed in this report. These were Robert L. Pitman and Lisa T. Ballance (Southwest Fisheries Science Center) and Michael P. Force (contract scientist). Methodology and data specific to each project objective are detailed below. For all data, time is given in Greenwich Mean Time (GMT). Conversion from GMT to Local Mean Time (LMT) is given in Table 1.

Cetacean Survey

We surveyed for cetaceans during all daylight hours when the ship was in transit, weather permitting, taking short breaks as necessary to maintain concentration. Generally, we surveyed in sea conditions corresponding to Beauforts 0 - 6 (Table 2), and suspended cetacean survey when the sea state was higher.

We used line transect methodology as in Holt (1987) to survey for cetaceans. Two observers (R.L. Pitman and L.T. Ballance) scanned the ocean area in front of the ship from beam to beam and out to the horizon (a distance of approximately 15 km), or to the farthest limit of visibility, for cetaceans. We used 25 power Fujinon[1] binoculars which were mounted to the port and starboard sides of the deck of the flying bridge at a height of 15.5 m above water. With few exceptions, each observer used the same pair of binoculars (port side: R.L. Pitman, starboard side: L.T. Ballance). A third observer (M.P. Force) collected data on seabird distribution and abundance (see below) and was present during almost all occasions on which mammal survey effort occurred. This individual also scanned for bowriding cetaceans and reported any dolphin schools or whale blows that were not detected by the observers on the mounted binoculars. We used 10 power handheld binoculars for observing cetaceans that were close to the ship.

When a cetacean was detected, we recorded certain information specific to that sighting (see below). One observer would watch the individual or school until this information was obtained. Generally, the other observer remained on search effort during this time, continuing to scan for new sightings. Occasionally, both observers focused on the sighting in order to confirm species identification or school size estimates. In this case, survey effort stopped until these data were obtained.

We recorded the following information to indicate effort spent on cetacean survey and observation conditions prevailing during that time: date, start and stop times of survey effort (GMT), sea state (using the Beaufort Scale, Table 2), position of the sun (Figure 2), distance (km) to which we could see in clear air (without obstruction by rain, fog or haze).

We recorded the following information for all species of cetaceans that were sighted throughout the cruise: time (GMT), sighting number (consecutively numbered throughout the cruise), bearing to sighting to the nearest degree (using a 360° graduated washer attached to the base of the binocular), distance to sighting (using a graduated scale of reticles enclosed in the right eyepiece of each binocular), identification of observer detecting the sighting (Table 3), species identity and number of any associated birds, marine turtles, fish, or flotsam, and cetacean school size estimate (best, high and low estimates). Specific values for these variables

[1]Reference to trade name does not imply endorsement by National Marine Fisheries Service.

were agreed upon by all observers that had ample observation time with the sighting. All effort and sighting data were recorded on a Toshiba Portegé[1] notebook computer on the flying bridge by L.T. Ballance. In addition to the data recorded on the computer, we filled out a sighting record form (Figure 3) for each cetacean sighting.

The ship's Survey Department recorded certain navigational and environmental data continuously throughout the cruise. We had the following data recorded to a computer file every 10 minutes throughout the day: date, time (GMT), ship's position, ship's speed through the water, ship's speed over ground, ship's course, air temperature (°C), percent humidity, barometric pressure (millibars), wind direction, wind velocity (m s^{-1}), sea surface temperature (°C), sea surface salinity (parts per thousand), water depth (m).

Cetacean Biopsy

We obtained biopsy samples from bowriding animals by using a crossbow and bolts (arrows) equipped with hollow points specifically designed for the purpose. The bolts were attached to the crossbow with a thin nylon line to allow retrieval after firing. We also had bolts with flotation collars and no line attached in order to sample animals from a launch while the vessel was on station. Biopsy samples were stored in a solution of saturated salt water and dimethyl sulfoxide (DMSO).

Seabirds

a) Distribution and Abundance of Seabirds and Feeding Flocks

We surveyed for seabirds during all daylight hours when the ship was in transit, weather permitting, taking short breaks as necessary to maintain concentration. Generally, we surveyed in sea conditions corresponding to Beauforts 0 - 7 (Table 2), and suspended seabird survey when the sea state was higher.

We used standard 300 m strip transect methodology ("Method I" in Tasker et al. 1984) to survey for seabirds. A single observer (M.P. Force) scanned the ocean area in front of the ship from bow to beam and out to a distance of 300 m on that side of the ship with best visibility, recording the identity and number of all seabirds entering the area. Species identifications were confirmed with handheld binoculars. We also noted the presence of species outside the zone (as detected by the mammal observers, RLP and LTB, using the 25 power, mounted binoculars) if that species had not yet been sighted during the day.

We recorded the following information to document effort spent on seabird survey and observation conditions prevailing during that time: date, start and stop time of survey effort (GMT), sea state (using the Beaufort Scale, Table 2), observation conditions (Table 4), side of the ship on which survey was conducted.

We recorded the following information for all seabirds that were recorded in the 300 m zone: time (GMT), species identity and number of individuals, distance from ship (0 - 100 m, 100 - 200 m, 200 - 300 m, outside the 300 m zone), associations with other seabirds, cetaceans, fish, or flotsam; behavior (sitting, flying, feeding); age if distinguishable (juvenile, sub-adult, adult); sex if distinguishable. All effort and sighting data were recorded on a Toshiba 1000[2] notebook computer on the flying bridge by M.P. Force.

We conducted a separate survey for flocks of feeding seabirds, also using strip transect methodology. This

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[2]Reference to trade name does not imply endorsement by National Marine Fisheries Service.

survey was conducted by the mammal observers (RLP and LTB), simultaneously with the cetacean survey. (Effort data for the flock survey therefore is identical to effort data for the cetacean survey.) We defined a flock as any feeding aggregation of 5 or more birds. All flocks out to a distance of approximately 5 km on each side of the ship were noted. For each flock we recorded the species identity and number of individuals of all seabirds as well as any associations with cetaceans, fish, or flotsam.

b) Seabird Specimens for DNA Analysis, Studies of Wing Morphology, and Museum Collections

We collected seabirds on an opportunistic basis from a small launch while the ship was on oceanographic station. Wing span, area and body mass were recorded from freshly dead specimens. The entire bird was then frozen. Heart, liver and pectoralis muscle tissues will be taken for future DNA analysis and the skins and skeletons will be used as museum specimens.

Flyingfish

We conducted a visual survey for flushed flyingfish simultaneously with the seabird survey using a modified strip transect methodology. (Effort data for the flyingfish survey therefore is identical to effort data for the seabird survey.) The seabird observer (M.P. Force) recorded the numbers of all flyingfish flushed by the ship out to 100 m and identified them to the lowest possible taxon. Data were recorded on a standard data form. Handheld binoculars were used to confirm species identity.

Flyingfish (and other surface organisms) were sampled during hour-long evening and early morning stations, simultaneous with CTD casts, by R.L. Pitman. A single 500-watt lamp was suspended over the side of the ship to attract fish and a long-handled dipnet was used to collect them. All specimens were frozen in saltwater at -70° C for later processing onshore.

For each dipnet station, the following data were recorded: date, start and stop time (LMT), ship's position, sea state (using the Beaufort Scale, Table 2), moon phase (Table 5), cloud cover (Table 6), sea surface temperature (° C), sea surface salinity (parts per thousand), identity of all fish and squid collected and sighted (Tables 7 and 8, respectively). A relative abundance category was assigned to all fish and squid taxa sighted during the station (Table 9).

Marine Turtles

We recorded all sightings of marine turtles during the cetacean survey, regardless of their distance from the ship. (Effort data for the turtle survey therefore is identical to effort data for the cetacean survey.) We identified turtles to species whenever possible and noted any association with other animals or flotsam.

Live turtles were captured opportunistically for the purpose of freeing them from entanglement. Any captured turtles were tagged with a single monel tag on the posterior edge of each front flipper, the carapace was measured, and a 1 cc blood sample was obtained. The turtle was then released unharmed.

RESULTS

Cetacean Survey

We surveyed a total of 403.9 hours during 92 days for cetaceans. This effort covered a total linear distance of 9,783.9 km and an approximate area of 146,758 km^2. Details of observation conditions and ship's position for search effort are given in Table 10.

We recorded 589 cetacean sightings comprising a minimum of 21 different species. We identified 480 sightings to the genus or species level; the remaining 109 sightings were recorded at higher taxonomic categories, including: unidentified dolphin, unidentified large/small whale, unidentified odontocete, unidentified cetacean. Summary information for each taxonomic category is given in Table 11 and detailed information by species is given in Tables 12 - 36. Location of sightings for each taxonomic category is shown in Figures 4 - 19.

Cetacean Biopsy

We obtained 19 biopsy samples from a total of 3 species of dolphins. A summary of our biopsy results is given in Table 37.

Seabirds

a) Distribution and Abundance of Seabirds and Feeding Flocks

We surveyed a total of 437.1 hours during 91 days for seabirds using 300 m strip transect methodology. This effort covered a total linear distance of 10,778.7 km and an area of 3,233.6 km^2. Details of observation conditions and ship's position for search effort are given in Table 38. During this time, we recorded a total of 6,104 individual seabirds comprising a minimum of 51 different species (Table 39).

We surveyed a total of 403.9 hours during 92 days for seabird feeding flocks. This effort, simultaneous with the cetacean effort, covered a total linear distance of 9,783.9 km and an approximate area of 97,839 km^2. Details of observation conditions and ship's position for search effort are given in Table 10. During this time, we recorded a total of 623 feeding flocks comprised of a minimum of 36 species and 37,002 individuals (Table 40). The locations of these flocks are shown in Figure 20.

b) Seabird Specimens for DNA Analysis, Studies of Wing Morphology, and Museum Collections

We collected 3 individual seabirds for these purposes. These were comprised of the following: 2 Swinhoe's Storm-Petrel (*Oceanodroma monorhis*), 1 Flesh-footed Shearwater (*Puffinus creatopus*). All specimens will be housed at the Los Angeles County Museum of Natural History.

Flyingfish

We surveyed a total of 437.1 hours during 91 days for flyingfish using 100 m strip transect methodology. This effort, simultaneous with the seabird 300 m strip transect effort, covered a total linear distance of 10,778.7 km and an area of 1,077.9 km^2. Details of this effort are given in Table 37. During this time, we recorded a total of 16,257 individual flyingfish from 15 taxonomic categories (Table 41).

A total of 61 dipnet sampling stations was conducted during a total of 78.5 hours and 53 days. The location of these stations is shown in Figure 21. A total of 447 flyingfish of approximately 21 species was collected. These specimens have been processed and are now housed at the Los Angeles County Museum of Natural History. These data are summarized in Table 42.

Marine Turtles

A total of 81 individual marine turtles comprising a minimum of three species were recorded on 16 separate days (Table 43). The location of these sightings is shown in Figure 22.

We captured a single adult olive ridley turtle (*Lepidochelys olivacea*) on 20 July at 23° 03' N latitude, 59° 13' E longitude. This individual was entangled in a small piece of nylon netting. We brought it aboard and freed it from the netting. The carapace measured 61.5 cm in curved length. The turtle was double-tagged (right front flipper tag no: G0102, left front flipper tag no: G0101) and a blood sample was collected. This sample has been sent to Dr. Brian Bowen of the University of Florida, Gainesville for future processing.

CONCLUSIONS

Ships of opportunity can be extremely useful and cost effective when used as platforms by experienced observers. During this project, we were able to gather a wealth of data on distribution and abundance over a large spatial scale for a variety of marine vertebrates, without requiring dedicated ship time. These data were of high quality. For example, 81% of our cetacean sightings were identified to the generic level, despite the fact that the ship did not divert from the cruise track for the purposes of obtaining closer views of cetacean schools. Our results were highly dependent on the experience of the observers and the quality of research possible on ships of opportunity will depend on this factor. With this in mind, we can highly recommend the use of such platforms in the future.

ACKNOWLEDGMENTS

We gratefully acknowledge the support of the officers and crew of the NOAA Ship *Malcolm Baldrige* during our stay aboard. Captain Craig S. Nelson and Chief Engineer Jack Bergstrom deserve special mention for their outstanding contributions to this project. We also thank the chief scientists of WOCE and GLOBEC legs, Amy Ffield, Bob Molinari, and Peter Ortner, for allowing us space aboard during their projects. Robert Holland provided computer programming expertise and generated the distribution figures. Valerie Philbrick and Gaye Holder were invaluable with logistical assistance at Southwest Fisheries Science Center.

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Table 1. Conversion of times from Greenwich Mean Time (GMT) to Local Mean Time (LMT).

Dates (1995)	LMT = GMT + X
21 March - 24 March	2
25 March - 27 March	3
28 March - 18 April	4
19 April - 1 May	5.5
2 May - 24 July	4

Table 2. Sea state conditions as measured by the Beaufort Scale (from Bowditch 1966).

Wind Force (Beaufort)	Knots	Descriptive	Sea Conditions	Probable Wave Height (ft)
0	0 - 1	Calm	Sea smooth and mirror-like	-
1	1 - 3	Light Air	Scale-like ripples without foam crests	1/4
2	4 - 6	Light Breeze	Small short wavelets; crests have a glassy appearance and do not break	½
3	7 - 10	Gentle Breeze	Large wavelets: some crests begin to break; foam of glassy appearance. Occasional white foam crests	2
4	11 - 16	Moderate Breeze	Small waves, becoming longer; fairly frequent white foam crests	4
5	17 - 21	Fresh Breeze	Moderate waves, taking a more pronounced long form; many white foam crests; there may be some spray	6
6	22 - 27	Strong Breeze	Large waves begin to form; white foam crests are more extensive everywhere; there may be some spray	10
7	28 - 33	Near Gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind; spindrift begins	14

Table 3. Observer names and code numbers used to record cetacean survey data.

	Robert L. Pitman	Michael P. Force	Lisa T. Ballance
Observer Code	004	098	120

Table 4. Observation condition codes used in the 300 m strip transect seabird survey and the 100 m strip flyingfish survey.

Observation Code	General Description	Species Visibility Category
1	Extremely Bad	Storm-Petrels and phalaropes cannot reliably be detected to 100 m All individuals of all other species cannot reliably be detected to 200 m
2	Poor	All Storm-Petrels and phalaropes visible to 100 m All individuals of all other species visible to 200 m
3	Fair	All Storm-Petrels and phalaropes visible to 200 m All individuals of all other species visible to 300 m
4	Good	All individuals of all species visible out to 300 m
5	Excellent	All individuals of all species visible out to 300 + m

Table 5. Moon phase categories and code numbers used during nightly dipnet stations.

Moon Phase	Code Number
Quarter	1
Half	2
Three-Quarter	3
Full	4
No	5
New	6

Table 6. Cloud cover categories and code numbers used during nightly dipnet stations.

Cloud Cover	Code Number
Clear	1
Partly Cloudy	2
Overcast	3
Rain	4
Other or Unknown	5

Table 7. Fish species categories and code numbers used during nightly dipnet stations.

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

Table 8. Squid categories and code numbers used during nightly dipnet stations.

Squid Category	Code Number
Large (mantle length > 8 inches)	1
Medium (3 inches ≤ mantle length ≤ 8 inches)	2
Small (mantle length < 3 inches)	3

Table 9. Relative abundance categories and code numbers for fish and squid used during nightly dipnet stations.

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

Table 10. Daily cetacean and seabird flock search effort.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950322	1316	2	00	00	14.8	21.3	89	-32.07	32	1.92	40.8
950322	1521	2	00	00	14.8	26.1	112	-32.07	32.05	0.47	12.3
950323	0541	3	11	02	18.5	25.9		-32.97	35.4	1.25	32.4
950323	0708	3	11	02	18.5	25.9		-32.99	35.71	1.18	30.6
950323	1011	3	09	01	18.5	25.9		-33	36.16	0.77	19.9
950323	1258	3	07	02	18.5	25.9		-33	36.35	1.22	31.6
950324	0406	3	00	00	18.5	27.4	92	-32.98	39	0.63	17.2
950324	0522	3	00	00	18.5	27.4	92	-32.98	39	1.12	30.7
950324	0642	4	00	00	18.5	26.3	92	-32.98	39	1.03	27.1
950324	0839	4	00	00	18.5	25.2	89	-32.98	40	0.03	0.8
950324	0910	4	00	00	18.5	25.7	91	-32.98	39.7	1.02	26.2
950324	1439	4	00	00	18.5	26.3	89	-32.98	39.98	0.60	15.8
950325	0356	4	11	03	12.95	26.3	96	-32.98	42.37	0.47	12.3
950325	0730	3	10	01	18.5	22.6	49	-32.97	42.48	1.43	32.3
950325	1102	3	08	01	18.5	25.7	92	-32.98	42.9	2.63	67.6
950326	0316	2	11	03	18.5	26.6	101	-33.15	45.72	1.85	49.3
950326	0529	2	10	02	18.5	27.0	107	-33.27	46.3	2.02	54.6
950326	0737	3	10	01	18.5	26.8	102	-33.37	46.87	0.38	10.2
950326	0835	3	09	01	18.5	19.2	106	-33.43	47.13	1.25	24.1
950326	1232	4	07	02	18.5	25.0	28	-33.47	47.42	0.97	24.2
950326	1405	3	06	03	18.5	24.6	91	-33.50	47.85	0.60	14.8
950329	0641	5	01	12	14.8	27.6	4	-28.43	54.97	1.93	53.2
950330	0338	5	02	03	14.8	23.9	348	-27.00	54.97	2.22	53.0

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950330	1008	5	10	01	14.8	24.1	2	-26.48	54.95	0.23	5.5
950330	1038	5	10	01	14.8	27.8	7	-26.38	54.97	1.68	46.6
950331	0525	4	02	02	18.5	24.1	3	-24.95	54.98	2.13	51.2
950331	1122	4	10	02	18.5	25.2	4	-24.47	54.98	2.03	51.1
950401	0258	4	03	03	14.8	26.8	1	-22.70	54.97	1.85	49.6
950401	0800	4	12	01	14.8	25.3	0	-22.45	54.98	1.92	48.7
950401	1259	2	09	02	18.5	23.9	49	-21.97	54.98	1.30	31.0
950402	0525	1	02	02	18.5	26.3	340	-20.00	54.98	1.33	34.9
950402	0654	1	00	00	18.5	28.9	2	-19.65	54.98	0.62	17.9
950402	1056	2	10	01	18.5	25.9	131	-19.50	54.98	2.12	54.9
950403	0234	2	11	03	18.5	25.9		-20.02	57.26	0.28	7.3
950403	1237	1	11	02	18.5	25.9		-20.09	57.39	0.97	25.1
950403	1346	1	11	03	18.5	25.9		-19.93	57.16	0.42	10.9
950404	0343	4	02	02	14.8	25.9		-18.42	54.98	0.07	1.8
950404	0350	4	02	02	14.8	25.9		-18.39	54.98	1.78	46.1
950404	0855	4	11	01	16.65	25.9		-17.98	54.96	0.53	13.7
950404	1000	4	10	02	16.65	25.9		-17.73	54.98	0.98	25.4
950405	0236	3	03	03	14.8	25.9	296	-16.08	54.98	1.45	37.6
950405	0728	4	01	01	16.65	26.8	358	-16.08	54.97	1.97	52.8
950405	1246	4	10	02	14.8	25.5	93	-15.60	55.02	1.50	38.3
950406	0401	4	02	02	14.8	27.8	0	-14.13	55	1.92	53.3
950406	0935	4	10	01	14.8	26.1	2	-13.68	54.97	2.15	56.1
950407	0655	3	03	01	18.5	26.6	323	-11.95	54.62	0.67	17.8
950407	0751	2	00	00	14.8	26.6	315	-11.82	54.47	0.97	25.8
950407	1216	3	11	02	18.5	27.0	312	-11.63	54.27	2.08	56.2

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950408	0521	3	04	01	18.5	26.3	151	-10.72	53.22	2.08	54.6
950408	1101	3	00	00	12.95	30.0	309	-10.33	52.73	0.22	6.6
950408	1123	4	11	02	12.95	23.7	311	-10.28	52.67	1.12	26.5
950409	0418	3	04	02	12.95	11.7	341	-9.72	51.98	1.00	11.7
950409	0809	3	12	12	14.8	21.1	316	-9.60	51.87	0.65	13.7
950409	0853	2	12	12	14.8	22.4	316	-9.53	51.8	0.15	3.4
950409	1201	3	10	02	18.5	26.8	24	-9.52	51.77	1.38	37.0
950409	1336	3	09	03	18.5	18.1	3	-9.12	51.78	0.18	3.3
950410	0428	2	02	02	18.5	18.5	51	-8.45	52.03	0.73	13.5
950410	0832	2	12	12	18.5	20.0	130	-8.33	52.15	1.15	23.0
950410	1231	2	08	02	18.5	23.5	107	-8.25	52.27	1.28	30.1
950411	0231	2	03	03	18.5	20.2	1	-7.32	52.88	0.30	6.0
950411	0514	2	02	01	18.5	15.5	100	-7.23	52.9	0.42	6.5
950411	0603	2	02	01	18.5	17.4	1	-7.10	52.9	1.93	33.6
950411	1028	2	10	01	18.5	22.8	351	-6.72	52.87	0.10	2.3
950411	1056	2	10	01	18.5	23.3	355	-6.67	52.87	0.37	8.6
950411	1123	2	00	00	9.25	19.6	38	-6.60	52.85	0.02	0.4
950411	1327	3	10	02	18.5	27.6	343	-6.43	52.83	0.85	23.4
950412	0233	2	01	03	18.5	27.4	44	-4.23	54.02	2.32	63.5
950412	0508	2	01	02	18.5	27.6	61	-3.85	54.5	2.37	65.3
950412	0907	2	12	12	18.5	28.5	3	-3.62	54.98	0.40	11.4
950412	0943	2	10	01	18.5	25.5	2	-3.48	54.98	1.37	35.0
950412	1256	0	09	02	18.5	27.4	0	-3.10	55	0.47	12.9
950412	1337	1	10	03	18.5	27.0	356	-2.93	55.02	0.65	17.6
950413	0409	1	03	02	18.5	26.5	101	-1.55	55.02	2.17	57.4

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950413	0931	0	12	12	18.5	24.1	167	-1.03	55	2.23	53.6
950414	0220	1	01	03	18.5	21.8	40	.43	55.9	0.55	12.0
950414	0533	1	01	01	18.5	27.8	42	.75	56.18	0.92	25.5
950414	0851	1	09	01	18.5	26.5	41	.93	56.35	1.97	52.1
950414	1249	0	08	02	18.5	24.1	67	1.28	56.67	1.45	34.9
950415	0408	2	02	02	18.5	24.1	122	2.37	57.67	1.53	36.8
950415	0543	3	01	02	18.5	23.1	41	2.67	57.92	0.38	8.8
950415	0911	2	09	01	18.5	26.1	42	2.75	58	0.13	3.4
950415	0925	2	09	01	18.5	26.6	43	2.77	58.03	1.12	29.8
950415	1040	2	08	02	18.5	28.3	47	3.00	58.23	0.57	16.1
950416	0200	2	02	03	18.5	27.4	41	4.03	59.22	0.77	21.1
950416	0525	1	01	01	18.5	24.8	43	4.18	59.35	2.00	49.6
950416	1021	1	08	02	18.5	23.5	142	4.53	59.65	2.10	49.3
950417	0412	4	01	02	18.5	26.5	40	6.02	61.02	0.08	2.1
950417	0438	4	01	02	14.8	26.5	42	6.17	61.15	1.13	29.9
950417	0742	4	12	12	14.8	25.9	42	6.37	61.35	0.63	16.3
950417	0828	4	12	12	14.8	23.9	43	6.48	61.45	1.23	29.4
950417	1205	3	08	02	14.8	26.6	26	6.70	61.67	1.83	48.8
950418	0431	4	02	01	12.95	23.7	181	7.80	62.97	2.23	52.8
950418	1000	4	07	02	12.95	24.1	65	8.18	62.97	0.17	4.1
950418	1016	4	07	02	12.95	25.5	84	8.20	63	2.12	54.1
950419	0143	3	11	03	12.95	26.1	99	8.32	65.2	2.02	52.7
950419	0421	4	11	01	12.95	26.3	95	8.25	65.82	1.58	41.5
950419	0639	3	12	12	12.95	26.8	96	8.20	66.35	1.80	48.3
950419	0900	3	06	01	12.95	26.5	95	8.13	66.9	1.75	46.3

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950419	1133	3	06	02	12.95	26.6	96	8.08	67.48	1.87	49.8
950420	0112	2	11	03	18.5	27.9	97	7.73	70.67	1.07	29.9
950420	0239	1	11	02	18.5	27.4	94	7.70	71.03	0.40	11.0
950420	0335	1	11	02	18.5	27.6	91	7.67	71.22	1.85	51.0
950420	0628	2	12	12	18.5	24.6	97	7.60	71.92	0.62	15.3
950420	0716	1	12	12	18.5	27.2	90	7.58	72.07	1.02	27.7
950420	0835	1	06	01	18.5	27.2	97	7.57	72.33	0.75	20.4
950420	0930	1	06	01	18.5	27.6	95	7.53	72.53	0.77	21.2
950420	1138	3	05	02	18.5	27.0	123	7.47	73.03	1.55	41.9
950421	0053	0	10	03	18.5	26.3	124	5.65	75.77	0.12	3.2
950421	0107	1	10	03	18.5	27.0	124	5.63	75.8	0.58	15.7
950421	0147	1	10	03	18.5	22.9	105	5.55	75.95	0.92	21.1
950421	0253	2	10	02	18.5	26.6	130	5.40	76.17	0.97	25.8
950421	0442	3	10	01	18.5	28.5	124	5.23	76.38	1.12	31.9
950421	0638	3	10	01	18.5	29.0	121	5.00	76.73	0.08	2.3
950421	0735	3	06	01	18.5	27.9	118	4.92	76.82	1.52	42.5
950421	0933	3	08	02	18.5	27.0	54	4.98	77.2	0.93	25.1
950421	1108	2	08	02	18.5	26.6	51	5.18	77.48	1.62	43.2
950427	0552	1	12	12	18.5	27.4	283	6.97	79.62	1.30	35.6
950427	0732	1	12	01	18.5	25.0	271	6.97	79.23	1.77	44.2
950427	0927	1	01	01	18.5	23.7	275	7.00	78.82	1.90	45.0
950428	0048	1	00	00	14.8	26.3	289	7.18	75.28	1.72	45.2
950428	0249	2	05	02	18.5	26.1	270	7.27	74.82	2.68	69.9
950428	0608	2	04	01	18.5	26.8	282	7.33	74.03	1.97	52.8
950428	0818	2	01	01	18.5	23.7	277	7.42	73.53	0.40	9.5

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950428	1031	2	12	02	18.5	27.0	277	7.45	73.42	2.63	71.0
950429	0108	1	00	00	14.8	22.9	266	7.20	70.13	0.72	16.5
950429	0159	1	05	03	18.5	26.6	265	7.18	69.95	0.52	13.9
950429	0241	2	05	02	18.5	26.6	267	7.17	69.8	0.22	5.9
950429	0547	2	05	01	18.5	26.5	263	7.15	69.65	0.63	16.7
950429	0737	3	12	12	18.5	27.4	262	7.15	69.48	1.15	31.5
950430	0123	2	00	00	18.5	24.4	263	6.92	67.42	3.03	74.0
950430	0643	3	04	01	18.5	25.2	265	6.85	66.77	2.78	69.9
950430	1118	3	01	02	14.8	26.1	263	6.78	65.92	0.32	8.3
950430	1156	2	01	02	18.5	19.6	263	6.75	65.82	0.27	5.3
950430	1231	3	01	02	18.5	16.3	258	6.75	65.73	0.58	9.4
950501	0132	1	00	00	18.5	25.9	261	6.47	62.9	1.73	44.8
950501	0722	3	00	00	14.8	26.1	266	6.38	62.2	1.38	36.0
950501	0903	1	02	01	18.5	25.7	263	6.33	61.83	1.43	36.8
950501	1109	2	01	02	18.5	26.1	265	6.30	61.4	2.83	73.8
950502	0155	2	00	00	18.5	25.9	264	6.00	58.52	1.07	27.7
950502	0320	1	06	02	18.5	25.5	266	5.97	58.22	2.67	68.2
950502	0619	3	06	01	18.5	26.1	262	5.90	57.55	0.62	16.2
950502	0751	2	12	12	18.5	26.8	262	5.85	57.23	1.18	31.7
950502	0944	2	02	02	18.5	25.5	265	5.80	56.77	1.90	48.5
950502	1243	1	01	02	18.5	26.1	266	5.72	56.1	0.87	22.7
950502	1345	1	01	03	18.5	26.1	268	5.70	55.87	0.45	11.7
950503	0220	2	00	00	18.5	27.2	264	5.45	53.27	0.67	18.2
950503	0330	1	06	02	18.5	25.5	264	5.43	53.02	1.92	49.0
950503	0529	2	06	02	18.5	25.3	263	5.37	52.55	0.52	13.2

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950503	0624	2	06	01	18.5	25.3	266	5.35	52.37	0.53	13.4
950503	0738	1	12	12	18.5	25.7	266	5.32	52.1	2.27	58.4
950503	1029	2	01	02	18.5	25.5	263	5.27	51.48	1.45	37.0
950503	1237	2	01	02	18.5	25.3	264	5.20	51.02	1.80	45.6
950504	0735	3	12	12	14.8	2.0	23	5.02	49.02	0.40	0.8
950505	0240	4	00	00	14.8	2.8	93	5.58	49.38	1.13	3.1
950505	0851	4	12	12	11.1	13.3	289	5.62	49.4	0.23	3.1
950505	1329	5	10	02	11.1	26.3	355	5.72	49.43	1.15	30.2
950506	0242	2	00	00	18.5	25.2	20	6.73	50.13	0.25	6.3
950506	0316	3	02	03	14.8	23.5	15	6.88	50.18	0.67	15.7
950506	0403	4	02	02	14.8	16.1	15	7.03	50.22	0.33	5.3
950506	0428	4	02	02	14.8	18.5	32	7.08	50.25	1.53	28.3
950506	0616	5	02	01	14.8	15.7	30	7.33	50.38	0.47	7.4
950506	0651	5	02	01	14.8	15.7	32	7.42	50.43	0.18	2.8
950506	0710	5	02	01	11.1	15.7	28	7.45	50.45	0.27	4.2
950506	0730	5	02	01	11.1	20.7	31	7.48	50.47	0.45	9.3
950506	0948	5	09	01	12.95	22.6	41	7.62	50.58	0.93	21.0
950506	1235	5	07	02	11.1	14.1	64	7.93	50.8	1.73	24.3
950507	0236	2	02	03	12.95	27.4	33	8.83	51.32	0.83	22.7
950507	0334	3	02	02	12.95	25.5	32	9.10	51.47	2.95	75.3
950507	0642	3	04	01	14.8	15.5	317	9.72	51.77	0.13	2.0
950507	0726	3	05	01	14.8	24.2	293	9.77	51.68	1.52	36.8
950507	0905	1	12	12	14.8	25.2	297	9.92	51.4	0.62	15.6
950507	1005	2	06	01	14.8	26.5	90	9.98	51.33	0.32	8.5
950507	1032	2	06	01	14.8	26.6	85	10.00	51.45	1.05	28.0

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950507	1139	2	06	01	14.8	26.5	91	9.98	51.75	0.27	7.1
950507	1236	3	06	02	14.8	26.6	89	9.98	51.95	1.70	45.3
950510	0218	2	00	00	18.5	26.8	59	10.72	53.23	0.77	20.7
950510	0328	1	01	03	18.5	17.9	59	10.85	53.47	2.68	48.1
950510	0617	1	12	01	18.5	13.7	56	10.98	53.67	0.45	6.2
950510	0651	1	12	01	18.5	6.8	68	11.15	53.98	0.13	0.9
950510	0806	1	12	12	18.5	13.9	129	11.15	54.03	0.23	3.2
950510	0931	1	08	01	18.5	15.7	6	11.15	54	0.97	15.3
950510	1044	1	07	01	18.5	28.3	58	11.23	54.15	1.17	33.1
950510	1236	2	08	02	18.5	28.3	60	11.47	54.53	0.40	11.3
950510	1328	2	08	02	18.5	14.4	63	11.53	54.63	0.78	11.3
950511	0206	2	01	03	18.5	26.6	52	11.72	55.08	1.13	30.1
950511	0349	3	01	02	18.5	27.4	59	11.97	55.38	1.87	51.2
950511	0602	3	01	01	18.5	28.7	59	12.23	55.83	0.95	27.2
950511	0742	3	12	12	18.5	22.4	63	12.43	56.18	0.28	6.3
950511	0818	3	12	12	18.5	16.7	64	12.48	56.28	1.58	26.3
950511	1021	3	08	01	18.5	16.3	57	12.63	56.55	1.02	16.6
950511	1400	2	08	03	18.5	28.9	58	12.75	56.68	0.37	10.7
950512	0207	3	12	03	14.8	26.5	76	13.18	57.27	0.88	23.3
950512	0341	3	12	02	18.5	27.4	61	13.28	57.65	2.00	54.8
950512	0606	2	01	01	18.5	27.9	59	13.55	58.13	0.88	24.6
950512	0738	3	12	12	18.5	26.5	59	13.73	58.43	0.37	9.8
950512	0831	2	08	01	18.5	15.5	63	13.80	58.55	1.22	19.0
950512	1017	3	11	01	18.5	27.2	55	13.90	58.77	1.72	46.8
950512	1244	3	08	02	18.5	27.0	60	14.22	59.25	1.22	33.0

