

data report

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CalCOFI Cruise 8508
9 – 22 August 1985

CalCOFI Cruise 8511
1 – 14 November 1985

SIO Reference 86-6
17 March 1986

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

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Approved for distribution:


W. A. Nierenberg, Director

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INTRODUCTION

The data in this report were collected during Cruises 8508* and 8511 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV *New Horizon* of the Scripps Institution of Oceanography. The data were collected and processed by personnel of the Marine Life Research Group (MLRG), the Southwest Fisheries Center, National Marine Fisheries Service (NMFS), and the Physical and Chemical Oceanographic Data Facility (PACODF). Volunteers also assisted in the collection of data at sea.

STANDARD PROCEDURES

Hydrographic Cast Data

The Hydrographic casts consisted of 20 or fewer Nansen bottles lowered to a maximum sampling depth of 600 meters, bottom depth permitting. Temperature, salinity, oxygen and nutrients were determined for all depths sampled. Chlorophyll-a and phaeopigments were usually determined from the top 12 depths.

At selected stations, 10-meter bottles were cast with samples being taken for temperature, salinity, oxygen, nutrients, chlorophyll-a, and phaeopigments.

Paired protected reversing thermometers were used to determine temperatures which are recorded to hundredths of a degree Celsius. Sampling bottles used below a depth of 100 meters were equipped with unprotected thermometers for determination of the depth of sampling.

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with sub-standard seawater. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater batch P-96. The salinity values are reported to three decimal places."

Dissolved oxygen was determined 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).

Silicate, phosphate, nitrate and nitrite nutrients were determined at sea using an automated analyzer. The procedures used are similar to those described in Atlas *et al.* (1971).

Chlorophyll was measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965) from subsamples filtered onto GF/C 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 fluorometer.

The observed data have been evaluated using the methodology described by Klein (1973). This involves consideration of their variation as functions of density or depth and their relations to each other, and comparisons with adjacent observations.

Primary Productivity Casts

Primary production was estimated from 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). Six depths, corresponding to predetermined levels of light penetration, were sampled with 5 l Niskin bottles. Temperature, salinity, oxygen, nutrients, chlorophyll-a, and phaeopigments were determined for all depths sampled. Triplicate samples (two light and one dark control) were drawn from each depth into 250 ml polycarbonate incubation bottles which were inoculated with 10 uci of C as NaHCO₃. These were then incubated approximately from local apparent noon to civil twilight in seawater-cooled incubators with neutral-density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered onto HA milipore filters and placed in

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

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 S.L.O. where the radioactivity was determined with a scintillation counter.

Macrozooplankton Net Tows

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210 m 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).

TABULATED DATA

The reported hydrographic cast time is the Greenwich Mean Time (GMT) of the messenger release. Bottom depths, determined acoustically, have been corrected using Matthews (1939) tables and are reported in meters. Weather conditions have been coded using W M O code 4051.

Data tabulations are presented in the following forms:

Hydrographic Cast Data

Observed and interpolated standard depth data from hydrographic casts have been interspersed and are presented together sequentially by depth. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (EOS80, UNESCO, 1981). Some of the differences between EOS80 and the older equations-of-state are discussed in the introduction to SIO Ref. 84-18. Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), dynamic height or geopotential anomaly, and pressure are included with both observed and interpolated standard depth levels.

10-Meter Data

The 10-meter data are reported in the same format as the hydrographic data. The few 10-meter stations taken on Cruise 8508 are included in the hydrographic data section for that cruise.

Freon Casts

Special 10-bottle casts for freon measurements were taken in nine basins in the Southern California Bight on Cruise 8508. Freon data are not included in this report, but the observed hydrographic data for these casts are given in a separate section.

Primary Productivity Casts

In addition to the normal hydrographic data, the tabulated data include: the light levels at which the samples were incubated, 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, the dark uptake, chlorophyll and phaeophytin. The uptake values shown are the total for the incubation period. The times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample depth (assuming that the shallowest measured value extends to the surface and that negative values are zero) are also shown for each experiment. The uptake data have been presented to two significant digits (values < 1.00) or one decimal (values > 1.00). The higher production values may not warrant all of the significant digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to

convert to G M T , add eight hours to the P S T time.

Secchi Disk Observations

Secchi disk observations were made on most daylight stations. The times are given in local P S T (+ 8) time. Weather codes and cloud observations are also presented.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total biomass volume (cm/1000 in strained) and as the total volume minus the volume of larger organisms under the heading "Small".

FOOTNOTES

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

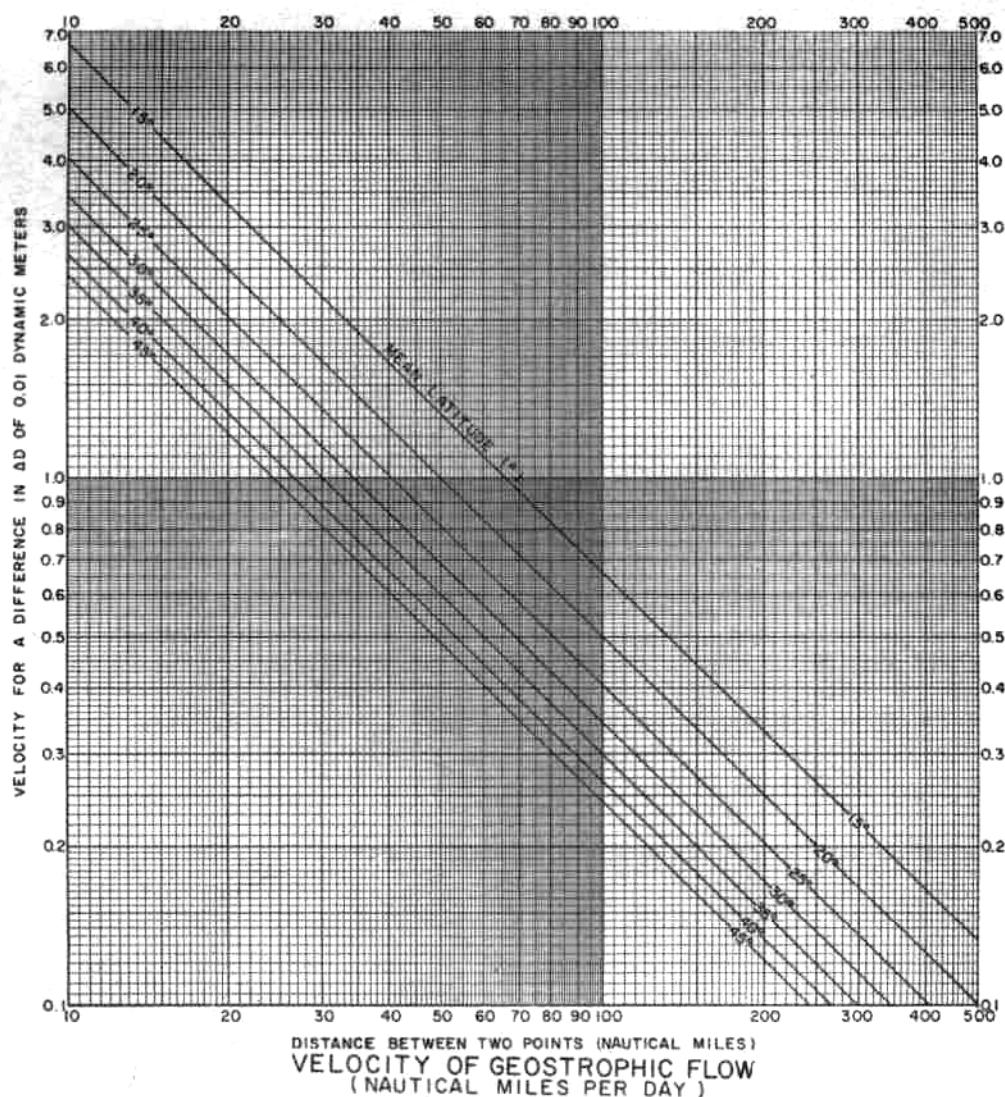
ISL: After depth values indicates interpolated or extrapolated standard level.

P. After depth values indicates the Nan sen bottle posttripped.

U: Uncertain value. Values which are not used in interpolation because they seem to be in error without apparent reason.

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cm/sec	0	1	2	3	4	5	6	7	8	9
0	<i>KNOTS</i> NM/DAY 0.02 0.47	<i>0.04</i> 0.93	<i>0.06</i> 1.40	<i>0.08</i> 1.86	<i>0.10</i> 2.33	<i>0.12</i> 2.80	<i>0.14</i> 3.26	<i>0.16</i> 3.73	<i>0.17</i> 4.20	
10	<i>0.19</i> 4.66	<i>0.21</i> 5.13	<i>0.23</i> 5.59	<i>0.25</i> 6.06	<i>0.27</i> 6.53	<i>0.29</i> 6.99	<i>0.31</i> 7.46	<i>0.33</i> 7.93	<i>0.35</i> 8.39	
20	<i>0.39</i> 9.32	<i>0.41</i> 9.79	<i>0.43</i> 10.26	<i>0.45</i> 10.72	<i>0.47</i> 11.19	<i>0.49</i> 11.66	<i>0.51</i> 12.12	<i>0.52</i> 12.59	<i>0.54</i> 13.05	
30	<i>0.58</i> 13.99	<i>0.60</i> 14.45	<i>0.62</i> 14.92	<i>0.64</i> 15.38	<i>0.66</i> 15.85	<i>0.68</i> 16.32	<i>0.70</i> 16.78	<i>0.72</i> 17.25	<i>0.74</i> 17.72	
40	<i>0.78</i> 18.65	<i>0.80</i> 19.11	<i>0.82</i> 19.58	<i>0.84</i> 20.05	<i>0.85</i> 20.51	<i>0.87</i> 20.98	<i>0.89</i> 21.45	<i>0.91</i> 21.91	<i>0.93</i> 22.38	
50	<i>0.97</i> 23.31	<i>0.99</i> 23.78	<i>1.01</i> 24.24	<i>1.03</i> 24.71	<i>1.05</i> 25.17	<i>1.07</i> 25.64	<i>1.09</i> 26.11	<i>1.11</i> 26.57	<i>1.13</i> 27.04	
60	<i>1.17</i> 27.98	<i>1.18</i> 28.44	<i>1.20</i> 28.90	<i>1.22</i> 29.37	<i>1.24</i> 29.84	<i>1.26</i> 30.30	<i>1.28</i> 30.77	<i>1.30</i> 31.24	<i>1.32</i> 31.70	
70	<i>1.36</i> 32.63	<i>1.38</i> 33.10	<i>1.40</i> 33.57	<i>1.42</i> 34.03	<i>1.44</i> 34.50	<i>1.46</i> 34.96	<i>1.48</i> 35.43	<i>1.50</i> 35.90	<i>1.52</i> 36.36	
80	<i>1.55</i> 37.30	<i>1.57</i> 37.76	<i>1.59</i> 38.23	<i>1.61</i> 38.69	<i>1.63</i> 39.16	<i>1.65</i> 39.63	<i>1.67</i> 40.09	<i>1.69</i> 40.56	<i>1.71</i> 41.03	
90	<i>1.75</i> 41.96	<i>1.77</i> 42.42	<i>1.79</i> 42.89	<i>1.81</i> 43.36	<i>1.83</i> 43.82	<i>1.85</i> 44.29	<i>1.86</i> 44.76	<i>1.88</i> 45.22	<i>1.90</i> 45.69	
100	<i>1.94</i> 46.62	<i>1.96</i> 47.09	<i>1.98</i> 47.55	<i>2.00</i> 48.02	<i>2.02</i> 48.48	<i>2.04</i> 48.95	<i>2.06</i> 49.42	<i>2.08</i> 49.88	<i>2.10</i> 50.35	

CONVERSION TABLE
(CENTIMETERS / SECOND - KNOTS - NAUTICAL MILES / DAY)

1 cm/sec = 0.019 kts = 0.466 NAUTICAL MILES / DAY
1 kt = 24 NAUTICAL MILES / DAY = 51.48 cm/sec
1 NAUTICAL MILE / DAY = 0.042 kts = 2.14 cm/sec

FIGURES

Cruise 8508

1. CalCOFI Cruise 8508, station positions.
2. Horizontal distribution of chlorophyll-a at 10 meters.
3. Horizontal distribution of dynamic height anomaly (0 over 500 m).
4. Horizontal distribution of sigma-theta at 10 meters.
5. Horizontal distribution of temperature at 10 meters.
6. Horizontal distribution of salinity at 10 meters.
7. Horizontal distribution of dynamic height anomalies.
8. Horizontal distribution of sigma-theta at 200 meters.
9. Horizontal distribution of temperature at 200 meters.
10. Horizontal distribution of salinity at 200 meters.

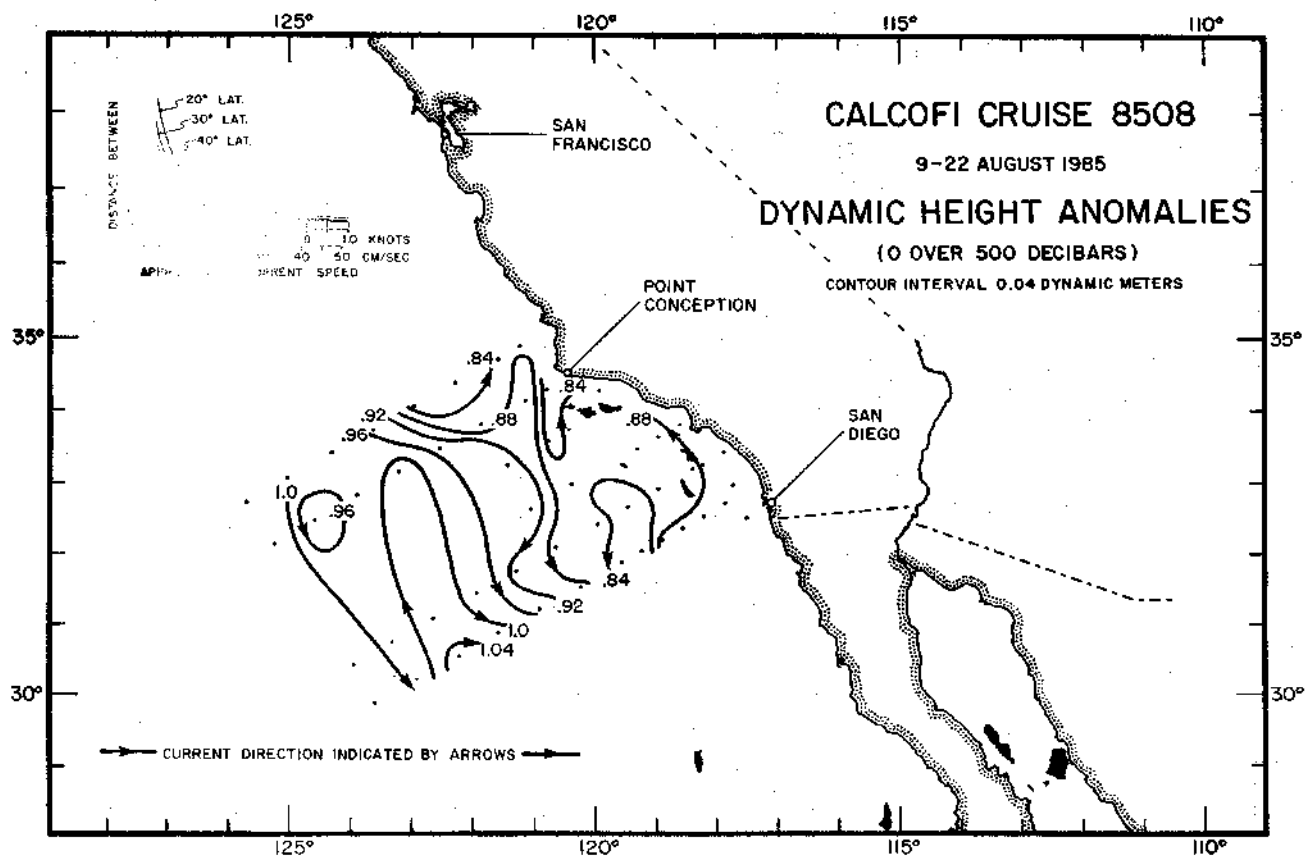


FIGURE 3

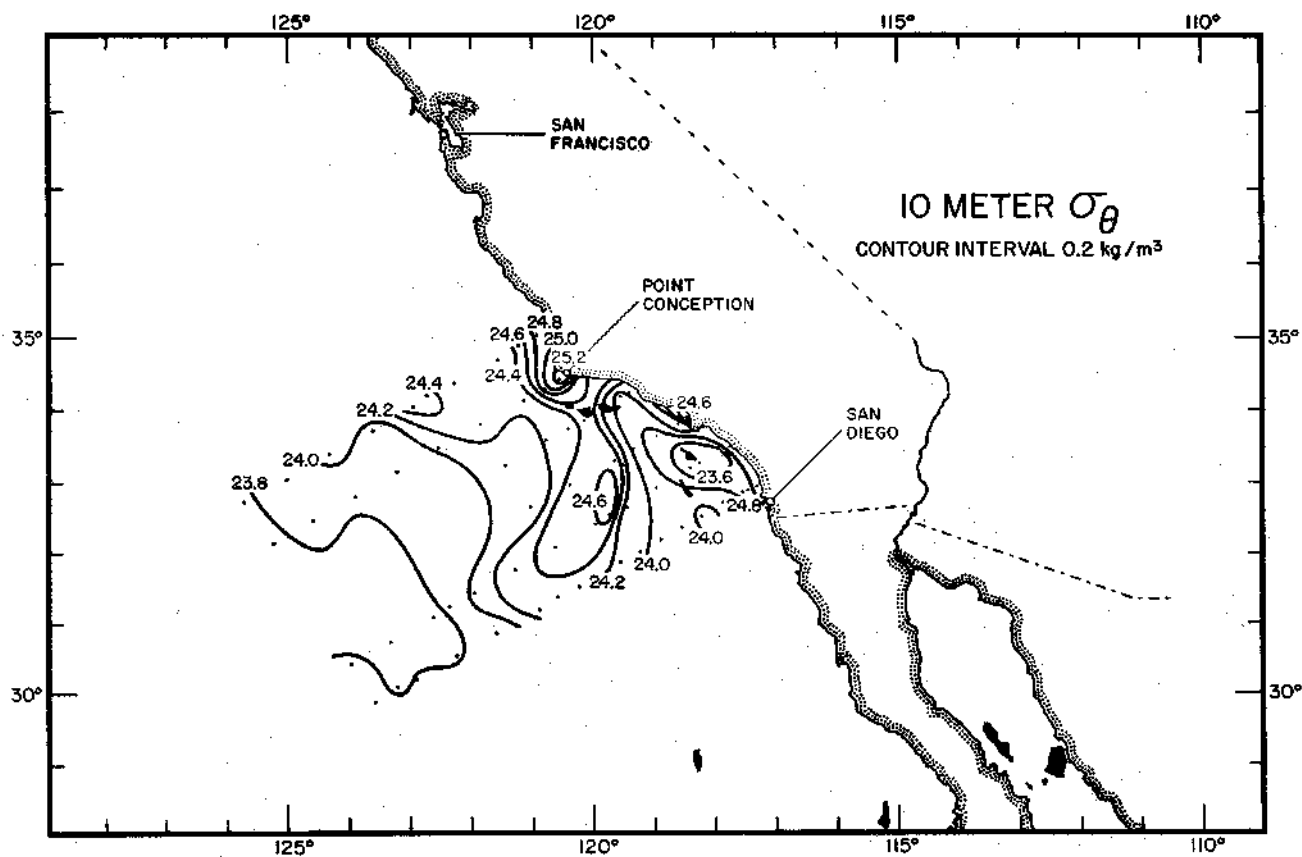


FIGURE 4

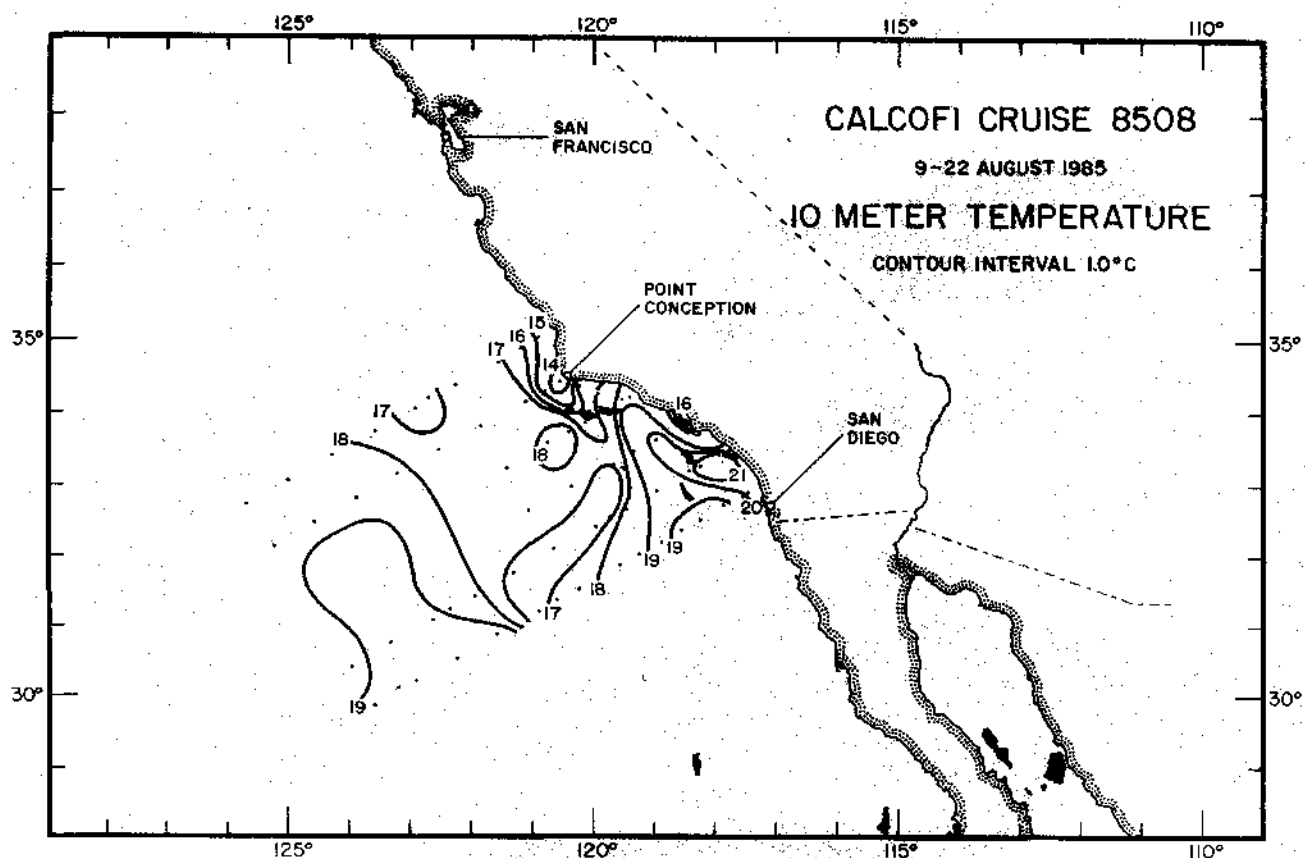


FIGURE 5

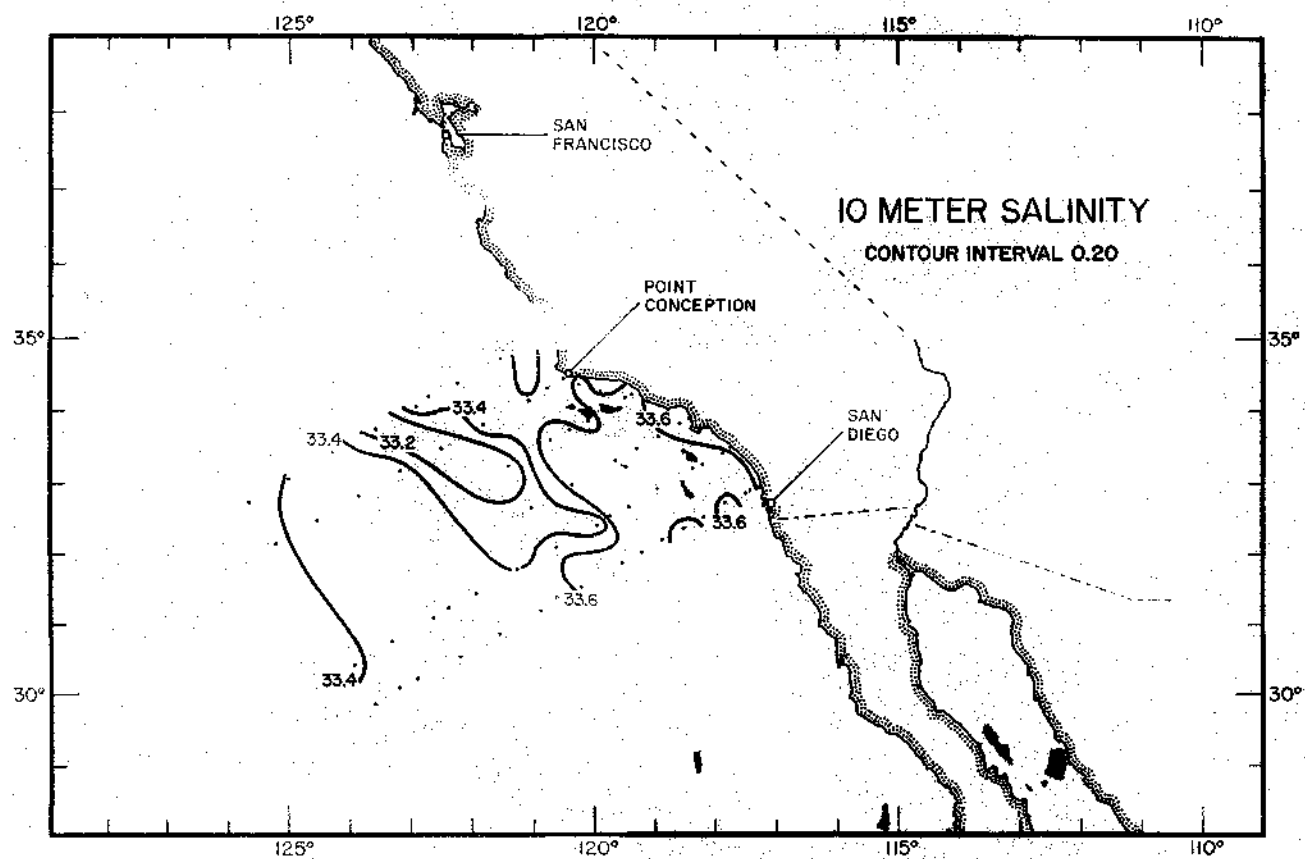


FIGURE 6

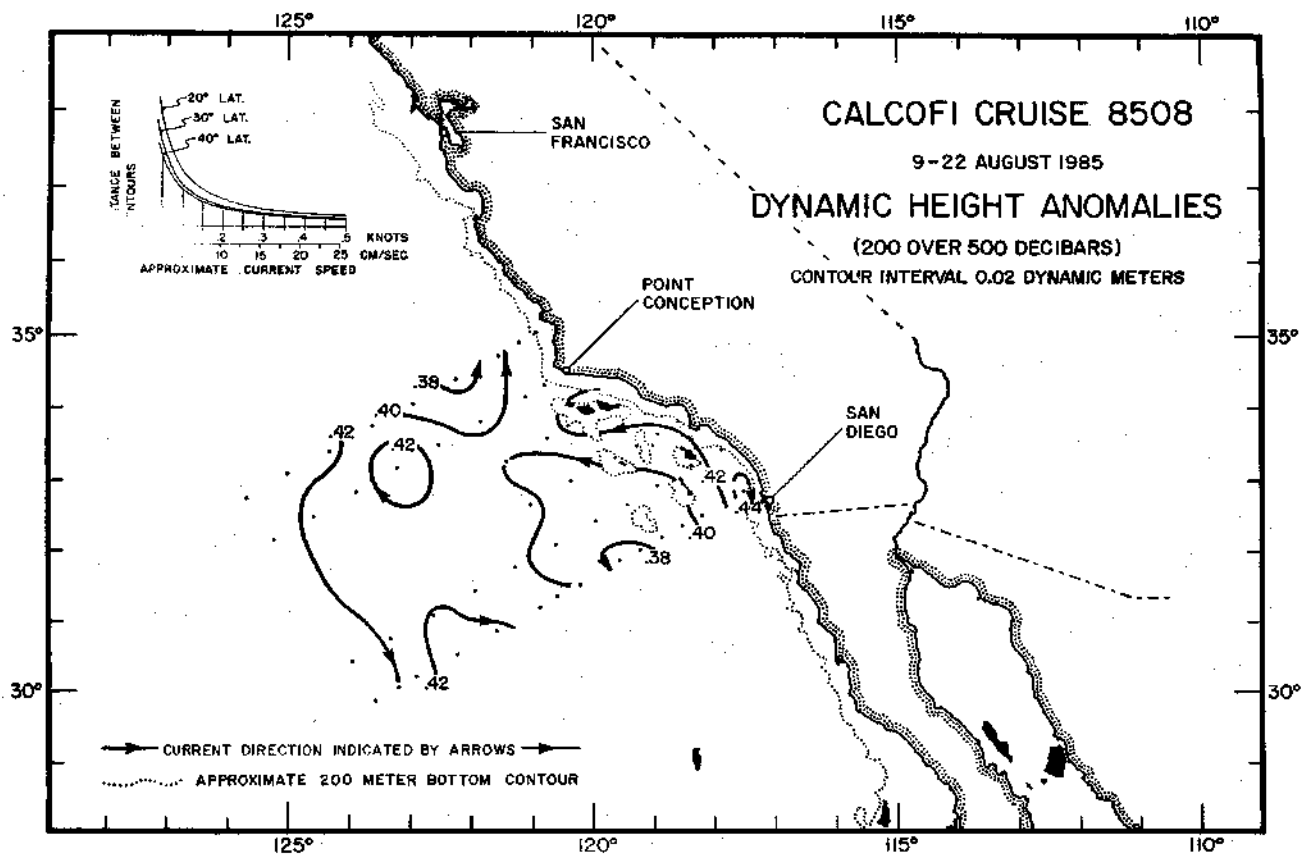


FIGURE 7

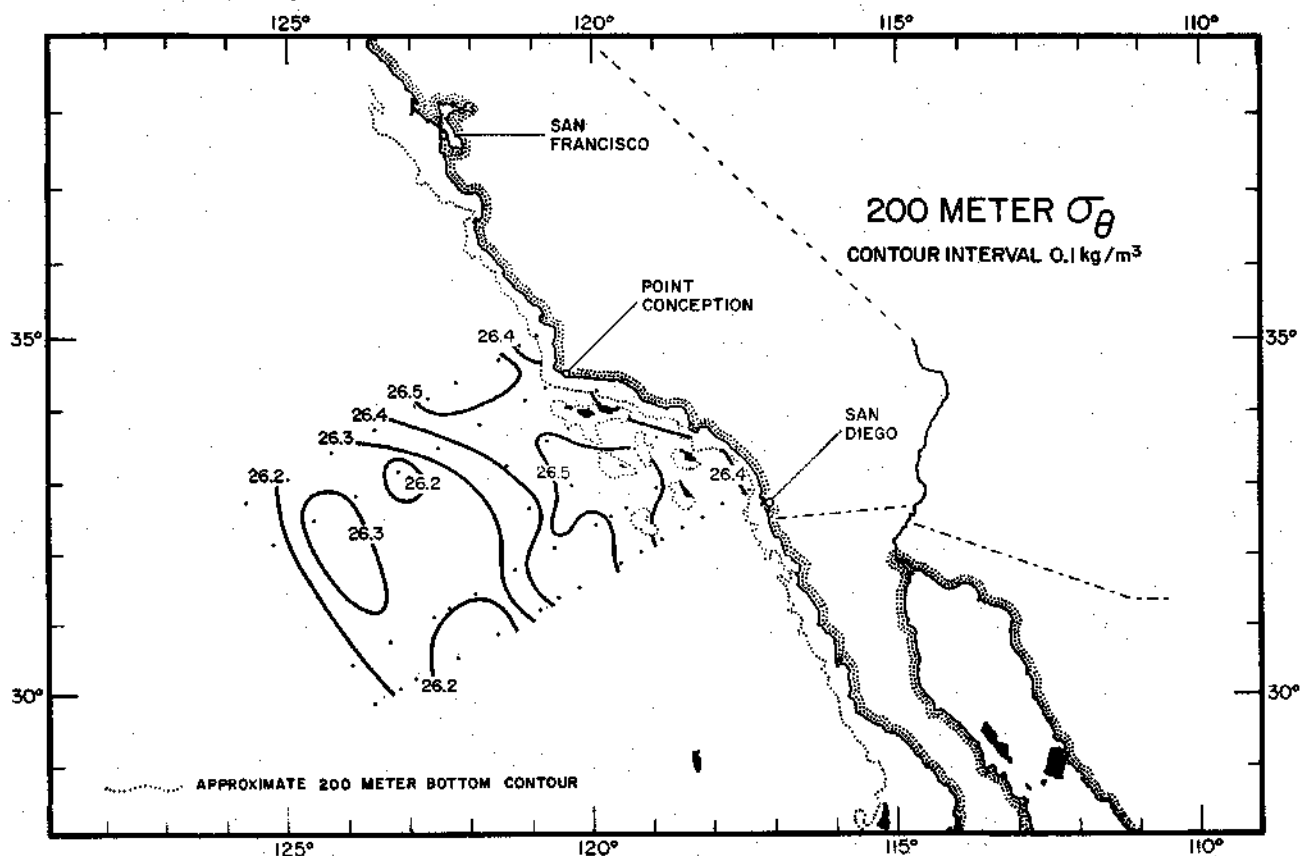


FIGURE 8

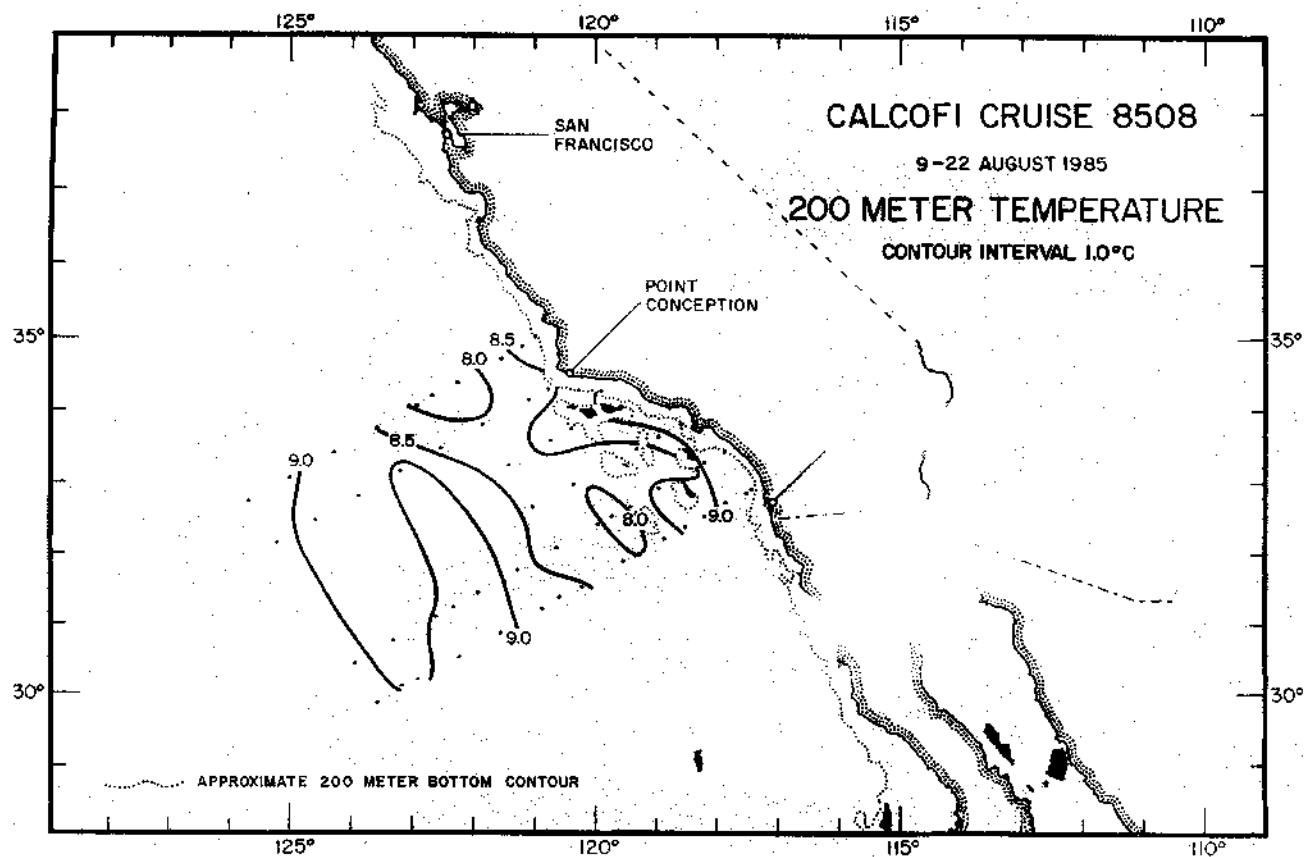


FIGURE 9

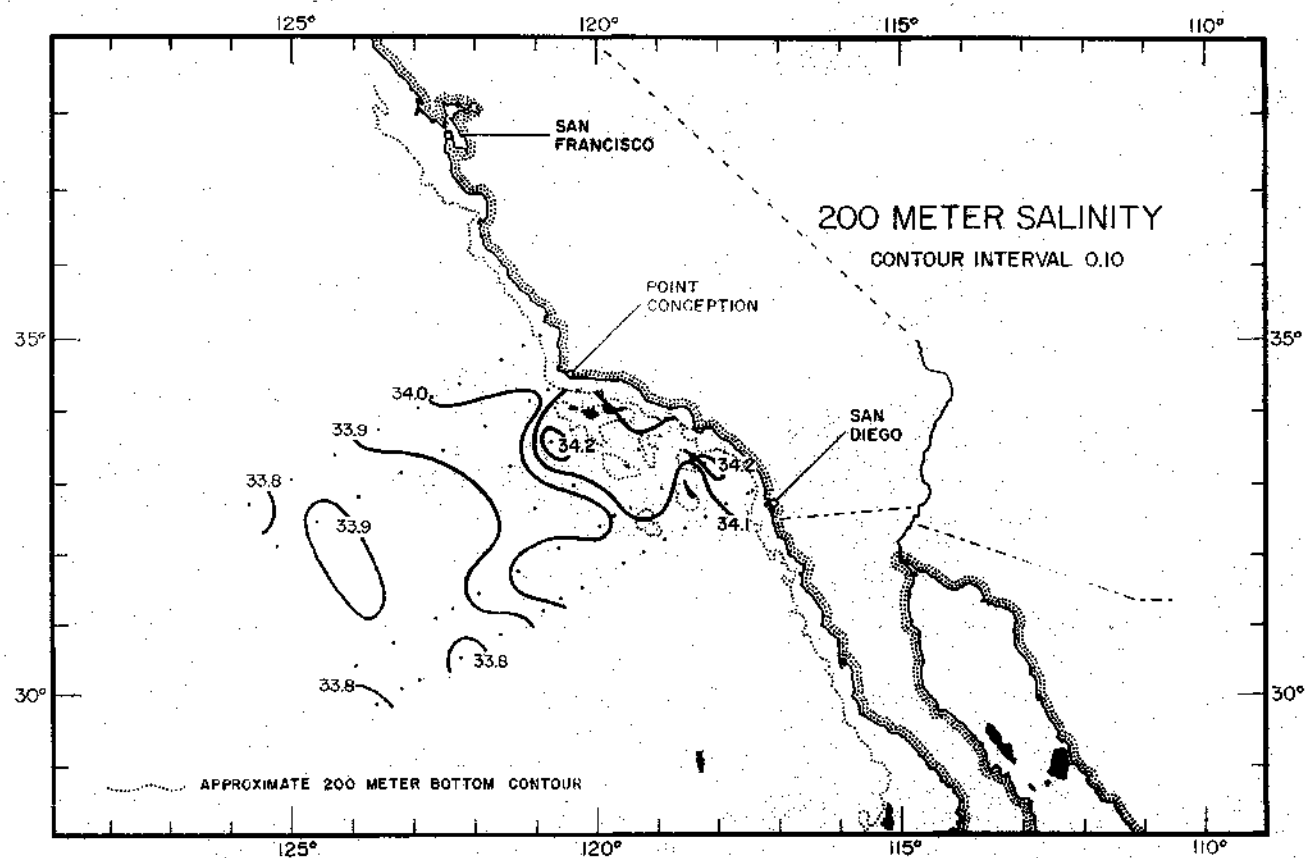


FIGURE 10

PERSONNEL

Cruise 8508

SHIP'S CAPTAIN

Phillip L. Munsch, *RV New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

Venrick, Elizabeth L. (in charge)	Associate Research Oceanographer, SIO
Abramenkoff, Dimitry N.	Biological Technician, NMFS
Anderson, George C.	Staff Research Associate, SIO
Bryan, Walter R.	Marine Technician, SIO
Bullister, John	Postdoctoral Investigator, SIO
Hana, Beverly M.	Student, UCSB
Horak, Lenka	Student, UCSB
Meger, Cindy A.	Computer Programmer, NMFS
Muzzy, Moris C.	Student, Mesa College
Schmitt, Walter R.	Staff Research Associate, SIO
Watts, Kimberly J.	Student, Humboldt State Univ.
Weaver, Lisa	Student, UCSB

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AM.T	TYPE		
55 01.2 N	120 55.2 W	22/08/85	1204 GMT	246 M	310	12 KT			1018.4 MB	14.8 C	13.5 C					
CAST	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	PHAE0 UG/L	PRESS D.BAR
	0 ISL	14.75	14.75	33.435	24.819	312.2	.000	6.20	107.4							0
1	1	14.75	14.75	33.435	24.819	312.0	.003	6.20	107.4	2.9	.35	1.0	.07	1.03	.19	1
	10 ISL	14.69	14.69	33.446	24.842	310.1	.031	6.25	108.1							10
1	11	14.68	14.68	33.447	24.844	309.9	.034	6.25	108.1	3.0	.36	1.2	.08	1.51	.16	11
	20 ISL	13.60	13.60	33.396	25.031	292.4	.061	5.97	101.0							20
	30 ISL	12.28	12.28	33.355	25.259	270.9	.089	5.57	91.7							30
1	32	12.03	12.02	33.350	25.304	266.6	.094	5.49	89.8	6.6	.82	6.8	.28	.39	.17	32
1	47	11.54	11.54	33.384	25.420	255.9	.133	5.18	83.9	3.8	1.01	9.8	.36	.37	.26	47
	50 ISL	11.39	11.39	33.427	25.481	250.2	.142	4.99	80.6							50
1	59	11.01	11.00	33.544	25.642	235.1	.163	4.51	72.3	13.5	1.31	15.2	.06	.22	.1	59
1	74	10.74	10.73	33.602	25.735	226.6	.197	4.35	69.3	15.9	1.46	17.4	.04	.23	.12	74
	75 ISL	10.72	10.71	33.612	25.746	225.6	.200	4.29	68.3							76
1	89	10.55	10.54	33.712	25.854	215.5	.230	3.59	57.0	19.5	1.63	19.8	.02	.13	.12	89
	100 ISL	10.24	10.23	33.777	25.959	205.7	.254	3.22	50.9							101
1	109	9.97	9.96	33.822	26.039	198.4	.273	3.02	47.4	24.8	1.86	23.0	.01	.06	.10	110
	125 ISL	9.70	9.68	33.874	26.126	190.4	.304	2.61	43.8							126
1	135	9.55	9.53	33.901	26.172	186.3	.323	2.70	42.0	29.2	2.01	25.1	.02	.02	.13	136
	150 ISL	9.33	9.31	33.941	26.240	180.0	.350	2.45	38.0							151
1	157	9.24	9.22	33.959	26.269	177.4	.363	2.34	36.2	33.7	2.19	26.8	.16	.01	.15	158
1	186	8.99	8.97	34.026	26.360	169.3	.413	2.16	33.2	36.5	2.30	21.0	.10	.01	.13	187
	200 ISL	8.93	8.91	34.042	26.383	167.3	.437	2.08	31.9							202
1	210	8.90	8.88	34.047	26.391	166.7	.453	2.02	31.0	38.0	2.36	29.0	.08	.01	.18	211

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 55

LATITUDE		LONGITUDE		DAY/MO/YR		MFSSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHFR		BAROMETER		DRY		WET		CLOUD		AMT		TYPF			
34	53.4 N	121	12.6 W	22/08/85		C 11 GMT		577 M		330		13		KT				1017.9 MB		15.7 C		14.2 C									
CAST	DEPTH	TEMP		POT	TEMP	SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SIO3		P04		N03		N02		CHL-A		PHAE0		PRESS	
	M	DEG C		TEMP	DEG C			THETA						ML/L		PCT		UM/L		UM/L		UM/L		UM/L		UG/L		UG/L		0.BAR	
1	0	16.02		16.02		33.266		24.411		350.9		.000		5.95		105.6		1.8		.39.		.1		.00		.1?		.05			
1	10	16.03		16.03		33.267		24.408		351.4		.035		5.97		106.0		1.8		.39		.1		.00		.4?		.0?		10	
1	20	15.7:		15.78		33.252		24.453		347.5		.070		6.03		106.5		1.8		.36.		.1		.00		.25		.06		20	
	30 ISL	13.71		13.71		33.392		25.006		295.1		.102		5.98		101.5														30	
1	31	13.51		13.51		33.411		25.061		289.9		.105		5.98		101.0		3.6		.57		2.2		.13		.53		.26		31	
1	41	12.36		12.36		33.469		25.410		256.8		.13?		4.99		82.3		9.1		.98		8.8		.42		.21		.17		41	
	50 ISL	12.01		12.00		33.590		25.494		248.9		.155		4.74		77.6														50	
1	51	11.99		11.9?		33.592		25.500		243.5		.157		4.73		77.4		10.8		1.09		11.0		.42		.16		.16		51	
1	61	11.00		11.08		33.631		25.695		230.2		.181		4.34		69.7		15.1		1.37		16.3		.13		.09		.13		61	
1	72	10.84		10.83		33.644		25.770		222.1		.206		4.16		66.5		16.7		1.45		17.6		.07		.09		.12		72	
	75 ISL	10.77		10.76		33.651		25.768		223.5		.213		4.09		65.3														76	
1	87	10.58		10.57		33.674		25.819		217.9		.239		3.88		61.7		18.5		1.53		15.9		.04		.08		.13		87	
	100 ISL	10.50		10.49		33.681		25.840		217.2		.268		3.83		60.7														101	
1	101	10.40		10.48		33.6P3		25.843		217.0		.271		3.82		60.6		19.2		1.56		19.3		.03		.06		.09		102	
1	121	10.18		10.17		33.774		25.966		205.6		.313		3.28		51.7		23.3		1.72		21.5		.02		.04		.11		122	
	125 ISL	10.15		10.14		33.787		25.982		204.3		.321		3.22		50.7														126	
1	147	9.89		9.87		33.847		26.073		195.9		.365		2.96		46.4		27.1		1.87		23.6		.03		.02		.10		148	
	150 ISL	9.81		9.79		33.853		26.091		194.3		.371		2.95		46.1														151	
1	177	9.06		9.04		33.924		26.270		177.6		.421		2.81		42.2		32.2		2.00		26.1		.02						178	
	200 ISL	8.84		8.82		34.026		26.385		167.1		.461		2.41		36.9														202	
1	207	8.79		8.77		34.052		26.412		164.6		.472		2.30		35.2		37.7		2.20		28.3		.02						208	
1	237	8.21		P.19		34.052		26.502		156.5		.520		2.37		35.8		41.4		2.24		29.6		.01						233	
	250 ISL	8.11		P.0?		34.070		26.531		153.9		.540		2.25		33.8														252	
1	276	S.00		7.97		34.115		26.583		149.4		.580		1.88		28.3		46.7		2.43		31.4		.01						27	
	300 ISL	7.84		7.31		34.150		26.634		144.9		.615		1.52		22.8														302	
1	335	7.58		7.54		34.191		26.706		138.6		.665		1.06		15.8		57.9		2.77		34.3		.01						337	
	400 ISL	7.03		6.99		34.212		26.800		130.3		.752		.82		12.0														403	
1	40?	6.96		6.92		34.213		26.810		129.4		.763		.81		11.9		66.0		2.91		36.5		.00						411	
1	441	6.46		6.41		34.247		26.905		121.1		.854		.54		7.8		75.9		3.09		37.7		.02						484	
	500 ISL	6.30		6.26		34.257		26.933		113.6		.877		.49		7.1														504	
1	552	5.84		5.80		34.286		27.014		111.0		.936		.41		5.9		86.1		3.20		39.5		.04						556	

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLUD	AMI	TYPE		
34 43.6 N	121 33.5 W	22/08/8.5.	0432 GMT	925 M	330	18 KT			1017.1 MB	16.1 C	14.7 C					
CST	DEPTH	TEF<P	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	' DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	17.10	17.10	33.471	24.318	359.8	.000	5.82	105.7							
1	1	17.10	17.10	33.471	24.318	359.8	.004	5.82	105.7	2.1	.40	.2	.00	.26	.04	1
	10 ISL	17.08	17.08	33.470	24.322	359.7	.036	5.86	106.3							10
1	11	17.0?	17.08	33.470	24.323	359.7	.039	5.86	106.4	2.0	.39	.2	.01	.26	.05	11
	50 ISL	17.08	17.08	33.469	24.323	360.0	.072	5.84	105.9							20
1	12	17.08	17.08	33.469	24.323	360.0	.079	5.83	105.8	2.0	.39	.2	.00	.27	.05	22
	30 ISL	14.89	14.88	33.334	24.714	322.9	.106	6.26	108.8							30
1	32	14.30	14.29	33.310	24.821	312.7	.112	6.35	108.9	2.3	.48	1.2	.04	.37	.08	32
1	42	12.48	12.47	33.323	25.198	277.0	.142	6.02	99.4	4.6	.74	5.3	.16	.43	.11	42
	50 ISL	11.89	11.89	33.302	25.292	268.2	.164	5.91	96.4							50
1	53	11.77	11.76	33.298	25.313	266.3	.171	5.84	95.0	5.9	.87	7.1	.23	.36	.15	53
1	63	10.93	10.93	33.390	25.535	245.3	.197	5.00	79.9	10.6	1.13	11.8	.16	.30	.14	63
1	7?	10.74	10.73	33.516	25.668	232.9	.221	4.55	72.5	13.9	1.32	15.2	.07	.18	.13	73
	75 ISL	10.65	10.64	33.542	25.704	229.6	.226	4.45	70.8							76
1	88	10.14	10.13	33.668	25.891	212.0	.254	3.92	61.7	19.9	1.62	20.3	.02	.10	.06	88
	100 ISL	9.73	9.72	33.778	26.044	197.6	.279	3.33	51.9							101
1	103	9.65	9.63	33.805	26.080	194.3	.286	3.17	49.4	25.6	1.85	23.5	.00	.06	.06	104
1	123	9.41	9.39	33.923	26.212	182.2	.324	2.61	40.5	30.1	2.03	25.7	.00	.02	.08	124
	125 ISL	9.39	9.38	33.931	26.221	131.3	.327	2.58	40.0							126
1	149	9.07	9.06	34.018	26.340	170.4	.369	2.30	35.4	34.4	2.19	27.5	.00	.02	.08	150
	150 ISL	9.06	9.04	34.019	26.344	170.1	.370	2.30	35.4							151
1	180	8.53	8.51	34.040	26.444	161.0	.420	2.35	35.8	37.6	2.23	28.5	.01			181
1	200 ISL	8.36	8.33	34.087	26.507	155.3	.452	2.05	31.0							202
1	210	8.29	8.26	34.111	26.536	152.7	.467	1.87	28.3	42.7	2.43	30.5	.01			211
1	241	7.91	7.89	34.145	26.619	145.4	.513	1.55	23.3	47.9	2.56	32.3	.01			242
1	250 ISL	7.83	7.80	34.154	26.638	143.6	.526	1.47	22.0							252
1	281	7.58	7.55	34.179	26.695	138.7	.570	1.25	18.6	53.3	2.72	34.0	.01			253
1	300 ISL	7.43	7.40	34.186	26.722	136.4	.596	1.16	17.2							302
1	342	7.11	7.08	34.196	26.774	131.8	.652	1.00	14.7	60.0	2.85	35.7	.00			344
	400 ISL	6.67	6.63	34.219	26.854	124.9	.727	.75	10.9							403
1	417	6.55	6.52	34.226	26.875	123.1	.748	.68	9.9	70.4	3.04	37.7	.00			420
1	493	6.34	6.29	34.255	26.927	119.1	.839	.54	7.8	74.4	3.10	38.6	.00			496
	500 ISL	6.30	6.25	34.258	26.934	118.5	.848	.53	7.6							504
1	56?	5.81	5.76	34.279	27.013	111.3	.926	.39	5.6	82.2	3.19	40.1	.00			572

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 70

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT		TYPE	
34 23.3 N		122 15.6 W		21/08/85		2304 GMT		3918 M		350		15 KT		020 08 07		1		1018.0 MB		17.2 C		15.3 C				5/8		CU	
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS													
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	US/L	UG/L	D.BAR													
1	0	17.25	17.25	33.526	24.325	359.1	.000	5.79	105.5	2.0	.41	.3	.00	.25	.04	0													
1	10	17.23	17.23	33.523	24.328	359.2	.036	5.81	105.8	1.9	.39	.3	.00	.22	.04	10													
1	20	17.19	17.18	33.521	24.338	358.5	.072	5.83	106.1	1.8	.38	.3	.01	.27	.05	20													
1	30	17.13	17.13	33.517	24.347	358.0	.107	5.81	105.6	1.8	.39	.3	.01	.28	.05	30													
1	40	16.42	16.41	33.492	24.494	344.2	.142	5.94	106.4	2.0	.40	.4	.01	.33	.07	40													
1	50	12.23	12.22	33.533	25.408	257.2	.172	5.80	95.4	6.3	.94	9.0	.31	.55	.19	50													
1	59	11.24	11.23	33.654	25.687	230.9	.194	4.69	75.6	13.4	1.37	15.7	.68	.46	.21	59													
1	74	10.07	10.06	33.806	26.010	200.4	.226	3.25	51.1	22.9	1.83	23.4	.07	.18	.11	74													
	75 ISL	9.99	9.98	33.809	26.026	198.9	.229	3.23	50.8							76													
1	90	9.28	9.27	33.820	26.151	187.1	.257	3.07	47.5	26.6	1.93	25.2	.01	.02	.07	90													
	100 ISL	9.07	9.06	33.878	26.231	179.8	.276	2.84	43.6							101													
1	109	8.98	8.96	33.931	26.287	174.6	.293	2.64	40.6	31.3	2.10	27.3	.01	.01	.08	110													
	125 ISL	8.81	8.80	33.954	26.331	170.8	.320	2.63	40.2							126													
1	134	8.71	8.70	33.958	26.350	169.1	.335	2.62	40.0	33.0	2.11	27.8	.00	.01	.06	135													
	150 ISL	8.42	8.40	33.998	26.426	162.1	.361	2.52	38.2							151													
1	164	8.14	8.12	34.029	26.493	155.9	.384	2.44	36.8	38.3	2.28	29.6	.01	.01	.05	165													
1	194	7.7(1	7.68	34.025	26.556	150.4	.429	2.55	38.1	41.3	2.29	30.1	.01			195													
	200 ISL	7.60	7.58	34.025	26.570	149.1	.439	2.53	37.7							202													
1	225	7.22	7.20	34.026	26.624	144.2	.475	2.46	36.3	46.2	2.38	31.3	.02			226													
	250 ISL	6.90	6.88	34.040	26.679	139.2	.511	2.0(2	30.7							252													
1	264	6.75	6.72	34.049	26.707	136.6	.531	1.86	27.2	54.8	2.64	34.2	.01			266													
1	294	6.51	6.49	34.062	26.749	133.0	.571	1.61	23.4	58.5	2.75	35.6	.01			296													
	300 ISL	6.49	6.46	34.070	26.758	132.2	.578	1.54	22.4							302													
1	325	6.42	6.39	34.107	26.797	128.8	.611	1.23	17.8	63.0	2.93	37.0	.00			327													
1	399	5.89	5.86	34.169	26.914	118.5	.703	.64	9.2	74.6	3.17	39.6	.00			402													
	400 ISL	5.89	5.86	34.170	26.915	118.4	.704	.64	9.1							403													
1	475	5.55	5.51	34.211	26.990	111.9	.790	.49	7.0	82.3	3.30	40.4	.00			478													
	500 ISL	5.42	5.37	34.228	27.020	109.3	.818	.43	6.1							504													
1	550	5.13	5.09	34.266	27.083	103.5	.871	.31	4.4	92.1	3.42	41.5	.00			554													

