UNIVERSITY OF CALIFORNIA, SAN DIEGO

SCRIPPS INSTITUTION OF OCEANOGRAPHY

LA JOLLA, CALIFORNIA 92093-0227

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 0007
29 June – 14 July 2000

CalCOFI Cruise 0010
12 – 31 October 2000

SIO Reference 01-5
15 June 2001

Approved for distribution:

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Charles F. Kennel, Director

CONTENTS

INTRODUCTION

The data in this report were collected during cruises 0007* and 0010 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *New Horizon* of Scripps Institution of Oceanography, University of California, San Diego. The CalCOFI program was organized in the late 1940's to study the causes of variations in population size of fishes of importance to the State of California. It is carried out by NOAA's National Marine Fisheries Service Southwest Fisheries Science Center, the California Department of Fish and Game, and the Marine Life Research Group (MLRG) at Scripps Institution of Oceanography (SIO). MLRG contributes to this program by investigations of the physical, chemical and biological structure of the California Current. Data from the cruises were collected and processed by personnel of the Marine Life Research Group and the Southwest Fisheries Science Center. Volunteers and other SIO staff members also assisted in the collection of data and chemical analyses at sea. CalCOFI data presented in this report and collected on previous cruises can be accessed via the World Wide Web (http://www.calcofi.org).

STANDARD PROCEDURES

CTD/Rosette Cast Data

At each station on these cruises a Sea-Bird Electronics, Inc., Conductivity-Temperature-Depth (CTD) instrument was deployed with a 24-place rosette. The rosette was equipped with 24 ten-liter plastic (PVC) bottles. The CTD/rosette cast usually sampled 20 depths to a maximum sampling depth of 525 meters, bottom depth permitting. Occasional stations have multiple bottles tripped at the same depth to provide more water for ancillary programs. The sample spacing was designed to sample depth intervals as close as 10 meters around the sharp upper thermocline features such as the chlorophyll, oxygen, nitrite maxima and the shallow salinity minimum. Salinity, oxygen and nutrients were determined at sea for all depths sampled. Chlorophyll-*a* and phaeopigments were determined at sea within the top 200 meters, bottom depth permitting.

Pressures and temperatures assigned to the water sample data were derived from the CTD signals recorded just prior to the bottle trip. Pressures have been converted to depths by the Saunders (1981) pressure-to-depth conversion technique. CTD temperatures reported with the bottle data have been rounded to the nearest hundredth of a degree Celsius.

Salinity samples were collected from all rosette bottles and analyzed at sea using a Guildline model 8410 Portasal salinometer. Salinity samples were drawn in to 200 ml Kimax high-alumina borosilicate bottles which were rinsed three times with sample prior to filling. The results were compared with the CTD salinity in order to verify that the rosette bottle did not mis-trip or leak. The salinometer was standardized before and after each group of samples with substandard seawater. Periodic checks on the conductivity of the substandard were made by comparison with IAPSO Standard Seawater batch P134. Salinity values have been calculated using the algorithms for the Practical Salinity Scale, 1978 (UNESCO, 1981a) and were reported to three decimal places, provided that accepted standards were met.

Dissolved oxygen samples were collected in calibrated 100 ml iodine flasks, allowing at least 200% overflow. The dissolved oxygen samples were analyzed at sea by the Winkler method, as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971). Percent oxygen saturation was calculated from the equations of Weiss (1970).

Nutrient samples were analyzed at sea for dissolved silicate, phosphate, nitrate and nitrite using procedures similar to those described in Gordon et al., 1993. Samples were collected in 45 ml high density polypropylene screw-capped tubes which were rinsed three times prior to filling. Standardizations were done at the beginning and end of each group of samples with a set of mid-concentration range standards prepared fresh for each run. Samples

* The first two digits represent the year and the last digits the month of the cruise.

not analyzed immediately after collection were refrigerated and run the following day. Sets of six different concentration standards were analyzed periodically to determine the deviation from linearity as a function of concentration, primarily for the silicate and nitrate analyses. Final sample concentrations were corrected for deviations from linearity.

Samples for chlorophyll-*a* and phaeopigments were collected in calibrated 138 ml polyethylene bottles and filtered onto Whatman GF/F filters. The pigments were extracted with a cold extraction technique in 90% acetone (Venrick and Hayward, 1984), and the fluorescence determined before and after acidification with a Turner Designs fluorometer (Yentsch and Menzel, 1963; Holm-Hansen *et al*., 1965).

Evaluation of the water sample data involved comparisons with the CTD cast profiles, adjacent stations and consideration of the variation of a property as a function of density or depth and the relationships with other properties (Klein, 1973). Estimates of precision of the standard techniques are given in SIO (1991).

Primary Productivity Sampling

Primary productivity samples were taken each day shortly before local apparent noon (LAN). Primary production was estimated from ^{14}C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). The depths with ambient light intensities corresponding to light levels simulated by the on-deck incubators were identified and sampled on the up rosette cast. Occasionally an extra bottle or two were tripped in addition to the usual 20 levels sampled in the combined rosette-productivity cast in order to maintain the normal sampling depth resolution. The ten-liter bottles were equipped with epoxy-coated springs and Viton O-rings. Triplicate samples (two light and one dark control) were drawn from each productivity sample depth into 250 ml polycarbonate incubation bottles. Samples were inoculated with 10 µCi of ^{14}C as $NaHCO_3$ (200 µl of 50 µCi/ml stock) prepared in a 0.3 g/liter solution of sodium carbonate (Fitzwater *et al*., 1982). Samples were incubated from LAN to civil twilight in seawater-cooled incubators with neutral-density screens which simulate *in situ* light levels. At the end of the incubation, the samples were filtered onto Millipore HA filters and placed in scintillation vials. One half ml of 10% HCl was added to each sample. The sample was then allowed to sit, without a cap, at room temperature for 12 hours (after Lean and Burnison, 1979). Following this, 10 ml of scintillation fluor were added to each sample and the samples were returned to SIO where the radioactivity was determined with a scintillation counter. Salinity, oxygen, nutrients, chlorophyll-*a* and phaeopigments were determined from all rosette productivity bottles.

Macrozooplankton Net Tows

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505µm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 meters to the surface. The tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Only one sample of each pair was retained and preserved. The biomass, as wet displacement volume, after removal of large (>5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al*. (1972). An Optical Plankton Counter (OPC) was routinely used in one side of the paired bongo net frame. The purpose of the OPC is to obtain information on the vertical distributions of size categories of zooplankton, using data from the counter, without affecting the ongoing time series of data obtained from the catches of the integrative bongo net.

Avifauna Observations

Sea birds were counted within a 300 meter wide strip off to one side of the ship. Counts were made while underway between stations during periods of daylight. These counts were summed over 20 nautical mile (nm) intervals, or the distance between consecutive stations, whichever was less. Included at the end of this report are individual maps of the most numerous bird species (individuals/nm).

Ancillary Programs

Several ancillary programs produced data on these cruises which are not presented in this report. These programs include:

1) *Underway Data*. Continuous near surface measurements of temperature, salinity and chlorophyll fluorescence were recorded from water pumped through the ship's uncontaminated seawater system. The data were logged at one-minute intervals.

2) *ADCP*. Continuous profiles of ocean currents and acoustic backscatter between 20 and 400 meters deep were measured along the shiptrack from a hull-mounted 150 kHz Acoustic Doppler Current Profiler (ADCP). The ADCP data were averaged over 3-minute intervals. Sixty 8-meter depth bins were recorded.

3) *Atmospheric and Marine Optics.* Datasets of spectral water-leaving radiance and aerosol optical thickness were acquired during daylight hours en route and on stations using hand held SIMBAD radiometers. The SIMBAD radiometer measures both variables in typical spectral bands of satellite ocean color sensors, namely bands centered at 443, 490, 560, 670 and 870 nm. The instrument was designed for evaluation of satellite derived ocean color. In sun viewing mode the instrument operates like a classic sun photometer. In sea viewing mode a vertical polarizer reduces sky light reflection in the instrument's field of view. Water samples were collected from the CTD/Rosette casts to determine particulate, detrital and soluble absorption as well as phytoplankton pigment concentrations.

TABULATED DATA

CTD/Rosette Cast Data

The time reported is the Coordinated Universal Time (UTC) of the first rosette bottle trip on the up cast. The rosette bottles tripped on the up cast are reported as cast 2, where cast 1 is considered to be the down CTD cast. The sample number reported is the cast number followed by a two digit rosette bottle number. Bottom depths, determined acoustically, have been corrected using British Admiralty Tables (Carter, 1980) and are reported in meters. Weather conditions have been coded using WMO code 4501. Secchi depths are reported for most daylight stations.

Observed data from individual CTD/rosette trip levels are interpolated and reported for standard depths. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Multiple bottles tripped at the same depth to provide water for ancillary programs are not used in the calculation of standard depth data. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (UNESCO, 1981b). Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), and dynamic height or geopotential anomaly are included with both observed and interpolated standard depth levels.

On stations where primary productivity samples were drawn a footnote appears after each productivity depth sampled. The corresponding primary productivity data are reported in a separate section following the tabulated rosette cast data.

Primary Productivity Data

In addition to the normal hydrographic data also reported in the rosette cast data section, the tabulated data include: the *in situ* light levels at which the samples were collected, the uptake from each of the replicate light bottles, uptake 1 and uptake 2 (which have been corrected for dark uptake by subtracting the dark value), the mean of the two uptake values and the dark uptake. The uptake values are totals for the incubation period. Also shown are the times of LAN, civil twilight, and the value of the mean uptake integrated from the surface to the deepest sample,
assuming the shallowest value continues to the surface and that negative values (when dark uptake exceeds light uptake) are zero. The uptake data have been presented to two significant digits (values <1.00) or one decimal (values >1.00). Precision of the higher production values may not warrant all of the digits presented. Incubation
time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to UTC, add eight hours to the PST time. Incubation light intensities are listed in a footnote at the bottom of each page.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total biomass volume ($cm^3/1000m^3$ strained) and as the total volume minus the volume of larger organisms under the heading "Small." Tow times are given in local PST (+8) time.

FOOTNOTES

In addition to footnotes, special notations are used without footnotes because the meaning is always the same:

D: CTD salinity value listed in place of normal shipboard salinity analysis.
ISL: After a depth value indicates that this is an interpolated or extrapolated standard level.
U: Uncertain value. Values which are not used in interpolation because they seem to be in error without apparent reason.

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FIGURES

Cruise 0007

1. CalCOFI Cruise 0007, track and station positions.

2. Horizontal distribution of dynamic height anomaly (0 over 500m). In areas shallower than 500 m, the dynamic heights were extrapolated on the basis of the offshore deeper steric height as described in Reid and Mantyla (1976).

3. Horizontal distributions at 10 meters: A) chlorophyll-*a*; B) potential density; C) temperature; and D) salinity.

4. Horizontal distributions at 200 meters: A) dynamic height anomaly (200 over 500 m); B) potential density; C) temperature; and D) salinity.

5. Sections along CalCOFI line 90 (vertical exaggeration, 1000): A) potential density; B) temperature; C) salinity; D) silicate; E) nitrate; F) phosphate; G) chlorophyll-*a*; H) oxygen saturation; I) oxygen; J) nitrite; and K) phaeopigments.

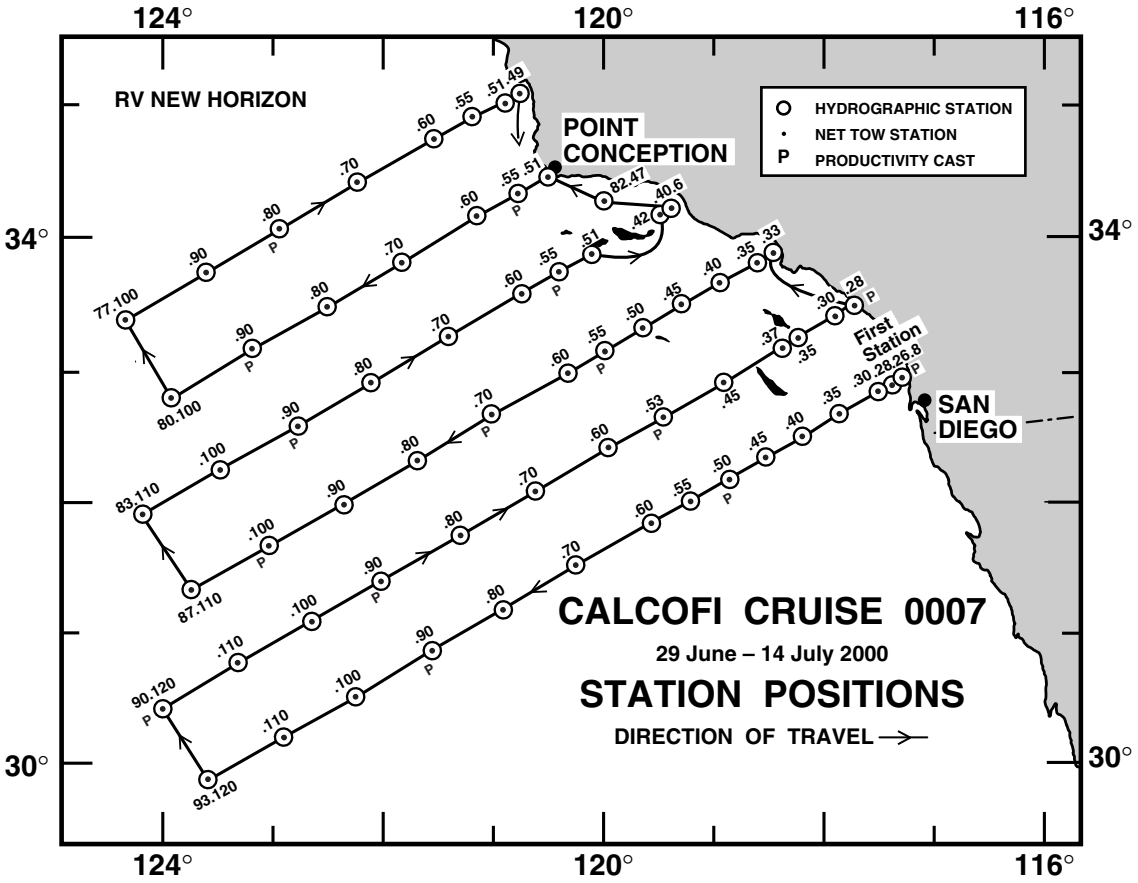


FIGURE 1

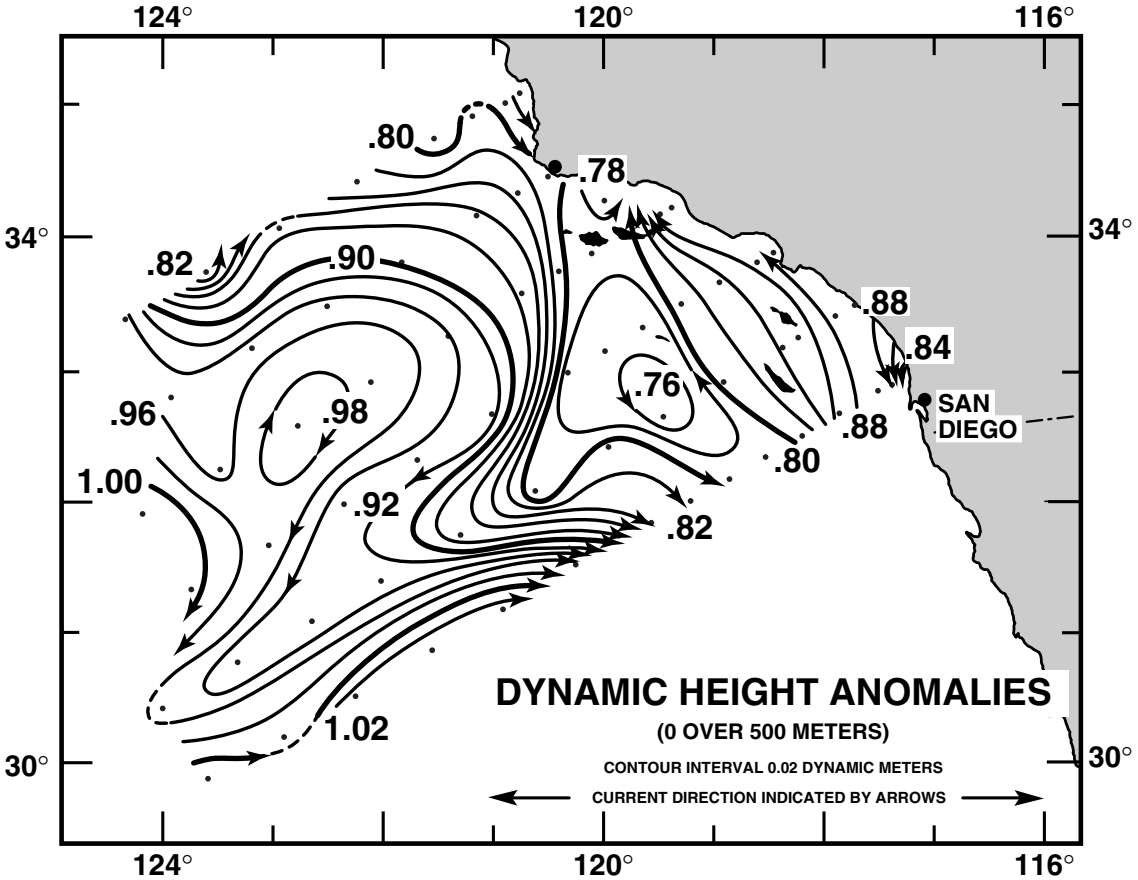


FIGURE 2

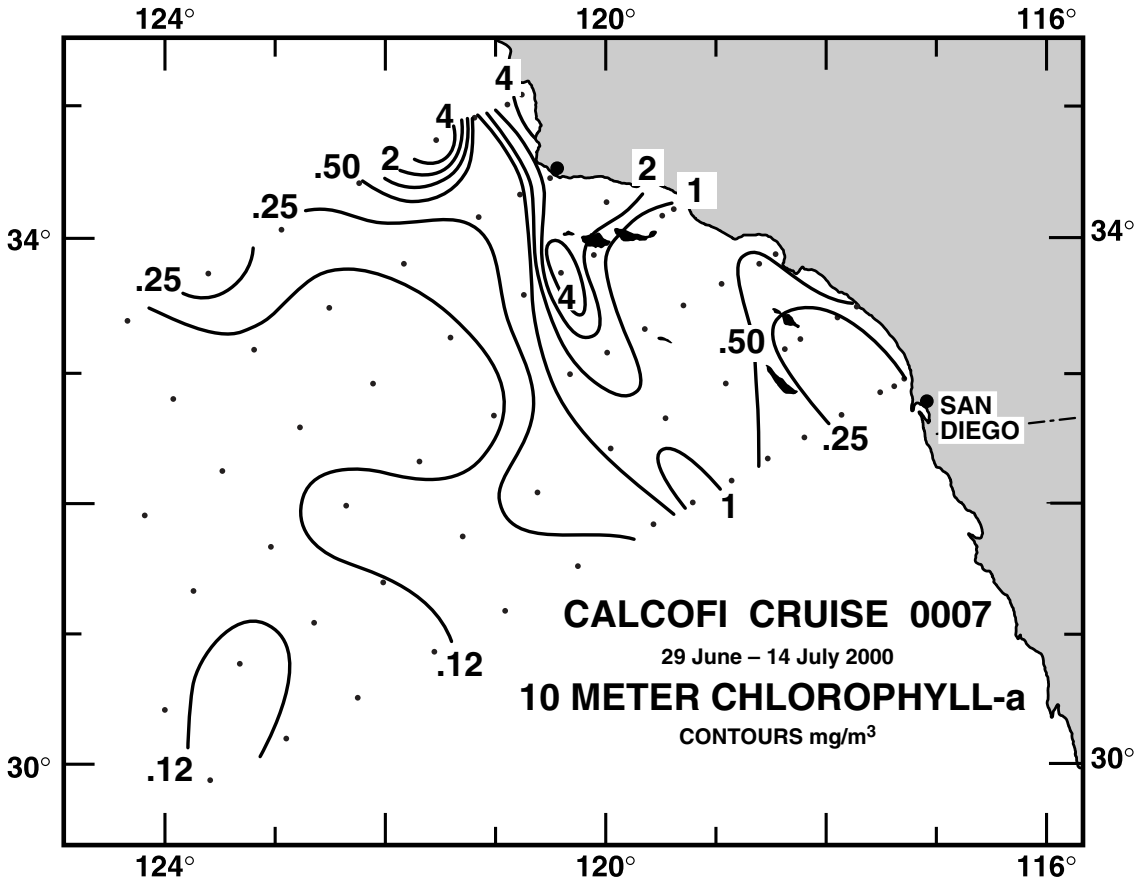


FIGURE 3A

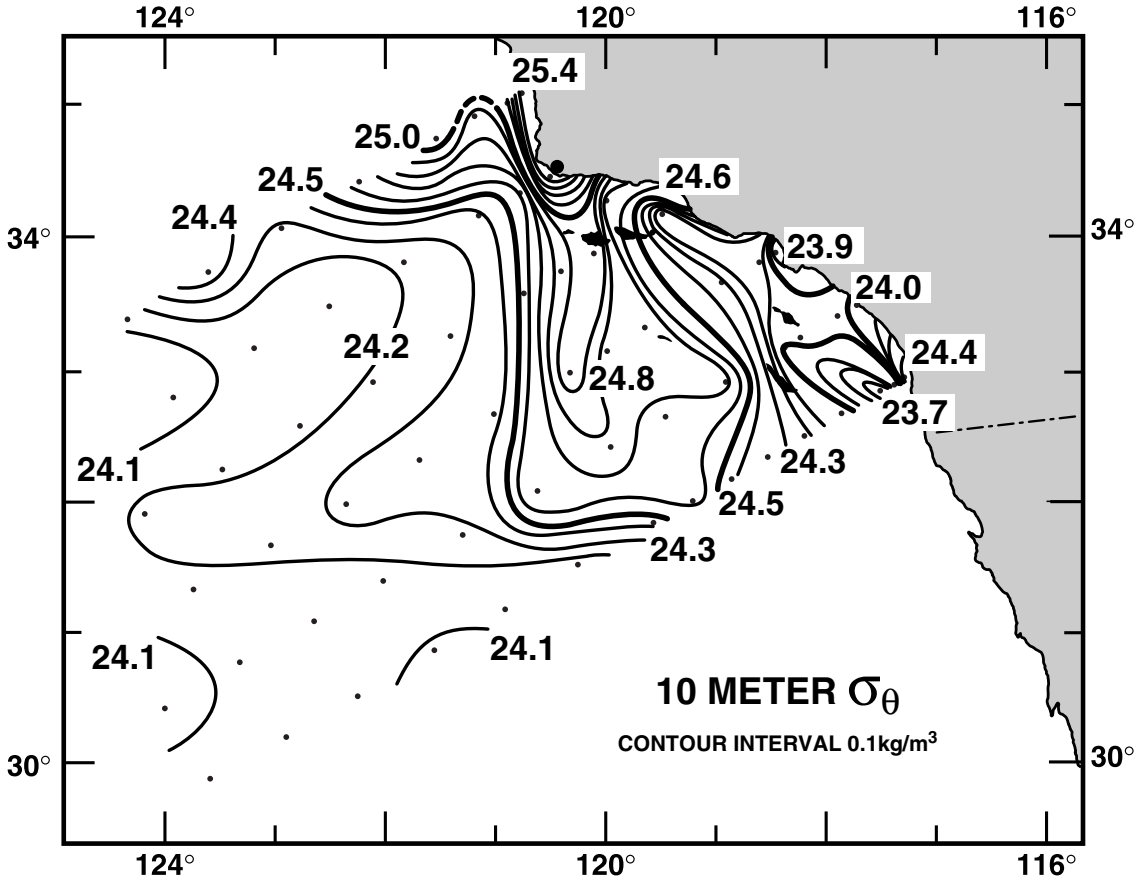


FIGURE 3B

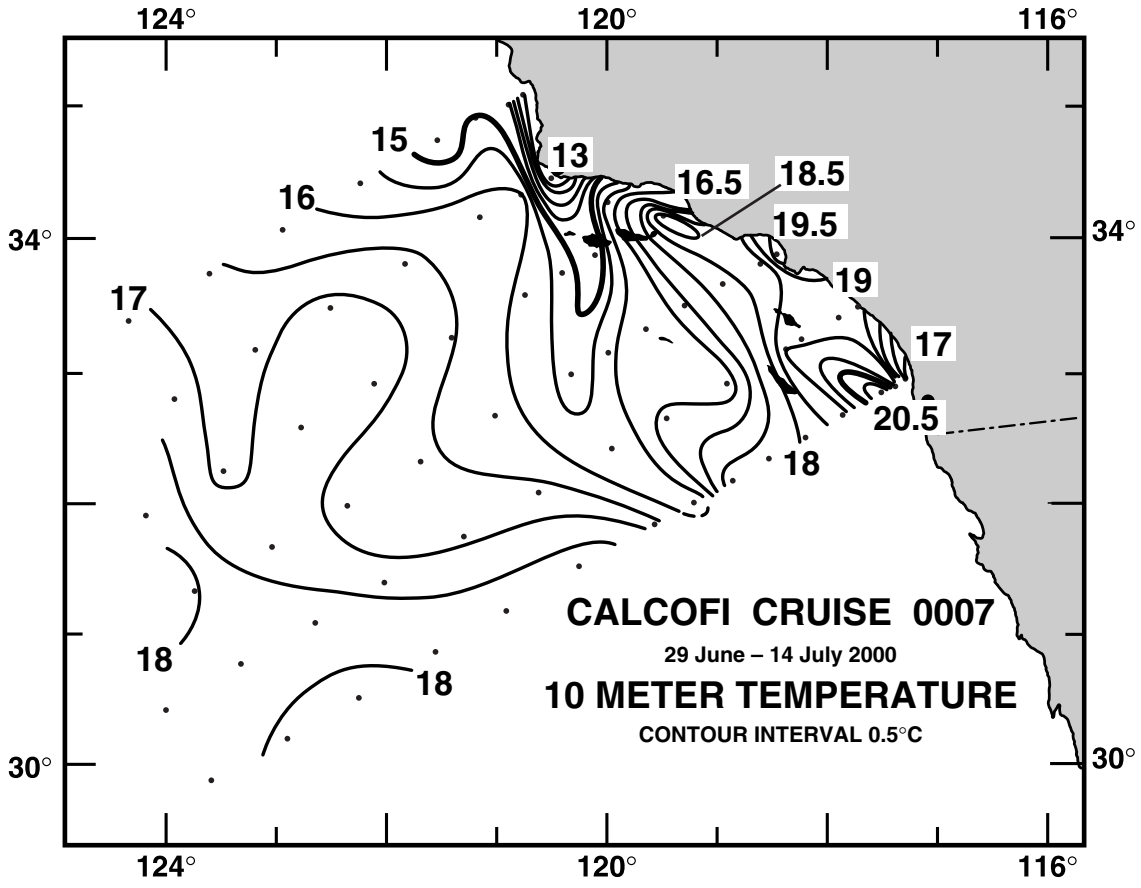


FIGURE 3C

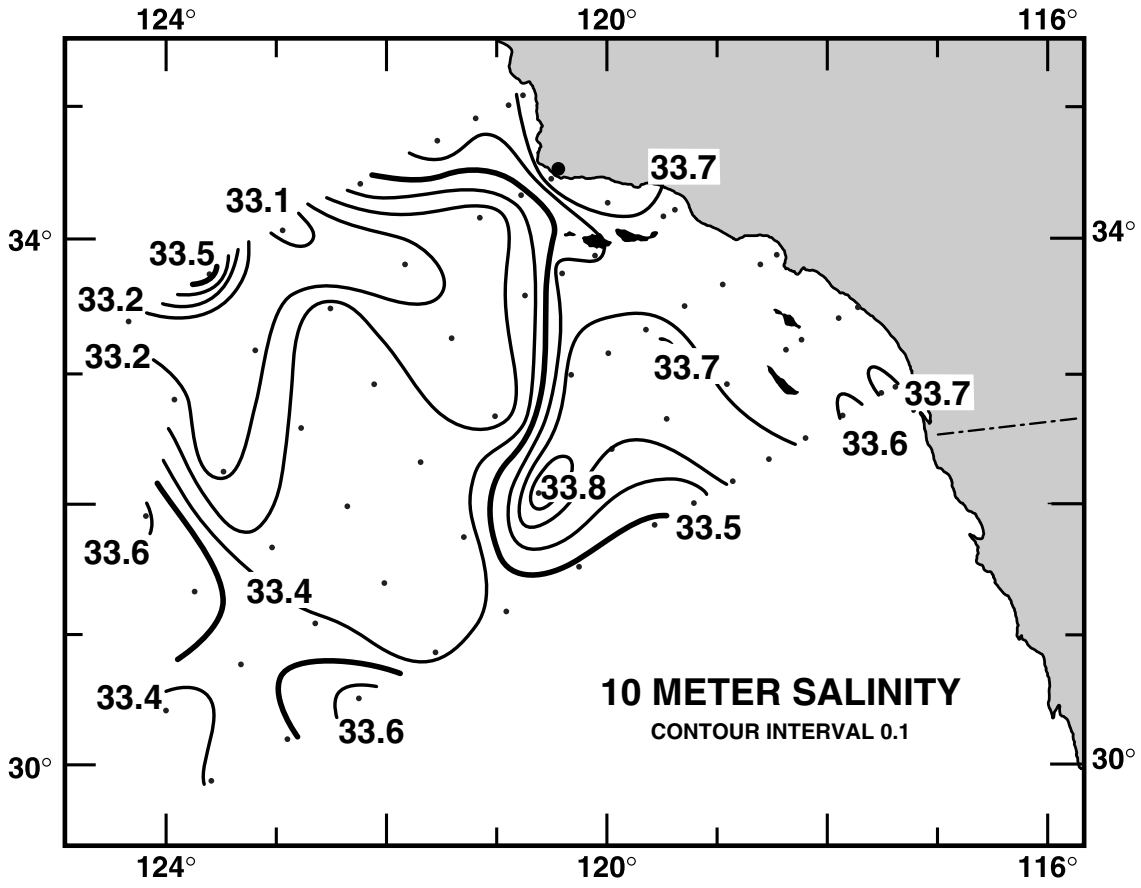


FIGURE 3D

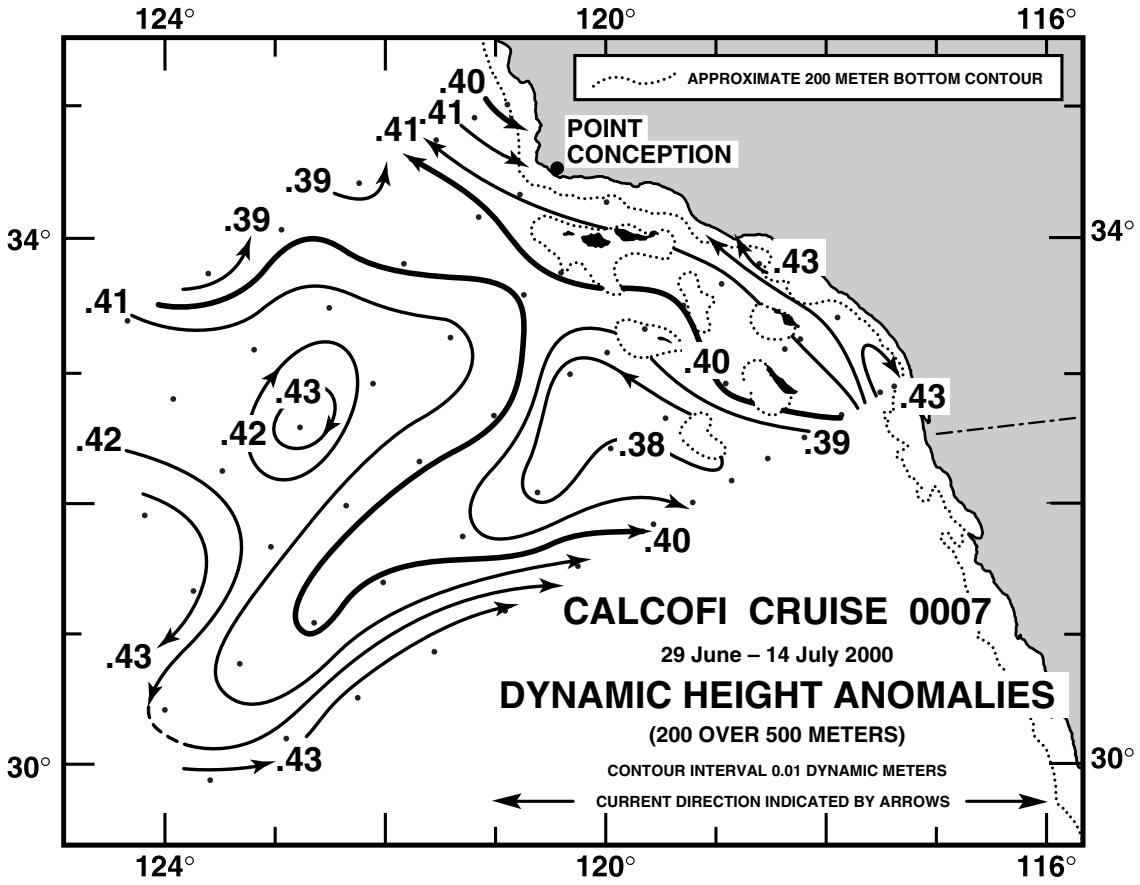


FIGURE 4A

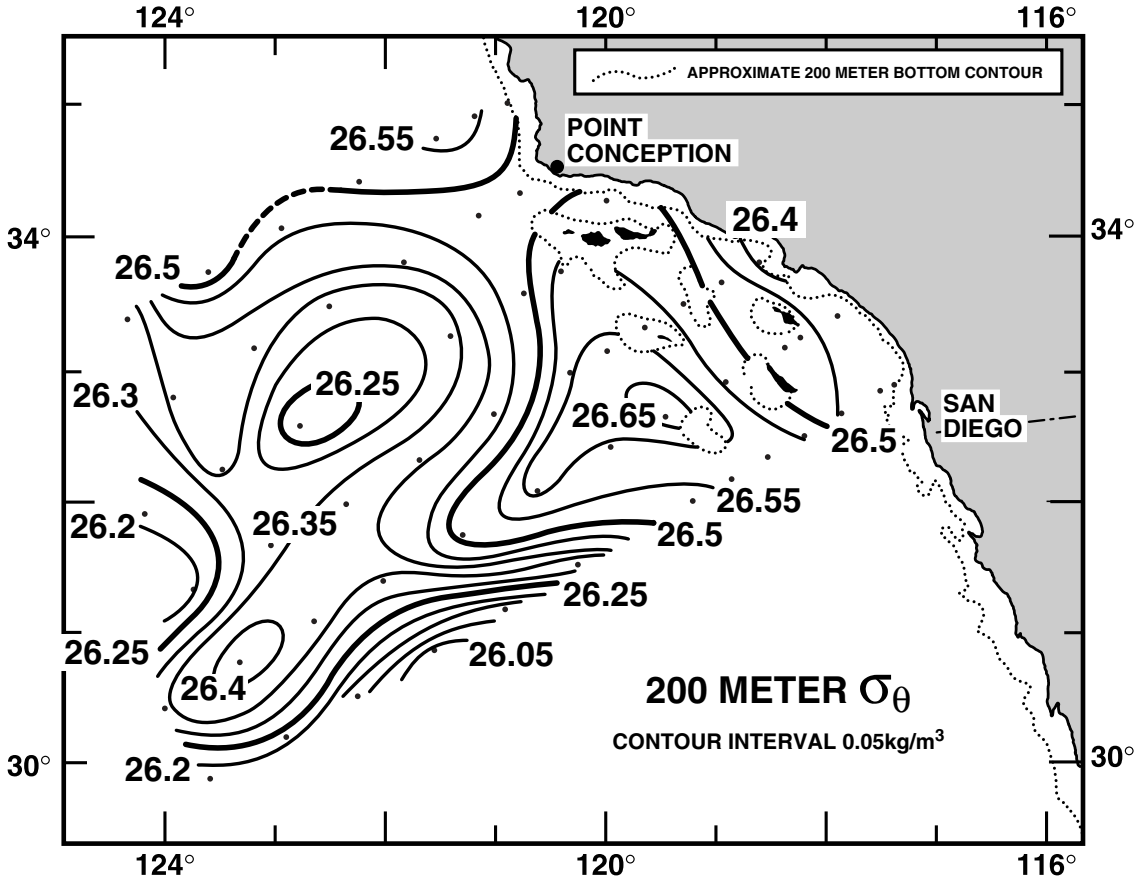


FIGURE 4B

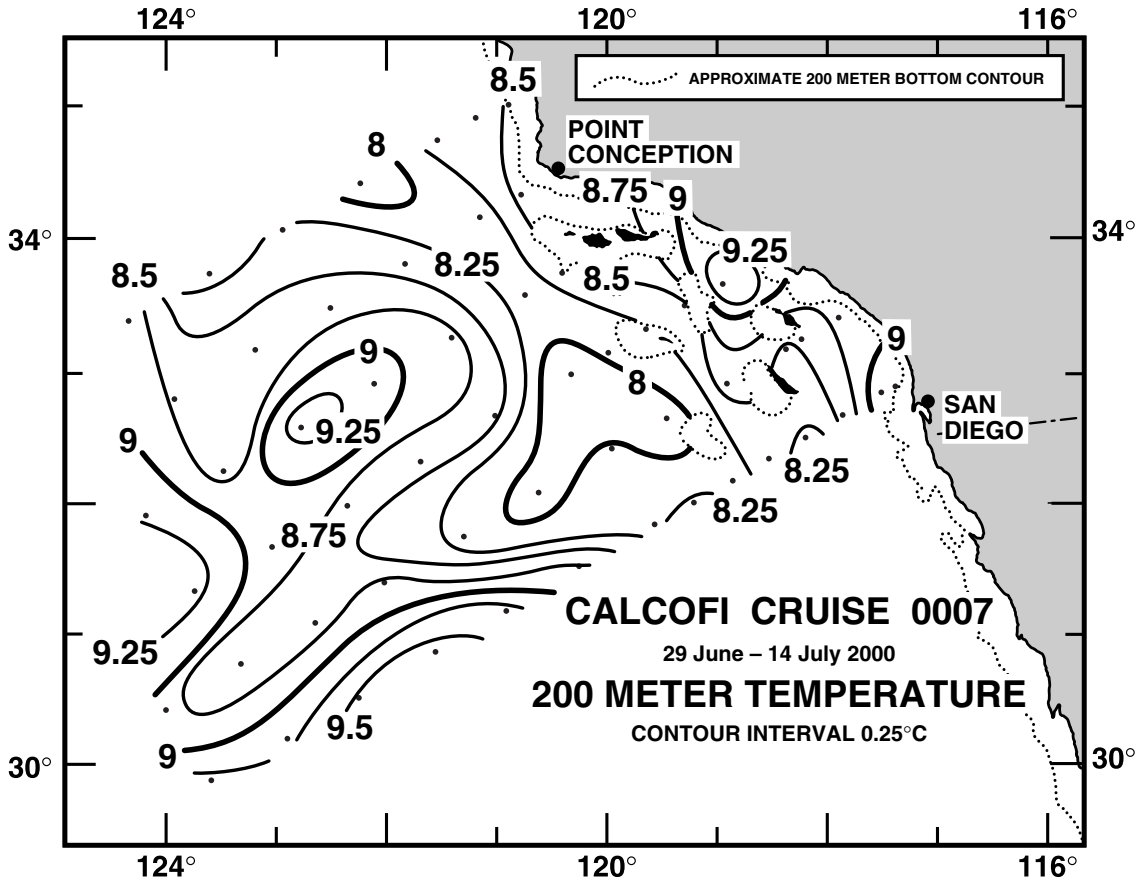


FIGURE 4C

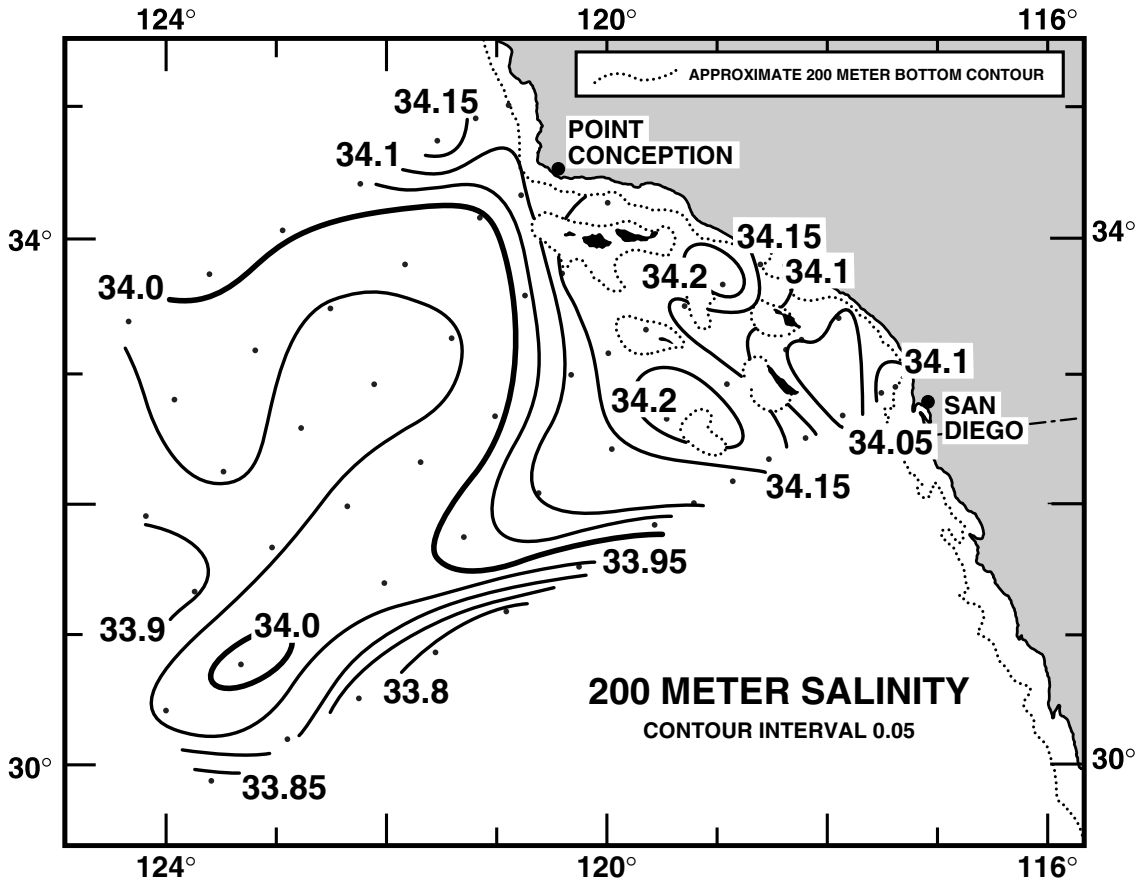


FIGURE 4D

CALCOFI CRUISE 0007

2 - 5 JULY 2000

POTENTIAL DENSITY (σ_θ) ALONG CALCOFI LINE 90

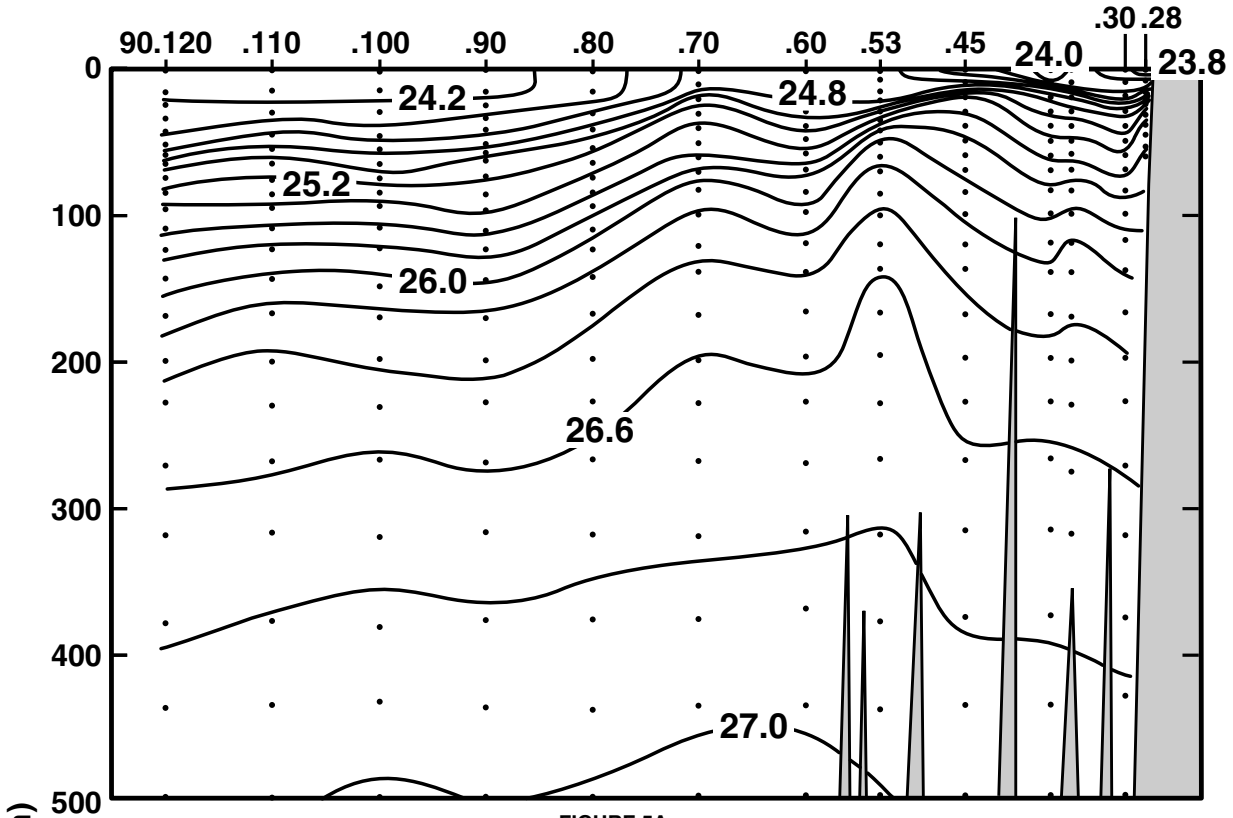


FIGURE 5A

TEMPERATURE (°C) ALONG CALCOFI LINE 90

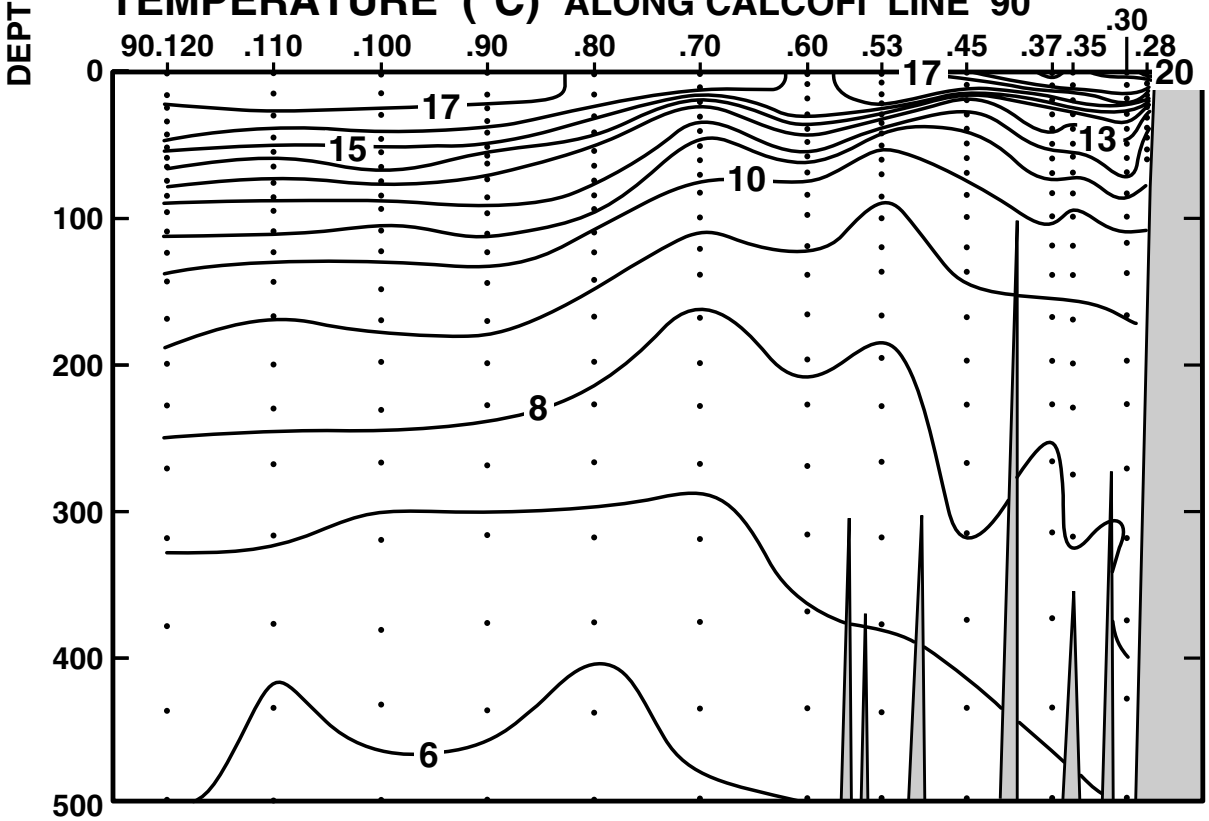


FIGURE 5B

CALCOFI CRUISE 0007

2 - 5 JULY 2000

SALINITY ALONG CALCOFI LINE 90

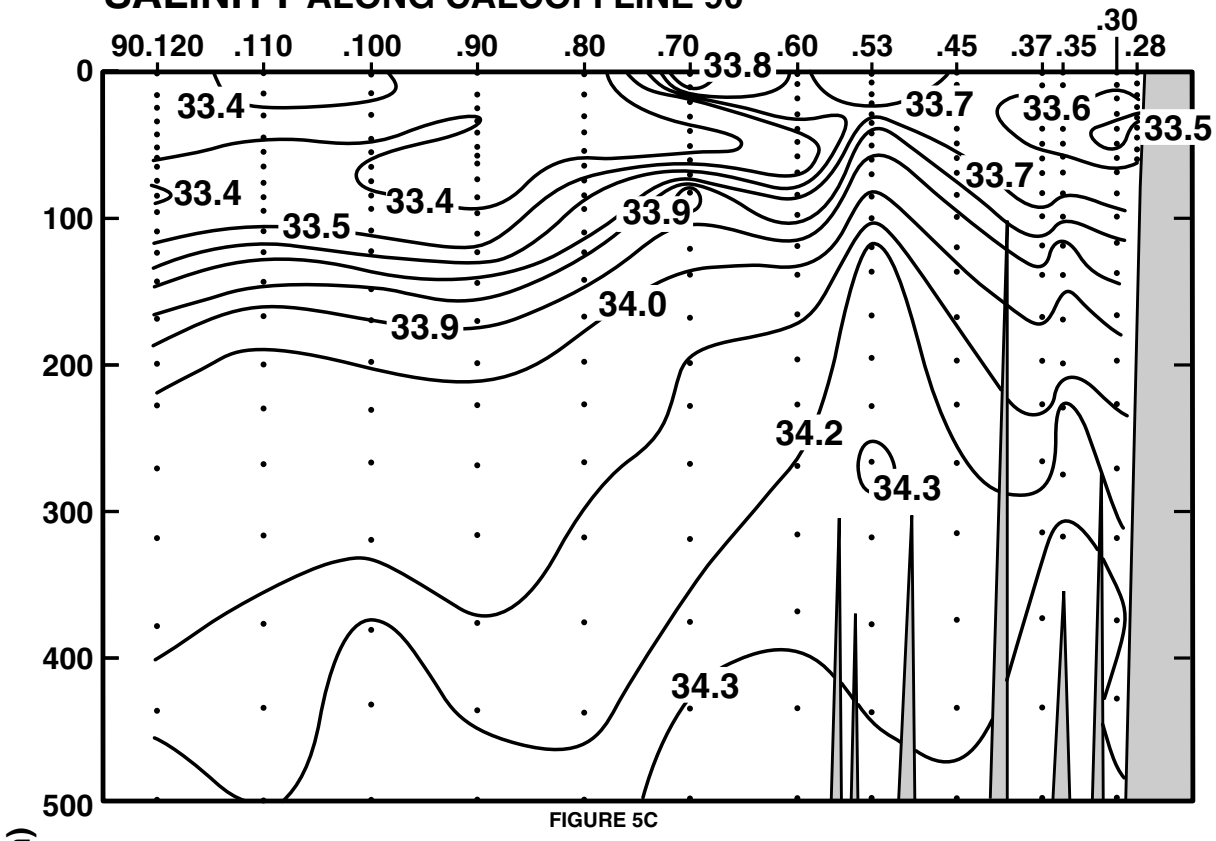


FIGURE 5C

SILICATE (μM/l) ALONG CALCOFI LINE 90

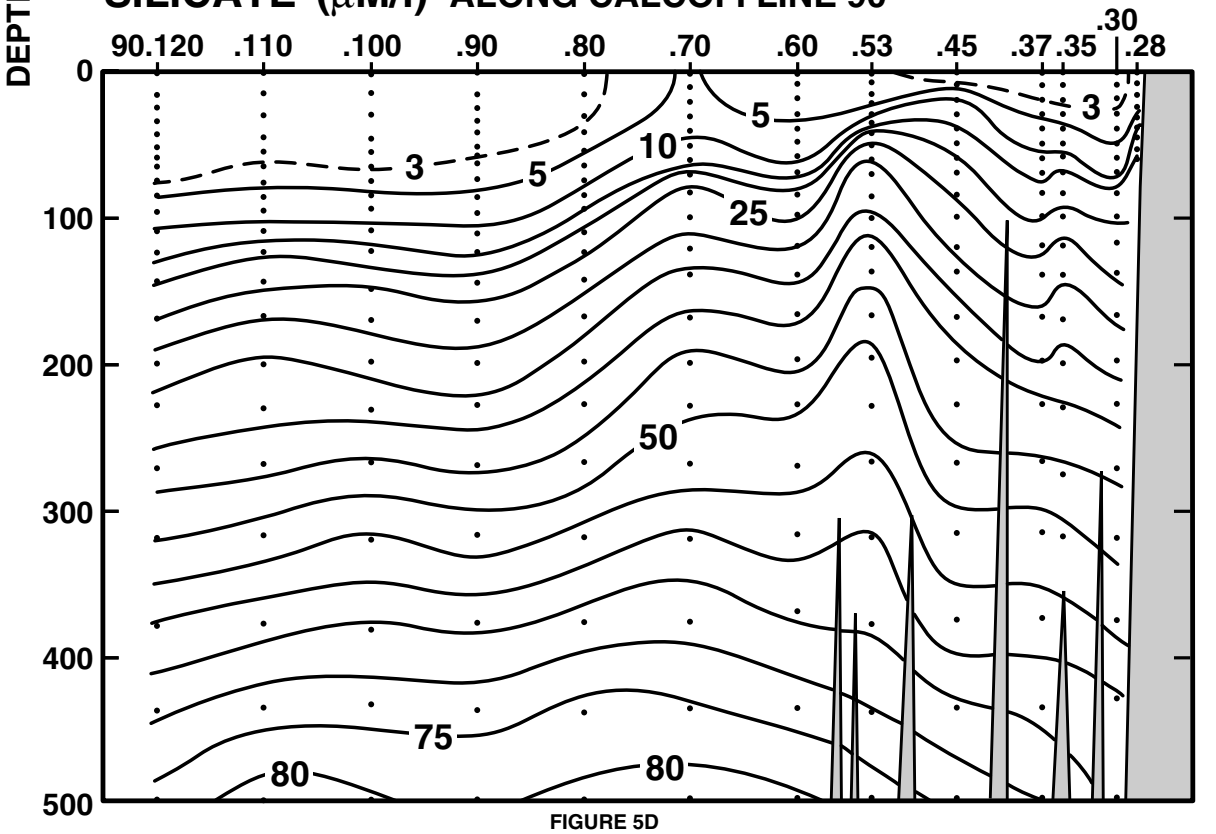


FIGURE 5D

CALCOFI CRUISE 0007

2 - 5 JULY 2000

NITRATE (μM/l) ALONG CALCOFI LINE 90

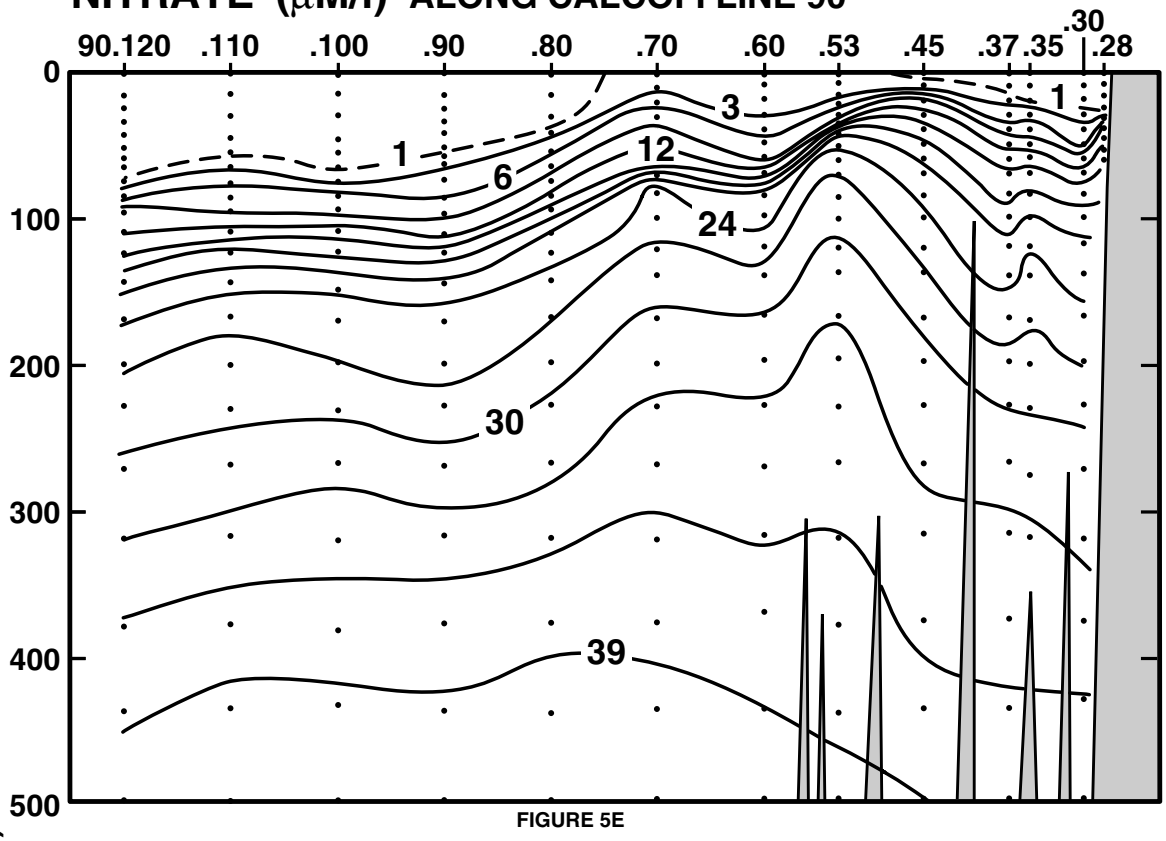


FIGURE 5E

PHOSPHATE (μM/l) ALONG CALCOFI LINE 90

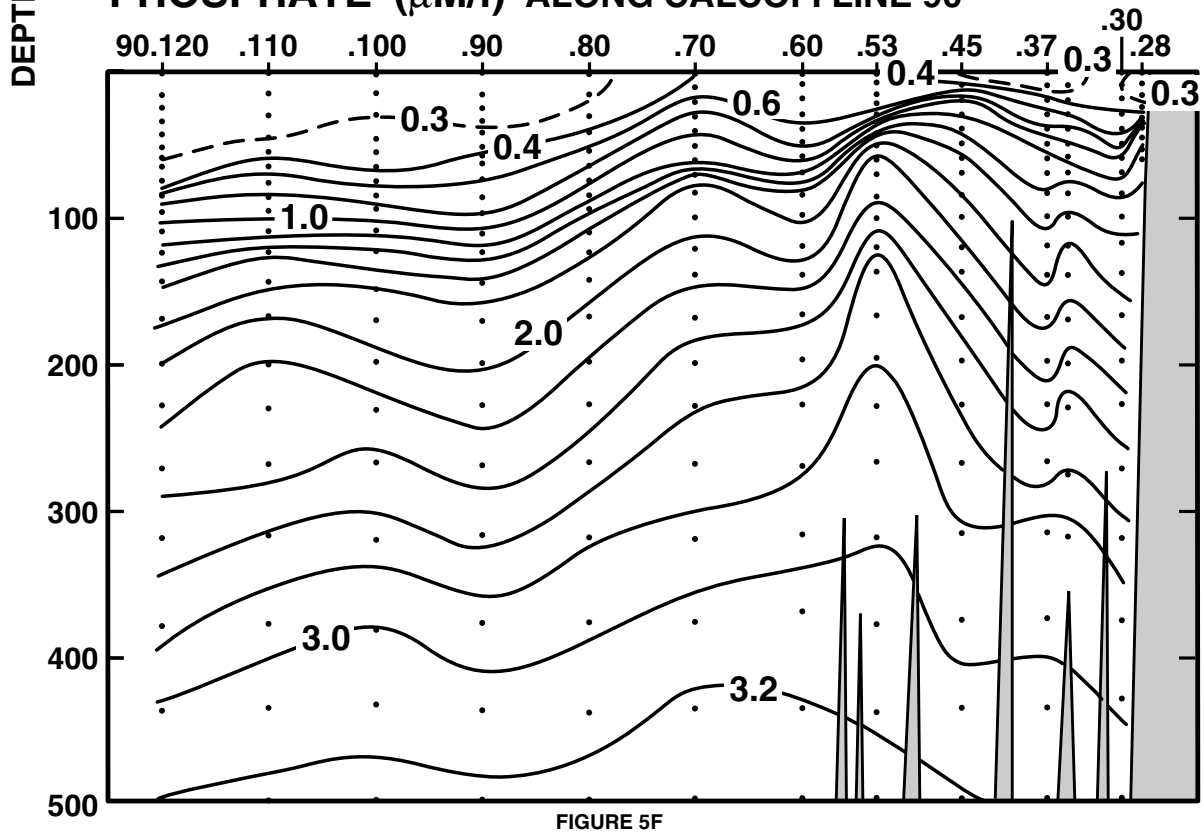


FIGURE 5F

CALCOFI CRUISE 0007

2 - 5 JULY 2000

CHLOROPHYLL-a (μg/l) ALONG CALCOFI LINE 90

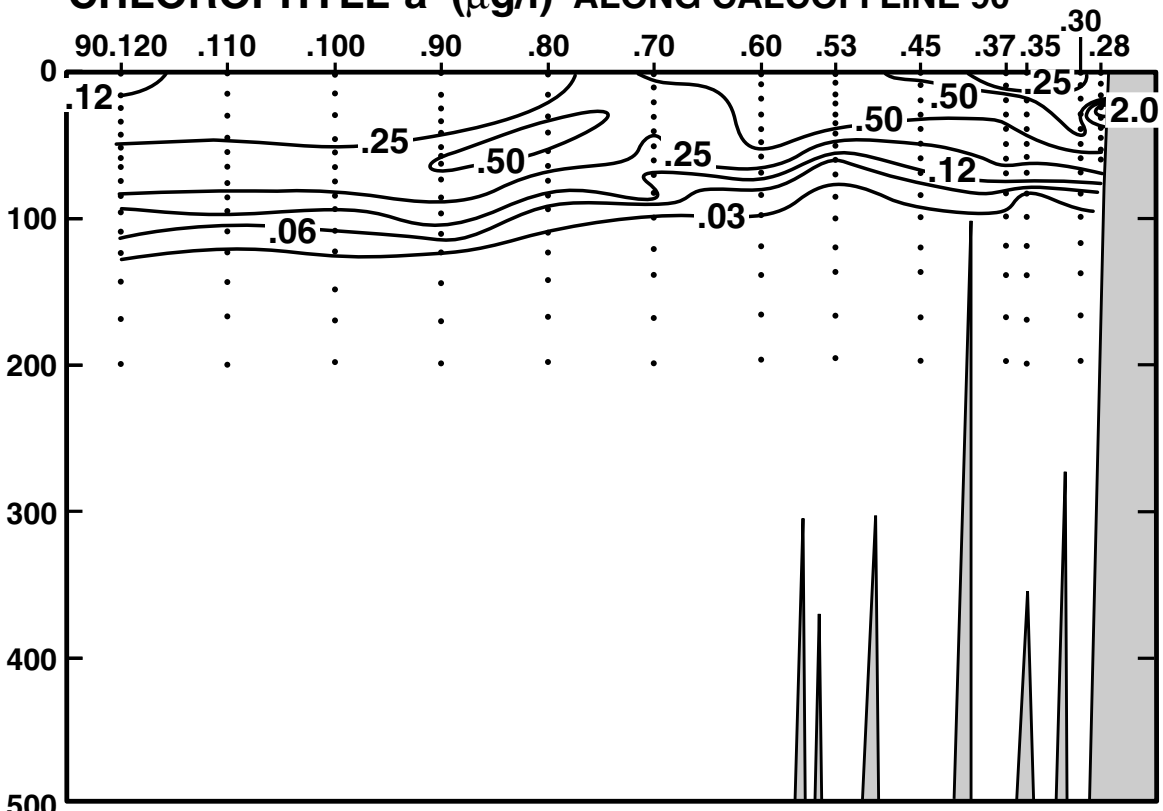


FIGURE 5G

OXYGEN SATURATION (%) ALONG CALCOFI LINE 90

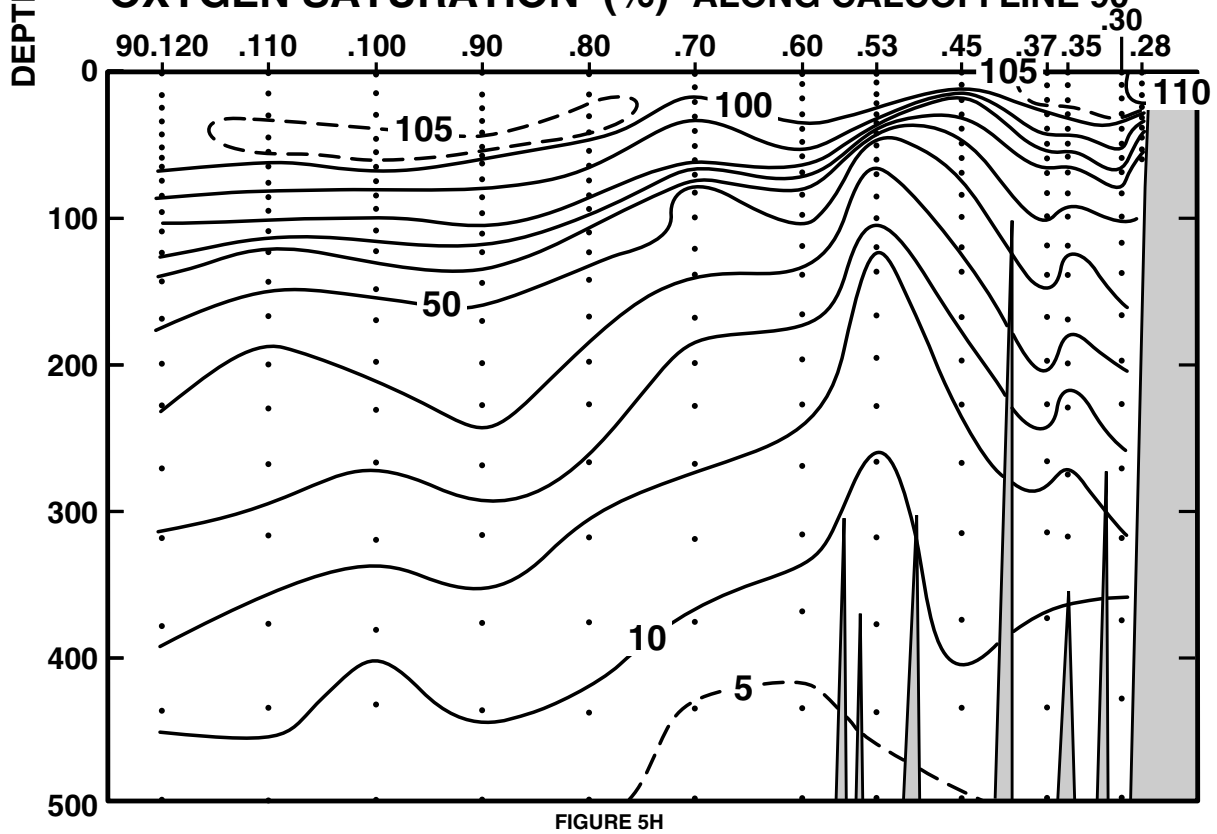


FIGURE 5H

CALCOFI CRUISE 0007

2 - 5 JULY 2000

OXYGEN (ml/l) ALONG CALCOFI LINE 90

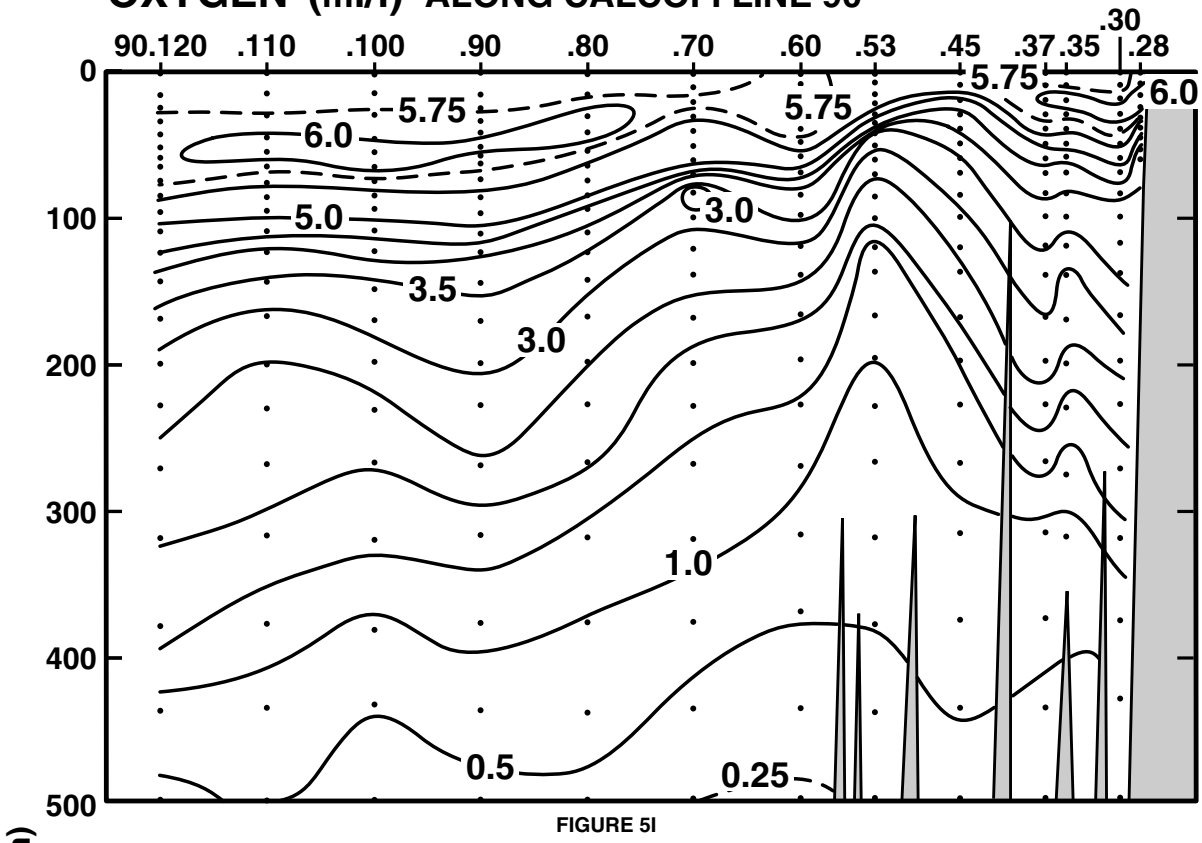


FIGURE 5I

DEPTH (m)

NITRITE (μM/l) ALONG CALCOFI LINE 90

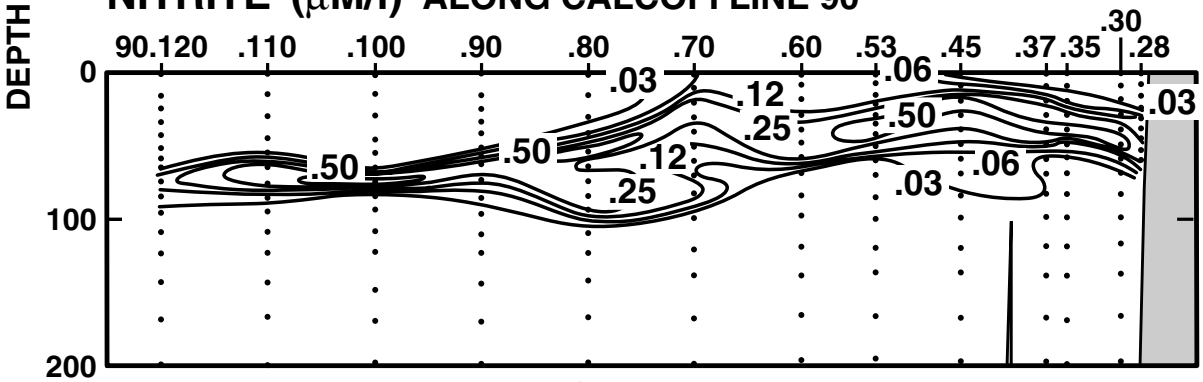


FIGURE 5J

PHAEOPIGMENTS (μg/l) ALONG CALCOFI LINE 90

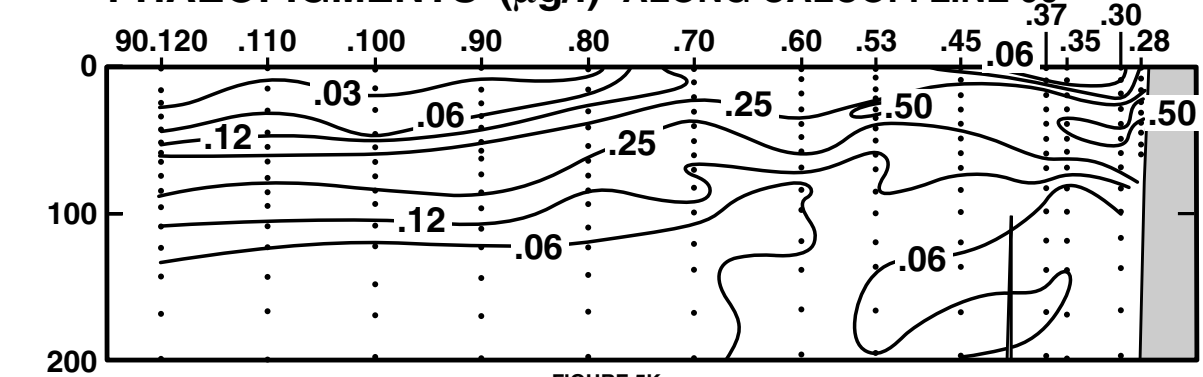


FIGURE 5K

PERSONNEL

CalCOFI Cruise 0007

SHIP'S CAPTAIN

John P. Manion, RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

		Participation (Leg)
Renger, Edward H. (Chief Scientist)	Staff Research Associate, SIO	1,2
Collier, Natalia S.	Seabird Biologist, Pt. Reyes Bird Observatory	1,2
Cummings, Sherry L.	Staff Research Associate, SIO	1,2
Dotson, Ronald C.	Fishery Biologist, NMFS	1,2
Hays, Amy E.	Fishery Biologist, NMFS	1,2
Masten, Douglas M.	Staff Research Associate, SIO	1,2
Mattson, Donna M.	Scientific Aid, NMFS	1,2
Michalski, Greg M.	Graduate Student, UCSD	1
Poteau, Antoine	Marine Technician, SIO	1,2
Ramirez, Fernando	Staff Research Associate, SIO	1,2
Slanina, Ray A.	Programmer/Analyst, SIO	1,2
Thimgan, Michael P.	Staff Research Associate, SIO	1,2
Wilkinson, James R.	Programmer/Analyst, SIO	1,2

Leg 1: San Diego to Dana Pt., California, 29 June - 5 July, 2000
Leg 2: Dana Pt. to San Diego, California, 5-14 July, 2000

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 49

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
35 5.5 N	120 46.9 W	13/07/00	1650 UTC	78 m	280 01 kn	300 01 08	0	1020.5 mb	18.5 C	14.7 C	09m	0/8

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	13.89	13.89	33.715	25.218	274.1	0.000	5.86	99.9	8.2	0.77	6.9	0.25	2.36	0.81	0	
1		13.89	13.89	33.715	25.218	274.1	0.003	5.86	99.9	8.2	0.77	6.9	0.25	2.36	0.81	1	208
6		13.38	13.38	33.711	25.319	264.6	0.016	6.02	101.6	5.9	0.63	6.0	0.24	6.67	1.44	6	207
10	ISL	12.95	12.95	33.715	25.408	256.2	0.027	5.62	94.0	7.1	0.75	7.8	0.27	7.28	1.42	10	
11		12.86	12.86	33.717	25.428	254.4	0.029	5.50	91.8	7.5	0.79	8.3	0.28	7.43	1.42	11	206
20	ISL	12.76	12.76	33.721	25.451	252.4	0.052	5.36	89.3	8.5	0.86	8.9	0.29	6.87	1.53	20	
21		12.75	12.75	33.722	25.453	252.2	0.055	5.34	88.9	8.5	0.86	9.0	0.29	6.81	1.54	21	205
30		12.62	12.62	33.730	25.485	249.4	0.077	5.11	84.9	9.5	0.97	9.9	0.32	5.73	1.47	30	204
40		11.83	11.82	33.759	25.659	233.1	0.101	4.21	68.8	15.2	1.35	14.6	0.36	1.92	1.02	40	203
50		11.30	11.29	33.793	25.783	221.5	0.124	3.54	57.2	22.1	1.68	18.1	0.38	1.24	1.07	50	202
61		10.97	10.96	33.805	25.852	215.2	0.148	3.19	51.2	24.6	1.82	19.5	0.36	0.68	0.83	61	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
35 1.5 N	120 55.4 W	13/07/00	1415 UTC	249 m	00 kn	340 02 08	0	1019.2 mb	14.8 C	13.1 C	10m	0/8