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950513	0210	3	12	03	14.8	27.8	73	14.68	59.95	0.88	24.4
950513	0342	3	01	02	14.8	26.1	62	14.77	60.22	1.83	47.7
950513	0555	3	01	01	14.8	26.1	62	14.77	60.22	1.12	29.2
950515	0908	5	08	01	7.4	26.1	30	15.45	61.5	1.15	30.0
950515	1023	5	08	02	7.4	26.1	30	15.45	61.5	0.88	23.0
950517	0538	5	05	01	5.55	23.1	289	16.02	61.83	1.32	30.5
950518	0242	5	04	03	5.55	15.9	286	16.32	60.07	0.27	4.3
950518	0334	5	04	02	3.7	15.2	324	16.40	59.98	0.23	3.5
950518	0413	5	04	02	5.55	13.1	324	16.40	59.98	1.47	19.3
950518	0614	6	04	01	5.55	13.0	324	16.68	59.78	0.25	3.2
950518	0645	6	04	01	5.55	15.2	313	16.72	59.73	0.22	3.3
950518	0740	5	12	12	5.55	14.6	319	16.80	59.65	1.48	21.6
950518	0926	5	11	01	5.55	25.5	317	16.97	59.5	0.35	8.9
950518	1020	5	11	02	5.55	14.6	320	17.08	59.4	0.30	4.4
950518	1109	5	11	02	5.55	14.6	318	17.18	59.32	0.80	11.7
950518	1245	5	11	02	5.55	15.4	321	17.33	59.15	0.67	10.3
950519	0202	5	00	00	7.4	7.8	327	18.63	57.78	1.23	9.6
950519	0321	4	01	02	7.4	1.1	91	18.80	58.08	0.18	0.2
950519	0441	4	01	02	7.4	25.0	44	18.87	58.17	0.40	10.0
950520	0143	4	01	03	7.4	26.1	33	19.02	58.35	0.07	1.8
950520	0155	4	01	03	7.4	27.9	33	19.07	58.38	0.60	16.8
950520	0249	4	01	03	7.4	27.8	29	19.25	58.5	0.33	9.2
950520	0355	4	02	02	7.4	26.8	19	19.50	58.65	1.73	46.4
950520	0605	3	02	01	9.25	26.8	32	19.93	58.93	0.95	25.5
950520	0751	4	12	12	9.25	25.0	35	20.28	59.18	1.90	47.5

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950520	1021	4	09	02	9.25	25.9		20.47	59.28	1.32	34.2
950520	1256	4	09	03	5.55	25.9		20.47	59.28	1.03	26.7
950521	0135	4	11	03	7.4	25.9		22.12	60.08	1.35	35.0
950521	0329	5	12	02	5.55	25.9		22.25	60.59	0.55	14.2
950531	1106	2	05	02	11.1	25.7	122	23.58	58.82	1.27	32.7
950531	1259	2	00	00	11.1	26.1	133	23.27	59.15	0.67	17.5
950601	0137	4	00	00	11.1	26.3	192	21.02	59.5	1.43	37.6
950601	0346	2	07	02	12.95	25.3	211	20.63	59.25	1.87	47.4
950601	0617	4	08	01	11.1	25.5	215	20.18	58.93	0.93	23.7
950601	0803	4	12	12	9.25	25.3	214	19.85	58.72	1.70	43.1
950601	1049	4	02	02	7.4	26.3	224	19.52	58.53	0.68	17.9
950601	1159	4	02	02	7.4	25.5	220	19.30	58.38	0.50	12.8
950601	1308	4	02	02	9.25	25.9	213	19.12	58.23	1.15	29.8
950602	0156	4	07	03	12.95	25.3	213	16.85	56.72	1.23	31.2
950602	0358	4	09	02	9.25	25.3	181	16.45	56.48	1.53	38.8
950602	0602	4	09	01	11.1	25.9	180	15.98	56.5	0.98	25.4
950602	0738	4	12	12	12.95	24.6	177	15.62	56.5	1.40	34.4
950602	1016	4	03	01	14.8	25.7	181	15.23	56.53	1.75	45.0
950602	1235	2	03	02	14.8	25.7	184	14.70	56.5	1.82	46.8
950603	0218	4	00	00	12.95	25.0	180	11.57	56.5	0.70	17.5
950603	0345	4	08	02	12.95	25.2	176	11.23	56.5	1.50	37.7
950603	0535	4	06	01	12.95	22.4	250	10.93	56.33	0.37	8.3
950603	0641	4	05	01	11.1	27.0	247	10.88	56.25	0.32	8.6
950603	0743	4	12	12	12.95	24.8	247	10.80	56.05	0.55	13.6
950603	0823	4	12	12	11.1	21.5	245	10.75	55.92	0.60	12.9

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950605	0412	5	10	02	7.4	25.5	105	8.52	50.62	0.23	5.9
950605	0619	5	10	01	9.25	23.7	95	8.50	50.7	0.80	18.9
950605	0940	5	08	01	9.25	24.8	86	8.50	50.98	0.23	5.7
950605	1035	6	08	01	9.25	25.3	90	8.45	51.18	0.48	12.2
950605	1403	5	07	03	7.4	25.0	85	8.50	51.4	0.37	9.2
950606	0236	5	00	00	7.4	27.2	85	8.45	52.68	0.38	10.3
950606	0327	5	00	00	7.4	17.9	85	8.48	52.88	0.80	14.4
950606	0832	5	12	12	7.4	25.7	96	8.42	53.1	0.47	12.1
950606	0922	6	08	01	7.4	25.9	81	8.43	53.28	1.68	43.5
950607	0436	5	11	02	7.4	24.8	88	8.48	54.87	0.58	14.4
950607	0516	5	11	02	7.4	25.7	86	8.48	55.02	1.82	46.8
950607	1032	6	07	01	9.25	25.7	83	8.47	55.43	1.97	50.7
950608	0409	5	11	02	7.4	26.3	90	8.47	57.15	2.73	71.7
950608	0922	6	08	01	7.4	26.6	84	8.48	57.77	2.53	67.4
950609	0214	6	00	00	5.55	25.9	88	8.48	60.07	0.35	9.1
950609	0250	6	00	00	5.55	25.3	90	8.50	60.2	0.35	8.9
950609	0351	6	00	00	5.55	27.0	89	8.50	60.43	1.03	27.8
950609	0518	6	00	00	5.55	25.2	108	8.48	60.77	0.70	17.6
950609	0625	6	10	01	5.55	24.8	111	8.40	61.02	0.27	6.7
950610	0805	6	12	12	7.4	6.7	271	8.48	59.75	1.42	9.5
950610	0947	6	07	01	5.55	6.7	271	8.48	59.75	1.08	7.2
950611	0202	6	11	03	7.4	0.0	86	8.48	62.07	1.50	0.0
950611	0741	6	12	12	5.55	25.2	88	8.47	62.48	1.35	34.0
950611	0916	6	08	01	5.55	24.6	88	8.50	62.83	0.72	17.7
950612	0936	6	07	01	5.55	23.7	89	8.47	64.78	0.63	14.9

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950613	0739	6	00	00	5.55	26.1	91	8.48	67.68	1.35	35.2
950613	0945	6	00	00	5.55	24.1	88	8.48	68.15	0.38	9.1
950614	0928	6	07	01	5.55	22.2	88	7.57	69.42	1.22	27.1
950615	0348	5	11	02	9.25	23.9	92	7.60	71.27	1.10	26.3
950615	0505	5	11	01	9.25	25.7	88	7.60	71.47	0.95	24.4
950615	0845	5	00	00	11.1	25.7	91	7.60	71.77	1.35	34.7
950615	1220	5	07	03	9.25	25.3	89	7.60	72.13	0.87	22.1
950616	0123	5	11	03	7.4	23.5	89	7.60	73.52	0.95	22.3
950616	0432	4	00	00	11.1	24.6	91	7.60	73.77	1.03	25.3
950616	0544	5	00	00	11.1	18.9	83	7.58	74.05	0.10	1.9
950616	0812	5	00	00	5.55	19.4	107	7.58	74.13	1.30	25.3
950616	0943	5	00	00	5.55	23.9	88	7.58	74.43	0.65	15.5
950616	1230	4	00	00	7.4	25.5	145	7.57	74.57	0.58	14.8
950617	0114	4	00	00	11.1	25.2	141	6.28	75.63	1.45	36.5
950617	0432	5	00	00	11.1	25.3	142	6.00	75.87	1.32	33.5
950617	0606	5	00	00	11.1	23.3	142	5.73	76.08	0.45	10.5
950617	0818	5	00	00	9.25	25.0	140	5.63	76.18	1.53	38.2
950617	1001	5	05	01	7.4	21.3	135	5.33	76.42	0.30	6.4
950617	1226	5	00	00	7.4	25.9	144	5.25	76.5	0.73	18.9
950618	0134	3	01	03	12.95	23.9	59	5.43	77.68	2.10	50.1
950618	0609	6	11	01	7.4	25.3	56	5.72	78.1	1.18	29.9
950618	0754	6	09	01	7.4	20.4	56	5.93	78.42	0.30	6.1
950618	1004	5	08	02	7.4	26.6	52	5.98	78.48	2.17	57.8
950619	0134	4	06	03	11.1	23.5	246	6.78	79.55	1.58	37.1
950619	0354	4	06	02	7.4	13.1	243	6.57	79.1	2.17	28.5

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950619	0619	4	03	01	7.4	24.4	247	6.52	78.83	0.70	17.1
950619	0748	5	02	01	7.4	23.7	248	6.40	78.53	0.30	7.1
950620	0121	5	00	00	7.4	25.0	246	4.82	75.08	1.08	27.0
950620	0238	5	06	02	7.4	26.5	243	4.70	74.82	0.37	9.8
950620	0346	4	06	02	9.25	15.9	247	4.60	74.62	1.77	28.2
950620	0610	4	05	01	9.25	25.3	245	4.48	74.28	1.20	30.4
950620	0754	4	03	01	11.1	25.5	247	4.32	73.93	0.75	19.1
950620	0846	4	03	01	11.1	23.3	244	4.23	73.77	0.73	17.0
950622	0144	3	05	03	14.8	25.0	270	4.70	71.62	1.27	31.7
950622	0348	3	05	02	14.8	24.6	271	4.70	71.17	2.07	50.9
950622	0620	3	05	01	18.5	24.8	274	4.72	70.62	1.10	27.3
950622	0816	4	02	01	14.8	24.2	272	4.72	70.22	1.48	35.9
950622	1018	3	01	02	14.8	24.4	269	4.72	69.77	1.72	42.0
950622	1244	3	01	03	11.1	23.1	272	4.73	69.25	0.72	16.7
950623	0158	4	05	03	11.1	25.0	273	4.80	66.42	1.22	30.5
950623	0404	4	05	02	12.95	24.4	271	4.80	65.98	1.65	40.3
950623	0625	4	04	01	12.95	25.0	283	4.87	65.52	1.12	28.0
950623	0828	4	01	01	14.8	22.9	283	4.97	65.12	1.63	37.4
950623	1046	3	01	02	14.8	24.2	285	5.08	64.65	1.27	30.8
950623	1230	3	12	03	14.8	23.3	286	5.17	64.32	1.02	23.8
950624	0205	5	05	03	7.4	26.6	286	5.87	61.52	0.95	25.3
950624	0343	4	05	02	7.4	24.4	283	5.95	61.18	0.82	20.0
950624	0722	5	05	01	9.25	22.8	224	5.95	60.95	0.90	20.5
950625	0427	4	07	02	9.25	24.2	222	4.87	59.95	1.52	36.8
950625	0602	4	07	01	9.25	21.5	226	4.60	59.72	0.47	10.1

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950625	0944	5	03	01	9.25	24.6	220	4.43	59.57	1.38	34.0
950626	0228	4	00	00	9.25	22.6	225	3.25	58.48	0.33	7.4
950626	0254	5	00	00	9.25	24.8	223	3.18	58.43	0.50	12.4
950626	0719	5	12	12	9.25	24.6	227	2.98	58.25	1.17	28.8
950626	1228	5	02	02	7.4	24.1	223	2.67	57.95	0.35	8.4
950626	1259	6	02	03	7.4	25.2	225	2.60	57.88	0.85	21.4
950627	0902	5	04	01	9.25	23.5	224	1.23	56.62	1.90	44.6
950627	1326	5	02	03	9.25	23.3	226	.88	56.3	0.42	9.8
950628	0235	4	00	00	12.95	22.9	223	.17	55.63	1.08	24.8
950628	0622	4	06	01	14.8	24.6	227	.00	55.48	0.93	22.9
950628	1027	3	03	01	14.8	24.1	221	-.17	55.33	0.98	23.6
950629	0506	4	08	02	12.95	23.7	179	-1.07	55	2.28	54.0
950629	1023	5	04	01	11.1	24.2	182	-1.58	54.98	2.08	50.4
950630	0457	5	11	02	7.4	25.3	91	-3.63	55.02	0.42	10.6
950712	0956	5	12	01	12.95	25.3	1	-4.12	55.48	1.80	45.6
950712	1153	5	10	02	12.95	23.3	356	-3.68	55.48	0.43	10.0
950712	1254	5	00	00	12.95	25.9	341	-3.47	55.42	0.92	23.8
950712	0311	4	00	00	11.1		200	-4.62	55.45	0.38	4.2
950712	0407	4	03	02	12.95		200	-4.62	55.45	1.03	13.3
950712	0630	4	02	01	11.1		228	-4.62	55.45	0.15	1.7
950712	0652	4	02	01	11.1	4.6	2	-4.62	55.45	0.40	1.9
950712	0843	4	12	12	11.1	26.6	353	-4.40	55.47	1.42	37.8
950712	1032	5	11	01	11.1	25.2	4	-3.98	55.48	1.28	32.2
950712	1156	5	11	02	11.1	25.9	358	-3.67	55.48	0.10	2.6
950712	1307	5	11	02	9.25	26.5	339	-3.42	55.38	0.88	23.3

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950714	0356	6	03	02	7.4	24.1	332	4.15	52.32	2.03	48.8
950714	0641	6	02	01	7.4	24.4	339	4.80	52.05	0.50	12.2
950719	0216	3	00	00	3.7	20.0	17	21.27	59.57	0.68	13.6
950719	0411	2	00	00	5.55	26.1	24	21.60	59.7	1.83	47.7
950719	0640	2	02	01	7.4	25.3	37	22.15	59.95	0.53	13.4
950719	0758	2	12	12	5.55	24.2	15	22.43	60.08	1.72	41.7
950719	1026	2	00	00	5.55	25.3	224	22.63	59.77	0.92	23.3
950719	1145	3	11	02	5.55	24.8	290	22.63	59.53	0.28	6.9
950719	1241	2	00	00	5.55	24.6	78	22.68	59.7	1.05	25.8
950720	0438	3	06	01	7.4	25.3	254	22.90	59.48	0.53	13.4
950720	0620	2	00	00	5.55	25.3	331	23.00	59.25	0.23	5.8
950720	0803	3	00	00	5.55	25.7	328	23.17	59.13	0.52	13.4
950720	0843	3	00	00	5.55	25.2	255	23.25	59.05	0.60	15.1
950720	0956	3	00	00	7.4	25.9	329	23.50	58.9	0.90	23.3
950720	1122	4	09	02	7.4	25.9	354	23.80	58.75	0.65	16.8
950720	1301	4	11	02	7.4	25.2	307	24.08	58.45	0.57	14.3
950720	1408	4	00	00	7.4	25.7	307	24.18	58.33	0.10	2.6
950721	0245	5	00	00	5.55	22.8	312	24.30	58.23	0.25	5.7
950721	0445	4	00	00	7.4	22.6	293	24.52	57.85	0.37	8.4
950721	0527	4	00	00	5.55	22.0	303	24.58	57.7	1.58	34.8
950721	0804	4	00	00	7.4	23.1	296	24.85	57.2	0.93	21.5
950721	0937	3	00	00	7.4	20.9	163	24.85	57.07	0.85	17.8
950721	1103	4	00	00	9.25	21.3	135	24.67	57.25	0.97	20.6
950721	1252	3	00	00	12.95	22.6	140	24.40	57.5	1.00	22.6
950722	0225	2	00	00	11.1	25.3	108	24.22	57.77	0.30	7.6

Table 10. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Ship's Speed km/hr	Ship's Course	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Time Searched hours	Linear Distance Searched km
950722	0346	2	00	00	12.95	19.6	112	24.10	58.07	0.95	18.6
950722	0518	1	00	00	12.95	19.4	110	24.02	58.37	0.10	1.9
950722	0555	3	00	00	9.25	19.8	96	23.98	58.4	0.12	2.4
950722	0742	3	00	00	9.25	21.3	122	23.88	58.68	0.53	11.3
950722	0936	5	05	01	11.1	20.5	132	23.73	58.97	0.50	10.3
950722	1116	4	05	02	11.1	20.7	135	23.68	59.17	0.33	6.8
950723	0247	5	00	00	9.25	23.3	289	23.12	59.95	0.75	17.5
950723	0408	5	05	02	11.1	22.6	293	23.20	59.68	0.33	7.4
950723	0437	4	05	02	12.95	23.3	340	23.25	59.6	0.88	20.5
950723	0544	2	08	01	14.8	25.3	223	23.33	59.37	0.08	2.0
950723	0702	2	10	01	14.8	22.0	157	23.15	59.3	0.17	3.7
950723	0750	1	12	12	14.8	22.4	158	23.00	59.38	0.43	9.6
950723	0848	0	12	12	12.95	22.4	147	22.87	59.48	0.70	15.7
950723	1010	2	01	01	12.95	21.6	226	22.65	59.6	0.32	6.9
950723	1057	3	07	02	9.25	22.6	61	22.67	59.65	0.10	2.3
950723	1145	3	08	02	9.25	22.0	30	22.72	59.65	0.27	5.9
950724	0241	2	05	03	12.95	25.2	276	23.63	59.07	0.47	11.8
950724	0324	1	05	02	16.65	25.5	277	23.65	58.9	0.53	13.5
										403.9	**9783.9**
										Total hours	**Total Linear km**

Table 11. Summary of cetacean sightings, listed in order of abundance.

Species	Number of Sightings			School Size	
	Total	Pure	Mixed	Mean	SE
Physeter macrocephalus	99	98	1	2.8	0.3
Stenella longirostris	66	56	10	169.8	29.9
Grampus griseus	49	40	9	48.3	17.5
Tursiops truncatus	41	24	17	53.1	20.9
Stenella coeruleoalba	37	36	1	42.8	7.4
Unidentified Stenella	23	20	3	45.0	12.2
Kogia simus	20	20	0	1.6	0.2
Unidentified Mesoplodon	19	19	0	2	0.2
Balaenoptera musculus	17	17	0	1.5	0.1
Unidentified Globicephala	16	10	6	30.7	5
Delphinus cf. tropicalis	16	14	2	235	85.4
Unidentified Balaenoptera	12	11	1	1.4	0.2
Steno bredanensis	12	12	0	21.4	4.3
Stenella attenuata	12	5	7	147.2	61.9
Balaenoptera edeni	8	8	0	1.2	0.1
Pseudorca crassidens	7	6	1	41.3	13.6
Feresa attenuata	5	5	0	15.8	2.8
Unidentified Delphinus	5	5	0	161.7	56.6
Hyperoodon cf. planifrons	3	3	0	15	8.3
Peponocephala electra	3	3	0	283.3	129.8
Lagenodelphis hosei	3	3	0	183.3	49.1
Kogia breviceps	2	2	0	1	0
Feresa/Peponocephala	2	2	0	20.5	10.3
Orcinus orca	2	2	0	8	0
Ziphiius cavirostris	1	1	0	3	0

Table 12. Sightings of *Balaenoptera musculus.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950420	1	06	01	18.5	2	0935	7.53	72.57	158	098	N	0001	0001	0001
950420	1	06	01	18.5	2	0953	7.53	72.62	159	004	N	0002	0002	0002
950420	1	05	02	18.5	2	1250	7.30	73.27	164	120	N	0002	0003	0002
950421	3	08	02	18.5	2	0937	4.98	77.2	176	004	N	0001	0001	0001
950428	2	05	02	18.5	2	0254	7.27	74.82	218	004	N	0002	0002	0001
950428	2	05	02	18.5	2	0331	7.27	74.65	219	004	N	0001	0001	0001
950428	2	04	01	18.5	2	0613	7.33	74.03	223	004	N	0002	0002	0001
950428	2	04	01	18.5	2	0617	7.33	74	224	004	N	0002	0003	0002
950428	2	04	01	18.5	2	0717	7.38	73.77	227	120	N	0001	0001	0001
950618	4	01	02	11.1	2	0207	5.45	77.8	471	120	N	0001	0001	0001
950618	4	01	02	11.1	2	0214	5.48	77.82	472	120	N	0002	0002	0002
950618	4	01	02	11.1	2	0216	5.48	77.82	473	098	N	0001	0001	0001
950618	4	01	02	11.1	2	0230	5.52	77.87	474	098	N	0002	0002	0002
950618	4	01	02	11.1	2	0255	5.58	77.93	477	098	N	0002	0002	0002
950619	3	06	03	9.25	2	0228	6.70	79.38	482	004	N	0001	0002	0001
950619	4	06	02	7.4	2	0516	6.50	78.95	486	004	N	0003	0004	0002
950619	4	03	01	7.4	2	0556	6.53	78.87	490	098	N	0001	0001	0001

Table 13. Sightings of *Balaenoptera edeni.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950420	1	05	02	18.5	2	1241	7.33	73.23	162	004	N	0001	0001	0001
950420	1	05	02	18.5	2	1246	7.3	73.27	163	004	N	0001	0001	0001
950421	1	08	02	18.5	2	1239	5.23	77.55	179	120	N	0001	0001	0001
950427	2	12	12	18.5	2	0628	6.97	79.5	182	004	N	0001	0001	0001
950427	1	01	02	18.5	2	1034	7.02	78.53	203	004	N	0002	0003	0002
950503	1	12	12	18.5	2	0907	5.3	51.77	304	120	N	0001	0001	0001
950512	3	12	03	14.8	2	0234	13.2	57.35	379	004	N	0001	0002	0001
950512	3	11	01	18.5	2	1144	14.08	59.03	383	129	N	0002	0003	0002

Table 14. Sightings of *Balaenoptera sp.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950331	4	09	02	18.5	2	1310	-24.07	54.98	018	004	N	0002	0002	0001
950420	1	06	01	18.5	2	0953	7.53	72.62	159	004	N	0002	0002	0002
950421	2	06	01	18.5	2	0839	4.83	77.02	175	004	N	0001	0002	0001
950618	3	01	03	12.95	2	0147	5.43	77.72	470	004	N	0002	0002	0001
950618	4	01	02	11.1	2	0245	5.55	77.9	475	004	N	0001	0001	0001
950618	4	01	02	11.1	2	0247	5.55	77.9	476	098	N	0001	0001	0001
950618	4	01	02	11.1	2	0303	5.60	77.95	478	120	N	0003	0004	0002
950619	3	06	03	9.25	2	0238	6.68	79.33	483	120	N	0001	0001	0001
950619	4	06	02	7.4	2	0447	6.52	79	485	004	N	0001	0001	0001
950619	4	06	02	7.4	2	0523	6.50	78.93	487	120	N	0001	0001	0001
950619	4	06	02	7.4	2	0540	6.52	78.9	488	120	N	0001	0001	0001
950619	4	06	02	7.4	2	0544	6.52	78.88	489	120	N	0001	0002	0001

Table 15. Sightings of *Physeter macrocephalus.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950322					5	0725	-31.73	31.35	002	004	N	0001	0001	0001
950322					5	0753	-31.82	31.43	003	004	N	0003	0003	0003
950324					5	0515	-32.98	39	011	004	N	0002	0002	0002
950326	2	10	02	18.5	2	0546	-33.28	46.38	015	004	N	0012	0015	0010
950326	2	10	02	18.5	2	0615	-33.32	46.52	016	004	N	0009	0011	0007
950326	4	09	01	18.5	2	0932	-33.48	47.43	017	004	N	0004	0006	0003
950403	2	11	03	18.5	5	0300	-20.05	57.35	024	004	N	0012	0015	0010
950403	1	11	03	18.5	2	1401	-19.90	57.11	026	004	N	0001	0002	0001
950412	2	01	03	18.5	2	0315	-4.12	54.13	041	120	N	0003	0003	0003
950412	2	01	02	18.5	2	0540	-3.80	54.6	046	120	N	0005	0008	0004
950412	1	10	01	18.5	2	0957	-3.40	55	055	004	N	0001	0001	0001
950412	1	10	01	18.5	2	1041	-3.23	55	057	120	N	0001	0002	0001
950412	1	10	01	18.5	2	1043	-3.23	55	058	004	N	0001	0001	0001
950412	1	10	01	18.5	2	1104	-3.13	54.98	060	004	N	0001	0001	0001
950412	0	09	02	18.5	2	1258	-3.10	55	061	004	N	0001	0001	0001
950412	0	09	02	18.5	2	1302	-3.10	55	062	120	N	0006	0006	0006
950414	1	01	03	18.5	2	0226	.47	55.92	081	004	N	0001	0001	0001
950414	1			18.5	5	0500	.63	56.08	084	004	N	0001	0002	0001
950414	0	08	02	18.5	2	1300	1.30	56.68	100	004	N	0002	0002	0002
950415	3	01	01	18.5	2	0605	2.72	57.98	110	004	N	0002	0004	0002
950415	2	09	01	18.5	2	0912	2.75	58	111	098	N	0009	0010	0008
950415	2	09	01	18.5	2	0957	2.87	58.12	112	004	N	0003	0004	0002

Table 15. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950415	2	09	01	18.5	2	1012	2.92	58.17	113	004	N	0006	0009	0005
950416	0	08	02	18.5	2	1150	4.78	59.88	124	004	N	0005	0007	0004
950419	3	06	01	12.95	2	0952	8.12	67.1	134	098	N	0001	0001	0001
950427	1	12	01	18.5	2	0745	6.97	79.18	187	004	N	0005	0006	0005
950427	1	12	01	18.5	2	0804	6.98	79.12	190	004	N	0003	0005	0002
950427	1	01	01	18.5	2	0932	7.00	78.77	193	120	N	0003	0003	0003
950427	1	01	01	18.5	2	0940	7.00	78.77	194	120	N	0002	0004	0002
950427	1	01	01	18.5	2	0944	7.00	78.73	195	120	N	0008	0010	0007
950427	1	01	01	18.5	2	0945	7.00	78.73	196	004	N	0002	0002	0002
950427	1	01	01	18.5	2	0947	7.00	78.73	197	004	N	0001	0001	0001
950427	1	01	01	18.5	2	1003	7.02	78.65	198	120	N	0001	0001	0001
950427	1	01	01	18.5	2	1007	7.02	78.65	199	120	N	0003	0003	0003
950427	1	01	01	18.5	2	1010	7.02	78.65	200	004	N	0002	0004	0002
950427	1	01	01	18.5	2	1013	7.02	78.62	201	120	N	0004	0006	0002
950427	1	01	01	18.5	2	1017	7.02	78.62	202	004	N	0002	0003	0001
950428	2	12	03	18.5	2	1232	7.50	72.95	235	004	N	0002	0003	0002
950428	2	01	03	18.5	2	1237	7.50	72.95	236	120	N	0004	0005	0004
950501	1	00	00	18.5	2	0258	6.43	62.58	259	120	N	0003	0004	0002
950501	2	01	02	18.5	2	1207	6.28	61.18	268	120	N	0001	0001	0001
950503	2	06	02	18.5	2	0411	5.42	52.87	294	004	N	0004	0005	0004
950503	2	06	02	18.5	2	0439	5.40	52.73	297	004	N	0005	0006	0004
950507	3	04	01	14.8	2	0616	9.67	51.82	316	120	N	0001	0001	0001
950507	3	06	02	14.8	2	1406	10.00	52.3	329	120	N	0001	0001	0001
950508					5	0737	10.12	52.02	330	120	N	0001	0001	0001
950508					5	0738	10.12	52.02	331	120	N	0002	0002	0002

Table 15. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950510	2	01	03	18.5	2	0247	10.77	53.33	335	004	N	0007	0010	0006
950510	2	01	03	18.5	2	0252	10.77	53.33	336	004	N	0001	0001	0001
950510	1	01	03	18.5	2	0346	10.87	53.5	338	120	N	0002	0002	0002
950510	1	01	03	18.5	2	0354	10.87	53.5	339	120	N	0002	0002	0002
950510	1	12	02	18.5	2	0427	10.93	53.58	340	004	N	0003	0004	0003
950510	1	12	02	18.5	2	0444	10.93	53.6	342	120	N	0005	0005	0005
950510	1	12	02	18.5	2	0455	10.97	53.65	343	004	N	0002	0002	0002
950510	0	12	02	18.5	2	0503	10.97	53.65	344	004	N	0001	0001	0001
950510	0	12	02	18.5	2	0517	10.98	53.67	345	120	N	0002	0002	0002
950510	0	12	02	18.5	2	0518	10.98	53.67	346	004	N	0002	0002	0002
950510	0	12	02	18.5	2	0521	10.98	53.67	347	004	N	0001	0001	0001
950510	0	12	02	18.5	2	0521	10.98	53.67	348	004	N	0001	0001	0001
950510	0	12	02	18.5	2	0536	10.98	53.67	349	004	N	0002	0002	0002
950510	0	12	02	18.5	2	0539	10.98	53.67	350	004	N	0003	0005	0003
950510	0	12	02	18.5	2	0547	10.98	53.67	351	004	N	0003	0003	0003
950510	0	12	02	18.5	2	0551	10.98	53.67	352	120	N	0001	0001	0001
950510	1	12	02	18.5	2	0557	10.98	53.67	353	004	N	0001	0001	0001
950510	1	12	02	18.5	2	0605	10.98	53.67	354	120	N	0002	0002	0002
950510	1	12	01	18.5	2	0618	10.98	53.67	355	004	N	0001	0001	0001
950510	1	12	01	18.5	2	0632	11.15	53.98	356	004	N	0005	0006	0005
950510	1	07	01	18.5	2	1108	11.30	54.25	359	004	N	0002	0002	0002
950510	1	07	01	18.5	2	1116	11.32	54.28	361	120	N	0001	0001	0001
950510	1	07	01	18.5	2	1133	11.33	54.3	362	120	N	0001	0001	0001
950510	2	07	01	18.5	2	1149	11.38	54.37	363	120	N	0001	0001	0001
950520	4	02	02	7.4	2	0422	19.58	58.68	400	120	N	0001	0001	0001

Table 15. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950520	4	02	02	7.4	2	0446	19.68	58.73	401	120	N	0003	0004	0003
950520	4	02	02	7.4	2	0455	19.70	58.77	402	004	N	0002	0002	0002
950520	4	02	02	7.4	2	0459	19.70	58.77	403	120	N	0002	0002	0002
950520	4	02	02	7.4	2	0502	19.72	58.77	404	098	N	0001	0001	0001
950601	4	12	12	9.25	2	0804	19.85	58.72	442	004	N	0010	0015	0006
950601	4	12	12	9.25	2	0815	19.82	58.7	443	120	N	0002	0002	0002
950601	4	12	12	9.25	2	0830	19.77	58.67	444	120	N	0001	0002	0001
950601	4	12	12	9.25	2	0845	19.72	58.63	445	004	N	0003	0003	0003
950601	4	03	01	9.25	2	0926	19.58	58.57	446	120	N	0001	0001	0001
950602	4	09	02	9.25	2	0513	16.17	56.5	452	120	N	0015	0022	0010
950603					5	1200	10.48	55.27	460	004	N			0008
950605	6	08	01	9.25	2	1054	8.48	51.28	462	004	N			0001
950619	4	06	03	9.25	2	0255	6.65	79.28	484	120	N	0001	0001	0001
950622	3	05	03	14.8	2	0217	4.70	71.5	505	120	N	0001	0001	0001
950622	3	05	02	14.8	2	0353	4.70	71.15	506	120	N	0001	0001	0001
950712	5	10	02	12.95	2	1143	-3.70	55.48	523	004	N	0001	0002	0001
950719	2	00	00	5.55	5	0616	22.07	59.9	530	004	N	0002	0003	0002
950719	2	02	01	7.4	2	0641	22.15	59.95	531	120	N	0001	0001	0001
950719	2	02	01	7.4	2	0654	22.20	59.98	533	098	N	0003	0003	0003
950719	2	02	01	7.4	2	0655	22.20	59.98	534	120	N	0001	0001	0001
950719	2	02	01	7.4	2	0711	22.25	60.02	535	004	N	0006	0007	0005
950719	2	02	01	7.4	5	0714	22.27	60.03	536	004	N	0001	0001	0001
950719	2	02	01	7.4	5	0723	22.30	60.05	537	004	N	0003	0004	0003
950723	5	05	02	11.1	2	0424	23.23	59.62	569	120	N	0001	0001	0001
950723	4	05	02	12.95	2	0447	23.27	59.57	570	004	N	0005	0008	0003

Table 15. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950724					5	0227	23.62	59.12	582	120	N	0001	0001	0001
950724	2	05	03	12.95	2	0245	23.63	59.03	585	004	N	0001	0001	0001

Table 16. Sightings of *Kogia breviceps.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950414	0	08	02	18.5	2	1346	1.45	56.82	103	004	N	0001	0001	0001
950502	1	01	02	18.5	2	1254	5.72	56.07	289	004	N	0001	0001	0001

Table 17. Sightings of *Kogia simus*.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950413	1	03	02	18.5	2	0515	-1.28	55	069	004	N	0003	0003	0003
950413	0	12	12	18.5	2	1049	-.75	55	077	004	N	0002	0002	0002
950414	1	01	03	18.5	2	0227	.47	55.92	082	004	N	U001	0001	0001
950414	1	09	01	18.5	2	1046	1.27	56.65	099	004	N	0003	0003	0003
950416	1	08	02	18.5	2	1106	4.67	59.78	119	004	N	0001	0001	0001
950420	0	11	02	18.5	2	0444	7.65	71.5	150	004	N	0001	0001	0001
950420	1	12	12	18.5	2	0806	7.57	72.27	157	004	N	0002	0002	0002
950420	1	05	02	18.5	2	1256	7.28	73.3	165	004	N	0001	0001	0001
950427	1	01	02	18.5	2	1107	7.05	78.43	205	004	N	0001	0001	0001
950427	1	01	02	18.5	2	1114	7.05	78.38	206	004	N	0001	0001	0001
950428	1	00	00	14.8	2	0051	7.18	75.28	207	120	N	0002	0002	0002
950428	1	00	00	14.8	2	0105	7.22	75.25	209	004	N	0001	0001	0001
950501	2	02	01	18.5	2	0940	6.33	61.72	264	004	N	0001	0001	0001
950501	1	01	02	18.5	2	1330	6.25	60.88	273	004	N	0001	0001	0001
950502	2	00	00	18.5	2	0200	6.00	58.52	275	120	N	0002	0003	0002
950502	2	02	02	18.5	2	1017	5.78	56.67	285	120	N	0002	0002	0002
950502	2	02	02	18.5	2	1029	5.78	56.62	286	004	N	0004	0005	0004
950502	1	01	02	18.5	2	1326	5.70	55.95	291	120	N	0001	0001	0001
950503	1	12	12	18.5	2	0750	5.32	52.03	301	120	N	0001	0001	0001
950721	2	00	00	12.95	2	1341	24.28	57.6	560	120	N	0001	0001	0001

