file copy

NOAA Technical Memorandum NMFS

AUGUST 1987

REPORT OF A MARINE MAMMAL SURVEY OF THE EASTERN TROPICAL PACIFIC ABOARD THE RESEARCH VESSEL *DAVID STARR JORDAN* JULY 29 - DECEMBER 5, 1986

Rennie S. Holt
Stephanie N. Sexton

NOAA-TM-NMFS-SWFC-76

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

NOAA Technical Memorandum NMFS

The National Oceanic and Atmospheric Administration (NOAA), organized in 1970, has evolved into an agency which establishes national policies and manages and conserves our oceanic, coastal, and atmospheric resources. An organizational element within NOAA, the Office of Fisheries is responsible for fisheries policy and the direction of the National Marine Fisheries Service (NMFS).

In addition to its formal publications, the NMFS uses the NOAA Technical Memorandum series to issue informal scientific and technical publications when complete formal review and editorial processing are not appropriate or feasible. Documents within this series, however, reflect sound professional work and may be referenced in the formal scientific and technical literature.

NOAA Technical Memorandum NMFS

This TM series is used for documentation and timely communication of preliminary results, interim reports, or special purpose information; and have not received complete formal review, editorial control, or detailed editing.

AUGUST 1987

REPORT OF A MARINE MAMMAL SURVEY OF THE EASTERN TROPICAL PACIFIC ABOARD THE RESEARCH VESSEL *DAVID STARR JORDAN* JULY 29 - DECEMBER 5, 1986

Rennie S. Holt
Stephanie N. Sexton

Southwest Fisheries Center
National Marine Fisheries Service
La Jolla, California

NOAA-TM-NMFS-SWFC-76

U.S. DEPARTMENT OF COMMERCE
Malcolm Baldrige, Secretary
National Oceanic and Atmospheric Administration
Anthony J. Calio, Administrator
National Marine Fisheries Service
William E. Evans, Assistant Administrator for Fisheries

CONTENTS

LIST OF TABLES

LIST OF FIGURES

REPORT OF A MARINE MAMMAL SURVEY OF THE EASTERN TROPICAL PACIFIC ABOARD THE RESEARCH VESSEL DAVID STARR JORDAN JULY 29 - DECEMBER 5, 1986

Rennie S. Holt
and
Stephanie N. Sexton

In 1984, as a result of an amendment to the Marine Mammal Protection Act of 1972, the National Marine Fisheries Service (NMFS) was mandated to conduct a research program to monitor trends in the abundance of stocks of dolphins in the eastern tropical Pacific (ETP). These dolphins are killed incidentally during fishing operations by the U. S. purse seine fishery for yellowfin tuna (Thunnus albacares). In 1986, the Southwest Fisheries Center (SWFC) of the NMFS initiated a five-year program to monitor these stocks of dolphins. In this first year of the program, two surveys of marine mammal populations in the ETP were conducted concurrently aboard the National Oceanic and Atmospheric Administration ships the David Starr Jordan and the McArthur. The surveys lasted 120 days.

In this report, we describe the experimental procedures used during the surveys and we present summaries of the distance searched and marine mammals encountered from aboard the David Starr Jordan (Cruise 86-09 (204); SWFC Observer Cruise 990). A separate report of the McArthur cruise has been published by Holt and Jackson (1987).

SURVEY OBJECTIVES

The primary objective of the cruise was to collect information to calculate relative abundance of dolphin species in the ETP that are taken incidentally by the purse seine fishery for yellowfin tuna. Specific objectives were to collect information to:

1. estimate school density, school size, and species composition of each species taken by the fishery;

2. investigate the physical and biological environment of the affected species; and

3. contribute to on-going U.S. and international programs investigating oceanography and ocean-atmosphere interactions in the ETP.

MATERIALS AND METHODS

Study Area and Itinerary

The David Starr Jordan traversed predetermined tracklines in the ETP from July 29 through December 5, 1986 (Figure 1), with scheduled port calls in Manzanillo, Mexico (twice) and Panama City, Panama. In addition, the ship made emergency medical stops in San Jose, Guatamala and Baltra Island (Galapagos), Ecuador. The itinerary of the ship included four segments or effort legs:

Leg 1.		
Departed	San Diego	July 29, 1986
Arrived	Manzanillo	August 27, 1986
Leg 2.		
Departed	Manzanillo	September 1, 1986
Arrived	Manzanillo	September 30, 1986
Leg 3.		
Departed	Manzanillo	October 4, 1986
Arrived	San Jose	October 20, 1986
Departed	San Jose	October 20, 1986
Arrived	Panama City	November 2, 1986
Leg 4.		
Departed	Panama City	November 7, 1986
Arrived	Baltra Island	November 17, 1986
Departed	Baltra Island	November 18, 1986
Arrived	San Diego	December 5, 1986

Scientific Personnel

Cruise Leaders	Legs
Rennie Holt, SWFC	1
Wesley Parks, SWFC	2-3
Stephen Reilly, SWFC	4
Identification Specialists	
Robert Pitman, SWFC	1-4
Mark Webber, SWFC	1-4

Observers

Kurt Brownell, SWFC	1-4
William Irwin, SWFC	1-4
Richard LeDuc, SWFC	1-4
Andrew Dizon, SWFC	1
Steve Buckland, IATTC	2
Peter Stangl, SWFC	3
Morgan Lynn, SWFC	4

Bird Survey and Oceanographic Specialists

Dawn Brese, Univ. Calif. Santa Cruz	1
Bernie Tershey, SWFC	1
Gregg Thomas, Atl. Oceano. & Meter. Lab.	1-2
Keith Rittmaster, Duke Univ.	2-4
Victoria Thayer, SWFC	2-4
Elizabeth Vetter, SWFC	4

Marine Mammal Species Surveyed

During the survey, the observers recorded information on all species of whales and dolphins sighted throughout the cruise. However, rates of encountering sightings are presented only for dolphin species. Of these, only large schools with a mean minimum or mean best estimate of >14 animals were used.

Equipment

The Jordan, commissioned in 1964, is 52.1 m in length and 11.2 m in breadth, and has a 3.8 m draft. During the survey, the vessel maintained a cruising speed of approximately 18.5 km/hr.

Several pieces of equipment were used to gather data. The geographic position of the vessel was recorded periodically and at the time of a marine mammal sighting using the ship's Satellite Navigation System (SAT NAV). Marine mammals were detected using port and starboard pedestal mounted 25X Fuginon[1] binoculars and a variety of hand-held 7-15X binoculars. The 25X glasses were mounted on the upper deck approximately 10.7 m above the sea surface. Surface temperature and salinity, fluorescence (chlorophyll), and temperature-depth profiles were obtained using a thermosalinograph, fluorometer, and expendable bathythermograph (XBT), respectively. Discrete conductivity and temperature-depth profiles were also obtained using conductivity-temperature-depth (CTD) probes.

The bearing and radial distances of marine mammals from the ship were calculated using two methods. First, the Computer Assisted Sighting Technology (CAST) system used information from several sensors to measure sighting angles and then to calculate radial distances. A CAMAC[1] computer collected data from various sources: the ship's course from the gyroscope; the electronically encoded train angles of the 25X binoculars; a measurement of the relative motion of the ship from a pitch-roll sensor; speed from the speed log; and information concerning survey status, such as identification of observers occupying survey positions from data pads located on the flying bridge. An IBM-compatible computer, which was interfaced with the CAMAC, was then used to process information to determine the sighting angle to the cue. Successive sighting angles, recorded as the ship traveled along the trackline, were used to calculate radial distances. Analyses of CAST data will be presented in a separate report. The second method was the use of estimates of the bearing and radial distance of a school from the ship, which were recorded by the observers using a 360^{o} graduated washer attached to the base of the 25X binoculars and graduated reticles enclosed in the right eye piece of the binoculars.

A 35 mm F-1 Canon[1] camera with motor drive was used to photograph animals to aid in stock and species identification. The system included 400 mm, 75-210 mm zoom, and 28 mm lens. Some observers also used film supplied by the SWFC in personal camera equipment to photograph sightings. Animals were also recorded on 1.27 cm video tape using a Panasonic[1] VHS recorder and a Panasonic[1] camera equipped with telephoto lens.

Duty Stations

Three duty stations were used during the survey, with observers rotating through each station.

1. Left Binocular - The port-side observer used a 25X binocular, mounted on the port side of the ship to scan the ocean for marine mammal sighting cues. The major area of responsibility for this observer was from the midpoint of the trackline to abeam the port-side of the vessel and outward to the horizon or to the extent possible with prevailing environmental conditions.

2. Right Binocular - The starboard observer used a 25X binocular, mounted on the starboard side of the ship,

---

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

to search from the midpoint of the trackline to abeam the right side of the ship; and outward to the horizon or to the extent possible with prevailing environmental conditions. Observers in the left and right positions frequently searched areas on the opposite side of the tracklines.

3. Recorder - The recorder's duties were to transcribe transect effort data at regular intervals, to make notes of information pertaining to each sighting, and, when possible, to search the trackline adjacent to the ship with hand held binoculars for schools not detected by the observers on the 25X glasses.

Observer Teams and Rotation

Two teams of three observers each alternately occupied the three duty stations. Each team was on duty for 2-hour shifts. During each shift members spent approximately equal time occupying each duty station. Two of the six observers had completed several marine mammal cruises in the ETP and were experts in identifying marine mammals. These two identification specialists were assigned to separate teams so that one would always be on duty. The other four observers were systematically assigned to a different team every three days. Team members rotated among the duty stations and teams rotated on and off duty without interrupting searching effort. Teams alternated completing the first watch of the day.

Data Collection Procedures

A typical day's searching activity began at sunrise, approximately 0630 hours local time, and ended at sunset, approximately 1830 hours local time. The searching procedure was initiated when observers were occupying the duty stations and a recorder was in place to record information on the Research Vessel Effort Form (Figure 2). The ship traversed a predetermined trackline at a constant speed of approximately 18.5 km/hr. Except for approximately 2 to 3 hours per night when oceanographic data were collected, the ship maintained its speed and course between sunset and sunrise to provide wider spatial distribution of searching effort.

When a sighting cue (marine mammals, birds, splashes, etc.) was detected, it was determined if the cue was a marine mammal and if the cue was appropriate for tracking using the CAST system. Schools that were not tracked included whales, dolphins detected close to the vessel or at distances greater than 5.6 km

lateral to the vessel, small schools of dolphins (<15 animals), and schools detected during poor sighting conditions. If tracking was appropriate, the searching effort was terminated and the observer began tracking by turning on a switch attached to the binocular stand. With the ship still on course and with the school in the field of view of the binoculars, the CAST system recorded successive bearings of the animals to the ship. After approximately 8 minutes the ship was directed towards the cue and the tracking continued for another 8 minutes. When the target was not in the field of view, the switch was deactivated until the target was again sighted. At the end of the tracking sequence, if the target was lost from view and not resighted, or if the cue was not a marine mammal, the tracking procedure was terminated. All marine mammal schools were approached to obtain estimates of school size and species composition. The searching mode was resumed when the vessel returned to course and speed and the observers resumed searching for other sighting cues.

During each marine mammal sighting, the recorder collected data to complete Research Vessel Effort and Research Vessel Sighting (Figure 3) forms. Definition of each data element is given by Ralston (1984)[2]. Criteria for assigning sun position and sea state conditions are given in Figure 4 and Table 1, respectively. Observers recorded bearing and range for schools using the 360° washer and reticle increments. The reticle measurements were converted to km using

$$a = 0.003942 \tan (\arctan (45242.52) - 0.001088\ r),$$

where a equals radial distance in km and r denotes the number of reticles below the topmost reticle. Values in this equation were calculated by Barlow (per. comm.) using an equation presented by Smith (1982) and data collected during a previous research vessel cruise and the present ETP cruise.

Each observer who had a good view of the school independently recorded in his logbook an estimate of school size and a determination of species composition. All available observers determined species identification and animal behavior, and a consensus was entered on the Research Vessel Sighting and Research Vessel Continuation (Figure 4) Forms at the time of a sighting. Species identifications were validated when possible by photographing the school at close range using 35 mm and video cameras.

---

[2]Ralston, F. Ms. Usage procedures and coding notes for "Research Vessel Sighting and Effort Records." Southwest Fisheries Center, P. O. Box 271, La Jolla, CA 92038.

Data Analyses

Data were recorded for each Beaufort sea state and then grouped into (1) "calm" sea state conditions without whitecaps (Beaufort numbers 0-2) or (2) "rough" sea state conditions with whitecaps (Beaufort numbers 3-5). The presence of whitecaps was important in searching for sighting cues. Animal splashes could not be used as a sighting cue during rough seas because whitecaps were easily confused with the animal splashes.

Sun location was recorded by noting its horizontal and vertical position relative to the ship (Figure 4). Visibility effects were investigated by classifying sun positions into "good" and "poor" categories defined by the effect of the glare from the sun on the trackline. Criteria used were those described in Holt (In press). Poor sun conditions were recorded only when horizontal sun position was 12 and vertical position was 1, 2, or 3 or when there were clouds together with fog or rain. All other conditions were good conditions.

The rate of encountering marine mammal schools was determined as the simple ratio of sightings detected per 1000 km searched. The standard error of the encounter rate was calculated as

$$\text{Var } (n/L) = [\ \Sigma\ l_i[(n_i/l_i) - (n/L)]^2]/L(R - 1)$$

where n equals the number of dolphin schools detected in the survey, L equals the km searched, l_i equals km searched during the ith day, n_i equals schools detected during the ith day, and R equals number of days searched.

Encounter rates were calculated only for large dolphin schools (>14 animals) detected during Beaufort states 0 through 5 (elimination of Beaufort 6 data discussed below). Rates were calculated for these schools detected in the entire study area and for schools stratified by area, species, individual Beaufort numbers, calm and rough sea conditions, good and poor sun conditions, individual observers, and observer teams.

RESULTS

Data describing each leg of searching effort during the entire survey are summarized in Table 2. Information summarized for each marine mammal sighting encountered during the survey is presented in Table 3. The geographic positions of all schools detected during the survey are presented for each species category (code) in Figures 6 through 19. Observer estimates of school size are presented by species code in Table 4.

During the entire survey, observers searched 16,411 km and detected 769 marine mammal sightings (Table 5). Dolphins were detected in 499 schools and whales were detected in 289 schools (19 schools contained both dolphins and whales). This included 9 species of dolphins and 16 species of whales.

While operating in the searching mode in the study area (Figure 1), observers searched 15,759 km and detected 398 dolphin schools (Table 6). Searching effort was conducted during Beauforts 0 through 6 conditions, although since Beaufort 6 seas were very rough, data collected during these conditions were omitted from further analysis. During Beauforts 0 through 5, 15,497 km were searched and 395 dolphin schools were detected. Of the 395 dolphin schools, 244 were large schools (i.e., average school size greater than 14 animals)

The rate of detecting large schools in the study area was 15.74 schools/1000 km searched (Table 6). The Jordan conducted approximately 61% of its effort in the northern and inshore areas and only 7% of its effort in the south and west areas. Detection rates were much higher in the inshore and northern areas than in the west and south areas (Table 6).

Sea conditions in the study area were rough; only 28% of the searching effort was completed in calm seas (Table 6). However, 52% of all schools were detected during calm seas and the rate of detecting schools during calm seas was almost three times the rate detected during rough seas. Most of the rough sea effort occurred during Beaufort 3 conditions (32% of total effort-Figure 20). With the exception of Beaufort 0 data, which only represented 1% of the searching effort, the rates of detecting dolphins generally decreased as sea conditions became rougher (i.e., with increasing Beaufort number).

Poor visibility conditions occurred only during 11% of the surveying effort during which 15% of the schools were detected (Table 6). The rate of detecting schools during good conditions was less than the rate during poor conditions.

Five observers (observers 4, 22, 31, 56, and 62) participated on all 4 legs of the cruise and all spent approximately equal time searching (Table 6). However, the percent of all schools that were detected by these 5 observers ranged from 7 to 32%. Consequently, rates of detecting dolphin schools also varied greatly (range of 2.10 to 10.12 schools/1000 km). Observer experience did not fully explain difference in the abilities of observers to detect dolphin schools. Observers 4 and 31 had completed several research vessel trips during which they searched through 25X binoculars. Observers 22 and 56 completed several trips on tuna vessels in the ETP, although observers on tuna vessels do not search through the 25X glasses. Observer 62 had no experience in the ETP. The research vessel experienced observers had the highest encounter rates, however the observer with no experience had the next highest rate. The

tuna vessel experienced observers had the lowest rates.

Both teams spent approximately equal time searching (Table 6). Team 1 (when observer 4 was on duty) detected 48% of the sightings. In addition, the rate of detecting schools for team 1 was less than the rate of team 2 (when observer 31 was on duty) (Table 6), although individually observer 4 had a substantially higher detection rate than observer 31. This indicates that observer 4 detected a larger proportion of his team's sightings than did observer 31.

CONCLUSIONS

In this report, we have presented data on dolphin encounter rates, school size, and species composition which meet the primary objectives of the cruise aboard the Jordan. Data on effort and sightings have been summarized. We found that the rate of encountering dolphin schools was higher during calm seas than during rough seas, and the rate during good visibility conditions was higher than the rate during poor visibility conditions. Rates were higher in the inshore and northern areas than in the south and west areas. Encounter rates for individual observers were variable and there was little correlation with observer experience.

ACKNOWLEDGEMENTS

Through the work of many dedicated professionals, the cruise aboard the Jordan was successfully executed. Among those contributing to the success of the cruise were the observers who spent many hours collecting the data, the officers and crew of the Jordan who gave their continuous support, and L. Farrar (Jordan Port Captain) who provided liaison with ship support personnel and the scientists. G. Smith and N. Mendes of the NMFS Southwest Regional Office provided, through an inter-agency loan, the services of K. Brownell and W. Irwin. We also thank E. Duffin, R. Hopkins, and R. Schipper for their contribution to the CAST system. Critical logistical arrangements were completed by W. Parks and P. Stangl. Special efforts were provided in procurement by B. Engstrand and B. Watkins. Many people contributed to training the observers but A. Jackson, A. Myrick, R. Pitman, S. Reilly, M. Scott, and P. Stangl provided valuable assistance. We are grateful to the Inter-American Tropical Tuna Commission for S. Buckland's participation in the cruise. The manuscript benefited from critical reviews by D. DeMaster, J. Michalski, and S. Reilly. Part of the manuscript was typed by C. Ratcliffe and H. Orr constructed the figures. Finally, we are

grateful to I. Barrett, J. Carr, D. DeMaster, B. Remington and G. Sakagawa for their support during the entire cruise preparation and execution.

LITERATURE CITED

Bowditch, N. 1966. American practical navigator, an epitome of navigation. U. S. Naval Oceanographic Office. H. O. Pub. No. 9. Washington, DC. 1524 pp.

Holt, R. S. In Press. Estimating density of dolphin schools in the eastern tropical Pacific Ocean by line transect methods. Fish. Bull. U. S. 85(3).

Holt, R. S. and A. Jackson. 1987. Report of a marine mammal survey of the eastern tropical Pacific aboard the research vessel McArthur July 29 - December 6, 1987. NOAA-TM-NMFS-SWFC-77, 161 pp.

Thayer, V. G., S. B. Reilly, and K. Rittmaster. In prep. Report of environmental data collected on the R/V David Starr Jordan during the August - December, 1986 dolphin assessment cruise.

Smith, T. D. 1982. Testing methods of estimating range and bearing to cetaceans aboard the R/V D. S. Jordan. NOAA-TM-NMFS-SWFC-20. 20 pp.

Table 1. Sea state conditions measured by the Beaufort scale (from Bowditch, 1966).

Wind force (Beaufort)	Knots	Descriptive	Sea Conditions	Probable wave height in ft.
0	0- 1	Calm	Sea smooth and mirror-like	-
1	1- 3	Light air	Scale-like ripple without foam crests	1/4
2	4- 6	Light breeze	Small short wavelets; crests have a glassy appearance and do not break	1/2
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

Table 2. Daily searching effort recorded in the eastern tropical Pacific aboard the David Starr Jordan during July 29 through December 5, 1986.

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
01	01	860731	19.45	22	56	31			4	167	29 46 N	115 52 W	5.83
01	02	860731	19.45	22	56	31			5	167	29 43 N	115 51 W	11.34
01	03	860731	19.45	04	62	56			5	167	29 37 N	115 50 W	2.59
02	01	860731	19.45	04	62	56	02	01	5	167			1.94
02	02	860731	19.45	62	56	04			5	167			13.29
02	03	860731	19.45	56	04	62			6	167			12.64
02	04	860731	19.45	31	22	60			6	167	29 18 N	115 43 W	8.10
02	05	860731	19.45	31	22	60			6	167			3.89
02	06	860731	19.45	60	31	22			6	167			4.86
02	07	860731	19.45	60	31	22			6	167	29 08 N	115 41 W	3.24
02	08	860731	19.45	60	31	22	03	02	6	167			5.19
02	09	860731	19.45	22	60	31	03	02	6	167			5.51
02	10	860731	19.45	04	62	56	03	02	5	167	29 00 N	115 39 W	11.99
02	11	860731	19.45	62	56	04	04	03	5	167			13.61
01	01	860801	20.37	31	22	60			2	182			4.07
01	02	860801	20.37	31	22	60	08	03	2	182			9.51
01	03	860801	20.37	60	31	22	08	03	2	182			5.09
01	04	860801	20.37	60	31	22	08	03	2	182	26 31 N	115 34 W	7.47
02	01	860801	20.37	60	31	22			2	182	26 27 N	115 35 W	1.36
02	02	860801	20.37	60	31	22	08	02	2	182			1.36
02	03	860801	20.37	04	62	56	08	02	2	182			13.58
02	04	860801	20.37	56	04	62			2	182			13.58
02	05	860801	20.37	62	56	04			2	182			13.58
02	06	860801	20.37	22	60	31			2	182			13.58
02	07	860801	20.37	31	22	60			2	182			2.04
02	08	860801	20.37	31	22	60			2	182	25 55 N	115 42 W	2.38
03	01	860801	18.52	31	22	60			2	182			3.40
03	02	860801	18.52	60	31	22			2	182			6.79
03	03	860801	18.52	60	31	22			2	182	25 46 N	115 43 W	0.31
04	01	860801	18.52	60	31	22			2	182			3.40
04	02	860801	18.52	04	62	56			2	182	25 43 N	115 43 W	6.17
04	03	860801	18.52	04	62	56	12	12	2	182			2.16
05	01	860801	20.93	56	04	62	12	12	2	182	25 38 N	115 44 W	7.67

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
05	02	860801	20.93	56	04	62	01	12	1	182			4.88
06	01	860801	20.93	22	60	31	01	01	1	182	25 29 N	115 43 W	13.60
06	02	860801	20.93	31	22	60			1	182			3.84
06	03	860801	20.93	31	22	60	02	01	1	182			2.09
06	04	860801	20.93	31	22	60			1	182			2.09
07	01	860801	22.41	31	22	60	03	01	1	182	25 19 N	115 42 W	1.87
07	02	860801	22.41	60	31	22	03	01	1	182			7.10
07	03	860801	22.41	60	31	22	03	01	1	182			2.99
07	04	860801	22.41	60	31	22			2	182			4.86
07	05	860801	22.41	04	62	56	03	01	2	182			1.87
08	01	860801	22.41	04	62	56			2	183			4.48
08	02	860801	22.41	04	62	56			2	210	25 07 N	115 40 W	4.11
08	03	860801	22.41	56	04	62			1	210			10.08
01	01	860802	19.26	56	62	04	10	03	1	140	23 33 N	114 14 W	12.52
01	02	860802	19.26	04	56	62	10	03	1	140			2.25
02	01	860802	18.89	62	04	56	10	02	1	140	23 22 N	114 07 W	5.67
03	01	860802	18.89	31	22	60	10	02	1	134	23 21 N	113 59 W	10.70
03	02	860802	18.89	60	31	22	10	02	1	134			3.78
04	01	860802	17.78	56	04	62	11	01	1	138	23 20 N	113 47 W	1.78
05	01	860802	17.78	62	56	04	11	01	1	138	23 19 N	113 46 W	8.00
05	02	860802	17.78	04	62	56	12	01	1	138			6.52
06	01	860802	17.78	04	62	56	12	12	1	138	23 12 N	113 39 W	2.96
06	02	860802	17.78	22	60	31	12	12	1	138			3.26
07	01	860802	17.78	31	22	60	12	12	1	138	23 09 N	113 37 W	10.67
07	02	860802	17.78	60	31	22	12	12	1	138			6.52
08	01	860802	17.78	04	62	56	03	01	1	138	22 59 N	113 24 W	1.78
09	01	860802	18.52	62	56	04	04	01	0	138	22 59 N	113 20 W	5.25
09	02	860802	18.52	62	56	04	04	01	1	138			8.64
09	03	860802	19.82	22	60	31	04	02	1	138	22 53 N	113 17 W	4.62
10	01	860802	18.89	31	22	60	04	02	1	138	22 50 N	113 16 W	1.26
11	01	860802	18.89	04	62	56	05	02	2	138	22 52 N	113 16 W	6.93
12	01	860802	19.63	56	04	62	04	03	2	138	22 48 N	113 15 W	8.83
12	02	860802	19.26	62	56	04	05	03	3	138	22 43 N	113 12 W	10.91
01	01	860803	21.48	60	31	22	10	03	2	140	21 11 N	111 39 W	1.43
01	02	860803	21.48	60	31	22	10	03	3	140			9.67
01	03	860803	21.48	22	60	31	10	03	3	140			10.03
01	04	860803	21.48	22	60	31	10	02	4	140			4.65

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
01	05	860803	19.82	31	22	60	10	02	4	140	21 01 N	111 31 W	12.88
01	06	860803	20.74	04	62	56	10	02	4	140	20 56 N	111 26 W	14.17
01	07	860803	18.52	56	04	62	10	02	4	140	20 52 N	111 22 W	12.04
01	08	860803	18.52	62	56	04	10	02	4	140			12.35
01	09	860803	20.37	60	31	22	10	01	4	140	20 39 N	111 11 W	1.70
02	01	860803	18.71	22	60	31	10	01	4	140	20 35 N	111 11 W	10.29
02	02	860803	20.19	31	22	60	10	01	4	140	20 30 N	111 06 W	6.06
02	03	860803	20.19	31	22	60	10	12	4	140			4.37
03	01	860803	20.19	31	22	60	10	12	4	140			1.35
03	02	860803	20.19	04	62	56	12	12	4	140			13.46
03	03	860803	20.19	56	04	62	12	12	4	140			13.46
03	04	860803	20.19	62	56	04	04	01	4	140			13.46
03	05	860803	20.56	60	31	22	04	01	3	140	20 05 N	110 46 W	3.77
04	01	860803	20.56	60	31	22	04	01	3	140	20 04 N	110 44 W	8.91
04	02	860803	20.56	22	60	31	04	01	3	140			13.70
05	01	860803	20.56	31	22	60	04	01	3	140			13.02
05	02	860803	20.56	04	62	56	04	01	3	140			10.28
05	03	860803	20.56	56	04	62	04	02	3	140			10.28
05	04	860803	21.11	62	56	04	05	02	4	140	19 42 N	110 26 W	10.56
05	05	860803	21.30	60	31	22	05	02	4	140	19 37 N	110 32 W	11.00
05	06	860803	21.11	60	31	22	05	02	3	140	19 33 N	110 18 W	3.17
05	07	860803	21.11	22	60	31	05	03	3	140			4.93
01	01	860804	20.74	04	62	56	07	01	3	248	18 48 N	111 06 W	9.68
02	01	860804	20.74	31	22	60	07	01	3	248			5.88
02	02	860804	20.74	60	31	22	06	01	3	248			5.19
02	03	860804	20.74	60	31	22	07	01	3	248			7.61
02	04	860804	20.74	22	60	31	06	01	3	248			13.83
02	05	860804	21.11	04	56	62	06	01	3	248	18 40 N	111 31 W	14.08
02	06	860804	21.11	62	04	56	06	01	3	248			13.37
03	01	860804	21.11	31	22	60	06	01	3	248			10.20
03	02	860804	21.11	60	31	22	12	12	3	248			14.08
03	03	860804	21.11	22	60	31	12	12	3	248			13.72
03	04	860804	20.93	04	62	56	12	01	3	248	18 24 N	112 06 W	11.16
04	01	860804	20.74	56	04	62	01	02	3	248	18 18 N	112 12 W	3.46
05	01	860804	20.56	56	04	62	01	02	3	248	18 17 N	112 14 W	5.48
06	01	860804	20.56	31	22	60	01	02	3	248	18 17 N	112 14 W	2.06
07	01	860804	20.56	31	22	60	01	02	3	248	18 13 N	112 18 W	4.11

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
08	01	860804	20.56	31	60	22	01	02	2	248			4.80
08	02	860804	20.56	04	62	56	01	02	2	248			10.28
08	03	860804	20.74	56	04	62	01	03	2	248	18 04 N	112 30 W	10.37
08	04	860804	20.74	62	56	04	02	03	2	248			10.37
01	01	860805	20.93	56	62	31	06	03	2	250	17 22 N	114 23 W	4.53
01	02	860805	20.93	56	62	31	06	03	3	250			6.98
01	03	860805	20.93	31	56	62	06	03	3	250			12.21
01	04	860805	20.93	62	31	56	06	03	3	250			4.88
02	01	860805	23.34	04	60	22	06	02	3	250	17 15 N	114 39 W	8.95
02	02	860805	23.34	04	60	22	06	02	3	250			5.44
02	03	860805	23.34	22	04	60	06	02	3	250			15.56
02	04	860805	23.34	60	22	04	06	02	3	250			17.11
02	05	860805	23.34	56	62	31	06	01	3	250			4.28
02	06	860805	23.34	56	62	31	06	01	3	255			1.94
03	01	860805	21.30	31	56	62	06	01	3	255	17 05 N	115 04 W	8.87
03	02	860805	21.30	62	31	56	06	01	3	255			6.39
04	01	860805	20.93	04	60	21	02	12	3	255	17 01 N	115 16 W	3.84
05	01	860805	20.93	22	04	60	01	12	4	255	17 03 N	115 21 W	9.77
05	02	860805	20.93	60	22	04	01	12	4	255			7.32
05	03	860805	21.48	56	62	31	01	12	3	255	16 00 N	115 30 W	11.82
05	04	860805	21.48	56	62	31	01	01	4	255			2.51
05	05	860805	21.48	31	56	62	01	01	4	255			14.32
05	06	860805	21.48	62	31	56	01	01	4	255			13.61
05	07	860805	21.48	04	60	21	01	01	3	255			12.53
05	08	860805	21.48	04	60	21	01	02	3	255			2.86
05	09	860805	21.48	21	04	60	01	02	3	255			13.96
05	10	860805	21.48	60	21	04	01	02	3	255			3.58
05	11	860805	21.30	56	62	31	01	02	3	252	16 48 N	116 10 W	10.65
05	12	860805	21.30	31	56	62	01	03	3	252	16 47 N	116 16 W	10.65
05	13	860805	21.11	62	31	56	01	03	3	252	16 45 N	116 22 W	11.96
01	01	860806	20.37	04	22	60	12	03	2	080	16 39 N	116 08 W	10.53
01	02	860806	20.37	60	04	22	12	03	2	080			8.83
01	03	860806	20.37	22	60	04	12	03	2	080			7.81
01	04	860806	20.37	31	56	62	12	03	2	080			6.79
02	01	860806	19.26	31	56	62	12	02	2	080	16 43 N	115 50 W	2.25
03	01	860806	19.82	62	31	56	12	02	3	080	16 45 N	115 49 W	11.23
03	02	860806	19.82	56	62	31	12	02	3	080			11.23

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
03	03	860806	21.48	05	22	60	12	02	3	080	16 48 N	115 37 W	15.04
03	04	860806	21.48	60	04	22	12	02	3	080			13.25
03	05	860806	21.48	22	60	04	01	01	2	080			14.68
03	06	860806	21.48	31	56	62	01	01	3	080	16 51 N	115 16 W	10.03
04	01	860806	21.30	62	31	56	01	01	3	080	16 51 N	115 09 W	3.90
05	01	860806	21.30	56	62	31	12	12	3	080	16 52 N	115 02 W	10.65
05	02	860806	21.48	05	22	60	01	12	3	080	16 53 N	114 57 W	14.32
05	03	860806	21.48	60	04	22	06	01	3	080			2.51
06	01	860806	21.48	60	04	22	06	01	3	080			9.67
06	02	860806	21.67	22	60	04	06	01	2	080	16 57 N	114 42 W	14.45
06	03	860806	21.48	31	56	62	06	01	2	080	16 58 N	114 34 W	10.74
07	01	860806	21.48	62	31	56	07	02	2	080			8.95
07	02	860806	20.19	56	62	31	07	02	2	080	16 59 N	114 25 W	4.71
08	01	860806	21.30	04	22	60	07	02	2	080	17 00 N	114 18 W	0.35
09	01	860806	21.48	04	22	60	07	02	2	080	16 59 N	114 17 W	3.58
09	02	860806	21.48	60	04	22	07	03	2	080			9.31
01	01	860807	21.11	62	31	56	12	03	2	080	17 13 N	112 44 W	1.76
02	01	860807	20.37	62	31	56	12	03	2	080	17 13 N	112 46 W	5.77
02	02	860807	20.37	56	62	31	12	03	3	080			10.87
02	03	860807	21.48	31	56	62	12	03	3	080	17 14 N	112 37 W	4.65
03	01	860807	20.74	04	22	31	12	02	3	080	17 18 N	112 33 W	1.73
03	02	860807	20.74	04	22	60	12	02	3	080			2.42
04	01	860807	20.93	60	04	22	12	02	3	080	17 17 N	112 30 W	7.67
05	01	860807	21.11	22	60	04	12	02	4	080	17 21 N	112 22 W	4.22
06	01	860807	20.56	62	31	56	12	01	4	080	17 18 N	112 21 W	6.85
07	01	860807	20.56	56	62	31	12	01	3	080			8.91
07	02	860807	21.30	31	56	62	12	01	3	080	17 17 N	112 11 W	10.29
07	03	860807	21.30	04	22	60	12	01	3	080	17 19 N	112 05 W	4.26
08	01	860807	21.30	04	22	60	12	12	3	080			4.97
08	02	860807	21.30	60	04	22	12	12	3	080			14.20
08	03	860807	21.30	22	60	04	12	12	3	080			14.20
08	04	860807	21.48	62	31	56	06	12	3	080	17 23 N	111 44 W	14.68
08	05	860807	21.48	56	62	31	06	01	3	080			6.80
09	01	860807	21.30	31	56	62	06	02	3	080	17 27 N	111 28 W	1.42
10	01	860807	21.30	31	56	62	06	02	2	080	17 27 N	111 28 W	8.87
10	02	860807	21.30	31	56	62	06	02	3	080			2.84
11	01	860807	21.30	60	04	22	07	02	3	080			8.52

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
11	02	860807	20.74	60	04	22	08	02	3	080	17 25 N	111 22 W	1.73
12	01	860807	21.11	62	31	56	07	02	3	080	17 30 N	111 17 W	6.69
12	02	860807	21.11	56	62	31	08	03	3	080			4.57
13	01	860807	21.11	31	56	62	07	03	2	080	17 34 N	111 12 W	2.11
01	01	860808	21.48	60	04	56	12	03	3	090	17 45 N	109 28 W	6.80
02	01	860808	20.74	56	60	04	12	03	2	090	17 49 N	109 18 W	10.37
02	02	860808	20.74	04	56	60	11	03	2	090			1.73
02	03	860808	21.30	04	56	60	11	03	2	090	17 48 N	109 10 W	2.48
03	01	860808	21.30	04	56	60	11	03	2	090	17 49 N	109 07 W	1.06
04	01	860808	20.56	31	22	62	12	02	2	090	17 47 N	109 06 W	10.96
04	02	860808	20.56	62	31	22	12	02	2	090			1.37
05	01	860808	21.85	60	04	56	12	01	2	080	17 42 N	108 52 W	15.30
05	02	860808	21.48	56	60	04	12	01	2	080	17 43 N	108 43 W	5.73
06	01	860808	21.48	56	60	04	12	01	2	080			4.65
06	02	860808	22.59	04	56	60	12	01	2	080	17 45 N	108 35 W	14.31
07	01	860808	20.74	31	22	62	12	01	2	080	17 46 N	108 28 W	6.57
07	02	860808	20.74	31	22	62	12	01	1	080			5.53
07	03	860808	20.74	62	31	22	12	12	2	080			2.77
08	01	860808	19.82	62	31	22	12	12	2	080	17 48 N	108 19 W	3.30
09	01	860808	19.82	60	31	56	06	01	1	080			1.98
09	02	860808	21.48	60	04	56	01	01	1	233	17 44 N	108 09 W	12.89
09	03	860808	21.48	56	60	04	01	02	2	233			2.51
10	01	860808	21.48	31	22	62	01	02	2	233			7.52
10	02	860808	21.48	62	31	22	01	02	2	233	17 35 N	108 19 W	0.72
11	01	860808	21.67	22	62	31	02	02	2	233	17 33 N	108 23 W	2.53
12	01	860808	20.74	60	04	56	02	02	2	233	17 29 N	108 23 W	10.37
13	01	860808	21.48	56	60	04	02	03	3	233	17 25 N	108 30 W	4.65
01	01	860809	21.30	31	62	22	07	03	2	236	16 16 N	109 59 W	12.42
01	02	860809	21.30	22	31	62	07	03	3	236			6.74
02	01	860809	20.37	22	31	62	07	03	3	236	16 10 N	110 09 W	3.06
02	02	860809	20.37	62	22	31	07	03	3	236			4.75
03	01	860809	19.63	04	56	60	07	02	3	236	16 09 N	110 14 W	6.54
04	01	860809	19.63	04	56	60	07	02	3	236			4.58
04	02	860809	19.63	60	04	56	07	02	3	236			13.09
04	03	860809	19.63	56	60	04	07	02	3	236			13.09
04	04	860809	21.48	31	62	22	07	02	3	236	15 35 N	110 35 W	0.72
05	01	860809	21.48	31	62	22	07	01	2	236	15 53 N	110 40 W	3.22

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
05	02	860809	21.48	31	62	22	07	01	3	236			2.15
05	03	860809	21.48	22	31	62	07	01	3	236	15 51 N	110 42 W	3.94
06	01	860809	21.30	62	22	31	12	12	2	236	15 47 N	110 45 W	5.32
07	01	860809	21.30	04	56	60	12	12	2	236			12.42
07	02	860809	21.30	60	04	56	12	12	2	236	15 43 N	110 50 W	12.78
08	01	860809	20.93	31	62	22	01	01	2	236	15 30 N	111 03 W	5.93
09	01	860809	19.45	22	31	62	01	02	2	236	15 25 N	111 07 W	1.62
09	02	860809	19.45	22	31	62	07	02	2	236			3.57
10	01	860809	18.71	62	22	31	07	02	2	078	15 24 N	111 05 W	9.66
10	02	860809	18.71	04	56	60	07	02	2	078			2.18
11	01	860809	21.30	04	56	60	07	02	2	078	15 26 N	110 58 W	5.32
12	01	860809	21.30	60	04	56	07	02	2	078	15 26 N	110 51 W	4.97
13	01	860809	21.30	31	62	22	07	02	2	078			10.65
13	02	860809	21.30	22	31	62	07	03	1	078	15 28 N	110 43 W	2.13
14	01	860809	20.93	22	62	31	08	03	1	078	15 27 N	110 41 W	7.67
01	01	860810	16.48	56	04	60			2	080	15 52 N	108 52 W	4.40
01	02	860810	16.48	56	04	60	12	03	2	080			1.92
01	03	860810	16.48	56	04	60			2	080			2.75
01	04	860810	16.48	56	04	60	12	03	2	080			1.10
01	05	860810	16.48	56	04	60			2	080			0.82
01	06	860810	16.48	60	56	04	12	03	2	080			4.40
02	01	860810	20.56	60	56	04	12	03	2	080	15 52 N	108 42 W	3.08
02	02	860810	20.56	04	60	56	12	02	2	080			7.54
03	01	860810	20.56	62	22	31	12	02	3	080			9.59
03	02	860810	21.30	31	62	22	12	01	3	080	15 58 N	108 26 W	10.29
03	03	860810	21.30	22	31	62	12	01	3	080			9.94
03	04	860810	19.63	56	04	60			3	080	15 59 N	108 17 W	5.23
03	05	860810	19.63	56	04	60	12	01	3	080			7.85
03	06	860810	19.63	60	56	04	12	01	3	080			13.09
03	07	860810	19.63	04	60	56	12	12	4	080			13.09
03	08	860810	18.89	62	22	31	12	12	3	080	16 01 N	107 54 W	11.02
04	01	860810	18.89	31	62	22	12	12	3	080	16 02 N	107 46 W	0.63
04	02	860810	18.89	31	62	22	12	12	4	080			0.63
05	01	860810	19.26	31	62	22			2	080	16 02 N	107 43 W	1.28
06	01	860810	19.26	22	31	62			2	080	16 04 N	107 42 W	9.31
06	02	860810	21.11	56	04	60			2	080	16 05 N	107 37 W	5.63
07	01	860810	21.11	56	04	60	06	01	2	080			5.63

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
07	02	860810	21.11	60	56	04	06	01	2	080			9.15
07	03	860810	21.11	60	56	04	06	02	3	080			4.22
07	04	860810	21.85	04	60	56	06	02	3	080	16 08 N	107 18 W	6.56
08	01	860810	21.11	04	60	56	07	02	3	080			1.76
08	02	860810	22.04	62	22	31	07	02	3	080	16 13 N	107 17 W	2.20
09	01	860810	20.56	31	62	22	07	02	3	080	16 14 N	107 15 W	1.03
10	01	860810	21.48	31	62	22	07	02	2	080	16 14 N	107 13 W	0.36
11	01	860810	21.48	22	31	62	07	03	2	080			9.67
11	02	860810	21.85	56	04	60	07	03	2	080	16 16 N	107 05 W	6.92
01	01	860811	21.11	31	60	56	07	03	2	207	15 34 N	106 28 W	3.52
02	01	860811	21.85	56	31	60	07	03	2	207	15 29 N	106 31 W	2.91
03	01	860811	20.74	56	31	60	08	03	2	207	15 27 N	106 27 W	4.15
03	02	860811	20.74	60	56	31	08	02	2	207			7.26
04	01	860811	21.48	04	22	62	08	02	2	207	15 19 N	106 32 W	15.40
04	02	860811	21.48	62	04	22	08	02	2	207			11.10
05	01	860811	21.48	62	04	22	08	01	1	207	15 07 N	106 40 W	2.15
05	02	860811	21.48	22	62	04	08	01	1	207			12.53
06	01	860811	19.82	31	60	56	08	01	1	207	15 00 N	106 44 W	12.55
07	01	860811	20.19	56	31	60			1	207	14 54 N	106 45 W	8.41
07	02	860811	20.19	60	56	31	09	12	2	207			5.05
08	01	860811	20.37	04	22	62	01	12	2	207	14 49 N	106 53 W	10.53
08	02	860811	20.19	62	04	22	12	12	1	207	14 44 N	106 56 W	7.40
08	03	860811	20.19	62	04	22	03	12	2	207			2.69
08	04	860811	21.67	22	62	04	02	01	2	207	14 39 N	106 59 W	6.50
09	01	860811	20.93	31	60	56	02	01	2	207	14 35 N	107 02 W	13.95
09	02	860811	20.93	56	31	60	02	01	2	207			14.30
09	03	860811	20.93	60	56	31	02	02	2	207			13.60
09	04	860811	19.82	04	22	62	02	02	2	207	14 17 N	107 13 W	9.58
09	05	860811	19.82	62	04	22	02	02	3	207			6.94
10	01	860811	19.63	22	62	04	02	03	3	207	14 09 N	107 17 W	8.18
10	02	860811	19.63	31	60	56	03	03	3	207			3.93
11	01	860811	18.52	56	31	60	03	03	3	207	14 01 N	107 21 W	8.33
01	01	860812	18.89	04	62	22			1	207	12 06 N	108 16 W	0.63
01	02	860812	18.89	04	62	22	08	03	1	207			11.33
01	03	860812	18.89	22	04	62	08	03	1	207			12.59
01	04	860812	18.89	62	22	04	08	03	2	207			12.59
01	05	860812	18.71	31	60	56	08	02	2	207	11 48 N	108 26 W	12.47

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
01	06	860812	18.71	56	31	60	08	02	2	207			10.60
01	07	860812	19.82	56	31	60	08	02	2	207	11 37 N	108 34 W	0.33
02	01	860812	19.82	60	56	31	08	02	2	207			9.25
02	02	860812	20.19	04	62	22	08	01	2	207	11 30 N	108 37 W	9.42
02	03	860812	20.56	04	62	22	08	01	3	207	11 26 N	108 40 W	3.43
02	04	860812	20.56	22	04	62	08	01	3	207			13.70
02	05	860812	20.56	62	22	04	08	01	3	207			13.70
02	06	860812	19.63	31	60	56	12	12	3	207	11 12 N	108 47 W	13.09
02	07	860812	19.63	56	31	60	12	12	3	207			14.40
02	08	860812	19.63	06	56	31	03	12	2	207			12.11
02	09	860812	20.19	04	62	22	03	01	1	207	10 52 N	108 56 W	14.13
02	10	860812	20.19	22	04	62	02	01	1	207			12.45
02	11	860812	20.19	62	22	04	02	02	1	207			13.46
02	12	860812	20.00	31	60	56	03	02	1	207	10 34 N	109 06 W	5.00
03	01	860812	20.00	31	60	56	03	02	1	207			1.00
03	02	860812	20.00	56	31	60	03	02	1	207			10.67
03	03	860812	18.89	60	56	31	03	03	1	208	10 23 N	109 10 W	2.20
01	01	860813	18.52	31	56	60	09	03	1	188	09 33 N	109 19 W	0.93
02	01	860813	19.82	31	56	60	09	03	1	188	09 31 N	109 19 W	1.32
03	01	860813	20.19	60	31	56	09	03	1	188	09 26 N	109 23 W	7.07
03	02	860813	20.19	56	60	31			2	188			2.36
03	03	860813	20.19	56	60	31	09	02	2	188			3.36
04	01	860813	19.82	04	22	62	08	02	1	188	09 18 N	109 23 W	7.27
04	02	860813	19.82	04	22	62	08	02	2	188			0.99
04	03	860813	20.93	04	22	62	08	02	3	188	09 13 N	109 24 W	4.53
04	04	860813	20.93	62	04	22	08	02	2	188			13.95
04	05	860813	20.93	22	62	04	08	02	2	188			8.72
05	01	860813	19.63	31	56	60	08	01	3	188	08 52 N	109 27 W	3.60
06	01	860813	20.00	60	31	56	09	12	3	188	08 51 N	109 26 W	5.00
07	01	860813	19.45	04	22	62	12	12	3	188	08 43 N	109 22 W	8.10
07	02	860813	19.45	04	22	62			3	188			2.59
08	01	860813	19.26	62	04	22	03	01	4	188	08 34 N	109 22 W	9.95
08	02	860813	19.82	22	62	04	04	01	4	188	08 28 N	109 22 W	9.91
08	03	860813	19.82	31	56	60	04	01	4	188	08 23 N	109 22 W	2.64
09	01	860813	17.04	31	56	60	04	01	4	188	08 22 N	109 18 W	1.99
09	02	860813	17.04	60	31	56	03	01	4	188			8.24
10	01	860813	17.04	56	60	31	03	01	4	188			5.96

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
10	02	860813	20.37	04	22	62	03	02	4	188	08 13 N	109 19 W	3.40
10	03	860813	20.37	04	22	62			4	188			7.13
10	04	860813	17.22	62	04	22			4	188	08 07 N	109 19 W	8.32
10	05	860813	18.52	22	62	04			4	188	08 03 N	109 19 W	9.26
10	06	860813	20.19	31	56	60	02	03	4	188	07 57 N	109 18 W	3.36
10	07	860813	20.19	31	56	60			4	188			2.02
01	01	860814	17.96	04	56	22	08	01	5	203	05 37 N	109 51 W	11.98
01	02	860814	17.96	22	04	56	08	01	5	203			11.98
01	03	860814	17.96	56	22	04	08	01	5	203			11.98
01	04	860814	17.59	31	60	62			5	203	05 17 N	109 56 W	8.80
01	05	860814	18.71	31	60	62	12	12	5	203	05 12 N	109 52 W	3.12
01	06	860814	18.71	62	31	60	12	12	5	203			13.41
01	07	860814	18.71	60	62	31	03	12	5	203			3.43
01	01	860815	19.08	60	62	31			3	221	03 55 N	111 31 W	3.50
01	02	860815	19.26	60	62	31			4	221	03 54 N	111 33 W	4.82
01	03	860815	19.26	60	62	31	08	03	4	221			2.57
01	04	860815	19.26	31	60	62	08	03	4	221			10.59
01	05	860815	19.26	62	31	60	08	03	4	221			11.24
01	06	860815	18.15	56	22	04	08	02	4	221	03 45 N	111 44 W	12.10
01	07	860815	18.15	04	56	22	07	02	5	221			12.10
01	08	860815	18.15	22	04	56	07	02	5	221			12.10
01	09	860815	19.08	60	62	31	07	01	5	221	03 31 N	111 59 W	12.72
01	10	860815	19.08	31	60	62	07	01	5	221			12.72
01	11	860815	19.08	62	31	60	07	01	5	221			12.72
01	12	860815	19.08	56	22	04	07	12	5	221	03 19 N	112 16 W	12.72
01	13	860815	19.08	04	56	22	12	12	5	221			12.72
01	14	860815	19.08	22	04	56	03	12	5	221			3.82
01	15	860815	18.52	22	04	56	12	01	5	221	03 10 N	112 27 W	8.64
01	16	860815	21.30	60	62	31	12	01	5	304	03 14 N	112 35 W	14.20
01	17	860815	21.30	31	60	62	12	01	5	304			14.20
01	18	860815	21.30	62	31	60	12	01	5	304			1.06
01	19	860815	21.30	62	31	60	12	01	4	304			6.03
02	01	860815	22.22	62	31	60	12	01	4	304	03 28 N	112 52 W	3.70
02	02	860815	22.22	56	22	04	12	02	5	304			11.85
02	03	860815	22.22	04	56	22	11	02	5	304			2.22
03	01	860815	24.45	04	56	22	11	02	5	304	03 37 N	112 59 W	4.07
03	02	860815	24.26	22	04	56	11	02	5	304	03 38 N	113 00 W	0.81

