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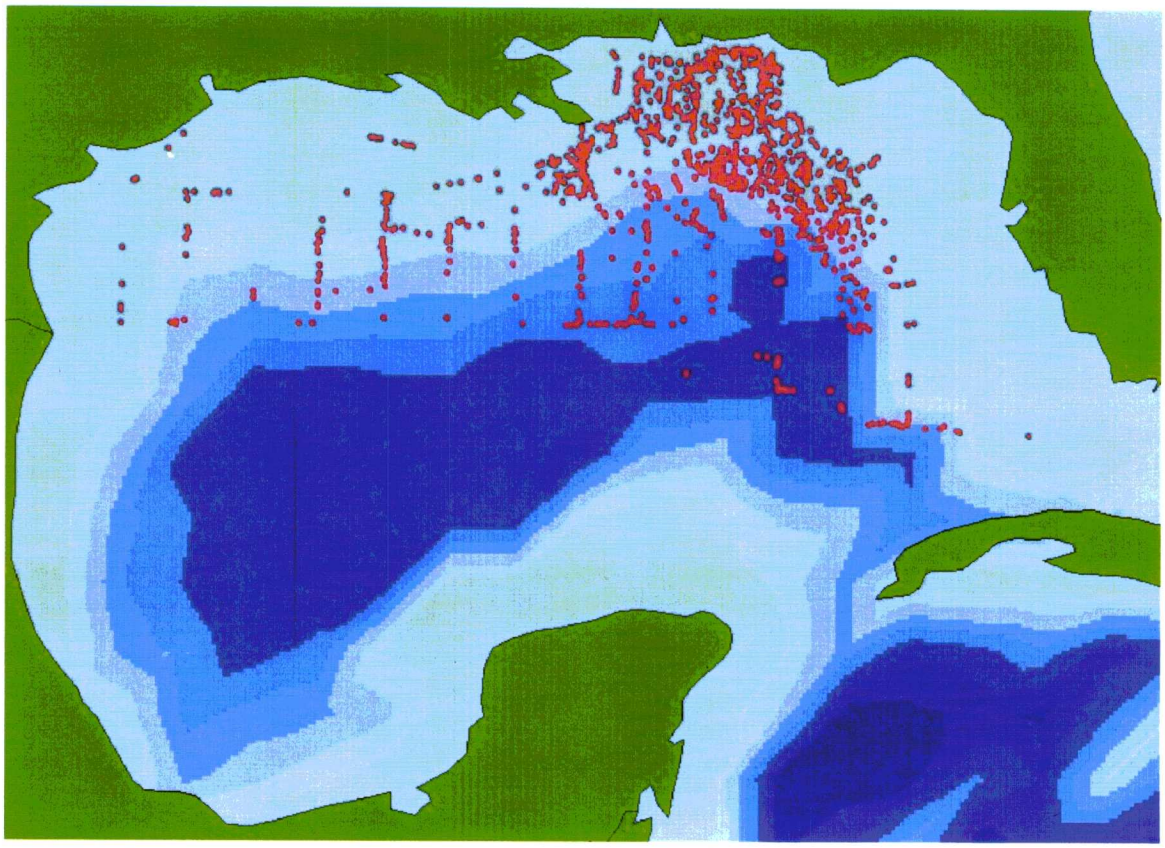

Cetaceans, Sea Turtles and Seabirds in the Northern Gulf of Mexico: Distribution, Abundance and Habitat Associations

Volume III: Data Appendix

U.S. Department of the Interior
U.S. Geological Survey
Biological Resources Division

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico Region

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Volume III: Data Appendix

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PREFACE

This study entitled "Cetaceans, Sea Turtles and Seabirds in the Northern Gulf of Mexico: Distribution, Abundance and Habitat Associations", also known as the GulfCet II study, provides synoptic data and analyses on the species diversity, abundance, and habitat characteristics for cetaceans, sea turtles and seabirds in the northern Gulf of Mexico. Results of the study are described in three volumes including this volume ("Volume III: Data Appendix"), "Volume I: Executive Summary" and "Volume II: Technical Report."

This study was sponsored and administered by the U.S. Department of Interior, U.S. Geological Survey, Biological Resources Division to provide environmental information to the U.S. Department of Interior, Minerals Management Service. It was managed by Texas A&M University at Galveston in partnership with the National Marine Fisheries Service at the Southeast Fisheries Science Center.

ABSTRACT

The Gulf of Mexico is a semi-enclosed, intercontinental sea with a total area of about 1.5 million square kilometers. As a large marine ecosystem, it has a unique bathymetry, hydrography and productivity. Cetaceans, sea turtles and seabirds are upper trophic level predators that play an important role in the pelagic marine ecosystem of the Gulf of Mexico. These are highly valued taxa, protected by national laws and international agreements, and knowledge of their distribution, abundance and ecology is vital to their protection. GulfCet II was planned to help resolve issues concerning the potential impacts of various oil and gas activities on cetaceans, sea turtles and seabirds that inhabit the northern and eastern regions of the Gulf of Mexico, emphasizing the continental slope where water depths range from 100 to 2,000 m. The objectives of the GulfCet II field studies (1996-97) were to: 1) expand the geographical coverage of ship and aerial surveys that were conducted previously during GulfCet I (1992-94), which surveyed the north-central and northwestern Gulf of Mexico, 2) estimate the minimum abundances of cetaceans and sea turtles in areas surveyed during 1996-97, 3) collect simultaneous hydrographic data and biological samples during the ship surveys to better define the habitat associations of cetaceans and seabirds, and 4) collect acoustic data on cetacean sounds and identify and record other natural and man-made underwater sounds to provide additional insights into cetacean distribution and behavior, particularly in relation to noise from seismic exploration vessels.

We hypothesized that hydrographic features in the study area had different levels of potential prey that influence cetacean and seabird distribution. We further hypothesized that these food stocks would be locally concentrated in nutrient-rich areas offshore from the Mississippi River, within cyclonic eddies, and along the high-shear edges of cyclonic eddies.

An integrated methodology was used that included visual surveys from ships and aircraft, and acoustic recordings and hydrographic collections from ships. Near real-time sea surface altimetry from the TOPEX/POSEIDON and ERS satellites was used during ship surveys to determine the location of hydrographic features (e.g., cyclones, anticyclones and confluence zones). Archival satellite sea surface altimetry data were used to retrospectively determine the location of hydrographic features for analysis with cetacean sightings collected during GulfCet I. We measured zooplankton and micronekton biomass derived from both net and acoustic sampling to indicate the amount of potential food available for higher trophic level foraging by cetaceans and seabirds.

Nineteen cetacean species were identified in the oceanic northern Gulf of Mexico (398,960 km^2) during GulfCet II surveys. The estimated minimum abundance of all cetaceans in the oceanic northern Gulf based on shipboard surveys was 86,705 animals. Pantropical spotted dolphins were the most abundant species with an estimated 46,625 animals, followed by spinner dolphins (11,251) and clymene dolphins (10,093). Estimates for bottlenose dolphins, striped dolphins, melon-headed whales, Risso's dolphins and short-finned pilot whales ranged from 4,381 to 1,471 animals. Abundances of all other species were less than 1,000 animals. Cetaceans were sighted throughout the study area, but fewer were sighted in the western Gulf. There are now sighting records during three or more seasons for at least 16 cetacean species.

Seventeen cetacean species were sighted in the Minerals Management Service's Eastern Planning Area (EPA, 70,470 km^2). The abundance estimate based on aerial surveys (which were more extensive than the ship surveys in the EPA) was 38,184 total animals. In general, cetaceans were found throughout the EPA each season. The most abundant species were pantropical spotted dolphins (13,649) and spinner dolphins (8,670). Other species with abundance estimates over 1,000 based on aerial surveys were bottlenose dolphins, Atlantic spotted dolphins, Risso's dolphins, striped dolphins and clymene dolphins. The seasonal abundance of some species may vary regionally in continental slope waters. For example, dwarf/pygmy sperm whales were nine-times more abundant in the summer than in the winter.

Cetaceans in the northeastern and oceanic northern Gulf of Mexico were concentrated along the continental slope in or near cyclones and the confluence of cyclone-anticyclone eddy pairs. Net tows and acoustic backscatter measurements with an Acoustic Doppler Current Profiler showed that cyclonic eddies and confluence areas are mesoscale features with locally concentrated zooplankton and micronekton stocks that appear to develop in response to increased nutrient-rich water and primary production in the mixed layer. A significant relationship existed between integrated zooplankton biomass and integrated cephalopod (a major component of cetacean prey) paralarvae numbers, indicating that higher zooplankton and micronekton biomass may correlate with higher concentrations of cetacean prey. In the north-central Gulf, an additional factor affecting cetacean distribution may be the narrow continental shelf south of the Mississippi River delta. Low salinity, nutrient-rich water may occur over the continental slope near the mouth of the Mississippi River (MOM) or be entrained within the confluence of a cyclone-anticyclone eddy pair and transported beyond the continental slope. This creates a deep-water environment with locally enhanced primary and secondary productivity and may explain the presence of a resident, breeding population of endangered sperm whales within 50 km of the Mississippi River delta. We suggest that this area may be essential habitat for sperm whales in the northern Gulf. Overall, the results suggest that the amount of potential prey for cetaceans (and seabirds) may be consistently greater in the cyclone, confluence areas, and south of the MOM, making them preferential areas for foraging. Since cyclones in the northern Gulf are dynamic and usually associated with westward moving cyclone-anticyclone pairs, cetacean distribution will be dynamic. However, with near real-time satellite remote sensing of sea surface altimetry, these features can be tracked and used to predict where pelagic cetaceans may be concentrated. The exceptions are bottlenose dolphins, Atlantic spotted dolphins and possibly Bryde's whales that typically occur on the continental shelf or along the shelf break outside of major influences of eddies.

An acoustic survey was performed using a towed hydrophone array to describe the distribution of cetaceans based on species-specific vocalizations and to record man-made noise. Sperm whales and pantropical spotted dolphins were the most commonly identified cetaceans, although recordings were also made for clymene dolphins, spinner dolphins, striped dolphins, Atlantic spotted dolphins, false killer whales, bottlenose dolphins, rough-toothed dolphins and Fraser's dolphins. The whistles of nine dolphin species were characterized based on species-specific patterns of whistle usage and acoustic structure. A diversity of anthropogenic signals was recorded, many of which were low frequency seismic exploration signals. Seismic exploration signals were detected during 21% of recordings, although there was no significant difference in

the cetacean sighting frequency for low, medium, and high noise levels in different hydrographic features.

GulfCet II aerial surveys provided the first assessment of sea turtle abundance and distribution over a large area of the oceanic northeastern Gulf of Mexico. Three sea turtle species occurred in the EPA study area: loggerhead, Kemp's ridley, and leatherback sea turtles. The leatherback and Kemp's ridley sea turtles are listed as endangered, and the loggerhead sea turtle is listed as threatened. The overall density of loggerhead sea turtles in the EPA shelf was 20 times that of the EPA slope. The majority of loggerheads over the EPA slope were sighted during winter. While many winter sightings were near the 100 m isobath, there were sightings of loggerheads over very deep waters (i.e., >1000 m). Leatherbacks were sighted throughout the EPA slope and were about 12 times more abundant in winter than summer. The nearly disjunct summer and winter distributions of leatherbacks indicates that specific areas may be important to this species either seasonally or for short periods of time.

Seabird species present in the Gulf of Mexico varied by season. The species composition of the sightings during late summer reflected a pattern of migration and transition to a winter distribution. Two of the three most commonly identified species (laughing gull and royal tern) in late summer are considered year-round residents in the Gulf. Pomarine jaegers, a wintering marine species in the Gulf, were the third most commonly identified species. During mid-summer, the black tern was the most abundant species, followed by band-rumped storm-petrels (summer migrant pelagic), frigatebirds (permanent resident), Audubon's shearwaters (summer migrant pelagic) and sooty terns (summer resident).

Cyclones had the greatest diversity of seabird species, although habitat use varied among species. Pomarine jaegers were more likely to be present in the MOM area during late summer. Audubon's shearwaters were more likely to be encountered inside a cyclone, while band-rumped storm-petrels were more likely to be present in the areas other than cyclones, anticyclones or confluence zones during mid-summer. Black terns were encountered more frequently in the MOM area during mid-summer. Generalized additive models incorporating indicators of plankton standing stock (surface chlorophyll and predicted mean biomass of zooplankton and micronekton) best predicted seabird presence for five of the seven species analyzed. Other predictive models were: sea surface properties of temperature and salinity for black tern, sooty tern, and laughing gull; sea surface height for pomarine jaeger; and bathymetry for Audubon's shearwater. Seasonal surveys are needed to better assess community structure and seabird-habitat associations.

Eighty-three percent of the crude oil and 99% of the gas production in United States federal waters occurs in the Gulf of Mexico, primarily along the Texas-Louisiana continental shelf and slope. By 2003, oil production in the Gulf is projected to increase 43%. Production from deepwater fields (depth >305 m) will account for about 59% of the daily oil production and 27% of the daily gas production in the Gulf. In addition to oil and gas exploration and production, this area has considerable commercial shipping traffic that enters the northern Gulf ports. The long-term forecast for petroleum transportation is for the total volume to increase into the next century. The cumulative impact of these multiple, potential impact-producing factors on cetaceans in the northern Gulf cannot be predicted with certainty. However, it can be anticipated

that cetaceans along the continental slope will encounter increasing oil and gas exploration and production activities. There are critical uncertainties in our understanding of short and long-term effects of seismic and other loud industrial sounds on the behavior and distribution of Gulf cetaceans. Against the background of growing oil and gas exploration and development, continued research and monitoring are needed to assess the potential impacts of these activities on pelagic cetaceans, sea turtles and seabirds in the Gulf of Mexico

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LIST OF ABBREVIATIONS AND ACRONYMS

The following acronyms and abbreviations are used throughout this report:

ADCP	Acoustic Doppler Current Profiler
AVHRR	Advanced Very High Resolution Radiometer
BRD	Biological Resources Division
CCAR	Colorado Center for Astrodynamics Research, University of Colorado
CCR	Cold-Core Ring
CHL	Chlorophyll
CI	Confidence Interval
CON	Confluence between ring structures
CTD	Conductivity, Temperature, and Depth Profiler
CV	Coefficient of Variation
dB rel μP	Decibels relative to 1 micro Pascal
DCM	Deep Chlorophyll Maximum
DFA	Discriminant Function Analysis
EPA	Eastern Planning Area
GIS	Geographic Information System
GPS	Global Positioning System
GulfCet I	Distribution and Abundance of Cetaceans in the North-Central and Western Gulf of Mexico (1991-1995)
GulfCet II	Cetaceans, Sea Turtles and Seabirds in the Northern Gulf of Mexico: Distribution, Abundance, and Habitat Associations (this study)
HCLS	High Chlorophyll, Low Salinity
HPLC	High Pressure Liquid Chromatography
IKMT	Isaacs Kidd Midwater Trawl
LC	Loop Current
LCE	Loop Current Eddy
MAR	Mississippi-Atchafalaya River
MLD	Mixed Layer Depth
MOCNESS	Multiple Opening/Closing Net and Environmental Sampling System
MOM	Mouth of the Mississippi
MMS	Minerals Management Service
NE	Northeast
NEGOM	Northeastern Gulf of Mexico
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OCS	Outer Continental Shelf
PER	Periphery of ring structures
PMB	Predicted Mean Biomass
PSD	Perpendicular Sighting Distance
SAIL	Serial ASCII Interface Loop
SD	Standard Deviation
SEFSC	Southeast Fisheries Science Center, NMFS
SSH	Sea Surface Height

SST	Sea Surface Temperature
Stenellids	Dolphins of the genus *Stenella*
S_v	Acoustic backscattering strength
TAMU	Texas A&M University (College Station)
TAMUG	Texas A&M University at Galveston
TOPEX/ERS	Topography Experiment Mission/European Research Satellite
TOPEX/POSEIDON	Topography Experiment Mission/Poseidon
T-S	Temperature-Salinity Relationship
UC	University of Colorado
USGS	United States Geological Survey
WCR	Warm-Core Ring
WCWRU	Wisconsin Cooperative Wildlife Research Unit
XBT	Expendable Bathythermograph

SURVEY DATES AND TYPES OF DATA COLLECTED FOR THE GULFCET II PROGRAM

Abbreviations: CTD = conductivity/temperature casts; XBT = expendable bathythermograph; SST = sea surface temperature; SSS = sea surface salinity; ADCP = Acoustic Doppler Current Profiler; MOCNESS = Multiple Opening and Closing Net and Environmental System; SSH = sea surface height.

			Mammal Surveys		Hydrographic Surveys								
Survey		Dates	Visual	Acoustic	CTD	XBT	Chlorophyll	SST	SSS	Nutrients	ADCP	MOCNESS	Satellite SSH
SPRING 1996													
R/V *Oregon II*	Cruise 220												
	Leg 1	17 Apr-4 May 1996											✓
	Leg 2	8-25 May 1996	✓										✓
	Leg 3	29 May-8 Jun 1996	✓		✓	✓							✓
SUMMER 1996													
Aerial 9		11-31 Jul 1996	✓										✓
LATE SUMMER 1996													
R/V *Gyre*	Cruise *Gyre*96G06	11-19 Oct 1996	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WINTER 1997													
Aerial 10		7 Feb-20 Mar 1997	✓										✓
SPRING 1997													
R/V *Oregon II*	Cruise 222												
	Leg 1	17 Apr-5 May 1997	✓										✓
	Leg 2	9-25 May 1997	✓										✓
	Leg 3	29 May-9 Jun 1997	✓	✓	✓	✓							✓
SUMMER 1997													
Aerial 11		15 Jul-6 Aug 1997	✓										✓
R/V *Gyre*	Cruise *Gyre*97G08	6-20 Aug 1997	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
WINTER 1998													
Aerial 12		8 Feb-14 Mar 1998	✓										✓

CETACEANS OF THE GULF OF MEXICO

The (E) next to the common name indicates that the species is listed under the Edangered Species Act of 1973 as endangered.

Balaenidae	
Northern right whale (E)	*Eubalaena glacialis*
Balaenopteridae	
Blue whale (E)	*Balaenoptera musculus*
Fin whale (E)	*Balaenoptera physalus*
Sei whale (E)	*Balaenoptera borealis*
Bryde's whale	*Balaenoptera edeni*
Minke whale	*Balaenoptera acutorostrata*
Humpback whale (E)	*Megaptera novaeangliae*
Physeteridae	
Sperm whale (E)	*Physeter macrocephalus*
Kogiidae	
Pygmy sperm whale	*Kogia breviceps*
Dwarf sperm whale	*Kogia simus*
Ziphiidae	
Cuvier's beaked whale	*Ziphius cavirostris*
Blainville's beaked whale	*Mesoplodon densirostris*
Sowerby's beaked whale	*Mesoplodon bidens*
Gervais' beaked whale	*Mesoplodon europaeus*
Delphinidae	
Melon-headed whale	*Peponocephala electra*
Pygmy killer whale	*Feresa attenuata*
False killer whale	*Pseudorca crassidens*
Killer whale	*Orcinus orca*
Short-finned pilot whale	*Globicephala macrorhynchus*
Rough-toothed dolphin	*Steno bredanensis*
Fraser's dolphin	*Lagenodelphis hosei*
Bottlenose dolphin	*Tursiops truncatus*
Risso's dolphin	*Grampus griseus*
Atlantic spotted dolphin	*Stenella frontalis*
Pantropical spotted dolphin	*Stenella attenuata*
Striped dolphin	*Stenelia coeruleoalba*
Spinner dolphin	*Stenella longirostris*
Clymene dolphin	*Stenella clymene*

LIST OF BIRDS SIGHTED

Order Procellariiformes
Family Procellariidae
- Audubon's shearwater (*Puffinus lherminieri*)
- Cory's shearwater (*Calonectris diomedea*)
- Greater shearwater (*Puffinus gravis*)
- Manx shearwater (*Puffinus puffinus*)
- Sooty shearwater (*Puffinus griseus*)

Family Hydrobatidae
- Band-rumped storm-petrel (*Oceanodroma castro*)
- Leach's storm-petrel (*Oceanodroma leucorhoa*)
- Wilson's storm-petrel (*Oceanites oceanicus*)

Order Pelecaniformes
Family Phaethontidae
- Red-billed tropicbird (*Phaethon aethereus*)
- White-tailed tropicbird (*Phaethon lepturus*)

Family Sulidae
- Masked booby (*Sula dactylatra*)
- Northern gannet (*Morus bassanus*)

Family Fregatidae
- Magnificent frigatebird (*Fregata magnificens*)

Order Charadriiformes
Family Laridae
Subfamily Stercorariinae
- Long-tailed jaeger (*Stercorarius longicaudus*)
- Parasitic jaeger (*Stercorarius parasiticus*)
- Pomarine jaeger (*Stercorarius pomarinus*)

Subfamily Larinae
- Herring gull (*Larus argentatus*)
- Laughing gull (*Larus atricilla*)

Subfamily Sterninae
- Arctic tern (*Sterna paradisaea*)
- Black tern (*Chlidonias niger*)
- Bridled tern (*Sterna anaethetus*)
- Brown noddy (*Anous stolidus*)
- Common tern (*Sterna hirundo*)
- Least tern (*Sterna antillarum*)
- Royal tern (*Sterna maxima*)
- Sandwich tern (*Sterna sandvicensis*)
- Sooty tern (*Sterna fuscata*)

SEA TURTLES OF THE GULF OF MEXICO

Green	*Chelonia mydas*
Hawksbill	*Eretmocheleys imbricata*
Kemp's ridley	*Lepidochelys kempi*
Leatherback	*Dermochelys coriacea*
Loggerhead	*Caretta caretta*

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I. HYDROGRAPHIC DATA

Appendices of Hydrographic Data

The six appendices which follow are spreadsheets of hydrographic data used to determine the "Environmental Patterns and Oceanographic Processes" described in Chapter 2 of Volume 2.

In the first of these (Chap2_appendix_table1.xls), hydrographic data from the four NE Gulf cruises during GulfCet II (*OregonII* 220 Leg 3, *Gyre*96G06, *OregonII* 225 Leg 3, *Gyre*97G08) are sorted by cruise and by station. Tables 2.1 and 2.2 in Chapter 2 of Volume II gave a capsule summary of these data.

In the second appendix (Chap2_appendix_table2.xls), hydrographic data from the two R/V *Gyre* cruises are sorted by environment in order to calculate mean and standard deviation of data in all rows for each environment. Tables 2.3 and 2.4 in Chapter 2 of Volume II gave a capsule summary of the maximum, minimum, mean, and standard deviation of these data, for each of the five environments: 1) cyclone; 2) Loop Current Eddy (LCE); 3) flow confluence between cyclone and LCE; 4) Mouth of Mississippi (MOM); and 5) other margin (the far field away from environments 1-4).

Further description of the data in each of the columns of these two spreadsheets follows:

Station: sequential number (XBT if ship was underway or CTD if ship was stopped)
GMT: Greenwich Mean Time (also called Zulu, or Universal Time)
Sfc Temp: surface temperature (degrees Centigrade)
MLD: mixed layer depth (meters), base of which was defined as the depth below the surface where temperature was 1°C less than at surface
Depth 19C: depth (m) below the surface where temperature was 19°C and a proxy for nitrate concentration of 10 μM/L (see Figure 2.5 in Volume 2).
15C Depth: depth (m) below the surface where temperature was 15°C and a proxy for dynamic height in water depths > 800 m (see Figure 2.6 in Volume 2).
Dynht(800m): Dynamic height (cm) relative to reference level of 800 m
Dynht Anomaly: Dynamic height (cm) relative to reference level of 800 m less monthly mean dynamic height (95 cm for June; 105 cm for August; 100 cm for October)
Sfc Sigma: density anomaly at the surface (sigma notation)

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
OregonII-220											
xbt 53	151.76	18:17	27.25	-85.46	27.8	6	83	166	91.0	-4.0	cyclone
54	151.82	19:41	27.36	-85.24	28.0	12	79	187	94.8	-0.2	other margin
55	151.86	20:37	27.45	-85.10	28.0	15	88	198			other margin
56	151.90	21:35	27.54	-84.94	28.2	14	106	204			other margin
57	151.93	22:26	27.62	-84.80	28.4	15	97	169			other margin
59	151.98	23:24	27.72	-84.63	27.9	15	84	161			other margin
60	152.01	0:20	27.80	-84.49	27.4	13	39	97			other margin
61	152.45	10:51	28.19	-84.80	26.7	8	25				other margin
62	152.50	11:58	28.08	-84.95	27.3	7	74	168			other margin
63	152.55	13:08	27.95	-85.11	28.2	18	89	170			other margin
64	152.59	14:10	27.85	-85.26	28.2	15	81	172			other margin
65	152.66	15:57	27.76	-85.40	27.9	13	82	172			other margin
66	152.75	18:03	27.64	-85.62	27.6	9	88	152	91.8	-3.2	cyclone
CTD-1	152.76	18:09	27.64	-85.62	27.5	13	89	151	91.6	-3.4	cyclone
67	152.86	20:45	27.78	-85.83	27.8	13	90	162	90.1	-4.9	cyclone
68	152.90	21:30	27.88	-85.77	28.2	13	92	168	92.1	-2.9	cyclone
69	152.95	22:53	28.05	-85.64	28.5	15	95	176			other margin
70	153.01	0:17	28.20	-85.55	28.1	9	89	184			other margin
71	153.46	11:00	28.20	-85.55	27.6	25	94	192			other margin
72	154.44	10:31	29.18	-85.60	25.9	12	39				other margin
73	154.52	12:34	29.03	-85.67	26.0	14	52	127			other margin
74	154.59	14:07	28.87	-85.70	26.1	15	65	148			other margin
75	154.63	15:11	28.72	-85.77	26.2	19	58	160			other margin
76	154.68	16:13	28.57	-85.83	26.6	16	77	177			other margin
77	154.75	18:04	28.37	-85.89	27.2	16	81	181			other margin
78	154.80	19:05	28.23	-85.95	27.5	11	84	194			other margin
79	154.87	20:57	28.05	-86.01	26.9	25	97	168	92.2	-2.8	cyclone
80	154.92	22:06	27.87	-86.08	27.0	19	90	169	92.4	-2.6	cyclone
CTD-2	155.00	23:53	27.93	-86.15	26.7	22	101	169	93.3	-1.7	cyclone
81	155.04	0:57	27.93	-86.16	26.8	20	102	174	93.9	-1.1	cyclone
82	155.44	10:37	27.93	-86.15	26.6	22	84	164	91.5	-3.5	cyclone
83	155.49	11:45	28.10	-86.17	27.3	21	104	181	94.5	-0.5	other margin
84	155.54	12:52	28.28	-86.17	26.8	18	85	178			other margin
85	155.57	13:47	28.43	-86.19	26.7	15	86	191			other margin
86	155.63	15:02	28.61	-86.19	26.5	18	108	223			other margin
87	155.71	17:09	28.79	-86.21	26.0	18	95	210			other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
89	155.75	18:00	28.92	-86.22	25.8	19	100	196			other margin
90	155.79	18:56	29.09	-86.23	26.2	17	91	195			other margin
91	155.83	19:53	29.25	-86.24	26.6	21	96	179			other margin
92	155.90	21:36	29.43	-86.25	26.7	24	72	146			other margin
93	155.96	23:03	29.60	-86.25	27.0	19	64				other margin
94	156.80	19:13	29.88	-86.53	26.5	16	50				other margin
95	156.84	20:16	29.69	-86.55	26.6	14	74	134			other margin
96	156.88	21:14	29.53	-86.56	26.3	19	69	160			other margin
98	156.96	23:02	29.38	-86.57	26.3	24	96	198			other margin
99	156.48	11:28	29.20	-86.64	26.4	22	110	207			other margin
100	157.61	14:41	28.99	-86.56	26.4	22	110	224			other margin
102	157.78	18:36	28.66	-86.64	26.8	22	92	215			other margin
103	157.82	19:40	28.51	-86.65	27.0	15	101	206			other margin
104	157.86	20:43	28.34	-86.67	26.8	14	91	196	95.7	0.7	other margin
105	157.96	22:56	28.12	-86.69	27.1	14	83	203	96.8	1.8	other margin
106	158.42	10:11	28.19	-86.83	26.5	20	94	217	99.2	4.2	other margin
CTD-3	158.43	10:12	28.20	-86.83	26.4	22	95	213	98.7	3.7	other margin
107	158.50	12:05	28.30	-86.85	26.9	18	110	209	99.9	4.9	other margin
108	158.55	13:06	28.46	-86.86	27.2	20	110	195	101.6	6.6	other margin
109	158.59	14:09	28.63	-86.88	27.2	15	112	191			other margin
110	158.64	15:17	28.81	-86.89	27.4	18	108	196			other margin
111	158.70	16:51	28.96	-86.91	27.3	20	113	211			other margin
112	158.74	17:52	29.14	-86.92	27.5	18	107	223			other margin
113	158.78	18:49	29.31	-86.94	27.1	21	99	211			other margin
114	158.86	20:40	29.48	-86.85	27.3	19	90	198			other margin
115	158.93	22:21	29.64	-86.97	27.6	21	87	175			other margin
116	159.48	11:30	29.82	-87.00	27.7	22	75	144			other margin
117	159.48	11:34	29.82	-87.00	27.6	15	74	143			other margin
118	159.53	12:41	29.98	-87.01	27.2	16	55				other margin
119	159.72	17:21	29.81	-87.27	27.5	12	56				other margin
120	159.76	18:13	29.67	-87.29	27.8	11	48	129			other margin
121	159.81	19:28	29.47	-87.30	27.6	14	89	150			other margin
122	159.88	21:14	29.32	-87.32	27.2	22	98	188			other margin
123	159.93	22:13	29.16	-87.33	27.5	20	110	196	98.0	3.0	other margin
124	159.97	23:17	28.98	-87.34	27.6	19	105	184	97.9	2.9	other margin
125	160.01	0:16	28.82	-87.36	27.6	20	106	183	99.3	4.3	other margin
CTD-4	160.02	0:22	28.82	-87.36	27.5	22	105	178	98.4	3.4	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
126	160.41	9:57	28.58	-87.62	27.6	20	101	173	98.1	3.1	other margin
127	160.50	11:57	28.75	-87.63	27.4	21	102	178	98.5	3.5	other margin
128	160.54	12:55	28.92	-87.64	27.2	19	99	188	97.1	2.1	other margin
129	160.58	13:57	29.09	-87.65	27.1	20	95	185			other margin
131	160.67	16:07	29.27	-87.66	26.7	23	91	183			other margin
134	160.75	18:05	29.58	-87.68	27.0	6					other margin
Gyre-96G06											
1	285.60	14:30	29.01	-88.17	26.1	50	75	169	99.7	-0.3	other margin
2	285.65	15:39	28.83	-88.10	26.1	42	77	172	99.8	-0.2	other margin
3	285.70	16:45	28.66	-88.04	26.2	36	78	176	97.8	-2.2	cyclone
4	285.74	17:51	28.50	-87.99	26.1	35	86	162	97.2	-2.8	cyclone
5	285.78	18:50	28.35	-87.94	26.4	34	79	164	95.8	-4.2	cyclone
6	285.84	20:16	28.17	-87.88	26.6	27	67	167	94.3	-5.7	cyclone
7	285.90	21:30	28.01	-87.84	26.2	25	68	147	91.2	-8.8	cyclone
8	285.95	22:52	27.84	-87.77	26.1	22	78	139	88.5	-11.5	cyclone
9	286.01	0:13	27.67	-87.71	27.2	29	93	142	89.1	-10.9	cyclone
10	286.06	1:30	27.51	-87.65	27.0	35	76	128	87.9	-12.1	cyclone
11	286.11	2:42	27.35	-87.60	27.2	31	93	143	88.1	-11.9	cyclone
12 (CTD-01)	286.19	4:32	27.18	-87.53	27.2	39	84	135	90.5	-9.5	cyclone
13	286.38	9:07	27.00	-87.51	27.4	37	81	158	94.5	-5.5	cyclone
14	286.43	10:22	26.85	-87.43	27.6	40	101	172	98.3	-1.7	cyclone
15	286.49	11:45	26.66	-87.36	27.7	46	109	185	100.1	0.1	confluence
16	286.54	13:01	26.50	-87.31	28.0	52	120	202	106.3	6.3	confluence
17	286.60	14:17	26.34	-87.25	28.3	62	142	218	115.6	15.6	confluence
18	286.65	15:43	26.17	-87.19	28.3	80	168	262	126.5	26.5	LCE "C"
19 (CTD-02)	286.74	17:48	26.07	-87.23	28.2	69	187	273	132.9	32.9	LCE "C"
20	286.87	20:50	26.11	-87.00	28.2	78	173	268	127.8	27.8	LCE "C"
21	286.97	23:12	26.18	-86.78	28.4	80	162	241	122.3	22.3	confluence
22	287.06	1:29	26.25	-86.59	28.4	68	140	220	114.8	14.8	confluence
23	287.18	4:21	26.34	-86.39	28.0	54	113	193	104.6	4.6	confluence
24	287.33	7:52	26.53	-86.22	27.7	45	102	171	100.9	0.9	confluence
25	287.46	11:01	26.64	-86.05	27.3	35	90	161	94.6	-5.4	cyclone
26	287.58	13:48	26.79	-85.83	26.6	32	78	140	90.1	-9.9	cyclone
27	287.66	15:50	26.94	-85.67	26.8	38	87	130	91.9	-8.1	cyclone
28	287.76	18:11	27.11	-85.53	26.9	41	87	150	96.9	-3.1	cyclone
29	287.83	19:58	27.26	-85.48	27.1	41	83	152	96.9	-3.1	cyclone
30	287.92	22:09	27.42	-85.40	27.1	40	85	166	100.0	0.0	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
31	288.03	0:42	27.55	-85.24	26.3	43	90	153			other margin
32	288.12	2:51	27.66	-85.09	26.6	48	83	175			other margin
33	288.21	5:00	27.77	-84.88	26.6	49	96	170			other margin
34	288.30	7:08	27.89	-84.77	26.5	49	93				other margin
35	288.38	9:09	28.00	-84.61	26.4	46					other margin
36	288.48	11:27	27.98	-84.78	26.4	55	93				other margin
37	288.53	12:47	27.96	-84.96	26.4	52	106	172			other margin
38	288.59	14:04	27.94	-85.15	26.4	51	99	178			other margin
39	288.64	15:20	27.91	-85.33	26.4	52	98	175			other margin
40	288.69	16:39	27.90	-85.50	26.2	52	97	182			other margin
41	288.75	17:53	27.87	-85.70	26.7	43	83	174	98.5	-1.5	cyclone
42	288.80	19:08	27.85	-85.89	26.8	41	90	158	98.2	-1.8	cyclone
43 (CTD-03)	288.82	19:38	27.84	-85.94	26.7	50	89	160			other margin
44	288.94	22:34	28.04	-85.83	26.3	50	90	172			other margin
45	289.00	0:03	28.19	-85.73	26.6	48	92	166			other margin
46	289.06	1:30	28.36	-85.64	26.6	52	98	174			other margin
47	289.12	2:54	28.53	-85.55	26.4	54	105	190			other margin
48	289.18	4:14	28.70	-85.47	26.3	42	103				other margin
49	289.23	5:33	28.87	-85.38	25.8	41	100				other margin
50	289.36	8:43	28.81	-85.57	26.1	41	111				other margin
51	289.42	10:03	28.73	-85.75	26.0	43	103	178			other margin
52	289.47	11:19	28.65	-85.92	26.4	57	110	174			other margin
53	289.53	12:43	28.56	-86.09	26.4	58	107	178			other margin
54	289.59	14:13	28.47	-86.28	26.2	52	113	190			other margin
55	289.64	15:24	28.39	-86.42	26.1	52	90	174			other margin
56	289.74	17:44	28.25	-86.59	26.0	43	94	167	100.8	0.8	other margin
57	289.80	19:16	28.20	-86.81	26.1	37	88	174	98.9	-1.1	cyclone
58 (CTD-04)	289.83	19:48	28.20	-86.86	26.2	41	88	169	98.5	-1.5	cyclone
59	289.93	22:18	28.33	-86.76	26.0	40	89	178	100.0	0.0	other margin
60	290.00	0:05	28.51	-86.63	26.2	42	88	164			other margin
61	290.06	1:26	28.69	-86.64	25.8	40	88	185			other margin
62	290.12	2:46	28.86	-86.66	25.7	42	93	174			other margin
63	290.17	4:10	29.03	-86.68	26.1	45	103	181			other margin
64	290.27	6:26	29.17	-86.70	25.6	50	112	189			other margin
65	290.34	8:08	29.33	-86.70	25.4	57	103	197			other margin
66	290.41	9:50	29.54	-86.72	25.2	62	105	183			other margin
67	290.45	10:50	29.68	-86.73	25.5	65	108				other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
68	290.51	12:08	29.82	-86.75	25.8	49	117				other margin
69	290.56	13:31	30.00	-86.77	25.7	60	112				other margin
70	290.62	14:54	30.17	-86.78	24.5						other margin
71	290.97	23:10	29.59	-87.40	25.7	58					other margin
72	290.99	23:51	29.51	-87.40	25.6	50	114				other margin
73	291.02	0:32	29.42	-87.40	25.7	57	102	205			other margin
74	291.05	1:13	29.34	-87.40	25.8	55	118	205			other margin
75	291.08	1:54	29.26	-87.40	25.8	52	124	206	108.6	8.6	other margin
76	291.13	3:03	29.17	-87.40	25.7	49	124	198	107.0	7.0	other margin
77 (CTD-05)	291.25	6:04	29.07	-87.35	25.7	55	106	198	104.6	4.6	other margin
78	291.47	11:12	28.92	-87.41	26.0	49	101	179	103.0	3.0	other margin
79	291.50	11:55	28.83	-87.40	26.0	47	93	160	100.9	0.9	other margin
80	291.55	13:11	28.67	-87.40	26.1	46	86	152	100.8	0.8	other margin
81	291.65	15:37	28.50	-87.40	26.1	40	80	146	98.7	-1.3	cyclone
82	291.70	16:47	28.34	-87.40	26.4	36	84	160	97.3	-2.7	cyclone
83	291.75	17:57	28.17	-87.40	27.1	48	95	161	96.5	-3.5	cyclone
84	291.80	19:07	28.00	-87.40	27.1	50	97	153	94.0	-6.0	cyclone
85	291.85	20:19	27.83	-87.40	26.5	39	82	149	91.8	-8.2	cyclone
86	291.89	21:25	27.67	-87.40	26.2	30	78	143	89.6	-10.4	cyclone
87 (CTD-06)	291.95	22:43	27.52	-87.42	26.1	30	73	134	88.0	-12.0	cyclone
88	292.14	3:24	27.66	-87.54	26.2	32	74	132	89.6	-10.4	cyclone
89	292.18	4:26	27.83	-87.60	26.2	36	82	135	89.7	-10.3	cyclone
90	292.23	5:27	27.99	-87.62	26.5	43	95	145	92.2	-7.8	cyclone
91	292.27	6:34	28.17	-87.68	27.0	50	100	150	94.9	-5.1	cyclone
92	292.32	7:38	28.32	-87.76	26.3	42	88	158	96.2	-3.8	cyclone
93	292.36	8:41	28.50	-87.83	26.3	41	89	150	98.8	-1.2	cyclone
94	292.41	9:45	28.67	-87.89	26.3	46	94	165	101.5	1.5	other margin
95	292.45	10:52	28.83	-87.98	25.9	48	102	179	104.0	4.0	other margin
96	292.50	12:06	29.00	-88.10	25.9	45	98	204	105.5	5.5	other margin
97	292.55	13:16	29.17	-88.17	25.8	61	112	215			other margin
98	292.56	13:20	29.18	-88.18	25.8	59	104	215			other margin
99	292.56	13:26	29.20	-88.18	25.8	61	105	227			other margin
100	294.46	11:06	28.61	-88.99	25.5	55	96	188			other margin
101	294.58	14:02	28.66	-89.00	25.5	50	97	184			other margin
102	294.74	17:46	28.72	-88.88	25.6	58	99	178	104.8	4.8	other margin
103 (CTD-07)	294.98	23:34	28.69	-88.69	25.5	50	103	181	104.4	4.4	other margin
104	295.13	3:08	28.72	-88.92	25.3	50	92	188	104.1	4.1	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
105	295.22	5:19	28.56	-88.90	25.6	53	87	187	104.4	4.4	other margin
106	295.28	6:41	28.39	-88.81	25.7	47	97	183	101.5	1.5	other margin
107	295.33	7:48	28.26	-88.73	25.9	46	93	172	99.4	-0.6	cyclone
108	295.38	9:06	28.11	-88.64	26.3	47	85	159	97.6	-2.4	cyclone
109	295.43	10:18	27.96	-88.55	26.3	42	85	159	95.1	-4.9	cyclone
110	295.48	11:28	27.82	-88.47	26.0	37	78	140	91.4	-8.6	cyclone
111	295.53	12:43	27.67	-88.39	25.8	35	80	136	91.1	-8.9	cyclone
112	295.58	13:51	27.59	-88.28	25.4	37	74	138	89.6	-10.4	cyclone
113	295.63	15:06	27.43	-88.22	25.6	36	74	140	89.9	-10.1	cyclone
114	295.68	16:23	27.28	-88.18	25.4	34	77	141	91.3	-8.7	cyclone
115	295.73	17:35	27.13	-88.08	25.5	38	79	147	93.3	-6.7	cyclone
116	295.84	20:13	26.97	-87.98	25.8	42	86	154	97.0	-3.0	cyclone
117	295.90	21:40	26.80	-87.88	27.3	42	93	175	98.7	-1.3	cyclone
118	295.95	22:47	26.66	-87.84	27.5	44	108	195	102.9	2.9	confluence
119	296.00	23:58	26.50	-87.79	27.6	45	110	200	103.1	3.1	confluence
120	296.05	1:18	26.32	-87.74	27.6	55	114	188	102.8	2.8	confluence
121	296.18	4:20	26.16	-87.69	27.5	51	116	201	103.5	3.5	confluence
122	296.23	5:36	26.01	-87.62	27.5	50	123	211	106.6	6.6	confluence
123	296.29	6:51	25.85	-87.57	27.6	65	141	222	115.2	15.2	confluence
124	296.34	8:08	25.69	-87.55	27.8	58	160	267	125.0	25.0	LCE "C"
125	296.48	11:37	25.53	-87.43	27.6	66	213	354	136.7	36.7	LCE "C"
126	296.53	12:50	25.37	-87.41	27.6	58	236	376	142.6	42.6	LCE "C"
127	296.58	13:59	25.22	-87.39	27.5	54	252	395	146.1	46.1	LCE "C"
128	296.64	15:17	25.05	-87.38	27.4	62	270	403	150.3	50.3	LCE "C"
129 (CTD-08)	296.66	15:49	25.02	-87.37	27.4	62	263	403	149.7	49.7	LCE "C"
130	296.77	18:27	24.85	-87.31	27.5	70	272	408	150.1	50.1	LCE "C"
131	296.82	19:47	24.68	-87.25	27.6	64	258	403	147.4	47.4	LCE "C"
132	296.91	21:46	24.82	-87.42	27.5	67	258	387	146.7	46.7	LCE "C"
133	296.95	22:55	24.97	-87.47	27.3	63	244				LCE "C"
134	297.01	0:09	25.13	-87.56	27.7	68	241	372	143.7	43.7	LCE "C"
135	297.11	2:45	25.30	-87.60	27.6	64	223	333	137.3	37.3	LCE "C"
136	297.17	4:05	25.45	-87.70	27.7	68	164	268	127.1	27.1	LCE "C"
137	297.21	5:08	25.58	-87.78	27.5	35	152	256	118.8	18.8	confluence
138	297.27	6:31	25.73	-87.88	27.4	63	143	231	121.2	21.2	confluence
139	297.33	7:50	25.90	-87.96	27.5	73	148	227	110.2	10.2	confluence
140	297.44	10:34	26.06	-88.02	27.5	70	148	212	105.1	5.1	confluence
141	297.52	12:30	26.19	-88.10	27.5	63	134	202	103.7	3.7	confluence

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
142	297.58	13:50	26.35	-88.18	27.5	52	112	204	104.2	4.2	confluence
143	297.63	15:03	26.50	-88.25	26.8	54	110	181	102.8	2.8	confluence
144	297.68	16:20	26.65	-88.33	26.5	47	102	183	100.9	0.9	confluence
145	297.74	17:46	26.82	-88.41	26.0	52	93	171	100.5	0.5	confluence
146	297.80	19:14	26.99	-88.50	25.7	42	91	174	99.0	-1.0	cyclone
147 (CTD-09)	297.84	20:16	27.08	-88.56	25.7	47	86	164	97.0	-3.0	cyclone
148	297.98	23:30	27.16	-88.58	25.7	44	83	166	96.1	-3.9	cyclone
149	298.05	1:11	27.29	-88.68	25.6	40	83	158	94.7	-5.3	cyclone
150	298.17	3:58	27.43	-88.78	25.5	38	84	156	94.2	-5.8	cyclone
151	298.22	5:22	27.59	-88.90	26.1	40	90	158	96.5	-3.5	cyclone
152	298.28	6:39	27.74	-89.00	25.5	41	87	166	96.4	-3.6	cyclone
153	298.33	7:52	27.88	-89.09		48					other margin
154	298.38	9:07	28.02	-89.19	25.4	49	96	177	100.6	0.6	other margin
155	298.44	10:32	28.18	-89.32	25.1	54	92	189	103.4	3.4	other margin
156	298.49	11:52	28.31	-89.46	25.1	50	94	187			other margin
157 (CTD-10)	298.56	13:24	28.50	-89.51	24.1	15	92	226			other margin
158	298.66	15:45	28.31	-89.46	25.4	58	94	190	105.9	5.9	other margin
159	298.71	17:03	28.15	-89.39	25.1	55	100	192	103.8	3.8	other margin
160	298.76	18:16	28.00	-89.32	25.2	50	85	198	102.3	2.3	other margin
161	298.82	19:35	27.84	-89.26	25.6	46	72	176	99.5	-0.5	cyclone
162	298.86	20:33	27.76	-89.33	25.2	44	84	162	98.9	-1.1	cyclone
163	298.90	21:29	27.65	-89.28	25.4	42	86	171	98.4	-1.6	cyclone
164	298.95	22:44	27.50	-89.20	25.5	43	95	167	98.4	-1.6	cyclone
165	299.00	23:56	27.36	-89.12	26.1	44	93	173	98.4	-1.6	cyclone
166	299.05	1:15	27.23	-89.05	26.3	42	89	168	98.1	-1.9	cyclone
167	299.23	5:37	27.02	-89.04	26.8	41	103	169	100.3	0.3	other margin
168	299.28	6:50	26.86	-88.97	26.6	45	100	168	100.6	0.6	other margin
169	299.33	7:59	26.72	-88.92	26.8	54	112	172	104.8	4.8	other margin
170	299.46	11:04	26.56	-88.84	26.8	48	118	185	104.9	4.9	other margin
171	299.52	12*25	26.41	-88.75	26.4	49	116	187	104.1	4.1	other margin
172	299.58	13:52	26.23	-88.65	27.5	52	114	196	105.0	5.0	other margin
173	299.63	15:04	26.09	-88.58	27.5	52	113	233	106.8	6.8	other margin
174	299.67	16:08	25.95	-88.53	27.3	45	116	240	106.5	6.5	other margin
175	299.73	17:26	25.79	-88.47	26.9	56	122	216	107.1	7.1	other margin
176	299.78	18:37	25.64	-88.41	26.5	61	130	210	109.7	9.7	other margin
177	299.83	20:02	25.48	-88.33	27.4	62	138	217	112.5	12.5	other margin
178	299.90	21:39	25.38	-88.14	27.4	78	160	247	120.0	20.0	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
179	299.96	23:01	25.31	-87.97	27.7	72	180	271	130.2	30.2	LCE "C"
180	300.02	0:25	25.22	-87.82	27.7	67	228	345	137.5	37.5	LCE "C"
181	300.07	1:42	25.12	-87.66	27.6	64	240	414	144.8	44.8	LCE "C"
182	300.10	2:21	25.17	-87.58	27.4	68	240	419	145.4	45.4	LCE "C"
183	300.12	2:54	25.23	-87.51	27.7	59	247	416	145.7	45.7	LCE "C"
184	300.14	3:22	25.28	-87.45	27.8	66	268	424	150.4	50.4	LCE "C"
185	300.16	3:53	25.34	-87.38	27.6	65	253	410	148.2	48.2	LCE "C"
186	300.18	4:22	25.39	-87.32	27.6	70	252	395	147.4	47.4	LCE "C"
187	300.21	5:02	25.46	-87.26	27.7	67	244	396	146.1	46.1	LCE "C"
188 (CTD-11)	300.23	5:25	25.47	-87.22	27.6	65	235	384	143.3	43.3	LCE "C"
189	300.34	8:06	25.59	-87.21	27.6	59	232	376	142.2	42.2	LCE "C"
190	300.39	9:18	25.75	-87.27	27.6	57	208	339	134.0	34.0	LCE "C"
191	300.43	10:23	25.89	-87.33	27.6	63	177	287	124.9	24.9	LCE "C"
192	300.48	11:34	26.04	-87.40	27.3	64	140	208	113.6	13.6	confluence
193	300.53	12:50	26.20	-87.49	27.2	62	140	208	107.0	7.0	confluence
194	300.58	13:49	26.34	-87.54	27.1	57	124	195	104.5	4.5	confluence
195	300.62	14:56	26.50	-87.60	27.5	54	126	194	102.3	2.3	confluence
196	300.67	16:03	26.66	-87.65	27.4	44	108	183	98.8	-1.2	cyclone
197	300.72	17:23	26.84	-87.70	25.9	50	95	180	99.8	-0.2	cyclone
198	300.77	18:22	26.98	-87.75	26.0	43	90	164	96.2	-3.8	cyclone
199	300.93	22:12	27.13	-87.75	25.7	36	79	146	92.0	-8.0	cyclone
200	300.98	23:33	27.28	-87.85	25.6	39	86	143	90.8	-9.2	cyclone
201	301.14	3:18	27.45	-87.87	25.8	37	78	134	91.4	-8.6	cyclone
202	301.19	4:29	27.62	-87.95	25.7	36	75	130	91.2	-8.8	cyclone
203	301.25	6:01	27.80	-88.05	25.9	38	81	148	93.6	-6.4	cyclone
204	301.29	6:51	27.91	-88.11	25.8	40	81	145	94.4	-5.6	cyclone
205	301.33	8:01	28.05	-88.18	25.8	44	83	154	95.0	-5.0	cyclone
206	301.48	11:35	28.22	-88.24	25.7	47	90	169	99.1	-0.9	cyclone
207	301.53	12:47	28.36	-88.34	25.8	43	93	171	100.8	0.8	other margin
208	301.58	14:01	28.50	-88.42	25.8	50	103	167	103.2	3.2	other margin
209	301.64	15:15	28.65	-88.49	25.4	55	92	167	105.4	5.4	MOM
210 (CTD-12)	301.68	16:12	28.67	-88.52	25.2	52	91	170	104.4	4.4	MOM
211	301.76	18:21	28.70	-88.69	25.5	44	96	194	107.9	7.9	MOM
212	301.82	19:43	28.70	-88.91	25.5	56	104	207	111.1	11.1	MOM
213	301.88	21:07	28.55	-88.94	25.3	54	99	206	106.2	6.2	MOM
214	301.91	21:57	28.46	-89.02	25.9	52	107	197	106.4	6.4	MOM
215	301.96	23:03	28.38	-88.92	26.0	47	100	183	104.9	4.9	MOM

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
216	302.00	23:58	28.30	-88.83	25.9	49	97	166	101.9	1.9	MOM
217	302.07	1:36	28.23	-88.91	25.8	49	96	178	99.6	-0.4	MOM
218	302.14	3:22	28.12	-88.97	25.9	44	87	168	97.2	-2.8	cyclone
219	302.19	4:36	28.19	-89.08	25.9	42	97	171	100.6	0.6	MOM
220	302.29	6:51	28.29	-89.16	25.9	41	97	180	103.6	3.6	MOM
221	302.32	7:42	28.37	-89.25	25.8	51	99	206			MOM
222	302.36	8:34	28.44	-89.18	25.7	60	94	179			MOM
223	302.43	10:20	28.38	-89.07	26.0	46	92	180	104.6	4.6	MOM
224	302.47	11:22	28.29	-88.97	25.9	45	95	177	101.5	1.5	MOM
225	302.55	13:16	28.05	-89.06	25.8	41	82	172	97.2	-2.8	cyclone
226	302.85	20:22	28.12	-89.17	26.1	45	96	168	100.3	0.3	MOM
227	302.90	21:32	28.19	-89.28	26.3	42	99	181	103.5	3.5	MOM
228	302.95	22:42	28.28	-89.33	26.0	50	106	176	105.7	5.7	MOM
229	303.08	1:53	28.53	-89.07	25.7	55	105	194	99.5	-0.5	MOM
230	303.11	2:38	28.62	-88.98	25.4	53	98	182	93.8	-6.2	cyclone
231	303.16	3:46	28.62	-88.79	25.5	50	94	171	105.8	5.8	other margin
232	303.36	8:38	28.67	-88.17	25.8	57	107	183	102.7	2.7	other margin
233	303.39	9:15	28.75	-88.17	25.5	56	116	189	103.0	3.0	other margin
234	303.41	9:52	28.83	-88.17	25.4	58	112	196	103.8	3.8	other margin
235	303.44	10:31	28.90	-88.17	25.6	58	114	201	107.2	7.2	other margin
236	303.46	11:08	29.00	-88.17	25.4	59	115	206	107.5	7.5	other margin
237	303.49	11:45	29.08	-88.17	25.4	57	123	222	110.3	10.3	other margin
238	303.52	12:28	29.18	-88.17	25.5	54	130	252			other margin
239	303.54	12:58	29.25	-88.16	25.6	55	104				other margin
240	303.56	13:31	29.33	-88.15	25.2	61					other margin
241	303.59	14:04	29.42	-88.15	24.9						other margin
OregonII-225											
2	151.45	10:55	28.62	-84.67	24.6	18	74				other margin
3	151.52	12:33	28.29	-85.10	25.2	14	93	159			other margin
4	151.54	13:00	28.23	-85.13	25.1	14	97	159			other margin
5	151.58	13:51	28.11	-85.19	25.2	20	102	173			other margin
6	151.69	16:37	27.96	-85.29	25.7	15	101				other margin
7	151.73	17:29	27.81	-85.38	26.2	17	114	197			other margin
8	151.77	18:25	27.68	-85.45	25.6	28	123	199	101.8	6.8	other margin
9	151.82	19:40	27.51	-85.54	26.1	19	123	195	102.5	7.5	other margin
CTD-1	152.06	1:20	27.67	-85.65	26.2	18	122	196	102.0	7.0	other margin
10	152.43	10:25	27.66	-85.65	26.6	20	125	197	103.3	8.3	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
11	152.50	12:03	27.82	-85.59	26.6	26	117	192	102.4	7.4	other margin
12	152.55	13:14	27.97	-85.61	25.7	26	117	190			other margin
13	152.59	14:09	28.12	-85.61	25.5	24	112	196			other margin
14	152.63	15:13	28.29	-85.59	25.5	23	110	190			other margin
15	152.70	16:43	28.43	-85.57	25.2	25	109	183			other margin
16	152.73	17:36	28.57	-85.56	25.4	22	105	160			other margin
17	152.78	18:37	28.74	-85.54	25.0	15	85	148			other margin
18	152.82	19:37	28.89	-85.55	25.2	21	83	140			other margin
19	152.85	20:24	29.00	-85.52	25.2	14	97				other margin
20	152.92	22:01	29.20	-85.60	25.4	19	67				other margin
21	152.95	22:42	29.08	-85.65	25.0	18	87	126			other margin
22	153.00	23:55	28.90	-85.72	25.1	20	95	178			other margin
23	153.49	11:39	28.73	-85.81	24.7	13	102	174			other margin
24	153.53	12:44	28.57	-85.87	24.7	11	117	184			other margin
25	153.60	14:22	28.41	-85.94	24.3	32	123	197			other margin
26	153.66	15:53	28.24	-85.98	25.5	29	124	204			other margin
27	153.71	16:59	28.10	-86.06	26.8	24	119	183	103.4	8.4	other margin
28	153.83	19:57	27.91	-86.07	26.9	13	126	190	104.0	9.0	other margin
CTD-2	153.85	20:18	27.91	-86.07	26.3	12	124	183	100.9	5.9	other margin
29	153.90	21:33	27.93	-86.15	27.0	22	127	188	104.9	9.9	other margin
30	153.97	23:13	28.10	-86.25	27.0	24	123	186			other margin
31	154.02	0:30	28.25	-86.17	26.4	22	129	182			other margin
32	154.49	11:48	28.42	-86.18	24.6	35	131	193			other margin
33	154.54	12:59	28.59	-86.19	25.1	20	139	206			other margin
34	154.58	14:00	28.75	-86.20	24.6	17	118	188			other margin
35	154.65	15:38	28.92	-86.21	24.8	29	111	178			other margin
36	154.70	16:41	29.08	-86.22	24.9	37	105	171			other margin
37	154.78	18:45	29.25	-86.24	25.3	31	102	167			other margin
38	154.83	19:54	29.42	-86.24	25.4	27	107	143			other margin
39	154.91	21:46	29.58	-86.26	25.5	12	88				other margin
40	155.77	18:33	29.84	-86.53	25.3	15	91				other margin
41	155.85	20:18	29.66	-86.55	25.4	14	85	120			other margin
42	155.92	22:00	29.51	-86.56	26.1	27	101	155			other margin
43	156.00	23:53	29.34	-86.58	25.7	21	108	186			other margin
44	156.47	11:19	29.17	-86.59	25.4	22	125	200			other margin
45	156.54	12:54	28.98	-86.54	25.3	13	127	225			other margin
46	156.59	14:07	28.85	-86.62	25.6	27					other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
47	156.63	15:12	28.68	-86.64	25.1	16	140	202			other margin
48	156.68	16:20	28.51	-86.66	25.5	29	122	202			other margin
49	156.73	17:27	28.35	-86.67	26.9	29	103	181	100.5	9.5	other margin
50	156.80	19:05	28.13	-86.68	27.4	23	95	173	99.3	4.3	other margin
CTD-3	156.86	20:36	28.20	-86.82	26.5	28	82	136	92.7	-2.3	cyclone
51	156.88	21:13	28.21	-86.84	27.1	28	87	146	96.0	1.0	cyclone
52	156.92	22:08	28.33	-86.85	26.9	30					other margin
53	156.97	23:16	28.50	-86.88	26.1	27	114	194			other margin
54	157.46	11:09	28.67	-86.88	25.4	19	130	195			other margin
56	157.53	12:41	28.86	-86.87	25.2	25	137	210			other margin
57	157.57	13:44	28.99	-86.84	25.0	27	138	219			other margin
58	157.66	15:51	29.16	-86.95	25.2	29	131	202			other margin
59	157.71	16:56	29.32	-86.93	25.9	23	117	188			other margin
60	157.80	19:09	29.50	-86.90	25.7	22	105	164			other margin
61	157.84	20:16	29.66	-86.95	25.8	25	87	116			other margin
62	157.90	21:36	29.80	-87.00	25.0	28	82	123			other margin
63	157.95	22:44	29.97	-87.02	25.8	16	80				other margin
64	158.56	13:33	29.81	-87.33	25.2	21					other margin
65	158.62	14:59	29.65	-87.31	25.4	25	78	125			other margin
66	158.68	16:17	29.48	-87.31	26.3	23	106	129			other margin
67	158.73	17:26	29.32	-87.32	26.2	21	116	184			other margin
68	158.77	18:29	29.17	-87.34	25.7	29	128	201			other margin
69	158.85	20:27	28.99	-87.36	26.2	26	120	193			other margin
70	158.90	21:34	28.83	-87.37	25.8	29	121	200			other margin
71	158.94	22:37	28.68	-87.38	26.1	26	115	192			other margin
72	159.00	23:57	28.47	-87.40	26.7	28	105	171	96.7	1.7	other margin
CTD-4	158.04	1:01	28.37	-87.40	26.2	26	89	144	90.2	-4.8	n edge cyclone
73	158.05	1:15	28.37	-87.41	26.7	26	93	148	93.5	-1.5	n edge cyclone
74	158.45	10:45	28.25	-87.60	26.5	28	103	157	94.8	-0.2	n edge cyclone
75	158.49	11:42	28.41	-87.61	26.5	27	104	171	96.2	1.2	other margin
76	158.53	12:48	28.63	-87.63	26.2	26	114	174			other margin
77	158.59	14:05	28.77	-87.64	25.8	33	122	191			other margin
78	158.65	15:34	28.91	-87.64	26.1	30	122	190			other margin
79	158.70	16:41	29.08	-87.65	25.9	28	125	192			other margin
Gyre-97G08											
1	218.37	8:47	28.64	-89.24	29.5	12	91	143			other margin
2	218.40	9:43	28.66	-89.00	29.2	22	92	182			MOM

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
3	218.50	11:53	28.51	-88.95	29.4	19	101	181	108.7	3.7	MOM
4	218.55	13:12	28.34	-88.90	29.4	21	97	174	108.1	3.1	MOM
5	218.62	14:47	28.17	-88.85	29.7	18	88	157	106.4	1.4	MOM
6	218.68	16:25	28.00	-88.80	29.7	22	95	175	111.2	6.2	confluence
7	218.74	17:44	27.83	-88.74	29.9	28	125	198	125.7	20.7	confluence
8	218.78	18:45	27.73	-88.65	29.9	30	144	212	129.1	24.1	confluence
9	218.80	19:19	27.67	-88.62	29.5	50	157	229	125.8	20.8	confluence
10	218.87	20:56	27.49	-88.53	30.3	28	189	263	138.9	33.9	LCE "E"
11	218.93	22:13	27.33	-88.50	30.6	32	221	290	147.6	42.6	LCE "E"
12	218.98	23:33	27.17	-88.47	30.6	29	232	322	154.1	49.1	LCE "E"
13	219.04	0:52	27.01	-88.43	30.7	28	269	351	160.3	55.3	LCE "E"
14	219.15	3:41	26.84	-88.38	30.4	40	279	393	164.6	59.6	LCE "E"
15	219.31	7:27	26.65	-88.33	30.3	46	288	437	170.3	65.3	LCE "E"
16	219.37	8:47	26.49	-88.31	30.5	41	293	442	172.7	67.7	LCE "E"
17	219.42	10:02	26.34	-88.28	30.2	35	296	443	172.2	67.2	LCE "E"
18	219.48	11:32	26.16	-88.24	30.2	44	301	453	175.9	70.9	LCE "E"
19	219.54	13:04	26.01	-88.19	30.2	46	293	427	172.2	67.2	LCE "E"
19 (CTD-1)	219.55	13:19	26.00	-88.20	30.2	44	295	421			LCE "E"
20	219.64	15:27	26.17	-88.21	30.4	48	294	452	173.6	68.6	LCE "E"
21	219.72	17:15	26.33	-88.20	30.4	37	303	457	175.6	70.6	LCE "E"
22	219.77	18:30	26.50	-88.17	30.4	39	295	445	174.3	69.3	LCE "E"
23	219.82	19:44	26.67	-88.15	30.5	41	295	437	173.8	68.8	LCE "E"
24	219.87	20:54	26.83	-88.14	30.5	37	296	419	170.6	65.6	LCE "E"
25	219.92	22:10	27.00	-88.12	30.9	32	278	370	163.3	58.3	LCE "E"
26	219.99	23:41	27.17	-88.10	30.8	34	244	326	155.6	50.6	LCE "E"
27	220.04	0:59	27.33	-88.09	30.8	29	229	303	148.4	43.4	LCE "E"
28	220.10	2:20	27.50	-88.08	30.4	32	183	267	137.7	32.7	LCE "E"
29	220.15	3:38	27.67	-88.07	30.2	38	151	234	127.2	22.2	confluence
30	220.38	9:00	27.83	-87.98	30.3	25	140	205	118.8	13.8	confluence
31 (CTD-2)	220.41	9:57	27.94	-87.98	30.0	30	117	191	109.3	4.3	confluence
32	220.49	11:46	28.00	-87.94	30.0	28	113	177	105.2	0.2	confluence
33	220.54	13:03	28.17	-87.95	29.8	27	105	157	105.4	0.4	confluence
34	220.60	14:20	28.33	-87.97	29.7	22	105	159	104.2	-0.8	cyclone
35	220.66	15:49	28.50	-87.97	29.6	21	100	158	104.4	-0.6	cyclone
36	220.71	17:00	28.67	-87.98	29.8	20	102	172	104.4	-0.6	cyclone
37	220.77	18:26	28.84	-88.02	30.0	17	119	190	107.7	2.7	other margin
38	220.82	19:37	29.00	-88.01	30.1	17	120	191	109.8	4.8	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
39	220.87	20:46	29.17	-88.00	30.1	15	125	196			other margin
40	220.96	23:05	29.00	-87.94	29.9	15	120	197	109.9	4.9	other margin
41	221.06	1:31	28.83	-87.89	30.1	17	117	192	112.2	7.2	other margin
42	221.12	2:54	28.67	-87.80	30.1	13	98	173	106.7	1.7	other margin
43 (CTD-3)	221.35	8:30	28.50	-87.68	29.4	24	91	148	102.5	-2.5	cyclone
44	221.46	11:06	28.33	-87.60	29.6	19	90	146	98.5	-6.5	cyclone
45	221.48	11:37	28.26	-87.58	29.5	20	91	150	98.7	-6.3	cyclone
46	221.52	12:23	28.17	-87.54	29.8	24	85	141	98.4	-6.6	cyclone
47	221.58	13:53	28.00	-87.46	29.3	27	91	141	97.5	-7.5	cyclone
48	221.64	15:15	27.83	-87.36	29.9	25	105	151	101.9	-3.1	cyclone
49	221.68	16:21	27.67	-87.28	30.5	23	113	168	110.9	5.9	confluence
50	221.73	17:35	27.50	-87.21	30.5	25	133	207	117.2	12.2	confluence
51	221.78	18:50	27.33	-87.14	30.6	29	149	234	128.4	23.4	confluence
52	221.84	20:16	27.17	-87.05	30.8	27	160	268	133.6	28.6	LCE "E"
53	221.89	21:23	27.00	-86.96	30.7	25	193	308	142.9	37.9	LCE "E"
54	222.02	0:25	26.83	-86.91	30.5	29	221	318	150.9	45.9	LCE "E"
55	222.24	5:46	26.90	-86.78	30.7	28	184	294	140.8	35.8	LCE "E"
56	222.28	6:43	27.00	-86.78	30.4	30	163	267	132.8	27.8	LCE "E"
57	222.34	8:15	27.17	-86.80	30.1	30	141	227	124.0	19.0	confluence
58	222.41	9:46	27.33	-86.81	30.3	27	120	194	114.6	9.6	confluence
59	222.47	11:19	27.50	-86.82	30.2	20	101	160	106.2	1.2	confluence
60	222.53	12:39	27.67	-86.84	29.7	18	95	140	97.8	-7.2	cyclone
61	222.60	14:19	27.83	-86.87	29.8	19	89	130	92.1	-12.9	cyclone
62 (CTD-4)	222.68	16:12	28.00	-86.86	30.0	23	89	126	91.7	-13.3	cyclone
63	222.76	18:12	28.17	-86.86	30.0	20	82	134	93.9	-11.1	cyclone
64	222.81	19:22	28.33	-86.88	30.4	21	85	134	98.3	-6.7	cyclone
65	222.94	22:35	28.50	-86.85	30.0	19	88	155			cyclone
66	222.99	23:50	28.67	-86.87	29.9	21	95	156			cyclone
67	223.05	1:11	28.83	-86.89	29.7	16	100	167			other margin
68	223.10	2:28	29.00	-86.90	29.9	13	100	174			other margin
69	223.16	3:50	29.17	-86.91	30.1	14	108	162			other margin
70	223.38	9:02	29.00	-87.01	29.9	14	112	181			other margin
71	223.43	10:17	28.83	-87.04	29.8	9	103	168			other margin
72	223.48	11:36	28.67	-87.07	29.5	25	97	154	103.9	-1.1	cyclone
73	223.54	12:51	28.50	-87.11	29.8	26	95	151	103.4	-1.6	cyclone
74	223.59	14:08	28.33	-87.14	29.7	23	88	146	99.7	-5.3	cyclone
75	223.64	15:26	28.17	-87.18	29.9	17	89	138	94.2	-10.8	cyclone

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
76	223.69	16:31	28.00	-87.20	30.0	25	98	130	95.1	-9.9	cyclone
77	223.74	17:45	27.83	-87.22	30.0	25	101	151	98.7	-6.3	cyclone
78	223.79	18:53	27.67	-87.26	30.7	9	122	165	109.9	4.9	confluence
79	223.85	20:24	27.46	-87.30	30.1	44	167	219	125.7	20.7	confluence
80	224.06	1:32	27.33	-87.27	30.1	30	182	254	134.1	29.1	LCE "E"
81	224.11	2:44	27.17	-87.32	30.3	37	220	294	146.3	41.3	LCE "E"
82	224.17	4:02	27.00	-87.37	30.4	39	262	350	160.4	55.4	LCE "E"
83 (CTD-5)	224.23	5:29	26.83	-87.43	30.3	47	296	389	168.9	63.9	LCE "E"
84	224.47	11:17	27.00	-87.50	30.3	42	279	365	166.0	61.0	LCE "E"
85	224.55	13:12	27.17	-87.59	29.9	40	253	343	155.9	50.9	LCE "E"
86	224.62	14:52	27.33	-87.70	30.4	37	235	328	151.2	46.2	LCE "E"
87	224.69	16:30	27.50	-87.79	30.4	32	220	310	142.7	37.7	LCE "E"
88	224.76	18:11	27.67	-87.89	30.6	27	189	282	135.2	30.2	LCE "E"
89	224.82	19:46	27.83	-87.99	30.3	24	145	249	123.4	18.4	confluence
90	224.89	21:23	28.00	-88.09	31.1	19	104	210	110.2	5.2	confluence
91	224.95	22:52	28.17	-88.18	30.7	19	99	170	104.8	-0.2	cyclone
92	225.06	1:25	28.33	-88.25	30.5	9	99	160	104.6	-0.4	cyclone
93	225.12	2:55	28.50	-88.39	30.5	9	97	168	108.8	3.8	other margin
94 (CTD-6)	225.17	4:04	28.62	-88.47	30.1	12	103	172	105.9	0.9	other margin
95	225.27	6:32	28.80	-88.48	30.0	17	111	186	109.6	4.6	other margin
96	225.32	7:42	28.96	-88.48	29.9	8	104	178	108.4	3.4	other margin
97	225.37	8:49	29.11	-88.48	29.9	10	91	166			other margin
98	225.40	9:43	29.24	-88.47	29.8	6	84				other margin
99	225.42	9:59	29.28	-88.47	29.8	7	70				other margin
100	225.47	11:12	29.45	-88.48	30.1	10	57				other margin
101	225.52	12:24	29.62	-88.46	29.4	10					other margin
102	226.49	11:46	30.03	-87.83	29.3	11					other margin
103	226.54	12:55	29.88	-87.83	29.6	8					other margin
104	226.64	15:27	29.54	-87.81	30.0	9					other margin
105	226.70	16:44	29.37	-87.82	30.0	12					other margin
106	226.75	17:53	29.22	-87.83	30.3	15	118	181			other margin
107	226.80	19:17	29.03	-87.83	30.5	15	116	182	108.1	3.1	other margin
108	226.88	21:06	28.87	-87.85	30.4	15	120	178	109.2	4.2	other margin
109	226.89	21:22	28.84	-87.84	30.3	12	120	174	107.5	2.5	other margin
110 (CTD-7)	227.00	0:05	28.92	-87.59	30.7	12	117	183	107.6	2.6	other margin
111	227.36	8:40	29.08	-87.49	29.9	14	103	200	108.9	3.9	other margin
112	227.41	9:49	29.22	-87.42	30.3	15	107	177	109.1	4.1	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
113	227.46	10:58	29.38	-87.36	30.5	8	100	160			other margin
114	227.51	12:14	29.53	-87.28	30.3	7	78	180			other margin
115	227.58	13:52	29.66	-87.15	30.2	7	79	160			other margin
116	227.64	15:16	29.82	-87.09	30.2	8	84	197			other margin
117	227.69	16:32	29.98	-87.04	29.9	8					other margin
118	227.99	23:43	29.97	-86.43	30.1	10	60				other margin
119	228.85	20:29	29.90	-86.68	30.3	8	84				other margin
120	228.91	21:45	29.73	-86.68	30.7	8	100				other margin
121	228.96	23:02	29.57	-86.69	31.1	8	108	193			other margin
122	229.05	1:05	29.40	-86.60	30.8	5	103	192			other margin
123	229.12	2:47	29.23	-86.62	30.8	14	106	194			other margin
124	229.18	4:17	29.05	-86.62	30.7	8	100	181			other margin
125	229.23	5:30	28.90	-86.63	30.3	12	103	171			other margin
126	229.35	8:17	28.73	-86.64	30.2	19	96	180			other margin
127	229.46	11:03	28.57	-86.66	30.5	20	96	163			cyclone
128	229.53	12:41	28.40	-86.66	30.4	16	100	157			cyclone
129	229.58	14:02	28.24	-86.69	30.5	16	99	158	101.6	-3.4	cyclone
130 (CTD-8)	229.63	15:05	28.17	-86.67	30.5	13	96	147	100.5	-4.5	cyclone
131	229.72	17:22	28.08	-86.55	30.4	16	95	148	102.3	-2.7	cyclone
132	229.80	19:07	28.24	-86.45	30.9	14	100	156			cyclone
133	229.85	20:28	28.39	-86.34	30.4	20	104	165			cyclone
134	229.90	21:31	28.52	-86.24	30.5	21	102	169			other margin
135	229.95	22:49	28.65	-86.14	30.9	16	104	174			other margin
136	230.00	0:05	28.79	-86.04	30.5	23	99	178			other margin
137	230.06	1:22	28.93	-85.93	30.1	19	84	228			other margin
138	230.11	2:37	29.07	-85.83	30.1	13	83	175			other margin
139	230.14	3:27	29.16	-85.75	30.4	15	68				other margin
140	230.28	6:47	28.87	-85.38	30.2	13	97				other margin
141	230.33	8:00	28.72	-85.46	30.4	20	106				other margin
142	230.45	10:47	28.56	-85.55	30.4	16	100	193			other margin
143	230.50	12:00	28.41	-85.62	30.4	20	116	185			other margin
144	230.56	13:33	28.26	-85.70	30.8	13	98	174			other margin
145	230.63	15:06	28.12	-85.78	30.7	15	100	171			other margin
146	230.75	18:05	27.97	-85.87	30.7	19	104	164	105.7	0.7	other margin
147 (CTD-9)	230.80	19:15	27.85	-85.90	30.9	18	98	163	105.7	0.7	other margin
148	230.93	22:18	27.69	-85.66	31.1	9	102	182	106.6	1.6	other margin
149	231.00	23:56	27.73	-85.50	31.7	16	106	199	108.6	3.6	other margin

