

OCEANOGRAPHICAL OBSERVATIONS  
IN THE INDIAN OCEAN IN 1960  
H.M.A.S. *DIAMANTINA*  
Cruise Dm 2/60

OCEANOGRAPHICAL CRUISE REPORT  
NO. 3

DIVISION OF FISHERIES AND OCEANOGRAPHY  
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL  
RESEARCH ORGANIZATION, AUSTRALIA 1963

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MELBOURNE, 1963.

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# OCEANOGRAPHICAL CRUISE REPORT

No. 3

Oceanographical Observations in the Indian Ocean in 1960

H.M.A.S. DIAMANTINA

Cruise Dm 2/60

July 11 - September 26, 1960

## I. INTRODUCTION

This volume gives the data collected during Cruise Dm 2/60, when H.M.A.S. Diamantina, Royal Australian Navy frigate, was operating in the Indian Ocean from July 11 to September 26, 1960.

### Objectives

1. To study the effect of latitude on diurnal variation of rates of primary production.
2. To extend the existing network of oceanographical stations to the westward, particularly in the poorly documented eastern equatorial region of the Indian Ocean.
3. To determine the magnitude of upwelling off the north-west coast of Australia, and the effects of such upwelling on nutrients and primary production in the region.
4. To examine the characteristics of water masses in the Arafura and Timor Seas.
5. To investigate the contributions of the south-east Asian seas to the hydrological and productivity structures of the equatorial currents.

### Itinerary

The cruise commenced at Fremantle on July 11, 1960, occupied Scov - Unesco Reference Station 1, proceeded to Singapore, departed Singapore on August 2, went north west around the northern tip of Sumatra and worked a series of stations to Djakarta. From Djakarta, stations were worked to Thursday I., the ship visited Port Moresby, worked a series of stations across the Arafura and Timor Seas and arrived in Darwin on September 6. Between Darwin and Fremantle several lines of stations were worked. The positions of all stations are shown in Figure 1.

### Scientific Personnel

H. Jitts (Cruise Leader)  
B. Newell (11/9/60 - 26/9/60)  
R. Bradley  
F. Davies (11/7/60 - 12/8/60)  
N. Dyson  
B. Scott  
J. Staniforth

Two Indonesian scientists, Mr E. Soeriaatmadja, Head of the Institute of Marine Research, and Major M. Wardiman, Chief of the Hydrographic Section, joined the cruise at Djakarta and left at Darwin.

The analyses of hydrological samples were done in the ship's laboratory by Messrs Bradley, Davies and Staniforth. The primary production measurements were made by Messrs Dyson, Jitts and Scott. The collection of zooplankton samples was made by Mr Bradley and of phytoplankton by Mr Scott. Measurements of particulate phosphate were made by Mr Newell.

The data were processed under the direction of Mr A.D. Crooks by Mrs M. Derrick, Mrs Tarbett and Misses M. Johnson, L. Lalor and E. Wanstall. The plots were prepared for publication by Mr R. Breach and Mrs B. Walters, and the master sheets were typed by Mrs D. Schmitzer.

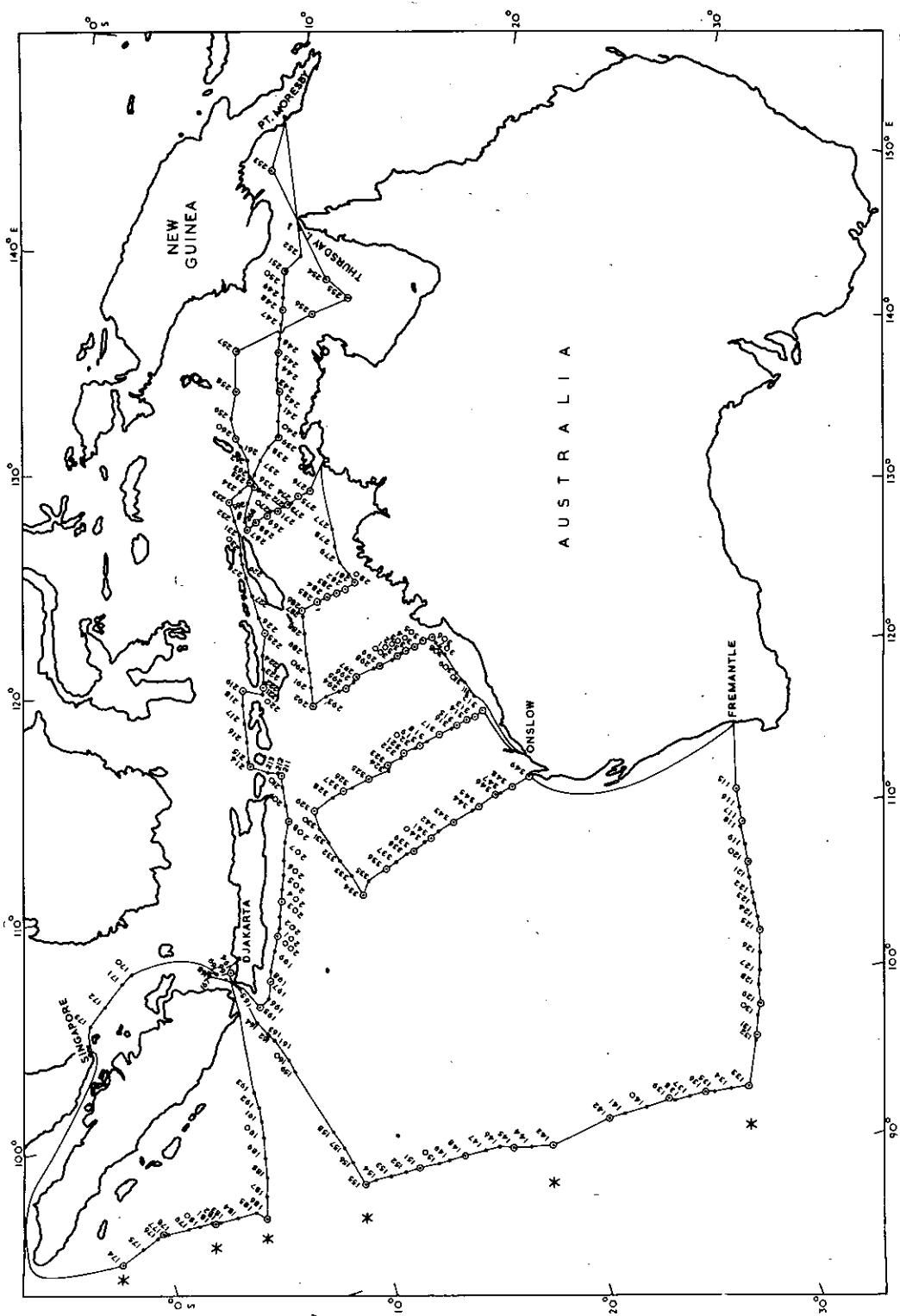


Fig. 1

## II. WORK ACCOMPLISHED

On this cruise 235 stations were worked of which 87 were deep stations; on 87 of these, hydrology samples were taken to 4000 m and the euphotic layer was sampled for primary production, phytoplankton, and pigments. Drift stations were occupied at six positions for studies of diurnal variations. Zooplankton hauls were made at 35 stations. At the other stations bathythermograms and surface samples for hydrology, phytoplankton and primary production and pigments were collected.

TABLE 1  
WORK DONE AT EACH STATION

Stn. No.	BT	Hydrology		SD	Primary Production		Pig- ments	Phyto- plankton	Zoo- plankton
		Surface	Deep		1	2		1	2
115	+	+	+		+		+		+
116	+	+				+			
117	+	+	+		+		+	+	+
118	+	+				+			+
119	+	+				+			
120	+	+	+		+		+	+	+
121	+					+			+
122	+	+							
123	+	+							
124	+								
125	+	+	+		+		+	+	+
126	+	+				+			+
127	+	+				+			+
128	+	+				+			+
129	+	+	+		+	+	+	+	+
130	+	+				+			+
131	+	+	+		+	+	+	+	+
132						+			
133	+	+	+		+		+	+	+
134	+	+				+			+
135	+	+				+			
136	+	+	+		+	+	+	+	+

Stn. No.	BT	Hydrology	SD	Primary Production		Pig- ments	Phyto- plankton			Zoo- plankton
				1	2		1	2	3	
137	+	+				+				+
138	+	+				+				+
139	+	+	+	+	+	+	+	+	+	
140	+	+								
141	+									
142	+	+	+	+		+	+	+	+	
143	+	+	+	+	+	+	+	+	+	+
144	+	+								
145	+	+	+	+		+	+	+	+	
146	+	+								
147	+	+								
148	+	+	+	+		+	+	+		
149	+	+								
150	+									
151	+	+	+	+		+	+	+		+
152	+									
153	+									
154	+	+								
155	+	+	+	+	+		+	+		+
156	+									
157	+									
158	+	+								
159	+	+								
160	+									
161	+									
162		+								+
163	+	+								+
164	+	+								+
165		+								
166		+								+
167		+								+
168		+								+
169		+								+
170		+								+
171		+								+
172		+								+
173		+								+
174	+	+	+	+	+		+	+	+	+
175	+	+				+				

Stn. No.	BT	Surface	Deep	SD	Primary Production		Pig- ments	Phyto- plankton			Zoo- plankton
					1	2		1	2	3	
176	+	+					+				
177	+	+	+	+	+		+	+	+		+
178							+				
179	+	+					+				
180	+	+					+				
181	+	+					+		+		
182	+	+	+	+	+		+	+	+		+
183							+				
184	+	+					+				
185							+				
186	+	+	+	+	+		+	+	+		+
187	+	+					+				
188	+	+					+				
189	+						+				
190	+	+					+				
191	+	+					+				
192	+	+					+				
193	+	+					+				
194	+		+	+			+	+	+		
195	+	+	+		+		+		+		
196	+	+									
197	+	+	+	+	+		+	+	+		+
198	+	+					+				
199	+	+					+				
200	+	+	+		+		+	+	+		
201	+	+					+				
202	+	+									
203	+	+	+	+	+		+	+	+		
204	+	+					+				
205	+	+					+				
206	+	+					+	+	+		
207	+	+					+				
208	+	+	+	+	+		+	+	+		+
209	+	+					+				
210	+	+					+				
211	+	+	+		+		+	+			
212	+	+					+				
213	+						+				
214	+	+	+	+	+		+	+	+		+

Stn. No.	BT	Surface	Deep	SD	Primary Production		Pig- ments	Phyto- plankton			Zoo- plankton
					1	2		1	2	3	
215		+					+				
216		+					+				
217	+	+					+				+
218	+	+					+				+
219	+	+	+	+	+	+	+	+	+		+
220		+					+				
221	+	+	+		+			+	+	+	
222	+	+					+				+
223	+	+					+				+
224	+	+									
225	+	+	+	+	+	+	+	+	+	+	+
226	+	+					+				
227	+	+					+				+
228	+	+					+				+
229		+					+				+
230	+	+					+				+
231		+					+				+
232	+	+					+				+
233	+	+	+	+	+	+	+	+	+	+	+
234	+	+					+				
235	+	+	+		+	+	+	+	+	+	
236							+				
237	+	+					+				+
238	+	+					+				
239	+	+	+		+	+	+	+	+	+	+
240	+	+					+				
241	+	+					+				+
242	+	+	+		+	+	+	+	+	+	
243	+	+					+				+
244											
245	+	+			+	+		+	+	+	
246	+						+				+
247	+						+				
248	+	+			+	+	+	+	+	+	
249	+						+				+
250	+						+				+
251	+	+			+	+	+	+	+	+	
252							+				
253	+	+			+		+	+	+	+	

Stn. No.	BT	Hydrology	SD	Primary Production		Pig- ments	Phyto- plankton			Zoo- plankton
				Surface	Deep		1	2	3	
254		+	+		+		+	+	+	
255		+	+		+		+	+	+	+
256		+	+		+		+	+	+	
257		+	+		+		+	+		
258		+	+		+		+	+	+	+
259		+					+			
260	+	+	+		+		+	+	+	
261	+	+					+			
262	+	+					+			
263	+						+			+
264	+	+	+		+		+	+	+	
265	+	+					+			
266	+	+					+			
267	+	+	+		+		+	+	+	
268	+	+	+		+		+	+		
269	+	+	+		+		+	+		+
270	+						+			
271	+	+			+		+	+	+	
272	+						+			
273	+	+			+		+	+	+	
274	+						+			
275	+	+			+		+	+	+	
276	+	+			+		+	+	+	
277	+						+			
278	+						+			
279	+						+			
280	+						+			
281	+	+	+	+	+		+	+	+	+
282	+	+			+		+	+	+	
283	+	+			+		+	+	+	
284	+	+			+		+	+	+	
285	+	+			+		+	+	+	
286	+	+	+		+		+	+	+	+
287	+									
288	+	+								
289	+	+								
290	+	+								
291	+	+								
292	+	+	+		+		+	+	+	+
293	+	+					+			

Stn. No.	BT	Hydrology		SD	Primary Production		Pig- ments	Phyto- plankton			Zoo- plankton
		Surface	Deep		1	2		1	2	3	
294							+				
295	+	+	+		+	+	+	+	+	+	
296		+					+				
297	+	+	+		+	+	+	+	+	+	
298	+	+					+				
299	+	+	+	+	+	+	+	+	+	+	+
300	+	+					+				
301	+	+			+			+	+	+	
302	+						+		+	+	
303	+	+			+			+	+	+	
304	+	+			+	+		+	+	+	
305	+	+			+	+		+	+	+	
306	+	+			+			+	+	+	+
307							+				
308		+					+				
309		+					+				
310		+					+				
311		+					+				
312	+		+		+	+		+	+	+	
313	+	+			+	+		+	+	+	
314	+	+	+	+	+	+		+	+	+	+
315	+	+	+		+			+	+	+	
316		+					+				
317	+	+	+		+	+		+	+		
318		+					+				
319	+	+	+		+	+		+	+	+	
320	+	+					+				
321	+	+	+		+	+		+	+	+	
322	+	+					+				
323	+	+	+		+	+		+	+	+	
324	+	+					+				
325	+	+	+		+	+		+	+	+	+
326	+	+					+				
327	+	+	+		+	+		+	+	+	
328	+	+					+				
329	+	+	+		+	+		+	+	+	
330	+	+					+				
331	+	+					+				
332	+	+					+				

Stn. No.	BT	Hydrology		SD	Primary Production		Pig- ments	Phyto- plankton			Zoo- plankton
		Surface	Deep		1	2		1	2	3	
333	+	+				+					
334	+	+	+		+	+	+	+	+	+	+
335	+	+				+					+
336	+	+	+		+	+	+	+	+	+	
337	+	+				+					
338	+	+				+					
339	+	+	+		+	+	+	+	+	+	
340	+					+					
341	+	+	+		+		+	+	+	+	
342	+	+				+					
343	+	+	+		+	+	+	+	+	+	
344	+	+				+					
345	+	+	+		+	+	+	+	+	+	+
346	+	+	+		+	+	+	+	+	+	+
347	+	+				+					
348	+	+	+		+		+	+	+	+	
349	+	+			+		+	+	+	+	

BT	Bathythermograms
SD	Submarine daylight measurements
Primary Production	<ol style="list-style-type: none"> <li>1. Euphotic zone</li> <li>2. Surface</li> </ol>
Phytoplankton	<ol style="list-style-type: none"> <li>1. Qualitative ) with 5 l sampler</li> <li>2. Quantitative)</li> <li>3. Under-way sampling</li> </ol>

### III. METHODS OF COLLECTION AND ANALYSIS OF SAMPLES

#### 1. Physics

Temperature.- Water temperatures were taken with deep-sea reversing thermometers: protected thermometers with a range of  $-2^{\circ}$  to  $30^{\circ}\text{C}$  and unprotected thermometers with a range of  $-2^{\circ}$  to  $30^{\circ}\text{C}$ , or  $0^{\circ}$  to  $60^{\circ}\text{C}$ . The accuracy of the temperatures is considered to be  $\pm 0.03^{\circ}\text{C}$ . The readings are recorded in degrees centigrade.

Bathythermograph.- A 900 ft bathythermograph was used at the stations indicated in Table 1. Photographs of each slide are filed at this Laboratory.

Thermometric Depth.- Depth calculations were made by the method described by Pollak (1950) and are considered accurate to  $\pm 15$  m below 1000 m and to 1% above that depth.

$\sigma_t$ .- The values were calculated from a nomograph constructed from the Table of  $\sigma_t$  given by the U.S. Hydrographic Office (1951).

Dynamic Heights.- Dynamic heights were calculated from interpolated values of temperature and salinity using Tables 6, 7, 9, given by La Fond (1951).

#### 2. Chemistry

Salinity.- Salinity was measured on board with an inductive salinometer (Brown and Hamon 1961). Duplicate samples were taken at depths below 4000 m and returned to the Cronulla laboratory where they were checked on a second inductive salinometer of the same design.

Dissolved Oxygen.- The standard Winkler method (Jacobsen, Robinson and Thompson 1950) was used with potassium iodate as the iodometric standard. Samples were collected in 275-300 ml capacity bottles and 100 ml duplicate aliquots were titrated to a starch end point. Values are given as ml/l. Duplicate titrations agreed to better than 0.03 ml/l of oxygen.

Oxygen Saturation.- The saturation value was computed from the nomograph of Richards and Corwin (1956).

Inorganic Phosphate.- The method of Atkins (1923) was used with 1 ml molybdate reagent (300 ml 10% ammonium molybdate and 100 ml 50% sulphuric acid) and 0.1 ml 1% stannous chloride diluted afresh from a 40% stock solution in hydrochloric acid, which was kept under paraffin. The reagents were automatically dispensed by a piston dispenser.

Standard phosphate solutions were made up in distilled water. Analyses were carried out in batches of 10 since air temperature never exceeded 25°C; readings were taken within 10 minutes after the reagents were added and completed within a further 10 minutes. Each batch was compared with a distilled water blank and a 0.65 $\mu$ g at./l standard in a Hilger Spekker absorptiometer using 4 cm cells and Ilford 608 filters. Each week a complete check was made using standards up to 3.25 $\mu$ g at./l. Results are given as  $\mu$ g at.P/l without any correction for salt error and are precise to  $\pm 10\%$  for values less than 0.5 $\mu$ g at./l and  $\pm 5\%$  for higher values. If it is wished to correct for salt effects, the results given should be multiplied by 1.15.

Particulate Phosphate.- 500 ml samples of sea water were filtered through 24 mm Millipore membrane filters (HA plain white). The filters, with the collected material, were returned to the Cronulla laboratory. The membranes were digested in silica crucibles with the aid of 1 ml 70% perchloric acid, 0.5 ml conc. nitric acid, (S.G. 1.40) and about 10 ml distilled water. Digestion was carried out for 15-30 min. at 100°C, until the membranes were dissolved, then the temperature was raised gradually until the digest was clear and no further fumes of perchloric acid were given off. The sides of the crucibles were washed down periodically with distilled water.

The dry digest was then redissolved in distilled water with the aid of 1 drop of perchloric acid and gentle warming. The resultant solution was transferred, with washings, to a 150 ml Erlenmeyer flask and adjusted to pH 8.4 (phenol phthalein) with dilute ammonium hydroxide. The volume was then adjusted to 50 ml. Inorganic orthophosphate present was estimated in the 50 ml sample by the above method. Prolonged boiling of digests in acid medium produced no increase in phosphorus content, hence it is assumed that no pyrophosphate was formed during digestion.

Results are expressed as mg of phosphorus present in particulate form per l of sea water.

### 3. Primary Production

Measurements of photosynthetic uptake of CO<sub>2</sub> were made by the <sup>14</sup>C method described by Jitts (1957) with the exceptions that radioactivity was measured on board with a windowless Geiger counter and the determination of <sup>14</sup>C stock activities was made by the method of Jitts and Scott (1961). As indicated in the data, incubation was done in one of the three following ways:

- (a) In a fluorescent light incubator with a constant illumination of about 1100 ft candles.
- (b) In situ by suspending the samples from a free floating buoy.
- (c) In a simulated in situ incubator using sunlight and blue glass filters (Jitts and Wyrtki, (in press))

During drift stations, diurnal variations of photosynthetic uptake of CO<sub>2</sub> were studied by making measurements on samples taken at approximately 3 hourly intervals throughout the time on station. For this, incubation was as in (a) above.

At intervals of approximately 4 hours during parts of the cruise, surface samples were taken with a plastic bucket and photosynthesis measured by the method of Doty (1956) in 250 ml pyrex bottles and with incubation in a fluorescent light incubator as described by Doty (1958) (197-205).

### 4. Pigments

Water samples were taken with a plastic sampler and filtered within one or two hours through HA Millipore filters. The filters were placed in envelopes and stored in metal desiccators over silica gel. The analyses were carried out at Cronulla using the method given by Humphrey (1960).

### 5. Phytoplankton

Samples were collected in a 5 l plastic sampler (Davis 1957) at 0, 25, 50, 75, 100, and 150 m. The samples were

transferred to polythene bottles and centrifuged immediately at 5,000 g in a continuous centrifuge (Davis 1957); each 5 l sample took 15 min. The residue in the cup was carefully washed into a graduated tube and diluted to 10 ml with sea water.

Quantitative Examination.- All counts were made with a Petroff Hausser bacterial counting chamber. If the count was more than five per field, four fields were counted; if the count was less than five per field, ten fields were counted.

Organisms with chlorophyll were counted by using a Wild BG 12 fluorescence filter, a Wild OG 1 exclusion filter, an immersed condenser, and a high-power incandescent lamp. The chloroplasts appeared bright red in the blue-violet light.

Organisms without chlorophyll were calculated as the difference between total living organisms and organisms with chlorophyll. Total living organisms were counted after adding acridine orange to give a final concentration of 2 parts per million. The living organisms gave a green fluorescence in the blue-violet light produced by the filter system described above.

Total particles were counted with ordinary illumination.

Qualitative Examination.- Twenty minute tows were made with a modified Hardy indicator. The plankton was washed off the metal grid (120 meshes/in.) with sea water, and formalin was added to give a final concentration of 2%. Identifications were made at Cronulla.

## 6. Zooplankton

The sampler used to collect zooplankton was a modified Clarke-Bumpus unit. On this cruise it was fitted with a new and more robust flowmeter designed and constructed at the Cronulla laboratory, and calibrated by flume tank. The net was nylon No. 4 mesh (62 meshes per inch).

The hauls were oblique from 200 m to the surface and 400 m to 200 m. Depths were estimated from wire angle and are only approximate. The speed of tow was 2-4 knots and the wire was recovered at about 10 metres per minute. The period of tow averaged half an hour and the volume filtered 14 m<sup>3</sup>.

Samples were weighed in the laboratory after washing in 50% alcohol to facilitate removal of external "interstitial" water (Tranter 1960).

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#### IV. DATA SHEETS AND TABLES

The data sheets for this cruise are arranged in six parts. Part 1 contains the data for hydrology deep stations, Part 2 gives the temperature and salinity data from surface sampling, Part 3 gives primary production data, Part 4 gives data on pigments, Part 5 gives phytoplankton data, and Part 6 gives quantitative zooplankton data.

Explanations of the headings used in the data sheets are given at the beginning of each part.

Short vertical lines below certain headings indicate the positions of decimal points.

DATA

PART 1

HYDROLOGY

DEEP STATIONS

EXPLANATION OF HEADINGS

Part 1      Hydrology - Deep Stations

SHIP      The figures 11 are used to designate Diamantina.

CRUISE    Cruise numbers are allotted each year beginning with 1 for the first cruise.

STATION   Stations are numbered consecutively for each ship for each year.

TIME      Time at the beginning of the first cast is given in Zone Time. The letter following the time gives the code for the time zone (Table 2).

TABLE 2

CODE FOR TIME ZONES

Longitude Exceeding	Up to but not exceeding	Time Zone (hrs)	Code
07°30'E	- 22°30'E	-1	A
22°30'E	- 37°30'E	-2	B
37°30'E	- 52°30'E	-3	C
52°30'E	- 67°30'E	-4	D
67°30'E	- 82°30'E	-5	E
82°30'E	- 97°30'E	-6	F
97°30'E	- 112°30'E	-7	G
112°30'E	- 127°30'E	-8	H
127°30'E	- 142°30'E	-9	I
142°30'E	- 157°30'E	-10	K
157°30'E	- 172°30'E	-11	L
172°30'E	- 180°	-12	M
180°	- 172°30'W	+12	Y
172°30'W	- 157°30'W	+11	X
157°30'W	- 142°30'W	+10	W
142°30'W	- 127°30'W	+9	V
127°30'W	- 112°30'W	+8	U
112°30'W	- 97°30'W	+7	T
97°30'W	- 82°30'W	+6	S
82°30'W	- 67°30'W	+5	R
67°30'W	- 52°30'W	+4	Q
52°30'W	- 37°30'W	+3	P
37°30'W	- 22°30'W	+2	O
22°30'W	- 07°30'W	+1	N
07°30'W	- 07°30'E	0	Z

LATITUDE	LONGITUDE	The position of each station is given in degrees and minutes.
SONIC DEPTH		Given in m, measured at standard sound velocity of 800 fm (1463 m) per second.
MAX. SAMP. DEPTH		Maximum sampling depth is given in 100 m units.
AIR TEMP. WET DRY		Air temperatures are recorded from wet and dry bulb thermometers in centigrade degrees to one decimal place.
WIND DIR. SPEED		Wind direction and speed are coded using Tables 8 and 9 in U.S. Hydrogr. Office (1955).
ANEM. HEIGHT		The average height of the anemometer above sea level is given in metres.
CLOUD TYPE AMOUNT		Cloud type and amount are coded using Tables 2 and 3 in U.S. Hydrogr. Office (1955).
VIS.		Visibility is coded using Table 4 in U.S. Hydrogr. Office (1955).
SEA DIR. AMOUNT		Sea direction and amount are coded using Tables 5 and 8 in U.S. Hydrogr. Office (1955).
SWELL DIR. AMOUNT		Sea swell direction and amount are coded using Tables 6 and 8 in U.S. Hydrogr. Office (1955).
ATMOS. PRESSURE		Atmospheric pressure is coded. The reading in millibars has the figure for 900 or 1000 omitted, so that 999.4 millibars is recorded as 994 and 1013.4 as 134.
WIRE ANGLES CAST 1 CAST 2		Measured at the surface and expressed in degrees for each cast. No more than two wire angles are recorded; if there is a third cast, the shallow cast angle is neglected.

CAST	The cast numbers (corresponding to the wire angles) are shown.
DEPTH	Actual sampling depth given in metres, a blank indicates 0 metres.
TEMP.	Sea temperatures are recorded in degrees centigrade, to 2 decimal places.
S%	Salinities are recorded in parts per thousand, to 3 decimal places.
$\sigma_t$	<u>Sigma-t</u> recorded to 3 decimal places.
O <sub>2</sub>	Oxygen is recorded in ml/l to 2 decimal places. A blank indicates that sample was lost or not analysed.
O <sub>2</sub> % Sat.	Oxygen percentage saturation. A blank indicates that sample was not analysed.
INORG. P	Inorganic phosphate values are given in $\mu\text{g at./l}$ to 2 decimal places. A blank indicates that sample was lost or not analysed.
PARTIC. P	Particulate phosphate micrograms/l recorded as micrograms of phosphorus present in the particulate form.
DOUBTFUL	A figure in this column indicates that the values for certain properties are doubtful or have been interpolated. The properties are designated by the following numbers:- 1. temperature, 2. salinity, 3. temperature and salinity, 4 oxygen, 5. inorganic phosphate, 6. oxygen and inorganic phosphate, 7. depth.

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
SONIC DEPTH	MAX. AMPHTH DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA	SWELL	ATMOS. PRESSURE	WIRE ANGLES
CAST	DEPTH	TEMP.		S%	σ <sub>t</sub>	O <sub>2</sub>	% O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUTFUL	
11	02	0115	60	07	12	715 G	3151 S	11154 E			
5000	43	150	156	21	06	16	7	9	6	21	23
2	2	1740	358	65	26099	534	106				13
2	2	1740	356	79	26109	538	107				12
2	48	1740	356	75	26106	516	103				13
2	77	1739	356	72	26106	536	107				13
2	96	1724	356	65	25137	539	107				18
2	144	1673	356	42	26242	541	106				20
2	193	1459	354	59	26433	544	102				35
2	290	1165	350	31	25698	516	91				66
2	482	0931	347	3	26876	526	88				99
2	676	0825	345	08	26933	541	88				119
2	868	0584	344	23	27138	470	72				
2	1058	0386	344	35	27369	416	61				201
1	1246	0336	345	28	27497	367	53				215
1	1435	0307	345	96	27576	357	51				215
1	1905	0249	347	08	27719	376	54				206
1	2380	0205	347	33	27775	396	55				209
1	2850	0169	347	36	27806	418	58				209
1	3325	0146	347	33	27827	435	60				207
1	3805	0126	347	24	27827	446	51				201
1	4290	0118	347	22	27831	462	63				201

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE					
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 / CAST 2
CAST	DEPTH	TEMP.	s%o			O <sub>t</sub>	O <sub>2</sub>	%O <sub>2</sub> SAT.	INORG. P	PARTIC. P		DOUTFUL	
11	02	0117	60	07	12	1900 G	3201 S	10957 E					
4500	43	111	133	28	03	16	7	9	6	21	2	182	
2	1624	35819	26339						554	108	11		
2	1624	35825	26343						555	108	11		
2	1624	35827	26350						556	104	11		
2	1622	35825	26360						556	104	11		
2	175	35825	26371						555	108	15		
2	100	1612	35825						540	103	25		
2	150	1534	35662						536	98	46		
2	198	1340	35318						26576				
2	292	1131	35000						26740				
2	480	922	34713						26878				
2	673	799	34564						570	95	99		
1	650	558	34418						524	82	125		
1	1040	392	34429						27167	461	71	180	
1	1230	323	34494						27362	417	61	201	
1	1415	304	34582						27482	393	57	213	
1	1690	254	34703						27570	365	52	213	
1	2350	203	34732						27711	373	53	210	
1	2630	173	34760						27776	386	54	211	
1	3305	151	34740						27822	420	58	205	
1	3780	128	34740						27839	442	61	200	
1	4265	120	34730						27836	456	62	205	

2 2 2 2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE				
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	SEA VIS.	SWELL	ATMOS. PRESSURE	WIRE ANGLES	CAST 1	CAST 2
CAST	DEPTH	TEMP.		S%	$\sigma_t$	O <sub>2</sub>	% O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUTFUL		
11	2	120	60	7	13	815 G	3200 S	10734 E				
500	48	133	150	28	5	16	6	9	27	2	22	4
500	48	133	150	28	5	16	6	9	27	2	22	4
2	1550	357	38		26446	568	109	19				
2	1550	357	40		26448	568	109	16				
2	1550	357	27		26438	568	109	16				
2	75	357	36		26455	569	109	16				
2	100	357	32		26457	571	109	19				
2	150	357	31		26472	569	109	19				
2	190	353	05		26617	551	100	45				
2	290	1124	350	07	26756	566	99	67				
2	475	953	347	64	26866	576	97	97				
2	670	824	345	90	26936	536	87	119				
2	870	553	344	17	27172	470	72	162				
2	1070	400	344	40	27363	403	59	198				
1	1265	324	345	14	27497	365	56	198				
1	1630	274	346	52	27653	372	53	203				
1	1810	260	346	92	27697	370	53	204				
1	2270	217	347	30	27763	393	55	197				
1	2730	180	347	39	27800	425	59	193				
1	3190	150	347	39	27822	451	62	193				
1	3640	119	347	32	27838	458	63	177				
1	4110	114	347	27	27838	470	64	173				
1	4570	101	347	19	27840	481	66	173				
1	4755	102	347	17	27838	484	66	187				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE		
SONIC DEPTH	MAX. SAFETY DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	ATMOS. DIR.	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.		S%	σ <sub>t</sub>	O <sub>2</sub>	% O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUTFUL
11	2	125	60	7	14	730 G	3159 S		10329 E	
5358	" 42	106	131	25	5	16	7	9	24	2
2	1647	35.8		26.3	3	54.8	107			15
2	1645	35.8	73	26.3	31	54.4	106			13
2	1642	35.8	61	26.3	29	54.6	107			13
2	1578	35.7	77	26.4	13	55.7	107			14
2	1578	35.7	82	26.4	16	55.7	107			14
2	1536	35.7	42	26.4	81	56.5	108			14
2	1458	35.6	03	26.5	46					
2	170	179	35.0	76	26.7	07	56.5	100		58
2	455	969	34.8	15	26.8	46	57.5	97		102
2	655	662	34.6	38	26.9	15	53.9	89		116
1	644	636	34.4	46	27.0	90	47.4	74		165
1	1030	406	34.4	16	27.3	37	42.4	62		203
1	1210	358	34.5	10	27.4	61	36.6	53		218
1	1390	322	34.5	77	27.5	49	35.0	51		221
1	1870	257	34.6	95	27.7	02	35.9	51		211
1	2310	212	34.7	30	27.7	67	38.6	54		211
1	2775	178	34.7	36	27.7	99	41.0	57		203
1	3250	152	34.7	38	27.8	20	44.7	62		201
1	3730	125	34.7	30	27.8	33	46.3	63		197
1	4216	109	34.7	23	27.8	38	47.2	64		197

SHIP	CRUISE		STATION		YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
	SONIC DEPTH	MAX. DEPTH	AIR	TEMP.	WIND	ANEM.	CLOUD	VIS.	SWELL		ATMOS.	WIRE ANGLES	
			WET	DRY	DIR.		SPEED		HEIGHT	TYPE	AMT.	DIR.	CAST 1
									DIR.	AMT.	DIR.	AMT.	CAST 2
11	2	129	60	7	15	200 G			3112 S		09915 E		
230	22	106	128	22	3	16	7	9	6	22	2	23	1
2	2	1715	35937			26214			548		109		13
2	25	1712	35943			26226			551		109		13
2	50	1712	35938			26222			545		108		13
2	75	1704	35941			26244			546		108		13
2	100	1707	35944			26230			547		108		17
2	150	1667	35866			26274			549		108		18
2	197	1506	35889			26430			508		96		35
2	290	1224	35164			26688			565		101		54
1	477	986	34822			26856			576		98		87
1	668	840	34614			26930			542		89		119
1	657	558	34416			27150			475		73		166
1	1055	421	34464			27360			391		56		201
1	1240	345	34528			27486			364		53		208
1	1524	300	34628			27610			346		50		211
1	1714	271	34679			27677			356		51		208
1	2190	219	34727			27759			394		55		206





SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
SONIC DEPTH	MAX. SAMPLE DEPTH	AIR	TEMP.	WIND	ANEM.	CLOUD	SEA VIS.	SWELL DIR.	ATMOS. DIR.	PRESSURE	WIRE ANGLES CAST 1 CAST 2
		WET	DRY	DIR.	HEIGHT	TYPE					
4023	38	161	178	13	4	16	7	9	6	13	2
							99	9	75	00	0
							095	1 E			
CAST	DEPTH	TEMP.	s%	σ <sub>t</sub>	O <sub>2</sub>	O <sub>2</sub> % SAT.	O <sup>2</sup> % SAT.	INORG. P	PARTIC. P		DOUBTFUL
2	25	19.07	35.840	25.662	53.6	110	11				
2	50	18.97	35.846	25.669	53.4	110	13				
2	75	18.19	35.858	25.899	53.4	109	11				
2	100	16.67	35.861	26.270	53.9	109	17				
2	125	15.07	35.578	26.419	55.2	108	19				
2	150	13.95	35.434	26.551	51.7	98	37				
2	175	12.52	35.202	26.663	53.8	100	37				
1	200	10.65	34.938	26.809	54.6	98	49				
1	225	9.02	34.704	26.903	56.5	97	78				
1	250	6.67	34.481	27.076	54.4	90	94				
1	275	4.37	34.445	27.327	46.1	76	147				
1	300	3.76	34.541	27.468	40.4	60	163				
1	325	3.38	34.608	27.558	33.6	49	204				
1	350	2.58	34.700	27.705	33.0	48	204				
1	375	2.04	34.723	27.768	36.5	52	194				
1	400	1.70	34.738	27.807	39.7	56	189				
1	425	1.46	34.730	27.818	41.3	57	189				
1	450	1.24	34.718	27.824	43.5	60	181				
1	475	1.02	34.716	27.824	45.3	62	62				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM HEIGHT	CLOUD TYPE	SEA VIS.	SWELL DIR.	ATMOS. AMT.	WIRE PRESSURE	WIRE ANGLES CAST 1 / CAST 2
CAST	DEPTH	TEMP.		S%/ oo		$\sigma_t$	$O_2$	% $O_2$ SAT.	INORG. P	PARTIC. P	DOUBTFUL
11	2	139	60	7	18	800 F	2534 S			09512 E	
2	20	37	356	45	25	17.5	4.9	4	1.04		1.9
2	20	37	356	54	25	18.0	5.1	6	1.09		1.7
2	20	37	356	73	25	19.5	5.1	4	1.08		1.6
2	75	2037	356	87	25	20.5	5.0	6	1.07		1.6
2	98	2037	357	26	25	23.5	5.0	8	1.07		1.6
2	147	1994	357	74	25	38.6	5.0	2	1.05		1.6
2	195	1840	357	81	25	7.8	4.9	6	1.00		2.0
2	290	1561	357	75	26	4.50	5.0	0	9.6		2.7
2	473	1083	349	77	26	8.07	5.5	3	9.6		7.6
2	648	875	346	71	26	9.20	5.4	1	8.5		1.12
1	826	610	344	65	27	13.5	4.6	1	6.0		1.55
1	1007	448	344	81	27	3.50	3.6	6	5.2		1.95
1	1186	414	345	65	27	4.50	3.1	8	4.5		2.13
1	1367	346	346	01	27	5.50	3.2	0	4.4		2.05
1	1618	268	346	97	27	7.00	3.4	7	4.7		2.08
1	2271	214	347	28	27	7.65	3.7	5	5.0		2.05
1	2732	171	347	36	27	8.13	3.3	9	5.3		1.98
1	3200	150	347	25	27	8.39	4.1	8	5.5		1.68
1	4115	114	347	18	27	8.34	4.6	0	6.0		1.69
1	4590	110	347	20	27	8.36	4.6	4	6.1		1.78

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	095 E											
									SONIC DEPTH	MAX. WAV. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	WIRE ANGLES CAST 1   CAST 2
CAST	DEPTH	TEMP.	S‰		σ <sub>t</sub>	O <sub>2</sub>	% <sup>O<sub>2</sub></sup> SAT.	O <sub>2</sub>	InORG. P	PARTIC. P	DOUBTFUL									
11	2	142	60	7	19	1200 F	2223 S		2055	355	58	25059	520	109	19					
2	25	2055	355	59	25060	515	108	19	2047	355	90	25105	515	108	20					
2	50	2047	355	90	25105	515	108	20	2047	356	18	25126	523	110	20					
2	75	2047	356	18	25126	523	110		100	2047	356	30	25135	524	110	20				
2	100	2047	357	73	25637	510	104	22	150	1897	357	73	25637	510	104	22				
2	150	1897	357	81	26044	502	100	31	197	1736	357	81	26044	502	100	31				
2	290	1441	355	21	26520	520	97	43	290	1441	355	21	26520	520	97	43				
2	478	1079	349	69	26808	564	98	63	478	1079	349	69	26808	564	98	63				
2	667	874	346	69	26920	543	90	115	667	874	346	69	26920	543	90	115				
2	820	605	344	69	27148	442	68	165	820	605	344	69	27148	442	68	165				
1	1000	442	345	18	27380	336	50	215	1000	442	345	18	27380	336	50	215				
1	1160	368	345	96	27499	301	44	215	1160	368	345	96	27499	301	44	215				
1	1360	341	346	35	27577	316	46	212	1360	341	346	35	27577	316	46	212				
1	1800	258	347	12	27714	344	49	196	1800	258	347	12	27714	344	49	196				
1	2244	206	347	36	27777	377	53	198	2244	206	347	36	27777	377	53	198				
1	2692	175	347	34	27800	396	55	203	2692	175	347	34	27800	396	55	203				
1	3140	154	347	28	27810	410	57	198	3140	154	347	28	27810	410	57	198				
1	3564	136	347	42	27835	430	59	194	3564	136	347	42	27835	430	59	194				
1	4030	114	347	18	27835	461	60	194	4030	114	347	18	27835	461	60	194				
1	4500	108	347	14	27830	470	62		4500	108	347	14	27830	470	62					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	SEA DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.	S %	σ <sub>t</sub>	σ <sub>2</sub>	O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUTFUL
11	2	143	60	7	20	1200 F	1940 S	09437 E	
530	47	194	222	18	5	16	7	9	
2	2242	35044	24153	499	106	106	106	106	14
2	2228	35146	24269	495	107	107	107	107	14
2	2224	35163	24309	495	107	107	107	107	11
2	71	2220	35229	24355	492	106	106	106	11
2	95	2139	35496	24783	492	105	105	105	14
2	144	1925	35639	25463	435	89	89	89	26
2	192	1792	35624	25787	425	85	85	85	39
2	287	1505	35579	26424	489	93	93	93	41
2	480	1034	34917	26850	532	77	77	77	81
2	674	762	34573	27015	476	77	77	77	136
1	852	562	34604	27309	265	41	41	41	206
1	1035	493	34654	27431	231	35	35	35	211
1	1213	419	34645	27506	261	39	39	39	211
1	1392	370	34670	27576	280	41	41	41	211
1	1854	268	34716	27709	326	46	46	46	204
1	2325	205	34728	27771	360	50	50	50	200
1	2795	174	34740	27805	383	53	53	53	195
1	3264	150	34746	27828	395	55	55	55	190
1	3736	136	34727	27823	421	50	50	50	190
1	4205	117	34716	27827	450	62	62	62	184
1	4690	108	34709	27827	466	64	64	64	184

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	SEA VIS.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2	
CAST	DEPTH	TEMP.		S%		$\sigma_t$	$O_2$	% SAT.	INORG. P	PARTIC. P	DOUTFUL
11	2	145	60	7	22	545 F	1727 S	09453 E			
530	" 47	183	211	14	7	16	7	9	6	14	2
3	23	30	346	24	235	82	489	107	106	106	21
3	23	30	346	09	235	71	485	106	106	106	16
3	23	19	348	14	237	58	492	108	108	108	15
3	22	02	351	23	240	98	492	107	107	107	15
3	75	22	352	43	243	15	486	106	106	106	14
3	100	22	352	43	244	30	476	103	103	103	14
3	125	22	353	47	244	30	476	103	103	103	14
2	146	20	354	63	249	25	443	94	94	94	33
2	194	18	356	64	255	84	446	91	91	91	26
2	243	17	356	95	256	62	446	90	90	90	35
2	291	15	356	96	356	32	262	60	466	466	46
2	368	12	352	25	352	08	267	21	517	517	78
2	465	10	01	348	71	263	69	526	69	69	104
2	670	6	77	345	84	271	44	334	55	55	203
1	842	5	64	346	65	273	29	215	33	33	244
1	018	5	00	346	72	274	37	210	32	32	253
1	184	4	38	346	80	275	13	230	34	34	218
1	1352	3	98	346	84	275	59	257	38	38	244
1	1805	2	72	347	24	277	10	320	44	44	241
1	2260	2	07	347	39	277	79	357	50	50	250
1	2730	1	65	347	49	278	04	387	54	54	218
1	3206	1	49	347	24	278	11	393	54	54	218
1	3694	1	31	347	23	278	23	421	56	56	220
1	4190	1	17	347	26	278	35	445	61	61	218
1	4687	1	13	347	24	278	36	454	62	62	218