Table 18. Sightings of *Hyperoodon cf. planifrons.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950430					5	1147	6.77	65.85	251	004	N	0002	0003	0002
950501					5	0400	6.42	62.43	260	120	N	0035	0045	0025
950503	2	01	02	18.5	2	1115	5.23	51.3	306	120	N	0008	0012	0006

Table 19. Sightings of *Ziphius cavirostris.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950430	1	05	02	18.5	2	0322	6.88	67	246	120	N	0003	0004	0003

Table 20. Sightings of *Mesoplodon sp.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950323	3	11	02	18.5	2	0603	-32.98	35.46	008	004	N	0003	0004	0002
950401	2	09	02	18.5	2	1355	-21.75	54.98	019	004	N	0003	0004	0003
950414	2	01	01	18.5	2	0627	.90	56.32	087	004	N	0005	0007	0004
950414	1	09	01	18.5	2	0909	.97	56.38	088	004	N	0001	0001	0001
950414	1	09	01	18.5	2	0952	1.12	56.52	092	004	N	0001	0001	0001
950414	1	09	01	18.5	2	1019	1.18	56.57	094	120	N	0002	0003	0002
950414	1	09	01	18.5	2	1021	1.22	56.58	095	004	N	0001	0001	0001
950414	1	09	01	18.5	2	1037	1.23	56.62	097	004	N	0001	0001	0001
950414	0	08	02	18.5	2	1310	1.33	56.7	101	120	N	0002	0002	0002
950414	0	08	02	18.5	2	1414	1.55	56.9	106	004	N	0003	0004	0003
950420	2	11	03	18.5	2	0130	7.72	70.75	138	120	N	0002	0002	0002
950420	1	11	02	18.5	2	0404	7.67	71.33	146	098	N	0001	0001	0001
950420	2	12	12	18.5	2	0638	7.60	71.97	154	004	N	0001	0001	0001
950420	1	12	12	18.5	2	0747	7.57	72.18	156	120	N	0002	0002	0002
950429	1	00	00	14.8	2	0124	7.20	70.1	239	004	N	0001	0001	0001
950501	1	00	00	18.5	2	0213	6.45	62.78	255	004	N	0002	0002	0001
950503	2	06	02	18.5	2	0418	5.42	52.87	295	004	N	0002	0002	0002
950503	2	06	02	18.5	2	0421	5.40	52.77	296	004	N	0002	0002	0002
950503	2	01	02	18.5	2	1405	5.17	50.7	310	004	N	0003	0004	0003

Table 21. Sightings of *Peponocephala electra.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950412	2	01	02	18.5	2	0509	-3.85	54.5	044	004	N	0600	0800	0400
950412	2	01	02	18.5	2	0525	-3.82	54.57	045	004	N	0150	0200	0100
950412	2	01	02	18.5	2	0546	-3.77	54.63	047	004	N	0100	0150	0075

Table 22. Sightings of *Feresa attenuata.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950414	0	08	02	18.5	2	1330	1.40	56.77	102	004	N	0007	0010	0007
950420	1	11	02	18.5	2	0240	7.70	71.03	140	004	N	0012	0015	0008
950427	1	12	01	18.5	2	0854	7.00	78.93	191	120	N	0025	0035	0020
950503	2	06	02	18.5	2	0538	5.37	52.55	299	120	N	0020	0030	0015
950510	1	08	01	18.5	2	0950	11.17	54.05	358	004	N	0015	0020	0010

Table 23. Sightings of *Peponocephala/Feresa.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950413	1	03	02	18.5	2	0520	-1.28	55	070	004	N	0035	0050	0030
950418	4	02	01	12.95	2	0533	7.98	62.82	130	120	N	0006	0015	0004

Table 24. Sightings of *Pseudorca crassidens.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950421	2	06	01	18.5	2	0824	4.83	76.98	174	004	N	0070	0125	0040
950428	2	05	02	18.5	2	0450	7.30	74.35	220	004	Y	0035	0060	0025
950430					5	1150	6.75	65.82	252	004	N			0005
950430	2	01	02	18.5	2	1203	6.75	65.78	253	004	Y	0010	0012	0008
950501	1	00	00	18.5	2	0255	6.43	62.58	258	004	Y	0008	0012	0006
950501					5	0500	6.40	62.43	261	004	Y	0025	0035	0020
950511	3	01	02	18.5	2	0358	11.98	55.42	375	120	N	0100	0200	0075

Table 25. Sightings of *Orcinus orca.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950323	3	11	02	18.5	2	0652	-32.99	35.71	009	004	N			0001
950607	5	00	00	7.4	2	0642	8.48	55.32	464	120	N	0008	0010	0005

Table 26. Sightings of *Globicephala sp.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950322	2	00	00	14.8	2	1506	-32.07	32.05	006	004	N	0055	0070	0045
950410	2	12	12	18.5	2	0907	-8.30	52.27	034	004	N	0020	0030	0015
950412	2	01	03	18.5	2	0343	-4.07	54.18	042	004	N	0008	0012	0006
950412	2	01	02	18.5	2	0551	-3.77	54.63	048	004	N	0012	0020	0008
950412	2	12	12	18.5	2	0702	-3.63	54.87	052	004	N	0005	0010	0004
950412	2	12	12	18.5	2	0721	-3.63	54.95	053	004	N	0012	0020	0010
950412	2	12	12	18.5	2	0724	-3.65	54.98	054	120	N	0060	0075	0045
950412	0	09	02	18.5	2	1320	-3.02	55	066	120	N	0030	0040	0020
950421	3	10	01	18.5	2	0639	5.00	76.73	171	004	N	0025	0050	0020
950428	2	12	03	18.5	2	1230	7.50	72.95	234	120	N	0008	0012	0006
950502	2	06	02	18.5	2	0426	5.95	57.95	280	004	N			0020
950507	3	06	01	14.8	2	1123	9.98	51.67	328	120	N	0060	0075	0040
950508					5	0745	10.13	52.02	332	120	N	0025	0035	0015
950509					5	0315	10.02	52.02	334	120	N	0050		
950511	3	12	12	18.5	2	0850	12.52	56.35	378	120	N	0050	0075	0040
950621					5	1227	4.15	73.55	498	004	N	0040	0065	0030

Table 27. Sightings of *Steno bredanensis.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950412	0	09	02	18.5	2	1315	-3.02	55	065	004	N	0020	0030	0015
950419	3	06	01	12.95	2	0901	8.13	66.9	133	004	N	0006	0012	0004
950420	1	11	02	18.5	2	0345	7.67	71.25	143	004	N	0008	0012	0006
950421	2	08	02	18.5	2	1142	5.23	77.55	178	098	N	0012	0015	0009
950508					5	1100	10.22	52.03	333	004	N	0050	0075	0035
950510	1	07	01	18.5	2	1110	11.30	54.25	360	004	N	0040	0060	0030
950510	2	08	02	18.5	2	1254	11.48	54.57	366	120	N	0030	0045	0025
950510	2	08	02	18.5	2	1335	11.53	54.65	367	004	N			0005
950510	2	08	02	18.5	2	1356	11.55	54.68	370	120	N	0025	0050	0010
950510	2	08	02	18.5	2	1411	11.57	54.7	372	120	N	0030	0045	0020
950719	2	12	12	5.55	2	0937	22.73	59.9	538	120	Y	0005	0006	0004
950720	3	00	00	5.55	2	0833	23.27	59.07	547	004	N	0010	0012	0008

Table 28. Sightings of *Lagenodelphis hosei.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950421	3	10	01	18.5	2	0640	5.00	76.73	172	004	N	0300	0450	0225
950621					5	1237	4.15	73.58	499	120	N	0150	0250	0100
950629	4	08	02	12.95	2	0643	-1.42	54.98	519	004	N	0100	0200	0050

Table 29. Sightings of *Delphinus cf. tropicalis.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950519	4	12	03	7.4	2	0218	18.63	57.78	390	004	Y	0450	0600	0300
950519					5	1130	18.92	58.22	393	004	Y			0075
950519					5	1430	18.93	58.22	394	004	N	0030	0075	0025
950520	4	01	03	7.4	2	0146	19.03	58.37	396	120	N	0075	0100	0050
950520	4	01	03	7.4	2	0258	19.28	58.52	398	004	Y	1200	1700	0900
950521	4	11	03	7.4	2	0152	22.15	60.21	420	004	Y	0150	0200	0125
950601	2	07	02	12.95	2	0347	20.60	59.23	436	120	Y	0060	0100	0030
950601	4	02	02	7.4	2	1124	19.40	58.45	447	120	Y	0380	0475	0333
950601	4	02	02	7.4	5	1145	19.33	58.4	448	004	N	0050	0075	0030
950718					5	0150	18.28	57.7	526	098	N			0035
950718					5	0830	18.98	58.13	527	004	N			0015
950718					5	0918	19.10	58.22	528	120	N	0120	0200	0060
950719	3	00	00	3.7	5	0325	21.48	59.67	529	004	N	0075	0150	0050
950719	2	00	00	5.55	2	1342	22.73	59.92	541	004	N	0125	0175	0075
950720	1	04	01	7.4	2	0508	22.90	59.37	544	004	N	0300	0500	0250
950723	3	07	02	9.25	2	1102	22.67	59.67	577	004	N	0040	0060	0030

Table 30. Sightings of *Delphinus sp.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950519	5				5	0130	18.62	57.8	388	098	Y			0050
950519	5	00	00	7.4	2	0205	18.63	57.78	389	120	Y			0020
950601	3	07	03	11.1	2	0258	20.75	59.33	435	120	Y	0085	0125	0060
950601	2	07	02	12.95	2	0352	20.60	59.23	437	004	N	0300	0500	0175
950601	3	07	02	12.95	2	0427	20.50	59.17	440	004	N	0100	0200	0075

Table 31. Sightings of *Tursiops truncatus.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950411	2	03	03	18.5	2	0233	-7.32	52.88	035	004	N	0002	0004	0002
950412	0	09	02	18.5	2	1320	-3.02	55	066	120	N	0015	0020	0010
950421	3	10	01	18.5	2	0639	5.00	76.73	171	004	N	0025	0050	0015
950421	2	08	02	18.5	2	1135	5.23	77.55	177	004	N	0015	0020	0010
950428	1	00	00	14.8	2	0120	7.25	75.18	213	004	N	0015	0025	0012
950430	2	01	02	14.8	2	1133	6.78	65.88	250	004	Y	0008	0012	0006
950501					5	0500	6.40	62.43	261	004	Y	0008	0015	0006
950507	1	12	12	14.8	2	0909	9.93	51.37	320	120	N	0120	0175	0100
950507	2	06	01	14.8	2	1016	9.98	51.38	323	004	N	0040	0060	0030
950507	3	06	01	14.8	2	1046	10.00	51.5	326	120	N	0020	0030	0015
950507	3	06	01	14.8	2	1123	9.98	51.67	328	120	N	0040	0050	0025
950509					5	0315	10.02	52.02	334	120	N	0200		
950510	2	08	02	18.5	2	1342	11.53	54.65	368	098	N	0020	0030	0015
950511	3	12	12	18.5	2	0850	12.52	56.35	378	120	N	0012	0020	0008
950519	4	12	03	7.4	2	0255	18.80	58.08	391	120	N	0012	0020	0008
950519	4	12	03	7.4	2	0314	18.80	58.08	392	004	N	0008	0012	0005
950520	4	01	03	7.4	2	0217	19.15	58.43	397	120	N	0040	0060	0020
950520	3	02	01	9.25	2	0632	20.02	58.98	406	004	N	0020	0030	0015
950520	4	12	12	9.25	2	0753	20.28	59.18	409	004	N	0008	0012	0006
950520	4	12	12	9.25	2	0823	20.38	59.23	410	004	N	0005	0008	0004
950531	2	05	02	11.1	2	1203	23.42	59	430	004	N	0175	0250	0100
950621					5	1227	4.15	73.55	498	004	N	0060	0075	0030

Table 31. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950719	2	02	01	7.4	2	0647	22.18	59.97	532	120	N	0040	0055	0035
950720					5	0130	23.07	60.05	542	098	N	0015	0020	0010
950720	3	00	00	5.55	2	0918	23.37	58.97	549	004	N	0012	0015	0009
950720	3	00	00	5.55	2	0919	23.37	58.97	550	098	N	0010	0012	0008
950720	4	00	00	7.4	2	1413	24.20	58.32	553	098	N	0010	0015	0008
950721	2	00	00	12.95	2	1350	24.25	57.63	561	120	N	0018	0025	0010
950722					5	0210	24.23	57.7	562	098	N	0025	0035	0020
950722	2	00	00	11.1	2	0234	24.20	57.8	563	120	N	0020	0030	0015
950722	2	00	00	12.95	2	0351	24.10	58.08	564	120	N	0020	0030	0015
950722	4	05	02	11.1	2	1119	23.68	59.17	566	098	N			0005
950722	4	05	02	11.1	5	1139	23.63	59.23	567	120	N			0010
950722	4	05	02	11.1	5	1240	23.55	59.33	568	004	N	0750	1200	0500
950723	1	12	12	14.8	2	0809	22.93	59.4	572	004	N	0030	0037	0022
950724					5	0120	23.55	59.35	578	098	N			0075
950724					5	0203	23.58	59.2	580	098	N			0005
950724					5	0229	23.62	59.12	583	120	N	0050	0060	0040
950724	2	05	03	12.95	2	0244	23.63	59.07	584	120	N	0025	0035	0015
950724	2	05	03	12.95	2	0245	23.63	59.03	585	004	N			0001
950724	2	05	03	12.95	2	0251	23.65	59.02	586	120	N	0020	0025	0015

Table 32. Sightings of *Grampus griseus.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950417	4	12	12	14.8	2	0805	6.43	61.4	127	004	N	0010	0020	0008
950417	4	12	12	14.8	2	0854	6.58	61.53	128	004	N	0020	0030	0015
950420	1	11	02	18.5	2	0354	7.67	71.3	145	120	N	0015	0025	0006
950420	3	05	02	18.5	2	1202	7.42	73.1	161	004	N	0013	0020	0011
950428	2	05	02	18.5	2	0453	7.30	74.35	221	120	N	0006	0012	0004
950428	2	12	02	18.5	2	1139	7.47	73.13	231	004	N	0015	0025	0012
950430	3	01	02	14.8	2	1123	6.78	65.92	249	004	N			0003
950501	2	01	02	18.5	2	1138	6.28	61.28	267	004	N	0020	0025	0015
950502	1	06	02	18.5	2	0336	5.97	58.13	276	004	N	0025	0035	0020
950502	1	06	02	18.5	2	0342	5.97	58.13	277	004	N	0040	0060	0030
950502	1	06	02	18.5	2	0346	5.97	58.1	278	120	N	0025	0040	0012
950502	2	12	12	18.5	2	0829	5.83	57.08	283	004	N	0012	0020	0008
950507	2	05	01	14.8	2	0820	9.83	51.52	317	098	N	0005	0008	0003
950511	2	01	03	18.5	2	0256	11.85	55.22	374	120	N	0055	0075	0045
950519					5	1438	18.95	58.23	395	004	N			0002
950520	4	01	03	7.4	2	0217	19.15	58.43	397	120	N	0020	0040	0010
950520	4	01	03	7.4	2	0305	19.32	58.53	399	120	N			0002
950520	3	02	01	9.25	2	0632	20.02	58.98	406	004	N	0100	0150	0075
950520	3	02	01	9.25	2	0640	20.05	59.02	407	098	N	0008	0012	0006
950520	3	02	01	9.25	2	0656	20.10	59.05	408	120	N	0012	0018	0008
950520	4	12	12	9.25	2	0833	20.43	59.25	411	120	N	0012	0018	0008
950520	4	12	12	9.25	2	0845	20.47	59.28	412	004	N	0012	0020	0006

Table 32. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950520	4	08	01	9.25	2	0924	20.47	59.28	414	004	N	0012	0015	0008
950520	4	09	02	9.25	2	1053	20.47	59.28	416	120	N	0005	0015	0003
950520	4	09	03	5.55	2	1345	20.47	59.28	417	004	N	0005	0012	0002
950531	2	05	02	11.1	2	1151	23.45	58.95	427	004	N	0012	0020	0010
950531	2	05	02	11.1	2	1153	23.43	58.97	429	004	N	0050	0075	0040
950531	2	05	02	11.1	2	1203	23.42	59	430	004	N	0500	0700	0400
950531	2	00	00	11.1	2	1321	23.22	59.22	432	004	N	0015	0020	0010
950531					5	1435	23.02	59.43	433	004	N	0040	0065	0025
950621					5	1307	4.22	73.67	501	004	N			0003
950626	6	02	03	7.4	2	1329	2.52	57.8	518	004	N			0010
950712	5	10	02	12.95	2	1139	-3.73	55.48	522	004	N			0025
950720	3	06	01	7.4	2	0439	22.90	59.48	543	004	N	0005	0007	0005
950720	4	10	02	7.4	2	1154	23.90	58.68	551	004	N	0004	0005	0003
950721	4	00	00	5.55	2	0617	24.68	57.55	554	004	N	0004	0006	0003
950721	4	00	00	5.55	2	0642	24.73	57.47	555	004	N	0012	0015	0010
950721	3	00	00	12.95	2	1311	24.35	57.53	558	004	N	0010	0014	0008
950721	3	00	00	12.95	2	1318	24.33	57.55	559	120	N	0005	0010	0002
950722	2	00	00	11.1	2	0234	24.20	57.8	563	120	N	0060	0080	0040
950722	2	00	00	12.95	2	0351	24.10	58.08	564	120	N	0500	0700	0400
950722	4	05	02	11.1	5	1240	23.55	59.33	568	004	N			0010
950723	1	12	12	14.8	2	0809	22.93	59.4	572	004	N	0170	0213	0128
950724					5	0153	23.58	59.23	579	098	N			0006
950724					5	0225	23.62	59.12	581	098	N			0005
950724					5	0229	23.62	59.12	583	120	N			0002
950724	2	05	03	12.95	2	0251	23.65	59.02	586	120	N	0015	0020	0010

Table 32. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950724	1	05	02	16.65	2	0333	23.65	58.85	588	004	N	0008	0012	0006
950724	1	05	02	16.65	2	0340	23.67	58.82	589	120	N	0025	0035	0015

Table 33. Sightings of *Stenella attenuata.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950322					5	0715	-31.70	31.32	001	004	N	0100	0150	0075
950403	2	11	03	18.5	2	0246	-20.05	57.35	023	004	N	0006	0012	0005
950403	1	11	02	18.5	2	1312	-20.03	57.31	025	004	N	0050	0060	0040
950412					5	0227	-4.23	54.02	039		Y	0040	0060	0030
950420	2	11	03	18.5	2	0119	7.73	70.7	137	120	Y	0034	0044	0030
950420	1	11	02	18.5	2	0250	7.70	71.07	141	120	Y	0070	0090	0056
950428	1	00	00	14.8	2	0126	7.25	75.18	215	120	N	0012	0020	0008
950502	1	01	02	18.5	2	1244	5.72	56.1	287	004	N	0090	0120	0075
950520	3	02	01	9.25	2	0629	20.00	58.98	405	120	Y	0330	0420	0240
950520	4	08	01	9.25	2	0918	20.47	59.28	413	004	Y	0800	1200	0600
950521	4	11	03	7.4	2	0152	22.15	60.21	419	120	Y	0175	0280	0105
950609	6	11	02	5.55	2	0453	8.50	60.67	466	004	Y	0060	0080	0045

Table 34. Sightings of *Stenella coeruleoalba.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950322	2	00	00	14.8	2	1401	-32.07	32.05	004	004	N	0150	0200	0100
950402	2	10	01	18.5	2	1149	-19.50	54.98	021	004	N	0015	0020	0010
950404	4	10	02	16.65	2	1001	-17.73	54.99	027	004	N	0010	0012	0008
950413	0	12	12	18.5	2	1009	-.90	55	074	004	N	0030	0040	0025
950414	0	08	02	18.5	2	1359	1.48	56.83	105	004	N	0035	0055	0025
950415	2	02	02	18.5	2	0435	2.47	57.75	109	004	N	0025	0035	0020
950416	2	01	01	18.5	2	0648	4.43	59.55	116	004	N	0020	0030	0015
950416	1	08	02	18.5	2	1119	4.70	59.8	121	004	N	0022	0028	0018
950416	1	08	02	18.5	2	1125	4.73	59.83	122	004	N	0015	0020	0012
950417	3	00	00	14.8	2	1345	7.02	61.92	129	120	N	0020	0030	0015
950419	4	11	02	12.95	2	0339	8.27	65.67	132	004	N	0020	0040	0010
950421	1	10	03	18.5	2	0134	5.57	75.9	166	120	N	0025	0040	0015
950421	1	10	03	18.5	2	0139	5.57	75.9	167	120	N	0015	0020	0010
950427	2	12	12	18.5	2	0648	6.97	79.43	184	120	N	0175	0250	0025
950428	2	04	01	18.5	2	0727	7.38	73.73	228	120	N	0040	0050	0030
950428	2	01	01	18.5	2	0819	7.42	73.53	229	004	N	0012	0020	0008
950428	2	01	03	18.5	2	1246	7.48	72.92	237	004	N	0030	0040	0020
950429	1	00	00	14.8	2	0118	7.20	70.1	238	004	N	0040	0060	0030
950501	1	00	00	18.5	2	0133	6.47	62.9	254	004	N	0012	0020	0008
950501	1	00	00	18.5	2	0232	6.43	62.65	257	004	N	0040	0060	0030
950501	3	00	00	14.8	2	0750	6.37	62.13	262	004	N			0001
950501	2	01	02	18.5	2	1300	6.25	61	270	004	N	0020	0030	0015

Table 34. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950502	2	06	02	18.5	2	0437	5.95	57.92	281	004	N	0025	0035	0020
950503	2	00	00	18.5	2	0223	5.45	53.27	293	004	N	0090	0120	0075
950503	2	06	02	18.5	2	0450	5.38	52.7	298	004	N	0060	0075	0050
950503	2	06	01	18.5	2	0637	5.35	52.32	300	120	N	0015	0020	0010
950503	1	12	12	18.5	2	0807	5.32	51.98	303	120	N	0010	0008	0005
950503	2	01	02	18.5	2	1249	5.20	50.98	307	004	N	0030	0040	0025
950507	3	02	02	12.95	2	0406	9.17	51.52	315	004	N	0045	0060	0035
950509					5	0315	10.02	52.02	334	120	N			
950510	1	01	03	18.5	2	0331	10.85	53.47	337	004	N	0150	0200	0125
950510	2	08	02	18.5	2	1241	11.47	54.53	365	120	N	0075	0100	0060
950515	5	08	01	7.4	2	0944	15.45	61.5	386	120	N	0060	0080	0050
950603	4	08	02	12.95	2	0354	11.20	56.5	459	004	N			0001
950620	4	06	02	9.25	2	0416	4.58	74.55	495	004	N			0005
950623	4	05	03	11.1	2	0203	4.80	66.4	512	004	N			0005
950629	5	04	01	11.1	2	1045	-1.67	54.98	520	004	Y	0040	0060	0030

Table 35. Sightings of *Stenella longirostris.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950411	2	10	03	18.5	2	1416	-6.28	52.78	038	004	N	0025	0030	0015
950412	2	01	03	18.5	2	0302	-4.15	54.1	040	004	N	0060	0075	0050
950413	0	12	12	18.5	2	1018	-.85	55	075	120	N	0045	0060	0030
950414	2	01	01	18.5	2	0547	.78	56.22	085	120	N	0040	0055	0030
950415	2	02	02	18.5	2	0424	2.43	57.72	107	120	Y	0075	0100	0060
950416	1	01	01	18.5	2	0709	4.48	59.6	118	004	Y	0070	0090	0060
950419	3	11	03	12.95	2	0212	8.30	65.32	131	120	N	0024	0036	0018
950420	2	11	03	18.5	2	0116	7.73	70.7	136	004	N	0015	0020	0010
950420	2	11	03	18.5	2	0119	7.73	70.7	137	120	Y	0051	0066	0045
950420	1	11	02	18.5	2	0250	7.70	71.07	141	120	Y	0105	0135	0084
950420	1	11	02	18.5	2	0406	7.67	71.33	147	004	N	0040	0050	0030
950421	1	10	03	18.5	2	0206	5.50	76.02	168	004	Y	0012	0015	0008
950421	1	10	03	18.5	2	0208	5.50	76.02	169	004	N	0135	0170	0100
950421	3	06	01	18.5	2	0744	4.90	76.85	173	120	N	0055	0075	0045
950427					5	0540	6.95	79.7	180	004	N	0025	0035	0020
950427	1	12	12	18.5	2	0555	6.97	79.62	181	004	N	0030	0040	0025
950427	2	12	12	18.5	2	0642	6.97	79.43	183	004	N	0150	0175	0100
950427	1	12	01	18.5	2	0738	6.97	79.23	186	004	N	0200	0300	0150
950427	1	01	01	18.5	2	0931	7.00	78.77	192	004	N	0300	0400	0250
950428	1	00	00	14.8	2	0126	7.25	75.18	215	120	N	0060	0080	0050
950428	1	00	00	14.8	2	0156	7.27	75.05	216	120	N	0120	0160	0100
950428	2	04	01	18.5	2	0623	7.33	74	225	098	N	0004	0006	0004

Table 35. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950428	2	04	01	18.5	2	0638	7.35	73.92	226	004	N	0020	0030	0010
950430	4	04	01	18.5	2	0736	6.83	66.58	248	120	N	0060	0090	0040
950507	1	05	01	14.8	2	0838	9.85	51.5	318	004	N	0200	0300	0150
950507	1	05	01	14.8	2	0853	9.90	51.43	319	004	N	0400	0600	0300
950507	2	06	01	14.8	2	1009	9.98	51.38	321	120	N	0150	0200	0080
950507	2	06	01	14.8	2	1014	9.98	51.38	322	004	N	0500	0700	0400
950507	2	06	01	14.8	2	1021	9.98	51.42	324	120	N	0300	0400	0200
950509					5	0315	10.02	52.02	334	120	N			
950510	2	08	02	18.5	2	1237	11.47	54.53	364	004	Y	0400	0600	0300
950512	3	08	02	18.5	2	1255	14.25	59.32	384	004	Y	0750	1000	0600
950520	3	02	01	9.25	2	0629	20.00	58.98	405	120	Y	0220	0280	0160
950520	4	08	01	9.25	2	0918	20.47	59.28	413	004	Y	1200	1800	0900
950520					5	1000	20.47	59.28	415	004	Y	1050	1750	0700
950521	4	11	03	7.4	2	0152	22.15	60.21	419	120	Y	0075	0120	0045
950524					5	0145			421	004	N	0040	0060	0030
950531					5	1018	23.65	58.63	422	098	N	0250	0400	0200
950531	2	05	02	11.1	2	1151	23.45	58.95	428	120	N	0006	0008	0004
950531	2	05	02	11.1	2	1215	23.38	59.02	431	004	N	0020	0030	0017
950601	4	02	02	7.4	2	1124	19.40	58.45	447	120	Y	0020	0025	0017
950602	4	07	03	9.25	2	0305	16.63	56.58	450	120	Y	0200	0280	0140
950609	6	11	02	5.55	2	0453	8.50	60.67	466	004	Y	0060	0080	0045
950616	5	00	00	11.1	2	0530	7.58	74	468	004	N	0450	0600	0300
950616	5	00	00	11.1	2	0534	7.58	74.02	469	004	Y	0067	0090	0056
950618	4	01	02	11.1	2	0310	5.62	77.97	479	004	N	0075	0200	0050
950618	5	08	02	7.4	2	1106	6.12	78.67	480	004	N			0025

Table 35. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950619					5	1040	6.13	77.98	492	004	N	0400	0600	0300
950620	5	00	00	7.4	2	0123	4.82	75.07	493	004	Y			0035
950620	4	06	02	9.25	2	0349	4.60	74.6	494	004	Y	0300	0500	0200
950620	4	05	01	9.25	2	0644	4.42	74.17	496	098	N	0080	0100	0060
950621					5	1305	4.20	73.65	500	120	Y	0085	0120	0060
950622	3	05	03	14.8	2	0212	4.70	71.52	504	004	N	0250	0400	0175
950622	3	05	01	18.5	2	0519	4.70	70.85	509	120	Y	0040	0060	0020
950622	3	01	02	14.8	2	1130	4.72	69.52	510	004	N	0060	0100	0040
950623	4	05	02	12.95	2	0515	4.80	65.73	514	004	N	0060	0120	0030
950623	4	12	12	12.95	2	0716	4.92	65.35	515	120	N	0080	0100	0050
950626	5	00	00	9.25	2	0324	3.13	58.38	517	004	Y	0380	0500	0250
950719	2	11	01	5.55	2	1120	22.60	59.57	540	004	N	0090	0120	0075
950720	1	04	01	7.4	2	0508	22.90	59.37	544	004	N			0001
950720	2	00	00	5.55	2	0626	23.02	59.25	545	120	N			0001
950720	3	00	00	5.55	2	0911	23.35	58.98	548	120	N			0001
950722	1	00	00	12.95	2	0522	24.02	58.37	565	004	N	0100	0150	0070
950723	2	08	01	14.8	2	0548	23.33	59.37	571	004	N	0075	0125	0050
950723	1	12	12	12.95	2	0909	22.78	59.52	574	098	N	0002	0002	0002
950723	2	01	01	12.95	2	1018	22.65	59.58	576	004	N	0030	0050	0025

Table 36. Sightings of *Stenella sp.*

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950406	3	02	02	14.8	2	0523	-13.82	54.98	028	004	N			0001
950406	3	02	02	14.8	2	0555	-13.70	54.98	030	120	N	0020	0030	0010
950407	3	11	02	18.5	2	1310	-11.52	54.13	032	004	N	0020	0030	0010
950411	2	03	03	18.5	2	0246	-7.27	52.88	036	004	N	0020	0040	0010
950412	0	09	02	18.5	2	1306	-3.05	55	063	004	N			0010
950413	1	03	02	18.5	2	0556	-1.12	55	072	004	N	0035	0045	0025
950414	1	01	03	18.5	2	0224	.47	55.92	080	004	N	0050	0075	0040
950414	2	01	01	18.5	2	0617	.87	56.3	086	004	Y	0050	0075	0040
950414	1	09	01	18.5	2	0923	1.03	56.43	090	004	Y	0040	0060	0030
950414	1	09	01	18.5	2	1012	1.18	56.57	093	004	N			0010
950416	2	02	03	18.5	2	0204	4.03	59.22	114	120	N			0001
950416	2	02	03	18.5	2	0237	4.13	59.3	115	120	N	0020	0040	0012
950416	2	01	01	18.5	2	0650	4.43	59.55	117	004	N	0040	0075	0025
950416	0	08	02	18.5	2	1152	4.78	59.88	125	120	N	0020	0025	0015
950419	3	11	03	12.95	2	0212	8.30	65.32	131	120	N	0016	0024	0012
950419	3	06	03	12.95	2	1314	8.03	67.9	135	120	N			0002
950420	2	11	03	18.5	2	0156	7.72	70.82	139	120	N	0030	0040	0020
950420	1	11	02	18.5	2	0252	7.70	71.07	142	004	N	0020	0040	0015
950421	1	10	03	18.5	2	0206	5.50	76.02	168	004	Y	0006	0008	0004
950428	1	00	00	14.8	2	0053	7.18	75.28	208	004	N	0075	0125	0060
950428	1	00	00	14.8	2	0106	7.22	75.25	210	004	N	0100	0125	0075
950429	1	00	00	14.8	2	0129	7.18	70.07	240	004	N	0030	0040	0020

Table 36. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Ship's Position (Decimal Degrees) Longitude E	Sighting Number	Detected by (Table 3)	Birds Present?	School Size Estimate Best	School Size Estimate High	School Size Estimate Low
950429	2	05	02	18.5	2	0249	7.17	69.77	243	004	N			0020
950430	2	05	02	18.5	2	0300	6.88	67.07	244	120	N	0040	0060	0030
950430	1	05	02	18.5	2	0319	6.88	67	245	098	N	0015	0025	0012
950430	2	06	02	18.5	2	0353	6.87	66.88	247	004	N	0050	0070	0035
950501	1	00	00	18.5	2	0217	6.43	62.7	256	120	N	0004	0006	0002
950501	2	01	02	18.5	2	1235	6.27	61.07	269	004	N			0001
950501	1	01	02	18.5	2	1314	6.25	60.92	271	004	N			0050
950502	1	06	02	18.5	2	0357	5.97	58.07	279	120	N	0035	0050	0025
950502	2	02	02	18.5	2	1005	5.80	56.7	284	004	N			0025
950502	1	01	02	18.5	2	1320	5.72	55.98	290	120	N			0001
950502	1	01	03	18.5	2	1349	5.70	55.87	292	120	N			0001
950509	0				5	0315	10.02	52.02	334	120	N	0300		
950512	3	12	03	14.8	2	0242	13.22	57.38	380	004	N			0020

Table 37. Biopsy samples collected from free-ranging cetaceans.