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.14	15.14	33.714	24.951	299.5	0.000	6.25	109.3	2.8	0.37	1.9	0.10	1.94	0.72	0	
1		15.14	15.14	33.714	24.951	299.5	0.003	6.25	109.3	2.8	0.37	1.9	0.10	1.94	0.72	1	215
10		14.54	14.54	33.679	25.054	290.0	0.030	6.50	112.3	2.2	0.34	1.7	0.11	3.13	1.28	10	214
20		13.45	13.45	33.716	25.309	265.9	0.057	5.75	97.2	5.1	0.72	4.7	0.19	0.34	0.60	20	213
30		12.18	12.18	33.658	25.514	246.6	0.083	4.39	72.2	14.0	1.21	12.9	0.46	0.69	0.54	30	212
40		11.17	11.17	33.679	25.718	227.5	0.107	3.86	62.1	17.4	1.45	17.1	0.29	0.54	0.47	40	211
50		10.74	10.73	33.678	25.794	220.4	0.129	3.70	59.0	18.7	1.52	18.4	0.08	0.27	0.28	50	210
60		10.42	10.41	33.732	25.892	211.3	0.151	3.49	55.3	20.8	1.64	20.3	0.06	0.17	0.38	60	209
70		10.18	10.17	33.827	26.007	200.6	0.171	2.88	45.4	25.6	1.86	23.1	0.19	0.15	0.28	70	208
75	ISL	9.97	9.96	33.868	26.075	194.2	0.181	2.74	43.0	27.3	1.93	24.2	0.15	0.11	0.22	75	
85		9.56	9.55	33.930	26.192	183.3	0.200	2.62	40.8	29.6	2.02	25.9	0.03	0.04	0.14	85	207
100		9.40	9.39	33.960	26.242	178.8	0.227	2.48	38.5	30.5	2.07	26.5	0.03	0.03	0.18	101	206
119		9.32	9.31	33.977	26.268	176.7	0.261	2.43	37.6	31.3	2.10	26.9	0.03	0.03	0.15	120	205
125	ISL	9.26	9.25	33.988	26.287	175.1	0.271	2.39	37.0	32.0	2.12	27.2	0.03	0.03	0.14	126	
139		9.10	9.08	34.019	26.337	170.5	0.296	2.25	34.7	33.9	2.19	28.0	0.03	0.03	0.13	140	204
150	ISL	8.96	8.94	34.050	26.383	166.3	0.314	2.10	32.3	35.7	2.26	28.8	0.02	0.02	0.12	151	
169		8.75	8.73	34.099	26.455	159.8	0.345	1.85	28.3	38.8	2.37	30.1	0.02	0.01	0.11	170	203
200		8.56	8.54	34.125	26.505	155.6	0.394	1.63	24.8	42.0	2.47	30.9	0.06	0.02	0.13	201	202
232		8.37	8.35	34.150	26.555	151.5	0.443	1.45	22.0	44.5	2.56	31.7	0.05			233	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 53.5 N	121 12.0 W	13/07/00	1032 UTC	568 m	240 04 kn			1019.1 mb	15.5 C	13.2 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.25	16.25	33.688	24.682	325.0	0.000	6.17	110.3	1.4	0.50	3.5	0.11	0.54	0.10	0	
2		16.25	16.25	33.688	24.683	325.1	0.007	6.17	110.3	1.4	0.50	3.5	0.11	0.54	0.10	2	220
10		15.17	15.17	33.609	24.864	308.0	0.032	6.12	107.0	4.0	0.61	4.0	0.12	0.44	0.19	10	219
20		15.00	15.00	33.658	24.939	301.2	0.062	6.06	105.7	3.4	0.59	4.0	0.14	0.44	0.20	20	218
30		14.38	14.38	33.678	25.088	287.3	0.092	5.97	102.8	3.6	0.66	5.3	0.20	0.59	0.23	30	217
40		13.56	13.55	33.673	25.254	271.7	0.120	5.73	97.0	5.3	0.75	7.0	0.35	0.91	0.23	40	216
50		12.06	12.05	33.693	25.564	242.4	0.145	4.82	79.1	12.0	1.23	13.1	0.62	0.31	0.18	50	215
60		11.53	11.52	33.747	25.705	229.2	0.169	4.00	64.9	16.4	1.48	17.0	0.55	0.17	0.14	60	214
69		10.82	10.81	33.807	25.880	212.7	0.189	3.42	54.7	21.1	1.71	21.0	0.32	0.10	0.13	69	213
75	ISL	10.39	10.38	33.841	25.982	203.1	0.201	3.15	49.9	23.9	1.83	23.0	0.18	0.07	0.13	75	
84		9.85	9.84	33.881	26.105	191.5	0.219	2.89	45.3	27.3	1.97	25.2	0.04	0.04	0.12	84	212
99		9.38	9.37	33.914	26.209	181.9	0.247	2.72	42.2	29.9	2.04	26.6	0.03	0.03	0.11	100	211
100	ISL	9.35	9.34	33.917	26.216	181.3	0.249	2.71	42.0	30.1	2.04	26.7	0.03	0.03	0.11	101	
119		8.91	8.90	33.973	26.330	170.7	0.282	2.53	38.8	33.0	2.12	27.8	0.07			120	210
125	ISL	8.80	8.79	33.992	26.363	167.7	0.292	2.48	38.0	33.9	2.15	28.1	0.07	0.02	0.10	126	
139		8.61	8.60	34.036	26.427	161.9	0.316	2.32	35.4	36.0	2.22	28.9	0.07	0.01	0.10	140	209
150	ISL	8.54	8.52	34.073	26.467	158.3	0.333	2.08	31.7	38.0	2.30	29.7	0.06	0.01	0.11	151	
167		8.47	8.45	34.121	26.516	153.9	0.360	1.71	26.0	40.9	2.43	30.9	0.05	0.01	0.12	168	208
198		8.31	8.29	34.144	26.558	150.4	0.407	1.56	23.6	44.0	2.53	31.5	0.13	0.01	0.13	199	207
200	ISL	8.30	8.28	34.147	26.562	150.1	0.410	1.54	23.3	44.2	2.54	31.6	0.12			201	
228		8.11	8.09	34.183	26.620	145.1	0.451	1.28	19.3	47.2	2.63	32.8	0.03			229	206
250	ISL	8.03	8.00	34.204	26.648	142.8	0.483	1.16	17.5	49.0	2.69	33.3	0.02			252	
267		7.98	7.95	34.217	26.666	141.4	0.507	1.09	16.4	50.2	2.73	33.6	0.01			269	205
300	ISL	7.83	7.80	34.233	26.701	138.6	0.553	0.96	14.4	52.6	2.80	34.2	0.01			302	
318		7.73	7.70	34.239	26.721	136.9	0.578	0.90	13.5	54.1	2.83	34.6	0.01			320	204
377		7.33	7.29	34.259	26.794	130.7	0.657	0.69	10.2	60.7	2.96	36.0	0.01			380	203
400	ISL	7.14	7.10	34.259	26.821	128.4	0.687	0.64	9.4	63.1	3.00	36.6	0.01			403	
441		6.81	6.77	34.255	26.864	124.7	0.739	0.57	8.3	67.2	3.05	37.6	0.01			444	202
500	ISL	6.41	6.36	34.261	26.922	119.7	0.811	0.48	7.0	73.0	3.12	39.1	0.01			504	
520		6.27	6.22	34.263	26.942	117.9	0.835	0.45	6.5	75.0	3.15	39.6	0.01			524	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 43.4 N	121 33.2 W	13/07/00	0614 UTC	925 m	240 02 kn			1019.1 mb	17.2 C	13.9 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.68	16.68	33.714	24.603	332.5	0.000	6.62	119.4	2.7	0.22	0.1	0.01	1.41	0.41	0	
2		16.68	16.68	33.714	24.603	332.6	0.007	6.62	119.4	2.7	0.22	0.1	0.01	1.41	0.41	2	220
10		14.63	14.63	33.676	25.032	292.0	0.032	6.20	107.3	2.4	0.37	2.6	0.09	6.00	0.80	10	219
20		12.18	12.18	33.630	25.492	248.5	0.059	4.64	76.3	11.7	1.14	11.5	0.28	0.41	0.27	20	218
30		11.52	11.52	33.656	25.636	235.0	0.083	4.54	73.6	13.6	1.31	14.5	0.42	0.24	0.18	30	217
41		10.90	10.90	33.748	25.820	217.8	0.108	3.60	57.6	18.8	1.59	18.8	0.26	0.16	0.14	41	216
50		10.61	10.60	33.772	25.890	211.3	0.127	3.30	52.5	21.0	1.70	20.9	0.18	0.15	0.14	50	215
60		10.08	10.07	33.834	26.030	198.2	0.148	2.97	46.7	24.5	1.85	23.3	0.05	0.12	0.17	60	214
70		9.76	9.75	33.893	26.130	188.9	0.167	2.74	42.8	27.2	1.95	24.9	0.03	0.12	0.15	70	213
75	ISL	9.65	9.64	33.911	26.162	185.9	0.176	2.67	41.6	28.1	1.98	25.4	0.03	0.11	0.14	75	
86		9.48	9.47	33.938 D	26.211	181.5	0.196									86	212
100		9.33	9.32	33.974	26.264	176.7	0.222	2.48	38.4	31.0	2.08	26.7	0.01	0.05	0.13	101	211
121		9.13	9.12	34.008	26.323	171.5	0.258	2.37	36.5	32.8	2.14	27.5	0.02	0.04	0.11	122	210
125	ISL	9.09	9.08	34.015	26.335	170.4	0.265	2.35	36.2	33.2	2.15	27.7	0.02	0.04	0.11	126	
139		8.95	8.94	34.041	26.378	166.6	0.289	2.25	34.6	34.7	2.20	28.3	0.01	0.03	0.12	140	209
150	ISL	8.82	8.80	34.069	26.420	162.8	0.307	2.09	32.0	36.5	2.27	29.1	0.01	0.03	0.13	151	
169		8.61	8.59	34.117	26.491	156.4	0.337	1.79	27.3	39.7	2.40	30.4	0.01	0.02	0.14	170	208
199		8.40	8.38	34.157	26.555	150.8	0.383	1.52	23.1	43.7	2.52	31.7	0.01	0.01	0.10	200	207
200	ISL	8.39	8.37	34.159	26.558	150.5	0.385	1.51	22.9	43.8	2.52	31.7	0.01			201	
228		8.24	8.22	34.202	26.615	145.6	0.426	1.27	19.2	46.4	2.63	32.5	0.01			229	206
250	ISL	8.15	8.12	34.226	26.648	142.9	0.458	1.13	17.1	48.2	2.69	33.0	0.01			252	
268		8.09	8.06	34.240	26.668	141.3	0.483	1.04	15.7	49.5	2.73	33.3	0.01			270	205
300	ISL	8.02	7.99	34.261	26.695	139.2	0.528	0.92	13.9	51.0	2.78	33.7	0.01			302	
319		7.98	7.95	34.269	26.708	138.4	0.555	0.87	13.1	51.7	2.80	33.9	0.01			321	204
377		7.83	7.79	34.274	26.735	136.8	0.634	0.78	11.7	54.1	2.85	34.5	0.01			380	203
400	ISL	7.75	7.71	34.275	26.747	135.9	0.666	0.75	11.2	55.1	2.87	34.8	0.01			403	
438		7.59	7.55	34.275	26.771	134.2	0.717	0.69	10.3	57.1	2.91	35.4	0.01			441	202
500	ISL	7.17	7.12	34.271	26.828	129.4	0.799	0.59	8.7	62.4	3.00	36.8	0.01			504	
518		7.05	7.00	34.271	26.845	128.0	0.822	0.56	8.2	64.0	3.02	37.2	0.01			522	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 23.4 N	122 15.0 W	13/07/00	0009 UTC	4027 m	160 04 kn	320 03 08	2	1018.6 mb	19.6 C	16.0 C	18m	8/8 ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.43	16.43	33.456	24.463	345.9	0.000	5.93	106.3	3.2	0.35	0.5	0.03	0.39	0.08	0	
2		16.43	16.43	33.456	24.463	346.0	0.007	5.93	106.3	3.2	0.35	0.5	0.03	0.39	0.08	2	220
9		15.86	15.86	33.453	24.591	334.0	0.031	6.01	106.5	3.3	0.36	0.7	0.03	0.33	0.08	9	219
10	ISL	15.79	15.79	33.451	24.605	332.7	0.034	6.01	106.3	3.3	0.37	0.8	0.03	0.34	0.09	10	
19		15.34	15.34	33.469	24.719	322.1	0.064	6.03	105.7	3.8	0.43	1.6	0.06	0.39	0.13	19	218
20	ISL	15.32	15.32	33.481	24.733	320.9	0.067	6.03	105.7	3.8	0.43	1.7	0.06	0.61	0.17	20	
30		15.17	15.17	33.624	24.876	307.5	0.098	6.04	105.6	4.0	0.50	3.1	0.09	2.36	0.51	30	217
40		13.94	13.93	33.530	25.066	289.7	0.128	5.85	99.7	5.9	0.64	4.2	0.15	0.67	0.48	40	216
50		12.10	12.09	33.544	25.441	254.1	0.155	5.53	90.7	9.3	1.04	9.9	0.43	0.31	0.26	50	215
60		10.74	10.73	33.580	25.718	227.9	0.179	4.58	73.0	15.1	1.42	17.0	0.18	0.19	0.15	60	214
70		10.70	10.69	33.673	25.797	220.6	0.202	4.40	70.1	17.2	1.54	18.9	0.04	0.13	0.10	70	213
75	ISL	10.45	10.44	33.700	25.862	214.5	0.213	4.13	65.5	19.3	1.63	20.3	0.03	0.10	0.11	75	
85		9.86	9.85	33.738	25.992	202.3	0.233	3.57	55.9	23.5	1.81	23.1	0.01	0.05	0.12	85	212
100		9.48	9.47	33.788	26.094	192.8	0.263	3.21	49.8	26.4	1.90	24.8	0.01	0.03	0.11	101	211
120		9.21	9.20	33.913	26.236	179.8	0.300	2.49	38.4	31.4	2.12	27.9	0.01	0.02	0.14	121	210
125	ISL	9.10	9.09	33.922	26.261	177.5	0.309	2.56	39.4	31.5	2.10	27.8	0.01	0.02	0.13	126	
140		8.77	8.76	33.933	26.321	171.9	0.335	2.93	44.8	31.6	2.01	27.0	0.01	0.01	0.08	141	209
150	ISL	8.61	8.59	33.950	26.360	168.4	0.352	2.95	44.9	32.2	2.01	27.2	0.01	0.01	0.08	151	
168		8.35	8.33	33.979	26.422	162.7	0.382	2.99	45.3	34.1	2.01	27.6	0.01	0.01	0.08	169	208
199		7.89	7.87	34.001	26.509	155.0	0.432	2.74	41.1	38.9	2.15	29.5	0.01	0.00	0.06	200	207
200	ISL	7.88	7.86	34.002	26.511	154.7	0.433	2.72	40.8	39.1	2.16	29.6	0.01			201	
228		7.48	7.46	34.019	26.582	148.3	0.476	2.26	33.6	44.7	2.36	32.1	0.01			229	206
250	ISL	7.23	7.21	34.036	26.631	143.9	0.508	2.03	30.0	48.4	2.46	33.3	0.01			252	
268		7.04	7.01	34.049	26.668	140.6	0.533	1.88	27.6	51.1	2.52	34.0	0.01			270	205
300	ISL	6.71	6.68	34.054	26.717	136.3	0.578	1.58	23.1	55.4	2.62	35.3	0.01			302	
317		6.55	6.52	34.057	26.740	134.2	0.601	1.43	20.8	57.6	2.67	35.9	0.01			319	204
377		6.15	6.12	34.108	26.833	126.0	0.679	1.06	15.3	66.9	2.89	38.5	0.01			379	203
400	ISL	5.95	5.92	34.127	26.874	122.3	0.707	0.91	13.0	71.1	2.96	39.4	0.01			403	
435		5.65	5.61	34.156	26.934	116.8	0.749	0.70	10.0	77.4	3.05	40.7	0.01			438	202
500	ISL	5.29	5.25	34.213	27.023	108.9	0.822	0.44	6.2	86.5	3.18	42.1	0.00			504	
517		5.19	5.15	34.228	27.046	106.7	0.841	0.37	5.2	88.9	3.22	42.5	0.00			521	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 3.9 N	122 56.2 W	12/07/00	1724	UTC	4231 m	330	03 kn	330 03 08	2	1018.3 mb	17.5 C	14.3 C	31m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.29	16.29	33.103	24.224	368.7	0.000	5.76	102.7	3.2	0.32	0.1	0.00	0.14	0.03	0	
2	A	16.29	16.29	33.103	24.224	368.8	0.007	5.76	102.7	3.2	0.32	0.1	0.00	0.14	0.03	2	222
10		16.13	16.13	33.090	24.251	366.5	0.037	5.77	102.5	3.1	0.32	0.1	0.00	0.14	0.04	10	221
20	ISL	15.66	15.66	33.117	24.377	354.7	0.073	5.88	103.5	3.0	0.31	0.1	0.00	0.20	0.06	20	
21	A	15.58	15.58	33.121	24.398	352.7	0.076	5.90	103.7	3.0	0.31	0.1	0.00	0.21	0.06	21	220
30	ISL	14.25	14.25	33.162	24.717	322.6	0.107	6.19	106.0	3.4	0.33	0.1	0.01	0.29	0.11	30	
32		13.92	13.92	33.172	24.793	315.4	0.113	6.25	106.3	3.5	0.34	0.1	0.01	0.31	0.12	32	219
42	A	12.76	12.75	33.170	25.024	293.6	0.144	6.28	104.2	3.9	0.38	0.4	0.03	0.36	0.16	42	218
50	ISL	11.90	11.89	33.141	25.166	280.2	0.167	6.12	99.7	4.7	0.50	2.0	0.12	0.47	0.20	50	
53		11.64	11.63	33.137	25.211	276.0	0.175	6.03	97.7	5.1	0.56	2.8	0.16	0.50	0.21	53	217
64	A	11.37	11.36	33.224	25.328	265.1	0.205	5.73	92.4	7.2	0.79	6.4	0.31	0.37	0.17	64	216
72		11.06	11.05	33.328	25.465	252.2	0.225	5.52	88.4	8.9	0.97	9.6	0.21	0.25	0.13	72	215
75	ISL	10.56	10.55	33.291	25.524	246.6	0.233	5.55	87.9	9.1	0.96	9.6	0.15	0.23	0.13	75	
80	A	9.75	9.74	33.240	25.621	237.3	0.245	5.57	86.7	9.5	0.94	9.5	0.06	0.20	0.12	80	214
94		10.33	10.32	33.591	25.798	221.0	0.277	4.71	74.4	15.7	1.41	16.8	0.19	0.05	0.08	94	213
100	ISL	10.07	10.06	33.601	25.850	216.1	0.290	4.41	69.3	17.7	1.51	18.5	0.16	0.04	0.07	100	
108		9.62	9.61	33.592 D	25.918	209.7	0.307									109	212
119	A	9.47	9.46	33.722	26.044	197.9	0.330	3.72	57.7	22.5	1.66	21.5	0.02	0.02	0.04	120	211
125	ISL	9.37	9.36	33.764	26.094	193.4	0.341	3.62	56.0	23.7	1.70	22.3	0.01	0.01	0.04	126	
131		9.26	9.25	33.798	26.138	189.3	0.353	3.50	54.1	25.1	1.76	23.2	0.01	0.01	0.04	132	210
141		9.02	9.00	33.869	26.232	180.5	0.371	3.11	47.8	29.2	1.94	25.9	0.01	0.00	0.03	142	209
150	ISL	8.89	8.87	33.912	26.286	175.5	0.387	3.02	46.3	31.0	1.98	26.4	0.01	0.00	0.03	151	
170		8.67	8.65	33.968	26.365	168.3	0.422	2.81	42.9	32.8	2.06	27.5	0.01	0.00	0.02	171	208
199		8.29	8.27	34.000	26.448	160.8	0.469	2.66	40.2	36.3	2.15	28.9	0.01	0.00	0.04	200	207
200	ISL	8.28	8.26	34.001	26.451	160.6	0.471	2.65	40.1	36.4	2.15	29.0	0.01			201	
231		7.93	7.91	34.034	26.529	153.6	0.520	2.30	34.5	41.0	2.29	30.7	0.01			232	206
250	ISL	7.67	7.65	34.039	26.571	149.8	0.549	2.16	32.2	43.8	2.36	31.7	0.01			251	
270		7.39	7.36	34.038	26.611	146.3	0.578	2.04	30.2	46.9	2.44	32.8	0.01			272	205
300	ISL	6.96	6.93	34.038	26.671	140.8	0.621	1.86	27.3	51.7	2.55	34.3	0.01			302	
319		6.70	6.67	34.041	26.708	137.4	0.648	1.74	25.4	54.9	2.62	35.3	0.01			321	204
378		6.10	6.07	34.074	26.813	127.9	0.726	1.21	17.4	65.9	2.86	38.4	0.01			380	203
400	ISL	5.87	5.84	34.088	26.853	124.2	0.754	1.09	15.6	70.3	2.93	39.4	0.01			403	
437		5.53	5.49	34.116	26.917	118.3	0.798	0.93	13.2	77.4	3.03	40.7	0.01			440	202
500	ISL	5.21	5.17	34.172	26.999	110.9	0.871	0.57	8.0	86.1	3.16	42.1	0.01			503	
512		5.15	5.11	34.183	27.015	109.5	0.884	0.50	7.0	87.8	3.18	42.4	0.01			516	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 43.4 N	123 38.2 W	12/07/00	1118	UTC	4201 m	310	08 kn			1017.0 mb	16.0 C	14.5 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.59	16.59	33.495	24.456	346.6	0.000	5.82	104.6	3.0	0.44	1.5	0.04	0.40	0.09	0	
1		16.59	16.59	33.495	24.456	346.6	0.003	5.82	104.6	3.0	0.44	1.5	0.04	0.40	0.09	1	220
9		16.59	16.59	33.499	24.459	346.5	0.031	5.86	105.4	2.9	0.44	1.5	0.04	0.32	0.07	9	219
10	ISL	16.56	16.56	33.509	24.474	345.2	0.035	5.87	105.5	3.0	0.45	1.6	0.04	0.32	0.07	10	
20		15.90	15.90	33.610	24.703	323.7	0.068	5.99	106.3	4.2	0.58	3.4	0.08	0.36	0.10	20	218
30		14.48	14.48	33.627	25.027	293.1	0.099	6.04	104.2	5.6	0.70	4.9	0.09	0.33	0.11	30	217
40		12.77	12.76	33.678	25.416	256.3	0.126	5.99	99.8	9.1	0.95	9.2	0.27	0.52	0.28	40	216
50		11.33	11.32	33.668	25.680	231.3	0.151	5.10	82.4	13.6	1.30	14.0	0.89	0.51	0.33	50	215
60		10.21	10.20	33.596	25.822	217.9	0.173	4.46	70.3	17.4	1.49	18.2	0.09	0.24	0.18	60	214
69		9.70	9.69	33.612	25.920	208.8	0.192	4.20	65.4	20.4	1.59	20.0	0.03	0.14	0.14	69	213
75	ISL	9.75	9.74	33.705	25.984	202.8	0.205	3.81	59.5	23.0	1.73	22.1	0.02	0.09	0.12	75	
84		9.83	9.82	33.829	26.068	195.0	0.223	3.21	50.2	26.6	1.94	25.1	0.01	0.05	0.11	84	212
99		9.47	9.46	33.865	26.156	186.9	0.251	2.87	44.6	28.9	2.03	26.5	0.01	0.02	0.09	100	211
100	ISL	9.45	9.44	33.870	26.163	186.3	0.253	2.84	44.1	29.2	2.04	26.6	0.01	0.02	0.09	101	
119		9.13	9.12	33.957	26.283	175.2	0.288	2.37	36.5	33.7	2.22	29.1	0.01	0.01	0.11	120	210
125	ISL	9.03	9.02	33.971	26.310	172.8	0.298	2.31	35.5	34.3	2.22	29.2	0.01	0.01	0.11	126	
139		8.80	8.79	33.991	26.362	168.0	0.322	2.25	34.4	35.1	2.22	29.4	0.01	0.01	0.11	140	209
150	ISL	8.61	8.59	34.003	26.401	164.5	0.340	2.22	33.8	36.4	2.24	29.9	0.01	0.01	0.10	151	
169		8.31	8.29	34.018	26.459	159.3	0.371	2.19	33.2	38.6	2.29	30.7	0.01	0.01	0.08	170	208
199		8.02	8.00	34.033	26.515	154.4	0.418	2.16	32.5	40.7	2.32	31.2	0.01	0.00	0.07	200	207
200	ISL	8.01	7.99	34.033	26.516	154.3	0.419	2.16	32.5	40.8	2.32	31.2	0.01			201	
228		7.56	7.54	34.030	26.580	148.6	0.462	2.15	32.0	44.6	2.38	32.2	0.01			229	206
250	ISL	7.17	7.15	34.013	26.621	144.8	0.494	2.16	31.8	47.7	2.42	33.0	0.01			252	
269		6.88	6.86	34.008	26.657	141.5	0.521	2.16	31.6	50.5	2.47	33.7	0.01			271	205
300	ISL	6.77	6.74	34.066	26.718	136.2	0.564	1.63	23.8	55.7	2.66	35.4	0.01			302	
318		6.73	6.70	34.104	26.754	133.1	0.589	1.29	18.8	58.9	2.77	36.5	0.01			320	204
381		5.96	5.93	34.108	26.857	123.6	0.670	1.02	14.6	70.1	2.95	39.2	0.01			384	203
400	ISL	5.75	5.72	34.112	26.886	120.9	0.693	0.93	13.3	73.5	3.00	40.0	0.01			403	
436		5.39	5.35	34.126	26.941	115.8	0.735	0.77	10.9	79.8	3.08	41.4	0.00			439	202
500	ISL	4.98	4.94	34.178	27.031	107.7	0.807	0.52	7.3	90.3	3.19	42.9	0.00			504	
515		4.88	4.84	34.190	27.052	105.8	0.823	0.46	6.4	92.7	3.22	43.2	0.00			519	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 77 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 23.2 N	124 19.6 W	12/07/00	0520 UTC	4493 m	310 12 kn			1017.2 mb	16.0 C	14.6 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.00	17.00	33.150	24.096	380.9	0.000	5.67	102.5	3.0	0.32	0.1	0.00	0.09	0.01	0	
2		17.00	17.00	33.150	24.096	381.0	0.008	5.67	102.5	3.0	0.32	0.1	0.00	0.09	0.01	2	220
10	ISL	17.06	17.06	33.185	24.109	380.0	0.038	5.66	102.5	3.0	0.32	0.1	0.00	0.09	0.02	10	
15		17.11	17.11	33.220	24.124	378.7	0.057	5.66	102.6	2.9	0.32	0.1	0.00	0.09	0.02	15	219
20	ISL	17.11	17.11	33.253	24.150	376.5	0.076	5.66	102.6	2.8	0.31	0.1	0.00	0.09	0.02	20	
30		17.11	17.11	33.318	24.200	372.0	0.113	5.67	102.9	2.7	0.30	0.1	0.00	0.11	0.02	30	218
46		14.29	14.28	33.255	24.780	317.0	0.168	6.22	106.6	3.0	0.32	0.1	0.00	0.16	0.05	46	217
50	ISL	13.92	13.91	33.238	24.844	311.0	0.181	6.20	105.5	3.0	0.33	0.1	0.00	0.17	0.06	50	
60		13.41	13.40	33.231	24.943	301.8	0.212	6.15	103.5	3.1	0.35	0.1	0.00	0.22	0.11	60	216
74		13.30	13.29	33.402	25.098	287.5	0.253	5.98	100.5	3.4	0.36	0.2	0.01	0.44	0.28	74	215
75	ISL	13.23	13.22	33.400	25.110	286.3	0.256	5.96	100.0	3.5	0.37	0.3	0.02	0.44	0.28	75	
85		12.33	12.32	33.337	25.238	274.3	0.284	5.77	95.0	4.6	0.54	2.6	0.12	0.39	0.22	85	214
94		11.41	11.40	33.281	25.366	262.2	0.308	5.59	90.2	6.3	0.74	5.9	0.15	0.34	0.16	94	213
100	ISL	10.90	10.89	33.271	25.450	254.3	0.323	5.56	88.7	7.0	0.80	7.0	0.12	0.28	0.15	100	
105		10.56	10.55	33.277 D	25.514	248.2	0.336									105	212
115		10.11	10.10	33.321	25.625	237.8	0.360	5.35	84.0	9.5	0.94	9.7	0.02	0.14	0.14	116	211
125		9.96	9.95	33.420	25.728	228.2	0.384	4.91	76.8	12.6	1.15	13.1	0.01	0.09	0.11	126	210
139		9.85	9.83	33.551	25.849	217.0	0.415	4.43	69.2	16.4	1.36	16.5	0.01	0.05	0.07	140	209
150	ISL	9.71	9.69	33.663	25.960	206.7	0.438	3.92	61.1	20.2	1.57	19.7	0.01	0.03	0.05	151	
165		9.46	9.44	33.800	26.108	192.9	0.468	3.34	51.8	24.9	1.80	23.4	0.00	0.01	0.03	166	208
194		8.90	8.88	33.937	26.305	174.6	0.521	3.38	51.8	28.3	1.82	24.5	0.01	0.00	0.03	195	207
200	ISL	8.80	8.78	33.953	26.333	172.0	0.532	3.38	51.7	28.9	1.82	24.6	0.01			201	
229		8.37	8.35	33.998	26.435	162.7	0.580	3.38	51.2	32.6	1.89	25.6	0.00			230	206
250	ISL	8.05	8.02	34.017	26.498	156.9	0.614	3.00	45.1	36.8	2.05	27.8	0.00			251	
268		7.78	7.75	34.027	26.546	152.6	0.642	2.60	38.9	40.7	2.21	29.9	0.01			270	205
300	ISL	7.37	7.34	34.047	26.621	145.8	0.689	2.16	32.0	46.5	2.41	32.3	0.00			302	
318		7.16	7.13	34.057	26.658	142.4	0.715	1.96	28.9	49.6	2.50	33.4	0.00			320	204
378		6.52	6.49	34.081	26.764	132.8	0.798	1.45	21.1	59.5	2.73	36.3	0.00			380	203
400	ISL	6.40	6.36	34.105	26.799	129.8	0.827	1.22	17.7	62.8	2.82	37.3	0.00			403	
437		6.22	6.18	34.144	26.853	125.0	0.874	0.88	12.7	68.4	2.96	38.8	0.01			440	202
500	ISL	5.63	5.59	34.168	26.946	116.4	0.950	0.65	9.2	78.6	3.09	40.9	0.01			503	
518		5.46	5.42	34.176	26.973	113.9	0.971	0.59	8.4	81.5	3.13	41.5	0.01			522	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 26.9 N	120 31.5 W	10/07/00	1511 UTC	77 m	300 07 kn	300 02 08	2	1015.5 mb	14.0 C	13.0 C	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	14.01	14.01	33.635	25.131	282.3	0.000	5.52	94.3	8.8	0.71	5.6	0.16	2.65	0.62	0	
1		14.01	14.01	33.635	25.131	282.3	0.003	5.52	94.3	8.8	0.71	5.6	0.16	2.65	0.62	1	209
5		13.86	13.86	33.679	25.196	276.2	0.014	5.29	90.1	9.7	0.77	6.5	0.18	3.11	0.81	5	208
10		12.79	12.79	33.727	25.449	252.3	0.027	4.59	76.5	14.1	1.10	11.7	0.28	2.31	0.73	10	207
20		12.00	12.00	33.652	25.543	243.6	0.052	4.41	72.3	14.2	1.20	13.2	0.31	1.28	0.60	20	206
30		11.64	11.64	33.632	25.595	238.9	0.076	4.30	69.9	14.6	1.25	14.0	0.32	0.63	0.56	30	205
40		11.21	11.21	33.635	25.676	231.4	0.100	4.06	65.4	16.5	1.36	15.6	0.29	0.47	0.39	40	204
50		10.94	10.93	33.665	25.748	224.8	0.122	3.82	61.2	18.1	1.46	17.3	0.25	0.32	0.36	50	203
60		10.74	10.73	33.706	25.816	218.6	0.145	3.59	57.3	20.2	1.56	18.7	0.24	0.25	0.28	60	202
70		9.80	9.79	33.880	26.113	190.5	0.165	2.70	42.2	28.2	1.94	24.3	0.11	0.07	0.26	70	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 18.9 N	120 48.3 W	10/07/00	1830 UTC	798 m	300 07 kn	300 02 07	2	1016.5 mb	14.9 C	13.7 C	19m	8/8 ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.03	16.03	33.472	24.567	336.1	0.000	5.84	103.8	3.6	0.45	2.0	0.04	0.41	0.07	0	
2	A	16.03	16.03	33.472	24.567	336.1	0.007	5.84	103.8	3.6	0.45	2.0	0.04	0.41	0.07	2	220
10	ISL	16.01	16.01	33.470	24.570	336.0	0.034	5.84	103.8	3.6	0.45	2.0	0.04	0.47	0.05	10	
12	A	16.00	16.00	33.470	24.572	335.9	0.040	5.84	103.8	3.6	0.45	2.0	0.04	0.49	0.04	12	219
19		15.71	15.71	33.465	24.634	330.2	0.064	5.92	104.6	3.6	0.47	2.2	0.05	0.51	0.06	19	218
20	ISL	15.43	15.43	33.438	24.675	326.3	0.067	5.95	104.5	3.7	0.47	2.2	0.06	0.51	0.06	20	
26	A	13.52	13.52	33.283	24.960	299.3	0.086	6.08	102.6	4.3	0.49	2.1	0.10	0.51	0.09	26	217
30	ISL	12.74	12.74	33.261	25.098	286.2	0.097	5.97	99.1	5.1	0.57	3.3	0.14	0.52	0.10	30	
38	A	11.77	11.77	33.280	25.298	267.4	0.120	5.63	91.6	6.8	0.76	6.3	0.19	0.54	0.11	38	216
50	A	11.02	11.01	33.312	25.459	252.3	0.151	5.40	86.4	9.0	0.94	9.4	0.11	0.34	0.17	50	215
62		10.79	10.78	33.529	25.669	232.6	0.180	4.76	75.9	13.7	1.30	14.8	0.25	0.15	0.13	62	214
73	A	9.84	9.83	33.584	25.875	213.1	0.204	4.12	64.4	18.8	1.54	19.1	0.02	0.08	0.09	73	213
75	ISL	9.83	9.82	33.616	25.902	210.6	0.209	4.01	62.7	19.7	1.58	19.8	0.02	0.07	0.09	75	
86		9.78	9.77	33.765	26.026	199.0	0.231	3.39	53.0	24.3	1.81	23.2	0.02	0.04	0.09	86	212
99		9.59	9.58	33.918	26.178	184.9	0.256	2.63	41.0	28.7	1.99	25.6	0.03	0.06	0.13	100	211
100	ISL	9.58	9.57	33.923	26.183	184.4	0.258	2.62	40.8	28.9	2.00	25.7	0.03	0.06	0.13	101	
119		9.37	9.36	33.965	26.251	178.4	0.292	2.44	37.8	30.9	2.08	26.7	0.01	0.04	0.11	120	210
125	ISL	9.27	9.26	33.985	26.283	175.4	0.303	2.36	36.5	32.1	2.12	27.2	0.01	0.04	0.11	126	
139		9.05	9.03	34.031	26.354	168.9	0.327	2.17	33.4	34.7	2.21	28.2	0.01	0.03	0.10	140	209
150	ISL	8.95	8.93	34.053	26.387	165.9	0.345	2.10	32.3	35.7	2.24	28.6	0.01	0.03	0.10	151	
168		8.83	8.81	34.075	26.424	162.8	0.375	2.05	31.4	36.5	2.27	28.9	0.01	0.02	0.11	169	208
199		8.65	8.63	34.094	26.467	159.2	0.425	1.97	30.1	38.2	2.32	29.6	0.01	0.01	0.10	200	207
200	ISL	8.64	8.62	34.095	26.470	159.0	0.427	1.96	29.9	38.3	2.32	29.6	0.01			201	
228		8.42	8.40	34.133	26.534	153.4	0.470	1.66	25.2	41.9	2.45	31.1	0.01			229	206
250	ISL	8.27	8.24	34.151	26.571	150.2	0.504	1.53	23.2	43.9	2.52	31.7	0.01			252	
268		8.14	8.11	34.165	26.602	147.6	0.531	1.43	21.6	45.6	2.57	32.2	0.01			270	205
300	ISL	7.87	7.84	34.206	26.674	141.1	0.577	1.13	17.0	50.3	2.70	33.6	0.01			302	
318		7.73	7.70	34.228	26.712	137.8	0.602	0.96	14.4	53.0	2.77	34.3	0.01			320	204
378		7.42	7.38	34.256	26.779	132.2	0.683	0.74	11.0	58.9	2.89	35.5	0.01			380	203
400	ISL	7.32	7.28	34.259	26.796	130.9	0.712	0.68	10.1	60.8	2.93	35.8	0.01			403	
437		7.14	7.10	34.263	26.825	128.7	0.760	0.58	8.6	64.1	3.00	36.3	0.02			440	202
500	ISL	6.69	6.64	34.279	26.899	122.1	0.839	0.45	6.6	70.3	3.10	37.9	0.01			504	
521		6.54	6.49	34.285	26.924	120.0	0.864	0.41	6.0	72.3	3.13	38.4	0.01			525	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 9.4 N	121 9.0 W	10/07/00	2243 UTC	2182 m	320 05 kn	310 03 09	4	1015.5 mb	17.0 C	14.9 C	22m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.14	16.14	33.235	24.359	355.8	0.000	5.82	103.6	2.8	0.31	0.1	0.00	0.20	0.04	0	
1		16.14	16.14	33.235	24.359	355.8	0.004	5.82	103.5	2.8	0.31	0.1	0.00	0.20	0.04	1	220
10	ISL	16.12	16.12	33.259	24.383	353.9	0.035	5.83	103.7	2.7	0.32	0.2	0.01	0.31	0.06	10	
15		16.11	16.11	33.297	24.414	351.0	0.053	5.83	103.7	2.7	0.32	0.2	0.01	0.39	0.08	15	219
20	ISL	15.99	15.99	33.317	24.457	347.1	0.071	5.85	103.8	2.8	0.35	0.5	0.02	0.41	0.10	20	
30		15.74	15.74	33.422	24.594	334.3	0.105	5.92	104.6	3.3	0.42	1.4	0.05	0.42	0.13	30	218
45		13.67	13.66	33.294	24.939	301.9	0.152	6.13	103.8	4.7	0.50	2.6	0.13	0.52	0.13	45	217
50	ISL	13.14	13.13	33.271	25.028	293.5	0.167	6.09	102.0	4.6	0.51	2.5	0.16	0.50	0.15	50	
55		12.64	12.63	33.259	25.117	285.1	0.182	6.04	100.1	4.6	0.52	2.4	0.18	0.47	0.17	55	216
65		11.53	11.52	33.278	25.341	263.9	0.209	5.64	91.3	6.4	0.73	5.9	0.16	0.38	0.17	65	215
75		10.19	10.18	33.297	25.592	240.1	0.234	5.40	84.9	9.2	0.94	9.6	0.06	0.24	0.20	75	214
85		9.97	9.96	33.330	25.655	234.3	0.258	5.21	81.5	11.1	1.06	11.6	0.04	0.19	0.14	85	213
95		10.00	9.99	33.432	25.730	227.4	0.281	4.87	76.3	14.9	1.26	14.7	0.02	0.16	0.13	95	212
100	ISL	9.89	9.88	33.498	25.800	220.8	0.292	4.60	71.9	16.7	1.36	16.4	0.02	0.12	0.13	100	
110		9.61	9.60	33.628	25.948	206.9	0.314	4.03	62.7	20.0	1.55	19.6	0.02	0.04	0.11	111	211
125	ISL	9.33	9.32	33.757	26.095	193.3	0.344	3.48	53.8	24.7	1.78	23.1	0.01	0.01	0.05	126	
126		9.31	9.30	33.764	26.103	192.5	0.346	3.45	53.3	25.0	1.79	23.3	0.01	0.01	0.05	127	210
145		8.98	8.96	33.898	26.261	177.8	0.381	2.94	45.2	30.3	2.00	26.5	0.01	0.01	0.06	146	209
150	ISL	8.94	8.92	33.925	26.289	175.3	0.390	2.75	42.2	31.6	2.06	27.3	0.01	0.01	0.06	151	
172		8.73	8.71	34.000	26.381	166.9	0.427	2.16	33.0	36.0	2.26	29.8	0.01	0.01	0.08	173	208
200	ISL	8.09	8.07	33.996	26.475	158.2	0.473	2.64	39.8	37.9	2.17	29.4	0.01	0.00	0.06	201	
201		8.07	8.05	33.995	26.477	158.0	0.474	2.66	40.0	37.9	2.17	29.4	0.01	0.00	0.06	202	207
231		7.81	7.79	34.028	26.542	152.3	0.521	2.33	34.9	41.7	2.31	30.9	0.01			232	206
250	ISL	7.60	7.58	34.039	26.581	148.8	0.550	2.25	33.5	44.0	2.36	31.5	0.01			251	
268		7.38	7.35	34.047	26.619	145.4	0.576	2.17	32.2	46.3	2.41	32.0	0.01			270	205
300	ISL	7.01	6.98	34.066	26.686	139.4	0.622	1.74	25.6	51.6	2.55	33.7	0.01			302	
318		6.82	6.79	34.077	26.720	136.3	0.646	1.48	21.7	54.9	2.64	34.8	0.01			320	204
385		6.23	6.20	34.121	26.833	126.1	0.734	1.08	15.6	66.5	2.90	38.0	0.00			388	203
400	ISL	6.22	6.18	34.145	26.854	124.4	0.753	0.96	13.9	68.2	2.95	38.4	0.00			403	
436		6.18	6.14	34.198	26.901	120.5	0.797	0.67	9.7	71.8	3.05	39.2	0.00			439	202
500	ISL	6.01	5.97	34.276	26.985	113.3	0.872	0.40	5.7	77.7	3.18	40.2	0.00			503	
511		5.98	5.94	34.289	26.999	112.1	0.884	0.35	5.0	78.7	3.20	40.4	0.00			515	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 49.1 N	121 50.5 W	11/07/00	0532 UTC	3632 m	320 07 kn			1015.7 mb	16.1 C	13.9 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.75	16.75	33.179	24.176	373.2	0.000	5.74	103.3	2.8	0.32	0.1	0.00	0.12	0.03	0	
1		16.75	16.75	33.179	24.176	373.2	0.004	5.74	103.3	2.8	0.32	0.1	0.00	0.12	0.03	1	220
10	ISL	16.60	16.60	33.171	24.205	370.8	0.037	5.73	102.8	2.8	0.32	0.1	0.00	0.13	0.03	10	
14		16.47	16.47	33.169	24.234	368.2	0.052	5.73	102.6	2.8	0.32	0.1	0.00	0.13	0.03	14	219
20	ISL	16.29	16.29	33.178	24.282	363.8	0.074	5.79	103.3	2.8	0.32	0.1	0.00	0.18	0.05	20	
30		15.82	15.82	33.204	24.409	352.0	0.110	5.94	105.0	2.8	0.32	0.1	0.00	0.30	0.10	30	218
45		14.54	14.53	33.267	24.737	321.1	0.160	6.15	106.0	3.2	0.38	0.7	0.02	0.49	0.18	45	217
50	ISL	13.93	13.92	33.217	24.826	312.7	0.176	6.25	106.3	3.1	0.36	0.3	0.01	0.44	0.16	50	
54		13.45	13.44	33.184	24.899	305.9	0.188	6.29	105.9	3.1	0.35	0.1	0.01	0.39	0.15	54	216
65		12.63	12.62	33.267	25.125	284.6	0.221	6.05	100.2	4.3	0.52	2.2	0.11	0.44	0.25	65	215
75		11.56	11.55	33.307	25.358	262.5	0.248	5.62	91.0	7.2	0.81	7.1	0.20	0.37	0.28	75	214
84		11.13	11.12	33.396	25.506	248.6	0.271	5.30	85.1	9.8	1.03	10.6	0.21	0.24	0.16	84	213
95		11.31	11.30	33.629	25.655	234.8	0.298	4.85	78.3	13.7	1.32	14.9	0.49	0.08	0.07	95	212
100	ISL	10.85	10.84	33.598	25.713	229.3	0.309	4.69	74.9	14.8	1.37	16.0	0.35	0.08	0.08	100	
109		9.92	9.91	33.520	25.812	219.9	0.330	4.39	68.7	16.7	1.44	17.6	0.02	0.07	0.09	110	211
125		9.85	9.84	33.719	25.980	204.3	0.364	3.66	57.2	22.8	1.76	22.4	0.02	0.04	0.06	126	210
144		9.43	9.41	33.825	26.132	190.2	0.401	3.08	47.8	27.4	1.95	25.5	0.01	0.01	0.07	145	209
150	ISL	9.29	9.27	33.863	26.184	185.3	0.412	2.87	44.4	29.1	2.01	26.5	0.01	0.01	0.07	151	
169		8.85	8.83	33.964	26.334	171.3	0.446	2.42	37.1	33.7	2.16	28.8	0.01	0.01	0.08	170	208
198		8.32	8.30	33.983	26.431	162.5	0.495	2.83	42.8	35.2	2.08	28.2	0.01	0.00	0.06	199	207
200	ISL	8.29	8.27	33.987	26.438	161.8	0.498	2.79	42.2	35.6	2.09	28.4	0.01			201	
229		7.96	7.94	34.046	26.534	153.1	0.544	2.08	31.2	41.9	2.35	31.4	0.01			230	206
250	ISL	7.66	7.64	34.062	26.591	148.0	0.575	1.90	28.3	45.4	2.44	32.5	0.01			251	
268		7.42	7.39	34.068	26.630	144.4	0.601	1.84	27.3	48.0	2.50	33.2	0.01			270	205
300	ISL	7.12	7.09	34.084	26.685	139.6	0.647	1.61	23.7	52.2	2.61	34.5	0.01			302	
317		6.98	6.95	34.091	26.710	137.4	0.670	1.49	21.9	54.6	2.67	35.2	0.01			319	204
378		6.27	6.24	34.119	26.827	126.7	0.751	1.06	15.3	66.0	2.89	38.1	0.01			380	203
400	ISL	6.10	6.06	34.134	26.860	123.7	0.779	0.91	13.1	69.5	2.95	38.9	0.01			403	
439		5.84	5.80	34.164	26.917	118.6	0.826	0.68	9.7	75.2	3.05	40.2	0.01			442	202
500	ISL	5.48	5.44	34.210	26.998	111.4	0.896	0.47	6.7	83.5	3.16	41.6	0.00			503	
519		5.37	5.33	34.225	27.023	109.2	0.917	0.40	5.7	86.1	3.20	42.0	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 29.0 N	122 32.5 W	11/07/00	1128 UTC	4007 m	320 08 kn			1015.6 mb	15.7 C	14.7 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.16	17.16	33.303	24.175	373.3	0.000	5.65	102.6	2.5	0.30	0.1	0.00	0.09	0.02	0	
2		17.16	17.16	33.303	24.176	373.4	0.007	5.65	102.6	2.5	0.30	0.1	0.00	0.09	0.02	2	220
10	ISL	17.17	17.17	33.304	24.174	373.8	0.037	5.68	103.2	2.5	0.30	0.1	0.00	0.09	0.02	10	
15		17.17	17.17	33.305	24.175	373.9	0.056	5.70	103.5	2.5	0.30	0.1	0.00	0.10	0.02	15	219
20	ISL	17.14	17.14	33.306	24.183	373.3	0.075	5.69	103.3	2.5	0.31	0.1	0.00	0.10	0.02	20	
30		17.08	17.08	33.309	24.200	372.0	0.112	5.67	102.8	2.5	0.33	0.1	0.00	0.12	0.03	30	218
45		15.71	15.70	33.233	24.456	348.0	0.166	5.94	104.8	2.6	0.31	0.1	0.00	0.20	0.06	45	217
50	ISL	15.32	15.31	33.229	24.540	340.2	0.183	5.98	104.7	2.7	0.31	0.1	0.00	0.25	0.08	50	
55		14.89	14.88	33.231	24.635	331.2	0.200	6.01	104.3	2.8	0.31	0.1	0.00	0.30	0.12	55	216
65		13.70	13.69	33.247	24.897	306.4	0.232	6.15	104.1	2.8	0.33	0.1	0.00	0.38	0.24	65	215
74		13.15	13.14	33.244	25.006	296.2	0.259	6.08	101.8	3.0	0.38	0.3	0.03	0.51	0.47	74	214
75	ISL	13.08	13.07	33.244	25.020	294.9	0.262	6.06	101.3	3.1	0.39	0.4	0.05	0.51	0.46	75	
84		12.48	12.47	33.254	25.145	283.2	0.288	5.87	96.9	3.8	0.53	2.0	0.22	0.41	0.31	84	213
94		11.83	11.82	33.278	25.286	269.8	0.316	5.62	91.5	5.3	0.68	5.1	0.08	0.26	0.25	94	212
100	ISL	11.31	11.30	33.291	25.392	259.8	0.331	5.51	88.7	6.4	0.77	6.8	0.04	0.20	0.21	100	
109		10.60	10.59	33.328	25.547	245.2	0.354	5.32	84.4	8.5	0.92	9.4	0.02	0.13	0.15	109	211
124		10.06	10.05	33.450	25.734	227.6	0.390	4.69	73.6	13.6	1.23	14.5	0.01	0.06	0.08	125	210
125	ISL	10.04	10.03	33.460	25.746	226.6	0.392	4.64	72.8	14.0	1.25	14.9	0.01	0.06	0.08	126	
144		9.77	9.75	33.642	25.933	209.1	0.433	3.88	60.5	20.1	1.59	20.3	0.00	0.02	0.05	145	209
150	ISL	9.64	9.62	33.692	25.994	203.4	0.446	3.89	60.5	20.9	1.59	20.5	0.00	0.01	0.04	151	
169		9.21	9.19	33.825	26.168	187.2	0.483	3.92	60.5	23.1	1.60	21.2	0.00	0.00	0.02	170	208
198		8.74	8.72	33.943	26.335	171.8	0.535	3.11	47.5	30.4	1.94	26.1	0.00	0.00	0.02	199	207
200	ISL	8.71	8.69	33.948	26.344	171.0	0.538	3.06	46.7	30.9	1.96	26.4	0.00			201	
229		8.31	8.29	34.004	26.449	161.4	0.586	2.50	37.8	36.9	2.18	29.4	0.00			230	206
250	ISL	8.04	8.01	34.026	26.507	156.1	0.620	2.35	35.4	39.6	2.26	30.4	0.00			251	
268		7.80	7.77	34.036	26.550	152.2	0.648	2.29	34.3	41.7	2.30	31.0	0.00			270	205
300	ISL	7.30	7.27	34.042	26.627	145.2	0.695	2.11	31.2	47.2	2.43	32.6	0.00			302	
318		7.03	7.00	34.043	26.665	141.7	0.721	2.00	29.4	50.4	2.50	33.6	0.00			320	204
377		6.45	6.42	34.069	26.764	132.8	0.802	1.52	22.0	59.5	2.72	36.3	0.00			379	203
400	ISL	6.27	6.23	34.087	26.802	129.4	0.832	1.31	18.9	63.3	2.81	37.4	0.00			403	
443		5.97	5.93	34.124	26.869	123.3	0.886	0.95	13.6	70.5	2.96	39.3	0.00			446	202
500	ISL	5.58	5.54	34.174	26.957	115.4	0.954	0.64	9.1	79.7	3.10	41.1	0.00			503	
514		5.49	5.45	34.186	26.978	113.5	0.970	0.56	7.9	81.9	3.14	41.5	0.00			517	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 9.4 N	123 13.5 W	11/07/00	1733 UTC	4230 m	350 08 kn	340 04 08	2	1016.6 mb	17.0 C	14.5 C	30m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.96	16.96	33.159	24.112	379.4	0.000	5.64	101.9	2.8	0.32	0.1	0.00	0.09	0.01	0	
1	A	16.96	16.96	33.159	24.112	379.4	0.004	5.64	101.9	2.8	0.32	0.1	0.00	0.09	0.01	1	222
10		16.92	16.92	33.158	24.121	378.8	0.038	5.65	102.0	2.7	0.32	0.1	0.00	0.10	0.02	10	221
19	A	16.85	16.85	33.159	24.138	377.5	0.072	5.64	101.7	2.7	0.32	0.1	0.00	0.10	0.02	19	220
20	ISL	16.82	16.82	33.158	24.145	376.9	0.076	5.65	101.8	2.7	0.32	0.1	0.00	0.10	0.02	20	
30	ISL	16.48	16.48	33.145	24.214	370.6	0.113	5.72	102.4	2.7	0.31	0.1	0.00	0.11	0.03	30	
31		16.44	16.44	33.144	24.222	369.8	0.117	5.73	102.5	2.7	0.31	0.1	0.00	0.11	0.03	31	219
40	A	16.24	16.23	33.143	24.267	365.8	0.150	5.76	102.6	2.7	0.31	0.1	0.00	0.17	0.04	40	218
50		15.12	15.11	33.199	24.560	338.2	0.185	5.99	104.4	2.5	0.31	0.1	0.00	0.21	0.06	50	217
61	A	13.65	13.64	33.156	24.837	312.0	0.221	6.23	105.3	2.7	0.34	0.1	0.00	0.25	0.09	61	216
69		13.16	13.15	33.179	24.953	301.1	0.245	6.19	103.6	2.9	0.35	0.0	0.00	0.30	0.16	69	215
75	ISL	12.82	12.81	33.170	25.013	295.5	0.263	6.12	101.7	3.1	0.37	0.1	0.01	0.41	0.24	75	
79	A	12.61	12.60	33.161	25.047	292.3	0.275	6.05	100.1	3.2	0.40	0.2	0.03	0.47	0.29	79	214
91		12.03	12.02	33.170	25.165	281.3	0.309	5.79	94.6	4.0	0.56	2.5	0.13	0.38	0.28	91	213
100	ISL	11.32	11.31	33.209	25.326	266.1	0.334	5.61	90.3	5.8	0.72	5.5	0.08	0.27	0.24	100	
102		11.16	11.15	33.219	25.363	262.6	0.339	5.58	89.5	6.2	0.75	6.1	0.06	0.25	0.23	102	212
115	A	10.45	10.44	33.259	25.519	247.9	0.373	5.49	86.8	7.9	0.87	8.3	0.03	0.18	0.17	116	211
125	ISL	10.07	10.06	33.294	25.611	239.3	0.397	5.38	84.3	9.4	0.96	9.9	0.02	0.12	0.14	126	
129		9.96	9.95	33.316	25.647	236.0	0.406	5.30	82.9	10.3	1.01	10.8	0.02	0.10	0.13	130	210
146		9.66	9.64	33.517	25.854	216.6	0.445	4.40	68.4	17.3	1.41	17.3	0.01	0.03	0.05	147	209
150	ISL	9.58	9.56	33.574	25.911	211.2	0.453	4.16	64.6	19.3	1.51	18.9	0.01	0.02	0.05	151	
171		9.14	9.12	33.840	26.191	185.0	0.495	3.09	47.6	28.9	1.93	25.7	0.01	0.00	0.03	172	208
200	ISL	8.66	8.64	33.961	26.361	169.3	0.546	2.66	40.6	33.7	2.11	28.3	0.00	0.00	0.02	201	
201		8.65	8.63	33.962	26.364	169.1	0.548	2.66	40.6	33.8	2.11	28.3	0.00	0.00	0.02	202	207
227		8.28	8.26	34.003	26.453	161.0	0.591	2.63	39.8	36.6	2.16	29.0	0.00			228	206
250	ISL	8.03	8.00	34.017	26.501	156.6	0.628	2.62	39.4	38.5	2.18	29.4	0.00			251	
268		7.82	7.79	34.017	26.532	153.9	0.656	2.62	39.2	40.3	2.20	29.8	0.00			269	205
300	ISL	7.22	7.19	34.004	26.608	146.9	0.704	2.59	38.2	45.4	2.27	31.0	0.00			302	
321		6.81	6.78	33.997	26.659	142.2	0.734	2.57	37.6	49.5	2.34	32.1	0.00			323	204
384		5.95	5.92	34.027	26.794	129.5	0.820	1.67	23.9	64.2	2.72	37.0	0.00			386	203
400	ISL	5.83	5.80	34.046	26.824	126.8	0.840	1.44	20.6	67.5	2.81	38.0	0.00			403	
437		5.64	5.60	34.097	26.888	121.1	0.886	0.97	13.8	74.4	2.98	40.0	0.00			440	202
500	ISL	5.42	5.38	34.182	26.983	112.8	0.960	0.56	7.9	83.3	3.15	41.7	0.00			503	
509		5.39	5.35	34.194	26.996	111.6	0.970	0.50	7.1	84.6	3.18	41.9	0.00			512	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 80 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 49.1 N	123 54.5 W	11/07/00	2317 UTC	4370 m	350 09 kn	340 03 08	1	1017.4 mb	17.0 C	15.4 C	26m	7/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.71	17.71	33.234	23.991	390.9	0.000	5.62	103.1	2.6	0.30	0.1	0.00	0.08	0.01	0	
1		17.71	17.71	33.234	23.991	390.9	0.004	5.62	103.1	2.6	0.30	0.1	0.00	0.08	0.01	1	220
10	ISL	17.47	17.47	33.229	24.045	386.0	0.039	5.63	102.8	2.6	0.30	0.1	0.00	0.08	0.01	10	
15		17.28	17.28	33.229	24.091	381.9	0.058	5.64	102.6	2.6	0.30	0.1	0.00	0.09	0.01	15	219
20	ISL	17.19	17.19	33.239	24.120	379.3	0.077	5.66	102.8	2.5	0.30	0.1	0.00	0.10	0.02	20	
30		17.06	17.06	33.261	24.168	375.0	0.115	5.69	103.1	2.4	0.29	0.1	0.00	0.12	0.03	30	218
46		16.93	16.92	33.266	24.203	372.2	0.175	5.71	103.2	2.3	0.29	0.1	0.00	0.17	0.04	46	217
50	ISL	16.30	16.29	33.271	24.353	358.0	0.189	5.87	104.8	2.4	0.29	0.1	0.00	0.17	0.04	50	
55		15.35	15.34	33.273	24.567	337.7	0.207	6.07	106.3	2.6	0.29	0.1	0.00	0.18	0.05	55	216
65		13.54	13.53	33.209	24.900	306.1	0.239	6.23	105.1	2.8	0.32	0.1	0.00	0.27	0.10	65	215
75		12.96	12.95	33.276	25.068	290.3	0.269	6.07	101.2	3.3	0.38	0.2	0.01	0.56	0.39	75	214
84		12.44	12.43	33.314	25.199	278.0	0.294	5.81	95.9	4.2	0.51	2.1	0.09	0.55	0.41	84	213
95		11.57	11.56	33.322	25.369	262.0	0.324	5.57	90.2	5.9	0.69	5.5	0.08	0.35	0.33	95	212
100	ISL	11.18	11.17	33.329	25.445	254.8	0.337	5.55	89.2	6.4	0.73	6.3	0.06	0.28	0.28	100	
109		10.57	10.56	33.346	25.566	243.4	0.359	5.52	87.5	7.4	0.79	7.4	0.03	0.19	0.20	109	211
123		10.07	10.06	33.382	25.680	232.8	0.393	5.25	82.3	10.0	0.96	10.4	0.02	0.12	0.13	124	210
125	ISL	10.03	10.02	33.403	25.703	230.6	0.397	5.16	80.9	10.8	1.01	11.2	0.02	0.11	0.12	126	
144		9.77	9.75	33.640	25.932	209.2	0.439			19.5	1.53	19.5	0.01	0.03	0.05	145	209
150	ISL	9.63	9.61	33.701	26.002	202.6	0.451	4.00	62.3	21.9	1.64	21.3	0.01	0.02	0.05	151	
168		9.19	9.17	33.848	26.189	185.2	0.486	3.16	48.7	27.8	1.89	25.1	0.00	0.00	0.03	169	208
198		8.69	8.67	33.965	26.360	169.4	0.539	2.75	42.0	33.2	2.07	27.8	0.00	0.00	0.03	199	207
200	ISL	8.66	8.64	33.970	26.369	168.6	0.543	2.74	41.8	33.5	2.08	27.9	0.00			201	
229		8.20	8.18	34.020	26.478	158.5	0.590	2.66	40.2	37.2	2.14	29.1	0.00			230	206
250	ISL	7.89	7.86	34.036	26.537	153.2	0.623	2.57	38.5	40.2	2.21	30.1	0.00			251	
268		7.64	7.61	34.044	26.580	149.3	0.650	2.46	36.7	42.9	2.28	31.0	0.00			269	205
300	ISL	7.27	7.24	34.057	26.643	143.7	0.697	2.09	30.9	48.2	2.44	32.9	0.00			302	
320		7.07	7.04	34.065	26.677	140.6	0.725	1.82	26.8	51.7	2.55	34.1	0.00			322	204
378		6.59	6.56	34.114	26.781	131.3	0.804	1.21	17.6	61.3	2.80	37.0	0.00			380	203
400	ISL	6.47	6.43	34.134	26.813	128.5	0.833	1.03	14.9	64.3	2.87	37.8	0.00			402	
439		6.26	6.22	34.166	26.866	123.9	0.882	0.79	11.4	69.2	2.98	39.0	0.00			442	202
500	ISL	5.82	5.78	34.195	26.945	116.9	0.956	0.58	8.3	77.6	3.11	40.6	0.00			503	
517		5.70	5.66	34.203	26.966	114.9	0.975	0.52	7.4	79.9	3.14	41.0	0.00			520	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 82 47

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 16.4 N	120 1.8 W	10/07/00	1036 UTC	580 m	270 12 kn			1013.8 mb	15.0 C	13.7 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.42	16.42	33.734	24.679	325.4	0.000	6.18	110.9	4.5	0.26	0.0	0.01	2.53	0.93	0	
1	A	16.42	16.42	33.734	24.679	325.4	0.003	6.18	110.9	4.5	0.26	0.0	0.01	2.53	0.93	1	224
10		16.33	16.33	33.731	24.698	323.9	0.032	6.21	111.2	4.7	0.27	0.0	0.01	2.90	1.04	10	223
20		11.24	11.24	33.669	25.697	229.0	0.060	4.21	67.9	16.0	1.30	15.3	0.17	0.69	0.34	20	222
30		10.08	10.08	33.848	26.040	196.6	0.081	3.12	49.1	25.3	1.78	22.4	0.06	0.21	0.18	30	221
40		9.57	9.57	33.926	26.186	182.8	0.100	2.75	42.8	28.9	1.97	25.0	0.03	0.14	0.13	40	220
50		9.39	9.38	33.962	26.244	177.6	0.118	2.63	40.8	30.4	2.03	25.9	0.02	0.04	0.13	50	219
60		9.27	9.26	33.993	26.288	173.6	0.136	2.38	36.8	32.7	2.12	27.1	0.03	0.03	0.17	60	218
70		9.17	9.16	34.015	26.321	170.6	0.153	2.27	35.0	33.9	2.17	27.7	0.03	0.02	0.13	70	217
75	ISL	9.13	9.12	34.026	26.336	169.3	0.162	2.21	34.1	34.4	2.19	27.9	0.03	0.02	0.13	75	
84		9.07	9.06	34.043	26.359	167.3	0.177	2.13	32.8	35.1	2.23	28.3	0.03	0.02	0.13	84	216
100		8.99	8.98	34.064	26.389	164.8	0.203	2.12	32.6	35.9	2.26	28.6	0.03	0.02	0.13	101	215
119		8.85	8.84	34.104	26.443	160.1	0.234	1.83	28.1	38.2	2.36	29.9	0.02	0.01	0.12	120	214
125	ISL	8.82	8.81	34.112	26.454	159.1	0.244	1.79	27.4	38.7	2.38	30.1	0.02	0.01	0.12	126	
139		8.77	8.76	34.125	26.472	157.6	0.266	1.74	26.6	39.6	2.41	30.4	0.01	0.02	0.12	140	213
150	ISL	8.76	8.74	34.134	26.481	157.0	0.283	1.69	25.9	39.9	2.42	30.5	0.01	0.02	0.12	151	
169		8.75	8.73	34.143	26.490	156.6	0.313	1.61	24.6	40.3	2.44	30.6	0.02	0.02	0.12	170	212
199		8.71	8.69	34.161	26.510	155.2	0.360	1.51	23.1	41.4	2.48	31.0	0.02	0.02	0.11	200	211
200	ISL	8.71	8.69	34.162	26.511	155.1	0.361	1.50	22.9	41.5	2.48	31.0	0.02			201	
229		8.56	8.54	34.184	26.552	151.7	0.406	1.32	20.1	44.6	2.59	32.0	0.03			230	210
250	ISL	8.33	8.30	34.191	26.593	148.1	0.437	1.12	17.0	47.8	2.69	33.2	0.03			252	
268		8.14	8.11	34.194	26.624	145.4	0.464	0.97	14.6	50.3	2.76	34.1	0.03			270	209
300	ISL	8.05	8.02	34.198	26.641	144.3	0.510	0.88	13.3	51.6	2.78	34.3	0.03			302	
318		8.01	7.98	34.200	26.649	143.9	0.536	0.86	12.9	52.3	2.79	34.4	0.03			320	208
377		7.44	7.40	34.209	26.740	136.0	0.619	0.59	8.8	61.4	3.00	36.2	0.01			380	207
400	ISL	7.16	7.12	34.217	26.785	131.8	0.649	0.46	6.8	67.8	3.11	36.0	0.01			403	
437		6.78	6.74	34.230	26.848	126.1	0.697	0.27	3.9	77.2	3.26	35.8	0.01			440	206
477		6.65	6.61	34.234	26.869	124.6	0.747	0.18	2.6	80.8	3.31	35.4	0.01			480	205
500	ISL	6.53	6.48	34.239	26.889	122.9	0.776	0.11	1.6	86.0	3.38	34.4	0.00			504	
511		6.48	6.43	34.241	26.897	122.3	0.789	0.08	1.2	88.6	3.41	33.8	0.00			515	204
536		6.43	6.38	34.242	26.905	121.9	0.820	0.07	1.0	92.8	3.47	32.2	0.01			540	203
560		6.39	6.34	34.244	26.912	121.5	0.849	0.04	0.6	99.6	3.63	29.3	0.02			564	202
570		6.37	6.32	34.243	26.914	121.4	0.861	0.00	0.0	102.9	3.73	27.6	0.02			574	201

A) SANTA BARBARA BASIN STATION.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 40.6

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 13.2 N	119 24.7 W	10/07/00	0619 UTC	36 m	270 07 kn			1014.5 mb	16.5 C	14.9 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.27	18.27	33.689	24.203	370.7	0.000	5.85	108.8	3.3	0.26	0.1	0.00	0.52	0.11	0	
1		18.27	18.27	33.689	24.203	370.7	0.004	5.85	108.8	3.3	0.26	0.1	0.00	0.52	0.11	1	205
5		18.15	18.15	33.694	24.237	367.7	0.018	5.85	108.5	3.2	0.26	0.1	0.00	0.52	0.12	5	204
10	ISL	16.98	16.98	33.678	24.506	342.2	0.036	6.07	110.1	4.5	0.28	0.1	0.01	0.75	0.20	10	
11		16.65	16.65	33.672	24.578	335.3	0.040	6.10	109.9	4.9	0.29	0.1	0.01	0.81	0.22	11	203
20	ISL	13.09	13.09	33.577	25.274	269.3	0.067	5.04	84.5	9.9	0.91	7.6	0.37	1.29	0.62	20	
21		12.74	12.74	33.573	25.340	263.0	0.069	4.89	81.3	10.4	0.99	8.5	0.42	1.31	0.66	21	202
30		12.35	12.35	33.575	25.417	255.9	0.093	4.57	75.4	12.4	1.14	10.5	0.53	0.64	0.44	30	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 10.8 N	119 31.6 W	10/07/00	0340 UTC	165 m	270 17 kn	290 02 05	1	1014.1 mb	16.3 C	14.8 C		2/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.62	18.62	33.692	24.118	378.8	0.000	5.77	108.0	2.5	0.25	0.1	0.00	0.61	0.15	0	
1		18.62	18.62	33.692	24.118	378.8	0.004	5.77	108.0	2.5	0.25	0.1	0.00	0.61	0.15	1	213
10	ISL	18.59	18.59	33.694	24.128	378.2	0.038	5.81	108.7	2.5	0.25	0.1	0.00	0.60	0.15	10	
11		18.59	18.59	33.694	24.128	378.2	0.042	5.81	108.7	2.5	0.25	0.1	0.00	0.60	0.15	11	212
20		17.99	17.99	33.691	24.274	364.6	0.075	5.94	109.9	2.8	0.24	0.1	0.00	0.64	0.24	20	211
30	ISL	16.10	16.10	33.637	24.679	326.3	0.110	6.35	113.2	4.1	0.30	0.4	0.02	1.94	0.59	30	
31		15.88	15.88	33.632	24.724	322.0	0.113	6.36	112.8	4.3	0.31	0.4	0.02	2.04	0.62	31	210
41		13.97	13.96	33.587	25.103	286.1	0.143	5.43	92.7	6.8	0.71	5.8	0.25	0.87	0.46	41	209
50	ISL	12.35	12.34	33.593	25.432	255.0	0.168	4.76	78.5	10.8	1.03	10.9	0.31	0.47	0.38	50	
51		12.19	12.18	33.595	25.464	252.0	0.170	4.70	77.3	11.3	1.06	11.4	0.32	0.45	0.37	51	208
61		11.24	11.23	33.608	25.650	234.4	0.194	4.26	68.6	14.0	1.28	15.0	0.20	0.35	0.35	61	207
71		10.37	10.36	33.768	25.929	208.1	0.217	3.43	54.3	21.6	1.64	20.3	0.09	0.11	0.17	71	206
75	ISL	10.15	10.14	33.803	25.994	201.9	0.225	3.25	51.2	23.1	1.72	21.6	0.06	0.09	0.15	75	
85		9.79	9.78	33.860	26.099	192.1	0.244	2.93	45.8	25.6	1.86	23.8	0.01	0.04	0.11	85	205
100		9.52	9.51	33.939	26.206	182.3	0.273	2.33	36.2	30.3	2.01	25.4	0.07	0.04	0.20	101	204
120		9.34	9.33	33.982	26.269	176.7	0.308	2.47	38.3	31.7	2.08	26.4	0.03	0.03	0.13	121	203
125	ISL	9.31	9.30	33.992	26.282	175.6	0.317	2.45	37.9	31.7	2.09	26.5	0.02	0.03	0.12	126	
135		9.27	9.26	34.012	26.304	173.6	0.335	2.42	37.4	31.6	2.10	26.7	0.02	0.02	0.11	136	202
150	ISL	9.20	9.18	34.044	26.340	170.5	0.361	2.29	35.4	32.8	2.16	27.3	0.03	0.01	0.09	151	
151		9.20	9.18	34.046	26.342	170.3	0.362	2.28	35.2	32.9	2.16	27.3	0.03	0.01	0.09	152	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 52.7 N	120 8.5 W	09/07/00	2051 UTC	103 m	280 14 kn	290 02 06	1	1016.4 mb	17.0 C	15.7 C	12m	3/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.13	17.13	33.646	24.446	347.6	0.000	5.95	108.2	3.5	0.33	0.6	0.03	1.02	0.27	0	
2		17.13	17.13	33.646	24.446	347.6	0.007	5.95	108.2	3.5	0.33	0.6	0.03	1.02	0.27	2	210
10	ISL	14.52	14.52	33.591	24.990	296.0	0.033	5.75	99.2	5.9	0.58	4.1	0.15	1.07	0.36	10	
11		14.08	14.08	33.589	25.081	287.4	0.036	5.70	97.5	6.3	0.63	4.8	0.17	1.08	0.38	11	209
20		12.09	12.09	33.566	25.459	251.6	0.060	5.04	82.7	9.7	0.96	9.9	0.21	1.05	0.50	20	208
30		11.53	11.53	33.601	25.591	239.3	0.084	4.57	74.1	12.5	1.17	13.2	0.11	0.78	0.43	30	207
41		11.12	11.11	33.628	25.687	230.4	0.110	4.25	68.3	14.7	1.30	15.4	0.08	0.61	0.42	41	206
50	ISL	11.02	11.01	33.635	25.711	228.4	0.131	4.17	66.9	15.3	1.34	15.9	0.07	0.55	0.37	50	
51		11.01	11.00	33.637	25.714	228.1	0.133	4.16	66.7	15.4	1.34	16.0	0.07	0.54	0.36	51	205
60		10.68	10.67	33.683	25.808	219.3	0.153	3.83	61.0	17.8	1.47	18.1	0.06	0.39	0.28	60	204
69		9.85	9.84	33.813	26.052	196.2	0.172	3.25	50.9	23.7	1.74	22.3	0.02	0.08	0.11	69	203
75	ISL	9.74	9.73	33.879	26.122	189.7	0.184	3.04	47.5	26.0	1.84	23.6	0.02	0.07	0.11	75	
81		9.62	9.61	33.887	26.148	187.3	0.195	2.93	45.7	27.2	1.89	24.1	0.03	0.06	0.12	81	202
90		9.61	9.60	33.889	26.151	187.2	0.212	2.92	45.5	27.4	1.89	24.2	0.03	0.06	0.12	90	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 44.8 N	120 24.8 W	09/07/00	1819 UTC	1021 m	310 12 kn	310 03 06	2	1015.0 mb	15.8 C	14.1 C	09m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.68	15.68	33.648	24.781	315.7	0.000	6.14	108.5	4.9	0.36	0.7	0.04	4.25	0.83	0	
2	A	15.68	15.68	33.648	24.781	315.7	0.006	6.14	108.5	4.9	0.36	0.7	0.04	4.25	0.83	2	222
7	A	15.63	15.63	33.647	24.791	314.9	0.022	6.13	108.2	4.9	0.36	0.7	0.04	4.21	0.94	7	221
10	ISL	15.49	15.49	33.650	24.825	311.8	0.031	6.09	107.2	5.1	0.38	1.0	0.04	4.15	0.93	10	
12	A	15.40	15.40	33.652	24.846	309.8	0.038	6.07	106.7	5.3	0.39	1.2	0.04	4.10	0.93	12	220
18	A	13.48	13.48	33.727	25.312	265.6	0.055	5.30	89.6	11.7	0.88	8.7	0.14	3.98	1.11	18	219
20	ISL	13.11	13.11	33.711	25.374	259.8	0.060	5.17	86.7	12.1	0.96	9.9	0.17	3.12	1.00	20	
24	A	12.56	12.56	33.656	25.439	253.6	0.070	5.02	83.2	12.9	1.07	11.2	0.20	1.24	0.72	24	218
30	ISL	11.82	11.82	33.601	25.538	244.4	0.085	4.87	79.5	13.5	1.16	12.6	0.19	0.78	0.46	30	
34	A	11.49	11.49	33.588	25.589	239.6	0.095	4.77	77.3	14.0	1.20	13.3	0.18	0.47	0.36	34	217
43		11.40	11.39	33.677	25.675	231.7	0.116	4.32	69.9	16.4	1.34	15.7	0.20	0.32	0.31	43	216
50		10.38	10.37	33.681	25.859	214.2	0.132	3.86	61.1	19.2	1.55	19.1	0.08	0.13	0.20	50	215
60		10.25	10.24	33.770	25.951	205.7	0.153	3.48	54.9	21.6	1.65	20.7	0.12	0.13	0.18	60	214
70		10.12	10.11	33.795	25.993	202.0	0.173	3.38	53.2	22.5	1.69	21.3	0.10	0.11	0.15	70	213
75	ISL	10.05	10.04	33.799	26.008	200.6	0.183	3.36	52.8	22.7	1.70	21.5	0.09	0.10	0.15	75	
86		9.84	9.83	33.825	26.063	195.5	0.205	3.31	51.8	23.8	1.74	22.3	0.06	0.07	0.14	86	212
100		9.33	9.32	33.942	26.239	179.1	0.231	2.92	45.2	28.6	1.92	24.7	0.02	0.02	0.13	101	211
121		9.13	9.12	33.980	26.301	173.6	0.268	2.76	42.6	30.7	2.00	25.9	0.02	0.01	0.14	122	210
125	ISL	9.06	9.05	33.992	26.322	171.7	0.275	2.73	42.0	31.4	2.02	26.2	0.02	0.01	0.14	126	
139		8.81	8.80	34.038	26.397	164.7	0.299	2.59	39.7	34.1	2.11	27.3	0.02	0.01	0.13	140	209
150	ISL	8.71	8.69	34.068	26.437	161.2	0.317	2.41	36.8	35.7	2.18	28.0	0.02	0.01	0.12	151	
171		8.62	8.60	34.116	26.489	156.6	0.350	2.05	31.3	38.4	2.31	29.2	0.02	0.00	0.09	172	208
200	ISL	8.49	8.47	34.172	26.553	151.1	0.395	1.72	26.2	42.1	2.45	30.5	0.02	0.01	0.05	201	
201		8.49	8.47	34.174	26.555	150.9	0.396	1.71	26.0	42.2	2.45	30.5	0.02	0.01	0.05	202	207
229		8.46	8.44	34.207	26.586	148.5	0.438	1.38	21.0	44.2	2.56	31.4	0.02			230	206
250	ISL	8.45	8.42	34.248	26.620	145.7	0.469	1.12	17.0	46.3	2.66	32.0	0.01			252	
267		8.44	8.41	34.282	26.648	143.4	0.494	0.95	14.4	48.0	2.73	32.4	0.01			269	205
300	ISL	8.18	8.15	34.270	26.678	140.9	0.541	0.96	14.5	50.2	2.75	33.1	0.01			302	
316		8.01	7.98	34.256	26.693	139.7	0.563	0.96	14.5	51.4	2.76	33.5	0.01			318	204
379		7.36	7.32	34.265	26.795	130.7	0.648	0.68	10.1	60.1	2.93	36.0	0.01			382	203
400	ISL	7.22	7.18	34.271	26.820	128.6	0.675	0.62	9.2	62.2	2.97	36.5	0.01			403	
440		7.01	6.97	34.282	26.858	125.5	0.726	0.52	7.6	65.5	3.03	37.3	0.00			443	202
500	ISL	6.69	6.64	34.295	26.912	121.0	0.800	0.43	6.3	70.1	3.11	38.4	0.00			504	
511		6.63	6.58	34.297	26.922	120.1	0.813	0.41	6.0	70.9	3.12	38.6	0.00			515	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 34.6 N	120 45.8 W	09/07/00	1253 UTC	1525 m	310 15 kn			1013.7 mb	15.5 C	13.5 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.80	15.80	33.334	24.512	341.2	0.000	5.87	103.8	3.1	0.34	0.5	0.02	0.34	0.09	0	
1		15.80	15.80	33.334	24.512	341.2	0.003	5.87	103.8	3.1	0.34	0.5	0.02	0.34	0.09	1	220
9		15.80	15.80	33.337	24.515	341.3	0.031	5.87	103.8	3.1	0.34	0.5	0.02	0.38	0.09	9	219
10	ISL	15.80	15.80	33.337	24.515	341.3	0.034	5.87	103.8	3.1	0.34	0.5	0.02	0.37	0.09	10	
19		15.75	15.75	33.341	24.529	340.2	0.065	5.92	104.6	3.1	0.35	0.6	0.02	0.34	0.09	19	218
20	ISL	15.73	15.73	33.341	24.534	339.8	0.068	5.92	104.5	3.1	0.35	0.6	0.02	0.36	0.10	20	
29		15.43	15.43	33.335	24.596	334.1	0.099	5.95	104.4	3.2	0.36	0.7	0.03	0.52	0.16	29	217
30	ISL	15.42	15.42	33.334	24.598	334.0	0.102	5.95	104.4	3.2	0.36	0.7	0.03	0.51	0.16	30	
39		14.94	14.93	33.295	24.673	327.1	0.132	6.00	104.2	3.1	0.36	0.7	0.03	0.46	0.16	39	216
49		12.97	12.96	33.168	24.982	297.8	0.163	6.11	101.9	3.2	0.38	0.4	0.04	0.38	0.18	49	215
50	ISL	12.89	12.88	33.169	24.998	296.3	0.166	6.10	101.5	3.3	0.39	0.5	0.05	0.38	0.18	50	
59		12.41	12.40	33.211	25.124	284.5	0.192	6.04	99.5	4.5	0.51	2.2	0.13	0.41	0.17	59	214
69		11.51	11.50	33.241	25.316	266.4	0.219	5.74	92.8	6.0	0.69	5.1	0.15	0.31	0.16	69	213
75	ISL	11.09	11.08	33.268	25.413	257.2	0.235	5.58	89.4	7.0	0.79	6.9	0.12	0.26	0.15	75	
85		10.54	10.53	33.330	25.558	243.6	0.260	5.28	83.6	9.3	0.96	10.0	0.05	0.18	0.14	85	212
99		9.95	9.94	33.456	25.757	224.9	0.293	4.67	73.1	14.3	1.26	14.9	0.02	0.08	0.14	99	211
100	ISL	9.94	9.93	33.464	25.765	224.2	0.295	4.63	72.5	14.6	1.28	15.2	0.02	0.08	0.14	100	
119		9.70	9.69	33.621	25.928	209.1	0.336	3.95	61.5	19.9	1.58	19.9	0.01	0.03	0.05	120	210
125	ISL	9.48	9.47	33.696	26.023	200.1	0.349	3.72	57.7	22.6	1.68	21.7	0.01	0.02	0.05	126	
139		8.95	8.94	33.864	26.239	179.7	0.375	3.24	49.7	28.6	1.89	25.3	0.01	0.00	0.04	140	209
150	ISL	8.74	8.72	33.930	26.324	171.9	0.395	3.07	46.9	30.8	1.96	26.0	0.01	0.00	0.04	151	
169		8.52	8.50	33.984	26.401	164.9	0.427	2.94	44.7	33.0	2.01	27.1	0.01	0.00	0.03	170	208
199		8.19	8.17	34.019	26.478	158.0	0.475	2.75	41.5	36.9	2.12	28.5	0.01	0.00	0.02	200	207
200	ISL	8.18	8.16	34.020	26.481	157.7	0.477	2.74	41.4	37.0	2.12	28.6	0.01			201	
228		7.78	7.76	34.032	26.549	151.6	0.520	2.55	38.1	41.1	2.23	30.1	0.01			229	206
250	ISL	7.43	7.41	34.028	26.597	147.3	0.553	2.43	36.1	44.6	2.31	31.2	0.01			251	
272		7.09	7.06	34.024	26.641	143.2	0.585	2.29	33.7	48.2	2.39	32.3	0.00			274	205
300	ISL	6.75	6.72	34.034	26.696	138.3	0.624	2.01	29.4	53.2	2.53	34.0	0.00			302	
321		6.54	6.51	34.046	26.733	134.9	0.653	1.78	25.9	56.9	2.63	35.2	0.00			323	204
376		6.20	6.17	34.085	26.809	128.3	0.725	1.30	18.7	64.5	2.82	37.6	0.00			378	203
400	ISL	6.11	6.07	34.109	26.839	125.7	0.756	1.12	16.1	67.4	2.89	38.3	0.00			403	
437		5.99	5.95	34.147	26.885	121.8	0.802	0.88	12.6	71.7	2.99	39.3	0.00			440	202
500	ISL	5.66	5.62	34.204	26.971	114.1	0.876	0.55	7.8	80.2	3.13	41.0	0.00			503	
519		5.56	5.52	34.221	26.997	111.8	0.897	0.45	6.4	82.8	3.17	41.5	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 14.6 N	121 26.8 W	09/07/00	0643 UTC	3804 m	310 15 kn			1017.0 mb	16.7 C	14.0 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.61	16.61	33.234	24.251	366.1	0.000	5.69	102.2	3.0	0.29	0.1	0.00	0.10	0.02	0	
2		16.61	16.61	33.234	24.251	366.2	0.007	5.69	102.2	3.0	0.29	0.1	0.00	0.10	0.02	2	220
10	ISL	16.59	16.59	33.233	24.255	366.0	0.037	5.70	102.3	3.0	0.30	0.1	0.00	0.10	0.02	10	
13		16.58	16.58	33.232	24.257	366.0	0.048	5.71	102.5	3.0	0.30	0.1	0.00	0.10	0.02	13	219
20	ISL	16.49	16.49	33.240	24.284	363.6	0.073	5.72	102.5	3.1	0.30	0.1	0.00	0.11	0.02	20	
28		16.38	16.38	33.249	24.317	360.8	0.102	5.74	102.6	3.1	0.29	0.1	0.00	0.13	0.03	28	218
30	ISL	16.22	16.22	33.248	24.352	357.4	0.109	5.77	102.8	3.1	0.29	0.1	0.00	0.15	0.04	30	
43		15.03	15.02	33.252	24.620	332.2	0.154	6.00	104.4	3.0	0.30	0.1	0.00	0.31	0.13	43	217
50	ISL	14.65	14.64	33.273	24.718	323.1	0.177	6.03	104.1	3.1	0.31	0.1	0.00	0.45	0.22	50	
54		14.43	14.42	33.277	24.768	318.4	0.190	6.04	103.8	3.1	0.32	0.2	0.01	0.51	0.26	54	216
63		13.67	13.66	33.231	24.891	307.0	0.218	6.06	102.5	3.2	0.37	0.4	0.03	0.49	0.28	63	215
74		12.80	12.79	33.206	25.045	292.4	0.251	5.95	98.9	3.7	0.48	1.2	0.17	0.51	0.32	74	214
75	ISL	12.73	12.72	33.211	25.063	290.8	0.254	5.93	98.4	3.8	0.49	1.5	0.18	0.49	0.31	75	
84		12.16	12.15	33.279	25.225	275.5	0.279	5.70	93.5	4.9	0.61	3.8	0.23	0.25	0.19	84	213
94		11.59	11.58	33.360	25.394	259.5	0.306	5.58	90.4	5.7	0.65	5.0	0.13	0.18	0.24	94	212
100	ISL	11.24	11.23	33.375	25.470	252.4	0.321	5.51	88.7	6.4	0.71	6.0	0.08	0.16	0.21	100	
109		10.81	10.80	33.392	25.560	244.0	0.344	5.39	85.9	7.7	0.81	7.8	0.03	0.13	0.14	109	211
123		10.52	10.51	33.473	25.674	233.5	0.377	5.07	80.4	10.1	0.97	10.6	0.02	0.08	0.09	124	210
125	ISL	10.47	10.46	33.491	25.697	231.3	0.382	4.96	78.5	10.9	1.02	11.4	0.02	0.07	0.09	126	
143		9.98	9.96	33.656	25.909	211.4	0.422	3.96	62.1	18.8	1.50	19.1	0.01	0.02	0.06	144	209
150	ISL	9.80	9.78	33.699	25.973	205.5	0.436	3.79	59.2	20.6	1.59	20.5	0.01	0.02	0.05	151	
168		9.38	9.36	33.789	26.112	192.5	0.472	3.54	54.8	24.1	1.72	22.7	0.01	0.01	0.03	169	208
197		8.85	8.83	33.940	26.315	173.6	0.525	3.12	47.8	29.6	1.91	25.7	0.01	0.00	0.02	198	207
200	ISL	8.79	8.77	33.949	26.332	172.1	0.530	3.10	47.4	30.2	1.92	25.9	0.01			201	
228		8.21	8.19	34.001	26.462	160.1	0.577	2.94	44.4	35.3	2.04	27.7	0.01			229	206
250	ISL	7.85	7.83	34.015	26.526	154.2	0.612	2.78	41.6	38.9	2.13	29.0	0.01			251	
268		7.60	7.57	34.019	26.566	150.6	0.639	2.62	39.0	41.8	2.21	30.1	0.01			270	205
300	ISL	7.21	7.18	34.035	26.634	144.5	0.686	2.23	32.9	47.3	2.39	32.3	0.00			302	
318		7.03	7.00	34.047	26.668	141.4	0.712	1.99	29.2	50.4	2.49	33.5	0.00			320	204
378		6.59	6.56	34.111	26.779	131.5	0.794	1.30	18.9	60.1	2.76	36.5	0.00			380	203
400	ISL	6.48	6.44	34.145	26.820	127.9	0.822	1.05	15.2	63.8	2.86	37.5	0.00			403	
437		6.31	6.27	34.200	26.886	122.0	0.869	0.70	10.1	69.6	3.01	38.9	0.00			440	202
500	ISL	5.95	5.91	34.240	26.964	115.2	0.943	0.48	6.9	77.0	3.13	40.4	0.00			503	
517		5.85	5.81	34.251	26.985	113.3	0.963	0.42	6.0	79.0	3.16	40.8	0.00			521	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 54.9 N	122 7.8 W	09/07/00	0022 UTC	4181 m	320 12 kn	340 03 08	1	1018.2 mb	18.6 C	15.6 C	23m	3/8 SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.32	17.32	33.317	24.148	375.9	0.000	5.64	102.7	2.2	0.28	0.0	0.00	0.10	0.02	0	
1		17.32	17.32	33.317	24.148	375.9	0.004	5.64	102.7	2.2	0.28	0.0	0.00	0.10	0.02	1	220
10	ISL	17.07	17.07	33.315	24.206	370.7	0.037	5.65	102.4	2.2	0.28	0.0	0.00	0.11	0.03	10	
15		16.89	16.89	33.314	24.248	366.9	0.056	5.66	102.2	2.2	0.28	0.0	0.00	0.12	0.03	15	219
20	ISL	16.88	16.88	33.315	24.251	366.8	0.074	5.66	102.2	2.2	0.28	0.0	0.00	0.12	0.03	20	
30		16.87	16.87	33.316	24.255	366.8	0.111	5.67	102.4	2.2	0.28	0.0	0.00	0.14	0.03	30	218
45		16.60	16.59	33.333	24.331	360.0	0.165	5.73	102.9	2.2	0.28	0.0	0.00	0.21	0.06	45	217
50	ISL	15.82	15.81	33.298	24.482	345.7	0.183	5.91	104.5	2.4	0.29	0.0	0.00	0.29	0.08	50	
54		15.16	15.15	33.278	24.612	333.3	0.197	6.05	105.6	2.6	0.30	0.0	0.00	0.35	0.11	54	216
65		14.27	14.26	33.317	24.833	312.5	0.232	6.09	104.4	2.7	0.31	0.1	0.00	0.48	0.21	65	215
75		13.31	13.30	33.308	25.023	294.6	0.262	5.99	100.7	4.1	0.52	2.3	0.15	0.53	0.31	75	214
85		13.10	13.09	33.356	25.103	287.3	0.292	5.90	98.7	5.2	0.65	4.2	0.28	0.34	0.25	85	213
94		12.79	12.78	33.385	25.186	279.5	0.317	5.80	96.4	5.7	0.71	5.2	0.40	0.32 A	0.27 A	94	212
100	ISL	12.42	12.41	33.386	25.259	272.7	0.334	5.66	93.4	6.4	0.78	6.6	0.29	0.26	0.24	100	
110		11.78	11.77	33.388	25.381	261.2	0.360	5.42	88.2	7.7	0.90	9.0	0.04	0.16	0.16	110	211
125		11.23	11.21	33.439	25.522	248.1	0.398	5.24	84.3	9.7	1.04	11.1	0.05	0.10	0.11	126	210
145		10.34	10.32	33.534	25.753	226.4	0.446	4.54	71.7	14.4	1.28	15.4	0.01	0.05	0.09	146	209
150	ISL	10.22	10.20	33.574	25.805	221.6	0.457	4.32	68.1	16.0	1.36	16.7	0.01	0.04	0.08	151	
169		9.86	9.84	33.734	25.990	204.2	0.498	3.54	55.4	22.2	1.68	21.6	0.01	0.01	0.06	170	208
198		9.07	9.05	33.903	26.252	179.8	0.553	2.96	45.5	29.6	1.95	25.9	0.00	0.01	0.07	199	207
200	ISL	9.02	9.00	33.908	26.264	178.7	0.557	2.95	45.3	29.9	1.96	26.0	0.00			201	
229		8.49	8.47	33.965	26.391	166.9	0.607	2.88	43.8	33.5	2.03	27.5	0.01			230	206
250	ISL	8.27	8.24	34.036	26.480	158.8	0.641	2.43	36.8	38.0	2.20	29.3	0.01			251	
268		8.13	8.10	34.096	26.549	152.5	0.669	1.98	29.9	42.2	2.37	30.8	0.00			269	205
300	ISL	7.82	7.79	34.155	26.641	144.2	0.717	1.43	21.4	47.8	2.56	32.6	0.00			302	
319		7.62	7.59	34.174	26.686	140.2	0.744	1.20	17.9	50.8	2.65	33.5	0.00			321	204
379		6.94	6.90	34.178	26.785	131.3	0.825	1.04	15.3	59.8	2.83	36.1	0.00			381	203
400	ISL	6.71	6.67	34.181	26.818	128.3	0.852	0.95	13.9	63.2	2.89	37.0	0.00			402	
438		6.33	6.29	34.186	26.872	123.4	0.900	0.77	11.1	69.3	2.99	38.6	0.00			441	202
500	ISL	5.80	5.76	34.195	26.947	116.6	0.975	0.60	8.6	77.9	3.10	40.4	0.00			503	
517		5.66	5.62	34.198	26.967	114.8	0.994	0.55	7.8	80.3	3.13	40.9	0.00			520	201

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 34.9 N	122 48.9 W	08/07/00	1822 UTC	4292 m	320 05 kn	340 02 08	1	1019.3 mb	19.7 C	16.9 C	32m	4/8	CU

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	17.40	17.40	33.305	24.120	378.6	0.000	5.62	102.5	2.7	0.28	0.0	0.00	0.09	0.01	0	
2 A	17.40	17.40	33.305	24.120	378.7	0.008	5.62	102.5	2.7	0.28	0.0	0.00	0.09	0.01	2	223
10 ISL	17.20	17.20	33.308	24.170	374.2	0.038	5.62	102.1	2.7	0.28	0.0	0.00	0.09	0.01	10	
11	17.17	17.17	33.309	24.178	373.4	0.041	5.62	102.1	2.7	0.28	0.0	0.00	0.09	0.01	11	222
20 ISL	17.15	17.15	33.316	24.188	372.7	0.075	5.65	102.6	2.6	0.29	0.0	0.00	0.10	0.02	20	
22 A	17.14	17.14	33.318	24.193	372.4	0.082	5.66	102.7	2.6	0.29	0.0	0.00	0.10	0.02	22	221
30 ISL	17.12	17.12	33.321	24.200	372.0	0.112	5.63	102.2	2.6	0.29	0.0	0.00	0.10	0.02	30	
32	17.11	17.10	33.322	24.203	371.8	0.120	5.62	102.0	2.6	0.29	0.0	0.00	0.10	0.02	32	220
43 A	16.06	16.05	33.221	24.368	356.3	0.160	5.85	103.9	2.7	0.29	0.0	0.00	0.15	0.04	43	219
50 ISL	15.38	15.37	33.172	24.483	345.6	0.184	5.96	104.4	2.7	0.30	0.0	0.00	0.17	0.07	50	
55	15.04	15.03	33.197	24.576	336.8	0.201	6.01	104.6	2.7	0.30	0.0	0.00	0.18	0.08	55	218
64 A	15.08	15.07	33.497	24.799	315.9	0.231	6.00	104.7	2.7	0.26	0.0	0.00	0.18	0.05	64	217
73	14.30	14.29	33.451	24.930	303.5	0.259	5.97	102.5	2.8	0.28	0.0	0.00	0.22	0.10	73	216
75 ISL	14.19	14.18	33.452	24.954	301.3	0.265	5.97	102.2	2.8	0.28	0.0	0.00	0.22	0.11	75	
83 A	13.82	13.81	33.472	25.047	292.7	0.288	5.96	101.3	3.0	0.29	0.0	0.00	0.25	0.16	83	215
93	13.22	13.21	33.497	25.188	279.4	0.317	5.77	96.9	3.6	0.37	0.6	0.03	0.35	0.26	93	214
100 ISL	12.06	12.05	33.430	25.362	262.9	0.336	5.63	92.2	4.9	0.54	3.3	0.09	0.28	0.24	100	
103	11.55	11.54	33.403	25.435	255.9	0.344	5.57	90.2	5.5	0.62	4.6	0.11	0.24	0.22	103	213
113	10.80	10.79	33.399	25.567	243.4	0.369	5.39	85.9	7.6	0.78	7.4	0.02	0.12	0.18	113	212
122 A	10.19	10.18	33.332	25.620	238.4	0.390	5.33	83.8	9.6	0.93	9.7	0.01	0.13	0.13	123	211
125 ISL	10.06	10.05	33.346	25.653	235.3	0.398	5.24	82.1	10.5	0.99	10.6	0.01	0.12	0.12	126	
131	9.88	9.87	33.392	25.719	229.1	0.411	5.00	78.1	12.5	1.11	12.5	0.01	0.09	0.10	132	210
139	9.72	9.70	33.437	25.781	223.4	0.430	4.66	72.5	15.8	1.30	15.3	0.01	0.07	0.08	140	209
150 ISL	9.67	9.65	33.586	25.906	211.8	0.453	3.87	60.2	21.8	1.62	19.9	0.01	0.04	0.05	151	
164	9.61	9.59	33.775	26.064	197.1	0.482	2.89	45.0	28.7	1.97	25.0	0.00	0.00	0.03	165	208
193	9.33	9.31	33.910	26.216	183.2	0.537	2.34	36.2	32.6	2.14	27.7	0.00	0.00	0.02	194	207
200 ISL	9.27	9.25	33.926	26.238	181.2	0.550	2.31	35.7	33.1	2.16	28.0	0.00			201	
229	8.99	8.97	33.968	26.316	174.3	0.602	2.20	33.8	34.6	2.21	28.8	0.00			230	206
250 ISL	8.74	8.71	34.000	26.380	168.5	0.638	2.12	32.4	36.4	2.26	29.6	0.00			251	
269	8.49	8.46	34.024	26.438	163.3	0.669	2.06	31.3	38.4	2.30	30.3	0.00			270	205
300 ISL	8.00	7.97	34.039	26.524	155.4	0.718	2.06	31.0	42.1	2.36	31.4	0.00			302	
318	7.69	7.66	34.041	26.571	151.1	0.746	2.06	30.7	44.5	2.39	32.0	0.00			320	204
378	6.72	6.69	34.042	26.707	138.4	0.833	1.86	27.1	54.1	2.57	34.5	0.00			380	203
400 ISL	6.47	6.43	34.056	26.751	134.3	0.863	1.61	23.4	58.7	2.68	35.9	0.00			402	
439	6.11	6.07	34.093	26.827	127.4	0.914	1.12	16.1	67.1	2.88	38.4	0.00			442	202
500 ISL	5.65	5.61	34.166	26.942	116.8	0.988	0.67	9.5	78.6	3.08	40.7	0.00			503	
519	5.51	5.47	34.190	26.978	113.5	1.010	0.53	7.5	82.2	3.14	41.4	0.00			522	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 14.9 N	123 29.4 W	08/07/00	1237 UTC	4174 m	320 06 kn			1018.9 mb	17.3 C	14.3 C			

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	16.93	16.93	33.202	24.152	375.6	0.000	5.68	102.6	2.8	0.29	0.0	0.00	0.11	0.02	0	
1	16.93	16.93	33.202	24.152	375.6	0.004	5.68	102.6	2.8	0.29	0.0	0.00	0.11	0.02	1	220
10 ISL	16.79	16.79	33.197	24.181	373.1	0.037	5.71	102.9	2.7	0.29	0.0	0.00	0.11	0.02	10	
15	16.69	16.69	33.194	24.202	371.2	0.056	5.73	103.0	2.7	0.29	0.0	0.00	0.11	0.02	15	219
20 ISL	16.66	16.66	33.194	24.209	370.7	0.075	5.74	103.1	2.7	0.29	0.0	0.00	0.11	0.02	20	
29	16.57	16.57	33.193	24.230	369.1	0.108	5.76	103.3	2.7	0.29	0.0	0.00	0.11	0.03	29	218
30 ISL	16.55	16.55	33.192	24.234	368.7	0.112	5.76	103.3	2.7	0.29	0.0	0.00	0.11	0.03	30	
44	16.06	16.05	33.179	24.336	359.4	0.163	5.84	103.7	2.7	0.29	0.0	0.00	0.16	0.05	44	217
50 ISL	15.74	15.73	33.172	24.403	353.2	0.184	5.89	103.9	2.7	0.29	0.0	0.00	0.19	0.06	50	
55	15.37	15.36	33.174	24.486	345.4	0.201	5.94	104.0	2.7	0.29	0.0	0.00	0.22	0.07	55	216
64	14.27	14.26	33.221	24.759	319.6	0.231	6.11	104.7	2.7	0.31	0.0	0.00	0.29	0.14	64	215
75	13.42	13.41	33.220	24.933	303.2	0.266	6.20	104.4	2.8	0.33	0.0	0.00	0.43	0.29	75	214
84	12.67	12.66	33.244	25.100	287.4	0.292	6.02	99.8	3.6	0.43	0.6	0.07	0.36	0.29	84	213
94	12.15	12.14	33.264	25.216	276.6	0.320	5.76	94.4	4.4	0.55	2.7	0.21	0.22	0.19	94	212
100 ISL	11.76	11.75	33.312	25.326	266.2	0.337	5.51	89.6	6.0	0.71	5.6	0.15	0.16	0.16	100	
109	11.14	11.13	33.388	25.498	249.9	0.360	5.13	82.4	9.0	0.96	10.2	0.02	0.09	0.13	109	211
125	10.02	10.01	33.430	25.726	228.5	0.398	4.83	75.7	13.0	1.17	13.7	0.01	0.07	0.09	126	210
144	9.77	9.75	33.616	25.913	211.0	0.440	3.97	61.9	19.6	1.55	19.6	0.00	0.03	0.05	145	209
150 ISL	9.67	9.65	33.663	25.966	206.1	0.452	3.77	58.7	21.4	1.64	21.0	0.00	0.02	0.04	151	
169	9.31	9.29	33.791	26.125	191.3	0.490	3.27	50.6	26.5	1.85	24.3	0.00	0.00	0.03	170	208
198	8.73	8.71	33.964	26.353	170.1	0.543	2.79	42.6	32.5	2.05	27.4	0.00	0.00	0.03	199	207
200 ISL	8.70	8.68	33.971	26.363	169.1	0.546	2.76	42.1	32.9	2.06	27.6	0.00			201	
228	8.36	8.34	34.029	26.461	160.2	0.592	2.36	35.8	37.3	2.22	29.5	0.00			229	206
250 ISL	8.10	8.07	34.053	26.519	155.0	0.627	2.16	32.5	40.2	2.31	30.7	0.00			251	
267	7.89	7.86	34.061	26.557	151.6	0.653	2.06	30.9	42.5	2.37	31.5	0.00			268	205
300 ISL	7.33	7.30	34.059	26.636	144.4	0.702	1.95	28.9	47.9	2.46	32.9	0.00			302	
317	7.05	7.02	34.057	26.673	140.9	0.726	1.89	27.8	50.9	2.51	33.7	0.00			319	204
377	6.48	6.45	34.096	26.781	131.2	0.807	1.25	18.1	61.9	2.78	37.0	0.00			379	203
400 ISL	6.26	6.22	34.098	26.812	128.5	0.837	1.14	16.5	65.2	2.84	37.9	0.00			402	
437	5.93	5.89	34.105	26.859	124.2	0.884	1.00	14.3	70.4	2.93	39.2	0.00			440	202
500 ISL	5.54	5.50	34.167	26.956	115.4	0.960	0.64	9.1	80.6	3.10	41.1	0.00			503	
510	5.48	5.44	34.177	26.972	114.0	0.971	0.58	8.2	82.2	3.13	41.4	0.00			513	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 83 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
31 54.8 N	124 10.5 W	08/07/00	0644 UTC	4181 m	320 08 kn			1018.9 mb	17.7 C	15.0 C		

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	18.05	18.05	33.605	24.193	371.7	0.000	5.52	102.2	2.4	0.25	0.0	0.00	0.09	0.02	0	
1	18.05	18.05	33.605	24.193	371.7	0.004	5.52	102.2	2.4	0.25	0.0	0.00	0.09	0.02	1	220
10 ISL	17.96	17.96	33.604	24.214	370.0	0.037	5.53	102.2	2.4	0.26	0.0	0.00	0.09	0.02	10	
16	17.87	17.87	33.606	24.238	367.9	0.059	5.53	102.0	2.3	0.26	0.0	0.00	0.09	0.02	16	219
20 ISL	17.84	17.84	33.613	24.251	366.8	0.074	5.54	102.1	2.2	0.26	0.0	0.00	0.09	0.02	20	
30 ISL	17.78	17.77	33.630	24.279	364.5	0.110	5.57	102.6	2.1	0.25	0.0	0.00	0.10	0.02	30	
31	17.78	17.77	33.632	24.280	364.4	0.114	5.57	102.6	2.1	0.25	0.0	0.00	0.10	0.02	31	218
45	17.68	17.67	33.628	24.302	362.8	0.165	5.59	102.7	2.2	0.25	0.0	0.00	0.14	0.04	45	217
50 ISL	17.58	17.57	33.651	24.344	359.0	0.183	5.60	102.7	2.2	0.24	0.0	0.00	0.14	0.04	50	
61	17.13	17.12	33.684	24.477	346.7	0.222	5.66	102.9	2.3	0.23	0.0	0.00	0.15	0.05	61	216
75	15.91	15.90	33.603	24.697	326.0	0.269	5.84	103.6	2.4	0.26	0.0	0.00	0.17	0.08	75	215
85	15.18	15.17	33.607	24.863	310.5	0.301	5.84	102.1	2.5	0.27	0.0	0.00	0.20	0.14	85	214
95	14.23	14.22	33.516	24.996	297.9	0.331	5.73	98.2	2.9	0.37	0.7	0.09	0.25	0.19	95	213
100 ISL	13.98	13.97	33.573	25.092	288.9	0.346	5.65	96.4	3.3	0.39	1.1	0.12	0.25	0.22	100	
105	13.77	13.76	33.644	25.191	279.6	0.360	5.57	94.7	3.7	0.41	1.6	0.13	0.25	0.23	105	212
115	13.16	13.14	33.671	25.335	266.0	0.387	5.42	91.0	4.7	0.50	3.3	0.14	0.18	0.19	115	211
125	11.77	11.75	33.457	25.437	256.3	0.414	5.30	86.3	6.8	0.74	6.8	0.02	0.12	0.13	126	210
140	10.71	10.69	33.475	25.643	236.8	0.450	4.87	77.5	11.0	1.03	11.6	0.01	0.06	0.08	141	209
150 ISL	10.38	10.36	33.583	25.784	223.5	0.474	4.53	71.6	14.0	1.19	14.4	0.00	0.04	0.06	151	
165	10.09	10.07	33.767	25.978	205.5	0.506	4.06	63.9	18.3	1.39	18.0	0.00	0.02	0.03	166	208
195	9.32	9.30	33.897	26.207	184.1	0.564	3.61	55.9	24.7	1.66	22.3	0.00	0.00	0.02	196	207
200 ISL	9.22	9.20	33.914	26.236	181.3	0.573	3.59	55.4	25.4	1.68	22.7	0.00			201	
228	8.72	8.70	33.986	26.372	168.8	0.622	3.52	53.8	29.4	1.77	24.2	0.00			229	206
250 ISL	8.32	8.29	34.008	26.451	161.6	0.659	3.30	50.0	33.5	1.90	26.1	0.00			251	
268	8.01	7.98	34.015	26.503	156.8	0.687	3.06	46.0	36.9	2.01	27.6	0.00			269	205
300 ISL	7.55	7.52	34.020	26.574	150.3	0.736	2.60	38.7	41.8	2.16	29.5	0.00			302	
318	7.33	7.30	34.022	26.607	147.4	0.763	2.35	34.8	44.5	2.24	30.5	0.00			320	204
377	6.84	6.80	34.065	26.709	138.3	0.847	1.82	26.6	54.1	2.56	34.3	0.00			379	203
400 ISL	6.69	6.65	34.092	26.751	134.6	0.879	1.52	22.2	58.0	2.68	35.6	0.00			402	
436	6.48	6.44	34.138	26.815	128.9	0.926	1.07	15.5	64.1	2.86	37.5	0.00			439	202
500 ISL	6.07	6.03	34.214	26.928	118.7	1.006	0.62	8.9	74.4	3.06	39.7	0.00			503	
519	5.95	5.90	34.237	26.962	115.6	1.028	0.48	6.9	77.5	3.12	40.4	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 53.4 N	118 29.6 W	05/07/00	2307 UTC	56 m	280 06 kn	270 02 06	1	1013.8 mb	19.0 C	16.8 C	09m	1/8 CI

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	19.77	19.77	33.677	23.814	407.8	0.000	6.37	121.8	4.0	0.16	0.0	0.00	0.92	0.20	0	
1	19.77	19.77	33.677	23.814	407.8	0.004	6.37	121.8	4.0	0.16	0.0	0.00	0.92	0.20	1	207
6	19.65	19.65	33.674	23.843	405.2	0.024	6.39	121.9	4.0	0.16	0.0	0.00	0.92	0.22	6	206
10 ISL	19.52	19.52	33.672	23.875	402.3	0.041	6.42	122.2	4.0	0.16	0.0	0.00	1.00	0.24	10	
11	19.49	19.49	33.672	23.883	401.6	0.045	6.43	122.3	4.0	0.16	0.0	0.00	1.02	0.25	11	205
20 ISL	15.79	15.79	33.584	24.708	323.3	0.077	6.44	114.0	5.0	0.32	0.1	0.01	3.16	0.81	20	
21	15.28	15.28	33.581	24.818	312.7	0.080	6.44	112.9	5.1	0.34	0.1	0.01	3.33	0.86	21	204
30	12.61	12.61	33.522	25.326	264.6	0.106	4.91	81.4	10.2	0.97	7.6	0.34	0.76	0.51	30	203
40	12.21	12.20	33.518	25.400	257.8	0.132	4.44	73.0	12.6	1.17	9.9	0.46	0.46	0.41	40	202
50 ISL	12.00	11.99	33.513	25.436	254.6	0.158	4.29	70.2	13.4	1.26	11.0	0.46	0.29	0.36	50	
51	11.98	11.97	33.513	25.440	254.2	0.161	4.27	69.9	13.5	1.27	11.1	0.46	0.27	0.35	51	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 35

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 49.2 N	118 37.8 W	06/07/00	0105 UTC	680 m	280 06 kn	280 02 07	0	1012.7 mb	19.1 C	16.5 C	15m	0/8

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	19.25	19.25	33.679	23.949	394.9	0.000	5.98	113.3	3.0	0.22	0.1	0.00	0.66	0.09	0	
1	19.25	19.25	33.679	23.949	394.9	0.004	5.98	113.3	3.0	0.22	0.1	0.00	0.66	0.09	1	220
9	18.72	18.72	33.658	24.068	383.9	0.035	6.15	115.3	3.1	0.23	0.1	0.00	0.45	0.15	9	219
10 ISL	18.46	18.46	33.649	24.126	378.4	0.039	6.22	116.0	3.2	0.24	0.1	0.00	0.47	0.16	10	
20	15.19	15.19	33.581	24.838	310.8	0.073	6.60	115.5	4.2	0.31	0.1	0.00	1.08	0.23	20	218
29	12.68	12.68	33.548	25.332	263.9	0.099	5.57	92.5	7.9	0.68	4.5	0.15	2.04	1.05	29	217
30 ISL	12.55	12.55	33.548	25.358	261.5	0.102	5.48	90.8	8.2	0.72	5.2	0.17	1.96	1.02	30	
39	11.98	11.97	33.555	25.472	250.9	0.125	4.88	79.9	9.9	1.02	11.0	0.25	0.93	0.51	39	216
50	11.61	11.60	33.574	25.556	243.1	0.152	4.58	74.4	11.7	1.16	13.2	0.15	0.51	0.36	50	215
60	10.86	10.85	33.622	25.729	226.8	0.176	4.08	65.2	15.2	1.35	16.0	0.13	0.37	0.51	60	214
70	10.56	10.55	33.662	25.813	219.0	0.198	3.97	63.1	16.9	1.43	17.4	0.07	0.17	0.20	70	213
75 ISL	10.42	10.41	33.678	25.850	215.6	0.209	3.90	61.8	17.6	1.47	18.0	0.06	0.14	0.18	75	
86	10.14	10.13	33.728	25.937	207.6	0.232	3.64	57.3	19.9	1.59	19.8	0.04	0.08	0.13	86	212
100	9.83	9.82	33.848	26.083	193.9	0.260	2.94	46.0	25.4	1.87	23.6	0.03	0.07	0.13	101	211
120	9.53	9.52	33.929	26.197	183.6	0.298	2.68	41.7	28.6	1.99	25.2	0.02	0.05	0.09	121	210
125 ISL	9.48	9.47	33.946	26.218	181.6	0.307	2.62	40.7	29.3	2.02	25.5	0.02	0.04	0.09	126	
141	9.36	9.34	33.993	26.275	176.6	0.336	2.47	38.3	31.0	2.10	26.4	0.02	0.01	0.09	142	209
150 ISL	9.30	9.28	34.011	26.299	174.5	0.351	2.41	37.3	31.7	2.13	26.7	0.02	0.01	0.09	151	
171	9.21	9.19	34.050	26.344	170.6	0.388	2.26	34.9	33.0	2.19	27.4	0.02	0.01	0.09	172	208
199	9.23	9.21	34.119	26.395	166.3	0.435	1.95	30.2	35.1	2.31	28.3	0.02	0.01	0.08	200	207
200 ISL	9.24	9.22	34.125	26.398	166.0	0.437	1.92	29.7	35.2	2.32	28.3	0.02			201	
227	9.51	9.48	34.258	26.459	161.0	0.481	1.29	20.1	38.1	2.53	29.3	0.02			228	206
250 ISL	9.18	9.15	34.234	26.494	158.0	0.517	1.38	21.3	39.5	2.51	29.9	0.01			251	
271	8.74	8.71	34.180	26.522	155.5	0.550	1.62	24.8	40.6	2.49	30.3	0.01			273	205
300 ISL	8.40	8.37	34.173	26.569	151.4	0.595	1.56	23.7	43.0	2.52	31.1	0.01			302	
321	8.22	8.19	34.185	26.606	148.2	0.626	1.52	23.0	45.1	2.58	31.7	0.02			323	204
378	7.89	7.85	34.277	26.728	137.4	0.708	0.85	12.8	53.1	2.87	33.9	0.03			380	203
400 ISL	7.74	7.70	34.288	26.759	134.8	0.738	0.73	10.9	55.5	2.93	34.6	0.02			403	
437	7.45	7.41	34.292	26.804	130.9	0.787	0.61	9.1	59.3	3.00	35.6	0.01			440	202
500 ISL	6.89	6.84	34.301	26.890	123.3	0.867	0.44	6.5	67.2	3.14	37.6	0.01			503	
512	6.78	6.73	34.303	26.906	121.8	0.882	0.41	6.0	68.7	3.17	38.0	0.01			516	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 38.9 N	118 58.7 W	06/07/00	0454 UTC	625 m	270 15 kn			1012.5 mb	17.1 C	15.7 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.78	18.78	33.681	24.070	383.4	0.000	5.80	108.9	3.0	0.25	0.2	0.00	0.33	0.08	0	
1		18.78	18.78	33.681	24.070	383.4	0.004	5.80	108.9	3.0	0.25	0.2	0.00	0.33	0.08	1	220
10		17.58	17.58	33.640	24.334	358.5	0.037	6.13	112.5	3.4	0.26	0.2	0.00	0.68	0.23	10	219
20		14.88	14.88	33.574	24.900	304.9	0.070	6.35	110.4	4.4	0.38	0.8	0.02	1.98	0.75	20	218
30		12.48	12.48	33.559	25.380	259.4	0.099	5.17	85.5	9.3	0.84	7.5	0.17	0.88	0.59	30	217
40		11.65	11.64	33.576	25.550	243.4	0.124	4.58	74.4	12.1	1.09	12.0	0.30	0.62	0.44	40	216
50		11.30	11.29	33.595	25.629	236.1	0.148	4.38	70.7	13.6	1.25	14.7	0.06	0.35	0.26	50	215
60		11.03	11.02	33.629	25.704	229.2	0.171	4.16	66.7	15.5	1.36	16.6	0.02	0.12	0.12	60	214
70		10.71	10.70	33.668	25.792	221.1	0.194	3.95	62.9	17.5	1.45	18.1	0.01	0.07	0.11	70	213
75	ISL	10.41	10.40	33.695	25.865	214.2	0.204	3.90	61.8	18.6	1.48	18.8	0.01	0.05	0.09	75	
85		9.82	9.81	33.756	26.013	200.3	0.225	3.84	60.0	20.7	1.54	20.1	0.01	0.02	0.05	85	212
100		9.53	9.52	33.843	26.129	189.5	0.254	3.70	57.5	23.2	1.61	21.5	0.01	0.01	0.08	101	211
121		9.29	9.28	33.940	26.244	179.0	0.293	3.22	49.8	27.3	1.81	24.1	0.01	0.01	0.04	122	210
125	ISL	9.27	9.26	33.962	26.265	177.1	0.300	3.12	48.3	28.1	1.85	24.5	0.01	0.01	0.04	126	
140		9.20	9.18	34.032	26.331	171.2	0.326	2.71	41.9	31.2	2.00	26.1	0.01	0.00	0.04	141	209
150	ISL	9.33	9.31	34.095	26.359	168.7	0.343	2.32	36.0	32.9	2.12	27.1	0.01	0.00	0.05	151	
170		9.58	9.56	34.204	26.404	165.0	0.377	1.64	25.6	35.6	2.34	28.6	0.01	0.00	0.06	171	208
199		9.31	9.29	34.238	26.475	158.8	0.424	1.48	22.9	38.3	2.44	29.5	0.01	0.01	0.05	200	207
200	ISL	9.31	9.29	34.241	26.478	158.5	0.425	1.47	22.8	38.4	2.45	29.5	0.01			201	
231		9.23	9.20	34.304	26.541	153.2	0.474	1.10	17.0	41.5	2.58	30.5	0.01			232	206
250	ISL	8.98	8.95	34.276	26.559	151.7	0.502	1.17	18.0	42.5	2.58	30.9	0.01			252	
268		8.74	8.71	34.249	26.576	150.4	0.530	1.25	19.1	43.4	2.57	31.2	0.01			270	205
300	ISL	8.71	8.68	34.324	26.640	145.0	0.577	0.88	13.5	46.6	2.71	31.8	0.00			302	
320		8.69	8.66	34.380	26.687	140.9	0.606	0.61	9.3	49.3	2.82	32.4	0.00			322	204
377		7.46	7.42	34.298	26.807	129.7	0.683	0.61	9.1	59.8	2.94	35.8	0.00			379	203
400	ISL	7.27	7.23	34.298	26.834	127.3	0.712	0.58	8.6	61.8	2.97	36.4	0.00			403	
439		7.07	7.03	34.312	26.873	124.1	0.761	0.49	7.2	64.7	3.03	37.1	0.00			442	202
500	ISL	6.50	6.45	34.328	26.963	115.9	0.834	0.33	4.8	73.5	3.15	39.0	0.00			503	
518		6.33	6.28	34.333	26.990	113.5	0.855	0.28	4.1	76.1	3.19	39.6	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 29.1 N	119 20.2 W	06/07/00	0848 UTC	1636 m	270 15 kn			1012.5 mb	17.1 C	16.0 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.87	16.87	33.677	24.531	339.5	0.000	5.73	103.7	2.9	0.35	1.0	0.02	0.65	0.19	0	
1		16.87	16.87	33.677	24.531	339.5	0.003	5.73	103.7	2.9	0.35	1.0	0.02	0.65	0.19	1	220
10	ISL	16.91	16.91	33.679	24.523	340.5	0.034	5.74	104.0	2.9	0.35	1.0	0.02	0.63	0.18	10	
11		16.92	16.92	33.679	24.521	340.8	0.037	5.74	104.0	2.9	0.35	1.0	0.02	0.63	0.18	11	219
20	ISL	16.90	16.90	33.676	24.523	340.8	0.068	5.71	103.4	2.9	0.35	1.0	0.02	0.68	0.21	20	
21		16.90	16.90	33.676	24.524	340.9	0.071	5.71	103.4	2.9	0.35	1.0	0.02	0.68	0.22	21	218
30	ISL	15.56	15.56	33.666	24.822	312.6	0.101	5.52	97.3	5.1	0.51	3.5	0.06	0.85	0.30	30	
31		15.32	15.32	33.664	24.874	307.8	0.104	5.50	96.5	5.6	0.55	4.0	0.06	0.87	0.31	31	217
41		11.68	11.67	33.671	25.618	237.0	0.131	4.28	69.7	14.7	1.25	14.4	0.28	0.78	0.41	41	216
50		10.87	10.86	33.709	25.795	220.4	0.152	3.74	59.8	18.7	1.49	18.5	0.13	0.48	0.31	50	215
60		10.34	10.33	33.767	25.933	207.4	0.173	3.29	52.0	21.9	1.68	21.5	0.02	0.16	0.17	60	214
71		10.03	10.02	33.814	26.023	199.1	0.196	3.10	48.7	24.1	1.78	22.9	0.01	0.07	0.11	71	213
75	ISL	9.92	9.91	33.834	26.057	195.9	0.203	3.03	47.5	25.0	1.82	23.4	0.01	0.05	0.10	75	
86		9.62	9.61	33.888	26.149	187.4	0.225	2.90	45.2	27.1	1.89	24.6	0.01	0.03	0.08	86	212
100	ISL	9.28	9.27	33.937	26.243	178.7	0.250	3.04	47.0	28.2	1.87	24.7	0.01	0.01	0.05	101	
103		9.22	9.21	33.947	26.260	177.1	0.255	3.06	47.3	28.5	1.87	24.7	0.01	0.01	0.05	104	211
122		9.00	8.99	34.017	26.351	168.8	0.288	2.35	36.1	34.5	2.14	27.8	0.04	0.02	0.10	123	210
125	ISL	8.96	8.95	34.023	26.362	167.8	0.293	2.31	35.5	35.0	2.16	28.0	0.04	0.02	0.10	126	
138		8.81	8.80	34.045	26.403	164.2	0.315	2.21	33.8	36.6	2.22	28.6	0.06	0.02	0.10	139	209
150	ISL	8.72	8.70	34.062	26.430	161.8	0.335	2.11	32.3	37.8	2.27	29.1	0.05	0.02	0.10	151	
171		8.59	8.57	34.088	26.471	158.3	0.368	1.94	29.6					0.01	0.09	172	208
198		8.42	8.40	34.125	26.527	153.5	0.410	1.68	25.5	42.0	2.45	31.2	0.01	0.01	0.10	199	207
200	ISL	8.41	8.39	34.128	26.531	153.1	0.413	1.65	25.1	42.2	2.46	31.3	0.01			201	
233		8.19	8.17	34.171	26.598	147.3	0.463	1.29	19.5	46.1	2.61	32.9	0.02			234	206
250	ISL	8.03	8.00	34.188	26.636	143.9	0.488	1.25	18.8	48.0	2.65	33.2	0.03			252	
264		7.91	7.88	34.201	26.664	141.5	0.508	1.24	18.6	49.4	2.67	33.3	0.03			266	205
300	ISL	7.75	7.72	34.229	26.710	137.7	0.558	0.99	14.8	52.5	2.76	34.0	0.03			302	
325		7.66	7.63	34.245	26.736	135.6	0.592	0.79	11.8	54.7	2.82	34.6	0.03			327	204
389		7.26	7.22	34.283	26.823	128.1	0.676	0.61	9.0	62.1	2.98	36.4	0.01			392	203
400	ISL	7.20	7.16	34.287	26.835	127.2	0.690	0.58	8.6	63.0	3.00	36.7	0.01			403	
433		7.01	6.97	34.295	26.868	124.4	0.732	0.49	7.2	65.6	3.05	37.4	0.01			436	202
500	ISL	6.55	6.50	34.304	26.938	118.4	0.813	0.36	5.2	72.8	3.15	38.7	0.00			503	
512		6.47	6.42	34.306	26.950	117.3	0.827	0.34	4.9	74.1	3.17	38.9	0.00			516	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 19.1 N	119 40.2 W	06/07/00	1256 UTC	78 m	300 23 kn	300 06 07	2	1015.0 mb	14.5 C	13.5 C		8/8	ST