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 51

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM	MIND	SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMT	TYPE
35 01.2 N		120 55.2 W		22/08/85		1204 GMT		246 M	310	12 KT				1018.4 MB		14.8 C	13.5 C		
CAST	DEPTH	TEMP	POT	TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS	
	M	DEG C	DEG C			THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0	ISL 14.75	14.75		33.435	24.819	312.2	.000		6.20	107.4							0	
	1		14.75	14.75	33.435	24.819	312.0	.003		6.20	107.4	2.9	.35	1.0	.07	1.03	.19	1	
	10	ISL 14.69	14.69		33.446	24.842	310.1	.031		6.25	108.1							10	
1	11		14.68	14.68	33.447	24.844	309.9	.034		6.25	108.1	3.0	.36	1.2	.08	1.51	.16	11	
	20	ISL 13.60	13.60		33.396	25.031	292.4	.061		5.97	101.0							20	
	30	ISL 12.28	12.28		33.355	25.259	270.9	.089		5.57	91.7							30	
1	32		12.03	12.02	33.350	25.304	266.6	.094		5.49	89.8	6.6	.82	6.8	.28	.39	.17	32	
1	47		11.54	11.54	33.384	25.420	255.9	.133		5.18	83.9	8.8	1.01	9.8	.36	.37	.26	47	
	50	ISL 11.39	11.39		33.427	25.481	250.2	.142		4.99	80.6							50	
1	59		11.01	11.00	33.544	25.642	235.1	.163		4.51	72.3	13.5	1.31	15.2	.06	.22	.15	*9	
1	74		10.74	10.73	33.602	25.735	226.6	.197		4.35	69.3	15.9	1.46	17.4	.04	.23	*1?	74	
	75	ISL 10.72	10.71		33.612	25.746	225.6	.200		4.29	68.3							76	
1	89		10.55	10.54	33.712	25.854	215.5	.230		3.59	57.0	19.5	1.63	19.8	.02	.18	.12	*9	
	160	ISL 10.24	10.23		33.778	25.050	205.8	.254		3.22	50.9							101	
1	109		9.9?	9.96	33.822	26.039	198.4	.273		3.02	47.4	24.8	1.86	23.0	.01	.06	.10	110	
	25	ISL 9.70	9.68		33.874	26.126	190.4	.304		2.81	43.8							126	
1	135		9.55	9.53	33.901	26.172	186.3	.323		2.70	42.0	29.2	2.01	25.1	.02	.02	.13	136	
	150	ISL 9.33	9.31		33.941	26.240	180.1	.350		2.45	38.0							151	
1	157		9.24	9.22	33.959	26.269	177.4	.363		2.34	36.2	33.7	2.19	26.8	.16	.01	.15	158	
	186		8.09	8.97	34.026	26.360	169.3	.413		2.16	33.2	36.5	2.30	28.0	.10	.01	.13	187	
	200	ISL 8.93	8.91		34.042	26.383	167.3	.437		2.08	31.9							202	
1	210		8.90	8.88	34.047	26.391	166.7	.453		2.02	31.0	38.0	2.36	28.0	.08	.01	.18	211	

RV NEW HORIZON

CALCOFI CRUISE 8508

- STATION 77 55

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPF	
34	53.4 N	121	12.6 W	22/08/85	C81	1 GMT	577 M	330	13			1017.9 MB	15.7 C	14.2 C				
CST	DEPTH	TEPP	POT	TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	K	DEC C	DEG C			THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	16.02	16.02		33.266	24.411	350.9		.000	5.05	105.6	1.8	.39.	.1	.00	.19	.05	C
1	10	16.03	16.03		33.267	24.408	351.4		.035	5.97	106.0	1.8	.39	.1	.00	.15	.09	10
1	20	15.75	15.78		33.252	24.453	347.5		.070	6.03	106.5	1.8	.38	.1	.00	.25	.06	20
	30	ISL 13.71	13.71		33.392	25.006	295.1		.102	5.98	101.5							34
1	31	13.51	13.51		33.411	25.061	289.9		.105	5.98	101.0	3.6	.57	2.2	.13	.53	.26	31
1	41	12.36	12.36		33.569	25.410	256.8		.132	4.99	82.3	9.1	.98	8.8	.42	.21	.17	41
	50	ISL 12.01	12.00		33.590	25.494	248.9		.155	4.74	77.6							50
1	51	11.96	11.9?		33.592	25.500	248.5		.157	4.73	77.4	10.8	1.09	11.0	.42	.16	.16	51
1	61	11.00	11.0?		33.631	25.695	230.2		.181	4.34	69.7	15.1	1.37	16.3	.13	.09	.13	61
1	72	10.84	10.83		33.644	25.750	225.1		.206	4.16	66.5	16.7	1.45	17.6	.07	.0?	.12	72
	75	ISL 10.77	10.76		33.651	25.768	223.5		.213	4.09	65.3							76
1	87	10.58	10.57		33.674	25.819	218.9		.239	3.88	61.7	18.5	1.53	18.9	.04	.0*	.1	87
	100	ISL 10.50	10.49		33.681	25.840	217.2		.268	3.83	60.7							101
1	101	10.40	10.48		33.6P3	25.843	217.0		.271	3.82	60.6	19.2	1.56	19.3	.03	.06	.09	102
1	121	10.1?	10.17		33.774	25.966	205.6		.313	3.23	51.7	23.3	1.72	21.5	.02	.04	.11	122
	125	ISL 10.15	10.14		33.787	25.982	204.3		.321	3.22	50.7							126
1	147	9.89	9.87		33.847	26.073	195.9		.365	2.96	46.4	27.1	1.87	23.6	.03	.02	.10	148
	150	ISL 9.81	9.79		33.853	26.091	194.3		.371	2.95	46.1							151
1	177	9.06	9.04		33.924	26.270	177.6		.421	2.81	43.2	32.2	2.00	26.1	.02			178
	200	ISL 8.84	8.82		34.026	26.385	167.1		.461	2.41	36.9							202
1	207	8.79	8.77		34.052	26.412	164.6		.472	2.30	35.2	37.7	2.20	28.3	.02			208
	237	8.21	8.10		34.052	26.502	156.5		.520	2.37	35.8	41.4	2.24	29.6	.01			233
	250	ISL 8.11	8.0P		34.070	26.531	153.9		.540	2.25	33.8							252
1	276	8.00	7.97		34.115	26.583	149.4		.580	1.88	28.3	46.7	2.43	31.4	.01			278
	300	ISL 7.84	7.31		34.150	26.634	144.9		.615	1.52	22.8							302
1	335	7.55	7.54		34.191	26.706	138.6		.665	1.06	15.8	57.9	2.77	34.3	.01			337
	400	ISL 7.03	6.99		34.212	26.800	130.3		.752	.82	12.0							403
1	40?	6.96	6.92		34.213	26.810	129.4		.763	.81	11.9	66.0	2.91	36.5	.00			411
1	481	6.46	6.41		34.247	26.905	121.1		.854	.54	7.8	75.9	3.09	37.7	.02			484
	500	ISL 6.30	6.26		34.257	26.033	113.6		.877	.49	7.1							504
1	552	5.84	5.80		34.286	27.014	111.0		.936	.41	5.9	86.1	3.20	39.5	.04			556

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
34 43.6 N	121 33.5 W	22/08/85	0432 GMT	925 M	330	18 KT			1017.1 MB	16.1 C	14.7 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEC C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0 ISL	17.10	17.10	33.471	24.318	359.8	.000	5.82	105.7							0
	1	17.10	17.10	33.471	24.318	359.8	.004	5.82	105.7	2.1	.40	.2	.00	.26	.04	1
	10 ISL	17.08	17.08	33.470	24.322	359.7	.036	5.86	106.3							10
1	11	17.08	17.08	33.470	24.323	359.7	.039	5.86	106.4	2.0	.39	.2	.01	.26	.05	11
	20 ISL	17.08	17.08	33.469	24.323	360.0	.072	5.84	105.9							20
1	22	17.08	17.08	33.469	24.323	360.0	.079	5.83	105.8	2.0	.39	.2	.00	.27	.05	22
	30 ISL	14.89	14.88	33.334	24.714	322.9	.106	6.26	108.8							30
1	32	14.30	14.29	33.310	24.821	312.7	.112	6.35	108.9	2.3	.48	1.2	.04	.37	.08	32
1	42	12.48	12.47	33.323	25.198	277.0	.142	6.02	99.4	4.6	.74	5.3	.16	.43	.11	42
	50 ISL	11.89	11.89	33.302	25.292	268.2	.164	5.91	96.4							50
1	53	11.77	11.76	33.298	25.313	266.3	.171	5.84	95.0	5.9	.87	7.1	.23	.36	.15	53
1	63	10.93	10.93	33.390	25.535	245.3	.197	5.00	79.9	10.6	1.13	11.8	.16	.30	.14	63
1	7?	10.74	10.73	33.516	25.668	232.9	.221	4.55	72.5	13.9	1.32	15.2	.07	.18	.13	73
	75 ISL	10.65	10.64	33.542	25.704	229.6	.226	4.45	70.8							76
1	88	10.14	10.13	33.668	25.891	212.0	.254	3.92	61.7	19.9	1.62	20.3	.02	.10	.06	88
	100 ISL	9.73	9.72	33.778	26.044	197.6	.279	3.33	51.9							101
1	103	9.65	9.63	33.805	26.080	194.3	.286	3.17	49.4	25.6	1.85	23.5	.00	.06	.06	104
1	123	9.41	9.39	33.923	26.212	187.2	.324	2.61	40.5	30.1	2.03	25.7	.00	.02	.08	124
	125 ISL	9.39	9.38	33.931	26.221	131.3	.327	2.58	40.0							126
1	149	9.07	9.06	34.018	26.340	170.4	.369	2.30	35.4	34.4	2.19	27.5	.00	.02	.08	150
	150 ISL	9.06	9.04	34.019	26.344	170.1	.370	2.30	35.4							151
1	180	8.53	8.51	34.040	26.444	161.0	.420	2.35	35.8	37.6	2.23	28.5	.01			181
	200 ISL	8.36	8.33	34.087	26.507	155.3	.452	2.05	31.0							202
1	210	8.29	8.26	34.111	26.536	152.7	.467	1.87	28.3	42.7	2.43	30.5	.01			211
1	241	7.91	7.89	34.145	26.619	145.4	.513	1.55	23.3	47.9	2.56	32.3	.01			242
	250 ISL	7.83	7.80	34.154	26.638	143.6	.526	1.47	22.0							252
1	281	7.55	7.55	34.179	26.695	138.7	.570	1.25	18.6	53.3	2.72	34.0	.01			283
	300 ISL	7.43	7.40	34.186	26.722	136.4	.596	1.16	17.2							302
1	342	7.11	7.08	34.196	26.774	131.8	.652	1.00	14.7	60.0	2.85	35.7	.00			344
	400 ISL	6.67	6.63	34.219	26.854	124.9	.727	.75	10.9							403
1	417	6.55	6.52	34.226	26.875	123.1	.748	.68	9.9	70.4	3.04	37.7	.00			420
1	493	6.34	6.29	34.255	26.927	119.1	.839	.54	7.8	74.4	3.10	38.6	.00			476
	500 ISL	6.30	6.25	34.258	26.934	118.5	.848	.53	7.6							504
1	568	5.81	5.76	34.279	27.013	111.3	.926	.39	5.6	82.2	3.19	40.1	.00			572

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT		TYPE	
34 23.3 N		122 15.6 W		21/08/85		2304 GMT		3918 M		350		15 KT		020 08 07		1		1018.0 MB		17.2 C		15.3 C				5/8		CU	
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAF.0	PRESS													
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	US/L	UG/L	D.BAR													
1	0	17.25	17.25	33.526	24.325	359.1	.000	5.79	105.5	2.0	.41	.3	.00	.25	.04	0													
1	10	17.23	17.23	33.523	24.328	359.2	.836	5.81	105.8	1.9	.39	.3	.00	.28	.04	10													
1	20	17.19	17.18	33.521	24.338	358.5	.072	5.83	106.1	1.8	.38	.3	.01	.27	.05	20													
1	30	17.13	17.13	33.517	24.347	358.0	.107	5.81	105.6	1.8	.39	.3	.01	.28	.05	30													
1	40	16.42	16.41	33.497	24.494	344.2	.142	5.94	106.4	2.0	.40	.4	.01	.33	.07	40													
1	50	12.23	12.22	33.533	25.408	257.2	.172	5.80	95.4	6.3	.94	9.0	.31	.55	.19	50													
1	59	11.24	11.23	33.654	25.687	230.9	.194	4.69	75.6	13.4	1.37	15.7	.68	.46	.21	59													
1	74	10.07	10.06	33.806	26.010	200.4	.226	3.25	51.1	22.9	1.83	23.4	.07	.18	.11	74													
	75 ISL	9.99	9.98	33.809	26.026	198.9	.229	3.23	50.8							76													
1	90	9.28	9.27	33.820	26.151	187.1	.257	3.07	47.5	26.6	1.93	25.2	.01	.02	.07	90													
	100 ISL	9.07	9.06	33.878	26.231	179.8	.276	2.84	43.6							101													
1	109	8.98	8.96	33.931	26.287	174.6	.293	2.64	40.6	31.3	2.10	27.3	.01	.01	.08	110													
	125 ISL	8.81	8.80	33.954	26.331	170.8	.320	2.63	40.2							126													
1	134	8.71	8.70	33.958	26.350	169.1	.335	2.62	40.0	33.0	2.11	27.8	.00	.01	.06	135													
	150 ISL	8.42	8.40	33.998	26.426	162.1	.361	2.52	38.2							151													
1	164	8.14	8.12	34.029	26.493	155.9	.384	2.44	36.8	38.3	2.28	29.6	.01	.01	.05	165													
1	194	7.70	7.68	34.025	26.556	150.4	.429	2.55	38.1	41.3	2.29	30.1	.01			195													
	200 ISL	7.60	7.58	34.025	26.570	149.1	.439	2.53	37.7							202													
1	225	7.22	7.20	34.026	26.624	144.2	.475	2.46	36.3	46.2	2.38	31.3	.02			226													
	250 ISL	6.90	6.88	34.040	26.679	139.2	.511	2.09	30.7							252													
1	264	6.75	6.72	34.049	26.707	136.6	.531	1.86	27.2	54.8	2.64	34.2	.01			266													
1	294	6.51	6.49	34.062	26.749	133.0	.571	1.61	23.4	58.5	2.75	35.6	.01			296													
	300 ISL	6.49	6.46	34.070	26.758	132.2	.578	1.54	22.4							302													
1	325	6.42	6.39	34.107	26.797	128.8	.611	1.23	17.8	63.0	2.93	37.0	.00			327													
1	399	5.89	5.86	34.169	26.914	118.5	.703	.64	9.2	74.6	3.17	39.6	.00			402													
	400 ISL	5.89	5.86	34.170	26.915	118.4	.704	.64	9.1							403													
1	475	5.55	5.51	34.211	26.990	111.9	.790	.49	7.0	82.3	3.30	40.4	.00			478													
	500 ISL	5.42	5.37	34.228	27.020	109.3	.818	.43	6.1							504													
1	550	5.13	5.09	34.266	27.083	103.5	.871	.31	4.4	92.1	3.42	41.5	.00			554													

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	HEATHER	BAROMETER	DRY	WET	CLCUD	AMT	TYPE		
34 10.4 N	122 42.5 W	21/08/85	1929 GMT													
CAST	DEPTH	TFMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEC C		THETA			WL/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	16.65	16.65	33.430	24.393	352.7	.000	5.86	105.4							0
1	1 A	16.65	16.65	33.430	24.393	352.6	.004	5.86	105.4	1.5	.38	.1	.00	.22	.05	1
	10 ISL	16.61	16.61	33.431	24.402	352.1	.035	5.88	105.8							10
1	13 A	16.60	16.60	33.432	24.405	351.9	.046	5.89	105.9	1.4	.37	.1	.01	.21	.04	13
1	18 A	15.60	15.60	33.568	24.737	320.4	.062	6.27	110.6	1.4	.38	.4	.03	.35	.11	18
	20 ISL	15.41	15.40	33.564	24.777	315.6	.069	6.23	109.4							20
-1	26 A	14.98	14.97	33.553	24.863	308.6	.08?	6.10	106.2	2.1	.47	1.6	.07	.60	.15	26
	50 ISL	14.32	14.31	33.553	25.005	295.2	.100	5.75	98.8							30
	42 A	12.24	12.24	33.576	25.43*	254.1	.132	4.68	77.0	10.5	1.11	10.7	.91	.67	.29	42
	50 ISL	11.30	11.29	33.553	25.596	239.3	.152	4.60	74.2							50
1	64 A	10.22	10.21	33.517	25.759	224.0	.184	4.47	70.4	16.9	1.47	17.6	.22	.11	.11	64
	75 ISL	9.70	9.70	33.559	25.878	212.9	.209	4.22	65.7							76
1	88	9.35	9.35	33.633	25.993	202.2	.235	3.90	60.3	23.7	1.74	22.4	.02	.02	.13	88
	100 ISL	9.01	9.00	33.715	26.112	191.1	.259	3.65	56.1							101
1	102	8.96	8.95	33.732	26.133	189.1	.264	3.60	55.2	25.9	1.79	23.3	.01	.01	.04	103
1	123	8.83	8.82	33.889	26.278	175.8	.302	2.91	44.5	31.0	2.01	26.5	.00	.01	.03	124
	125 ISL	8.80	8.79	33.899	26.289	174.7	.305	2.88	44.1							126
1	14?	8.44	8.42	33.973	26.404	164.1	.336	2.71	41.1	34.8	2.12	27.9	.00	.00	.05	144
	150 ISL	8.31	8.29	33.986	26.434	161.3	.347	2.71	41.1							151
1	174	7.88	7.86	34.003	26.511	154.3	.385	2.72	40.8	39.4	2.13	28.9	.00	.00	.0?	175
	200 ISL	7.50	7.48	34.003	26.567	148.6	.424	2.53	37.6							202
1	205	7.44	7.42	34.012	26.582	147.9	.431	2.48	36.8	44.8	2.31	31.0	.00	.01	.02	206

A. PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THE FIRST SIX DEPTHS ON THIS CAST.

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CL*UD		AMT		TYPE			
34 03.2 N		122 56.3 W		21/08/85		1629 CMT		4110 M		350		15 KT		350 06 07		1		1018.4 MB		18.0 C		15.3 C		4/8				CU			
CAST	DEPTH	TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		N03		N02		CHL-A		PHAE0		PRFSS	
		M	DEG C		DEC C				THETA				HT		ML/L		PCT		UM/L		UM/L		UM/L		UG/L		UG/L		D.BAR		
0	ISL	16.67		16.67		33.580		24.502		342.3		.000		5.92	106.7														0		
1	1	16.67		16.67		33.580		24.502		342.2		.003		5.92	106.7			1.6	.38		.3	.01	.27	.09					1		
	10 ISL	16.65		16.65		33.573		24.506		342.1		.034		5.91	106.4														10		
1	11	16.65		16.65		33.57?		24.507		342.1		.037		5.91	106.4			1.5	.37		.3	.01	.30	.07					11		
	20 ISL	15.78		15.70		33.597		24.737		320.4		.067		6.17	109.1														20		
1	23	15.39		15.39		33.606		24.814		313.2		.077		6.24	109.6			2.0	.45		1.4	.07	.57	.07					23		
	30 ISL	15.26		15.26		33.610		24.844		310.2		.099		6.13	107.5														30		
1	32	15.23		15.22		33.611		24.854		309.7		.105		6.08	106.5			2.2	.49		1.7	.07	.39	.13					32		
1	43	13.95		13.95		33.52?		25.062		290.1		.137		5.68	96.9			4.4	.69		3.8	.19	.34	.10					43		
	50 ISL	13.15		13.15		33.506		25.207		276.5		.158		5.48	91.9														50		
1	58	12.13		12.12		33.474		25.381		260.0		.179		5.25	86.2			8.7	.99		8.9	.44	.23	.11					58		
1	69	10.07		10.06		33.378		25.676		232.0		.205		4.78	75.0			14.9	1.31		15.6	.12	.07	.06					69		
	75 ISL	9.90		9.89		33.462		25.769		223.3		.220		4.56	71.3														7*		
1	79	9.81		9.80		33.491		25.808		219.6		.228		4.43	69.1			19.1	1.52		18.9	.04	.03	.05					79		
1	94	9.85		9.84		33.690		25.957		205.8		.260		3.72	58.2			23.1	1.73		22.2	.01	.04	.15					94		
	100 ISL	9.72		9.71		33.735		26.014		200.5		.273		3.50	54.6														101		
1	114	9.32		9.30		33.794		26.126		190.1		.301		3.18	49.2			27.9	1.90		25.0	.01	.01	.04					115		
	125 ISL	9.07		9.06		33.827		26.191		184.1		.321		3.13	48.2														126		
1	135	8.85		8.84		33.854		26.246		179.0		.339		3.09	47.3			30.7	1.94		25.8	.01	.02	.04					136		
	150 ISL	8.57		8.55		33.900		26.327		171.6		.365		3.36	51.1														151		
1	160	8.40		8.39		33.929		26.375		167.1		.382		3.59	54.4			31.8	1.87		24.9	.01	.01	.05					161		
1	191	8.10		8.08		33.993		26.472		158.4		.432		3.91	58.9			32.8	1.79		24.0	-.01							192		
	200 ISL	7.96		7.94		33.998		26.496		156.?		.447		3.65	54.9														202		
1	222	7.62		7.60		34.004		26.550		151.3		.480		2.90	43.2			41.7	2.15		28.6	.01							223		
	250 ISL	7.23		7.21		34.019		26.617		145.3		.522		2.46	36.4														252		
1	257	7.14		7.12		34.022		26.632		143.8		.533		2.39	35.2			49.6	2.38		31.3	.00							259		
	300 ISL	6.72		6.69		34.038		26.703		137.6		.593		1.95	28.5														302		
1	308	6.65		6.63		34.042		26.715		136.5		.604		1.87	27.2			57.6	2.61		34.5	.00							310		
1	364	6.29		6.26		34.118		26.823		126.9		.67?		1.08	15.6			67.8	2.92		37.6	.00							366		
	400 ISL	6.11		6.07		34.166		26.884		121.5		.722		.78	11.2														403		
1	451	5.85		5.81		34.218		26.958		115.0		.782		.54	7.7			80.1	3.20		39.8	.00							454		
	500 ISL	5.51		5.47		34.239		27.017		109.7		.837		.44	6.3														504		
1	538	5.26		5.21		34.253		27.058		105.9		.878		.40	5.6			90.8	3.33		41.7	.00							542		
	600 ISL	5.0?		4.97		34.300		27.124		100.2		.942		.24	3.4														605		
1	627	4.95		4.90		34.326		27.152		97.8		.969		.16	2.2				3.1*2		42.6	.00							632		

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 90

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMT	TYPE
33 43.5 N		123 38.3 W		21/08/85		1108 GMT		3730 M	350	13 KT				1018.8 MB	17.0 C	14.8 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N0?	CHL-A	PHAE0	PRESS			
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UK/L	UG/L	UG/L	D.BAR			
	0 ISL	17.41	17.41	33.088	23.952	394.7	.000												0
1	2	17.41	17.41	33.088	23.952	394.7	.008	6.34U	115.5U	1.4	.33	.1	.00	.09	.01				2
	10 ISL	17.39	17.39	33.087	23.956	394.7	.039												10
1	12	17.39	17.39	33.087	23.956	394.6	.047	6.01U	109.5U	1.3	.31	.1	.00	.10	.00				12
	20 ISL	17.40	17.39	33.093	23.959	394.6	.079												20
1	23	17.40	17.40	33.095	23.960	394.6	.090	5.88	107.1	1.2	.31	.0	.00	.09	.00				23
	30 ISL	17.55	17.55	33.222	24.021	389.0	.118	5.83	106.6										30
1	33	17.61	17.61	33.308	24.073	384.3	.129	5.81	106.4	1.3	.32	.0	.00	.06	.01				33
1	44	15.61	15.61	33.253	24.493	344.4	.169	6.25	110.0	1.4	.33	.0	.00	.13	.03				44
	50 ISL	14.34	14.33	33.180	24.713	323.5	.190	6.36	109.0										50
1	59	12.90	12.89	33.123	24.960	300.1	.217	6.51	108.3	1.8	.38	.0	.00	.32	.16				59
	69	12.56	12.55	33.203	25.090	288.0	.246	6.28	103.8	2.4	.45	.6	.05	.42	.35				69
1	75 ISL	12.31	12.30	33.239	25.166	240.9	.264	6.06	99.7										76
	79	12.16	12.15	33.256	25.207	277.0	.275	5.93	97.2	3.6	.60	3.2	.28	.27	.26				79
1	95	11.70	11.68	33.320	25.344	264.4	.318	5.56	90.3	5.8	.81	7.5	.04	.15	.20				95
	100 ISL	11.52	11.51	33.356	25.404	258.8	.332	5.44	88.1										101
1	114	11.06	11.05	33.458	25.566	243.6	.368	5.13	82.3	10.6	1.12	12.9	.01						115
	125 ISL	10.78	10.76	33.509	25.657	235.2	.393	4.89	78.0										126
1	135	10.47	10.46	33.560	25.750	226.5	.417	4.61	73.0	15.3	1.36	16.4	.01	.02	.03				136
	150 ISL	9.85	9.84	33.666	25.938	208.8	.449	4.03	62.9										51
1	160	9.42	9.40	33.743	26.070	196.4	.470	3.64	56.4	24.5	1.74	22.6	.00	.00	.02				161
	190	8.63	8.61	33.889	26.310	173.9	.525	3.28	50.0	30.3	1.88	25.0	.01						191
1	200 ISL	8.50	8.47	33.923	26.357	169.6	.542	3.45	52.4										201
	220	8.29	8.27	33.968	26.424	163.6	.575	3.86	58.4	30.6	1.77	23.7	.01						221
1	250 ISL	7.85	7.83	33.988	26.505	156.2	.623	3.85	57.7										252
	257	7.74	7.72	33.988	26.521	154.8	.634	3.85	57.5	36.1	1.89	25.9	.01						258
1	300 ISL	6.95	6.92	33.994	26.637	144.0	.699	3.04	44.6										302
	305	6.86	6.83	33.994	26.650	142.7	.706	2.92	42.7	48.9	2.25	30.7	.01						307
1	360	6.22	6.19	34.020	26.755	133.2	.781	1.98	28.5	60.6	2.63	35.0	.00						362
	400 ISL	5.81	5.78	34.043	26.824	126.8	.834	1.43	20.4										403
1	447	5.44	5.40	34.078	26.898	120.1	.892	.97	13.7	77.7	3.04	39.3	.00						450
	500 ISL	5.21	5.17	34.142	26.976	113.2	.953	.80	11.3										504
1	533	5.11	5.07	34.184	27.021	109.2	.991	.75	10.5	90.5	3.27	41.9	.00						537
	600 ISL	4.88	4.83	34.247	27.097	102.5	1.061	.43	6.0										605
1	622	4.81	4.76	34.264	27.119	100.6	1.083	.30	4.2		3.40	42.5	.00						626

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 100

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMI	TYPE	
33 23.5 N		124 19.8 W		21/08/85		0535 GMT		4302 M	350	17 KT				1019.2 MB		17.5 C	15.1 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SI6KA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS				
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR				
1	0 ISL	18.62	18.62	33.568	24.024	387.8	.000												0	
	1	18.62	18.62	33.568	24.024	387.8	.004			1.8	.33	.0	.00	.05	.00			1		
1	10 ISL	18.60	13.60	33.568	24.029	387.7	.039											10		
	11	18.60	18.60	33.568	24.029	387.7	.043			1.7	.33	.0	.00	.05	.00			11		
1	20 ISL	18.60	18.60	33.568	24.029	388.1	.078											20		
	22	18.60	18.60	33.568	24.028	388.1	.085	5.49	102.7	1.7	.32	.0	.00	.05	.00			22		
1	30 ISL	18.55	18.55	33.568	24.042	387.1	.116	5.50	102.8									30		
	32	18.53	18.52	33.565	24.045	386.9	.124	5.51	102.9	1.6	.30	.0	.00	.05	.00			32		
1	42	18.34	18.33	33.576	24.101	381.9	.162	5.55	103.2	1.5	.31	.0	.01	.07	.01			42		
	50 ISL	17.10	17.09	33.499	24.343	359.1	.192	5.96	108.2									50		
1	57	15.90	15.89	33.433	24.568	337.7	.216	6.26	111.0	1.8	.33	.0	.00	.10	.01			57		
	68	14.85	14.84	33.374	24.753	320.3	.252	6.05	105.0	1.8	.34	.0	.00	.13	.03			68		
1	75 ISL	13.93	13.92	33.263	24.862	310.1	.275	6.13	104.4									76		
	78	13.62	13.61	33.226	24.898	306.7	.283	6.17	104.3	1.8	.36	.0	.00	.17	.06			78		
1	93	12.98	12.96	33.248	25.044	293.1	.328	5.95	99.2	2.2	.40	.1	.04	.30	.21			93		
	100 ISL	12.68	12.67	33.272	25.120	286.0	.349	5.81	96.3									101		
1	114	12.10	12.09	33.345	25.287	270.3	.387	5.47	89.6	4.7	.67	4.7	.03	.15	.13			114		
	125 ISL	11.48	11.46	33.454	25.489	251.3	.417	5.08	82.2									126		
1	133	11.01	10.99	33.539	25.640	237.1	.437	4.78	76.6	10.4	1.03	11.4	.01	.06	.06			134		
	150 ISL	10.23	10.21	33.650	25.863	216.1	.475	4.29	67.6									151		
1	159	9.86	9.85	33.700	25.963	206.6	.494	4.05	63.4	19.6	1.51	19.3	.00	.01	.02			160		
	190	9.14	9.12	33.848	26.198	184.7	.555	3.41	52.5	26.5	1.79	23.4	.00					191		
1	200 ISL	8.93	8.91	33.884	26.259	179.1	.573	3.29	50.5									201		
	220	8.56	8.54	33.941	26.361	169.6	.607	3.13	47.6	31.5	1.94	25.8	.00					221		
1	250 ISL	8.10	8.08	33.999	26.477	159.0	.657	3.01	45.3									252		
	256	8.02	8.00	34.007	26.495	157.3	.666	2.98	44.8	37.6	2.09	27.5	.00					257		
1	300 ISL	7.41	7.38	34.047	26.615	146.4	.733	2.35	34.9									302		
	306	7.33	7.30	34.050	26.628	145.2	.742	2.26	33.5	47.6	2.40	31.8	.00					308		
1	363	6.77	6.73	34.081	26.731	135.9	.822	1.97	28.8	59.1	2.69	35.2	.00					365		
	400 ISL	6.38	6.35	34.094	26.793	130.3	.871	1.53	22.2									403		
1	449	5.92	5.88	34.119	26.871	123.2	.934	.93	13.3	73.9	3.03	39.1	.00					452		
	500 ISL	5.59	5.55	34.174	26.955	115.5	.994	.60	8.5									504		
1	534	5.43	5.38	34.215	27.008	110.8	1.033	.46	6.5	86.7	3.27	40.9	.00					538		
	600 ISL	5.20	5.15	34.275	27.083	104.3	1.104	.31	4.4									605		
1	621	5.16	5.11	34.292	27.102	102.8	1.125	.30	4.2	94.3	3.39	42.1	.00					625		

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPFED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	» « 1 TYPE	I		
33 03.3 N	125 01.1 W	20/08/85	2352 GMT	4717 M	360	15 KT	330 05 06	2	1019.1 MB	18.0	15.0	C8/8	SC	I		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN KT	OXYGEN	OXY	SI03	P04	N03	N0?	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	U*/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	18.42	18.42	33.411	23.953	394.5	.000	5.53	103.0							0
1	1	18.42	18.42	33.411	23.953	394.6	.004	5.53	103.0	1.9	.38	.0	.00	.05	.00	1
	10 ISL	16.41	18.41	33.407	23.953	394.9	.039	5.59	104.0							10
1	11	18.41	18.41	33.407	23.953	394.9	.043	5.59	104.0	1.9	.35	.0	.00	.05	.00	11
	20 ISL	18.39	18.38	33.408	23.960	394.6	.079	5.57	103.6							20
1	27	18.37	18.36	33.408	23.965	394.3	.106	5.55	103.2	1.9	.34	.0	.00	.06	.00	27
	30 ISL	18.03	18.03	33.405	24.045	326.6	.118	5.64	104.2							30
1	43	16.29	16.28	33.391	24.447	348.8	.166	6.06	108.2	2.0	.34	.0	.00	.12	.01	43
	50 ISL	15.36	15.36	33.326	24.605	334.0	.190	6.21	108.8							50
1	59	14.44	14.44	33.260	24.752	320.1	.219	6.29	108.2	2.0	.37	.0	.00	.16	.04	59
	69	13.96	13.95	33.273	24.863	309.7	.250	6.23	106.1	2.1	.39	.0	.00	.21	.10	69
1	75 ISL	13.94	13.93	33.323	24.906	305.8	.269	6.12	104.2							75
	80	13.93	13.91	33.355	24.935	303.3	.284	6.04	102.8	2.4	.37	.0	.00	.22	.14	80
1	96	12.91	12.90	33.259	25.065	291.1	.331	6.02	100.3	2.8	.47	.0	.10	.32	.26	96
	100 ISL	12.68	12.67	33.260	25.111	286.8	.344	5.94	98.5							101
1	111	12.20	12.18	33.296	25.232	275.5	.373	5.68	93.2	4.4	.63	4.2	.10	.14	.16	111
	125 ISL	11.64	11.63	33.390	25.409	258.9	.412	5.22	84.8							126
1	126	11.59	11.57	33.401	25.425	257.2	.416	5.18	84.0	7.6	.86	8.7	.01	.03	.10	127
	150 ISL	10.31	10.29	33.558	25.777	224.2	.472	4.76	75.2							151
1	151	10.24	10.23	33.567	25.795	222.5	.475	4.74	74.7	13.0	1.13	13.4	.01	.02	.03	152
	172	9.79	9.77	33.713	25.986	204.7	.520	4.06	63.4	19.8	1.46	18.5	.01	.02	.02	173
1	192	9.24	9.22	33.821	26.160	188.4	.559	3.52	54.3	26.0	1.74	22.8	.01			193
	200 ISL	9.07	9.05	33.859	26.218	183.0	.574	3.50	53.9							201
1	213	8.82	*.80	33.912	26.298	175.6	.597	3.48	53.3	29.1	1.82	23.8	.01			214
	244	3.28	8.25	33.979	26.435	162.9	.649	3.21	48.5	34.5	1.97	26.0	.00			245
1	250 ISL	8.17	8.14	33.988	26.458	160.8	.659	3.18	47.9							252
	283	7.63	7.61	34.017	26.560	151.5	.711	2.97	44.3	41.9		2.17	2*	.7	.01	285
1	300 ISL	7.40	7.38	34.026	26.600	147.8	.736	2.75	40.8							302
	344	6.82	6.85	34.045	26.688	139.8	.799	2.10	30.8	53.4	2.50	33.1	.00			346
1	400 ISL	6.36	6.33	34.077	26.782	131.4	.875	1.47	21.2							403
	420	6.20	6.16	34.089	26.813	128.6	.902	1.28	18.5	66.9	2.85	37.2	.00			423
1	497	5.53	5.53	34.134	26.926	118.2	.996	.80	11.4	79.7	3.10	39.6	.00			500
	500 ISL	5.56	5.51	34.137	26.931	117.8	1.000	.78	11.1							504
1	575	5.25	5.20	34.215	27.030	109.0	1.085	.45	6.3	89.3	3.22	41.3	.02			579

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 77 120

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM	WIND	SPEED	WAVES			WEATHER	BAROMETER		DRY	WET	CLOUD	AMI	TYPE
32 43.3 M		125 41.6 W		20/08/85		1754 GMT		4425 M	350	15 KT	010	04	05	2	1021.0 MB		18.3 C	15.5 C	8/8		CU
CAST	DEPTH	TEMP	FOT TEMP	SALINITY	SI6MA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS					
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	ft.BAR					
	0 ISL	18.80	18.80	33.311	23.781	410.9	.000	5.48	102.7							0					
1	1	18.80	18.80	33.311	23.781	411.0	.004	5.48	102.7	1.5	.32	.0	.00	.05	.00	1					
	10 ISL	18.80	18.80	33.312	23.783	411.1	.041	5.51	103.2							10					
1	12	18.80	18.80	33.312	23.784	411.1	.049	5.51	103.3	1.5	.31	.0	.00	.05	.00	12					
	20 ISL	18.88	18.88	33.374	23.810	408.9	.082	5.50	103.3							20					
1	27	18.95	18.95	33.427	23.833	406.9	.110	5.49	103.2	1.5	.31	.0	.00	.06	.00	27					
	30 ISL	18.64	18.63	33.424	23.911	399.6	.123	5.56	103.9							30					
1	42	16.94	16.94	33.364	24.275	365.3	.168	5.90	106.7	1.6	.31	.0	.00	.07	.01	42					
	50 ISL	15.64	15.63	33.270	24.501	343.9	.197	6.14	108.1							50					
1	57	14.68	14.67	33.206	24.661	328.8	.220	6.28	108.5	1.7	.34	.0	.00	.09	.01	57					
	68	13.94	13.93	33.203	24.815	314.3	.255	6.26	106.5	1.8	.34	.0	.00	.10	.02	68					
1	75 ISL	13.58	13.57	33.208	24.890	307.3	.278	6.18	104.4							76					
	79	13.44	13.43	33.210	24.921	304.4	.289	6.14	103.4	1.9	.35	.0	.00	.13	.03	79					
1	94	13.07	13.05	33.202	24.990	298.2	.334	6.06	101.2	1.9	.38	.0	.00	.16	.06	94					
	100 ISL	12.81	12.79	33.178	25.023	295.2	.353	6.03	100.2							101					
1	109	12.49	12.47	33.169	25.078	290.1	.378	5.96	98.3	2.4	.44	.3	.11	.26	.12	109					
	124	12.35	12.33	33.334	25.233	275.8	.423	5.58	91.9	4.0	.57	3.3	.06	.15	.10	125					
1	125 ISL	12.33	12.31	33.338	25.240	275.2	.424	5.56	91.6							126					
	150	11.09	11.08	33.469	25.570	244.1	.490	4.92	78.9	9.5	.95	10.2	.01	.05	.06	151					
1	171	10.37	10.35	33.604	25.803	222.2	.539	4.69	74.1	12.9	1.11	13.5	.00	.02	.03	172					
	191	9.67	9.65	33.729	26.019	201.9	.581	3.93	61.2	21.0	1.50	19.3	.00			192					
1	200 ISL	9.38	9.36	33.785	26.110	193.4	.599	3.69	57.1							201					
	211	9.06	9.04	33.847	26.209	184.0	.619	3.45	53.1	27.3	1.76	23.6	.00			212					
1	243	8.47	8.44	33.958	26.390	167.3	.675	3.09	46.9	33.9	1.95	26.5	.00			244					
	250 ISL	8.34	8.31	33.972	26.420	164.5	.687	3.02	45.7							252					
1	283	7.80	7.77	34.008	26.529	154.5	.741			40.3	2.10	28.4	.00			285					
	300 ISL	7.57	7.54	34.022	26.573	150.4	.766	2.53	37.7							302					
1	344	7.02	6.99	34.049	26.671	141.5	.830	2.11	31.0	52.9	2.49	33.0	.00			346					
	400 ISL	6.43	6.39	34.078	26.774	132.2	.907	1.51	21.8							403					
1	421	6.22	6.18	34.088	26.809	128.9	.935	1.29	18.6	66.9	2.83	37.4	.01			424					
	498	5.48	5.44	34.131	26.935	117.3	1.029	.80	11.3	80.7	3.10	40.5	.00			501					
1	500 ISL	5.47	5.42	34.133	26.939	117.0	1.031	.79	11.2							504					
	574	4.96	4.92	34.202	27.052	106.5	1.114	.46	6.4	93.1	3.29	42.4	.00			578					

RV NFW HORIZON

CALCOFI CRUISE 8508

STATION 80 70

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMI		TYPE	
33 48.9 N		121 50.8 W		19/08/85		095C GMT		3879 M		320		15 KT						1016.6 MB		17.4 C		16.1 C							
C	a	ST	DEPTH	TEMP	POT	TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXV	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS									
		m	DEG C		DEG C			THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR									
I		P	ISL	17.21	17.21		33.515	24.326	359.0			.000	5.82	105.9						0									
		1		17.21	17.21		33.515	24.326	359.0			.00*	5.82	105.9	1.5	.40	.3	.01	.22	.05	1								
		10	ISL	17.22	17.22		33.514	24.323	359.6			.036	5.88	107.1						10									
1		11		17.22	17.22		33.514	24.322	359.7			.039	5.89	107.2	1.6	.39	.3	.01	.22	.04	11								
		20	ISL	16.89	16.88		33.486	24.381	354.4			.072	5.96	107.7						20									
1		22		16.77	16.76		33.475	24.401	352.6			.078	5.98	107.9	1.5	.37	.1	.00	.20	.06	22								
		30	ISL	16.11	16.11		33.404	24.496	343.8			.107	6.18	110.0						30									
1		32		15.85	15.85		33.373	24.531	340.4			.113	6.24	110.5	1.8	.38	.1	.00	.32	.10	32								
1		43		12.75	12.74		33.056	24.938	301.8			.148	6.61	109.6	2.2	.45	.3	.01	.60	.1?	43								
		50	ISL	11.59	11.59		33.037	25.141	286.1			.169	6.47	104.7						50									
1		58		11.01	11.01		33.016	25.230	274.2			.191	6.12	97.8	4.6	.72	4.7	.19	.52	.20	58								
1		69		11.17	11.16		33.246	25.382	260.0			.220	5.52	88.6	8.1	1.00	9.2	.29	.31	.20	69								
		75	ISL	11.39	11.33		33.431	25.486	250.4			.236	5.30	85.6						76									
1		79		11.47	11.46		33.528	25.547	244.6			.245	5.1?	83.8	11.3	1.24	12.8	.44	.22	.19	79								
1		95		10.5?	10.51		33.620	25.788	222.0			.282	4.23	67.9	17.7	1.54	19.0	.03	.11	.0?	95								
		100	ISL	10.24	10.22		33.659	25.867	214.5			.294	3.96	62.5						101									
1		114		9.60	9.59		33.752	26.046	197.8			.324	3.33	51.8	25.1	1.85	23.5	.01	.04	.07	115								
		125	ISL	9.29	9.27		33.782	26.121	190.7			.345	3.33	51.5						126									
1		135		9.05	9.03		33.804	26.177	185.7			.364	3.33	51.2	27.5	1.87	24.5	.01	.01	.04	136								
		150	ISL	8.78	8.76		33.858	26.261	177.8			.391	3.65	55.8						151									
1		161		8.61	8.60		33.900	26.320	172.4			.410	3.91	59.6	27.9	1.74	23.1	.00	.01	.03	162								
1		192		8.18	8.16		33.985	26.453	160.2			.461	4.02	60.7	31.1	1.76	23.4	.01			193								
		200	ISL	8.08	8.06		33.986	26.470	158.4			.474	4.00	60.3						201									
1		223		7.79	7.77		33.989	26.514	154.8			.510	3.86	57.7	35.1	1.86	24.6	.01			224								
		250	ISL	7.42	7.39		33.984	26.564	150.4			.551	3.47	51.5						252									
1		258		7.30	7.27		33.983	26.580	148.9			.564	3.32	49.1	42.4	2.09	27.9	.01			260								
		300	ISL	6.75	6.73		34.000	26.669	140.9			.624	2.48	36.2						302									
1		309		6.64	6.62		34.007	26.689	139.0			.637	2.29	33.4	54.6	2.48	73.2	.01			311								
1		366		6.09	6.05		34.057	26.801	128.8			.713	1.42	20.4	66.3	2.84	37.4	.00			368								
		400	ISL	5.87	5.84		34.103	26.865	123.1			.756	1.05	15.1						403									
1		452		5.64	5.60		34.17?	26.948	115.6			.818	.67	9.5	80.1	3.14	40.2	.00			455								
		500	ISL	5.43	5.39		34.214	27.007	110.6			.872	.46	6.5						504									
1		537		5.29	5.25		34.242	27.045	107.2			.913	.37	5.2	90.0	3.31	41.8	.00			541								
		600	ISL	5.06	5.01		34.296	27.116	101.0			.978	.30	4.2						605									
1		623		4.98	4.93		34.317	27.142	98.7			1.002	.27	3.8		3.38	42.0	.00			628								

PV MEW HORIZON

CALCOFI CRUISE 8508

STATION 80 80

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES		WEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE				
33 28.8 N		122 32.1 U		19/08/35	1523 GMT	4110 M	310	16 KT	350	03 04	1	1020.1 MB	17.9 C	16.2 C	5/8		CU				
CAST	DEPTH	TEMP	POT	TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS			
	M	DEG C		DEG C		THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR			
1	0	17.22	17.22		33.098	24.003	389.7			.000	5.70	103.5	1.5	.36	.1	.00	.11	.03	0		
1	10	17.20	17.20		33.099	24.009	389.5			.039	5.73	104.0	1.5	.36	.1	.00	.12	.02	10		
	20	17.04	17.04		33.097	24.046	386.3			.078	5.71	103.4							20		
1	22	17.00	16.99		33.097	24.057	385.3			.085	5.71	103.2	1.4	.35	.1	.00	.14	.02	22		
	30	16.76	16.75		33.104	24.118	379.8			.116	5.80	104.5							30		
1	33	16.66	16.65		33.109	24.145	377.3			.127	5.85	105.1	1.4	.35	.1	.00	.15	.03	33		
1	44	16.23	16.22		33.152	24.277	365.1			.168	6.01	107.1	1.5	.37	.1	.00	.21	.05	44		
	50	14.17	14.16		33.055	24.652	329.3			.189	6.35	108.4							50		
1	54	12.84	12.83		33.004	24.881	307.5			.201	6.54	108.6	1.8	.41	.1	.00	.38	.11	54		
1	64	11.72	11.71		32.872	24.991	297.2			.231	6.54	106.0	2.2	.44	.1	.00	.46	.20	64		
1	74	11.43	11.42		32.852	25.029	293.8			.261	6.49	104.5	2.2	.45	.1	.00	.51	.24	74		
	75	11.38	11.37		32.852	25.038	293.2			.264	6.47	104.0							76		
1	91	10.86	10.85		32.853	25.132	284.3			.310	6.07	96.5	3.1	.59	2.3	.22	.25	.25	91		
	100	10.73	10.72		32.928	25.212	276.9			.336	5.83	92.6							101		
	107	10.65	10.63		33.014	25.294	269.2			.354	5.62	89.1	6.1	.86	7.4	.04	.14	.09	107		
1	125	10.00	9.98		33.442	25.739	227.2			.401	4.53	71.0	16.3	1.42	17.4	.02	.05	.04	126		
	150	9.73	9.72		33.728	26.007	202.2			.453	3.42	53.4							151		
1	152	9.71	9.70		33.744	26.022	200.8			.458	3.35	52.2	24.6	1.83	23.6	.01	.04	.07	153		
1	183	8.75	8.73		33.878	26.282	176.4			.516	3.14	48.0	30.1	1.94	25.6	.01			184		
	200	8.42	8.39		33.941	26.384	167.1			.545	3.61	54.8							201		
1	214	8.19	8.17		33.978	26.446	161.3			.568	3.98	60.1	31.1	1.76	23.6	.01			215		
1	245	7.67	7.65		33.991	26.533	153.3			.616	3.61	53.8	37.4	1.93	25.9	.01			246		
	250	7.58	7.55		33.991	26.547	152.1			.624	3.53	52.6							252		
1	284	7.02	6.99		33.989	26.624	145.0			.676	3.02	44.4	46.6	2.19	29.8	.01			286		
	300	6.82	6.79		33.991	26.652	142.5			.698	2.79	40.9							302		
1	345	6.37	6.34		34.008	26.726	135.8			.761	2.15	31.1	58.9	2.56	34.5		0	0	3	4	7
	400	5.98	5.95		34.073	26.827	126.8			.833	1.31	18.8							403		
1	421	5.86	5.82		34.101	26.865	123.4			.860	1.03	14.7	74.2	2.98	39.2	.00			424		
1	497	5.34	5.30		34.161	26.975	113.3			.949	.61	8.6	86.5	3.19	41.4	.00			500		
	500	5.32	5.28		34.164	26.980	112.9			.952	.60	8.4							504		
1	574	4.96	4.91		34.244	27.086	103.3			1.032	.34	4.8		3.33	42.4	.00			578		

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	MET	CLOUD	AMI	TYPE		
33 09.1 N	123 13.7 W	19/08/85	2056 GMT	4302 M	320	13 KT	340 03 06	1	1019.8 MB	19.5 C	16.8 C	3/8		CU		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UK/L	UG/L	UG/L	D.BAR
1	0	18.60	18.60	33.429	23.923	397.4	.000	5.52	103.1	1.7	.35	.0	.00	.05	.00	0
1	10	18.57	18.56	33.427	23.930	397.1	.040	5.53	103.2	1.7	.35	.0	.00	.05	.00	10
1	20	18.38	18.38	33.422	23.972	393.4	.079	5.53	102.9	1.7	.35	.0	.00	.06	.00	20
1	30	18.24	18.23	33.407	23.997	391.4	.118	5.56	103.1	1.7	.34	.0	.00	.06	.01	30
1	40	18.14	18.13	33.421	24.032	388.4	.157	5.57	103.1	1.7	.34	.0	.00	.06	.01	40
1	50	16.06	16.05	33.330	24.454	348.4	.194	6.16	109.5	1.9	.34	.0	.00	.10	.02	50
1	60	14.78	14.77	33.235	24.662	328.7	.227	6.02	104.2	1.7	.35	.0	.00	.12	.02	60
1	70	14.37	14.36	33.308	24.805	315.4	.259	6.20	106.5	1.9	.35	.0	.00	.15	.05	70
1	75 ISL	14.03	14.02	33.309	24.877	308.1	.276	6.17	105.3							76
1	85	13.41	13.40	33.312	25.006	296.5	.305	6.03	101.5	2.1	.38	.0	.00	.24	.18	85
1	100	12.90	12.89	33.320	25.115	286.5	.349	5.82	97.0	2.7	.46	1.0	.14	.28	.18	100
1	119	12.??	12.??	33.41C	25.317	267.7	.404	5.38	88.4	5.3	.73	6.1	.03	.1?	.16	120
1	125 ISL	12.05	12.03	33.436	25.360	262.9	.418	5.26	56.1							126
1	143	11.45	11.43	33.518	25.544	246.4	.465	4.85	78.4	9.7	1.01	11.1	.01	.07	.09	144
1	150 ISL	11.16	11.14	33.544	25.618	239.6	.481	4.70	75.5							151
1	173	10.12	10.10	33.645	25.878	215.1	.534	4.14	65.1	17.5	1.42	17.7	.00			174
1	200 ISL	9.20	9.18	33.815	26.163	188.3	.588	3.43	52.9							201
1	203	9.12	9.09	33.833	26.190	185.8	.594	3.36	51.7	27.2	1.84	24.0	.00			204
1	233	8.66	8.64	33.932	26.339	172.0	.647	3.08	47.0	31.9	2.00	26.2	.00			234
1	250 ISL	8.38	8.36	33.980	26.419	164.6	.676	2.86	43.4							252
1	273	8.03	8.00	34.028	26.510	156.2	.712	2.57	38.7	39.8	2.25	29.2	.00			274
1	300 ISL	7.6^	7.65	34.054	26.582	149.7	.754	2.28	34.0							302
1	332	7.34	7.31	34.069	26.643	144.2	.801	1.96	29.0	49.9	2.55	32.9	.00			334
1	400 ISL	6.77	6.74	34.139	26.776	132.3	.895	1.19	17.3							403
1	407	6.73	6.69	34.145	26.788	131.2	.904	1.12	16.4	62.7	2.91	36.8	.00			409
1	483	6.21	6.17	34.195	26.896	121.7	1.000	.79	11.4	72.7	3.13	38.9	.00			486
1	500 ISL	6.09	6.05	34.206	26.919	119.5	1.021	.72	10.3							504
1	556	5.70	5.65	34.241	26.996	112.6	1.086	.48	6.8	82.1	3.29	40.8	.00			560

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 80 1 C0

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT		TYPE	
32 49.2 N		123 54.8 W		20/08/85		0216 GMT		4345 M		320		10 <T		340 03 06		1		1016.2 MB		19.3 C		16.5 C		5/8				CU	
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS													
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	U»/L	UM/L	US/L	UG/L	D.BAR													
1	0	19.02	19.02	33.456	23.837	405.6	.000	5.46	102.8	2.0	.36	.0	.01	.05	.00	0													
1	10	18.99	18.99	33.457	23.846	405.1	.040	5.48	103.2	1.8	.35	.0	.00	.06	.00	10													
	20 ISL	18.72	18.72	33.475	23.902	400.1	.081	5.50	103.2							20													
1	26	18.77	18.72	33.485	23.935	397.2	.104	5.51	103.2	1.8	.34	.0	.00	.06	.00	26													
	30 ISL	17.97	17.97	33.454	24.097	381.8	.120	5.69	105.1							30													
1	41	15.36	15.86	33.402	24.552	338.8	.159	6.15	108.9	2.1	.33	.0	.00	.10	.01	41													
	50 ISL	15.24	15.23	33.427	24.709	324.0	.190	6.09	106.5							50													
1	5*	14.93	14.0?	33.441	24.788	316.8	.215	6.03	104.8	2.3	.35	.0	.00	.14	.05	58													
1	67	14.23	14.22	33.413	24.916	304.7	.242	5.97	102.3	2.5	.36	.0	.00	.18	.14	67													
	75 ISL	13.65	13.64	33.361	24.996	297.2	.267	6.03	102.1							76													
1	77	13.54	13.53	33.352	25.011	295.8	.272	6.04	102.0	2.7	.42	.6	.03	.31	.28	77													
1	93	12.72	12.71	33.360	25.181	280.0	.318	5.72	95.0	3.6	.56	2.8	.23	.18	.20	93													
	100 ISL	12.28	12.27	33.373	25.275	271.2	.339	5.61	92.3							101													
1	10?	11.86	11.85	33.396	25.372	262.0	.359	5.47	89.2	6.3	.76	6.6	.02	.10	.13	108													
1	123	11.29	11.27	33.493	25.553	245.1	.399	4.94	79.6	9.3	.93	9.9	.01	.07	.11	124													
	125 ISL	11.21	11.20	33.503	25.576	243.0	.403	4.88	78.5							126													
1	143	10.04	10.02	33.658	25.901	212.4	.456	4.08	64.1	18.2	1.41	17.9	.00	.02	.02	149													
	150 ISL	9.9^	9.96	33.667	25.917	210.8	.459	4.04	63.4							151													
1	169	9.43	9.41	33.756	26.079	195.8	.498	3.70	57.3	23.3	1.62	21.3	.00	.01	.02	170													
1	190	8.95	8.93	33.844	26.225	182.1	.538	3.41	52.3	27.7	1.79	23.7	.01			191													
	200 ISL	8.71	8.69	33.891	26.298	175.3	.556	3.32	50.6							201													
1	211	8.48	8.46	33.937	26.370	167.6	.574	3.24	49.2	31.9	1.90	25.1	.01			212													
1	242	2.11	8.09	33.982	26.462	160.3	.625	3.10	46.7	35.8	2.00	26.8	.01			243													
	250 ISL	8.00	7.97	33.993	26.487	157.9	.638	3.01	45.2							252													
1	281	7.57	7.55	34.031	26.579	149.6	.687	2.58	38.4	44.2	2.22	29.8	.00			283													
	300 ISL	7.33	7.30	34.044	26.624	145.5	.714	2.34	34.6							302													
1	343	6.82	6.79	34.069	26.714	137.3	.775	1.80	26.3	56.7	2.57	34.0	.00			345													
	400 ISL	6.35	6.31	34.123	26.820	127.7	.850	1.12	16.3							403													
1	420	6.22	6.18	34.146	26.854	124.7	.876	.92	13.3	70.0	2.91	37.7	.05U			423													
1	495	5.94	5.90	34.236	26.962	115.3	.965	.49	7.0	79.0	3.12	39.4	.00			498													
	500 ISL	5.9?	5.87	34.242	26.969	114.7	.971	.47	6.7							504													
1	571	5.49	5.44	34.289	27.060	106.5	1.050	.33	4.7		3.23	40.3	.00			575													

RV NEW HORIZON				CALCOFI CRUISE 8508										STATION 80 110				
LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPF
52 29.0 N		1 24 35.6 W		20/08/85		0736	GMT	4330 M	320	to KT			1019.1	MB	13.5 C	15.8 C		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	ST03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS	
	M	DEC C	DEC C		THETA				ML/L	PCT	UM/L	UM/L	UN/L	UM/L	UG/L	UG/L	D.BAR	
	0 ISL	19.00	19.00	33.550	23.915	398.2		.000	5.45	102.7							0	
1	1	19.00	19.00	33.550	23.915	398.2		.004	5.45	102.7	1.7	.36	.1	.00	.08	.00	1	
	10 ISL	18.98	18.98	33.545	23.912	397.2		.040	5.51	103.7							10	
1	11	18.98	16.98	33.548	23.918	397.2		.044	5.51	103.8	1.7	.36	.0	.00	.07	.00	11	
	20 ISL	18.88	18.87	33.543	23.941	396.4		.080	5.51	103.5							20	
1	22	18.85	18.85	37.542	23.947	395.9		.087	5.51	103.5	1.7	.34	.0	.00	.07	.01	22	
	30 ISL	18.76	18.75	33.539	23.964	394.2		.119	5.53	103.6							30	
1	32	18.72	18.71	33.537	23.976	393.5		.127	5.53	103.6	1.7	.34	.0	.00	.09	.01	32	
1	42	18.29	18.29	33.517	24.067	385.1		.165	5.63	104.6	1.6	.34	.0	.00	.15	.04	42	
	50 ISL	14.97	14.97	33.402	24.749	320.3		.194	6.51	113.2							50	
1	52	14.22	14.21	33.393	24.902	305.6		.200	6.68	114.4	2.5	.39	.1	.01	.69	.24	52	
	62	13.56	13.55	33.387	25.031	293.6		.230	6.24	105.4	3.2	.50	1.9	.09	.65	.38	62	
1	73	12.9*	12.27	33.413	25.190	278.7		.261	5.84	97.3	4.6	.62	4.3	.23	.32	.38	73	
	75 ISL	12.72	12.71	33.423	25.223	275.0		.267	5.74	95.4							76	
1	88	11.92	11.91	33.492	25.436	255.5		.301	5.21	85.1	7.8	.97	9.8	.04	.12	.18	88	
	100 ISL	11.35	11.34	33.555	25.590	241.1		.331	4.81	77.6							101	
1	104	11.21	11.20	33.571	25.627	237.6		.340	4.71	75.8	11.8	1.10	13.6	.02	.07	.09	104	
1	123	10.59	10.552	33.640	25.792	222.3		.386	4.28	68.0	15.8	1.41	17.1	.01	.05	.05	124	
	125 ISL	10.55	10.53	33.645	25.803	221.2		.389	4.24	67.4							126	
1	149	9.86	9.84	33.737	25.993	203.6		.441	3.68	57.6	21.8	1.66	20.9	.01	.01	.02	150	
	150 ISL	9.83	9.82	33.740	26.000	203.0		.442	3.66	57.3							151	
1	181	8.89	8.87	33.892	26.271	177.5		.501	3.09	47.4	29.8	1.92	2.2	.00			182	
	200 ISL	8.62	8.60	33.952	26.361	169.3		.534	2.84	43.2							201	
1	212	8.50	8.48	33.978	26.400	165.8		.554	2.74	41.6	34.9	2.10	27.2	.00			217	
1	243	8.03	8.01	34.00F	26.494	157.2		.604	2.55	42.9	38.0	2.12	27.8	.01			244	
	25C ISL	7.95	7.93	34.015	26.511	155.6		.615	2.80	42.0							252	
1	284	7.59	7.56	34.043	26.587	143.9		.668	2.40	35.7	44.7	2.33	30.5	.00			236	
	300 ISL	7.36	7.33	34.051	26.625	145.4		.691	2.20	32.6							302	
1	346	6.72	6.69	34.070	26.729	135.8		.755	1.64	23.9	57.4	2.65	34.7	.00			348	
	400 ISL	6.25	6.21	34.103	26.817	128.0		.826	1.15	16.6							403	
1	422	6.09	6.05	34.116	26.848	125.2		.855	.99	14.2	69.2	2.93	37.5	.00			425	
1	491	5.45	5.41	34.160	26.961	114.8		.945	.61	8.6	81.7	3.14	40.5	.00			501	
	500 ISL	5.44	5.40	34.161	26.964	114.5		.948	.60	8.5							504	
1	571	5.04	5.00	34.214	27.052	106.5		1.026	.41	5.8		3.25	41.4	.00			575	