Date yrmoda	Ship's Position (Decimal Degrees) Latitude N/S=+/-	Longitude E	Species	Sighting Number	Number of Samples Collected from School
950421	5.00	76.73	*Tursiops truncatus*	171	2
950501	6.40	62.43	*Pseudorca crassidens*	261	1
950520	19.15	58.43	*Tursiops truncatus*	397	3
950531	23.42	59	*Tursiops truncatus*	430	2
950719	22.73	59.92	*Delphinus cf. tropicalis*	541	3
950720	22.90	59.37	*Delphinus cf. tropicalis*	544	2
950721	24.25	57.63	*Tursiops truncatus*	561	1
950722	24.20	57.8	*Tursiops truncatus*	563	2
950722	23.55	59.33	*Tursiops truncatus*	568	3

Table 38. Daily seabird and flying fish search effort.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950322	1319	2	5	2	26.09	112	-32.07	32.05	2.50	65.21
950323	0547	3	4	2	25.90		-32.97	35.45	2.52	65.18
950323	1012	3	4	2	25.90		-33.00	36.1	0.75	19.43
950323	1258	3	4	2	25.90		-32.98	36.33	1.22	31.51
950324	0407	3	4	2	27.38	092	-32.98	39	0.63	17.34
950324	0523	4	4	2	27.38	092	-32.98	39	3.10	84.88
950324	0839	4	4	2	25.16	089	-32.98	39.55	1.53	38.58
950324	1438	4	4	2	24.24	089	-32.98	39.98	0.62	14.94
950325	0352	4	4	2	26.64	094	-32.98	42.32	0.53	14.21
950325	0730	3	4	2	25.53	049	-32.97	42.48	1.42	36.17
950325	1059	3	4	2	24.98	092	-32.98	42.9	0.42	10.41
950325	1124	4	4	2	25.72	091	-32.98	43.03	1.38	35.57
950325	1247	3	4	2	26.64	088	-32.98	43.4	0.88	23.53
950326	0318	2	4	2	26.27	101	-33.15	45.72	0.37	9.63
950326	0340	3	4	2	25.90	107	-33.17	45.8	1.02	26.33
950326	0441	2	4	2	25.90	103	-33.22	46.12	0.50	12.95
950326	0529	2	4	2	24.79	107	-33.27	46.3	1.00	24.79
950326	0629	3	4	2	27.57	104	-33.32	46.57	1.00	27.57
950326	0734	3	4	2	27.20	099	-33.37	46.83	0.43	11.78
950326	0835	3	4	2	26.27	106	-33.43	47.13	0.78	20.58
950326	0922	4	4	2	24.98	107	-33.45	47.22	0.47	11.66
950326	1231	4	4	2	18.32	028	-33.47	47.42	0.98	18.01
950326	1405	3	4	2	26.27	091	-33.50	47.85	0.60	15.76

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Longitude E	Time Searched hours	Linear Distance Searched km
950327	0306	6	3	2	19.06	045	-33.22	50.35	1.43	27.31
950327	0432	6	3	2	27.20	049	-33.00	50.62	0.88	24.02
950327	0525	6	3	2	24.24	048	-32.88	50.78	1.15	27.87
950327	0634	6	3	2	24.42	047	-32.70	51.02	1.02	24.83
950327	0736	6	3	2	26.46	051	-32.52	51.23	0.52	13.67
950327	1130	6	3	2	20.91	053	-32.43	51.33	1.12	23.34
950327	1237	6	3	2	25.53	049	-32.27	51.57	0.92	23.40
950327	1332	6	3	2	24.24	048	-32.15	51.72	0.83	20.20
950329	0637	5	3	1	27.94	339	-28.47	54.97	0.97	27.00
950329	0735	4	3	1	31.64	004	-28.25	54.98	1.03	32.69
950330	0338	5	3	1	25.90	348	-27.00	54.97	2.20	56.98
950330	1041	5	3	2	25.53	006	-26.33	54.97	1.63	41.70
950331	0524	4	4	1	25.90	122	-25.00	54.98	2.15	55.69
950331	1122	4	4	2	27.20	004	-24.47	54.98	2.03	55.30
950401	0258	4	4	1	20.54	001	-22.70	54.97	0.70	14.37
950401	0340	3	4	1	20.54	001	-22.70	54.97	0.80	16.43
950401	0428	4	4	1	24.42	006	-22.58	54.98	0.35	8.55
950401	0759	4	4	1	20.35	000	-22.45	54.98	0.30	6.11
950401	0817	3	4	1	26.46	002	-22.38	54.98	0.15	3.97
950401	0826	4	4	1	26.27	002	-22.33	54.98	0.35	9.19
950401	0847	4	4	2	26.46	002	-22.27	54.98	0.45	11.90
950401	0914	3	4	2	25.72	001	-22.15	54.98	0.43	11.14
950401	1259	2	4	2	25.90	049	-21.97	54.98	1.30	33.67
950402	0524	1	5	1	25.35	340	-20.00	54.98	1.98	50.27
950402	0723	2	5	1	31.08	001	-19.53	54.98	0.13	4.14

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950402	1056	2	5	2	25.90	131	-19.50	54.98	1.95	50.51
950402	1254	3	4	2	25.90	131	-19.50	54.98	0.13	3.45
950403	0229	2	4	2	25.90		-20.00	57.15	0.47	12.09
950403	1238	1	5	2	25.90		-20.02	57.3	1.48	38.42
950404	0343	4	3	1	25.90		-18.38	54.98	1.88	48.78
950404	0855	4	3	1	25.90		-17.97	54.95	0.05	1.30
950404	0858	4	3	2	25.90		-17.97	54.95	0.48	12.52
950404	1001	4	3	2	25.90		-17.73	54.98	0.97	25.04
950405	0236	3	4	1	25.90	296	-16.08	54.98	1.45	37.56
950405	0726	4	4	1	26.46	358	-16.08	54.97	1.07	28.22
950405	0830	4	4	2	26.09	008	-15.82	54.98	0.92	23.91
950405	1245	4	4	2	18.87	093	-15.60	55.02	0.97	18.24
950405	1344	3	4	2	27.01	001	-15.37	55.02	0.52	13.96
950406	0401	4	4	1	26.46	000	-14.13	55	0.98	26.01
950406	0500	3	4	1	32.56	358	-13.93	55	0.95	30.93
950406	0934	4	4	2	25.53	002	-13.68	54.97	0.95	24.25
950406	1031	3	4	2	26.46	003	-13.50	54.98	1.20	31.75
950407	0654	3	4	1	25.35	323	-11.95	54.62	1.03	26.19
950407	0756	2	4	1	26.83	316	-11.78	54.45	0.87	23.25
950407	1215	3	4	2	24.24	312	-11.63	54.27	1.87	45.24
950407	1407	2	4	2	26.46	311	-11.37	53.95	0.22	5.73
950408	0521	3	4	2	13.69	151	-10.72	53.22	0.25	3.42
950408	0536	4	4	2	27.75	308	-10.68	53.17	0.83	23.13
950408	0626	3	4	2	32.56	307	-10.58	53.02	0.98	32.02
950408	1100	3	4	2	32.19	309	-10.33	52.73	0.25	8.05

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950408	1123	4	4	2	27.94	311	-10.28	52.67	1.12	31.19
950409	0418	3	4	2	25.90	341	-9.72	51.98	0.97	25.04
950409	0516	2	4	2	25.90	311	-9.62	51.88	0.03	0.86
950409	0810	3	4	2	21.83	316	-9.60	51.87	0.63	13.83
950409	0854	2	4	2	24.61	316	-9.53	51.8	0.13	3.28
950409	1201	3	4	2	18.50	024	-9.52	51.77	0.17	3.08
950409	1211	2	4	2	27.57	359	-9.47	51.77	1.22	33.54
950409	1333	3	4	2	25.35	004	-9.17	51.77	0.23	5.91
950410	0429	2	4	1	10.55	051	-8.45	52.03	0.77	8.08
950410	0832	2	4	2	13.32	130	-8.33	52.15	0.10	1.33
950410	0840	2	4	2	25.90	045	-8.32	52.17	1.02	26.33
950410	1232	2	4	2	15.73	107	-8.25	52.27	1.27	19.92
950411	0231	2	4	1	25.72	001	-7.32	52.88	0.30	7.71
950411	0515	2	4	1	25.90	100	-7.23	52.9	0.40	10.36
950411	0556	2	4	1	18.87	001	-7.10	52.9	0.25	4.72
950411	0611	1	4	1	17.95	357	-7.07	52.9	1.27	22.73
950411	0728	1	4	2	19.06	354	-6.85	52.87	0.52	9.85
950411	0953	2	4	2	12.21	235	-6.77	52.88	0.13	1.63
950411	1023	2	4	2	9.44	315	-6.73	52.87	0.17	1.57
950411	1057	2	4	2	23.87	355	-6.67	52.87	0.37	8.75
950411	1123	2	4	2	19.61	038	-6.60	52.85	0.02	0.33
950411	1325	3	4	2	25.90	040	-6.47	52.83	0.62	15.97
950411	1402	2	4	2	31.82	346	-6.33	52.8	0.30	9.55
950412	0227	2	4	1	27.38	044	-4.23	54.02	2.42	66.17
950412	0510	2	4	1	27.01	061	-3.85	54.5	0.45	12.15

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950412	0537	2	4	2	31.27	060	-3.80	54.6	1.90	59.40
950412	0907	2	4	2	25.90	003	-3.62	54.98	0.40	10.36
950412	0943	2	4	2	27.75	002	-3.48	54.98	0.12	3.24
950412	0951	1	4	2	22.57	002	-3.45	54.98	1.23	27.84
950412	1256	1	5	2	27.20	000	-3.10	55	1.33	36.26
950413	0409	1	5	1	25.90	101	-1.55	55.02	2.13	55.25
950413	0931	0	5	2	25.90	167	-1.03	55	1.42	36.69
950413	1056	1	5	2	25.53	000	-0.70	55	0.82	20.85
950414	0220	1	5	1	28.12	040	0.43	55.9	0.55	15.47
950414	0533	1	5	1	26.27	042	0.75	56.18	0.12	3.06
950414	0540	2	4	1	26.27	042	0.75	56.18	0.78	20.58
950414	0850	1	5	2	25.90	279	0.92	56.33	1.98	51.37
950414	1249	0	5	2	25.90	067	1.28	56.67	1.47	37.99
950415	0408	2	4	1	9.99	122	2.37	57.67	0.70	6.99
950415	0450	3	4	1	30.16	042	2.50	57.77	0.85	25.63
950415	0546	3	4	1	18.87	041	2.67	57.92	0.30	5.66
950415	0912	2	4	2	23.68	042	2.75	58	1.37	32.36
950415	1041	2	4	2	27.01	047	3.00	58.23	0.55	14.86
950416	0200	2	4	1	26.64	041	4.03	59.22	0.77	20.42
950416	0525	1	5	2	28.12	043	4.18	59.35	0.90	25.31
950416	0619	2	4	2	27.20	041	4.33	59.48	0.58	15.86
950416	0654	1	5	2	27.01	043	4.45	59.58	0.52	13.96
950416	1021	1	5	2	25.90	142	4.53	59.65	1.32	34.10
950416	1140	0	5	2	24.42	041	4.77	59.85	0.78	19.13
950417	0410	4	3	1	26.46	040	6.02	61.02	1.62	42.77

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950417	0742	4	4	2	26.46	042	6.37	61.35	0.65	17.20
950417	0830	4	4	2	26.83	043	6.48	61.45	0.68	18.33
950417	0911	3	4	2	27.20	042	6.63	61.58	0.55	14.96
950417	1205	3	4	2	27.57	026	6.70	61.67	1.83	50.54
950418	0429	4	3	1	17.76	181	7.80	62.65	1.15	20.42
950418	0542	4	3	1	13.88	040	7.98	62.82	1.05	14.57
950418	0958	4	3	2	19.80	065	8.18	62.97	0.18	3.63
950418	1016	4	3	2	25.53	084	8.20	63	2.12	54.04
950419	0143	3	4	2	27.01	099	8.32	65.2	0.57	15.31
950419	0217	3	4	1	25.53	089	8.30	65.35	0.17	4.26
950419	0228	3	4	2	25.90	073	8.32	65.38	0.40	10.36
950419	0253	4	4	2	23.68	103	8.30	65.47	0.83	19.73
950419	0420	4	4	2	27.57	095	8.25	65.82	1.60	44.10
950419	0639	3	4	2	31.82	096	8.20	66.35	0.73	23.33
950419	0723	4	4	2	26.46	097	8.18	66.5	0.55	14.55
950419	0756	3	4	2	31.08	098	8.17	66.67	0.52	16.06
950419	0904	3	4	2	26.09	097	8.13	66.93	1.48	38.69
950419	1034	4	4	2	26.09	094	8.10	67.28	0.18	4.78
950419	1131	3	4	2	27.01	096	8.08	67.48	1.88	50.87
950420	0112	2	4	2	30.90	097	7.73	70.67	1.05	32.44
950420	0237	2	4	2	27.20	094	7.70	71.03	0.15	4.08
950420	0246	1	5	2	27.57	094	7.70	71.07	0.28	7.81
950420	0335	1	5	2	26.27	091	7.67	71.22	0.70	18.39
950420	0417	0	5	2	27.38	095	7.67	71.38	0.37	10.04
950420	0441	0	5	2	27.57	095	7.67	71.45	0.10	2.76

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950420	0447	1	5	2	27.20	095	7.65	71.5	0.65	17.68
950420	0628	2	4	2	23.68	097	7.60	71.92	0.60	14.21
950420	0716	1	4	2	27.75	090	7.58	72.07	0.30	8.33
950420	0734	1	5	2	31.27	094	7.57	72.15	0.72	22.41
950420	0835	1	5	2	27.20	097	7.57	72.33	1.77	48.04
950420	1138	3	4	2	27.20	123	7.47	73.03	0.92	24.93
950420	1233	1	5	2	25.90	127	7.35	73.2	0.65	16.84
950421	0052	0	5	2	26.27	124	5.65	75.77	0.23	6.13
950421	0106	1	5	2	26.64	124	5.63	75.8	1.38	36.85
950421	0229	2	4	2	32.01	128	5.47	76.08	0.22	6.93
950421	0253	2	4	2	26.46	130	5.40	76.17	0.97	25.57
950421	0441	3	4	2	26.46	126	5.25	76.35	1.13	29.98
950421	0735	3	4	2	28.49	118	4.92	76.82	0.28	8.07
950421	0752	2	4	2	27.57	118	4.88	76.88	1.23	34.00
950421	0933	3	4	2	26.46	054	4.98	77.2	0.48	12.79
950421	1021	2	4	2	27.38	049	5.07	77.33	0.12	3.19
950421	1109	2	4	2	27.01	051	5.18	77.48	1.17	31.51
950421	1219	1	4	2	26.64	052	5.23	77.55	0.52	13.76
950427	0554	1	5	2	27.01	283	6.97	79.62	0.40	10.80
950427	0618	2	4	2	27.01	271	6.97	79.55	0.58	15.76
950427	0653	1	5	2	24.79	272	6.97	79.38	0.27	6.61
950427	0736	1	5	2	26.27	271	6.97	79.23	1.85	48.60
950427	0927	1	5	1	26.09	275	7.00	78.82	1.12	29.13
950427	1035	1	5	2	27.01	287	7.02	78.53	0.40	10.80
950427	1100	1	5	1	29.42	293	7.05	78.47	0.35	10.30

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950428	0048	1	5	2	26.46	289	7.18	75.28	1.72	45.41
950428	0249	2	4	2	27.20	270	7.27	74.82	2.70	73.43
950428	0613	2	4	2	26.83	282	7.33	74.03	1.87	50.07
950428	0820	2	4	2	27.20	277	7.42	73.53	0.35	9.52
950428	1031	2	4	1	27.20	277	7.45	73.42	2.62	71.16
950429	0108	1	5	2	25.90	266	7.20	70.13	0.70	18.13
950429	0156	2	5	2	16.47	266	7.18	69.98	0.57	9.33
950429	0237	2	5	2	26.46	266	7.17	69.83	0.25	6.61
950429	0252	1	5	2	26.64	264	7.17	69.77	0.03	0.89
950429	0548	2	4	2	26.64	263	7.15	69.65	0.28	7.55
950429	0605	3	4	2	26.27	262	7.13	69.57	0.33	8.76
950429	0739	3	4	2	26.46	262	7.15	69.48	1.10	29.10
950430	0123	2	4	2	24.79	263	6.92	67.42	1.87	46.27
950430	0315	1	4	2	24.79	266	6.88	67.03	0.52	12.81
950430	0347	2	4	2	24.42	265	6.87	66.88	0.62	15.06
950430	0424	3	4	2	24.98	263	6.85	66.78	0.02	0.42
950430	0643	3	4	2	25.90	265	6.85	66.77	0.27	6.91
950430	0659	4	4	2	25.72	266	6.85	66.68	0.93	24.00
950430	0755	4	4	1	25.35	265	6.83	66.5	1.57	39.71
950430	1117	3	4	1	11.66	047	6.78	65.95	0.18	2.14
950430	1129	2	4	1	25.53	262	6.78	65.88	0.15	3.83
950430	1138	1	5	1	26.83	231	6.77	65.85	0.05	1.34
950430	1154	2	4	1	25.16	263	6.75	65.82	0.30	7.55
950430	1231	3	4	1	15.54	258	6.75	65.73	0.37	5.70
950430	1253	4	4	1	18.13	261	6.73	65.68	0.22	3.93

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950501	0134	1	5	2	25.16	261	6.47	62.9	2.02	50.74
950501	0722	3	4	2	25.90	266	6.38	62.2	1.25	32.38
950501	0838	2	4	2	27.01	264	6.35	61.95	0.10	2.70
950501	0903	1	5	1	26.09	263	6.33	61.83	0.37	9.56
950501	0925	2	4	1	25.90	264	6.33	61.77	0.97	25.04
950501	1026	2	4	1	27.01	267	6.32	61.53	0.05	1.35
950501	1108	2	4	1	25.72	265	6.30	61.4	1.95	50.14
950501	1305	1	4	1	26.27	266	6.25	60.95	0.90	23.64
950502	0154	1	5	2	26.09	264	6.00	58.52	0.17	4.35
950502	0204	2	4	2	25.90	265	6.00	58.47	0.45	11.66
950502	0231	3	4	2	28.12	265	5.98	58.4	0.25	7.03
950502	0246	2	4	2	25.72	265	5.98	58.33	0.20	5.14
950502	0324	1	5	2	25.35	265	5.97	58.18	0.95	24.08
950502	0421	2	4	2	27.01	265	5.95	58	0.88	23.86
950502	0514	1	4	2	25.35	265	5.93	57.78	0.18	4.65
950502	0525	2	4	2	25.90	264	5.93	57.73	0.57	14.68
950502	0622	2	4	2	25.35	262	5.90	57.55	0.58	14.78
950502	0750	2	4	2	25.35	262	5.85	57.23	1.20	30.41
950502	0944	2	4	1	25.53	265	5.80	56.77	1.88	48.08
950502	1243	1	4	1	26.27	266	5.72	56.1	0.85	22.33
950502	1346	1	4	1	26.64	268	5.70	55.87	0.43	11.54
950503	0219	2	4	2	30.34	264	5.45	53.27	0.72	21.74
950503	0331	1	4	2	25.72	264	5.43	53.02	0.45	11.57
950503	0358	2	4	2	26.83	265	5.42	52.9	0.93	25.04
950503	0454	1	4	2	24.98	262	5.38	52.7	0.35	8.74

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950503	0515	2	4	2	26.27	263	5.38	52.62	0.75	19.70
950503	0624	2	4	2	25.16	266	5.35	52.37	0.53	13.42
950503	0751	1	4	2	26.27	266	5.32	52.03	1.47	38.53
950503	0919	2	4	2	24.61	266	5.28	51.73	0.27	6.56
950503	0935	2	4	1	24.79	266	5.28	51.67	0.32	7.85
950503	1028	2	4	1	24.98	263	5.27	51.48	1.12	27.89
950503	1135	1	4	1	24.24	261	5.23	51.23	0.33	8.08
950503	1237	2	4	1	24.98	264	5.20	51.02	1.80	44.96
950504	0735	3	4	2	25.90	023	5.02	49.02	0.17	4.32
950504	0745	4	4	2	25.90	023	5.02	49.02	0.25	6.48
950505	0239	4	3	1	25.90	093	5.58	49.38	0.72	18.56
950505	0322	5	3	1	25.90	093	5.58	49.38	0.43	11.22
950505	0852	4	3	2	15.36	289	5.62	49.4	0.22	3.33
950505	1330	5	3	2	25.72	355	5.72	49.43	1.12	28.72
950506	0241	2	4	1	24.98	020	6.73	50.13	0.25	6.24
950506	0315	3	4	1	26.27	015	6.88	50.18	0.68	17.95
950506	0404	4	3	1	16.65	015	7.03	50.22	0.30	5.00
950506	0427	4	3	1	17.21	032	7.08	50.25	0.78	13.48
950506	0514	5	3	1	22.20	029	7.20	50.32	0.75	16.65
950506	0615	5	3	1	17.39	030	7.33	50.38	0.48	8.41
950506	0654	5	3	1	16.47	032	7.42	50.43	0.20	3.29
950506	0710	5	3	1	14.99	028	7.45	50.45	0.27	4.00
950506	0730	5	3	1	16.28	031	7.48	50.47	0.43	7.05
950506	0947	5	3	2	20.91	041	7.62	50.58	0.92	19.16
950506	1235	5	3	2	10.18	064	7.93	50.8	1.73	17.64

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950507	0235	2	4	1	26.09	033	8.83	51.32	0.15	3.91
950507	0244	3	4	1	30.53	033	8.88	51.33	0.68	20.86
950507	0339	3	4	1	26.64	032	9.10	51.47	1.98	52.84
950507	0603	3	4	1	30.71	033	9.62	51.82	0.47	14.33
950507	0642	3	4	2	15.54	317	9.72	51.77	0.12	1.81
950507	0726	3	4	2	27.75	293	9.77	51.68	0.10	2.78
950507	0732	2	4	2	21.28	291	9.77	51.67	0.85	18.08
950507	0823	1	4	2	20.91	302	9.83	51.52	1.32	27.52
950507	1006	2	4	2	26.27	090	9.98	51.33	0.50	13.14
950507	1036	3	4	2	27.01	085	10.00	51.45	0.87	23.41
950507	1128	2	4	2	26.83	093	9.98	51.67	0.45	12.07
950507	1236	3	4	2	26.27	089	9.98	51.95	1.70	44.66
950510	0218	2	4	1	27.01	059	10.72	53.23	0.77	20.71
950510	0327	1	4	1	25.16	059	10.85	53.47	0.13	3.35
950510	0342	1	4	1	18.13	042	10.87	53.48	1.32	23.87
950510	0501	0	5	1	16.84	055	10.97	53.65	0.85	14.31
950510	0552	1	5	1	20.54	056	10.98	53.67	0.32	6.50
950510	0618	1	5	2	20.54	056	10.98	53.67	0.68	14.03
950510	0805	1	4	2	14.06	129	11.15	54.03	0.43	6.09
950510	0931	1	4	2	15.54	006	11.15	54	0.97	15.02
950510	1045	1	4	2	28.31	056	11.25	54.18	0.87	24.53
950510	1137	2	4	2	27.38	059	11.35	54.33	0.28	7.76
950510	1236	2	4	2	32.01	060	11.47	54.53	0.42	13.34
950510	1327	2	4	2	15.36	063	11.53	54.63	0.78	12.03
950511	0206	2	4	1	23.68	052	11.72	55.08	1.13	26.84

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950511	0348	3	4	1	27.57	059	11.97	55.38	1.23	34.00
950511	0510	3	4	1	27.57	058	12.13	55.65	0.50	13.78
950511	0602	3	4	1	28.12	059	12.23	55.83	0.95	26.71
950511	0741	3	4	2	28.12	063	12.43	56.18	0.28	7.97
950511	0819	3	4	2	16.84	064	12.48	56.28	1.57	26.37
950511	1020	3	4	2	16.65	057	12.63	56.55	0.95	15.82
950511	1117	2	4	2	14.80	057	12.72	56.65	0.07	0.99
950511	1403	2	4	2	28.12	058	12.75	56.68	2.00	56.24
950512	0206	3	3	2	30.34	076	13.18	57.27	0.90	27.31
950512	0340	3	4	1	26.83	061	13.28	57.65	0.65	17.44
950512	0419	2	4	1	26.64	060	13.35	57.75	0.93	24.86
950512	0516	1	4	1	27.01	061	13.45	57.95	0.40	10.80
950512	0606	1	4	1	25.16	059	13.55	58.13	0.88	22.22
950512	0738	3	4	2	26.64	059	13.73	58.43	0.35	9.32
950512	0831	2	4	2	14.62	063	13.80	58.55	1.20	17.54
950512	1017	3	4	2	26.83	055	13.90	58.77	1.80	48.29
950512	1243	3	4	2	27.75	060	14.22	59.25	1.23	34.23
950513	0204	3	4	1	31.82	074	14.67	59.9	0.97	30.76
950513	0342	3	4	1	26.09	062	14.77	60.22	1.83	47.82
950513	0554	3	4	1	26.09	062	14.77	60.22	0.58	15.22
950513	0629	4	4	1	26.09	062	14.77	60.22	0.53	13.91
950515	0908	5	3	2	26.09	030	15.45	61.5	2.17	56.52
950517	0540	5	3	2	20.72	289	16.02	61.83	0.57	11.74
950517	0614	6	3	2	25.53	285	16.05	61.7	0.55	14.04
950517	0647	5	3	2	21.09	287	16.08	61.6	0.15	3.16

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950517	0735	6	3	2	19.80	286	16.13	61.43	0.58	11.55
950517	0813	5	3	2	27.38	285	16.15	61.32	0.47	12.78
950517	0918	5	3	2	12.95	284	16.18	61.18	0.73	9.50
950517	1002	5	3	2	24.42	287	16.22	61.08	0.35	8.55
950518	0242	5	3	2	15.54	286	16.32	60.07	0.27	4.14
950518	0336	5	3	2	15.17	324	16.40	59.98	0.20	3.03
950518	0413	5	3	1	15.17	324	16.40	59.98	1.45	22.00
950518	0613	6	3	1	14.43	323	16.67	59.78	0.27	3.85
950518	0645	6	3	1	14.99	313	16.72	59.73	0.22	3.25
950518	0740	5	3	2	14.80	319	16.80	59.65	1.48	21.95
950518	0926	5	3	2	25.72	317	16.97	59.5	0.37	9.43
950518	1018	5	3	2	18.32	319	17.08	59.4	1.65	30.22
950518	1244	5	3	2	14.99	321	17.33	59.15	0.82	12.24
950519	0159	5	3	2	14.43	327	18.63	57.78	0.25	3.61
950519	0216	4	3	1	14.43	327	18.63	57.78	1.28	18.52
950520	0143	4	3	1	24.24	033	19.02	58.35	1.47	35.54
950520	0354	4	3	1	27.38	021	19.48	58.63	1.15	31.49
950520	0503	3	4	1	26.27	038	19.72	58.77	0.60	15.76
950520	0603	3	4	1	25.35	037	19.92	58.92	0.97	24.50
950520	0750	4	4	2	27.38	035	20.28	59.18	1.90	52.02
950520	1021	4	4	2	25.90		20.47	59.28	1.30	33.67
950520	1256	4	4	2	25.90		20.47	59.28	1.03	26.76
950521	0135	4	3	2	25.90		22.12	60.08	0.93	24.17
950521	0231	4	3	1	25.90				0.27	6.91
950521	0248	5	3	1	25.90				0.13	3.45

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950521	0329	5	3	1	25.90		22.25	60.59	0.55	14.25
950522	0135	6	3	2	25.90				0.95	24.61
950531	1106	2	4	1	26.09	122	23.58	58.82	1.38	36.08
950531	1256	2	4	2	25.53	135	23.28	59.15	0.15	3.83
950531	1305	2	4	1	29.60	134	23.25	59.17	0.55	16.28
950531	1339	1	4	2	25.72	133	23.17	59.28	0.12	3.00
950601	0137	4	3	2	26.27	192	21.02	59.5	1.08	28.46
950601	0242	3	3	2	26.27	205	20.82	59.37	0.47	12.26
950601	0346	2	4	2	24.61	211	20.63	59.25	0.25	6.15
950601	0401	3	4	2	25.35	211	20.57	59.22	0.83	21.12
950601	0452	4	4	2	25.35	216	20.42	59.12	0.75	19.01
950601	0617	4	4	2	25.16	215	20.18	58.93	0.93	23.48
950601	0804	4	4	1	25.16	214	19.85	58.72	1.67	41.93
950601	1049	4	3	1	27.94	224	19.52	58.53	0.67	18.62
950601	1139	4	3	1	25.72	218	19.35	58.42	0.83	21.43
950601	1308	4	3	1	24.79	213	19.12	58.23	1.13	28.10
950602	0156	4	3	1	25.53	213	16.85	56.72	1.42	36.17
950602	0358	4	3	2	26.09	181	16.45	56.48	1.53	40.00
950602	0604	4	3	2	25.72	180	15.98	56.5	0.93	24.00
950602	0738	4	4	2	26.09	177	15.62	56.5	1.35	35.21
950602	1026	3	4	1	25.35	178	15.18	56.53	1.55	39.28
950602	1235	2	4	1	25.90	184	14.70	56.5	1.80	46.62
950603	0217	4	3	2	25.35	180	11.57	56.5	0.72	18.16
950603	0343	4	3	2	25.35	176	11.23	56.5	1.18	29.99
950603	0454	3	4	2	25.53	224	10.98	56.47	0.35	8.94

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950603	0535	4	4	2	26.27	250	10.93	56.33	0.35	9.19
950603	0740	4	3	2	24.98	248	10.80	56.07	0.33	8.33
950603	0800	4	3	1	25.72	247	10.78	56	0.25	6.43
950603	0823	4	3	1	20.72	245	10.75	55.92	0.15	3.11
950603	0832	5	3	1	20.72	245	10.73	55.9	1.47	30.39
950603	1000	5	3	1	28.31	246	10.62	55.63	1.18	33.49
950603	1112	5	3	1	22.39	251	10.53	55.42	0.65	14.55
950604	0225	5	3	2	14.62	253	9.70	53.43	1.00	14.62
950605	0415	5	3	2	25.35	105	8.52	50.62	0.17	4.22
950605	0619	5	3	2	24.79	095	8.50	50.7	0.80	19.83
950605	0940	5	3	2	24.42	086	8.50	50.98	0.15	3.66
950605	0949	6	3	2	27.01	082	8.52	51.02	1.25	33.76
950605	1400	5	3	2	20.35	080	8.48	51.38	0.52	10.51
950606	0225	5	3	2	27.94	090	8.45	52.65	0.57	15.83
950606	0327	5	3	2	26.09	085	8.48	52.88	0.78	20.43
950606	0831	5	3	2	25.90	096	8.42	53.1	0.47	12.09
950606	0921	6	3	2	25.90	081	8.43	53.28	1.70	44.03
950607	0435	5	3	2	26.83	088	8.48	54.87	0.58	15.65
950607	0518	5	3	2	25.16	086	8.48	55.02	1.78	44.87
950607	1030	6	3	2	28.49	083	8.47	55.43	2.00	56.98
950608	0407	5	3	2	26.64	090	8.47	57.15	2.75	73.26
950608	0921	6	3	2	24.42	084	8.48	57.77	1.68	41.11
950608	1102	5	3	2	27.57	090	8.50	58.13	0.85	23.43
950609	0213	6	3	2	27.01	088	8.48	60.07	0.97	26.11
950609	0351	6	3	2	22.94	089	8.50	60.43	2.15	49.32

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950609	0624	6	3	2	21.28	111	8.40	61.02	0.28	6.03
950610	0803	6	3	2	25.90	271	8.48	59.75	1.43	37.12
950610	0947	6	3	2	25.90	271	8.48	59.75	1.08	28.06
950611	0200	5	3	2	25.90	086	8.48	62.07	0.10	2.59
950611	0206	6	3	2	25.90	086	8.48	62.08	1.43	37.12
950611	0737	6	3	2	26.09	086	8.47	62.45	1.42	36.95
950611	0916	6	3	2	21.83	088	8.50	62.83	0.70	15.28
950612	0342	6	3	2	32.75	089	8.48	64.33	0.12	3.82
950612	0414	6	3	2	15.73	090	8.48	64.42	0.18	2.88
950612	0426	6	3	2	28.31	094	8.48	64.45	1.32	37.27
950612	0932	6	3	2	25.53	090	8.47	64.77	1.03	26.38
950612	1038	6	3	2	24.24	085	8.47	65	0.80	19.39
950612	1126	6	3	2	19.80	084	8.48	65.18	1.05	20.78
950612	1230	6	3	2	22.20	094	8.50	65.42	0.50	11.10
950612	1304	6	3	2	25.90	095	8.48	65.55	0.43	11.22
950612	1330	6	3	2	26.46	094	8.48	65.65	0.23	6.17
950613	0739	6	3	2	24.42	091	8.48	67.68	1.33	32.56
950613	0944	6	3	2	24.42	088	8.48	68.15	0.38	9.36
950614	0929	6	3	2	24.24	088	7.57	69.42	1.20	29.08
950614	1054	6	3	2	22.76	088	7.58	69.73	0.73	16.69
950614	1138	5	3	2	25.90	086	7.58	69.9	0.43	11.22
950615	0349	5	3	2	24.05	092	7.60	71.27	1.07	25.65
950615	0507	5	3	2	20.35	088	7.60	71.47	1.25	25.44
950615	0844	5	3	2	25.35	091	7.60	71.77	1.37	34.64
950615	1220	5	3	2	26.27	089	7.60	72.13	0.85	22.33

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950616	0112	5	3	2	24.42	092	7.60	73.48	1.15	28.08
950616	0430	4	3	2	20.54	091	7.60	73.77	0.97	19.85
950616	0528	5	3	2	25.90	094	7.58	74	0.37	9.50
950616	0804	5	3	2	12.40	095	7.60	74.12	0.05	0.62
950616	0812	5	3	2	16.10	107	7.58	74.13	0.13	2.15
950616	0823	5	3	2	9.81	100	7.58	74.17	1.12	10.95
950616	0942	5	3	2	27.75	088	7.58	74.4	0.67	18.50
950616	1230	4	3	2	25.90	145	7.57	74.57	0.58	15.11
950617	0114	4	3	2	25.72	141	6.28	75.63	0.28	7.29
950617	0131	5	3	2	27.20	142	6.25	75.67	1.17	31.73
950617	0431	5	3	2	20.91	140	6.02	75.85	1.33	27.87
950617	0606	5	3	2	26.27	142	5.73	76.08	0.43	11.38
950617	0821	5	3	2	27.94	140	5.63	76.18	1.47	40.97
950617	1000	5	3	2	26.09	135	5.33	76.42	0.30	7.83
950617	1223	5	3	2	24.79	144	5.25	76.5	0.62	15.29
950618	0131	3	4	1	25.72	058	5.42	77.67	0.10	2.57
950618	0137	3	4	2	27.01	059	5.43	77.68	0.30	8.10
950618	0155	4	4	2	23.87	092	5.43	77.77	0.05	1.19
950618	0158	4	4	1	24.42	062	5.45	77.78	1.70	41.51
950618	0601	6	3	2	25.53	057	5.70	78.08	1.30	33.19
950618	0753	6	3	2	26.27	056	5.93	78.42	0.30	7.88
950618	1003	5	3	2	25.72	052	5.98	78.48	2.18	56.14
950619	0131	4	4	2	27.20	246	6.78	79.57	0.57	15.41
950619	0205	3	4	2	19.43	247	6.73	79.47	0.70	13.60
950619	0247	4	4	2	20.35	245	6.67	79.3	0.30	6.11