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	16.24	16.24	33.722	24.711	322.3	0.000	5.35	95.7	6.5	0.55	4.0	0.05	0.74	0.21	0	
1	16.24	16.24	33.722	24.711	322.3	0.003	5.35	95.7	6.5	0.55	4.0	0.05	0.74	0.21	1	209
5	16.25	16.25	33.723	24.710	322.6	0.016	5.32	95.1	6.5	0.55	4.0	0.05	0.72	0.22	5	208
10	16.23	16.23	33.723	24.714	322.3	0.032	5.35	95.6	6.5	0.55	4.0	0.05	0.71	0.19	10	207
20	11.32	11.32	33.803	25.787	220.5	0.059	3.58	57.9	20.9	1.54	19.1	0.13	0.25	0.17	20	206
30 ISL	10.56	10.56	33.816	25.932	206.8	0.081	3.31	52.6	23.1	1.70	21.5	0.10	0.23	0.18	30	
31	10.48	10.48	33.818	25.948	205.3	0.083	3.28	52.1	23.3	1.72	21.7	0.09	0.23	0.18	31	205
41	9.80	9.80	33.883	26.115	189.7	0.103	2.87	44.9	27.3	1.92	24.5	0.05	0.15	0.22	41	204
50	9.19	9.18	33.991	26.299	172.3	0.119	2.45	37.8	33.4	2.10	27.0	0.06	0.06	0.14	50	203
60	9.10	9.09	34.008	26.327	169.9	0.136	2.40	37.0	34.1	2.14	27.4	0.05	0.04	0.12	60	202
70	9.10	9.09	34.009	26.328	170.0	0.153	2.40	37.0	34.2	2.14	27.5	0.05	0.05	0.12	70	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 8.6 N	120 1.7 W	06/07/00	1737 UTC	1160 m	320 25 kn	320 05 06	2	1015.6 mb	15.0 C	14.0 C	10m	8/8	ST

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	16.06	16.06	33.731	24.759	317.7	0.000	5.51	98.2	7.0	0.60	4.2	0.05	1.14	0.33	0	
1 A	16.06	16.06	33.731	24.759	317.8	0.003	5.51	98.2	7.0	0.60	4.2	0.05	1.14	0.33	1	222
6 A	16.08	16.08	33.729	24.753	318.5	0.019	5.49	97.9	7.0	0.57	4.2	0.05	1.17	0.32	6	221
10 ISL	15.93	15.93	33.733	24.790	315.1	0.032	5.48	97.4	7.2	0.60	4.6	0.05	1.26	0.35	10	
14 A	15.79	15.79	33.737	24.825	311.9	0.044	5.46	96.8	7.7	0.62	4.9	0.06	1.31	0.39	14	220
20 ISL	15.01	15.01	33.759	25.015	294.0	0.062	5.41	94.4	9.6	0.76	7.1	0.08	1.15	0.44	20	
21 A	14.87	14.87	33.763	25.048	290.8	0.065	5.40	94.0	9.9	0.78	7.5	0.08	1.12	0.45	21	219
27 A	14.24	14.24	33.759	25.179	278.5	0.082	5.28	90.7	10.9	0.86	8.2	0.11	1.04	0.60	27	218
30 ISL	13.88	13.88	33.755	25.251	271.7	0.091	5.11	87.1	11.6	0.92	9.3	0.13	0.96	0.56	30	
38 A	12.86	12.85	33.747	25.452	252.8	0.112	4.56	76.1	13.8	1.12	12.7	0.16	0.72	0.47	38	217
44	12.11	12.10	33.748	25.598	239.1	0.126	4.18	68.7	15.8	1.27	14.9	0.17	0.59	0.40	44	216
50	10.91	10.90	33.765	25.831	216.9	0.140	3.63	58.1	19.6	1.53	18.8	0.17	0.51	0.38	50	215
61	9.99	9.98	33.819	26.033	197.9	0.163	3.11	48.8	24.2	1.77	22.9	0.06	0.25	0.20	61	214
70	9.71	9.70	33.890	26.135	188.3	0.180	2.86	44.7	27.3	1.90	24.6	0.03	0.14	0.15	70	213
75 ISL	9.57	9.56	33.916	26.179	184.3	0.190	2.77	43.1	28.5	1.95	25.3	0.03	0.10	0.15	75	
86	9.32	9.31	33.954	26.250	177.8	0.210	2.64	40.9	30.3	2.02	26.2	0.02	0.06	0.15	86	212
100 ISL	9.20	9.19	33.976	26.286	174.5	0.234	2.61	40.3	31.3	2.04	26.6	0.01	0.05	0.16	101	
101	9.19	9.18	33.977	26.289	174.3	0.236	2.61	40.3	31.4	2.04	26.6	0.01	0.05	0.16	102	211
118	8.83	8.82	34.036	26.392	164.8	0.265	2.29	35.1	36.0	2.20	28.5	0.01	0.04	0.16	119	210
125 ISL	8.74	8.73	34.057	26.423	162.0	0.276	2.19	33.5	37.2	2.25	29.0	0.01	0.03	0.14	126	
139	8.59	8.58	34.093	26.475	157.3	0.299	2.02	30.8	39.0	2.33	29.9	0.01	0.02	0.11	140	209
150 ISL	8.46	8.44	34.113	26.510	154.1	0.316	1.89	28.7	40.7	2.39	30.6	0.01	0.01	0.11	151	
169	8.26	8.24	34.138	26.561	149.6	0.345	1.69	25.6	43.3	2.48	31.5	0.01	0.01	0.11	170	208
200 ISL	8.07	8.05	34.166	26.612	145.3	0.390	1.49	22.5	46.2	2.57	32.4	0.01	0.01	0.10	201	
204	8.05	8.03	34.168	26.616	144.9	0.396	1.47	22.1	46.5	2.58	32.5	0.01	0.01	0.10	205	207
226	7.82	7.80	34.169	26.651	141.9	0.428	1.43	21.4	48.8	2.62	33.1	0.01			227	206
250 ISL	7.68	7.66	34.198	26.695	138.2	0.461	1.19	17.8	52.1	2.73	34.1	0.01			252	
269	7.59	7.56	34.226	26.730	135.1	0.487	0.96	14.3	54.7	2.82	34.9	0.01			271	205
300 ISL	7.38	7.35	34.248	26.778	131.0	0.528	0.78	11.6	58.2	2.90	35.9	0.01			302	
318	7.27	7.24	34.257	26.800	129.1	0.552	0.71	10.5	60.0	2.94	36.3	0.01			320	204
380	7.07	7.03	34.284	26.850	125.3	0.631	0.54	8.0	64.4	3.04	37.1	0.01			383	203
400 ISL	7.01	6.97	34.288	26.862	124.4	0.656	0.51	7.5	65.4	3.05	37.4	0.01			403	
438	6.87	6.83	34.294	26.886	122.6	0.703	0.46	6.7	67.7	3.08	37.9	0.01			441	202
500 ISL	6.44	6.39	34.310	26.957	116.5	0.777	0.37	5.4	74.4	3.17	39.2	0.00			504	
518	6.32	6.27	34.315	26.977	114.7	0.798	0.34	4.9	76.4	3.20	39.6	0.00			522	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 59.3 N	120 21.8 W	06/07/00	2046 UTC	785 m	310 20 kn	310 05 08	1	1016.4 mb	16.4 C	15.0 C	10m	3/8	SC

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	15.38	15.38	33.752	24.927	301.7	0.000	5.47	96.2	8.7	0.70	6.3	0.07			0	
1	15.38	15.38	33.752	24.927	301.7	0.003	5.47	96.2	8.7	0.70	6.3	0.07			1	220
10 ISL	15.29	15.29	33.754	24.949	299.9	0.030	5.48	96.2	8.8	0.71	6.4	0.07			10	
11	15.27	15.27	33.754	24.953	299.5	0.033	5.48	96.1	8.8	0.71	6.4	0.07	0.97	0.29	11	219
20 ISL	14.99	14.99	33.756	25.016	293.8	0.060	5.46	95.2	9.3	0.75	6.9	0.07	1.03	0.38	20	
21	14.95	14.95	33.756	25.025	293.0	0.063	5.46	95.2	9.4	0.75	7.0	0.07	1.04	0.39	21	218
30 ISL	14.56	14.56	33.757	25.110	285.2	0.089	5.30	91.6	9.8	0.80	7.6	0.12	0.69	0.36	30	
31	14.49	14.49	33.758	25.126	283.7	0.092	5.28	91.2	9.8	0.80	7.7	0.13	0.65	0.35	31	217
41	13.10	13.09	33.797	25.443	253.8	0.118	4.54	76.2	14.0	1.11	12.2	0.33	0.59	0.40	41	216
49	11.29	11.28	33.853	25.832	216.9	0.137	3.46	55.9	21.3	1.59	19.4	0.51	0.35	0.29	49	215
50 ISL	11.23	11.22	33.855	25.844	215.7	0.139	3.43	55.3	21.9	1.61	19.9	0.50	0.33	0.28	50	
62	10.46	10.45	33.881	26.001	201.0	0.164	3.03	48.1	25.4	1.80	23.0	0.28	0.20	0.22	62	214
70	10.42	10.41	33.882	26.009	200.4	0.181	3.00	47.6	25.7	1.82	23.2	0.28	0.19	0.22	70	213
75 ISL	10.26	10.25	33.892	26.044	197.2	0.190	2.89	45.7	26.7	1.87	23.9	0.21	0.17	0.21	75	
84	9.85	9.84	33.920	26.136	188.6	0.208	2.65	41.5	29.1	1.98	25.6	0.07	0.13	0.19	84	212
100 ISL	9.10	9.09	33.970	26.298	173.4	0.237	2.39	36.8	33.2	2.13	28.0	0.01	0.04	0.12	101	
101	9.06	9.05	33.974	26.307	172.5	0.239	2.38	36.6	33.5	2.14	28.1	0.01	0.03	0.12	102	211
120	8.56	8.55	34.063	26.456	158.8	0.270	2.05	31.2	38.8	2.30	30.0	0.02	0.01	0.10	121	210
125 ISL	8.44	8.43	34.069	26.479	156.6	0.278	2.06	31.3	39.6	2.31	30.2	0.02	0.01	0.10	126	
140	8.16	8.15	34.070	26.522	152.7	0.301	2.08	31.4	41.2	2.33	30.7	0.03	0.01	0.09	141	209
150 ISL	8.13	8.11	34.084	26.538	151.4	0.316	2.03	30.6	42.0	2.36	31.0	0.03	0.01	0.09	151	
175	8.04	8.02	34.099	26.563	149.4	0.354	1.89	28.5	43.7	2.42	31.5	0.01	0.01	0.10	176	208
200	7.84	7.82	34.106	26.599	146.5	0.391	1.84	27.6	45.7	2.46	32.1	0.01	0.00	0.07	201	207
233	7.58	7.56	34.167	26.685	138.8	0.438	1.35	20.1	51.6	2.66	33.8	0.01			234	206
250 ISL	7.49	7.47	34.189	26.715	136.2	0.461	1.17	17.4	53.8	2.73	34.5	0.01			252	
271	7.39	7.36	34.211	26.747	133.4	0.490	0.99	14.7	56.4	2.81	35.2	0.01			273	205
300 ISL	7.17	7.14	34.235	26.797	129.1	0.528	0.77	11.4	60.6	2.91	36.3	0.00			302	
319	7.03	7.00	34.249	26.827	126.4	0.552	0.66	9.7	63.2	2.97	37.0	0.00			321	204
384	6.72	6.68	34.295	26.906	119.7	0.632	0.44	6.4	69.2	3.09	38.3	0.00			387	203
400 ISL	6.63	6.59	34.305	26.927	118.0	0.651	0.39	5.7	70.7	3.12	38.7	0.00			403	
438	6.42	6.38	34.325	26.970	114.2	0.695	0.29	4.2	74.5	3.19	39.5	0.00			441	202
500 ISL	6.03	5.99	34.340	27.033	108.8	0.764	0.24	3.5	80.8	3.25	40.6	0.00			504	
519	5.91	5.86	34.345	27.052	107.1	0.785	0.23	3.3	82.7	3.27	41.0	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 39.2 N	121 2.3 W	07/07/00	0218 UTC	3749 m	320 17 kn	320 05 07	1	1015.5 mb	16.9 C	14.4 C		3/8	CU

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	16.35	16.35	33.289	24.353	356.4	0.000	5.74	102.6	3.2	0.28	0.1	0.00	0.11	0.02	0	
1	16.35	16.35	33.289	24.353	356.4	0.004	5.74	102.6	3.2	0.28	0.1	0.00	0.11	0.02	1	220
10 ISL	16.36	16.36	33.290	24.352	356.8	0.036	5.74	102.6	3.2	0.28	0.1	0.00	0.11	0.02	10	
15	16.36	16.36	33.290	24.352	357.0	0.054	5.74	102.6	3.2	0.28	0.1	0.00	0.11	0.02	15	219
20 ISL	16.31	16.31	33.292	24.365	355.9	0.071	5.74	102.5	3.1	0.28	0.1	0.00	0.17	0.02	20	
30	16.20	16.20	33.295	24.393	353.5	0.107	5.75	102.5	3.0	0.28	0.1	0.00	0.27	0.03	30	218
45	15.51	15.50	33.310	24.560	338.1	0.159	5.92	104.1	2.9	0.29	0.1	0.00	0.23	0.09	45	217
50 ISL	15.06	15.05	33.326	24.671	327.6	0.175	5.98	104.2	2.9	0.29	0.1	0.00	0.25	0.12	50	
55	14.60	14.59	33.348	24.787	316.7	0.191	6.03	104.1	3.0	0.29	0.1	0.00	0.28	0.15	55	216
65	14.03	14.02	33.409	24.954	301.0	0.222	6.03	102.9	3.2	0.29	0.1	0.00	0.31	0.17	65	215
75	13.60	13.59	33.404	25.039	293.2	0.252	6.00	101.5	3.3	0.29	0.1	0.00	0.29	0.26	75	214
85	12.96	12.95	33.344	25.121	285.5	0.281	5.89	98.3	3.8	0.41	1.1	0.08	0.38	0.40	85	213
95	11.56	11.55	33.316	25.366	262.3	0.308	5.85	94.7	4.0	0.44	1.6	0.12	0.36	0.28	95	212
100 ISL	10.95	10.94	33.334	25.490	250.5	0.321	5.56	88.9	6.5	0.66	5.3	0.09	0.26	0.21	100	
109	10.13	10.12	33.398	25.682	232.3	0.343	4.95	77.7	12.0	1.10	12.8	0.01	0.08	0.11	109	211
124	9.76	9.75	33.539	25.854	216.2	0.377	4.39	68.5	16.8	1.35	16.9	0.01	0.03	0.05	125	210
125 ISL	9.74	9.73	33.552	25.867	214.9	0.379	4.35	67.8	17.2	1.37	17.2	0.01	0.03	0.05	126	
145	9.41	9.39	33.785	26.104	192.8	0.419	3.65	56.6	23.6	1.66	22.2	0.01	0.01	0.03	146	209
150 ISL	9.31	9.29	33.820	26.148	188.8	0.429	3.55	54.9	24.7	1.71	22.9	0.01	0.01	0.03	151	
170	8.91	8.89	33.911	26.283	176.2	0.465	3.29	50.5	28.3	1.83	24.9	0.00	0.00	0.02	171	208
200	8.44	8.42	33.982	26.412	164.4	0.517	3.09	46.9	33.1	1.95	26.8	0.00	0.00	0.02	201	207
230	8.01	7.99	34.023	26.509	155.6	0.565	2.66	40.0	38.5	2.14	29.1	0.00			231	206
250 ISL	7.78	7.76	34.038	26.554	151.5	0.595	2.44	36.5	41.6	2.24	30.4	0.00			251	
272	7.56	7.53	34.057	26.601	147.3	0.628	2.18	32.4	45.1	2.36	31.7	0.00			274	205
300 ISL	7.34	7.31	34.108	26.673	140.9	0.668	1.65	24.4	50.8	2.55	33.7	0.00			302	
317	7.23	7.20	34.140	26.714	137.2	0.692	1.34	19.8	54.1	2.66	34.8	0.00			319	204
379	6.93	6.89	34.195	26.799	129.9	0.775	0.90	13.2	60.9	2.85	36.7	0.00			381	203
400 ISL	6.72	6.68	34.205	26.836	126.6	0.802	0.79	11.5	64.3	2.91	37.5	0.00			403	
437	6.35	6.31	34.225	26.901	120.7	0.848	0.63	9.1	70.2	3.02	38.8	0.00			440	202
500 ISL	6.15	6.11	34.295	26.982	113.7	0.921	0.36	5.2	76.8	3.16	40.0	0.00			503	
511	6.11	6.06	34.307	26.997	112.4	0.934	0.31	4.5	77.9	3.18	40.2	0.00			514	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 19.5 N	121 43.4 W	07/07/00	0747 UTC	4031 m	310 12 kn			1016.6 mb	16.5 C	13.6 C			

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	16.59	16.59	33.340	24.337	357.9	0.000	5.71	102.6	2.9	0.28	0.0	0.00	0.10	0.02	0	
1	16.59	16.59	33.340	24.337	357.9	0.004	5.71	102.6	2.9	0.28	0.0	0.00	0.10	0.02	1	220
10 ISL	16.60	16.60	33.346	24.340	358.0	0.036	5.73	102.9	2.9	0.28	0.0	0.00	0.10	0.02	10	
15	16.60	16.60	33.349	24.342	357.9	0.054	5.74	103.1	2.9	0.28	0.0	0.00	0.10	0.02	15	219
20 ISL	16.60	16.60	33.346	24.340	358.3	0.072	5.74	103.1	2.9	0.28	0.0	0.00	0.10	0.02	20	
30	16.59	16.59	33.339	24.337	358.9	0.107	5.74	103.1	2.9	0.28	0.0	0.00	0.10	0.02	30	218
45	16.05	16.04	33.313	24.441	349.4	0.161	5.83	103.6	3.0	0.29	0.0	0.00	0.19	0.05	45	217
50 ISL	15.90	15.89	33.315	24.477	346.2	0.178	5.87	104.0	3.1	0.29	0.0	0.00	0.25	0.07	50	
54	15.75	15.74	33.315	24.511	343.1	0.192	5.91	104.4	3.1	0.29	0.0	0.00	0.30	0.10	54	216
65	14.96	14.95	33.287	24.663	328.8	0.229	6.04	105.0	3.2	0.31	0.1	0.01	0.48	0.22	65	215
75	13.17	13.16	33.238	24.997	297.1	0.260	6.08	101.8	3.8	0.42	1.1	0.09	0.47	0.31	75	214
84	12.36	12.35	33.275	25.184	279.4	0.286	5.87	96.7	4.6	0.57	3.1	0.24	0.38	0.29	84	213
94	11.56	11.55	33.323 D	25.371	261.7	0.313									94	212
100 ISL	11.07	11.06	33.325	25.461	253.2	0.328	5.54	88.8	7.1	0.78	6.9	0.14	0.20	0.21	100	
109	10.46	10.45	33.343	25.583	241.8	0.351	5.30	83.8	9.3	0.91	9.5	0.02	0.12	0.16	109	211
125	10.16	10.15	33.528	25.778	223.5	0.388	4.57	71.9	15.1	1.29	15.5	0.01	0.04	0.09	126	210
145	9.84	9.82	33.685	25.955	207.1	0.431	3.80	59.4	20.9	1.61	20.7	0.01	0.01	0.05	146	209
150 ISL	9.78	9.76	33.718	25.991	203.7	0.441	3.75	58.6	22.0	1.66	21.5	0.01	0.01	0.05	151	
169	9.49	9.47	33.827	26.124	191.4	0.479	3.66	56.8	25.9	1.82	24.0	0.01	0.00	0.05	170	208
200	8.61	8.59	33.982	26.386	166.9	0.534	2.87	43.7	32.8	2.01	27.2	0.00	0.00	0.03	201	207
229	8.08	8.06	34.057	26.525	154.0	0.581	2.36	35.5	39.9	2.24	30.0	0.00			230	206
250 ISL	7.83	7.81	34.081	26.581	149.0	0.613	2.09	31.3	43.6	2.37	31.4	0.00			251	
267	7.67	7.64	34.091	26.612	146.2	0.638	1.91	28.5	46.1	2.45	32.2	0.00			268	205
300 ISL	7.34	7.31	34.105	26.671	141.1	0.685	1.69	25.0	50.4	2.56	33.5	0.00			302	
318	7.18	7.15	34.115	26.701	138.4	0.710	1.58	23.3	52.8	2.62	34.2	0.00			320	204
380	6.81	6.77	34.212	26.829	127.0	0.793	0.82	12.0	63.3	2.92	37.2	0.00			382	203
400 ISL	6.70	6.66	34.236	26.863	124.1	0.818	0.67	9.8	66.0	2.98	37.9	0.00			402	
440	6.49	6.45	34.275	26.922	118.9	0.866	0.47	6.8	70.8	3.08	38.9	0.00			443	202
500 ISL	6.15	6.11	34.312	26.996	112.4	0.936	0.35	5.0	77.7	3.18	40.1	0.00			503	
521	6.03	5.98	34.325	27.021	110.2	0.959	0.31	4.5	80.1	3.21	40.5	0.00			525	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 59.3 N	122 23.7 W	07/07/00	1330 UTC	4123 m	310 10 kn	310 03 07	2	1016.7 mb	16.5 C	13.2 C		8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.67	16.67	33.382	24.351	356.6	0.000	5.70	102.6	3.1	0.28	0.1	0.00	0.20	0.04	0	
1		16.67	16.67	33.382	24.351	356.6	0.004	5.70	102.6	3.1	0.28	0.1	0.00	0.20	0.04	1	220
10	ISL	16.64	16.64	33.381	24.357	356.3	0.036	5.71	102.7	3.0	0.29	0.1	0.00	0.19	0.04	10	
15		16.60	16.60	33.379	24.365	355.7	0.053	5.73	103.0	2.9	0.29	0.1	0.00	0.19	0.04	15	219
20	ISL	16.55	16.55	33.373	24.372	355.2	0.071	5.75	103.2	2.9	0.29	0.1	0.00	0.19	0.05	20	
30		16.44	16.44	33.361	24.389	354.0	0.107	5.80	103.9	2.9	0.30	0.1	0.00	0.19	0.06	30	218
45		14.39	14.38	33.296	24.791	316.0	0.157	6.15	105.7	3.6	0.36	0.8	0.04	0.51	0.23	45	217
50	ISL	14.12	14.11	33.319	24.865	309.0	0.173	6.13	104.8	3.8	0.42	1.5	0.07	0.52	0.28	50	
55		14.00	13.99	33.355	24.918	304.1	0.188	6.08	103.7	4.1	0.49	2.4	0.10	0.54	0.31	55	216
64		13.95	13.94	33.441	24.995	297.0	0.215	6.00	102.3	4.8	0.60	4.0	0.16	0.36	0.22	64	215
74		12.63	12.62	33.352	25.191	278.5	0.244	5.75	95.3	5.5	0.68	4.9	0.39	0.23	0.25	74	214
75	ISL	12.57	12.56	33.353	25.204	277.3	0.246	5.73	94.8	5.6	0.69	5.1	0.38	0.22	0.24	75	
85		12.22	12.21	33.405	25.312	267.3	0.274	5.53	90.9	6.7	0.82	7.6	0.26	0.14	0.14	85	213
94		12.01	12.00	33.478	25.408	258.3	0.297	5.31	86.9	7.5	0.94	9.9	0.03	0.08	0.10	94	212
100	ISL	11.59	11.58	33.481	25.489	250.7	0.313	5.21	84.5	8.9	1.01	11.0	0.04	0.07	0.11	100	
109		10.91	10.90	33.477	25.608	239.4	0.335	5.04	80.6	11.5	1.11	12.6	0.06	0.06	0.13	109	211
124		10.41	10.40	33.556	25.758	225.5	0.370	4.55	72.0	15.2	1.32	16.1	0.02	0.04	0.11	125	210
125	ISL	10.39	10.38	33.562	25.766	224.8	0.372	4.52	71.5	15.4	1.33	16.3	0.02	0.04	0.11	126	
144		10.13	10.11	33.671	25.896	212.8	0.413	3.91	61.5	19.3	1.54	19.7	0.01	0.02	0.06	145	209
150	ISL	10.01	9.99	33.699	25.938	208.9	0.426	3.77	59.2	20.4	1.59	20.6	0.01	0.02	0.06	151	
169		9.55	9.53	33.785	26.082	195.5	0.464	3.38	52.5	24.4	1.75	23.2	0.01	0.01	0.07	170	208
197		8.73	8.71	33.950	26.342	171.1	0.516	2.81	42.9	32.3	2.02	27.3	0.00	0.01	0.07	198	207
200	ISL	8.68	8.66	33.961	26.358	169.6	0.521	2.75	42.0	32.9	2.04	27.6	0.00			201	
229		8.37	8.35	34.039	26.467	159.7	0.569	2.22	33.7	38.0	2.23	30.0	0.00			230	206
250	ISL	8.09	8.06	34.081	26.543	152.8	0.601	1.99	30.0	41.6	2.34	31.1	0.00			251	
267		7.85	7.82	34.103	26.596	147.9	0.627	1.85	27.7	44.5	2.41	31.9	0.00			268	205
300	ISL	7.34	7.31	34.102	26.668	141.3	0.675	1.62	24.0	49.6	2.51	33.4	0.00			302	
318		7.10	7.07	34.100	26.700	138.4	0.700	1.50	22.1	52.4	2.56	34.2	0.00			320	204
378		6.85	6.81	34.200	26.814	128.4	0.780	0.85	12.5	62.4	2.87	37.1	0.00			380	203
400	ISL	6.62	6.58	34.199	26.844	125.7	0.808	0.78	11.4	65.7	2.92	37.9	0.00			402	
440		6.16	6.12	34.189	26.897	120.9	0.857	0.71	10.2	71.7	2.99	39.3	0.00			443	202
500	ISL	5.64	5.60	34.242	27.004	111.1	0.927	0.45	6.4	81.8	3.13	41.2	0.00			503	
512		5.53	5.49	34.253	27.026	109.0	0.940	0.40	5.7	83.8	3.16	41.6	0.00			515	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 39.5 N	123 4.7 W	07/07/00	1914 UTC	4115 m	340 06 kn	340 03 07	2	1018.8 mb	18.0 C	14.9 C	27m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.14	17.14	33.314	24.189	372.1	0.000	5.64	102.4	2.8	0.28	0.0	0.00	0.10	0.03	0	
1	A	17.14	17.14	33.314	24.189	372.1	0.004	5.64	102.4	2.8	0.28	0.0	0.00	0.10	0.03	1	222
10	ISL	17.07	17.07	33.314	24.205	370.8	0.037	5.64	102.2	2.8	0.28	0.0	0.00	0.11	0.04	10	
17	A	17.00	17.00	33.313	24.221	369.5	0.063	5.64	102.1	2.8	0.28	0.0	0.00	0.12	0.04	17	221
20	ISL	16.99	16.99	33.312	24.223	369.4	0.074	5.64	102.1	2.8	0.28	0.0	0.00	0.12	0.04	20	
27		16.95	16.95	33.309	24.230	369.0	0.100	5.65	102.2	2.8	0.28	0.0	0.00	0.12	0.04	27	220
30	ISL	16.91	16.91	33.308	24.239	368.2	0.111	5.66	102.3	2.8	0.28	0.0	0.00	0.13	0.04	30	
36	A	16.82	16.81	33.306	24.259	366.6	0.133	5.67	102.3	2.9	0.28	0.0	0.00	0.17	0.05	36	219
47		15.64	15.63	33.314	24.534	340.6	0.172	6.04	106.4	3.0	0.29	0.0	0.00	0.33	0.14	47	218
50	ISL	15.28	15.27	33.309	24.610	333.4	0.182	6.05	105.8	3.0	0.31	0.1	0.01	0.39	0.18	50	
55	A	14.74	14.73	33.304	24.723	322.8	0.198	6.08	105.2	3.0	0.35	0.4	0.02	0.49	0.25	55	217
62		14.32	14.31	33.317	24.823	313.5	0.221	6.03	103.5	2.8	0.37	0.5	0.03	0.55	0.35	62	216
70	A	13.95	13.94	33.324	24.905	305.8	0.246	5.89	100.3	3.2	0.44	1.3	0.13	0.51	0.51	70	215
75	ISL	13.70	13.69	33.329	24.961	300.6	0.261	5.85	99.1	3.4	0.50	1.9	0.27	0.47	0.44	75	
82		13.38	13.37	33.344	25.037	293.5	0.281	5.82	98.0	3.7	0.58	2.9	0.52	0.39	0.29	82	214
93		13.07	13.06	33.392	25.137	284.3	0.313	5.73	95.8	4.4	0.67	4.4	0.89	0.26	0.25	93	213
100	ISL	12.64	12.63	33.395	25.224	276.1	0.333	5.57	92.3	5.1	0.70	5.4	0.31	0.21	0.23	100	
103	A	12.43	12.42	33.394	25.263	272.4	0.341	5.50	90.8	5.4	0.71	5.8	0.03	0.20	0.22	103	212
114		11.81	11.80	33.395	25.381	261.3	0.370	5.33	86.8	6.4	0.77	7.2	0.02	0.14	0.17	114	211
125		11.33	11.31	33.410	25.481	252.0	0.399	5.17	83.4	7.9	0.87	8.8	0.01	0.11	0.18	126	210
145		10.34	10.32	33.556	25.770	224.8	0.446	4.29	67.8	15.2	1.34	16.4	0.01	0.03	0.06	146	209
150	ISL	10.19	10.17	33.604	25.833	218.8	0.457	4.06	63.9	17.0	1.44	18.0	0.01	0.03	0.06	151	
170		9.68	9.66	33.787	26.062	197.4	0.499	3.31	51.6	23.6	1.76	22.9	0.00	0.01	0.04	171	208
200		8.80	8.78	33.940	26.323	172.9	0.555	3.10	47.4	30.1	1.94	25.8	0.00	0.00	0.03	201	207
230		8.26	8.24	34.002	26.455	160.8	0.605	2.82	42.6	35.4	2.08	28.1	0.00			231	206
250	ISL	7.89	7.86	34.019	26.524	154.5	0.636	2.67	40.0	39.1	2.17	29.4	0.00			251	
269		7.56	7.53	34.025	26.576	149.6	0.665	2.55	37.9	42.5	2.25	30.4	0.00			270	205
300	ISL	7.18	7.15	34.027	26.632	144.7	0.711	2.41	35.5	46.6	2.35	31.7	0.00			302	
320		6.98	6.95	34.027	26.659	142.2	0.739	2.30	33.8	49.2	2.41	32.5	0.00			322	204
379		6.41	6.38	34.060	26.762	133.0	0.821	1.61	23.3	59.2	2.69	36.0	0.00			381	203
400	ISL	6.23	6.19	34.081	26.802	129.3	0.848	1.35	19.5	63.5	2.79	37.2	0.00			402	
439		5.94	5.90	34.122	26.871	123.0	0.897	0.93	13.3	71.3	2.97	39.3	0.00			442	202
500	ISL	5.55	5.51	34.172	26.959	115.1	0.970	0.63	8.9	80.4	3.12	41.2	0.00			503	
511		5.48	5.44	34.181	26.975	113.7	0.983	0.58	8.2	82.1	3.15	41.6	0.00			514	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 19.4 N	123 44.7 W	08/07/00	0040 UTC	4011 m	320 06 kn	360 03 08	1	1018.3 mb	17.8 C	15.3 C	37m	4/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.23	18.23	33.571	24.123	378.4	0.000	5.53	102.7	2.5	0.26	0.1	0.00	0.09	0.02	0	
2		18.23	18.23	33.571	24.123	378.4	0.008	5.53	102.7	2.5	0.26	0.1	0.00	0.09	0.02	2	220
10	ISL	18.06	18.06	33.573	24.166	374.5	0.038	5.53	102.3	2.4	0.26	0.1	0.00	0.09	0.03	10	
15		17.92	17.92	33.578	24.204	371.1	0.056	5.54	102.3	2.4	0.26	0.1	0.00	0.09	0.03	15	219
20	ISL	17.86	17.86	33.582	24.222	369.6	0.075	5.55	102.3	2.4	0.26	0.1	0.00	0.11	0.03	20	
30		17.80	17.79	33.609	24.258	366.5	0.112	5.56	102.4	2.3	0.26	0.1	0.00	0.14	0.03	30	218
45		17.72	17.71	33.726	24.367	356.6	0.166	5.60	103.0	2.0	0.23	0.1	0.00	0.16	0.04	45	217
50	ISL	17.60	17.59	33.720	24.392	354.4	0.184	5.61	103.0	2.1	0.23	0.1	0.00	0.17	0.05	50	
55		17.36	17.35	33.698	24.433	350.7	0.201	5.64	103.0	2.2	0.24	0.1	0.00	0.18	0.05	55	216
65		16.21	16.20	33.630	24.649	330.3	0.235	5.80	103.6	2.4	0.25	0.1	0.00	0.25	0.14	65	215
75		15.03	15.02	33.532	24.837	312.6	0.267	5.86	102.1	2.6	0.29	0.1	0.00	0.22	0.15	75	214
85		14.88	14.87	33.693	24.994	297.9	0.298	5.74	99.8	2.8	0.30	0.3	0.04	0.28	0.20	85	213
95		14.68	14.67	33.764	25.092	288.9	0.327	5.64	97.7	3.1	0.32	0.6	0.08	0.26	0.21	95	212
100	ISL	14.39	14.38	33.742	25.137	284.7	0.342	5.61	96.6	3.2	0.35	0.9	0.13	0.25	0.20	100	
110		13.56	13.54	33.645	25.234	275.6	0.370	5.54	93.8	3.8	0.45	2.1	0.20	0.21	0.18	110	211
124		12.02	12.00	33.491	25.417	258.2	0.407	5.39	88.2	5.8	0.65	5.5	0.04	0.13	0.14	125	210
125	ISL	11.97	11.95	33.491	25.426	257.4	0.410	5.38	88.0	5.9	0.66	5.7	0.04	0.13	0.14	126	
145		11.40	11.38	33.579	25.601	241.2	0.459	5.08	82.1	8.3	0.83	8.7	0.01	0.07	0.12	146	209
150	ISL	11.29	11.27	33.604	25.640	237.5	0.471	4.96	80.0	9.1	0.88	9.6	0.01	0.06	0.11	151	
169		10.83	10.81	33.707	25.803	222.4	0.515	4.49	71.7	13.0	1.11	13.5	0.00	0.04	0.05	170	208
199		9.50	9.48	33.878	26.163	188.4	0.577	3.91	60.7	21.8	1.53	20.4	0.00	0.00	0.04	200	207
200	ISL	9.47	9.45	33.883	26.172	187.6	0.579	3.90	60.5	22.1	1.54	20.5	0.00			201	
229		8.72	8.70	33.990	26.375	168.5	0.630	3.61	55.1	28.6	1.75	23.8	0.00			230	206
250	ISL	8.37	8.34	34.013	26.447	161.9	0.665	3.32	50.3	32.5	1.89	25.8	0.00			251	
268		8.13	8.10	34.015	26.485	158.6	0.694	3.06	46.1	35.6	2.01	27.3	0.00			269	205
300	ISL	7.63	7.60	34.026	26.567	151.0	0.743	2.70	40.2	41.3	2.19	29.7	0.00			302	
319		7.36	7.33	34.033	26.612	147.0	0.772	2.50	37.0	44.7	2.29	31.0	0.00			321	204
377		6.75	6.72	34.070	26.725	136.7	0.854	1.76	25.7	55.3	2.63	34.9	0.00			379	203
400	ISL	6.49	6.45	34.079	26.767	132.9	0.885	1.53	22.2	59.9	2.73	36.3	0.00			402	
438		6.07	6.03	34.096	26.834	126.6	0.934	1.20	17.2	67.4	2.88	38.4	0.00			441	202
500	ISL	5.58	5.54	34.148	26.937	117.3	1.010	0.79	11.2	78.6	3.07	40.8	0.00			503	
519		5.43	5.39	34.164	26.967	114.4	1.032	0.66	9.3	82.0	3.13	41.6	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 29.0 N	117 46.2 W	05/07/00	1742 UTC	70 m	250 04 kn	250 02 04	1	1015.0 mb	19.0 C	17.0 C	12m	6/8	CC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	20.51	20.51	33.690	23.630	425.4	0.000	5.80	112.5	3.8	0.21	0.1	0.00	0.64	0.14	0	
1	A	20.51	20.51	33.690	23.630	425.4	0.004	5.80	112.5	3.8	0.21	0.1	0.00	0.64	0.14	1	209
9	A	18.74	18.74	33.656	24.061	384.5	0.037	5.98	112.2	3.4	0.23	0.1	0.00	0.46	0.15	9	208
10	ISL	18.52	18.52	33.654	24.115	379.5	0.040	6.02	112.4	3.4	0.24	0.1	0.00	0.44	0.15	10	
17	A	16.74	16.74	33.616	24.515	341.6	0.066	6.28	113.3	3.3	0.29	0.1	0.00	0.27	0.13	17	207
20	ISL	15.57	15.57	33.565	24.742	320.0	0.076	6.33	111.6	3.3	0.31	0.1	0.01	0.96	0.40	20	
25	A	13.79	13.79	33.506	25.078	288.1	0.091	6.41	108.9	3.4	0.39	0.2	0.02	2.08	0.83	25	206
30	ISL	13.03	13.03	33.490	25.219	274.8	0.105	5.81	97.2	4.8	0.59	2.5	0.10	1.97	0.79	30	
32	A	12.85	12.85	33.490	25.254	271.4	0.110	5.53	92.2	5.6	0.69	3.9	0.13	1.92	0.78	32	205
39		12.18	12.17	33.539	25.422	255.6	0.129			9.6	1.11	11.3	0.20	0.66	0.47	39	204
46	A	11.56	11.55	33.549	25.546	244.0	0.146	4.82	78.2	10.3	1.12	11.7	0.21	0.64	0.44	46	203
50	ISL	11.44	11.43	33.560	25.576	241.2	0.156	4.57	73.9	12.0	1.18	12.3	0.30	0.58	0.45	50	
54		11.39	11.38	33.573	25.596	239.4	0.166	4.35	70.3	13.8	1.26	13.1	0.38	0.50	0.46	54	202
61		11.19	11.18	33.598	25.652	234.3	0.182	4.16	67.0	15.5	1.35	14.4	0.34	0.37	0.45	61	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 25.3 N	117 54.4 W	05/07/00	1300 UTC	614 m	230 04 kn	290 02 05	2	1014.0 mb	18.0 C	16.2 C		8/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	19.08	19.08	33.617	23.945	395.3	0.000	5.61	105.9	1.7	0.31	0.1	0.00	0.22	0.05	0	
1		19.08	19.08	33.617	23.945	395.3	0.004	5.61	105.9	1.7	0.31	0.1	0.00	0.22	0.05	1	220
10		18.82	18.82	33.610	24.006	389.8	0.039	5.68	106.7	1.7	0.30	0.1	0.00	0.25	0.06	10	219
19		17.54	17.54	33.586	24.302	361.9	0.073	5.90	108.1	1.9	0.32	0.0	0.00	0.31	0.10	19	218
20	ISL	17.28	17.28	33.579	24.359	356.5	0.077	5.93	108.1	2.0	0.33	0.1	0.00	0.33	0.12	20	
30		14.74	14.74	33.518	24.887	306.4	0.110	6.14	106.4	3.1	0.47	2.0	0.11	0.50	0.29	30	217
40		13.40	13.39	33.437	25.104	286.0	0.139	5.85	98.6	4.1	0.57	3.5	0.43	0.44	0.40	40	216
50		12.94	12.93	33.487	25.235	273.8	0.167	5.65	94.3	5.0	0.73	5.8	0.60	0.56	0.64	50	215
60		12.37	12.36	33.585	25.422	256.2	0.194	5.11	84.3	7.8	1.03	10.9	0.08	0.31	0.42	60	214
70		12.08	12.07	33.603	25.491	249.8	0.219	4.85	79.6	9.5	1.14	12.6	0.02	0.22	0.28	70	213
75	ISL	11.74	11.73	33.618	25.567	242.7	0.232	4.57	74.4	11.6	1.24	14.2	0.02	0.15	0.20	75	
84		11.05	11.04	33.652	25.719	228.4	0.253	4.07	65.3	15.7	1.41	17.0	0.01	0.05	0.09	84	212
100		10.27	10.26	33.721	25.910	210.5	0.288	3.83	60.5	19.0	1.50	18.9	0.01	0.02	0.06	100	211
118		9.73	9.72	33.804	26.066	196.0	0.324	3.61	56.3	22.8	1.66	21.6	0.01	0.01	0.05	119	210
125	ISL	9.58	9.57	33.833	26.113	191.6	0.338	3.60	56.0	23.4	1.67	21.9	0.01	0.01	0.04	126	
139		9.36	9.34	33.887	26.192	184.4	0.364	3.58	55.4	24.4	1.69	22.3	0.01	0.00	0.03	140	209
150	ISL	9.22	9.20	33.926	26.245	179.5	0.384	3.42	52.8	26.0	1.76	23.2	0.01	0.00	0.03	151	
168		9.04	9.02	33.979	26.315	173.1	0.416	3.10	47.7	28.9	1.90	24.9	0.01	0.00	0.03	169	208
199		8.76	8.74	34.036	26.405	165.2	0.469	2.68	41.0	33.4	2.07	26.9	0.01	0.00	0.03	200	207
200	ISL	8.75	8.73	34.038	26.408	164.9	0.470	2.66	40.7	33.6	2.08	27.0	0.01			201	
229		8.47	8.45	34.098	26.499	156.8	0.517	2.17	33.0	38.4	2.30	29.3	0.01			230	206
250	ISL	8.24	8.21	34.113	26.546	152.6	0.549	2.02	30.5	41.0	2.38	30.3	0.01			251	
273		8.04	8.01	34.127	26.587	149.0	0.584	1.90	28.6	43.5	2.45	31.1	0.01			275	205
300	ISL	8.05	8.02	34.177	26.625	145.9	0.624	1.60	24.1	46.2	2.56	31.9	0.01			302	
321		8.05	8.02	34.214	26.654	143.5	0.654	1.32	19.9	48.2	2.66	32.5	0.01			323	204
378		8.14	8.10	34.362	26.758	134.9	0.734	0.52	7.9	54.2	2.95	33.8	0.00			380	203
400	ISL	7.78	7.74	34.328	26.785	132.4	0.763	0.57	8.5	56.9	2.95	34.8	0.00			403	
431		7.23	7.19	34.267	26.815	129.5	0.804	0.74	10.9	60.5	2.96	36.2	0.00			434	202
500	ISL	7.11	7.06	34.314	26.870	125.4	0.891	0.53	7.8	64.2	3.07	36.8	0.00			503	
511		7.09	7.04	34.322	26.879	124.7	0.905	0.50	7.4	64.8	3.09	36.9	0.00			515	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 35

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 15.1 N	118 15.4 W	05/07/00	0845 UTC	357 m	280 07 kn			1013.9 mb	17.3 C	15.5 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.83	18.83	33.642	24.028	387.4	0.000	5.65	106.2	2.0	0.29	0.0	0.00	0.23	0.05	0	
1		18.83	18.83	33.642	24.028	387.4	0.004	5.65	106.2	2.0	0.29	0.0	0.00	0.23	0.05	1	217
10		18.83	18.83	33.648	24.033	387.3	0.039	5.65	106.2	2.0	0.28	0.0	0.00	0.22	0.05	10	216
20		16.17	16.17	33.629	24.656	328.2	0.075	6.08	108.5	2.5	0.36	0.7	0.04	0.58	0.20	20	215
30		13.86	13.86	33.570	25.113	284.9	0.105	5.93	101.0	4.0	0.63	4.6	0.32	0.52	0.44	30	214
40		12.69	12.68	33.530	25.317	265.7	0.133	5.55	92.2	5.8	0.83	7.3	0.65	0.51	0.51	40	213
50		12.24	12.23	33.556	25.424	255.7	0.159	5.19	85.4	7.8	1.01	10.5	0.10	0.46	0.43	50	212
59		11.86	11.85	33.606	25.535	245.4	0.181	4.72	77.1	10.9	1.19	13.3	0.03	0.26	0.27	59	211
70		11.15	11.14	33.642	25.693	230.5	0.207	4.19	67.4	15.0	1.38	16.5	0.01	0.13	0.15	70	210
75	ISL	10.81	10.80	33.658	25.766	223.6	0.219	4.10	65.5	16.2	1.41	17.2	0.01	0.08	0.11	75	
84		10.27	10.26	33.695	25.889	212.1	0.238	4.00	63.1	18.1	1.45	18.1	0.02	0.02	0.05	84	209
100		9.80	9.79	33.790	26.043	197.8	0.271	3.67	57.4	21.8	1.64	21.0	0.01	0.01	0.04	100	208
120		9.37	9.36	33.921	26.216	181.6	0.309	3.26	50.5	26.4	1.81	23.5	0.02	0.01	0.05	121	207
125	ISL	9.31	9.30	33.939	26.240	179.5	0.318	3.17	49.1	27.3	1.85	24.0	0.02	0.01	0.05	126	
140		9.18	9.16	33.975	26.290	175.1	0.345	2.93	45.2	29.4	1.95	25.2	0.02	0.01	0.06	141	206
150	ISL	9.08	9.06	33.996	26.322	172.2	0.362	2.85	43.9	30.5	2.00	25.8	0.02	0.01	0.06	151	
171		8.86	8.84	34.034	26.387	166.4	0.398	2.71	41.5	32.8	2.09	26.8	0.02	0.01	0.05	172	205
200	ISL	8.56	8.54	34.086	26.475	158.5	0.445	2.33	35.5	37.1	2.25	28.6	0.01	0.00	0.04	201	
201		8.56	8.54	34.088	26.476	158.4	0.446	2.31	35.2	37.2	2.26	28.7	0.01	0.00	0.04	202	204
231		8.92	8.90	34.221	26.525	154.5	0.493	1.58	24.3	40.1	2.49	29.8	0.03			232	203
250	ISL	8.73	8.70	34.235	26.566	150.9	0.522	1.43	21.9	42.4	2.56	30.6	0.03			251	
277		8.32	8.29	34.235	26.630	145.2	0.562	1.31	19.9	46.1	2.64	31.7	0.02			279	202
300	ISL	8.23	8.20	34.282	26.680	140.8	0.595	0.99	15.0	49.4	2.77	32.6	0.01			302	
320		8.15	8.12	34.323	26.725	136.9	0.623	0.72	10.9	52.2	2.88	33.4	0.01			322	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 11.1 N	118 23.4 W	05/07/00	0541 UTC	1180 m	310 09 kn			1014.1 mb	17.1 C	15.0 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	19.13	19.13	33.648	23.956	394.2	0.000	5.56	105.1	2.2	0.28	0.1	0.00	0.18	0.04	0	
2		19.13	19.13	33.648	23.956	394.3	0.008	5.56	105.1	2.2	0.28	0.1	0.00	0.18	0.04	2	220
10		19.02	19.02	33.642	23.980	392.3	0.039	5.59	105.4	2.1	0.29	0.1	0.00	0.18	0.04	10	219
20		15.35	15.35	33.595	24.814	313.1	0.075	6.03	105.8	3.0	0.46	2.1	0.13	0.59	0.27	20	218
30		13.81	13.81	33.579	25.130	283.3	0.104	5.84	99.3	4.5	0.67	5.0	0.38	0.51	0.37	30	217
40		13.11	13.10	33.576	25.270	270.2	0.132	5.64	94.5	5.7	0.81	6.9	0.63	0.47	0.45	40	216
50		12.24	12.23	33.583	25.445	253.7	0.158	5.05	83.1	8.5	1.06	11.1	0.25	0.41	0.42	50	215
60		11.91	11.90	33.626	25.541	244.8	0.183	4.74	77.5	10.9	1.21	13.6	0.02	0.31	0.29	60	214
70		11.26	11.25	33.624	25.659	233.7	0.207	4.30	69.3	14.2	1.34	15.7	0.02	0.17	0.20	70	213
75	ISL	10.99	10.98	33.631	25.713	228.7	0.219	4.19	67.2	15.2	1.37	16.3	0.02	0.12	0.15	75	
84		10.59	10.58	33.655	25.803	220.4	0.239	4.06	64.5	16.6	1.41	17.1	0.03	0.05	0.08	84	212
100		10.15	10.14	33.721	25.930	208.5	0.273	3.83	60.3	19.3	1.52	19.0	0.02	0.02	0.05	100	211
120		9.60	9.59	33.829	26.107	192.1	0.313	3.51	54.6	23.6	1.71	22.2	0.01	0.00	0.04	121	210
125	ISL	9.50	9.49	33.854	26.143	188.7	0.323	3.51	54.5	24.2	1.72	22.4	0.01	0.00	0.04	126	
140		9.25	9.23	33.919	26.234	180.3	0.351	3.50	54.1	25.8	1.75	22.8	0.01	0.00	0.03	141	209
150	ISL	9.14	9.12	33.950	26.276	176.5	0.368	3.34	51.5	27.3	1.82	23.7	0.01	0.00	0.04	151	
169		8.93	8.91	33.993	26.344	170.4	0.401	3.00	46.0	30.5	1.96	25.6	0.01	0.00	0.07	170	208
199		8.40	8.38	34.032	26.457	160.1	0.451	2.87	43.5	35.0	2.07	27.3	0.01	0.00	0.03	200	207
200	ISL	8.39	8.37	34.034	26.460	159.8	0.452	2.85	43.2	35.2	2.08	27.4	0.01			201	
229		8.14	8.12	34.086	26.539	152.8	0.498	2.23	33.6	40.4	2.32	29.9	0.01			230	206
250	ISL	7.94	7.91	34.107	26.585	148.6	0.529	1.79	26.9	44.4	2.49	31.3	0.01			251	
268		7.80	7.77	34.131 D	26.625	145.1	0.556									270	205
300	ISL	7.84	7.81	34.242	26.707	138.0	0.601	0.99	14.8	52.2	2.79	33.5	0.01			302	
317		7.86	7.83	34.294	26.745	134.7	0.624	0.79	11.9	54.3	2.87	34.0	0.01			319	204
376		7.68	7.64	34.312	26.786	131.8	0.703	0.64	9.6	57.2	2.95	34.8	0.00			378	203
400	ISL	7.52	7.48	34.317	26.813	129.5	0.734	0.56	8.3	59.4	3.00	35.4	0.00			403	
437		7.23	7.19	34.323	26.860	125.5	0.782	0.45	6.7	63.3	3.07	36.5	0.00			440	202
500	ISL	6.71	6.66	34.325	26.933	119.0	0.859	0.37	5.4	70.0	3.16	38.2	0.00			503	
521		6.54	6.49	34.326	26.957	116.9	0.883	0.34	4.9	72.2	3.19	38.8	0.00			525	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 55.0 N	118 56.3 W	05/07/00	0020 UTC	1692 m	300 20 kn	300 06 06	1	1015.2 mb	17.2 C	15.0 C	12m	1/8 SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.06	18.06	33.700	24.263	365.0	0.000	5.65	104.6	1.6	0.28	0.1	0.00	0.36	0.07	0	
1		18.06	18.06	33.700	24.263	365.0	0.004	5.65	104.6	1.6	0.28	0.1	0.00	0.36	0.07	1	220
10		16.16	16.16	33.688	24.703	323.3	0.035	5.65	100.8	3.8	0.43	2.4	0.08	0.76	0.22	10	219
20		12.64	12.64	33.662	25.428	254.6	0.064	4.69	77.9	10.9	1.03	10.9	0.51	0.69	0.37	20	218
30		11.73	11.73	33.623	25.571	241.2	0.088	4.39	71.5	12.9	1.20	13.5	0.39	0.52	0.34	30	217
40		11.12	11.12	33.652	25.706	228.6	0.112	4.00	64.3	15.6	1.38	16.4	0.25	0.34	0.27	40	216
50		10.61	10.60	33.676	25.815	218.4	0.134	3.71	59.0	18.0	1.51	18.6	0.10	0.23	0.22	50	215
60		10.27	10.26	33.742	25.925	208.1	0.155	3.39	53.5	20.7	1.66	20.8	0.05	0.15	0.16	60	214
70		10.13	10.12	33.779	25.978	203.3	0.176	3.25	51.2	22.1	1.72	21.8	0.04	0.11	0.13	70	213
75	ISL	10.03	10.02	33.805	26.016	199.9	0.186	3.17	49.8	23.0	1.76	22.4	0.04	0.09	0.12	75	
85		9.82	9.81	33.857 D	26.092	192.8	0.206									85	212
100		9.50	9.49	33.910	26.186	184.1	0.234	2.84	44.1	27.4	1.94	24.8	0.02	0.02	0.08	101	211
121		9.28	9.27	33.962	26.263	177.2	0.272	2.70	41.8	29.5	2.02	25.9	0.01	0.01	0.07	122	210
125	ISL	9.24	9.23	33.977	26.281	175.6	0.279	2.61	40.3	30.3	2.06	26.3	0.01	0.01	0.06	126	
138		9.10	9.09	34.024	26.341	170.2	0.301	2.29	35.3	33.1	2.18	27.8	0.00	0.02	0.05	139	209
150	ISL	8.91	8.89	34.051	26.392	165.5	0.322	2.19	33.6	34.8	2.23	28.5	0.00	0.01	0.06	151	
169		8.64	8.62	34.087	26.463	159.1	0.352	2.09	31.9	37.1	2.30	29.3	0.01	0.00	0.08	170	208
199		8.62	8.60	34.168	26.530	153.3	0.399	1.52	23.2	41.0	2.52	31.0	0.01	0.00	0.06	200	207
200	ISL	8.62	8.60	34.169	26.531	153.2	0.401	1.51	23.0	41.1	2.52	31.0	0.01			201	
229		8.47	8.45	34.179	26.562	150.8	0.445	1.39	21.1	42.9	2.58	31.7	0.00			230	206
250	ISL	8.34	8.31	34.191	26.592	148.3	0.476	1.29	19.6	44.6	2.63	32.2	0.00			252	
269		8.23	8.20	34.206	26.620	145.9	0.504	1.19	18.0	46.3	2.68	32.7	0.00			271	205
300	ISL	8.11	8.08	34.244	26.669	141.8	0.549	0.99	14.9	49.5	2.78	33.3	0.00			302	
317		8.02	7.99	34.262	26.696	139.5	0.573	0.89	13.4	51.3	2.83	33.6	0.00			319	204
377		7.36	7.32	34.245	26.779	132.2	0.654	0.83	12.3	57.3	2.91	35.4	0.00			379	203
400	ISL	7.16	7.12	34.254	26.814	129.0	0.684	0.72	10.6	60.4	2.97	36.2	0.00			403	
437		6.88	6.84	34.277	26.871	124.0	0.731	0.53	7.8	65.6	3.08	37.4	0.00			440	202
500	ISL	6.46	6.41	34.316	26.959	116.3	0.807	0.33	4.8	73.3	3.21	39.1	0.00			503	
515		6.36	6.31	34.326	26.980	114.4	0.824	0.28	4.1	75.1	3.24	39.5	0.00			519	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 39.3 N	119 29.5 W	04/07/00	1848 UTC	1318 m	320 25 kn	330 06 07	1	1017.4 mb	16.0 C	14.5 C	11m	7/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.67	16.67	33.788	24.662	326.9	0.000	5.58	100.7	3.5	0.46	2.7	0.11	0.62	0.15	0	
2	A	16.67	16.67	33.788	24.662	327.0	0.007	5.58	100.7	3.5	0.46	2.7	0.11	0.62	0.15	2	222
8	A	16.66	16.66	33.784	24.662	327.2	0.026	5.60	101.0	3.5	0.47	2.7	0.11	0.63	0.16	8	221
10	ISL	16.66	16.66	33.783	24.661	327.4	0.033	5.60	101.0	3.5	0.47	2.7	0.11	0.63	0.16	10	
16	A	16.65	16.65	33.781	24.662	327.5	0.052	5.59	100.8	3.5	0.46	2.7	0.11	0.62	0.15	16	220
20	ISL	16.40	16.40	33.765	24.708	323.2	0.065	5.61	100.6	3.8	0.49	3.0	0.12	0.67	0.18	20	
22	A	16.11	16.11	33.748	24.761	318.2	0.072	5.62	100.2	3.9	0.50	3.1	0.12	0.71	0.19	22	219
30	A	13.10	13.10	33.635	25.317	265.4	0.095	5.39	90.4	8.8	0.86	8.1	0.32	0.95	0.51	30	218
36		12.28	12.28	33.735	25.555	242.9	0.110	4.57	75.4	13.7	1.22	12.8	0.80	0.63	0.38	36	217
43	A	10.89	10.88	33.832	25.887	211.4	0.126	3.45	55.3	22.1	1.70	20.5	0.71	0.32	0.18	43	216
50	ISL	10.27	10.26	33.865	26.021	198.8	0.141	3.07	48.5	25.4	1.87	23.5	0.26	0.19	0.14	50	
51		10.22	10.21	33.866	26.031	197.9	0.143	3.05	48.2	25.7	1.88	23.7	0.19	0.18	0.14	51	215
61		9.54	9.53	33.910	26.179	184.0	0.162	2.70	42.0	29.6	2.04	26.2	0.02	0.06	0.12	61	214
71		9.32	9.31	33.930	26.231	179.3	0.180	2.55	39.5	31.2	2.10	27.0	0.01	0.04	0.14	71	213
75	ISL	9.25	9.24	33.947	26.255	177.0	0.187	2.51	38.8	31.6	2.11	27.2	0.01	0.03	0.13	75	
86		9.07	9.06	34.007	26.331	170.0	0.206	2.39	36.8	33.0	2.16	27.6	0.02	0.02	0.12	86	212
100	ISL	8.90	8.89	34.092	26.425	161.3	0.229	2.06	31.6	36.2	2.30	28.8	0.01	0.01	0.07	101	
101		8.89	8.88	34.098	26.431	160.8	0.231	2.03	31.2	36.5	2.31	28.9	0.01	0.01	0.07	102	211
121		8.76	8.75	34.231	26.556	149.3	0.262	1.32	20.2	42.3	2.58	30.9	0.02	0.01	0.08	122	210
125	ISL	8.73	8.72	34.239	26.567	148.3	0.268	1.29	19.7	42.9	2.60	31.1	0.02	0.01	0.08	126	
138		8.61	8.60	34.246	26.592	146.3	0.287	1.21	18.5	44.3	2.65	31.6	0.01	0.01	0.06	139	209
150	ISL	8.45	8.43	34.250	26.620	143.8	0.304	1.14	17.3	46.1	2.70	32.1	0.01	0.01	0.06	151	
168		8.19	8.17	34.249	26.658	140.3	0.330	1.06	16.0	48.6	2.75	32.8	0.02	0.00	0.05	169	208
197		7.91	7.89	34.234	26.689	137.9	0.370	1.01	15.2	51.0	2.79	33.7	0.02	0.00	0.06	198	207
200	ISL	7.88	7.86	34.234	26.693	137.5	0.374	1.00	15.0	51.3	2.80	33.8	0.02			201	
230		7.71	7.69	34.247	26.729	134.6	0.415	0.88	13.2	53.9	2.86	34.5	0.02			231	206
250	ISL	7.74	7.72	34.278	26.749	133.1	0.442	0.75	11.2	54.9	2.91	34.6	0.01			252	
268		7.76	7.73	34.303	26.766	131.8	0.466	0.65	9.7	55.8	2.95	34.6	0.01			270	205
300	ISL	7.47	7.44	34.280	26.790	129.9	0.508	0.66	9.8	58.4	2.98	35.5	0.02			302	
320		7.25	7.22	34.259	26.805	128.7	0.534	0.66	9.8	60.1	2.99	36.1	0.02			322	204
380		7.02	6.98	34.287	26.859	124.4	0.610	0.52	7.7	64.5	3.08	37.2	0.02			383	203
400	ISL	6.90	6.86	34.290	26.879	122.8	0.634	0.48	7.0	66.3	3.11	37.6	0.02			403	
440		6.63	6.59	34.297	26.921	119.1	0.683	0.39	5.7	70.6	3.17	38.5	0.01			443	202
500	ISL	6.17	6.13	34.326	27.004	111.7	0.752	0.28	4.0	78.6	3.27	39.9	0.00			504	
510		6.09	6.04	34.331 D	27.018	110.4	0.763	0.26	3.7	79.9	3.29	40.1	0.00			514	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 24.9 N	119 57.8 W	04/07/00	1337 UTC	832 m	320 25 kn	320 06 06	1	1017.7 mb	15.5 C	13.5 C		7/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.84	15.84	33.699	24.784	315.3	0.000	5.80	102.9	4.5	0.47	2.9	0.11	0.51	0.16	0	
2		15.84	15.84	33.699	24.784	315.4	0.006	5.80	102.9	4.5	0.47	2.9	0.11	0.51	0.16	2	220
9		15.84	15.84	33.697	24.783	315.7	0.028	5.81	103.0	4.5	0.47	2.8	0.11	0.56	0.17	9	219
10	ISL	15.84	15.84	33.697	24.783	315.8	0.032	5.81	103.0	4.5	0.47	2.8	0.11	0.56	0.17	10	
19		15.82	15.82	33.694	24.785	315.8	0.060	5.81	103.0	4.5	0.48	2.8	0.11	0.56	0.17	19	218
20	ISL	15.80	15.80	33.693	24.789	315.5	0.063	5.81	103.0	4.5	0.48	2.8	0.11	0.56	0.17	20	
30		15.59	15.59	33.678	24.825	312.4	0.095	5.87	103.6	4.4	0.48	2.9	0.12	0.55	0.18	30	217
40		13.59	13.58	33.533	25.140	282.6	0.124	5.90	99.9	5.5	0.66	5.0	0.30	0.51	0.26	40	216
49		12.46	12.45	33.445	25.296	267.9	0.149	5.62	92.9	6.4	0.78	6.7	0.36	0.54	0.35	49	215
50	ISL	12.39	12.38	33.440	25.305	267.0	0.152	5.61	92.6	6.5	0.79	6.8	0.36	0.54	0.35	50	
59		11.74	11.73	33.419	25.412	257.0	0.175	5.47	89.0	7.0	0.87	8.2	0.28	0.45	0.34	59	214
70		10.23	10.22	33.450	25.705	229.3	0.202	4.88	76.9	12.4	1.20	13.8	0.02	0.15	0.13	70	213
75	ISL	10.05	10.04	33.559	25.820	218.4	0.213	4.45	69.9	15.9	1.38	16.8	0.02	0.11	0.10	75	
85		9.68	9.67	33.694	25.988	202.7	0.234	3.72	58.0	21.9	1.68	21.4	0.01	0.04	0.05	85	212
99		9.60	9.59	33.709	26.013	200.6	0.263	3.65	56.8	22.5	1.71	21.7	0.01	0.03	0.06	99	211
100	ISL	9.58	9.57	33.718	26.023	199.6	0.265	3.62	56.3	22.8	1.72	21.9	0.01	0.03	0.06	100	
120		9.06	9.05	33.935	26.277	175.8	0.302	2.96	45.6	29.5	1.97	25.8	0.01	0.01	0.05	121	210
125	ISL	8.97	8.96	33.964	26.314	172.4	0.311	2.85	43.8	30.8	2.02	26.4	0.01	0.01	0.05	126	
140		8.74	8.73	34.023	26.397	164.8	0.336	2.56	39.1	34.0	2.14	27.8	0.01	0.01	0.07	141	209
150	ISL	8.63	8.61	34.055	26.439	160.9	0.352	2.35	35.8	35.9	2.22	28.7	0.01	0.01	0.07	151	
167		8.48	8.46	34.095	26.494	156.0	0.379	2.04	31.0	39.0	2.35	30.0	0.01	0.01	0.07	168	208
198		8.14	8.12	34.123	26.568	149.5	0.427	1.71	25.8	44.2	2.52	31.7	0.01	0.00	0.09	199	207
200	ISL	8.12	8.10	34.125	26.572	149.1	0.430	1.69	25.5	44.5	2.53	31.8	0.01			201	
229		7.83	7.81	34.154	26.638	143.2	0.472	1.43	21.4	48.4	2.64	33.2	0.01			230	206
250	ISL	7.72	7.70	34.180	26.675	140.1	0.502	1.25	18.7	50.5	2.72	33.9	0.01			251	
271		7.64	7.61	34.205	26.706	137.4	0.531	1.09	16.3	52.5	2.79	34.4	0.01			273	205
300	ISL	7.46	7.43	34.232	26.754	133.3	0.570	0.89	13.2	56.0	2.89	35.3	0.01			302	
318		7.33	7.30	34.246	26.783	130.7	0.594	0.78	11.6	58.3	2.94	35.9	0.01			320	204
371		6.96	6.93	34.282	26.864	123.8	0.661	0.53	7.8	64.6	3.07	37.4	0.00			373	203
400	ISL	6.74	6.70	34.301	26.909	119.8	0.697	0.42	6.1	68.3	3.14	38.2	0.00			403	
437		6.45	6.41	34.324	26.966	114.7	0.740	0.31	4.5	73.1	3.21	39.2	0.00			440	202
500	ISL	6.00	5.96	34.355	27.049	107.3	0.810	0.24	3.4	80.6	3.30	40.7	0.00			503	
516		5.89	5.85	34.364	27.070	105.4	0.827	0.22	3.2	82.5	3.32	41.1	0.00			520	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 4.9 N	120 38.9 W	04/07/00	0533 UTC	3787 m	320 22 kn			1017.8 mb	15.9 C	14.0 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.78	16.78	33.805	24.650	328.1	0.000	5.66	102.3	5.2	0.40	2.0	0.06	0.51	0.19	0	
2		16.78	16.78	33.805	24.650	328.2	0.007	5.66	102.3	5.2	0.40	2.0	0.06	0.51	0.19	2	220
10	ISL	16.78	16.78	33.803	24.649	328.6	0.033	5.68	102.7	5.1	0.42	2.0	0.06	0.35	0.13	10	
11		16.78	16.78	33.803	24.649	328.6	0.036	5.68	102.7	5.1	0.42	2.0	0.06	0.33	0.12	11	219
20	ISL	13.61	13.61	33.484	25.097	286.1	0.064	5.78	97.9	6.3	0.69	4.8	0.26	0.40	0.21	20	
21		13.23	13.23	33.455	25.151	280.9	0.067	5.79	97.2	6.5	0.72	5.2	0.29	0.41	0.23	21	218
30	ISL	12.46	12.46	33.419	25.275	269.4	0.091	5.59	92.4	7.8	0.86	7.5	0.36	0.34	0.33	30	
31		12.43	12.43	33.420	25.282	268.8	0.094	5.56	91.8	7.9	0.87	7.7	0.37	0.33	0.33	31	217
41		11.22	11.21	33.389	25.483	249.8	0.120	5.30	85.3	9.4	0.98	10.0	0.14	0.26	0.16	41	216
50	ISL	10.87	10.86	33.378	25.537	244.8	0.142	5.15	82.2	10.5	1.06	11.4	0.10	0.20	0.14	50	
51		10.85	10.84	33.379	25.542	244.4	0.145	5.14	82.0	10.6	1.07	11.5	0.09	0.19	0.14	51	215
61		10.55	10.54	33.430	25.634	235.9	0.169	5.10	80.9	12.3	1.17	13.1	0.07	0.20	0.15	61	214
71		10.15	10.14	33.685	25.902	210.6	0.191	4.00	63.0	20.1	1.62	19.9	0.06	0.09	0.11	71	213
75	ISL	10.03	10.02	33.777	25.994	201.9	0.199	3.48	54.7	23.2	1.77	22.1	0.10	0.10	0.15	75	
83		9.80	9.79	33.909	26.136	188.6	0.215	2.68	41.9	28.0	1.98	25.1	0.16	0.14	0.22	83	212
100		9.17	9.16	33.866	26.205	182.2	0.246	3.16	48.7	27.9	1.91	24.8	0.01	0.02	0.07	101	211
122		8.82	8.81	33.957	26.332	170.6	0.285	2.72	41.6	32.1	2.09	27.5	0.00	0.00	0.05	123	210
125	ISL	8.75	8.74	33.966	26.350	168.9	0.290	2.71	41.4	32.7	2.10	27.7	0.00	0.00	0.05	126	
139		8.42	8.41	34.001	26.429	161.6	0.313	2.68	40.7	35.4	2.14	28.3	0.00	0.00	0.06	140	209
150	ISL	8.21	8.19	34.016	26.472	157.6	0.331	2.59	39.1	37.4	2.19	29.1	0.00	0.00	0.05	151	
169		7.93	7.91	34.039	26.532	152.2	0.360	2.34	35.1	40.8	2.30	30.5	0.01	0.00	0.04	170	208
200		7.77	7.75	34.103	26.606	145.7	0.407	1.75	26.2	46.4	2.53	32.5	0.00	0.00	0.05	201	207
229		7.55	7.53	34.104	26.639	143.0	0.448	1.68	25.0	48.7	2.59	33.1	0.01			230	206
250	ISL	7.40	7.38	34.122	26.675	139.9	0.478	1.52	22.5	50.9	2.66	33.8	0.01			252	
269		7.25	7.22	34.138	26.709	136.9	0.504	1.37	20.3	53.3	2.72	34.5	0.01			271	205
300	ISL	6.85	6.82	34.129	26.757	132.6	0.546	1.27	18.6	57.9	2.80	35.8	0.00			302	
321		6.60	6.57	34.127	26.789	129.7	0.574	1.20	17.5	61.2	2.85	36.7	0.00			323	204
378		6.40	6.37	34.220	26.889	120.9	0.645	0.67	9.7	68.8	3.06	38.4	0.00			380	203
400	ISL	6.36	6.32	34.258	26.925	117.9	0.671	0.52	7.5	71.4	3.13	38.9	0.00			403	
437		6.29	6.25	34.313	26.978	113.4	0.714	0.33	4.8	75.3	3.22	39.6	0.00			440	202
500	ISL	5.93	5.89	34.336	27.042	107.8	0.784	0.25	3.6	81.3	3.30	40.7	0.00			503	
515		5.85	5.81	34.342	27.057	106.5	0.800	0.23	3.3	82.7	3.32	41.0	0.00			519	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
31 45.3 N	121 19.0 W	03/07/00	2243 UTC	3708 m	340 20 kn	340 06 07	1	1019.3 mb	17.7 C	15.0 C	16m	7/8 SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.83	16.83	33.315	24.262	365.1	0.000	5.70	102.9	2.5	0.29	0.0	0.00	0.19	0.03	0	
2		16.83	16.83	33.315	24.262	365.1	0.007	5.70	102.9	2.5	0.29	0.0	0.00	0.19	0.03	2	220
10	ISL	16.82	16.82	33.316	24.266	365.1	0.037	5.72	103.2	2.5	0.29	0.0	0.00	0.19	0.03	10	
16		16.82	16.82	33.317	24.267	365.1	0.058	5.73	103.4	2.6	0.29	0.0	0.00	0.19	0.03	16	219
20	ISL	16.47	16.47	33.322	24.352	357.2	0.073	5.85	104.8	2.6	0.30	0.1	0.00	0.26	0.05	20	
30	ISL	15.37	15.37	33.333	24.608	333.0	0.107	6.12	107.3	2.7	0.32	0.2	0.02	0.45	0.14	30	
31		15.24	15.24	33.335	24.638	330.2	0.111	6.15	107.5	2.7	0.32	0.2	0.02	0.47	0.15	31	218
42		14.13	14.12	33.325	24.868	308.6	0.146	6.15	105.1	3.1	0.42	1.4	0.06	0.60	0.26	42	217
50	ISL	13.22	13.21	33.339	25.065	290.0	0.170	5.91	99.1	3.8	0.57	3.2	0.48	0.54	0.36	50	
55		12.75	12.74	33.362	25.175	279.6	0.184	5.73	95.2	4.5	0.67	4.7	0.67	0.50	0.38	55	216
65		12.41	12.40	33.446	25.307	267.3	0.211	5.49	90.6	6.3	0.85	8.0	0.16	0.29	0.22	65	215
75		12.06	12.05	33.511	25.424	256.4	0.238	5.31	87.0	8.5	0.97	9.4	0.32	0.18	0.19	75	214
85		11.44	11.43	33.565	25.581	241.6	0.262	4.99	80.7	11.7	1.17	12.4	0.33	0.09	0.12	85	213
94		11.12	11.11	33.649	25.705	230.0	0.284	4.46	71.7	14.7	1.38	15.7	0.37	0.04	0.09	94	212
100	ISL	10.60	10.59	33.652	25.799	221.1	0.297	4.17	66.3	17.3	1.51	17.9	0.24	0.04	0.09	100	
110		9.76	9.75	33.655	25.944	207.3	0.319	3.79	59.1	21.3	1.67	21.0	0.01	0.03	0.08	111	211
124		9.48	9.47	33.774	26.084	194.3	0.347	3.47	53.9	24.0	1.77	22.7	0.01	0.01	0.04	125	210
125	ISL	9.46	9.45	33.781	26.092	193.5	0.349	3.45	53.5	24.2	1.78	22.8	0.01	0.01	0.04	126	
143		9.08	9.06	33.884	26.234	180.3	0.382	3.09	47.6	28.3	1.92	25.2	0.01	0.01	0.05	144	209
150	ISL	8.96	8.94	33.916	26.278	176.2	0.395	3.01	46.2	29.5	1.96	25.8	0.01	0.01	0.05	151	
168		8.67	8.65	33.979	26.374	167.5	0.426	2.86	43.6	32.4	2.05	26.9	0.01	0.00	0.04	169	208
199		8.16	8.14	34.041	26.500	155.9	0.476	2.51	37.9	38.1	2.21	29.1	0.00	0.00	0.04	200	207
200	ISL	8.15	8.13	34.042	26.502	155.7	0.477	2.50	37.7	38.2	2.21	29.1	0.00			201	
228		7.86	7.84	34.053	26.554	151.1	0.520	2.31	34.6	41.6	2.32	30.3	0.00			229	206
250	ISL	7.62	7.60	34.065	26.599	147.2	0.553	2.16	32.2	44.5	2.40	31.3	0.00			251	
268		7.42	7.39	34.076	26.636	143.9	0.579	2.01	29.8	47.3	2.48	32.2	0.00			270	205
300	ISL	7.04	7.01	34.104	26.712	137.0	0.624	1.58	23.2	53.7	2.67	34.4	0.00			302	
320		6.80	6.77	34.121	26.758	132.8	0.651	1.32	19.3	57.9	2.78	35.7	0.00			322	204
378		6.24	6.21	34.134	26.842	125.2	0.726	0.97	14.0	67.3	2.96	38.3	0.00			380	203
400	ISL	6.02	5.99	34.141	26.876	122.2	0.753	0.85	12.2	71.1	3.02	39.2	0.00			403	
440		5.71	5.67	34.167	26.935	116.8	0.801	0.66	9.4	77.2	3.13	40.5	0.00			443	202
500	ISL	5.71	5.67	34.251	27.002	111.3	0.870	0.43	6.1	81.0	3.24	41.0	0.00			503	
518		5.71	5.67	34.276	27.022	109.7	0.889	0.36	5.1	82.2	3.27	41.2	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 24.9 N	121 59.9 W	03/07/00	1730 UTC	3834 m	350 13 kn	350 06 07	2	1019.7 mb	16.8 C	14.4 C	25m	8/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.45	17.45	33.373	24.160	374.8	0.000	5.58	101.9	2.5	0.28	0.0	0.00	0.12	0.03	0	
1	A	17.45	17.45	33.373	24.160	374.8	0.004	5.58	101.9	2.5	0.28	0.0	0.00	0.12	0.03	1	222
10	ISL	17.45	17.45	33.373	24.161	375.1	0.037	5.58	101.9	2.4	0.28	0.0	0.00	0.12	0.03	10	
16	A	17.45	17.45	33.373	24.161	375.3	0.060	5.58	101.9	2.4	0.28	0.0	0.00	0.12	0.03	16	221
20	ISL	17.26	17.26	33.371	24.205	371.2	0.075	5.65	102.8	2.3	0.28	0.0	0.00	0.13	0.03	20	
25		16.94	16.94	33.372	24.281	364.1	0.093	5.74	103.8	2.2	0.29	0.0	0.00	0.15	0.04	25	220
30	ISL	16.56	16.56	33.392	24.385	354.3	0.111	5.82	104.5	2.1	0.29	0.0	0.00	0.17	0.05	30	
34	A	16.26	16.25	33.404	24.463	347.0	0.125	5.87	104.8	2.0	0.29	0.0	0.00	0.19	0.06	34	219
42		15.80	15.79	33.367	24.539	340.0	0.153	5.93	104.9	2.0	0.31	0.0	0.00	0.24	0.09	42	218
50	ISL	15.17	15.16	33.356	24.670	327.7	0.179	6.04	105.5	2.3	0.33	0.0	0.01	0.39	0.19	50	
52	A	14.94	14.93	33.356	24.720	323.0	0.186	6.05	105.2	2.4	0.33	0.0	0.01	0.43	0.22	52	217
58		13.91	13.90	33.356	24.938	302.3	0.205	5.97	101.6	2.9	0.43	1.2	0.11	0.48	0.53	58	216
63	A	13.56	13.55	33.373	25.023	294.4	0.220	5.87	99.2	3.4	0.50	2.0	0.29	0.51	0.38	63	215
74		12.87	12.86	33.379	25.165	281.0	0.251	5.61	93.4	4.2	0.59	3.7	0.19	0.41	0.36	74	214
75	ISL	12.82	12.81	33.380	25.176	280.0	0.254	5.59	93.0	4.3	0.60	3.9	0.17	0.40	0.35	75	
86		12.29	12.28	33.389	25.286	269.8	0.284	5.45	89.7	5.4	0.69	5.6	0.03	0.26	0.27	86	213
97	A	11.83	11.82	33.400	25.381	260.9	0.314	5.32	86.7	6.5	0.78	7.1	0.03	0.18	0.21	97	212
100	ISL	11.70	11.69	33.409	25.412	258.0	0.321	5.25	85.3	7.1	0.83	7.9	0.03	0.15	0.19	100	
111		11.18	11.17	33.456	25.544	245.7	0.349	4.91	78.9	10.1	1.03	11.2	0.02	0.07	0.11	111	211
124		10.35	10.34	33.534	25.751	226.1	0.380			14.6	1.28	15.3	0.01	0.03	0.06	125	210
125	ISL	10.31	10.30	33.542	25.764	224.9	0.382	4.38	69.1	15.0	1.30	15.6	0.01	0.03	0.06	126	
145		9.76	9.74	33.715	25.992	203.6	0.425	3.66	57.1	21.6	1.65	21.1	0.01	0.01	0.04	146	209
150	ISL	9.62	9.60	33.754	26.046	198.5	0.435	3.53	54.9	23.0	1.71	22.1	0.01	0.01	0.04	151	
171		9.12	9.10	33.889	26.232	181.1	0.475	3.13	48.2	27.6	1.89	24.8	0.00	0.00	0.03	172	208
200		8.77	8.75	33.963	26.346	170.8	0.526	3.09	47.2	30.7	1.95	25.9	0.00	0.00	0.03	201	207
229		8.30	8.28	34.016	26.460	160.3	0.574	2.78	42.1	35.7	2.11	27.9	0.00			230	206
250	ISL	7.87	7.85	34.026	26.532	153.6	0.607	2.63	39.4	39.9	2.22	29.4	0.00			251	
270		7.46	7.43	34.027	26.592	148.1	0.637	2.46	36.5	44.1	2.32	30.9	0.00			271	205
300	ISL	7.00	6.97	34.037	26.664	141.4	0.680	2.00	29.4	50.0	2.48	32.9	0.00			302	
318		6.78	6.75	34.046	26.701	138.1	0.705	1.72	25.1	53.4	2.57	34.0	0.00			320	204
378		6.28	6.25	34.101	26.811	128.2	0.785	1.20	17.3	64.4	2.87	37.6	0.00			380	203
400	ISL	6.16	6.12	34.128	26.848	124.9	0.813	1.01	14.6	67.8	2.96	38.4	0.00			402	
438		6.03	5.99	34.182	26.907	119.7	0.860	0.71	10.2	73.0	3.09	39.4	0.00			441	202
500	ISL	5.96	5.92	34.282	26.996	112.2	0.932	0.40	5.7	78.8	3.23	40.2	0.00			503	
521		5.94	5.89	34.316	27.026	109.7	0.955	0.29	4.2	80.8	3.28	40.5	0.00			524	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 5.5 N	122 40.3 W	03/07/00	0820 UTC	4016 m	340 20 kn			1019.1 mb	19.0 C	15.0 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.63	17.63	33.403	24.140	376.7	0.000	5.61	102.9	2.4	0.29	0.0	0.00	0.10	0.02	0	
2		17.63	17.63	33.403	24.140	376.8	0.008	5.61	102.9	2.4	0.29	0.0	0.00	0.10	0.02	2	220
10	ISL	17.64	17.64	33.409	24.143	376.8	0.038	5.60	102.7	2.3	0.29	0.0	0.00	0.10	0.02	10	
15		17.65	17.65	33.413	24.143	376.9	0.057	5.60	102.7	2.3	0.29	0.0	0.00	0.11	0.02	15	219
20	ISL	17.46	17.46	33.391	24.172	374.3	0.075	5.65	103.2	2.3	0.29	0.0	0.00	0.12	0.03	20	
30		16.91	16.91	33.343	24.266	365.7	0.112	5.79	104.6	2.3	0.30	0.0	0.00	0.14	0.04	30	218
46		15.90	15.89	33.329	24.488	345.0	0.169	5.93	105.1	2.3	0.31	0.0	0.00	0.16	0.05	46	217
50	ISL	15.43	15.42	33.364	24.619	332.6	0.183	6.04	106.0	2.3	0.32	0.0	0.00	0.22	0.09	50	
55		14.87	14.86	33.407	24.775	317.9	0.199	6.14	106.6	2.4	0.34	0.0	0.00	0.30	0.15	55	216
65		14.43	14.42	33.386	24.853	310.7	0.230	6.04	103.9	2.6	0.35	0.3	0.02	0.40	0.26	65	215
75		13.32	13.31	33.390	25.085	288.8	0.260	5.75	96.7	3.6	0.56	2.6	0.73	0.41	0.39	75	214
85		12.34	12.33	33.417	25.298	268.6	0.288	5.44	89.6	5.5	0.75	6.5	0.02	0.20	0.25	85	213
94		11.55	11.54	33.410	25.441	255.1	0.312	5.29	85.7	7.2	0.83	8.0	0.01	0.12	0.17	94	212
100	ISL	11.24	11.23	33.430	25.513	248.4	0.327	5.09	81.9	8.9	0.95	9.9	0.01	0.09	0.14	100	
109		10.90	10.89	33.479	25.612	239.1	0.349	4.73	75.6	11.9	1.15	13.0	0.01	0.06	0.11	109	211
123		10.25	10.24	33.578	25.802	221.2	0.381	4.25	67.0	16.5	1.40	17.1	0.01	0.04	0.05	124	210
125	ISL	10.18	10.17	33.597	25.829	218.7	0.385	4.16	65.5	17.2	1.44	17.7	0.01	0.04	0.05	126	
149		9.49	9.47	33.806	26.107	192.6	0.435	3.30	51.2	25.0	1.81	23.5	0.00	0.00	0.05	150	209
150	ISL	9.47	9.45	33.812	26.115	191.9	0.437	3.29	51.1	25.2	1.82	23.6	0.00	0.00	0.05	151	
171		9.12	9.10	33.900	26.241	180.3	0.476	3.13	48.2	28.5	1.92	25.1	0.00	0.01 U	0.14 U	172	208
199		8.66	8.64	33.988	26.383	167.2	0.524	2.86	43.6	32.8	2.04	27.0	0.00	0.00	0.03	200	207
200	ISL	8.65	8.63	33.991	26.386	166.9	0.526	2.84	43.3	33.0	2.05	27.1	0.00			201	
232		8.31	8.29	34.053	26.488	157.8	0.578	2.32	35.1	38.3	2.27	29.6	0.00			233	206
250	ISL	7.96	7.93	34.069	26.553	151.8	0.606	2.16	32.4	42.1	2.37	30.8	0.00			251	
268		7.59	7.56	34.078	26.614	146.1	0.633	2.04	30.4	46.0	2.46	32.0	0.00			269	205
300	ISL	7.02	6.99	34.074	26.691	139.0	0.678	1.83	26.9	52.2	2.59	33.9	0.00			302	
321		6.74	6.71	34.078	26.732	135.2	0.707	1.66	24.2	55.9	2.67	35.1	0.00			323	204
383		6.62	6.58	34.211	26.854	124.6	0.788	0.75	10.9	65.8	3.01	37.9	0.00			385	203
400	ISL	6.52	6.48	34.227	26.880	122.3	0.809	0.64	9.3	68.0	3.06	38.4	0.00			402	
434		6.27	6.23	34.247	26.928	118.0	0.850	0.51	7.4	72.3	3.14	39.4	0.00			437	202
500	ISL	5.77	5.73	34.271	27.011	110.6	0.925	0.37	5.3	80.9	3.25	41.1	0.00			503	
512		5.68	5.64	34.276	27.026	109.2	0.938	0.35	5.0	82.5	3.27	41.4	0.00			515	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
30 45.1 N	123 20.4 W	03/07/00	0142 UTC	4004 m	350 20 kn	350 06 06	2	1018.4 mb	17.1 C	14.8 C	15m	8/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.00	18.00	33.470	24.102	380.3	0.000	5.55	102.5	2.3	0.28	0.0	0.00	0.14	0.03	0	
1		18.00	18.00	33.470	24.102	380.4	0.004	5.55	102.5	2.3	0.28	0.0	0.00	0.14	0.03	1	220
10	ISL	17.98	17.98	33.469	24.106	380.3	0.038	5.56	102.7	2.3	0.28	0.0	0.00	0.14	0.03	10	
15		17.97	17.97	33.468	24.108	380.3	0.057	5.57	102.8	2.3	0.28	0.0	0.00	0.14	0.03	15	219
20	ISL	17.72	17.72	33.443	24.150	376.5	0.076	5.62	103.2	2.3	0.28	0.0	0.00	0.15	0.03	20	
30		16.98	16.98	33.392	24.287	363.7	0.113	5.75	104.1	2.3	0.28	0.0	0.00	0.16	0.05	30	218
45		15.56	15.55	33.396	24.615	332.8	0.165	6.03	106.1	2.2	0.30	0.0	0.00	0.24	0.09	45	217
50	ISL	15.07	15.06	33.400	24.726	322.4	0.182	6.08	106.0	2.3	0.32	0.1	0.01	0.34	0.13	50	
55		14.57	14.56	33.405	24.837	311.9	0.197	6.13	105.8	2.3	0.36	0.2	0.02	0.42	0.17	55	215
65		13.55	13.54	33.421	25.062	290.7	0.228	5.84	98.7	3.3	0.53	2.3	0.37	0.40	0.27	65	216
75	ISL	12.91	12.90	33.449	25.212	276.6	0.256	5.56	92.7	4.4	0.69	5.2	0.42	0.30	0.26	75	
76		12.86	12.85	33.451	25.223	275.6	0.259	5.54	92.3	4.5	0.70	5.5	0.43	0.29	0.26	76	214
86		12.30	12.29	33.448	25.330	265.6	0.286	5.38	88.6	5.8	0.80	7.3	0.03	0.20	0.19	86	213
95		11.72	11.71	33.431	25.426	256.6	0.309	5.20	84.6	7.5	0.88	8.7	0.03	0.15	0.19	95	212
100	ISL	11.49	11.48	33.455	25.487	250.9	0.322	5.09	82.4	8.6	0.96	10.0	0.02	0.11	0.16	100	
109		11.09	11.08	33.526	25.615	238.9	0.344	4.79	76.9	11.5	1.16	13.1	0.01	0.05	0.09	109	211
124		10.20	10.19	33.664	25.878	214.0	0.378	3.80	59.9	19.7	1.59	19.8	0.01	0.02	0.06	125	210
125	ISL	10.16	10.15	33.671	25.890	212.9	0.380	3.77	59.4	20.0	1.60	20.0	0.01	0.02	0.06	126	
144		9.54	9.52	33.785	26.083	194.8	0.419	3.43	53.3	24.1	1.77	22.8	0.01	0.00	0.04	145	209
150	ISL	9.39	9.37	33.827	26.140	189.5	0.430	3.30	51.1	25.6	1.83	23.7	0.01	0.00	0.04	151	
168		9.02	9.00	33.940	26.288	175.7	0.463	2.92	44.9	29.9	2.00	26.1	0.01	0.00	0.03	169	208
200	ISL	8.56	8.54	34.026	26.428	162.9	0.517	2.49	37.9	35.5	2.21	28.5	0.00	0.00	0.04	201	
201		8.55	8.53	34.027	26.430	162.7	0.519	2.48	37.7	35.6	2.21	28.5	0.00	0.00	0.04	202	207
231		8.32	8.30	34.057	26.489	157.6	0.567	2.33	35.3	38.3	2.29	29.5	0.00			232	206
250	ISL	8.00	7.97	34.049	26.531	153.8	0.597	2.38	35.8	40.4	2.31	30.0	0.00			251	
269		7.64	7.61	34.039	26.576	149.7	0.626	2.41	35.9	43.0	2.34	30.7	0.00			270	205
300	ISL	7.24	7.21	34.056	26.646	143.3	0.671	2.08	30.7	48.5	2.50	32.6	0.00			302	
318		7.04	7.01	34.071	26.686	139.7	0.696	1.83	26.9	52.1	2.61	33.8	0.00			320	204
379		6.37	6.34	34.115	26.810	128.4	0.778	1.27	18.4	64.1	2.92	37.4	0.01			381	203
400	ISL	6.18	6.14	34.126	26.844	125.3	0.805	1.09	15.7	67.7	2.99	38.3	0.01			402	
436		5.89	5.85	34.145	26.896	120.6	0.849	0.81	11.6	73.4	3.08	39.7	0.00			439	202
500	ISL	5.46	5.42	34.194	26.987	112.4	0.924	0.53	7.5	83.0	3.23	41.6	0.00			503	
514		5.37	5.33	34.205	27.007	110.6	0.939	0.47	6.6	85.1	3.26	42.0	0.00			517	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
30 25.2 N	124 0.5 W	02/07/00	1915 UTC	4210 m	010 10 kn	360 04 06	2	1019.2 mb	18.8 C	15.8 C	25m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.69	17.69	33.338	24.076	382.8	0.000	5.58	102.4	2.1	0.27	0.0	0.00	0.11	0.02	0	
1	A	17.69	17.69	33.338	24.076	382.9	0.004	5.58	102.4	2.1	0.27	0.0	0.00	0.11	0.02	1	222
10	ISL	17.67	17.67	33.338	24.081	382.7	0.038	5.57	102.2	2.1	0.27	0.0	0.00	0.11	0.02	10	
16	A	17.65	17.65	33.338	24.086	382.4	0.061	5.57	102.1	2.1	0.27	0.0	0.00	0.12	0.02	16	221
20	ISL	17.37	17.37	33.336	24.152	376.3	0.076	5.62	102.5	2.1	0.27	0.0	0.00	0.12	0.02	20	
25		16.99	16.99	33.335	24.241	367.9	0.095	5.69	103.0	2.1	0.28	0.0	0.00	0.13	0.03	25	220
30	ISL	16.75	16.75	33.333	24.296	362.8	0.113	5.76	103.8	2.0	0.28	0.0	0.00	0.14	0.03	30	
34	A	16.61	16.60	33.331	24.327	360.0	0.128	5.80	104.2	2.0	0.28	0.0	0.00	0.15	0.03	34	219
43		16.48	16.47	33.330	24.356	357.5	0.160	5.77	103.4	2.0	0.28	0.0	0.00	0.19	0.05	43	218
50	ISL	15.98	15.97	33.302	24.449	348.8	0.185	5.83	103.4	2.1	0.29	0.0	0.00	0.27	0.08	50	
52	A	15.77	15.76	33.301	24.495	344.5	0.192	5.86	103.5	2.1	0.29	0.0	0.00	0.29	0.09	52	217
59		14.81	14.80	33.379	24.766	318.8	0.215	5.99	103.8	2.2	0.30	0.0	0.00	0.37	0.17	59	216
65	A	14.28	14.27	33.437	24.924	303.9	0.234	5.94	101.9	2.4	0.32	0.0	0.01	0.41	0.29	65	215
75		13.61	13.60	33.497	25.109	286.5	0.263	5.78	97.8	2.9	0.37	0.8	0.11	0.38	0.37	75	214
85		12.40	12.39	33.356	25.239	274.2	0.291	5.62	92.7	4.7	0.64	4.8	0.07	0.23	0.27	85	213
96	A	11.58	11.57	33.429	25.450	254.3	0.320	5.15	83.5	8.0	0.92	9.3	0.02	0.11	0.18	96	212
100	ISL	11.43	11.42	33.440	25.486	251.0	0.330	5.07	81.9	8.7	0.97	10.1	0.02	0.09	0.16	100	
109		11.16	11.15	33.458	25.549	245.1	0.353	4.94	79.4	10.0	1.05	11.5	0.01	0.07	0.12	109	211
124		10.42	10.41	33.522	25.729	228.2	0.388	4.50	71.2	13.8	1.25	14.8	0.01	0.04	0.07	125	210
125	ISL	10.39	10.38	33.530	25.741	227.1	0.390	4.46	70.5	14.1	1.27	15.1	0.01	0.04	0.07	126	
144		9.93	9.91	33.691	25.945	208.0	0.432	3.77	59.1	19.8	1.58	20.0	0.01	0.01	0.05	145	209
150	ISL	9.80	9.78	33.725	25.993	203.6	0.444	3.65	57.0	21.1	1.64	21.0	0.01	0.01	0.05	151	
170		9.38	9.36	33.818	26.135	190.4	0.483	3.38	52.3	25.0	1.79	23.4	0.01	0.00	0.04	171	208
200		8.78	8.76	33.965	26.346	170.8	0.538	2.93	44.8	31.3	2.00	26.5	0.00	0.00	0.04	201	207
229		8.30	8.28	34.018	26.462	160.2	0.586	2.69	40.7	36.2	2.14	28.3	0.01			230	206
250	ISL	8.03	8.00	34.037	26.517	155.1	0.619	2.53	38.1	39.1	2.24	29.4	0.01			251	
272		7.77	7.74	34.046	26.563	151.1	0.652	2.37	35.4	42.1	2.33	30.5	0.00			273	205
300	ISL	7.37	7.34	34.053	26.626	145.4	0.694	2.17	32.1	46.5	2.44	31.9	0.01			302	
320		7.08	7.05	34.055	26.668	141.5	0.723	2.03	29.9	49.8	2.52	33.0	0.01			322	204
380		6.33	6.30	34.052	26.766	132.5	0.805	1.61	23.3	60.5	2.75	36.3	0.01			382	203
400	ISL	6.33	6.29	34.096	26.801	129.5	0.831	1.32	19.1	63.4	2.85	37.2	0.01			402	
438		6.34	6.30	34.180	26.866	123.9	0.879	0.78	11.3	68.5	3.03	38.6	0.00			441	202
500	ISL	6.09	6.05	34.261	26.963	115.4	0.953	0.42	6.0	76.4	3.20	40.1	0.00			503	
513		6.04	5.99	34.278	26.983	113.7	0.968	0.35	5.0	78.0	3.23	40.4	0.00			516	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 26.8