Hydrographic Data spreadsheet (Appendix 1 for Chapter 2), sorted by cruise and by station for *Oregon II* plus R/V *Gyre* cruises

station	Julian Day	GMT	Latitude	Longitude	sfc Temp	MLD	depth 19C	15C depth	dynht (800m)	dynht anomaly	environment
150	231.05	1:18	27.80	-85.31	31.2	13	111	212			other margin
151	231.11	2:36	27.91	-85.17	31.2	23	118	206			other margin
152	231.16	3:51	28.02	-85.03	30.7	19	116	208			other margin
153	231.21	5:07	28.14	-84.89	30.9	19	97				other margin
154 (CTD-10)	231.33	7:52	28.00	-84.60	30.4	18	90				other margin
155	231.41	9:46	27.89	-84.75	30.6	16	110	177			other margin
156	231.46	10:59	27.80	-84.90	30.5	19	108	200			other margin
157	231.52	12:34	27.72	-85.07	30.9	15	118	205			other margin
158	231.58	13:56	27.58	-85.18	30.6	17	111	206			other margin
159	231.66	15:47	27.44	-85.34	31.0	13	108	187	109.0	4.0	other margin
160 (CTD-11)	231.74	17:48	27.41	-85.46	31.0	10	102	180	105.8	0.8	other margin
161	231.80	19:12	27.38	-85.63	31.2	13	86	155	106.1	1.1	other margin
162	231.90	21:39	27.39	-86.03	30.9	12	83	150	102.3	-2.7	cyclone
163	231.97	23:16	27.45	-86.21	31.0	10	87	150	99.9	-5.1	cyclone
164	232.05	1:06	27.49	-86.40	31.2	9	89	145	101.7	-3.3	cyclone
165	232.10	2:19	27.47	-86.59	30.8	12	98	146	100.3	-4.7	cyclone
166	232.15	3:34	27.44	-86.77	30.6	21	98	160	103.7	-1.3	cyclone
167	232.20	4:51	27.42	-86.96	31.0	13	126	187	113.1	8.1	confluence
168	232.51	12:15	27.41	-86.99	30.8	24	143	200	118.5	13.5	confluence
169	232.61	14:39	27.47	-87.17	30.0	37	155	240	128.9	23.9	confluence
170	232.71	17:04	27.54	-87.38	30.4	29	182	275	133.3	28.3	LCE "E"
171	232.76	18:15	27.63	-87.50	30.8	27	184	279	134.3	29.3	LCE "E"
172	232.83	19:48	27.76	-87.64	30.7	23	174	273	132.7	27.7	LCE "E"
173	232.90	21:35	27.89	-87.77	30.6	23	163	265	129.9	24.9	LCE "E"
174	232.98	23:36	28.06	-87.80	31.3	14	136	231	121.5	16.5	confluence
175	233.04	1:03	28.16	-87.98	31.3	27	120	230	120.1	15.1	confluence
176	233.09	2:11	28.27	-88.11	31.3	19	122	203	113.9	8.9	confluence
177	233.14	3:24	28.56	-88.24	31.5	8	101	185	111.9	6.9	confluence
178	233.19	4:33	28.51	-88.38	31.7	11	91	151	116.2	11.2	confluence
179	233.26	6:18	28.71	-88.59	31.4	18	106	166			MOM
180 (CTD-12)	233.41	9:55	28.79	-88.73	30.8	13	106	190			MOM

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
Oct-96	GYRE 96G-06										
cyclone	3	28.66	-88.04	26.2	23.65	36	78	176	97.8	-2.2	
cyclone	4	28.50	-87.99	26.1	23.65	35	86	162	97.2	-2.8	
cyclone	5	28.35	-87.94	26.4	23.45	34	79	164	95.8	-4.2	
cyclone	6	28.17	-87.88	26.6	22.98	27	67	167	94.3	-5.7	
cyclone	7	28.01	-87.84	26.2	23.36	25	68	147	91.2	-8.8	
cyclone	8	27.84	-87.77	26.1	23.43	22	78	139	88.5	-11.5	
cyclone	9	27.67	-87.71	27.2	23.38	29	93	142	89.1	-10.9	
cyclone	10	27.51	-87.65	27.1	23.64	35	76	128	87.9	-12.1	
cyclone	11	27.35	-87.60	27.2	23.62	31	93	143	88.1	-11.9	
cyclone	12 (CTD-01)	27.18	-87.53	27.3	23.62	39	84	135	90.5	-9.5	
cyclone	13	27.00	-87.51	27.4	23.56	37	81	158	94.5	-5.5	
cyclone	14	26.85	-87.43	27.7	23.48	40	101	172	98.3	-1.7	
cyclone	25	26.64	-86.05	27.3	23.58	35	90	161	94.6	-5.4	
cyclone	26	26.79	-85.83	26.6	23.57	32	78	140	90.1	-9.9	
cyclone	27	26.94	-85.67	26.8	23.51	38	87	130	91.9	-8.1	
cyclone	28	27.11	-85.53	26.9	23.41	41	87	150	96.9	-3.1	
cyclone	81	28.50	-87.40	26.1	23.49	40	80	146	98.7	-1.3	
cyclone	82	28.34	-87.40	26.4	23.21	36	84	160	97.3	-2.7	
cyclone	83	28.17	-87.40	27.1	23.59	48	95	161	96.5	-3.5	
cyclone	84	28.00	-87.40	27.1	23.64	50	97	153	94	-6	
cyclone	85	27.83	-87.40	26.5	23.44	39	82	149	91.8	-8.2	
cyclone	86	27.67	-87.40	26.3	23.51	30	78	143	89.6	-10.4	
cyclone	87 (CTD-06)	27.52	-87.42	26.1	23.42	30	73	134	88	-12	
cyclone	88	27.66	-87.54	26.2	23.44	32	74	132	89.6	-10.4	
cyclone	89	27.83	-87.60	26.2	23.45	36	82	135	89.7	-10.3	
cyclone	90	27.99	-87.62	26.5	23.50	43	95	145	92.2	-7.8	
cyclone	91	28.17	-87.68	27.0	23.61	50	100	150	94.9	-5.1	
cyclone	92	28.32	-87.76	26.3	23.43	42	88	158	96.2	-3.8	
cyclone	93	28.50	-87.83	26.3	23.43	41	89	150	98.8	-1.2	
cyclone	107	28.26	-88.73	25.9	23.83	46	93	172	99.4	-0.6	
cyclone	108	28.11	-88.64	26.3	23.82	47	85	159	97.6	-2.4	
cyclone	109	27.96	-88.55	26.3	23.77	42	85	159	95.1	-4.9	
cyclone	110	27.82	-88.47	26.0	23.82	37	78	140	91.4	-8.6	
cyclone	111	27.67	-88.39	25.8	23.73	35	80	136	91.1	-8.9	
cyclone	112	27.59	-88.28	25.4	23.86	37	74	138	89.6	-10.4	
cyclone	113	27.43	-88.22	25.6	23.78	36	74	140	89.9	-10.1	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
cyclone	114	27.28	-88.18	25.4	23.64	34	77	141	91.3	-8.7	
cyclone	115	27.13	-88.08	25.5	23.71	38	79	147	93.3	-6.7	
cyclone	116	26.97	-87.98	25.8	23.65	42	86	154	97	-3	
cyclone	117	26.80	-87.88	27.3	23.65	42	93	175	98.7	-1.3	
cyclone	146	26.99	-88.50	25.7	23.79	42	91	174	99	-1	
cyclone	147 (CTD-09)	27.08	-88.56	25.7	23.88	47	86	164	97	-3	
cyclone	148	27.16	-88.58	25.7	23.89	44	83	166	96.1	-3.9	
cyclone	149	27.29	-88.68	25.6	23.88	40	83	158	94.7	-5.3	
cyclone	150	27.43	-88.78	25.6	23.91	38	84	156	94.2	-5.8	
cyclone	151	27.59	-88.90	26.1	23.88	40	90	158	96.5	-3.5	
cyclone	152	27.74	-89.00	25.5	23.92	41	87	166	96.4	-3.6	
cyclone	161	27.84	-89.26	25.6	23.81	46	72	176	99.5	-0.5	
cyclone	162	27.76	-89.33	25.2	23.89	44	84	162	98.9	-1.1	
cyclone	163	27.65	-89.28	25.4	23.77	42	86	171	98.4	-1.6	
cyclone	164	27.50	-89.20	25.5	23.81	43	95	167	98.4	-1.6	
cyclone	165	27.36	-89.12	26.2	23.90	44	93	173	98.4	-1.6	
cyclone	166	27.23	-89.05	26.3	23.72	42	89	168	98.1	-1.9	
cyclone	196	26.66	-87.65	27.4	23.62	44	108	183	98.8	-1.2	
cyclone	197	26.84	-87.70	25.9	23.75	50	95	180	99.8	-0.2	
cyclone	198	26.98	-87.75	26.0	23.82	43	90	164	96.2	-3.8	
cyclone	199	27.13	-87.75	25.7	23.79	36	79	146	92	-8	
cyclone	200	27.28	-87.85	25.7	23.70	39	86	143	90.8	-9.2	
cyclone	201	27.45	-87.87	25.8	23.67	37	78	134	91.4	-8.6	
cyclone	202	27.62	-87.95	25.7	23.68	36	75	130	91.2	-8.8	
cyclone	203	27.80	-88.05	25.9	23.66	38	81	148	93.6	-6.4	
cyclone	204	27.91	-88.11	25.8	23.57	40	81	145	94.4	-5.6	
cyclone	205	28.05	-88.18	25.8	23.83	44	83	154	95	-5	
cyclone	206	28.22	-88.24	25.7	23.62	47	90	169	99.1	-0.9	
cyclone	29	27.26	-85.48	27.1	23.30	41	83	152	96.9	-3.1	
cyclone	41	27.87	-85.70	26.7	23.50	43	83	174	98.5	-1.5	
cyclone	42	27.85	-85.89	26.8	23.48	41	90	158	98.2	-1.8	
cyclone	57	28.20	-86.81	26.1	23.45	37	88	174	98.9	-1.1	
cyclone	58 (CTD-04)	28.20	-86.86	26.2	23.40	41	88	169	98.5	-1.5	
cyclone	218	28.12	-88.97	25.9	23.47	44	87	168	97.2	-2.8	
cyclone	225	28.05	-89.06	25.8	23.51	41	82	172	97.2	-2.8	
cyclone	230	28.62	-88.98	25.4	23.72	53	98	182	93.8	-6.2	
	mean (n=72)	27.65	-87.86	26.2	23.62	39.4	84.93	155.49	94.8	-5.2	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
	std deviation	0.52	0.92	0.6	0.19	5.9	7.84	14.51	3.53	3.53	
confluence	15	26.66	-87.36	27.7	23.53	46	109	185	100.1	0.1	
confluence	16	26.50	-87.31	28.0	23.38	52	120	202	106.3	6.3	
confluence	17	26.34	-87.25	28.3	23.29	62	142	218	115.6	15.6	
confluence	21	26.18	-86.78	28.4	23.25	80	162	241	122.3	22.3	
confluence	22	26.25	-86.59	28.4	23.26	68	140	220	114.8	14.8	
confluence	23	26.34	-86.39	28.0	23.37	54	113	193	104.6	4.6	
confluence	24	26.53	-86.22	27.7	23.45	45	102	171	100.9	0.9	
confluence	118	26.66	-87.84	27.5	23.60	44	108	195	102.9	2.9	
confluence	119	26.50	-87.79	27.6	23.54	45	110	200	103.1	3.1	
confluence	120	26.32	-87.74	27.6	23.50	55	114	188	102.8	2.8	
confluence	121	26.16	-87.69	27.5	23.54	51	116	201	103.5	3.5	
confluence	122	26.01	-87.62	27.5	23.54	50	123	211	106.6	6.6	
confluence	123	25.85	-87.57	27.6	23.47	65	141	222	115.2	15.2	
confluence	137	25.58	-87.78	27.5	23.56	35	152	256	118.8	18.8	
confluence	138	25.73	-87.88	27.4	23.54	63	143	231	121.2	21.2	
confluence	139	25.90	-87.96	27.5	23.65	73	148	227	110.2	10.2	
confluence	140	26.06	-88.02	27.5	23.67	70	148	212	105.1	5.1	
confluence	141	26.19	-88.10	27.5	23.66	63	134	202	103.7	3.7	
confluence	142	26.35	-88.18	27.5	23.66	52	112	204	104.2	4.2	
confluence	143	26.50	-88.25	26.8	23.78	54	110	181	102.8	2.8	
confluence	144	26.65	-88.33	26.5	23.78	47	102	183	100.9	0.9	
confluence	145	26.82	-88.41	26.0	23.90	52	93	171	100.5	0.5	
confluence	192	26.04	-87.40	27.3	23.57	64	140	208	113.6	13.6	
confluence	193	26.20	-87.49	27.2	23.58	62	140	208	107	7	
confluence	194	26.34	-87.54	27.1	23.62	57	124	195	104.5	4.5	
confluence	195	26.50	-87.60	27.5	23.60	54	126	194	102.3	2.3	
	mean (n=26)	26.28	-87.58	27.5	23.55	56.27	125.85	204.58	107.44	7.44	
	std deviation	0.31	0.57	0.5	0.16	10.29	18.31	20.42	6.71	6.71	
LCE "C"	18	26.17	-87.19	28.3	23.30	80	168	262	126.5	26.5	
LCE "C"	19 (CTD-02)	26.07	-87.23	28.2	23.31	69	187	273	132.9	32.9	
LCE "C"	20	26.11	-87.00	28.2	23.31	78	173	268	127.8	27.8	
LCE "C"	124	25.69	-87.55	27.8	23.47	58	160	267	125	25	
LCE "C"	125	25.53	-87.43	27.6	23.57	66	213	354	136.7	36.7	
LCE "C"	126	25.37	-87.41	27.6	23.56	58	236	376	142.6	42.6	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
LCE "C"	127	25.22	-87.39	27.6	23.55	54	252	395	146.1	46.1	
LCE "C"	128	25.05	-87.38	27.4	23.61	62	270	403	150.3	50.3	
LCE "C"	129 (CTD-08)	25.02	-87.37	27.4	23.63	62	263	403	149.7	49.7	
LCE "C"	130	24.85	-87.31	27.5	23.61	70	272	408	150.1	50.1	
LCE "C"	131	24.68	-87.25	27.6	23.56	64	258	403	147.4	47.4	
LCE "C"	132	24.82	-87.42	27.6	23.56	67	258	387	146.7	46.7	
LCE "C"	133	24.97	-87.47	27.3	23.65	63	244	n/a	n/a	n/a	bad data >300m
LCE "C"	134	25.13	-87.56	27.7	23.53	68	241	372	143.7	43.7	
LCE "C"	135	25.30	-87.60	27.6	23.52	64	223	333	137.3	37.3	
LCE "C"	136	25.45	-87.70	27.7	23.48	68	164	268	127.1	27.1	
LCE "C"	179	25.31	-87.97	27.7	23.48	72	180	271	130.2	30.2	
LCE "C"	180	25.22	-87.82	27.7	23.47	67	228	345	137.5	37.5	
LCE "C"	181	25.12	-87.66	27.6	23.54	64	240	414	144.8	44.8	
LCE "C"	182	25.17	-87.58	27.4	23.58	68	240	419	145.4	45.4	
LCE "C"	183	25.23	-87.51	27.7	23.51	59	247	416	145.7	45.7	
LCE "C"	184	25.28	-87.45	27.8	23.46	66	268	424	150.4	50.4	
LCE "C"	185	25.34	-87.38	27.6	23.52	65	253	410	148.2	48.2	
LCE "C"	186	25.39	-87.32	27.6	23.52	70	252	395	147.4	47.4	
LCE "C"	187	25.46	-87.26	27.7	23.52	67	244	396	146.1	46.1	
LCE "C"	188 (CTD-11)	25.47	-87.22	27.6	23.58	65	235	384	143.3	43.3	
LCE "C"	189	25.59	-87.21	27.6	23.53	59	232	376	142.2	42.2	
LCE "C"	190	25.75	-87.27	27.6	23.51	57	208	339	134	34	
LCE "C"	191	25.89	-87.33	27.7	23.50	63	177	287	124.9	24.9	
	mean (n=29)	25.37	-87.42	27.7	23.52	65.28	227.1	358.86	140.36	40.36	
	std deviation	0.38	0.20	0.2	0.09	5.77	34.91	56.79	8.57	8.57	
other margin	207	28.36	-88.34	25.8	23.59	43	93	171	100.8	0.8	
other margin	208	28.50	-88.42	25.8	23.79	50	103	167	103.2	3.2	
other margin	1	29.01	-88.17	26.1	23.68	50	75	169	99.7	-0.3	
other margin	2	28.83	-88.10	26.1	23.56	42	77	172	99.8	-0.2	
other margin	80	28.67	-87.40	26.1	23.73	46	86	152	100.8	0.8	
other margin	94	28.67	-87.89	26.3	23.64	46	94	165	101.5	1.5	
other margin	95	28.83	-87.98	25.9	23.71	48	102	179	104	4	
other margin	96	29.00	-88.10	25.9	23.67	45	98	204	105.5	5.5	
other margin	102	28.72	-88.88	25.6	23.79	58	99	178	104.8	4.8	
other margin	103 (CTD-07)	28.69	-88.69	25.5	23.97	50	103	181	104.4	4.4	
other margin	104	28.72	-88.92	25.3	23.86	50	92	188	104.1	4.1	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
other margin	105	28.56	-88.90	25.6	23.83	53	87	187	104.4	4.4	
other margin	106	28.39	-88.81	25.7	23.80	47	97	183	101.5	1.5	
other margin	153	27.88	-89.09	n/a	n/a	48	n/a	n/a	n/a	n/a	temp is suspect
other margin	154	28.02	-89.19	25.4	23.92	49	96	177	100.6	0.6	
other margin	155	28.18	-89.32	25.1	23.97	54	92	189	103.4	3.4	
other margin	156	28.31	-89.46	25.1	23.96	50	94	187	depth < 800m	depth < 800m	
other margin	157 (CTD-10)	28.50	-89.51	24.1	22.54	15	92	226	depth < 800m	depth < 800m	
other margin	158	28.31	-89.46	25.4	23.95	58	94	190	105.9	5.9	
other margin	159	28.15	-89.39	25.1	23.97	55	100	192	103.8	3.8	
other margin	160	28.00	-89.32	25.2	23.96	50	85	198	102.3	2.3	
other margin	167	27.02	-89.04	26.8	23.77	41	103	169	100.3	0.3	
other margin	168	26.86	-88.97	26.7	23.77	45	100	168	100.6	0.6	
other margin	169	26.72	-88.92	26.8	23.74	54	112	172	104.8	4.8	
other margin	170	26.56	-88.84	26.8	23.65	48	118	185	104.9	4.9	
other margin	171	26.41	-88.75	26.4	23.65	49	116	187	104.1	4.1	
other margin	172	26.23	-88.65	27.5	23.60	52	114	196	105	5	
other margin	173	26.09	-88.58	27.5	23.61	52	113	233	106.8	6.8	
other margin	174	25.95	-88.53	27.3	23.56	45	116	240	106.5	6.5	
other margin	175	25.79	-88.47	26.9	23.60	56	122	216	107.1	7.1	
other margin	176	25.64	-88.41	26.5	23.59	61	130	210	109.7	9.7	
other margin	177	25.48	-88.34	27.4	23.58	62	138	217	112.5	12.5	
other margin	178	25.38	-88.14	27.4	23.59	78	160	247	120	20	
other margin	30	27.42	-85.40	27.2	23.38	40	85	166	100	0	
other margin	31	27.55	-85.24	26.3	23.63	43	90	153	depth < 800m	depth < 800m	
other margin	32	27.66	-85.09	26.6	23.68	48	83	175	depth < 800m	depth < 800m	
other margin	33	27.77	-84.88	26.6	23.69	49	96	170	depth < 800m	depth < 800m	
other margin	34	27.89	-84.77	26.5	23.81	49	93	bottom >15C	depth < 800m	depth < 800m	
other margin	35	28.00	-84.61	26.4	23.83	46	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	36	27.98	-84.78	26.4	23.83	55	93	bottom >15C	depth < 800m	depth < 800m	
other margin	37	27.96	-84.96	26.4	23.78	52	106	172	depth < 800m	depth < 800m	
other margin	38	27.94	-85.15	26.4	23.74	51	99	178	depth < 800m	depth < 800m	
other margin	39	27.91	-85.33	26.4	23.71	52	98	175	depth < 800m	depth < 800m	
other margin	40	27.90	-85.50	26.3	23.60	52	97	182	depth < 800m	depth < 800m	
other margin	43 (CTD-03)	27.84	-85.94	26.7	23.45	50	89	160	depth < 800m	depth < 800m	
other margin	44	28.04	-85.83	26.3	23.62	50	90	172	depth < 800m	depth < 800m	
other margin	45	28.19	-85.73	26.6	23.70	48	92	166	depth < 800m	depth < 800m	
other margin	46	28.36	-85.64	26.6	23.77	52	98	174	depth < 800m	depth < 800m	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
other margin	47	28.53	-85.55	26.4	23.75	54	105	190	depth < 800m	depth < 800m	
other margin	48	28.70	-85.47	26.3	23.73	42	103	bottom >15C	depth < 800m	depth < 800m	
other margin	49	28.87	-85.38	25.8	23.74	41	100	bottom >15C	depth < 800m	depth < 800m	
other margin	50	28.81	-85.57	26.1	23.63	41	111	bottom >15C	depth < 800m	depth < 800m	
other margin	51	28.73	-85.75	26.0	23.61	43	103	178	depth < 800m	depth < 800m	
other margin	52	28.65	-85.92	26.4	23.74	57	110	174	depth < 800m	depth < 800m	
other margin	53	28.56	-86.09	26.4	23.71	58	107	178	depth < 800m	depth < 800m	
other margin	54	28.47	-86.28	26.2	23.76	52	113	190	depth < 800m	depth < 800m	
other margin	55	28.39	-86.42	26.1	23.76	52	90	174	depth < 800m	depth < 800m	
other margin	56	28.25	-86.59	26.0	23.46	43	94	167	100.8	0.8	
other margin	59	28.33	-86.76	26.0	23.68	40	89	178	100	0	
other margin	60	28.51	-86.63	26.2	23.75	42	88	164	depth < 800m	depth < 800m	
other margin	61	28.69	-86.64	25.8	23.82	40	88	185	depth < 800m	depth < 800m	
other margin	62	28.86	-86.66	25.7	23.82	42	93	174	depth < 800m	depth < 800m	
other margin	63	29.03	-86.68	26.1	23.70	45	103	181	depth < 800m	depth < 800m	
other margin	64	29.17	-86.70	25.7	23.70	50	112	189	depth < 800m	depth < 800m	
other margin	65	29.33	-86.70	25.4	23.42	57	103	197	depth < 800m	depth < 800m	
other margin	66	29.54	-86.72	25.2	23.44	62	105	183	depth < 800m	depth < 800m	
other margin	67	29.68	-86.73	25.5	23.57	65	108	bottom >15C	depth < 800m	depth < 800m	
other margin	68	29.82	-86.75	25.8	23.68	49	117	bottom >15C	depth < 800m	depth < 800m	
other margin	69	30.00	-86.77	25.7	23.88	60	112	bottom >15C	depth < 800m	depth < 800m	
other margin	70	30.17	-86.78	24.5	23.71		bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	71	29.59	-87.40	25.7	23.82	58	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	72	29.51	-87.40	25.6	23.80	50	114	bottom >15C	depth < 800m	depth < 800m	
other margin	73	29.42	-87.40	25.7	23.73	57	102	205	depth < 800m	depth < 800m	
other margin	74	29.34	-87.40	25.8	23.66	55	118	205	depth < 800m	depth < 800m	
other margin	75	29.26	-87.40	25.8	23.66	52	124	206	108.6	8.6	
other margin	76	29.17	-87.40	25.7	23.73	49	124	198	107	7	
other margin	77 (CTD-05)	29.07	-87.35	25.7	23.88	55	106	198	104.6	4.6	
other margin	78	28.92	-87.41	26.0	23.73	49	101	179	103	3	
other margin	79	28.83	-87.40	26.0	23.75	47	93	160	100.9	0.9	
other margin	97	29.17	-88.17	25.8	23.63	61	112	215	depth < 800m	depth < 800m	
other margin	98	29.18	-88.18	25.8	23.67	59	104	215	depth < 800m	depth < 800m	
other margin	99	29.20	-88.18	25.8	23.68	61	105	227	depth < 800m	depth < 800m	
other margin	100	28.61	-88.99	25.5	23.84	55	96	188	depth < 800m	depth < 800m	
other margin	101	28.66	-89.00	25.5	23.83	50	97	184	depth < 800m	depth < 800m	
other margin	231	28.62	-88.79	25.5	23.71	50	94	171	105.8	5.8	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
other margin	232	28.67	-88.17	25.8	23.78	57	107	183	102.7	2.7	
other margin	233	28.75	-88.17	25.5	23.83	56	116	189	103	3	
other margin	234	28.83	-88.17	25.4	23.84	58	112	196	103.8	3.8	
other margin	235	28.90	-88.17	25.6	23.83	58	114	201	107.2	7.2	
other margin	236	29.00	-88.17	25.4	23.89	59	115	206	107.5	7.5	
other margin	237	29.08	-88.17	25.4	23.88	57	123	222	110.3	10.3	
other margin	238	29.18	-88.17	25.5	23.88	54	130	252	depth < 800m	depth < 800m	
other margin	239	29.25	-88.16	25.6	23.91	55	104	bottom >15C	depth < 800m	depth < 800m	
other margin	240	29.33	-88.15	25.2	23.84	61	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	241	29.42	-88.15	24.9	23.70		bottom >19C	bottom >15C	depth < 800m	depth < 800m	
	mean (n=95)	28.37	-87.42	26.0	23.72	51.02	103.09	187.85	104.4	4.4	
	std deviation	1.01	1.38	0.6	0.18	7.6	13.58	21.01	3.84	3.84	
MOM	209	28.65	-88.49	25.4	23.94	55	92	167	105.4	5.4	
MOM	210 (CTD-12)	28.67	-88.52	25.2	23.97	52	91	170	104.4	4.4	
MOM	211	28.70	-88.69	25.5	23.75	44	96	194	107.9	7.9	
MOM	212	28.70	-88.91	25.5	23.65	56	104	207	111.1	11.1	
MOM	213	28.55	-88.94	25.3	23.73	54	99	206	106.2	6.2	
MOM	214	28.46	-89.02	25.9	23.63	52	107	197	106.4	6.4	
MOM	215	28.38	-88.92	26.0	23.51	47	100	183	104.9	4.9	
MOM	216	28.30	-88.83	25.9	23.61	49	97	166	101.9	1.9	
MOM	217	28.23	-88.91	25.8	23.66	49	96	178	99.6	-0.4	
MOM	219	28.19	-89.08	25.9	23.49	42	97	171	100.6	0.6	
MOM	220	28.29	-89.16	25.9	23.53	41	97	180	103.6	3.6	
MOM	221	28.37	-89.25	25.8	23.58	51	99	206	depth < 800m	depth < 800m	
MOM	222	28.44	-89.18	25.7	23.67	60	94	179	depth < 800m	depth < 800m	
MOM	223	28.38	-89.07	26.0	23.55	46	92	180	104.6	4.6	
MOM	224	28.29	-88.97	25.9	23.57	45	95	177	101.5	1.5	
MOM	226	28.12	-89.17	26.1	23.48	45	96	168	100.3	0.3	
MOM	227	28.19	-89.28	26.3	23.41	42	99	181	103.5	3.5	
MOM	228	28.28	-89.33	26.0	23.50	50	106	176	105.7	5.7	
MOM	229	28.53	-89.07	25.7	23.61	55	105	194	99.5	-0.5	
	mean (n=19)	28.41	-88.99	25.8	23.62	49.21	98	183.16	103.95	3.95	
	std deviation	0.18	0.23	0.3	0.15	5.38	4.7	13.55	3.15	3.15	
Aug-97	GYRE 97G-08										
cyclone	34	28.33	-87.97	29.7	20.71	22	105	159	104.2	-0.8	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
cyclone	35	28.50	-87.97	29.6	20.76	21	100	158	104.4	-0.6	
cyclone	36	28.67	-87.98	29.8	20.99	20	102	172	104.4	-0.6	
cyclone	43 (CTD-3)	28.50	-87.68	29.4	20.88	24	91	148	102.5	-2.5	
cyclone	44	28.33	-87.60	29.6	21.05	19	90	146	98.5	-6.5	
cyclone	45	28.26	-87.58	29.5	21.14	20	91	150	98.7	-6.3	
cyclone	46	28.17	-87.54	29.8	21.51	24	85	141	98.4	-6.6	
cyclone	47	28.00	-87.46	29.3	20.99	27	91	141	97.5	-7.5	
cyclone	48	27.83	-87.36	29.9	19.92	25	105	151	101.9	-3.1	
cyclone	60	27.67	-86.84	29.7	20.81	18	95	140	97.8	-7.2	
cyclone	61	27.83	-86.87	29.8	20.96	19	89	130	92.1	-12.9	
cyclone	62 (CTD-4)	28.00	-86.86	30.0	20.90	23	89	126	91.7	-13.3	
cyclone	63	28.17	-86.86	30.0	21.14	20	82	134	93.9	-11.1	
cyclone	64	28.33	-86.88	30.4	21.01	21	85	134	98.3	-6.7	
cyclone	65	28.50	-86.85	30.0	21.50	19	88	155	depth < 800m	depth < 800m	
cyclone	66	28.67	-86.87	29.9	21.66	21	95	156	depth < 800m	depth < 800m	
cyclone	72	28.67	-87.07	29.5	21.69	25	97	154	103.9	-1.1	
cyclone	73	28.50	-87.11	29.8	21.69	26	95	151	103.4	-1.6	
cyclone	74	28.33	-87.14	29.7	21.68	23	88	146	99.7	-5.3	
cyclone	75	28.17	-87.18	29.9	21.17	17	89	138	94.2	-10.8	
cyclone	76	28.00	-87.20	30.0	20.93	25	98	130	95.1	-9.9	
cyclone	77	27.83	-87.84	30.0	20.82	25	101	151	98.7	-6.3	
cyclone	91	28.17	-88.18	30.7	22.05	19	99	170	104.8	-0.2	
cyclone	92	28.33	-88.25	30.5	19.70	9	99	160	104.6	-0.4	
cyclone	127	28.57	-86.66	30.5	n/a	20	96	163	depth < 800m	depth < 800m	
cyclone	128	28.40	-86.66	30.4	n/a	16	100	157	depth < 800m	depth < 800m	
cyclone	129	28.24	-86.69	30.5	n/a	16	99	158	101.6	-3.4	
cyclone	130 (CTD-8)	28.17	-86.67	30.5	n/a	13	96	147	100.5	-4.5	
cyclone	131	28.08	-86.55	30.4	n/a	16	95	148	102.3	-2.7	
cyclone	132	28.24	-86.45	30.9	n/a	14	100	156	depth < 800m	depth < 800m	
cyclone	133	28.39	-86.34	30.4	n/a	20	104	165	depth < 800m	depth < 800m	
cyclone	162	27.39	-86.03	30.9	n/a	12	83	150	102.3	-2.7	
cyclone	163	27.45	-86.21	31.0	n/a	10	87	150	99.9	-5.1	
cyclone	164	27.49	-86.40	31.2	n/a	9	89	145	101.7	-3.3	
cyclone	165	27.47	-86.59	30.8	n/a	12	98	146	100.3	-4.7	
cyclone	166	27.44	-86.77	30.6	n/a	21	98	160	103.7	-1.3	
	mean (n=36)	28.14	-87.09	30.1	21.07	19.19	94.28	149.61	100.03	-4.97	
	std deviation	0.37	0.58	0.5	0.53	4.9	6.31	10.99	3.79	3.79	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
confluence	6	28.00	-88.80	29.7	18.00	22	95	175	111.2	6.2	
confluence	7	27.83	-88.74	29.9	15.65	28	125	198	125.7	20.7	
confluence	8	27.73	-88.65	29.9	20.95	30	144	212	129.1	24.1	
confluence	9	27.67	-88.62	29.5	22.53	50	157	229	125.8	20.8	
confluence	29	27.67	-88.07	30.2	22.49	38	151	234	127.2	22.2	
confluence	30	27.83	-87.98	30.3	15.88	25	140	205	118.8	13.8	
confluence	31 (CTD-2)	27.94	-87.98	30.0	18.31	30	117	191	109.3	4.3	
confluence	32	28.00	-87.94	30.0	21.22	28	113	177	105.2	0.2	
confluence	33	28.17	-87.95	29.8	20.60	27	105	157	105.4	0.4	
confluence	49	27.67	-87.28	30.5	19.57	23	113	168	110.9	5.9	
confluence	50	27.50	-87.21	30.5	22.45	25	133	207	117.2	12.2	
confluence	51	27.33	-87.14	30.6	22.40	29	149	234	128.4	23.4	
confluence	57	27.17	-86.80	30.1	22.54	30	141	227	124	19	
confluence	58	27.33	-86.81	30.3	21.02	27	120	194	114.6	9.6	
confluence	59	27.50	-86.82	30.2	19.37	20	101	160	106.2	1.2	
confluence	78	27.67	-87.26	30.7	16.53	9	122	165	109.9	4.9	
confluence	79	27.46	-87.30	30.1	22.42	44	167	219	125.7	20.7	
confluence	89	27.83	-87.99	30.3	22.25	24	145	249	123.4	18.4	
confluence	90	28.00	-88.09	31.1	21.61	19	104	210	110.2	5.2	
confluence	105	29.37	-87.82	30.0	n/a	12	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
confluence	106	29.22	-87.83	30.3	n/a	15	118	181	depth < 800m	depth < 800m	
confluence	107	29.03	-87.83	30.5	n/a	15	116	182	108.1	3.1	
confluence	108	28.87	-87.85	30.4	n/a	15	120	178	109.2	4.2	
confluence	109	28.84	-87.84	30.3	n/a	12	120	174	107.5	2.5	
confluence	110 (CTD-7)	28.92	-87.59	30.7	n/a	12	117	183	107.6	2.6	
confluence	111	29.08	-87.49	29.9	n/a	14	103	200	108.9	3.9	
confluence	112	29.22	-87.42	30.3	n/a	15	107	177	109.1	4.1	
confluence	113	29.38	-87.36	30.5	n/a	8	100	160	depth < 800m	depth < 800m	
confluence	114	29.53	-87.28	30.3	n/a	7	78	180	depth < 800m	depth < 800m	
confluence	115	29.66	-87.15	30.2	n/a	7	79	160	depth < 800m	depth < 800m	
confluence	116	29.82	-87.09	30.2	n/a	8	84	197	depth < 800m	depth < 800m	
confluence	119	29.90	-86.68	30.3	n/a	8	84	bottom >15C	depth < 800m	depth < 800m	
confluence	120	29.73	-86.68	30.7	n/a	8	100	bottom >15C	depth < 800m	depth < 800m	
confluence	121	29.57	-86.69	31.1	n/a	8	108	193	depth < 800m	depth < 800m	
confluence	122	29.40	-86.60	30.8	n/a	5	103	192	depth < 800m	depth < 800m	
confluence	123	29.23	-86.62	30.8	n/a	14	106	194	depth < 800m	depth < 800m	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
confluence	124	29.05	-86.62	30.7	n/a	8	100	181	depth < 800m	depth < 800m	
confluence	125	28.90	-86.63	30.3	n/a	12	103	171	depth < 800m	depth < 800m	
confluence	126	28.73	-86.64	30.2	n/a	19	96	180	depth < 800m	depth < 800m	
confluence	134	28.52	-86.24	30.5	n/a	21	102	169	depth < 800m	depth < 800m	
confluence	135	28.65	-86.14	30.9	n/a	16	104	174	depth < 800m	depth < 800m	
confluence	136	28.79	-86.04	30.5	n/a	23	99	178	depth < 800m	depth < 800m	
confluence	137	28.93	-85.93	30.1	n/a	19	84	228	depth < 800m	depth < 800m	
confluence	138	29.07	-85.83	30.1	n/a	13	83	175	depth < 800m	depth < 800m	
confluence	139	29.16	-85.75	30.4	n/a	15	68	bottom >15C	depth < 800m	depth < 800m	
confluence	140	28.87	-85.38	30.2	n/a	13	97	bottom >15C	depth < 800m	depth < 800m	
confluence	141	28.72	-85.46	30.4	n/a	20	106	bottom >15C	depth < 800m	depth < 800m	
confluence	142	28.56	-85.55	30.4	n/a	16	100	193	depth < 800m	depth < 800m	
confluence	143	28.41	-85.62	30.4	n/a	20	116	185	depth < 800m	depth < 800m	
confluence	144	28.26	-85.70	30.8	n/a	13	98	174	depth < 800m	depth < 800m	
confluence	145	28.12	-85.78	30.7	n/a	15	100	171	depth < 800m	depth < 800m	
confluence	146	27.97	-85.87	30.7	n/a	19	104	164	105.7	0.7	
confluence	147 (CTD-9)	27.85	-85.90	30.9	n/a	18	98	163	105.7	0.7	
confluence	148	27.69	-85.66	31.1	n/a	9	102	182	106.6	1.6	
confluence	149	27.73	-85.50	31.7	n/a	16	106	199	108.6	3.6	
confluence	150	27.80	-85.31	31.2	n/a	13	111	212	depth < 800m	depth < 800m	
confluence	151	27.91	-85.17	31.2	n/a	23	118	206	depth < 800m	depth < 800m	
confluence	152	28.02	-85.03	30.7	n/a	19	116	208	depth < 800m	depth < 800m	
confluence	153	28.14	-84.89	30.9	n/a	19	97	bottom >15C	depth < 800m	depth < 800m	
confluence	154 (CTD-10)	28.00	-84.60	30.4	n/a	18	90	bottom >15C	depth < 800m	depth < 800m	
confluence	155	27.89	-84.75	30.6	n/a	16	110	177	depth < 800m	depth < 800m	
confluence	156	27.80	-84.90	30.5	n/a	19	108	200	depth < 800m	depth < 800m	
confluence	157	27.72	-85.07	30.9	n/a	15	118	205	depth < 800m	depth < 800m	
confluence	158	27.58	-85.18	30.6	n/a	17	111	206	depth < 800m	depth < 800m	
confluence	159	27.44	-85.34	31.0	n/a	13	108	187	109	4	
confluence	160 (CTD-11)	27.41	-85.46	31.0	n/a	10	102	180	105.8	0.8	
confluence	161	27.38	-85.63	31.2	n/a	13	86	155	106.1	1.1	
confluence	167	27.42	-86.96	31.0	n/a	13	126	187	113.1	8.1	
confluence	168	27.41	-86.99	30.8	n/a	24	143	200	118.5	13.5	
confluence	169	27.47	-87.17	30.0	n/a	37	155	240	128.9	23.9	
confluence	174	28.06	-87.80	31.3	n/a	14	136	231	121.5	16.5	
confluence	175	28.16	-87.98	31.3	n/a	27	120	230	120.1	15.1	
confluence	176	28.27	-88.11	31.3	n/a	19	122	203	113.9	8.9	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
confluence	177	28.56	-88.24	31.5	n/a	8	101	185	111.9	6.9	
confluence	178	28.51	-88.38	31.7	n/a	11	91	151	116.2	11.2	
	mean (n=75)	28.32	-86.75	30.6	20.30	18.19	111.08	191.22	114.26	9.26	
	std deviation	0.73	1.13	0.5	2.38	8.68	19.91	22.96	7.91	7.91	
LCE "E"	10	27.49	-88.53	30.3	22.45	28	189	263	138.9	33.9	
LCE "E"	11	27.33	-88.50	30.6	22.38	32	221	290	147.6	42.6	
LCE "E"	12	27.17	-88.47	30.6	22.33	29	232	322	154.1	49.1	
LCE "E"	13	27.01	-88.43	30.7	22.34	28	269	351	160.3	55.3	
LCE "E"	14	26.84	-88.38	30.4	22.42	40	279	393	164.6	59.6	
LCE "E"	15	26.65	-88.33	30.3	22.37	46	288	437	170.3	65.3	
LCE "E"	16	26.49	-88.31	30.5	22.41	41	293	442	172.7	67.7	
LCE "E"	17	26.34	-88.28	30.2	22.49	35	296	443	172.2	67.2	
LCE "E"	18	26.16	-88.24	30.2	22.48	44	301	453	175.9	70.9	
LCE "E"	19	26.01	-88.19	30.2	22.46	46	293	427	172.2	67.2	
LCE "E"	19 (CTD-1)	26.00	-88.20	30.2	22.52	44	295	421	depth < 800m	depth < 800m	
LCE "E"	20	26.17	-88.21	30.4	22.45	48	294	452	173.6	68.6	
LCE "E"	21	26.33	-88.20	30.4	22.43	37	303	457	175.6	70.6	
LCE "E"	22	26.50	-88.17	30.4	22.42	39	295	445	174.3	69.3	
LCE "E"	23	26.67	-88.15	30.5	22.40	41	295	437	173.8	68.8	
LCE "E"	24	26.83	-88.14	30.5	22.38	37	296	419	170.6	65.6	
LCE "E"	25	27.00	-88.12	30.9	22.37	32	278	370	163.3	58.3	
LCE "E"	26	27.17	-88.10	30.8	22.29	34	244	326	155.6	50.6	
LCE "E"	27	27.33	-88.09	30.8	22.30	29	229	303	148.4	43.4	
LCE "E"	28	27.50	-88.08	30.4	22.41	32	183	267	137.7	32.7	
LCE "E"	52	27.17	-87.05	30.8	22.32	27	160	268	133.6	28.6	
LCE "E"	53	27.00	-86.96	30.7	22.32	25	193	308	142.9	37.9	
LCE "E"	54	26.83	-86.91	30.5	22.27	29	221	318	150.9	45.9	
LCE "E"	55	26.90	-86.78	30.7	22.33	28	184	294	140.8	35.8	
LCE "E"	56	27.00	-86.78	30.4	22.40	30	163	267	132.8	27.8	
LCE "E"	80	27.33	-87.27	30.1	22.41	30	182	254	134.1	29.1	
LCE "E"	81	27.17	-87.32	30.3	22.47	37	220	294	146.3	41.3	
LCE "E"	82	27.00	-87.37	30.4	22.44	39	262	350	160.4	55.4	
LCE "E"	83 (CTD-5)	26.83	-87.43	30.3	22.48	47	296	389	168.9	63.9	
LCE "E"	84	27.00	-87.50	30.3	22.42	42	279	365	166	61	
LCE "E"	85	27.17	-87.59	29.9	22.53	40	253	343	155.9	50.9	
LCE "E"	86	27.33	-87.70	30.4	22.45	37	235	328	151.2	46.2	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
LCE "E"	87	27.50	-87.79	30.4	22.45	32	220	310	142.7	37.7	
LCE "E"	88	27.67	-87.89	30.6	22.36	27	189	282	135.2	30.2	
LCE "E"	170	27.54	-87.38	30.4	n/a	29	182	275	133.3	28.3	
LCE "E"	171	27.63	-87.50	30.8	n/a	27	184	279	134.3	29.3	
LCE "E"	172	27.76	-87.64	30.7	n/a	23	174	273	132.7	27.7	
LCE "E"	173	27.89	-87.77	30.6	n/a	23	163	265	129.9	24.9	
	mean (n=38)	26.99	-87.84	30.5	22.40	34.58	240.34	346.84	153.88	48.88	
	std deviation	0.49	0.52	0.2	0.07	7.14	49.6	69.2	15.7	15.7	
other margin	37	28.84	-88.02	30.0	19.98	17	119	190	107.7	2.7	
other margin	38	29.00	-88.01	30.1	19.81	17	120	191	109.8	4.8	
other margin	39	29.17	-88.00	30.1	19.17	15	125	196	depth < 800m	depth < 800m	
other margin	40	29.00	-87.94	29.9	20.00	15	120	197	109.9	4.9	
other margin	41	28.83	-87.89	30.1	19.91	17	117	192	112.2	7.2	
other margin	42	28.67	-87.80	30.1	20.31	13	98	173	106.7	1.7	
other margin	67	28.83	-86.89	29.7	20.74	16	100	167	depth < 800m	depth < 800m	
other margin	68	29.00	-86.90	29.9	20.24	13	100	174	depth < 800m	depth < 800m	
other margin	69	29.17	-86.91	30.1	20.10	14	108	162	depth < 800m	depth < 800m	
other margin	70	29.00	-87.01	29.9	20.06	14	112	181	depth < 800m	depth < 800m	
other margin	71	28.83	-87.04	29.8	20.67	9	103	168	depth < 800m	depth < 800m	
other margin	93	28.50	-88.39	30.5	18.60	9	97	168	108.8	3.8	
other margin	94 (CTD-6)	28.62	-88.47	30.1	20.25	12	103	172	105.9	0.9	
other margin	95	28.80	-88.48	30.0	20.76	17	111	186	109.6	4.6	
other margin	96	28.96	-88.48	29.9	20.41	8	104	178	108.4	3.4	
other margin	97	29.11	-88.48	29.9	19.37	10	91	166	depth < 800m	depth < 800m	
other margin	98	29.24	-88.47	29.8	18.16	6	84	bottom >15C	depth < 800m	depth < 800m	
other margin	99	29.28	-88.47	29.8	16.86	7	70	bottom >15C	depth < 800m	depth < 800m	
other margin	100	29.45	-88.48	30.1	16.93	10	57	bottom >15C	depth < 800m	depth < 800m	
other margin	101	29.62	-88.46	29.4	19.65	10	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	102	30.03	-87.83	29.3	n/a	11	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	103	29.88	-87.83	29.6	n/a	8	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	104	29.54	-87.81	30.0	n/a	9	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	117	29.98	-87.04	29.9	n/a	8	bottom >19C	bottom >15C	depth < 800m	depth < 800m	
other margin	118	29.97	-86.43	30.1	n/a	10	60	bottom >15C	depth < 800m	depth < 800m	
	mean (n=25)	29.17	-87.82	29.9	19.60	11.8	99.95	178.81	108.78	3.78	
	std deviation	0.44	0.65	0.3	1.14	3.51	19.38	11.7	1.89	1.89	

Hydrographic Data spreadsheet (Appendix 2 for Chapter 2), sorted by environment for R/V *Gyre* cruises 96G06 and 97G08

environment	station	Latitude	Longitude	sfc Temp	sfc sigma-t	MLD	depth 19C	15C depth	dynht (800m)	dynht anom	comments
MOM	1	28.64	-89.24	29.5	16.66	12	91	143	depth < 800m	depth < 800m	
MOM	2	28.66	-89.00	29.2	17.00	22	92	182	depth < 800m	depth < 800m	
MOM	3	28.51	-88.95	29.4	17.94	19	101	181	108.7	3.7	
MOM	4	28.34	-88.90	29.4	18.67	21	97	174	108.1	3.1	
MOM	5	28.17	-88.85	29.7	17.91	18	88	157	106.4	1.4	
MOM	179	28.71	-88.59	31.4	n/a	18	106	166	depth < 800m	depth < 800m	
MOM	180 (CTD-12)	28.79	-88.73	30.8	n/a	13	106	190	depth < 800m	depth < 800m	
	mean (n=7)	28.55	-88.89	29.9	17.64	17.57	97.29	170.43	107.73	2.73	
	std deviation	0.22	0.21	0.8	0.81	3.78	7.3	16.3	1.19	1.19	

Appendices of Hydrographic Data (continued)

- **Bottle Data**

Four tables and two pages of figures present raw data and metadata from biogeochemical analysess of the Niskin bottles that were tripped at the CTD stations made on R/V *Gyre* cruises 96G06 and 97G08.

Chap2_appendix_table3.xls and Chap2_appendix_table4.xls are summaries of bottle sampling for salinity, chlorophyll, and dissolved oxygen on cruises 96G06 and 97G08. The "calc Chl" and "calc DO" columns were computed from first order polynomial fits to the data as explained in Chap2_appendix_table5.xls. Two pages of graphs follow, which for each cruise illustrate the range in the raw data and in the bottle data. The "Chl error" and "DO error" columns in Chap2_appendix_table3.xls and Chap2_appendix_table4.xls were computed by taking the difference from these computed properties and the bottle data. In general, chlorophyll computed from the submersible fluorometer profile generally agreed to within $\pm$ 0.05 ug/L with individual bottle samples, and "calc DO" measured by calibrating the raw DO data from the polarigraphic oxygen probe against bottle DO generally agreed to within $\pm$ 0.1 ml/L with any individual bottle sample.

The final table (Chap2_appendix_table6.xls) is a summary of autoanalyzer nutrient analyses for phosphate, nitrate, nitrite, and silicate on bottle data from R/V *Gyre* cruise 96G06. If an individual analysis was suspect, this was flagged as "-999"; if all four analyses did not agree with historical property-property relationships, they were flagged as "problematic data". Nutrient analyses were not performed on cruise 97G08.

Upcast Bottle Data spreadsheet (Appendix 3 for Chapter 2) of salinity, chlorophyll, oxygen, and beam attenuation for R/V *Gyre* cruise 96G06

CTD & Sta #	Bottle #	Trip Depth	CTD Temp	CTD Salin	Bottle Salin	Salin error	Fluor volts	calc Chl	Bottle Chl	Chl error	raw DO	calc DO	Bottle DO	DO error	Xmiss volts	volts > min
96G06 CTD-1	1	250	10.8	35.32	35.31	0.01	0.546	0.000	-999	-999	2.23	2.81	2.81	0.00	4.431	0.020
(Sta 12)	2	225	11.5	35.43	35.42	0.01	0.547	0.000	-999	-999	2.26	2.86	2.84	0.02	4.432	0.019
	3	200	12.5	35.57	35.55	0.02	0.537	0.000	-999	-999	2.31	2.93	2.91	0.02	4.432	0.019
	4	175	13.2	35.70	35.68	0.02	0.550	0.000	-999	-999	2.34	2.97	2.93	0.04	4.435	0.016
	5	151	14.3	35.86	35.83	0.03	0.573	0.000	0.005	0.00	2.35	2.98	2.97	0.01	4.434	0.017
	6	125	15.6	36.08	36.06	0.02	0.553	0.000	0.014	-0.01	2.39	3.04	3.07	-0.02	4.437	0.014
	7	101	17.8	36.35	36.32	0.02	0.624	0.060	0.059	0.00	2.39	3.04	3.02	0.03	4.427	0.024
	8	81	19.3	36.45	36.42	0.02	1.024	0.177	0.122	0.06	2.52	3.23	3.29	-0.06	4.414	0.037
	9	60	21.3	36.45	36.43	0.02	1.285	0.330	0.351	-0.02	2.82	3.65	3.73	-0.07	4.375	0.076
	10	40	24.9	36.40	36.40	-0.01	1.030	0.181	0.185	0.00	3.71	4.92	5.00	-0.07	4.365	0.086
	11	20	27.2	36.27	36.25	0.02	0.830	0.064	0.081	-0.02	3.52	4.65	4.58	0.07	4.391	0.060
	12	3	27.2	36.28	36.25	0.02	0.840	0.069	0.061	-0.01	3.48	4.59	4.53	0.06	4.390	0.061
96G06 CTD-2	1	252	15.6	36.06	36.06	0.01	0.546	0.000	0.005	0.00	2.27	2.92	2.86	0.06	4.431	0.012
(Sta 19)	2	228	16.8	36.23	36.23	0.00	0.596	0.007	0.018	-0.01	2.28	2.94	2.92	0.01	4.432	0.011
	3	200	18.9	36.56	36.56	-0.01	0.652	0.029	0.014	0.02	2.66	3.49	-999	-999	4.436	0.007
	4	176	20.3	36.64	36.63	0.01	0.607	0.011	0.018	-0.01	2.61	3.42	3.44	-0.02	4.437	0.006
	5	151	22.6	36.63	36.64	-0.02	0.753	0.067	0.045	0.02	2.82	3.72	3.80	-0.08	4.431	0.012
	6	122	24.3	36.50	36.51	-0.01	0.899	0.123	0.122	0.00	3.13	4.16	4.20	-0.02	4.426	0.017
	7	101	25.5	36.42	36.42	0.01	1.214	0.245	0.216	0.03	3.35	4.50	4.56	-0.06	4.418	0.025
	8	77	26.7	36.38	36.38	0.00	1.046	0.180	0.230	-0.05	3.55	4.79	4.68	0.10	4.399	0.044
	9	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	10	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	11	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	12	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
96G06 CTD-3	1	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
(Sta 42)	2	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	3	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	4	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	5	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	6	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	7	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	8	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	9	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	10	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	11	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	12	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
96G06 CTD-4	1	224	12.6	35.63	35.62	0.01	0.483	0.000	-999	-999	2.37	2.79	2.89	-0.10	4.431	0.002
(Sta 58)	2	199	13.7	35.77	35.63	0.14	0.536	0.000	-999	-999	2.43	2.86	2.90	-0.04	4.431	0.002
	3	176	14.6	35.92	35.75	0.16	0.553	0.000	-999	-999	2.43	2.86	2.91	-0.05	4.426	0.007
	4	151	15.7	36.08	35.89	0.18	0.589	-0.022	0.002	-0.02	2.46	2.89	2.92	-0.02	4.427	0.006
	5	124	16.9	36.24	36.06	0.18	0.656	0.007	0.005	0.00	2.37	2.79	2.94	-0.14	4.432	0.001
	6	105	17.8	36.33	36.22	0.11	0.772	0.056	0.027	0.03	2.34	2.76	2.78	-0.02	4.429	0.004
	7	90	18.7	36.22	36.31	-0.09	0.910	0.114	0.072	0.04	2.57	3.01	2.84	0.17	4.422	0.011
	8	75	19.8	36.33	36.30	0.02	1.037	0.166	0.113	0.06	3.11	3.60	3.16	0.45	4.414	0.019
	9	60	21.2	36.40	36.31	0.10	1.247	0.258	0.270	-0.01	3.61	4.15	3.94	0.21	4.397	0.036
	10	48	22.6	36.44	36.38	0.06	1.395	0.321	0.333	-0.01	3.78	4.34	4.44	-0.10	4.373	0.060
	11	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	12	10	26.2	35.57	35.77	-0.20	0.913	0.116	0.194	-0.08	3.78	4.34	4.68	-0.34	4.395	0.048

Upcast Bottle Data spreadsheet (Appendix 3 for Chapter 2) of salinity, chlorophyll, oxygen, and beam attenuation for R/V *Gyre* cruise 96G06

CTD & Sta #	Bottle #	Trip Depth	CTD Temp	CTD Salin	Bottle Salin	Salin error	Fluor volts	calc Chl	Bottle Chl	Chl error	raw DO	calc DO	Bottle DO	DO error	Xmiss volts	volts > min
96G06 CTD-5	1	225	14.0	35.80	35.80	0.01	0.532	0.000	0.000	0.00	2.37	2.91	2.92	-0.01	4.435	0.002
(Sta 77)	2	199	14.9	35.95	35.95	0.00	0.631	0.019	0.000	0.02	2.46	3.03	3.02	0.01	4.437	0.000
	3	176	15.6	36.06	36.05	0.01	0.596	0.005	0.000	0.00	2.46	3.03	2.96	0.07	4.432	0.005
	4	150	16.4	36.18	36.17	0.00	0.607	0.009	0.014	0.00	2.42	2.98	2.95	0.03	4.431	0.006
	5	126	17.4	36.29	36.29	0.01	0.744	0.066	0.041	0.03	2.44	3.01	2.97	0.04	4.436	0.001
	6	106	19.1	36.49	36.47	0.02	0.875	0.121	0.063	0.06	2.55	3.15	3.25	-0.10	4.431	0.006
	7	91	19.9	36.52	36.51	0.01	0.962	0.157	0.081	0.08	2.74	3.41	3.46	-0.05	4.424	0.013
	8	75	21.1	36.37	36.36	0.01	1.258	0.281	0.261	0.02	3.37	4.26	4.32	-0.06	4.399	0.038
	9	60	23.0	36.42	36.42	0.00	1.238	0.272	0.297	-0.02	3.82	4.87	4.93	-0.06	4.379	0.058
	10	45	25.6	35.96	35.97	-0.02	0.877	0.122	0.207	-0.09	3.76	4.79	4.73	0.06	4.397	0.040
	11	31	25.7	35.95	35.95	0.00	0.840	0.106	0.176	-0.07	3.75	4.78	4.73	0.05	4.396	0.041
	12	5	25.7	35.95	35.95	0.00	0.853	0.112	0.135	-0.02	3.71	4.72	4.71	0.01	4.399	0.038
96G06 CTD-6	1	850	4.8	34.95	34.94	0.02	0.539	0.000	-999	-999	3.68	4.41	4.22	0.19	4.143	0.289
(Sta 87)	2	201	12.2	35.52	35.51	0.01	0.575	0.000	0.000	0.00	2.42	2.80	2.86	-0.05	4.425	0.007
	3	176	13.0	35.65	35.64	0.01	0.524	0.000	0.000	0.00	2.46	2.85	2.88	-0.03	4.430	0.002
	4	151	14.0	35.81	35.80	0.01	0.601	0.003	0.000	0.00	2.51	2.92	2.95	-0.04	4.431	0.001
	5	126	15.3	36.02	36.01	0.01	0.610	0.008	0.009	0.00	2.59	3.02	2.97	0.05	4.432	0.000
	6	106	16.4	36.18	36.17	0.01	0.623	0.014	0.023	-0.01	2.63	3.07	3.06	0.01	4.431	0.001
	7	92	17.4	36.31	36.31	0.00	0.767	0.085	0.086	0.00	2.63	3.07	3.03	0.05	4.425	0.007
	8	75	18.8	36.43	36.42	0.01	1.035	0.216	0.081	0.13	2.71	3.17	3.16	0.01	4.414	0.018
	9	60	20.8	36.50	36.50	0.01	1.271	0.332	0.383	-0.05	3.32	3.95	3.89	0.07	4.370	0.062
	10	45	22.9	36.46	36.45	0.01	0.990	0.194	0.230	-0.04	3.76	4.51	4.84	-0.33	4.366	0.066
	11	30	25.2	36.06	35.95	0.11	0.917	0.158	0.180	-0.02	4.03	4.86	4.87	-0.01	4.346	0.086
	12	11	26.1	35.53	35.52	0.01	0.766	0.084	0.104	-0.02	3.98	4.79	4.70	0.09	4.359	0.073
96G06 CTD-7	1	851	5.8	34.91	34.90	0.01	0.593	0.000	-999	-999	3.07	3.64	3.59	0.05	4.397	0.034
(Sta 103)	2	202	14.5	35.89	35.88	0.01	0.498	0.000	0.000	0.00	2.44	2.86	2.88	-0.02	4.403	0.028
	3	172	15.4	36.02	36.01	0.01	0.560	0.000	0.000	0.00	2.48	2.91	2.92	-0.02	4.424	0.007
	4	151	16.4	36.19	36.17	0.01	0.630	0.011	0.014	0.00	2.65	3.12	3.11	0.01	4.431	0.000
	5	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	6	100	19.2	36.49	36.48	0.00	0.961	0.127	0.077	0.05	2.78	3.26	3.27	0.01	4.422	0.009
	7	75	20.5	36.43	36.43	0.00	1.237	0.224	0.171	0.05	3.41	4.06	-999	-999	4.398	0.033
	8	60	21.9	36.43	36.41	0.02	1.424	0.290	0.302	-0.01	3.86	4.62	4.59	0.03	4.358	0.073
	9	51	23.6	36.36	36.15	0.21	1.160	0.197	0.248	-0.05	3.96	4.74	4.80	-0.06	4.365	0.066
	10	31	25.4	35.86	35.86	0.00	0.961	0.127	0.180	-0.05	3.99	4.78	4.74	0.04	4.372	0.059
	11	21	25.4	35.85	35.84	0.01	0.940	0.120	0.131	-0.01	3.97	4.75	4.73	0.02	4.368	0.063
	12	11	25.5	35.84	35.84	0.00	0.946	0.122	0.095	0.03	3.95	4.73	4.77	-0.04	4.374	0.057
96G06 CTD-8	1	251	19.4	36.65	36.64	0.01	0.627	0.000	0.000	0.00	3.03	3.54	3.50	0.04	4.436	0.006
(Sta 129)	2	222	20.7	36.79	36.78	0.01	0.513	0.000	0.000	0.00	2.96	3.44	3.43	0.01	4.437	0.005
	3	199	21.7	36.85	36.85	0.01	0.607	0.020	0.000	0.02	2.95	3.43	3.41	0.01	4.436	0.004
	4	174	23.4	36.66	36.65	0.01	0.618	0.023	0.005	0.02	3.02	3.52	3.56	-0.04	4.441	0.001
	5	154	24.1	36.45	36.44	0.01	0.631	0.027	0.014	0.01	3.46	4.14	4.27	-0.13	4.442	0.000
	6	127	24.4	36.40	36.39	0.00	0.882	0.097	0.090	0.01	3.62	4.36	4.35	0.01	4.426	0.016
	7	102	25.6	36.53	36.53	0.00	1.237	0.197	0.180	0.02	3.49	4.18	4.09	0.09	4.399	0.043
	8	81	26.1	36.52	36.51	0.01	1.127	0.166	0.171	-0.01	3.46	4.14	4.16	-0.02	4.407	0.035
	9	59	26.4	36.47	36.46	0.01	0.979	0.124	0.144	-0.02	3.62	4.36	4.37	-0.01	4.405	0.037
	10	41	27.4	36.35	36.34	0.00	0.703	0.047	0.072	-0.02	3.74	4.53	4.53	0.00	4.411	0.031
	11	21	27.4	36.35	36.34	0.01	0.745	0.059	0.054	0.00	3.78	4.59	4.57	0.02	4.413	0.029
	12	5	27.4	36.35	36.34	0.01	0.662	0.036	0.066	-0.03	3.77	4.57	4.57	0.00	4.415	0.027

Upcast Bottle Data spreadsheet (Appendix 3 for Chapter 2) of salinity, chlorophyll, oxygen, and beam attenuation for R/V *Gyre* cruise 96G06

CTD & Sta #	Bottle #	Trip Depth	CTD Temp	CTD Salin	Bottle Salin	Salin error	Fluor volts	calc Chl	Bottle Chl	Chl error	raw DO	calc DO	Bottle DO	DO error	Xmiss volts	volts > min
96G06 CTD-9	1	177	14.7	35.92	35.91	0.01	0.524	0.000	0.000	0.00	2.47	2.82	2.86	-0.03	4.415	0.021
(Sta 147)	2	161	15.2	35.99	35.99	0.01	0.592	0.000	0.000	0.00	2.58	2.96	2.97	-0.01	4.436	0.000
	3	146	15.7	36.07	36.06	0.01	0.554	0.000	0.005	0.00	2.62	3.01	2.95	0.05	4.431	0.005
	4	130	16.5	36.18	36.16	0.02	0.681	0.018	0.009	0.01	2.54	2.91	2.87	0.04	4.426	0.010
	5	115	17.2	36.26	36.24	0.02	0.669	0.014	0.023	-0.01	2.53	2.90	2.89	0.00	4.421	0.015
	6	101	17.9	36.35	36.35	0.01	0.842	0.067	0.027	0.04	2.64	3.03	3.05	-0.01	4.431	0.005
	7	85	19.3	36.36	36.35	0.01	1.067	0.136	0.090	0.05	2.71	3.12	3.16	-0.04	4.414	0.022
	8	69	20.2	36.33	36.31	0.02	1.272	0.199	0.194	0.01	3.48	4.07	3.90	0.17	4.397	0.039
	9	56	21.9	36.46	36.44	0.02	1.297	0.206	0.216	-0.01	3.70	4.35	4.59	-0.24	4.374	0.062
	10	39	25.7	35.98	35.98	0.00	0.937	0.096	0.144	-0.05	4.04	4.77	4.67	0.10	4.386	0.050
	11	22	25.7	35.96	35.96	0.00	0.949	0.100	0.122	-0.02	4.00	4.72	4.71	0.01	4.383	0.053
	12	11	25.7	35.96	35.96	0.01	0.928	0.094	0.104	-0.01	3.97	4.68	4.70	-0.02	4.383	0.053
96G06 CTD-10	1	178	15.7	36.07	36.06	0.01	0.593	0.000	0.009	-0.01	2.60	3.01	2.97	0.04	4.340	0.094
(Sta 157)	2	163	16.4	36.17	36.18	0.00	0.664	0.016	0.014	0.00	2.63	3.05	3.06	-0.02	4.430	0.004
	3	145	17.1	36.27	36.26	0.00	0.742	0.034	0.027	0.01	2.63	3.05	3.01	0.03	4.433	0.001
	4	129	17.5	36.34	36.33	0.01	0.796	0.046	0.036	0.01	2.71	3.15	3.17	-0.02	4.432	0.002
	5	114	18.4	36.42	36.41	0.01	0.905	0.071	0.050	0.02	2.76	3.22	3.15	0.07	4.426	0.008
	6	101	18.8	36.38	36.38	0.00	0.983	0.089	0.050	0.04	2.70	3.14	3.12	0.02	4.421	0.013
	7	87	19.7	36.47	36.45	0.02	1.066	0.108	0.086	0.02	2.90	3.40	3.46	-0.06	4.407	0.027
	8	72	21.0	36.42	36.43	-0.01	1.168	0.131	0.153	-0.02	3.33	3.97	4.17	-0.19	4.394	0.040
	9	55	22.6	36.20	36.19	0.01	1.116	0.120	0.104	0.02	3.62	4.36	4.25	0.11	4.216	0.218
	10	42	25.4	35.89	35.89	0.01	0.908	0.072	0.117	-0.05	3.69	4.45	4.50	-0.05	4.190	0.244
	11	27	25.6	35.81	35.80	0.01	1.013	0.096	0.135	-0.04	3.77	4.56	4.50	0.06	3.976	0.458
	12	11	24.3	33.65	33.60	0.05	1.951	0.311	0.579	-0.27	4.20	5.13	5.11	0.02	3.801	0.633
96G06 CTD-11	1	250	18.7	36.56	36.55	0.01	0.476	0.000	0.000	0.00	3.06	3.57	3.50	0.07	4.441	0.004
(Sta 188)	2	225	19.5	36.67	36.67	0.00	0.534	0.000	0.000	0.00	3.01	3.50	3.46	0.04	4.442	0.003
	3	201	20.6	36.78	36.78	0.00	0.586	0.000	0.000	0.00	2.95	3.42	3.40	0.02	4.443	0.002
	4	175	22.0	36.88	36.87	0.01	0.587	0.023	0.005	0.02	2.95	3.42	3.43	-0.01	4.444	0.001
	5	152	23.4	36.87	36.87	0.00	0.694	0.046	0.023	0.02	2.99	3.47	3.55	-0.08	4.443	0.002
	6	125	24.4	36.61	36.62	-0.01	0.888	0.086	0.050	0.04	3.29	3.88	3.94	-0.06	4.432	0.013
	7	105	25.0	36.49	36.48	0.00	1.200	0.152	0.144	0.01	3.51	4.16	4.20	-0.01	4.408	0.037
	8	96	25.4	36.46	36.46	0.01	1.300	0.173	0.171	0.00	3.60	4.31	4.28	0.02	4.399	0.046
	9	82	25.6	36.43	36.42	0.01	1.082	0.127	0.131	0.00	3.67	4.40	4.43	-0.02	4.418	0.027
	10	60	27.2	36.36	36.36	0.00	0.875	0.084	0.113	-0.03	3.79	4.57	4.53	0.04	4.416	0.029
	11	40	27.6	36.36	36.36	0.01	0.758	0.059	0.086	-0.03	3.78	4.55	4.54	0.01	4.418	0.027
	12	21	27.6	36.37	36.36	0.01	0.757	0.055	0.086	-0.03	3.77	4.54	4.56	-0.02	4.416	0.029
96G06 CTD-12	1	174	14.9	35.95	35.95	0.01	0.487	0.000	0.000	0.00	2.69	3.12	3.18	-0.06	4.440	0.000
(Sta 210)	2	161	15.4	36.04	36.03	0.00	0.551	0.000	0.000	0.00	2.74	3.18	3.17	0.02	4.438	0.002
	3	145	16.0	36.11	36.11	0.01	0.647	0.008	0.009	0.00	2.67	3.09	3.01	0.09	4.438	0.002
	4	128	16.8	36.23	36.23	0.00	0.650	0.009	0.018	-0.01	2.59	2.99	2.95	0.04	4.436	0.004
	5	118	17.2	36.28	36.29	-0.01	0.737	0.044	0.032	0.01	2.57	2.97	2.97	0.00	4.438	0.002
	6	102	18.2	36.36	36.36	0.00	0.812	0.074	0.041	0.03	2.60	3.01	3.01	0.00	4.433	0.007
	7	85	19.2	36.34	36.34	0.01	0.873	0.099	0.059	0.04	2.91	3.40	3.43	-0.03	4.429	0.011
	8	73	20.1	36.33	36.41	-0.08	1.172	0.219	0.086	0.13	3.34	3.94	3.94	0.01	4.421	0.019
	9	56	22.9	36.38	36.34	0.05	1.556	0.373	0.423	-0.05	3.69	4.39	4.60	-0.21	4.314	0.126
	10	40	25.1	35.90	35.89	0.01	1.012	0.154	0.207	-0.05	3.99	4.77	4.71	0.06	4.377	0.063
	11	24	25.1	35.86	35.86	0.01	0.911	0.114	0.144	-0.03	4.01	4.79	4.74	0.05	4.361	0.079
	12	9	25.1	35.86	35.86	0.01	0.807	0.072	0.144	-0.07	3.99	4.77	4.70	0.07	4.363	0.077

Upcast Bottle Data spreadsheet (Appendix 4 for Chapter 2) of salinity, chlorophyll, oxygen, and beam attenuation for R/V *Gyre* cruise 97G08