RV NEW HORIZON				CALCOFI CRUISE 8508										STATION 30 120				
LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETFR	DRY	WET	CLCUD	AMT	TYPF
32 08.8 N		125 16.2 W		20/08/85		1242 6MT		3918 M	350	10 KT			1019.1 KB	18.1 C	16.0 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	SI03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS	
	M	DEG C	DEG C		THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
	0 ISL	19.00	19.00	33.750	23.761	412.9		.000	5.45	102.5							0	
1	1	19.00	19.00	33.350	23.761	412.9		.004	5.45	102.5	1.8	.36	.1	.00	.05	.00	1	
	10 ISL	18.99	18.99	33.352	23.765	412.8		.041	5.49	103.2							10	
1	11	18.99	18.99	33.352	23.766	412.8		.045	5.49	103.3	1.7	.34	.1	.00	.05	.00	11	
	20 ISL	18.98	18.98	33.412	23.814	401.5		.082	5.49	103.2							20	
1	27	18.98	18.97	33.478	23.866	403.8		.110	5.48	103.1	1.8	.33	.1	.00	.05	.00	27	
	30 ISL	18.92	18.92	33.492	23.891	403.1		.123	5.49	103.2							30	
1	41	18.73	18.72	33.541	23.977	393.7		.166	5.53	103.6	2.0	.31	.1	.00	.06	.00	41	
	50 ISL	17.13	17.12	33.434	24.286	364.5		.201	5.86	106.4							50	
1	57	15.83	15.82	33.356	24.524	341.9		.225	6.11	108.1	2.0	.34	.1	.00	.08	.02	57	
1	67	14.97	14.96	33.314	24.681	327.2		.258	6.21	108.0	2.0	.34	.1	.00	.10	.02	67	
	75 ISL	14.59	14.58	33.331	24.777	318.2		.285	6.16	106.4							76	
1	78	14.50	14.48	33.340	24.804	315.7		.293	6.15	105.9	2.1	.34	.1	.00	.13	.05	73	
1	94	13.89	13.87	33.351	24.940	303.1		.343	5.89	100.2	2.6	.40	.1	.00	.23	.18	94	
	100 ISL	13.56	13.54	33.384	25.033	294.4		.362	5.72	96.6							101	
1	110	13.14	13.13	33.474	25.186	280.0		.389	5.45	91.3	4.7	.56	3.1	.21	.18	.18	110	
1	123	13.02	13.01	33.706	25.390	261.1		.427	5.17	86.6	5.7	.65	5.6	.04	.11	.14	124	
	125 ISL	12.91	12.89	33.702	25.410	259.2		.431	5.12	85.5							126	
1	149	10.78	10.76	33.545	25.686	233.0		.491	4.32	68.9	13.4	1.18	14.7	.01	.07	.10	150	
	150 ISL	10.75	10.73	33.546	25.692	232.4		.492	4.31	68.7							151	
1	170	10.05	10.03	33.642	25.887	214.1		.537	4.05	63.6	18.1	1.42	17.4	.01	.03	.05	171	
1	190	9.43	9.41	33.759	26.081	195.9		.578	3.68	57.0	23.6	1.65	20.7	.00			191	
	200 ISL	9.16	9.14	33.815	26.169	187.7		.597	3.54	54.5							201	
1	212	8.87	8.85	33.876	26.262	179.0		.619	3.39	51.9	28.7	1.83	23.4	.00			213	
1	243	8.35	8.33	33.971	26.417	164.7		.672	3.13	47.4	34.5	1.97	25.4	.00			244	
	250 ISL	8.25	8.23	33.981	26.440	162.5		.684	3.13	47.4							252	
1	283	7.83	7.80	34.005	26.522	155.2		.737	3.15	47.2	39.0	2.04	26.8	.00			285	
	300 ISL	7.62	7.59	34.016	26.561	151.7		.762	2.94	43.8							302	
1	345	7.06	7.03	34.040	26.658	142.7		.829	2.19	32.2	51.3	2.45	32.1	.00			347	
	400 ISL	6.41	6.37	34.066	26.767	132.8		.904	1.54	22.4							403	
1	422	6.16	6.13	34.078	26.808	129.0		.934	1.33	19.2	66.6	2.85	36.8	.00			425	
1	499	5.51	5.47	34.138	26.937	117.1		1.028	.76	10.8	79.9	3.13	40.0	.00		.00	502	
	500 ISL	5.50	5.46	34.140	26.939	117.0		1.029	.75	10.7							504	
1	575	5.10	5.05	34.206	27.040	107.9		1.114	.45	6.3	90.0	3.30	41.6	.00			579	

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 81 48.6

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AWT	TYPE
34 21.0 N		120 13.8 W		18/08/85		1932 GMT													
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYNHT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS			
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR			
	0 ISL	17.79	17.79	33.581	24.237	371.7	.000	5.95	109.6							0			
1	1 A	17.79	17.79	33.581	24.237	367.5	.004	5.95	109.6	1.5	.30	.0	.00	.24	.05	1			
1	9 A	16.36	16.35	33.629	24.613	331.9	.032	6.16	110.3	1.8	.32	.0	.00	.50	.13	9			
	10 ISL	16.12	16.12	33.629	24.667	326.8	.035	6.24	111.2							in			
1	12 A	15.69	15.69	33.630	24.764	317.6	.041	6.37	112.6	1.6	.34	.0	.00	.64	.22	12			
1	19 A	14.69	14.69	33.615	24.972	298.0	.063	6.25	108.3	2.9	.45	.6	.04	1.58	.41	19			
	20 ISL	14.51	14.50	33.616	25.012	294.2	.066	6.13	105.8							20			
1	30 A	12.88	12.87	33.643	25.367	260.6	.093	4.82	80.4	9.0	1.00	8.7	.56	.77	.40	30			
1	46 A	11.12	11.11	33.694	25.740	225.6	.132	3.77	60.6	17.0	1.46	17.1	.20	.15	.22	46			
	50 ISL	10.81	10.81	33.720	25.814	218.6	.141	3.57	57.1							50			
1	62	10.23	10.22	33.795	25.974	203.6	.166	3.15	49.7	22.5	1.75	21.6	.05	.06	.15	62			
1	72	9.94	9.93	33.848	26.064	195.2	.186	2.91	45.7	25.1	1.88	23.2	.05	.05	.13	72			
	75 ISL	9.90	9.89	33.852	26.075	194.5	.192	2.89	45.3							76			
1	88	9.82	9.81	33.869	26.102	192.0	.217	2.83	44.3	26.3	1.93	23.5	.07	.04	.17	88			
	100 ISL	9.76	9.75	33.885	26.124	190.1	.240	2.76	43.1							101			
1	102	9.75	9.74	33.889	26.129	189.6	.245	2.74	42.8	26.7	1.97	24.2	.05	.03	.16	103			
1	123	9.53	9.52	33.965	26.225	181.0	.284	2.52	39.2	28.9	2.07	25.6	.02	.02	.13	124			
	125 ISL	9.52	9.50	33.971	26.232	180.4	.287	2.50	38.0							126			
1	143	9.3f	9.36	34.020	26.293	174.9	.319	2.34	36.3	31.0	2.16	26.6	.02	.02	.09	144			
	150 ISL	9.36	9.34	34.032	26.305	173.9	.331	2.33	36.1							151			
1	174	9.27	9.26	34.066	26.346	170.5	.372	2.26	35.0	32.8	2.20	27.0	.03			175			
	200 ISL	8.95	8.93	34.119	26.440	162.0	.415	1.92	29.5							202			
1	205	8.87	8.84	34.130	26.462	159.9	.423	1.83	28.1	38.8	2.40	29.2	.02			206			

A. PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THE FIRST SIX DEPTHS ON THIS CAST.

RV NFW HORIZON

CALCOFI CRUISE 8508

STATION 82 46

ATTITUDE		LONGITUDE		DAY/MO/YR	MESSENGER		BOTTOM	WIND	SPEED	WAVES			WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE
34 16.2 N		119 56.3 W		18/08/85	1458 GMT		528 M	110	04 KT	240	02	04	1	1016.9 MB	18.0 C	16.6 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	Nn3	N02	CHL-A	PHAE0	PRESS			
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR			
1	0	17.99	17.99	33.592	24.198	371.2	.000	5.89	108.9	1.5	.30	.1	.00	.23	.05	0			
1	10	17.04	17.03	33.592	24.427	349.7	.036	6.28	114.0	1.6	.30	.1	.00	.32	.07	10			
	20 ISL	14.79	14.79	33.590	24.931	304.3	.069	5.75	99.7							20			
	30 ISL	12.57	12.57	33.587	25.384	259.8	.097	4.92	81.5							30			
1	32	12.16	12.16	33.587	25.463	251.6	.102	4.73	77.7	11.3	1.08	11.3	.28	.27	.23	32			
1	48	11.09	11.08	33.642	25.704	228.9	.140	3.90	62.7	16.1	1.44	16.8	.04	.17	.19	48			
	50 ISL	11.04	11.04	33.646	25.715	228.0	.145	3.86	61.9							50			
1	58	10.96	10.95	33.656	25.738	226.0	.163	3.76	60.2	17.3	1.51	17.2	.04	.15	.16	58			
1	75	10.63	10.62	33.694	25.826	217.9	.200	3.53	56.2	19.3	1.62	19.1	.03	.08	.15	75			
1	91	10.35	10.34	33.748	25.917	209.7	.234	3.30	52.2	21.3	1.72	20.8	.01	.06	.12	91			
	100 ISL	10.23	10.22	33.777	25.960	205.7	.254	3.18	50.2							101			
1	104	10.17	10.16	33.790	25.980	203.9	.263	3.13	49.3	23.1	1.80	21.8	.01	.04	.09	105			
	125 ISL	9.89	9.87	33.865	26.088	194.1	.304	2.86	44.8							126			
1	130	9.82	9.80	33.884	26.114	191.7	.314	2.79	43.7	27.0	1.96	24.0	.00	.02	.07	131			
	150 ISL	9.62	9.60	33.946	26.196	184.3	.351	2.59	40.4							151			
1	151	9.61	9.59	33.949	26.200	183.9	.353	2.58	40.2	29.8	2.08	25.0	.02	.02	.08	152			
1	182	9.24	9.22	34.050	26.339	171.3	.408	2.22	34.3	34.0	2.24	27.0	.01			183			
	200 ISL	9.05	9.03	34.087	26.399	165.9	.438	2.03	31.2							202			
1	213	8.93	8.91	34.106	26.434	162.8	.459			38.0	2.40	29.0	.00			214			
1	248	8.68	8.66	34.136	26.496	157.5	.515	1.57	24.0	41.5	2.54	30.1	.01			249			
	250 ISL	8.65	8.62	34.138	26.502	156.9	.519	1.55	23.6							252			
	300 ISL	7.90	7.87	34.164	26.637	144.7	.594	1.10	16.6							302			
1	303	7.85	7.82	34.164	26.645	143.9	.599	1.08	16.2	53.0	2.83	33.0	.00			305			
1	361	7.18	7.15	34.168	26.743	135.1	.679	.80	11.8	63.8	3.04	34.8	.00			363			
	400 ISL	6.80	6.77	34.185	26.809	129.3	.731	.58	8.5							403			
1	423	6.61	6.57	34.199	26.846	125.9	.761	.44	6.4	79.6	3.26	34.4	.00			426			

RV NEK HORIZON

CALCOFI CRUISE 8508

STATION 83 40.7

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AHT	TYPE
34 12.6 N		119 24.7 W		18/08/85	1127 GMT		38 M	270	05 KT			1014.9 MB	18.2 C	16.2 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS	
	M	DEC C	DEG C		THETA			ML/L	PCT	UH/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
	0 ISL	18.84	18.84	33.616	24.005	389.7	.000	5.76	108.2							0	
1	1	18.84	18.84	33.616	24.005	389.6	.004	5.76	108.2	1.6	.29	.0	.01	.24	.08	1	
	10 ISL	18.79	18.78	33.610	24.015	388.9	.039	5.80	108.8							10	
1	11	18.78	18.78	33.610	24.016	388.9	.043	5.80	108.8	1.5	.29	.0	.01	.26	.08	11	
	20 ISL	16.56	16.56	33.535	24.494	343.7	.076	6.31	113.5							20	
1	22	15.94	15.94	33.524	24.628	331.0	.082	6.36	112.9	3.6	.36	.2	.02	1.03	.17	22	
	30 ISL	13.44	13.44	33.524	25.163	281.0	.107	5.50	92.7							30	
1	32	12.81	12.81	33.520	25.285	268.5	.112	5.14	85.6	9.7	.98	6.1	.43			32	

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 83 42

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE
34	10.6 N	119	30.2 W	18/08/85	0948	GMT	135 M	250	07 KT			1014.9 MB	17.8 C	15.5 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY PCT	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS	
	M	DEG C	DEG C		THETA			ML/L		UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0	18.99	18.99	33.612	23.964	393.5	.000	5.91	111.4	1.7	.29	.0	.02	.21	.03		0
1	10	18.95	18.95	33.611	23.974	392.9	.039	5.85	110.1	1.6	.29	.0	.02	.23	.09		10
	20 ISL	17.90	17.89	33.582	24.214	370.4	.077	5.93	109.3								20
1	26	16.95	16.94	33.562	24.425	350.4	.099	5.97	108.1	2 ^	.8	.7	.05	.62	.24		26
	30 ISL	16.26	16.25	33.551	24.577	336.0	.113	6.28	112.2								30
1	36	15.11	15.11	33.538	24.822	312.8	.132	6.52	113.9	4.4	.7	2.3	.13	.72	.26		36
1	46	12.65	12.65	33.527	25.322	265.4	.161	5.37	89.1	6.6	.72	3.5	.28	.60	.30		46
	50 ISL	12.18	12.17	33.540	25.424	255.8	.172	5.02	82.5								50
1	62	11.5?	11.51	33.5.89	25.585	240.6	.201	4.26	69.1	13.1	1.30	13.5	.32	.28	.27		6?
	75 ISL	10.74	10.73	33.687	25.801	220.3	.231	3.56	56.8								76
1	77	10.66	10.65	33.700	25.826	218.0	.235	3.49	55.6	21.1	1.62	19.1	.04	.09	.19		77
	100 ISL	9.94	9.93	33.859	26.074	194.9	.283	2.87	45.1								101
1	102	9.91	9.90	33.874	26.091	193.3	.288	2.85	44.7	26.5	1.94	23.1	.05	.03	.09		103

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVFS	WEATHER	BAROMETER	DRY	WET	CLCUD	AMT	TYPE		
33 52.7 N	120 08.4 W	18/08/85	0410 GMT	97 M	340	17 KT			1014.9 MB	16.9 C	15.2 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	"I	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.RAR
1	? ISL	17.01	17.01	33.579	24.423	350.4	.000	5.80	105.2							?
1	1	17.01	17.01	33.579	24.423	340.8	.003	5.80	105.2	2.8	.36	.3	.04	1.12	.25	1
1	10 ISL	16.20	16.20	33.549	24.587	334.4	.034	6.30	112.5							10
1	11	16.07	16.07	33.547	24.615	331.7	.037	6.32	112.5	2.6	.36	.0	.03	1.30	.24	11
1	20 ISL	14.33	14.33	33.547	24.997	295.7	.066	6.08	104.5							20
1	2?	13.93	13.9?	33.552	25.085	287.3	.071	6.03	102.8	5.3	.58	3.3	.11	.80	.22	2?
1	30 ISL	12.54	12.54	33.561	25.370	259.8	.094	5.04	83.4							30
1	32	12.28	12.28				.098	4.30	79.1	12.3	1.10	10.9	.19	.43	.23	32
1	50 ISL	11.74	11.74	33.616	25.564	242.4	.143	4.50	73.4							50
1	53	11.66	11.65	33.622	25.584	240.5	.150	4.46	72.5	14.2	1.24	13.1	.19	.31	.19	53
1	75 ISL	10.62	10.61	33.750	25.872	213.6	.201	3.73	59.4							76
1	78	10.47	10.46	33.771	25.915	209.6	.206	3.62	57.4	22.0	1.66	19.5	.11	.13	.12	78

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 83 55

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLCUD		AMT		TYPE	
33 44.5 N		120 24.9 W		18/08/85		0040 GMT		950 M		340		15 KT		310 04 06		2		1015.4 MB		17.9 C		15.9 C				8/8		SC	
CAST	DEPTH	TEMP	POT	TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS											
	X	DEG C	DEG C			THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR											
1	0	18.04	18.04		33.608	24.198	371.2		.000	5.67	104.9	1.7	.31	.1	.00	.25	.05												0
1	10	18.02	18.02		33.605	24.201	371.2		.037	5.71	105.6	1.7	.30	.1	.00	.27	.04												
	20 ISL	14.73	14.73		33.596	24.949	300.6		.071	6.21	107.7																		
1	21	14.41	14.41		33.595	25.017	293.8		.073	6.26	107.8	1.3	.33	.2	.01	.85	.18												
	30 ISL	13.71	13.70		33.561	25.137	287.5		.100	6.30	106.9																		30
1	33	13.61	13.60		33.548	25.147	281.7		.108	6.31	106.9	3.6	.49	2.3	.07	.84	.30												33
1	42	12.24	12.23		33.595	25.454	252.6		.13?	4.97	81.8	9.3	.96	9.8	.34	.69	.62												42
	50 ISL	11.56	11.55		33.607	25.592	239.7		.152	4.64	75.2																		50
1	54	11.35	11.35		33.609	25.630	236.1		.161	4.58	74.0	12.4	1.17	13.0	.24	.40	.33												54
1	64	10.86	10.85		33.647	25.749	225.0		*184	3.98	63.6	16.0	1.38	16.6	.07	.21	.31												64
1	75	10.35	10.34		33.719	25.894	211.5		.207	3.55	56.2	20.0	1.57	19.8	.03	.10	.17												75
1	90	9.77	9.76		33.860	26.102	191.9		.238	3.03	47.4	25.7	1.82	22.9	.02	.03	.11												<90
	100 ISL	9.57	9.56		33.911	26.176	185.2		.257	2.84	44.3																		101
1	105	9.50	9.49		33.928	26.200	182.9		.267	2.78	43.2	28.9	1.97	24.7	.02	.02	.06												106
	125 ISL	9.28	9.26		33.978	26.276	176.0		.302	2.56	39.7																		126
1	126	9.26	9.25		33.981	26.281	175.7		.305	2.55	39.4	31.9	2.07	26.2	.02	.02	.10												127
	150 ISL	9.13	9.12		34.062	26.365	168.1		.345	2.21	34.1																		151
1	152	9.13	9.11		34.069	26.372	167.5		.349	2.18	33.6	35.3	2.21	27.6	.01	.02	.13												153
1	182	9.01	9.00		34.098	26.413	164.2		.398	2.09	32.2	36.8	2.26	28.2	.01														183
	200 ISL	8.93	8.90		34.118	26.442	161.7		.428	2.02	31.1																		201
1	212	8.85	8.83		34.129	26.463	160.0		.447	1.98	30.4	38.7	2.33	28.8	.01														213
1	243	8.62	8.59		34.144	26.512	155.8		.495	1.87	28.5	41.4	2.41	29.4	.01														244
	250 ISL	8.55	8.52		34.143	26.52?	154.9		.507	1.86	28.3																		252
1	283	8.23	8.20		34.142	26.570	150.9		.558	1.76	26.6	44.9	2.48	30.9	.01														285
	300 ISL	8.17	8.14		34.170	26.602	148.2		.583	1.58	23.9																		302
1	343	7.96	7.92		34.231	26.681	141.3		.645	1.15	17.3	52.2	2.74	32.9	.01														345
	400 ISL	6.98	6.94		34.148	26.756	134.4		.724	1.24	18.2																		403
1	417	6.67	6.63		34.121	26.777	132.4		.747	1.28	18.7	62.2	2.81	36.1	.01														420
1	494	6.10	6.05		34.193	26.908	120.5		.843	.66	9.5	74.8	3.07	39.0	.01														497
	500 ISL	6.06	6.01		34.199	26.918	119.6		.851	.62	9."																		504
1	571	5.68	5.64		34.261	27.014	111.1		.933	.41	5			40.4	.00														575

RV NEW HORIZON CALCOFI CRUISE 8508 STATION 33 60

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT		TYPF	
33 34.9 N		120 46.5 W		17/08/85		2026 GMT		1961 M		330		11 KT		300 04 08		2		1016.2 MB		18.2 C		16.0 C		8/8		SC			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRFSS													
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR													
	0 ISL	18.18	18.18	33.654	24.198	371.3	.000	5.68	105.4							0													
1	1	18.18	18.18	33.654	24.198	371.3	.004	5.68	105.4	1.1	.27	.0	.00	.29	.05	1													
	10 ISL	18.13	18.13	33.651	24.208	370.6	.037	5.72	106.0							10													
1	11	18.13	18.12	33.651	24.210	370.4	.041	5.72	106.0	1.0	.27	.0	.00	.30	.05	11													
	20 ISL	18.05	18.05	33.652	24.230	368.9	.074	5.71	105.7							20													
1	21	18.04	18.04	33.652	24.232	368.7	.077	5.71	105.7	1.0	.27	.0	.00	.40	.08	21													
	30 ISL	17.2?	17.26	33.646	24.414	351.6	.110	5.99	109.2							30													
1	32	16.97	16.97	33.643	24.481	345.3	.117	6.02	109.1	1.2	.31	.2	.01	1.08	.16	32													
1	42	14.22	14.21	33.640	25.093	287.1	.148	5.47	93.9	5.2	.66	5.2	.22	1.49	.34	42													
	50 ISL	12.13	12.13	33.629	25.501	241.6	.170	4.72	77.6							50													
1	52	11.75	11.74	33.627	25.572	241.6	.174	4.55	74.1	12.7	1.16	13.2	.27	.45	.38	52													
1	62	10.55	10.54	33.695	25.841	216.2	.197	3.83	60.8	18.9	1.51	18.8	.07	.18	.19	62													
1	72	10.25	10.24	33.749	25.935	207.4	.218	3.48	54.9	21.7	1.64	20.6	.04	.12	.11	72													
	75 ISL	10.09	10.08	33.780	25.987	202.6	.225	3.35	52.6							76													
1	88	9.53	9.52	33.896	26.171	185.4	.249	2.90	45.1	28.0	1.92	24.3	.02	.02	.07	88													
	100 ISL	9.33	9.32	33.942	26.240	179.1	.272	2.69	41.7							101													
1	102	9.31	9.29	33.947	26.247	17K.4	.277	2.66	41.2	31.1	2.06	25.8	.01	.02	.06	103													
1	123	9.07	9.06	34.031	26.351	165.9	.313	2.32	35.7	34.5	2.17	27.3	.02	.01	.06	124													
	125 ISL	9.06	9.04	34.037	26.358	168.2	.316	2.30	35.4							126													
1	148	8.91	8.90	34.114	26.441	160.8	.354	2.01	30.9	37.6	2.32	28.4	.01	.01	.06	149													
	150 ISL	8.91	8.89	34.110	26.446	160.4	.357	1.99	30.5							151													
1	179	8.82	8.80	34.18?	26.510	154.9	.402	1.65	25.3	40.8	2.47	29.7	.01			180													
	200 ISL	8.70	8.68	34.205	26.546	151.8	.435	1.52	23.3							201													
1	210	8.64	8.62	34.211	26.561	150.6	.449	1.48	22.6	43.2	2.56	30.4	.01			211													
1	241	8.45	8.42	34.229	26.605	147.0	.495	1.31	19.9	45.9	2.65	31.4	.00			242													
	250 ISL	8.38	8.35	34.235	26.620	145.6	.509	1.25	19.0							252													
1	281	8.12	8.09	34.250	26.672	141.2	.554	1.08	16.3	50.3	2.76	32.7	.01			283													
	300 ISL	7.97	7.94	34.249	26.692	139.4	.580	1.03	15.5							302													
1	343	7.64	7.61	34.246	26.739	135.6	.639	.95	14.2	55.6	2.86	34.2	.00			345													
	400 ISL	7.15	7.11	34.257	26.819	128.6	.714	.73	10.8							403													
1	419	6.98	6.94	34.261	26.845	126.3	.739	.66	9.7	64.9	3.03	36.5	.00			422													
	495	6.46	6.41	34.258	26.914	120.4	.832	.57	8.3	72.1	3.13	38.1	.00			49*5													
	500 ISL	6.42	6.38	34.259	26.919	120.0	.838	.56	8.1							504													
1	570	6.00	5.95	34.289	26.998	113.1	.920	.39	5.6	80.1	3.24	39.4	.00			574													

RV NEW HORIZON CALCOFI CRUISE 8508 STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE		
33 14.4 N	121 26.8 W	17/08/85	1443 GMT	3879 M	320	07 KT	320 03 05	1	1013.9 MR	16.9 C	14.8 C	7/8		SC		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0 ISL	17.39	17.39	33.165	24.014	388.7	.000	5.67	103.3							0
1	1	17.39	17.39	33.165	24.014	388.7	.004	5.67	103.3	1.5	.37	.2	.00	.10	.01	1
1	10	17.39	17.39	33.163	24.015	389.0	.039	5.66	103.2	1.4	.36	.1	.00	.11	.01	10
	20 ISL	17.31	17.31	33.161	24.031	387.8	.078	5.70	103.7							20
1	22	17.30	17.30	33.161	24.034	387.5	.085	5.71	103.9	1.4	.36	.1	.00	.12	.01	22
	30 ISL	16.98	16.98	33.207	24.145	377.2	.116	5.79	104.8							30
1	31	16.91	16.90	33.210	24.165	375.4	.119	5.81	104.9	1.4	.36	.1	.00	.16	.02	31
1	41	15.02	15.01	33.158	24.550	338.9	.155	6.21	108.0	1.6	.36	.1	.00	.20	.03	41
	50 ISL	13.70	13.69	33.153	24.825	313.0	.185	6.46	109.2							50
1	52	13.49	13.48	33.152	24.867	308.9	.190	6.48	109.2	1.7	.39	.1	.00	.22	.05	52
1	62	12.68	12.67	33.164	25.035	293.0	.220	6.38	105.7	2.0	.42	.1	.06	.32	.17	62
1	72	12.09	12.08	33.168	25.152	282.2	.249	6.18	101.1	2.7	.51	1.0	.02	.32	.21	72
	75 ISL	12.00	11.99	33.181	25.179	279.6	.258	6.06	99.0							76
1	88	11.74	11.73	33.254	25.284	269.9	.293	5.57	90.5	4.5	.65	4.6	.01	.17	.16	88
	100 ISL	11.31	11.29	33.343	25.433	255.9	.325	5.23	84.2							101
1	103	11.21	11.19	33.363	25.467	252.8	.332	5.16	83.0	7.8	.90	9.0	.01	.09	.11	103
1	124	10.36	10.34	33.549	25.761	225.2	.384	4.39	69.4	15.1	1.33	16.2	.01	.04	.05	125
	125 ISL	10.33	10.32	33.554	25.770	224.4	.386	4.38	69.2							126
1	1*9	9.31	9.29	33.743	26.088	194.4	.436	4.06	62.8	21.0	1.55	19.6	.00	.01	.02	150
	150 ISL	9.29	9.27	33.748	26.095	193.7	.438	4.04	62.5							151
1	180	8.62	8.60	33.904	26.323	172.5	.493	3.39	51.6	29.6	1.85	24.8	.00			181
	200 ISL	8.26	8.24	33.959	26.420	163.5	.526	3.12	47.2							201
1	210	8.11	8.09	33.975	26.456	160.2	.542	3.02	45.5	35.5	2.06	27.3	.00			211
1	242	7.64	7.62	33.998	26.543	152.3	.592	2.76	41.1	40.9	2.20	29.3	.00			243
	250 ISL	7.53	7.50	34.007	26.567	150.2	.605	2.65	39.4							252
1	282	7.12	7.09	34.041	26.651	142.5	.652	2.18	32.1	49.6	2.45	32.4	.00			284
	300 ISL	6.87	6.85	34.048	26.690	138.9	.677	1.96	28.7							302
1	343	6.36	6.33	34.063	26.771	131.6	.735	1.49	21.6	61.5	2.76	36.0	.00			345
	400 ISL	6.04	6.01	34.119	26.856	124.0	.808	.98	14.1							403
1	419	5.97	5.94	34.141	26.882	121.8	.832	.84	12.0	72.3	3.04	38.7	.00			422
1	495	5.57	5.53	34.205	26.983	112.8	.920	.48	6.8	82.0	3.22	40.0	.00			498
	500 ISL	5.54	5.50	34.209	26.990	112.2	.926	.46	6.6							504
1	570	5.18	5.13	34.272	27.083	103.9	1.002	.33	4.6	91.4	3.32	41.7	.00			574

RV MEM HORIZON CALCOFI CRUISE 8508 STATION 87 33

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER		BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE	
33 53.4 N	118 29.4 W	16/08/85	0514	GMT	59 M	260	07 KT			1009.4 MB	18.3 C	17.0 C				
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	U6/L	U6/L	D.BAR
1	10	15.62	15.62	33.477	24.662	327.3		6.32	111.5	4.5	.66	.6	.06	1.08	.21	10

RV NEW HORIZON

CALCOFI CRUISE 8508

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STATION 8? 35

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WBATHER		BAROMETER		DRY		WET		CLOUD		AMI		TYPE	
33 49.3 N		118 37.6 W		16/08/85		0740 GMT		650 M		260		05 KT						1009.9 MB		18.1 C		16.6 C							
CAST	DEPTH	TEMP	POT	TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	SI03	P04	N03	N0?	CHL-A	PHAE0	PRESS											
	M	DEG C	DEG C			THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR											
1	0 ISL	18.39	18.39		33.56.9	24.081	382.9	.000		6.04	112.5																		0
	1	18.39	18.39		33.569	24.081	382.4	.004		6.04	112.5																		1
1	10 ISL	18.13	18.13		33.557	24.136	377.4	.038		6.21	115.1		2.7	.30	.0	.00	.33	.04											in
	11	18.10	13.10		33.555	24.142	376.9	.042		6.24	115.6		2.8	.29	.0	.00	.37	.06											11
1	20 ISL	14.53	14.52		33.52?	24.936	302.6	.072		6.68	115.3																		20
	22	13.76	13.76		33.515	25.091	286.8	.078		6.74	114.5		2.9	.32	.0	.00	.35	.08											22
1	30 ISL	13.39	13.38		33.502	25.157	280.7	.101		6.39	107.6																		30
	32	13.30	13.29		33.500	25.173	279.2	.106		6.25	105.1		5.7	.52	1.5	.17	1.01	.23											32
1	43	12.57	12.57		33.512	25.326	264.9	.136		5.44	90.1		7.7	.79	5.8	.43	.34	.38											43
	50 ISL	11.94	11.93		33.545	25.472	251.1	.154		4.70	76.8																		50
1	53	11.70	11.70		33.561	25.529	245.8	.161		4.43	72.1		12.0	1.23	12.3	.83	.32	.21											53
	63	11.17	11.16		33.624	25.675	232.0	.185		3.93	63.2		15.3	1.39	16.1	.04	.09	.22											63
1	74	10.82	10.81		33.672	25.776	222.8	.210		3.65	58.3		18.2	1.51	17.9	.02	.08	.16											74
	75 ISL	10.80	10.79		33.676	25.783	222.1	.213		3.62	57.8																		76
1	89	10.61	10.60		33.710	25.842	216.8	.243		3.36	53.4		20.4	1.62	19.5	.01	.05	.15											f.9
	100 ISL	10.41	10.39		33.745	25.906	210.9	.267		3.27	51.9																		101
1	104	10.33	10.32		33.759	25.930	208.7	.277		3.26	51.5		21.8	1.69	20.6	.02	.04	.09											105
	125	10.14	10.13		33.799	25.993	203.1	.320		3.23	50.9		23.3	1.77	21.8	.01	.04	.03											126
1	150	9.77	9.76		33.960	26.181	185.8	.368		2.61	40.8		28.5	1.99	24.7	.00	.01	.06											151
	182	9.50	9.48		34.052	26.298	175.2	.425		2.29	35.6		32.1	2.16	26.4	.00													183
1	200 ISL	9.43	9.40		34.105	26.353	170.4	.456		2.11	32.8																		201
	213	9.36	9.34		34.136	26.388	167.4	.478		2.01	31.2		34.9	2.29	27.6	.00													214
1	244	9.1?	9.00		34.159	26.461	160.9	.529		1.96	30.2		37.4	2.35	28.3	.01													245
	250 ISL	8.8B	8.85		34.151	26.477	159.4	.539		1.97	30.2																		252
1	285	R.14	*.11		34.117	26.564	151.4	.594		2.00	30.2		43.0	2.42	30.2	.01													257
	300 ISL	8.17	8.14		34.162	26.595	148.8	.616		1.78	26.8																		302
1	346	3.25	8.21		34.285	26.681	141.6	.682		.97	14.7		50.2	2.78	32.2	.00													348
	400 ISL	7.75	7.71		34.285	26.756	134.3	.757		.78	11.7																		403
1	423	7.46	7.42		34.285	26.797	131.4	.788		.70	10.4		59.4	2.97	34.9	.00													426
	500	6.74	6.70		34.310	26.917	120.6	.884		.39	5.7		69.9	3.14	37.4	.00													503
1	577	6.07	6.02		34.320	27.013	111.8	.974		.30	4.3		80.0	3.26	39.0	.00													551

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 87 4C

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND		SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLCUD		AMT		TYPE	
33 39.3 N		118 5ft.4 W		16/08/35		1314 GMT		723 M		170		07 KT						1010.6 MB		18.0 C		15.7 C							
CAST	DEPTH	TEMP	POT	TEMP	SALTNTTY	SIGMA	SVA	DYN	HI	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS											
	M	DEC	DEG	DEG		THETA				ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR											
1	0	20.17	20.17		33.631	23.675	421.0		.000	5.58	107.5	1.7	.28	.0	.00	.13	.02	1											0
1	16	20.02	20.02		33.616	23.704	418.7		.042	5.65	108.5	1.7	.27	.0	.00	.14	.02	10											10
	20 ISL	18.59	18.59		33.559	24.024	388.5		.082	5.98	111.8							20											20
1	22	18.16	18.15		33.545	24.122	379.2		.090	6.08	112.7	1.8	.30	.0	.00	.23	.06	22											22
	30 ISL	15.50	15.50		33.507	24.713	323.1		.118	6.69	117.7							30											30
1	32	14.87	14.87		33.505	24.849	310.2		.124	6.78	117.8	1.8	.31	.0	.00	.27	.07	32											32
1	42	13.01	13.00		33.449	25.192	277.6		.153	6.07	101.5	3.8	.55	3.0	.06	1.06	.27	42											42
	50 ISL	12.5?	12.51		33.494	25.322	265.4		.175	5.59	92.5							50											50
1	54	12.42	12.42		33.522	25.363	261.7		.185	5.38	88.9	6.9	.79	7.0	.31	.60	.28	54											54
1	65	11.72	11.71		33.570	25.534	245.6		.213	4.70	76.5	10.6	1.06	11.6	.30	.31	.30	65											65
1	74	10.08	10.97		33.651	25.731	226.9		.234	3.97	63.6	15.9	1.36	16.4	.03	.13	.15	74											74
	75 ISL	10.90	10.90		33.659	25.750	225.2		.237	3.91	62.6							76											76
1	91	10.30	10.29		33.738	25.918	209.5		.271	3.45	54.5	21.0	1.61	?n.2	.02	.06	.10	91											91
1	100 ISL	9.94	9.92		33.823	26.046	197.5		.290	3.13	49.2							101											101
1	106	9.73	9.71		33.879	26.125	190.1		.303	2.95	46.1	26.8	1.86	23.5	.01	.01	.08	107											107
1	125	9.46	9.45		33.938	26.214	182.0		.338	2.78	43.2	29.3	1.95	24.8	.01	.01	.05	126											126
1	150 ISL	9.19	9.18		34.019	26.322	172.2		.382	2.54	39.3							151											151
1	151	9.18	9.17		34.023	26.327	171.8		.384	2.53	39.1	32.8	2.09	26.4	.01	.00	.04	152											152
1	183	8.99	8.97		34.113	26.428	162.7		.437	2.15	33.1	37.0	2.25	27.9	.01			184											184
1	200 ISL	8.87	8.85		34.147	26.475	158.7		.464	1.97	30.2							201											201
1	213	8.79	8.77		34.171	26.506	156.0		.484	1.83	28.0	40.1	2.40	29.1	.01			214											214
1	244	8.73	8.70		34.234	26.565	150.9		.532	1.42	21.7	43.5	2.55	30.3	.01			245											245
1	250 ISL	8.71	8.68		34.241	26.574	150.1		.541	1.37	20.9							252											252
1	284	8.53	8.50		34.263	26.620	146.4		.592	1.16	17.7	46.7	2.67	31.2	.00			286											286
1	300 ISL	8.41	8.38		34.275	26.647	144.1		.615	1.05	16.0							302											302
1	346	7.99	7.96		34.297	26.729	136.9		.679	.79	11.9	54.0	2.84	33.2	.00			348											348
1	400 ISL	7.31	7.27		34.281	26.815	12<->.1		.751	.64	9.5							403											403
1	420	7.06	7.02		34.275	26.846	126.4		.777	.61	9.0	64.6	3.02	36.2	.00			423											423
1	497	6.48	6.44		34.298	26.942	117.8		.870	.45	6.5	74.9	3.15	37.9	.00			500											500
	500 ISL	6.46	6.41		34.299	26.946	117.5		.874	.44	6.4							504											504
1	574	5.97	5.91		34.323	27.029	110.2		.959	.34	4.9	82.7	3.26	39.4	.00			578											578

RV NEW HORIZON

CALCOFI CRUISE 8508

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT		TYPE	
33 15.2	118 15.3 U	15/08/85		1639		GMT		519 M		280 09	KT	280	03 05	1		1013.4	MB K	.8 C	17.0 C					7/8	CU		
CST	DEPTH	TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS						
	M	DEG C		DEG C				THETA				HL/L		KT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.8AR						
	0	IS	21.02	21.02	33.697	23.497	438.1			.000	5.44	106.5														0	
A	1		21.02	21.02	33.697	23.497	438.1			.004	5.44	106.5			1.3	.20	.0	.00	.15	.03						1	
	10	I SI	21.02	21.02	33.697	23.499	438.2			.044	5.51	107.9														10	
1	11		21.02	21.01	33.697	23.500	438.2			.048	5.52	108.0			1.1	.19	.0	.00	.16	.02						11	
	20	IS	18.67	18.67	33.576	24.019	389.0			.085	6.10	114.2					.0	.00								20	
	30	IS	15.66	15.66	33.545	24.707	326.2			.121	6.59	116.3														30	
1	34		14.38	14.38	33.514	24.961	299.5			.133	6.73	115.8			2.2	.30	.0	.00	.32	.10						34	
1	49		12.61	12.60	33.533	25.335	264.2			.175	5.81	96.4			6.0	.61	3.5	.19	.82	.23						49	
	50	IS	12.50	12.49	33.537	25.360	261.8			.179	5.67	93.9														50	
1	60		11.71	11.71	33.578	25.540	244.9			.203	4.58	74.5			10.9	1.08	11.6	.39	.35	.33						60	
	75	IS	10.96	10.95	33.646	25.731	227.0			.239	3.85	61.6														76	
1	76		10.93	10.92	33.649	25.738	226.4			.241	3.83	61.3			15.7	1.41	16.8	.04	.20	.21						76	
1	91		10.33	10.31	33.742	25.917	209.7			.273	3.36	53.1			20.9	1.66	20.3	.01	.09	.14						91	
	100	IS	9.88	9.87	33.756	26.003	201.6			.293	3.44	53.9														101	
1	105		9.64	9.63	33.761	26.046	197.5			.304	3.52	54.8			23.6	1.74	22.1	.00	.02	.05						106	
	125	IS	9.27	9.25	33.837	26.168	186.3			.341	3.23	49.9														126	
1	132		9.23	9.21	33.881	26.208	182.6			.355	3.04	46.9			28.5	1.94	24.4	.00	.00	.03						133	
	150	IS	9.21	9.20	34.028	26.326	171.8			.386	2.60	40.2														151	
1	152		9.21	9.19	34.045	26.340	170.6			.390	2.54	39.2			32.7	2.14	26.4	.00	.00	.03						153	
1	182		9.42	9.40	34.205	26.431	162.6			.439	1.64	25.5			37.1	2.40	28.5	.00	.00	.04						183	
	200	IS	9.20	9.17	34.215	26.476	158.0			.468	1.60	24.8														201	
1	213		8.98	8.96	34.222	26.516	155.1			.488	1.58	24.3			40.5	2.53	29.3	.00	.00	.03						214	
1	249		8.64	8.61	34.232	26.578	149.7			.543	1.45	22.1			44.2	2.59	30.6	.00								250	
	250	IS	8.63	8.60	34.233	26.580	149.5			.545	1.44	22.0														252	
	300	IS	8.33	8.30	34.270	26.656	143.2			.618	1.10	16.7														302	
1	304		8.31	8.28	34.273	26.661	142.8			.624	1.07	16.2			49.1	2.76	32.0	.00								306	
1	362		8.14	8.10	34.310	26.718	138.4			.705	.81	12.2			52.7	2.88	32.8	.00								364	
	400	IS	7.84	7.80	34.310	26.762	134.5			.757	.69	10.4															403
1	426		7.56	7.52	34.305	26.799	131.4			.792	.64	9.5			58.8	2.99	34.8	.00								429	

RV NEW HORIZON

CALCOFI CRUISE 8508

ATTITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	LOUD	T				
33 10.9	118 23.8 W	15/08/85	1409	1147 M	270 09	KT 290	02 05	1	1013.3	MB 18	.8 C	16.5 C	7/8 SC			
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRFSS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	1	IS	20.86	20.86	33.686	23.533	434.6	.000	5.46	106.6						0
1	1		20.86	20.86	33.686	23.533	434.7	.004	5.46	106.6	1.2	.22	.2	.00	.16	.04
	10	IS	20.87	20.87	33.684	23.528	435.5	.044	5.51	107.5						1
1	12		20.88	20.87	33.683	23.527	435.6	.052	5.52	107.7	1.2	.20	.2	.00	.16	.03
	20	IS	20.04	20.04	33.638	23.715	418.0	.086	5.77	110.9						12
1	23		19.74	19.73	33.624	23.784	411.6	.099	5.92	113.1	1.1	.21	.2	.00	.21	.05
	30	IS	16.44	16.44	33.613	24.582	336.8	.125	6.54	117.4						23
1	32		15.49	15.48	33.610	24.795	315.3	.131	6.65	117.1	1.2	.33	.2	.00	.44	.12
1	44		12.42	12.41	33.664	25.473	250.9	.165	5.25	86.8	6.3	.89	7.1	.25	.84	.43
	50	IS	11.57	11.56	33.681	25.646	234.5	.180	4.33	70.2						44
1	53		11.39	11.29	33.684	25.698	229.6	.186	3.96	63.9	13.2	1.34	15.0	.48	.46	.25
1	63		10.59	10.58	33.704	25.841	216.3	.209	3.56	56.6	18.3	1.54	19.2	.04	.20	.18
1	73		10.39	10.38	33.722	25.889	211.8	.230	3.51	55.6	19.9	1.60	20.0	.04	.13	.15
	75	IS	10.33	10.32	33.732	25.908	210.1	.235	3.48	55.1						73
1	89		9.98	9.97	33.796	26.018	199.9	.263	3.29	51.6	23.5	1.74	22.0	.02	.06	.08
	100	IS	9.86	9.85	33.826	26.061	196.1	.285	3.13	49.0						76
1	104		9.82	9.81	33.837	26.077	194.6	.294	3.07	48.0	25.2	1.82	23.2	.01	.03	.07
1	124		9.29	9.28	33.929	26.236	179.9	.331	2.89	44.7	29.6	1.96	25.2	.01	.01	.04
	125	IS	9.27	9.26	33.930	26.239	179.6	.332	2.89	44.6						101
	150	IS	8.89	8.88	33.975	26.335	170.8	.376	2.73	41.8						105
1	151		8.88	8.86	33.976	26.338	170.6	.378	2.72	41.7	32.9	2.07	26.8	.01	.00	.02
1	182		8.52	8.50	34.030	26.437	161.7	.429	2.62	39.9	36.2	2.13	27.9	.01		152
	200	IS	8.39	8.37	34.067	26.486	157.4	.458	2.46	37.4						183
1	212		8.36	8.34	34.100	26.516	154.8	.476	2.28	34.6	40.2	2.31	29.3	.01		201
1	243		8.62	8.59	34.244	26.590	148.4	.523	1.35	20.6	44.7	2.56	30.9	.03		213
	250	IS	8.61	8.59	34.259	26.603	147.4	.534	1.25	19.1						244
1	282		8.47	8.44	34.287	26.648	143.7	.581	1.05	16.0	47.9	2.71	31.8	.01		252
	300	IS	8.40	8.37	34.303	26.671	141.8	.606	.92	14.0						284
1	345		8.13	8.10	34.324	26.729	137.0	.669	.67	10.1	53.5	2.86	33.4	.00		302
	400	IS	7.46	7.42	34.292	26.803	130.5	.743	.64	9.5						347
1	420		7.20	7.16	34.280	26.830	128.0	.769	.63	9.3	62.6	2.98	36.0	.00		403
1	498		6.62	6.57	34.320	26.941	118.1	.864	.36	5.2	72.6	3.14	38.0	.00		423
	500	IS	6.60	6.56	34.320	26.943	117.9	.867	.36	5.2						501
1	573		6.13	6.08	34.319	27.005	112.6	.951	.32	4.6	79.9	3.20	39.6	.00		504

RV NEW HORIZON

CALCOFI CRUISE 8508

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE			
32 55.4	118 57.7 U	15/08/85	0736	6MT	1694 M	300 13 XT	0	1014.2	MB 18	.0 C	16.1 C	0/8				
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYSEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	N	DEC C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	US/L	UG/L	D.BAR
	0	ISL	19.33	19.33	33.668	23.920	397.9	.000	5.67	107.6						0
1	1	19.33	19.33	33.668	23.920	397.7	.004	5.67	107.6	1.8	.31	.0	.00	.12	.01	1
	10	ISL	19.26	33.671	23.942	396.0	.040	5.74	108.7							10
1	11	19.25	19.25	33.671	23.944	395.8	.044			1.7	.30	.0	.00	.12	.01	11
	20	ISL	18.70	33.690	24.098	381.5	.079	5.82	109.0							20
1	22	18.58	18.58	33.694	24.130	378.4	.086	5.83	109.1	1.8	.30	.0	.00	.12	.02	22
	30	ISL	15.95	33.601	24.684	325.8	.114	6.22	110.4							30
1	32	15.28	15.28	33.586	24.822	312.7	.120	6.29	110.2	2.6	.36	.0	.01	.40	.10	32
1	42	13.38	13.37	33.548	25.195	277.4	.150	6.01	101.3	5.0	.59	3.4	.09	.67	.16	42
	50	ISL	12.29	33.527	25.392	258.8	.172	5.51	90.7							50
1	53	12.02	12.01	33.523	25.440	254.2	.179	5.32	87.1	8.3	.96	9.2	.33	.60	.26	53
1	63	11.52	11.51	33.555	25.559	243.2	.204	4.84	78.4	10.7	1.17	12.5	.16	.39	.22	63
1	73	10.65	10.65	33.634	25.775	222.7	.227	4.30	68.4	16.2	1.45	17.3	.05	.20	.12	73
	75	ISL	10.55	33.649	25.806	219.9	.232	4.23	67.2							76
1	89	10.19	10.18	33.718	25.922	209.1	.261	3.92	61.8	21.0	1.65	20.2	.02	.11	.08	89
	100	ISL	9.95	33.766	26.000	201.9	.284	3.45	54.1							101
1	104	9.88	9.86	33.781	26.023	199.7	.291	3.31	51.8	23.8	1.79	22.1	.02	.05	.06	104
1	124	9.25	9.24	33.906	26.224	181.0	.331	2.89	44.7	29.4	1.99	24.9	.01	.01	.04	125
	125	ISL	9.24	33.910	26.229	180.5	.332	2.88	44.5							126
1	150	9.00	" .98	34.060	26.385	166.2	.376	2.44	37.5	34.6	2.19	27.1	.01	.01	.03	151
1	181	5.81	8.79	34.118	26.461	159.5	.426	2.13	32.6	37.9	2.31	28.3	.01			182
	200	ISL	8.58	34.128	26.505	155.6	.456	2.06	31.4							201
1	212	8.43	8.41	34.135	26.533	153.1	.474	2.00	30.4	41.5	2.42	29.5	.01			213
1	242	8.21	8.18	34.196	26.616	145.8	.519	1.55	23.4	46.6	2.60	31.2	.01			243
	250	ISL	8.19	34.216	26.634	144.3	.531	1.44	21.8							252
1	283	8.14	8.11	34.284	26.695	139.0	.578	1.09	16.5	51.0	2.83	32.5	.02			285
	300	ISL	7.99	34.295	26.727	136.3	.601	.98	14.8							302
1	344	7.51	7.48	34.297	26.798	129.9	.660	.80	11.9	59.3	3.00	34.8	.01			346
	400	ISL	7.11	34.298	26.856	125.0	.731	.62	9.1							403
1	421	6.97	6.93	34.299	26.876	123.4	.758	.56	8.2	66.0	3.12	36.5	.00			424
1	493	6.28	6.24	34.310	26.978	114.3	.848	.37	5.4	76.0	3.24	38.7	.00			501
	500	ISL	6.26	34.311	26.981	114.0	.851	.37	5.3							504
1	574	5.79	5.74	34.353	27.074	105.7	.932	.27	3.9	84.3	3.33	40.1	.00			578

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 90 53

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE			
32 38.8	119 29.3 W	14/08/85	2132	GMT	1310 M	290 11	KT 320	03 07	0	1017.0	MB 18.4	C 16.1	C	0/8		
CAST	DEPTH	TE*P	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEC C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	O.BAR
1	0	18.89	11.89	33.711	24.066	383.8	.000	5.57	104.8	1.9	.34	.0	.12	.16	.02	0
1	1?	18.74	18.73	33.705	24.100	381.9	.038	5.61	105.2	1.9	.34	.1	.01	.15	.02	10
1	20	16.96	16.96	33.666	24.501	343.0	.074	6.06	109.9	3.3	.38	.1	.00	.45	.11	20
	30	IS	14.12	33.601	25.083	287.7	.106	5.80	99.3							30
1	31	13.88	13.87	33.599	25.132	283.1	.108	5.78	98.5	6.5	.70	5.0	.14	.67	.25	31
1	41	12.39	12.38	33.596	25.427	255.3	.135	5.12	84.6	9.9	1.02	9.9	.28	.64	.31	41
	50	IS	11.43	33.651	25.649	234.3	.158	4.33	70.1							50
1	51	11.37	11.37	33.656	25.663	232.9	.159	4.27	69.0	14.5	1.36	14.9	.20	.35	.22	51
1	61	11.14	11.13	33.670	25.716	228.2	.182	4.06	65.3	15.7	1.45	16.2	.14	.26	.19	61
1	71	10.42	10.41	33.733	25.893	211.5	.204	3.49	55.3	20.4	1.69	20.1	.03	.13	.13	71
	75	IS	10.33	33.739	25.912	209.7	.213	3.48	55.1							76
1	87	10.19	10.18	33.755	25.950	206.3	.237	3.46	54.5	22.0	1.74	21.0	.02	.04	.17	87
	100	IS	9.47	33.861	26.153	187.3	.264	3.03	47.1							101
1	102	9.39	9.3?	33.873	26.176	185.1	.267	2.98	46.2	28.6	1.99	24.7	.01	.02	.04	102
1	121	9.17	9.15	33.945	26.268	176.8	.303	2.68	41.4	31.7	2.09	26.2	.01	.01	.05	122
	125	IS	9.14	33.957	26.282	175.5	.309	2.65	40.8							126
1	146	8.97	8.95	34.020	26.359	168.6	.346	2.49	38.3	34.1	2.20	27.2	.04	.00	.04	147
1	150	IS	8.93	34.031	26.374	167.2	.352	2.45	37.6							151
1	176	8.61	8.59	34.093	26.473	158.3	.394	2.18	33.2	38.7	2.34	28.9	.04			177
	200	IS	8.29	34.108	26.533	152.9	.432	2.03	30.7							201
1	206	8.23	8.20	34.109	26.544	151.9	.440	2.00	30.2	42.4	2.43	30.1	.05			207
1	236	8.04	8.01	34.113	26.576	149.3	.485	1.89	28.4	45.0	2.49	31.0	.08			237
	250	IS	7.81	34.120	26.614	145.9	.507	1.78	26.6							252
1	275	7.40	7.38	34.137	26.687	139.2	.543	1.54	22.8	52.6	2.68	33.4	.02			277
	300	IS	7.23	34.165	26.734	135.0	.576	1.30	19.2							302
1	334	7.09	7.06	34.203	26.783	130.8	.622	1.00	14.7	60.6	2.90	35.5	.00			336
	400	IS	6.71	34.238	26.864	124.0	.706	.68	9.9							403
1	408	6.65	6.62	34.241	26.873	123.2	.716	.65	9.5	68.2	3.06	37.3	.00			411
1	484	6.11	6.06	34.282	26.977	113.9	.806	.40	5.8	77.8	3.20	39.1	.00			487
	500	IS	5.98	34.282	26.994	112.2	.824	.39	5.7							504
1	560	5.49	5.44	34.277	27.051	107.2	.890	.37	5.2	87.1	3.20	40.9	.00			564

RV NEW HORIZON

CALCOFI CRUISE 8508

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMI		TYPE							
32 31.9 N		119 43.2 W		14/08/85		1924		GMT																									
CAST		DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		NO 3		NO?		CHL-A		PHAE0		PRESS	
		M		DEG C		DEG C				THETA						ML/L		PCT		UM/L		UM/L		UM/L		UM/L		UG/L		UG/L		D.BAR	
		0		ISL		17.28		17.28		33.686		24.441		355.2		.000		5.77		105.3										0			
1	2	A	17.28	17.28																													
	10	ISL	16.19	16.19																													
1	12	A	15.99	15.99																													
	16	A	15.67	15.67																													
	20	ISL	15.58	15.58																													
1	23	A	15.48	15.47																													
	30	ISL	14.04	14.03																													
1	38	A	12.25	12.25																													
	50	ISL	11.89	11.89																													
1	58	A	11.66	11.66																													
	63		11.54	11.53																													
1	73		10.97	10.96																													
	75	ISL	10.90	10.89																													
1	89		10.56	10.55																													
	100	ISL	10.07	10.06																													
1	103		9.91	9.90																													
	124		9.17	9.16																													
	125	ISL	9.16	9.14																													
1	145		8.79	8.78																													
	150	ISL	8.70	8.69																													
	175		8.25	8.23																													
1	200	ISL	7.91	7.89																													
	205		7.26	7.84																													

A. PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THE FIRST SIX DEPTHS ON THIS CAST.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 90

ATTITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE				
2 24.7	119 57.9 W	14/08/85	1625	GMT	830 M	270 08	KT 320	03 05	0	1017.0	MS	17.5 C	1*0 C	0/8			
AST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	NO 2	CHL-A	PHAE0	PRESS	
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
	0	ISL	16.50	16.50	33.335	24.353	356.9	.000	5.95	106.7						0	
1	1		16.50	16.50	33.335	24.353	356.4	.004	5.95	106.7	1.7	.40	.1	.00	.15	.01	1
	10	ISL	16.22	16.22	33.338	24.421	350.2	.035	6.01	107.1							10
1	11		16.19	16.19	33.341	24.430	349.4	.039	6.01	107.1	1.3	.40	.1	.00	.15	.01	11
	20	ISL	15.94	15.94	33.402	24.534	339.8	.070	6.03	106.9							20
1	22		15.88	15.88	33.418	24.559	337.5	.076	6.03	106.9	1.2	.44	.0	.00	.14	.03	22
	30	ISL	15.60	15.60	33.466	24.659	328.1	.103	6.11	107.6							30
1	32		15.49	15.48	33.468	24.686	325.6	.109	6.12	107.6	1.0	.42	.1	.00	.20	.09	32
	42		14.19	14.18	33.354	24.879	307.5	.141	6.08	104.1	1.8	.50	.4	.03	.63	.21	42
	50	ISL	13.35	13.34	33.311	25.017	294.5	.166	6.01	101.1							50
1	52		13.17	13.16	33.303	25.047	291.7	.171	5.99	100.4	2.9	.61	1.7	.09	.40	.22	52
1	62		12.01	12.01	33.246	25.226	274.8	.199	5.74	93.8	3.8	.68	3.8	.16	.33	.21	62
	72		11.26	11.25	33.330	25.431	255.5	.225	5.26	84.6	7.4	.95	8.7	.13	.20	.18	72
	75	ISL	11.09	11.08	33.361	25.485	250.4	.234	5.14	82.5							76
1	88		10.66	10.65	33.488	25.661	234.0	.264	4.75	75.5	13.4	1.34	15.5	.05	.05	.06	88
	100	ISL	10.43	10.41	33.615	25.800	221.0	.292	4.31	68.2							101
1	103		10.38	10.37	33.639	25.827	218.4	.298	4.21	66.6	17.5	1.56	19.1	.02	.03	.04	103
1	122		9.66	9.64	33.798	26.074	195.3	.339	3.23	50.3	24.7	1.81	23.7	.01	.01	.05	123
	125	ISL	9.57	9.56	33.807	26.095	193.3	.344	3.22	50.2							126
1	148		8.91	8.89	33.854	26.239	180.0	.388	3.18	48.7	28.5	1.91	25.3	.01	.00	.04	149
	150	ISL	8.86	8.85	33.858	26.249	179.1	.391	3.17	48.6							151
1	178		8.34	8.32	33.926	26.383	166.7	.439	3.06	46.3	32.9	2.02	27.0	.01			179
	200	ISL	8.12	8.10	33.970	26.451	160.6	.475	3.03	45.7							201
1	208		8.07	8.05	33.986	26.471	158.8	.488	3.02	45.5	36.0	2.06	27.6	.01			209
1	239		7.98	7.96	34.072	26.551	151.7	.535	2.20	33.1	42.4	2.37	30.4	.01			240
	250	ISL	7.96	7.94	34.103	26.579	149.3	.553	1.95	29.3							252
1	278		7.91	7.88	34.177	26.646	143.4	.594	1.45	21.8	48.1	2.54	32.4	.01			280
	300	ISL	7.64	7.61	34.181	26.688	139.0	.625	1.24	18.5							302
1	339		7.08	7.04	34.188	26.773	131.9	.677	1.02	15.0	58.7	2.76	35.7	.01			341
	400	ISL	6.63	6.60	34.212	26.853	124.9	.756	.74	10.7							403
1	414		6.56	6.52	34.221	26.870	123.4	.774	.68	9.9	67.5	2.93	37.9	.00			417
1	490		6.01	5.97	34.288	26.994	112.2	.863	.37	5.3	78.2	3.11	39.9	.00			493
	500	ISL	5.96	5.91	34.295	27.007	111.2	.874	.36	5.2							504
1	565		5.74	5.69	34.319	27.053	107.4	.945	.29	4.1	83.3	3.18		.00			569