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 56.8 N	117 18.3 W	29/06/00	1844 UTC	67 m	270 05 kn	280 02 06	2	1014.1 mb	20.5 C	19.2 C	15m	8/8	ST

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	20.55	20.55	33.709	23.633	425.0	0.000	5.69	110.4	2.6	0.25	0.0	0.00	0.28	0.06	0	
1 A	20.55	20.55	33.709	23.633	425.1	0.004	5.69	110.4	2.6	0.25	0.0	0.00	0.28	0.06	1	208
6	18.64	18.64	33.671	24.098	381.0	0.024	5.86	109.7	2.4	0.26	0.0	0.00	0.21	0.05	6	207
10 ISL	16.92	16.92	33.633	24.485	344.1	0.039	6.29	113.9	3.2	0.28	0.1	0.00	0.27	0.08	10	
11 A	16.50	16.50	33.624	24.576	335.5	0.042	6.39	114.8	3.4	0.29	0.1	0.00	0.29	0.09	11	206
20 ISL	13.56	13.56	33.535	25.147	281.4	0.070	5.90	99.8	4.7	0.59	3.8	0.16	1.28	0.39	20	
21 A	13.30	13.30	33.528	25.194	276.9	0.073	5.85	98.4	5.0	0.64	4.5	0.18	1.38	0.42	21	205
30 ISL	11.49	11.49	33.572	25.576	240.7	0.096	4.67	75.6	11.9	1.10	11.9	0.20	0.79	0.35	30	
31 A	11.35	11.35	33.581	25.609	237.6	0.099	4.52	73.0	12.8	1.15	12.8	0.20	0.69	0.33	31	204
39 A	10.81	10.81	33.667	25.773	222.2	0.117	3.60	57.5	19.1	1.55	18.1	0.32	0.36	0.34	39	203
48	10.78	10.77	33.676	25.785	221.2	0.137	3.55	56.7	19.5	1.52	17.9	0.34	0.34	0.33	48	202
50 ISL	10.70	10.69	33.688	25.809	219.0	0.141	3.48	55.5	20.1	1.55	18.4	0.33	0.30	0.32	50	
57 A	10.44	10.43	33.731	25.887	211.7	0.156	3.23	51.2	22.4	1.66	20.3	0.28	0.17	0.29	57	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 28

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 54.5 N	117 24.2 W	29/06/00	2043 UTC	573 m	260 10 kn	270 02 07	1	1014.1 mb	20.2 C	18.6 C	18m	7/8	SC

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	21.39	21.39	33.706	23.405	446.9	0.000	5.38	106.0	2.1	0.25	0.0	0.00	0.19	0.03	0	
2	21.39	21.39	33.706	23.405	446.9	0.009	5.38	106.0	2.1	0.25	0.0	0.00	0.19	0.03	2	220
10 ISL	19.12	19.12	33.627	23.943	395.8	0.043	5.92	111.8	2.2	0.29	0.0	0.00	0.19	0.04	10	
16	16.67	16.67	33.588	24.510	342.0	0.065	6.36	114.6	2.2	0.32	0.0	0.00	0.19	0.05	16	219
20 ISL	15.50	15.50	33.560	24.754	318.9	0.078	6.32	111.2	3.0	0.39	1.0	0.04	0.34	0.12	20	
30	13.19	13.19	33.517	25.208	275.8	0.108	5.94	99.7	5.3	0.61	4.2	0.16	0.72	0.29	30	218
46	12.03	12.02	33.490	25.412	256.7	0.150	5.27	86.3	7.9	0.87	8.5	0.18	0.81	0.36	46	217
50 ISL	11.64	11.63	33.500	25.493	249.1	0.160	5.03	81.7	9.3	0.96	10.2	0.13	0.61	0.30	50	
55	11.19	11.18	33.521	25.592	239.8	0.173	4.74	76.3	11.2	1.08	12.2	0.06	0.36	0.23	55	216
64	10.79	10.78	33.569	25.700	229.6	0.194	4.39	70.0	13.7	1.23	14.6	0.03	0.23	0.18	64	215
75	10.57	10.56	33.640	25.794	220.9	0.219	3.97	63.1	16.4	1.39	17.1	0.02	0.17	0.18	75	214
85	10.16	10.15	33.766	25.963	205.1	0.240	3.21	50.6	22.0	1.69	21.5	0.02	0.12	0.17	85	213
95	9.98	9.97	33.824	26.039	198.0	0.260	2.91	45.7	24.9	1.81	23.1	0.01	0.07	0.14	95	212
100 ISL	9.93	9.92	33.840	26.060	196.1	0.270	2.89	45.3	25.6	1.83	23.5	0.01	0.06	0.13	100	
110	9.81	9.80	33.864	26.099	192.6	0.289	2.85	44.6	26.3	1.86	23.9	0.01	0.04	0.10	111	211
125	9.46	9.45	33.905	26.189	184.3	0.318	3.11	48.3	26.6	1.83	23.8	0.01	0.02	0.07	126	210
145	9.20	9.18	33.955	26.271	177.0	0.354	3.13	48.3	27.7	1.84	24.3	0.01	0.00	0.06	146	209
150 ISL	9.21	9.19	33.983	26.291	175.1	0.363	2.95	45.6	28.7	1.90	24.9	0.01	0.00	0.06	151	
171	9.31	9.29	34.096	26.364	168.7	0.399	2.13	33.0	33.4	2.18	27.5	0.01	0.01	0.08	172	208
200	9.10	9.08	34.117	26.415	164.4	0.447	2.02	31.1	35.5	2.24	28.2	0.01	0.01	0.07	201	207
230	8.96	8.94	34.166	26.476	159.2	0.495	1.70	26.1	38.3	2.36	29.5	0.01			231	206
250 ISL	8.91	8.88	34.198	26.509	156.4	0.527	1.51	23.2	39.9	2.43	30.0	0.01			251	
271	8.87	8.84	34.231	26.542	153.8	0.560	1.33	20.4	41.5	2.51	30.5	0.01			273	205
300 ISL	8.83	8.80	34.280	26.587	150.1	0.604	1.06	16.3	44.0	2.61	31.2	0.00			302	
318	8.77	8.74	34.304	26.615	147.7	0.630	0.92	14.1	45.6	2.67	31.6	0.00			320	204
379	8.13	8.09	34.293	26.705	139.8	0.718	0.84	12.7	51.1	2.76	33.2	0.00			381	203
400 ISL	8.10	8.06	34.332	26.741	136.9	0.747	0.67	10.1	52.9	2.83	33.6	0.00			403	
438	8.02	7.97	34.395	26.803	131.7	0.798	0.37	5.6	56.7	2.95	34.4	0.00			441	202
500 ISL	7.07	7.02	34.335	26.892	123.3	0.877	0.37	5.5	66.0	3.05	37.2	0.01			503	
506	6.98	6.93	34.330	26.901	122.5	0.885	0.37	5.4	66.9	3.06	37.5	0.01			509	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 50.6 N	117 32.4 W	29/06/00	2336 UTC	870 m	270 07 kn	280 01 06	1	1012.9 mb	20.1 C	18.5 C	17m	7/8	SC

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	21.55	21.55	33.742	23.388	448.4	0.000	5.34	105.6	1.7	0.26	0.0	0.00	0.19	0.03	0	
2	21.55	21.55	33.742	23.388	448.5	0.009	5.34	105.6	1.7	0.26	0.0	0.00	0.19	0.03	2	220
10 ISL	20.64	20.64	33.715	23.615	427.2	0.044	5.46	106.1	1.7	0.27	0.0	0.00	0.21	0.03	10	
11	20.41	20.41	33.706	23.669	422.1	0.048	5.48	106.1	1.7	0.27	0.0	0.00	0.21	0.03	11	219
20	16.75	16.75	33.596	24.497	343.3	0.083	6.39	115.3	2.2	0.30	0.0	0.00	0.22	0.06	20	218
30 ISL	14.31	14.31	33.550	25.003	295.3	0.115	6.37	109.4	3.7	0.42	1.1	0.04	0.81	0.33	30	
31	14.15	14.15	33.546	25.034	292.4	0.118	6.37	109.1	3.9	0.44	1.3	0.05	0.88	0.36	31	217
40	13.15	13.14	33.531	25.227	274.3	0.143	5.85	98.1	5.8	0.63	4.4	0.12	1.07	0.51	40	216
50 ISL	12.21	12.20	33.561	25.434	254.8	0.170	5.16	84.9	9.1	0.89	8.6	0.22	0.78	0.44	50	
51	12.12	12.11	33.563	25.452	253.1	0.172	5.09	83.6	9.4	0.92	9.0	0.23	0.74	0.43	51	215
61	11.26	11.25	33.532	25.588	240.3	0.197	4.64	74.8	11.5	1.11	12.5	0.17	0.48	0.33	61	214
70	10.95	10.94	33.557	25.663	233.4	0.218	4.46	71.4	12.8	1.20	14.0	0.07	0.28	0.23	70	213
75 ISL	10.75	10.74	33.597	25.729	227.1	0.230	4.23	67.4	14.4	1.29	15.6	0.06	0.20	0.18	75	
85	10.36	10.35	33.695	25.874	213.6	0.252	3.69	58.4	18.4	1.51	19.0	0.03	0.10	0.12	85	212
100 ISL	10.01	10.00	33.813	26.026	199.4	0.283	3.02	47.4	23.9	1.78	22.6	0.02	0.06	0.12	100	
101	9.99	9.98	33.819	26.034	198.7	0.285	2.99	46.9	24.2	1.79	22.8	0.02	0.06	0.12	101	211
120	9.30	9.29	33.878	26.194	183.7	0.321	3.48	53.8	25.2	1.72	22.9	0.02	0.01	0.06	121	210
125 ISL	9.31	9.30	33.911	26.218	181.5	0.330	3.33	51.5	26.3	1.78	23.5	0.02	0.01	0.06	126	
140	9.35	9.33	33.985	26.270	177.0	0.357	2.71	42.0	29.7	1.98	25.4	0.01	0.01	0.07	141	209
150 ISL	9.31	9.29	34.019	26.303	174.0	0.374	2.54	39.3	30.9	2.04	26.1	0.01	0.01	0.07	151	
170	9.21	9.19	34.069	26.359	169.1	0.409	2.37	36.6	32.5	2.11	26.9	0.01	0.00	0.06	171	208
200	9.15	9.13	34.137	26.422	163.7	0.459	2.02	31.2	35.6	2.27	28.3	0.01	0.00	0.06	201	207
231	9.34	9.31	34.240	26.473	159.7	0.509	1.40	21.7	38.3	2.47	29.4	0.01			232	206
250 ISL	9.39	9.36	34.283	26.499	157.7	0.539	1.15	17.9	39.7	2.58	29.8	0.01			251	
270	9.44	9.41	34.326	26.524	155.7	0.570	0.99	15.4	41.1	2.67	30.2	0.01			272	205
300 ISL	9.05	9.02	34.299	26.567	152.1	0.616	0.98	15.1	43.2	2.65	30.9	0.01			302	
319	8.75	8.72	34.272	26.593	149.8	0.645	0.97	14.9	44.5	2.63	31.3	0.01			321	204
378	8.40	8.36	34.291	26.663	144.0	0.732	0.90	13.7	48.4	2.74	32.5	0.01			380	203
400 ISL	8.24	8.20	34.291	26.688	142.0	0.763	0.86	13.0	50.1	2.77	33.0	0.01			403	
439	7.90	7.86	34.290	26.738	137.7	0.818	0.77	11.6	53.9	2.83	34.0	0.01			442	202
500 ISL	7.15	7.10	34.300	26.854	127.0	0.899	0.52	7.7	63.4	3.00	36.7	0.01			503	
510	7.03	6.98	34.302	26.872	125.3	0.911	0.48	7.1	64.9	3.03	37.1	0.01			513	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 35

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 40.6 N	117 52.7 W	30/06/00	0322 UTC	594 m	290 10 kn	290 01 06	2	1012.4 mb	18.3 C	17.0 C		8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	19.05	19.05	33.605	23.944	395.4	0.000	5.58	105.3	1.8	0.31	0.0	0.00	0.24	0.04	0	
1		19.05	19.05	33.605	23.944	395.4	0.004	5.58	105.3	1.8	0.31	0.0	0.00	0.24	0.04	1	220
10	ISL	18.66	18.66	33.599	24.038	386.8	0.039	5.64	105.6	1.9	0.31	0.0	0.00	0.24	0.05	10	
11		18.62	18.62	33.599	24.048	385.9	0.043	5.65	105.7	1.9	0.31	0.0	0.00	0.24	0.05	11	219
20		16.55	16.55	33.579	24.531	340.1	0.076	5.95	106.9	2.2	0.35	0.1	0.02	0.56	0.18	20	218
30	ISL	15.27	15.27	33.551	24.798	315.0	0.108	6.06	106.2	2.7	0.45	1.7	0.08	0.70	0.33	30	
31		15.18	15.18	33.546	24.814	313.5	0.112	6.07	106.1	2.8	0.46	1.9	0.09	0.70	0.35	31	217
40		14.18	14.17	33.496	24.989	297.0	0.139	5.97	102.3	3.4	0.55	3.0	0.21	0.70	0.49	40	216
49		13.50	13.49	33.449	25.093	287.3	0.165	5.82	98.3	4.0	0.58	3.3	0.41	0.61	0.55	49	215
50	ISL	13.44	13.43	33.457	25.112	285.5	0.168	5.80	97.8	4.1	0.60	3.6	0.50	0.59	0.54	50	
59		12.86	12.85	33.547	25.297	268.1	0.193	5.58	93.0	5.3	0.86	7.1	1.00	0.43	0.48	59	214
69		12.09	12.08	33.558	25.454	253.3	0.219	5.10	83.7	8.4	1.07	11.4	0.02	0.21	0.24	69	213
75	ISL	11.76	11.75	33.588	25.540	245.3	0.234	4.82	78.5	10.6	1.19	13.3	0.02	0.13	0.16	75	
85		11.30	11.29	33.648	25.671	233.0	0.258	4.35	70.2	14.3	1.37	16.0	0.01	0.06	0.09	85	212
100		10.56	10.55	33.718	25.857	215.5	0.292	3.68	58.5	19.2	1.58	19.4	0.01	0.03	0.07	100	211
120		9.86	9.85	33.805	26.045	198.0	0.333	3.34	52.3	23.3	1.75	22.2	0.01	0.01	0.05	121	210
125	ISL	9.71	9.70	33.820	26.082	194.6	0.343	3.35	52.3	23.9	1.77	22.6	0.01	0.01	0.05	126	
140		9.34	9.32	33.864	26.177	185.8	0.371	3.38	52.3	25.5	1.79	23.3	0.01	0.01	0.04	141	209
150	ISL	9.18	9.16	33.904	26.234	180.5	0.390	3.33	51.4	26.5	1.81	23.7	0.01	0.01	0.04	151	
170		8.94	8.92	33.979	26.331	171.6	0.425	3.24	49.7	29.0	1.88	24.6	0.01	0.00	0.03	171	208
200		8.54	8.52	34.040	26.442	161.6	0.475	2.68	40.8	34.8	2.12	27.5	0.01	0.00	0.03	201	207
230		8.16	8.14	34.061	26.516	154.9	0.522	2.44	36.8	38.9	2.25	29.2	0.01			231	206
250	ISL	8.00	7.97	34.096	26.568	150.3	0.553	2.11	31.7	42.1	2.39	30.5	0.01			251	
269		7.87	7.84	34.132	26.615	146.1	0.581	1.78	26.7	45.4	2.52	31.8	0.01			271	205
300	ISL	7.56	7.53	34.166	26.688	139.6	0.625	1.41	21.0	50.8	2.68	33.5	0.00			302	
320		7.34	7.31	34.180	26.730	135.8	0.653	1.22	18.1	54.3	2.77	34.5	0.00			322	204
378		6.72	6.69	34.199	26.831	126.7	0.729	0.86	12.6	63.6	2.96	37.2	0.00			380	203
400	ISL	6.62	6.58	34.218	26.859	124.3	0.757	0.73	10.6	66.0	3.02	37.8	0.00			403	
438		6.54	6.50	34.258	26.902	120.8	0.803	0.54	7.9	69.1	3.10	38.4	0.00			441	202
500	ISL	6.56	6.51	34.325	26.953	117.0	0.877	0.34	4.9	71.8	3.20	38.7	0.00			503	
513		6.56	6.51	34.339	26.964	116.1	0.892	0.30	4.4	72.4	3.22	38.8	0.00			517	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 40

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 30.9 N	118 13.3 W	30/06/00	0714 UTC	1611 m	340 04 kn			1013.9 mb	17.7 C	15.9 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.52	18.52	33.705	24.153	375.4	0.000	5.64	105.4	0.5	0.27	0.0	0.00	0.29	0.07	0	
1		18.52	18.52	33.705	24.153	375.5	0.004	5.64	105.4	0.5	0.27	0.0	0.00	0.29	0.07	1	220
10		18.13	18.13	33.680	24.231	368.4	0.037	5.76	106.8	0.9	0.29	0.0	0.00	0.29	0.07	10	219
20		15.96	15.96	33.615	24.693	324.6	0.072	6.19	110.0	1.9	0.34	0.1	0.01	0.61	0.17	20	218
30		13.14	13.14	33.573	25.261	270.8	0.102	5.63	94.4	6.0	0.72	5.6	0.16	0.73	0.30	30	217
40		11.75	11.74	33.588	25.541	244.3	0.127	4.68	76.2	11.4	1.13	12.2	0.28	0.55	0.34	40	216
50		10.69	10.68	33.673	25.799	220.0	0.151	3.83	61.0	17.4	1.49	18.3	0.10	0.26	0.29	50	215
60		10.40	10.39	33.711	25.879	212.6	0.172	3.61	57.2	19.4	1.60	19.8	0.06	0.17	0.22	60	214
70		10.16	10.15	33.775	25.970	204.1	0.193	3.26	51.4	21.9	1.74	21.8	0.04	0.15	0.16	70	213
75	ISL	10.05	10.04	33.802	26.010	200.4	0.203	3.16	49.7	22.9	1.79	22.5	0.03	0.12	0.14	75	
85		9.82	9.81	33.851	26.087	193.3	0.223	3.03	47.4	24.8	1.87	23.7	0.02	0.06	0.10	85	212
100		9.43	9.42	33.923	26.208	182.1	0.251	2.91	45.2	27.6	1.95	25.0	0.02	0.02	0.07	101	211
120		9.19	9.18	33.977	26.289	174.7	0.287	2.78	42.9	29.9	2.04	26.1	0.01	0.01	0.06	121	210
125	ISL	9.13	9.12	33.990	26.309	172.9	0.295	2.68	41.3	30.8	2.08	26.5	0.01	0.01	0.07	126	
139		8.97	8.96	34.025	26.362	168.1	0.319	2.37	36.4	33.4	2.19	27.8	0.01	0.01	0.09	140	209
150	ISL	8.84	8.82	34.054	26.405	164.2	0.338	2.24	34.3	35.0	2.25	28.5	0.01	0.01	0.08	151	
169		8.60	8.58	34.093	26.474	158.0	0.368	2.11	32.2	37.5	2.33	29.4	0.01	0.00	0.05	170	208
199		8.22	8.20	34.106	26.542	151.9	0.415	2.02	30.5	41.1	2.42	30.5	0.01	0.00	0.04	200	207
200	ISL	8.21	8.19	34.107	26.544	151.7	0.416	2.01	30.4	41.2	2.42	30.5	0.01			201	
229		7.95	7.93	34.147	26.615	145.5	0.459	1.76	26.4	45.2	2.55	31.9	0.01			230	206
250	ISL	7.71	7.69	34.148	26.651	142.3	0.489	1.64	24.5	48.1	2.61	32.8	0.01			252	
270		7.51	7.48	34.152	26.683	139.5	0.518	1.51	22.5	50.7	2.67	33.5	0.01			272	205
300	ISL	7.49	7.46	34.214	26.735	135.1	0.559	1.11	16.5	54.2	2.82	34.4	0.01			302	
317		7.48	7.45	34.248	26.764	132.7	0.582	0.89	13.2	56.2	2.90	34.9	0.01			319	204
378		6.62	6.59	34.210	26.853	124.6	0.660	0.80	11.7	65.2	3.02	37.7	0.01			380	203
400	ISL	6.52	6.48	34.221	26.875	122.7	0.687	0.71	10.3	67.4	3.07	38.2	0.01			403	
440		6.45	6.41	34.258	26.914	119.6	0.736	0.53	7.7	70.7	3.15	38.8	0.01			443	202
500	ISL	6.25	6.21	34.324	26.992	112.9	0.805	0.34	4.9	76.1	3.26	39.9	0.01			503	
514		6.20	6.15	34.340	27.012	111.2	0.821	0.29	4.2	77.3	3.29	40.2	0.01			518	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 20.8 N	118 33.8 W	30/06/00	1115 UTC	1396 m	290 12 kn			1013.1 mb	16.0 C	15.0 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.79	18.79	33.715	24.093	381.1	0.000	5.56	104.4	1.5	0.26	0.0	0.00	0.29	0.06	0	
1		18.79	18.79	33.715	24.093	381.2	0.004	5.56	104.4	1.5	0.26	0.0	0.00	0.29	0.06	1	220
10		17.57	17.57	33.717	24.395	352.7	0.037	5.78	106.1	1.4	0.29	0.3	0.02	0.36	0.09	10	219
20		13.52	13.52	33.698	25.281	268.6	0.068	5.36	90.7	5.9	0.85	7.5	0.41	0.64	0.36	20	218
30	ISL	12.25	12.25	33.685	25.522	245.9	0.094	4.88	80.4	10.3	1.15	11.4	0.77	0.64	0.44	30	
31		12.21	12.21	33.681	25.526	245.5	0.096	4.83	79.5	10.7	1.17	11.7	0.79	0.64	0.45	31	217
40		11.70	11.69	33.681	25.622	236.6	0.118	4.34	70.7	13.7	1.31	14.1	0.66	0.53	0.40	40	216
50		10.82	10.81	33.736	25.825	217.5	0.140	3.68	58.8	18.9	1.60	19.5	0.15	0.31	0.28	50	215
60		10.51	10.50	33.776	25.911	209.6	0.162	3.57	56.7	21.2	1.71	21.1	0.04	0.22	0.19	60	214
70		10.32	10.31	33.801	25.963	204.8	0.183	3.32	52.5	22.8	1.79	22.4	0.02	0.16	0.15	70	213
75	ISL	10.22	10.21	33.817	25.993	202.1	0.193	3.22	50.8	23.7	1.83	23.0	0.01	0.13	0.14	75	
85		9.98	9.97	33.855	26.063	195.5	0.213	3.04	47.7	25.7	1.92	24.1	0.01	0.07	0.13	85	212
100	ISL	9.50	9.49	33.919	26.193	183.5	0.241	2.76	42.9	28.4	2.01	25.6	0.01	0.03	0.08	101	
101		9.47	9.46	33.923	26.201	182.7	0.243	2.74	42.6	28.6	2.02	25.7	0.01	0.03	0.08	102	211
119		9.07	9.06	34.000	26.326	171.1	0.275	2.45	37.7	32.5	2.16	27.5	0.01	0.01	0.08	120	210
125	ISL	9.00	8.99	34.017	26.351	168.9	0.285	2.39	36.8	33.4	2.19	27.9	0.01	0.01	0.08	126	
139		8.89	8.88	34.048	26.393	165.2	0.308	2.25	34.5	35.1	2.26	28.7	0.01	0.01	0.08	140	209
150	ISL	8.82	8.80	34.071	26.422	162.6	0.326	2.11	32.3	36.3	2.32	29.3	0.01	0.01	0.08	151	
168		8.70	8.68	34.110	26.471	158.2	0.355	1.87	28.6	38.4	2.41	30.2	0.01	0.01	0.08	169	208
199		8.38	8.36	34.186	26.581	148.4	0.403	1.51	22.9	43.6	2.59	31.5	0.02	0.00	0.07	200	207
200	ISL	8.38	8.36	34.187	26.582	148.3	0.404	1.50	22.8	43.7	2.59	31.5	0.02			201	
226		8.29	8.27	34.211	26.615	145.6	0.442	1.36	20.6	45.6	2.65	32.1	0.02			227	206
250	ISL	8.09	8.06	34.237	26.665	141.2	0.477	1.14	17.2	48.9	2.75	33.1	0.02			252	
269		7.89	7.86	34.253	26.708	137.4	0.503	0.97	14.6	51.7	2.83	34.0	0.02			271	205
300	ISL	7.57	7.54	34.250	26.752	133.6	0.545	0.88	13.1	55.3	2.90	35.1	0.01			302	
320		7.38	7.35	34.245	26.776	131.6	0.572	0.84	12.5	57.5	2.94	35.7	0.01			322	204
380		6.95	6.91	34.281	26.864	123.8	0.648	0.52	7.6	64.9	3.14	37.7	0.01			382	203
400	ISL	6.75	6.71	34.292	26.900	120.6	0.673	0.44	6.4	68.0	3.18	38.5	0.01			403	
439		6.38	6.34	34.312	26.965	114.7	0.719	0.32	4.6	73.9	3.25	39.8	0.00			442	202
500	ISL	6.09	6.05	34.337	27.023	109.8	0.787	0.25	3.6	79.1	3.32	40.8	0.00			503	
518		6.01	5.96	34.344	27.039	108.5	0.807	0.23	3.3	80.6	3.34	41.1	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 11.4 N	118 52.8 W	30/06/00	1729 UTC	1369 m	320 09 kn	320 04 05	2	1015.4 mb	15.5 C	17.5 C	11m	8/8 ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.27	18.27	33.764	24.260	365.2	0.000	5.72	106.4	1.5	0.28	0.2	0.02	0.54	0.10	0	
1	A	18.27	18.27	33.764	24.260	365.3	0.004	5.72	106.4	1.5	0.28	0.2	0.02	0.54	0.10	1	222
7	A	18.18	18.18	33.766	24.284	363.2	0.026	5.78	107.3	1.4	0.28	0.4	0.03	0.61	0.12	7	221
10	ISL	17.65	17.65	33.773	24.419	350.4	0.036	5.95	109.4	1.5	0.33	0.7	0.04	0.68	0.15	10	
15	A	16.27	16.27	33.783	24.751	318.9	0.053	6.06	108.5	1.7	0.42	2.4	0.12	0.85	0.24	15	220
20	ISL	14.36	14.36	33.781	25.171	279.1	0.068	5.52	95.1	5.6	0.77	6.7	0.32	1.08	0.39	20	
22	A	13.68	13.68	33.787	25.317	265.2	0.073	5.26	89.3	7.3	0.91	8.4	0.40	1.14	0.45	22	219
30	A	13.13	13.13	33.782	25.425	255.2	0.094	4.88	81.9	10.7	1.10	10.5	0.60	0.91	0.47	30	218
37		13.04	13.03	33.776	25.438	254.1	0.112	4.82	80.8	11.1	1.15	10.9	0.70	0.88	0.48	37	217
42	A	12.85	12.84	33.770	25.471	251.1	0.125	4.73	79.0	11.8	1.21	11.4	0.83	0.92	0.51	42	216
50	ISL	11.39	11.38	33.724	25.713	228.2	0.144	4.28	69.2	15.9	1.47	16.0	1.26	0.53	0.31	50	
51		11.19	11.18	33.721	25.747	225.0	0.146	4.21	67.8	16.5	1.50	16.7	1.29	0.47	0.28	51	215
61		10.65	10.64	33.746	25.863	214.1	0.168	3.81	60.7	19.9	1.65	19.8	0.36	0.24	0.20	61	214
70		10.41	10.40	33.776	25.928	208.1	0.187	3.58	56.7	22.0	1.73	21.3	0.10	0.22	0.17	70	213
75	ISL	10.19	10.18	33.809	25.992	202.2	0.197	3.34	52.7	23.8	1.80	22.4	0.07	0.17	0.16	75	
84		9.78	9.77	33.875	26.112	190.8	0.215	2.89	45.2	27.3	1.93	24.5	0.02	0.07	0.14	84	212
100		9.24	9.23	33.959	26.267	176.4	0.244	2.47	38.2	32.1	2.12	27.0	0.01	0.02	0.11	101	211
120		8.99	8.98	34.010	26.347	169.2	0.279	2.43	37.4	33.6	2.15	27.5	0.01	0.01	0.10	121	210
125	ISL	8.91	8.90	34.024	26.370	167.0	0.287	2.37	36.4	34.5	2.18	27.9	0.01	0.01	0.10	126	
139		8.67	8.66	34.059	26.436	161.0	0.310	2.20	33.6	36.9	2.26	28.9	0.01	0.01	0.11	140	209
150	ISL	8.52	8.50	34.066	26.464	158.5	0.328	2.25	34.2	37.6	2.26	29.0	0.01	0.01	0.09	151	
169		8.33	8.31	34.071	26.498	155.6	0.358	2.35	35.6	38.6	2.26	29.1	0.02	0.01	0.06	170	208
200	ISL	8.16	8.14	34.128	26.568	149.4	0.405	1.83	27.6	43.1	2.46	31.0	0.02	0.00	0.06	201	
204		8.14	8.12	34.136	26.578	148.6	0.411	1.75	26.4	43.8	2.49	31.3	0.02	0.00	0.06	205	207
231		7.90	7.88	34.159	26.632	143.9	0.450	1.51	22.7	47.3	2.59	32.4	0.02			232	206
250	ISL	7.64	7.62	34.164	26.674	140.1	0.477	1.38	20.6	50.3	2.66	33.2	0.02			252	
278		7.26	7.23	34.169	26.732	134.9	0.516	1.22	18.0	55.0	2.76	34.5	0.01			280	205
300	ISL	7.04	7.01	34.178	26.770	131.5	0.545	1.08	15.9	58.4	2.83	35.5	0.00			302	
323		6.88	6.85	34.195	26.805	128.4	0.575	0.93	13.6	61.6	2.91	36.4	0.00			325	204
376		6.76	6.73	34.283	26.892	121.0	0.641	0.48	7.0	67.8	3.09	37.7	0.00			378	203
400	ISL	6.59	6.55	34.286	26.917	118.9	0.670	0.46	6.7	70.2	3.13	38.3	0.00			403	
447		6.26	6.22	34.278	26.954	115.7	0.725	0.41	5.9	74.2	3.17	39.4	0.00			450	202
500	ISL	6.17	6.13	34.313	26.994	112.6	0.786	0.29	4.2	77.7	3.24	39.9	0.00			503	
513		6.15	6.10	34.321	27.003	111.9	0.800	0.26	3.7	78.5	3.26	40.0	0.00			517	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 0.8 N	119 14.2 W	30/06/00	2054 UTC	1592 m	280 10 kn	290 03 07	2	1015.5 mb	17.9 C	15.8 C	14m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.10	16.10	33.511	24.581	334.7	0.000	6.01	107.0	2.1	0.40	1.4	0.07	1.00	0.19	0	
1		16.10	16.10	33.511	24.581	334.7	0.003	6.01	107.0	2.1	0.40	1.4	0.07	1.00	0.19	1	220
10		15.87	15.87	33.515	24.636	329.7	0.033	6.12	108.5	2.1	0.40	1.4	0.08	1.32	0.23	10	219
20		14.22	14.22	33.490	24.976	297.7	0.065	6.15	105.4	3.9	0.52	2.9	0.10	0.63	0.22	20	218
30		13.36	13.36	33.472	25.139	282.4	0.094	5.90	99.4	5.4	0.68	4.8	0.31	0.75	0.47	30	217
40		12.06	12.05	33.442	25.369	260.6	0.121	5.44	89.1	7.1	0.90	8.6	0.20	0.32	0.25	40	216
50		11.46	11.45	33.422	25.465	251.7	0.146	5.27	85.2	8.7	0.99	10.3	0.03	0.23	0.19	50	215
60		10.67	10.66	33.429	25.612	237.9	0.171	5.01	79.7	11.5	1.14	12.5	0.02	0.12	0.13	60	214
70		10.34	10.33	33.495	25.721	227.7	0.194	4.65	73.4	14.6	1.30	15.3	0.01	0.08	0.09	70	213
75	ISL	10.20	10.19	33.579	25.810	219.4	0.205	4.27	67.3	17.3	1.45	17.6	0.01	0.06	0.09	75	
86		9.93	9.92	33.762	25.999	201.6	0.228	3.45	54.1	23.2	1.77	22.4	0.01	0.03	0.08	86	212
100		9.64	9.63	33.820	26.093	193.0	0.256	3.15	49.1	26.1	1.89	24.2	0.01	0.02	0.10	100	211
120		9.36	9.35	33.892	26.195	183.6	0.294	2.81	43.5	29.5	2.02	26.0	0.01	0.02	0.09	121	210
125	ISL	9.29	9.28	33.925	26.232	180.2	0.303	2.72	42.1	30.4	2.05	26.4	0.01	0.02	0.09	126	
140		9.08	9.06	34.020	26.341	170.2	0.329	2.46	37.9	32.9	2.14	27.3	0.01	0.03	0.09	141	209
150	ISL	8.95	8.93	34.048	26.383	166.3	0.346	2.36	36.3	34.3	2.19	27.9	0.01	0.03	0.08	151	
171		8.69	8.67	34.077	26.447	160.6	0.380	2.19	33.5	37.1	2.29	29.1	0.01	0.02	0.07	172	208
200		8.30	8.28	34.122	26.543	151.9	0.426	1.86	28.2	42.1	2.45	30.9	0.01	0.01	0.05	201	207
228		8.41	8.39	34.204	26.591	148.0	0.468	1.38	21.0	45.1	2.61	31.7	0.00			229	206
250	ISL	8.24	8.21	34.235	26.641	143.6	0.500	1.20	18.2	48.2	2.70	32.5	0.00			251	
268		8.01	7.98	34.247	26.685	139.6	0.525	1.11	16.7	51.0	2.77	33.3	0.01			270	205
300	ISL	7.60	7.57	34.252	26.750	133.8	0.569	0.84	12.5	56.0	2.88	34.8	0.00			302	
318		7.39	7.36	34.251	26.779	131.2	0.593	0.70	10.4	58.7	2.93	35.6	0.00			320	204
378		7.01	6.97	34.277	26.853	124.9	0.670	0.56	8.2	65.1	3.07	37.2	0.00			380	203
400	ISL	6.82	6.78	34.277	26.879	122.6	0.697	0.52	7.6	67.6	3.11	37.8	0.00			403	
438		6.52	6.48	34.279	26.921	119.0	0.743	0.45	6.5	71.7	3.16	38.8	0.00			441	202
500	ISL	6.26	6.22	34.314	26.983	113.8	0.815	0.31	4.5	76.7	3.25	39.9	0.00			503	
514		6.20	6.15	34.322	26.997	112.5	0.831	0.28	4.0	77.8	3.27	40.1	0.00			518	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 50.7 N	119 34.4 W	01/07/00	0057 UTC	1826 m	300 13 kn	300 03 08	1	1014.7 mb	17.5 C	15.5 C	12m	7/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.89	16.89	33.498	24.388	353.0	0.000	5.81	105.1	3.8	0.42	1.8	0.05	0.33	0.08	0	
1		16.89	16.89	33.498	24.389	353.0	0.004	5.81	105.1	3.8	0.42	1.8	0.05	0.33	0.08	1	220
10		16.81	16.81	33.499	24.408	351.4	0.035	5.84	105.5	3.7	0.43	1.8	0.05	0.38	0.08	10	219
19		16.10	16.10	33.490	24.565	336.8	0.066	5.93	105.6	3.8	0.45	2.0	0.06	0.31	0.11	19	218
20	ISL	15.84	15.84	33.476	24.613	332.2	0.070	5.92	104.9	3.9	0.45	2.1	0.06	0.32	0.13	20	
30		13.48	13.48	33.420	25.074	288.5	0.101			4.9	0.56	3.3	0.10	0.47	0.28	30	217
40		13.55	13.54	33.578	25.183	278.5	0.129	5.77	97.6	6.1	0.79	6.0	0.24	0.48	0.28	40	216
50		12.78	12.77	33.573	25.333	264.4	0.156	5.50	91.6	7.1	0.93	7.5	0.43	0.41	0.23	50	215
60		11.61	11.60	33.505	25.503	248.4	0.182	5.26	85.4	8.9	1.06	9.9	0.62	0.25	0.21	60	214
70		11.19	11.18	33.572	25.632	236.4	0.206	4.96	79.8	12.0	1.26	14.2	0.18	0.11	0.14	70	213
75	ISL	10.93	10.92	33.574	25.680	231.9	0.218	4.87	77.9	13.1	1.32	15.3	0.12	0.09	0.12	75	
85		10.42	10.41	33.587	25.779	222.6	0.240	4.60	72.8	15.7	1.44	17.3	0.01	0.06	0.09	85	212
100	ISL	9.89	9.88	33.756	26.001	201.7	0.272	3.49	54.7	22.6	1.78	22.6	0.01	0.02	0.09	100	
101		9.86	9.85	33.768	26.016	200.4	0.274	3.42	53.5	23.1	1.80	22.9	0.01	0.02	0.09	101	211
120		9.29	9.28	33.863	26.184	184.7	0.311	3.12	48.2	26.7	1.89	24.7	0.01	0.01	0.06	121	210
125	ISL	9.19	9.18	33.884	26.216	181.7	0.320	3.06	47.2	27.5	1.92	25.2	0.01	0.01	0.06	126	
140		8.95	8.93	33.936	26.296	174.4	0.347	2.90	44.5	29.8	2.00	26.4	0.00	0.01	0.05	141	209
150	ISL	8.83	8.81	33.959	26.333	171.1	0.364	2.80	42.9	31.0	2.05	27.1	0.00	0.01	0.05	151	
169		8.61	8.59	33.991	26.392	165.7	0.396	2.64	40.2	33.4	2.12	28.1	0.00	0.00	0.04	170	208
199		8.06	8.04	34.037	26.512	154.7	0.444	2.54	38.2	38.2	2.21	29.3	0.00	0.01	0.04	200	207
200	ISL	8.05	8.03	34.037	26.513	154.6	0.446	2.54	38.2	38.3	2.21	29.3	0.00			201	
227		7.81	7.79	34.036	26.548	151.7	0.487	2.56	38.3	40.3	2.24	29.8	0.00			228	206
250	ISL	7.74	7.72	34.108	26.615	145.7	0.521	1.94	29.0	45.0	2.47	31.7	0.00			251	
268		7.70	7.67	34.173	26.672	140.6	0.547	1.37	20.5	49.3	2.67	33.4	0.00			270	205
300	ISL	7.48	7.45	34.220	26.741	134.5	0.591	0.95	14.1	54.9	2.85	35.0	0.00			302	
318		7.33	7.30	34.232	26.772	131.8	0.615	0.84	12.4	57.5	2.91	35.6	0.00			320	204
379		6.80	6.76	34.236	26.849	125.1	0.693	0.66	9.7	64.5	3.03	37.4	0.00			381	203
400	ISL	6.66	6.62	34.244	26.875	122.9	0.719	0.59	8.6	66.8	3.07	38.0	0.00			403	
437		6.45	6.41	34.263	26.918	119.2	0.764	0.48	7.0	70.6	3.14	39.0	0.00			440	202
500	ISL	6.17	6.13	34.312	26.993	112.7	0.837	0.33	4.8	77.0	3.24	40.1	0.00			503	
519		6.08	6.03	34.327	27.017	110.7	0.858	0.28	4.0	78.9	3.27	40.4	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
31 30.7 N	120 14.7 W	01/07/00	0656 UTC	3932 m	320 09 kn			1015.6 mb	16.2 C	15.0 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.98	17.98	33.491	24.123	378.4	0.000	5.54	102.3	2.3	0.28	0.0	0.00	0.12	0.02	0	
2		17.98	17.98	33.491	24.123	378.4	0.008	5.54	102.3	2.3	0.28	0.0	0.00	0.12	0.02	2	220
10	ISL	17.99	17.99	33.495	24.124	378.6	0.038	5.56	102.7	2.3	0.29	0.0	0.00	0.12	0.02	10	
15		18.00	18.00	33.496	24.122	378.9	0.057	5.57	102.9	2.3	0.29	0.0	0.00	0.12	0.02	15	219
20	ISL	17.98	17.98	33.506	24.135	377.9	0.076	5.58	103.1	2.3	0.29	0.0	0.00	0.12	0.02	20	
30		17.94	17.93	33.525	24.160	375.9	0.113	5.59	103.2	2.3	0.28	0.0	0.00	0.12	0.02	30	218
45		16.07	16.06	33.429	24.526	341.3	0.167	5.82	103.5	2.5	0.30	0.0	0.00	0.16	0.05	45	217
50	ISL	15.86	15.85	33.443	24.584	335.9	0.184	5.85	103.6	2.5	0.29	0.0	0.00	0.18	0.07	50	
55		15.66	15.65	33.452	24.636	331.1	0.201	5.88	103.7	2.5	0.29	0.0	0.00	0.21	0.10	55	216
64		14.78	14.77	33.399	24.788	316.9	0.230	6.04	104.7	2.5	0.32	0.1	0.01	0.34	0.19	64	215
75		14.08	14.07	33.383	24.924	304.2	0.264	5.93	101.3	2.7	0.37	0.3	0.02	0.33	0.27	75	214
85		14.27	14.26	33.618	25.066	291.0	0.294	5.69	97.7	3.0	0.36	0.6	0.11	0.20	0.20	85	213
94		13.32	13.31	33.478	25.153	282.8	0.320	5.64	94.9	3.7	0.57	3.4	0.35	0.20	0.18	94	212
100	ISL	12.79	12.78	33.448	25.235	275.0	0.336	5.55	92.3	4.6	0.69	5.3	0.26	0.16	0.17	100	
110		11.99	11.98	33.445	25.387	260.8	0.363	5.35	87.5	6.6	0.84	8.1	0.01	0.08	0.14	110	211
125		10.82	10.80	33.436	25.593	241.3	0.401	4.98	79.4	10.2	0.99	10.6	0.01	0.06	0.10	126	210
144		10.46	10.44	33.609	25.791	222.8	0.445	4.40	69.7	14.7	1.25	15.0	0.01	0.03	0.06	145	209
150	ISL	10.27	10.25	33.653	25.858	216.5	0.458	4.15	65.5	16.9	1.38	16.9	0.01	0.02	0.05	151	
168		9.64	9.62	33.768	26.053	198.2	0.495	3.45	53.7	23.5	1.73	22.3	0.00	0.01	0.03	169	208
199		8.82	8.80	33.919	26.304	174.8	0.553	3.12	47.7	30.0	1.94	25.7	0.00	0.00	0.03	200	207
200	ISL	8.80	8.78	33.923	26.310	174.2	0.555	3.11	47.6	30.2	1.95	25.8	0.00			201	
228		8.30	8.28	34.015	26.459	160.4	0.602	2.76	41.8	35.8	2.11	28.0	0.00			229	206
250	ISL	7.93	7.90	34.038	26.533	153.6	0.636	2.56	38.4	39.6	2.22	29.4	0.00			251	
268		7.64	7.61	34.041	26.577	149.6	0.664	2.42	36.1	42.5	2.30	30.4	0.00			269	205
300	ISL	7.17	7.14	34.048	26.650	142.9	0.710	2.13	31.4	48.3	2.46	32.5	0.00			302	
318		6.94	6.91	34.050	26.683	139.9	0.736	1.97	28.9	51.5	2.54	33.6	0.00			320	204
377		6.43	6.40	34.070	26.767	132.5	0.816	1.54	22.3	60.1	2.74	36.1	0.00			379	203
400	ISL	6.27	6.23	34.082	26.798	129.8	0.846	1.37	19.8	63.3	2.82	37.1	0.00			402	
438		6.02	5.98	34.111 D	26.853	124.9	0.895	1.08	15.5	68.8	2.94	38.6	0.00			441	202
500	ISL	5.62	5.58	34.190	26.965	114.7	0.969	0.61	8.7	79.9	3.15	40.8	0.00			503	
520		5.49	5.45	34.216	27.001	111.3	0.992	0.46	6.5	83.5	3.22	41.5	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
31 10.9 N	120 55.2 W	01/07/00	1303 UTC	3824 m	270 09 kn	320 03 06	2	1015.6 mb	19.0 C	16.0 C		8/8 ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.77	17.77	33.422	24.121	378.5	0.000	5.57	102.4	2.2	0.28	0.0	0.00	0.13	0.02	0	
1		17.77	17.77	33.422	24.121	378.6	0.004	5.57	102.4	2.2	0.28	0.0	0.00	0.13	0.02	1	220
10	ISL	17.78	17.78	33.423	24.120	379.0	0.038	5.58	102.6	2.2	0.28	0.0	0.00	0.14	0.02	10	
15		17.78	17.78	33.423	24.120	379.2	0.057	5.58	102.6	2.2	0.28	0.0	0.00	0.14	0.02	15	219
20	ISL	17.58	17.58	33.400	24.151	376.4	0.076	5.63	103.1	2.2	0.28	0.0	0.00	0.14	0.02	20	
30		17.22	17.22	33.385	24.225	369.6	0.113	5.72	104.0	2.2	0.28	0.0	0.00	0.14	0.03	30	218
44		17.39	17.38	33.547	24.310	362.0	0.164	5.67	103.6	2.1	0.26	0.0	0.00	0.14	0.04	44	217
50	ISL	17.30	17.29	33.601	24.373	356.2	0.186	5.69	103.8	2.1	0.25	0.0	0.00	0.16	0.05	50	
60		17.14	17.13	33.714	24.498	344.7	0.221	5.74	104.4	2.1	0.23	0.0	0.00	0.19	0.06	60	216
74		16.22	16.21	33.660	24.671	328.6	0.268	5.83	104.1	2.3	0.24	0.0	0.00	0.22	0.08	74	215
75	ISL	16.19	16.18	33.666	24.682	327.5	0.271	5.83	104.1	2.3	0.24	0.0	0.00	0.22	0.08	75	
84		15.85	15.84	33.690	24.778	318.6	0.300	5.83	103.4	2.3	0.24	0.0	0.00	0.26	0.13	84	214
95		14.63	14.62	33.509	24.906	306.6	0.335	5.89	101.8	2.5	0.29	0.0	0.00	0.25	0.18	95	213
100	ISL	14.21	14.20	33.434	24.937	303.7	0.350	5.90	101.1	2.6	0.32	0.1	0.01	0.28	0.23	100	
105		13.86	13.85	33.381	24.969	300.7	0.365	5.91	100.5	2.7	0.36	0.2	0.03	0.30	0.27	105	212
115		13.40	13.38	33.403	25.080	290.4	0.395	5.77	97.2	3.3	0.41	0.7	0.11	0.23	0.24	115	211
125		13.26	13.24	33.460	25.152	283.7	0.423	5.65	94.9	3.8	0.48	2.0	0.22	0.20	0.19	126	210
139		12.50	12.48	33.536	25.361	264.1	0.462	5.39	89.2	5.3	0.61	4.8	0.07	0.12	0.16	140	209
150	ISL	11.94	11.92	33.542	25.472	253.6	0.490	5.24	85.7	6.5	0.71	6.6	0.05	0.08	0.13	151	
162		11.33	11.31	33.544	25.587	242.9	0.520	5.01	80.8	8.7	0.86	9.1	0.02	0.06	0.10	163	208
194		9.59	9.57	33.744	26.043	199.6	0.591	3.60	56.0	22.3	1.66	21.5	0.00	0.01	0.03	195	207
200	ISL	9.38	9.36	33.785	26.110	193.4	0.603	3.47	53.7	24.1	1.73	22.7	0.00			201	
229		8.68	8.66	33.948	26.349	171.0	0.655	3.19	48.7	30.5	1.92	25.7	0.00			230	206
250	ISL	8.35	8.32	33.996	26.437	162.9	0.690	3.18	48.2	33.4	1.97	26.5	0.00			251	
269		8.10	8.07	34.012	26.487	158.4	0.721	3.16	47.6	35.8	2.01	27.0	0.00			270	205
300	ISL	7.57	7.54	34.027	26.577	150.1	0.769	2.76	41.1	41.8	2.21	29.5	0.00			302	
319		7.26	7.23	34.031	26.624	145.8	0.797	2.44	36.1	45.9	2.35	31.2	0.00			321	204
380		6.54	6.51	34.067	26.750	134.2	0.882	1.62	23.5	57.9	2.69	35.5	0.00			382	203
400	ISL	6.34	6.30	34.081	26.788	130.8	0.909	1.41	20.4	61.8	2.78	36.7	0.00			402	
440		6.01	5.97	34.111	26.854	124.8	0.960	1.06	15.2	69.1	2.94	38.6	0.00			443	202
500	ISL	5.71	5.67	34.155	26.926	118.4	1.033	0.74	10.5	76.7	3.10	40.2	0.00			503	
517		5.62	5.58	34.168	26.948	116.5	1.053	0.65	9.2	78.9	3.14	40.7	0.00			520	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
30 51.2 N	121 35.3 W	01/07/00	1913 UTC	4089 m	330 09 kn	340 03 09	2	1017.4 mb	17.0 C	15.1 C	26m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.00	18.00	33.406	24.053	385.0	0.000	5.54	102.3	2.4	0.27	0.0	0.00	0.10	0.02	0	
1	A	18.00	18.00	33.406	24.053	385.1	0.004	5.54	102.3	2.4	0.27	0.0	0.00	0.10	0.02	1	222
10	ISL	17.83	17.83	33.391	24.083	382.5	0.038	5.56	102.3	2.3	0.27	0.0	0.00	0.11	0.02	10	
17	A	17.70	17.70	33.380	24.106	380.5	0.065	5.58	102.4	2.3	0.27	0.0	0.00	0.12	0.02	17	221
20	ISL	17.53	17.53	33.368	24.138	377.6	0.076	5.62	102.8	2.3	0.27	0.0	0.00	0.12	0.02	20	
26		17.21	17.21	33.361	24.209	371.0	0.099	5.70	103.6	2.3	0.27	0.0	0.00	0.13	0.03	26	220
30	ISL	17.14	17.14	33.392	24.250	367.3	0.114	5.70	103.5	2.3	0.27	0.0	0.00	0.13	0.03	30	
35	A	17.10	17.09	33.447	24.301	362.5	0.132	5.71	103.6	2.3	0.27	0.0	0.00	0.14	0.03	35	219
44		16.95	16.94	33.545	24.412	352.2	0.164	5.73	103.8	2.3	0.27	0.0	0.00	0.16	0.05	44	218
50	ISL	16.22	16.21	33.437	24.498	344.2	0.185	5.82	103.8	2.3	0.28	0.0	0.00	0.19	0.07	50	
53	A	15.82	15.81	33.373	24.540	340.3	0.195	5.87	103.8	2.3	0.28	0.0	0.00	0.20	0.08	53	217
68	A	15.10	15.09	33.374	24.700	325.4	0.245	6.00	104.6	2.3	0.31	0.0	0.00	0.28	0.15	68	216
75	ISL	14.75	14.74	33.401	24.797	316.4	0.268	5.99	103.7	2.4	0.32	0.0	0.00	0.27	0.17	75	
79		14.54	14.53	33.411	24.849	311.5	0.280	5.98	103.1	2.5	0.32	0.1	0.01	0.27	0.18	79	215
90		13.92	13.91	33.363	24.942	302.8	0.314	5.96	101.4	2.6	0.36	0.4	0.04	0.25	0.19	90	214
100	ISL	13.83	13.82	33.458	25.034	294.3	0.344	5.75	97.7	3.1	0.43	1.1	0.17	0.22	0.19	100	
101	A	13.82	13.81	33.471	25.047	293.2	0.347	5.72	97.2	3.2	0.43	1.1	0.18	0.22	0.19	101	213
107		14.14	14.12	33.693	25.152	283.4	0.364	5.59	95.8	3.3	0.36	0.8	0.15	0.21	0.18	107	212
114		13.99	13.97	33.706	25.193	279.7	0.384	5.52	94.3	3.5	0.39	1.3	0.21	0.20	0.19	114	211
123		13.66	13.64	33.743	25.290	270.7	0.409	5.44	92.3	3.9	0.43	2.1	0.23	0.17	0.19	124	210
125	ISL	13.58	13.56	33.747	25.310	268.9	0.414	5.43	92.0	4.0	0.44	2.3	0.21	0.16	0.19	126	
139		12.95	12.93	33.750	25.439	256.8	0.451	5.30	88.6	5.1	0.52	4.2	0.02	0.11	0.15	140	209
150	ISL	12.24	12.22	33.720	25.554	246.0	0.478	5.10	84.0	7.0	0.67	6.7	0.02	0.08	0.11	151	
164		11.31	11.29	33.688	25.702	232.0	0.512	4.76	76.8	10.2	0.92	10.5	0.01	0.05	0.06	165	208
194		10.00	9.98	33.751	25.981	205.7	0.578	3.91	61.4	19.4	1.49	19.1	0.00	0.01	0.03	195	207
200	ISL	9.74	9.72	33.783	26.049	199.3	0.590	3.74	58.4	21.6	1.59	20.6	0.00			201	
227		8.79	8.77	33.931	26.318	173.9	0.640	3.18	48.6	29.9	1.91	25.7	0.00			228	206
250	ISL	8.45	8.42	33.988	26.416	165.0	0.679	3.29	49.9	31.9	1.90	25.6	0.00			251	
268		8.29	8.26	34.008	26.456	161.4	0.708	3.41	51.6	32.9	1.89	25.6	0.00			269	205
300	ISL	7.81	7.78	34.033	26.547	153.1	0.759	2.84	42.5	39.4	2.14	28.7	0.00			302	
318		7.53	7.50	34.040	26.593	148.9	0.786	2.43	36.1	43.7	2.32	30.9	0.00			320	204
379		6.66	6.63	34.060	26.729	136.3	0.873	1.74	25.4	56.0	2.66	35.2	0.00			381	203
400	ISL	6.42	6.38	34.076	26.774	132.2	0.901	1.48	21.4	60.8	2.77	36.6	0.00			402	
441		6.03	5.99	34.114	26.854	124.8	0.954	1.03	14.8	69.6	2.97	38.9	0.00			444	202
500	ISL	5.67	5.63	34.166	26.940	117.1	1.025	0.68	9.7	78.3	3.13	40.8	0.00			503	
515		5.58	5.54	34.180	26.962	115.1	1.043	0.59	8.4	80.5	3.17	41.3	0.00			518	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
30 31.2 N	122 15.6 W	02/07/00	0117 UTC	4181 m	340 09 kn	340 04 09	2	1017.0 mb	17.8 C	15.2 C	20m	8/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.47	18.47	33.651	24.124	378.2	0.000	5.48	102.3	2.0	0.23	0.0	0.00	0.15	0.09	0	
1		18.47	18.47	33.651	24.124	378.2	0.004	5.48	102.3	2.0	0.23	0.0	0.00	0.15	0.09	1	220
10	ISL	18.43	18.43	33.649	24.133	377.7	0.038	5.49	102.4	2.0	0.24	0.0	0.00	0.11	0.04	10	
15		18.39	18.39	33.640	24.136	377.6	0.057	5.50	102.5	2.0	0.24	0.0	0.00	0.09	0.01	15	219
20	ISL	18.32	18.32	33.683	24.187	372.9	0.075	5.53	102.9	1.9	0.23	0.0	0.00	0.10	0.02	20	
30		18.19	18.18	33.780	24.294	363.1	0.112	5.59	103.8	1.7	0.20	0.0	0.00	0.11	0.03	30	218
45		18.12	18.11	33.836	24.354	357.9	0.166	5.60	103.9	1.5	0.19	0.0	0.00	0.15	0.04	45	217
50	ISL	18.03	18.02	33.838	24.378	355.8	0.184	5.60	103.7	1.6	0.19	0.0	0.00	0.17	0.05	50	
60		17.64	17.63	33.821	24.460	348.3	0.219	5.63	103.5	1.8	0.19	0.0	0.00	0.22	0.07	60	216
75		16.35	16.34	33.759	24.717	324.2	0.270	5.76	103.2	2.2	0.22	0.0	0.00	0.29	0.12	75	215
85		15.81	15.80	33.768	24.847	312.1	0.302	5.72	101.4	2.4	0.23	0.0	0.00	0.26	0.28	85	214
95		14.97	14.96	33.752	25.020	295.8	0.332	5.66	98.7	2.7	0.28	0.2	0.05	0.24	0.22	95	213
100	ISL	14.54	14.53	33.757	25.117	286.7	0.347	5.59	96.6	3.0	0.32	0.7	0.15	0.21	0.20	100	
106		14.07	14.05	33.768	25.224	276.5	0.363	5.50	94.1	3.5	0.38	1.4	0.23	0.18	0.17	106	212
116		13.56	13.54	33.780	25.339	265.8	0.391	5.38	91.1	4.1	0.44	2.8	0.07	0.13	0.14	116	211
125		12.87	12.85	33.711	25.424	257.8	0.414	5.32	88.8	5.1	0.54	4.3	0.03	0.10	0.13	126	210
140		11.43	11.41	33.570	25.588	242.2	0.452	5.04	81.5	8.5	0.84	8.9	0.01	0.07	0.09	141	209
150	ISL	11.08	11.06	33.618	25.689	232.8	0.475	4.90	78.7	9.9	0.92	10.4	0.01	0.05	0.06	151	
165		10.84	10.82	33.744	25.830	219.7	0.509	4.65	74.3	12.3	1.03	12.4	0.01	0.02	0.03	166	208
194		9.68	9.66	33.815	26.084	195.8	0.570	3.65	56.9	22.3	1.63	21.2	0.00	0.00	0.03	195	207
200	ISL	9.54	9.52	33.839	26.126	191.9	0.581	3.64	56.6	23.3	1.65	21.5	0.00			201	
230		9.04	9.02	33.948	26.292	176.6	0.637	3.57	54.9	26.7	1.73	23.1	0.00			231	206
250	ISL	8.64	8.61	33.985	26.384	168.1	0.671	3.40	51.8	30.4	1.84	24.8	0.00			251	
269		8.27	8.24	34.006	26.457	161.3	0.702	3.19	48.2	34.1	1.96	26.6	0.00			270	205
300	ISL	7.82	7.79	34.023	26.538	154.0	0.751	2.85	42.7	39.3	2.14	28.8	0.00			302	
319		7.58	7.55	34.027	26.576	150.5	0.780	2.63	39.1	42.4	2.24	30.1	0.00			321	204
380		6.78	6.74	34.046	26.702	139.0	0.868	1.97	28.8	53.3	2.56	34.1	0.00			382	203
400	ISL	6.51	6.47	34.060	26.749	134.6	0.896	1.69	24.5	58.3	2.69	35.7	0.00			402	
440		6.03	5.99	34.098	26.841	126.0	0.948	1.17	16.8	68.2	2.92	38.5	0.00			443	202
500	ISL	5.72	5.68	34.167	26.935	117.6	1.021	0.71	10.1	77.3	3.11	40.5	0.00			503	
512		5.66	5.62	34.181	26.953	116.0	1.035	0.62	8.8	79.1	3.15	40.9	0.00			515	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
30 11.0 N	122 55.4 W	02/07/00	0717 UTC	3980 m	350 11 kn			1018.0 mb	17.0 C	14.6 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.96	17.96	33.454	24.099	380.6	0.000	5.57	102.8	2.4	0.27	0.0	0.00	0.12	0.03	0	
2		17.96	17.96	33.454	24.099	380.7	0.008	5.57	102.8	2.4	0.27	0.0	0.00	0.12	0.03	2	220
10	ISL	18.02	18.02	33.499	24.119	379.0	0.038	5.57	103.0	2.4	0.27	0.0	0.00	0.11	0.03	10	
15		18.05	18.05	33.527	24.134	377.8	0.057	5.57	103.0	2.4	0.27	0.0	0.00	0.11	0.03	15	219
20	ISL	17.80	17.80	33.508	24.180	373.6	0.076	5.64	103.8	2.4	0.27	0.0	0.00	0.12	0.03	20	
30		17.26	17.26	33.475	24.285	363.9	0.113	5.77	105.1	2.3	0.27	0.0	0.00	0.14	0.04	30	218
45		17.17	17.16	33.593	24.397	353.7	0.166	5.67	103.1	2.3	0.26	0.0	0.00	0.19	0.07	45	217
50	ISL	16.95	16.94	33.598	24.453	348.5	0.184	5.70	103.3	2.3	0.26	0.0	0.00	0.21	0.08	50	
55		16.56	16.55	33.577	24.528	341.5	0.201	5.76	103.5	2.3	0.26	0.0	0.00	0.24	0.09	55	216
64		15.17	15.16	33.462	24.752	320.3	0.231	5.98	104.5	2.5	0.31	0.0	0.00	0.32	0.16	64	215
75		14.49	14.48	33.422	24.868	309.5	0.266	5.97	102.9	2.5	0.34	0.2	0.02	0.29	0.21	75	214
85		13.96	13.95	33.410	24.970	300.1	0.296	5.89	100.4	2.8	0.42	0.9	0.10	0.27	0.21	85	213
95		13.24	13.23	33.425	25.128	285.2	0.325	5.68	95.4	3.5	0.60	3.1	0.68	0.19	0.21	95	212
100	ISL	12.82	12.81	33.410	25.200	278.4	0.339	5.62	93.5	4.0	0.62	3.6	0.55	0.17	0.20	100	
111		11.97	11.96	33.375	25.336	265.6	0.369	5.52	90.2	5.3	0.65	4.7	0.06	0.15	0.18	111	211
124		11.30	11.28	33.381	25.464	253.6	0.403	5.36	86.3	7.1	0.78	7.1	0.02	0.09	0.14	125	210
125	ISL	11.31	11.29	33.396	25.474	252.6	0.406	5.34	86.1	7.2	0.78	7.2	0.02	0.09	0.14	126	
144		11.50	11.48	33.697	25.674	234.2	0.452	4.95	80.2	9.1	0.85	9.2	0.01	0.06	0.08	145	209
150	ISL	11.25	11.23	33.709	25.729	229.1	0.466	4.77	76.9	10.7	0.96	10.9	0.01	0.05	0.07	151	
169		10.20	10.18	33.698	25.905	212.4	0.508	4.18	65.9	17.0	1.37	17.1	0.01	0.02	0.05	170	208
199		9.14	9.12	33.906	26.243	180.7	0.567	3.48	53.6	26.4	1.77	23.5	0.01	0.00	0.02	200	207
200	ISL	9.12	9.10	33.910	26.249	180.1	0.569	3.45	53.1	26.7	1.78	23.7	0.01			201	
228		8.62	8.60	33.986	26.388	167.3	0.617	2.85	43.4	33.0	2.05	27.1	0.00			229	206
250	ISL	8.22	8.19	34.013	26.470	159.7	0.653	2.67	40.3	36.9	2.16	28.6	0.00			251	
267		7.92	7.89	34.024	26.523	154.8	0.680	2.59	38.9	39.7	2.22	29.5	0.00			268	205
300	ISL	7.38	7.35	34.037	26.612	146.7	0.730	2.33	34.5	45.8	2.38	31.5	0.00			302	
318		7.14	7.11	34.046	26.652	143.0	0.756	2.15	31.7	49.1	2.47	32.5	0.00			320	204
380		6.79	6.75	34.134	26.770	132.5	0.841	1.24	18.1	59.3	2.81	36.0	0.00			382	203
400	ISL	6.53	6.49	34.133	26.804	129.4	0.867	1.11	16.1	63.1	2.88	37.1	0.00			402	
439		6.03	5.99	34.131	26.867	123.5	0.917	0.93	13.4	70.1	2.99	39.0	0.00			442	202
500	ISL	5.83	5.79	34.209	26.954	115.9	0.990	0.55	7.9	77.6	3.16	40.6	0.00			503	
517		5.77	5.73	34.231	26.979	113.7	1.009	0.45	6.4	79.7	3.21	41.0	0.00			520	201

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 93 120

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
29 51.0 N	123 35.3 W	02/07/00	1320 UTC	4160 m	020 14 kn	340 04 06	5	1017.9 mb	16.0 C	15.0 C		8/8 SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.06	18.06	33.457	24.077	382.7	0.000	5.55	102.6	2.4	0.26	0.0	0.00	0.13	0.03	0	
1		18.06	18.06	33.457	24.077	382.7	0.004	5.55	102.6	2.4	0.26	0.0	0.00	0.13	0.03	1	220
10	ISL	17.70	17.70	33.407	24.127	378.3	0.038	5.63	103.4	2.3	0.27	0.0	0.00	0.13	0.03	10	
15		17.42	17.42	33.375	24.169	374.4	0.057	5.68	103.7	2.3	0.27	0.0	0.00	0.13	0.03	15	219
20	ISL	17.35	17.35	33.384	24.193	372.3	0.076	5.68	103.6	2.3	0.27	0.0	0.00	0.14	0.03	20	
30	ISL	17.12	17.12	33.401	24.261	366.2	0.112	5.71	103.7	2.3	0.27	0.0	0.00	0.16	0.03	30	
31		17.09	17.08	33.403	24.270	365.4	0.116	5.71	103.6	2.3	0.27	0.0	0.00	0.16	0.03	31	218
45		15.96	15.95	33.331	24.476	346.1	0.166	5.93	105.2	2.3	0.29	0.0	0.00	0.22	0.07	45	217
50	ISL	15.82	15.81	33.371	24.538	340.3	0.183	5.92	104.7	2.3	0.29	0.0	0.00	0.25	0.09	50	
59		15.69	15.68	33.475	24.647	330.2	0.213	5.90	104.2	2.3	0.28	0.0	0.00	0.30	0.14	59	216
75		15.24	15.23	33.640	24.874	309.0	0.264	5.86	102.6	2.5	0.28	0.1	0.01	0.35	0.23	75	215
84		14.10	14.09	33.481	24.996	297.6	0.292	5.82	99.5	2.8	0.39	0.7	0.09	0.31	0.26	84	214
94		13.51	13.50	33.437	25.083	289.5	0.321	5.71	96.4	3.2	0.50	1.9	0.47	0.21	0.20	94	213
100	ISL	13.18	13.17	33.438	25.151	283.2	0.338	5.63	94.4	3.7	0.53	2.7	0.32	0.17	0.20	100	
104		13.00	12.99	33.450	25.196	279.0	0.349	5.59	93.4	4.1	0.55	3.3	0.17	0.15	0.21	104	212
115		12.90	12.88	33.527	25.275	271.7	0.380	5.53	92.2	4.4	0.61	4.5	0.08	0.13	0.16	115	211
124		12.36	12.34	33.521	25.376	262.2	0.404	5.41	89.2	5.7	0.73	6.5	0.04	0.09	0.14	125	210
125	ISL	12.31	12.29	33.518	25.383	261.6	0.406	5.41	89.1	5.7	0.73	6.5	0.04	0.09	0.14	126	
139		11.58	11.56	33.475	25.487	251.9	0.442	5.36	86.9	6.8	0.74	6.8	0.02	0.09	0.14	140	209
150	ISL	10.95	10.93	33.485	25.609	240.4	0.469	5.01	80.1	9.9	0.95	10.1	0.01	0.07	0.11	151	
164		10.23	10.21	33.545	25.781	224.1	0.502	4.42	69.6	15.0	1.28	15.4	0.01	0.03	0.06	165	208
194		9.53	9.51	33.810	26.105	193.8	0.565	3.44	53.4	24.4	1.74	22.7	0.01	0.00	0.03	195	207
200	ISL	9.40	9.38	33.847	26.155	189.1	0.576	3.45	53.5	25.4	1.75	22.9	0.01			201	
229		8.83	8.81	33.968	26.341	171.8	0.628	3.47	53.1	28.9	1.80	24.1	0.00			230	206
250	ISL	8.44	8.41	34.002	26.428	163.8	0.664	3.33	50.5	32.3	1.90	25.6	0.00			251	
269		8.11	8.08	34.011	26.485	158.6	0.694	3.13	47.2	35.6	2.00	27.0	0.00			270	205
300	ISL	7.66	7.63	34.016	26.555	152.2	0.743	2.71	40.4	40.2	2.13	28.8	0.00			302	
319		7.43	7.40	34.019	26.591	149.0	0.771	2.43	36.0	43.2	2.22	29.9	0.00			321	204
379		6.82	6.78	34.096	26.736	135.8	0.857	1.57	23.0	56.5	2.70	35.2	0.00			381	203
400	ISL	6.57	6.53	34.099	26.772	132.5	0.885	1.40	20.4	60.3	2.79	36.4	0.00			402	
440		6.12	6.08	34.101	26.832	126.9	0.937	1.15	16.5	67.1	2.91	38.3	0.00			443	202
500	ISL	5.65	5.61	34.152	26.931	117.9	1.010	0.74	10.5	77.5	3.10	40.5	0.00			503	
515		5.53	5.49	34.165	26.956	115.6	1.028	0.64	9.1	80.1	3.15	41.1	0.00			518	201

RV NEW HORIZON — CALCOFI CRUISE 0007 — STATION 77 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 3.9 N	122 56.2 W	12/07/00	1724 UTC	31 m		1218 - 1952 PST	1218 PST	1952 PST	265.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	16.29	33.103	24.224	5.76	102.7	3.2	0.32	0.1	0.00	0.14	0.03	91. A	3.4	3.0	3.2	0.10
10	16.13	33.090	24.251	5.77	102.5	3.1	0.32	0.1	0.00	0.14	0.04					
21	15.58	33.121	24.398	5.90	103.7	3.0	0.31	0.1	0.00	0.21	0.06	35.	4.1	4.2	4.2	0.09
32	13.92	33.172	24.793	6.25	106.3	3.5	0.34	0.1	0.01	0.31	0.12					
42	12.76	33.170	25.024	6.28	104.2	3.9	0.38	0.4	0.03	0.36	0.16	12.	4.0	4.0	4.0	0.10
53	11.64	33.137	25.211	6.03	97.7	5.1	0.56	2.8	0.16	0.50	0.21					
64	11.37	33.224	25.328	5.73	92.4	7.2	0.79	6.4	0.31	0.37	0.17	4.2	2.3	2.0	2.2	0.09
72	11.06	33.328	25.465	5.52	88.4	8.9	0.97	9.6	0.21	0.25	0.13					
80	9.75	33.240	25.621	5.57	86.7	9.5	0.94	9.5	0.06	0.20	0.12	1.9	0.63	0.62	0.62	0.04
94	10.33	33.591	25.798	4.71	74.4	15.7	1.41	16.8	0.19	0.05	0.08					
108	9.62	33.592 D	25.918													
119	9.47	33.722	26.044	3.72	57.7	22.5	1.66	21.5	0.02	0.02	0.04	0.28	0.01	0.01	0.01	0.02

RV NEW HORIZON — CALCOFI CRUISE 0007 — STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 18.9 N	120 48.3 W	10/07/00	1830 UTC	19 m		1208 - 1953 PST	1208 PST	1949 PST	376.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	16.03	33.472	24.567	5.84	103.8	3.6	0.45	2.0	0.04	0.41	0.07	85. A	10.2	10.2	10.2	0.12
12	16.00	33.470	24.572	5.84	103.8	3.6	0.45	2.0	0.04	0.49	0.04	38.	12.9	12.1	12.5	0.43
19	15.71	33.465	24.634	5.92	104.6	3.6	0.47	2.2	0.05	0.51	0.06					
26	13.52	33.283	24.960	6.08	102.6	4.3	0.49	2.1	0.10	0.51	0.09	12.	7.8	7.9	7.8	0.42
38	11.77	33.280	25.298	5.63	91.6	6.8	0.76	6.3	0.19	0.54	0.11	4.6	3.4	3.0	3.2	0.26
50	11.02	33.312	25.459	5.40	86.4	9.0	0.94	9.4	0.11	0.34	0.17	1.8	0.90	0.88	0.89	0.06
62	10.79	33.529	25.669	4.76	75.9	13.7	1.30	14.8	0.25	0.15	0.13					
73	9.84	33.584	25.875	4.12	64.4	18.8	1.54	19.1	0.02	0.08	0.09	0.27	-0.01	0.00	-0.01	0.05

RV NEW HORIZON — CALCOFI CRUISE 0007 — STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 9.4 N	123 13.5 W	11/07/00	1733 UTC	30 m		1216 - 1956 PST	1216 PST	1956 PST	179.2 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	16.96	33.159	24.112	5.64	101.9	2.8	0.32	0.1	0.00	0.09	0.01	95. A	1.9	2.1	2.0	0.18
10	16.92	33.158	24.121	5.65	102.0	2.7	0.32	0.1	0.00	0.10	0.02					
19	16.85	33.159	24.138	5.64	101.7	2.7	0.32	0.1	0.00	0.10	0.02	38.	2.4	2.5	2.4	0.11
31	16.44	33.144	24.222	5.73	102.5	2.7	0.31	0.1	0.00	0.11	0.03					
40	16.24	33.143	24.267	5.76	102.6	2.7	0.31	0.1	0.00	0.17	0.04	13.	2.0	2.3	2.2	0.15
50	15.12	33.199	24.560	5.99	104.4	2.5	0.31	0.1	0.00	0.21	0.06					
61	13.65	33.156	24.837	6.23	105.3	2.7	0.34	0.1	0.00	0.25	0.09	4.4	1.5	1.4	1.4	0.20
69	13.16	33.179	24.953	6.19	103.6	2.9	0.35	0.0	0.00	0.30	0.16					
79	12.61	33.161	25.047	6.05	100.1	3.2	0.40	0.2	0.03	0.47	0.29	1.8	1.4	1.4	1.4	0.06
91	12.03	33.170	25.165	5.79	94.6	4.0	0.56	2.5	0.13	0.38	0.28					
102	11.16	33.219	25.363	5.58	89.5	6.2	0.75	6.1	0.06	0.25	0.23					
115	10.45	33.259	25.519	5.49	86.8	7.9	0.87	8.3	0.03	0.18	0.17	0.28	0.05	0.07	0.06	0.03

RV NEW HORIZON — CALCOFI CRUISE 0007 — STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 44.8 N	120 24.8 W	09/07/00	1819 UTC	9 m		1207 - 1944 PST	1207 PST	1942 PST	2395.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	15.68	33.648	24.781	6.14	108.5	4.9	0.36	0.7	0.04	4.25	0.83	71. A	131.8	123.6	127.7	0.49
7	15.63	33.647	24.791	6.13	108.2	4.9	0.36	0.7	0.04	4.21	0.94	30.	163.1	158.7	160.9	0.77
12	15.40	33.652	24.846	6.07	106.7	5.3	0.39	1.2	0.04	4.10	0.93	13.	130.8	131.7	131.2	0.50
18	13.48	33.727	25.312	5.30	89.6	11.7	0.88	8.7	0.14	3.98	1.11	4.6	42.4	39.5	41.0	0.29
24	12.56	33.656	25.439	5.02	83.2	12.9	1.07	11.2	0.20	1.24	0.72	1.7	6.2	5.8	6.0	0.18
34	11.49	33.588	25.589	4.77	77.3	14.0	1.20	13.3	0.18	0.47	0.36	0.30	0.15	0.15	0.15	0.09

RV NEW HORIZON — CALCOFI CRUISE 0007 — STATION 83 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 34.9 N	122 48.9 W	08/07/00	1822 UTC	32 m		1216 - 1948 PST	1216 PST	1948 PST	192.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	17.40	33.305	24.120	5.62	102.5	2.7	0.28	0.0	0.00	0.09	0.01	91. A	1.9	1.7	1.8	0.05
11	17.17	33.309	24.178	5.62	102.1	2.7	0.28	0.0	0.00	0.09	0.01					
22	17.14	33.318	24.193	5.66	102.7	2.6	0.29	0.0	0.00	0.10	0.02	35.	2.8	2.8	2.8	0.10
32	17.11	33.322	24.203	5.62	102.0	2.6	0.29	0.0	0.00	0.10	0.02					
43	16.06	33.221	24.368	5.85	103.9	2.7	0.29	0.0	0.00	0.15	0.04	13.	2.5	2.5	2.5	0.11
55	15.04	33.197	24.576	6.01	104.6	2.7	0.30	0.0	0.00	0.18	0.08					
64	15.08	33.497	24.799	6.00	104.7	2.7	0.26	0.0	0.00	0.18	0.05	4.6	1.5	1.4	1.5	0.09
73	14.30	33.451	24.930	5.97	102.5	2.8	0.28	0.0	0.00	0.22	0.10					
83	13.82	33.472	25.047	5.96	101.3	3.0	0.29	0.0	0.00	0.25	0.16	1.9	1.0	1.1	1.0	0.05
93	13.22	33.497	25.188	5.77	96.9	3.6	0.37	0.6	0.03	0.35	0.26					
103	11.55	33.403	25.435	5.57	90.2	5.5	0.62	4.6	0.11	0.24	0.22					
113	10.80	33.399	25.567	5.39	85.9	7.6	0.78	7.4	0.02	0.12	0.18					
122	10.19	33.332	25.620	5.33	83.8	9.6	0.93	9.7	0.01	0.13	0.13	0.29	0.06	0.09	0.08	0.04

A) INCUBATION LIGHT INTENSITIES WERE 95, 37, 13, 4.5, 1.8, 0.28 PERCENT RESPECTIVELY.

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 8.6 N	120 1.7 W	06/07/00	1737 UTC	10 m		1205 - 1944 PST	1205 PST	1944 PST	592.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	16.06	33.731	24.759	5.51	98.2	7.0	0.60	4.2	0.05	1.14	0.33	86. A	10.8	10.6	10.7	0.19
6	16.08	33.729	24.753	5.49	97.9	7.0	0.57	4.2	0.05	1.17	0.32	40.	29.1	34.2	31.6	0.19
14	15.79	33.737	24.825	5.46	96.8	7.7	0.62	4.9	0.06	1.31	0.39	12.	25.5	25.3	25.4	0.21
21	14.87	33.763	25.048	5.40	94.0	9.9	0.78	7.5	0.08	1.12	0.45	4.0	18.8	14.5	16.6	0.16
27	14.24	33.759	25.179	5.28	90.7	10.9	0.86	8.2	0.11	1.04	0.60	1.6	5.8	5.7	5.8	0.11
38	12.86	33.747	25.452	4.56	76.1	13.8	1.12	12.7	0.16	0.72	0.47	0.29	0.38	0.33	0.35	0.09

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 87 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 39.5 N	123 4.7 W	07/07/00	1914 UTC	27 m		1217 - 1949 PST	1217 PST	1949 PST	282.2 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	17.14	33.314	24.189	5.64	102.4	2.8	0.28	0.0	0.00	0.10	0.03	94. A	2.3	2.4	2.4	0.10
17	17.00	33.313	24.221	5.64	102.1	2.8	0.28	0.0	0.00	0.12	0.04	38.	3.2	3.3	3.2	0.21
27	16.95	33.309	24.230	5.65	102.2	2.8	0.28	0.0	0.00	0.12	0.04					
36	16.82	33.306	24.259	5.67	102.3	2.9	0.28	0.0	0.00	0.17	0.05	13.	2.9	3.0	3.0	0.11
47	15.64	33.314	24.534	6.04	106.4	3.0	0.29	0.0	0.00	0.33	0.14					
55	14.74	33.304	24.723	6.08	105.2	3.0	0.35	0.4	0.02	0.49	0.25	4.4	4.6	4.4	4.5	0.17
62	14.32	33.317	24.823	6.03	103.5	2.8	0.37	0.5	0.03	0.55	0.35					
70	13.95	33.324	24.905	5.89	100.3	3.2	0.44	1.3	0.13	0.51	0.51	1.9	2.8	2.9	2.9	0.08
82	13.38	33.344	25.037	5.82	98.0	3.7	0.58	2.9	0.52	0.39	0.29					
93	13.07	33.392	25.137	5.73	95.8	4.4	0.67	4.4	0.89	0.26	0.25					
103	12.43	33.394	25.263	5.50	90.8	5.4	0.71	5.8	0.03	0.20	0.22	0.29	0.07	0.10	0.09	0.06

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 29.0 N	117 46.2 W	05/07/00	1742 UTC	12 m		1155 - 1939 PST	1155 PST	1939 PST	556.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	20.51	33.690	23.630	5.80	112.5	3.8	0.21	0.1	0.00	0.64	0.14	88. A	15.8	15.0	15.4	0.35
9	18.74	33.656	24.061	5.98	112.2	3.4	0.23	0.1	0.00	0.46	0.15	32.	16.8		16.8	0.26
17	16.74	33.616	24.515	6.28	113.3	3.3	0.29	0.1	0.00	0.27	0.13	11.	9.5	9.3	9.4	0.15
25	13.79	33.506	25.078	6.41	108.9	3.4	0.39	0.2	0.02	2.08	0.83	4.1	22.8	25.7	24.3	0.42
32	12.85	33.490	25.254	5.53	92.2	5.6	0.69	3.9	0.13	1.92	0.78	1.7	8.4	8.0	8.2	0.85
39	12.18	33.539	25.422			9.6	1.11	11.3	0.20	0.66	0.47					
46	11.56	33.549	25.546	4.82	78.2	10.3	1.12	11.7	0.21	0.64	0.44	0.28	0.25	0.28	0.27	0.08

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 39.3 N	119 29.5 W	04/07/00	1848 UTC	11 m		1202 - 1935 PST	1202 PST	1935 PST	480.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	16.67	33.788	24.662	5.58	100.7	3.5	0.46	2.7	0.11	0.62	0.15	76. A	9.4	11.0	10.2	0.19
8	16.66	33.784	24.662	5.60	101.0	3.5	0.47	2.7	0.11	0.63	0.16	33.	22.0	21.9	21.9	0.19
16	16.65	33.781	24.662	5.59	100.8	3.5	0.46	2.7	0.11	0.62	0.15	11.	18.8	17.8	18.3	0.19
22	16.11	33.748	24.761	5.62	100.2	3.9	0.50	3.1	0.12	0.71	0.19	4.6	12.1	9.9	11.0	0.19
30	13.10	33.635	25.317	5.39	90.4	8.8	0.86	8.1	0.32	0.95	0.51	1.5	6.7	6.7	6.7	0.23
36	12.28	33.735	25.555	4.57	75.4	13.7	1.22	12.8	0.80	0.63	0.38					
43	10.89	33.832	25.887	3.45	55.3	22.1	1.70	20.5	0.71	0.32	0.18	0.25	0.14	0.15	0.14	0.07

RV NEW HORIZON CALCOFI CRUISE 0007 STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 24.9 N	121 59.9 W	03/07/00	1730 UTC	25 m		1212 - 1940 PST	1212 PST	1942 PST	189.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	17.45	33.373	24.160	5.58	101.9	2.5	0.28	0.0	0.00	0.12	0.03	94. A	0.95	2.1	1.5	0.12
16	17.45	33.373	24.161	5.58	101.9	2.4	0.28	0.0	0.00	0.12	0.03	37.	3.1	2.8	2.9	0.09
25	16.94	33.372	24.281	5.74	103.8	2.2	0.29	0.0	0.00	0.15	0.04					
34	16.26	33.404	24.463	5.87	104.8	2.0	0.29	0.0	0.00	0.19	0.06	12.	2.7	2.7	2.7	0.11
42	15.80	33.367	24.539	5.93	104.9	2.0	0.31	0.0	0.00	0.24	0.09					
52	14.94	33.356	24.720	6.05	105.2	2.4	0.33	0.0	0.01	0.43	0.22	4.1	3.2	3.0	3.1	0.06
58	13.91	33.356	24.938	5.97	101.6	2.9	0.43	1.2	0.11	0.48	0.53					
63	13.56	33.373	25.023	5.87	99.2	3.4	0.50	2.0	0.29	0.51	0.38	2.1	1.5	1.6	1.5	0.04
74	12.87	33.379	25.165	5.61	93.4	4.2	0.59	3.7	0.19	0.41	0.36					
86	12.29	33.389	25.286	5.45	89.7	5.4	0.69	5.6	0.03	0.26	0.27					
97	11.83	33.400	25.381	5.32	86.7	6.5	0.78	7.1	0.03	0.18	0.21	0.26	0.09	0.09	0.09	0.02

A) INCUBATION LIGHT INTENSITIES WERE 95, 37, 13, 4.5, 1.8, 0.28 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON | CALCOFI CRUISE 0007 | STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 25.2 N	124 0.5 W	02/07/00	1915 UTC	25 m		1219 - 1945 PST	1219 PST	1948 PST	149.3 mg C/m2

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	PO4	NO3	NO2	CHL-A	PHAEO	LIGHT	UPTAKE (mg C/m3)			
m	DEG C		THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	17.69	33.338	24.076	5.58	102.4	2.1	0.27	0.0	0.00	0.11	0.02	94. A	2.6	2.7	2.7	0.13
16	17.65	33.338	24.086	5.57	102.1	2.1	0.27	0.0	0.00	0.12	0.02	37.	2.7	2.9	2.8	0.13
25	16.99	33.335	24.241	5.69	103.0	2.1	0.28	0.0	0.00	0.13	0.03					
34	16.61	33.331	24.327	5.80	104.2	2.0	0.28	0.0	0.00	0.15	0.03	12.	1.6	1.8	1.7	0.11
43	16.48	33.330	24.356	5.77	103.4	2.0	0.28	0.0	0.00	0.19	0.05					
52	15.77	33.301	24.495	5.86	103.5	2.1	0.29	0.0	0.00	0.29	0.09	4.1	1.3	1.3	1.3	0.07
59	14.81	33.379	24.766	5.99	103.8	2.2	0.30	0.0	0.00	0.37	0.17					
65	14.28	33.437	24.924	5.94	101.9	2.4	0.32	0.0	0.01	0.41	0.29	1.8	1.3	1.3	1.3	0.04
75	13.61	33.497	25.109	5.78	97.8	2.9	0.37	0.8	0.11	0.38	0.37					
85	12.40	33.356	25.239	5.62	92.7	4.7	0.64	4.8	0.07	0.23	0.27					
96	11.58	33.429	25.450	5.15	83.5	8.0	0.92	9.3	0.02	0.11	0.18	0.28	0.05	0.05	0.05	0.02

RV NEW HORIZON | CALCOFI CRUISE 0007 | STATION 93 26.8

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 56.8 N	117 18.3 W	29/06/00	1844 UTC	15 m		1155 - 1932 PST	1153 PST	1932 PST	613.2 mg C/m2

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	PO4	NO3	NO2	CHL-A	PHAEO	LIGHT	UPTAKE (mg C/m3)			
m	DEG C		THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	20.55	33.709	23.633	5.69	110.4	2.6	0.25	0.0	0.00	0.28	0.06	90. A	13.5	13.5	13.5	0.19
6	18.64	33.671	24.098	5.86	109.7	2.4	0.26	0.0	0.00	0.21	0.05					
11	16.50	33.624	24.576	6.39	114.8	3.4	0.29	0.1	0.00	0.29	0.09	32.	12.4	11.5	12.0	0.23
21	13.30	33.528	25.194	5.85	98.4	5.0	0.64	4.5	0.18	1.38	0.42	12.	33.0	33.6	33.3	0.19
31	11.35	33.581	25.609	4.52	73.0	12.8	1.15	12.8	0.20	0.69	0.33	4.2	6.3	5.9	6.1	0.10
39	10.81	33.667	25.773	3.60	57.5	19.1	1.55	18.1	0.32	0.36	0.34	1.8	1.8	1.8	1.8	0.05
48	10.78	33.676	25.785	3.55	56.7	19.5	1.52	17.9	0.34	0.34	0.33					
57	10.44	33.731	25.887	3.23	51.2	22.4	1.66	20.3	0.28	0.17	0.29	0.29	0.10	0.10	0.10	0.06

RV NEW HORIZON | CALCOFI CRUISE 0007 | STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 11.4 N	118 52.8 W	30/06/00	1729 UTC	11 m		1200 - 1936 PST	1200 PST	1936 PST	563.6 mg C/m2

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	PO4	NO3	NO2	CHL-A	PHAEO	LIGHT	UPTAKE (mg C/m3)			
m	DEG C		THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	18.27	33.764	24.260	5.72	106.4	1.5	0.28	0.2	0.02	0.54	0.10	87. A	18.1	16.6	17.4	0.19
7	18.18	33.766	24.284	5.78	107.3	1.4	0.28	0.4	0.03	0.61	0.12	38.	22.3	22.5	22.4	0.17
15	16.27	33.783	24.751	6.06	108.5	1.7	0.42	2.4	0.12	0.85	0.24	12.	22.9	23.9	23.4	0.18
22	13.68	33.787	25.317	5.26	89.3	7.3	0.91	8.4	0.40	1.14	0.45	4.6	13.8	12.9	13.4	0.13
30	13.13	33.782	25.425	4.88	81.9	10.7	1.10	10.5	0.60	0.91	0.47	1.5	5.9	5.9	5.9	0.11
37	13.04	33.776	25.438	4.82	80.8	11.1	1.15	10.9	0.70	0.88	0.48					
42	12.85	33.770	25.471	4.73	79.0	11.8	1.21	11.4	0.83	0.92	0.51	0.28	0.37	0.37	0.37	0.10

RV NEW HORIZON | CALCOFI CRUISE 0007 | STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 51.2 N	121 35.3 W	01/07/00	1913 UTC	26 m		1210 - 1944 PST	1210 PST	1944 PST	144.9 mg C/m2

DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SIO3	PO4	NO3	NO2	CHL-A	PHAEO	LIGHT	UPTAKE (mg C/m3)			
m	DEG C		THETA	ml/l	PCT	uM/l	uM/l	uM/l	uM/l	ug/l	ug/l	PCT	1	2	MEAN	DARK
1	18.00	33.406	24.053	5.54	102.3	2.4	0.27	0.0	0.00	0.10	0.02	94. A	2.9	2.8	2.8	0.13
17	17.70	33.380	24.106	5.58	102.4	2.3	0.27	0.0	0.00	0.12	0.02	37.	2.6	2.8	2.7	0.16
26	17.21	33.361	24.209	5.70	103.6	2.3	0.27	0.0	0.00	0.13	0.03					
35	17.10	33.447	24.301	5.71	103.6	2.3	0.27	0.0	0.00	0.14	0.03	13.	1.7	1.8	1.8	0.08
44	16.95	33.545	24.412	5.73	103.8	2.3	0.27	0.0	0.00	0.16	0.05					
53	15.82	33.373	24.540	5.87	103.8	2.3	0.28	0.0	0.00	0.20	0.08	4.4	1.1	1.2	1.2	0.04
68	15.10	33.374	24.700	6.00	104.6	2.3	0.31	0.0	0.00	0.28	0.15	1.8	0.86	0.85	0.85	0.04
79	14.54	33.411	24.849	5.98	103.1	2.5	0.32	0.1	0.01	0.27	0.18					
90	13.92	33.363	24.942	5.96	101.4	2.6	0.36	0.4	0.04	0.25	0.19					
101	13.82	33.471	25.047	5.72	97.2	3.2	0.43	1.1	0.18	0.22	0.19	0.26	0.07	0.08	0.07	0.02

A) INCUBATION LIGHT INTENSITIES WERE 95, 37, 13, 4.5, 1.8, 0.28 PERCENT RESPECTIVELY.

CalCOFI Cruise 0007

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505mm

Line	Sta.	Latitude N	Longitude W	Date Mo/Day	Time (PST) Start	Time (PST) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
77	49	35 06.1	120 47.7	07/13	0940	0946	120	53	556	556
77	51	35 02.4	120 56.6	07/13	0710	0731	432	194	301	301
77	55	34 53.8	121 13.0	07/13	0344	0405	428	211	344	344
77	60	34 43.6	121 34.9	07/12	2319	2341	453	205	320	292
77	70	34 23.9	122 16.1	07/12	1713	1735	416	211	156	156
77	80	34 03.6	122 54.6	07/12	1024	1045	457	200	70	70
77	90	33 44.1	123 38.8	07/12	0423	0444	425	214	411	317
77	100	33 23.3	124 20.1	07/11	2225	2247	462	209	30	30
80	51	34 27.0	120 32.2	07/10	0757	0805	170	78	912	912
80	55	34 18.8	120 49.2	07/10	1134	1156	435	214	83	83
80	60	34 10.3	121 08.2	07/10	1559	1621	461	187	119	119
80	70	33 49.2	121 50.9	07/10	2236	2258	441	213	150	150
80	80	33 29.6	122 33.6	07/11	0430	0452	447	213	27	27
80	90	33 10.0	123 14.2	07/11	1035	1057	465	207	34	34
80	100	32 49.7	123 55.3	07/11	1616	1637	437	209	30	30
82	47	34 16.6	120 03.4	07/10	0358	0419	407	214	535	535
83	40.6	34 12.4	119 25.1	07/09	2256	2259	70	27	285	285
83	42	34 10.4	119 31.7	07/09	2047	2108	443	196	375	375
83	51	33 52.4	120 09.9	07/09	1339	1401	455	206	114	114
83	55	33 44.6	120 23.8	07/09	0920	0942	471	205	87	87
83	60	33 34.6	120 47.0	07/09	0557	0618	433	206	129	129
83	70	33 14.4	121 27.5	07/08	2344	0005	428	217	56	56
83	80	32 55.6	122 08.2	07/08	1722	1743	444	205	122	122
83	90	32 35.1	122 49.8	07/08	1123	1145	464	202	26	26
83	100	32 15.2	123 29.4	07/08	0534	0556	437	208	34	34
83	110	31 55.3	124 11.6	07/07	2343	0004	448	206	51	51
87	33	33 53.1	118 30.5	07/05	1549	1556	120	44	702	702
87	35	33 48.6	118 38.9	07/05	1810	1831	448	199	237	237
87	40	33 37.7	119 00.2	07/05	2207	2229	442	208	272	272
87	45	33 29.0	119 23.0	07/06	0210	0232	488	186	322	322
87	50	33 18.8	119 41.6	07/06	0545	0553	164	59	2600	2600
87	55	33 08.8	120 00.2	07/06	0835	0857	458	198	109	109
87	60	32 59.6	120 24.6	07/06	1403	1424	483	199	420	190
87	70	32 38.6	121 03.7	07/06	1918	1939	465	206	47	47
87	80	32 20.4	121 44.8	07/07	0052	0114	464	213	211	211
87	90	31 59.4	122 24.6	07/07	0628	0650	437	207	165	165
87	100	31 39.7	123 05.7	07/07	1210	1232	452	213	162	162
87	110	31 19.8	123 45.4	07/07	1742	1803	426	207	26	26
90	28	33 28.7	117 46.6	07/05	0850	0904	296	132	149	149
90	30	33 26.1	117 53.8	07/05	0603	0625	447	207	139	139
90	35	33 14.8	118 16.3	07/05	0147	0208	424	210	177	177
90	37	33 11.2	118 24.6	07/04	2247	2309	461	203	306	306
90	45	32 55.0	118 57.5	07/04	1725	1746	439	214	210	210
90	53	32 39.6	119 30.9	07/04	1157	1219	409	209	259	259
90	60	32 25.0	119 58.6	07/04	0641	0702	457	208	182	160
90	70	32 04.7	120 40.6	07/03	2239	2301	470	211	241	206
90	80	31 45.7	121 19.3	07/03	1548	1609	417	212	96	96
90	90	31 24.0	121 59.3	07/03	0820	0842	479	206	88	88
90	100	31 06.5	122 41.8	07/03	0133	0155	455	211	108	108
90	110	30 45.4	123 21.9	07/02	1848	1908	405	210	62	62
90	120	30 25.6	124 01.6	07/02	1215	1237	447	214	31	31
93	26.7	32 55.9	117 18.7	06/29	1132	1141	195	81	154	154
93	28	32 53.4	117 25.6	06/29	1409	1431	445	211	294	294
93	30	32 49.9	117 33.4	06/29	1643	1705	435	204	310	310
93	35	32 40.0	117 54.2	06/29	2035	2057	467	192	392	392
93	40	32 30.9	118 14.7	06/30	0028	0049	451	207	162	162
93	45	32 20.3	118 35.0	06/30	0429	0450	422	211	220	220
93	50	32 11.0	118 52.8	06/30	0826	0848	477	199	147	147
93	55	32 00.3	119 15.2	06/30	1406	1428	457	214	243	243
93	60	31 50.6	119 35.5	06/30	1807	1828	426	208	317	317
93	70	31 30.6	120 14.9	07/01	0008	0030	441	212	77	77
93	80	31 11.4	120 55.3	07/01	0602	0623	472	200	32	32
93	90	30 52.2	121 35.5	07/01	1216	1238	443	211	36	36
93	100	30 32.3	122 16.1	07/01	1819	1840	433	204	25	25
93	110	30 11.8	122 55.4	07/02	0015	0037	449	208	80	80
93	120	29 51.7	123 35.5	07/02	0617	0639	452	205	35	35

PERSONNEL

CalCOFI Cruise 0010

SHIP'S CAPTAIN

Albert Arsenault, RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

		Participating (Legs)
Wilkinson, James R.	Programmer Analyst, SIO	1,2
(Chief Scientist)		1,2
Abramenkoff, Dimitry N.	Fishery Biologist, NMFS	1,2
Becker, Susan M.	Staff Research Associate, SIO	1,2
Carter, Melissa L.	Staff Research Associate, SIO	1,2
Collier, Natalia S.	Seabird Biologist, Pt. Reyes Bird Observatory	1,2
Farber-Lorda, Jaime	Visiting Scientist, CISESE, Mexico	1
Gruber, Dennis W.	Staff Research Associate, SIO	1,2
Hays, Amy E.	Fishery Biologist, NMFS	1,2
Johnson, Catherine L.	Graduate Student, SIO	1,2
Massoud, Vanessa	Volunteer	2
Miller, Shanley R.	Volunteer	1
Nightingale, Timothy	Visiting Scientist, Appleton Rutherford Lab., U.K.	1,2
Poteau, Antoine	Staff Research Associate, SIO	1,2
Ramirez, Fernando	Staff Research Associate, SIO	1,2
Wolgast, David M.	Staff Research Associate, SIO	1,2
Wolgast, Michael M.	Volunteer	1,2

Leg 1: San Diego to Dana Point, California, 12-19 October, 2000
Leg 2: Dana Point to San Diego, California, 19-31 October, 2000

FIGURES

Cruise 0010

1. CalCOFI Cruise 0010 track and station positions.

2. Horizontal distribution of dynamic height anomaly (0 over 500m). In areas shallower than 500 m, the dynamic heights were extrapolated on the basis of the offshore deeper steric height as described in Reid and Mantyla (1976).