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950619	0346	4	4	2	27.01	242	6.57	79.13	0.05	1.35
950619	0353	4	4	2	14.06	243	6.57	79.1	0.30	4.22
950619	0412	4	4	2	13.88	246	6.53	79.07	1.10	15.26
950619	0535	4	3	1	10.36	294	6.52	78.9	0.48	5.01
950619	0618	4	3	1	24.98	247	6.52	78.83	0.70	17.48
950619	0748	5	3	1	27.75	248	6.40	78.53	0.82	22.66
950619	0919	5	3	1	24.79	242	6.27	78.23	2.47	61.15
950620	0121	5	3	2	26.46	246	4.82	75.08	1.65	43.65
950620	0353	4	3	2	25.90	244	4.60	74.58	0.02	0.43
950620	0358	4	3	2	16.10	244	4.58	74.58	1.55	24.95
950620	0610	4	3	2	25.90	245	4.48	74.28	1.18	30.65
950620	0753	4	3	2	25.53	244	4.32	73.95	0.20	5.11
950620	0805	4	3	1	25.35	245	4.30	73.9	0.40	10.14
950620	0835	4	3	1	25.35	243	4.25	73.8	0.90	22.81
950622	0146	3	4	2	25.90	270	4.70	71.6	0.55	14.25
950622	0221	3	4	2	25.16	271	4.70	71.48	0.55	13.84
950622	0348	3	4	2	25.16	271	4.70	71.17	1.10	27.68
950623	0158	4	3	2	25.16	273	4.80	66.42	1.20	30.19
950623	1239	3	4	1	25.53	283	5.17	64.28	0.85	21.70
950624	0205	4	3	2	25.53	286	5.87	61.52	0.92	23.40
950624	0340	4	3	2	25.53	283	5.95	61.18	0.50	12.77
950624	0410	5	3	2	23.50	285	5.97	61.08	0.37	8.61
950624	0433	5	3	2	22.94	281	5.98	61.02	0.10	2.29
950624	0720	5	3	2	19.80	224	5.95	60.95	0.92	18.15
950624	1020	5	3	1	19.43	240	5.78	60.8	0.27	5.18

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950624	1036	6	3	1	27.94	236	5.77	60.75	0.78	21.88
950625	0423	4	3	2	23.87	223	4.87	59.97	1.45	34.60
950626	0229	4	3	2	20.35	225	3.25	58.48	0.25	5.09
950626	0244	5	3	2	20.17	224	3.22	58.45	0.08	1.68
950626	0254	5	3	2	24.42	223	3.18	58.43	0.68	16.69
950626	0719	5	3	2	19.24	227	2.98	58.25	1.15	22.13
950626	1228	5	3	1	24.98	223	2.67	57.95	0.35	8.74
950626	1259	6	3	1	28.12	225	2.60	57.88	0.85	23.90
950627	0437	6	3	1	21.46	226	1.62	56.98	0.63	13.59
950627	0515	5	3	1	24.79	223	1.52	56.88	0.58	14.46
950627	0550	5	3	2	20.35	224	1.43	56.8	1.00	20.35
950627	0900	5	3	2	23.68	224	1.23	56.62	0.83	19.73
950627	0952	5	3	2	25.16	224	1.10	56.48	0.38	9.64
950627	1015	5	3	1	23.87	224	1.03	56.42	0.70	16.71
950627	1319	5	3	1	24.98	225	0.90	56.32	0.55	13.74
950628	0302	4	4	2	25.72	221	0.10	55.58	0.63	16.29
950628	0622	4	4	2	20.54	227	0.00	55.48	0.25	5.13
950628	0637	3	4	2	25.53	227	-0.05	55.45	0.68	17.45
950628	1026	3	4	1	25.35	221	-0.17	55.33	0.98	24.92
950629	0505	4	3	2	20.91	181	-1.05	55	0.80	16.72
950629	0553	5	3	2	25.90	183	-1.23	55	0.28	7.34
950629	0613	5	3	2	25.53	184	-1.30	55	0.27	6.81
950629	0629	4	3	2	26.27	181	-1.37	55	0.38	10.07
950629	0654	4	3	2	25.16	181	-1.45	54.98	0.47	11.74
950629	1022	5	3	1	21.46	182	-1.58	54.98	1.67	35.77

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950629	1203	5	3	1	24.42	176	-1.95	55	0.40	9.77
950630	0300	5	3	2	27.75	182	-3.57	54.98	0.30	8.33
950630	0319	5	3	2	24.05	181	-3.60	54.98	0.03	0.80
950630	0453	5	3	2	17.21	122	-3.63	55	0.47	8.03
950630	0521	6	3	2	25.72	092	-3.63	55.12	0.22	5.57
950712	0957	5	3	2	24.42	001	-4.12	55.48	0.22	5.29
950712	1017	5	3	2	25.16	003	-4.03	55.48	1.50	37.74
950712	1154	5	3	2	11.29	356	-3.68	55.48	0.42	4.70
950712	1252	5	3	2	28.31	341	-3.47	55.42	0.97	27.36
950713	0250	4	4	1	27.01	339	-0.63	54.25	0.73	19.81
950713	0406	4	4	1	24.61	340	-0.35	54.13	1.03	25.43
950713	0521	4	4	1	24.05	339	-0.10	54.03	0.30	7.22
950713	0545	4	4	1	11.66	339	-0.03	54.02	0.88	10.30
950713	0652	4	4	1	24.79	338	0.18	53.92	0.40	9.92
950713	0836	4	4	1	25.53	341	0.55	53.78	0.85	21.70
950713	0927	4	4	2	28.12	342	0.73	53.72	0.68	19.22
950713	1037	5	3	2	20.91	333	0.97	53.62	1.40	29.27
950713	1254	5	3	2	24.61	341	1.38	53.45	1.23	30.35
950714	0334	6	3	1	27.20	337	4.05	52.37	2.40	65.27
950714	0633	6	3	1	22.57	336	4.77	52.07	0.63	14.29
950714	0743	6	3	1	25.90	338	5.03	51.97	0.92	23.74
950714	0838	6	3	1	24.05	338	5.25	51.88	0.98	23.65
950714	0937	6	3	2	28.12	338	5.47	51.78	0.72	20.15
950719	0206	3	4	1	10.73	019	21.25	59.57	0.87	9.30
950719	0347	2	4	1	24.98	004	21.52	59.67	0.28	7.08

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950719	0404	2	4	2	28.12	022	21.58	59.68	0.20	5.62
950719	0416	2	4	1	26.27	024	21.62	59.7	1.75	45.97
950719	0618	2	4	1	26.27	023	22.08	59.9	0.85	22.33
950719	0741	2	4	1	25.53	021	22.35	60.07	1.40	35.74
950719	0905	2	4	2	24.05	313	22.63	60.02	0.57	13.63
950719	1000	2	4	1	26.09	235	22.70	59.83	0.70	18.26
950719	1042	3	4	1	24.98	260	22.60	59.7	0.57	14.15
950719	1117	2	4	2	25.53	298	22.60	59.57	0.07	1.70
950719	1145	3	4	2	25.72	290	22.63	59.53	0.27	6.86
950719	1240	2	4	2	24.42	078	22.68	59.7	0.72	17.50
950719	1324	1	4	2	24.24	078	22.72	59.85	0.22	5.25
950719	1337	2	4	2	24.61	076	22.72	59.9	0.12	2.87
950720	0228	5	3	2	25.90		23.07	60.05	0.63	16.40
950720	0431	4	3	2	24.98	252	22.90	59.5	0.10	2.50
950720	0437	3	4	2	25.90	254	22.90	59.48	0.33	8.63
950720	0457	2	4	2	25.16	253	22.88	59.4	0.05	1.26
950720	0500	2	4	1	24.79	320	22.88	59.38	0.08	2.07
950720	0505	1	4	1	24.42	326	22.90	59.37	0.08	2.04
950720	0609	2	4	2	24.61	329	22.95	59.28	0.15	3.69
950720	0618	2	4	1	27.01	331	22.98	59.27	0.27	7.20
950720	0802	3	4	2	25.16	328	23.17	59.13	0.52	13.00
950720	0844	3	4	2	24.61	255	23.25	59.05	0.35	8.61
950720	0913	3	4	2	24.61	333	23.35	58.98	1.60	39.37
950720	1111	4	4	2	26.09	328	23.77	58.75	0.83	21.74
950720	1257	4	4	2	26.83	315	24.07	58.47	0.63	16.99

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950720	1408	4	3	2	25.72	307	24.18	58.33	0.13	3.43
950721	0409	4	3	2	22.76	297	24.47	57.97	0.97	22.00
950721	0528	4	3	2	22.39	303	24.58	57.7	0.95	21.27
950721	0628	4	3	2	22.02	306	24.70	57.52	0.57	12.48
950721	0806	4	3	2	31.45	296	24.85	57.2	0.52	16.25
950721	0837	3	4	2	27.38	294	24.90	57.08	0.37	10.04
950721	0938	3	4	2	20.35	163	24.85	57.07	0.55	11.19
950721	1012	4	4	2	20.35	133	24.77	57.15	0.55	11.19
950721	1112	4	4	2	21.09	138	24.63	57.27	0.23	4.92
950721	1126	3	4	2	21.28	139	24.62	57.3	0.57	12.06
950721	1253	3	4	2	23.50	140	24.40	57.5	0.45	10.57
950721	1320	2	4	2	21.83	141	24.33	57.55	0.55	12.01
950722	0219	2	4	2	25.53	108	24.22	57.75	0.55	14.04
950722	0343	3	4	2	20.35	112	24.10	58.07	0.12	2.37
950722	0350	2	4	1	20.54	109	24.10	58.08	0.15	3.08
950722	0359	2	4	2	19.98	112	24.08	58.12	0.73	14.65
950722	0554	3	4	2	19.43	096	23.98	58.4	0.13	2.59
950722	0750	3	4	2	21.46	122	23.87	58.7	0.08	1.79
950722	0755	4	4	2	20.72	122	23.87	58.72	0.30	6.22
950722	0935	5	3	1	20.54	132	23.73	58.97	0.52	10.61
950722	1116	4	3	2	20.72	135	23.68	59.17	0.20	4.14
950722	1132	4	3	2	20.54	130	23.63	59.22	0.07	1.37
950723	0245	5	3	2	19.98	289	23.12	59.95	0.77	15.32
950723	0408	5	3	2	26.83	293	23.20	59.68	0.17	4.47
950723	0422	5	3	1	23.50	292	23.23	59.63	0.25	5.87

Table 38. Continued.

Date yrmoda	Start Time GMT	Sea State (Table 2)	Observation Conditions (Table 3)	Observation Side L/R=1/2	Ship's Speed km/h	Ship's Course	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Time Searched hours	Linear Distance Searched km
950723	0437	4	3	1	22.39	340	23.25	59.6	0.17	3.73
950723	0448	3	4	1	26.83	296	23.27	59.57	0.22	5.81
950723	0513	2	4	1	19.98	292	23.30	59.48	0.52	10.32
950723	0544	2	4	2	23.13	223	23.33	59.37	0.07	1.54
950723	0634	2	4	2	23.87	215	23.22	59.3	0.60	14.32
950723	0749	1	4	2	22.76	158	23.00	59.38	0.73	16.69
950723	0841	1	4	2	23.13	146	22.88	59.48	0.08	1.93
950723	0847	0	4	1	21.83	147	22.87	59.48	0.22	4.73
950723	0900	1	4	1	21.65	169	22.82	59.5	0.45	9.74
950723	0927	2	4	1	21.28	167	22.73	59.53	0.22	4.61
950723	1009	2	4	1	22.20	226	22.65	59.6	0.53	11.84
950723	1100	3	4	2	22.76	063	22.67	59.67	0.17	3.79
950723	1144	3	3	2	22.02	030	22.72	59.65	0.27	5.87
950723	1251	5	3	1	21.09	088	22.78	59.85	0.37	7.73
950724	0144	1	4	2	25.16	281	23.57	59.27	0.55	13.84
950724	0218	1	4	1	19.24	286	23.60	59.13	0.28	5.45
950724	0235	2	4	2	25.90	277	23.63	59.08	0.52	13.38
950724	0327	1	4	2	25.35	277	23.65	58.88	0.75	19.01
									437.1	**10778.7**
									Total hours	**Total Linear km**

Table 39. Summary of seabird sightings during strip transect survey, listed in order of abundance.

Common Name	Latin Name	Total Number Recorded
Audubon's Shearwater	*Puffinus lherminieri*	1079
Sooty Tern	*Sterna fuscata*	877
Wilson's Storm-Petrel	*Oceanites oceanicus*	631
Lesser Noddy	*Anous tenuirostris*	534
Flesh-footed Shearwater	*Puffinus carneipes*	431
Persian Shearwater	*Puffinus l. persecus*	416
Brown Noddy	*Anous stolidus*	401
Jouanin's Petrel	*Bulweria fallax*	367
Soft-plumaged Petrel	*Pterodroma mollis*	282
Bridled Tern	*Sterna anaethetus*	113
Wedge-tailed Shearwater (Dk morph)	*Puffinus pacificus*	107
Northern Phalarope	*Phalaropus lobatus*	102
Great-winged Petrel	*Pterodroma macroptera*	90
Barau's Petrel	*Pterodroma baraui*	84
White Tern	*Gygis alba*	82
Masked Booby	*Sula dactylatra*	63
Swinhoe's Storm-Petrel	*Oceanodroma monorhis*	56
Red-billed Tropicbird	*Phaethon aethereus*	53
Black-bellied Storm-Petrel	*Fregetta tropica*	50
White-faced Storm-Petrel	*Pelagodroma marina*	34
Red-footed Booby	*Sula sula*	31
White-tailed Tropicbird	*Phaethon lepturus*	30
Noddy species	*Anous sp.*	18
White-chinned Petrel	*Procellaria aequinoctialis*	17
Sooty Gull	*Larus hemprichii*	15
Parasitic Jaeger	*Stercorarius parasiticus*	14
Frigatebird species	*Fregata sp.*	12
Brown Booby	*Sula leucogaster*	8
Pomarine Jaeger	*Stercorarius pomarinus*	8
Crested Tern	*Sterna bergii*	8
Cory's Shearwater	*Calonectris diomedea*	7
South Polar Skua	*Catharacta maccormicki*	7
Long-tailed Jaeger	*Stercorarius longicaudus*	7
Black-bellied/White-bellied S-P	*Fregetta sp.*	6
Matsudaira's Storm-Petrel	*Oceanodroma matsudairae*	6
Yellow-nosed Albatross	*Diomedea chlororhynchos*	4
Leach's Storm-Petrel	*Oceanodroma leucorhoa*	4
Lesser Frigatebird	*Fregata ariel*	4
Phalarope species	*Phalaropus sp.*	4
Skua species	*Catharacta sp.*	4
Arctic Tern	*Sterna paradisaea*	4
Shorebird		4

Table 39. Continued.

Common Name	Latin Name	Total Number Recorded
Sooty Albatross	*Phoebetria fusca*	3
Sooty Shearwater	*Puffinus griseus*	3
Petrel species	*Pterodroma sp.*	3
Tern species	*Sterna sp.*	3
Little Shearwater	*Puffinus assimilis*	2
Bulweria species	*Bulweria sp.*	2
Roseate Tern	*Sterna dougallii*	2
Passerine		2
Shy Albatross	*Diomedea cauta ssp?*	1
Wandering Albatross	*Diomedea exulans*	1
Streaked Shearwater	*Calonectris leucomelas*	1
Bulwer's Petrel	*Bulweria bulwerii*	1
Storm-Petrel species		1
Red-tailed Tropicbird	*Phaethon rubricauda*	1
Tropicbird species	*Phaethon sp.*	1
Antarctic Skua	*Catharacta antarctica*	1
Lesser Black-backed Gull	*Larus fuscus*	1
Saunder's Tern	*Sterna saundersi*	1
	TOTAL	**6104**

Table 40. Summary of seabirds recorded in feeding flocks, listed in order of abundance.

Common Name	Latin Name	Total Number Recorded
Sooty Tern	*Sterna fuscata*	11653
Noddy species	*Anous sp.*	8911
Sooty/Bridled Tern	*S. fuscata/anaethetus*	6575
Persian Shearwater	*Puffinus l. persecus*	2295
Audubon's Shearwater	*Puffinus lherminieri*	1427
Flesh-footed Shearwater	*Puffinus carneipes*	1241
Jouanin's Petrel	*Bulweria fallax*	1238
Bridled Tern	*Sterna anaethetus*	546
Tern species		501
Wilson's Storm-Petrel	*Oceanites oceanicus*	448
Shearwater species		385
Brown Noddy	*Anous stolidus*	370
White Tern	*Gygis alba*	345
Soft-plumaged Petrel	*Pterodroma mollis*	307
Masked Booby	*Sula dactylatra*	183
Barau's Petrel	*Pterodroma baraui*	102
Petrel species	*Pterodroma sp.*	81
Wedge-tailed Shearwater (Dk morph)	*Puffinus pacificus*	70
Saunder's Tern	*Sterna saundersi*	69
Storm-Petrel species		60
Lesser Noddy	*Anous tenuirostris*	43
Red-footed Booby	*Sula sula*	20
Crested Tern	*Sterna bergii*	13
Swinhoe's Storm-Petrel	*Oceanodroma monorhis*	12
Pomarine Jaeger	*Stercorarius pomarinus*	10
Black-bellied Storm-Petrel	*Fregetta tropica*	9
Parasitic Jaeger	*Stercorarius parasiticus*	9
Roseate Tern	*Sterna dougallii*	9
White-faced Storm-Petrel	*Pelagodroma marina*	8
Red-billed Tropicbird	*Phaethon aethereus*	7
Jaeger species	*Stercorarius sp.*	7
Frigatebird species	*Fregata sp.*	6
South Polar Skua	*Catharacta maccormicki*	6
White-cheeked Tern	*Sterna repressa*	6
Albatross species	*Diomedea sp.*	4
Great-winged Petrel	*Pterodroma macroptera*	4
Parasitic/Long-tailed Jaeger	*S. parasiticus/longicaudus*	4
Cory's Shearwater	*Calonectris diomedea*	3
Brown Booby	*Sula leucogaster*	3
White-tailed Tropicbird	*Phaethon lepturus*	2
Lesser Frigatebird	*Fregata ariel*	2
Arctic Tern	*Sterna paradisaea*	2

Table 40. Continued.

Common Name	Latin Name	Total Number Recorded
Sooty Albatross	*Phoebetria fusca*	1
Streaked Shearwater	*Calonectris leucomelas*	1
Matsudaira's Storm-Petrel	*Oceanodroma matsudairae*	1
White-rumped Storm-Petrel		1
Skua species	*Catharacta sp.*	1
Long-tailed Jaeger	*Stercorarius longicaudus*	1
	TOTAL	**37002 birds** **623 flocks**

Table 41. Summary of flyingfish recorded flushed by the ship to 100 m, listed in order of abundance.

Taxon	Number of Individuals
Exocetus	6097
Unidentified Four-Wing	2995
Hirundichthys coromandalensis	2141
Unidentified	1912
Hirundichthys oxycephalus	1900
White Wing	576
Black-Wing	260
Black and Yellow Wing	111
Pink-Speckled Wing, No Black Pelvic Spot	108
Pink-Speckled Wing, Black Pelvic Spot	46
Callopterus type	42
Blue-Wing	37
Prognichthys brevipennis	17
Green Wing	13
Green Wing, Black Border	2
	16257 Total Flyingfish

Table 42. Results of nightly dipnet stations.
(Records without Station Numbers reflect opportunistic or non-standard collection methods.)

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
	95-03-29		27 30 S	055 00 E						30		2		
1	95-03-30	1.0	26 00 S	055 00 E	4.0	5	2	26.1	35.28	100	1	0	1	2
1	95-03-30	1.0	26 00 S	055 00 E	4.0	5	2	26.1	35.28	0	0	0	2	2
2	95-03-31	1.0	23 59 S	055 00 E	4.0	5	1	26.3	35.41	100	1	0	2	1
3	95-04-01	1.0	21 30 S	055 00 E	2.0	5	1	26.9	35.35	100	1	0	2	3
0	95-04-04	0.0	18 30 S	055 00 E	0.0	0	0	0.0	0.00	30	0	2	0	0
4	95-04-04	1.0	17 00 S	055 00 E	4.0	6	1	28.3	34.84	0	0	0	2	1
5	95-04-05	1.5	15 08 S	055 00 E	3.0	1	1	28.7	34.70	30	3	8	2	1
5	95-04-05	1.5	15 08 S	055 00 E	3.0	1	1	28.7	34.70	100	1	0	0	0
0	95-04-05	0.0	00 00 S	000 00 E	0.0	0	0	0.0	0.00	30	0	1	0	0
0	95-04-07	1.2	12 14 S	055 00 E	0.0	0	0	0.0	0.00	20	0	1	0	0
0	95-04-07	1.2	12 14 S	055 00 E	0.0	0	0	0.0	0.00	30	0	1	0	0
6	95-04-06	1.0	12 44 S	055 00 E	5.0	2	2	29.1	34.70	20	2	1	2	3
6	95-04-06	1.0	12 44 S	055 00 E	5.0	2	2	29.1	34.70	30	3	2	0	0
6	95-04-06	1.0	12 44 S	055 00 E	5.0	2	2	29.1	34.70	100	3	0	0	0
7	95-04-07	1.0	11 20 S	053 56 E	3.0	2	1	28.8	34.72	30	1	1	2	3
7	95-04-07	1.0	11 20 S	053 56 E	3.0	2	1	28.8	34.72	100	2	0	0	0
8	95-04-08	1.0	10 07 S	052 30 E	4.0	2	1	29.1	34.74	20	1	1	2	2
8	95-04-08	1.0	10 07 S	052 30 E	4.0	2	1	29.1	34.74	30	1	1	3	1
8	95-04-08	1.0	10 07 S	052 30 E	4.0	2	1	29.1	34.74	100	1	0	0	0
9	95-04-08	1.0	09 57 S	052 19 E	4.0	0	3	29.1	34.78	10	1	1	2	2
9	95-04-08	1.0	09 57 S	052 19 E	4.0	0	3	29.1	34.78	30	2	5	3	1

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
9	95-04-08	1.0	09 57 S	052 19 E	4.0	0	3	29.1	34.78	100	2	0	0	0
10	95-04-09	1.0	09 05 S	051 47 E	3.0	2	1	29.4	34.72	10	8	1	2	5
10	95-04-09	1.0	09 05 S	051 47 E	3.0	2	1	29.4	34.72	30	2	1	0	0
10	95-04-09	1.0	09 05 S	051 47 E	3.0	2	1	29.4	34.72	100	4	1	0	0
0	95-04-10	0.0	08 34 S	051 55 E	0.0	0	0	0.0	0.00	30	0	2	0	0
11	95-04-10	1.7	08 03 S	052 30 E	2.0	2	2	30.1	34.61	10	2	2	1	2
11	95-04-10	1.7	08 03 S	052 30 E	2.0	2	2	30.1	34.61	30	3	3	2	5
12	95-04-12	1.0	02 36 S	055 00 E	1.0	3	1	30.0	35.21	10	1	1	2	3
13	95-04-17	1.0	07 05 N	062 00 E	3.0	0	3	29.8	34.94	10	2	6	2	1
13	95-04-17	1.0	07 05 N	062 00 E	3.0	0	3	29.8	34.94	300	1	0	0	0
14	95-04-18	1.0	08 31 N	063 33 E	4.0	5	2	29.5	35.17	10	2	2	2	2
14	95-04-18	1.0	08 31 N	063 33 E	4.0	5	2	29.5	35.17	100	3	2	0	0
15	95-04-29	1.2	07 00 N	069 11 E	1.0	6	5	30.8	34.39	10	1	1	0	0
15	95-04-29	1.2	07 00 N	069 11 E	1.0	6	5	30.8	34.39	30	1	1	0	0
15	95-04-29	1.2	07 00 N	069 11 E	1.0	6	5	30.8	34.39	100	3	3	0	0
16	95-05-01	1.0	06 13 N	060 20 E	2.0	5	1	30.4	34.60	10	1	1	1	1
16	95-05-01	1.0	06 13 N	060 20 E	2.0	5	1	30.4	34.60	20	1	2	0	0
16	95-05-01	1.0	06 13 N	060 20 E	2.0	5	1	30.4	34.60	30	2	2	0	0
16	95-05-01	1.0	06 13 N	060 20 E	2.0	5	1	30.4	34.60	100	4	10	0	0
17	95-05-02	1.0	05 38 N	054 55 E	0.0	5	2	30.2	35.16	30	1	1	2	1
17	95-05-02	1.0	05 38 N	054 55 E	0.0	5	2	30.2	35.16	100	4	5	3	1
17	95-05-02	1.0	05 38 N	054 55 E	0.0	5	2	30.2	35.16	400	2	3	0	0
17	95-05-02	1.0	05 38 N	054 55 E	0.0	5	2	30.2	35.16	500	1	0	0	0
18	95-05-03	1.0	05 00 N	049 02 E	4.0	5	1	29.9	35.20	10	1	0	0	0
18	95-05-03	1.0	05 00 N	049 02 E	4.0	5	1	29.9	35.20	20	1	1	0	0

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
18	95-05-03	1.0	05 00 N	049 02 E	4.0	5	1	29.9	35.20	30	2	1	0	0
18	95-05-03	1.0	05 00 N	049 02 E	4.0	5	1	29.9	35.20	300	1	0	0	0
19	95-05-03	1.0	05 00 N	049 04 E	4.0	1	1	30.0	35.14	10	2	4	0	0
19	95-05-03	1.0	05 00 N	049 04 E	4.0	1	1	30.0	35.14	20	1	3	0	0
19	95-05-03	1.0	05 00 N	049 04 E	4.0	1	1	30.0	35.14	30	1	0	0	0
19	95-05-03	1.0	05 00 N	049 04 E	4.0	1	1	30.0	35.14	100	3	0	0	0
20	95-05-08	1.5	10 10 N	052 02 E	3.0	2	2	29.9	35.46	10	1	1	1	2
20	95-05-08	1.5	10 10 N	052 02 E	3.0	2	2	29.9	35.46	20	3	4	2	1
20	95-05-08	1.5	10 10 N	052 02 E	3.0	2	2	29.9	35.46	30	3	5	0	0
20	95-05-08	1.5	10 10 N	052 02 E	3.0	2	2	29.9	35.46	100	2	0	0	0
21	95-05-08	1.0	10 14 N	052 02 E	2.0	2	2	30.0	35.46	10	1	1	0	0
21	95-05-08	1.0	10 14 N	052 02 E	2.0	2	2	30.0	35.46	30	3	3	0	0
22	95-05-09	0.2	10 11 N	052 03 E	3.0	5	2	29.6	35.46	20	1	2	0	0
22	95-05-09	0.2	10 11 N	052 03 E	3.0	5	2	29.6	35.46	30	6	13	0	0
23	95-05-09	3.0	10 00 N	052 16 E	2.0	2	2	29.3	35.28	10	3	3	1	2
23	95-05-09	3.0	10 00 N	052 16 E	2.0	2	2	29.3	35.28	30	2	1	0	0
23	95-05-09	3.0	10 00 N	052 16 E	2.0	2	2	29.3	35.28	300	1	1	0	0
0	95-05-09	0.0	10 00 N	052 15 E	0.0	0	0	0.0	0.00	10	0	1	0	0
0	95-05-09	0.0	10 00 N	052 15 E	0.0	0	0	0.0	0.00	30	0	1	0	0
24	95-05-10	2.0	11 39 N	054 50 E	3.0	3	1	30.0	35.82	10	2	0	2	2
24	95-05-10	2.0	11 39 N	054 50 E	3.0	3	1	30.0	35.82	20	9	4	0	0
24	95-05-10	2.0	11 39 N	054 50 E	3.0	3	1	30.0	35.82	30	2	1	0	0
24	95-05-10	2.0	11 39 N	054 50 E	3.0	3	1	30.0	35.82	100	2	0	0	0
24	95-05-10	2.0	11 39 N	054 50 E	3.0	3	1	30.0	35.82	400	2	0	0	0
0	95-05-10	0.0	11 39 N	054 51 E	0.0	0	0	0.0	0.00	20	0	3	0	0

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
0	95-05-10	0.0	11 39 N	054 51 E	0.0	0	0	0.0	0.00	30	0	3	0	0
25	95-05-11	1.2	13 00 N	057 05 E	3.0	3	2	30.0	35.90	20	3	4	1	1
25	95-05-11	1.2	13 00 N	057 05 E	3.0	3	2	30.0	35.90	30	5	13	2	2
25	95-05-11	1.2	13 00 N	057 05 E	3.0	3	2	30.0	35.90	100	2	0	0	0
0	95-05-11	0.0	13 00 N	057 06 E	0.0	0	0	0.0	0.00	30	0	3	0	0
26	95-05-12	2.7	14 32 N	059 48 E	2.0	3	1	29.6	36.10	10	1	1	1	2
26	95-05-12	2.7	14 32 N	059 48 E	2.0	3	1	29.6	36.10	20	2	3	0	0
26	95-05-12	2.7	14 32 N	059 48 E	2.0	3	1	29.6	36.10	30	5	9	0	0
26	95-05-12	2.7	14 32 N	059 48 E	2.0	3	1	29.6	36.10	500	1	1	0	0
27	95-05-15	1.0	15 59 N	062 00 E	6.0	4	2	29.2	36.58	20	1	1	0	0
27	95-05-15	1.0	15 59 N	062 00 E	6.0	4	2	29.2	36.58	30	2	1	0	0
0	95-05-16	0.0	15 58 N	061 58 E	0.0	0	0	0.0	0.00	30	0	2	0	0
28	95-05-16	1.2	16 00 N	062 00 E	5.0	5	2	29.2	36.59	20	1	1	2	1
28	95-05-16	1.2	16 00 N	062 00 E	5.0	5	2	29.2	36.59	30	3	6	0	0
0	95-05-16	0.0	16 00 N	062 01 E	0.0	0	0	0.0	0.00	20	0	1	0	0
0	95-05-16	0.0	16 00 N	062 01 E	0.0	0	0	0.0	0.00	30	0	1	0	0
29	95-05-17	1.6	17 41 N	068 17 E	6.0	5	2	29.2	36.48	20	1	2	2	1
29	95-05-17	1.6	17 41 N	068 17 E	6.0	5	2	29.2	36.48	30	4	5	0	0
30	95-05-19	2.0	18 54 N	058 12 E	5.0	5	2	27.3	36.18	10	4	2	1	3
30	95-05-19	2.0	18 54 N	058 12 E	5.0	5	2	27.3	36.18	30	3	5	0	0
31	95-05-20	1.5	21 58 N	059 54 E	3.0	5	1	27.7	36.61	10	4	0	1	1
31	95-05-20	1.5	21 58 N	059 54 E	3.0	5	1	27.7	36.61	30	1	1	0	0
31	95-05-20	1.5	21 58 N	059 54 E	3.0	5	1	27.7	36.61	80	1	1	0	0
31	95-05-20	1.5	21 58 N	059 54 E	3.0	5	1	27.7	36.61	90	1	0	0	0
32	95-05-21	2.2	22 14 N	060 44 E	4.0	5	1	0.0	0.00	10	5	2	1	2

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
32	95-05-21	2.2	22 14 N	060 44 E	4.0	5	1	0.0	0.00	20	1	1	2	2
32	95-05-21	2.2	22 14 N	060 44 E	4.0	5	1	0.0	0.00	30	4	15	0	0
32	95-05-21	2.2	22 14 N	060 44 E	4.0	5	1	0.0	0.00	400	1	1	0	0
0	95-05-21	0.0	22 14 N	060 45 E	0.0	0	0	0.0	0.00	30	0	6	0	0
33	95-05-22	1.0	22 17 N	060 44 E	4.0	5	1	28.1	36.80	10	5	4	1	1
33	95-05-22	1.0	22 17 N	060 44 E	4.0	5	1	28.1	36.80	20	1	1	2	1
33	95-05-22	1.0	22 17 N	060 44 E	4.0	5	1	28.1	36.80	30	4	20	3	1
34	95-05-22	1.5	22 14 N	060 42 E	4.0	5	1	28.0	36.74	10	5	0	1	1
34	95-05-22	1.5	22 14 N	060 42 E	4.0	5	1	28.0	36.74	20	1	1	0	0
34	95-05-22	1.5	22 14 N	060 42 E	4.0	5	1	28.0	36.74	30	4	4	0	0
0	95-05-22	0.0	22 14 N	060 43 E	0.0	0	0	0.0	0.00	30	0	1	0	0
0	95-05-23	0.0	22 14 N	060 43 E	0.0	0	0	0.0	0.00	30	0	1	0	0
0	95-06-04	0.0	10 06 N	054 20 E	0.0	0	0	0.0	0.00	20	0	1	0	0
35	95-06-05	1.0	08 30 N	051 56 E	6.0	2	1	28.8	35.44	20	4	4	1	1
35	95-06-05	1.0	08 30 N	051 56 E	6.0	2	1	28.8	35.44	30	1	0	0	0
0	95-06-06	0.0	08 30 N	052 17 E	0.0	0	0	0.0	0.00	20	0	1	0	0
0	95-06-06	0.0	08 30 N	052 17 E	0.0	0	0	0.0	0.00	30	0	1	0	0
0	95-06-07	0.0	08 30 N	054 13 E	0.0	0	0	0.0	0.00	20	0	2	0	0
36	95-06-07	0.8	08 30 N	056 00 E	6.0	5	3	29.9	35.35	10	2	2	1	1
36	95-06-07	0.8	08 30 N	056 00 E	6.0	5	3	29.9	35.35	20	3	5	0	0
36	95-06-07	0.8	08 30 N	056 00 E	6.0	5	3	29.9	35.35	30	2	2	0	0
36	95-06-07	0.8	08 30 N	056 00 E	6.0	5	3	29.9	35.35	100	2	0	0	0
0	95-06-08	0.0	08 30 N	056 35 E	0.0	0	0	0.0	0.00	30	0	1	0	0
37	95-06-08	1.0	08 30 N	058 56 E	6.5	5	3	29.9	35.33	20	1	1	0	0
37	95-06-08	1.0	08 30 N	058 56 E	6.5	5	3	29.9	35.33	30	1	0	0	0