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 90 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE		
2 05.2 N	120 39.5 W	14/08/85	1006	3769 M	280 08	XT	0	1017.4	MB 17	.7 C	16.0 C	0/8			
AST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO2	CHL-A	PHAE0	PRESS
M	DE6 C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/t	UG/L	D.BAR
1 0	17.29	17.29	33.607	24.376	354.2	.000	5.73	104.5	1.7	.32	.1	.00	.11	.01	0
1 10	16.78	16.78	.33.588	24.484	344.3	.035	5.78	104.4	1.7	.3*	.0	.00	.09	.02	10
1 20	16.57	16.57	33.576	24.522	340.9	.069	5.80	104.2							20
1 22	16.54	16.53	33.574	24.530	340.3	.076	5.80	104.2	1*7	.34	.0	.00	.1*	.05	22
1 30	14.82	14.81	33.392	24.774	317.3	.102	6.07	105.3							30
1 31	14.61	14.61	33.373	24.803	314.5	.105	6.10	105.3	1.9	.39	.1	.01	.33	.14	31
1 41	13.28	13.27	33.282	25.008	295.1	.135	6.08	102.1	2.8	.49	1.1	.07	.35	.12	41
1 50	12.50	12.49	33.278	25.159	281.2	.162	5.94	98.2							50
1 52	12.40	12.39	33.277	25.178	279.2	.167	5.91	97.4	4.0	.62	3.2	.19	.31	.14	52
1 62	12.16	12.15	33.296	25.237	273.8	.194	5.75	94.3	4.9	.71	4.6	.24	.36	.19	62
1 72	11.87	11.86	33.361	25.342	264.0	.227	5.41	88.2	6.8	.83	7.1	.23			72
1 75	11.79	11.78	33.367	25.362	262.1	.230	5.36	87.3							76
1 88	11.43	11.42	33.392	25.448	254.2	.262	5.17	83.5	8.3	.93	9.0	.09	.17	.19	88
1 100	10.94	10.93	33.492	25.615	238.7	.293	4.70	75.2							101
1 104	10.77	10.76	33.526	25.670	233.4	.301	4.54	72.4	13.3	1.21	14.1	.03	.08	.12	104
1 123	9.60	9.58	.33.725	26.026	199.8	.344	3.69	57.4	22.8	1.65	21.6	.01	.01	.04	124
1 125	9.55	9.53	33.738	26.045	198.1	.347	3.65	56.7							126
1 149	9.04	9.03	33.883	26.240	179.9	.393	3.24	49.8	28.4	1.84	24.2	.01	.00	.03	150
1 150	9.03	9.01	33.886	26.245	179.5	.395	3.23	49.6							151
1 180	8.49	8.47	33.996	26.415	163.8	.446	2.74	41.6	35.2	2.08	27.1	.01			181
1 200	8.08	8.06	34.020	26.496	156.3	.478	2.66	40.0							201
1 211	7.87	7.85	34.028	26.532	152.9	.495	2.61	39.1	40.7	2.19	29.0	.00			212
1 242	7.49	7.47	34.069	26.620	145.0	.541	2.09	31.1	47.4	2.41	31.4	.01			243
1 250	7.39	7.37	34.075	26.639	143.3	.553	1.98	29.3							252
1 282	7.07	7.04	34.102	26.706	137.3	.598	1.62	23.8	54.4	2.61	33.9	.00			284
1 300	7.00	6.97	34.134	26.741	134.2	.622	1.47	21.7							302
1 345	6.88	6.85	34.218	26.823	127.1	.681			63.6	2.91	36.4	.00			347
1 400	6.55	6.52	34.269	26.908	119.6	.749	.92	13.4							403
1 421	6.42	6.38	34.280	26.935	117.3	.774	.82	11.9	73.1	3.10	38.1	.00			424
1 497	6.09	6.04	34.302	26.996	112.3	.860	.35	5.0	79*4	3.18	39.3	.00			500
1 500	6.07	6.03	34.304	26.999	112.1	.864	.35	5.0							504
1 575	5.75	5.70	34.322	27.054	107.5	.947	.31	4.4	84.6	3.22	40.2	.00			579

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 90 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	N	WET	CLOUD	AMI	TYPE	
31 44.9	1 21 18.7 W	14/08/85	0415	6HI	srfb n	330 03	KT		u	1016.5	HB IB	.3 C !..../.. C	u/s		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO2	CHL-A	PHAE0	PRESS
«	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0	17.01	17.01	33.386	24.274	364.0	.000	5.77	104.5	1.6	.35	.0	.00	.09	.01	0
1 10	16.62	16.62	33.400	24.376	354.6	.036	5.85	105.2	1.5	.36	.0	.00	.12	.03	10
1 20	15.90	15.90	33.335	24.491	343.8	.071	6.00	106.3	1.5	.40	.0	.00	.16	.04	20
1 30	15.24	15.24	33.290	24.603	333.5	.104	6.11	106.8	1.6	.38	.0	.00	.20	.07	30
1 40	14.78	14.78	33.259	24.678	326.6	.137	6.14	106.3	1.6	.39	.0	.00	.33	.12	40
1 50	13.46	13.45	33.261	24.956	300.4	.168	6.11	103.0	2.4	.49	.9	.05	.33	.21	50
1 60	12.62	12.61	33.272	25.131	283.9	.197	5.92	98.0	3.5	.62	2*7	.13	.29	.23	60
1 71	12.21	12.20	33.312	25.240	273.7	.228	5.97	98.0	4.9	.74	4.9	.20	.24	.22	71
75	12.13	12.12	33.349	25.284	269.6	.240	5.80	95.1							76
1 86	11.94	11.93	33.444	25.394	259.5	.268	5.35	87.4	7.5	.95	8.8	.27	.1*	.15	86
100	11.42	11.41	33.500	25.535	246.3	.304	5.32	86.0							101
101	11.40	11.38	33.502	25.541	245.8	.306	5.32	86.0	10.5	1.15	12.5	.05	.10	.11	101
1 121	10.51	10.49	33.641	25.807	220.8	.354	4.14	65.7	17.0	1.46	18.0	.02	.06	.08	122
1 125	10.36	10.34	33.668	25.854	216.4	.362	3.99	63.2							126
1 146	9.61	9.60	33.814	26.094	193.9	.406	3.34	52.0	25.2	1.80	23.0	.01	.01	.05	147
1 150	9.54	9.53	33.832	26.119	191.6	.413	3.26	50.6							151
1 178	9.17	9.15	33.933	26.259	178.7	.465	2.82	43.5	29.9	1.99	25.5	.01			179
1 200	8.80	8.78	34.003	26.373	168.3	.503	2.69	41.2							201
1 209	8.66	8.64	34.029	26.415	164.4	.518	2.64	40.3	34.9	2.13	27.3	.01			210
1 241	8.33	8.31	34.107	26.527	154.3	.568	2.16	32.7	41.0	2.35	29.6	.01			242
250	8.23	8.20	34.115	26.549	152.3	.583	2.06	31.1							252
1 282	7.83	7.80	34.122	26.614	146.5	.631	1.77	26.5	46.7	2.49	31.6	.00			284
1 300	7.56	7.53	34.123	26.654	142.8	.656	1.63	24.3							302
1 343	6.93	6.90	34.130	26.748	134.2	.716	1.33	19.5	57.7	2.73	34.9	.00			345
1 400	6.52	6.48	34.173	26.837	126.3	.790	1.00	14.6							403
1 421	6.42	6.38	34.192	26.866	123.8	.817	.90	13.1	68.1	2.99	37.7	.00	/		424
1 499	5.90	5.86	34.243	26.972	114.3	.909			78.3	3.16		.00			502
1 500	5.90	5.85	34.244	26.974	114.2	.911	.56	8.1							504
1 573	5.38	5.34	34.285	27.070	105.5	.991	.34	4.8	88.7	3.27		.00			577

RV NEW 1	ORI i	ON	CALC			OFI CRUI	ie 8508			"			:ir< 90 S0		
ATITUDE	LONGITUDE	DAV/MO/YR	MESSENGER	BOTTOM		HIND	SPEED	HAVES	HEATHER	BAROMETER	DRY	HET	CLOUD	ANT	TYPE
1 25.4 N	121 59.9 U	13/03/85	2236	GMT	3815 M	210 03	KT 340	0 5 08	2	1017.9	MB 20	.9 c	18.3 t	8/8	SC
AST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DTN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL^A	PNAEO	PRESS
M	DEG C	DES t		THETA			NL/L	PCT	UN/L	UH/L	UM/L	UM/L	US/L	UC/L	D.BAR
1 0	18.52	18.52	33.440	23.951	394.8	.000	5.54	103.4	2.2	.33	.1	.00	.08	.00	0
1 10	18.20	18.20	33.421	24.016	388.9	.039	5.56	103.1	1.9	.33	.1	.00	.08	.01	10
1 20	18.18	18.17	33.430	24.029	387.9	.078	5.63	104.4							20
1 21	18.17	18.17	33.431	24.030	387.9	.082	5.64	104.5	1.8	.33	.0	.00	.09	.01	21
1 30	17.90	17.89	33.387	24.065	384.9	.117	5.63	103.8							30
1 31	17.85	17.84	33.377	24.068	384.6	.120	5.63	103.6	1.7	.33	.0	.00	.13	.02	31
1 42	16.86	16.86	33.358	24.289	363.9	.161	5.90	106.5	1.7	.34	.0	.00	.19	.04	42
1 50	15.59	15.58	33.368	24.587	335.6	.190	6.07	107.0							50
1 52	15.32	15.31	33.372	24.650	329.7	.196	6.10	106.8	2.0	.35	.0	.00	.26	.10	52
1 63	14.69	14.68	33.354	24.773	318.3	.231	6.06	104.8	2.0	.36	.0	.00	.29	.16	63
1 73	14.01	14.00	33.320	24.890	307.3	.262	6.08	103.7	2.1	.38	.0	.00	.26	.17	73
1 75	13.88	13.87	33.324	24.920	304.5	.269	6.05	102.9							76
1 89	13.27	13.26	33.369	25.079	289.7	.310	5.82	97.8	3.3	.51	.8	.11	.19	.27	89
1 100	12.93	12.91	33.374	25.151	283.1	.342	5.67	94.5							101
1 105	12.79	12.77	33.377	25.181	280.3	.355	5.59	92.9	4.1	.56	2.8	.24	.16	.20	105
1 124	11.77	11.76	33.493	25.465	253.6	.408	4.97	80.9	8.4	.89	2.1	.03	.08	.12	125
1 125	11.75	11.73	33.495	25.471	253.0	.410	4.95	80.6							126
1 150	10.71	10.69	33.597	25.738	228.0	.471	4.22	67.2	14.6	1.25	15.6	.01	.03	.11	151
1 182	9.79	9.77	33.828	26.075	196.5	.538	3.22	50.3	24.2	1.69	22.7	.00			183
1 200	9.40	9.38	33.920	26.212	183.8	.572	2.95	45.8							201
1 213	9.15	9.12	33.970	26.292	176.3	.595	2.84	43.8	30.4	1.90	25.8	.00			214
1 244	8.53	8.50	34.040	26.444	162.2	.647	2.67	40.6	35.9	2.03	27.9	.00			245
1 250	8.43	8.40	34.048	26.467	160.2	.658	2.64	40.0							252
1 284	7.09	7.86	34.077	26.570	150.7	.711	2.37	35.5	43.3	2.23	30.5	.00			286
1 300	7.62	7.59	34.090	26.620	146.1	.734	2.11	31.4							302
1 346	6.90	6.86	34.132	26.754	133.6	.799	1.34	19.6	58.9	2.63	35.8	.00			348
1 400	6.43	6.40	34.192	26.864	123.7	.868	1.16	16.8							403
1 424	6.18	6.24	34.217	26.904	120.2	.898	1.13	16.3	72.3	2.92	39.1	.00			427
1 499	5.69	5.64	34.263	27.015	110.1	.983	.39	5.6	83.4	3.07	41.4	.00			502
1 500	5.68	5.64	34.264	27.016	109.9	.985	.39	5.5							504
1 575	5.21	5.24	34.307	27.099	102.6	1.065	.27	3.8		3.15	42.6	.00			579
RV NEW HORIZON			CALCOFI CRUISE 8508												

RV NEW HORIZON				CALCOFI CRUISE 8508																					
LATITUDE		LONGITUDE		DAY/HO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMY TYPE	
31 12.2		122 22.9 W		13/08/85		1927 GMT																			
CAS	DEPTH	TEMP		POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO 2	CHL-A	PHAE0	PRESS								
T	M	DEG C		DEG C		THETA			NL/L	PCT	UM/L	UM/L	UM/L	UM/L	UC/L	UG/L	D.BAR								
	n	19.08		19.08	33.505	23.859	404.2	.000	5.44	102.6							0								
1	2 A	19.08		19.08	33.505	23.859	403.6	.008	5.44	102.6	1.9	.33	.1	.00	.07	.00	2								
	10 IS	18.92		18.92	33.490	23.888	401.0	.040	5.46	102.7							10								
	20 IS	18.72		18.72	33.472	23.926	397.9	.080	5.49	102.8							20								
1	28 A	18.56		18.56	33.458	23.954	395.4	.112	5.51	102.9	1.7	.33	.1	.00	.07	.00	28								
	30 IS	18.42		18.41	33.452	23.986	392.5	.120	5.56	103.6							30								
1	36 A	17.95		17.94	33.442	24.094	382.4	.143	5.72	105.5	1.7	.33	.1	.00			36								
	50 IS	16.52		16.51	33.519	24.492	344.8	.194	5.99	107.6							50								
1	54 A	16.13		16.12	33.543	24.601	334.5	.207	6.04	107.6	1.9	.31	.1	.00	.09	.01	54								
	75 IS	14.65		14.64	33.413	24.827	313.4	.276	6.03	104.2							76								
1	89 A	13.89		13.88	33.303	24.902	306.6	.318	6.02	102.4	1.9	.37	.1	.00	.21	.11	89								
	10 IS	13.20		13.18	33.315	25.052	292.5	.352	5.74	96.2							101								
1	12 A	11.84		11.82	33.423	25.399	259.9	.419	5.00	81.5	7.4	.82	8.3	.03	.12	.13	125								
	12 IS	11.81		11.80	33.426	25.406	259.3	.421	4.99	81.3							126								
1	14 A	10.97		10.95	33.526	25.637	237.5	.466	4.57	73.2	11.8	1.11	12.7	.02	.07	.09	144								
	15 IS	10.71		10.69	33.558	25.708	230.9	.482	4.44	70.6							151								
1	17 A	9.87		9.85	33.678	25.946	208.6	.535	3.98	62.3	19.3	1.46	18.5	.01	.02	.04	175								
	20 IS	9.01		8.98	33.842	26.214	183.4	.586	3.50	53.8							201								
1	20 A	8.84		8.82	33.877	26.267	178.4	.595	3.41	52.2	28.5	1.80	24.1	.01	.00	.01	206								

PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THE FIRST SIX DEPTHS ON THIS CAST.

RV MEN HORIZON

CALCOFI CRUISE 8508

STATION 90 100

UOE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE			
1H 122	39.6 W	13/08/85	1630	GMT	4110 M	160 02	KT 350	05 08	2	1017.5	MB 18.9	C 16.8	C	8/8	SC	
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS	
M	DEG C	DEG t		TMETA			ML/L	PCT	UM/L	UN/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
0	ISL	19.40	19.40	33.523	23.791	410.1	.000	5.39	102.3						0	
1		19.40	19.40	33.523	23.791	410.0	.004	5.39	102.3	2.0	.32	.1	.00	.05	.00	1
10	ISC	19.36	19.36	33.518	23.798	409.7	.041	5.42	102.7							10
12		19.36	19.35	33.518	23.800	409.6	.049	5.42	102.8	1.9	.32	.1	.00	.06	.00	12
20	ISL	19.33	19.33	33.520	23.807	409.2	.082	5.41	102.6							20
23		19.33	19.32	33.520	23.810	409.0	.094	5.41	102.5	1.9	.32	.1	.00	.06	.01	23
30	ISL	19.30	19.30	33.519	23.815	408.8	.123	5.61	106.2							30
33		19.29	19.29	33.518	23.817	408.8	.135			1.8	.32	.1	.00	.07	.00	33
43		16.72	16.71	33.583	24.495	344.2	.172	6.01	108.4	1.8	.29	.1	.00	.08	.01	43
50	ISL	16.42	16.41	33.606	24.582	336.2	.196	6.01	107.8							50
54		16.26	16.25	33.618	24.628	331.9	.209	6.01	107.4	2.0	.27	.1	.00	.09	.02	54
63		15.58	15.57	33.524	24.710	324.4	.239	6.01	105.9	1.9	.30	.1	.00	.10	.02	63
74		14.93	14.92	33.473	24.813	314.9	.274	6.00	104.3	2.0	.32	.1	.00	.14	.04	74
75	ISL	14.90	14.89	33.477	24.823	313.9	.278	5.99	104.1							76
90		14.50	14.49	33.513	24.937	303.4	.323	5.90	101.7	2.2	.33	.1	.00	.19	.14	90
100	ISL	13.86	13.84	33.424	25.003	297.4	.354	5.60	95.3							101
105		13.53	13.52	33.383	25.037	294.2	.368	5.46	92.2	2.5	.40	.3	.03	.28	.24	105
125		12.25	12.23	33.423	25.321	267.5	.426	5.17	85.0	6.0	.74	6.4	.05	.15	.15	126
14"		10.91	10.97	33.519	25.627	238.6	.487	4.57	73.2	11.4	1.09	12.6	.01	.07	.11	150
150	ISL	10.96	10.94	33.523	25.636	237.8	.488	4.55	72.8							151
181		9.56	9.54	33.728	26.035	200.1	.556	3.70	57.5	22.1	1.60	20.9	.00			182
200	ISL	9.05	9.03	33.835	26.202	184*5	.593	3.41	52.5							201
211		8.82	8.80	33.888	26.279	177.3	.612	3.31	50.6	28.7	1.82	24.4	.00			212
241		8.24	8.22	33.981	26.441	162.3	.663	3.23	48.8	34.1	1.91	26.1	.00			242
250	ISL	8.11	8.08	33.995	26.473	159.4	.678	3.12	47.0							252
283		7.68	7.65	34.021	26.556	151.9	.728	2.67	39.8	41.9	2.16	29.3	.00			284
300	ISL	7.41	7.38	34.026	26.599	147.9	.755	2.52	37.3							302
342		6.40	6.77	34.038	26.692	139.3	.815	2.16	31.6	53.3	2.42	32.5	.00			344
400	ISL	6.24	6.20	34.088	26*806	128.9	.893	1.35	19.5							403
417		6.11	6.07	34.103	26.835	126.3	.914	1.13	16.3	68.2	2.84	38.0	.00			419
492		5.53	5.49	34.153	26.946	116.2	1.005	.70	9.9	81.0	3.06	40.4	.00			495
500	ISL	5.48	5.44	34.162	26.959	115.1	1.015	.66	9.3							504
565		5.19	5.14	34.258	27.071	105.0	1.086	.34	4.8		3.23	41.3	.00			569

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 90 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE		
30 43.8 N	123 20.4 W	13/08/85	1042 GMT	3941 M	270 05 KT			2	1017.3	MB 18.9	C 16.0	C	8/8		
DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UH/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	19.65	19.65	33.534	23.737	416.0	.000	5.40	103.0							0
1	19.65	19.65	33.534	23.737	415.2	.004	5.40	103.0	1.8	.32	.1	.00	-.05	.00	1
10 ISL	19.38	19.38	33.522	23.796	409.9	.041	5.42	102.8							10
11	19.37	19.37	33.521	23.800	409.6	.045	5.42	102.8	1.8	.32	.0	.00	.05	.00	11
20 ISL	19.34	19.34	33.522	23.808	409.2	.082	5.43	102.9							20
23	19.33	19.33	33.522	23.810	409.0	.094	5.43	102.9	1.8	.33	.0	.00	.05	.01	23
30 ISL	19.32	19.32	33.522	23.813	409.1	.123	5.42	102.7							30
32	19.32	19.31	33.522	23.813	409.1	.131	5.42	102.7	1.7	.33	.1	.00	.05	.01	32
4?	16.56	16.56	33.396	24.388	354.4	.169	6.07	109.0	1.8	.33	.1	.00	.08	.01	42
50 ISL	15.69	15.68	33.365	24.562	338.1	.197	6.12	108.0							50
53	15.55	15.54	33.361	24.590	335.4	.207	6.14	108.0	1.7	.33	.1	.00	.10	.02	53
63	14.98	14.97	33.386	24.735	321.9	.239	6.11	106.3	1.7	.34	.0	.00	.13	.04	63
74	14.3K	14.36	33.328	24.820	314.1	.274	6.08	104.4	1.8	.36	.0	.00	.17	.06	74
75 ISL	14.30	14.29	33.323	24.831	313.0	.278	6.08	104.2							76
89	13.55	13.54	33.305	24.972	299.9	.320	5.95	100.5	2.4	.40	.0	.00	.25	.24	89
100 ISL	13.03	13.02	33.337	25*102	287.8	.353	5.65	94.4							101
105	12.83	12.81	33.356	25.157	282.6	.366	5.51	91.7	4.1	.59	3.0	.20	.24	.21	105
125	11.82	11.81	33.484	25.449	255.2	.423	4.96	80.9	7.9	.88	8.8	.02	.11	.14	126
150 ISL	10.10	10.09	33.652	25.885	213.9	.480	4.17	65.6							151
151	10.01	9.99	33.661	25.908	211.8	.483	4.13	64.8	17.8	1.39	17.6	.01	.02	.03	152
181	9.11	9.10	33.818	26.178	186.4	.542	3.47	53.4	26.0	1.73	23.1	.00			182
200 ISL	8.76	8.73	33.893	26.294	175.7	.576	3.32	50.7							201
212	8.57	8.55	33.931	26.352	170.4	.597	3.27	49.8	31.1	1.87	25.2	.00			213
244	8.06	8.03	33.994	26.479	158.7	.649	3.06	46.0	36.7	2.02	27.2	.00			245
250 ISL	7.97	7.94	34.001	26.499	156.9	.659	2.99	44.9							252
283	7.51	7.48	34.030	26.588	148.7	.710	2.54	37.7	44.2	2.23	30.3	.00			285
300 ISL	7.29	7.26	34.044	26.630	145.0	.735	2.26	33.4							302
345	6.77	6.74	34.076	26.726	136.1	.798	1.53	22.4	57.2	2.59	34.9	.00			347
400 ISL	6.26	6.23	34.110	26.820	127.7	.870	1.10	15.9							403
421	6.09	6.05	34.121	26.852	124.7	.898	1.00	14.4	69.7	2.88	37.7	.00			424
498	5.42	5.38	34.164	26.968	114.1	.989	.64	9.1	82.5	3.07	39.8	.00			501
500 ISL	5.41	5.37	34.166	26.971	113.8	.991	.63	8.9							504
574	5.17	5.12	34.261	27.075	104.6	1.072	.33	4.6	91.2	3.17	42.2	.00			578

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 30

ATTITUDE		LONEITUDE		DAY/MO/YR	MESSENGER	BOTTOM		HIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMI		TYPE		
32	50.8	117 32.1 W		10/08/85	0107	GMT	854 M	250	07	XT	270	01	08	1	1012.9	MB	20.4	C	18.0	C	1/8	sc	sc	sc	sc	sc
CAST DEPTH		TEMP		POT TEMP	SALINITY	SIGMA	SVA	DYN HT		OXYGEN		OXY		SI03	P04	N0	3	N02	CHL-A	PHAE0	PRESS					
M		DEG C		DEC C	THETA					ML/L		PCT		UM/L	UM/L	UM/L	UM/L	UM/L	U6/L	U6/L	D.BAR					
0		ISL	20.76	20.76	33.659	23.539	433.9	.008		5.56		108.3									0					
1	1		20.76	20.76	33.659	23.539	434.0	.004		5.56		108.3		2.7	.31	.1	.00	.09	.00	1						
	10	ISL	19.85	19.85	33.640	23.766	414.7	.043		5.60		107.2								10						
1	11		19.75	19.75	33.638	23.790	410.5	.047		5.60		107.0		2.0	.31	.1	.00	.09	.00	11						
	40	ISL	16.52	16.52	33.483	24.463	346.6	.081		6.36		114.2								20						
1	22		15.76	15.76	33.452	24.613	332.3	.087		6.53		115.5		2.5	.35	.1	.00	.19	.02	22						
	30	ISL	13.63	13.63	33.281	24.937	301.7	.113		6.68		112.9								30						
1	32		13.27	13.26	33.250	24.986	297.0	.118		6.71		112.6		2.7	.40	.1	.00	.29	.08	32						
1	43		12.61	12.61	33.328	25.175	279.3	.150		6.17		102.2		4.1	.61	3.4	.11	.75	.41	43						
	50	ISL	12.17	12.16	33.357	25.283	269.1	.170		6.13		100.7								50						
1	53		12.01	12.00	33.370	25.323	265.3	.177		6.12		100.1		6.2	.80	6.5	.23	.60	.40	53						
1	63		11.61	11.60	33.461	25.469	251.7	.203		5.27		85.5		9.0	1.01	10.5	.07	.40	.26	63						
1	74		11.38	11.37	33.543	25.576	241.8	.230		4.97		80.3		11.3	1.13	12.8	.04	.24	.28	74						
1	75	ISL	11.32	11.31	33.551	25.593	240.2	.233		4.92		79.4								76						
1	89		10.63	10.62	33.639	25.783	222.3	.264		4.31		65.6		17.4	1.41	17.3	.03	.11	.10	89						
	100	ISL	10.14	10.13	33.745	25.950	206.6	.289		3.65		57.4								101						
1	105		9.99	9.97	33.786	26.009	201.1	.298		3.41		53.5		24.0	1.71	21.7	.01	.05	.04	105						
1	124		9.67	9.65	33.884	26.139	189.2	.337		3.05		47.6		26.9	1.68	23.6	.01	.01	.03	125						
	125	ISL	9.67	9.65	33.889	26.143	188.8	.338		3.03		47.2								126						
1	150		9.67	9.65	34.067	26.283	176.1	.384		2.23		34.8		32.9	2.14	76.5	.00	.01	.04	151						
1	181		9.41	9.39	34.098	26.350	170.3	.437		2.17		33.7		34.8	2.22	27.2	.00			152						
	2 00	ISL	9.29	9.27	34.142	26.404	165.6	.469		1.96		30.4								201						
1	213		9.25	9.22	34.175	26.437	162.7	.490		1.80		27.9		37.9	2.33	28.5	.01			214						
1	244		9.29	9.27	34.227	26.470	160.2	.540		1.56		24.2		39.5	2.42	28.8	.01			245						
	250	ISL	9.29	9.26	34.233	26.476	159.8	.550		1.53		23.7								252						
1	283		9.23	9.19	34.254	26.503	157.8	.603		1.40		21.7		41.1	2.48	29.4	.01			235						
	300	ISL	9.16	9.13	34.269	26.525	156.1	.629		1.31		20.2								302						
1	346		8.91	8.87	34.303	26.594	150.3	.700		1.09		16.7		45.1	2.62	30.9	.01			348						
	400	ISL	8.54	8.50	34.323	26.667	144.2	.779		1.06		16.1								403						
1	423		8.28	8.24	34.326	26.709	140.5	.813		1.04		15.8		52.0	2.80	32.9	.00			426						
1	499		6.65	6.61	34.336	26.949	117.4	.910		.40		5.8		72.0	3.09	38.1	.00			502						
	500	ISL	6.64	6.59	34.336	26.951	117.3	.911		.40		5.8								504						
1	575		6.69	6.04	34.341	27.027	110.5	.997		.33		4.8		79.7	3.18	39.8	.00			579						

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 35

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CUD AMI TYPE	
32 41.0 I		1 17 52.5 U		10/08/85		064 0		586 M		180 07		KT		0		1015.2		ME 18		.2 C		16.7 C	
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		S103		P04		NO 3	
M		DEG C		DEG C				THETA						ML/L		PCT		UH/L		UM/L		UM/L	
0		ISL 19.97		19.97		33.691		23.774		413.8		.000											
1	1		19.97		19.97		33.691		23.774		411.7		.004			2.2	.28	.2	.00	.11	.02	.1	
	10	ISL	18.80		18.80		33.592		23.996		390.7		.040									10	
1	11		18.61		18.68		33.585		24.022		388.3		.044	5.61	105.1	2.1	.31	.2	.00	.09	.01	11	
	20	ISL	17.59		17.59		33.559		24.269		365.1		.078	5.87	107.6							20	
1	22		17.26		17.26		33.543		24.337		351.7		.085	5.94	108.2	2.2	.34	.2	.00	.16	.03	22	
	30	ISL	14.54		14.53		33.347		24.799		314.8		.112	6.35	109.4							30	
1	32		13.02		13.91		33.314		24.903		304.9		.118	6.44	109.6	2.7	.40	.2	.00	.32	.15	32	
	42	ISL	12.84		12.83		33.325		25.129		283.6		.147	6.68	111.2	4.0	.58	2.9	.13	.50	.31	42	
1	50		12.23		12.23		33.380		25.288		268.6		.170	5.84	96.0							50	
	52	ISL	12.14		12.13		33.392		25.316		266.0		.175	5.64	92.5	6.4	.80	6.6	.26	.45	.40	52	
1	62		11.91		11.90		33.425		25.385		259.7		.201	5.56	90.8	7.5	.91	8.6	.35	.33	.25	62	
	73	ISL	11.61		11.60		33.434		25.448		253.9		.229	5.18	84.0	9.0	.99	10.1	.15	.27	.27	73	
1	75		11.53		11.52		33.449		25.474		251.5		.235	5.08	82.3							76	
	88	ISL	11.01		11.00		33.550		25.647		235.3		.265	4.52	72.5	13.7	1.21	14.0	.04	.12	.17	88	
1	100		10.40		10.39		33.629		25.816		219.4		.294	4.08	64.5							101	
	104	ISL	10.24		10.23		33.651		25.861		215.2		.301	3.96	62.4	19.4	1.48	18.4	.01	.04	.07	104	
1	124		9.75		9.74		33.790		26.051		197.5		.344	3.30	51.5	25.3	1.72	22.3	.02	.01	.04	125	
	125	ISL	9.75		9.73		33.794		26.055		197.1		.346	3.29	51.3							126	
1	150		9.55		9.53		33.960		26.219		182.1		.393	2.82	43.9	30.1	1.95	24.8	.01	.00	.03	151	
	180	ISL	9.25		9.23		34.108		26.383		167.1		.445	2.20	34.0	36.5	2.20	27.4	.00			181	
1	200		9.32		9.30		34.163		26.415		164.5		.479	1.73	26.9							201	
	212	ISL	9.36		9.35								.498	1.50	23.3	40.6	2.43	29.1	.01			213	
1	243		9.01		8.98		34.266		26.547		152.8		.547	1.29	19.9	44.3	2.54	30.2	.00			244	
	250	ISL	8.94		8.91		34.274		26.563		151.3		.558	1.25	19.2							252	
1	284		8.64		8.61		34.287		26.621		146.4		.609	1.08	16.5	48.6	2.65	31.4	.01			286	
	300	ISL	8.50		8.47		34.300		26.653		143.6		.632	.99	15.0							302	
1	346		P.10		8.06		34.332		26.740		135.9		.696	.74	11.2	55.9	2.84	33.5	.00			348	
	400	ISL	7.63		7.59		34.327		26.806		130.3		.768	.58	8.7							403	
1	422		7.45		7.41		34.322		26.827		123.5		.797	.54	8.0	62.2	2.96	35.5	.00			425	
	499	ISL	6.96		6.91		34.333		26.905		121.9		.892	.38	5.6	68.1	3.05	37.0	.00			502	
1	500		6.95		6.90		34.333		26.907		121.7		.894	.38	5.5							504	
	574	ISL	6.14		6.08		34.360		27.036		109.7		.979	.25	3.6	80.4	3.18	39.7	.01			578	

RV Nf.u HORIZON

CALCOFI CRUISE 8508

STATION 93 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPEED	HAVES	HEATHER	BAROMETER	DRY	HET	CLOUD	AMI	TYPE		
32 30.4	118 12.5 M	10/0 8/85	1351	GMT	1605 M	150 04	KT 280	02	1	1016.5	MB 17	.6 C 15.0 C	7/8 SC		
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN H»	OXY6EN	OXY	SI03	P04	N03	N02	CHL-A	PHAEO	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UC/L	U6/L	D.BAR
1 0	18.87	18.87	33.671	24.041	386.2	.000	5.54	104.2	1.9	.29	.1	.00	.14	.01	0
1 10	18.87	18.86	33.671	24.041	386.5	.039	5.55	104.4	1.9	.30	.1	.00	.14	.01	10
1 20	IS 18.39	18.39	33.637	24.13*	378.0	.077	5.64	105.2							20
1 22	18.27	18.26	33.629	24.159	375.7	.084	5.67	105.4	1.9	.30	.1	.00	.1*	.03	22
1 30	IS 17.75~	17.75	33.606	24.267	365.7	.114	5.80	106.7							30
1 31	17.64	17.63	33.600	24.291	363.4	.117	5.82	106.8	2.0	.34	.1	.01	.22	.04	31
1 41	14.27	14.27	33.494	24.969	299.0	.150	6.21	106.6	3.7	.49	2.2	.09	.45	.20	41
1 50	IS 13.13	13.13	33.478	25.190	278.1	.177	6.03	101.0							50
1 52	13.03	13.03	33.476	25.208	276.4	.182	5.99	100.2	5.4	.66	4.6	.19	.42	.28	52
1 62	12.31	12.30	33.481	25.354	262.7	.208	5.60	92.2	7.3	.85	7.6	.31	.36	.37	62
1 72	11.87	11.86	33.515	25.462	252.6	.234	5.16	84.2	9.4	1.01	10.2	.39	.29	.30	72
1 75	IS 11.65	11.64	33.530	25.515	247.7	.242	5.00	81.3							76
1 88	10.84	10.83	33.589	25.707	229.6	.272	4.47	71.4	14.9	1.31	15.8	.05	.13	.13	88
1 100	IS 10.48	10.47	33.621	25.795	221.4	.300	4.20	66.5							101
1 103	10.42	10.41	33.628	25.811	220.0	.306	4.14	65.5	17.7	1.44	17.8	.03	.08	.08	103
1 123	9.54	9.53	33.776	26.075	195.1	.349	3.17	49.3	25.0	1.70	22.2	.01	.01	.04	124
1 125	IS 9.51	9.49	33.782	26.086	194.2	.352	3.17	49.2							126
1 150	9.14	9.13	33.855	26.202	183.6	.400	3.17	48.9	28.8	1.85	24.6	.01	.00	.03	151
1 179	8.74	8.72	33.982	26.365	168.5	.451	2.71	41.4	34.5	2.05	27.1	.01			180
1 200	IS 8.52	8.50	34.035	26.440	161.7	.485	2.43	37.0							201
1 210	8.42	8.40	34.052	26.469	159.1	.501	2.32	35.2	39.4	2.22	29.0	.01			211
1 241	7.99	7.97	34.092	26.566	150.4	.549	2.01	30.2	45.0	2.37	30.6	.01			242
1 250	IS 7.90	7.87	34.098	26.585	148.7	.563	1.94	29.1							252
1 281	7.61	7.59	34.110	26.635	144.3	.609	1.73	25.8	49.5	2.48	32.5	.00			283
1 300	IS 7.43	7.40	34.120	26.670	141.2	.635	1.58	23.5							302
1 344	7.02	6.98	34.151	26.752	133.8	.696	1.22	17.9	58.9	2.73	35.0	.00			346
1 400	IS 6.64	6.61	34.213	26.852	125.0	.768	.80	11.7							403
1 419	6.54	6.50	34.234	26.882	122.3	.792	.68	9.9	69.6	2.98	38.0	.00			422
1 496	6.20	6.16	34.296	26.976	114.3	.883	.37	5.3	77.5	3.12	39.4	.00			499
1 500	IS 6.19	6.14	34.299	26.981	113.9	.888	.37	5.3							504
1 570	5.87	5.82	34.333	27.048	108.1	.965	.29	4.2	82.8	3.20	40.4	.00			574

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPEED	HAVES	HEATHER	BAROMETER	DRY	HET	CLOUD	ANT	TYPE			
32 20.9 N	118 33.3 H	10/08/85	1805	GMT	1341 M	260 06	KT 310	03 05	2	1016.3	MB 17.7 C	14.6 C	8/8 SC			
CUST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXY6EN	OXY	SI03	P04	N0 3	N02	CHL-A	PHAEO	PRESS	
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
0	IS	18.85	18.85	33.584	23.977	392.3	.000	5.48	103.0						0	
1 1		18.85	18.85	33.584	23.977	392.3	.004	5.48	103.0	2.2	.33	.1	.00	.09	.01	1
1 10	IS	18.84	18.84	33.580	23.979	392.4	.039	5.49	103.1						10	
1 11		18.84	18.83	33.579	23.979	392.5	.043	5.49	103.1	2.1	.33	.1	.00	.10	.02	11
1 20	IS	18.70	18.70	33.563	24.001	390.6	.078	5.50	103.0						20	
1 22		18.65	18.65	33.558	24.010	389.9	.086	5.50	102.9	2.1	.34	.1	.00	.10	.04	22
1 30	IS	18.32	18.32	33.525	24.066	384.8	.117	5.58	103.8						30	
1 32		18.25	18.24	33.518	24.079	383.6	.124	5.60	104.0	2.1	.34	.1	.00	.12	.02	32
1 43		15.05	15.04	33.364	24.702	324.5	.163	6.27	109.2	2.1	.34	.1	.00	.15	.05	43
1 50	IS	13.74	13.74	33.289	24.920	303.8	.186	6.35	107.6						50	
1 53		13.38	13.37	33.270	24.979	298.2	.194	6.38	107.3	2.7	.45	.2	.02	.40	.18	53
1 63		12.66	12.65	33.319	25.159	281.2	.223	5.99	99.3	4.0	.62	3.0	.17	.43	.24	63
1 74		12.09	12.08	33.506	25.414	257.3	.252	5.28	86.6	8.0	.96	9.1	.34	.34	.22	74
1 75	IS	12.00	11.99	33.518	25.440	254.8	.256	5.21	85.3						76	
1 90		11.05	11.04	33.594	25.674	232.8	.291	4.58	73.5	13.8	1.29	15.1	.05	.17	.13	90
1 100	IS	10.65	10.64	33.625	25.769	223.9	.315	4.28	68.0						101	
1 106		10.49	10.47	33.645	25.814	219.8	.327	4.11	65.2	17.8	1.47	17.9	.02	.10	.08	106
1 125	IS	9.8*	9.88	33.812	26.045	198.1	.368	3.16	49.4						126	
1 126		9.86	9.84	33.825	26.061	196.6	.371	3.09	48.4	25.6	1.80	22.8	.01	.05	.06	127
1 150	IS	9.44	9.42	33.953	26.230	181.0	.415	2.71	42.0						151	
1 152		9.41	9.39	33.961	26.242	179.9	.419	2.69	41.7	30.6	2.01	25.5	.00	.01	.04	153
1 183		8.80	8.78	34.006	26.375	167.6	.473	2.19	33.5	35.2	2.13	27.5	.01			184
1 200	IS	8.59	8.57	34.033	26.428	162.9	.501	2.26	34.4						201	
1 213		8.46	8.44	34.052	26.464	159.7	.522	2.33	35.4	38.9	2.24	28.8	.00			214
1 246		8.06	8.03	34.092	26.557	151.4	.573	2.05	30.9	43.7	2.37	30.7	.01			247
1 250	IS	7.98	7.95	34.093	26.569	150.3	.579	2.02	30.4						252	
1 286		7.38	7.35	34.097	26.658	142.0	.632	1.78	26.4	51.3	2.52	32.9	.00			288
1 300	IS	7.26	7.23	34.112	26.688	139.4	.652	1.62	24.0						302	
1 347		6.97	6.93	34.176	26.779	131.4	.715	1.06	15.6	60.8	2.81	35.8	.00			349
1 400	IS	6.63	6.59	34.234	26.871	123.2	.783	.67	9.7						403	
1 424		6.47	6.43	34.257	26.910	119.8	.812	.55	8.0	71.4	3.04	38.3	.00			427
1 500	IS	5.94	5.89	34.305	27.017	110.2	.899	.41	5.9						504	
1 501		5.93	5.89	34.305	27.018	110.1	.900	.41	5.9	81.1	3.18	40.2	.00			504
1 574		5.69	5.64	34.347	27.082	104.8	.979	.24	3.4	85.9	3.24	41.0	.00			578

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER		BOTTOM	WIND SPEED		WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMI	TYPE
32 10.8	1 18 53.7 U	11/08/85	0035	GMT	1479 M	280 07	KT 300	03 06	1	1014.7	MB 18.0	C 15.0	C	6/8	SC	
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	19.70	19.70	33.632	23.798	409.3	.000	5.47	104.5	1.9	.32	.2	.00	.08	.01	0
1	10	19.45	19.45	33.626	23.859	403.9	.041	5.48	104.1	1.9	.33	.2	.00	.09	.01	10
	20	ISL 18.55	18.54	33.618	24.081	383.0	.080	5.58	104.2							20
1	21	18.45	18.44	33.618	24.106	380.7	.084	5.59	104.2	1.7	.32	.2	.00	.11	.01	21
	30	ISL 17.65	17.64	33.617	24.300	362.5	.117	5.74	105.3							30
1	31	17.53	17.52	33.612	24.325	360.1	.120	5.76	105.5	1.7	.32	.2	.00	.16	.02	31
1	42	14.40	14.39	33.436	24.897	305.8	.157	6.36	109.4	2.8	.45	1.2	.05	.45	.11	42
	50	ISL 12.97	12.97	33.334	25.110	285.7	.181	6.12	102.2							50
1	52	12.75	12.75	33.319	25.141	282.7	.186	6.03	100.2	3.8	.6.1	3.2	.14	.39	.18	52
1	62	12.08	12.08	33.357	25.300	267.8	.214	5.64	92.4	5.5	.81	6.7	.28	.45	.25	62
1	73	11.92	11.91	33.459	25.410	257.6	.242	5.29	86.4	7.7	.94	9.3	.31	.31	.22	73
	75	ISL 11.84	11.83	33.476	25.437	255.1	.248	5.20	84.8							76
1	88	11.29	11.28	33.557	25.602	239.7	.279	4.68	75.5	11.6	1.10	12.5	.04	.16	.17	88
	100	ISL 10.57	10.56	33.631	25.788	222.1	.308	4.23	67.2							101
1	104	10.36	10.35	33.652	25.841	217.2	.316	4.11	65.0	17.7	1.44	18.4	.01	.05	.06	104
1	124	9.54	9.52	33.780	26.079	194.8	.359	3.49	54.2	24.3	1.69	22.4	.01	.01	.03	125
	125	ISL 9.52	9.50	33.784	26.085	194.3	.360	3.48	54.0							126
1	150	8.90	8.89	33.929	26.298	174.4	.407	2.97	45.5	31.3	1.93	26.0	.02	.00	.03	151
1	181	8.49	8.48				.458	2.71	41.2	35.7	2.06	27.7	.01			182
	200	ISL 8.23	8.21	34.046	26.493	156.6	.489	2.41	36.5							201
1	212	8.07	8.07	34.071	26.534	152.9	.507	2.23	33.6	41.6	2.26	30.2	.00			213
1	243	7.91	7.88	34.100	26.584	148.6	.554	1.99	29.9	45.2	2.36	31.4	.01			244
	250	ISL 7.86	7.83	34.111	26.600	147.2	.564	1.89	28.3							252
1	284	7.59	7.57	34.159	26.677	140.4	.614	1.38	20.6	52.0	2.60	33.8	.01			286
	300	ISL 7.42	7.39	34.172	26.712	137.3	.636	1.23	18.3							302
1	345	6.96	6.92	34.199	26.799	129.5	.695	.93	13.7	61.8	2.81	36.3	.00			347
	400	ISL 6.69	6.66	34.239	26.866	123.8	.765	.65	9.5							403
1	421	6.64	6.60	34.256	26.888	122.0	.791	.57	8.3	68.5	2.98	38.0	.01			424
1	497	6.37	6.33	34.335	26.985	113.7	.880	.31	4.5	75.0	3.10	39.2	.00			500
	500	ISL 6.36	6.31	34.337	26.989	113.3	.884	.31	4.5							504
1	572	5.91	5.86	34.351	27.057	107.4	.965	.25	3.6	81.9	3.17	40.6	.00			577

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER		BOTTOM	WIND SPE		WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMI	TYPE
32 00.8	119 14.4 W	11/08/85	0610	GMT	1572 M	330 07	KT		2	1006.0	MB 17	.4 C	15.7 C	8/8		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SI6MA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N0 3	N0 2	CHL-A	PHAE0	PRESS
	M	DFG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	ISL 18.61	18.61	33.688	24.117	378.9	.000	5.50	102.9							0
1	1	18.61	18.61	33.688	24.117	378.9	.004	5.50	102.9	1.5	.26	.1	.00	.09	.01	1
	10	ISL 18.60	18.60	33.684	24.118	370.2	.038	5.50	102.9							11
1	11	18.60	18.60	33.684	24.118	370.2	.042	5.50	102.9	1.4	.25	.1	.00	.10	.01	10
	20	ISL 18.06	18.06	33.681	24.249	366.8	.075	5.53	102.5							20
1	21	17.85	17.85	33.680	24.300	362.2	.082	5.54	102.2	1.3	.25	.1	.00	.12	.02	22
	30	ISL 16.35	16.35	33.622	24.610	332.9	.110	6.01	107.6							30
1	32	15.90	15.89	33.605	24.700	324.4	.117	6.10	108.2	2.3	.32	.5	.02	.34	.09	32
1	42	13.00	12.09	33.528	25.254	271.7	.146	5.76	96.3	5.1	.66	5.2	.17	.55	.22	42
	50	ISL 12.14	12.13	33.553	25.441	254.1	.168	5.24	86.1							50
1	53	12.00	12.00	33.565	25.476	250.8	.175	5.05	82.7	9.2	.97	10.1	.32	.39	.23	53
1	63	11.31	11.30	33.607	25.637	235.6	.199	4.49	72.5	12.6	1.19	13.9	.26	.24	.17	63
1	73	10.91	10.90	33.648	25.741	226.0	.222	4.33	69.3	15.9	1.33	16.5	.14	.17	.11	73
	75	ISL 10.85	10.84	33.655	25.757	224.5	.227	4.26	68.1							76
1	89	10.42	10.41	33.703	25.869	214.1	.257	3.76	59.6	19.8	1.50	19.0	.04	.12	.12	89
	100	ISL 9.78	9.77	33.781	26.039	198.1	.280	3.35	52.3							101
1	105	9.52	9.51	33.814	26.107	191.7	.289	3.22	50.0	26.2	1.75	23.3	.01	.03	.04	105
1	125	8.94	8.93	33.903	26.271	176.4	.328	3.19	49.0	29.9	1.81	24.7	.01	.01	.02	126
1	150	8.45	8.44	33.973	26.402	164.3	.370	2.94	44.6	34.4	1.96	26.2	.01	.01	.02	151
1	181	8.13	8.11	34.018	26.486	156.9	.419	2.70	40.7	38.3	2.07	28.3	.00			182
	200	ISL 8.00	7.98	34.066	26.543	151.7	.449	2.29	34.4							201
1	212	7.91	7.88	34.095	26.581	148.4	.466	2.02	30.3	44.8	2.33	30.9	.00			213
1	243	7.45	7.43	34.129	26.674	130.9	.511	1.64	24.4	51.7	2.51	33.2	.00			244
	250	ISL 7.38	7.35	34.136	26.689	138.5	.521	1.55	23.0							252
1	283	7.14	7.11	34.165	26.745	133.6	.566	1.18	17.4	57.3	2.68	34.9	.00			285
	300	ISL 7.05	7.02	34.183	26.772	131.3	.588	1.04	15.3							302
1	346	6.84	6.81	34.228	26.837	125.7	.647	.75	11.0	64.3	2.86	36.7	.00			348
	400	ISL 6.56	6.52	34.279	26.916	118.9	.714	.50	7.3							403
1	422	6.44	6.40	34.295	26.945	116.4	.740	.43	6.2	72.5	3.03	38.4	.00			425
1	498	6.01	5.96	34.316	27.017	110.2	.825	.31	4.5	79.9	3.11	39.8	.00			501
	500	ISL 5.99	5.95	34.317	27.020	110.0	.828	.31	4.4							504
1	574	5.63	5.58	34.340	27.084	104.5	.907	.27	3.8	86.5	3.16	40.7	.00			578

LATITUDE	LONGITUD	DAY/MO/VR	MESSENGER	BOTTOM	WIND SPEED	NAVES	WEATHER	BAROME	TER	DRY	WET	CLOUD	ANT	TYPE	
31 50.9	19 11	11/08/85	0954	2690 M	260 OS	KT	2	1015.5	MB 17	.0 C	14.2 C	8/8			
CST DEPTH	TEMP	POT	SALINITY	SIGMA	SVA	DYN HT	OXY	OXY	SIO3	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	18.64	18.64	33.685	24.109	379.7	.004	5.48	102.6	1.5	.24	.1	.00	.08	.01	1
	ISL 18.64	18.64	33.684	24.108	380.1	.038	5.49	102.8	1.5	.23	.1	.00	.10	.02	10
20	17.91	17.91	33.667	24.275	364.6	.075	5.79	106.9							20
21	17.77	17.77	33.663	24.306	361.6	.079	5.83	107.4	1.8	.26	.1	.00	.18	.04	21
30	15.13	15.13	33.622	24.883	306.9	.109	6.32	110.8							30
31	14.85	14.85	33.621	24.943	301.1	.112	6.35	110.4	3.2	.37	.8	.02	.56	.17	31
42	12.68	12.68	33.559	25.341	263.4	.143	5.60	93.0	6.6	.70	6.3	.16	.41	.14	42
50	11.85	11.85	33.583	25.518	246.7	.163	4.97	81.2							50
52	11.73	11.72	33.592	25.548	244.0	.168	4.84	78.8	11.1	1.01	11.3	.34	.49	.24	52
62	11.13	11.12	33.630	25.688	230.8	.191	4.31	69.3	14.2	1.23	14.9	.18	.31	.21	62
73	10.35	10.34	33.678	25.863	214.3	.216	3.94	62.3	18.6	1.46	19.0	.02	.11	.06	73
75	10.21	10.20	33.692	25.896	211.2	.221	3.86	60.8							76
88	9.68	9.67	33.760	26.040	197.8	.246	3.48	54.2	23.6	1.67	22.1	.01	.03	.04	88
100	9.49	9.48	33.794	26.098	192.6	.271	3.34	51.9							101
104	9.46	9.45	33.801	26.108	191.6	.277	3.32	51.5	25.4	1.74	23.2	.01	.02	.03	104
124	9.04	9.03	33.879	26.236	179.8	.316	3.14	48.3	28.5	1.80	24.7	.01	.00	.03	125
125	9.03	9.02	33.880	26.239	179.5	.317	3.14	48.2							126
149	8.69	8.67	33.942	26.342	170.2	.360	2.99	45.6	31.9	1.92	26.1	.01	.00	.03	150
150	8.67	8.66	33.944	26.345	169.9	.361	2.99	45.6							151
181	8.27	8.26	34.009	26.457	159.8	.412	2.73	41.3	36.6	2.03	27.9	.01			182
200	8.09	8.07	34.063	26.527	153.3	.442	2.31	34.8							201
212	7.96	7.94	34.092	26.570	149.4	.460	2.04	30.7	43.8	2.29	30.8	.01			213
244	7.41	7.38	34.112	26.666	140.6	.506	1.70	25.2	51.2	2.46	33.1	.01			245
250	7.36	7.34	34.127	26.684	139.0	.515	1.59	23.6							252
253	7.22	7.19	34.204	26.766	131.8	.560	1.03	15.2	58.3	2.72	35.2	.01			285
300	7.08	7.06	34.214	26.792	129.5	.582	.90	13.3							302
346	6.70	6.67	34.221	26.850	124.4	.640	.72	10.5	65.9	2.86	37.2	.00			348
400	6.47	6.39	34.279	26.932	117.3	.705	.46	6.6							403
422	6.33	6.30	34.302	26.963	114.6	.731	.37	5.4	74.5	3.05	38.8	.00			425
499	5.90	5.85	34.317	27.032	108.7	.816	.31	4.4	82.0	3.12	40.1	.00			502
500	5.89	5.85	34.318	27.033	108.6	.818	.31	4.4							504
575	5.59	5.55	34.339	27.087	104.1	.898	.23	3.3	87.3	3.16	40.9	.00			579

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRV	MET	CLOUD	AMI	TYPE		
31 30.8	120 14.9 W	11/08/85	1525	5028 M	280 06	KT 320	05 06 2	1015.5	MB 17	.0 C	14.0 C	8/8	SC		
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SIO3	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UH/L	UG/L	UG/L	D.BAR
0	ISL 17.56	17.56	33.693	24.378	354.1	.000	5.58	102.4							0
1	17.56	17.56	33.693	24.378	354.0	.004	5.58	102.4	.7	.18	.0	.00	.17	.04	1
10	ISL 17.52	17.51	33.690	24.388	353.4	.035	5.61	102.8							10
11	17.51	17.51	33.689	24.389	353.4	.039	5.61	102.8	.5	.18	.0	.00	.17	.05	11
20	ISL 17.42	17.42	33.679	24.402	352.4	.071	5.61	102.6							20
22	17.41	17.40	33.678	24.405	352.2	.077	5.61	102.6	.5	.17	.0	.00	.18	.07	22
30	ISL 17.40	17.40	33.680	24.408	352.2	.106	5.64	103.0							30
32	17.40	17.40	33.681	24.408	352.2	.113	5.64	103.1	.4	.17	.0	.00	.19	.06	32
43	17.30	17.30	33.677	24.429	350.6	.151	5.62	102.6	.6	.18	.0	.00	.22	.09	43
50	ISL 14.57	14.56	33.465	24.883	307.4	.175	5.79	100.0							50
53	13.43	13.42	33.404	25.072	289.4	.183	5.85	98.6	4.0	.58	3.9	.15	.68	.22	53
65	12.15	12.14	33.361	25.290	268.8	.216	5.62	92.2	6.1	.80	6.9	.24	.40	.18	65
74	11.48	11.47	33.432	25.469	251.9	.240	5.23	84.6	9.1	.99	10.9	.27	.32	.18	74
75	ISL 11.44	11.44	33.445	25.487	250.3	.243	5.18	83.8							76
91	11.15	11.14	33.597	25.659	234.3	.281	4.56	73.3	13.8	1.22	15.4	.06	.16	.11	91
100	ISL 10.73	10.72	33.657	25.780	222.9	.302	4.09	65.2							101
106	10.47	10.46	33.687	25.849	216.4	.314	3.83	60.7	18.8	1.45	18.9	.04	.09	.13	106
125	ISL 9.86	9.85	33.778	26.024	200.1	.355	3.34	52.3							126
126	9.83	9.81	33.784	26.034	199.2	.358	3.32	51.9	24.1	1.65	22.3	.02	.05	.06	127
150	ISL 9.24	9.23	33.893	26.216	182.3	.403	2.88	44.4							151
152	9.20	9.18	33.903	26.231	180.9	.407	2.84	43.8	30.1	1.88	25.5	.01	.01	.03	153
183	8.78	8.76	34.002	26.375	167.7	.460	2.44	37.3	35.1	2.05	27.7	.02			184
200	ISL 8.53	8.51	34.037	26.441	161.6	.488	2.34	35.6							201
213	8.35	8.33	34.056	26.483	157.8	.509	2.29	34.7	39.3	2.15	29.1	.01			214
244	8.07	8.04	34.079	26.544	152.4	.557	2.16	32.5	42.7	2.24	30.2	.01			245
250	ISL 7.97	7.95	34.085	26.563	150.8	.566	2.09	31.4							252
284	7.46	7.43	34.119	26.665	141.4	.616	1.63	24.2	51.2	2.46	32.9	.01			286
300	ISL 7.30	7.27	34.136	26.701	138.3	.638	1.45	21.4							302
345	6.94	6.91	34.176	26.782	131.0	.699	1.01	14.8	60.8	2.71	35.8	.01			347
400	ISL 6.50	6.46	34.203	26.863	123.8	.769	.74	10.7							403
421	6.36	6.32	34.213	26.890	121.5	.795	.67	9.7	70.6	2.92	38.2	.00			424
499	6.07	6.02	34.279	26.980	113.8	.886	.40	5.8	78.0	3.05	39.6	.00			502
500	ISL 6.06	6.01	34.280	26.982	113.6	.888	.40	5.7							504
576	5.32	5.27	34.291	27.081	104.3	.970	.33	4.7	89.9	3.13	41.6	.00			580