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	01	860815	23.15	22	04	56	11	02	5	304	03 40 N	113 01 W	5.79
04	02	860815	23.15	62	60	31	11	03	5	304			8.49
04	03	860815	23.15	31	60	62	11	03	5	304			8.87
04	04	860815	23.15	62	31	60	11	03	5	304			8.87
01	01	860816	20.56	04	22	56	04	03	5	310	04 49 N	114 27 W	12.68
01	02	860816	20.56	56	04	22	04	03	5	310			6.85
01	03	860816	20.56	22	56	04	04	03	6	310			6.85
01	04	860816	20.56	31	60	62	04	03	6	310			13.70
01	05	860816	20.56	62	31	60	04	03	6	310			14.05
01	06	860816	20.56	60	62	31			6	310	05 08 N	115 11 W	1.03
02	01	860816	20.93	60	62	31	04	02	6	310	05 10 N	115 12 W	8.72
02	02	860816	20.74	04	22	56	04	01	6	310	05 12 N	115 16 W	13.83
02	03	860816	20.74	56	04	22	04	01	6	310			13.83
02	04	860816	20.74	22	56	04	04	12	6	310			13.83
02	05	860816	21.11	31	60	62	01	12	6	310	05 25 N	115 34 W	1.06
03	01	860816	21.11	62	31	60	01	12	6	310			10.20
03	02	860816	21.11	62	31	60			6	310			2.11
03	03	860816	21.48	60	62	31			5	310	05 32 N	115 43 W	4.30
04	01	860816	21.48	60	62	31			5	310			4.65
04	02	860816	21.11	04	22	56			5	310	05 34 N	115 46 W	5.28
04	03	860816	21.11	04	22	56	12	01	5	310			3.17
05	01	860816	20.19	56	04	22			5	310	05 38 N	115 51 W	7.07
05	02	860816	20.19	56	04	22	11	01	5	310			4.37
05	03	860816	20.19	22	56	04	11	02	5	310	05 42 N	115 54 W	10.09
05	04	860816	20.19	31	60	62			5	310			10.09
05	05	860816	20.19	62	31	60			5	310			10.43
05	06	860816	20.56	60	62	31			4	310	05 42 N	116 07 W	7.20
05	07	860816	20.56	60	62	31			4	280			1.37
05	08	860816	20.56	60	62	31			4	300			1.37
05	09	860816	19.63	04	22	56			4	310	05 56 N	116 11 W	4.91
05	10	860816	19.63	04	22	56	11	02	4	310			2.62
05	11	860816	19.63	04	22	56			4	310			2.29
05	12	860816	19.82	56	04	22			4	310	06 00 N	116 15 W	9.91
05	13	860816	20.00	22	56	04			4	310	06 04 N	116 19 W	3.67
01	01	860817	22.78	31	22	60			4	065	07 20 N	117 36 W	10.25
01	02	860817	22.78	31	22	60			5	065			0.76
01	03	860817	22.78	60	31	22			5	065			5.32

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
01	04	860817	22.78	60	31	22	12	03	5	065			1.14
01	05	860817	22.22	60	31	22			5	065	07 24 N	117 28 W	2.59
01	06	860817	22.22	22	60	31	12	03	5	065			9.26
01	07	860817	22.78	04	56	62	12	02	5	065	07 26 N	117 22 W	15.19
01	08	860817	22.78	62	04	56			5	065			15.19
01	09	860817	22.78	56	62	04	01	02	5	065			15.19
01	10	860817	21.48	31	22	60			5	065	07 37 N	117 03 W	14.68
01	11	860817	21.48	60	31	22			5	065			13.25
01	12	860817	21.48	60	31	22	12	01	5	065			1.07
01	13	860817	21.48	22	60	31	12	01	5	065			1.79
01	14	860817	21.11	22	60	31	12	01	5	069	07 45 N	116 48 W	11.96
01	15	860817	20.37	04	56	62	12	01	5	069	07 46 N	116 43 W	13.58
01	16	860817	20.37	62	04	56	12	12	5	069			13.58
01	17	860817	20.37	56	62	04	12	12	6	069			13.58
01	18	860817	21.30	31	22	60	12	12	6	069	07 56 N	116 27 W	6.03
01	01	860818	22.41	56	62	04			4	073	08 57 N	113 30 W	10.46
01	02	860818	22.41	04	56	62			4	073			9.71
01	03	860818	22.41	62	04	56			4	073			8.96
01	04	860818	20.74	22	60	31			4	073	09 01 N	113 17 W	10.72
02	01	860818	20.74	31	22	60			4	073			11.41
02	02	860818	20.74	60	31	22	12	02	4	073			13.83
02	03	860818	21.48	56	62	04	01	01	5	073	09 09 N	112 58 W	10.74
02	04	860818	21.11	56	62	04	01	01	4	073	09 11 N	112 50 W	2.11
02	05	860818	21.11	56	62	04			4	073			1.41
02	06	860818	21.11	04	56	62			4	073			7.04
02	07	860818	20.56	04	56	62	01	12	4	073	09 13 N	112 46 W	6.85
02	08	860818	20.56	62	04	56	12	12	4	073			13.70
02	09	860818	21.11	22	60	31	12	12	4	073	09 16 N	112 34 W	8.45
02	10	860818	21.11	22	60	31	12	12	3	073			5.63
02	11	860818	21.11	31	22	60	12	12	3	073			2.82
03	01	860818	20.19	31	22	60	12	12	3	073	09 20 N	112 24 W	3.36
04	01	860818	20.19	60	31	22	06	12	3	073			12.78
04	02	860818	20.74	56	62	04			3	073	09 23 N	112 13 W	13.83
04	03	860818	20.74	04	56	62	07	02	3	073			13.83
04	04	860818	20.74	62	04	56	07	02	3	073			10.37
05	01	860818	18.52	22	60	31	07	02	3	073	09 28 N	111 53 W	8.95
05	02	860818	18.52	31	22	60	07	02	3	073			9.26

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
05	03	860818	19.63	60	31	22	07	02	3	073	09 31 N	111 43 W	9.82
05	04	860818	20.19	56	62	04			3	073	09 34 N	111 37 W	8.41
05	05	860818	20.19	04	56	62			3	073			8.41
05	06	860818	20.74	62	04	56			3	073	09 37 N	111 27 W	3.46
01	01	860819	20.19	31	22	60			2	073	10 09 N	109 46 W	12.45
01	02	860819	19.08	60	31	22			2	073	10 10 N	109 42 W	9.54
01	03	860819	18.89	22	60	31			3	073	10 12 N	109 36 W	1.26
01	01	860820	19.45	62	60	04	12	03	3	066	11 21 N	107 12 W	11.34
01	02	860820	19.45	04	62	60			3	066			4.86
01	03	860820	19.45	04	62	60			3	066			2.59
01	04	860820	19.45	04	62	60	01	03	3	066			1.30
02	01	860820	19.08	60	04	62	01	03	3	066	11 27 N	107 01 W	1.91
02	02	860820	19.08	60	04	62	01	03	3	066			10.17
02	03	860820	19.08	31	22	56	12	02	4	066	11 29 N	106 55 W	12.72
02	04	860820	19.08	56	31	22	12	02	4	066			13.03
02	05	860820	19.08	22	56	31	12	02	4	066			2.86
02	06	860820	19.26	22	56	31			4	066	11 34 N	106 45 W	9.63
02	07	860820	19.63	52	60	04	12	01	4	066	11 39 N	106 35 W	13.09
02	08	860820	19.63	04	52	60	12	01	4	066			7.85
03	01	860820	19.82	22	56	31			5	066	11 40 N	106 23 W	11.23
04	01	860820	20.37	56	60	04			4	066	11 53 N	105 57 W	5.43
04	02	860820	20.37	56	60	04			4	051			1.36
05	01	860820	20.37	62	60	31			4	066			2.04
05	02	860820	20.37	04	62	60			4	066			2.38
05	03	860820	20.37	04	62	60			5	066			4.75
05	04	860820	21.11	04	62	60			4	066	11 58 N	105 48 W	3.87
05	05	860820	21.11	04	62	60			4	066			2.82
05	06	860820	21.11	60	04	62			4	066			3.52
05	07	860820	21.48	60	04	62	06	02	4	086	12 00 N	105 44 W	5.01
05	08	860820	21.48	60	04	62	06	02	3	086			4.30
06	01	860820	19.45	31	22	56			3	066	12 02 N	105 39 W	3.89
06	02	860820	19.45	31	22	56			3	066			1.62
07	01	860820	20.19	56	31	22			3	066	12 06 N	105 31 W	3.70
07	02	860820	20.19	56	31	22			3	066			7.07
07	03	860820	22.22	56	60	04			2	066	12 09 N	105 25 W	7.41
07	04	860820	22.22	04	56	60			2	066			1.85
01	01	860821	20.37	56	22	31			5	066	13 16 N	103 16 W	7.47

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
01	02	860821	20.37	56	22	31	12	03	5	066			1.70
02	01	860821	20.93	31	56	22			5	066	13 20 N	103 10 W	1.40
02	02	860821	20.93	31	56	22			5	066			10.46
02	03	860821	20.93	31	56	22			6	066			1.05
03	01	860821	19.08	04	60	62	08	02	4	020	14 03 N	101 43 W	6.04
03	02	860821	19.08	04	60	62	09	03	4	010			2.23
03	03	860821	19.08	62	04	60	09	03	4	010			8.90
03	04	860821	19.45	60	62	04	09	03	3	010	14 11 N	101 43 W	8.43
03	05	860821	19.45	56	22	31	09	03	3	010			9.40
01	01	860822	19.45	04	60	62			1	100	14 11 N	099 58 W	6.81
01	02	860822	19.45	04	60	62	11	03	1	100			9.72
01	03	860822	19.45	62	04	60	11	03	1	100			6.81
01	04	860822	19.45	62	04	60			1	100			4.54
02	01	860822	19.63	62	04	60	11	03	1	100	14 09 N	099 42 W	0.65
03	01	860822	19.26	60	62	04	12	02	2	100	14 11 N	099 36 W	4.17
03	02	860822	18.52	31	22	56	12	02	2	100	14 10 N	099 36 W	12.35
03	03	860822	18.52	56	31	22	12	01	1	100			12.35
03	04	860822	18.52	22	56	31	12	01	2	100			12.35
03	05	860822	19.08	04	62	60	12	01	2	100	14 06 N	099 12 W	2.23
04	01	860822	18.52	60	04	62	12	12	3	100	14 05 N	099 02 W	4.63
05	01	860822	19.26	31	22	56	12	12	3	100	14 04 N	098 55 W	11.56
05	02	860822	19.26	56	31	22	05	12	2	100			6.10
05	03	860822	19.26	56	31	22	05	12	1	100			6.74
05	04	860822	19.26	22	56	31	05	01	1	100			3.53
05	05	860822	19.26	22	56	31	05	01	2	100			6.10
05	06	860822	19.45	04	62	60	05	01	2	100	14 02 N	098 41 W	4.54
06	01	860822	19.45	60	04	62	06	02	2	100	14 02 N	098 26 W	6.16
07	01	860822	18.52	31	22	56	06	02	3	100	14 02 N	098 24 W	7.41
07	02	860822	18.52	56	31	22	06	02	2	100			6.79
07	03	860822	18.52	22	56	31	06	03	2	100			6.79
07	04	860822	18.89	04	62	60	06	03	2	100	14 01 N	098 13 W	5.67
01	01	860823	18.52	31	62	56	05	03	3	275	15 00 N	096 59 W	8.95
01	02	860823	18.52	56	31	62	05	03	2	275	15 01 N	097 04 W	9.26
01	03	860823	16.67	62	56	31	05	02	2	275	14 59 N	097 08 W	0.56
02	01	860823	17.41	22	60	04	06	02	2	275	14 58 N	097 15 W	6.96
02	02	860823	17.59	04	22	60	06	02	2	275	14 58 N	097 17 W	2.35
03	01	860823	17.78	04	22	60	06	02	2	275	14 57 N	097 23 W	3.26

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
03	02	860823	17.78	60	04	22	06	01	2	275			4.15
04	01	860823	17.96	31	62	56	06	01	2	275	14 57 N	097 29 W	9.28
05	01	860823	17.78	56	31	62	12	12	1	275	14 56 N	097 35 W	1.48
06	01	860823	17.78	56	31	62	12	12	1	275	14 56 N	097 36 W	0.30
07	01	860823	17.59	62	56	31	12	12	1	275	14 56 N	097 38 W	7.33
07	02	860823	18.15	22	04	60	12	12	1	275	14 56 N	097 42 W	10.59
08	01	860823	19.82	22	04	60	12	12	1	275	14 56 N	097 48 W	2.31
08	02	860823	19.82	60	22	04	12	12	1	275			2.31
09	01	860823	20.19	31	62	56	12	01	1	275	14 53 N	097 54 W	1.68
09	02	860823	20.19	31	62	56	12	01	1	275			2.69
10	01	860823	17.96	56	31	62	12	01	1	275	14 51 N	098 00 W	4.49
11	01	860823	18.15	62	56	31	12	02	1	275	14 54 N	098 02 W	5.75
11	02	860823	18.15	22	04	60	12	02	1	275			4.84
12	01	860823	17.78	60	22	04	12	02	1	275	14 52 N	098 11 W	5.33
13	01	860823	18.71	04	60	22	12	02	1	275	14 52 N	098 15 W	1.87
14	01	860823	18.52	31	62	56	12	03	1	275	14 47 N	098 21 W	4.94
14	02	860823	18.52	56	31	62	12	03	1	275			4.63
01	01	860824	20.00	04	22	60			1	285	15 15 N	100 34 W	10.33
01	02	860824	20.00	60	04	22			1	285			5.33
02	01	860824	21.11	31	56	62			3	285	15 20 N	100 47 W	8.45
03	01	860824	21.48	62	31	56			3	285	15 22 N	100 57 W	10.03
03	02	860824	21.48	56	62	31			2	285			6.44
04	01	860824	19.82	04	22	60			2	277	15 24 N	101 12 W	8.92
05	01	860824	20.19	60	04	22			2	277	15 25 N	101 18 W	6.73
06	01	860824	20.19	22	60	04			2	277			7.07
06	02	860824	21.11	31	56	62			1	277	15 24 N	101 28 W	11.96
07	01	860824	19.82	62	31	56	01	12	1	277	15 20 N	101 40 W	9.91
07	02	860824	20.93	04	22	60	01	12	1	277	15 21 N	101 46 W	13.95
07	03	860824	20.93	60	04	22	12	01	3	277			3.84
07	04	860824	20.93	60	04	22			3	277			10.12
07	05	860824	20.93	22	60	04			3	277			11.16
07	06	860824	20.93	22	60	04			4	277			2.79
07	07	860824	18.89	31	56	62	12	02	4	277	15 24 N	102 07 W	3.46
07	08	860824	18.52	31	56	62			4	277	15 24 N	102 09 W	6.79
07	09	860824	18.52	62	31	56	12	02	4	277			8.64
07	10	860824	19.82	56	62	31	12	02	4	277	15 25 N	102 19 W	10.24
07	11	860824	19.82	04	22	60	12	02	4	277			1.32

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
07	12	860824	19.82	04	22	60	08	03	4	027			8.59
07	13	860824	19.63	60	04	22	08	03	4	027	15 30 N	102 23 W	9.16
07	14	860824	19.63	22	60	04	08	03	4	027			8.18
01	01	860825	19.45	56	62	31			3	035	15 52 N	102 19 W	2.27
02	01	860825	19.45	56	62	31			3	035	15 52 N	102 19 W	5.83
02	02	860825	19.45	31	56	62			4	035			7.45
02	03	860825	19.45	62	31	56			4	035			8.10
02	04	860825	19.45	22	60	04	02	03	4	035			11.99
02	05	860825	19.45	22	60	04			5	035			1.30
02	06	860825	19.45	04	22	60			5	035			9.72
03	01	860825	21.85	60	04	22			5	035	16 20 N	102 05 W	0.73
03	02	860825	21.85	60	04	22	02	01	5	035			3.28
03	03	860825	21.85	60	04	22	03	01	5	289			1.46
03	04	860825	21.30	56	62	31	05	01	5	289	16 22 N	102 05 W	13.13
04	01	860825	20.56	31	56	62	05	12	5	289	16 23 N	102 05 W	10.28
04	02	860825	20.56	62	31	56	06	01	4	289			6.85
04	03	860825	19.82	60	22	04	06	12	5	289	16 25 N	102 23 W	13.54
04	04	860825	19.82	04	60	22	12	12	5	289			12.88
04	05	860825	19.82	22	04	60	12	12	5	289			9.25
05	01	860825	20.56	56	62	31	11	01	4	289	16 32 N	102 52 W	7.54
05	02	860825	20.56	31	56	62	11	01	4	289			4.11
06	01	860825	19.26	60	22	04	11	02	4	289	16 36 N	103 04 W	9.31
06	02	860825	19.26	04	60	22	11	02	4	289	16 37 N	103 09 W	0.64
07	01	860825	19.26	22	04	60	11	02	4	289			2.57
07	02	860825	19.26	56	62	31	11	02	3	289			3.53
07	03	860825	19.63	56	62	31	10	02	3	340	16 45 N	103 18 W	2.62
08	01	860825	19.63	31	56	62	10	03	3	340	16 47 N	103 26 W	5.23
01	01	860826	20.37	56	60	04			5	280	16 56 N	103 40 W	12.90
01	02	860826	20.37	31	22	62			6	280			10.53
02	01	860826	20.37	62	31	22			6	280			8.49
02	02	860826	20.56	22	62	31	05	02	6	280	17 01 N	103 57 W	3.08
02	03	860826	18.89	22	62	31	03	02	6	351	17 02 N	104 02 W	1.26
03	01	860826	18.89	22	62	31	05	01	6	290	17 04 N	104 03 W	5.67
01	01	860902	19.82	31	58	56	07	03	5	244	17 47 N	106 14 W	4.95
02	01	860902	19.08	56	31	58	07	03	5	244	17 43 N	106 17 W	9.22
02	02	860902	19.08	04	22	62	07	03	5	244			13.03
02	03	860902	19.08	62	04	22	07	02	5	244			12.40

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
02	04	860902	19.08	22	62	04	07	02	5	244			7.63
02	05	860902	19.08	22	62	04	07	02	4	244			5.09
02	06	860902	19.26	31	58	56	07	01	4	244	17 31 N	106 39 W	13.16
02	07	860902	19.26	56	31	58	07	01	4	244			12.52
02	08	860902	19.26	58	56	31	08	12	4	244			12.84
02	09	860902	19.45	04	22	62	12	12	4	244	17 19 N	106 57 W	6.48
02	10	860902	19.45	04	22	62	12	12	5	244			7.13
02	11	860902	19.45	62	04	22	12	12	4	244			1.62
03	01	860902	19.45	62	04	22	10	12	4	244	17 14 N	107 08 W	4.54
03	02	860902	19.45	22	62	04	10	01	4	244			11.34
04	01	860902	19.45	31	58	56	12	01	4	244	17 07 N	107 19 W	7.45
05	01	860902	19.45	31	58	56	12	01	4	244	17 05 N	107 23 W	2.59
05	02	860902	19.45	56	31	58	12	01	4	244			10.37
05	03	860902	19.45	58	56	31	01	01	4	244			5.51
05	04	860902	19.45	58	56	31	01	02	4	244			5.19
05	05	860902	19.45	04	22	62	12	02	3	244	16 59 N	107 34 W	5.51
06	01	860902	19.45	04	22	62	12	02	3	244	16 57 N	107 36 W	0.65
06	02	860902	19.45	62	04	22	12	02	3	244			9.72
06	03	860902	19.45	22	62	04	01	02	3	244			9.72
06	04	860902	19.45	31	58	56	01	02	3	244	16 53 N	107 49 W	2.27
06	05	860902	19.45	31	58	56			3	244			1.30
06	06	860902	19.45	31	58	56	01	02	3	244			3.57
07	01	860902	19.45	58	56	31	01	03	3	244	16 54 N	107 57 W	9.40
07	02	860902	19.45	58	56	31			3	244			3.24
01	01	860903	19.63	04	62	04			3	239	15 49 N	109 47 W	1.64
01	02	860903	19.63	04	62	04	07	03	3	239			0.65
01	03	860903	19.63	04	62	04			3	239			2.94
01	04	860903	19.63	22	04	62			3	239			1.64
01	05	860903	19.63	22	04	62	07	03	3	239			0.65
02	01	860903	19.63	22	04	62	07	03	3	239	15 46 N	109 52 W	3.27
02	02	860903	19.63	62	22	04	07	03	3	239			6.54
02	03	860903	19.63	56	58	31	07	03	3	239			9.16
02	04	860903	19.63	56	58	31	07	02	4	239			3.93
02	05	860903	19.63	31	56	58	07	02	4	239			13.09
02	06	860903	19.63	58	31	56	07	02	4	239			13.09
02	07	860903	21.11	04	62	22	07	02	4	239	15 31 N	110 16 W	14.08
02	08	860903	21.11	22	04	62	07	01	3	239			14.08

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
02	09	860903	21.11	62	22	04	07	01	3	239			14.08
02	10	860903	21.11	56	58	31	08	12	3	239	15 18 N	110 36 W	14.08
02	11	860903	21.11	31	56	58	12	12	3	239			14.08
02	12	860903	21.11	58	31	56	12	12	3	239			14.08
02	13	860903	21.11	04	62	22	12	12	3	239			5.28
03	01	860903	20.74	04	62	22	12	12	3	239	15 05 N	111 00 W	4.49
03	02	860903	20.74	22	04	62	12	01	3	239			13.83
03	03	860903	20.74	62	22	04	01	01	3	239			13.83
03	04	860903	20.00	56	58	31	01	01	3	239	14 56 N	111 14 W	7.67
03	05	860903	20.00	56	58	31	01	02	3	239			2.33
03	06	860903	20.00	31	56	58	01	02	3	239			10.00
03	07	860903	20.00	58	31	56	01	02	3	239	14 50 N	111 23 W	9.00
04	01	860903	19.82	04	62	22	01	02	2	239	14 47 N	111 32 W	5.94
05	01	860903	20.37	04	62	22	01	03	2	239	14 45 N	111 36 W	1.70
05	02	860903	20.37	22	04	62	01	03	2	239			7.81
01	01	860904	20.19	31	56	58			2	238	13 38 N	113 26 W	2.36
02	01	860904	20.19	31	56	58	07	03	2	238	13 36 N	113 29 W	5.72
02	02	860904	20.19	31	56	58	07	03	2	238			0.34
02	03	860904	20.19	58	31	56	07	03	2	238			2.69
02	04	860904	20.19	58	31	56	07	03	2	238			8.75
02	05	860904	20.19	56	58	31	07	03	2	238			9.08
02	06	860904	20.19	56	58	31	07	02	1	238			2.02
02	07	860904	20.19	04	22	62	07	02	1	238	13 28 N	113 42 W	5.05
02	08	860904	20.19	04	22	62			2	238			6.06
02	09	860904	20.19	04	22	62	07	02	2	238			2.69
02	10	860904	20.19	62	04	22	07	02	3	238			6.39
02	11	860904	20.19	62	04	22	07	02	2	238			6.73
02	12	860904	20.19	22	62	04	07	02	2	238			7.74
03	01	860904	21.11	31	56	58	07	01	2	238	13 16 N	114 03 W	6.33
04	01	860904	20.56	58	31	56	07	01	2	238	13 12 N	114 06 W	3.77
04	02	860904	20.56	58	31	56	07	12	1	238			9.25
04	03	860904	20.56	56	58	31	08	12	1	238			7.88
05	01	860904	20.74	04	62	22	12	12	1	238	13 07 N	114 16 W	8.64
06	01	860904	19.08	22	04	62	12	12	1	238	13 05 N	114 24 W	0.32
07	01	860904	18.71	22	04	62	12	12	1	225	13 02 N	114 25 W	5.30
07	02	860904	18.71	62	22	04	01	01	1	225			4.05
08	01	860904	19.63	62	22	04	01	01	1	225	12 59 N	114 31 W	3.27

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
08	02	860904	19.63	31	56	58	01	01	1	225			4.25
09	01	860904	20.56	31	56	58	01	01	1	225	12 54 N	114 36 W	3.08
10	01	860904	20.56	31	56	58	01	01	1	222	12 53 N	114 37 W	0.69
10	02	860904	20.56	58	31	56	01	01	1	222			13.70
10	03	860904	20.56	56	58	31	01	01	2	222			8.57
11	01	860904	18.52	04	22	62	01	02	2	225	12 44 N	114 48 W	5.86
11	02	860904	18.52	04	22	62	06	02	3	088			3.09
11	03	860904	18.52	62	04	22	06	02	2	088			8.95
11	04	860904	21.30	22	62	04	06	02	3	088	12 42 N	114 44 W	6.03
12	01	860904	20.74	31	56	58	06	03	3	088	12 39 N	114 38 W	2.77
13	01	860904	20.37	58	31	56	06	03	3	088	12 38 N	114 34 W	6.79
01	01	860905	18.52	04	56	22			1	088	12 42 N	112 57 W	0.62
02	01	860905	19.45	22	04	56	12	02	1	088	12 47 N	112 53 W	7.45
02	02	860905	19.45	56	22	04	12	02	2	088			10.70
02	03	860905	19.45	31	58	62	12	02	1	088			4.21
03	01	860905	19.08	31	58	62	12	02	1	088	12 51 N	112 41 W	2.54
03	02	860905	19.08	62	31	58	12	02	1	088			12.72
03	03	860905	19.08	58	62	31	12	02	2	088			12.72
03	04	860905	18.89	04	56	22	12	02	2	088	12 51 N	112 24 W	0.94
03	05	860905	18.89	04	56	22	12	02	2	088			1.57
03	06	860905	18.89	04	56	22	12	02	2	088			1.89
03	07	860905	18.89	04	56	22	12	02	1	088			5.98
03	08	860905	18.89	04	56	22	12	01	1	088			2.20
03	09	860905	18.89	22	04	56	12	01	1	088			3.15
03	10	860905	18.89	22	04	56			1	088			1.26
04	01	860905	20.00	56	22	04			3	088	12 52 N	112 09 W	12.00
04	02	860905	20.00	31	58	62			1	088			11.00
05	01	860905	19.26	31	58	62	12	12	1	088	12 52 N	111 57 W	1.28
05	02	860905	19.26	62	31	58	12	12	1	088			9.95
05	03	860905	19.26	62	31	58	12	12	1	108			3.21
05	04	860905	19.26	58	62	31	12	12	2	108			1.61
06	01	860905	19.82	58	62	31	06	12	2	088	12 51 N	111 43 W	4.62
06	02	860905	19.82	04	56	22	06	12	2	088			9.25
07	01	860905	16.85	22	04	56	06	01	2	088	12 49 N	111 33 W	7.30
07	02	860905	16.85	56	22	04			2	088			2.25
08	01	860905	18.71	31	58	62			2	088	12 49 N	111 24 W	7.17
08	02	860905	18.71	31	58	62			1	088			1.25

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
09	01	860905	18.71	04	56	22			3	088			5.92
09	02	860905	18.71	22	04	56			3	088			1.87
09	03	860905	18.52	22	04	56			3	088	12 49 N	111 19 W	0.00
01	01	860906	20.19	58	62	31			4	088	12 53 N	109 31 W	5.05
01	02	860906	20.19	58	62	31			5	088			6.39
01	03	860906	20.19	31	58	62			5	088			8.41
02	01	860906	20.00	62	31	58			5	088	12 59 N	109 20 W	6.67
02	02	860906	20.00	04	22	56			5	088			10.33
02	03	860906	20.00	04	22	56			5	088			3.33
02	04	860906	20.00	56	04	22			5	088			5.00
03	01	860906	19.63	56	04	22			5	088	12 57 N	109 05 W	4.25
04	01	860906	18.71	58	62	31			5	088	12 56 N	108 56 W	3.74
05	01	860906	18.89	58	62	31			5	088	12 56 N	108 53 W	2.52
05	02	860906	18.89	31	58	62			5	088			4.72
05	03	860906	18.89	31	58	62	12	12	5	088			4.09
05	04	860906	18.89	31	58	62			5	088			3.78
05	05	860906	18.89	62	31	58			5	088			12.59
05	06	860906	20.19	04	22	56			5	088	12 57 N	108 36 W	6.06
06	01	860906	19.08	56	04	22			5	088	12 54 N	108 30 W	6.36
06	02	860906	19.08	22	56	04	05	01	5	088			12.72
06	03	860906	19.08	58	62	31	05	01	5	088			12.72
06	04	860906	19.08	31	58	62			4	088			12.72
06	05	860906	19.08	62	31	58			4	088			12.72
06	06	860906	20.00	04	22	56			4	088	12 56 N	107 55 W	10.00
06	07	860906	20.00	56	04	22			4	088			10.00
06	08	860906	20.00	22	56	04			3	088			10.00
06	09	860906	20.00	58	62	31			3	088			6.67
06	10	860906	20.00	31	58	62			3	088			7.33
06	11	860906	20.37	31	58	62			3	088	12 57 N	107 31 W	0.34
01	01	860907	19.63	04	22	56	12	03	1	087	13 03 N	105 53 W	5.23
01	02	860907	19.63	04	22	56			1	087			5.23
01	03	860907	19.63	04	22	56	12	02	1	087			2.62
01	04	860907	19.63	56	04	22	12	02	1	087			12.76
01	05	860907	19.63	22	56	04	12	02	1	087			1.96
02	01	860907	18.33	31	58	62	12	02	1	087	13 02 N	105 34 W	2.44
03	01	860907	17.96	62	31	58	12	02	1	087	13 02 N	105 30 W	10.48
03	02	860907	17.96	58	62	31	12	02	2	087			2.40

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	01	860907	17.96	58	62	31	12	02	2	087			7.49
04	02	860907	19.45	04	22	56	12	01	2	087	13 03 N	105 17 W	10.70
04	03	860907	19.45	04	22	56	12	01	3	087			2.59
04	04	860907	19.45	56	04	22	12	01	3	087			3.89
04	05	860907	19.45	56	04	22			4	087			0.65
04	06	860907	19.45	56	04	22			5	087			1.94
04	07	860907	18.33	56	04	22	12	01	6	087	13 04 N	105 07 W	4.28
05	01	860907	17.41	22	56	04			6	087	13 05 N	105 01 W	1.74
06	01	860907	19.26	31	58	62			4	087	13 05 N	104 57 W	1.61
07	01	860907	18.15	62	31	58			4	087	13 06 N	104 57 W	9.38
07	02	860907	18.15	58	62	31	06	01	4	087			8.77
07	03	860907	18.15	04	22	56	06	01	4	087	13 08 N	104 46 W	12.10
07	04	860907	18.15	56	04	22	06	01	4	087			1.81
07	05	860907	18.15	56	04	22	06	01	5	087			10.28
07	06	860907	18.15	22	56	04	06	02	4	087			12.10
07	07	860907	18.15	31	58	62	06	02	4	087			6.05
07	08	860907	18.15	31	58	62	06	02	3	087			3.02
07	09	860907	18.15	62	31	58	06	02	4	087			2.12
07	10	860907	18.15	62	31	58			4	087			0.91
07	11	860907	17.04	62	31	58			4	087	13 08 N	104 20 W	0.57
01	01	860908	17.96	31	22	58			3	087	13 14 N	102 34 W	1.50
01	02	860908	17.96	31	22	58	12	03	3	087			8.08
02	01	860908	16.67	58	31	22			3	087	13 17 N	102 27 W	5.83
02	02	860908	16.67	58	31	22			3	087			0.83
03	01	860908	18.52	62	56	04			4	087	13 18 N	102 16 W	10.19
03	02	860908	18.52	04	62	56			5	087			0.62
04	01	860908	17.96	04	62	56			3	090	13 19 N	102 04 W	7.19
04	02	860908	17.96	56	04	62			3	090			2.99
05	01	860908	18.52	56	04	62			3	090	13 21 N	101 57 W	2.16
05	02	860908	18.52	31	22	58			3	094			12.35
05	03	860908	18.52	58	31	22			3	094			3.09
06	01	860908	18.52	62	56	04			3	094	13 21 N	101 48 W	10.19
06	02	860908	18.52	04	62	56			3	094			12.96
06	03	860908	18.52	56	04	62			3	094			3.40
07	01	860908	19.08	56	04	62			3	094	13 22 N	101 33 W	6.99
07	02	860908	19.08	31	22	58			3	094			11.13
07	03	860908	19.08	31	22	58	06	01	3	094			1.59

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
07	04	860908	19.08	58	31	22	06	01	3	094			11.76
07	05	860908	19.08	58	31	22	06	01	3	094			1.27
08	01	860908	19.08	22	58	31			3	094	13 23 N	101 16 W	9.22
08	02	860908	19.08	62	56	04			3	094			10.81
08	03	860908	19.08	04	62	56			3	094			8.27
08	04	860908	19.63	56	04	62			3	094	13 21 N	100 58 W	9.82
08	05	860908	19.63	31	22	58			3	094			4.58
01	01	860909	19.45	04	62	56	07	03	3	229	13 25 N	099 36 W	2.59
01	02	860909	19.45	04	62	56			3	229			12.32
01	03	860909	19.45	56	04	62	08	03	3	229			7.78
01	04	860909	19.45	56	04	62	08	03	4	229			7.45
01	05	860909	19.45	62	56	04	08	02	3	229			7.45
02	01	860909	20.00	62	56	04	08	02	3	229	13 13 N	099 55 W	2.67
02	02	860909	20.00	58	31	22	08	02	3	229			12.00
03	01	860909	20.37	22	58	31	08	02	3	229	13 08 N	100 01 W	12.22
03	02	860909	20.37	31	22	58	08	01	3	229			4.75
04	01	860909	20.00	31	22	58	08	01	3	229	13 01 N	100 11 W	2.67
04	02	860909	20.00	04	62	56	08	12	3	229			5.33
05	01	860909	19.63	56	04	62	12	12	3	229	12 57 N	100 16 W	3.60
06	01	860909	19.08	56	04	62	12	12	3	229	12 55 N	100 18 W	2.86
07	01	860909	19.08	62	56	04	12	12	4	229			5.09
07	02	860909	20.93	58	31	22	12	12	4	229	12 52 N	100 25 W	6.28
07	03	860909	20.93	58	31	22	12	12	3	229			7.67
07	04	860909	20.93	22	58	31	12	01	3	229			13.60
07	05	860909	20.93	31	22	58	12	01	3	229			13.60
08	01	860909	20.74	04	62	56	01	01	3	229	12 37 N	100 42 W	12.45
08	02	860909	20.74	56	04	62	01	02	3	229			10.72
08	03	860909	20.74	56	04	62	01	02	2	229			3.11
08	04	860909	20.74	62	56	04	01	02	3	229			13.83
08	05	860909	20.93	58	31	22	02	02	3	229	12 23 N	100 59 W	2.09
08	06	860909	20.93	58	31	22	02	02	2	229			3.14
09	01	860909	18.89	22	58	31	02	03	2	229	12 23 N	101 02 W	7.24
09	02	860909	18.89	31	22	58	02	03	2	229			4.41
01	01	860910	19.63	22	04	58			3	230	11 12 N	102 24 W	2.62
01	02	860910	19.63	22	04	58	07	03	3	230			0.98
02	01	860910	19.82	58	22	04	07	03	4	230	11 05 N	102 30 W	9.25
03	01	860910	20.56		62	56	07	02	4	230	10 58 N	102 44 W	11.65

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	01	860910	21.11	22	04	58	08	01	3	230	10 41 N	102 53 W	2.11
04	02	860910	21.11	22	04	58			3	230			2.82
05	01	860910	21.11	58	22	04			3	230	10 37 N	103 00 W	1.41
06	01	860910	20.00	04	58	22	12	12	3	230	10 30 N	103 06 W	1.33
07	01	860910	18.89		62	56	12	12	3	233	10 26 N	103 03 W	4.41
07	02	860910	18.89		62	56			3	233			6.30
07	03	860910	18.89	56		62	01	01	3	233			10.07
07	04	860910	18.89	62	56		01	01	3	233			10.39
07	05	860910	20.93	22	04	58	01	01	3	233	10 14 N	103 20 W	13.95
07	06	860910	20.93	58	22	04	01	02	2	233			13.95
07	07	860910	20.93	04	58	22	01	02	2	233			2.44
08	01	860910	19.82	04	58	22	01	02	3	233	10 06 N	103 35 W	3.96
08	02	860910	19.82		62	56	01	02	3	233			1.65
08	03	860910	19.82		62	56			3	233			0.99
09	01	860910	19.08	56		62			2	233	10 03 N	103 43 W	2.86
01	01	860911	18.52	58	62	04			2	228	08 51 N	105 16 W	12.96
01	02	860911	18.71	04	58	62			2	228	08 48 N	105 21 W	3.12
01	03	860911	18.71	04	58	62			3	228			6.86
02	01	860911	18.71	62	04	58			3	228			4.68
02	02	860911	20.00	31	56	22	08	02	3	228	08 44 N	105 32 W	13.33
02	03	860911	20.00	22	31	56	08	02	3	228			5.00
02	04	860911	20.00	22	31	56	08	01	2	228			8.67
02	05	860911	20.00	56	22	31	08	01	2	228			14.67
02	06	860911	20.00		62	04	08	01	1	228			11.67
02	07	860911	20.00	04		62	12	12	2	228			13.33
02	08	860911	20.00	62	04		12	12	2	228			13.67
02	09	860911	19.45	31	56	04	12	12	2	228	08 15 N	106 04 W	12.64
02	10	860911	19.45	22	31	56	12	12	2	228			3.57
03	01	860911	18.15	22	31	56	01	12	2	228	08 07 N	106 11 W	1.81
04	01	860911	18.15		04	62	01	02	2	228			7.56
04	02	860911	17.59	31	56	22	01	02	2	228	08 04 N	106 20 W	9.09
04	03	860911	17.59	22	31	56	01	02	2	228			8.50
01	01	860912	18.52	22	31	56			3	231	06 48 N	107 48 W	1.54
02	01	860912	19.08	04	58	62			5	231	06 10 N	108 32 W	4.77
01	01	860913	15.37	04		62	03	02	4	180	03 59 N	109 58 W	4.61
02	01	860913	17.41	31	56	22			4	180	03 55 N	109 50 W	4.35
02	02	860913	17.41	31	56	22	03	03	4	180			2.03

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
02	03	860913	17.41	04		62	03	03	4	180			2.03
01	01	860915	18.15	22	58	04			4	180	00 36 S	109 59 W	9.07
01	02	860915	18.15	04	22	58			4	180			9.07
01	03	860915	18.15	58	04	22	09	12	4	180			1.81
01	04	860915	18.15	58	04	22	09	12	5	180			7.56
01	05	860915	18.33	56	31	62	12	12	5	188	00 52 S	109 59 W	4.89
02	01	860915	18.33	56	31	62			4	188			3.97
02	02	860915	18.33	56	31	62			4	188	01 00 S	105 59 W	0.31
01	01	860916	18.33	56	62	31	03	02	5	172	04 28 S	110 02 W	2.14
01	02	860916	18.33	56	62	31	03	02	5	172			3.97
01	03	860916	18.33	31	56	62	03	02	4	172			1.53
02	01	860916	18.71	62	31	56			4	172	04 36 S	110 01 W	5.61
01	01	860917	17.59	04	56	58			4	060	04 08 S	108 52 W	2.93
02	01	860917	15.56	04	56	58			4	060	04 07 S	108 49 W	1.04
02	02	860917	15.56	58	04	56			4	060			6.48
02	03	860917	15.56	58	04	56	01	02	4	060			0.26
02	04	860917	15.56	56	58	04	01	02	5	060			3.89
02	05	860917	15.56	56	58	04			5	060			3.89
02	06	860917	17.59	22	31	62			5	060	04 01 S	108 42 W	11.73
02	07	860917	17.59	62	22	31			5	060			7.33
02	08	860917	17.59	62	22	31	01	02	5	060			4.40
02	09	860917	17.59	31	62	22			5	060			11.73
02	10	860917	17.59	04	56	58			5	060			3.52
03	01	860917	17.59	58	04	56			5	060	03 49 S	108 23 W	1.17
03	02	860917	17.59	58	04	56			5	060			0.59
04	01	860917	17.78	56	58	04			5	060	03 46 S	108 19 W	0.00
05	01	860917	17.78	22	31	62			5	060	03 42 S	108 12 W	10.96
05	02	860917	17.78	62	22	31			5	060			7.11
05	03	860917	17.78	62	22	31	08	12	6	060			3.56
05	04	860917	17.78	31	62	22	08	12	5	060			3.85
06	01	860917	7.04	04	56	58	08	12	6	060	03 34 S	108 01 W	3.64
06	02	860917	10.56	04	56	58	08	12	6	060			1.06
06	03	860917	10.56	58	04	56	07	01	6	060			0.53
07	01	860917	17.78	58	04	56	07	01	6	060	03 31 S	107 59 W	4.44
08	01	860917	17.04	56	58	04	07	02	6	060	03 31 S	107 56 W	7.10
08	02	860917	17.04	22	31	62	07	02	5	060			8.52
08	03	860917	17.04	62	22	31	07	02	5	060			5.68

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
09	01	860917	18.52	31	62	22	07	03	5	054	03 21 S	107 44 W	2.78
09	02	860917	18.52	04	56	58	07	03	5	054			4.63
09	03	860917	18.52	58	04	56	07	03	5	054			4.63
01	01	860918	20.93	31	22	62			4	058	02 04 S	106 06 W	13.25
01	02	860918	20.93	62	31	22			4	058			13.25
01	03	860918	20.93	22	62	31			4	058			12.91
01	04	860918	21.11	04	58	56			4	056	01 52 S	105 48 W	0.70
02	01	860918	20.74	04	58	56			4	056	01 50 S	105 46 W	12.10
02	02	860918	20.74	56	04	58	01	01	4	056			12.10
02	03	860918	20.74	58	56	04			5	056			1.73
02	04	860918	20.74	58	56	04			5	056			2.07
03	01	860918	21.30	31	22	62	01	01	4	056	01 38 S	105 29 W	8.16
03	02	860918	21.30	31	22	62	01	01	5	056			5.32
03	03	860918	21.30	62	31	22	01	01	5	056			14.91
03	04	860918	21.30	22	62	31	12	12	5	056			13.49
03	05	860918	21.48	04	58	56			5	056	01 24 S	105 10 W	10.03
03	06	860918	21.48	04	58	56			5	053			2.15
03	07	860918	21.48	04	58	56	12	12	5	053			2.15
03	08	860918	21.48	56	04	58	12	12	5	053			14.32
03	09	860918	21.48	58	56	04	08	01	4	053			14.32
03	10	860918	21.67	31	22	62			4	053	01 10 S	104 51 W	0.36
04	01	860918	21.67	31	22	62	07	01	4	053			9.39
04	02	860918	21.67	62	31	22	07	01	4	053			14.45
04	03	860918	21.67	22	62	31			4	053			14.08
04	04	860918	21.67	04	58	56			4	053			10.83
04	05	860918	21.67	56	04	58			4	053			10.83
04	06	860918	20.37	58	56	04	07	02	4	053	00 48 S	104 26 W	10.19
04	07	860918	20.37	31	22	62	07	03	4	053			6.11
01	01	860919	0.00	58	04	56	01	03	3		00 30 N	102 43 W	0.00
02	01	860919	18.33	58	04	56	01	03	3	062	00 32 N	102 40 W	2.75
02	02	860919	18.33	58	04	56			3	062			0.92
02	03	860919	18.33	56	58	04			3	062			6.72
03	01	860919	20.19	56	58	04			3	062	00 37 N	102 35 W	1.68
03	02	860919	20.19	04	56	58			3	062			13.46
03	03	860919	20.19	31	62	22			3	054			5.72
03	04	860919	20.19	31	62	22	01	02	3	054			5.38
04	01	860919	19.63	22	31	62	01	02	3	054	00 47 N	102 22 W	2.29

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
04	02	860919	19.63	22	31	62			3	054			4.25
04	03	860919	19.63	22	31	62			3	054			4.58
04	04	860919	19.63	62	22	31			3	054			10.14
04	05	860919	19.63	58	04	56			3	054	00 53 N	102 13 W	0.65
05	01	860919	18.52	56	58	04	01	01	4	054	00 58 N	102 10 W	2.16
06	01	860919	20.00	04	56	58			4	054	01 04 N	102 07 W	8.33
06	02	860919	20.00	04	56	58	12	12	4	054			1.67
06	03	860919	20.00	31	62	22	12	12	4	054			3.00
06	04	860919	20.00	31	62	22			4	054			4.00
06	05	860919	20.00	31	62	22	07	12	4	054			6.33
06	06	860919	20.00	22	31	62	07	01	4	054			1.67
07	01	860919	21.11	22	31	62	07	01	4	054	01 10 N	101 58 W	10.91
07	02	860919	21.11	62	22	31	07	01	4	054			14.43
07	03	860919	20.74	58	04	56	07	01	4	054	01 18 N	101 49 W	13.48
07	04	860919	20.74	56	58	04	07	01	4	058			14.17
07	05	860919	20.74	04	56	58	07	02	4	058			13.83
07	06	860919	18.52	31	62	22	07	02	3	058	01 31 N	101 33 W	4.94
08	01	860919	20.37	22	31	62			3	058	01 33 N	101 32 W	3.73
01	01	860920	18.89	31	56	58			3	058			13.54
01	02	860920	18.89	58	31	56			3	058	02 40 N	099 56 W	0.94
01	03	860920	18.89	58	31	56	01	02	3	058			8.82
01	04	860920	18.89	58	31	56			3	058			4.72
01	05	860920	18.89	56	58	31			3	058			5.35
01	06	860920	18.89	56	58	31			4	058			8.19
01	07	860920	18.52	04	62	22	01	02	4	058	02 51 N	099 43 W	1.23
01	08	860920	18.52	04	62	22			4	058			4.63
01	09	860920	18.52	04	62	22	01	02	4	058			6.17
01	10	860920	18.52	22	04	62	01	02	4	058			12.35
01	11	860920	18.52	62	22	04	01	01	4	058			12.35
01	12	860920	19.45	31	56	58	01	12	4	058	03 02 N	099 25 W	12.96
01	13	860920	19.45	58	31	56			4	058			1.62
01	14	860920	19.45	58	31	56	01	12	4	058			3.57
01	15	860920	19.45	58	31	56			4	058			7.78
01	16	860920	19.45	56	58	31			4	058			4.21
02	01	860920	19.63	04	62	22			4	058	03 15 N	099 05 W	6.22
02	02	860920	19.63	04	62	22			4	056			5.56
02	03	860920	19.63	22	04	62	07	01	4	056			11.45

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
02	04	860920	19.63	62	22	04	07	01	4	056			11.45
02	05	860920	20.19	31	56	58			4	056	03 26 N	098 48 W	4.37
02	06	860920	20.19	31	56	58	07	01	4	056			9.76
02	07	860920	20.19	58	31	56	07	01	4	056			13.12
02	08	860920	20.19	56	58	31	08	02	4	056			2.69
02	09	860920	13.15	56	58	31			4	056			2.63
03	01	860920	20.00	56	58	31			4	056	03 38 N	098 32 W	3.33
03	02	860920	20.00	04	31	22			4	056			10.00
03	03	860920	20.00	22	04	62			4	056			10.00
03	04	860920	20.19	62	22	04			4	056	03 45 N	098 22 W	5.05
01	01	860921	21.30	04	22				4	049	05 02 N	096 37 W	3.90
02	01	860921	20.74	04	22				4	049	05 06 N	096 34 W	1.04
02	02	860921	20.74	62	04	22			4	049			3.11
03	01	860921	20.37	22	62	04			4	049	05 13 N	096 29 W	3.06
03	02	860921	20.37	58	31	56			4	049			4.07
04	01	860921	21.67	04	22	62	06	01	6	058	05 57 N	095 33 W	4.33
04	02	860921	21.67	04	22	62			6	058			8.31
05	01	860921	21.67	62	04	22			6	058	06 01 N	095 27 W	10.83
05	02	860921	21.67	22	62	04	07	02	6	058			10.83
05	03	860921	21.67	58	31	56			6	058			10.83
05	04	860921	20.93	56	58	31			5	058	06 09 N	095 10 W	1.74
01	01	860922	20.56	31	56	58			3	051			6.17
01	02	860922	20.56	31	56	58			3	051	07 34 N	093 11 W	2.74
02	01	860922	20.56	58	31	56			3	051	07 37 N	093 08 W	5.48
03	01	860922	20.37	04	62	22			2	051	07 47 N	092 58 W	3.06
03	02	860922	20.37	04	62	22			2	051			4.75
03	03	860922	20.37	04	62	22			3	051			3.06
03	04	860922	20.37	04	62	22	01	02	3	051			1.02
03	05	860922	20.37	22	04	62			3	051			11.88
03	06	860922	20.37	62	22	04			3	051			11.88
03	07	860922	25.19	31	56	58	01	01	3	051	08 02 N	092 36 W	16.79
03	08	860922	25.19	58	31	56			3	051			6.30
03	09	860922	25.19	58	31	56	01	12	3	051			10.91
03	10	860922	25.19	56	58	31	01	12	3	051			16.37
03	11	860922	23.52	04	62	22	03	12	3	051	08 15 N	092 17 W	15.68
03	12	860922	23.52	22	04	62			3	051			13.72
03	13	860922	23.52	22	04	62			3	051			1.96

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
03	14	860922	23.52	62	22	04			3	051			8.62
04	01	860922	23.15	31	56	58			3	051	08 30 N	091 57 W	3.09
04	02	860922	23.15	31	56	58			2	051			12.35
04	03	860922	23.15	58	31	56	07	01	2	051			7.72
04	04	860922	23.15	58	31	56			2	051			1.93
04	05	860922	23.15	56	31	04			2	051			4.24
05	01	860922	21.85	56	58	31	07	01	2	051	08 39 N	091 44 W	10.93
05	02	860922	21.85	04	62	22			2	051			2.91
06	01	860922	20.37	22	04	62			2	051	08 47 N	091 34 W	6.11
06	02	860922	20.37	22	04	62			1	051			3.40
06	03	860922	20.37	62	22	04			2	051			10.19
06	04	860922	20.37	31	56	58			2	051			1.02
07	01	860922	20.37	31	56	58			2	051	08 54 N	091 26 W	5.09
01	01	860923	17.04	04	56	22	01	03	1	052	09 31 N	090 32 W	2.27
02	01	860923	16.85	04	56	22	01	03	2	052	09 33 N	090 28 W	1.12
02	02	860923	16.85	22	04	56	01	03	2	052			0.56
03	01	860923	17.22	22	04	56	01	02	2	052	09 35 N	090 25 W	4.59
03	02	860923	17.22	56	22	04	01	02	3	052			11.48
03	03	860923	18.33	31	58	62	01	02	3	052	09 42 N	090 17 W	6.11
03	04	860923	18.33	31	58	62	01	02	2	052			3.36
04	01	860923	21.30	04	56	22	05	01	2	306	09 55 N	090 13 W	10.65
04	02	860923	21.30	22	04	56	06	12	2	306			10.65
04	03	860923	22.41	56	22	04	07	01	2	306	10 02 N	090 23 W	4.86
05	01	860923	20.74	56	58	62	11	01	1	306	10 03 N	090 32 W	2.77
05	02	860923	20.74	31	58	62	11	12	1	306			4.49
05	03	860923	20.74	31	58	62	02	01	1	153			4.15
05	04	860923	20.74	62	31	58	03	01	1	153			1.73
06	01	860923	23.34	62	31	58	03	01	1	153	10 03 N	090 34 W	5.06
07	01	860923	20.93	04	56	22	03	01	2	153	09 59 N	090 32 W	7.67
07	02	860923	20.93	04	56	22			2	153			4.88
08	01	860923	18.52	22	04	56			2	153	09 50 N	090 27 W	2.47
09	01	860923	17.78	22	04	56			2	153	09 47 N	090 26 W	1.48
10	01	860923	18.33	22	04	56			2	153	09 45 N	090 25 W	0.61
11	01	860923	22.04	31	58	62	03	02	2	153	09 41 N	090 23 W	4.41
11	02	860923	22.04	31	58	62			2	153			7.35
11	03	860923	22.04	62	31	58			2	153			1.84
11	04	860923	22.04	62	31	58	04	02	2	153			5.51