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
							AIR	TEMP.	WIND	ANEM.	WIRE ANGLES
SONIC	MAX.	TEMP.	DIR.	SPEED	HEIGHT	TYPE	AMT.	DIR.	AMT.	CAST 1	CAST 2
DEPTH	WET	DRY	DIR.	AMT.	AMT.	AMT.	AMT.	DIR.	AMT.	PRESSURE	WIRE PRESSURE
11	2	148	60	.7	22	2200 F	1502 S			095 4 E	
4975	46	211	233	12	6	16	7	9	6	12	2
CAST	DEPTH	TEMP.	\$%		$\sigma_t$	O <sub>2</sub>	O <sub>2</sub> SAT.		INORG. P	PARTIC. P	DOUTFUL
1	2549	34290			22677	470					
2	2549	34287			22675	467					
2	2549	34285			22673	461					
2	2440	34075			23446	475					
2	2317	35169			24046	470					
2	2173	35266			24514	435					
2	2093	35433			24861	435					
2	1958	35767			25475	429					
2	1737	35677			25962	435					
2	1533	35552			26341	446					
2	1318	35340			26638	481					
2	1162	35103			26760	505					
2	952	34810			26904	519					
2	734	34733			27161	293					
1	583	34768			27412	220					
1	506	34704			27455	225					
1	440	34653			27489	220					
1	645	34677			27563	236					
1	615	34768			27717	301					
1	500	34704			27778	351					
1	1178	34653			27794	380					
1	1362	388			27804	403					
1	1815	281			27820	424					
1	2267	210			27829	446					
1	2724	174			27829	460					
1	3187	155			27829	460					
1	3653	133			27829	460					
1	4125	118			27829	460					
1	4613	114			27829	460					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
SONIC DEPTH	MAX. AMP. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST 1	WIRE ANGLES CAST 2
CAST	DEPTH	TEMP.		S%		$\sigma_t$		$O_2$ % SAT.	INORG. P	PARTIC. P	DOUBTFUL
11	2	151	60	7	23	1400 F	1241 S		095 4 E		
450	" 41	206	250	12	6	16	7	9	6	12	2
2	2617	34281	22460	465	102	25					
2	2617	34265	22450	465	102	14					
2	2617	34262	22440	467	102	21					
2	2617	34260	22440	467	102	21					
2	2256	34809	23940	337	70	64					
2	116	2457	35118	24460	391	60	51				
2	139	2010	35348	25020	396	79	44				
2	183	1799	35511	25690	403	78	57				
2	226	1326	34877	26260	279	49	134				
2	266	1172	34829	26530	274	46	152				
2	356	1026	34823	26790	308	50	155				
2	455	877	34706	26930	279	44	184				
2	607	725	34672	27150	202	31	206				
1	790	613	34658	27280	191	26	226				
1	965	526	34645	27380	202	29	226				
1	1151	464	34658	27480	214	31	231				
1	1332	410	34660	37550	231	33	231				
1	1812	283	34742	27720	301	41	226				
1	2240	213	34745	27770	351	47	211				
1	2700	177	34740	27807	372	50	206				
1	3156	149	34813	27890	403	53	201				
1	3615	130	34731	27834	422	56	201				
1	4064	117	34722	27837	444	58	201				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.	s%	σ <sub>t</sub>	O <sub>2</sub>	% O <sub>2</sub> SAT.	InORG. P	PARTIC. P		DOUTFUL
11	2	155	60	7	24	1530 F	1000 S		095 E	
5303	44	250	278	07	3	16	7	9	6	00
2	27	69	-	34545	22188	465	104	22		
2	27	51	34541	22245	466	104	22			
2	26	51	34778	22720	98	30	47			
2	22	51	35131	24200	225	47	100			
2	20	96	35170	24560	182	37	120			
2	93	17953	35056	24950	164	32	130			
2	140	1754	34879	25320	184	35	133			
2	183	1406	34731	25930	37	1	145			
2	222	1206	34718	26380	172	29	165			
1	7	62	674	34740	27270	161	24			
1	945	586	34697	27350	172	25	220			
1	1130	511	34694	27450	196	26	225			
1	1312	442	34719	27550	207	29	205			
1	1754	319	34746	27690	273	36	210			
1	2190	240	34748	27760	332	45	215			
1	2616	192	34736	27790	370	49	205			
1	3050	164	34736	27810	366	52	205			
1	3500	135	34728	27810	405	53	203			
1	3950	124	34723	27830	435	57	203			
1	4420	116	34720	27840	454	60	200			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE							
							AIR TEMP.	WIND DIR. SPEED	ANEM. HEIGHT TYPE	CLOUD AMT.	SEA VIS.	SWELL DIR. AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2		
SONIC DEPTH	MAX. SAMP. DEPTH	WET	DRY													
4572	~ 36	278	283	24	4	16	7	9	6	24	9	26	9	89	00	0
CAST	DEPTH	TEMP.	s%o				$\sigma_t$		$O_2$	% O <sub>2</sub> SAT.		INORG. P	PARTIC. P		DOUTFUL	
2	28	28.0	34.0	6.7	21.4	4.0	4.5	4	1.09	1.2						
2	28	28.5	34.0	7.4	21.4	4.0	4.5	4	1.09	1.2						
2	28	28.3	34.0	6.2	21.4	5.3	4.3	2	1.03	1.2						
2	28	28.7	34.1	5.3	21.5	2.9	4.5	0	1.07	1.2						
2	28	28.6	34.5	6.9	21.9	7.5	4.3	8	1.04	1.2						
2	28	28.4	34.6	8.0	22.5	4.3	3.4	4	1.04	1.2						
2	28	26.8	34.6	8.0	22.5	4.3	3.4	4	1.04	1.2						
2	28	17.8	34.9	8.7	25.5	3.1	1.4	5	2.9	1.42						
2	28	13.1	35.0	6.6	26.5	5.5	1.3	3	2.4	1.72						
2	28	17.2	35.0	6.6	26.5	5.5	1.4	5	2.6	1.70						
2	28	12.5	35.0	7.8	26.6	5.3	1.4	5	2.6	1.70						
2	28	12.4	35.0	7.8	26.7	3.1	1.6	9	3.0	1.69						
2	28	12.0	35.0	6.8	26.8	3.2	1.6	9	2.9	1.67						
2	28	11.6	35.0	6.8	26.9	2.6	1.3	1	2.2	1.90						
2	28	11.4	35.0	6.8	27.1	6.1	1.9	3	1.15	2.20						
2	28	11.4	34.9	7.0	27.3	4.9	9	8	1.16	2.20						
2	28	11.2	34.9	4.4	27.4	4.7	1.1	2	1.18	2.20						
2	28	11.0	34.8	9.7	27.5	4.1	1.5	1	2.3	2.20						
2	28	10.4	35.0	3.6	26.9	2.6	1.3	1	2.2	1.90						
2	28	10.2	35.0	1.5	27.1	6.1	1.9	3	1.15	2.20						
2	28	9.5	34.9	7.0	27.3	4.9	9	8	1.16	2.20						
2	28	7.4	34.9	7.0	27.7	3.0	2.5	8	3.7	2.20						
1	630	6.3	34.9	4.4	27.7	3.0	2.7	8	3.7	2.20						
1	1000	6.6	34.9	4.4	27.7	3.0	2.7	8	3.7	2.20						
1	1191	5.6	34.8	9.7	27.5	4.1	1.5	1	2.3	2.20						
1	1361	4.9	34.8	7.4	27.5	9.8	1.7	2	2.6	2.20						
1	1361	4.9	34.8	10.0	27.7	3.0	2.5	8	3.7	2.20						
1	1608	3.2	34.8	10.0	27.7	3.0	2.5	8	3.7	2.20						
1	2270	2.2	34.7	6.5	27.7	8.6	3.2	1	4.5	2.15						
1	2720	1.8	34.7	4.3	27.7	9.7	3.4	7	4.8	2.10						
1	3170	1.6	34.7	3.0	27.8	1.4	3.6	8	5.1	1.90						
1	3625	1.3	34.7	3.3	27.8	2.9	4.1	1	5.6	2.00						



SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE							
							AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1	WIRE ANGLES CAST 2
SONIC DEPTH	MAX. SAMP. DEPTH	WET	DRY													
4572	~ 23	24.4	26.9	16	3	16	7	9	6	16	2	15	1	8.6	00	0
CAST	DEPTH	TEMP.		\$%		$\sigma_t$		$O_2$	% SAT.	$O_2$	INORG. P	PARTIC. P		DOUTFUL		
2	2.0	28.68	28.68	34.5	5.0	21.0	6.0	4.4	9	1.07	1.19					
2	2.5	28.68	28.68	34.5	5.6	21.0	5.6	4.5	7	1.09	1.18					
2	5.0	28.68	28.68	34.5	5.5	21.0	5.7	4.5	5	1.09	1.19					
2	7.4	28.68	28.68	34.5	5.4	21.0	5.7	4.5	0	1.08	2.0					
2	9.8	28.58	28.58	34.6	0.7	21.9	2.9	4.4	2	1.06	1.19					
2	12.1	19.76	19.76	34.1	6.0	24.2	0.4	1.7	7	3.6	1.30					
2	14.4	14.95	14.95	35.3	3.6	26.2	6.0	1.5	6	2.9	1.63					
2	17.0	13.30	13.30	35.0	8.5	26.4	1.0	1.6	2	3.2	1.61					
2	2.3	2.25	2.25	35.0	5.1	26.5	9.9	1.6	8	3.0	1.73					
2	2.7	1.39	1.39	35.0	0.8	26.7	2.9	1.6	9	3.3	1.73					
2	3.7	1.066	1.066	34.9	9.1	26.8	4.9	1.9	7	3.4	1.76					
2	4.6	9.68	9.68	34.9	4.6	26.9	8.3	1.5	3	2.6	2.01					
2	6.3	8.58	8.58	34.9	4.3	27.1	6.0	1.2	7	2.1	2.19					
1	8.1	7.32	7.32	34.9	4.3	27.3	3.7	1.1	7	1.9	2.46					
1	9.9	6.57	6.57	34.9	1.2	27.4	2.9	1.2	6	2.0	2.43					
1	11.7	5.56	5.56	34.8	6.6	27.5	2.5	1.5	6	2.4	2.34					
1	13.5	4.79	4.79	34.8	5.5	27.6	2.0	1.9	2	2.9	2.37					
1	17.9	3.12	3.12	34.8	6.4	27.8	0.0	2.7	6	3.8	2.30					
1	22.6	2.27	2.27	34.7	6.4	27.7	6.0	3.3	1	4.5	2.25					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.		s%o	σ <sub>t</sub>	O <sub>2</sub>	% SAT.	INORG. P	PARTIC. P		DOUBTFUL
5212	36	250	283	15	3	16	7	9	6	15	2
11	2	186	60	8	09	1200 F	500 S	09440 E			
2	2	2852	34355	21771	455	103	13				
2	2	2849	34354	21769	451	107	13				
2	4	2844	34394	21816	445	106	13				
2	6	2690	35099	22845	391	91	39				
2	6	2360	35115	23860	264	56					
2	1	2147	35066	24445	197	40	110				
2	13	2	1679	34721	25368	210	41	135			
2	17	5	1348	34893	26231	162	30	160			
2	21	8	1202	34945	26561	153	27	170			
2	26	3	1146	34970	26686	172	30	170			
2	35	3	1040	34943	26857	171	29	172			
2	44	5	980	34911	26936	147	25	190			
1	61	0	856	34903	27132	133	22	210			
1	79	4	708	34812	27280	134	21	220			
1	96	0	597	34785	27408	155	24	234			
1	114	3	507	34765	27502	162	28	222			
1	131	5	439	34784	27594	206	31	222			
1	175	3	306	34777	27723	263	41	222			
1	219	0	225	34758	27779	333	47	210			
1	268	8	186	34737	27794	364	51	208			
1	317	1	159	34727	27806	379	52	196			
1	364	8	133	34718	27817	27817					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE		
11	2	194	60	8	14	1400 G	5 43 S	10623 E		
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1   CAST 2
9999	~ 00	261	289	12	3	16	7	9	6	
CAST	DEPTH	TEMP.	S%	$\sigma_t$	O <sub>2</sub>	O <sub>2</sub> % SAT.	O <sub>2</sub> % SAT.	INORG. P	PARTIC. P	DOUBTFUL
1	2865	32797	20548		462	109				9
1	2850	32770	20577		468	110				6
1	2843	32780	20608		456	107				7

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	195	60	8	15	300 G	658 S	10433 E

SONIC DEPTH	MAX. DEPTH	AIR	TEMP.	WIND	ANEM.	CLOUD	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	ATM. AMT.	PRESSURE	WIRE ANGLES CAST 1 / CAST 2
		WET	DRY	SPEED		HEIGHT TYPE							
2195	18	256	178	12	4	16	7	9	6	12	2	13	1
2	28	56	32915		20666	462							
2	28	43	33365		21047	462							
2	28	17	34009		21616	456							
2	75	2800	34178		21798	456							
2	100	2280	34531		23656	340							
2	125	1994	34535		24443	293							
2	150	1568	34551		25448	271							
2	200	1169	34559		26324	240							
2	273	1125	34943		26704	165							
1	361	994	34860		26872	171							
1	446	947	34870		26959	162							
1	620	625	34820		27115	146							
1	769	665	34714		27262	177							
1	960	546	34665		27376	201							
1	1126	508	34746		27486	169							
1	1300	441	34729		27545	214							
1	1750	320	34773		27707	274							

CAST	DEPTH	TEMP.	%‰		$\sigma_t$	$\sigma_t$	$O_2$	% SAT.	$O_2$	INORG. P	PARTIC. P	DOUBTFUL
			%	‰								
2	2856	32915	20666	462	109	13						
2	2843	33365	21047	462	109	14						
2	2817	34009	21616	456	108	20						
2	75	34178	21798	456	108	21						
2	100	34531	23656	340	74	65						
2	125	34535	24443	293	61	96						
2	150	34551	25448	271	52	124						
2	200	34559	26324	240	42	157						
2	273	34943	26704	165	29	174						
1	361	34860	26872	171	29	174						
1	446	34870	26959	162	27	167						
1	620	34820	27115	146	24	211						
1	769	34714	27262	177	28	217						
1	960	34665	27376	201	31	218						
1	1126	34746	27486	169	29	221						
1	1300	34729	27545	214	32	220						
1	1750	34773	27707	274	40	216						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	
SONIC DEPTH	MAX. WATER DEPTH	AIR TEMP.	WIND DIR.	ANEM. HEIGHT	CLOUD TYPE	SEA VIS.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.	\$%	$\sigma_t$	$O_2$	% $O_2$ SAT.	INORG. P	PARTIC. P	DOUTFUL
11	2	197	60	8	15	1200 G	735 S	10539 E	
2286	03	24.4	28.3	11	6	16	7	9	2 13 1 100 00 99
1	2.5	27.74	34.0	9.4	21.820	4.70	110	110	17
1	5.0	27.54	34.0	5.4	21.854	4.62	108	108	16
1	7.5	27.43	34.2	4.7	22.035	4.66	110	110	16
1	10.0	27.42	34.2	7.0	22.055	4.62	108	108	19
1	12.5	24.70	34.2	4.0	22.879	3.51	79	79	50
1	15.0	19.85	34.5	3.9	24.469	2.66	59	59	95
1	20.0	15.93	34.5	6.1	25.445	2.63	50	50	33
1	25.0	13.46	34.5	4.6	25.968	2.52	46	46	142
1	30.0	11.69	34.5	6.6	26.331	2.38	42	42	156
1	30.0	10.43	34.6	7.4	26.642	2.03	35	35	170

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	SPEED	ANEM. HEIGHT	CLOUD TYPE	SEA DIR.	SWELL DIR.	ATMOS. AMT.	WIRE PRESSURE	ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.			%	$\sigma_t$	$O_2$	% SAT.	INORG. P	PARTIC. P	DOWNTUL
3109	26	261	267	13	4	16	7	9	6	13	2
11	2	200	60	8	15	2300 G	814 S	10743 E			
2	2	2656	34190		22269	460	106				
2	2	2656	34195		22273	473	109				
2	2	2656	34206		22281	476	110				
2	2	2506	34110		22672	447	101				
2	2	2185	34444		23858	300	64				
2	2	1894	34562		24721	282	57				
2	2	1599	34548		25421	276	53				
2	2	1334	34556		25999	266	48				
2	2	1149	34572		26372	235	41				
2	2	1051	34628		26593	215	37				
2	2	990	34740		26785	194	33				
1	1	971	34815		26876	182	31				
1	1	759	34723		27137	176	28				
1	1	667	34735		27276	170	27				
1	1	531	34659		27390	213	32				
1	1	449	34645		27473	228	34				
1	1	399	34681		27555	242	36				
1	1	287	34745		27715	294	42				
1	1	216	34749		27779	335	47				
1	1	192	34743		27794	364	51				



SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE							
							AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	SPEED	ANEM HEIGTH	CLOUD TYPE	VIS.	SEA DIR.	AMT.	ATMOS. PRESSURE
SONIC DEPTH	MAX. DEPTH															
11	2	208	60	8	17	830 H	935 S	113 9 E								
3109	26	228	256	12	5		16	9	9	9	12	2	18	1	131	00
CAST	DEPTH	TEMP.	% O <sub>2</sub>	σ <sub>t</sub>			O <sub>2</sub>	% SAT.	O <sub>2</sub>	INORG. P	PARTIC. P			DOUTIFUL		
2	2603	34193	224	37			465		106						18	
2	2594	34177	224	53			461		110						13	
2	2389	34270	231	43			364		85						48	
2	2069	34437	241	69			306		64						66	
2	1931	34473	245	59			302		62						95	
2	1588	34547	254	45			277		53						126	
2	1421	34557	25819				265		49						129	
2	1234	34563	26203				246		44						156	
2	1091	34568	26475				234		40						171	
2	1004	34619	26667				217		37						182	
2	919	34663	26843				212		35						192	
2	853	34668	26952				212		35						197	
2	699	34660	27173				193		31						219	
2	566	34625	27320				214		33						230	
2	496	34625	27404				234		35						225	
1	439	34631	27473				224		33						227	
1	395	34665	27554				244		36						225	
1	566	34625	27715				320		46						216	
1	496	34746	27780				348		49						208	
1	439	34740	27804				377		52						217	
1	388	34665	27854													
1	274	34730	27715													
1	212	34746	27780													
1	177	34746	27780													
1	176	34740	27804													

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	WIRE PRESSURE CAST 1	WIRE ANGLES CAST 2
CAST	DEPTH	TEMP.		S%	$\sigma_t$	O <sub>2</sub>	O <sub>2</sub> % SAT.	O <sub>2</sub> INORG. P	PARTIC. P	DOUBTFUL	
11	2	211	60	8	17	2245 H	9 31 S			11521 E	
4206	~ 03	222	256	14	4	16	7	9	6	22	1
									109	00	99
1	25	2695	34116		22090	463		107		15	
1	50	2501	34233		22780	429		92		34	
1	75	2468	34213		22865	427		96		33	
1	100	2460	34201		22890	427		95		34	
1	125	1935	34445		24527	315		64		87	
1	150	1718	34477		25069	297		58		102	
1	200	1400	34500		25820	277		51		117	
1	250	1226	34517		26153	256		46		129	
1	300	1140	34515		26344	255		45		139	
		1060	34570		26532	250		40		147	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.	s%	σ <sub>t</sub>	O <sub>2</sub>	% SAT.	INORG. P	PARTIC. P	DOUTFUL	
11	2	214	60	8	18	1200 H	801 S	116 E		
1463	12	244	283	22	4	116	9	8	22	2
									117	00
									0	
2	2730	33628	21611	463	108					13
2	2730	33700	21665	471	110					10
2	2730	33780	21725	460	107					12
2	2612	34223	22432	410	94					30
2	2392	34367	23207	377	83					51
2	1974	34478	24451	328	67					83
2	1621	34560	25380	324	62					05
2	913	34469	26702	244	41					85
1	736	34521	27012	230	37					20
1	615	34547	27197	215	33					22
1	529	34574	27325	208	32					34
1	442	34595	27441	205	31					39
1	391	34614	27510	206	30					62



SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE						
							MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIHT	CLOUD TYPE	VIS.	SEA DIR.	ATMOS. DIR.
SONIC DEPTH	SAMP. DEPTH														
11	2	225	60	8	20	1104 H	915 S								12225 E
3109	27	228	250	16	3	16	8	9	6						120 00 00
CAST	DEPTH	TEMP.		s‰		σ <sub>t</sub>		O <sub>2</sub>	% SAT.		O <sub>2</sub>		INORG. P	PARTIC. P	DOUTIFUL
22	24	26 04	34 0 94	223 59	4 9 5			1 1 3			2 0				
22	24	23 66	34 0 84	230 69	4 0 7			8 9			5 0				
22	24	22 99	34 1 31	232 99	3 6 9			8 0			5 9				
22	24	22 48	34 1 56	234 63	3 4 6			8 0			5 9				
22	24	20 29	34 3 14	241 02	3 6 0			7 5			6 6				
22	24	19 69	34 3 46	246 19	3 4 5			7 5			6 3				
22	24	16 22	34 4 74	253 12	3 1 1			7 0			9 6				
22	24	13 75	34 4 92	258 65	2 6 5			6 0			10 0				
22	24	11 65	34 5 04	262 89	2 6 4			5 2			13 1				
22	24	10 30	34 5 01	265 30	2 5 2			4 6			14 4				
22	24	8 66	34 5 11	268 09	2 3 4			4 3			16 5				
22	24	7 64	34 5 26	269 75	2 2 8			3 8			18 4				
22	24	6 71	34 5 63	271 35	2 2 3			3 7			17 8				
22	24	5 30	34 5 88	273 35	2 2 8			3 5			19 2				
22	24	4 41	34 6 01	274 47	2 3 1			3 5			18 6				
22	24	4 07	34 6 13	275 00	2 3 1			3 4			20 5				
22	24	3 81	34 6 15	275 30	2 3 0			3 3			20 6				
22	24	3 47	34 6 23	275 70	2 2 1			3 2			20 0				
22	24	3 38	34 6 32	275 80	2 1 7			3 1			20 3				
22	24	3 44	34 6 25	275 66	2 1 1			3 0			20 4				
22	24	2 74						3 1			20 4				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. TEMP.	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 / CAST 2
CAST	DEPTH	TEMP.				$\sigma_t$	$O_2$	% $O_2$ SAT.	INORG. P	PARTIC. P	DOUTFUL
11	2	233	60	8	22	8301	746 S	12845 E			
4206	~ 28	233	261	12	4	16	8	9	6	13	2
2	2	262	341	71	223	58	47	4	09	19	
2	2	261	341	72	223	96	47	4	09	16	
2	2	259	342	14	224	94	46	6	07	24	
2	2	252	341	89	226	83	43	0	97	40	
2	2	227	345	20	236	76	33	1	72	69	
2	2	227	343	92	239	86	31	3	66	80	
2	2	212	344	60	242	16	30	0	63	91	
2	2	205	344	60	242	16	30	0	63	91	
2	2	162	345	77	253	81	27	9	54	116	
2	2	162	345	65	258	42	26	3	49	117	
2	2	141	345	65	258	42	26	3	49	117	
2	2	141	345	98	263	30	21	5	58	142	
2	2	116	345	98	263	30	21	5	58	142	
2	2	100	345	76	266	34	24	5	42	162	
2	2	806	345	81	269	53	22	7	37	194	
2	2	630	345	90	272	11	22	4	35	210	
2	2	536	346	01	273	38	22	4	34	211	
2	2	536	346	01	274	17	23	0	34	211	
2	2	472	346	07	274	17	23	0	34	211	
2	2	416	346	15	274	85	23	5	34	266	
2	2	365	346	18	275	20	23	3	34	223	
2	2	365	346	25	275	73	23	7	34	219	
2	2	357	346	25	275	93	23	9	34	218	
2	2	317	346	26	275	93	23	9	34	218	
2	2	311	346	26	275	98	23	1	33	215	
2	2	311	346	26	275	98	23	1	33	215	

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SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE					
11	2	239	60	8	23	1200 1	1004 S	13157 E					
SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT TYPE	CLOUD TYPE	VIS.	SEA	SWELL	ATMOS. PRESSURE	WIRE ANGLES CAST 1	WIRE ANGLES CAST 2
79	~ 01	22.8	25.6	12	5	16	7	9	6	12	2	12	1
CAST	DEPTH	TEMP.	S%			AMT.	AMT.	DIR.	AMT.	DIR.	AMT.		
1	2575	34.228	22550			4.7	4					1.08	1.7
1	2570	34.213	22554			4.7	6					1.08	2.2
1	2570	34.215	22556			4.8	2					1.10	2.0
1	2567	34.214	22564			4.7	4					1.08	3.2
1	2557	34.216	22597			4.7	1					1.07	2.2
1	2544	34.243	22657			4.6	4					1.05	3.2
1	2532	34.247	22697			4.5	0					1.02	3.4
1	2491	34.255	22627			4.1	6					9.3	4.2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC DEPTH	SAMP DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	ATMOS. DIR.	WIRE ANGLES CAST 1 / CAST 2
CAST	DEPTH	TEMP.		%		$\sigma_t$		$O_2$	$O_2$ % SAT.	DOUTFUL
1	10	2543	34	285	226	92	474	107	20	
1	20	2537	34	284	227	9	476	108	14	
1	20	2522	34	286	227	56	479	108	21	
1	30	2517	34	285	227	71	482	109	15	
1	40	2510	34	343	228	36	476	107	16	
1	50	2506	34	386	228	74	474	107	21	
1	60	2500	34	395	229	05	464	105	23	
1	70	2445	34	397	230	73	398	89	58	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC DEPTH	AIR TEMP. WET	TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT TYPE	VIS.	SEA	SWELL	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.	S%	$\sigma_t$		$O_2$	% $O_2$ SAT.	INORG. P	PARTIC. P	DOUBTFUL
1	10	2500	34.409	229.16	4.6	0	110	-	-	15
1	20	2495	34.586	230.65	4.6	5	109	110	109	12
1	30	2491	34.382	229.23	4.6	6	110	110	110	13
1	40	2466	34.410	229.59	4.6	6	110	110	110	14
1	50	2466	34.393	229.39	4.6	5	119	119	119	15
1	60	2466	34.412	229.61	4.6	5	109	109	109	15
1	2247	34517	237.39	26.8	62	62	66	66	66	66

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	248	60	8	25	1 1	1004 S	138 5 E

SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DRY	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT	ATMOS. TYPE	SWELL	ATMOS. PRESSURE	WIRE ANGLES CAST 1	WIRE ANGLES CAST 2
53	01	222	250	09	3	16	7	9	6	11	2

CAST	DEPTH	TEMP.	S%o	σ <sub>t</sub>	O <sub>2</sub>	O <sub>2</sub>	%O <sub>2</sub> SAT.	O <sub>2</sub>	INORG. P	PARTIC. P	DOUBTFUL
1	2555	34 604	22695	474	1 08						40
1	2551	34 604	22907	471	1 07						40
1	2552	34 598	22900	471	1 07						40
1	2550	34 601	22906	474	1 08						37
1	2548	34 603	22916	474	1 08						37
1	2551	34 597	22902	474	1 08						37

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
11	2	251	60	8	25	1200 1	1007 S		140 E	

SONIC DEPTH	MAX. SAMPLE DEPTH	AIR	TEMP.	WIND	ANEM.	CLoud	SEA	SWELL	ATMOS.		WIRE ANGLES					
		WET	DRY	DIR.		SPEED			DIR.	AMT.	PRESSURE	CAST 1	CAST 2			
51	00	239	256	11	6	16	7	9	6	11	2	10	1	123	00	99

CAST	DEPTH	TEMP.	s%	$\sigma_t$	$\sigma_2$	$\sigma_2$	$\sigma_2$	$\sigma_2$	INORG. P	PARTIC. P	DOUTFUL
1	10	2510	35570	23761	476	108					10
1	20	2508	35564	23778	465	110					9
1	30	2504	35566	23781	476	108					10
1	40	2504	35565	23791	474	108					8
			35568	23793	476	108					13

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	ATMOS. DIR.	WIRE ANGLES CAST 1   CAST 2
CAST	DEPTH	TEMP.	S‰		$\sigma_t$	$\sigma_2$	$O_2$ % SAT.	INORG. P	PARTIC. P	DOUTFUL
1	11	2	253	60	8	31	1 K	903 S	14446 E	
1	88	01	228	244	18	4	16	7	0	4
1	10	2520	34782	23137	474	474	107	107	107	16
1	20	2498	34986	23357	477	477	106	106	106	13
1	30	2484	35226	23581	475	475	107	107	107	14
1	40	2476	35349	23698	479	479	108	108	108	15
1	50	2468	35368	23737	479	479	108	108	108	16
1	60	2460	35360	23755	461	461	104	104	104	19
1	70	2460	35360	23755	443	443	100	100	100	19
1	80	2458	35350	23753	455	455	102	102	102	19

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	254	60	9	01	630 1	1208 S	13946 E

SONIC DEPTH	MAX. SAMPLE DEPTH	AIR	TEMP.	WIND	ANEM. HEIGHT	CLOUD	VIS.	SEA	ATMOS. PRESSURE	DIR.	AMT.	WIRE ANGLES
		DRY	WET	DIR.		SPEED		TYPE				CAST 1
6	1	217	239	01	3	16	8	0	11	3	119	00

CAST	DEPTH	TEMP.	S% <sub>o</sub>	σ <sub>t</sub>	O <sub>2</sub>	%O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUTFUL
1	10	2562	35030	23195	4.71	—	1.06	—	3.1
1	20	2558	35034	23210	4.66	—	1.06	—	3.2
1	30	2558	35030	23207	4.62	—	1.06	—	2.7
1	30	2564	35047	23201	4.62	—	1.06	—	2.6
1	40	2551	35034	23232	4.55	—	1.04	—	2.8
1	50	2526	35202	23435	3.24	—	7.4	—	5.4

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE				
11	2	255	60	9	01	1545 I	1310 S	13858 E				
SONIC DEPTH	MAX. SAMPLE DEPTH	AIR TEMP.	TEMP.	WIND DIR.	SPEED	ANEM. HEIGTH TYPE	CLOUD VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	PRESSURE	CAST 1 CAST 2
59	01	21.7	23.9	10	2	16	7	4	2			115 00 99
CAST	DEPTH	TEMP.	S%			O <sub>2</sub>	% SAT.	O <sub>2</sub>	INORG. P	PARTIC. P	DOUTFUL	
1	10	25.46	35.162		2335.9	4.9	8	1.1	4			5
1	20	25.29	35.175		2340.5	4.9	5	1.1	3			6
1	30	25.17	35.176		2344.3	4.9	2	1.1	2			9
1	40	24.32	35.149		2367.9	5.3	0	1.1	9			10
1	50	23.31	35.731		2441.7	4.4	0	97				1.4
1	60	23.24	35.761		2446.0	4.2	6	94				1.9

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE		
11	2	256	60	9	02	3071	1130 S	138 E		
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
59 ~ 01	217	23.9	12	2	16	7	0	12	1	8 4 13.5 00 99
CAST	DEPTH	TEMP.	S%	$\sigma_t$	$O_2$	% SAT.	$O_2$	INORG. P	PARTIC. P	DOUBTFUL
1	254.3	34.427	227.9	4.7	7	1.08	2.8			
1	253.4	34.424	228.2	4.7	1	1.07	3.1			
1	253.6	34.424	228.1	4.7	1	1.07	2.7			
1	254.0	34.424	228.0	4.7	2	1.07	2.6			
1	247.8	34.793	232.7	4.6	6	1.05	2.6			
1	248.0	35.084	234.6	3.5	7	1.61	5.6			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	257	60	9	03	11	800 S	136 E

SONIC DEPTH	MAX. AMP. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. TYPE	CLOUD AMT.	SEA VIS.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.			HEIGHT	TYPE	AMT.	DIR.	AMT.	
53	01	22.2	25.0	12	3	16	8	3	3	124 00 99
										DOUTFUL
1	2567	34320			22644		468		107	60
1	2565	34320			22650		470		107	59
1	2565	34336			22664		468		106	57
1	2503	34457			22943		420		95	60
1	40	2351	34421		23366		263		58	107
1	50	2317	34422		23467		225		49	119

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
11	2	258	60	9	03	1000 1	800 S	134 E			
SONIC DEPTH	MAX. WATER DEPTH	AIR TEMP.	WIND DRY	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	SEA DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST 1	WIRE ANGLES CAST 2
64	01	228	250	14	3	16	7	4	8	14	2

CAST	DEPTH	TEMP.	S%	$\sigma_t$	$O_2$	$O_2$ % SAT.	$O_2$ % SAT.	INORG. P	PARTIC. P	DOUTFUL
1	256.6	34164			22530	469		107		19
1	255.9	34140			22533	471		107		24
1	255.9	34146			22536	462		105		23
1	256.4	34152			22527	460		105		21
1	256.0	34155			22541	462		105		21
1	254.5	34173			22601	458		104		26
1	246	34430			23676	263		57		80

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE						
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. DIR.	WIRE PRESSURE	ANGLES CAST 1	ANGLES CAST 2	
CAST	DEPTH	TEMP.		S%		$\sigma_t$		$O_2$	$O_2$	% SAT.		INORG. P	PARTIC. P	DOUBTFUL
11	2	260	60	9	03	2045	1	805	S	13148	E			
1298	09	22.8	250	12	3	116	8	4	4	12	2	11	1	101
												00	00	00
2	25	257.1	34.1	6.0		2225	32	4.6	2	1	10			3.8
2	25	256.9	34.1	6.2		2225	46	4.6	0	1	09			3.2
2	50	256.2	34.2	14		2225	60	4.7	7	1	08			3.3
2	75	256.4	34.2	21		2225	79	4.6	6		106			3.3
2	99	2204	34.4	63		2308	34	239			51			100
2	124	2080	34.5	69		2442	40	254			53			90
2	148	1942	34.6	01		2446	28	251			51			106
2	190	1596	34.5	79		2544	52	239			46			129
1	195	1596	34.5	79		2544	52	239			46			126
1	233	1405	34.6	04		2588	89	221			41			145
1	309	1117	34.5	98		2644	51	210			37			168
1	380	699	34.5	91		2682	20	210			35			183
1	562	733	34.5	95		2707	4	212			34			196
1	735	591	34.6	03		2727	22	211			33			208
1	911	526	34.6	25		2736	9	214			33			220

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	264	60	9	04	900 1	853 S	12941 E

SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND SPEED	ANEM. DIR.	CLOUD TYPE	VIS.	SEA		ATMOS.		WIRE ANGLES	
							HEIGTH	AMT.	DIR.	AMT.	DIR.	AMT.
224	17	23.3	256	11	3	16	8	6	4	11	2	11
225	25	26.0	161	34.1	161	224	19	4.9	6	1.1	4	2.5
246	46	26.00	157	34.1	157	224	19	4.9	6	1.1	4	2.3
269	69	25.66	128	34.1	128	225	0.3	4.4	3	1.0	1	3.6
292	92	25.02	207	34.4	74	227	58	39.5	5	8.9	4.9	
2115	115	21.56	550	34.5	550	239	55	26.1	1	6.0	9.0	
2139	139	19.66	593	34.5	93	245	27	25.3	3	5.2	9.6	
2165	165	16.51	587	34.5	87	253	36	26.0	0	5.0	1.16	
2231	231	13.92	564	34.5	64	259	0.3	25.4	1	4.6	1.35	
2276	276	11.81	577	34.5	77	263	0.6	23.9	4.2	1.13	1	
2370	370	9.36	575	34.5	75	267	4.6	22.7	7	3.6	1.75	
2426	426	8.70	580	34.5	80	268	5.3	22.1	1	3.6	1.76	
2595	595	7.00	595	34.6	10	271	15	22.1	1	3.5	2.00	
2762	762	5.95	610	34.6	10	272	72	20.0	0	3.2	2.11	
2942	942	5.11	617	34.6	17	273	80	21.5	5	3.3	2.13	
2100	100	4.50	624	34.6	24	274	55	21.2	2	3.2	2.12	
21269	1269	3.93	634	34.6	34	275	24	22.7	7	3.3	2.15	
21745	1745	2.97	699	34.6	99	276	69	27.7	4.0	4.0	2.08	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	267	60	9	04	2205 H	832 S	12728 E

SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIA.	ANEM. SPEED	CLOUD TYPE	SEA VIS.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 / CAST 2	
CAST	DEPTH	TEMP.	S%	$\sigma_t$	$\sigma_2$	$O_2$ % SAT.	$O_2$ % SAT.	INORG. P	PARTIC. P	DOUTFUL
1189	10	23.9	261	14	4	16	9	3	14	2
2	2.4	26.3	34.253	223.89	4.71	1.08				1.2
2	2.4	26.24	34.266	224.26	4.68	1.07				1.0
2	4.9	25.09	34.292	228.01	4.58	1.03				1.4
2	7.3	24.26	34.371	231.09	3.78	0.4				3.6
2	9.7	22.35	34.405	236.88	3.51	7.6				5.4
2	12.2	20.04	34.469	243.66	3.29	6.8				7.0
2	14.6	17.15	34.549	251.51	3.04	6.0				6.7
2	19.5	14.63	34.661	257.33	2.79	5.2				11.0
2	23.2	12.61	34.518	261.16	2.75	4.9				12.6
1	27.5	11.66	34.542	262.79	2.46	4.4				14.1
1	36.0	9.96	34.553	266.29	2.31	3.9				16.0
1	44.6	8.38	34.559	268.90	2.21	3.6				17.5
1	61.7	6.76	34.585	271.46	2.21	3.5				19.2
1	78.8	5.54	34.604	273.19	2.15	3.3				20.0
1	96.0	4.80	34.612	274.12	2.18	3.3				20.4



SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 / CAST 2	
CAST	DEPTH	TEMP.		S %	σ <sub>t</sub>	O <sub>2</sub>	O <sub>2</sub>	O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUBTFUL
11	2	269	60	9	05	800 I	8 36 S		128 7 E		
1	25	263 0	34 14 3		22 29 0	4 57	1 0 5	4			
1	49	263 1	34 13 4		22 30 5	4 60	1 0 6	6			
1	73	263 0	34 13 2		22 30 7	4 51	1 0 4	6			
1	97	259 6	34 11 7		22 40 1	4 39	1 0 0	10			
1	121	239 9	34 27 5		23 11 7	2 60	6 2	50			
1	145	203 1	34 45 0		24 28 0	2 90	6 0	71			
1	169	183 5	34 50 9		24 62 9	2 67	5 6	76			
1	192	158 8	34 57 4		25 46 6	2 65	5 1	96			
1	235	138 6	34 56 9		25 90 2	2 46	4 5	114			
1	278	122 9	34 55 9		26 21 0	2 39	4 3	127			
1	362	92 6	34 54 5		26 74 0	2 23	3 7	156			
1	446	79 3	34 56 7		26 96 5	2 11	3 4	168			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE			
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	WIRE ANGLES CAST 1 / CAST 2
CAST	DEPTH	TEMP.	s‰		$\sigma_t$		$\sigma_2$	% O <sub>2</sub> SAT.	INORG. P	PARTIC. P		DOUBTFUL
1	10	2663	34193		22249		454		105		19	
1	20	2652	34176		22272		457		105		20	
1	30	2639	34202		22331		460		106		25	
1	40	2640	34276		22364		452		104		26	
1	50	2628	34409		22522		417		96		39	
1	60	2616	34392		22546		407		93		40	
1	70	2615	34400		22555		398		91		41	
1		2618	34426		22567		400		92		41	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. TYPE	CLOUD HT.	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLE
CAST	DEPTH	TEMP.		%		$\sigma_t$		$O_2$ % SAT.	$O_2$ % SAT.	INORG. P	DOUTIFUL
11	2	273	60	9	05	1740 I		1035 S		12843 E	
9999	01	261	267	11	4	16	9	0	11	2	99
1	10	2694	34417	22319	470	109	13				
1	20	2688	34416	22338	472	110	14				
1	30	2678	34407	22331	470	109	15				
1	40	2660	34394	22353	469	109	12				
1	50	2651	34397	22412	476	110	12				
1	60	2639	34406	22447	472	109	11				
1	70	2613	34434	22506	465	107	16				
1	80	2566	34414	22718	379	86	40				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	275	60	9	05	2125 I	1108 S	129 2 E

SONIC DEPTH	MAX. DEPTH	AIR		WIND		ANEM.	CLOUD TYPE	VIS.	SEA	SWELL	ATMOS.		WIRE PRESSURE	ANGLE CAST 1	ANGLE CAST 2
		TEMP.	WET	DRY	DIR.						HEIGHT	AMT.	DIR.	AMT.	
35	00	23.9	25.6	07	3	16	9	0	7	2	8	1	11.0	00	99

CAST	DEPTH	TEMP.		S‰		$\sigma_t$	$\sigma_2$	% O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUBTFUL	
		TEMP.	DEPTH	S‰	DIR.						DIR.	AMT.
1	26.78	34.572	22.467	4.57	1.05	1.9						
1	26.72	34.564	22.500	4.37	1.06	2.0						
1	26.73	34.561	22.494	4.57	1.05	1.7						
1	26.60	34.562	22.536	4.57	1.06	1.6						
						1						

SHIP	CRUISE	STATION	YEAR	MONTH	D/Y	TIME	LATITUDE	LONGITUDE	
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT TYPE	VIS.	SEA DIR.	ATMOS. PRESSURE	WIRE ANGLE
CAST	DEPTH	TEMP.	%	$\sigma_t$	O <sub>2</sub>	O <sub>2</sub> % SAT.	O <sub>2</sub> INORG. P	PARTIC. P	DOUBTFUL
1	10	26.92	34.747	22574	4.79	112	2.4		
1	20	26.90	34.758	22586	4.66	109	2.6		
1	30	26.64	34.715	22639	4.66	106	2.5		
1	40	26.40	34.703	22705	4.66	106	3.0		
1	26.36	34.703	22712	4.60	106		2.9		
								112	00 99

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. DEPTH	AIR	TEMP.	WIND	ANEM. SPEED	CLD	VIS.	SEA	ATMOS. DIR.	AMT.	WIRE ANGLES
		WET	DRY	DIR.		TYPE		DIR.			CAST 1
86	~ 01	250	283	19	2	16	8	1	2	19	1
										93	00
										99	
CAST	DEPTH	TEMP.	%	$\sigma_t$		$\sigma_t$	$O_2$	% SAT.	$O_2$	INORG. P	PARTIC. P
1	27	27.7	34.9	6.9	22.4	9.8	4.6	9	11.1	2.7	0.6
1	10	27.2	34.9	6.5	22.6	5.7	4.7	5	11.1	2.6	0.7
1	20	27.2	34.9	6.6	22.6	6.9	4.7	2	10.5	2.6	0.6
1	30	26.4	34.9	7.8	22.8	1.2	4.7	5	11.0	2.7	0.9
1	40	26.0	34.9	7.3	22.9	4.9	4.6	0	10.6	3.5	1.0
1	50	25.9	34.9	6.4	22.9	0.0	4.4	3	10.2	3.9	0.6
1	60	25.8	34.9	5.2	22.9	7.5	4.3	0	9.4	3.6	-
1	70	25.6	34.9	4.6	22.9	6.8	4.2	6	9.6	4.3	-
1	80	25.6	34.9	4.6	22.9	9.7	4.2	6	9.6	4.1	-

SHIP		CRUISE		STATION		YEAR	MONTH	DAY	TIME		LATITUDE		LONGITUDE	
SONIC	MAX.	AIR	TEMP.	WIND					ANEM.	CLOUD	SEA	SWELL	ATMOS.	WIRE
SAMP.	DEPTH	WET	DRY	DIR.	SPEED	DIR.	TYPE	AMT.	VIS.	DIR.	DIR.	AMT.	PRESSURE	ANGLES
CAST	DEPTH	DEPTH	TEMP.	s%	σ <sub>t</sub>	σ <sub>t</sub>	O <sub>2</sub>	% SAT.	O <sub>2</sub>	O <sub>2</sub>	INORG. P	PARTIC. P	DOUTIFUL	
1	20	2763	34795	22382	472	111	20							
1	20	2701	34613	22595	470	110	23							
1	39	2611	34672	22773	472	108	21							
1	56	2540	34677	22996	436	99	34							
1	76	2464	34664	23217	369	63	49							
1	97	2356	34631	23512	360	79	59	03						
1	122	2166	34609	24035	321	68	78							
1	146	2022	34619	24432	294	61	96	03						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1   CAST 2
CAST	DEPTH	TEMP.		S%	$\sigma_t$		$O_2$	% SAT.	INORG. P	PARTIC. P	DOUBTFUL
1	2753	34.671			219.94		4.45		1.06	2.0	0.5
1	2653	34.609			225.93		4.70		1.09	1.6	0.3
1	2602	34.647			227.82		4.78		1.10	1.9	0.1
1	2581	34.667			229.62		4.54		1.04	2.6	0.6
1	2534	34.677			230.15		4.30		0.98	3.4	0.5
1	1991	34.599			244.99		3.02		6.2	9.0	
1	1668	34.600			253.01		2.54		4.9	1.17	0.3
1	1576	34.598			255.12		2.42		4.6	1.22	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	284	60	9	13	40 H	1218 S	124.3 E

SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DRT.	WIND DIR.	ANEM. SPEED	CLOUD TYPE	VIS.	SEA SWELL	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
88	01	23.9	26.7	19	1	16	8	1	2	1 110 00 99

CAST	DEPTH	TEMP.	S%	$\sigma_t$	$\sigma_t$	$O_2$	% SAT.	$O_2$	INORG. P	PARTIC. P	DOUBTFUL
1	26.82	34.31	22.27	6	4.7	0	1.09	1.7	0.5		
1	26.67	34.39	22.38	5	4.7	4	1.10	1.9	0.3		
1	26.56	34.56	22.55	3	4.7	1	1.09	1.6	0.5		
1	26.00	34.63	22.77	5	4.6	2	1.06	2.3	0.6		
1	25.68	34.63	22.68	1	4.5	3	1.03	2.9			
1	25.53	34.62	22.91	8	4.4	6	1.01	2.9	0.4		
1	25.44	34.63	22.95	3	4.4	6	1.01	3.1			
1	25.44	34.63	22.95	3	4.4	4	1.01	3.1			
1	25.40	34.63	22.96	7	4.4	0	1.00	3.0			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. DEPTH	AIR	TEMP.	WIND	ANEM.	CLOUD	VIS.	SEA	SWELL	ATMOS. PRESSURE	WIRE ANGLES CAST 1   CAST 2
		WET	DRY	SPEED	DIR.	HEIGHT					
11	2	285	60	9	13	330 H		1154 S		12347 E	
172	01	233	256	23	2	16	8,	1	2	23	1
								21	1	103	00
										99	
CAST	DEPTH	TEMP.	S%O <sub>2</sub>	/	σ <sub>t</sub>	O <sub>2</sub>	%O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUBTFUL	
1	2683	34462	22403			462	107			20	04
1	2665	34496	22471			466	108			19	
1	2632	34561	22623			470	108			16	
1	2592	34572	22757			447	102			27	
1	2545	34572	22902			429	97			30	
1	2442	34555	23201			399	89			45	02
1	2082	34522	24199			312	65			65	
1	1792	34530	24951			259	52			109	16