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 76

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPIED	WAVES	HEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE				
31 20.5 N	120 37.6 W	11/08/85	1918 GMT														
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN Nf	OXYGEN	OXY	SI03	PO4	NO 3	NO2	CHL-A	PHAE0	PRESS	
	M	DEC C	DEO C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
	0	ISL	17.48	17.48	33.507	24.255	366.1	.000	5.65	103.4						0	
1	1	A	17.48	17.48	33.507	24.255	365.8	.004	5.65	103.4	1.4	.28	.1	.00	.15	.01	1
	10	ISL	17.22	17.22	33.467	24.287	363.0	.036	5.72	104.0						10	
1	13	A	17.16	17.16	33.461	24.296	362.3	.047	5.73	104.2	1.5	.30	.1	.00	.20	.03	13
1	18	A	17.10	17.10	33.456	24.307	361.3	.065	5.74	104.2	1.5	.29	.1	.00	.24	.05	18
	20	ISL	17.04	17.04	33.452	24.319	360.3	.073	5.75	104.3						20	
1	26	A	16.75	16.74	33.435	24.375	355.2	.094	5.80	104.6	1.5	.30	.1	.00	.32	.08	26
	30	ISL	16.40	16.40	33.423	24.445	348.6	.108	5.87	105.2						30	
1	12	A	15.13	15.13	33.385	24.701	324.5	.148	6.07	105.9	1.6	.34	.2	.01	.42	.15	42
	50	ISL	13.87	13.87	33.354	24.944	306.6	.174	6.02	102.3						50	
1	64	A	12.41	12.40	33.303	25.195	277.8	.214	5.93	97.8	4.2	.63	4.2	.19	.31	.25	64
2	68		12.43	12.43	33.404	25.270	270.9	.225	5.70	94.1	5.8	.73	6.3	.29	.28	.22	68
	75	ISL	12.14	12.13	33.483	25.387	259.9	.24*	5.36	87.9						76	
2	79		11.92	11.91	33.498	25.440	254.9	.254	5.21	85.1	8.4	.89	9.7	.25	.13	.11	79
	100	ISL	10.83	10.82	33.565	25.691	231.4	.305	4.56	72.8						101	
?	104		10.70	10.69	33.577	25.722	228.4	.314	4.47	71.2	14.1	1.16	15.0	.02	.05	.07	104
2	109		10.67	10.65	33.620	25.763	224.7	.325	4.33	68.9	14.7	1.19	15.5	.03	.05	.07	109
	125	ISL	10.10	10.09	33.695	25.918	210.2	.361	3.92	61.6						126	
2	130		9.88	9.86	33.713	25.970	205.3	.372	3.78	59.2	21.2	1.55	21.1	.01	.2	.04	131
2	150		9.49	9.47	33.839	26.133	190.2	.411	3.13	48.6	26.7	1.75	23.9	.01	.01	.04	151
2	182		8.85	8.83	33.974	26.342	170.8	.469	2.64	40.4	33.4	1.97	27.0	.01			183
	200	ISL	8.59	8.57	34.025	26.422	163.5	.499	2.43	37.1							201
2	215		8.44	8.42	34.052	26.467	159.4	.523	2.30	34.9	38.5	2.15	29.1	.01			216

A. PRIMARY PRODUCTIVITY SAMPLFS WERE TAKEN FROM CAST 1.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AM	TYPE			
31 10.7	120 54.9 W	11/08/85	2219	GMT 4033 M	210 03	KT 350	04 07 2	1016.0	MB 19	.3 C	17.0 C	8/8	SC			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXY6EN	OXY	SI03	PO4	NO 3	NO2	CHL-A	PHAE0	PRES
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	17.89	17.89	33.343	24.032	387.0	.000	5.73	105.6	1.4	.25	.2	.00	.09	.01	0
1	10	16.93	16.93	33.409	24.312	360.7	.037	5.77	104.4	1.3	.25	.2	.00	.13	.02	10
	20	ISL 16.77	16.76	33.412	24.353	357.1	.073	5.79	104.4							20
?	21	16.75	16.75	33.413	24.356	356.8	.077	5.79	104.4	1.2	.25	.2	.00	.17	.02	21
	30	ISL 16.70	16.69	33.410	24.367	356.1	.109	5.80	104.4							30
1	31	16.69	16.69	33.410	24.368	356.0	.112	5.80	104.4	1.2	.25	.2	.00	.21	.04	31
1	41	16.53	16.53	33.395	24.394	353.9	.147	5.82	104.4	1.1	.26	.2	.00	.30	.06	41
	50	ISL 14.9?	14.92	33.248	24.639	330.7	.179	6.20	107.6							50
1	51	14.78	14.77	33.236	24.662	328.4	.181	6.23	107.9	1.4	.25	.2	.00	.29	.07	51
1	62	14.12	14.11	33.227	24.795	316.1	.217	6.25	106.7	1.5	.25	.2	.00	.26	.08	62
1	72	ISL 13.40	13.39	33.195	24.918	304.6	.248	6.23	104.8	1.5	.25	.2	.00	.29	.14	72
	75	ISL 13.32	13.31	33.212	24.947	301.9	.258	6.19	104.0							76
1	84	13.14	13.13	33.320	25.067	290.8	.295	5.91	99.0	2.6	.35	1.2	.09	.27	.26	88
	100	ISL 12.59	12.58	33.433	25.262	272.5	.330	5.46	90.5							101
1	104	12.41	12.39	33.461	25.320	267.0	.339	5.33	88.0	5.7	.66	7.0	.05	.13	.16	104
1	124	11.37	11.35	33.507	25.550	245.5	.393	4.94	79.8	9.8	.93	11.4	.01	.07	.10	125
	125	ISL 11.3?	11.33	33.510	25.556	244.9	.394	4.92	79.5							126
1	149	10.44	10.42	33.63?	25.817	220.4	.451	4.17	66.0	15.8	1.21	16.7	.01	.03	.05	150
	150	ISL 10.40	10.38	33.642	25.827	219.5	.452	4.15	65.7							151
1	180	8.97	8.95	33.840	26.21?	182.6	.513	3.42	52.5	26.6	1.65	23.5	.01			181
	200	ISL 8.55	8.53	33.923	26.349	170.4	.548	3.23	49.2							201
1	211	8.41	8.39	33.956	26.396	166.1	.566	3.17	48.1	32.0	1.79	26.0	.01			212
1	242	7.95	7.95	34.015	26.508	155.9	.616	2.88	43.3	38.2	1.93	28.1	.00			243
	250	ISL 7.7	7.85	34.024	26.530	153.8	.629	2.78	41.6							252
1	282	7.47	7.45	34.046	26.605	147.0	.678	2.34	34.8	45.6	2.15	30.9				284
	300	ISL 7.28	7.25	34.062	26.645	143.5	.703	2.11	31.2							302
1	344	6.83	6.79	34.095	26.734	135.4	.764	1.60	23.4	56.8	2.47	34.8	.00			346
	400	ISL 6.26	6.22	34.122	26.831	126.7	.838	1.13	16.3							403
1	421	6.06	6.03	34.133	26.864	123.6	.865	.98	14.1	70.1	2.74	38.3	.00			424
1	497	5.59	5.55	34.215	26.989	112.4	.954	.53	7.5	81.8	2.95	40.5	.00			500
	500	ISL 5.57	5.53	34.219	26.994	112.0	.957	.52	7.3							504
1	572	5.1?	5.13	34.291	27.098	102.5	1.035	.33	4.6	91.1	3.04	41.9	.00			576

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 50.7	121 35.6 W	12/08/85	0409	GMT	4110 M	320 08	KT	2	1015.2	MB 18	.1 C	15.6 C	8/8		
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO*	NO3	NO2	CHL^A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0	IS	19.19	19.19	33.496	23.826	406.7	.000								0
1	1	19.19	19.19	33.496	23.826	406.7	.004		2.6	.36	.1	.00	.06	.01	1
1	10	IS	19.17	33.492	23.827	406.9	.041								10
1	11	19.17	19.17	33.492	23.827	406.9	.045		2.3	.33	.0	.00	.06	.01	11
1	20	IS	19.10	33.493	23.847	405.4	.081								20
1	22	19.08	19.08	33.493	23.851	405.1	.089	5.72	107.9	2.2	.32	.0	.00	.06	22
1	30	IS	19.08	33.492	23.851	405.3	.122	5.73	108.0						30
1	33	19.08	19.07	33.492	23.852	405.4	.134	5.73	108.1	2.3	.33	.0	.00	.07	33
1	44	16.95	16.94	33.664	24.503	343.6	.175	5.79	104.9	2.4	.27	.0	.00	.08	44
1	50	IS	16.44	33.586	24.563	338.1	.196	5.96	106.9						50
1	55	16.16	16.15	33.564	24.609	333.8	.212		2.3	.28	.0	.00	.10	.01	55
1	65	15.27	15.26	33.435	24.709	324.4	.245	6.33	110.8	2.3	.29	.0	.00	.11	65
1	75	IS	14.76	33.361	24.763	319.6	.277	6.16	106.7						75
1	76	14.74	14.72	33.358	24.766	319.3	.280	6.14	106.3	2.2	.31	.0	.00	.13	76
1	92	14.13	14.12	33.363	24.899	307.0	.330	5.99	102.4	2.8	.32	.0	.00	.19	92
1	100	IS	13.79	33.359	24.967	301.1	.355	5.97	101.3						101
1	107	13.51	13.49	33.355	25.021	295.8	.375	5.92	99.9	2.8	.39	.5	.11	.25	107
1	125	IS	12.75	33.463	25.255	273.9	.427	5.35	88.9						126
1	127	12.64	12.62	33.480	25.291	270.5	.434	5.26	87.2	5.7	.64	5.4	.02	.12	128
1	150	IS	11.14	33.535	25.614	239.9	.491	4.78	76.8						151
1	154	10.85	10.83	33.547	25.674	234.2	.502	4.69	74.9	12.9	1.08	13.4	.00	.04	155
1	134	9.86	9.84	33.740	25.996	204.1	.567	3.86	60.4	20.8	1.45	19.5	.00		185
1	200	IS	9.38	33.820	26.138	190.7	.598	3.49	54.1						201
1	214	9.00	8.98	33.880	26.245	180.7	.624	3.26	50.1	28.8	1.74	24.3	.00		215
1	245	8.44	8.42	33.986	26.415	165.0	.677	3.24	49.2	32.3	1.77	24.8	.00		246
1	250	IS	8.34	33.992	26.436	163.0	.686	3.23	48.9						252
1	286	7.67	7.64	34.010	26.549	152.5	.742	3.03	45.2	40.1	1.95	27.7	.00		287
1	300	IS	7.46	34.025	26.591	148.8	.764	2.82	41.9						302
1	346	6.93	6.90	34.077	26.706	138.2	.830	2.02	29.6	55.5	2.46	34.0	.00		348
1	400	IS	6.48	34.150	26.824	127.5	.902	1.16	16.8						403
1	421	6.35	6.31	34.176	26.862	124.1	.927	.89	12.9	69.5	2.83	38.1	.00		423
1	497	5.98	5.94	34.246	26.965	115.1	1.019	.51	7.3	78.0	2.99	39.7	.00		500
1	500	IS	5.97	34.249	26.969	114.8	1.022	.50	7.2						504
1	576	5.51	5.46	34.303	27.069	105.8	1.106	.33	4.7	87.7	3.10	41.2	.00		580

M «« HORIZON

CALCOFI CRUISE:8508

STATION 93 100

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT		TYPE					
30	30.7	122	15.5 W	12/08/85	0945	GMT	4188 M	330	06	KT				2			1016.3	MB	17.9 C	14.7 C			8/8								
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		N03		N02		CHL-A		PHAE0		PRESS	
M		DEG C		DEG C				THETA						ML/L		PCT		UM/L		UM/L		UM/L		UM/L		UG/L		UG/L		D.BAR	
	0	IS	19.33	19.33	33.507	23.797	409.5	.000	5.40	102.3																			0		
1	1		19.33	19.33	33.507	23.797	409.5	.004	5.40	102.3	2.1	.16	.0	.00	.05	.01	1												10		
1	10	IS	19.33	19.33	33.507	23.799	409.6	.041	5.40	102.3																			20		
1	11		19.33	19.33	33.507	23.799	409.6	.045	5.40	102.3	2.0	.17	.0	.00	.05	.01	11												20		
1	20	IS	19.28	19.28	33.495	23.802	409.7	.082	5.42	102.6																			30		
1	27		19.25	19.24				.110	5.43	102.7	2.0	.18	.0	.00	.06	.01	27												30		
1	30	IS	19.17	19.16	33.483	23.822	408.2	.123	5.49	103.7																			40		
1	43		18.38	18.37	33.463	24.004	391.2	.174	5.78	107.5	2.3	.17	.0	.01	.08	.02	43												50		
1	50	IS	17.31	17.30	33.429	24.239	369.0	.201	5.93	108.1																			59		
1	59		16.00	15.99	33.414	24.530	341.4	.233	6.06	107.6	2.0	.17	.0	.00	.08	.02	59												69		
1	69		15.34	15.33	33.447	24.704	325.1	.266	6.04	105.9	2.1	.17	.0	.01	.09	.03	69												76		
1	75	IS	15.01	15.00	33.425	24.759	320.1	.286	6.03	104.9																			80		
1	80		14.80	14.79	33.398	24.784	317.7	.301	6.01	104.2	2.0	.18	.0	.01	.11	.03	80												95		
1	95		14.26	14.25	33.342	24.855	311.3	.348	5.92	101.5	2.2	.21	.0	.01	.17	.09	95												100		
1	100	IS	14.26	14.24	33.402	24.903	307.0	.365	5.84	100.2																			111		
1	111		14.25	14.24	33.537	25.008	297.3	.397	5.67	97.3	3.1	.24	.5	.08	.23	.22	111												126		
1	125	IS	13.20	13.18	33.442	25.150	284.0	.438	5.49	92.1																			126		
1	126		13.15	13.14	33.436	25.155	283.5	.440	5.48	91.8	4.2	.41	3.3	.07	.14	.20	126												151		
1	150	IS	11.93	11.91	33.506	25.446	256.2	.504	4.95	80.9																			152		
1	151		11.88	11.86	33.513	25.462	254.6	.509	4.92	80.3	8.2	.72	.7	.02	.07	.09	152												172		
1	172		10.83	10.81	33.591	25.712	231.1	.560	4.55	72.7	12.6	.97	13.1	.01	.03	.04	173												193		
1	193		9.99	9.96	33.771	25.999	204.0	.605	3.98	62.5	19.6	1.30	18.4	.01			194												200		
1	200	IS	9.70	9.68	33.791	26.062	198.1	.619	3.81	59.3							201												213		
1	213		9.21	9.19	33.815	26.161	188.8	.645	3.54	54.6	25.3	1.55	22.6	.01			214												244		
1	244		8.53	8.50	33.953	26.376	168.6	.700	3.46	52.6	31.0	1.67	24.7	.01			245												250		
1	250	IS	8.41	8.38	33.967	26.406	165.9	.710	3.39	51.4							252												286		
1	286		7.80	7.77	34.010	26.531	154.4	.767	2.92	43.7	39.7	1.94	28.4	.00			287												300		
1	300	IS	7.59	7.56	34.018	26.567	151.0	.789	2.78	41.4							302												346		
1	346		7.00	6.97	34.032	26.661	142.5	.857	2.34	34.4	51.0	2.20	32.0	.00			348												400		
1	400	IS	6.39	6.35	34.068	26.771	132.4	.931	1.60	23.2							403												423		
1	423		6.18	6.14	34.087	26.814	128.5	.960	1.30	18.7	66.4	2.63	37.3	.00			425												499		
1	499		5.70	5.66	34.164	26.935	117.6	1.054	.67	9.5	78.4	2.89	40.1	.00			502												500		
1	500	IS	5.69	5.65	34.165	26.937	117.4	1.055	.66	9.5							504												575		
1	575		5.30	5.25	34.228	27.034	108.7	1.140	.41	5.8	87.6	3.02	41.4	.00			579														

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	HAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	Tf PE				
30 11.7 N	122 55.5 W	12/08/85	1606	3978 H	360 03	K! 330	08	1017.7	MB 18.8	C 15.4	C	8/8	SC			
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN NT	OXYGEN	OXY	SI03	P04	N0 3	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	19.37	19.37	33.531	23.807	408.5	.000	5.60	106.2	2.2	.17	.1	.00	.06	.01	0
1	10	19.37	19.37	33.528	23.804	409.1	.041	5.55	105.3	2.1	.17	.1	.00	.06	.01	10
1	20	ISL 19.36	19.36	33.529	23.806	409.3	.082	5.55	105.2	2.1	.18	.1	.00	.06	.01	20
1	26	ISL 19.36	19.36	33.529	23.808	409.4	.10*	5.55	105.2	2.1	.18	.1	.00	.06	.01	26
1	30	ISL 18.60	18.59	33.495	23.974	393.6	.122	5.68	106.1	2.1	.16	.1	.00	.09	.01	30
1	42	ISL 16.30	16.29	33.450	24.490	344.7	.166	6.07	108.5	2.1	.16	.1	.00	.09	.01	42
1	50	ISL 16.07	16.06	33.536	24.608	333.7	.19*	6.11	108.8	2.1	.15	.1	.00	.10	.03	50
1	58	ISL 15.85	15.84	33.536	24.658	329.2	.220	6.15	109.0	2.1	.15	.1	.00	.10	.03	58
1	68	ISL 15.28	15.27	33.509	24.763	319.4	.252	6.14	107.6	2.1	.17	.1	.00	.13	.04	68
1	75	ISL 14.64	14.62	33.417	24.834	312.8	.275	6.15	106.3	2.2	.23	.1	.00	.19	.09	76
1	80	ISL 14.22	14.21	33.362	24.879	308.7	.289	6.16	105.5	2.2	.23	.1	.00	.19	.09	80
1	95	ISL 13.60	13.58	33.389	25.029	294.7	.335	5.89	99.6	2.9	.29	.6	.06	.31	.18	95
1	100	ISL 13.24	13.22	33.374	25.089	289.0	.350	5.78	97.1	3.1	.52	4.3	.18	.25	.19	101
1	111	ISL 12.50	12.48	33.354	25.220	276.7	.380	5.53	91.4	5.1	.75	8.9	.02	.13	.15	111
1	124	ISL 11.75	11.73	33.428	25.419	258.0	.417	5.06	82.3	8.2	.75	8.9	.02	.13	.15	125
1	125	ISL 11.72	11.70	33.431	25.427	257.3	.419	5.04	82.0	8.2	.75	8.9	.02	.13	.15	126
1	150	ISL 10.46	10.44	33.578	25.767	225.2	.479	4.30	68.1	15.4	1.13	15.8	.00	.04	.06	151
1	151	ISL 10.40	10.38	33.587	25.784	223.6	.482	4.26	67.4	15.4	1.13	15.8	.00	.04	.06	152
1	172	ISL 9.50	9.48	33.749	26.062	197.4	.526	3.68	57.1	22.9	1.48	21.2	.00	.01	.02	173
1	192	ISL 8.98	8.96	33.859	26.232	181.5	.564	3.36	51.6	28.0	1.65	23.7	.00	.01	.02	193
1	200	ISL 8.83	8.81	33.886	26.276	177.4	.578	3.31	50.7	31.0	1.75	25.2	.00	.01	.02	201
1	213	ISL 8.61	8.59	33.919	26.336	171.9	.600	3.26	49.7	31.0	1.75	25.2	.00	.01	.02	214
1	243	ISL 8.11	8.09	33.992	26.470	159.5	.650	3.06	46.1	36.5	1.88	27.1	.00	.01	.02	244
1	250	ISL 7.99	7.97	34.003	26.495	157.2	.661	2.98	44.7	36.5	1.88	27.1	.00	.01	.02	252
1	284	ISL 7.44	7.44	34.031	26.595	148.0	.712	2.53	37.6	45.1	2.12	30.5	.00	.01	.02	285
1	300	ISL 7.20	7.18	34.038	26.637	144.2	.736	2.33	34.4	45.1	2.12	30.5	.00	.01	.02	302
1	345	ISL 6.59	6.56	34.053	26.732	135.4	.799	1.81	26.3	57.9	2.46	34.6	.00	.01	.02	347
1	400	ISL 6.19	6.15	34.109	26.829	126.7	.871	1.18	17.0	57.9	2.46	34.6	.00	.01	.02	403
1	420	ISL 6.07	6.04	34.131	26.861	123.8	.897	.98	14.1	70.9	2.80	38.2	.00	.01	.02	423
1	496	ISL 5.51	5.47	34.186	26.975	113.6	.987	.58	8.2	82.7	2.98	40.6	.00	.01	.02	499
1	500	ISL 5.49	5.45	34.190	26.981	113.0	.991	.56	8.0	82.7	2.98	40.6	.00	.01	.02	504
1	572	ISL 5.11	5.06	34.268	27.088	103.4	1.069	.35	4.9	93.0	3.12	42.3	.00	.01	.02	576

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 114

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ANT TYPE				
30 05.6	123 10.7 W	12/08/85	1937	GMT												
CAS	DEPTH	TE" P	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
-	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	2	ISL 19.68	19.68	33.547	23.739	415.4	.000	5.37	102.5							0
1	2	A 19.68	19.68	33.547	23.739	415.1	.008	5.37	102.5	2.5	.17	.1	.00	.06	.00	2
	10	ISL 19.62	19.62	33.547	23.754	413.9	.041	5.37	102.4							10
	20	ISL 19.55	19.54	33.544	23.771	412.6	.083	5.38	102.3							20
1	26	A 19.51	19.50	33.540	23.779	412.1	.107	5.38	102.3	2.3	.17	.1	.00	.07	.01	26
	30	ISL 19.48	19.47	33.537	23.784	411.8	.124	5.39	102.3							30
1	34	A 19.45	19.44	33.533	23.788	411.5	.140	5.39	102.4	2.2	.16	.1	.00	.08	.02	34
1	50	A 15.75	15.85	33.376	24.534	340.7	.200	5.99	106.0	2.3	.16	.1	.00	.11	.01	50
	75	ISL 13.81	13.80	33.312	24.924	304.2	.281	5.99	101.7							76
1	82	A 13.64	13.63	33.303	24.953	301.6	.301	5.99	101.3	2.7	.23	.0	.00	.22	.15	82
	100	ISL 12.55	12.56	33.348	25.199	278.4	.354	5.53	91.5							101
1	125	A 11.27	11.26	33.470	25.538	246.6	.421	4.70	75.7	10.6	.85	11.3	.02	.12	.12	126
1	145	ISL 10.36	10.34	33.584	25.789	223.0	.468	4.20	66.4	16.1	1.16	16.3	.01	.05	.07	146
	150	ISL 10.20	10.18	33.610	25.836	218.6	.478	4.10	64.6							151
1	176	ISL 9.48	9.46	33.752	26.068	196.9	.533	3.62	56.2	23.5	1.47	21.5	.01	.01	.03	177
	200	ISL 8.87	8.85	33.876	26.262	178.7	.577	3.30	50.6							201
1	706	ISL 8.73	8.71	33.907	26.309	174.4	.588	3.24	49.5	30.6	1.70	25.1	.01			207

A. PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THE FIRST SIX DEPTHS ON THIS CAST.

RV NEW HORIZON

CALCOFI CRUISE 8508

- STATION 93 120

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SP		f.l>		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT		TYPE			
29 50.7 N		1 23 3 5.8 U		12/08/85		2307		4014 M		020 06		KT 330		08 07		1		1016.4		MB 19		.6 C 16.0 C		7/8		SC					
MSI	DEPTH	TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		N03		N02		CHL-A		PHAE0		PRESS	
	M	DEG C		DES C				TMETA						ML/L		PCT		UH/L		UM/L		UM/L		UM/L		U6/L		UG/L		D.BAR	
1	0	20.25		20.25		33.497		23.551		432.9		.000		5.41		104.3		2.5		.33		.00		.04		.00		0			
1	10	19.22		19.22		33.493		23.816		408.0		.042		5.45		103.1		2.4		.31		.1		.00		.05		.01		10	
	20	ISL	19.17	19.17		33.493		23.828		407.2		.083		5.42		102.4														20	
1	21	19.17		19.16		33.493		23.829		407.1		.087		5.42		102.4		2.3		.31		.1		.00		.05		.01		21	
	30	ISL	19.11	19.11		33.616		23.938		397.0		.123		5.48		103.4														30	
1	32	19.10		19.09		33.661		23.976		393.5		.131		5.49		103.7		2.3		.29		.1		.00		.06		.01		32	
1	42	18.11		18.10		33.744		24.286		364.3		.168		5.75		106.6		2.5		.27		.1		.00		.07		.01		42	
	50	ISL	17.06	17.05		33.703		24.509		343.3		.197		5.94		107.8														50	
1	53	16.7?		16.72		33.681		24.570		337.5		.207		5.98		107.9		2.6		.26		.1		.00		.08		.02		53	
1	64	16.18		16.17		33.639		24.662		329.0		.243		5.95		106.2		2.4		.27		.1		.00		.09		.02		64	
1	74	15.95		15.94		33.708		24.768		319.3		.276		5.88		104.5		2.4		.27		.1		.00		.11		.04		74	
	75	ISL	15.87	15.86		33.700		24.780		318.1		.280		5.88		104.3														76	
1	89	15.06		15.05		33.619		24.898		307.2		.322		5.85		102.1		2.5		.29		.1		.00		.13		.11		89	
	100	ISL	15.07	15.06		33.731		24.981		299.6		.357		5.78		101.0														101	
1	105	15.08		15.07		33.776		25.015		296.6		.370		5.74		100.3		2.8		.29		.1		.00		.20		.19		105	
	125	ISL	14.32	14.30		33.792		25.191		280.1		.429		5.44		93.6														126	
1	126	14.28		14.27		33.792		25.198		279.6		.431		5.43		93.4		4.0		.47		1.8		.11		.15		.21		126	
1	150	11.91		11.89		33.696		25.597		241.8		.495		4.87		79.6		8.9		.84		8.9		.01		.06		.07		151	
1	181	10.06		10.04		33.713		25.940		209.3		.565		4.12		64.7		18.0		1.35		17.1		.01						182	
	200	ISL	9.32	9.29		33.795		26.127		191.7		.603		3.72		57.5														201	
1	212	8.96		8.93		33.855		26.232		181.8		.625		3.50		53.7		27.5		1.75		23.2		.01						213	
1	2*3	8.32		8.30		33.975		26.424		163.9		.678		3.12		47.2		34.5		1.96		26.6		.01						244	
	250	ISL	8.20	8.18		33.988		26.453		161.4		.690		3.07		46.3														252	
1	284	7.71		7.68		34.015		26.547		152.7		.743		2.81		42.0		41.2		2.13		29.0		.00						285	
	3 00	ISL	7.47	7.44		34.030		26.593		148.5		.767		2.56		37.9														302	
1	344	6.90		6.87		34.066		26.701		138.6		.831		1.82		26.7		54.7		2.53		33.7		.00						346	
	400	ISL	6.34	6.30		34.100		26.803		129.3		.908		1.22		17.7														403	
1	421	6.17		6.13		34.113		26.835		126.4		.932		1.06		15.3		68.4		2.86		37.6		.00						423	
1	497	5.67		5.63		34.185		26.955		115.7		1.024		.60		8.5		80.1		3.10		40.1		.00						500	
	500	ISL	5.65	5.61		34.188		26.959		115.3		1.028		.59		8.4														504	
1	573	4.98		4.93		34.216		27.062		105.7		1.109		.43		6.0		93.2		3.19		42.4		.00						577	

RV MEM HORIZON

CALCOFI CRUISE 8508

STATION 82 47

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIN SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE			
34 13.7 N	120 01.8 W	18/08/85	1720 GMT	581 M											
CAST DEPTH	TEW	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHI-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	1	17.87	17.87	33.571	24.211	370.0	5.95	109.7	1.5	.31	.0	.00			1
1	27	13.15	13.15	33.517	25.215	275.0	5.85	98.1	5.6	.64	4.1	.15			27
1	53	11.07	11.06	33.671	25.730	226.6	3.86	62.0	16.7	1.40	16.7	.08			53
1	103	10.01	10.00	33.833	26.041	198.1	3.02	47.4	24.7	1.80	22.6	.03			104
1	206	9.13	9.10	34.103	26.400	166.0	2.03	31.3	35.7	2.25	27.9	.01			207
1	309	7.73	7.70	34.166	26.663	142.2	1.04	15.5	55.2	2.78	33.6	.01			311
1	411	6.97	6.93	34.180	26.783	152.0	.73	10.7	66.8	3.00	35.3	.01			414
1	489	6.45	6.41	34.208	26.874	124.1	.30	4.4	82.1	3.22	34.5	.01			492
1	534	6.28	6.23	34.215	26.903	121.9	.12	1.7	89.6	3.33	32.7	.00			538
1	555	6.26	6.21	34.217	26.908	121.6	.07	1.0		3.48	30.0	.00			559

SPECIAL FREON CAST TAKEN IN SANTA BARBARA BASIN.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 87 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER		BOTTOM	WIN SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD AMT	
33 46.3 N	118 48.6 W	16/08/85	1045	GMT	895 M									
CAST DEPTH	TEMP	POT TEMP	SALINITY	SI6MA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO 2	CHL-A	PHAE0 PRESS
	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L D.BAR
1	n	19.14	19.14	33.578	23.901	399.6	6.09	115.0	2.8	.30	.0	.00		1
1	52	11 .96	11.95	33.537	25.463	252.0	5.02	82.1	8.3	.91	8.5	.54		52
1	103	10.06	10.05	33.803	26.009	201.1	3.12	49.1	23.2	1.72	21.8	.02		103
1	310	8.24	8.20	34.230	26.639	144.9	1.38	20.4	46.6	2.59	31.2	.01		312
1	516	6.39	6.34	34.312	26.965	115.8	.35	5.1	73.3	3.14	38.3	.00		520
1	523	6.37	6.32	34.314	26.970	115.5	.34	4.9	74.2	3.20	38.4	.01		527
1	670	5.47	5.41	34.350	27.112	102.9	.24	3.4	92.8	3.32	39.7	.01		675
1	769	5.19	5.12	34.378	27.168	98.3	.15	2.1	103.4	3.42	38.8	.00		775

SPECIAL FREON CAST TAKEN IN SANTA MONICA BASIN.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 37 45

1	818	5.10	5.03	34.390	27.188	96.9				.15	2.1	107.5	3.48	37.0	.01		824																
t	846	5.06	4.99	34.396	27.198	96.3				.10	1.4	111.5		35.1	.00		853																
LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD AMT											
33 29.2 N		119 19.5 W		16/08/85		1650		GMT		1626 M																							
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN		HT		OXYGEN		OXY		SI03		P04		NO 3		NO2		CHL-A		PNAEO		PRES	
M		DEG C		DEG C				THETA								ML/L		PCT		UM/L		UM/L		UM/L		UM/L		UG/L		D.BA			
1	1	19.22	19.22	33.650	23.936	396.2						5.56	105.2	1.3		.30		.0		.00										1			
t	53	11.66	11.65	33.567	25.542	244.5						4.65	75.6	10.9	1.02	11.7	.26													53			
1	104	9.74	9.72	33.867	26.114	191.1						3.02	47.2	25.4	1.79	23.0	.01													105			
1	311	7.77	7.74	34.242	26.717	137.2						.99	14.8	52.5	2.72	33.4	.02													313			
1	517	6.64	6.59	34.293	26.917	120.6						.46	6.7	69.4	3.06	37.3	.01													521			
1	826	4.93	4.86	34.400	27.216	94.0						.23	3.2	108.8	3.35	40.5	.00													832			
1	1132	4.22	4.13	34.461	27.344	83.7						.29	4.0	127.6	3.42	41.0	.00													1142			
1	1336	4.17	4.06	34.468	27.356	84.4						.29	4.0	134.7	3.44	41.1	.00													1348			

SPECIAL FREON CAST TAKEN IN SANTA CRUZ BASIN.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 87 55

1	1539	4.16	4.04	34.468	27.359	86.0	.26	3.6	130.4	3.46	40.7	.00	1554
1	1640	4.18	4.04	34.470	27.360	87.0	.25	3.4	132.9	3.49	40.1	.02	1656

SPECIAL FREON CAST TAKEN IN TANNER BASIN.

RV NEW HORIZON						CALCOFI CRUISE 8508						STATION 90 38					
LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	LOUP AMI TYPE			
33 08.0 N		118 28.4 W		15/08/85	1216	GMT 1242 M											
CAST DEPTH		TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HI	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0 PRESS		
M		DEG C	DEG C		THETA			ML/L	PCX	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L D.BAR		
1	1	20.36	20.36	33.639	23.630	425.4		5.63	108.8	1.6	.32	.1	.00		1		
1	52	12.06	12.06	33.591	25.485	250.0		4.94	81.0	9.0	.99	9.0	.42		52		
1	104	9.88	9.87	33.776	26.019	200.1		3.34	52.3	23.3	1.73	21.9	.02		104		
1	308	8.26	8.23	34.313	26.701	139.0		.79	12.0	51.5	2.80	32.8	.00		310		
1	514	6.47	6.42	34.298	26.944	117.9		.38	5.5	73.1	3.16	38.0	.00		518		
1	721	5.24	5.18	34.374	27.158	98.8		.21	3.0	97.7	3.39	41.0	.00		726		
1	925	4.46	4.39	34.442	27.302	86.1		.30	4.2	10.2	3.42	42.4	.00		933		
1	1026	4.24	4.16	34.461	27.341	83.0		.34	4.7	121.2	3.46	42.5	.00		1035		

SPECIAL FREON CAST TAKEN IN CATALINA BASIN*

RV NEW HORIZON				CALCOFI CRUISE 8508										STATION 90 45					
1	1101	4.10	4.02	34.472	27.365	81.2		.36	4.9	125.0		42*1	.00		1111				
1	1176	4.04	3.95	34.478	27.376	80.5		.36	4.9	128.5		41.5	.00		1186				
LATITUDE,		LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT						
32 55.1 N		118 56.8 W	15/08/85	0614	GMT	1694	M												
CAST DEPTH		TEMP	POT TENP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS			
M		DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR			
1	1	19.34	19.34	33.668	23.918	397.9		5.51	104.5	1.6	.31	.1	.00			1			
1	103	9.72	9.71	33.780	26.049	197.3		3.28	51.2	24.4	1.72	22.4	.01			103			
1	407	7.07	7.03	34.308	26.870	123.8		.55	8.1	65.6	3.03	36.3	.00			410			
1	612	5.73	5.68	34.361	27.088	104.8		.38	5.4	87.1	3.30	40.6	.00			616			
1	816	4.91	4.84	34.405	27.221	93.4		.33	4.6	104.6	3.39	42.0	.00			822			
1	1122	3.98	3.89	34.479	27.383	79.3		.43	5.9	127.2	3.40	42.6	.00			1132			
1	1224	3.85	3.76	34.491	27.406	77.7		.69	9.4	126.0	3.43	43.3	.00			1235			
1	1430	3.75	3.64	34.501	27.427	77.3		.57	7.8	135.0	3.44	42.4	.00			1443			

SPECIAL FREON CAST TAKEN IN SAN NICHOLAS BASIN.

RV NEW HORIZON						CALCOFI CRUISE 8508								STATION		90	53
1	1532	3.71	3.59	34.504	27.433	77.5		.54	7.3	137.3	3.46	41.7	.00			1547	
1	1635	3.71	3.58	34.506	27.436	78.1		.45	6.1		3.49	40.8	.00			1651	
LATITUDE		LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIN	SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD AMT			
32 39.3 N		119 28.5 W	14/08/85	2312	GMT 1310 M												
CAST DEPTH		TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI 03	P04	N03	N02	CHL-A	PHAE0	PRESS	
M, FATH.		DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0	18.93	18.93	33*711	24.056	384.8		5.50	103.6	1.8	.28	.1	.00			0	
1	51	11.39	11.38	33.650	25.656	233.6		4.36	70.5	14.2	1.24	14.8	.17			51	
1	101	9.42	9.41	33.871	26.168	185.8		2.96	45.9	28.3	1.91	24.4	.01			101	
1	203	8.22	8.20	34.104	26.541	152.1		2.00	30.2	42.3	2.36	30.1	.05			204	
1	406	6.68	6.65	34.242	26.870	123.5		.85	12.4	67.4	3.02	36.9	.01			409	
1	609	5.32	5.27	34.293	27.083	104.6		.30	4.2	90.2	3.28	41.4	.00			613	
1	811	4.71	4.64	34.418	27.254	89.8		.36	5.0	108.4	3.38	42.6	.00			817	
1	1013	4.06	3.98	34.470	27.366	80.0		.54	7.4	125.6	3.39	42.9	.00			1021	

SPECIAL FREON CAST TAKEN IN TANNER BASIN.

RV NEW HORIZON						CALCOFI CRUISE 8508						STATION 94 32	
1	1113	3.98	3.90	34.475	27.379	79.6	.49	6.7	128.2	3.40	42.5	.01	1123
1	1214	3.97	3.87	34.481	27.386	79.8	.53	7.2	128.0	3.40	42.7	.00	1225

RV NEW HORIZON						CALCOFI CRUISE 8508						STATION 94 32					
1	1113	3.98	3.90	34.475	27.379	79.6	.49	6.7	128.2	3.40	42.5	.01			1123		
1	1214	3.97	3.87	34.481	27.386	79.8	.53	7.2	128.0	3.40	42.7	.00			1225		
LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	HIN	SPEED	HAVES	HEATHER	BAROMETER	DRY	HET	LOUD	AMT	TYPE			
32 44.9 N	117 39.1 W	10/08/85	0408 GMT	1067 M													
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SV A	DYN HT	OXYGEN	OXY	SI03	P04	N03	M02	CHL-A	PHAE0	PRESS		
M	DEG C	DEG C		THETA			ML/L	PCJ	UM/L	UM/L	UM/L	UM/L	UG/L	U</L	D.BAR		
1	1	20.31	20.31	33.643	23.646	423.9	5.42	104.7	1.9	.33	.1	.00			1		
1	50	12.46	12.48	33.338	25.208	276.3	5.96	98.5	4.5	.67	4.1	.19			50		
1	99	10.51	10.50	33.649	25.812	219.8	4.01	63.6	17.3	1.43	17.8	.03			99		
1	196	9.32	9.30	34.114	26.376	168.1	2.08	32.2	35.1	2.19	27.4	.01			197		
1	293	8.72	8.69	34.282	26.605	148.1	1.21	18.5	45.0	2.57	31.1	.00			295		
1	391	8.20	8.16	34.346	26.736	137.2	.63	9.5	53.8	2.84	33.4	.00			393		
1	489	7.18	7.14	34.322	26.866	125.7	.47	6.9	64.0	2.99	36.6	.00			492		
1	682	5.45	5.39	34.375	27.134	100.9	.25	3.5	89.6	3.26	41.9	.00			687		
1	877	4.48	4.42	34.447	27*302	85.6	.33	4.6	112.4	3.33	43.3	.00			884		
1	973	4.14	4.07	34.476	27.363	80.2	.41	5.6	119.4	3.35	43.6	.00			981		

SPECIAL FREON CAST TAKEN IN SAN DIEGO TROUGH.

RV NEW HORIZON

CALCOFI CRUISE 850a

STATION 93 39

LATITUDE		LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM		WIN SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	ANT	TYPE
32 31.0 N		118 07.2 U	10/08/85	111* GNT	2037 N											
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN NT	OXYGEN	OXY	SI03	P0*	N03	N02	CNL-A	PHAE0	PRESS
M		DEG C	DEG C	THETA				M./L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	1	18.64	18.64	33.624	24.061	384.3		5.55	103.9	1.8	.34	.0	.00			1
1	104	10.25	10.23	33.446	25.856	215.7		4.11	64.8	17.9	1.49	18.4	.01			104
1	206	8.51	8.49	34.042	26.448	161.2		2.36	35.9	36.6	2.19	28.7	.01			207
1	411	6.72	6.68	34.204	26.836	126.8		.88	1219	62.4	2.90	37.1	.01			414
1	515	6.03	5.98	34.295	26.998	112.3		.38	5.5	76.2	3.15	40.0	.00			518
1	771P	4.81	4.75	34.427	27.250	90.0		.30	4.2	105.5	3.31	43.5	.00			777
1	1062P	3.95	3.87	34.490	27.394	77.6		.49	6.7	124.0	3.32	43.3	.00			1071

SPECIAL FREON CAST TAKEN IN SAN CLEMENTE BASIN.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 46

1 1540P	2.74	2.63	34.578	27.582	60.0		1.17	15.5	149.9	3.19	42.7	.00			1555
1 1667P	2.66	2.55	34.586	27.595	59.3		1.24	16.4	152.7	3.16	42.5	.00			1684
LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIN SPEED		WAVES		WEATHER	
32 16.7 N		118 38.0 W		10/08/85		2134		GMT 1664 M							
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN	
n		DEG C		DEG C				TNETA						ML/L	
1 2		19.74		19.74		33.628		23.786		410.6				5.41	
														103.4	
														1.6	
														.14	
														.1	
														.00	
1 54		12.69		12.68		33.327		25.161		280.9		5.92		98.2	
														3.6	
														.44	
														3.1	
														.17	
1 106		10.30		10.29		33.662		25.859		215.5		4.07		64.3	
														17.7	
														1.27	
														17.8	
														.01	
1 208		8.67		8.65		34.062		26.438		162.1		2.35		35.9	
														37.1	
														2.00	
														28.1	
														.01	
1 414		6.67		6.64		34.235		26.866		124.0		.68		9.9	
														67.5	
														2.77	
														37.3	
														.02	
1 621		5.44		5.39		34.366		27.127		100.7		.24		3.4	
														90.6	
														3.06	
														41.6	
														.00	
1 826		4.65		4.58		34.429		27.270		88.4		.30		4.2	
														105.7	
														3.11	
														43.8	
														.00	
1 1030		4.11		4.03		34.476		27.366		80.3		.84		11.5	
														120.1	
														3.12	
														44.0	
														.00	

SPECIAL FREON CAST TAKEN IN EAST CORTES BASIN.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 52

1 1337	3.28	3.18	34.536	27.498	68.2		.78	10.5	140.0	3.06	43.8	.00			1349
1 1586	3.16	3.04	34.547	27.520	67.7		.85	11.4	144.5	3.05	43.3	.01			1602

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI TYPE			
32 05.9 N	119 03.2 W	11/08/85	034 0	GMT 1572 M											
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
n	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	2		33.659				5.52		1.2	.15	.1	.00			2
1	54	13.18	13.17	33.526	25.218	275.5	5.68	95.3	5.2	.51	4.9	.01			54
1	104	9.82	9.81	33.730	25.992	202.7	3.89	60.8	21.7	1.45	20.9	.01			105
1	207	8.18	8.16	34.052	26.505	155.5	2.87	43.3	40.1	2.02	29.0	.00			208
1	412	6.52	6.49	34.258	26.904	120.2	.81	11.8	70.1	2.81	37.9	.00			415
1	719	5.05	4.99	34.380	27.185	95.9	.35	4.9	97.6	3.06	42.0	.00			725
1	1027	4.05	3.97	34.477	27.373	79.4	.55	7.5	119.6	3.08	44.1	.00			1036
1	1233	3.49	3.39	34.522	27.467	71.0	.76	10.3	133.4	3.07	43.9	.00			1244
1	1438	3.23	3.13	34.539	27.506	68.2	1.01	13.6	140.0	3.05	43.5	.00			1452
1	1540A	3.22	3.11	34.539	27.507	68.8	.78	10.5	142.0	3.06	43.2	.00			1555

SPECIAL FREON CAST TAKEN IN EAST CORTES BASIN.

A. THE PRESSURE THERMOMETER MALFUNCTIONED ON THE DEEPEST BOTTLE, THE DEPTH SHOWN IS THE WIRE LENGTH. DATA FROM THIS LEVEL SHOULD BE USED WITH CAUTION.

RV NEW HORIZON					CALCOFI CRUISE 8508										STATION 77				77
LATITUDE	LONGITUDE	MO/DAY/Y	MESSENGER	SECCHI	DEPTH	INCUBATION	TIME	LAN	CIVIL TWILIGHT	INTEGRATED									
34°10.4 N	122°42.5 ' W	08/21/85	1929 GMT	18	at	1218	- PST	1215 PST	1918 PST	224.5 Dg C/m2									
DEPTH	TEMP	SALINITY	SIGMA	DISS	O2	OZY	SI03	P04	N03	1922 H02	CHL	PHAE0	LIGHT	UPTAKE	(mgC/m3)	MEAN	DARK		
m	DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	ug/1	%	1	2				
1	16.65	33.430	24.393	5.86	105.4	1.5	0.38	0.1	0.00	0.22	0.05	91	0.49	0.56	0.33	0.22			
13	16.60	33.432	24.405	3.89	105.4	1.4	0.37	0.1	0.01	0.21	0.04	34	3.6	3.5	3.6	0.18			
18	13.60	33.568	24.737	6.27	110.6	1.4	0.38	0.4	0.03	0.35	0.12	24	7.0	6.7	6.8	0.28			
26	14.98	33.553	24.863	6.10	106.2	2.1	0.47	1.6	0.07	0.60	0.15	12	7.4	6.9	7.1	0.21			
42	12.24	33.576	25.438	4.68	77.0	10.5	1.11	10.7	0.91	0.67	0.29	3.1	3.4	2.9	3.2	0.33			
6*	10.22	33.517	25.739	4.47	70.4	16.9	1.47	17.6	0.22	0.11	0.11	0.5	0*	0	0	0.21			

* Dark uptake exceeded light uptake.

RV NEW HORIZON					CALCOFI CRUISE 8508										STATION 77 120			
LATITUDE	LONGITUDE		DATE	MESSENGER	SECCHI	DEPTH	INCUBATION		TIME	LAN	CIVIL TWILIGHT		INTEGRATED					
32044.2°N	1	125°42.3'W	08/20/85	1912 GMT	31	m	1208	-	PST	1226	1918	74.2	C/m2					
DEPTH	TEMP	SALINITY	SIGMA	DISS	O2	OXY	SI03	P04	N03	1919	CHL	PHAE0	LIGHT	UPTAK	E	2	MEAN	DARK
m	DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	ug/1	%	1	2			
2	18.84	33.351	23.802	5.65	106.0	1.5	0.35	0.0	0.00	0.05	0.00	91	1.1	0.88	0.99	0.18		
23	18.87	33.393	23.828	5.57	104.6	1.5	0.33	0.0	0.00	0.06	0.00	34	0.88	0.99	0.93	0.18		
30	19.60	33.781	23.938	5.49	104.7	1.7	0.32	0.0	0.00	0.06	0.00	24	0.55	0.75	0.65	0.18		
44	16.79	33.457	24.381	6.07	109.5	1.7	0.32	0.0	0.00	0.08	0.01	12	1.0	1.1	1.1	0.20		
72	13.90	33.205	24.824	6.31	107.3	1.7	0.35	0.0	0.00	0.12	0.02	3.1	0.50	0.46	0.48	0.17		
110	12.83	33.289	25.104	5.85	97.3	2.5	0.45	0.6	0.14	0.25	0.10	0.50	0.17	0.16	0.16	0.12		

RV NED HORIZON						CALCOFI CRUISE 8508										STATION 80 90			
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI	DEPTH	INCUBATION TIME			LAN	CIVIL TWILIGHT		INTEGRATED			
33008.9' N		123° 13.5'W		08/19/85		2022 GMT		27	m	1237	-	PST	1216 PST	1923 PST		94.1	C/m2		
DEPTH		TEMP	SALINITY	SIGMA	DISS	O2	OZY	SI03	P04	N03	1923 N02	CHL	PHAE0	LIGHT	UPTAKE	(mgC/m3)			
m		DEG C		THETA	ml/L	PCT		um/1	um/1	um/1	um/1	ug/1	ug/1	%	1	2	MEAN		
1		18.58	33.427	23.926	5.53	103.3		1.7	0.37	0.0	0.00	0.05	0.01	91	1.0	1.0	1.0		
18		18.40	33.422	23.967	5.55	103.3		1.7	0.37	0.0	0.00	0.06	0.00	34	1.8	1.8	1.8		
24		18.32	33.419	23.986	5.53	102.7		1.7	0.36	0.0	0.00	0.06	0.01	24	1.4	1.3	1.3		
36		18.07	33.402	24.035	5.58	103.2		1.7	0.36	0.0	0.00	0.07	0.01	12	1.4	1.6	1.5		
61		14.45	33.272	24.761	6.26	107.7		1.9	0.36	0.0	0.00	0.14	0.03	3.1	0.73	0.76	0.74		
94		12.91	33.299	25.095	5.93	98.8		2.6	0.45	0.6	0.11	0.31	0.22	0.50	0.17	0.19	0.18		

RV NEW HORIZON						CALCOFI CRUISE 8508										STATION 81				48.6
LATITUDE		LONGITUDE	MO/DAY/YR	MESSENGER	SECCH	DEPTH	INCUBATION	TIME	LAM	CIVIL TWILIGHT	INTEGRATED									
34021 N		120013.8 W	08/18/85	1932 GMT	13	m	1208	- PST	1205 PST	1912 PST	501.8 mg C/m2									
0.0							1905													
DEPTH	TEMP	SALINITY	SIGMA	DISS	O2	OXY	SI03	P04	N03	1905 N02	CHL	PHAE0	LIGHT	UPTAKE	(mgC/m3)	MEAN	DARK			
m	DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	SI	1	2						
1	17.79	33.581	24.237	5.95	109.6	1.5	0.30	0.0	0.00	0.24	0.05	91	2.6	2.3	2.5	0.27				
9	16.36	33.629	24.613	6.16	110.3	1.8	0.32	0.0	0.00	0.50	0.13	34	8.6	11.4	10.0	0.38				
12	15.69	33.630	24.764	6.37	112.6	1.6	0.34	0.0	0.00	0.64	0.22	24	14.2	15.3	14.8	0.48				
19	14.69	33.615	24.972	6.25	108.3	2.9	0.45	0.6	0.04	1.58	0.41	12	28.4	31.9	30.2	0.49				
30	12.88	33.643	25.367	4.82	80.4	9.0	1.0	8.7	0.56	0.77	0.40	3.1	6.5	6.5	6.5	0.26				
46	11.12	33.694	25.740	3.77	60.6	17.0	1.46	17.1	0.20	0.15	0.22	0.50	0.09	0.10	0.09	0.22				

RV NEW HORIZON						CALCOFI CRUISE 8508										STATION 83				60
LATITUDE		LONGITUDE	MO/DAY/YR		MESSENGER	SECCHI	DB#ff	INCUBATION		TIME	LAN	CIVIL TWILIGHT		INTEGRATED						
33033	6'N	120045.2'W	08/17/85		1949	GMT	14	m	1208	-	1207 PST	1912 PST		552.7 mg C/m2						
DEPT H	TEMP	SALINITY	SIGMA	DISS	O2	OXY	SI03	P04	N03	N02	CHL	PHAE0	LIGHT	UPTAKE (mgC/m3)						
	m	DEG C		THETA	'm/L	PCT	: um/1	um/1	um/1	um/1	ug/1	ug/1	*	1	2	MEAN	DARK			
1	18.12	33.656	24.215			-	1.1	0.29	0.1	0.00	0.30	0.05	91	10.7	11.0	10.8	0.39			
10	18.06	33.656	24.229	5.70	105.5	1.1	0.29	0.0	0.00	0.35	0.06	34	14.8	16.0	15.4	0.41				
13	18.04	33.654	24.233	5.68	105.1	1.0	0.28	0.0	0.00	0.35	0.07	24	12.0	11.7	11.9	0.38				
20	17.39	33.654	24.390	5.84	106.8	1.0	0.28	0.0	0.00	0.54	0.12	12	16.3	14.5	15.4	0.38				
33	14.51	35.643	25.032	5.68	98.0	4.0	0.57	3.9	0.16	1.53	0.36	3.1	13.3	11.2	12.3	0.30				
50	11.50	33.631	25.620	4.52	73.3	12.9	1.16	13.2	0.27	0.42	0.35	0.50	0.26	0.43	0.34	0.19				

RV NEW HORIZON						CALCOFI CRUISE 8508										STATION 87 45							
LATITUDE		LONGITUDE		MO/DAY/Y		MESSENGER		SECCH		DEPTH		INCUBATION		TIME		LAN		CIVIL TWILIGHT		INTEGRAT		I	
33° 28.7		119020.5^		08/16/85		1918 GMT		20		m		1157 -		PST		1201		1907 PST		452.2		C7m2	
DEPTH		TEMP		SALINITY		SIGMA		DISS		O2		OR		SI03		P04		N03		N02		CHL	
a		DEG				THETA		mL/L		PCT		um/1		um/1		um/1		um/1		ug/1		ug/1	
1		19.2		33.647		23.926'		5.53		104.7		1.6		0.29		0.0		0.00		0.22		0.04	
14		19.2		33.646		23.924		5.55		105.1		1.5		0.29		0.0		0.00		0.26		0.04	
20		18.6		33.640		24.062		5.72		107.2		1.4		0.28		0.0		0.00		0.31		0.06	
29		16.3		33.665		24.650		5.98		107.1		1.6		0.33		0.0		0.00		0.98		0.17	
46		13.0		33.569		25.277		5.43		90.9		6.8		0.74		6.3		0.17		0.72		0.41	
71		11.0		33.674		25.732		3.97		63.8		16.9		1.36		16.6		0.21		0.18		0.17	
		7																					
RV NEW HORIZON						CALCOFI CRUISE 8508										STATION 90 30							
LATITUDE		LONGITUDE		MO/DAY/Y		MESSENGER		SECCH		DEPTH		INCUBATION		TIME		LAN		CIVIL TWILIGHT		INTEGRATED			
33025.0		117<54.3*		08/15/85		1939 GMT		18		m		121 -		PST		1156		1900 PST		321.6		C/m2	
DEPTH		TEMP		SALINITY		SIGMA		DISS		O2		OXY		SI03		P04		803.		N02		CHL	
m		DEG C				THETA		mL/L		PCT		um/1		um/1		um/1		um/1		ug/1		ug/1	
1		21.32		33.696		23.417		5.54		109.0		1.8		0.23		0.0		0.00		0.18		0.03	
13		21.16		33.692		23.457		5.58		109.5		1.8		0.22		0.0		0.00		0.22		0.04	
18		17.76		33.581		24.245		6.39		117.6		1.2		0.27		0.0		0.00		0.22		0.03	
26		14.74		33.554		24.916		6.72		116.5		2.1		0.34		0.0		0.00		0.24		0.06	
42		12.61		33.558		25.354		5.77		95.7		6.5		0.72		4.8		0.17		0.91		0.25	
64		10.96		33.548		25.655		4.59		73.5		12.4		1.24		14.2		0.04		0.26		0.23	
RV NEW HORIZON						CALCOFI CRUISE 8508										STATION 90 56							
LATITUDE		LONGITUDE		MO/DAY/Y		MESSENGER		SECCH		DEPTH		INCUBATION		TIME		LAN		CIVI TWILIGHT		INTEGRATED			
32° 3 9'N		119° 43.2'W		08/14/85		1924 GMT		16		m		1213 -		PST		1214		1917 PST		146.1 mg		C/m2	
DEPT		TEMP		SALINITY		SIGMA		DISS		O2		OXY		SI03		P04		N03		N02		CHL	
H		DEG C				THETA		mL/L		PCT		um/1		um/1		um/1		um/1		ug/1		ug/1	
2		17.28		33.686		24.441		5.77		105.3		1.2		0.32		0.1		0.00		0.31		0.00	
12		15.99		33.622		24.691		6.07		107.9		0.9		0.35		0.0		0.00		0.22		0.05	
16		15.67		33.383		24.734		6.00		106.0		1.0		0.39		0.0		0.00		0.30		0.07	
23		15.48		33.575		24.771		5.92		104.2		1.5		0.43		0.2		0.01		0.49		0.10	
38		12.26		33.434		25.326		5.18		85.2		8.1		1.00		8.5		0.47		0.25		0.36	
58		11.66		33.451		25.451		4.97		80.7		10.2		1.16		11.6		0.47		0.15		0.29	
RV NEW HORIZON						CALCOFI CRUISE 8508										STATION 90 96							
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI		DEPTH		INCUBATION		TIME		LAN		CIVIL TWILIGHT		INTEGRATED			
31° 12.2'N		122022.9'W		08/13/85		1927 GMT		38		m		1209 -		PST		1214		1920		33.4 mg		C/m2	
DEPTH		TEMP		SALINITY		SIGMA		DISS		O2		OXY		SI03		P04		N03		N02		CHL	
m		DBG C				THETA		mL/L		PCT		um/1		um/1		um/1		um/1		ug/1		ug/1	
2		19.08		33.505		23.859		5.44		102.6		1.9		0.33		0.1		0.00		0.07		0.00	
28		18.57		33.458		23.954		5.51		102.9		1.7		0.33		0.1		0.00		0.07		0.00	
36		17.95		33.442		24.094		5.72		105.5		1.7		0.33		0.1		0.00		-		-	
54		16.13		33.343		24.601		6.04		107.6		1.9		0.31		0.1		0.00		0.09		0.01	
89		13.89		33.303		24.902		6.02		102.4		1.9		0.37		0.1		0.00		0.21		0.11	
124		11.84		33.423		25.399		5.00		81.5		7.4		0.82		8.3		0.03		0.12		0.13	
RV NEW HORIZON						CALCOFI CRUISE 8508										STATION 93.3 26.7							
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCH		DEPTH		INCUBATION		TIME		LAN		CIVIL TWILIGHT		INTEGRA		VALU	
32056.6		117019.4'W		08/09/85		1935 GMT		21		m		1214		1937		1156		1912 PST		118.6		C/m2	
DEPTH		TEMP		SALINITY		SIGMA		DISS		O2		OXY		SI03		P04		N03		N02		CHL	
A		DEG C				THETA		mL/L		PCT		um/1		um/1		um/1		um/1		ug/1		ug/1	
1		22.54		33.744		23.115		5.25		105.6		1.9		0.24		0.1		0.00		0.20		0.02	
15		17.00		33.495		24.360		6.20		112.4		2.1		0.34		0.1		0.00		0.17		0.02	
21		14.76		33.421		24.809		6.62		114.7		2.9		0.38		0.0		0.00		0.32		0.06	
30		12.96		33.387		25.152		6.27		104.7		4.4		0.60		3.1		0.13		0.38		0.13	
50		11.73		33.488		25.468		5.17		84.1		9.2		1.00		10.2		0.20		0.53		0.30	

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 45

LA : 32° 2 3' N	IDE	LONGITUDE 118034.6°	MO/DAY/YR 08/10/85	MESSENGER 1948	GMT	SKCCHJ 30	DEPTH B	INCUBATION TIME 1219 - 1917 I T L				LAN : 1203 PST	CIVIL TWILIGHT 1918 PST		INTEGRATED 153.0 mg C/m2	
DEP TH m	TEMP	SALINITY	SIGMA	DISS O2	OXT	SI03	P04	N03	N02	CHL	PBAB0	LIGHT	UPTAKE (mgC/m3)			
	DE6 C		THETA	ml / L	per	um / 1	um / 1	um / 1	um / 1	ug / 1	ug / 1	t	1	2	MEAN	DARK
2	19.22	33.618	23.912	5.44	102.9	2.4	0.29	0.2	0.00	0.10	0.01	91	1.5	1.4	1.4	0.24
22	18.96	33.592	23.957	5.50	103.6	2.2	0.31	0.2	0.00	0.11	0.02	34	2.1	1.7	1.9	0.17
29	17.93	33.551	24.181	5.73	105.8	2.1	0.31	0.1	0.00	0.13	0.02	24	2.1	2.3	2.2	0.22
42	14.32	33.283	24.796	6.38	109.5	2.3	0.37	0.1	0.00	0.17	0.06	12	2.0	2.1	2.1	0.19
70	12.14	33.369	25.298	5.68	93.2	6.0	0.80	6.5	0.29	0.38	0.22	3.1	1.4	1.4	1.4	0.15
X07	10.32	33.623	25.791	4.25	67.*	16.2	1.41	17.2	0.03	0.10	0.09	0.50	0*	0*	0	0.31

* Dark uptake exceeded light uptake.