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
11	05	860923	22.04	62	31	58			2	153			2.57
12	01	860923	20.74	04	56	22			2	153	09 31 N	090 19 W	0.35
01	01	860924	19.45	58	62	31			3	263			4.86
01	02	860924	19.45	58	62	31	06	03	2	263	08 00 N	089 37 W	9.72
01	03	860924	19.45	31	58	62	06	03	2	273			3.57
01	04	860924	19.45	31	58	62	06	03	3	273			0.65
01	05	860924	19.45	31	58	62	06	03	3	263			2.27
01	06	860924	19.45	31	58	62	06	03	3	263			2.27
01	07	860924	19.45	31	58	62	06	03	2	268			4.21
01	08	860924	19.45	31	58	62	06	03	3	268			1.62
01	09	860924	19.45	62	31	58	06	02	3	268			11.67
01	10	860924	19.45	62	31	58			3	268			1.30
01	11	860924	19.45	62	31	58	06	02	3	268			1.62
01	12	860924	17.96	56	22	04	06	02	3	268	08 00 N	089 57 W	4.79
01	13	860924	17.96	56	22	04	05	02	3	311			7.78
01	14	860924	17.96	04	56	22	05	01	3	311			11.38
01	15	860924	17.96	22	04	56	05	01	3	311			8.08
01	16	860924	17.96	22	04	56	05	01	2	311			2.10
01	17	860924	17.96	22	04	56	05	01	3	311			2.40
01	18	860924	20.19	58	62	31	06	01	3	304	08 10 N	090 17 W	9.42
02	01	860924	20.00	31	58	62	06	01	3	304	08 14 N	090 22 W	2.33
02	02	860924	20.00	31	58	62	06	01	2	304			3.33
03	01	860924	20.37	62	31	58	06	12	2	304	08 16 N	090 27 W	9.17
04	01	860924	10.00	56	22	04	09	12	3	309	08 17 N	090 27 W	6.50
04	02	860924	10.00	04	56	22	09	12	3	309			4.83
04	03	860924	10.00	04	56	22	09	01	3	309			1.83
04	04	860924	10.00	22	04	56	10	01	3	309			3.33
05	01	860924	21.30	22	04	56	10	01	3	309	08 30 N	090 39 W	3.55
05	02	860924	21.30	58	62	31	10	01	3	309			14.20
05	03	860924	21.30	31	58	62	10	01	3	309			14.20
05	04	860924	21.30	62	31	58	11	02	3	309			14.20
05	05	860924	18.15	56	22	04	11	02	3	309	08 44 N	090 59 W	9.07
05	06	860924	18.15	04	56	22	11	02	3	309			3.63
06	01	860924	18.52	04	56	22			3	309	08 48 N	091 55 W	1.85
06	02	860924	18.52	22	04	56	11	02	3	309			0.31
06	03	860924	18.52	22	04	56			3	309			0.62
06	04	860924	18.52	22	04	56	11	03	3	309			6.79

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
07	01	860924	20.37	58	62	31	11	03	3	309	08 54 N	091 13 W	4.41
01	01	860925	20.74	22	04	56			3	320	10 11 N	092 47 W	1.73
01	02	860925	20.74	22	04	56	04	03	3	320			3.46
02	01	860925	21.11	22	04	56	04	03	3	320	10 18 N	092 53 W	0.70
02	02	860925	21.11	56	22	04	04	02	3	320			5.63
03	01	860925	21.30	04	56	22	04	02	3	320	10 22 N	093 01 W	1.42
03	02	860925	21.30	31	58	62	04	02	3	320			14.20
03	03	860925	21.30	62	31	58	05	02	3	320			14.55
03	04	860925	21.30	58	62	31	05	01	3	320			4.97
04	01	860925	22.41	58	62	31	05	01	3	320	10 37 N	093 14 W	2.24
05	01	860925	22.41	22	04	56	05	01	3	320			13.45
05	02	860925	22.41	56	22	04	05	01	3	320			11.20
05	03	860925	22.41	04	56	22	05	12	3	320			5.98
05	04	860925	22.41	04	56	22	06	12	3	314			7.47
05	05	860925	21.30	31	58	62	12	12	3	314	10 55 N	093 30 W	14.20
05	06	860925	21.30	62	31	58	12	12	3	314			15.62
05	07	860925	21.30	58	62	31	09	12	3	314			12.78
05	08	860925	21.48	22	04	56	10	01	3	314	11 11 N	093 46 W	0.72
06	01	860925	20.93	56	22	04	10	02	2	314	11 18 N	093 52 W	3.84
07	01	860925	21.30	31	58	62	10	02	2	314	11 30 N	093 51 W	0.35
08	01	860925	22.04	31	58	62	10	02	2	314	11 30 N	093 51 W	2.20
09	01	860925	21.67	62	31	58	10	02	2	314	11 32 N	093 52 W	6.50
01	01	860926	19.08	31	22	58	05	03	3	311	12 45 N	095 33 W	11.45
01	02	860926	19.08	58	31	22	05	03	3	311			9.54
01	03	860926	19.08	58	31	22	05	02	3	311			2.23
01	04	860926	19.08	22	58	31	05	02	3	311			2.54
02	01	860926	18.71	56	62	04	05	02	3	311	12 56 N	095 49 W	10.60
02	02	860926	18.71	04	56	62	05	02	3	311			9.66
02	03	860926	18.71	62	04	56	05	01	3	311			9.35
02	04	860926	20.00	31	22	58	06	01	3	311	13 07 N	096 03 W	13.33
02	05	860926	20.00	58	31	22	06	01	3	311			13.67
02	06	860926	20.00	22	58	31	06	12	3	311			9.33
02	07	860926	20.00	22	58	31	06	12	3	311			3.67
02	08	860926	20.37	56	62	04	07	12	3	311	13 17 N	096 17 W	13.58
02	09	860926	20.37	04	56	62	12	12	3	311			13.58
02	10	860926	20.37	62	04	56	08	01	3	311			1.70
03	01	860926	16.11	31	22	58	10	02	3	305	13 30 N	096 30 W	2.95

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	01	860926	19.45	31	22	58	10	02	3	305	13 31 N	096 32 W	1.94
04	02	860926	19.45	58	31	22	11	02	3	305			6.48
04	03	860926	19.45	56	62	04	10	02	3	305			9.72
04	04	860926	19.45	04	56	62	11	02	3	305			9.72
04	05	860926	19.08	62	04	56	11	02	3	305	13 38 N	096 45 W	2.54
05	01	860926	19.26	31	22	58	11	03	3	305	13 38 N	096 49 W	4.82
05	02	860926	19.26	58	31	22	11	03	3	305			9.63
01	01	860927	19.63	04	56	62			5	308	14 44 N	098 33 W	8.18
01	02	860927	19.63	62	04	56			5	308			6.87
02	01	860927	19.08	56	62	04			5	308	14 49 N	098 42 W	8.90
02	02	860927	19.08	58	22	31	05	02	5	308			12.40
02	03	860927	19.08	31	58	22	05	02	5	308			12.72
02	04	860927	19.08	22	31	58	05	02	5	308			13.03
02	05	860927	19.08	04	56	62	06	01	5	308			4.45
03	01	860927	17.22	62	04	56			4	308	15 06 N	099 05 W	8.04
03	02	860927	17.22	56	62	04			4	308			1.15
04	01	860927	17.22	56	62	04			3	308			6.89
04	02	860927	19.08	58	22	31			3	308	15 11 N	099 13 W	12.72
04	03	860927	19.08	31	58	22			3	308			3.82
04	04	860927	19.08	31	58	22			4	308			8.90
04	05	860927	19.08	22	31	58			3	308			3.18
05	01	860927	20.00	04	56	62	10	02	3	308	15 26 N	099 19 W	8.33
05	02	860927	20.00	62	04	56	10	02	3	308			5.33
06	01	860927	20.00	56	62	04	10	02	3	308			11.00
06	02	860927	20.00	58	22	31	10	02	3	308	15 37 N	099 32 W	5.67
06	03	860927	20.00	31	58	22	10	02	4	308			4.33
06	04	860927	20.00	22	31	58	11	02	4	308			20.00
06	05	860927	20.19	04	56	62	11	03	4	308	15 47 N	099 45 W	7.40
06	06	860927	20.19	62	04	56	11	03	4	308			2.69
01	01	860928	18.71	31	58	22			3	303			11.53
01	02	860928	18.71	22	31	58	05	03	3	303	16 46 N	101 28 W	4.68
02	01	860928	17.59	04	62	56	05	02	3	303	16 45 N	101 34 W	8.80
03	01	860928	19.45	56	04	62	06	01	2	303	16 51 N	101 42 W	1.62
04	01	860928	18.71	31	58	22	06	01	2	303	16 55 N	101 45 W	0.94
05	01	860928	19.82	22	31	58	06	01	1	303	16 59 N	101 50 W	9.58
05	02	860928	19.82	58	22	31			1	303			8.92
05	03	860928	19.82	04	62	56			1	303			4.62

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
06	01	860928	19.82	56	04	62			2	303	17 04 N	102 06 W	7.60
06	02	860928	19.82	62	56	04			2	303			8.26
06	03	860928	19.82	31	58	22			2	303			13.21
06	04	860928	19.82	22	31	58			2	303			13.21
06	05	860928	19.82	58	22	31			2	303			13.21
06	06	860928	19.08	04	62	56			2	303	17 19 N	107 33 W	9.54
06	07	860928	19.08	56	04	62			3	303			9.54
06	08	860928	19.08	62	56	04	11	02	2	303			3.18
07	01	860928	19.63	62	56	04	11	02	2	303	17 27 N	102 47 W	3.27
07	02	860928	19.63	31	58	22	11	02	2	303			2.29
01	01	860929	18.33	04	58	62			2	316	17 30 N	102 51 W	0.92
02	01	860929	18.89	04	58	62	04	03	2	316	17 31 N	102 54 W	0.63
03	01	860929	19.08	22	56	31	05	02	2	313	17 32 N	102 58 W	5.09
03	02	860929	19.08	31	22	56	05	02	2	313			1.59
04	01	860929	20.56	04	58	62	05	01	3	313	17 33 N	103 06 W	13.36
04	02	860929	20.56	62	04	58	06	01	2	313			13.70
04	03	860929	20.56	58	62	04	06	01	2	313			11.31
05	01	860929	20.00	22	58	31	08	01	2	313	17 46 N	103 29 W	9.67
05	02	860929	20.00	31	22	56	09	01	2	313			9.00
05	03	860929	20.00	56	31	22	09	01	2	313			9.67
05	04	860929	21.11	04	58	62	09	01	2	313	17 57 N	103 41 W	14.43
05	05	860929	21.11	62	04	58	10	01	2	313			4.93
06	01	860929	20.00	58	62	04	07	02	2	050	18 06 N	103 52 W	1.33
07	01	860929	20.00	22	56	31	07	02	3	050			7.67
07	02	860929	20.19	31	22	56			3	000	18 10 N	103 48 W	4.71
07	03	860929	20.56	31	22	56			3	320	18 14 N	103 48 W	1.71
07	04	860929	20.56	31	22	56	10	02	3	320			0.34
08	01	860929	20.56	04	58	62	10	03	3	320	18 21 N	103 47 W	3.08
08	02	860929	20.56	04	58	62			3	320			4.11
01	01	861004	21.85	59	04	62	02	02	3	185	18 56 N	104 21 W	1.46
02	01	861004	20.93	59	04	62	02	02	3	185	18 55 N	104 22 W	0.70
03	01	861004	20.74	22	56	31	02	02	3	185	18 52 N	104 22 W	1.73
04	01	861004	20.00	31	22	56	02	02	3	185	18 52 N	104 21 W	6.67
04	02	861004	20.00	56	31	22	02	02	3	185			6.67
04	03	861004	20.00	59	04	62	02	03	4	185			8.33
04	04	861004	20.00	62	59	04	02	03	4	185			4.67
01	01	861005	19.26	31	62	56			3	183			3.85

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
01	02	861005	19.26	31	62	56	09	03	3	183	16 41 N	104 34 W	3.85
01	03	861005	19.26	56	31	62	09	03	3	183			7.38
01	04	861005	19.26	62	56	31	09	03	2	183			1.28
02	01	861005	18.71	62	56	31	09	03	2	183	16 34 N	104 36 W	4.05
02	02	861005	18.71	22	04	59	09	02	2	183			12.47
02	03	861005	18.71	59	22	04	09	02	2	183			5.30
03	01	861005	18.52	04	59	22	09	02	3	183	16 20 N	104 35 W	2.78
04	01	861005	19.26	04	59	22	09	02	3	183	16 17 N	104 35 W	5.46
04	02	861005	19.26	31	62	56	10	02	3	183			6.42
04	03	861005	19.26	31	62	56	10	01	3	183			6.74
04	04	861005	19.26	56	31	62	10	01	3	183			12.84
04	05	861005	19.26	62	56	31	10	01	3	183			8.99
05	01	861005	19.08	22	04	59	12	12	3	183	15 54 N	104 38 W	6.36
06	01	861005	19.26	59	22	04	12	01	3	183	15 50 N	104 38 W	10.27
06	02	861005	19.26	04	59	22	12	01	3	183			12.84
06	03	861005	19.08	31	62	56	01	01	3	183	15 38 N	104 38 W	12.72
06	04	861005	19.08	56	31	62	02	01	3	183			12.72
06	05	861005	19.08	62	56	31	02	01	3	183			9.86
07	01	861005	18.52	22	04	59	02	02	2	183	15 18 N	104 39 W	9.26
07	02	861005	18.52	59	22	04	02	02	2	183			9.26
07	03	861005	18.52	04	59	22	03	02	2	183			9.26
07	04	861005	18.52	31	62	56	03	02	2	183			5.25
07	05	861005	19.26	31	62	56	03	03	2	183	15 00 N	104 40 W	2.57
07	06	861005	19.26	56	31	62	03	03	2	183			8.03
07	07	861005	19.26	62	56	31	03	03	2	183			8.03
01	01	861006	19.45	04	22	99			1	183			6.48
01	02	861006	19.45	04	22	59			1	183	13 05 N	104 48 W	3.57
01	03	861006	19.45	56	04	22	09	03	1	183			7.78
01	04	861006	19.45	22	56	04	09	03	1	183			8.10
01	05	861006	19.45	56	31	62	09	02	1	183			3.24
01	06	861006	18.52	56	31	62	10	02	1	163	12 52 N	104 48 W	8.03
02	01	861006	18.71	62	56	31	11	02	1	135	12 47 N	104 40 W	5.61
03	01	861006	19.26	04	22	59	11	01	1	150	12 42 N	104 37 W	5.14
04	01	861006	18.89	59	04	22	10	02	1	183	12 26 N	104 33 W	10.39
04	02	861006	18.89	22	59	04	11	01	1	183			5.98
05	01	861006	19.26	56	31	62	11	01	1	183	12 24 N	104 32 W	6.42
05	02	861006	18.71	56	31	62	12	01	2	195	12 20 N	104 31 W	2.81

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
05	03	861006	18.71	62	56	31	12	01	3	195			8.73
05	04	861006	18.71	31	62	56	12	01	3	195			4.36
05	05	861006	18.71	31	62	56	01	01	3	195			4.99
06	01	861006	18.33	04	22	59	01	01	2	195	12 09 N	104 33 W	6.42
06	02	861006	18.33	04	22	59	01	01	3	195			4.28
06	03	861006	18.33	59	04	22			3	195			2.14
06	04	861006	18.33	59	04	22			3	195			0.31
06	05	861006	18.33	59	04	22	01	01	3	195			1.53
06	06	861006	18.33	59	04	22	01	01	3	195			3.06
07	01	861006	18.33	22	59	04	02	02	3	195	12 01 N	104 35 W	3.06
07	02	861006	18.33	56	31	62	02	02	3	195			9.47
07	03	861006	18.33	62	56	31	02	02	3	195			7.33
08	01	861006	18.33	31	62	56	02	02	3	195	11 48 N	104 36 W	5.19
08	02	861006	18.33	04	22	59	02	02	2	195			7.64
08	03	861006	18.33	04	22	59			2	195			1.83
08	04	861006	18.33	59	04	22	02	03	3	195			1.22
08	05	861006	18.33	59	04	22			3	195			1.83
08	06	861006	18.33	59	04	22			3	195			2.14
08	07	861006	18.33	59	04	22	02	03	3	195			3.67
08	08	861006	19.26	22	59	04	02	03	3	195	11 34 N	104 39 W	3.21
01	01	861007	19.82	62	56	31			3	195	09 53 N	104 55 W	8.26
01	02	861007	19.82	31	62	56			3	195			4.95
01	03	861007	19.82	31	62	56			3	195			3.30
01	04	861007	19.82	56	31	62			3	195			8.26
01	05	861007	19.45	59	04	22			3	195	09 40 N	104 58 W	11.02
01	06	861007	19.45	59	04	22			3	195			0.97
01	07	861007	19.45	59	04	22			4	195			0.97
02	01	861007	19.63	22	59	04	09	02	4	195	09 28 N	105 02 W	2.62
03	01	861007	19.63	04	22	59			4	195	09 25 N	105 03 W	6.22
03	02	861007	19.63	04	22	59			3	195			3.60
03	03	861007	19.63	62	56	31	09	02	4	195			8.51
03	04	861007	19.63	62	56	31	09	01	4	195			1.64
03	05	861007	19.63	62	56	31			3	195			2.94
03	06	861007	19.63	31	62	56			3	195			2.29
03	07	861007	19.63	31	62	56	03	01	3	195			1.31
04	01	861007	19.08	56	31	62	10	01	4	195	09 10 N	105 07 W	0.95
04	02	861007	19.08	56	31	62			4	195			4.77

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	03	861007	19.08	56	31	62	10	01	3	195			7.63
04	04	861007	18.89	59	04	22	10	01	3	195	09 04 N	105 09 W	12.59
04	05	861007	18.89	22	59	04	11	01	4	195			12.59
04	06	861007	18.89	04	22	59	12	12	3	195			13.22
04	07	861007	19.26	62	56	31	01	01	3	195	08 43 N	105 12 W	10.59
04	08	861007	19.26	62	56	31	02	01	3	195			1.61
04	09	861007	19.26	31	62	56	02	01	3	195			7.70
04	10	861007	19.26	31	62	56			3	195			1.61
05	01	861007	18.33	31	62	56	02	01	3	190	08 31 N	105 13 W	2.14
05	02	861007	18.33	56	31	62	02	01	3	190			5.81
05	03	861007	18.33	56	31	62	02	02	4	190			1.83
05	04	861007	18.33	56	31	62	02	02	4	190			3.97
05	05	861007	18.33	59	04	22	02	02	4	190			0.61
06	01	861007	17.04	59	04	22			4	170	08 21 N	105 14 W	5.11
06	02	861007	17.04	22	59	04	03	02	4	170			8.52
06	03	861007	17.04	04	22	59			3	170			8.52
06	04	861007	19.08	62	56	31			3	190	08 09 N	105 11 W	5.09
06	05	861007	19.08	62	56	31	03	03	3	190			2.86
06	06	861007	19.08	31	62	56			3	190			0.95
06	07	861007	19.08	31	62	56	02	03	3	190			5.40
06	08	861007	19.08	31	62	56			3	190			2.23
01	01	861008	17.78	59	56	04			5	195	06 24 N	105 21 W	5.33
02	01	861008	17.78	04	59	56			5	195	06 21 N	105 21 W	3.85
02	02	861008	17.78	04	59	56			5	195			4.74
02	03	861008	17.78	04	59	56			5	195			2.07
02	04	861008	17.78	22	31	62			5	195			4.44
02	05	861008	17.78	22	31	62	09	02	5	195			2.67
02	06	861008	17.78	22	31	62	09	02	5	195			5.04
02	07	861008	17.78	62	22	31	09	02	5	195			5.63
03	01	861008	16.85	62	22	31			5	195	06 03 N	105 23 W	2.81
03	02	861008	16.85	31	62	22			5	195			1.97
04	01	861008	19.82	31	62	22	02	02	5	055	06 02 N	105 22 W	7.93
04	02	861008	19.82	59	56	04	02	01	5	055			13.21
04	03	861008	19.82	04	59	56	02	01	5	055			13.21
04	04	861008	19.82	56	04	59	02	02	4	055			11.56
05	01	861008	21.30	22	31	62	03	01	5	055	06 22 N	104 58 W	9.23
06	01	861008	21.30	62	22	31	06	01	5	055			8.87

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
06	02	861008	21.30	31	62	22			5	055			8.87
06	03	861008	21.67	04	56	59	06	01	4	055	06 30 N	104 47 W	13.36
06	04	861008	21.48	04	56	59	06	01	4	060	06 33 N	104 41 W	1.43
06	05	861008	21.48	59	04	56	06	01	5	060			13.96
06	06	861008	21.48	56	59	04	07	01	5	060			10.03
06	07	861008	21.48	56	59	04	07	02	4	060			4.30
06	08	861008	20.56	22	31	62	07	02	5	060	06 42 N	104 26 W	10.28
06	09	861008	20.56	62	22	31			5	060			3.77
06	10	861008	20.56	62	22	31	07	02	5	060			6.51
06	11	861008	20.56	31	62	22	07	02	5	060			5.48
06	12	861008	20.56	31	62	22	07	02	5	060			1.37
06	13	861008	20.56	31	62	22	07	02	5	060			3.43
06	14	861008	20.56	31	62	22			5	060			0.34
06	15	861008	20.56	59	56	04			5	060			9.94
06	16	861008	21.11	04	59	56			5	060	06 52 N	104 07 W	10.56
06	17	861008	21.11	56	04	59	07	03	3	060			3.87
01	01	861009	21.11	62	22	31			3	060	07 47 N	102 29 W	5.98
01	02	861009	21.11	62	22	31			3	060			3.87
01	03	861009	21.11	31	62	22			3	060			7.04
01	04	861009	21.11	31	62	22			3	060			5.98
01	05	861009	21.11	22	31	62			3	060			2.11
01	06	861009	21.11	22	31	62			4	060			3.17
02	01	861009	19.82	04	59	56			4	060	07 56 N	102 13 W	6.28
02	02	861009	19.82	04	59	56	01	02	4	060			1.98
03	01	861009	18.52	56	04	59			3	060	07 58 N	102 08 W	6.48
03	02	861009	18.52	56	04	59			3	060			4.32
04	01	861009	20.19	62	22	31			3	060	08 10 N	101 49 W	6.73
04	02	861009	20.19	31	62	22			3	060			1.01
01	01	861010	17.41	04	59	56			2	033	10 14 N	099 31 W	0.87
01	02	861010	17.41	04	59	56			2	053			4.64
01	03	861010	17.41	56	04	59			2	053			5.80
01	04	861010	17.41	59	56	04			2	053			5.80
01	05	861010	17.41	31	62	22			2	053			1.16
02	01	861010	18.89	22	31	62	02	02	1	052	10 29 N	099 22 W	7.87
02	02	861010	18.89	22	31	62	02	02	2	052			2.52
03	01	861010	18.52	62	22	31	02	01	2	053	10 31 N	099 19 W	6.17
03	02	861010	18.52	62	22	31	12	01	2	100			1.54

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
03	03	861010	18.52	04	59	56	12	01	2	100			0.62
04	01	861010	18.52	04	59	56	02	01	2	059	10 34 N	099 13 W	8.33
04	02	861010	18.52	56	04	59	02	01	2	059			12.35
04	03	861010	18.52	59	56	04	02	01	2	059			12.35
04	04	861010	19.63	31	62	22	03	12	2	059	10 46 N	099 00 W	11.78
05	01	861010	19.63	22	31	62			2	059	10 56 N	098 49 W	3.60
05	02	861010	19.63	04	59	56			2	059			3.60
05	03	861010	19.63	04	59	56	06	01	2	059			9.49
06	01	861010	18.52	56	04	59	06	01	2	059	11 02 N	098 40 W	0.31
07	01	861010	18.71	56	04	59	07	02	2	059	11 02 N	098 38 W	2.18
07	02	861010	18.71	59	56	04	07	02	2	059			10.60
08	01	861010	20.37	31	62	22	07	02	1	059	11 10 N	098 31 W	6.11
08	02	861010	20.37	22	31	62			1	059			1.70
09	01	861010	16.67	22	31	62			1	059	11 13 N	098 27 W	0.83
09	02	861010	16.67	04	59	56			1	059			1.39
10	01	861010	19.26	04	59	56			1	059	11 13 N	098 25 W	3.53
01	01	861011	19.26	31	59	24	01	03	3	053	12 13 N	097 00 W	1.61
01	02	861011	19.26	31	59	56	01	03	3	053			8.03
02	01	861011	19.26	56	31	59	02	03	3	053			7.06
02	02	861011	19.26	56	59	31	02	02	3	053			4.49
02	03	861011	19.26	22	62	04	02	02	3	053	12 19 N	096 50 W	13.16
02	04	861011	19.26	04	22	62	02	02	3	053			12.20
02	05	861011	19.26	62	04	22	02	02	3	053			13.48
02	06	861011	19.82	31	59	56	02	01	3	047	12 33 N	096 33 W	0.99
03	01	861011	20.00	31	59	56	02	01	3	047	12 36 N	096 29 W	4.00
04	01	861011	18.15	56	31	59	03	01	3	047	12 37 N	096 27 W	5.44
04	02	861011	18.15	59	56	31	04	01	3	047			10.28
04	03	861011	18.15	22	62	04	04	12	3	047			12.10
04	04	861011	18.15	04	22	62	05	01	3	047			8.47
05	01	861011	17.78	04	22	62	06	01	2	047	12 54 N	096 13 W	1.19
05	02	861011	17.78	62	04	22	06	01	2	047			5.33
06	01	861011	18.52	62	04	22	06	01	2	047	12 57 N	096 10 W	1.54
07	01	861011	17.04	56	31	59	07	02	2	047	12 59 N	096 04 W	8.80
07	02	861011	17.04	59	56	31	07	02	2	047			6.82
08	01	861011	18.52	04	62	22	07	02	2	047	13 07 N	095 53 W	6.79
08	02	861011	18.52	22	04	62	07	03	2	047			8.64
08	03	861011	18.52	31	59	56	07	03	2	047			1.54

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
09	01	861011	18.52	31	59	56	07	03	2	047			0.31
09	02	861011	18.52	56	31	59	07	03	2	047			7.72
09	03	861011	19.08	56	31	59	07	03	2	047	13 16 N	095 39 W	0.32
01	01	861012	19.82	22	04	62	09	03	3	200	11 51 N	096 01 W	9.58
02	01	861012	19.82	62	22	04	09	03	3	200			2.97
02	02	861012	19.82	62	22	04	09	03	4	200			8.26
02	03	861012	19.82	04	62	22	09	02	4	200			3.30
02	04	861012	19.82	04	62	22			4	200			3.30
02	05	861012	17.96	59	56	31	09	02	5	200	11 34 N	096 07 W	11.98
02	06	861012	17.96	31	59	56	09	02	5	200			5.69
03	01	861012	17.59	31	59	56	09	02	5	200	11 23 N	096 10 W	4.40
03	02	861012	17.59	56	31	59	09	02	5	200			5.28
03	03	861012	17.59	56	31	59	10	01	5	193			6.45
03	04	861012	17.59	22	04	62	10	02	4	193			2.64
04	01	861012	20.00	22	04	62	10	02	4	193	11 11 N	096 17 W	1.67
04	02	861012	20.00	22	04	62			4	193			1.67
05	01	861012	20.56	62	22	04	10	01	4	193	11 07 N	096 17 W	13.36
05	02	861012	20.56	04	62	22	10	01	4	193			1.71
06	01	861012	20.37	59	56	31	11	01	4	200	10 58 N	096 20 W	10.19
07	01	861012	21.30	31	59	56	12	01	4	200	10 51 N	096 23 W	4.26
08	01	861012	18.33	31	59	56	12	01	4	200	10 48 N	096 25 W	3.06
08	02	861012	18.33	56	31	59	01	01	3	200			4.89
08	03	861012	18.33	56	31	59	01	01	3	200			7.33
08	04	861012	18.33	22	04	62			3	200			0.61
09	01	861012	18.71	22	04	62	01	01	3	200	10 37 N	096 29 W	5.30
09	02	861012	18.71	22	04	62	01	01	4	200			5.92
09	03	861012	18.71	62	22	04	01	01	4	200			2.81
09	04	861012	18.71	62	22	04	01	01	3	200			9.04
09	05	861012	18.71	04	62	22	02	02	3	200			12.78
09	06	861012	20.19	59	56	31	02	02	3	200	10 19 N	096 37 W	9.76
09	07	861012	20.19	31	59	56	02	02	3	200			10.09
09	08	861012	20.19	56	31	59	02	02	3	200			10.09
09	09	861012	20.19	22	04	62	02	03	3	200			2.69
09	10	861012	20.19	22	04	62	02	03	3	200			2.36
09	11	861012	20.19	62	22	04	02	03	3	200			5.72
09	12	861012	20.00	04	62	22	02	03	3	200	09 59 N	096 45 W	4.33
01	01	861013	18.71	56	59	31			3	195	08 24 N	097 21 W	3.43

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
01	02	861013	18.71	56	59	31	09	03	3	195			4.68
01	03	861013	18.71	56	59	31			3	195			1.25
01	04	861013	18.71	56	59	31			3	195			1.56
02	01	861013	18.33	31	56	59	09	03	3	195	08 17 N	097 22 W	6.11
02	02	861013	18.33	31	56	59			3	195			1.53
02	03	861013	18.33	31	56	59			3	195			1.22
02	04	861013	18.33	59	31	56			3	195			2.44
02	05	861013	18.33	59	31	56	09	02	3	195			7.03
02	06	861013	18.33	22	62	04	09	02	3	195			1.53
03	01	861013	17.59	22	62	04	09	02	3	195	08 07 N	097 24 W	3.81
04	01	861013	17.78	04	22	62	09	02	3	195	08 05 N	097 24 W	1.78
04	02	861013	17.78	04	22	62			3	195			1.19
04	03	861013	17.78	04	22	62			3	195			6.22
05	01	861013	17.59	62	04	22			3	195	07 56 N	097 23 W	5.86
05	02	861013	17.59	62	04	22			4	195			2.64
05	03	861013	17.59	56	59	31			4	195			4.69
05	04	861013	17.59	56	59	31			4	195			1.17
06	01	861013	18.52	59	31	56			4	195	07 38 N	097 28 W	1.85
06	02	861013	18.52	59	31	56			4	195			1.54
01	01	861015	20.37	31	62	59			5	035	02 53 N	098 48 W	10.19
01	02	861015	20.37	59	31	62			5	035			10.19
01	03	861015	20.37	62	59	31			5	035			10.19
01	04	861015	18.52	22	56	04	02	02	5	035	03 06 N	098 39 W	12.35
01	05	861015	18.52	04	22	56	02	02	5	035			5.56
01	06	861015	18.52	04	22	56			5	035			6.79
01	07	861015	18.52	56	04	22			5	035			10.19
02	01	861015	19.82	31	62	59	02	01	5	035	03 24 N	098 26 W	10.90
02	02	861015	19.82	59	31	62	03	01	5	035			13.54
02	03	861015	19.82	62	59	31	03	01	5	035			2.64
03	01	861015	21.11	59	62	31			5	035	03 40 N	098 16 W	2.82
03	02	861015	21.11	22	56	04			5	035			14.08
03	03	861015	21.11	04	22	56			5	035			14.08
03	04	861015	21.11	56	04	22			5	035			5.98
03	05	861015	21.11	56	04	22			6	035			5.98
04	01	861015	20.74	31	62	59			5	035	04 03 N	098 03 W	8.64
04	02	861015	20.74	59	31	62			5	035			7.26
05	01	861015	20.74	62	59	31			5	035			6.91

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
05	02	861015	19.82	22	56	04			5	035	04 12 N	097 56 W	9.91
05	03	861015	19.82	04	22	56			5	035			10.24
05	04	861015	19.82	56	04	22			5	035			9.58
05	05	861015	19.82	31	62	59	07	02	5	035	04 26 N	097 46 W	2.64
05	06	861015	19.82	31	62	59			5	035			3.96
05	07	861015	19.82	59	31	62			5	035			7.60
01	01	861016	21.30	04	22	56	02	03	6	030	06 04 N	096 36 W	6.03
01	02	861016	21.30	04	22	56			6	030			6.74
01	03	861016	21.30	56	04	22			6	030			4.61
01	04	861016	21.30	56	04	22	02	02	6	030			2.48
01	05	861016	21.30	56	04	22			6	030			3.19
01	06	861016	21.30	22	56	04	03	02	6	030			10.65
01	07	861016	21.48	59	31	62	02	02	5	030	06 19 N	096 26 W	5.37
01	08	861016	21.48	59	31	62			5	030			3.58
01	09	861016	21.48	59	31	62	02	02	5	030			5.37
01	10	861016	21.48	62	59	31	03	02	5	030			14.32
01	11	861016	21.48	31	62	59	03	01	5	030			14.32
01	12	861016	21.11	04	22	56	03	01	5	030	06 37 N	096 14 W	14.08
01	13	861016	21.11	56	04	22	03	01	5	030			14.08
01	14	861016	21.11	22	56	04	04	01	5	030			14.08
01	15	861016	20.74	59	31	62	05	12	5	030	06 57 N	096 03 W	6.57
01	16	861016	20.74	59	31	62	06	12	5	030			7.26
01	17	861016	20.74	62	59	31	06	01	6	030			11.06
01	18	861016	20.74	62	59	31			6	030			2.77
01	19	861016	20.74	31	62	59	07	01	5	030			3.46
01	20	861016	20.74	31	62	59			5	030			10.37
01	21	861016	21.67	04	22	56			5	027	07 17 N	095 50 W	2.89
02	01	861016	20.74	56	04	22			6	027	07 27 N	095 51 W	1.73
03	01	861016	20.74	59	31	62			4	027	07 34 N	095 47 W	1.38
04	01	861016	20.74	59	31	62			5	027			2.42
04	02	861016	20.74	62	59	31			5	027			10.37
04	03	861016	21.11	31	62	59			4	030	07 43 N	095 42 W	5.63
04	04	861016	21.11	31	62	59			5	030			4.93
04	05	861016	21.11	04	22	56			5	030			1.41
01	01	861017	20.74	22	59	31			3	038	09 25 N	094 36 W	10.37
01	02	861017	20.74	31	22	59	02	03	3	038			6.22
02	01	861017	19.45	59	31	22	02	02	3	038	09 35 N	094 32 W	7.13

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
02	02	861017	20.00	04	56	62	02	02	3	038	09 39 N	094 29 W	13.33
02	03	861017	20.00	62	04	56	02	02	3	038			7.00
03	01	861017	18.52	62	04	56	02	02	3	038	09 48 N	094 21 W	3.40
03	02	861017	18.52	56	62	04	02	02	3	038			12.35
03	03	861017	18.52	22	59	31	03	02	3	038			8.03
04	01	861017	18.52	31	22	59			3	038			1.85
04	02	861017	20.74	31	22	59			3	038	10 06 N	094 08 W	8.30
04	03	861017	20.74	59	31	22			3	038			3.11
05	01	861017	20.37	59	31	22			3	038	10 10 N	094 04 W	1.36
05	02	861017	20.37	59	31	22	04	12	3	038			1.02
05	03	861017	20.37	59	31	22	04	12	2	038			1.36
05	04	861017	20.37	59	31	22	04	02	2	038			5.77
05	05	861017	21.30	04	56	62	05	01	2	038	10 15 N	094 01 W	7.45
05	06	861017	21.30	04	56	62	05	01	3	038			0.71
05	07	861017	16.85	04	56	62			3	038			4.78
05	08	861017	16.85	62	04	56	06	01	3	038			11.24
05	09	861017	16.85	56	62	04			2	038			2.25
06	01	861017	20.56	56	62	04	07	01	3	030	10 25 N	093 48 W	6.85
06	02	861017	20.56	22	59	31	07	01	3	030			9.94
07	01	861017	18.89	31	22	59	07	02	3	030	10 32 N	093 39 W	2.20
08	01	861017	19.08	31	22	59	08	02	3	025	10 35 N	093 37 W	1.91
08	02	861017	19.08	59	31	22	08	02	3	025			4.45
08	03	861017	19.08	59	31	22	08	02	3	025			1.59
08	04	861017	19.08	04	56	62	08	02	3	025			2.23
09	01	861017	18.52	04	56	62			3	025	10 39 N	093 35 W	3.40
10	01	861017	18.89	62	04	56	08	03	3	025	10 42 N	093 32 W	3.78
11	01	861017	17.78	62	04	56			3	025	10 46 N	093 31 W	2.37
12	01	861017	17.78	56	62	04			2	025			2.96
12	02	861017	18.71	22	59	31			2	025	10 48 N	093 25 W	4.68
12	03	861017	18.71	31	22	59			2	025			3.12
01	01	861018	20.56	56	62	99			2	040	12 13 N	092 36 W	2.40
01	02	861018	20.56	56	62	99	02	03	2	040			11.99
01	03	861018	20.56	99	56	62	02	03	1	040			4.11
01	04	861018	20.56	04	56	62	02	03	1	040			9.94
01	05	861018	20.56	62	04	56	02	02	1	040			13.36
01	06	861018	20.37	31	22	59	02	02	1	040	12 31 N	092 22 W	11.20
02	01	861018	19.82	56	62	04	03	01	1	055	12 45 N	092 27 W	0.99

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
03	01	861018	19.82	04	56	62	03	01	1	055			14.20
03	02	861018	19.82	31	22	59	04	12	1	055	12 54 N	092 15 W	12.88
03	03	861018	19.82	59	31	22	05	01	1	055			4.95
04	01	861018	20.00	59	31	22	05	01	1	055	13 00 N	092 07 W	6.67
04	02	861018	20.00	22	59	31	06	01	1	055			6.67
05	01	861018	20.00	22	59	31	01	01	1	177	13 02 N	092 00 W	1.67
06	01	861018	18.52	56	62	04	02	02	1	177	13 00 N	092 02 W	1.85
07	01	861018	19.63	56	62	04	02	02	1	170	12 58 N	092 01 W	2.94
08	01	861018	16.85	04	56	62	02	02	1	177	12 57 N	092 02 W	6.18
08	02	861018	16.85	62	04	56	02	02	1	177			3.65
08	03	861018	16.85	31	22	59	02	02	1	177			8.43
08	04	861018	16.85	59	31	22	03	02	1	177			6.18
08	05	861018	16.85	59	31	22	03	03	1	177			2.25
08	06	861018	18.52	22	59	31	03	03	1	177	12 40 N	092 01 W	9.26
08	07	861018	18.52	04	62	56	03	03	1	177			5.25
01	01	861019	19.45	31	22	59			1	190	10 50 N	091 55 W	0.97
02	01	861019	19.45	31	22	59			1	190	10 48 N	091 54 W	5.51
02	02	861019	19.45	31	22	59	09	03	1	190			2.27
02	03	861019	19.45	59	31	22	09	03	1	190			7.45
02	04	861019	19.45	59	31	22			1	190			1.94
02	05	861019	19.45	59	31	22	09	02	1	190			1.62
02	06	861019	19.45	59	31	22			1	190			1.30
02	07	861019	19.45	22	59	31	09	02	1	190			12.96
02	08	861019	19.45	56	04	62	09	02	1	193	10 30 N	091 55 W	12.96
02	09	861019	19.45	62	56	04	09	02	1	193			3.24
02	10	861019	19.45	62	56	04	03	01	1	010			9.72
02	11	861019	19.45	04	62	56	04	01	1	010			12.96
02	12	861019	21.30	31	22	59	04	01	1	010	10 31 N	091 54 W	3.55
02	13	861019	20.37	31	22	59	04	01	1	010	10 34 N	091 54 W	10.19
02	14	861019	19.45	59	31	22	04	01	1	010			2.27
02	15	861019	19.45	59	31	22	05	01	1	010			10.70
02	16	861019	19.45	22	59	04	05	01	1	010			4.21
02	17	861019	19.45	22	59	31	05	01	1	010			2.92
03	01	861019	19.45	22	59	31			1	010	10 52 N	091 49 W	0.32
04	01	861019	21.30	56	04	62	06	01	1	013	10 57 N	091 47 W	5.68
04	02	861019	21.30	62	56	04			2	013			14.20
04	03	861019	21.30	04	62	56	08	01	2	013			12.42

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
05	01	861019	20.56	31	59	56	08	01	2	013	11 14 N	091 42 W	4.80
05	02	861019	20.56	31	59	22	08	01	2	013			2.06
05	03	861019	20.56	31	59	22			2	013			6.85
05	04	861019	20.56	22	31	59			2	013			14.05
05	05	861019	20.56	59	22	31	08	02	3	013			1.37
06	01	861019	22.04	59	22	31	08	02	3	013	11 32 N	091 37 W	5.51
06	02	861019	22.04	56	04	62	08	02	4	013			1.10
06	03	861019	22.04	56	04	62	08	02	4	017			5.51
06	04	861019	22.04	56	04	62	08	02	3	017			4.41
06	05	861019	22.04	62	56	04	08	02	3	017			11.02
06	06	861019	21.11	04	62	56	08	03	3	017	11 47 N	091 33 W	10.56
06	07	861019	22.04	31	56	22	08	03	3	017			5.88
06	08	861019	22.04	31	56	22			3	017	11 55 N	091 30 W	0.73
01	01	861020	19.63	31	56	22	10	02	1	185	13 54 N	090 50 W	5.89
01	02	861020	19.63	22	31	56	10	02	1	185			5.23
02	01	861020	21.30	04	59	62	11	01	2	185	13 39 N	090 52 W	11.71
02	02	861020	21.30	62	04	59	11	01	2	185			10.65
02	03	861020	21.30	59	62	04	11	01	2	185			10.65
02	04	861020	20.74	31	56	22	12	01	2	185	13 23 N	090 54 W	3.80
03	01	861020	20.74	31	22	56	02	01	2	185			2.42
03	02	861020	19.45	04	59	62	02	01	2	185	13 13 N	090 51 W	12.96
03	03	861020	19.45	62	04	59	02	02	2	185			10.37
04	01	861020	19.63	62	04	59	02	02	2	185	13 00 N	090 53 W	1.64
04	02	861020	19.63	59	62	04	02	02	1	185			4.91
05	01	861020	18.52	31	56	22	02	02	1	185	12 55 N	090 57 W	2.78
06	01	861020	18.52	22	31	56	02	03	1	185			4.94
06	02	861020	18.52	56	22	31	02	03	2	185			7.72
06	03	861020	18.71	04	59	62	02	03	2	185	12 45 N	090 59 W	4.05
01	01	861021	19.45	31	22	56			2	195	11 01 N	091 09 W	0.97
02	01	861021	20.56	31	22	56	09	03	2	195	10 57 N	091 04 W	2.06
03	01	861021	19.08	56	31	22	09	02	2	195	10 52 N	091 06 W	1.59
04	01	861021	19.26	22	56	31	09	02	2	195	10 49 N	091 05 W	9.63
04	02	861021	19.26	62	04	59			2	195			6.42
04	03	861021	19.26	62	04	59	09	02	2	195			5.14
05	01	861021	20.00	59	62	04	09	02	2	195	10 35 N	091 05 W	2.67
06	01	861021	19.63	04	59	62	08	01	1	235	10 32 N	091 04 W	8.83
07	01	861021	19.82	04	59	62	09	01	1	235	10 28 N	091 09 W	0.66

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
07	02	861021	19.82	31	22	56	09	01	1	235			6.61
07	03	861021	19.82	31	22	56			1	235			2.64
07	04	861021	19.82	31	22	56	09	01	1	235			1.98
08	01	861021	18.89	56	31	22	09	01	1	235	10 23 N	091 14 W	1.26
09	01	861021	20.37	56	31	22			1	235	10 18 N	091 17 W	4.07
10	01	861021	20.19	62	04	59	11	01	1	235	10 14 N	091 16 W	5.05
11	01	861021	20.19	04	59	56	12	01	1	235			6.39
11	02	861021	20.37	04	22	56	12	01	1	235	10 05 N	091 26 W	12.90
11	03	861021	20.37	56	04	22	12	02	1	235			13.58
11	04	861021	20.37	22	56	04	12	02	1	235			13.24
11	05	861021	20.93	62	31	59	01	02	1	235	09 51 N	091 43 W	4.19
12	01	861021	19.63	59	62	31	01	02	1	235	09 46 N	091 45 W	0.65
13	01	861021	20.19	31	59	62	01	03	1	235	09 43 N	091 48 W	4.37
14	01	861021	20.37	31	59	62	01	03	1	235	09 41 N	091 50 W	3.73
14	02	861021	20.37	56	04	22	01	03	1	235			2.04
14	03	861021	20.37	56	04	22			1	235			3.73
01	01	861022	19.26	59	62	04			2	185	07 49 N	092 00 W	15.09
01	02	861022	19.26	04	59	62	09	03	3	185			12.84
01	03	861022	19.26	62	04	59	09	02	3	185			7.70
01	04	861022	19.26	62	04	59			3	185			5.14
01	05	861022	18.89	22	56	31	10	02	2	185	07 27 N	092 01 W	12.59
01	06	861022	18.89	31	22	56	10	02	2	185			9.45
01	07	861022	18.89	31	22	56			2	185			3.15
01	08	861022	18.89	56	31	22	10	02	2	185			9.45
02	01	861022	18.89	59	62	04			2	185	07 05 N	092 02 W	3.15
03	01	861022	19.45	59	62	04	11	01	2	185	07 04 N	092 02 W	3.57
03	02	861022	19.45	04	59	62	11	01	3	185			1.62
03	03	861022	19.45	04	59	62			2	185			4.86
03	04	861022	19.45	04	59	62	11	01	2	185			5.51
03	05	861022	19.45	04	59	62	11	01	3	185			0.97
03	06	861022	19.45	62	04	59			3	185			12.96
03	07	861022	20.19	22	56	31	12	01	2	185	06 47 N	092 03 W	10.77
03	08	861022	20.19	22	56	31	01	01	3	185			2.69
03	09	861022	20.19	31	22	56	01	01	3	185			6.39
03	10	861022	20.19	31	22	56			3	185			1.35
03	11	861022	20.19	31	22	56	01	01	3	185			5.72
03	12	861022	20.19	56	31	22	01	01	3	185			3.03

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	01	861022	19.63	56	31	22	02	01	3	185	06 29 N	092 04 W	4.25
04	02	861022	19.63	59	62	31	02	01	2	185			1.64
04	03	861022	19.63	59	62	04	02	01	2	185			11.78
04	04	861022	19.63	04	59	62	02	02	3	185			2.62
04	05	861022	19.63	04	59	62			2	185			2.62
04	06	861022	19.63	04	59	62	02	02	3	185			7.53
04	07	861022	19.63	62	04	59	02	02	3	185			6.54
05	01	861022	20.37	22	56	31	02	02	2	185	06 03 N	092 04 W	6.79
05	02	861022	20.37	31	22	56	02	03	2	185			5.43
01	01	861023	20.00	62	31	56			3	185	04 08 N	092 07 W	9.67
01	02	861023	20.00	62	31	56			3	185			4.33
02	01	861023	19.08	04	22	59			3	185	03 42 N	092 08 W	4.77
03	01	861023	18.52	59	04	22	10	02	5	185	03 36 N	092 08 W	4.94
03	02	861023	18.52	59	04	22			5	185			2.16
04	01	861023	19.08	62	31	56			4	185	03 18 N	092 09 W	7.95
05	01	861023	17.78	56	62	31			4	185	03 12 N	092 10 W	2.96
01	01	861024	14.63	22	59	04			5	180	00 44 N	092 11 W	2.19
02	01	861024	17.22	22	59	04			5	034	00 42 N	092 10 W	5.74
02	02	861024	17.22	04	22	59			5	035			11.77
02	03	861024	17.22	59	04	22			5	035			11.20
02	04	861024	21.30	56	31	62			5	035	00 58 N	092 01 W	14.91
02	05	861024	21.30	62	56	31			5	035			13.49
02	06	861024	21.30	31	62	56			5	035			4.61
02	07	861024	20.37	31	62	56			4	035	01 11 N	091 52 W	5.09
03	01	861024	20.00	22	59	04			4	035	01 17 N	091 50 W	3.67
04	01	861024	19.08	59	04	22			4	050	01 27 N	091 43 W	0.64
05	01	861024	20.00	59	04	22			4	050	01 30 N	091 41 W	5.67
05	02	861024	20.00	56	31	62			4	050			2.33
06	01	861024	18.52	56	31	62	06	12	4	050	01 33 N	091 40 W	4.63
06	02	861024	18.52	62	56	31			4	050			12.35
06	03	861024	18.52	31	62	56			4	050			3.09
07	01	861024	18.52	22	59	04			5	050	01 41 N	091 29 W	12.35
07	02	861024	18.52	04	22	59	07	01	5	050			7.72
07	03	861024	18.52	04	22	59			5	050			2.16
08	01	861024	19.08	04	22	59			5	050	01 50 N	091 20 W	1.27
08	02	861024	19.08	59	04	22			5	050			13.03
08	03	861024	19.08	56	31	62			4	040			9.54

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
08	04	861024	19.63	62	56	31			4	040	01 59 N	091 10 W	9.82
08	05	861024	19.63	31	62	56			4	040			9.82
08	06	861024	19.63	59	22	04			3	040			4.91
01	01	861025	20.56	31	62	56			2	036	03 37 N	090 06 W	2.74
01	02	861025	20.56	31	62	56	02	03	2	036			2.40
01	03	861025	20.56	31	62	56			2	036			3.43
01	04	861025	20.56	31	62	56	02	03	3	036			6.85
01	05	861025	20.56	56	31	62	02	03	3	036			6.17
01	06	861025	20.56	56	31	62			3	036			8.91
02	01	861025	20.56	59	22	04			3	036	03 54 N	089 59 W	6.85
03	01	861025	16.11	04	59	22			3	036	03 56 N	089 56 W	8.86
04	01	861025	20.37	22	04	59			3	036	04 03 N	089 50 W	10.19
04	02	861025	20.37	31	62	56			3	036			9.51
04	03	861025	21.11	31	62	56	03	01	3	036	04 12 N	089 44 W	4.22
04	04	861025	21.11	56	31	62	03	01	3	036			12.32
04	05	861025	21.11	56	31	62			3	036			1.76
04	06	861025	21.11	62	56	31			3	036			7.04
05	01	861025	20.56	59	22	04	06	01	3	036	04 28 N	089 34 W	5.14
05	02	861025	20.56	04	22	59	06	01	3	036			1.71
05	03	861025	20.56	04	59	22	06	01	3	036			6.85
05	04	861025	20.56	04	59	22			3	036			5.14
05	05	861025	20.56	22	04	59			3	036			13.70
05	06	861025	20.00	31	62	56			3	036	04 42 N	089 25 W	3.00
05	07	861025	20.00	31	62	56	07	01	3	036			5.33
06	01	861025	20.37	56	31	62			3	046	04 45 N	089 18 W	10.19
06	02	861025	20.37	62	56	31			3	046			10.19
06	03	861025	20.37	59	22	04			3	046			10.19
06	04	861025	20.37	04	59	22	07	02	3	046			2.04
06	05	861025	20.37	04	59	22			3	075			8.15
06	06	861025	21.85	22	04	59			3	075	05 01 N	089 02 W	10.93
06	07	861025	21.85	31	62	56			3	075			2.55
01	01	861027	18.71	31	62	22			3	019	06 05 N	088 17 W	14.96
02	01	861027	19.26	22	31	62	03	03	3	019	06 13 N	088 12 W	9.31
02	02	861027	19.26	22	31	62	03	02	3	019			1.61
03	01	861027	18.89	62	22	31			3	019	06 21 N	088 09 W	6.30
04	01	861027	19.82	56	04	59			3	019	06 27 N	088 06 W	6.94
05	01	861027	18.71	59	56	04	03	01	2	019	06 34 N	088 00 W	9.35