CTD & Sta #	Bottle #	Trip Depth	CTD Temp	CTD Salin	Bottle Salin	Salin error	Fluor volts	calc Chl	Bottle Chl	Chl error	raw DO	calib DO	Bottle DO	DO error	Xmiss volts	volts > min
97G08 CTD-1	1	173	24.9	36.74	-999	-999	0.650	0.026	0.024	0.00	3.41	4.55	4.51	0.04	4.388	0.004
(Sta 19)	2	155	25.7	36.56	36.56	-0.01	0.670	0.032	0.028	0.00	3.49	4.66	4.68	-0.02	4.388	0.004
	3	139	26.2	36.39	36.40	-0.01	0.778	0.066	0.060	0.01	3.59	4.80	4.77	0.02	4.382	0.010
	4	125	26.5	36.26	36.29	-0.03	0.939	0.116	0.095	0.02	3.71	4.96	4.93	0.04	4.369	0.023
	5	110	26.7	36.20	36.21	-0.01	1.181	0.191	0.162	0.03	3.79	5.07	5.07	0.00	4.358	0.034
	6	100	26.8	36.12	36.13	-0.01	1.140	0.178	0.207	-0.03	3.93	5.27	5.25	0.02	4.360	0.032
	7	81	27.4	36.07	36.06	0.01	1.026	0.143	0.158	-0.01	4.07	5.46	5.44	0.03	4.354	0.038
	8	65	28.0	36.10	36.10	0.00	0.905	0.105	0.115	-0.01	4.10	5.50	5.50	0.00	4.353	0.039
	9	50	28.6	36.09	36.08	0.01	0.852	0.089	0.098	-0.01	4.10	5.50	5.49	0.01	4.353	0.039
	10	34	30.0	36.14	36.14	0.00	0.766	0.062	0.055	0.01	3.80	5.09	5.11	-0.02	4.360	0.032
	11	21	30.2	36.14	36.14	0.00	0.720	0.048	0.044	0.00	3.75	5.02	5.05	-0.03	4.361	0.031
	12	5	30.2	36.14	36.13	0.01	0.664	0.031	0.047	-0.02	3.73	4.99	5.08	-0.09	4.363	0.029
97G08 CTD-2	1	167	15.9	36.10	36.18	-0.08	0.620	-999	0.010	-999	2.63	3.31	3.27	0.04	4.377	0.015
(Sta 31)	2	154	16.5	36.18	36.18	0.00	0.648	-0.005	0.019	-0.02	2.60	3.27	3.28	-0.01	4.382	0.010
	3	141	17.6	36.31	36.31	0.00	0.742	0.031	0.032	0.00	2.60	3.27	3.27	0.00	4.385	0.007
	4	126	18.8	36.41	36.41	0.00	0.838	0.068	0.063	0.01	2.72	3.43	3.45	-0.01	4.377	0.015
	5	111	19.9	36.44	36.42	0.01	0.830	0.065	0.057	0.01	2.98	3.79	3.78	0.01	4.365	0.027
	6	96	20.9	36.40	36.40	0.00	1.192	0.206	-999	-999	3.51	4.52	4.51	0.01	4.353	0.039
	7	81	22.0	36.47	36.47	0.00	1.321	0.256	0.270	-0.01	3.74	4.83	4.78	0.05	4.326	0.066
	8	66	23.0	36.47	36.46	0.00	1.292	0.245	0.261	-0.02	4.05	5.26	5.20	0.05	4.305	0.087
	9	51	24.6	36.36	36.36	-0.01	0.999	0.131	0.126	0.01	4.32	5.63	5.54	0.09	4.336	0.056
	10	36	27.5	36.26	36.26	0.00	0.965	0.118	0.135	-0.02	4.25	5.53	5.55	-0.02	4.335	0.057
	11	21	29.8	35.44	35.26	0.18	0.916	0.099	0.090	0.01	3.98	5.16	5.21	-0.05	4.321	0.071
	12	6	30.2	33.45	32.98	0.47	1.060	0.155	0.108	0.05	3.89	5.04	5.19	-0.15	4.240	0.152
97G08 CTD-3	1	170	13.9	35.79	-999	-999	0.518	-999	-999	-999	2.55	3.19	-999	-999	4.514	0.004
(Sta 43)	2	155	14.6	35.90	35.90	0.00	0.640	0.000	0.003	0.00	2.56	3.20	3.20	0.00	4.515	0.003
	3	140	15.3	36.01	36.01	0.00	0.640	0.000	0.003	0.00	2.54	3.17	3.20	-0.03	4.513	0.005
	4	125	16.2	36.14	36.14	0.00	0.646	0.002	0.016	-0.01	2.61	3.27	3.27	0.00	4.515	0.003
	5	110	17.1	36.25	36.24	0.00	0.800	0.053	0.047	0.01	2.60	3.25	3.20	0.05	4.513	0.005
	6	95	18.6	36.38	36.38	0.00	0.962	0.107	0.107	0.00	2.67	3.35	3.34	0.01	4.506	0.012
	7	81	19.6	36.41	36.41	0.00	1.062	0.140	0.126	0.01	2.92	3.70	3.72	-0.02	4.498	0.020
	8	65	21.6	36.49	36.47	0.02	1.286	0.214	0.234	-0.02	3.62	4.67	4.65	0.02	4.478	0.040
	9	50	23.1	36.45	36.45	0.00	1.100	0.153	0.153	0.00	4.15	5.40	5.34	0.06	4.471	0.047
	10	36	24.6	36.31	36.26	0.05	0.911	0.090	0.099	-0.01	4.36	5.69	5.67	0.03	4.476	0.042
	11	21	29.1	35.83	-999	-999	0.842	-999	-999	-999	4.04	5.25	-999	-999	4.471	0.047
	12	6	29.3	33.75	33.71	0.04	0.939	0.099	0.072	0.03	3.89	5.04	5.16	-0.12	4.425	0.093
97G08 CTD-4	1	852	4.8	34.94	34.93	0.00	0.505	-999	-999	-999	3.78	4.88	4.75	0.14	-999	-999
(Sta 62)	2	157	12.5	35.57	35.57	0.00	0.523	-999	0.003	-999	2.63	3.30	3.29	0.01	4.348	0.044
	3	142	13.3	35.72	35.72	0.00	0.606	0.003	0.003	0.00	2.66	3.37	3.37	0.00	4.357	0.035
	4	127	14.8	35.92	35.93	-0.01	0.585	-0.005	0.010	-0.01	2.76	3.48	3.49	-0.01	4.364	0.028
	5	110	16.0	36.10	36.11	-0.01	0.601	0.001	0.019	-0.02	2.82	3.56	3.57	-0.01	4.365	0.027
	6	97	17.9	36.33	36.34	0.00	0.786	0.066	0.045	0.02	2.82	3.56	3.56	0.01	4.360	0.032
	7	81	20.2	36.51	36.50	0.00	1.067	0.166	0.117	0.05	3.09	3.93	3.93	0.00	4.346	0.046
	8	66	21.5	36.51	36.50	0.01	1.313	0.253	0.306	-0.05	3.53	4.54	4.57	-0.03	4.295	0.097
	9	50	22.5	36.45	36.44	0.01	1.542	0.334	0.324	0.01	4.02	5.22	5.26	-0.05	4.244	0.148
	10	35	25.7	36.35	36.35	0.00	0.897	0.106	0.117	-0.01	4.32	5.63	5.60	0.03	4.305	0.087
	11	21	28.7	36.01	36.00	0.01	0.823	0.080	0.081	0.00	4.14	5.38	5.41	-0.03	4.305	0.087
	12	5	29.8	33.95	33.90	0.05	0.844	0.087	0.072	0.02	3.95	5.12	5.17	-0.05	4.260	0.132

Upcast Bottle Data spreadsheet (Appendix 4 for Chapter 2) of salinity, chlorophyll, oxygen, and beam attenuation for R/V *Gyre* cruise 97G08

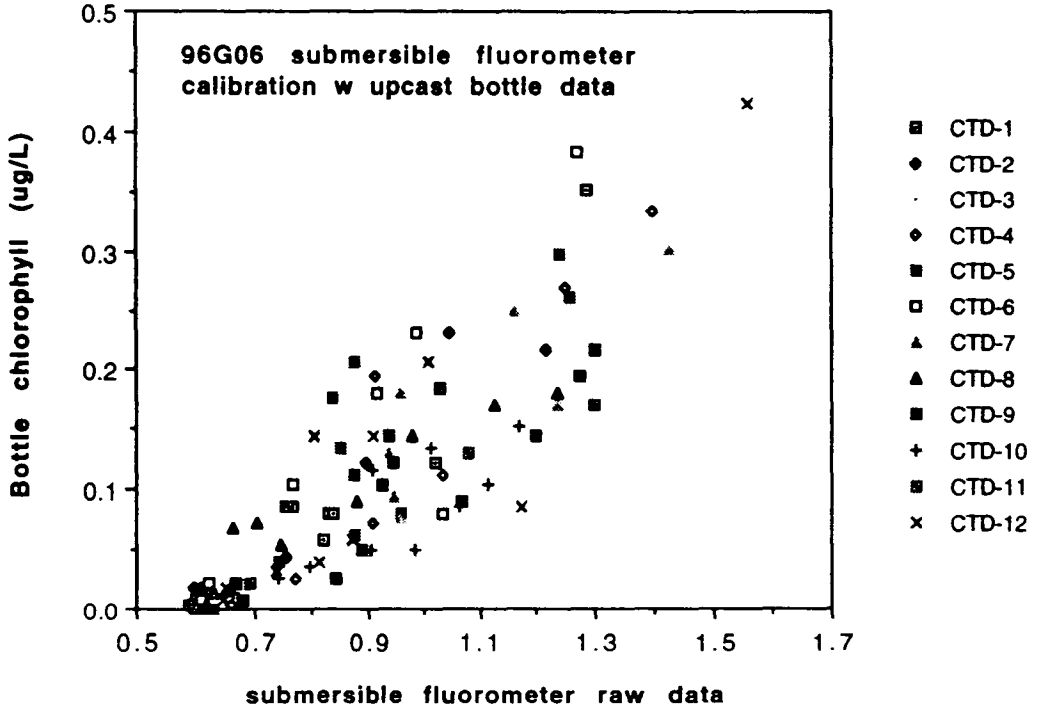
CTD & Sta #	Bottle #	Trip Depth	CTD Temp	CTD Salin	Bottle Salin	Salin error	Fluor volts	calc Chl	Bottle Chl	Chl error	raw DO	calib DO	Bottle DO	DO error	Xmiss volts	volts > min
97G08 CTD-5	1	167	25.5	36.59	36.59	0.00	0.676	0.022	0.041	-0.02	3.67	4.69	4.64	0.05	4.365	0.027
(Sta 83)	2	155	25.9	36.46	36.47	0.00	0.861	0.079	0.101	-0.02	3.68	4.71	4.68	0.02	4.363	0.029
	3	140	26.3	36.31	36.32	0.00	1.038	0.133	0.113	0.02	3.82	4.90	4.90	0.01	4.359	0.033
	4	126	26.6	36.22	36.23	0.00	1.115	0.157	0.171	-0.01	3.95	5.09	5.08	0.02	4.359	0.033
	5	111	26.9	36.14	36.14	0.00	1.087	0.148	0.124	0.02	4.08	5.28	5.26	0.02	4.358	0.034
	6	96	27.3	36.10	36.11	0.00	1.060	0.140	0.170	-0.03	4.13	5.36	5.38	-0.02	4.352	0.040
	7	81	27.7	36.08	36.09	-0.01	0.922	0.098	0.090	0.01	4.23	5.50	5.43	0.07	4.352	0.040
	8	67	28.2	36.08	36.08	0.00	0.882	0.085	0.079	0.01	4.24	5.51	5.50	0.01	4.349	0.043
	9	50	29.0	36.06	36.06	0.00	0.755	0.047	0.044	0.00	4.19	5.44	5.49	-0.06	4.361	0.031
	10	36	30.1	36.10	36.10	0.00	0.725	0.037	0.027	0.01	3.91	5.04	5.10	-0.06	4.363	0.029
	11	21	30.2	36.11	36.12	0.00	0.720	0.036	0.027	0.01	3.86	4.97	5.04	-0.07	4.360	0.032
	12	5	30.3	36.13	36.12	0.00	0.692	0.027	0.025	0.00	3.85	4.95	-999	-999	4.363	0.029
97G08 CTD-6	1	172	15.1	35.98	35.98	0.00	0.632	-0.033	0.003	-0.04	2.86	3.33	3.36	-0.02	4.369	0.023
(Sta 94)	2	155	15.6	36.06	36.06	0.00	0.651	-0.026	0.006	-0.03	2.82	3.29	3.26	0.04	4.375	0.017
	3	140	16.3	36.18	36.18	0.00	0.707	-0.006	0.013	-0.02	2.95	3.46	3.54	-0.09	4.379	0.013
	4	125	17.2	36.30	36.30	0.00	0.824	0.036	0.019	0.02	2.98	3.49	-999	-999	4.383	0.009
	5	111	18.5	36.39	36.40	0.00	0.846	0.044	0.038	0.01	2.75	3.20	3.30	-0.10	4.382	0.010
	6	96	19.8	36.42	36.42	0.00	0.998	0.099	0.060	0.04	3.12	3.67	3.46	0.20	4.371	0.021
	7	81	20.7	36.37	36.38	-0.01	1.110	0.139	0.099	0.04	3.72	4.41	4.05	0.36	4.365	0.027
	8	66	21.5	36.37	36.36	0.01	1.446	0.260	0.324	-0.06	4.24	5.06	5.22	-0.17	4.342	0.050
	9	51	22.6	36.31	36.31	-0.01	1.188	0.167	0.162	0.01	4.55	5.45	5.30	0.15	4.337	0.055
	10	35	24.7	36.29	36.30	-0.01	0.971	0.089	0.090	0.00	4.52	5.40	5.03	0.37	4.343	0.049
	11	21	27.1	35.46	35.51	-0.05	0.915	0.069	0.063	0.01	4.39	5.25	5.60	-0.35	4.333	0.059
	12	6	30.0	33.56	33.57	-0.01	0.943	0.079	0.045	0.03	4.05	4.82	5.20	-0.37	4.278	0.114
97G08 CTD-7	1	170	15.5	36.03	36.04	-0.01	0.645	-0.007	0.001	-0.01	2.71	3.35	3.26	0.09	4.352	0.040
(Sta 110)	2	155	16.3	36.16	36.17	-0.01	0.699	0.010	0.006	0.00	2.71	3.36	3.32	0.03	4.358	0.034
	3	140	17.3	36.28	36.29	0.00	0.732	0.020	0.016	0.00	2.70	3.35	3.32	0.03	4.364	0.028
	4	125	18.1	36.36	36.36	0.00	0.825	0.049	0.028	0.02	2.66	3.32	3.34	-0.02	4.366	0.026
	5	109	20.1	36.53	36.53	0.00	1.050	0.120	0.082	0.04	2.95	3.67	3.74	-0.07	4.338	0.054
	6	95	20.8	36.44	36.42	0.02	1.131	0.145	0.135	0.01	3.54	4.44	4.56	-0.12	4.357	0.035
	7	81	21.4	36.33	36.33	0.00	1.280	0.192	0.207	-0.01	4.15	5.23	5.30	-0.06	4.337	0.055
	8	66	22.3	36.33	36.34	0.00	1.126	0.144	0.153	-0.01	4.49	5.67	5.63	0.04	4.333	0.059
	9	50	23.4	36.29	36.29	0.00	0.949	0.088	0.108	-0.02	4.64	5.67	5.68	0.00	4.336	0.056
	10	35	25.0	36.34	36.34	-0.01	0.895	0.071	0.088	-0.02	4.50	5.68	5.60	0.09	4.326	0.064
	11	20	28.2	36.10	36.09	0.01	0.820	0.048	0.063	-0.02	4.27	5.39	5.38	0.01	4.326	0.066
	12	6	30.1	33.33	33.37	-0.04	0.916	0.078	0.076	0.00	4.10	5.17	5.17	0.00	4.254	0.138
97G08 CTD-8	1	169	14.0	35.81	35.81	0.00	0.543	-999	0.003	-999	2.64	3.21	3.21	0.00	4.347	0.045
(Sta 130)	2	154	14.7	35.91	35.91	0.00	0.590	-0.036	0.006	-0.04	2.65	3.22	3.22	0.00	4.360	0.032
	3	140	15.2	35.99	35.99	0.00	0.676	0.005	0.010	0.00	2.67	3.24	3.17	0.07	4.365	0.027
	4	125	16.6	36.17	36.17	-0.01	0.686	0.010	0.035	-0.02	2.63	3.19	3.23	-0.03	4.365	0.027
	5	111	17.5	36.31	36.31	0.00	0.853	0.091	0.060	0.03	2.78	3.39	3.37	0.02	4.371	0.021
	6	96	19.2	36.48	36.48	0.00	0.965	0.145	0.090	0.06	2.95	3.62	3.57	0.04	4.364	0.028
	7	82	20.3	36.47	36.46	0.01	1.133	0.227	0.189	0.04	3.23	3.99	4.05	-0.06	4.346	0.046
	8	66	21.5	36.41	36.41	0.00	1.414	0.363	0.422	-0.06	3.81	4.77	4.75	0.02	4.291	0.101
	9	51	23.9	36.41	36.42	0.00	1.022	0.173	0.181	-0.01	4.38	5.54	5.45	0.08	4.330	0.062
	10	35	25.7	36.39	36.39	0.00	0.872	0.100	0.108	-0.01	4.46	5.64	5.57	0.08	4.328	0.064
	11	20	28.8	35.93	35.92	0.01	0.774	0.053	0.072	-0.02	4.33	5.47	5.42	0.05	4.336	0.056
	12	5	30.7	33.75	33.68	0.07	0.863	0.096	0.054	0.04	4.05	5.10	5.34	-0.25	4.276	0.116

Upcast Bottle Data spreadsheet (Appendix 4 for Chapter 2) of salinity, chlorophyll, oxygen, and beam attenuation for R/V *Gyre* cruise 97G08

CTD & Sta #	Bottle #	Trip Depth	CTD Temp	CTD Salin	Bottle Salin	Salin error	Fluor volts	calc Chl	Bottle Chl	Chl error	raw DO	calib DO	Bottle DO	DO error	Xmiss volts	volts > min
97G08 CTD-9	1	170	14.6	35.90	35.90	0.00	0.526	-999	0.003	-999	2.65	3.24	3.20	0.03	4.309	0.083
(Sta 147)	2	155	15.3	36.00	36.00	0.00	0.542	-999	0.006	-999	2.67	3.27	3.26	0.01	4.321	0.071
	3	140	15.9	36.09	36.10	-0.01	0.536	-999	0.006	-999	2.71	3.32	3.31	0.01	4.339	0.053
	4	125	16.8	36.22	36.22	0.00	0.618	0.014	0.010	0.00	2.76	3.39	3.40	-0.01	4.348	0.044
	5	110	17.8	36.31	36.33	-0.01	0.734	0.052	0.041	0.01	2.75	3.37	3.36	0.02	4.358	0.034
	6	95	19.2	36.42	36.42	0.00	0.839	0.086	0.076	0.01	2.87	3.53	3.56	-0.04	4.355	0.037
	7	80	20.9	36.41	36.41	0.00	1.066	0.160	0.126	0.03	3.62	4.52	4.60	-0.09	4.328	0.064
	8	65	22.1	36.44	36.44	0.00	1.245	0.218	0.243	-0.03	4.05	5.09	5.05	0.04	4.310	0.082
	9	50	23.0	36.36	36.31	0.05	1.053	0.155	0.171	-0.02	4.49	5.66	5.69	-0.03	4.315	0.077
	10	35	26.0	36.43	36.45	-0.02	0.877	0.098	0.099	0.00	4.33	5.46	5.33	0.13	4.320	0.072
	11	20	29.4	35.92	35.97	-0.05	0.807	0.076	0.144	-0.07	4.27	5.37	5.40	-0.03	4.313	0.079
	12	5	30.9	31.66	31.47	0.19	0.955	0.124	0.072	0.05	4.20	5.29	5.34	-0.05	4.186	0.206
97G08 CTD-10	1	88	19.3	36.36	36.35	0.01	1.241	0.199	0.135	0.06	2.92	3.42	3.46	-0.04	4.280	0.112
(Sta 154)	2	78	19.7	36.39	36.38	0.01	1.245	0.200	0.153	0.05	3.11	3.68	3.48	0.20	4.338	0.054
	3	68	20.9	36.41	36.41	0.00	1.311	0.221	0.234	-0.01	3.68	4.42	4.46	-0.03	4.319	0.073
	4	60	21.6	36.38	36.38	0.00	1.432	0.260	0.333	-0.07	4.11	4.99	4.97	0.02	4.272	0.120
	5	50	22.7	36.33	36.34	-0.01	0.995	0.120	0.117	0.00	4.69	5.76	5.67	0.09	4.325	0.067
	6	41	24.4	36.45	36.44	0.01	0.93	0.100	0.107	-0.01	4.46	5.46	5.41	0.05	4.327	0.065
	7	31	26.2	36.33	36.33	0.00	0.813	0.062	0.091	-0.03	4.58	5.61	5.49	0.11	4.327	0.065
	8	21	28.0	36.19	36.12	0.08	0.766	0.047	0.091	-0.04	4.56	5.58	5.55	0.03	4.320	0.072
	9	11	30.1	34.63	34.48	0.14	0.805	0.060	0.063	0.00	4.22	5.14	5.19	-0.05	4.311	0.081
	10	5	30.1	34.12	34.11	0.00	0.861	0.078	0.060	0.02	4.18	5.05	5.16	-0.11	4.293	0.099
	11	1	30.4	33.62	33.60	0.02	0.866	0.079	0.060	0.02	4.09	4.96	5.08	-0.11	4.300	0.092
	12	1	30.3	33.91	33.82	0.09	0.882	0.084	0.060	0.02	4.10	4.97	5.14	-0.16	4.300	0.092
97G08 CTD-11	1	171	15.3	36.02	36.02	0.00	0.477	-999	0.006	-999	2.89	3.44	3.44	0.00	4.293	0.099
(Sta 160)	2	156	15.9	36.09	36.09	0.00	0.597	-0.002	0.006	-0.01	2.83	3.37	3.38	-0.01	4.326	0.066
	3	140	16.5	36.18	36.18	0.00	0.603	0.000	0.010	-0.01	2.77	3.30	3.31	-0.01	4.315	0.077
	4	125	16.9	36.22	36.24	-0.02	0.634	0.012	0.019	-0.01	2.75	3.27	3.26	0.01	4.324	0.068
	5	110	17.9	36.37	36.37	0.00	0.729	0.047	0.038	0.01	2.87	3.42	3.40	0.02	4.341	0.051
	6	95	19.4	36.51	36.52	-0.01	0.839	0.088	0.069	0.02	2.98	3.56	3.58	-0.02	4.355	0.037
	7	81	20.4	36.49	36.50	0.00	0.978	0.139	0.081	0.06	3.31	3.96	3.98	-0.02	4.348	0.044
	8	65	21.6	36.48	36.54	-0.06	1.233	0.233	0.270	-0.04	3.92	4.70	4.64	0.06	4.314	0.078
	9	50	23.0	36.40	36.41	-0.01	1.046	0.164	0.162	0.00	4.49	5.38	5.46	-0.08	4.320	0.072
	10	35	24.9	36.44	36.47	-0.04	0.904	0.112	0.108	0.00	4.50	5.40	5.27	0.13	4.317	0.075
	11	20	28.3	36.16	36.18	-0.02	0.803	0.074	0.099	-0.02	4.52	5.43	5.49	-0.06	4.319	0.073
	12	5	30.9	32.64	32.69	-0.06	0.844	-999	-999	-999	4.31	5.17	5.20	-0.02	4.243	0.149
97G08 CTD-12	1	170	15.5	36.06	36.06	0.00	0.639	0.000	0.000	0.00	3.13	3.74	3.69	0.05	4.346	0.046
(Sta 180)	2	156	16.0	36.13	36.13	0.00	0.542	-999	0.003	-999	3.12	3.73	3.73	0.01	4.348	0.044
	3	140	16.5	36.21	36.21	0.00	0.643	0.001	0.010	-0.01	3.10	3.71	3.74	-0.03	4.359	0.033
	4	126	17.3	36.30	36.30	0.00	0.728	0.031	0.025	0.01	2.93	3.49	3.48	0.00	4.361	0.031
	5	111	18.4	36.44	36.44	0.00	0.797	0.055	0.054	0.00	3.01	3.59	3.60	-0.01	4.363	0.029
	6	95	19.4	36.43	36.43	0.00	0.841	0.070	0.069	0.00	3.13	3.75	3.76	-0.01	4.360	0.032
	7	80	20.7	36.36	36.37	0.00	0.999	0.125	0.099	0.03	3.88	4.72	4.75	-0.03	4.346	0.046
	8	65	21.7	36.39	36.39	0.00	1.178	0.187	0.198	-0.01	4.28	5.23	5.19	0.04	4.326	0.066
	9	50	22.6	36.34	36.34	0.00	1.023	0.133	0.144	-0.01	4.65	5.71	5.66	0.05	4.339	0.053
	10	36	24.8	36.45	36.46	-0.01	0.941	0.105	0.108	0.00	4.42	5.40	5.33	0.07	4.332	0.060
	11	20	27.1	35.68	35.60	0.08	0.819	0.062	0.072	-0.01	4.50	5.51	5.57	-0.06	4.328	0.064
	12	6	30.5	33.76	33.74	0.02	0.89	0.087	0.072	0.01	4.13	5.03	5.14	-0.11	4.297	0.095

First order polynomial fit to submersible fluorometer and DO sensor data (Appendix 5 for Chapter 2) for R/V *Gyre* cruises 96G06 and 97G08

Cruise	CTD & Sta #	first-order fit slope (m)	to profiling intercept (b)	fluorometer data: r2	first-order fit slope (m)	to profiling intercept (b)	DO sensor data: r2
96G06	1 (Sta 12)	0.58622	-0.423	0.934 (n=6)	1.4249	-0.364	0.996 (n=12)
	2 (Sta 19)	0.38429	-0.222	0.923 (n=7)	1.4583	-0.389	0.992 (n=7)
	3 (Sta 42)	0.43735	-0.212	[all data: 1+2]	1.4455	-0.345	[all data: 1+2]
	4 (Sta 58)	0.42557	-0.273	0.886 (n=8)	1.0978	0.190	0.911 (n=11)
	5 (Sta 77)	0.41715	-0.244	0.789 (n=11)	1.3521	-0.294	0.996 (n=12)
	6 (Sta 87)	0.48980	-0.291	0.813 (n=9)	1.2763	-0.286	0.978 (n=12)
	7 (Sta 103)	0.35191	-0.211	0.808 (n=8)	1.2391	-0.167	0.998 (n=10)
	8 (Sta 129)	0.28025	-0.150	0.916 (n=10)	1.4017	-0.710	0.988 (n=12)
	9 (Sta 147)	0.30556	-0.190	0.845 (n=9)	1.2387	-0.238	0.986 (n=12)
	10 (Sta 157)	0.22897	-0.136	0.725 (n=11)	1.3264	-0.443	0.989 (n=12)
	11 (Sta 188)	0.20984	-0.100	0.817 (n=9)	1.3647	-0.606	0.992 (n=12)
	12 (Sta 210)	0.40065	-0.251	0.776 (n=10)	1.2662	-0.287	0.990 (n=12)
				ensemble n=98			ensemble n=124
97G08	1 (Sta 19)	0.30969	-0.175	0.925 (n=12)	1.3777	-0.147	0.987 (n=12)
	2 (Sta 31)	0.38841	-0.257	0.946 (n=10)	1.3706	-0.295	0.996 (n=12)
	3 (Sta 43)	0.33164	-0.212	0.966 (n=10)	1.3856	-0.348	0.998 (n=10)
	4 (Sta 62)	0.35429	-0.212	0.945 (n=10)	1.3782	-0.325	0.997 (n=12)
	5 (Sta 83)	0.30540	-0.184	0.896 (n=12)	1.4491	-0.628	0.977 (n=11)
	6 (Sta 94)	0.35977	-0.260	0.873 (n=12)	1.2441	-0.219	0.929 (n=11)
	7 (Sta 110)	0.31422	-0.210	0.925 (n=12)	1.3011	-0.168	0.996 (n=12)
	8 (Sta 130)	0.48425	-0.322	0.904 (n=11)	1.3382	-0.329	0.992 (n=12)
	9 (Sta 147)	0.32426	-0.186	0.762 (n=9)	1.3175	-0.250	0.997 (n=12)
	10 (Sta 154)	0.31891	-0.197	0.789 (n=12)	1.3193	-0.430	0.981 (n=12)
	11 (Sta 160)	0.37012	-0.223	0.900 (n=10)	1.2152	-0.067	0.997 (n=12)
	12 (sta 180)	0.37419	-0.222	0.961 (n=11)	1.2856	-0.274	0.996 (n=12)
				ensemble n=131			ensemble n=140


96G06 submersible fluorometer
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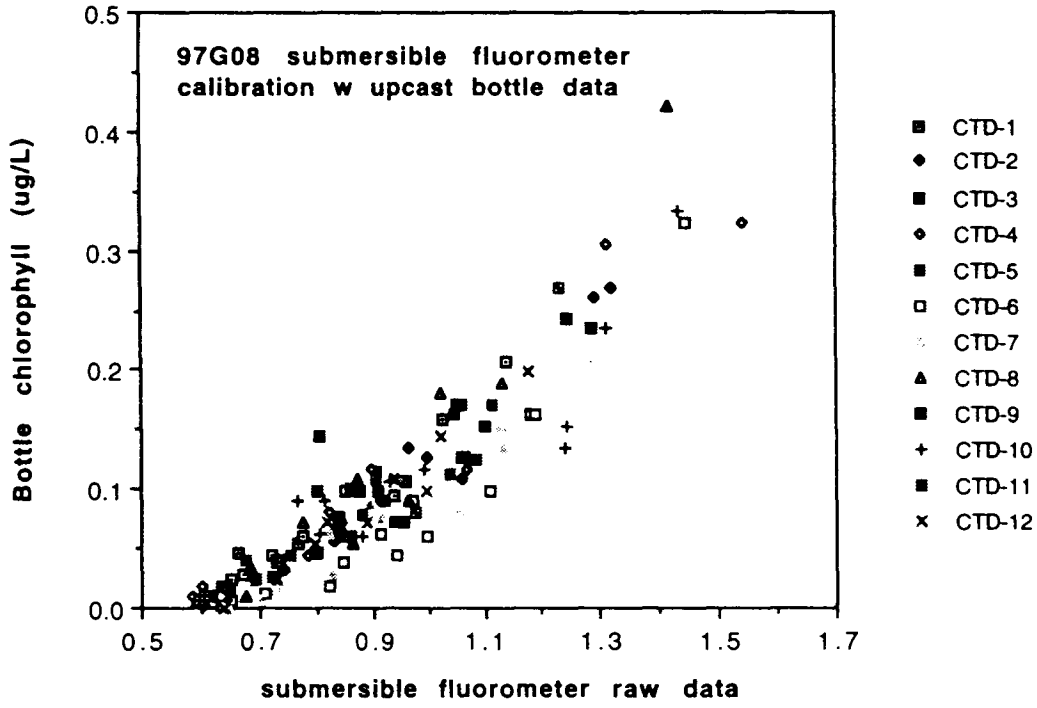
0.4
0.3
0.2
0.1
0.0
0.5
0.7
0.9
1.1
1.3
1.5
1.7
submersible fluorometer raw data
CTD-1
CTD-2
CTD-3
CTD-4
CTD-5
CTD-6
CTD-7
CTD-8
CTD-9
CTD-10
CTD-11
CTD-12


97G08 submersible fluorometer
calibration w upcast bottle data
Bottle chlorophyll (ug/L)
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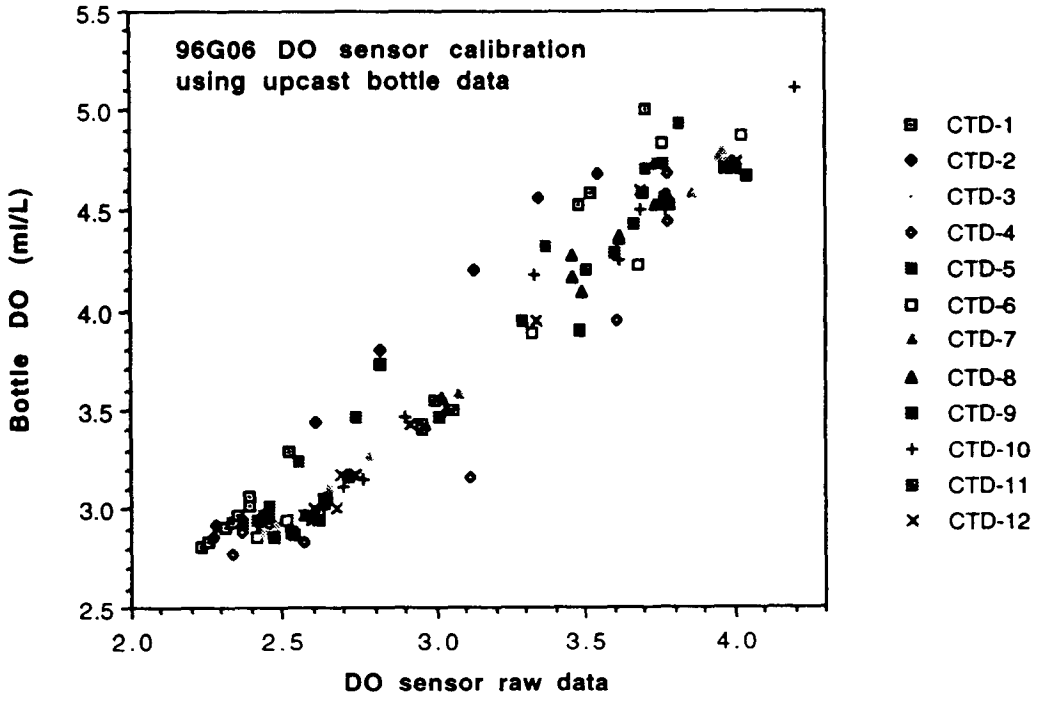
0.4
0.3
0.2
0.1
0.0
0.5
0.7
0.9
1.1
1.3
1.5
1.7
submersible fluorometer raw data
CTD-1
CTD-2
CTD-3
CTD-4
CTD-5
CTD-6
CTD-7
CTD-8
CTD-9
CTD-10
CTD-11
CTD-12


96G06 DO sensor calibration
using upcast bottle data
Bottle DO (ml/L)
DO sensor raw data
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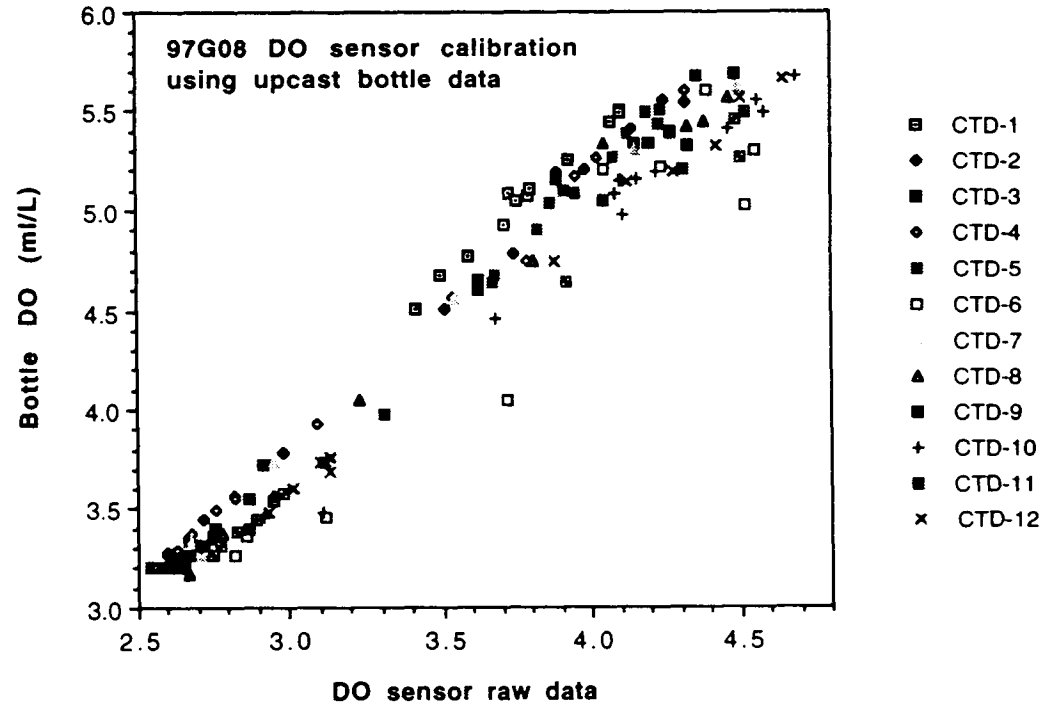
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2.5
3.0
3.5
4.0
CTD-1
CTD-2
CTD-3
CTD-4
CTD-5
CTD-6
CTD-7
CTD-8
CTD-9
CTD-10
CTD-11
CTD-12


97G08 DO sensor calibration
using upcast bottle data
Bottle DO (ml/L)
DO sensor raw data
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5.5
5.0
4.5
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3.0
3.5
4.0
4.5
CTD-1
CTD-2
CTD-3
CTD-4
CTD-5
CTD-6
CTD-7
CTD-8
CTD-9
CTD-10
CTD-11
CTD-12

Upcast Bottle Data spreadsheet (Appendix 6 for Chapter 2) for autoanalyzer nutrient analyses for R/V *Gyre* cruise 96G06

CTD & Sta #	Bottle #	Trip Depth	comments	PO4	NO3	NO2	SiOH4
96G06 CTD-1	1	250		[1.63]	[26.7]	0.02	[14.0]
(Sta 12)	2	225		[1.32]	[20.4]	0.03	[9.1]
	3	200		[1.16]	[18.2]	0.03	[7.8]
	4	175		1.29	21.7	0.05	9.4
	5	151		1.11	18.0	0.05	7.4
	6	125		0.94	15.9	0.07	6.2
	7	101		0.76	13.5	0.07	4.5
	8	81		0.62	7.8	0.10	1.9
	9	60		0.27	3.0	0.22	[0.4]
	10	40		0.15	0.4	0.01	1.6
	11	20		0.05	0.4	0.05	1.3
	12	3		[0.51]	0.4	0.05	1.4
96G06 CTD-2	1	252		1.01	17.6	0.03	7.0
(Sta 19)	2	228		0.85	15.4	0.03	5.7
	3	200		0.40	6.6	0.03	1.8
	4	176		[0.94]	3.7	0.05	1.6
	5	151		[1.39]	2.7	0.06	[3.1]
	6	122		0.09	0.7	0.07	0.8
	7	101		0.02	0.3	0.03	0.8
	8	77		0.10	0.2	0.02	0.9
	9	-999	no trip	-999	-999	-999	-999
	10	-999	no trip	-999	-999	-999	-999
	11	-999	no trip	-999	-999	-999	-999
	12	-999	no trip	-999	-999	-999	-999
96G06 CTD-3	1	-999	no trip	-999	-999	-999	-999
(Sta 42)	2	-999	no trip	-999	-999	-999	-999
	3	-999	no trip	-999	-999	-999	-999
	4	-999	no trip	-999	-999	-999	-999
	5	-999	no trip	-999	-999	-999	-999
	6	-999	no trip	-999	-999	-999	-999
	7	-999	no trip	-999	-999	-999	-999
	8	-999	no trip	-999	-999	-999	-999
	9	-999	no trip	-999	-999	-999	-999
	10	-999	no trip	-999	-999	-999	-999
	11	-999	no trip	-999	-999	-999	-999
	12	-999	no trip	-999	-999	-999	-999
96G06 CTD-4	1	224		[1.13]	[17.1]	0.03	[7.6]
(Sta 58)	2	199		[1.12]	[20.9]	0.03	[9.7]
	3	176		[1.01]	[14.9]	0.03	[6.3]
	4	151		1.04	16.9	0.04	7.3
	5	124		0.96	16.6	0.03	6.8
	6	105		0.87	15.7	0.04	6.0
	7	90		[0.76]	[13.8]	0.05	[5.1]
	8	75		0.58	10.1	0.05	4.2
	9	60		0.27	3.8	0.06	2.5
	10	48		0.09	0.3	0.33	2.2
	11	-999	no trip	-999	-999	-999	-999
	12	10		0.10	0.3	0.02	0.8

Upcast Bottle Data spreadsheet (Appendix 6 for Chapter 2) for autoanalyzer nutrient analyses for R/V *Gyre* cruise 96G06

CTD & Sta #	Bottle #	Trip Depth	comments	PO4	NO3	NO2	SiOH4
96G06 CTD-5	1	225		[1.18]	[21.0]	0.04	[8.6]
(Sta 77)	2	199		[0.86]	[14.3]	0.03	[5.0]
	3	176		0.96	17.3	0.03	7.2
	4	150		[0.73]	[11.9]	0.03	[4.1]
	5	126		0.76	14.1	0.04	5.1
	6	106		0.52	9.9	0.06	3.2
	7	91		0.37	6.9	0.07	2.4
	8	75		0.07	0.6	0.26	1.6
	9	60		0.01	0.1	0.03	1.0
	10	45		0.01	0.1	0.03	1.0
	11	31		0.01	0.1	0.03	1.0
	12	5		0.01	0.1	0.00	1.4
96G06 CTD-6	1	850		1.82	27.9	0.04	26.8
(Sta 87)	2	201		1.45	24.1	0.05	11.2
	3	176		1.34	22.5	0.06	9.5
	4	151		1.18	20.4	0.05	7.9
	5	126		0.90	14.6	0.04	5.0
	6	106		0.77	13.9	0.06	4.3
	7	92		0.73	11.9	0.06	3.5
	8	75		0.55	9.6	0.08	2.5
	9	60		0.20	2.6	0.20	1.3
	10	45		0.02	0.0	0.04	[4.1]
	11	30		0.05	0.0	0.05	0.8
	12	11		0.02	0.2	0.03	1.3
96G06 CTD-7	1	851		2.00	30.8	0.04	26.2
(Sta 103)	2	202		1.12	19.4	0.04	7.7
	3	172		0.98	17.2	0.04	6.0
	4	151		[0.67]	[10.6]	0.04	[2.7]
	5	-999	no trip	-999	-999	-999	-999
	6	100		0.53	10.1	0.09	2.6
	7	75		0.18	2.6	0.19	1.2
	8	60		0.03	0.0	0.14	0.3
	9	51		0.03	0.1	0.05	0.6
	10	31		0.03	0.0	0.05	0.5
	11	21		0.04	0.1	0.04	0.9
	12	11		0.06	0.2	0.04	1.0
96G06 CTD-8	1	251		0.44	9.4	0.02	1.9
(Sta 129)	2	222		0.37	7.5	0.02	1.6
	3	199		[0.25]	[4.8]	0.02	[0.6]
	4	174		0.22	4.4	0.03	0.9
	5	154		0.07	1.0	0.03	0.3
	6	127		0.08	0.6	0.05	0.5
	7	102		0.08	0.7	0.04	0.4
	8	81		0.05	0.0	0.01	0.4
	9	59		0.04	0.0	0.02	0.5
	10	41		0.05	0.1	0.02	0.9
	11	21		0.03	0.0	0.02	0.6
	12	5		0.03	0.1	0.00	1.1

Upcast Bottle Data spreadsheet (Appendix 6 for Chapter 2) for autoanalyzer nutrient analyses for R/V *Gyre* cruise 96G06

CTD & Sta #	Bottle #	Trip Depth	comments	PO4	NO3	NO2	SiOH4
96G06 CTD-9	1	177		1.13	22.1	0.04	8.6
(Sta 147)	2	161		[1.02]	[19.4]	0.05	[6.6]
	3	146		0.97	19.5	0.06	6.9
	4	130		0.88	17.6	0.02	6.3
	5	115		0.80	16.0	0.02	4.9
	6	101		0.50	9.0	0.02	2.4
	7	85		0.48	9.0	0.05	2.7
	8	69		0.26	4.2	0.14	2.6
	9	56		0.02	0.1	0.02	0.5
	10	39		0.03	0.1	0.02	0.6
	11	22		0.05	0.1	0.02	0.5
	12	11		0.02	0.1	0.02	0.5
96G06 CTD-10	1	178		0.96	20.8	0.08	7.0
(Sta 157)	2	163		[0.71]	[14.1]	0.09	[3.9]
	3	145		[0.71]	[14.9]	0.09	[4.4]
	4	129		0.70	15.8	0.09	4.6
	5	114		0.61	14.1	0.10	4.3
	6	101		[0.31]	[8.3]	0.09	[2.8]
	7	87		0.34	8.3	0.12	2.7
	8	72		[0.15]	[1.1]	0.28	[1.4]
	9	55		0.18	1.3	0.32	2.3
	10	42		0.13	0.3	0.43	1.9
	11	27		0.09	0.1	0.52	1.2
	12	11		0.13	0.3	0.08	1.9
96G06 CTD-11	1	250		0.46	7.6	0.07	1.9
(Sta 188)	2	225		[0.33]	[5.3]	0.06	[0.8]
	3	201		0.36	6.4	0.07	1.6
	4	175		0.27	4.7	0.07	0.8
	5	152		0.17	2.4	0.07	0.2
	6	125		0.10	1.0	0.08	0.1
	7	105		0.05	0.3	0.08	0.2
	8	96		0.04	0.2	0.07	0.4
	9	82		0.04	0.2	0.06	0.3
	10	60		0.03	0.2	0.07	0.3
	11	40		0.04	0.2	0.07	0.6
	12	21		0.06	0.3	0.06	0.3
96G06 CTD-12	1	174		[0.91]	[15.3]	0.06	[5.4]
(Sta 210)	2	161		[0.85]	[14.1]	0.06	[4.5]
	3	145		0.87	15.0	0.06	5.0
	4	128		0.80	14.4	0.07	4.9
	5	118		0.63	10.3	0.06	3.1
	6	102		0.54	9.3	0.08	3.1
	7	85		0.42	7.5	0.09	2.6
	8	73		0.10	1.5	0.08	0.1
	9	56		0.04	0.1	0.15	0.3
	10	40		0.01	0.2	0.06	0.1
	11	24		0.03	0.2	0.06	0.3
	12	9		0.01	0.2	0.06	0.2

Other Hydrographic Data

To keep the length of hard-copy supporting tables to a minimum, no other raw data or metadata from underway hydrographic survey (XBT, SAIL) and from the CTD stations are included in this appendix. However, these raw data and metadata are archived by the GulfCet Data Management Office (DMO) and are available by ftp by query to the GulfCet II web site: http://www.tamug.tamu.edu/gulfcet/.

- **XBT raw data (R/V *Oregon II* and R/V *Gyre* cruises)**:

XBT processed rawdata (EDF files) that are created by the Sippican manufacturer's software are archived by the GulfCet DMO. Metadata files (SPLINEDXBT files) in which the rawdata depth was first corrected for drop-rate error and then salinity was splined to each (Z,T) rawdata pair are also available. The method is summarized in section 2.2.1 of Volume 2 and described in more detail by Biggs 1992 (J. Geophys. Res. 97: 2143-2154). Additional metadata files (CRUNCHEDXBT files) which include density and geopotential anomaly calculated as described by Biggs 1992 are also available.

- **CTD raw data (R/V *Oregon II* and R/V *Gyre* cruises):**

One meter averaged processed rawdata (CNV files) that are created by the SeaBird manufacturer's software from sensor calibration files (CON files) are archived by the GulfCet DMO. Metadata files (CRUNCHEDCTD files) which include density and geopotential anomaly calculations are also available.

- **SAIL data (R/V *Gyre* cruises only)**:

Data from navigation sensors and from the temperature, conductivity, and fluorescence sensors tied in to R/V *Gyre*'s Serial ASCII Interface Loop were scanned and written to disk every two minutes. Four spreadsheets that summarize these SAIL data separately for Leg One and Leg Two of cruise 96G06 and for Leg One and Leg Two of cruise 97G08 are available by ftp from the GulfCet DMO. The spreadsheets from cruise 96G06 have 12 columns of data:

Column 1: date-month-year
Column 2: Greenwich Mean Time (GMT)
Column 3: Latitude N (decimal degrees, positive for convention for North Latitude)
Column 4: Longitude W (decimal degrees, negative by convention for West Longitude)
Column 5: Ship Heading
Column 6: Ship Speed
Column 7: Station Work (comments field to describe XBT, CTD, or other over-the-side work)
Column 8: flow-thru Temp = sea surface temperature (degrees C)
Column 9: flow-thru Salin = sea surface salinity (practical salinity units)
Column 10: flow-thru Fluor = sea surface fluorescence (mvolts rawdata signal used to calc Chl)
Column 11: calc Chl = chlorophyll concentration (μg/L) calculated from regression of rawdata in column 10 on measured concentration data in column 12
Column 12: chl sample = extracted chlorophyll concentration (μg/L) measured on one liter samples drawn at intervals from the flow-thru lines to the fluorometer

In 1997, meteorological sensors to measure wind speed and wind direction were tied in to the SAIL system, so the spreadsheets from cruise 97G08 have two additional columns of data:

Column 13: Wind speed (true knots, by difference after subtracting ship speed)
Column 14: Wind direction (true heading, by difference after subtracting ship heading)

- **ADCP data (R/V *Gyre* cruises only):**

Along-track current velocity at 10 m depth, measured by 153 kHz acoustic Doppler current profiler during R/V *Gyre* cruises 96G06 and 97G08, are summarized graphically in Figures 2.8 and 2.10 in Volume II, and gridded ADCP current vectors within the deepwater focal and continental margin areas on these two cruises were summarized graphically in Figures 2.9 and 2.11 in Volume II. The raw data and metadata from the ADCP are archived by the NEGOM Data Management Office and are available on request from Dr. Matthew Howard (mkhoward@tamu.edu).

The acoustic backscatter portion of the metadata from the ADCP were processed by Mr. Patrick Ressler, who has converted these metadata to Predicted Mean Biomass (PMB: see Figures 3.14 through 3.26 in Volume II). This conversion and other ongoing modelling efforts will be described in detail as part of Mr. Ressler's PhD dissertation research, which is in progress with completion expected for December 2000. Please contact Ressler (pressler@ocean.tamu.edu) for additional details.

II. BIOLOGICAL OCEANOGRAPHY

97G8 Myctophid Data - A comparison of the Dominant Myctophid Genera in Three Isaacs Kidd Midwater Trawls (15') and of the Genera Common to All Three for Cruise Gyre 97G8

CYCLONE MAR-NW (IKMT09)			CONFLUENCE (IKMT07)			ANTICYCLONE (IKMT11)		
2358-0106 hrs			2300-0000 hrs			2147-2300 hrs		
9-Aug-97			7-Aug-97			9-Aug-97		
Night, post-midnight			Night, pre-midnight			Night, pre-midnight		
Depth (m) = cos(45) *mwo		153	Depth (m) = cos(45) *mwo('		221	Depth (m) = cos(45) *mwo(		141
Flowf (counts)		645439	Flowf (counts)		313056	Flowf (counts)		992708
Flowi (counts)		493051	Flowi (counts)		167015	Flowi (counts)		793766
Volume (m3) = flow counts		67203.108	Volume (m3) = flow counts		64404.081	Volume (m3) = flow counts		87733.422
(Note: **BOLDED** represents Genera common to all trawls in set.)								
	#	#/Area (#/m**2)		#	#/Area (#/m**2)		#	#/Area (#/m**2)
Diaphus	93	0.212	**Ceratoscopelus**	47	0.161	**Diaphus**	38	0.061
Lampanyctus	69	0.157	**Diaphus**	32	0.110	**Benthosema**	23	0.037
Ceratoscopelus	51	0.116	Lampanyctus	23	0.079	**Lepidophanes**	16	0.026
Benthosema	40	0.091	**Benthosema**	16	0.055	**Diogenichthys**	8	0.013
Lepidophanes	31	0.071	Notolynchus	15	0.051	**Ceratoscopelus**	4	0.006
Hygophum	23	0.052	**Lepidophanes**	8	0.027	**Bolinichthys**	2	0.003
Diogenichthys	10	0.023	Notoscopelus	7	0.024	**Myctophum**	1	0.002
Bolinichthys	9	0.020	**Diogenichthys**	4	0.014	**Hygophum**	1	0.002
Myctophum	5	0.011	**Myctophum**	4	0.014			
Notoscopelus	4	0.009	Lampadena	2	0.007			
Notolynchus	3	0.007	**Bolinichthys**	1	0.003			
Lampadena	3	0.007	**Hygophum**	1	0.003			
Lobianchia	1	0.002	Lobianchia	1	0.003			
			Symbolophorus	1	0.003			
Unknown	15	0.034	Unknown	5	0.017	Unknown	1	0.002
TOTAL (w/Unknown)	357	0.813	TOTAL (w/Unknown)	167	0.573	TOTAL (w/Unknown)	94	0.151
13 Genera			14 Genera			08 Genera		
357 fish			167 fish			94 fish		
COMPARISON OF COMMON GENERA								
IKMT9			IKMT7			IKMT11		
		#/m**2			#/m**2			#/m**2
Benthosema		0.091	**Benthosema**		0.055	**Benthosema**		0.037
Bolinichthys		0.020	**Bolinichthys**		0.003	**Bolinichthys**		0.003
Ceratoscopelus		0.116	**Ceratoscopelus**		0.161	**Ceratoscopelus**		0.006
Diaphus		0.212	**Diaphus**		0.110	**Diaphus**		0.061
Diogenichthys		0.023	**Diogenichthys**		0.014	**Diogenichthys**		0.013
Hygophum		0.052	**Hygophum**		0.003	**Hygophum**		0.002
Lepidophanes		0.071	**Lepidophanes**		0.027	**Lepidophanes**		0.026
Myctophum		0.011	**Myctophum**		0.014	**Myctophum**		0.002

97G8 IKMT Data - Isaacs Kidd Midwater Trawl (15') Summary Data for Squid Paralarvae for Cruise Gyre 97G8

IKMT #	Date	Time (local)	Latitude	Longitude	# Squid Paralarvae/m**2	Depth of Tow	Depth of 15 Deg Isotherm	Environment
IKMT#5	8/6/97	0505-0600	28.66	89	0.181	212	181	MOM Region
IKMT#6	8/6/97	2234-2330	26.84	88.38	0.023	212	393	Anticyclone
IKMT#7	8/7/97	2300-0000	27.7	88.05	0.089	221	234	Confluence
IKMT#8	8/8/97	0157-0300	27.68	88.02	0.115	229	205	Confluence
IKMT#9	8/9/97	2358-0106	28.63	87.83	0.091	153	173	Cyclone Margin (NW)
IKMT#10	8/9/97	1801-1900	26.87	86.94	0.071	212	308	Anticyclone Margin
IKMT#11	8/9/97	2147-2300	26.85	86.79	0.048	141	294	Anticyclone Margin
IKMT#12	8/10/97	1601-1647	28.39	86.85	0	225	134	Cyclone
IKMT#13	8/11/97	0046-0146	29.13	86.91	0.121	225	162	Cyclone Margin (N)
IKMT#14	8/12/97	0150-0410	26.82	87.4	0.008	153	389	Anticyclone
IKMT#15	8/14/97	2229-2352	28.92	87.53	0.013	106	183	Cyclone Margin (N)
IKMT#16	8/17/97	0253-0410	28.74	86.64	0.02	141	171	Cyclone Margin (N)
IKMT#17	8/18/97	0330-0523	28.67	85.48	0.023	141	193	Shallow Shelf
IKMT#18	8/20/97	0023-0225	27.42	86.99	0.08	354	187	Confluence
IKMT#19	8/21/97	0308-0440	28.76	88.67	0.062	254	166	MOM Region

97G8 MOCNESS and Squid Data - MOCNESS Data for Zooplankton and Squid Paralarvae by Individual Net and Associated Depth Intervals for R/V *Gyre* 97G8 cruise (see Chapter 3, Table 3 1 for summary by Tow Number)

MOCNESS #	Net #	Thickness (m)	Open Depth (m)	Close Depth (m)	Displacement Volume (cc)	Volume Filtered	DV (cc)/m**3	Interval Biomass (cc/interval)	Integrated DV (cc/m**2)	Squid (#)	squid (#)/m**3	squid (#/interval)	squid (#/m**2)
208	1	20	0	20	NS	429							
208	2	20	20	40	12	588	0 02	0 41			0.00	0 00	
208	3	20	40	60	9	299	0 03	0 60		2	0 01	0 13	
208	4	20	60	80	12	329	0 04	0 73		2	0 01	0 12	
208	5	20	80	100	12	313	0 04	0 77		2	0 01	0 13	
208	6	25	100	125	10	257	0 04	0 97		3	0 01	0 29	
208	7	25	125	150	8	336	0 02	0 60		2	0 01	0 15	
208	8	25	150	175	10	209	0 05	1 20		1	0 00	0 12	
208	9	25	175	200	4	353	0 01	0 28	5 55	1	0 00	0 07	1 014232411
209	1	20	0	20	16	463	0 03	0 69			0 00	0 00	
209	2	20	20	40	11	213	0 05	1 03		1	0 00	0 09	
209	3	20	40	60	10	213	0 05	0 94		1	0 00	0 09	
209	4	20	60	80	15	257	0 06	1 17		7	0 03	0 54	
209	5	20	80	100	9	247	0 04	0 73		2	0 01	0 16	
209	6	25	100	125	10	272	0 04	0 92		1	0 00	0 09	
209	7	25	125	150	5	208	0 02	0 60			0 00	0 00	
209	8	25	150	175	5	262	0 02	0 48		1	0 00	0 10	
209	9	25	175	200	2	228	0 01	0 22	6 78		0 00	0 00	1 081815441
210	1	40	0	40	30	517	0 06	2 32		18	0 03	1 39	
210	2	20	40	60	25	385	0 06	1 30		28	0 07	1 45	
210	3	20	60	80	28	222	0 13	2 52		8	0 04	0 72	
210	4	20	80	100	38	278	0 14	2 73		5	0 02	0 36	
210	5	20	100	120	24	383	0 06	1 25		1	0 00	0 05	
210	6	20	120	140	12	270	0 04	0 89		2	0 01	0 15	
210	7	20	140	160	9	277	0 03	0 65		1	0 00	0 07	
210	8	20	160	180	10	244	0 04	0 82		1	0 00	0 08	
210	9	20	180	200	6	243	0 02	0 49	12 86	1	0 00	0 08	4 364466884
211	1	20	0	20	19	245	0 08	1 55		2	0 01	0 16	
211	2	20	20	40	8	258	0 03	0 62		1	0 00	0 08	
211	3	20	40	60	8	351	0 02	0 46		2	0 01	0 11	
211	4	20	60	80	12	315	0 04	0 76		5	0 02	0 32	
211	5	20	80	100	8	256	0 03	0 63			0 00	0 00	
211	6	25	100	125	3	344	0 01	0 22		2	0 01	0 15	
211	7	25	125	150	3	210	0 01	0 36		1	0 00	0 12	
211	8	59	150	209	6	174	0 03	2 03	8 62		0 00	0 00	0 936601574
211	9	209	209	0	50	1303	0 04	8 02		2	0 00	0 32	
212	1	20	0	20	52	436	0 12	2 39		1	0 00	0 05	
212	2	20	20	40	19	445	0 04	0 85		3	0 01	0 13	
212	3	20	40	60	22	431	0 05	1 02		1	0 00	0 05	
212	4	20	60	80	13 5	328	0 04	0 82		4	0 01	0 24	
212	5	20	80	100	5	310	0 02	0 32		2	0 01	0 13	
212	6	25	100	125	8	394	0 02	0 38			0 00	0 00	
212	7	25	125	150	8	385	0 02	0 52		2	0 01	0 13	
212	8	25	150	175	0 5	464	0 00	0 03	6 33		0 00	0 00	0 72991156
212	9	225	175	200-0	14	3983	0 00	0 79			0 00	0 00	
213	1	150	0	150	80	968	0 08	12 40		2	0 00	0 31	
213	2	25	150	125	3	179	0 02	0 42			0 00	0 00	
213	3	25	125	100	4	312	0 01	0 32			0 00	0 00	
213	4	20	100	80	7	465	0 02	0 30		3	0 01	0 13	
213	5	20	80	60	14	285	0 05	0 98			0 00	0 00	
213	6	15	60	45	24	265	0 09	1 36		4	0 02	0 23	
213	7	15	45	30	52	392	0 13	1 99		21	0 05	0 80	
213	8	15	30	15	42	310	0 14	2 03		14	0 05	0 68	
213	9	15	15	0	89	268	0 33	5 02	12 42	2	0 01	0 11	1 949220091
214	1	20	0	20	2	339	0 01	0 12		1	0 00	0 06	
214	2	20	20	40	6	244	0 02	0 49		1	0 00	0 06	
214	3	20	40	60	12	338	0 04	0 71		4	0 01	0 24	
214	4	20	60	80	15	293	0 05	1 02		3	0 01	0 20	
214	5	20	80	100	6	282	0 02	0 43		1	0 00	0 07	
214	6	25	100	125	19	665	0 03	0 71		1	0 00	0 04	
214	7	25	125	150	10	356	0 03	0 70			0 00	0 00	
214	8	25	150	175	9	214	0 04	1 05			0 00	0 00	

97G8 MOCNESS and Squid Data - MOCNESS Data for Zooplankton and Squid Paralarvae by Individual Net and Associated Depth Intervals for R/V Gyre 97G8 cruise (see Chapter 3, Table 3.1 for summary by Tow Number)

MOCNESS #	Net #	Thickness (m)	Open Depth (m)	Close Depth (m)	Displacement Volume (cc)	Volume Filtered	DV (cc)/m**3	Interval Biomass (cc/interval)	Integrated DV (cc/m**2)	Squid (#)	squid (#)/m**3	squid (#/interval)	squid (#/m**2)
214	9	25	175	200	11	375	0.03	0.73	5.97		0.00	0.00	0.690944782
215	1	200	0	200	85	2668	0.03	6.37			0.00	0.00	
215	2	50	200	150	21	1204	0.02	0.87		6	0.00	0.25	
215	3	25	150	125	10	442	0.02	0.57		1	0.00	0.06	
215	4	25	125	100	22	482	0.05	1.14		2	0.00	0.10	
215	5	20	100	80	19	411	0.05	0.92		2	0.00	0.10	
215	6	20	80	60	25	416	0.06	1.20		6	0.01	0.29	
215	7	20	60	40	17	358	0.05	0.95		3	0.01	0.17	
215	8	20	40	20	27	419	0.06	1.29		7	0.02	0.33	
215	9	20	20	0	37	369	0.10	2.01	8.95	2	0.01	0.11	1.405377828
216	1	20	0	20	27	457	0.06	1.18		1	0.00	0.04	
216	2	20	20	40	16	392	0.04	0.82		1	0.00	0.05	
216	3	20	40	60	16	408	0.04	0.79		13	0.03	0.64	
216	4	20	60	80	26	470	0.06	1.11		3	0.01	0.13	
216	5	20	80	100	19	432	0.04	0.88		4	0.01	0.19	
216	6	25	100	125	26	492	0.05	1.32		7	0.01	0.36	
216	7	25	125	150	14	422	0.03	0.83		4	0.01	0.24	
216	8	25	150	175	18	342	0.05	1.17		3	0.01	0.22	
216	9	25	175	200	9.5	314	0.03	0.76	8.85		0.00	0.00	1.85997906
217	1	20	0	20	51	402	0.13	2.54		1	0.00	0.05	
217	2	20	20	40	23	354	0.06	1.30		2	0.01	0.11	
217	3	20	40	60	23	418	0.06	1.10		4	0.01	0.19	
217	4	20	60	80	22	362	0.06	1.22		7	0.02	0.39	
217	5	20	80	100	11	605	0.02	0.36		3	0.00	0.10	
217	6	25	100	125	12	444	0.03	0.68			0.00	0.00	
217	7	25	125	150	11	507	0.02	0.54			0.00	0.00	
217	8	25	150	175	13	446	0.03	0.73			0.00	0.00	
217	9	25	175	200	9	498	0.02	0.45	8.91		0.00	0.00	0.840047039
218	1	20	0	20	41	327	0.13	2.51		15	0.06	0.92	
218	2	20	20	40	36	413	0.09	1.74		7	0.02	0.34	
218	3	20	40	60	12	200	0.06	1.20		2	0.01	0.20	
218	4	20	60	80	24	496	0.05	0.97		3	0.01	0.12	
218	5	20	80	100	14	353	0.04	0.79		1	0.00	0.06	
218	6	25	100	125	9	301	0.03	0.75			0.00	0.00	
218	7	25	125	150	6	331	0.02	0.45			0.00	0.00	
218	8	25	150	175	2	363	0.01	0.14	8.58		0.00	0.00	1.634039209
218	9	??	175	??	7	??	#VALUE!	#VALUE!			#VALUE!	#VALUE!	
219	1	50	0	50	32	463	0.07	3.46		8	0.01	0.86	
219	2	50	50	100	36	1023	0.04	1.86		11	0.01	0.54	
219	3	50	100	150	11	632	0.02	0.87			0.00	0.00	
219	4	50	150	200	14	704	0.02	0.99		1	0.00	0.07	
219	5	50	200	250	15	883	0.02	0.85			0.00	0.00	
219	6	50	250	300	20	790	0.03	1.27			0.00	0.00	
219	7	25	300	325	10	262	0.04	0.95			0.00	0.00	
219	8	25	325	350	5	165	0.03	0.76			0.00	0.00	
219	9	50	350	400	6	206	0.03	1.46	12.46		0.00	0.00	1.2566053
220	1	20	0	20	44	533	0.08	1.65		11	0.02	0.41	
220	2	20	20	40	21	321	0.07	1.31		1	0.00	0.06	
220	3	20	40	60	3	310	0.01	0.19			0.00	0.00	
220	4	20	60	80	10	328	0.03	0.61		1	0.00	0.06	
220	5	20	80	100	11	411	0.03	0.54			0.00	0.00	
220	6	25	100	125	18	455	0.04	0.99			0.00	0.00	
220	7	25	125	150	7	548	0.01	0.32			0.00	0.00	
220	8	25	150	175	26	618	0.04	1.06			0.00	0.00	
220	9	25	175	200	14	669	0.02	0.52	7.18		0.00	0.00	0.536038879
221	1	10	0	10	13	381	0.03	0.34		3	0.01	0.08	
221	2	20	10	30	32	394	0.08	1.63		14	0.04	0.71	
221	3	18	30	48	8	189	0.05	0.71			0.00	0.00	
221	4	25	45	70	18	349	0.05	1.29			0.00	0.00	
221	5	30	70	100	11	461	0.02	0.72		2	0.00	0.13	
221	6	25	100	125	16	356	0.04	1.12		6	0.02	0.42	
221	7	25	125	150	16	347	0.05	1.15			0.00	0.00	

97G8 MOCNESS and Squid Data - MOCNESS Data for Zooplankton and Squid Paralarvae by Individual Net and Associated Depth Intervals for R/V Gyre 97G8 cruise (see Chapter 3, Table 3.1 for summary by Tow Number)

MOCNESS #	Net #	Thickness (m)	Open Depth (m)	Close Depth (m)	Displacement Volume (cc)	Volume Filtered	DV (cc)/m**3	Interval Biomass (cc/interval)	Integrated DV (cc/m**2)	Squid (#)	squid (#)/m**3	squid (#/interval)	squid (#/m**2)
221	8	25	150	175	8	324	0.02	0.62			0.00	0.00	
221	9	25	175	200	10	331	0.03	0.76	8.33	1	0.00	0.08	1.416428915
222	1	20	0	20	28	295	0.09	1.90		1	0.00	0.07	
222	2	20	20	40	38	359	0.11	2.12		10	0.03	0.56	
222	3	20	40	60	27	438	0.06	1.23		1	0.00	0.05	
222	4	20	60	80	42	532	0.08	1.58			0.00	0.00	
222	5	20	80	100	7	300	0.02	0.47		1	0.00	0.07	
222	6	25	100	125	17	406	0.04	1.05		2	0.00	0.12	
222	7	25	125	150	26	837	0.03	0.78		4	0.00	0.12	
222	8	25	150	175	8	296	0.03	0.68		1	0.00	0.08	
222	9	25	175	200	4	295	0.01	0.34	10.13	1	0.00	0.08	1.149060666
223	1	20	0	20	22	330	0.07	1.33		4	0.01	0.24	
223	2	20	20	40	24	273	0.09	1.76		5	0.02	0.37	
223	3	20	40	60	20	243	0.08	1.65		2	0.01	0.16	
223	4	20	60	80	19	243	0.08	1.56		2	0.01	0.16	
223	5	20	80	100	8	268	0.03	0.56		5	0.02	0.35	
223	6	25	100	125	10	270	0.04	0.93		1	0.00	0.09	
223	7	25	125	150	1	209	0.00	0.12			0.00	0.00	
223	8	25	150	175	5	228	0.02	0.55			0.00	0.00	
223	9	25	175	200	1	218	0.00	0.11	8.57		0.00	0.00	1.377757531
224	1		147	153	59	1977	0.03	0.00			0.00	0.00	
224	2		152	154	31	1327	0.02	0.00		5	0.00	0.00	
224	3		149	154	15	1183	0.01	0.00			0.00	0.00	
224	4		150	153	29	1062	0.03	0.00		3	0.00	0.00	
224	5		151	154	19	1192	0.02	0.00		1	0.00	0.00	
224	6		152	153	19	1287	0.01	0.00		1	0.00	0.00	
224	7		148	150	22	1348	0.02	0.00		2	0.00	0.00	
224	8		149	150	28	1283	0.02	0.00		2	0.00	0.00	
224	9		150	153	31	1308	0.02	0.00		3	0.00	0.00	
225	1	20	0	20	74	333	0.22	4.44		5	0.02	0.30	
225	2	20	20	40	21	359	0.06	1.17			0.00	0.00	
225	3	20	40	60	6	300	0.02	0.40		2	0.01	0.13	
225	4	20	60	80	32	831	0.04	0.77		5	0.01	0.12	
225	5	20	80	100	6	229	0.03	0.52			0.00	0.00	
225	6	25	100	125	7	237	0.03	0.74			0.00	0.00	
225	7	25	125	150	6	331	0.02	0.45		2	0.01	0.15	
225	8	25	150	175	8	393	0.02	0.51			0.00	0.00	
225	9	25	175	200	8	527	0.02	0.38	9.39	1	0.00	0.05	0.752466309