3. Horizontal distributions at 10 meters: A) chlorophyll-*a*; B) potential density; C) temperature; and D) salinity.

4. Horizontal distributions at 200 meters: A) dynamic height anomaly (200 over 500 m); B) potential density; C) temperature; and D) salinity.

5. Sections along CalCOFI line 90 (vertical exaggeration, 1000): A) potential density; B) temperature; C) salinity; D) silicate; E) nitrate; F) phosphate; G) chlorophyll-*a*; H) oxygen saturation; I) oxygen; J) nitrite; and K) phaeopigments.

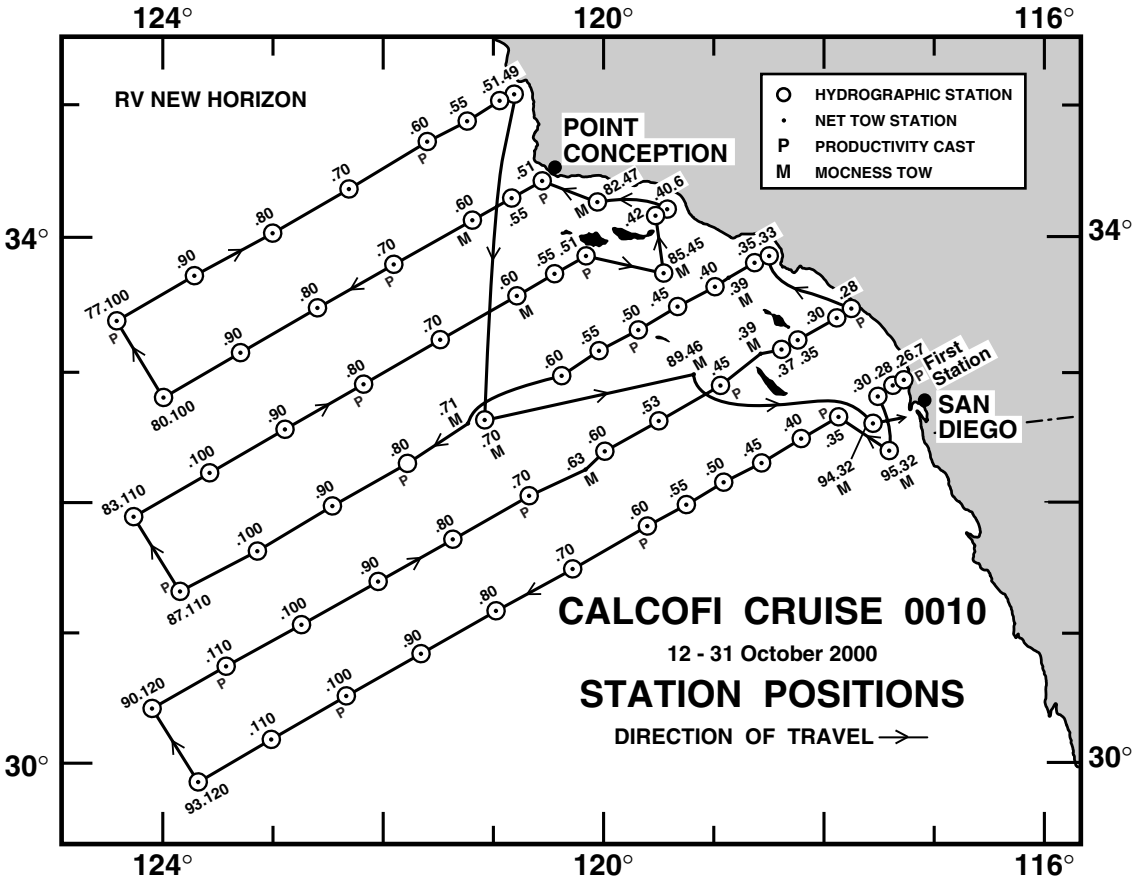


FIGURE 1

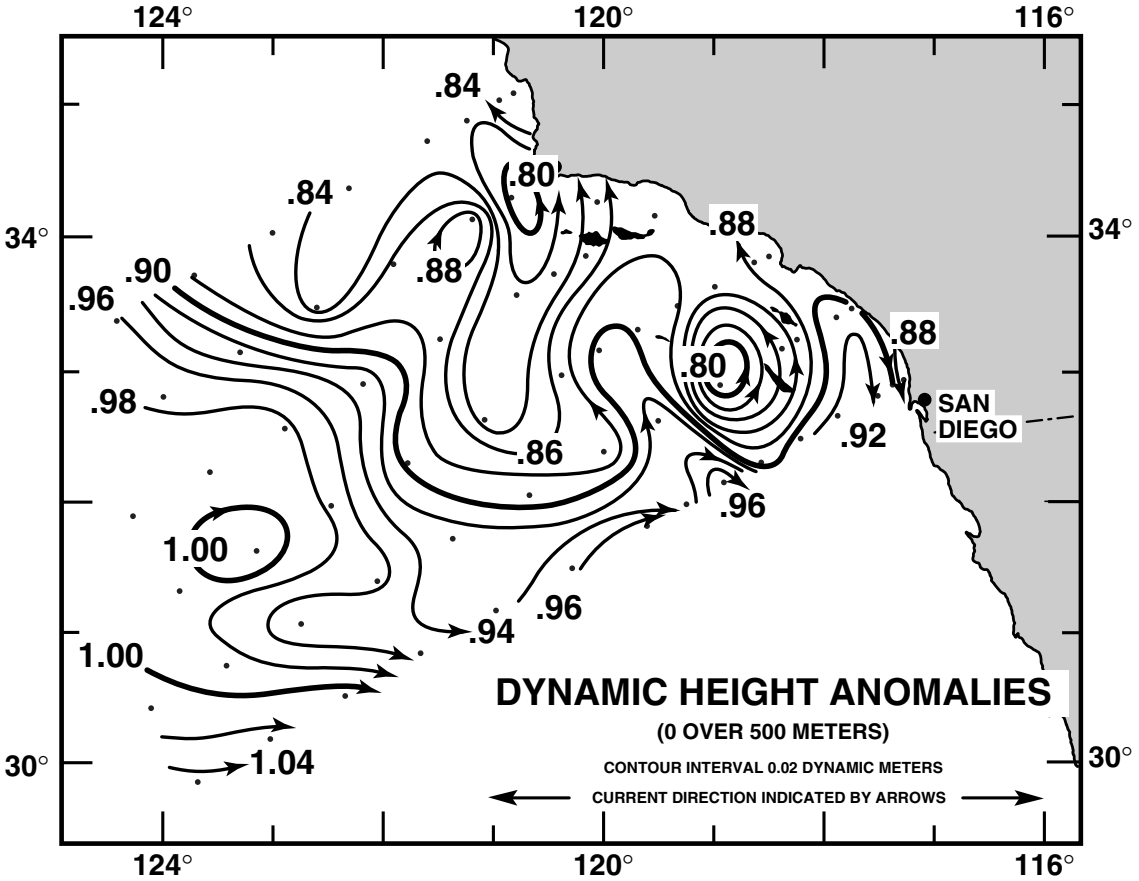


FIGURE 2

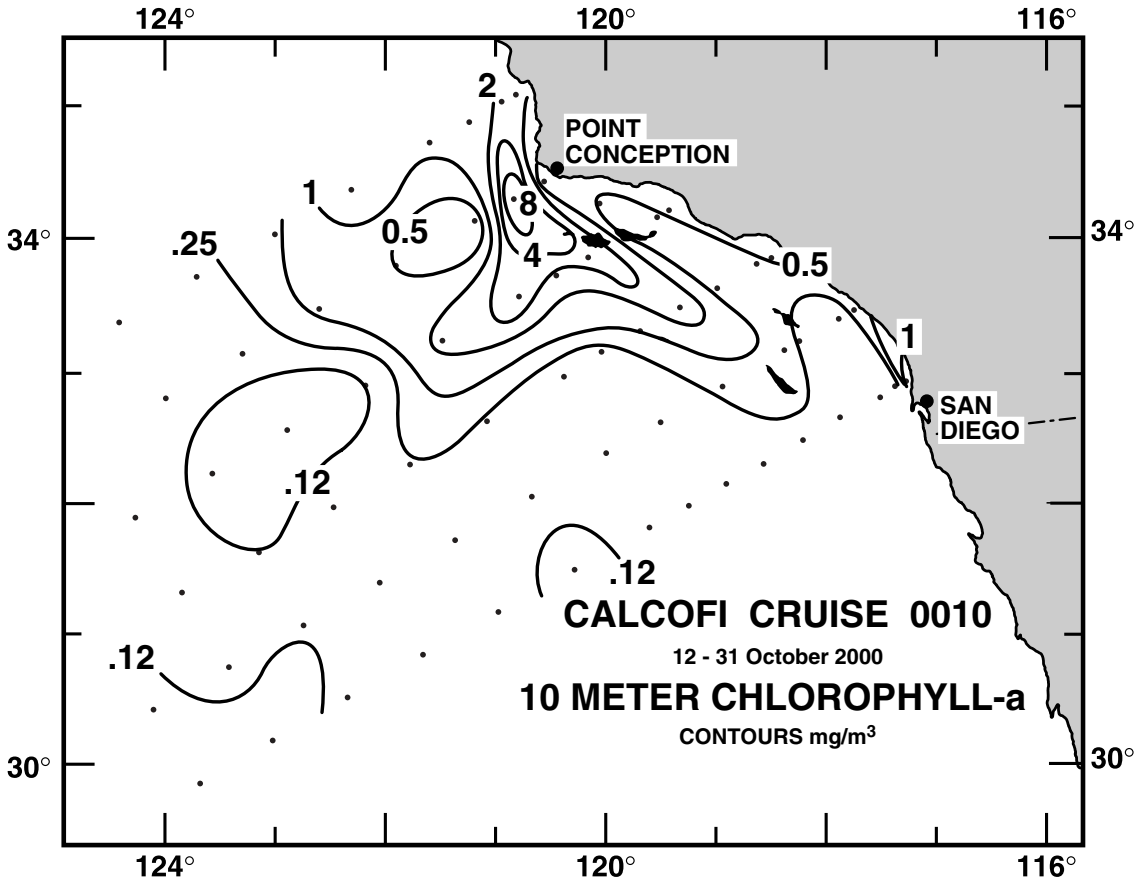


FIGURE 3A

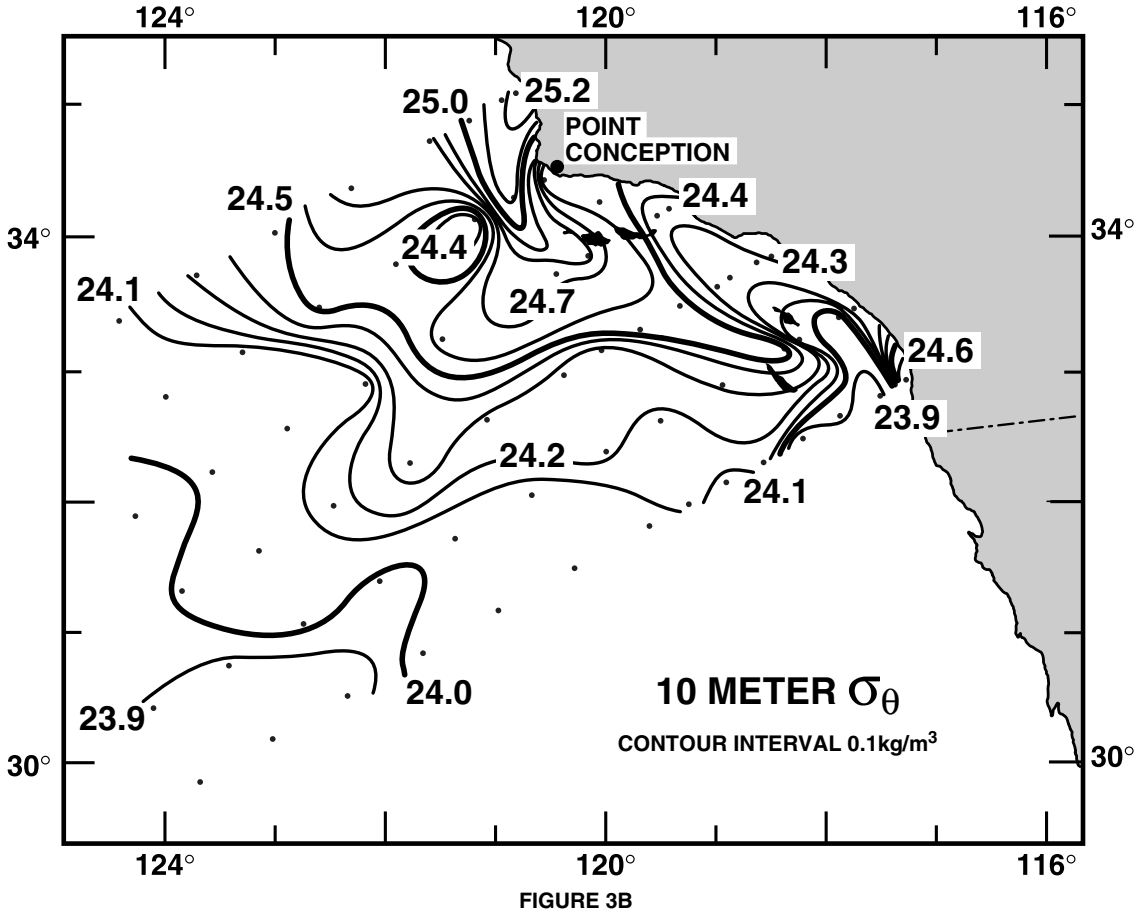


FIGURE 3B

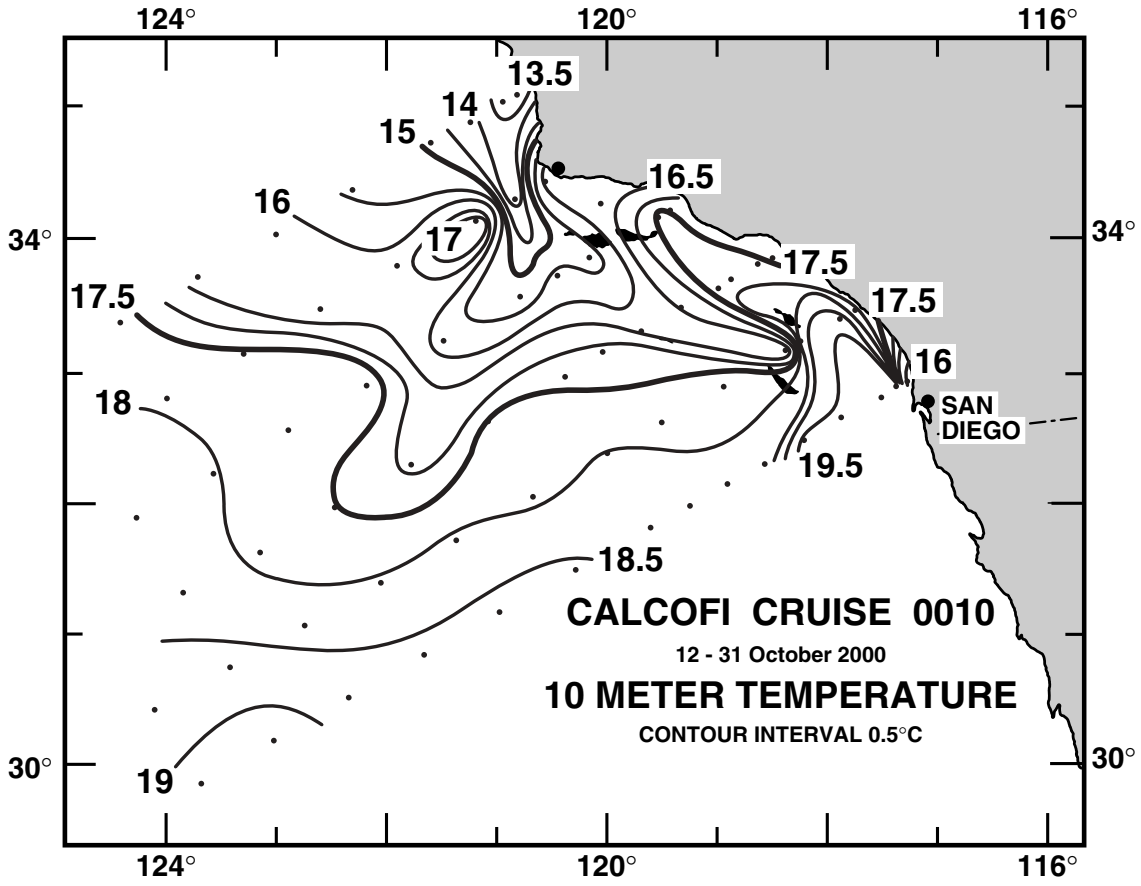


FIGURE 3C

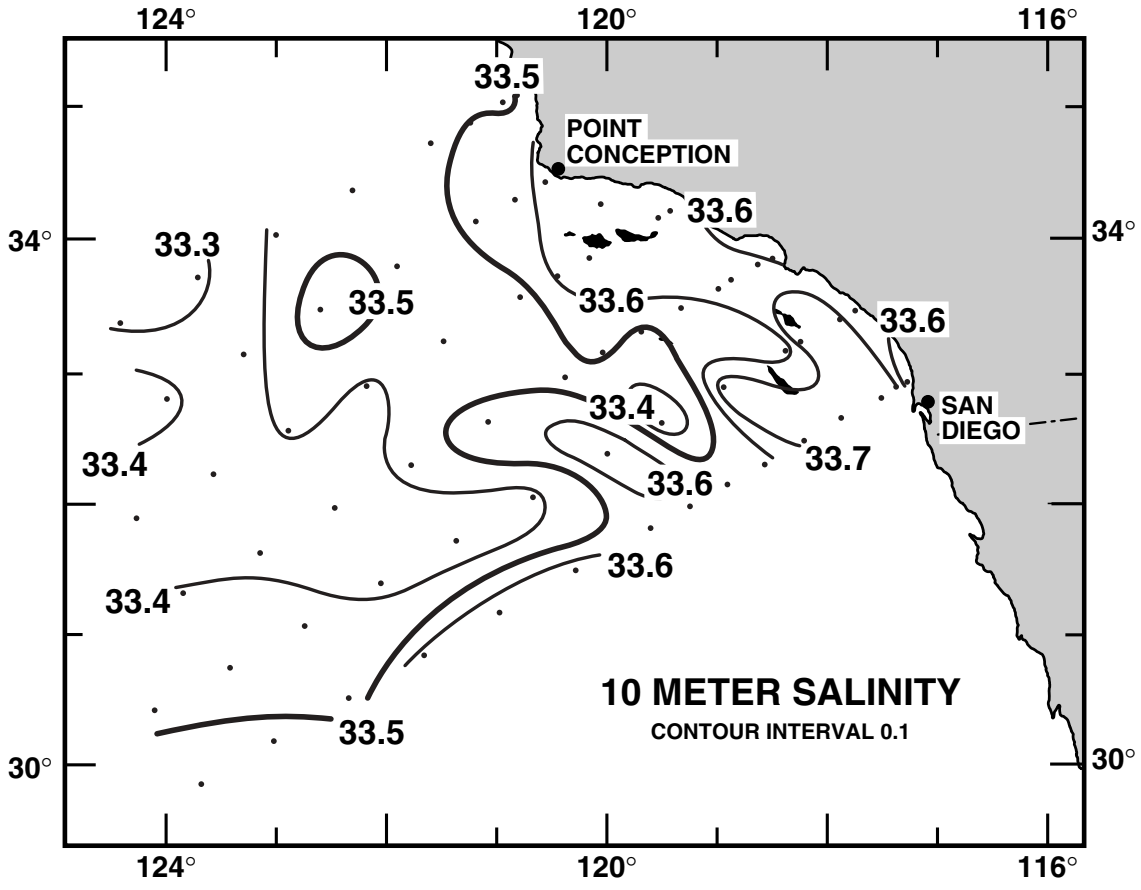


FIGURE 3D

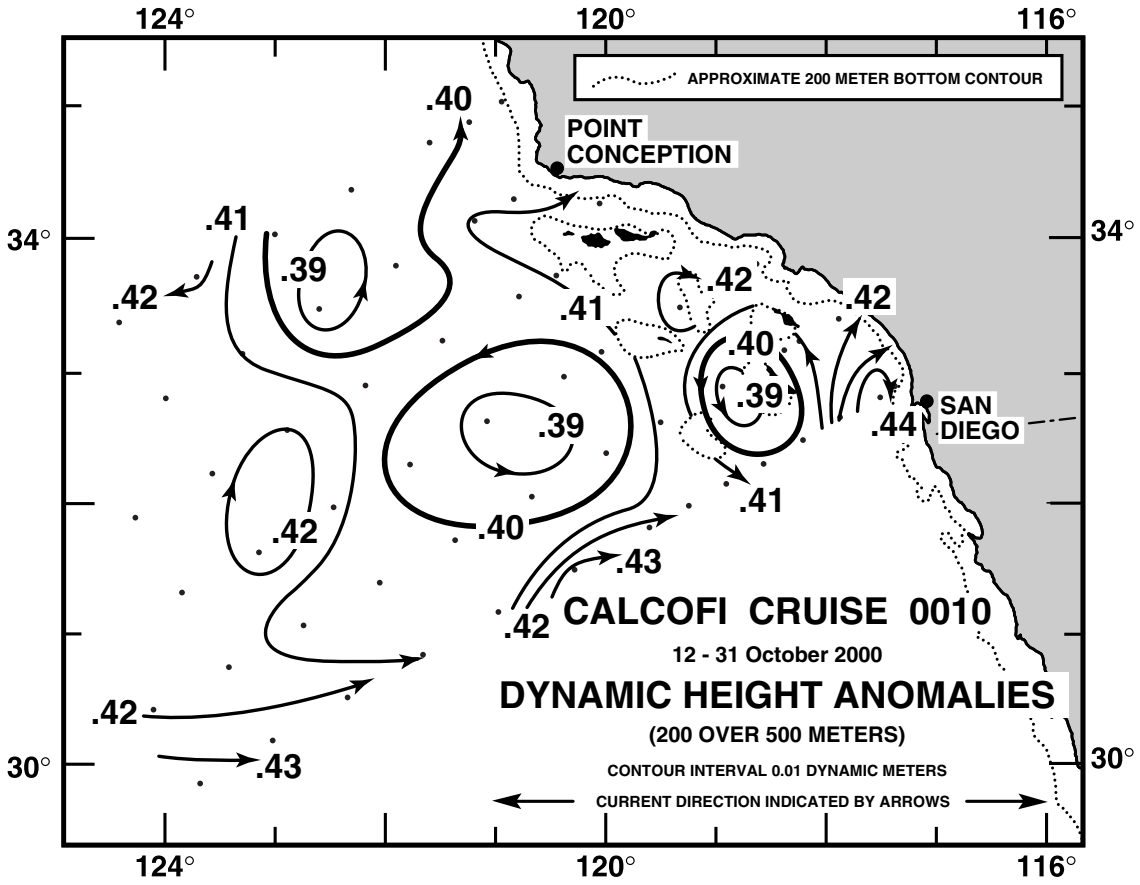


FIGURE 4A

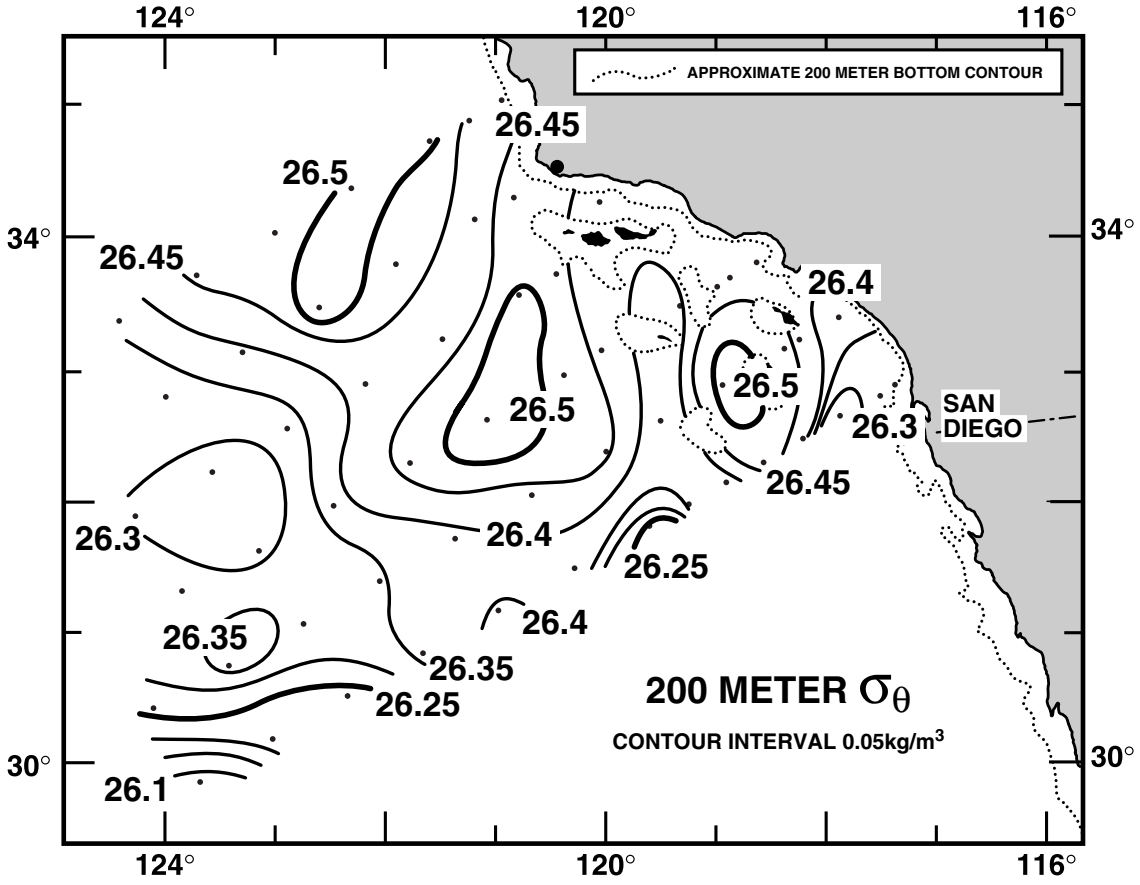


FIGURE 4B

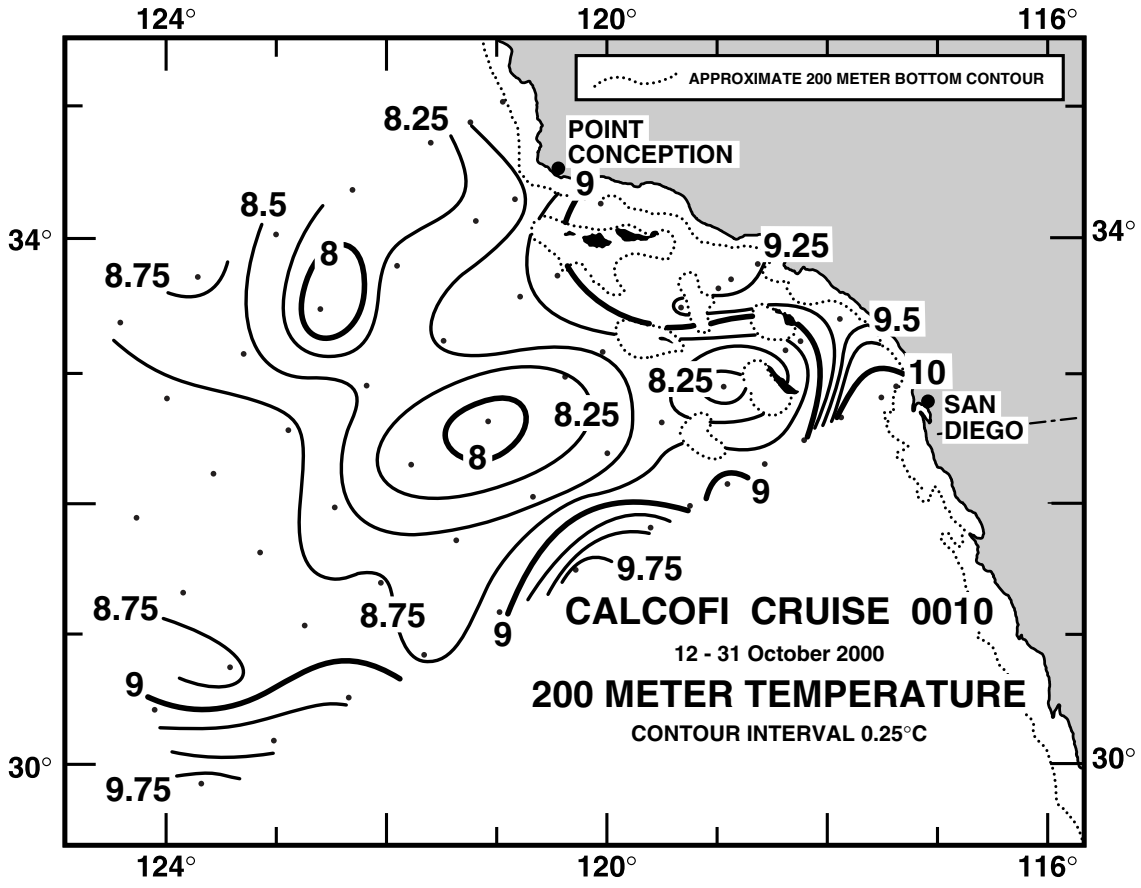


FIGURE 4C

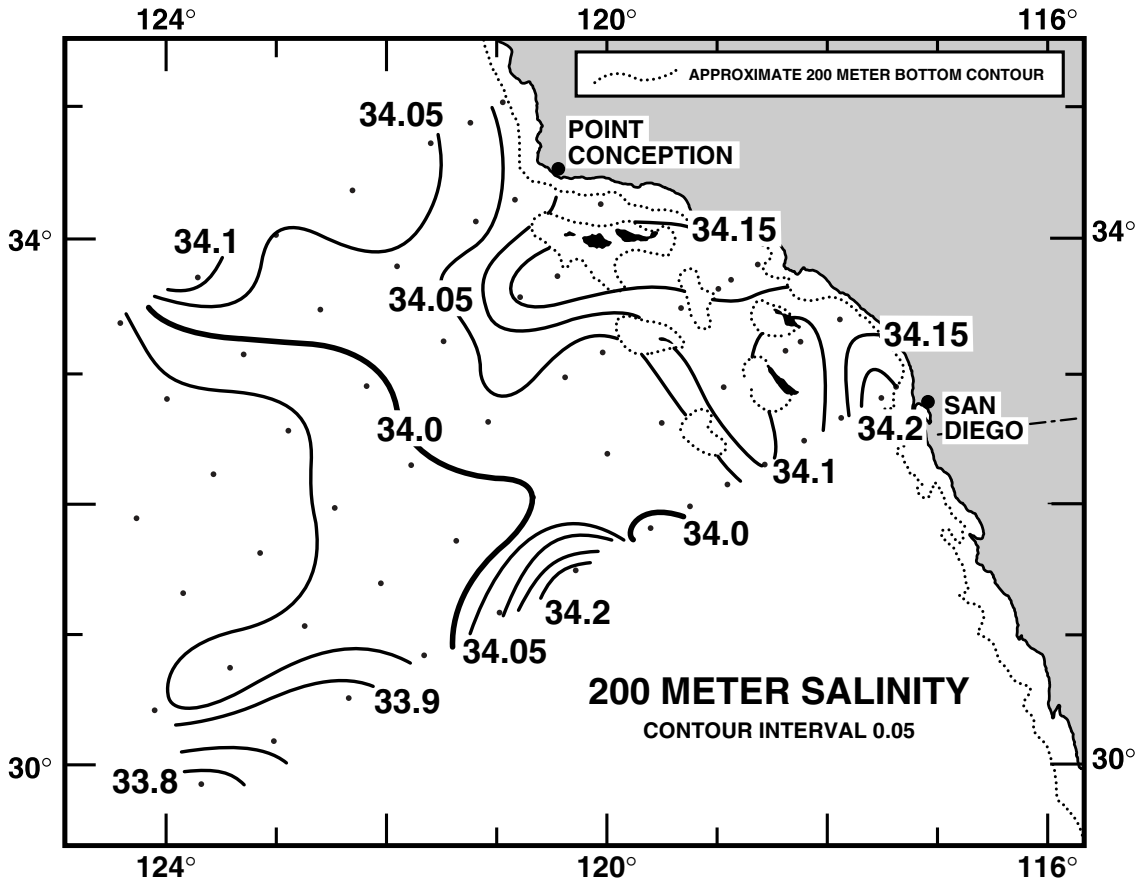


FIGURE 4D

CALCOFI CRUISE 0010

16 - 19 OCTOBER 2000

POTENTIAL DENSITY (σ_θ) ALONG CALCOFI LINE 90

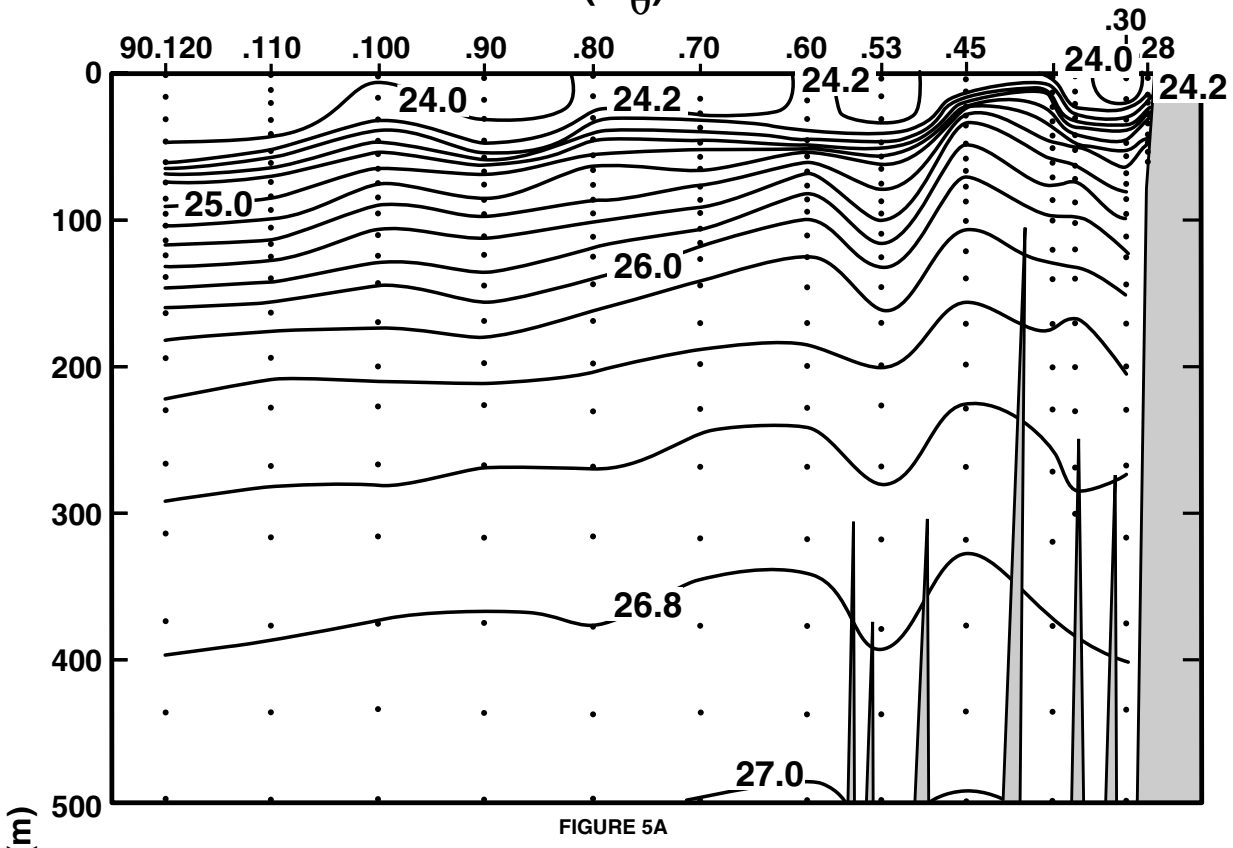


FIGURE 5A

TEMPERATURE (°C) ALONG CALCOFI LINE 90

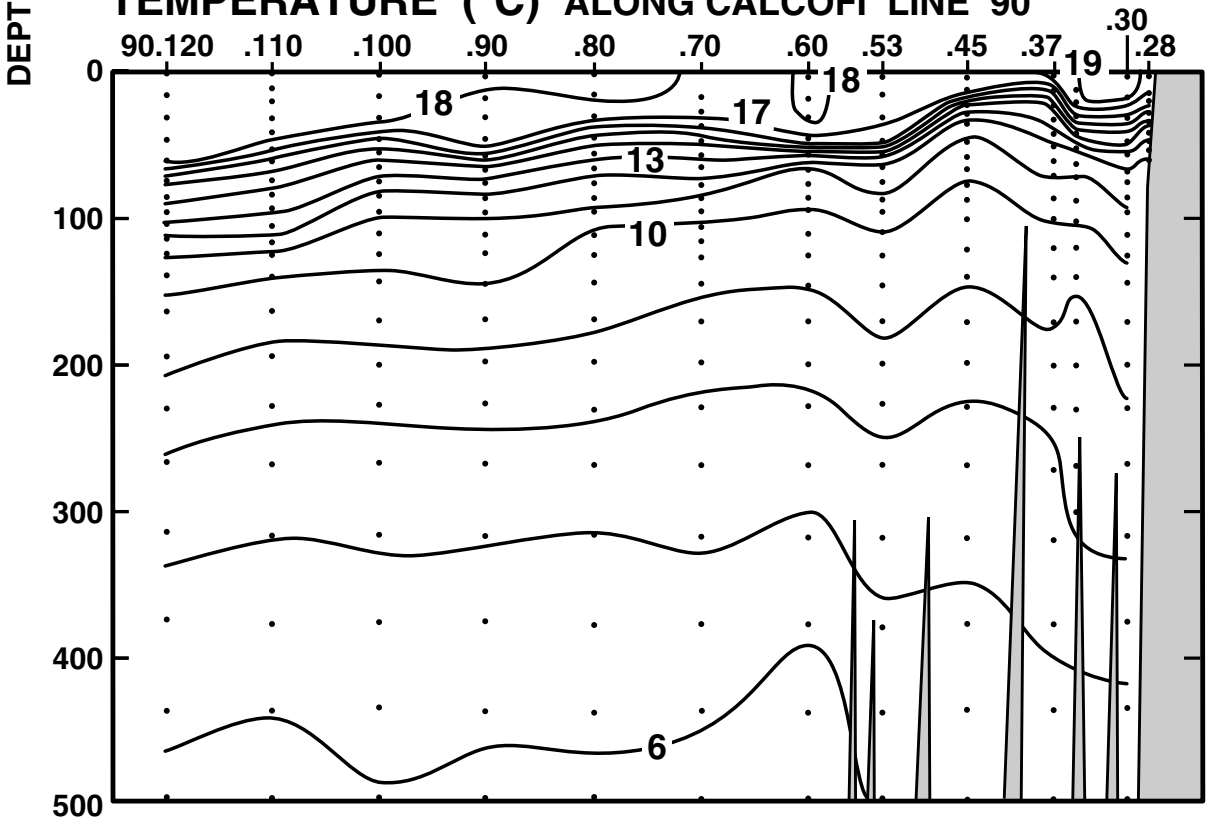


FIGURE 5B

CALCOFI CRUISE 0010

16 - 19 OCTOBER 2000

SALINITY ALONG CALCOFI LINE 90

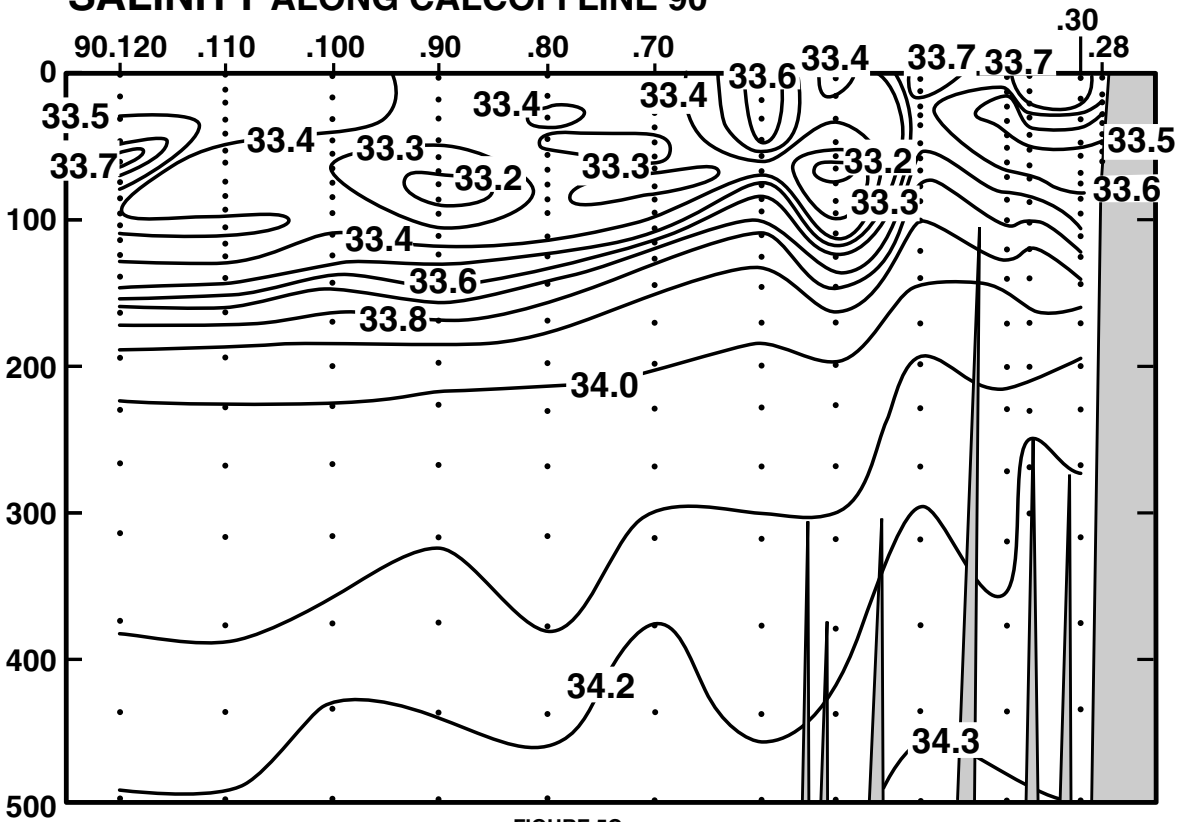


FIGURE 5C

SILICATE (μM/l) ALONG CALCOFI LINE 90

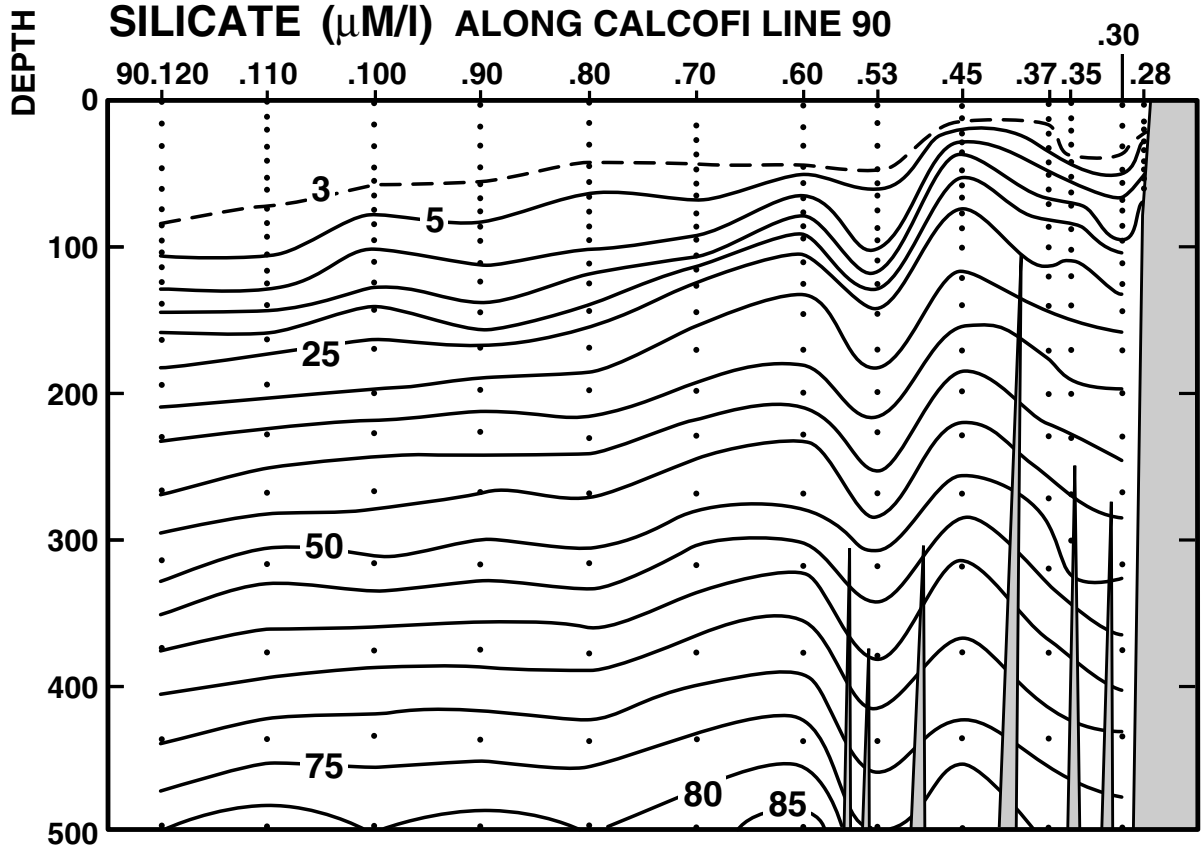


FIGURE 5D

CALCOFI CRUISE 0010

16 - 19 OCTOBER 2000

NITRATE (μM/l) ALONG CALCOFI LINE 90

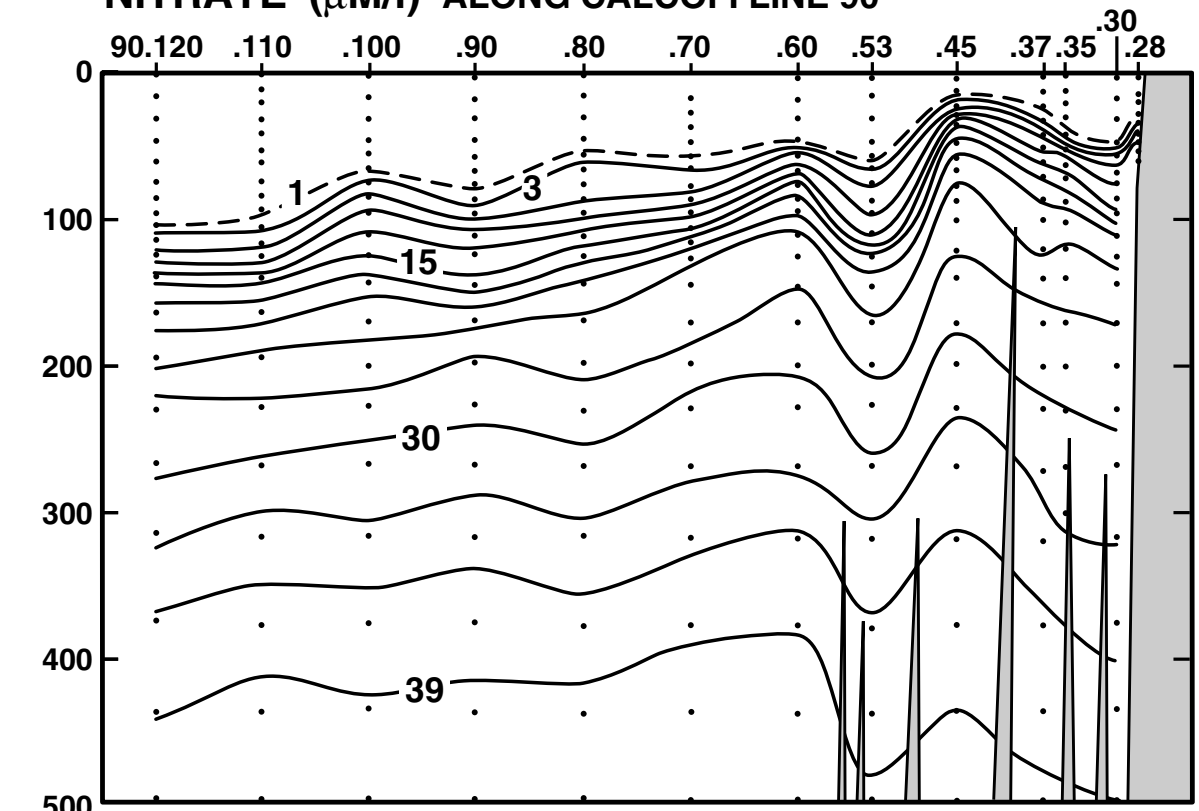


FIGURE 5E

PHOSPHATE (μM/l) ALONG CALCOFI LINE 90

DEPTH (m)

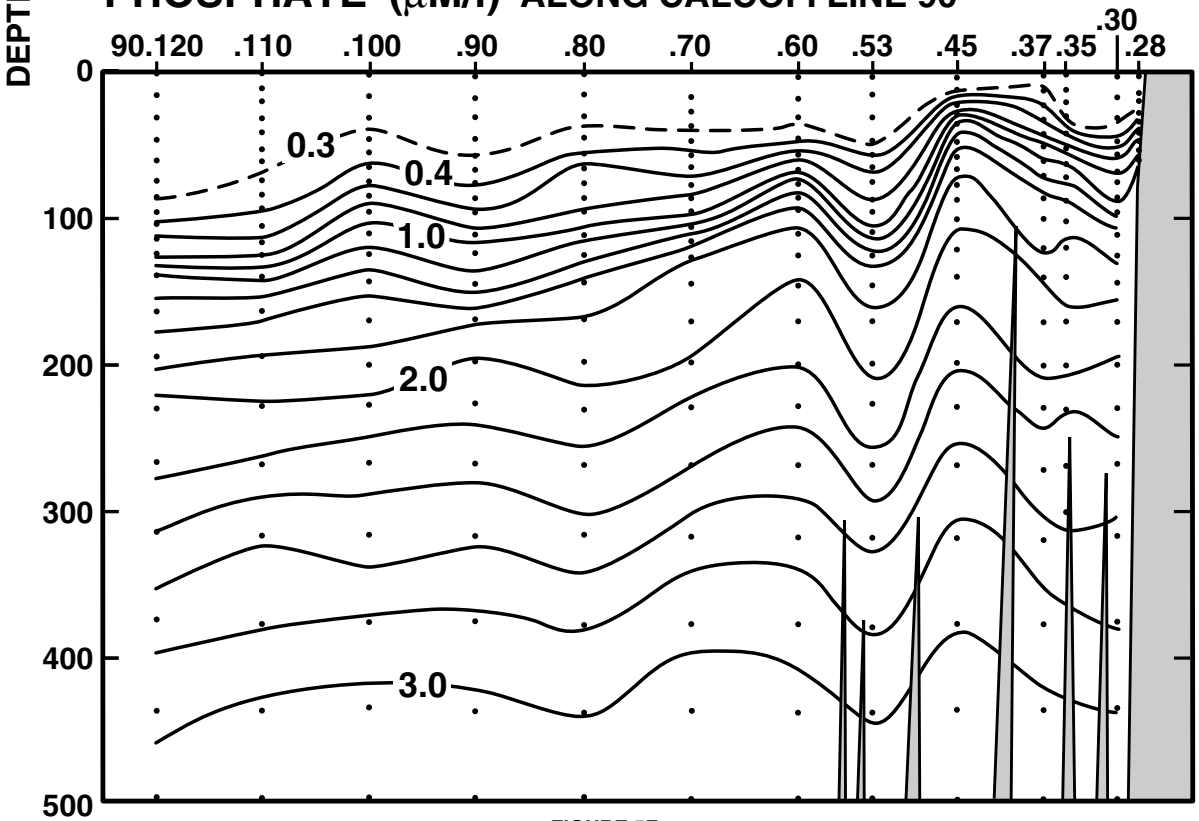


FIGURE 5F

CALCOFI CRUISE 0010

16 - 19 OCTOBER 2000

CHLOROPHYLL-a (μg/l) ALONG CALCOFI LINE 90

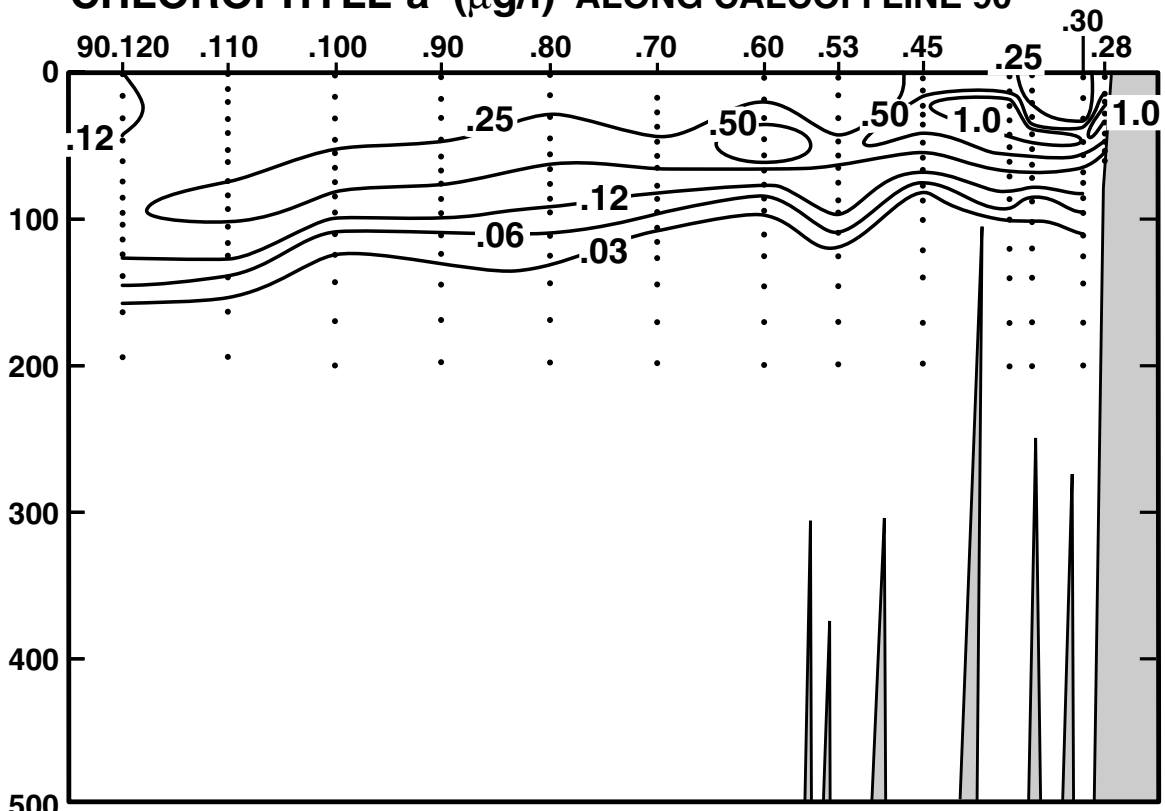


FIGURE 5G

OXYGEN SATURATION (%) ALONG CALCOFI LINE 90

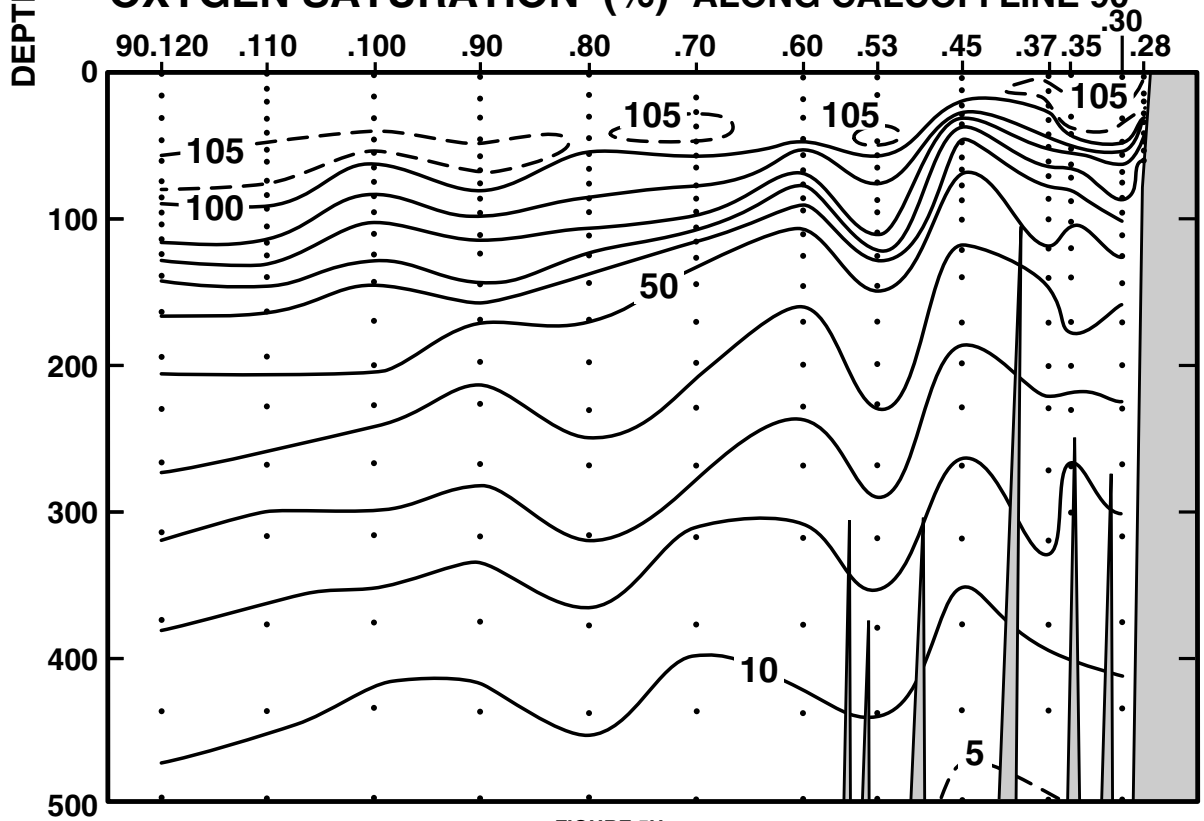


FIGURE 5H

CALCOFI CRUISE 0010

16 - 19 OCTOBER 2000

OXYGEN (ml/l) ALONG CALCOFI LINE 90

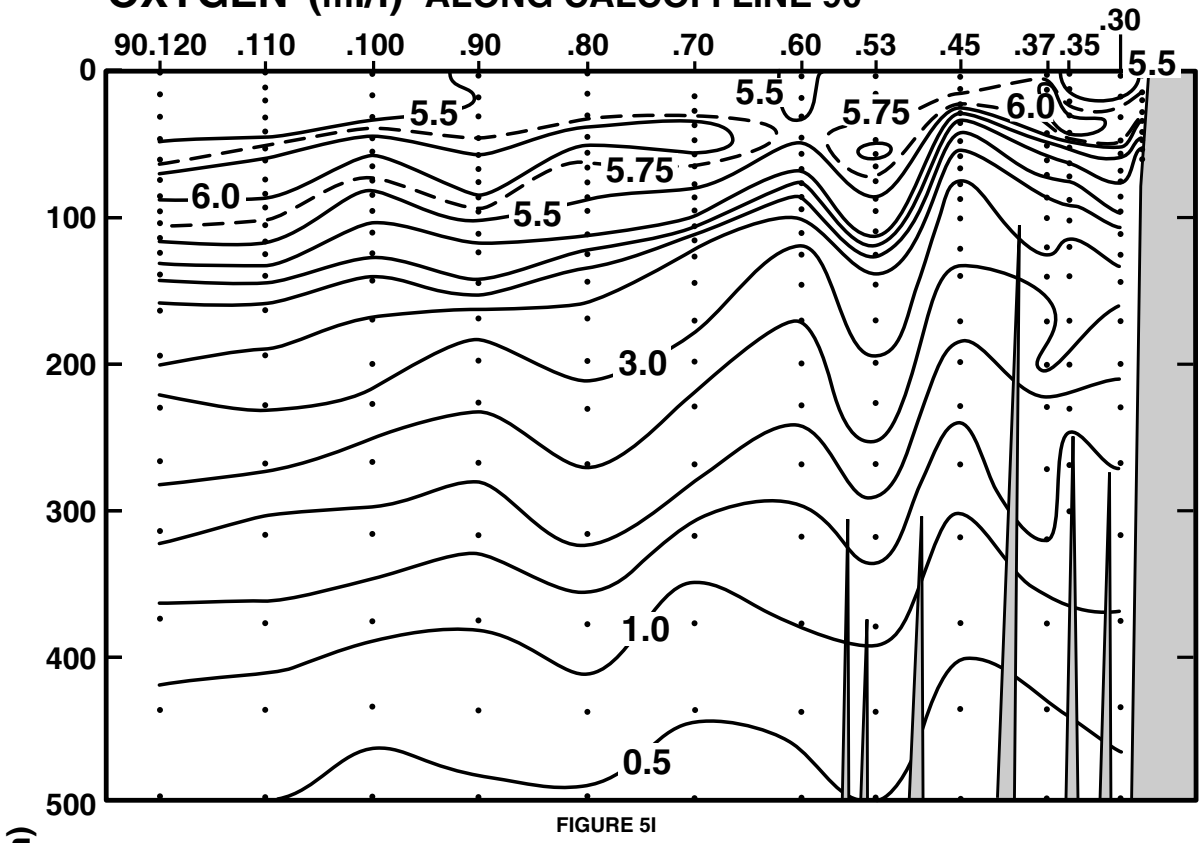


FIGURE 5I

DEPTH (m)

NITRITE (μM/l) ALONG CALCOFI LINE 90

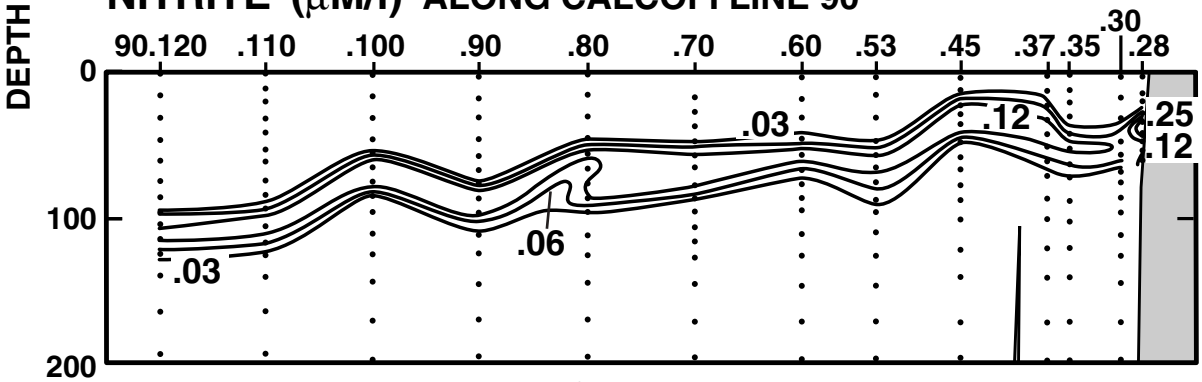


FIGURE 5J

PHAEOPIGMENTS (μg/l) ALONG CALCOFI LINE 90

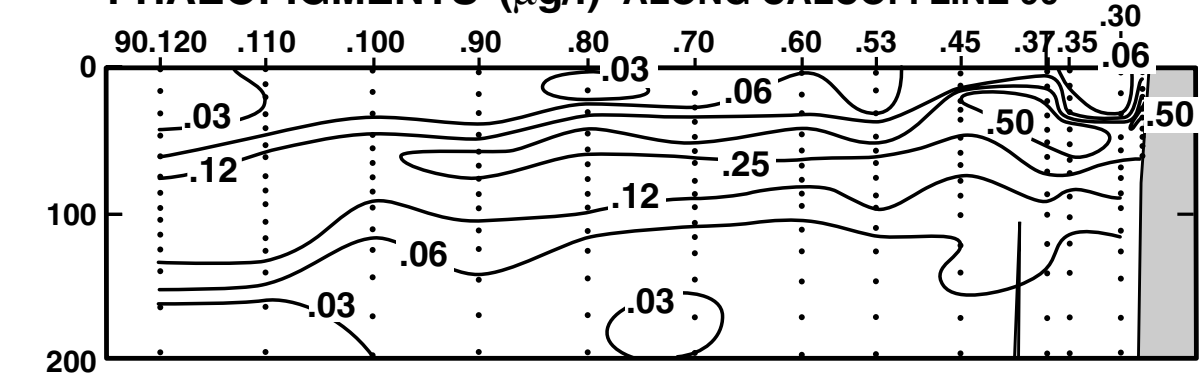


FIGURE 5K

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 49

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
35 5.4 N	120 46.7 W	30/10/00	0410 UTC	69 m	320 12 kn			1016.8 mb	14.7 C	12.3 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	14.86	14.86	33.547	24.883	305.9	0.000	6.17	107.2	1.7	0.30	0.6	0.05	4.14	0.71	0	
2		14.86	14.86	33.547	24.883	306.0	0.006	6.17	107.2	1.7	0.30	0.6	0.05	4.14	0.71	2	208
5		14.43	14.43	33.563	24.987	296.1	0.015	5.85	100.8	3.0	0.41	1.9	0.09	4.08	0.84	5	207
10	ISL	13.47	13.47	33.583	25.202	275.8	0.029	5.09	86.0	7.5	0.77	6.4	0.22	2.04	0.74	10	
11		13.30	13.30	33.587	25.239	272.3	0.032	4.95	83.3	8.4	0.84	7.3	0.24	1.57	0.72	11	206
20		13.18	13.18	33.587	25.264	270.2	0.057	4.84	81.3	9.1	0.90	7.9	0.25	1.11	0.59	20	205
30	ISL	13.19	13.19	33.586	25.261	270.7	0.084	4.85	81.4	9.1	0.89	7.9	0.25	1.13	0.62	30	
31		13.53 U		33.581 U			0.086	5.05 U	84.8 U	7.7 U	0.80 U	6.8 U	0.22 U	1.94 U	0.86 U	31	204
40		13.21	13.20	33.586	25.257	271.4	0.111	4.85	81.5	9.0	0.87	7.9	0.25	1.16	0.64	40	203
50	ISL	13.07	13.06	33.589	25.288	268.7	0.138	4.81	80.6	9.6	0.92	8.4	0.26	1.03	0.66	50	
51		13.06	13.05	33.589	25.290	268.6	0.140	4.81	80.6	9.7	0.92	8.4	0.26	1.02	0.66	51	202
59		12.57	12.56	33.603	25.397	258.6	0.162	4.52	74.9	14.4	1.21	10.1	0.30	1.17	3.39	59	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
35 1.5 N	120 55.2 W	30/10/00	0145 UTC	241 m	310 09 kn	310 06 08		1016.6 mb	14.7 C	12.8 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	13.73	13.73	33.422	25.024	292.5	0.000	5.92	100.4	7.3	0.59	4.3	0.16	2.36	0.98	0	
1		13.73	13.73	33.422	25.024	292.5	0.003	5.92	100.4	7.3	0.59	4.3	0.16	2.36	0.98	1	215
10		13.44	13.44	33.461	25.114	284.2	0.029	5.71	96.3	7.6	0.66	5.1	0.18	2.30	1.09	10	214
20		13.23	13.23	33.484	25.174	278.8	0.057	5.52	92.7	8.2	0.72	6.1	0.22	2.08	1.27	20	213
30	ISL	13.15	13.15	33.483	25.189	277.6	0.085	5.46	91.6	8.5	0.75	6.5	0.23	1.73	1.12	30	
32		13.13	13.13	33.487	25.197	276.9	0.090	5.45	91.3	8.6	0.75	6.6	0.23	1.64	1.07	32	212
41		12.67	12.66	33.513	25.307	266.6	0.115	5.10	84.7	10.2	0.91	9.0	0.24	1.07	0.86	41	211
50		12.08	12.07	33.546	25.447	253.6	0.138	4.57	75.0	12.0	1.10	12.0	0.19	0.52	0.46	50	210
61		11.76	11.75	33.569	25.525	246.4	0.166	4.33	70.5	13.2	1.20	13.6	0.15	0.30	0.33	61	209
70		11.09	11.08	33.631	25.695	230.3	0.187	3.88	62.3	16.3	1.40	16.8	0.03	0.12	0.21	70	208
75	ISL	11.04	11.03	33.653	25.722	227.9	0.199	3.84	61.6	16.8	1.43	17.1	0.03	0.10	0.19	75	
85		10.93	10.92	33.656	25.744	226.0	0.221	3.76	60.2	17.4	1.46	17.7	0.03	0.05	0.16	85	207
100	ISL	10.39	10.38	33.736	25.901	211.4	0.254	3.43	54.3	21.2	1.63	20.3	0.02	0.03	0.15	101	
101		10.35	10.34	33.742	25.912	210.3	0.256	3.41	53.9	21.5	1.64	20.5	0.02	0.03	0.15	102	206
120		9.81	9.80	33.832	26.074	195.2	0.295	3.08	48.2	25.5	1.81	23.2	0.02	0.02	0.14	121	205
125	ISL	9.73	9.72	33.851	26.103	192.6	0.304	2.93	45.7	26.3	1.84	23.7	0.03	0.02	0.20	126	
141		9.54	9.52	33.907	26.178	185.8	0.335	2.48	38.6	28.7	1.94	24.9	0.05	0.02	0.39	142	204
150	ISL	9.40	9.38	33.942	26.229	181.1	0.351	2.36	36.6	30.6	2.02	25.8	0.06	0.02	0.36	151	
171		9.08	9.06	34.017	26.339	171.0	0.388	2.18	33.6	35.2	2.21	27.8	0.08	0.01	0.28	172	203
197		8.76	8.74	34.077	26.437	162.1	0.432	1.79	27.4	40.4	2.39	29.6	0.15	0.01	0.27	198	202
200	ISL	8.73	8.71	34.081	26.445	161.4	0.436	1.77	27.1	40.8	2.40	29.8	0.15			201	
227		8.41	8.39	34.114	26.520	154.7	0.479	1.64	24.9	44.0	2.49	31.1	0.11			228	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 53.3 N	121 12.1 W	29/10/00	2155 UTC	569 m	300 06 kn	320 07 12	1	1017.2 mb	16.9 C	14.2 C	16m	3/8 CU

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	14.48	14.48	33.504	24.931	301.3	0.000	6.34	109.3	2.0	0.32	0.3	0.02	0.68	0.17	0	
1		14.48	14.48	33.504	24.931	301.3	0.003	6.34	109.3	2.0	0.32	0.3	0.02	0.68	0.17	1	220
10		14.08	14.08	33.504	25.016	293.6	0.030	6.32	108.1	1.5	0.28	0.3	0.01	1.26	0.30	10	219
19		13.41	13.41	33.500	25.150	281.0	0.056	5.97	100.7	3.4	0.46	2.2	0.09	3.77	0.83	19	218
20	ISL	13.21	13.21	33.500	25.190	277.2	0.058	5.84	98.1	4.2	0.53	3.2	0.11	3.56	0.82	20	
30	ISL	11.41	11.41	33.550	25.574	240.9	0.084	4.44	71.8	13.2	1.18	13.1	0.23	0.76	0.49	30	
31		11.24	11.24	33.560	25.612	237.3	0.087	4.29	69.1	14.1	1.25	14.1	0.24	0.41	0.44	31	217
39		11.04	11.04	33.656	25.723	226.9	0.105	3.78	60.7	17.7	1.44	17.1	0.20	0.34	0.25	39	216
50		10.80	10.79	33.700	25.800	219.8	0.130	3.51	56.1	19.9	1.56	18.9	0.06	0.10	0.27	50	215
61		10.59	10.58	33.720	25.853	215.1	0.154	3.41	54.2	20.9	1.61	19.7	0.04	0.10	0.25	61	214
69		10.46	10.45	33.758	25.905	210.3	0.171	3.26	51.7	22.4	1.68	20.8	0.04	0.09	0.22	69	213
75	ISL	10.37	10.36	33.776	25.935	207.6	0.183	3.18	50.3	23.1	1.72	21.3	0.03	0.08	0.22	75	
84		10.23	10.22	33.803	25.980	203.4	0.202	3.06	48.3	24.2	1.77	22.1	0.02	0.08	0.22	84	212
100	ISL	9.91	9.90	33.884	26.098	192.6	0.234	2.75	43.1	27.1	1.90	24.1	0.02	0.08	0.30	101	
101		9.89	9.88	33.889	26.105	191.9	0.235	2.73	42.8	27.3	1.91	24.2	0.02	0.08	0.30	102	211
120		9.82	9.81	33.907	26.131	189.8	0.272	2.67	41.8	28.0	1.95	24.6	0.01	0.04	0.20	121	210
125	ISL	9.81	9.80	33.909	26.135	189.6	0.281	2.66	41.6	28.1	1.95	24.6	0.01	0.04	0.22	126	
141		9.79	9.77	33.915	26.143	189.2	0.311	2.64	41.3	28.3	1.95	24.8	0.01	0.06	0.27	142	209
150	ISL	9.75	9.73	33.928	26.160	187.7	0.328	2.60	40.6	28.7	1.96	25.0	0.01	0.06	0.23	151	
170		9.67	9.65	33.956	26.196	184.8	0.366	2.49	38.8	29.7	2.02	25.6	0.01	0.04	0.11	171	208
199		8.51	8.49	34.006	26.420	163.7	0.416	2.39	36.3	36.3	2.17	29.2	0.02	0.03	0.14	200	207
200	ISL	8.50	8.48	34.010	26.424	163.2	0.418	2.38	36.2	36.4	2.17	29.3	0.02			201	
230		8.31	8.29	34.076	26.506	156.0	0.466	2.00	30.3	40.5	2.32	30.4	0.03			231	206
250	ISL	8.12	8.09	34.115	26.565	150.7	0.496	1.69	25.5	44.4	2.45	31.6	0.10			252	
269		7.90	7.87	34.140	26.617	146.0	0.525	1.45	21.8	48.1	2.56	32.7	0.15			271	205
300	ISL	7.44	7.41	34.125	26.672	141.0	0.569	1.47	21.8	51.5	2.61	33.7	0.09			302	
319		7.18	7.15	34.115	26.701	138.4	0.596	1.50	22.1	53.5	2.63	34.3	0.04			321	204
377		6.88	6.84	34.208	26.816	128.2	0.673	0.72	10.6	65.8	2.96	37.0	0.02			380	203
400	ISL	6.66	6.62	34.219	26.855	124.8	0.702	0.61	8.9	69.2	3.02	37.8	0.02			403	
436		6.31	6.27	34.229	26.909	119.8	0.746	0.52	7.5	73.7	3.09	38.8	0.02			439	202
500	ISL	5.92	5.88	34.272	26.993	112.4	0.820	0.31	4.4	82.3	3.21	40.0	0.02			504	
516		5.82	5.78	34.283	27.014	110.5	0.838	0.26	3.7	84.5	3.24	40.3	0.02			520	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 43.5 N	121 32.8 W	29/10/00	1733 UTC	920 m	230 04 kn	300 08 14	1	1018.1 mb	16.6 C	14.3 C	12m	7/8	AC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.05	15.05	33.462	24.776	316.1	0.000	6.03	105.1	2.3	0.28	0.1	0.00	0.99	0.43	0	
2	A	15.05	15.05	33.462	24.776	316.1	0.006	6.03	105.1	2.3	0.28	0.1	0.00	0.99	0.43	2	222
8	A	14.98	14.98	33.462	24.792	314.8	0.025	6.07	105.7	2.3	0.28	0.1	0.00	1.03	0.48	8	221
10	ISL	14.97	14.97	33.462	24.794	314.7	0.032	6.06	105.5	2.3	0.28	0.1	0.00	1.09	0.51	10	
16	A	14.93	14.93	33.463	24.804	314.0	0.050	6.04	105.0	2.4	0.29	0.1	0.00	1.25	0.58	16	220
20	ISL	14.90	14.90	33.465	24.812	313.3	0.063	6.05	105.1	2.4	0.29	0.1	0.00	1.22	0.57	20	
25	A	14.87	14.87	33.467	24.820	312.7	0.079	6.07	105.4	2.3	0.29	0.1	0.01	1.19	0.55	25	219
30	ISL	14.65	14.65	33.470	24.870	308.1	0.094	5.97	103.2	2.7	0.34	0.6	0.07	1.10	0.57	30	
33	A	14.46	14.46	33.471	24.911	304.2	0.103	5.89	101.5	3.0	0.39	1.1	0.12	1.06	0.59	33	218
41		13.79	13.78	33.467	25.048	291.4	0.127	5.65	96.0	6.2	0.60	4.1	0.32	1.18	0.90	41	217
47	A	13.56	13.55	33.464	25.093	287.3	0.144	5.61	94.9	6.6	0.64	4.6	0.32	0.99	0.86	47	216
50	ISL	13.08	13.07	33.421	25.156	281.3	0.153	5.56	93.1	6.7	0.69	5.4	0.30	0.81	0.73	50	
55		12.11	12.10	33.352	25.290	268.5	0.167	5.43	89.0	7.4	0.80	7.3	0.26	0.49	0.48	55	215
61		11.22	11.21	33.344	25.448	253.6	0.182	5.16	83.0	9.5	0.99	10.6	0.09	0.27	0.34	61	214
72		10.42	10.41	33.509	25.718	228.1	0.209	4.48	70.9	14.9	1.36	16.4	0.01	0.12	0.16	72	213
75	ISL	10.24	10.23	33.531	25.766	223.6	0.216	4.38	69.0	15.9	1.40	17.2	0.01	0.10	0.13	75	
83		9.85	9.84	33.585	25.874	213.4	0.233	4.14	64.7	18.6	1.49	18.8	0.01	0.05	0.09	83	212
98		9.48	9.47	33.772	26.082	194.0	0.264	3.32	51.5	25.3	1.79	23.7	0.00	0.01	0.07	98	211
100	ISL	9.46	9.45	33.787	26.097	192.6	0.268	3.25	50.4	25.8	1.82	24.1	0.00	0.01	0.07	101	
119		9.26	9.25	33.878	26.200	183.1	0.303	2.81	43.4	29.3	1.98	26.3	0.00	0.01	0.07	120	210
125	ISL	9.15	9.14	33.903	26.238	179.7	0.314	2.73	42.1	30.4	2.02	26.9	0.00	0.01	0.07	126	
140		8.86	8.85	33.956	26.325	171.6	0.341	2.60	39.8	33.0	2.09	28.0	0.00	0.01	0.07	141	209
150	ISL	8.71	8.69	33.982	26.369	167.6	0.357	2.49	38.0	34.6	2.14	28.7	0.00	0.01	0.06	151	
170		8.45	8.43	34.020	26.439	161.2	0.390	2.30	34.9	37.4	2.22	29.8	0.00	0.00	0.05	171	208
199		8.18	8.16	34.050	26.504	155.5	0.436	2.11	31.9	40.6	2.31	31.0	0.00	0.01	0.05	200	207
200	ISL	8.17	8.15	34.051	26.507	155.3	0.438	2.10	31.7	40.8	2.32	31.1	0.00			201	
229		7.73	7.71	34.071	26.587	148.0	0.482	1.80	26.9	45.8	2.46	32.8	0.00			230	206
250	ISL	7.47	7.45	34.073	26.626	144.5	0.513	1.75	26.0	48.4	2.51	33.5	0.00			252	
268		7.26	7.23	34.072	26.656	141.9	0.538	1.73	25.6	50.5	2.54	34.0	0.00			270	205
300	ISL	6.84	6.81	34.072	26.714	136.7	0.583	1.58	23.1	55.6	2.63	35.4	0.00			302	
318		6.63	6.60	34.076	26.745	133.8	0.607	1.47	21.4	58.5	2.69	36.2	0.00			320	204
379		6.41	6.38	34.132	26.819	127.6	0.687	1.03	14.9	65.3	2.88	37.9	0.00			382	203
400	ISL	6.29	6.25	34.159	26.856	124.3	0.713	0.84	12.1	68.8	2.96	38.7	0.00			403	
435		6.06	6.02	34.202	26.919	118.6	0.756	0.56	8.1	74.9	3.08	39.9	0.00			438	202
500	ISL	5.58	5.54	34.241	27.010	110.4	0.830	0.40	5.7	84.2	3.19	41.5	0.00			504	
519		5.44	5.40	34.253	27.037	108.0	0.851	0.35	5.0	86.9	3.22	42.0	0.00			523	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 23.3 N	122 14.6 W	29/10/00	1104 UTC	4020 m	300 07 kn			1016.6 mb	15.0 C	13.8 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.27	15.27	33.476	24.739	319.6	0.000	5.97	104.5	2.7	0.27	0.0	0.00	1.47	0.68	0	
2		15.27	15.27	33.476	24.739	319.7	0.006	5.97	104.5	2.7	0.27	0.0	0.00	1.47	0.68	2	220
10		15.26	15.26	33.476	24.742	319.7	0.032	5.99	104.9	2.7	0.27	0.1	0.00	1.49	0.72	10	219
20		14.83	14.83	33.473	24.833	311.3	0.064	5.90	102.4	3.6	0.36	0.8	0.09	1.84	0.90	20	218
30		14.18	14.18	33.451	24.954	300.0	0.094	5.83	99.8	4.9	0.48	2.3	0.24	1.18	0.92	30	217
40		12.29	12.28	33.328	25.237	273.2	0.123	5.41	89.0	6.6	0.72	6.1	0.22	0.47	0.34	40	216
49		11.14	11.13	33.404	25.509	247.5	0.146	4.89	78.5	10.3	1.03	11.2	0.03	0.15	0.22	49	215
50	ISL	11.09	11.08	33.409	25.522	246.3	0.149	4.88	78.3	10.5	1.04	11.3	0.03	0.15	0.21	50	
60		10.76	10.75	33.427	25.595	239.6	0.173	4.78	76.1	11.6	1.11	12.6	0.03	0.10	0.16	60	214
70		10.14	10.13	33.405	25.685	231.2	0.196	4.90	77.0	12.6	1.15	13.4	0.03	0.08	0.16	70	213
75	ISL	10.07	10.06	33.456	25.736	226.4	0.208	4.74	74.4	14.0	1.24	14.7	0.02	0.07	0.14	75	
86		9.91	9.90	33.567	25.850	215.8	0.232	4.19	65.6	17.7	1.47	18.3	0.01	0.06	0.09	86	212
100	ISL	9.82	9.81	33.697	25.967	205.0	0.262	3.60	56.3	22.0	1.69	21.8	0.01	0.03	0.08	101	
101		9.81	9.80	33.705	25.975	204.2	0.264	3.56	55.6	22.3	1.70	22.0	0.01	0.03	0.08	102	211
119		9.39	9.38	33.817	26.132	189.6	0.299	3.18	49.3	26.3	1.84	24.3	0.00	0.01	0.06	120	210
125	ISL	9.24	9.23	33.856	26.187	184.5	0.310	3.04	47.0	28.0	1.90	25.2	0.00	0.01	0.06	126	
148		8.74	8.72	33.978	26.361	168.3	0.351	2.55	39.0	34.0	2.10	28.3	0.00	0.01	0.05	149	209
150	ISL	8.71	8.69	33.984	26.371	167.4	0.354	2.52	38.5	34.4	2.11	28.5	0.00	0.01	0.05	151	
169		8.44	8.42	34.027	26.446	160.5	0.385	2.31	35.1	37.3	2.21	29.7	0.00	0.00	0.04	170	208
197		8.15	8.13	34.063	26.519	154.1	0.430	2.10	31.7	41.1	2.32	30.8	0.00	0.00	0.05	198	207
200	ISL	8.10	8.08	34.061	26.525	153.6	0.434	2.11	31.8	41.4	2.32	30.9	0.00			201	
228		7.64	7.62	34.042	26.578	148.8	0.476	2.15	32.1	44.2	2.36	31.9	0.00			229	206
250	ISL	7.41	7.39	34.057	26.622	144.8	0.509	1.96	29.1	47.3	2.45	33.0	0.00			252	
268		7.25	7.22	34.074	26.658	141.6	0.535	1.75	25.9	50.1	2.53	33.9	0.00			270	205
300	ISL	6.86	6.83	34.077	26.715	136.6	0.579	1.52	22.3	55.4	2.65	35.5	0.00			302	
316		6.67	6.64	34.078	26.741	134.2	0.601	1.42	20.7	58.1	2.71	36.2	0.00			318	204
377		6.26	6.23	34.122	26.830	126.3	0.680	1.01	14.6	66.8	2.90	38.4	0.00			379	203
400	ISL	6.10	6.06	34.142	26.867	123.1	0.709	0.86	12.4	70.3	2.97	39.2	0.00			403	
435		5.86	5.82	34.172	26.921	118.2	0.751	0.66	9.4	75.5	3.06	40.3	0.00			438	202
500	ISL	5.54	5.50	34.216	26.995	111.7	0.826	0.47	6.7	83.4	3.16	41.6	0.00			504	
522		5.43	5.39	34.231	27.021	109.5	0.850	0.40	5.7	86.1	3.20	42.0	0.00			526	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 3.2 N	122 56.2 W	29/10/00	0505 UTC	4237 m	210 20 kn			1017.2 mb	17.3 C	15.6 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.34	16.34	33.433	24.466	345.6	0.000	5.70	101.9	2.4	0.29	0.1	0.00	0.32	0.09	0	
2		16.34	16.34	33.433	24.466	345.7	0.007	5.70	101.9	2.4	0.29	0.1	0.00	0.32	0.09	2	220
10	ISL	16.34	16.34	33.434	24.467	345.8	0.035	5.70	101.9	2.4	0.29	0.1	0.00	0.33	0.09	10	
16		16.34	16.34	33.434	24.467	346.0	0.055	5.70	101.9	2.4	0.29	0.1	0.00	0.33	0.09	16	219
20	ISL	16.32	16.32	33.432	24.470	345.8	0.069	5.70	101.9	2.4	0.29	0.1	0.00	0.34	0.10	20	
30		16.26	16.26	33.428	24.482	345.1	0.104	5.70	101.8	2.4	0.29	0.1	0.00	0.37	0.11	30	218
45		12.16	12.15	33.192	25.157	281.0	0.151	5.87	96.2	5.8	0.59	3.7	0.27	0.50	0.38	45	217
50	ISL	11.52	11.51	33.242	25.315	266.0	0.164	5.60	90.6	7.2	0.74	6.4	0.15	0.39	0.34	50	
55		11.11	11.10	33.311	25.443	254.0	0.177	5.28	84.7	8.6	0.90	9.2	0.02	0.27	0.28	55	216
65		10.55	10.54	33.415	25.622	237.0	0.202	4.87	77.2	11.7	1.13	12.9	0.02	0.15	0.18	65	215
75		10.01	10.00	33.491	25.774	222.8	0.225	4.53	71.0	15.4	1.32	16.1	0.01	0.08	0.09	75	214
85		9.70	9.69	33.476	25.814	219.1	0.247	4.63	72.1	15.6	1.31	16.1	0.01	0.07	0.08	85	213
96		9.64	9.63	33.507	25.848	216.1	0.271	4.51	70.1	16.8	1.37	17.0	0.01	0.05	0.07	96	212
100	ISL	9.61	9.60	33.525	25.867	214.4	0.280	4.44	69.0	17.4	1.40	17.5	0.01	0.05	0.07	100	
110		9.52	9.51	33.598	25.939	207.7	0.301	4.15	64.4	19.7	1.52	19.5	0.01	0.04	0.06	111	211
124		9.38	9.37	33.793	26.115	191.4	0.329	3.29	51.0	25.8	1.80	23.9	0.01	0.01	0.05	125	210
125	ISL	9.37	9.36	33.803	26.124	190.5	0.330	3.24	50.2	26.1	1.82	24.1	0.01	0.01	0.05	126	
145		9.10	9.08	33.946	26.280	176.1	0.367	2.58	39.7	31.5	2.06	27.3	0.00	0.00	0.05	146	209
150	ISL	9.03	9.01	33.967	26.307	173.5	0.376	2.49	38.3	32.5	2.10	27.8	0.00	0.00	0.05	151	
168		8.79	8.77	34.015	26.383	166.6	0.407	2.29	35.0	35.2	2.18	29.0	0.00	0.00	0.05	169	208
200	ISL	8.41	8.39	34.041	26.463	159.6	0.459	2.24	34.0	38.0	2.24	29.9	0.00	0.00	0.05	201	
202		8.39	8.37	34.042	26.466	159.3	0.462	2.24	34.0	38.2	2.24	29.9	0.00	0.00	0.05	203	207
228		8.09	8.07	34.078	26.540	152.6	0.502	1.92	28.9	42.4	2.38	31.6	0.00			229	206
250	ISL	7.72	7.70	34.080	26.596	147.5	0.535	1.85	27.6	45.7	2.45	32.5	0.00			251	
267		7.44	7.41	34.077	26.634	144.0	0.560	1.81	26.9	48.3	2.49	33.1	0.00			269	205
300	ISL	7.07	7.04	34.092	26.698	138.3	0.607	1.47	21.6	53.8	2.62	34.6	0.00			302	
319		6.91	6.88	34.103	26.729	135.6	0.633	1.26	18.5	57.0	2.69	35.5	0.00			321	204
377		6.46	6.43	34.136	26.815	127.9	0.709	1.00	14.5	65.0	2.87	37.8	0.00			379	203
400	ISL	6.38	6.34	34.167	26.851	124.9	0.738	0.82	11.9	68.1	2.95	38.5	0.00			403	
432		6.26	6.22	34.208	26.899	120.7	0.778	0.58	8.4	72.5	3.05	39.3	0.00			435	202
500	ISL	5.55	5.51	34.218	26.996	111.7	0.857	0.42	6.0	84.2	3.16	41.5	0.00			503	
521		5.33	5.29	34.222	27.025	108.9	0.880	0.37	5.2	87.8	3.20	42.2	0.00			525	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 43.5 N	123 37.9 W	28/10/00	2327 UTC	4194 m	200 13 kn	300 04 08	1	1017.1 mb	18.8 C	14.9 C	19m	7/8 SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.25	16.25	33.288	24.375	354.3	0.000	5.76	102.7	3.4	0.32	0.1	0.00	0.20	0.04	0	
1		16.25	16.25	33.288	24.375	354.3	0.004	5.76	102.7	3.4	0.32	0.1	0.00	0.20	0.04	1	220
10		16.24	16.24	33.288	24.378	354.3	0.035	5.74	102.4	3.4	0.32	0.1	0.00	0.20	0.04	10	219
20		15.81	15.81	33.332	24.509	342.1	0.070	5.81	102.8	3.3	0.32	0.0	0.00	0.34	0.07	20	218
29		14.85	14.85	33.282	24.682	325.9	0.100	6.00	104.1	3.5	0.32	0.0	0.00	0.34	0.12	29	217
30	ISL	14.66	14.66	33.271	24.714	322.9	0.104	6.03	104.2	3.5	0.32	0.0	0.00	0.33	0.12	30	
40		12.84	12.83	33.195	25.028	293.2	0.134	6.26	104.1	4.1	0.34	0.1	0.01	0.27	0.17	40	216
50		12.08	12.07	33.222	25.195	277.5	0.163	6.01	98.4	5.1	0.48	1.8	0.10	0.27	0.21	50	215
61		11.22	11.21	33.333	25.440	254.4	0.192	5.31	85.4	9.0	0.95	10.0	0.02	0.17	0.27	61	214
70		10.53	10.52	33.379	25.598	239.5	0.214	5.11	81.0	10.9	1.09	12.2	0.02	0.09	0.12	70	213
75	ISL	10.13	10.12	33.377	25.665	233.2	0.226	5.07	79.6	11.4	1.12	12.4	0.02	0.08	0.13	75	
86		9.56	9.55	33.430	25.801	220.4	0.251	4.98	77.3	13.7	1.17	13.7	0.01	0.07	0.14	86	212
100	ISL	9.98	9.97	33.770	25.997	202.1	0.281	3.18	49.9	23.2	1.77	22.5	0.02	0.04	0.08	100	
101		10.02	10.01	33.796	26.011	200.9	0.283	3.05	47.9	23.9	1.82	23.2	0.02	0.04	0.08	101	211
120		9.47	9.46	33.924	26.202	183.0	0.319	2.64	41.0	29.2	2.01	26.1	0.01	0.01	0.05	121	210
125	ISL	9.38	9.37	33.949	26.237	179.8	0.328	2.55	39.5	30.2	2.05	26.5	0.01	0.01	0.05	126	
139		9.21	9.19	34.006	26.309	173.2	0.353	2.33	36.0	32.4	2.13	27.4	0.01	0.00	0.07	140	209
150	ISL	9.13	9.11	34.034	26.344	170.1	0.372	2.23	34.4	33.6	2.17	27.9	0.01	0.00	0.07	151	
169		9.02	9.00	34.067	26.388	166.3	0.404	2.09	32.2	35.2	2.23	28.6	0.00	0.00	0.05	170	208
198		8.83	8.81	34.115	26.456	160.4	0.451	1.83	28.0	38.0	2.34	29.8	0.00	0.00	0.05	199	207
200	ISL	8.82	8.80	34.118	26.460	160.1	0.454	1.81	27.7	38.2	2.35	29.9	0.00			201	
226		8.69	8.67	34.151	26.506	156.1	0.495	1.63	24.9	40.3	2.43	30.7	0.00			227	206
250	ISL	8.59	8.56	34.177	26.542	153.1	0.533	1.48	22.6	42.1	2.50	31.2	0.00			251	
266		8.51	8.48	34.191	26.566	151.1	0.557	1.38	21.0	43.4	2.54	31.6	0.00			268	205
300	ISL	8.25	8.22	34.214	26.624	146.1	0.607	1.18	17.9	47.2	2.64	32.7	0.00			302	
319		8.09	8.06	34.224	26.656	143.3	0.635	1.07	16.1	49.4	2.69	33.3	0.00			321	204
379		7.66	7.62	34.248	26.739	136.3	0.719	0.80	11.9	55.3	2.83	35.0	0.00			381	203
400	ISL	7.20	7.16	34.199	26.766	133.7	0.747	0.89	13.1	58.7	2.85	36.1	0.00			403	
435		6.41	6.37	34.122	26.812	129.1	0.793	1.05	15.2	64.7	2.87	37.9	0.00			438	202
500	ISL	5.89	5.85	34.152	26.902	120.9	0.874	0.74	10.6	74.3	3.03	39.9	0.00			503	
513		5.79	5.75	34.159	26.920	119.3	0.890	0.68	9.7	76.2	3.06	40.3	0.00			517	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 77 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 23.4 N	124 19.0 W	28/10/00	1755 UTC	4580 m	240 12 kn	330 05 08	1	1019.2 mb	19.8 C	12.2 C	31m	2/8	AC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.68	17.68	33.299	24.048	385.4	0.000	5.52	101.3	3.4	0.30	0.2	0.00	0.15	0.03	0	
1	A	17.68	17.68	33.299	24.048	385.5	0.004	5.52	101.3	3.4	0.30	0.2	0.00	0.15	0.03	1	222
10		17.67	17.67	33.296	24.049	385.7	0.039	5.56	102.0	3.3	0.30	0.1	0.00	0.15	0.03	10	221
18	A	17.65	17.65	33.295	24.053	385.6	0.069	5.53	101.4	3.3	0.30	0.1	0.00	0.15	0.03	18	220
20	ISL	17.65	17.65	33.295	24.053	385.6	0.077	5.53	101.4	3.3	0.30	0.1	0.00	0.15	0.03	20	
30		17.64	17.63	33.295	24.056	385.7	0.116	5.57	102.1	3.3	0.30	0.0	0.00	0.15	0.04	30	219
41	A	17.37	17.36	33.262	24.096	382.3	0.158	5.60	102.1	3.3	0.30	0.0	0.00	0.18	0.05	41	218
50	ISL	16.10	16.09	33.275	24.401	353.4	0.191	6.05	107.6	3.5	0.28	0.0	0.00	0.23	0.08	50	
52		15.74	15.73	33.276	24.483	345.6	0.198	6.16	108.7	3.6	0.28	0.0	0.00	0.24	0.09	52	217
63	A	13.75	13.74	33.183	24.837	312.0	0.234	6.33	107.3	4.0	0.30	0.0	0.00	0.27	0.15	63	216
75		12.67	12.66	33.140	25.019	294.9	0.271	6.35	105.2	4.3	0.33	0.0	0.00	0.27	0.19	75	215
86	A	12.11	12.10	33.255	25.216	276.4	0.302	6.00	98.3	4.6	0.39	0.3	0.08	0.25	0.19	86	214
97		11.43	11.42	33.251	25.339	264.8	0.332	5.78	93.3	5.6	0.53	2.4	0.20	0.19	0.20	97	213
100	ISL	11.20	11.19	33.256	25.385	260.5	0.340	5.70	91.6	6.1	0.60	3.6	0.16	0.18	0.20	100	
110		10.43	10.42	33.287	25.544	245.4	0.365	5.53	87.4	7.8	0.79	7.3	0.02	0.14	0.17	110	212
118	A	9.93	9.92	33.322	25.656	234.9	0.384	5.60	87.5	8.6	0.83	8.5	0.01	0.10	0.14	119	211
125	ISL	9.67	9.66	33.321	25.698	230.9	0.401	5.60	87.0	8.9	0.85	8.7	0.01	0.08	0.12	126	
131		9.51	9.50	33.327	25.729	228.1	0.414	5.60	86.7	9.2	0.86	9.1	0.01	0.06	0.10	132	210
143		9.22	9.20	33.437	25.862	215.6	0.441	5.28	81.3	12.8	1.05	12.3	0.00	0.03	0.04	144	209
150	ISL	9.17	9.15	33.534	25.946	207.8	0.456	5.05	77.7	14.9	1.15	14.1	0.00	0.02	0.03	151	
168		9.10	9.08	33.777	26.148	189.0	0.491	4.37	67.2	20.8	1.40	18.7	0.00	0.00	0.02	169	208
197		8.66	8.64	33.939	26.344	170.8	0.544	3.11	47.4	32.0	1.94	26.4	0.00	0.00	0.01	198	207
200	ISL	8.62	8.60	33.946	26.356	169.8	0.549	3.11	47.4	32.2	1.93	26.4	0.00			201	
227		8.28	8.26	33.981	26.435	162.6	0.594	3.38	51.1	33.5	1.87	25.9	0.00			228	206
250	ISL	7.91	7.88	33.997	26.503	156.4	0.630	3.10	46.5	37.9	2.00	27.8	0.00			251	
266		7.64	7.61	34.004	26.548	152.3	0.655	2.81	41.9	41.6	2.13	29.5	0.00			267	205
300	ISL	7.05	7.02	34.011	26.637	144.1	0.705	2.38	35.0	48.4	2.33	32.2	0.00			302	
316		6.79	6.76	34.014	26.675	140.6	0.728	2.20	32.1	51.5	2.42	33.3	0.00			318	204
379		6.18	6.15	34.051	26.784	130.6	0.814	1.54	22.2	63.3	2.72	37.0	0.00			381	203
400	ISL	6.02	5.99	34.061	26.813	128.1	0.841	1.37	19.7	66.5	2.79	37.9	0.00			403	
440		5.76	5.72	34.084	26.864	123.6	0.891	1.09	15.6	72.4	2.91	39.3	0.00			443	202
500	ISL	5.40	5.36	34.139	26.951	115.7	0.963	0.74	10.5	81.9	3.06	41.3	0.00			503	
511		5.33	5.29	34.149	26.967	114.3	0.975	0.68	9.6	83.7	3.09	41.7	0.00			514	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 27.4 N	120 31.6 W	26/10/00	1749 UTC	71 m	180 14 kn	260 04 13	6	1011.0 mb	15.9 C	14.8 C	15m	8/8	NS