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
05	02	861027	18.71	04	59	56	03	01	2	019			8.11
05	03	861027	18.71	04	59	56			2	019			0.94
06	01	861027	18.33	31	62	22	05	01	2	000	06 52 N	087 59 W	1.83
07	01	861027	21.67	59	04	56	08	01	2	019	06 57 N	087 57 W	13.36
07	02	861027	21.67	31	62	22	08	01	2	019			14.08
07	03	861027	21.67	22	31	62	08	02	1	019			14.08
07	04	861027	21.67	62	22	31	08	02	2	019			7.22
08	01	861027	20.00	56	04	59	08	02	2	019	07 23 N	087 49 W	10.00
08	02	861027	20.00	57	56	04	08	03	1	019			10.00
08	03	861027	20.00	04	59	56	07	03	1	032			10.33
01	01	861028	20.56	04	59	56			1	035	09 16 N	086 44 W	1.37
01	02	861028	20.56	04	59	56	02	03	1	035			9.94
02	01	861028	20.74	04	59	56	02	03	1	035	09 21 N	086 40 W	2.77
02	02	861028	20.74	56	04	59	02	03	1	035			6.91
02	03	861028	19.26	56	04	59			1	132	09 27 N	086 36 W	8.67
02	04	861028	19.26	59	56	04	11	02	1	132			14.45
02	05	861028	18.33	31	22	62	11	02	1	132	09 19 N	086 27 W	12.22
02	06	861028	18.33	62	31	22	12	02	1	132			9.17
02	07	861028	18.33	62	31	22	12	01	1	132			4.28
02	08	861028	18.33	22	62	31			1	132			1.83
02	09	861028	19.63	22	62	31			1	107	09 09 N	086 14 W	5.56
03	01	861028	18.52	04	59	56	01	01	0	132	09 10 N	086 09 W	2.47
04	01	861028	17.59	56	04	59	02	01	0	132	09 10 N	086 08 W	3.81
04	02	861028	17.59	31	22	62	02	01	1	132			11.73
04	03	861028	17.59	62	31	22	03	01	1	132			1.76
05	01	861028	18.71	62	31	22	03	01	1	132	09 02 N	085 59 W	8.11
06	01	861028	18.33	22	62	31	03	01	0	132	08 59 N	085 55 W	9.78
06	02	861028	18.33	04	59	56	04	01	0	132			7.03
07	01	861028	19.26	56	04	59	04	02	0	132	08 51 N	085 47 W	1.61
08	01	861028	19.63	56	04	59	04	02	0	132	08 49 N	085 45 W	3.93
08	02	861028	19.63	59	56	04	04	02	0	132			13.09
08	03	861028	19.63	31	22	62	04	02	0	132			6.54
09	01	861028	19.26	62	31	22	04	03	0	132	08 42 N	085 34 W	7.70
09	02	861028	19.26	22	62	31			1	132			3.21
09	03	861028	19.26	22	62	31	04	03	1	132	08 38 N	085 30 W	4.82
01	01	861029	19.08	31	56	59			3	116	07 51 N	083 53 W	12.72
01	02	861029	19.08	22	62	04			4	116			10.49

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
02	01	861029	19.26	04	22	62			3	116	07 41 N	083 37 W	1.61
02	02	861029	19.26	04	22	62			3	116			7.06
02	03	861029	19.26	04	22	62			3	116			1.61
02	04	861029	19.26	62	04	22			3	116			2.25
03	01	861029	20.19	31	56	59			3	116	07 35 N	083 20 W	7.74
03	02	861029	20.19	59	31	56			3	116			1.01
04	01	861029	20.56	22	62	04			3	116	07 27 N	083 01 W	3.77
05	01	861029	20.74	04	22	62			3	116	07 23 N	083 02 W	5.19
05	02	861029	20.74	62	04	22			3	116			6.91
05	03	861029	20.74	31	56	59	04	01	3	116			11.75
05	04	861029	20.74	31	56	59	04	01	3	110			2.07
05	05	861029	20.74	59	31	56	04	01	3	110			6.91
05	06	861029	20.74	59	31	56	05	01	3	110			2.77
06	01	861029	21.48	56	59	31	05	02	3	110	07 16 N	082 41 W	14.32
06	02	861029	21.48	22	62	04	05	02	3	110			10.74
06	03	861029	21.48	04	22	62	05	02	3	110			10.74
06	04	861029	21.48	62	04	22	05	03	3	110	07 10 N	082 24 W	10.74
06	05	861029	21.48	31	56	59	05	03	3	110			7.16
06	06	861029	21.48	59	31	56	05	03	3	110			5.37
01	01	861030	20.00	59	31	56			2	145	05 26 N	080 39 W	9.33
01	02	861030	20.00	56	59	31			2	145			8.67
01	03	861030	20.00	31	56	59			2	145			7.67
02	01	861030	20.19	04	22	62			2	145	05 13 N	080 24 W	7.74
02	02	861030	20.19	62	04	22			2	145			9.76
02	03	861030	20.19	22	62	04			2	145			5.38
02	04	861030	20.19	59	31	56			2	145			7.40
02	05	861030	20.19	59	31	56	01	01	3	145			3.03
03	01	861030	20.37	56	59	31			3	145	04 57 N	080 12 W	11.88
03	02	861030	20.37	31	56	59	03	01	3	145			11.88
03	03	861030	20.37	04	22	62	03	01	3	145			10.19
04	01	861030	20.00	62	04	22			3	145	04 40 N	079 57 W	11.33
04	02	861030	20.00	22	62	04			3	145			10.00
04	03	861030	20.00	59	31	56			2	145			1.00
04	04	861030	20.00	59	31	56	04	02	2	145			0.33
05	01	861030	20.56	04	22	62	04	03	3	145	04 23 N	079 51 W	1.71
05	02	861030	20.56	04	22	62			3	145			7.54
01	01	861031	21.11	56	59	31			2	035	03 25 N	078 20 W	5.28

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
02	01	861031	21.11	31	56	59	02	03	2	035	03 33 N	078 18 W	0.70
03	01	861031	20.74	59	31	56			2	110	03 39 N	078 17 W	2.77
03	02	861031	20.74	59	31	56	12	02	2	110			4.15
03	03	861031	20.74	62	04	22			2	035			6.57
03	04	861031	20.74	62	04	22	03	02	2	035			6.91
03	05	861031	20.74	22	62	04	03	02	2	035			2.77
03	06	861031	20.74	22	62	04	02	02	2	040			2.07
04	01	861031	20.74	22	62	04			1	040			3.11
04	02	861031	20.74	04	22	62	03	01	1	040			4.15
04	03	861031	20.74	04	22	62	03	01	0	040			9.68
04	04	861031	19.82	56	59	31	03	01	0	045	03 55 N	078 03 W	6.94
04	05	861031	19.82	56	59	31	03	01	1	045			6.28
04	06	861031	19.82	31	56	59	03	01	1	045			13.87
04	07	861031	19.82	59	31	56	03	01	1	045			6.94
04	08	861031	19.82	59	31	56			1	045			2.64
05	01	861031	19.82	62	04	22	03	12	1	045			9.25
05	02	861031	21.67	62	04	22	07	01	1	004	04 14 N	077 48 W	3.25
05	03	861031	21.67	22	62	04	07	01	1	004			8.67
05	04	861031	21.67	22	62	04	07	01	2	004			5.78
05	05	861031	21.67	04	22	62	08	01	2	004			2.89
05	06	861031	21.67	04	22	62	08	01	3	004			11.56
05	07	861031	22.04	56	59	31	08	01	3	004	04 32 N	077 47 W	9.92
06	01	861031	22.04	31	56	59	08	02	2	004			13.59
06	02	861031	22.04	59	31	56	08	02	3	004			4.78
06	03	861031	22.04	59	31	56			3	004			2.94
06	04	861031	22.04	59	31	56	08	02	3	004			6.98
06	05	861031	19.63	62	04	22	08	02	3	004	04 52 N	077 45 W	6.54
07	01	861031	18.52	22	62	04	08	02	3	004	04 57 N	077 46 W	3.09
08	01	861031	19.45	22	62	04	08	03	3	358	04 59 N	077 46 W	2.59
08	02	861031	19.45	04	22	62			3	358			3.89
08	03	861031	19.45	04	22	62	09	03	3	358			5.83
08	04	861031	19.45	56	59	31	09	03	3	358			6.81
01	01	861101	20.93	56	22	04			2	344	07 05 N	078 17 W	1.40
02	01	861101	20.56	56	22	04			2	344	07 07 N	078 19 W	4.45
02	02	861101	20.56	04	56	22			2	344			15.42
02	03	861101	20.56	22	04	56			2	344			7.88
02	04	861101	18.52	31	62	59			2	344	07 21 N	078 24 W	4.32

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
02	05	861101	18.52	31	62	59			1	353			8.33
02	06	861101	18.52	59	31	62			1	353			1.85
02	07	861101	18.52	59	31	62	04	02	1	353			0.31
03	01	861101	19.63	62	59	31	04	02	2	353	07 39 N	078 30 W	1.64
03	02	861101	19.63	62	59	31			2	353			1.96
03	03	861101	19.63	56	22	04			1	353			2.94
03	04	861101	19.63	56	22	04			1	343			1.64
03	05	861101	19.63	56	22	04			3	343			8.51
03	06	861101	19.63	04	56	22	05	01	3	343			10.14
03	07	861101	19.63	04	56	22	06	01	2	343			2.94
03	08	861101	19.63	22	04	56	06	01	2	343			12.11
04	01	861101	20.56	31	62	59	08	01	1	343	08 07 N	078 41 W	10.28
04	02	861101	20.56	59	31	62	08	01	1	343			8.57
04	03	861101	20.56	59	31	62	08	01	0	343			1.71
04	04	861101	20.56	62	59	31	08	01	1	343			2.06
01	01	861108	19.82	31	22	57			2	235	08 16 N	078 33 W	7.60
02	01	861108	18.52	57	31	22			2	235	08 12 N	078 40 W	4.63
03	01	861108	17.96	04	56	62			2	235	08 07 N	078 43 W	0.90
04	01	861108	20.19	04	56	62			2	235	08 06 N	078 47 W	0.34
05	01	861108	20.37	31	22	57			3	235	07 56 N	079 05 W	11.54
05	02	861108	20.37	57	31	22			3	235			5.43
05	03	861108	20.37	57	31	22			3	235			2.04
05	04	861108	20.37	57	31	22			3	235			3.40
06	01	861108	20.93	22	57	31			2	235	07 44 N	079 20 W	3.49
07	01	861108	17.78	04	56	62			2	235	07 38 N	079 23 W	4.15
08	01	861108	18.33	62	04	56			2	235	07 34 N	079 28 W	9.47
09	01	861108	19.45	31	22	57			2	235	07 30 N	079 35 W	7.13
10	01	861108	19.63	57	31	22			2	235	07 26 N	079 40 W	9.16
11	01	861108	18.89	22	57	31			2	235	07 20 N	079 46 W	3.15
11	02	861108	18.89	04	56	62			2	235			5.04
12	01	861108	20.37	62	04	56			2	235	07 17 N	079 51 W	1.02
13	01	861108	19.45	56	62	04			2	235	07 15 N	079 52 W	4.21
13	02	861108	19.45	56	62	04	03	01	2	235			3.57
13	03	861108	19.45	31	22	04			2	235			6.81
13	04	861108	19.45	99	31	22			3	235			2.27
01	01	861109	19.08	04	62	56			3	240	05 34 N	082 11 W	6.68
02	01	861109	18.52	22	31	57			3	240	05 33 N	082 18 W	12.04

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
02	02	861109	18.52	57	22	31			3	240			2.78
02	03	861109	18.52	57	22	31			3	236			1.85
03	01	861109	19.26	22	31	57	12	02	3	236	05 10 N	082 49 W	7.38
04	01	861109	19.63	57	22	31	01	02	3	236	05 03 N	082 54 W	4.58
04	02	861109	19.63	04	62	56	01	03	3	236			4.58
05	01	861109	19.63	56	04	62			3	236			1.64
05	02	861109	20.00	56	04	62			3	236	04 59 N	083 01 W	0.33
01	01	861110	17.59	31	22	57			3	239	04 00 N	084 24 W	14.95
01	02	861110	17.59	57	31	22			3	239			14.66
01	03	861110	17.59	22	57	31			4	239			3.23
01	04	861110	17.59	22	57	31	08	02	4	239			2.64
01	05	861110	17.59	22	57	31			4	239			9.97
01	06	861110	17.78	56	62	04			4	239	03 45 N	084 44 W	11.85
01	07	861110	17.78	04	56	62	08	02	4	239			2.96
01	08	861110	17.78	04	56	62			4	239			8.89
01	09	861110	17.78	62	04	56			4	239			7.41
01	10	861110	17.78	62	04	56	09	01	4	239			4.44
01	11	861110	17.78	31	22	57	09	01	4	239	03 33 N	085 00 W	11.85
01	12	861110	17.78	57	31	22			4	239			4.44
02	01	861110	18.52	57	31	22	10	01	4	239	03 28 N	085 08 W	4.94
03	01	861110	18.71	22	57	31			4	239	03 24 N	085 13 W	5.61
03	02	861110	18.71	56	62	04	11	01	4	239			12.47
03	03	861110	18.71	04	56	62	11	01	4	239			4.68
03	04	861110	18.33	04	56	62			4	239	03 18 N	085 23 W	3.67
03	05	861110	18.71	04	56	62	12	01	4	239			4.05
03	06	861110	18.71	62	04	56	12	01	4	239			12.47
03	07	861110	19.82	31	22	57			4	239	03 12 N	085 33 W	6.28
03	08	861110	19.82	31	22	57			4	239			0.66
04	01	861110	18.52	31	22	57			4	239	03 08 N	085 37 W	2.78
04	02	861110	18.52	57	31	22	12	02	4	239			8.03
04	03	861110	18.52	57	31	22			4	239			5.56
04	04	861110	18.52	22	57	31			4	239			2.78
04	05	861110	18.52	22	57	31			4	239			3.40
04	06	861110	18.52	22	57	31			3	239			5.56
04	07	861110	18.15	56	62	04			3	239	03 00 N	085 49 W	9.07
04	08	861110	18.15	04	56	62			3	239			9.07
04	09	861110	18.15	62	04	56			3	239			6.65

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
01	01	861111	19.08	04	62	57			3	237	01 52 N	087 28 W	15.90
01	02	861111	19.08	57	04	62	08	03	4	237			3.82
01	03	861111	19.08	57	04	62			4	237			11.45
01	04	861111	19.08	62	57	04	08	02	4	237			7.63
02	01	861111	18.71	62	57	04	08	02	4	237	01 41 N	087 47 W	1.56
02	02	861111	18.71	22	31	56	08	02	4	237			1.56
02	03	861111	18.71	22	31	56	08	02	4	230			10.91
02	04	861111	18.71	56	22	31			4	230			7.79
02	05	861111	18.71	56	22	31	09	01	4	230			4.36
02	06	861111	18.71	31	56	22	09	01	4	230			4.68
02	07	861111	18.71	31	56	22			4	230			8.11
03	01	861111	17.59	04	62	57	10	01	4	230	01 27 N	088 09 W	6.45
03	02	861111	17.59	57	04	62	10	01	4	230			3.23
03	03	861111	17.59	57	04	62	10	01	4	223			3.23
04	01	861111	18.71	57	04	62	10	01	4	223	01 23 N	088 15 W	0.31
04	02	861111	18.71	62	57	04	11	01	4	223			7.79
04	03	861111	18.71	22	31	56	11	01	4	223			11.85
05	01	861111	19.45	56	22	31	12	01	4	223	01 12 N	088 26 W	3.24
05	02	861111	19.45	56	22	31	11	01	4	273			3.24
05	03	861111	19.45	31	56	22	11	01	4	273			6.16
05	04	861111	19.45	04	62	57	11	01	4	273			13.61
05	05	861111	19.45	57	04	62	11	02	4	273			11.34
06	01	861111	18.89	62	57	04	11	02	4	273	01 09 N	088 47 W	1.57
06	02	861111	18.89	22	31	56	11	02	4	273			9.76
06	03	861111	18.89	56	22	31	11	03	4	273			9.13
06	04	861111	18.89	31	56	22	11	03	4	273			9.76
06	05	861111	18.89	04	62	57	11	03	4	273			2.20
01	01	861112	20.19	56	22	31			4	270	01 16 N	090 51 W	15.14
01	02	861112	20.19	56	22	31			3	270			2.69
02	01	861112	20.19	56	22	31			3	270			8.75
02	02	861112	20.19	22	31	56	07	03	4	270			13.46
02	03	861112	19.45	62	57	04	07	02	5	270	01 16 N	091 13 W	12.96
02	04	861112	19.45	04	62	57	07	02	5	270			13.94
02	05	861112	19.45	57	04	62	07	01	5	270			2.59
03	01	861112	17.96	56	22	31	07	01	5	300	01 11 N	091 30 W	11.68
03	02	861112	17.96	31	56	22	07	01	5	300			1.20
04	01	861112	17.04	22	31	56	08	01	4	300	01 15 N	091 38 W	8.52

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	02	861112	17.96	62	57	04	09	01	3	300			8.08
05	01	861112	17.96	56	22	31	09	01	4	335	01 27 N	091 52 W	0.90
06	01	861112	17.41	56	22	31			4	335	01 29 N	091 55 W	1.45
06	02	861112	17.41	31	56	22	09	02	4	335			8.70
06	03	861112	17.41	31	56	22			4	350			4.35
07	01	861112	16.48	22	31	56	09	02	4	350	01 37 N	091 59 W	0.27
08	01	861112	18.89	62	57	04			4	270	01 40 N	092 01 W	8.19
08	02	861112	18.89	62	57	04	11	03	4	270			2.52
08	03	861112	18.89	56	22	31	11	03	4	270			5.04
01	01	861113	19.82	57	62	04			5	275	01 31 N	093 59 W	14.20
01	02	861113	19.82	04	57	62			5	275			19.82
01	03	861113	19.82	62	04	57	07	02	5	275			6.28
01	04	861113	18.89	31	56	22	07	02	5	275	01 30 N	094 19 W	12.91
01	05	861113	18.89	22	31	56	07	02	5	275			13.85
01	06	861113	18.89	56	22	31	07	01	5	275			11.33
01	07	861113	22.22	57	62	04	07	01	5	275	01 30 N	094 43 W	14.82
01	08	861113	22.22	04	57	62	08	01	4	275			1.11
02	01	861113	21.30	04	57	62	08	01	4	275	01 28 N	094 53 W	4.97
02	02	861113	21.30	04	57	62	08	01	3	275			2.84
02	03	861113	21.30	62	04	57	08	01	3	275			13.84
02	04	861113	20.56	31	56	22	09	01	3	275	01 30 N	095 03 W	13.02
02	05	861113	20.56	31	56	22	10	01	3	275			1.03
02	06	861113	20.56	22	31	56	10	01	3	275			12.33
02	07	861113	20.56	22	31	56			3	275			1.37
02	08	861113	20.56	56	22	31			3	275			13.70
02	09	861113	21.30	57	62	04	11	02	3	275	01 31 N	095 27 W	9.58
02	10	861113	21.30	57	62	04			3	275			4.61
02	11	861113	21.30	04	57	62			3	275			10.29
03	01	861113	22.59	62	04	57			3	275	01 31 N	095 48 W	3.77
03	02	861113	22.59	31	56	22			3	275			11.30
03	03	861113	22.59	22	31	56			3	275			11.30
03	04	861113	22.59	56	22	31			3	275			9.41
04	01	861113	19.63	57	62	04			4	275	01 31 N	096 09 W	0.98
05	01	861113	20.19	57	62	04			4	275	01 31 N	096 11 W	4.04
01	01	861114	22.59	31	62	56			3	274	01 38 N	098 18 W	12.80
01	02	861114	22.59	31	62	56			3	274			1.51
01	03	861114	22.59	56	31	62			4	274			7.15

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
01	04	861114	22.59	56	31	62			4	274			5.27
01	05	861114	22.59	56	31	62			4	274			1.51
01	06	861114	22.59	62	56	31			4	274			13.56
02	01	861114	21.67	22	04	57			4	274	01 40 N	098 55 W	15.53
02	02	861114	21.67	31	62	56			4	274			5.06
02	03	861114	21.67	31	62	56	07	01	4	274			4.69
02	04	861114	21.67	31	62	56	08	01	4	274			4.69
02	05	861114	21.67	56	31	62	08	01	4	274			5.06
03	01	861114	21.30	56	31	62	08	01	4	274	01 42 N	099 16 W	4.97
03	02	861114	21.30	62	56	31	08	01	4	274			1.06
04	01	861114	22.04	62	56	31	08	01	4	274	01 43 N	099 22 W	7.71
04	02	861114	22.04	22	04	57	09	01	4	274			14.69
04	03	861114	22.04	57	22	04	10	01	4	274			9.18
04	04	861114	22.22	57	22	04	10	01	4	270	01 44 N	099 39 W	2.96
04	05	861114	22.22	57	22	04	09	01	4	315			2.59
04	06	861114	22.22	04	57	22	09	01	4	315			10.37
05	01	861114	22.22	04	57	22	09	01	4	315			2.59
05	02	861114	22.78	31	62	56	09	01	4	315	01 52 N	099 48 W	6.83
05	03	861114	22.78	31	62	56	10	01	4	315			8.35
05	04	861114	22.78	56	31	62	10	01	4	315			15.19
05	05	861114	22.78	62	56	31	10	02	4	315			15.19
05	06	861114	22.41	22	04	57	10	02	4	315	02 06 N	100 07 W	12.33
06	01	861114	24.63	57	22	04	05	02	4	110	02 10 N	100 10 W	6.16
06	02	861114	24.63	04	57	22	05	02	4	110			12.32
06	03	861114	24.63	31	62	56	05	03	4	110			12.32
06	04	861114	17.41	56	31	62			4	110	02 06 N	099 58 W	6.38
01	01	861115	18.52	57	22	04			5	103	01 35 N	097 59 W	0.93
01	02	861115	18.52	57	22	04	12	03	5	103			7.10
01	03	861115	18.52	57	22	04			5	103			3.40
01	04	861115	18.52	04	57	22			5	103			9.26
01	05	861115	18.52	22	04	57			5	103			9.26
01	06	861115	17.78	56	31	62			5	103	01 33 N	097 43 W	10.07
02	01	861115	18.89	57	22	04	04	01	5	103	01 18 N	096 41 W	9.13
02	02	861115	18.89	04	57	22			5	103			3.15
02	03	861115	18.89	04	57	22			5	150			0.94
02	04	861115	18.89	04	57	22			5	103			2.83
02	05	861115	18.89	04	57	22			5	103			5.04

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
03	01	861115	18.89	22	04	57			5	103			11.02
03	02	861115	20.00	56	31	62			4	103	01 15 N	096 22 W	7.67
03	03	861115	20.00	56	31	62			4	103			2.67
03	04	861115	20.00	62	56	31			4	103			4.33
03	05	861115	20.00	62	56	31			4	103			5.33
03	06	861115	20.00	31	62	56			4	103			4.33
03	07	861115	20.00	31	62	56			4	103			3.33
03	08	861115	20.00	31	62	56	05	03	4	103			2.33
03	09	861115	19.26	57	22	04	05	03	4	103	01 12 N	096 07 W	10.59
01	01	861116	19.45	31	56	62			4	103	00 49 N	094 01 W	11.99
01	02	861116	19.45	62	31	56			4	103			12.96
01	03	861116	19.45	56	62	31			4	103			13.61
01	04	861116	19.26	22	57	04			4	103	00 44 N	093 39 W	12.20
01	05	861116	19.26	04	22	57			4	103			12.84
01	06	861116	19.26	57	04	22			4	103			9.63
01	07	861116	19.26	57	04	22			3	103			3.21
01	08	861116	20.37	31	56	62			3	103	00 40 N	093 20 W	13.58
01	09	861116	20.37	62	31	56	01	01	3	103			13.92
01	10	861116	20.37	56	62	31			3	103			13.24
01	11	861116	19.82	22	57	04			3	103	00 37 N	093 00 W	13.21
01	12	861116	19.82	04	22	57	03	01	3	103			13.21
01	13	861116	19.82	57	04	22	04	01	3	103			13.21
01	14	861116	21.67	31	56	62	05	01	3	103	00 33 N	092 38 W	14.45
01	15	861116	21.67	62	31	56	05	01	3	103			10.11
02	01	861116	21.67	62	31	56	05	02	3	103			0.72
02	02	861116	21.67	56	62	31	05	02	3	103			14.45
02	03	861116	21.67	22	57	04	05	02	3	103			8.67
02	04	861116	20.93	22	57	04	05	02	3	111	00 28 N	092 12 W	2.09
02	05	861116	20.93	04	22	57	05	02	3	111			11.16
02	06	861116	20.93	57	04	22	05	03	3	111			9.77
02	07	861116	20.93	31	56	62	05	03	3	111			8.02
01	01	861119	21.11	04	56	57			4	289	00 35 N	092 41 W	4.57
02	01	861119	20.37	04	56	57			4	289	00 37 N	092 46 W	7.47
02	02	861119	20.37	57	04	56			4	289			3.06
03	01	861119	20.56	57	04	56			4	289	00 39 N	092 54 W	1.37
03	02	861119	20.56	56	57	04			4	289			7.88
04	01	861119	20.56	56	57	04			4	289			3.43

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
04	02	861119	20.37	31	22	62			4	289	00 41 N	093 03 W	13.58
04	03	861119	20.37	62	31	22			4	289			13.92
04	04	861119	20.37	22	62	31			4	289			9.51
04	05	861119	20.37	22	62	31			4	289			3.73
04	06	861119	20.37	04	56	57			4	289	00 49 N	093 23 W	8.49
04	07	861119	20.37	04	56	57	07	01	4	289			5.09
04	08	861119	20.37	57	04	56	08	01	4	289			4.41
04	09	861119	20.37	57	04	56			4	289			4.07
04	10	861119	20.37	57	04	56	08	01	4	289			5.09
04	11	861119	20.37	56	57	04			4	289			3.40
04	12	861119	20.37	56	57	04			4	289			6.11
05	01	861119	20.37	31	22	62	10	01	5	289			8.49
05	02	861119	20.37	62	31	22	10	01	5	289			8.83
05	03	861119	20.37	22	62	31			5	289			1.36
05	04	861119	20.37	22	62	31			5	289			6.45
05	05	861119	20.56	04	56	57			5	289	01 05 N	094 00 W	8.57
05	06	861119	20.56	04	56	57	10	02	5	289			5.14
05	07	861119	20.56	57	04	56			5	289			11.99
05	08	861119	20.56	57	04	56	11	02	5	289			1.71
05	09	861119	20.56	56	57	04	11	02	5	289			5.14
05	10	861119	20.56	56	57	04	11	02	4	289			8.57
05	11	861119	20.00	31	22	62	11	02	5	289	01 12 N	094 21 W	1.67
06	01	861119	19.26	62	31	22			5	266	01 17 N	094 19 W	4.17
07	01	861119	19.82	04	56	57			4	266	01 18 N	094 25 W	6.94
01	01	861120	19.45	31	56	57			4	268	01 12 N	096 18 W	10.70
02	01	861120	19.63	57	31	56			4	268	01 12 N	096 25 W	5.56
02	02	861120	19.63	57	31	56			4	268			6.87
02	03	861120	19.63	56	57	31	01	02	4	268			1.31
02	04	861120	19.63	56	57	31	07	02	4	268			6.87
02	05	861120	19.63	56	57	31	07	02	5	268			2.62
02	06	861120	20.37	22	04	62	07	02	5	268	01 10 N	096 39 W	6.79
02	07	861120	20.37	22	04	62			5	268			6.79
02	08	861120	20.37	62	22	04			5	268			13.58
02	09	861120	20.37	04	62	22			5	268			13.58
02	10	861120	21.30	31	56	57			5	268	01 09 N	097 02 W	14.91
02	11	861120	21.30	57	31	56			5	268			14.55
02	12	861120	19.45	56	57	31			5	268			5.51

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
03	01	861120	19.45	22	04	62			5	270	01 06 N	097 23 W	11.99
03	02	861120	19.45	62	22	04			5	270			10.70
03	03	861120	19.45	04	62	22			5	270			12.96
03	04	861120	20.37	31	56	57			5	270	01 07 N	097 43 W	14.26
04	01	861120	20.56	57	31	56			5	270	01 07 N	097 55 W	2.40
04	02	861120	20.56	57	31	56	11	02	5	270			7.88
04	03	861120	20.56	56	57	31	11	02	5	270			8.57
04	04	861120	20.56	22	04	62	11	02	5	270			9.94
05	01	861120	21.11	62	22	04			5	270	01 09 N	098 17 W	5.63
05	02	861120	20.56	04	62	22			5	270			5.14
05	03	861120	20.56	31	56	57			5	270			13.70
01	01	861121	22.22	04	62	22			4	270	01 00 N	100 34 W	10.74
01	02	861121	22.22	22	04	62			5	270			4.44
02	01	861121	22.59	22	04	62			5	270	01 00 N	100 43 W	6.40
02	02	861121	22.59	62	22	04			4	270			11.30
02	03	861121	23.52	57	31	56			4	270	01 00 N	100 53 W	7.45
02	04	861121	23.52	57	31	56			4	270			8.23
02	05	861121	23.52	56	57	31			4	270			10.58
02	06	861121	23.52	56	57	31	01	02	5	270			5.10
02	07	861121	23.52	31	56	57	01	02	5	270			15.68
02	08	861121	23.71	04	62	22			5	270	00 58 N	101 19 W	5.93
02	09	861121	23.71	04	62	22	10	01	5	270			9.88
02	10	861121	23.71	22	04	62	10	01	5	270			15.80
02	11	861121	23.71	62	22	04			5	270			15.80
02	12	861121	24.45	57	31	56	09	01	5	270	00 57 N	101 43 W	16.30
02	13	861121	24.45	56	57	31			5	270			16.30
02	14	861121	24.45	31	56	57			5	270			16.30
02	15	861121	21.48	04	62	22			4	270	00 57 N	102 07 W	14.32
02	16	861121	21.48	22	04	62			4	270			1.79
03	01	861121	24.45	62	22	04	11	02	4	270	01 02 N	102 17 W	15.89
03	02	861121	24.45	57	31	56			4	270			12.22
03	03	861121	24.45	56	57	31			4	270			12.22
03	04	861121	24.45	31	56	57			4	270			5.30
04	01	861121	19.26	04	62	22			4	270	01 05 N	102 42 W	6.42
04	02	861121	19.26	22	04	62			4	270			8.99
01	01	861122	22.22	56	57	31			5	267	00 54 N	104 44 W	10.37
01	02	861122	22.22	56	57	31			4	267			6.67

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
01	03	861122	22.22	31	56	57			4	267			3.70
02	01	861122	22.22	31	56	57			4	267	00 54 N	104 58 W	6.30
02	02	861122	22.22	31	56	57			4	267			2.96
02	03	861122	22.22	57	31	56			4	267			2.59
02	04	861122	22.22	57	31	56	07	02	4	267			14.08
02	05	861122	22.22	62	22	04	07	02	5	267	00 54 N	105 10 W	14.82
02	06	861122	22.22	04	62	22	07	02	5	267			2.59
02	07	861122	22.22	04	62	22			5	267			12.22
02	08	861122	22.22	22	04	62			5	267			4.82
02	09	861122	22.22	22	04	62	07	01	5	267			10.00
02	10	861122	22.22	56	57	31	08	01	4	267	00 54 N	105 35 W	15.19
02	11	861122	22.22	31	56	57	08	01	4	267			14.45
02	12	861122	22.22	57	31	56			4	267			14.82
02	13	861122	20.74	62	22	04	10	01	4	267	00 54 N	105 58 W	13.83
02	14	861122	20.74	04	62	22			4	267			13.83
02	15	861122	20.74	22	04	62			4	267			13.83
02	16	861122	21.85	56	57	31			4	267	00 54 N	106 22 W	5.83
02	17	861122	21.85	56	57	31			5	267			5.83
02	18	861122	21.85	56	57	31	11	02	5	267			2.91
02	19	861122	21.85	31	56	57	11	02	5	267			14.57
02	20	861122	21.85	57	31	56	11	02	5	267			1.09
03	01	861122	21.85	57	31	56	11	02	5	267			2.55
03	02	861122	21.67	57	31	56	11	02	5	269	00 54 N	106 43 W	2.89
04	01	861122	21.48	62	22	04	11	02	5	269	00 54 N	106 45 W	10.03
04	02	861122	21.48	04	62	22	12	02	5	269			8.59
04	03	861122	21.48	04	62	22	12	03	5	269			2.15
04	04	861122	23.71	22	04	62	11	03	5	269	00 54 N	106 57 W	3.95
05	01	861122	23.71	22	04	62			5	269	00 54 N	107 02 W	2.77
01	01	861123	24.26	04	56	22			3	267	00 58 N	109 16 W	19.00
01	02	861123	24.26	22	04	56			3	267			0.81
02	01	861123	24.26	22	04	56			3	267			4.45
02	02	861123	25.00	22	04	56			3	267	00 57 N	109 31 W	8.33
02	03	861123	25.00	56	22	04			3	267			7.50
02	04	861123	25.00	56	22	04			3	267			5.42
02	05	861123	25.00	56	22	04			3	267			3.75
02	06	861123	26.67	62	31	57			3	267	00 56 N	109 46 W	17.78
02	07	861123	26.67	57	62	31	07	02	3	267			2.67

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
02	08	861123	26.67	57	62	31			3	267			7.11
02	09	861123	26.67	57	62	31			4	267			3.11
02	10	861123	26.67	57	62	31			4	000			4.89
02	11	861123	26.67	31	57	62			4	000			13.33
02	12	861123	26.67	31	57	62			4	000			4.44
02	13	861123	23.52	04	56	22			5	000	01 07 N	109 58 W	1.57
02	14	861123	23.52	04	56	22			5	000			6.27
02	15	861123	23.52	04	56	22			5	010			1.57
02	16	861123	23.52	04	56	22			6	010			7.06
02	17	861123	23.52	22	04	56	04	01	6	010			9.80
02	18	861123	23.52	22	04	56	05	01	6	010			5.10
02	19	861123	23.52	56	22	04	05	01	5	010			2.74
02	20	861123	23.52	56	22	04	05	01	5	010			12.94
02	21	861123	19.82	62	31	57	06	01	5	010	01 28 N	110 01 W	4.95
03	01	861123	19.82	62	31	57	06	01	5	010			5.28
03	02	861123	19.82	57	62	31	07	01	5	010			12.88
03	03	861123	19.82	31	57	62			5	010			13.21
03	04	861123	23.71	04	62	22			5	010	01 52 N	110 00 W	15.80
03	05	861123	23.71	22	04	56			5	010			1.58
03	06	861123	23.71	22	04	56			5	312			1.58
04	01	861123	23.71	62	31	57			5	270			7.51
04	02	861123	23.71	57	62	31			5	270	02 12 N	110 24 W	2.37
04	03	861123	23.71	57	62	31	11	03	5	270			4.35
05	01	861123	25.93	04	56	22	11	03	5	270	02 12 N	110 33 W	6.05
05	02	861123	25.93	22	04	56	11	03	5	270			6.91
01	01	861124	22.22	57	62	31			5	270	02 20 N	112 45 W	4.44
02	01	861124	22.96	57	62	31	07	03	5	270	02 20 N	112 49 W	6.89
02	02	861124	22.96	31	62	99	07	03	5	270			1.91
02	03	861124	22.96	31	57	62	07	03	5	270			6.12
02	04	861124	22.96	31	57	62			5	270			6.51
02	05	861124	22.96	62	31	57			5	270			11.48
02	06	861124	22.96	22	04	56			5	270	02 20 N	113 06 W	6.12
02	07	861124	22.96	22	04	56	07	02	5	270			9.19
02	08	861124	22.96	56	22	04	07	02	5	270			15.31
02	09	861124	22.96	04	56	22			5	270			15.31
02	10	861124	22.96	57	62	31	07	01	5	270	02 18 N	113 28 W	15.31
02	11	861124	22.96	31	57	62	08	01	5	270			6.89

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
02	12	861124	22.96	31	57	62	08	01	5	277	02 18 N	113 42 W	8.42
02	13	861124	22.96	62	31	57	08	01	5	277			15.31
02	14	861124	23.15	22	04	56	09	01	5	277	02 20 N	113 54 W	5.02
02	15	861124	22.96	22	04	56			5	277			10.33
02	16	861124	22.96	56	22	04			5	277			5.74
02	17	861124	22.96	56	22	04			4	277			6.89
02	18	861124	22.96	56	22	04	10	01	4	277			2.68
02	19	861124	22.96	04	56	22	10	01	4	277			7.27
02	20	861124	22.96	04	56	22	10	01	5	277			3.44
02	21	861124	22.96	04	56	22	09	01	5	307			4.59
02	22	861124	22.59	57	62	31	09	01	5	307	02 24 N	114 18 W	15.06
02	23	861124	22.59	31	57	62	10	01	5	307			15.06
02	24	861124	22.59	62	31	57			4	307			12.05
02	25	861124	22.59	62	31	57	10	02	4	307			3.01
02	26	861124	23.15	22	04	56	10	02	4	307	02 39 N	114 40 W	3.86
02	27	861124	23.15	22	04	56			4	307			7.72
02	28	861124	23.15	56	22	04			4	307			11.57
02	29	861124	23.15	04	56	22			4	307			11.57
02	30	861124	23.89	57	62	31			4	307	02 49 N	114 53 W	6.37
02	31	861124	23.89	57	62	31	10	03	4	307			1.99
02	32	861124	23.89	31	57	62	10	03	4	307			7.57
02	33	861124	23.89	62	31	57	10	03	4	307			5.97
01	01	861125	19.82	04	22	56			3	275	02 55 N	116 55 W	10.57
01	02	861125	19.82	56	04	22			3	275			1.98
02	01	861125	19.63	56	04	22			3	275	02 55 N	117 03 W	5.89
02	02	861125	19.63	22	56	04	07	02	3	275			8.83
03	01	861125	19.45	31	57	62			4	275	02 59 N	117 17 W	4.54
04	01	861125	20.93	62	31	57			4	275	02 59 N	117 26 W	6.98
04	02	861125	20.93	62	31	57	07	02	4	275			5.23
04	03	861125	20.93	04	22	56	07	01	5	275			14.65
04	04	861125	20.93	56	04	22			5	275			0.35
05	01	861125	20.93	56	04	22	08	01	5	275	03 00 N	117 43 W	9.77
05	02	861125	20.93	22	56	04			5	275			13.95
05	03	861125	20.56	31	57	62			5	275	02 59 N	117 55 W	8.57
05	04	861125	20.56	31	57	62	09	01	5	275			5.14
05	05	861125	20.56	62	31	57	09	01	5	275			14.39
05	06	861125	20.56	57	62	31	10	01	5	275			2.40

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
05	07	861125	20.56	57	62	31	09	01	5	312			10.62
05	08	861125	19.63	04	22	56	09	01	5	312	03 05 N	118 15 W	13.41
05	09	861125	19.63	56	04	22	09	01	5	312			12.76
05	10	861125	19.63	22	56	04	10	01	5	312			13.09
05	11	861125	20.74	31	57	62	10	02	4	312	03 20 N	118 33 W	10.37
05	12	861125	20.74	62	31	57	10	02	4	312			10.72
05	13	861125	20.74	57	62	31	10	02	4	312			10.03
05	14	861125	21.85	04	22	56	10	03	4	312	03 30 N	118 47 W	9.47
05	15	861125	21.85	56	04	22	10	03	4	312			8.74
05	16	861125	21.85	22	56	04	10	03	4	312			6.92
01	01	861126	20.37	22	57	31			4	310	04 41 N	120 30 W	14.94
01	02	861126	20.37	31	22	57	05	03	4	310	04 46 N	120 35 W	14.94
01	03	861126	20.37	57	31	22	05	02	4	310			15.62
01	04	861126	18.89	62	56	04	05	02	4	310	04 53 N	120 48 W	12.59
01	05	861126	18.89	04	62	56	06	02	4	310			12.91
01	06	861126	18.89	56	04	62	06	01	4	310			7.56
01	07	861126	18.89	56	04	62	06	01	4	316			5.04
01	08	861126	19.45	22	57	31	06	01	4	316	05 05 N	121 05 W	12.64
01	09	861126	19.45	31	22	57	07	01	4	316			12.64
01	10	861126	19.45	57	31	22	07	01	4	316			13.29
01	11	861126	19.26	62	56	04	08	01	4	316	05 21 N	121 20 W	12.84
01	12	861126	19.26	04	62	56	09	01	4	316			3.21
01	13	861126	19.26	04	62	56	09	01	5	316			10.27
01	14	861126	19.26	56	04	62	09	01	4	316			12.52
01	15	861126	18.33	22	57	31	09	01	4	316	05 33 N	121 36 W	11.92
02	01	861126	18.15	31	22	57	10	02	4	313	05 40 N	121 41 W	6.96
02	02	861126	18.15	57	31	22	10	02	4	313			12.10
02	03	861126	18.15	62	56	04	10	02	4	313			9.07
02	04	861126	18.15	04	62	56	10	03	4	313			9.07
02	05	861126	17.78	56	04	62	10	03	4	313	05 51 N	121 57 W	6.22
03	01	861126	17.59	22	57	31			4	313	05 53 N	122 02 W	4.69
01	01	861127	18.89	04	62	56			3	310	06 58 N	123 20 W	13.22
01	02	861127	18.89	56	04	62			3	310			3.15
02	01	861127	19.08	56	04	62	05	03	3	310	07 05 N	123 30 W	6.36
02	02	861127	19.08	62	56	04	05	02	3	310			12.72
02	03	861127	19.08	31	22	57	06	02	3	310	07 11 N	123 38 W	7.63
02	04	861127	19.08	31	22	57			3	310			5.09

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
02	05	861127	19.08	57	31	22			3	310			15.26
02	06	861127	19.08	22	57	31			3	310			10.17
02	07	861127	19.08	04	62	56			3	310	07 25 N	123 52 W	8.58
02	08	861127	19.08	04	62	56	07	01	3	310			0.64
03	01	861127	19.08	56	04	62	07	01	2	310	07 30 N	123 58 W	0.95
04	01	861127	17.59	56	04	62	07	01	2	310	07 32 N	123 58 W	4.40
04	02	861127	17.59	62	56	04			3	310			11.73
04	03	861127	18.33	31	22	57			3	310	07 38 N	124 05 W	13.45
04	04	861127	18.33	57	31	22			3	310			11.61
04	05	861127	18.33	22	57	31	09	01	3	310			5.81
04	06	861127	18.33	22	57	31			3	310			5.81
04	07	861127	18.52	04	62	56			3	310	07 52 N	124 18 W	1.54
05	01	861127	19.08	04	62	56			3	310	07 54 N	124 20 W	8.90
05	02	861127	19.08	56	04	62	10	02	3	310			6.36
06	01	861127	20.00	56	04	62	10	02	3	310	08 01 N	124 26 W	3.67
06	02	861127	20.00	62	56	04	10	02	3	310			13.33
06	03	861127	20.00	31	22	57	10	02	3	310			10.00
06	04	861127	20.00	57	31	22	10	02	3	310			8.00
06	05	861127	20.00	57	31	22	10	03	3	310			2.00
06	06	861127	17.59	22	57	31	10	03	3	310	08 13 N	124 38 W	8.80
06	07	861127	17.59	04	62	56	10	03	3	310			2.05
06	08	861127	17.59	04	62	56			3	310			6.74
01	01	861128	18.15	57	22	31			2	305	09 20 N	126 03 W	9.98
01	02	861128	18.15	31	57	22	05	03	2	305			11.19
02	01	861128	17.78	56	04	62	06	02	2	305	09 24 N	126 14 W	10.67
02	02	861128	17.78	62	56	04	06	02	2	305			11.85
02	03	861128	17.78	04	62	56	06	02	2	305			10.37
02	04	861128	17.78	04	62	56	07	01	2	305			0.30
03	01	861128	18.71	57	22	31	07	01	1	305	09 35 N	126 30 W	10.91
03	02	861128	18.71	31	57	22	07	01	1	305			10.29
03	03	861128	18.71	22	31	57	08	01	1	305			9.04
04	01	861128	20.56	57	22	31	09	01	1	305	09 34 N	126 55 W	10.28
04	02	861128	20.56	57	22	31	10	02	1	305			3.43
04	03	861128	20.56	31	57	22	10	02	1	305			12.33
04	04	861128	20.56	22	31	57	10	02	1	305			6.17
04	05	861128	20.56	22	31	57	10	02	1	315			5.48
04	06	861128	20.37	56	04	62	10	02	1	315	09 44 N	127 13 W	10.19

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
04	07	861128	20.37	62	56	04	10	02	1	315	09 51 N	127 11 W	10.19
04	08	861128	20.37	04	62	56	10	03	1	315			10.19
04	09	861128	20.37	57	22	31	10	03	1	315			3.40
04	10	861128	20.37	57	22	31			1	315			2.72
04	11	861128	20.37	31	57	22			2	315			3.06
04	12	861128	20.37	31	57	22	10	03	2	315			1.36
04	13	861128	20.00	31	57	22	10	03	3	315	10 01 N	127 24 W	1.33
04	14	861128	20.00	31	57	22			2	315			1.33
01	01	861129	18.52	04	62	57			3	025	11 37 N	126 47 W	6.79
01	02	861129	18.52	04	62	57	03	03	3	025			3.09
01	03	861129	18.52	57	04	62	03	03	3	025			4.01
01	04	861129	18.52	57	04	62	03	03	4	025			5.25
01	05	861129	18.52	62	57	04	03	03	4	025			9.26
01	06	861129	17.59	22	31	56	03	02	4	025	11 51 N	126 41 W	13.20
01	07	861129	17.59	56	22	31			4	025			2.93
01	08	861129	17.59	56	22	31	03	02	4	025			7.92
01	09	861129	17.59	31	56	22	03	02	4	025			11.14
01	10	861129	17.59	04	62	57	04	02	4	025	12 08 N	126 35 W	8.80
01	11	861129	17.59	04	62	57	04	01	5	025			2.93
01	12	861129	17.59	57	04	62	04	01	5	025			11.73
01	13	861129	17.59	62	57	04	04	01	5	025			11.73
01	14	861129	18.15	22	31	56	05	01	5	025	12 28 N	126 29 W	10.28
01	01	861130	17.96	31	56	22			4	025	16 13 N	124 42 W	6.59
01	02	861130	17.96	22	31	56			4	025			2.99
02	01	861130	19.26	56	22	31			4	025	16 19 N	124 39 W	3.21
02	02	861130	19.26	04	57	62			4	025			9.63
02	03	861130	19.26	62	04	57			4	025			9.63
02	04	861130	18.71	57	62	04			4	025	16 29 N	124 33 W	9.35
02	05	861130	18.71	31	56	22			4	025			2.49
01	01	861201	18.89	62	57	04			4	025	18 43 N	123 36 W	7.24
01	02	861201	18.89	04	62	57			4	025			9.45
01	03	861201	18.89	57	04	62			4	025			9.45
01	04	861201	18.52	22	31	56			4	025	18 58 N	123 31 W	11.11
01	05	861201	18.52	22	31	56	03	02	4	025			1.85
01	06	861201	18.52	56	22	31	03	02	4	025			11.73
01	07	861201	18.52	31	56	22	04	02	4	025			12.35
01	08	861201	19.26	62	57	04	04	02	4	025	19 17 N	123 22 W	12.84

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
01	09	861201	19.26	04	62	57	04	01	4	025			6.42
02	01	861201	19.26	04	62	57	05	01	4	025			1.93
02	02	861201	19.26	57	04	62	05	01	4	025			13.16
02	03	861201	19.08	22	31	56	05	01	4	025	19 34 N	123 16 W	3.82
02	04	861201	19.08	22	31	56			4	025			6.36
02	05	861201	19.08	22	31	56	06	01	4	025			2.86
02	06	861201	19.08	56	22	31	06	01	4	025			13.03
02	07	861201	19.08	31	56	22	06	02	4	025			12.08
02	08	861201	19.08	62	57	04	07	02	4	025	19 53 N	123 07 W	12.72
02	09	861201	19.08	04	62	57	07	02	4	025			9.54
02	10	861201	19.08	04	62	57			3	025			3.18
02	11	861201	19.08	57	04	62	07	02	3	025			12.72
02	12	861201	18.71	22	31	56	07	02	3	025	20 13 N	122 58 W	9.66
02	13	861201	18.71	56	22	31			3	025			9.04
02	14	861201	18.71	31	56	22	07	03	3	025			7.48
02	15	861201	18.71	31	56	22			3	025			0.94
01	01	861202	19.63	31	62	56			1	026	22 29 N	121 56 W	7.20
01	02	861202	19.63	31	62	56			1	030			2.62
01	03	861202	19.63	56	31	62			1	030			8.18
02	01	861202	19.63	62	56	31	03	02	2	030			1.64
02	02	861202	19.63	62	56	31			2	030			1.64
02	03	861202	18.52	57	22	04			2	030	22 41 N	121 48 W	4.32
02	04	861202	18.52	57	22	04	03	02	2	030			8.03
02	05	861202	18.52	04	57	22			1	030			5.25
02	06	861202	18.52	04	57	22	03	02	1	030	22 50 N	121 43 W	5.56
02	07	861202	18.52	04	57	22	03	02	2	030			1.54
02	08	861202	18.52	22	04	57	04	02	2	030			12.35
02	09	861202	18.52	31	62	56	04	02	2	030			4.63
03	01	861202	19.08	56	31	62	05	01	2	030	23 06 N	121 32 W	4.13
04	01	861202	19.08	57	22	04	05	01	2	030			11.13
04	02	861202	19.08	04	57	22	06	01	2	030			12.72
04	03	861202	19.08	22	04	57	06	01	2	030			12.72
04	04	861202	18.52	31	62	56	06	02	2	030	23 27 N	121 21 W	9.26
04	05	861202	18.52	31	62	56	07	02	2	030			3.40
04	06	861202	18.52	56	31	62	07	02	2	030			8.95
04	07	861202	18.52	56	31	62	07	02	1	030			3.70
04	08	861202	18.52	62	56	31			2	030			2.78

Table 2. (continued)

Series	Leg	Date	Speed Km/Hr	Observer Codes Left	Right	Rec.	Sun Position Horz.	Vert.	Beauf. No.	Course (Deg.)	Position Latitude	Longitude	KM In Leg
04	09	861202	18.52	62	56	31	07	02	2	030			2.78
04	10	861202	18.52	62	56	31			2	030			6.17
04	11	861202	20.00	57	22	04	07	02	2	030	23 44 N	121 10 W	9.67
04	12	861202	20.00	04	57	22	07	03	2	030			10.33
04	13	861202	20.00	22	04	57			2	030			2.00
04	14	861202	20.00	22	04	57	07	03	2	030			6.33
01	01	861203	19.63	04	57	22			2	050	25 59 N	119 52 W	1.31
01	02	861203	19.63	04	57	22	02	03	2	050			11.45
01	03	861203	19.63	22	04	57	02	03	2	050			8.18
01	04	861203	19.63	57	22	04	02	03	2	050			9.82
01	05	861203	19.63	56	62	31	03	02	2	050	26 09 N	119 38 W	13.09
01	06	861203	19.63	31	56	62	03	02	2	050			13.09
01	07	861203	19.63	62	31	56	03	02	2	050			13.41
01	08	861203	20.00	04	57	22	03	02	2	050	26 25 N	119 19 W	13.33
01	09	861203	20.00	22	04	57	04	02	2	050			1.67
02	01	861203	18.89	56	62	31	04	02	2	050	26 35 N	119 16 W	6.61
02	02	861203	18.89	56	62	31	05	02	2	050			4.41
02	03	861203	18.89	56	62	31	05	02	1	050			3.15
02	04	861203	18.89	31	56	62	05	02	1	050			2.20
03	01	861203	18.89	31	56	62	05	02	1	050			0.94
03	02	861203	19.26	62	31	56	05	02	1	050	26 44 N	119 05 W	2.57
04	01	861203	19.26	04	57	22	06	02	1	050	26 49 N	119 00 W	10.59
04	02	861203	19.26	22	04	57	06	02	1	050			7.38
05	01	861203	19.26	57	22	04	06	03	0	050			7.38
05	02	861203	18.89	56	62	31			0	050	27 03 N	118 39 W	7.87
05	03	861203	18.89	31	56	62			0	050			5.98
05	04	861203	18.89	31	56	62	07	03	1	050			4.41
01	01	861204	18.52	31	56	62	03	03	0	030	28 37 N	116 40 W	3.09
01	02	861204	18.52	31	56	62			0	030			3.40
02	01	861204	18.52	62	31	56			0	030	28 43 N	116 37 W	3.40
03	01	861204	18.52	56	62	31			0	030	28 45 N	116 34 W	5.25
03	02	861204	18.52	22	04	57	03	02	0	030			4.32
04	01	861204	18.52	57	22	04	04	02	0	030	28 52 N	116 30 W	7.72
04	02	861204	18.52	04	57	22	04	02	0	030			7.10
05	01	861204	18.52	04	57	22			1	030			4.32
05	02	861204	18.52	31	56	62			1	030	29 02 N	116 24 W	5.56
06	01	861204	18.52	62	31	56			1	030	29 05 N	116 20 W	12.66

Table 2. (continued)

Series	Leg	Date	Speed	Observer Codes			Sun Position		Beauf.	Course	Position		KM
			Km/Hr	Left	Right	Rec.	Horz.	Vert.	No.	(Deg.)	Latitude	Longitude	In Leg
06	02	861204	18.52	56	62	31			1	030			2.78
06	03	861204	18.52	56	62	31			1	030	29 13 N	116 15 W	0.62
07	01	861204	18.52	22	04	57			1	038			10.19
07	02	861204	18.52	57	22	04			1	038			10.80
07	03	861204	18.52	04	57	22			1	038			10.80
07	04	861204	20.74	31	56	62			1	038	29 31 N	116 00 W	1.38
08	01	861204	20.74	31	56	62			1	038			1.73
08	02	861204	20.74	31	56	62			1	355	29 33 N	116 00 W	9.68
08	03	861204	20.74	62	31	56			1	055			13.83
08	04	861204	20.74	56	62	31			1	055			2.77
01	01	861205	18.52	04	56	57			2	025	31 47 N	117 46 W	4.32

Table 3. Marine mammal sightings, classified by species code groups, encountered in the eastern tropical Pacific during July 29 through December 5, 1986.