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
37	95-06-08	1.0	08 30 N	058 56 E	6.5	5	3	29.9	35.33	500	1	1	0	0
0	95-06-10	0.0	08 27 N	060 19 E	0.0	0	0	0.0	0.00	20	0	1	0	0
0	95-06-10	0.0	08 27 N	060 19 E	0.0	0	0	0.0	0.00	30	0	1	0	0
0	95-06-10	0.0	08 30 N	061 02 E	0.0	0	0	0.0	0.00	20	0	2	0	0
38	95-06-14	1.2	07 34 N	070 00 E	5.0	4	2	29.4	35.53	10	1	1	1	1
38	95-06-14	1.2	07 34 N	070 00 E	5.0	4	2	29.4	35.53	20	1	1	2	2
38	95-06-14	1.2	07 34 N	070 00 E	5.0	4	2	29.4	35.53	30	2	4	0	0
0	95-05-23	0.0	22 14 N	060 43 E	0.0	0	0	0.0	0.00	30	0	1	0	0
39	95-06-15	0.7	07 36 N	072 25 E	5.0	5	2	29.5	34.99	30	2	1	1	2
39	95-06-15	0.7	07 36 N	072 25 E	5.0	5	2	29.5	34.99	100	3	0	2	3
40	95-06-15	1.2	07 23 N	072 45 E	5.0	4	3	29.6	35.20	10	1	0	1	3
40	95-06-15	1.2	07 23 N	072 45 E	5.0	4	3	29.6	35.20	20	1	2	2	3
40	95-06-15	1.2	07 23 N	072 45 E	5.0	4	3	29.6	35.20	30	1	1	0	0
40	95-06-15	1.2	07 23 N	072 45 E	5.0	4	3	29.6	35.20	90	1	0	0	0
40	95-06-15	1.2	07 23 N	072 45 E	5.0	4	3	29.6	35.20	400	1	1	0	0
0	95-06-16	0.0	07 36 N	073 27 E	0.0	0	0	0.0	0.00	30	0	1	0	0
41	95-06-16	2.0	07 12 N	074 54 E	5.0	5	2	29.1	35.39	30	2	0	1	3
41	95-06-16	2.0	07 12 N	074 54 E	5.0	5	2	29.1	35.39	100	4	0	2	3
41	95-06-16	2.0	07 12 N	074 54 E	5.0	5	2	29.1	35.39	300	1	0	0	0
41	95-06-16	2.0	07 12 N	074 54 E	5.0	5	2	29.1	35.39	400	1	0	0	0
42	95-06-17	1.5	04 50 N	076 50 E	5.0	5	2	28.6	34.78	10	1	1	1	4
42	95-06-17	1.5	04 50 N	076 50 E	5.0	5	2	28.6	34.78	30	1	0	2	3
42	95-06-17	1.5	04 50 N	076 50 E	5.0	5	2	28.6	34.78	90	1	1	0	0
42	95-06-17	1.5	04 50 N	076 50 E	5.0	5	2	28.6	34.78	100	4	0	0	0
42	95-06-17	1.5	04 50 N	076 50 E	5.0	5	2	28.6	34.78	300	1	0	0	0

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
42	95-06-17	1.5	04 50 N	076 50 E	5.0	5	2	28.6	34.78	400	1	0	0	0
43	95-06-18	1.5	06 24 N	079 05 E	4.0	5	2	26.2	34.67	90	1	1	1	4
43	95-06-18	1.5	06 24 N	079 05 E	4.0	5	2	26.2	34.67	100	8	0	2	3
43	95-06-18	1.5	06 24 N	079 05 E	4.0	5	2	26.2	34.67	500	1	1	0	0
44	95-06-19	1.5	06 33 N	079 17 E	4.0	2	1	26.2	34.66	90	1	1	1	4
45	95-06-20	1.0	00 00 N	000 00 E	2.0	5	2	0.0	0.00	20	3	9	1	3
45	95-06-20	1.0	00000 N	000000 E	2.0	5	2	0.0	0.00	30	3	6	0	0
45	95-06-20	1.0	00000 N	000000 E	2.0	5	2	0.0	0.00	500	6	3	0	0
45	95-06-20	1.0	00000 N	000000 E	2.0	5	2	0.0	0.00	500	1	1	0	0
46	95-06-24	1.0	05 26 N	060 38 E	5.0	5	2	28.8	35.59	10	1	0	2	1
46	95-06-24	1.0	05 26 N	060 38 E	5.0	5	2	28.8	35.59	20	6	21	0	0
46	95-06-24	1.0	05 26 N	060 38 E	5.0	5	2	28.8	35.59	30	6	23	0	0
46	95-06-24	1.0	05 26 N	060 38 E	5.0	5	2	28.8	35.59	300	1	0	0	0
46	95-06-24	1.0	05 26 N	060 38 E	5.0	5	2	28.8	35.59	500	1	1	0	0
47	95-06-24	1.0	05 16 N	060 19 E	5.0	5	2	28.8	35.67	20	8	4	1	8
47	95-06-24	1.0	05 16 N	060 19 E	5.0	5	2	28.8	35.67	30	8	5	2	8
47	95-06-24	1.0	05 16 N	060 19 E	5.0	5	2	28.8	35.67	100	8	0	0	0
47	95-06-24	1.0	05 16 N	060 19 E	5.0	5	2	28.8	35.67	300	1	0	0	0
48	95-06-25	1.0	03 49 N	060 00 E	4.0	5	2	0.0	0.00	20	3	3	1	4
48	95-06-25	1.0	03 49 N	060 00 E	4.0	5	2	0.0	0.00	30	3	4	2	3
48	95-06-25	1.0	03 49 N	060 00 E	4.0	5	2	0.0	0.00	100	4	1	0	0
48	95-06-25	1.0	03 49 N	060 00 E	4.0	5	2	0.0	0.00	300	1	0	0	0
49	95-06-26	2.0	02 22 N	057 41 E	4.0	5	3	0.0	0.00	10	1	1	1	1
49	95-06-26	2.0	02 22 N	057 41 E	4.0	5	3	0.0	0.00	20	4	7	2	2
49	95-06-26	2.0	02 22 N	057 41 E	4.0	5	3	0.0	0.00	30	3	3	0	0

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
49	95-06-26	2.0	02 22 N	057 41 E	4.0	5	3	0.0	0.00	400	1	1	0	0
49	95-06-26	2.0	02 22 N	057 41 E	4.0	5	3	0.0	0.00	500	6	0	0	0
49	95-06-26	2.0	02 22 N	057 41 E	4.0	5	3	0.0	0.00	500	2	0	0	0
50	95-06-27	1.0	00 44 N	056 10 E	4.0	5	3	28.0	35.15	20	3	2	1	4
50	95-06-27	1.0	00 44 N	056 10 E	4.0	5	3	28.0	35.15	30	2	2	2	2
50	95-06-27	1.0	00 44 N	056 10 E	4.0	5	3	28.0	35.15	100	4	1	0	0
50	95-06-27	1.0	00 44 N	056 10 E	4.0	5	3	28.0	35.15	300	1	0	0	0
0	95-06-26	0.0	03 43 N	058 54 E	0.0	0	0	0.0	0.00	20	0	1	0	0
51	95-06-27	1.0	00 33 N	056 00 E	4.0	5	3	28.0	35.15	10	2	2	1	5
51	95-06-27	1.0	00 33 N	056 00 E	4.0	5	3	28.0	35.15	20	3	4	2	3
51	95-06-27	1.0	00 33 N	056 00 E	4.0	5	3	28.0	35.15	30	1	1	0	0
51	95-06-27	1.0	00 33 N	056 00 E	4.0	5	3	28.0	35.15	300	1	0	0	0
51	95-06-27	1.0	00 33 N	056 00 E	4.0	5	3	28.0	35.15	400	1	1	0	0
51	95-06-27	1.0	00 33 N	056 00 E	4.0	5	3	28.0	35.15	500	1	1	0	0
51	95-06-27	1.0	00 33 N	056 00 E	4.0	5	3	28.0	35.15	500	1	1	0	0
52	95-06-28	2.5	00 33 S	055 02 E	3.0	5	2	27.9	35.19	10	2	3	1	5
52	95-06-28	2.5	00 33 S	055 02 E	3.0	5	2	27.9	35.19	20	3	5	2	3
52	95-06-28	2.5	00 33 S	055 02 E	3.0	5	2	27.9	35.19	30	2	2	3	2
52	95-06-28	2.5	00 33 S	055 02 E	3.0	5	2	27.9	35.19	100	4	3	0	0
52	95-06-28	2.5	00 33 S	055 02 E	3.0	5	2	27.9	35.19	300	3	0	0	0
52	95-06-28	2.5	00 33 S	055 02 E	3.0	5	2	27.9	35.19	500	1	0	0	0
53	95-06-29	1.7	02 37 S	055 00 E	4.0	1	2	27.5	35.31	20	2	2	1	4
53	95-06-29	1.7	02 37 S	055 00 E	4.0	1	2	27.5	35.31	30	4	11	2	2
53	95-06-29	1.7	02 37 S	055 00 E	4.0	1	2	27.5	35.31	400	1	1	3	2
54	95-06-30	1.2	03 08 S	055 00 E	4.0	5	1	0.0	0.00	20	1	1	1	5

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
54	95-06-30	1.2	03 08 S	055 00 E	4.0	5	1	0.0	0.00	30	2	0	0	0
54	95-06-30	1.2	03 08 S	055 00 E	4.0	5	1	0.0	0.00	90	1	0	0	0
54	95-06-30	1.2	03 08 S	055 00 E	4.0	5	1	0.0	0.00	100	4	0	0	0
54	95-06-30	1.2	03 08 S	055 00 E	4.0	5	1	0.0	0.00	300	1	0	0	0
0	95-07-14	0.0	02 43 N	052 54 E	0.0	0	0	0.0	0.00	30	0	1	0	0
0	95-07-15	0.0	07 08 N	050 34 E	0.0	0	0	0.0	0.00	20	0	3	0	0
0	95-07-15	0.0	07 08 N	050 34 E	0.0	0	0	0.0	0.00	30	0	1	0	0
0	95-07-16	0.0	09 10 N	054 08 E	0.0	0	0	0.0	0.00	20	0	1	0	0
0	95-07-17	0.0	13 25 N	056 08 E	0.0	0	0	0.0	0.00	20	0	1	0	0
55	95-07-19	1.4	22 44 N	060 10 E	4.0	0	3	30.5	36.42	10	4	5	1	1
55	95-07-19	1.4	22 44 N	060 10 E	4.0	0	3	30.5	36.42	20	2	3	2	2
55	95-07-19	1.4	22 44 N	060 10 E	4.0	0	3	30.5	36.42	30	3	8	0	0
55	95-07-19	1.4	22 44 N	060 10 E	4.0	0	3	30.5	36.42	90	1	2	0	0
55	95-07-19	1.4	22 44 N	060 10 E	4.0	0	3	30.5	36.42	500	1	1	0	0
55	95-07-19	1.4	22 44 N	060 10 E	4.0	0	3	30.5	36.42	500	1	1	0	0
56	95-07-19	1.5	23 03 N	060 00 E	5.0	5	3	30.7	37.03	10	6	5	1	2
56	95-07-19	1.5	23 03 N	060 00 E	5.0	5	3	30.7	37.03	30	4	30	2	2
56	95-07-19	1.5	23 03 N	060 00 E	5.0	5	3	30.7	37.03	90	4	3	0	0
56	95-07-19	1.5	23 03 N	060 00 E	5.0	5	3	30.7	37.03	500	3	2	0	0
56	95-07-19	1.5	23 03 N	060 00 E	5.0	5	3	30.7	37.03	500	1	1	0	0
56	95-07-19	1.5	23 03 N	060 00 E	5.0	5	3	30.7	37.03	500	1	1	0	0
57	95-07-20	1.0	24 25 N	057 27 E	4.0	5	3	32.0	37.04	10	2	0	1	3
57	95-07-20	1.0	24 25 N	057 27 E	4.0	5	3	32.0	37.04	30	1	1	2	2
57	95-07-20	1.0	24 25 N	057 27 E	4.0	5	3	32.0	37.04	500	7	0	0	0
58	95-07-21	1.0	24 23 N	057 41 E	1.0	5	3	31.9	37.09	10	2	1	1	1

Table 42. Continued.

Station Number	Date yr-mo-da	Hours Effort	Ship's Position Latitude degrees, minutes	Ship's Position Longitude degrees, minutes	Sea State (T. 2)	Moon Phase (T. 5)	Cloud Cover (T. 6)	Sea Surface Temp C	Sea Surface Salinity ppt	Fish Species (T. 7)	Fish Abundance (T. 9)	Fish Number Collected	Squid Species (T. 8)	Squid Abundance (T. 9)
58	95-07-21	1.0	24 23 N	057 41 E	1.0	5	3	31.9	37.09	30	1	1	3	1
58	95-07-21	1.0	24 23 N	057 41 E	1.0	5	3	31.9	37.09	500	4	0	0	0
59	95-07-22	1.0	23 10 N	059 54 E	3.0	5	3	29.1	36.71	10	6	9	1	2
59	95-07-22	1.0	23 10 N	059 54 E	3.0	5	3	29.1	36.71	30	3	8	2	2
59	95-07-22	1.0	23 10 N	059 54 E	3.0	5	3	29.1	36.71	90	4	2	3	1
59	95-07-22	1.0	23 10 N	059 54 E	3.0	5	3	29.1	36.71	400	1	0	0	0
59	95-07-22	1.0	23 10 N	059 54 E	3.0	5	3	29.1	36.71	500	1	1	0	0
60	95-07-22	1.0	23 00 N	059 52 E	2.0	5	3	28.7	36.72	10	5	0	1	2
60	95-07-22	1.0	23 00 N	059 52 E	2.0	5	3	28.7	36.72	20	1	1	2	2
60	95-07-22	1.0	23 00 N	059 52 E	2.0	5	3	28.7	36.72	30	4	17	0	0
60	95-07-22	1.0	23 00 N	059 52 E	2.0	5	3	28.7	36.72	90	3	0	0	0
60	95-07-22	1.0	23 00 N	059 52 E	2.0	5	3	28.7	36.72	500	2	2	0	0
61	95-07-23	1.0	22 56 N	060 02 E	4.0	5	3	28.8	36.64	10	5	0	1	2
61	95-07-23	1.0	22 56 N	060 02 E	4.0	5	3	28.8	36.64	20	2	2	0	0
61	95-07-23	1.0	22 56 N	060 02 E	4.0	5	3	28.8	36.64	30	3	6	0	0
61	95-07-23	1.0	22 56 N	060 02 E	4.0	5	3	28.8	36.64	90	1	0	0	0
61	95-07-23	1.0	22 56 N	060 02 E	4.0	5	3	28.8	36.64	900	1	0	0	0

Table 43. Sightings of marine turtles.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Detected by (Table 3)	Birds Present?	Species	Number
950416	2	01	01	18.5	2	0635	4.4	59.54	004	N	Olive Ridley	1
950416	1	08	02	18.5	2	1100	4.65	59.76	098	N	Unid. Hard-Shelled	1
950416	0	08	02	18.5	2	1200	4.83	59.92	004	N	Olive Ridley	1
950419	3	06	01	12.95	2	0950	8.13	67.1	098	N	Green	1
950420	1	11	02	18.5	2	0349	7.68	71.26	120	N	Unid. Hard-Shelled	1
950420	1	11	02	18.5	2	0406	7.68	71.34	004	N	Unid. Hard-Shelled	1
950420	1	11	02	18.5	2	0414	7.67	71.38	004	N	Unid. Hard-Shelled	1
950420	0	11	02	18.5	2	0427	7.67	71.42	120	N	Unid. Hard-Shelled	1
950420	0	11	02	18.5	2	0428	7.67	71.42	120	N	Unid. Hard-Shelled	1
950420	0	11	02	18.5	2	0432	7.67	71.42	120	N	Unid. Hard-Shelled	1
950420	0	11	02	18.5	2	0436	7.67	71.47	120	N	Unid. Hard-Shelled	1
950420	1	11	02	18.5	2	0455	7.66	71.55	098	N	Olive Ridley	1
950420	1	12	12	18.5	2	0520	7.65	71.63	098	N	Olive Ridley	1
950420	1	12	12	18.5	2	0726	7.58	72.12	004	N	Unid. Hard-Shelled	1
950420	1	12	12	18.5	2	0810	7.57	72.28	004	N	Olive Ridley	1
950421	1	10	03	18.5	2	0118	5.62	75.85	098	N	Unid. Hard-Shelled	1
950427	2	12	12	18.5	2	0705	6.97	79.36	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0750	6.97	79.2	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0751	6.99	79.16	004	N	Olive Ridley	1
950427	1	12	01	18.5	2	0759	6.99	79.16	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0815	7	79.09	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0816	7	79.09	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0825	7	79.05	004	N	Unid. Hard-Shelled	1

Table 43. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Detected by (Table 3)	Birds Present?	Species	Number
950427	1	12	01	18.5	2	0826	7	79.05	004	N	Olive Ridley	1
950427	1	12	01	18.5	2	0829	7	79.05	004	N	Olive Ridley	2
950427	1	12	01	18.5	2	0830	7	79.01	004	N	Olive Ridley	1
950427	1	12	01	18.5	2	0832	7	79.01	004	N	Unid. Hard-Shelled	3
950427	1	12	01	18.5	2	0833	7	79.01	004	N	Olive Ridley	1
950427	1	12	01	18.5	2	0836	7	79.01	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0845	7	78.97	004	N	Olive Ridley	1
950427	1	12	01	18.5	2	0849	7	78.97	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0859	7	78.93	004	N	Unid. Hard-Shelled	1
950427	1	12	01	18.5	2	0900	7	78.93	004	N	Olive Ridley	1
950427	1	12	01	18.5	2	0905	7.01	78.9	004	N	Unid. Hard-Shelled	2
950427	1	01	01	18.5	2	0910	7.01	78.9	004	N	Olive Ridley	1
950427	1	01	01	18.5	2	0912	7.01	78.86	004	N	Unid. Hard-Shelled	1
950427	1	01	01	18.5	2	0914	7.01	78.86	004	N	Unid. Hard-Shelled	1
950427	1	01	01	18.5	2	0929	7.01	78.82	004	N	Olive Ridley	1
950427	1	01	01	18.5	2	0930	7.01	78.82	004	N	Olive Ridley	1
950427	1	01	01	18.5	2	0935	7.01	78.78	004	N	Unid. Hard-Shelled	1
950427	1	01	01	18.5	2	1004	7.02	78.66	004	N	Unid. Hard-Shelled	1
950427	1	01	02	18.5	2	1044	7.04	78.51	004	N	Unid. Hard-Shelled	1
950427	1	01	02	18.5	2	1047	4.04	78.51	004	N	Unid. Hard-Shelled	1
950427	1	01	02	18.5	2	1053	7.06	78.47	004	N	Unid. Hard-Shelled	1
950427	1	01	02	18.5	2	1107	7.06	78.43	004	N	Unid. Hard-Shelled	1
950427	1	01	02	18.5	2	1110	7.06	78.43	004	N	Unid. Hard-Shelled	2
950427	1	01	02	18.5	2	1114	7.06	78.39	004	N	Unid. Hard-Shelled	2
950427	1	01	02	18.5	2	1115	7.06	78.39	120	N	Unid. Hard-Shelled	1

Table 43. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude (Decimal Degrees) E	Detected by (Table 3)	Birds Present?	Species	Number
950427	1	01	02	18.5	2	1121	7.06	78.39	120	N	Unid. Hard-Shelled	2
950428	1	00	00	14.8	2	0105	7.22	75.25	004	N	Unid. Hard-Shelled	1
950428	1	00	00	14.8	2	0137	7.27	75.1	004	N	Unid. Hard-Shelled	1
950428	1	00	00	14.8	2	0206	7.27	75.02	120	N	Unid. Hard-Shelled	1
950428	1	00	00	14.8	2	0207	7.27	74.98	120	N	Unid. Hard-Shelled	1
950428	1	00	00	14.8	2	0217	7.27	74.94	120	N	Olive Ridley	1
950428	1	00	00	14.8	2	0219	7.27	74.94	004	N	Unid. Hard-Shelled	1
950428	1	00	00	14.8	2	0221	7.27	74.94	120	N	Olive Ridley	1
950510	0	12	02	18.5	2	0536	10.99	53.68	098	N	Olive Ridley	1
950512	2	08	01	18.5	2	0942	13.88	58.7		N	Unid. Hard-Shelled	1
950520	4	09	02	9.25	2	1022	20.85	59.5	098	N	Olive Ridley	1
950524	0				5	0207			004	N	Unid. Hard-Shelled	2
950524	0				5	0212			004	N	Green	2
950601	3	07	03	11.1	2	0252	20.76	59.35	098	N	Unid. Hard-Shelled	1
950601	3	07	02	12.95	2	0407	20.58	59.23	098	N	Olive Ridley	1
950612	0				5	0528	8.49	64.67	120	N	Unid. Hard-Shelled	1
950619	4	03	01	7.4	2	0644	6.48	78.74	004	N	Olive Ridley	1
950719	2	02	01	7.4	2	0643			098	N	Loggerhead	1
950719	2	02	01	7.4	2	0700	22.22	60.01	098	N	Olive Ridley	1
950719	2	12	12	5.55	5	1000	22.72	59.84	004	N	Unid. Hard-Shelled	1
950720	2	00	00	5.55	2	0630	23.04	59.24	004	Y	Olive Ridley	1
950723	1	12	12	14.8	2	0755	22.99	59.39	004	N	Unid. Hard-Shelled	1
950723	1	12	12	14.8	5	0819	22.92	59.43	098	N	Olive Ridley	1

Table 43. Continued.

Date yrmoda	Sea State (Table 2)	Sun Horizontal (Figure 2)	Sun Vertical (Figure 2)	Visibility km	Event 2=on effort 5=off effort	Time GMT	Ship's Position Latitude (Decimal Degrees) N/S=+/-	Ship's Position Longitude Degrees) E	Detected by (Table 3)	Birds Present?	Species	Number
950723	1				5	0955	22.69	60	098	N	Unid. Hard-Shelled	1

72 Total Sightings
81 Total Turtles

25 Olive Ridley	***Lepidochelys olivacea***
3 Green	***Chelonia mydas***
1 Loggerhead	***Caretta caretta***
52 Unid. Hard-Shelled	

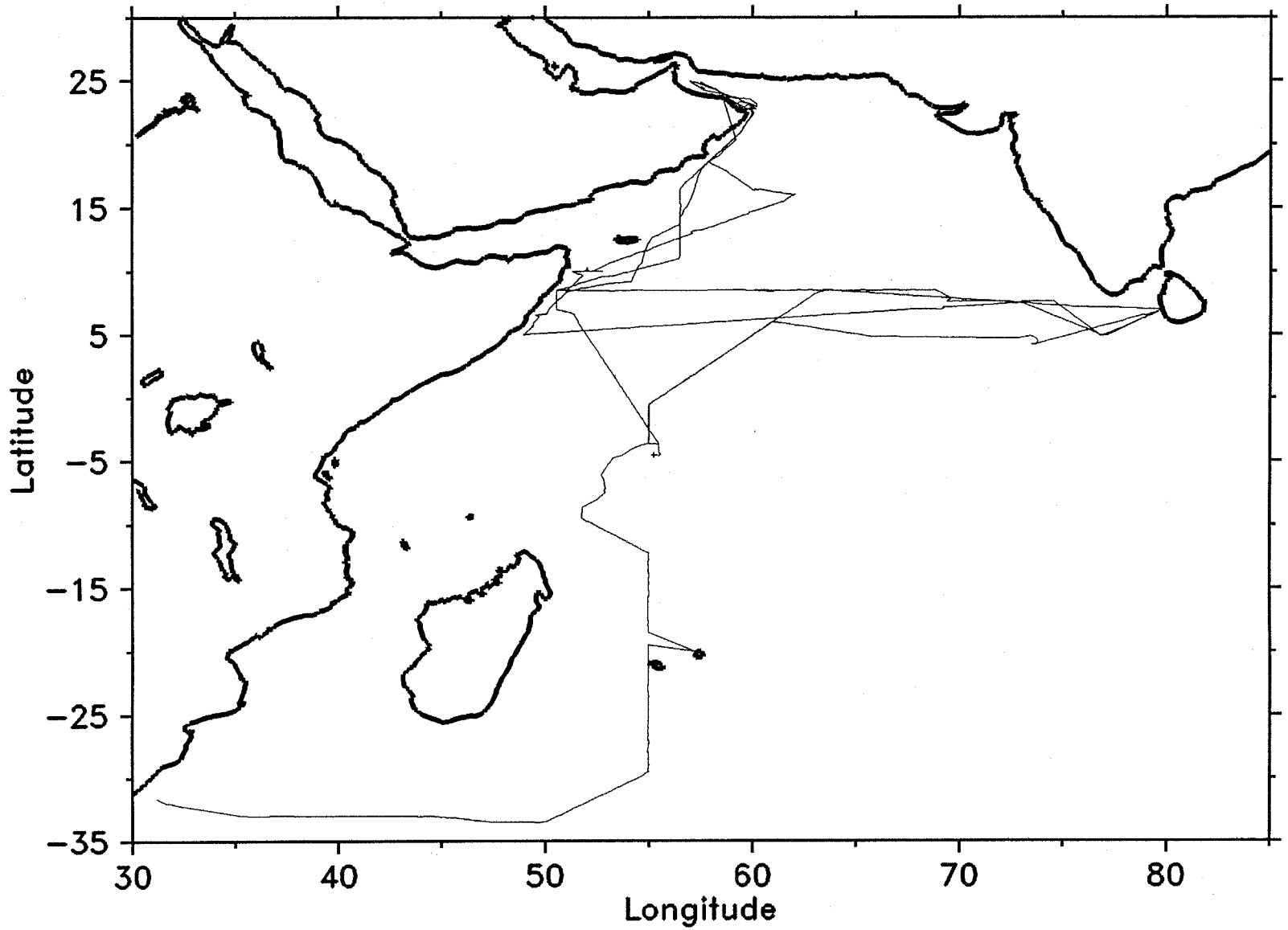
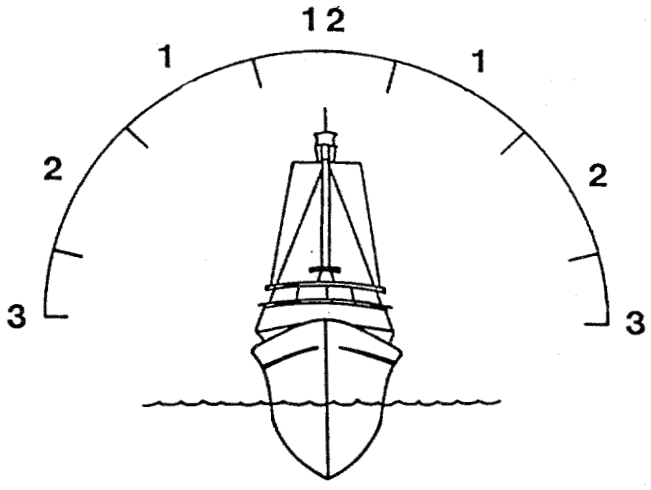
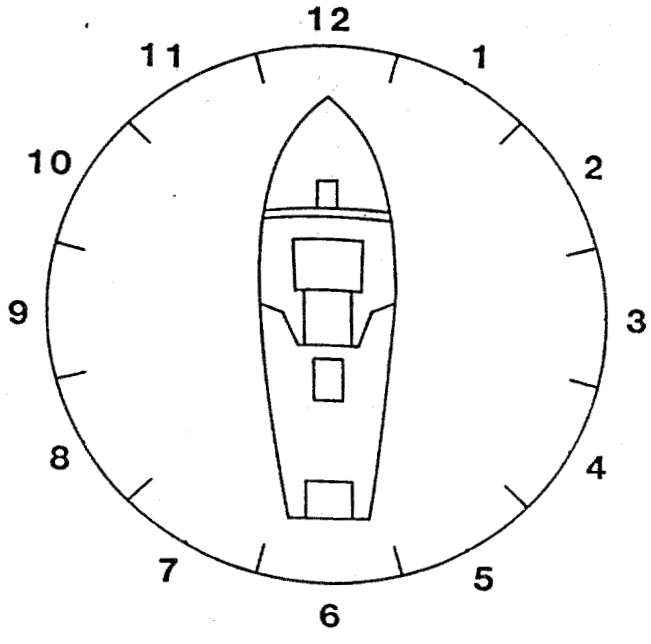


Figure 1. Track lines surveyed by the NOAA Ship *Malcolm Baldrige* 21 March - 24 July, 1995.



VERTICAL SUN POSITION



HORIZONTAL SUN POSITION

Figure 2. Vertical and horizontal sun position categories.

SWFSC Marine Mammal Sighting Form

Date (Y Y M M D D) ☐☐☐☐☐☐ Observer ☐☐☐ Cruise # ☐☐☐☐

Time ☐☐☐☐ Effort: ON / OFF Sighting # ☐☐☐☐

SPECIES DETERMINATION:

1.	2.	3.

DIAGNOSTIC FEATURES: Describe and sketch shape, size and markings of species identified.

BEHAVIOR: Describe aggregation, movement, blows, etc.

ASSOCIATED ANIMALS: List the number and species of other animals near sightings.

Initials	Roll #	Frame #'s

NOAA Form 88-208 (4/93)

☐ Biopsy

☐ Bow Riding

☐ Calibration

Initial School Movement:

☐☐☐ Speed - knots

☐☐☐ Direction - relative to bow

Figure 3. Cetacean sighting record form.

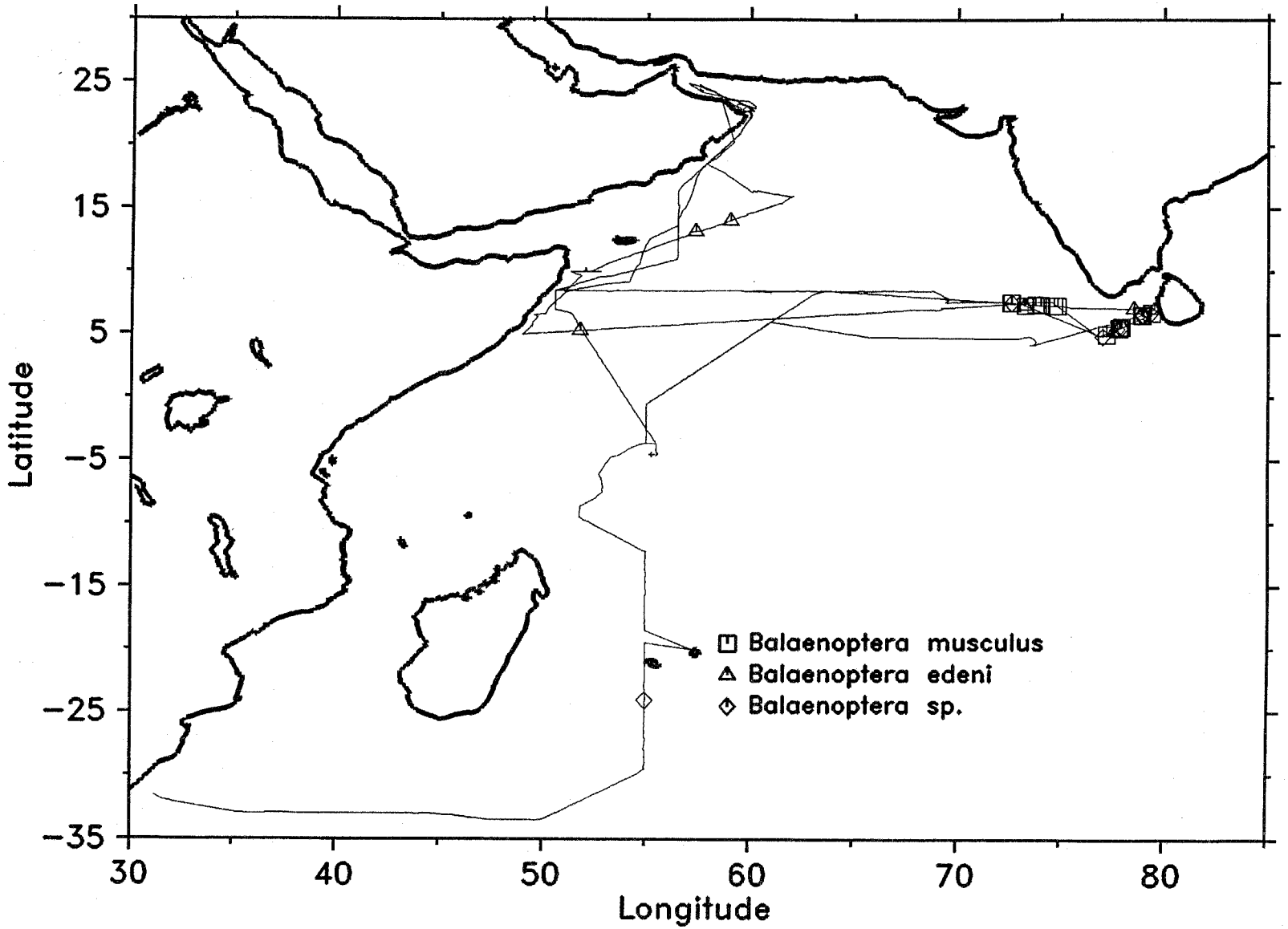


Figure 4. Location of *Balaenoptera musculus* (n = 17), *Balaenoptera edeni* (n = 8) and *Balaenoptera* sp. (n = 12) sightings.