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 76

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI		DEPTH		INCUBATION TIME		LAN		CIVIL TWILIGHT		INTEGRATED VALUE	
31° 20.5' N		120° 37.6' W		08/11/85		1918 GMT		18		m		1204 - 1920 PST		1207 PST		1913 PST		178.6 mg C/m2	
DEPTH	TEMP	SALINITY	SIGMA	DISS	O2	OXY	SI03	P04	N03	N02	CHL	P8AE0	LIGHT	UPTAKE	CmgC/m3)	MEAN	DARK		
m	DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	ug/1	t	1	2				
1	17.48	33.507	24.255	5.65	103.4	1.4	0.28	0.1	0.00	0.15	0.01	91	1.8	1.9	1.8	0.20			
13	17.16	33.461	24.296	5.73	104.2	1.5	0.30	0.1	0.00	0.20	0.03	34	2.2	2.2	2.2	0.18			
18	17.10	33.456	24.307	5.74	104.2	1.5	0.29	0.1	0.00	0.24	0.05	24	5.2	5.0	5.1	0.19			
26	16.75	33.435	24.375	5.80	104.6	1.5	0.30	0.1	0.00	0.32	0.08	12	5.6	5.6	5.6	0.18			
42	15.13	33.383	24.701	6.07	105.9	1.6	0.34	0.2	0.01	0.42	0.15	3.1	2.3	2.2	2.3	0.19			
64	12.41	33.303	25.195	5.93	97.8	4.2	0.63	4.2	0.19	0.31	0.25	0.50	0.25	0.35	0.30	0.14			

RV NEW HORIZON

CALCOFI CRUISE 8508

STATION 93 114

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI		DEPTH		INCUBATION TIME		LAN		CIVIL TWILIGHT		INTEGRATED VALUE															
30° 05.6' N		123° 10.7' W		08/12/85		1937 GMT		35		m		1218 - 1930 PST		1217 PST		1924 PST		71.9 mg C/m2															
DEPTH		TEMP		SALINITY		SIGMA		DISS O2		OXY		SI03		P04		N03		N02		CHL		PBAB0		LIGHT		UPTAK E		(mgC/m3)		MEAN		DARK	
m		DEG C				ram		mL/L		PCT		um/1		um/1		um/1		um/1		ug/1		ug/1		%		1		2					
2		19.68		33.547		23.739		5.37		102.5		2.5		0.17		0.1		0.00		0.06		0.00		91		0.37		0.31		0.34		0.14	
26		19.50		33.540		23.779		5.38		102.3		2.3		0.17		0.1		0.00		0.07		0.01		34		0.40		0.42		0.41		0.14	
34		19.45		33.533		23.788		5.39		102.4		2.2		0.16		0.1		0.00		0.08		0.02		24		0.61		0.48		0.55		0.12	
50		15.85		33.376		24.534		5.99		106.0		2.3		0.16		0.1		0.00		0.11		0.01		12		1.4		1.2		1.3		0.14	
82		13.64		33.303		24.953		5.99		101.3		2.7		0.23		0.0		0.00		0.22		0.15		3.1		0.48		0.68		0.58		0.12	
125		11.28		33.470		25.538		4.70		75.7		10.6		0.85		11.3		0.02		0.12		0.12		0.50		0.05		0.04		0.05		0.10	

Secchi Disk Observations

CalCOFI Cruise 8508

Line	Sta.	Day	Mo	Local Time (+8: PST)	Depth (m)	Weather	Clouds Type/Amt	
77	70	21	8	1418	15	1	CU	5/8
77	77	21	8	1129	18	-	-	-
77	80	21	8	0805	17	1	CU	4/8
77	110	20	8	1506	31	2	sc	8/8
77	120	20	8	1112	31	2	CU	8/8
80	51	18	8	1312	9	1	sc	2/8
80	55	18	8	1542	11	1	sc	3/8
80	80	19	8	0650	18	1	CU	5/8
80	90	19	8	1222	27	1	CU	3/8
80	100	19	8	1738	25	1	CU	5/8
81	48.6	18	8	1132	13	-	-	-
82	46	18	8	0810	15	1	sc	4/8
83	55	17	8	1600	15	2	sc	8/8
83	60	17	8	1149	14	2	sc	8/8
83	70	17	8	0620	22	1	sc	7/8
87	45	16	8	1118	20	2	sc	8/8
87	50	16	8	1310	11	2	sc	8/8
87	55	16	8	1606	14	-	-	-
90	28	15	8	1457	11	1	sc	2/8
90	30	15	8	1139	18	1	sc	1/8
90	35	15	8	0825	20	1	CU	7/8
90	37	15	8	0555	21	1	sc	7/8
90	53	14	8	1300	16	0	-	0
90	56	14	8	1124	16	-	-	-
90	60	14	8	0705	22	0	.	0
90	90	13	8	1355	32	2	sc	8/8
90	96	13	8	1127	38	-	-	-
90	100	13	8	0820	47	2	sc	8/8
93	27	9	8	1135	21	0	-	0
93	45	10	8	1148	30	2	sc	8/8
93	50	10	8	1355	27	1	sc	6/8
93	76	11	8	1918	18	2	sc	8/8
93	80	11	8	1335	22	2	sc	8/8
93	110	12	8	0750	40	2	sc	8/8
93	114	12	8	1137	35	-	-	-
93	120	12	8	1415	36	1	sc	7/8

CalCOFI Cruise 8508

MACROZOOPLANKTON BIOMASS

Net Mesh Size: 0.505 mm

Line	Sta.	Position	Date Mo/Day	Time (GMT)		Water Volume Strained (m ³)	Max. Tow Depth (m)	Volume per 1000 m ³ Strained	
				Start	End			Total (cm ³)	Small (cm ³)
77	51	35 01.2N 120 55.2W	8/22	1220	1242	416	211	183	183
77	55	34 53.4N 121 12.6W	8/22	0838	0900	407	212	177	177
77	60	34 43.6N 121 33.5W	8/22	0500	0522	451	199	217	206
77	70	34 23.3N 122 15.6W	8/21	2335	2357	455	212	99	99
77	80	34 03.2N 122 56.3W	8/21	1705	1727	420	210	152	152
77	90	33 43.5N 123 38.3W	8/21	1143	1205	431	211	58	58
77	100	33 23.5N 124 19.8W	8/21	0602	0624	443	215	41	41
77	110	33 03.4N 125 01.1W	8/21	0025	0047	452	212	22	22
77	120	32 43.3N 125 41.6W	8/20	1815	1837	424	214	61	38
80	51	34 26.8N 120 31.7W	8/18	2134	2141	120	56	600	600
80	55	34 18.6N 120 48.5W	8/19	0049	0111	426	208	129	129
80	60	34 09.0N 121 09.3W	8/19	0444	0506	436	206	135	101
80	70	33 48.9N 121 50.8W	8/19	1020	1042	441	209	250	250
80	80	33 28.8N 122 32.1W	8/19	1555	1617	446	206	56	56
80	90	33 09.1N 123 13.7W	8/19	2122	2144	426	215	31	31
80	100	32 49.2N 123 54.8W	8/20	0315	1337	422	213	59	59
80	110	32 29.0N 124 35.6W	8/20	0803	0825	424	211	71	59
80	120	32 08.8N 125 16.2W	8/20	0310	1332	415	210	41	41
82	46	34 16.2N 119 56.3W	8/18	1525	1547	418	206	141	141
83	40.7	34 12.6N 119 24.7W	8/18	1140	1144	65	26	643	643
83	42	34 10.6N 119 30.2W	8/18	1005	1017	215	116	210	210
83	51	33 52.7N 120 08.4W	8/18	0422	0432	191	86	89	89
83	55	33 44.5N 120 24.9W	8/18	0137	1059	420	208	110	110
83	60	33 34.9N 120 46.5W	8/17	2055	2117	402	215	134	134
83	70	33 14.4N 121 26.8W	8/17	1520	1542	401	211	45	45
87	33	33 53.4N 118 29.4W	8/16	0522	0528	103	52	897	897
87	35	33 49.3N 118 31.6W	8/16	0815	0837	436	205	241	241
87	40	33 39.3N 118 58.4W	8/16	1345	1407	422	210	114	114
87	45	33 29.1N 119 19.9W	8/16	1830	1852	373	211	123	123
87	50	33 19.7N 119 40.0W	8/16	2142	2149	128	65	273	273
87	60	32 59.4N 120 21.1W	8/17	0421	0443	411	215	380	380
87	70	32 39.1N 121 02.0W	8/17	0930	0952	406	216	222	222
90	28	33 29.0N 117 46.2W	8/15	2345	2351	125	56	255	255
90	30	33 24.7N 117 54.3W	8/15	2053	2115	413	211	70	70
90	35	33 15.2N 118 15.3W	8/15	1700	1722	391	215	166	125
90	37	33 10.9N 118 23.8W	8/15	1445	1507	403	212	697	697
90	45	32 55.4N 118 57.7W	8/15	0805	0827	457	210	131	131
90	53	32 38.8N 119 29.3W	8/14	2357	0019	419	210	60	60
90	60	32 24.7N 119 57.9W	8/14	1655	1717	410	211	273	273
90	70	32 05.2N 120 39.5W	8/14	1040	1102	406	204	239	239
90	80	31 44.9N 121 18.7W	8/14	0441	0503	431	207	125	125
90	90	31 25.4N 121 59.9W	8/13	2307	2329	437	207	50	50
90	100	31 05.6N 122 39.6W	8/13	1705	1727	434	211	23	23
90	110	30 43.8N 123 20.4W	8/13	1120	1142	431	217	42	42
90	120	30 25.0N 123 59.5W	8/13	0536	0558	431	218	46	46
93	26.8	32 56.8N 117 18.5W	8/9	1857	1904	121	59	124	124
93	29	32 52.5N 117 27.7W	8/9	2244	2306	437	207	46	46
93	30	32 50.8N 117 32.1W	8/10	0141	0203	426	209	61	61
93	35	32 41.0N 117 52.5W	8/10	0710	0732	408	210	122	122
93	40	32 30.4N 118 12.5W	8/10	1428	1450	426	211	167	167
93	45	32 20.9N 118 33.3W	8/10	1835	1857	412	212	95	95
93	50	32 10.8N 118 53.7W	8/11	0137	0159	431	206	95	95
93	55	32 00.8N 119 14.4W	8/11	0640	0702	424	208	118	118
93	60	31 50.9N 119 34.3W	8/11	1025	1047	414	214	174	174
93	70	31 30.8N 120 14.9W	8/11	1600	1622	414	216	452	133
93	80	31 10.7N 120 54.9W	8/11	2253	2315	447	211	63	63
93	90	30 50.7N 121 35.6W	8/12	0439	0501	434	213	67	67
93	100	30 30.7N 122 15.5W	8/12	1020	1042	445	210	47	47
93	U0	30 11.7N 122 55.5W	8/12	1640	1702	443	216	36	36
93	120	29 50.8N 123 35.8W	8/12	2343	0005	438	207	30	30

FIGURES

Cruise 8511

1. CalCOFI Cruise 8511, station positions.
2. Horizontal distribution of chlorophyll-a at 10 meters.
3. Horizontal distribution of dynamic height anomaly (0 over 500 m).
4. Horizontal distribution of sigma-theta at 10 meters.
5. Horizontal distribution of temperature at 10 meters.
6. Horizontal distribution of salinity at 10 meters.
7. Horizontal distribution of dynamic height anomaly (200 over 500 m).
8. Horizontal distribution of sigma-theta at 200 meters.
9. Horizontal distribution of temperature at 200 meters.
10. Horizontal distribution of salinity at 200 meters.

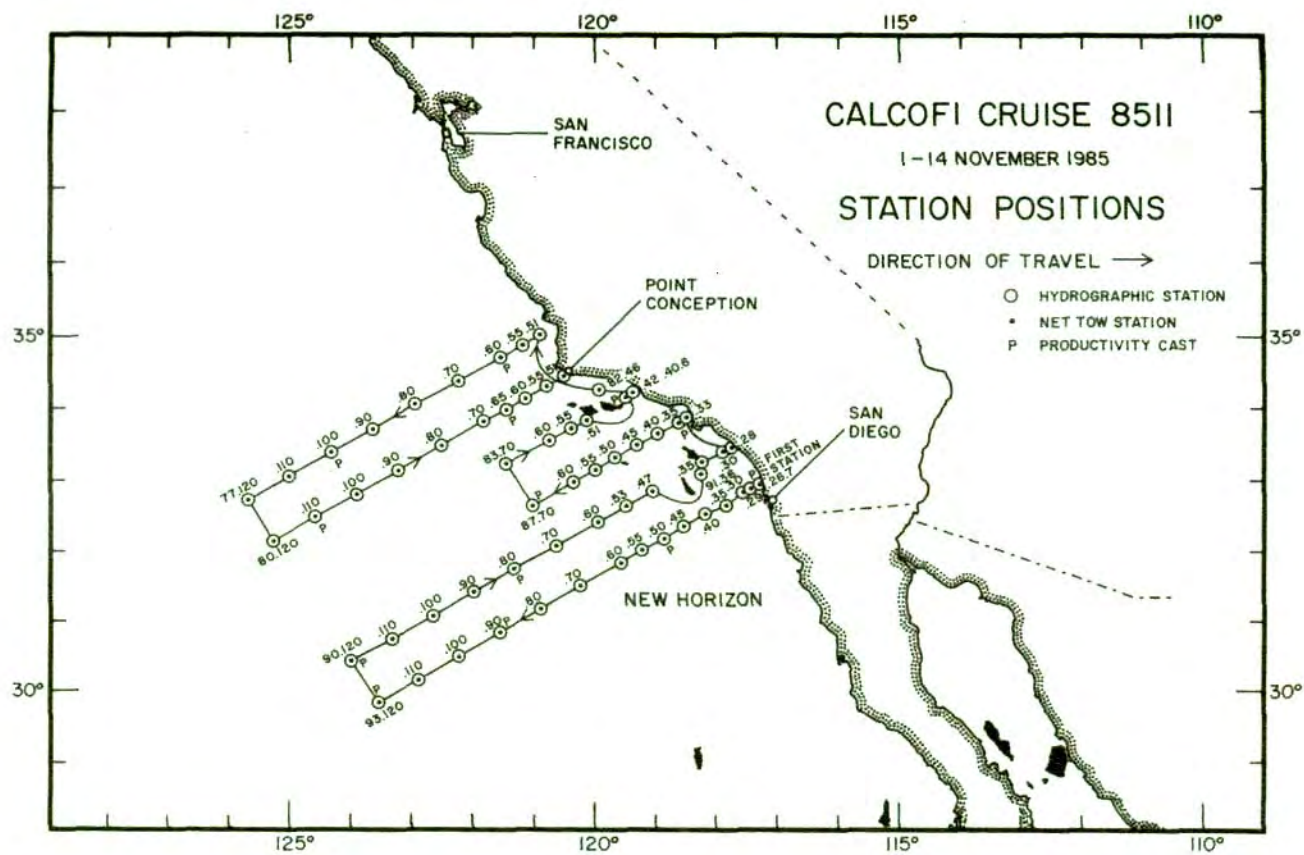


FIGURE 1

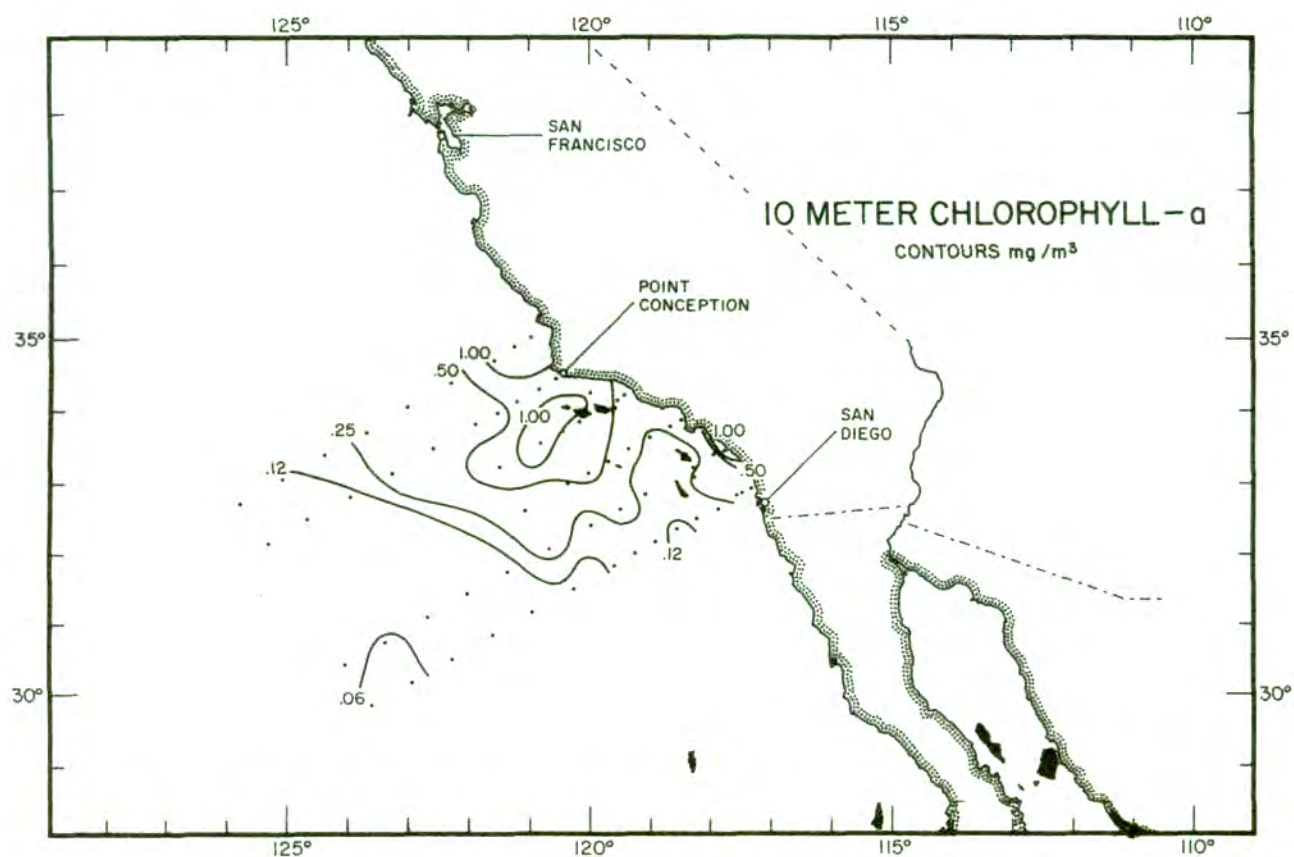


FIGURE 2

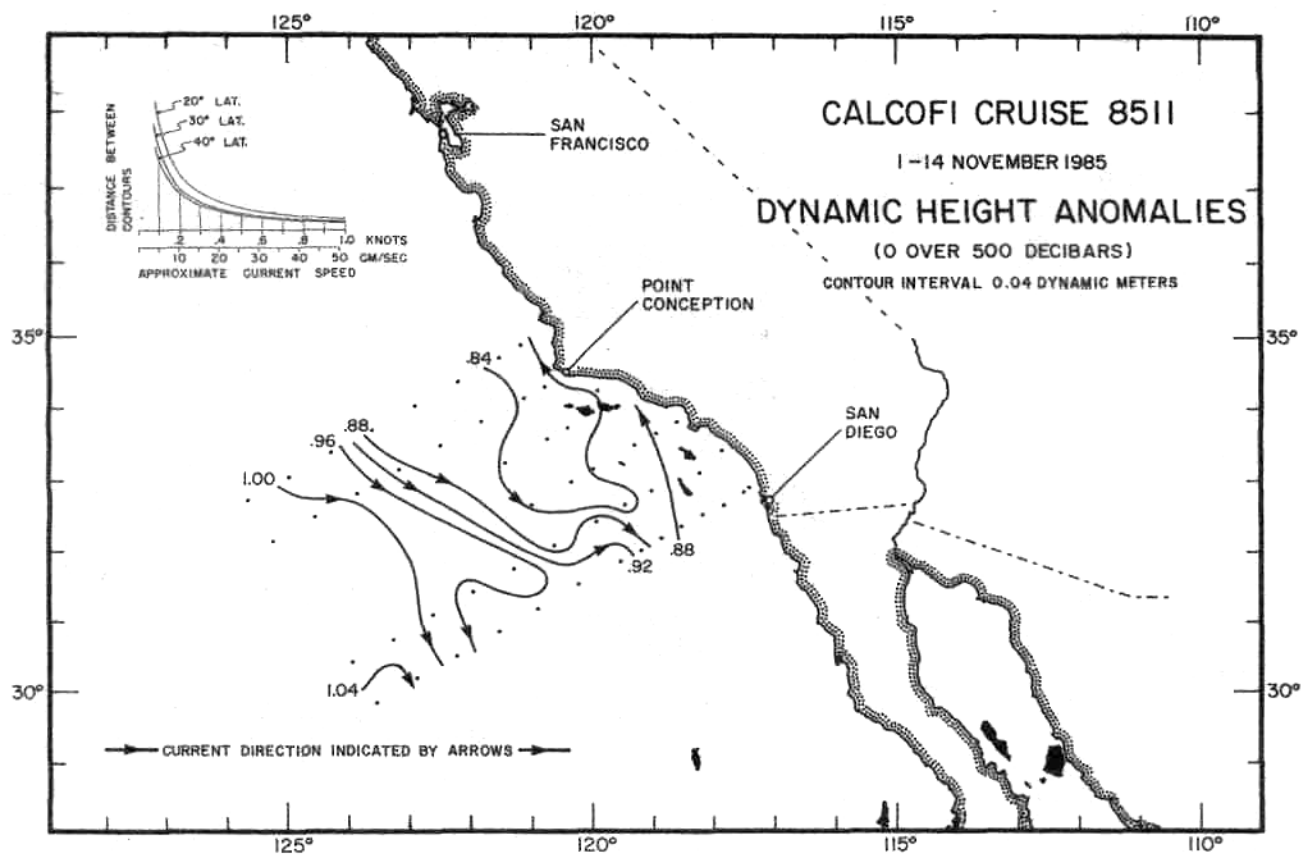


FIGURE 3

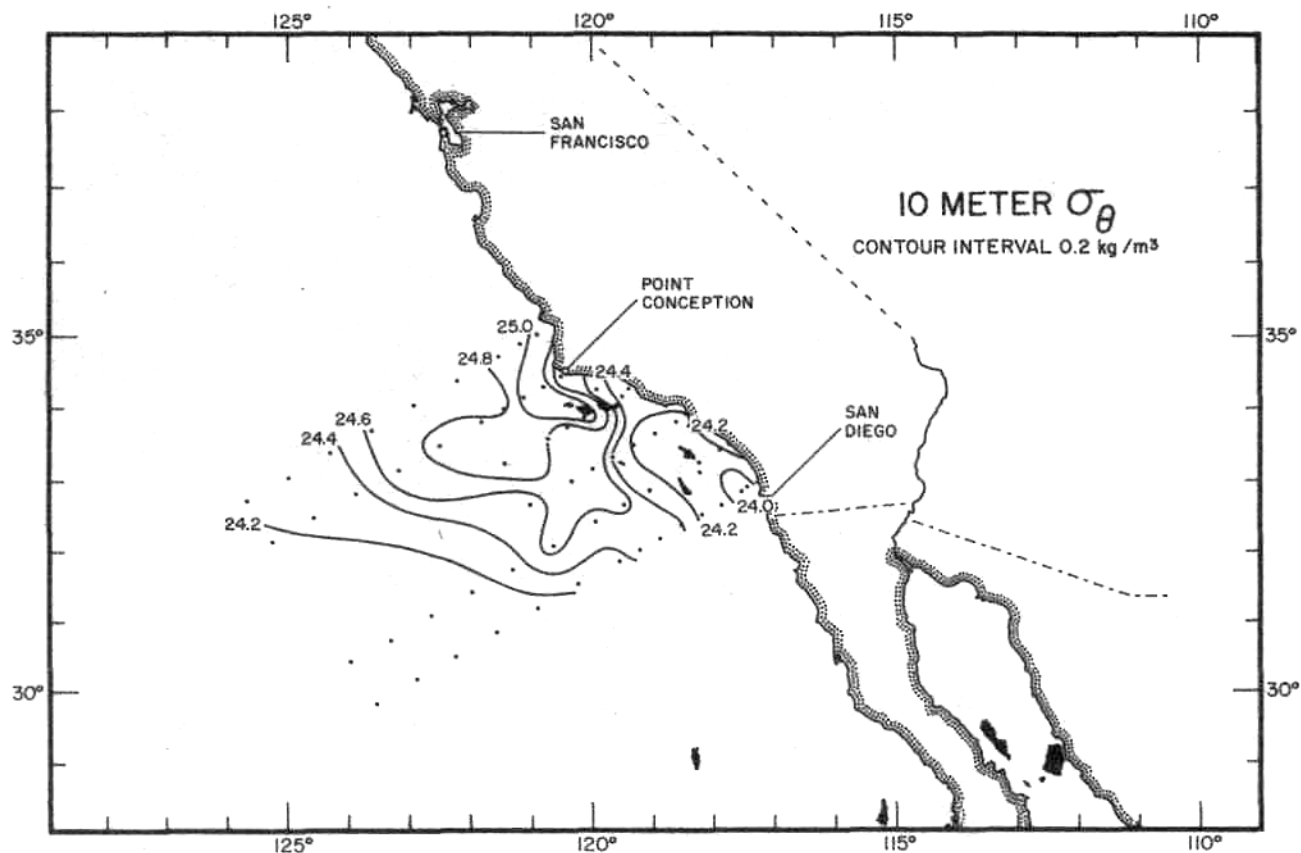


FIGURE 4

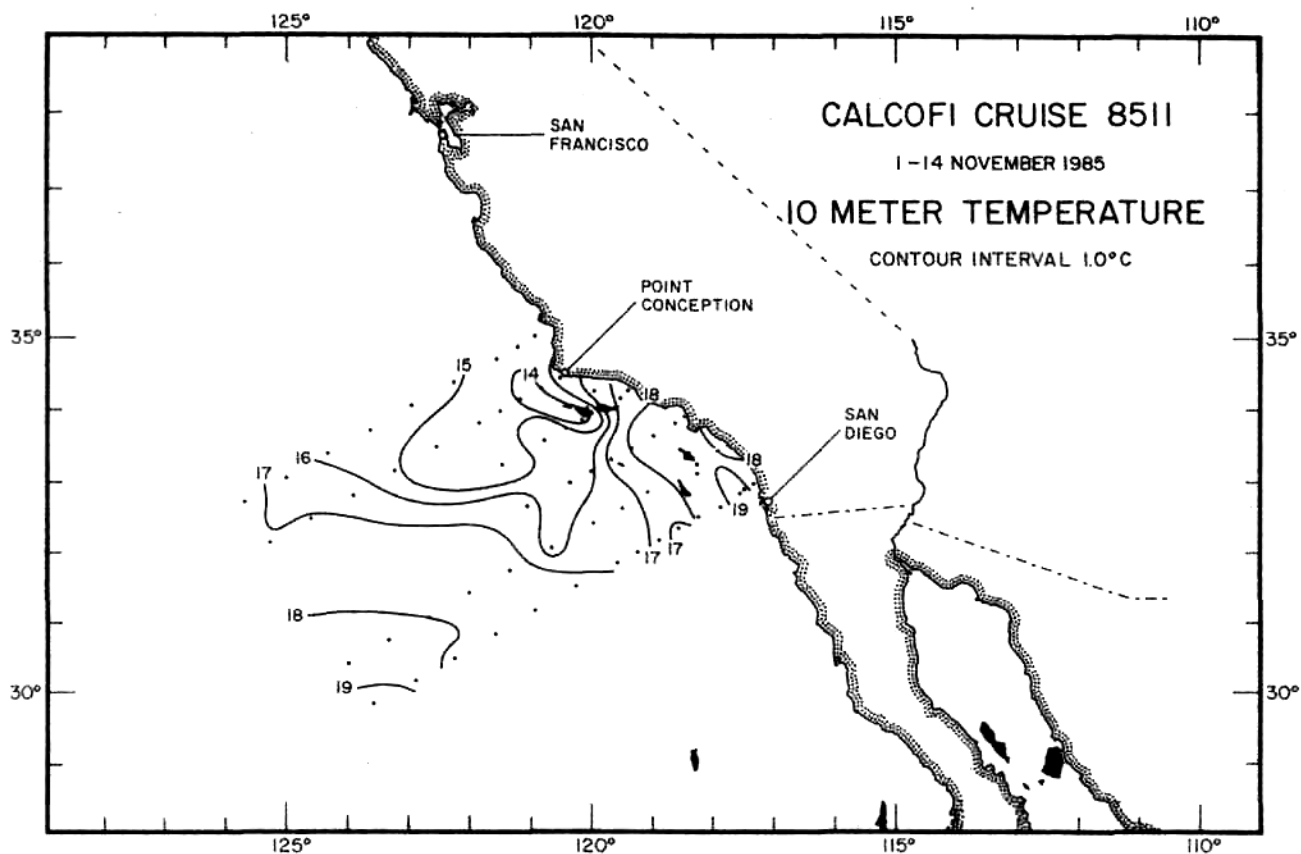


FIGURE 5

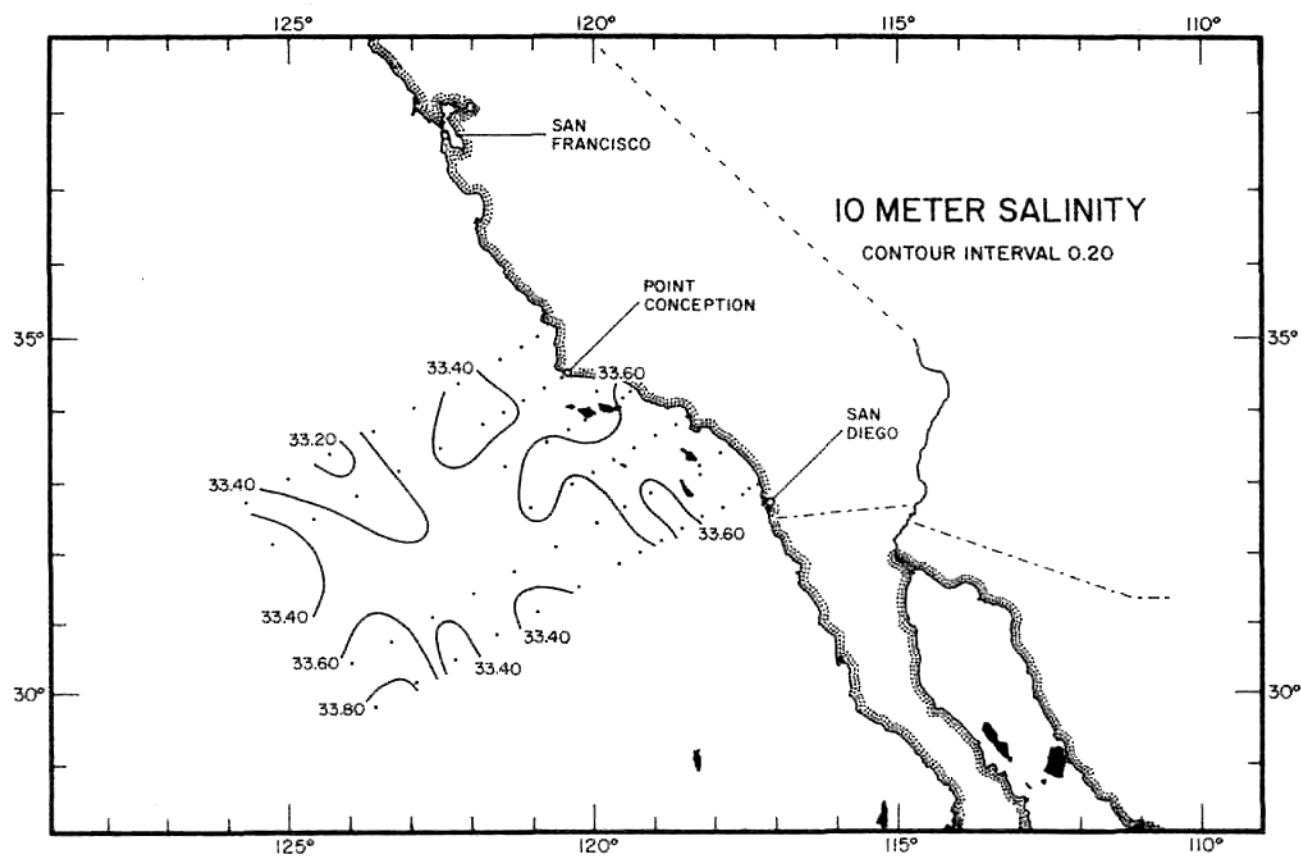


FIGURE 6

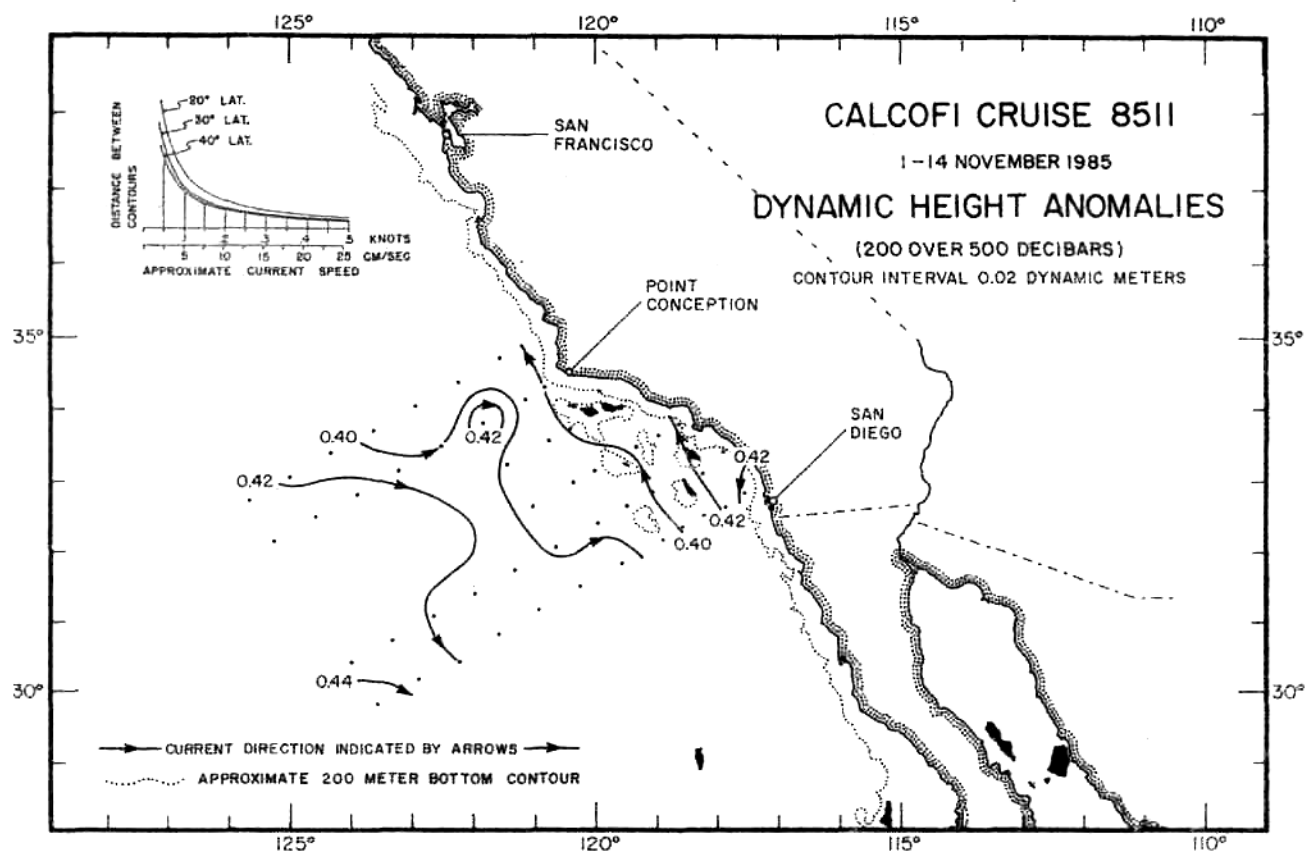


FIGURE 7

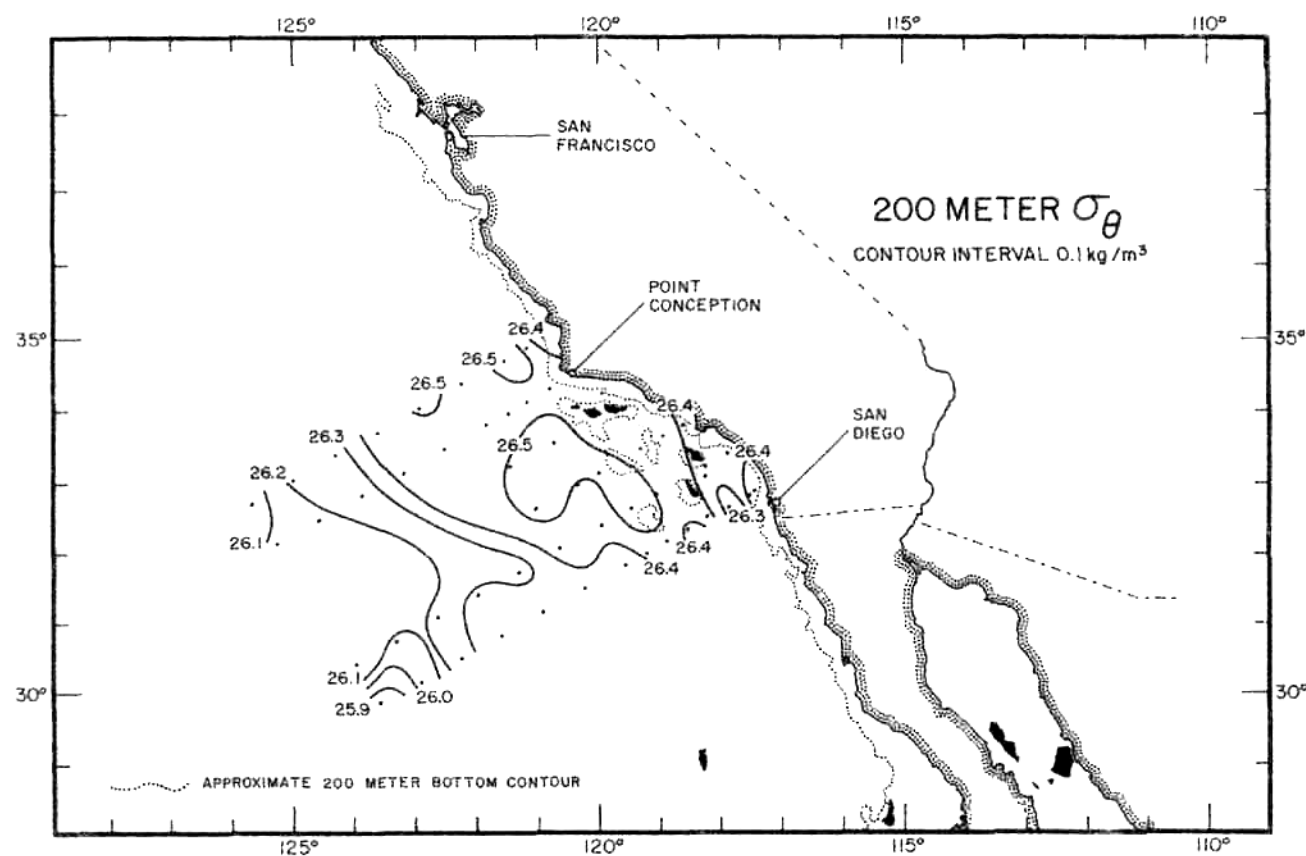


FIGURE 8

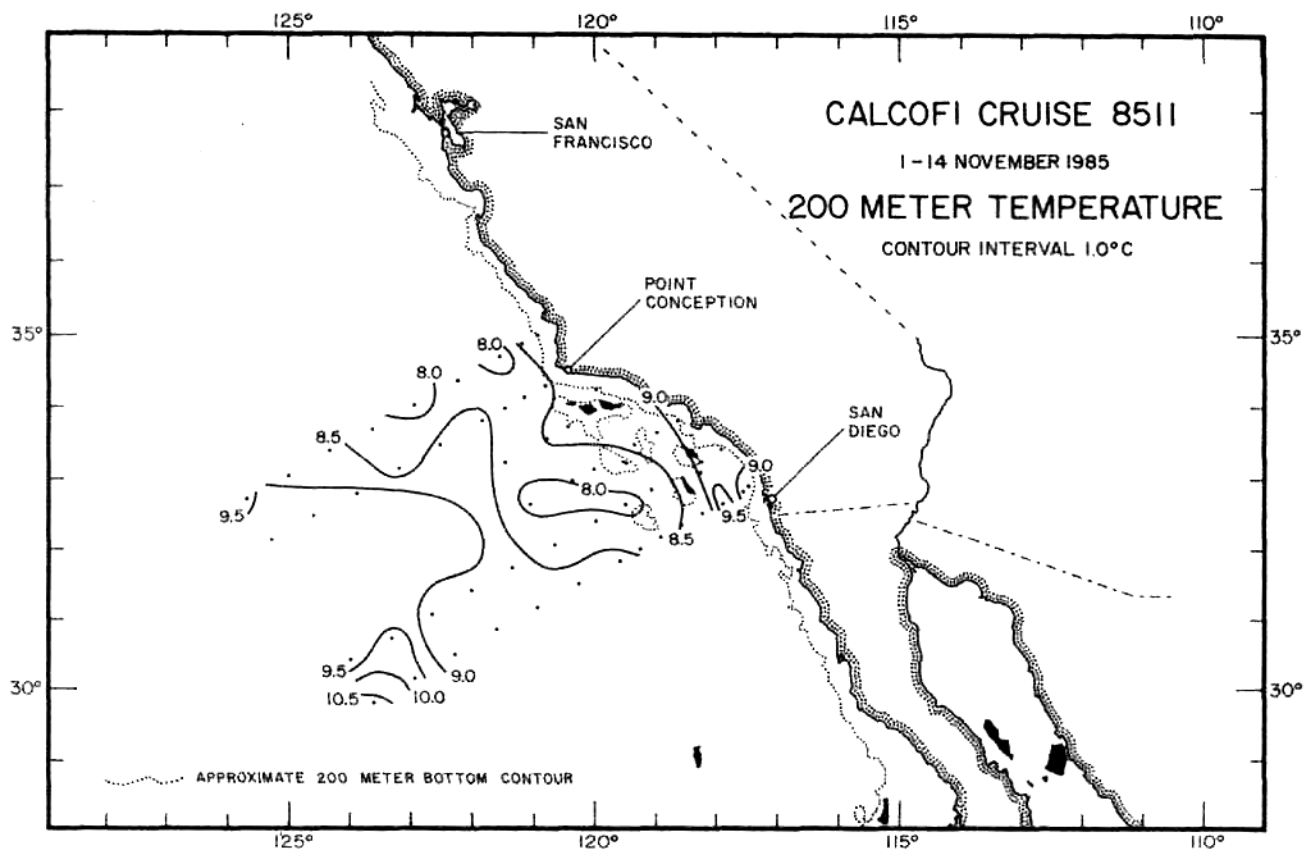


FIGURE 9

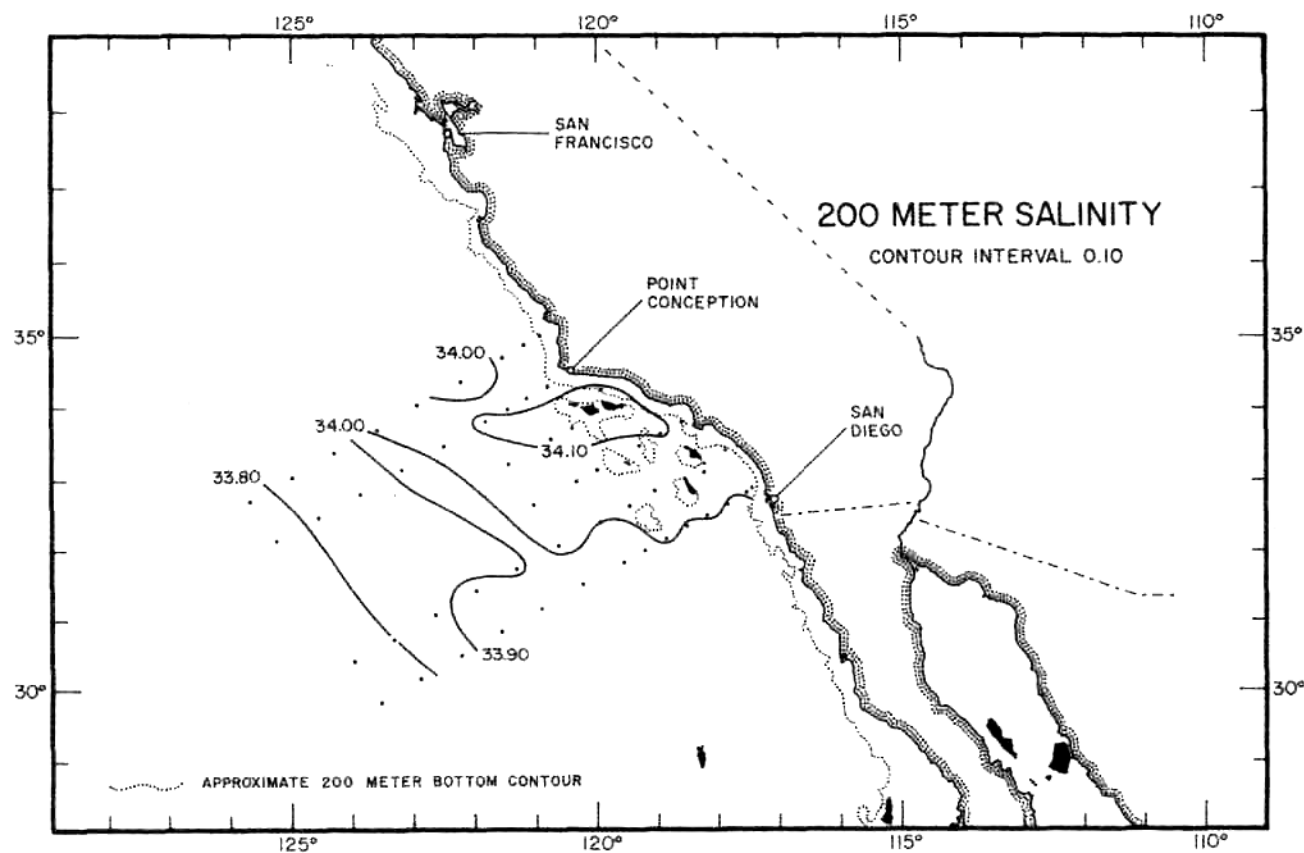


FIGURE 10

PERSONNEL

Cruise 8511

SHIP'S CAPTAIN

Phillip L. Munsch, RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

Anderson, George C. (in charge)	Staff Research Associate,	SIO
Abramenskoff, Dmitry N.	Fishery Biologist, NMFS	
Bryan, Walter R.	Marine Technician, SIO	
Cohenour, Bernard C.	Oceanographer, U.S. Navy, PMTC	
Cummings, Sherry L.	Staff Research Associate,	SIO
Fabricius, Josephine M.	Volunteer	
Flerx, William C.	Fishery Biologist, NMFS	
Paniagua, Carmen	Biologist, CICESE	
Radilla-Camacho, Rufino	Biologist, UABC	
Ramirez-Siqueiros, Olga E.	Oceanographer, CICESE	
Schmitt, Walter, R.	Staff Research Associate,	SIO
Villalobos-Fierro, David	Oceanographer, CICESE	

ATTITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRV	WET	CLOUD	AH1	TYPE			
35 01.4	120 55.5 W	10/11/85	1003 6H»	249 M	230 06	KT		1015.0	HB 13.3 C	10.5 C						
CAST	DEPTH	TEHP	POT TEHP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXT	8103	P04	N03	N0?	CML-A	PHAE0	PRESS
	H	DE6 C	DEG C		THETA			ML/L	PCT	UH/L	UH/L	UH/L	UH/L	UG/L	UG/L	D.BAR
	0	I	14.18	14.18	33.544	25.026	29-2.3	.000	5.81	99.6						0
1	1	14.18	14.18	33.544	25.026	292.4	.003	5.81	99.6	S.5	.54	2.0	.09	1.29	.43	1
	10	ISL 14.20	14.20	33.547	25.024	292.8	.02*	5.76	98.8							10
1	11	14.20	14.20	33.547	25.023	292.9	.032	5.76	98.8	5.7	.56	2.1	.09	1.34	.40	11
	20	ISL 13.36	13.36	33.550	25.199	277.1	.058	5.32	89.6							20
	30	ISL 12.26	12.26	33.550	25.415	256.1	.084	4.74	78.0							30
1	32	12.04	12.04	33.555	25.460	251.8	.089	4.62	75.7	11.3	1.08	10.8	.10	.51	.39	32
1	47	11.40	11.39	33.599	25.614	237.5	.126	4.15	67.1	14.4	1.33	14.8	.02	.18	.24	47
	50	ISL 11.30	11.30	33.609	25.640	235.2	.133	4.08	65.8							50
1	58	11.11	11.10	33.631	25.692	230.3	.151	3.94	63.3	16.1	1.41	16.3	.02	.10	.22	58
1	73	10.79	10.78	33.674	25.783	222.1	.165	3.73	59.5	18.1	1.50	18.1	.02	.06	.16	73
	75	ISL 10.74	10.73	33.681	25.797	220.8	.190	3.70	58.9							76
1	89	10.51	10.50	33.718	25.866	214.5	.220	3.51	55.7	20.2	1.64	19.7	.00	.03	.12	89
	100	ISL 10.38	10.36	33.744	25.909	210.5	.244	3.38	53.5							101
1	108	10.29	10.28	33.762	25.938	208.0	.262	3.29	52.0	22.6	1.72	21.2	.00	.03	.11	109
	125	ISL 10.11	10.09	33.803	26.002	202.3	.296	3.11	48.9							126
1	134	10.00	9.99	33.826	26.038	199.1	.314	3.01	47.3	25.6	1.86	23.1	.00	.02	.09	135
	150	ISL 9.84	9.83	33.863	26.094	194.1	.345	2.86	44.8							151
1	155	9.78	9.76	33.876	26.114	192.2	.355	2.82	44.1	27.7	1.94	24.5	.00	.02	.09	156
1	185	9.15	9.13	33.984	26.302	174.8	.410	2.57	39.6	33.8	2.14	27.2	.06	.02	.05	186
	200	ISL 8.90	8.88	34.025	26.374	168.2	.436	2.30	35.3							202
1	210	8.77	8.74	34.046	26.412	164.7	.452	2.07	31.7	39.9	2.36	29.3	.19	.02	.15	211

ATTITUDE		LONGITUDE		DAY/NO/YR	MESSENGER		BOTTOft	WIND SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AHT	TYPE
34 53.3		1 21 11 .9 W		10/11/85	1334	GMT	565 H	230 14	XT			1013.1	MB 14.1 C	11.0 C			
CAST	DEPTH	TEHP		POT TEHP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	UH/L	UM/L	UM/L	UG/L	PHAE0	PRESS
	M	DEG C		DEG C		THETA			ML/L	PCT	UH/L	UH/L	UM/L	UM/L	UG/L	UG/L	D.8AR
	0	ISL	14.38	14.38	33.549	24.987	296.0	.000	5.76	99.1							0
1	1		14.38	14.38	33.549	24.987	296.1	.003	5.76	99.1	4.9	.55	1.9	.09	1.14	.36	1
	10	ISL	14.38	14.38	33.547	24.986	296.4	.030	5.78	99.4							10
1	11		14.38-8	14.38	33.547	24.986	296.4	.032	5.78	99.4	5.1	.52	1.8	.08	1.18	.39	11
	20	ISL	14.28	14.27	33.539	25.002	295.2	.05*	5.76	98.8							20
1	22		14.26	14.25	33.538	25.005	294.9	.065	5.75	98.7	5.4	.57	2.2	.09	1.33	.36	22
	30	ISL	12.98	12.98	33.530	25.260	271.3	.088	5.13	85.7							30
1	32		12.63	12.63	33.528	25.326	264.6	.093	4.95	82.1	8.9	.94	8.7	.15	.51	.41	32
1	42		11.23	11.23	33.623	25.663	232.7	.117	4.16	67.0	14.5	1.31	15.3	.05	.20	.20	42
	50	ISL	10.9?	10.92	33.660	25.748	224.8	.136	3.92	62.8							50
1	52		10.91	10.90	33.665	25.754	224.3	.140	3.90	62.4	17.1	1.42	17.2	.03	.14	.18	52
1	63		10.69	10.68	33.693	25.815	218.7	.164	3.73	59.4	18.5	1.52	18.4	.02	.14	.08	63
1	73		10.58	10.57	33.716	25.852	215.4	.186	3.63	57.7	19.6	1.59	19.1	.02	.08	.14	73
	75	ISL	10.52	10.51	33.727	25.872	213.6	.191	3.57	56.7							76
1	88		10.17	10.16	33.790	25.981	203.5	.217	3.25	51.2	23.4	1.77	21.7	.01	.03	.09	88
	100	ISL	10.00	9.98	33.823	26.036	198.5	.242	3.08	48.4							101
1	103		9.96	9.95	33.831	26.049	197.3	.249	3.05	47.9	25.5	1.85	23.0	.00	.02	.10	104
1	123		9.59	9.58	33.913	26.174	185.8	.287	2.83	44.1	29.1	1.97	24.9	.00	.01	.07	124
	125	ISL	9.58	9.57	33.917	26.179	185.4	.290	2.81	43.8							126
1	149		9.46	9.44	33.950	26.226	181.4	.335	2.65	41.1	30.5	2.06	25.8	.00	.01	.06	150
	150	ISL	9.45	9.43	33.952	26.228	181.2	.336	2.65	41.1							151
1	180		9.15	9.13	34.020	26.331	172.0	.389	2.59	40.0	34.2	2.17	27.5	.00			181
	200	ISL	8.74	8.72	34.047	26.416	164.1	.423	2.43	37.2							202
1	211		8.53	8.51	34.060	26.459	160.2	.440	2.32	35.3	38.5	2.29	29.6	.01			212
1	242		8.31	8.28	34.110	26.532	153.7	.488	1.95	29.5	42.5	2.42	30.9	.01			243
	250	ISL	8.21	8.18	34.122	26.557	151.5	.501	1.86	28.2							252
1	283		7.77	7.74	34.159	26.651	142.9	.550	1.59	23.8	50.5	2.64	33.4	.00			285
	300	ISL	7.57	7.54	34.159	26.680	140.0	.574	1.51	22.5							302
1	346		7.04	7.01	34.158	26.755	133.6	.637	1.34	19.7	59.7	2.81	36.3	.00			348
	400	ISL	6.41	6.37	34.155	26.837	126.5	.707	1.04	15.0							403
1	424		6.17	6.13	34.154	26.867	123.5	.73?	.90	13.0	72.9	3.02	39.4	.00			427
2	510		5.78	5.74	34.219	26.969	114.5	.820	.58	8.3	83.9	3.22	41.2	.00			504
2	555		5.53	5.49	34.265	27.035	108.7	.889	.39	5.5	101.0	3.38	40.0	.15			559