SPECIES: OFFSHORE SPOTTED DOLPHIN (STENELLA ATTENUATA) SPECIES CODE: 2

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860804	03	04	05	12	01	3	04	8.3	18 22 N	112 11 W	12.0	349.0	284.0
860807			10	08	02	3	04	0.5	17 27 N	111 20 W	100.0	18.0	14.0
860807	10	02	09	06	02	3	56	3.3	17 28 N	111 23 W	7.0	112.0	88.0
860808	01	01	01	12	03	3	60	3.0	17 45 N	109 24 W	100.0	18.0	14.0
860808	04	02	05	12	02	2	31	3.9	17 47 N	108 59 W	4.3	106.0	84.0
860808	08	01	11	12	12	2	31	8.6	17 48 N	108 17 W	100.0	113.0	88.0
860809			10	12	12	2		0.2	15 48 N	110 46 W	2.5	67.0	57.0
860809	07	02	11	12	12	2	60	0.0	15 36 N	111 00 W	6.7	166.0	137.0
860810	07	04	05	06	02	3	04	5.9	16 08 N	107 18 W	100.0	14.0	11.0
860810	11	02	08	07	03	2	04	8.0	16 17 N	107 02 W	100.0	44.0	37.0
860811	03	02	03	08	02	2	56	0.1	15 20 N	106 30 W	4.5	57.0	46.0
860811	06	01	06	08	01	1	31	1.7	14 53 N	106 47 W	100.0	39.0	27.0
860813	02	01	02	09	03	1	56	2.5	09 30 N	109 19 W	100.0	151.0	112.0
860813	04	05	05	08	02	2	22	2.9	08 58 N	109 27 W	71.7	37.0	28.0
860818	02	11	02	12	12	3	31	0.4	09 19 N	112 25 W	100.0	13.0	12.0
860820	07	04	01			2	56	13.2	12 11 N	105 21 W	100.0	35.0	12.0
860822	02	01	02	11	03	1	04	4.2	14 09 N	099 42 W	35.0	57.0	45.0
860822	03	05	03	12	01	2	04	4.3	14 05 N	099 11 W	100.0	59.0	34.0
860822	04	01	04	12	12	3	04	3.7	14 04 N	099 00 W	5.0	105.0	87.0
860822	05	06	06	05	01	2	04	1.9	14 00 N	098 32 W	48.8	65.0	47.0
860823	01	02	01	05	03	2	31	3.1	15 02 N	097 06 W	76.0	120.0	95.0
860823	01	03	02	05	02	2	62	0.5	14 59 N	097 08 W	100.0	0.0*	75.0
860823	13	01	15	12	02	1	04	3.2	14 52 N	098 16 W	87.0	150.0	107.0
860824	01	02	01			1	04	4.4	15 17 N	100 42 W	100.0	47.0	31.0
860824	03	01	03			3	31	2.3	15 23 N	101 01 W	100.0	65.0	51.0
860824	06	02	05			1	31	5.3	15 20 N	101 40 W	100.0	230.0	173.0
860825	03	04	03	05	01	5	56	5.6	16 25 N	102 12 W	100.0	47.0	40.0
860825	04	05	05	12	12	5	04	0.9	16 32 N	102 41 W	100.0	25.0	22.0
860825	05	01	06	11	01	4	62	3.3	16 33 N	102 57 W	23.3	400.0	333.0
860825	06	02	07	11	02	4	04	5.4	16 37 N	103 09 W	100.0	30.0	17.0
860825	07	03	08	10	02	3	62	3.2	16 45 N	103 18 W	86.7	72.0	62.0

Table 3. (continued)

SPECIES: OFFSHORE SPOTTED DOLPHIN (STENELLA ATTENUATA) SPECIES CODE: 2

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860904	11	03	11	06	02	2	04	1.4	12 42 N	114 44 W	26.0	70.0	50.0
860905	06	02	06	06	12	2	04	0.7	12 51 N	111 40 W	100.0	39.0	27.0
860905	08	02	07			1	58	1.9	12 50 N	111 19 W	30.3	127.0	106.0
860906	01	03	01			5	31	0.0	12 53 N	109 31 W	9.3	32.0	25.0
860906	03	01	02			5	04	2.3	12 57 N	109 05 W	100.0	30.0	21.0
860906	04	01	03			5	31	0.5	12 56 N	108 53 W	100.0	11.0	9.0
860906	05	05	05			5	31	4.4	12 57 N	108 37 W	100.0	25.0	7.0
860907	06	01	05			4	31	0.8	13 05 N	104 56 W	57.5	132.0	87.0
860909	06	01	05	12	12	3	04	0.0	12 54 N	100 20 W	3.0	45.0	38.0
860909	09	02	09	02	03	2	22	5.1	12 20 N	101 08 W	31.7	400.0	400.0
860910	01	02	01	07	03	3	04	0.7	11 10 N	102 26 W	100.0	24.0	18.0
860910	02	01	02	07	03	4	22	0.8	11 01 N	102 34 W	52.0	30.0	41.0
860910	03	01	03	07	02	4	62	3.7	10 53 N	102 49 W	100.0	139.0	106.0
860910	06	01	05	12	12	3	04	3.8	10 30 N	103 06 W	21.7	500.0	417.0
860911	01	01	01			2	62	4.3	08 48 N	105 21 W	100.0	47.0	40.0
860911	04	03	03	01	02	2	31	0.6	07 57 N	106 28 W	45.0	142.0	101.0
860913	01	01	01	03	02	4	04	8.8	03 55 N	110 00 W	15.0	575.0	450.0
860919	04	05	04			3	04	1.5	00 53 N	102 13 W	95.0	199.0	176.0
860921	02	02	02			4	04	0.3	05 07 N	096 32 W	21.7	48.0	33.0
860923	04	03	04	07	01	2	56	6.5	10 04 N	090 24 W	27.0	1136.0	966.0
860925	06	01	06	10	02	2	22	4.6	11 20 N	093 54 W	72.0	602.0	503.0
860926	01	03	02	05	02	3	58	0.4	12 52 N	095 42 W	94.3	112.0	77.0
860926	02	09	04	12	12	3	04	3.8	13 23 N	096 24 W	58.3	142.0	108.0
860927	02	05	01	06	01	5	04	5.1	15 06 N	099 02 W	100.0	52.0	39.0
860927	04	05	03			3	31	9.7	15 21 N	099 25 W	100.0	67.0	51.0
860928	01	02	02	05	03	3	22	7.2	16 48 N	101 31 W	61.3	31.0	21.0
860928	05	03	08			1	04	3.0	17 05 N	101 59 W	8.7	105.0	83.0
860929			01			2	58	0.2	17 30 N	102 51 W	100.0	18.0	11.0
860929	01	01	02			2	04	0.5	17 30 N	102 51 W	100.0	100.0	78.0
860929	01	01	03			2	04	4.8	17 30 N	102 51 W	95.7	57.0	46.0
860929	02	01	04	04	03	2	04	3.7	17 31 N	102 54 W	100.0	71.0	60.0

Table 3. (continued)

SPECIES: OFFSHORE SPOTTED DOLPHIN (STENELLA ATTENUATA) SPECIES CODE: 2

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860929	03	01	05	05	02	2	22	0.8	17 34 N	103 00 W	52.0	198.0	177.0
860929	05	04	10	09	01	2	04	3.2	18 02 N	103 46 W	100.0	7.0	6.0
860929	06	01	11	07	02	2	62	2.5	18 03 N	103 47 W	100.0	105.0	65.0
860929	08	02	14			3	04	2.3	18 25 N	103 45 W	100.0	93.0	78.0
861005	04	05	04	10	01	3	56	2.9	15 59 N	104 35 W	93.2	73.0	59.0
861006			08	11	01	1	56	1.9	12 25 N	104 32 W	100.0	25.0	20.0
861006	01	05	01	09	02	1	56	6.5	12 54 N	104 49 W	99.0	93.0	78.0
861006	02	01	02	11	02	1	56	2.6	12 46 N	104 39 W	60.7	102.0	72.0
861006	04	01	06	10	02	1	04	0.0	12 33 N	104 34 W	88.7	33.0	28.0
861006	06	02	12	01	01	3	04	1.8	12 04 N	104 33 W	66.5	97.0	55.0
861007	05	04	06	02	02	4	31	1.1	08 25 N	105 14 W	33.3	27.0	19.0
861008	04	04	01	02	02	4	56	0.4	06 16 N	105 02 W	28.3	27.0	18.0
861010			03	10	02	2	22	0.5	10 32 N	099 19 W	100.0	50.0	25.0
861010	01	05	01			2	31	4.3	10 22 N	099 23 W	100.0	131.0	94.0
861010	10	01	14			1	04	6.9	11 13 N	098 25 W	65.7	128.0	88.0
861011	01	02	01	01	03	3	59	3.0	12 15 N	096 57 W	100.0	68.0	60.0
861011	02	06	04	02	01	3	31	2.4	12 33 N	096 33 W	42.5	139.0	117.0
861011	06	01	06	06	01	2	04	5.5	12 58 N	096 09 W	65.0	327.0	283.0
861011	07	02	08	07	02	2	56	3.5	13 05 N	095 58 W	54.5	242.0	201.0
861016			03			5	04	5.3	07 18 N	095 50 W	54.0	0.0*	182.0
861018	01	06	01	02	02	1	31	7.0	12 33 N	092 22 W	60.0	500.0	400.0
861018	02	01	05	03	01	1	56	1.5	12 45 N	092 27 W	88.3	182.0	133.0
861019	05	01	16	08	01	2	59	0.2	11 15 N	091 41 W	42.5	87.0	67.0
861019	05	03	17			2	31	1.4	11 19 N	091 40 W	5.0	0.0*	150.0
861020	03	03	12	02	02	2	04	2.8	13 00 N	090 53 W	58.7	509.0	414.0
861025	04	06	04			3	62	0.9	04 21 N	089 37 W	9.4	231.0	192.0
861111	02	07	02			4	56	2.9	01 30 N	088 01 W	7.3	312.0	257.0
861111	04	03	05	11	01	4	31	3.2	01 16 N	088 22 W	4.3	275.0	221.0
861111	06	05	08	11	03	4	09	0.6	01 11 N	089 06 W	8.0	0.0*	65.0
861112	02	04	03	07	02	5	04	3.1	01 16 N	091 24 W	25.0	25.0	33.0
861112	03	02	05	07	01	5	31	0.8	01 14 N	091 36 W	100.0	40.0	37.0

Table 3. (continued)

SPECIES: OFFSHORE SPOTTED DOLPHIN (STENELLA ATTENUATA)

SPECIES CODE: 2

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861112	05	01	07	09	01	4	56	1.5	01 27 N	091 52 W	62.7	177.0	143.0
861114	02	05	02	08	01	4	31	0.1	01 41 N	099 13 W	100.0	4.0	4.0
861119	04	12	07			4	57	1.7	00 55 N	093 41 W	93.3	0.0*	162.0
861119	05	10	08	11	02	4	57	3.9	01 12 N	094 21 W	100.0	250.0	200.0
861119	06	01	09			5	31	2.2	01 17 N	094 21 W	86.7	95.0	67.0
861121	02	16	01			4	04	3.4	00 57 N	102 17 W	76.2	452.0	351.0
861123	03	06	03			5	04	3.3	02 01 N	110 07 W	100.0	75.0	47.0
861125	02	02	02	07	02	3	56	3.0	02 55 N	117 10 W	73.3	112.0	78.0
861127	01	02	01			3	56	0.2	07 03 N	123 30 W	100.0	24.0	18.0
861127	02	08	02	07	01	3	04	2.2	07 28 N	123 55 W	100.0	19.0	14.0
861128	03	03	03	08	01	1	22	4.8	09 45 N	126 45 W	68.7	260.0	204.0

Table 3. (continued)

SPECIES: SPINNER DOLPHIN (STENELLA LONGIROSTRIS) SPECIES CODE: 3

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860928			04	06	01	2	04	1.5	16 50 N	101 41 W	6.5	0.0*	17.0
861025	04	06	04			3	62	0.9	04 21 N	089 37 W	90.6	231.0	192.0

Table 3. (continued)

SPECIES: COMMON DOLPHIN (DELPHINUS DELPHIS) SPECIES CODE: 5

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860731			01			4	04	0.1	30 05 N	116 04 W	100.0	150.0	125.0
860731			03			6	04	1.9	29 12 N	115 42 W	100.0	0.0*	7.0
860731			04			6	04	3.0	29 08 N	115 41 W	100.0	0.0*	8.0
860731	01	03	02			5	04	0.3	29 37 N	115 50 W	100.0	100.0	80.0
860801	02	07	01			2	31	0.7	25 55 N	115 42 W	100.0	182.0	165.0
860802			01	10	03	1	04	3.8	23 26 N	114 07 W	100.0	43.0	32.0
860802	02	01	02	10	02	1	62	5.5	23 19 N	114 05 W	100.0	34.0	24.0
860802	03	02	03	10	02	1	60	5.9	23 17 N	113 54 W	100.0	143.0	118.0
861004	04	04	02	02	03	4	62	2.2	18 38 N	104 23 W	100.0	73.0	60.0
861010	04	04	06	03	12	2	62	4.0	10 50 N	098 55 W	100.0	398.0	261.0
861013	04	03	03			3	04	6.1	07 59 N	097 26 W	100.0	95.0	70.0
861013	06	02	04			4	56	0.2	07 36 N	097 29 W	100.0	345.0	290.0
861016	03	01	04			4	31	0.4	07 34 N	095 47 W	100.0	350.0	275.0
861016	04	05	05			5	04	1.8	07 48 N	095 38 W	100.0	206.0	164.0
861017			08			3	04	0.0	10 45 N	093 31 W	100.0	450.0	377.0
861028			01			1	04	1.6	09 14 N	086 44 W	100.0	59.0	50.0
861028	07	01	21	04	02	0	04	3.1	08 51 N	085 47 W	100.0	5.0	4.0
861031			05	02	03	2	31	0.1	03 35 N	078 17 W	100.0	52.0	40.0
861031	01	01	02			2	59	0.6	03 27 N	078 19 W	100.0	53.0	44.0
861031	02	01	03	02	03	2	31	0.7	03 34 N	078 18 W	100.0	31.0	26.0
861031	03	01	08			2	31	0.9	03 39 N	078 17 W	100.0	38.0	33.0
861108	12	01	16			2	04	5.0	07 16 N	079 52 W	100.0	335.0	292.0
861203	05	04	07	07	03	1	56	3.0	27 03 N	118 40 W	100.0	93.0	67.0
861204	05	02	05			1	56	4.4	29 04 N	116 23 W	100.0	41.0	34.0
861204	08	04	09			1	62	2.7	29 43 N	115 55 W	100.0	292.0	242.0
861205			05			1	04	7.9	32 04 N	117 35 W	100.0	200.0	150.0
861205			06			1	04	4.3	32 07 N	117 33 W	100.0	350.0	250.0

Table 3. (continued)

SPECIES: COASTAL SPOTTED DOLPHIN (S.A. GRAFFMANI) SPECIES CODE: 6

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861020	01	02	02	10	02	1	31	1.7	13 48 N	090 50 W	100.0	0.0*	63.0
861101			06	05	01	1	31	0.7	07 31 N	078 26 W	100.0	125.0	112.0
861101			09			1	31	0.5	08 21 N	078 46 W	100.0	33.0	26.0
861101	02	07	04	04	02	1	59	4.2	07 28 N	078 25 W	100.0	150.0	110.0
861101	03	08	07	06	01	2	04	0.5	08 00 N	078 38 W	98.0	265.0	189.0
861108			05			2	31	0.2	08 09 N	078 43 W	100.0	25.0	19.0
861108			07			2	04	0.5	08 02 N	078 55 W	100.0	35.0	25.0
861108	01	01	03			2	22	4.1	08 14 N	078 37 W	100.0	99.0	78.0
861108	03	01	06			2	56	2.4	08 06 N	078 43 W	100.0	40.0	25.0

Table 3. (continued)

SPECIES: EASTERN SPINNER DOLPHIN (STENELLA LONGIROSTRIS) SPECIES CODE: 10

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860803	05	07	03	05	03	3	60	0.7	19 30 N	110 16 W	100.0	85.0	70.0
860804	02	06	03	06	01	3	04	3.1	18 35 N	111 46 W	100.0	137.0	116.0
860804	03	04	05	12	01	3	04	8.3	18 22 N	112 11 W	88.0	349.0	284.0
860805	03	02	04	06	01	3	62	0.4	17 03 N	115 13 W	100.0	81.0	60.0
860806	08	01	09	07	02	2	04	0.3	17 00 N	114 18 W	100.0	26.0	20.0
860807	01	01	01	12	03	2	04	0.3	17 13 N	112 44 W	100.0	50.0	39.0
860807	08	05	08	06	01	3	56	0.8	17 25 N	111 33 W	100.0	3.0	3.0
860807	10	02	09	06	02	3	56	3.3	17 28 N	111 23 W	76.3	112.0	88.0
860808	04	02	05	12	02	2	31	3.9	17 47 N	108 59 W	95.8	106.0	84.0
860808	09	03	14	01	02	2	56	0.1	17 40 N	108 14 W	100.0	100.0	80.0
860809			09	07	01	2	22	0.7	15 49 N	110 46 W	100.0	220.0	187.0
860809			10	12	12	2		0.2	15 48 N	110 46 W	47.5	67.0	57.0
860809	04	04	06	07	02	3	31	0.2	15 55 N	110 36 W	100.0	92.0	85.0
860809	05	03	07	07	01	3	31	2.2	15 50 N	110 44 W	100.0	127.0	112.0
860809	07	02	11	12	12	2	60	0.0	15 36 N	111 00 W	93.3	166.0	137.0
860810	10	01	07	07	02	2	31	1.3	16 14 N	107 13 W	100.0	30.0	25.0
860811	03	02	03	08	02	2	56	0.1	15 20 N	106 30 W	45.5	57.0	46.0
860822	02	01	02	11	03	1	04	4.2	14 09 N	099 42 W	65.0	57.0	45.0
860822	04	01	04	12	12	3	04	3.7	14 04 N	099 00 W	28.3	105.0	87.0
860822	05	06	06	05	01	2	04	1.9	14 00 N	098 32 W	26.2	65.0	47.0
860823	01	02	01	05	03	2	31	3.1	15 02 N	097 06 W	24.0	120.0	95.0
860823	13	01	15	12	02	1	04	3.2	14 52 N	098 16 W	12.0	150.0	107.0
860824	02	01	02			3	56	1.8	15 21 N	100 51 W	100.0	161.0	125.0
860825	02	06	02			5	04	5.6	16 15 N	102 03 W	100.0	65.0	47.0
860825	05	01	06	11	01	4	62	3.3	16 33 N	102 57 W	76.7	400.0	333.0
860825	07	03	08	10	02	3	62	3.2	16 45 N	103 18 W	13.3	72.0	62.0
860904	11	03	11	06	02	2	04	1.4	12 42 N	114 44 W	14.0	70.0	50.0
860905	01	01	01			1	04	4.2	12 42 N	112 57 W	100.0	30.0	25.0
860905	08	02	07			1	58	1.9	12 50 N	111 19 W	58.3	127.0	106.0
860906	01	03	01			5	31	0.0	12 53 N	109 31 W	90.8	32.0	25.0
860907	01	05	01	12	02	1	56	2.3	13 05 N	105 37 W	100.0	45.0	34.0

Table 3. (continued)

SPECIES: EASTERN SPINNER DOLPHIN (STENELLA LONGIROSTRIS) SPECIES CODE: 10

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860907	02	01	02	12	02	1	31	0.6	13 02 N	105 34 W	100.0	139.0	121.0
860907	06	01	05			4	31	0.8	13 05 N	104 56 W	42.5	132.0	87.0
860909	06	01	05	12	12	3	04	0.0	12 54 N	100 20 W	97.0	45.0	38.0
860909	09	02	09	02	03	2	22	5.1	12 20 N	101 08 W	68.3	400.0	400.0
860910	02	01	02	07	03	4	22	0.8	11 01 N	102 34 W	14.7	30.0	41.0
860910	06	01	05	12	12	3	04	3.8	10 30 N	103 06 W	44.3	500.0	417.0
860923	04	03	04	07	01	2	56	6.5	10 04 N	090 24 W	72.0	1136.0	966.0
860923	05	04	06	03	01	1	31	3.5	10 03 N	090 34 W	100.0	0.0*	200.0
860925	06	01	06	10	02	2	22	4.6	11 20 N	093 54 W	24.3	602.0	503.0
860926	02	09	04	12	12	3	04	3.8	13 23 N	096 24 W	41.7	142.0	108.0
860928			07	05	01	1	31	2.7	16 57 N	101 47 W	95.0	0.0*	100.0
860928			14			1	04	2.3	17 28 N	102 51 W	90.0	0.0*	50.0
860928	01	02	02	05	03	3	22	7.2	16 48 N	101 31 W	5.3	31.0	21.0
860928	03	01	05	06	01	2	04	3.5	16 51 N	101 43 W	100.0	42.0	32.0
860928	05	03	08			1	04	3.0	17 05 N	101 59 W	91.3	105.0	83.0
860929	01	01	03			2	04	4.8	17 30 N	102 51 W	4.3	57.0	46.0
860929	03	01	05	05	02	2	22	0.8	17 34 N	103 00 W	48.0	198.0	177.0
861005	04	05	04	10	01	3	56	2.9	15 59 N	104 35 W	6.8	73.0	59.0
861006	02	01	02	11	02	1	56	2.6	12 46 N	104 39 W	6.0	102.0	72.0
861006	04	01	06	10	02	1	04	0.0	12 33 N	104 34 W	11.3	33.0	28.0
861006	06	02	12	01	01	3	04	1.8	12 04 N	104 33 W	33.5	97.0	55.0
861007	05	04	06	02	02	4	31	1.1	08 25 N	105 14 W	33.3	27.0	19.0
861011	02	06	04	02	01	3	31	2.4	12 33 N	096 33 W	7.5	139.0	117.0
861011	06	01	06	06	01	2	04	5.5	12 58 N	096 09 W	35.0	327.0	283.0
861011	07	02	08	07	02	2	56	3.5	13 05 N	095 58 W	45.5	242.0	201.0
861016			03			5	04	5.3	07 18 N	095 50 W	11.0	0.0*	182.0
861018	01	06	01	02	02	1	31	7.0	12 33 N	092 22 W	40.0	500.0	400.0
861018	02	01	05	03	01	1	56	1.5	12 45 N	092 27 W	11.7	182.0	133.0
861019	05	01	16	08	01	2	59	0.2	11 15 N	091 41 W	7.5	87.0	67.0
861019	05	03	17			2	31	1.4	11 19 N	091 40 W	45.0	0.0*	150.0
861020			08			3	56	1.3	13 18 N	090 56 W	100.0	2583.0	2000.0

Table 3. (continued)

SPECIES: EASTERN SPINNER DOLPHIN (STENELLA LONGIROSTRIS) SPECIES CODE: 10

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861020	02	04	06	12	01	2	56	4.7	13 21 N	090 54 W	100.0	355.0	330.0
861020	02	04	07	12	01	2	31	2.7	13 21 N	090 54 W	100.0	1225.0	950.0
861020	03	03	12	02	02	2	04	2.8	13 00 N	090 53 W	41.2	509.0	414.0
861108	10	01	14			2	57	1.4	07 23 N	079 44 W	100.0	92.0	77.0

Table 3. (continued)

SPECIES: WHITEBELLY SPINNER DOLPHIN (STENELLA LONGIROSTRIS) SPECIES CODE: 11

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860813	04	05	05	08	02	2	22	2.9	08 58 N	109 27 W	28.3	37.0	28.0
860911	04	03	03	01	02	2	31	0.6	07 57 N	106 28 W	5.0	142.0	101.0
860913	01	01	01	03	02	4	04	8.8	03 55 N	110 00 W	85.0	575.0	450.0
860919	04	05	04			3	04	1.5	00 53 N	102 13 W	5.0	199.0	176.0
860921	02	02	02			4	04	0.3	05 07 N	096 32 W	78.3	48.0	33.0
861111	02	07	02			4	56	2.9	01 30 N	088 01 W	92.7	312.0	257.0
861111	04	03	05	11	01	4	31	3.2	01 16 N	088 22 W	95.7	275.0	221.0
861111	06	05	08	11	03	4	09	0.6	01 11 N	089 06 W	62.0	0.0*	65.0
861112	02	04	03	07	02	5	04	3.1	01 16 N	091 24 W	8.3	25.0	33.0
861112	05	01	07	09	01	4	56	1.5	01 27 N	091 52 W	37.3	177.0	143.0
861113	02	11	02			3	04	0.7	01 32 N	095 35 W	43.3	33.0	23.0
861119	04	12	07			4	57	1.7	00 55 N	093 41 W	6.7	0.0*	162.0
861119	06	01	09			5	31	2.2	01 17 N	094 21 W	13.3	95.0	67.0
861121	02	16	01			4	04	3.4	00 57 N	102 17 W	23.7	452.0	351.0
861125	02	02	02	07	02	3	56	3.0	02 55 N	117 10 W	26.7	112.0	78.0
861128	03	03	03	08	01	1	22	4.8	09 45 N	126 45 W	6.2	260.0	204.0

Table 3. (continued)

SPECIES: STRIPED DOLPHIN (S. COERULEOALBA) SPECIES CODE: 13

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802	06	02	09	12	12	1	22	1.5	23 09 N	113 37 W	100.0	25.0	20.0
860802	09	03	14	04	02	1	60	5.5	22 51 N	113 16 W	100.0	19.0	16.0
860803	01	09	01	10	01	4	31	1.1	20 39 N	111 11 W	100.0	24.0	20.0
860804	01	01	02	07	01	3	04	0.3	18 47 N	111 11 W	100.0	10.0	9.0
860806	01	04	01	12	03	2	31	0.7	16 42 N	115 49 W	100.0	2.0	2.0
860806	02	01	03	12	02	2	31	2.1	16 43 N	115 49 W	100.0	18.0	16.0
860807	02	03	02	12	03	3	31	5.2	17 15 N	112 35 W	100.0	21.0	15.0
860807	03	02	03	12	02	3	04	1.4	17 18 N	112 30 W	100.0	19.0	16.0
860807	04	01	04	12	02	3	60	0.8	17 18 N	112 24 W	100.0	33.0	25.0
860807	05	01	05	12	02	4	60	3.3	17 21 N	112 21 W	100.0	22.0	19.0
860807	12	02	12	08	03	3	56	1.4	17 33 N	111 13 W	100.0	18.0	14.0
860808			06	01	12	2	31	2.5	17 45 N	108 52 W	100.0	21.0	19.0
860808	03	01	04	11	03	2	04	0.1	17 49 N	109 07 W	100.0	6.0	5.0
860808	06	02	09	12	01	2	56	0.1	17 46 N	108 30 W	100.0	8.0	7.0
860808	11	01	18	02	02	2	22	1.1	17 32 N	108 23 W	100.0	25.0	20.0
860809			03	07	03	3		1.9	16 08 N	110 13 W	100.0	24.0	20.0
860809	01	02	02	07	03	3	31	0.2	16 11 N	110 08 W	100.0	11.0	9.0
860809	03	01	04	07	02	3	04	0.1	16 07 N	110 17 W	100.0	10.0	6.0
860809	11	01	15	07	02	2	04	0.6	15 26 N	110 55 W	100.0	24.0	16.0
860809	12	01	16	07	02	2	60	4.7	15 27 N	110 48 W	100.0	0.0*	15.0
860810	03	08	03	12	12	3	31	0.4	16 02 N	107 46 W	100.0	6.0	5.0
860810	08	02	06	07	02	3	22	1.9	16 13 N	107 17 W	100.0	28.0	23.0
860811	02	01	02	07	03	2	56	2.6	15 27 N	106 31 W	100.0	22.0	17.0
860811	10	02	12	03	03	3	31	2.2	14 03 N	107 21 W	100.0	11.0	10.0
860813	01	01	01	09	03	1	31	0.8	09 33 N	109 19 W	100.0	14.0	10.0
860813	03	03	03	09	02	2	60	1.3	09 19 N	109 23 W	100.0	15.0	12.0
860813	06	01	07	09	12	3	60	2.9	08 48 N	109 26 W	100.0	52.0	41.0
860813	08	03	08	04	01	4	31	2.2	08 22 N	109 22 W	100.0	8.0	5.0
860816	01	06	01			6	31	0.7	05 08 N	115 11 W	100.0	20.0	13.0
860902			05	11	03	3	31	5.4	16 54 N	107 56 W	100.0	31.0	25.0
860903	02	13	02	12	12	3	62	0.3	15 06 N	110 58 W	100.0	11.0	9.0

Table 3. (continued)

SPECIES: STRIPED DOLPHIN (S. COERULEOALBA) SPECIES CODE: 13

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860903	03	07	03	01	02	3	31	4.6	14 47 N	111 28 W	100.0	10.0	8.0
860903	04	01	04	01	02	2	62	0.9	14 47 N	111 35 W	100.0	8.0	7.0
860904	06	01	07	12	12	1	04	0.3	13 05 N	114 24 W	100.0	23.0	19.0
860904	08	02	08	01	01	1	56	0.3	12 56 N	114 34 W	100.0	9.0	7.0
860904	13	01	13	06	03	3	56	0.3	12 38 N	114 32 W	100.0	5.0	4.0
860905	02	03	04	12	02	1	31	2.8	12 48 N	112 41 W	100.0	8.0	7.0
860905	08	02	07			1	58	1.9	12 50 N	111 19 W	11.3	127.0	106.0
860910	05	01	04			3	04	0.9	10 36 N	103 00 W	100.0	24.0	20.0
860910	08	03	09			3	62	1.8	10 03 N	103 38 W	100.0	134.0	105.0
860911			04	02	03	2	31	0.0	07 53 N	106 33 W	100.0	108.0	82.0
860917	02	10	02			5	04	1.5	03 50 S	108 25 W	100.0	45.0	35.0
860919	03	04	03	01	02	3	31	0.3	00 44 N	102 24 W	100.0	29.0	25.0
860919	05	01	05	01	01	4	56	3.0	00 59 N	102 09 W	100.0	75.0	63.0
860920	01	16	01			4	56	0.6	03 10 N	099 11 W	100.0	35.0	27.0
860921	01	01	01			4	04	3.3	05 03 N	096 35 W	100.0	15.0	8.0
860921	05	04	04			5	58	2.1	06 09 N	095 10 W	100.0	20.0	14.0
860923			11			2	04	3.5	09 42 N	090 24 W	100.0	40.0	32.0
860923	01	01	01	01	03	1	04	2.3	09 32 N	090 31 W	100.0	32.0	26.0
860923	02	02	02	01	03	2	04	2.0	09 33 N	090 28 W	100.0	10.0	8.0
860923	03	04	03	01	02	2	31	2.9	09 45 N	090 13 W	100.0	104.0	85.0
860923	07	02	08			2	04	2.2	09 53 N	090 29 W	100.0	39.0	30.0
860923	08	01	09			2	04	4.9	09 49 N	090 26 W	100.0	27.0	21.0
860923	10	01	10			2	04	1.8	09 45 N	090 25 W	100.0	42.0	36.0
860925			08	12	03	1	04	1.0	11 36 N	093 59 W	100.0	47.0	37.0
860925			09	12	03	1	04	4.2	11 37 N	094 02 W	100.0	12.0	10.0
860925	05	08	05	10	01	3	04	3.9	11 11 N	093 46 W	100.0	70.0	60.0
860925	09	01	07	10	02	2	31	0.0	11 34 N	093 55 W	100.0	60.0	51.0
861005	02	03	02	09	02	2	59	1.7	16 22 N	104 36 W	100.0	46.0	37.0
861005	06	05	07	02	01	3	31	0.2	15 19 N	104 39 W	100.0	0.0*	1.0
861007			01			4		0.1	09 30 N	105 01 W	100.0	20.0	15.0
861012	07	01	06	12	01	4	31	0.1	10 50 N	096 23 W	100.0	54.0	44.0

Table 3. (continued)

SPECIES: STRIPED DOLPHIN (S. COERULEOALBA) SPECIES CODE: 13

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861015	02	03	01	03	01	5	62	0.9	03 36 N	098 16 W	100.0	22.0	17.0
861015	03	05	02			6	04	1.3	03 58 N	098 04 W	100.0	20.0	12.0
861016			02			5	04	3.2	07 18 N	095 50 W	100.0	20.0	12.0
861017			07			3	56	0.8	10 42 N	093 33 W	100.0	40.0	32.0
861017	01	02	01	02	03	3	31	1.0	09 31 N	094 31 W	100.0	89.0	80.0
861017	03	03	03	03	02	3	22	0.6	10 00 N	094 11 W	100.0	51.0	38.0
861019			02			1	31	2.1	10 50 N	091 55 W	100.0	14.0	13.0
861019	02	14	07	04	01	1	31	1.3	10 40 N	091 52 W	100.0	17.0	13.0
861019	04	01	12	06	01	1	04	2.1	10 57 N	091 47 W	100.0	75.0	65.0
861019	04	03	15	08	01	2	04	1.3	11 09 N	091 43 W	100.0	0.0*	2.0
861019	06	01	20	08	02	3	31	1.3	11 34 N	091 37 W	100.0	10.0	8.0
861021			04	09	03	2	31	0.0	10 55 N	091 04 W	100.0	6.0	5.0
861021	01	01	01			2	31	4.1	11 00 N	091 09 W	100.0	67.0	59.0
861021	02	01	02	09	03	2	31	0.5	10 56 N	091 04 W	100.0	62.0	54.0
861021	03	01	05	09	02	2	56	3.0	10 50 N	091 07 W	100.0	25.0	21.0
861021	04	03	06	09	02	2	62	0.3	10 37 N	091 07 W	100.0	48.0	38.0
861021	05	01	07	09	02	2	59	1.7	10 34 N	091 06 W	93.3	15.0	13.0
861021	08	01	10	09	01	1	56	2.0	10 23 N	091 15 W	100.0	37.0	33.0
861021	09	01	13			1	56	4.4	10 16 N	091 19 W	100.0	38.0	30.0
861021	10	01	16	11	01	1	04	1.2	10 13 N	091 18 W	100.0	35.0	30.0
861021	11	01	19	12	01	1	59	4.1	10 07 N	091 23 W	100.0	35.0	30.0
861021	11	05	27	01	02	1	62	1.8	09 49 N	091 44 W	100.0	43.0	36.0
861021	12	01	28	01	02	1	59	0.6	09 46 N	091 45 W	100.0	62.0	53.0
861021	13	01	29	01	03	1	59	3.9	09 41 N	091 50 W	100.0	40.0	35.0
861022	05	02	09	02	03	2	22	4.3	05 56 N	092 04 W	100.0	0.0*	25.0
861024	02	07	02			4	31	4.4	01 14 N	091 50 W	100.0	22.0	17.0
861028	02	01	04	02	03	1	04	0.1	09 22 N	086 39 W	100.0	6.0	3.0
861029	01	02	02			4	62	2.8	07 46 N	083 42 W	100.0	17.0	9.0
861029	04	01	03			3	62	4.0	07 26 N	082 59 W	100.0	83.0	68.0
861030	01	03	01			2	31	1.9	05 15 N	080 30 W	100.0	83.0	71.0
861030	02	05	02	01	01	3	59	0.5	04 59 N	080 13 W	100.0	48.0	40.0

Table 3. (continued)

SPECIES: STRIPED DOLPHIN (S. COERULEOALBA) SPECIES CODE: 13

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861030	03	03	04	03	01	3	04	1.3	04 43 N	080 02 W	100.0	22.0	17.0
861031	04	07	14	03	01	1	31	0.8	04 06 N	077 53 W	100.0	13.0	10.0
861109	01	01	01			3	62	1.8	05 34 N	082 13 W	100.0	19.0	13.0
861109	04	02	07	01	03	3	04	2.5	04 59 N	082 58 W	100.0	13.0	8.0
861111	01	04	01	08	02	4	04	0.7	01 42 N	087 44 W	100.0	33.0	21.0
861116	01	13	01	04	01	3	04	3.5	00 34 N	092 44 W	100.0	47.0	32.0
861119	01	01	02			4	04	0.9	00 35 N	092 43 W	100.0	29.0	20.0
861119	02	01	03			4	56	2.5	00 38 N	092 49 W	100.0	79.0	62.0
861120	01	01	01			4	31	0.4	01 12 N	096 24 W	100.0	14.0	9.0
861120	03	04	06			5	56	0.0	01 07 N	097 51 W	100.0	242.0	183.0
861120	04	04	07	11	02	5	04	3.3	01 07 N	098 11 W	100.0	43.0	23.0
861121	03	04	03			4	31	3.8	01 01 N	102 40 W	100.0	60.0	32.0
861122	02	20	01	11	02	5	31	0.8	00 54 N	106 38 W	100.0	45.0	33.0
861125	04	03	03	07	01	5	04	1.3	02 59 N	117 35 W	100.0	27.0	15.0
861201	02	14	02	07	03	3	56	3.8	20 25 N	122 52 W	100.0	15.0	10.0
861203	01	09	01	04	02	2	22	6.9	26 30 N	119 14 W	100.0	43.0	36.0
861203	03	02	04	05	02	1	62	2.5	26 45 N	119 04 W	100.0	40.0	33.0

Table 3. (continued)

SPECIES: ROUGH-TOOTHED DOLPHIN (STENO BREDANENSIS) SPECIES CODE: 15

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802	08	01	11	03	01	1	04	5.2	22 59 N	113 23 W	100.0	23.0	19.0
860808	02	02	02	11	03	2	04	4.2	17 48 N	109 10 W	100.0	8.0	6.0
860808	02	03	03	11	03	2	56	0.0	17 48 N	109 08 W	100.0	6.0	5.0
860823			13	12	02	1	31	2.4	14 52 N	098 13 W	100.0	11.0	10.0
860823	02	02	03	06	02	2	04	4.8	14 58 N	097 20 W	100.0	5.0	3.0
860823	04	01	04	06	01	2	31	1.2	14 57 N	097 34 W	100.0	5.0	5.0
860823	05	01	05	12	12	1	56	0.6	14 56 N	097 36 W	100.0	6.0	4.0
860823	07	01	06	12	12	1	62	0.8	14 56 N	097 40 W	100.0	3.0	2.0
860823	08	01	07	12	12	1	04	1.4	14 56 N	097 48 W	36.8	28.0	24.0
860823	11	02	12	12	02	1	04	4.8	14 54 N	098 08 W	100.0	0.0*	2.0
860825	01	01	01			3	31	0.0	15 52 N	102 19 W	100.0	4.0	4.0
860904	03	01	04	07	01	2	31	2.2	13 14 N	114 06 W	100.0	8.0	6.0
860909	08	06	08	02	02	2	31	3.1	12 22 N	101 01 W	100.0	7.0	5.0
860910			10			3	04	0.0	10 03 N	103 42 W	100.0	0.0*	1.0
860927	05	02	04	10	02	3	04	0.4	15 31 N	099 25 W	100.0	11.0	8.0
860929	07	02	12			3	56	0.0	18 12 N	103 48 W	100.0	5.0	4.0
861005	06	05	06	02	01	3	31	0.1	15 19 N	104 39 W	100.0	7.0	6.0
861008	05	01	02	03	01	5	22	0.6	06 24 N	104 54 W	100.0	8.0	8.0
861011			07	04	01	2	31	0.0	12 57 N	096 07 W	100.0	15.0	12.0
861011			09	06	02	2	31	0.1	13 06 N	095 55 W	100.0	5.0	5.0
861011	08	03	10	07	03	2	59	0.0	13 13 N	095 44 W	100.0	9.0	8.0
861012	02	06	02	09	02	5	31	0.0	11 24 N	096 10 W	100.0	2.0	2.0
861013	02	06	01	09	02	3	62	0.2	08 06 N	097 24 W	100.0	9.0	7.0
861018	08	07	14	03	03	1	04	0.9	12 32 N	092 01 W	100.0	7.0	6.0
861019	06	07	21	08	03	3	31	0.1	11 55 N	091 30 W	100.0	4.0	4.0
861119	03	02	05			4	56	0.4	00 41 N	093 00 W	100.0	12.0	10.0
861120	03	01	05			5	04	0.7	01 07 N	097 24 W	100.0	15.0	10.0
861126	01	15	02	09	01	4	57	0.2	05 37 N	121 40 W	100.0	8.0	6.0

Table 3. (continued)

SPECIES: BOTTLENOSED DOLPHINS (TURSIOPS TRUNCATUS) SPECIES CODE: 18

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860801			03			1	31	0.6	24 58 N	115 46 W	100.0	28.0	21.0
860804			01	12	03	2		0.0	18 49 N	111 05 W	100.0	4.0	3.0
860806	04	01	05	01	01	3	62	0.5	16 51 N	115 08 W	100.0	31.0	27.0
860808	10	02	17	01	02	2	62	0.2	17 35 N	108 19 W	100.0	5.0	4.0
860808	12	01	19	02	02	2	04	0.0	17 28 N	108 24 W	100.0	11.0	8.0
860809	05	03	08	07	01	3	62	0.6	15 50 N	110 44 W	100.0	47.0	39.0
860810	02	02	02	12	02	2	04	3.6	15 53 N	108 37 W	100.0	43.0	32.0
860810	05	01	04			2	31	1.2	16 02 N	107 42 W	100.0	15.0	14.0
860811	01	01	01	07	03	2	31	0.2	15 32 N	106 29 W	100.0	16.0	12.0
860811	07	02	07	09	12	2	56	3.9	14 48 N	106 49 W	100.0	36.0	32.0
860812	01	07	01	08	02	2	31	0.1	11 37 N	108 34 W	22.7	10.0	8.0
860812	03	03	05	03	03	1	56	0.2	10 23 N	109 10 W	100.0	36.0	27.0
860823	08	01	07	12	12	1	04	1.4	14 56 N	097 48 W	7.8	28.0	24.0
860823	09	02	08	12	01	1	31	1.4	14 53 N	097 56 W	46.0	58.0	42.0
860823	13	01	15	12	02	1	04	3.2	14 52 N	098 16 W	1.0	150.0	107.0
860903			06	12	03	2	04	6.4	14 41 N	111 43 W	17.5	40.0	20.0
860905			08			2	58	0.0	12 48 N	111 18 W	100.0	13.0	10.0
860908	01	02	01	12	03	3	31	2.4	13 14 N	102 30 W	6.2	38.0	29.0
860910			06			3	58	0.4	10 29 N	103 06 W	100.0	7.0	6.0
860910	06	01	05	12	12	3	04	3.8	10 30 N	103 06 W	0.7	500.0	417.0
860911	03	01	02	01	12	2	31	5.8	08 07 N	106 12 W	9.7	44.0	37.0
860914			01			6	04	1.4	01 25 N	110 00 W	0.0*	0.0*	15.0
860917			04			5	04	1.3	03 47 S	108 20 W	71.7	52.0	45.0
860923	04	03	04	07	01	2	56	6.5	10 04 N	090 24 W	1.0	1136.0	966.0
860925	06	01	06	10	02	2	22	4.6	11 20 N	093 54 W	3.7	602.0	503.0
860926	01	03	02	05	02	3	58	0.4	12 52 N	095 42 W	5.7	112.0	77.0
860926	04	05	07	11	02	3	62	2.1	13 39 N	096 46 W	23.3	0.0*	20.0
860928	02	01	03	05	02	3	04	0.1	16 48 N	101 37 W	92.0	0.0*	55.0
860929	04	03	08	06	01	2	58	3.2	17 46 N	103 21 W	85.0	230.0	200.0
860929	07	03	13			3	31	2.3	18 14 N	103 48 W	33.0	80.0	60.0
861005	03	01	03	09	02	3	04	0.1	16 19 N	104 35 W	86.0	6.0	6.0

Table 3. (continued)

SPECIES: BOTTLENOSED DOLPHINS (TURSIOPS TRUNCATUS) SPECIES CODE: 18

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861007	03	07	03	03	01	3	62	1.3	09 11 N	105 06 W	10.5	16.0	14.0
861010	10	01	14			1	04	6.9	11 13 N	098 25 W	1.0	128.0	88.0
861011	02	05	03	02	02	3	04	3.0	12 34 N	096 33 W	12.5	10.0	13.0
861016			03			5	04	5.3	07 18 N	095 50 W	1.7	0.0*	182.0
861017	02	03	02	02	02	3	04	0.0	09 47 N	094 22 W	100.0	4.0	4.0
861017	06	02	04	07	01	3	59	0.7	10 31 N	093 42 W	79.0	59.0	44.0
861018			15			1	04	0.2	12 31 N	092 01 W	100.0	6.0	5.0
861019	03	01	09			1	59	2.5	10 52 N	091 49 W	44.0	0.0*	34.0
861019	04	03	14	08	01	2	04	0.8	11 08 N	091 44 W	78.0	0.0*	77.0
861020			01			1	31	1.5	13 54 N	090 49 W	100.0	0.0*	6.0
861020			03	11	01	2	59	0.0	13 39 N	090 52 W	100.0	2.0	2.0
861020			14			2	31	0.0	12 54 N	090 57 W	100.0	0.0*	6.0
861020	02	01	04	11	01	2	04	0.2	13 35 N	090 53 W	100.0	6.0	5.0
861020	02	03	05	11	01	2	62	1.0	13 26 N	090 54 W	100.0	0.0*	52.0
861020	03	01	10	02	01	2	56	0.0	13 13 N	090 51 W	100.0	0.0*	135.0
861020	03	03	11	02	02	2	62	0.0	13 03 N	090 53 W	100.0	0.0*	10.0
861021	11	01	20	12	01	1	04	0.1	10 06 N	091 25 W	100.0	13.0	11.0
861024	03	01	03			4	59	0.9	01 19 N	091 49 W	100.0	5.0	9.0
861027	06	01	07	05	01	2	62	0.2	06 53 N	088 00 W	40.0	0.0*	101.0
861029	05	06	06	05	01	3	31	0.7	07 16 N	082 44 W	37.0	0.0*	27.0
861029	06	02	07	05	02	3	62	0.2	07 12 N	082 31 W	100.0	3.0	2.0
861101	01	01	01			2	56	1.8	07 06 N	078 17 W	76.3	28.0	25.0
861101	02	02	02			2	04	0.8	07 10 N	078 17 W	100.0	20.0	15.0
861101	03	08	07	06	01	2	04	0.5	08 00 N	078 38 W	2.0	265.0	189.0
861108			01			1		0.2	08 16 N	078 32 W	90.0	3.0	3.0
861108			08			2	04	0.7	08 00 N	078 59 W	100.0	10.0	6.0
861108			09			2	04	0.2	07 58 N	079 02 W	100.0	10.0	6.0
861108			10			2	04	0.4	07 41 N	079 22 W	100.0	0.0*	50.0
861108	01	01	02			2	31	3.2	08 14 N	078 37 W	100.0	0.0*	5.0
861108	08	01	13			2	04	1.3	07 31 N	079 32 W	100.0	0.0*	62.0
861112			06	08	01	4	04	0.0	01 20 N	091 47 W	100.0	122.0	100.0

Table 3. (continued)

SPECIES: BOTTLENOSED DOLPHINS (TURSIOPS TRUNCATUS) SPECIES CODE: 18

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861112	01	02	01			3	31	0.7	01 16 N	090 59 W	30.5	43.0	37.0
861112	06	03	08			4	56	1.1	01 34 N	091 59 W	100.0	0.0*	45.0
861116			07			2	31	0.0	00 17 N	091 36 W	100.0	0.0*	6.0
861118			01			3	66	0.1	00 21 S	090 48 W	100.0	0.0*	4.0
861118			02			3	04	0.0	00 18 S	090 52 W	100.0	12.0	10.0
861128	01	02	01	05	03	2	31	3.2	09 25 N	126 10 W	10.7	26.0	17.0
861205			07			1	31	1.4	32 10 N	117 31 W	33.0	15.0	10.0

Table 3. (continued)