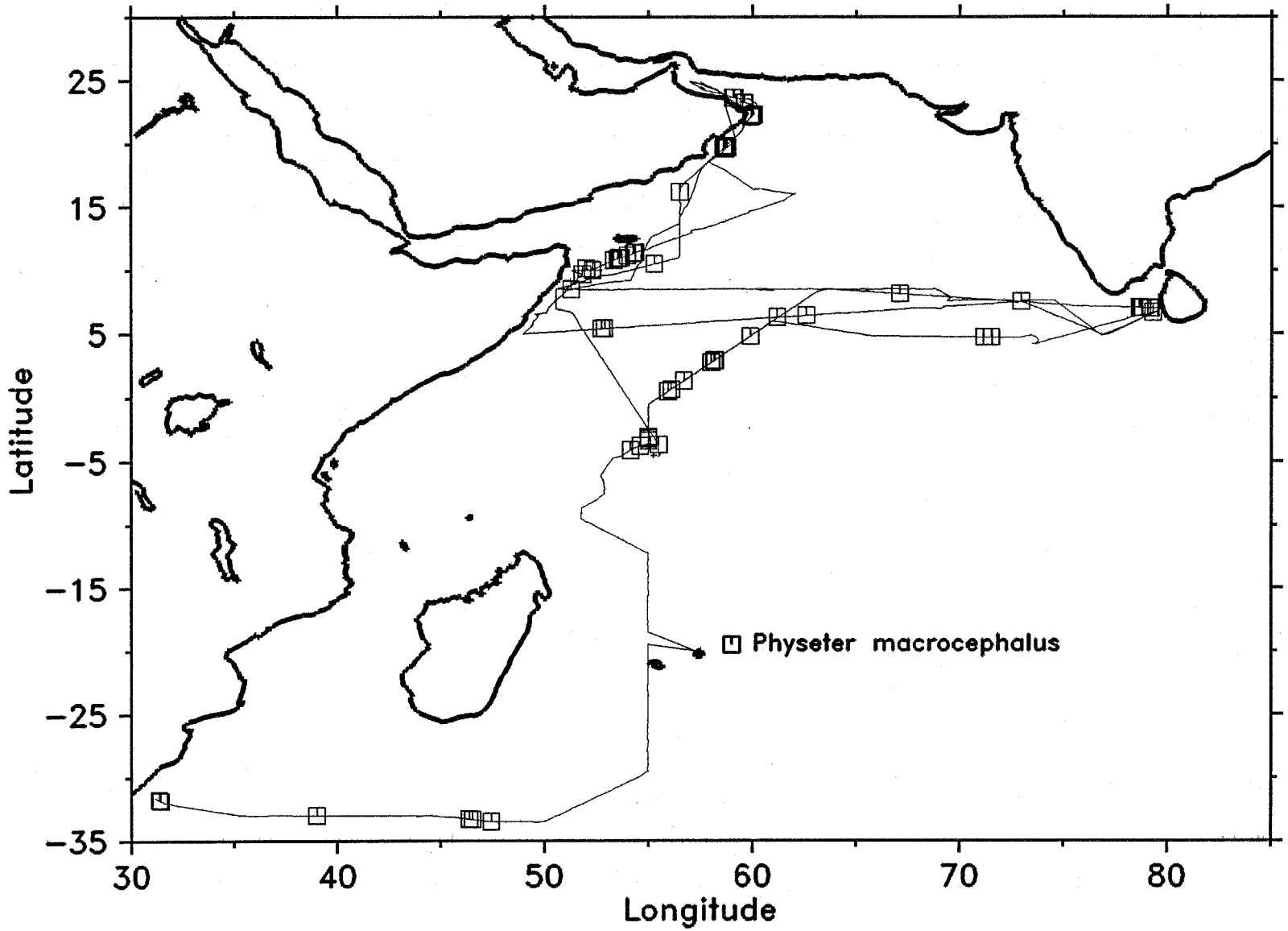


Figure 5. Location of *Physeter macrocephalus* sightings (n = 99).

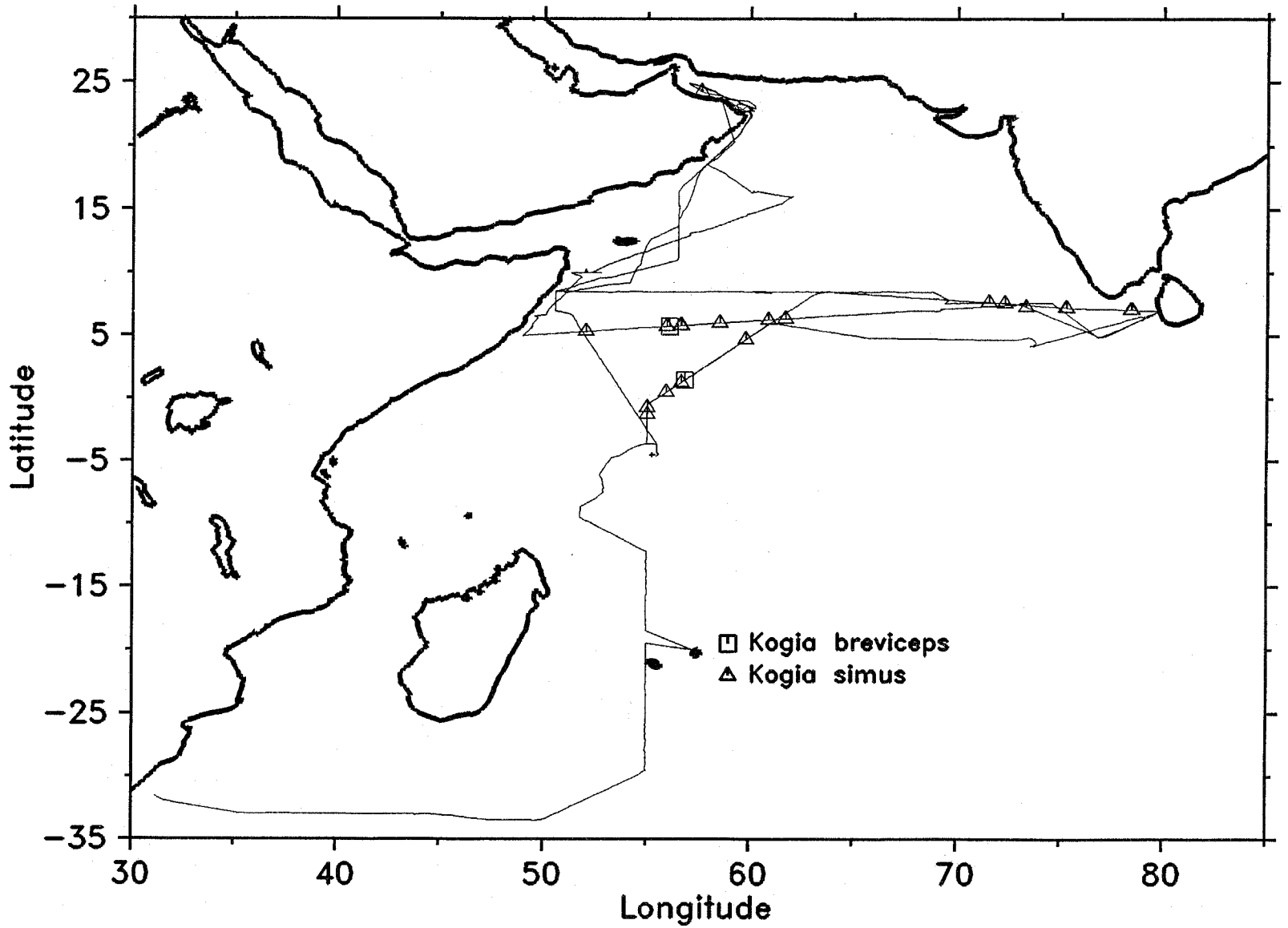


Figure 6. Location of *Kogia breviceps* (n = 2) and *Kogia simus* (n = 20) sightings.

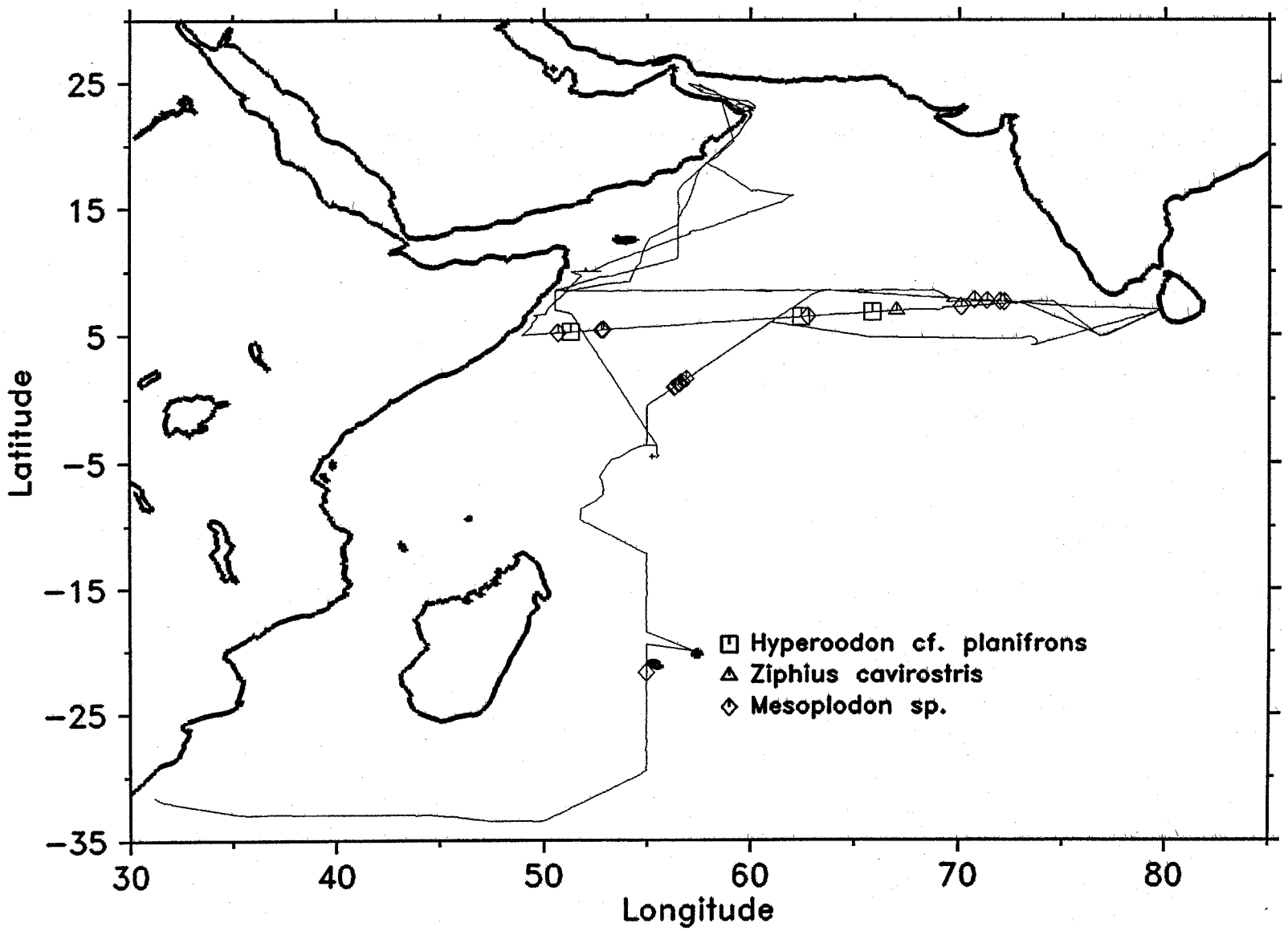


Figure 7. Location of *Hyperoodon cf. Planifrons* (n = 3), *Ziphius cavirostris* (n = 1) and *Mesoplodon* sp. (n = 19) sightings.

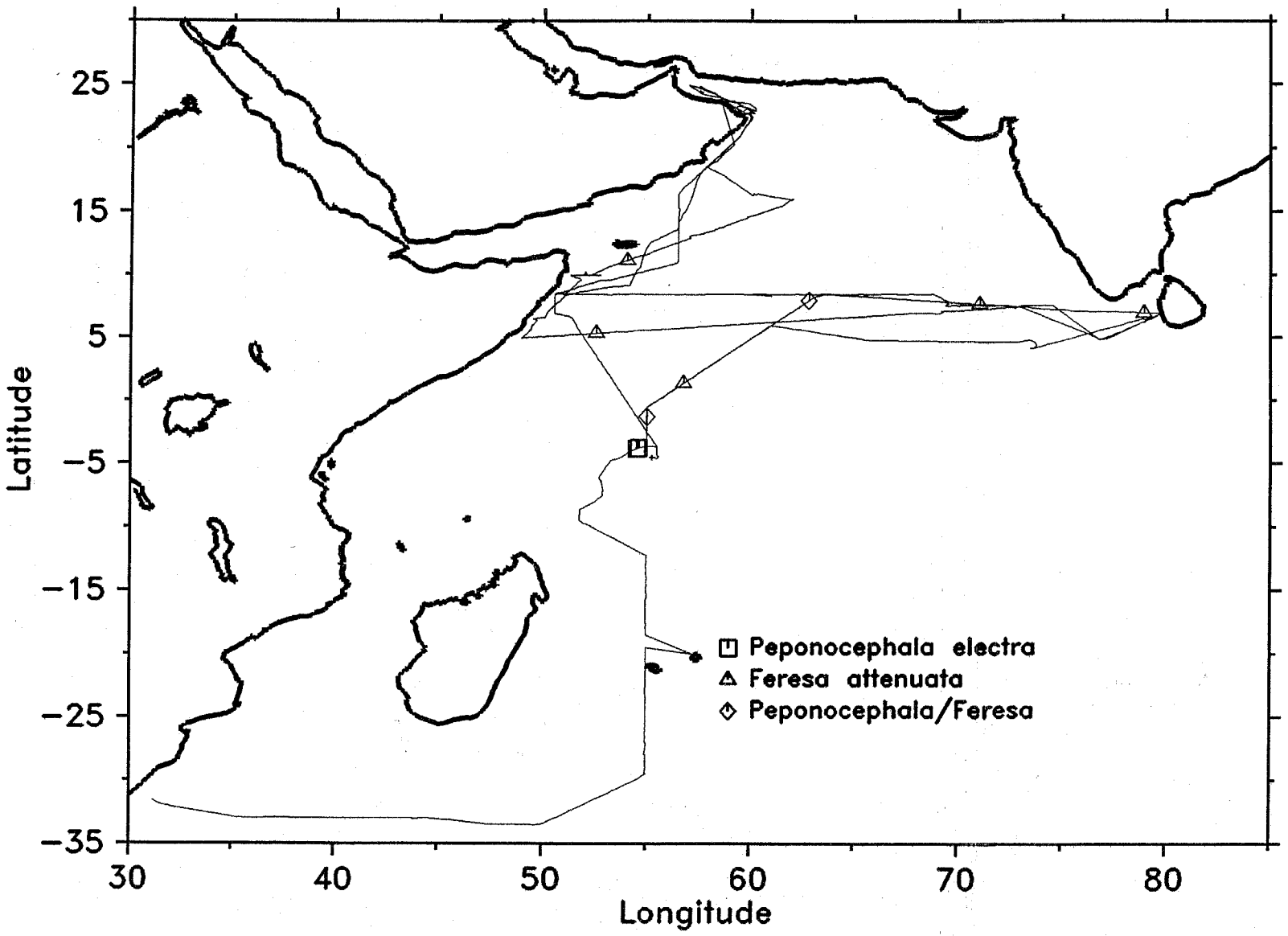


Figure 8. Location of *Peponocephala electra* (n = 3), *Feresa attenuata* (n = 5) and *Peponocephala/Feresa* (n = 2) sightings.

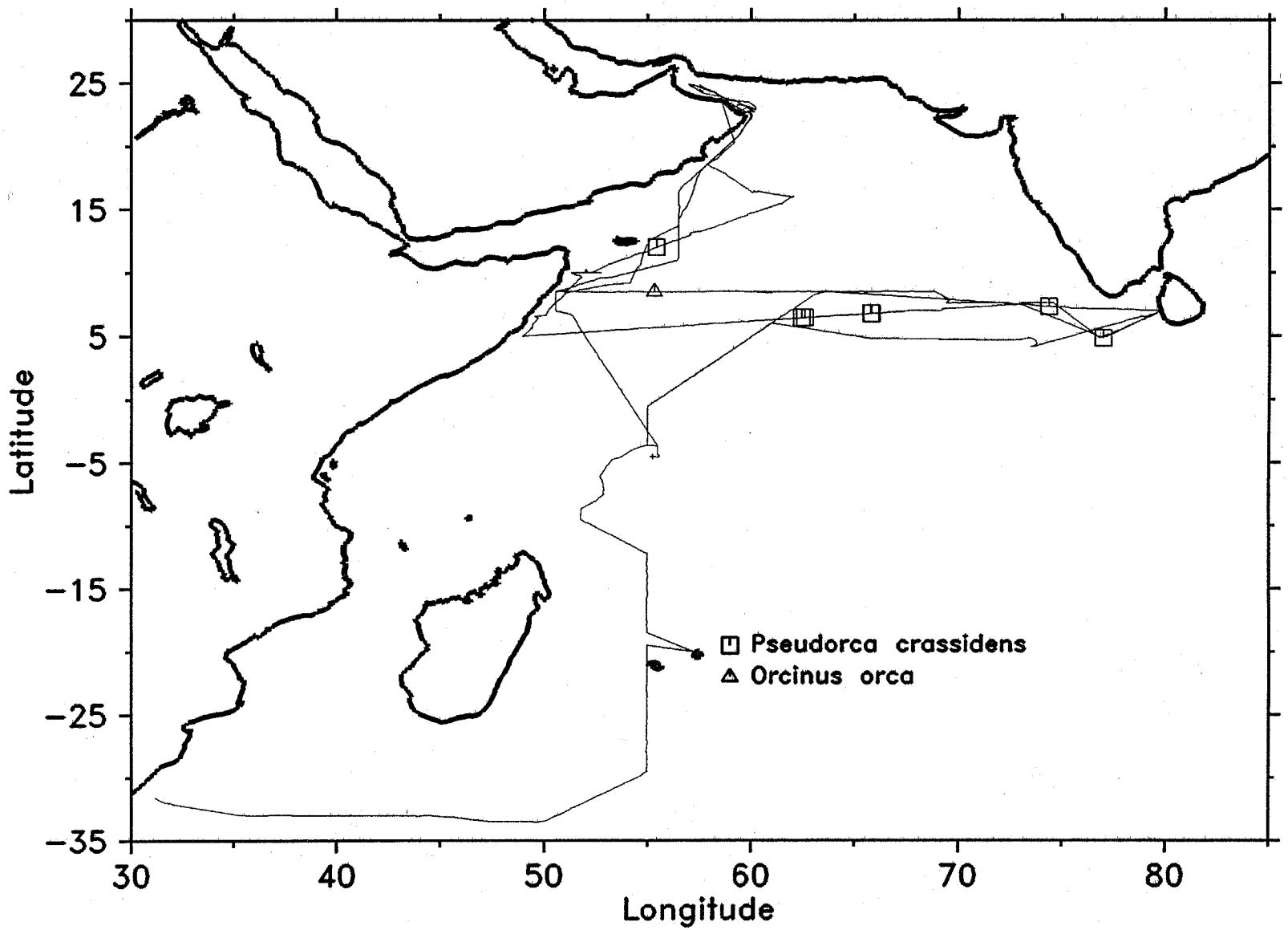


Figure 9. Location of *Pseudorca crassidens* (n = 7) and *Orcinus orca* (n = 2) sightings.

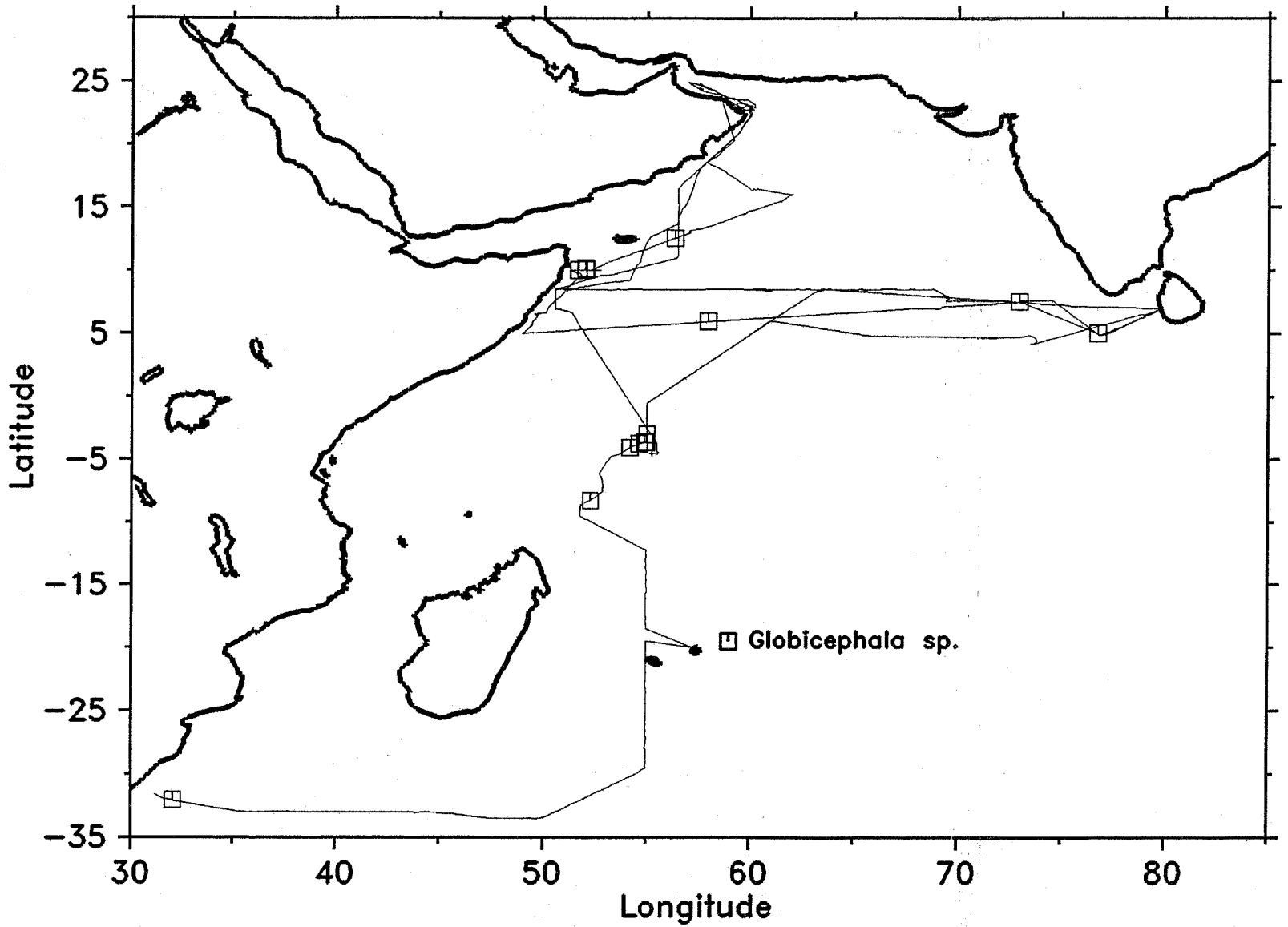


Figure 10. Location of *Globicephala* sp. sightings (n = 16).

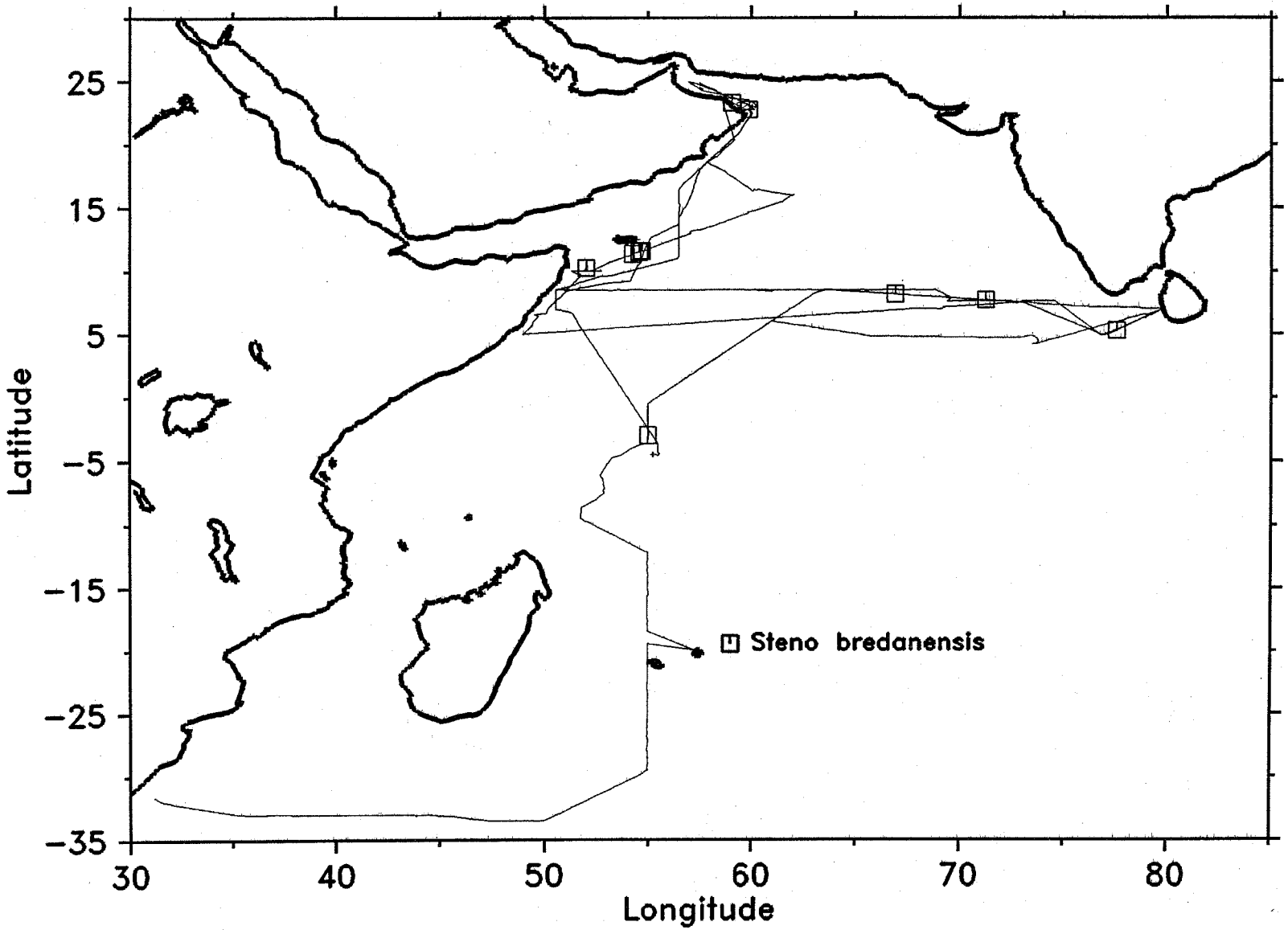


Figure 11. Location of *Steno bredanensis* sightings (n = 12).

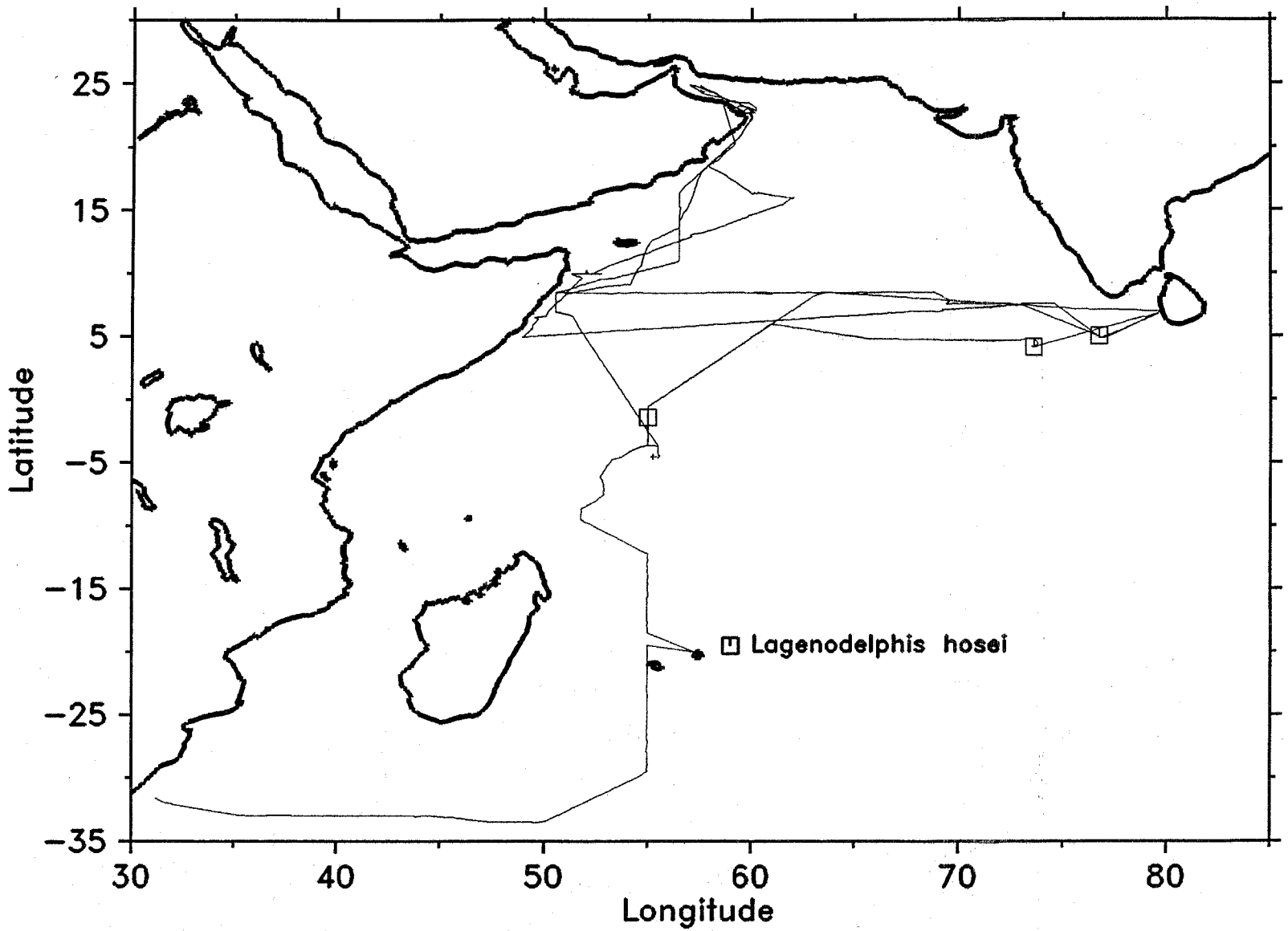


Figure 12. Location of *Lagenodelphis hosei* sightings (n = 3).

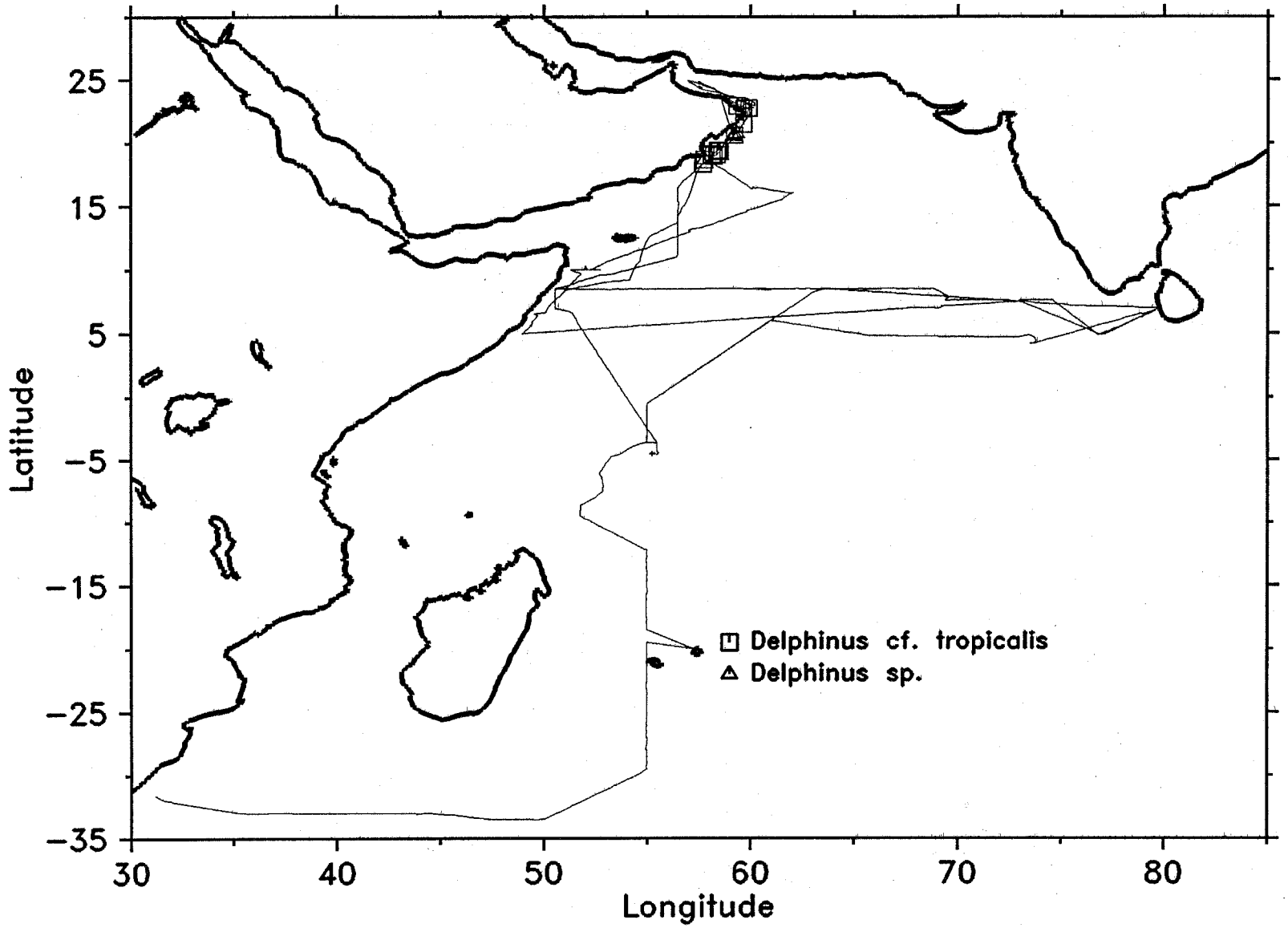


Figure 13. Location of *Delphinus cf. tropicalis* (n = 16) and *Delphinus* sp. (n = 5) sightings.