RV MEM HORIZON

CALCOFI CRUISE 8S11

STATION 77 60

LATITUDE		LONGITUDE		OAY/MO/YR		MESSENGER		BOTTOM		HIND SPEED		WAVES		HEATHER		BAROMETER		DRY		WET		CLOUD AMI		TYPE							
34 43.0		121 33.2 W		10/11/85		1751		GM1 962 M		220 16		KT 260		05 04 1		1013.9		MB 14.8 C 12.1 C													
CAST DEPTH		TEMP		POT TEKP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		S103		P04		N03		N0 2		CNL-A		PHAE0		PRFSS	
n		DES C		DEG C				THETA						.. ML/L		PCT		UM/L		UM/L		UM/L		UH/L		UG/L		UG/L		D.BAR	
0		ISL 14.55		14.55		33.545		24.947		299.9		.000		5.87		101.4														0	
1	1	14.55		14.55		33.545		24.947		299.9		.003		5.87		101.4		3.4		.45		.9		.09		1.08		.48		1	
	10	ISL 14.54		14.54		33.544		24.949		299.9		.030		5.93		102.4														10	
1	11	14.54		14.54		33.544		24.949		299.9		.033		5.94		102.5		3.4		.46		.9		.09		1.08		.46		11	
	20	ISL 14.55		14.55		33.543		24.948		300.4		.060		5.86		101.2														20	
1	22	14.55		14.55		33.543		24.947		300.5		.066		5.84		100.8		3.3		.46		.8		.08		1.07		.47		22	
	30	ISL 14.51		14.51		33.537		24.951		300.3		.090		5.84		100.7														30	
1	32	14.50		14.49		33.536		24.953		300.2		.096		5.84		100.7		3.5		.48		1.0		.11		.99		.38		32	
1	42	14.43		14.43		33.533		24.964		299.4		.125		5.82		100.2		3.7		.49		1.2		.11		.83		.38		42	
	50	ISL 12.89		12.88		33.509		25.262		271.7		.149		4.96		82.8														50	
1	52	12.51		12.50		33.504		25.333		264.5		.154		4.75		78.6		9.5		1.00		10.1		.13		.20		.29		52	
1	62	11.33		11.32		33.596		25.625		236.8		.178		4.10		66.2		15.0		1.35		16.1		.02		.08		.23		62	
1	73	10.73		10.72		33.635		25.763		223.9		.204		3.87		61.7		17.8		1.49		18.4		.00		.05		.19		73	
	75	ISL 10.61		10.60		33.649		25.795		220.9		.209		3.81		60.6														76	
1	88	10.02		10.01		33.719		25.950		206.3		.236		3.52		55.3		22.2		1.69		21.7		.01		.03		.15		88	
	100	ISL 9.52		9.51		33.756		26.063		195.8		.261		3.40		52.8														101	
1	102	9.43		9.42		33.763		26.083		193.9		.266		3.38		52.4		25.8		1.80		23.7		.02		.01		.05		103	
1	123	8.93		8.92		33.899		26.269		176.6		.304		3.05		46.8		30.3		1.93		25.9		.02		.01		.01		124	
	125	ISL 8.90		8.88		33.907		26.281		175.5		.307		3.04		46.7														126	
1	146	8.47		8.45		33.986		26.410		163.6		.346		2.96		45.0		34.7		2.03		27.3		.01		.00		.07		149	
	150	ISL 8.44		8.42		33.989		26.417		163.0		.349		2.96		45.0														151	
1	179	8.03		8.01		34.007		26.493		156.1		.396		3.01		45.3		38.3		2.06		28.0		.02						180	
	200	ISL 7.79		7.77		34.046		26.558		150.3		.428		2.62		39.2														202	
1	210	7.72		7.70		34.066		26.585		147.8		.442		2.38		35.6		44.9		2.31		30.7		.02						211	
1	241	7.67		7.64		34.132		26.645		142.8		.487		1.68		25.1		50.2		2.54		33.1		.00						242	
	250	ISL 7.59		7.56		34.130		26.655		141.7		.501		1.64		24.4														252	
1	281	7.26		7.24		34.124		26.696		138.3		.544		1.51		22.3		55.2		2.64		34.8		.00						283	
	300	ISL 7.10		7.07		34.136		26.729		135.5		.570		1.40		20.7														302	
1	342	6.78		6.75		34.174		26.803		128.9		.625		1.14		16.7		64.6		2.82		37.3		.00						344	
	400	ISL 6.35		6.32		34.208		26.886		121.5		.698		.74		10.7														403	
1	419	6.22		6.18		34.217		26.912		119.3		.721		.62		8.9		74.7		3.07		39.8		.00						422	
1	498	5.66		5.61		34.254		27.011		110.3		.811		.42		6.0		86.4		3.17		41.8		.00						501	
	500	ISL 5.64		5.60		34.256		27.014		110.1		.814		.42		6.0														504	
1	576	5.35		5.30		34.297		27.083		104.2		.893		.41		5.8		93.0		3.27		42.6		.00						580	

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 77 20

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE		
34 22.9	122 14.6 U	10/11/85	2339	GMT 4063 H	210 19	KT 290	07 04 1	1018.1	MB 15	.7 C 13.7 C	7/8	SC			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N0 3	N0 2	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UN/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0	ISL 15.14	15.13	33.361	24.680	325.3	.000	5.97	104.2							0
1 1	15.14	15.13	33.361	24.680	325.3	.003	5.97	104.2	2.8	.40	.2	.00	.31	.12	1
1 10	ISL 15.12	15.12	33.359	24.682	325.4	.033	5.85	102.0							10
1 11	15.12	15.12	33.359	24.682	325.4	.036	5.84	101.9	2.8	.40	.2	.00	.30	.15	11
1 20	ISL 15.13	15.12	33.358	24.680	325.8	.065	5.86	102.3							20
1 22	15.13	15.12	33.358	24.680	325.9	.071	5.87	102.4	2.7	.39	.2	.00	.27	.12	22
1 30	ISL 15.12	15.12	33.357	24.680	326.1	.098	5.86	102.2							30
1 32	15.12	15.12	33.357	24.681	326.2	.104	5.85	102.1	2.6	.39	.2	.00	.31	.11	32
1 42	15.10	15.10				.136	5.82	101.5	2.5	.40	.2	.00	.33	.19	42
1 50	ISL 14.90	14.89	33.340	24.717	323.2	.163	5.86	101.7							50
1 52	14.85	14.84	33.338	24.726	322.5	.169	5.86	101.7	2.9	.40	.3	.02	.37	.18	52
1 63	11.73	11.72	33.123	25.184	278.8	.202	5.75	93.4	4.4	.73	4.8	.03	.24	.25	63
1 73	11.18	11.17	33.162	25.314	266.6	.229	5.61	90.0	6.0	.89	7.9	.02	.14	.16	73
1 75	ISL 11.11	11.10	33.191	25.350	263.3	.235	5.51	88.3							76
1 88	10.75	10.74	33.368	25.551	244.4	.267	4.85	77.2	10.9	1.19	13.2	.01	.06	.08	88
1 100	ISL 10.23	10.22	33.490	25.736	227.0	.296	4.36	68.7							101
1 103	10.12	10.11	33.511	25.772	223.6	.302	4.28	67.3	17.0	1.48	18.2	.01	.03	.04	103
1 123	9.17	9.16	33.665	26.048	197.6	.346	3.93	60.5	23.9	1.70	22.4	.00	.01	.02	124
1 125	ISL 9.15	9.13	33.681	26.065	196.0	.349	3.85	59.3							126
1 148	8.94	8.92	33.883	26.256	178.3	.392	2.85	43.7	31.4	2.02	27.0	.00	.00	.03	149
1 150	ISL 8.91	8.90	33.890			.395	2.86	43.9							151
1 179	8.49	8.47	33.949			.445	3.05	46.3	33.9	2.02	27.1	.00			180
1 200	ISL 8.23	8.21	33.983			.480	3.06	46.2							202
1 210	8.10	8.08	33.995	26.473	158.6	.496	3.06	46.1	37.7	2.08	27.8	.01			211
1 240	7.61	7.59	34.022	26.566	150.1	.542	2.66	39.6	44.1	2.27	30.3	.01			241
1 250	ISL 7.45	7.43	34.028	26.593	147.6	.557	2.56	38.0							252
1 280	7.04	7.01	34.040			.601	2.28	33.5	52.9	2.50	33.5	.00			282
1 380	ISL 6.81	6.79	34.049			.628	2.03	29.7							302
1 3*1	6.42	6.39	34.070			.683	1.51	21.9	63.0	2.78	37.0	.01			343
1 400	ISL 5.96	5.92	34.112	26.860	123*6	.759	1.03	14.7							403
1 417	5.86	5.82	34.127	26.885	121.3	.780	.92	13.2	75.9	3.09	40.3	.00			420
1 493	5.69	5.65	34.232	26.990	112.4	.868	.50	7.1	84.2	3.29	41.6	.01			496
1 500	ISL 5.65	5.61	34.239		111.4	.876	.47	6.7							504
1 5*9	5.10	5.05	34.286		101.9	.950	.33	4.6	97.7	3.39	43.5	.00			573

LATITUDE	LONGITUDE	OAY/VO/YR	SSENSER		BOTTO	WIND SPEED	WAVES	WEATHFR	WET				CLOUD	TYPE	
3 4 03.A N	122 5 6.9	11/1 1/85	0545	SHI	4233 M	330 17	KT		1010.2	MR 11	.5 C	10,2 C			
CAST DPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	oxy	SI03	P04	N0 3	N02	CHL-A	PHAE0	PRES
M	DEG C	DEG C		THETA	329.9	.000			UM/L	UH/L	UM/L	UM/L	UG/L	UG/L	D.PA
							HL/L	PCT							
0 ISL	15.78	15.78	33.482	24.631	329.9	.003	5.76	101.9	2.2	.36	.3	.00	.32	.10	1
1 1	15.78	15.78	33.482	24.632	330.1	.033	5.78	102.2							10
1 11	15.78	15.78	33.482	24.632	330.2	.036	5.78	102.3	2.2	.37	.3	.00	.30	.11	11
20 I SL	15.79	15.79	33.482	24.629	330.7	.066	5.77	102.1							20
1 22	15.79	15.79	33.482	24.629	330.8	.072	5.77	102.1	2.3	.37	.2	.00	.31	.10	22
30 ISL	15.78	15.78	33.482	24.631	330.9	.099	5.77	102.1							39
1 32	15.76	15.78	33.482	24.632	330.9	.105	5.77	102.1	2.2	.36	.2	.00	.30	.12	32
1 42	15.78	15.78	33.482	24.631	331.2	.138	5.77	102.1	2.2	.36	.3	.00	.30	.12	42
50 ISL	14.31	14.30	33.402	24.889	306.8	.164	5.71	98.0							50
1 58	12.57	12.56	33.355	25.205	276.8	.187	5.65	93.5	6.1	.82	7.5	.17	.60	.45	58
1 68	11.14	11.13	33.393	25.502	248.6	.213	4.92	79.0	10.2	1.18	13.3	.02	.35	.32	68
75 ISL	10.87	10.86	33.466	25.606	238.8	.231	4.62	73.7							76
1 79	10.83	10.82	33.507	25.645	235.2	.240	4.49	71.7	13.8	1.40	16.7	.00	.18	.22	79
1 94	10.13	10.12	33.670	25.893	211.9	.273	3.74	58.9	20.3	1.70	21.8	.00	.05	.06	94
100 ISL	9.92	9.91	33.707	25.958	205.9	.286	3.55	55.6							101
1 114	9.52	9.51	33.764	26.065	195.6	.315	3.27	50.8	25.4	1.83	24.6	.00	.02	.03	115
125 ISL	9.20	9.18	33.817	26.163	186.8	.336	3.08	47.6							126
1 134	8.93	8.92	33.861	26.240	179.4	.353	2.95	45.3	30.4	1.99	26.8	.00	.01	.03	135
150 ISL	8.66	8.64	33.921	26.329	171.4	.380	2.80	42.7							151
1 160	8.53	8.51	33.950	26.373	167.4	.397	2.74	41.7	34.6	2.09	28.4	.00	.01	.03	161
1 192	6.07	6.05	34.000	26.481	157.6	.449	2.64	39.7	39.1	2.21	30.0	.00			193
200 ISL	7.96	7.94	34.010	26.505	155.4	.462	2.57	38.6							202
1 221	7.69	7.67	34.031	26.562	150.3	.493	2.36	35.2	44.4	2.34	31.5	.00			222
250 ISL	7.40	7.37	34.053	26.622	144.9	.536	2.06	30.6							252
1 256	7.34	7.31	34.057	26.633	143.9	.546	2.00	29.6	50.4	2.54	33.4	.00			258
300 ISL	6.83	6.81	34.069	26.712	136.8	.607	1.69	24.8							302
1 307	6.75	6.72	34.070	26.724	135.8	.617	1.65	24.1	58.7	2.66	35.7	.00			309
1 364	6.27	6.24	34.093	26.805	128.5	.691	1.30	18.8	67.5	2.89	38.3	.00			366
400 ISL	5.99	5.95	34.105	26.852	124.4	.737	1.08	15.5							403
1 451	5.65	5.61	34.129	26.913	119.0	.799	.80	11.4	79.9	3.11	41.0	.00			454
500 ISL	5.42	5.38	34.160	26.966	114.4	.857	.60	8.5							504
1 539	5.34	5.30	34.206	27.011	110.5	.901	.46	6.5	89.5	3.26	42.4	.00			543
600 ISL	5.49	5.44	34.342	27.102	103.0	.965	.25	3.5							605
1 627	5.66	5.60	34.427	27.150	99.1	.993	.16	2.3	92.5	3.42	41.7	.00			632

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER		BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMI	TYPE
33 42.7	123 38.3 W	11/11/85	1118	6MT	4110 M	310 15	KT		1009.8	MB	13.8 C	9.8 C			
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	OYN HT	OXY6EN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DE6 C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL	15.45	15.45	33.441	24.671	325.9	.000	5.79	101.7							0
1 2	15.45	15.45	33.441	24.671	326.1	.006	5.79	101.7	1 .9	.36	.2	.01	.33	.16	2
1 10 ISL	15.46	15.46	33.437	24.667	326.8	.033	5.84	102.6							10
1 12	15.46	15.46	33.437	24.667	326.9	.039	5.85	102.8	2.0	.34	.2	.01	.35	.15	12
20 ISL	15.45	15.47	33.436	24.664	327.4	.065	5.92	104.0							20
1 23	15.48	15.47	33.436	24.663	327.6	.075	5.93	104.2	2.1	.36	.2	.01	.36	.13	23
30 ISL	15.46	15.46	33.434	24.665	327.6	.098	5.86	102.9							30
1 33	15.46	15.45	33.434	24.666	327.6	.107	5.83	102.4	2.1	.38	.2	.01	.35	.14	33
1 43	14.91	14.90	33.361	24.731	321.7	.140	5.91	102.7	2.5	.42	.5	.03	.43	.21	43
50 ISL	13.46	13.45	33.369	25.039	294.7	.162	5.67	95.5							50
1 59	11.70	11.69	33.378	25.388	259.3	.186	5.21	84.7	7.8	1.01	11.0	.09	.36	.42	59
1 69	11.14	11.13	33.451	25.547	244.4	.211	4.71	75.7	11.5	1.22	14.7	.02	.19	.23	69
75 ISL	10.95	10.94	33.499	25.618	237.8	.226	4.46	71.3							76
1 80	10.82	10.81	33.534	25.668	235.1	.237	4.29	68.5	14.8	1.44	17.3	.02	.12	.13	80
1 95	10.04	10.03	33.642	25.887	212.5	.271	3.80	59.7	20.3	1.65	21.3	.01	.05	.06	95
100 ISL	9.87	9.86	33.667	25.936	207.9	.282	3.69	57.7							101
1 115	9.51	9.50	33.732	26.046	197.8	.313	3.43	53.3	24.6	1.78	23.8	.01	.01	.04	116
125 ISL	9.30	9.28	33.791	26.127	190.2	.332	3.23	50.0							126
1 135	9.08	9.07	33.852	26.209	182.6	.351	3.04	46.8	29.0	1.93	26.0	.01	.01	.03	136
150 ISL	8.82	8.80	33.908	26.295	174.6	.377	2.89	44.3							151
1 161	8.64	8.62	33.940	26.348	169.8	.397	2.82	43.0	33.8	2.08	27.9	.00	.00	.03	162
1 191	8.23	8.21	34.010	26.465	159.1	.446	2.63	39.7	38.5	2.19	29.2	.00			192
200 ISL	8.06	8.04	34.009	26.490	156.6	.460	2.66	40.0							201
1 222	7.65	7.62	34.007	26.549	151.4	.493	2.75	41.0	42.7	2.22	30.0	.00			223
250 ISL	7.17	7.15	34.008	26.617	145.2	.535	2.68	39.6							252
1 256	7.07	7.05	34.009	26.631	143.9	.545	2.67	39.3	49.1	2.38	31.8	.00			258
300 ISL	6.49	6.47	34.020	26.719	136.0	.606	2.12	30.7							302
1 307	6.42	6.39	34.024	26.732	134.8	.615	2.00	29.0	59.3	2.64	35.5	.00			309
1 363	6.13	6.10	34.106	26.833	125.7	.688	1.15	16.6	70.0	2.92	38.9	.00			365
400 ISL	5.90	5.87	34.138	26.888	120.9	.734	.86	12.2							403
1 449	5.60	5.56	34.168	26.949	115.5	.791	.65	9.2	83.1	3.17	41.5	.00			452
500 ISL	5.37	5.33	34.205	27.006	110.5	.849	.50	7.0							504
1 537	5.22	5.17	34.230	27.045	107.1	.890	.43	6.1	92.8	3.29	43.0	.00			541
600 ISL	4.90	4.86	34.262	27.107	101.6	.955	.34	4.8							605
1 627	4.76	4.71	34.273	27.132	99.3	.983	.32	4.5		3.38	44.2	.00			632

LATITUDE	LO	UCI TUBE	DAY/MO/Y.R	MESSE	NGER	BOTTOM	WIND SPEgD	W	WES	WEATHER	BAROMETER	DRY	WET	CLOUD	AW	TYPE
3 5 23.9	12		11/11/85	1636	GMT	4606 M	310 16	KT 320	09 05	1	1011.5	MB 12	.9 C	3.9 C	3 / ?	SC
CAST DE	H	T E M P	POT TEMP	SALINITY	SIGMA	SVA	DYN Hf	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRES
°		DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.SA
	0	ISL	15.81	15.81	33.149	24.369	354.9	.000	5.76	101.8						Q
1	2		15.81	15.81	33.149	24.369	355.0	.002	5.76	101.8	2.1	.36	.2	.00	.09	.2
1	10	ISL	15.81	5.80	33.147	24.368	355.3	.036	5.89	104.0						10
1	12		15.81	15.80	33.147	24.367	355.4	.042	5.90	104.2	2.0	.36	.2	.00	.13	.12
1	20	ISL	15.71	15.71	33.142	24.386	353.9	.071	5.86	103.4						20
1	23		15.65	15.64	33.140	24.398	352.9	.081	5.84	102.8	2.1	.36	.2	.00	.14	.23
1	30	ISL	15.41	15.41	33.135	24.447	348.4	.106	5.85	102.5						30
1	33		15.32	15.32	33.134	24.465	346.8	.116	5.85	102.3	2.1	.36	.2	.00	.18	.33
1	44		15.31	15.30	33.136	24.470	346.5	.154	5.85	102.3	2.1	.35	.2	.00	.16	.44
1	50	ISL	5.22	15.21	33.125	24.481	345.7	.175	5.95	103.8						50
1	55		15.15	15.14	33.117	24.490	345.0	.192	6.07	105.8	2.1	.37	.2	.00	.18	.55
1	64		13.64	13.63	33.144	24.830	312.7	.221	6.43	108.7	2.0	.39	.2	.00	.21	.64
1	75		13.01	13.00	33.124	24.941	302.4	.255	6.38	106.4	2.1	.41	.2	.00	.28	.75
1	90		12.33	12.32	33.198	25.129	284.8	.299	5.95	97.9	2.9	.56	2.0	.24	.16	.90
1	100	ISL	12.14	12.12	33.278	25.229	275.5	.328	5.66	92.8						101
1	106		12.02	12.01	33.318	25.282	270.5	.343	5.51	90.1	4.9	.74	6.3	.05	.08	106
1	125		10.88	10.86	33.394	25.550	245.4	.394	4.90	78.2	9.6	1.04	12.0	.02	.05	126
1	150	ISL	9.90	9.89	33.554	25.842	217.9	.451	4.27	66.8						151
1	151		9.86	9.85	33.563	25.856	216.6	.454	4.24	66.3	17.7	1.47	19.1	.00	.01	152
1	182		9.25	9.23	33.764	26.115	192.6	.517	3.45	53.3	25.3	1.75	23.9	.00		133
1	200	ISL	8.86	8.84	33.863	26.253	179.6	.551	3.14	48.1						201
1	212		8.62	8.59	33.917	26.334	172.1	.571	3.02	46.0	32.1	1.96	27.0	.00		213
1	243		8.08	8.05	33.985	26.469	159.6	.622	3.08	46.4	36.2	2.03	28.0	.00		244
1	250	ISL	7.94	7.92	33.994	26.497	157.1	.634	3.04	45.6						252
1	283		7.37	7.34	34.020	26.599	147.5	.685	2.71	40.1	45.6	2.26	31.2	.00		285
1	300	ISL	7.15	7.12	34.028	26.637	144.1	.709	2.51	36.9						302
1	344		6.67	6.64	34.046	26.716	137.0	.77t	1.93	28.1	57.1	2.58	35.3	.00		346
1	400	ISL	6.19	6.15	34.085	26.811	128.5	.845	1.27	18.3						403
1	420		6.05	6.01	34.102	26.842	125.7	.871	1.07	15.4	70.6	2.93	39.4	.00		423
1	500		5.71	5.67	34.185	26.950	116.2	.967	.60	8.6	81.5	3.15	41.4	.00		503
1	578		5.35	5.30	34.268	27.060	106.4	1.054	.36	5.1	91.7	3.31	42.7	.00		582

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 77 110

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	TYPE			
33 03.1	125 01.2 W	11/11/85	2304	GMT	4675 M	330 21	XT 330	09 05	1	1012.8	MB 15	.0 C	11.0 C	5/8	CU
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BA
1	0	16.54	16.54	33.309	24.324	359.1	.000		1.9	.39		.00	.12	.05	0
1	10	16.55	16.55	33.308	24.322	359.7	.036	5.38	96.5	1.9	.39	.1	.00	.12	.10
	20	ISL	16.55	33.307	24.321	360.1	.072	5.40	96.9						20
1	26	16.56	16.55	33.306	24.320	360.4	.093	5.41	97.1	1.8	.39	.1	.00	.12	.26
	30	ISL	16.56	33.306	24.320	360.6	.108	5.42	97.3						30
1	42	16.56	16.55	33.306	24.319	361.0	.151	5.45	97.8	1.8	.39	.1	.00	.12	.42
	50	ISL	16.55	33.304	24.321	361.1	.180	5.54	99.5						50
1	57	16.54	16.53	33.302	24.322	361.2	.205	5.69	102.1	1.7	.38	.1	.00	.13	.57
1	72	12.87	12.86	33.098	24.947	301.7	.254	6.34	105.4	2.1	.44	.1	.00	.25	.72
	75	ISL	12.74	12.73	33.104	24.978	.264	6.31	104.6						76
1	83	12.42	12.41	33.117	25.050	292.1	.287	6.13	101.0	2.1	.47	.2	.05	.21	.83
1	98	12.35	12.34	33.255	25.170	281.1	.329	5.76	94.8	2.8	.55	1.8	.11	.15	.98
	100	ISL	12.31	12.29	33.271	25.192	.336	5.70	93.8						101
1	118	11.67	11.66	33.369	25.387	260.8	.386	5.23	84.9	5.9	.82	7.4	.02	.08	.119
	125	ISL	11.29	11.27	33.399	25.480	.403	5.02	80.9						126
1	138	10.48	10.46	33.471	25.680	233.2	.435	4.60	72.8	12.3	1.20	14.4	.01	.03	.139
	150	ISL	9.96	9.95	33.560	25.837	.461	4.29	67.2						151
1	159	9.64	9.63	33.639	25.952	207.6	.481	4.07	63.3	18.6	1.50	19.3	.00	.01	.160
1	179	9.19	9.17	33.808	26.158	188.3	.520	3.71	57.2	24.1	1.69	22.4	.00	.00	.180
1	200	8.83	8.81	33.880	26.271	177.9	.559	3.47	53.1	28.0	1.83	24.4	.00		201
1	220	8.51	8.49	33.951	26.376	168.1	.593	3.08	46.8	32.3	2.00	26.7	.00		221
	250	ISL	8.02	7.99	34.003	26.492	.64 2	2.91	43.8						252
1	256	7.93	7.90	34.007	26.509	155.9	.651	2.90	43.5	38.4	2.12	28.6	.00		257
	300	ISL	7.29	7.27	34.036	26.623	.718	2.37	35.0						302
1	305	7.23	7.20	34.038	26.634	144.5	.725	2.29	33.8	48.8	2.42	32.4	.00		307
1	361	6.49	6.46	34.069	26.758	133.2	.803	1.54	22.4	61.0	2.74	36.8	.00		363
	400	ISL	6.11	6.08	34.096	26.829	.853	1.15	16.6						403
1	445	5.77	5.73	34.128	26.897	120.5	.909	.83	11.8	76.3	3.06	40.6	.00		448
	500	ISL	5.43	5.39	34.158	26.963	114.7	.97*	.62	8.8					504
1	528	5.28	5.23	34.175	26.994	111.9	1.006	.56	7.9	87.8	3.21	42.4	.01		532
	600	ISL	4.90	4.85	34.238	27.088	103.3	1.083	.37	5.2					605
1	611	4.85	4.80	34.250	27.104	102.0	1.096	.35	4.9	100.2	3.36	43.8	.00		615

STATION 77 120

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTO!"		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		OUD		T							
52 43.3 N		25 42. 1		12/1 1/85		0444 SHI		4577 M		320 19 KT						1015.2		MB 14.9 C		11.1 °C		...		---							
CAST DEPTH		"TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		NO 3		NO2		CHL-A		PHAEO		PRESS	
M		DEG C		DEG C				THETA						ML/L		PCT		UM/L		UM/L		UM/L		UM/L		UG/L		UG/L		D.BAR	
0 ISL		17.51		17.51		33.475		24.224		368.7		.000		5.55		101.6														0	
1	1	17.51	17*51	17*51	33.475	24.224	368.7	.004	5.55	101.6	2.4	.26	.1	.00	.10	.04	1												1		
	10 ISL	17.50	17.50	17.50	33.474	24.226	368.8	.037	5.56	101.7							10												10		
1	11	17.50	17.50	17.50	33.474	24.226	368.8	.040	5.56	101.7	2.3	.25	.1	.00	.11	.04	11												11		
	20 ISL	17.51	17.50	17.50	33.472	24.223	369.4	.07*	5.57	101.8							20												20		
1	27	17.51	17.51	17.51	33.472	24.222	369.8	.099	5.57	101.9	2.5	.24	.1	.00	.11	.04	27												27		
	30 ISL	17.52	17.51	17.51	33.478	24.225	369.6	.111	5.57	101.9							30												30		
1	43	17.60	17.60	17.60	33.521	24.238	368.8	.158	5.54	101.6	2.3	.24	.1	.00	.11	.04	43												43		
	50 ISL	17.74	17.74	17.74	33.592	24.259	367.1	.185	5.53	101.7							50												50		
1	58	17.90	17.89	17.89	33.668	24.281	365.3	.213	5.52	101.9	2.4	.21	.1	.00	.11	.05	58												58		
1	69	15.16	15.15	15.15	33.350	24.668	328.4	.251	6.20	108.2	2.4	.23	.1	.00	.20	.11	69												69		
	75 ISL	14.19	14.18	14.18	33.291	24.829	313.2	.271	6.18	105.8							76												76		
1	79	13.79	13.78	13.78	33.280	24.904	306.2	.283	6.17	104.7	2.5	.26	.1	.00	.19	.18	79												79		
	95	13.23	13.22	13.22	33.329	25.055	292.1	.330	5.95	99.8	2.6	.28	.1	.08	.20	.22	95												95		
	100 ISL	13.13	13.11	13.11	33.345	25.089	289.0	.346	5.89	98.6							101												101		
1	110	12.98	12.96	12.96	33.384	25.149	283.5	.373	5.77	96.3	3.0	.33	1.0	.11	.15	.19	110												110		
1	125	12.66	12.65	12.65	33.508	25.307	268.9	.417	5.49	91.1	4.3	.42	3.3	.02	.08	.17	126												126		
	150 ISL	11.62	11.60	11.60	33.572	25.554	245.8	.480	4.98	80.8							151												151		
1	151	11.56	11.54	11.54	33.573	25.568	244.5	.483	4.95	80.3	8.9	.73	9.1	.01	.05	.08	152												152		
1	172	10.59	10.57	10.57	33.647	25.799	222.8	.532	4.62	73.4	13.3	.99	13.5	.00	.02	.04	173												173		
1	192	9.79	9.77	9.77	33.749	26.015	202.4	.575	4.17	65.1	19.2	1.28	18.1	.00			193												193		
	200 ISL	9.53	9.50	9.50	33.774	26.078	196.5	.590	3*97	61.7							201												201		
1	213	9.17	9.15	9.15	33.813	26.166	188.2	.615	3.70	57.0	25.0	1.57	22.3	.00			214												214		
1	244	8.6J*	8.65	8.65	33.951	26.352	171.0	.671	3.69	56.3	29.5	1.81	23.8	.00			245												245		
	250 ISL	8.56	8.53	8.53	33.964	26.380	168.4	.681	3.66	55.8							252												252		
1	284	7.93	7.90	7.90	33.996	26.501	157.2	.737	3.40	51.0	37.1	1.88	26.8	.00			286												286		
	300 ISL	7.68	7.65	7.65	34.004	26.543	153.4	.761	3.19	47.6							302												302		
1	346	7.02	6.99	6.99	34.018	26.647	143.8	.830	2.46	36.1	50.1	2.31	32*3	.00			348												348		
	400 ISL	6.31	6.28	6.28	34.047	26.765	132.9	.904	1.68	24.2							403												403		
1	422	6.06	6.02	6.02	34.062	26.809	128.8	.934	1.39	20.0	68.3	2.80	38.5	.00			425												425		
1	499	5.48	5.44	5.44	34.130	26.934	117.4	1.028	.74	10.5	82.2	3.15	41.9	.00			502												502		
	500 ISL	5.48	5.43	5.43	34.132	26.936	117.2	1.029	.73	10.4							504												504		
1	574	5.02	4.98	4.98	34.198	27.042	107.6	1.113	.43	6.0	94.6	3.33	43.5	.00			578												578		

STATION 80 51

LATITUDE	LONGITUDE	DAY/NO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE			
34 27.2	120 31.3 W	14/11/85	0416 GMT	69 M	010 08 KT			1023.6	MB 14.2 C	9.8 C						
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVa	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO2	CHL-A	PHAE0	PRESS
	M	DE6 C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.8AR
	0	ISL 15.53	15.53	33.557	24.744	319.1	.000	5.95	104.8							0
1	1	15.53	15.53	33.557	24.744	319.2	.003	5.95	104.8	3.8	.47	.3	.01	.72	.27	10
	10	ISL 15.52	15.52	33.556	24.746	319.3	.032	6.04	106.4							11
1	11	15.52	15.52	33.556	24.746	319.3	.035	6.05	106.5	3.9	.47	.3	.02	.80	.23	11
	20	ISL 15.38	15.37	33.552	24.775	316.8	.064	5.92	103.9							20
1	22	15.34	15.34	33.551	24.781	316.3	.070	5.87	103.0	4.4	.51	.6	.05	.80	.27	22
	30	ISL 14.3V	14.38	33.519	24.963	299.1	.095	5.67	97.6							30
1	32	14.15	14.15	33.513	25.008	294.9	.100	5.63	96.4	6.1	.66	3.1	.18	.88	.36	32
	50	ISL 13.76	13.76	33.504	25.083	288.3	.153	5.54	94.1							50
1	53	13.70	13.70	33.503	25.094	287.3	.161	5.53	93.8	7.1	.79	4.8	.21	.79	.40	53

STATION 80 55

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD AMT		TYPE	
34 19.0		120 48.9 W		14/11/85		0103 GMT		768 M		320 11		KT 320		03 06 0		1022.9		MB 15		.2 C 11.2 C		0/8			
CAST	DEPTH	TEMP		POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P0*	N03	NO 2	CHL-A	PHAE0	AMT	TYPE							
		M	DEG C									DEG C	THETA	ML/L	PCT	UM/L	UM/L		UM/L	UG/L	UG/L	D.BAR			
	0	ISL	14.58	14.58	33.562	2*.955	299.8	.000	5.93	102.5								0							
1	1		14.58	14.58	33.562	2*.955	299.1	.003	5.93	102.5	2.2	.49	.6	.0*	.81	.3*	10								
	10	ISL	14.27	14.26	33.544	25.008	294.3	.030	5.93	101.8							10								
1	11		14.24	14.24	33.543	25.011	294.0	.032	5.93	101.7	2.1	.49	.7	.06	.82	.4*	11								
	20	ISL	14.16	14.15	33.54*	25.031	292.4	.059	5.89	100.9							20								
1	21		14.15	14.15	33.5*5	25.033	292.3	.062	5.88	100.7	2.6	.53	1.3	.09	.80	.60	21								
	30	ISL	13.85	13.85	33.531	25.08*	287.7	.088	5.7*	97.6							30								
1	31		13.83	13.82	33.530	25.089	287.2	.091	5.71	97.1	3.5	.61	2.4	.12	.57	.52	31								
	41		11.61	11.60	33.373	25.400	257.7	.118	5.05	81.9	8.*	1.05	9.7	.11	.23	.62	*1								
1	50		10.99	10.98	33.405	25.537	244.8	.140	*.75	76.0	11.0	1.22	12.7	.0*	.13	.37	50								
	61		10.80	10.80	33.561	25.692	230.4	.166	4.12	65.7	15.2	1.46	16.9	.01	.08	.35	61								
1	70		10.67	10.66	33.578	25.729	227.1	.187	4.06	64.6	16.*	1.52	17.8	.02	.07	.28	70								
	75	ISL	10.44	10.43	33.588	25.776	222.7	.199	4.02	63.6							75								
1	84		10.01	10.00	33.617	25.872	213.7	.217	3.91	61.3	19.2	1.68	20.2	.02	.0*	.25	8*								
	98		9.48	9.47	33.739	26.056	196.4	.2*8	3.56	55.2	23.4	1.82	23.1	.01	.0*	.99	98								
	100	ISL	9.44	9.43	33.753	26.072	194.9	.251	3.51	54.5							101								
1	117		9.16	9.15	33.878	26.216	181.5	.28*	3.02	46.6	28.7	2.05	26.1	.01	.01	.09	118								
	125	ISL	9.07	9.06	33.893	26.242	179.2	.297	2.96	45.5							126								
1	1*1		8.96	8.9*	33.905	26.270	176.8	.326	2.89	44.*	30.6	2.10	27.0	.00	.01	.10	1*2								
	160	ISL	8.97	8.95	33.936	26.293	174.9	.3*2	2.74	42.1							151								
1	199		8.99	8.97	34.016	26.352	169.7	.37*	2.41	37.1	3*.*	2.29	28.5	.00			170								
	1		8.43	8.41	34.077	26.488	157.2	.422	2.22	33.7	39.7	2.42	30.4	.00			199								
	200	ISL	8.42	8.39	34.081	26.493	156.7	.425	2.19	33.3							202								
1	226		8.33	8.31	34.117	26.534	153.2	.465	1.91	28.9	42.4	2.55	31.7	.00			227								
	250	ISL	8.12	8.10	34.130	26.576	149.6	.502	1.82	27.*							252								
1	263		7.98	7.95	34.133	26.601	147.5	.521	1.78	26.8	46.*	2.66	33.1	.00			265								
	300	ISL	7.53	7.50	34.152	26.680	140.3	.57*	1.9	22.2							302								
1	320		7.31	7.28	34.163	26.721	136.6	.602	1.32	19.5	55.*	2.92	35.9	.00			322								
1	393		6.96	6.93	34.205	26.803	129.8	.700	.90	13.2	62.8	3.07	38.1	.00			396								
	400	ISL	6.92	6.88	3*.209	26.812	129.0	.708	.87	12.7							*03								
1	469		6.46	6.42	3*.2*7	26.904	121.0	.79*	.57	8.3	72.*	3.29	40.4	.00			*72								
	500	ISL	6.28	6.23	3*.261	26.939	117.9	.831	.48	7.0							50*								
			6.03	5.98	3*.278	26.985	114.0	.888	.40	5.7	80.0	3.38	41.9	.00			553								
1	549																								

RV NEW HORIZON				CALCOFI CRUISE 8511										STATION 30 60			
LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLCUD	TYPE					
34 09.2 N	1 21 09.2 U	13/11/85	2123	6MT	2192 M	030 09	KT 350	03 07	0	1023.7	MB 14	.4 C	11.0 C	e/a			
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRES		
n	DEC C	DE6 C		THETA			ML/L	PCT	UM/L	im/L	UM/L	UM/L	UG/L	UG/L	D.BA		
1	0	13.83	13.83	33.406	24.992	295.6	.000	6.08	103.4	3.5	.52	.9	.07	.83	23		
	10	ISL 13.79	13.79	33.437	25.024	292.8	.029	6.11	103.8						10		
1	11	13.79	13.78	33.440	25.027	292.5	.032	6.11	103.8	3.7	.52	1.0	.08	.77	.35		
	20	ISL 13.86	13.86	33.499	25.057	290.0	.059	6.10	103.8						20		
1	21	13.87	13.87	33.504	25.059	289.8	.061	6.10	103.8	4.0	.52	1.1	.10	1.13	.49		
	30	ISL 13.86	13.85	33.504	25.063	289.7	.088	6.00	102.2						31		
1	31	13.85	13.85	33.504	25.063	289.7	.090	5.99	101.9	4.1	.53	1.2	.10	1.04	.50		
1	42	12.56	12.55	33.312	25.173	279.4	.121	5.71	94.5	4.5	.70	3.8	.12	.37	.37		
	50	ISL 11.55	11.54	33.242	25.310	266.5	.144	5.48	88.7						42		
1	53	11.29	11.28	33.236	25.352	262.5	.151	5.41	87.1	6.2	.88	7.5	.03	.17	.28		
1	63	11.26	11.25	33.309	25.414	256.8	.177	5.25	84.5	7.4	.94	8.5	.01	.15	.23		
1	73	10.77	10.76	33.429	25.595	239.8	.201	4.68	74.6	11.9	1.24	14.0	.01	.08	.12		
	75	ISL 10.70	10.69	33.460	25.632	236.4	.207	4.57	72.6						76		
1	89	10.37	10.36	33.610	25.805	220.2	.238	4.10	64.8	16.4	1.46	17.7	.00	.04	.10		
	100	ISL 10.06	10.04	33.663	25.901	211.3	.263	4.01	63.0						89		
1	103	9.97	9.95	33.674	25.925	209.1	.270	4.00	62.7	18.7	1.54	19.0	.00	.02	.06		
1	124	9.65	9.64	33.770	26.052	197.4	.312	3.51	54.7	22.8	1.71	22.1	.02	.02	.06		
	125	ISL 9.64	9.63	33.773	26.056	197.0	.314	3.50	54.5						104		
1	150	9.23	9.21	33.890	26.216	182.3	.361	3.06	47.3	28.6	1.96	25.6	.00	.01	.07		
1	181	8.65	8.63	33.999	26.393	165.9	.415	2.64	40.3	34.2	2.12	28.2	.01		.15		
	200	ISL 8.45	8.42	34.038	26.455	160.4	.446	2.53	38.5						125		
1	212	8.32	8.30	34.051	26.485	157.7	.465	2.49	37.7	38.5	2.29	29.6	.01		.12		
1	243	7.73	7.71	34.053	26.573	149.5	.512	2.32	34.7	44.1	2.37	31.4	.00		.18		
	250	ISL 7.61	7.59	34.054	26.591	147.9	.523	2.27	33.8						.20		
1	283	7.16	7.14	34.066	26.665	141.3	.571	1.98	29.2	50.9	2.54	33.6	.01		.21		
	300	ISL 6.98	6.95	34.083	26.704	137.7	.595	1.77	25.9						.28		
1	344	6.56	6.53	34.135	26.801	128.8	.653	1.21	17.6	63.5	2.89	37.9	.00		.30		
	400	ISL 6.10	6.07	34.181	26.897	120.2	.723	.82	11.8						.34		
1	421	5.94	5.91	34.195	26.928	117.4	.748	.73	10.5	75.9	3.12	40.8	.00		.40		
1	499	5.39	5.35	34.247	27.038	107.5	.835	.53	7.5	88.1	3.29	42.7	.00		.42		
	500	ISL 5.39	5.35	34.250	27.040	107.3	.837	.53	7.5						.50		
1	576	5.24	5.19	34.334	27.125	100.1	.915	.38	5.4		3.37	43.2	.00		.58		

RV NEW HORIZON				CALCOFI CRUISE 8511										STATION 80 65			
LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE				
33 59.8	121 28.5 W	13/11/85	1844	GMT	3333 M	030 08	KT 030	03 07	0	1024.5	MB 16	.1 C	11.7 C	0/8			
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS		
M	DE6 C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR		
0	ISL 14.82	14.82	33.360	24.748	319.0	.000	5.87	101.8								0	
1	1	A 14.22	14.82	33.360	24.748	318.9	.003	5.87	101.8	2.7	.43	.2	.00	.37	.15	1	
1	10	ISL 14.78	14.78	33.359	24.756	318.3	.032	5.90	102.3							10	
1	15	A 14.76	14.76	33.359	24.759	318.2	.048	5.92	102.5	2.6	.43	.2	.00	.37	.18	15	
1	20	ISL 14.76	14.75	33.358	24.760	318.2	.064	5.94	102.8							20	
1	21	A 14.76	14.75	33.358	24.760	318.2	.067	5.94	102.9	2.6	.43	.2	.00	.38	.19	21	
1	28	A 14.77	14.76	33.358	24.758	318.7	.089	6.01	104.1	2.6	.43	.1	.00	.39	.18	28	
1	30	ISL 14.47	14.47	33.318	24.790	315.7	.095	6.00	103.4							30	
1	49	A 11.32	11.31	33.044	25.197	277.2	.151	5.96	95.9	4.2	.77	4.3	.04	.27	.33	49	
1	50	ISL 11.29	11.28	33.064	25.219	275.1	.155	5.91	95.1							50	
1	72	A 10.70	10.69	33.375	25.565	242.6	.211	4.87	77.5	10.6	1.21	12.8	.01	.07	.10	72	
1	75	ISL 10.58	10.57	33.414	25.616	237.8	.219	4.72	74.9							76	
1	78	10.48	10.47	33.442	25.656	234.1	.225	4.61	73.0	13.2	1.36	15.2	.01	.04	.10	78	
1	88	10.07	10.05	33.530	25.795	221.0	.247	4.28	67.2	17.0	1.55	18.2	.00	.02	.05	88	
1	100	ISL 9.61	9.60	33.606	25.931	208.4	.274	4.09	63.6							101	
1	103	9.50	9.49	33.624	25.963	205.3	.281	4.05	62.8	20.7	1.69	20.7	.00	.01	.04	104	
1	123	9.07	9.05	33.743	26.126	190.2	.321	3.62	55.7	25.1	1.86	23.5	.00	.01	.03	124	
1	125	ISL 9.04	9.03	33.755	26.138	189.0	.324	3.57	54.9							126	
1	144	8.87	8.85	33.889	26.272	176.8	.359	3.07	47.0	29.9	2.04	26.3	.00	.00	.03	145	
1	150	ISL 8.83	8.81	33.921	26.303	173.9	.369	2.96	45.4							151	
1	174	8.64	8.62	34.018	26.408	164.3	.410	2.67	40.7	34.9	2.22	27.8	.00	.00	.04	175	
1	200	ISL 8.33	8.31	34.018	26.457	157.2	.451	2.59	39.3							201	
1	205	8.25	8.23	34.055	26.497	156.3	.459	2.58	39.0	39.1	2.32	29.2	.00			206	

A. PRIMARY PRODUCTIVITY SAMPLES WERE TAKEN FROM THE FIRST SIX DEPTHS ON THIS CAST.

STATION	80	70
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STATION 80 80

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 80 90

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	W	AVES	WEATHER	BAROMETER	DRY	WET	CLOUD	TY*			
30 9.0	I 1 23 12 .9	13/11/85	0435	GMT	4227 M	300 04	KT		1018.4	MB 15	.3 C	11.2 C				
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN MT	OXYGEN	OXY	SI03	P04	NO 3	NO2	CML-A	PHAE0	PRFS	
M	OE6 C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	0.8A	
0	ISL 15.07	15.07	33.425	24.744	319.2	.000	5.88	102.5							0	
1	1	15.07	15.07	33.425	24.744	319.2	.003	5.88	102.5	2.6	.47	.4	.03	.36	.15	1
	10	ISL 15.06	15.06	33.424	24.744	319.4	.032	5.96	103.8							10
	11	15.06	15.06	33.424	24.744	319.4	.035	5.96	103.9	2.7	.48	.3	.05	.38	.17	11
	20	ISL 15.07	15.07	33.425	24.744	319.8	.064	5.93	103.5							20
1	27	15.08	15.07	33.426	24.744	320.0	.086	5.89	102.7	2.7	.45	.3	.01	.35	.19	27
	30	ISL 15.07	15.07	33.425	24.744	320.0	.096	5.88	102.5							30
1	42	15.06	15.05	33.423	24.747	320.2	.134	5.85	102.0	2.6	.45	.3	.02	.39	.14	42
	50	ISL 13.45	13.45	33.242	24.943	301.7	.159	5.99	101.0							50
1	58	11.98	11.97	33.127	25.141	282.8	.182	6.07	99.1	2.8	.54	.8	.12	.24	.23	58
	68	11.8 2	11.81	33.217	25.241	273.5	.209	5.83	94.9	3.9	.66	3.5	.03	.14	.17	68
	75	ISL 11.64	11.63	33.245	25.295	268.5	.229	5.70	92.4							76
1	79	11.54	11.53	33.258	25.325	265.8	.239	5.62	90.9	5.1	.77	5.6	.01	.10	.12	79
1	94	11.02	11.01	33.402	25.529	246.6	.277	5.00	80.1	9.3	1.05	11.0	.00	.06	.10	94
	100	ISL 10.54	10.53	33.433	25.638	236.3	.293	4.85	76.8							101
1	108	9.95	9.93	33.473	25.771	223.8	.312	4.67	73.1	15.4	1.37	16.5	.00	.02	.06	109
1	124	9.75	9.73	33.609	25.911	210.8	.347	4.20	65.5	19.2	1.55	19.5	.00	.01	.03	125
	125	ISL 9.73	9.72	33.614	25.917	210.2	.348	4.18	65.1							126
1	150	9.07	9.06	33.784	26.157	187.7	.398	3.34	51.4	26.8	1.83	24.4	.00	.00	.02	151
1	170	8.73	8.71	33.870	26.279	176.5	.435	3.15	48.1	30.4	1.96	26.1	.00	.01	.03	171
1	191	8.31	8.29	33.953	26.409	164.4	.470	3.24	49.0	33.8	2.03	27.1	.00			192
	200	ISL 8.25	8.23	33.963	26.426	163.0	.485	3.20	48.3							201
1	212	8.18	8.16	33.967	26.439	161.9	.504	3.12	47.1	34.8	2.05	27.5	.00			213
1	242	7.60	7.58	34.001	26.551	151.5	.551	3.02	45.0	41.3	2.16	29.3	.00			243
	250	ISL 7.47	7.45	34.006	26.573	149.5	.563	2.91	43.3							252
1	283	7.08	7.05	34.024	26.643	143.2	.612	2.38	35.0	49.9	2.41	32.6	.00			285
	300	ISL 6.95	6.92	34.040	26.673	140.6	.636	2.11	31.0							302
1	344	6.69	6.66	34.082	26.742	134.6	.696	1.49	21.7	59.9	2.74	36.4	.00			346
	400	ISL 6.29	6.26	34.129	26.832	126.6	.769	1.07	15.5							403
1	420	6.16	6.12	34.146	26.863	123.8	.795	.97	14.0	71.7	3.02	39.5	.00			423
1	497	5.76	5.71	34.222	26.974	114.0	.886	.49	7.0	82.3	3.20	41.3	.00			500
	500	ISL 5.74	5.70	34.225	26.978	113.6	.889	.48	6.9							504
1	573	5.42	5.37	34.279	27.060	106.4	.970	.34	4.8	90.3	3.32	42.4	.00			577

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 80 100

L	ATTITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	T			
3	i 48.9	123 54.2 W	12/11/85	2328	GMT 4370 M	320 15	KT 360	08 06 1	1015.7	MB 14.9	C 13.2 C	6/8	SC			
C	1ST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO2	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UN/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	ISL 16.79	16.79	33.333	24.285	362.9	.000	5.75	103.7							0
1		16.79	16.79	33.333	24.285	362.9	.004	5.75	103.7	2.0	.40	.1	.00	.11	.03	1
	10	ISL 16.78	16.78	33.331	24.286	363.1	.036	5.70	102.8							10
1	11	16.76	16.78	33.331	24.286	363.1	.040	5.70	102.8	1.9	.41	.1	.00	.11	.04	11
	20	ISL 16.78	16.78	33.331	24.286	363.4	.073	5.71	102.9							20
1	27	16.78	16.78	33.331	24.287	363.6	.098	5.71	102.9	1.9	.40	.1	.00	.10	.05	27
	30	ISL 16.78	16.78	33.331	24.287	363.7	.109	5.70	102.8							30
1		16.77	16.76	33.329	24.289	363.9	.152	5.67	102.2	1.9	.40	.1	.00	.11	.06	42
	50	ISL 16.75	16.74	33.328	24.294	363.7	.182	5.65	101.9							50
1	58	16.72	16.72	33.327	24.298	363.5	.210	5.64	101.5	1.9	.39	.1	.00	.13	.06	58
1	68	13.72	13.71	33.154	24.822	313.7	.244	6.41	108.5	2.0	.43	.1	.00	.16	.13	68
	75	ISL 12.95	12.94	33.124	24.953	301.2	.266	6.32	105.2							76
1	79	12.81	12.80	33.121	24.978	299.0	.277	6.27	104.1	2.3	.44	.1	.00	.17	.21	79
1		12.36	12.35	33.134	25.075	290.0	.321	6.03	99.2	2.6	.49	.2	.12	.24	.24	94
	100	ISL 12.21	12.20	33.171	25.133	284.7	.339	5.90	96.7							101
1		12.05	12.03	33.235	25.213	277.2	.363	5.71	93.4	3.8	.64	3.0	.04	.13	.20	109
*		11.87	11.85	33.361	25.344	265.1	.407	5.41	88.2	5.4	.73	5.6	.02	.08	.15	125
	125	ISL 11.85	11.83	33.365	25.351	264.5	.408	5.39	87.9							126
1		10.68	10.66	33.568	25.720	229.7	.471	4.49	71.5	13.2	1.22	14.5	.01	.03	.07	151
*		9.89	9.87	33.728	25.981	205.2	.514	3.73	58.4	21.4	1.70	21.7	.00	.01	.02	171
1	191	9.23	9.21	33.829	26.168	187.6	.555	3.33	51.4	26.3	1.91	24.8	.00			192
	200	ISL 9.02	9.00	33.866	26.231	181.8	.571	3.36	51.6							201
1		8.78	8.75	33.909	26.303	175.1	.593	3.39	51.8	29.2	1.95	25.8	.00			213
1		8.22	8.19	33.987	26.450	161.5	.646	3.53	53.3	33.2	1.96	26.3	.00			245
	250	ISL 8.13	8.10	33.992	26.468	159.9	.656	3.50	52.8							252
1		7.70	7.68	34.004	26.539	153.4	.709	3.18	47.5	39.0	2.16	28.7	.00			285
	300	ISL 7.49	7.46	34.017	26.581	149.7	.734	2.90	43.1							302
1		6.91	6.88	34.052	26.688	139.8	.799	2.09	30.6	53.5	2.63	35.3	.00			347
	400	ISL 6.29	6.26	34.083	26.795	130.0	.873	1.40	20.2							403
1		6.07	6.03	34.094	26.833	126.6	.902	1.19	17.1	68.8	3.04	40.1	.00			425
1		5.54	5.50	34.143	26.938	117.1	.994	.75	10.6	80.9	3.26	42.8	.00			501
	500	ISL 5.53	5.49	34.146	26.941	116.8	.996	.74	10.5							504
1	576	5.23	5.19	34.233	27.046	107.6	1.082	.43	6.1	89.8	3.43	44.3	.00			580

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	TYPE			
3 2 29.3 N	24 36 11.0 W	12/1 1/85	-2.6 GMT	4341 M	310 15	KT 3 50	0 7 08 1	1015.5	MB 14.2 C 1	0.6 C	7/8	T TYPE			
CAS'T DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DE6 C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	U3/L	D.BAR
0 ISL	17.93	17.03	33.436	24.307	360.8	.000	5.63	102.1							0
1 1	17.03	17.03	33.436	24.307	360.8	.004	5.63	102.1	1.7	.24	.1	.00	.12	.06	1
10 ISL	17.04	17.04	33.435	24.306	361.2	.036	5.63	102.1							10
1 11	17.04	17.04	33.435	24.305	361.3	.040	5.63	102.1	1.8	.24	.1	.00	.11	.06	11
20 ISL	17.05	17.05	33.435	24.304	361.8	.072	5.71	103.6							20
1 27	17.05	17.05	33.435	24.303	362.1	.097	5.76	104.5	1-9	.24	.1	.00	.12	.05	27
1 30	17.05	17.05	33.436	24.304	362.1	.108	5.73	103.9							30
1 42	17.05	17.04	33.439	24.308	362.1	.151	5.62	101.9	1.9	.24	.1	.00	.12	.05	42
1 50	17.04	17.04	33.437	24.308	362.4	.181	5.68	102.9							50
1 58	17.04	17.03	33.435	24.307	362.7	.209	5.73	103.9	1.8	.24	.1	.00	.12	.05	58
1 68	15.45	15.44	33.339	24.595	335.4	.244	6.19	108.7	2.2	.24	.1	.00	.19	.15	68
1 75	14.55	14.54	33.296	24.759	320.0	.268	6.18	106.4							75
1 78	14.27	14.26	33.285	24.808	315.3	.276	6.17	105.7	2.1	.27	.1	.00	.18	.13	78
1 94	13.41	13.40	33.244	24.954	301.7	.325	6.05	101.8	2.5	.32	.1	.04	.16	.22	94
1 100	13.08	13.07	33.260	25.032	294.4	.344	5.93	99.1							101
1 109	12.67	12.66	33.295	25.140	284.3	.369	5.74	95.2	3.4	.40	1.7	.15	.11	.21	109
1 123	12.10	12.08	33.363	25.303	269.1	.410	5.45	89.3	5.4	.59	5.6	.02	.08	.16	124
1 125	12.03	12.01	33.371	25.322	267.3	.414	5.41	88.5							126
1 149	10.96	10.94	33.501	25.620	239.3	.476	4.73	75.7	11.2	.97	12.6	.01	.03	.08	150
1 150	10.93	10.92	33.505	25.627	238.7	.478	4.72	75.4							151
1 170	10.25	10.24	33.616	25.832	219.4	.524	4.26	67.2	16.3	1.26	17.3	.00	.02	.04	171
1 190	9.39	9.37	33.754	26.084	195.6	.565	3.50	54.2	21.8	1.52	21.0	.00			191
1 200	9.10	9.07	33.816	26.180	186.6	.584	3.71	57.0							201
1 211	8.84	8.82	33.876	26.266	178.5	.604	3.98	60.9	27.4	1.71	24.2	.00			212
1 242	8.40	8.37	33.968	26.408	165.5	.657	2.92	44.3	30.3	1.77	24.7	.00			243
1 250	8.26	8.23	33.980	26.438	162.8	.671	2.68	40.5							252
1 282	7.73	7.70	34.006	26.537	153.7	.722	1.92	28.7	38.8	2.08	28.6	.02			264
1 300	7.51	7.48	34.021	26.581	149.7	.749	1.69	25.1							302
1 343	7.04	7.00	34.054	26.673	141.3	.811	1.34	19.7	51.7	2.53	33.9	.00			345
1 400	6.46	6.42	34.086	26.777	131.9	.889	.93	13.5							403
1 419	6.29	6.25	34.099	26.809	129.1	.914	.83	12.0	65.4	2.93	38.2	.00			4 22
1 497	5.83	5.79	34.183	26.933	117.9	1.010	.65	9.3	77.8	3.27	41.2	.01			500
1 500	5.82	5.77	34.187	26.938	117.5	1.014	.64	9.2							504
1 573	5.52	5.48	34.256	27.030	109.4	1.097	.42	6.0	86.2	3.44	42.5	.00			577

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT TYPE			
32 08.9	125 16.8 W	12/11/85	1015 6MT	4397 M	300 20	KT		1015.8	MB 15	.0 C 10.7 C					
CAS'T DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N0 3	N02	CHL-A	PHAE0	PRESS
M	DE6 C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0	ISL 16.99	16.99	33.277	24.194	371.4	.000	5.74	103.9							0
2	16.99	16.99	33.277	24.194	371.6	.007	5.74	103.9	1.8	.30	.1	.00	.04	.01	2
10	ISL 17.01	17.01	33.276	24.191	372.1	.037	5.66	102.5							10
12	17.01	17.01	33.276	24.191	372.2	.044	5.65	102.3	1.8	.28	.1	.00	.12	.04	12
20	ISL 17.01	17.01	33.276	24.191	372.5	.074	5.64	102.1							20
27	17.01	17.00	33.276	24.192	372.7	.100	5.63	101.9	1.7	.28	.1	.00	.13	.03	27
30	ISL 17.01	17.00	33.276	24.191	372.8	.112	5.63	101.9							30
43	17.02	17.01	33.275	24.189	373.4	.160	5.63	101.9	1.8	.27	.1	.00	.12	.05	43
50	ISL 17.02	17.01	33.276	24.189	373.7	.186	5.63	101.8							50
58	17.03	17.02	33.276	24.188	374.1	.215	5.62	101.8	1.6	.27	.1	.00	.12	.04	58
73	14.51	14.50	33.406	24.851	311.1	.267	6.08	104.8	2.1	.27	.1	.00	.19	.19	73
75	ISL 14.64	14.63	33.487	24.887	307.8	.274	6.03	104.2							76
83	15.16	15.15	33.720	24.954	301.8	.297	5.80	101.5	2.4	.24	.1	.01	.18	.20	83
99	13.29	13.27	33.412	25.109	287.2	.344	5.85	98.3	2.6	.31	.4	.13	.15	.18	99
100	ISL 13.24	13.22	33.419	25.124	286.2	.348	5.84	98.0							101
119	12.90	12.88	33.510	25.262	273.0	.400	5.56	92.7	3.9	.43	2.8	.03	.08	.13	119
125	ISL 12.56	12.54	33.525	25.342	265.6	.417	5.40	89.4							126
138	11.71	11.70	33.545	25.517	249.1	.452	5.07	82.5	7.5	.68	8.0	.01	.05	.09	139
150	ISL 11.02	11.00	33.550	25.647	236.8	.480	4.95	79.3							151
158	10.56	10.55	33.561	25.736	228.4	.499	4.85	77.0	11.7	1.03	12.7	.00	.02	.04	159
178	9.81	9.79	33.669	25.948	208.4	.543	4.30	67.2	17.5	1.27	17.6	.00	.01	.03	179
198	9.28	9.26	33.784	26.125	191.8	.582	3.74	57.8	24.0	1.58	22.0	.00			199
200	ISL 9.24	9.22	33.792	26.137	190.7	.586	3.74	57.8							201
218	8.97	8.94	33.860	26.235	181.7	.619	3.76	57.7	25.9	1.64	22.8	.00			219
250	ISL 8.36	8.33	33.964	26.411	165.4	.675	3.25	49.3							252
253	8.30	8.28	33.971	26.425	164.1	.680	3.20	48.4	33.8	1.93	26.9	.00			254
300	ISL 7.48	7.45	34.013	26.579	149.7	.754	2.78	41.2							302
302	7.44	7.41	34.015	26.586	149.2	.757	2.76	40.9	43.7	2.18	30.4	.00			304
358	6.80	6.77	34.039	26.693	139.5	.838	2.08	30.4	54.1	2.54	34.4	.00			360
400	ISL 6.38	6.35	34.067	26.771	132.4	.895	1.61	23.3							403
443	5.99	5.95	34.098	26.846	125.5	.950	1.19	17.1	70.9	3.02	39.8	.00			446
500	ISL 5.54	5.50	34.136	26.932	117.7	1.020	.78	11.1							504
531	5.34	5.30	34.158	26.974	113.9	1.055	.62	8.8	85.1	3.33	42.4	.00			534
600	ISL 4.99	4.94	34.226	27.068	105.4	1.131	.41	5.8							605
621	4.92	4.87	34.249	27.095	103.0	1.153	.39	5.5	98.3	3.44	44.1	.00			625