SPECIES: RISSO'S DOLPHIN (GRAMPUS GRISEUS) SPECIES CODE: 21

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860806	07	02	08	07	02	2	62	0.9	17 00 N	114 23 W	100.0	18.0	14.0
860812	01	07	01	08	02	2	31	0.1	11 37 N	108 34 W	44.0	10.0	8.0
860816	03	03	03			5	60	0.7	05 33 N	115 43 W	100.0	2.0	2.0
860823	09	02	08	12	01	1	31	1.4	14 53 N	097 56 W	54.0	58.0	42.0
860903			06	12	03	2	04	6.4	14 41 N	111 43 W	82.5	40.0	20.0
860908	01	02	01	12	03	3	31	2.4	13 14 N	102 30 W	93.7	38.0	29.0
860926	04	05	07	11	02	3	62	2.1	13 39 N	096 46 W	43.3	0.0*	20.0
860928	02	01	03	05	02	3	04	0.1	16 48 N	101 37 W	8.0	0.0*	55.0
860928	06	07	11			3	04	0.2	17 24 N	102 40 W	100.0	17.0	15.0
860929	04	03	08	06	01	2	58	3.2	17 46 N	103 21 W	15.0	230.0	200.0
860929	07	03	13			3	31	2.3	18 14 N	103 48 W	67.0	80.0	60.0
861005	03	01	03	09	02	3	04	0.1	16 19 N	104 35 W	14.0	6.0	6.0
861011	02	05	03	02	02	3	04	3.0	12 34 N	096 33 W	12.5	10.0	13.0
861020	03	03	13	02	02	2	62	0.6	13 00 N	090 53 W	100.0	6.0	4.0
861109	03	01	04	12	02	3	31	0.2	05 08 N	082 52 W	100.0	13.0	9.0
861120	02	10	03			5	31	0.0	01 08 N	097 10 W	100.0	5.0	5.0
861129	01	14	02	05	01	5	22	0.2	12 32 N	126 27 W	100.0	12.0	10.0
861202	03	01	04	05	01	2	31	2.0	23 08 N	121 30 W	100.0	16.0	13.0
861203	02	04	02	05	02	1	31	2.9	26 39 N	119 08 W	100.0	12.0	10.0

Table 3. (continued)

SPECIES: PACIFIC WHITE-SIDED DOLPHIN (LAGENORHYNCHUS OBLIQUIDENS) SPECIES CODE: 22

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861205			09			2	31	2.0	32 32 N	117 14 W	100.0	11.0	9.0

Table 3. (continued)

SPECIES: FRASER'S DOLPHIN (LAGENODELPHIS HOSEI)

SPECIES CODE: 26

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860816	02	05	02	01	12	6	31	0.5	05 25 N	115 34 W	100.0	578.0	446.0
861112	07	01	10	09	02	4	22	1.4	01 37 N	091 59 W	30.0	426.0	338.0

Table 3. (continued)

SPECIES: MELON-HEADED WHALE (PEPONOCEPHALA ELECTRA) SPECIES CODE: 31

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861030	04	04	05	04	02	2	31	6.7	04 30 N	079 50 W	100.0	425.0	355.0
861031	06	05	18	08	02	3	04	1.3	04 56 N	077 45 W	100.0	0.0*	50.0
861112	07	01	10	09	02	4	22	1.4	01 37 N	091 59 W	70.0	426.0	338.0
861120	02	12	04			5	57	0.1	01 08 N	097 21 W	100.0	350.0	275.0

Table 3. (continued)

SPECIES: PYGMY KILLER WHALE (FERESA ATTENUATA) SPECIES CODE: 32

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860909	04	02	02	08	12	3	04	0.1	12 58 N	100 14 W	100.0	34.0	29.0

Table 3. (continued)

SPECIES: FALSE KILLER WHALE (PSEUDORCA CRASSIDENS) SPECIES CODE: 33

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860823	08	01	07	12	12	1	04	1.4	14 56 N	097 48 W	55.3	28.0	24.0
860904	02	12	03	07	02	2	62	2.2	13 19 N	113 59 W	100.0	19.0	15.0
860914			01			6	04	1.4	01 25 N	110 00 W	0.0*	0.0*	15.0
860916			02			6	31	0.0	03 22 S	110 01 W	100.0	0.0*	2.0
860917	08	03	07	07	02	5	31	0.1	03 23 S	107 46 W	100.0	3.0	4.0
861113	01	08	01	08	01	4	04	3.8	01 31 N	094 52 W	100.0	0.0*	12.0
861116	01	15	02	05	01	3	31	0.2	00 32 N	092 27 W	100.0	0.0*	40.0
861116	02	05	04	05	02	3	04	2.3	00 28 N	092 09 W	100.0	0.0*	20.0
861116	02	06	05	05	03	3	04	5.6	00 26 N	092 04 W	100.0	0.0*	20.0
861128	01	02	01	05	03	2	31	3.2	09 25 N	126 10 W	89.3	26.0	17.0

Table 3. (continued)

SPECIES: PILOT WHALE (GLOBICEPHALA SP.) SPECIES CODE: 34

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802	04	01	05	11	01	1	56	2.2	23 20 N	113 47 W	100.0	18.0	13.0
860911	03	01	02	01	12	2	31	5.8	08 07 N	106 12 W	57.0	44.0	37.0
860917			04			5	04	1.3	03 47 S	108 20 W	28.3	52.0	45.0
860917			08	08	03	5		0.0	03 21 S	107 44 W	100.0	2.0	2.0
860918	03	09	01	08	01	4	56	0.7	01 10 S	104 51 W	100.0	0.0*	3.0
860920	02	09	02			4	56	0.4	03 37 N	098 33 W	100.0	12.0	7.0
860922	02	01	03			3	58	2.7	07 39 N	093 07 W	100.0	15.0	10.0
860925	01	02	01	04	03	3	04	0.5	10 13 N	092 49 W	100.0	0.0*	6.0
861007	03	07	03	03	01	3	62	1.3	09 11 N	105 06 W	64.5	16.0	14.0
861010	07	02	11	07	02	2	59	1.4	11 08 N	098 32 W	100.0	19.0	17.0
861013	03	01	02	09	02	3	22	0.6	08 05 N	097 25 W	100.0	13.0	11.0
861024	07	01	09			5	22	0.8	01 42 N	091 28 W	100.0	11.0	8.0
861027			04			3	04	2.7	06 30 N	088 03 W	100.0	0.0*	12.0
861027			06			2	31	0.0	06 45 N	087 54 W	100.0	0.0*	8.0
861027	06	01	07	05	01	2	62	0.2	06 53 N	088 00 W	60.0	0.0*	101.0
861027	07	01	08	08	01	2	59	4.2	07 02 N	087 55 W	100.0	9.0	8.0
861027	07	03	10	08	02	1	22	5.8	07 14 N	087 52 W	100.0	3.0	4.0
861029	05	06	06	05	01	3	31	0.7	07 16 N	082 44 W	63.0	0.0*	27.0
861101	01	01	01			2	56	1.8	07 06 N	078 17 W	23.7	28.0	25.0
861101	02	02	03			2	04	1.0	07 14 N	078 22 W	100.0	10.0	7.0
861108	07	01	11			2	04	6.3	07 38 N	079 23 W	100.0	0.0*	6.0
861112	01	02	01			3	31	0.7	01 16 N	090 59 W	69.5	43.0	37.0
861205			04			1	31	6.7	32 04 N	117 35 W	100.0	0.0*	6.0
861205			07			1	31	1.4	32 10 N	117 31 W	67.0	15.0	10.0

Table 3. (continued)

SPECIES: KILLER WHALE (ORCINUS ORCA) SPECIES CODE: 37

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802	07	02	10	12	12	1	31	2.4	23 02 N	113 26 W	100.0	2.0	2.0
860808			15	01	02	2	56	0.0	17 37 N	108 15 W	100.0	3.0	3.0
860809			12	12	01	2	56	0.2	15 30 N	111 03 W	100.0	1.0	1.0
861016	01	21	01			5	04	3.1	07 18 N	095 50 W	100.0	4.0	3.0
861025	05	07	06	07	01	3	31	0.9	04 45 N	089 21 W	100.0	7.0	7.0
861027			01			3		1.5	06 12 N	088 13 W	100.0	0.0*	1.0
861116	02	03	03	05	02	3	04	2.4	00 28 N	092 12 W	100.0	0.0*	1.0
861128	02	04	02	07	01	2	04	0.2	09 35 N	126 30 W	100.0	3.0	3.0

Table 3. (continued)

SPECIES: SPERM WHALE (PHYSETER MACROCEPHALUS) SPECIES CODE: 46

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860804	07	01	08	01	02	3	31	6.4	18 11 N	112 19 W	100.0	8.0	7.0
860805			05	12	12	3	04	1.4	17 02 N	115 15 W	100.0	6.0	6.0
860805	02	06	03	06	01	3	56	3.0	17 07 N	115 05 W	80.3	6.0	5.0
860808	10	02	16	01	02	2	31	0.1	17 35 N	108 19 W	100.0	1.0	1.0
860813	10	05	09			4	22	1.4	08 02 N	109 19 W	100.0	1.0	1.0
860816	04	03	04	12	01	5	04	1.1	05 38 N	115 50 W	100.0	31.0	29.0
860818	01	04	01			4	22	2.3	09 03 N	113 11 W	100.0	2.0	3.0
860818	03	01	03	12	12	3	22	1.5	09 20 N	112 22 W	100.0	0.0*	6.0
860819	01	01	01			2	31	1.7	10 10 N	109 43 W	100.0	0.0*	5.0
860825	04	01	04	05	12	5	31	5.4	16 25 N	102 19 W	100.0	1.0	1.0
860908	06	02	02			3	04	0.1	13 21 N	101 38 W	100.0	2.0	3.0
860917	01	01	01			4	56	0.4	04 08 S	108 51 W	100.0	9.0	9.0
860922	01	01	01			3	56	0.4	07 53 N	093 22 W	100.0	1.0	1.0
860925			02	04	03	3	04	4.4	10 17 N	092 52 W	100.0	0.0*	1.0
860925	02	02	03	04	02	3	56	5.0	10 22 N	093 01 W	100.0	9.0	9.0
861005	07	02	08	02	02	2	59	5.1	15 11 N	104 39 W	100.0	1.0	1.0
861006	05	01	10	11	01	1	31	5.4	12 22 N	104 30 W	100.0	0.0*	2.0
861006	05	05	11	01	01	3	37	6.3	12 10 N	104 33 W	100.0	0.0*	4.0
861007	03	01	02			4	04	2.6	09 25 N	105 03 W	100.0	0.0*	11.0
861007	04	06	05	12	12	3	22	3.5	08 46 N	105 12 W	100.0	0.0*	9.0
861017	06	02	04	07	01	3	59	0.7	10 31 N	093 42 W	21.0	59.0	44.0
861017	08	04	05	08	02	3	04	3.7	10 39 N	093 35 W	100.0	4.0	5.0
861019	03	01	09			1	59	2.5	10 52 N	091 49 W	56.0	0.0*	34.0
861019	04	03	14	08	01	2	04	0.8	11 08 N	091 44 W	22.0	0.0*	77.0
861019	05	04	18			2	31	6.3	11 22 N	091 38 W	100.0	0.0*	11.0
861022	03	07	04	12	01	2	22	3.7	06 44 N	092 03 W	100.0	0.0*	11.0
861022	04	03	07	02	01	2	04	2.0	06 21 N	092 04 W	100.0	0.0*	7.0
861027	05	01	05	03	01	2	56	13.5	06 38 N	087 58 W	100.0	0.0*	39.0
861029	05	05	05	04	01	3	31	5.6	07 17 N	082 47 W	100.0	1.0	1.0
861029	06	03	08	05	02	3	04	2.1	07 11 N	082 27 W	100.0	0.0*	10.0
861030			06	01	02	2	04	0.0	04 29 N	079 49 W	100.0	0.0*	7.0

Table 5. (Continued)

SPECIES: SPERM WHALE (PHYSETER MACROCEPHALUS)

SPECIES CODE: 46

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861109			06	12	02	3	04	0.5	05 06 N	082 52 W	100.0	6.0	6.0
861109	02	01	02			3	22	5.6	05 30 N	082 23 W	100.0	0.0*	1.0
861130	01	02	01			4	31	3.7	16 19 N	124 39 W	100.0	6.0	5.0

Table 3. (continued)

SPECIES: PYGMY SPERM WHALE (KOGIA BREVICEPS)

SPECIES CODE: 47

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861204	02	01	02			0	31	1.7	28 45 N	116 36 W	100.0	1.0	1.0
861204	03	02	03	03	02	0	04	1.1	28 48 N	116 31 W	100.0	2.0	2.0
861204	04	01	04	04	02	0	22	0.2	29 02 N	116 24 W	100.0	1.0	1.0
861204	06	03	06			1	62	2.3	29 13 N	116 15 W	100.0	2.0	2.0
861204	07	02	07			1	22	0.4	29 21 N	116 08 W	100.0	2.0	2.0

Table 3. (continued)

SPECIES: DWARF SPERM WHALE (KOGIA SIMUS) SPECIES CODE: 48

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802			12	09	01	1	04	0.0	23 00 N	113 21 W	100.0	1.0	1.0
860808	09	02	13	01	01	1	60	0.2	17 41 N	108 13 W	100.0	1.0	1.0
860809	13	02	17	07	03	1	31	1.1	15 28 N	110 42 W	100.0	3.0	3.0
860812			04	03	02	1		0.5	10 32 N	109 07 W	100.0	2.0	2.0
860823	11	01	10	12	02	1	56	0.5	14 54 N	098 02 W	100.0	1.0	1.0
860924	02	02	02	06	01	2	31	0.6	08 16 N	090 24 W	100.0	3.0	3.0
860924	03	01	04	06	12	2	31	1.9	08 17 N	090 27 W	100.0	2.0	2.0
861006	02	01	03	11	02	1	56	0.3	12 45 N	104 39 W	21.3	5.0	5.0
861006	04	01	07	10	02	1	04	1.0	12 33 N	104 34 W	100.0	1.0	1.0
861006	07	03	14	02	02	3	31	1.2	11 51 N	104 37 W	100.0	1.0	1.0
861007	04	06	04	12	12	3	04	0.7	08 49 N	105 11 W	100.0	1.0	1.0
861010			08	03	12	2	31	1.3	10 49 N	098 52 W	100.0	2.0	2.0
861018			11	02	02	1	31	0.5	12 57 N	092 01 W	100.0	2.0	2.0
861018			13	02	02	1		3.1	12 51 N	092 01 W	100.0	2.0	2.0
861018	02	01	04	03	01	1	56	0.3	12 45 N	092 27 W	100.0	2.0	2.0
861018	03	01	06	03	01	1	56	0.7	12 50 N	092 20 W	100.0	5.0	5.0
861018	07	01	09	02	02	1	56	0.2	12 58 N	092 01 W	100.0	1.0	1.0
861018	08	01	12	02	02	1	04	0.1	12 53 N	092 01 W	100.0	1.0	1.0
861019	02	02	05	09	03	1	31	0.3	10 45 N	091 54 W	100.0	1.0	1.0
861021			14	01	01	1	31	0.7	10 14 N	091 18 W	100.0	4.0	4.0
861021			17	11	01	1	04	1.2	10 12 N	091 20 W	100.0	2.0	2.0
861021	07	04	09	09	01	1	31	0.4	10 24 N	091 13 W	100.0	3.0	3.0
861021	11	03	23	12	02	1	56	2.1	09 59 N	091 33 W	100.0	1.0	1.0
861021	11	04	26	12	02	1	56	0.2	09 54 N	091 39 W	100.0	2.0	2.0
861028			20	04	01	0	59	1.4	08 53 N	085 48 W	100.0	1.0	1.0
861028	01	02	02	02	03	1	04	0.1	09 18 N	086 43 W	100.0	2.0	2.0
861028	02	02	05	02	03	1	04	1.4	09 24 N	086 38 W	100.0	1.0	1.0
861028	02	03	06			1	04	1.5	09 26 N	086 36 W	100.0	1.0	1.0
861028	02	06	09	12	02	1	31	1.7	09 12 N	086 19 W	100.0	1.0	1.0
861028	02	06	10	12	02	1	62	0.1	09 12 N	086 19 W	100.0	1.0	1.0
861028	02	06	11	12	02	1	31	0.3	09 11 N	086 18 W	100.0	2.0	2.0

Table 3. (continued)

SPECIES: DWARF SPERM WHALE (KOGIA SIMUS) SPECIES CODE: 48

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861028	02	07	12	12	01	1	31	0.2	09 10 N	086 16 W	100.0	1.0	1.0
861028	03	01	13	01	01	0	04	0.0	09 10 N	086 07 W	100.0	4.0	4.0
861028	04	02	14	02	01	1	31	2.7	09 05 N	086 02 W	100.0	1.0	1.0
861028	06	02	17	04	01	0	04	0.7	08 55 N	085 50 W	100.0	2.0	2.0
861028	06	02	18	04	01	0	04	0.4	08 54 N	085 49 W	100.0	1.0	1.0
861028	08	01	22	04	02	0	56	2.8	08 49 N	085 45 W	100.0	2.0	2.0
861028	09	03	26	04	03	1	62	1.7	08 38 N	085 30 W	100.0	1.0	1.0
861031	04	03	11	03	01	0	04	0.2	03 52 N	078 05 W	100.0	1.0	1.0
861031	05	01	16	03	12	1	04	4.2	04 12 N	077 50 W	100.0	1.0	1.0
861114	04	02	04	09	01	4	04	0.5	01 44 N	099 30 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: BEAKED WHALE (ZIPHIID) SPECIES CODE: 49

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860806	02	01	02	12	02	2	31	1.4	16 43 N	115 49 W	100.0	2.0	2.0
860811	08	01	08	01	12	2	04	6.2	14 47 N	106 54 W	100.0	0.0*	1.0
860812	02	12	03	03	02	1	31	0.6	10 32 N	109 07 W	100.0	2.0	2.0
860815	01	07	01	07	02	5	04	0.2	03 39 N	111 51 W	100.0	1.0	1.0
860823	10	01	09	12	01	1	31	4.4	14 52 N	098 02 W	100.0	2.0	2.0
860905	02	01	02	12	02	1	22	3.1	12 47 N	112 52 W	100.0	2.0	1.0
860905	04	02	05			1	31	0.2	12 52 N	111 57 W	100.0	2.0	1.0
860909	07	05	07	12	01	3	31	0.2	12 37 N	100 42 W	100.0	2.0	2.0
860916	02	01	04			4	31	0.5	04 36 S	110 01 W	100.0	2.0	2.0
860923	07	01	07	03	01	2	56	1.7	09 56 N	090 30 W	100.0	1.0	1.0
860928	07	02	13	11	02	2	31	3.0	17 29 N	102 50 W	100.0	0.0*	4.0
861010	02	02	02	02	02	2	31	1.6	10 32 N	099 19 W	100.0	2.0	2.0
861018			03			1	56	0.0	12 44 N	092 27 W	100.0	2.0	2.0
861018	03	03	07	05	01	1	31	4.9	12 59 N	092 08 W	100.0	3.0	3.0
861021	06	01	08	08	01	1	04	3.3	10 30 N	091 08 W	100.0	1.0	1.0
861021	11	02	22	12	01	1	04	1.5	10 04 N	091 22 W	100.0	0.0*	1.0
861028	01	02	03	02	03	1	59	3.2	09 21 N	086 41 W	100.0	3.0	3.0
861028	04	03	15	03	01	1	31	3.1	09 01 N	086 00 W	100.0	2.0	2.0
861028	08	03	23	04	02	0	31	0.5	08 42 N	085 35 W	100.0	1.0	1.0
861028	09	01	25	04	03	0	31	0.7	08 40 N	085 32 W	100.0	4.0	3.0
861031	03	04	09	03	02	2	04	5.9	03 41 N	078 11 W	100.0	2.0	2.0
861031	04	06	13	03	01	1	56	0.9	04 00 N	077 58 W	100.0	1.0	1.0
861126	01	05	01	06	02	4	04	0.3	04 59 N	120 57 W	100.0	1.0	1.0
861205	01	01	01			2	56	0.9	31 49 N	117 44 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: SOUTHERN BOTTLENOSED WHALE (HYPEROODON PLANIFRONS) SPECIES CODE: 50

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861025	01	06	01			3	56	1.7	03 50 N	089 57 W	100.0	8.0	6.0

Table 3. (continued)

SPECIES: UNID. MESOPLODONT (MESOPLODON SP.)

SPECIES CODE: 51

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802	05	02	06	12	01	1	04	2.7	23 13 N	113 40 W	100.0	3.0	2.0
860804	03	03	04	12	12	3	04	1.6	18 27 N	111 01 W	100.0	0.0*	1.0
860806	03	06	04	01	01	3	56	1.7	16 52 N	115 11 W	100.0	2.0	2.0
860808	09	02	12	01	01	1	04	0.5	17 44 N	108 09 W	100.0	3.0	3.0
860811	09	05	11	02	02	3	04	0.7	14 09 N	107 18 W	100.0	3.0	3.0
860814	01	07	01	03	12	5	60	0.2	05 03 N	110 00 W	100.0	1.0	1.0
860904	04	03	05	08	12	1	58	3.4	13 07 N	114 15 W	100.0	2.0	2.0
860917			03			5	58	0.2	03 49 S	108 23 W	100.0	4.0	4.0
861010			10	07	02	2	04	0.1	11 01 N	098 38 W	100.0	3.0	3.0
861019	02	16	08	05	01	1	04	1.4	10 47 N	091 50 W	100.0	3.0	3.0
861028	08	03	24	04	02	0	04	0.9	08 42 N	085 35 W	100.0	3.0	3.0
861031			07			2		0.3	03 36 N	078 17 W	100.0	3.0	2.0
861111	03	03	04	10	01	4	04	0.5	01 23 N	088 15 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: CUVIER'S BEAKED WHALE (ZIPHIUS CAVIROSTRIS)

SPECIES CODE: 61

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860809	08	01	13	01	01	2	31	4.9	15 28 N	111 07 W	100.0	4.0	3.0
860822	05	03	05	05	12	1	31	0.0	14 02 N	098 41 W	100.0	1.0	1.0
860909	05	01	03	12	12	3	56	0.1	12 57 N	100 16 W	100.0	3.0	2.0
860925	03	04	04	05	01	3	58	0.3	10 37 N	093 13 W	100.0	1.0	1.0
860926	03	01	05	10	02	3	22	0.7	13 30 N	096 31 W	100.0	3.0	2.0
861005	05	01	05	12	12	3	04	0.4	15 53 N	104 38 W	100.0	4.0	4.0
861010	05	03	09	06	01	2	59	1.0	11 02 N	098 41 W	100.0	3.0	2.0
861010	08	02	12			1	31	1.9	11 13 N	098 28 W	100.0	3.0	3.0
861010	09	02	13			1	04	1.7	11 13 N	098 26 W	100.0	2.0	2.0
861021			11			1	31	4.4	10 20 N	091 16 W	100.0	2.0	2.0
861021			15	02	01	1	31	2.5	10 14 N	091 17 W	100.0	4.0	4.0
861021	11	01	18	12	01	1	04	5.9	10 07 N	091 23 W	100.0	0.0*	1.0
861021	11	02	21	12	01	1	04	1.1	10 05 N	091 26 W	100.0	3.0	3.0
861028	06	01	16	03	01	0	31	0.4	08 59 N	085 55 W	100.0	1.0	1.0
861112	02	04	04	07	02	5	04	0.2	01 16 N	091 26 W	100.0	4.0	3.0
861123	02	21	02	06	01	5	31	0.2	01 31 N	110 01 W	100.0	1.0	1.0
861205			02			2	04	0.3	31 57 N	117 38 W	100.0	4.0	4.0

Table 3. (contined)

SPECIES: RORQUAL (BALAENOPTERA SP.) SPECIES CODE: 70

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860730			01			3	04	2.4	31 57 N	116 57 W	100.0	1.0	1.0
860805	01	04	02	06	03	3	31	0.0	17 17 N	114 38 W	100.0	1.0	1.0
860807	07	03	07	12	01	3	04	1.1	17 19 N	112 05 W	100.0	1.0	1.0
860809	10	02	14	07	02	2	04	6.5	15 26 N	110 58 W	33.0	3.0	2.0
860902	05	05	03	12	02	3	04	1.0	16 58 N	107 37 W	100.0	1.0	1.0
860902	06	06	04	01	02	3	58	3.5	16 51 N	107 52 W	100.0	1.0	1.0
860910	07	07	08	01	02	2	58	3.5	10 04 N	103 33 W	100.0	12.0	8.0
860916			03			5	04	1.0	04 13 S	110 01 W	100.0	1.0	1.0
860917	07	01	06	07	01	6	04	4.0	03 30 S	107 57 W	100.0	2.0	2.0
860924	02	02	03	06	01	2	31	10.5	08 16 N	090 24 W	100.0	0.0*	1.0
861012	06	01	04	11	01	4	59	1.7	10 56 N	096 22 W	100.0	1.0	1.0
861022	01	08	01	10	02	2	31	2.9	07 08 N	092 01 W	100.0	0.0*	1.0
861025	03	01	03			3	04	2.7	04 01 N	089 52 W	100.0	1.0	1.0
861025	05	05	05			3	04	2.4	04 38 N	089 28 W	100.0	1.0	1.0
861027	02	01	02	03	03	3	31	9.5	06 14 N	088 12 W	100.0	2.0	1.0
861108			01			1		0.2	08 16 N	078 32 W	60.0	3.0	3.0
861109	03	01	03	12	02	3	22	1.1	05 09 N	082 50 W	100.0	2.0	3.0
861110	01	06	01			4	56	7.8	03 43 N	084 47 W	100.0	1.0	1.0
861110	02	01	03	10	01	4	57	0.8	03 27 N	085 10 W	100.0	1.0	1.0
861111	05	05	06	11	02	4	57	2.4	01 11 N	088 42 W	100.0	2.0	1.0
861112	06	03	09			4	31	0.6	01 35 N	091 59 W	100.0	1.0	1.0
861114	02	03	01	07	01	4	31	0.0	01 41 N	099 07 W	100.0	1.0	1.0
861114	05	04	05	10	01	4	31	6.3	01 59 N	099 58 W	100.0	1.0	1.0
861115	03	01	02			5	04	1.9	01 16 N	096 26 W	100.0	1.0	1.0
861116	02	07	06	05	03	3	31	0.8	00 24 N	091 56 W	100.0	1.0	1.0
861120	05	03	08			5	31	1.8	01 09 N	098 29 W	100.0	1.0	1.0
861122	03	02	02	11	02	5	31	0.4	00 54 N	106 44 W	100.0	2.0	1.0
861123			01	06	01	5		0.7	01 31 N	110 01 W	200.0	1.0	1.0
861204	08	03	08			1	04	1.2	29 40 N	115 57 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: MINKE WHALE (B.ACUTOROSTRATA) SPECIES CODE: 71

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861203	04	02	05	06	02	1	04	0.4	26 55 N	118 53 W	100.0	1.0	1.0
861205			03			2	04	1.9	31 57 N	117 38 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: BRYDE'S WHALE (B. EDENI) SPECIES CODE: 72

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860815	02	03	03	11	02	5	04	2.8	03 35 N	112 58 W	100.0	1.0	1.0
861024	04	01	04			4	04	2.9	01 27 N	091 43 W	100.0	2.0	1.0
861024	06	03	08			4	31	0.1	01 40 N	091 29 W	100.0	2.0	2.0
861025	02	01	02			3	04	0.1	03 57 N	089 55 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: BLUE WHALE (B. MUSCULUS) SPECIES CODE: 75

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860919	07	06	07	07	02	3	31	1.6	01 32 N	101 32 W	100.0	2.0	2.0
860924	04	04	05	10	01	3	04	1.7	08 28 N	090 38 W	100.0	1.0	1.0
861022	04	07	08	02	02	3	04	1.2	06 09 N	092 04 W	100.0	1.0	1.0
861027	04	01	03			3	04	3.3	06 29 N	088 04 W	100.0	1.0	1.0
861028	06	02	19	04	01	0	59	1.9	08 54 N	085 48 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: UNIDENTIFIED DOLPHIN SPECIES CODE: 77

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802			04	10	02	1	60	0.0	23 15 N	113 53 W	100.0	1.0	1.0
860802			15	04	02	1	04	0.7	22 N	113 W	100.0	5.0	5.0
860802	10	01	16	04	02	1	31	2.2	22 50 N	113 17 W	100.0	25.0	20.0
860802	12	01	19	04	03	2	04	5.7	22 47 N	113 14 W	100.0	1.0	1.0
860802	12	01	20	04	03	2	56	0.3	22 43 N	113 42 W	100.0	10.0	8.0
860803	02	03	02	10	12	4	31	0.2	20 26 N	111 03 W	100.0	1.0	1.0
860804	04	01	06	01	02	3	04	7.5	18 17 N	112 14 W	100.0	0.0*	1.0
860804	06	01	07	01	02	3	31	6.8	18 15 N	112 18 W	100.0	0.0*	10.0
860805	01	03	01	06	03	3	31	7.3	17 19 N	114 32 W	100.0	0.0*	2.0
860805	02	06	03	06	01	3	56	3.0	17 07 N	115 05 W	19.7	6.0	5.0
860807	06	01	06	12	01	4	31	5.8	17 19 N	112 17 W	100.0	0.0*	1.0
860807	12	01	11	07	02	3	62	0.4	17 31 N	111 13 W	100.0	1.0	1.0
860808			07	06	01	2	31	0.4	17 43 N	108 53 W	100.0	0.0*	10.0
860809	01	01	01	07	03	2	04	3.9	16 15 N	110 00 W	100.0	0.0*	2.0
860809	04	03	05	07	02	3	56	10.9	15 56 N	110 34 W	100.0	0.0*	1.0
860810	01	06	01	12	03	2	56	0.3	15 54 N	108 43 W	100.0	10.0	5.0
860811	08	04	09	02	01	2	62	1.4	14 36 N	107 00 W	100.0	2.0	2.0
860812	02	01	02	08	02	2	56	0.0	11 34 N	108 36 W	100.0	0.0*	2.0
860813	05	01	06	08	01	3	31	1.9	08 52 N	109 29 W	100.0	0.0*	3.0
860818	04	04	04	07	02	3	04	2.2	09 28 N	111 56 W	100.0	0.0*	2.0
860819	01	01	02			2	22	0.2	10 10 N	109 42 W	100.0	0.0*	1.0
860821	01	02	01	12	03	5	56	0.7	13 18 N	103 12 W	100.0	15.0	8.0
860824	07	08	06			4	31	7.2	15 24 N	102 09 W	100.0	0.0*	1.0
860902	01	01	01	07	03	5	31	2.2	17 46 N	106 17 W	100.0	1.0	1.0
860902	02	11	02	12	12	4	04	2.2	17 15 N	107 05 W	100.0	2.0	2.0
860903	01	05	01	07	03	3	04	0.2	15 47 N	109 51 W	100.0	1.0	0.0*
860903	05	02	05	01	03	2	04	2.5	14 42 N	111 40 W	100.0	0.0*	1.0
860904	05	01	06	12	12	1	04	0.5	13 04 N	114 21 W	100.0	0.0*	5.0
860904	12	01	12	06	03	3	56	0.3	12 39 N	114 36 W	100.0	4.0	3.0
860906	05	05	04			5	31	0.1	12 57 N	108 44 W	100.0	0.0*	0.0*
860907	03	01	03	12	02	1	62	4.7	13 03 N	105 26 W	100.0	0.0*	1.0

Table 3. (continued)

SPECIES: UNIDENTIFIED DOLPHIN SPECIES CODE: 77

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860908	07	04	03	06	01	3	31	8.8	13 22 N	101 21 W	100.0	0.0*	0.0*
860909	02	02	01	08	02	3	58	0.2	13 08 N	100 01 W	100.0	2.0	2.0
860910	07	07	08	01	02	2	58	3.5	10 04 N	103 33 W	100.0	12.0	8.0
860913	02	03	02	03	03	4	04	5.3	03 50 N	109 51 W	100.0	0.0*	40.0
860919	01	01	01	01	03	3	04	0.9	00 31 N	102 42 W	100.0	10.0	6.0
860922	01	02	02			3	31	2.0	07 35 N	093 10 W	100.0	0.0*	1.0
860922	04	05	04			2	31	0.4	08 38 N	091 45 W	100.0	1.0	1.0
860923	05	01	05	11	01	1	56	6.9	10 04 N	090 34 W	100.0	0.0*	1.0
860924	01	06	01	06	03	3	58	8.0	08 00 N	089 46 W	100.0	0.0*	120.0
860924	05	06	06	11	02	3	04	0.1	08 48 N	091 03 W	100.0	0.0*	1.0
860926	01	01	01	05	03	3	31	3.9	12 48 N	095 37 W	100.0	0.0*	10.0
860926	02	04	03	06	01	3	31	8.5	13 08 N	096 04 W	100.0	0.0*	5.0
860926	04	04	06	11	02	3	04	0.2	13 36 N	096 41 W	100.0	0.0*	3.0
860927	03	01	02			4	04	6.2	15 09 N	099 09 W	100.0	0.0*	1.0
860927	06	01	05	10	02	3	56	6.1	15 34 N	099 29 W	100.0	0.0*	1.0
860928			04	06	01	2	04	1.5	16 50 N	101 41 W	43.5	0.0*	17.0
860928			06	05	01	2	31	3.6	16 55 N	101 46 W	100.0	0.0*	100.0
860928			07	05	01	1	31	2.7	16 57 N	101 47 W	5.0	0.0*	100.0
860928			14			1	04	2.3	17 28 N	102 51 W	10.0	0.0*	50.0
860928	01	01	01			3	31	7.9	16 45 N	101 26 W	100.0	0.0*	20.0
860928	06	01	09			2	04	7.1	17 05 N	102 09 W	100.0	0.0*	1.0
860928	06	04	10			2	31	10.4	17 14 N	102 22 W	100.0	0.0*	1.0
860928	06	07	12			3	04	6.6	17 24 N	102 42 W	100.0	0.0*	10.0
860929			06	05	02	2	22	1.8	17 35 N	103 01 W	100.0	0.0*	5.0
860929	04	01	07	05	01	3	58	5.4	17 34 N	103 08 W	100.0	0.0*	1.0
860929	05	03	09	09	01	2	31	7.5	17 54 N	103 38 W	100.0	0.0*	1.0
861005	07	04	09	03	02	2	31	3.2	15 00 N	104 40 W	100.0	0.0*	1.0
861006			05	11	01	1	22	2.1	12 40 N	104 35 W	100.0	0.0*	2.0
861006	01	05	01	09	02	1	56	6.5	12 54 N	104 49 W	1.0	93.0	78.0
861006	03	01	04	11	01	1	22	13.1	12 41 N	104 36 W	100.0	0.0*	1.0
861006	05	01	09	11	01	1	56	6.7	12 24 N	104 32 W	100.0	0.0*	2.0

Table 3. (continued)

SPECIES: UNIDENTIFIED DOLPHIN SPECIES CODE: 77

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861006	06	06	13	01	01	3	04	2.4	11 59 N	104 34 W	100.0	0.0*	1.0
861008	04	04	01	02	02	4	56	0.4	06 16 N	105 02 W	5.0	27.0	18.0
861009	02	02	01	01	02	4	04	0.2	07 58 N	102 09 W	100.0	0.0*	1.0
861010	03	03	05	12	01	2	04	1.6	10 34 N	099 15 W	100.0	50.0	40.0
861010	04	04	07	03	12	2	31	3.7	10 50 N	098 55 W	100.0	0.0*	2.0
861012			11					0.0	09 42 N	096 52 W	100.0	0.0*	0.0*
861012	01	01	01	09	03	3	04	2.0	11 46 N	096 07 W	100.0	0.0*	1.0
861012	03	04	03	10	02	4	04	1.2	11 12 N	096 16 W	100.0	40.0	25.0
861012	09	04	08	01	01	3	04	0.1	10 30 N	096 34 W	100.0	0.0*	1.0
861012	09	08	09	02	02	3	31	6.5	10 07 N	096 42 W	100.0	0.0*	10.0
861012	09	11	10	02	03	3	62	7.6	09 59 N	096 45 W	100.0	0.0*	15.0
861017	09	01	06			3	56	1.2	10 41 N	093 33 W	100.0	5.0	4.0
861017	12	03	09			2	22	0.9	10 50 N	093 23 W	100.0	6.0	6.0
861018			02	02	02	1	22	1.6	12 36 N	092 20 W	100.0	1.0	1.0
861019			01			1	31	3.3	10 53 N	091 54 W	100.0	0.0*	10.0
861019			11			1	04	3.7	10 54 N	091 48 W	100.0	0.0*	40.0
861019	01	01	03			1	31	0.9	10 50 N	091 55 W	100.0	0.0*	4.0
861019	02	01	04			1	22	4.1	10 48 N	091 54 W	100.0	0.0*	2.0
861019	02	12	06	04	01	1	22	2.2	10 34 N	091 54 W	100.0	0.0*	20.0
861019	03	01	10			1	59	0.6	10 52 N	091 49 W	100.0	12.0	10.0
861019	04	02	13			2	04	0.1	11 04 N	091 45 W	100.0	4.0	3.0
861019	05	04	19			2	31	0.3	11 26 N	091 38 W	100.0	0.0*	4.0
861020			09	03	01	2	31	3.6	13 17 N	090 52 W	100.0	0.0*	10.0
861020	06	03	15	02	03	2	04	3.4	12 44 N	090 59 W	100.0	0.0*	1.0
861020	06	03	16	02	03	2	04	1.9	12 43 N	091 00 W	100.0	0.0*	50.0
861021			03	09	03	2	22	3.3	10 56 N	091 04 W	100.0	0.0*	2.0
861021	05	01	07	09	02	2	59	1.7	10 34 N	091 06 W	6.7	15.0	13.0
861021	09	01	12			1	56	5.9	10 17 N	091 18 W	100.0	0.0*	10.0
861021	11	03	24	12	02	1	04	8.6	09 57 N	091 35 W	100.0	0.0*	30.0
861021	11	03	25	12	02	1	04	4.0	09 56 N	091 37 W	100.0	0.0*	8.0
861022	02	01	02			2	04	0.5	07 04 N	092 02 W	100.0	0.0*	1.0

Table 3. (continued)

SPECIES: UNIDENTIFIED DOLPHIN SPECIES CODE: 77

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861022	03	11	05	01	01	3	31	11.8	06 34 N	092 04 W	100.0	0.0*	1.0
861022	04	03	06	02	01	2	62	6.4	06 22 N	092 04 W	100.0	0.0*	1.0
861027	07	01	09	08	01	2	04	2.2	07 03 N	087 55 W	100.0	7.0	6.0
861029	05	01	04			3	04	0.3	07 22 N	083 00 W	100.0	1.0	1.0
861030	03	02	03	03	01	3	31	6.5	04 49 N	080 06 W	100.0	0.0*	1.0
861031			04	02	03	2	56	3.2	03 34 N	078 17 W	100.0	0.0*	3.0
861031	01	01	01			2	56	7.6	03 26 N	078 19 W	100.0	0.0*	1.0
861031	03	06	10	02	02	2	22	2.9	03 45 N	078 08 W	100.0	0.0*	2.0
861031	04	03	12	03	01	0	31	7.3	03 52 N	078 05 W	100.0	0.0*	50.0
861031	06	01	17	08	02	2	31	0.1	04 42 N	077 48 W	100.0	0.0*	1.0
861101			05	04	02	1	31	0.0	07 31 N	078 26 W	100.0	0.0*	5.0
861101	04	02	08	08	01	1	31	7.0	08 14 N	078 43 W	100.0	0.0*	20.0
861109			05	12	02	3	04	3.3	05 06 N	082 52 W	100.0	0.0*	10.0
861111			07			4	04	0.0	01 11 N	086 46 W	100.0	0.0*	1.0
861111	02	07	03			4	56	0.2	01 29 N	088 30 W	100.0	0.0*	4.0
861111	06	05	08	11	03	4	09	0.6	01 11 N	089 06 W	30.0	0.0*	65.0
861113	02	11	02			3	04	0.7	01 32 N	095 35 W	23.3	33.0	23.0
861113	03	04	03			3	56	0.5	01 32 N	096 04 W	100.0	0.0*	3.0
861114	03	02	03	08	01	4	56	1.7	01 42 N	099 19 W	100.0	0.0*	2.0
861115	01	04	01			5	04	6.1	01 34 N	097 51 W	100.0	0.0*	1.0
861115	03	01	03			5	04	7.3	01 16 N	096 25 W	100.0	0.0*	1.0
861119	01	01	01			4	56	8.0	00 35 N	092 43 W	100.0	0.0*	2.0
861119	03	02	04			4	56	2.4	00 40 N	092 57 W	100.0	0.0*	1.0
861120	02	01	02			4	31	8.1	01 12 N	096 27 W	100.0	1.0	1.0
861120	05	03	09			5	56	2.6	01 09 N	098 30 W	100.0	1.0	1.0
861121			04			4	04	1.8	01 05 N	102 42 W	100.0	0.0*	5.0
861122	03	02	03	11	02	5	31	1.2	00 54 N	106 44 W	100.0	0.0*	1.0
861122	04	03	04	12	03	5	04	1.9	00 54 N	106 57 W	100.0	0.0*	5.0
861124	01	01	01			5	57	0.5	02 20 N	112 48 W	100.0	0.0*	2.0
861125	01	02	01			3	04	1.7	02 55 N	116 55 W	100.0	0.0*	3.0
861126	02	05	03	10	03	4	04	2.4	05 52 N	121 59 W	100.0	0.0*	4.0

Table 3. (continued)

SPECIES: UNIDENTIFIED DOLPHIN SPECIES CODE: 77

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861201	01	09	01	04	01	4	04	3.7	19 25 N	123 18 W	100.0	12.0	2.0
861202			03	02	02	2	31	0.0	23 02 N	121 36 W	100.0	35.0	25.0
861203			03	06	02	1	56	1.8	26 41 N	119 07 W	100.0	0.0*	1.0
861203	05	04	06	07	03	1	56	12.0	27 02 N	118 40 W	100.0	0.0*	6.0
861204			10			1	31	3.2	29 50 N	115 56 W	100.0	75.0	60.0
861205			08			2	31	7.5	32 18 N	117 28 W	100.0	0.0*	0.0*

Table 3. (continued)

SPECIES: UNIDENTIFIED SMALL WHALE SPECIES CODE: 78

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860801	07	05	02	03	01	2	04	3.6	25 09 N	115 40 W	100.0	2.0	2.0
860802			08	12	12	1		0.2	23 10 N	113 38 W	100.0	1.0	1.0
860802	06	01	07	12	12	1	04	2.7	23 19 N	113 46 W	100.0	1.0	1.0
860802	09	01	13	04	01	0	56	3.7	22 57 N	113 18 W	100.0	1.0	1.0
860811	04	02	04	08	02	2	04	0.5	15 07 N	106 40 W	100.0	1.0	1.0
860811	05	02	05	08	01	1	22	1.5	15 00 N	106 44 W	100.0	1.0	1.0
860813	04	04	04	08	02	2	04	0.9	09 07 N	109 27 W	100.0	1.0	1.0
860822	01	04	01			1	62	0.4	14 09 N	099 43 W	100.0	1.0	1.0
860823	11	01	11	12	02	1	56	0.4	14 54 N	098 05 W	100.0	1.0	1.0
860904	10	03	10	01	01	2	58	1.6	12 45 N	114 45 W	100.0	4.0	3.0
860907	03	02	04	12	02	2	62	2.6	13 03 N	105 22 W	100.0	0.0*	1.0
860914			02			6		3.1	01 23 N	110 00 W	100.0	1.0	1.0
861006	02	01	03	11	02	1	56	0.3	12 45 N	104 39 W	78.7	5.0	5.0
861010	03	01	04	02	01	2	62	0.6	10 33 N	099 17 W	100.0	0.0*	1.0
861011	04	04	05	05	01	3	04	0.3	12 53 N	096 14 W	100.0	1.0	1.0
861012	08	04	07			3	04	0.2	10 38 N	096 29 W	100.0	2.0	2.0
861018	07	01	10	02	02	1	62	1.8	12 57 N	092 01 W	100.0	5.0	5.0
861024	05	02	05			4	56	0.1	01 33 N	091 40 W	100.0	1.0	1.0
861024	06	02	07			4	56	1.8	01 37 N	091 33 W	100.0	1.0	1.0
861028	02	04	07	11	02	1	59	1.6	09 20 N	086 29 W	100.0	1.0	1.0
861031			06			2	31	1.0	03 36 N	078 17 W	100.0	1.0	1.0
861031	07	01	19	08	02	3	62	0.2	04 59 N	077 46 W	100.0	0.0*	1.0
861108	02	01	04			2	57	3.8	08 10 N	078 42 W	100.0	1.0	1.0
861108	11	02	15			2	04	4.3	07 18 N	079 49 W	100.0	1.0	1.0
861112	02	01	02			3	31	1.5	01 16 N	091 05 W	100.0	0.0*	1.0
861115	03	06	04			4	62	2.1	01 13 N	096 10 W	100.0	0.0*	1.0
861121	03	04	02			4	56	1.9	01 01 N	102 25 W	100.0	2.0	1.0
861202	01	03	01			1	56	0.3	22 38 N	121 52 W	100.0	1.0	1.0
861204	01	02	01			0	31	0.7	28 40 N	116 38 W	100.0	2.0	2.0

Table 3. (continued)

SPECIES: UNIDENTIFIED LARGE WHALE

SPECIES CODE: 79

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802	11	01	18	05	02	2	56	1.8	22 49 N	113 13 W	100.0	1.0	1.0
860916			01			6	31	0.4	03 19 S	110 01 W	100.0	1.0	1.0
860919	06	06	06	07	01	4	22	2.0	01 10 N	101 58 W	100.0	0.0*	1.0
861011	02	05	02	02	02	3	04	0.1	12 29 N	096 38 W	100.0	1.0	1.0
861110	01	12	02			4	22	0.3	03 28 N	085 07 W	100.0	1.0	1.0

Table 3. (continued)

SPECIES: SPOTTED DOLPHIN (STENELLA ATTENUATA)

SPECIES CODE: 90

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
861004			01	02	02	3	62	0.1	19 03 N	104 18 W	100.0	6.0	5.0
861202	02	09	02	04	02	2	62	0.7	23 01 N	121 37 W	100.0	52.0	39.0

Table 3. (continued)

SPECIES: UNIDENTIFIED CETACEAN — SPECIES CODE: 96

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST. (KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860808	05	02	08	12	01	2	56	0.1	17 44 N	108 40 W	100.0	1.0	1.0
860808	07	03	10	12	12	2	62	2.1	17 47 N	108 20 W	100.0	1.0	1.0
860811	09	01	10	02	01	2	60	1.3	14 33 N	107 03 W	100.0	0.0*	1.0
860823	12	01	14	12	02	1	60	2.0	14 52 N	098 13 W	100.0	2.0	2.0
860824	05	01	04			2	60	1.6	15 24 N	101 10 W	100.0	3.0	2.0
860904	02	01	01	07	03	2	31	1.8	13 36 N	113 29 W	100.0	1.0	1.0
860904	02	01	02	07	03	2	56	0.4	13 36 N	113 30 W	100.0	2.0	2.0
860904	10	02	09	01	01	1	58	1.3	12 49 N	114 41 W	100.0	0.0*	1.0
860905	02	02	03	12	02	2	22	1.0	12 48 N	112 44 W	100.0	0.0*	1.0
860919	02	03	02			3	56	3.1	00 35 N	102 35 W	100.0	0.0*	2.0
860922	05	01	05	07	01	2	56	0.7	08 42 N	091 44 W	100.0	1.0	1.0
861005	01	04	01	09	03	2	56	2.5	16 35 N	104 35 W	100.0	0.0*	1.0
861012	07	01	05	12	01	4	31	4.6	10 50 N	096 23 W	100.0	0.0*	1.0
861018	04	02	08	06	01	1	59	3.5	13 03 N	092 01 W	100.0	1.0	1.0
861028	02	05	08	11	02	1	22	0.1	09 15 N	086 23 W	100.0	1.0	1.0
861028	09	03	27	04	03	1	62	2.9	08 37 N	085 28 W	100.0	4.0	4.0
861029	01	01	01			3	31	0.4	07 48 N	083 48 W	100.0	1.0	1.0
861108	07	01	12			2	56	0.0	07 37 N	079 24 W	100.0	0.0*	1.0
861112	08	03	11	11	03	4	56	2.6	01 41 N	092 07 W	100.0	0.0*	1.0
861119	04	02	06			4	31	1.9	00 42 N	093 07 W	100.0	1.0	1.0
861128			04	11	01	1	04	8.0	09 43 N	126 48 W	100.0	0.0*	2.0

Table 3. (continued)

SPECIES: UNIDENTIFIED WHALE SPECIES CODE: 98

DATE YRMODY	SERIES	LEG	SIGHT NUMBER	SUN POSITION HORZ.	SUN POSITION VERT.	BEAUF. NUMBER	DETECTED BY	PERP. DIST.(KM)	LATITUDE DEG MIN	LONGITUDE DEG MIN	PROPORTION (% OF SCHOOL)	MEAN SCHOOL SIZE EST BEST	MEAN SCHOOL SIZE EST LOW
860802	11	01	17	05	02	2	62	5.7	22 51 N	113 15 W	100.0	1.0	1.0
860806	05	03	06	06	01	3	60	3.5	16 55 N	114 48 W	100.0	1.0	1.0
860806	06	02	07	06	01	2	22	1.6	16 57 N	114 38 W	100.0	1.0	1.0
860809	10	02	14	07	02	2	04	6.5	15 26 N	110 58 W	67.0	3.0	2.0
860815	01	19	02	12	01	4	31	4.7	03 26 N	112 50 W	100.0	1.0	1.0
860909	05	01	04	12	12	3	56	0.7	12 57 N	100 16 W	100.0	2.0	2.0
860909	07	02	06	12	12	4	58	3.0	12 51 N	100 27 W	100.0	0.0*	1.0
860917	06	03	05	07	01	6	04	0.2	03 32 S	108 00 W	100.0	1.0	1.0
860921	03	02	03			4	58	2.2	05 16 N	096 25 W	100.0	0.0*	1.0
861022	03	03	03			2	04	2.7	07 00 N	092 03 W	100.0	0.0*	1.0
861024	02	07	02			4	31	4.4	01 14 N	091 50 W	25.0	22.0	17.0
861024	06	02	06			4	62	0.6	01 37 N	091 34 W	100.0	1.0	1.0
861031	04	07	15	03	01	1	59	3.4	04 07 N	077 52 W	100.0	1.0	1.0
861129	01	06	01	03	02	4	31	4.6	11 54 N	126 41 W	100.0	1.0	1.0

*denotes that no estimate was made.

Table 4. Marine mammal school size estimates for each observer, classified by species codes, for all sightings encountered in the eastern tropical Pacific during July 29 through December 5, 1986.

			OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
	DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES	2																			
	860804	05	350	15			420	10	250	10									375	13
	860807	09	150	5	48	10	100	10	275	4									68	13
	860808	01	30	100					12	100							12	100		
	860808	05	135	5	65	5	100	5											123	2
	860808	11					200	100									25	100	115	100
	860809	11	75	8					160	7							262	5		
	860810	05	12	100					20	100							10	100		
	860810	08	28	100			60	100	60	100							30	100		
	860811	03	45	8			75	10												
	860811	06	35	100	14	100	60	100	60	100							25	100		
	860813	02	135	100			230	100	200	100							40	100		
	860813	05	50	60	30	80													30	75
	860818	02	12	100			15	100												
	860820	01	35	100															75	30
	860822	02	40	40													35	100	70	100
	860822	03	80	100			50	100											50	75
	860822	04					140	15									40	95	200	70
	860822	06	45	70			100	50											150	90
	860823	01	75	70			175	75	110	70							50	100		
	860823	15	150	84													24	100	30	100
	860824	01	75	100	16	100													400	100
	860824	03	75	100			50	100	145	100									30	100
	860824	05	50	100			240	100											15	100
	860825	03	30	100			80	100											400	30
	860825	05	30	100			30	100									30	100		
	860825	06					300	30	500	10									85	85
	860825	07	30	100																
	860825	08	60	80					70	95										
	860904	11	100	70			80	60												
	860905	06	50	100	8	100			60	100										
	860905	07	132	31			150	25					100	35						
	860906	01	30	7			50	10					25	10					25	10
	860906	02	25	100			45	100	20	100										
	860906	03	10	100			11	100					13	100						

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	2																			
	860906	05	25	100																
	860907	05	125	75			140	40												
	860909	05	50	2					50	4									35	3
	860909	09	400	35																
	860910	01	35	100	35	100							2	100						
	860910	02											30	70						
	860910	03	142	100			150	100											125	100
	860910	05	500	35					600	30										
	860911	01	50	100									50	100					40	100
	860911	03	200	85					120	95										
	860913	01	450	20			700	10												
	860919	04	335	97			90	90	190	97			180	96						
	860921	02	60	20	35	25													50	20
	860923	04	800	19			1000	9	1800	9			880	69					1200	29
	860925	06	450	68	515	85	500	60	1250	89			500	60					400	70
	860926	02	150	96			100	95					85	92						
	860926	04	225	30					100	80									100	65
	860927	01	75	100															30	100
	860927	03	100	100	30	100	75	100					65	100						
	860928	02	30	94					40	88			30	94					25	92
	860928	08	100	6					90	5									125	15
	860929	02	150	100									80	100					70	100
	860929	03	60	95									70	97					40	95
	860929	04			43	100	120	100	50	100										
	860929	05			150	56	220	40	225	60										
	860929	10	8	100									8	100					6	100
	860929	11	200	100									80	100					35	100
	860929	14	100	100									110	100					70	100
	861005	04	100	95	65	94	60	95	110	92					63	95			40	88
	861006	01	100	99			90	99	90	99										
	861006	02	150	92			110	90												
	861006	06	35	86			35	90	30	90										
	861006	12	150	60	45	73														
	861007	06	25	30			30	70												

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	2																			
	861008	01	40	85																
	861010	01	100	100	35	100	90	100											300	100
	861010	14	250	99					75	98										
	861011	01	60	100			56	100	100	100					55	100				
	861011	04	175	80					120	90										
	861011	06	250	60			430	70	300	65										
	861011	08	300	35					275	33					144	80			250	70
	861018	01					500	60												
	861018	05	300	90					120	90									125	85
	861019	16	100	80					90	90										
	861020	12	600	60			450	70							186	20			800	85
	861025	04	225	5			400	10	225	7					180	5			125	20
	861111	02	400	5	480	2	310	5	250	5	80	25							350	2
	861111	05	350	7	250	1	280	5	220	4										
	861112	03									25	75								
	861112	05					55	100	25	100										
	861112	07			100	60	180	40	250	88										
	861114	02					4	100												
	861119	08					250	100												
	861119	09	75	80			150	90											60	90
	861121	01	500	65	210	85	500	70											600	85
	861123	03	100	100	75	100			50	100										
	861125	02	125	65			120	75	90	80										
	861127	01	35	100					25	100										
	861127	02	35	100					10	100									12	100
	861128	03	175	85			350	95											13	100
																			400	95
SPECIES	3																			
	861025	04	225	95			400	90	225	93					180	95			125	80
SPECIES	5																			
	860731	02	250	100	30	100			30	100										
	860801	01	175	100	120	100	250	100											90	100
	860802	02	15	100	120	100	20	100	25	100							8	100	18	100

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	5																			
	860802	03	150	100			200	100									80	100		
	861004	02	110	100											50	100			60	100
	861010	06	375	100			420	100											400	100
	861013	03	125	100	60	100													100	100
	861013	04					440	100	250	100										
	861016	04					300	100											400	100
	861016	05	300	100	165	100			200	100					161	100				
	861028	21	7	100					4	100										
	861031	02	50	100	44	100	50	100	60	100					63	100				
	861031	03	40	100			22	100												
	861031	08	35	100			50	100	30	100										
	861108	16	350	100			450	100	90	100									450	100
	861203	07	150	100			70	100	60	100										
	861204	05	60	100			35	100	35	100									35	100
	861204	09	225	100			250	100											400	100
SPECIES	6																			
	861101	04	100	100											200	100				
	861101	07	231	97															300	99
	861108	03	150	100	75	100	140	100			30	100								
	861108	06							40	100										
SPECIES	10																			
	860803	03	110	100													60	100		
	860804	03	175	100			220	100	110	100							50	100	130	100
	860804	05	350	85			420	90	250	90									375	87
	860805	04	40	100			140	100	60	100							40	100	125	100
	860806	09	25	100	5	100	50	100	40	100							10	100		
	860807	01	50	100			80	100	30	100									40	100
	860807	08	4	100					3	100									3	100
	860807	09	150	95	48	90	100	90	275	96									68	87
	860808	05	135	95	65	95	100	95											123	98
	860808	14	125	100			160	100	65	100							50	100		
	860809	06	50	100	68	100	180	100											70	100

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 10																			
860809	07	90	100	100	100	200	100											120	100
860809	11	75	92					160	93							262	95		
860810	07	30	100																
860811	03	45	92			75	90												
860822	02	40	60															75	70
860822	04					140	85												
860822	06	45	30			100	50											50	25
860823	01	75	30			175	25	110	30							40	5	200	30
860823	15	150	15															150	9
860824	02	175	100			140	100	180	100									150	100
860825	02	60	100	30	100			120	100							50	100		
860825	06					300	70	500	90									400	70
860825	08	60	20					70	5									85	15
860904	11	100	30			80	40												
860905	01	27	100	18	100			45	100										
860905	07	132	60			150	65					100	50						
860906	01	30	93			50	90					25	90					25	90
860907	01	40	100	15	100			80	100										
860907	02	125	100			220	100	120	100			120	100					110	100
860907	05	125	25			140	60												
860909	05	50	98					50	96									35	97
860909	09	400	65																
860910	02											30	30						
860910	05	500	64					600	69										
860923	04	800	80			1000	90	1800	90			880	30					1200	70
860925	06	450	29	515	14	500	30	1250	10			500	35					400	28
860926	04	225	70					100	20									100	35
860928	02	30	6					40	12			30	6					25	8
860928	05	40	100			60	100	40	100			30	100						
860928	08	100	94					90	95									125	85
860929	03	60	5									70	3					40	5
860929	05			150	44	220	60	225	40										
861005	04	100	5	65	6	60	5	110	8					63	5			40	12
861006	02	150	8			110	10												

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	10																			
	861006	06	35	14			35	10	30	10										
	861006	12	150	40	45	27														
	861007	06	25	70			30	30												
	861011	04	175	20					120	10										
	861011	06	250	40			430	30	300	35										
	861011	08	300	65					275	67					144	20			250	30
	861018	01					500	40												
	861018	05	300	10					120	10									125	15
	861019	16	100	20					90	10										
	861020	06			450	100	350	100	265	100										
	861020	07	900	100	1400	100	1400	100	1200	100										
	861020	12	600	40			450	30												
	861108	14	100	100			110	100			65	100			186	80			800	15
SPECIES	11																			
	860813	05	50	40	30	20													30	25
	860911	03	200	15					120	5										
	860913	01	450	80			700	90												
	860919	04	335	3			90	10	190	3			180	4						
	860921	02	60	80	35	75													50	80
	861111	02	400	95	480	98	310	95	250	95	80	75							350	98
	861111	05	350	93	250	99	280	95	220	96										
	861112	03									25	25								
	861112	07			100	40	180	60	250	12										
	861113	02	50	70															25	60
	861119	09	75	20			150	10											60	10
	861121	01	500	35	210	15	500	30											600	15
	861125	02	125	35			120	25	90	20										
	861128	03	175	15			350	5											400	5
SPECIES	13																			
	860802	09	25	100	22	100	26	100									25	100	25	100
	860802	14	22	100	20	100											15	100		
	860803	01	40	100	15	100	30	100									12	100		

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 13																			
860804	02	12	100	5	100	20	100									3	100		
860806	01	2	100			2	100	2	100							2	100	2	100
860806	03	16	100			20	100	24	100							15	100	17	100
860807	02	20	100	8	100	25	100	30	100										
860807	03	25	100	13	100														
860807	04	38	100					45	100							17	100		
860807	05	22	100																
860807	12	15	100			20	100	25	100							14	100	16	100
860808	04	6	100			6	100	8	100							6	100		
860808	09	10	100					12	100							7	100	5	100
860808	18	25	100			35	100									16	100	23	100
860809	02	12	100	9	100	12	100											10	100
860809	04	10	100																
860809	15	17	100					40	100							15	100		
860810	03	8	100	4	100													5	100
860810	06	20	100	37	100	30	100											25	100
860811	02	18	100			15	100	35	100							20	100		
860811	12	11	100	8	100	12	100	12	100							9	100	17	100
860813	01					12	100	14	100							15	100		
860813	03	20	100					15	100							10	100		
860813	07	35	100	28	100	70	100	85	100							40	100		
860813	08	8	100																
860816	01	30	100			15	100											15	100
860903	02	15	100	6	100	10	100											15	100
860903	03	12	100	7	100	8	100											12	100
860903	04	10	100	5	100													10	100
860904	07	20	100	19	100													30	100
860904	08	8	100			9	100	9	100										
860904	13	7	100			3	100	8	100			3	100						
860905	04	12	100			8	100					5	100						
860905	07	132	9			150	10					100	15						
860910	04	25	100	12	100							35	100						
860910	09	55	100			130	100	100	100									250	100
860917	02	50	100					40	100										

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 13																			
860919	03	40	100	11	100	35	100											30	100
860919	05	85	100					85	100			55	100						
860920	01	30	100	35	100	15	100	40	100			55	100						
860921	01	15	100																
860921	04	15	100			25	100												
860923	01	25	100	20	100			50	100										
860923	02	10	100	5	100			15	100										
860923	03	60	100			80	100					75	100					200	100
860923	08	40	100	37	100			40	100										
860923	09	35	100	17	100			30	100										
860923	10	45	100	40	100														
860925	05	70	100	70	100			70	100										
860925	07	40	100	40	100	70	100	65	100			85	100						
861005	02	45	100	54	100									40	100				
861012	06	80	100			60	100	45	100					33	100				
861015	01	25	100			25	100							18	100			20	100
861015	02	25	100					15	100										
861017	01	50	100			130	100							88	100				
861017	03	55	100	33	100									65	100				
861019	07	25	100			16	100							10	100				
861019	12	100	100					50	100										
861019	20					10	100												
861021	01	50	100	62	100	110	100	45	100										
861021	02	60	100	32	100	120	100	35	100										
861021	05	35	100	16	100	25	100	25	100										
861021	06	35	100											30	100			80	100
861021	07	15	94											18	94			13	92
861021	10	30	100	36	100	42	100	40	100										
861021	13					42	100	35	100										
861021	16	35	100																
861021	19	40	100																
861021	27	50	100			56	100							30	100				
861021	28	75	100			65	100							25	100			40	100
861021	29													60	100			50	100
														40	100				

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	13																			
	861024	02	30	100			25	100	15	100									20	100
	861028	04	6	100																
	861029	02	20	100															15	100
	861029	03	70	100	55	100													125	100
	861030	01	75	100	45	100	80	100	40	100									175	100
	861030	02	45	100			65	100	20	100					63	100				
	861030	04	25	100															20	100
	861031	14	10	100			8	100	15	100					20	100			12	100
	861109	01	25	100					12	100									20	100
	861109	07	12	100															15	100
	861111	01	50	100							17	100								
	861116	01	50	100							45	100								
	861119	02	40	100					18	100										
	861119	03	100	100					48	100	90	100								
	861120	01	20	100			10	100	12	100										
	861120	06	175	100			150	100			400	100								
	861120	07	45	100	25	100													60	100
	861121	03	60	100																
	861122	01	35	100					30	100	70	100								
	861125	03	50	100	12	100			20	100										
	861201	02	15	100					15	100										
	861203	01	35	100	41	100	45	100	40	100	55	100							40	100
	861203	04	40	100	36	100	40	100	30	100	45	100							50	100
SPECIES	15																			
	860802	11	30	100	16	100			30	100							17	100	23	100
	860808	02	8	100																
	860808	03	8	100					5	100										
	860823	03	5	100																
	860823	04	6	100	3	100	5	100	6	100									6	100
	860823	05	6	100			6	100	6	100										
	860823	06	3	100																
	860823	07	32	31	17	41	40	35	35	60							22	27	22	27
	860825	01					2	100	8	100									3	100

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 15																			
860904	04	7	100			6	100	8	100			10	100						
860909	08	8	100	5	100	8	100												
860927	04	12	100															10	100
860929	12	6	100			5	100	4	100										
861005	06	8	100			6	100	6	100										
861008	02	10	100			6	100											7	100
861011	10					14	100	10	100					3	100				
861012	02					2	100												
861013	01	12	100	7	100	10	100											6	100
861018	14	8	100					3	100									10	100
861019	21					4	100												
861119	05	15	100			7	100	8	100	20	100								
861120	05	15	100																
861126	02					8	100			9	100								
SPECIES 18																			
860806	05	30	100			40	100											23	100
860808	17	5	100															5	100
860808	19	12	100	14	100			12	100							6	100		
860809	08	12	100	120	100													8	100
860810	02	60	100					40	100							30	100		
860810	04	18	100															13	100
860811	01	15	100			20	100	20	100							8	100		
860811	07	50	100	14	100			50	100									30	100
860812	01	8	38			10	30												
860812	05	35	100					37	100										
860823	07	32	6	17	12	40	5	35	6							22	9	22	9
860823	08	47	47			60	50	85	60									42	50
860823	15	150	1															150	1
860908	01	60	3	20	10	43	5					30	7						
860910	05	500	1					600	1										
860911	02	58	14			35	15												
860923	04	800	1			1000	1	1800	1			880	1					1200	1
860925	06	450	3	515	1	500	10	1250	1			500	5					400	2

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 18																			
860926	02	150	4			100	5					85	8						
860929	08											230	85						
860929	13					80	33												
861005	03			6	84									7	86				
861007	03					12	17	20	10									15	15
861010	14	250	1					75	2										
861017	02	4	100			4	100											4	100
861017	04	35	72	41	85									100	80				
861020	04	6	100																
861021	20	18	100					6	100					15	100				
861024	03													5	100				
861029	07	4	100			2	100												
861101	01	37	68	21	81			26	80										
861101	02	20	100																
861101	07	231	3															300	1
861112	01	60	25	37	32	40	25	35	40										
861128	01	26	4																
SPECIES 21																			
860806	08	25	100					20	100									10	100
860812	01	8	62			10	70												
860816	03	2	100													2	100		
860823	08	47	53			60	50	85	40									42	50
860908	01	60	97	20	90	43	95					30	93						
860928	11	25	100					11	100									15	100
860929	08											230	15						
860929	13					80	67												
861005	03			6	16									7	14				
861020	13	6	100																
861109	04	15	100			12	100												
861120	03					5	100												
861129	02	15	100	9	100	12	100												
861202	04	20	100			12	100	15	100	17	100								
861203	02	12	100			14	100	10	100									13	100

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	26																			
	860816	02	600	100	800	100	400	100	270	100							700	100	700	100
	861112	10	500	40	380	20	450	50	300	10									500	30
SPECIES	31																			
	861030	05	500	100	550	100	550	100	275	100									250	100
	861112	10	500	60	380	80	450	50	300	90									500	70
	861120	04	500	100			500	100	200	100	250	100							300	100
SPECIES	32																			
	860909	02	35	100					38	100									30	100
SPECIES	33																			
	860823	07	32	63	17	47	40	60	35	34							22	64	22	64
	860904	03	25	100			22	100	14	100			15	100					18	100
	860917	07			3	100													3	100
	861128	01	26	96																
SPECIES	34																			
	860802	05	12	100					30	100									12	100
	860911	02	58	86			35	85												
	860920	02	12	100																
	860922	03	15	100			18	100	10	100			17	100						
	861007	03					12	83	20	90									15	85
	861010	11	18	100					25	100					12	100			22	100
	861013	02	20	100	7	100													11	100
	861024	09	15	100	7	100														
	861027	08					8	100							11	100				
	861027	10			3	100														
	861101	01	37	32	21	19			26	20										
	861101	03	12	100					8	100										
	861112	01	60	75	37	68	40	75	35	60										

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	37																			
	860802	10	2	100	2	100	2	100	2	100							2	100	2	100
	861016	01	4	100																
	861025	06	10	100	7	100	8	100	6	100									6	100
	861128	02	3	100			3	100												
SPECIES	46																			
	860804	08			6	100			10	100									7	100
	860805	03	8	88					6	83									4	75
	860808	16					1	100												
	860813	09			1	100														
	860816	04	35	100	27	100	22	100	34	100							37	100	30	100
	860818	01			2	100														
	860825	04					1	100												
	860908	02							2	100										
	860917	01							9	100			10	100						
	860922	01	1	100			1	100	1	100			1	100						
	860925	03	10	100	7	100	10	100	10	100										
	861005	08	1	100																
	861017	04	35	28	41	15									100	20				
	861017	05							4	100										
	861029	05					1	100												
	861130	01			4	100	7	100	6	100										
SPECIES	47																			
	861204	02	1	100			1	100											1	100
	861204	03	2	100	2	100	2	100											2	100
	861204	04			1	100														
	861204	06	2	100			2	100	2	100									2	100
	861204	07	2	100	2	100														
SPECIES	48																			
	860808	13	1	100																
	860809	17	3	100															3	100
	860823	10	1	100			1	100	1	100										

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 48																			
860924	02	3	100			3	100												
860924	04					2	100												
861006	03	3	33			6	17	7	14										
861006	07	1	100																
861006	14					1	100												
861007	04	1	100																
861018	04					2	100	3	100									2	100
861018	06							5	100										
861018	09							1	100										
861018	12	1	100																
861019	05					1	100												
861021	09					3	100												
861021	23							1	100										
861021	26	2	100					2	100										
861028	02	2	100																
861028	05	1	100																
861028	06	1	100																
861028	09					1	100												
861028	10																	1	100
861028	11					2	100												
861028	12					1	100												
861028	13	4	100	4	100	4	100	5	100					4	100			4	100
861028	14					1	100												
861028	17	2	100																
861028	18	1	100																
861028	22					2	100	2	100										
861028	26					1	100											1	100
861031	11	1	100																
861031	16	1	100																
861114	04	1	100																
SPECIES 49																			
860806	02					2	100												
860812	03					2	100												

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	49																			
	860815	01	1	100																
	860823	09					2	100												
	860905	02	2	100																
	860905	05	2	100			1	100					2	100						
	860909	07	2	100			2	100												
	860916	04					2	100												
	860923	07							1	100										
	861010	02					2	100												
	861018	07					3	100												
	861021	08	1	100																
	861028	03	3	100																
	861028	15					2	100							4	100				
	861028	23					1	100												
	861028	25					4	100												
	861031	09	2	100															4	100
	861031	13	1	100					1	100										
	861126	01	1	100																
	861205	01	1	100					1	100										
SPECIES	50																			
	861025	01	15	100	5	100	7	100	7	100					5	100			7	100
SPECIES	51																			
	860802	06	4	100																
	860806	04							2	100									2	100
	860808	12	3	100																
	860811	11	3	100															3	100
	860814	01	1	100																
	860904	05	2	100									2	100						
	861019	08	3	100			3	100												
	861028	24	3	100			3	100												
	861111	04	1	100															1	100

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	61																			
	860809	13	4	100			4	100												
	860822	05	1	100	1	100	1	100												
	860909	03	3	100					3	100										
	860925	04					1	100					2	100						
	860926	05	3	100			3	100												
	861005	05	4	100	5	100														
	861010	09	3	100					3	100					3	100				
	861010	12					3	100												
	861010	13	2	100			2	100												
	861021	21	3	100	3	100														
	861028	16	1	100	1	100	1	100												
	861112	04	4	100																
	861123	02					1	100												
SPECIES	70																			
	860805	02	1	100					1	100									1	100
	860807	07	1	100																
	860809	14	3	33																
	860902	03	1	100																
	860902	04	1	100			1	100					1	100						
	860917	06	2	100					3	100			2	100						
	861012	04					1	100							1	100				
	861025	03	1	100																
	861025	05	1	100																
	861027	02					2	100												
	861109	03			2	100														
	861110	01	1	100					1	100										
	861110	03	1	100			1	100												
	861111	06	2	100															2	100
	861112	09	1	100																
	861114	01					1	100												
	861114	05					1	100												
	861115	02	1	100																
	861116	06					1	100												

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 70																			
861120	08					1	100												
861122	02	2	100																
861204	08	1	100																
SPECIES 71																			
861203	05	1	100			1	100											1	100
SPECIES 72																			
860815	03	1	100																
861024	04	2	100	1	100									3	100				
861024	08	2	100	2	100	2	100	2	100									2	100
861025	02	1	100	1	100			1	100					1	100			1	100
SPECIES 75																			
860919	07			2	100	2	100	3	100									2	100
860924	05	1	100																
861022	08	1	100	1	100			1	100					1	100			1	100
861027	03	1	100																
861028	19	1	100	1	100	1	100	1	100					1	100				
SPECIES 77																			
860802	16					25	100												
860802	19	1	100																
860802	20							10	100										
860803	02					1	100												
860805	03	8	12					6	17									4	25
860807	11																	1	100
860810	01	5	100					15	100										
860811	09																	2	100
860821	01							15	100										
860902	01					1	100												
860902	02	2	100																
860903	01	1	100																
860904	12					2	100	6	100										

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 77																			
860909	01											2	100						
860910	08	12	100																
860919	01	10	100																
860922	04					1	100												
861006	01	100	1			90	1	90	1										
861008	01	40	15																
861010	05	50	100																
861012	03	40	100																
861017	06							5	100										
861017	09			6	100														
861019	10	12	100																
861019	13	4	100					5	100										
861021	07	15	6											18	6			13	8
861027	09	7	100																
861029	04	1	100																
861113	02	50	30															25	40
861120	02					1	100												
861120	09							1	100										
861201	01	12	100																
SPECIES 78																			
860801	02	2	100																
860802	07	1	100																
860802	13							1	100										
860811	04	1	100																
860811	05			1	100														
860813	04	1	100																
860822	01																	1	100
860823	11																	1	100
860904	10	3	100					5	100			4	100						
861006	03	3	67			6	83	7	86										
861011	05	1	100																
861012	07	2	100																
861018	10																	5	100

Table 4. (continued)

	DATE	SIGHT NO.	OBS 4 BEST EST.	OBS 4 PCT	OBS 22 BEST EST.	OBS 22 PCT	OBS 31 BEST EST.	OBS 31 PCT	OBS 56 BEST EST.	OBS 56 PCT	OBS 57 BEST EST.	OBS 57 PCT	OBS 58 BEST EST.	OBS 58 PCT	OBS 59 BEST EST.	OBS 59 PCT	OBS 60 BEST EST.	OBS 60 PCT	OBS 62 BEST EST.	OBS 62 PCT
SPECIES	78																			
	861024	05					1	100	1	100									1	100
	861024	07							1	100										
	861028	07													1	100				
	861108	04									1	100								
	861108	15	1	100																
	861121	02							2	100										
	861202	01					1	100	1	100										
	861204	01					2	100												
SPECIES	79																			
	860802	18							2	100									1	100
	861011	02	1	100																
	861110	02	1	100																
SPECIES	90																			
	861202	02	30	100					55	100									70	100
SPECIES	96																			
	860808	08							1	100							1	100		
	860808	10																	1	100
	860823	14															2	100		
	860824	04															3	100		
	860904	01					1	100												
	860904	02							2	100										
	860922	05							1	100										
	861018	08													1	100				
	861028	08			1	100														
	861028	27																	4	100
	861029	01					1	100												
	861119	06					1	100												
SPECIES	98																			
	860802	17																	1	100
	860806	06															1	100		

Table 4. (continued)

		OBS 4		OBS 22		OBS 31		OBS 56		OBS 57		OBS 58		OBS 59		OBS 60		OBS 62	
DATE	SIGHT NO.	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT	BEST EST.	PCT
SPECIES 98																			
860806	07			1	100														
860809	14	3	67																
860815	02					1	100												
860909	04							2	100										
860917	05	1	100																
861024	06																	1	100
861031	15													1	100				
861129	01					1	100												

Table 5. Summary of marine mammal sightings encountered in the eastern tropical Pacific during July 29 through December 5, 1986.

Species Name (Scientific Name)	Species Code	Species Sightings Total	Pure	Mixed	Estimated-Mean-School-Size Low /(n)	High /(n)	Best /(n)
Offshore Spotted Dolphin (Stenella attenuata)	2	104	42	62	58.35(104)	99.84(97)	73.96(99)
Spinner Dolphin (Stenella longirostris)	3	2	0	2	87.53(2)	250.96(1)	209.29(1)
Common Dolphin (Delphinus delphis)	5	27	27	0	121.78(27)	212.52(25)	164.72(25)
Coastal Spotted Dolphin (S.A. graffmani)	6	9	8	1	71.47(9)	142.63(7)	95.84(8)
Eastern Spinner Dolphin (Stenella longirostris)	10	66	22	44	123.44(66)	203.48(60)	155.75(61)
Whitebelly Spinner Dolphin (Stenella longirostris)	11	16	0	16	70.16(16)	124.97(14)	96.74(14)
Striped Dolphin (S. coeruleoalba)	13	110	108	2	26.48(110)	46.30(107)	34.31(106)
Rough-Toothed Dolphin (Steno Bredanensis)	15	28	27	1	6.32(28)	10.97(26)	8.20(26)
Bottlenosed Dolphin (Tursiops truncatus)	18	68	36	32	19.87(68)	25.16(51)	19.20(50)
Risso's Dolphin (Grampus griseus)	21	19	9	10	12.51(19)	22.94(18)	17.38(17)
Pacific White-Sided Dolphin (Lagenorhynchus obliquidens)	22	1	1	0	9.00(1)	15.00(1)	11.00(1)
Fraser's Dolphin (Lagenodelphis Hosei)	26	2	1	1	273.70(2)	502.00(2)	352.90(2)
Unidentified Dolphin	77	130	121	9	8.29(125)	15.27(34)	9.90(37)
Spotted Dolphin (Stenella attenuata)	90	2	2	0	22.00(2)	38.00(2)	29.00(2)

Table 5. (continued)

Species Name (Scientific Name)	Species Code	Species Sightings Total	Pure	Mixed	Estimated-Mean-School-Size Low /(n)	High /(n)	Best /(n)
Melon-Headed Whale (Peponocephala electra)	31	4	3	1	229.15(4)	457.67(3)	357.73(3)
Pygmy Killer Whale (Feresa attenuata)	32	1	1	0	29.00(1)	45.00(1)	34.00(1)
False Killer Whale (Pseudorca crassidens)	33	9	7	2	15.72(9)	23.86(4)	15.18(4)
Pilot Whale (Globicephala sp.)	34	24	16	8	11.95(24)	17.53(16)	13.04(16)
Killer Whale (Orcinus orca)	37	8	8	0	2.62(8)	4.17(6)	3.33(6)
Sperm Whale (Physeter macrocephalus)	46	34	30	4	7.68(34)	7.36(17)	5.90(18)
Pygmy Sperm Whale (Kogia breviceps)	47	5	5	0	1.60(5)	1.60(5)	1.60(5)
Dwarf Sperm Whale (Kogia simus)	48	41	40	1	1.68(41)	1.79(40)	1.68(41)
Beaked Whale (Ziphiid)	49	24	24	0	1.75(24)	2.48(21)	1.86(21)
Southern Bottelnosed Whale (Hyperoodon planifrons)	50	1	1	0	6.00(1)	10.00(1)	8.00(1)
Unid. Mesoplodont (Mesoplodon sp.)	51	13	13	0	2.31(13)	2.92(12)	2.58(12)
Cuvier's Beaked Whale (Ziphius cavirostris)	61	17	17	0	2.29(17)	3.06(16)	2.69(16)
Rorqual (Balaenoptera sp.)	70	29	27	2	1.40(29)	2.15(26)	1.66(27)
Minke Whale (B. acutorostrata)	71	2	2	0	1.00(2)	1.00(2)	1.00(2)
Bryde's Whale (B. edeni)	72	4	4	0	1.25(4)	1.50(4)	1.50(4)
Blue Whale (B. musculus)	75	5	5	0	1.20(5)	1.20(5)	1.20(5)
Unidentified Small Whale	78	29	28	1	1.41(29)	1.90(24)	1.58(24)
Unidentified Large Whale	79	5	5	0	1.00(5)	1.25(4)	1.00(4)
Unidentified Cetacean	96	21	21	0	1.38(21)	1.80(10)	1.58(12)

Table 6. Summary of distance searched, large dolphin schools detected, and rates of encountering dolphins by observers aboard the Jordan in the eastern tropical Pacific during July 29 through December 5, 1986.

	Distance Searched (km)	Percent km Searched	Number Schools Detected	Percent All Schools Detected	Detection Rate (Schools/ 1000 km)	S.E. Detection Rate	Number[1] Days Searched
All Data	15497	100	245	100	15.81	1.82	102
Northern	606	4	11	4	18.14	9.54	4
Inshore	8567	55	176	72	20.54	2.62	62
Middle	5285	34	53	22	10.03	2.32	37
West	746	5	4	2	5.39	2.71	5
South	302	2	1	0	3.32	2.58	4
Sea State Conditions							
Calm	4300	28	127	52	29.54	3.49	51
Rough	11197	72	118	48	10.54	1.65	95
Visibility Conditions							
Good	13769	89	209	85	15.17	1.91	102
Poor	1728	11	36	15	20.83	7.36	66
Observers							
4	7739	50	79	32	10.21	1.85	100
22	7639	49	16	7	2.10	0.52	100
31	7725	50	57	23	7.38	1.08	100
56	7769	50	36	15	4.63	0.83	101
57	2031	13	3	1	1.48	1.04	23
58	1857	12	5	2	2.69	2.16	25
59	1929	12	12	5	6.22	2.77	27
60	1956	13	10	4	5.11	2.34	26
62	7705	50	27	11	3.50	0.87	100
Observer Teams[2]							
1	7703	50	116	48	15.06	2.23	100
2	7690	50	127	52	16.52	2.26	100

[1]Day included in tally if searching effort for the variable occurred during any part of the day.
[2]105 km occurred when either both or no team leaders were on duty and is not used for team analysis.

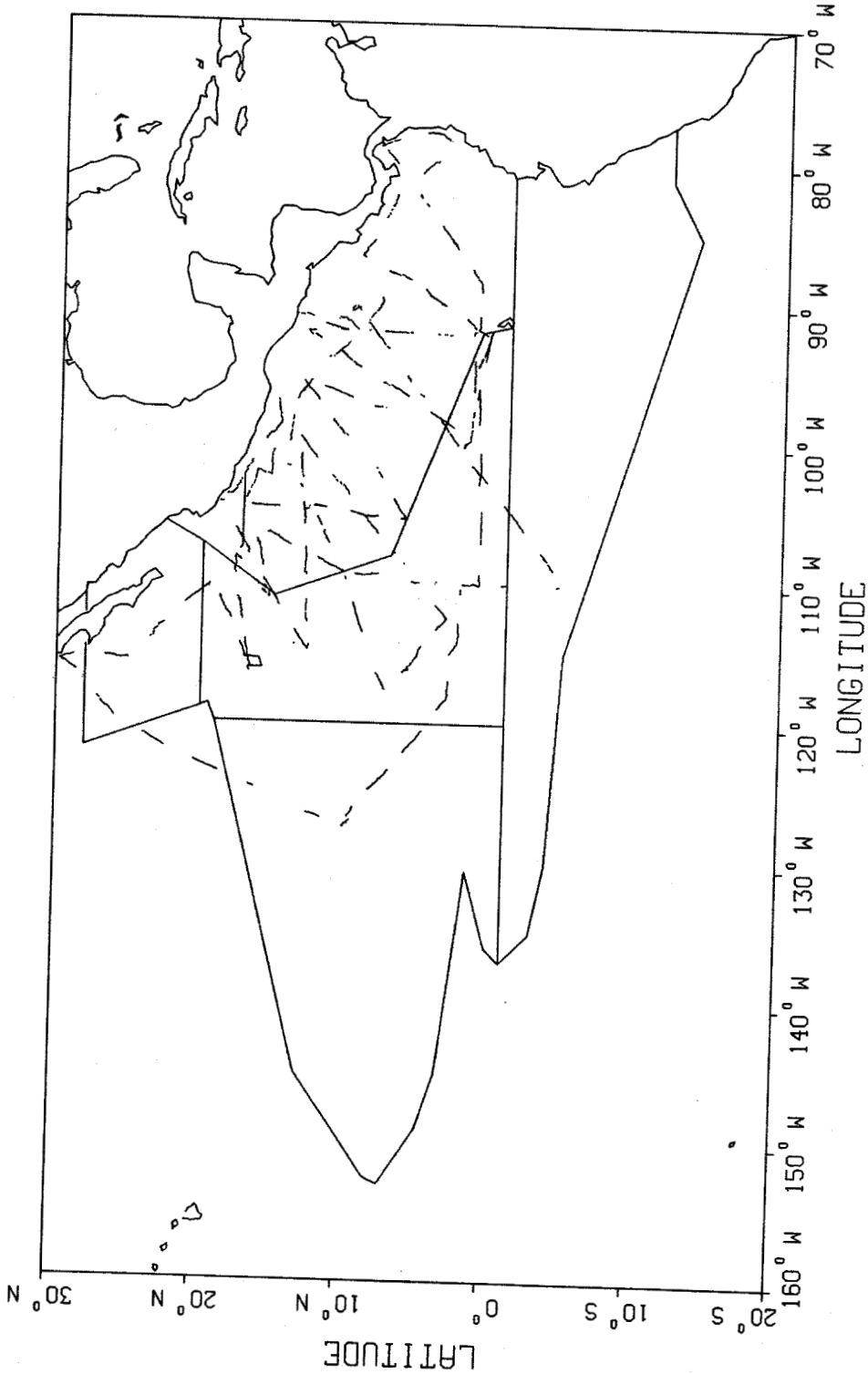


Figure 1. Tracklines surveyed from the R/V Jordan in the eastern tropical Pacific during July 29 through December 5, 1986.

CRUISE #	YEAR	MONTH	DAY
1	4	6	8

RESEARCH SHIP
MARINE MAMMAL
DAILY EFFORT RECORD

		START OF LEG									POSITION: ONE OR MORE PER SERIES				OBSERVER POSITION			
SERIES #	LEG #	TIME	SURFACE TEMP. °F & 10ths	BEAU #	FOG/ RAIN	HORZ SUN	VERT SUN	END OF LEG TIME	COMPASS COURSE °T	VESSEL SPEED KTS & 10ths	LATITUDE	N/S	LONGITUDE	E/W	LEFT BIND.	RIGHT BIND.	REC.	END LEG CODE
10	12	14	18	22	23	24	26	28	32	35	38	42	43	48	49	51	53	55

FOG/RAIN CODES

NO FOG OR RAIN = 1
FOG = 2
RAIN = 3
FOG AND RAIN = 4

ENDING CODES

1 = COURSE CHANGE
2 = SPEED CHANGE
4 = EFFORT TERMINATED
5 = LEG ENDS TO RECORD POSITION IN FOLLOWING LEG
8 = LEG ENDS DUE TO CHANGE IN ENVIRONMENTAL CONDITIONS

Figure 2. Research ship marine mammal daily effort record.

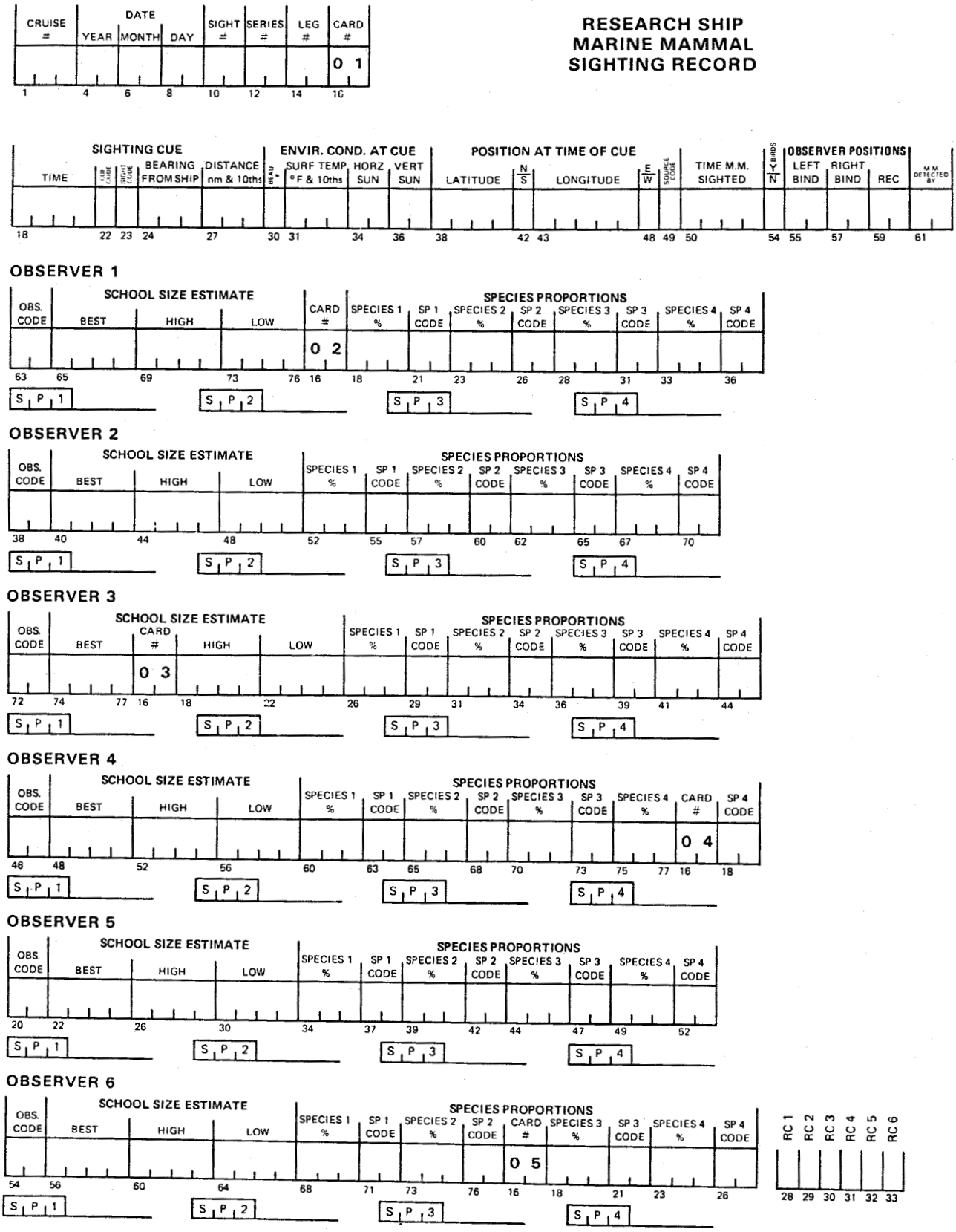
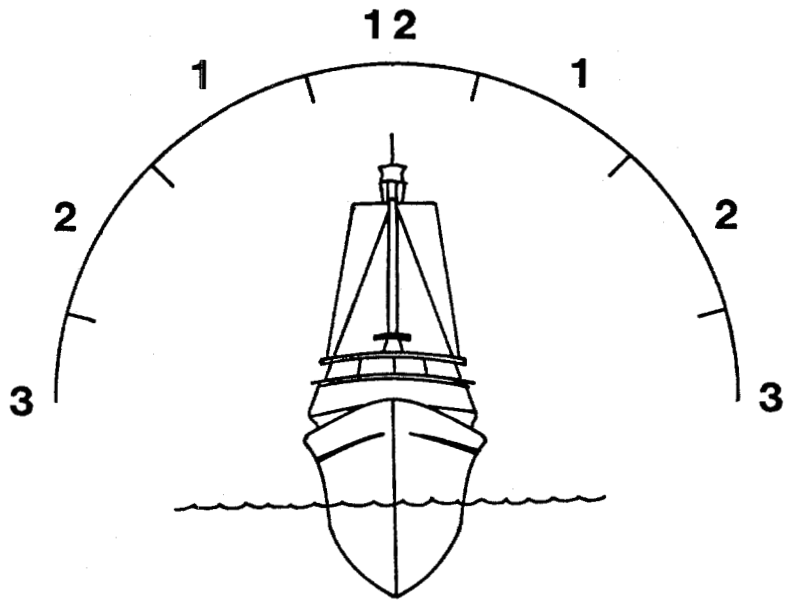
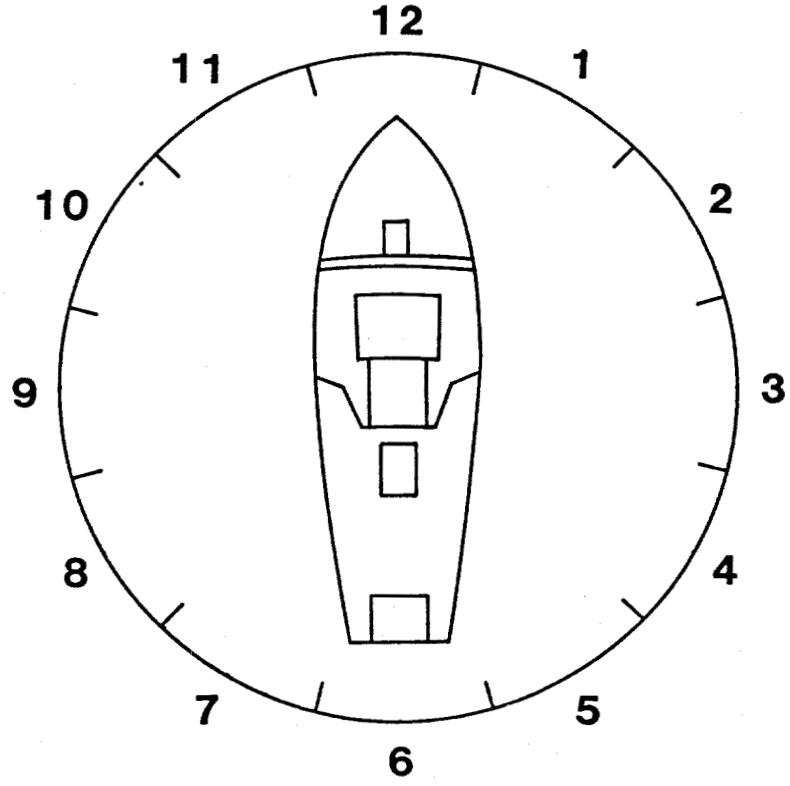


Figure 3. Research ship marine mammal sighting record.



VERTICAL SUN POSITION



HORIZONTAL SUN POSITION

Figure 4. Vertical and horizontal sun position categories.

CRUISE #	DATE YEAR	MONTH	DAY	SIGHT #	SERIES #	LEG #	OBS. CODE
1	4	6	8	10	12	14	16

SIGHTING SUMMARY

LIST ALL DIAGNOSTIC FEATURES OBSERVED
(INCLUDING ESTIMATED BODY LENGTH)

SKETCH FEATURES OF ANIMALS SIGHTED

BEHAVIOR – (DESCRIBE AGGREGATION, MOVEMENT, BOW AND STERN RIDING, BLOWS, ETC.)

ASSOCIATED ANIMALS – (INCLUDE NUMBER AND SPECIES OF BIRDS)

PHOTOS: ROLL # _____

FRAME(S): # _____

TOTAL TIME OF OBSERVATION	_____	ENVIR. COND. (RAIN, OVERCAST, FOG, CHOPPY)	_____	CLOSEST DISTANCE OF OBSERVATION	_____
AMT. OF TIME AT CLOSEST DISTANCE	_____	TAGS ASSOCIATED WITH SIGHTING	_____	METHOD OF OBSERVATION (EYE, 7x, 10x, 25x)	_____

Figure 5. Research ship marine mammal sighting record continuation sheet.

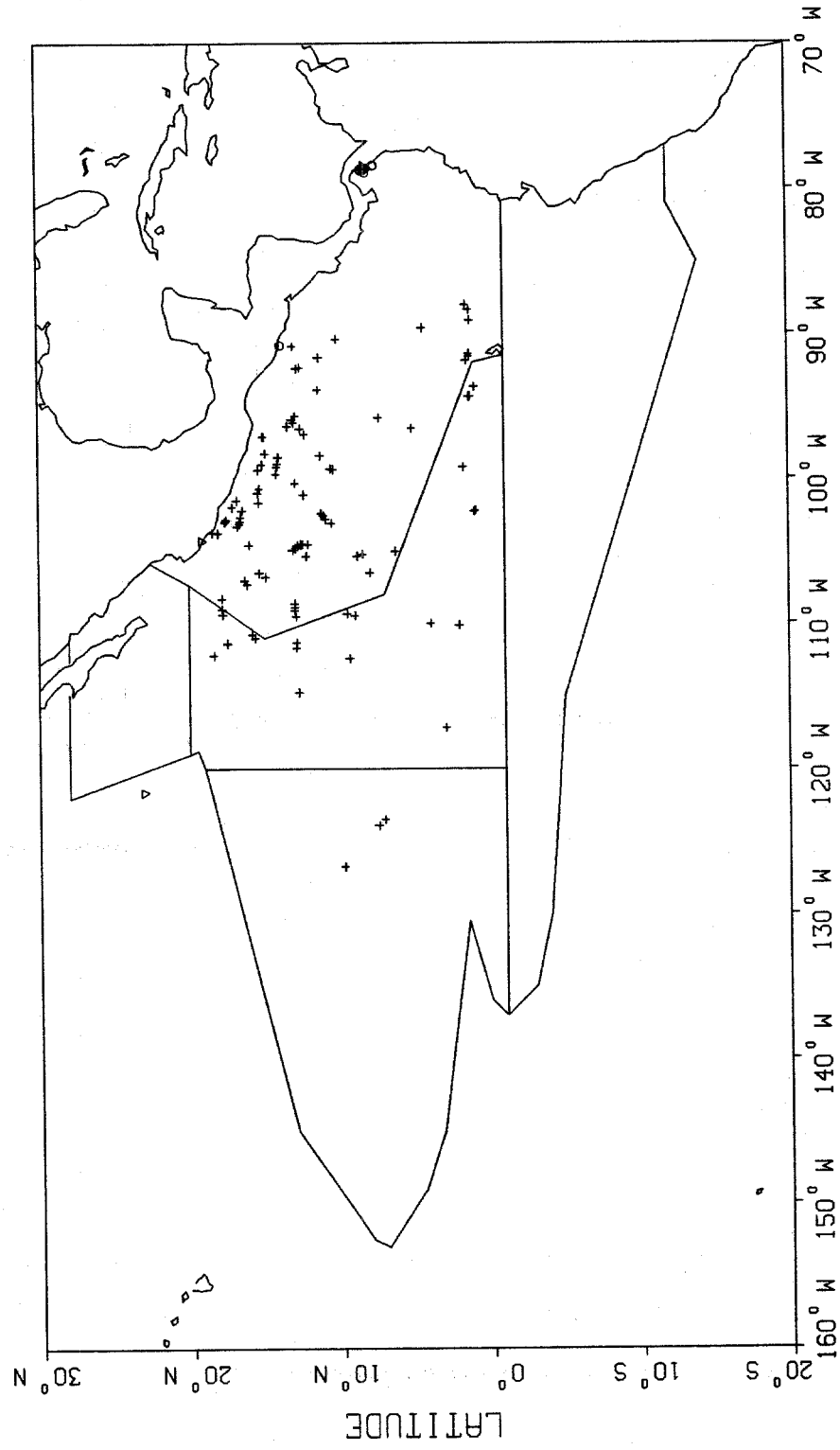


Figure 6. Offshore (+), coastal (o) and unidentified (v) spotted dolphins detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

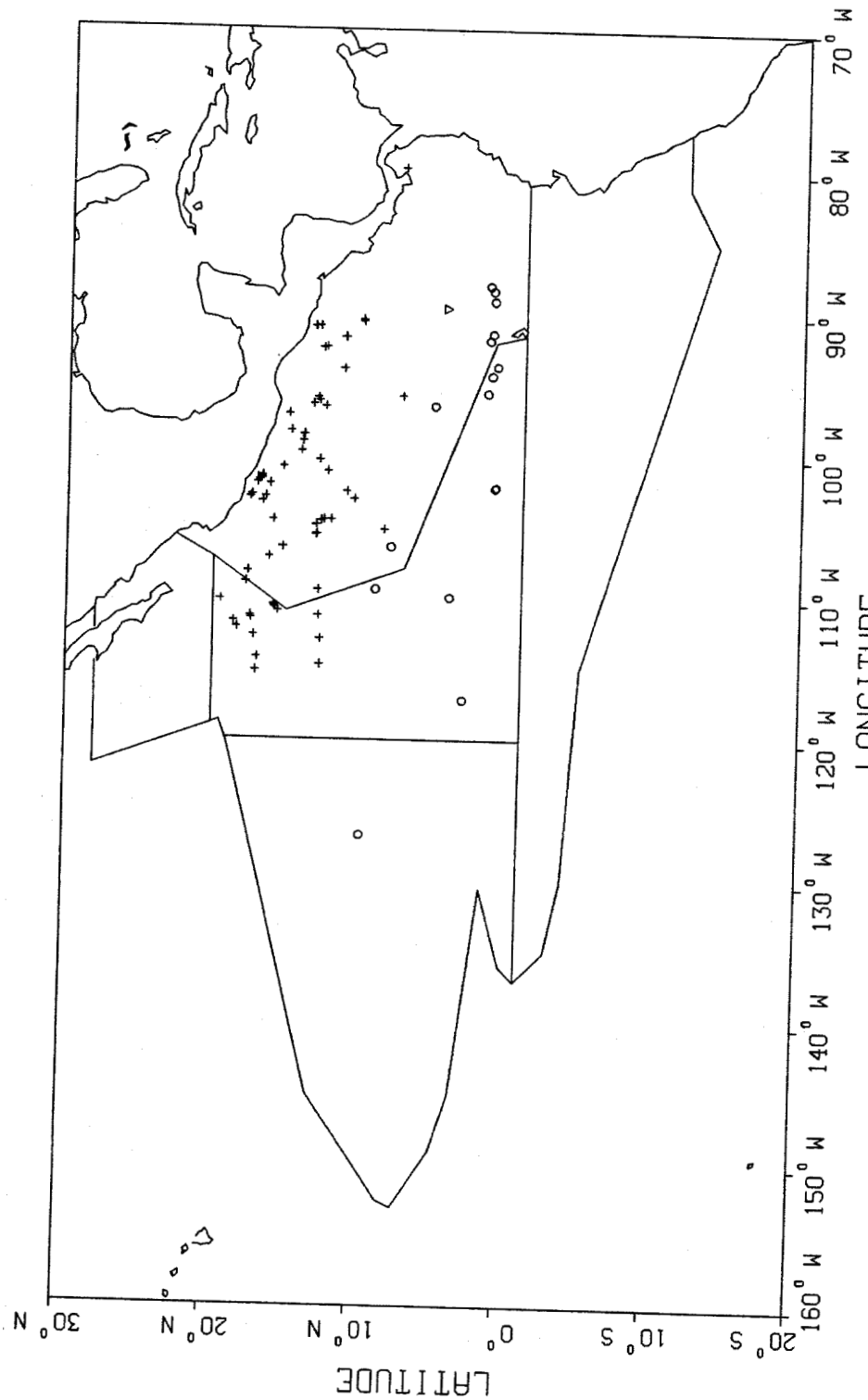


Figure 7. Eastern (+), whitebelly (o) and unidentified (v) spinner dolphins detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