96G6 MOCNESS and Squid Data - MOCNESS Data for Zooplankton and Squid Paralarvae by Individual Net and Associated Depth Intervals for Cruise Gyre 96G6 (see Chapter 3, Table 3.1 for summary by Tow Number)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	MOCNESS #	Net #	Thickness (m)	Open Depth (m)	Close Depth (m)	Displacement Volume (cc)	Volume Filtered	DV (cc)/m**3	Interval Biomass (cc/interval)	Integrated DV (cc/m**2)	Squid (#)	squid (#)/m**3	squid (#/interval	squid (#/m**2)
2	180	1	111	0	111	36	1965	0.018	2.034		22	0.01	1.24	
3	180	2	17	111	94	37	4056	0.009	0.155		17	0.00	0.07	
4	180	3	13	94	81	36	3958	0.009	0.118		25	0.01	0.08	
5	180	4	13	81	68	66	4066	0.016	0.211		15	0.00	0.05	
6	180	5	17	68	51	108	2582	0.042	0.711		14	0.01	0.09	
7	180	6	15	51	36	90	2397	0.038	0.563		8	0.00	0.05	
8	180	7	15	36	21	94	2436	0.039	0.579		20	0.01	0.12	
9	180	8	14	21	7	100	2450	0.041	0.571		58	0.02	0.33	
10	180	9	7	7	0	62	1621	0.038	0.266	3.177	30	0.02	0.13	0.928
11	181	1	121	0	121	63	1618	0.039	4.711			0.00	0.00	
12	181	2	29	121	92	21	1609	0.013	0.376		2	0.00	0.04	
13	181	3	18	92	74	37	1710	0.022	0.389		3	0.00	0.03	
14	181	4	15	74	59	50	1761	0.028	0.426		1	0.00	0.01	
15	181	5	15	59	44	70	1510	0.046	0.695		16	0.01	0.16	
16	181	6	15	44	29	68	1522	0.045	0.670		5	0.00	0.05	
17	181	7	16	29	13	95	1682	0.056	0.904		46	0.03	0.44	
18	181	8	14	13	-1	128	1967	0.063	0.881	4.344	18	0.01	0.13	0.849
19	182	1	190	0	190	15	1976	0.008	1.442		1	0.00	0.10	
20	182	2	24	190	166	8	1180	0.007	0.163		0	0.00	0.00	
21	182	3	24	166	142	9	953	0.009	0.227		0	0.00	0.00	
22	182	4	24	142	118	5	898	0.006	0.134		0	0.00	0.00	
23	182	5	26	118	92	13	1229	0.011	0.275		2	0.00	0.04	
24	182	6	27	92	65	56	1505	0.037	1.005		12	0.01	0.22	
25	182	7	22	65	43	75	992	0.076	1.663		9	0.01	0.20	
26	182	8	43	43	0	76	2642	0.029	1.237	4.703	2	0.00	0.03	0.490
27	183	1	190	0	190	34	1186	0.029	5.447		3	0.00	0.48	
28	183	2	22	190	168	3	939	0.003	0.070		0	0.00	0.00	
29	183	3	27	168	141	13	1207	0.011	0.291		1	0.00	0.02	
30	183	4	22	141	119	16	1456	0.011	0.242		3	0.00	0.05	
31	183	5	26	119	93	13	1184	0.011	0.285		7	0.01	0.15	
32	183	6	24	93	69	70	1612	0.061	1.221		3	0.00	0.04	
33	183	7	26	69	43	98	1777	0.055	1.434		7	0.00	0.10	
34	183	8	25	43	18	82	1672	0.049	1.226		19	0.01	0.28	
35	183	9	18	18	0	76	1869	0.041	0.732	5.801	28	0.01	0.27	0.92
36	184	1	189	0	189	22	2295	0.010	1.812		1	0.00	0.08	
37	184	2	20	189	169	11	1593	0.007	0.138		0	0.00	0.00	
38	184	3	25	169	144	7	1607	0.004	0.109		0	0.00	0.00	
39	184	4	25	144	119	9	1637	0.005	0.137		0	0.00	0.00	
40	184	5	25	119	94	17	1667	0.010	0.255		1	0.00	0.01	
41	184	6	25	94	69	50	1751	0.029	0.714		2	0.00	0.03	
42	184	7	26	69	43	28	1564	0.018	0.465		7	0.00	0.12	
43	184	8	25	43	18	35	1551	0.023	0.564		10	0.01	0.16	
44	184	9	18	18	0	32	1682	0.019	0.342	2.725	10	0.01	0.11	0.428
45	185	1	193	0	193	14	1629	0.009	1.659		1	0.00	0.12	
46	185	2	15	193	178	6	1339	0.004	0.087		0	0.00	0.00	
47	185	3	35	178	143	8	1688	0.005	0.166		1	0.00	0.02	
48	185	4	25	143	118	8	1632	0.005	0.123		1	0.00	0.02	
49	185	5	26	118	92	11	1301	0.008	0.220		0	0.00	0.00	
50	185	6	92	92	0	33	3100	0.011	0.979	1.555	0	0.00	0.00	0.036
51	186	1	193	0	193	50	1664	0.030	5.799		5	0.00	0.58	
52	186	2	25	193	168	7	1484	0.005	0.118		0	0.00	0.00	
53	186	3	25	168	143	10	1500	0.007	0.167		0	0.00	0.00	
54	186	4	25	143	118	15	1552	0.010	0.242		2	0.00	0.03	
55	186	5	25	118	93	38	1670	0.023	0.569		4	0.00	0.06	
56	186	6	26	93	67	110	1769	0.062	1.617		4	0.00	0.06	
57	186	7	67	67	0	0	4103	0.000	0.000	2.712		0.00	0.00	0.151
58	187	1	187	0	187	15	1275	0.012	2.200		3	0.00	0.44	
59	187	2	19	187	168	11	2090	0.005	0.100		0	0.00	0.00	
60	187	3	25	168	143	10	1780	0.006	0.140		0	0.00	0.00	
61	187	4	25	143	118	13	1491	0.009	0.218		0	0.00	0.00	
62	187	5	25	118	93	8	1743	0.005	0.115		0	0.00	0.00	
63	187	6	26	93	67	20	1079	0.019	0.462		2	0.00	0.05	
64	187	7	28	67	39	61	1443	0.042	1.184		1	0.00	0.02	

96G6 MOCNESS and Squid Data - MOCNESS Data for Zooplankton and Squid Paralarvae by Individual Net and Associated Depth Intervals for Cruise Gyre 96G6 (see Chapter 3, Table 3 1 for summary by Tow Number)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	MOCNESS #	Net #	Thickness (m)	Open Depth (m)	Close Depth (m)	Displacement Volume (cc)	Volume Filtered	DV (cc)/m**3	Interval Biomass (cc/interval)	Integrated DV (cc/m**2)	Squid (#)	squid (#)/m**3	squid (#/interval	squid (#/m**2)
65	187	8	23	39	16	50	982	0 051	1 171		10	0.01	0 23	
66	187	9	16	16	0	36	1135	0.032	0 507	3.917	5	0 00	0 07	0 372
67	188	1	183	0	183	32	1506	0 021	3 886		6	0 00	0 73	
68	188	2	17	183	166	9	1524	0.006	0 100		0	0.00	0 00	
69	188	3	24	166	142	13	1471	0.009	0 212		0	0.00	0 00	
70	188	4	25	142	117	13	1532	0.008	0 212		1	0.00	0 02	
71	188	5	26	117	91	12	1492	0.008	0 209		1	0.00	0 02	
72	188	6	25	91	66	32	1496	0.021	0 535		3	0.00	0 05	
73	188	7	27	66	39	60	1630	0.037	0 994		2	0.00	0 03	
74	188	8	22	39	17	76	1462	0.052	1 144			0.00	0 00	
75	188	9	16	17	1	64	1434	0.045	0 714	4.120	23	0.02	0 26	0 374
76	189	1	385	0	385	32	3282	0.010	3 754		1	0.00	0 12	
77	189	2	43	385	342	11	2613	0.004	0 181		0	0.00	0 00	
78	189	3	50	342	292	10	1867	0.005	0 268		0	0.00	0 00	
79	189	4	50	292	242	7	1719	0.004	0.204		0	0.00	0 00	
80	189	5	50	242	192	11	1764	0.006	0 312		1	0.00	0 03	
81	189	6	50	192	142	8	945	0.008	0 423		0	0.00	0 00	
82	189	7	142	142	0	98	3849	0.025	3 615	5.003	6	0.00	0 22	0 250
83	190	1	385	0	385	31	2329	0.013	5 125		0	0.00	0 00	
84	190	2	53	385	332	6	1362	0.004	0 233		0	0.00	0 00	
85	190	3	39	332	293	10	1637	0.006	0 238		0	0.00	0 00	
86	190	4	101	293	192	13	2133	0.006	0 616		0	0.00	0 00	
87	190	5	101	192	91	16	1502	0.011	1 076		0	0.00	0 00	
88	190	6	49	91	42	44	1130	0.039	1 906		3	0.00	0 13	
89	190	7	42	42	0	96	1695	0.057	2 379	6.450	32	0.02	0 79	0 923
90	191	1	393	0	393	24	2934	0.008	3 215		1	0.00	0 13	
91	191	2	51	393	342	5	1327	0.004	0 192		0	0.00	0 00	
92	191	3	50	342	292	8	1484	0.005	0 270		0	0.00	0 00	
93	191	4	100	292	192	8	1346	0.004	0.446		0	0.00	0 00	
94	191	5	99	192	93	7	1117	0.006	0 620		0	0.00	0 00	
95	191	6	52	93	41	58	1493	0.039	2 020		6	0.00	0 21	
96	191	7	41	41	0	26	1611	0.017	0 713	4.261	9	0.01	0 23	0 438
97	192	1	393	0	393	26	3811	0.007	2 681		2	0.00	0 21	
98	192	2	55	393	338	7	2479	0.003	0 155		0	0.00	0 00	
99	192	3	52	338	286	5	1015	0.005	0 256		0	0.00	0 00	
100	192	4	94	286	192		1682		0 000			0.00	0 00	
101	192	5	100	192	92	10	1348	0.007	0 742		0	0.00	0.00	
102	192	6	51	92	41	21	813	0 026	1 317		1	0.00	0 06	
103	192	7	41	41	0	70	1496	0.047	1 918	4.389	11	0.01	0 30	0 364
104	193	1	191	0	191	35	1917	0.018	3 487		1	0.01	1 10	
105	193	2	48	191	143	13	1212	0.011	0 515		0	0.00	0 00	
106	193	3	51	143	92	17	1104	0.015	0 785		0	0.00	0 00	
107	193	4	26	92	66		706		0.000			0.00	0 00	
108	193	5	24	66	42	38	784	0.048	1 163		0	0.00	0 00	
109	193	6	25	42	17	50	1022	0.049	1 223		7	0.01	0 17	
110	193	7	17	17	0	35	980	0.036	0 607	4.294	5	0.01	0 09	0.256
111	194	1	183	0	183	34	1611	0.021	3 862		4	0.00	0 45	
112	194	2	43	183	140	7	848	0.008	0 355		0	0.00	0 00	
113	194	3	51	140	89	18	1252	0.014	0 733		1	0.00	0 04	
114	194	4	24	89	65	15	598	0.025	0 602		0	0.00	0 00	
115	194	5	26	65	39	24	861	0.028	0 725		1	0.00	0 00	
116	194	6	23	39	16	31	787	0.039	0 906		3	0.00	0 03	
117	194	7	15	16	1	62	1693	0.037	0 549	3.870	2	0.00	0 03	0 097
118	195	1	181	0	181	48	2094	0.023	4 149		1	0.00	0 17	
119	195	2	43	181	138	9	794	0.011	0 487		0	0.00	0 05	
120	195	3	51	138	87	12	901	0.013	0 679		0	0.00	0 00	
121	195	4	27	87	60	22	886	0.025	0 670		0	0.00	0 00	
122	195	5	21	60	39	35	863	0.041	0 852		1	0.00	0 00	
123	195	6	26	39	13	64	866	0 060	1 847		4	0.00	0 12	
124	195	7	13	13	0	30	828	0 036	0 471	4.727	3	0.00	0 05	0 217
125	196	1	187	0	187	30	1032	0 029	5 436		1	0.00	0 18	
126	196	2	51	187	136	6	767	0 008	0 399		0	0.00	0 00	
127	196	3	49	136	87	18	1582	0.012	0.588		3	0.00	0.09	

96G6 MOCNESS and Squid Data - MOCNESS Data for Zooplankton and Squid Paralarvae by Individual Net and Associated Depth Intervals for Cruise Gyre 96G6 (see Chapter 3, Table 3.1 for summary by Tow Number)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	MOCNESS #	Net #	Thickness (m)	Open Depth (m)	Close Depth (m)	Displacement Volume (cc)	Volume Filtered	DV (cc)/m**3	Interval Biomass (cc/interval)	Integrated DV (cc/m**2)	Squid (#)	squid (#)/m**3	squid (#/interval	squid (#/m**2)
128	196	4	24	87	63	20	738	0.027	0.650		0	0.00	0.00	
129	196	5	26	63	37	18	663	0.027	0.706		1	0.00	0.04	
130	196	6	25	37	12	48	876	0.055	1.367		27	0.03	0.77	
131	196	7	12	12	0	42	795	0.053	0.634	4.324	1	0.00	0.02	0.918
132	197	1	190	0	190	28	2732	0.010	1.947		7	0.00	0.49	
133	197	2	50	190	140	4	862	0.005	0.232		0	0.00	0.00	
134	197	3	51	140	89	8	872	0.009	0.468		2	0.00	0.12	
135	197	4	24	89	65	18	884	0.020	0.489		4	0.00	0.11	
136	197	5	25	65	40	112	910	0.123	3.077		21	0.02	0.58	
137	197	6	25	40	15	12	609	0.020	0.493		1	0.00	0.04	
138	197	7	15	15	0	27	781	0.035	0.519	5.277	37	0.05	0.71	1.554
139	198	1	189	0	189	21	1289	0.016	3.079		3	0.00	0.44	
140	198	2	50	189	139	4	747	0.005	0.268		1	0.00	0.07	
141	198	3	48	139	91	6	789	0.008	0.365		1	0.00	0.08	
142	198	4	33	91	58	17	578	0.029	0.971		2	0.00	0.11	
143	198	5	29	58	29	19	398	0.048	1.384		2	0.01	0.15	
144	198	6	22	29	7	10	688	0.015	0.320		1	0.00	0.03	
145	198	7	7	7	0	19	738	0.026	0.180	3.488	3	0.00	0.03	0.448
146	MOC4-1	1	400	0	400	0.5	10162	0.000	0.020			0.00	0.00	
147		2	100	400	300	13	4092	0.003	0.318			0.00	0.00	
148		3	100	300	200	0.5	3120	0.000	0.016			0.00	0.00	
149		4	50	200	150	10	2838	0.004	0.176			0.00	0.00	
150		5	50	150	100	27	3348	0.008	0.403			0.00	0.00	
151		6	50	100	50	2	3630	0.001	0.028			0.00	0.00	
152		7	50	50	0	5	5921	0.001	0.042	0.983		0.00	0.00	
153	MOC4-2	1	400	0	400	14	13868	0.001	0.404			0.00	0.00	
154		2	101	400	299	2.5	5441	0.000	0.046			0.00	0.00	
155		3	101	299	198	0.5	5294	0.000	0.010			0.00	0.00	
156		4	48	198	150	14	5225	0.003	0.129			0.00	0.00	
157		5	50	150	100	2	6301	0.000	0.016			0.00	0.00	
158		6	51	100	49	4	5212	0.001	0.039			0.00	0.00	
159		7	3	0	3	18	5046	0.004	0.011	0.250		0.00	0.00	
160	MOC4-3	1	400	0	400	16	9706	0.002	0.659			0.00	0.00	
161		2	100	400	300	5	7642	0.001	0.065			0.00	0.00	
162		3	100	300	200	5	6537	0.001	0.076			0.00	0.00	
163		4	51	200	149	1	2958	0.000	0.017			0.00	0.00	
164		5	50	149	99	10	3496	0.003	0.143			0.00	0.00	
165		6	49	99	50	17	4428	0.004	0.188			0.00	0.00	
166		7	50	50	0	5	4665	0.001	0.054	0.544		0.00	0.00	
167	MOC4-4	1	399	0	399	19	8651	0.002	0.876			0.00	0.00	
168		2	100	399	299	5	8165	0.001	0.061			0.00	0.00	
169		3	99	299	200	9	7644	0.001	0.117			0.00	0.00	
170		4	51	200	149	17	4451	0.004	0.195			0.00	0.00	
171		5	49	149	100	17	5148	0.003	0.162			0.00	0.00	
172		6	50	100	50	32	6383	0.005	0.251			0.00	0.00	
173		7	50	50	0	22	5489	0.004	0.200	0.985		0.00	0.00	
174								13868.000				#DIV/0!	#DIV/0!	
175								2838.000				#DIV/0!	#DIV/0!	

III. VISUAL SURVEYS FROM AIRCRAFT AND SHIPS

Summary of cetacean sightings from GulfCet II aerial surveys. Location, group size, and depth data.

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
SUMMER 1996					
960711	0936	*Tursiops truncatus*	5	291643 880580	138
960711	0951	*Physeter macrocephalus*	2	285837 880641	1342
960711	1008	*Kogia sp.*	2	285746 875799	1534
960711	1209	*Stenella attenuata*	45	290878 872417	1124
960711	1222	*Grampus griseus*	9	292035 872348	541
960711	1254	*Tursiops truncatus*	12	295263 872385	31
960711	1338	*Tursiops truncatus*	10	292716 873982	64
960711	1343	*Tursiops truncatus*	6	292902 874004	58
960711	1347	*Tursiops truncatus*	5	293367 873993	45
960712	1001	*Grampus griseus*	10	293115 871360	325
960712	1001	*T. truncatus/S.frontalis*	2	293115 871360	325
960712	1011	*Stenella attenuata*	36	292475 871484	440
960712	1017	*Grampus griseus*	7	292239 871517	524
960712	1042	*Stenella attenuata*	10	285635 871974	1205
960712	1056	*Physeter macrocephalus*	1	283922 872261	1250
960712	1127	*Stenella longirostris*	140	282785 872093	1356
960712	1319	*Tursiops truncatus*	13	294672 874900	34
960712	1424	*Tursiops truncatus*	32	294404 880559	34
960712	1432	*Tursiops truncatus*	4	295344 880595	31
960713	1140	Unidentified dolphin	5	301443 863646	25
960713	1153	*Tursiops truncatus*	7	301037 864151	27
960713	1201	*Stenella frontalis*	42	300582 864107	40
960713	1240	*Stenella frontalis*	27	300547 865844	53
960714	1129	*Stenella attenuata*	125	282790 870076	872
960714	1205	*Kogia sp.*	5	285391 864027	446
960715	0916	Kogia sp.	1	282217 865026	826
960715	0919	*Kogia sp.*	1	281778 865289	941
960715	0926	Unidentified ziphiidae	2	281152 865026	1633
960715	0928	*Kogia sp.*	1	281271 864796	1280
960715	0934	*Physeter macrocephalus*	1	281600 864558	899
960715	1032	*Kogia sp.*	1	290480 860277	226
960715	1037	*Kogia sp.*	1	285641 860885	288
960715	1047	*Tursiops truncatus*	51	285485 860948	290
960715	1132	*Stenella coeruleoalba*	48	280499 863688	1596
960715	1205	*Stenella clymene*	150	283033 861688	422
960715	1248	*Tursiops truncatus*	7	292481 860026	58
960719	0843	*Tursiops truncatus*	2	285519 855042	199
960719	0852	*Tursiops truncatus*	4	284778 855514	45

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960719	0919	*Stenella coeruleoalba*	14	281411 861676	672
960719	0937	*Stenella attenuata*	250	281005 861988	773
960719	0937	*Kogia sp.*	3	281005 861988	773
960719	0943	Unidentified odontocete	1	280540 862304	883
960719	0956	*Stenella attenuata*	10	275975 861556	1161
960719	1026	*Stenella* longirostris	250	282766 855883	331
960719	1051	*Tursiops truncatus*	10	285958 853801	144
960719	1122	*Tursiops truncatus*	4	283166 854720	256
960719	1136	*Grampus griseus*	9	281625 855679	460
960719	1144	*Stenella attenuata*	90	281013 860115	619
960719	1237	*Tursiops truncatus*	10	284665 852516	107
960719	1245	*Tursiops truncatus*	4	285984 853089	71
960719	1318	*Tursiops truncatus*	3	294914 860793	40
960719	1322	*Kogia sp.*	1	295681 860796	34
960719	1331	*Tursiops truncatus*	5	295900 860805	32
960719	1331	*T. truncatus/S.frontalis*	10	300027 860787	32
960719	1336	*Tursiops truncatus*	4	300586 860777	29
960719	1351	*Tursiops truncatus*	17	301069 862381	29
960719	1401	*Stenella frontalis*	22	300888 862405	32
960720	0910	*Tursiops truncatus*	3	283988 851716	129
960720	0924	*Tursiops truncatus*	5	282346 853115	221
960720	0936	*Stenella attenuata*	170	281758 853653	303
960720	0943	*Grampus griseus*	6	280952 854362	471
960720	1005	*Tursiops truncatus*	1	275594 854767	810
960720	1014	*Stenella attenuata*	55	280082 854253	658
960720	1029	*Stenella attenuata*	45	281030 853269	374
960720	1045	*Tursiops truncatus*	1	281949 852346	213
960720	1059	Unidentified dolphin	1	283290 850921	126
960720	1115	*Stenella frontalis*	35	283908 850462	87
960720	1155	*Stenella attenuata*	160	275468 853913	733
960720	1159	*Mesoplodon sp.*	2	275320 854076	791
960720	1221	*Stenella attenuata*	165	274813 853612	822
960720	1230	*Kogia sp.*	1	275742 852310	493
960720	1246	*Tursiops truncatus*	5	281274 850278	159
960721	1106	*T. truncatus/S.frontalis*	2	281334 844915	82
960721	1120	*Tursiops truncatus*	6	280401 850273	217
960721	1130	*Tursiops truncatus*	15	275925 850786	298
960721	1152	*Stenella clymene*	95	275620 851328	387
960721	1212	*Tursiops truncatus*	5	273846 853729	1521
960721	1216	*Kogia sp.*	4	273724 853926	2168
960721	1223	*Tursiops truncatus*	1	273445 853292	1444
960721	1406	*Balaenoptera edeni*	7	275754 845861	237

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960721	1406	*Tursiops truncatus*	6	275754 845861	237
960722	0903	*Tursiops truncatus*	1	275735 843677	96
960722	0947	*Ziphius cavirostris*	1	272115 853038	2446
960722	0947	Unidentified dolphin	1	272115 853038	2446
960722	1000	*Stenella attenuata*	100	272687 851873	854
960722	1007	*Kogia sp.*	2	273333 850572	460
960722	1032	*Tursiops truncatus*	15	274988 843167	98
960722	1056	*Stenella frontalis*	85	273836 843563	146
960722	1116	*Grampus griseus*	8	272828 850108	400
960722	1140	*Stenella clymene*	80	271994 851984	1014
960722	1146	*Stenella attenuata*	16	272007 852069	1057
960722	1158	Unidentified dolphin	2	271086 852774	3041
960722	1205	*Mesoplodon sp.*	2	271080 852110	1453
960722	1212	*Ziphius cavirostris*	1	271285 851678	1086
960722	1248	*Stenella frontalis*	1	273551 842226	85
960723	0908	*Stenella frontalis*	42	270132 841424	117
960723	0948	*Kogia sp.*	1	265506 850024	865
960723	1056	*Grampus griseus*	10	265643 851593	2569
960723	1059	*Grampus griseus*	11	265844 851835	2801
960723	1112	Unidentified odontocete	3	270405 851481	1351
960723	1140	*Tursiops truncatus*	4	272188 843221	140
960730	1345	*Stenella attenuata*	120	264412 845219	453
960730	1350	*Mesoplodon sp.*	1	264303 845898	1907
960730	1410	*Grampus griseus*	38	263961 844717	281
960730	1455	*T. truncatus/S.frontalis*	2	263769 841419	144
960730	1539	*Tursiops truncatus*	25	262528 844126	234
960731	0952	*Stenella frontalis*	26	260217 835477	115
960731	1004	*Tursiops truncatus*	27	260117 840149	137
960731	1036	*Stenella attenuata*	23	255476 844489	854
960731	1041	*Mesoplodon sp.*	2	255430 845029	1397
960731	1234	*Stenella attenuata*	120	261712 843716	223
WINTER 1997					
970207	1038	*Physeter macrocephalus*	2	290135 873217	1613
970211	1328	*Tursiops truncatus*	1	295165 872206	36
970211	1404	*Tursiops truncatus*	45	295698 871302	38
970211	1405	*Tursiops truncatus*	22	295489 871336	51
970211	1420	*Tursiops truncatus*	1	295922 870410	62
970211	1427	*Tursiops truncatus*	1	300711 870393	27
970211	1432	*Tursiops truncatus*	2	301462 865836	25
970211	1520	*Stenella frontalis*	6	300699 863089	34

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970211	1527	*Tursiops truncatus*	56	300786 863079	32
970211	1548	*Tursiops truncatus*	6	300032 862177	45
970211	1610	*Tursiops truncatus*	3	294448 861398	53
970216	0931	*Tursiops truncatus*	18	300546 880494	14
970216	0948	*Tursiops truncatus*	3	294091 880422	36
970216	1024	*Tursiops truncatus*	32	294031 875578	38
970216	1031	*Tursiops truncatus*	6	294206 875586	36
970216	1043	*Tursiops truncatus*	2	300001 875621	21
970216	1048	*Tursiops truncatus*	3	300227 875631	18
970216	1049	*Tursiops truncatus*	1	300424 875616	16
970219	0953	*Tursiops truncatus*	6	295838 875588	25
970219	1019	*Tursiops truncatus*	4	294975 874753	32
970219	1056	*Tursiops truncatus*	4	293804 873836	38
970219	1125	*Stenella frontalis*	14	300350 874031	23
970219	1138	*Tursiops truncatus*	3	300204 873032	23
970219	1213	*T. truncatus/S.frontalis*	1	294817 872212	60
970302	1449	*Stenella coeruleoalba*	65	290588 870832	866
970302	1551	*Stenella attenuata*	80	290156 871709	1068
970303	1250	*Tursiops truncatus*	4	292167 862213	212
970303	1301	*Tursiops truncatus*	7	291478 862664	307
970303	1333	*Kogia sp.*	1	283170 865005	678
970303	1400	*Stenella coeruleoalba*	40	282254 865533	863
970303	1434	*Kogia sp.*	2	283986 865266	645
970303	1441	*Tursiops truncatus*	11	284230 865106	607
970303	1512	*Tursiops truncatus*	6	291442 863666	380
970303	1520	*Grampus griseus*	4	291614 863584	365
970303	1534	*T. truncatus/S.frontalis*	6	292583 863187	235
970303	1540	*T. truncatus/S.frontalis*	2	292708 863124	219
970303	1637	*Stenella frontalis*	10	300889 860573	27
970304	0849	*Tursiops truncatus*	6	295412 864305	118
970304	0909	*Grampus griseus*	5	292345 865349	480
970304	0913	*Tursiops truncatus*	4	292245 865388	501
970304	0941	*Stenella coeruleoalba*	55	291737 865554	566
970304	1037	*Stenella attenuata*	85	281677 871629	1764
970304	1038	*Grampus griseus*	10	281561 871607	2040
970304	1050	Unidentified large whale	1	282101 870731	1106
970304	1126	*Grampus griseus*	3	291313 864717	459
970304	1137	*Tursiops truncatus*	140	291910 864446	407
970304	1335	*Grampus griseus*	4	285776 862633	358
970304	1405	Unidentified small whale	1	281164 865364	059
970304	1434	*Tursiops truncatus*	42	283232 863260	521
970304	1530	*Tursiops truncatus*	1	294306 855808	38

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970304	1542	*Tursiops truncatus*	10	295670 855809	32
970305	1119	*Stenella frontalis*	2	290566 855957	206
970305	1149	*Grampus griseus*	5	283273 862268	435
970305	1154	*Grampus griseus*	3	283141 862362	459
970305	1232	*Stenella attenuata*	105	280783 864038	1313
970305	1326	*Stenella longirostris*	630	282655 861563	446
970305	1336	*Tursiops truncatus*	9	283174 861313	387
970305	1344	*Grampus griseus*	2	283704 860963	340
970305	1412	*Tursiops truncatus*	2	291089 854570	93
970305	1425	*Tursiops truncatus*	2	290543 854085	133
970305	1505	*Stenella longirostris*	350	282348 860830	438
970305	1530	*Stenella attenuata*	53	275834 862449	2426
970305	1544	*Stenella attenuata*	17	280864 860764	707
970305	1553	*Stenella attenuata*	24	281694 860258	497
970305	1618	*Tursiops truncatus*	1	285098 854091	177
970308	1137	*T. truncatus/S.frontalis*	4	300355 860611	29
970308	1254	*Grampus griseus*	2	281143 855708	561
970308	1323	*Grampus griseus*	5	281052 854872	495
970308	1327	*Tursiops truncatus*	10	281146 854780	486
970308	1335	*Grampus griseus*	2	281894 854289	323
970308	1349	*Tursiops truncatus*	4	282622 853794	241
970308	1411	*Stenella frontalis*	14	284462 852363	117
970308	1447	*Tursiops truncatus*	6	281594 853495	312
970308	1447	*Grampus griseus*	11	281594 853495	312
970308	1450	*Grampus griseus*	3	281466 853665	338
970308	1508	*Stenella coeruleoalba*	60	280643 854261	535
970308	1648	*Tursiops truncatus*	2	294080 860632	45
970308	1705	*Tursiops truncatus*	1	300872 860607	27
970310	0921	*Tursiops truncatus*	1	275181 850093	290
970310	1014	*Tursiops truncatus*	1	274666 845200	234
970310	1056	*Grampus griseus*	4	273533 845652	307
970310	1139	*Grampus griseus*	4	272653 845817	352
970310	1152	*Tursiops truncatus*	8	273181 844548	210
970310	1229	Unidentified odontocete	1	272531 844164	193
970310	1242	*Grampus griseus*	1	272172 844995	250
970310	1319	*Tursiops truncatus*	19	270850 850006	541
970310	1341	*Stenella frontalis*	53	271657 844052	184
970311	0936	*Stenella frontalis*	21	282496 850102	106
970311	0957	*Grampus griseus*	4	280489 852352	373
970311	1002	*Grampus griseus*	4	280360 852516	396
970311	1048	*Stenella attenuata*	90	275382 852459	579
970311	1224	*Tursiops truncatus*	8	280725 850584	212

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970311	1224	*Balaenoptera edeni*	1	280725 850584	212
970311	1226	*Tursiops truncatus*	6	280811 850505	197
970311	1309	*Tursiops truncatus*	3	274749 852104	601
970319	0955	*Pseudorca crassidens*	30	265056 850754	2403
970319	1007	*Grampus griseus*	12	265059 841839	140
970319	1243	*Stenella attenuata*	50	263299 850061	2503
970319	1256	*Tursiops truncatus*	3	262941 844815	395
970319	1309	*Stenella attenuata*	27	263075 844147	235
970319	1340	*Tursiops truncatus*	7	263826 840129	111
970319	1346	*Tursiops truncatus*	5	263916 835562	91
970320	1001	*Mesoplodon sp.*	2	260066 844543	735
SUMMER 1997					
970715	1038	Unidentified odontocete	1	285335 874841	1810
970715	1121	*Stenella attenuata*	60	291650 873184	716
970715	1150	*Stenella attenuata*	14	282882 873326	2339
970715	1225	*Stenella attenuata*	95	291214 872386	1020
970715	1312	*Tursiops truncatus*	28	294749 872300	60
970715	1319	*T. truncatus/S.frontalis*	4	295376 872309	29
970715	1331	*T. truncatus/S.frontalis*	6	295858 872306	29
970716	0913	*Tursiops truncatus*	5	295639 880495	29
970716	0919	*Tursiops truncatus*	2	294904 880514	32
970716	0945	*Tursiops truncatus*	3	292565 875745	56
970716	1040	*T. truncatus/S.frontalis*	6	293500 874829	38
970716	1107	*Tursiops truncatus*	2	294606 873888	34
970716	1117	*Tursiops truncatus*	1	300135 873895	25
970716	1138	*Tursiops truncatus*	90	300099 873132	25
970716	1154	*Tursiops truncatus*	6	294194 873103	43
970716	1204	*Tursiops truncatus*	65	293725 873098	60
970716	1226	*Tursiops truncatus*	6	294453 872290	69
970716	1316	*T. truncatus/S.frontalis*	4	301113 870526	27
970716	1326	*Tursiops truncatus*	2	301134 865728	25
970716	1335	*Stenella frontalis*	57	300722 865738	40
970716	1342	*Tursiops truncatus*	30	300446 865734	71
970717	1001	*Stenella longirostris*	47	291679 871546	669
970717	1015	*Stenella attenuata*	75	290669 871702	980
970717	1027	*Stenella attenuata*	12	290026 871835	1117
970717	1121	*Physeter macrocephalus*	1	291173 870754	784
970717	1156	*T. truncatus/S.frontalis*	1	295915 865395	122
970717	1220	*T. truncatus/S.frontalis*	5	300708 863984	34
970723	0914	*Kogia sp.*	2	290312 870133	694

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970723	0934	*Kogia sp.*	1	283617 871024	929
970723	0946	*Stenella attenuata*	23	282742 871313	1126
970723	0956	*Physeter macrocephalus*	3	282563 871470	1199
970723	1014	*Kogia sp.*	1	282036 870844	1166
970723	1018	*Kogia sp.*	6	282181 870782	1104
970723	1022	*Physeter macrocephalus*	1	282514 870664	1018
970723	1029	*Stenella attenuata*	30	282784 870542	930
970723	1107	*Stenella coeruleoalba*	28	284301 870144	726
970723	1146	*Tursiops truncatus*	1	293706 863854	177
970723	1211	*T. truncatus/S.frontalis*	3	293686 861504	65
970723	1214	*T. truncatus/S.frontalis*	1	293891 861489	60
970723	1222	*Tursiops truncatus*	2	294832 861508	54
970723	1301	*T. truncatus/S.frontalis*	3	293233 860703	73
970723	1315	*Tursiops truncatus*	4	292482 855888	54
970723	1323	*Tursiops truncatus*	2	293456 855905	42
970723	1338	*Tursiops truncatus*	29	295057 855890	36
970724	0857	*Stenella frontalis*	13	292917 863161	206
970724	0915	*Tursiops truncatus*	20	291698 863781	373
970724	1009	*Stenella attenuata*	6	282195 865687	899
970724	1038	*Stenella longirostris*	325	284078 864621	559
970724	1110	*Tursiops truncatus*	4	291219 862895	336
970724	1130	*Stenella frontalis*	11	292990 861897	133
970724	1149	*Tursiops truncatus*	3	292516 861125	109
970724	1202	*Tursiops truncatus*	9	291264 861832	267
970724	1222	*Tursiops truncatus*	12	290118 862597	352
970724	1231	*T. truncatus/S.frontalis*	30	285690 862823	369
970724	1308	*Tursiops truncatus*	22	281448 865286	1353
970724	1339	*Tursiops truncatus*	11	284010 862892	426
970724	1355	*Tursiops truncatus*	7	285905 861714	316
970724	1404	*Stenella attenuata*	135	285988 861199	292
970725	0914	*Kogia sp.*	1	283130 862454	464
970725	0919	*Tursiops truncatus*	12	282913 862665	502
970725	1011	*Tursiops truncatus*	4	284116 860763	318
970725	1021	*Stenella attenuata*	130	284686 860351	288
970725	1032	*Tursiops truncatus*	1	290130 855368	201
970725	1042	*Tursiops truncatus*	10	291281 854585	84
970725	1058	*Stenella frontalis*	3	290867 853994	98
970725	1112	*Tursiops truncatus*	2	285404 854966	201
970725	1117	*Tursiops truncatus*	11	284950 855252	232
970725	1130	*Tursiops truncatus*	7	283532 860261	318
970725	1139	*Tursiops truncatus*	2	282788 860649	369
970725	1156	Unidentified odontocete	1	280603 862156	863

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970725	1234	*Tursiops truncatus*	38	282118 860074	415
970725	1300	*Stenella attenuata*	225	282642 855672	336
970725	1307	*Tursiops truncatus*	4	283303 855374	285
970725	1311	*Tursiops truncatus*	1	283932 854975	246
970726	0924	*Tursiops truncatus*	9	283583 854230	219
970726	1051	*Tursiops truncatus*	2	283688 851808	146
970726	1109	*Tursiops truncatus*	13	282093 853216	245
970726	1218	*Tursiops truncatus*	8	282800 851267	157
970726	1223	*Tursiops truncatus*	2	283176 850905	129
970727	0932	Unidentified odontocete	1	275192 853986	795
970727	1031	*Stenella attenuata*	50	275995 851245	327
970727	1057	Unidentified dolphin	1	281219 844841	80
970729	1441	*Stenella sp.*	375	273684 854426	2980
970729	1547	*Pseudorca crassidens*	31	274768 851718	528
970729	1604	*Stenella attenuata*	70	275552 851101	363
970730	0851	*Stenella frontalis*	9	265155 841683	135
970730	0902	*Tursiops truncatus*	3	265090 842032	148
970730	1033	*Tursiops truncatus*	1	263769 840974	137
970730	1051	*Stenella frontalis*	19	263658 841546	148
970731	1001	*Tursiops truncatus*	8	263234 843841	212
970731	1026	Unidentified small whale	3	262254 845366	1375
970731	1139	*Ziphius cavirostris*	3	261472 844968	985
970731	1355	*Tursiops truncatus*	9	265929 844613	232
970801	1009	*Stenella attenuata*	75	271273 845135	272
970801	1146	*Steno bredanensis*	34	271862 850190	490
970801	1244	*Stenella coeruleoalba*	45	272555 850318	449
970804	0953	*Stenella attenuata*	70	255998 845382	1907
970804	1022	*Stenella attenuata*	41	255558 843587	268
970806	1000	*Stenella attenuata*	21	273273 853414	1781
970806	1006	*Stenella attenuata*	34	272802 853660	3112
970806	1036	*Stenella attenuata*	67	274006 850605	413
970806	1051	*Tursiops truncatus*	8	274395 850182	338
970806	1105	*Tursiops truncatus*	2	275357 844120	135
970806	1140	*Kogia sp.*	1	273056 850886	554
970806	1209	*Mesoplodon sp.*	4	272204 851114	749
970806	1236	*Tursiops truncatus*	10	273679 843641	146
970806	1239	*Tursiops truncatus*	10	273737 843444	137
WINTER 1998					
980208	1058	*T. truncatus/S.frontalis*	1	293876 880840	36
980208	1111	*Tursiops truncatus*	25	293282 880909	40

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
980208	1142	*Stenella frontalis*	38	293584 875999	38
980208	1230	*Stenella frontalis*	72	293062 875150	43
980208	1307	*Tursiops truncatus*	2	300023 874228	27
980208	1315	*Tursiops truncatus*	4	300470 874203	20
980209	0907	*Physeter macrocephalus*	5	285938 880774	1190
980209	1002	*Grampus griseus*	57	291107 875105	590
980209	1012	*Grampus griseus*	21	285618 875149	1633
980209	1051	*Stenella coeruleoalba*	160	291237 874235	735
980209	1052	*Physeter macrocephalus*	1	291394 874230	544
980209	1119	*Tursiops truncatus*	110	292218 873255	221
980209	1136	*Stenella sp.*	15	285148 873618	2061
980209	1218	*Globicephala sp.*	33	290882 872724	1212
980209	1218	*Grampus griseus*	10	290882 872724	1212
980209	1229	*Tursiops truncatus*	30	292813 872457	212
980209	1251	*Tursiops truncatus*	9	293991 871401	230
980209	1301	*Tursiops truncatus*	5	292843 871644	363
980209	1314	*Stenella coeruleoalba*	73	291368 871863	817
980209	1336	*Stenella clymene*	130	290877 872010	993
980212	1222	*Tursiops truncatus*	52	292548 871668	422
980212	1301	*Stenella attenuata*	36	283809 872514	1329
980212	1330	*Stenella attenuata*	47	284969 871692	1064
980212	1359	*Stenella clymene*	32	285186 871819	1099
980212	1404	*Stenella sp.*	50	285126 871809	1099
980212	1507	*T. truncatus/S.frontalis*	5	300569 870003	36
980212	1525	*Tursiops truncatus*	2	300112 870829	34
980212	1542	*Tursiops truncatus*	1	295451 871724	36
980212	1614	*Tursiops truncatus*	8	294422 872644	51
980212	1618	*Tursiops truncatus*	4	294261 872624	53
980212	1638	*Tursiops truncatus*	3	294101 873426	40
980212	1646	*Tursiops truncatus*	2	295269 873417	32
980213	1231	*Tursiops truncatus*	8	300676 870047	2
980213	1244	*Tursiops truncatus*	2	301237 865214	25
980213	1256	*Tursiops truncatus*	3	300908 864325	29
980213	1343	*Physeter macrocephalus*	1	285523 870776	828
980213	1359	*Grampus griseus*	11	283593 871407	1018
980213	1428	*Ziphius cavirostris*	3	282150 871156	1269
980213	1530	*Tursiops truncatus*	8	295244 863582	98
980219	1105	*Tursiops truncatus*	5	300384 861848	36
980219	1124	*Tursiops truncatus*	3	300340 861048	32
980219	1145	*Tursiops truncatus*	4	294285 861089	47
980219	1146	*Tursiops truncatus*	2	294022 861076	51
980224	1240	*Stenella frontalis*	31	295997 862617	49

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
980224	1330	*Tursiops truncatus*	110	285375 864284	471
980224	1345	*Stenella attenuata*	8	283512 865356	693
980224	1352	*Stenella attenuata*	27	283144 865572	757
980224	1402	*Stenella attenuata*	99	282782 865756	832
980224	1408	*Stenella attenuata*	73	282425 865978	916
980224	1418	*Stenella attenuata*	20	281450 865722	1505
980224	1423	*Physeter macrocephalus*	1	281787 865478	978
980224	1432	*Stenella attenuata*	11	282625 865037	764
980224	1439	*Stenella attenuata*	16	283301 864510	625
980224	1454	*Feresa attenuata*	6	283503 864492	603
980224	1519	*Tursiops truncatus*	1	290962 862448	318
980224	1543	*Tursiops truncatus*	3	292182 860601	98
980224	1636	*Ziphius cavirostris*	2	281057 864871	1792
980224	1636	Unidentified dolphin	6	281057 864871	1792
980224	1658	*Stenella attenuata*	26	283085 862986	502
980224	1702	*Stenella attenuata*	21	283336 862745	459
980225	0817	*Tursiops truncatus*	4	291328 855020	102
980225	0836	*Tursiops truncatus*	18	284950 860668	296
980225	0937	*Feresa attenuata*	9	282064 861563	528
980225	1149	*Tursiops truncatus*	1	292100 860232	80
980225	1201	*Tursiops truncatus*	23	293593 860225	43
980225	1217	*Stenella frontalis*	18	295291 860262	36
980225	1225	*T. truncatus/S.frontalis*	6	295930 860249	31
980228	1309	*T. truncatus/S.frontalis*	2	293017 861062	91
980228	1323	*Stenella frontalis*	30	294768 861035	43
980228	1330	T. *truncatus/S.frontalis*	1	295708 861033	38
980304	0959	*Stenella attenuata*	75	282196 855556	367
980304	1138	*Tursiops truncatus*	1	282256 853549	241
980304	1222	*Tursiops truncatus*	2	281628 852990	277
980304	1252	Unidentified odontocete	1	274662 855149	881
980314	1209	*Stenella longirostris*	100	275120 853600	764
980314	1355	*Grampus griseus*	6	273466 852259	811
980314	1410	*Tursiops truncatus*	11	274371 850653	407
980314	1451	*Stenella frontalis*	60	274531 844654	210
980314	1543	*Grampus griseus*	11	273140 845691	323

Summary of cetacean sightings from GulfCet II ship surveys from NOAA Ship *Oregon II*. Location, group size, and depth data.

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
OREGON II CRUISE 220 - 1996					
960417	1453	*Tursiops truncatus*	3	293072 863253	156
960417	1650	*Tursiops truncatus*	7	292500 862492	220
960418	1151	*Stenella longirostris*	750	273029 850022	520
960418	1513	*Stenella longirostris*	500	270988 845803	439
960419	1603	*Stenella frontalis*	11	251269 840018	128
960419	1629	*Tursiops truncatus*	8	250779 840021	132
960420	1259	*Stenella attenuata*	5	245996 851163	3331
960421	1623	*Stenella attenuata*	18	272730 860019	3239
960421	1850	*Stenella attenuata*	21	274731 860044	3020
960422	0620	Unidentified odontocete	1	290012 863338	401
960422	0735	*Grampus griseus*	2	290093 864637	512
960422	1003	*Stenella attenuata*	125	285973 865998	695
960422	1225	Unidentified large whale	1	283999 870064	732
960423	1302	Unidentified dolphin	1	260391 872570	3148
960423	1521	*Stenella attenuata*	150	260004 873552	3148
960423	1720	*Stenella attenuata*	125	260083 875443	3111
960423	1810	*Stenella clymene*	78	260011 875962	3020
960424	1533	Unidentified ziphiidae	1	280756 875943	2525
960425	0713	Unidentified dolphin	1	285992 883358	494
960425	0742	*Grampus griseus*	8	285957 883759	357
960425	1112	*Tursiops truncatus*	8	285302 890096	117
960425	1159	*Grampus griseus*	3	284547 890059	522
960425	1226	*Grampus griseus*	3	284286 890021	622
960425	1318	*Physeter macrocephalus*	1	283495 885878	805
960425	1347	*Physeter macrocephalus*	1	283077 885981	805
960425	1355	*Physeter macrocephalus*	1	283014 885994	805
960425	1517	*Physeter macrocephalus*	1	282645 885934	1007
960425	1542	*Physeter macrocephalus*	4	282275 885934	1105
960425	1558	*Physeter macrocephalus*	2	282003 885936	1157
960425	1602	*Physeter macrocephalus*	1	281942 885940	1157
960426	1101	*Stenella attenuata*	80	255900 890437	3111
960426	1614	*Physeter macrocephalus*	1	260056 895313	2928
960427	0725	*Stenella attenuata*	75	273147 903033	1007
960427	0846	Unidentified dolphin	1	273012 904366	1007
960427	0945	*Stenella coeruleoalba*	80	273312 905178	1299
960427	1052	*Stenella clymene*	68	273017 910025	1116
960428	0658	Unidentified dolphin	2	260549 920029	2150

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960428	1200	*Stenella clymene*	100	265170 915948	1885
960429	0940	*Stenella clymene*	75	261571 925999	1885
960430	1836	*Stenella attenuata*	50	272308 945870	1116
960430	1911	*Stenella clymene*	150	271898 950104	1136
960501	0715	*Mesoplodon sp.*	2	255979 950976	1830
960501	1254	*Stenella attenuata*	45	260109 955986	1025
960501	1833	Unidentified small whale	3	263547 955939	1098
960502	1405	*Tursiops truncatus*	12	280055 950136	90
960502	1715	*Tursiops truncatus*	7	275991 943536	68
960502	1728	*Stenella frontalis*	40	275996 943290	66
960503	0717	*Grampus griseus*	3	280013 923397	110
960503	0717	*Tursiops truncatus*	2	280013 923397	110
960503	1100	Unidentified dolphin	2	275938 915954	110
960504	1005	*Stenella attenuata*	40	281933 891748	824
960504	1128	*Kogia simus*	4	283051 890950	549
960504	1231	*Tursiops truncatus*	4	283960 890214	694
960508	0722	*Tursiops truncatus*	1	292174 862155	231
960508	1344	*Tursiops truncatus*	2	285263 855422	243
960508	1454	Unidentified dolphin	4	284563 854445	210
960508	1603	*Stenella frontalis*	10	283630 853621	207
960508	1742	*Balaenoptera edeni*	2	282900 853017	203
960509	1144	*Stenella attenuata*	220	262420 850261	3289
960509	1315	*Grampus griseus*	9	261092 850051	3312
960509	1738	*Tursiops truncatus*	30	260002 844036	481
960510	1103	*Stenella attenuata*	20	242594 840670	2379
960510	1212	Unidentified dolphin	3	242748 840710	2196
960510	1731	*Stenella longirostris*	500	242739 832742	351
960512	1106	*Tursiops truncatus*	12	241728 821047	242
960512	1554	*Tursiops truncatus*	12	242122 831345	384
960512	1621	*Tursiops truncatus*	10	242321 831583	320
960512	1739	*Grampus griseus*	7	242471 833096	575
960512	1858	*Stenella attenuata*	100	242534 834512	988
960513	0639	*Physeter macrocephalus*	2	244305 850030	3386
960513	0707	*Physeter macrocephalus*	1	244582 850139	3386
960513	1606	*Grampus griseus*	15	250063 855126	3294
960513	1629	*Grampus griseus*	6	250114 855476	3294
960513	1901	*Grampus griseus*	4	250265 855905	3395
960514	1239	*Grampus griseus*	4	264028 860047	3203
960514	1646	Unidentified large whale	1	270409 855733	3221
960515	1524	*Stenella sp.*	2	285970 863607	423
960515	1723	*Stenella attenuata*	35	290014 865853	672
960516	0617	*Physeter macrocephalus*	3	272286 870063	3038

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960516	0622	*Physeter macrocephalus*	1	272208 870072	3038
960516	1116	*Stenella attenuata*	30	264726 865936	3001
960516	1508	Unidentified dolphin	1	262301 870062	3038
960517	0627	*Stenella clymene*	15	264177 875963	2699
960517	1001	*Stenella attenuata*	150	270611 875949	2745
960517	1126	*Mesoplodon sp.*	1	272007 875922	2562
960517	1311	Unidentified dolphin	2	272939 880051	2425
960517	1313	*Physeter macrocephalus*	4	272949 880040	2425
960517	1348	*Physeter macrocephalus*	1	272958 875991	2562
960517	1719	*Stenella attenuata*	300	275935 875870	2471
960517	1933	*Stenella attenuata*	200	281026 880118	2379
960518	0618	*T. truncatus/S.frontalis*	5	293738 875985	22
960518	0651	*Stenella frontalis*	4	294241 875972	22
960518	0941	*Tursiops truncatus*	23	291935 881348	86
960518	1116	*Tursiops truncatus*	10	290768 882485	124
960518	1325	*Grampus griseus*	24	285901 883242	525
960518	1404	Unidentified dolphin	1	290170 883714	366
960518	1427	*Tursiops truncatus*	10	290287 884116	220
960518	1455	*Tursiops truncatus*	11	290106 884579	201
960518	1607	*Tursiops truncatus*	15	290162 885902	64
960518	1714	Unidentified dolphin	2	285937 885969	81
960518	1852	*Grampus griseus*	4	284386 885992	604
960519	0720	*Stenella attenuata*	13	270668 885983	2196
960519	0811	*Stenella attenuata*	200	265846 885956	2288
960519	1023	*Stenella attenuata*	150	265199 890038	2269
960519	1121	*Stenella attenuata*	650	264324 885953	2677
960519	1237	*Physeter macrocephalus*	3	263415 890209	3294
960519	1853	*Physeter macrocephalus*	1	255901 890971	3203
960519	1911	*Physeter macrocephalus*	1	255912 891285	3248
960520	1050	Unidentified ziphiidae	2	270908 895949	2196
960520	1131	*Stenella attenuata*	150	271613 900058	1354
960520	1217	*Grampus griseus*	20	272263 900042	1254
960520	1230	*Stenella attenuata*	150	272335 895919	1241
960520	1258	*Ziphius cavirostris*	4	272726 900007	1197
960520	1516	*Physeter macrocephalus*	1	274460 900020	897
960520	1518	*Physeter macrocephalus*	2	274513 900019	878
960520	1937	*Tursiops truncatus*	75	280290 901401	346
960521	0630	*Stenella attenuata*	20	272029 910014	1373
960521	0644	*Stenella attenuata*	18	271792 910014	1336
960521	0703	*Stenella attenuata*	15	271552 910185	1373
960521	0747	*Stenella attenuata*	20	270893 905927	1556
960521	1027	*Stenella clymene*	55	265662 910012	1830

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960521	1236	*Orcinus orca*	4	264729 910204	1922
960521	1719	Unidentified dolphin	1	260631 910176	2946
960522	0651	*Stenella clymene*	75	263487 915888	1647
960522	0736	*Stenella attenuata*	45	264058 920022	1647
960522	0738	*Stenella attenuata*	40	264095 920016	1647
960522	0751	*Grampus griseus*	12	264265 915976	1647
960522	0806	*Stenella attenuata*	45	264464 915889	1739
960522	0935	*Stenella attenuata*	20	265806 915921	1501
960522	1115	*Mesoplodon sp.*	1	270189 915984	1427
960522	1127	*Kogia breviceps*	1	270366 915999	1482
960522	1132	*Kogia breviceps*	1	270452 920003	1501
960522	1204	*Stenella attenuata*	17	270880 920019	1524
960522	1206	*Kogia breviceps*	1	270847 920017	1524
960522	1218	*Kogia sp.*	5	271000 920045	1519
960522	1244	*Grampus griseus*	10	271130 920237	1499
960522	1330	*Stenella attenuata*	25	271580 920168	1153
960522	1336	*Mesoplodon sp.*	1	271673 920148	1007
960522	1342	*Kogia sp.*	3	271769 920141	970
960522	1446	*Stenella attenuata*	175	272782 915939	778
960522	1636	*Globicephala sp.*	27	273680 915740	877
960522	1638	*Stenella attenuata*	30	273714 915739	877
960522	1640	Unidentified dolphin	15	273747 915740	877
960522	1645	*Kogia simus*	2	273778 915735	877
960522	1648	*Kogia simus*	6	273793 915739	877
960522	1735	*Kogia simus*	4	274533 915814	452
960522	1810	Unidentified small whale	1	275082 915963	346
960522	1826	*Stenella frontalis*	15	275254 915732	220
960522	1831	*Stenella frontalis*	10	275265 915648	220
960522	1833	Unidentified dolphin	4	275290 915612	220
960522	1920	*Stenella frontalis*	30	275762 915390	135
960522	1943	Unidentified dolphin	1	275930 915731	112
960523	0652	*Globicephala sp.*	35	273527 925638	553
960523	0856	*Stenella attenuata*	100	272542 925718	769
960523	0932	*Stenella attenuata*	115	272123 930068	778
960523	1006	*Mesoplodon sp.*	2	271629 925958	1135
960523	1119	*Peponocephala electra*	125	271322 930199	1025
960523	1520	Unidentified odontocete	2	264548 925975	1519
960523	1657	*Physeter macrocephalus*	1	263004 925999	1733
960523	1755	Unidentified ziphiidae	1	262732 930036	1775
960523	1933	*Grampus griseus*	4	261684 930091	1976
960524	0730	*Ziphius cavirostris*	1	262991 935999	1556
960525	0706	*Stenella frontalis*	6	280628 911199	112

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960525	0802	*Tursiops truncatus*	1	280860 910033	101
960525	0851	*T. truncatus/S.frontalis*	3	281057 905021	93
960525	1006	Unidentified dolphin	2	281387 903437	77
960525	1013	*Stenella frontalis*	10	281447 903296	73
960525	1013	*Tursiops truncatus*	2	281447 903296	73
960525	1130	*T. truncatus/S.frontalis*	4	281893 901726	70
960525	1433	*Stenella attenuata*	40	282657 893869	695
960525	1449	*Grampus griseus*	2	282722 893521	732
960525	1521	*Stenella attenuata*	25	282837 892840	458
960525	1521	*Grampus griseus*	6	282837 892840	458
960525	1524	Unidentified small whale	1	282851 892773	458
960525	1659	*Physeter macrocephalus*	3	283065 890804	540
960525	1738	*Physeter macrocephalus*	1	283638 890360	540
960525	1748	*Grampus griseus*	8	283795 890285	586
960525	1823	Unidentified dolphin	4	284294 885875	659
960525	1841	Unidentified odontocete	1	284489 885581	695
960525	1924	*Grampus griseus*	8	285116 885054	604
960529	1838	*Tursiops truncatus*	3	292986 874907	53
960530	0711	*Stenella attenuata*	40	275247 860535	3111
960530	0755	*Stenella attenuata*	60	274749 860117	3175
960530	*0959*	*Stenella attenuata*	115	273535 854279	3235
960530	1021	*Stenella attenuata*	48	273361 853933	3228
960530	1353	*Stenella attenuata*	65	271804 852228	1281
960530	1510	*Stenella attenuata*	20	272470 850978	745
960530	1729	*Tursiops truncatus*	6	273805 844674	205
960530	1729	*Stenella frontalis*	12	273805 844674	205
960531	0559	*Stenella frontalis*	7	281081 844817	99
960531	1145	*Stenella attenuata*	40	274446 853080	869
960531	1238	*Stenella attenuata*	175	274019 853752	1739
960531	1517	*Stenella attenuata*	50	274468 854505	2379
960531	1754	*T. truncatus/S.frontalis*	1	280374 853821	710
960531	1914	*Stenella longirostris*	32	281244 853376	381
960601	1630	*Stenella frontalis*	9	282140 852190	205
960601	1630	*T. truncatus/S.frontalis*	2	282140 852190	205
960602	1553	*Physeter macrocephalus*	5	280324 860052	877
960602	1743	Unidentified small whale	1	274573 860742	3157
960603	0722	*Stenella attenuata*	120	281200 861143	719
960603	0946	*Tursiops truncatus*	15	283367 861172	377
960603	1034	*Tursiops truncatus*	8	284008 861417	366
960603	1114	*Tursiops truncatus*	6	284503 861306	342
960603	1540	*Tursiops truncatus*	10	291946 861406	205
960603	1611	*Tursiops truncatus*	4	292454 861441	161

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960603	1803	*Tursiops truncatus*	5	293587 861527	71
960603	1836	*Stenella frontalis*	70	293897 861347	62
960604	0609	*Stenella frontalis*	15	295015 861503	62
960604	0639	*Tursiops truncatus*	15	295483 861452	62
960604	0657	Unidentified dolphin	4	295804 861524	49
960604	0754	*Tursiops truncatus*	12	300681 861733	55
960604	0810	*Tursiops truncatus*	17	300783 861706	35
960604	0834	*T. truncatus/S.frontalis*	2	301185 861793	35
960604	0927	*T. truncatus/S.frontalis*	5	301184 861953	31
960604	0934	*Tursiops truncatus*	12	301213 862082	29
960604	0937	*T. truncatus/S.frontalis*	1	301230 862147	29
960604	0941	*Tursiops truncatus*	4	301245 862205	29
960604	1118	*T. truncatus/S.frontalis*	1	300960 863061	33
960604	1120	*T. truncatus/S.frontalis*	1	300922 863060	33
960604	1207	*Stenella frontalis*	38	300746 863153	38
960604	1254	*Stenella frontalis*	20	300467 863088	46
960604	1334	Unidentified dolphin	1	295863 863251	75
960604	1445	Unidentified small whale	1	294685 863299	123
960604	1743	Unidentified dolphin	1	292520 863255	313
960604	1838	*Kogia breviceps*	2	291837 863682	379
960604	1927	*Stenella coeruleoalba*	30	291624 863991	404
960605	0619	*Stenella coeruleoalba*	21	291245 863904	414
960605	0635	*Kogia sp.*	1	291104 863737	406
960605	0643	Unidentified dolphin	1	290959 863727	408
960605	0656	Unidentified dolphin	1	290725 863707	415
960605	0707	*Grampus griseus*	20	290564 863669	414
960605	0844	Unidentified dolphin	5	285995 863959	447
960605	0849	Unidentified dolphin	8	285991 863937	447
960605	0851	*Grampus griseus*	12	290012 863904	410
960605	0856	*Kogia sp.*	1	290054 863832	439
960605	0910	*Kogia sp.*	1	290087 863615	439
960605	0940	*Tursiops truncatus*	45	285964 863331	404
960605	0949	*Kogia sp.*	1	285842 863397	412
960605	1112	*Stenella longirostris*	250	285697 863563	723
960605	1142	*Stenella longirostris*	100	285425 863588	434
960605	1237	*Kogia sp.*	1	284649 863826	485
960605	1246	*Grampus griseus*	6	284579 863867	489
960605	1333	*Grampus griseus*	10	284013 863787	522
960605	1358	*Grampus griseus*	8	283664 863970	567
960605	1410	*Grampus griseus*	4	283562 863857	569
960605	1426	*Grampus griseus*	8	283313 863899	602
960605	1611	*Stenella attenuata*	200	281720 863803	844

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
960605	1830	*Stenella attenuata*	100	280546 864277	2937
960605	1929	*Grampus griseus*	15	281199 864556	1135
960606	0636	*Stenella attenuata*	85	281492 865027	1144
960606	0658	*Physeter macrocephalus*	3	281720 865158	1030
960606	0827	*Stenella attenuata*	85	283104 865066	737
960606	1253	*Grampus griseus*	7	290849 865535	604
960606	1423	*Kogia sp.*	1	292455 865721	567
960606	1450	*Tursiops truncatus*	4	292699 865388	556
960606	1452	Unidentified dolphin	5	292698 865357	556
960606	1502	*Tursiops truncatus*	172	292701 865163	479
960606	1645	*Grampus griseus*	15	293311 865424	304
960606	1930	*Balaenoptera sp.*	1	294483 870350	212
960606	1932	*Balaenoptera edeni*	4	294484 870352	212
960607	0713	*Stenella frontalis*	28	295504 865836	163
960607	0837	*Stenella frontalis*	28	300806 870248	26
960607	0942	*Stenella frontalis*	7	300960 870321	27
960607	1026	*Stenella frontalis*	21	300300 870710	31
960607	1106	*Tursiops truncatus*	10	295704 870782	55
960607	1129	*Stenella frontalis*	25	295424 870995	77
960607	1312	*Tursiops truncatus*	5	294007 871734	185
960608	1027	*Stenella attenuata*	75	291029 873923	1098
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970417	1139	*Tursiops truncatus*	2	293030 863044	203
970417	1401	*Physeter macrocephalus*	1	291987 861934	231
970417	1548	Unidentified dolphin	1	290630 860614	243
970419	0628	*Stenella frontalis*	20	250652 840033	124
970419	1049	*Physeter macrocephalus*	1	243908 835941	970
970419	1122	*Grampus griseus*	4	243434 840003	1464
970419	1249	*Kogia sp.*	1	242952 840097	2288
970419	1407	*Grampus griseus*	12	242909 840927	2379
970419	1433	*Grampus griseus*	4	243052 841000	2379
970419	1439	*Kogia sp.*	2	243021 841086	2745
970419	1448	*Kogia sp.*	1	243001 841231	2562
970419	1502	*Kogia sp.*	1	242991 841469	2236
970419	1604	*Grampus griseus*	11	243088 842205	3440
970419	1604	Unidentified dolphin	6	243088 842205	3440
970419	1625	Unidentified dolphin	3	243047 842580	3440
970419	1817	*Kogia sp.*	2	242968 843244	3422
970419	1912	*Feresa attenuata*	13	242881 843580	3422
970420	0705	*Stenella attenuata*	8	250091 854492	3294

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970420	0820	Unidentified odontocete	1	250037 855968	3294
970420	0846	Unidentified dolphin	6	245996 855994	3294
970420	1053	Unidentified dolphin	4	250913 860030	3276
970420	1240	*Stenella attenuata*	33	252261 860029	3239
970420	1259	*Mesoplodon sp.*	1	252571 855996	3257
970420	1436	*Pseudorca crassidens*	65	252903 855930	3203
970420	1642	*Grampus griseus*	10	253054 860935	3203
970420	1742	*Grampus griseus*	3	253164 861787	3221
970420	1742	Unidentified dolphin	1	253164 861787	3221
970421	1119	*Stenella attenuata*	25	273976 855882	3203
970421	1635	*Stenella longirostris*	100	281722 855191	423
970421	1657	Unidentified dolphin	1	281913 855305	401
970421	1742	*Stenella longirostris*	110	282406 855562	351
970421	1838	*Stenella sp.*	4	283005 860025	326
970422	0748	*Stenella attenuata*	35	282077 865940	1067
970422	0845	*Steno bredanensis*	6	281913 865984	1098
970422	0940	*Peponocephala/Feresa*	6	281395 870072	2745
970422	0940	*Stenella attenuata*	17	281395 870072	2745
970422	1105	Unidentified ziphiidae	1	280278 870013	2815
970422	1245	*Stenella attenuata*	20	275712 870019	2855
970424	0846	*Stenella attenuata*	32	285775 880005	1510
970424	1542	*Tursiops truncatus*	7	291531 881502	92
970424	1634	*Stenella frontalis*	17	291089 881831	221
970424	1714	*Tursiops truncatus*	85	291023 882008	240
970429	0642	Unidentified dolphin	1	260051 930562	2196
970429	0756	*Stenella attenuata*	50	260089 931781	2379
970429	1708	Unidentified small whale	1	262336 940007	1885
970430	0935	*Stenella frontalis*	19	280022 945358	82
970430	1546	*Stenella attenuata*	17	272685 950007	999
970430	1834	*Stenella attenuata*	200	270185 950060	1382
970501	1724	Unidentified ziphiidae	1	270959 955951	531
970503	0728	*Grampus griseus*	22	274008 915746	641
970503	0832	*Stenella attenuata*	55	273062 920023	778
970503	1008	*Stenella attenuata*	250	272667 915197	970
970503	1031	*Stenella attenuata*	13	272682 914951	1007
970503	1153	*Globicephala sp.*	39	272756 914247	1058
970503	1319	*Grampus griseus*	7	272376 912988	1089
970503	1443	*Stenella attenuata*	300	272235 911882	1292
970504	0651	*Stenella attenuata*	14	270360 890038	2196
970504	1907	*Physeter macrocephalus*	6	282740 885766	961
970505	0655	*T. truncatus/S.frontalis*	1	283286 892620	214
970505	1753	Unidentified odontocete	1	285079 883202	871

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970505	1932	*Stenella attenuata*	37	290479 883156	329
970509	0635	*Tursiops truncatus*	24	291664 863058	275
970509	0802	*Stenella longirostris*	40	290236 862904	357
970509	0927	*Stenella longirostris*	80	290034 863057	357
970509	1015	*Kogia sp.*	1	290281 862467	339
970509	1016	*Grampus griseus*	7	290289 862439	339
970509	1115	*Tursiops truncatus*	17	290640 861558	293
970509	114	*Tursiops truncatus*	13	290851 861090	260
970509	1239	*Balaenoptera edeni*	2	290999 860671	229
970509	1241	Unidentified dolphin	2	290997 860655	229
970509	1601	*Tursiops truncatus*	1	290780 855601	187
970509	1626	*Tursiops truncatus*	3	290664 855434	187
970509	1756	*Tursiops truncatus*	3	285552 854318	178
970509	1839	*Tursiops truncatus*	9	284896 854051	181
970509	1847	*Tursiops truncatus*	5	284791 854000	181
970510	0701	*Stenella attenuata*	12	272795 855849	3203
970510	0753	*Stenella attenuata*	35	272232 855709	3203
970510	0807	Unidentified dolphin	3	272075 855895	3203
970510	0838	Unidentified dolphin	4	271658 855714	3203
970510	0853	*Stenella attenuata*	32	271607 855898	3203
970510	0956	*Stenella attenuata*	80	270707 860020	3203
970510	1008	*Kogia sp.*	1	270508 860057	3203
970510	1049	*Stenella attenuata*	15	270042 855961	3203
970511	1540	*Steno bredanensis*	30	261352 865943	3111
970511	1655	*Stenella attenuata*	30	262459 865883	3056
970512	1206	*Grampus griseus*	2	285873 865886	644
970512	1412	*Physeter macrocephalus*	3	290377 870694	781
970512	1552	*Stenella attenuata*	200	291187 871749	1010
970512	1651	*Stenella attenuata*	120	291075 872341	1098
970512	1748	*Stenella coeruleoalba*	90	291536 873034	919
970512	1840	*Tursiops truncatus*	27	291829 873385	439
970512	1910	*Stenella longirostris*	15	291946 873892	275
970512	1943	*Tursiops truncatus*	40	291871 874417	201
970513	0646	*Stenella attenuata*	28	284759 880054	1830
970513	0754	*Stenella longirostris*	70	283756 880013	2269
970513	1455	*Stenella attenuata*	17	274889 875997	2525
970513	1631	*Stenella attenuata*	25	273335 880061	3056
970513	1655	*Stenella attenuata*	12	272944 880188	2562
970513	1657	Unidentified dolphin	1	272933 880176	2562
970513	1800	*Stenella attenuata*	7	272772 880040	2562
970513	1823	*Stenella attenuata*	19	272519 875837	2654
970513	1907	*Stenella attenuata*	35	271872 875922	2654

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970514	0642	*Stenella attenuata*	35	260269 880670	2965
970514	0712	Unidentified dolphin	14	260298 881190	3001
970514	0738	*Stenella attenuata*	19	260153 881619	3001
970514	0742	*Kogia sp.*	2	260148 881689	3001
970514	0752	*Kogia sp.*	1	260105 881844	3001
970514	0803	*Stenella attenuata*	19	255975 881962	3001
970514	0831	*Stenella attenuata*	19	260165 882413	3001
970514	0906	*Ziphius cavirostris*	4	255886 882765	3001
970514	1059	*Kogia sp.*	6	260005 883635	3020
970514	1127	Unidentified odontocete	1	260048 884077	3001
970514	1129	Unidentified dolphin	15	260051 884105	3020
970514	1156	Unidentified dolphin	30	260042 884584	3056
970514	1246	*Stenella attenuata*	70	260117 885149	3203
970514	1403	*Stenella attenuata*	60	260233 890256	3129
970514	1413	*Kogia sp.*	2	260136 890148	3129
970514	1548	*Stenella attenuata*	35	260459 890071	2928
970514	1702	*Stenella coeruleoalba*	95	261101 890155	3020
970514	1709	Unidentified dolphin	20	261181 890174	3020
970514	1839	*Physeter macrocephalus*	6	262609 885915	2745
970514	1852	*Orcinus orca*	1	262685 885852	2745
970515	0652	*Physeter macrocephalus*	5	275757 890113	1327
970515	0711	*Stenella attenuata*	65	275913 885845	1318
970515	0856	*Kogia sp.*	2	280341 885624	1373
970515	0923	*Kogia sp.*	2	280624 885604	1464
970515	0946	Unidentified odontocete	1	280978 885565	1363
970515	1030	*Physeter macrocephalus*	1	281540 885970	1171
970515	1104	*Physeter* macrocephalus	2	282058 885941	1061
970515	1119	*Stenella attenuata*	55	282231 885735	1098
970515	1144	*Physeter macrocephalus*	1	282629 885717	1016
970515	1205	*Kogia sp.*	3	282886 885906	878
970515	1211	*Physeter macrocephalus*	1	282950 885963	822
970515	1323	*Kogia sp.*	4	282734 890283	747
970515	1331	*Physeter macrocephalus*	1	282638 890371	739
970515	1334	*Physeter macrocephalus*	4	282605 890404	739
970515	1439	*Globicephala sp.*	85	281928 890566	908
970515	1507	*Physeter macrocephalus*	1	281819 890995	880
970515	1525	Unidentified odontocete	2	281589 891128	880
970515	1622	*Stenella attenuata*	42	281665 892015	750
970515	1652	*Kogia sp.*	3	281213 891976	988
970515	1719	*Kogia sp.*	1	280877 892259	1039
970515	1744	*Stenella coeruleoalba*	58	280589 892256	1113
970515	1824	*Grampus griseus*	25	280166 892395	1147

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970515	1828	Unidentified dolphin	10	280161 892472	1147
970515	1913	*Stenella attenuata*	53	280089 893171	915
970516	0855	Unidentified dolphin	1	265517 900164	2562
970516	1232	*Stenella attenuata*	30	262475 895967	2763
970517	1402	*Stenella attenuata*	100	272517 910151	1391
970519	1306	*Tursiops truncatus*	5	285447 950345	18
970519	1435	*Tursiops truncatus*	20	284049 951728	22
970519	1739	*Tursiops truncatus*	9	281302 954591	31
970519	1752	*Tursiops truncatus*	6	281113 954834	33
970520	0701	*Kogia sp.*	1	261611 960010	952
970520	0728	*Kogia sp.*	1	261188 960008	1007
970520	1453	Unidentified dolphin	12	260117 951488	1793
970520	1533	*Stenella clymene*	70	260248 950968	1757
970520	1622	*Stenella attenuata*	87	260255 950220	2397
970521	0940	*Stenella frontalis*	14	275376 945979	110
970521	1312	*Tursiops truncatus*	2	275886 943555	73
970521	1341	*Tursiops truncatus*	4	275911 943154	73
970521	1354	*Tursiops truncatus*	4	280030 943115	68
970521	1507	*Tursiops truncatus*	5	280006 942233	81
970523	0703	*Globicephala sp.*	3	263060 921314	1903
970523	1015	*Globicephala sp.*	10	262991 924402	1647
970523	1410	*Stenella attenuata*	150	263927 930009	1506
970523	1550	*Mesoplodon sp.*	1	265320 925980	1318
970523	1903	*M. densirostris*	1	270503 930067	1365
970523	1924	*Stenella attenuata*	6	270695 925993	1299
970524	1005	Unidentified dolphin	4	273008 920017	732
970524	1636	Unidentified dolphin	3	273478 904898	1138
970525	0836	*Stenella attenuata*	25	280667 895046	595
970525	1008	*Physeter macrocephalus*	1	281636 893807	851
970525	1035	*Stenella clymene*	20	281862 893547	833
970525	1155	*Grampus griseus*	4	282603 892432	571
970525	1242	*Grampus griseus*	2	282997 892011	393
970525	1329	Unidentified dolphin	2	283433 891323	309
970525	1600	*Grampus griseus*	25	284636 885567	573
970525	1617	*Grampus griseus*	3	284655 885437	620
970525	1654	Unidentified dolphin	2	284710 885059	673
970525	1849	*Stenella attenuata*	160	284471 883568	941
970525	1922	*Grampus griseus*	11	284504 883066	1190
970525	1934	Unidentified dolphin	3	284625 883023	1248
970530	1218	*Tursiops truncatus*	30	280198 850012	223
970530	1251	Unidentified dolphin	3	280666 845959	188
970530	1434	*Stenella frontalis*	38	281910 845452	93