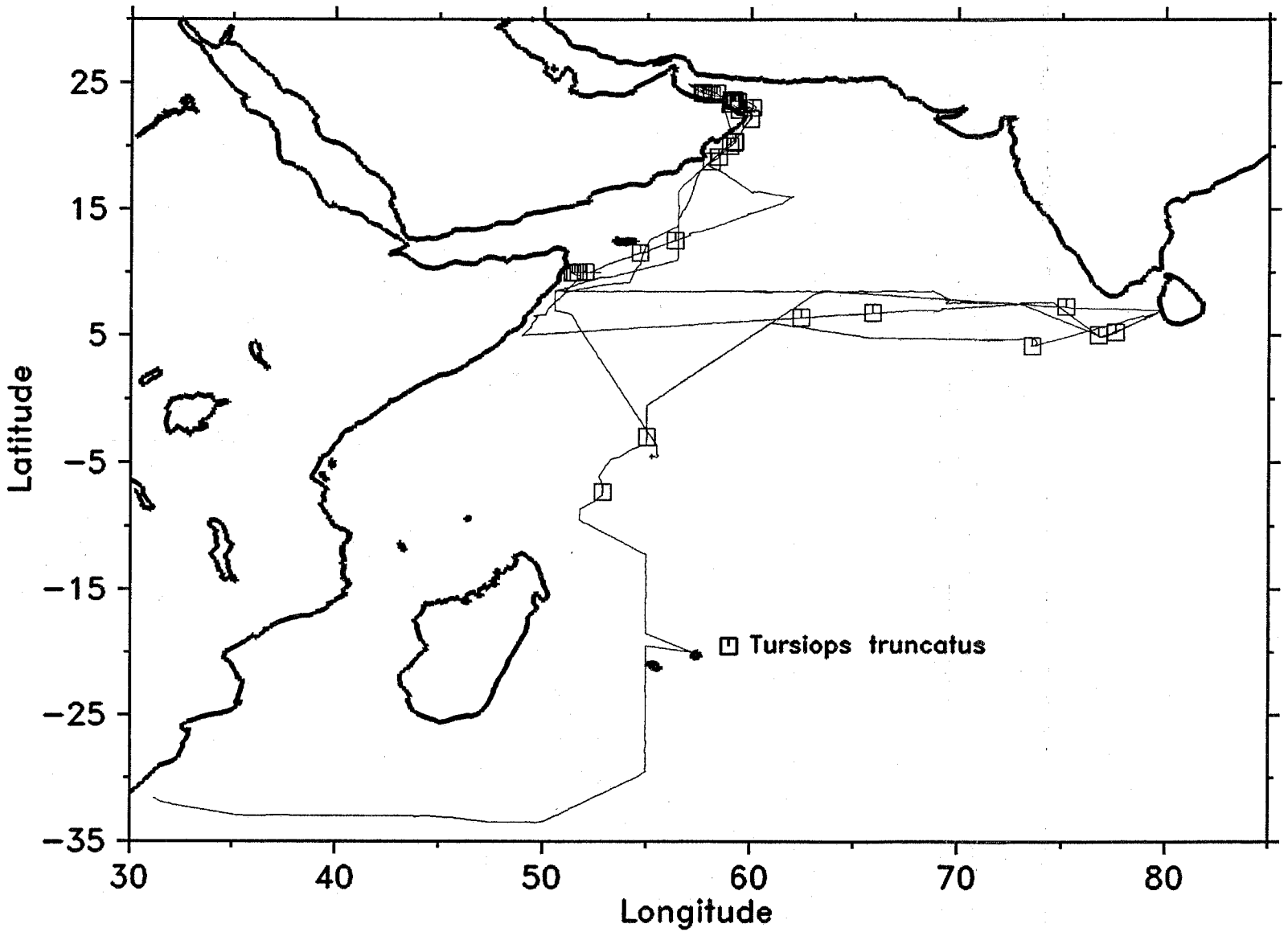


Figure 14. Location of *Tursiops truncatus* sightings (n = 41).

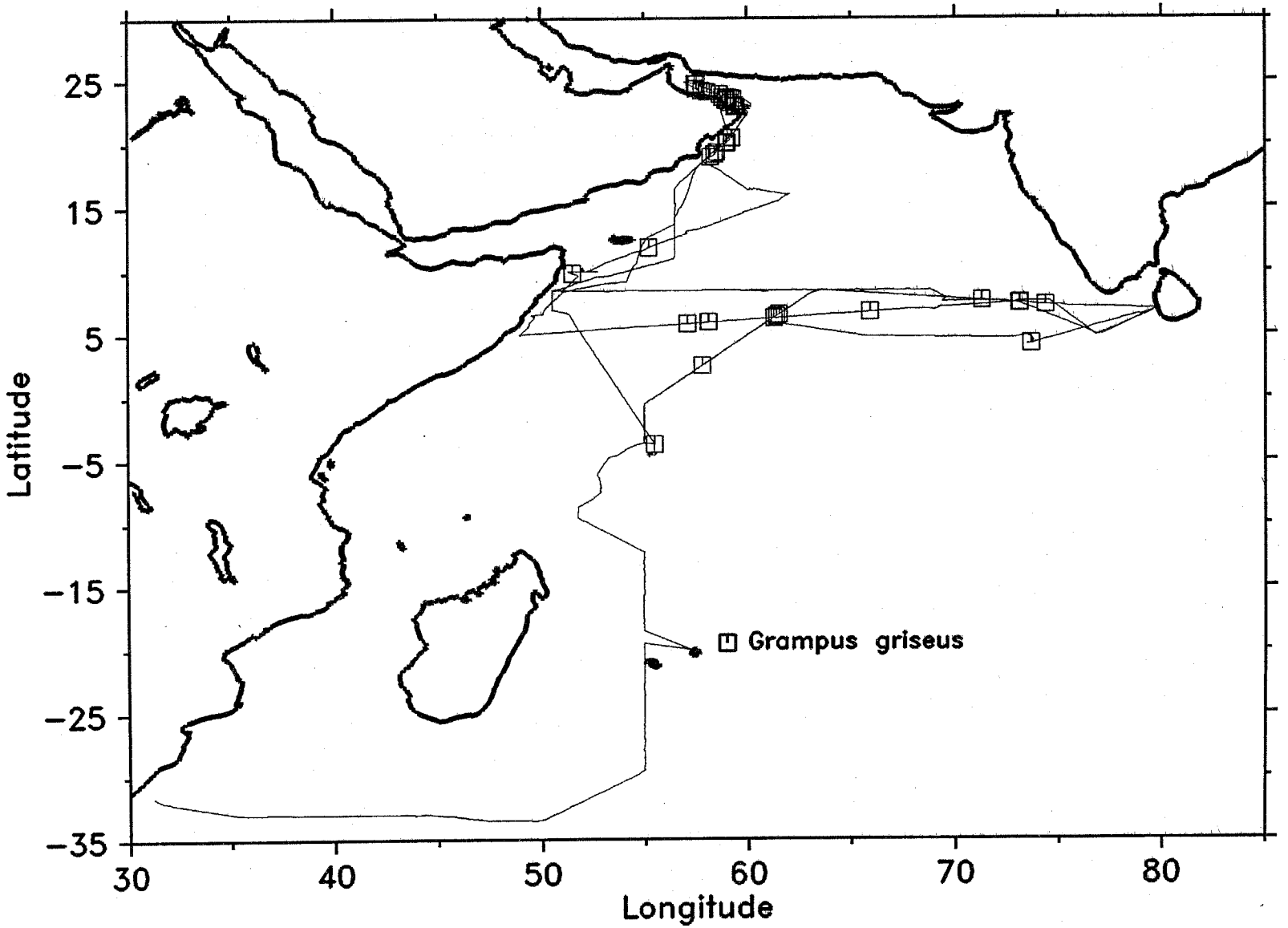


Figure 15. Location of *Grampus griseus* sightings (n = 49).

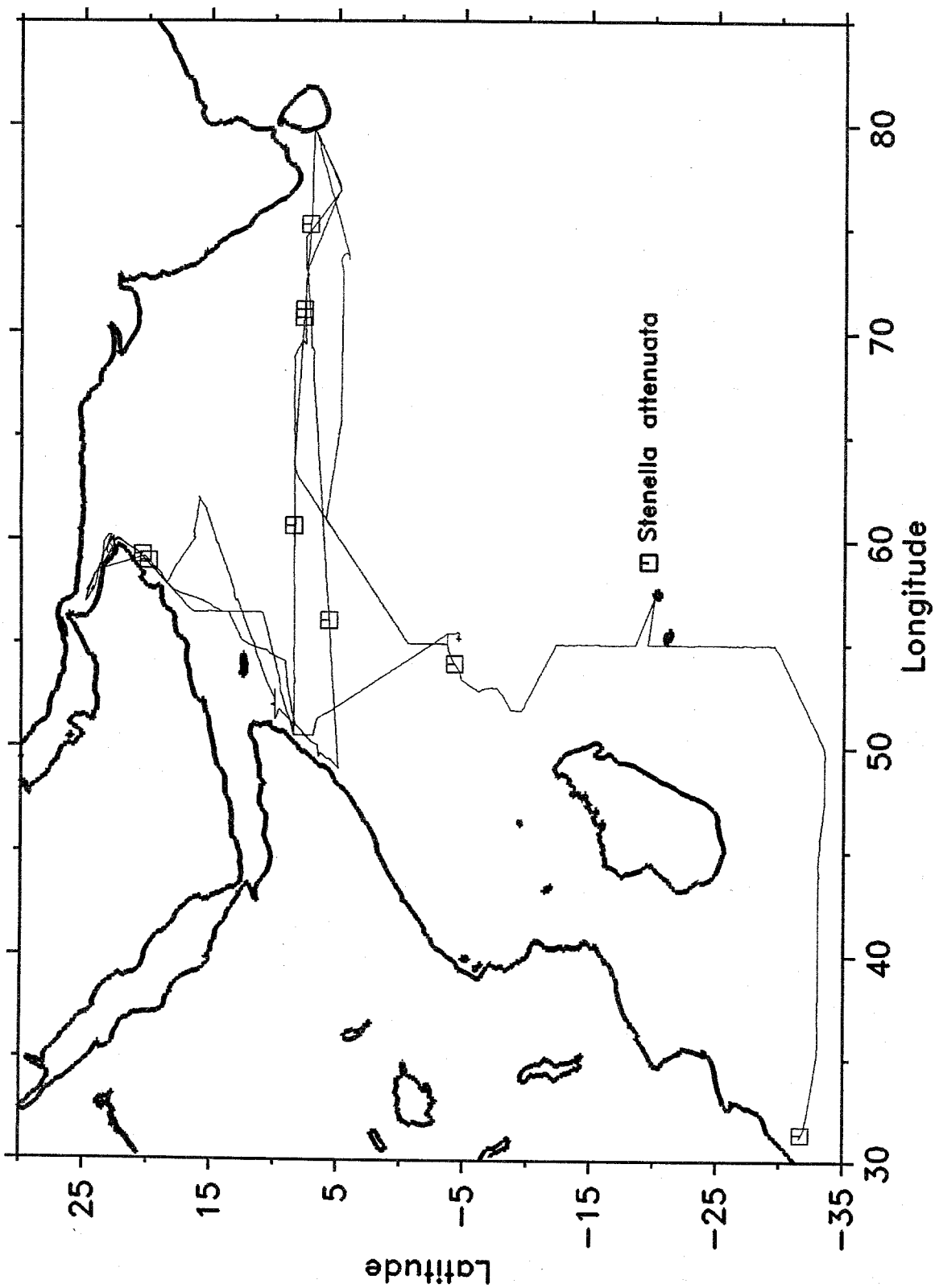


Figure 16. Location of *Stenella attenuata* sightings (n = 12).

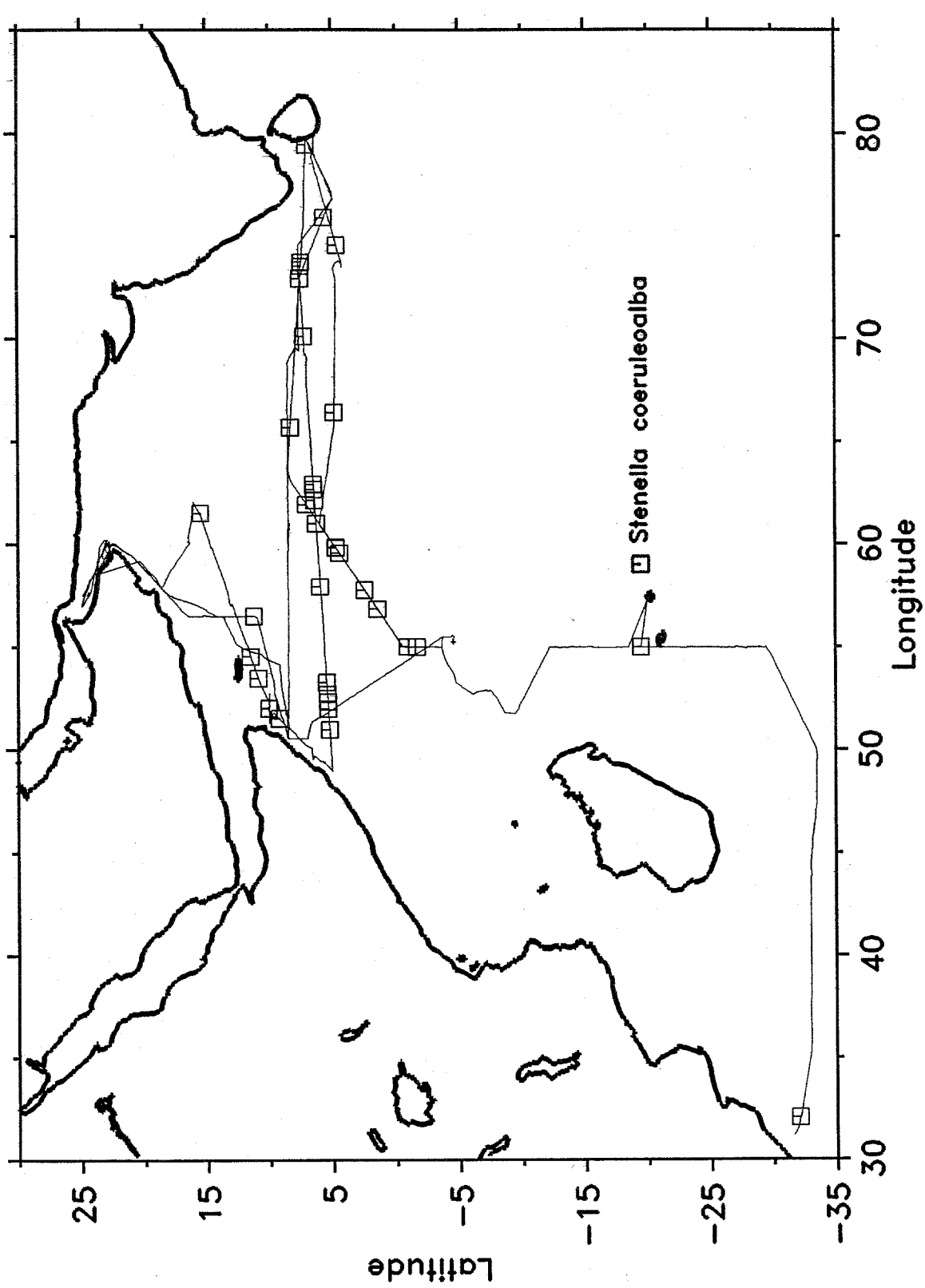


Figure 17. Location of *Stenella coeruleoalba* sightings (n = 37).

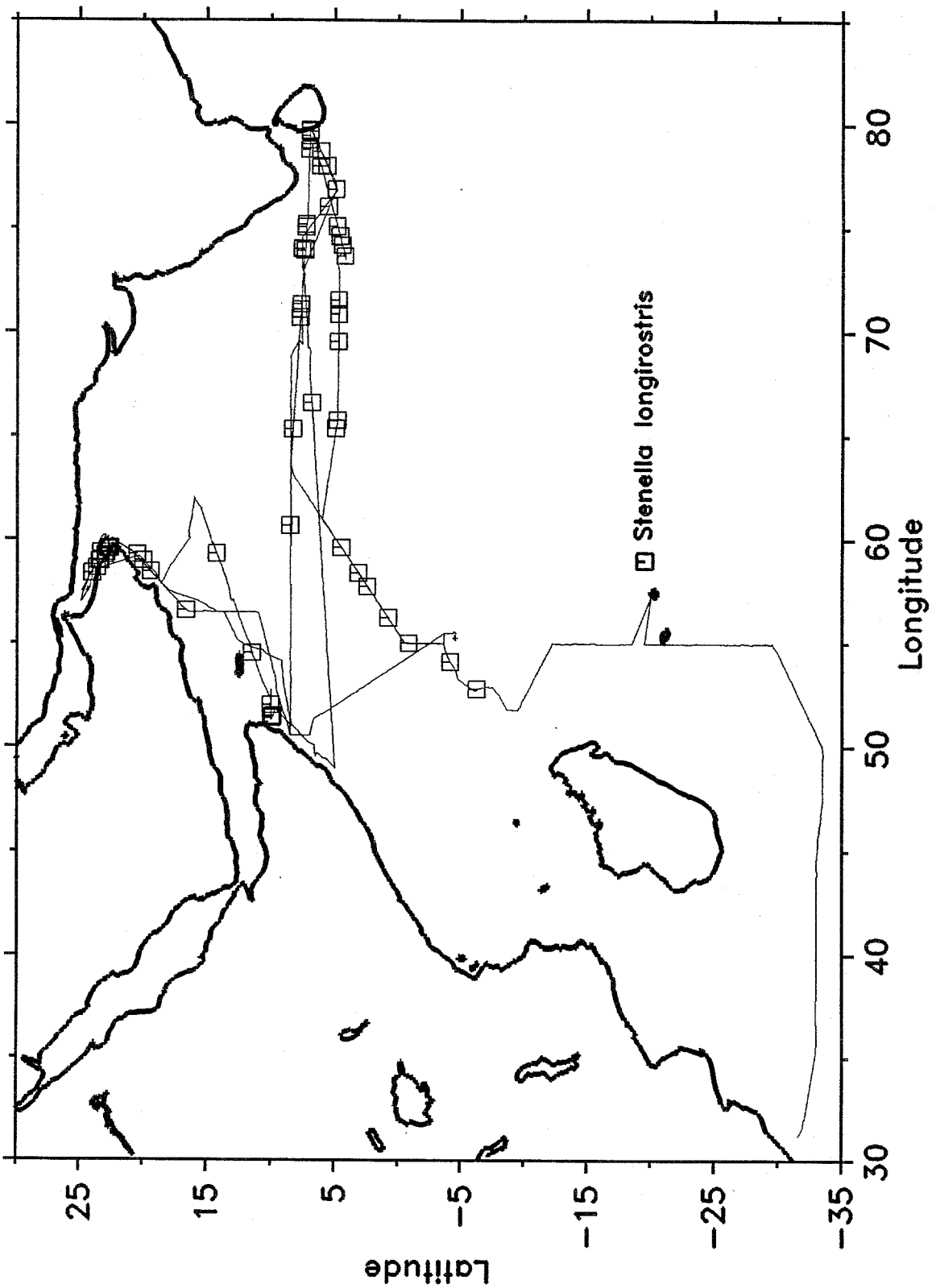


Figure 18. Location of *Stenella longirostris* sightings (n = 66).

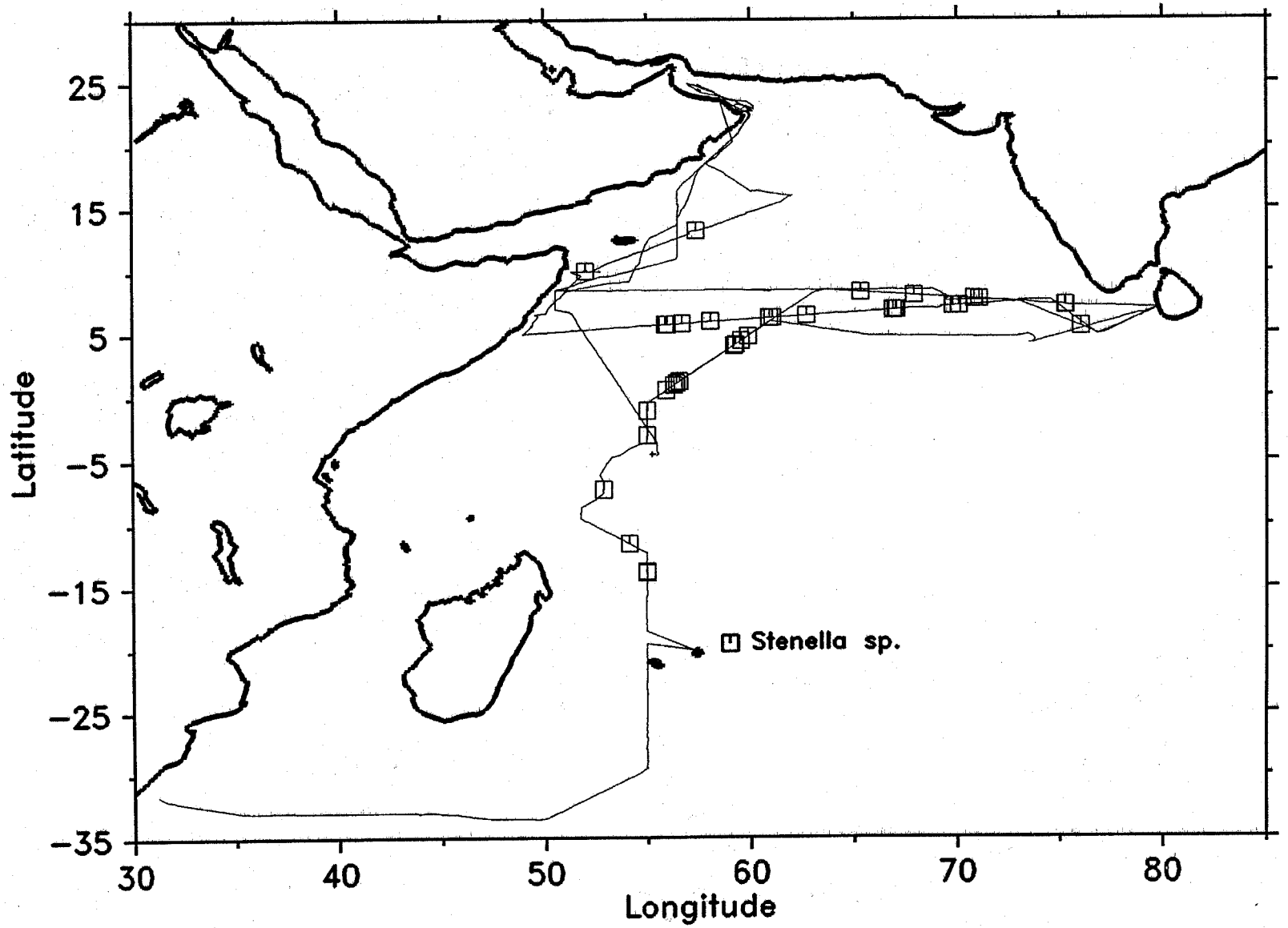


Figure 19. Location of *Stenella sp.* sightings (n = 23).

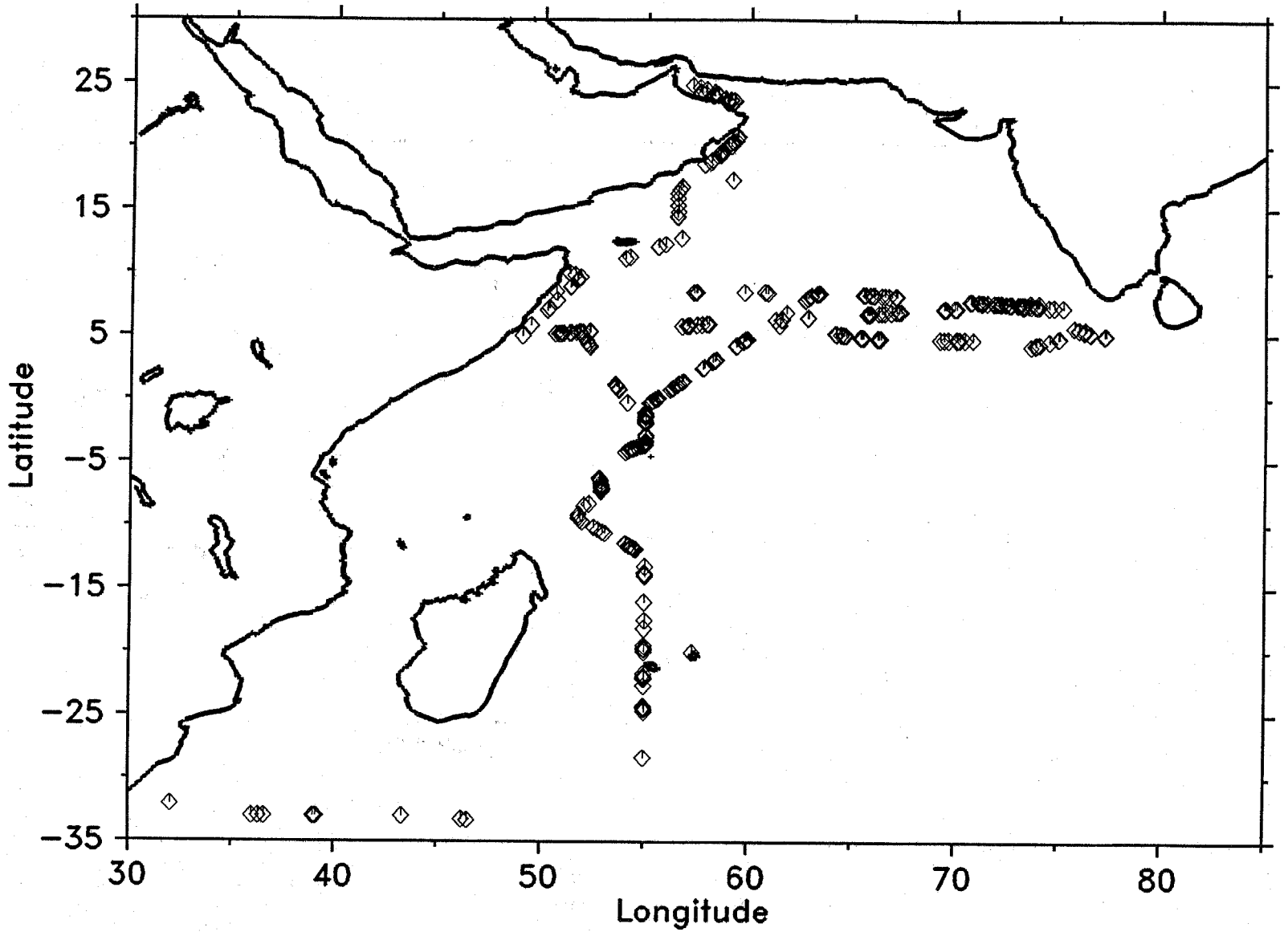


Figure 20. Location of seabird feeding flocks.

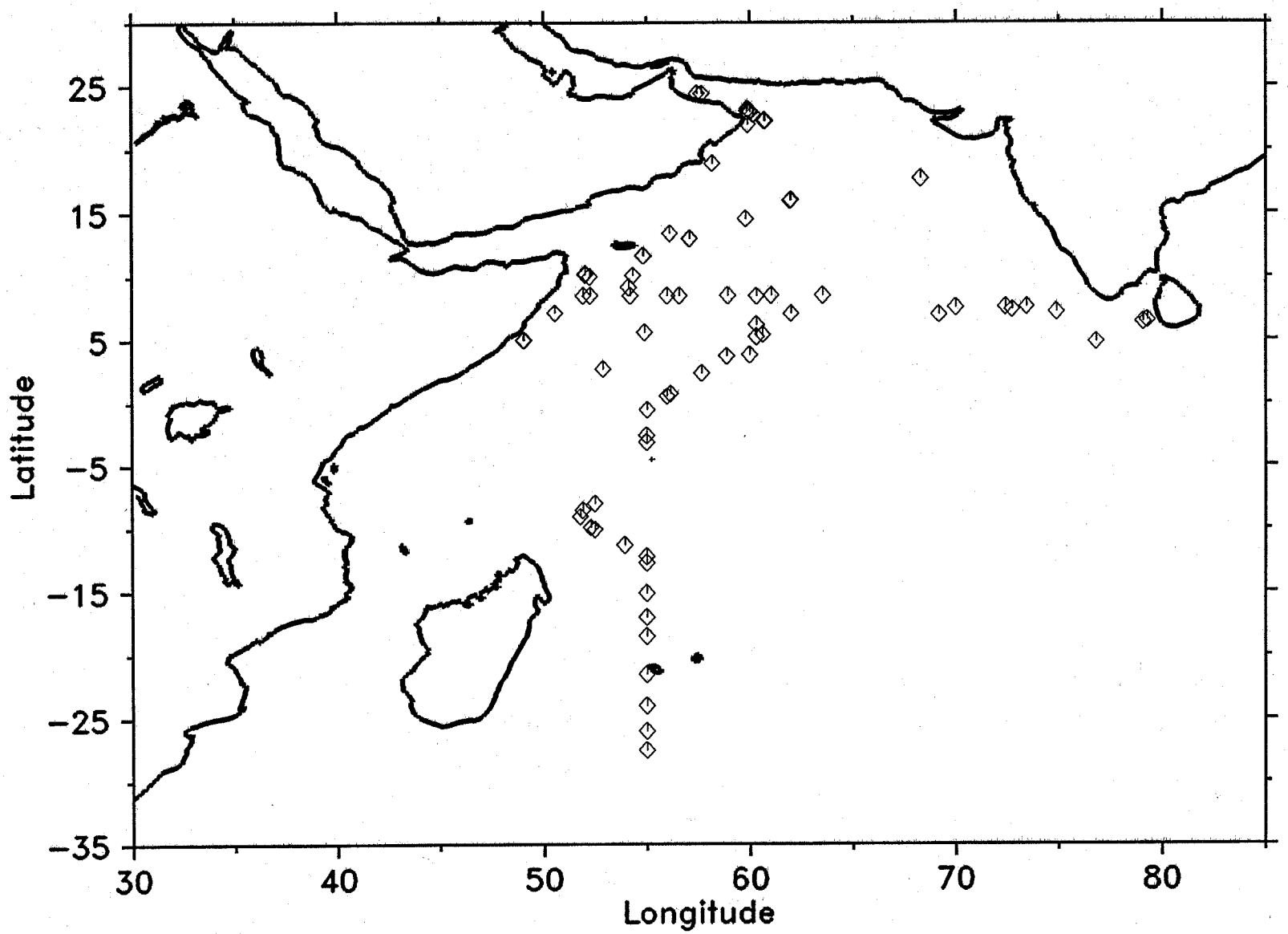


Figure 21. Location of flyingfish dipnet stations.

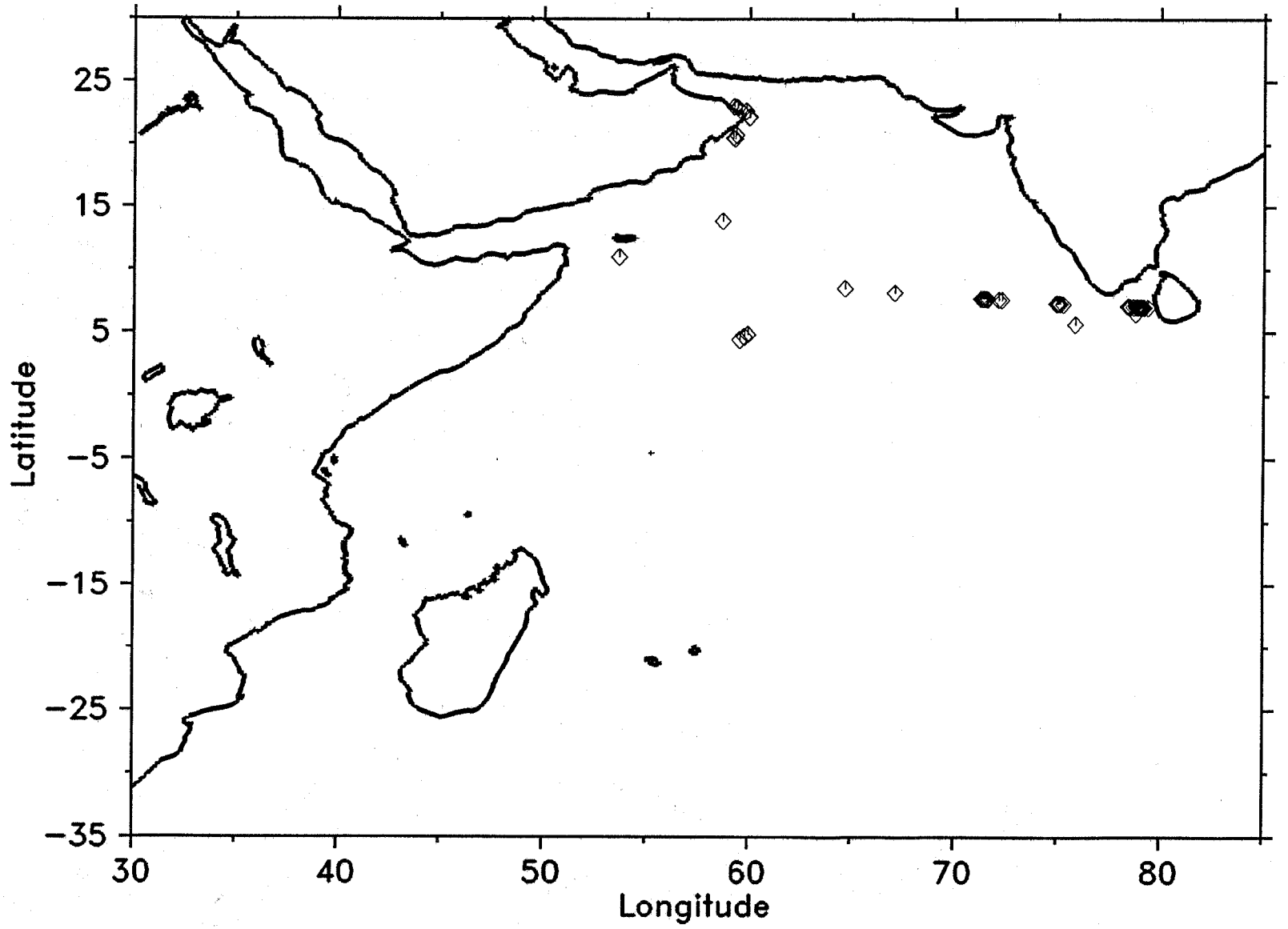


Figure 22. Location of marine turtle sightings.

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