SHIP		CRUISE		STATION		YEAR	MONTH	DAY	TIME		LATITUDE		LONGITUDE				
SONIC DEPTH	MAX. SAMPLE DEPTH	AIR		TEMP.		WIND DIR.	SPEED	ANEM. HEIGHT TYPE	CLOUD AMT.	VIS.	SEA DIR.	AMT.	SWELL DIR.	AMT.	ATMOS. PRESSURE	WIRE CAST 1	ANGLES CAST 1 CAST 2
		WET	DRY	DIR.	SPEED												
1829	08	24.4	27.2	20	3	16	8	1	2	20	1	20	1	10.3	0.0	0.0	
CAST	DEPTH	TEMP.	TEMP.	%	‰	σ <sub>t</sub>	σ <sub>t</sub>	O <sub>2</sub>	% <sub>SAT.</sub>	O <sub>2</sub>	% <sub>SAT.</sub>	INORG. P	PARTIC. P	DOUBTFUL			
2	27.0	34.27.0	34.25.3	22.1	6.4	4.6	6.8	1.09	9	9	1.10	1.09	1.09	0.4	0.4	0.4	
2	26.9	34.26.9	34.25.3	22.2	0.2	4.7	3	1.10	7	7	1.10	1.09	1.09	0.3	0.3	0.3	
2	26.5	34.26.5	34.22.7	22.3	1.2	4.7	3	1.09	1.0	1.0	1.09	1.09	1.09	0.3	0.3	0.3	
2	25.8	34.25.8	34.22.0	22.5	0.1	4.2	5	9.7	2.0	2.0	9.7	9.7	9.7	0.5	0.5	0.5	
2	24.2	34.24.2	34.23.3	22.9	9.6	3.5	6	7.6	4.6	4.6	7.6	7.6	7.6	0.5	0.5	0.5	
2	21.4	34.21.4	34.34.4	23.6	6.4	3.3	1	7.0	6.4	6.4	7.0	7.0	7.0	0.3	0.3	0.3	
2	18.8	34.18.8	34.31.1	24.7	1.0	2.7	4	5.5	9.5	9.5	5.5	5.5	5.5	0.3	0.3	0.3	
2	15.1	34.15.1	34.36.2	25.6	1.1	2.4	6	4.7	1.22	1.22	4.7	4.7	4.7	1.22	1.22	1.22	
2	13.4	34.13.4	34.35.8	25.9	7.6	2.4	5	4.4	1.38	1.38	4.4	4.4	4.4	1.38	1.38	1.38	
2	11.4	34.11.4	34.34.9	26.3	5.8	2.3	0	4.0	1.54	1.54	4.0	4.0	4.0	1.54	1.54	1.54	
1	9.7	34.9.7	34.35.6	26.6	7.4	2.2	1	3.7	1.72	1.72	3.7	3.7	3.7	1.72	1.72	1.72	
1	6.5	34.6.5	34.35.0	27.1	7.0	2.1	6	3.4	2.01	2.01	3.4	3.4	3.4	2.01	2.01	2.01	
1	5.4	34.5.4	34.35.9	27.3	2.0	2.1	7	3.3	2.07	2.07	3.3	3.3	3.3	2.07	2.07	2.07	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA	SWELL	ATMOS. PRESSURE	AMT.
CAST	DEPTH	TEMP.	s%	σ <sub>t</sub>	O <sub>2</sub>	% SAT.	O <sub>2</sub>	INORG. P	PARTIC. P	
11	2	292	60	9	14	808 H	1119 S	1184 E		
4389	~ 39	222	256	22	4	16	7	1	2	2.3
1	2	2651	34262	22339	472	109	21	0	0	0
2	22	2634	34253	22385	478	110	19	0	0.4	
2	45	2541	34279	22693	428	97	40	0	0.5	
2	67	2428	34318	23063	377	84	54	0	0.3	
2	90	2251	34383	23626	350	76	67	0	0.3	
2	112	2073	34403	24133	334	70	78			
2	134	1845	34666	24924	211	42	105	0.3		
2	177	1471	34503	25671	211	39	129			
2	220	1399	34547	25858	240	46	137			
2	264	1205	34548	26248	242	43	149			
2	350	961	34517	26660	228	38	173			
2	437	881	34585	26843	216	36	176			
2	590	728	34592	27079	206	33	169			
2	760	605	34599	27251	204	32	200			
2	930	509	34604	27372	214	32	166			
2	1094	455	34615	27443	214	32	161			
2	1259	402	34636	27516	224	35	210			
2	1690	286	34713	27690	279	40	199			
2	2118	224	34736	27764	316	45	186			
2	2545	190	34738	27791	349	49	182			
2	2971	161	34736	27812	369	51	181			
2	3408	137	34734	27827	397	55	171			
2	3671	103	34724	27843	419	57				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	295	60	9	14	2150 H	1301 S	11927 E

SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIRECTION	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA SWELL	ATMOS. DIR.	ATMOS. AMT.	WIRE PRESSURE	CAST 1	CAST 2		
4297	32	239	261	19	3	16	8	0	19	3	20	2	104	00	00

CAST	DEPTH	TEMP.	S% <sub>o</sub>	σ <sub>t</sub>	O <sub>2</sub>	%O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUBTFUL
2	2659	34.277	22325	4.65	1.07	2.1	0.3		

2	2654	34.259	22327	4.60	1.06	2.2	0.3		
2	2621	34.303	22464	4.62	1.06	2.0	0.4		
2	2576	34.343	22634	4.62	1.05	2.3	0.3		
2	2517	34.463	22905	3.65	0.67	4.8	0.2		
2	2491	34.618	23252	4.65	1.05	2.7	4		
2	2424	34.677	23498	3.78	0.64	4.5			
2	178	1995	34.516	24425	2.82	5.6	9.0	0.2	
2	223	1602	34.604	25457	2.44	4.7	1.22		
2	269	1406	34.609	25948	2.42	4.5	1.34		
2	359	1062	34.657	26596	2.35	4.0	1.54		
2	450	867	34.650	26885	2.66	4.4	1.61		
1	550	714	34.639	27156	2.66	4.2	1.70		
1	656	677	34.605	27160	2.02	3.2	2.01		
1	600	575	34.602	27291	2.02	3.1	2.08		
1	937	508	34.603	27373	2.12	3.2	2.10		
1	1085	453	34.617	27446	2.15	3.2	2.14		
1	1425	355	34.655	27579	2.42	3.5	2.11		
1	1860	375	34.716	27608	2.66	4.2	2.08		
1	2246	169	34.730	27786	3.20	4.5	2.06		
1	2656	216	34.732	27764	3.46	4.9	1.95		
1	3075	169	34.733	27803	3.61	5.0	1.85		
1	3182	156	34.726	27807	3.70	5.1	1.92		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	297	60	9	15	600 H	1332 S	11950 E

SONIC DEPTH	MAX. AMP. DEPTH	AIR TEMP.	WIND	ANEM.	CLOUD		SEA	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
					HEIGHT	TYPE			
3091	10	23.3	25.6	17	3	16	8	0	17

CAST	DEPTH	TEMP.	%	$\sigma_t$	$\sigma_2$		% $O_2$ SAT.	INORG. P	PARTIC. P	DOUBTFUL
					%	PPM				
2	2623	34.584	226.9	4.62	1.06	9	0.4			

2	2615	34.580	226.91	4.62	1.06	4	0.3			
2	2610	34.573	227.01	4.55	1.04	7	0.5			
2	2557	34.623	229.03	4.55	1.04	6	0.5			
2	2509	34.747	231.44	4.36	0.99	12	0.1			
2	2338	34.743	236.49	3.32	7.3	4.6				
2	2252	34.669	239.92	3.10	6.7	4.9	0.1			
2	1949	34.794	247.57	2.47	5.1	7.6				
2	1695	34.959	254.36	2.53	5.0	8.8				
2	1402	34.645	260.81	2.53	4.7	10.5				
2	1013	34.635	266.64	2.39	4.1	14.4				
2	876	34.620	268.79	2.39	3.9	14.3				
2	876	34.603	270.79	2.16	3.8	17.4				
1	865	34.595	272.16	1.99	3.1	16.6				
1	865	34.600	273.25	2.20	3.4	19.2				
1	864	34.604	274.01	2.06	3.1	19.9				
1	864	34.604	274.01	2.06						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	WIRE ANGLES CAST 1   CAST 2
CAST	DEPTH	TEMP.		s%	σ <sub>t</sub>	O <sub>2</sub>	O <sub>2</sub> % SAT.	Inorg. P	Partic. P		Doubtful
11	2	299	60	9	15	1452 H	1449 S	12024 E			
1609	14	239	261	22	4	16	8	0	22	2	00 00
2	2658	34 515	22507	465	106	23	04				
2	2628	34 587	22656	462	106	34	05				
2	2567	34 604	22858	460	105	36	05				
2	2534	34 721	23048	453	103	36	06				
2	2487	34 660	23296	415	94	33	04				
2	2354	34 638	23675	338	75	61					
2	2175	34 622	24172	269	62	76	05				
2	2174	34 645	25316	260	51	119					
2	1379	34 728	26039	244	45	148					
2	1160	34 672	26429	239	42	163					
2	999	34 728	26761	262	48	163					
2	866	34 662	26924	294	48	177					
1	646	34 601	27191	206	32	229					
1	836	34 603	27323	207	32	235					
1	1031	470	34 612	27423	215	32					
1	1221	406	34 627	27505	225	33					
1	1415	348	34 661	27591	246	36	227				



SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE							
							AIR TEMP.	WIND DIR. SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. AMT.	WIRE PRESSURE	WIRE ANGLES CAST 1 / CAST 2
SONIC DEPTH	SAMP DEPTH	AIR WET														
11	2	303	60	9	16	110 H	1607 S							121 5 E		
66	01	222	244	21	4	16	8	0	0	21	2	21	1	13 8	00	.99
CAST	DEPTH	TEMP.	s‰		$\sigma_t$	$O_2$	% $O_2$	% sat.	$O_2$	INORG. P	PARTIC. P		DOUTFUL			
1	10	2553	34777		23032	475	108	108	22	06						
1	20	2545	34772		23052	470	107	107	26	07						
1	30	2546	34773		23050	466	106	106	27	07						
1	40	2545	34774		23054	473	108	108	27	06						
1	50	2530	34773		23099	475	108	108	28	06						
1	60	2522	34774		23124	452	102	102	28	09						
1	60	2493	34778		23216	429	97	97	29							

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE					
11	2	304	60	9	16	410 H	1635 S	12119 E					
SONIC DEPTH	MAX. SAMPLE DEPTH	AIR TEMP.	TEMP.	WIND DIR.	WIND DIR.	ANEM. SPEED	CLOUD TYPE	SEA VIS.	SWELL DIR.	ATMOS. AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST 1	WIRE ANGLES CAST 2
42	00	222	244	21	2	16	8	0	21	2	22	1	142
CAST	DEPTH	TEMP.	TEMP.	S%	S%	σ <sub>t</sub>	σ <sub>t</sub>	O <sub>2</sub> % SAT.	O <sub>2</sub> % SAT.	INORG. P	PARTIC. P	DOUTFUL	
1	10	2522	34768	23120	23120	4.65	4.65	1.05	1.05	2.5			
1	20	2516	34762	23134	23134	4.65	4.65	1.05	1.05	2.1			
1	30	2516	34760	23126	23126	4.65	4.65	1.05	1.05	2.2			
1	30	2510	34762	23152	23152	4.65	4.65	1.05	1.05	2.3			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE		
11	2	305	60	9	16	705 H	1700 S	12133 E		
SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 / CAST 2
44	00	22.8	24.4	24	2	16	8	0	24	2
CAST	DEPTH	TEMP.	S%o	σ <sub>t</sub>	O <sub>2</sub>	% O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUTFUL	
1	10	25.08	34.815	23198	4.65	1.05	1.9			
1	20	25.05	34.810	23203	4.63	1.05	2.1			
1	30	25.06	34.810	23200	4.55	1.03	2.3			
1	30	25.03	34.813	23212	4.61	1.04	2.3			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	306	60	9	16	918 H	1725 S	12142 E

SONIC DEPTH	MAX. DEPTH	AIR	TEMP.	WIND	ANEM. HEIGHT	CLOUD	VIS.	SEA	ATMOS. PRESSURE	WIRE ANGLES CAST 1   CAST 2
		WET	DRY	DIR.		SPEED		TYPE		
42	00	233	250	24	2	16	8	1	24	2

CAST	DEPTH	TEMP.	S%	σ <sub>t</sub>	O <sub>2</sub>	O <sub>2</sub> % SAT.	O <sub>2</sub> % SAT.	Inorg. P	Partic. P	Doubtful
1	10	25.06	34.966	23318	470	106	106	2.3		
1	20	24.89	34.966	23370	471	106	106	2.4		
1	30	24.91	34.965	23363	465	105	105	2.3		
1	30	24.91	34.965	23363	465	105	105	2.6		

SHIP		CRUISE		STATION		YEAR	MONTH	DAY	TIME		LATITUDE		LONGITUDE	
SONIC DEPTH	MAX. SAMPLE DEPTH	AIR	TEMP.	WIND		ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA		SWELL	ATMOS. DIR.	AMT.	PRESSURE
		WET	DRY	DIR.	SPEED				DIR.	AMT.				
11	2	312	60	9	17	750 H			1942 S		11745 E			
62	01	200	233	12	1	16	8	1	4	12	1	28	1	117
CAST	DEPTH	TEMP.	s%	σ <sub>t</sub>		O <sub>2</sub>	O <sub>2</sub>	% SAT.	O <sub>2</sub>	% SAT.	INORG. P	PARTIC. P		
1	10	2404	35039		23679		476		106					18
1	20	2366	35029		23725		474		105					18
1	30	2368	35029		23719		470		104					12
1	40	2391	35029		23710		471		105					14
1	50	2374	35045		23772		476		105					21
1	50	2375	35104		23614		466		103					19



SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIR.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT TYPE	VIS.	SEA	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.		S%		$\sigma_t$	$\sigma_t$	$O_2$ % SAT.	INORG. P	DOUTFUL
11	2	314	60	9	17	1437 H		1850 S	111719 E	
292	03	211	239	.09	2	16	8	1	27	1 117 00 99
1	2450	2488	34.846	34.858		23390	4.67	1.01	1.0	0.2
1	2426	2426	34.903	34.903		23500	4.70	1.01	1.5	0.3
1	2403	2403	34.963	34.963		23630	4.74	1.01	1.6	0.3
1	2367	2367	35.033	35.033		23784	4.67	9.9	1.7	0.3
1	2308	2308	35.058	35.058		23974	4.59	9.7	2.9	0.2
1	2214	2214	35.066	35.066		24248	4.48	3.51	7.6	3.9
1	2003	2003	35.063	35.063		24821	4.21	3.22	6.7	7.1
1	1471	1471	35.022	35.022		26070	3.04	5.7	10.6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE		
SONIC DEPTH	MAX. SAMPLE DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. TYPE	CLOUD TYPE	VIS.	SEA SWELL	ATMOS. PRESSURE	WIRE ANGLES CAST 1 CAST 2
CAST	DEPTH	TEMP.		S%	$\sigma_t$	$\sigma_2$	% O <sub>2</sub> SAT.	INORG. P	PARTIC. P	DOUBTFUL
11	2	315	60	9	17	1740 H	1820 S	1117 5 E		
1554	10	211	244	26	2	16	8	1	2	= 1 105 00 00
2	250.6	34.8	13	23203	4.6	2	104	15	0.3	
2	247.5	34.8	14	23297	4.6	2	104	14	0.3	
2	245.5	34.9	66	234.87	4.6	7	105	15	0.3	
2	245.1	35.0	10	235.17	4.6	7	105	16	0.2	
2	236.6	35.0	36	237.24	4.5	4	101	21	0.1	
2	239.1	35.0	38	237.17	3.6	5	86	46		
2	217.6	35.0	03	243.07	3.4	0	73	62		
2	188.9	35.0	74	251.24	3.6	6	75	75		
2	157.0	35.0	27	258.55	3.1	2	60	101		
2	133.7	34.9	77	263.18	2.6	9	53	120		
1	105.6	34.8	53	267.59	3.6	5	63	120		
1	87.0	34.7	03	269.53	4.1	4	66	132		
1	66.0	34.6	30	272.03	2.2	9	56	105		
1	56.3	34.6	31	273.29	2.0	6	32	192		
1	46.5	34.6	26	274.19	2.1	1	32	199		
1	103.2	84.4	46.5							

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE			LONGITUDE		
SONIC DEPTH	MAX. SAMP. DEPTH	AIR	TEMP.	WIND		ANEM.	CLOUD	SEA	SWELL	ATMOS.	WIRE ANGLES	
		WET	DRY	DIR.	SPEED	HEIGHT	TYPE	AMT.	DIR.	AMT.	DIR.	AMT.
11	2	.317	60	9	18	2 H	1726 S			11641 E		
2286	14	211	244	26	2	16	8	1	3	26	1	24
CAST	DEPTH	TEMP.		S%		σ <sub>t</sub>	O <sub>2</sub>	% <sub>SAT.</sub>	O <sub>2</sub>	INORG. P	PARTIC. P	DOUBTFUL
2	25	2589		34495		22708	470	107	19	04		
2	25	2553		34632		22922	473	108	32	05		
2	49	2539		34722		23033	475	108	19	04		
2	74	2502		34841		23236	473	107	19	07		
2	99	2415		34832		23490	397	88	36	03		
2	123	2326		34950		23841	349	77	43			
2	147	2188		35010		24279	326	70	69	02		
2	194	1844		34923		25122	266	58	97			
2	240	1596		34994		25770	269	56	110			
2	287	1354		34896		26221	286	52	132			
2	384	1069		34825		26716	322	56	143			
1	455	910		34750		26913	410	68	136			
1	640	690		34629		27150	250	40	196			
1	629	567		34629		27322	212	33	225			
1	1012	465		34630		27421	215	32	223			
1	1194	432		34639		27487	224	33	229			
1	1375	354		34664		27587	252	37	227			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE			LONGITUDE		
SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIR.	A NEW. SPEED	CLOUD HEIGHT	VIS.	SEA DIR.	ATMOS. AMT.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1 / CAST 2	
CAST	DEPTH	TEMP.	S%	σ <sub>t</sub>	O <sub>2</sub>	O <sub>2</sub> % SAT.	O <sub>2</sub> % SAT.	INORG. P	PARTIC. P	DOUBTFUL		
11	2	319	60	9	18	630 H	1626 S			11615 E		
4572	42	211	239	27	2	16	7	1	7	24	1	104
2	25	2539	34641	22972	467	107				19	04	
2	49	2440	34752	23355	474	108				16	05	
3	72	2393	34745	23490	473	106				17	04	
2	96	2235	34806	23992	378	84				49	06	
2	119	2113	34823	24343	275	59				64	05	
2	142	2041	35020	24687	304	64				79		
2	167	1779	35006	25346	312	65				77		
2	232	1529	34926	25870	269	58				97		
2	271	1527	34941	26311	277	53				113		
2	366	1074	34647	26722	294	54				125		
2	458	869	34613	26931	343	59				128		
1	659	667	34631	27167	268	64				144		
1	636	566	34620	27314	229	56				192		
1	1022	464	34623	27416	200	51				208		
1	1208	429	34637	27488	206	51				215		
1	1390	370	34663	27571	212	51				216		
1	1646	251	34721	27728	232	54				210		
1	2302	210	34725	27765	294	42				206		
1	2767	184	34738	27796	352	47				204		
1	3230	133	34723	27821	391	49				194		
1	3696	122	34715	27823	416	57				186		
1	4172	116	34713	27825	430	59				168		

SHIP	CRUISE		STATION		YEAR	MONTH	DAY	TIME		LATITUDE		LONGITUDE	
	MAX. SONIC DEPTH	AIR TEMP.	WIND DIRECTION	WIND SPEED				ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA	SWELL	ATMOS. PRESSURE
CAST	DEPTH	TEMP.		S% <sub>o</sub>		$\sigma_t$		$O_2$		% <sub>O2</sub> SAT.	INORG. P	PARTIC. P	DOUTIFUL
11	2	321	60	9	18	1545	H	1535	S	11556 E			
5706	50	222	250	24	2	16	8	8	4	21	1	100	00 00
25	25	2568	34	405	2264	3	465	106	10	04			
22	50	2574	34	590	2282	6	467	107	10	04			
22	50	2565	34	539	2281	5	470	107	6	06			
22	75	2522	34	566	2296	6	462	105	8	07			
22	100	2451	34	683	2327	1	365	66	30	06			
22	124	2323	34	730	2368	3	337	74	46				
22	149	2199	34	925	2418	3	320	69	59	05			
22	194	1804	34	922	2522	1	266	53	91				
22	239	1559	35	124	2595	4	320	61	66				
22	285	1329	34	953	2631	6	300	55	116				
22	379	1114	34	905	2669	5	349	61	116				
22	475	892	34	775	2699	1	357	56	147				
1	652	670	34	616	2717	6	218	34	193				
1	640	525	34	603	2735	3	206	31	201				
1	1027	460	34	623	2744	3	208	31	221				
1	1211	417	34	637	2750	1	216	32	236				
1	1395	361	34	661	2757	9	232	34	221				
1	1845	250	34	717	2772	5	269	41	199				
1	2312	205	34	737	2777	9	325	46	193				
1	2770	160	34	734	2781	1	354	49	165				
1	3220	148	34	727	2781	4	360	52	165	5			
1	3670	125	34	725	2782	9	414	57	165	5			
1	4122	118	34	717	2782	7	415	57	165	5			
1	4573	119	34	711	2782	2	426	59	142	57			
1	5032	127	34	715	2781	9	416	180					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE			LONGITUDE		
							ANEM.	CLOUD	SEA	ATMOS.	WIRE ANGLES	
SONIC MAX. DEPTH	AIR TEMP. WET	WIND DIR.	SPEED	HEIGHT	TYPE	AMT.	DIR.	AMT.	DIR.	AMT.	CAST 1	CAST 2
CAST	DEPTH	TEMP.	%	σ <sub>t</sub>	σ <sub>t</sub>	σ <sub>2</sub>	σ <sub>2</sub>	% <sub>SAT.</sub>	O <sub>2</sub> % <sub>SAT.</sub>	INORG. P	PARTIC. P	DOUTFUL
5752	52	23.3	24.4	22	6	16	8	3	22	2	21	1
11	2	323	60	9	18	2300	H		1445 S		11522 E	
2	2567	34.404	22707	475	108	16	04					
2	2560	34.496	22791	475	108	19	01					
2	493	34.610	23089	473	107	19	03					
2	73	34.702	23285	467	105	19	04					
2	97	34.815	23576	362	65	46	01					
2	121	34.862	23929	337	73	58						
2	145	34.866	24230	320	66	67	01					
2	191	34.916	25006	294	60	62						
2	237	35.048	25816	307	59	101						
2	263	35.009	26361	322	59	110						
2	380	34.901	26794	435	75	104						
2	478	34.681	26969	405	66	132						
1	658	34.629	27180	224	35	166						
1	847	34.650	27327	194	30	209						
1	1033	34.623	27433	212	32	211						
1	1220	34.631	27501	221	33	207						
1	1410	34.663	27586	242	35	200						
1	1880	34.725	27734	300	43	190						
1	2348	34.737	27783	346	48	209						
1	2818	34.739	27824	371	51	190						
1	3276	34.726	27820	395	54	167						
1	3757	34.729	27833	422	58	161						
1	4228	34.727	27836	424	58	161						
1	4697	34.726	27838	428	58	161						
1	5167	34.717	27826	416	57							

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE								
							SONIC DEPTH	MAX. SAMPLE DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. PRESSURE
CAST	DEPTH	TEMP.		S%		$\sigma_t$											
11	2	325	60	9	19	800 H			1343 S			11449 E					
5358	47	250	256	23	3		16	8	8	23	1	22	1	111	00	00	
2	24	2594	34354		22586		470		107		17		03				
2	49	2581	34342		22618		470		107		13		03				
2	73	2538	34591		22938		465		106		13		04				
2	97	2453	34605		23357		475		107		15		03				
2	121	2327	34912		23609		475		106		17		03				
2	145	2213	34994		24196		368		85		41						
2	193	1852	35036		25189		367		79		46		02				
2	240	1445	34831		25979		312		63		30						
2	268	1183	34770		26462		266		66		50		119				
2	365	999	34801		26818		370		63		47		136				
2	482	800	34639		27014		261		63		47		124				
1	664	660	34607		27185		261		63		46		154				
1	846	546	34608		27331		209		63		33		192				
1	1032	473	34613		27421		218		63		32		202				
1	1214	424	34626		27465		235		33		33		203				
1	1390	393	34662		27546		235		35		207						
1	1865	256	34725		27727		294		42		200						
1	2335	205	34736		27778		325		46		194						
1	2813	167	34731		27803		367		51		183						
1	3274	146	34725		27814		392		54		169						
1	3754	123	34722		27828		420		56		177						
1	4229	117	34718		27829		424		58		162						
1	4705	120	34717		27826		433		59		162						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE								
							AIR	TEMP.	WIND	ANEM.	CLOUD	SEA	SWELL	ATMOS.	WIRE ANGLES		
SONIC	MAX.						VIS.	DIR.	AMT.	DIR.	AMT.	DIR.	AMT.	CAST 1	CAST 2		
DEPTH	WET	DYR	SPEED	DIR.	AMT.												
CAST	DEPTH	TEMP.	s%o				O <sub>2</sub>	%O <sub>2</sub> SAT.		INORG. P	PARTIC. P			DOUBTFUL			
11	2	327	60	9	19	1800 H								11418 E			
4572	42	22.2	25.0	19	2		16	6	0	1	19	2	21	1	105	00	00
2	2.5	26.7	24				223.0	6	47.0	109	12	0.3					
2	4.0	26.6	12				223.4	5	47.0	109	10						
2	7.3	25.9	29				225.8	3	46.7	107	12	0.3					
2	9.7	25.6	57				227.4	7	43.5	99	24	0.5					
2	12.0	24.0	5				233.0	6	34.0	75	52	0.6					
2	14.4	21.8	3				239.6	6	26.9	62	76						
2	14.4	20.4	5				244.3	0	28.9	60	82	0.6					
2	19.1	17.0	7				255.3	1	28.0	61	82						
2	23.7	14.7	9				259.7	3	27.2	51	131						
2	28.4	12.2	8				263.9	9	27.2	49	104						
2	37.7	10.2	5				267.4	6	31.2	53	150						
2	47.0	8.0	9				269.1	4	32.5	54	145						
2	65.3	6.5	3				272.0	0	20.0	33	194						
2	63.2	5.4	9				273.2	6	21.2	32	200						
1	101.4	4.7	7				274.1	3	22.4	34	201						
1	119.6	4.1	9				274.8	9	22.9	34	202						
1	137.7	3.5	6				275.6	6	25.0	36	200						
1	163.5	2.5	0				277.4	0	31.0	44	192						
1	229.9	2.0	2				277.8	4	34.6	48	178						
1	275.7	1.6	8				278.0	3	36.9	51	171						
1	313.3	1.4	5				278.2	3	40.1	55	169						
1	367.6	1.2	0				278.2	7	42.0	59	162						
1	421.6	1.0	6				278.3	4	39.9	60	163						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE			
							MAX. WATER DEPTH	AIR TEMP. WET	WIND DIR.	ANEM. SPEED	CLOUD TYPE	SEA VIS.
CAST	DEPTH	TEMP.		S%	$\sigma_t$	$O_2$	$O_2$	% SAT.	$O_2$	INORG. P	PARTIC. P	DOUBTFUL
11	2	329	60	9	20	2030 H	1053 S				11332 E	
6218	55	222	250	12	4	16	7	0	8	12	21	1
											110	00
											00	00
2	24	2641	34386	22464	471	109	11	04				
2	49	2565	34329	22657	471	107	10	05				
2	73	2547	34500	22841	459	104	11	07				
2	97	2460	34646	23216	390	87	33	03				
2	121	2167	34366	23848	292	62	78	03				
2	145	2011	34656	24490	272	56	79	03				
2	178	1762	34721	25121	272	54	92	03				
2	192	1450	34776	25926	249	46	120					
2	239	1178	34561	26309	232	41	156					
2	265	1057	34569	26535	226	39	137					
2	377	904	34626	26839	215	36	170					
2	470	834	34662	26977	191	31	186					
2	656	636	34617	27225	199	31	196					
1	643	536	34608	27343	208	32	207					
1	1018	465	34617	27433	217	32	208					
1	1195	416	34634	27500	226	33	205					
1	1370	365	34679	27588	240	35	211					
1	1812	273	34731	27717	292	42	206					
1	2268	215	34743	27775	316	44	199					
1	2726	185	34731	27800	359	48	191					
1	3168	149	34728	27822	365	51	186					
1	3650	126	34719	27823	414	57	180					
1	4115	115	34716	27828	433	59	178					
1	4582	119	34720	27829	437	60	185					
1	5051	125	34713	27819	440	60	181					
1	5521	130	34713	27816	445	61	182					

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SHIP	CRUISE		STATION		YEAR		MONTH		DAY		TIME		LATITUDE		LONGITUDE	
	SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIR.	TEMP.	WIND DIR.	ANEM. SPEED	CLOUD HEIGHT	TYPE	AMT.	VIS.	SEA DIR.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1   CAST 2	
CAST	DEPTH	TEMP.	s%	s%	σ <sub>t</sub>	O <sub>2</sub>	O <sub>2</sub>	O <sub>2</sub>	% SAT.	INORG. P	PARTIC. P	DOUTFUL				
11	2	334	60	9	21	430 G						1243 S		109 8 E		
3475	35	222	244	15	6	16	7	0	5	15	2	17	2	104	00 00 00	
2	588	34313	22574	468	107	27	0					0				
2	2588	34314	22575	474	108	24	0					0				
2	2502	34310	22635	429	97	39	0					0				
2	2330	34374	23393	342	75	65	0					0				
2	2153	34391	23906	302	64	64	0					0				
2	1962	34470	24476	268	55	37	0					0				
1	1790	34469	24909	298	59	103	0					0				
1	1544	34763	25710	264	50	120	0					0				
1	1324	34837	26237	283	52	124	0					0				
2	1116	34663	26505	240	42	154	0					0				
2	1000	34717	26750	258	44	157	0					0				
2	849	34681	26969	321	53	158	0					0				
2	681	34641	27183	199	31	200	0					0				
2	576	34615	27297	199	31	209	0					0				
2	502	34613	27388	211	32	209	0					0				
2	440	34626	27468	211	31	211	0					0				
2	392	34650	27538	232	34	211	0					0				
2	264	34715	27694	292	42	204	0					0				
2	216	34736	27769	304	43	200	0					0				
2	177	34737	27800	366	51	200	0					0				
1	146	34728	27816	395	54	195	0					0				
1	129	34717	27819	399	55	55	0					0				



SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE		
SONIC DEPTH	MAX. SAMP. DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	SEA VIS.	SWELL DIR.	ATMOS. PRESSURE	WIRE ANGLES CAST 1   CAST 2	
CAST	DEPTH	TEMP.		S%		$\sigma_t$	$O_2$	% $O_2$ SAT.	INORG. P	PARTIC. P	DOUBTFUL
5852	52	222	233	17	6	16	7	0	2	17	2
11	2	339	60	9	22	115 G	1529 S		11053 E		
25	2562	34230	22592	2	47	5	108		17	06	
22	2561	34222	22589	2	468		106		18	05	
2	2562	34227	22589	2	459		104		19	05	
2	2460	34291	22948	2	356		75		52	05	
2	2294	34293	23436	2	304		66		68	03	
96	2294	34344	23646	2	292		62		76		
122	2161	34627	24336	2	353		70		59	03	
146	2117	34916	25242	2	292		58		76		
194	1794	34637	25742	2	300		57		66		
241	1555	35001	26350	2	320		56		95		
288	1324	34945	26730	2	366		64		114		
382	1112	34741	26927	2	426		71		100		
475	905	34652	27171	2	191		30		105		
661	696	34657	27296	2	186		31		200		
644	591	34633	27395	2	202		31		198		
1036	511	34648	27490	2	226		34		200		
1225	436	34675	27581	2	247		36		204		
1	1413	369	34729	2	27720		294		196		
1	1803	267	34746	2	27763		342		187		
1	2350	208	34736	2	27811		374		52	184	
1	2817	164	34736	2	27826		402		55	174	
1	3265	141	34726	2	27831		414		57	172	
1	3752	123	34725	2	27833		434		59	177	
1	4220	119	34727	2	27836		445		61	172	
1	4668	114	34725	2	27833		455		62	166	
1	5154	119	34725	2	27833						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	341	60	9	22	949 K	1621 S.	11127 E

SONIC DEPTH	MAX. DEPTH	AIR TEMP.	WIND D.R.	WIND SPEED	ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL AMT.	ATMOS. DIR.	PRESSURE	CAST 1 CAST 2	WIRE ANGLES
CAST	DEPTH	TEMP.		S%	O <sub>t</sub>		O <sub>2</sub>	% O <sub>2</sub>	SAT.	INORG. P	PARTIC. P		DOUTFUL
4938	42	194	244	17	9	16	8	6	3	17	2	157	00 00
2	54	343	301	22701	460	109	14	05					
2	53	342	293	22713	479	108	13	07					
2	50	345	75	23168	447	100	15	04					
2	75	241	641	23343	472	105	10	03					
2	100	241	34	23428	479	107	11	05					
2	123	237	2	23721	415	91	29						
2	149	227	5	24012	367	80	41	03					
2	195	199	9	24746	311	64	67						
2	241	170	7	25664	336	66	75						
2	267	144	4	26270	363	65	81						
2	381	116	2	35052	26720	454	80	76					
2	476	917	7	34755	26919	507	85	97					
2	667	681	1	34630	27174	234	37	179					
2	845	590	5	34631	27295	193	30	193					
2	1025	507	3	34633	27398	205	31	194					
2	1209	441	1	34643	27480	220	33	199					
2	1392	379	1	34669	27566	249	36	194					
2	1650	260	1	34720	27719	308	44	187					
2	2316	209	1	34734	27773	336	47	183					
2	2783	170	1	34730	27800	362	50	181					
2	3254	142	1	34722	27814	395	54	172					
2	3730	121	1	34723	27838	416	55	171					
2	4206	117	1	34730	27838	429	59	170					

SHIP		CRUISE		STATION		YEAR	MONTH	DAY	TIME		LATITUDE		LONGITUDE			
SONIC	DEPTH	MAX.	DEPTH	AIR	TEMP.	WIND	DIR.	WET	DRY	ANEM.	CLOUD	VIS.	SEA	SWELL	ATMOS.	WIRE ANGLES
CAST	DEPTH					SPEED	HEIGHT	TYPE	AMT.	AMT.	DIR.	AMT.	DIR.	AMT.	CAST 1	CAST 2
4755	42	11	2	343	60	9	22	2100 H	1733 S	112 2 E						
2	429	346	83	233	36	49	5	110	110	110	110	110	110	110	110	110
2	425	346	67	233	36	46	6	108	108	108	108	108	108	108	108	108
5	392	348	29	235	56	47	1	105	105	105	105	105	105	105	105	105
7	297	350	76	240	20	43	9	96	96	96	96	96	96	96	96	96
10	2291	351	42	240	67	46	1	105	105	105	105	105	105	105	105	105
12	2258	351	47	241	85	45	6	100	100	100	100	100	100	100	100	100
14	2127	350	03	244	42	34	7	74	74	74	74	74	74	74	74	74
19	1935	352	92	251	73	37	2	76	76	76	76	76	76	76	76	76
24	1752	354	22	257	30	38	6	77	77	77	77	77	77	77	77	77
26	1625	353	80	260	00	46	8	91	91	91	91	91	91	91	91	91
37	1168	350	29	266	91	45	3	80	80	80	80	80	80	80	80	80
47	931	347	06	268	59	55	6	93	93	93	93	93	93	93	93	93
67	665	345	70	271	49	26	4	45	45	45	45	45	45	45	45	45
85	567	346	03	273	02	21	5	53	53	53	53	53	53	53	53	53
1035	500	345	96	273	76	21	7	33	33	33	33	33	33	33	33	33
1216	432	346	45	274	92	24	0	36	36	36	36	36	36	36	36	36
1400	374	346	61	275	65	27	2	40	40	40	40	40	40	40	40	40
1860	257	347	22	277	22	32	7	46	46	46	46	46	46	46	46	46
2324	207	347	36	277	18	33	6	47	47	47	47	47	47	47	47	47
2795	173	347	39	278	05	33	2	49	49	49	49	49	49	49	49	49
3269	144	347	29	278	18	40	2	55	55	55	55	55	55	55	55	55
3742	120	347	22	278	00	42	0	59	59	59	59	59	59	59	59	59
4214	116	347	20	278	31	43	4	59	59	59	59	59	59	59	59	59

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
							MAX. SONIC DEPTH	AIR TEMP.	WIND DIR.	WIND SPEED
CAST	DEPTH	TEMP.	s‰	σ <sub>t</sub>	O <sub>2</sub>	% SAT.	O <sub>2</sub> % SAT.	INORG. P	PARTIC. P	
11	2	345	60	9	23	615 H	1900 S	11246 E		
2106	18	197	208	18	6	16	7	0	4	18
								2	19	2
										178
2280	2273	35157	35153	24127	508	111	15	0.4		
22	48	35155	35155	24150	502	109	12	0.3		
22	72	35157	35157	24140	495	108	12	0.5		
22	96	35154	35154	24144	493	107	10	0.4		
22	119	35139	35139	24173	478	104	20	0.3		
22	142	35154	35154	24219	467	101	20			
22	166	35301	35301	24309	414	89	18	0.1		
22	209	35447	35447	24753	399	84	32			
22	234	35447	35447	25327	475	97	45			
22	260	35645	35645	25962	508	101	34			
22	373	35245	35245	26601	513	93	80			
22	446	34671	34671	26791	552	95	50			
1	623	34524	34524	26986	466	75	130			
1	801	34557	34557	27248	250	38	98			
1	980	34587	34587	27361	229	35	208			
1	1157	34641	34641	27479	232	35	200			
1	1335	34622	34622	27529	263	39	205			
1	1780	34680	34680	27691	310	44	202			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	346	60	9	23	1300 H	1959 S	11315 E

SONIC DEPTH	MAX. DEPTH	AIR TEMP.		WIND		ANEM. HEIGHT	CLOUD TYPE	VIS.	SEA DIR.	SWELL DIR.	ATMOS. DIR.	PRESSURE	CAST 1	CAST 2	
		WET	DRY	DIR.	SPEED										
1006	08	206	222	19	7	16	9	4	5	19	2	20	2	177	00 00

CAST	DEPTH	TEMP.	S%	σ <sub>t</sub>	O <sub>2</sub>	%O <sub>2</sub> SAT.	InORG. P	PARTIC. P	DOUTFUL
1	2304	35126	24037	508	111	111	17	03	
1	2294	35130	24069	508	111	10	10	04	
1	2284	35141	24106	493	108	13	13	03	
1	2251	35171	24223	466	106	13	03		
1	2191	35264	24463	493	106	14	04		
1	2133	35337	24679	461	102	22			
1	2046	35282	24873	380	80	50	04		
1	1951	35444	25247	405	84	43			
1	1790	35602	25775	445	89	38			
1	212	35502	25775	445	89	38			
1	1624	35557	26138	461	93	42			
1	144	35043	26747	548	96	62			
1	655	34720	26990	534	86	102			
1	604	34564	27224	298	46	179			
1	534	34632	27365	218	33	209			



SHIP		CRUISE		STATION		YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
SONIC	MAX.	AIR	TEMP.	WIND		ANEM.	CLOUD		SEA	SWELL	ATMOS.	WIRE ANGLES	
DEPTH	DEPTH	WET	DRY	DIR.	SPEED	HEIGHT	TYPE	AMT.	VIS.	DIR.	AMT.	CAST 1	
CAST	DEPTH	TEMP.	%		$\sigma_t$		$\sigma_t$		$\text{O}_2$	% SAT.	INORG. P	PARTIC. P	DOUBTFUL
1	230	230	35195	35203	24301	520	115	17					
1	230	229	35203	24307	513	111	14						
1	46	2199	35259	24437	510	110	14						
1	70	2180	35278	24504	508	109	16						
1	93	2165	35301	24563	510	109	17						
1	116	2161	35269	24565	499	107	21						
1	142	2142	35333	24651	481	103	23						

DATA

PART 2

HYDROLOGY

SURFACE SAMPLING

EXPLANATION OF HEADINGS

Part 2 Hydrology - Surface Sampling

STATION                    Stations are numbered consecutively for each ship for each year.

DATE                      Given as year, month, day.

TIME                      Given in Zone Time (Table 2).

LATITUDE    LONGITUDE    The position of each station is given in degrees and minutes.

TEMP.                     Sea temperatures are recorded in degrees centigrade, to 2 decimal places.

S $\%$                       Salinities are recorded in parts per thousand, to 3 decimal places.

STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	S%
115	60	7	12	715G	3159S	11154E	1740	3586
116	60	7	12	1600H	3159S	11650E	1610	3577
117	60	7	12	1900G	3201S	10957E	1624	3581
118	60	7	12	2400G	3159S	10947E	1690	3590
119	60	7	13	400G	3159S	10841E	1610	3582
120	60	7	13	815G	3200S	10734E	1550	3575
121	60	7	13	1600G	3156S	10638E		
122	60	7	13	2000G	3155S	10547E	1650	3589
123	60	7	13	2400G	3157S	10501E	1640	3592
124	60	7	14	400G	3158S	10415E		
125	60	7	14	700G	3159S	10329E	1647	3586
126	60	7	14	1605G	3142S	10212E	1600	3585
127	60	7	14	2000G	3129S	10110E	1580	3579
128	60	7	14	2400G	3119S	10017E	1700	3594
129	60	7	15	260G	3112S	9915E	1715	3593
130	60	7	15	800G	3059S	9841E	1660	3591
131	60	7	15	1230F	3040S	9730E	1807	3590
132	60	7	15	1600F	3037S	9718E		
133	60	7	16	2000F	2940S	9447E	1765	3599
134	60	7	18	15F	2845S	9453E	1795	3592
135	60	7	18	400F	2758S	9457E	1870	3591
136	60	7	18	700F	2723S	9501E	1907	3584
137	60	7	18	1200F	2638S	9501E	1910	3587
138	60	7	18	1605F	2554S	9501E	2010	3565
139	60	7	18	2000F	2534S	9512E	2037	3564
140	60	7	19	400F	2422S	9502E	1990	3568
141	60	7	19	800F	2312S	9503E		
142	60	7	19	1200F	2223S	9500E	2055	3555
143	60	7	20	F	1940S	9437E	2242	3504
144	60	7	22	F	1819S	9442E	2120	3526
145	60	7	22	500F	1726S	9452E	2330	3462
146	60	7	22	1200F	1657S	9503E	2440	3592
147	60	7	22	1600F	1609S	9505E	2520	3421
148	60	7	22	2130F	1502S	9504E	2549	3429
149	60	7	23	400F	1414S	9504E	2520	3414
150	60	7	23	800F	1340S	9502E		
151	60	7	23	1330F	1241S	9504E	2610	3428
152	60	7	23	2000F	1201S	9502E		
153	60	7	23	2400F	1115S	9502E		
154	60	7	24	2400F	1028S	9502E	2680	3457
155	60	7	24	615F	1000S	9500E	2769	3454
156	60	7	24	2400F	937S	9610E		
157	60	7	25	400F	923S	9700E		
158	60	7	25	800G	905S	9750E	2820	3401

STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	S%
159	60	7	26	30G	7558	10100E	2620	3424
160	60	7	26	400G	7428	10448E		
161	60	7	26	800G	7148	10251E		
162	60	7	26	1800G	7088	10348E	2880	3412
163	60	7	26	2000G	7038	10310E	2800	3405
164	60	7	26	2400G	6368	10350E	2880	3366
165	60	7	27	815G	6108	10533E	2830	3355
166	60	7	27	1130G	535S	10607E	2920	
167	60	7	27	1550G	450S	10640E	2880	
168	60	7	27	1850G	450S	10640E	2860	
169	60	7	27	2330G	505S	10630E	2820	
170	60	7	28	855G	108S	10705E	2860	
171	60	7	28	1145G	40S	10645E	2880	
172	60	7	28	1810G	18N	10552E	2880	
173	60	7	28	2345G	103N	10506E	2850	3355
174	60	8	6	545F	200N	9412E	2888	3408
175	60	8	7	F	56N	9443E	2890	3420
176	60	8	7	400F	15N	9500E	2850	3434
177	60	8	7	545F	4S	9507E	2871	3430
178	60	8	7	2030F	12S	9505E		
179	60	8	7	2400F	112S	9504E	2880	3431
180	60	8	8	400F	147S	9502E	2880	3436
181	60	8	8	800F	228S	9501E	2880	3456
182	60	8	8	1205F	230S	9500E	2868	3455
183	60	8	8	2030F	242S	9500E		
184	60	8	9	F	337S	9500E	2840	3465
185	60	8	9	400F	432S	9500E	2820	3442
186	60	8	9	1200F	500S	9440E	2852	3435
187	60	8	10	F	512S	9536E	2830	3447
188	60	8	10	400F	525S	9630E	2840	3449
189	60	8	10	800F	536S	9725E	2860	3436
190	60	8	10	1200G	548S	9819E	2830	3421
191	60	8	10	1600G	552S	9908E	2800	3429
192	60	8	10	2000G	551S	9953E	2820	3429
193	60	8	10	2400G	549S	10035E	2820	3409
194	60	8	14	1400G	542S	10623E	2865	3279
195	60	8	15	300G	657S	10433E	2856	3291
196	60	8	15	800G	718S	10453E	2850	3293
197	60	8	15	1200G	735S	10539E	2774	3409
198	60	8	15	1600G	741S	10607E	2800	3400
199	60	8	15	2000G	801S	10702E	2700	3417
200	60	8	15	2300G	814S	10743E	2686	3419
201	60	8	16	400G	827S	10807E	2650	3421
202	60	8	16	800G	837S	10842E	2640	3421
203	60	8	16	1200G	845S	10922E	2687	3415
204	60	8	16	1600G	853S	10959E	2650	3416

STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	S%
205	60	8	16	2000C	901S	11040E	2620	3416
206	60	8	17	G	910S	11126E	2615	3416
207	60	8	17	400G	920S	11212E	2560	3425
208	60	8	17	830H	935S	11309E	2603	3419
209	60	8	17	1600H	933S	11359E	2610	3425
210	60	8	17	2000H	930S	11449E	2480	3397
211	60	8	17	2245H	930S	11521E	2695	3411
212	60	8	18	400H	922S	11524E	2560	3422
213	60	8	18	800H	851S	11541E	2725	3402
214	60	8	18	1200H	800S	11600E	2730	3362
215	60	8	18	1600H	800S	11616E	2680	3407
216	60	8	18	2015H	804S	11716E	2710	3414
217	60	8	19	1H	800S	11808E	2620	3406
218	60	8	19	400H	800S	11900E	2710	3400
219	60	8	19	830H	800S	11937E	2716	3402
220	60	8	19	1600H	900S	11927E	2520	3398
221	60	8	19	1645H	901S	11946E	2604	3397
222	60	8	19	2000H	903S	11951E	2540	3398
223	60	8	20	30H	908S	12037E	2530	3407
224	60	8	20	400H	910S	12119E	2520	3409
225	60	8	20	1100H	914S	12225E	2604	3409
226	60	8	20	2000H	901S	12307E	2580	3423
227	60	8	21	H	845S	12415E	2585	3423
228	60	8	21	400H	831S	12505E	2660	3437
229	60	8	21	800H	820S	12550E	2640	3426
230	60	8	21	2000H	816S	12620E	2630	3420
231	60	8	21	2359H	813S	12711E	2620	3427
232	60	8	22	400I	801S	12755E	2600	3422
233	60	8	22	1600I	746S	12844E	2623	3417
234	60	8	22	1600I	819S	12914E	2660	3386
235	60	8	22	2030I	851S	12947E	2604	3415
236	60	8	23	1I	858S	13002E	2660	3386
237	60	8	23	400I	920S	13045E	2580	3420
238	60	8	23	800I	941S	13123E	2560	3427
239	60	8	23	1200I	1003S	13196E	2575	3422
240	60	8	23	1600I	1008S	13241E	2600	3414
241	60	8	23	2000I	1009S	13327E	2540	3425
242	60	8	24	1I	1005S	13406E	2543	3428
243	60	8	24	400I	1000S	13442E	2520	3436
244	60	8	24	800I	1000S	13526E	2480	3458
245	60	8	24	1200I	1000S	13600E	2500	3440
246	60	8	24	1600I	1001S	13641E	2530	3433
247	60	8	24	2000I	1003S	13723E	2530	3438
248	60	8	25	1I	1003S	13805E	2555	3460
249	60	8	25	400I	1002S	13842E	2550	3497
250	60	8	25	800I	1003S	13920E	2520	3535

STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	S%
251	60	8	25	1600I	1007S	14000E	2510	3557
252	60	8	25	2000I	1047S	14045E		
253	60	8	31	5K	903S	14446E	2522	3477
254	60	9	1	630I	1208S	13946E	2562	3503
255	60	9	1	1545I	1310S	13858E	2546	3518
256	60	9	2	300I	1130S	13800E	2543	3442
257	60	9	3	1I	800S	13600E	2547	3432
258	60	9	3	1000I	800S	13400E	2566	3416
259	60	9	3	1600I	754S	13242E	2610	3414
260	60	9	3	2000I	805S	13148E	2571	3418
261	60	9	4	1I	820S	13125E	2595	3418
262	60	9	4	400I	839S	13044E	2560	3423
263	60	9	4	800I	851S	12952E	2600	3418
264	60	9	4	900I	853S	12940E	2610	3417
265	60	9	4	1600I	842S	12840E	2670	3416
266	60	9	4	2000I	831S	12749E	2640	3418
267	60	9	4	2200H	832S	12728E	2633	3425
268	60	9	5	300I	901S	12748E	2624	3415
269	60	9	5	860I	936S	12807E	2638	3414
270	60	9	5	1200I	941S	12815E	2660	3416
271	60	9	5	1400I	1003S	12824E	2663	3419
272	60	9	5	1615I	1025S	12835E	2680	3443
273	60	9	5	1740I	1035S	12843E	2694	3441
274	60	9	5	1810I	1038S	12844E	2670	3460
275	60	9	5	2130I	1108S	12902E	2678	3457
276	60	9	6	140I	1138S	12920E	2692	3474
277	60	9	12	1I	1242S	12728E	2715	3474
278	60	9	12	400H	1251S	12636E	2660	3460
279	60	9	12	510H	1302S	12554E	2730	3461
280	60	9	12	1200H	1328S	12507E	2765	3479
281	60	9	12	1437H	1344S	12440E	2772	3498
282	60	9	12	1830H	1321S	12426E	2763	3479
283	60	9	12	2120H	1250S	12414E	2853	3467
284	60	9	13	1H	1218S	12403E	2682	3431
285	60	9	13	320H	1154S	12347E	2683	3448
286	60	9	13	800H	1108S	12324E	2708	3427
287	60	9	13	1200H	1111S	12310E	2740	3463
288	60	9	13	1600H	1114S	12218E	2725	3499
289	60	9	13	2000H	1114S	12115E	2660	3427
290	60	9	14	H	1117S	12022E	2660	3425
291	60	9	14	400H	1118S	11932E	2630	3431
292	60	9	14	800H	1119S	11840E	2651	3426
293	60	9	14	1600H	1202S	11904E	2700	3454
294	60	9	14	2000H	1241S	11918E		
295	60	9	14	2140H	1301S	11927E	2659	3427
296	60	9	15	400H	1325S	11940E	2650	3436

STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	S%
297	60	9	15	600H	1332S	11950E	2623	3458
298	60	9	15	1200H	1426S	12015E	2640	3467
299	60	9	15	1420H	1449S	12024E	2658	3415
300	60	9	15	2000H	1522S	12040E	2600	3474
301	60	9	15	2150H	1540S	12051E	2593	3461
302	60	9	16	1H	1556S	12059E	2570	3481
303	60	9	16	105H	1607S	12105E	2553	3477
304	60	9	16	H	1635S	12119E	2522	3476
305	60	9	16	700H	1700S	12133E	2508	3481
306	60	9	16	915H	1725S	12142E	2506	3496
307	60	9	16	1230H	1740S	12123E		
308	60	9	16	1600H	1802S	12046E	2570	3488
309	60	9	16	2000H	1829S	11947E	2460	3499
310	60	9	17	1H	1853S	11914E	2420	3514
311	60	9	17	400H	1918S	11829E	2385	3514
312	60	9	17	750H	1942S	11745E	2404	3503
313	60	9	17	1050H	1916S	11729E	2417	3505
314	60	9	17	1400H	1850S	11719E		
315	60	9	17	1740H	1820S	11705E	2506	3481
316	60	9	17	2000H	1802S	11656E	2540	3478
317	60	9	18	2H	1726S	11641E	2589	3449
318	60	9	18	400H	1649S	11625E	2580	3458
319	60	9	18	630H	1626S	11615E	2574	3457
320	60	9	18	1200H	1613S	11610E	2580	3465
321	60	9	18	1530H	1535S	11556E	2588	3440
322	60	9	18	2000H	1527S	11547E	2610	3460
323	60	9	18	2330H	1445S	11522E	2567	3440
324	60	9	19	400H	1447S	11510E	2575	3447
325	60	9	19	800H	1343S	11449E	2594	3435
326	60	9	19	1600H	1254S	11429E	2530	3445
327	60	9	19	1859H	1224S	11418E	2676	3432
328	60	9	20	1H	1151S	11402E	2630	3470
329	60	9	20	500H	1053S	11332E	2641	3438
330	60	9	20	1200H	1102S	11237E	2660	3442
331	60	9	20	1600G	1122S	11154E	2630	3438
332	60	9	20	2000G	1149S	11059E	2630	3433
333	60	9	21	1G	1214S	11008E	2670	3418
334	60	9	21	430G	1243S	10908E	2588	3431
335	60	9	21	1200G	1303S	10948E	2580	3433
336	60	9	21	1515G	1403S	11015E	2646	3425
337	60	9	21	2010G	1426S	11026E	2630	3427
338	60	9	22	1G	1507S	11047E	2565	3422
339	60	9	22	115G	1529S	11053E	2562	3423
340	60	9	22	800G	1604S	11118E	2510	3438
341	60	9	22	1000G	1621S	11127E	2544	3430
342	60	9	22	1600G	1650S	11141E	2410	3488

STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	S% ‰
343	60	9	22	2000G	1733S	11202E	2429	3468
344	60	9	23	400H	1835S	11233E	2310	3490
345	60	9	23	615H	1900S	11246E	2280	3515
346	60	9	23	1300H	1959S	11315E	2304	3512
347	60	9	23	1600H	2010S	11319E	2320	3510
348	60	9	23	1900H	2044S	11333E	2327	3496
349	60	9	24	115H	2140S	11400E	2230	3519

DATA

PART 3

PRIMARY PRODUCTION

- (a) Stations sampled to 150 m pp. 120-196.
- (b) Stations at which surface samples taken  
pp. 197-205.

EXPLANATION OF HEADINGS

Part 3 Primary Production

(a) Stations sampled to 150 m

SHIP	The figures 11 are used to designate <u>Diamantina</u> .
CRUISE	Cruise numbers are allotted each year, beginning with 1 for the first cruise.
STATION	Stations are numbered consecutively for each ship for each year.
TIME	Given in Zone Time (Table 2).
LATITUDE LONGITUDE	The position of each station is given in degrees and minutes.
SONIC DEPTH	Given in m, measured at standard sound velocity of 800 fm (1463 m) per second.
MAX. SAMP. DEPTH	Depth of deepest observation to nearest 10 m is recorded in units of 10 m.
DIST. FROM COAST	Distance of nearest land in miles.
METHOD OF INCUBATION	The numbers indicate the method of incubation as follows:  0 = Fluorescent light bath. 1 = <u>In situ</u> incubation from sunrise to sunset. 1A = <u>In situ</u> incubation from sunrise to noon. 1J = <u>In situ</u> incubation from noon to sunset. 2 = Simulated <u>in situ</u> incubation.
STOCK NUMBER	Number of $^{14}\text{C}$ stock used.
STOCK ACTIVITY	The activity of $^{14}\text{C}$ stock used is recorded in millions of counts/min. i.e. $9.11 \times 10^6$ counts/min.

BACKGROUND	Background count is recorded in counts/min.
DEPTH	Actual sampling depth given in metres, a blank indicates 0 m.
LIGHT COUNT	The counts/min. of the filter from the clear bottle.
DARK COUNT	The counts/min. of the filter from the dark bottle.
NET COUNT	The difference between light and dark count.
INCUBATION PERIOD	For incubation method 0, the period is expressed in hours to 2 decimal places. For incubation methods 1 and 2, the period is expressed as part of daylight period, i.e. 01.00 or 00.50.
RATE OF PRODUCTION	A is given in mgC/hr/m <sup>3</sup> to 2 decimal places for incubation method 0 and in mgC/day/m <sup>3</sup> for methods 1 and 2. B is given in gC/day/m <sup>2</sup> to 2 decimal places for the layer from the surface to the depth indicated. For incubation method 0, a day has been taken to be equal to 10 hours.
A	B

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	115	60	7	12	1015 G	3159 S	11154 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5000	15	205	0	8	9260	10

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	552	6	544	0400	37	
50	676	5	671	0400	45	10
75	609	5	604	0400	41	21
100	586	4	582	0400	39	31
125	173	16	155	0400	10	37
150	93	13	90	0400	6	41

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	117	60	7	12	2000 G	3201 S	10957 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4500	15	320	0	8	9260	10

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	166	11	155	0400	10	
50	266	4	262	0400	16	4
75	155	26	129	0400	9	7
100	233	14	119	0400	6	9
125	256	46	210	0400	14	12
150	43	5	38	0400	3	16

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	120	60	7	13	0830 G	3200 S	10734 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
5000	15	255	0	8	9260	010	
25	50	75	100	150	25	50	

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
25	50	75	100	150	25	50	
540	356	489	491	543	540	356	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	125	60	7	14	0815 G	3159 S	10329 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
25	50	75	100	150	25	50	
495	392	268	315	156	495	392	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	129	60	7	15	0230 G	3112 S	09915 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
2300	15	900	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	BACKGROUND
100	100	10	10	178	0400	112
150	150	7	333	0400	22	4
200	200	6	183	0400	12	9
250	250	7	275	0400	19	12
300	300	5	331	0400	22	10
350	350	7	5	0400	22	23

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	131	60	7	15	1345 F	3014 S	09730 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	15	990	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	BACKGROUND
100	100	6	192	0400	13	4
150	150	20	330	0400	22	2
200	200	29	328	0400	22	10
250	250	9	322	0400	22	15
300	300	5	137	0400	9	19
350	350	7	4	0400	22	22

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
	11	2	133	60	7	16	0700 F	2940 S

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	ACTIVITY	STOCK ACTIVITY	BACKGROUND
3072	15	999	0	8	9260	010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A	B
	207	9	198	0375	14		

25	189	6	183	0375	13	3
50	656	2	654	0375	47	11
75	211	2	209	0375	15	19
100	29	34	55	0375		21
150	272	17	255	0375	16	25

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
	11	2	133	60	7	16	0910 F	2940 S

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	ACTIVITY	STOCK ACTIVITY	BACKGROUND
3072	10	999	0	8	9260	010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A	B
	243	9	234	0433	15		

25	299	4	295	0433	18	4
50	393	1	392	0433	24	9
100	533	3	530	0433	33	24

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	16	1500 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	10	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	232	4	228	0400	15	
50	224	6	216	0400	15	4
75	268	7	281	0400	19	9
100	343	7	336	0400	23	18

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	16	1800 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	10	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	171	10	161	0400	11	
50	200	7	193	0400	13	3
75	233	6	227	0400	15	7
100	259	3	256	0400	17	15

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	16	2100 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	ACTIVITY	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
3072	10	999	0	8	9 260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
25	165	14	151	0 400	1 0		
50	181	14	167	0 400	1 1		3
100	221	15	206	0 400	1 4		6
	272	5	267	0 400	1 8		4

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	0030 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	ACTIVITY	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
3072	10	999	0	8	9 260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
25	206	6	200	0 400	1 4		
50	197	9	188	0 400	1 3		3
100	237	5	232	0 400	1 6		7
	273	6	267	0 400	1 8		1 5

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	0310 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	10	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
208	7	201	0483	111		
280	9	271	0483	15		
329	10	319	0483	16		
287	4	283	0483	16		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	0600 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	15	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
246	6	240	0400	16		
335	7	328	0400	22		
289	7	282	0400	19		
422	3	419	0400	28		
405	4	401	0400	27		
194	6	166	0400	13		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SONIC DEPTH	MAX. SAMPLE DEPTH	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		INCUBATION PERIOD	RATE OF PRODUCTION	
				DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	A
3072	10	999	0	8		9260	010	B
25		191		7		184	0400	12
50		225		7		218	0400	3
50		307		11		296	0400	8
100		369		5		364	0400	19

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	1500 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	10	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
25	77	7	70	0400	5	
50	111	11	100	0400	7	1
100	218	13	205	0400	14	4
	322	15	307	0400	21	13

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	1830 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	10	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
25	139	5	134	0400	9	
50	53	7	46	0400	3	2
100	100	8	92	0400	6	3
	246	8	240	0400	16	8

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	16	0615 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND				
					DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
3072	15	999	1	7	10390	010					
25		170		2	160	0050	0050	116	79	3	
50		256		7	249	0050	0050	116	79	5	
75		171		4	167	0050	0050	116	79	5	
100		96		5	93	0050	0050	44	44	7	
150		29		4	25	0050	0050	119	19	7	
		11		2	9	0050	0050	4	4	8	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	0600 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND				
					DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
3072	15	999	1	7	10390	010					
25		218		2	216	0050	0050	102	102	3	
50		282		2	280	0050	0050	132	132	6	
75		210		3	207	0050	0050	98	98	6	
100		89		3	86	0050	0050	41	41	6	
150		26		4	22	0050	0050	10	10	6	
		12		7	5	0050	0050	2	2	6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	1250 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	15	999	1	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	
	A	B		A	B	
25	98	4	94	0050	44	
50	45	5	40	0050	19	1
75	99	19	80	0050	38	2
100	96	6	90	0050	43	3
150	35	3	32	0050	15	3
	10		10	0050	5	4

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	0600 F	2940 S	09447 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3072	15	999	1	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	
	A	B		A	B	
25	56	15	41	0100	100	
50	446	7	439	0100	104	1
75	440	20	420	0100	99	4
100	125	10	115	0100	27	6
150	228	12	216	0100	51	7
	22	4	18	0100	5	8

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	136	60	7	18	815 F	2723 S	09501 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4023	15	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	129	8	121	0425	8	2
50	156	6	150	0425	10	
75	110	10	100	0425	6	4
100	362	10	352	0425	22	8
150	298	3	295	0425	19	3
	59	3	56	0425	18	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	139	60	9	18	2030 F	2534 S	09512 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5395	15	999	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	60	21	39	0200	5	1
50	56	24	32	0200	4	3
75	62	11	71	0200	10	
100	44	15	29	0200	4	5
150	106	11	95	0200	13	7
	92	3	89	0200	12	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	142	60	7	19	1330 F	2223 S	09500 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5000	15	900	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	102	10	92	0400	6	6
50	199	14	185	0400	13	2
75	105	15	90	0400	6	5
100	243	19	24	0400	15	7
150	271	6	265	0400	10	11
	16	4	12	0400	1	16

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	20	0610 F	1947 S	09456 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4755	15	880	0	8	9260	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	123	14	109	0400	7	7
50	161	15	146	0400	10	2
75	215	20	195	0400	13	5
100	162	21	141	0400	10	6
150	234	64	170	0400	12	10
		7	7	0400	1	3

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	20	0900 F	1947 S	09456 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND							
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A	B
4755	10	880	0	8	9260	010							
25				122	9		113	0400	0400	0400	0400	8	
50				266	14		252	0400	0400	0400	0400	17	3
100				315	12		303	0400	0400	0400	0400	20	6
				185	11		174	0400	0400	0400	0400	12	16

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	20	1210 F	1940 S	09437 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND							
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A	B
4755	10	880	0	8	9260	010							
25				241	11		230	0400	0400	0400	0400	16	
50				127	13		114	0400	0400	0400	0400	8	3
100				98	16		82	0400	0400	0400	0400	6	5
				108	4		104	0400	0400	0400	0400	7	8

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
SONIC DEPTH	MAX. AMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND	
11	2	143	60	7	20	1500 F	1940 S	09437 E

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	
					A	B
25	193	7	186	0.400	1.2	3
50	179	9	170	0.400	1.2	5
100	126	10	116	0.400	8	3
	60	11	49	0.400	6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	20	1800 F	1941 S	09435 E
SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND		
5390	10	880	0	8	9260		010	

N N 6  
0 0 0 7  
0 0 0 0  
4 4 4 4  
0 0 0 0  
0 0 4 9  
1 4 9 4  
2 7 7 2  
1 9 9 9  
2 1 9 9  
1 1 5 1  
1 1 0 1  
2 5 0 0

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	0600 F	1925 S	09428 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	COUNT	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
50	204	14	190	0450	11	
75	266	8	256	0450	16	
100	62	8	54	0450	3	
150	23	26	5	0450		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	0900 F	1925 S	09428 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	COUNT	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
25	261	11	250	0400	17	
50	164	12	152	0400	10	
50	231	11	220	0400	15	
100	165	2	163	0400	11	13

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	1300 F	1925 S	09428 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5300	10	880	0	8	9260	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	146	13	133	0450	6	
50	165	8	157	0450	9	2
75	297	9	288	0450	17	6
100	288	10	278	0450	17	14

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	1525 F	1924 S	09420 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5670	10	880	0	8	9260	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	251	13	238	0450	14	4
50	263	16	247	0450	14	
75	231	12	219	0450	13	7
100	173	10	163	0450	10	13

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	1815 F	1924 S	09420 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND		
DEPTH								
5670	10	880	0	8	9260	011		
DEPTH								
25		62	21	41	0400	3		
50		42	20	22	0400	2		
100		128	21	107	0400	7		
		12A	19	109	0400	7		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	20	0600 F	1947 S	09456 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND		
DEPTH								
4755	15	880	1	7	10390	010		
DEPTH								
25		88	23	65	0100	15		
50		269	12	277	0100	65		
75		6	4	22	0100	1		
100		314	5	309	0100	73		
150		194	6	166	0100	44		
		139	17	122	0100	29		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	0600 F.	1925 S	09428 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5300	15	880	1	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	BACKGROUND B
25	133	18	115	0050	54	1
50	117	11	6	0050	5	1
75	130	3	127	0050	60	1
100	93	87	6	0050	3	2
150	183	13	170	0050	80	3
	88	24	64	0050	30	6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	1200 F	1925 S	09428 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5300	15	880	1	7	10390	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	BACKGROUND B
25	96	11	85	0050	40	1
50	96	9	89	0050	42	2
75	150	9	141	0050	67	3
100	43	6	35	0050	17	4
150	97	13	84	0050	40	5
	5	17	12	0050		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	0600 F	1925 S	09428 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5300	15	880	1	7	10390	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	138	29	109	0100	26	
50	97	15	82	0100	19	1
75	355	6	349	0100	82	2
100	111	14	97	0100	23	3
150	28	9	19	0100	5	3
	19	5	14	0100	3	4

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	145	60	7	22	0815 F	1726 S	09453 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5300	15	770	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	151	7	144	0400	10	
50	147	5	142	0400	10	
75	329	6	323	0400	22	7
100	135	15	120	0400	8	10
150	501	16	485	0400	35	14
	31	13	16	0400	1	24

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	148	60	7	22	2130 F	1502 S	09504 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4975	15	700	0	8	9 260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	105	13	96	0400	7	
50	106	13	93	0400	6	2
75	120	24	96	0400	7	3
100	164	17	147	0400	10	5
150	73	2	71	0400	5	7
	9	42	33	0400		6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	151	60	7	23	1415 F	1241 S	09504 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4500	15	680	0	8	9 260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	519	74	545	0400	37	
50	583	44	539	0400	36	9
75	428	24	404	0400	27	17
100	230	23	207	0400	14	22
150	72	75	53	0400	5	24
	5	10	5	0400		24

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
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P.T.H	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	
					A	B
15	530	0	8	9260	0.010	
25	206	7	199	0.400	1.3	
35	398	22	376	0.400	2.5	5
50	370	19	351	0.400	2.4	1.1
75	193	20	173	0.400	1.2	1.5
100	34	11	23	0.400	2	1.7
150	7			0.400		1.8

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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PHT	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	
					A	B
10	530	0	8	q260	0.10	
25	406	23	385	0.400	2.6	
50	351	10	341	0.400	2.3	
85	985	19	966	0.400	6	
38	38	10	28	0.400	1.7	
00	00	10	0	0.400	6.5	
					2	
					3.4	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	155	60	7	24	1215 F	1000 S	09500 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND					
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
5303	10	530	0	8	9260	010					
25				207	19	13	400	192	0400		
50				42	22	1	400	20	0400		
100				17	18	2	400	18	0400		
				132	6	2	400	126	0400		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	155	60	7	24	1530 F	1000 S	09500 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND					
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
5303	10	530	0	8	9260	010					
25				439	26	13	5000	413	0500	22	
50				277	17	14	5000	260	0500	14	
100				1552	31	17	5000	1521	0500	82	
				21	16	37	5000	16	0500	37	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	155	60	7	24	1750 F	1000 S	09500 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	STOCK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
5303	10	530	0	8	9260			010		
25	42	33	185	162	0400	11				
50	610	37	42	5	0400					1
100	20	19	810	791	0400					8
		11	20	9	0400					53
										1
										22

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	155	60	7	24	0600 F	1000 S	09500 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	STOCK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
5303	15	530	1	7	10390			010		
25	527	50	527	477	0050	225				
50	607	30	607	577	0050	273				
75	340	13	340	327	0050	155				
100	40	15	40	25	0050	12				
150	9	17	9	6	0050					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY			
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
5303	10	530	1	7	24	10390	010	09500 E
11	2	155	60	7	24	1240 F	1000 S	09500 E

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY			
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
5303	15	530	1	7	24	10390	010	09500 E
11	2	155	60	7	24	0600 F	1000 S	09500 E

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY			
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
5303	15	530	1	7	24	10390	010	09500 E
11	2	155	60	7	24	0600 F	1000 S	09500 E

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	0630 F	0200 N	09412 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	15	100	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	475	22	453	0350	35	
50	366	36	350	0350	27	8
75	319	16	303	0350	23	14
100	250	10	140	0350	11	16
150	70	31	39	0350	3	20
	61	20	41	0350	3	22

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	0915 F	0200 N	09412 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	10	100	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	344	7	337	0400	23	
50	340	11	329	0400	22	6
75	303	19	284	0400	19	11
100	525	6	517	0400	35	24

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	1300 F	0200 N	09412 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	10	100	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	480	13	467	0400	32	
50	231	14	217	0400	15	6
100	733	14	719	0400	49	14
	247	13	234	0400	16	30

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	1800 F	0200 N	09412 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	10	100	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	269	21	248	0400	17	
50	502	34	468	0400	32	6
100	264	20	264	0400	18	12
	176	31	147	0400	19	10

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	0600 F	0200 N	09412 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND				
					DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A
4572	15	100	1	7	10390				010		
25				272	272	17	255	0050	121		
50				144	144	21	123	0050	156		
75				166	166	16	150	0050	71		
100				119	119	9	110	0050	52		
150				21	21	4	17	0050	6		
				11	11	6	5	0050	2		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	1130 F	0200 N	09412 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND				
					DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A
4572	10	100	1	7	10390				010		
30				340	340	13	327	0050	155		
40				646	646	26	620	0050	293		
60				160	160	10	150	0050	71		
60				185	185	10	175	0050	63		
70				17	17	6	11	0050	10		
95				58	58	10	46	0050	5		
									23		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	0600 F	0200 N	09412 E
SONIC DEPTH	MAX. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY			BACKGROUND
4572	15	100	1	7	10390		010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
25	237	20	217	0100	51
50	636	20	616	0100	146
75	403	21	383	0100	5
100	167	14	153	0100	36
150	54	17	37	0100	7
	7	25	16	0100	0
					6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	174	60	8	06	1130 F	0200 N	09412 E
SONIC DEPTH	MAX. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY			BACKGROUND
4572	10	100	3	7	10390		010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
30	99	9	0050	49	2
40	165	165	0050	67	4
60	520	520	0050	246	4
80	653	653	0050	309	9
95	317	317	0050	150	14
	95	95	0050	45	15

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
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DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	
					A	B
25	354	16	336	0.400	1.0	4
50	178	25	153	0.400	2.5	6
75	507	20	487	0.400	1.0	1.4
100	619	2	617	0.400	3.5	2.3
150	617	7	610	0.400	4.2	1.1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
100	100	100	100	100	100	100
100	100	100	100	100	100	100
100	100	100	100	100	100	100
100	100	100	100	100	100	100

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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BACKGROUND					
SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY
4572	10	150	0	8	9260
DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A B

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND		
					LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
DEPTH								A	B
4572	10	150	0	8			9260		010

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
II	2	177	60	8	07	0600 F	0004 S	09507 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	15	150	1	7	10390	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	331	17	314	0050	148	4
50	449	20	429	0050	203	
75	177	23	94	0050	44	7
100	240	16	224	0050	106	9
150	161	14	2	0050	1	1
	5	5	0	0050	2	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
II	2	177	60	8	07	1145 F	0004 S	09507 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	09	150	1	7	10390	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
20	201	11	190	0050	90	2
30	340	20	320	0050	151	
50	333	18	315	0050	149	4
70	304	24	280	0050	132	7
90	326	12	314	0050	148	10
	142	10	132	0050	62	12

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
	11	2	177	60	8	07	0600 F	0 004 S 09507 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	15	150	1	7	10390	011

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	109	171	62	0100	6	6
50	730	234	496	0100	117	1
75	117	117	0	0100	28	3
100	429	107	322	0100	76	5
150	181	150	31	0100	7	6
	5	8	3	0100	6	6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
	11	2	177	60	8	07	1145 F	0 004 S 09507 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	09	150	3	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
20	338	338	0050	160	4	4
30	476	476	0050	225	6	6
50	530	530	0050	250	11	11
70	511	511	0050	241	17	17
90	658	658	0050	311	21	21
	275	275	0050	130		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	182	60	8	08	1130 F	0230 S	09500 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	INCUBATION PERIOD	RATE OF PRODUCTION A	BACKGROUND B
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
4572	15	250	0	8	9260	010		
25	25	700	24	676	0400	46		
50	48	948	16	932	0400	63		
75	52	452	40	412	0400	28		
100	75	723	7	716	0400	46		
150	100	467	26	441	0400	30		
		110	8	2	0400	44		
						52		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	182	60	8	08	1130 F	0230 S	09500 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	INCUBATION PERIOD	RATE OF PRODUCTION A	BACKGROUND B
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
4572	11	250	0	7	10390	010		
30	30	642	100	542	0400	32		
50	50	758	79	679	0400	40		
70	70	761	55	726	0400	43		
90	90	836	44	792	0400	47		
105	105	877	84	793	0400	47		
		161	75	106	0400	37		
						6		
						41		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	182	60	8	08	1130 F	0230 S	09500 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	11	250	1	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
30	515	10	505	0050	239	
50	102	20	162	0050	77	5
70	60	63	26	0050		5
90	23	79	55	0050		5
105	29	27	2	0050	1	6
	15	6	9	0050	4	6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	182	60	8	08	1130 F	0230 S	09500 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	11	250	3	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
30	268	288	0050	136		5
50	458	456	0050	216		6
70	166	116	0050	55		9
90	180	180	0050	85		11
105	103	103	0050	48		11
	35	35	0050	17		11

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	0600 F	0500 S	09440 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
4572	15	330	0	8	9 260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
25	55	18	37	0350	3		
50	233	15	218	0350	17		2
75	333	17	316	0350	24		6
100	493	10	483	0350	37		15
150	43	31	12	0350	1		20
	6	4	2	0350			20

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	0910 F	0500 S	09440 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
4572	10	330	0	8	9 260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
25	354	20	334	0400	23		
50	495	14	481	0400	32		7
100	442	13	429	0400	29		15
	29	5	24	0400	2		22

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	1200 F	0500 S	09440 E
4572	10	330	0	8		9260	010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	91	21	70	0400	5	1
50	66	8	78	0400	5	
	617	6	611	0400	41	7

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	1500 F	0500 S	09440 E
4572	10	330	0	8		9260	010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	241	25	216	0450	13	3
50	194	26	168	0450	10	6
100	532	31	502	0450	30	6
	118	12	106	0450	4	7

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	1800 F	0500 S	09440 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	10	330	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	160	31	129	0400	9	2
50	127	20	107	0400	7	4
75	194	18	176	0400	12	6
100	36	5	31	0400	2	8

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	1145 F	0500 S	09440 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4572	10	330	1	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
35	289	21	268	0050	127	4
55	382	129	253	0050	120	7
70	295	15	280	0050	132	9
85	321	6	315	0050	149	10
100	140	19	121	0050	57	2
	11	6	5	0050	2	11

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	.09	0600 F	0500 S	09440 E
5212	15	330	1	7		10390	010	

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH						
25				105	35	16
50				439	21	99
75				510	130	90
100				152	23	51
150				60	20	9
				7	9	6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	.09	1200 F	0500 S	09440 E
4572	10	330	3	7		10390	010	

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH						
35				61	0050	29
55				284	0050	34
70				202	0050	55
85				205	0050	97
100				43	0050	77
				39	0050	18

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	194	60	8	14	1400 G	0543 S	10623 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	COUNT	COUNT	COUNT	PERIOD	RATE OF PRODUCTION	
02	8	0	8	9260	010		
10	20	2009 2663 3133	47 72 25	1962 2591 3107	0400 0400 0400	132 175 209	15 35

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	195	60	8	15	415 G	0658 S	10433 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	COUNT	COUNT	COUNT	PERIOD	RATE OF PRODUCTION	
2195	15	65	0	8	9260	010	
25	50	469 2306 350	154 176 37	315 2230 315	0400 0400 0400	21 150 21	21 43
75	100	135 52 100 150	16 48 4 12	119 4 5	0400 0400 0400 0400	6 47 48 46	47 48 46

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	197	60	8	15	1245 G.	0735 S	10539 E

SONIC DEPTH	MAX. AMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
2286	10	55	0	8	9 260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
-	-	1 478	1 9	1 460	0 400	9 8
15	1 411	1 5	1 396	0 400	9 4	1 4
35	1 192	2 1	1 160	0 400	7 6	3 2
60	2 516	1 0	2 506	0 400	1 69	6 3
80	565	2 7	536	0 400	3 6	8 3
100	105	2 4	8 1	0 400	6	8 7

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	197	60	8	15	1245 G	0735 S	10539 E

SONIC DEPTH	MAX. AMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
2286	10	55	3	7	10 390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
15	229	229	0 050	1 08	4 05	4
35	857	857	0 050	4 05	1 68	1 0
60	398	398	0 050	5 00	1 05	1 0
80	1 058	1 058	0 050	6 7	2 4	2 4
100	1 411	1 411	0 050	1 5	2 5	2 5

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	200	60	8	15	2305 G	0814 S	10743 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
3109	15	55	0	8	9260	010
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
25	1035	82	953	0400	64	
50	1122	56	1064	0400	72	17
75	2006	50	1956	0400	32	42
100	1152	22	130	0400	9	60
150	32	13	19	0400	1	64
	12	24	12	0400	2	62

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	203	60	8	16	1230 G	0845 S	10923 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
3566	09	60	0	8	9260	010
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
35	1319	28	1294	0400	87	
45	1911	28	1883	0400	27	37
60	1450	17	1433	0400	97	49
75	2517	22	2495	0400	68	68
85	154	13	144	0400	10	62
	179	14	165	0400	1	63

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	203	60	8	16	1200 G	0845 S	10923 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3566	09	60	3	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
35	1496	1496	0500	707		
45	1051	1051	0500	497	21	
60	2061	2061	0500	974	29	
75	318	318	0500	150	37	
85	116	116	0500	55	36	
	47	47	0500	22	39	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	208	60	8	17	1130 H	0936 S	11309 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3109	09	65	0	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
30	1347	20	1327	0425	04	0
50	893	28	865	0425	55	
65	1150	30	1120	0425	71	33
75	16	17	1	0425		39
85	155	29	126	0425	8	39
	73	9	64	0425	4	40

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	208	60	8	17	1130 H	0936 S	11309 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND				
					DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A
3109	09	65	3	7	10390				010		
30				1353	1353	0050	0050	639			
50				803	803	0050	0050	379			
65				627	627	0050	0050	296			
75				198	198	0050	0050	94			
85				104	104	0050	0050	49			
				60	60	0050	0050	26			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	211	60	8	18	0030 H	0831 S	11521 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND				
					DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	A
1011	15	40	0	9260	9260				010		
25				931	931	0400	0400	57			
50				760	760	0400	0400	49			
				2030	2030	0400	0400	134			
75				1701	1701	0400	0400	113			
100				53	53	0400	0400	67			
150				30	30	0400	0400	61			
								1			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	214	60	8	18	1305 H	0800 S	11600 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
1463	08	9	0	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
20	579	24	555	0400	33	33
35	594	44	550	0400	33	7
45	3064	27	3037	0400	179	22
60	1547	13	1534	0400	91	36
75	1094	25	1069	0400	63	47
	323	32	291	0400	17	53

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	214	60	8	18	1255 H	0800 S	11600 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
1463	08	9	3	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
20	974	974	0050	460	6	6
35	708	708	0050	354	23	23
45	3417	3417	0050	1614	34	34
60	1273	1273	0050	601	40	40
75	473	473	0050	223	4	4
	216	216	0050	103		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	219	60	8	19	1145 H	0 800 S	11938 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3750	07	12	0	7	10390	010
DEPTH	LIGHT COUNT		DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
20	628		17	611	0400	36
30	451		23	426	0400	25
40	929		22	906	0400	54
55	1661		20	1641	0400	97
65	972		12	960	0400	16
	232		18	214	0400	57
						29
						33

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	219	60	8	19	1145 H	0 800 S	11938 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3750	07	12	3	7	10390	010
DEPTH	LIGHT COUNT		DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
20	25				0050	12
30	497				0050	235
40	937				0050	443
55	635				0050	300
65	377				0050	10
	164				0050	178
						13
						78
						14

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	221	60	8	19	1740 H	0901 S	11946 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
1143	15	10	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
25	2516	72	2444	0425	155	
50	3318	37	3281	0425	208	45
75	2665	47	2618	0425	166	92
100	1002	22	980	0425	62	121
150	2338	17	2321	0425	147	147
	41	5	36	0425	2	184

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	225	60	8	20	1255 H	0915 S	12225 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3109	07	25	0	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
20	697	20	677	0500	32	19
30	335	43	3292	0500	156	38
40	4816	44	4772	0500	225	51
50	807	27	780	0500	37	54
65	537	15	522	0500	25	59
	823	11	A12	0500	38	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	225	60	8	20	1240 H	0 915 S	12225 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
3109	07	25	3	7	10390	010	
20	1355	1355	1355	0050	0050	640	
30	1966	1966	1966	0050	0050	929	
40	1140	1140	1140	0050	0050	539	
50	338	338	338	0050	0050	160	
65	218	218	218	0050	0050	103	
	170	170	170	0050	0050	80	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	233	60	8	22	1200 I	0 746 S	12845 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
4206	08	29	0	7	10390	010	
20	687	35	650	0400	0400	38	
35	1437	1402	0400	0400	0400	63	
45	1625	29	1594	0400	0400	94	
60	1627	37	1590	0400	0400	94	
75	966	17	951	0400	0400	56	
	416	20	396	0400	0400	23	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	233	60	8	22	115011	0746 S	12845 E

SONIC DEPTH	MAX. AMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4206	08	29	3	7	10390	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
20	1359	1359	0050	642		
35	1961	1961	0050	926		
45	969	969	0050	458		
60	518	518	0050	245		
75	281	281	0050	133		
	60	60	0050	28		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	235	60	8	22	21001	0851 S	12947 E

SONIC DEPTH	MAX. AMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
2468	16	25	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	522	36	486	0400	33	
50	903	21	882	0400	59	12
60	632	21	911	0400	55	26
105	192	19	173	0400	12	36
155	55	15	40	0400	5	36
	20	21	0400	1	0400	36

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	239	60	8	23	1215 I	1 004 S	13157 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND						
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
79	07	60	0	8	9 260	010						
10				6 6 5	3 7		6 2 8	0 4 0 0	0 4 0 0	4 2		
20				1 2 5 3	4 2		1 2 1 1	0 4 0 0	0 4 0 0	8 2		
30				1 3 3 3	4 3		1 2 9 0	0 4 0 0	0 4 0 0	8 7		
50				1 6 3 3	4 8		1 5 8 5	0 4 0 0	0 4 0 0	1 0 7		
70				3 0 6 3	1 1		3 0 5 2	0 4 0 0	0 4 0 0	2 4		
				6 5 7	1 0		6 4 7	0 4 0 0	0 4 0 0	5 6		
										6 0		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	242	60	8	24	0030 I	1 003 S	13406 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND						
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
73	07	60	0	8	9 260	010						
10				3 1 3	4 8		2 6 5	0 4 0 0	0 4 0 0	1 8		
20				4 4 8	4 8		4 0 0	0 4 0 0	0 4 0 0	2 7		
30				4 9 3	4 7		4 4 6	0 4 0 0	0 4 0 0	3 0		
50				6 1 0	4 6		5 7 2	0 4 0 0	0 4 0 0	3 9		
70				2 2 8 4	4 2		2 2 4 2	0 4 0 0	0 4 0 0	1 5 1		
				2 9 7 2	2 0		2 9 5 2	0 4 0 0	0 4 0 0	2 6		
										4 9		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	245	60	8	24	1230 I	1000 S	13600 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
59	05	85	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
1279	50	1229	0400	83		
1666	49	1617	0400	109		
1897	66	1831	0400	123		
2171	51	2120	0400	143		
2379	49	2330	0400	157		
2424	30	2394	0400	161		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	248	60	8	25	0025 I	1004 S	13805 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
53	04	92	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
1871	63	1798	0400	120		
2252	61	2171	0400	146		
2164	60	2084	0400	140		
2138	77	2061	0400	139		
2031	51	1980	0400	134		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	251	60	8	25	1220 I	1007 S	14000 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
51	04	45	0	8	9 260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
10	3657	96	3561	0400	240		
20	4267	57	4210	0400	284		
30	4111	58	4053	0400	273		
40	4345	51	4294	0400	289		
	2809	31	2778	0400	187		
					106		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	253	60	8	31	0010 K	0903 S	14446 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
88	07	20	0	8	9260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
10	375	72	303	0300	27		
20	368	53	315	0300	28		
30	346	47	299	0300	27		
50	696	33	365	0300	33		
70	693	22	671	0300	60		
	453	12	441	0300	18		
					28		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	254	60	9	01	0650 I	1208 S	13946 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
60	05	125	0	8	9 260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
10	1521	32	1489	0400	100	
20	1653	29	1624	0400	110	10
30	954	25	929	0400	63	19
40	1898	36	1662	0400	126	29
50	1956	23	1933	0400	130	41
	2020	32	1988	0400	134	55

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	255	60	9	01	1600 I	1310 S	13858 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
59	05	100	0	8	9 260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
10	1912	67	1845	0400	124	
20	2491	90	2401	0400	162	14
30	2176	89	2087	0400	141	29
40	2720	71	2649	0400	179	45
50	4009	62	3947	0400	266	68
	2260	33	2227	0400	150	88

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	256	60	9	02	0320 I	1130 S	13800 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
59	05	55	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
10	836	48	788	0400	53
20	820	46	774	0400	66
30	877	53	824	0400	56
40	996	43	955	0400	12
50	854	50	804	0400	18
60	3706	60	3646	0400	24
					39

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	257	60	9	03	0020 I	0800 S	13600 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
53	05	95	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
10	5253	76	5177	0400	349
20	5901	81	5820	0400	392
30	4876	111	4765	0400	321
40	4172	25	4137	0400	73
50	1764	55	1709	0400	103
	1049	34	1015	0400	122
					132

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	258	60	9	03	1025 I	0800 S	13400 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
64	05	55	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
10	3182	98	3084	0400	208	24
20	4252	88	4164	0400	281	
30	4065	82	3983	0400	269	52
40	4784	60	4724	0400	318	81
50	4822	53	4769	0400	321	113
	2270	31	2239	0400	151	137

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	260	60	9	03	2130 I	0805 S	13148 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
1298	15	12	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	581	75	506	0400	34	8
50	471	74	397	0400	27	
75	982	25	957	0400	65	19
100	784	13	771	0400	52	34
150	51	17	34	0400	2	40
	20	7	13	0400	1	41

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
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25	234	17	1217	82
50	1846	16	1832	26
75	1809	12	1797	56
100	356	14	342	74
150	87	14	73	78
		1	6	79

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
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SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCKY ACTIVITY	BACKGROUND
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DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	
					A	B
1189	15	10	0	9260	010	
25	996	60	936	0400	63	
50	1956	56	1896	0400	126	24
75	1628	29	1599	0400	106	53
100	157	10	147	0400	10	66
150	101	8	93	0400	6	70
	12	6	6	0400		71

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	268	60	9	05	0430 H	0901 S	12748 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
3383	15	50	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
525	38	487	0400	33		
584	40	544	0400	37		
571	13	556	0400	36		
161	14	167	0400	11		
75	0	23	0400	2		
100	31	11	0400	26		
150	13	2	0400	26		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	269	60	9	05	0830 I	0936 S	12807 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
585	15	80	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
1026	16	1012	0400	66		
1341	15	1326	0400	69		
1187	16	1169	0400	79		
843	10	833	0400	56		
42	11	31	0400	2		
26	9	16	0400	65		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	271	60	9	05	14251	1004 S	12824 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
73	05	70	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
359	12	347	0500	10		
691	15	676	0500	47		3
1937	20	1917	0500	103		11
3248	39	3211	0500	173		25
1863	27	1656	0500	100		38
1148	19	1129	0500	61		46

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	273	60	9	05	17301	1035 S	12843 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
9999	07	65	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	B
10	284	60	224	0400	15	
20	364	65	319	0400	22	2
30	361	55	306	0400	21	4
50	501	55	446	0400	30	5
70	986	49	937	0400	63	16
	1170	30	1140	0400	77	30

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	275	60	9	05	2130	1108 S	12902 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
35	03	75	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
1450	62	1396	0450	84		
2075	94	1992	0450	19	10	
890	92	798	0450	53	23	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	276	60	9	06	0155	1138 S	12920 E

SONIC DEPTH	MAX. SAMPL. DEPTH	DIST FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
55	03	65	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
536	56	480	0400	32		
534	58	479	0400	32	5	
30	55	1279	0400	66	14	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	281	60	9	12	1500 H	1 343 S	12442 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
86	07	12	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	STOCK ACTIVITY	INCUBATION PERIOD	RATE OF PRODUCTION	A	B
10	130	32	96	0400	7			
20	421	45	376	0400	25			
30	445	55	390	0400	26			
50	795	67	726	0400	49			
70	3725	67	3658	0400	247			
	1731	36	1395	0400	114			
					74			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	282	60	9	12	1900 H	1 322 S	12426 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
163	15	5	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	STOCK ACTIVITY	INCUBATION PERIOD	RATE OF PRODUCTION	A	B
25	179	28	151	0400	10			
50	139	58	81	0400	6			
75	326	56	272	0400	13			
100	652	19	633	0400	43			
150	103	9	94	0400	6			
	60	9	51	0400	3			
					21			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	283	60	9	12	2135 H	1250 S	12415 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
192	15	12	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	136	26	110	0400	7	
50	168	54	144	0400	10	2
75	202	45	157	0400	11	5
100	1571	20	1551	0400	105	19
150	799	20	779	0400	53	39
	17	9	8	0400	1	52

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	284	60	9	13	0100 H	1218 S	12403 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
88	07	2	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
10	265	46	220	0400	115	
20	162	79	103	0400	7	1
30	743	75	673	0400	45	4
50	1459	50	1409	0400	95	1
70	1092	17	1075	0400	73	27
	1175	18	1161	0400	70	42

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	285	60	9	13	0345 H	1154 S	12347 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
172	15	10	0	8	9260	010
25		488	43	445	0400	30
50		1007	50	957	0400	65
		1450	48	1402	0400	95
75		877	29	848	0400	57
100		142	10	132	0400	51
150		8	17	0400	9	59
					1	61

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	286	60	9	13	0930 H	1109 S	12325 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
1829	15	25	0	8	9260	010
25		500	34	466	0400	31
50		860	45	815	0400	55
		2079	28	2051	0400	138
75		547	25	522	0400	35
100		38	8	30	0400	57
150		13	8	5	0400	2
					1	61
					0	62

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	292	60	9	14	1045 H	1119 S	11841 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4389	15	115	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
910	42	868	0400	59		
1642	43	1599	0400	108	21	
2856	46	2410	0400	169	58	
407	23	374	0400	25	85	
84	81	3	0400	80	80	
8	8	0	400	80	80	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	295	60	9	14	2230 H	1301 S	11927 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4297	15	145	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
160	57	103	0400	7		
157	66	91	0400	6	2	
155	37	118	0400	6	3	
50	509	22	487	0400	33	0
75	107	13	94	0400	33	0
100	8	16	0400	6	15	1
150	24	0	400	8	15	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	297	60	9	15	0730 H	1332 S	11950 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND					
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
3091	15	115	0	8	9260	010					
25				397	15		382	0400	0400	26	
50				454	20		434	0400	0400	29	
75				618	13		605	0400	0400	41	
100				867	15		852	0400	0400	57	
150				57	11		46	0400	0400	35	
				5	5		5	0400	0400	36	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	299	60	9	15	1510 H	1449 S	12024 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND					
						DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
1609	15	98	0	8	9260	010					
25				162	22		160	0400	0400	11	
50				280	49		231	0400	0400	16	
75				242	40		202	0400	0400	14	
100				1314	26		1286	0400	0400	87	
150				241	35		206	0400	0400	14	
				19	10		9	0400	0400	1	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	301	60	9	15	2230 H	1541 S	12051 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
287	15	65	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
25	147	24	123	6400	8
50	100	25	75	0400	5
75	610	26	584	0400	7
100	180	10	170	0400	14
150	77	8	69	0400	5
	11	14	3	0400	16
					17

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	303	60	9	16	0125 H	1607 S	12105 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
66	05	65	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
10	490	55	443	0400	30
20	564	54	530	0400	36
30	663	37	626	0400	42
40	563	51	512	0400	35
50	979	57	922	0400	62
	1483	55	1426	0400	96
					24

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	304	60	9	16	0425 H	1635 S	12119 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
42	03	45	0	8	9260	010
10						
20						
30						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	305	60	9	16	0715 H	1700 S	12133 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
44	03	20	0	8	9260	010
10						
20						
30						

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	306	60	9	16	0930 H	1725 S	12142 E
SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND	
42	03	33	0	8	9260		010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
1 6 7 0	2 1	1 6 4 9	0 4 0 0	1 1 1		
1 7 7 9	2 4	1 6 5 5	0 4 0 0	1 1 2		
2 2 7 4	2 2	2 2 5 2	0 4 0 0	1 5 2		
1 9 4 3	1 9	1 9 2 4	0 4 0 0	1 3 0		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	312	60	9	17	0810 H	1942 S	11745 E
SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND	
60	05	35	0	8	9260		010	

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
1 3 0 7	3 5	1 2 7 2	0 4 0 0	0 6		
1 5 9 0	2 6	1 5 6 2	0 4 0 0	1 0 5		
1 9 3 3	2 2	1 9 1 1	0 4 0 0	1 2 9		
1 7 6 6	2 0	1 7 4 6	0 4 0 0	1 1 8		
1 6 6 0	1 6	1 6 4 4	0 4 0 0	1 1 1		
1 6 0 7	1 6	1 5 6 9	0 4 0 0	1 0 7		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	313	60	9	17	1105 H	1916 S	11729 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
119	10	65	0	8	9260	010
25	591	25	566	0400	36	
50	536	37	599	0400	40	10
75	3654	34	3620	0400	244	45
100	583	13	570	0400	38	81
	376	20	356	0400	24	66

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	314	60	9	17	1440 H	1850 S	11719 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
282	15	90	0	8	9260	010
25	160	20	140	0400	9	
50	331	31	300	0400	20	
75	611	32	779	0400	53	13
100	1440	16	1424	0400	96	31
150	190	9	181	0400	12	45
	24	10	14	0400	1	48

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	315	60	9	17	1830 H	1820 S	11705 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
1554	08	113	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	BACKGROUND
25	169	32	137	0400	9	
50	133	35	98	0400	7	
75	261	49	212	0400	5	
	628	24	504	0400	14	
				0400	41	
					11	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	317	60	9	18	0105 H	1726 S	11641 E

SONIC DEPTH	MAX. SAMPLING DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
2286	15	135	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	BACKGROUND
25	136	35	101	0400	7	
50	154	53	101	0400	7	
75	269	39	250	0400	5	
100	679	20	659	0400	17	
150	56	15	41	0400	58	
				0400	3	
				0400	22	
				0400	1	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	319	60	9	18	0735 H	1626 S	11615 E.