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970530	1456	*T. truncatus/S.frontalis*	4	282242 845348	79
970530	1631	*Stenella frontalis*	5	282393 844661	59
970530	1658	*Tursiops truncatus*	2	282633 844307	57
970530	1744	*Stenella frontalis*	11	282815 843499	53
970530	1758	*Stenella frontalis*	3	282963 843309	49
970530	1830	*T. truncatus/S.frontalis*	2	283276 843080	46
970530	1914	*Tursiops truncatus*	1	283402 842830	42
970531	0601	*Stenella frontalis*	14	283189 845759	82
970531	0619	*Stenella frontalis*	10	282928 845942	93
970531	0631	Unidentified dolphin	5	282837 850137	106
970531	0634	*Stenella frontalis*	1	282818 850175	106
970531	0648	*T. truncatus/S.frontalis*	3	282646 850318	119
970531	0651	*T. truncatus/S.frontalis*	25	282603 850342	119
970531	0658	*Stenella frontalis*	7	282503 850417	126
970531	0813	Unidentified dolphin	1	281361 850780	181
970531	0903	Unidentified dolphin	1	280659 851156	271
970531	0944	*Stenella longirostris*	130	280466 851373	313
970531	1214	Unidentified dolphin	4	275294 852063	549
970531	1522	*Stenella attenuata*	115	273006 853662	2745
970531	1609	*Stenella attenuata*	8	272420 853616	2745
970601	0632	*Stenella attenuata*	10	274214 853494	1427
970601	0635	Unidentified small whale	1	274247 853489	1427
970601	0727	*Stenella attenuata*	37	275014 853579	813
970601	1045	Unidentified dolphin	2	282043 853511	276
970601	1157	*Tursiops truncatus*	3	282614 853424	223
970601	1205	*Tursiops truncatus*	3	282748 853409	216
970601	1240	*Tursiops truncatus*	4	283298 853357	192
970601	1754	*Stenella frontalis*	30	290477 853868	132
970602	0933	Unidentified odontocete	1	282436 855627	355
970602	1020	*Grampus griseus*	3	282051 855768	415
970602	1218	*Physeter macrocephalus*	2	280533 860423	820
970602	1408	*Pseudorca crassidens*	35	280355 860729	915
970602	1408	*Steno bredanensis*	2	280355 860729	915
970602	1813	*Pseudorca crassidens*	22	280436 861529	915
970603	0621	*Stenella sp.*	3	281798 860972	547
970603	1343	*Lagenodelphis hosei*	117	291241 861466	251
970603	1415	Unidentified large whale	1	291709 861295	210
970603	1912	*Stenella frontalis*	30	293941 861649	66
970604	0813	*Tursiops truncatus*	15	295999 861772	40
970604	0851	*Tursiops truncatus*	16	300560 861742	31
970604	0916	*Tursiops truncatus*	3	300832 861749	29
970604	1009	*T. truncatus/S.frontalis*	1	301330 862274	26

DATE	TIME	SPECIES	GROUP SIZE	POSITION	DEPTH (METERS)
970604	1030	*Tursiops truncatus*	15	301417 862464	24
970604	1033	*T. truncatus/S.frontalis*	20	301415 862502	24
970604	1109	*Stenella frontalis*	8	301328 863064	24
970604	1112	*T. truncatus/S.frontalis*	3	301269 863066	24
970604	1121	*Tursiops truncatus*	9	301162 863128	24
970604	1123	*Tursiops truncatus*	5	301133 863143	24
970604	1130	*T. truncatus/S.frontalis*	6	301027 863152	24
970604	1147	*Tursiops truncatus*	2	300763 863166	24
970604	1156	*Tursiops truncatus*	5	300624 863165	24
970604	1157	*T. truncatus/S.frontalis*	3	300609 863166	24
970604	1612	*Stenella frontalis*	23	293933 863206	143
970604	1732	*Stenella frontalis*	25	292988 863304	216
970604	1811	*Grampus griseus*	7	292885 863546	242
970604	1925	*Tursiops truncatus*	6	291861 863701	179
970605	1311	*Tursiops truncatus*	1	281739 864053	831
970605	1447	*Kogia sp.*	1	280857 864418	2882
970606	1343	*Stenella longirostris*	485	292450 865284	845
970606	1643	*Tursiops truncatus*	12	294702 870019	185
970606	1730	*Tursiops truncatus*	5	295394 870111	156
970606	1732	*T. truncatus/S.frontalis*	12	295426 870113	156
970606	1844	*T. truncatus/S.frontalis*	2	300048 870084	59
970606	1857	*T. truncatus/S.frontalis*	3	300251 870085	53
970606	1907	*Stenella frontalis*	8	300391 865990	53
970606	1948	*Stenella frontalis*	17	300649 870039	27
970607	0612	*Tursiops truncatus*	7	300657 871526	24
970607	0622	*Stenella frontalis*	11	300492 871513	31
970607	0722	*Stenella frontalis*	29	295782 871625	86
970607	0806	*Stenella frontalis*	42	295483 871971	27
970607	0900	*Stenella frontalis*	3	294662 871951	88
970607	1117	*Tursiops truncatus*	3	293083 871862	302
970607	1840	Unidentified dolphin	1	283320 872291	1347
970608	0921	*Stenella attenuata*	35	284710 873828	2196
970608	1226	*Stenella attenuata*	55	291001 873929	1136
970608	1257	Unidentified odontocete	2	291509 873979	589
970608	1344	*Tursiops truncatus*	10	292260 874071	104
970609	1107	*Stenella attenuata*	43	285560 880535	1519
970609	1333	*Stenella attenuata*	40	285251 882957	816
970609	1620	*Grampus griseus*	3	284425 885785	564
970609	1645	Unidentified small whale	3	284292 890116	580
970609	1736	*Tursiops truncatus*	38	284061 890974	269

GulfCet II: All ship and aerial surveys. Locations, group size, and effort data

Platform	Survey	Date	Time	Latitude	Longitude	Species	Group size	Effort
Oregon II	220	17 Apr 96	14:53	29.512	86.542	*Tursiops truncatus*	3	ON
Oregon II	220	17 Apr 96	16:50	29.417	86.415	*Tursiops truncatus*	7	ON
Oregon II	220	18 Apr 96	11:51	27.505	85.004	*Stenella longirostris*	750	ON
Oregon II	220	18 Apr 96	15:13	27.165	84.967	*Stenella longirostris*	500	ON
Oregon II	220	19 Apr 96	16:03	25.212	84.003	*Stenella frontalis*	11	ON
Oregon II	220	19 Apr 96	16:29	25.130	84.004	*Tursiops truncatus*	8	ON
Oregon II	220	20 Apr 96	12:59	24.999	85.194	*Stenella attenuata*	5	ON
Oregon II	220	21 Apr 96	16:23	27.455	86.003	*Stenella attenuata*	18	ON
Oregon II	220	21 Apr 96	18:50	27.789	86.007	*Stenella attenuata*	21	ON
Oregon II	220	22 Apr 96	06:20	29.002	86.556	Unidentified odontocete	1	ON
Oregon II	220	22 Apr 96	07:35	29.016	86.773	*Grampus griseus*	2	ON
Oregon II	220	22 Apr 96	10:03	28.996	87.000	*Stenella attenuata*	125	OFF
Oregon II	220	22 Apr 96	12:25	28.667	87.011	Unidentified large whale	1	ON
Oregon II	220	23 Apr 96	13:02	26.065	87.428	Unidentified dolphin	1	ON
Oregon II	220	23 Apr 96	15:21	26.001	87.592	*Stenella attenuata*	150	ON
Oregon II	220	23 Apr 96	17:20	26.014	87.907	*Stenella attenuata*	125	ON
Oregon II	220	23 Apr 96	18:10	26.002	87.994	*Stenella clymene*	78	ON
Oregon II	220	24 Apr 96	15:33	28.126	87.991	*Ziphiidae fm.*	1	ON
Oregon II	220	25 Apr 96	07:13	28.999	88.560	Unidentified dolphin	1	ON
Oregon II	220	25 Apr 96	07:42	28.993	88.627	*Grampus griseus*	8	ON
Oregon II	220	25 Apr 96	11:12	28.884	89.016	*Tursiops truncatus*	8	ON
Oregon II	220	25 Apr 96	11:59	28.758	89.010	*Grampus griseus*	3	ON
Oregon II	220	25 Apr 96	12:26	28.714	89.004	*Grampus griseus*	3	ON
Oregon II	220	25 Apr 96	13:18	28.583	88.980	*Physeter macrocephalus*	1	ON
Oregon II	220	25 Apr 96	13:47	28.513	88.997	*Physeter macrocephalus*	1	ON
Oregon II	220	25 Apr 96	13:55	28.502	88.999	*Physeter macrocephalus*	1	ON

Oregon II	220	25 Apr 96	15:17	28.441	88.989	*Physeter macrocephalus*	1	ON
Oregon II	220	25 Apr 96	15:42	28.379	88.989	*Physeter macrocephalus*	4	ON
Oregon II	220	25 Apr 96	15:58	28.334	88.989	*Physeter macrocephalus*	2	ON
Oregon II	220	25 Apr 96	16:02	28.324	88.990	*Physeter macrocephalus*	1	ON
Oregon II	220	26 Apr 96	11:01	25.983	89.073	*Stenella attenuata*	80	ON
Oregon II	220	26 Apr 96	16:14	26.009	89.886	*Physeter macrocephalus*	1	ON
Oregon II	220	27 Apr 96	07:25	27.525	90.506	*Stenella attenuata*	75	ON
Oregon II	220	27 Apr 96	08:46	27.502	90.728	Unidentified dolphin	1	ON
Oregon II	220	27 Apr 96	09:45	27.552	90.863	*Stenella coeruleoalba*	80	ON
Oregon II	220	27 Apr 96	10:52	27.503	91.004	*Stenella clymene*	68	ON
Oregon II	220	28 Apr 96	06:58	26.092	92.005	Unidentified dolphin	2	ON
Oregon II	220	28 Apr 96	12:00	26.862	91.991	*Stenella clymene*	100	ON
Oregon II	220	29 Apr 96	09:40	26.262	93.000	*Stenella clymene*	75	ON
Oregon II	220	30 Apr 96	18:36	27.385	94.978	*Stenella attenuata*	50	ON
Oregon II	220	30 Apr 96	19:11	27.316	95.017	*Stenella clymene*	150	ON
Oregon II	220	01 May 96	07:15	25.997	95.163	*Ziphius cavirostris*	2	ON
Oregon II	220	01 May 96	12:54	26.018	95.998	*Stenella attenuata*	45	ON
Oregon II	220	01 May 96	18:33	26.591	95.990	Unidentified small whale	3	ON
Oregon II	220	02 May 96	14:05	28.009	95.023	*Tursiops truncatus*	12	ON
Oregon II	220	02 May 96	17:15	27.999	94.589	*Tursiops truncatus*	7	ON
Oregon II	220	02 May 96	17:28	27.999	94.548	*Stenella frontalis*	40	ON
Oregon II	220	03 May 96	07:17	28.002	92.566	*Tursiops truncatus*	2	ON
Oregon II	220	03 May 96	07:17	28.002	92.566	*Grampus griseus*	3	ON
Oregon II	220	03 May 96	11:00	27.990	91.992	Unidentified dolphin	2	ON
Oregon II	220	04 May 96	10:05	28.322	89.291	*Stenella attenuata*	40	ON
Oregon II	220	04 May 96	11:28	28.509	89.158	*Kogia simus*	4	ON
Oregon II	220	04 May 96	12:31	28.660	89.036	*Tursiops truncatus*	4	OFF

Oregon II	220	08 May 96	07:22	29.362	86.359	*Tursiops truncatus*	1	ON
Oregon II	220	08 May 96	13:44	28.877	85.904	*Tursiops truncatus*	2	ON
Oregon II	220	08 May 96	14:54	28.761	85.741	Unidentified dolphin	4	ON
Oregon II	220	08 May 96	16:03	28.605	85.604	*Stenella frontalis*	10	ON
Oregon II	220	08 May 96	17:42	28.483	85.503	*Balaenoptera edeni*	2	OFF
Oregon II	220	09 May 96	11:44	26.403	85.044	*Stenella attenuata*	220	ON
Oregon II	220	09 May 96	13:15	26.182	85.009	*Grampus griseus*	9	ON
Oregon II	220	09 May 96	17:38	26.000	84.673	*Tursiops truncatus*	30	ON
Oregon II	220	10 May 96	11:03	24.432	84.112	*Stenella attenuata*	20	ON
Oregon II	220	10 May 96	12:12	24.458	84.118	Unidentified dolphin	3	ON
Oregon II	220	10 May 96	17:31	24.457	83.457	*Stenella longirostris*	500	ON
Oregon II	220	12 May 96	11:06	24.288	82.175	*Tursiops truncatus*	12	ON
Oregon II	220	12 May 96	15:54	24.354	83.224	*Tursiops truncatus*	12	ON
Oregon II	220	12 May 96	16:21	24.387	83.264	*Tursiops truncatus*	10	ON
Oregon II	220	12 May 96	17:39	24.412	83.516	*Grampus griseus*	7	ON
Oregon II	220	12 May 96	18:58	24.422	83.752	*Stenella attenuata*	100	ON
Oregon II	220	13 May 96	06:39	24.718	85.005	*Physeter macrocephalus*	2	ON
Oregon II	220	13 May 96	07:07	24.764	85.023	*Physeter macrocephalus*	1	ON
Oregon II	220	13 May 96	16:06	25.011	85.854	*Grampus griseus*	15	ON
Oregon II	220	13 May 96	16:29	25.019	85.913	*Grampus griseus*	6	ON
Oregon II	220	13 May 96	19:01	25.044	85.984	*Grampus griseus*	4	ON
Oregon II	220	14 May 96	12:39	26.671	86.008	*Grampus griseus*	4	ON
Oregon II	220	14 May 96	16:46	27.068	85.956	Unidentified large whale	1	ON
Oregon II	220	15 May 96	15:24	28.995	86.601	*Stenella clymene/ longirostris/coeruleoalb*	2	ON
Oregon II	220	15 May 96	17:23	29.002	86.976	*Stenella attenuata*	35	ON
Oregon II	220	16 May 96	06:17	27.381	87.011	*Physeter macrocephalus*	3	ON
Oregon II	220	16 May 96	06:22	27.368	87.012	*Physeter macrocephalus*	1	ON

Oregon II	220	16 May 96	11:16	26.788	86.989	*Stenella attenuata*	30	ON
Oregon II	220	16 May 96	15:08	26.384	87.010	Unidentified dolphin	1	ON
Oregon II	220	17 May 96	06:27	26.696	87.994	*Stenella clymene*	15	ON
Oregon II	220	17 May 96	10:01	27.102	87.992	*Stenella attenuata*	150	ON
Oregon II	220	17 May 96	11:26	27.335	87.987	*Ziphius cavirostris*	1	ON
Oregon II	220	17 May 96	13:11	27.490	88.009	Unidentified dolphin	2	ON
Oregon II	220	17 May 96	13:13	27.492	88.007	*Physeter macrocephalus*	4	OFF
Oregon II	220	17 May 96	13:48	27.493	87.999	*Physeter macrocephalus*	1	OFF
Oregon II	220	17 May 96	17:19	27.989	87.978	*Stenella attenuata*	300	ON
Oregon II	220	17 May 96	19:33	28.171	88.020	*Stenella attenuata*	200	ON
Oregon II	220	18 May 96	06:18	29.623	87.998	*Tursiops truncatus/Stenella frontalis*	5	ON
Oregon II	220	18 May 96	06:51	29.707	87.995	*Stenella frontalis*	4	ON
Oregon II	220	18 May 96	09:41	29.323	88.225	*Tursiops truncatus*	23	ON
Oregon II	220	18 May 96	11:16	29.128	88.414	*Tursiops truncatus*	10	ON
Oregon II	220	18 May 96	13:25	28.984	88.540	*Grampus griseus*	24	ON
Oregon II	220	18 May 96	14:04	29.028	88.619	Unidentified dolphin	1	OFF
Oregon II	220	18 May 96	14:27	29.048	88.686	*Tursiops truncatus*	10	ON
Oregon II	220	18 May 96	14:55	29.018	88.763	*Tursiops truncatus*	11	ON
Oregon II	220	18 May 96	16:07	29.027	88.984	*Tursiops truncatus*	15	ON
Oregon II	220	18 May 96	17:14	28.990	88.995	Unidentified dolphin	2	ON
Oregon II	220	18 May 96	18:52	28.731	88.999	*Grampus griseus*	4	ON
Oregon II	220	19 May 96	07:20	27.111	88.997	*Stenella attenuata*	13	ON
Oregon II	220	19 May 96	08:11	26.974	88.993	*Stenella attenuata*	200	ON
Oregon II	220	19 May 96	10:23	26.867	89.006	*Stenella attenuata*	150	ON
Oregon II	220	19 May 96	11:21	26.721	88.992	*Stenella attenuata*	650	ON
Oregon II	220	19 May 96	12:37	26.569	89.035	*Physeter macrocephalus*	3	ON
Oregon II	220	19 May 96	18:53	25.984	89.162	*Physeter macrocephalus*	1	ON

Oregon II	220	19 May 96	19:11	25.985	89.214	*Physeter macrocephalus*	1	ON
Oregon II	220	20 May 96	10:50	27.151	89.992	*Ziphiidae fm.*	2	ON
Oregon II	220	20 May 96	11:31	27.269	90.010	*Stenella attenuata*	150	ON
Oregon II	220	20 May 96	12:17	27.377	90.007	*Grampus griseus*	20	ON
Oregon II	220	20 May 96	12:30	27.389	89.987	*Stenella attenuata*	150	ON
Oregon II	220	20 May 96	12:58	27.454	90.001	*Ziphiidae fm.*	4	ON
Oregon II	220	20 May 96	15:16	27.743	90.003	*Physeter macrocephalus*	1	ON
Oregon II	220	20 May 96	15:18	27.752	90.003	*Physeter macrocephalus*	2	ON
Oregon II	220	20 May 96	19:37	28.048	90.234	*Tursiops truncatus*	75	ON
Oregon II	220	21 May 96	06:30	27.338	91.002	*Stenella attenuata*	20	ON
Oregon II	220	21 May 96	06:44	27.299	91.002	*Stenella attenuata*	18	ON
Oregon II	220	21 May 96	07:03	27.259	91.031	*Stenella attenuata*	15	ON
Oregon II	220	21 May 96	07:47	27.149	90.988	*Stenella attenuata*	20	ON
Oregon II	220	21 May 96	10:27	26.944	91.002	*Stenella clymene*	55	ON
Oregon II	220	21 May 96	12:36	26.788	91.034	*Orcinus orca*	4	ON
Oregon II	220	21 May 96	17:19	26.105	91.029	Unidentified dolphin	1	ON
Oregon II	220	22 May 96	06:51	26.581	91.981	*Stenella clymene*	75	ON
Oregon II	220	22 May 96	07:36	26.676	92.004	*Stenella attenuata*	45	ON
Oregon II	220	22 May 96	07:38	26.683	92.003	*Stenella attenuata*	40	OFF
Oregon II	220	22 May 96	07:51	26.711	91.996	*Grampus griseus*	12	ON
Oregon II	220	22 May 96	08:06	26.744	91.982	*Stenella attenuata*	45	ON
Oregon II	220	22 May 96	09:35	26.968	91.987	*Stenella attenuata*	20	ON
Oregon II	220	22 May 96	11:15	27.032	91.997	*Ziphius cavirostris*	1	ON
Oregon II	220	22 May 96	11:27	27.061	92.000	*Kogia breviceps*	1	ON
Oregon II	220	22 May 96	11:32	27.075	92.001	*Kogia breviceps*	1	ON
Oregon II	220	22 May 96	12:04	27.147	92.003	*Stenella attenuata*	17	ON
Oregon II	220	22 May 96	12:06	27.141	92.003	*Kogia breviceps*	1	OFF

Oregon II	220	22 May 96	12:18	27.167	92.008	*Kogia sp.*	5	ON
Oregon II	220	22 May 96	12:44	27.188	92.040	*Grampus griseus*	10	ON
Oregon II	220	22 May 96	13:30	27.263	92.028	*Stenella attenuata*	25	ON
Oregon II	220	22 May 96	13:36	27.279	92.025	*Ziphius cavirostris*	1	ON
Oregon II	220	22 May 96	13:42	27.295	92.024	*Kogia sp.*	3	ON
Oregon II	220	22 May 96	14:46	27.464	91.990	*Stenella attenuata*	175	ON
Oregon II	220	22 May 96	16:36	27.613	91.957	*Globicephala sp.*	27	ON
Oregon II	220	22 May 96	16:38	27.619	91.957	*Stenella attenuata*	30	OFF
Oregon II	220	22 May 96	16:40	27.625	91.957	Unidentified dolphin	15	OFF
Oregon II	220	22 May 96	16:45	27.630	91.956	*Kogia simus*	2	OFF
Oregon II	220	22 May 96	16:48	27.632	91.957	*Kogia simus*	6	OFF
Oregon II	220	22 May 96	17:35	27.756	91.969	*Kogia simus*	4	ON
Oregon II	220	22 May 96	18:10	27.847	91.994	Unidentified small whale	1	ON
Oregon II	220	22 May 96	18:26	27.876	91.955	*Stenella frontalis*	15	ON
Oregon II	220	22 May 96	18:31	27.878	91.941	*Stenella frontalis*	10	OFF
Oregon II	220	22 May 96	18:33	27.882	91.935	Unidentified dolphin	4	ON
Oregon II	220	22 May 96	19:20	27.960	91.898	*Stenella frontalis*	30	ON
Oregon II	220	22 May 96	19:43	27.988	91.955	Unidentified dolphin	1	ON
Oregon II	220	23 May 96	06:52	27.588	92.940	*Globicephala sp.*	35	ON
Oregon II	220	23 May 96	08:56	27.424	92.953	*Stenella attenuata*	100	ON
Oregon II	220	23 May 96	09:32	27.354	93.011	*Stenella attenuata*	115	ON
Oregon II	220	23 May 96	10:06	27.272	92.993	*Ziphius cavirostris*	2	ON
Oregon II	220	23 May 96	11:19	27.220	93.033	*Peponocephala electra*	125	ON
Oregon II	220	23 May 96	15:20	26.758	92.996	Unidentified odontocete	2	ON
Oregon II	220	23 May 96	16:57	26.501	93.000	*Physeter macrocephalus*	1	ON
Oregon II	220	23 May 96	17:55	26.455	93.006	*Ziphiidae fm.*	1	ON
Oregon II	220	23 May 96	19:33	26.281	93.015	*Grampus griseus*	4	ON

Oregon II	220	24 May 96	07:30	26.499	94.000	*Ziphius cavirostris*	1	ON
Oregon II	220	25 May 96	07:06	28.105	91.200	*Stenella frontalis*	6	OFF
Oregon II	220	25 May 96	08:02	28.143	91.006	*Tursiops truncatus*	1	OFF
Oregon II	220	25 May 96	08:51	28.176	90.837	*Tursiops truncatus/Stenella frontalis*	3	ON
Oregon II	220	25 May 96	10:06	28.231	90.573	Unidentified dolphin	2	ON
Oregon II	220	25 May 96	10:13	28.241	90.549	*Tursiops truncatus*	2	ON
Oregon II	220	25 May 96	10:13	28.241	90.549	*Stenella frontalis*	10	ON
Oregon II	220	25 May 96	11:30	28.316	90.288	*Tursiops truncatus/Stenella frontalis*	4	ON
Oregon II	220	25 May 96	14:33	28.443	89.645	*Stenella attenuata*	40	ON
Oregon II	220	25 May 96	14:49	28.454	89.587	*Grampus griseus*	2	ON
Oregon II	220	25 May 96	15:21	28.473	89.473	*Grampus griseus*	6	ON
Oregon II	220	25 May 96	15:21	28.473	89.473	*Stenella attenuata*	25	ON
Oregon II	220	25 May 96	15:24	28.475	89.462	Unidentified small whale	1	OFF
Oregon II	220	25 May 96	16:59	28.511	89.134	*Physeter macrocephalus*	3	ON
Oregon II	220	25 May 96	17:38	28.606	89.060	*Physeter macrocephalus*	1	ON
Oregon II	220	25 May 96	17:48	28.633	89.048	*Grampus griseus*	8	ON
Oregon II	220	25 May 96	18:23	28.716	88.979	Unidentified dolphin	4	OFF
Oregon II	220	25 May 96	18:41	28.748	88.930	Unidentified odontocete	1	ON
Oregon II	220	25 May 96	19:24	28.853	88.842	*Grampus griseus*	8	ON
Oregon II	220	29 May 96	18:38	29.498	87.818	*Tursiops truncatus*	3	ON
Oregon II	220	30 May 96	07:11	27.875	86.089	*Stenella attenuata*	40	ON
Oregon II	220	30 May 96	07:55	27.792	86.020	*Stenella attenuata*	60	ON
Oregon II	220	30 May 96	09:59	27.589	85.713	*Stenella attenuata*	115	ON
Oregon II	220	30 May 96	10:21	27.560	85.656	*Stenella attenuata*	48	ON
Oregon II	220	30 May 96	13:53	27.301	85.371	*Stenella attenuata*	65	ON
Oregon II	220	30 May 96	15:10	27.412	85.163	*Stenella attenuata*	20	ON
Oregon II	220	30 May 96	17:29	27.634	84.779	*Tursiops truncatus*	6	ON

Oregon II	220	31 May 96	05:59	28.180	84.803	*Stenella frontalis*	7	OFF
Oregon II	220	31 May 96	11:45	27.741	85.513	*Stenella attenuata*	40	ON
Oregon II	220	31 May 96	12:38	27.670	85.625	*Stenella attenuata*	175	ON
Oregon II	220	31 May 96	15:17	27.745	85.751	*Stenella attenuata*	50	ON
Oregon II	220	31 May 96	17:54	28.062	85.637	*Tursiops truncatus/Stenella frontalis*	1	OFF
Oregon II	220	31 May 96	19:14	28.207	85.563	*Stenella longirostris*	32	ON
Oregon II	220	01 Jun 96	16:30	28.357	85.365	*Tursiops truncatus*	2	OFF
Oregon II	220	01 Jun 96	16:30	28.357	85.365	*Stenella frontalis*	9	OFF
Oregon II	220	02 Jun 96	15:53	28.054	86.009	*Physeter macrocephalus*	5	ON
Oregon II	220	02 Jun 96	17:43	27.762	86.124	Unidentified small whale	1	ON
Oregon II	220	03 Jun 96	07:22	28.200	86.191	*Stenella attenuata*	120	ON
Oregon II	220	03 Jun 96	09:46	28.561	86.195	*Tursiops truncatus*	15	ON
Oregon II	220	03 Jun 96	10:34	28.668	86.236	*Tursiops truncatus*	8	ON
Oregon II	220	03 Jun 96	11:14	28.751	86.218	*Tursiops truncatus*	6	ON
Oregon II	220	03 Jun 96	15:40	29.324	86.234	*Tursiops truncatus*	10	ON
Oregon II	220	03 Jun 96	16:11	29.409	86.240	*Tursiops truncatus*	4	ON
Oregon II	220	03 Jun 96	18:03	29.598	86.255	*Tursiops truncatus*	5	ON
Oregon II	220	03 Jun 96	18:36	29.650	86.225	*Stenella frontalis*	70	ON
Oregon II	220	04 Jun 96	06:09	29.836	86.251	*Stenella frontalis*	15	OFF
Oregon II	220	04 Jun 96	06:39	29.914	86.242	*Tursiops truncatus*	15	ON
Oregon II	220	04 Jun 96	06:57	29.967	86.254	Unidentified dolphin	4	ON
Oregon II	220	04 Jun 96	07:54	30.114	86.289	*Tursiops truncatus*	12	ON
Oregon II	220	04 Jun 96	08:10	30.131	86.284	*Tursiops truncatus*	17	ON
Oregon II	220	04 Jun 96	08:34	30.198	86.299	*Tursiops truncatus/Stenella frontalis*	2	ON
Oregon II	220	04 Jun 96	09:27	30.197	86.326	*Tursiops truncatus/Stenella frontalis*	5	ON
Oregon II	220	04 Jun 96	09:34	30.202	86.347	*Tursiops truncatus*	12	ON
Oregon II	220	04 Jun 96	09:37	30.205	86.358	*Tursiops truncatus/Stenella frontalis*	1	ON

Oregon II	220	04 Jun 96	09:41	30.208	86.368	*Tursiops truncatus*	4	ON
Oregon II	220	04 Jun 96	11:18	30.160	86.510	*Tursiops truncatus/Stenella frontalis*	1	ON
Oregon II	220	04 Jun 96	11:20	30.154	86.510	*Tursiops truncatus/Stenella frontalis*	1	ON
Oregon II	220	04 Jun 96	12:07	30.124	86.526	*Stenella frontalis*	38	ON
Oregon II	220	04 Jun 96	12:54	30.078	86.515	*Stenella frontalis*	20	ON
Oregon II	220	04 Jun 96	13:34	29.977	86.542	Unidentified dolphin	1	ON
Oregon II	220	04 Jun 96	14:45	29.781	86.550	Unidentified small whale	1	ON
Oregon II	220	04 Jun 96	17:43	29.420	86.543	Unidentified dolphin	1	ON
Oregon II	220	04 Jun 96	18:38	29.306	86.614	*Kogia breviceps*	2	OFF
Oregon II	220	04 Jun 96	19:27	29.271	86.665	*Stenella coeruleoalba*	30	ON
Oregon II	220	05 Jun 96	06:19	29.208	86.651	*Stenella coeruleoalba*	21	ON
Oregon II	220	05 Jun 96	06:35	29.184	86.623	*Kogia sp.*	1	ON
Oregon II	220	05 Jun 96	06:43	29.160	86.621	Unidentified dolphin	1	ON
Oregon II	220	05 Jun 96	06:56	29.121	86.618	Unidentified dolphin	1	ON
Oregon II	220	05 Jun 96	07:07	29.094	86.612	*Grampus griseus*	20	ON
Oregon II	220	05 Jun 96	08:44	28.999	86.660	Unidentified dolphin	5	ON
Oregon II	220	05 Jun 96	08:49	28.999	86.656	Unidentified dolphin	8	OFF
Oregon II	220	05 Jun 96	08:51	29.002	86.651	*Grampus griseus*	12	OFF
Oregon II	220	05 Jun 96	08:56	29.009	86.639	*Kogia sp.*	1	ON
Oregon II	220	05 Jun 96	09:10	29.015	86.603	*Kogia sp.*	1	OFF
Oregon II	220	05 Jun 96	09:40	28.994	86.555	*Tursiops truncatus*	45	ON
Oregon II	220	05 Jun 96	09:49	28.974	86.566	*Kogia sp.*	1	ON
Oregon II	220	05 Jun 96	11:12	28.950	86.594	*Stenella longirostris*	250	OFF
Oregon II	220	05 Jun 96	11:42	28.904	86.598	*Stenella longirostris*	100	ON
Oregon II	220	05 Jun 96	12:37	28.775	86.638	*Kogia sp.*	1	ON
Oregon II	220	05 Jun 96	12:46	28.763	86.645	*Grampus griseus*	6	ON
Oregon II	220	05 Jun 96	13:33	28.669	86.631	*Grampus griseus*	10	ON

Oregon II	220	05 Jun 96	13:58	28.611	86.662	*Grampus griseus*	8	ON
Oregon II	220	05 Jun 96	14:10	28.594	86.643	*Grampus griseus*	4	ON
Oregon II	220	05 Jun 96	14:26	28.552	86.650	*Grampus griseus*	8	ON
Oregon II	220	05 Jun 96	16:11	28.287	86.634	*Stenella attenuata*	200	ON
Oregon II	220	05 Jun 96	18:30	28.091	86.713	*Stenella attenuata*	100	ON
Oregon II	220	05 Jun 96	19:29	28.200	86.759	*Grampus griseus*	15	ON
Oregon II	220	06 Jun 96	06:36	28.249	86.838	*Stenella attenuata*	85	ON
Oregon II	220	06 Jun 96	06:58	28.287	86.860	*Physeter macrocephalus*	3	ON
Oregon II	220	06 Jun 96	08:27	28.517	86.844	*Stenella attenuata*	85	ON
Oregon II	220	06 Jun 96	12:53	29.142	86.923	*Grampus griseus*	7	ON
Oregon II	220	06 Jun 96	14:23	29.409	86.954	*Kogia sp.*	1	ON
Oregon II	220	06 Jun 96	14:50	29.450	86.898	*Tursiops truncatus*	4	OFF
Oregon II	220	06 Jun 96	14:52	29.450	86.893	Unidentified dolphin	5	OFF
Oregon II	220	06 Jun 96	15:02	29.450	86.861	*Tursiops truncatus*	172	ON
Oregon II	220	06 Jun 96	16:45	29.552	86.904	*Grampus griseus*	15	ON
Oregon II	220	06 Jun 96	19:30	29.747	87.058	*Balaenoptera sp.*	1	ON
Oregon II	220	06 Jun 96	19:32	29.747	87.059	*Balaenoptera edeni*	4	ON
Oregon II	220	07 Jun 96	07:13	29.917	86.973	*Stenella frontalis*	28	ON
Oregon II	220	07 Jun 96	08:37	30.134	87.041	*Stenella frontalis*	28	ON
Oregon II	220	07 Jun 96	09:42	30.160	87.054	*Stenella frontalis*	7	ON
Oregon II	220	07 Jun 96	10:26	30.050	87.118	*Stenella frontalis*	21	ON
Oregon II	220	07 Jun 96	11:06	29.951	87.130	*Tursiops truncatus*	10	ON
Oregon II	220	07 Jun 96	11:29	29.904	87.166	*Stenella frontalis*	25	ON
Oregon II	220	07 Jun 96	13:12	29.668	87.289	*Tursiops truncatus*	5	ON
Oregon II	220	08 Jun 96	10:27	29.172	87.654	*Stenella attenuata*	75	ON
Aerial	Summer 96	11 Jul 96	09:36	29.274	88.097	*Tursiops truncatus*	5	ON
Aerial	Summer 96	11 Jul 96	09:51	28.973	88.107	*Physeter macrocephalus*	2	ON

Aerial	Summer 96	11 Jul 96	10:08	28.958	87.967	*Kogia sp.*	2	ON
Aerial	Summer 96	11 Jul 96	12:09	29.146	87.403	*Stenella attenuata*	45	OFF
Aerial	Summer 96	11 Jul 96	12:22	29.339	87.391	*Grampus griseus*	9	OFF
Aerial	Summer 96	11 Jul 96	12:54	29.877	87.398	*Tursiops truncatus*	12	ON
Aerial	Summer 96	11 Jul 96	13:38	29.453	87.664	*Tursiops truncatus*	10	ON
Aerial	Summer 96	11 Jul 96	13:43	29.484	87.667	*Tursiops truncatus*	6	ON
Aerial	Summer 96	11 Jul 96	13:47	29.561	87.666	*Tursiops truncatus*	5	ON
Aerial	Summer 96	12 Jul 96	10:01	29.519	87.227	*Tursiops truncatus/Stenella frontalis*	2	ON
Aerial	Summer 96	12 Jul 96	10:01	29.519	87.227	*Grampus griseus*	10	ON
Aerial	Summer 96	12 Jul 96	10:11	29.413	87.247	*Stenella attenuata*	36	ON
Aerial	Summer 96	12 Jul 96	10:17	29.373	87.253	*Grampus griseus*	7	ON
Aerial	Summer 96	12 Jul 96	10:42	28.939	87.329	*Stenella attenuata*	10	ON
Aerial	Summer 96	12 Jul 96	10:56	28.654	87.377	*Physeter macrocephalus*	1	ON
Aerial	Summer 96	12 Jul 96	11:27	28.464	87.349	*Stenella longirostris*	140	ON
Aerial	Summer 96	12 Jul 96	13:19	29.779	87.817	*Tursiops truncatus*	13	ON
Aerial	Summer 96	12 Jul 96	14:24	29.734	88.093	*Tursiops truncatus*	32	ON
Aerial	Summer 96	12 Jul 96	14:32	29.891	88.099	*Tursiops truncatus*	4	OFF
Aerial	Summer 96	13 Jul 96	11:40	30.241	86.608	Unidentified dolphin	5	OFF
Aerial	Summer 96	13 Jul 96	11:53	30.173	86.692	*Tursiops truncatus*	7	OFF
Aerial	Summer 96	13 Jul 96	12:01	30.097	86.685	*Stenella frontalis*	42	ON
Aerial	Summer 96	13 Jul 96	12:40	30.091	86.974	*Stenella frontalis*	27	ON
Aerial	Summer 96	14 Jul 96	11:29	28.465	87.013	*Stenella attenuata*	125	ON
Aerial	Summer 96	14 Jul 96	12:05	28.899	86.671	*Kogia sp.*	5	ON
Aerial	Summer 96	15 Jul 96	09:16	28.370	86.838	*Kogia sp.*	1	ON
Aerial	Summer 96	15 Jul 96	09:19	28.296	86.882	*Kogia sp.*	1	ON
Aerial	Summer 96	15 Jul 96	09:26	28.192	86.838	*Ziphiidae fm.*	2	OFF
Aerial	Summer 96	15 Jul 96	09:28	28.212	86.799	*Kogia sp.*	1	ON

Aerial	Summer 96	15 Jul 96	09:34	28.267	86.760	*Physeter macrocephalus*	1	ON
Aerial	Summer 96	15 Jul 96	10:32	29.080	86.046	*Kogia sp.*	1	ON
Aerial	Summer 96	15 Jul 96	10:37	28.940	86.148	*Kogia sp.*	1	ON
Aerial	Summer 96	15 Jul 96	10:47	28.914	86.158	*Tursiops truncatus*	51	ON
Aerial	Summer 96	15 Jul 96	11:32	28.083	86.615	*Stenella coeruleoalba*	48	OFF
Aerial	Summer 96	15 Jul 96	12:05	28.506	86.281	*Stenella clymene*	150	ON
Aerial	Summer 96	15 Jul 96	12:48	29.414	86.004	*Tursiops truncatus*	7	ON
Aerial	Summer 96	19 Jul 96	08:43	28.920	85.840	*Tursiops truncatus*	2	ON
Aerial	Summer 96	19 Jul 96	08:52	28.796	85.919	*Tursiops truncatus*	4	ON
Aerial	Summer 96	19 Jul 96	09:19	28.235	86.279	*Stenella coeruleoalba*	14	ON
Aerial	Summer 96	19 Jul 96	09:37	28.168	86.331	*Kogia sp.*	3	ON
Aerial	Summer 96	19 Jul 96	09:37	28.168	86.331	*Stenella attenuata*	250	ON
Aerial	Summer 96	19 Jul 96	09:43	28.090	86.384	Unidentified odontocete	1	ON
Aerial	Summer 96	19 Jul 96	09:56	27.996	86.259	*Stenella attenuata*	10	OFF
Aerial	Summer 96	19 Jul 96	10:26	28.461	85.981	*Stenella longirostris*	250	OFF
Aerial	Summer 96	19 Jul 96	10:51	28.993	85.634	*Tursiops truncatus*	10	ON
Aerial	Summer 96	19 Jul 96	11:22	28.528	85.787	*Tursiops truncatus*	4	ON
Aerial	Summer 96	19 Jul 96	11:36	28.271	85.947	*Grampus griseus*	9	ON
Aerial	Summer 96	19 Jul 96	11:44	28.169	86.019	*Stenella attenuata*	90	ON
Aerial	Summer 96	19 Jul 96	12:37	28.778	85.419	*Tursiops truncatus*	10	ON
Aerial	Summer 96	19 Jul 96	12:45	28.997	85.515	*Tursiops truncatus*	4	OFF
Aerial	Summer 96	19 Jul 96	13:18	29.819	86.132	*Tursiops truncatus*	3	ON
Aerial	Summer 96	19 Jul 96	13:22	29.947	86.133	*Kogia sp.*	1	ON
Aerial	Summer 96	19 Jul 96	13:31	29.983	86.134	*Tursiops truncatus*	5	ON
Aerial	Summer 96	19 Jul 96	13:31	30.005	86.131	*Tursiops truncatus/Stenella frontalis*	10	ON
Aerial	Summer 96	19 Jul 96	13:36	30.098	86.130	*Tursiops truncatus*	4	ON
Aerial	Summer 96	19 Jul 96	13:51	30.178	86.397	*Tursiops truncatus*	17	OFF

Aerial	Summer 96	19 Jul 96	14:01	30.148	86.401	*Stenella frontalis*	22	ON
Aerial	Summer 96	20 Jul 96	09:10	28.665	85.286	*Tursiops truncatus*	3	ON
Aerial	Summer 96	20 Jul 96	09:24	28.391	85.519	*Tursiops truncatus*	5	ON
Aerial	Summer 96	20 Jul 96	09:36	28.293	85.609	*Stenella attenuata*	170	ON
Aerial	Summer 96	20 Jul 96	09:43	28.159	85.727	*Grampus griseus*	6	OFF
Aerial	Summer 96	20 Jul 96	10:05	27.932	85.795	*Tursiops truncatus*	1	ON
Aerial	Summer 96	20 Jul 96	10:14	28.014	85.709	*Stenella attenuata*	55	ON
Aerial	Summer 96	20 Jul 96	10:29	28.172	85.545	*Stenella attenuata*	45	ON
Aerial	Summer 96	20 Jul 96	10:45	28.325	85.391	*Tursiops truncatus*	1	ON
Aerial	Summer 96	20 Jul 96	10:59	28.548	85.154	Unidentified dolphin	1	ON
Aerial	Summer 96	20 Jul 96	11:15	28.651	85.077	*Stenella frontalis*	35	ON
Aerial	Summer 96	20 Jul 96	11:55	27.911	85.652	*Stenella attenuata*	160	OFF
Aerial	Summer 96	20 Jul 96	11:59	27.887	85.679	*Mesoplodon sp.*	2	OFF
Aerial	Summer 96	20 Jul 96	12:21	27.802	85.602	*Stenella attenuata*	165	ON
Aerial	Summer 96	20 Jul 96	12:30	27.957	85.385	*Kogia sp.*	1	ON
Aerial	Summer 96	20 Jul 96	12:46	28.212	85.046	*Tursiops truncatus*	5	ON
Aerial	Summer 96	21 Jul 96	11:06	28.222	84.819	*Tursiops truncatus/Stenella frontalis*	2	OFF
Aerial	Summer 96	21 Jul 96	11:20	28.067	85.046	*Tursiops truncatus*	6	OFF
Aerial	Summer 96	21 Jul 96	11:30	27.988	85.131	*Tursiops truncatus*	15	OFF
Aerial	Summer 96	21 Jul 96	11:52	27.937	85.221	*Stenella clymene*	95	OFF
Aerial	Summer 96	21 Jul 96	12:12	27.641	85.622	*Tursiops truncatus*	5	ON
Aerial	Summer 96	21 Jul 96	12:16	27.621	85.654	*Kogia sp.*	4	ON
Aerial	Summer 96	21 Jul 96	12:23	27.574	85.549	*Tursiops truncatus*	1	ON
Aerial	Summer 96	21 Jul 96	14:06	27.959	84.977	*Tursiops truncatus*	6	OFF
Aerial	Summer 96	21 Jul 96	14:06	27.959	84.977	*Balaenoptera edeni*	7	OFF
Aerial	Summer 96	22 Jul 96	09:03	27.956	84.613	*Tursiops truncatus*	1	ON
Aerial	Summer 96	22 Jul 96	09:47	27.353	85.506	Unidentified dolphin	1	ON

Aerial	Summer 96	22 Jul 96	09:47	27.353	85.506	*Ziphius cavirostris*	1	ON
Aerial	Summer 96	22 Jul 96	10:00	27.448	85.312	*Stenella attenuata*	100	ON
Aerial	Summer 96	22 Jul 96	10:07	27.556	85.095	*Kogia sp.*	2	ON
Aerial	Summer 96	22 Jul 96	10:32	27.831	84.528	*Tursiops truncatus*	15	ON
Aerial	Summer 96	22 Jul 96	10:56	27.639	84.594	*Stenella frontalis*	85	ON
Aerial	Summer 96	22 Jul 96	11:16	27.471	85.018	*Grampus griseus*	8	OFF
Aerial	Summer 96	22 Jul 96	11:40	27.332	85.331	*Stenella clymene*	80	ON
Aerial	Summer 96	22 Jul 96	11:46	27.335	85.345	*Stenella attenuata*	16	OFF
Aerial	Summer 96	22 Jul 96	11:58	27.181	85.462	Unidentified dolphin	2	OFF
Aerial	Summer 96	22 Jul 96	12:05	27.180	85.352	*Mesoplodon sp.*	2	ON
Aerial	Summer 96	22 Jul 96	12:12	27.214	85.280	*Ziphius cavirostris*	1	ON
Aerial	Summer 96	22 Jul 96	12:48	27.592	84.371	*Stenella frontalis*	21	OFF
Aerial	Summer 96	23 Jul 96	09:08	27.022	84.237	*Stenella frontalis*	42	ON
Aerial	Summer 96	23 Jul 96	09:48	26.918	85.004	*Kogia sp.*	1	OFF
Aerial	Summer 96	23 Jul 96	10:56	26.941	85.266	*Grampus griseus*	10	ON
Aerial	Summer 96	23 Jul 96	10:59	26.974	85.306	*Grampus griseus*	11	OFF
Aerial	Summer 96	23 Jul 96	11:12	27.068	85.247	Unidentified odontocete	3	OFF
Aerial	Summer 96	23 Jul 96	11:40	27.365	84.537	*Tursiops truncatus*	4	ON
Aerial	Summer 96	30 Jul 96	13:45	26.735	84.870	*Stenella attenuata*	120	OFF
Aerial	Summer 96	30 Jul 96	13:50	26.717	84.983	*Mesoplodon sp.*	1	OFF
Aerial	Summer 96	30 Jul 96	14:10	26.660	84.786	*Grampus griseus*	38	ON
Aerial	Summer 96	30 Jul 96	14:55	26.628	84.237	*Tursiops truncatus/Stenella frontalis*	2	ON
Aerial	Summer 96	30 Jul 96	15:39	26.421	84.688	*Tursiops truncatus*	25	ON
Aerial	Summer 96	31 Jul 96	09:52	26.036	83.913	*Stenella frontalis*	26	ON
Aerial	Summer 96	31 Jul 96	10:04	26.020	84.025	*Tursiops truncatus*	27	ON
Aerial	Summer 96	31 Jul 96	10:36	25.913	84.748	*Stenella attenuata*	23	ON
Aerial	Summer 96	31 Jul 96	10:41	25.905	84.838	*Mesoplodon sp.*	2	ON

Aerial	Summer 96	31 Jul 96	12:34	26.285	84.619	*Stenella attenuata*	120	OFF
Gyre	96G06	11 Oct 96	16:17	28.035	87.833	Unidentified dolphin	2	ON
Gyre	96G06	13 Oct 96	07:10	26.683	85.950	*Stenella attenuata*	20	OFF
Gyre	96G06	14 Oct 96	07:15	27.964	84.920	*Tursiops truncatus*	6	ON
Gyre	96G06	15 Oct 96	03:08	28.850	85.480	*Stenella frontalis*	5	OFF
Gyre	96G06	15 Oct 96	10:30	28.367	86.433	*Physeter macrocephalus*	2	ON
Gyre	96G06	15 Oct 96	12:18	28.262	86.527	Unidentified odontocete	1	ON
Gyre	96G06	15 Oct 96	12:44	28.249	86.589	*Stenella attenuata*	70	ON
Gyre	96G06	16 Oct 96	06:50	29.797	86.748	*Tursiops truncatus*	6	ON
Gyre	96G06	16 Oct 96	07:50	29.921	86.757	*Tursiops truncatus*	10	OFF
Gyre	96G06	16 Oct 96	10:37	30.199	86.827	*Stenella frontalis*	3	OFF
Gyre	96G06	16 Oct 96	11:48	30.091	86.944	*Tursiops truncatus*	1	OFF
Gyre	96G06	16 Oct 96	12:06	30.066	86.973	*Tursiops truncatus*	2	ON
Gyre	96G06	16 Oct 96	12:39	30.018	87.027	Unidentified dolphin	2	ON
Gyre	96G06	16 Oct 96	12:46	30.009	87.041	*Tursiops truncatus*	1	ON
Gyre	96G06	16 Oct 96	13:06	29.986	87.080	*Stenella frontalis*	40	ON
Gyre	96G06	16 Oct 96	14:56	29.916	87.320	*Tursiops truncatus*	2	ON
Gyre	96G06	16 Oct 96	15:31	29.910	87.402	*Tursiops truncatus*	15	ON
Gyre	96G06	16 Oct 96	18:12	29.589	87.401	Unidentified dolphin	1	ON
Gyre	96G06	17 Oct 96	09:10	28.564	87.359	*Ziphiidae fm.*	1	ON
Gyre	96G06	17 Oct 96	09:45	28.606	87.364	Unidentified cetacean	1	ON
Gyre	96G06	17 Oct 96	15:04	27.867	87.404	*Kogia sp.*	1	ON
Gyre	96G06	18 Oct 96	08:29	29.201	88.180	*Tursiops truncatus*	3	ON
Gyre	96G06	20 Oct 96	06:58	28.664	88.990	*Physeter macrocephalus*	3	ON
Gyre	96G06	20 Oct 96	09:00	28.619	88.993	*Physeter macrocephalus*	1	OFF
Gyre	96G06	20 Oct 96	09:41	28.624	88.983	*Physeter macrocephalus*	3	OFF
Gyre	96G06	20 Oct 96	09:48	28.629	88.973	*Physeter macrocephalus*	N/A	OFF

Gyre	96G06	20 Oct 96	09:55	28.634	88.963	*Physeter macrocephalus*	2	OFF
Gyre	96G06	20 Oct 96	10:06	28.639	88.953	*Physeter macrocephalus*	N/A	OFF
Gyre	96G06	20 Oct 96	10:20	28.644	88.943	*Physeter macrocephalus*	5	OFF
Gyre	96G06	20 Oct 96	12:01	28.649	88.933	*Physeter macrocephalus*	N/A	OFF
Gyre	96G06	20 Oct 96	12:11	28.654	88.923	*Physeter macrocephalus*	N/A	OFF
Gyre	96G06	20 Oct 96	12:15	28.659	88.913	*Physeter macrocephalus*	N/A	OFF
Gyre	96G06	20 Oct 96	13:01	28.664	88.903	*Physeter macrocephalus*	N/A	OFF
Gyre	96G06	20 Oct 96	13:13	28.669	88.893	*Physeter macrocephalus*	N/A	OFF
Gyre	96G06	20 Oct 96	13:38	28.674	88.883	*Physeter macrocephalus*	N/A	OFF
Gyre	96G06	20 Oct 96	16:52	28.676	88.723	*Stenella longirostris*	15	ON
Gyre	96G06	21 Oct 96	07:16	27.717	88.418	*Physeter macrocephalus*	1	ON
Gyre	96G06	21 Oct 96	07:23	27.703	88.410	*Physeter macrocephalus*	2	ON
Gyre	96G06	21 Oct 96	07:33	27.689	88.402	*Physeter macrocephalus*	1	ON
Gyre	96G06	21 Oct 96	07:44	27.665	88.390	*Physeter macrocephalus*	6	ON
Gyre	96G06	21 Oct 96	10:04	27.438	88.222	*Ziphius cavirostris*	1	OFF
Gyre	96G06	21 Oct 96	16:07	26.862	87.925	*Stenella coeruleoalba*	40	ON
Gyre	96G06	22 Oct 96	08:43	25.254	87.398	*Stenella attenuata*	20	ON
Gyre	96G06	23 Oct 96	07:08	26.150	88.067	*Stenella attenuata*	15	OFF
Gyre	96G06	23 Oct 96	08:40	26.333	88.167	*Stenella attenuata*	25	OFF
Gyre	96G06	23 Oct 96	14:30	27.016	88.516	*Physeter macrocephalus*	2	OFF
Gyre	96G06	24 Oct 96	07:20	28.367	88.450	*Physeter macrocephalus*	5	ON
Gyre	96G06	24 Oct 96	14:14	27.878	89.282	*Stenella coeruleoalba*	40	ON
Gyre	96G06	26 Oct 96	07:04	26.102	87.438	*Stenella clymene*	12	ON
Gyre	96G06	26 Oct 96	08:56	26.358	87.543	*Stenella attenuata*	4	ON
Gyre	96G06	28 Oct 96	09:00	28.070	89.127	*Physeter macrocephalus*	2	ON
Gyre	96G06	28 Oct 96	09:08	28.080	89.135	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	09:20	28.093	89.145	*Physeter macrocephalus*	1	OFF

Gyre	96G06	28 Oct 96	09:59	28.102	89.157	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	10:07	28.093	89.162	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	10:25	28.075	89.164	*Physeter macrocephalus*	2	OFF
Gyre	96G06	28 Oct 96	10:36	28.065	89.148	*Physeter macrocephalus*	2	OFF
Gyre	96G06	28 Oct 96	10:38	28.063	89.144	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	10:53	28.058	89.138	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	11:11	28.046	89.137	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	11:19	28.041	89.135	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	11:32	28.029	89.134	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	11:33	28.027	89.133	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	11:53	28.026	89.149	*Physeter macrocephalus*	2	OFF
Gyre	96G06	28 Oct 96	12:26	28.018	89.168	*Physeter macrocephalus*	2	OFF
Gyre	96G06	28 Oct 96	14:43	28.027	89.207	*Physeter macrocephalus*	1	ON
Gyre	96G06	28 Oct 96	14:44	28.027	89.207	*Physeter macrocephalus*	1	ON
Gyre	96G06	28 Oct 96	16:08	28.173	89.259	*Physeter macrocephalus*	1	ON
Gyre	96G06	28 Oct 96	16:33	28.191	85.000	*Physeter macrocephalus*	1	OFF
Gyre	96G06	28 Oct 96	17:41	28.274	89.330	*Physeter macrocephalus*	1	ON
Gyre	96G06	28 Oct 96	17:44	28.282	89.332	Unidentified dolphin	30	ON
Gyre	96G06	28 Oct 96	18:01	28.291	89.373	*Physeter macrocephalus*	1	OFF
Gyre	96G06	29 Oct 96	07:08	29.132	88.169	*Ziphiidae fm.*	2	ON
Gyre	96G06	29 Oct 96	07:37	29.197	88.167	*Ziphiidae fm.*	1	ON
Gyre	96G06	29 Oct 96	07:47	29.222	88.167	*Tursiops truncatus*	2	ON
Gyre	96G06	29 Oct 96	07:55	29.239	88.166	Unidentified small whale	1	OFF
Gyre	96G06	29 Oct 96	09:12	29.432	88.148	*Tursiops truncatus*	10	ON
Gyre	96G06	29 Oct 96	09:59	29.541	88.159	*Tursiops truncatus*	30	ON
Gyre	96G06	29 Oct 96	10:29	29.613	88.163	*Tursiops truncatus*	15	ON
Gyre	96G06	29 Oct 96	11:28	29.756	88.173	*Tursiops truncatus*	9	ON

Gyre	96G06	29 Oct 96	11:50	29.811	88.174	Unidentified dolphin	12	ON
Gyre	96G06	29 Oct 96	11:59	29.835	88.174	Unidentified dolphin	6	ON
Aerial	Winter 97	07 Feb 97	10:38	29.023	87.536	*Physeter macrocephalus*	2	ON
Aerial	Winter 97	11 Feb 97	13:28	29.861	87.368	*Tursiops truncatus*	1	ON
Aerial	Winter 97	11 Feb 97	14:04	29.950	87.217	*Tursiops truncatus*	45	OFF
Aerial	Winter 97	11 Feb 97	14:05	29.915	87.223	*Tursiops truncatus*	22	OFF
Aerial	Winter 97	11 Feb 97	14:20	29.987	87.068	*Tursiops truncatus*	1	ON
Aerial	Winter 97	11 Feb 97	14:27	30.119	87.066	*Tursiops truncatus*	1	ON
Aerial	Winter 97	11 Feb 97	14:32	30.244	86.973	*Tursiops truncatus*	2	OFF
Aerial	Winter 97	11 Feb 97	15:20	30.117	86.515	*Stenella frontalis*	6	OFF
Aerial	Winter 97	11 Feb 97	15:27	30.131	86.513	*Tursiops truncatus*	56	ON
Aerial	Winter 97	11 Feb 97	15:48	30.005	86.363	*Tursiops truncatus*	6	OFF
Aerial	Winter 97	11 Feb 97	16:10	29.741	86.233	*Tursiops truncatus*	3	ON
Aerial	Winter 97	16 Feb 97	09:31	30.091	88.082	*Tursiops truncatus*	18	OFF
Aerial	Winter 97	16 Feb 97	09:48	29.682	88.070	*Tursiops truncatus*	3	ON
Aerial	Winter 97	16 Feb 97	10:24	29.672	87.930	*Tursiops truncatus*	32	ON
Aerial	Winter 97	16 Feb 97	10:31	29.701	87.931	*Tursiops truncatus*	6	ON
Aerial	Winter 97	16 Feb 97	10:43	30.000	87.937	*Tursiops truncatus*	2	ON
Aerial	Winter 97	16 Feb 97	10:48	30.038	87.939	*Tursiops truncatus*	3	ON
Aerial	Winter 97	16 Feb 97	10:49	30.071	87.936	*Tursiops truncatus*	1	ON
Aerial	Winter 97	19 Feb 97	09:53	29.973	87.931	*Tursiops truncatus*	6	OFF
Aerial	Winter 97	19 Feb 97	10:19	29.829	87.792	*Tursiops truncatus*	4	ON
Aerial	Winter 97	19 Feb 97	10:56	29.634	87.639	*Tursiops truncatus*	4	ON
Aerial	Winter 97	19 Feb 97	11:25	30.058	87.672	*Stenella frontalis*	14	OFF
Aerial	Winter 97	19 Feb 97	11:38	30.034	87.505	*Tursiops truncatus*	3	ON
Aerial	Winter 97	19 Feb 97	12:13	29.803	87.369	*Tursiops truncatus/Stenella frontalis*	1	ON
Aerial	Winter 97	02 Mar 97	14:49	29.098	87.139	*Stenella coeruleoalba*	65	ON

Aerial	Winter 97	02 Mar 97	15:51	29.026	87.285	*Stenella attenuata*	80	ON
Aerial	Winter 97	03 Mar 97	12:50	29.361	86.369	*Tursiops truncatus*	4	ON
Aerial	Winter 97	03 Mar 97	13:01	29.246	86.444	*Tursiops truncatus*	7	ON
Aerial	Winter 97	03 Mar 97	13:33	28.528	86.834	*Kogia sp.*	1	ON
Aerial	Winter 97	03 Mar 97	14:00	28.376	86.922	*Stenella coeruleoalba*	40	ON
Aerial	Winter 97	03 Mar 97	14:34	28.664	86.878	*Kogia sp.*	2	ON
Aerial	Winter 97	03 Mar 97	14:41	28.705	86.851	*Tursiops truncatus*	11	OFF
Aerial	Winter 97	03 Mar 97	15:12	29.240	86.611	*Tursiops truncatus*	6	ON
Aerial	Winter 97	03 Mar 97	15:20	29.269	86.597	*Grampus griseus*	4	ON
Aerial	Winter 97	03 Mar 97	15:34	29.431	86.531	*Tursiops truncatus/Stenella frontalis*	6	ON
Aerial	Winter 97	03 Mar 97	15:40	29.451	86.521	*Tursiops truncatus/Stenella frontalis*	2	ON
Aerial	Winter 97	03 Mar 97	16:37	30.148	86.096	*Stenella frontalis*	10	ON
Aerial	Winter 97	04 Mar 97	08:49	29.902	86.718	*Tursiops truncatus*	6	ON
Aerial	Winter 97	04 Mar 97	09:09	29.391	86.892	*Grampus griseus*	5	ON
Aerial	Winter 97	04 Mar 97	09:13	29.374	86.898	*Tursiops truncatus*	4	ON
Aerial	Winter 97	04 Mar 97	09:41	29.290	86.926	*Stenella coeruleoalba*	55	ON
Aerial	Winter 97	04 Mar 97	10:37	28.280	87.272	*Stenella attenuata*	85	ON
Aerial	Winter 97	04 Mar 97	10:38	28.260	87.268	*Grampus griseus*	10	OFF
Aerial	Winter 97	04 Mar 97	10:50	28.350	87.122	Unidentified large whale	1	ON
Aerial	Winter 97	04 Mar 97	11:26	29.219	86.786	*Grampus griseus*	3	OFF
Aerial	Winter 97	04 Mar 97	11:37	29.318	86.741	*Tursiops truncatus*	140	OFF
Aerial	Winter 97	04 Mar 97	13:35	28.963	86.439	*Grampus griseus*	4	ON
Aerial	Winter 97	04 Mar 97	14:05	28.194	86.894	Unidentified small whale	1	ON
Aerial	Winter 97	04 Mar 97	14:34	28.539	86.543	*Tursiops truncatus*	42	ON
Aerial	Winter 97	04 Mar 97	15:30	29.718	85.968	*Tursiops truncatus*	1	ON
Aerial	Winter 97	04 Mar 97	15:42	29.945	85.968	*Tursiops truncatus*	10	ON
Aerial	Winter 97	05 Mar 97	11:19	29.094	85.993	*Stenella frontalis*	2	ON

Aerial	Winter 97	05 Mar 97	11:49	28.546	86.378	*Grampus griseus*	5	ON
Aerial	Winter 97	05 Mar 97	11:54	28.524	86.394	*Grampus griseus*	3	ON
Aerial	Winter 97	05 Mar 97	12:32	28.131	86.673	*Stenella attenuata*	105	OFF
Aerial	Winter 97	05 Mar 97	13:26	28.443	86.261	*Stenella longirostris*	630	OFF
Aerial	Winter 97	05 Mar 97	13:36	28.529	86.219	*Tursiops truncatus*	9	ON
Aerial	Winter 97	05 Mar 97	13:44	28.617	86.161	*Grampus griseus*	2	ON
Aerial	Winter 97	05 Mar 97	14:12	29.182	85.762	*Tursiops truncatus*	2	ON
Aerial	Winter 97	05 Mar 97	14:25	29.091	85.681	*Tursiops truncatus*	2	ON
Aerial	Winter 97	05 Mar 97	15:05	28.391	86.138	*Stenella longirostris*	350	ON
Aerial	Winter 97	05 Mar 97	15:30	27.972	86.408	*Stenella attenuata*	53	ON
Aerial	Winter 97	05 Mar 97	15:44	28.144	86.127	*Stenella attenuata*	17	ON
Aerial	Winter 97	05 Mar 97	15:53	28.282	86.043	*Stenella attenuata*	24	ON
Aerial	Winter 97	05 Mar 97	16:18	28.850	85.682	*Tursiops truncatus*	1	ON
Aerial	Winter 97	08 Mar 97	11:37	30.059	86.102	*Tursiops truncatus/Stenella frontalis*	4	ON
Aerial	Winter 97	08 Mar 97	12:54	28.191	85.951	*Grampus griseus*	2	OFF
Aerial	Winter 97	08 Mar 97	13:23	28.175	85.812	*Grampus griseus*	5	ON
Aerial	Winter 97	08 Mar 97	13:27	28.191	85.797	*Tursiops truncatus*	10	ON
Aerial	Winter 97	08 Mar 97	13:35	28.316	85.715	*Grampus griseus*	2	OFF
Aerial	Winter 97	08 Mar 97	13:49	28.437	85.632	*Tursiops truncatus*	4	OFF
Aerial	Winter 97	08 Mar 97	14:11	28.744	85.394	*Stenella frontalis*	14	ON
Aerial	Winter 97	08 Mar 97	14:47	28.266	85.583	*Grampus griseus*	11	ON
Aerial	Winter 97	08 Mar 97	14:47	28.266	85.583	*Tursiops truncatus*	6	ON
Aerial	Winter 97	08 Mar 97	14:50	28.244	85.611	*Grampus griseus*	3	OFF
Aerial	Winter 97	08 Mar 97	15:08	28.107	85.710	*Stenella coeruleoalba*	60	OFF
Aerial	Winter 97	08 Mar 97	16:48	29.680	86.105	*Tursiops truncatus*	2	ON
Aerial	Winter 97	08 Mar 97	17:05	30.145	86.101	*Tursiops truncatus*	1	ON
Aerial	Winter 97	10 Mar 97	09:21	27.864	85.016	*Tursiops truncatus*	1	ON

Aerial	Winter 97	10 Mar 97	10:14	27.778	84.867	*Tursiops truncatus*	1	ON
Aerial	Winter 97	10 Mar 97	10:56	27.589	84.942	*Grampus griseus*	4	OFF
Aerial	Winter 97	10 Mar 97	11:39	27.442	84.970	*Grampus griseus*	4	ON
Aerial	Winter 97	10 Mar 97	11:52	27.530	84.758	*Tursiops truncatus*	8	ON
Aerial	Winter 97	10 Mar 97	12:29	27.422	84.694	Unidentified odontocete	1	ON
Aerial	Winter 97	10 Mar 97	12:42	27.362	84.833	*Grampus griseus*	1	OFF
Aerial	Winter 97	10 Mar 97	13:19	27.142	85.001	*Tursiops truncatus*	19	ON
Aerial	Winter 97	10 Mar 97	13:41	27.276	84.675	*Stenella frontalis*	53	ON
Aerial	Winter 97	11 Mar 97	09:36	28.416	85.017	*Stenella frontalis*	21	ON
Aerial	Winter 97	11 Mar 97	09:57	28.082	85.392	*Grampus griseus*	4	OFF
Aerial	Winter 97	11 Mar 97	10:02	28.060	85.419	*Grampus griseus*	4	OFF
Aerial	Winter 97	11 Mar 97	10:48	27.897	85.410	*Stenella attenuata*	90	ON
Aerial	Winter 97	11 Mar 97	12:24	28.121	85.097	*Balaenoptera pysalus*	1	OFF
Aerial	Winter 97	11 Mar 97	12:24	28.121	85.097	*Tursiops truncatus*	8	OFF
Aerial	Winter 97	11 Mar 97	12:26	28.135	85.084	*Tursiops truncatus*	6	ON
Aerial	Winter 97	11 Mar 97	13:09	27.792	85.351	*Tursiops truncatus*	3	OFF
Aerial	Winter 97	19 Mar 97	09:55	26.843	85.126	*Pseudorca crassidens*	30	ON
Aerial	Winter 97	19 Mar 97	10:07	26.940	84.857	*Grampus griseus*	3	ON
Aerial	Winter 97	19 Mar 97	11:47	26.843	84.307	*Stenella frontalis*	12	OFF
Aerial	Winter 97	19 Mar 97	12:43	26.550	85.010	*Stenella attenuata*	50	OFF
Aerial	Winter 97	19 Mar 97	12:56	26.490	84.803	*Tursiops truncatus*	3	ON
Aerial	Winter 97	19 Mar 97	13:09	26.513	84.691	*Stenella attenuata*	27	ON
Aerial	Winter 97	19 Mar 97	13:40	26.638	84.022	*Tursiops truncatus*	7	ON
Aerial	Winter 97	19 Mar 97	13:46	26.653	83.927	*Tursiops truncatus*	5	ON
Aerial	Winter 97	20 Mar 97	10:01	26.011	84.757	*Mesoplodon sp.*	2	ON
Oregon II	225	17 Apr 97	11:39	29.505	86.507	*Tursiops truncatus*	2	ON
Oregon II	225	17 Apr 97	14:01	29.331	86.322	*Physeter macrocephalus*	1	ON

Oregon II	225	17 Apr 97	15:48	29.105	86.102	Unidentified dolphin	1	ON
Oregon II	225	19 Apr 97	06:28	25.109	84.006	*Stenella frontalis*	20	OFF
Oregon II	225	19 Apr 97	10:49	24.651	83.990	*Physeter macrocephalus*	1	ON
Oregon II	225	19 Apr 97	11:22	24.572	84.001	*Grampus griseus*	4	ON
Oregon II	225	19 Apr 97	12:49	24.492	84.016	*Kogia sp.*	1	ON
Oregon II	225	19 Apr 97	14:07	24.485	84.155	*Grampus griseus*	12	ON
Oregon II	225	19 Apr 97	14:33	24.509	84.167	*Grampus griseus*	4	ON
Oregon II	225	19 Apr 97	14:39	24.504	84.181	*Kogia sp.*	2	ON
Oregon II	225	19 Apr 97	14:48	24.500	84.205	*Kogia sp.*	1	ON
Oregon II	225	19 Apr 97	15:02	24.499	84.245	*Kogia sp.*	1	ON
Oregon II	225	19 Apr 97	16:04	24.515	84.368	Unidentified dolphin	6	ON
Oregon II	225	19 Apr 97	16:04	24.515	84.368	*Grampus griseus*	11	ON
Oregon II	225	19 Apr 97	16:25	24.508	84.430	Unidentified dolphin	3	ON
Oregon II	225	19 Apr 97	18:17	24.495	84.541	*Kogia sp.*	2	ON
Oregon II	225	19 Apr 97	19:12	24.480	84.597	*Feresa attenuata*	13	ON
Oregon II	225	20 Apr 97	07:05	25.015	85.749	*Stenella attenuata*	8	ON
Oregon II	225	20 Apr 97	08:20	25.006	85.995	Unidentified odontocete	1	ON
Oregon II	225	20 Apr 97	08:46	24.999	85.999	Unidentified dolphin	6	ON
Oregon II	225	20 Apr 97	10:53	25.152	86.005	Unidentified dolphin	4	ON
Oregon II	225	20 Apr 97	12:40	25.377	86.005	*Stenella attenuata*	33	ON
Oregon II	225	20 Apr 97	12:59	25.429	85.999	*Mesoplodon sp.*	1	ON
Oregon II	225	20 Apr 97	14:36	25.484	85.988	*Pseudorca crassidens*	65	ON
Oregon II	225	20 Apr 97	16:42	25.509	86.156	*Grampus griseus*	10	ON
Oregon II	225	20 Apr 97	17:42	25.527	86.298	Unidentified dolphin	1	ON
Oregon II	225	20 Apr 97	17:42	25.527	86.298	*Grampus griseus*	3	ON
Oregon II	225	21 Apr 97	11:19	27.663	85.980	*Stenella attenuata*	25	ON
Oregon II	225	21 Apr 97	16:35	28.287	85.865	*Stenella longirostris*	100	ON

Oregon II	225	21 Apr 97	16:57	28.319	85.884	Unidentified dolphin	1	ON
Oregon II	225	21 Apr 97	17:42	28.401	85.927	*Stenella longirostris*	110	ON
Oregon II	225	21 Apr 97	18:38	28.501	86.004	*Stenella sp.*	4	ON
Oregon II	225	22 Apr 97	07:48	28.346	86.990	*Stenella attenuata*	35	ON
Oregon II	225	22 Apr 97	08:45	28.319	86.997	*Steno bredanensis*	6	ON
Oregon II	225	22 Apr 97	09:40	28.233	87.012	*Stenella attenuata*	17	ON
Oregon II	225	22 Apr 97	09:40	28.233	87.012	*Peponocephala/Feresa*	6	ON
Oregon II	225	22 Apr 97	11:05	28.046	87.002	*Ziphiidae fm.*	1	ON
Oregon II	225	22 Apr 97	12:45	27.952	87.003	*Stenella attenuata*	20	ON
Oregon II	225	24 Apr 97	08:46	28.963	88.001	*Stenella attenuata*	32	ON
Oregon II	225	24 Apr 97	15:42	29.255	88.250	*Tursiops truncatus*	7	ON
Oregon II	225	24 Apr 97	16:34	29.182	88.305	*Stenella frontalis*	17	ON
Oregon II	225	24 Apr 97	17:14	29.171	88.335	*Tursiops truncatus*	85	ON
Oregon II	225	29 Apr 97	06:42	26.009	93.094	Unidentified dolphin	1	ON
Oregon II	225	29 Apr 97	07:56	26.015	93.297	*Stenella attenuata*	50	ON
Oregon II	225	29 Apr 97	17:08	26.389	94.001	Unidentified small whale	1	ON
Oregon II	225	30 Apr 97	09:35	28.004	94.893	*Stenella frontalis*	19	ON
Oregon II	225	30 Apr 97	15:46	27.448	95.001	*Stenella attenuata*	17	OFF
Oregon II	225	30 Apr 97	18:34	27.031	95.010	*Stenella attenuata*	200	ON
Oregon II	225	01 May 97	17:24	27.160	95.992	*Ziphiidae fm.*	1	ON
Oregon II	225	03 May 97	07:28	27.668	91.958	*Grampus griseus*	22	ON
Oregon II	225	03 May 97	08:32	27.510	92.004	*Stenella attenuata*	55	ON
Oregon II	225	03 May 97	10:08	27.445	91.866	*Stenella attenuata*	250	ON
Oregon II	225	03 May 97	10:31	27.447	91.825	*Stenella attenuata*	13	ON
Oregon II	225	03 May 97	11:53	27.459	91.708	*Peponocephala electra*	39	ON
Oregon II	225	03 May 97	13:19	27.396	91.498	*Grampus griseus*	7	ON
Oregon II	225	03 May 97	14:43	27.373	91.314	*Stenella attenuata*	300	ON