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.67	16.67	33.595	24.514	341.0	0.000	5.83	105.0	1.1	0.27	0.1	0.00	0.38	0.11	0	
1	A	16.67	16.67	33.595	24.514	341.1	0.003	5.83	105.0	1.1	0.27	0.1	0.00	0.38	0.11	1	208
9	A	16.55	16.55	33.611	24.555	337.5	0.031	5.88	105.7	1.1	0.29	0.0	0.00	0.55	0.17	9	207
10	ISL	16.47	16.47	33.611	24.573	335.7	0.034	5.88	105.5	1.2	0.30	0.0	0.00	0.71	0.20	10	
20	A	15.40	15.40	33.598	24.805	314.0	0.066	5.70	100.1	3.0	0.42	1.4	0.08	2.14	0.53	20	206
30	ISL	14.20	14.20	33.582	25.051	290.8	0.097	5.27	90.4	6.1	0.66	4.4	0.25	1.69	0.62	30	
31	A	14.08	14.08	33.580	25.075	288.6	0.100	5.22	89.3	6.5	0.69	4.8	0.27	1.64	0.63	31	205
41	A	12.84	12.83	33.567	25.316	265.8	0.127	4.73	78.8	9.8	0.96	9.1	0.26	0.93	0.45	41	204
49		12.79	12.78	33.571	25.329	264.8	0.148	4.75	79.1	10.0	0.97	9.4	0.24	1.05	0.55	49	203
50	ISL	12.78	12.77	33.573	25.333	264.4	0.151	4.73	78.7	10.0	0.98	9.5	0.24	1.06	0.56	50	
58	A	12.66	12.65	33.589	25.369	261.2	0.172	4.61	76.6	11.3	1.04	10.1	0.19	1.13	0.61	58	202
65		12.02	12.01	33.610	25.508	248.1	0.190	4.20	68.8	14.6	1.26	13.0	0.15	0.69	1.10	65	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 80 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 19.0 N	120 47.7 W	26/10/00	2124 UTC	751 m	220 10 kn	260 05 08	5	1009.6 mb	14.9 C	13.9 C	08m	8/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	14.42	14.42	33.565	24.991	295.6	0.000	6.76	116.4	1.2	0.19	0.1	0.01	3.04	0.32	0	
2		14.42	14.42	33.565	24.991	295.7	0.006	6.76	116.4	1.2	0.19	0.1	0.01	3.04	0.32	2	220
9		13.76	13.76	33.583	25.143	281.4	0.026	6.80	115.6	1.2	0.21	0.1	0.01	8.99	0.49	9	219
10	ISL	13.62	13.62	33.587	25.175	278.4	0.029	6.62	112.2	2.0	0.28	0.9	0.03	8.52	0.58	10	
19		12.26	12.26	33.630	25.477	249.9	0.053	4.65	76.6	11.5	1.05	10.7	0.17	1.50	1.19	19	218
20	ISL	12.08	12.08	33.634	25.514	246.4	0.055	4.52	74.2	12.4	1.11	11.6	0.17	1.40	1.14	20	
30		10.60	10.60	33.697	25.833	216.3	0.078	3.61	57.4	19.5	1.56	18.9	0.16	0.41	0.42	30	217
39		10.40	10.40	33.779	25.931	207.1	0.097	3.16	50.1	22.8	1.72	21.2	0.06	0.18	0.39	39	216
50		10.05	10.04	33.844	26.042	196.8	0.120	2.91	45.8	25.9	1.84	23.1	0.04	0.06	0.15	50	215
60		9.96	9.95	33.865	26.074	194.0	0.139	2.84	44.6	26.4	1.88	23.6	0.04	0.06	0.15	60	214
71		9.93	9.92	33.873	26.085	193.1	0.160	2.90	45.5	26.9	1.89	23.8	0.03	0.08	0.13	71	213
75	ISL	9.89	9.88	33.884	26.101	191.7	0.168	2.84	44.5	27.3	1.91	24.1	0.03	0.08	0.13	75	
86		9.76	9.75	33.920	26.151	187.2	0.189	2.62	41.0	28.6	1.96	24.9	0.02	0.08	0.15	86	212
98		9.66	9.65	33.951	26.192	183.6	0.211	2.52	39.3	29.5	2.01	25.5	0.02	0.05	0.15	99	211
100	ISL	9.65	9.64	33.955	26.197	183.2	0.215	2.51	39.1	29.6	2.02	25.6	0.02	0.05	0.15	101	
120		9.51	9.50	34.002	26.257	177.8	0.251	2.34	36.4	31.4	2.09	26.4	0.02	0.04	0.15	121	210
125	ISL	9.44	9.43	34.019	26.282	175.6	0.260	2.27	35.3	32.2	2.12	26.8	0.02	0.03	0.14	126	
138		9.28	9.26	34.060	26.340	170.3	0.282	2.10	32.5	34.1	2.19	27.8	0.02	0.02	0.12	139	209
150	ISL	9.26	9.24	34.084	26.362	168.4	0.303	2.05	31.7	34.8	2.21	28.2	0.02	0.02	0.13	151	
169		9.17	9.15	34.097	26.387	166.4	0.334	1.98	30.6	35.6	2.25	28.5	0.02	0.03	0.17	170	208
198		8.35	8.33	34.063	26.489	157.0	0.381	2.36	35.8	38.4	2.21	29.0	0.04	0.03	0.22	199	207
200	ISL	8.32	8.30	34.064	26.494	156.5	0.384	2.35	35.6	38.7	2.22	29.1	0.04			201	
229		8.03	8.01	34.096	26.563	150.4	0.429	2.03	30.5	42.9	2.35	30.8	0.06			230	206
250	ISL	7.92	7.89	34.135	26.610	146.3	0.460	1.68	25.2	46.2	2.49	32.0	0.07			252	
267		7.84	7.81	34.162	26.644	143.4	0.485	1.42	21.3	48.6	2.59	32.9	0.08			269	205
300	ISL	7.56	7.53	34.163	26.685	139.9	0.531	1.28	19.1	51.8	2.66	34.0	0.10			302	
317		7.41	7.38	34.158	26.703	138.4	0.555	1.25	18.5	53.3	2.68	34.5	0.11			319	204
377		7.05	7.01	34.204	26.790	130.9	0.636	0.85	12.5	60.5	2.86	36.4	0.08			380	203
400	ISL	6.92	6.88	34.219	26.820	128.3	0.666	0.74	10.9	63.0	2.92	37.0	0.06			403	
439		6.70	6.66	34.241	26.867	124.2	0.715	0.60	8.8	67.1	3.00	38.0	0.02			442	202
500	ISL	6.38	6.33	34.263	26.927	119.1	0.789	0.45	6.5	72.8	3.09	39.1	0.00			504	
518		6.29	6.24	34.270	26.945	117.7	0.810	0.41	5.9	74.5	3.12	39.4	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 80 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
34 8.7 N	121 9.1 W	27/10/00	0143 UTC	2193 m	240 12 kn	260 07 09	1	1008.7 mb	16.1 C	13.8 C		4/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.06	17.06	33.516	24.362	355.5	0.000	5.65	102.5	2.3	0.28	0.1	0.00	0.29	0.07	0	
1		17.06	17.06	33.516	24.362	355.5	0.004	5.65	102.5	2.3	0.28	0.1	0.00	0.29	0.07	1	220
10	ISL	17.06	17.06	33.517	24.364	355.7	0.036	5.65	102.5	2.2	0.28	0.1	0.00	0.30	0.07	10	
15		17.06	17.06	33.517	24.364	355.9	0.053	5.65	102.5	2.2	0.28	0.1	0.00	0.31	0.07	15	219
20	ISL	17.02	17.02	33.515	24.372	355.3	0.071	5.65	102.4	2.2	0.28	0.1	0.00	0.33	0.21	20	
30	ISL	16.93	16.93	33.511	24.390	353.8	0.107	5.66	102.4	2.2	0.29	0.1	0.00	0.42	0.48	30	
31		16.92	16.91	33.511	24.393	353.7	0.110	5.66	102.4	2.2	0.29	0.1	0.00	0.43	0.51	31	218
45		12.66	12.65	33.253	25.108	285.7	0.155	5.86	97.1	5.2	0.55	3.1	0.27	0.72	0.47	45	217
50	ISL	11.89	11.88	33.211	25.222	274.9	0.169	5.78	94.2	5.9	0.60	4.0	0.20	0.60	0.45	50	
55		11.39	11.38	33.203	25.308	266.8	0.182	5.70	91.9	6.7	0.68	5.3	0.10	0.43	0.43	55	216
64		10.86	10.85	33.349	25.517	247.1	0.206	5.14	82.0	9.6	0.98	10.5	0.02	0.21	0.24	64	215
72		10.47	10.46	33.389	25.616	237.8	0.225	4.99	79.0	11.3	1.07	12.0	0.02	0.16	0.25	72	214
75	ISL	10.35	10.34	33.386	25.634	236.1	0.232	4.99	78.8	11.4	1.07	12.1	0.02	0.15	0.24	75	
83		10.15	10.14	33.390	25.672	232.7	0.251	4.98	78.3	12.0	1.10	12.5	0.01	0.14	0.19	83	213
96		10.26	10.25	33.567	25.791	221.7	0.280	4.22	66.5	16.6	1.39	17.1	0.01	0.09	0.13	96	212
100	ISL	10.22	10.21	33.609	25.831	218.0	0.289	4.02	63.4	17.9	1.47	18.3	0.01	0.07	0.11	100	
110		9.97	9.96	33.700	25.944	207.4	0.310	3.61	56.6	21.4	1.64	21.1	0.01	0.04	0.07	111	211
124		9.31	9.30	33.827	26.153	187.7	0.338	3.20	49.5	26.9	1.85	24.5	0.01	0.01	0.04	125	210
125	ISL	9.28	9.27	33.832	26.161	186.9	0.340	3.19	49.3	27.1	1.85	24.6	0.01	0.01	0.04	126	
147		9.00	8.98	33.892	26.253	178.6	0.380	3.06	47.0	29.4	1.91	25.7	0.01	0.00	0.03	148	209
150	ISL	8.98	8.96	33.901	26.264	177.7	0.385	3.02	46.4	29.7	1.92	25.9	0.01	0.00	0.03	151	
171		8.87	8.85	33.961	26.328	171.9	0.422	2.69	41.2	32.3	2.04	27.3	0.00	0.01	0.04	172	208
200	ISL	8.49	8.47	34.032	26.443	161.4	0.471	2.34	35.6	36.9	2.20	29.0	0.00	0.01	0.05	201	
201		8.48	8.46	34.034	26.446	161.2	0.472	2.33	35.4	37.0	2.20	29.1	0.00	0.01	0.05	202	207
229		8.16	8.14	34.041	26.501	156.4	0.517	2.33	35.2	39.5	2.23	30.0	0.00			230	206
250	ISL	7.92	7.89	34.057	26.549	152.1	0.549	2.13	32.0	42.4	2.32	31.0	0.00			251	
268		7.71	7.68	34.071	26.591	148.3	0.576	1.92	28.7	45.1	2.40	31.9	0.00			270	205
300	ISL	7.29	7.26	34.078	26.656	142.4	0.623	1.67	24.7	49.9	2.49	33.2	0.00			302	
319		7.07	7.04	34.081	26.690	139.4	0.649	1.56	23.0	52.6	2.54	33.9	0.00			321	204
377		6.74	6.71	34.115	26.762	133.2	0.728	1.31	19.1	59.3	2.73	36.0	0.00			379	203
400	ISL	6.61	6.57	34.135	26.795	130.3	0.759	1.15	16.7	62.4	2.81	36.8	0.00			403	
441		6.39	6.35	34.175	26.856	125.0	0.811	0.85	12.3	67.9	2.94	38.2	0.00			444	202
500	ISL	6.16	6.12	34.238	26.936	118.1	0.883	0.53	7.6	74.7	3.09	39.7	0.00			503	
510		6.12	6.07	34.249	26.950	116.9	0.894	0.47	6.8	75.9	3.11	39.9	0.00			514	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 49.2 N	121 51.0 W	27/10/00	1750 UTC	3637 m	340 20 kn	310 07 07	1	1011.4 mb	16.5 C	14.1 C	13m	5/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.35	16.35	33.486	24.504	342.0	0.000	5.71	102.2	2.5	0.30	0.1	0.00	0.44	0.13	0	
1	A	16.35	16.35	33.486	24.504	342.0	0.003	5.71	102.2	2.5	0.30	0.1	0.00	0.44	0.13	1	221
9	A	16.34	16.34	33.487	24.508	341.9	0.031	5.76	103.0	2.5	0.30	0.1	0.00	0.50	0.14	9	220
10	ISL	16.34	16.34	33.487	24.508	342.0	0.034	5.76	103.0	2.5	0.30	0.1	0.00	0.50	0.14	10	
18	A	16.34	16.34	33.486	24.507	342.3	0.062	5.73	102.5	2.5	0.30	0.1	0.00	0.51	0.16	18	219
20	ISL	16.34	16.34	33.486	24.507	342.3	0.068	5.73	102.5	2.5	0.30	0.1	0.00	0.51	0.17	20	
27	A	16.32	16.32	33.488	24.514	341.9	0.092	5.71	102.1	2.5	0.30	0.0	0.00	0.53	0.22	27	218
30	ISL	16.12	16.12	33.484	24.556	338.0	0.103	5.79	103.1	2.6	0.31	0.0	0.01	0.72	0.35	30	
36	A	15.41	15.40	33.467	24.703	324.2	0.122	5.89	103.4	2.9	0.33	0.1	0.02	1.00	0.54	36	217
44		13.74	13.73	33.439	25.036	292.5	0.147	5.59	94.9	4.7	0.57	3.1	0.22	0.52	0.29	44	216
50	ISL	13.35	13.34	33.438	25.115	285.2	0.164	5.48	92.2	5.3	0.64	4.2	0.25	0.43	0.32	50	
51	A	13.28	13.27	33.433	25.125	284.2	0.167	5.47	91.9	5.4	0.65	4.4	0.25	0.42	0.33	51	215
58		11.75	11.74	33.324	25.336	264.2	0.186	5.49	89.3	7.7	0.79	6.9	0.15	0.30	0.34	58	214
70		11.11	11.10	33.374	25.492	249.6	0.217	5.25	84.2	8.9	0.89	8.9	0.05	0.22	0.25	70	213
75	ISL	10.84	10.83	33.412	25.569	242.3	0.230	5.05	80.6	10.4	0.99	10.6	0.03	0.18	0.21	75	
83		10.46	10.45	33.484	25.692	230.8	0.249	4.69	74.2	13.3	1.17	13.6	0.02	0.12	0.16	83	212
100		9.93	9.92	33.651	25.913	210.1	0.286	4.00	62.7	19.0	1.49	18.8	0.01	0.03	0.07	100	211
119		9.56	9.55	33.783	26.077	194.8	0.324	3.41	53.0	24.4	1.75	22.9	0.01	0.01	0.08	120	210
125	ISL	9.48	9.47	33.812	26.113	191.5	0.336	3.28	50.9	25.5	1.80	23.7	0.01	0.01	0.07	126	
139		9.30	9.28	33.871	26.189	184.6	0.362	3.05	47.2	27.8	1.89	25.1	0.00	0.01	0.05	140	209
150	ISL	9.10	9.08	33.923	26.262	177.9	0.382	2.88	44.4	30.1	1.97	26.3	0.00	0.01	0.04	151	
170		8.72	8.70	34.002	26.384	166.6	0.417	2.62	40.0	34.2	2.10	28.1	0.00	0.00	0.03	171	208
200		8.35	8.33	34.047	26.476	158.2	0.466	2.41	36.5	37.9	2.21	29.4	0.00	0.00	0.03	201	207
229		8.08	8.06	34.077	26.541	152.6	0.511	2.16	32.5	41.6	2.32	30.7	0.00			230	206
250	ISL	7.85	7.83	34.102	26.595	147.7	0.542	1.91	28.6	44.9	2.43	31.9	0.00			251	
270		7.63	7.60	34.127	26.646	143.1	0.571	1.66	24.8	48.5	2.55	33.1	0.00			272	205
300	ISL	7.32	7.29	34.163	26.719	136.5	0.613	1.27	18.8	54.6	2.72	35.0	0.00			302	
316		7.15	7.12	34.177	26.754	133.3	0.635	1.10	16.2	57.8	2.80	35.9	0.00			318	204
375		6.50	6.47	34.171	26.838	125.8	0.711	0.91	13.2	65.4	2.92	37.9	0.00			377	203
400	ISL	6.41	6.37	34.197	26.870	123.1	0.742	0.76	11.0	68.3	2.98	38.5	0.00			403	
436		6.33	6.29	34.238	26.913	119.5	0.786	0.56	8.1	72.4	3.07	39.3	0.00			439	202
500	ISL	5.84	5.80	34.247	26.983	113.2	0.860	0.46	6.6	80.1	3.17	40.9	0.00			503	
518		5.70	5.66	34.250	27.003	111.4	0.881	0.43	6.1	82.3	3.20	41.4	0.00			522	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 80 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 28.9 N	122 32.1 W	27/10/00	2327 UTC	3998 m	340 18 kn	350 06 08	1	1012.6 mb	16.2 C	13.7 C	11m	6/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.22	16.22	33.546	24.580	334.7	0.000	5.73	102.3	2.8	0.29	0.3	0.02	0.70	0.21	0	
2		16.22	16.22	33.546	24.580	334.8	0.007	5.73	102.3	2.8	0.29	0.3	0.02	0.70	0.21	2	220
10	ISL	16.22	16.22	33.546	24.581	335.0	0.033	5.73	102.3	2.8	0.30	0.3	0.02	0.69	0.22	10	
11		16.22	16.22	33.546	24.581	335.1	0.037	5.73	102.3	2.8	0.30	0.3	0.02	0.69	0.22	11	219
20	ISL	16.22	16.22	33.546	24.581	335.3	0.067	5.74	102.5	2.7	0.30	0.3	0.02	0.71	0.22	20	
21		16.22	16.22	33.546	24.581	335.4	0.070	5.74	102.5	2.7	0.30	0.3	0.02	0.71	0.22	21	218
30		16.19	16.19	33.545	24.587	335.0	0.101	5.73	102.2	2.6	0.30	0.3	0.02	0.76	0.26	30	217
41		16.15	16.14	33.545	24.597	334.5	0.137	5.68	101.3	2.7	0.30	0.4	0.03	0.67	0.26	41	216
50	ISL	12.77	12.76	33.524	25.297	267.9	0.164	4.75	79.0	8.0	0.91	9.6	0.17	0.49	0.47	50	
51		12.37	12.36	33.532	25.380	259.9	0.167	4.63	76.4	8.8	0.99	10.8	0.18	0.46	0.48	51	215
60		11.14	11.13	33.618	25.676	231.9	0.189	3.87	62.2	15.7	1.44	17.6	0.01	0.16	0.16	60	214
71		10.46	10.45	33.693	25.855	215.1	0.214	3.48	55.2	20.1	1.66	21.0	0.01	0.06	0.09	71	213
75	ISL	10.24	10.23	33.718	25.912	209.7	0.222	3.38	53.3	21.6	1.72	21.9	0.01	0.04	0.08	75	
85		9.76	9.75	33.777	26.039	197.8	0.243	3.16	49.4	24.9	1.84	23.9	0.01	0.02	0.07	85	212
100		9.31	9.30	33.852	26.172	185.4	0.271	2.89	44.7	28.9	1.98	26.2	0.00	0.00	0.05	100	211
120		9.07	9.06	33.954	26.290	174.5	0.307	2.46	37.9	32.3	2.11	27.9	0.00	0.00	0.05	121	210
125	ISL	9.00	8.99	33.967	26.312	172.6	0.316	2.44	37.5	32.9	2.13	28.2	0.00	0.00	0.05	126	
139		8.80	8.79	33.991	26.362	168.0	0.340	2.37	36.3	34.6	2.16	28.8	0.00	0.00	0.05	140	209
150	ISL	8.61	8.59	34.004	26.402	164.4	0.358	2.38	36.3	35.9	2.17	29.2	0.00	0.00	0.04	151	
169		8.27	8.25	34.019	26.466	158.6	0.389	2.39	36.1	38.2	2.20	29.9	0.00	0.00	0.03	170	208
199		7.86	7.84	34.037	26.541	151.9	0.435	2.21	33.1	42.4	2.31	31.3	0.00	0.00	0.02	200	207
200	ISL	7.85	7.83	34.038	26.544	151.7	0.437	2.20	33.0	42.5	2.31	31.3	0.00			201	
229		7.59	7.57	34.069	26.606	146.1	0.480	1.84	27.4	46.8	2.46	32.8	0.00			230	206
250	ISL	7.36	7.34	34.082	26.649	142.3	0.510	1.67	24.7	50.2	2.55	33.9	0.00			251	
270		7.13	7.10	34.091	26.688	138.8	0.539	1.55	22.8	53.4	2.62	34.9	0.00			272	205
300	ISL	6.78	6.75	34.096	26.740	134.1	0.580	1.38	20.2	57.8	2.71	36.0	0.00			302	
315		6.65	6.62	34.105	26.765	131.9	0.599	1.28	18.7	59.8	2.76	36.5	0.00			317	204
375		6.91	6.87	34.264	26.856	124.5	0.676	0.53	7.8	65.8	3.01	37.5	0.00			377	203
400	ISL	6.72	6.68	34.264	26.882	122.2	0.707	0.51	7.5	68.5	3.05	38.2	0.00			403	
436		6.34	6.30	34.244	26.917	119.1	0.751	0.49	7.1	72.7	3.09	39.3	0.00			439	202
500	ISL	5.88	5.84	34.279	27.004	111.4	0.824	0.35	5.0	81.5	3.20	40.7	0.00			503	
520		5.74	5.70	34.291	27.031	108.9	0.846	0.30	4.3	84.3	3.23	41.2	0.00			524	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 9.0 N	123 13.3 W	28/10/00	0528 UTC	4231 m	320 13 kn			1016.6 mb	16.4 C	13.8 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.74	17.74	33.378	24.094	381.1	0.000	5.51	101.2	2.9	0.29	0.1	0.00	0.13	0.03	0	
2		17.74	17.74	33.378	24.094	381.1	0.008	5.51	101.2	2.9	0.29	0.1	0.00	0.13	0.03	2	220
10	ISL	17.74	17.74	33.378	24.095	381.4	0.038	5.52	101.4	2.9	0.29	0.1	0.00	0.13	0.03	10	
15		17.74	17.74	33.378	24.095	381.5	0.057	5.52	101.4	2.9	0.29	0.1	0.00	0.13	0.03	15	219
20	ISL	17.48	17.48	33.362	24.145	376.9	0.076	5.56	101.6	3.0	0.29	0.1	0.00	0.14	0.03	20	
30		16.90	16.90	33.325	24.255	366.8	0.113	5.66	102.3	3.2	0.30	0.1	0.00	0.18	0.04	30	218
44		16.53	16.52	33.294	24.317	361.2	0.164	5.73	102.8	3.2	0.31	0.1	0.00	0.24	0.07	44	217
50	ISL	15.31	15.30	33.245	24.554	338.8	0.185	6.00	105.0	3.3	0.31	0.1	0.00	0.22	0.10	50	
56		13.94	13.93	33.207	24.816	313.8	0.205	6.25	106.3	3.3	0.32	0.1	0.00	0.21	0.13	56	216
64		12.72	12.71	33.169	25.032	293.4	0.229	6.23	103.3	3.9	0.36	0.1	0.01	0.24	0.16	64	215
75		11.86	11.85	33.174	25.200	277.6	0.261	6.05	98.5	4.8	0.44	0.9	0.13	0.23	0.22	75	214
85		11.31	11.30	33.186	25.310	267.3	0.288	5.88	94.6	5.5	0.53	2.3	0.20	0.23	0.25	85	213
94		11.13	11.12	33.257	25.398	259.1	0.312	5.60	89.8	6.3	0.67	5.0	0.14	0.22	0.25	94	212
100	ISL	10.75	10.74	33.272	25.477	251.7	0.327	5.51	87.7	7.3	0.76	6.7	0.09	0.18	0.21	100	
110		10.01	10.00	33.288	25.616	238.5	0.351	5.43	85.0	9.2	0.90	9.3	0.01	0.11	0.13	110	211
125	ISL	9.34	9.33	33.357	25.780	223.1	0.386	5.26	81.2	12.0	1.06	12.2	0.01	0.05	0.07	126	
126		9.31	9.30	33.364	25.791	222.1	0.388	5.24	80.8	12.2	1.07	12.4	0.01	0.05	0.07	127	210
144		9.40	9.38	33.619	25.976	204.9	0.427	4.27	66.1	19.1	1.43	18.5	0.00	0.03	0.04	145	209
150	ISL	9.37	9.35	33.688	26.035	199.5	0.439	4.05	62.7	20.9	1.52	20.0	0.00	0.02	0.03	151	
169		9.15	9.13	33.856	26.202	184.0	0.475	3.58	55.2	25.7	1.72	23.2	0.00	0.01	0.02	170	208
200		8.55	8.53	33.983	26.396	166.0	0.529	3.43	52.2	30.8	1.82	25.2	0.00	0.00	0.02	201	207
229		8.18	8.16	34.016	26.478	158.5	0.576	2.67	40.3	37.1	2.11	28.8	0.00			230	206
250	ISL	7.87	7.85	34.024	26.530	153.8	0.609	2.60	39.0	40.2	2.19	29.8	0.00			251	
268		7.59	7.56	34.025	26.572	150.0	0.637	2.54	37.8	42.6	2.23	30.4	0.00			270	205
300	ISL	7.08	7.05	34.026	26.645	143.3	0.684	2.27	33.4	48.4	2.38	32.4	0.00			302	
318		6.82	6.79	34.030	26.683	139.8	0.709	2.08	30.4	51.9	2.47	33.6	0.00			320	204
377		6.34	6.31	34.086	26.792	130.1	0.789	1.31	18.9	62.7	2.77	37.2	0.00			379	203
400	ISL	6.17	6.13	34.104	26.828	126.8	0.818	1.11	16.0	66.6	2.86	38.2	0.00			403	
437		5.93	5.89	34.129	26.878	122.4	0.864	0.86	12.3	72.3	2.98	39.6	0.00			440	202
500	ISL	5.59	5.55	34.167	26.950	116.0	0.939	0.61	8.7	80.1	3.09	41.0	0.00			503	
521		5.47	5.43	34.180	26.975	113.8	0.964	0.53	7.5	82.7	3.13	41.5	0.00			525	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 80 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 49.1 N	123 54.3 W	28/10/00	1140 UTC	4427 m	280 09 kn			1017.4 mb	16.4 C	13.3 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.94	17.94	33.426	24.083	382.2	0.000	5.48	101.1	2.7	0.29	0.1	0.00	0.14	0.03	0	
2		17.94	17.94	33.426	24.083	382.2	0.008	5.48	101.1	2.7	0.29	0.1	0.00	0.14	0.03	2	220
10	ISL	17.95	17.95	33.426	24.081	382.7	0.038	5.48	101.1	2.7	0.28	0.1	0.00	0.14	0.03	10	
15		17.95	17.95	33.426	24.081	382.9	0.057	5.48	101.1	2.7	0.28	0.1	0.00	0.14	0.03	15	219
20	ISL	17.95	17.95	33.426	24.081	383.0	0.077	5.48	101.1	2.7	0.28	0.1	0.00	0.14	0.03	20	
30		17.95	17.94	33.426	24.081	383.3	0.115	5.47	100.9	2.7	0.28	0.1	0.00	0.15	0.02	30	218
46		17.97	17.96	33.433	24.083	383.8	0.176	5.49	101.3	3.1	0.28	0.1	0.00	0.15	0.04	46	217
50	ISL	17.95	17.94	33.436	24.090	383.2	0.192	5.49	101.3	3.0	0.28	0.1	0.00	0.15	0.04	50	
56		17.93	17.92	33.441	24.099	382.6	0.215	5.49	101.3	3.0	0.29	0.1	0.00	0.17	0.04	56	216
65		14.57	14.56	33.244	24.713	324.0	0.246	6.21	107.0	3.4	0.30	0.1	0.00	0.24	0.14	65	215
74		13.64	13.63	33.326	24.970	299.6	0.274	5.88	99.5	3.6	0.43	1.0	0.16	0.29	0.23	74	214
75	ISL	13.54	13.53	33.330	24.994	297.4	0.277	5.85	98.8	3.7	0.45	1.2	0.16	0.29	0.23	75	
85		12.70	12.69	33.353	25.179	280.0	0.306	5.59	92.8	4.7	0.61	3.9	0.19	0.28 A	0.24 A	85	213
95		12.25	12.24	33.364	25.274	271.1	0.334	5.45	89.6	5.6	0.70	5.8	0.05	0.23	0.24	95	212
100	ISL	12.01	12.00	33.373	25.327	266.2	0.347	5.38	88.0	6.2	0.75	6.8	0.04	0.20	0.22	100	
111		11.45	11.44	33.394	25.447	254.9	0.376	5.23	84.5	7.8	0.86	8.8	0.02	0.15	0.16	111	211
124		10.79	10.78	33.414	25.581	242.4	0.408	5.03	80.2	9.9	0.99	10.9	0.01	0.09	0.10	125	210
125	ISL	10.74	10.73	33.418	25.593	241.2	0.411	5.01	79.8	10.1	1.00	11.1	0.01	0.09	0.10	126	
143		10.05	10.03	33.529	25.798	222.0	0.452	4.47	70.1	15.3	1.29	15.9	0.01	0.04	0.05	144	209
150	ISL	9.89	9.87	33.591	25.873	214.9	0.468	4.19	65.5	17.6	1.41	17.9	0.01	0.03	0.04	151	
170		9.52	9.50	33.771	26.076	196.1	0.509	3.41	53.0	24.2	1.73	23.0	0.00	0.00	0.02	171	208
199		8.87	8.85	33.942	26.314	173.8	0.562	2.81	43.1	31.2	1.99	26.9	0.00	0.00	0.03	200	207
200	ISL	8.85	8.83	33.946	26.320	173.2	0.564	2.80	42.9	31.4	2.00	27.0	0.00			201	
227		8.39	8.37	34.015	26.446	161.7	0.609	2.55	38.7	36.4	2.13	28.8	0.00			228	206
250	ISL	8.02	7.99	34.048	26.527	154.2	0.646	2.31	34.7	40.7	2.26	30.3	0.00			251	
270		7.73	7.70	34.065	26.583	149.1	0.676	2.08	31.1	44.4	2.36	31.6	0.00			271	205
300	ISL	7.37	7.34	34.084	26.650	143.1	0.720	1.71	25.3	49.7	2.49	33.2	0.00			302	
319		7.16	7.13	34.093	26.687	139.8	0.747	1.49	22.0	53.0	2.56	34.1	0.00			321	204
379		6.55	6.52	34.130	26.799	129.6	0.827	1.09	15.8	62.8	2.82	37.3	0.00			381	203
400	ISL	6.38	6.34	34.141	26.830	126.8	0.854	0.96	13.9	66.0	2.89	38.2	0.00			402	
433		6.12	6.08	34.156	26.875	122.8	0.896	0.78	11.2	70.8	2.97	39.3	0.00			436	202
500	ISL	5.58	5.54	34.175	26.958	115.3	0.975	0.58	8.2	80.8	3.09	41.1	0.00			503	
517		5.44	5.40	34.180	26.979	113.4	0.995	0.53	7.5	83.4	3.12	41.6	0.00			520	201

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 82 47

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 16.5 N	120 1.7 W	26/10/00	1019 UTC	577 m	300 07 kn			1013.1 mb	15.1 C	14.0 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.74	16.74	33.613	24.512	341.3	0.000	5.88	106.1	1.3	0.25	0.0	0.00	0.36	0.11	0	
2	A	16.74	16.74	33.613	24.512	341.3	0.007	5.88	106.1	1.3	0.25	0.0	0.00	0.36	0.11	2	224
10	ISL	16.46	16.46	33.604	24.570	336.0	0.034	5.96	106.9	1.3	0.25	0.0	0.00	0.44	0.15	10	
11		16.42	16.42	33.603	24.579	335.3	0.037	5.96	106.9	1.3	0.25	0.0	0.00	0.45	0.16	11	223
19		14.71	14.71	33.568	24.932	301.8	0.063	5.72	99.1	2.9	0.42	1.5	0.11	3.60	0.81	19	222
20	ISL	14.58	14.58	33.560	24.954	299.8	0.066	5.70	98.5	3.2	0.44	1.8	0.14	3.45	0.79	20	
30		13.59	13.59	33.495	25.110	285.1	0.095	5.39	91.2	6.4	0.67	5.2	0.36	0.60	0.31	30	221
40		12.36	12.35	33.519	25.372	260.4	0.122	4.83	79.7	9.6	0.97	10.2	0.14	0.26	0.25	40	220
50		11.83	11.82	33.545	25.493	249.1	0.148	4.60	75.0	11.2	1.08	12.0	0.07	0.22	0.21	50	219
60		11.29	11.28	33.597	25.633	236.0	0.172	4.25	68.6	14.2	1.26	14.8	0.05	0.17	0.18	60	218
70		10.78	10.77	33.660	25.773	222.9	0.195	3.85	61.4	17.5	1.45	17.6	0.03	0.10	0.16	70	217
75	ISL	10.66	10.65	33.681	25.811	219.4	0.206	3.72	59.2	18.5	1.50	18.4	0.02	0.08	0.14	75	
84		10.55	10.54	33.711	25.853	215.5	0.226	3.56	56.5	19.6	1.57	19.4	0.02	0.05	0.11	84	216
100		10.41	10.40	33.757	25.914	210.2	0.260	3.31	52.4	21.2	1.66	20.7	0.02	0.04	0.10	101	215
120		10.14	10.13	33.856	26.038	198.8	0.301	2.92	46.0	24.7	1.84	23.0	0.02	0.02	0.08	121	214
125	ISL	10.08	10.07	33.896	26.079	194.9	0.310	2.82	44.4	26.1	1.91	23.8	0.02	0.02	0.08	126	
138		9.92	9.90	33.994	26.183	185.4	0.335	2.58	40.5	29.5	2.07	25.6	0.01	0.01	0.08	139	213
150	ISL	9.73	9.71	34.026	26.240	180.2	0.357	2.42	37.8	31.0	2.12	26.4	0.01	0.01	0.08	151	
168		9.45	9.43	34.044	26.300	174.7	0.389	2.21	34.3	32.5	2.16	27.2	0.01	0.01	0.08	169	212
198		9.17	9.15	34.110	26.398	166.0	0.440	1.77	27.3	36.8	2.32	29.1	0.01	0.01	0.11	199	211
200	ISL	9.14	9.12	34.114	26.406	165.3	0.443	1.73	26.7	37.2	2.33	29.3	0.01			201	
228		8.76	8.74	34.161	26.503	156.5	0.488	1.25	19.1	43.0	2.53	31.5	0.01			229	210
250	ISL	8.53	8.50	34.176	26.551	152.3	0.522	1.07	16.3	46.1	2.63	32.5	0.01			252	
268		8.37	8.34	34.182	26.580	149.7	0.550	0.97	14.7	48.4	2.69	33.1	0.01			270	209
300	ISL	8.06	8.03	34.199	26.641	144.4	0.597	0.76	11.5	53.4	2.82	34.3	0.01			302	
318		7.89	7.86	34.207	26.672	141.6	0.622	0.65	9.8	56.3	2.89	34.9	0.01			320	208
375		7.38	7.34	34.222	26.758	134.1	0.701	0.46	6.8	64.7	3.04	35.7	0.01			377	207
400	ISL	7.10	7.06	34.229	26.803	130.1	0.734	0.36	5.3	70.6	3.14	35.5	0.01			403	
437		6.75	6.71	34.237	26.857	125.2	0.781	0.21	3.1	79.5	3.28	35.1	0.01			440	206
475		6.61	6.57	34.239	26.878	123.7	0.829	0.09	1.3	86.3	3.40	33.6	0.01			478	205
500	ISL	6.50	6.45	34.240	26.894	122.5	0.859	0.03	0.4	94.1	3.53	31.2	0.05			503	
515		6.45	6.40	34.241	26.901	121.9	0.878	0.01	0.1	99.8	3.65	29.0	0.06			519	204
539		6.43	6.38	34.242	26.905	121.9	0.907	0.00	0.0	110.1	3.94	23.9	0.01			543	203
563		6.41	6.36	34.242	26.908	122.0	0.936	0.00	0.0	117.0	4.18	20.1	0.01			567	202
566		6.41	6.36	34.242	26.908	122.0	0.940	0.01	0.1	117.0	4.20	20.1	0.01			570	201

A) SANTA BARBARA BASIN STATION.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 40.6

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 13.5 N	119 24.8 W	26/10/00	0604 UTC	35 m	280 10 kn			1014.3 mb	16.6 C	14.7 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.38	17.38	33.614	24.362	355.6	0.000	5.83	106.5	2.5	0.23	0.1	0.00	0.81	0.24	0	
1		17.38	17.38	33.614	24.362	355.6	0.004	5.83	106.5	2.5	0.23	0.1	0.00	0.81	0.24	1	205
5		17.37	17.37	33.613	24.363	355.6	0.018	5.84	106.7	2.4	0.22	0.1	0.00	0.82	0.25	5	204
10		17.23	17.23	33.609	24.394	352.8	0.035	5.85	106.6	2.5	0.23	0.1	0.00	0.90	0.28	10	203
20	ISL	16.38	16.38	33.561	24.556	337.7	0.070	5.89	105.5	4.0	0.36	0.9	0.08	1.67	0.61	20	
21		16.26	16.26	33.555	24.579	335.6	0.073	5.89	105.2	4.2	0.38	1.0	0.10	1.73	0.64	21	202
30	ISL	14.84	14.84	33.521	24.868	308.2	0.102	5.51	95.7	6.3	0.66	3.2	0.32	0.94	0.69	30	
31		14.68	14.68	33.519	24.901	305.1	0.105	5.47	94.7	6.5	0.69	3.4	0.34	0.85	0.69	31	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
34 10.7 N	119 30.7 W	26/10/00	0400 UTC	140 m	270 15 kn			1014.5 mb	16.7 C	14.9 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.67	17.67	33.624	24.300	361.5	0.000	5.76	105.8	2.3	0.25	0.1	0.00	0.28	0.09	0	
1		17.67	17.67	33.624	24.300	361.5	0.004	5.76	105.8	2.3	0.25	0.1	0.00	0.28	0.09	1	211
10	ISL	17.66	17.66	33.624	24.302	361.6	0.036	5.76	105.8	2.3	0.25	0.1	0.00	0.28	0.09	10	
11		17.66	17.66	33.624	24.302	361.6	0.040	5.76	105.8	2.3	0.25	0.1	0.00	0.28	0.09	11	210
20	ISL	16.74	16.74	33.576	24.484	344.6	0.072	6.06	109.3	3.0	0.26	0.1	0.00	0.73	0.37	20	
21		16.59	16.59	33.569	24.514	341.8	0.075	6.09	109.5	3.1	0.26	0.1	0.00	0.80	0.40	21	209
30	ISL	15.03	15.03	33.507	24.816	313.2	0.104	6.10	106.3	4.0	0.36	0.7	0.13	1.33	0.55	30	
31		14.85	14.85	33.502	24.851	309.9	0.108	6.10	105.9	4.1	0.38	0.8	0.14	1.38	0.56	31	208
41		13.61	13.60	33.474	25.090	287.4	0.137	5.56	94.1	6.0	0.64	4.4	0.71	1.34	0.61	41	207
50		12.29	12.28	33.509	25.378	260.1	0.162	4.93	81.2	9.5	0.92	9.6	0.15	0.48	0.36	50	206
60		11.68	11.67	33.556	25.529	245.9	0.187	4.52	73.5	12.1	1.12	12.7	0.07	0.30	0.28	60	205
69		11.23	11.22	33.621	25.662	233.4	0.209	4.13	66.5	15.4	1.29	15.2	0.10	0.25	0.24	69	204
75	ISL	10.91	10.90	33.652	25.744	225.8	0.223	3.95	63.2	17.1	1.39	16.7	0.09	0.18	0.20	75	
84		10.45	10.44	33.698	25.861	214.8	0.243	3.70	58.6	19.6	1.53	18.9	0.05	0.08	0.15	84	203
99		9.89	9.88	33.812	26.045	197.5	0.273	3.17	49.7	24.6	1.76	22.4	0.02	0.03	0.09	99	202
100	ISL	9.88	9.87	33.816	26.050	197.1	0.275	3.15	49.3	24.7	1.77	22.5	0.02	0.03	0.09	100	
122		9.70	9.69	33.902	26.147	188.3	0.318	2.79	43.5	27.8	1.91	24.6	0.01	0.01	0.08	123	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 52.7 N	120 8.1 W	25/10/00	1752 UTC	101 m	270 03 kn	280 01 08		1018.9 mb	17.8 C	15.4 C	09m	

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.67	15.67	33.614	24.757	317.9	0.000	6.08	107.4	2.1	0.30	0.3	0.03	3.57	0.65	0	
1	A	15.67	15.67	33.614	24.757	317.9	0.003	6.08	107.4	2.1	0.30	0.3	0.03	3.57	0.65	1	212
7	A	15.53	15.53	33.614	24.788	315.2	0.022	6.07	106.9	2.3	0.30	0.4	0.03	3.97	0.67	7	211
10	ISL	15.24	15.24	33.615	24.853	309.1	0.032	5.94	104.0	3.1	0.36	1.2	0.05	3.92	0.72	10	
12	A	15.05	15.05	33.616	24.895	305.1	0.038	5.85	102.1	3.7	0.41	1.7	0.06	3.88	0.75	12	210
19	A	14.99	14.99	33.616	24.909	304.1	0.059	5.85	102.0	3.6	0.43	1.9	0.06	4.34	0.73	19	209
20	ISL	14.97	14.97	33.616	24.913	303.7	0.062	5.84	101.7	3.6	0.43	1.9	0.06	4.29	0.72	20	
26	A	14.82	14.82	33.618	24.947	300.6	0.080	5.71	99.2	4.3	0.50	2.6	0.07	3.73	0.68	26	208
30	ISL	14.33	14.33	33.617	25.051	290.8	0.092	5.47	94.1	6.0	0.61	4.4	0.10	3.29	0.66	30	
35	A	13.68	13.68	33.618	25.187	278.0	0.106	5.17	87.7	8.1	0.76	6.7	0.14	2.76	0.64	35	207
43		13.35	13.34	33.615	25.252	272.0	0.128	5.00	84.3	9.1	0.85	7.8	0.16	2.26	0.65	43	206
50		12.60	12.59	33.640	25.420	256.2	0.147	4.64	77.0	12.2	1.03	10.9	0.16	1.51	0.56	50	205
60		12.03	12.02	33.648	25.535	245.4	0.172	4.37	71.6	13.9	1.16	12.9	0.16	1.02	0.51	60	204
70		11.19	11.18	33.691	25.724	227.6	0.195	3.89	62.6	18.0	1.42	17.0	0.12	0.45	0.36	70	203
75	ISL	11.08	11.07	33.694	25.746	225.6	0.207	3.83	61.5	18.4	1.45	17.5	0.11	0.43	0.35	75	
86		10.96	10.95	33.706	25.777	222.9	0.231	3.75	60.1	19.0	1.47	17.9	0.10	0.39	0.34	86	202
96		10.52	10.51	33.767	25.902	211.1	0.253	3.40	54.0	22.1	1.64	20.4	0.07	0.21	0.29	96	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 44.6 N	120 25.2 W	25/10/00	1234 UTC	1136 m	220 03 kn			1018.4 mb	15.6 C	14.7 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	15.92	15.92	33.611	24.698	323.5	0.000	5.85	103.9	3.6	0.31	0.4	0.03	1.15	0.27	0	
1		15.92	15.92	33.611	24.698	323.5	0.003	5.85	103.9	3.6	0.31	0.4	0.03	1.15	0.27	1	220
10	ISL	15.90	15.90	33.611	24.703	323.4	0.032	5.85	103.8	3.5	0.30	0.4	0.02	1.13	0.27	10	
11		15.90	15.90	33.611	24.703	323.4	0.036	5.85	103.8	3.5	0.30	0.4	0.02	1.13	0.27	11	219
20		15.28	15.28	33.603	24.835	311.1	0.064	5.77	101.1	4.2	0.40	1.8	0.06	1.13	0.40	20	218
30	ISL	12.59	12.59	33.581	25.375	259.8	0.093	4.82	79.9	10.4	0.97	10.3	0.17	0.84	0.35	30	
31		12.30	12.30	33.585	25.434	254.2	0.095	4.71	77.6	11.2	1.03	11.3	0.18	0.80	0.35	31	217
41		11.02	11.02	33.641	25.715	227.7	0.119	4.01	64.3	16.6	1.38	16.8	0.12	0.35	0.22	41	216
50	ISL	10.54	10.53	33.705	25.850	215.1	0.139	3.62	57.5	19.7	1.56	19.4	0.05	0.16	0.15	50	
51		10.51	10.50	33.712	25.860	214.1	0.141	3.59	57.0	20.0	1.57	19.6	0.04	0.15	0.15	51	215
58		10.38	10.37	33.746	25.910	209.6	0.156	3.45	54.6	21.2	1.64	20.5	0.03	0.11	0.16	58	214
70		10.06	10.05	33.805	26.010	200.2	0.181	3.19	50.2	23.9	1.76	22.3	0.03	0.06	0.11	70	213
75	ISL	9.97	9.96	33.846	26.058	195.8	0.191	3.01	47.2	25.3	1.83	23.1	0.02	0.04	0.11	75	
85		9.85	9.84	33.924	26.139	188.3	0.210	2.67	41.8	27.9	1.96	24.6	0.01	0.02	0.10	85	212
99		9.83	9.82	33.977	26.184	184.4	0.236	2.42	37.9	29.2	2.04	25.5	0.01	0.01	0.09	100	211
100	ISL	9.82	9.81	33.979	26.187	184.1	0.238	2.41	37.7	29.3	2.04	25.5	0.01	0.01	0.09	101	
119		9.58	9.57	34.018	26.258	177.7	0.272	2.35	36.6	30.9	2.10	26.4	0.01	0.01	0.11	120	210
125	ISL	9.52	9.51	34.034	26.280	175.7	0.283	2.30	35.8	31.6	2.12	26.7	0.01	0.01	0.10	126	
139		9.39	9.37	34.072	26.332	171.1	0.307	2.15	33.4	33.3	2.18	27.4	0.01	0.01	0.08	140	209
150	ISL	9.28	9.26	34.103	26.374	167.3	0.326	2.01	31.1	34.8	2.24	28.1	0.01	0.01	0.08	151	
169		9.10	9.08	34.148	26.438	161.6	0.357	1.79	27.6	37.2	2.34	29.1	0.00	0.01	0.07	170	208
200		8.94	8.92	34.169	26.481	158.1	0.407	1.67	25.7	39.1	2.40	29.8	0.00	0.00	0.06	201	207
230		8.58	8.56	34.182	26.547	152.2	0.453	1.53	23.3	42.5	2.48	31.0	0.00			231	206
250	ISL	8.40	8.37	34.183	26.576	149.8	0.483	1.49	22.6	44.1	2.52	31.5	0.01			252	
271		8.22	8.19	34.181	26.602	147.6	0.515	1.44	21.8	45.9	2.56	32.0	0.01			273	205
300	ISL	7.84	7.81	34.184	26.661	142.3	0.557	1.30	19.5	50.0	2.65	33.3	0.00			302	
319		7.61	7.58	34.187	26.697	139.1	0.583	1.20	17.9	52.6	2.70	34.1	0.00			321	204
376		7.34	7.30	34.197	26.744	135.4	0.662	1.04	15.4	56.5	2.79	35.2	0.00			378	203
400	ISL	7.22	7.18	34.204	26.767	133.6	0.694	0.96	14.2	58.4	2.83	35.8	0.00			403	
440		6.97	6.93	34.219	26.814	129.6	0.746	0.82	12.0	62.3	2.91	36.8	0.00			443	202
500	ISL	6.43	6.38	34.241	26.904	121.4	0.822	0.58	8.4	70.8	3.05	38.7	0.00			504	
515		6.30	6.25	34.247	26.925	119.5	0.840	0.52	7.5	72.9	3.08	39.2	0.00			519	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 34.7 N	120 45.1 W	25/10/00	0425 UTC	1341 m	220 04 kn			1020.3 mb	16.7 C	15.3 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.52	16.52	33.485	24.464	345.8	0.000	5.76	103.4	2.6	0.28	0.1	0.00	0.37	0.06	0	
1		16.52	16.52	33.485	24.465	345.8	0.003	5.76	103.4	2.6	0.28	0.1	0.00	0.37	0.06	1	220
10	ISL	15.17	15.17	33.451	24.742	319.6	0.033	6.11	106.8	2.2	0.29	0.1	0.02	2.12	0.41	10	
11		14.97	14.97	33.449	24.784	315.7	0.037	6.15	107.0	2.2	0.29	0.1	0.02	2.43	0.46	11	219
20	ISL	14.15	14.15	33.469	24.974	297.8	0.064	6.00	102.7	2.9	0.41	1.5	0.13	5.31	0.69	20	
21		14.07	14.07	33.468	24.990	296.3	0.067	5.98	102.2	3.1	0.43	1.7	0.14	5.47	0.70	21	218
30	ISL	12.90	12.90	33.336	25.125	283.7	0.093	5.74	95.7	5.1	0.58	3.7	0.22	1.55	0.49	30	
32		12.65	12.65	33.317	25.159	280.5	0.099	5.65	93.7	5.7	0.63	4.4	0.23	0.52	0.42	32	217
40		12.09	12.08	33.456	25.375	260.1	0.121	4.94	81.0	9.1	0.95	9.3	0.22	0.15	0.28	40	216
49		10.47	10.46	33.465	25.675	231.7	0.143	4.63	73.3	13.7	1.22	14.3	0.05	0.13	0.18	49	215
50	ISL	10.46	10.45	33.487	25.694	229.9	0.145	4.57	72.4	14.1	1.24	14.7	0.05	0.12	0.17	50	
60		10.31	10.30	33.619	25.823	217.9	0.167	4.06	64.1	17.6	1.42	17.7	0.02	0.05	0.11	60	214
70		10.00	9.99	33.664	25.911	209.7	0.189	3.92	61.5	19.2	1.49	18.9	0.02	0.03	0.08	70	213
75	ISL	10.01	10.00	33.744	25.971	204.0	0.199	3.55	55.7	21.4	1.62	20.5	0.02	0.03	0.09	75	
85		10.04	10.03	33.893	26.083	193.7	0.219	2.77	43.6	26.1	1.89	23.8	0.01	0.02	0.13	85	212
100		9.88	9.87	33.956	26.159	186.7	0.247	2.53	39.7	28.6	1.99	25.1	0.01	0.01	0.10	101	211
119		9.64	9.63	34.010	26.242	179.3	0.282	2.35	36.7	30.7	2.07	26.2	0.01	0.02	0.31	120	210
125	ISL	9.61	9.60	34.020	26.255	178.2	0.293	2.33	36.3	31.0	2.08	26.4	0.01	0.02	0.27	126	
140		9.52	9.50	34.043	26.288	175.4	0.320	2.26	35.2	31.9	2.12	26.8	0.01	0.01	0.11	141	209
150	ISL	9.40	9.38	34.074	26.332	171.4	0.337	2.14	33.2	33.4	2.18	27.5	0.01	0.01	0.10	151	
167		9.15	9.13	34.126	26.413	163.9	0.365	1.91	29.5	36.2	2.28	28.7	0.01	0.01	0.08	168	208
198		8.76	8.74	34.158	26.500	156.1	0.415	1.68	25.7	40.0	2.40	30.1	0.01	0.01	0.07	199	207
200	ISL	8.74	8.72	34.159	26.504	155.8	0.418	1.67	25.5	40.2	2.41	30.2	0.01			201	
229		8.48	8.46	34.172	26.555	151.4	0.463	1.55	23.6	42.9	2.48	31.2	0.01			230	206
250	ISL	8.32	8.29	34.188	26.592	148.2	0.494	1.37	20.8	45.4	2.56	32.0	0.01			252	
267		8.18	8.15	34.199	26.622	145.6	0.519	1.24	18.7	47.4	2.62	32.7	0.01			269	205
300	ISL	7.83	7.80	34.189	26.667	141.8	0.566	1.24	18.6	50.5	2.66	33.6	0.00			302	
317		7.64	7.61	34.182	26.689	139.9	0.590	1.24	18.5	52.2	2.68	34.1	0.00			319	204
377		6.98	6.94	34.209	26.803	129.5	0.671	0.85	12.5	61.8	2.88	36.6	0.00			379	203
400	ISL	6.70	6.66	34.207	26.840	126.2	0.701	0.76	11.1	65.5	2.94	37.5	0.00			403	
440		6.24	6.20	34.203	26.897	120.9	0.750	0.64	9.2	71.7	3.02	39.0	0.00			443	202
500	ISL	5.78	5.74	34.231	26.978	113.7	0.820	0.45	6.4	80.2	3.13	40.7	0.00			503	
511		5.70	5.66	34.236	26.992	112.4	0.833	0.42	6.0	81.7	3.15	41.0	0.00			515	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 14.9 N	121 26.4 W	24/10/00	2235 UTC	3798 m	150 03 kn	330 03 09	1	1019.9 mb	19.5 C	16.6 C	13m	2/8	CC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.63	16.63	33.476	24.432	348.9	0.000	5.86	105.4	2.1	0.29	0.1	0.00	0.84	0.11	0	
1		16.63	16.63	33.476	24.432	348.9	0.003	5.86	105.4	2.1	0.29	0.1	0.00	0.84	0.11	1	220
9		15.72	15.72	33.460	24.627	330.5	0.031	5.99	105.8	2.0	0.28	0.0	0.00	0.83	0.17	9	219
10	ISL	15.60	15.60	33.458	24.653	328.2	0.034	6.01	105.9	2.0	0.28	0.0	0.00	1.24	0.23	10	
20		14.19	14.19	33.386	24.902	304.7	0.066	6.15	105.3	2.4	0.32	0.3	0.04	4.43	0.77	20	218
30		12.43	12.43	33.205	25.115	284.6	0.095	5.98	98.6	5.4	0.52	2.5	0.16	0.67	0.52	30	217
40		12.10	12.09	33.211	25.182	278.4	0.123	5.88	96.3	6.0	0.58	3.5	0.17	0.54	0.52	40	216
49		11.73	11.72	33.291	25.314	266.1	0.148	5.61	91.2	7.0	0.71	5.7	0.11	0.40	0.44	49	215
50	ISL	11.71	11.70	33.297	25.322	265.3	0.150	5.59	90.8	7.1	0.72	5.8	0.11	0.39	0.43	50	
60		11.52	11.51	33.347	25.396	258.5	0.177	5.43	87.9	7.7	0.77	7.1	0.07	0.31	0.37	60	214
70		11.19	11.18	33.386	25.487	250.1	0.202	5.23	84.1	9.0	0.87	8.9	0.04	0.24	0.32	70	213
75	ISL	10.94	10.93	33.402	25.544	244.8	0.214	5.12	81.9	9.9	0.94	10.0	0.03	0.20	0.28	75	
86		10.35	10.34	33.449	25.684	231.7	0.241	4.83	76.3	12.7	1.12	13.0	0.02	0.11	0.19	86	212
100	ISL	9.79	9.78	33.551	25.858	215.3	0.272	4.30	67.1	17.6	1.40	17.5	0.01	0.05	0.10	100	
101		9.76	9.75	33.559	25.869	214.3	0.274	4.26	66.4	17.9	1.42	17.8	0.01	0.05	0.09	101	211
119		9.61	9.60	33.689	25.996	202.6	0.312	3.71	57.7	22.2	1.64	21.2	0.00	0.03	0.06	120	210
125	ISL	9.53	9.52	33.740	26.049	197.7	0.324	3.52	54.7	23.8	1.71	22.3	0.00	0.02	0.06	126	
140		9.31	9.29	33.857	26.176	185.8	0.352	3.10	48.0	27.5	1.86	24.7	0.00	0.01	0.05	141	209
150	ISL	9.17	9.15	33.905	26.237	180.3	0.371	2.95	45.5	29.1	1.92	25.6	0.00	0.01	0.05	151	
170		8.91	8.89	33.964	26.324	172.3	0.406	2.82	43.3	31.5	1.99	26.5	0.00	0.00	0.04	171	208
199		8.54	8.52	34.011	26.419	163.7	0.455	2.78	42.3	34.5	2.03	27.3	0.00	0.01	0.03	200	207
200	ISL	8.53	8.51	34.012	26.421	163.5	0.456	2.77	42.1	34.6	2.03	27.4	0.00			201	
228		8.32	8.30	34.045	26.480	158.4	0.501	2.42	36.6	38.1	2.19	29.2	0.00			229	206
250	ISL	8.02	7.99	34.062	26.538	153.1	0.536	2.28	34.3	41.3	2.27	30.1	0.00			251	
268		7.74	7.71	34.072	26.587	148.7	0.563	2.18	32.6	44.3	2.34	30.9	0.00			270	205
300	ISL	7.20	7.17	34.080	26.671	141.0	0.609	1.86	27.5	50.9	2.51	33.3	0.00			302	
318		6.93	6.90	34.086	26.713	137.1	0.634	1.67	24.5	54.6	2.61	34.6	0.00			320	204
378		6.55	6.52	34.134	26.802	129.3	0.714	1.11	16.1	63.1	2.82	37.0	0.00			380	203
400	ISL	6.35	6.31	34.146	26.838	126.1	0.742	0.95	13.7	66.8	2.90	38.0	0.00			403	
435		6.05	6.01	34.166	26.892	121.1	0.785	0.73	10.5	72.5	3.02	39.5	0.00			438	202
500	ISL	5.74	5.70	34.223	26.977	113.7	0.862	0.47	6.7	80.2	3.15	40.9	0.00			503	
520		5.65	5.61	34.241	27.002	111.5	0.884	0.39	5.6	82.6	3.19	41.3	0.00			524	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 54.6 N	122 7.1 W	24/10/00	1743 UTC	4177 m	170 05 kn	320 03 07	1	1020.4 mb	20.0 C	15.3 C	42m	3/8	AC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.88	17.88	33.394	24.073	383.1	0.000	5.53	101.9	3.0	0.30	0.0	0.00	0.11	0.03	0	
1	A	17.88	17.88	33.394	24.073	383.2	0.004	5.53	101.9	3.0	0.30	0.0	0.00	0.11	0.03	1	223
10	ISL	17.80	17.80	33.391	24.090	381.8	0.038	5.54	101.9	2.9	0.29	0.0	0.00	0.12	0.04	10	
13		17.76	17.76	33.389	24.098	381.1	0.050	5.55	102.0	2.9	0.29	0.0	0.00	0.13	0.04	13	222
20	ISL	17.69	17.69	33.380	24.109	380.4	0.076	5.55	101.9	2.9	0.29	0.0	0.00	0.15	0.04	20	
25	A	17.63	17.63	33.372	24.117	379.7	0.095	5.55	101.7	3.0	0.29	0.0	0.00	0.16	0.04	25	221
30	ISL	17.57	17.56	33.366	24.127	378.9	0.114	5.57	102.0	3.0	0.29	0.0	0.00	0.17	0.04	30	
36		17.49	17.48	33.359	24.141	377.8	0.137	5.59	102.2	3.1	0.30	0.0	0.00	0.18	0.05	36	220
46		16.69	16.68	33.331	24.309	362.1	0.174	5.76	103.6	3.2	0.31	0.1	0.00	0.24	0.09	46	219
50	ISL	15.51	15.50	33.288	24.543	339.8	0.188	5.99	105.3	3.1	0.32	0.0	0.00	0.24	0.12	50	
54	A	14.33	14.32	33.264	24.779	317.4	0.201	6.20	106.4	3.1	0.33	0.0	0.00	0.25	0.16	54	218
66		13.64	13.63	33.306	24.955	300.9	0.238	6.02	101.9	3.3	0.39	0.4	0.06	0.38	0.28	66	217
75		12.58	12.57	33.310	25.168	280.7	0.264	5.72	94.7	4.9	0.57	3.1	0.16	0.36	0.30	75	216
85	A	12.38	12.37	33.320	25.215	276.5	0.292	5.61	92.5	5.4	0.62	4.0	0.11	0.35	0.27	85	215
94		11.56	11.55	33.368	25.406	258.4	0.316	5.35	86.7	7.6	0.82	7.7	0.02	0.20	0.17	94	214
100	ISL	11.20	11.19	33.377	25.479	251.6	0.332	5.26	84.6	8.5	0.89	9.0	0.01	0.17	0.16	100	
104		11.00	10.99	33.386	25.521	247.6	0.342	5.18	82.9	9.2	0.94	9.8	0.01	0.15	0.15	104	213
114	A	10.41	10.40	33.479	25.697	231.0	0.366	4.74	74.9	13.3	1.19	14.0	0.01	0.06	0.06	115	212
125	ISL	9.98	9.97	33.578	25.848	216.8	0.390	4.27	66.9	17.3	1.40	17.4	0.00	0.03	0.05	126	
131		9.81	9.80	33.631	25.918	210.3	0.403	4.04	63.1	19.3	1.49	18.9	0.00	0.02	0.04	132	211
146		9.48	9.46	33.766	26.078	195.4	0.433	3.62	56.2	23.8	1.68	22.1	0.00	0.01	0.03	147	210
150	ISL	9.41	9.39	33.793	26.110	192.3	0.441	3.50	54.2	24.9	1.73	22.8	0.00	0.01	0.03	151	
163	A	9.19	9.17	33.866	26.203	183.7	0.466	3.16	48.7	28.0	1.86	24.9	0.00	0.00	0.03	164	209
183		8.77	8.75	33.954	26.339	171.1	0.501	2.90	44.3	32.4	1.99	27.0	0.00	0.00	0.03	184	208
199		8.52	8.50	33.987	26.403	165.2	0.528	3.00	45.6	33.8	1.99	27.0	0.00	0.00	0.03	200	207
200	ISL	8.50	8.48	33.988	26.407	164.8	0.530	3.01	45.8	33.9	1.99	27.0	0.00			201	
226		7.99	7.97	33.997	26.491	157.1	0.572	3.14	47.2	37.3	2.00	27.8	0.00			227	206
250	ISL	7.85	7.83	34.036	26.543	152.6	0.609	2.47	37.0	41.8	2.24	30.4	0.00			251	
266		7.80	7.77	34.064	26.572	150.1	0.633	1.94	29.0	44.9	2.42	32.3	0.00			267	205
300	ISL	7.40	7.37	34.081	26.643	143.7	0.683	1.64	24.3	50.2	2.57	34.2	0.00			302	
318		7.17	7.14	34.086	26.680	140.4	0.708	1.59	23.5	52.9	2.62	34.8	0.00			320	204
378		6.62	6.59	34.127	26.787	130.7	0.790	1.09	15.9	62.9	2.84	37.4	0.00			380	203
400	ISL	6.41	6.37	34.144	26.828	127.0	0.818	0.93	13.5	67.1	2.92	38.4	0.00			403	
435		6.10	6.06	34.174	26.892	121.2	0.862	0.72	10.4	73.4	3.04	39.8	0.00			438	202
500	ISL	5.82	5.78	34.231	26.973	114.2	0.938	0.46	6.6	80.6	3.17	41.0	0.00			503	
513		5.76	5.72	34.242	26.989	112.7	0.953	0.41	5.9	82.0	3.20	41.2	0.00			516	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 34.7 N	122 48.5 W	24/10/00	1049 UTC	4265 m	200 08 kn			1018.6 mb	17.3 C	14.8 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.95	17.95	33.413	24.070	383.4	0.000	5.51	101.7	2.6	0.27	0.1	0.00	0.09	0.02	0	
1		17.95	17.95	33.413	24.070	383.4	0.004	5.51	101.7	2.6	0.27	0.1	0.00	0.09	0.02	1	220
10	ISL	17.95	17.95	33.414	24.071	383.6	0.038	5.50	101.5	2.6	0.28	0.1	0.00	0.10	0.03	10	
14		17.95	17.95	33.414	24.072	383.7	0.054	5.50	101.5	2.6	0.28	0.1	0.00	0.11	0.03	14	219
20	ISL	17.95	17.95	33.414	24.072	383.9	0.077	5.50	101.5	2.6	0.28	0.1	0.00	0.11	0.03	20	
30		17.95	17.94	33.415	24.073	384.1	0.115	5.50	101.5	2.6	0.28	0.0	0.00	0.11	0.03	30	218
46		17.97	17.96	33.438	24.086	383.4	0.177	5.50	101.5	2.5	0.27	0.1	0.00	0.13	0.04	46	217
50	ISL	17.94	17.93	33.439	24.095	382.8	0.192	5.51	101.6	2.5	0.27	0.1	0.00	0.13	0.04	50	
60		17.86	17.85	33.443	24.118	380.9	0.230	5.53	101.9	2.4	0.28	0.1	0.00	0.15	0.05	60	216
73		14.28	14.27	33.297	24.816	314.4	0.275	6.11	104.7	3.0	0.31	0.0	0.01	0.21	0.19	73	215
75	ISL	14.09	14.08	33.289	24.849	311.3	0.281	6.10	104.2	3.1	0.32	0.1	0.02	0.22	0.20	75	
85		13.41	13.40	33.267	24.972	299.8	0.312	6.02	101.3	3.7	0.40	0.6	0.09	0.23	0.25	85	214
92		12.46	12.45	33.284	25.172	280.8	0.332	5.78	95.4	4.8	0.53	2.7	0.21	0.23	0.25	92	213
100	ISL	11.78	11.77	33.326	25.333	265.6	0.354	5.55	90.3	6.0	0.66	5.1	0.11	0.19	0.24	100	
104		11.54	11.53	33.347	25.394	259.8	0.365	5.45	88.2	6.6	0.72	6.3	0.03	0.16	0.24	104	212
115		10.93	10.92	33.372	25.523	247.7	0.393	5.21	83.3	8.8	0.91	9.5	0.02	0.10	0.14	115	211
125		10.39	10.38	33.440	25.671	233.8	0.417	4.85	76.6	12.1	1.11	13.0	0.01	0.05	0.08	126	210
139		10.05	10.03	33.543	25.809	220.9	0.449	4.40	69.0	16.0	1.34	16.6	0.00	0.00	0.03	140	209
150	ISL	9.84	9.82	33.628	25.911	211.4	0.472	4.04	63.1	19.1	1.50	19.2	0.00	0.00	0.03	151	
164		9.59	9.57	33.733	26.034	199.9	0.501	3.61	56.1	23.0	1.68	22.1	0.00	0.01	0.03	165	208
193		8.99	8.97	33.907	26.267	178.2	0.556	2.99	45.9	29.8	1.93	26.1	0.00	0.00	0.03	194	207
200	ISL	8.88	8.86	33.933	26.305	174.7	0.568	2.90	44.4	31.0	1.97	26.7	0.00			201	
228		8.55	8.53	34.003	26.412	165.0	0.616	2.62	39.9	35.0	2.10	28.3	0.00			229	206
250	ISL	8.36	8.33	34.034	26.465	160.2	0.652	2.44	37.0	37.5	2.18	29.3	0.00			251	
267		8.20	8.17	34.050	26.502	157.0	0.679	2.30	34.7	39.6	2.24	30.0	0.00			268	205
300	ISL	7.68	7.65	34.080	26.603	147.7	0.729	1.94	29.0	46.1	2.42	32.2	0.00			302	
317		7.41	7.38	34.096	26.654	143.0	0.754	1.74	25.8	49.7	2.52	33.3	0.00			319	204
377		6.98	6.94	34.157	26.762	133.4	0.836	1.14	16.7	58.6	2.78	36.1	0.00			379	203
400	ISL	6.70	6.66	34.164	26.806	129.4	0.867	0.98	14.3	62.9	2.86	37.2	0.00			402	
437		6.25	6.21	34.176	26.875	123.0	0.913	0.76	11.0	69.9	2.98	38.9	0.00			440	202
500	ISL	5.89	5.85	34.236	26.968	114.7	0.988	0.46	6.6	78.8	3.12	40.5	0.00			503	
520		5.78	5.74	34.256	26.998	112.1	1.011	0.37	5.3	81.6	3.17	41.0	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 14.7 N	123 29.4 W	24/10/00	0513 UTC	4166 m	200 03 kn			1017.7 mb	17.1 C	13.9 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.11	18.11	33.379	24.005	389.6	0.000	5.49	101.6	2.6	0.30	0.0	0.00	0.11	0.03	0	
2		18.11	18.11	33.379	24.005	389.6	0.008	5.49	101.6	2.6	0.30	0.0	0.00	0.11	0.03	2	220
10	ISL	18.00	18.00	33.373	24.028	387.8	0.039	5.50	101.5	2.6	0.29	0.0	0.00	0.11	0.03	10	
15		17.92	17.92	33.368	24.044	386.4	0.058	5.50	101.4	2.6	0.29	0.0	0.00	0.11	0.03	15	219
20	ISL	17.92	17.92	33.369	24.045	386.5	0.078	5.50	101.4	2.6	0.29	0.0	0.00	0.11	0.03	20	
30		17.91	17.90	33.370	24.048	386.5	0.116	5.50	101.4	2.5	0.29	0.0	0.00	0.12	0.04	30	218
45		17.90	17.89	33.368	24.050	386.9	0.174	5.50	101.3	2.5	0.29	0.0	0.00	0.13	0.04	45	217
50	ISL	17.90	17.89	33.368	24.050	387.0	0.194	5.50	101.3	2.5	0.29	0.0	0.00	0.14	0.04	50	
56		17.89	17.88	33.368	24.053	387.0	0.217	5.49	101.1	2.5	0.29	0.0	0.00	0.16	0.04	56	216
64		16.60	16.59	33.373	24.362	357.6	0.247	5.84	104.9	2.1	0.30	0.0	0.00	0.20	0.13	64	215
75		14.96	14.95	33.311	24.682	327.3	0.284	6.04	105.0	2.5	0.32	0.1	0.00	0.21	0.18	75	214
85		13.96	13.95	33.307	24.891	307.6	0.316	5.98	101.8	2.8	0.36	0.3	0.04	0.24	0.20	85	213
95		13.09	13.08	33.319	25.076	290.1	0.346	5.77	96.5	4.0	0.50	2.3	0.18	0.23	0.27	95	212
100	ISL	12.74	12.73	33.336	25.158	282.4	0.360	5.64	93.7	4.7	0.59	3.8	0.14	0.21	0.26	100	
109		12.10	12.09	33.369	25.307	268.3	0.385	5.40	88.5	6.2	0.75	6.8	0.02	0.15	0.20	109	211
124		10.73	10.72	33.414	25.591	241.4	0.423	5.02	79.9	10.4	1.02	11.4	0.01	0.07	0.09	125	210
125	ISL	10.67	10.66	33.421	25.607	239.8	0.426	4.98	79.2	10.8	1.04	11.8	0.01	0.07	0.09	126	
145		9.84	9.82	33.601	25.890	213.3	0.471	4.09	63.9	18.3	1.44	18.5	0.00	0.02	0.04	146	209
150	ISL	9.71	9.69	33.649	25.949	207.7	0.481	3.89	60.6	20.0	1.52	19.8	0.00	0.01	0.04	151	
169		9.38	9.36	33.810	26.129	190.9	0.519	3.27	50.6	25.6	1.78	23.7	0.00	0.00	0.03	170	208
200		8.97	8.95	33.920	26.281	177.0	0.576	2.92	44.8	30.2	1.94	26.3	0.00	0.00	0.04	201	207
230		8.50	8.48	33.997	26.415	164.7	0.628	2.59	39.4	35.0	2.08	28.3	0.00			231	206
250	ISL	8.25	8.22	34.028	26.477	159.0	0.660	2.43	36.7	38.0	2.17	29.4	0.00			251	
270		8.01	7.98	34.049	26.530	154.3	0.691	2.26	34.0	41.1	2.27	30.5	0.00			271	205
300	ISL	7.59	7.56	34.075	26.612	146.8	0.736	1.82	27.1	46.8	2.43	32.4	0.00			302	
318		7.36	7.33	34.091	26.657	142.7	0.763	1.54	22.8	50.4	2.53	33.6	0.00			320	204
377		6.87	6.83	34.163	26.782	131.4	0.843	1.02	14.9	60.4	2.81	36.5	0.00			379	203
400	ISL	6.75	6.71	34.203	26.830	127.2	0.873	0.79	11.5	64.2	2.91	37.4	0.00			402	
440		6.57	6.53	34.266	26.904	120.6	0.923	0.46	6.7	70.3	3.06	38.7	0.00			443	202
500	ISL	6.22	6.18	34.302	26.979	114.1	0.993	0.31	4.5	76.9	3.17	39.9	0.00			503	
514		6.14	6.09	34.311	26.996	112.6	1.009	0.28	4.0	78.5	3.19	40.2	0.00			517	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 54.7 N	124 10.3 W	23/10/00	2310 UTC	4193 m	330 05 kn	360 05 07	1	1014.4 mb	18.7 C	14.5 C	37m	4/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.35	18.35	33.328	23.907	398.9	0.000	5.50	102.2	3.0	0.29	0.0	0.00	0.14	0.03	0	
2		18.35	18.35	33.328	23.907	399.0	0.008	5.50	102.2	3.0	0.29	0.0	0.00	0.14	0.03	2	220
10	ISL	18.18	18.18	33.324	23.946	395.5	0.040	5.49	101.7	3.0	0.29	0.0	0.00	0.14	0.03	10	
15		18.04	18.04	33.322	23.979	392.6	0.059	5.49	101.4	3.0	0.29	0.0	0.00	0.14	0.03	15	219
20	ISL	18.03	18.03	33.322	23.982	392.5	0.079	5.49	101.4	3.0	0.29	0.0	0.00	0.15	0.03	20	
30		18.01	18.00	33.321	23.986	392.4	0.118	5.50	101.5	3.0	0.29	0.0	0.00	0.16	0.04	30	218
45		18.01	18.00	33.325	23.990	392.6	0.177	5.52	101.9	2.9	0.29	0.0	0.00	0.16	0.04	45	217
50	ISL	17.99	17.98	33.325	23.995	392.2	0.197	5.52	101.9	2.9	0.29	0.0	0.00	0.17	0.05	50	
60		17.94	17.93	33.325	24.008	391.4	0.236	5.52	101.8	2.9	0.29	0.0	0.00	0.21	0.06	60	216
75	ISL	14.94	14.93	33.342	24.710	324.6	0.290	5.95	103.4	2.7	0.33	0.0	0.00	0.34	0.28	75	
76		14.72	14.71	33.343	24.758	320.1	0.293	5.98	103.5	2.7	0.33	0.0	0.00	0.35	0.29	76	215
85		13.78	13.77	33.247	24.881	308.5	0.321	6.03	102.3	3.4	0.38	0.3	0.05	0.30	0.27	85	214
95		12.73	12.72	33.176	25.036	293.8	0.351	6.08	100.8	4.3	0.43	0.8	0.12	0.25	0.24	95	213
100	ISL	12.56	12.55	33.238	25.117	286.2	0.366	5.86	96.9	4.8	0.52	2.5	0.10	0.22	0.24	100	
106		12.35	12.34	33.313	25.216	276.9	0.383	5.59	92.1	5.4	0.63	4.5	0.07	0.18	0.25	106	212
115		11.44	11.43	33.271	25.353	263.9	0.407	5.60	90.4	6.5	0.68	5.2	0.06	0.15	0.18	115	211
125		10.95	10.93	33.363	25.513	248.9	0.433	5.24	83.8	8.6	0.89	9.1	0.01	0.08	0.15	126	210
138		10.27	10.25	33.478	25.721	229.2	0.464	4.67	73.6	13.6	1.21	14.4	0.00	0.03	0.05	139	209
150	ISL	9.87	9.85	33.584	25.871	215.1	0.490	4.24	66.3	17.6	1.41	17.8	0.00	0.02	0.04	151	
163		9.57	9.55	33.692	26.005	202.6	0.518	3.85	59.8	21.5	1.58	20.6	0.00	0.01	0.03	164	208
194		9.01	8.99	33.900	26.259	179.0	0.577	3.06	47.0	29.5	1.90	25.7	0.00	0.00	0.03	195	207
200	ISL	8.89	8.87	33.923	26.296	175.6	0.587	3.00	46.0	30.6	1.93	26.2	0.00			201	
228		8.33	8.31	33.995	26.439	162.3	0.635	2.82	42.7	35.6	2.06	28.2	0.00			229	206
250	ISL	7.89	7.86	34.033	26.535	153.4	0.669	2.47	37.0	40.7	2.22	30.2	0.00			251	
267		7.59	7.56	34.051	26.592	148.1	0.695	2.20	32.8	44.6	2.35	31.6	0.00			268	205
300	ISL	7.19	7.16	34.057	26.654	142.6	0.743	1.99	29.4	49.9	2.47	33.3	0.00			302	
318		7.04	7.01	34.059	26.676	140.6	0.768	1.89	27.8	52.5	2.53	34.0	0.00			320	204
377		6.67	6.64	34.155	26.803	129.3	0.848	1.01	14.7	62.8	2.85	37.0	0.00			379	203
400	ISL	6.52	6.48	34.176	26.839	126.1	0.877	0.84	12.2	66.1	2.92	37.9	0.00			402	
437		6.27	6.23	34.199	26.890	121.6	0.923	0.67	9.7	71.0	3.01	39.0	0.00			440	202
500	ISL	5.83	5.79	34.227	26.969	114.6	0.998	0.47	6.7	79.8	3.13	40.7	0.00			503	
521		5.68	5.64	34.237	26.995	112.2	1.022	0.41	5.8	82.7	3.17	41.2	0.00			524	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 53.2 N	118 29.8 W	19/10/00	2351 UTC	61 m	250 11 kn	250 01 07	4	1013.2 mb	16.8 C	15.0 C	13m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.72	17.72	33.554	24.234	367.7	0.000	6.15	113.1	3.1	0.23	0.1	0.01	1.26	0.34	0	
1		17.72	17.72	33.554	24.234	367.8	0.004	6.15	113.1	3.1	0.23	0.1	0.01	1.26	0.34	1	207
6		17.66	17.66	33.552	24.247	366.7	0.022	6.18	113.5	3.1	0.22	0.1	0.01	1.91	0.40	6	206
10	ISL	17.04	17.04	33.541	24.387	353.5	0.036	6.12	111.0	3.2	0.24	0.1	0.02	1.87	0.53	10	
11		16.85	16.85	33.538	24.429	349.5	0.040	6.10	110.3	3.2	0.25	0.1	0.02	1.86	0.56	11	205
20	ISL	15.49	15.49	33.495	24.706	323.4	0.070	6.11	107.5	3.2	0.32	0.3	0.05	1.24	0.51	20	
21		15.34	15.34	33.489	24.734	320.7	0.073	6.11	107.1	3.2	0.33	0.3	0.05	1.16	0.50	21	204
30		13.80	13.80	33.450	25.032	292.6	0.101	5.57	94.6	6.2	0.64	3.9	0.54	0.82	0.52	30	203
41		12.64	12.63	33.436	25.254	271.7	0.132	4.78	79.3	9.8	1.01	8.7	0.76	0.27	0.28	41	202
50	ISL	12.32	12.31	33.449	25.326	265.1	0.156	4.62	76.1	10.6	1.08	10.2	0.63	0.18	0.22	50	
52		12.25	12.24	33.452	25.341	263.6	0.162	4.58	75.3	10.8	1.10	10.5	0.60	0.16	0.21	52	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 35

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 49.5 N	118 38.1 W	20/10/00	0155 UTC	683 m	270 08 kn	280 02 06		1012.7 mb	16.5 C	14.3 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.06	18.06	33.639	24.216	369.4	0.000	5.74	106.3	2.0	0.22	0.1	0.00	0.35	0.13	0	
2		18.06	18.06	33.639	24.216	369.5	0.007	5.74	106.3	2.0	0.22	0.1	0.00	0.35 A	0.13 A	2	220
10	ISL	17.84	17.84	33.624	24.259	365.7	0.037	5.81	107.1	2.1	0.23	0.1	0.00	0.36	0.14	10	
11		17.80	17.80	33.621	24.266	365.0	0.040	5.82	107.2	2.1	0.23	0.1	0.00	0.36	0.14	11	219
20	ISL	17.65	17.65	33.610	24.295	362.7	0.073	5.87	107.8	2.1	0.23	0.0	0.00	0.40	0.16	20	
21		17.63	17.63	33.609	24.299	362.3	0.077	5.87	107.8	2.1	0.23	0.0	0.00	0.40	0.16	21	218
30	ISL	14.23	14.23	33.463	24.953	300.1	0.107	5.83	99.9	4.8	0.49	2.3	0.26	1.01	0.37	30	
31		13.84	13.84	33.455	25.028	293.0	0.110	5.83	99.1	5.1	0.52	2.6	0.29	1.07	0.39	31	217
41		13.20	13.19	33.453	25.156	281.0	0.138	5.52	92.6	6.3	0.66	4.9	0.43	0.71	0.43	41	216
49		12.65	12.64	33.484	25.289	268.6	0.160	5.19	86.1	7.8	0.82	7.8	0.27	0.52	0.35	49	215
50	ISL	12.57	12.56	33.487	25.307	266.9	0.163	5.14	85.1	8.1	0.84	8.2	0.25	0.49	0.34	50	
59		11.89	11.88	33.522	25.464	252.1	0.186	4.67	76.3	10.7	1.06	11.8	0.06	0.26	0.26	59	214
70		11.38	11.37	33.577	25.601	239.3	0.213	4.22	68.2	13.6	1.26	14.9	0.02	0.15	0.23	70	213
75	ISL	11.29	11.28	33.585	25.624	237.3	0.225	4.16	67.1	14.1	1.29	15.3	0.02	0.15	0.23	75	
85		11.13	11.12	33.607	25.670	233.1	0.249	4.07	65.4	15.1	1.33	16.1	0.02	0.14	0.21	85	212
99		10.58	10.57	33.714	25.851	216.1	0.280	3.56	56.6	19.5	1.57	19.6	0.01	0.07	0.13	99	211
100	ISL	10.55	10.54	33.722	25.862	215.1	0.282	3.52	55.9	19.8	1.58	19.8	0.01	0.07	0.13	100	
119		10.15	10.14	33.861	26.040	198.6	0.322	2.91	45.9	24.8	1.83	23.2	0.01	0.02	0.17	120	210
125	ISL	10.06	10.05	33.905	26.090	193.9	0.333	2.74	43.1	26.2	1.90	24.0	0.01	0.02	0.15	126	
139		9.89	9.87	33.998	26.191	184.6	0.360	2.40	37.6	29.2	2.04	25.6	0.01	0.01	0.10	140	209
150	ISL	9.78	9.76	34.052	26.252	179.0	0.380	2.21	34.6	31.0	2.12	26.5	0.01	0.01	0.07	151	
169		9.60	9.58	34.117	26.333	171.7	0.413	1.98	30.9	33.5	2.22	27.6	0.00	0.00	0.05	170	208
199		9.24	9.22	34.159	26.425	163.5	0.464	1.85	28.6	36.6	2.31	28.7	0.00	0.00	0.06	200	207
200	ISL	9.23	9.21	34.160	26.427	163.3	0.465	1.84	28.5	36.7	2.31	28.7	0.00			201	
229		9.00	8.98	34.192	26.490	157.9	0.512	1.63	25.1	39.1	2.41	29.7	0.00			230	206
250	ISL	8.87	8.84	34.207	26.522	155.1	0.545	1.51	23.2	40.8	2.46	30.3	0.00			251	
269		8.73	8.70	34.216	26.552	152.7	0.574	1.41	21.6	42.5	2.51	30.9	0.00			271	205
300	ISL	8.36	8.33	34.222	26.614	147.2	0.620	1.27	19.3	46.2	2.60	32.0	0.01			302	
320		8.10	8.07	34.228	26.658	143.2	0.649	1.17	17.6	49.0	2.67	32.8	0.01			322	204
379		7.57	7.53	34.279	26.776	132.7	0.731	0.70	10.4	58.0	2.93	35.3	0.00			381	203
400	ISL	7.39	7.35	34.289	26.810	129.7	0.758	0.60	8.9	60.7	2.99	36.0	0.00			403	
441		7.04	7.00	34.303	26.870	124.4	0.810	0.47	6.9	66.0	3.07	37.2	0.00			444	202
500	ISL	6.53	6.48	34.322	26.954	116.8	0.882	0.35	5.1	74.7	3.17	38.5	0.00			503	
518		6.38	6.33	34.329	26.980	114.5	0.902	0.31	4.5	77.4	3.20	38.9	0.00			522	201

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 40

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 39.3 N	118 58.7 W	20/10/00	0855 UTC	722 m	070 04 kn			1014.4 mb	16.9 C	15.1 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.95	17.95	33.633	24.239	367.3	0.000	5.77	106.6	2.4	0.22	0.1	0.00	0.39	0.13	0	
1		17.95	17.95	33.633	24.239	367.3	0.004	5.77	106.6	2.4	0.22	0.1	0.00	0.39	0.13	1	221
10		17.89	17.89	33.631	24.252	366.4	0.037	5.76	106.3	2.2	0.22	0.1	0.00	0.35	0.13	10	220
20		15.63	15.63	33.524	24.697	324.2	0.071	6.08	107.3	3.6	0.31	0.2	0.05	0.91	0.31	20	219
30		14.18	14.18	33.497	24.990	296.6	0.102	5.79	99.2	5.3	0.52	2.6	0.40	0.80	0.40	30	218
40		13.06	13.05	33.464	25.193	277.5	0.131	5.30	88.7	7.4	0.77	6.7	0.44	0.50	0.35	40	217
49		12.33	12.32	33.509	25.370	260.8	0.155	4.94	81.4	9.3	0.95	9.8	0.22	0.34	0.27	49	216
50	ISL	12.27	12.26	33.513	25.385	259.4	0.158	4.90	80.7	9.5	0.97	10.1	0.20	0.33	0.26	50	
59		11.76	11.75	33.543	25.504	248.3	0.181	4.56	74.3	11.6	1.12	12.8	0.09	0.22	0.23	59	215
70		11.20	11.19	33.592	25.645	235.1	0.207	4.18	67.3	14.4	1.30	15.5	0.05	0.15	0.22	70	214
75	ISL	10.99	10.98	33.621	25.706	229.4	0.219	4.01	64.3	15.8	1.38	16.7	0.04	0.12	0.20	75	
85		10.63	10.62	33.696	25.828	218.0	0.241	3.62	57.6	19.0	1.55	19.2	0.03	0.06	0.14	85	213
99		10.17	10.16	33.854	26.031	199.0	0.270	2.91	45.9	24.7	1.83	23.1	0.02	0.01	0.08	99	212
100	ISL	10.16	10.15	33.859	26.036	198.5	0.272	2.89	45.6	24.9	1.84	23.2	0.02	0.01	0.08	100	
119		10.04	10.03	33.924	26.108	192.1	0.309	2.67	42.0	27.0	1.93	24.4	0.01	0.01	0.08	120	211
125	ISL	9.97	9.96	33.952	26.141	189.0	0.321	2.57	40.4	27.9	1.97	24.9	0.01	0.01	0.08	126	
138		9.81	9.79	34.012	26.215	182.2	0.345	2.34	36.6	30.0	2.07	26.0	0.01	0.01	0.07	139	210
150	ISL	9.71	9.69	34.051	26.263	178.0	0.367	2.20	34.4	31.5	2.13	26.7	0.01	0.01	0.07	151	
169		9.55	9.53	34.099	26.327	172.2	0.400	2.03	31.6	33.6	2.21	27.5	0.00	0.00	0.06	170	209
199		9.20	9.18	34.162	26.434	162.7	0.450	1.78	27.5	37.1	2.34	29.0	0.00	0.00	0.05	200	208
200	ISL	9.19	9.17	34.163	26.436	162.4	0.452	1.77	27.4	37.2	2.34	29.0	0.00			201	
229		8.89	8.87	34.193	26.508	156.1	0.498	1.61	24.7	40.2	2.43	30.0	0.00			230	207
250	ISL	8.72	8.69	34.213	26.551	152.4	0.530	1.49	22.8	42.2	2.49	30.6	0.00			251	
268		8.59	8.56	34.227	26.582	149.7	0.558	1.38	21.0	44.0	2.55	31.2	0.00			270	206
300	ISL	8.31	8.28	34.242	26.637	145.0	0.605	1.15	17.4	47.6	2.65	32.5	0.01			302	
317		8.15	8.12	34.249	26.667	142.3	0.629	1.02	15.4	49.8	2.71	33.2	0.02			319	205
378		7.50	7.46	34.283	26.789	131.4	0.713	0.66	9.8	59.1	2.92	35.4	0.01			380	204
400	ISL	7.26	7.22	34.288	26.827	127.9	0.741	0.57	8.4	62.5	2.98	36.2	0.01			403	
439		6.88	6.84	34.296	26.886	122.6	0.790	0.44	6.5	68.2	3.07	37.6	0.01			442	203
500	ISL	6.50	6.45	34.317	26.954	116.7	0.863	0.33	4.8	75.1	3.16	38.8	0.00			503	
520		6.37	6.32	34.324	26.977	114.8	0.886	0.29	4.2	77.3	3.19	39.2	0.00			524	202

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 29.9 N	119 19.2 W	20/10/00	1314 UTC	1655 m	060 02 kn			1013.8 mb	15.3 C	14.3 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.65	16.65	33.593	24.517	340.7	0.000	5.86	105.5	1.4	0.24	0.1	0.00	1.15	0.51	0	
2		16.65	16.65	33.593	24.517	340.8	0.007	5.86	105.5	1.4	0.24	0.1	0.00	1.15	0.51	2	220
10	ISL	16.53	16.53	33.589	24.542	338.7	0.034	5.91	106.2	1.4	0.25	0.1	0.01	1.60	0.73	10	
12		16.47	16.47	33.586	24.554	337.6	0.041	5.93	106.4	1.4	0.25	0.1	0.01	1.73	0.80	12	219
20	ISL	16.16	16.16	33.570	24.613	332.3	0.068	5.92	105.6	1.8	0.28	0.3	0.04	1.82	0.85	20	
21		16.10	16.10	33.566	24.624	331.3	0.071	5.92	105.5	1.8	0.29	0.3	0.04	1.83	0.86	21	218
30	ISL	15.05	15.05	33.503	24.809	313.9	0.100	5.81	101.3	3.5	0.42	1.6	0.11	1.03	0.54	30	
31		14.90	14.90	33.496	24.836	311.3	0.103	5.79	100.6	3.8	0.44	1.8	0.12	0.93	0.50	31	217
40		13.44	13.43	33.482	25.131	283.5	0.130	5.37	90.6	6.7	0.69	5.7	0.19	0.55	0.36	40	216
50	ISL	12.10	12.09	33.531	25.431	255.0	0.157	4.70	77.1	10.9	1.03	11.3	0.09	0.25	0.32	50	
52		11.92	11.91	33.542	25.474	251.0	0.162	4.59	75.0	11.6	1.08	12.2	0.06	0.22	0.31	52	215
60		11.86	11.85	33.547	25.489	249.8	0.182	4.58	74.8	11.7	1.11	12.5	0.05	0.21	0.35	60	214
69		11.68	11.67	33.555	25.529	246.2	0.204	4.48	72.9	12.3	1.15	13.2	0.04	0.18	0.30	69	213
75	ISL	11.39	11.38	33.573	25.596	239.9	0.219	4.33	70.0	13.6	1.23	14.4	0.03	0.14	0.27	75	
86		10.79	10.78	33.626	25.745	225.9	0.244	3.99	63.7	16.6	1.40	17.1	0.02	0.08	0.23	86	212
100	ISL	10.28	10.27	33.712	25.901	211.3	0.275	3.61	57.0	20.4	1.58	19.9	0.01	0.04	0.16	100	
101		10.25	10.24	33.718	25.911	210.4	0.277	3.59	56.7	20.7	1.59	20.1	0.01	0.04	0.16	101	211
121		10.04	10.03	33.810	26.019	200.6	0.318	3.18	50.0	23.9	1.75	22.4	0.01	0.02	0.15	122	210
125	ISL	10.01	10.00	33.820	26.032	199.4	0.326	3.14	49.3	24.3	1.77	22.7	0.01	0.02	0.16	126	
138		9.95	9.93	33.858	26.072	195.9	0.352	3.00	47.1	25.6	1.84	23.5	0.01	0.02	0.20	139	209
150	ISL	9.90	9.88	33.941	26.145	189.2	0.375	2.65	41.6	28.0	1.97	24.9	0.01	0.01	0.17	151	
169		9.80	9.78	34.076	26.268	178.0	0.410	2.07	32.4	32.0	2.17	27.0	0.00	0.00	0.09	170	208
200		9.42	9.40	34.146	26.386	167.3	0.463	1.80	28.0	35.7	2.30	28.5	0.00	0.00	0.08	201	207
232		9.24	9.21	34.169	26.433	163.4	0.516	1.70	26.3	37.5	2.36	29.1	0.00			233	206
250	ISL	8.95	8.92	34.197	26.502	157.1	0.545	1.51	23.2	40.6	2.45	30.2	0.01			251	
269		8.62	8.59	34.226	26.577	150.3	0.574	1.29	19.7	44.2	2.56	31.5	0.01			271	205
300	ISL	8.34	8.31	34.240	26.631	145.5	0.620	1.13	17.1	47.4	2.65	32.6	0.00			302	
319		8.21	8.18	34.241	26.651	143.9	0.648	1.07	16.2	49.0	2.69	33.1	0.00			321	204
381		7.63	7.59	34.251	26.745	135.6	0.734	0.82	12.2	56.0	2.84	35.1	0.01			383	203
400	ISL	7.50	7.46	34.257	26.769	133.6	0.760	0.76	11.3	57.9	2.88	35.6	0.01			403	
440		7.23	7.19	34.274	26.821	129.1	0.812	0.63	9.3	62.3	2.97	36.6	0.00			443	202
500	ISL	6.61	6.56	34.307	26.932	119.0	0.887	0.38	5.5	72.3	3.14	38.7	0.00			503	
509		6.52	6.47	34.312	26.948	117.5	0.897	0.34	4.9	73.8	3.16	39.0	0.00			512	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 19.4 N	119 39.8 W	20/10/00	1825 UTC	80 m	330 04 kn	300 04 06	2	1014.5 mb	15.8 C	14.7 C	18m	8/8	ST