SONIC DEPTH	MAX. DEPTH	DIST FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
4572	15	180	0	8	9260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
25	406	20	306	0400	26		
50	589	23	566	0400	38		
75	625	15	610	0400	41		
100	610	13	592	0400	40		
150	132	10	123	0400	6		
	43	6	35	0400	34		
				2	37		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	321	60	9	18	1635 H	1535 S	11556 E

SONIC DEPTH	MAX. DEPTH	DIST FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
5706	15	215	0	8	9260	010	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	
25	154	22	132	0400	9		
50	238	43	195	0400	13		
75	352	48	304	0400	21		
100	543	29	514	0400	35		
150	361	16	345	0400	23		
	66	59	0400	4	28		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	323	60	9	19	0015 H	1445 S	11522 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5752	15	273	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	286	36	250	0400	17	3
50	188	45	73	0400	5	4
75	142	47	95	0400	6	6
100	389	23	366	0400	25	12
150	95	9	86	0400	6	13
	13	6	5	0400		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	325	60	9	19	0900 H	1343 S	11449 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5358	15	300	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	411	6	403	0400	27	0
50	513	20	493	0400	33	20
75	2006	20	1986	0400	134	20
100	640	19	621	0400	42	50
150	478	17	461	0400	31	60
	56	9	47	0400	3	68

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	327	60	9	19	1940 H	1224 S	11418 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
4572	15	230	0	8	9260	010		
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
25	79	50	50	37	0400	2		
50	155	52	103	0400	0400	2		
75	127	34	93	0400	0400	7		
100	121	49	72	0400	0400	6		
150	11	57	46	0400	0400	5		
						6		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	329	60	9	20	0730 H	1053 S	11332 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY		BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
6218	15	140	0	8	9260	010		
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
25	580	25	555	0400	0400	37		
50	1233	36	1197	0400	0400	81		
75	1309	24	1285	0400	0400	87		
100	478	20	458	0400	0400	31		
150	47	12	35	0400	0400	24		
	129	14	115	0400	0400	65		
						6		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	334	60	9	21	0630 G	1243 S	10908 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
3475	15	220	0	8	9260	016	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
25	146	3	31	1450	0400	98	
50	239	0	32	1431	0400	96	
75	411	1	29	2361	0400	159	
100	64	1	12	399	0400	27	
150	83	1	1	53	0400	4	
			13	70	0400	5	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	336	60	9	21	1705 G	1403 S	11015 E

SONIC DEPTH	MAX. SAMP. DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
5852	15	280	0	8	9260	016	
DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH	DEPTH
25	329	4	45	284	0450	17	
50	425	36	39	39	0450	23	
75	1572	60	1512	0450	90	19	
100	687	22	665	0450	40	36	
150	401	36	365	0450	20	43	
	110	24	86	86	0450	50	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	339	60	9	22	0200 G	1529 S	11053 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
5852	15	310	0	8	9260	016

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	951	29	922	0400	62	
50	1093	31	1062	0400	72	17
75	1227	59	1168	0400	79	36
100	209	17	182	0400	13	47
150	33	5	28	0400	2	49
	9	7	3	0400		49

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	341	60	9	22	1145 G	1621 S	11127 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4938	15	315	0	8	9260	010

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	484	19	465	0400	31	
50	730	21	709	0400	48	10
75	1308	10	1298	0400	68	27
100	776	42	734	0400	50	44
150	141	9	132	0400	9	51
	56	13	43	0400	3	54

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	343	60	9	22	2145 G	1733 S	11202 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
4755	15	260	0	8	9260	016

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
25	97	47	50	0	3	25	119	35	84	0	1
50	417	37	380	0	6	50	417	37	380	0	5
75	203	21	182	0	26	75	203	21	182	0	10
100	120	11	109	0	12	100	120	11	109	0	12
150	23	6	17	0	14	150	23	6	17	0	14

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	345	60	9	23	0730 H	1900 S	11246 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
2103	15	170	0	8	9260	016

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION	DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION
25	814	24	790	0	53	25	969	20	949	0	15
50	962	17	945	0	64	50	962	17	945	0	31
75	1304	17	1287	1	64	75	1304	17	1287	0	49
100	421	17	404	0	87	100	421	17	404	0	27
150	24	14	104	0	400	150	24	14	104	0	14

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	346	60	9	23	1340 H	1959 S	11315 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
1006	15	120	0	8	9260	016

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	644	12	632	0400	43	
50	990	17	973	0400	66	14
75	1720	22	1698	0400	114	36
100	408	11	397	0400	27	54
150	326	12	314	0400	21	60
	63	1	62	0400	4	66

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	348	60	9	23	1940 H	2044 S	11333 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST. FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
1189	15	065	0	8	9260	016

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	185	40	145	0475	8	
50	218	42	176	0475	10	2
75	886	29	857	0475	49	10
100	123	18	105	0475	6	16
150	18	16	2	0475	17	17
	39	3	36	0475	2	13

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	349	60	9	24	0145 H	2140 S	11400 E

SONIC DEPTH	MAX. SAMPLE DEPTH	DIST FROM COAST	METHOD OF INCUBATION	STOCK NUMBER	STOCK ACTIVITY	BACKGROUND
183	15	5	0	8	9260	016

DEPTH	LIGHT COUNT	DARK COUNT	NET COUNT	INCUBATION PERIOD	RATE OF PRODUCTION A	RATE OF PRODUCTION B
25	523	49	474	0400	32	8
50	503	48	455	0400	31	
75	315	43	278	0400	19	14
100	673	5	668	0400	59	24
150	415	26	389	0400	26	34
	48	14	34	0400	2	41

PRIMARY PRODUCTION

(b) Stations at which Surface Samples Taken.

Ship Diamantina      Cruise 4/60      14C stock 7      Activity 10.39 x 10<sup>6</sup>C/m

Stn. No.	Date Year Month Day	Position Lat. Long.	Incubation Time In Time Out	Activity c.p.m. Light Dark Net	Production mgC/hr/m <sup>3</sup>
116	60 07	3159S 11154E	2100 0415	186 149 017 017	169 0.09
118	60 07	3159S 10947E	2415 0900	149 000 132 0.08	132 0.08
119	60 07	3159S 10841E	0415	017 017	0.00 0.00
121	60 07	3156S 10638E	1615 2005	161 019 142 0.08	142 0.08
126	60 07	3142S 10212E	1615 2020	099 014	085 0.05
127	60 07	3129S 10110E	2015 0015	094 027	067 0.04
128	60 07	3119S 10017E	0010 0410	201 017	184 0.11
129	60 07	3112S 09915E	0345 0745	289 007	282 0.17
130	60 07	3059S 09841E	0810 1215	324 002	322 0.19
131	60 07	3040S 09730E	1240 1640	189 009	180 0.11
132	60 07	3037S 09718E	1635 2035	069 014	055 0.03
134	60 07	2845S 09453E	0025 0425	041 010	031 0.02
135	60 07	2758S 09457E	0430 0845	059 018	041 0.02
136	60 07	2723S 09501E	0805 1210	120 009	111 0.07
137	60 07	2638S 09501E	1205 1615	126 010	116 0.07
138	60 07	2554S 09501E	1615 2015	156 011	145 0.09
139	60 07	2534S 09512E	2025 0025	054 011	043 0.03
175	60 08	0056N 09443E	0005 0405	4080 0405	4012 2.37
176	60 08	0015N 09500E	0405 0800	186 023	163 0.10
177	60 08	0004S 09507E	0800 1205	348 025	323 0.19

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(b) Stations at which Surface Samples Taken.

Ship Diamantina

Cruise 2/60

14C stock 7

Activity  $10,39 \times 10^6 \text{C/m}^-$

Stn. No.	Year	Month	Date	Position	Incubation	Activity	c.p.m.	Production mgC/hr/m <sup>3</sup>
			Day	Lat. Long.	Time In	Time Out	Light	Dark
177	60	08	07	0004S	1215	1620	010	318
177	60	08	07	0004S	1615	2020	051	041
178	60	08	07	0012S	0950E	2030	020	009
179	60	08	08	0112S	09504E	2400	040	189
180	60	08	08	0147S	09502E	0400	0800	149
181	60	08	08	0228S	09501E	0805	1205	005
182	60	08	08	0230S	09500E	1205	1605	005
182	60	08	08	0230S	09500E	1605	2030	009
183	60	08	08	0242S	09500E	2030	0030	684
184	60	08	09	0337S	09500E	0015	0415	0.40
185	60	08	09	0432S	09500E	0415	0840	0.32
186	60	08	09	0500S	09440E	0840	1240	0.32
186	60	08	09	0500S	09440E	1207	1610	0.32
186	60	08	09	0500S	09440E	1610	2010	0.32
187	60	08	10	0512S	09536E	0010	0415	0.32
188	60	08	10	0525S	09630E	0415	0815	0.32
189	60	08	10	0536S	09725E	0810	1210	0.32
190	60	08	10	0548S	09819E	1200	1630	0.32
191	60	08	10	0552S	09908E	1700	2120	0.32
192	60	08	10	0551S	09935E	2010	0010	0.32

(b) Stations at which Surface Samples Taken.

Stn. No.	Ship <u>Diamantina</u>	Cruise 2/60			14C stock			Activity 10.39 x 10 <sup>6</sup> C/m		
		Date Year	Month	Day	Lat.	Long.	Position	Incubation Time In	Time Out	Activity c.p.m.
193	60	08	11	0549S	10035E	0035	0435	057	027	030
197	60	08	15	0735S	10539E	1210	1610	921	071	850
198	60	08	15	0741S	10607E	1620	2040	143	072	04
199	60	08	15	0801S	10702E	2050	2450	093	046	047
200	60	08	15	0814S	10743E	0100	0500	1195	058	1137
203	60	08	16	0845S	10922E	1215	1615	981	011	970
204	60	08	16	0853S	10959E	1610	2010	942	164	778
205	60	08	16	0901S	11040E	2010	2410	243	056	187
206	60	08	17	0910S	11126E	0001	0400	225	066	159
207	60	08	17	0920S	111212E	0405	0830	720	056	664
208	60	08	17	0935S	11309E	0840	1240	1707	036	1671
208	60	08	17	0935S	11309E	1215	1605	152	033	119
209	60	08	17	0933S	11359E	1615	2015	1496	021	1475
210	60	08	17	0930S	11449E	2000	2400	2282	109	2173
211	60	08	17	0930S	11521E	2406	0406	417	090	327
212	60	08	18	0922S	11524E	0402	0402	2071	032	2059
213	60	08	18	0851S	11541E	0809	1340	1267	054	1213
215	60	08	18	0800S	11616E	1600	2015	548	033	515
216	60	08	18	0804S	11716E	2015	0001	143	079	064
217	60	08	19	0800S	11808E	0010	0410	217	056	161

Ship Diamantina Cruise 2/60  $^{14}\text{C}$  stock 7 Activity  $10.39 \times 10^6 \text{C/m}^2$

Stn. No.	Year	Date Month Day	Position Lat. Long.	Incubation			Activity			c.p.m.	Production mgC/hr/m <sup>3</sup>
				Time In	Time Out	Light	Dark	Net			
218	60	08	19	0800S	11900E	0415	0815	251	031	220	0.13
219	60	08	19	0800S	11937E	0810	1225	978	014	964	0.57
219	60	08	19	0800S	11937E	1230	1640	831	014	817	0.48
220	60	08	19	0900S	11927E	1610	2010	2657	029	2628	1.55
222	60	08	19	0903S	11951E	2005	2410	1003	037	966	0.57
223	60	08	19	0908S	12037E	0027	-	-	-	-	-
225	60	08	20	0914S	12225E	0830	1235	2666	036	2630	1.55
225	60	08	20	0914S	12225E	1200	1630	2089	043	2046	1.07
225	60	08	20	0914S	12225E	1630	2005	298	080	218	0.15
226	60	08	20	0901S	12307E	2010	0010	653	081	572	0.34
227	60	08	21	0845S	12415E	0005	0410	859	269	590	0.35
228	60	08	21	0831S	12505E	0410	0810	572	043	529	0.31
229	60	08	21	0820S	12550E	0805	1205	1043	102	941	0.55
229	60	08	21	0820S	12550E	1208	1610	1144	014	1130	0.66
229	60	08	21	0823S	12549E	1610	2012	1852	020	1832	1.08
230	60	08	21	0816S	12620E	2010	1410	547	039	508	0.30
231	60	08	22	0813S	12711E	1410	0410	719	075	644	0.38
232	60	08	22	0801S	12755E	0410	0810	1105	054	1051	0.62
233	60	08	22	0746S	12844E	0810	1208	1060	054	1006	0.59
233	60	08	22	0746S	12844E	1155	1630	504	020	484	0.25

(b) Stations at which Surface Samples Taken.

Cruise 2/60      14C stock      7

Ship Diamantina

Stn. No.	Date Year	Month	Day	Position	Incubation Time In	Incubation Time Out	Activity c.p.m.	Production mgC/hr/m <sup>3</sup>	
				Lat.	Long.		Light	Dark	Net
234	60	08	22	0819S	12914E	1630	2030	361	314
235	60	08	22	0851S	12947E	2030	2430	338	302
236	60	08	23	0858S	13002E	0005	0405	468	044
237	60	08	23	0920S	13045E	0405	0815	779	072
238	60	08	23	0941S	13123E	0820	1230	1286	040
239	60	08	23	1003S	13156E	1225	1625	426	060
240	60	08	23	1008S	13241E	1605	2010	342	050
241	60	08	23	1009S	13327E	2015	-	-	292
242	60	08	24	1003S	13406E	0005	0405	245	101
243	60	08	24	1000S	13442E	0410	1010	674	190
245	60	08	24	1000S	13600E	1205	1615	1435	195
246	60	08	24	1001S	13641E	1620	2010	852	053
247	60	08	24	1003S	13723E	2005	0005	1719	151
248	60	08	25	1003S	13805E	0005	0405	846	075
249	60	08	25	1002S	13842E	0415	0815	1169	081
250	60	08	25	1003S	13920E	0813	1205	675	122
251	60	08	25	1007S	14000E	1210	1605	3813	044
251	60	08	25	1007S	14000E	1610	2000	1540	077
252	60	08	25	1047S	14045E	2000	2410	884	120
258	60	09	03	0800S	13400E	1210	1610	1736	090

Activity 10.39 x 10<sup>6</sup>C/m

(b) Stations at which Surface Samples Taken.

Stn. No.	Ship <u>Diamantina</u>	Cruise 2/60			$^{14}\text{C}$ stock			Activity $10.39 \times 10^6\text{C}/\text{m}^3$			
		Date Year	Month	Day	Position Lat.	Long.	Incubation Time In	Time Out	Activity Light	c.p.m.	Production Net
259	60	09	03	0754S	13243E	1610	2005	814	046	768	0.45
260	60	09	03	0805S	13148E	2000	2400	270	063	207	0.12
261	60	09	04	0820S	13125E	0010	0405	034	020	014	0.01
262	60	09	04	0839S	13044E	0405	0805	388	071	317	0.19
263	60	09	04	0851S	12952E	0800	1200	772	033	739	0.44
264	60	09	04	0853S	12940E	1210	1610	306	015	281	0.17
265	60	09	04	0842S	12840E	1605	2005	182	022	160	0.09
266	60	09	04	0831S	12749E	2010	0005	447	043	404	0.24
267	60	09	04	0832S	12728E	0010	0405	453	051	402	0.23
268	60	09	05	0901S	12748E	0410	0810	543	049	494	0.29
269	60	09	05	0936S	12807E	0815	1215	228	030	198	0.12
270	60	09	05	0941S	12815E	1220	1620	456	028	428	0.25
272	60	09	05	1025S	12835E	1615	2015	661	046	615	0.36
274	60	09	05	1038S	12844E	2015	0100	193	061	132	0.07
277	60	09	12	1242S	12728E	0010	0410	234	065	169	0.10
278	60	09	12	1251S	12636E	0405	0810	407	074	333	0.20
279	60	09	12	1302S	12554E	0815	1215	939	042	897	0.53
280	60	09	12	1328S	12507E	1205	1605	2386	260	2126	1.26
281	60	09	12	1344S	12440E	1615	2015	3065	049	3016	1.78
282	60	09	12	1321S	12426E	2010	0010	440	325	115	0.07

(b) Stations at which Surface Samples Taken.

Ship Diamantina       $^{14}\text{C}$  stock 7      Activity  $10.39 \times 10^6 \text{C/m}^3$

Stn. No.	Year	Date Month	Day	Position Lat.	Position Long.	Incubation Time In	Incubation Time Out	Activity c.p.m. Light	Activity c.p.m. Dark	Production mgC/hr/m <sup>3</sup>
284	60	09	13	1218S	12403E	0010	0410	221	069	252
285	60	09	13	1154S	12347E	0415	0815	626	033	593
286	60	09	13	1108S	12324E	0815	1215	942	176	766
287	60	09	13	1111S	12310E	1215	1615	478	042	436
288	60	09	13	1114S	12218E	1605	2000	598	200	398
291	60	09	14	1118S	11932E	0410	0813	756	185	571
292	60	09	14	1119S	11840E	0803	1212	1431	066	1365
292	60	09	14	1119S	11840E	1214	1603	685	171	514
293	60	09	14	1202S	11904E	1605	2005	079	011	068
294	60	09	14	1241S	11918E	2000	2400	116	070	046
295	60	09	14	1301S	11927E	0007	0400	084	055	029
296	60	09	15	1325S	11940E	0407	0810	241	057	184
297	60	09	15	1332S	11950E	0805	1205	462	040	422
298	60	09	15	1426S	12015E	1205	1610	285	044	241
299	60	09	15	1449S	12024E	1610	2010	320	079	241
300	60	09	15	1522S	12040E	2005	0005	127	317	190
302	60	09	16	1556S	12059E	0005	0405	222	271	049
304	60	09	16	1635S	12119E	0410	0810	1008	064	944
305	60	09	16	1700S	12133E	0807	1240	1090	047	943
307	60	09	16	1746S	12123E	1240	1640	813	7800	6987

(b) Stations at which Surface Samples Taken.

Stn. No.	Ship <u>Diamantina</u>	Cruise 2/60			$^{14}\text{C}$ stock			7			Activity $10.39 \times 10^6\text{C}/\text{m}^3$		
		Year	Month	Date	Lat.	Long.	Time In	Time Out	Incubation	Activity	c.p.m.	Production	
									Light	Dark	Net	mgC/hr/m <sup>3</sup>	
308	60	09	16	1802S	12046E	1613	2005	644	1559	915	-	2.02	
309	60	09	16	1829S	11947E	2008	0002	3601	185	3416	0.05	0.05	
310	60	09	17	1853S	11914E	0005	0405	132	048	084	0.08	0.08	
311	60	09	17	1918S	11829E	0410	0810	411	271	140	0.08	0.08	
312	60	09	17	1942S	11745E	0810	1200	1317	077	1240	0.73	0.73	
313	60	09	17	1916S	11729E	1210	1605	730	110	620	0.37	0.37	
314	60	09	17	1850S	11719E	1610	2015	379	135	244	0.14	0.14	
316	60	09	17	1802S	11658E	2015	0015	513	380	133	0.08	0.08	
317	60	09	18	1726S	11641E	0015	0407	334	142	192	0.11	0.11	
318	60	09	18	1649S	11625E	0407	0807	114	047	067	0.04	0.04	
319	60	09	18	1626S	11615E	0807	1210	365	111	254	0.15	0.15	
320	60	09	18	1613S	11610E	1205	1630	404	060	344	0.18	0.18	
321	60	09	18	1535S	11556E	1630	2030	111	085	026	0.02	0.02	
322	60	09	18	1527S	11547E	2005	0030	119	032	087	0.05	0.05	
323	60	09	19	1445S	11522E	0030	0400	265	071	194	0.13	0.13	
324	60	09	19	1447S	11510E	0400	1000	278	065	213	0.08	0.08	
325	60	09	19	1343S	11449E	1210	1608	517	071	446	0.26	0.26	
326	60	09	19	1254S	11429E	1605	2005	473	206	267	0.16	0.16	
327	60	09	19	1224S	11418E	2007	0007	122	069	053	0.03	0.03	
328	60			1151S	11402E	0010	0530	192	047	145	0.08	0.08	

(b) Stations at which Surface Samples Taken.

Ship Diamantina Cruise 2/60  $^{14}\text{C}$  stock 7 Activity  $10.39 \times 10^6 \text{C/m}^2$

Stn. No.	Year	Date Month Day	Position Lat. Long.	Incubation Time In Time Out	Activity Light Dark	c.p.m. Net	Production mgC/hr/m <sup>3</sup>
329	60	09	20 1053S	0815 1210	682 122	560	0.33
330	60	09	20 1102S	11237E 1210	372 047	325	0.19
331	60	09	20 1122S	11154E 1610	235 047	188	0.11
332	60	09	20 1149S	11059E 2010	0010 355	091 264	0.16
333	60	09	21 1214S	11008E 0010	0410 248	054 194	0.15
334	60	09	21 1243S	10908E 0410	0810 506	085 421	0.25
334	60	09	21 1243S	10908E 0813	1213 1205	071 071	1134 0.67
335	60	09	21 1303S	10948E 1206	1620 978	018 960	0.57
336	60	09	21 1403S	11015E 1620	2020 461	039 422	0.25
337	60	09	21 1426S	11026E 2010	2410 255	064 191	0.11
338	60	09	22 1507S	11047E 0005	0400 341	594 253	-
339	60	09	22 1529S	11053E 0400	0800 562	126 436	0.26
340	60	09	22 1604S	11118E 0804	1304 1089	027 1062	0.50
340	60	09	22 1604S	11118E 1305	1705 734	048 686	0.41
342	60	09	22 1650S	11141E 1610	2010 313	059 254	0.15
343	60	09	22 1733S	11202E 2010	0010 280	088 192	0.11
343	60	09	23 1733S	11202E 0004	0405 133	056 077	0.05
344	60	09	23 1835S	11233E 0410	0810 238	033 205	0.12
345	60	09	23 1900S	11246E 0810	1210 1006	026 980	0.58
346	60	09	23 1958S	11315E 1210	1610 791	132 659	0.39
347	60	09	23 2010S	11319E 1600	2000 1006	072 602	0.36

DATA

PART 4

PIGMENTS

EXPLANATION OF HEADINGS

Part 4      Pigments

SHIP	The figures 11 are used to designate <u>Diamantina</u> .
CRUISE	Cruise numbers are allotted each year, beginning with 1 for the first cruise.
STATION	Stations are numbered consecutively for each ship for each year.
TIME	Given in Zone Time (Table 2).
LATITUDE    LONGITUDE	The position of each station is given in degrees and minutes.
DEPTH	Actual sampling depth given in metres, a blank indicates 0 m.
CHLOROPHYLL a    b    c	Chlorophyll a and b are given in mg/m <sup>3</sup> , and chlorophyll c in MSPU/m <sup>3</sup> , to 2 decimal places.
ASTACIN NON-ASTACIN	Astacin and non-astacin are given in MSPU/m <sup>3</sup> to 2 decimal places.
	An asterisk in the body of the table indicates that a negative value was found. A blank indicates that the value was zero.

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	256	60	9	02	310	1 130 S	13600 E

DEPTH	CHLOROPHYLL			ASTACIN			NON ASTACIN	
	a	b	c	a	b	c	A	B
10	10	3*	8		2		3	*
10	10	6	52		7		2	*
20	4	10	39		6			
30	8	8	48		3		7	
40	7	3	38		6		1	*
50	19	3	50		7		2	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	257	60	9	03	5	1 600 S	13600 E

DEPTH	CHLOROPHYLL			ASTACIN			NON ASTACIN	
	a	b	c	a	b	c	A	B
22	22	9	63		6		1	*
22	22	6	96		10		1	*
26	26	13	75		7		2	
30	22	13					7	
40	16	10					7	*
50	23	16	33		10		15	
					20		15	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	177	60	8	07	1750	F	4 N 9507 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	6	5	30	7	1
50	4	3	21	4	
100	6	6	38	7	
	7	10	37	6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	182	60	8	08	1230	F	230 N 9500 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	9	9	48	7	1 *
50	7	42	6	6	
70	13	9	49	9	
90	9	6	49	9	
105	10	7	45	6	1
	12	6	56	15	2 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	115	60	7	12	1015	3159	8 11154 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
6	6	22	6	1	1
25	16	15	74	13	1
50	9	6	39	36	10
75	6	6	46	5	
100	4	4	23	7	1
150	7	7	6	8	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	117	60	7	12	2000	3201	S 10957 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
9	7	63	9	1	1
25	13	12	78	13	3
50	11	7	59	19	7
75	12	11	82	10	2
100	14	11	73	10	3
150	6	7	44	7	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	120	60	7	13	10 30 C	3200 S	107 34 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	NON ASTACIN
11	10	64	6	0	1 *
25	9	50	6	6	1 *
50	7	48	19	5	*
75	13	10	66	17	4 *
100	11	12	72	12	2 *
150	14	8	15	23	10

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	125	60	7	14	10 15 C	3159 S	10329 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	NON ASTACIN
7	4	55	7	7	2 *
25	10	6	66	11	1
50	6	3	23	6	
75	9	6	50	0	
100	10	6	53	9	1 *
150	6	7	42	7	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	129	60	7	15	230 G	31 12 S	99 15 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	10	6	54	6	1 *
50	10	6	53	9	1 *
75	6	9	41	9	
100	10	9	42	6	
150	9	7	31	6	1
			27	6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	131	60	7	15	1345 F	30 14 S	97 30 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	7	5	44	6	1 *
50	11	6	49	6	
75	11	9	60	14	3 *
100	12	10	61	10	
150	4	4	23	4	1
	2	3	27	4	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 6	7 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
25	5	4	28	4		1	*
50	10	9	55	1		1	*
75	7	6	50	6		1	*
150	6	7	43	7			
		8	51	1	0	2	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 6	9 1 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
25	6	7	44	7		2	*
50	4	4	24	4		1	*
100	9	6	50	6		1	*
	9	7	54	6			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 6	1 2 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5 0	6	5	3 3	6	
	5	5	3 4	6	
1 0 0	1 0	6	5 2	9	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 6	1 5 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
2 5	5	5	2 9	5	2
	6	4	2 3	4	1
5 0	4	5	2 9	5	1
		5	4 6	1 0	1 *
1 0 0	1				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 6	1 8 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
2 5	7	2		4 7		7	1 *
5 0	6	1 1		4 1		7	2 *
1 0 0	6	3		3 1		6	
	1 0	6		4 0		6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 6	2 1 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
2 5	5	3		2 1		4	1
5 0	5	4		2 6		4	1
1 0 0	6	4		2 5		5	1
		6		4 9		7	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 7	1 F	2 9 4 0	3 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
9	8	3.6	7				
25	4	3.6	7				
50	6	4.3	6				
100	6	5.4	6				
		4	3				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 3 3	6 0	7	1 7	3 0 0 F	2 9 4 0	3 9 4 4 7 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
10	9	5.4	10				
25	9	4.7	8				
50	9	4.7	8				
100	6	4.1	6				
		6	1				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	600 F	2940 S	9447 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	ASTACIN
25	1	6	4	24	5
50	5	6	70	10	2 *
75	5	3	29	6	
100	4	3	21	3	1
150	6	6	20	4	2
			51	6	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	900 F	2940 S	9447 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	ASTACIN
25	7	6	36	2	6
50	6	1	25	4	2
100	4	3	17	3	
	5	4	26	6	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	1200	F	2940 S 9447 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
6	4	24	5	1	
25	5	26	4	1	
50	6	23	4	2	
100	10	54	11	3	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	1500	F	2940 S 9447 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5	3	34	5	1	
25	5	33	5	2	
50	6	38	6	1	
100	7	52	20	6	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	133	60	7	17	1830 F	2940 S	9447 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	NON ASTACIN
25	5	4	27	4	2
50	6	5	46	6	1
75	4	7	41	6	1
100	11	8	96	9	1 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	136	60	7	18	815 F	2723 S	9501 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	NON ASTACIN
25	6	6	39	6	1 *
50	4	5	20	4	
75	6	6	49	6	2 *
100	7	4	37	6	1 *
150	14	10	66	10	2 *
			38	6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	139	60	9	18	2030	F	2534 S 9512 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	5	3	3.2	6	1 *
50	5	4	2.5	6	
75	5	6	3.5	6	
100	8	4	3.9	5	1
150	10	7	4.2	6	1 *
		9	5.4	11	1 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	142	60	7	19	1330	F	2223 S 9500 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	4	4	2.5	6	1 *
50	4	4	2.2	4	1
75	4	5	2.3	5	
100	8	5	3.3	6	
150		5	3.6	6	2 *
					8

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	1143	60	7	20		61.0	947.5

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN
	a	b	c			
25	5	4	4	34	5	1
50	6	5	4	26	6	3
75	5	9	10	28	6	4
100	4	13	13	23	6	5
150	9	7	65	65	15	6

SHIP.	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	20	900 F	1947 S	9456 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN
	a	b	c			
25	5	6	3	20	4	2
50	5	4	50	24	9	2 *
100	1	8	50	50	6	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 4 3	6 0	7	2 0	1 2 1 0 F	1 9 4 0 S	9 4 3 7 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5	4			2 5	2
25	7	4		3 5	2 *
50	4	3		2 2	
100	1 4	7	6 3	3	
				8	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 4 3	6 0	7	2 0	1 6 0 0 F	1 9 4 0 S	9 4 3 7 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
6	5			3 0	6
25	5	4		2 4	1
50	4	4		2 3	2
100	1 5	1 0	6 3	1 0	1 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	20	1800 F	1941 S	9435 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	2	1	20	5	1
50	5	4	27	4	2
100	5	5	33	5	
	16	12	50	6	2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	900 F	1925 S	9428 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	6	3	47	5	1 *
50	5	4	27	5	1
100	9	5	47	9	4 *
	8	9	41	5	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	1200 F	1925 S	9428 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5	6	36	9	1	*
25	3	20	2	1	
50	4	28	6		
100	6	65	10		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	1500 F	1924 S	9420 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5	5	30	5	1	
25	6	35	5		
50	6	38	6		
100	3	21	3		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	143	60	7	21	1815 F	1924 S	9420 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5	3	3.6	7		
25	2	4.1	5	2 *	
6					
100	10	5.3	9		
13				1	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	145	60	7	22	015 F	1726 S	9453 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
9	6	4.1	6		1
25	5	4	2.7		
50	5	4	2.4	1	
75	8	6	3.7	2 *	
100	5	2	2.7	6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 4 8	6 0	7	2 2	2 1 0 0	F	1 5 0 2 S 9 5 0 4 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
2 5	5	5	2 9	8	1 *
5 0	7	6	3 9	6	
6	6	5	3 1	4	
7 5	1 0	6	5 1	8	1 *
1 0 0	1 2	9	5 6	8	2
1 5 0	5	4	2 5	6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 5 1	6 0	7	2 3	1 3 4 5	F	1 2 4 1 S 9 5 0 4 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
2 5	7	9	2 7	5	
5 0	6	6	5 0	5	1 *
7	7	6	3 9	7	1 *
7 5	9	6	4 8	8	1 *
1 0 0	7	3	2 2	4	1
1 5 0	5	5	2 0	5	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	155	60	7	24	730 F	1000 S	9500 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	4	4	3	23	3
50	6	5	30	9	1
75	10	9	44	5	2
100	10	6	53	6	1
150	7	6	51	6	2 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	155	60	7	24	910 F	1000 S	9500 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	7	6	38	7	4
50	16	7	36	5	2
100	6	6	50	6	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	155	60	7	24	1330 F	1000 S	9500 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	9	5	35	6	1
50	4	4	23	5	1
50	5	3	21	4	1
100	27	24	127	27	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	155	60	7	24	1530 F	1000 S	9500 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	8	6	41	6	6
50	5	6	45	6	6
50	17	13	82	13	13
100	19	16	103	14	3

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1.1	2	174	60	8	06	915 F	200 N	9412 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	8	6	3.8	6	1 *
50	9	7	4.2	8	1 *
100	14	10	4.2	7	1 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1.1	2	174	60	8	06	1300 F	200 N	9412 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	14	11	6.0	14	1 *
50	11	6	5.2	10	1 *
100	15	9	5.7	9	1 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 7 4	6 0	8	0 6	1 8 0 0	F	2 0 0 N 9 4 1 2 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	A STACIN		A STACIN
1 0	1 0	5 0		9	1	*
2 5	6	4 0		6	2	*
5 0	7	4 4		6	1	*
1 0 0	9	6 1	1 0			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 7 4	6 0	8	0 6	6 0 0	F	2 0 0 N 9 4 1 2 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	A STACIN		A STACIN
6	2	4 2		7	1	*
2 5	6	3 6		7	2	*
5 0	5	3 1		5	1	*
7 5	7	1 0		5 9	6	*
1 0 0	1 1	6		4 0	7	
1 5 0	3	4		2 4	4	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	177	60	07		650 F	4 N	9507 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	9	6		51	1
50	4	1		32	1
50	5	4		37	1
100	11	7		59	1 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	177	60	07		1500 F	4 N	9507 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	4	3		22	5
50	7	5		32	7
50	7	4		47	7
100	13	7		47	10

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	600 F	230 N	9500 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN		ASTACIN
25	6	5	34	6		
50	6	7	43	7		
75	6	5	32	6		
100	12	11	55	6	1	
150	12	10	117	10		
		8	50	10	2	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	910 F	230 N	9500 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN		ASTACIN
25	6	3	52	6		
50	10	9	40	6	1	
100	13	10	47	9	1	
	11	5	61	6	1	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 86	6 0	8	0 9	1 200 F	2 3 0 N	9 5 0 0 E

DEPTH	CHLOROPHYLL			ASTACIN	ASTACIN
	a	b	c		
2 5	6	4	4 2	7	*
5 0	1 2	5	4 7	9	1
5 0	9	5	5 8	9	1
1 0 0	1 4	1 0	6 7	1 2	2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	1 86	6 0	8	0 9	1 500 F	2 3 0 N	9 5 0 0 E

DEPTH	CHLOROPHYLL			ASTACIN	ASTACIN
	a	b	c		
2 5	7	5	4 6	7	*
5 0	6	4	2 5	5	2
5 0	7	6	3 9	7	1
1 0 0	1 1	6	5 1	9	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	186	60	8	09	1800 F	230 N	9500 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
25	5	5	4.1	7	2 *		
50	6	7	3.2	7			
80	6	6	4.0	7	1		
100	5.6	9	6.9	1.6	2 *		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	194	60	8	14	1400 G	543 N	10623 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
10	1.7	6	4.4	6			
16	1.6	1.0	6.6	9			
17			5.1	9	1 *		
20							

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	195	60	8	15	4 15 C	658 N	10433 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b		c			
		b	c	c			
25	8	3	22	5			
50	13	6	45	9			
75	10	6	53	6			
100	12	6	52	7			
100	14	6	55	9			
150	12	5	46	6			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	197	60	8	15	1 245 C	735 N	10539 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b		c			
		b	c	c			
25	1	7	1	44			
50	12	9	44	8			
75	12	7	60	9			
100	25	5	76	7			
150	7	7	44	11			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	200	60	8	15	2305 C	814 N	10743 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
19	6	63	9				
25	9	57	10				
50	6	66	8				
75	1C	77	9				
100	3	16	1				
150	6	50	9				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	203	60	8	16	1200 C	845 N	10923 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
9	6	40	6				
25	13	7	61				
50	9	9	47				
75	11	6	51				
100	7	3	39				
150	10	6	40				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	208	60	8	17	11 30 H	936 S	11309 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN		ASTACIN
14	10	49		6		3
25	14	11	57	10		1 *
50	16	11	60	9		1
65	14	6	70	10		
75	10	7	44	7		1
85	10	9	43	6		*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	211	60	8	17	23 30 H	831 S	11521 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN		ASTACIN
8	4			27	4	1
25	16	10	68	7		*
50	17	9	60	6		
75	21	6	62	9		1
100	10	5	41	7	1	*
150	12	9	57	9		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	214	60	8	19	1305 H	800 9	11600 E
1 1	2	219	60	8	19	1200 H	800 9	11938 E
1 1	2	219	60	8	19	1305 H	800 9	11600 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
6	5	34	5		
20	9	44	7		
35	22	12	10	1	
45	20	9	13		
60	24	6	17	3	*
75	15	11	10		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	219	60	8	19	1200 H	800 9	11938 E
1 1	2	219	60	8	19	1305 H	800 9	11600 E
1 1	2	219	60	8	19	1305 H	800 9	11600 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
11	7	7	6	1	*
20	7	6	5		
30	8	7	42		
40	9	7	46	1	*
55	5	5	53	1	*
65	16	6	56	2	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
11	2	221	60	8	19	1740 H	901 S	11946 E		

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
27	13	60	10				1
29	11	79	10				
45	12	66	10				3
75	6	45	6				2
100	12	66	10				1
175	9	39	0				*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE		LONGITUDE	
11	2	225	60	8	20	1255 H	919 S	12225 E		

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
10	4	4	4				7
20	28	12	67				12
30	70	19	142				10
40	25	12	62				9
50	17	6	42				9
65	13	7	56				2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	233	60	6	22	1040	1	746 9 12845 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	A	B	C				
14	8	33	6				
20	10	43	6				
35	23	64	10				
45	21	63	10				
60	14	48	7				
75	12	47	7				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	235	60	6	22	2100	1	851 9 12947 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	A	B	C				
7	5	20	3				
25	16	58	7				
50	20	7	66				
75	14	10	49				
100	7	11	26				
150	7	6	26				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	239	60	8	23	1200	1	1004 S 13157 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
10	1.3			3.3		1	*
20	1.1			4.2		1	
30	1.4			3.7			
40	1.3			5			
50	4.7			6			
60				6			
70				6			
				6			
				6			
				6			
				6			
				10			
				10			
				16			
				57			
				57			
				11			
				2			
				2			
				16			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	242	60	8	24	5	11003	13406

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c	a	b	c	d
10	9	7	22	14	5	47	6
20	1	5	47	9	10	37	6
30	10	1	37	10	6	43	7
50	36	6	43	16	16	78	9
70	57	12	78	12	12	12	12

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	245	60	6	24	1230	1	1000 S 13600 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
10	15	6	65	13	1	*	
	16	6	43	6	1	*	
20	16	7	49	6	1		
30	14	6	34	5	12		
40	19	6	47	5	3		
50	19	7	39	6	3		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	246	60	8	25	10	1	1004 S 13805 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
10	30	7	58	9	1		
	25	9	35	7	1		
20	27	7	72	8			
30	27	6	55	6	2		
40	20	5	33	4	3		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	251	60	8	25	1200	1 1007 S	14000 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
16	10	79	9	2 *	
26	10	61	6	1	
39	9	77	6	3	
30	6	55	9		
14	7	55	6	1	
40	24				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	253	60	8	31	10 K	903 S	14446 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5	5	16	6	1	*
10	9	4	42	5	
20	5	1	40	7	*
30	6	2	46	5	1
50	17	9	46	9	1
70	13	13	16	6	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	254	60	9	01	640 1	120 0	S 139 46 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
10	6	7	11	6	1 *
11	1	7	30	6	1 *
20	7	5	20	6	1 *
30	2	1	50	4	1
40	15	3	45	8	1 *
50	13	6	45	5	2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	255	60	9	01	1600 1	1310 S	13850 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
10	16	5	30	7	2
11	16	11	60	8	1 *
20	16	5	30	12	4 *
30	17	13	33	7	1
40	19	7	69	14	4 *
50	25	10	69	11	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	258	60	9	03	1010	1800	S 13400 E

DEPTH	CHLOROPHYLL			ASTACIN			NON ASTACIN	
	a		b	c	a	b	c	
10	14	9			37	9		1 *
20	19	2			33	6		
30	16	5			56	6		2 *
40	13	5			39	5		1
50	17	6			61	4		4
	10	5			32	1		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	260	60	9	03	2110	1805	S 13148 E

DEPTH	CHLOROPHYLL			ASTACIN			NON ASTACIN	
	a		b	c	a	b	c	
25	7	7			26	2		2 *
50	6	15			36	9		2 *
75	14	11			56	5		7
100	16	9			30	1		9
150	2	4			42	6		7
	2	5			30	3		3 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	264	60	9	04	930	1	654 S 12941 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
5	11	44				27	
25	5	6	36			3	
50	6	10	9			4	
75	2		31				
100	2		30				
150	6	2	33			2	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	267	60	9	04	1020	H	832 S 12728 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
16	4			32	5		4
25	9	1	41		1		
50	11	9	58		6		2
75	19	16	71		11		
100	3	7	38		5		6
150	1	9	11		1		7

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	268	60	9	05	410 H	901 S	12748 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
25	13	9	29	2	6		
50	15	17	30	4	1		
75	9	10	26	5	1		
100	13	14	35	2	4		
150	11	9	10	1	5		
	6	5	14	4	2		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	269	60	9	05	815 I	936 S	12807 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
25	11	1	19	7	2	*	
50	2	1	39	5	1		
75	4	3	50	3	1		
100	10	6	39	5			
150	1	2	40	6	1		
	6	2	4				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	271	60	9	05	1425	1 1004	S 12824 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
10	2 *	42	2	5	
17	6	37	9	2 *	
20	13	51	5	3	
30	5	29	3	6	
50	13	65	4	2	
70	11	64	5	3	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	273	60	9	05	1730	1 1035	S 12843 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
10	7	30	5	4	*
20	6	13	4	1	*
30	3	83	4	2	
50	13	11	69	9	7
70	5	10	43	4	3
	11	12	56	9	4

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	275	60	9	05	2130	1	1108 S 12902 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	A STACIN	ASTACIN
10	12	7		30	2
	14	5		36	3
25	16	2	92	12	*
					6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	276	60	9	06	1451	1	1138 S 12920 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	A STACIN	ASTACIN
15	1	10		18	4
	5	6		34	1
30	16	20	50	6	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	261	60	9	12	1440 H	1343 S	12442 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
10	4	7		12	2		
20	4	1*		15	4		
30	8	2		48	6		*
40	7	5		16	6		
50	23	19		63	5		
70	15	5		39	10		*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	282	60	9	12	1840 H	1322 S	12426 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
4		14		15	6		
5		4		26	3		
25	24		11	46	6		
50	14		3	42	5		
75			2	47	4		*
100	8		2	47	4		
150	6		3	35	4		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1	1	2	283	60	9	12	2120 H	1250 S 12415 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a		b	c		ASTACIN
25	6	4		24	5	2 *
50	2	1		23	4	
75	14	5		36	7	1 *
100	21	6		49	8	
150	10	4		27	6	1 *
	4	4		9	4	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1	1	2	284	60	9	13	50 H	1218 S 12403 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a		b	c		ASTACIN
10	1	1		25	3	
20	3	11		29	3	
30	10	9		51	5	1
50	11	10		47	6	1
70	19	12		82	9	
	10	4		45	5	2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	285	60	9	13	325	J	1154 S 12347 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	6	6	52	1	2
	7	4	26	3	*
50	5	11	33	2	5
	4	12	24	3	4
75	1	9	22	2	2
150					3