Oregon II	225	04 May 97	06:51	27.060	89.006	*Stenella attenuata*	14	ON
Oregon II	225	04 May 97	19:07	28.457	88.961	*Physeter macrocephalus*	6	ON
Oregon II	225	05 May 97	06:55	28.548	89.437	*Tursiops truncatus/Stenella frontalis*	1	ON
Oregon II	225	05 May 97	17:53	28.847	88.534	Unidentified odontocete	1	ON
Oregon II	225	05 May 97	19:32	29.080	88.526	*Stenella attenuata*	37	ON
Oregon II	225	09 May 97	06:35	29.277	86.510	*Tursiops truncatus*	24	ON
Oregon II	225	09 May 97	08:02	29.039	86.484	*Stenella longirostris*	40	ON
Oregon II	225	09 May 97	09:27	29.006	86.510	*Stenella longirostris*	80	ON
Oregon II	225	09 May 97	10:15	29.047	86.411	*Kogia sp.*	1	ON
Oregon II	225	09 May 97	10:16	29.048	86.407	*Grampus griseus*	7	OFF
Oregon II	225	09 May 97	11:15	29.107	86.260	*Tursiops truncatus*	17	ON
Oregon II	225	09 May 97	11:47	29.142	86.182	*Tursiops truncatus*	13	ON
Oregon II	225	09 May 97	12:39	29.167	86.112	*Balaenoptera edeni*	2	ON
Oregon II	225	09 May 97	12:41	29.166	86.109	Unidentified dolphin	2	OFF
Oregon II	225	09 May 97	16:01	29.130	85.934	*Tursiops truncatus*	1	ON
Oregon II	225	09 May 97	16:26	29.111	85.906	*Tursiops truncatus*	3	ON
Oregon II	225	09 May 97	17:56	28.925	85.720	*Tursiops truncatus*	3	ON
Oregon II	225	09 May 97	18:39	28.816	85.675	*Tursiops truncatus*	9	ON
Oregon II	225	09 May 97	18:47	28.799	85.667	*Tursiops truncatus*	5	OFF
Oregon II	225	10 May 97	07:01	27.466	85.975	*Stenella attenuata*	12	ON
Oregon II	225	10 May 97	07:53	27.372	85.952	*Stenella attenuata*	35	ON
Oregon II	225	10 May 97	08:07	27.346	85.983	Unidentified dolphin	3	ON
Oregon II	225	10 May 97	08:38	27.276	85.952	Unidentified dolphin	4	ON
Oregon II	225	10 May 97	08:53	27.268	85.983	*Stenella attenuata*	32	ON
Oregon II	225	10 May 97	09:56	27.118	86.003	*Stenella attenuata*	80	ON
Oregon II	225	10 May 97	10:08	27.085	86.010	*Kogia sp.*	1	ON
Oregon II	225	10 May 97	10:49	27.007	85.994	*Stenella attenuata*	15	ON

Oregon II	225	11 May 97	15:40	26.225	86.991	*Steno bredanensis*	30	ON
Oregon II	225	11 May 97	16:55	26.410	86.981	*Stenella attenuata*	30	ON
Oregon II	225	12 May 97	12:06	28.979	86.981	*Grampus griseus*	2	ON
Oregon II	225	12 May 97	14:12	29.063	87.116	*Physeter macrocephalus*	3	ON
Oregon II	225	12 May 97	15:52	29.198	87.292	*Stenella attenuata*	200	ON
Oregon II	225	12 May 97	16:51	29.179	87.390	*Stenella attenuata*	120	ON
Oregon II	225	12 May 97	17:48	29.256	87.506	*Stenella coeruleoalba*	90	ON
Oregon II	225	12 May 97	18:40	29.305	87.564	*Tursiops truncatus*	27	ON
Oregon II	225	12 May 97	19:10	29.324	87.649	*Stenella longirostris*	15	ON
Oregon II	225	12 May 97	19:43	29.312	87.736	*Tursiops truncatus*	40	ON
Oregon II	225	13 May 97	06:46	28.793	88.009	*Stenella attenuata*	28	ON
Oregon II	225	13 May 97	07:54	28.626	88.002	*Stenella longirostris*	70	ON
Oregon II	225	13 May 97	14:55	27.815	88.000	*Stenella attenuata*	17	ON
Oregon II	225	13 May 97	16:31	27.556	88.010	*Stenella attenuata*	25	ON
Oregon II	225	13 May 97	16:55	27.491	88.031	*Stenella attenuata*	12	OFF
Oregon II	225	13 May 97	16:57	27.489	88.029	Unidentified dolphin	1	ON
Oregon II	225	13 May 97	18:00	27.462	88.007	*Stenella attenuata*	7	ON
Oregon II	225	13 May 97	18:23	27.420	87.973	*Stenella attenuata*	19	ON
Oregon II	225	13 May 97	19:07	27.312	87.987	*Stenella attenuata*	35	ON
Oregon II	225	14 May 97	06:42	26.045	88.112	*Stenella attenuata*	35	ON
Oregon II	225	14 May 97	07:12	26.050	88.198	Unidentified dolphin	14	ON
Oregon II	225	14 May 97	07:38	26.026	88.270	*Stenella attenuata*	19	ON
Oregon II	225	14 May 97	07:42	26.025	88.282	*Kogia sp.*	2	ON
Oregon II	225	14 May 97	07:52	26.018	88.307	*Kogia sp.*	1	OFF
Oregon II	225	14 May 97	08:03	25.996	88.327	*Stenella attenuata*	19	ON
Oregon II	225	14 May 97	08:31	26.028	88.402	*Stenella attenuata*	19	ON
Oregon II	225	14 May 97	09:06	25.981	88.461	*Ziphius cavirostris*	4	ON

Oregon II	225	14 May 97	10:59	26.001	88.606	*Kogia sp.*	6	ON
Oregon II	225	14 May 97	11:27	26.008	88.680	Unidentified odontocete	1	ON
Oregon II	225	14 May 97	11:29	26.009	88.684	Unidentified dolphin	15	OFF
Oregon II	225	14 May 97	11:56	26.007	88.764	Unidentified dolphin	30	ON
Oregon II	225	14 May 97	12:46	26.020	88.858	*Stenella attenuata*	70	ON
Oregon II	225	14 May 97	14:03	26.039	89.043	*Stenella attenuata*	60	OFF
Oregon II	225	14 May 97	14:13	26.023	89.025	*Kogia sp.*	2	OFF
Oregon II	225	14 May 97	15:48	26.077	89.012	*Stenella attenuata*	35	ON
Oregon II	225	14 May 97	17:02	26.184	89.026	*Stenella coeruleoalba*	95	ON
Oregon II	225	14 May 97	17:09	26.197	89.029	Unidentified dolphin	20	OFF
Oregon II	225	14 May 97	18:39	26.435	88.986	*Physeter macrocephalus*	6	OFF
Oregon II	225	14 May 97	18:52	26.448	88.975	*Orcinus orca*	1	ON
Oregon II	225	15 May 97	06:52	27.960	89.019	*Physeter macrocephalus*	5	ON
Oregon II	225	15 May 97	07:11	27.986	88.974	*Stenella attenuata*	65	ON
Oregon II	225	15 May 97	08:56	28.057	88.937	*Kogia sp.*	2	ON
Oregon II	225	15 May 97	09:23	28.104	88.934	*Kogia sp.*	2	ON
Oregon II	225	15 May 97	09:46	28.163	88.928	Unidentified odontocete	1	ON
Oregon II	225	15 May 97	10:30	28.257	88.995	*Physeter macrocephalus*	1	ON
Oregon II	225	15 May 97	11:04	28.343	88.990	*Physeter macrocephalus*	2	ON
Oregon II	225	15 May 97	11:19	28.372	88.956	*Stenella attenuata*	55	ON
Oregon II	225	15 May 97	11:44	28.438	88.953	*Physeter macrocephalus*	1	ON
Oregon II	225	15 May 97	12:05	28.481	88.984	*Kogia sp.*	3	ON
Oregon II	225	15 May 97	12:11	28.492	88.994	*Physeter macrocephalus*	1	ON
Oregon II	225	15 May 97	13:23	28.456	89.047	*Kogia sp.*	4	ON
Oregon II	225	15 May 97	13:31	28.440	89.062	*Physeter macrocephalus*	1	ON
Oregon II	225	15 May 97	13:34	28.434	89.067	*Physeter macrocephalus*	4	ON
Oregon II	225	15 May 97	14:39	28.321	89.094	*Peponocephala electra*	85	ON

Oregon II	225	15 May 97	15:07	28.303	89.166	*Physeter macrocephalus*	1	ON
Oregon II	225	15 May 97	15:25	28.265	89.188	Unidentified odontocete	2	ON
Oregon II	225	15 May 97	16:22	28.278	89.336	*Stenella attenuata*	42	ON
Oregon II	225	15 May 97	16:52	28.202	89.329	*Kogia sp.*	3	ON
Oregon II	225	15 May 97	17:19	28.146	89.377	*Kogia sp.*	1	ON
Oregon II	225	15 May 97	17:44	28.098	89.376	*Stenella coeruleoalba*	58	ON
Oregon II	225	15 May 97	18:24	28.028	89.399	*Grampus griseus*	25	ON
Oregon II	225	15 May 97	18:28	28.027	89.412	Unidentified dolphin	10	OFF
Oregon II	225	15 May 97	19:13	28.015	89.529	*Stenella attenuata*	53	ON
Oregon II	225	16 May 97	08:55	26.920	90.027	Unidentified dolphin	1	ON
Oregon II	225	16 May 97	12:32	26.413	89.995	*Stenella attenuata*	30	ON
Oregon II	225	17 May 97	14:02	27.420	91.025	*Stenella attenuata*	100	ON
Oregon II	225	19 May 97	13:06	28.908	95.058	*Tursiops truncatus*	5	ON
Oregon II	225	19 May 97	14:35	28.675	95.288	*Tursiops truncatus*	20	ON
Oregon II	225	19 May 97	17:39	28.217	95.765	*Tursiops truncatus*	9	ON
Oregon II	225	19 May 97	17:52	28.186	95.806	*Tursiops truncatus*	6	ON
Oregon II	225	20 May 97	07:01	26.269	96.002	*Kogia sp.*	1	ON
Oregon II	225	20 May 97	07:28	26.198	96.001	*Kogia sp.*	1	ON
Oregon II	225	20 May 97	14:53	26.020	95.248	Unidentified dolphin	12	ON
Oregon II	225	20 May 97	15:33	26.041	95.161	*Stenella clymene*	70	ON
Oregon II	225	20 May 97	16:22	26.043	95.037	*Stenella attenuata*	87	ON
Oregon II	225	21 May 97	09:40	27.896	94.997	*Stenella frontalis*	14	ON
Oregon II	225	21 May 97	13:12	27.981	94.593	*Tursiops truncatus*	2	ON
Oregon II	225	21 May 97	13:41	27.985	94.526	*Tursiops truncatus*	4	ON
Oregon II	225	21 May 97	13:54	28.005	94.519	*Tursiops truncatus*	4	ON
Oregon II	225	21 May 97	15:07	28.001	94.372	*Tursiops truncatus*	5	OFF
Oregon II	225	23 May 97	07:03	26.510	92.219	*Peponocephala electra*	3	ON

Oregon II	225	23 May 97	10:15	26.499	92.734	*Peponocephala electra*	10	ON
Oregon II	225	23 May 97	14:10	26.655	93.002	*Stenella attenuata*	150	ON
Oregon II	225	23 May 97	15:50	26.887	92.997	*Mesoplodon sp.*	1	ON
Oregon II	225	23 May 97	19:03	27.084	93.011	*Mesoplodon densirostris*	1	ON
Oregon II	225	23 May 97	19:24	27.116	92.999	*Stenella attenuata*	6	ON
Oregon II	225	24 May 97	10:05	27.501	92.003	Unidentified dolphin	4	ON
Oregon II	225	24 May 97	16:36	27.580	90.816	Unidentified dolphin	3	ON
Oregon II	225	25 May 97	08:36	28.111	89.841	*Stenella attenuata*	25	ON
Oregon II	225	25 May 97	10:08	28.273	89.635	*Physeter macrocephalus*	1	ON
Oregon II	225	25 May 97	10:35	28.310	89.591	*Stenella clymene*	20	ON
Oregon II	225	25 May 97	11:55	28.434	89.405	*Grampus griseus*	4	ON
Oregon II	225	25 May 97	12:42	28.500	89.335	*Grampus griseus*	2	ON
Oregon II	225	25 May 97	13:29	28.572	89.221	Unidentified dolphin	2	ON
Oregon II	225	25 May 97	16:00	28.773	88.928	*Grampus griseus*	25	ON
Oregon II	225	25 May 97	16:17	28.776	88.906	*Grampus griseus*	3	ON
Oregon II	225	25 May 97	16:54	28.785	88.843	Unidentified dolphin	2	ON
Oregon II	225	25 May 97	18:49	28.745	88.595	*Stenella attenuata*	160	ON
Oregon II	225	25 May 97	19:22	28.751	88.511	*Grampus griseus*	11	ON
Oregon II	225	25 May 97	19:34	28.771	88.504	Unidentified dolphin	3	ON
Oregon II	225	30 May 97	12:18	28.033	85.002	*Tursiops truncatus*	30	ON
Oregon II	225	30 May 97	12:51	28.111	84.993	Unidentified dolphin	3	ON
Oregon II	225	30 May 97	14:34	28.318	84.909	*Stenella frontalis*	38	ON
Oregon II	225	30 May 97	14:56	28.374	84.891	*Tursiops truncatus/Stenella frontalis*	4	ON
Oregon II	225	30 May 97	16:31	28.399	84.777	*Stenella frontalis*	5	ON
Oregon II	225	30 May 97	16:58	28.439	84.718	*Tursiops truncatus*	2	ON
Oregon II	225	30 May 97	17:44	28.469	84.583	*Stenella frontalis*	11	ON
Oregon II	225	30 May 97	17:58	28.494	84.552	*Stenella frontalis*	3	ON

Oregon II	225	30 May 97	18:30	28.546	84.513	*Tursiops truncatus/Stenella frontalis*	2	ON
Oregon II	225	30 May 97	19:14	28.567	84.472	*Tursiops truncatus*	1	ON
Oregon II	225	31 May 97	06:01	28.532	84.960	*Stenella frontalis*	14	OFF
Oregon II	225	31 May 97	06:19	28.488	84.990	*Stenella frontalis*	10	ON
Oregon II	225	31 May 97	06:31	28.473	85.023	Unidentified dolphin	5	ON
Oregon II	225	31 May 97	06:34	28.470	85.029	*Stenella frontalis*	1	ON
Oregon II	225	31 May 97	06:48	28.441	85.053	*Tursiops truncatus/Stenella frontalis*	3	ON
Oregon II	225	31 May 97	06:51	28.434	85.057	*Tursiops truncatus/Stenella frontalis*	25	ON
Oregon II	225	31 May 97	06:58	28.417	85.070	*Stenella frontalis*	7	ON
Oregon II	225	31 May 97	08:13	28.227	85.130	Unidentified dolphin	1	ON
Oregon II	225	31 May 97	09:03	28.110	85.193	Unidentified dolphin	1	ON
Oregon II	225	31 May 97	09:44	28.078	85.229	*Stenella longirostris*	130	ON
Oregon II	225	31 May 97	12:14	27.882	85.344	Unidentified dolphin	4	ON
Oregon II	225	31 May 97	15:22	27.501	85.610	*Stenella attenuata*	115	ON
Oregon II	225	31 May 97	16:09	27.403	85.603	*Stenella attenuata*	8	ON
Oregon II	225	01 Jun 97	06:32	27.702	85.582	*Stenella attenuata*	10	ON
Oregon II	225	01 Jun 97	06:35	27.708	85.582	Unidentified small whale	1	OFF
Oregon II	225	01 Jun 97	07:27	27.836	85.597	*Stenella attenuata*	37	ON
Oregon II	225	01 Jun 97	10:45	28.341	85.585	Unidentified dolphin	2	ON
Oregon II	225	01 Jun 97	11:57	28.436	85.571	*Tursiops truncatus*	3	ON
Oregon II	225	01 Jun 97	12:05	28.458	85.568	*Tursiops truncatus*	3	ON
Oregon II	225	01 Jun 97	12:40	28.550	85.560	*Tursiops truncatus*	4	ON
Oregon II	225	01 Jun 97	17:54	29.080	85.645	*Stenella frontalis*	30	ON
Oregon II	225	02 Jun 97	09:33	28.406	85.938	Unidentified odontocete	1	ON
Oregon II	225	02 Jun 97	10:20	28.342	85.961	*Grampus griseus*	3	ON
Oregon II	225	02 Jun 97	12:18	28.089	86.071	*Physeter macrocephalus*	2	ON
Oregon II	225	02 Jun 97	14:08	28.059	86.122	*Steno bredanensis*	2	ON

Oregon II	225	02 Jun 97	14:08	28.059	86.122	*Pseudorca crassidens*	35	ON
Oregon II	225	02 Jun 97	18:13	28.073	86.255	*Pseudorca crassidens*	22	ON
Oregon II	225	03 Jun 97	06:21	28.300	86.162	*Stenella sp.*	3	ON
Oregon II	225	03 Jun 97	13:43	29.207	86.244	*Lagenodelphis hosei*	117	ON
Oregon II	225	03 Jun 97	14:15	29.285	86.216	Unidentified large whale	1	ON
Oregon II	225	03 Jun 97	19:12	29.657	86.275	*Stenella frontalis*	30	ON
Oregon II	225	04 Jun 97	08:13	30.000	86.295	*Tursiops truncatus*	15	ON
Oregon II	225	04 Jun 97	08:51	30.093	86.290	*Tursiops truncatus*	16	ON
Oregon II	225	04 Jun 97	09:16	30.139	86.292	*Tursiops truncatus*	3	ON
Oregon II	225	04 Jun 97	10:09	30.222	86.379	*Tursiops truncatus/Stenella frontalis*	1	ON
Oregon II	225	04 Jun 97	10:30	30.236	86.411	*Tursiops truncatus*	15	ON
Oregon II	225	04 Jun 97	10:33	30.236	86.417	*Tursiops truncatus/Stenella frontalis*	20	ON
Oregon II	225	04 Jun 97	11:09	30.221	86.511	*Stenella frontalis*	8	ON
Oregon II	225	04 Jun 97	11:12	30.212	86.511	*Tursiops truncatus/Stenella frontalis*	3	ON
Oregon II	225	04 Jun 97	11:21	30.194	86.521	*Tursiops truncatus*	9	ON
Oregon II	225	04 Jun 97	11:23	30.189	86.524	*Tursiops truncatus*	5	ON
Oregon II	225	04 Jun 97	11:30	30.171	86.525	*Tursiops truncatus/Stenella frontalis*	6	ON
Oregon II	225	04 Jun 97	11:47	30.127	86.528	*Tursiops truncatus*	2	ON
Oregon II	225	04 Jun 97	11:56	30.104	86.528	*Tursiops truncatus*	5	ON
Oregon II	225	04 Jun 97	11:57	30.102	86.528	*Tursiops truncatus/Stenella frontalis*	3	ON
Oregon II	225	04 Jun 97	16:12	29.656	86.534	*Stenella frontalis*	23	ON
Oregon II	225	04 Jun 97	17:32	29.498	86.551	*Stenella frontalis*	25	ON
Oregon II	225	04 Jun 97	18:11	29.481	86.591	*Grampus griseus*	7	ON
Oregon II	225	04 Jun 97	19:25	29.310	86.617	*Tursiops truncatus*	6	ON
Oregon II	225	05 Jun 97	13:11	28.290	86.676	*Tursiops truncatus*	1	ON
Oregon II	225	05 Jun 97	14:47	28.143	86.736	*Kogia sp.*	1	ON
Oregon II	225	06 Jun 97	13:43	29.408	86.881	*Stenella longirostris*	485	ON

Oregon II	225	06 Jun 97	16:43	29.784	87.003	*Tursiops truncatus*	12	ON
Oregon II	225	06 Jun 97	17:30	29.899	87.019	*Tursiops truncatus*	5	ON
Oregon II	225	06 Jun 97	18:44	30.008	87.014	*Tursiops truncatus/Stenella frontalis*	2	ON
Oregon II	225	06 Jun 97	18:57	30.042	87.014	*Tursiops truncatus/Stenella frontalis*	3	ON
Oregon II	225	06 Jun 97	19:07	30.065	86.998	*Stenella frontalis*	8	ON
Oregon II	225	06 Jun 97	19:48	30.108	87.007	*Stenella frontalis*	17	ON
Oregon II	225	07 Jun 97	06:12	30.110	87.254	*Tursiops truncatus*	7	ON
Oregon II	225	07 Jun 97	06:22	30.082	87.252	*Stenella frontalis*	11	ON
Oregon II	225	07 Jun 97	07:22	29.964	87.271	*Stenella frontalis*	29	ON
Oregon II	225	07 Jun 97	08:06	29.914	87.329	*Stenella frontalis*	42	ON
Oregon II	225	07 Jun 97	09:00	29.777	87.325	*Stenella frontalis*	3	ON
Oregon II	225	07 Jun 97	11:17	29.514	87.310	*Tursiops truncatus*	3	ON
Oregon II	225	07 Jun 97	18:40	28.553	87.382	Unidentified dolphin	1	ON
Oregon II	225	08 Jun 97	09:21	28.785	87.638	*Stenella attenuata*	35	ON
Oregon II	225	08 Jun 97	12:26	29.167	87.655	*Stenella attenuata*	55	ON
Oregon II	225	08 Jun 97	12:57	29.252	87.663	Unidentified odontocete	2	ON
Oregon II	225	08 Jun 97	13:44	29.377	87.679	*Tursiops truncatus*	10	ON
Oregon II	225	09 Jun 97	11:07	28.927	88.089	*Stenella attenuata*	43	ON
Oregon II	225	09 Jun 97	13:33	28.875	88.493	*Stenella attenuata*	40	ON
Oregon II	225	09 Jun 97	16:20	28.738	88.964	*Grampus griseus*	3	ON
Oregon II	225	09 Jun 97	16:45	28.715	89.019	Unidentified small whale	3	ON
Oregon II	225	09 Jun 97	17:36	28.677	89.162	*Tursiops truncatus*	38	ON
Aerial	Summer 97	15 Jul 97	10:38	28.889	87.807	Unidentified odontocete	1	ON
Aerial	Summer 97	15 Jul 97	11:21	29.275	87.531	*Stenella attenuata*	60	ON
Aerial	Summer 97	15 Jul 97	11:50	28.480	87.554	*Stenella attenuata*	14	OFF
Aerial	Summer 97	15 Jul 97	12:25	29.202	87.398	*Stenella attenuata*	95	ON
Aerial	Summer 97	15 Jul 97	13:12	29.792	87.383	*Tursiops truncatus*	28	ON

Aerial	Summer 97	15 Jul 97	13:19	29.896	87.385	*Tursiops truncatus/Stenella frontalis*	4	ON
Aerial	Summer 97	15 Jul 97	13:31	29.976	87.384	*Tursiops truncatus/Stenella frontalis*	6	ON
Aerial	Summer 97	16 Jul 97	09:13	29.940	88.083	*Tursiops truncatus*	5	ON
Aerial	Summer 97	16 Jul 97	09:19	29.817	88.086	*Tursiops truncatus*	2	ON
Aerial	Summer 97	16 Jul 97	09:45	29.428	87.958	*Tursiops truncatus*	3	ON
Aerial	Summer 97	16 Jul 97	10:40	29.583	87.805	*Tursiops truncatus/Stenella frontalis*	6	ON
Aerial	Summer 97	16 Jul 97	11:07	29.768	87.648	*Tursiops truncatus*	2	ON
Aerial	Summer 97	16 Jul 97	11:17	30.023	87.649	*Tursiops truncatus*	1	ON
Aerial	Summer 97	16 Jul 97	11:38	30.017	87.522	*Tursiops truncatus*	90	ON
Aerial	Summer 97	16 Jul 97	11:54	29.699	87.517	*Tursiops truncatus*	6	OFF
Aerial	Summer 97	16 Jul 97	12:04	29.621	87.516	*Tursiops truncatus*	65	ON
Aerial	Summer 97	16 Jul 97	12:26	29.742	87.382	*Tursiops truncatus*	6	ON
Aerial	Summer 97	16 Jul 97	13:16	30.186	87.088	*Tursiops truncatus/Stenella frontalis*	4	OFF
Aerial	Summer 97	16 Jul 97	13:26	30.189	86.955	*Tursiops truncatus*	2	ON
Aerial	Summer 97	16 Jul 97	13:35	30.120	86.956	*Stenella frontalis*	57	ON
Aerial	Summer 97	16 Jul 97	13:42	30.074	86.956	*Tursiops truncatus*	30	ON
Aerial	Summer 97	17 Jul 97	10:01	29.280	87.258	*Stenella longirostris*	47	ON
Aerial	Summer 97	17 Jul 97	10:15	29.112	87.284	*Stenella attenuata*	75	OFF
Aerial	Summer 97	17 Jul 97	10:27	29.004	87.306	*Stenella attenuata*	12	ON
Aerial	Summer 97	17 Jul 97	11:21	29.196	87.126	*Physeter macrocephalus*	1	ON
Aerial	Summer 97	17 Jul 97	11:56	29.986	86.899	*Tursiops truncatus/Stenella frontalis*	1	ON
Aerial	Summer 97	17 Jul 97	12:20	30.118	86.664	*Tursiops truncatus/Stenella frontalis*	5	ON
Aerial	Summer 97	23 Jul 97	09:14	29.052	87.022	*Kogia sp.*	2	ON
Aerial	Summer 97	23 Jul 97	09:34	28.603	87.171	*Kogia sp.*	1	ON
Aerial	Summer 97	23 Jul 97	09:46	28.457	87.219	*Stenella attenuata*	23	OFF
Aerial	Summer 97	23 Jul 97	09:56	28.427	87.245	*Physeter macrocephalus*	3	OFF
Aerial	Summer 97	23 Jul 97	10:14	28.339	87.141	*Kogia sp.*	1	ON

Aerial	Summer 97	23 Jul 97	10:18	28.364	87.130	*Kogia sp.*	6	ON
Aerial	Summer 97	23 Jul 97	10:22	28.419	87.111	*Physeter macrocephalus*	1	ON
Aerial	Summer 97	23 Jul 97	10:29	28.464	87.090	*Stenella attenuata*	30	ON
Aerial	Summer 97	23 Jul 97	11:07	28.717	87.024	*Stenella coeruleoalba*	28	ON
Aerial	Summer 97	23 Jul 97	11:46	29.618	86.642	*Tursiops truncatus*	1	ON
Aerial	Summer 97	23 Jul 97	12:11	29.614	86.251	*Tursiops truncatus/Stenella frontalis*	3	ON
Aerial	Summer 97	23 Jul 97	12:14	29.649	86.248	*Tursiops truncatus/Stenella frontalis*	1	OFF
Aerial	Summer 97	23 Jul 97	12:22	29.805	86.251	*Tursiops truncatus*	2	ON
Aerial	Summer 97	23 Jul 97	13:01	29.539	86.117	*Tursiops truncatus/Stenella frontalis*	3	ON
Aerial	Summer 97	23 Jul 97	13:15	29.414	85.981	*Tursiops truncatus*	4	ON
Aerial	Summer 97	23 Jul 97	13:23	29.576	85.984	*Tursiops truncatus*	2	ON
Aerial	Summer 97	23 Jul 97	13:38	29.843	85.982	*Tursiops truncatus*	29	ON
Aerial	Summer 97	24 Jul 97	08:57	29.486	86.527	*Stenella frontalis*	13	ON
Aerial	Summer 97	24 Jul 97	09:15	29.283	86.630	*Tursiops truncatus*	20	OFF
Aerial	Summer 97	24 Jul 97	10:09	28.366	86.948	*Stenella attenuata*	6	ON
Aerial	Summer 97	24 Jul 97	10:38	28.680	86.770	*Stenella longirostris*	325	ON
Aerial	Summer 97	24 Jul 97	11:10	29.203	86.483	*Tursiops truncatus*	4	ON
Aerial	Summer 97	24 Jul 97	11:30	29.498	86.316	*Stenella frontalis*	11	ON
Aerial	Summer 97	24 Jul 97	11:49	29.419	86.188	*Tursiops truncatus*	3	ON
Aerial	Summer 97	24 Jul 97	12:02	29.211	86.305	*Tursiops truncatus*	9	ON
Aerial	Summer 97	24 Jul 97	12:22	29.020	86.433	*Tursiops truncatus*	12	ON
Aerial	Summer 97	24 Jul 97	12:31	28.948	86.471	*Tursiops truncatus/Stenella frontalis*	30	OFF
Aerial	Summer 97	24 Jul 97	13:08	28.241	86.881	*Tursiops truncatus*	22	ON
Aerial	Summer 97	24 Jul 97	13:39	28.668	86.482	*Tursiops truncatus*	11	ON
Aerial	Summer 97	24 Jul 97	13:55	28.984	86.286	*Tursiops truncatus*	7	ON
Aerial	Summer 97	24 Jul 97	14:04	28.998	86.200	*Stenella attenuata*	135	ON
Aerial	Summer 97	25 Jul 97	09:14	28.522	86.409	*Kogia sp.*	1	ON

Aerial	Summer 97	25 Jul 97	09:19	28.486	86.444	*Tursiops truncatus*	12	ON
Aerial	Summer 97	25 Jul 97	10:11	28.686	86.127	*Tursiops truncatus*	4	ON
Aerial	Summer 97	25 Jul 97	10:21	28.781	86.059	*Stenella attenuata*	130	ON
Aerial	Summer 97	25 Jul 97	10:32	29.022	85.895	*Tursiops truncatus*	1	ON
Aerial	Summer 97	25 Jul 97	10:42	29.214	85.764	*Tursiops truncatus*	10	ON
Aerial	Summer 97	25 Jul 97	10:58	29.145	85.666	*Stenella frontalis*	3	ON
Aerial	Summer 97	25 Jul 97	11:12	28.901	85.828	*Tursiops truncatus*	2	ON
Aerial	Summer 97	25 Jul 97	11:17	28.825	85.875	*Tursiops truncatus*	11	ON
Aerial	Summer 97	25 Jul 97	11:30	28.589	86.044	*Tursiops truncatus*	7	OFF
Aerial	Summer 97	25 Jul 97	11:39	28.465	86.108	*Tursiops truncatus*	2	ON
Aerial	Summer 97	25 Jul 97	11:56	28.101	86.359	Unidentified odontocete	1	ON
Aerial	Summer 97	25 Jul 97	12:34	28.353	86.012	*Tursiops truncatus*	38	ON
Aerial	Summer 97	25 Jul 97	13:00	28.440	85.945	*Stenella attenuata*	225	ON
Aerial	Summer 97	25 Jul 97	13:07	28.551	85.896	*Tursiops truncatus*	4	ON
Aerial	Summer 97	25 Jul 97	13:11	28.655	85.829	*Tursiops truncatus*	1	ON
Aerial	Summer 97	26 Jul 97	09:24	28.597	85.705	*Tursiops truncatus*	9	ON
Aerial	Summer 97	26 Jul 97	10:51	28.615	85.301	*Tursiops truncatus*	2	ON
Aerial	Summer 97	26 Jul 97	11:09	28.349	85.536	*Tursiops truncatus*	13	ON
Aerial	Summer 97	26 Jul 97	12:18	28.467	85.211	*Tursiops truncatus*	8	ON
Aerial	Summer 97	26 Jul 97	12:23	28.529	85.151	*Tursiops truncatus*	2	ON
Aerial	Summer 97	27 Jul 97	09:32	27.865	85.664	Unidentified odontocete	1	OFF
Aerial	Summer 97	27 Jul 97	10:31	27.999	85.208	*Stenella attenuata*	50	OFF
Aerial	Summer 97	27 Jul 97	10:57	28.203	84.807	Unidentified dolphin	1	OFF
Aerial	Summer 97	29 Jul 97	14:41	27.614	85.738	*Stenella clymene/ longirostris/coeruleoalb*	375	OFF
Aerial	Summer 97	29 Jul 97	15:47	27.795	85.286	*Pseudorca crassidens*	31	OFF
Aerial	Summer 97	29 Jul 97	16:04	27.925	85.184	*Stenella attenuata*	70	OFF
Aerial	Summer 97	30 Jul 97	08:51	26.859	84.281	*Stenella frontalis*	9	OFF

Aerial	Summer 97	30 Jul 97	09:02	26.848	84.339	*Tursiops truncatus*	3	OFF
Aerial	Summer 97	30 Jul 97	10:33	26.628	84.162	*Tursiops truncatus*	1	ON
Aerial	Summer 97	30 Jul 97	10:51	26.610	84.258	*Stenella frontalis*	19	ON
Aerial	Summer 97	31 Jul 97	10:01	26.539	84.640	*Tursiops truncatus*	8	ON
Aerial	Summer 97	31 Jul 97	10:26	26.376	84.894	Unidentified small whale	3	ON
Aerial	Summer 97	31 Jul 97	11:39	26.245	84.828	*Ziphius cavirostris*	3	ON
Aerial	Summer 97	31 Jul 97	13:55	26.988	84.769	*Tursiops truncatus*	9	ON
Aerial	Summer 97	01 Aug 97	10:09	27.212	84.856	*Stenella attenuata*	75	ON
Aerial	Summer 97	01 Aug 97	11:46	27.310	85.032	*Steno bredanensis*	34	ON
Aerial	Summer 97	01 Aug 97	12:44	27.426	85.053	*Stenella coeruleoalba*	45	ON
Aerial	Summer 97	04 Aug 97	09:53	26.000	84.897	*Stenella attenuata*	70	ON
Aerial	Summer 97	04 Aug 97	10:22	25.926	84.598	*Stenella attenuata*	41	ON
Gyre	Summer 97	05 Aug 97	10:02	28.863	92.204	*Tursiops truncatus*	20	OFF
Gyre	Summer 97	05 Aug 97	10:15	28.857	92.166	*Tursiops truncatus*	20	OFF
Gyre	Summer 97	05 Aug 97	12:23	28.850	92.127	*Tursiops truncatus*	7	OFF
Gyre	Summer 97	05 Aug 97	12:45	28.838	92.065	*Tursiops truncatus*	6	OFF
Gyre	Summer 97	05 Aug 97	14:00	28.783	91.827	*Tursiops truncatus*	7	OFF
Gyre	Summer 97	05 Aug 97	14:39	28.748	91.699	*Tursiops truncatus*	1	OFF
Gyre	Summer 97	05 Aug 97	14:48	28.741	91.674	*Tursiops truncatus*	12	OFF
Gyre	Summer 97	05 Aug 97	15:08	28.725	91.611	*Tursiops truncatus*	9	OFF
Gyre	Summer 97	05 Aug 97	15:25	28.712	91.555	*Tursiops truncatus*	5	OFF
Gyre	Summer 97	06 Aug 97	06:43	28.534	88.961	Unidentified dolphin	N/A	ON
Gyre	Summer 97	06 Aug 97	09:47	28.171	88.854	*Stenella longirostris*	35	ON
Aerial	Summer 97	06 Aug 97	10:00	27.546	85.569	*Stenella attenuata*	21	OFF
Aerial	Summer 97	06 Aug 97	10:06	27.467	85.610	*Stenella attenuata*	34	OFF
Aerial	Summer 97	06 Aug 97	10:36	27.668	85.101	*Stenella attenuata*	67	ON
Gyre	Summer 97	06 Aug 97	10:47	28.070	88.828	Unidentified small dolphin	N/A	ON

Aerial	Summer 97	06 Aug 97	10:51	27.733	85.030	*Tursiops truncatus*	8	OFF
Aerial	Summer 97	06 Aug 97	11:05	27.893	84.687	*Tursiops truncatus*	2	ON
Aerial	Summer 97	06 Aug 97	11:40	27.509	85.148	*Kogia sp.*	1	ON
Gyre	Summer 97	06 Aug 97	11:41	27.967	88.788	Unidentified Stenella	12	ON
Aerial	Summer 97	06 Aug 97	12:09	27.367	85.186	*Mesoplodon sp.*	4	ON
Aerial	Summer 97	06 Aug 97	12:36	27.613	84.607	*Tursiops truncatus*	10	ON
Aerial	Summer 97	06 Aug 97	12:39	27.623	84.574	*Tursiops truncatus*	10	ON
Gyre	97G08	06 Aug 97	12:53	27.809	88.735	*Physeter macrocephalus*	5	ON
Gyre	97G08	06 Aug 97	13:07	27.795	88.723	Unidentified Stenella	45	OFF
Gyre	97G08	06 Aug 97	13:56	27.711	88.643	*Physeter macrocephalus*	3	ON
Gyre	97G08	06 Aug 97	14:13	27.676	88.627	*Steno bredanensis*	25	ON
Gyre	97G08	06 Aug 97	16:23	27.436	88.520	Unidentified dolphin	N/A	OFF
Gyre	97G08	07 Aug 97	06:53	26.119	88.231	*Physeter macrocephalus*	N/A	ON
Gyre	97G08	07 Aug 97	11:10	26.257	88.201	*Pseudorca crassidens*	12	ON
Gyre	97G08	07 Aug 97	12:34	26.388	88.199	Unidentified cetacean	1	ON
Gyre	97G08	07 Aug 97	13:15	26.466	88.170	Unidentified small whale	5	ON
Gyre	97G08	07 Aug 97	14:29	26.634	88.157	Unidentified small dolphin	5	ON
Gyre	97G08	07 Aug 97	14:32	26.643	88.156	Unidentified odontocete	3	ON
Gyre	97G08	07 Aug 97	16:03	26.852	88.139	Unidentified small dolphin	4	ON
Gyre	97G08	07 Aug 97	16:27	26.904	88.131	*Stenella attenuata*	25*	OFF
Gyre	97G08	08 Aug 97	06:20	27.947	87.943	Unidentified small dolphin	N/A	OFF
Gyre	97G08	08 Aug 97	07:26	28.085	87.952	*Steno bredanensis*	22	OFF
Gyre	97G08	08 Aug 97	09:30	28.360	87.973	*Stenella coeruleoalba*	35	ON
Gyre	97G08	08 Aug 97	12:51	28.785	87.996	*Stenella attenuata*	55	ON
Gyre	97G08	08 Aug 97	13:22	28.834	88.024	Unidentified small dolphin	N/A	ON
Gyre	97G08	08 Aug 97	15:55	29.170	88.008	Unidentified cetacean	N/A	OFF
Gyre	97G08	08 Aug 97	17:08	29.067	87.961	*Stenella attenuata*	40	OFF

Gyre	97G08	08 Aug 97	17:53	29.027	87.943	*Stenella attenuata*	60	ON
Gyre	97G08	08 Aug 97	18:21	28.979	87.930	*Stenella attenuata*	12	OFF
Gyre	97G08	09 Aug 97	06:24	28.284	87.582	*Physeter macrocephalus*	2	OFF
Gyre	97G08	09 Aug 97	06:33	28.267	87.577	*Stenella attenuata*	25	OFF
Gyre	97G08	09 Aug 97	06:50	28.242	87.571	Unidentified Stenella	N/A	ON
Gyre	97G08	09 Aug 97	07:08	28.205	87.551	*Physeter macrocephalus*	3	ON
Gyre	97G08	09 Aug 97	07:24	28.171	87.534	*Stenella attenuata*	25	OFF
Gyre	97G08	09 Aug 97	07:43	28.127	87.518	*Physeter macrocephalus*	1	OFF
Gyre	97G08	09 Aug 97	07:51	28.104	87.506	Unidentified small dolphin	N/A	ON
Gyre	97G08	09 Aug 97	08:05	28.080	87.493	*Stenella attenuata*	10	ON
Gyre	97G08	09 Aug 97	08:09	28.071	87.488	*Physeter macrocephalus*	1	OFF
Gyre	97G08	09 Aug 97	11:23	27.662	87.281	Unidentified large whale	N/A	ON
Gyre	97G08	09 Aug 97	14:52	27.216	87.073	Unidentified small dolphin	N/A	OFF
Gyre	97G08	10 Aug 97	07:20	27.640	86.826	*Physeter macrocephalus*	3	ON
Gyre	97G08	10 Aug 97	07:53	27.704	86.838	*Physeter macrocephalus*	4	OFF
Gyre	97G08	10 Aug 97	09:12	27.823	86.864	*Stenella attenuata*	35	ON
Gyre	97G08	10 Aug 97	09:33	27.870	86.869	Unidentified large whale	1	ON
Gyre	97G08	10 Aug 97	10:07	27.923	86.890	*Stenella attenuata*	50	ON
Gyre	97G08	10 Aug 97	10:26	27.966	86.881	*Physeter macrocephalus*	4	ON
Gyre	97G08	10 Aug 97	14:26	28.339	86.876	*Stenella attenuata*	30	ON
Gyre	97G08	10 Aug 97	14:38	28.366	86.877	*Stenella attenuata*	130	OFF
Gyre	97G08	10 Aug 97	15:11	28.427	86.842	*Physeter macrocephalus*	3	OFF
Gyre	97G08	10 Aug 97	15:24	28.441	86.852	*Stenella attenuata*	80	OFF
Gyre	97G08	10 Aug 97	16:03	28.389	86.854	*Physeter macrocephalus*	2	OFF
Gyre	97G08	10 Aug 97	16:09	28.393	86.854	*Physeter macrocephalus*	1	OFF
Gyre	97G08	10 Aug 97	16:09	28.404	86.854	Unidentified Stenella	15	OFF
Gyre	97G08	10 Aug 97	17:04	28.441	86.857	*Stenella attenuata*	150	ON

Gyre	97G08	10 Aug 97	18:13	28.590	86.861	Unidentified large whale	2	ON
Gyre	97G08	11 Aug 97	13:22	27.745	87.243	*Physeter macrocephalus*	6	ON
Gyre	97G08	11 Aug 97	13:28	27.727	87.247	*Stenella attenuata*	40	OFF
Gyre	97G08	12 Aug 97	07:23	27.098	87.552	*Stenella attenuata*	20	ON
Gyre	97G08	12 Aug 97	17:44	28.158	88.193	*Stenella attenuata*	1	OFF
Gyre	97G08	12 Aug 97	17:44	28.158	88.193	*Stenella coeruleoalba*	2	ON
Gyre	97G08	12 Aug 97	19:20	28.310	88.237	*Grampus griseus*	7	OFF
Gyre	97G08	12 Aug 97	19:20	28.310	88.237	*Pseudorca crassidens*	9	OFF
Gyre	97G08	13 Aug 97	06:55	29.568	88.477	*Tursiops truncatus*	5	ON
Gyre	97G08	13 Aug 97	07:41	29.652	88.461	*Tursiops truncatus*	3	OFF
Gyre	97G08	13 Aug 97	07:44	29.661	88.460	*Tursiops truncatus*	6	ON
Gyre	97G08	13 Aug 97	07:52	29.677	88.459	*Tursiops truncatus*	2	ON
Gyre	97G08	13 Aug 97	07:52	29.678	88.459	*Tursiops truncatus*	3	ON
Gyre	97G08	13 Aug 97	07:58	29.689	88.458	Unidentified dolphin	1	ON
Gyre	97G08	13 Aug 97	08:46	29.795	88.446	*Tursiops truncatus*	2	ON
Gyre	97G08	13 Aug 97	09:31	29.900	88.443	*Tursiops truncatus*	2	OFF
Gyre	97G08	13 Aug 97	11:01	30.089	88.490	*Tursiops truncatus*	2	OFF
Gyre	97G08	13 Aug 97	11:33	30.162	88.529	*Tursiops truncatus*	2	OFF
Gyre	97G08	14 Aug 97	06:58	30.048	87.834	Unidentified dolphin	1	ON
Gyre	97G08	14 Aug 97	08:10	29.845	87.832	*Tursiops truncatus*	9	ON
Gyre	97G08	14 Aug 97	09:58	29.604	87.815	*Tursiops truncatus*	30	ON
Gyre	97G08	14 Aug 97	10:25	29.542	87.814	*Tursiops truncatus*	40	ON
Gyre	97G08	14 Aug 97	11:10	29.442	87.819	*Tursiops truncatus*	15	ON
Gyre	97G08	14 Aug 97	13:56	29.075	87.830	*Tursiops truncatus*	3	ON
Gyre	97G08	14 Aug 97	14:20	29.022	87.832	*Stenella attenuata*	500	ON
Gyre	97G08	14 Aug 97	15:34	28.932	87.876	*Ziphiidae fm.*	1	ON
Gyre	97G08	14 Aug 97	16:58	28.847	87.770	*Stenella attenuata*	40	ON

Gyre	97G08	15 Aug 97	07:06	29.515	87.296	*Stenella longirostris*	80	ON
Gyre	97G08	15 Aug 97	07:28	29.549	87.252	Unidentified small whale	1	OFF
Gyre	97G08	15 Aug 97	11:18	29.951	87.053	*Stenella frontalis*	5	OFF
Gyre	97G08	15 Aug 97	12:08	30.050	87.026	*Stenella frontalis*	8	OFF
Gyre	97G08	15 Aug 97	13:31	30.194	86.929	Unidentified dolphin	2	ON
Gyre	97G08	15 Aug 97	14:06	30.198	86.837	*Stenella frontalis*	4	OFF
Gyre	97G08	15 Aug 97	15:02	30.212	86.691	*Stenella frontalis*	5	OFF
Gyre	97G08	15 Aug 97	15:05	30.213	86.684	*Stenella frontalis*	4	OFF
Gyre	97G08	15 Aug 97	15:17	30.213	86.650	*Stenella frontalis*	4	ON
Gyre	97G08	15 Aug 97	15:17	30.213	86.650	*Tursiops truncatus*	4	ON
Gyre	97G08	15 Aug 97	15:34	30.213	86.606	*Stenella frontalis*	4	ON
Gyre	97G08	15 Aug 97	15:34	30.213	86.606	*Tursiops truncatus*	2	ON
Gyre	97G08	15 Aug 97	16:12	30.213	86.505	*Tursiops truncatus*	1	ON
Gyre	97G08	15 Aug 97	16:57	30.200	86.404	*Stenella frontalis*	1	ON
Gyre	97G08	15 Aug 97	16:57	30.200	86.404	Unidentified dolphin	1	ON
Gyre	97G08	16 Aug 97	16:39	29.746	86.680	*Tursiops truncatus*	5	ON
Gyre	97G08	16 Aug 97	17:04	29.696	86.692	*Tursiops truncatus*	1	ON
Gyre	97G08	16 Aug 97	19:02	29.430	86.693	*Stenella longirostris*	51	ON
Gyre	97G08	17 Aug 97	06:27	28.516	86.662	*Stenella attenuata*	26	ON
Gyre	97G08	17 Aug 97	06:56	28.485	86.664	*Stenella attenuata*	80	ON
Gyre	97G08	17 Aug 97	07:52	28.381	86.664	Unidentified dolphin	3	ON
Gyre	97G08	17 Aug 97	08:22	28.314	86.666	*Stenella attenuata*	100	ON
Gyre	97G08	17 Aug 97	08:48	28.270	86.692	*Physeter macrocephalus*	3	OFF
Gyre	97G08	17 Aug 97	08:48	28.270	86.692	*Stenella coeruleoalba*	95	ON
Gyre	97G08	17 Aug 97	11:33	28.160	86.637	*Physeter macrocephalus*	2	ON
Gyre	97G08	17 Aug 97	11:50	28.139	86.602	*Physeter macrocephalus*	1	ON
Gyre	97G08	17 Aug 97	12:04	28.115	86.577	*Physeter macrocephalus*	2	ON

Gyre	97G08	17 Aug 97	12:15	28.095	86.560	*Physeter macrocephalus*	2	ON
Gyre	97G08	17 Aug 97	12:21	28.084	86.551	*Physeter macrocephalus*	1	OFF
Gyre	97G08	17 Aug 97	12:34	28.091	86.531	*Physeter macrocephalus*	3	ON
Gyre	97G08	17 Aug 97	12:49	28.119	86.512	*Stenella coeruleoalba*	63	ON
Gyre	97G08	17 Aug 97	12:58	28.138	86.517	*Physeter macrocephalus*	1	OFF
Gyre	97G08	17 Aug 97	13:36	28.183	86.496	Unidentified large whale	1	ON
Gyre	97G08	18 Aug 97	06:23	28.490	85.580	*Tursiops truncatus*	9	ON
Gyre	97G08	18 Aug 97	07:43	28.355	85.670	Unidentified small whale	1	OFF
Gyre	97G08	18 Aug 97	09:27	28.155	85.748	*Stenella coeruleoalba*	40	ON
Gyre	97G08	18 Aug 97	10:27	28.093	85.814	*Tursiops truncatus*	35	OFF
Gyre	97G08	18 Aug 97	10:27	28.093	85.814	Unidentified small whale	4	OFF
Gyre	97G08	18 Aug 97	13:13	27.963	85.879	Unidentified dolphin	1	ON
Gyre	97G08	18 Aug 97	13:15	27.957	85.881	Unidentified dolphin	3	OFF
Gyre	97G08	18 Aug 97	15:56	27.783	85.812	*Ziphius cavirostris*	2	ON
Gyre	97G08	18 Aug 97	16:24	27.741	85.758	Unidentified dolphin	2	ON
Gyre	97G08	18 Aug 97	16:44	27.711	85.722	Unidentified dolphin	2	ON
Gyre	97G08	18 Aug 97	17:05	27.684	85.685	*Stenella attenuata*	35	ON
Gyre	97G08	18 Aug 97	17:58	27.734	85.569	Unidentified dolphin	47	ON
Gyre	97G08	18 Aug 97	18:54	27.742	85.483	*Stenella attenuata*	68	OFF
Gyre	97G08	18 Aug 97	18:54	27.742	85.483	*Stenella attenuata*	140	ON
Gyre	97G08	19 Aug 97	06:18	27.770	84.938	*Stenella attenuata*	190	ON
Gyre	97G08	19 Aug 97	06:51	27.785	85.001	*Tursiops truncatus*	29	ON
Gyre	97G08	19 Aug 97	07:56	27.685	85.108	*Tursiops truncatus*	1	ON
Gyre	97G08	19 Aug 97	08:51	27.585	85.180	Unidentified small dolphin	1	ON
Gyre	97G08	19 Aug 97	09:14	27.543	85.206	*Stenella attenuata*	83	ON
Gyre	97G08	19 Aug 97	09:38	27.504	85.238	*Stenella attenuata*	178	ON
Gyre	97G08	19 Aug 97	14:20	27.380	85.672	Unidentified dolphin	1	ON

Gyre	97G08	19 Aug 97	17:20	27.396	86.127	Unidentified dolphin	1	ON
Gyre	97G08	19 Aug 97	17:38	27.398	86.172	*Stenella attenuata*	350	ON
Gyre	97G08	19 Aug 97	18:19	27.446	86.216	*Stenella attenuata*	40	ON
Gyre	97G08	20 Aug 97	09:14	27.457	87.129	Unidentified small dolphin	10	ON
Gyre	97G08	20 Aug 97	09:42	27.475	87.173	Unidentified dolphin	1	OFF
Gyre	97G08	20 Aug 97	09:49	27.483	87.184	Unidentified dolphin	2	OFF
Gyre	97G08	20 Aug 97	10:32	27.536	87.243	*Kogia sp.*	3	ON
Gyre	97G08	20 Aug 97	11:04	27.560	87.303	*Kogia sp.*	1	ON
Gyre	97G08	20 Aug 97	12:23	27.563	87.411	*Kogia sp.*	2	ON
Gyre	97G08	20 Aug 97	13:34	27.654	87.534	Unidentified dolphin	12	ON
Gyre	97G08	20 Aug 97	15:21	27.801	87.692	Unidentified small whale	3	ON
Gyre	97G08	20 Aug 97	17:13	27.953	87.805	Unidentified dolphin	5	ON
Gyre	97G08	20 Aug 97	19:19	28.105	87.880	Unidentified dolphin	2	OFF
Gyre	97G08	21 Aug 97	09:26	28.643	88.923	Unidentified small dolphin	3	OFF
Gyre	97G08	21 Aug 97	09:50	28.578	88.923	Unidentified dolphin	3	OFF
Gyre	97G08	21 Aug 97	11:56	28.280	88.919	*Physeter macrocephalus*	3	OFF
Aerial	Winter 98	08 Feb 98	10:58	29.646	88.140	*Tursiops truncatus/Stenella frontalis*	1	ON
Aerial	Winter 98	08 Feb 98	11:11	29.547	88.152	*Tursiops truncatus*	25	OFF
Aerial	Winter 98	08 Feb 98	11:42	29.597	88.000	*Stenella frontalis*	38	ON
Aerial	Winter 98	08 Feb 98	12:30	29.510	87.858	*Stenella frontalis*	72	ON
Aerial	Winter 98	08 Feb 98	13:07	30.004	87.705	*Tursiops truncatus*	2	OFF
Aerial	Winter 98	08 Feb 98	13:15	30.078	87.701	*Tursiops truncatus*	4	OFF
Aerial	Winter 98	09 Feb 98	09:07	28.990	88.129	*Physeter macrocephalus*	5	OFF
Aerial	Winter 98	09 Feb 98	10:02	29.185	87.851	*Grampus griseus*	57	ON
Aerial	Winter 98	09 Feb 98	10:12	28.936	87.858	*Grampus griseus*	21	ON
Aerial	Winter 98	09 Feb 98	10:51	29.206	87.706	*Stenella coeruleoalba*	160	ON
Aerial	Winter 98	09 Feb 98	10:52	29.232	87.705	*Physeter macrocephalus*	1	ON

Aerial	Winter 98	09 Feb 98	11:19	29.370	87.543	*Tursiops truncatus*	110	OFF
Aerial	Winter 98	09 Feb 98	11:36	28.858	87.603	*Stenella clymene/ longirostris/coeruleoalb*	15	OFF
Aerial	Winter 98	09 Feb 98	12:18	29.147	87.454	*Grampus griseus*	10	ON
Aerial	Winter 98	09 Feb 98	12:18	29.147	87.454	*Globicephala sp.*	33	ON
Aerial	Winter 98	09 Feb 98	12:29	29.469	87.410	*Tursiops truncatus*	30	ON
Aerial	Winter 98	09 Feb 98	12:51	29.665	87.234	*Tursiops truncatus*	9	ON
Aerial	Winter 98	09 Feb 98	13:01	29.474	87.274	*Tursiops truncatus*	5	ON
Aerial	Winter 98	09 Feb 98	13:14	29.228	87.311	*Stenella coeruleoalba*	73	ON
Aerial	Winter 98	09 Feb 98	13:36	29.146	87.335	*Stenella clymene*	130	ON
Aerial	Winter 98	12 Feb 98	12:22	29.425	87.278	*Tursiops truncatus*	52	OFF
Aerial	Winter 98	12 Feb 98	13:01	28.635	87.419	*Stenella attenuata*	36	ON
Aerial	Winter 98	12 Feb 98	13:30	28.828	87.282	*Stenella attenuata*	47	ON
Aerial	Winter 98	12 Feb 98	13:59	28.864	87.303	*Stenella clymene*	32	OFF
Aerial	Winter 98	12 Feb 98	14:04	28.854	87.302	*Stenella clymene/ longirostris/coeruleoalb*	50	OFF
Aerial	Winter 98	12 Feb 98	15:07	30.095	87.001	*Tursiops truncatus/Stenella frontalis*	5	OFF
Aerial	Winter 98	12 Feb 98	15:25	30.019	87.138	*Tursiops truncatus*	2	ON
Aerial	Winter 98	12 Feb 98	15:42	29.909	87.287	*Tursiops truncatus*	1	ON
Aerial	Winter 98	12 Feb 98	16:14	29.737	87.441	*Tursiops truncatus*	8	ON
Aerial	Winter 98	12 Feb 98	16:18	29.710	87.437	*Tursiops truncatus*	4	ON
Aerial	Winter 98	12 Feb 98	16:38	29.684	87.571	*Tursiops truncatus*	3	ON
Aerial	Winter 98	12 Feb 98	16:46	29.878	87.570	*Tursiops truncatus*	2	ON
Aerial	Winter 98	13 Feb 98	12:31	30.113	87.008	*Tursiops truncatus*	8	ON
Aerial	Winter 98	13 Feb 98	12:44	30.206	86.869	*Tursiops truncatus*	2	ON
Aerial	Winter 98	13 Feb 98	12:56	30.151	86.721	*Tursiops truncatus*	3	ON
Aerial	Winter 98	13 Feb 98	13:43	28.921	87.129	*Physeter macrocephalus*	1	OFF
Aerial	Winter 98	13 Feb 98	13:59	28.599	87.235	*Grampus griseus*	11	ON
Aerial	Winter 98	13 Feb 98	14:28	28.358	87.193	*Ziphius cavirostris*	3	ON

Aerial	Winter 98	13 Feb 98	15:30	29.874	86.597	*Tursiops truncatus*	8	OFF
Aerial	Winter 98	19 Feb 98	11:05	30.064	86.308	*Tursiops truncatus*	5	ON
Aerial	Winter 98	19 Feb 98	11:24	30.057	86.175	*Tursiops truncatus*	3	ON
Aerial	Winter 98	19 Feb 98	11:45	29.714	86.182	*Tursiops truncatus*	4	ON
Aerial	Winter 98	19 Feb 98	11:46	29.670	86.179	*Tursiops truncatus*	2	ON
Aerial	Winter 98	24 Feb 98	12:40	30.000	86.436	*Stenella frontalis*	31	ON
Aerial	Winter 98	24 Feb 98	13:30	28.896	86.714	*Tursiops truncatus*	110	OFF
Aerial	Winter 98	24 Feb 98	13:45	28.585	86.893	*Stenella attenuata*	8	ON
Aerial	Winter 98	24 Feb 98	13:52	28.524	86.929	*Stenella attenuata*	27	ON
Aerial	Winter 98	24 Feb 98	14:02	28.464	86.959	*Stenella attenuata*	99	ON
Aerial	Winter 98	24 Feb 98	14:08	28.404	86.996	*Stenella attenuata*	73	ON
Aerial	Winter 98	24 Feb 98	14:18	28.242	86.954	*Stenella attenuata*	20	OFF
Aerial	Winter 98	24 Feb 98	14:23	28.298	86.913	*Physeter macrocephalus*	1	OFF
Aerial	Winter 98	24 Feb 98	14:32	28.438	86.840	*Stenella attenuata*	11	OFF
Aerial	Winter 98	24 Feb 98	14:39	28.550	86.752	*Stenella attenuata*	16	OFF
Aerial	Winter 98	24 Feb 98	14:54	28.584	86.749	*Feresa attenuata*	6	OFF
Aerial	Winter 98	24 Feb 98	15:19	29.160	86.408	*Tursiops truncatus*	1	ON
Aerial	Winter 98	24 Feb 98	15:43	29.364	86.100	*Tursiops truncatus*	3	OFF
Aerial	Winter 98	24 Feb 98	16:36	28.176	86.812	Unidentified dolphin	6	OFF
Aerial	Winter 98	24 Feb 98	16:36	28.176	86.812	*Ziphius cavirostris*	2	OFF
Aerial	Winter 98	24 Feb 98	16:58	28.514	86.498	*Stenella attenuata*	26	OFF
Aerial	Winter 98	24 Feb 98	17:02	28.556	86.458	*Stenella attenuata*	21	OFF
Aerial	Winter 98	25 Feb 98	08:17	29.221	85.837	*Tursiops truncatus*	4	ON
Aerial	Winter 98	25 Feb 98	08:36	28.825	86.111	*Tursiops truncatus*	18	ON
Aerial	Winter 98	25 Feb 98	09:37	28.344	86.261	*Feresa attenuata*	9	ON
Aerial	Winter 98	25 Feb 98	11:49	29.350	86.039	*Tursiops truncatus*	1	ON
Aerial	Winter 98	25 Feb 98	12:01	29.599	86.038	*Tursiops truncatus*	23	ON

Aerial	Winter 98	25 Feb 98	12:17	29.882	86.044	*Stenella frontalis*	18	ON
Aerial	Winter 98	25 Feb 98	12:25	29.988	86.042	*Tursiops truncatus/Stenella frontalis*	6	ON
Aerial	Winter 98	28 Feb 98	13:09	29.503	86.177	*Tursiops truncatus/Stenella frontalis*	2	OFF
Aerial	Winter 98	28 Feb 98	13:23	29.795	86.173	*Stenella frontalis*	30	OFF
Aerial	Winter 98	28 Feb 98	13:30	29.951	86.172	*Tursiops truncatus/Stenella frontalis*	1	OFF
Aerial	Winter 98	04 Mar 98	09:59	28.366	85.926	*Stenella attenuata*	75	ON
Aerial	Winter 98	04 Mar 98	11:38	28.376	85.592	*Tursiops truncatus*	1	OFF
Aerial	Winter 98	04 Mar 98	12:22	28.271	85.498	*Tursiops truncatus*	2	ON
Aerial	Winter 98	04 Mar 98	12:52	27.777	85.858	Unidentified odontocete	1	ON
Aerial	Winter 98	14 Mar 98	12:09	27.853	85.600	*Stenella longirostris*	100	ON
Aerial	Winter 98	14 Mar 98	13:55	27.578	85.377	*Grampus griseus*	6	ON
Aerial	Winter 98	14 Mar 98	14:10	27.729	85.109	*Tursiops truncatus*	11	OFF
Aerial	Winter 98	14 Mar 98	14:51	27.755	84.776	*Stenella frontalis*	60	OFF
Aerial	Winter 98	14 Mar 98	15:43	27.523	84.949	*Grampus griseus*	11	ON

IV. ACOUSTICS

Dolphin Acoustic Contacts during the late summer Gyre Cruise (Gyre 96G06).
Species codes: UD= unidentified dolphin; SA= *Stenella attenuata*, Pantropical spotted dolphin;
SF= *S. frontalis*, Atlantic spotted dolphin; SO= *S. coeruleoalba*, striped dolphin
SY= *S. clymene*, Clymene dolphin; TT= *Tursiops truncatus*, bottlenose dolphin;
SB= *Steno bredanensis*, Rough toothed dolphin; US= unidentified *Stenella*.