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.43	16.43	33.496	24.494	343.0	0.000	5.75	103.1	2.5	0.27	0.0	0.00	0.51	0.17	0	
1	A	16.43	16.43	33.496	24.494	343.0	0.003	5.75	103.1	2.5	0.27	0.0	0.00	0.51	0.17	1	209
10	ISL	16.39	16.39	33.495	24.503	342.5	0.034	5.73	102.6	2.5	0.27	0.1	0.00	0.50	0.19	10	
11	A	16.39	16.39	33.495	24.503	342.5	0.038	5.73	102.6	2.5	0.27	0.1	0.00	0.50	0.19	11	208
18		16.38	16.38	33.498	24.507	342.3	0.062	5.73	102.6	2.3	0.27	0.0	0.00	0.50	0.17	18	207
20	ISL	16.34	16.34	33.497	24.516	341.5	0.069	5.74	102.7	2.3	0.27	0.0	0.00	0.53	0.18	20	
25	A	16.19	16.19	33.486	24.542	339.2	0.086	5.75	102.6	2.3	0.27	0.0	0.00	0.63	0.23	25	206
29		16.04	16.04	33.469	24.563	337.3	0.099	5.81	103.3	2.4	0.29	0.0	0.01	0.71	0.28	29	205
30	ISL	15.99	15.99	33.466	24.572	336.5	0.102	5.81	103.2	2.4	0.29	0.0	0.01	0.71	0.28	30	
36	A	15.47	15.46	33.436	24.665	327.7	0.122	5.81	102.1	2.7	0.30	0.2	0.02	0.71	0.30	36	204
49	A	12.43	12.42	33.282	25.175	279.4	0.162	5.80	95.7	6.0	0.55	3.3	0.11	0.50	0.32	49	203
50	ISL	12.29	12.28	33.281	25.201	276.9	0.165	5.77	94.9	6.3	0.57	3.6	0.11	0.48	0.31	50	
60		11.44	11.43	33.329	25.397	258.4	0.191	5.36	86.6	9.2	0.80	7.2	0.12	0.26	0.23	60	202
70	A	11.19	11.18	33.492	25.569	242.3	0.216	4.72	75.9	13.3	1.10	12.1	0.11	0.17	0.19	70	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 9.5 N	120 0.5 W	20/10/00	2113 UTC	1192 m	320 13 kn	310 04 06	1	1014.5 mb	15.9 C	15.0 C	23m	4/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.35	17.35	33.509	24.288	362.6	0.000	5.58	101.8	2.2	0.27	0.1	0.00	0.21	0.09	0	
1		17.35	17.35	33.509	24.288	362.6	0.004	5.58	101.8	2.2	0.27	0.1	0.00	0.21	0.09	1	220
10	ISL	17.34	17.34	33.509	24.291	362.6	0.036	5.58	101.8	2.2	0.27	0.0	0.00	0.24	0.08	10	
11		17.34	17.34	33.509	24.291	362.7	0.040	5.58	101.8	2.2	0.27	0.0	0.00	0.24	0.08	11	219
20		17.31	17.31	33.509	24.299	362.3	0.073	5.58	101.7	2.1	0.28	0.0	0.00	0.24	0.10	20	218
30	ISL	17.22	17.22	33.508	24.320	360.6	0.109	5.60	101.9	2.1	0.28	0.0	0.00	0.25	0.08	30	
31		17.21	17.20	33.508	24.322	360.4	0.112	5.60	101.9	2.1	0.28	0.0	0.00	0.25	0.08	31	217
40		15.78	15.77	33.450	24.607	333.4	0.143	5.87	103.8	2.6	0.31	0.0	0.00	0.51	0.24	40	216
49		14.74	14.73	33.420	24.812	314.1	0.173	5.97	103.4	3.0	0.33	0.2	0.05	0.48	0.32	49	215
50	ISL	14.56	14.55	33.410	24.843	311.2	0.176	5.96	102.8	3.1	0.35	0.4	0.07	0.47	0.32	50	
59		13.04	13.03	33.333	25.096	287.2	0.203	5.80	96.9	4.3	0.50	2.1	0.20	0.37	0.30	59	214
69		12.39	12.38	33.299	25.196	277.9	0.231	5.77	95.1	5.1	0.55	3.0	0.18	0.33	0.28	69	213
75	ISL	11.67	11.66	33.295	25.329	265.3	0.247	5.63	91.4	6.6	0.68	5.1	0.13	0.25	0.23	75	
85		10.60	10.59	33.310	25.532	246.1	0.273	5.39	85.5	9.0	0.88	8.7	0.04	0.13	0.15	85	212
100		10.53	10.52	33.316	25.549	244.7	0.310	5.38	85.2	9.4	0.89	9.2	0.03	0.12	0.13	100	211
119		9.98	9.97	33.491	25.780	223.2	0.354	4.64	72.7	15.0	1.25	15.0	0.02	0.05	0.09	120	210
125	ISL	9.91	9.90	33.567	25.851	216.5	0.367	4.36	68.2	17.0	1.36	16.8	0.02	0.04	0.08	126	
139		9.79	9.77	33.735	26.002	202.4	0.397	3.77	58.9	21.3	1.58	20.4	0.01	0.02	0.05	140	209
150	ISL	9.67	9.65	33.812	26.083	195.0	0.418	3.54	55.2	23.3	1.67	21.9	0.01	0.01	0.04	151	
170		9.36	9.34	33.901	26.203	183.9	0.456	3.30	51.1	26.6	1.78	23.6	0.01	0.00	0.03	171	208
199		8.52	8.50	34.014	26.425	163.2	0.507	2.85	43.3	34.6	2.03	27.2	0.01	0.00	0.03	200	207
200	ISL	8.50	8.48	34.016	26.429	162.8	0.508	2.84	43.2	34.8	2.03	27.3	0.01			201	
228		8.17	8.15	34.043	26.501	156.4	0.553	2.60	39.2	38.6	2.15	28.9	0.00			229	206
250	ISL	7.94	7.91	34.073	26.559	151.2	0.587	2.31	34.7	42.3	2.29	30.4	0.00			251	
268		7.77	7.74	34.102	26.607	146.9	0.614	2.01	30.1	45.6	2.41	31.6	0.00			270	205
300	ISL	7.57	7.54	34.164	26.685	139.9	0.660	1.34	20.0	51.8	2.64	33.6	0.00			302	
318		7.46	7.43	34.196	26.726	136.3	0.684	1.00	14.9	55.2	2.76	34.6	0.00			320	204
377		6.92	6.88	34.243	26.839	126.2	0.762	0.70	10.3	64.7	2.97	37.3	0.00			379	203
400	ISL	6.77	6.73	34.250	26.865	124.0	0.791	0.62	9.1	67.1	3.02	37.9	0.00			403	
437		6.54	6.50	34.254	26.899	121.1	0.836	0.54	7.9	70.6	3.07	38.7	0.00			440	202
500	ISL	6.03	5.99	34.257	26.968	115.0	0.910	0.49	7.0	78.6	3.17	40.4	0.00			503	
521		5.86	5.81	34.259	26.990	112.9	0.934	0.47	6.7	81.3	3.20	41.0	0.00			525	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 59.2 N	120 21.4 W	21/10/00	0131 UTC	770 m	310 22 kn	310 05 06	1	1013.0 mb	17.1 C	15.1 C		2/8	CS

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	17.47	17.47	33.484	24.240	367.1	0.000	5.60	102.4	2.3	0.27	0.0	0.00	0.07	0.12	0	
1	17.47	17.47	33.484	24.240	367.2	0.004	5.60	102.4	2.3	0.27	0.0	0.00	0.07	0.12	1	221
10 ISL	17.48	17.48	33.485	24.239	367.6	0.037	5.60	102.4	2.3	0.27	0.0	0.00	0.15	0.09	10	
15	17.48	17.48	33.484	24.239	367.8	0.055	5.60	102.4	2.3	0.27	0.0	0.00	0.21	0.07	15	220
20 ISL	17.47	17.47	33.482	24.240	367.9	0.074	5.60	102.4	2.3	0.27	0.0	0.00	0.22	0.07	20	
30	17.44	17.43	33.478	24.244	367.8	0.110	5.59	102.2	2.3	0.27	0.0	0.00	0.23	0.07	30	219
45	13.60	13.59	33.295	24.954	300.4	0.160	5.89	99.6	4.7	0.48	2.1	0.22	0.65	0.49	45	218
50 ISL	13.07	13.06	33.326	25.084	288.1	0.175	5.69	95.2	5.5	0.58	3.7	0.21	0.55	0.46	50	
56	12.62	12.61	33.369	25.206	276.6	0.192	5.41	89.6	6.6	0.70	5.8	0.19	0.38	0.43	56	217
66	11.60	11.59	33.377	25.405	257.8	0.219	5.18	84.0	8.5	0.86	8.5	0.05	0.22	0.31	66	216
75	11.17	11.16	33.367	25.476	251.3	0.242	5.13	82.4	9.6	0.94	9.9	0.03	0.15	0.25	75	215
85	10.57	10.56	33.386	25.597	239.9	0.266	5.01	79.5	11.4	1.06	11.7	0.02	0.08	0.16	85	214
96	10.19	10.18	33.463	25.722	228.2	0.292	4.63	72.9	14.3	1.25	14.9	0.02	0.04	0.12	96	213
100 ISL	10.11	10.10	33.510	25.772	223.5	0.301	4.41	69.3	15.8	1.34	16.4	0.02	0.03	0.10	100	
110	9.92	9.91	33.643	25.908	210.8	0.323	3.86	60.4	20.0	1.56	19.9	0.01	0.02 A	0.07 A	111	212
125	9.32	9.31	33.838	26.160	187.1	0.353	3.35	51.8	26.0	1.77	23.6	0.01	0.01	0.05	126	211
147	8.82	8.80	33.937	26.317	172.5	0.392	3.04	46.5	30.9	1.93	26.3	0.00	0.00	0.03	148	210
150 ISL	8.79	8.77	33.942	26.326	171.7	0.397	3.03	46.4	31.1	1.94	26.4	0.00	0.00	0.03	151	
170	8.65	8.63	33.965	26.366	168.3	0.431	2.97	45.3	32.5	1.97	26.7	0.00	0.00	0.04	171	209
198	8.21	8.19	34.018	26.475	158.3	0.477	2.65	40.0	37.6	2.13	28.9	0.00	0.01	0.05	199	208
200 ISL	8.19	8.17	34.020	26.479	157.9	0.480	2.63	39.7	37.9	2.14	29.0	0.00			201	
230	7.92	7.90	34.043	26.538	152.8	0.527	2.35	35.3	41.5	2.25	30.4	0.00			231	207
250 ISL	7.65	7.63	34.051	26.583	148.7	0.557	2.20	32.8	44.6	2.34	31.5	0.00			251	
272	7.35	7.32	34.060	26.634	144.1	0.589	2.03	30.1	48.3	2.44	32.7	0.00			274	206
300 ISL	7.07	7.04	34.077	26.686	139.4	0.629	1.76	25.9	52.7	2.57	34.1	0.00			302	
315	6.93	6.90	34.088	26.714	136.9	0.650	1.61	23.6	55.2	2.64	34.9	0.00			317	205
383	6.12	6.09	34.155	26.874	122.2	0.738	0.85	12.2	71.0	2.97	39.1	0.00			385	204
400 ISL	5.97	5.94	34.163	26.900	119.9	0.758	0.76	10.9	73.8	3.01	39.7	0.00			403	
437	5.72	5.68	34.180	26.944	115.9	0.802	0.62	8.8	78.7	3.08	40.7	0.00			440	203
500 ISL	5.47	5.43	34.230	27.015	109.8	0.873	0.43	6.1	85.3	3.18	41.8	0.00			503	
510	5.43	5.39	34.238	27.026	108.8	0.884	0.40	5.7	86.3	3.20	42.0	0.00			514	202

A) SECOND FLUOROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPIGMENT
CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 39.2 N	121 2.4 W	21/10/00	0709 UTC	3764 m	310 24 kn			1014.3 mb	17.1 C	16.1 C			

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	17.53	17.53	33.553	24.279	363.5	0.000	5.53	101.3	2.2	0.26	0.1	0.00	0.23	0.05	0	
1	17.53	17.53	33.553	24.279	363.5	0.004	5.53	101.3	2.2	0.26	0.1	0.00	0.23	0.05	1	220
10	17.53	17.53	33.553	24.279	363.8	0.036	5.54	101.5	2.2	0.26	0.1	0.00	0.22	0.06	10	219
19	17.53	17.53	33.554	24.280	364.0	0.069	5.54	101.5	2.2	0.26	0.1	0.00	0.23	0.06	19	218
20 ISL	17.50	17.50	33.551	24.285	363.5	0.073	5.54	101.4	2.2	0.26	0.1	0.00	0.24	0.06	20	
30	17.16	17.16	33.521	24.344	358.3	0.109	5.62	102.2	2.3	0.27	0.0	0.00	0.29	0.11	30	217
40	13.07	13.06	33.303	25.066	289.5	0.141	5.77	96.5	5.2	0.53	3.1	0.13	0.67	0.45	40	216
50	11.89	11.88	33.356	25.335	264.2	0.169	5.30	86.5	7.8	0.80	7.7	0.07	0.40	0.35	50	215
60	11.00	10.99	33.408	25.538	245.0	0.194	4.91	78.6	10.8	1.04	11.5	0.02	0.19	0.21	60	214
70	10.82	10.81	33.650	25.758	224.3	0.218	3.92	62.6	17.8	1.47	18.5	0.03	0.15	0.15	70	213
75 ISL	10.66	10.65	33.687	25.815	219.0	0.229	3.72	59.2	19.3	1.55	19.8	0.02	0.12	0.12	75	
85	10.27	10.26	33.711	25.902	210.9	0.250	3.53	55.7	21.2	1.63	21.0	0.01	0.07	0.08	85	212
100	9.60	9.59	33.829	26.107	191.7	0.281	3.02	47.0	26.8	1.86	24.7	0.01	0.01	0.05	100	211
119	9.21	9.20	33.914	26.237	179.7	0.316	2.71	41.8	30.4	2.00	26.9	0.00	0.00	0.05	120	210
125 ISL	9.06	9.05	33.938	26.279	175.7	0.327	2.65	40.8	31.6	2.03	27.4	0.00	0.00	0.05	126	
140	8.70	8.69	33.990	26.377	166.6	0.352	2.53	38.6	34.5	2.10	28.4	0.00	0.00	0.05	141	209
150 ISL	8.53	8.51	34.010	26.419	162.8	0.369	2.46	37.4	36.1	2.14	29.0	0.00	0.00	0.04	151	
168	8.28	8.26	34.033	26.475	157.7	0.398	2.34	35.4	38.7	2.21	29.9	0.00	0.00	0.03	169	208
200	7.94	7.92	34.053	26.542	151.8	0.447	2.15	32.3	42.6	2.32	31.3	0.00	0.01	0.02	201	207
229	7.35	7.33	34.021	26.602	146.4	0.490	2.41	35.7	45.8	2.30	31.6	0.00			230	206
250 ISL	7.00	6.98	34.023	26.653	141.7	0.521	2.25	33.0	49.8	2.39	32.8	0.00			251	
270	6.74	6.72	34.037	26.699	137.5	0.548	1.96	28.6	54.1	2.51	34.3	0.00			272	205
300 ISL	6.55	6.52	34.076	26.755	132.5	0.589	1.43	20.8	59.6	2.68	36.1	0.00			302	
319	6.49	6.46	34.103	26.785	130.0	0.614	1.12	16.3	62.6	2.78	37.1	0.00			321	204
375	6.34	6.31	34.156	26.847	124.8	0.685	0.89	12.9	67.9	2.93	38.5	0.00			377	203
400 ISL	6.15	6.11	34.166	26.879	122.0	0.716	0.77	11.1	71.5	2.99	39.3	0.00			403	
441	5.82	5.78	34.184	26.935	116.9	0.765	0.58	8.3	77.7	3.08	40.6	0.00			444	202
500 ISL	5.54	5.50	34.250	27.022	109.2	0.832	0.37	5.3	85.3	3.20	41.9	0.00			503	
511	5.49	5.45	34.262	27.038	107.8	0.844	0.33	4.7	86.7	3.22	42.1	0.00			515	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 19.2 N	121 43.3 W	21/10/00	1828 UTC	4056 m	330 27 kn	310 08 07	1	1015.5 mb	16.8 C	14.3 C	18m	3/8	AC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	16.88	16.88	33.498	24.391	352.8	0.000	5.65	102.2	2.7	0.29	0.1	0.00	0.25	0.06	0	
2	A	16.88	16.88	33.498	24.391	352.8	0.007	5.65	102.2	2.7	0.29	0.1	0.00	0.25	0.06	2	222
10	ISL	16.86	16.86	33.488	24.388	353.4	0.035	5.67	102.5	2.7	0.29	0.1	0.00	0.25	0.06	10	
12	A	16.86	16.86	33.485	24.386	353.7	0.042	5.68	102.7	2.7	0.29	0.1	0.00	0.25	0.06	12	221
20	ISL	16.85	16.85	33.484	24.388	353.7	0.071	5.66	102.3	2.5	0.30	0.0	0.00	0.25	0.06	20	
24	A	16.85	16.85	33.483	24.387	353.9	0.085	5.65	102.1	2.4	0.30	0.0	0.00	0.25	0.06	24	220
30	ISL	16.83	16.83	33.480	24.390	353.9	0.106	5.66	102.2	2.4	0.29	0.0	0.00	0.25	0.07	30	
37	A	16.81	16.80	33.476	24.392	353.9	0.131	5.67	102.4	2.4	0.29	0.0	0.00	0.26	0.08	37	219
44		16.50	16.49	33.446	24.441	349.5	0.155	5.74	103.0	2.5	0.31	0.1	0.00	0.27	0.07	44	218
49	A	15.44	15.43	33.377	24.627	331.8	0.172	5.91	103.8	3.2	0.35	0.3	0.03	0.32	0.13	49	217
50	ISL	15.22	15.21	33.359	24.661	328.5	0.176	5.92	103.5	3.3	0.36	0.4	0.05	0.32	0.13	50	
61		13.04	13.03	33.202	24.995	296.9	0.210	6.04	100.9	4.9	0.53	2.0	0.28	0.32	0.14	61	216
71	A	11.76	11.75	33.186	25.227	274.9	0.239	5.85	95.1	6.5	0.68	5.0	0.31	0.21	0.21	71	215
75	ISL	11.28	11.27	33.178	25.309	267.1	0.250	5.79	93.1	6.7	0.67	5.0	0.17	0.20	0.19	75	
77		11.06	11.05	33.178	25.348	263.4	0.255	5.76	92.2	6.8	0.67	5.0	0.10	0.19	0.18	77	214
85		10.33	10.32	33.254 D	25.535	245.7	0.275	5.54	87.3	8.7	0.87	8.7	0.03	0.11	0.20	85	213
95		10.09	10.08	33.438	25.719	228.4	0.299	4.87	76.4	12.7	1.12	13.0	0.02	0.06	0.14	95	212
100	ISL	9.97	9.96	33.457	25.755	225.2	0.310	4.85	75.9	13.4	1.16	13.7	0.02	0.06	0.12	100	
108		9.78	9.77	33.463	25.791	221.8	0.328	4.83	75.3	14.1	1.19	14.3	0.01	0.05	0.10	108	211
122		9.50	9.49	33.585	25.932	208.6	0.358	4.36	67.6	18.0	1.38	17.5	0.01	0.03	0.07	123	210
125	ISL	9.47	9.46	33.622	25.966	205.5	0.365	4.19	64.9	19.2	1.45	18.5	0.01	0.03	0.06	126	
145		9.31	9.29	33.844	26.166	186.9	0.404	3.20	49.5	26.9	1.84	24.5	0.00	0.00	0.04	146	209
150	ISL	9.23	9.21	33.870	26.200	183.8	0.413	3.20	49.4	27.7	1.85	24.7	0.00	0.00	0.04	151	
167		8.91	8.89	33.921	26.291	175.4	0.444	3.19	48.9	29.7	1.87	25.4	0.00	0.00	0.03	168	208
198		8.10	8.08	33.990	26.469	158.8	0.495	3.20	48.2	35.8	1.96	27.2	0.00	0.00	0.03	199	207
200	ISL	8.07	8.05	33.992	26.475	158.2	0.499	3.17	47.7	36.2	1.97	27.4	0.00			201	
229		7.66	7.64	34.012	26.551	151.4	0.543	2.67	39.8	41.8	2.18	30.0	0.00			230	206
250	ISL	7.35	7.33	34.011	26.595	147.4	0.575	2.56	37.9	45.0	2.26	31.1	0.00			251	
269		7.13	7.10	34.017	26.630	144.2	0.603	2.46	36.2	47.7	2.33	31.9	0.00			271	205
300	ISL	7.11	7.08	34.091	26.692	138.9	0.646	1.80	26.5	53.0	2.55	33.9	0.00			302	
317		7.10	7.07	34.132	26.726	136.0	0.670	1.40	20.6	55.9	2.68	35.0	0.00			319	204
377		6.89	6.85	34.242	26.842	125.9	0.748	0.70	10.3	64.9	2.97	37.3	0.00			379	203
400	ISL	6.80	6.76	34.262	26.870	123.5	0.777	0.57	8.3	67.1	3.02	37.8	0.00			403	
443		6.61	6.57	34.283	26.912	120.0	0.829	0.43	6.3	70.9	3.09	38.6	0.00			446	202
500	ISL	6.22	6.18	34.307	26.983	113.7	0.896	0.32	4.6	77.7	3.18	40.0	0.00			503	
519		6.09	6.04	34.315	27.006	111.7	0.917	0.29	4.2	80.0	3.21	40.4	0.00			523	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 59.8 N	122 23.7 W	23/10/00	0234 UTC	4103 m	350 18 kn			1009.5 mb	16.2 C	13.4 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.50	17.50	33.367	24.144	376.4	0.000	5.56	101.7	3.0	0.30	0.0	0.00	0.14	0.04	0	
1		17.50	17.50	33.367	24.144	376.4	0.004	5.56	101.7	3.0	0.30	0.0	0.00	0.14	0.04	1	220
10	ISL	17.50	17.50	33.367	24.144	376.7	0.038	5.56	101.7	3.0	0.30	0.0	0.00	0.14	0.04	10	
15		17.50	17.50	33.367	24.144	376.8	0.056	5.56	101.7	3.0	0.30	0.0	0.00	0.14	0.04	15	219
20	ISL	17.50	17.50	33.367	24.144	377.0	0.075	5.56	101.7	3.0	0.30	0.0	0.00	0.14	0.04	20	
30		17.51	17.50	33.367	24.142	377.5	0.113	5.57	101.9	2.9	0.31	0.0	0.00	0.13	0.04	30	218
45		17.51	17.50	33.367	24.143	377.9	0.170	5.57	101.9	2.9	0.30	0.0	0.00	0.05	0.02	45	217
50	ISL	16.84	16.83	33.370	24.304	362.7	0.188	5.74	103.6	2.6	0.30	0.0	0.00	0.14	0.09	50	
54		16.22	16.21	33.368	24.445	349.3	0.202	5.89	105.0	2.4	0.31	0.0	0.00	0.21	0.14	54	216
64		15.03	15.02	33.289	24.649	330.1	0.236	6.06	105.5	2.9	0.32	0.0	0.00	0.23	0.16	64	215
75		14.21	14.20	33.267	24.807	315.3	0.272	6.10	104.4	3.3	0.34	0.1	0.01	0.27	0.21	75	214
85		13.58	13.57	33.284	24.950	301.9	0.303	5.97	100.9	3.8	0.41	0.8	0.09	0.28	0.20	85	213
94		12.99	12.98	33.294	25.077	290.0	0.329	5.83	97.3	4.3	0.50	1.9	0.24	0.28	0.22	94	212
100	ISL	12.63	12.62	33.322	25.169	281.3	0.347	5.68	94.1	4.9	0.60	3.7	0.19	0.25	0.21	100	
111		11.95	11.94	33.380	25.344	264.9	0.377	5.38	87.9	6.7	0.80	7.4	0.03	0.17	0.16	111	211
125	ISL	10.89	10.87	33.412	25.562	244.2	0.412	5.05	80.7	10.1	1.01	11.1	0.01	0.08	0.09	126	
126		10.82	10.80	33.415	25.576	242.8	0.415	5.02	80.1	10.4	1.02	11.3	0.01	0.07	0.08	127	210
144		10.12	10.10	33.522	25.781	223.6	0.457	4.44	69.8	15.8	1.32	16.3	0.01	0.02	0.04	145	209
150	ISL	9.90	9.88	33.574	25.859	216.3	0.470	4.29	67.1	17.6	1.40	17.6	0.01	0.02	0.04	151	
168		9.31	9.29	33.740	26.085	195.0	0.507	3.89	60.1	22.9	1.61	21.2	0.00	0.01	0.03	169	208
198		8.58	8.56	33.969	26.380	167.4	0.561	3.16	48.1	32.5	1.94	26.5	0.00	0.00	0.02	199	207
200	ISL	8.55	8.53	33.977	26.391	166.4	0.565	3.10	47.2	33.0	1.96	26.8	0.00			201	
232		8.30	8.28	34.063	26.497	156.9	0.616	2.24	33.9	39.6	2.27	30.1	0.00			233	206
250	ISL	8.18	8.15	34.100	26.544	152.7	0.644	1.96	29.6	42.6	2.39	31.2	0.00			251	
271		8.05	8.02	34.135	26.591	148.5	0.676	1.73	26.0	45.6	2.50	32.1	0.00			272	205
300	ISL	7.91	7.88	34.174	26.643	144.1	0.718	1.42	21.3	48.9	2.62	33.2	0.00			302	
319		7.80	7.77	34.191	26.673	141.5	0.745	1.25	18.7	51.0	2.69	33.9	0.00			321	204
382		7.05	7.01	34.183	26.773	132.5	0.832	0.99	14.6	59.9	2.86	36.5	0.00			384	203
400	ISL	6.78	6.74	34.175	26.804	129.7	0.855	0.93	13.6	63.4	2.91	37.4	0.00			402	
438		6.28	6.24	34.173	26.869	123.6	0.903	0.78	11.3	70.5	3.02	39.2	0.00			441	202
500	ISL	6.11	6.07	34.265	26.964	115.4	0.978	0.42	6.0	77.5	3.20	40.4	0.00			503	
511		6.08	6.03	34.281	26.980	114.0	0.990	0.36	5.2	78.8	3.23	40.6	0.00			514	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
31 39.3 N	123 4.3 W	23/10/00	0833 UTC	4149 m	340 09 kn			1011.7 mb	16.4 C	13.5 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.92	17.92	33.360	24.037	386.5	0.000	5.48	101.0	2.7	0.28	0.0	0.00	0.12	0.03	0	
1		17.92	17.92	33.360	24.037	386.6	0.004	5.48	101.0	2.7	0.28	0.0	0.00	0.12	0.03	1	220
10	ISL	17.93	17.93	33.359	24.034	387.1	0.039	5.49	101.2	2.7	0.28	0.0	0.00	0.12	0.03	10	
15		17.93	17.93	33.359	24.034	387.3	0.058	5.49	101.2	2.7	0.28	0.0	0.00	0.12	0.03	15	219
20	ISL	17.93	17.93	33.361	24.036	387.3	0.077	5.49	101.2	2.7	0.28	0.0	0.00	0.12	0.03	20	
30		17.93	17.92	33.365	24.040	387.3	0.116	5.49	101.2	2.7	0.29	0.0	0.00	0.11	0.03	30	218
44		17.93	17.92	33.360	24.036	388.1	0.170	5.48	101.0	2.7	0.28	0.0	0.00	0.12	0.03	44	217
50	ISL	17.93	17.92	33.362	24.038	388.2	0.194	5.48	101.0	2.7	0.29	0.0	0.00	0.12	0.04	50	
54		17.93	17.92	33.363	24.039	388.2	0.209	5.48	101.0	2.7	0.29	0.0	0.00	0.12	0.04	54	216
63		16.37	16.36	33.377	24.418	352.2	0.243	5.85	104.6	2.2	0.29	0.0	0.00	0.24	0.18	63	215
74		15.04	15.03	33.343	24.689	326.6	0.280	5.95	103.6	2.6	0.33	0.1	0.01	0.24	0.23	74	214
75	ISL	14.89	14.88	33.339	24.719	323.8	0.283	5.95	103.3	2.7	0.34	0.1	0.02	0.24	0.23	75	
84		13.71	13.70	33.313	24.946	302.2	0.311	5.89	99.8	3.5	0.42	0.8	0.13	0.22	0.25	84	213
94		13.09	13.08	33.310	25.069	290.7	0.341	5.75	96.2	4.2	0.50	2.0	0.35	0.21	0.26	94	212
100	ISL	12.71	12.70	33.318	25.150	283.1	0.358	5.64	93.6	4.8	0.57	3.3	0.25	0.18	0.24	100	
109		12.11	12.10	33.339	25.282	270.7	0.383	5.46	89.5	6.0	0.70	5.7	0.02	0.13	0.19	109	211
125		10.98	10.96	33.393	25.531	247.2	0.425	5.10	81.6	9.3	0.95	10.2	0.01	0.06	0.10	126	210
143		10.21	10.19	33.536	25.777	224.1	0.467	4.38	69.0	15.5	1.31	16.1	0.01	0.02	0.05	144	209
150	ISL	10.00	9.98	33.606	25.867	215.6	0.482	4.07	63.8	18.1	1.45	18.3	0.01	0.01	0.04	151	
168		9.58	9.56	33.774	26.068	196.8	0.519	3.37	52.4	24.3	1.74	23.0	0.00	0.00	0.03	169	208
199		8.98	8.96	33.916	26.276	177.4	0.577	2.96	45.5	29.8	1.93	26.1	0.00	0.00	0.03	200	207
200	ISL	8.96	8.94	33.919	26.282	176.9	0.579	2.95	45.3	30.0	1.93	26.2	0.00			201	
229		8.54	8.52	33.995	26.407	165.4	0.629	2.72	41.4	34.5	2.06	27.9	0.00			230	206
250	ISL	8.24	8.21	34.026	26.477	159.0	0.663	2.52	38.1	37.6	2.12	28.8	0.00			251	
300	ISL	7.62	7.59	34.076	26.608	147.2	0.739	2.01	30.0	45.8	2.37	31.7	0.00			302	
319		7.41	7.38	34.086	26.646	143.8	0.767	1.80	26.7	49.2	2.50	33.1	0.00			321	205
320		7.40	7.37	34.087	26.648	143.6	0.769	1.79	26.5	49.4	2.51	33.2	0.00			322	204
378		6.75	6.72	34.114	26.760	133.5	0.849	1.31	19.1	59.5	2.74	36.1	0.00			380	203
400	ISL	6.64	6.60	34.144	26.798	130.1	0.878	1.07	15.6	62.7	2.83	36.9	0.00			402	
435		6.51	6.47	34.194	26.855	125.1	0.923	0.73	10.6	67.4	2.97	38.1	0.00			438	202
500	ISL	6.12	6.08	34.228	26.933	118.3	1.002	0.49	7.1	75.0	3.09	39.8	0.00			503	
520		6.00	5.95	34.239	26.957	116.2	1.025	0.42	6.0	77.4	3.13	40.3	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
31 19.5 N	123 44.7 W	23/10/00	1749 UTC	4008 m	330 08 kn	330 05 08	1	1014.5 mb	17.0 C	15.0 C	32m	5/8 CU

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.25	18.25	33.408	23.993	390.7	0.000	5.53	102.6	2.8	0.29	0.0	0.00	0.14	0.03	0	
1	A	18.25	18.25	33.408	23.993	390.7	0.004	5.53	102.6	2.8	0.29	0.0	0.00	0.14	0.03	1	221
9		18.17	18.17	33.406	24.011	389.3	0.035	5.48	101.5	2.7	0.28	0.0	0.00	0.14	0.04	9	220
10	ISL	18.17	18.17	33.406	24.011	389.3	0.039	5.48	101.5	2.7	0.28	0.0	0.00	0.14	0.04	10	
19	A	18.16	18.16	33.406	24.014	389.3	0.074	5.52	102.2	2.7	0.29	0.0	0.00	0.14	0.04	19	219
20	ISL	18.16	18.16	33.406	24.014	389.4	0.078	5.52	102.2	2.7	0.29	0.0	0.00	0.14	0.04	20	
30	ISL	18.16	18.15	33.406	24.015	389.7	0.117	5.48	101.5	2.6	0.29	0.0	0.00	0.14	0.04	30	
31		18.16	18.15	33.406	24.015	389.7	0.121	5.48	101.5	2.6	0.29	0.0	0.00	0.14	0.04	31	218
41	A	18.15	18.14	33.406	24.018	389.8	0.160	5.49	101.7	2.6	0.28	0.0	0.00	0.15	0.04	41	217
50	ISL	18.14	18.13	33.407	24.021	389.8	0.195	5.49	101.6	2.6	0.29	0.0	0.00	0.16	0.04	50	
55		18.13	18.12	33.407	24.024	389.7	0.214	5.49	101.6	2.5	0.29	0.0	0.00	0.16	0.04	55	216
65	A	15.32	15.31	33.325	24.614	333.5	0.250	6.04	105.8	2.3	0.32	0.0	0.00	0.25	0.17	65	215
75	ISL	14.45	14.44	33.310	24.790	316.9	0.283	6.05	104.1	2.8	0.34	0.1	0.01	0.27	0.24	75	
76		14.40	14.39	33.308	24.799	316.1	0.286	6.05	104.0	2.9	0.34	0.1	0.01	0.27	0.24	76	214
88	A	12.66	12.65	33.252	25.108	286.8	0.322	5.87	97.3	4.6	0.50	2.0	0.22	0.25	0.22	88	213
100	ISL	12.02	12.01	33.338	25.298	269.0	0.356	5.46	89.3	6.1	0.70	6.0	0.04	0.18	0.19	100	
101		11.98	11.97	33.346	25.311	267.7	0.358	5.43	88.7	6.2	0.72	6.3	0.02	0.17	0.19	101	212
114		11.01	11.00	33.358	25.498	250.0	0.392	5.31	85.0	8.2	0.85	8.6	0.01	0.10	0.14	114	211
125	A	10.29	10.28	33.396	25.653	235.4	0.419	5.03	79.3	11.2	1.04	11.8	0.01	0.06	0.08	126	210
143		9.82	9.80	33.576	25.873	214.8	0.459	4.30	67.1	17.5	1.39	17.5	0.01	0.02	0.05	144	209
150	ISL	9.71	9.69	33.631	25.935	209.1	0.474	4.08	63.6	19.4	1.49	19.0	0.01	0.02	0.04	151	
169		9.44	9.42	33.757	26.078	195.8	0.513	3.57	55.3	23.9	1.69	22.3	0.00	0.01	0.03	170	208
200		8.85	8.83	33.935	26.312	174.1	0.570	2.90	44.4	31.0	1.96	26.6	0.00	0.00	0.03	201	207
229		8.34	8.32	34.017	26.455	160.8	0.618	2.57	38.9	36.5	2.12	28.7	0.00			230	206
250	ISL	8.06	8.03	34.048	26.521	154.8	0.652	2.33	35.1	40.4	2.23	30.1	0.00			251	
267		7.86	7.83	34.063	26.563	151.0	0.678	2.14	32.1							268	205
300	ISL	7.54	7.51	34.093	26.633	144.8	0.726	1.83	27.2	49.4	2.47	33.2	0.00			302	
317		7.37	7.34	34.104	26.666	141.8	0.751	1.69	25.0							319	204
377		6.54	6.51	34.122	26.794	130.0	0.832	1.18	17.2	62.3	2.79	37.0	0.00			379	203
400	ISL	6.36	6.32	34.145	26.836	126.3	0.862	0.98	14.2	66.0	2.88	38.0	0.00			402	
438		6.14	6.10	34.187	26.897	120.8	0.909	0.69	9.9	71.8	3.02	39.3	0.00			441	202
500	ISL	5.79	5.75	34.230	26.976	113.9	0.981	0.46	6.6	79.5	3.13	40.7	0.00			503	
520		5.68	5.64	34.245	27.001	111.6	1.004	0.39	5.6	82.0	3.17	41.2	0.00			523	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 29.0 N	117 46.0 W	19/10/00	1830 UTC	63 m	300 02 kn	310 02 06	2	1016.0 mb	19.2 C	16.5 C	19m	8/8	ST

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	18.77	18.77	33.680	24.072	383.2	0.000	5.58	104.7	2.1	0.23	0.1	0.00	0.36	0.09	0	
2 A	18.77	18.77	33.680	24.072	383.3	0.008	5.58	104.7	2.1	0.23	0.1	0.00	0.36	0.09	2	209
10 ISL	18.29	18.29	33.640	24.161	375.1	0.038	5.70	106.0	2.2	0.23	0.1	0.00	0.48	0.15	10	
12 A	18.11	18.11	33.626	24.195	371.9	0.045	5.74	106.4	2.2	0.23	0.1	0.00	0.51	0.17	12	208
18	17.66	17.66	33.592	24.278	364.1	0.068	5.83	107.1	2.3	0.25	0.1	0.00	0.87	0.25	18	207
20 ISL	17.37	17.37	33.583	24.341	358.2	0.075	5.85	106.8	2.7	0.28	0.3	0.01	1.09	0.37	20	
26 A	15.89	15.89	33.528	24.642	329.7	0.095	5.90	104.6	3.7	0.37	0.8	0.05	1.45	0.66	26	206
30 ISL	14.16	14.16	33.458	24.964	299.1	0.108	5.46	93.5	6.6	0.63	3.8	0.19	1.03	0.56	30	
32	13.35	13.35	33.438	25.115	284.8	0.114	5.23	88.0	8.0	0.76	5.3	0.26	0.78	0.48	32	205
40 A	12.58	12.57	33.472	25.293	267.9	0.136	5.07	84.0	7.9	0.82	7.1	0.31	0.55	0.43	40	204
46	11.81	11.80	33.527	25.482	250.0	0.151	4.80	78.3	9.1	0.94	9.7	0.07	0.34	0.32	46	203
50 ISL	11.60	11.59	33.557	25.545	244.2	0.161	4.52	73.4	11.3	1.08	11.7	0.10	0.26	0.29	50	
52 A	11.54	11.53	33.569	25.565	242.3	0.166	4.39	71.2	12.4	1.15	12.6	0.11	0.23	0.29	52	202
59	11.37	11.36	33.591	25.613	237.8	0.183	4.24	68.5	14.0	1.24	13.8	0.13	0.18	0.28	59	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 25.1 N	117 54.3 W	19/10/00	0841 UTC	616 m	300 05 kn		2	1016.0 mb	19.2 C	16.5 C		8/8	ST

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	19.50	19.50	33.706	23.906	399.0	0.000	5.39	102.6	2.3	0.24	0.1	0.00	0.17	0.03	0	
1	19.50	19.50	33.706	23.906	399.0	0.004	5.39	102.6	2.3	0.24	0.1	0.00	0.17	0.03	1	220
10 ISL	19.44	19.44	33.703	23.920	398.1	0.040	5.39	102.5	2.3	0.24	0.1	0.00	0.16	0.04	10	
15	19.41	19.41	33.702	23.927	397.6	0.060	5.39	102.4	2.3	0.24	0.1	0.00	0.16	0.04	15	219
20 ISL	18.68	18.68	33.638	24.063	384.8	0.079	5.60	104.9	2.3	0.25	0.1	0.00	0.19	0.04	20	
29	16.98	16.98	33.526	24.390	353.8	0.113	5.96	108.0	2.3	0.27	0.1	0.00	0.24	0.05	29	218
30 ISL	16.78	16.78	33.519	24.431	349.9	0.116	5.95	107.4	2.3	0.27	0.2	0.01	0.31	0.08	30	
45	14.09	14.08	33.492	25.005	295.6	0.164	5.87	100.4	4.0	0.43	1.0	0.11	0.99	0.44	45	217
50 ISL	13.42	13.41	33.505	25.153	281.6	0.179	5.53	93.3	5.3	0.59	3.7	0.11	0.74	0.40	50	
54	12.96	12.95	33.519	25.256	271.9	0.190	5.23	87.4	6.5	0.72	6.0	0.11	0.50	0.35	54	216
66	11.94	11.93	33.562	25.486	250.2	0.221	4.64	75.9	10.1	0.98	10.6	0.02	0.21	0.22	66	215
73	11.71	11.70	33.577	25.540	245.2	0.239	4.53	73.7	11.1	1.04	11.6	0.02	0.15	0.17	73	214
75 ISL	11.67	11.66	33.583	25.553	244.1	0.244	4.50	73.2	11.4	1.06	11.8	0.02	0.14	0.17	75	
84	11.43	11.42	33.611	25.619	238.0	0.265	4.35	70.4	12.7	1.15	13.1	0.02	0.11	0.15	84	213
94	10.87	10.86	33.633	25.737	226.9	0.288	4.19	67.0	14.7	1.26	15.3	0.02	0.06	0.09	94	212
100 ISL	10.65	10.64	33.681	25.813	219.8	0.302	3.86	61.4	17.3	1.42	17.6	0.02	0.04	0.08	100	
109	10.41	10.40	33.757	25.914	210.3	0.321	3.36	53.2	21.1	1.64	20.7	0.01	0.03	0.07	110	211
124	10.10	10.09	33.804	26.004	202.1	0.352	3.22	50.7	23.1	1.71	22.0	0.01	0.01	0.05	125	210
125 ISL	10.08	10.07	33.809	26.011	201.4	0.354	3.20	50.3	23.3	1.72	22.1	0.01	0.01	0.05	126	
143	9.70	9.68	33.908	26.153	188.3	0.389	2.85	44.5	27.5	1.93	24.8	0.01	0.00	0.04	144	209
150 ISL	9.66	9.64	33.950	26.192	184.7	0.402	2.70	42.1	28.8	1.99	25.4	0.01	0.00	0.04	151	
169	9.61	9.59	34.049	26.278	176.9	0.437	2.32	36.2	31.9	2.11	26.7	0.01	0.00	0.04	170	208
199	9.27	9.25	34.112	26.383	167.5	0.488	2.04	31.6	35.3	2.23	28.3	0.00	0.00	0.04	200	207
200 ISL	9.26	9.24	34.113	26.386	167.2	0.490	2.04	31.6	35.4	2.23	28.3	0.00			201	
229	8.95	8.93	34.142	26.458	160.8	0.538	1.94	29.8	38.0	2.31	29.3	0.01			230	206
250 ISL	8.69	8.66	34.170	26.521	155.1	0.571	1.75	26.7	40.6	2.40	30.2	0.01			251	
267	8.49	8.46	34.192	26.570	150.8	0.597	1.57	23.9	42.8	2.47	30.9	0.00			269	205
300 ISL	8.26	8.23	34.221	26.628	145.8	0.646	1.35	20.4	46.5	2.59	32.1	0.00			302	
317	8.15	8.12	34.231	26.653	143.7	0.670	1.26	19.0	48.4	2.64	32.7	0.00			319	204
377	7.55	7.51	34.238	26.747	135.4	0.754	0.97	14.4	55.5	2.79	34.8	0.00			379	203
400 ISL	7.30	7.26	34.247	26.789	131.5	0.785	0.82	12.1	59.4	2.87	35.8	0.00			403	
435	6.93	6.89	34.264	26.854	125.6	0.830	0.60	8.8	65.3	2.99	37.3	0.00			438	202
500 ISL	6.50	6.45	34.297	26.939	118.2	0.909	0.40	5.8	72.9	3.12	39.0	0.00			503	
521	6.36	6.31	34.308	26.966	115.8	0.933	0.33	4.8	75.3	3.16	39.6	0.00			525	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 35

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
33 15.2 N	118 14.9 W	19/10/00	0449 UTC	303 m	200 04 kn			1015.8 mb	18.2 C	16.5 C			

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	18.99	18.99	33.767	24.083	382.2	0.000	5.46	103.0	1.7	0.23	0.2	0.00	0.21	0.07	0	
1	18.99	18.99	33.767	24.083	382.2	0.004	5.46	103.0	1.7	0.23	0.2	0.00	0.21	0.07	1	217
10	18.99	18.99	33.766	24.082	382.6	0.038	5.46	103.0	1.7	0.23	0.2	0.00	0.21	0.05	10	216
19	18.89	18.89	33.757	24.101	381.1	0.073	5.56	104.6	1.7	0.24	0.2	0.00	0.25	0.07	19	215
20 ISL	18.74	18.74	33.741	24.127	378.7	0.076	5.60	105.1	1.7	0.24	0.2	0.00	0.26	0.07	20	
30	16.57	16.57	33.562	24.513	342.1	0.112	6.04	108.6	2.1	0.27	0.1	0.00	0.32	0.12	30	214
40	14.20	14.19	33.458	24.956	300.1	0.145	6.09	104.3	3.7	0.42	1.3	0.05	1.77	0.81	40	213
50	12.16	12.15	33.509	25.403	257.7	0.172	5.08	83.4	8.9	0.89	9.0	0.14	0.98	0.81	50	212
60	11.54	11.53	33.578	25.572	241.8	0.197	4.53	73.5	12.9	1.16	13.5	0.08	0.33	0.52	60	211
70	10.80	10.79	33.607	25.728	227.1	0.221	4.18	66.7	15.5	1.29	15.7	0.03	0.18	0.27	70	210
75 ISL	10.55	10.54	33.643	25.800	220.4	0.232	3.99	63.4	17.1	1.37	17.1	0.02	0.13	0.20	75	
86	10.20	10.19	33.732	25.930	208.2	0.256	3.59	56.6	20.6	1.56	20.1	0.01	0.05	0.11	86	209
100	10.02	10.01	33.806	26.019	200.1	0.284	3.22	50.6	23.6	1.73	22.5	0.01	0.03	0.08	100	208
119	9.68	9.67	33.907	26.155	187.6	0.321	2.94	45.9	26.8	1.85	24.2	0.01	0.01	0.05	120	207
125 ISL	9.57	9.56	33.918	26.182	185.1	0.332	2.93	45.6	27.4	1.86	24.6	0.01	0.01	0.05	126	
139	9.30	9.28	33.933	26.237	180.0	0.358	2.92	45.2	28.7	1.89	25.3	0.01	0.01	0.05	140	206
150 ISL	9.02	9.00	33.963	26.306	173.7	0.377	2.87	44.1	30.7	1.94	26.1	0.01	0.01	0.05	151	
169	8.65	8.63	34.020	26.409	164.2	0.409	2.73	41.6	33.9	2.04	27.4	0.01	0.00	0.06	170	205
199	8.78	8.76	34.076	26.433	162.5	0.458	2.41	36.9	35.5	2.14	28.1	0.01	0.00	0.04	200	204
200 ISL	8.78	8.76	34.079	26.435	162.3	0.460	2.39	36.6	35.6	2.15	28.2	0.01			201	
230	8.75	8.73	34.177	26.517	155.2	0.508	1.67	25.6	40.3	2.40	30.0	0.01			231	203
250 ISL	8.63	8.60	34.211	26.563	151.2	0.538	1.42	21.7	43.0	2.51	31.0	0.03			251	
269	8.51	8.48	34.227	26.594	148.5	0.567	1.30	19.8	44.9	2.57	31.7	0.04			271	202
300 ISL	8.44	8.41	34.228	26.606	147.9	0.613	1.27	19.3	45.7	2.58	31.9	0.04			302	
301	8.44	8.41	34.228	26.606	148.0	0.614	1.27	19.3	45.7	2.58	31.9	0.04			303	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 37

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
33 10.9 N	118 23.2 W	19/10/00	0200 UTC	1176 m	280 09 kn			1015.2 mb	17.9 C	16.2 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.28	18.28	33.668	24.184	372.5	0.000	5.60	104.1	1.8	0.26	0.1	0.00	0.27	0.08	0	
1		18.28	18.28	33.668	24.184	372.5	0.004	5.60	104.1	1.8	0.26	0.1	0.00	0.27	0.08	1	220
10		16.05	16.05	33.508	24.590	334.1	0.036	6.03	107.3	2.4	0.30	0.1	0.00	0.44	0.19	10	219
20		14.26	14.26	33.416	24.910	303.9	0.067	6.00	102.9	3.5	0.38	0.6	0.05	1.19	0.46	20	218
30		13.61	13.61	33.462	25.080	288.0	0.097	5.86	99.2	4.6	0.50	2.4	0.10	1.19	0.59	30	217
40		12.84	12.83	33.522	25.281	269.1	0.125	5.55	92.5	7.1	0.73	6.1	0.18	1.28	0.78	40	216
50		11.97	11.96	33.531	25.456	252.7	0.151	4.93	80.7	10.2	1.00	10.5	0.12	0.82	0.53	50	215
60		11.24	11.23	33.573	25.623	236.9	0.175	4.41	71.0	13.7	1.21	14.2	0.05	0.35	0.31	60	214
69		11.01	11.00	33.626	25.706	229.3	0.196	4.07	65.3	15.9	1.37	16.8	0.02	0.24	0.28	69	213
75	ISL	10.81	10.80	33.665	25.772	223.1	0.210	3.82	61.0	17.6	1.47	18.4	0.02	0.18	0.23	75	
85		10.45	10.44	33.726	25.882	212.8	0.232	3.50	55.5	20.4	1.61	20.5	0.01	0.09	0.15	85	212
100		10.00	9.99	33.794	26.013	200.7	0.263	3.43	53.9	23.0	1.70	22.2	0.01	0.03	0.09	101	211
120		9.51	9.50	33.855	26.142	188.7	0.302	3.21	49.9	25.8	1.78	23.7	0.01	0.01	0.07	121	210
125	ISL	9.48	9.47	33.888	26.173	185.9	0.311	3.09	48.0	26.7	1.82	24.2	0.01	0.01	0.07	126	
140		9.44	9.42	33.988	26.258	178.2	0.338	2.70	41.9	29.6	1.97	25.6	0.00	0.00	0.06	141	209
150	ISL	9.34	9.32	34.034	26.310	173.4	0.356	2.50	38.7	31.5	2.05	26.6	0.00	0.00	0.06	151	
170		9.06	9.04	34.084	26.395	165.7	0.390	2.30	35.4	34.6	2.16	28.0	0.00	0.00	0.05	171	208
200		8.53	8.51	34.059	26.458	160.0	0.439	2.58	39.3	36.3	2.12	28.1	0.00	0.00	0.05	201	207
229		8.40	8.38	34.137	26.540	152.8	0.484	1.90	28.8	41.4	2.36	30.3	0.00			230	206
250	ISL	8.07	8.04	34.134	26.587	148.5	0.516	1.86	28.0	44.5	2.43	31.4	0.00			251	
272		7.69	7.66	34.115	26.628	144.8	0.548	1.82	27.2	47.4	2.47	32.3	0.00			274	205
300	ISL	7.37	7.34	34.118	26.677	140.5	0.588	1.67	24.8	51.1	2.56	33.5	0.00			302	
320		7.22	7.19	34.131	26.708	137.8	0.616	1.51	22.3	53.7	2.63	34.3	0.00			322	204
378		7.15	7.11	34.239	26.804	129.7	0.693	0.79	11.7	61.0	2.90	36.4	0.00			380	203
400	ISL	7.03	6.99	34.259	26.836	126.9	0.722	0.64	9.4	63.6	2.96	37.0	0.00			403	
436		6.79	6.75	34.280	26.886	122.5	0.766	0.49	7.2	67.7	3.03	38.0	0.00			439	202
500	ISL	6.39	6.34	34.308	26.962	115.9	0.843	0.34	4.9	74.8	3.14	39.5	0.00			503	
519		6.27	6.22	34.317	26.985	113.9	0.865	0.29	4.2	76.9	3.17	39.9	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 55.2 N	118 56.4 W	18/10/00	1734 UTC	1692 m	280 08 kn	280 02 07	2	1016.0 mb	18.0 C	16.0 C	17m	8/8 AS

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.95	17.95	33.720	24.305	361.0	0.000	5.58	103.1	1.9	0.23	0.1	0.00	0.28	0.10	0	
1	A	17.95	17.95	33.720	24.305	361.0	0.004	5.58	103.1	1.9	0.23	0.1	0.00	0.28	0.10	1	221
10	ISL	17.92	17.92	33.718	24.311	360.7	0.036	5.60	103.5	1.8	0.23	0.1	0.00	0.28	0.10	10	
11	A	17.92	17.92	33.718	24.311	360.7	0.040	5.60	103.4	1.8	0.23	0.1	0.00	0.28	0.10	11	220
20	ISL	14.37	14.37	33.605	25.033	292.2	0.069	5.77	99.3	6.5	0.56	4.1	0.10	0.90	0.50	20	
21	A	13.93	13.93	33.603	25.123	283.6	0.072	5.79	98.7	7.2	0.61	4.8	0.12	0.96	0.54	21	219
28		12.43	12.43	33.635	25.448	252.9	0.091	4.97	82.2	12.1	1.01	11.1	0.22	0.74	0.42	28	218
30	ISL	12.08	12.08	33.631	25.512	246.8	0.096	4.76	78.1	13.0	1.10	12.5	0.22	0.70	0.39	30	
34	A	11.51	11.51	33.623	25.612	237.4	0.105	4.40	71.3	14.5	1.26	14.9	0.22	0.64	0.35	34	217
46	A	10.87	10.86	33.685	25.776	222.0	0.133	3.74	59.8	19.1	1.54	19.4	0.03	0.34	0.25	46	216
50	ISL	10.70	10.69	33.702	25.819	218.0	0.142	3.59	57.2	20.1	1.60	20.3	0.03	0.28	0.23	50	
56		10.50	10.49	33.723	25.871	213.2	0.155	3.43	54.4	21.3	1.66	21.3	0.02	0.21	0.21	56	215
65	A	10.31	10.30	33.749	25.924	208.4	0.174	3.29	52.0	22.4	1.73	22.2	0.02	0.15	0.19	65	214
75	ISL	9.92	9.91	33.819	26.045	197.0	0.194	2.97	46.6	25.6	1.86	24.2	0.01	0.05	0.11	75	
76		9.88	9.87	33.826	26.057	195.9	0.196	2.94	46.1	25.9	1.87	24.4	0.01	0.04	0.10	76	213
86		9.77	9.76	33.847	26.092	192.8	0.215	2.85	44.5	26.8	1.91	25.1	0.01	0.02	0.08	86	212
100		9.55	9.54	33.900	26.170	185.6	0.242	2.68	41.7	28.7	1.97	26.1	0.01	0.01	0.09	101	211
120		9.31	9.30	33.947	26.246	178.8	0.278	2.58	39.9	30.8	2.04	26.8	0.00	0.00	0.06	121	210
125	ISL	9.26	9.25	33.958	26.263	177.3	0.287	2.55	39.4	31.2	2.05	26.9	0.00	0.00	0.06	126	
140		9.09	9.07	33.993	26.318	172.3	0.313	2.45	37.7	32.7	2.09	27.5	0.00	0.00	0.07	141	209
150	ISL	8.92	8.90	34.020	26.366	167.9	0.330	2.37	36.4	34.3	2.14	28.1	0.00	0.00	0.06	151	
170		8.58	8.56	34.070	26.459	159.4	0.363	2.17	33.1	37.9	2.25	29.6	0.00	0.00	0.05	171	208
198		8.26	8.24	34.108	26.538	152.4	0.407	1.82	27.5	42.1	2.39	31.3	0.00	0.00	0.05	199	207
200	ISL	8.24	8.22	34.110	26.542	151.9	0.410	1.80	27.2	42.4	2.40	31.4	0.00			201	
228		7.96	7.94	34.135	26.604	146.5	0.452	1.60	24.0	46.2	2.51	32.6	0.00			229	206
250	ISL	7.76	7.74	34.151	26.646	142.8	0.483	1.45	21.7	49.1	2.58	33.4	0.00			252	
269		7.60	7.57	34.167	26.682	139.6	0.510	1.32	19.7	51.7	2.65	34.0	0.00			271	205
300	ISL	7.33	7.30	34.205	26.751	133.5	0.553	1.02	15.1	57.1	2.79	35.3	0.00			302	
318		7.18	7.15	34.227	26.789	130.1	0.576	0.85	12.6	60.1	2.86	36.1	0.00			320	204
377		6.86	6.82	34.266	26.865	123.6	0.651	0.57	8.4	65.9	2.99	37.6	0.00			379	203
400	ISL	6.71	6.67	34.274	26.891	121.4	0.679	0.51	7.5	68.4	3.03	38.2	0.00			403	
437		6.48	6.44	34.287	26.933	117.8	0.724	0.43	6.2	72.5	3.09	39.0	0.00			440	202
500	ISL	6.16	6.12	34.327	27.006	111.5	0.796	0.29	4.2	79.2	3.19	40.2	0.00			503	
521		6.06	6.01	34.341	27.030	109.4	0.819	0.24	3.5	81.4	3.22	40.6	0.00			525	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 39.2 N	119 29.1 W	18/10/00	0927 UTC	1322 m	290 18 kn			1017.0 mb	16.4 C	15.1 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.60	17.60	33.395	24.141	376.6	0.000	5.58	102.3	2.5	0.27	0.0	0.00	0.15	0.05	0	
1		17.60	17.60	33.395	24.141	376.6	0.004	5.58	102.3	2.5	0.27	0.0	0.00	0.15	0.05	1	220
10	ISL	17.61	17.61	33.397	24.141	377.0	0.038	5.58	102.3	2.5	0.27	0.0	0.00	0.16	0.05	10	
14		17.61	17.61	33.398	24.141	377.0	0.053	5.58	102.3	2.5	0.27	0.0	0.00	0.17	0.05	14	219
20	ISL	17.61	17.61	33.401	24.144	377.0	0.075	5.59	102.5	2.5	0.27	0.0	0.00	0.17	0.05	20	
30		17.60	17.59	33.405	24.150	376.8	0.113	5.60	102.6	2.4	0.27	0.0	0.00	0.18	0.05	30	218
45		16.24	16.23	33.383	24.452	348.4	0.167	5.92	105.6	2.3	0.28	0.0	0.00	0.29	0.17	45	217
50	ISL	14.81	14.80	33.306	24.709	323.9	0.184	6.02	104.3	3.0	0.32	0.3	0.04	0.36	0.24	50	
55		13.34	13.33	33.242	24.966	299.5	0.200	6.07	102.0	4.0	0.39	0.5	0.09	0.39	0.28	55	216
64		11.85	11.84	33.176	25.203	277.1	0.226	5.85	95.2	5.9	0.56	2.9	0.20	0.23	0.19	64	215
74		11.34	11.33	33.204	25.318	266.2	0.253	5.72	92.1	6.9	0.66	4.8	0.09	0.19	0.17	74	214
75	ISL	11.29	11.28	33.213	25.334	264.7	0.256	5.70	91.7	7.0	0.67	5.0	0.08	0.18	0.17	75	
85		10.88	10.87	33.296	25.472	251.8	0.281	5.50	87.8	7.8	0.78	7.1	0.03	0.13	0.15	85	213
94		10.56	10.55	33.297	25.529	246.5	0.304	5.43	86.0	8.7	0.84	8.2	0.03	0.13	0.13	94	212
100	ISL	10.31	10.30	33.309	25.582	241.6	0.319	5.37	84.6	9.6	0.90	9.2	0.03	0.11	0.11	100	
109		9.99	9.98	33.366	25.680	232.4	0.340	5.14	80.5	11.8	1.05	11.6	0.02	0.06	0.09	109	211
124		9.82	9.81	33.604	25.895	212.3	0.373	4.08	63.7	18.8	1.47	18.4	0.01	0.02	0.05	125	210
125	ISL	9.80	9.79	33.616	25.907	211.1	0.375	4.03	62.9	19.2	1.49	18.7	0.01	0.02	0.05	126	
144		9.44	9.42	33.798	26.109	192.3	0.414	3.41	52.9	25.1	1.75	22.9	0.01	0.01	0.03	145	209
150	ISL	9.39	9.37	33.835	26.146	188.9	0.425	3.36	52.1	26.0	1.78	23.4	0.01	0.01	0.03	151	
170		9.23	9.21	33.920	26.239	180.5	0.462	2.86 U	44.2U	27.9	1.83	24.1	0.01	0.00	0.04	171	208
199		8.66	8.64	34.001	26.393	166.3	0.512	2.99	45.6	32.6	1.95	26.0	0.01	0.00	0.03	200	207
200	ISL	8.64	8.62	34.003	26.397	165.8	0.514	2.98	45.4	32.8	1.95	26.1	0.01			201	
226		8.29	8.27	34.035	26.476	158.7	0.556	2.73	41.3	36.7	2.08	28.2	0.00			227	206
250	ISL	8.00	7.97	34.047	26.529	154.0	0.594	2.56	38.5	39.7	2.17	29.5	0.00			251	
268		7.81	7.78	34.055	26.564	150.9	0.621	2.41	36.1	42.1	2.24	30.3	0.00			270	205
300	ISL	7.49	7.46	34.096	26.642	143.9	0.668	1.94	28.8	48.2	2.44	32.4	0.00			302	
318		7.33	7.30	34.120	26.684	140.1	0.694	1.66	24.6	51.7	2.56	33.5	0.00			320	204
379		6.89	6.85	34.159	26.776	132.1	0.777	1.15	16.9	59.5	2.77	36.2	0.00			381	203
400	ISL	6.79	6.75	34.182	26.808	129.3	0.804	0.98	14.3	62.2	2.85	36.8	0.00			403	
439		6.62	6.58	34.225	26.865	124.3	0.854	0.70	10.2	67.3	2.98	37.8	0.00			442	202
500	ISL	6.23	6.19	34.263	26.947	117.1	0.927	0.51	7.4	74.8	3.10	39.5	0.00			503	
519		6.11	6.06	34.275	26.972	114.9	0.949	0.45	6.5	77.1	3.14	40.0	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 25.2 N	119 57.6 W	18/10/00	0435 UTC	862 m	320 17 kn			1017.0 mb	17.2 C	15.7 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.00	18.00	33.654	24.242	366.9	0.000	5.49	101.5	2.1	0.27	0.0	0.00	0.20	0.06	0	
1		18.00	18.00	33.654	24.242	367.0	0.004	5.49	101.5	2.1	0.27	0.0	0.00	0.20	0.06	1	220
10	ISL	18.00	18.00	33.655	24.244	367.2	0.037	5.50	101.7	2.1	0.27	0.0	0.00	0.21	0.07	10	
16		18.01	18.01	33.656	24.242	367.5	0.059	5.50	101.7	2.1	0.27	0.0	0.00	0.22	0.07	16	219
20	ISL	18.01	18.01	33.658	24.244	367.5	0.073	5.49	101.6	2.1	0.27	0.0	0.00	0.24	0.08	20	
30		18.02	18.01	33.662	24.245	367.7	0.110	5.48	101.4	2.1	0.27	0.0	0.00	0.32	0.10	30	218
45		16.87	16.86	33.622	24.490	344.8	0.164	5.61	101.5	3.0	0.35	0.7	0.05	0.63	0.30	45	217
50	ISL	15.03	15.02	33.549	24.849	310.6	0.180	5.37	93.6	4.9	0.53	3.5	0.12	0.81	0.41	50	
55		13.08	13.07	33.495	25.213	276.0	0.195	5.13	85.9	7.1	0.73	6.5	0.17	0.89	0.47	55	216
66		10.68	10.67	33.343	25.544	244.6	0.223	5.18	82.3	10.4	0.96	10.2	0.04	0.25	0.24	66	215
75		10.45	10.44	33.505	25.710	228.9	0.245	4.51	71.4	14.8	1.26	15.1	0.02	0.13	0.15	75	214
84		10.24	10.23	33.601	25.821	218.6	0.265	4.06	64.0	18.1	1.46	18.1	0.02	0.06	0.11	84	213
94		9.97	9.96	33.678	25.927	208.7	0.286	3.70	58.0	21.1	1.61	20.6	0.01	0.04	0.10	94	212
100	ISL	9.82	9.81	33.730	25.993	202.5	0.298	3.48	54.4	23.1	1.70	22.1	0.01	0.03	0.08	100	
110		9.58	9.57	33.809	26.094	193.0	0.318	3.15	49.0	26.2	1.83	24.1	0.01	0.01	0.05	111	211
125		9.28	9.27	33.882	26.200	183.2	0.346	2.89	44.7	29.0	1.95	25.8	0.00	0.00	0.05	126	210
145		9.05	9.03	33.935	26.279	176.1	0.382	2.73	42.0	31.6	2.02	26.9	0.00	0.00	0.05	146	209
150	ISL	9.01	8.99	33.945	26.293	174.9	0.391	2.69	41.4	32.0	2.04	27.1	0.00	0.00	0.05	151	
169		8.83	8.81	33.977	26.347	170.1	0.424	2.55	39.0	33.6	2.10	28.0	0.00	0.00	0.05	170	208
199		8.44	8.42	34.027	26.447	161.1	0.474	2.38	36.1	37.7	2.19	29.3	0.00	0.01	0.05	200	207
200	ISL	8.42	8.40	34.029	26.452	160.6	0.475	2.37	36.0	37.9	2.20	29.4	0.00			201	
228		7.76	7.74	34.066	26.579	148.8	0.519	2.07	31.0	44.6	2.37	31.7	0.00			229	206
250	ISL	7.58	7.56	34.076	26.613	145.8	0.551	1.97	29.3	46.6	2.42	32.3	0.00			251	
268		7.49	7.46	34.080	26.629	144.5	0.577	1.90	28.2	48.0	2.46	32.7	0.00			270	205
300	ISL	7.03	7.00	34.100	26.710	137.2	0.622	1.54	22.6	55.0	2.63	34.9	0.00			302	
318		6.74	6.71	34.112	26.759	132.6	0.646	1.33	19.4	59.4	2.73	36.2	0.00			320	204
378		6.10	6.07	34.119	26.848	124.5	0.724	1.02	14.7	69.1	2.90	38.7	0.00			380	203
400	ISL	5.94	5.91	34.137	26.883	121.4	0.751	0.86	12.3	72.8	2.97	39.5	0.00			403	
438		5.72	5.68	34.177	26.942	116.1	0.796	0.60	8.6	78.9	3.09	40.7	0.00			441	202
500	ISL	5.47	5.43	34.235	27.019	109.4	0.866	0.40	5.7	86.2	3.19	41.7	0.00			503	
522		5.38	5.34	34.256	27.046	107.0	0.890	0.33	4.7	88.8	3.22	42.0	0.00			526	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 5.2 N	120 37.9 W	17/10/00	1812 UTC	3812 m	330 10 kn	320 01 07	1	1017.9 mb	18.0 C	15.5 C	27m	7/8	AS

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.95	17.95	33.352	24.023	387.8	0.000	5.54	102.2	3.0	0.29	0.1	0.00	0.12	0.03	0	
1	A	17.95	17.95	33.352	24.024	387.8	0.004	5.54	102.2	3.0	0.29	0.1	0.00	0.12	0.03	1	222
10	ISL	17.90	17.90	33.346	24.031	387.4	0.039	5.55	102.3	2.9	0.28	0.1	0.00	0.13	0.03	10	
16	A	17.87	17.87	33.351	24.043	386.5	0.062	5.55	102.2	2.9	0.28	0.1	0.00	0.13	0.03	16	221
20	ISL	17.80	17.80	33.347	24.057	385.3	0.077	5.57	102.4	2.9	0.28	0.1	0.00	0.13	0.03	20	
26		17.70	17.70	33.341	24.077	383.6	0.100	5.59	102.6	3.0	0.28	0.1	0.00	0.15	0.04	26	220
30	ISL	17.18	17.18	33.344	24.203	371.7	0.116	5.75	104.5	2.8	0.28	0.1	0.00	0.18	0.08	30	
36	A	16.14	16.13	33.338	24.440	349.3	0.137	6.01	107.0	2.5	0.29	0.0	0.00	0.22	0.13	36	219
46		14.23	14.22	33.242	24.783	316.8	0.171	6.14	105.1	3.2	0.33	0.1	0.01	0.26	0.15	46	218
50	ISL	13.67	13.66	33.239	24.896	306.0	0.183	6.11	103.4	3.6	0.36	0.3	0.05	0.30	0.23	50	
55	A	13.15	13.14	33.254	25.013	295.0	0.198	6.02	100.8	4.0	0.41	0.8	0.12	0.33	0.32	55	217
64		12.81	12.80	33.314	25.127	284.4	0.224	5.75	95.6	4.6	0.53	2.6	0.24	0.28	0.20	64	216
75	A	11.66	11.65	33.285	25.323	265.9	0.254	5.66	91.8	6.1	0.64	4.7	0.17	0.18	0.15	75	215
85		10.84	10.83	33.331	25.507	248.5	0.280	5.40	86.1	8.1	0.81	8.0	0.03	0.10	0.14	85	214
94		10.36	10.35	33.356	25.610	238.9	0.302	5.25	82.9	10.2	0.95	10.3	0.02	0.07	0.10	94	213
100	ISL	10.05	10.04	33.411	25.705	229.9	0.316	5.02	78.7	12.4	1.08	12.6	0.01	0.05	0.07	100	
105	A	9.85	9.84	33.478	25.791	221.8	0.327	4.74	74.0	14.8	1.22	14.9	0.01	0.04	0.06	105	212
115		9.76	9.75	33.665	25.952	206.7	0.349	3.86	60.2	20.9	1.57	20.4	0.01	0.01	0.06	116	211
125	ISL	9.60	9.59	33.780	26.069	195.8	0.369	3.33	51.8	25.1	1.78	23.6	0.01	0.00	0.04	126	
126		9.58	9.57	33.788	26.078	194.9	0.371	3.29	51.2	25.4	1.79	23.8	0.01	0.00	0.04	127	210
144		9.16	9.14	33.872	26.212	182.5	0.405	3.12	48.1	28.7	1.88	25.4	0.01	0.00	0.04	145	209
150	ISL	9.04	9.02	33.895	26.249	179.0	0.416	3.11	47.8	29.5	1.89	25.7	0.01	0.00	0.04	151	
170		8.72	8.70	33.953	26.345	170.2	0.451	3.09	47.2	31.8	1.92	26.5	0.00	0.00	0.02	171	208
198		8.37	8.35	33.996	26.433	162.3	0.497	2.90	44.0	35.4	2.02	27.9	0.00	0.00	0.03	199	207
200	ISL	8.33	8.31	34.000	26.443	161.4	0.500	2.87	43.5	35.8	2.03	28.1	0.00			201	
229		7.79	7.77	34.044	26.557	150.8	0.546	2.37	35.5	42.2	2.25	30.6	0.00			230	206
250	ISL	7.41	7.39	34.042	26.611	146.0	0.577	2.30	34.1	46.0	2.33	31.8	0.00			251	
269		7.15	7.12	34.043	26.648	142.6	0.604	2.23	32.9	49.2	2.40	32.7	0.00			271	205
300	ISL	7.13	7.10	34.120	26.712	137.1	0.648	1.62	23.9	54.4	2.61	34.5	0.00			302	
317		7.12	7.09	34.160	26.745	134.2	0.671	1.25	18.4	57.3	2.73	35.5	0.00			319	204
378		6.54	6.51	34.201	26.856	124.2	0.749	0.77	11.2	67.8	2.96	38.5	0.00			380	203
400	ISL	6.36	6.32	34.209	26.886	121.5	0.776	0.66	9.6	70.9	3.02	39.2	0.00			403	
437		6.09	6.05	34.223	26.932	117.4	0.821	0.53	7.6	75.5	3.09	40.1	0.00			440	202
500	ISL	5.76	5.72	34.268	27.010	110.7	0.893	0.36	5.1	82.9	3.19	41.3	0.00			503	
521		5.65	5.61	34.284	27.036	108.3	0.916	0.30	4.3	85.3	3.23	41.7	0.00			525	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 45.3 N	121 18.7 W	17/10/00	1107 UTC	3697 m	280 07 kn			1017.3 mb	17.8 C	14.8 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.11	18.11	33.383	24.008	389.3	0.000	5.50	101.8	2.7	0.28	0.2	0.00	0.13	0.03	0	
2		18.11	18.11	33.383	24.008	389.3	0.008	5.50	101.8	2.7	0.28	0.2	0.00	0.13	0.03	2	220
10	ISL	18.12	18.12	33.386	24.008	389.6	0.039	5.50	101.8	2.7	0.28	0.2	0.00	0.13	0.02	10	
15		18.12	18.12	33.388	24.010	389.6	0.058	5.50	101.8	2.7	0.28	0.2	0.00	0.13	0.02	15	219
20	ISL	17.97	17.97	33.412	24.065	384.5	0.078	5.55	102.4	2.6	0.28	0.2	0.00	0.17	0.04	20	
29		17.30	17.30	33.427	24.238	368.3	0.112	5.69	103.7	2.5	0.27	0.2	0.00	0.26	0.10	29	218
30	ISL	17.13	17.13	33.415	24.270	365.4	0.115	5.72	103.9	2.5	0.27	0.2	0.00	0.27	0.11	30	
45		14.44	14.43	33.274	24.764	318.6	0.167	6.09	104.7	3.1	0.33	0.2	0.01	0.36	0.26	45	217
50	ISL	13.95	13.94	33.289	24.878	307.9	0.182	6.04	102.8	3.2	0.36	0.7	0.09	0.33	0.26	50	
55		13.50	13.49	33.312	24.988	297.5	0.197	5.93	100.0	3.6	0.41	1.1	0.15	0.29	0.27	55	216
65		12.27	12.26	33.341	25.252	272.5	0.226	5.53	90.9	5.8	0.65	5.1	0.06	0.23	0.21	65	215
75	ISL	11.74	11.73	33.307	25.325	265.7	0.253	5.60	91.0	6.3	0.66	5.3	0.11	0.18	0.15	75	
76		11.71	11.70	33.303	25.328	265.5	0.255	5.61	91.1	6.3	0.66	5.3	0.12	0.18	0.15	76	214
86		11.46	11.45	33.303	25.374	261.3	0.282	5.56	89.8	6.6	0.69	5.7	0.12	0.14	0.14	86	213
96		10.92	10.91	33.357	25.513	248.2	0.307	5.35	85.5	8.5	0.85	8.7	0.03	0.10	0.13	96	212
100	ISL	10.59	10.58	33.361	25.574	242.4	0.317	5.29	83.9	9.4	0.91	9.8	0.02	0.09	0.12	100	
110		9.87	9.86	33.384	25.714	229.1	0.341	5.08	79.3	12.1	1.08	12.5	0.01	0.06	0.08	110	211
125		9.72	9.71	33.527	25.851	216.5	0.374	4.44	69.2	16.8	1.35	17.0	0.01	0.04	0.06	126	210
144		9.65	9.63	33.718	26.012	201.6	0.414	3.66	57.0	22.4	1.64	21.6	0.01	0.02	0.03	145	209
150	ISL	9.54	9.52	33.766	26.068	196.4	0.426	3.52	54.7	23.8	1.69	22.5	0.01	0.02	0.03	151	
169		9.13	9.11	33.884	26.227	181.6	0.462	3.28	50.5	27.5	1.80	24.5	0.00	0.01	0.03	170	208
199		8.62	8.60	33.980	26.382	167.2	0.514	3.13	47.7	32.0	1.91	26.2	0.00	0.00	0.03	200	207
200	ISL	8.60	8.58	33.982	26.387	166.8	0.516	3.12	47.5	32.2	1.91	26.3	0.00			201	
230		8.14	8.12	34.020	26.487	157.7	0.564	2.84	42.8	37.3	2.07	28.3	0.00			231	206
250	ISL	7.79	7.77	34.029	26.546	152.3	0.595	2.68	40.1	41.0	2.16	29.7	0.00			251	
268		7.49	7.46	34.032	26.592	148.1	0.622	2.54	37.7	44.3	2.24	30.8	0.00			270	205
300	ISL	7.14	7.11	34.040	26.647	143.1	0.669	2.26	33.3	48.8	2.37	32.4	0.00			302	
318		6.98	6.95	34.047	26.675	140.7	0.694	2.08	30.5	51.4	2.45	33.3	0.00			320	204
379		6.35	6.32	34.099	26.800	129.3	0.777	1.27	18.4	64.2	2.79	37.5	0.00			381	203
400	ISL	6.23	6.19	34.120	26.833	126.4	0.804	1.08	15.6	67.5	2.87	38.4	0.00			402	
440		6.07	6.03	34.165	26.889	121.5	0.853	0.80	11.5	72.9	2.99	39.5	0.00			443	202
500	ISL	5.94	5.90	34.245	26.969	114.7	0.924	0.47	6.7	79.1	3.13	40.6	0.00			503	
517		5.90	5.85	34.268	26.993	112.7	0.943	0.38	5.4	80.9	3.17	40.9	0.00			520	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 25.1 N	121 59.4 W	17/10/00	0525 UTC	3906 m	320 08 kn			1018.0 mb	16.8 C	14.3 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.04	18.04	33.334	23.988	391.2	0.000	5.52	102.0	2.9	0.28	0.1	0.00	0.12	0.03	0	
2		18.04	18.04	33.334	23.988	391.3	0.008	5.52	102.0	2.9	0.28	0.1	0.00	0.12	0.03	2	220
10	ISL	18.00	18.00	33.326	23.992	391.2	0.039	5.51	101.7	2.8	0.29	0.1	0.00	0.13	0.03	10	
16		17.97	17.97	33.318	23.993	391.2	0.063	5.50	101.5	2.8	0.29	0.1	0.00	0.14	0.03	16	219
20	ISL	17.97	17.97	33.318	23.993	391.4	0.078	5.50	101.5	2.8	0.29	0.1	0.00	0.14	0.03	20	
30		17.96	17.95	33.319	23.997	391.4	0.117	5.51	101.6	2.9	0.28	0.1	0.00	0.16	0.04	30	218
44		17.72	17.71	33.328	24.063	385.6	0.172	5.61	103.0	2.9	0.28	0.1	0.00	0.24	0.07	44	217
50	ISL	17.02	17.01	33.290	24.200	372.6	0.195	5.81	105.2	3.0	0.28	0.1	0.00	0.28	0.13	50	
54		16.36	16.35	33.260	24.330	360.3	0.209	5.96	106.5	3.0	0.29	0.1	0.00	0.30	0.17	54	216
65		13.76	13.75	33.206	24.853	310.6	0.246	6.24	105.8	3.5	0.33	0.1	0.00	0.33	0.30	65	215
74		12.81	12.80	33.195	25.035	293.4	0.273	6.17	102.5	4.0	0.38	0.3	0.03	0.26	0.27	74	214
75	ISL	12.72	12.71	33.192	25.050	292.0	0.276	6.16	102.2	4.1	0.39	0.4	0.04	0.25	0.26	75	
85		11.91	11.90	33.174	25.191	278.8	0.305	5.99	97.6	5.1	0.49	1.8	0.15	0.20	0.20	85	213
95		11.32	11.31	33.213	25.329	265.7	0.332	5.73	92.3	6.3	0.63	4.4	0.14	0.14	0.17	95	212
100	ISL	11.00	10.99	33.249	25.415	257.6	0.345	5.61	89.7	7.2	0.71	6.1	0.10	0.11	0.15	100	
110		10.55	10.54	33.337	25.562	243.7	0.370	5.32	84.3	9.2	0.89	9.5	0.02	0.06	0.11	110	211
123		10.63	10.62	33.450	25.637	237.0	0.401	4.77	75.8	12.2	1.12	13.1	0.01	0.03	0.07	124	210
125	ISL	10.59	10.58	33.465	25.656	235.2	0.406	4.74	75.2	12.5	1.13	13.3	0.01	0.03	0.07	126	
144		10.00	9.98	33.600	25.862	215.9	0.449	4.48	70.2	15.6	1.24	15.6	0.01	0.03	0.06	145	209
150	ISL	9.87	9.85	33.650	25.923	210.2	0.462	4.20	65.7	17.8	1.36	17.5	0.01	0.02	0.05	151	
169		9.51	9.49	33.801	26.101	193.7	0.500	3.26	50.6	25.3	1.78	23.8	0.00	0.00	0.04	170	208
198		8.82	8.80	33.962	26.337	171.6	0.553	2.73	41.8	32.3	2.02	27.4	0.00	0.00	0.04	199	207
200	ISL	8.78	8.76	33.968	26.348	170.6	0.556	2.71	41.4	32.6	2.03	27.5	0.00			201	
227		8.31	8.29	34.021	26.462	160.1	0.601	2.56	38.8	37.0	2.12	29.0	0.00			228	206
250	ISL	7.88	7.85	34.043	26.544	152.5	0.637	2.38	35.7	41.4	2.23	30.5	0.00			251	
268		7.58	7.55	34.054	26.596	147.7	0.664	2.21	32.9	45.0	2.33	31.7	0.00			269	205
300	ISL	7.22	7.19	34.082	26.669	141.1	0.710	1.83	27.0	50.5	2.50	33.6	0.00			302	
317		7.07	7.04	34.097	26.702	138.2	0.734	1.62	23.8	53.4	2.58	34.5	0.00			319	204
377		6.54	6.51	34.145	26.812	128.3	0.814	1.03	15.0	64.0	2.84	37.5	0.00			379	203
400	ISL	6.37	6.33	34.167	26.852	124.8	0.843	0.85	12.3	67.9	2.93	38.5	0.00			402	
437		6.11	6.07	34.198	26.910	119.5	0.888	0.62	8.9	73.9	3.04	39.8	0.00			440	202
500	ISL	5.68	5.64	34.220	26.981	113.2	0.962	0.46	6.6	82.1	3.13	41.2	0.00			503	
520		5.55	5.51	34.227	27.003	111.3	0.984	0.41	5.8	84.7	3.16	41.7	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 5.2 N	122 39.6 W	16/10/00	2342 UTC	4015 m	340 08 kn	350 03 07	1	1017.9 mb	18.0 C	14.3 C	27m	4/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.52	18.52	33.470	23.974	392.6	0.000	5.46	101.9	2.2	0.29	0.0	0.00	0.13	0.03	0	
1		18.52	18.52	33.470	23.974	392.6	0.004	5.46	101.9	2.2	0.29	0.0	0.00	0.13	0.03	1	220
10	ISL	18.38	18.38	33.474	24.012	389.3	0.039	5.47	101.8	2.1	0.29	0.0	0.00	0.12	0.03	10	
15		18.28	18.28	33.478	24.040	386.8	0.059	5.48	101.8	2.0	0.29	0.0	0.00	0.12	0.03	15	219
20	ISL	18.28	18.28	33.481	24.042	386.7	0.078	5.47	101.6	2.0	0.29	0.0	0.00	0.12	0.03	20	
30		18.27	18.26	33.487	24.050	386.4	0.117	5.46	101.4	1.9	0.29	0.0	0.00	0.14	0.04	30	218
46		15.65	15.64	33.350	24.560	338.1	0.174	6.02	106.1	2.3	0.31	0.0	0.00	0.21	0.12	46	217
50	ISL	15.11	15.10	33.336	24.668	327.9	0.188	6.03	105.2	2.4	0.32	0.0	0.00	0.24	0.14	50	
54		14.61	14.60	33.326	24.768	318.5	0.201	6.03	104.1	2.6	0.33	0.0	0.01	0.27	0.17	54	216
64		13.54	13.53	33.296	24.967	299.7	0.232	5.90	99.6	3.6	0.43	0.7	0.19	0.34	0.23	64	215
75		12.60	12.59	33.312	25.166	280.9	0.264	5.66	93.7	4.9	0.58	3.3	0.20	0.31	0.23	75	214
84		11.77	11.76	33.321	25.331	265.4	0.288	5.44	88.5	6.6	0.74	6.3	0.03	0.20	0.15	84	213
95		11.18	11.17	33.358	25.467	252.6	0.317	5.20	83.5	8.6	0.89	9.0	0.02	0.13	0.10	95	212
100	ISL	10.89	10.88	33.376	25.533	246.4	0.329	5.09	81.3	9.7	0.96	10.2	0.02	0.10	0.08	100	
110		10.42	10.41	33.418	25.648	235.6	0.353	4.88	77.1	11.8	1.09	12.4	0.02	0.05	0.06	110	211
125		10.24	10.23	33.491	25.736	227.5	0.388	4.56	71.8	14.4	1.25	15.0	0.01	0.03	0.06	126	210
144		9.74	9.72	33.698	25.982	204.5	0.429	3.92	61.2	20.2	1.51	19.5	0.01	0.01	0.04	145	209
150	ISL	9.62	9.60	33.744	26.038	199.3	0.441	3.78	58.8	21.6	1.57	20.5	0.01	0.01	0.04	151	
169		9.31	9.29	33.851	26.172	186.8	0.478	3.50	54.1	25.4	1.72	23.0	0.01	0.01	0.04	170	208
200		8.80	8.78	33.959	26.338	171.5	0.533	3.42	52.3	30.1	1.85	25.2	0.00	0.00	0.03	201	207
228		8.17	8.15	34.005	26.471	159.2	0.580	2.91	43.9	36.7	2.04	28.0	0.00			229	206
250	ISL	7.86	7.84	34.031	26.537	153.1	0.614	2.53	37.9	41.0	2.20	29.8	0.00			251	
267		7.67	7.64	34.046	26.577	149.6	0.640	2.28	34.0	43.8	2.31	31.0	0.00			268	205
300	ISL	7.34	7.31	34.061	26.636	144.3	0.688	2.02	29.9	48.0	2.43	32.6	0.00			302	
318		7.16	7.13	34.067	26.666	141.7	0.714	1.90	28.0	50.5	2.49	33.4	0.00			320	204
377		6.40	6.37	34.112	26.804	128.9	0.794	1.15	16.7	64.3	2.82	37.5	0.00			379	203
400	ISL	6.31	6.27	34.149	26.845	125.3	0.823	0.91	13.2	67.8	2.92	38.3	0.00			402	
435		6.26	6.22	34.206	26.897	120.9	0.866	0.62	9.0	72.1	3.04	39.2	0.00			438	202
500	ISL	5.95	5.91	34.265	26.984	113.3	0.942	0.38	5.5	79.6	3.15	40.5	0.00			503	
520		5.86	5.81	34.283	27.009	111.1	0.965	0.30	4.3	81.9	3.19	40.9	0.00			523	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
30 45.1 N	123 19.8 W	16/10/00	1746 UTC	4024 m	020 08 kn	350 02 06	2	1019.4 mb	17.7 C	14.0 C	30m	8/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.81	18.81	33.417	23.861	403.3	0.000	5.41	101.5	2.8	0.28	0.1	0.00	0.14	0.04	0	
1	A	18.81	18.81	33.417	23.861	403.4	0.004	5.41	101.5	2.8	0.28	0.1	0.00	0.14	0.04	1	222
10		18.81	18.81	33.417	23.861	403.7	0.040	5.43	101.8	2.8	0.28	0.1	0.00	0.13	0.04	10	221
19	A	18.81	18.81	33.417	23.862	403.9	0.077	5.41	101.5	2.6	0.28	0.1	0.00	0.14	0.03	19	220
20	ISL	18.81	18.81	33.417	23.862	404.0	0.081	5.41	101.5	2.6	0.28	0.1	0.00	0.14	0.03	20	
30		18.80	18.79	33.417	23.865	404.1	0.121	5.43	101.8	2.6	0.28	0.1	0.00	0.13	0.03	30	219
40	A	18.78	18.77	33.416	23.869	404.0	0.162	5.38	100.8	2.6	0.28	0.1	0.00	0.13	0.04	40	218
50	ISL	17.50	17.49	33.368	24.146	377.8	0.201	5.75	105.1	2.6	0.28	0.1	0.00	0.23	0.07	50	
51		17.33	17.32	33.363	24.183	374.3	0.204	5.80	105.7	2.6	0.28	0.1	0.00	0.24	0.07	51	217
61	A	15.82	15.81	33.333	24.509	343.4	0.240	6.04	106.8	2.7	0.29	0.1	0.00	0.22	0.13	61	216
73		14.36	14.35	33.321	24.818	314.3	0.280	6.15	105.6	3.0	0.31	0.1	0.00	0.24	0.18	73	215
75	ISL	14.19	14.18	33.319	24.852	311.1	0.286	6.14	105.1	3.0	0.31	0.1	0.00	0.25	0.19	75	
83	A	13.66	13.65	33.322	24.964	300.6	0.310	6.07	102.7	3.2	0.34	0.1	0.00	0.29	0.23	83	214
93		13.16	13.15	33.379	25.109	287.0	0.340	5.92	99.2	3.7	0.39	0.4	0.04	0.29	0.24	93	213
100	ISL	12.85	12.84	33.428	25.208	277.6	0.360	5.77	96.1	4.2	0.44	1.2	0.14	0.26	0.23	100	
104		12.64	12.63	33.444	25.262	272.6	0.371	5.68	94.2	4.5	0.48	1.9	0.19	0.24	0.22	104	212
116	A	11.55	11.54	33.379	25.417	257.9	0.402	5.55	89.9	6.1	0.65	4.9	0.10	0.18	0.19	116	211
125		10.77	10.76	33.379	25.557	244.6	0.425	5.39	85.8	7.9	0.80	7.7	0.02	0.13	0.15	126	210
139		10.03	10.01	33.496	25.776	224.0	0.458	4.81	75.4	13.4	1.14	13.5	0.01	0.06	0.10	140	209
150	ISL	9.75	9.73	33.627	25.925	210.0	0.482	4.34	67.7	17.5	1.36	17.2	0.00	0.03	0.06	151	
163		9.55	9.53	33.777	26.075	196.0	0.508	3.87	60.1	21.9	1.56	20.5	0.00	0.01	0.02	164	208
194		8.84	8.82	33.958	26.331	172.1	0.565	3.46	53.0	29.1	1.80	24.5	0.00	0.00	0.02	195	207
200	ISL	8.72	8.70	33.973	26.362	169.3	0.575	3.39	51.8	30.3	1.84	25.1	0.00			201	
229		8.20	8.18	34.006	26.467	159.6	0.623	3.04	45.9	35.9	2.02	27.5	0.00			230	206
250	ISL	7.90	7.87	34.018	26.521	154.7	0.656	2.81	42.1	39.5	2.13	29.1	0.00			251	
268		7.66	7.63	34.025	26.562	151.0	0.684	2.59	38.6	42.6	2.23	30.4	0.00			269	205
300	ISL	7.23	7.20	34.051	26.644	143.6	0.731	2.06	30.4	49.3	2.46	33.0	0.00			302	
318		7.01	6.98	34.065	26.685	139.8	0.756	1.77	26.0	53.0	2.58	34.4	0.00			320	204
378		6.46	6.43	34.091	26.780	131.3	0.838	1.34	19.4	62.5	2.79	37.2	0.00			380	203
400	ISL	6.30	6.26	34.112	26.817	127.9	0.866	1.12	16.2	66.4	2.88	38.2	0.00			402	
437		6.04	6.00	34.152	26.883	122.1	0.912	0.76	10.9	73.1	3.03	39.8	0.00			440	202
500	ISL	5.60	5.56	34.205	26.979	113.3	0.986	0.51	7.3	83.3	3.17	41.5	0.00			503	
522		5.45	5.41	34.224	27.013	110.3	1.011	0.42	6.0	86.8	3.22	42.1	0.00			525	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 90 120

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
30 25.2 N	123 59.9 W	16/10/00	1142 UTC	4227 m	360 12 kn			1018.5 mb	17.2 C	13.4 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.87	18.87	33.485	23.898	399.8	0.000	5.42	101.8	2.9	0.27	0.0	0.00	0.12	0.01	0	
2		18.87	18.87	33.485	23.898	399.9	0.008	5.42	101.8	2.9	0.27	0.0	0.00	0.12	0.01	2	220
10	ISL	18.87	18.87	33.486	23.899	400.1	0.040	5.41	101.6	2.8	0.27	0.1	0.00	0.11	0.02	10	
15		18.87	18.87	33.488	23.900	400.1	0.060	5.40	101.4	2.7	0.27	0.1	0.00	0.11	0.02	15	219
20	ISL	18.87	18.87	33.493	23.905	399.9	0.080	5.40	101.4	2.7	0.27	0.1	0.00	0.11	0.02	20	
30		18.87	18.86	33.500	23.910	399.7	0.120	5.40	101.4	2.8	0.27	0.0	0.00	0.11	0.02	30	218
45		19.00	18.99	33.533	23.903	400.9	0.180	5.40	101.7	2.7	0.26	0.0	0.00	0.12	0.03	45	217
50	ISL	18.84	18.83	33.557	23.962	395.5	0.200	5.46	102.5	2.6	0.24	0.1	0.00	0.14	0.03	50	
60		18.52	18.51	33.743	24.185	374.6	0.238	5.64	105.4	2.5	0.21	0.2	0.00	0.17	0.04	60	216
74		15.47	15.46	33.554	24.758	320.2	0.287	6.01	105.7	2.8	0.25	0.2	0.00	0.20	0.09	74	215
75	ISL	15.33	15.32	33.541	24.778	318.2	0.290	6.02	105.6	2.8	0.25	0.2	0.00	0.20	0.10	75	
85		14.30	14.29	33.436	24.919	305.0	0.321	6.07	104.2	3.0	0.28	0.2	0.00	0.20	0.16	85	214
95		13.75	13.74	33.400	25.006	296.9	0.352	5.66	96.0	3.4	0.32	0.2	0.01	0.24	0.19	95	213
100	ISL	13.34	13.33	33.400	25.089	289.0	0.366	5.75	96.7	3.7	0.36	0.4	0.06	0.23	0.20	100	
104		12.97	12.96	33.403	25.165	281.8	0.378	5.84	97.5	4.1	0.41	0.9	0.10	0.22	0.20	104	212
114		11.99	11.98	33.396	25.349	264.5	0.405	5.57	91.1	5.8	0.61	4.0	0.15	0.17	0.23	114	211
124		11.33	11.31	33.377	25.456	254.4	0.431	5.35	86.2	7.7	0.77	7.0	0.05	0.13	0.16	124	210
125	ISL	11.25	11.23	33.379	25.472	252.9	0.433	5.30	85.3	8.1	0.80	7.5	0.04	0.13	0.16	125	
139		10.32	10.30	33.458	25.697	231.6	0.467	4.60	72.6	13.8	1.20	14.2	0.01	0.08	0.11	140	209
150	ISL	10.01	9.99	33.581	25.846	217.6	0.492	4.21	66.0	17.3	1.38	17.3	0.01	0.05	0.07	151	
164		9.81	9.79	33.744	26.007	202.6	0.521	3.87	60.5	20.8	1.51	19.8	0.00	0.02	0.03	165	208
195		9.16	9.14	33.930	26.259	179.1	0.581	3.61	55.7	26.1	1.67	22.8	0.00	0.00	0.01	196	207
200	ISL	9.07	9.05	33.948	26.287	176.5	0.589	3.47	53.4	27.3	1.73	23.6	0.00			201	
231		8.56	8.54	34.011	26.417	164.6	0.642	2.66	40.5	34.7	2.08	28.2	0.00			232	206
250	ISL	8.20	8.17	34.023	26.481	158.7	0.673	2.70	40.8	37.5	2.13	28.9	0.00			251	
268		7.88	7.85	34.027	26.532	154.0	0.701	2.74	41.1	39.8	2.14	29.2	0.00			269	205
300	ISL	7.47	7.44	34.048	26.608	147.1	0.749	2.35	34.9	45.2	2.31	31.3	0.00			302	
316		7.29	7.26	34.059	26.642	144.0	0.773	2.10	31.1	48.1	2.41	32.5	0.00			318	204
376		6.60	6.57	34.095	26.765	132.8	0.856	1.43	20.8	59.8	2.71	36.2	0.00			378	203
400	ISL	6.41	6.37	34.116	26.806	129.1	0.887	1.21	17.5	63.7	2.80	37.3	0.00			402	
438		6.16	6.12	34.151	26.867	123.7	0.935	0.92	13.3	69.6	2.93	38.8	0.00			441	202
500	ISL	5.78	5.74	34.205	26.957	115.6	1.009	0.55	7.9	79.2	3.09	40.7	0.00			503	
519		5.66	5.62	34.222	26.986	113.0	1.031	0.44	6.3	82.1	3.14	41.3	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 57.4 N	117 18.3 W	12/10/00	1825 UTC	63 m	230 03 kn	290 02 08	1	1019.6 mb	19.3 C	15.8 C	10m	4/8	AC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	17.50	17.50	33.558	24.290	362.4	0.000	5.90	108.0	3.2	0.28	0.2	0.01	0.91	0.29	0	
1	A	17.50	17.50	33.558	24.290	362.4	0.004	5.90	108.0	3.2	0.28	0.2	0.01	0.91	0.29	1	208
7	A	17.27	17.27	33.558	24.345	357.4	0.025	5.95	108.4	3.0	0.29	0.2	0.01	0.86	0.34	7	207
10	ISL	15.96	15.96	33.508	24.610	332.2	0.036	5.96	105.8	3.6	0.34	0.6	0.04	1.05	0.38	10	
13	A	14.53	14.53	33.472	24.896	305.0	0.045	5.97	103.0	4.5	0.42	1.3	0.11	1.26	0.44	13	206
20	A	13.20	13.20	33.428	25.137	282.3	0.066	5.47	91.8	7.2	0.69	4.8	0.54	1.30	0.71	20	205
27	A	12.60	12.60	33.442	25.266	270.2	0.085	5.03	83.4	9.3	0.89	8.1	0.59	0.63	0.58	27	204
30	ISL	12.33	12.33	33.457	25.329	264.2	0.093	4.91	80.9	9.9	0.94	9.1	0.46	0.47	0.51	30	
38	A	11.74	11.74	33.507	25.480	250.1	0.114	4.66	75.9	11.3	1.03	11.2	0.10	0.25	0.34	38	203
48		11.55	11.54	33.560	25.556	243.0	0.138	4.29	69.6	13.6	1.18	13.2	0.15	0.15	0.26	48	202
50	ISL	11.50	11.49	33.568	25.572	241.6	0.143	4.24	68.7	14.0	1.20	13.6	0.15	0.14	0.25	50	
57		11.31	11.30	33.597	25.629	236.3	0.160	4.05	65.4	15.3	1.29	15.1	0.14	0.09	0.21	57	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 28

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 54.5 N	117 23.9 W	12/10/00	2317 UTC	565 m	280 10 kn	310 02 08	1	1019.5 mb	18.6 C	14.9 C	21m	2/8	CU

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	19.89	19.89	33.732	23.825	406.8	0.000	5.42	103.9	1.8	0.22	0.3	0.01	0.18	0.03	0	
1		19.89	19.89	33.732	23.825	406.8	0.004	5.42	103.9	1.8	0.22	0.3	0.01	0.18	0.03	1	220
10		19.54	19.54	33.716	23.904	399.6	0.040	5.46	104.0	1.8	0.22	0.3	0.01	0.17	0.03	10	219
20		16.45	16.45	33.503	24.495	343.5	0.078	6.30	113.0	2.6	0.28	0.2	0.01	0.27	0.09	20	218
30		14.78	14.78	33.468	24.840	310.9	0.110	6.38	110.6	3.3	0.32	0.2	0.01	0.40	0.27	30	217
40		13.07	13.06	33.472	25.197	277.1	0.140	5.84	97.8	5.3	0.57	3.2	0.23	1.25	0.65	40	216
49		12.46	12.45	33.512	25.348	263.0	0.164	5.14	85.0	7.3	0.78	7.4	0.06	0.56	0.43	49	215
50	ISL	12.38	12.37	33.516	25.366	261.2	0.167	5.09	84.0	7.6	0.81	7.9	0.06	0.51	0.41	50	
59		11.69	11.68	33.556	25.527	246.0	0.189	4.70	76.4	11.1	1.07	12.2	0.04	0.25	0.28	59	214
70		11.23	11.22	33.627	25.667	233.0	0.216	4.09	65.9	15.0	1.29	15.3	0.03	0.13	0.18	70	213
75	ISL	11.00	10.99	33.637	25.716	228.4	0.227	3.99	64.0	16.1	1.35	16.3	0.03	0.10	0.15	75	
85		10.66	10.65	33.669	25.802	220.5	0.250	3.77	60.0	18.2	1.46	18.1	0.03	0.06	0.11	85	212
99		10.67	10.66	33.821	25.918	209.7	0.280	2.86	45.6	23.4	1.77	21.6	0.02	0.02	0.08	99	211
100	ISL	10.67	10.66	33.829	25.925	209.2	0.282	2.82	44.9	23.7	1.78	21.8	0.02	0.02	0.08	100	
119		10.51	10.50	33.922	26.026	200.0	0.321	2.43	38.6	26.8	1.95	23.6	0.01	0.01	0.06	120	210
125	ISL	10.38	10.37	33.929	26.054	197.4	0.333	2.46	39.0	27.1	1.96	23.9	0.01	0.01	0.06	126	
137		10.13	10.11	33.944	26.108	192.5	0.356	2.53	39.9	27.5	1.96	24.4	0.02	0.01	0.06	138	209
150	ISL	10.17	10.15	34.025	26.165	187.4	0.381	2.25	35.5	29.4	2.07	25.4	0.02	0.01	0.05	151	
170		10.24	10.22	34.134	26.239	180.9	0.418	1.72	27.2	32.5	2.25	26.9	0.01	0.00	0.04	171	208
200		10.08	10.06	34.190	26.310	174.7	0.471	1.54	24.3	34.4	2.33	27.7	0.01	0.00	0.04	201	207
229		9.62	9.59	34.205	26.400	166.7	0.520	1.58	24.7	36.3	2.36	28.5	0.02			230	206
250	ISL	9.30	9.27	34.203	26.451	162.1	0.555	1.61	24.9	37.8	2.38	29.0	0.02			251	
269		9.03	9.00	34.200	26.492	158.5	0.585	1.63	25.1	39.4	2.40	29.5	0.01			271	205
300	ISL	8.67	8.64	34.214	26.560	152.5	0.634	1.46	22.3	42.8	2.49	30.6	0.01			302	
319		8.46	8.43	34.224	26.600	148.9	0.662	1.33	20.2	45.2	2.56	31.4	0.01			321	204
376		7.80	7.76	34.236	26.709	139.1	0.744	1.05	15.7	52.9	2.73	33.7	0.01			378	203
400	ISL	7.59	7.55	34.240	26.743	136.2	0.777	0.94	14.0	55.6	2.79	34.5	0.01			403	
434		7.30	7.26	34.248	26.791	132.0	0.823	0.79	11.7	59.6	2.88	35.6	0.01			437	202
500	ISL	6.65	6.60	34.294	26.917	120.5	0.906	0.45	6.6	70.6	3.08	38.2	0.02			503	
523		6.42	6.37	34.311	26.961	116.4	0.934	0.33	4.8	74.5	3.15	39.1	0.02			527	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 30