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	286	60	9	13	915 H	1109 S	12325 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	6	3	53	3	1 *
50	6	5	34	6	1 *
75	6	2	25	6	2 *
100	20	12	26	4	6
150	10	2	47	4	3 *
		5	30	5	1 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	292	60	9	14	1000 H	1119 S	11841 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	13	12	16	5	4
50	6	5	32	5	1
75	31	19	94	9	2
100	16	17	12	6	1 *
150	10	9	19	6	3
		6	21	4	3

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	295	60	9	14	2200 H	1301 S	11927 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	3	3	31	4	1 *
50	2	2	26	4	1 *
75	5	4	24	6	1 *
100	7	6	37	3	4 *
150	15	5	77	7	4 *

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	297	60	9	15	700 H	1332 S	11950 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	2	4	24	3	2 *
50	7	7	29	4	1 *
75	6	3	21	3	2
100	6	3	21	3	1
150	6	8	15	4	2
		4	21		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	299	60	9	15	1 4 45 H	1 4 49 S	1 2 0 24 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
6	5	3 4	5		
25	7	4	2 6		1 *
50	1 0	1 4	1 6		1 *
75	6	6	4 1		2
100	1 2	1 0	4 6	7	4
150	5	4	2 9	4	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	301	60	9	15	2 2 1 5 H	1 5 4 1 S	1 2 0 5 1 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
4	2	1 1	3		1 *
25	2	5	3 0		3 *
50	1 2	6	4 4		5
75	1 1	6	3 9	6	1
100	6	3	2 2	4	
150	6	7	1 2	4	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	303	60	9	16	110 H	1607 S	12105 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
6	5	30		5	1 *
10	5	4	24	3	
20	7	3	22	4	
30	7	3	22	4	
40	12	6	40	4	1
50	31	14	63	9	2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	304	60	9	16	410 H	1635 S	12119 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
10	10	7	47	6	
15	15	7	51	6	
20	19	11	64	9	1 *
30	10	6	42	5	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	305	60	9	16	705 H	1700 S	12133 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN	ASTACIN	ASTACIN
10	10	2		4.8	3	2
19	9	8		1.2	4	
20	11	8		4.9	6	
30	14	12		4.4	8	1

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	306	60	9	16	920 H	1725 S	12142 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN	ASTACIN	ASTACIN
5	5	3		2.2	4	
10	11	9		3.1	5	4 *
20	11	6		4.1	5	
30	10	3		2.6	4	2

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	312	60	9	17	750 H	1942 S	11745 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
22	9	56	9			2	*
43	6	44	5			1	
7	3	22	4			1	
11	3	38	6			1	*
18	4	17	3			2	
12	12	19	7			2	
16							
150							

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	313	60	9	17	1055 H	1916 S	11729 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
5	4	26	4				
5	4	26	4				
21	9	65	6			3	
6	4	17	3			2	
10	7	46	5				
100							

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	314	60	9	17	1415 H	1850 S	11719 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN	c	ASTACIN
4	4	4	4	4	4	1 *
25	4	3	22	4	4	*
50	12	7	44	5	1	
75	5	4	36	3	1	
100	6	5	33	5	*	
150	4	23	4	2	1	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	315	60	9	17	1615 H	1820 S	11705 E

DEPTH	CHLOROPHYLL			NON ASTACIN		
	a	b	c	ASTACIN	c	ASTACIN
3	4	3	4	16	5	*
25	4	3	22	2	2	2
50	4	3	21	11	3	1
75	9	9	9	7	6	1
100	1	5	4	23	3	1
150	4					*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	317	60	9	18	40 H	1726 S	11641 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
25	3	3	18	3		*	*
50	4	3	22	4		*	*
75	9	3	22	4		*	
100	6	7	35	4		2	
150	4	3	32	4		3	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	319	60	9	18	645 H	1626 S	11615 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
25	4	4	24	3		1	*
50	3	4	15	4		*	*
75	5	4	27	3		1	
100	17	6	56	6		3	
150	10	9	54	6		2	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	321	60	9	18	1615 H	1535 S	11556 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	NON ASTACIN
5	4	26	4	1	
5	5	29	5	2	
6	4	27	5	*	
6	5	23	6	2	
75	7	44	4		
100	8	21	3		
150	4				

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	323	60	9	19	1 H	1445 S	11522 E

DEPTH	CHLOROPHYLL			NON ASTACIN	
	a	b	c	ASTACIN	NON ASTACIN
4	4	15	2		
5	4	26	4		
50	4	3	21		
75	12	7	36		
100	8	5	19		
150	5	5	32		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	325	60	9	19	045 H	1343 S	11449 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
4	4	4	15	3	*	1	*
25	4	4	15	3	*	3	
50	4	4	24	5			
75	5	3	21	3			
100	6	5	45	2			
150	3	2	24	3	*		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	327	60	9	19	020 H	1224 S	11418 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
1	1	1	5	2		1	*
25	4	3	22	4		2	
50	4	2	25	3			
75	9	7	46	5			
100	9	6	39	4			
150	3	2	24	3			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	329	60	9	20	715 H	1053 S	11332 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
5	5	4	3	1	1
7	6	39	4	1	1
13	5	39	4	3	3
13	6	40	4	3	3
6	3	20	4	4	4
4	3	21	3	3	3
150					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	334	60	9	21	610 G	1243 S	10908 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
9	7	33	5	5	5
13	4	43	4	4	2
16	5	38	5	3	3
6	3	20	2	2	4
2					1
150					

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	336	60	9	21	1630	03	11015 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	9	7	33	4	
40	4	3	17	1	
50	20	10	36	6	
75	24	9	45	6	
100	14	5	39	5	
150	9	2	19	3	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	339	60	9	22	1400	03	11053 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	12	6	42	4	1
50	13	8	31	5	1
75	13	6	33	4	4
100	14	6	41	4	4
150	9	7	12	2	4
				24	3

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	341	60	9	22	1115	1621	11127 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	4	4	23	4	1 *
50	4	3	21	3	*
75	16	11	76	12	
100	6	3	22	4	
125	10	7	46	5	
150	4	4	24	4	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	2	343	60	9	22	2120	1733	11202 E

DEPTH	CHLOROPHYLL			ASTACIN	NON ASTACIN
	a	b	c		
25	4	5	1	1	1
50	5	1 *		2	
75	11	7	16	4	
100	16	6	41	7	
125	9	6	27	4	
150	6	5	24	3	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	3 4 5	6 0	9	2 3	7 1 0 H	1 9 0 0 S	1 1 2 4 5' E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
4	2			4 8	4	1	*
25	9	2		1 8	3	2	
50	1 6	9		3 4	5	3	
75	1 9	7		3 8	4	6	
100	1 4	7		3 5	4	5	
150	5	3		2 1	3	2	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	2	3 4 6	6 0	9	2 3	1 3 2 0 H	1 9 5 9 S	1 1 3 1 5 E

DEPTH	CHLOROPHYLL			ASTACIN		NON ASTACIN	
	a	b	c				
4	3			1 7	1	2	
25	4	3		2 9	4	1	*
50	2 0	1 0		4 6	5	4	
75	1 1	6		3 9	2	3	
100	3	3		2 1	2	1	
150	2	3		1 9	3	4	*

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1	1	2	349	60	9	24	115 N	2140 S 11400 E

DEPTH	CHLOROPHYLL			
	A	B	C	ASTACIN
				NON ASTACIN
25	15	5	24	2
50	15	5	24	3
75	11	2	22	2
100	16	5	38	3
150	13	9	44	4
			61	1
			6	6
			17	0
			2	*

DATA

PART 5

PHYTOPLANKTON

EXPLANATION OF HEADINGS

Part 5 Phytoplankton

SHIP			The figures 11 are used to designate <u>Diamantina.</u>	
CRUISE			Cruise numbers are allotted each year, beginning with 1 for the first cruise.	
STATION			Stations are numbered consecutively for each ship for each year.	
TIME			Given in Zone Time (Table 2).	
LATITUDE	LONGITUDE			The position of each station is given in degrees and minutes.
DEPTH			Actual sampling depth given in metres, a blank indicates 0 m.	
ORGANISMS				
WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL			The counts of organisms with and without chlorophyll are expressed as log numbers per litre.
TOTAL PARTICLES			The counts of total particles are expressed as log numbers per litre.	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	117	60	7	12	1900	G	3201 S 10957 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560		640	
50	560		648	
75	578		640	
100	548		618	
150	578		617	
	560		630	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	120	60	7	13	015	G	3200 S 10734 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	585		630	
50	611		623	
75	570		630	
100	600		640	
150	590		640	
	578		630	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	125	60	7	14	730 G	3159 S	10329 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	560		600
50	578		618
595		595	630
150	570		626

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	129	60	7	15	200 G	3112 S	9915 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	578		618
75	530		600
100	570		618
150	560		600
	530		590

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	131	60	7	15	1230	F	3041 S 9730 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560	604		
50	530	590		
75	570	590		
100	548	578		
150	578	616		
	548	590		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	133	60	7	16	745	F	2940 S 9447 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	600	608		
50	560	600		
75	570	620		
100	600	615		
150	578	590		
	578	600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 3 3	6 0	7	1 6	9 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
2 5	5 7 8		6 0 8
5 0	5 6 0		6 0 0
5 4 8	5 4 8		6 1 8
1 0 0	5 4 8		6 1 8

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 3 3	6 0	7	1 6	1 2 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
2 5	6 1 1		6 1 8
5 0	5 7 8		6 0 0
1 0 0	5 8 5		6 0 0
	5 9 0		5 9 0

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
1 1	0 2	1 3 3	6 0	7	1 6	1 5 0 0	F	2 9 4 0	S	9 4 4 7	E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
2 5	5 7 8		6 2 0	
5 0	5 8 5		6 1 4	
5 0	5 9 0		5 9 0	
1 0 0	5 8 5		5 9 0	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
1 1	0 2	1 3 3	6 0	7	1 6	1 8 0 0	F	2 9 4 0	S	9 4 4 7	E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
2 5	5 9 5		6 0 0	
5 0	5 7 0		5 9 0	
5 0	5 7 6		5 9 0	
1 0 0	5 6 5		6 1 8	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 3 3	6 0	7	1 6	2 1 0 0	F	2 9 4 0 S 9 4 4 7 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	615		629	
50	608		615	
100	530		590	
	595		608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 3 3	6 0	7	1 7	1	F	2 9 4 0 S 9 4 4 7 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	608		616	
50	620		611	
100	585		600	
	600		615	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	133	60	7	17	600 F	2940 S	9447 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560		590	
50	570		590	
75	570		608	
100	578		608	
150	595		618	
	548		600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	133	60	7	17	900 F	2940 S	9447 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	548		578	
50	560		590	
100	548		590	
	590		604	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 3 3	6 0	7	1 7	1 3 0 0 F	2 9 4 0 S	9 4 4 7 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	5 9 0		6 0 8	
50	5 7 8		6 0 8	
50	5 7 8		6 1 9	
100	6 0 4		6 1 5	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 3 3	6 0	7	1 7	1 3 0 0 F	2 9 4 0 S	9 4 4 7 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	5 7 0		6 0 0	
50	5 8 5		6 1 1	
50	6 0 0		6 0 8	
100	5 7 0		5 9 5	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	02	133	60	7	17	1030 F	2940 S	9447 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	546		590	
50	604		608	
75	608		618	
100	630		626	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	02	136	60	7	18	700 F	2723 S	9501 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	530		590	
50	570		608	
75	548		608	
100	578		608	
150	560		600	
	548		608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 39	6 0	7	1 0	2 0 0 0	F	2 9 3 4 9 9 5 1 2 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560		590	
50	585		608	
75	560		600	
100	578		618	
150	590		626	
	570		616	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 42	6 0	7	1 9	1 2 0 0	F	2 2 2 3 9 9 5 0 0 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	590		590	
50	606		600	
75	611		620	
100	600		615	
150	590		600	
	530		595	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	143	60	7	20	000 F	1947 S	9456 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	608		618	
50	570		600	
75	576		595	
100	611		626	
150	560		608	
	530		600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	143	60	7	20	000 F	1947 S	9456 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	585		608	
50	576		606	
75	576		600	
100	530		600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
1 1	0 2	1 4 3	6 0	7	2 0	1 2 0 0	F	1 9 4 0	S	9 4 3 7	E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560		600	
50	604		615	
50	560		618	
100	570		630	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
1 1	0 2	1 4 3	6 0	7	2 0	1 5 0 0	F	1 9 4 1	S	9 4 3 5	E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	570		626	
50	608		630	
50	578		634	
100	615		634	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
1 1	0 2	1 4 3	6 0	7	2 0	1 8 0 0	F	1 9 1 4	S	9 4 3 5	E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
2 5	5 6 5		6 2 0	
5 0	5 7 0		6 2 6	
7 5	6 0 0		6 0 8	
	5 6 0		6 0 0	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE			
1 1	0 2	1 4 5	6 0	7	2 2	5 0 0	F	1 7 2 7	S	9 4 5 3	E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
2 5	5 7 0		5 9 0	
5 0	5 7 0		6 0 0	
7 5	5 3 0		5 9 0	
1 0 0	5 4 6		6 0 8	
1 5 0	5 3 0		6 1 1	
	5 3 0		6 1 6	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	148	60	7	22	2130 F	1502 S	9504 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560	590	590	590
50	530	570	530	600
75	570	565	565	618
100	565	546	546	600
150	546	595	595	608

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	151	60	7	23	1330 F	1241 S	9504 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	530	530	530	604
50	530	530	530	615
75	500	500	500	585
100	578	578	578	618
150	595	595	595	608

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 5 5	6 0	7	2 4	1 3 0 0	F	1 0 0 0 S 9 5 0 0 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
2 5	5 6 0			6 0 6
5 0	5 3 0			6 0 0
5 0	5 6 0			5 9 0
7 5	5 7 6			5 9 0
1 0 0	5 6 5			6 0 0
1 5 0	5 6 5			6 1 5

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 7 4	6 0	8	0 6	6 0 0	F	2 0 0 N 9 4 1 2 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
2 5	5 6 5			6 1 6
5 0	5 9 0			6 3 0
1 0 0	5 6 0			6 2 0
1 5 0	6 0 0			6 2 6
	5 7 6			6 2 6

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 7 4	6 0	8	0 6	9 0 0 F	2 0 0 N	9 4 1 2 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	590		608	
50	560		600	
50	570		600	
100	595		615	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 7 4	6 0	8	0 6	1 5 0 0 F	2 0 0 N	9 4 1 2 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	604		630	
50	590		636	
50	578		636	
100	595		630	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 7 7	6 0	8	0 6	6 0 0	F	4 S 9 5 0 7 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
2 5	5 9 5		6 1 8	
5 0	5 3 0		6 0 0	
7 5	5 7 0		5 9 0	
1 0 0	5 6 5		6 0 0	
1 5 0	5 9 5		6 0 0	
	5 9 0		6 1 1	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	1 7 7	6 0	8	0 7	9 0 0	F	4 S 9 5 0 7 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
2 5	5 9 0		5 9 0	
5 0	5 7 0		6 1 5	
1 0 0	6 0 0		6 0 8	
	5 7 0		5 9 0	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	177	60	8	07	1500 F	4 9	9507 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	604		620	
500	570		615	
1000	595		608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	177	60	8	07	1600 F	4 9	9507 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	595		608	
50	908		616	
100	570		600	
	585		608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11.	02	182	60	8	08	1200	F	203° 9' 9500 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
50	570	600		
50	590	590		
50	578	590		
50	560	600		
70	600	608		
90	600	616		
105	600			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	186	60	8	09	1200	F	500° 3' 9440 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	609	615		
50	585	600		
75	604	618		
100	630	626		
150	636	626		
	615	636		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	166	60	8	09	900 F	500 S	9440 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	590		600	
50	570		590	
100	590		578	
	615		608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	166	60	8	09	1200 F	500 S	9440 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	600		608	
50	600		618	
75	595		608	
	604		608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	106	60	09	1500	F	500 S	9440 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
25	5.95	6.00	6.00	
50	6.15	6.16	6.16	
100	6.15	5.23	5.23	
	6.36	6.34	6.34	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	106	60	09	1800	F	500 S	9440 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
25	5.78	5.90	5.90	
50	5.78	6.00	6.00	
100	6.16	6.15	6.15	
	6.00	6.16	6.16	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	194	60	6	14	1400 C	543 S	10623 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
100	654	690		
150	654	700		
200	648	700		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	195	60	6	15	300 C	658 S	10433 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	600	608		
75	611	600		
100	604	616		
150	590	600		
	590	600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	197	60	8	15	1200 G	733 S	10539 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	600	618		
50	604	626		
75	578	611		
100	578	600		
150	560	590		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	200	60	8	15	2300 G	614 S	10743 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	618	618		
50	600	626		
75	590	618		
100	590	608		
	615	600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	203	60	8	16	1200 G	845 3	10923 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	615	606	
50	585	600	
75	560	590	
100	600	600	
150	570	600	
	590	600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	206	60	8	17	1 G	910 S	11126 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
30	570	590	
50	570	595	
65	504	608	
75	600	608	
85	595	608	
95	585	600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	214	60	8	18	1200 H	801 S	11600 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
20	595	608	
35	634	620	
45	636	640	
50	590	608	
60	608	608	
75	620	600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	221	60	8	19	1645 H	901 S	11946 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	623	608	
50	606	608	
75	600	618	
100	615	608	
150	634	626	
	590	608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	225	60	8	20	1104 H	915 S	12225 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
20	606	608		
30	580	608		
40	578	615		
50	570	615		
65	570	608		
	570	600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	233	60	8	22	030 I	746 S	12843 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
20	615	618		
35	620	618		
45	620	608		
60	626	618		
75	590	600		
	630	630		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 3 5	6 0	6	2 2	2 0 3 0	1	6 1 5 9 1 2 9 4 7 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	585	608		
50	576	606		
75	590	606		
100	585	516		
150	595	606		
	576	590		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 3 9	6 0	6	2 3	1 2 0 0	1	1 0 0 4 8 1 3 1 5 7 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	608	618		
30	630	626		
50	630	626		
70	640	630		
	608	640		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	242	60	8	24	1	1 1003 S	13406 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	595		600
50	585		600
75	600		606
100	608		608
	616		608

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	245	60	8	24	1200	1 1000 S	13600 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
10	608		590
20	590		608
30	590		608
40	600		608
40	578		600
50	616		616

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	02	246	60	6	25	1	1 1004 S	13805 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
20	5300	578	618	
30	5000	590	626	
30	5000	585	630	
40		606	640	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	02	251	60	6	25	1 200	1 1007 S	14000 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
10	5000	615	626	
20	5300	618	618	
30	5000	615	630	
40	5300	651	648	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	253	60	6	31	1 K	903 9	14446 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	5000	985	600	
20	5000	600	608	
30	0	615	626	
50	0	600	615	
70	0	595	606	
		604	606	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	254	60	9	10	630 I	1208 S	13946 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	595	595	606	
20	578	578	615	
30	595	595	615	
40	618	618	615	
50	595	595	606	
	578	578	615	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	255	60	9	01	1530	1	1310 9 13056 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
10	5000	600	500	590
20	5000	600	500	600
30	5000	611	500	609
40	5300	611	5300	620
50	5300	600	5300	630

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	256	60	9	02	300	1	1130 9 13000 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
10	608	570	608	590
20	5300	630	5300	600
30		570	570	654
40		565	565	600
50	5300	620	5300	668

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 5 8	6 0	9	0 3	1 0 0 0 . . . 1	8 0 0	S 1 3 4 0 0 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
10	600			626
20	595			620
30	578			615
40	570			615
50	600			615
50	5000	615		626

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 6 0	6 0	9	0 3	2 0 0 0 . . . 1	8 0 5	S 1 3 1 4 6 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
25	5300	600		615
50	5000	578		608
75		565		608
100		595		600
150		600		615
		595		630

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 64	6 0	9	0 4	9 00	1 0 5 4	S 1 2 9 4 1 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	5 6 0		6 0 0
50	5 8 5		6 1 5
75	5 7 0		6 0 0
100	5 7 0		5 9 0
150	5 6 0		5 9 0
	5 7 6		6 0 0

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 67	6 0	9	0 4	2 2 0 5	H 0 3 2	S 1 2 7 2 8 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	5 0 0	5 7 8	6 0 0
50	5 0 0	5 4 8	6 0 0
75	5 0 0	5 8 5	6 1 5
100		5 7 0	6 0 0
150		5 6 5	6 0 0
		5 8 5	6 0 0

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	269	60	9	05	800	1	936 S 12807 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	560	590	
50	548	600	
75	560	600	
100	578	600	
	585	606	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	271	60	9	05	1400	1	1004 S 12824 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
10	570	600	
20	590	618	
30	595	608	
50	578	608	
50	595	626	
70	5000	5300	
	618	640	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	273	60	9	05	1740	1 1039 S	12843 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	ORGANISMS WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
10	618	618	618	
20	565	606	606	
30	570	606	606	
50	576	606	606	
60	560	600	600	
70	600	606	606	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	275	60	9	05	2125	1 1108 S	12902 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	ORGANISMS WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
10	5000	626	626	630
25		630	630	636

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	276	60	9	06	120 1	1136 S	12920 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
15	578		600	
30	5300	618	608	
			630	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	281	60	9	12	1437 H	1344 S	12440 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	608		615	
20	623		620	
30	590		608	
50	576		606	
70	560		615	
	585		630	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 6 2	6 0	9	1 2	1 0 3 6	H	1 3 2 2 S 1 2 4 2 6 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	530	590		
50	560	600		
75	560	608		
95	595	618		
100	600	608		
150	600	618		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	2 8 3	6 0	9	1 2	2 1 2 0	H	1 2 5 0 S 1 2 4 1 5 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	548	600		
50	585	608		
75	585	608		
100	560	600		
150	590	618		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	284	60	9	13	40 H	1218 S	12403 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	560	590		
20	565	600		
30	560	608		
50	560	600		
70	560	608		
	600	620		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	286	60	9	13	620 H	1109 S	12325 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	570	608		
50	546	600		
75	560	608		
100	590	608		
150	606	618		
	606	620		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	292	60	9	14	000 H	1119 S	11841 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	5000	590	600
50	5000	560	590
75	5000	578	595
100	5000	608	618
150	548	560	600

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	295	60	9	14	2140 H	1301 S	11927 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
25	570	570	590
50	570	578	590
75	560	560	600
100	548	548	590
150	560	560	600

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	297	60	9	15	600 H	1332 S	11950 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560	590		
50	565	608		
75	590	608		
100	590	600		
150	560	600		
	585	590		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	299	60	9	15	1400 H	1449 S	12024 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560	590		
50	570	590		
75	570	595		
100	585	608		
150	548	600		
	570	600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	301	60	9	15	2150 H	1541 S	12051 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	560	590	590	590
50	548	590	590	590
75	560	608	608	608
100	585	615	615	615
150	595	615	615	626
	618			

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	303	60	9	16	100 H	1607 S	12105 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	548	548	548	600
20	560	560	560	600
30	560	548	548	600
40	5300	590	590	618
50	5300	590	590	626

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	304	60	9	16	400 H	1635 S	12119 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
500	500	595	608
550	530	578	620
600	585	606	606
30	606	626	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	305	60	9	16	700 H	1700 S	12133 E

DEPTH	ORGANISMS		TOTAL PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	
500	500	595	620
550	570	570	615
600	570	560	615
30	560	606	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	306	60	9	16	911 H	1725 S	12142 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	548	600		
30	560	600		
	595	615		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	312	60	9	17	750 H	1942 S	11745 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
10	548	600		
20	585	600		
30	585	600		
40	590	606		
50	560	600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	313	60	9	17	1045 H	1916 S	11729 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	548	590		
50	570	608		
75	595	608		
100	604	608		
	615	618		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	314	60	9	17	1400 H	1850 S	11719 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	590	590		
50	560	590		
75	570	600		
100	570	608		
150	560	600		
	530	590		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	315	60	9	17	1742 H	1820 S	11705 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	578	590		
50	548	578		
75	590	595		
100	590	615		
150	578	608		
	595	620		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	319	60	9	18	635 H	1626 S	11615 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	530	578		
50	560	595		
75	560	590		
100	560	590		
150	570	606		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	321	60	9	18	700 H	1535 S	11556 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	578	590		
50	585	590		
75	570	595		
90	590	606		
100	560	606		
150	585	620		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	323	60	9	19	1430 H	1445 S	11522 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	595	606		
50	590	606		
75	546	600		
90	565	600		
100	606	616		
150	636	626		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	325	60	9	19	2330 H	1343 S	11449 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
25	578	600	
50	560	600	
75	585	606	
100	546	590	
150	530	590	
	585	606	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	327	60	9	19	930 H	1224 S	11418 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
25	548	590	
45	570	590	
75	576	590	
100	595	600	
150	608	608	
	608	608	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	329	60	9	20	500 H	1093 S	11332 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	548		590	
50	548		600	
50	5000	604	615	
75	570		608	
150	576		600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	334	60	9	21	430 G	1243 S	10906 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	606		616	
50	600		608	
50	585		590	
75	578		590	
100	578		600	
150	576		600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	336	60	9	21	1515 C	1403 S	11015 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	570		600	
50	570		608	
75	548		590	
100	608		608	
100	5000	611	615	
150	620		616	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	339	60	9	22	115 C	1529 S	11053 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	548		590	
50	570		590	
75	585		600	
100	560		608	
100	585		608	
150	570		600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	3 4 1	6 0	9	2 2	9 4 9 C	1 6 2 1 S	1 1 1 2 7 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	548	578		
50	570	590		
75	560	590		
100	585	604		
150	590	606		
		600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
1 1	0 2	3 4 3	6 0	9	2 2	2 1 0 0 C	1 7 3 3 S	1 1 2 0 2 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	5000	570		
50	5000	590		
75		590		
100		548		
150		578		
		590		
		600		
		600		
		578		
		590		
		600		

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	345	60	9	23	615 H	1900 S	11246 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	ORGANISMS WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
25	560		560	585
50	546		546	576
75	546		546	590
100	576		576	590
150	570		570	595
	546		546	600

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	346	60	9	23	1300 H	1959 S	11315 E

DEPTH	ORGANISMS WITH CHLOROPHYLL	ORGANISMS WITHOUT CHLOROPHYLL	TOTAL	PARTICLES
25	530		530	576
50	530		530	590
75	546		546	590
100	590		590	600
150	595		595	608
	600		600	620

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	348	60	9	23	1900 H	2044 S	11333 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	530		578	
50	560		595	
75	548		595	
100	570		608	
150	585		600	
	540		600	

SHIP	CRUISE	STATION	YEAR	MONTH	DAY	TIME	LATITUDE	LONGITUDE
11	02	349	60	9	24	120 H	2140 S	11400 E

DEPTH	ORGANISMS		TOTAL	PARTICLES
	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL		
25	548		590	
50	548		590	
75	576		595	
100	576		600	
150	600		615	
	600		608	

TABLE 3

OCCURRENCE OF DINOFAGELLATES

Numbers refer to stations at which organisms were found. Numbers in brackets indicate depths (m) at which samples were collected. (H) modified Hardy indicator.

- Amphisolenia bidentata 129(0-150), 133, 142(0-150), 165, 168, 174(0-100), 177(0-100), 178(0-150), 186, 197(0-150), 214, 221(0-150), 223(0), 230(0), 231(0), 239(0-70), 242(0-75), 248(0-40).
- A. brevicauda 177, 306, 312, 319.
- A. clavipes 186.
- A. globifera 174.
- A. lemmermanni 143, 174, 167(0), 189(0).
- A. rectangulata 165(H).
- A. schauinslandii 275.
- A. schroederi 201(0).
- A. thrinax 135(0), 148(0-150).
- Blepharocysta paulseni 143, 145, 155, 164(0), 177, 186, 200, 206(0), 217(0), 219, 221, 231(0), 243, 313, 317, 319, 332(0).
- B. splendor maris 148, 152, 162(0), 163(0), 194, 299.
- Centrodonium eminens 297, 322(0).
- C. intermedium 297.
- Ceratium azoricum 208.
- C. belone 242
- C. bigelowi 257(0-50).
- C. breve 165(H), 177, 194, 226, 227, 231, 261(0), 266(0), 267, 269, 271.
- C. buceros 133, 145, 165, 170(0), 171(0), 183(0), 239, 312, 339, 341, 346, 348.
- C. candelabrum 197.
- C. carriense 133, 177, 182, 225, 229, 254, 277, 283, 312
- C. cephalotum 345.
- C. concilians 253, 312.
- C. contortum 133, 165, 174, 177, 186, 197, 253, 283, 284.
- Ceratium declinatum 137, 138, 145, 186, 197, 211, 212, 219, 221, 253, 269, 270, 271, 283, 290, 298, 313, 328, 332, 341, 345.

- Ceratium deflexum 262, 348.  
C. dens 165, 239, 253, 260.  
C. euarcuatum 283, 343.  
C. eupulchellum 174(0-100), 313(0-150).  
C. falcatiforme 167, 199, 292.  
C. falcatum 162  
C. furca 155, 165, 167, 172, 174, 186, 221, 222(0), 223(0), 226(0), 227(0), 253, 271, 273, 275, 276, 277, 278, 283, 286, 289, 290, 312, 327, 335, 336, 339, 345, 346, 347, 349.  
C. fusus 121, 129, 133, 165, 167(0), 168, 174, 177, 186, 194, 279, 280, 281, 282, 283, 284, 312, 313, 327, 328, 335, 349.  
C. geniculatum 186(0-100), 284(0-70).  
C. gibberum 343.  
C. gravidum 174(0-150).  
C. horridum 253.  
C. inflatum 346.  
C. karstenii 311  
C. kofoidi 129, 133, 148, 164, 165, 168, 174, 177, 194, 203, 206, 214, 228, 231, 232, 233, 235, 239, 241, 242, 243, 245, 260, 261, 264, 266, 269, 270, 278, 279, 280, 281, 282, 285, 292, 295, 303, 311(0), 315, 317, 322, 323, 341, 343, 345, 346, 348, 349.  
C. limulus 133, 174, 186, 197, 304.  
C. longirostrum 133, 203.  
C. lunula 172(0), 339.  
C. massiliense 133, 177, 235, 311(0).  
C. minutum 133, 305.  
C. pavillardi 253.  
C. pentagonum 121, 129, 133, 134(0), 142, 143, 151, 174, 177, 186, 197, 198, 221, 222, 235(0), 237(0), 253, 312, 335, 341, 345, 346, 347.  
C. praelongum 295(0-150), 345(0-150)  
C. pulchellum 266, 304, 312, 327, 346(0).  
C. ranifera 267, 346.  
C. reflexum 133(0-100), 174(0-100).  
C. schmidti 145, 165(H), 174, 186, 312, 346, 347.  
C. schroeteri 186(0-100).  
C. symmetricum 133, 142, 346.  
C. teres 129, 133, 148, 174, 327, 328, 335, 346, 348.  
C. trichoceros 133, 145, 169, 170, 171, 172(0), 177, 186, 198, 201, 203, 204, 219, 221, 228, 229, 231, 232, 241, 245, 246, 248, 253, 254, 255, 256, 298, 313, 319, 336, 339, 347(0).

Ceratium tripos 165(H), 167, 174, 177, 197, 199, 200, 203,  
211, 212, 217, 226, 227, 231, 232, 251, 253, 271, 273,  
276, 277, 283, 312, 314, 334, 335, 339, 346, 347(0).

C. vultur 133, 143, 174, 177, 313, 334.

Ceratocorys armata 186, 283.

C. gourreti 348.

C. horrida 151, 167, 182, 186, 219, 253, 349.

Citharistes apsteini 315.

Dinophysis caudata 200, 208, 226, 239, 255, 267, 268, 334.

D. exigua 177, 311, 317.

D. hastata 253.

D. hyalina sp. nov. 186.

D. miles 165(H), 168, 214, 253, 268, 271, 275, 285, 312.

D. ovum 197, 198, 237(0), 327.

D. parva 254.

D. schuelti 133, 151, 254, 258, 276.

D. sphaerica 174, 177, 186, 203, 264, 295, 298.

D. uracantha 117, 225, 260.

Diplopsalis lenticulata 174, 253, 255, 260, 303, 335(0).

Exuviaella baltica 133, 136, 143, 174, 186, 321.

E. compressa 133, 151, 254, 329.

E. marina 133, 143, 145, 148, 155, 169(0), 174, 177, 186,  
194, 200, 203, 242, 243(0), 255, 256, 264, 266(0), 281  
282, 285, 295, 341, 348.

E. mediterranea 299.

E. perforata 260.

Goniaulax apiculata 133(0-100), 137(0-100), 145(0-150),

163(0), 186(0-100), 276(0-30), 279(0), 348(0-150).

G. alaskensis 270(0)

G. birostis 143(0-100), 164(0), 199(0), 204(0), 211(0-150),  
269(0-150), 317(0-150), 332(0), 341(0-150).

G. diegensis 133(0-100), 145(0-150), 226(0), 237(0), 239(0-  
70), 241(0), 277(0), 289, 321(0-150), 345(0-150), 348(0-  
150).

G. digitale 133(0-100), 134(0), 143(0-100), 279(0), 290(0),  
301(0-150), 303(0-50), 311(0), 313(0-150), 317(0-150),  
322(0), 323(0-150), 325(0-150), 329(0-150), 331(0), 335(0).

Goniaulax glyptorhynchus 133(0-100), 143(0-100), 174(0-100),  
190(0), 219(0-65), 283(0-150), 299(0-150), 346(0).

G. hyalina 174(0-150).

G. kofoidi 133(0-100), 142(0-150), 155(0-150), 177(0-150),  
225(0-65), 297(0-150), 301(0-150), 329(0-150).

G. minima 135(0), 137(0), 174(0-150), 254(0-50).

G. monacantha 133(0-100), 208(0-85), 228(0), 267(0-150),  
269(0-150), 303(0-50).

G. pacifica 133(0-100), 143(0-150).

G. polyedra 133(0-100), 143(0-100), 177, 197(0-150),  
208(0-85), 232(0), 241(0), 268(0-150), 276(0-30), 285(0-  
150), 299(0-150).

G. polygramma 297(0-150).

G. scrippsae 143(0-100), 203(0-150), 254(0-50), 255(0-50),  
336(0).

G. spinifera 164(0), 174(0-100), 197(0-150), 198(0-150),  
255(0-50), 281(0-70), 283(0-150).

Goniodoma polyedricum 133(0-150), 135(0), 136(0-150),  
143(0-100), 148(0-150), 151(0-150), 162(0), 165(H),  
186(0-100), 188(0), 200(0-150), 203(0-150), 204(0),  
206(0), 211(0-150), 214(0-75), 218(0), 221(0-150), 223(0),  
227(0), 233(0-75), 235(0), 243(0), 245(0-50), 249(0),  
255(0-50), 261(0), 267(0-150), 270(0), 271(0-70),  
273(0-70), 279(0), 281(0-70), 283(0-150), 286(0-150),  
313(0-150), 322(0), 323(0-150), 328(0), 329(0-150), 335(0),  
339(0-150), 341(0-150), 343(0-150), 348(0-150).

Gymnodinium galaeiforme 188(0).

G. marinum 143(0-100).

G. simplex 143(0-100), 148(0-150), 290(0).

Heterodinium australe 269(0-150), 276.

H. dispar 297(0-150), 327(0-150).

H. ridgeni 177(0-100).

H. scrippsi 283(0-150).

Histoneis cerasus 174(0-150).

H. costata 253(0-70).

H. dolon 151(0-150).

H. elongata 198(0-150), 241(0), 276(0-30).

H. helenae 174(0-100).

H. hyalina 143(0-100), 177, 237(0), 284(0-70).

H. inclinata 133(0-100).

Histoneis longicollis 133(0-100), 142(0-150).

H. milneri 148(0-150), 194(0-100), 177, 186(0-150).

H. panaria 133(0-150), 186(0-100).

H. remora 177, 264(0-150).

H. tubifera 174(0-100).

H. variabilis 129(0-150), 133(0-100), 151(0-150), 174(0-150),  
177, 190(0), 197(0-150).

Melanodinium nigricans 199(0).

Ornithocercus geniculatus 133, 143.

O. magnificus 168, 174, 177, 186, 194, 214, 239, 254, 283,  
284, 335, 339.

O. quadratus 143, 155, 208, 254.

O. splendidus 143, 151, 155, 174, 177, 197, 273, 317.

O. steini 174, 254, 256, 311.

O. thurni 133, 214, 271, 312, 346(0).

Oxytoxum caudatum 143, 177.

O. challengeroides 143, 200, 204, 216, 242, 255, 328.

O. compressum 155, 177, 242, 254, 269, 286.

O. constrictum 133, 268, 347.

O. curvatum 129, 133, 136, 143, 145, 148, 151, 163, 174,  
177, 186, 197, 225, 255, 256, 267, 268, 273, 277, 279,  
280, 284, 286, 301, 311, 327, 328, 339, 341, 347.

O. diploconus 334.

O. elegans 148, 242, 255, 268, 271, 273, 286, 297, 311, 313.

O. elongatum 143, 177, 189, 199, 200, 203, 323.

O. gladiolus 174, 347.

O. gracile 143, 328.

O. laticeps 143, 174, 306.

O. longiceps 142, 143, 182, 257, 347.

O. longum 135, 136, 143, 174.

O. milneri 133, 143, 151, 174, 186, 214, 242, 253, 297,  
305, 312, 325, 345, 347.

O. mitra 143.

O. obliquum 327.

O. parvum 133, 134, 135, 143, 145, 164, 174, 177, 186, 199,  
255, 264, 273, 283, 292, 295, 299, 305, 311, 313, 317,  
329, 341, 349.

O. reticulatum 253.

O. sceptrum 295, 345.

- Oxytoxum scolopax 117, 121, 129, 133, 134, 136, 142, 143,  
145, 155, 162, 165(H), 166, 174, 177, 181, 182, 186, 188,  
197, 200, 203, 217, 218, 219, 225, 228(0), 235, 237, 239,  
242, 253, 255, 260, 261, 264, 268, 269, 273, 279, 280,  
281, 282, 283, 284, 286, 295, 297, 299, 301, 303, 304,  
305, 306, 312, 314, 315, 319, 322, 323, 325, 327, 328,  
329, 332, 334, 336, 337, 341, 345, 347, 348.  
O. sphaeroideum 143, 242, 255, 262, 279, 282, 283.  
O. tesselatum 137, 174, 186, 198, 208, 222, 230, 242, 253,  
267, 268, 271, 286, 314, 327, 343.  
O. turbo 117, 133, 136, 142, 174, 186, 198, 237, 264, 267,  
286, 297, 315.  
O. variabile 127, 143, 177, 188, 219, 237, 242, 271, 286,  
295, 349.

Peridinium avellana 133.

- P. cerasus 117, 129, 133, 177, 188, 208, 239, 262, 266,  
270, 285, 262, 270, 285, 298, 311, 325.  
P. claudicans 208, 260, 248.  
P. crassipes 255, 256, 268, 335.  
P. divergens 117, 194, 255.  
P. elegans 165, 174, 177, 198, 222, 258, 276, 284, 297, 304.  
P. fatulipes 246  
P. globulus 133, 136, 198, 230, 253, 256, 268, 334, 335,  
339.  
P. grande 255, 334.  
P. grani 121, 133, 142, 174, 177, 197, 284, 297.  
P. hirobis 143.  
P. monacanthum 323.  
P. murrayi 283.  
P. oceanicum 225, 245, 255, 349.  
P. okamurae 143, 255.  
P. pedunculatum 168, 251.  
P. pellucidum 133, 142, 312.  
P. pentagonum 167, 199.  
P. roseum 133, 169, 216, 283.  
P. scutellum 226, 227, 251, 255, 260, 292, 313.  
P. steini 256.  
P. subinerme 211.  
P. tenuissimum 148, 197, 241, 268.  
P. thorianum 143.  
P. tuba 186, 197, 198.  
P. ventricum 245, 251.

Phalacroma acutum 268.

Phalacroma cuneus 208, 285.

P. doryphorum 283.

P. favus 254, 283.

P. hindmarchi 133, 283.

P. mitra 177, 312.

P. ovum 177.

P. parvulum 155.

P. rapa 255.

Podolampas bipes 117, 121, 129, 133, 142, 143, 145, 151, 174, 177, 194, 197, 200, 245, 253, 255, 273, 276, 277, 281, 286, 297, 323, 327, 336.

P. curvatus 129, 133.

P. elegans 129, 133, 148, 174, 205, 221, 282, 284, 295, 297, 301, 305, 314, 321, 331, 349.

P. palmipes 117, 121, 129, 133, 134, 136, 142, 143, 148, 165, 171, 174, 177, 186, 197, 198, 200, 203, 214, 219, 225, 245, 251, 253, 254, 255, 264, 269, 273, 275, 277, 283, 285, 286, 292, 295, 297, 299, 301, 304, 305, 306, 313, 315, 319, 321, 322, 323, 325, 327, 329, 331, 334, 336, 343, 346, 348,

P. spinifer 132, 133, 135, 136, 142, 143, 162, 163, 174, 177, 181, 182, 186, 188, 194, 198, 199, 203, 213, 223, 225, 237, 239, 264, 269, 270, 277, 279, 280, 283, 284, 285, 286, 290, 297, 299, 301, 304, 313, 314, 315, 319, 321, 322, 325, 327, 339, 341, 343, 345, 347.

Protonoctiluca pelagica 133, 143, 148, 177, 218, 271, 348.

P. spinifera 237, 343, 346.

Prorocentrum arcuatum 171, 172, 248, 251, 255, 282.

P. dentatum 313.

P. micans 133, 241, 242, 245, 246, 264, 278, 279, 286, 349.

P. minimum 258.

P. rostratum 117, 121, 129, 133, 143, 148, 168, 177, 186, 222, 230, 242, 273, 276, 277, 283, 304, 311, 347, 348.

Protoceratium areolatum 174, 186, 203, 317.

Pyrocystis biconica 133, 260, 348.

P. elegans 133, 143, 177, 218, 229, 271.

P. fusiformis 177.

P. hamulus 117, 174.

P. lunula 142, 246.

Pyrocystis obtusa 190, 261, 311, 327.

P. pseudonocytluca 143, 177, 254, 264, 349.

P. robusta 186, 267, 349.

Pyrophacus horologicum 145, 148, 174, 194, 198, 248, 254, 267, 276.

TABLE 4

OCCURRENCE OF DIATOMS

Numbers refer to stations at which organisms were found. Numbers in brackets indicate depths (m) at which samples were collected. (H) modified Hardy indicator.

Actinoptychus adriaticus 225(0-65), 336(0).

A. brunii 276.

A. maculatus 292.

A. macraei 276.

A. senarius 143(0-150), 148(0-150), 168, 169(0), 171(0), 186(0-150), 211(0-150), 245(0-50), 248(0-40), 249(0), 254(0-50), 255(0-65), 257(0-50), 258(0-150), 271(0-70), 275(0-25), 281(0-70), 282, 283, 306(0-30).

A. splendens 221(0-150), 275(0-65).

Amphiprora alata 194, 249, 276, 281.

Amphora arenaria 275.

A. dubia 194

A. hyalina 223, 246, 254, 264.

A. ovalis 282, 306.

A. proteus 275.

A. turgida 275.

Anomoeoneis brachysira 169.

A. serians 170, 169, 194, 249, 251.

Asterionella bleakleyi 143.

Asterolampra dallasianna 120, 133, 136, 143, 148, 164, 177, 255, 275, 281, 301.

A. grevillei 117, 130, 143, 145, 162, 174, 189.

A. marylandica 133(0-100), 136(0-150), 142(0-150), 143(0-100), 163(0), 165(H), 186(0-100), 253, 304(0-30), 315(0-150).

Asteromphalus arachne 229.

A. antarcticus 203(0-150).

A. cleveanus 143, 167, 169, 170, 172, 194, 200, 208, 221, 223, 225, 233, 245, 249, 251, 255, 260, 267, 279, 292, 336.

A. darwinii 275.

A. elegans 219(0-65), 249(0), 271(0-70), 273(0-70), 281(0-150), 283(0-150), 285(0-150), 297(0-150), 306(0-30), 314(0-150), 315(0-150), 319(0-150), 323(0-150).

A. flabellatus 221(0-150), 227, 228(0), 232(0), 233(0-75), 235, 240, 249(0), 250 266(0), 275(0-25), 281(0-70), 292(0-150), 295(0-150), 329(0-150).

A. heptactis 133, 148, 151, 168, 171, 172, 174, 197, 198, 221, 225, 229, 230, 250, 253, 254, 255, 264, 267, 269, 275, 276, 284, 285, 286, 292, 301, 304, 305, 306, 311, 312, 313, 315, 319, 329, 334, 347, 349.

A. hookeri 198(0-150), 212(0), 235(0), 241, 250, 258, 275, 281(0-70), 283(0-150), 285(0-150), 297(0-150), 315(0-150),

Bacillaria paxillifer 131(0-150), 170, 172(0), 173(0), 194(0-20), 221(0-150), 248(0-40), 250, 251(0), 257(0-50), 271(0-70), 275(0-25), 276(0-30), 281(0-70), 282(0-150), 284(0-70).

Bacteriastrum comosum 165(H), 170(0), 172(0), 221(0-50), 245(0-50), 251(0), 304(0-30), 305(0-30), 346(0).

B. delicatulum 172(0), 181(0), 246(0), 250, 260(0-150), 283(0-150), 349(0-150).

B. elongatum 245, 246, 343.

B. hyalinum 172(0), 198(0-150), 221(0-150), 241(0), 245(0-50), 248(0-40), 251(0), 304(0-30).

B. varians 169(0), 170(0), 200(0-150), 225(0-65), 241(0), 245(0-50), 246(0), 248(0-40), 257(0-50), 276(0-30), 349(0-150).

Bellerochea malleus 221(0-150), 223(0), 257(0-50), 281(0-150).

Biddulphia chinensis 166(0), 169(0), 170(0), 211(0-150), 212(0), 245(0-50), 246(0), 249(0), 250, 257(0-50), 275(0-25), 336(0).

B. cylindrata 257.

B. longicruris 276.

B. mobilensis 165(H), 168, 173(0), 198(0-150), 200(0-150), 214(0-75), 22;(0-150), 242(0-75), 250, 257(0-50), 276(0-30), 299(0-150), 305(0-30).