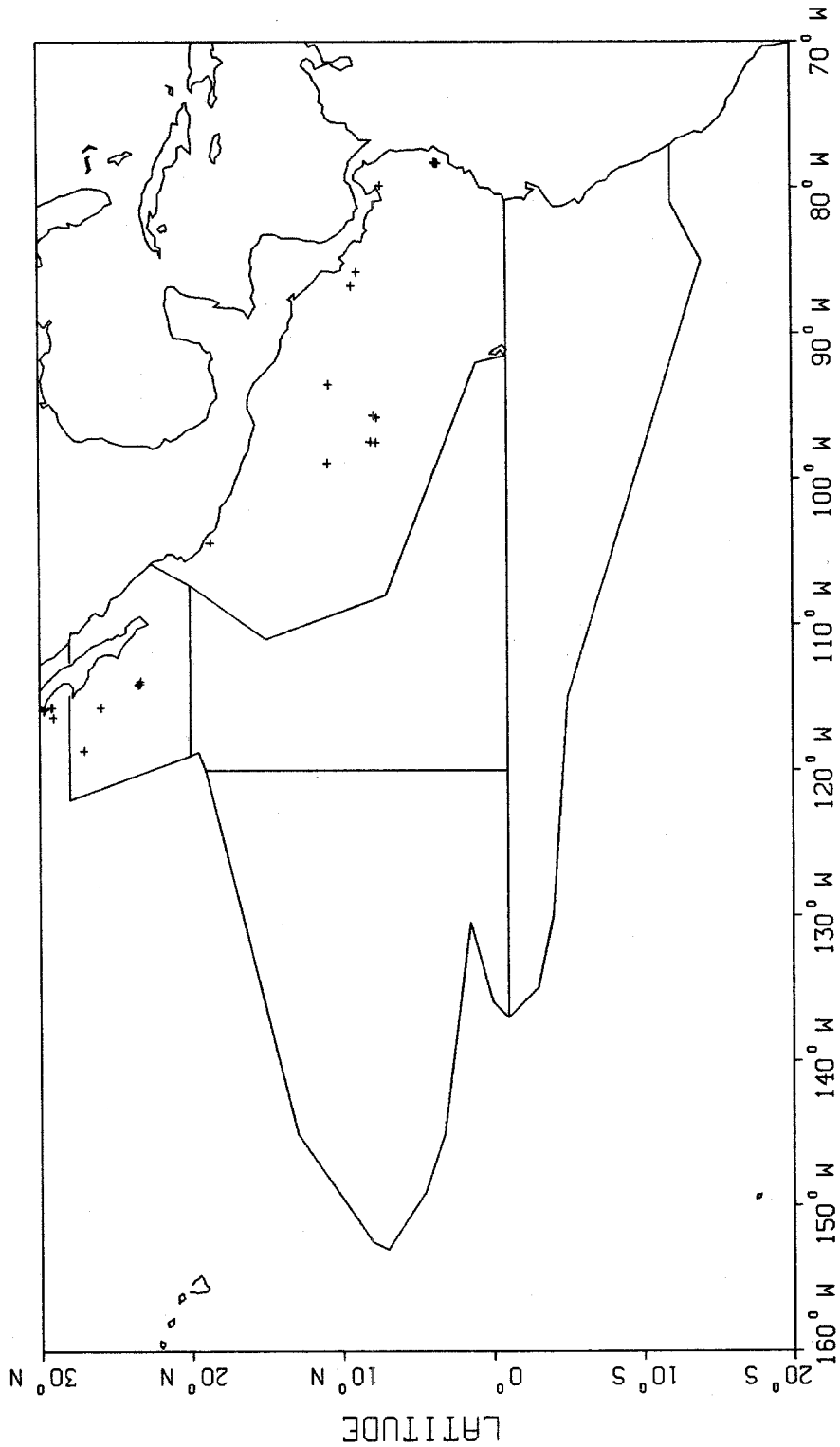


Figure 8. Common dolphins (+) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

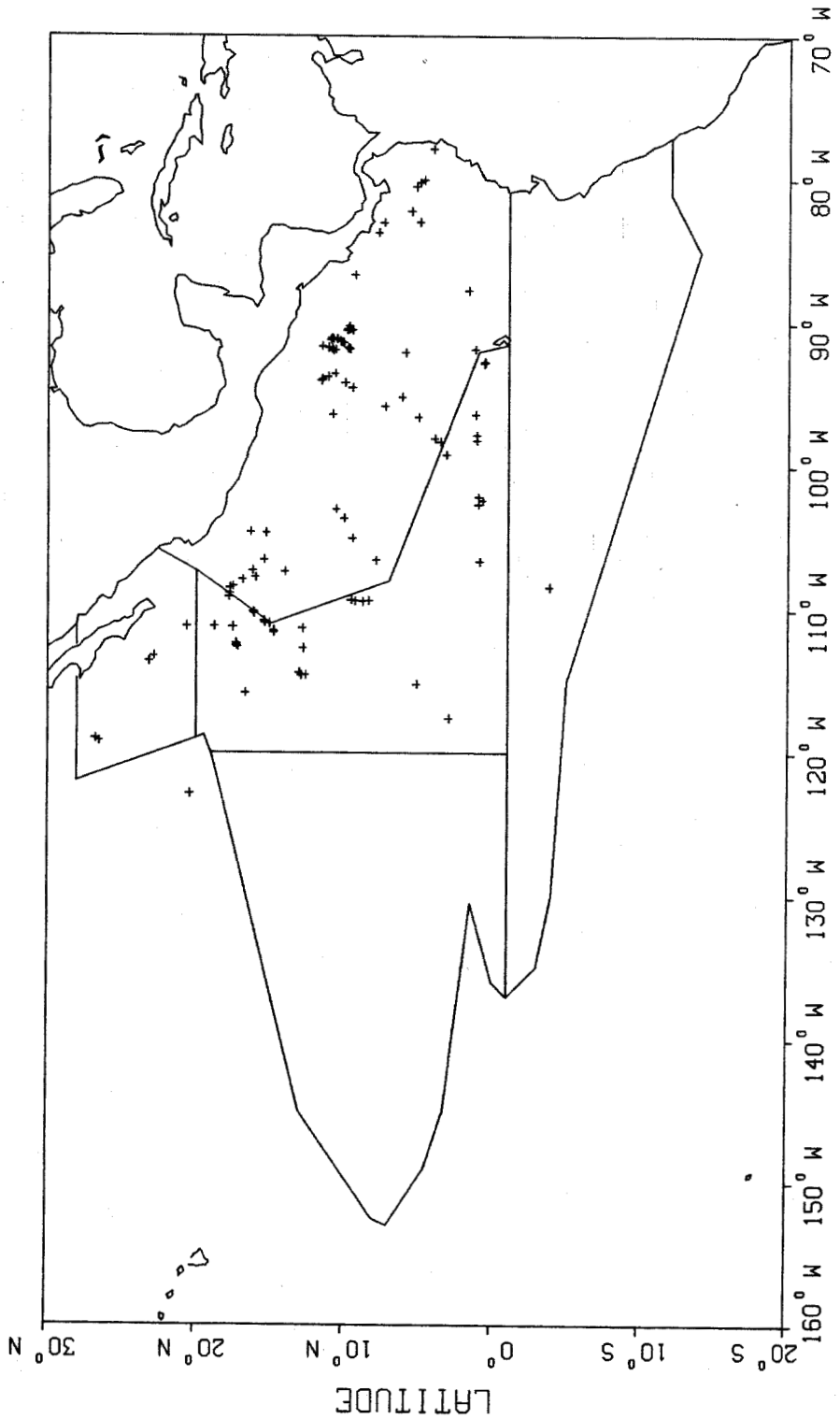


Figure 9. Striped dolphins (+) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

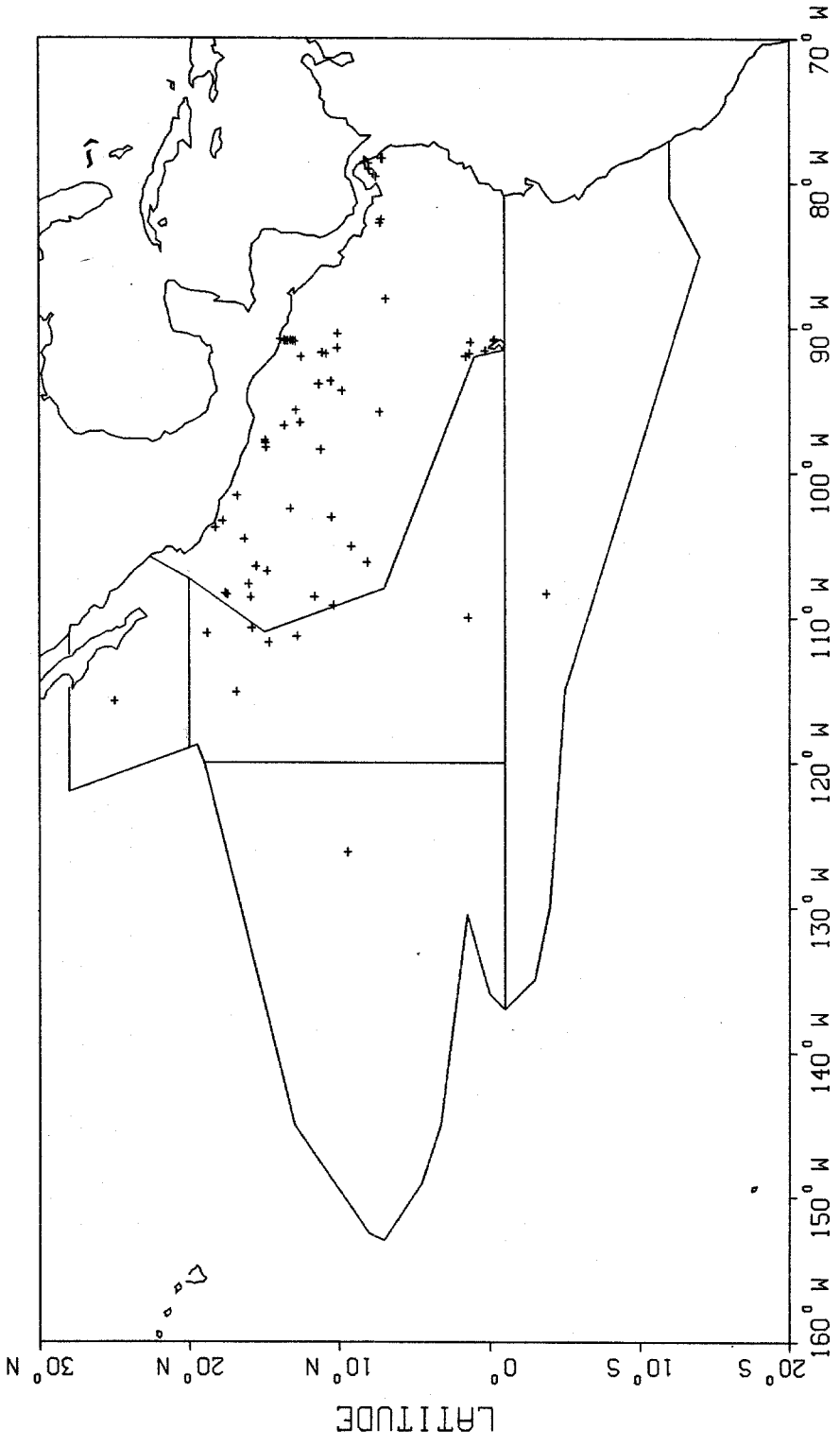


Figure 10. Bottlenose dolphins (+) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

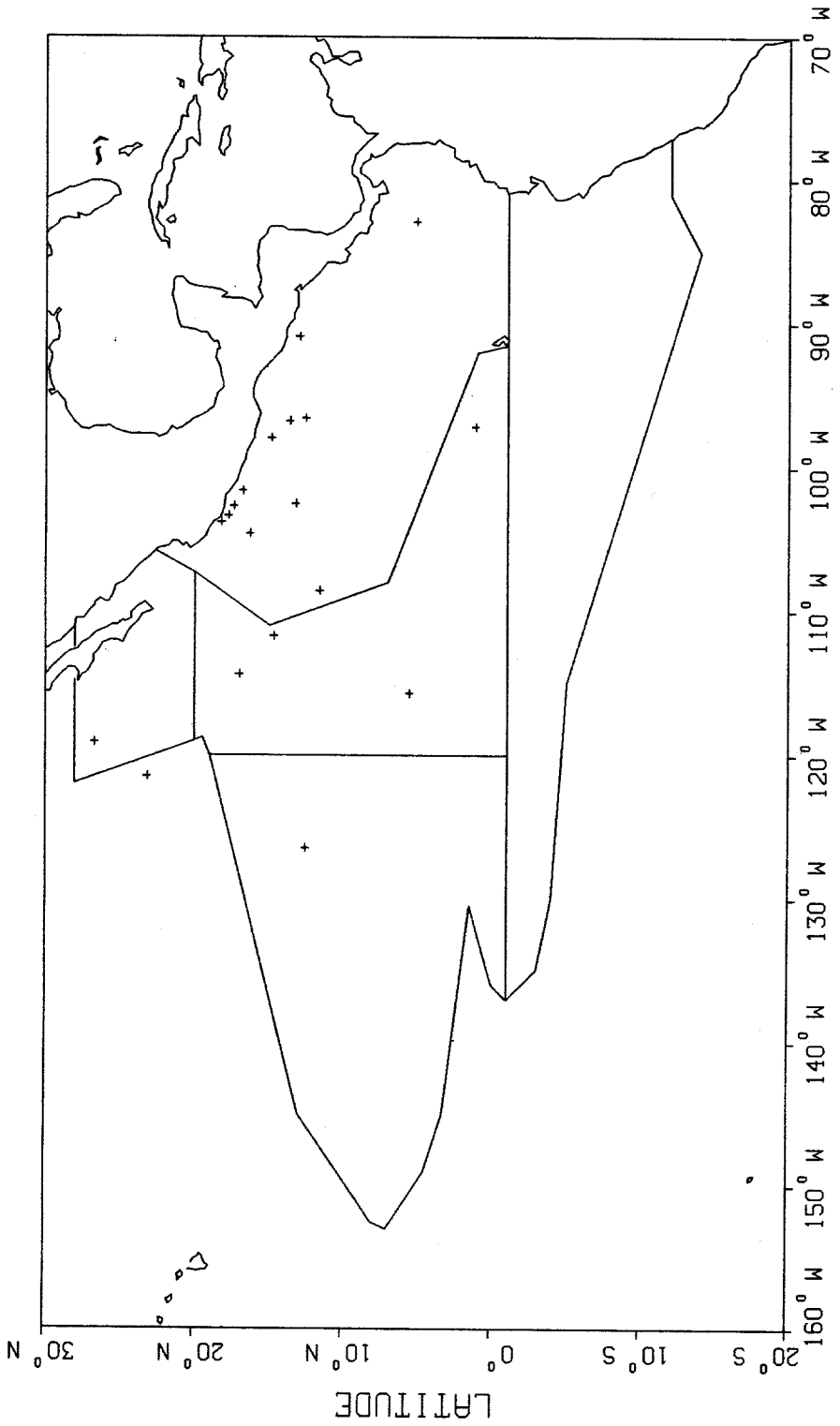


Figure 11. Risso's dolphins (+) detected from aboard the NOAA ship, David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

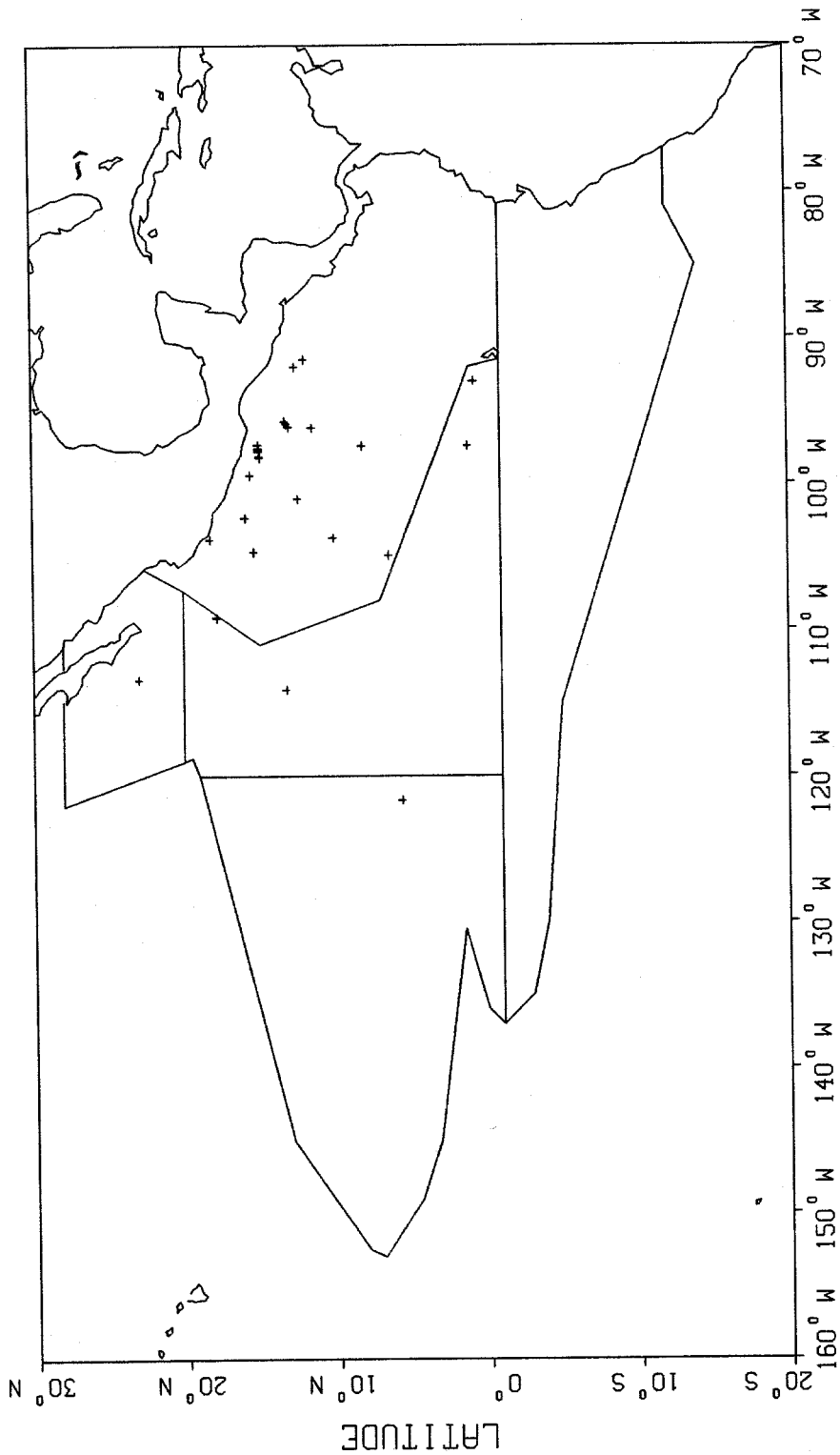


Figure 12. Rough-toothed dolphins (+) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

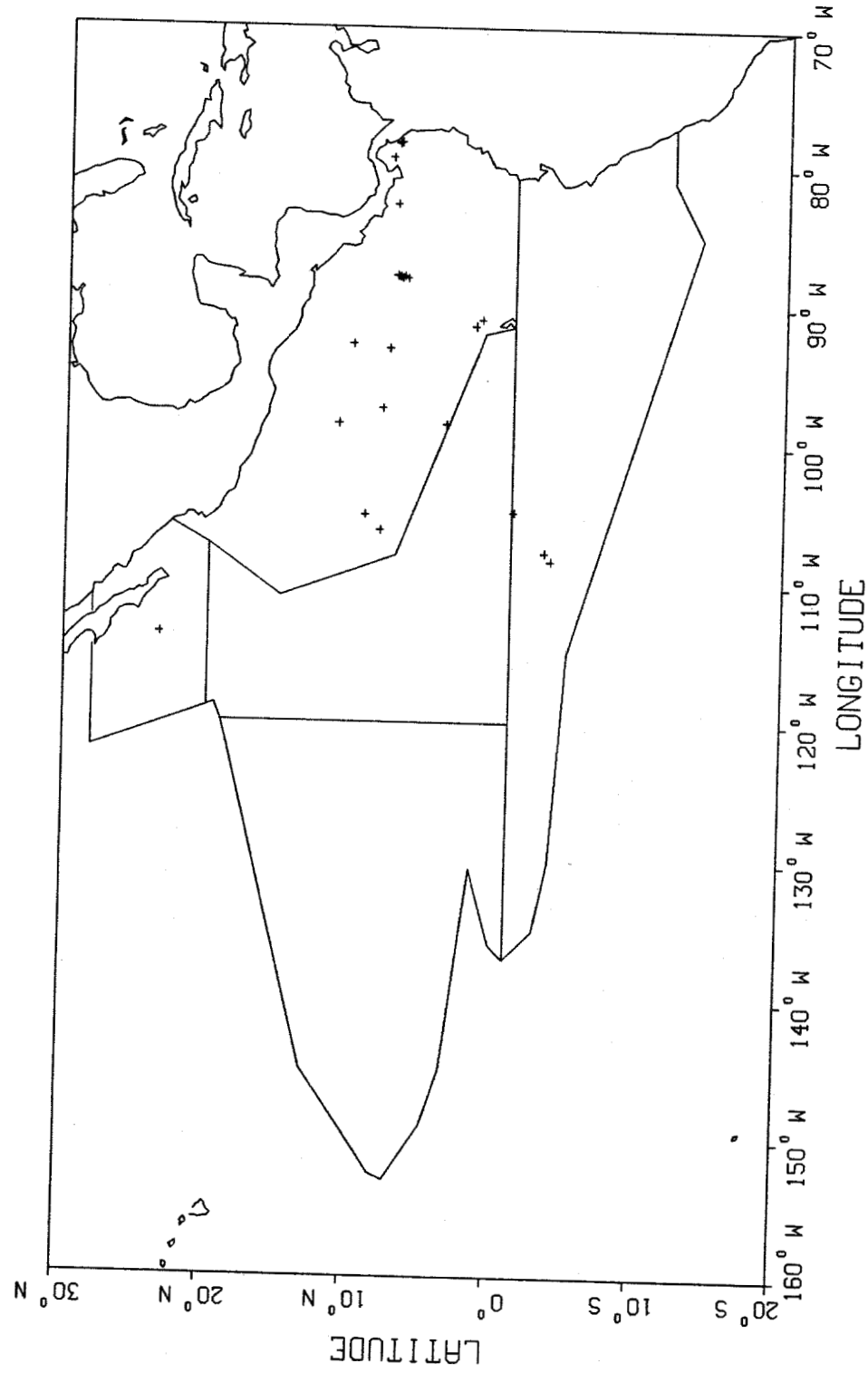


Figure 13. Pilot whales (+) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

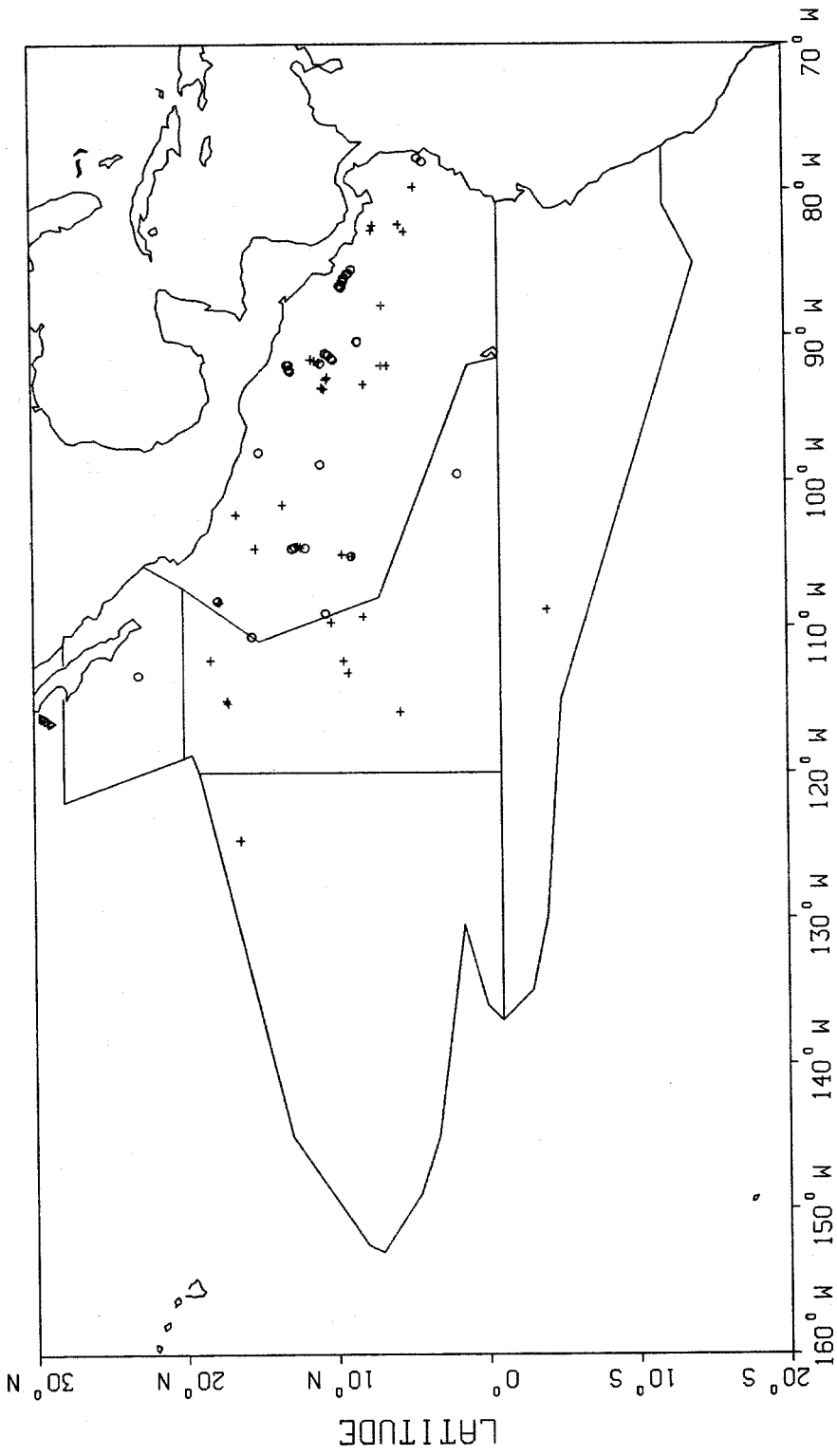


Figure 14. Sperm (+), dwarf sperm (o) and pygmy sperm (v) whales detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

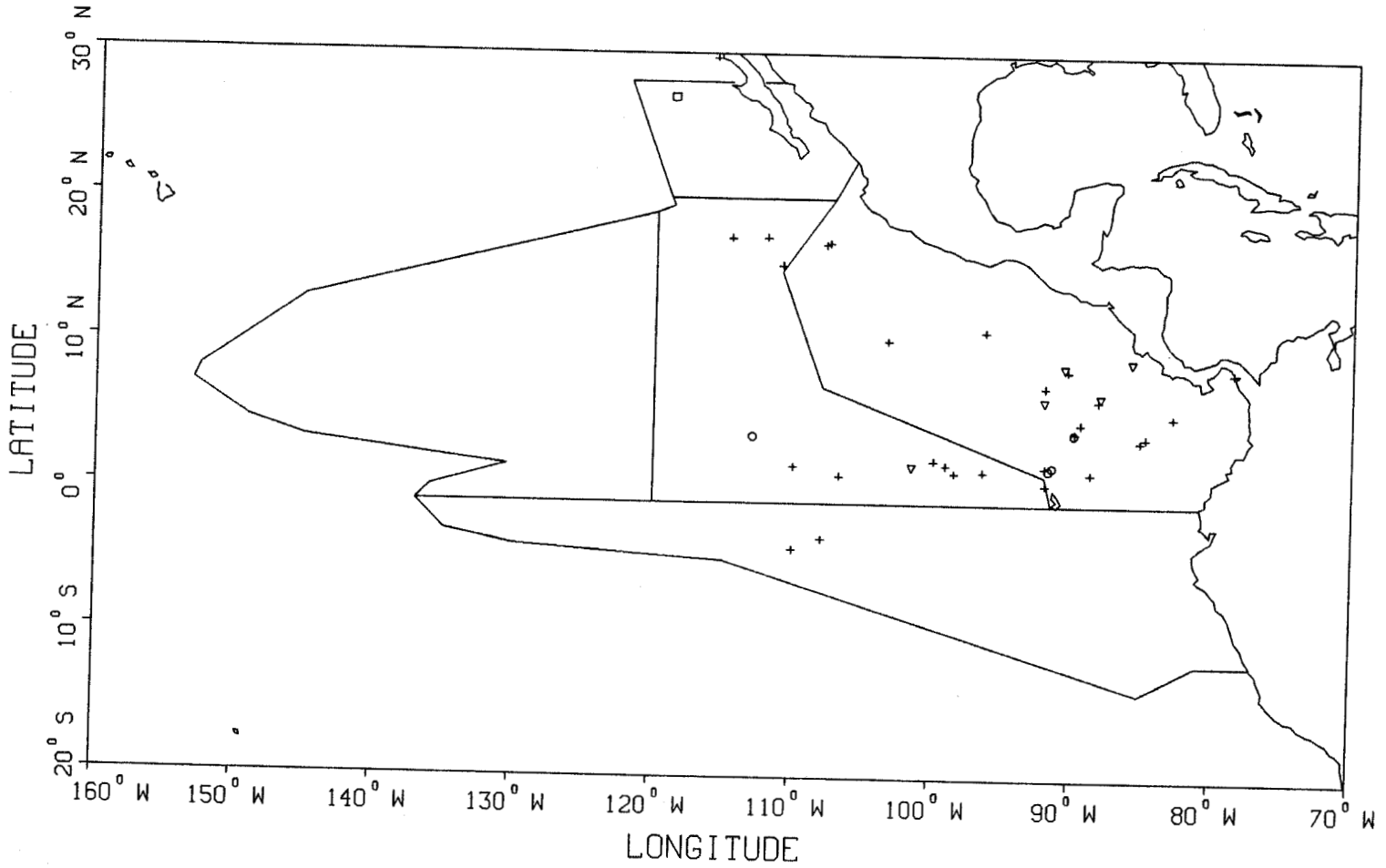


Figure 15. Unidentified rorquals (+), Bryde's (o), blue (v) and minke (□) whales detected from aboard the NOAA ship David Starr Jordan from July 30 through December 5, 1984 in the eastern tropical Pacific.

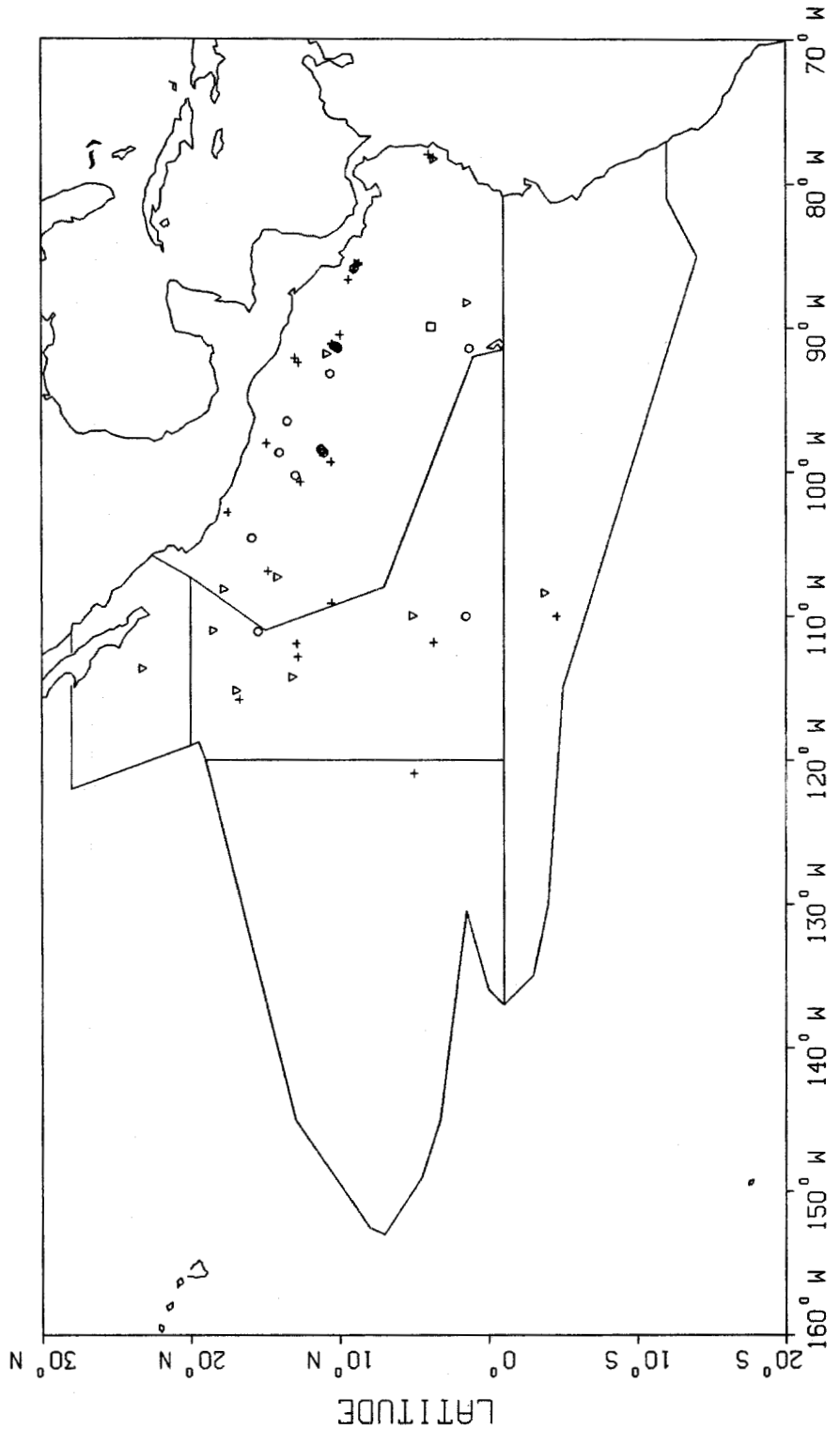


Figure 16. Unidentified beaked (+), Cuvier's beaked (o), unidentified mesoplodon (v) and southern bottlenose (□) whales detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

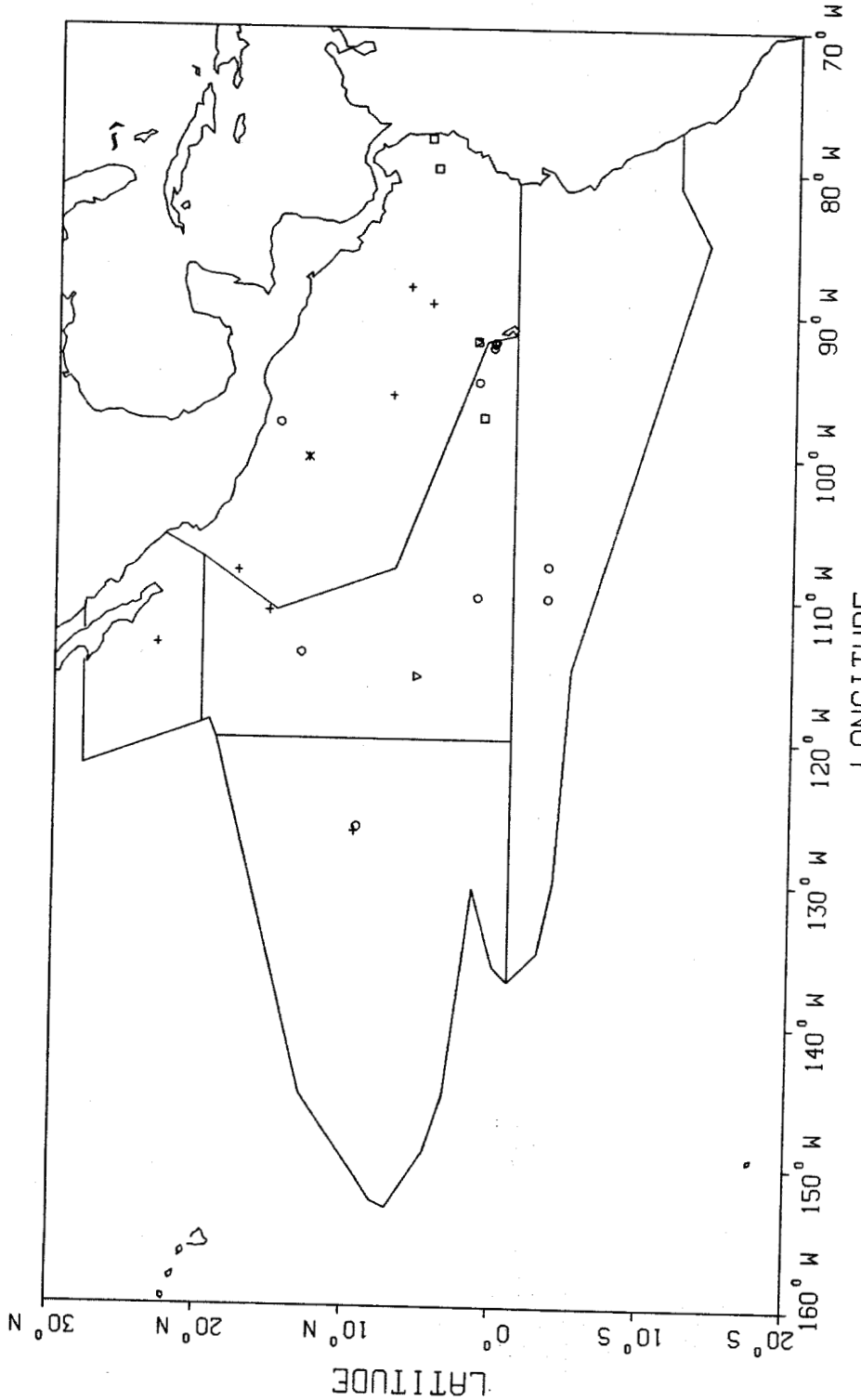


Figure 17. Killer (+) and false killer (o) whales, Fraser's dolphins (v), melon-headed whales (□) and pygmy killer whales (*) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

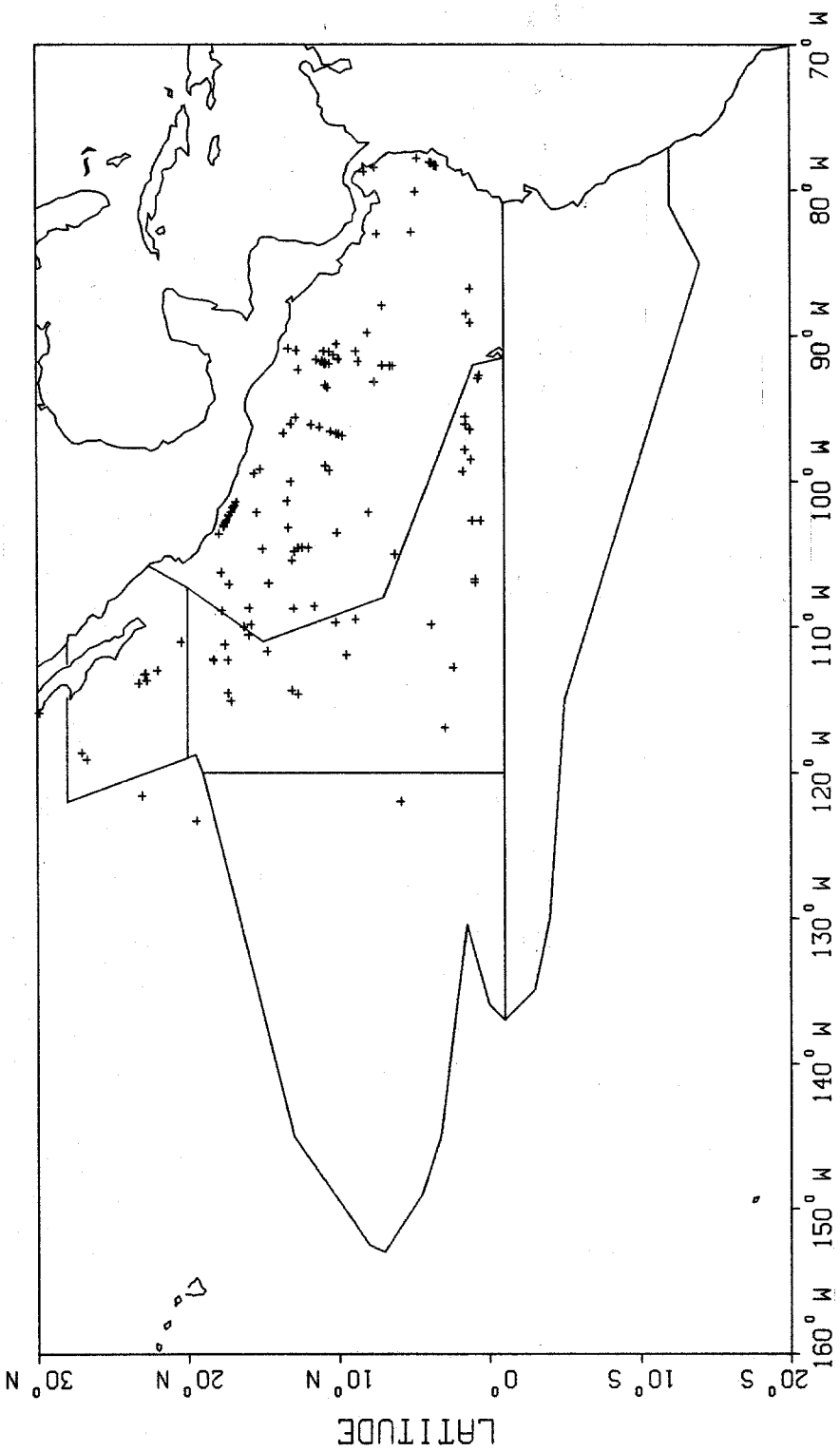


Figure 18. Unidentified dolphins (+) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

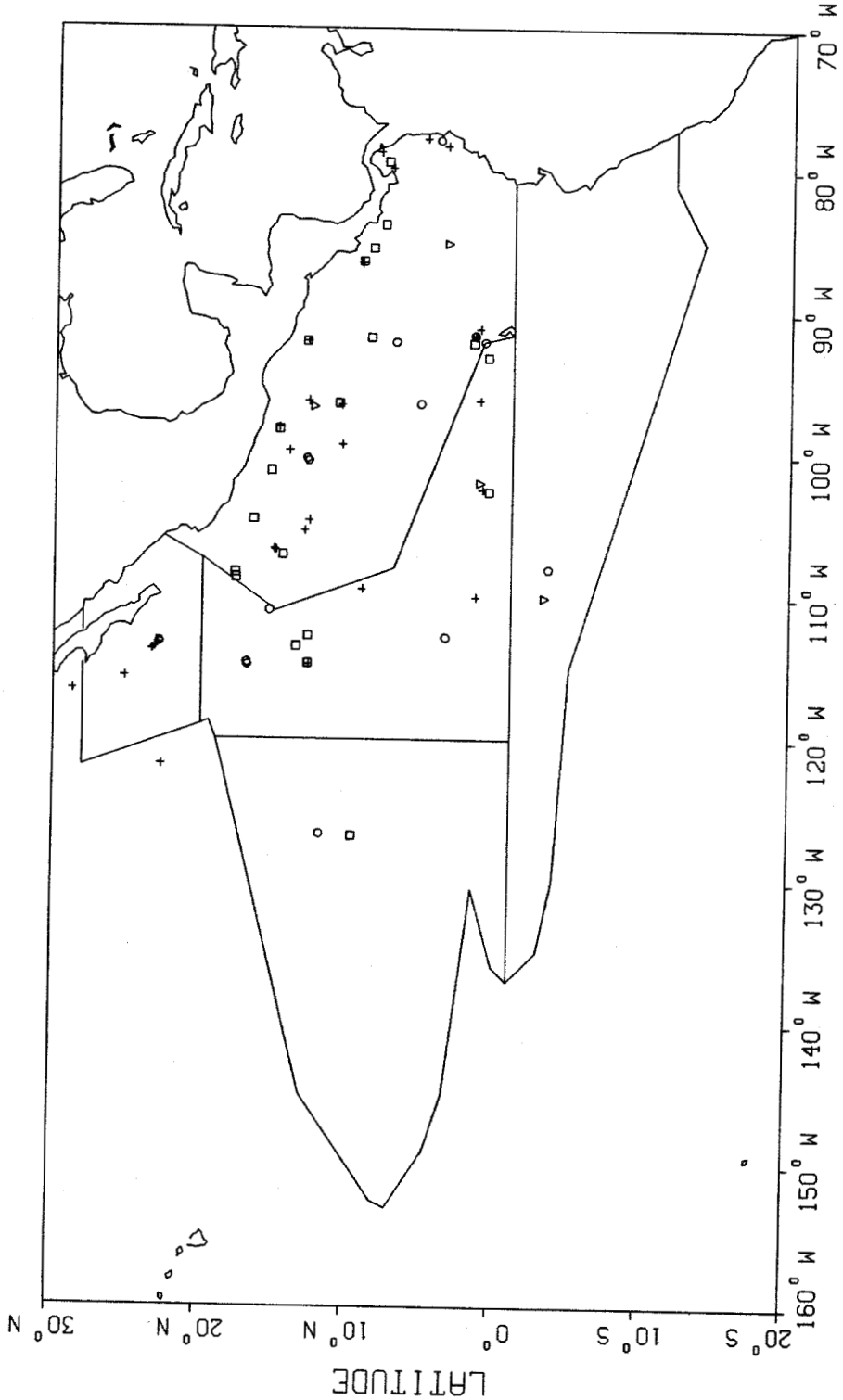


Figure 19. Unidentified small whales (+), unidentified whales (o), unidentified large whales (▽) and unidentified cetaceans (□) detected from aboard the NOAA ship David Starr Jordan from July 29 through December 5, 1986 in the eastern tropical Pacific.

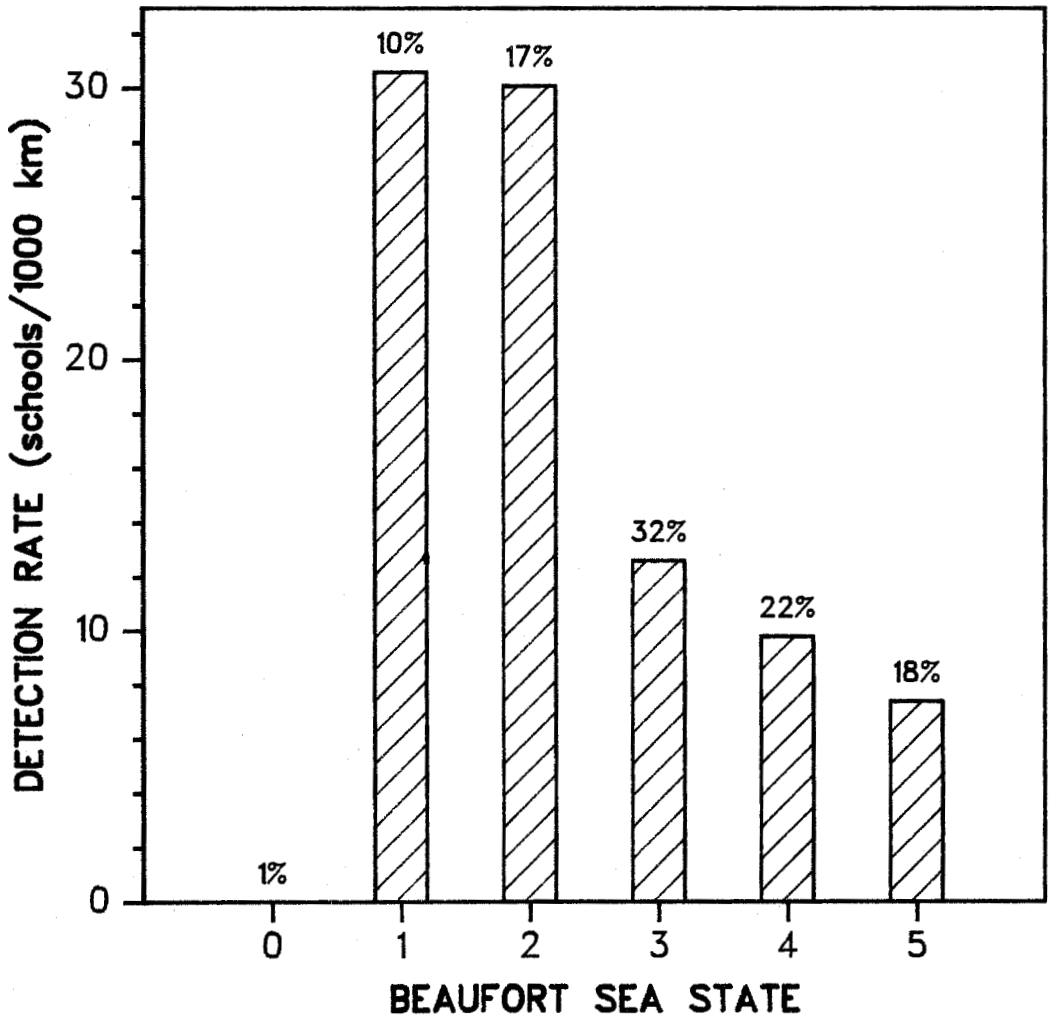


Figure 20. Rate of encountering dolphin schools during each Beaufort state from aboard the Jordan in the eastern tropical Pacific during July 29 through December 5, 1986. Percentages are amount of total effort searched during each sea state.

RECENT TECHNICAL MEMORANDUMS

Copies of this and other NOAA Technical Memorandums are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22167. Paper copies vary in price. Microfiche copies cost $4.50. Recent issues of NOAA Technical Memorandums from the NMFS Southwest Fisheries Center are listed below:

NOAA TM-NMFS SWFC

66 U.S. albacore trolling exploration conducted in the South Pacific during February-March, 1986.
R.M. LAURS
(August 1986)

67 Upwelling index update, U.S. west coast, 33N-48N latitude.
J.E. MASON and A. BAKUN
(November 1986)

68 The 40 MW_e OTEC plant at Kahe Point, Oahu, Hawaii:
A case study of potential biological impacts.
J.H. HARRISON
(February 1987)

69 Effects of Tropical Tuna Fisheries on non-target species.
G.T. SAKAGAWA
(February 1987)

70 The Hawaiian monk seal on Laysan Island: 1984.
T.C. JOHANOS, A.K.H. KAM, and R.G. FORSYTH
(March 1987)

71 Preliminary assessment of habitat utilization by Hawaiian green turtles in their resident foraging pastures.
G.H. BALAZS, R.G. FORSYTH, and A.K.H. KAM
(March 1987)

72 Forces of change in Hawaii's aku (skipjack tuna) industry, 1986—workshop summary.
C.H. BOGGS and S.G. POOLEY
(April 1987)

73 United States North Pacific Albacore Fishery 1961-1980.
A.P. MAJORS
(April 1987)

74 Abundance of zooplankton species in California coastal waters during April 1981, February 1982 and March 1985.
A. ALVARINO and C.A. KIMBRELL
(June 1987)

75 Data report on the vertical distribution of the eggs and larvae of northern anchovy, *Engraulis mordax,* at two stations in the Southern California Bight, March-April 1980.
T. POMMERANZ and H.G. MOSER
(July 1987)