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 50.3 N	117 32.1 W	13/10/00	0234 UTC	870 m	280 12 kn			1019.4 mb	17.9 C	14.9 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	19.86	19.86	33.741	23.839	405.4	0.000	5.39	103.3	2.1	0.23	0.0	0.00	0.21	0.04	0	
1		19.86	19.86	33.741	23.839	405.4	0.004	5.39	103.3	2.1	0.23	0.0	0.00	0.21	0.04	1	220
10		19.85	19.85	33.739	23.841	405.6	0.041	5.41	103.7	1.9	0.23	0.0	0.00	0.20	0.04	10	219
20		16.98	16.98	33.534	24.396	353.0	0.078	6.30	114.2	2.6	0.28	0.0	0.00	0.30	0.11	20	218
30		14.30	14.30	33.431	24.914	303.9	0.111	6.12	105.0	3.4	0.39	0.3	0.03	1.01	0.52	30	217
41		12.94	12.93	33.454	25.209	276.0	0.143	5.47	91.3	6.2	0.68	5.0	0.21	0.75	0.60	41	216
50		12.23	12.22	33.526	25.403	257.7	0.167	4.94	81.3	8.7	0.88	8.7	0.03	0.31	0.44	50	215
60		11.58	11.57	33.568	25.557	243.2	0.192	4.42	71.7	12.3	1.12	12.5	0.02	0.17	0.29	60	214
70		11.21	11.20	33.569	25.626	236.9	0.216	4.34	69.9	13.6	1.21	14.0	0.03	0.11	0.19	70	213
75	ISL	11.19	11.18	33.590	25.646	235.2	0.228	4.21	67.8	14.3	1.26	14.7	0.03	0.09	0.18	75	
86		11.15	11.14	33.644	25.695	230.7	0.254	3.84	61.8	16.4	1.38	16.3	0.02	0.07	0.17	86	212
100	ISL	10.77	10.76	33.741	25.839	217.4	0.285	3.35	53.5	20.4	1.59	19.2	0.02	0.04	0.10	100	
110		10.46	10.45	33.823	25.957	206.3	0.306	3.02	47.9	23.5	1.75	21.5	0.02	0.02	0.06	111	211
121		10.28	10.27	33.918	26.062	196.5	0.328	2.76	43.6	26.6	1.92	23.7	0.02	0.01	0.05	122	210
125	ISL	10.26	10.25	33.952	26.092	193.8	0.336	2.61	41.3	27.6	1.97	24.3	0.02	0.01	0.05	126	
139		10.20	10.18	34.039	26.171	186.6	0.363	2.09	33.0	30.4	2.12	25.7	0.02	0.00	0.04	140	209
150	ISL	10.24	10.22	34.098	26.210	183.2	0.383	1.85	29.3	32.0	2.22	26.5	0.02	0.00	0.04	151	
170		10.32	10.30	34.178	26.259	179.0	0.419	1.59	25.2	34.0	2.34	27.4	0.02	0.00	0.04	171	208
200		10.25	10.23	34.240	26.320	173.9	0.472	1.31	20.7	35.6	2.41	28.2	0.02	0.00	0.04	201	207
229		9.87	9.84	34.235	26.381	168.6	0.522	1.43	22.4	36.7	2.41	28.6	0.02			230	206
250	ISL	9.72	9.69	34.251	26.419	165.4	0.557	1.39	21.7	37.7	2.44	28.9	0.02			251	
271		9.58	9.55	34.266	26.455	162.4	0.591	1.33	20.7	38.8	2.47	29.3	0.02			273	205
300	ISL	9.24	9.21	34.259	26.505	158.0	0.638	1.34	20.7	40.7	2.50	29.9	0.02			302	
322		8.95	8.91	34.248	26.543	154.7	0.672	1.36	20.9	42.4	2.52	30.4	0.02			324	204
385		8.07	8.03	34.223	26.659	144.2	0.766	1.24	18.7	49.5	2.64	32.7	0.02			387	203
400	ISL	7.85	7.81	34.233	26.700	140.5	0.788	1.09	16.3	52.5	2.71	33.6	0.02			403	
431		7.42	7.38	34.260	26.783	132.8	0.830	0.78	11.6	59.0	2.87	35.4	0.02			434	202
500	ISL	6.76	6.71	34.278	26.889	123.2	0.918	0.53	7.7	68.7	3.04	37.8	0.02			503	
505		6.71	6.66	34.279	26.897	122.5	0.925	0.51	7.4	69.4	3.05	38.0	0.02			508	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 35

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 40.8 N	117 52.8 W	13/10/00	1734 UTC	595 m	330 10 kn	330 03 07	1	1018.6 mb	17.8 C	15.5 C	25m	3/8	CU

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	19.74	19.74	33.775	23.897	399.9	0.000	5.33	101.9	2.5	0.25	0.0	0.00	0.15	0.03	0	
1	A	19.74	19.74	33.775	23.897	399.9	0.004	5.33	101.9	2.5	0.25	0.0	0.00	0.15	0.03	1	221
10	ISL	19.70	19.70	33.774	23.907	399.3	0.040	5.36	102.4	2.4	0.24	0.0	0.00	0.16	0.03	10	
15	A	19.68	19.68	33.774	23.912	399.0	0.060	5.37	102.6	2.4	0.24	0.0	0.00	0.16	0.03	15	220
20	ISL	19.11	19.11	33.721	24.018	389.1	0.080	5.56	105.1	2.5	0.25	0.0	0.00	0.18	0.04	20	
30	ISL	17.26	17.26	33.579	24.365	356.3	0.117	5.95	108.4	2.6	0.28	0.0	0.00	0.22	0.06	30	
33	A	16.51	16.50	33.535	24.506	342.8	0.127	6.07	109.0	2.6	0.29	0.0	0.00	0.23	0.07	33	219
42		13.88	13.87	33.445	25.012	294.8	0.156	6.18	105.2	4.5	0.41	0.2	0.04	1.90	0.86	42	218
50	ISL	13.33	13.32	33.460	25.136	283.2	0.179	5.85	98.4	5.3	0.53	2.2	0.21	1.30	0.63	50	
51	A	13.30	13.29	33.464	25.145	282.4	0.182	5.78	97.2	5.4	0.55	2.6	0.23	1.16	0.60	51	217
60		12.13	12.12	33.499	25.401	258.2	0.206	4.95	81.2	9.1	0.89	9.0	0.03	0.33	0.34	60	216
67	A	11.73	11.72	33.539	25.507	248.2	0.224	4.60	74.9	11.3	1.05	11.6	0.01	0.21	0.25	67	215
75	ISL	11.39	11.38	33.588	25.608	238.8	0.244	4.29	69.3	13.6	1.20	13.8	0.01	0.14	0.18	75	
78		11.28	11.27	33.607	25.643	235.5	0.251	4.18	67.4	14.5	1.25	14.5	0.01	0.12	0.16	78	214
88		10.89	10.88	33.678	25.768	223.8	0.274	3.74	59.8	18.0	1.44	17.4	0.01	0.05	0.10	88	213
97	A	10.72	10.71	33.710	25.823	218.7	0.294	3.56	56.8	19.3	1.52	18.6	0.01	0.04	0.08	97	212
100	ISL	10.69	10.68	33.721	25.837	217.5	0.300	3.50	55.8	19.7	1.54	18.9	0.01	0.04	0.08	100	
110		10.62	10.61	33.759	25.879	213.7	0.322	3.30	52.5	21.2	1.62	20.0	0.01	0.03	0.07	111	211
125		10.56	10.55	33.833	25.948	207.5	0.353	2.89	45.9	23.8	1.77	21.7	0.00	0.02	0.06	126	210
144		10.34	10.32	33.921	26.055	197.8	0.392	2.56	40.5	26.7	1.91	23.7	0.01	0.01	0.06	145	209
150	ISL	10.32	10.30	33.954	26.084	195.1	0.404	2.43	38.5	27.6	1.96	24.3	0.01	0.01	0.06	151	
170		10.27	10.25	34.048	26.166	187.8	0.442	2.02	32.0	30.5	2.12	25.8	0.00	0.00	0.04	171	208
200		10.23	10.21	34.149	26.253	180.3	0.497	1.64	25.9	33.4	2.27	27.2	0.01	0.00	0.04	201	207
230		10.14	10.11	34.231	26.333	173.3	0.550	1.36	21.5	35.5	2.38	28.2	0.00			231	206
250	ISL	9.67	9.64	34.220	26.403	166.8	0.584	1.48	23.1	37.1	2.37	28.9	0.00			251	
269		9.15	9.12	34.198	26.471	160.5	0.615	1.64	25.3	38.9	2.37	29.5	0.00			271	205
300	ISL	8.66	8.63	34.204	26.554	153.1	0.664	1.54	23.5	42.6	2.45	30.7	0.00			302	
319		8.42	8.39	34.213	26.598	149.1	0.692	1.41	21.4	45.2	2.52	31.5	0.00			321	204
380		7.64	7.60	34.239	26.735	136.7	0.780	0.95	14.2	54.9	2.77	34.3	0.00			382	203
400	ISL	7.51	7.47	34.245	26.758	134.7	0.807	0.87	12.9	56.9	2.81	34.9	0.00			403	
437		7.30	7.26	34.256	26.797	131.4	0.856	0.75	11.1	60.4	2.88	35.9	0.00			440	202
500	ISL	6.76	6.71	34.278	26.889	123.2	0.936	0.53	7.7	68.6	3.01	38.0	0.00			503	
513		6.65	6.60	34.283	26.908	121.5	0.952	0.48	7.0	70.3	3.04	38.4	0.00			516	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 40

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 30.7 N	118 13.0 W	13/10/00	2049 UTC	1620 m	300 10 kn	310 02 07	1	1019.1 mb	19.8 C	17.2 C	16m	1/8	CC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	19.88	19.88	33.739	23.833	406.0	0.000	5.38	103.1	1.9	0.22	0.1	0.00	0.18	0.04	0	
1		19.88	19.88	33.739	23.833	406.0	0.004	5.38	103.1	1.9	0.22	0.1	0.00	0.18	0.04	1	220
10	ISL	19.69	19.69	33.730	23.876	402.3	0.040	5.41	103.3	1.9	0.23	0.1	0.00	0.19	0.04	10	
14		19.60	19.60	33.726	23.896	400.5	0.056	5.42	103.4	1.9	0.23	0.1	0.00	0.20	0.04	14	219
20	ISL	18.84	18.84	33.645	24.028	388.1	0.080	5.56	104.5	2.0	0.25	0.1	0.00	0.20	0.05	20	
30		17.17	17.17	33.509	24.332	359.4	0.118	5.86	106.6	2.1	0.28	0.1	0.00	0.20	0.07	30	218
45		14.64	14.63	33.457	24.862	309.2	0.168	6.23	107.7	3.1	0.33	0.1	0.00	0.49	0.33	45	217
50	ISL	13.83	13.82	33.480	25.050	291.4	0.183	5.88	100.0	4.0	0.45	1.6	0.14	0.60	0.47	50	
54		13.24	13.23	33.502	25.187	278.5	0.194	5.55	93.2	5.0	0.57	3.3	0.23	0.64	0.54	54	216
65		12.22	12.21	33.516	25.397	258.7	0.224	4.94	81.2	8.7	0.92	9.7	0.05	0.29	0.31	65	215
74		11.82	11.81	33.525	25.480	251.0	0.247	4.70	76.6	10.3	1.04	11.6	0.03	0.20	0.26	74	214
75	ISL	11.80	11.79	33.525	25.483	250.7	0.249	4.69	76.4	10.4	1.04	11.7	0.03	0.19	0.26	75	
85		11.53	11.52	33.543	25.547	244.8	0.274	4.56	73.9	11.7	1.11	12.8	0.03	0.15	0.20	85	213
95		11.00	10.99	33.617	25.701	230.3	0.298	4.05	64.9	15.4	1.31	15.6	0.01	0.07	0.12	95	212
100	ISL	10.91	10.90	33.668	25.757	225.1	0.309	3.72	59.5	17.4	1.43	17.3	0.01	0.05	0.10	100	
109		10.80	10.79	33.744	25.836	217.8	0.329	3.27	52.2	20.3	1.61	19.7	0.01	0.03	0.09	110	211
125		10.16	10.15	33.739	25.943	207.9	0.363	3.63	57.2	20.5	1.56	20.0	0.01	0.02	0.05	126	210
144		9.72	9.70	33.875	26.124	191.1	0.401	3.44	53.7	24.0	1.66	22.0	0.01	0.00	0.04	145	209
150	ISL	9.57	9.55	33.900	26.168	186.9	0.412	3.37	52.4	25.2	1.70	22.7	0.01	0.00	0.04	151	
168		9.19	9.17	33.956	26.274	177.2	0.445	3.08	47.5	29.0	1.86	24.9	0.01	0.00	0.04	169	208
199		8.88	8.86	34.068	26.411	164.7	0.498	2.27	34.8	35.6	2.17	28.3	0.00	0.00	0.04	200	207
200	ISL	8.86	8.84	34.070	26.416	164.2	0.500	2.27	34.8	35.7	2.17	28.3	0.00			201	
228		8.37	8.35	34.087	26.505	156.1	0.544	2.38 U	36.1U	38.9	2.20	28.9	0.00			229	206
250	ISL	7.93	7.90	34.080	26.566	150.5	0.578	2.20	33.0	42.6	2.27	30.0	0.00			251	
268		7.63	7.60	34.079	26.609	146.6	0.605	2.17	32.4	45.8	2.36	31.2	0.00			270	205
300	ISL	7.46	7.43	34.140	26.681	140.1	0.651	1.51	22.4	51.0	2.57	33.3	0.00			302	
319		7.43	7.40	34.184	26.720	136.8	0.677	1.09	16.2	54.0	2.70	34.4	0.00			321	204
378		7.10	7.06	34.266	26.832	127.0	0.755	0.63	9.3	62.9	2.95	36.7	0.00			380	203
400	ISL	6.97	6.93	34.287	26.867	124.0	0.782	0.50	7.3	65.9	3.01	37.4	0.00			403	
437		6.75	6.71	34.311	26.916	119.7	0.828	0.33	4.8	70.3	3.09	38.4	0.00			440	202
500	ISL	6.40	6.35	34.322	26.971	115.0	0.902	0.28	4.1	75.8	3.16	39.4	0.00			503	
518		6.30	6.25	34.325	26.987	113.7	0.922	0.26	3.8	77.4	3.18	39.7	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 20.4 N	118 33.5 W	14/10/00	0129	UTC	1420 m	300	13 kn	280 03 07	1	1016.8 mb	17.4 C	15.8 C		3/8	CS

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.16	18.16	33.587	24.152	375.6	0.000	5.51	102.2	2.2	0.27	0.1	0.00	0.16	0.04	0	
1		18.16	18.16	33.587	24.152	375.6	0.004	5.51	102.2	2.2	0.27	0.1	0.00	0.16	0.04	1	220
10		18.15	18.15	33.585	24.153	375.8	0.038	5.52	102.3	2.1	0.26	0.0	0.00	0.17	0.04	10	219
20		17.79	17.79	33.589	24.245	367.4	0.075	5.59	102.9	2.0	0.26	0.0	0.00	0.21	0.09	20	218
30		16.54	16.54	33.476	24.454	347.7	0.110	5.83	104.7	2.3	0.29	0.0	0.00	0.42	0.19	30	217
40		14.44	14.43	33.432	24.885	306.9	0.143	5.99	103.1	3.5	0.41	1.1	0.09	0.75	0.44	40	216
50		13.36	13.35	33.495	25.157	281.2	0.173	5.60	94.3	4.8	0.60	4.1	0.19	0.60	0.51	50	215
61		12.59	12.58	33.520	25.329	265.1	0.203	5.19	86.0	6.8	0.81	7.8	0.13	0.43	0.42	61	214
70		12.16	12.15	33.516	25.409	257.7	0.226	5.00	82.1	8.2	0.90	9.2	0.07	0.36	0.35	70	213
75	ISL	11.77	11.76	33.538	25.499	249.2	0.239	4.75	77.4	10.3	1.02	11.3	0.05	0.30	0.31	75	
85		10.99	10.98	33.602	25.691	231.1	0.263	4.23	67.8	14.8	1.28	15.6	0.03	0.17	0.22	85	212
100		10.41	10.40	33.671	25.847	216.5	0.296	3.87	61.3	18.5	1.45	18.3	0.01	0.05	0.10	100	211
121		9.73	9.72	33.791	26.056	197.0	0.340	3.63	56.7	22.8	1.60	21.0	0.01	0.01	0.05	122	210
125	ISL	9.69	9.68	33.805	26.073	195.4	0.348	3.58	55.8	23.3	1.63	21.4	0.01	0.01	0.05	126	
139		9.61	9.59	33.859	26.129	190.4	0.375	3.32	51.7	25.3	1.74	23.0	0.00	0.01	0.04	140	209
150	ISL	9.49	9.47	33.947	26.218	182.2	0.395	2.88	44.8	28.6	1.91	24.8	0.00	0.01	0.04	151	
169		9.23	9.21	34.089	26.371	167.9	0.428	2.16	33.4	34.4	2.18	27.7	0.00	0.00	0.04	170	208
200		8.79	8.77	34.107	26.456	160.4	0.479	2.15	32.9	37.2	2.23	28.8	0.00	0.00	0.03	201	207
230		8.61	8.59	34.155	26.522	154.7	0.527	1.74	26.5	41.0	2.39	30.4	0.00			231	206
250	ISL	8.42	8.39	34.167	26.561	151.3	0.557	1.64	24.9	43.1	2.46	31.0	0.00			251	
271		8.21	8.18	34.173	26.597	148.1	0.589	1.57	23.7	45.2	2.52	31.6	0.00			273	205
300	ISL	7.95	7.92	34.192	26.651	143.3	0.631	1.34	20.1	48.9	2.62	32.8	0.00			302	
322		7.77	7.74	34.209	26.691	139.8	0.662	1.16	17.4	51.8	2.69	33.8	0.00			324	204
379		7.34	7.30	34.251	26.787	131.5	0.739	0.81	12.0	59.1	2.86	35.6	0.00			381	203
400	ISL	7.16	7.12	34.267	26.825	128.1	0.767	0.67	9.9	62.2	2.93	36.4	0.00			403	
433		6.88	6.84	34.289	26.881	123.1	0.808	0.48	7.0	67.0	3.03	37.6	0.00			436	202
500	ISL	6.38	6.33	34.303	26.959	116.2	0.888	0.37	5.4	74.8	3.14	39.4	0.00			503	
509		6.31	6.26	34.305	26.970	115.2	0.899	0.35	5.1	75.8	3.15	39.6	0.00			512	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	CAST	TIME	BOTTOM	WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
32 10.9 N	118 53.5 W	14/10/00	0513	UTC	1465 m	310	11 kn			1017.5 mb	18.0 C	15.7 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.47	18.47	33.576	24.067	383.7	0.000	5.46	101.8	2.2	0.26	0.1	0.00	0.13	0.03	0	
1		18.47	18.47	33.576	24.067	383.7	0.004	5.46	101.8	2.2	0.26	0.1	0.00	0.13	0.03	1	220
10	ISL	18.48	18.48	33.576	24.065	384.2	0.038	5.47	102.0	2.2	0.26	0.1	0.00	0.13	0.03	10	
15		18.48	18.48	33.576	24.065	384.4	0.058	5.49	102.4	2.2	0.26	0.1	0.00	0.13	0.03	15	219
20	ISL	18.47	18.47	33.575	24.067	384.4	0.077	5.51	102.8	2.2	0.26	0.1	0.00	0.14	0.03	20	
30		18.46	18.45	33.574	24.069	384.5	0.115			2.0	0.26	0.1	0.00	0.15	0.04	30	218
44		17.75	17.74	33.544	24.221	370.5	0.168	5.69	104.6	1.7	0.26	0.1	0.00	0.25	0.09	44	217
50	ISL	17.39	17.38	33.528	24.295	363.6	0.190	5.77	105.4	1.9	0.26	0.1	0.00	0.27	0.11	50	
54		17.10	17.09	33.517	24.356	357.9	0.205	5.83	105.9	2.0	0.27	0.1	0.00	0.29	0.13	54	216
65		15.90	15.89	33.487	24.610	334.0	0.243	5.97	105.9	2.3	0.30	0.1	0.00	0.51	0.28	65	215
75	ISL	14.73	14.72	33.470	24.854	310.9	0.275	5.94	102.9	2.8	0.35	0.4	0.05	0.41	0.25	75	
76		14.60	14.59	33.469	24.881	308.4	0.278	5.94	102.6	2.9	0.35	0.4	0.06	0.40	0.25	76	214
85		13.24	13.23	33.473	25.165	281.4	0.305	5.57	93.6	5.1	0.56	3.6	0.19	0.20	0.17	85	213
95		12.30	12.29	33.502	25.372	261.9	0.332	5.18	85.3	7.3	0.75	7.0	0.06	0.13	0.15	95	212
100	ISL	12.09	12.08	33.532	25.435	255.9	0.345	5.11	83.8	7.6	0.77	7.5	0.05	0.13	0.15	100	
110		11.78	11.77	33.594	25.542	246.0	0.370	4.95	80.7	8.6	0.83	8.8	0.03	0.12	0.15	110	211
124		10.89	10.87	33.657	25.752	226.1	0.403	4.25	68.0	14.3	1.22	15.1	0.01	0.05	0.08	125	210
125	ISL	10.84	10.82	33.666	25.768	224.6	0.405	4.20	67.1	14.7	1.25	15.5	0.01	0.05	0.08	126	
144		10.20	10.18	33.839	26.015	201.5	0.446	3.34	52.7	22.2	1.64	21.1	0.01	0.01	0.04	145	209
150	ISL	10.08	10.06	33.879	26.066	196.7	0.457	3.16	49.7	23.8	1.72	22.2	0.01	0.01	0.04	151	
169		9.79	9.77	33.974	26.190	185.3	0.494	2.79	43.6	27.4	1.90	24.5	0.00	0.00	0.03	170	208
197		9.23	9.21	34.047	26.339	171.6	0.544	2.62	40.5	31.4	2.01	26.3	0.00	0.00	0.03	198	207
200	ISL	9.14	9.12	34.046	26.353	170.3	0.549	2.62	40.4	31.9	2.02	26.5	0.00			201	
228		8.39	8.37	34.042	26.467	159.7	0.595	2.59	39.3	36.7	2.11	28.3	0.00			229	206
250	ISL	8.28	8.25	34.120	26.545	152.7	0.629	2.10	31.8	41.4	2.30	30.1	0.00			251	
267		8.20	8.17	34.169	26.596	148.1	0.655	1.66	25.1	44.8	2.46	31.4	0.00			268	205
300	ISL	7.99	7.96	34.216	26.664	142.1	0.703	1.29	19.4	48.9	2.61	32.9	0.00			302	
319		7.87	7.84	34.230	26.693	139.7	0.730	1.17	17.6	50.7	2.67	33.5	0.00			321	204
377		7.63	7.59	34.267	26.758	134.4	0.809	0.83	12.4	55.9	2.82	34.7	0.00			379	203
400	ISL	7.31	7.27	34.262	26.800	130.6	0.840	0.73	10.8	60.0	2.89	35.9	0.00			402	
442		6.71	6.67	34.256	26.878	123.3	0.893	0.57	8.3	67.8	3.01	38.1	0.00			445	202
500	ISL	6.42	6.37	34.291	26.944	117.6	0.963	0.39	5.7	73.8	3.11	39.3	0.00			503	
517		6.33	6.28	34.302	26.965	115.8	0.983	0.34	4.9	75.5	3.14	39.6	0.00			520	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 55

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
32 0.5 N	119 14.3 W	14/10/00	0913 UTC	1608 m	290 12 kn			1017.0 mb	17.4 C	15.5 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.37	18.37	33.592	24.104	380.1	0.000	5.50	102.4	2.1	0.27	0.1	0.00	0.15	0.03	0	
1		18.37	18.37	33.592	24.104	380.2	0.004	5.50	102.4	2.1	0.27	0.1	0.00	0.15	0.03	1	220
10	ISL	18.38	18.38	33.596	24.105	380.4	0.038	5.48	102.1	2.1	0.27	0.1	0.00	0.15	0.03	10	
15		18.38	18.38	33.598	24.107	380.4	0.057	5.46	101.7	2.1	0.27	0.1	0.00	0.16	0.03	15	219
20	ISL	18.38	18.38	33.597	24.106	380.6	0.076	5.47	101.9	2.1	0.26	0.1	0.00	0.17	0.03	20	
30		18.37	18.36	33.594	24.107	380.9	0.114	5.48	102.0	2.1	0.26	0.0	0.00	0.19	0.04	30	218
44		15.83	15.82	33.470	24.612	333.1	0.164	6.02	106.6	2.5	0.29	0.0	0.00	0.21	0.11	44	217
50	ISL	15.01	15.00	33.459	24.784	316.8	0.184	6.01	104.7	2.7	0.32	0.1	0.01	0.30	0.21	50	
55		14.45	14.44	33.459	24.904	305.5	0.199	6.00	103.3	3.0	0.35	0.1	0.01	0.36	0.28	55	216
65		13.65	13.64	33.458	25.070	289.9	0.229	5.71	96.7	3.9	0.46	1.5	0.20	0.33	0.29	65	215
75		13.32	13.31	33.478	25.153	282.3	0.258	5.56	93.5	4.6	0.54	3.0	0.29	0.26	0.25	75	214
84		12.55	12.54	33.553	25.363	262.5	0.282	5.11	84.6	6.7	0.73	6.7	0.04	0.16	0.17	84	213
94		12.03	12.02	33.590	25.491	250.4	0.308	4.83	79.1	8.8	0.87	9.1	0.03	0.11	0.12	94	212
100	ISL	11.74	11.73	33.616	25.566	243.4	0.323	4.69	76.4	10.1	0.94	10.5	0.03	0.09	0.11	100	
112		11.15	11.14	33.678	25.722	228.8	0.351	4.39	70.6	13.1	1.11	13.5	0.02	0.05	0.08	112	211
125	ISL	10.46	10.45	33.765	25.912	210.9	0.379	3.95	62.6	17.9	1.37	17.5	0.01			126	
127		10.36	10.35	33.778	25.939	208.3	0.384	3.88	61.4	18.6	1.41	18.1	0.01			128	210
144		9.95	9.93	33.859	26.073	196.0	0.418	3.50	54.9	22.7	1.62	21.2	0.01			145	209
150	ISL	9.77	9.75	33.878	26.118	191.7	0.430	3.48	54.4	23.7	1.65	21.8	0.01			151	
171		9.20	9.18	33.937	26.257	178.8	0.469	3.42	52.8	27.0	1.74	23.5	0.01			172	208
196		8.91	8.89	34.026	26.373	168.2	0.512	2.92	44.8	32.0	1.95	26.2	0.01			197	207
200	ISL	8.92	8.90	34.045	26.387	167.0	0.519	2.79	42.8	32.7	2.00	26.6	0.01			201	
229		9.05	9.03	34.169	26.464	160.4	0.566	1.89	29.1	37.5	2.30	29.0	0.00			230	206
250	ISL	8.80	8.77	34.199	26.527	154.7	0.599	1.65	25.3	40.6	2.41	30.2	0.00			251	
271		8.48	8.45	34.210	26.585	149.4	0.631	1.55	23.6	43.5	2.48	31.1	0.00			273	205
300	ISL	8.26	8.23	34.235	26.639	144.7	0.674	1.32	20.0	46.7	2.59	32.0	0.00			302	
321		8.09	8.06	34.245	26.673	141.8	0.704	1.17	17.6	49.3	2.66	32.7	0.00			323	204
371		7.26	7.22	34.225	26.777	132.1	0.772	0.93	13.8	58.6	2.82	35.7	0.00			373	203
400	ISL	7.05	7.01	34.249	26.826	127.9	0.810	0.73	10.7	62.7	2.92	36.7	0.00			402	
439		6.91	6.87	34.297 D	26.883	123.0	0.859	0.47	6.9	67.4	3.04	37.7	0.00			442	202
500	ISL	6.64	6.59	34.358	26.968	115.6	0.932	0.25	3.6	73.4	3.16	39.0	0.00			503	
511		6.59	6.54	34.369	26.984	114.3	0.944	0.21	3.1	74.5	3.18	39.2	0.00			514	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
31 50.7 N	119 34.6 W	14/10/00	1846 UTC	1846 m	310 18 kn	320 03 08	1	1017.0 mb	18.8 C	16.5 C	20m	6/8 AC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.39	18.39	33.514	24.039	386.3	0.000	5.47	101.8	2.8	0.29	0.1	0.00	0.14	0.03	0	
2	A	18.39	18.39	33.514	24.040	386.4	0.008	5.47	101.8	2.8	0.29	0.1	0.00	0.14	0.03	2	221
10	ISL	18.37	18.37	33.510	24.042	386.4	0.039	5.46	101.6	2.7	0.28	0.0	0.00	0.14	0.03	10	
14	A	18.35	18.35	33.503	24.042	386.6	0.054	5.46	101.6	2.7	0.28	0.0	0.00	0.14	0.03	14	220
20	ISL	18.28	18.28	33.488	24.048	386.2	0.077	5.47	101.6	2.7	0.28	0.0	0.00	0.16	0.04	20	
26	A	18.22	18.22	33.474	24.052	386.0	0.100	5.47	101.5	2.7	0.28	0.0	0.00	0.19	0.04	26	219
30	ISL	17.83	17.82	33.445	24.125	379.2	0.116	5.57	102.5	2.6	0.28	0.0	0.00	0.20	0.05	30	
42	A	16.48	16.47	33.369	24.386	354.6	0.160	5.86	105.0	2.4	0.28	0.0	0.00	0.28	0.14	42	218
49		16.00	15.99	33.351	24.482	345.6	0.184	5.90	104.7	2.6	0.30	0.0	0.00	0.40	0.23	49	217
50	ISL	15.84	15.83	33.342	24.511	342.9	0.188	5.91	104.6	2.6	0.30	0.0	0.00	0.44	0.25	50	
56	A	14.79	14.78	33.301	24.710	324.0	0.208	5.99	103.8	2.9	0.33	0.1	0.02	0.61	0.35	56	216
65		13.65	13.64	33.350	24.987	297.9	0.236	5.94	100.5	3.6	0.40	0.6	0.10	0.34	0.24	65	215
75	ISL	13.57	13.56	33.452	25.082	289.1	0.265	5.77	97.6	3.8	0.42	1.1	0.15	0.30	0.31	75	
78	A	13.54	13.53	33.468	25.101	287.4	0.274	5.70	96.3	4.0	0.44	1.3	0.16	0.29	0.33	78	214
86		12.96	12.95	33.504	25.245	273.8	0.296	5.45	91.0	5.3	0.58	4.0	0.15	0.28	0.23	86	213
96		12.29	12.28	33.495	25.368	262.2	0.323	5.29	87.1	6.4	0.68	5.9	0.06	0.19	0.19	96	212
100	ISL	12.04	12.03	33.498	25.418	257.5	0.333	5.21	85.3	7.0	0.73	6.8	0.04	0.17	0.18	100	
110		11.46	11.45	33.522	25.545	245.7	0.359	4.94	79.9	9.3	0.91	9.7	0.02	0.12	0.15	110	211
125		10.61	10.60	33.612	25.767	224.7	0.394	4.23	67.2	15.2	1.28	15.7	0.01	0.05	0.08	126	210
145		10.19	10.17	33.798	25.984	204.4	0.437	3.48	54.9	21.5	1.60	20.6	0.00	0.02	0.04	146	209
150	ISL	10.10	10.08	33.820	26.017	201.4	0.447	3.31	52.1	22.9	1.68	21.6	0.00	0.01	0.04	151	
170		9.77	9.75	33.869	26.111	192.8	0.486	2.77	43.3	27.5	1.92	24.9	0.00	0.00	0.04	171	208
200		9.40	9.38	33.944	26.231	181.9	0.542	2.49	38.6	30.9	2.05	26.8	0.00	0.00	0.04	201	207
228		8.53	8.51	33.994	26.408	165.3	0.591	2.74	41.7	34.8	2.07	28.2	0.00			229	206
250	ISL	8.27	8.24	34.026	26.473	159.5	0.627	2.58	39.0	37.5	2.15	29.3	0.00			251	
268		8.13	8.10	34.042	26.506	156.5	0.655	2.36	35.6	39.9	2.24	30.2	0.00			269	205
300	ISL	7.44	7.41	34.037	26.603	147.5	0.704	2.21	32.8	46.5	2.37	32.2	0.00			302	
320		7.03	7.00	34.036	26.660	142.2	0.733	2.09	30.7	50.8	2.46	33.5	0.00			322	204
379		6.76	6.72	34.126	26.768	132.7	0.814	1.23	18.0	60.4	2.78	36.7	0.00			381	203
400	ISL	6.71	6.67	34.166	26.806	129.4	0.842	0.98	14.3	63.4	2.88	37.5	0.00			402	
437		6.61	6.57	34.230	26.871	123.8	0.888	0.62	9.0	68.4	3.02	38.5	0.00			440	202
500	ISL	6.29	6.24	34.280	26.953	116.7	0.964	0.40	5.8	75.6	3.15	39.9	0.00			503	
518		6.20	6.15	34.294	26.975	114.7	0.985	0.34	4.9	77.7	3.19	40.3	0.00			521	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 31.0 N	120 14.7 W	14/10/00	2352 UTC	3928 m	340 17 kn	350 05 06	1	1015.4 mb	17.8 C	15.2 C	21m	7/8	SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.53	18.53	33.618	24.084	382.0	0.000	5.47	102.2	2.5	0.26	0.1	0.00	0.11	0.02	0	
1		18.53	18.53	33.618	24.084	382.0	0.004	5.47	102.2	2.5	0.26	0.1	0.00	0.11	0.02	1	220
10	ISL	18.53	18.53	33.617	24.084	382.4	0.038	5.46	102.0	2.5	0.26	0.0	0.00	0.11	0.03	10	
15		18.53	18.53	33.616	24.083	382.6	0.057	5.46	102.0	2.5	0.26	0.0	0.00	0.11	0.03	15	219
20	ISL	18.50	18.50	33.614	24.089	382.2	0.076	5.46	101.9	2.5	0.26	0.0	0.00	0.11	0.03	20	
30		18.45	18.44	33.611	24.100	381.6	0.115	5.47	102.0	2.5	0.26	0.0	0.00	0.12	0.03	30	218
45		15.95	15.94	33.479	24.592	335.1	0.168	5.98	106.1	2.9	0.29	0.0	0.00	0.19	0.08	45	217
50	ISL	15.23	15.22	33.461	24.738	321.3	0.185	6.01	105.1	3.1	0.30	0.1	0.00	0.28	0.14	50	
55		14.62	14.61	33.456	24.866	309.2	0.201	6.03	104.2	3.3	0.32	0.1	0.00	0.38	0.21	55	216
65		13.86	13.85	33.472	25.038	293.0	0.231	5.84	99.4	3.7	0.39	0.8	0.07	0.47	0.31	65	215
75		13.19	13.18	33.471	25.173	280.3	0.259	5.66	95.0	4.4	0.49	2.3	0.17	0.44	0.34	75	214
85		12.72	12.71	33.471	25.266	271.7	0.287	5.49	91.2	5.3	0.58	4.0	0.17	0.35	0.28	85	213
96		12.05	12.04	33.556	25.461	253.4	0.316	5.07	83.1	7.9	0.77	7.6	0.04	0.24	0.23	96	212
100	ISL	11.75	11.74	33.582	25.538	246.1	0.326	4.86	79.2	9.5	0.89	9.4	0.03	0.20	0.21	100	
110		11.07	11.06	33.647	25.712	229.6	0.350	4.31	69.2	13.8	1.19	13.9	0.02	0.12	0.15	110	211
125		10.67	10.66	33.760	25.871	214.8	0.383	3.69	58.8	18.6	1.45	17.9	0.01	0.06	0.10	126	210
145		10.35	10.33	33.918	26.051	198.2	0.424	2.83	44.8	25.0	1.80	22.5	0.01	0.03	0.05	146	209
150	ISL	10.31	10.29	33.960	26.090	194.5	0.434	2.60	41.1	26.6	1.89	23.5	0.01	0.02	0.04	151	
170		10.18	10.16	34.108	26.229	181.8	0.472	1.80	28.4	32.1	2.21	26.8	0.00	0.00	0.03	171	208
199		9.95	9.93	34.229	26.363	169.7	0.523	1.43	22.5	35.7	2.38	28.5	0.00	0.00	0.03	200	207
200	ISL	9.94	9.92	34.231	26.366	169.4	0.524	1.42	22.3	35.8	2.38	28.5	0.00			201	
230		9.78	9.75	34.276	26.428	164.1	0.574	1.27	19.9	37.6	2.46	29.2	0.00			231	206
250	ISL	9.66	9.63	34.313	26.478	159.8	0.607	1.12	17.5	39.4	2.53	29.7	0.00			251	
268		9.55	9.52	34.342	26.519	156.2	0.635	0.98	15.3	41.1	2.60	30.2	0.00			269	205
300	ISL	9.29	9.26	34.357	26.574	151.6	0.684	0.86	13.3	43.5	2.67	30.9	0.00			302	
321		9.11	9.07	34.360	26.605	148.9	0.716	0.79	12.2	45.1	2.71	31.3	0.00			323	204
379		8.63	8.59	34.404	26.716	139.2	0.800	0.41	6.3	51.6	2.89	32.9	0.00			381	203
400	ISL	8.35	8.31	34.395	26.753	136.0	0.828	0.39	5.9	54.4	2.94	33.7	0.00			402	
439		7.80	7.76	34.369	26.815	130.3	0.880	0.36	5.4	59.6	3.01	35.3	0.00			442	202
500	ISL	7.19	7.14	34.352	26.889	123.7	0.958	0.31	4.6	66.0	3.08	37.1	0.00			503	
515		7.04	6.99	34.348	26.907	122.1	0.976	0.30	4.4	67.6	3.10	37.6	0.00			518	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
31 11.1 N	120 55.6 W	15/10/00	0555 UTC	3861 m	320 20 kn			1016.8 mb	17.3 C	14.9 C			

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.60	18.60	33.621	24.069	383.5	0.000	5.44	101.8	2.7	0.26	0.0	0.00	0.13	0.05	0	
1		18.60	18.60	33.621	24.069	383.5	0.004	5.44	101.8	2.7	0.26	0.0	0.00	0.13	0.05	1	220
10	ISL	18.61	18.61	33.621	24.067	384.0	0.038	5.45	102.0	2.6	0.26	0.0	0.00	0.13	0.04	10	
15		18.61	18.61	33.622	24.068	384.1	0.058	5.45	102.0	2.6	0.26	0.0	0.00	0.13	0.03	15	219
20	ISL	18.61	18.61	33.622	24.068	384.3	0.077	5.45	102.0	2.6	0.26	0.0	0.00	0.13	0.03	20	
30		18.61	18.60	33.621	24.068	384.7	0.115	5.45	101.9	2.6	0.26	0.0	0.00	0.14	0.04	30	218
45		17.24	17.23	33.577	24.368	356.5	0.171	5.69	103.6	2.2	0.27	0.0	0.00	0.22	0.08	45	217
50	ISL	16.17	16.16	33.509	24.565	337.8	0.188	5.89	105.0	2.5	0.29	0.0	0.00	0.35	0.18	50	
55		15.12	15.11	33.454	24.757	319.6	0.205	6.04	105.4	2.9	0.32	0.0	0.00	0.48	0.28	55	216
65		14.14	14.13	33.440	24.955	300.9	0.236	5.91	101.1	3.8	0.40	0.8	0.09	0.64	0.37	65	215
75		12.99	12.98	33.418	25.172	280.4	0.265	5.58	93.2	5.6	0.61	4.1	0.22	0.39	0.29	75	214
85		11.81	11.80	33.448	25.422	256.8	0.292	5.15	83.9	8.5	0.86	8.6	0.02	0.20	0.19	85	213
95		11.37	11.36	33.445	25.501	249.4	0.317	5.12	82.6	9.1	0.88	9.0	0.03	0.15	0.19	95	212
100	ISL	11.17	11.16	33.468	25.555	244.4	0.329	4.95	79.6	10.4	0.97	10.5	0.03	0.12	0.17	100	
109		10.86	10.85	33.526	25.655	235.0	0.351	4.57	73.0	13.2	1.16	13.6	0.02	0.08	0.12	109	211
125	ISL	10.54	10.53	33.618	25.783	223.1	0.387	4.14	65.7	16.4	1.35	16.5	0.02	0.04	0.09	126	
126		10.52	10.51	33.625	25.792	222.3	0.390	4.11	65.2	16.6	1.36	16.7	0.02	0.04	0.09	127	210
147		10.07	10.05	33.854	26.049	198.3	0.434	3.20	50.3	23.8	1.72	22.0	0.01	0.01	0.05	148	209
150	ISL	10.00	9.98	33.883	26.083	195.1	0.440	3.09	48.5	24.8	1.77	22.6	0.01	0.01	0.05	151	
170		9.56	9.54	34.031	26.272	177.5	0.477	2.55	39.7	30.2	2.01	25.7	0.01	0.00	0.03	171	208
199		8.89	8.87	34.070	26.411	164.7	0.527	2.59	39.7	34.2	2.07	27.1	0.00	0.00	0.03	200	207
200	ISL	8.88	8.86	34.073	26.415	164.3	0.528	2.57	39.4	34.4	2.08	27.2	0.00			201	
231		8.69	8.67	34.153	26.508	156.0	0.578	1.94	29.6	39.5	2.32	29.5	0.00			232	206
250	ISL	8.60	8.57	34.186	26.548	152.6	0.607	1.69	25.8	41.8	2.43	30.3	0.00			251	
271		8.47	8.44	34.207	26.585	149.4	0.639	1.50	22.8	44.3	2.52	31.1	0.00			272	205
300	ISL	8.03	8.00	34.201	26.647	143.8	0.681	1.37	20.6	48.5	2.61	32.4	0.00			302	
325		7.64	7.61	34.195	26.699	139.0	0.717	1.27	18.9	52.3	2.68	33.6	0.00			327	204
380		7.26	7.22	34.268	26.811	129.1	0.791	0.68	10.1	61.0	2.92	36.0	0.00			382	203
400	ISL	7.12	7.08	34.288	26.847	126.0	0.816	0.55	8.1	63.7	2.99	36.7	0.00			402	
436		6.88	6.84	34.314	26.901	121.2	0.861	0.39	5.7	68.2	3.08	37.8	0.00			439	202
500	ISL	6.42	6.37	34.330	26.975	114.7	0.936	0.29	4.2	75.1	3.17	39.4	0.00			503	
510		6.35	6.30	34.333	26.987	113.7	0.947	0.28	4.1	76.2	3.18	39.6	0.00			513	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 90

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
30 50.6 N	121 35.8 W	15/10/00	1152 UTC	4156 m	330 18 kn			1017.7 mb	17.2 C	14.8 C		

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.81	18.81	33.637	24.029	387.3	0.000	5.44	102.2	2.3	0.27	0.0	0.00	0.15	0.04	0	
2		18.81	18.81	33.637	24.029	387.4	0.008	5.44	102.2	2.3	0.27	0.0	0.00	0.15	0.04	2	220
10	ISL	18.81	18.81	33.639	24.031	387.5	0.039	5.42	101.8	2.3	0.26	0.0	0.00	0.15	0.03	10	
16		18.81	18.81	33.640	24.032	387.6	0.062	5.41	101.6	2.3	0.26	0.0	0.00	0.15	0.03	16	219
20	ISL	18.81	18.81	33.639	24.031	387.8	0.078	5.42	101.8	2.3	0.26	0.0	0.00	0.15	0.03	20	
30	ISL	18.80	18.79	33.636	24.032	388.1	0.116	5.43	101.9	2.3	0.26	0.0	0.00	0.15	0.04	30	
31		18.80	18.79	33.636	24.032	388.1	0.120	5.43	101.9	2.3	0.26	0.0	0.00	0.15	0.04	31	218
46		17.28	17.27	33.433	24.248	367.9	0.177	5.75	104.7	2.4	0.28	0.3	0.00	0.21	0.07	46	217
50	ISL	16.19	16.18	33.393	24.471	346.7	0.191	5.92	105.5	2.6	0.28	0.2	0.00	0.20	0.11	50	
54		15.14	15.13	33.369	24.687	326.2	0.205	6.06	105.8	2.8	0.29	0.1	0.00	0.19	0.16	54	216
65		14.12	14.11	33.316	24.864	309.6	0.240	6.03	103.0	3.0	0.35	0.2	0.03	0.29	0.26	65	215
74		12.56	12.55	33.243	25.120	285.2	0.266	5.97	98.7	4.5	0.46	1.2	0.19	0.26	0.23	74	214
75	ISL	12.46	12.45	33.250	25.145	282.9	0.269	5.93	97.9	4.7	0.48	1.6	0.18	0.25	0.22	75	
85		11.80	11.79	33.343	25.342	264.3	0.297	5.48	89.2	6.5	0.71	5.7	0.03	0.15	0.16	85	213
95		11.33	11.32	33.375	25.453	253.9	0.322	5.40	87.1	7.1	0.74	6.5	0.07	0.12	0.16	95	212
100	ISL	10.91	10.90	33.333	25.496	249.9	0.335	5.41	86.4	7.4	0.77	7.0	0.06	0.10	0.15	100	
111		10.14	10.13	33.288	25.594	240.6	0.362	5.43	85.2	9.2	0.89	9.1	0.02	0.07	0.13	111	211
125		10.20	10.19	33.546	25.786	222.8	0.394	4.52	71.2	14.8	1.22	15.0	0.01			126	210
145		9.76	9.74	33.696	25.977	205.0	0.437	3.80	59.3	21.0	1.56	20.3	0.01			146	209
150	ISL	9.65	9.63	33.733	26.024	200.6	0.447	3.66	57.0	22.4	1.63	21.4	0.01			151	
171		9.22	9.20	33.868	26.200	184.2	0.488	3.30	50.9	27.2	1.81	24.7	0.00			172	208
198		8.76	8.74	33.956	26.342	171.1	0.536	3.40	52.0	29.9	1.81	25.2	0.00			199	207
200	ISL	8.72	8.70	33.961	26.352	170.2	0.539	3.39	51.8	30.2	1.82	25.3	0.00			201	
227		8.23	8.21	34.004	26.461	160.1	0.584	3.14	47.4	35.2	1.95	27.3	0.00			228	206
250	ISL	7.83	7.81	34.024	26.536	153.2	0.620	2.82	42.2	39.8	2.10	29.3	0.00			251	
270		7.51	7.48	34.035	26.591	148.2	0.650	2.52	37.5	44.0	2.24	31.1	0.00			271	205
300	ISL	7.09	7.06	34.051	26.663	141.6	0.693	2.14	31.5	50.3	2.42	33.3	0.00			302	
318		6.87	6.84	34.060	26.700	138.2	0.719	1.93	28.3	54.0	2.52	34.5	0.00			320	204
381		6.28	6.25	34.099	26.809	128.4	0.803	1.28	18.5	65.5	2.80	38.3	0.00			383	203
400	ISL	6.12	6.08	34.116	26.844	125.3	0.827	1.10	15.8	69.0	2.87	39.3	0.00			402	
434		5.88	5.84	34.148	26.899	120.3	0.868	0.82	11.7	74.8	2.99	40.7	0.00			437	202
500	ISL	5.58	5.54	34.206	26.983	113.0	0.945	0.50	7.1	83.4	3.14	42.3	0.00			503	
505		5.56	5.52	34.210	26.988	112.5	0.951	0.48	6.8	84.1	3.15	42.4	0.00			508	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT TYPE
30 31.0 N	122 15.7 W	15/10/00	1749 UTC	4166 m	320 12 kn	330 04 06	1	1018.6 mb	18.1 C	15.7 C	29m	7/8 SC

DEPTH m		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0	ISL	18.81	18.81	33.414	23.858	403.6	0.000	5.44	102.0	2.9	0.29	0.3	0.00	0.13	0.03	0	
1	A	18.81	18.81	33.414	23.858	403.6	0.004	5.44	102.0	2.9	0.29	0.3	0.00	0.13	0.03	1	222
10	ISL	18.81	18.81	33.414	23.859	403.9	0.040	5.44	102.0	2.8	0.29	0.2	0.00	0.13	0.03	10	
18	A	18.80	18.80	33.414	23.862	403.9	0.073	5.44	102.0	2.7	0.28	0.2	0.00	0.13	0.03	18	221
20	ISL	18.80	18.80	33.414	23.862	404.0	0.081	5.43	101.8	2.7	0.28	0.2	0.00	0.13	0.03	20	
28		18.80	18.80	33.414	23.862	404.2	0.113	5.40	101.3	2.7	0.28	0.3	0.00	0.13	0.03	28	220
30	ISL	18.80	18.79	33.414	23.862	404.3	0.121	5.40	101.3	2.7	0.28	0.3	0.00	0.13	0.03	30	
38	A	18.80	18.79	33.414	23.863	404.5	0.154	5.41	101.4	2.7	0.28	0.3	0.00	0.13	0.03	38	219
48		18.79	18.78	33.413	23.865	404.7	0.194	5.42	101.6	2.5	0.28	0.0	0.00	0.13	0.05	48	218
50	ISL	18.67	18.66	33.409	23.892	402.2	0.202	5.46	102.1	2.5	0.28	0.0	0.00	0.14	0.05	50	
59	A	17.76	17.75	33.392	24.103	382.3	0.237	5.70	104.8	2.6	0.28	0.1	0.00	0.20	0.06	59	217
69		16.07	16.06	33.407	24.510	343.6	0.274	6.01	106.9	2.9	0.27	0.1	0.00	0.23	0.08	69	216
75	ISL	15.03	15.02	33.374	24.715	324.1	0.294	6.11	106.4	3.0	0.28	0.1	0.00	0.22	0.12	75	
79	A	14.45	14.44	33.358	24.827	313.5	0.306	6.13	105.5	3.0	0.29	0.1	0.00	0.22	0.15	79	215
90		13.81	13.80	33.428	25.015	295.9	0.340	5.99	101.8	3.3	0.32	0.1	0.00	0.25	0.22	90	214
100	ISL	13.20	13.19	33.488	25.185	279.9	0.369	5.76	96.7	4.0	0.39	0.8	0.12	0.24	0.22	100	
101		13.14	13.13	33.494	25.202	278.3	0.372	5.74	96.2	4.1	0.40	0.9	0.13	0.24	0.22	101	213
112	A	12.76	12.74	33.563	25.331	266.3	0.401	5.64	93.8	4.6	0.45	1.8	0.18	0.20	0.19	112	212
118		11.72	11.71	33.484	25.467	253.2	0.417	5.55	90.3	5.9	0.60	4.3	0.07	0.14	0.16	118	211
125		11.24	11.22	33.432	25.515	248.8	0.435	5.56	89.5	6.8	0.68	5.6	0.03	0.12	0.12	125	210
139		10.43	10.41	33.426	25.653	235.7	0.469	5.03	79.5	10.9	1.01	11.4	0.01	0.07	0.08	140	209
150	ISL	10.07	10.05	33.510	25.780	223.8	0.494	4.54	71.3	15.1	1.26	15.4	0.01	0.04	0.06	151	
164		9.80	9.78	33.650	25.935	209.4	0.524	3.98	62.2	20.2	1.52	19.5	0.00	0.01	0.04	165	208
193		9.35	9.33	33.842	26.159	188.6	0.582	3.54	54.8	25.1	1.70	22.8	0.00	0.00	0.05	194	207
200	ISL	9.23	9.21	33.878	26.207	184.2	0.595	3.51	54.2	26.1	1.72	23.3	0.00			201	
227		8.74	8.72	33.980	26.364	169.5	0.643	3.43	52.4	30.1	1.81	24.8	0.00			228	206
250	ISL	8.32	8.29	34.010	26.453	161.4	0.681	3.18	48.1	34.5	1.95	26.8	0.00			251	
268		7.99	7.96	34.016	26.507	156.4	0.709	2.92	43.9	38.3	2.07	28.6	0.00			269	205
300	ISL	7.41	7.38	34.029	26.601	147.7	0.758	2.31	34.3	45.5	2.29	31.5	0.00			302	
317		7.13	7.10	34.036	26.646	143.5	0.783	1.99	29.3	49.3	2.40	33.0	0.00			319	204
378		6.55	6.52	34.094	26.771	132.3	0.867	1.41	20.5	61.4	2.74	36.9	0.00			380	203
400	ISL	6.33	6.29	34.114	26.815	128.2	0.896	1.19	17.2	66.0	2.85	38.1	0.00			402	
437		5.99	5.95	34.144	26.882	122.0	0.942	0.86	12.3	73.3	3.01	39.9	0.00			440	202
500	ISL	5.53	5.49	34.175	26.964	114.7	1.016	0.61	8.7	83.1	3.12	41.9	0.00			503	
520		5.38	5.34	34.185	26.990	112.3	1.039	0.53	7.5	86.2	3.16	42.5	0.00			523	201

A) PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THESE LEVELS.

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
30 10.7 N	122 55.6 W	15/10/00	2349 UTC	3581 m	340 13 kn	340 04 09	2	1017.8 mb	18.4 C	15.1 C	25m	8/8	SC

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	19.22	19.22	33.546	23.856	403.8	0.000	5.39	102.0	2.8	0.25	0.2	0.00	0.10	0.03	0	
1	19.22	19.22	33.546	23.856	403.9	0.004	5.39	102.0	2.8	0.25	0.2	0.00	0.10	0.03	1	220
10 ISL	19.22	19.22	33.545	23.855	404.2	0.040	5.38	101.8	2.7	0.25	0.2	0.00	0.10	0.02	10	
16	19.22	19.22	33.544	23.855	404.5	0.065	5.38	101.8	2.7	0.25	0.2	0.00	0.10	0.02	16	219
20 ISL	19.21	19.21	33.543	23.857	404.5	0.081	5.38	101.7	2.7	0.25	0.2	0.00	0.10	0.02	20	
30	19.20	19.19	33.545	23.861	404.4	0.121	5.39	101.9	2.8	0.25	0.2	0.00	0.11	0.02	30	218
45	19.08	19.07	33.540	23.889	402.3	0.182	5.40	101.9	2.7	0.25	0.2	0.00	0.13	0.04	45	217
50 ISL	18.49	18.48	33.502	24.008	391.1	0.202	5.57	103.9	2.7	0.25	0.2	0.00	0.14	0.05	50	
61	16.77	16.76	33.432	24.368	357.0	0.243	5.96	107.5	2.8	0.25	0.1	0.00	0.17	0.07	61	216
74	14.72	14.71	33.450	24.841	312.2	0.286	6.08	105.3	3.1	0.27	0.1	0.00	0.23	0.14	74	215
75 ISL	14.66	14.65	33.458	24.860	310.4	0.289	6.07	105.0	3.1	0.27	0.1	0.00	0.23	0.15	75	
85	14.27	14.26	33.525	24.994	297.8	0.320	5.97	102.5	3.0	0.28	0.1	0.00	0.26	0.22	85	214
94	13.67	13.66	33.508	25.106	287.4	0.346	5.86	99.3	3.6	0.32	0.2	0.03	0.28	0.23	94	213
100 ISL	13.51	13.50	33.550	25.171	281.3	0.363	5.76	97.3	3.7	0.35	0.4	0.11	0.26	0.22	100	
105	13.39	13.38	33.586	25.223	276.5	0.377	5.68	95.8	3.9	0.38	0.8	0.17	0.23	0.22	105	212
114	12.88	12.86	33.584	25.323	267.1	0.402	5.54	92.4	4.7	0.47	2.5	0.13	0.20	0.20	114	211
124	11.77	11.75	33.455	25.436	256.4	0.428	5.54	90.2	6.0	0.59	4.3	0.10	0.16	0.16	124	210
125 ISL	11.68	11.66	33.446	25.445	255.5	0.430	5.54	90.0	6.1	0.60	4.5	0.09	0.16	0.16	125	
140	10.65	10.63	33.392	25.589	242.0	0.468	5.35	85.0	8.3	0.82	8.1	0.01	0.10	0.12	141	209
150 ISL	10.31	10.29	33.487	25.721	229.5	0.491	4.95	78.1	11.5	1.02	11.5	0.01	0.06	0.09	151	
165	10.03	10.01	33.679	25.919	211.0	0.524	4.28	67.2	17.0	1.31	16.6	0.00	0.02	0.04	166	208
194	9.41	9.39	33.862	26.165	188.1	0.582	3.56	55.2	24.5	1.66	22.2	0.00	0.00	0.01	195	207
200 ISL	9.31	9.29	33.887	26.201	184.8	0.593	3.50	54.1	25.5	1.70	22.8	0.00			201	
228	8.85	8.83	33.965	26.335	172.4	0.643	3.31	50.7	29.6	1.81	24.7	0.00			229	206
250 ISL	8.47	8.44	34.001	26.423	164.3	0.680	3.11	47.2	33.4	1.93	26.5	0.00			251	
268	8.16	8.13	34.019	26.484	158.7	0.709	2.93	44.2	36.7	2.03	28.0	0.00			269	205
300 ISL	7.64	7.61	34.032	26.571	150.7	0.759	2.61	38.9	42.4	2.20	30.2	0.00			302	
319	7.36	7.33	34.036	26.614	146.8	0.787	2.39	35.4	45.9	2.31	31.4	0.00			321	204
377	6.64	6.61	34.083	26.750	134.3	0.869	1.56	22.7	58.4	2.67	35.8	0.00			379	203
400 ISL	6.42	6.38	34.102	26.794	130.3	0.899	1.30	18.8	62.8	2.78	37.2	0.00			402	
438	6.13	6.09	34.134	26.857	124.6	0.947	0.95	13.7	69.3	2.93	39.0	0.00			441	202
500 ISL	5.84	5.80	34.195	26.942	117.1	1.022	0.60	8.6	77.6	3.08	40.6	0.00			503	
519	5.75	5.71	34.214	26.968	114.8	1.044	0.49	7.0	80.2	3.13	41.1	0.00			522	201

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 93 120

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	BOTTOM	WIND SPEED	WAVES	WEA	BAROMETER	DRY	WET	SECCHI	CLD AMT	TYPE
29 50.9 N	123 35.3 W	16/10/00	0528 UTC	4144 m	340 13 kn			1018.9 mb	18.1 C	14.2 C			

DEPTH m	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	PRES db	SAMP
0 ISL	19.10	19.10	33.528	23.872	402.2	0.000	5.38	101.5	2.9	0.26	0.1	0.00	0.10	0.01	0	
2	19.10	19.10	33.528	23.872	402.3	0.008	5.38	101.5	2.9	0.26	0.1	0.00	0.10	0.01	2	220
10 ISL	19.10	19.10	33.529	23.874	402.5	0.040	5.38	101.5	2.9	0.26	0.1	0.00	0.10	0.02	10	
15	19.10	19.10	33.529	23.874	402.6	0.060	5.38	101.5	2.9	0.26	0.1	0.00	0.10	0.02	15	219
20 ISL	19.11	19.11	33.537	23.878	402.5	0.080	5.38	101.5	2.9	0.26	0.1	0.00	0.10	0.02	20	
30	19.14	19.13	33.553	23.883	402.3	0.121	5.38	101.6	2.8	0.25	0.1	0.00	0.11	0.01	30	218
45	19.79	19.78	33.835	23.932	398.3	0.181	5.30	101.5	2.5	0.22	0.1	0.00	0.12	0.03	45	217
50 ISL	19.68	19.67	33.925	24.029	389.2	0.200	5.38	102.9	2.5	0.20	0.1	0.00	0.14	0.03	50	
60	18.91	18.90	33.996	24.281	365.5	0.238	5.60	105.6	2.4	0.18	0.1	0.00	0.18	0.04	60	216
75	16.28	16.27	33.666	24.661	329.5	0.290	5.89	105.3	2.7	0.23	0.1	0.00	0.21	0.08	75	215
85	15.63	15.62	33.700	24.835	313.2	0.322	5.87	103.7	2.9	0.24	0.1	0.00	0.24	0.15	85	214
96	14.96	14.95	33.763	25.031	294.8	0.356	5.74	100.0	3.5	0.26	0.1	0.01	0.24	0.28	96	213
100 ISL	14.67	14.66	33.755	25.087	289.5	0.368	5.69	98.6	3.7	0.29	0.3	0.06	0.23	0.28	100	
106	14.25	14.23	33.742	25.167	282.0	0.385	5.61	96.4	3.9	0.34	0.7	0.14	0.21	0.28	106	212
115	13.84	13.82	33.782	25.283	271.2	0.410	5.52	94.0	4.2	0.38	1.5	0.14	0.19	0.25	115	211
125	13.00	12.98	33.719	25.405	259.7	0.436	5.43	90.9	5.0	0.48	3.2	0.04	0.13	0.22	125	210
139	12.42	12.40	33.717	25.517	249.3	0.472	5.33	88.1	6.0	0.57	4.8	0.02	0.09	0.15	140	209
150 ISL	11.83	11.81	33.688	25.606	240.9	0.499	5.19	84.7	7.5	0.68	6.7	0.01	0.06	0.10	151	
164	11.07	11.05	33.662	25.725	229.7	0.532	4.96	79.6	10.1	0.86	9.7	0.01	0.04	0.06	165	208
194	9.98	9.96	33.758	25.990	204.9	0.597	4.30	67.5	17.6	1.30	16.7	0.00	0.01	0.02	195	207
200 ISL	9.79	9.77	33.795	26.050	199.2	0.609	4.15	64.8	19.5	1.39	18.1	0.00			201	
228	8.99	8.97	33.956	26.306	175.2	0.661	3.50	53.8	27.9	1.73	23.6	0.00			229	206
250 ISL	8.52	8.49	34.002	26.416	165.0	0.699	3.21	48.8	32.8	1.89	26.0	0.00			251	
266	8.23	8.20	34.013	26.469	160.1	0.725	3.04	45.9	35.9	1.99	27.3	0.00			267	205
300 ISL	7.65	7.62	34.037	26.573	150.5	0.778	2.49	37.1	43.0	2.25	30.6	0.00			302	
317	7.39	7.36	34.042	26.614	146.7	0.803	2.23	33.1	46.5	2.37	32.0	0.00			319	204
378	6.52	6.49	34.046	26.737	135.4	0.889	1.81	26.3	57.5	2.59	35.2	0.00			380	203
400 ISL	6.37	6.33	34.080	26.783	131.2	0.918	1.47	21.3	62.1	2.72	36.6	0.00			402	
440	6.19	6.15	34.151	26.863	124.1	0.969	0.86	12.4	70.1	2.95	39.0	0.00			443	202
500 ISL	5.84	5.80	34.201	26.947	116.6	1.042	0.57	8.2	78.8	3.09	40.7	0.00			503	
520	5.72	5.68	34.218	26.975	114.1	1.065	0.47	6.7	81.7	3.14	41.2	0.00			523	201

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON — CALCOFI CRUISE 0010 — STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 43.5 N	121 32.8 W	29/10/00	1733 UTC	12 m		1150 - 1149 PST	1150 PST	1740 PST	498.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	15.05	33.462	24.776	6.03	105.1	2.3	0.28	0.1	0.00	0.99	0.43	77. A	14.6	15.8	15.2	0.18
8	14.98	33.462	24.792	6.07	105.7	2.3	0.28	0.1	0.00	1.03	0.48	36.	22.4	22.8	22.6	0.21
16	14.93	33.463	24.804	6.04	105.0	2.4	0.29	0.1	0.00	1.25	0.58	13.	19.0	18.6	18.8	0.16
25	14.87	33.467	24.820	6.07	105.4	2.3	0.29	0.1	0.01	1.19	0.55	4.1	8.5	8.9	8.7	0.13
33	14.46	33.471	24.911	5.89	101.5	3.0	0.39	1.1	0.12	1.06	0.59	1.5	2.6	2.3	2.5	0.10
41	13.79	33.467	25.048	5.65	96.0	6.2	0.60	4.1	0.32	1.18	0.90					
47	13.56	33.464	25.093	5.61	94.9	6.6	0.64	4.6	0.32	0.99	0.86	0.24	0.50	0.43	0.47	0.09

RV NEW HORIZON — CALCOFI CRUISE 0010 — STATION 77 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 23.4 N	124 19.0 W	28/10/00	1755 UTC	31 m		1200 - 1752 PST	1201 PST	1752 PST	147.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	17.68	33.299	24.048	5.52	101.3	3.4	0.30	0.2	0.00	0.15	0.03	95. A	1.3	1.5	1.4	0.10
10	17.67	33.296	24.049	5.56	102.0	3.3	0.30	0.1	0.00	0.15	0.03					
18	17.65	33.295	24.053	5.53	101.4	3.3	0.30	0.1	0.00	0.15	0.03	41.	2.3	2.2	2.2	0.09
30	17.64	33.295	24.056	5.57	102.1	3.3	0.30	0.0	0.00	0.15	0.04					
41	17.37	33.262	24.096	5.60	102.1	3.3	0.30	0.0	0.00	0.18	0.05	13.	1.9	1.8	1.8	0.08
52	15.74	33.276	24.483	6.16	108.7	3.6	0.28	0.0	0.00	0.24	0.09					
63	13.75	33.183	24.837	6.33	107.3	4.0	0.30	0.0	0.00	0.27	0.15	4.4	1.5	1.4	1.5	0.05
75	12.67	33.140	25.019	6.35	105.2	4.3	0.33	0.0	0.00	0.27	0.19					
86	12.11	33.255	25.216	6.00	98.3	4.6	0.39	0.3	0.08	0.25	0.19	1.4	0.55	0.53	0.54	0.04
97	11.43	33.251	25.339	5.78	93.3	5.6	0.53	2.4	0.20	0.19	0.20					
110	10.43	33.287	25.544	5.53	87.4	7.8	0.79	7.3	0.02	0.14	0.17					
118	9.93	33.322	25.656	5.60	87.5	8.6	0.83	8.5	0.01	0.10	0.14	0.29	0.06	0.06	0.06	0.04

RV NEW HORIZON — CALCOFI CRUISE 0010 — STATION 80 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
34 27.4 N	120 31.6 W	26/10/00	1749 UTC	15 m		1145 - 1742 PST	1146 PST	1743 PST	414.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	16.67	33.595	24.514	5.83	105.0	1.1	0.27	0.1	0.00	0.38	0.11	90. A	7.1	7.3	7.2	0.13
9	16.55	33.611	24.555	5.88	105.7	1.1	0.29	0.0	0.00	0.55	0.17	40.	9.8	10.1	10.0	0.16
20	15.40	33.598	24.805	5.70	100.1	3.0	0.42	1.4	0.08	2.14	0.53	13.	19.0	18.0	18.5	0.22
31	14.08	33.580	25.075	5.22	89.3	6.5	0.69	4.8	0.27	1.64	0.63	4.2	6.2	5.6	5.9	0.15
41	12.84	33.567	25.316	4.73	78.8	9.8	0.96	9.1	0.26	0.93	0.45	1.5	1.4	0.98	1.2	0.15
49	12.79	33.571	25.329	4.75	79.1	10.0	0.97	9.4	0.24	1.05	0.55					
58	12.66	33.589	25.369	4.61	76.6	11.3	1.04	10.1	0.19	1.13	0.61	0.26	0.20	0.29	0.25	0.16

RV NEW HORIZON — CALCOFI CRUISE 0010 — STATION 80 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 49.2 N	121 51.0 W	27/10/00	1750 UTC	13 m		1152 - 1747 PST	1151 PST	1747 PST	233.3 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	16.35	33.486	24.504	5.71	102.2	2.5	0.30	0.1	0.00	0.44	0.13	89. A	4.2	4.7	4.4	0.15
9	16.34	33.487	24.508	5.76	103.0	2.5	0.30	0.1	0.00	0.50	0.14	35.	7.4	9.2	8.3	0.15
18	16.34	33.486	24.507	5.73	102.5	2.5	0.30	0.1	0.00	0.51	0.16	12.	6.4	6.5	6.5	0.15
27	16.32	33.488	24.514	5.71	102.1	2.5	0.30	0.0	0.00	0.53	0.22	4.1	4.2	4.3	4.2	0.10
36	15.41	33.467	24.703	5.89	103.4	2.9	0.33	0.1	0.02	1.00	0.54	1.4	3.5	3.7	3.6	0.12
44	13.74	33.439	25.036	5.59	94.9	4.7	0.57	3.1	0.22	0.52	0.29					
51	13.28	33.433	25.125	5.47	91.9	5.4	0.65	4.4	0.25	0.42	0.33	0.24	0.16	0.16	0.16	0.09

RV NEW HORIZON — CALCOFI CRUISE 0010 — STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 52.7 N	120 8.1 W	25/10/00	1752 UTC	9 m		1145 - 1736 PST	1145 PST	1738 PST	1538.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	15.67	33.614	24.757	6.08	107.4	2.1	0.30	0.3	0.03	3.57	0.65	84. A	77.7	85.8	81.8	0.60
7	15.53	33.614	24.788	6.07	106.9	2.3	0.30	0.4	0.03	3.97	0.67	30.	114.2	107.1	110.7	0.44
12	15.05	33.616	24.895	5.85	102.1	3.7	0.41	1.7	0.06	3.88	0.75	13.	72.4	63.5	67.9	0.39
19	14.99	33.616	24.909	5.85	102.0	3.6	0.43	1.9	0.06	4.34	0.73	3.9	23.0	21.5	22.3	0.25
26	14.82	33.618	24.947	5.71	99.2	4.3	0.50	2.6	0.07	3.73	0.68	1.2	4.6	4.8	4.7	0.17
35	13.68	33.618	25.187	5.17	87.7	8.1	0.76	6.7	0.14	2.76	0.64	0.26	0.39	0.26	0.33	0.12

A) INCUBATION LIGHT INTENSITIES WERE 94, 38, 13, 4.4, 1.5, 0.26 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 83 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 54.6 N	122 7.1 W	24/10/00	1743 UTC	42 m		1152 - 1745 PST	1153 PST	1747 PST	179.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	17.88	33.394	24.073	5.53	101.9	3.0	0.30	0.0	0.00	0.11	0.03	96. A	1.0	1.2	1.1	0.06
13	17.76	33.389	24.098	5.55	102.0	2.9	0.29	0.0	0.00	0.13	0.04					
25	17.63	33.372	24.117	5.55	101.7	3.0	0.29	0.0	0.00	0.16	0.04	40.	2.2	2.2	2.2	0.07
36	17.49	33.359	24.141	5.59	102.2	3.1	0.30	0.0	0.00	0.18	0.05					
46	16.69	33.331	24.309	5.76	103.6	3.2	0.31	0.1	0.00	0.24	0.09					
54	14.33	33.264	24.779	6.20	106.4	3.1	0.33	0.0	0.00	0.25	0.16	14.	1.9	2.0	1.9	0.06
66	13.64	33.306	24.955	6.02	101.9	3.3	0.39	0.4	0.06	0.38	0.28					
75	12.58	33.310	25.168	5.72	94.7	4.9	0.57	3.1	0.16	0.36	0.30					
85	12.38	33.320	25.215	5.61	92.5	5.4	0.62	4.0	0.11	0.35	0.27	4.5	1.5	1.6	1.5	0.06
94	11.56	33.368	25.406	5.35	86.7	7.6	0.82	7.7	0.02	0.20	0.17					
104	11.00	33.386	25.521	5.18	82.9	9.2	0.94	9.8	0.01	0.15	0.15					
114	10.41	33.479	25.697	4.74	74.9	13.3	1.19	14.0	0.01	0.06	0.06	1.6	0.12	0.15	0.13	0.04
131	9.81	33.631	25.918	4.04	63.1	19.3	1.49	18.9	0.00	0.02	0.04					
146	9.48	33.766	26.078	3.62	56.2	23.8	1.68	22.1	0.00	0.01	0.03					
163	9.19	33.866	26.203	3.16	48.7	28.0	1.86	24.9	0.00	0.00	0.03	0.26	0.00	0.01	0.00	0.04

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 19.4 N	119 39.8 W	20/10/00	1825 UTC	18 m		1144 - 1747 PST	1144 PST	1747 PST	331.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	16.43	33.496	24.494	5.75	103.1	2.5	0.27	0.0	0.00	0.51	0.17	92. A	3.1	4.1	3.6	0.14
11	16.39	33.495	24.503	5.73	102.6	2.5	0.27	0.1	0.00	0.50	0.19	39.	9.4	10.8	10.1	0.16
18	16.38	33.498	24.507	5.73	102.6	2.3	0.27	0.0	0.00	0.50	0.17					
25	16.19	33.486	24.542	5.75	102.6	2.3	0.27	0.0	0.00	0.63	0.23	12.	9.2	9.1	9.2	0.12
29	16.04	33.469	24.563	5.81	103.3	2.4	0.29	0.0	0.01	0.71	0.28					
36	15.47	33.436	24.665	5.81	102.1	2.7	0.30	0.2	0.02	0.71	0.30	4.6	4.9	4.8	4.8	0.08
49	12.43	33.282	25.175	5.80	95.7	6.0	0.55	3.3	0.11	0.50	0.32	1.5	0.95	0.88	0.92	0.08
60	11.44	33.329	25.397	5.36	86.6	9.2	0.80	7.2	0.12	0.26	0.23					
70	11.19	33.492	25.569	4.72	75.9	13.3	1.10	12.1	0.11	0.17	0.19	0.26	0.07	0.05	0.06	0.07

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 19.2 N	121 43.3 W	21/10/00	1828 UTC	18 m		1152 - 1754 PST	1152 PST	1754 PST	162.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	16.88	33.498	24.391	5.65	102.2	2.7	0.29	0.1	0.00	0.25	0.06	84. A	1.3	1.6	1.5	0.08
12	16.86	33.485	24.386	5.68	102.7	2.7	0.29	0.1	0.00	0.25	0.06	36.	4.9	4.8	4.8	0.10
24	16.85	33.483	24.387	5.65	102.1	2.4	0.30	0.0	0.00	0.25	0.06	13.	4.2	4.1	4.2	0.11
37	16.81	33.476	24.392	5.67	102.4	2.4	0.29	0.0	0.00	0.26	0.08	4.3	2.5	2.1	2.3	0.10
44	16.50	33.446	24.441	5.74	103.0	2.5	0.31	0.1	0.00	0.27	0.07					
49	15.44	33.377	24.627	5.91	103.8	3.2	0.35	0.3	0.03	0.32	0.13	1.5	0.96	1.0	0.99	0.07
61	13.04	33.202	24.995	6.04	100.9	4.9	0.53	2.0	0.28	0.32	0.14					
71	11.76	33.186	25.227	5.85	95.1	6.5	0.68	5.0	0.31	0.21	0.21	0.23	0.13	0.12	0.12	0.07

RV NEW HORIZON CALCOFI CRUISE 0010 STATION 87 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 19.5 N	123 44.7 W	23/10/00	1749 UTC	32 m		1159 - 1800 PST	1159 PST	1801 PST	146.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	18.25	33.408	23.993	5.53	102.6	2.8	0.29	0.0	0.00	0.14	0.03	95. A	1.2	1.3	1.2	0.06
9	18.17	33.406	24.011	5.48	101.5	2.7	0.28	0.0	0.00	0.14	0.04					
19	18.16	33.406	24.014	5.52	102.2	2.7	0.29	0.0	0.00	0.14	0.04	40.	2.3	2.3	2.3	0.11
31	18.16	33.406	24.015	5.48	101.5	2.6	0.29	0.0	0.00	0.14	0.04					
41	18.15	33.406	24.018	5.49	101.7	2.6	0.28	0.0	0.00	0.15	0.04	14.	1.6	1.6	1.6	0.09
55	18.13	33.407	24.024	5.49	101.6	2.5	0.29	0.0	0.00	0.16	0.04					
65	15.32	33.325	24.614	6.04	105.8	2.3	0.32	0.0	0.00	0.25	0.17	4.4	1.5	1.4	1.5	0.09
76	14.40	33.308	24.799	6.05	104.0	2.9	0.34	0.1	0.01	0.27	0.24					
88	12.66	33.252	25.108	5.87	97.3	4.6	0.50	2.0	0.22	0.25	0.22	1.5	0.53	0.56	0.54	0.05
101	11.98	33.346	25.311	5.43	88.7	6.2	0.72	6.3	0.02	0.17	0.19					
114	11.01	33.358	25.498	5.31	85.0	8.2	0.85	8.6	0.01	0.10	0.14					
125	10.29	33.396	25.653	5.03	79.3	11.2	1.04	11.8	0.01	0.06	0.08	0.25	0.01	0.01	0.01	0.06

A) INCUBATION LIGHT INTENSITIES WERE 94, 38, 13, 4.4, 1.5, 0.26 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 29.0 N	117 46.0 W	19/10/00	1830 UTC	19 m		1134 - 1738 PST	1136 PST	1738 PST	577.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	18.77	33.680	24.072	5.58	104.7	2.1	0.23	0.1	0.00	0.36	0.09	85. A	9.4	9.6	9.5	0.15
12	18.11	33.626	24.195	5.74	106.4	2.2	0.23	0.1	0.00	0.51	0.17	38.	13.8	14.5	14.1	0.17
18	17.66	33.592	24.278	5.83	107.1	2.3	0.25	0.1	0.00	0.87	0.25					
26	15.89	33.528	24.642	5.90	104.6	3.7	0.37	0.8	0.05	1.45	0.66	12.	21.3	20.7	21.0	0.19
32	13.35	33.438	25.115	5.23	88.0	8.0	0.76	5.3	0.26	0.78	0.48					
40	12.58	33.472	25.293	5.07	84.0	7.9	0.82	7.1	0.31	0.55	0.43	3.9	3.4	3.4	3.4	0.17
46	11.81	33.527	25.482	4.80	78.3	9.1	0.94	9.7	0.07	0.34	0.32					
52	11.54	33.569	25.565	4.39	71.2	12.4	1.15	12.6	0.11	0.23	0.29	1.5	0.50	0.58	0.54	0.08

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 90 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 55.2 N	118 56.4 W	18/10/00	1734 UTC	17 m		1141 - 1737 PST	1141 PST	1737 PST	328.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	17.95	33.720	24.305	5.58	103.1	1.9	0.23	0.1	0.00	0.28	0.10	91. A	5.8	6.6	6.2	0.19
11	17.92	33.718	24.311	5.60	103.4	1.8	0.23	0.1	0.00	0.28	0.10	37.	9.4	8.8	9.1	0.16
21	13.93	33.603	25.123	5.79	98.7	7.2	0.61	4.8	0.12	0.96	0.54	15.	12.0	12.8	12.4	0.16
28	12.43	33.635	25.448	4.97	82.2	12.1	1.01	11.1	0.22	0.74	0.42					
34	11.51	33.623	25.612	4.40	71.3	14.5	1.26	14.9	0.22	0.64	0.35	4.6	3.7	3.5	3.6	0.08
46	10.87	33.685	25.776	3.74	59.8	19.1	1.54	19.4	0.03	0.34	0.25	1.6	0.76	0.80	0.78	0.06
56	10.50	33.723	25.871	3.43	54.4	21.3	1.66	21.3	0.02	0.21	0.21					
65	10.31	33.749	25.924	3.29	52.0	22.4	1.73	22.2	0.02	0.15	0.19	0.28	0.08	0.07	0.07	0.05

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 5.2 N	120 37.9 W	17/10/00	1812 UTC	27 m		1144 - 1751 PST	1148 PST	1751 PST	181.9 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	17.95	33.352	24.024	5.54	102.2	3.0	0.29	0.1	0.00	0.12	0.03	94. A	2.6	2.5	2.5	0.13
16	17.87	33.351	24.043	5.55	102.2	2.9	0.28	0.1	0.00	0.13	0.03	40.	2.8	2.8	2.8	0.08
26	17.70	33.341	24.077	5.59	102.6	3.0	0.28	0.1	0.00	0.15	0.04					
36	16.14	33.338	24.440	6.01	107.0	2.5	0.29	0.0	0.00	0.22	0.13	13.	2.6	2.6	2.6	0.10
46	14.23	33.242	24.783	6.14	105.1	3.2	0.33	0.1	0.01	0.26	0.15					
55	13.15	33.254	25.013	6.02	100.8	4.0	0.41	0.8	0.12	0.33	0.32	4.4	2.5	2.4	2.5	0.08
64	12.81	33.314	25.127	5.75	95.6	4.6	0.53	2.6	0.24	0.28	0.20					
75	11.66	33.285	25.323	5.66	91.8	6.1	0.64	4.7	0.17	0.18	0.15	1.4	0.44	0.47	0.46	0.05
85	10.84	33.331	25.507	5.40	86.1	8.1	0.81	8.0	0.03	0.10	0.14					
94	10.36	33.356	25.610	5.25	82.9	10.2	0.95	10.3	0.02	0.07	0.10					
105	9.85	33.478	25.791	4.74	74.0	14.8	1.22	14.9	0.01	0.04	0.06	0.26	0.05	0.05	0.05	0.03

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 45.1 N	123 19.8 W	16/10/00	1746 UTC	30 m		1156 - 1800 PST	1158 PST	1802 PST	138.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	18.81	33.417	23.861	5.41	101.5	2.8	0.28	0.1	0.00	0.14	0.04	95. A	0.82	0.97	0.90	0.09
10	18.81	33.417	23.861	5.43	101.8	2.8	0.28	0.1	0.00	0.13	0.04					
19	18.81	33.417	23.862	5.41	101.5	2.6	0.28	0.1	0.00	0.14	0.03	38.	2.0	2.1	2.1	0.09
30	18.80	33.417	23.865	5.43	101.8	2.6	0.28	0.1	0.00	0.13	0.03					
40	18.78	33.416	23.869	5.38	100.8	2.6	0.28	0.1	0.00	0.13	0.04	13.	1.5	1.6	1.5	0.12
51	17.33	33.363	24.183	5.80	105.7	2.6	0.28	0.1	0.00	0.24	0.07					
61	15.82	33.333	24.509	6.04	106.8	2.7	0.29	0.1	0.00	0.22	0.13	4.4	1.5	1.5	1.5	0.07
73	14.36	33.321	24.818	6.15	105.6	3.0	0.31	0.1	0.00	0.24	0.18					
83	13.66	33.322	24.964	6.07	102.7	3.2	0.34	0.1	0.00	0.29	0.23	1.4	0.89	0.75	0.82	0.04
93	13.16	33.379	25.109	5.92	99.2	3.7	0.39	0.4	0.04	0.29	0.24					
104	12.64	33.444	25.262	5.68	94.2	4.5	0.48	1.9	0.19	0.24	0.22					
116	11.55	33.379	25.417	5.55	89.9	6.1	0.65	4.9	0.10	0.18	0.19	0.26	0.16	0.11	0.13	0.03

A) INCUBATION LIGHT INTENSITIES WERE 94, 38, 13, 4.4, 1.5, 0.26 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 93 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 57.4 N	117 18.3 W	12/10/00	1825 UTC	10 m		1132 - 1743 PST	1135 PST	1744 PST	582.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	17.50	33.558	24.290	5.90	108.0	3.2	0.28	0.2	0.01	0.91	0.29	86. A	24.2	23.6	23.9	0.52
7	17.27	33.558	24.345	5.95	108.4	3.0	0.29	0.2	0.01	0.86	0.34	34.	29.4	29.2	29.3	0.41
13	14.53	33.472	24.896	5.97	103.0	4.5	0.42	1.3	0.11	1.26	0.44	14.	27.9	26.8	27.4	0.26
20	13.20	33.428	25.137	5.47	91.8	7.2	0.69	4.8	0.54	1.30	0.71	4.6	15.8	15.4	15.6	0.18
27	12.60	33.442	25.266	5.03	83.4	9.3	0.89	8.1	0.59	0.63	0.58	1.6	2.6	2.5	2.5	0.08
38	11.74	33.507	25.480	4.66	75.9	11.3	1.03	11.2	0.10	0.25	0.34	0.29	0.21	0.27	0.24	0.04

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 93 35

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 40.8 N	117 52.8 W	13/10/00	1734 UTC	25 m		1135 - 1746 PST	1137 PST	1748 PST	345.0 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	19.74	33.775	23.897	5.33	101.9	2.5	0.25	0.0	0.00	0.15	0.03	94. A	2.3	2.4	2.3	0.11
15	19.68	33.774	23.912	5.37	102.6	2.4	0.24	0.0	0.00	0.16	0.03	40.	3.7	3.5	3.6	0.16
33	16.51	33.535	24.506	6.07	109.0	2.6	0.29	0.0	0.00	0.23	0.07	13.	3.8	3.7	3.7	0.14
42	13.88	33.445	25.012	6.18	105.2	4.5	0.41	0.2	0.04	1.90	0.86					
51	13.30	33.464	25.145	5.78	97.2	5.4	0.55	2.6	0.23	1.16	0.60	4.4	10.9	10.9	10.9	0.10
60	12.13	33.499	25.401	4.95	81.2	9.1	0.89	9.0	0.03	0.33	0.34					
67	11.73	33.539	25.507	4.60	74.9	11.3	1.05	11.6	0.01	0.21	0.25	1.6	0.74	0.71	0.73	0.04
78	11.28	33.607	25.643	4.18	67.4	14.5	1.25	14.5	0.01	0.12	0.16					
88	10.89	33.678	25.768	3.74	59.8	18.0	1.44	17.4	0.01	0.05	0.10					
97	10.72	33.710	25.823	3.56	56.8	19.3	1.52	18.6	0.01	0.04	0.08	0.26	0.02	0.03	0.02	0.05

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 93 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 50.7 N	119 34.6 W	14/10/00	1846 UTC	20 m		1146 - 1754 PST	1144 PST	1755 PST	143.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
2	18.39	33.514	24.040	5.47	101.8	2.8	0.29	0.1	0.00	0.14	0.03	86. A	1.5	1.8	1.6	0.16
14	18.35	33.503	24.042	5.46	101.6	2.7	0.28	0.0	0.00	0.14	0.03	34.	2.6	2.5	2.5	0.13
26	18.22	33.474	24.052	5.47	101.5	2.7	0.28	0.0	0.00	0.19	0.04	14.	1.8	1.9	1.9	0.11
42	16.48	33.369	24.386	5.86	105.0	2.4	0.28	0.0	0.00	0.28	0.14	4.0	2.2	2.0	2.1	0.15
49	16.00	33.351	24.482	5.90	104.7	2.6	0.30	0.0	0.00	0.40	0.23					
56	14.79	33.301	24.710	5.99	103.8	2.9	0.33	0.1	0.02	0.61	0.35	1.4	2.2	2.0	2.2	0.08
65	13.65	33.350	24.987	5.94	100.5	3.6	0.40	0.6	0.10	0.34	0.24					
78	13.54	33.468	25.101	5.70	96.3	4.0	0.44	1.3	0.16	0.29	0.33	0.25	0.20	0.29	0.24	0.03

RV NEW HORIZON | CALCOFI CRUISE 0010 | STATION 93 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30 31.0 N	122 15.7 W	15/10/00	1749 UTC	29 m		1154 - 1802 PST	1155 PST	1804 PST	105.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN ml/l	OXY PCT	SIO3 uM/l	PO4 uM/l	NO3 uM/l	NO2 uM/l	CHL-A ug/l	PHAEO ug/l	LIGHT PCT	UPTAKE (mg C/m3) 1	2	MEAN	DARK
1	18.81	33.414	23.858	5.44	102.0	2.9	0.29	0.3	0.00	0.13	0.03	95. A	1.6	1.5	1.6	0.10
18	18.80	33.414	23.862	5.44	102.0	2.7	0.28	0.2	0.00	0.13	0.03	39.	2.1	2.0	2.0	0.10
28	18.80	33.414	23.862	5.40	101.3	2.7	0.28	0.3	0.00	0.13	0.03					
38	18.80	33.414	23.863	5.41	101.4	2.7	0.28	0.3	0.00	0.13	0.03	13.	1.1	1.2	1.1	0.11
48	18.79	33.413	23.865	5.42	101.6	2.5	0.28	0.0	0.00	0.13	0.05					
59	17.76	33.392	24.103	5.70	104.8	2.6	0.28	0.1	0.00	0.20	0.06	4.4	0.88	0.90	0.89	0.05
69	16.07	33.407	24.510	6.01	106.9	2.9	0.27	0.1	0.00	0.23	0.08					
79	14.45	33.358	24.827	6.13	105.5	3.0	0.29	0.1	0.00	0.22	0.15	1.5	0.43	0.42	0.42	0.05
90	13.81	33.428	25.015	5.99	101.8	3.3	0.32	0.1	0.00	0.25	0.22					
101	13.14	33.494	25.202	5.74	96.2	4.1	0.40	0.9	0.13	0.24	0.22					
112	12.76	33.563	25.331	5.64	93.8	4.6	0.45	1.8	0.18	0.20	0.19	0.27	0.10	0.07	0.09	0.03

A) INCUBATION LIGHT INTENSITIES WERE 94, 38, 13, 4.4, 1.5, 0.26 PERCENT RESPECTIVELY.

CalCOFI Cruise 0010

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505mm

Line	Sta.	Latitude N	Longitude W	Date Mo/Day	Time (PST) Start	Time (PST) End	Water Volume Strained (m^3)	Max. Tow Depth (m)	Volume per 1000 m^3 Strained Total (cm^3)	Volume per 1000 m^3 Strained Small (cm^3)
77	49	35 05.8	120 47.4	10/29	2051	2056	124	49	169	169
77	51	35 02.2	120 55.7	10/29	1839	1901	450	214	447	447
77	55	34 53.5	121 13.4	10/29	1512	1534	499	194	106	106
77	60	34 44.2	121 33.2	10/29	1048	1109	467	207	62	62
77	70	34 23.1	122 15.1	10/29	0422	0443	503	202	189	189
77	80	34 02.2	122 56.1	10/28	2205	2226	459	213	50	50
77	90	33 43.6	123 38.1	10/28	1626	1647	469	212	96	96
77	100	33 23.7	124 18.9	10/28	1102	1123	468	199	17	17
80	55	34 18.5	120 47.9	10/26	1444	1505	438	209	107	89
80	60	34 07.7	121 09.8	10/26	1848	1909	484	206	52	52
80	70	33 49.2	121 50.6	10/27	0836	0857	500	212	62	62
80	80	33 29.2	122 32.6	10/27	1630	1651	493	202	118	118
80	90	33 09.4	123 13.4	10/27	2228	2249	456	207	59	59
80	100	32 49.3	123 55.1	10/28	0449	0510	467	204	47	47
82	47	34 17.0	120 02.9	10/26	0349	0410	464	197	138	82
83	40.6	34 13.5	119 25.6	10/25	2238	2241	62	21	16	16
83	42	34 10.9	119 31.5	10/25	2044	2055	228	100	70	70
83	51	33 52.7	120 09.0	10/25	0906	0915	185	85	76	76
83	55	33 45.0	120 23.7	10/25	0543	0604	454	197	86	86
83	60	33 35.0	120 45.4	10/24	2129	2150	471	199	117	117
83	70	33 15.2	121 26.9	10/24	1551	1612	460	199	91	91
83	80	32 54.4	122 07.2	10/24	0845	0906	441	208	45	45
83	90	32 34.9	122 48.9	10/24	0359	0420	458	199	39	39
83	100	32 15.4	123 29.4	10/23	2210	2231	462	204	39	39
83	110	31 55.3	124 11.2	10/23	1624	1645	482	205	35	35
87	33	33 52.6	118 30.7	10/19	1634	1638	97	38	145	145
87	35	33 48.4	118 38.4	10/19	1859	1920	426	210	99	99
87	40	33 39.2	118 59.9	10/20	0226	0247	434	209	157	157
87	45	33 30.6	119 17.6	10/20	0628	0649	443	198	61	61
87	50	33 19.2	119 39.1	10/20	0948	0953	112	50	71	71
87	55	33 09.7	120 00.6	10/20	1437	1458	439	211	16	16
87	60	32 59.3	120 22.8	10/20	1837	1858	441	224	43	43
87	70	32 39.1	121 03.9	10/21	0024	0046	477	211	59	59
87	90	32 00.7	122 24.2	10/22	1936	1957	455	211	81	81
87	100	31 39.6	123 04.7	10/23	0153	0214	459	210	52	52
87	110	31 19.9	123 44.9	10/23	0833	0854	483	205	23	23
90	28	33 29.3	117 46.4	10/19	0952	0958	125	47	80	80
90	30	33 25.0	117 54.9	10/19	0207	0228	442	212	57	57
90	35	33 15.5	118 14.5	10/18	2146	2207	445	203	106	106
90	37	33 10.6	118 24.4	10/18	1901	1922	432	207	83	83
90	45	32 55.0	118 55.8	10/18	0838	0859	459	207	57	57
90	53	32 39.2	119 30.1	10/18	0259	0320	461	211	43	43
90	60	32 25.5	119 57.9	10/17	2138	2159	440	217	100	100
90	70	32 04.7	120 37.2	10/17	0908	0929	428	215	30	30
90	80	31 44.7	121 19.0	10/17	0416	0437	446	207	40	40
90	90	31 25.4	121 59.8	10/16	2220	2241	453	206	82	82
90	100	31 05.9	122 39.8	10/16	1642	1703	467	209	45	45
90	110	30 45.6	123 20.1	10/16	1056	1117	457	211	28	28
90	120	30 26.1	124 00.1	10/16	0451	0512	487	200	23	23
93	26.7	32 57.2	117 18.9	10/12	1348	1359	267	93	60	60
93	28	32 53.9	117 25.1	10/12	1631	1652	403	230	25	25
93	30	32 49.2	117 33.5	10/12	1936	1957	440	213	57	57
93	35	32 41.6	117 53.7	10/13	0733	0754	457	208	13	13
93	40	32 30.4	118 14.4	10/13	1438	1459	446	212	9	9
93	45	32 19.5	118 34.4	10/13	1826	1847	444	210	36	36
93	50	32 11.1	118 54.4	10/13	2214	2235	420	212	45	45
93	55	32 00.3	119 16.1	10/14	0236	0257	471	214	38	38
93	60	31 51.5	119 35.2	10/14	0927	0948	456	206	22	22
93	70	31 31.6	120 15.1	10/14	1703	1724	453	215	24	24
93	80	31 11.9	120 56.9	10/14	2255	2315	450	216	38	38
93	90	30 51.0	121 36.9	10/15	0500	0521	484	199	27	27
93	100	30 31.6	122 16.2	10/15	1058	1119	463	206	19	19
93	110	30 11.1	122 56.3	10/15	1652	1713	458	210	20	20
93	120	29 51.5	123 35.7	10/15	2227	2248	462	209	22	22

FIGURES

Avifauna Observations

CalCOFI Cruise 0007

1a. Leach’s Storm-Petrel distribution.

1b. Black-footed Albatross distribution.

1c. Pink-footed Shearwater distribution.

1d. Sooty Shearwater distribution.

1e. Red and Red-necked Phalarope distribution.

1f. Western Gull distribution.

CalCOFI Cruise 0010

2a. Leach’s Storm-Petrel distribution.

2b. Black-vented Shearwater distribution.

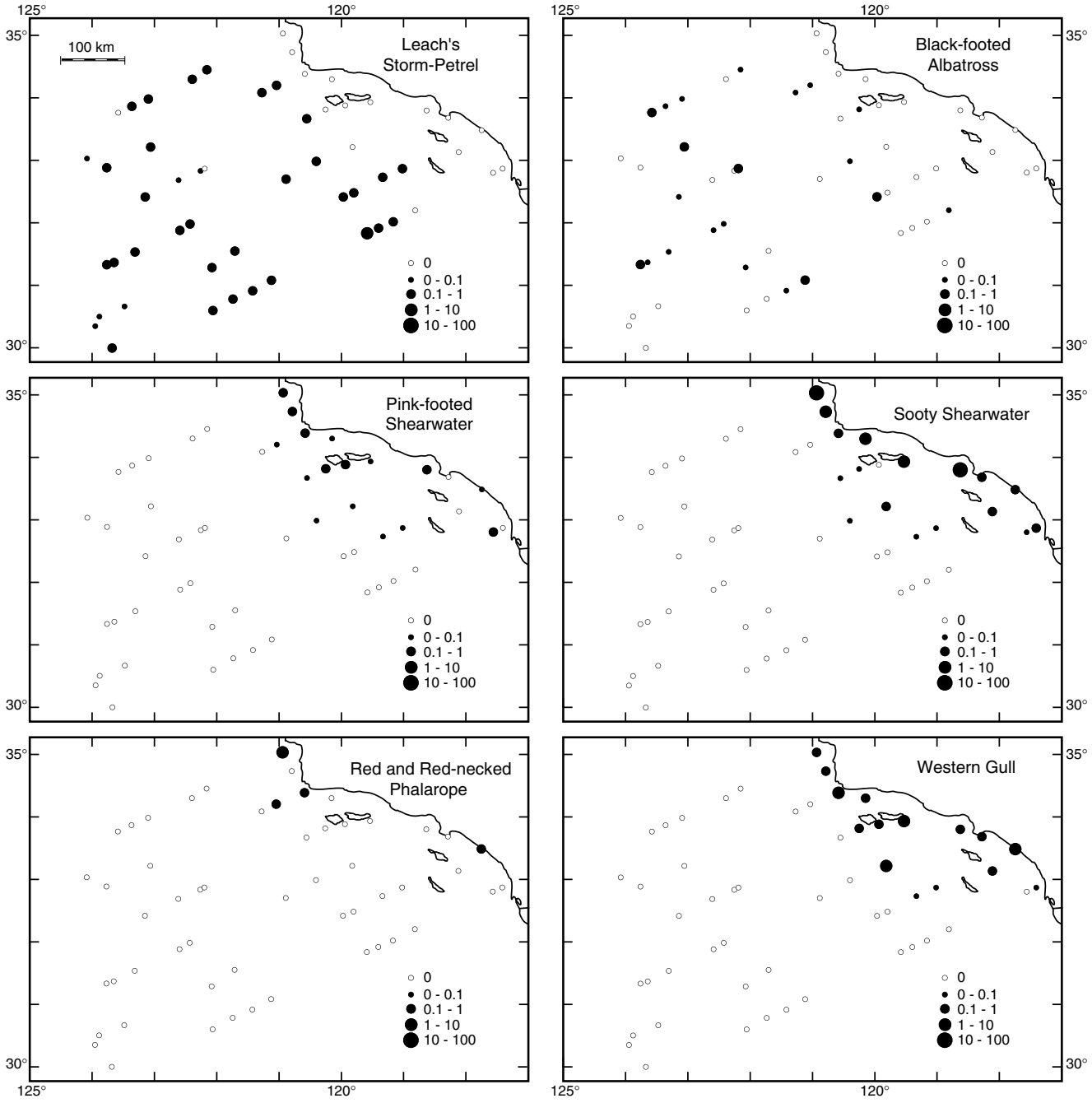
2c. Northern Fulmar distribution.

2d. Brown Pelican distribution.

2e. Red and Red-necked Phalarope distribution.

2f. Western Gull distribution.

CalCOFI Cruise 0007



CalCOFI Cruise 0010