Biddulphia pulchella 283

Campylodiscus kinkerl 271, 281.  
C. thuretii 276, 281.

Cerataulina compacta 166, 168, 170, 173, 177, 188, 208, 212, 213, 214, 248, 255, 257, 295, 299, 306, 327, 332, 341, 342, 343, 347, 348.  
C. curvata 169, 199, 200, 208, 211, 242, 246, 248, 249, 254, 257, 306, 336.  
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Figs 2 - 25

VERTICAL SECTIONS

Vertical sections of temperature ( $^{\circ}\text{C}$ ), salinity (%), oxygen (ml/l) and inorganic phosphate ( $\mu\text{g at./l}$ ) were prepared from data in Section IV and appear as Figures 2-25.

Figs 2-7 Vertical sections for the line of Stations 133, 136, 139, 142, 143, 145, 148. Degrees of longitude (S) indicated at bottom of sections.

Fig. 2 Temperature above 400 m.

Fig. 3 Temperature below 400 m.

Fig. 4 Salinity above 400 m.

Fig. 5 Salinity below 400 m.

Fig. 6 Oxygen concentration surface to bottom.

Fig. 7 Inorganic phosphate surface to bottom.

Figs 8-13 Vertical sections for the line of Stations 148, 151, 155, 186, 182, 177, 174. Properties as for Figs 2-7 above.

Figs 14-19 Vertical sections for the line of Stations 312, 313, 314, 315, 317, 319, 321, 324, 325, 327, 329. Properties as for Figs 2-7 above.

Figs 20-25 Vertical sections for the line of Stations 349, 348, 346, 345, 343, 341, 336, 334. Properties as for Figs 2-7 above.

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DATA

PART 6

ZOOPLANKTON

DIAMANTINA Dm 2/60		ZOOPLANKTON BIOMASS IN THE UPPER 200 m.		CLARKE BUMPUS OBLIQUE HAULS	
STATION	DATE	TIME	LATITUDE	LONGITUDE	VOLUME FILTERED
					BIOMASS mg/m <sup>3</sup>
115	12.7.60	1055	31°59'S	111°54'E	4.7
125	14.7.60	1042	31°59'S	103°29'E	10.8
133	16.7.60	1106	29°40'S	94°47'E	7
136	18.7.60	0925	27°23'S	95°01'E	6
153	24.7.60	0940	11°15'S	95°02'E	20.5
153	24.7.60	1023	11°15'S	95°02'E	27.6
174	6.8.60	0743	02°00'N	94°12'E	21.7
174	6.8.60	0833	02°00'N	94°12'E	27.9
174	6.8.60	0951	02°00'N	94°12'E	17.5
177	7.8.60	0924	00°04'S	95°07'E	17.5
177	7.8.60	1015	00°04'S	95°07'E	15
182	8.8.60	1542	02°30'S	95°00'E	8.4
182	8.8.60	1635	02°30'S	95°00'E	13.7
186	9.8.60	0717	05°00'S	94°40'E	16.5
186	9.8.60	0814	05°00'S	94°40'E	13.3
186	9.8.60	0945	05°00'S	94°40'E	12.3
186	9.8.60	1039	05°00'S	94°40'E	12.5
208	17.8.60	0851	09°36'S	113°09'E	10.0
214	18.8.60	1345	08°01'S	116°00'E	68
225	20.8.60	1127	09°15'S	122°25'E	34
263	4.9.60	1057	08°51'S	129°52'E	56
286	13.9.60	1013	11°09'S	123°25'E	44
299	15.9.60	1625	14°49'S	14°47	25
334	21.9.60	0650	12°43'S	120°24'E	16.1
346	23.9.60	1410	19°59'S	109°08'E	21
					113°15'E
					15.2
					34

DIAMANTINA Dm 2/60			ZOOPLANKTON BIOMASS IN 400-200 m.			CLARKE BUMPS OBLIQUE HAULS		
STATION	DATE	TIME	LATITUDE	LONGITUDE	VOLUME FILTERED	BIOMASS mg/m <sup>3</sup>		
115	12.7.60	1055	31°59'S	111°54'E	2.4			
125	14.7.60	1042	31°59'S	103°29'E	14.8			
136	18.7.60	0925	27°23'S	95°01'E	18.1			
208	17.8.60	0851	09°36'S	113°09'E	11.2			
214	18.8.60	1345	08°01'S	116°00'E	13.8			
225	20.8.60	1127	09°15'S	122°25'E	23.6			
263	4.9.60	1057	08°51'S	129°52'E	25.2			
286	13.9.60	1013	11°09'S	123°25'E	23.7			
299	15.9.60	1625	14°49'S	120°24'E	18.8			
334	21.9.60	0650	12°43'S	109°08'E	8.0			
						7		
						3		
						13		
						17		
						7		
						6		

DIAMANTINA Dm 2/60		ZOOPLANKTON BIOMASS AT SURFACE			CLARKE BUMPUS HORIZONTAL HAULS		
STATION	DATE	TIME	LATITUDE	LONGITUDE	DEPTH m	VOLUME FILTERED	BIOMASS mg/m <sup>3</sup>
120	17.7.60	1146	32°00'S	107°34'E	0	14.6	8
131	15.7.60	1244	30°41'S	97°30'E	0	10.6	9
133	17.7.60	0943	29°40'S	94°47'E	0	40.2	1
133	17.7.60	1026	29°40'S	94°47'E	0	45.5	18
143	20.7.60	0935	19°47'S	94°56'E	0	60.2	7
143	20.7.60	1018	19°47'S	94°56'E	0	59.8	7
143	21.7.60	0935	19°25'S	94°28'E	0	22.2	6
143	21.7.60	1010	19°25'S	94°28'E	0	33.7	4
143	21.7.60	1045	19°25'S	94°28'E	0	33.0	4
143	21.7.60	1115	19°25'S	94°28'E	0	28.9	5
151	23.7.60	1625	12°41'S	95°04'E	0	14.2	6
186	9.8.60	1543	05°00'S	94°40'E	0	31.3	12
186	9.8.60	1543	05°00'S	94°40'E	0	40.2	8
186	9.8.60	1628	05°00'S	94°40'E	0	50.3	10
186	9.8.60	1628	05°00'S	94°40'E	0	44.3	5
197	15.8.60	1305	07°35'S	105°39'E	0	11.6	9
219	19.8.60	0835	08°00'S	119°38'E	0	11.8	71

STATION	DATE	TIME	LATITUDE	LONGITUDE	DEPTH m	VOLUME FILTERED	BIOOMASS mg/m <sup>3</sup>
233	22.8.60	0845	07°46'S	128°45'E	0	22.3	104
239	23.8.60	1240	10°04'S	131°57'E	0	37.1	16
258	3.9.60	1036	08°00'S	134°00'E	0	35.9	12
269	5.9.60	0909	09°36'S	128°07'E	0	19.6	26
281	12.9.60	1530	13°43'S	124°42'E	0	49.2	17
292	14.9.60	1109	11°19'S	118°41'E	0	10.1	114
306	16.9.60	0940	17°25'S	121°42'E	0	50.1	22
313	17.9.60	1128	19°16'S	117°29'E	0	40.2	20
325	19.9.60	1100	13°43'S	114°49'E	0	15.2	18
340	22.9.60	1220	16°04'S	111°18'E	0	16.7	25
346	23.9.60	1410	19°59'S	113°15'E	0	14.7	9
120	13.7.60	1146	32°00'S	107°34'E	250	15.3	5
131	15.7.60	1244	30°41'S	97°30'E	250	9.7	4
133	16.7.60	1015	29°40'S	94°47'E	250	16.1	10
197	15.8.60	1305	07°35'S	105°39'E	250	19.2	35
219	19.8.60	0845	08°00'S	119°38'E	250	12.5	14
233	22.8.60	0845	07°46'S	128°45'E	250	11.7	14
269	5.9.60	0909	09°36'S	128°07'E	250	11.9	11
292	14.9.60	1109	11°19'S	118°41'E	250	5.1	14
325	19.9.60	1100	13°43'S	114°49'E	250	12.6	17
340	22.9.60	1220	16°04'S	111°18'E	250	18.7	19

## V. FIGURES

Figs 2 - 25 Hydrology - Vertical Sections.

Figs 26 - 28 Hydrology - Horizontal Distribution of Properties.

Figs 29 - 33 Primary Production

Figs 2 - 25

VERTICAL SECTIONS

Vertical sections of temperature ( $^{\circ}\text{C}$ ), salinity (%), oxygen (ml/l) and inorganic phosphate ( $\mu\text{g at./l}$ ) were prepared from data in Section IV and appear as Figures 2-25.

Figs 2-7 Vertical sections for the line of Stations 133, 136, 139, 142, 143, 145, 148. Degrees of longitude (S) indicated at bottom of sections.

Fig. 2 Temperature above 400 m.

Fig. 3 Temperature below 400 m.

Fig. 4 Salinity above 400 m.

Fig. 5 Salinity below 400 m.

Fig. 6 Oxygen concentration surface to bottom.

Fig. 7 Inorganic phosphate surface to bottom.

Figs 8-13 Vertical sections for the line of Stations 148, 151, 155, 186, 182, 177, 174. Properties as for Figs 2-7 above.

Figs 14-19 Vertical sections for the line of Stations 312, 313, 314, 315, 317, 319, 321, 324, 325, 327, 329. Properties as for Figs 2-7 above.

Figs 20-25 Vertical sections for the line of Stations 349, 348, 346, 345, 343, 341, 336, 334. Properties as for Figs 2-7 above.

Figs 26 - 28

HORIZONTAL DISTRIBUTION OF PROPERTIES

Figures illustrating the horizontal distribution of properties at the surface, at 50 m and at 500 m were prepared from data in Section IV.

Figs 26-28      Horizontal distribution of properties.

Fig. 26      A   Surface      Temperature

                B                 Salinity

                C                 Inorganic phosphate.

Fig. 27      A   50 m      Temperature

                B                 Oxygen

                C                 Inorganic phosphate.

Fig. 28      A   500 m      Temperature

                B                 Oxygen

                C                 Inorganic phosphate.

Figs 29 - 33

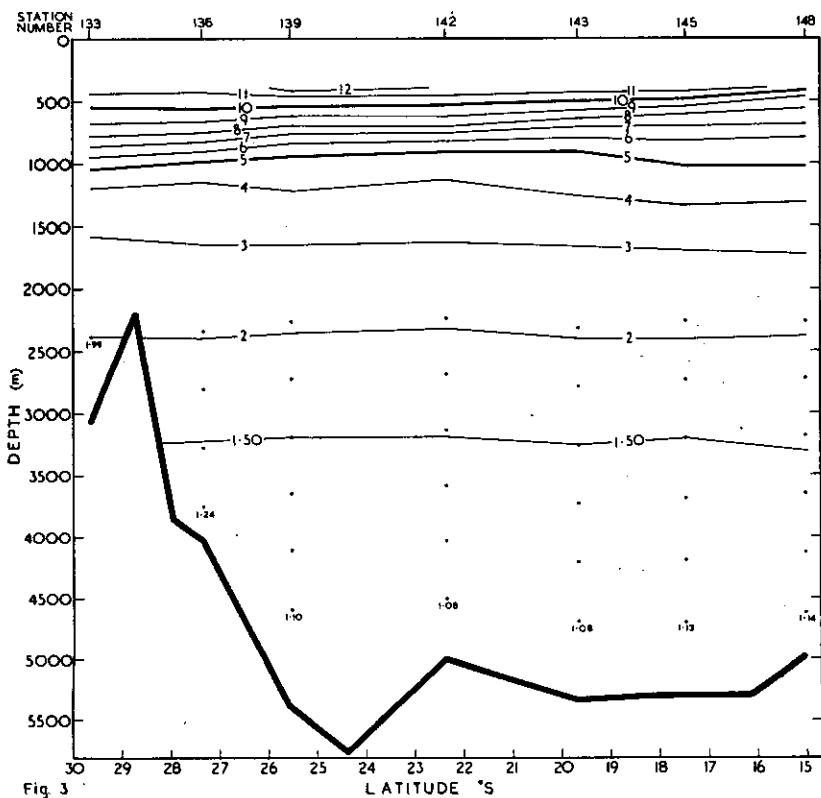
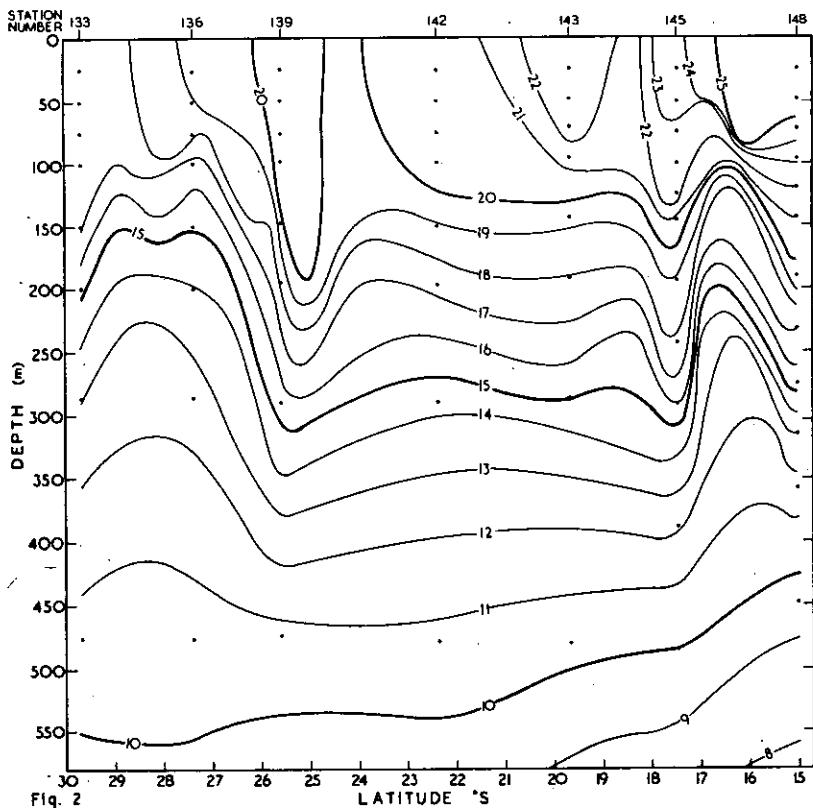
PRIMARY PRODUCTION

Fig. 29. Daily rates of primary production, calculated for the columns under 1 metre square from 0 - 150 m depth in gC/day/m<sup>2</sup> for each station. Figures are arranged with station number above and value below. \* Depth of water less than 150 m. + Although water deeper at these stations, samples were taken down to depths of less than 150 m.

Figs 30, 31. Vertical profiles of hourly rates of primary production in mgC/hr/m<sup>3</sup> as measured in fluorescent light incubator at each station. Sampling times are given below the station number.

Fig. 32. Vertical profiles of daily rates of primary production as measured in situ. Figures given below each profile are, in order, the production in the column given in gC/day/m<sup>2</sup>, the period of incubation in the day, the station number, the date and time of sampling.

Fig. 33. Vertical profiles of daily rates of primary production in mgC/day/m<sup>3</sup> as measured in a simulated in situ incubator. Figures given below each profile are, in order, the production in the column given in gC/day/m<sup>2</sup>, the period of incubation in the day, the station number, the date and time of sampling.



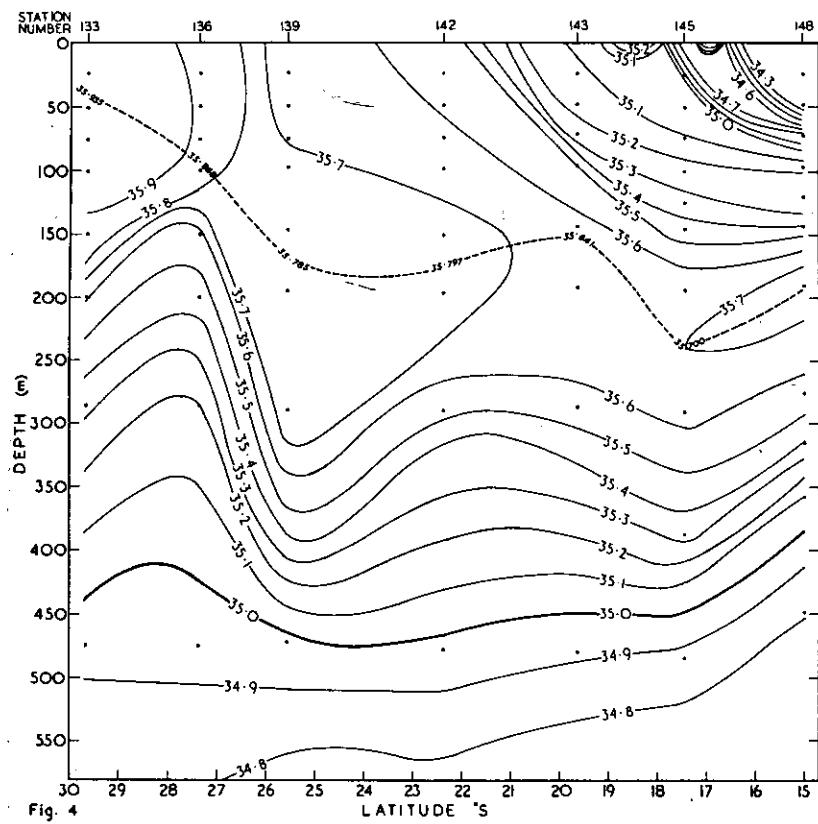
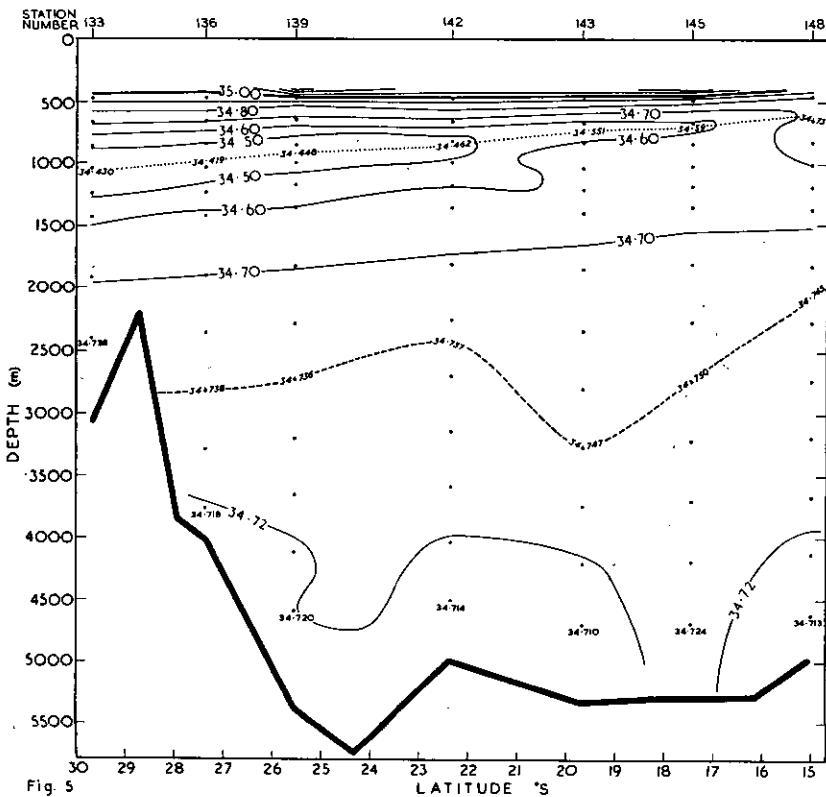
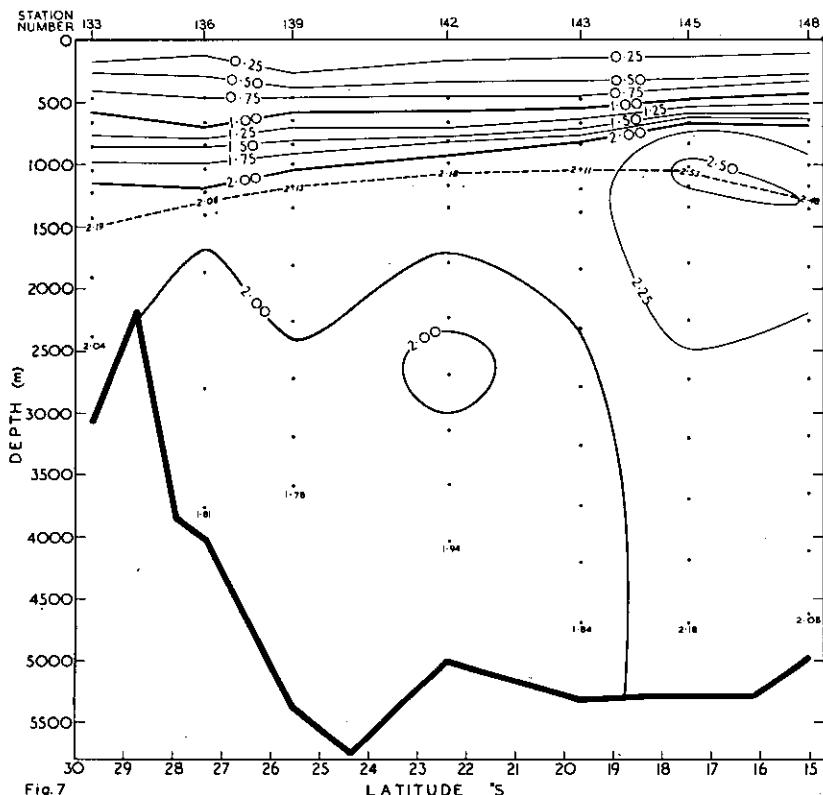
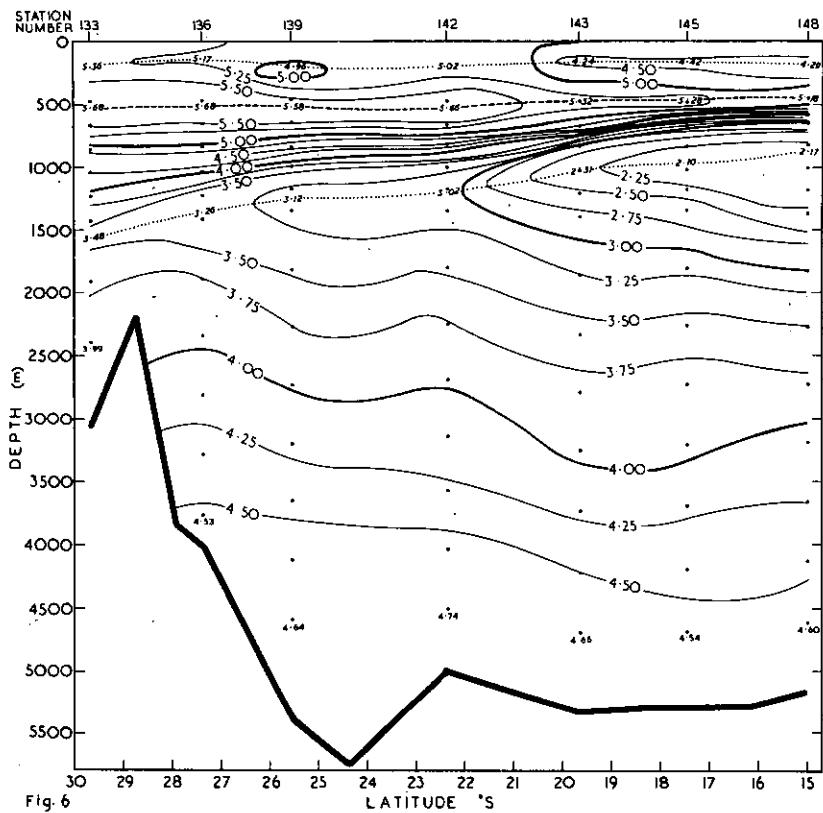
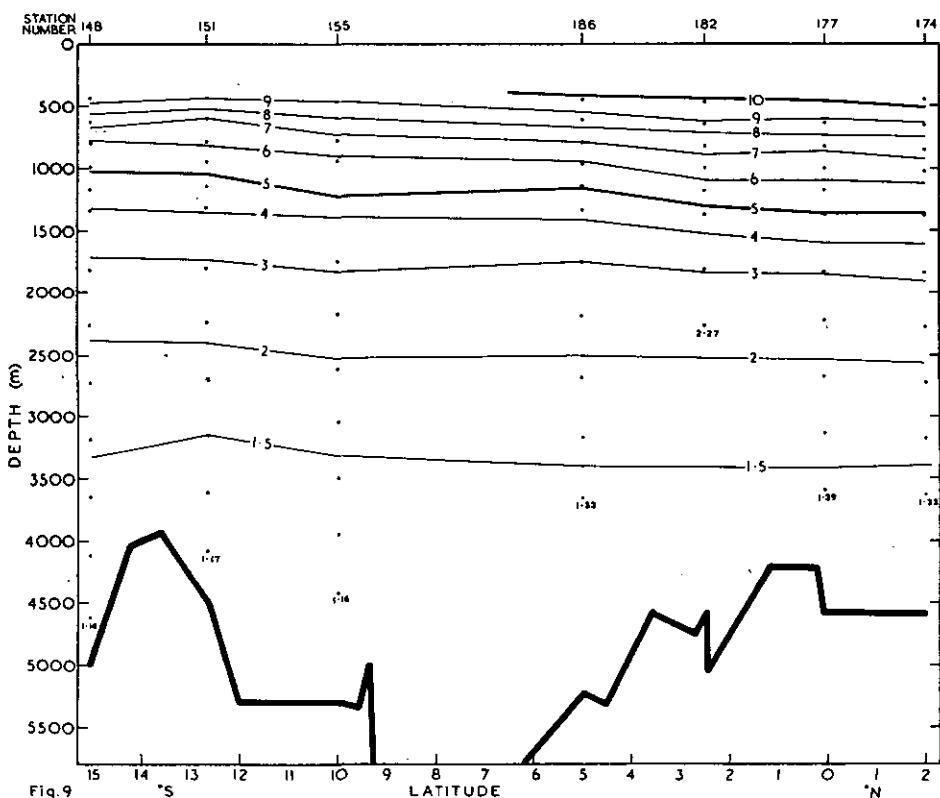
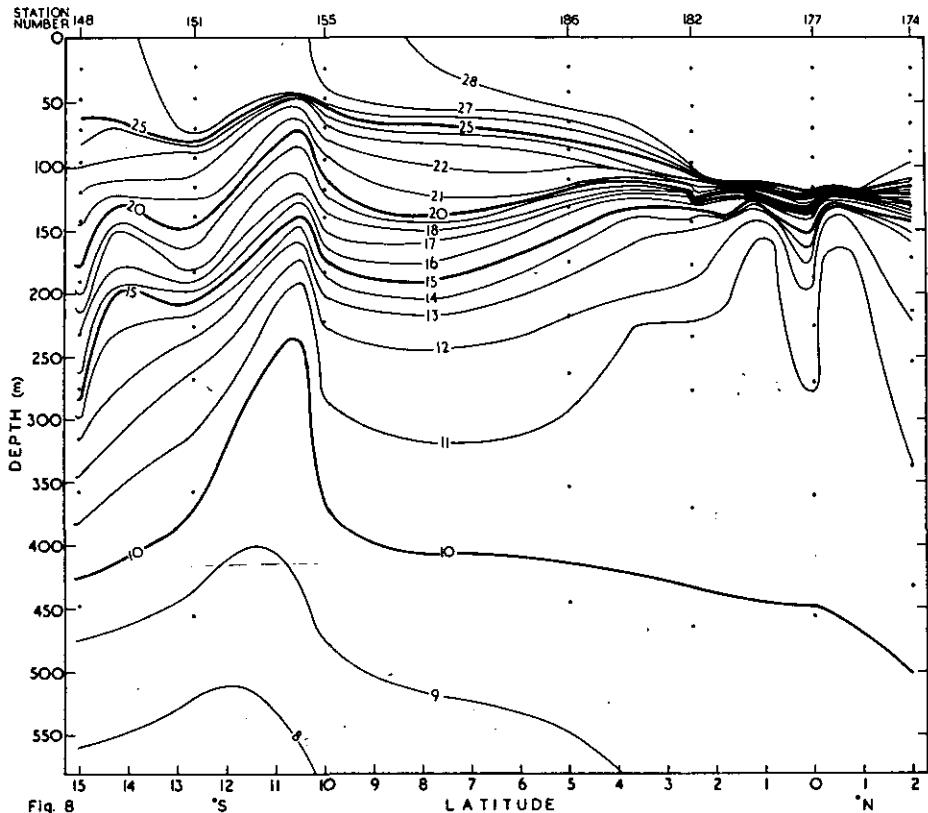
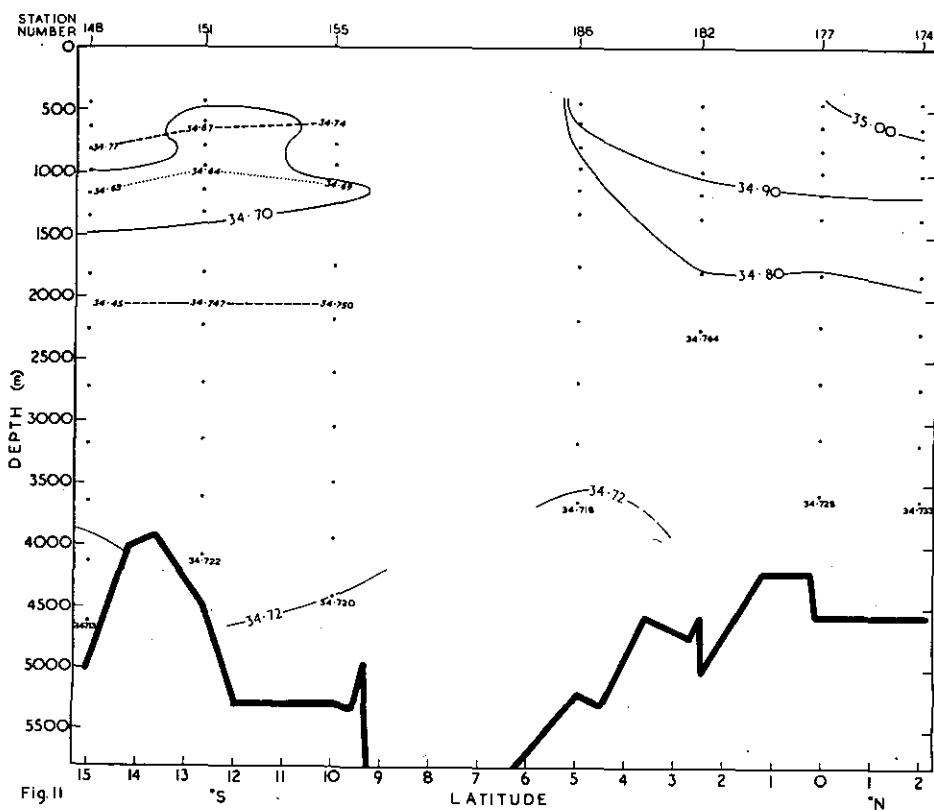
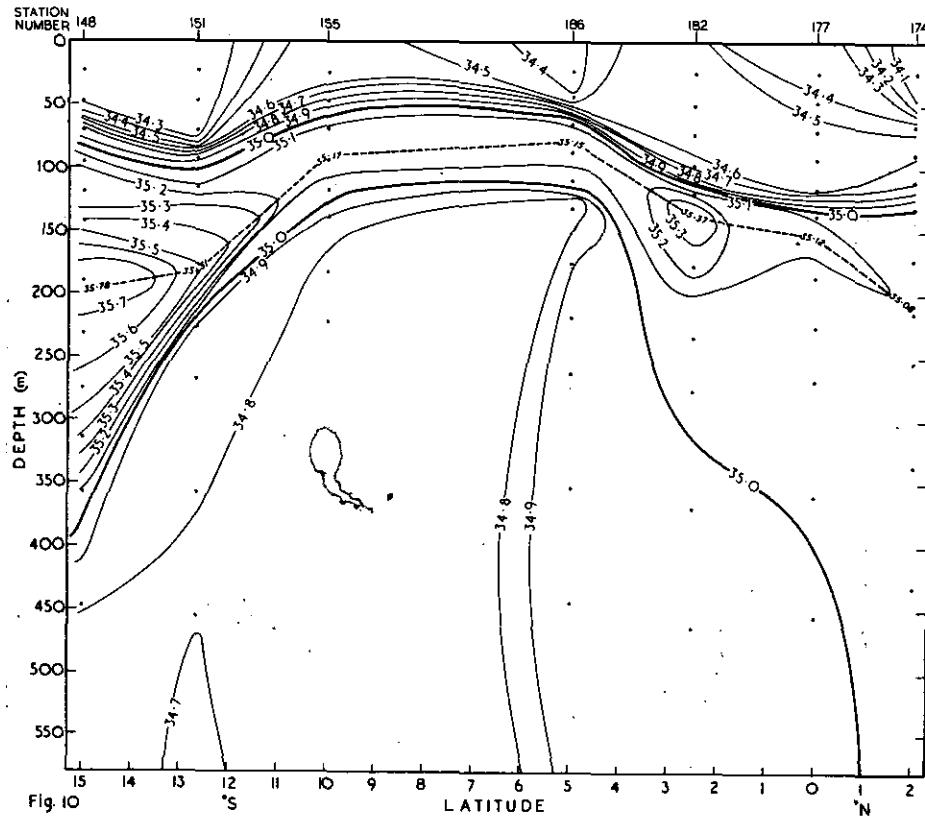


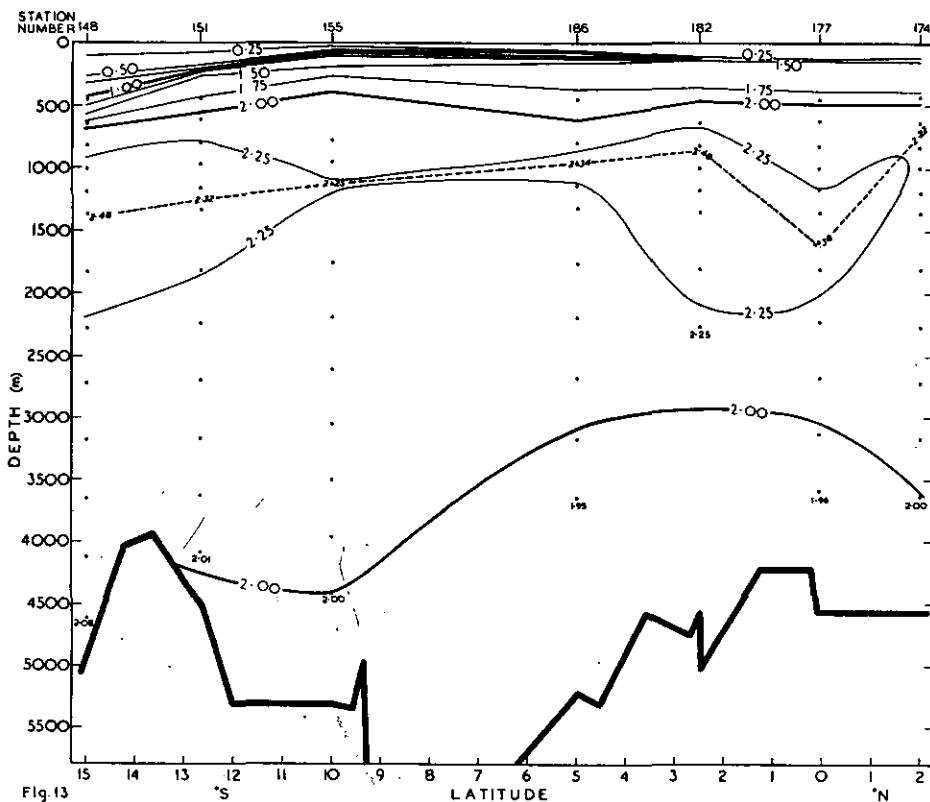
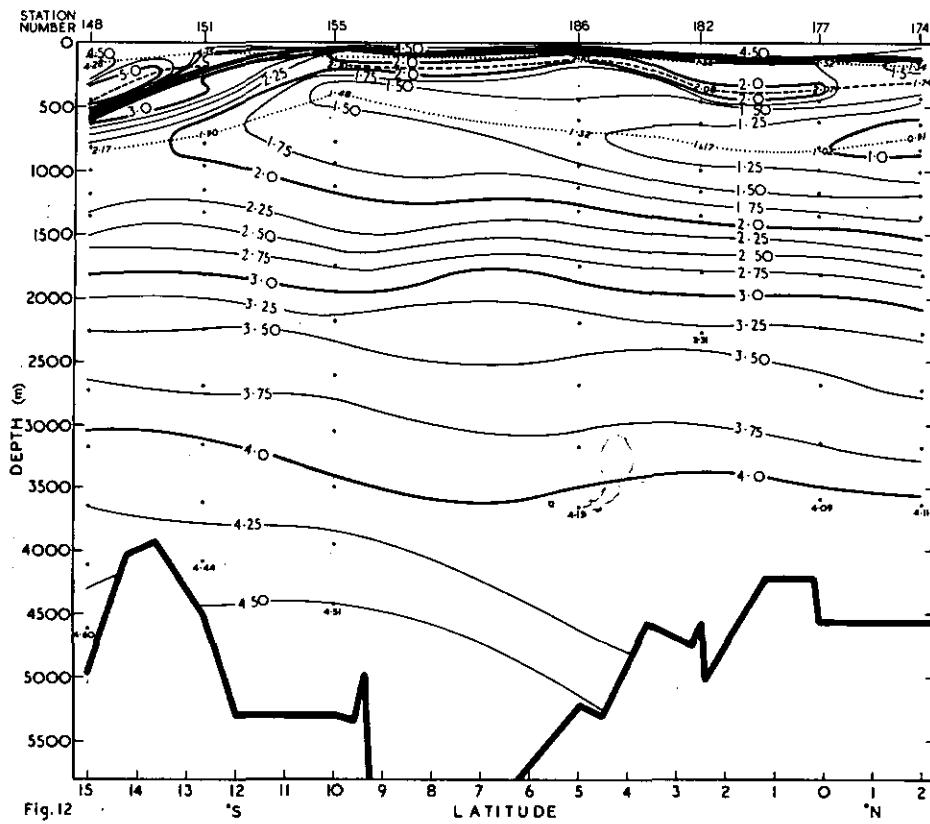
Fig. 4

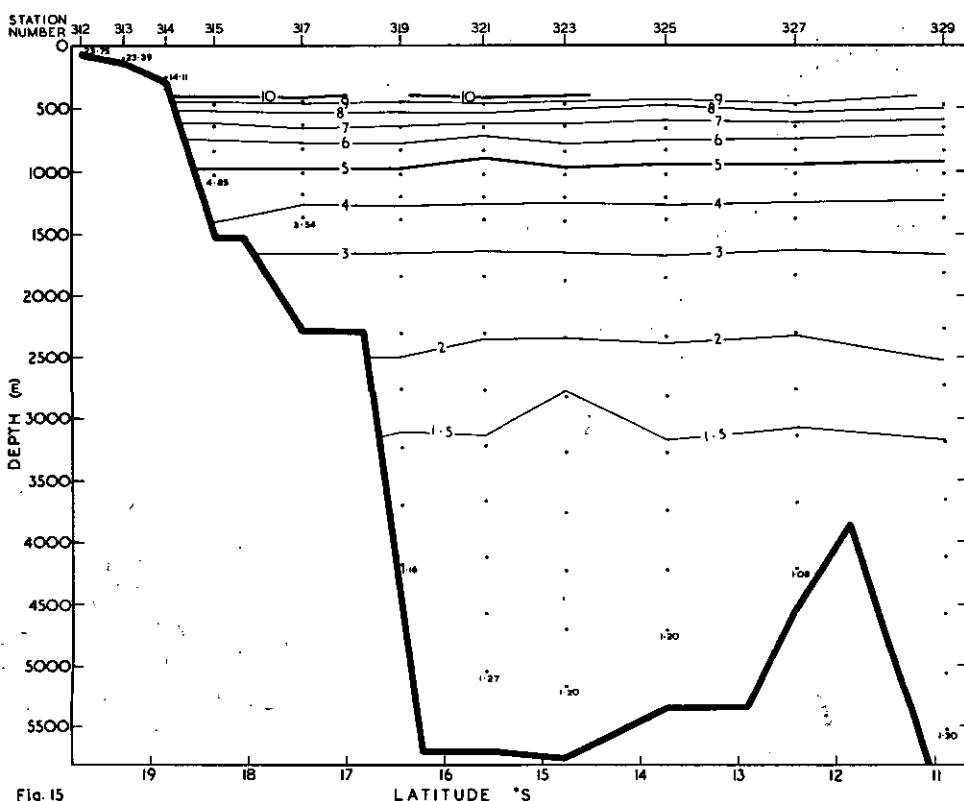
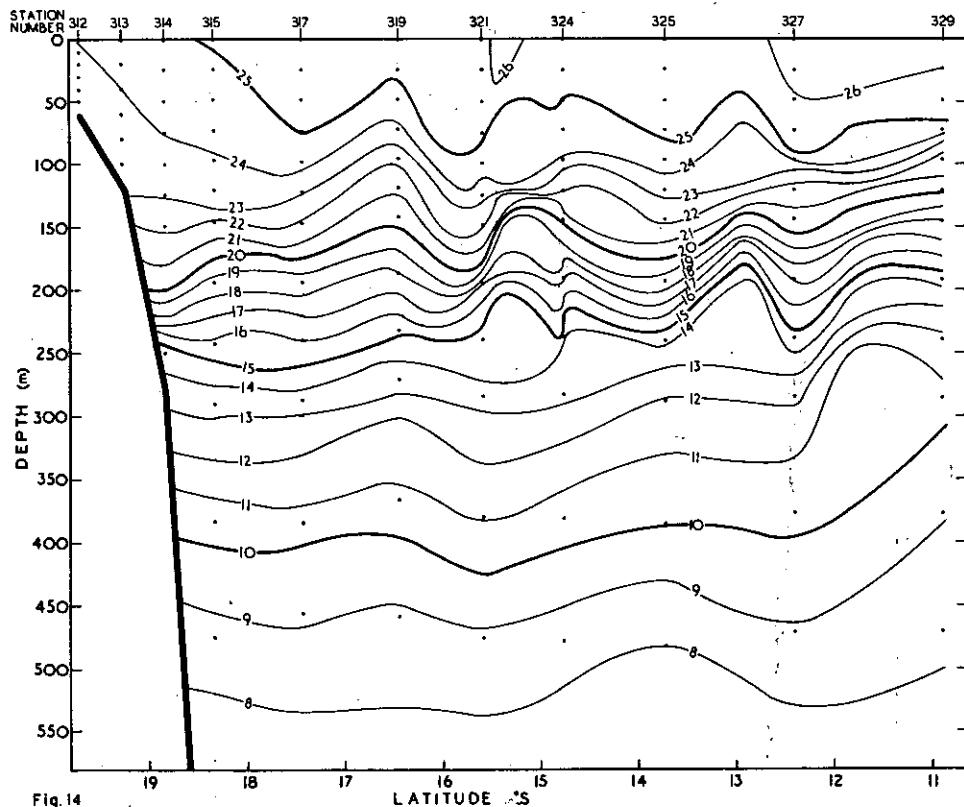