Date	Time	Species	Latitude	Longitude	Comments
10/11/96	21:45:48	UD	27.300	87.590	faint whistles. positions are same because duration<5 min
10/11/96	21:46:06	UD	27.300	87.590	echolocation
10/11/96	21:46:29	UD	27.300	87.590	faint echolocation
10/11/96	21:46:59	UD	27.300	87.590	echolocation
10/11/96	21:47:22	UD	27.300	87.590	echolocation
10/11/96	21:47:40	UD	27.300	87.590	echolocation
10/12/96	4:37:00	UD	26.941	87.480	echolocation
10/12/96	4:37:00	UD	26.941	87.480	burst pulse (bp)
10/12/96	5:39:00	UD	26.465	87.461	echolocation. dur<5min. therefore all same location
10/12/96	5:39:31	UD	26.465	87.461	echolocation
10/12/96	5:39:45	UD	26.465	87.461	whistles
10/12/96	5:40:08	UD	26.465	87.461	continued echolocation
10/12/96	5:41:50	UD	26.465	87.461	faint echolocation
10/12/96	6:28:00	SA	26.699	87.354	loud echolocation. estimated location
10/12/96	6:28:14	SA	26.699	87.354	bp and whistles
10/12/96	6:28:33	SA	26.699	87.354	continued echolocation
10/14/96	6:53:00	UD	27.973	84.830	echolocation
10/14/96	6:53:21	UD	27.973	84.830	low freq echolocation
10/14/96	12:56	SA	28.254	86.620	sa pulsing (animals seen)
10/14/96	23:30:46	UD	28.736	85.440	echolocation
10/14/96	23:33:10		28.739	85.446	more pulsing faint whistles and pulsing
10/15/96	3:04:00	UD	28.860	85.480	whistle
10/15/96	3:04:00	UD	28.860	85.480	echolocation

10/15/96	3:04:00	UD	28.860	85.480	echolocation
10/15/96	4:37:40	SF	28.754	85.69	burst pulsing and echolocation
10/15/96	4:38:03	SF	28.754	85.69	2 bp and 1 whistle
10/15/96	4:38:10	SF	28.754	85.69	
10/15/96	4:38:18	SF	28.754	85.69	
10/15/96	4:38:21	SF	28.754	85.69	
10/15/96	4:38:33	SF	28.753	85.69	2 bp and 1 whistle
10/15/96	4:38:44	SF	28.753	85.69	2 bp and 1 whistle
10/15/96	4:38:56	SF	28.753	85.69	
10/15/96	4:39:04	SF	28.753	85.69	2 bp and 1 whistle
10/15/96	4:39:35	SF	28.752	85.69	2 bp and 1 whistle
10/15/96	4:39:43	SF	28.752	85.69	
10/15/96	4:39:51	SF	28.752	85.69	
10/15/96	4:39:59	SF	28.751	85.69	2 bp and 1 whistle
10/15/96	4:40:11	SF	28.751	85.69	
10/15/96	4:40:23	SF	28.75	85.69	
10/15/96	4:40:27	SF	28.75	85.69	faint2 bp-1 whistle
10/15/96	4:40:35	SF	28.75	85.7	
10/15/96	4:42:02	SF	28.749	85.7	faint whistles
10/15/96	5:10:00	US	28.72	85.764	
10/15/96	5:10:13	US	28.72	85.764	
10/15/96	5:10:26	US	28.72	85.764	
10/15/96	5:10:33	US	28.718	85.768	
10/15/96	5:11:19	US	28.718	85.768	
10/15/96	5:14:01	US	28.716	85.772	
10/15/96	12:56:28	SA	28.257	86.624	sa pulsing (animals seen)
10/15/96	22:30:36	UD	29.004	86.679	faint whistle
10/15/96	22:31:19	UD	29.004	86.679	faint whistle
10/16/96	3:17:30	SF	29.352	86.705	faint pulsing and whistle. note: location for this contact is the same because contact<5min
10/16/96	3:17:42	SF	29.352	86.705	louder pulsing
10/16/96	3:18:00	SF	29.352	86.705	good echolocation
10/16/96	3:18:37	SF	29.352	86.705	good echolocation
10/16/96	3:19:00	SF	29.352	86.705	whistles and echolocation
10/16/96	3:19:09	SF	29.352	86.705	series of 3 or 4 good whistles

10/16/96	3:19:22	SF	29.352	86.705	3 burst pulses and 2 whistles
10/16/96	3:19:41	SF	29.352	86.705	series of 4 whistles
10/16/96	3:20:26	SF	29.352	86.705	echolocation
10/16/96	7:55:00	TT	29.932	86.758	echolocation. tt on bow at 7:52
10/16/96	18:29:00	UD	29.550	87.401	whistles.
10/16/96	18:30:21	UD	29.550	87.401	odd whistle
10/16/96	18:32:20	UD	29.550	87.401	whistle
10/16/96	18:32:39	UD	29.550	87.401	short pt whistles
10/16/96	18:38:33	UD	29.550	87.401	pt whistles
10/16/96	18:38:46	UD	29.550	87.401	faint echolocation and pt whistles
10/16/96	18:39:06	UD	29.540	87.401	echolocation
10/16/96	18:40:17	UD	29.540	87.401	better whistles
10/16/96	18:40:33	UD	29.540	87.401	multiple animal whistles
10/16/96	18:41:41	UD	29.530	87.401	whistles
10/16/96	18:43:51	UD	29.529	87.401	moe pt tones at 6500 hz like steno
10/16/96	18:44:04	UD	29.529	87.401	good pt whistle
10/16/96	18:45:20	UD	29.529	87.401	upswept whistle
10/16/96	18:47:05	UD	29.529	87.401	upswept whistles
10/18/96	10:05:00	UD	29.445	88.245	whistle
10/18/96	10:05:10	UD	29.445	88.245	faint whistle
10/18/96	10:05:41	UD	29.445	88.245	faint whistle
10/18/96	11:00:00	UD	29.580	88.301	2 whistles
10/18/96	11:00:31	UD	29.580	88.301	whistles
10/18/96	11:00:54	UD	29.580	88.301	whistles
10/18/96	11:03:25	UD	29.585	88.302	more whistles
10/18/96	11:05:54	UD	29.590	88.303	whistles
10/18/96	11:06:33	UD	29.593	88.304	whistles
10/21/96	16:24:00	SO	26.831	87.908	pulsing and whistles. contact <5min therefore all locations the same
10/21/96	16:24:25	SO	26.831	87.908	high whistles at 9 khz
10/21/96	16:24:37	SO	26.831	87.908	good whistles
10/21/96	16:24:54	SO	26.831	87.908	good whistles
10/21/96	16:25:04	SO	26.831	87.908	good whistles

10/21/96	16:25:18	SO	26.831	87.908	3 similar whistles
10/21/96	16:25:31	SO	26.831	87.908	multiple animals
10/21/96	16:25:48	SO	26.831	87.908	very good whistles
10/21/96	16:26:29	SO	26.831	87.908	faint whistles
10/21/96	16:26:39	SO	26.831	87.908	still whistling while boat turns
10/23/96	7:10:00	SA	26.153	88.081	sa all around after mocness
10/23/96	7:10:10	SA	26.153	88.081	good bp
10/23/96	7:10:40	SA	26.153	88.081	whistle
10/23/96	7:11:08	SA	26.153	88.081	echolocation
10/23/96	8:42:00	SA	26.332	88.175	echolocation
10/23/96	8:42:15	SA	26.332	88.175	much echolocation
10/23/96	8:42:28	SA	26.332	88.175	some whistling
10/23/96	8:42:58	SA	26.332	88.175	echolocation
10/23/96	22:35:00	UD	27.390	88.748	whistle
10/24/96	14:37:00	SO	27.832	89.257	whistles
10/24/96	14:40:00	SO			Off effort with much changing of course
10/24/96	15:16:00	SO	27.802	89.329	Continued good whistles
10/25/96	0:00:15	UD	27.065	89.061	lone faint whistle
10/26/96	7:05:00	SY	26.103	87.438	faint whistles
10/26/96	8:59:00	SA	26.366	87.546	faint whistles
10/26/96	8:59:00	SA	26.366	87.546	better stepped whistles
10/26/96	19:18:00	ud	27.366	87.911	echolocation
10/27/96	21:43:00	SB	28.189	88.893	whistles (is this a different contact from later in this tape?)
10/27/96	21:43:45	SB	28.189	88.893	whistles
10/27/96	21:44:07	SB	28.189	88.893	whistles
10/27/96	21:44:25	SB	28.189	88.893	whistles
10/27/96	21:44:42	SB	28.189	88.893	whistles
10/27/96	21:44:59	SB	28.130	88.954	good stepped whistles like steno
10/27/96	21:45:29	SB	28.130	88.954	faint whistles
10/29/96	8:01:00	TT	29.224	88.165	echolocation pulses

10/29/96	8:01:00	TT	29.224	88.165	good whistles amid loud banging from rig
10/29/96	10:35:03	TT	29.629	88.165	whistles
10/29/96	10:39:42	TT	29.643	88.167	whistles
10/29/96	10:44:15	TT	29.656	88.168	whistles
10/29/96	10:44:35	TT	29.656	88.168	whistles
10/29/96	10:44:55	TT	29.656	88.168	whistles
10/29/96	10:45:02	TT	29.656	88.168	whistles
10/29/96	10:45:10	TT	29.656	88.168	whistles
10/29/96	10:45:25	TT	29.656	88.168	whistles

All Sperm Whale Contacts during the late summer Gyre Cruise (Gyre 96G06)

Time and Date	Latitude	Longitude	Comments
10/15/96 10:48	28.352	-86.426	bot off effort with faint pm pulses and animals seen
10/15/96 10:48	28.355	-86.427	pm pulses faint
10/15/96 10:50	28.352	-86.425	faint pulsing multiple an.examining tape every 200 revs.
10/15/96 10:51	28.352	-86.425	faint pulsing multiple an.
10/15/96 10:53	28.348	-86.423	good but faint single an. pulsing
10/15/96 10:53	28.348	-86.423	faint pulsing
10/15/96 10:56	28.342	-86.419	mult. an. pulsing faint
10/15/96 10:59	28.339	-86.417	faint mult. an. pulsing
10/15/96 11:02	28.332	-86.413	pulsing fainter than later in recording
10/15/96 11:06	28.326	-86.409	good mult. an. pulsing
10/15/96 11:09	28.322	-86.407	2 or 3 an. with quite diff. pulse config
10/15/96 11:09	28.322	-86.407	2 or 3 an pulsing with adcp on
10/15/96 11:12	28.316	-86.402	good double pulsing
10/15/96 11:16	28.309	-86.399	2 or 3 an. pulsing
10/15/96 11:19	28.306	-86.396	mult. an.
10/15/96 11:20	28.302	-86.394	mult. an. including low freq. pm pulsing
10/15/96 11:22	28.299	-86.394	mult an. with adcp on
10/15/96 11:27	28.292	-86.398	2 an. with 1 at 2393 hz 2nd broader at 3564
10/15/96 11:29	28.29	-86.402	multiple animals pulsing in quiet conditions
10/15/96 11:29	28.285	-86.416	pm pulsing continues (still off effort)
10/15/96 11:32	28.285	-86.416	faint pm pulsing on effort
10/15/96 11:32	28.286	-86.412	faint pm and seismic
10/15/96 11:34	28.285	-86.416	pm pulsing and seismic
10/15/96 11:35	28.285	-86.416	pulsing a little louder than next entry
10/15/96 11:35	28.285	-86.416	faint pulsing
10/15/96 11:36	28.284	-86.421	faint pm pulses (just before tape gap)
10/15/96 11:37	28.284	-86.421	faint pm pulses
10/15/96 11:38	28.283	-86.426	faint pm pulses (?)
10/15/96 11:39	28.283	-86.426	lf pulse

10/15/96 11:39	28.283	-86.426	lf pulse
10/15/96 11:40	28.282	-86.431	lf pulse and tape gap
10/15/96 11:44	28.28	-86.441	long duration lf signal
10/15/96 11:45	28.28	-86.441	faint pulsing
10/15/96 11:46	28.279	-86.446	solitary pulse
10/15/96 12:01	28.272	-86.48	clicks generated by grnd test
10/15/96 12:08	28.268	-86.499	faint pm pulsing
10/15/96 12:08	28.268	-86.499	faint pm pulses
10/15/96 12:25	28.26	-86.539	faint pm pulsing (?)
10/15/96 12:45	28.249	-86.589	louder pulses than next notation
10/15/96 12:45	28.249	-86.589	pm pulsing 20 degrees port (beamforming)
10/15/96 12:46	28.248	-86.594	faint pm pulsing
10/15/96 12:48	28.247	-86.599	off effort to see sa
10/15/96 12:56	28.254	-86.618	good pm pulsing
10/15/96 12:59	28.256	-86.622	faint pm pulsing (every 200 revs)
10/15/96 13:01	28.258	-86.627	faint pm pulsing
10/15/96 13:15	28.256	-86.661	good pm pulse
10/15/96 13:16	28.254	-86.665	on effort
10/15/96 13:17	28.254	-86.665	lf pulse and cont. pm pulsing
10/15/96 13:17	28.254	-86.665	faint pm pulsing
10/15/96 13:18	28.253	-86.67	pm pulsing
10/15/96 13:19	28.253	-86.67	good pm pulsing
10/15/96 13:21	28.251	-86.675	pm pulses with variable frequency
10/15/96 13:21	28.251	-86.675	Lfow freq. pulse and continued pm pulsing
10/15/96 13:22	28.249	-86.68	good pm pulsing
10/15/96 13:22	28.249	-86.68	lf pulse and pm pulsing
10/15/96 13:23	28.249	-86.68	louder pulsing and lf pulse
10/15/96 13:23	28.249	-86.68	pm pulses aft of beam
10/15/96 13:23	28.249	-86.68	faint pm pulsing
10/15/96 13:24	28.247	-86.684	faint multiple animals pulsing
10/15/96 13:25	28.247	-86.684	faster pm pulsing
10/15/96 13:26	28.245	-86.689	pm pulsing
10/15/96 13:27	28.245	-86.689	faint pm pulsing
10/15/96 13:27	28.245	-86.689	faint pm pulsing
10/15/96 13:29	28.244	-86.694	faint pm pulsing end of contact
10/20/96 07:10	28.645	-88.991	faint pulsing -seismic activity
10/20/96 07:11	28.645	-88.991	pulsing more regular -still faint
10/20/96 07:12	28.645	-88.991	faint pulsing -seismic activity ending
10/20/96 07:12	28.645	-88.991	lot of sperm whales sighted

10/20/96 07:13	28.642	-88.991	pulsing
10/20/96 07:14	28.642	-88.991	pulsing
10/20/96 07:15	28.639	-88.991	multiple animals
10/20/96 07:17	28.636	-88.991	regular pulsing
10/20/96 07:17	28.636	-88.991	short periods of fast pulsing (sounds repetitive)
10/20/96 07:18	28.636	-88.991	very fast pulsing
10/20/96 07:21	28.629	-88.992	good signal
10/20/96 07:24	28.626	-88.992	multiple animals
10/20/96 07:25	28.623	-88.992	pulsing
10/20/96 07:25	28.623	-88.992	pulsing
10/20/96 07:28	28.619	-88.992	pulsing
10/20/96 07:29	28.616	-88.993	pulsing
10/20/96 07:31	28.613	-88.993	multiple animals
10/20/96 07:32	28.613	-88.993	good signal -multiple animals
10/20/96 07:32	28.613	-88.993	regular pulsing
10/20/96 07:34	28.61	-88.993	regular pulsing
10/20/96 07:35	28.606	-88.993	one animal clearer than others -still multiple animals
10/20/96 07:38	28.603	-88.994	" 8-9 animals sighted including mother and calf
10/20/96 07:39	28.6	-88.994	good signal
10/20/96 07:39	28.6	-88.994	multiple animals (and cavitation?)
10/20/96 07:41	28.597	-88.994	good signal
10/20/96 07:43	28.593	-88.995	still good signal -multiple animals
10/20/96 07:44	28.593	-88.995	multiple animals
10/20/96 07:44	28.593	-88.995	pulsing
10/20/96 07:48	28.586	-88.996	
10/20/96 07:48	28.586	-88.996	pulsing
10/20/96 07:49	28.583	-88.999	pulsing
10/20/96 07:51	28.585	-89.004	fast pulsing (animals or boat noise)
10/20/96 07:54	28.589	-89.006	pulsing
10/20/96 07:55	28.593	-89.006	seismic activity stopped
10/20/96 07:56	28.593	-89.006	multiple animals
10/20/96 07:57	28.597	-89.006	pulsing
10/20/96 07:57	28.597	-89.006	faint pulses
10/20/96 07:58	28.597	-89.006	good signal
10/20/96 07:58	28.597	-89.006	pulsing
10/20/96 08:00	28.6	-89.006	multiple animals (one pulsing fast for short durations

10/20/96 08:00	28.6	-89.006	pulsing
10/20/96 08:03	28.607	-89.006	regular pulsing
10/20/96 08:04	28.607	-89.006	regular pulsing
10/20/96 08:04	28.607	-89.006	whales are diving (from visual team)
10/20/96 08:05	28.61	-89.006	good signal -multiple animals
10/20/96 08:07	28.613	-89.006	regular pulsing
10/20/96 08:08	28.613	-89.006	good signal -multiple animals
10/22/96 00:31	26.02	-87.628	faint pulsing-pm or cavitation?
10/22/96 00:44	25.998	-87.608	"pulses very regular and rhythmic
10/22/96 00:49	25.985	-87.599	"pulse configuration variable unlike pm pulses
10/22/96 00:52	25.981	-87.596	signal getting louder
10/22/96 01:09	25.943	-87.581	continued loud pulsing-cavitation or pm
10/22/96 01:19	25.922	-87.579	pulsing
10/22/96 01:21	25.917	-87.579	pulsing loud but irregular
10/22/96 01:23	25.913	-87.578	faint pulsing-they gradually faded out
10/22/96 01:24	25.913	-87.578	irregular faint pulsing
10/22/96 01:27	25.905	-87.577	irregular faint pulsing
10/22/96 01:46	25.867	-87.572	louder cavitation at 2200 hz at 2.2/sec not pulsed
10/22/96 01:48	25.863	-87.571	as cavitation gets louder pulsing begins at 2nd harmonic
10/22/96 01:49	25.858	-87.57	pulsing with cavitation but pulse is not always in same part of cavitation i.e. may not be part of it
10/22/96 01:49	25.858	-87.57	3 loud pulses like pm pulses
10/22/96 01:50	25.858	-87.57	good pulse like pm-wee thinks its pm
10/22/96 01:50	25.858	-87.57	continued pulsing-ship 3nm strbd
10/22/96 01:56	25.845	-87.567	good pulse
10/22/96 02:02	25.833	-87.566	loud pulsing
10/22/96 02:07	25.821	-87.565	loud pulsing
10/22/96 02:09	25.816	-87.564	loud pulsing
10/22/96 02:11	25.812	-87.564	multiple pulsing-probably several animals if pm
10/22/96 02:15	25.804	-87.563	pulsing louder than at next entry (examining tape starting at end)
10/22/96 02:19	25.796	-87.562	continued pulsing with cavitation
10/22/96 02:35	25.762	-87.559	fainter pulses

10/22/96 02:29	25.775	-87.56	multiple pulsing with a few good pulses
10/22/96 02:31	25.771	-87.559	loud good pulse plus cavitation
10/22/96 02:39	25.753	-87.558	bot with much pulsing
10/22/96 02:39	25.753	-87.558	good loud pulsing from multiple animals
10/22/96 02:41	25.749	-87.557	good pulsing from multiple animals
10/22/96 02:44	25.745	-87.557	good loud pulsing like pm
10/22/96 02:47	25.736	-87.556	continued pulsing
10/22/96 02:50	25.732	-87.555	pulsing louder than later but still odd
10/22/96 02:53	25.723	-87.555	multiple animals
10/22/96 02:55	25.719	-87.554	continued pulsing (i'm sampling every 200 revs)
10/22/96 03:00	25.71	-87.553	continued pulsing plus adcp on
10/22/96 06:13	25.585	-87.451	pulsing 3 hrs after previous recording
10/22/96 06:15	25.582	-87.448	cavitation not as loud as later but still pm like pulses
10/22/96 06:16	25.582	-87.448	mixed cavitation and pm like pulses
10/22/96 06:17	25.578	-87.445	pm like pulse
10/22/96 06:18	25.578	-87.445	loud pulsing it's configuration unlike pm
10/22/96 06:20	25.575	-87.442	loud rapid cavitation
10/22/96 06:22	25.571	-87.44	more rapid pulsing like cavitation
10/22/96 06:23	25.567	-87.439	irregular pulsing array sensitivity returned to normal
10/22/96 06:25	25.563	-87.439	pm like pulses
10/22/96 06:26	25.563	-87.439	cavitation like pulses with some pm like pulses
10/22/96 06:29	25.555	-87.437	faint cavitation like pulsing
10/22/96 06:36	25.542	-87.435	faint pulsing like cavitation
10/23/96/ 14:05	26.968	-88.484	begin contact -adcp is on -faint seismic activity
10/23/96/ 14:09	26.975	-88.488	pulses start up again (still faint)
10/23/96/ 14:11	26.979	-88.491	more pulsing (faint and sporadic)
10/23/96/ 14:17	26.99	-88.496	pulsing becoming more regular
10/23/96/ 14:18	26.99	-88.496	second animal
10/23/96/ 14:23	27	-88.503	begin tape 135 -pulsing getting more clear

10/23/96/ 14:26	27.004	-88.505	visual contact
10/23/96/ 14:26	27.004	-88.505	multiple animals
10/23/96/ 14:28	27.007	-88.508	good signal
10/23/96/ 14:32	27.013	-88.512	double pulses
10/23/96/ 14:33	27.016	-88.514	multiple animals -faint
10/23/96/ 14:35	27.018	-88.517	good signal
10/23/96/ 14:36	27.018	-88.517	good signal
10/23/96/ 14:38	27.021	-88.519	pulses becoming faint
10/23/96/ 14:39	27.024	-88.521	good signal -multiple animals
10/23/96/ 14:40	27.024	-88.521	pulses growing faint -a lot of cavitation noise
10/23/96/ 14:44	27.03	-88.526	pulses scarce and faint
10/15/96 17:18	28.332	-86.765	faint pulsing
10/15/96 17:30	28.352	-86.749	end of tape
10/24/96 05:43	28.197	-89.336	pulsing very faint? -adcp on and seismic activity
10/24/96 05:49	28.205	-89.344	pulsing getting stronger
10/24/96 05:51	28.212	-89.351	pulsing becoming stronger
10/24/96 05:52	28.212	-89.351	signal again getting stronger
10/24/96 05:53	28.215	-89.355	multiple animals
10/24/96 06:10	28.246	-89.386	rapid 3-pulse groups
10/24/96 06:31	28.285	-89.42	regular pulsing -one animal
10/24/96 06:41	28.311	-89.437	pulses and seismic activity
10/24/96 06:42	28.305	-89.433	faint pulsing
10/24/96 06:47	28.313	-89.438	faint pulsing
10/24/96 06:55	28.33	-89.441	multiple animals
10/24/96 06:55	28.33	-89.441	pulsing
10/24/96 06:57	28.333	-89.44	pulsing
10/24/96 06:57	28.333	-89.44	faint pulsing
10/24/96 06:59	28.336	-89.438	good signal
10/24/96 06:59	28.336	-89.438	multiple animals
10/24/96 07:00	28.341	-89.44	good signal
10/24/96 07:01	28.345	-89.441	"regular pulsing by an animal then small overlap of regular pulsing by two animals, then second animal alone continues pulsing -this cycle continues a few times"
10/24/96 07:06	28.354	-89.445	"good regular pulsing
10/24/96 07:09	28.362	-89.448	regular pulsing
10/24/96 07:11	28.366	-89.45	faint pulsing
10/24/96 07:11	28.366	-89.45	regular pulsing
10/24/96 07:12	28.366	-89.45	faint pulsing
10/24/96 07:14	28.37	-89.451	faint pulsing

10/24/96 07:16	28.374	-89.453	faint pulsing
10/24/96 07:16	28.374	-89.453	very fast pulsing
10/24/96 07:16	28.374	-89.453	very fast pulsing -dolphin click train?
10/24/96 07:17	28.374	-89.453	pulsing getting louder and more regular
10/24/96 07:18	28.378	-89.455	regular pulsing
10/24/96 07:18	28.378	-89.455	multiple animals
10/24/96 07:19	28.382	-89.456	pulsing -good signal
10/24/96 07:19	28.382	-89.456	multiple animals
10/24/96 07:21	28.386	-89.458	good signal
10/24/96 07:22	28.386	-89.458	good signal
10/24/96 07:23	28.39	-89.46	multiple animals
10/24/96 07:24	28.39	-89.46	double pulses
10/24/96 07:24	28.39	-89.46	good signal
10/24/96 07:26	28.394	-89.461	pulsing getting fainter
10/24/96 07:26	28.394	-89.461	good signal
10/24/96 07:26	28.394	-89.461	good signal
10/24/96 07:28	28.398	-89.463	good signal
10/24/96 07:29	28.402	-89.464	pulsing getting fainter and less regular
10/24/96 07:31	28.406	-89.466	pulsing
10/24/96 07:32	28.406	-89.466	very faint pulsing
10/24/96 07:32	28.411	-89.468	faint pulsing
10/24/96 07:33	28.41	-89.468	faint pulsing
10/24/96 15:24	27.788	89.336	bot side b
10/24/96 16:35	27.645	89.275	bot
10/24/96 17:23	27.549	89.224	eot
10/24/96 19:06	27.342	-89.108	"faint pulsing -seismic activity -cavitation noise. These pulses are 14.88 nm after last pulsing infrequent pulses
10/24/96 19:14	27.325	-89.098	pulses getting louder and more frequent

Acoustic Contacts for All Species during the mid-summer Gyre Cruise (Gyre 97G08). Species codes: UD= unidentified dolphin; SA= *Stenella attenuata*, Pantropical spotted dolphin; SF= *S. frontalis*, Atlantic spotted dolphin; SO= *S. coeruleoalba*, Striped dolphin; SY= *S. clymene*, Clymene dolphin; SL= *S. longirostris*, Spinner dolphin; TT= *Tursiops truncatus*, Bottlenose dolphin;SB= *Steno bredanensis*, Rough toothed dolphin; US= unidentified *Stenella*; PM= *Physeter macrocephalus*, Sperm whale.

Date	Time	Species	Latitude	Longitude	Comments
8/6/97	9:31:00	US	28.032	-88.857	"odd upswept signals perhaps artifact"
8/6/97	9:31:14	US			"odd upswept signals perhaps artifact"
8/6/97	9:51:00	SL	28.163	-88.852	faint upsweep
8/6/97	9:51:33	SL			more whistles
8/6/97	9:51:51	SL			stept whiste
8/6/97	9:53:02	SL	28.161	-88.852	good down sweep
8/6/97	9:53:26	SL			"see tascam good whistles and pulses"
8/6/97	9:55:26	SL	28.157	-88.851	continued good whistles
8/6/97	9:55:31	SL			good cc whistle
8/6/97	9:57:05	SL	28.154	-88.850	whistles stop
8/6/97	9:59:25	SL	28.150	-88.850	good upsweeps
8/6/97	10:01:43	SL	28.147	-88.849	odd bird-like whistles
8/6/97	12:56:00	PM	27.798	-88.730	faint pm pulses
8/6/97	12:56:56	PM			off effort
8/6/97	13:07:33	PM			faint pm pulses
8/6/97	13:09:01	PM	27.790	-88.705	pm pulses with ratchet sounds
8/6/97	13:10:00	PM	27.787	-88.697	pm pulses getting louder
8/6/97	13:10:33	PM			louder ratchet
8/6/97	13:10:54	PM			louder pulses
8/6/97	13:11:50	PM			seems to be one animal
8/6/97	13:14:27	PM	27.785	-88.689	multiple animals
8/6/97	13:15:31	PM			5 pulse rapid coda?
8/6/97	13:17:11	PM			several diff. ratchet signals
8/6/97	13:19:17	PM	27.783	-88.681	multiple animals
8/6/97	13:20:16	PM	27.780	-88.677	on effort
8/6/97	13:21:19	PM	27.776	-88.675	normal and ratchet signals

8/6/97	13:21:19	PM	27.776	-88.675	normal and ratchet signals
8/6/97	13:24:00	PM	27.773	-88.673	many (>>5) pulse ratchet five times
8/6/97	13:25:43	PM	27.769	-88.671	ratchet sounds (ratchet sounds may be codas but they sound too fast)
8/6/97	13:31:00	PM	27.760	-88.666	"swept signal-sonar or ?? check low frequency not heard before"
8/6/97	13:32:00	PM	27.756	-88.653	more pm pulsing along with sonar like swept frequency
8/6/97	13:33:00	US	27.753	-88.663	"stenella sp. seen"whistles
8/6/97	13:33:13	US			more whistles
8/6/97	13:35:05	PM	27.749	-88.661	pm pulsing
8/6/97	13:35:10	US			good whistles
8/6/97	13:35:42	US	27.749	-88.661	good whistles
8/6/97	13:36:42	PM			pm pulsing
8/6/97	13:39:59	PM	27.741	-88.657	good solitary pulses
8/6/97	13:42:05	PM	27.737	-88.655	loud solitary pulses
8/6/97	13:44:50	PM	27.733	-88.653	pulses
8/6/97	13:50:16	PM	27.722	-88.648	faint pm pulsing
8/6/97	13:51:00	PM	27.716	-88.645	faint pm pulsing
8/6/97	14:02:00	PM	27.697	-88.635	pm pulsing
8/6/97	14:03:34	PM	27.694	-88.635	louder pulses
8/6/97	14:05:00	PM	27.690	-88.633	good recording
8/6/97	14:05:17	PM			"multiple animals ship cavitation pulsing will make it difficult to beamform this data"
8/6/97	14:08:21	PM	27.686	-88.631	good pulsing
8/6/97	14:09:24	PM	27.682	-88.629	pulsing not as loud
8/6/97	14:15:00		27.670	-88.623	off effort
8/6/97	14:18:16	PM	27.667	-88.622	pm pulses
8/6/97	14:19:40	PM	27.663	-88.619	louder pulses
8/6/97	14:21:36	PM	27.661	-88.614	multiple animals
8/6/97	14:27:00	PM	27.652	-88.598	good signals-2 animals?
8/6/97	14:27:14	SB	27.652	-88.598	whistle

8/6/97	14:27:35	SB	27.649	-88.569	both whistles and pm pulsing
8/6/97	14:29:00	SB	27.652	-89.473	good whistles
8/6/97	14:29:25	SB			multiple sb whistles and pm pulsing
8/6/97	14:29:54	SB	27.652	-88.593	good sb whistles
8/6/97	14:31:50	SB	27.651	-88.587	fair sb low freq. whistles
8/6/97	14:32:20	SB			sb pulsing
8/6/97	14:33:37	PM	27.651	-88.587	pm pulses
8/6/97	14:34:50	SB	27.651	-88.581	faint whistles
8/6/97		SB	27.648	-88.568	on effort
8/6/97	14:37:21	SB	27.649	-88.569	pulse assoc.with pdr
8/7/97	16:20:00	SA	26.893	-88.132	faint whistles
8/7/97	16:42:00	UD	26.938	-88.128	faint whistles amid much static
8/7/97	16:58:00	UD	26.977	-88.125	faint whistles-sb??
8/7/97	17:05:00	UD	26.990	-88.123	faint whistles
8/7/97	17:09:00	UD	26.996	-88.124	faint whistles like rev 479 and 571
8/7/97	17:09:39	UD			better whistles
8/7/97	17:10:53	UD	27.001	-88.123	faint whistles
8/7/97	17:12:03	UD	27.005	-88.122	faint whistles
8/8/97	13:00:00	SA	28.793	-88.019	faint whistle
8/8/97	13:00:19	SA	28.792	-88.021	faint whistle
8/8/97	13:00:56	SA			faint whistle
8/8/97	13:01:19	SA			faint whistle
8/8/97	13:01:42	SA	28.792	-88.021	little louder whistle
8/8/97	17:23:00	SA	29.065	-87.970	whistles amid static
8/8/97	17:25:09	SA	29.066	-87.969	faint whistles and pulses amid static
8/8/97	17:26:09	SA	29.070	-87.971	better whistles
8/8/97	18:07:00	SA	28.995	-87.938	pulses and whistles
8/8/97	18:08:06	SA	29.062	-87.968	echolocation
8/9/97	6:29:00	SA	28.273	-87.578	fair whistles
8/9/97	6:29:09	SA			stepped whistles
8/9/97	6:29:45	SA	28.994	-87.938	stepped whistles
8/9/97	6:29:54	PM	28.273	-87.575	pm pulses
8/9/97	6:30:07	PM	28.273	-87.575	off effort
8/9/97	6:30:25	PM			"boat slows and is quiet good pm pulses"
8/9/97	6:31:02	SA			whistles
8/9/97	6:31:20	PM			pm pulses

8/9/97	6:31:52	PM	28.270	-87.577	good pulses
8/9/97	6:33:29	PM	28.272	-87.576	good pulses single animal
8/9/97	6:33:00	SA	28.273	-87.575	whistle
8/9/97	6:34:06	PM	28.267	-87.577	good pulses
8/9/97	6:38:09	PM	28.261	-87.577	faint pulses
8/9/97	6:41:36	PM	28.258	-87.576	"faint pulses ship slowed"
8/9/97	6:44:00	PM	28.253	-87.575	"on effort ship speeds up"
8/9/97	6:47:47	PM	28.250	-87.574	pm pulsing
8/9/97	6:50:32	PM	28.242	-87.571	faint pulses
8/9/97	6:51:00	PM	28.267	-87.577	louder pulses
8/9/97	6:51:31	PM	28.237	-87.568	louder pulses
8/9/97	6:54:02	PM	28.233	-87.567	solitary pulses
8/9/97	6:55:10	PM	28.229	-87.564	faint pulses
8/9/97	6:57:09	PM	28.225	-87.562	faint pulses
8/9/97	7:01:23	PM	28.217	-87.557	faint pulsing
8/9/97	8:06:31	SA	28.078	-87.492	faint echolocation
8/9/97	8:06:40	SA			faint whistle
8/9/97	8:07:00	SA	28.078	-87.490	faint echolocation
8/9/97	8:07:38	SA	28.074	-87.489	faint whistles
8/10/97	1:53:00	UD	27.021	-86.784	whistles
8/10/97	1:53:19	UD			whistles
8/10/97	3:43:16	UD	27.218	-86.800	echolocation
8/10/97	3:43:28	UD			echolocation
8/10/97	3:44:09	UD	28.074	-87.489	burst pulses-sounds like sa
8/10/97	3:44:46	UD			echolocation
8/10/97	3:45:41	UD	27.221	-86.800	more faint echolocation
8/10/97	3:45:49	UD	28.009	-87.470	louder echolocation
8/10/97	3:46:10	UD	28.005	-87.468	good echolocation
8/10/97	3:46:36	UD	27.225	-86.800	echolocation and faint burst pulse
8/10/97	8:15:49	PM	27.697	-86.865	very faint pm pulses
8/10/97	10:20:31	SA	27.949	-86.883	whistles
8/10/97	10:21:40	SA	27.953	-86.882	pulsing
8/10/97	10:22:15	SA	27.958	-86.880	loud pulsing and whistles
8/10/97	10:33:00	PM	27.977	-86.880	faint pm pulsing

8/10/97	10:34:28	PM	27.980	-86.868	faint pulsing
8/10/97	10:37:00	PM	27.985	-86.857	louder pulsing
8/10/97		G2C4038C-B			on effort
8/10/97	10:43:04	PM	27.992	-86.855	louder pulsing
8/10/97	14:29:00	SA	28.343	-86.875	very faint whistles
8/10/97	14:29:25	SA			"stronger more frequent whistles"
8/10/97	14:30:05	SA	28.351	-86.876	very good whistles and clicks
8/10/97	14:33:00	SA	28.355	-86.876	faint whistles
8/10/97	15:00:00	SA	28.405	-86.852	pulses and whistles
8/10/97	15:00:41	SA			good whistles and pulses
8/10/97	15:01:12	SA			good whistles and pulses
8/10/97	15:04:00	SA			whistles
8/10/97	15:04:00	SA	28.412	-86.845	many animals whistling and pulsing
8/10/97	15:04:57	SA	28.412	-86.845	good stereo signals
8/10/97	15:09:00	PM	28.422	-86.842	faint pm pulsing
8/10/97	15:09:35	PM			faint pulsing-3 animals seen
8/10/97	15:10:19	PM			pm pulsing
8/10/97	15:11:26	PM	28.426	-86.842	multiple an. pulsing
8/10/97	15:12:38	PM			pm pulsing
8/10/97	15:13:47	PM	28.430	-86.842	good pulsing
8/10/97	15:15:53	PM	28.435	-86.842	faint pulsing
8/10/97	15:16:21	PM	28.439	-86.842	multiple animals
8/10/97	15:20:09	PM	28.443	-86.848	faint pulsing
8/10/97	15:20:53	PM			pulsing
8/10/97	15:26:00	PM	28.433	-86.850	better pulsing
8/10/97	15:27:37	PM			multiple animals pulsing
8/10/97	15:29:09	PM	28.433	-86.849	good pulsing
8/10/97	15:30:17	PM	28.429	-86.847	fainter pulsing
8/10/97	15:31:31	PM			better pulsing
8/10/97	15:31:53	PM	28.421	-86.842	pulsing including lower freq. pulsing
8/10/97	17:35:00	SA	28.508	-86.852	faint whistles

8/10/97	17:35:30	SA			whistles get louder and more frequent
8/10/97	17:39:00	SA	28.500	-86.850	whistling becomes frequent again
8/11/97	10:41:00	PM	28.128	-87.183	very faint pm pulsing
8/11/97	11:01:00	PM	28.082	-87.190	very faint pulsing
8/11/97	11:09:00	PM	28.063	-87.193	better pulses but may be pdr echo
8/11/97	11:41:00	PM	27.987	-87.208	very faint pulses but again may be pdr echoes tho we're in deep water
8/11/97	12:27:00	UD	27.873	-87.223	dolphin whistles among artifact whistles
8/11/97	22:48:00	UD	27.028	-87.365	pulse train
8/11/97	22:48:50	UD	27.028	-87.365	faint whistles
8/12/97	6:57:00	G2C40 53C-A	27.060	-87.530	bot
8/12/97	7:25:00	SA	27.100	-87.553	clicks and whistles begin
8/12/97	21:24:00	PC	28.443	-88.343	faint whistles along with hammering from oil rig
8/12/97	21:24:15	PC			better whistle
8/12/97	21:28:16	PC	28.451	-88.349	faint whistles
8/12/97	21:29:35	PC			faint whistles
8/12/97	21:30:00	PC	28.433	-88.333	better whistles
8/12/97	21:31:05	PC			better whistles
8/12/97	21:31:50	PC			good whistles
8/12/97	21:32:27	PC	28.458	-88.355	good whistles with multiple an. vocalizing
8/12/97	21:33:21	PC			good whistles
8/12/97	21:34:25	PC	28.462	-88.358	faint whistles
8/12/97	21:34:55	PC			good whistles
8/12/97	21:35:56	PC	28.466	-88.361	whistles from at least 2 an.
8/12/97	21:38:13	PC	28.470	-88.364	faint whistles
8/12/97	21:39:44	PC			cont. faint whistles tho rarely many animals

8/12/97	21:40:34	PC	28.474	-88.367	good whislte
8/12/97	21:42:17	PC	28.478	-88.369	2 good whistles
8/12/97	21:46:52	PC	28.482	-88.372	faint whistle
8/12/97	22:03:00	PC	28.513	-88.407	good whistle
8/12/97	22:04:22	PC	28.526	-88.404	faint whistle
8/12/97	22:08:00	PC	28.528	-88.407	echolocation pulses
8/12/97	22:09:23	PC	28.534	-88.410	echolocation pulses
8/13/97	2:38:00	UD	28.947	-88.480	echolocation pulses
8/13/97	2:39:46	UD	28.950	-88.480	echolocation pulse trains
8/14/97	10:44:00	TT	29.498	-87.815	faint whistle
8/14/97	10:44:10	TT			faint whistles
8/14/97	10:44:20	TT			faint whistles
8/14/97	10:44:25	TT			better whistles
8/14/97	10:44:30	TT			faint whistles
8/14/97	10:44:35	TT			faint whistles
8/14/97	10:45:06	TT	29.496	-87.817	faint whistles
8/14/97	10:50:18	TT	29.487	-87.818	faint whistles
8/14/97	10:51:00	TT	29.483	-87.818	faint whistles
8/14/97	11:28:00	TT	29.402	-87.821	very faint whistle
8/14/97	15:05:33	SA	28.964	-87.883	faint whistles
8/14/97	15:06:02	SA			faint whistles
8/14/97	15:06:13	SA			faint whistles
8/14/97	15:06:23	SA			faint whistles
8/14/97	15:06:29	SA	28.968	-87.886	better whistles
8/14/97	15:06:34	SA			faint whistles
8/14/97	15:06:42	SA			better whistles
8/14/97	15:06:45	SA			better whistles
8/14/97	15:06:56	SA			faint whistles with echolocation thru 99
8/14/97	15:07:18	SA			good whistles with echolocation thru 125
8/14/97	15:07:27	SA			good whistles
8/14/97	15:07:46	SA			good whistles
8/14/97	15:08:06	SA			very good whistles
8/14/97	15:08:12	SA			very good whistles
8/14/97	15:08:29	SA	28.972	-87.889	very good whistles
8/14/97	15:08:32	SA			whistles thru 155
8/14/97	15:08:55	SA			burst pulses
8/14/97	15:09:27	SA			whistles & continuous echol.

8/14/97	15:10:12	SA			good echol.
8/14/97	15:10:34	SA	28.975	-87.892	upsweeps
8/14/97	15:10:46	SA			downsweeps
8/14/97	15:11:14	SA	28.975	-87.896	"ship turning few signals"
8/14/97	15:15:49	SA			faint whistle
8/14/97	15:16:34	SA	28.967	-87.896	whistles
8/14/97	15:16:59	SA			whistles and no echol
8/14/97	15:17:59	SA			good whistles
8/14/97	15:18:35	SA	28.963	-87.893	multiple upsweeps
8/14/97	15:20:45	SA	28.960	-87.891	echol. and whistles
8/14/97	15:21:00	SA	28.956	-87.889	whistles
8/15/97	4:50:00	UD	29.226	-87.424	echolocation trains
8/15/97	4:54:00	UD	29.235	-87.418	loud echolocation
8/15/97	7:57:03	SL	29.573	-87.180	faint whistes
8/15/97	7:58:00	SL	29.573	-87.180	alot of whistes
8/15/97	7:58:29	SL			strong loud whistes
8/15/97	7:58:48	SL			strong loud whistles cont.
8/15/97	7:59:42	SL			whistles
8/15/97	8:05:13	SL	29.568	-87.174	faint whistles
8/15/97	8:15:00	SL	29.582	-87.181	faint whistles
8/15/97	8:18:02	SL	29.586	-87.179	whistle
8/15/97	8:19:28	SL	29.590	-87.177	whistles
8/15/97	8:21:00	SL	29.594	-87.175	faint whistles
8/15/97	11:20:00	SF	29.957	-87.052	good whistle with animals on the bow
8/15/97	11:20:13	SF			good whistles
8/15/97	11:20:29	SF			good whistles
8/17/97	6:49:00	SA	28.490	-86.670	faint whistle
8/17/97	6:49:09	SA			echol and whistles
8/17/97	6:49:24	SA			whistles
8/17/97	7:43:00	UD	28.400	-86.663	whistles
8/17/97	7:43:30	UD			upsweep whistles
8/17/97	7:44:21	UD			whistles
8/17/97	9:54:00	SO	28.190	-86.662	good whistles
8/17/97	9:54:10	SO			good whistles
8/17/97	9:54:18	SO			good whistles
8/17/97	9:54:23	SO			whistle

8/17/97	11:51:00	PM	28.136	-86.599	"pm pulses-*note off effort because between legs started leg at rev 688"
8/17/97	11:51:35	PM			louder pulses
8/17/97	12:03:00	PM	28.116	-86.578	very faint pulses
8/17/97	12:25:00	PM	28.076	-86.544	louder pm pulsing
8/17/97	12:29:20	PM	28.081	-86.538	rapid pulsing
8/17/97	12:30:00	PM	28.082	-86.537	good long duration rapid pulsing
8/17/97	12:30:53	PM			good long duraiton pulsing
8/17/97	12:31:25	PM	28.085	-86.535	more long dur. fast pulsing (fp)
8/17/97	12:31:40	PM			still more fp
8/17/97	12:33:00	PM			good long fp-22 pulses
8/17/97	12:33:05	PM	28.088	-86.533	6 pulse coda-5 animals sighted in 3 sightings
8/17/97	12:33:07	PM			22? pulse fp
8/17/97	12:33:12	PM			"6 pulse coda overlaid on fp i.e. multiple animals"
8/17/97	12:34:00	PM			perhaps low freq
8/17/97	12:35:45	PM	28.092	-86.530	possible pulses
8/17/97	12:56:00	PM	28.122	-86.508	long rapid pulse
8/18/97	17:25:00	SA	27.693	-85.635	good whistle
8/18/97	17:25:15	SA	27.693	-85.635	faint whistles
8/18/97	17:25:20	SA	27.693	-85.635	very faint whistle
8/18/97	19:10:00	SA	27.737	-85.445	faint whistles
8/18/97	19:10:12	SA	27.737	-85.445	faint whistles
8/18/97	19:28:00	SA	27.735	-85.400	faint whistle
8/18/97	19:28:30	SA	27.735	-85.400	very faint whistle
8/18/97	19:29:27	SA			very faint whistle
8/18/97	19:30:00	SA			very faint whistle
8/18/97	19:30:27	SA	27.734	-85.396	very faint whistle
8/18/97	23:29:00	UD	28.085	-84.959	"faint whistle-seen at bow & described as ""big guys"". Sound like pc to me"
8/19/97	5:34:00	UD	27.823	-84.855	faint cc whistle
8/19/97	9:30:00	SA	27.517	-85.220	faint whistle
8/19/97	9:30:13	SA			faint whistle
8/19/97	10:17:00	SA	27.432	-85.259	good whistles

8/19/97	10:18:00	SA			faint whistle
8/19/97	10:32:00	SA	27.434	-85.299	faint whistle
8/19/97	17:57:00	SA	27.432	-86.180	good whistles
8/19/97	17:58:15	SA			good whistles
8/19/97	18:08:00	SA	27.447	-86.222	faint whistle
8/19/97	18:38:21	SA	27.479	-86.234	faint whistle
8/20/97	3:17:00	PC	27.448	-87.018	faint whistles
8/20/97	3:17:36	PC			
8/20/97	3:17:54	PC			
8/20/97	3:18:16	PC	27.445	-87.015	cf whistle
8/20/97	3:18:27	PC			ld whistle
8/20/97	3:18:34	PC			four whistles
8/20/97	3:19:08	PC			two whistles then series of 3 chirps
8/20/97	3:19:19	PC			two series of 4 then 3 chirps
8/20/97	3:19:56	PC			3 ld whistles
8/20/97	3:20:04	PC	27.446	-87.015	"1 cf whistle similar to beginning whiste at 317"
8/20/97	9:46:00	UD	27.482	-87.185	faint whistle
8/20/97	21:16:00	PM	28.285	-88.120	faint pm pulsing-boat slowed to 3 knots to better hear animals (off effort)
8/20/97	21:16:00	PM			faint pm pulsing
8/20/97	21:16:44	PM			"louder pm pulsing animals in front of ship"
8/20/97	21:19:23	PM			continued faint pulsing
8/20/97	21:42:00	UD	28.325	-88.167	brief faint whistle
8/21/97	11:54:00	PM	28.283	-88.918	faint pm pulsing
8/21/97	11:55:07	PM			faint pulsing even tho vessel is coasting
8/21/97	11:59:47	PM			faint pulsing even tho animals <.5 miles away
8/21/97	12:01:10	PM			very faint
8/21/97	12:04:25	PM			faint pulses

V. CETACEAN HABITAT

Cetacean sightings, with time and position, matched with the environmental and oceanographic variables used to analyze habitat associations for the GulfCet II *Gyre* cruises (see Chapter 6, Sections 6.2.5.2, 6.3.3, 6.2.5.3). The variables given in the columns of the table are briefly described below, and references are given to the section of the report that explains them in more detail.

Survey: Indicates the GulfCet II cruise, late summer Gyre 96G06 (October 1996) or mid-summer Gyre 97G08 (August 1997)

Julian Day, Latitude, Longitude: date/time and position information for each sighting

Depth: water depth, m

Depth Gradient: rate of change of water depth, m km^{-1}

Mixed layer depth: depth of mixed layer, m (see Chapter 2, Section 2.2.1)

Depth 19 C: depth of 19°C isotherm, m (see Chapter 2, Section 2.2.1)

Depth 15 C: depth of 15°C isotherm, m (see Chapter 2, Section 2.2.1)

Dynamic Height: dynamic sea surface topography determined from hydrographic data, dynamic cm (see Chapter 2, Section 2.2.1)

Dynamic Height Anomaly: dynamic sea surface topography anomaly determined from hydrographic data, dynamic cm (see Chapter 2, Section 2.2.1)

PMB50: acoustically predicted mean zooplankton and micronekton biomass in the depth interval 10 – 50 m, cc m^{-2} (see Chapter 3, Section 3.2.5)

SST: sea surface temperature, °C (see Chapter 2, Section 2.2.3)

SSS: sea surface salinity, PSU (see Chapter 2, Section 2.2.3)

CHL: sea surface chlorophyll, $\mu g\ l^{-1}$ (see Chapter 2, Section 2.2.3)

Species: cetacean species sighted (see Chapter 4, Section 4.3)

Survey	Julian Day	Latitude	Longitude	Depth	Depth Gradient	Mixed layer depth	Depth 19 C	Depth 15 C	Dynamic Height	Dynamic Height Anomaly	PMB50	SST	SSS	CHL	Species
Gyre 96G06	285.89	28.035	-87.833	2596	8.30	25	68	147	91.2	-8.8	0.53	26.31	35.38	0.20	Unidentified dolphin
Gyre 96G06	288.51	27.964	-84.920	228	3.69	52	106	172	0.0	0.0	1.17	26.45	36.12	0.20	Tursiops truncatus
Gyre 96G06	289.65	28.367	-86.433	641	13.71	52	90	174	0.0	0.0	0.52	26.15	36.01	0.22	Physeter macrocephalus
Gyre 96G06	289.72	28.262	-86.527	851	21.98	43	94	167	100.8	0.8	0.69	26.06	35.70	0.23	Unidentified odontocete
Gyre 96G06	289.74	28.249	-86.589	853	53.13	43	94	167	100.8	0.8	0.72	26.03	35.52	0.23	Stenella attenuata
Gyre 96G06	291.59	28.564	-87.359	1262	29.78	40	80	146	98.7	-1.3	0.63	26.12	NA	0.17	Ziphiidae fm.
Gyre 96G06	291.61	28.606	-87.364	1262	26.77	46	86	152	100.8	0.8	0.69	26.29	36.00	0.18	Unidentified cetacean
Gyre 96G06	291.84	27.867	-87.404	2961	4.65	39	82	149	91.8	-8.2	1.04	26.52	35.76	0.21	Kogia sp.
Gyre 96G06	292.56	29.201	-88.180	412	32.59	61	105	227	NA	NA	0.89	25.89	35.77	0.17	Tursiops truncatus
Gyre 96G06	294.50	28.664	-88.990	2153	29.31	50	97	184	NA	NA	0.87	25.62	35.90	0.11	Physeter macrocephalus
Gyre 96G06	294.91	28.676	-88.723	1181	22.69	50	103	181	104.4	4.4	0.69	25.60	35.83	0.12	Stenella longirostris
Gyre 96G06	295.51	27.717	-88.418	2391	14.87	35	80	136	91.1	-8.9	0.69	25.87	35.94	0.14	Physeter macrocephalus
Gyre 96G06	295.52	27.703	-88.410	2391	11.82	35	80	136	91.1	-8.9	0.67	25.82	35.90	0.14	Physeter macrocephalus
Gyre 96G06	295.52	27.689	-88.402	2391	11.82	35	80	136	91.1	-8.9	0.66	25.82	35.88	0.14	Physeter macrocephalus
Gyre 96G06	295.53	27.665	-88.390	2391	15.15	35	80	136	91.1	-8.9	0.71	25.82	35.86	0.14	Physeter macrocephalus
Gyre 96G06	295.88	26.862	-87.925	2799	2.24	42	93	175	98.7	-1.3	0.82	25.68	35.79	0.16	Stenella coeruleoalba
Gyre 96G06	296.57	25.254	-87.398	3330	6.16	54	252	395	146.1	46.1	0.28	27.56	36.33	0.09	Stenella attenuata
Gyre 96G06	298.51	28.367	-88.450	1767	13.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	Physeter macrocephalus
Gyre 96G06	298.80	27.878	-89.282	1394	5.85	46	72	176	99.5	-0.5	0.91	25.53	35.89	0.11	Stenella coeruleoalba
Gyre 96G06	300.50	26.102	-87.438	3095	3.67	64	140	208	113.6	13.6	0.78	27.51	36.20	0.10	Stenella clymene
Gyre 96G06	300.58	26.358	-87.543	2995	4.81	57	124	195	104.5	4.5	0.63	27.08	36.24	0.10	Stenella attenuata
Gyre 96G06	302.58	28.070	-89.127	1207	11.84	41	82	172	97.2	-2.8	1.23	25.88	35.79	0.10	Physeter macrocephalus
Gyre 96G06	302.82	28.027	-89.207	1205	13.93	45	96	168	100.3	0.3	1.17	26.22	35.76	0.10	Physeter macrocephalus
Gyre 96G06	302.82	28.027	-89.207	1205	13.93	45	96	168	100.3	0.3	1.17	26.22	35.76	0.10	Physeter macrocephalus
Gyre 96G06	302.88	28.173	-89.259	1000	10.15	42	99	181	103.5	3.5	0.95	26.25	35.78	0.10	Physeter macrocephalus
Gyre 96G06	302.95	28.274	-89.330	985	10.96	50	106	176	105.7	5.7	0.83	26.19	35.77	0.10	Physeter macrocephalus
Gyre 96G06	302.95	28.282	-89.332	985	10.96	50	106	176	105.7	5.7	0.83	26.08	35.76	0.10	Unidentified dolphin
Gyre 96G06	303.51	29.132	-88.169	707	36.83	54	130	252	NA	NA	0.96	25.55	35.90	0.10	Ziphiidae fm.
Gyre 96G06	303.53	29.197	-88.167	412	32.59	54	130	252	NA	NA	0.87	25.55	35.95	0.10	Ziphiidae fm.
Gyre 97G08	218.49	28.534	-88.961	1005	25.45	19	101	181	108.7	3.7	NA	29.38	28.86	0.19	Unidentified dolphin
Gyre 97G08	218.62	28.171	-88.854	1594	22.85	18	88	157	106.4	1.4	1.59	29.77	29.08	0.12	Stenella longirostris
Gyre 97G08	218.66	28.070	-88.828	1638	16.75	22	95	175	111.2	6.2	1.59	29.87	26.51	0.15	Unidentified small dolphin
Gyre 97G08	218.70	27.967	-88.788	1804	22.91	22	95	175	111.2	6.2	1.50	30.02	26.15	0.18	Unidentified Stenella
Gyre 97G08	218.75	27.809	-88.735	1806	13.47	28	125	198	125.7	20.7	1.28	29.99	27.87	0.14	Physeter macrocephalus
Gyre 97G08	218.79	27.711	-88.643	1819	22.85	30	144	212	129.1	24.1	1.16	29.87	34.86	0.03	Physeter macrocephalus
Gyre 97G08	218.80	27.676	-88.627	2010	22.85	50	157	229	125.8	20.8	1.35	29.77	36.05	0.02	Steno bredanensis
Gyre 97G08	219.50	26.119	-88.231	2942	5.72	44	301	453	175.9	70.9	0.70	30.32	36.09	0.02	Physeter macrocephalus
Gyre 97G08	219.67	26.257	-88.201	2848	5.40	37	303	457	175.6	70.6	0.78	30.43	36.12	0.02	Pseudorca crassidens
Gyre 97G08	219.73	26.388	-88.199	2721	6.86	37	303	457	175.6	70.6	0.91	30.47	36.12	0.02	Unidentified cetacean
Gyre 97G08	219.76	26.466	-88.170	2648	7.88	39	295	445	174.3	69.3	0.86	30.47	36.12	0.02	Unidentified large dolphin or small whale
Gyre 97G08	219.81	26.634	-88.157	2606	8.43	41	295	437	173.8	68.8	1.02	30.55	36.12	0.02	Unidentified small dolphin
Gyre 97G08	219.81	26.643	-88.156	2614	8.43	41	295	437	173.8	68.8	0.98	30.53	36.12	0.02	Unidentified odontocete
Gyre 97G08	219.88	26.852	-88.139	2687	6.52	37	296	419	170.6	65.6	1.25	30.55	35.99	0.02	Unidentified small dolphin
Gyre 97G08	220.60	28.360	-87.973	2401	5.20	22	105	159	104.2	-0.8	1.46	29.91	33.52	0.04	Stenella coeruleoalba
Gyre 97G08	220.74	28.785	-87.996	1954	25.97	17	119	190	107.7	2.7	1.63	29.97	34.00	0.03	Stenella attenuata
Gyre 97G08	220.77	28.834	-88.024	1662	24.77	17	119	190	107.7	2.7	1.34	29.89	32.50	0.04	Unidentified small dolphin
Gyre 97G08	220.95	29.027	-87.943	1392	26.53	15	120	197	109.9	4.9	1.25	30.27	32.74	0.04	Stenella attenuata
Gyre 97G08	221.49	28.242	-87.571	2595	8.02	20	91	150	98.7	-6.3	1.52	29.57	33.80	0.03	Unidentified Stenella
Gyre 97G08	221.51	28.205	-87.551	2605	8.02	24	85	141	98.4	-6.6	1.52	29.65	34.37	0.03	Physeter macrocephalus
Gyre 97G08	221.54	28.104	-87.506	2715	10.48	24	85	141	98.4	-6.6	1.50	29.56	33.89	0.03	Unidentified small dolphin
Gyre 97G08	221.55	28.080	-87.493	2715	10.69	27	91	141	97.5	-7.5	1.47	29.64	33.93	0.03	Stenella attenuata
Gyre 97G08	221.68	27.662	-87.281	3004	1.68	23	113	168	110.9	5.9	1.45	30.48	32.08	0.04	Unidentified large whale
Gyre 97G08	222.51	27.640	-86.826	3098	4.45	18	95	140	97.8	-7.2	1.42	29.91	32.78	0.03	Physeter macrocephalus
Gyre 97G08	222.59	27.823	-86.864	2889	11.29	19	89	130	92.1	-12.9	1.27	29.68	33.77	0.03	Stenella attenuata
Gyre 97G08	222.61	27.870	-86.869	2889	16.74	19	89	130	92.1	-12.9	1.25	29.97	34.09	0.03	Unidentified large whale
Gyre 97G08	222.63	27.923	-86.890	2727	25.22	23	89	126	91.7	-13.3	1.31	29.79	33.89	0.03	Stenella attenuata
Gyre 97G08	222.64	27.966	-86.881	2710	25.22	23	89	126	91.7	-13.3	1.33	29.78	33.99	0.03	Physeter macrocephalus

Gyre 97G08	222.81	28.339	-86.876	1002	45.81	21	85	134	98.3	-6.7	1.25	30.23	34.35	0.03	Stenella attenuata
Gyre 97G08	222.92	28.441	-86.857	804	14.42	19	88	155	NA	NA	1.20	30.26	34.66	0.04	Stenella attenuata
Gyre 97G08	222.97	28.590	-86.861	671	8.82	21	95	156	NA	NA	1.11	30.10	34.79	0.04	Unidentified large whale
Gyre 97G08	223.77	27.745	-87.243	3013	0.96	9	122	165	109.9	4.9	1.27	30.03	34.05	0.03	Physeter macrocephalus
Gyre 97G08	224.52	27.098	-87.552	2853	2.40	40	253	343	155.9	50.9	0.85	30.36	36.09	0.02	Stenella attenuata
Gyre 97G08	224.95	28.158	-88.193	2200	10.59	19	99	170	104.8	-0.2	1.76	30.61	35.80	0.02	Stenella coeruleoalba
Gyre 97G08	226.79	29.075	-87.830	1211	26.97	15	116	182	108.1	3.1	0.98	30.38	33.08	0.02	Tursiops truncatus
Gyre 97G08	226.81	29.022	-87.832	1424	26.97	15	116	182	108.1	3.1	1.06	30.57	33.28	0.02	Stenella attenuata
Gyre 97G08	226.86	28.932	-87.876	1667	27.54	15	120	178	109.2	4.2	0.99	30.59	33.47	0.03	Ziphiidae fm.
Gyre 97G08	226.92	28.847	-87.770	1995	21.27	12	120	174	107.5	2.5	0.98	30.56	33.70	0.03	Stenella attenuata
Gyre 97G08	227.50	29.515	-87.296	197	10.80	7	78	180	NA	NA	1.88	30.41	29.11	0.04	Stenella longirostris
Gyre 97G08	229.00	29.430	-86.693	322	8.98	5	103	192	NA	NA	1.47	30.48	29.72	0.05	Stenella longirostris
Gyre 97G08	229.48	28.516	-86.662	629	8.78	20	96	163	NA	NA	1.31	30.51	32.66	0.02	Stenella attenuata
Gyre 97G08	229.50	28.485	-86.664	629	10.80	20	96	163	NA	NA	1.31	30.65	32.84	0.02	Stenella attenuata
Gyre 97G08	229.54	28.381	-86.664	829	15.75	16	100	157	NA	NA	1.18	30.51	32.55	0.03	Unidentified dolphin
Gyre 97G08	229.56	28.314	-86.666	829	21.96	16	99	158	101.6	-3.4	1.13	30.70	32.22	0.03	Stenella attenuata
Gyre 97G08	229.58	28.270	-86.692	1029	45.37	16	99	158	101.6	-3.4	1.13	30.72	32.53	0.03	Stenella coeruleoalba
Gyre 97G08	229.69	28.160	-86.637	1250	101.62	13	96	147	100.5	-4.5	0.98	30.66	32.47	0.03	Physeter macrocephalus
Gyre 97G08	229.70	28.139	-86.602	1072	101.62	13	96	147	100.5	-4.5	0.94	30.66	31.63	0.03	Physeter macrocephalus
Gyre 97G08	229.71	28.115	-86.577	1837	83.45	16	95	148	102.3	-2.7	0.86	30.58	31.65	0.04	Physeter macrocephalus
Gyre 97G08	229.72	28.095	-86.560	1837	83.45	16	95	148	102.3	-2.7	0.95	30.50	31.80	0.03	Physeter macrocephalus
Gyre 97G08	229.73	28.091	-86.531	1292	83.45	16	95	148	102.3	-2.7	0.98	30.86	32.21	0.03	Physeter macrocephalus
Gyre 97G08	229.74	28.119	-86.512	1292	83.45	16	95	148	102.3	-2.7	1.06	31.04	32.29	0.03	Stenella coeruleoalba
Gyre 97G08	229.78	28.183	-86.496	1109	23.69	14	100	156	NA	NA	1.01	31.10	32.23	0.04	Unidentified large whale
Gyre 97G08	230.47	28.490	-85.580	201	4.61	16	100	193	NA	NA	1.03	30.64	32.56	0.03	Tursiops truncatus
Gyre 97G08	230.60	28.155	-85.748	596	14.71	15	100	171	NA	NA	0.85	30.91	31.79	0.03	Stenella coeruleoalba
Gyre 97G08	230.76	27.963	-85.879	1031	56.39	19	104	164	105.7	0.7	1.00	30.94	31.49	0.03	Unidentified large dolphin
Gyre 97G08	230.87	27.783	-85.812	2457	97.14	18	98	163	105.7	0.7	1.18	NA	NA	0.04	Ziphius cavirostris
Gyre 97G08	230.89	27.741	-85.758	1977	85.53	9	102	182	106.6	1.6	1.02	31.27	30.24	0.04	Unidentified dolphin
Gyre 97G08	230.91	27.711	-85.722	2841	107.07	9	102	182	106.6	1.6	0.98	31.34	30.81	0.04	Unidentified dolphin
Gyre 97G08	230.92	27.684	-85.685	2165	107.07	9	102	182	106.6	1.6	1.10	31.24	30.54	0.04	Stenella attenuata
Gyre 97G08	230.96	27.734	-85.569	1023	62.32	16	106	199	108.6	3.6	1.16	31.31	30.17	0.04	Unidentified dolphin
Gyre 97G08	231.00	27.742	-85.483	821	18.66	16	106	199	108.6	3.6	1.36	31.37	30.07	0.03	Stenella attenuata
Gyre 97G08	231.47	27.770	-84.938	259	5.57	19	108	200	NA	NA	1.29	30.51	33.72	0.02	Stenella attenuata
Gyre 97G08	231.49	27.785	-85.001	315	8.13	15	118	205	NA	NA	1.29	30.54	33.52	0.03	Tursiops truncatus
Gyre 97G08	231.54	27.685	-85.108	429	11.38	15	118	205	NA	NA	1.27	30.92	33.21	0.03	Tursiops truncatus
Gyre 97G08	231.58	27.585	-85.180	599	15.03	17	111	206	NA	NA	1.28	30.52	32.50	0.03	Unidentified small dolphin
Gyre 97G08	231.59	27.543	-85.206	606	19.80	17	111	206	NA	NA	1.43	30.98	31.51	0.03	Stenella attenuata
Gyre 97G08	231.61	27.504	-85.238	804	19.80	17	111	206	NA	NA	1.46	31.22	31.80	0.03	Stenella attenuata
Gyre 97G08	231.81	27.380	-85.672	3201	14.23	13	86	155	106.1	1.1	1.15	31.27	32.37	0.03	Unidentified large dolphin
Gyre 97G08	231.93	27.396	-86.127	3213	4.01	12	83	150	102.3	-2.7	1.11	31.17	32.64	0.03	Unidentified dolphin
Gyre 97G08	231.94	27.398	-86.172	3290	9.45	10	87	150	99.9	-5.1	1.14	31.21	32.61	0.03	Stenella attenuata
Gyre 97G08	231.97	27.446	-86.216	3384	10.23	10	87	150	99.9	-5.1	1.12	NA	NA	0.03	Stenella attenuata
Gyre 97G08	232.59	27.457	-87.129	3013	3.33	37	155	240	128.9	23.9	1.36	30.28	36.06	0.02	Unidentified small dolphin
Gyre 97G08	232.65	27.536	-87.243	2995	2.53	37	155	240	128.9	23.9	1.18	30.42	36.09	0.02	Kogia sp.
Gyre 97G08	232.67	27.560	-87.303	2980	2.28	29	182	275	133.3	28.3	1.34	30.35	36.09	0.02	Kogia sp.
Gyre 97G08	232.72	27.563	-87.411	2951	3.59	29	182	275	133.3	28.3	1.13	30.39	36.10	0.02	Kogia sp.
Gyre 97G08	232.77	27.654	-87.534	2914	5.50	27	184	279	134.3	29.3	0.89	30.86	36.11	0.01	Unidentified dolphin
Gyre 97G08	232.85	27.801	-87.692	2797	6.37	23	174	273	132.7	27.7	0.93	30.96	36.12	0.01	Unidentified small whale
Gyre 97G08	232.93	27.953	-87.805	2604	11.36	23	163	265	129.9	24.9	1.20	30.56	36.09	0.02	Unidentified dolphin

GulfCet II ship surveys from the *R/V Gyre*. Location, group size, and effort data.

Date	Time	Species	Latitude (north)	Longitude (west)	Effort status	Group size
Cruise Gyre 96G06: 10-30 October 1996 (late summer)						
11 Oct 96	16:17	Unid. dolphin	28.035	87.833	ON	2
13 Oct 96	07:10	*Stenella attenuata*	26.683	85.950	OFF	20
14 Oct 96	07:15	*Tursiops truncatus*	27.964	84.920	ON	6
15 Oct 96	03:08	*Stenella frontalis*	28.850	85.480	OFF	5
15 Oct 96	10:30	*Physeter macrocephalus*	28.367	86.433	ON	2
15 Oct 96	12:18	Unid. odontocete	28.262	86.527	ON	1
15 Oct 96	12:44	*Stenella attenuata*	28.249	86.589	ON	70
16 Oct 96	06:50	*Tursiops truncatus*	29.797	86.748	ON	6
16 Oct 96	07:50	*Tursiops truncatus*	29.921	86.757	OFF	10
16 Oct 96	10:37	*Stenella frontalis*	30.199	86.827	OFF	3
16 Oct 96	11:48	*Tursiops truncatus*	30.091	86.944	OFF	1
16 Oct 96	12:06	*Tursiops truncatus*	30.066	86.973	ON	2
16 Oct 96	12:39	Unid. dolphin	30.018	87.027	ON	2
16 Oct 96	12:46	*Tursiops truncatus*	30.009	87.041	ON	1
16 Oct 96	13:06	*Stenella frontalis*	29.986	87.080	ON	40
16 Oct 96	14:56	*Tursiops truncatus*	29.916	87.320	ON	2
16 Oct 96	15:31	*Tursiops truncatus*	29.910	87.402	ON	15
16 Oct 96	18:12	Unid. dolphin	29.589	87.401	ON	1
17 Oct 96	09:10	*Ziphiidae fm.*	28.564	87.359	ON	1
17 Oct 96	09:45	Unid. cetacean	28.606	87.364	ON	1
17 Oct 96	15:04	*Kogia sp.*	27.867	87.404	ON	1
18 Oct 96	08:29	*Tursiops truncatus*	29.201	88.180	ON	3
20 Oct 96	06:58	*Physeter macrocephalus*	28.664	88.990	ON	3
20 Oct 96	09:00	*Physeter macrocephalus*	28.619	88.993	OFF	1
20 Oct 96	09:41	*Physeter macrocephalus*	28.624	88.983	OFF	3
20 Oct 96	09:48	*Physeter macrocephalus*	28.629	88.973	OFF	
20 Oct 96	09:55	*Physeter macrocephalus*	28.634	88.963	OFF	2
20 Oct 96	10:06	*Physeter macrocephalus*	28.639	88.953	OFF	
20 Oct 96	10:20	*Physeter macrocephalus*	28.644	88.943	OFF	5
20 Oct 96	12:01	*Physeter macrocephalus*	28.649	88.933	OFF	
20 Oct 96	12:11	*Physeter macrocephalus*	28.654	88.923	OFF	
20 Oct 96	12:15	*Physeter macrocephalus*	28.659	88.913	OFF	
20 Oct 96	13:01	*Physeter macrocephalus*	28.664	88.903	OFF	
20 Oct 96	13:13	*Physeter macrocephalus*	28.669	88.893	OFF	
20 Oct 96	13:38	*Physeter macrocephalus*	28.674	88.883	OFF	
20 Oct 96	16:52	*Stenella longirostris*	28.676	88.723	ON	15
21 Oct 96	07:16	*Physeter macrocephalus*	27.717	88.418	ON	1
21 Oct 96	07:23	*Physeter macrocephalus*	27.703	88.410	ON	2
21 Oct 96	07:33	*Physeter macrocephalus*	27.689	88.402	ON	1
21 Oct 96	07:44	*Physeter macrocephalus*	27.665	88.390	ON	6
21 Oct 96	10:04	*Ziphius cavirostris*	27.438	88.222	OFF	1
21 Oct 96	16:07	*Stenella coeruleoalba*	26.862	87.925	ON	40
22 Oct 96	08:43	*Stenella attenuata*	25.254	87.398	ON	20
23 Oct 96	07:08	*Stenella attenuata*	26.150	88.067	OFF	15
23 Oct 96	08:40	*Stenella attenuata*	26.333	88.167	OFF	25
23 Oct 96	14:30	*Physeter macrocephalus*	27.016	88.516	OFF	2
24 Oct 96	07:20	*Physeter macrocephalus*	28.367	88.450	ON	5

GulfCet II ship surveys from the *R/V Gyre*. Location, group size, and effort data.