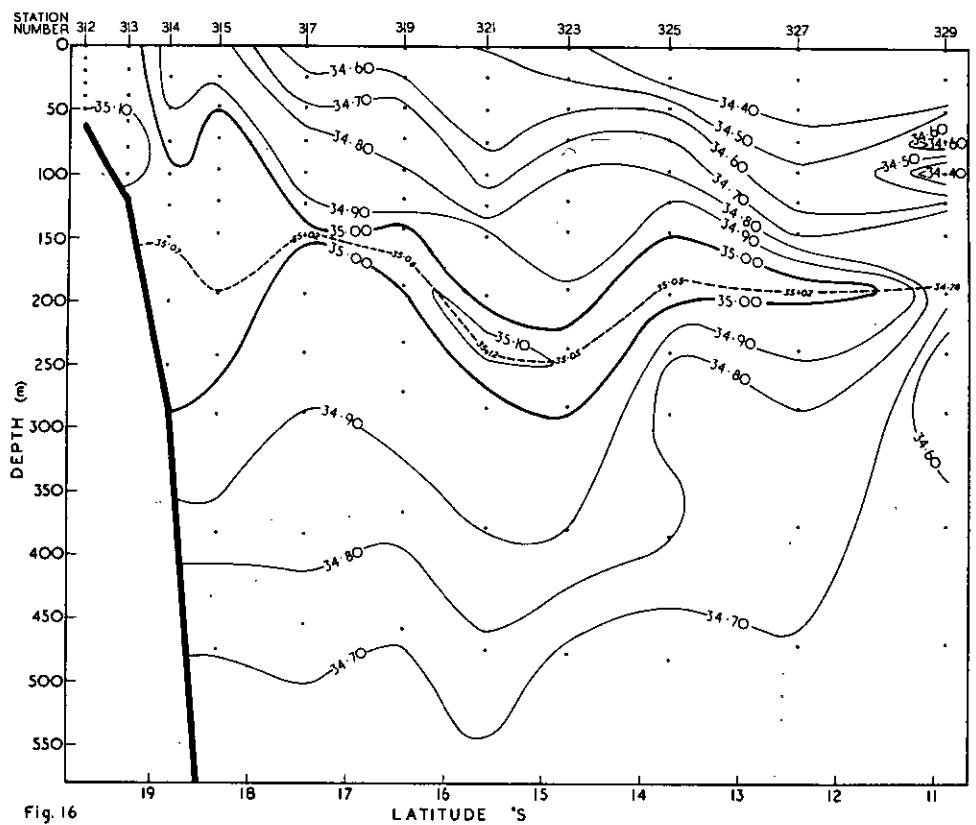




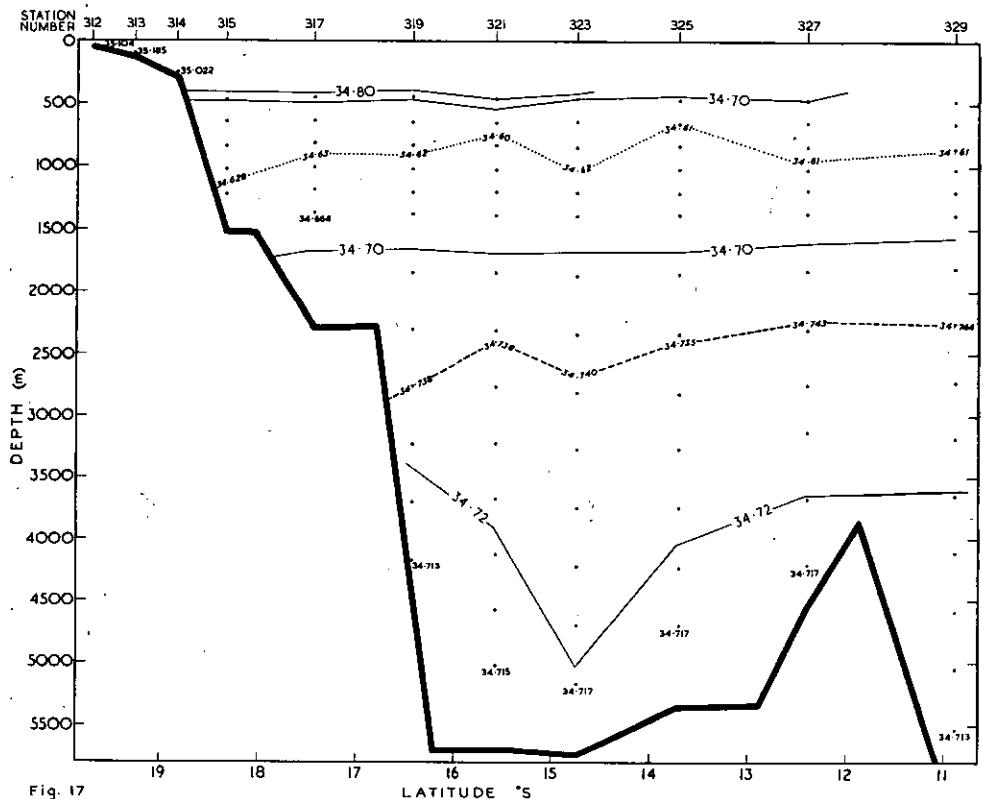


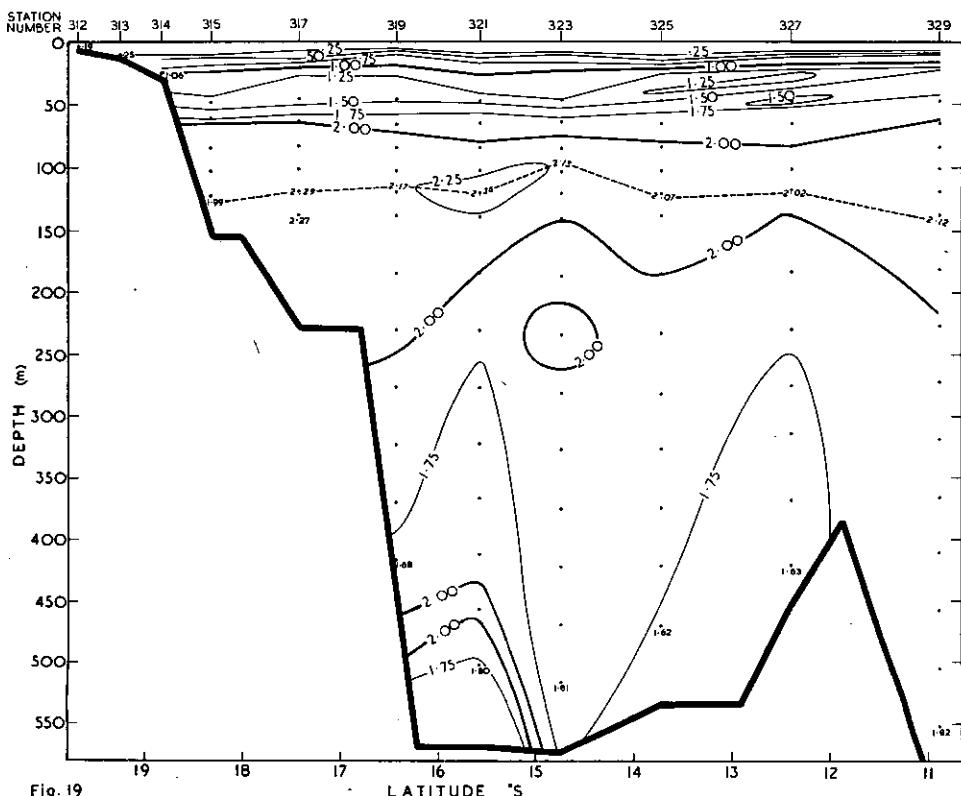
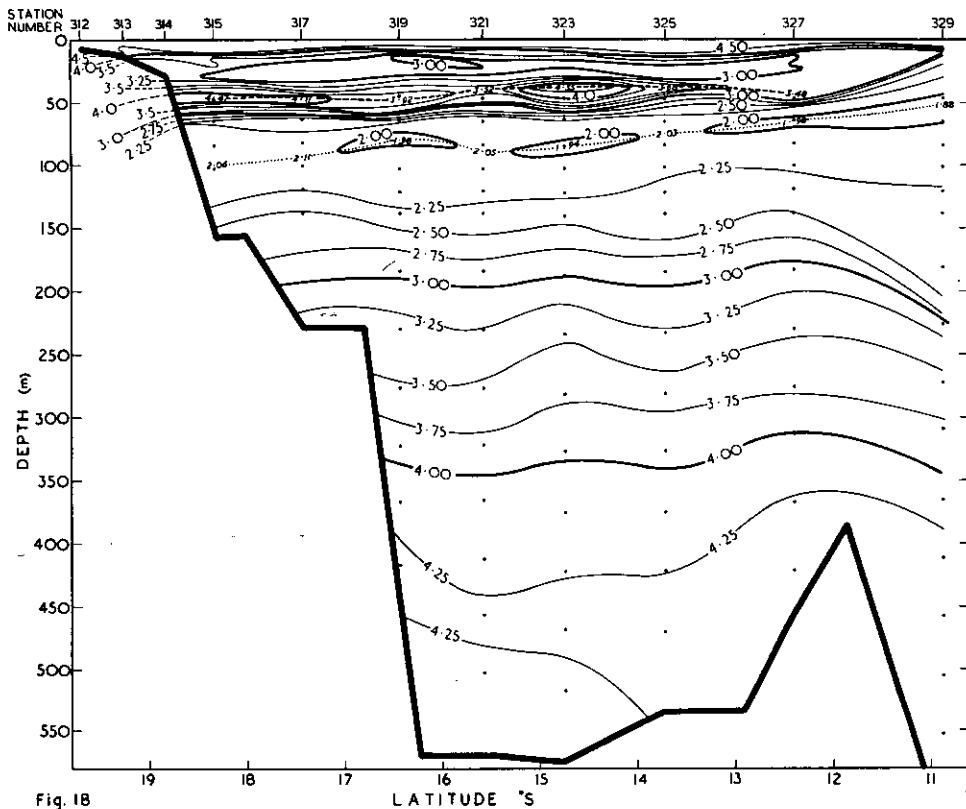






**Fig. 16**





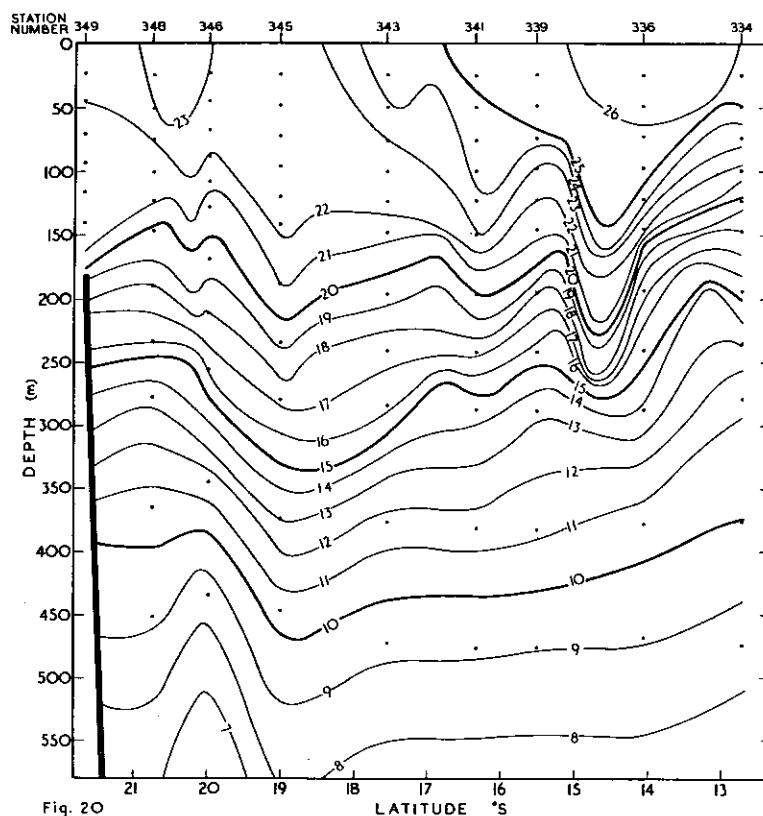


Fig. 20

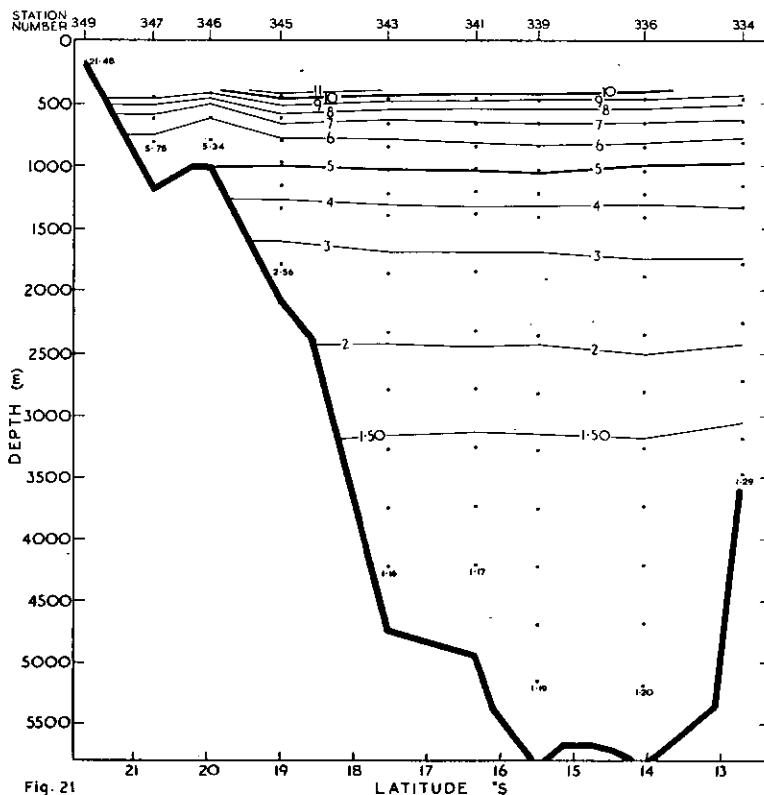


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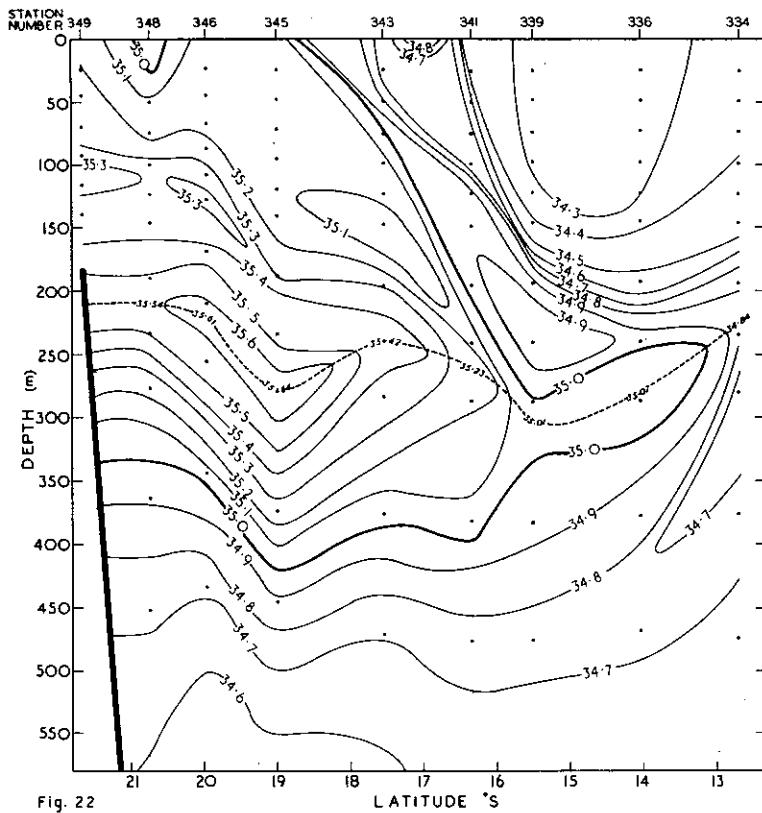
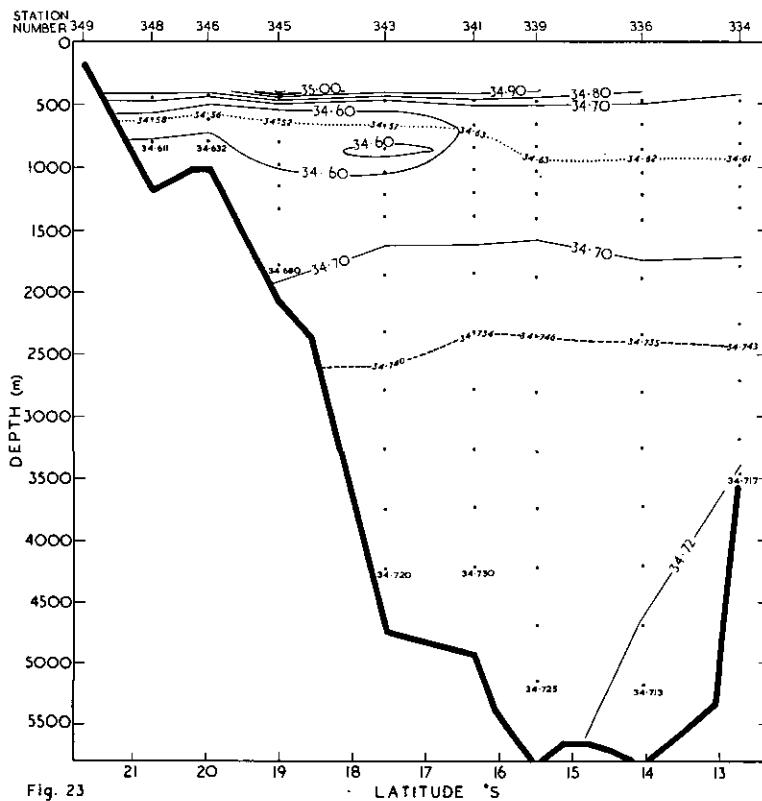
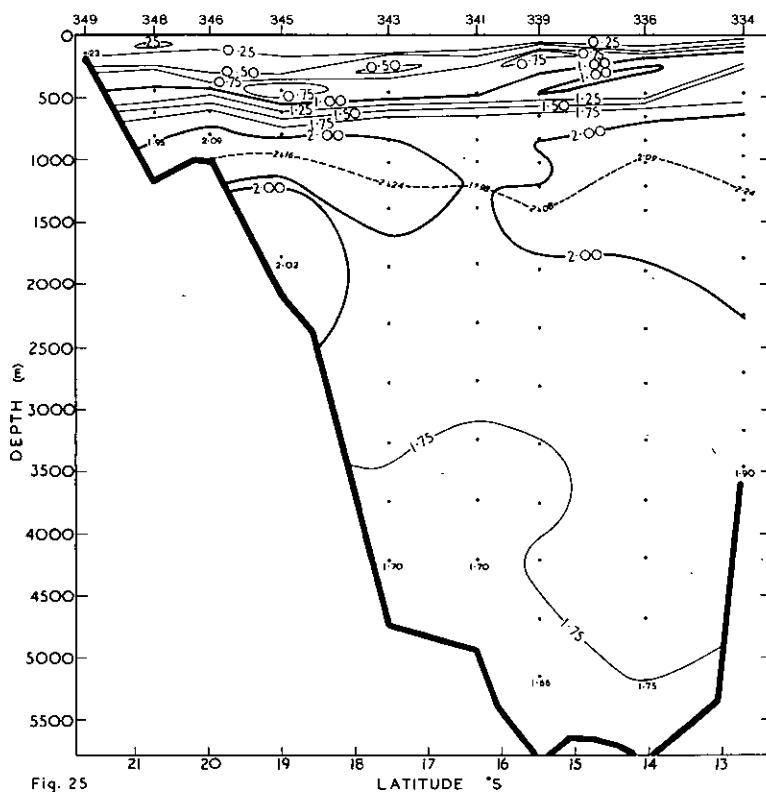
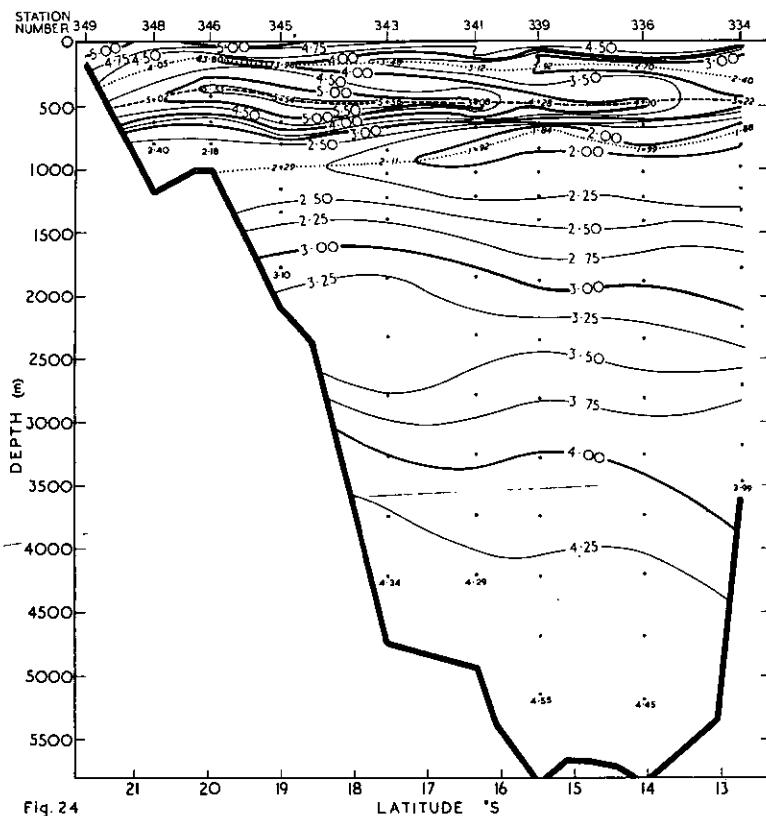


Fig. 22





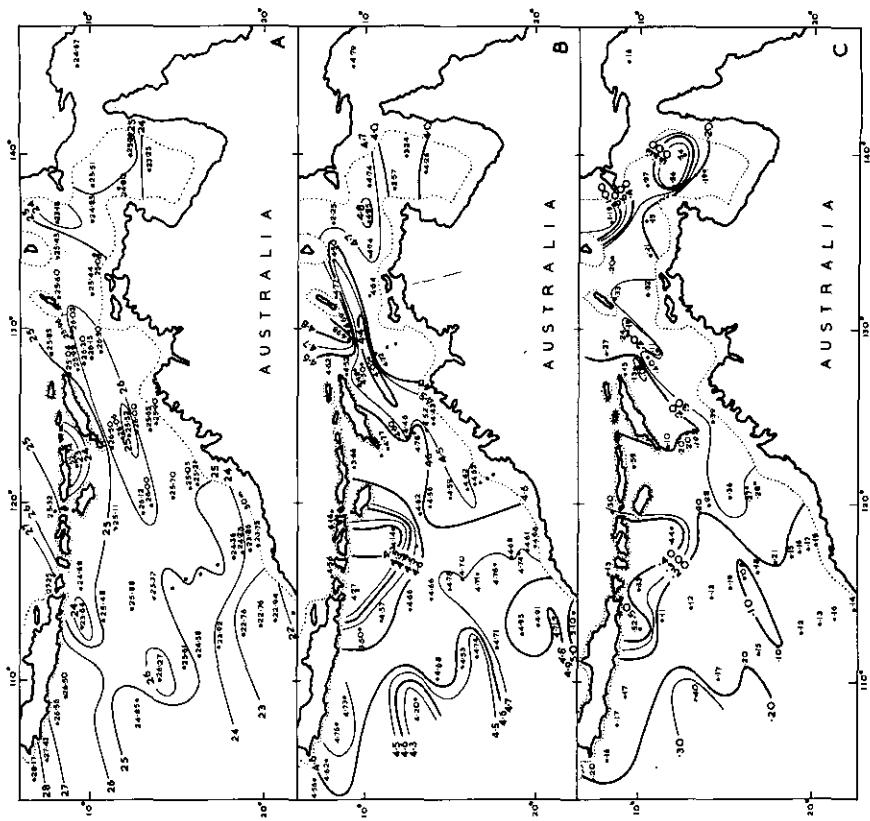
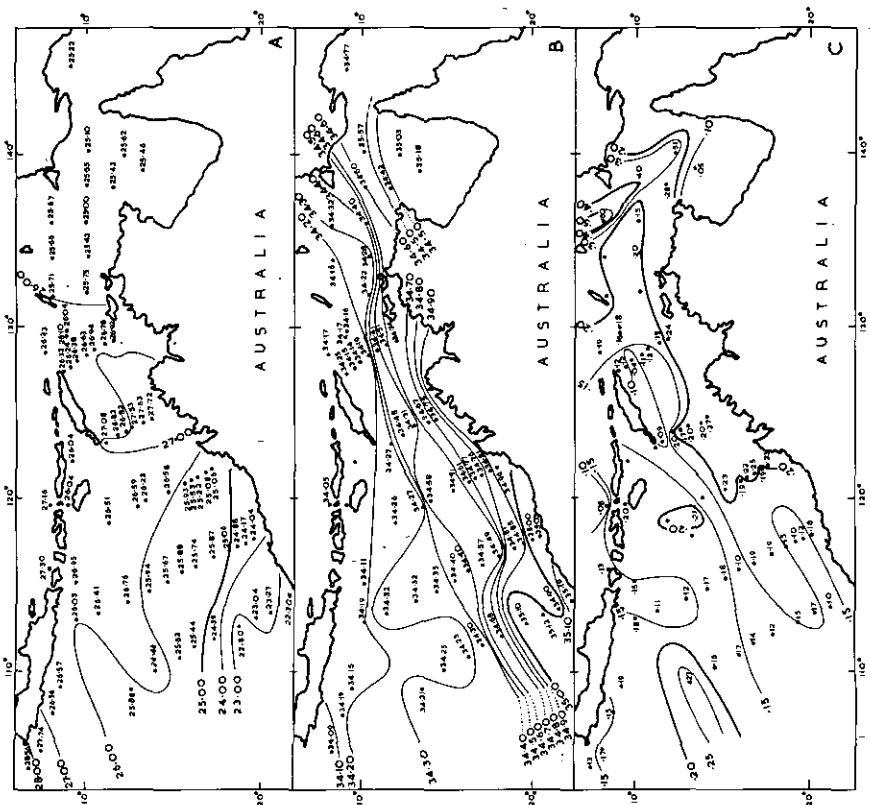


Fig. 27



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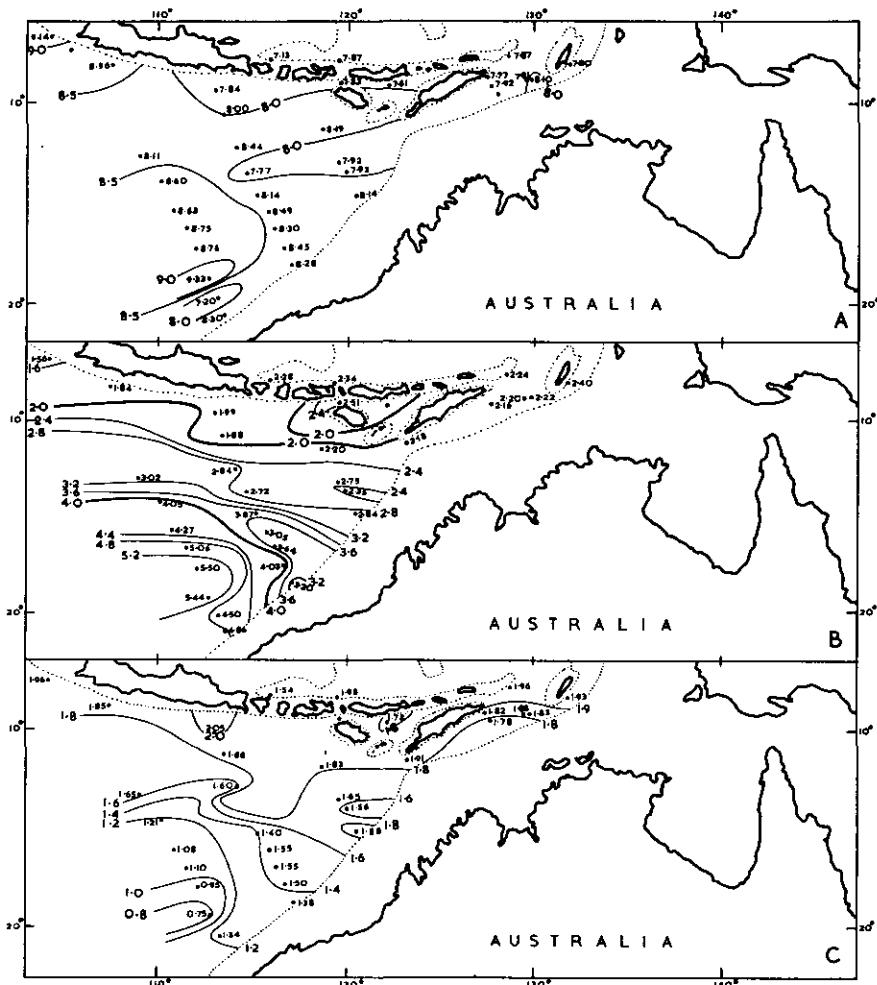


Fig. 28

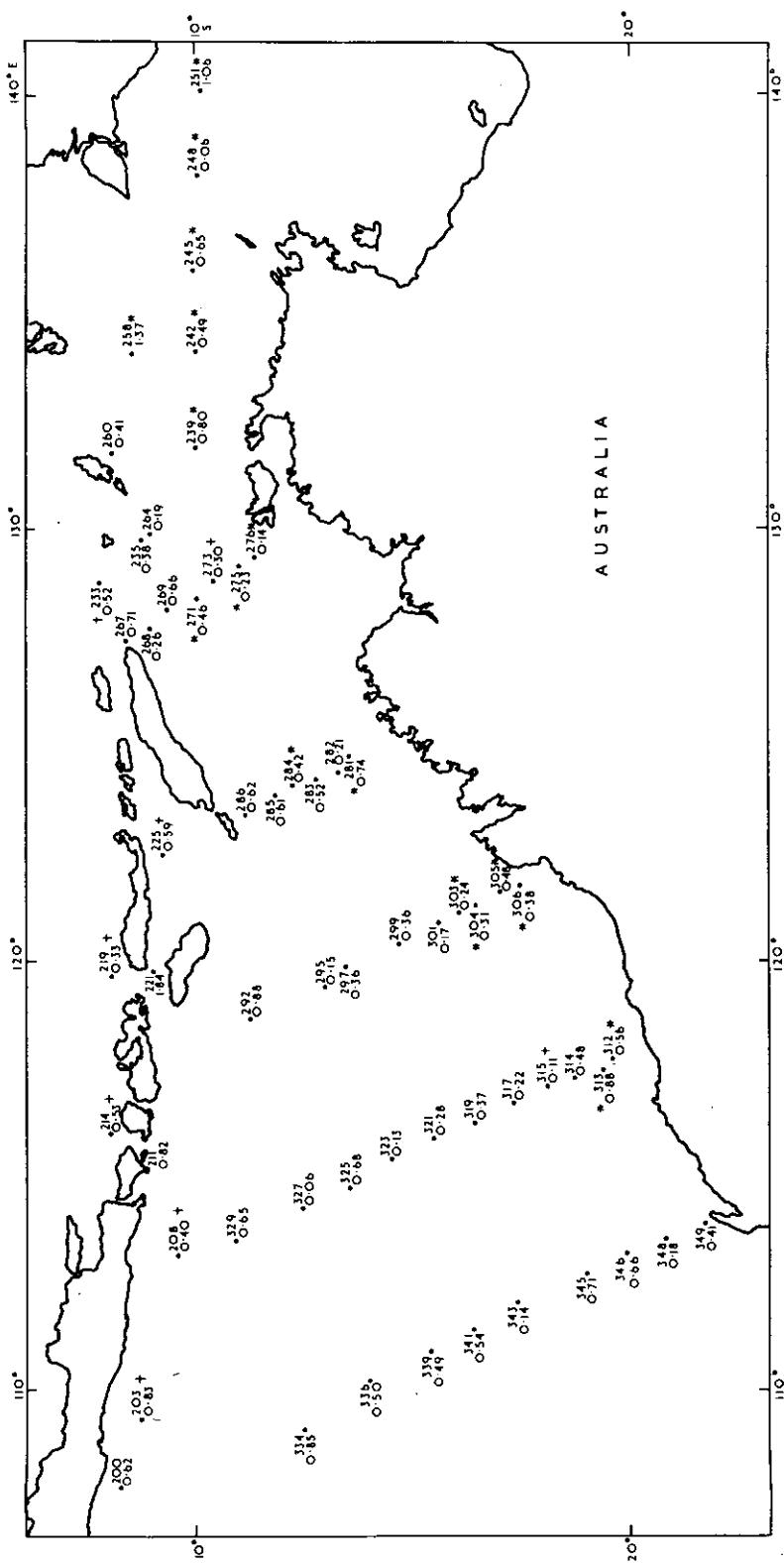


Fig. 29

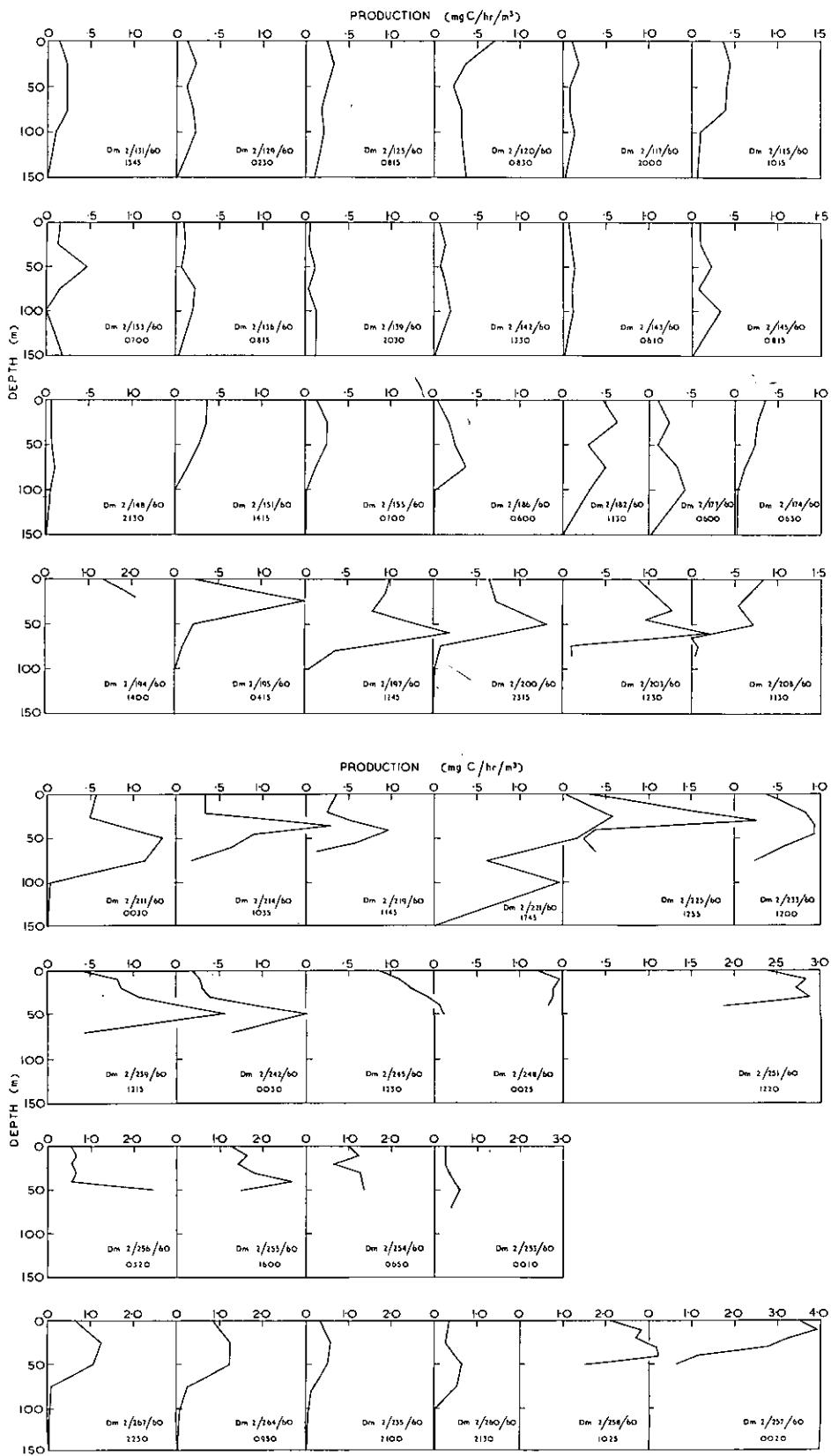


Fig. 30

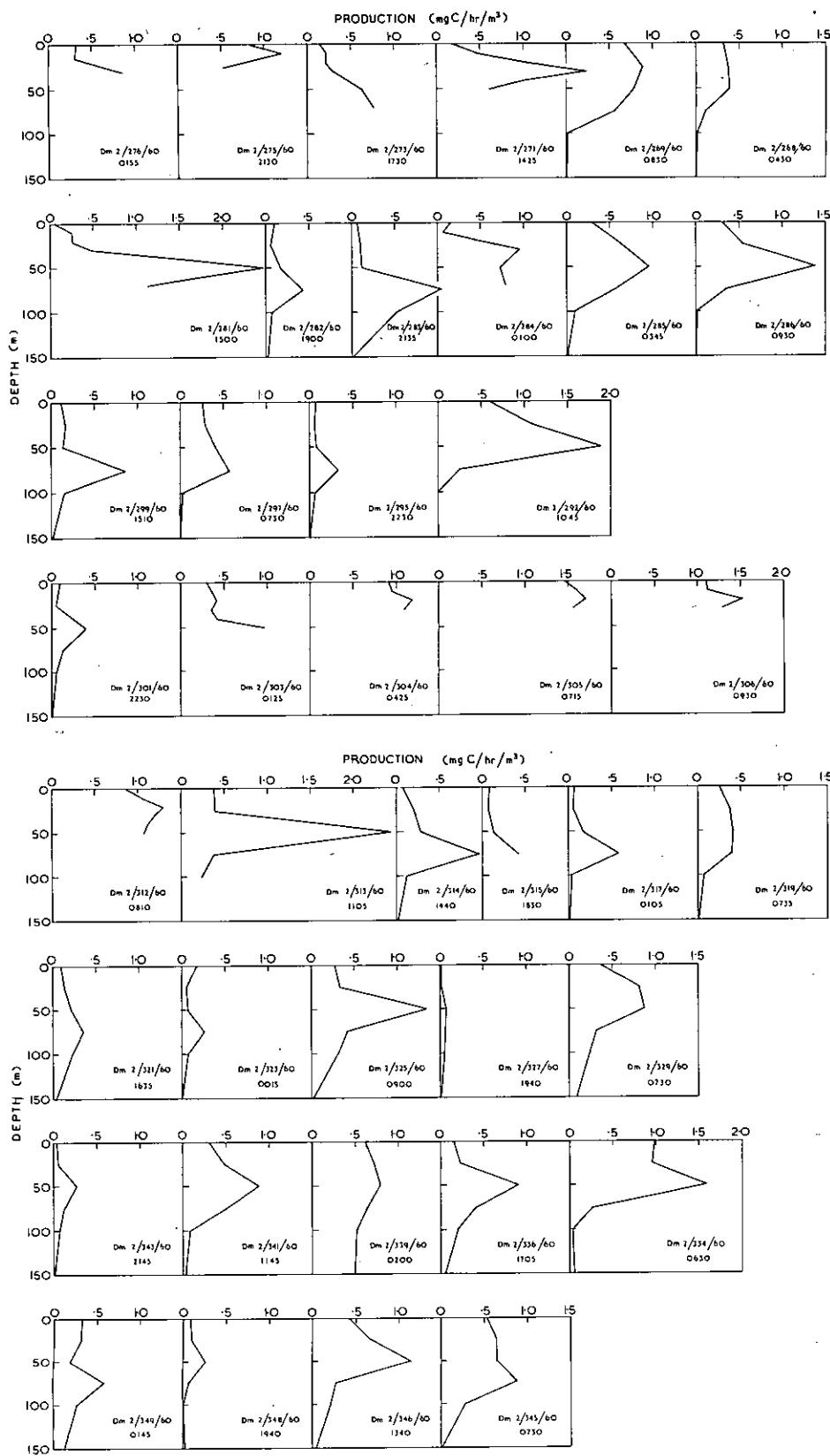


Fig. 31

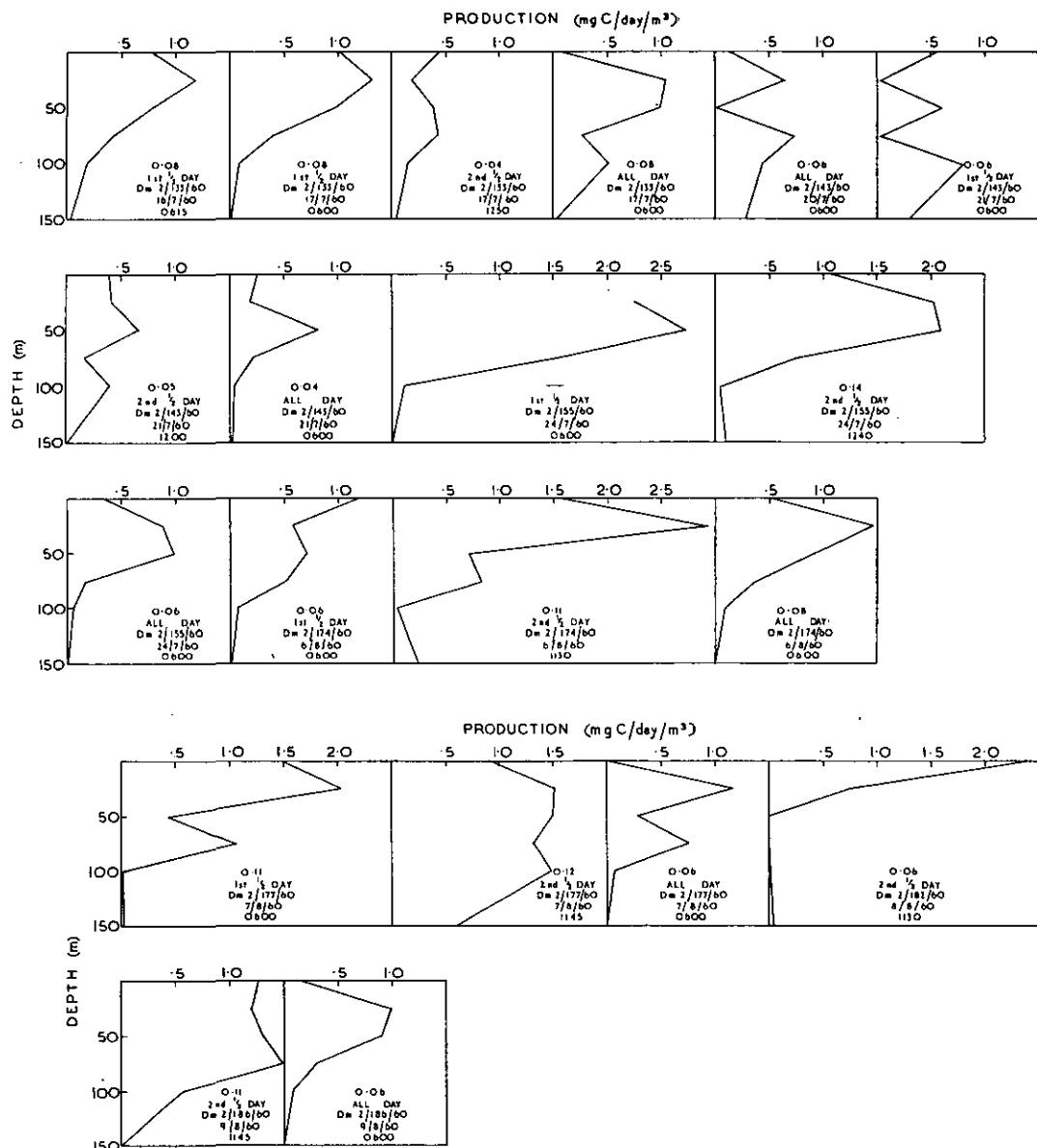


Fig. 32

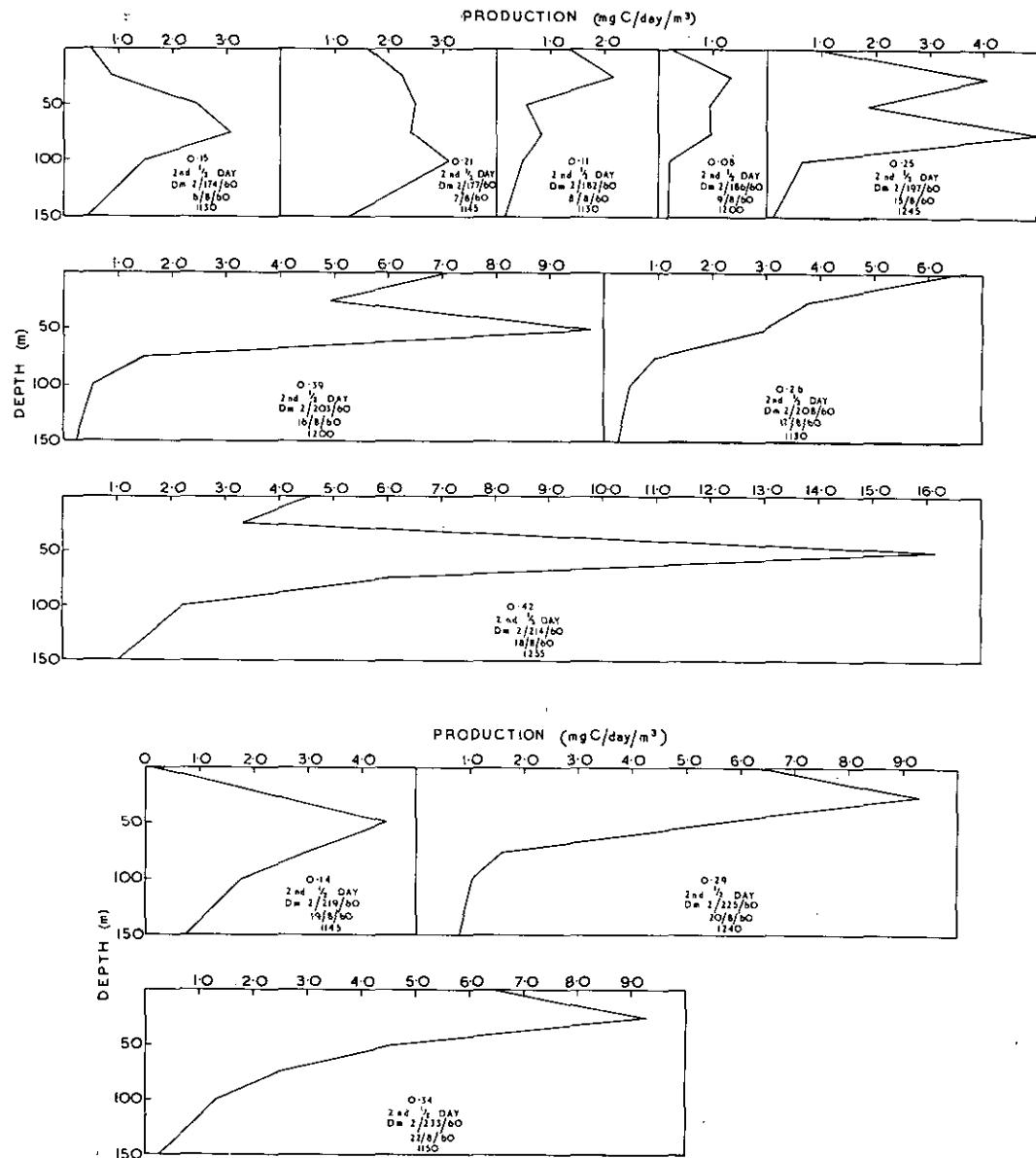


Fig. 33

## OCEANOGRAPHICAL CRUISE REPORTS

1. Oceanographic observations in the Indian Ocean in 1959. H.M.A.S. *Diamantina* Cruises Dm1/59 and Dm2/59.
2. Oceanographic observations in the Indian Ocean in 1960. H.M.A.S. *Diamantina* Cruise Dm1/60.
3. Oceanographical observations in the Indian Ocean in 1960. H.M.A.S. *Diamantina* Cruise Dm2/60.
4. Oceanographical observations in the Indian Ocean in 1960. H.M.A.S. *Diamantina* Cruise Dm3/60.
5. Oceanographical observations in the Pacific Ocean in 1960. H.M.A.S. *Gascoyne* Cruises G1/60 and G2/60.