Date	Time	Species	Latitude (north)	Longitude (west)	Effort status	Group size
24 Oct 96	14:14	*Stenella coeruleoalba*	27.878	89.282	ON	40
26 Oct 96	07:04	*Stenella clymene*	26.102	87.438	ON	12
26 Oct 96	08:56	*Stenella attenuata*	26.358	87.543	ON	4
28 Oct 96	09:00	*Physeter macrocephalus*	28.070	89.127	ON	2
28 Oct 96	09:08	*Physeter macrocephalus*	28.080	89.135	OFF	1
28 Oct 96	09:20	*Physeter macrocephalus*	28.093	89.145	OFF	1
28 Oct 96	09:59	*Physeter macrocephalus*	28.102	89.157	OFF	1
28 Oct 96	10:07	*Physeter macrocephalus*	28.093	89.162	OFF	1
28 Oct 96	10:25	*Physeter macrocephalus*	28.075	89.164	OFF	2
28 Oct 96	10:36	*Physeter macrocephalus*	28.065	89.148	OFF	2
28 Oct 96	10:38	*Physeter macrocephalus*	28.063	89.144	OFF	1
28 Oct 96	10:53	*Physeter macrocephalus*	28.058	89.138	OFF	1
28 Oct 96	11:11	*Physeter macrocephalus*	28.046	89.137	OFF	1
28 Oct 96	11:19	*Physeter macrocephalus*	28.041	89.135	OFF	1
28 Oct 96	11:32	*Physeter macrocephalus*	28.029	89.134	OFF	1
28 Oct 96	11:33	*Physeter macrocephalus*	28.027	89.133	OFF	1
28 Oct 96	11:53	*Physeter macrocephalus*	28.026	89.149	OFF	2
28 Oct 96	12:26	*Physeter macrocephalus*	28.018	89.168	OFF	2
28 Oct 96	14:43	*Physeter macrocephalus*	28.027	89.207	ON	1
28 Oct 96	14:44	*Physeter macrocephalus*	28.027	89.207	ON	1
28 Oct 96	16:08	*Physeter macrocephalus*	28.173	89.259	ON	1
28 Oct 96	16:33	*Physeter macrocephalus*	28.191	85.000	OFF	1
28 Oct 96	17:41	*Physeter macrocephalus*	28.274	89.330	ON	1
28 Oct 96	17:44	Unid. dolphin	28.282	89.332	ON	30
28 Oct 96	18:01	*Physeter macrocephalus*	28.291	89.373	OFF	1
29 Oct 96	07:08	*Ziphiidae fm.*	29.132	88.169	ON	2
29 Oct 96	07:37	*Ziphiidae fm.*	29.197	88.167	ON	1
29 Oct 96	07:47	*Tursiops truncatus*	29.222	88.167	ON	2
29 Oct 96	07:55	Unid. small whale	29.239	88.166	OFF	1
29 Oct 96	09:12	*Tursiops truncatus*	29.432	88.148	ON	10
29 Oct 96	09:59	*Tursiops truncatus*	29.541	88.159	ON	30
29 Oct 96	10:29	*Tursiops truncatus*	29.613	88.163	ON	15
29 Oct 96	11:28	*Tursiops truncatus*	29.756	88.173	ON	9
29 Oct 96	11:50	Unid. dolphin	29.811	88.174	ON	12
29 Oct 96	11:59	Unid. dolphin	29.835	88.174	ON	6

Date	Time	Species	Latitude (north)	Longitude (west)	Effort status	Group size
10 Aug 97	07:53	*Physeter macrocephalus*	27.704	86.838	OFF	4
10 Aug 97	09:12	*Stenella attenuata*	27.823	86.864	ON	35
10 Aug 97	09:33	Unid. large whale	27.870	86.869	ON	1
10 Aug 97	10:07	*Stenella attenuata*	27.923	86.890	ON	50
10 Aug 97	10:26	*Physeter macrocephalus*	27.966	86.881	ON	4
10 Aug 97	14:26	*Stenella attenuata*	28.339	86.876	ON	30
10 Aug 97	14:38	*Stenella attenuata*	28.366	86.877	OFF	130
10 Aug 97	15:11	*Physeter macrocephalus*	28.427	86.842	OFF	3
10 Aug 97	15:24	*Stenella attenuata*	28.441	86.852	OFF	80
10 Aug 97	16:03	*Physeter macrocephalus*	28.389	86.854	OFF	2
10 Aug 97	16:09	Unid. small dolphin	28.404	86.854	OFF	15
10 Aug 97	16:09	*Physeter macrocephalus*	28.393	86.854	OFF	1
10 Aug 97	17:04	*Stenella attenuata*	28.441	86.857	ON	150
10 Aug 97	18:13	Unid. large whale	28.590	86.861	ON	2
11 Aug 97	13:22	*Physeter macrocephalus*	27.745	87.243	ON	6
11 Aug 97	13:28	*Stenella attenuata*	27.727	87.247	OFF	40
12 Aug 97	07:23	*Stenella attenuata*	27.098	87.552	ON	20
12 Aug 97	17:44	*Stenella coeruleoalba*	28.158	88.193	ON	2
12 Aug 97	17:44	*Stenella attenuata*	28.158	88.193	OFF	1
12 Aug 97	19:20	*Grampus griseus*	28.310	88.237	OFF	7
12 Aug 97	19:20	*Pseudorca crassidens*	28.310	88.237	OFF	-9
13 Aug 97	06:55	*Tursiops truncatus*	29.568	88.477	ON	5
13 Aug 97	07:41	*Tursiops truncatus*	29.652	88.461	OFF	3
13 Aug 97	07:44	*Tursiops truncatus*	29.661	88.460	ON	6
13 Aug 97	07:52	*Tursiops truncatus*	29.677	88.459	ON	2
13 Aug 97	07:52	*Tursiops truncatus*	29.678	88.459	ON	3
13 Aug 97	07:58	Unid. dolphin	29.689	88.458	ON	1
13 Aug 97	08:46	*Tursiops truncatus*	29.795	88.446	ON	2
13 Aug 97	09:31	*Tursiops truncatus*	29.900	88.443	OFF	2
13 Aug 97	11:01	*Tursiops truncatus*	30.089	88.490	OFF	2
13 Aug 97	11:33	*Tursiops truncatus*	30.162	88.529	OFF	2
14 Aug 97	06:58	Unid. dolphin	30.048	87.834	ON	1
14 Aug 97	08:10	*Tursiops truncatus*	29.845	87.832	ON	9
14 Aug 97	09:58	*Tursiops truncatus*	29.604	87.815	ON	30
14 Aug 97	10:25	*Tursiops truncatus*	29.542	87.814	ON	40
14 Aug 97	11:10	*Tursiops truncatus*	29.442	87.819	ON	15
14 Aug 97	13:56	*Tursiops truncatus*	29.075	87.830	ON	3
14 Aug 97	16:58	*Stenella attenuata*	28.847	87.770	ON	40
15 Aug 97	07:06	*Stenella longirostris*	29.515	87.296	ON	80
15 Aug 97	07:28	Unid. small whale	29.549	87.252	OFF	1
15 Aug 97	11:18	*Stenella frontalis*	29.951	87.053	OFF	5
15 Aug 97	12:08	*Stenella frontalis*	30.050	87.026	OFF	8
15 Aug 97	13:31	Unid. dolphin	30.194	86.929	ON	2
15 Aug 97	14:06	*Stenella frontalis*	30.198	86.837	OFF	4
15 Aug 97	15:02	*Stenella frontalis*	30.212	86.691	OFF	5
15 Aug 97	15:05	*Stenella frontalis*	30.213	86.684	OFF	4
15 Aug 97	15:17	*Tursiops truncatus*	30.213	86.650	ON	4
15 Aug 97	15:17	*Stenella frontalis*	30.213	86.650	ON	4
15 Aug 97	15:34	*Tursiops truncatus*	30.213	86.606	ON	2

Date	Time	Species	Latitude (north)	Longitude (west)	Effort status	Group size
15 Aug 97	15:34	*Stenella frontalis*	30.213	86.606	ON	4
15 Aug 97	16:12	*Tursiops truncatus*	30.213	86.505	ON	1
15 Aug 97	16:57	*Stenella frontalis*	30.200	86.404	ON	1
15 Aug 97	16:57	Unid. dolphin	30.200	86.404	ON	1
16 Aug 97	16:39	*Tursiops truncatus*	29.746	86.680	ON	5
16 Aug 97	17:04	*Tursiops truncatus*	29.696	86.692	ON	1
16 Aug 97	19:02	*Stenella longirostris*	29.430	86.693	ON	51
17 Aug 97	06:27	*Stenella attenuata*	28.516	86.662	ON	26
17 Aug 97	06:56	*Stenella attenuata*	28.485	86.664	ON	80
17 Aug 97	07:52	Unid. dolphin	28.381	86.664	ON	3
17 Aug 97	08:22	*Stenella attenuata*	28.314	86.666	ON	100
17 Aug 97	08:48	*Stenella coeruleoalba*	28.270	86.692	ON	95
17 Aug 97	08:48	*Physeter macrocephalus*	28.270	86.692	OFF	3
17 Aug 97	11:33	*Physeter macrocephalus*	28.160	86.637	ON	2
17 Aug 97	11:50	*Physeter macrocephalus*	28.139	86.602	ON	1
17 Aug 97	12:04	*Physeter macrocephalus*	28.115	86.577	ON	2
17 Aug 97	12:15	*Physeter macrocephalus*	28.095	86.560	ON	2
17 Aug 97	12:21	*Physeter macrocephalus*	28.084	86.551	OFF	1
17 Aug 97	12:34	*Physeter macrocephalus*	28.091	86.531	ON	3
17 Aug 97	12:49	*Stenella coeruleoalba*	28.119	86.512	ON	63
17 Aug 97	12:58	*Physeter macrocephalus*	28.138	86.517	OFF	1
17 Aug 97	13:36	Unid. large whale	28.183	86.496	ON	1
18 Aug 97	06:23	*Tursiops truncatus*	28.490	85.580	ON	9
18 Aug 97	07:43	Unid. small whale	28.355	85.670	OFF	1
18 Aug 97	09:27	*Stenella coeruleoalba*	28.155	85.748	ON	40
18 Aug 97	10:27	*Tursiops truncatus*	28.093	85.814	OFF	35
18 Aug 97	10:27	Unid. small dolphin	28.093	85.814	OFF	4
18 Aug 97	13:13	Unid. large dolphin	27.963	85.879	ON	1
18 Aug 97	13:15	Unid. large dolphin	27.957	85.881	OFF	3
18 Aug 97	15:56	*Ziphius cavirostris*	27.783	85.812	ON	2
18 Aug 97	16:24	Unid. dolphin	27.741	85.758	ON	2
18 Aug 97	16:44	Unid. dolphin	27.711	85.722	ON	2
18 Aug 97	17:05	*Stenella attenuata*	27.684	85.685	ON	35
18 Aug 97	17:58	Unid. dolphin	27.734	85.569	ON	47
18 Aug 97	18:54	*Stenella attenuata*	27.742	85.483	OFF	68
18 Aug 97	18:54	*Stenella attenuata*	27.742	85.483	ON	140
19 Aug 97	06:18	*Stenella attenuata*	27.770	84.938	ON	190
19 Aug 97	06:51	*Tursiops truncatus*	27.785	85.001	ON	29
19 Aug 97	07:56	*Tursiops truncatus*	27.685	85.108	ON	1
19 Aug 97	08:51	Unid. small dolphin	27.585	85.180	ON	1
19 Aug 97	09:14	*Stenella attenuata*	27.543	85.206	ON	83
19 Aug 97	09:38	*Stenella attenuata*	27.504	85.238	ON	178
19 Aug 97	14:20	Unid. large dolphin	27.380	85.672	ON	1
19 Aug 97	17:20	Unid. dolphin	27.396	86.127	ON	1
19 Aug 97	17:38	*Stenella attenuata*	27.398	86.172	ON	350
19 Aug 97	18:19	*Stenella attenuata*	27.446	86.216	ON	40
20 Aug 97	09:14	Unid. small dolphin	27.457	87.129	ON	10
20 Aug 97	09:42	Unid. dolphin	27.475	87.173	OFF	1
20 Aug 97	09:49	Unid. dolphin	27.483	87.184	OFF	2

Date	Time	Species	Latitude (north)	Longitude (west)	Effort status	Group size
20 Aug 97	10:32	*Kogia sp.*	27.536	87.243	ON	3
20 Aug 97	11:04	*Kogia sp.*	27.560	87.303	ON	1
20 Aug 97	12:23	*Kogia sp.*	27.563	87.411	ON	2
20 Aug 97	13:34	Unid. dolphin	27.654	87.534	ON	12
20 Aug 97	15:21	Unid. small whale	27.801	87.692	ON	3
20 Aug 97	17:13	Unid. dolphin	27.953	87.805	ON	5
20 Aug 97	19:19	Unid. dolphin	28.105	87.880	OFF	2
21 Aug 97	09:26	Unid. small dolphin	28.643	88.923	OFF	3
21 Aug 97	09:50	Unid. dolphin	28.578	88.923	OFF	3
21 Aug 97	11:56	*Physeter macrocephalus*	28.280	88.919	OFF	3

VI. SEABIRD DATA

Local date and time	Latitude	Longitude	Species	Number
8/6/97 7:06	28.47	-88.94	black tern	1
8/6/97 7:42	28.39	-88.92	black tern	2
8/6/97 7:59	28.36	-88.91	storm-petrel sp.	1
8/6/97 8:08	28.35	-88.90	tern sp.	2
8/6/97 8:17	28.33	-88.90	black tern	1
8/6/97 9:39	28.19	-88.86	magnificent frigatebird	1
8/6/97 9:50	28.17	-88.85	black tern	8
8/6/97 10:19	28.12	-88.84	black tern	1
8/6/97 10:22	28.11	-88.84	bridled tern	1
8/6/97 10:29	28.10	-88.84	black tern	4
8/6/97 10:40	28.08	-88.83	black tern	2
8/6/97 10:48	28.07	-88.83	black tern	31
8/6/97 10:53	28.06	-88.82	black tern	2
8/6/97 10:53	28.06	-88.82	black tern	5
8/6/97 14:02	27.70	-88.64	black tern	1
8/6/97 15:23	27.56	-88.54	black tern	1
8/6/97 15:33	27.54	-88.54	laughing gull	1
8/6/97 15:36	27.54	-88.54	laughing gull	1
8/6/97 16:04	27.48	-88.53	black tern	4
8/6/97 16:22	27.44	-88.52	black tern	3
8/6/97 16:22	27.44	-88.52	black tern	1
8/6/97 16:33	27.42	-88.52	black tern	1
8/6/97 16:40	27.41	-88.52	black tern	1
8/6/97 16:42	27.40	-88.51	black tern	2
8/6/97 16:45	27.39	-88.51	royal tern	1
8/6/97 17:08	27.35	-88.51	black tern	3
8/6/97 17:56	27.25	-88.48	black tern	4
8/6/97 17:56	27.25	-88.48	black tern	1
8/6/97 17:57	27.24	-88.48	black tern	2
8/6/97 18:00	27.24	-88.48	black tern	3
8/6/97 18:18	27.20	-88.47	laughing gull	1
8/6/97 18:21	27.20	-88.47	laughing gull	1
8/6/97 18:32	27.18	-88.47	laughing gull	2
8/6/97 18:32	27.18	-88.47	tern sp.	2
8/6/97 18:36	27.17	-88.47	black tern	1
8/6/97 18:40	27.16	-88.46	laughing gull	2
8/6/97 18:42	27.15	-88.46	common tern	1
8/7/97 6:48	26.13	-88.24	tern sp.	2
8/7/97 6:54	26.12	-88.23	tern sp.	1
8/7/97 7:04	26.10	-88.23	black tern	1
8/7/97 7:14	26.09	-88.22	tern sp.	1

Local date and time	Latitude	Longitude	Species	Number
8/6/97 7:06	28.47	-88.94	black tern	1
8/6/97 7:42	28.39	-88.92	black tern	2
8/6/97 7:59	28.36	-88.91	storm-petrel sp.	1
8/6/97 8:08	28.35	-88.90	tern sp.	2
8/6/97 8:17	28.33	-88.90	black tern	1
8/6/97 9:39	28.19	-88.86	magnificent frigatebird	1
8/6/97 9:50	28.17	-88.85	black tern	8
8/6/97 10:19	28.12	-88.84	black tern	1
8/6/97 10:22	28.11	-88.84	bridled tern	1
8/6/97 10:29	28.10	-88.84	black tern	4
8/6/97 10:40	28.08	-88.83	black tern	2
8/6/97 10:48	28.07	-88.83	black tern	31
8/6/97 10:53	28.06	-88.82	black tern	2
8/6/97 10:53	28.06	-88.82	black tern	5
8/6/97 14:02	27.70	-88.64	black tern	1
8/6/97 15:23	27.56	-88.54	black tern	1
8/6/97 15:33	27.54	-88.54	laughing gull	1
8/6/97 15:36	27.54	-88.54	laughing gull	1
8/6/97 16:04	27.48	-88.53	black tern	4
8/6/97 16:22	27.44	-88.52	black tern	3
8/6/97 16:22	27.44	-88.52	black tern	1
8/6/97 16:33	27.42	-88.52	black tern	1
8/6/97 16:40	27.41	-88.52	black tern	1
8/6/97 16:42	27.40	-88.51	black tern	2
8/6/97 16:45	27.39	-88.51	royal tern	1
8/6/97 17:08	27.35	-88.51	black tern	3
8/6/97 17:56	27.25	-88.48	black tern	4
8/6/97 17:56	27.25	-88.48	black tern	1
8/6/97 17:57	27.24	-88.48	black tern	2
8/6/97 18:00	27.24	-88.48	black tern	3
8/6/97 18:18	27.20	-88.47	laughing gull	1
8/6/97 18:21	27.20	-88.47	laughing gull	1
8/6/97 18:32	27.18	-88.47	laughing gull	2
8/6/97 18:32	27.18	-88.47	tern sp.	2
8/6/97 18:36	27.17	-88.47	black tern	1
8/6/97 18:40	27.16	-88.46	laughing gull	2
8/6/97 18:42	27.15	-88.46	common tern	1
8/7/97 6:48	26.13	-88.24	tern sp.	2
8/7/97 6:54	26.12	-88.23	tern sp.	1
8/7/97 7:04	26.10	-88.23	black tern	1
8/7/97 7:14	26.09	-88.22	tern sp.	1

8/7/97 7:26	26.07	-88.20	black tern	1
8/7/97 7:34	26.06	-88.19	black tern	3
8/7/97 7:36	26.05	-88.19	black tern	1
8/7/97 7:37	26.05	-88.19	black tern	2
8/7/97 7:49	26.03	-88.19	black tern	3
8/7/97 7:50	26.03	-88.19	black tern	4
8/7/97 7:58	26.02	-88.19	black tern	5
8/7/97 8:01	26.02	-88.19	royal tern	1
8/7/97 8:08	26.01	-88.19	tern sp.	1
8/7/97 8:10	26.01	-88.20	black tern	1
8/7/97 8:17	26.00	-88.20	black tern	1
8/7/97 8:17	26.00	-88.20	black tern	4
8/7/97 9:36	26.05	-88.22	black tern	2
8/7/97 9:39	26.06	-88.22	black tern	7
8/7/97 9:40	26.06	-88.22	black tern	1
8/7/97 9:45	26.07	-88.22	black tern	1
8/7/97 9:47	26.07	-88.22	black tern	1
8/7/97 9:47	26.07	-88.22	black tern	1
8/7/97 10:03	26.11	-88.22	black tern	8
8/7/97 10:03	26.11	-88.22	bridled or sooty tern	2
8/7/97 10:08	26.12	-88.22	black tern	5
8/7/97 10:13	26.13	-88.22	black tern	5
8/7/97 10:26	26.16	-88.21	black tern	1
8/7/97 10:38	26.18	-88.21	black tern	1
8/7/97 10:49	26.21	-88.20	black tern	1
8/7/97 11:10	26.25	-88.20	black tern	2
8/7/97 11:10	26.25	-88.20	sooty tern	2
8/7/97 11:15	26.27	-88.20	black tern	1
8/7/97 11:18	26.27	-88.20	black tern	1
8/7/97 11:18	26.27	-88.20	black tern	1
8/7/97 11:19	26.27	-88.20	black tern	3
8/7/97 11:21	26.28	-88.20	sooty tern	4
8/7/97 11:30	26.29	-88.18	black tern	1
8/7/97 11:34	26.29	-88.18	arctic tern	1
8/7/97 11:34	26.29	-88.18	Audubon's shearwater	2
8/7/97 11:34	26.29	-88.18	black tern	36
8/7/97 11:34	26.29	-88.18	bridled tern	1
8/7/97 11:51	26.30	-88.19	black tern	1
8/7/97 11:52	26.30	-88.19	black tern	1
8/7/97 11:53	26.30	-88.20	black tern	1
8/7/97 12:05	26.32	-88.21	black tern	1
8/7/97 12:11	26.33	-88.21	black tern	1

8/7/97 12:19	26.35	-88.20	bridled tern	1
8/7/97 12:21	26.35	-88.20	black tern	1
8/7/97 12:23	26.36	-88.20	black tern	1
8/7/97 12:23	26.36	-88.20	bridled tern	1
8/7/97 12:27	26.37	-88.20	black tern	1
8/7/97 12:27	26.37	-88.20	black tern	1
8/7/97 12:27	26.37	-88.20	tern sp.	1
8/7/97 12:30	26.38	-88.20	band-rumped storm-petrel	1
8/7/97 12:30	26.38	-88.20	black tern	1
8/7/97 12:30	26.38	-88.20	black tern	1
8/7/97 12:30	26.38	-88.20	black tern	1
8/7/97 12:30	26.38	-88.20	black tern	1
8/7/97 12:30	26.38	-88.20	black tern	1
8/7/97 12:31	26.38	-88.20	black tern	1
8/7/97 12:33	26.38	-88.20	black tern	1
8/7/97 12:33	26.38	-88.20	black tern	1
8/7/97 12:33	26.38	-88.20	black tern	2
8/7/97 12:35	26.39	-88.20	black tern	1
8/7/97 12:40	26.40	-88.19	black tern	2
8/7/97 12:40	26.40	-88.19	black tern	1
8/7/97 12:45	26.41	-88.19	black tern	2
8/7/97 12:51	26.42	-88.19	tern sp.	1
8/7/97 13:01	26.44	-88.18	black tern	6
8/7/97 13:01	26.44	-88.18	sooty tern	2
8/7/97 13:04	26.45	-88.18	bridled tern	1
8/7/97 13:04	26.45	-88.18	sooty tern	1
8/7/97 13:51	26.54	-88.16	Audubon's shearwater	1
8/7/97 13:51	26.54	-88.16	Wilson's storm-petrel	1
8/7/97 14:04	26.57	-88.16	storm-petrel sp.	2
8/7/97 14:11	26.59	-88.16	black tern	3
8/7/97 14:26	26.63	-88.16	band-rumped storm-petrel	3
8/7/97 14:27	26.63	-88.16	bridled tern	1
8/7/97 14:45	26.67	-88.16	Audubon's shearwater	1
8/7/97 14:46	26.67	-88.16	band-rumped storm-petrel	2
8/7/97 14:46	26.67	-88.16	band-rumped storm-petrel	5
8/7/97 14:47	26.67	-88.16	band-rumped storm-petrel	1
8/7/97 14:48	26.68	-88.16	storm-petrel sp.	8
8/7/97 15:09	26.72	-88.15	Audubon's shearwater	1
8/7/97 15:09	26.72	-88.15	storm-petrel sp.	1
8/7/97 15:19	26.75	-88.15	storm-petrel sp.	1
8/7/97 15:34	26.78	-88.15	Audubon's shearwater	1
8/7/97 15:59	26.84	-88.14	sooty tern	5

8/7/97 15:59	26.84	-88.14	sooty tern	1
8/7/97 16:07	26.86	-88.14	cory's shearwater	1
8/7/97 16:22	26.89	-88.13	Audubon's shearwater	1
8/7/97 18:54	27.19	-88.09	band-rumped storm-petrel	3
8/7/97 19:30	27.27	-88.09	band-rumped storm-petrel	1
8/8/97 6:51	28.00	-87.94	storm-petrel sp.	1
8/8/97 6:54	28.01	-87.95	storm-petrel sp.	1
8/8/97 7:02	28.03	-87.95	laughing gull	1
8/8/97 7:26	28.08	-87.95	cory's shearwater	1
8/8/97 9:49	28.36	-87.97	red-billed tropicbird	1
8/8/97 10:26	28.45	-87.97	Audubon's shearwater	1
8/8/97 10:52	28.51	-87.97	sooty tern	2
8/8/97 10:52	28.51	-87.97	sooty tern	1
8/8/97 10:55	28.51	-87.98	storm-petrel sp.	1
8/8/97 11:44	28.63	-87.98	band-rumped storm-petrel	2
8/8/97 12:12	28.69	-87.98	sooty tern	2
8/8/97 12:39	28.76	-87.99	Audubon's shearwater	1
8/8/97 13:04	28.79	-88.02	Audubon's shearwater	2
8/8/97 13:31	28.85	-88.02	sooty tern	1
8/8/97 13:51	28.90	-88.02	band-rumped storm-petrel	1
8/8/97 14:01	28.92	-88.02	Audubon's shearwater	1
8/8/97 14:01	28.92	-88.02	storm-petrel sp.	3
8/8/97 14:54	29.04	-88.00	band-rumped storm-petrel	1
8/8/97 15:18	29.09	-88.00	band-rumped storm-petrel	1
8/8/97 15:38	29.14	-88.00	band-rumped storm-petrel	1
8/8/97 15:40	29.14	-88.00	band-rumped storm-petrel	1
8/8/97 15:49	29.17	-88.00	storm-petrel sp.	1
8/8/97 16:12	29.16	-88.00	band-rumped storm-petrel	1
8/9/97 6:30	28.28	-87.58	black tern	5
8/9/97 6:31	28.27	-87.58	black tern	1
8/9/97 6:31	28.27	-87.58	black tern	1
8/9/97 6:49	28.25	-87.57	black tern	1
8/9/97 6:49	28.25	-87.57	sooty tern	1
8/9/97 7:56	28.10	-87.51	storm-petrel sp.	1
8/9/97 8:39	28.03	-87.48	storm-petrel sp.	1
8/9/97 8:51	28.01	-87.47	sooty tern	1
8/9/97 8:53	28.00	-87.47	black tern	1
8/9/97 8:53	28.00	-87.47	sooty tern	1
8/9/97 9:04	27.98	-87.45	black tern	1
8/9/97 10:40	27.77	-87.33	storm-petrel sp.	1
8/9/97 11:28	27.66	-87.28	laughing gull	1
8/9/97 11:49	27.60	-87.27	black tern	1

8/9/97 12:06	27.57	-87.25	band-rumped storm-petrel	1
8/9/97 12:06	27.57	-87.25	bridled tern	1
8/9/97 12:17	27.54	-87.24	band-rumped storm-petrel	4
8/9/97 12:18	27.54	-87.23	cory's shearwater	1
8/9/97 13:25	27.39	-87.16	black tern	1
8/9/97 13:36	27.36	-87.15	black tern	1
8/9/97 13:40	27.36	-87.15	storm-petrel sp.	4
8/9/97 13:54	27.32	-87.13	band-rumped storm-petrel	1
8/9/97 14:42	27.24	-87.08	cory's shearwater	1
8/9/97 15:50	27.07	-87.01	band-rumped storm-petrel	38
8/9/97 15:52	27.06	-87.00	band-rumped storm-petrel	9
8/9/97 15:53	27.06	-87.00	band-rumped storm-petrel	23
8/9/97 15:53	27.06	-87.00	Wilson's storm-petrel	3
8/9/97 16:29	26.99	-86.96	cory's shearwater	1
8/9/97 16:54	26.95	-86.96	Wilson's storm-petrel	1
8/9/97 17:05	26.94	-86.95	storm-petrel sp.	1
8/9/97 17:08	26.93	-86.95	Wilson's storm-petrel	2
8/9/97 17:09	26.93	-86.95	black tern	4
8/9/97 17:49	26.89	-86.94	storm-petrel sp.	3
8/9/97 17:58	26.88	-86.94	sooty tern	1
8/9/97 18:03	26.87	-86.94	band-rumped storm-petrel	1
8/9/97 18:12	26.86	-86.93	band-rumped storm-petrel	1
8/9/97 18:16	26.86	-86.93	band-rumped storm-petrel	1
8/9/97 18:21	26.86	-86.93	band-rumped storm-petrel	1
8/9/97 18:23	26.86	-86.93	band-rumped storm-petrel	1
8/9/97 18:41	26.84	-86.92	band-rumped storm-petrel	1
8/9/97 18:41	26.84	-86.92	band-rumped storm-petrel	1
8/9/97 18:47	26.83	-86.92	storm-petrel sp.	2
8/10/97 7:22	27.64	-86.83	Audubon's shearwater	1
8/10/97 8:16	27.70	-86.87	band-rumped storm-petrel	3
8/10/97 8:21	27.71	-86.86	masked booby	1
8/10/97 8:43	27.75	-86.86	Audubon's shearwater	1
8/10/97 8:43	27.75	-86.86	frigatebird sp.	2
8/10/97 8:43	27.75	-86.86	sooty tern	1
8/10/97 9:05	27.80	-86.86	Audubon's shearwater	1
8/10/97 9:38	27.88	-86.87	band-rumped storm-petrel	1
8/10/97 10:16	27.94	-86.89	Audubon's shearwater	1
8/10/97 10:17	27.94	-86.89	Audubon's shearwater	1
8/10/97 10:22	27.95	-86.88	Audubon's shearwater	1
8/10/97 10:33	27.97	-86.88	Audubon's shearwater	2
8/10/97 10:37	27.98	-86.87	black tern	5
8/10/97 10:39	27.98	-86.86	Audubon's shearwater	1

8/10/97 10:44	27.99	-86.86	black tern	1
8/10/97 10:48	28.00	-86.86	Audubon's shearwater	1
8/10/97 11:14	28.02	-86.86	Audubon's shearwater	2
8/10/97 11:27	28.02	-86.86	Audubon's shearwater	1
8/10/97 11:30	28.03	-86.86	sooty tern	3
8/10/97 11:31	28.03	-86.86	Audubon's shearwater	1
8/10/97 11:45	28.03	-86.85	Audubon's shearwater	2
8/10/97 12:19	28.04	-86.86	jaeger sp.	1
8/10/97 12:25	28.06	-86.86	Audubon's shearwater	1
8/10/97 13:05	28.15	-86.86	band-rumped storm-petrel	1
8/10/97 13:15	28.17	-86.87	band-rumped storm-petrel	1
8/10/97 13:20	28.19	-86.87	band-rumped storm-petrel	1
8/10/97 13:22	28.19	-86.87	band-rumped storm-petrel	1
8/10/97 13:23	28.19	-86.87	band-rumped storm-petrel	1
8/10/97 13:24	28.20	-86.87	band-rumped storm-petrel	1
8/10/97 13:30	28.21	-86.87	masked booby	1
8/10/97 13:34	28.22	-86.87	band-rumped storm-petrel	2
8/10/97 13:41	28.23	-86.87	band-rumped storm-petrel	1
8/10/97 14:14	28.31	-86.88	Audubon's shearwater	2
8/10/97 14:23	28.33	-86.88	sooty tern	2
8/10/97 15:33	28.43	-86.85	sooty tern	1
8/10/97 15:38	28.42	-86.84	bridled tern	1
8/11/97 6:34	28.67	-87.07	laughing gull	1
8/11/97 6:34	28.67	-87.07	sooty tern	1
8/11/97 6:38	28.66	-87.07	tern sp.	1
8/11/97 6:43	28.65	-87.08	manx shearwater	1
8/11/97 7:00	28.62	-87.08	sooty tern	3
8/11/97 7:00	28.62	-87.08	sooty tern	5
8/11/97 7:03	28.61	-87.09	pomarine jaeger	1
8/11/97 8:13	28.46	-87.12	shearwater sp.	1
8/11/97 8:25	28.43	-87.13	bridled tern	1
8/11/97 8:30	28.42	-87.13	bridled or sooty tern	1
8/11/97 8:45	28.39	-87.13	bridled or sooty tern	1
8/11/97 8:55	28.37	-87.14	shearwater sp.	1
8/11/97 9:01	28.36	-87.14	bridled or sooty tern	1
8/11/97 9:24	28.31	-87.15	royal tern	1
8/11/97 10:37	28.14	-87.18	tern sp.	1
8/11/97 13:22	27.75	-87.24	shearwater sp.	1
8/11/97 13:29	27.73	-87.25	manx shearwater	3
8/11/97 13:43	27.70	-87.25	manx shearwater	1
8/11/97 14:08	27.63	-87.27	Audubon's shearwater	2
8/11/97 14:23	27.60	-87.27	bridled tern	1

8/11/97 14:25	27.59	-87.28	Audubon's shearwater	1
8/11/97 14:29	27.58	-87.28	Audubon's shearwater	1
8/11/97 14:43	27.55	-87.29	bridled tern	1
8/11/97 15:42	27.47	-87.30	Audubon's shearwater	1
8/11/97 15:45	27.47	-87.30	Audubon's shearwater	1
8/11/97 16:10	27.53	-87.30	Audubon's shearwater	1
8/11/97 16:47	27.61	-87.30	pomarine jaeger	1
8/11/97 16:59	27.61	-87.28	tern sp.	1
8/11/97 17:36	27.59	-87.23	Audubon's shearwater	1
8/11/97 17:53	27.58	-87.22	Audubon's shearwater	1
8/11/97 18:11	27.57	-87.22	bridled tern	1
8/11/97 18:41	27.57	-87.21	phalarope sp.	11
8/11/97 19:12	27.51	-87.22	Audubon's shearwater	1
8/11/97 19:12	27.51	-87.22	band-rumped storm-petrel	1
8/11/97 19:13	27.51	-87.22	band-rumped storm-petrel	1
8/11/97 19:15	27.51	-87.22	band-rumped storm-petrel	1
8/11/97 19:23	27.49	-87.22	laughing gull	1
8/12/97 6:31	27.02	-87.51	laughing gull	1
8/12/97 7:00	27.06	-87.53	cory's shearwater	1
8/12/97 7:03	27.07	-87.53	Audubon's shearwater	1
8/12/97 7:03	27.07	-87.53	Audubon's shearwater	1
8/12/97 7:03	27.07	-87.53	band-rumped storm-petrel	2
8/12/97 7:04	27.07	-87.54	band-rumped storm-petrel	1
8/12/97 7:06	27.07	-87.54	Audubon's shearwater	2
8/12/97 7:13	27.08	-87.54	Audubon's shearwater	1
8/12/97 7:45	27.13	-87.57	Audubon's shearwater	1
8/12/97 8:11	27.17	-87.59	storm-petrel sp.	1
8/12/97 8:12	27.17	-87.59	band-rumped storm-petrel	1
8/12/97 8:13	27.17	-87.59	band-rumped storm-petrel	2
8/12/97 8:13	27.17	-87.59	Wilson's storm-petrel	1
8/12/97 8:16	27.17	-87.60	band-rumped storm-petrel	1
8/12/97 8:29	27.19	-87.61	shearwater sp.	1
8/12/97 8:36	27.21	-87.62	least tern	1
8/12/97 8:51	27.23	-87.63	shearwater sp.	2
8/12/97 9:15	27.27	-87.66	tern sp.	1
8/12/97 9:25	27.29	-87.67	shearwater sp.	1
8/12/97 9:44	27.32	-87.69	Audubon's shearwater	1
8/12/97 10:11	27.36	-87.71	Audubon's shearwater	1
8/12/97 10:11	27.36	-87.71	bridled or sooty tern	10
8/12/97 10:11	27.36	-87.71	bridled tern	2
8/12/97 10:11	27.36	-87.71	masked booby	1
8/12/97 10:11	27.36	-87.71	sooty tern	1

8/12/97 10:34	27.40	-87.74	arctic tern	1
8/12/97 11:42	27.52	-87.80	band-rumped storm-petrel	1
8/12/97 11:49	27.53	-87.81	band-rumped storm-petrel	1
8/12/97 12:27	27.59	-87.85	masked booby	1
8/12/97 13:05	27.66	-87.89	Audubon's shearwater	1
8/12/97 14:07	27.77	-87.95	sooty tern	2
8/12/97 14:12	27.78	-87.95	black tern	1
8/12/97 14:35	27.81	-87.98	masked booby	1
8/12/97 14:38	27.82	-87.98	Audubon's shearwater	1
8/12/97 15:24	27.90	-88.03	Audubon's shearwater	2
8/12/97 15:48	27.94	-88.05	Audubon's shearwater	1
8/12/97 15:50	27.94	-88.05	Audubon's shearwater	1
8/12/97 19:06	28.28	-88.21	laughing gull	1
8/12/97 19:33	28.32	-88.24	Audubon's shearwater	1
8/13/97 7:44	29.66	-88.46	black tern	1
8/13/97 7:53	29.68	-88.46	shearwater sp.	1
8/13/97 7:56	29.68	-88.46	Audubon's shearwater	1
8/13/97 8:06	29.70	-88.46	phalarope sp.	6
8/13/97 9:59	29.96	-88.45	Audubon's shearwater	1
8/13/97 10:56	29.98	-88.45	Audubon's shearwater	2
8/13/97 13:10	29.98	-88.45	laughing gull	1
8/13/97 13:36	29.98	-88.45	band-rumped storm-petrel	1
8/13/97 13:51	29.98	-88.45	Audubon's shearwater	1
8/13/97 14:08	29.98	-88.45	Audubon's shearwater	1
8/13/97 14:28	29.98	-88.45	shearwater sp.	1
8/13/97 15:18	29.98	-88.45	Audubon's shearwater	1
8/13/97 15:37	29.98	-88.45	black tern	3
8/13/97 15:37	29.98	-88.45	bridled tern	1
8/13/97 15:57	29.98	-88.45	bridled tern	1
8/13/97 16:10	29.98	-88.45	sooty tern	1
8/13/97 16:52	29.98	-88.45	band-rumped storm-petrel	1
8/13/97 16:56	29.98	-88.45	cory's shearwater	1
8/13/97 16:59	29.98	-88.45	shearwater sp.	1
8/13/97 17:09	29.98	-88.45	Audubon's shearwater	1
8/13/97 17:11	29.98	-88.45	Wilson's storm-petrel	1
8/13/97 17:21	29.98	-88.45	sooty tern	1
8/13/97 17:23	29.98	-88.45	tern sp.	1
8/13/97 18:03	29.98	-88.45	Audubon's shearwater	1
8/13/97 18:23	29.98	-88.45	sooty tern	3
8/13/97 18:40	29.98	-88.45	pomarine jaeger	1
8/13/97 18:41	29.98	-88.45	laughing gull	1
8/13/97 18:41	29.98	-88.45	parasitic jaeger	1

8/13/97 18:41	29.98	-88.45	sooty shearwater	1
8/13/97 18:43	29.98	-88.45	Audubon's shearwater	1
8/13/97 18:44	29.98	-88.45	Audubon's shearwater	2
8/13/97 18:45	29.98	-88.45	Audubon's shearwater	1
8/13/97 18:46	29.98	-88.45	Audubon's shearwater	1
8/13/97 18:47	29.98	-88.45	Audubon's shearwater	1
8/13/97 18:47	29.98	-88.45	pomarine jaeger	1
8/13/97 18:51	29.98	-88.45	pomarine jaeger	4
8/13/97 18:57	29.98	-88.45	Audubon's shearwater	1
8/13/97 18:57	29.98	-88.45	band-rumped storm-petrel	1
8/13/97 18:59	29.98	-88.45	laughing gull	1
8/13/97 19:02	29.98	-88.45	band-rumped storm-petrel	1
8/13/97 19:05	29.98	-88.45	band-rumped storm-petrel	1
8/13/97 19:08	29.98	-88.45	storm-petrel sp.	1
8/13/97 19:13	29.98	-88.45	long-tailed jaeger	1
8/13/97 19:19	29.98	-88.45	band-rumped storm-petrel	1
8/13/97 19:21	29.98	-88.45	band-rumped storm-petrel	1
8/13/97 19:22	29.98	-88.45	band-rumped storm-petrel	1
8/14/97 6:32	30.05	-87.84	black tern	3
8/14/97 6:33	30.05	-87.84	black tern	1
8/14/97 6:33	30.05	-87.84	laughing gull	1
8/14/97 6:36	30.05	-87.84	black tern	1
8/14/97 6:36	30.05	-87.84	frigatebird sp.	1
8/14/97 6:37	30.05	-87.84	royal tern	1
8/14/97 6:38	30.05	-87.84	black tern	2
8/14/97 6:40	30.05	-87.83	black tern	1
8/14/97 6:40	30.05	-87.83	black tern	2
8/14/97 6:40	30.05	-87.83	frigatebird sp.	1
8/14/97 6:42	30.05	-87.84	black tern	2
8/14/97 6:42	30.05	-87.84	black tern	1
8/14/97 6:43	30.04	-87.84	black tern	1
8/14/97 6:44	30.04	-87.84	black tern	2
8/14/97 6:47	30.03	-87.84	laughing gull	1
8/14/97 6:47	30.03	-87.84	royal tern	1
8/14/97 6:49	30.03	-87.84	black tern	1
8/14/97 6:49	30.03	-87.84	black tern	19
8/14/97 6:49	30.03	-87.84	frigatebird sp.	1
8/14/97 6:51	30.02	-87.84	black tern	1
8/14/97 6:51	30.02	-87.84	laughing gull	1
8/14/97 6:52	30.02	-87.84	black tern	1
8/14/97 6:55	30.02	-87.84	black tern	1
8/14/97 6:56	30.02	-87.84	black tern	3

8/14/97 6:57	30.01	-87.84	black tern	7
8/14/97 6:57	30.01	-87.84	frigatebird sp.	5
8/14/97 6:57	30.01	-87.84	royal tern	2
8/14/97 6:58	30.01	-87.84	black tern	1
8/14/97 6:59	30.01	-87.84	black tern	2
8/14/97 7:00	30.01	-87.84	black tern	75
8/14/97 7:00	30.01	-87.84	long-tailed jaeger	1
8/14/97 7:05	29.99	-87.84	black tern	1
8/14/97 7:06	29.99	-87.84	black tern	1
8/14/97 7:07	29.99	-87.84	frigatebird sp.	1
8/14/97 7:08	29.99	-87.84	frigatebird sp.	10
8/14/97 7:09	29.98	-87.83	royal tern	2
8/14/97 7:10	29.98	-87.83	black tern	2
8/14/97 7:12	29.98	-87.83	black tern	1
8/14/97 7:15	29.97	-87.83	black tern	3
8/14/97 7:16	29.97	-87.83	laughing gull	1
8/14/97 7:17	29.97	-87.83	black tern	1
8/14/97 7:18	29.97	-87.83	black tern	6
8/14/97 7:18	29.97	-87.83	black tern	1
8/14/97 7:19	29.96	-87.83	black tern	1
8/14/97 7:20	29.96	-87.83	black tern	1
8/14/97 7:21	29.96	-87.83	frigatebird sp.	1
8/14/97 7:22	29.96	-87.83	black tern	2
8/14/97 7:23	29.95	-87.83	black tern	1
8/14/97 7:23	29.95	-87.83	black tern	1
8/14/97 7:23	29.95	-87.83	black tern	1
8/14/97 7:25	29.95	-87.83	black tern	1
8/14/97 7:26	29.95	-87.83	sandwich tern	2
8/14/97 7:27	29.94	-87.83	frigatebird sp.	1
8/14/97 7:28	29.94	-87.83	black tern	2
8/14/97 7:29	29.94	-87.83	black tern	1
8/14/97 7:29	29.94	-87.83	black tern	1
8/14/97 7:29	29.94	-87.83	tern sp.	2
8/14/97 7:30	29.94	-87.83	black tern	1
8/14/97 7:30	29.94	-87.83	frigatebird sp.	49
8/14/97 7:30	29.94	-87.83	pomarine jaeger	1
8/14/97 7:31	29.93	-87.83	black tern	1
8/14/97 7:31	29.93	-87.83	black tern	1
8/14/97 7:31	29.93	-87.83	black tern	1
8/14/97 7:33	29.93	-87.83	black tern	2
8/14/97 7:33	29.93	-87.83	black tern	1
8/14/97 7:35	29.93	-87.83	black tern	2

8/14/97 7:37	29.92	-87.83	black tern	1
8/14/97 7:37	29.92	-87.83	tern sp.	1
8/14/97 7:38	29.92	-87.83	black tern	1
8/14/97 7:39	29.92	-87.83	black tern	2
8/14/97 7:40	29.92	-87.83	magnificent frigatebird	1
8/14/97 7:41	29.91	-87.83	black tern	1
8/14/97 7:41	29.91	-87.83	frigatebird sp.	8
8/14/97 7:42	29.91	-87.83	black tern	1
8/14/97 7:42	29.91	-87.83	black tern	1
8/14/97 7:42	29.91	-87.83	frigatebird sp.	2
8/14/97 7:42	29.91	-87.83	tern sp.	45
8/14/97 7:46	29.90	-87.83	black tern	3
8/14/97 7:47	29.90	-87.83	black tern	1
8/14/97 7:48	29.90	-87.83	greater shearwater	1
8/14/97 7:48	29.90	-87.83	royal tern	1
8/14/97 7:55	29.88	-87.83	frigatebird sp.	10
8/14/97 7:55	29.88	-87.83	magnificent frigatebird	1
8/14/97 7:56	29.88	-87.83	sandwich tern	1
8/14/97 7:57	29.88	-87.83	black tern	2
8/14/97 8:00	29.87	-87.83	magnificent frigatebird	1
8/14/97 8:03	29.86	-87.83	black tern	1
8/14/97 8:03	29.86	-87.83	black tern	2
8/14/97 8:04	29.86	-87.83	black tern	2
8/14/97 8:05	29.86	-87.83	frigatebird sp.	11
8/14/97 8:08	29.85	-87.83	frigatebird sp.	1
8/14/97 8:09	29.85	-87.83	black tern	1
8/14/97 8:14	29.84	-87.83	black tern	1
8/14/97 8:15	29.84	-87.83	black tern	1
8/14/97 8:16	29.84	-87.83	sandwich tern	1
8/14/97 8:18	29.83	-87.83	frigatebird sp.	38
8/14/97 8:19	29.83	-87.83	frigatebird sp.	2
8/14/97 8:20	29.83	-87.83	tern sp.	1
8/14/97 8:21	29.82	-87.83	royal tern	2
8/14/97 8:22	29.82	-87.83	black tern	1
8/14/97 8:24	29.82	-87.83	royal tern	1
8/14/97 8:24	29.82	-87.83	sandwich tern	2
8/14/97 8:25	29.82	-87.83	black tern	1
8/14/97 8:25	29.82	-87.83	frigatebird sp.	15
8/14/97 8:25	29.82	-87.83	tern sp.	5
8/14/97 8:27	29.81	-87.83	black tern	40
8/14/97 8:27	29.81	-87.83	frigatebird sp.	12
8/14/97 8:27	29.81	-87.83	tern sp.	5

8/14/97 8:29	29.81	-87.83	black tern	2
8/14/97 8:30	29.81	-87.83	sandwich tern	2
8/14/97 8:31	29.80	-87.83	sandwich tern	1
8/14/97 8:36	29.79	-87.83	black tern	2
8/14/97 8:37	29.79	-87.83	black tern	1
8/14/97 8:38	29.79	-87.83	black tern	1
8/14/97 8:40	29.78	-87.83	black tern	1
8/14/97 8:43	29.77	-87.83	black tern	3
8/14/97 8:47	29.77	-87.83	black tern	1
8/14/97 8:48	29.77	-87.83	black tern	1
8/14/97 8:50	29.76	-87.83	black tern	5
8/14/97 8:52	29.76	-87.83	black tern	1
8/14/97 8:58	29.74	-87.83	black tern	3
8/14/97 8:58	29.74	-87.83	sandwich tern	1
8/14/97 8:59	29.74	-87.83	sandwich tern	1
8/14/97 9:01	29.73	-87.83	royal tern	1
8/14/97 9:01	29.73	-87.83	royal tern	2
8/14/97 9:03	29.73	-87.83	tern sp.	1
8/14/97 9:06	29.73	-87.83	black tern	1
8/14/97 9:21	29.69	-87.82	black tern	3
8/14/97 9:24	29.69	-87.82	black tern	1
8/14/97 9:27	29.68	-87.82	black tern	1
8/14/97 9:27	29.68	-87.82	black tern	1
8/14/97 9:35	29.66	-87.82	black tern	1
8/14/97 9:36	29.66	-87.82	black tern	1
8/14/97 9:36	29.66	-87.82	black tern	1
8/14/97 9:38	29.65	-87.82	black tern	1
8/14/97 9:46	29.64	-87.82	black tern	1
8/14/97 9:48	29.63	-87.82	black tern	1
8/14/97 9:50	29.63	-87.82	black tern	1
8/14/97 9:50	29.63	-87.82	black tern	1
8/14/97 9:50	29.63	-87.82	black tern	1
8/14/97 9:50	29.63	-87.82	black tern	2
8/14/97 9:53	29.62	-87.82	sandwich tern	1
8/14/97 9:57	29.61	-87.82	black tern	4
8/14/97 10:00	29.60	-87.82	black tern	2
8/14/97 10:00	29.60	-87.82	black tern	1
8/14/97 10:11	29.58	-87.81	black tern	1
8/14/97 10:11	29.58	-87.81	black tern	1
8/14/97 10:12	29.58	-87.81	black tern	1
8/14/97 10:13	29.57	-87.81	black tern	1
8/14/97 10:14	29.57	-87.81	black tern	1

8/14/97 10:16	29.57	-87.81	laughing gull	1
8/14/97 10:18	29.56	-87.81	black tern	1
8/14/97 10:20	29.56	-87.81	sandwich tern	1
8/14/97 10:22	29.55	-87.81	black tern	2
8/14/97 10:22	29.55	-87.81	laughing gull	3
8/14/97 10:23	29.55	-87.81	black tern	1
8/14/97 10:24	29.55	-87.81	black tern	1
8/14/97 10:24	29.55	-87.81	laughing gull	1
8/14/97 10:25	29.54	-87.81	black tern	1
8/14/97 10:26	29.54	-87.81	black tern	2
8/14/97 10:26	29.54	-87.81	black tern	1
8/14/97 10:29	29.54	-87.81	black tern	1
8/14/97 10:31	29.53	-87.81	sandwich tern	2
8/14/97 10:32	29.53	-87.81	black tern	1
8/14/97 10:32	29.53	-87.81	sandwich tern	1
8/14/97 10:33	29.53	-87.81	black tern	4
8/14/97 10:33	29.53	-87.81	black tern	1
8/14/97 10:35	29.52	-87.81	black tern	16
8/14/97 10:35	29.52	-87.81	black tern	1
8/15/97 6:41	29.46	-87.32	black tern	1
8/15/97 6:42	29.46	-87.32	black tern	1
8/15/97 6:43	29.47	-87.32	black tern	1
8/15/97 6:46	29.47	-87.32	cory's shearwater	1
8/15/97 6:52	29.48	-87.31	black tern	1
8/15/97 7:03	29.51	-87.30	black tern	1
8/15/97 7:04	29.51	-87.30	sandwich tern	2
8/15/97 7:08	29.52	-87.30	black tern	3
8/15/97 7:11	29.52	-87.29	black tern	3
8/15/97 7:16	29.53	-87.28	black tern	1
8/15/97 7:16	29.53	-87.28	black tern	1
8/15/97 7:19	29.53	-87.27	frigatebird sp.	1
8/15/97 7:20	29.53	-87.27	black tern	1
8/15/97 7:21	29.54	-87.27	black tern	1
8/15/97 7:21	29.54	-87.27	black tern	3
8/15/97 7:23	29.54	-87.27	black tern	1
8/15/97 7:25	29.54	-87.26	black tern	10
8/15/97 7:28	29.55	-87.26	black tern	5
8/15/97 7:31	29.55	-87.25	black tern	2
8/15/97 7:32	29.55	-87.25	black tern	1
8/15/97 7:32	29.55	-87.25	black tern	2
8/15/97 7:32	29.55	-87.25	black tern	1
8/15/97 7:35	29.56	-87.24	black tern	1

8/15/97 7:39	29.56	-87.23	black tern	5
8/15/97 7:40	29.56	-87.23	black tern	1
8/15/97 7:41	29.57	-87.23	black tern	2
8/15/97 7:42	29.57	-87.23	black tern	1
8/15/97 7:44	29.57	-87.22	black tern	1
8/15/97 7:44	29.57	-87.22	black tern	3
8/15/97 7:47	29.57	-87.21	black tern	1
8/15/97 7:49	29.57	-87.21	black tern	1
8/15/97 7:51	29.57	-87.20	black tern	1
8/15/97 7:51	29.57	-87.20	black tern	1
8/15/97 7:51	29.57	-87.20	black tern	1
8/15/97 7:53	29.57	-87.20	black tern	1
8/15/97 7:59	29.57	-87.18	black tern	1
8/15/97 8:05	29.57	-87.17	black tern	1
8/15/97 8:10	29.57	-87.18	black tern	1
8/15/97 8:12	29.57	-87.18	black tern	1
8/15/97 8:16	29.58	-87.18	black tern	1
8/15/97 8:18	29.58	-87.18	black tern	1
8/15/97 8:18	29.58	-87.18	black tern	1
8/15/97 8:23	29.59	-87.18	black tern	1
8/15/97 8:26	29.60	-87.17	black tern	42
8/15/97 8:30	29.61	-87.17	black tern	1
8/15/97 8:33	29.62	-87.17	black tern	1
8/15/97 8:43	29.64	-87.16	black tern	1
8/15/97 8:46	29.64	-87.15	black tern	4
8/15/97 8:51	29.65	-87.15	black tern	1
8/15/97 8:52	29.65	-87.15	black tern	1
8/15/97 8:53	29.66	-87.15	black tern	1
8/15/97 9:02	29.67	-87.14	black tern	2
8/15/97 9:05	29.68	-87.14	black tern	1
8/15/97 9:06	29.68	-87.14	black tern	1
8/15/97 9:09	29.69	-87.13	laughing gull	1
8/15/97 9:10	29.69	-87.13	black tern	1
8/15/97 9:12	29.69	-87.13	black tern	5
8/15/97 9:15	29.70	-87.13	black tern	1
8/15/97 9:16	29.70	-87.13	black tern	1
8/15/97 9:17	29.70	-87.13	black tern	1
8/15/97 9:19	29.71	-87.12	black tern	1
8/15/97 9:19	29.71	-87.12	black tern	1
8/15/97 9:20	29.71	-87.12	black tern	3
8/15/97 9:22	29.71	-87.12	black tern	16
8/15/97 9:30	29.73	-87.12	black tern	10

8/15/97 9:30	29.73	-87.12	black tern	3
8/15/97 9:30	29.73	-87.12	laughing gull	1
8/15/97 9:32	29.73	-87.12	black tern	1
8/15/97 9:37	29.74	-87.11	black tern	1
8/15/97 9:37	29.74	-87.11	black tern	2
8/15/97 9:39	29.75	-87.11	black tern	3
8/15/97 9:40	29.75	-87.11	black tern	4
8/15/97 9:40	29.75	-87.11	black tern	flock
8/15/97 9:41	29.75	-87.11	black tern	1
8/15/97 9:42	29.75	-87.11	black tern	1
8/15/97 9:43	29.75	-87.11	black tern	1
8/15/97 9:44	29.75	-87.11	black tern	1
8/15/97 9:44	29.75	-87.11	black tern	1
8/15/97 9:44	29.75	-87.11	black tern	1
8/15/97 9:44	29.75	-87.11	sandwich tern	2
8/15/97 9:46	29.76	-87.11	black tern	1
8/15/97 9:46	29.76	-87.11	black tern	4
8/15/97 9:46	29.76	-87.11	black tern	1
8/15/97 9:46	29.76	-87.11	black tern	2
8/15/97 9:46	29.76	-87.11	black tern	1
8/15/97 9:50	29.77	-87.11	black tern	7
8/15/97 9:52	29.77	-87.11	black tern	16
8/15/97 9:54	29.77	-87.10	black tern	11
8/15/97 9:55	29.78	-87.10	black tern	1
8/15/97 9:56	29.78	-87.10	black tern	22
8/15/97 9:59	29.79	-87.10	black tern	4
8/15/97 10:00	29.79	-87.10	black tern	5
8/15/97 10:00	29.79	-87.10	black tern	2
8/15/97 10:01	29.79	-87.10	black tern	5
8/15/97 10:01	29.79	-87.10	black tern	3
8/15/97 10:01	29.79	-87.10	black tern	3
8/15/97 10:02	29.79	-87.10	black tern	5
8/15/97 10:02	29.79	-87.10	black tern	5
8/15/97 10:02	29.79	-87.10	black tern	5
8/15/97 10:03	29.79	-87.10	black tern	1
8/15/97 10:03	29.79	-87.10	black tern	3
8/15/97 10:05	29.80	-87.10	black tern	1
8/15/97 10:06	29.80	-87.10	black tern	5
8/15/97 10:07	29.80	-87.10	black tern	1
8/15/97 10:07	29.80	-87.10	black tern	1
8/15/97 10:09	29.81	-87.10	black tern	1
8/15/97 10:10	29.81	-87.10	black tern	2

8/15/97 10:10	29.81	-87.10	black tern	3
8/15/97 10:11	29.81	-87.09	black tern	1
8/15/97 10:12	29.81	-87.09	black tern	2
8/15/97 10:12	29.81	-87.09	black tern	6
8/15/97 10:16	29.82	-87.09	black tern	2
8/15/97 10:18	29.82	-87.09	black tern	3
8/15/97 10:19	29.82	-87.09	arctic or common tern	1
8/15/97 10:20	29.82	-87.09	black tern	1
8/15/97 10:20	29.82	-87.09	black tern	1
8/15/97 10:21	29.83	-87.09	black tern	2
8/15/97 10:21	29.83	-87.09	black tern	1
8/15/97 10:23	29.83	-87.09	black tern	3
8/15/97 10:24	29.83	-87.09	black tern	1
8/15/97 10:28	29.84	-87.08	black tern	1
8/15/97 10:28	29.84	-87.08	black tern	1
8/15/97 10:34	29.85	-87.08	black tern	3
8/15/97 10:35	29.86	-87.08	black tern	1
8/15/97 10:37	29.86	-87.08	black tern	35
8/15/97 10:38	29.86	-87.08	black tern	2
8/15/97 10:39	29.87	-87.08	black tern	2
8/15/97 10:40	29.87	-87.08	black tern	1
8/15/97 10:43	29.87	-87.07	arctic or common tern	1
8/15/97 10:43	29.87	-87.07	black tern	2
8/15/97 10:44	29.87	-87.07	sandwich tern	1
8/15/97 10:47	29.88	-87.07	black tern	1
8/15/97 11:03	29.92	-87.06	black tern	1
8/15/97 11:05	29.92	-87.06	black tern	2
8/15/97 11:10	29.93	-87.06	black tern	1
8/15/97 11:22	29.96	-87.05	laughing gull	1
8/15/97 11:25	29.96	-87.05	black tern	5
8/15/97 11:28	29.97	-87.05	black tern	1
8/15/97 11:40	29.99	-87.04	black tern	2
8/15/97 11:43	30.00	-87.04	laughing gull	1
8/15/97 11:45	30.01	-87.04	black tern	1
8/15/97 11:45	30.01	-87.04	black tern	2
8/15/97 11:45	30.01	-87.04	black tern	2
8/15/97 11:56	30.03	-87.03	black tern	1
8/15/97 11:57	30.03	-87.03	black tern	2
8/15/97 12:03	30.05	-87.03	black tern	1
8/15/97 12:07	30.05	-87.03	black tern	1
8/15/97 12:13	30.07	-87.02	black tern	1
8/15/97 12:55	30.15	-86.99	black tern	1

8/15/97 13:02	30.16	-86.98	laughing gull	2
8/15/97 13:14	30.19	-86.97	black tern	2
8/15/97 13:14	30.19	-86.97	black tern	2
8/15/97 13:32	30.19	-86.93	black tern	1
8/15/97 13:39	30.19	-86.91	laughing gull	1
8/15/97 14:13	30.20	-86.83	black tern	2
8/15/97 14:28	30.21	-86.78	black tern	2
8/15/97 14:43	30.21	-86.75	tern sp.	1
8/15/97 14:53	30.21	-86.72	Audubon's shearwater	1
8/15/97 15:26	30.21	-86.63	black tern	1
8/15/97 15:32	30.21	-86.61	Audubon's shearwater	1
8/15/97 16:06	30.21	-86.52	storm-petrel sp.	1
8/15/97 16:25	30.21	-86.48	black tern	1
8/15/97 16:42	30.21	-86.43	tern sp.	1
8/16/97 6:35	29.89	-86.44	royal tern	1
8/16/97 6:37	29.89	-86.44	black tern	1
8/16/97 6:46	29.89	-86.44	black tern	4
8/16/97 6:49	29.89	-86.44	leach's storm-petrel	1
8/16/97 6:49	29.89	-86.44	shearwater sp.	1
8/16/97 6:56	29.89	-86.44	black tern	1
8/16/97 6:58	29.89	-86.44	black tern	18
8/16/97 7:03	29.89	-86.44	storm-petrel sp.	1
8/16/97 7:14	29.89	-86.44	black tern	3
8/16/97 7:16	29.89	-86.44	black tern	1
8/16/97 7:16	29.89	-86.44	black tern	1
8/16/97 7:20	29.89	-86.44	black tern	1
8/16/97 7:20	29.89	-86.44	black tern	4
8/16/97 7:24	29.89	-86.44	black tern	8
8/16/97 7:27	29.89	-86.44	black tern	2
8/16/97 7:29	29.89	-86.44	black tern	3
8/16/97 7:33	29.89	-86.44	black tern	2
8/16/97 7:37	29.89	-86.44	black tern	3
8/16/97 7:52	29.89	-86.44	black tern	1
8/16/97 8:27	29.89	-86.44	storm-petrel sp.	1
8/16/97 8:47	29.89	-86.44	black tern	3
8/16/97 9:17	29.89	-86.44	tern sp.	1
8/16/97 9:20	29.89	-86.44	black tern	1
8/16/97 9:48	29.89	-86.44	black tern	2
8/16/97 9:53	29.89	-86.44	black tern	1
8/16/97 9:58	29.89	-86.44	black tern	1
8/16/97 10:26	29.89	-86.44	black tern	8
8/16/97 10:28	29.89	-86.44	black tern	1

8/16/97 10:30	29.89	-86.44	black tern	4
8/16/97 10:32	29.89	-86.44	black tern	1
8/16/97 11:41	29.89	-86.44	black tern	10
8/16/97 13:11	29.89	-86.44	greater shearwater	1
8/16/97 15:50	29.86	-86.68	black tern	1
8/16/97 17:06	29.70	-86.69	tern sp.	2
8/16/97 17:06	29.70	-86.69	tern sp.	3
8/16/97 18:07	29.56	-86.69	black tern	2
8/17/97 14:37	28.30	-86.41	band-rumped storm-petrel	1
8/17/97 15:16	28.37	-86.35	cory's shearwater	1
8/17/97 16:27	28.50	-86.25	black tern	1
8/17/97 16:39	28.53	-86.24	black tern	1
8/17/97 16:52	28.55	-86.22	bridled or sooty tern	6
8/17/97 16:52	28.55	-86.22	tern sp.	8
8/18/97 6:25	28.49	-85.58	shearwater sp.	1
8/18/97 6:34	28.47	-85.59	black tern	3
8/18/97 6:49	28.44	-85.60	Audubon's shearwater	1
8/18/97 6:54	28.43	-85.61	sooty tern	1
8/18/97 6:57	28.42	-85.61	tern sp.	3
8/18/97 7:00	28.42	-85.61	bridled tern	2
8/18/97 7:15	28.38	-85.63	black tern	1
8/18/97 7:26	28.36	-85.64	sooty tern	1
8/18/97 7:35	28.35	-85.65	sooty tern	2
8/18/97 7:43	28.35	-85.67	sooty tern	1
8/18/97 7:58	28.34	-85.66	sooty tern	1
8/18/97 8:03	28.32	-85.67	bridled or sooty tern	2
8/18/97 8:29	28.27	-85.69	Audubon's shearwater	1
8/18/97 8:34	28.26	-85.70	tern sp.	1
8/18/97 8:42	28.25	-85.71	Audubon's shearwater	1
8/18/97 8:42	28.25	-85.71	black tern	3
8/18/97 8:42	28.25	-85.71	storm-petrel sp.	1
8/18/97 8:45	28.24	-85.71	Audubon's shearwater	1
8/18/97 8:45	28.24	-85.71	bridled or sooty tern	2
8/18/97 8:55	28.22	-85.72	sooty tern	1
8/18/97 9:07	28.20	-85.73	Audubon's shearwater	1
8/18/97 9:07	28.20	-85.73	cory's shearwater	1
8/18/97 9:08	28.20	-85.73	sooty tern	1
8/18/97 9:11	28.19	-85.74	Audubon's shearwater	2
8/18/97 9:18	28.18	-85.74	Audubon's shearwater	5
8/18/97 9:18	28.18	-85.74	Audubon's shearwater	8
8/18/97 9:18	28.18	-85.74	bridled or sooty tern	1
8/18/97 9:20	28.17	-85.74	sooty tern	1

8/18/97 9:22	28.17	-85.74	bridled tern	1
8/18/97 9:29	28.15	-85.75	bridled tern	4
8/18/97 9:32	28.15	-85.75	bridled tern	1
8/18/97 9:32	28.15	-85.75	bridled tern	2
8/18/97 9:33	28.14	-85.75	black tern	1
8/18/97 9:33	28.14	-85.75	bridled tern	4
8/18/97 9:34	28.14	-85.75	black tern	1
8/18/97 9:43	28.12	-85.75	arctic or common tern	1
8/18/97 9:44	28.12	-85.75	bridled tern	1
8/18/97 9:54	28.11	-85.76	bridled tern	1
8/18/97 9:57	28.11	-85.77	Audubon's shearwater	12
8/18/97 9:58	28.11	-85.77	tern sp.	1
8/18/97 10:03	28.12	-85.78	greater shearwater	1
8/18/97 11:27	28.12	-85.82	sooty tern	1
8/18/97 11:29	28.11	-85.82	pomarine jaeger	1
8/18/97 11:35	28.10	-85.83	shearwater sp.	1
8/18/97 11:37	28.10	-85.83	bridled or sooty tern	1
8/18/97 12:16	28.07	-85.82	Audubon's shearwater	1
8/18/97 12:22	28.05	-85.83	bridled tern	1
8/18/97 14:39	27.85	-85.90	band-rumped storm-petrel	1
8/18/97 16:03	27.78	-85.80	band-rumped storm-petrel	1
8/18/97 16:03	27.78	-85.80	band-rumped storm-petrel	1
8/18/97 16:07	27.77	-85.79	bridled tern	1
8/18/97 16:16	27.76	-85.78	band-rumped storm-petrel	2
8/18/97 16:56	27.70	-85.70	sooty tern	1
8/18/97 17:01	27.69	-85.69	band-rumped storm-petrel	1
8/18/97 17:25	27.69	-85.64	band-rumped storm-petrel	3
8/18/97 17:33	27.70	-85.62	band-rumped storm-petrel	3
8/19/97 6:27	27.77	-84.96	sooty tern	1
8/19/97 6:53	27.78	-85.00	sooty tern	1
8/19/97 7:33	27.72	-85.07	Audubon's shearwater	1
8/19/97 7:41	27.71	-85.08	sooty tern	3
8/19/97 7:59	27.68	-85.11	phalarope sp.	4
8/19/97 8:29	27.63	-85.16	gull sp.	2
8/19/97 8:39	27.61	-85.17	black tern	2
8/19/97 8:56	27.58	-85.18	storm-petrel sp.	1
8/19/97 9:13	27.55	-85.20	Audubon's shearwater	1
8/19/97 9:13	27.55	-85.20	black tern	3
8/19/97 9:13	27.55	-85.20	sooty tern	5
8/19/97 9:35	27.51	-85.23	band-rumped storm-petrel	4
8/19/97 9:41	27.50	-85.24	band-rumped storm-petrel	3
8/19/97 9:58	27.47	-85.26	Audubon's shearwater	1

8/19/97 9:58	27.47	-85.26	band-rumped storm-petrel	1
8/19/97 9:59	27.47	-85.26	laughing gull	1
8/19/97 10:00	27.47	-85.26	common tern	1
8/19/97 10:05	27.46	-85.26	black tern	1
8/19/97 10:06	27.46	-85.26	sooty tern	1
8/19/97 11:01	27.44	-85.37	black tern	1
8/19/97 11:40	27.42	-85.46	laughing gull	1
8/19/97 11:46	27.41	-85.46	shearwater sp.	1
8/19/97 11:46	27.41	-85.46	storm-petrel sp.	1
8/19/97 12:18	27.42	-85.46	band-rumped storm-petrel	1
8/19/97 12:23	27.42	-85.47	band-rumped storm-petrel	2
8/19/97 12:27	27.42	-85.47	Audubon's shearwater	1
8/19/97 16:06	27.39	-85.94	band-rumped storm-petrel	1
8/19/97 16:09	27.39	-85.95	band-rumped storm-petrel	1
8/19/97 16:15	27.39	-85.97	band-rumped storm-petrel	1
8/19/97 16:28	27.39	-86.00	black tern	2
8/19/97 16:28	27.39	-86.00	bridled tern	1
8/19/97 16:37	27.39	-86.02	bridled tern	1
8/19/97 16:55	27.39	-86.07	Audubon's shearwater	2
8/19/97 16:55	27.39	-86.07	bridled tern	2
8/19/97 16:55	27.39	-86.07	pomarine jaeger	1
8/19/97 16:55	27.39	-86.07	sooty tern	1
8/19/97 18:10	27.45	-86.19	shearwater sp.	1
8/19/97 18:14	27.45	-86.20	sooty tern	1
8/19/97 18:16	27.45	-86.20	sooty tern	1
8/19/97 18:31	27.46	-86.23	storm-petrel sp.	1
8/19/97 18:34	27.47	-86.23	band-rumped storm-petrel	1
8/19/97 18:42	27.48	-86.24	sandwich tern	1
8/19/97 18:48	27.49	-86.24	band-rumped storm-petrel	1
8/20/97 6:15	27.45	-87.04	Audubon's shearwater	1
8/20/97 6:30	27.45	-87.03	band-rumped storm-petrel	7
8/20/97 6:31	27.45	-87.03	Audubon's shearwater	1
8/20/97 6:35	27.45	-87.02	sooty tern	1
8/20/97 6:36	27.45	-87.02	bridled or sooty tern	1
8/20/97 6:40	27.45	-87.02	band-rumped storm-petrel	1
8/20/97 6:53	27.43	-87.00	sooty tern	1
8/20/97 7:31	27.39	-86.99	Audubon's shearwater	1
8/20/97 7:33	27.39	-86.99	laughing gull	1
8/20/97 7:39	27.38	-86.99	band-rumped storm-petrel	1
8/20/97 7:39	27.38	-86.99	bridled tern	1
8/20/97 7:55	27.38	-87.00	band-rumped storm-petrel	2
8/20/97 8:05	27.39	-87.02	band-rumped storm-petrel	1

8/20/97 8:08	27.39	-87.02	band-rumped storm-petrel	3
8/20/97 8:12	27.40	-87.03	Audubon's shearwater	1
8/20/97 8:23	27.41	-87.05	band-rumped storm-petrel	1
8/20/97 8:26	27.41	-87.05	bridled or sooty tern	1
8/20/97 8:28	27.41	-87.05	bridled or sooty tern	1
8/20/97 8:37	27.41	-87.06	sooty tern	1
8/20/97 8:40	27.42	-87.06	band-rumped storm-petrel	18
8/20/97 8:44	27.42	-87.07	band-rumped storm-petrel	6
8/20/97 8:45	27.42	-87.07	band-rumped storm-petrel	5
8/20/97 8:46	27.42	-87.07	band-rumped storm-petrel	1
8/20/97 8:48	27.42	-87.08	band-rumped storm-petrel	2
8/20/97 8:51	27.43	-87.08	band-rumped storm-petrel	1
8/20/97 8:52	27.43	-87.08	band-rumped storm-petrel	1
8/20/97 8:54	27.43	-87.09	sooty tern	1
8/20/97 8:57	27.44	-87.10	bridled tern	1
8/20/97 9:05	27.45	-87.11	Audubon's shearwater	1
8/20/97 9:06	27.45	-87.11	band-rumped storm-petrel	1
8/20/97 9:10	27.45	-87.12	band-rumped storm-petrel	1
8/20/97 9:26	27.47	-87.14	band-rumped storm-petrel	2
8/20/97 9:30	27.47	-87.15	Audubon's shearwater	2
8/20/97 9:38	27.47	-87.16	band-rumped storm-petrel	3
8/20/97 9:40	27.47	-87.17	tern sp.	1
8/20/97 9:42	27.47	-87.17	bridled or sooty tern	2
8/20/97 9:50	27.48	-87.18	storm-petrel sp.	3
8/20/97 9:57	27.49	-87.18	storm-petrel sp.	1
8/20/97 10:04	27.50	-87.19	bridled or sooty tern	1
8/20/97 10:05	27.50	-87.19	band-rumped storm-petrel	1
8/20/97 10:09	27.51	-87.20	Audubon's shearwater	1
8/20/97 10:28	27.53	-87.23	bridled or sooty tern	3
8/20/97 10:28	27.53	-87.23	sooty tern	2
8/20/97 10:28	27.53	-87.23	sooty tern	1
8/20/97 10:32	27.53	-87.24	band-rumped storm-petrel	4
8/20/97 10:32	27.53	-87.24	bridled or sooty tern	17
8/20/97 10:33	27.54	-87.24	bridled tern	1
8/20/97 10:35	27.54	-87.25	sooty tern	6
8/20/97 10:35	27.54	-87.25	sooty tern	1
8/20/97 10:59	27.55	-87.29	band-rumped storm-petrel	1
8/20/97 11:04	27.56	-87.30	band-rumped storm-petrel	1
8/20/97 11:20	27.54	-87.31	band-rumped storm-petrel	1
8/20/97 11:24	27.53	-87.32	red-billed tropicbird	1
8/20/97 11:33	27.52	-87.33	band-rumped storm-petrel	2
8/20/97 11:33	27.52	-87.33	band-rumped storm-petrel	3

8/20/97 11:44	27.52	-87.34	storm-petrel sp.	3
8/20/97 12:50	27.60	-87.46	storm-petrel sp.	2
8/20/97 12:58	27.61	-87.47	black tern	2
8/20/97 13:05	27.62	-87.49	storm-petrel sp.	3
8/20/97 13:12	27.62	-87.50	phalarope sp.	1
8/20/97 13:15	27.63	-87.50	sooty tern	2
8/20/97 13:17	27.63	-87.51	storm-petrel sp.	2
8/20/97 13:22	27.64	-87.51	tern sp.	1
8/20/97 13:57	27.69	-87.56	bridled tern	1
8/20/97 14:11	27.71	-87.58	bridled tern	1
8/20/97 14:29	27.74	-87.61	bridled or sooty tern	2
8/20/97 14:58	27.77	-87.65	band-rumped storm-petrel	2
8/20/97 14:58	27.77	-87.65	bridled or sooty tern	3
8/20/97 15:46	27.79	-87.73	sooty tern	1
8/20/97 16:03	27.82	-87.74	bridled tern	1
8/20/97 16:51	27.91	-87.78	shearwater sp.	2
8/20/97 17:05	27.94	-87.80	Audubon's shearwater	1
8/20/97 17:23	27.96	-87.78	Audubon's shearwater	1
8/20/97 17:55	27.98	-87.75	shearwater sp.	1
8/20/97 18:12	28.01	-87.77	bridled tern	3
8/20/97 18:19	28.03	-87.78	Audubon's shearwater	1
8/20/97 18:35	28.05	-87.80	bridled or sooty tern	1
8/20/97 18:37	28.06	-87.80	bridled or sooty tern	1
8/20/97 19:03	28.09	-87.85	shearwater sp.	1
8/21/97 6:28	28.75	-88.67	Audubon's shearwater	1
8/21/97 6:28	28.75	-88.67	sooty tern	1
8/21/97 6:57	28.74	-88.68	band-rumped storm-petrel	1
8/21/97 7:40	28.75	-88.77	tern sp.	2
8/21/97 7:42	28.75	-88.77	sooty tern	3
8/21/97 7:43	28.75	-88.77	bridled or sooty tern	2
8/21/97 7:55	28.75	-88.80	shearwater sp.	1
8/21/97 7:56	28.75	-88.80	Audubon's shearwater	1
8/21/97 7:59	28.75	-88.80	Audubon's shearwater	1
8/21/97 8:01	28.75	-88.81	Audubon's shearwater	1
8/21/97 8:01	28.75	-88.81	bridled tern	2
8/21/97 8:15	28.75	-88.84	bridled tern	2
8/21/97 8:15	28.75	-88.84	pomarine jaeger	1
8/21/97 8:15	28.75	-88.84	sooty tern	2
8/21/97 8:15	28.75	-88.84	sooty tern	10
8/21/97 8:17	28.75	-88.84	laughing gull	1
8/21/97 8:24	28.74	-88.85	sooty tern	1
8/21/97 8:28	28.73	-88.86	Audubon's shearwater	1

8/21/97 8:33	28.73	-88.86	bridled or sooty tern	2
8/21/97 8:47	28.70	-88.89	storm-petrel sp.	3
8/21/97 8:53	28.69	-88.90	storm-petrel sp.	1
8/21/97 9:01	28.67	-88.92	Audubon's shearwater	1
8/21/97 9:05	28.67	-88.92	band-rumped storm-petrel	2
8/21/97 9:21	28.65	-88.92	bridled or sooty tern	1
8/21/97 9:30	28.64	-88.92	Audubon's shearwater	1
8/21/97 9:37	28.62	-88.92	Audubon's shearwater	1
8/21/97 9:47	28.59	-88.92	Audubon's shearwater	2
8/21/97 9:48	28.59	-88.92	Audubon's shearwater	1
8/21/97 9:49	28.59	-88.92	Audubon's shearwater	1
8/21/97 9:51	28.58	-88.92	Audubon's shearwater	2
8/21/97 9:52	28.58	-88.92	Audubon's shearwater	2
8/21/97 9:52	28.58	-88.92	Audubon's shearwater	1
8/21/97 9:56	28.57	-88.92	Audubon's shearwater	2
8/21/97 9:58	28.57	-88.92	Audubon's shearwater	1
8/21/97 9:59	28.57	-88.92	Audubon's shearwater	1
8/21/97 10:10	28.55	-88.92	Audubon's shearwater	1
8/21/97 10:12	28.55	-88.92	Audubon's shearwater	1
8/21/97 10:13	28.55	-88.92	band-rumped storm-petrel	4
8/21/97 10:23	28.52	-88.92	Audubon's shearwater	1
8/21/97 10:44	28.47	-88.93	bridled or sooty tern	1
8/21/97 11:02	28.43	-88.92	Audubon's shearwater	2
8/21/97 11:07	28.41	-88.92	band-rumped storm-petrel	2
8/21/97 11:54	28.29	-88.92	bridled or sooty tern	3
8/21/97 12:04	28.27	-88.93	pomarine jaeger	1
8/21/97 12:26	28.27	-88.96	bridled tern	1
8/21/97 12:50	28.27	-89.00	Audubon's shearwater	1
8/21/97 12:59	28.27	-89.01	shearwater sp.	1
8/21/97 13:06	28.27	-89.02	sooty tern	1
8/21/97 13:06	28.27	-89.02	sooty tern	1
8/21/97 13:35	28.28	-89.10	storm-petrel sp.	2
8/21/97 13:42	28.29	-89.12	black tern	5
8/21/97 13:57	28.30	-89.16	Audubon's shearwater	1
8/21/97 14:09	28.31	-89.19	pomarine jaeger	1
8/21/97 14:14	28.31	-89.20	Audubon's shearwater	1
8/21/97 14:29	28.33	-89.24	Audubon's shearwater	1
8/21/97 16:08	28.41	-89.50	sooty tern	1
8/21/97 17:13	28.44	-89.69	bridled tern	18
8/21/97 17:45	28.47	-89.78	bridled or sooty tern	3
8/21/97 18:26	28.47	-89.90	laughing gull	1
8/21/97 18:38	28.47	-89.92	bridled or sooty tern	1

8/22/97 6:47	28.78	-92.18	sandwich tern	1
8/22/97 6:53	28.79	-92.20	tern sp.	1
8/22/97 7:02	28.79	-92.22	black tern	1
8/22/97 7:15	28.80	-92.27	black tern	4
8/22/97 7:54	28.82	-92.38	black tern	1
8/22/97 8:03	28.83	-92.41	black tern	1
8/22/97 8:09	28.83	-92.43	common tern	2
8/22/97 8:15	28.84	-92.45	frigatebird sp.	1
8/22/97 8:23	28.84	-92.47	tern sp.	1
8/22/97 8:33	28.85	-92.50	frigatebird sp.	1
8/22/97 8:34	28.85	-92.50	royal tern	1
8/22/97 8:37	28.85	-92.51	black tern	4
8/22/97 8:40	28.85	-92.51	royal tern	1
8/22/97 8:43	28.86	-92.53	black tern	1
8/22/97 9:30	28.88	-92.67	black tern	7
8/22/97 9:47	28.89	-92.73	Wilson's storm-petrel	1
8/22/97 9:58	28.90	-92.76	black tern	3
8/22/97 9:59	28.90	-92.76	black tern	1
8/22/97 10:13	28.91	-92.80	black tern	1
8/22/97 10:33	28.92	-92.86	sandwich tern	1
8/22/97 10:42	28.93	-92.89	black tern	2
8/22/97 10:50	28.93	-92.91	black tern	1
8/22/97 11:37	28.96	-93.06	black tern	1
8/22/97 11:53	28.97	-93.11	black tern	1

The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

USGS
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The Biological Resources Division Mission

The mission of the Biological Resources Division (BRD) of the U.S. Geological Survey (USGS) is to work with others to provide the scientific understanding and technologies needed to support the sound management and conservation of our Nation's biological resources.

The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Royalty Management Program** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.