RV MEM HORIZON

CALCOFI CRUISE 8511

STATION 82 46

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CUD	TYPE				
34 16.1 N	119 57.2 W	10/11/85	0144 GMT	536 M	280 22 KT	280 05 04		1012.0	MB 16	.0 C 12.5 C						
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRES
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BA
	0	ISL 16.82	16.82	33.598	24.481	344.5	.000	5.88	106.3							0
1	1	16.82	16.82	33.598	24.481	344.3	.003	5.88	106.3	2.6	.36	.3	.01	.91	.29	1
	10	ISL 16.67	16.67	33.584	24.506	342.1	.034	5.87	105.8							10
1	11	16.66	16.65	33.583	24.509	341.9	.038	5.87	105.7	2.8	.38	.5	.02	.96	.39	11
	20	ISL 15.26	15.26	33.529	24.783	316.1	.067	5.62	98.4							20
	30	ISL 13.42	13.42	33.510	25.156	281.4	.097	5.20	87.8							30
1	32	13.05	13.04	33.503	25.225	274.2	.102	5.11	85.5	8.4	.86	7.8	.20	.56	.37	32
1	46	11.61	11.61	33.548	25.535	245.0	.139	4.46	72.4	13.0	1.18	13.2	.08	.24	.24	46
	50	ISL 11.45	11.45	33.577	25.587	240.1	.149	4.31	69.8							50
1	57	11.25	11.25	33.629	25.664	233.0	.165	4.08	65.8	15.5	1.35	16.0	.06	.13	.19	57
1	72	10.35	10.34	33.754	25.921	208.8	.198	3.46	54.7	21.5	1.66	20.7	.02	.05	.11	72
	75	ISL 10.21	10.20	33.780	25.965	204.7	.205	3.34	52.7							76
1	87	9.88	9.87	33.844	26.071	194.8	.228	3.02	47.3	25.8	1.84	23.4	.01	.02	.08	87
	100	ISL 9.78	9.77	33.868	26.107	191.7	.254	2.92	45.6							101
1	101	9.78	9.77	33.870	26.109	191.5	.256	2.91	45.5	27.3	1.90	24.2	.01	.01	.09	102
	125	ISL 9.42	9.41	33.984	26.257	178.0	.300	2.43	37.7							126
1	127	9.39	9.37	33.995	26.272	176.6	.304	2.38	36.9	32.4	2.12	27.0	.01	.04	.04	128
1	147	9.22	9.21	34.039	26.333	171.1	.339	2.27	35.1	34.3	2.21	27.8	.01	.00	.06	148
	150	ISL 9.20	9.19	34.045	26.341	170.5	.343	2.25	34.8							151
1	178	9.04	9.02	34.091	26.404	165.0	.390	2.05	31.6	37.2	2.29	28.9	.01	.01	.06	179
	200	ISL 8.94	8.92	34.118	26.441	161.9	.426	1.78	27.3							202
1	208	8.89	8.87	34.126	26.455	160.7	.439	1.67	25.6	41.1	2.43	30.4	.01	.01	.07	209
1	239	8.54	8.51	34.150	26.529	154.1	.487	1.32	20.1	46.2	2.61	32.3	.00			240
	250	ISL 8.39	8.36	34.155	26.556	151.7	.505	1.23	18.6							252
1	278	8.02	8.00	34.163	26.617	146.2	.547	1.05	15.8	52.9	2.75	34.3	.00			280
	300	ISL 7.78	7.75	34.166	26.655	142.9	.571	.95	14.2							302
1	339	7.40	7.37	34.169	26.712	137.9	.633	.82	12.2	62.9	2.95	35.6	.00			341
1	394	6.97	6.93	34.184	26.786	131.5	.708	.67	9.8	71.1	3.08	36.3	.00			397
	400	ISL 6.91	6.87	34.187	26.796	130.5	.715	.62	9.1							403
1	456	6.38	6.34	34.209	26.885	122.5	.786	.16	2.3	89.9	3.39	34.5	.00			459
	500	ISL 6.30	6.25	34.212	26.898	121.8	.840	.10	1.5							504
1	517	6.27	6.22	34.212	26.902	121.6	.861	.08	1.2		3.73	26.8	.03			521

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 83 40.6

LATITUDE	LONGITUDE	1	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE		
34 13.6 N	19 24.7 W		09/11/85	2144 GMT	31 M	260 06 KT	240 04 05	1	1014.4 MB	17.0 C	12.3 C		1/8	sc		
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRES
	M	DEG C	DEG C		THETA		ML/L	PCT		UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BA
1	0	17.93	17.93	33.633	24.243	366.9	.000	5.70	105.3	2.3	.35	.1	.00	.31	.08	0
10		17.88	17.88	33.629	24.252	366.3	.037	5.72	105.5	2.1	.33	.1	.00	.32	.09	10
	20	ISL 16.26	16.26	33.512	24.545	338.7	.072	5.93	105.9	3.4	.43	.2	.06	.91	.36	20
1	21	16.11	16.11	33.503	24.572	336.2	.075	5.95	106.0							21

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 83 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE			
34 10.4 I	119 30.9 W	09/11/85	1945 GMT	133 M	240 07	KT 280	OXY 03 04 1	1015.1	MB 17.9 C	13.7 C		1/8	ST			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SI6MA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	17.49	17.49	33.615	24.336	358.0	.000	5.72	104.7	2.3	.34	.2	.00	.44	.15	0
1	10	17.44	17.44	33.612	24.345	357.5	.036	5.78	105.7	2.4	.33	.1	.00	.49	.12	10
	20	ISL 16.84	16.83	33.567	24.454	347.4	.071	5.84	105.6							20
1	26	16.48	16.48	33.542	24.519	341.5	.091	5.90	105.9	2.6	.35	.2	.00	.54	.28	26
	30	ISL 15.33	15.32	33.459	24.715	322.9	.105	5.97	104.6							30
1	36	13.69	13.69	33.382	25.002	295.6	.123	6.06	102.7	3.9	.50	1.0	.08	1.16	.55	36
1	46	12.64	12.63	33.437	25.256	271.7	.151	5.38	89.2	7.0	.80	6.2	.19	.64	.41	46
	50	ISL 12.34	12.33	33.461	25.331	264.6	.163	5.19	85.6							50
1	62	11.77	11.76	33.527	25.490	249.7	.193	4.80	78.2	10.2	1.10	11.5	.04	.22	.23	62
	75	ISL 11.31	11.30	33.595	25.627	237.0	.225	4.35	70.2							76
1	76	11.29	11.28	33.597	25.632	236.4	.227	4.33	69.9	13.6	1.32	14.7	.02	.10	.17	76
	100	ISL 10.56	10.55	33.701	25.844	216.8	.282	3.67	58.4							101
1	102	10.52	10.50	33.706	25.856	215.7	.285	3.64	57.8	19.5	1.62	19.5	.01	.04	.11	102

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 83 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE			
33 1.5 N	120 08.2 W	09/11/85	1255 GMT	102 M	310 21 KT			1015.7	MB 13.2 C	11.1 C						
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN Hf	OXYGEN	OXY	SI 03	P04	N03	N02	CHL-A	PHAE0	PRESS
	N	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	ISL 13.73	13.73	33.495	25.081	287.1	.000	5.47	92.8							0
1	1	13.73	13.73	33.495	25.081	287.1	.003	5.47	92.8	6.4	.73	5.1	.09	.70	.34	1
	10	ISL 13.73	13.72	33.495	25.082	287.3	.029	5.48	93.0							10
1	11	13.73	13.72	33.495	25.082	287.3	.031	5.48	93.0	6.6	.73	5.2	.09	.69	.36	11
	20	ISL 13.23	13.23	33.468	25.161	279.9	.057	5.40	90.7							20
1	22	13.08	13.08	33.463	25.188	277.5	.062	5.38	90.1	7.2	.81	6.3	.10	.67	.37	22
	30	ISL 12.27	12.27	33.462	25.344	263.0	.084	5.09	83.9							30
1	32	12.09	12.08	33.462	25.379	259.5	.089	5.02	82.3	9.3	1.02	9.7	.09	.49	.35	32
	50	ISL 11.28	11.27	33.539	25.590	239.9		72.4								50
1	53	11.21	11.20	33.556	25.615	237.5		71.0	13.5	1.30	14.6	.03	.20	.27	.53	53
	75	ISL 10.36	10.35	33.734	25.905	210.4	.191	55.7								76
1	78	10.26	10.25	33.760	25.941	207.0	.196	3.40	53.7	22.3	1.68	21.0	.03	.03	.11	78

RV NFW HORIZON										CALCOFI CRUISE 8511										STATION S3 55				
LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		TYPE
33 44.5	R	120 14 1	H	09/11/85	0957	GMT	1081 M	S0B 12	KT							1017.3	MB 13	.6 C	11.2 C					
CST DEPTH		TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI 03	PO4	NO 3	NO2	CHL-A	PHAE0	PR^SS								
M		DEG C	DEC C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR								
1	0	15.93	15.93	33.591	24.684	52*. t	.00fL	5.91	104.9	2.3	.38	.4	.00	.84	.37	0								
1	9	15.86	15.86	33.599	24.703	323.3		5.85	103.7	2.2	.37	.4	.01	.87	.35	9								
1	10	15.74	15.74	33.595	24.72a	311.1		5.82	103.0							10								
1	18	14.55	14.55	33.568	24.966	298.6	05 J	5.55	9 ; +	3.5	.55	2.2	.14	.44	.66	18								
1	20	14.27	14.26	33.568	25.026	293.1		5.48	94.1							20								
1	27	13.30	13.30	33.570	25.227	273.9	.083	5.16	86.8	6.4	.77	5.8	.28	.34	.60	27								
1	30	12.77	12.76	33.57 6	25.337	263.4	.091	4.89	81.4							30								
1	36	11.85	11.84	33.602	25.533	245.0	V.	4.39	71.7	12.7	1.19	13.3	.18	.21	.41	36								
1	49	10.95	10.95	33.66 2	25.743	225.3	.136	3.91	62.6	16.8	1.44	17.4	.05	.12	.29	49								
1	50	10.94	10.94	33.663	25.747	225.0	.139	3.89	62.3							50								
1	58	10.87	10.87	33.671	25.765	223.4	.156	3.84	61.4	17.4	1.47	17.9	.03	.12	.27	58								
1	66	10.77	10.76	33.680	25.791	221.1	.174	3.82	61.0	18.0	1.53	18.4	.03	.11	.27	66								
1	75	10.28	10.27	33.751	25.932	211.1	.194	3.45	54.4							75								
1	80	10.00	9.99	33.79 5	26.012	200.3	.203	3.23	50.7	23.6	1.79	22.4	.01	.04	.18	80								
1	97	9.64	9.62	33.884	26.144	188.1		2.92	45.5	26.9	1.95	24.6	.01	.02	.14	97								
1	100	9.58	9.57	33.893	26.159	186.7	.243	2.87	44.7							100								
1	114	9.42	9.41	33.925	26.211	182.1	.269	2.76	42.8	29.0	2.01	25.5	.00	.02	.11	115								
1	125	9.32	9.31	33.967	26.261	177.6	.200	2.84	44.0							126								
1	135	9.22	9.21	34.008	26.308	173.2	.306	2.89	44.7	32.5	2.16	27.3	.00	.01	.09	136								
1	150	9.07	9.05	34.050	26.366	168.0	.331	2.5 3	38.9							151								
1	162	8.95	8.93	34.074	26.404	164.6	.352	2.19	36.1	36.1	2.29	28.6	.00			163								
1	188	8.80	8.78	34.101	26.450	160.7	.394	2.09	32.0	38.2	2.35	29.4	.00			189								
1	200	8.71	8.69	34.114	26.473	158.7	.413	2.00	30.4							201								
1	218	8.59	8.57	34.132	26.506	155.9	.441	1.87	28.5	41.1	2.43	30.4	.00			219								
1	250	8.40	8.37	34.157	26.556	151.7	.490	1.71	26.0							25 2								
1	261	8.31	8.28	34.163	26.575	150.1	.508	1.66	25.1	45.1	2.56	31.7	.00			26 3								
1	300	7.75	7.72	34.173	26.667	141.8	.564	1.45	21.7							302								
1	308	7.63	7.60	34.176	26.686	140.0	.575	1.40	20.9	52.5	2.71	33.9	.00			310								
1	383	7.13	7.09	34.24 6	26.813	128.9	.675	.83	12.2	62.7	2.98	36.8	.00			385								
1	400	6.98	6.95	34.25 5	26.840	126.5	.698	.75	11.0							403								
1	458	6.52	6.47	34.273	26.917	119.6	.769	.57	8.3	72.2	3.14	39.0	.00			461								
1	500	6.22	6.17	34.285	26.966	115.3	.818	.47	6.8							504								
1	536	5.98	5.94	34.294	27.003	112.1	.860	.41	5.9	82.0	3.26	40.9	.00			540								

RV NEW HORIZON										CALCOFI CRUISE 8511										STATION 83 60										
LATITUDE		LONGITUDE		DAY/MC/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMI TYPE						
33 34.6		120 45.9 U		09/11/85		0546 GMT		1382 M		310 20 KT						1016.3		MB 15		.8 C 12.2 C										
CAST DEPTH		TEMP		POT TEHP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		NO3		NO 2		CHL-A	PHAE0	PRESS		
M		DE6 C		DEC C				THETA						NL/L		PCT		UM/L		y*/L		UM/L		UM/L		UG/L		UG/L		D.BAR
	0	ISL	15.47	15.42	33.605	24.805	313.4	.000	6.07	106.7																		0		
1	1		15.42	15.42	33.605	24.805	313.4	.003	6.07	106.7	1.2	.36	.4	.00	1.28	.45											1			
	10	ISL	15.42	15.42	33.605	24.806	313.5	.031	6.06	106.5																	10			
1	11		15.42	15.42	33.605	24.806	313.6	.034	6.06	106.5	1.2	.36	.6	.01	1.34	.48											11			
	20	ISL	15.37	15.37	33.606	24.818	312.8	.063	6.07	106.6																	20			
1	22		15.36	15.36	33.606	24.820	312.6	.069	6.07	106.6	1.0	.35	.6	.01	1.33	.53											22			
	30	ISL	14.15	14.15	33.581	25.060	289.9	.093	5.43	93.0																	30			
1	32		13.80	13.79	33.578	25.132	283.2	.098	5.25	89.3	5.3	.73	5.8	.18	2.16	1.26											32			
1	42		11.98	11.98	33.589	25.498	248.5	.125	4.47	73.2	12.0	1.14	12.4	.16	.75	.70											42			
	50	ISL	11.24	11.23	33.623	25.662	233.0	.145	4.11	66.2																	50			
1	58		10.82	10.81	33.669	25.773	222.6	.162	3.84	61.3	17.7	1.48	18.0	.02	.14	.30											58			
1	68		10.15	10.15	33.762	25.961	204.9	.183	3.38	53.2	22.2	1.71	21.6	.00	.06	.18											68			
	75	ISL	9.94	9.93	33.803	26.030	198.5	.198	3.19	50.1																	75			
1	79		9.87	9.86	33.819	26.053	196.3	.205	3.13	49.0	25.4	1.93	23.2	.00	.03	.15											79			
1	94		9.55	9.54	33.889	26.161	186.4	.234	2.92	45.4	28.4	1.95	25.0	.00	.01	.10											94			
	100	ISL	9.47	9.45	33.914	26.195	183.3	.246	2.84	44.1																	101			
1	114		9.32	9.31	33.961	26.256	177.8	.272	2.66	41.2	31.1	2.07	26.4	.00	.02	.08											115			
	125	ISL	9.22	9.20	33.998	26.301	173.6	.290	2.51	38.7																	126			
1	135		9.13	9.12	34.030	26.341	170.1	.308	2.37	36.6	34.3	2.17	27.8	.00	.01	.08											136			
	150	ISL	9.06	9.04	34.055	26.372	167.4	.333	2.27	35.0																	151			
1	161		9.00	8.98	34.069	26.393	165.7	.351	2.22	34.1	36.6	2.27	28.6	.00	.01	.06											162			
1	192		8.65	8.63	34.121	26.489	157.1	.401	1.97	30.1	40.7	2.37	30.1	.00													193			
	200	ISL	8.56	8.54	34.132	26.510	155.1	.41A	1.92	29.3																	201			
1	223		8.30	8.28	34.151	26.566	150.2	.448	1.82	27.6	44.4	2.47	31.2	.00													224			
	250	ISL	7.89	7.87	34.140	26.618	145.5	.489	1.72	25.8																	252			
1	258		7.78	7.75	34.138	26.634	144.2	.501	1.67	25.0	49.6	2.58	33.1	.00													260			
	300	ISL	7.58	7.55	34.216	26.72 5	136.2	.559	1.09	16.2																	302			
1	309		7.55	7.52	34.235	26.743	134.6	.572	.96	14.3	57.5	2.85	35.5	.00													311			
1	366		6.97	6.94	34.216	26.810	128.7	.646	.87	12.8	63.5	3.00	37.2	.00													368			
	400	ISL	6.73	6.69	34.239	26.862	124.2	.689	.70	10.3																	403			
1	451		6.41	6.37	34.277	26.934	117.8	.751	.46	6.7	74.3	3.17	39.8	.00													454			
	500	ISL	6.04	6.00	34.267	26.974	114.4	.808	.43	6.2																	504			
1	517		5.76	5.72	34.259	27.003	111.8	.850	.41	5.9	84.3	3.25	41.7	.00													541			
	600	SSL	5.35	5.30	34.296	27.083	104.6	.918	.30	4.3																	605			
1	622		5.21	5.16	34.319	27.117	101.4	.941	.25	3.5	96.3	3.36	43.3	.00													627			

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 87 40

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD AM		T							
-33 39.4 N		18 5 8.3 W		07/11/85		2058		695 M		350 04		KT 300		04 04 1		10 J1. KB 19		.9 C 17.2 C		1/6		CC									
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		NO3		NO2		CHL-A		PHAE0		PRESS	
n		DEG C		DEG C				THETA						WL/L		PCT		UM/L		UM/L		UM/L		U6/L		O O /1		D.BAR			
0		ISL	18.50	18.50		33.642		24.111		379.8		.000		5.64		105.3												0			
1	1		18.50	18.50		33.642		24.111		379.5		.004		5.64		105.3		2.0		.53		.2		.00		.18 .05		1			
1	10	ISL	18.50	18.41		33.641		24.131		377.9		.038		5.70		106.2												10			
1	11		18.41	18.40		33.641		24.133		377.7		.042		5.70		106.2		2.0		.33		.2		.00		.21		.08		11	
1	20	ISL	18.34	18.34		33.640		24.148		376.7		.076		5.71		106.3												20			
1	22		18.33	18.33		33.640		24.151		376.4		.083		5.71		106.3		1.9		.32		.2		.00		.23		.07		22	
1	30	ISL	16.65	16.64		33.516		24.459		347.3		.112		6.06		109.0												30			
1	32		16.11	16.11		33.481		24.556		338.1		.119		6.12		109.0		2.3		.35		.2		.00		.35		.16		32	
1	42		12.88	12.88		33.314		25.112		285.3		.150		5.75		95.8		4.6		.64		3.5		.19		.70		.43		42	
1	50	ISL	12.40	12.40		33.389		25.263		269.7		.172		5.38		88.7												50			
1	52		12.30	12.29		33.405		25.296		268.0		.177		5.29		87.1		6.7		.83		6.8		.19		.35		.36		52	
1	63		11.93	11.92		33.530		25.462		252.4		.205		4.80		78.5		9.5		1.01		10.4		.05		.18		.31		63	
1	73		11.67	11.66		33.553		25.529		246.3		.230		4.57		74.3		10.9		1.13		12.1		.03		.16		.26		73	
1	75	ISL	11.57	11.56		33.563		25.556		243.8		.236		4.49		72.8												76			
1	88		11.00	10.99		33.630		25.711		229.3		.266		4.03		64.6		15.1		1.38		16.4		.02		.05		.22		38	
1	100	ISL	10.62	10.61		33.686		25.822		218.9		.294		3.68		58.6												101			
1	104		10.52	10.51		33.701		25.851		216.2		.301		3.60		57.1		18.8		1.56		19.4		.01		.05		.16		104	
1	123		9.86	9.85		33.798		26.039		198.7		.342		3.22		50.4		23.6		1.73		22.6		.01		.02		.09		124	
1	125	ISL	9.83	9.81		33.806		26.052		197.5		.346		3.20		50.0												126			
1	149		9.40	9.38		33.921		26.213		182.6		.392		2.85		44.2		28.8		1.95		25.3		.00		.01		.04		150	
1	150	ISL	9.39	9.37		33.926		26.218		182.2		.393		2.83		43.9												151			
1	179		9.20	9.18		34.074		26.365		168.8		.444		2.23		34.5		34.4		2.20		27.9		.00						180	
1	200	ISL	8.92	8.90		34.122		26.447		161.3		.479		1.99		30.6												201			
1	210		8.79	8.77		34.136		26.479		158.4		.494		1.91		29.3		39.5		2.35		29.7		.01						211	
1	241		8.61	8.58		34.185		26.546		152.6		.542		1.63		24.9		43.1		2.48		30.9		.00						242	
1	250	ISL	8.54	8.52		34.200		26.568		150.7		.556		1.53		23.3														252	
1	280		8.32	8.29		34.239		26.633		144.9		.601		1.22		18.5		48.0		2.66		32.5		.01						282	
1	300	ISL	8.15	8.12		34.249		26.667		142.1		.629		1.09		16.5														302	
1	342		7.77	7.74		34.257		26.729		136.6		.688		.90		13.5		55.6		2.83		34.7		.00						344	
1	400	ISL	7.24	7.20		34.277		26.821		128.5		.765		.66		9.7														403	
1	419		7.08	7.04		34.283		26.849		126.0		.789		.59		8.7		65.4		3.02		37.2		.01						422	
1	496		6.64	6.59		34.306		26.927		119.4		.883		.41		6.0		72.6		3.14		38.9		.01						499	
1	500	ISL	6.60	6.56		34.307		26.933		118.9		.888		.40		5.9														504	
1	575		5.90	5.85		34.329		27.042		108.9		.974		.32		4.6		85.9		3.26		40.6		.01						579	

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 87 45

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD AMT		TYPE							
33 29.7		119 19.7 W		08/11/85		0055		1635 M		240 10		KT 270		05 08 1		1015.0		MB 19.7		C 17.5		C		CC							
CST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04		NO 3		NO2		CHL-A		PHAE0		PRESS	
M		DEG C		DEG C				THETA						ML/L		PCT		UM/L		UM/L		UM/L		UM/L		UG/L		UG/L		D.BAR	
0		ISL	18.59	18.59		33.648		24.092		381.7		.000		5.65		105.7												0			
1	1		18.59	18.59		33.648		24.092		381.3		.004		5.65		105.7		2.4		.34		.1		.00		.27		.05		1	
	10	ISL	18.38	18.38		33.634		24.133		377.7		.038		5.69		106.1												10			
1	11		18.36	18.36		33.633		24.138		377.3		.042		5.70		106.1		2.3		.30		.1		.00		.31		.07		11	
	20	ISL	17.54	17.54		33.574		24.293		362.7		.075		5.79		106.0												20			
1	22		17.27	17.26		33.552		24.342		358.2		.082		5.82		106.1		2.4		.33		.1		.00		.38		.13		22	
	30	ISL	15.53	15.53		33.382		24.610		332.9		.110		6.11		107.4												30			
1	32		15.10	15.09		33.353		24.683		326.0		.116		6.14		107.1		2.7		.40		.0		.01		.60		.30		32	
1	42		13.35	13.34		33.424		25.105		286.0		.147		5.58		93.9		5.6		.68		3.1		.19		.77		.60		42	
	50	ISL	12.39	12.38		33.463		25.324		265.2		.169		5.13		84.6												50			
1	52		12.23	12.23		33.471		25.359		261.9		.174		5.04		82.9		8.5		.94		8.1		.04		.28		.43		52	
1	63		11.75	11.74		33.542		25.505		248.3		.202		4.66		75.9		11.3		1.12		11.6		.02		.18		.31		63	
1	73		11.32	11.31		33.535		25.579		241.4		.226		4.49		72.4		12.7		1.24		13.2		.01		.14		.25		73	
	75	ISL	11.23	11.22		33.543		25.603		239.3		.232		4.43		71.3												76			
1	88		10.72	10.71		33.611		25.746		225.9		.261		4.07		64.9		16.6		1.42		16.8		.01		.06		.13		88	
	100	ISL	10.18	10.17		33.692		25.902		211.2		.288		3.73		58.7												101			
1	104		10.04	10.03		33.715		25.944		207.3		.295		3.64		57.2		21.3		1.63		20.3		.01		.02		.06		104	
1	124		9.53	9.52		33.793		26.090		193.8		.337		3.37		52.4		25.0		1.73		22.6		.00		.01		.04		125	
	125	ISL	9.52	9.51		33.796		26.093		193.4		.338		3.36		52.2												126			
1	149		9.14	9.13		33.907		26.243		179.7		.384		2.92		45.0		30.1		1.93		25.6		.00		.01		.03		150	
1	150	ISL	9.12	9.11		33.908		26.247		179.3		.385		2.92		45.0												151			
1	180		8.49	8.47		33.978		26.400		165.1		.437		2.82		42.9		35.5		2.06		27.7		.00				181			
	200	ISL	8.51	8.49		34.092		26.487		157.3		.469		2.26		34.3												201			
1	211		8.52	8.50		34.143		26.525		153.9		.486		1.93		29.4		41.7		2.35		30.2		.00				212			
1	262		8.35	8.32		34.187		26.587		148.6		.532		1.59		24.1		45.3		2.51		31.7		.00				243			
	250	ISL	8.26	8.23		34.192		26.604		147.1		.545		1.52		23.0												252			
1	283		7.90	7.87		34.205		26.669		141.3		.593		1.29		19.4		51.6		2.66		33.5		.01				285			
	300	ISL	7.76	7.73		34.219		26.699		138.7		.616		1.16		17.4												302			
1	345		7.47	7.44		34.254		26.771		132.6		.677		.86		12.8		59.3		2.87		35.7		.01				347			
	480	ISL	7.16	7.12		34.277		26.832		127.4		.749		.65		9.6												403			
1	422		7.04	7.00		34.283		26.854		125.6		.777		.59		8.7		67.0		3.01		37.7		.01				425			
1	500		6.57	6.52		34.308		26.939		118.3		.871		.40		5.8		73.8		3.13		39.6		.00				503			
1	578		5.96	5.91		34.331		27.036		109.5		.960		.31		4.4		83.9		3.21		41.4		.01				582			

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE		
33 19.3 N	119 40.0 W	08/11/85	0419	GMT 77 N	270 08	KT		1016.0	MB 16.8	C 14.9	C				
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN Hf	OXYGEN	OXY	SI03	P04	NO 3	NO2	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UM/L	UM/L	D.BAR
1 0	17.52	17.52	33.666	24.367	355.0	.000	5.65	103.5	2.4	.40	.2	.00	.21	.08	0
1 10	17.47	17.47	33.664	24.378	354.3	.035	5.67	103.8	2.3	.37	.2	.00	.26	.09	10
20 ISL	17.20	17.20	33.648	24.431	349.6	.074	5.76	104.9							20
1 21	17.16	17.15	33.646	24.440	348.8	.074	5.77	105.0	2.1	.36	.2	.00	.29	.27	21
30 ISL	16.36	16.35	33.623	24.609	333.0	.105	5.75	103.0							30
1 31	16.26	16.25	33.621	24.631	330.9	.108	5.75	102.8	2.3	.43	1.0	.04	2.28	.70	31
50 ISL	12.64	12.64	33.621	25.397	260.6	.164	4.69	77.8							50
1 52	12.18	12.17	33.597	25.467	251.6	.169	4.52	74.3	11.7	1.11	12.1	.20	.34	.38	52

RV MEM HORIZON

CALCOFI CRUISE 8511

STATION 87 55

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER		BOTTOM	WIND SPEED		WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMT	TYPE
33 09.3 N	120 00.4 W	08/11/85	0721	GMT	1183 M	290	11 KT			1016.9	MB	15.8 C	14.2 C			
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DE6 C	DE6 C		THETA				ML/L	PCI	UM/L	UM/L	UM/L	UM/L	UG/L	D.BAR
	0	ISL	15.91	15.91	33.616	24.705	322.9	.000	5.91	104.9						0
1	1	15.91	15.91	33.616	24.705	323.0	.003	5.91	104.9	3.0	.44	.1	.00	.49	.19	1
	10	ISL	15.91	15.91	33.616	24.705	323.2	.032	5.92	105.1						10
1	11	15.91	15.91	33.616	24.705	323.2	.035	5.92	105.1	2.7	.38	.01	.00	.51	.20	11
	0 0	ISL	15.85	15.85	33.625	24.726	321.5	.065	5.95	105.6						2 0
1	22	15.83	15.82	33.627	24.733	320.9	.071	5.96	105.6	2.7	.36	.1	.00	.61	.24	22
	30	ISL	15.68	15.68	33.630	24.768	317.5	.097	5.94	104.9						30
1	32	15.61	15.61	33.631	24.784	316.3	.102	5.93	104.6	2.8	.37	.1	.02	.81	.41	32
1	A3	14.66	14.65	33.535	24.919	303.8	.136	5.59	96.7	4.3	.54	1.8	.15	.67	.40	50
	60	ISL	13.48	13.47	33.442	25.092	.158	5.43	91.7							43
1	53	12.98	12.97	33.416	25.173	279.7	.165	5.35	89.3	5.8	.73	4.9	.17	.39	.40	53
1	63	11.38	11.37	33.465	25.514	247.3	.192	4.70	75.9	10.9	1.07	11.4	.04	.18	.26	63
1	74	11 .01	11.00	33.561	25.656	234.1	.218	4.29	68.8	14.3	1.25	14.7	.02	.12	.23	76
	75	ISL	10.95	10.94	33.577	25.679	.221	4.22	67.6							66
1	89	10.36	10.35	33.725	25.896	211.5	.251	3.57	56.5	20.6	1.57	19.7	.02	.06	.15	89
	100	ISL	10.06	10.05	33.780	25.992	.275	3.33	52.4							101
1	104	9.96	9.95	33.792	26.018	200.3	.284	3.28	51.5	23.9	1.71	21.9	.01	.03	.13	105
1	124	9.52	9.51	33.853	26.138	189.2	.323	3.09	48.0	27.2	1.83	24.0	.01	.02	.07	125
	125	ISL	9.51	9.50	33.855	26.142	.324	3.08	47.9							126
1	150	9.05	9.04	33.940	26.283	175.9	.370	2.82	43.4	31.3	1.99	26.0	.00	.01	.06	151
1	181	8.44	8.42	34.036	26.454	160.0	.422	2.44	37.1	38.3	2.18	28.7	.01			162
	2 00	ISL	8.25	8.25	34.072	26.507	.452	2.23	33.7							501
1	212	8.20	8.18	34.089	26.532	153.1	.470	2.09	31.6	42.8	2.33	30.4	.01			213
1	243	7.86	7.83	34.139	26.622	145.0	.516	1.69	25.3	48.6	2.54	32.5	.00			244
	2 50	ISL	7.79	7.77	34.14*	26.639	.526	1.62	24.2							252
1	284	7.56	7.53	34.182	26.701	138.1	.575	1.32	19.7	54.2	2.68	34.2	.00			286
	300	ISL	7.49	7.46	34.202	26.725	.596	1.18	17.6							302
1	34*	7.33	7.30	34.250	26.787	130.9	.657	.04	12.4	60.7	2.90	36.0	.00			540
	4 00	ISL	7.01	6.97	34.272	26.850	.727	.64	9.4							4 03
1	422	6.85	6.81	34.275	26.874	123.5	.754	.50	0.6	68.1	3.04	38.0	.00			4 25
	500	ISL	6.22	6.17	34.28 4	26.965	.847	.42	6.1							504
1	501	6.22	6.17	34.284	26.965	115.4	.848	.4 2	6.1	78.4	3.17	40.2	.00			5 04
1	57*	5.66	5.63	34.314	27.056	107.2	.934	.33	4.7	88.1	3.28	41.7	.00			532

RV NfcW HORIZON

CALCOFI CRUISE 8511

STATION 87 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE			
32 59.4	120 21 .3 U	08/11/85	1054	720 M	310 14	EC 0		1017.1	MB U	.4 C	12.7 C					
CST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SO A	DYN HT	OXYGEN	00 0	SI03	004	10 3	W00	CHL-A	PHAE0	PRESS
	f-	DEG C	DEG C		THETA			ML/L	00 0	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	I	15 .50	15.50	33.572	24.761	317.6	.000	5.84	102.8						0
1	1	15.50	15.50	33.572	24.761	317.6	.003	5.84	102.8	1 .0	.39		.00	.42	.26	1
	10	ISL	15.49	33.572	24.764	317.6	.032	5.84	102.8							10
1	11	15.49	15.49	33.572	24.764	317.6	.035	5.84	102.8	1.3	.30	.1	.00	.4 6	.26	11
	20	ISL	15.50	33.571	24.763	318.0	.064	5.84	102.8							00
1	21	15.50	15.49	33.571	24.763	318.0	.066	5.84	102.8	1.3	.38	.1	.00	.46	.26	21
	30	ISL	15.44	33.576	24.780	316.7	.095	5.86	103.0							50
1	32	15.43	15.42	33.580	24.786	316.2	.101	5.86	103.0	1.6	.40	.1	.06	.56	.30	0 0
1	42	15.18	15.17	33.568	24.832	312.1	.132	5.77	100.9	2.1	.43	.4	.05	.57	.51	40
	50	ISL	12.49	33.386	25.245	272.8	.156	5.27	87.1							50
1	52	11.88	11.87	33.360	25.341	263.7	.161	5.15	84.0	7.4	.02	8.5	.05	.30	.51	50
1	62	11 .06	11.05	33.407	25.527	246.1	.186	4.84	77.6	10.2	1.15	12.2	.02	.17	.31	00
1	72	10.76	10.75	33.545	25.688	231.0	.210	4.39	70.0	14.1	1.34	15.8	.01	.00	.17	50
	75	ISL	10.67	33.573	25.726	227.5	.218	4.25	67.6							05
1	87	10.34	10.33	33.645	25.838	217.1	.244	3.88	61.3	18.2	1.53	19.1	.51	.05	.13	87
	100	ISL	9.89	33.713	25.968	204.9	.272	3.84	60.1							101
1	103	9.80	9.79	33.724	25.992	202.7	.277	3.83	59.8	20.7	1.58	20.0	.01	.02	.05	103
1	122	9.18	9.16	33.835	26.180	185.1	.316	3.41	52.6	26.3	1.78	23.5	.00	.01	.03	123
	125	ISL	9.12	33.846	26.197	183.5	.320	3.38	52.1							126
1	147	8.76	8.75	33.916	26.310	173.2	.360	3.24	49.5	30.6	1 .90	25.4	.00	.01	.0 3	140
1	150	ISL	8.73	33.923	26.321	172.2	.365	3.24	49.4							151
1	178	8.38	8.36	33.981	26.419	163.2	.412	3.21	48.7	33.8	1.95	26.3	.00			179
	260	ISL	8.01	34.011	26.499	155.9	.447	2.84	42.7							201
1	208	7.39	7.87	34.023	26.526	153.4	.459	2.66	39.9	40.2	2.19	29.4	.00			209
1	239	7.79	7.76	34.117	26.615	145.6	.505	1 .86	27.8	47.1	2.48	32.2	.00			240
	0 50	ISL	7.69	34.135	26.644	143.0	.521	1.68	25.1							252
1	278	7.43	7.40	34.164	26.705	137.6	.561	1.36	20.2	54.0	2.67	34.4	.00			280
	; ISL	7.29	7.26	34.187	26.743	134.3	.591	1 .16	17.2							302
1	339	7.07	7.03	34.221	26.801	129.3	.64 2	.90	13.3	62.0	2.91	36.5	.00			341
	6 00	ISL	6.69	34.257	26.880	122.4	.719	.62	0.0							403
1	414	6.61	6.58	34.264	26.897	121.0	.736	.07	0 05	70.8	3.07	38.6	.00			417
1	491	6.2 8	6.24	34.300	26.969	115.0	.826	.4	0.1	77.5	3.19	39.9	.00			494
	5 4, ISL	6.24	6.20	34.303	26.977	114.4	.837	.41	5.0							504
1	566	5.94	5.89	34.308	27.020	110.8	.911	.06	5.3	83.0	3.24	41 .0	.00			570

RV FJFW HORIZON

CALCOFI CRUISE 8511

STATION 37 20

ATTITUDE		LONG I HIDE	DAY/MO/YR	MESSENGER	BOTTOM		WIND SPEED		WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE
32 39.4	*J	11 02.2	08/11/85	1619	GMT	3759 M	33 0 14 KT	340	05 06	1	1019.0	MB 15.2 C	13.3 C		6/8	SC
CAST DEPTH		TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO 2	CHL-A	PHAE0	PRESS
M		DEG	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM / L	U6/L	U6/L	D.BA
0	ISL	16.62	16.62	33.622	24.546	338.0	.000	5.65	101 .7							0
1 1		16.62	16.62	33.622	24.546	338.1	.003	5.65	101 .7	2.7	.38	.1	.00	.31	.15	1
1 10	ISL	16.62	16.62	33.620	24.546	338.3	.034	5.6 7	102.0							10
1 11		16.62	16.62	33.620	24.546	338.3	.037	5.67	102.1	2.5	.35	.1	.00	.30	.15	11
1 20	ISL	16.56	16 .56	33.617	24.557	337.6	.068	5.72	102.8							20
1 22		16.55	16.54	33.616	24.560	337.4	.074	5.73	103.0	2.2	.36	.1	.00	.33	.18	22
1 30	ISL	15.73	15.73	33.561	24.703	324.0	.101	5.84	103.3							30
1 33		15.41	15.41	33.541	24.759	318.7	.110	5.88	102.9	1.6	.36	.1	.00	.43	.31	33
1 43		14.89	14.88	33.509	24.849	310.4	.141	5.84	98.0	2.5	.47	.8	.11	.64	.62	43
1 50	ISL	13.25	13.24	33.437	25.135	283.4	.163	5.30	88.9							50
1 54		12.32	12.31	33.427	25.309	266.7	.173	5.05	83.2	7.6	.90	8.4	.08	.40	.55	54
1 65		11.05	11.04	33.603	25.681	231.5	.200	4.08	65.5	14.7	1.37	16.5	.02	.08	.26	65
1 75		10.75	10.74	33.655	25.774	222.9	.223	3.81	60.8	16.9	1.51	18.4	.02	.07	.19	75
1 91		10.00	9.99	33.733	25.965	205.0	.257	3.52	55.3	21 .2	1.69	21.4	.01	.04	.14	91
1 100	ISL	9.73	9.72	33.793	26.058	196.4	.276	3.2 8	51.1							101
1 105		9.59	9.58	33.825	26 .104	192.0	.287	3.16	49.2	25.1	1 .84	23.6	.01	.02	.12	106
1 125	ISL	8.99	8.98	33.869	26.236	179.7	.323	3.29	50.5							126
1 126		8*95	8.94	33.871	26.244	179.0	.325	3.30	50.6	27.8	1.89	24.8	.00	.02	.10	127
1 150	ISL	8.47	8.45	33.935	26.370	167.4	.361	3.38	51.3							151
1 152		8.43	8.42	33.941	26.380	166.5	.371	3.38	51.3	31.0	1.90	25.6	.00	.01	.05	153
1 183		8.08	8.06	33.993	26.475	157.9	.420	3.30	49.7	35.8	1.97	26.7	.00			184
1 200	ISL	7.90	7.88	34.027	26.529	153.1	.446	2.77	41.5							201
1 213		7.77	7.75	34.052	26.566	149.7	.466	2.33	34.9	43.7	2.29	30.9	.00			214
1 244		7.54	7.51	34.088	26.629	144.2	.511	1.91	28.4	48.7	2.47	32.8	.00			245
1 250	ISL	7.43	7.40	34.087	26.644	142.9	.520	1.87	27.7							252
1 284		6.84	6.81	34.079	26.719	135.9	.568	1.66	24.3	57.5	2.62	35.4	.00			284
1 300	ISL	6.80	6.77	34.109	26.748	133.4	.5 89	1.47	21.6							302
1 345		6.68	6.65	34.179	26.820	127.2	.647	.93	13.6	65.8	2.90	37.7	.00			347
1 400	ISL	6.49	6.45	34.248	26.900	120.3	.716	.57	8.3							403
1 422		6.39	6.35	34.270	26.931	117.7	.742	.49	7.1	74.2	3.10	39.3	.00			4 25
1 500	ISL	5.89	5.84	34.311	27.028	109.1	.830	.36	5.2							5 04
1 501		5.88	5.84	34.311	27.029	109.0	.831	.36	5.2	84.4	3.22	41.1	.01			504
1 581		5.46	5.41	34.333	27.098	103.0	.916	.29	4.1	91.9	3.31	42.4	.00			585

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 90 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE		
33 29.0 N	117 46.1	07/11/85	0912	62 N	120 05			1018.6							
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAE0	PRES
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BA
1	0	18.11	18.11	33.312	24.107	379.8	.000	6.58	121.8	2.6	.46	.1	.00	.85	.24
1	10	17.58	17.58	33.530	24.250	366.6	.037	6.66	12K1	2.6	.31	.1	.00	1.13	.19
1	20 ISL	14.95	14.95	33.406	24.754	318.8	.072	6.42	111.7						20
1	21	14.71	14.70	33.398	24.802	314.3	.074	6.39	110.6	2.8	.45	.1	.00	1.91	.36
1	30 ISL	13.89	13.89	33.396	24.972	298.4	.102	6.10	103.8						30
1	31	13.85	13.85	33.396	24.980	297.5	.105	6.07	103.2	4.0	.56	.3	.15	1.43	.42
1	50 ISL	12.41	12.40	33.457	25.315	266.1	.159	5.14	84.8						50
1	52	12.29	12.28	33.467	25.345	263.2	.164	5.03	82.8	7.6	.97	8.1	.15	.31	.43

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 90 30

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER		BOTTOM	WIND SPEED		WAVES	WEATHER	BAROMETER		DRV	WET	CLOUD	AMI	TYPE
33 25.4 N		117 54.4 W		07/11/85	0703	GMT	625 M	100	05	KT			1017.3	MB 19	.5 C	17.2 C		
CAST	DEPTH	TEMP		POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO 3	NO2	CHL-A	PHAE0	PRESS	
	M	DEG C		DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UN/L	UG/L	UG/L	D.BAR	
	0	ISL	18.75	18.75	33.633	24.040	386.3	.000	5.95	111.6							0	
1	1		18.75	18.75	33.633	24.040	386.3	.004	5.95	111.6	2.1	.36	.1	.00	.34	.06	1	
	10	ISL	18.71	18.71	33.630	24.049	385.8	.039	6.00	112.5							10	
1	11		18.71	18.71	33.630	24.049	385.7	.042	6.01	112.6	2.1	.31	.1	.00	.32	.06	11	
	20	ISL	16.30	16.30	33.466	24.502	342.9	.075	6.38	114.0							20	
1	22		15.70	15.70	33.437	24.614	332.2	.062	6.45	113.9	2.6	.39	.1	.00	.49	.17	22	
	30	ISL	14.28	14.27	33.391	24.887	306.3	.108	6.42	110.1							30	
1	12		14.02	14.01	33.389	24.941	301.3	.113	6.41	109.4	3.2	.45	.1	.00	.45	.23	32	
	43		12.74	12.74	33.439	25.236	273.5	.145	5.55	92.2	5.3	.74	4.0	.23	.60	.60	43	
	50	ISL	12.25	12.24	33.485	25.367	261.1	.164	5.05	83.1							50	
1	53		12.10	12.09	33.503	25.409	257.2	.171	4.88	80.0	8.4	1 .02	9.4	.03	.21	.32	53	
1	63		11.61	11.61	33.564	25.548	244.2	.196	4.44	72.1	11.2	1.21	12.8	.02	.11	.30	63	
1	73		11.31	11.30	33.599	25.630	236.6	.220	4.17	67.3	13.6	1.35	14.6	.01	.06	.21	73	
	75	ISL	11.26	11.25	33.607	25.646	235.2	.225	4.12	66.5							76	
1	89		11.00	10.99	33.650	25.726	227.8	.257	3.89	62.4	15.8	1.50	16.7	.01	.05	.15	89	
	100	ISL	10.77	10.75	33.684	25.795	221.4	.282	3.69	58.9							101	
1	104		10.69	10.68	33.696	25.818	219.4	.290	3.63	57.8	18.2	1.61	18.7	.01	.03	.10	104	
1	124		10.20	10.19	33.778	25.966	205.7	.335	3.24	51.1	22.2	1.81	21.5	.01	.02	.07	125	
	125	ISL	10.19	10.18	33.779	25.969	205.5	.336	3.23	51.0							126	
1	150		9.88	9.87	33.847	26.075	195.8	.386	2.97	46.5	25.5	1.97	23.5	.00	.01	.05	151	
1	181		9.44	9.42	33.976	26.249	179.9	.444	2.57	39.9	30.5	2.19	26.2	.01			182	
	200	ISL	9.26	9.24	34.028	26.318	173.6	.478	2.42	37.5							201	
1	212		9.18	9.15	34.054	26.353	170.5	.498	2.34	36.1	33.7	2.32	27.7	.01			213	
1	243		8.97	8.95	34.122	26.439	162.9	.550	2.03	31.2	37.2	2.48	28.9	.01			244	
	250	ISL	8.93	8.90	34.139	26.460	161.1	.562	1.94	29.9							252	
1	284		8.69	8.66	34.205	26.550	153.1	.615	1.58	24.1	43.0	2.70	31.0	.00			286	
	300	ISL	8.50	8.47	34.212	26.584	150.0	.639	1.48	22.5							302	
1	346		7.94	7.90	34.217	26.674	142.0	.706	1.25	18.8	50.7	2.90	33.4	.00			348	
	400	ISL	7.60	7.56	34.271	26.765	134.1	.781	.88	13.2							403	
1	423		7.47	7.43	34.294	26.803	130.8	.812	.73	10.9	60.4	3.21	36.1	.00			426	
	500	ISL	6.58	6.54	34.316	26.942	118.0	.907	.38	5.6							504	
1	501		6.58	6.53	34.316	26.943	117.9	.908	.38	5.5	73.8	3.44	39.2	.00			504	
			5.84	5.79	34.344	27.061	107.0	.996	.25	3.6	86.5	3.57	41.0	.00			583	

RV NEW HORIZON				CALCOFI CRUISE 8511				STATION 90 35							
LATITUDE	ON TUDF	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLCUD AM	TYPE			
33 15.0 N	11E 15.1 W	07/11/85	0325 C ML	611 N	240 09 KT			1017.1 MB	1< .9 C	17.8 C					
CST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.6AR
0 ISL	18.88	18.82	33.678	24.057	38 4.6	.000	5.6 5	106.2		.39	.2	.00	.20	.07	1
1 1	18.82	18.82	.33.673	24.0 57	384.6	.004	5.65	106.2							1
1 10 ISL	18.82	18.82	33.674	24.0 54	385.2	.038	5.67	106.5							10
1 11	18.83	18.82	33.674	24.054	.385.3	.042	5.67	106.5	2.1	.33	.2	.00	.20	.06	11
20 ISL	17.47	17.47	33.561	24.300	362.1	.076	5.98	109.3							2.0
30 ISL	15.55	15.55	33.44 7	24.656	32 8.5	.111	6.25	110.1							30
1 32	15.14	15.14	33.429	24.732	321.3	.117	6.30	110.0	2.8	.42	.1	.00	.30	.21	32
1 49	13.00	13.00	33.407	25.161	280.8	.168	5.8 2	97.2	4.9	.62	2.5	.29	.60	.40	49
50 ISL	12.91	12.91	33.412	25.182	27 8.9	.171	5.76	96.1							50
1 63	12.18	12.17	33.477	25.374	260.8	.205	5.06	83.1	8.0	.92	8.6	.05	.33	.44	63
75 ISL	11 .50	11.49	33.569	25.573	24 2.1	.236	4.39	71.2							76
1 79	11 .34	11.33	33.595	25.623	2 3 7.4	.245	4.23	68.3	13.2	1.25	14.3	.01	.10	.22	79
1 94	11 .00	11 .05	33.636	25.705	229.9	.280	3.98	63.9	15.4	1.36	16.1	.01	.07	.16	94
100 ISL	10 .88	10.87	33.666	25.760	224.9	.294	3.82	61 .1							101
1 115	10 .43	10.42	33.741	25.897	212.1	.328	3.44	54.5	20.6	1 .62	20.5	.01	.03	.10	116
1 125 ISL	10 .20	10.19	33.774	25.963	20 5.9	.348	3.32	52.3							126
1 140	9 .87	9.86	33.826	26.060	197.0	.379	3.16	49.5	24.9	1.81	22.9	.01	.01	.07	141
1 150 ISL	9 .68	9.67	33.874	26.129	19 0.6	.398	2.99	46.6							151
1 171	9 .37	9.35	33.971	26.256	178.9	.437	2.64	40.9	30.7	2.04	26.0	.01	.00	.05	172
200 ISL	9 .22	9.20	34.018	26.317	173.7	.488	2.50	38.6							201
1 207	9 .21	9.19	34.024	26.324	173.1	.5 00	2.48	38.3	33.1	2.13	26.7	.01	.00	.05	208
1 243	9 .01	8.98	34.107	26.422	16 4.5	.56 0	2.16	33.2	37.2	2.30	28.6	.01	.00	.04	244
250 ISL	8 .93	8.91	34.12 3	26.446	162.3	.572	2.07	31.8							252
1 284	8 .58	8.5 5	34.185	26.551	152.9	.626	1.64	25.0	43.7	2.49	30; 8	.00			286
300 ISL	8 .46	8.43	34.20 2	26.583	150.1	.650	1 .46	22.2							302
1 330	8 .24	8.22				.694	1.17	17.7	49.8	2.74	32.8	.00			332
1 3 71	7 .86	7.83	34.264	26.722	137.9	.752	.94	14.1	55.4	2.89	34.3	.00			373

RV NEW HORIZON				CALCOFI CRUISE 8511										STATION		91	36								
LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		W	ET	OUD		T	
33 06.8		118 15.2 W		07/11/85		0045 GMT		1110 M		280 14 KT		300 02 04		0		1015.7 MB		19 .0 C		.5 C		O/a			
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI03		P04	N03	N0 2	CHL-A	PHAE0	PRESS
M		DEG C		DEG C				THETA						ML/L		PCT		UM/L		UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
0 ISL		18.88		18.88		33.666		24.033		387.0		.000		5.66		106.5									0
1	1	18.88		18.88		33.666		24.033		386.9		.004		5.66		106.5		2.0		.39	.2	.00	.23	.05	1
\1	10	ISL 18.83		18.83		33.663		24.043		386.3		.039		5.67		106.6									10
	12	18.82		18.82		33.662		24.046		386.1		.046		5.68		106.7		1.9		.36	.1	.00	.26	.09	12
1	20	ISL 18.64		18.64		33.649		24.082		383.0		.077		5.71		106.9									20
	23	18.55		18.57		33.645		24.094		381.9		.088		5.72		106.9		1.8		.35	.1	.00	.29	.08	23
1	30	ISL 15.94		15.94		33.456		24.575		336.2		.114		6.23		110.6									30
	32	15.18		15.18		33.418		24.715		322.9		.120		6.36		111.1		2.7		.42	.1	.00	.33	.14	32
1	43	13.42		13.41		33.393		25.066		289.7		.153		6.19		104.3		3.9		.60	.4	.10	.97	.60	43
1	50	ISL 12.60		12.59		33.463		25.282		269.2		.174		5.37		89.0									50
	53	12.36		12.35		33.493		25.353		262.6		.181		5.04		83.1		7.5		.87	7.9	.14	.39	.51	53
1	64	11.88		11.87		33.531		25.473		251.4		.209		4.68		76.4		10.1		1.07	11.1	.03	.23	.33	64
	74	11.53		11.53		33.573		25.570		242.4		.234		4.37		70.9		12.3		1.22	12.9	.02	.13	.27	74
1	75	ISL 11.50		11.49		33.578		25.579		241.5		.237		4.34		70.3									76
	91	11.14		11.13		33.634		25.690		231.4		.274		3.97		63.8		15.3		1.39	16.0	.01	.08	.16	91
1	100	ISL 10.85		10.83		33.686		25.782		222.8		.295		3.68		58.9									101
	105	10.70		10.69		33.711		25.828		218.4		.305		3.55		56.6		19.0		1.59	19.0	.01	.03	.10	105
1	125	10.03		10.01		33.803		26.016		201.0		.349		3.15		49.5		24.0		1.81	22.5	.01	.01	.06	126
1	150	9.69		9.67		33.893		26.143		189.3		.397		2.82		44.0		27.9		1 .98	24.6	.01	.00	.05	151
1	181	9.40		9.37		33.983		26.262		178.6		.454		2.56		39.7		31.3		2.13	26.3	.01			182
1	200	ISL 9.05		9.03		34.025		26.3 50		170.5		.487		2.54		39.0									201
	213	8.83		8.80		34.051		26.406		165.3		.509		2.52		38.6		35.6		2.23	28.0	.01			214
1	243	8; 59		8.57		34.119		26.496		157.3		.557		2.12		32.3		40.1		2.39	29.5	.01			244
1	250	ISL 8.53		8.51		34.132		26.516		155.6		.568		2.02		30.8									252
	282	8.26		8.23		34.174		26.591		148.9		.617		1.64		24.8		45.9		2.59	31.6	.01			284
1	300	ISL 8.10		8.07		34.184		26.624		146.1		.643		1.51		22.8									302
	344	7.71		7.67		34.201		26.694		139.9		.706		1.25		18.7		53.4		2.80	34.0	.01			346
1	400	ISL 7.31		7.27		34.251		26.792		131.4		.782		.81		12.0									403
	419	7.19		7.15		34.268		26.822		128.6		.807		.68		10.0		63.2		3.09	36.8	.00			422
1	497	6.71		6.66		34.305		26.917		120.4		.904		.48		7.0		71.5		3.25	38.7	.00			500
	500	ISL 6.69		6.64		34.306		26.921		120.1		.908		.47		6.9									504
1	575	6.14		6.09		34.332		27.014		111.8		.995		.30		4.3		80.7		3.37	40.5	.00			579

STATION 90 47

LATITUDE			L ONGI			DAY/MO/YR		MESSENGER		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CUD AMI		TYPF	
32	ST.	4	M	I	15	04	0	06/11/85	1434	GMT	1552	M	120	03	K1	270	03	05	1	1018.3	16.0	14.5	c	1/8	SC
C	AST	DEP	H	T	E	M	p	POT	TEMP	SALINITY	SIGMA	SVA	DYN	HT	OXYGEN	OXY	☁	UM/L	P04	N03	N0?	UM/L	UG/L	PHAE0	PRESS
			M		DEG	C		DEG	C						ML/L	PCT		UM/L	UM/L	UM/L	UM/L	UG/L		D.BAR	
1		0	IS	17.17	17.17			17.17		33.583	24.387	353.2	.000		5.64	102.6									0
1	1	17.17		17.17	17.17			17.17		33.583	24.387	353.2	.004		5.64	102.6	2.3	.43	.1	.00	*14	.06	1	10	
	10	ISL		17.17	17.17			17.17		33.584	24.388	353.4	.035		5.64	102.6									10
1	11	17.17		17.17	17.17			17.17		33.584	24.388	353.4	.039		5.64	102.6	2.1	.40	.1	.00	.15	.06	11	11	
	20	IS		17.17	17.17			17.17		33.581	24.387	353.9	.071		5.65	102.8									20
				17.17	17.17			17.17		33.580	24.386	354.0	.077		5.65	102.8	2.2	.37	.1	*00	.15	.06	22	22	
1	30	IS		16.93	16.93			16.93		33.573	24.437	349.4	.106		5.70	103.3									30
1	33	16.85		16.84	16.84			16.84		33.571	24.455	347.8	.116		5.73	103.6	2.1	.38	.1	.00	.32	.18	33	33	
1	42	13.92		13.91	13.91			13.91		33.569	24.946	301.1	.14	5	5.81	98.9	4.0	.56	1.9	.23	.82	.52	42	42	
1	50	IS		13.61	13.60			13.60		33.443	25.066	290.0	.169		5.61	95.0									50
1	53	13.51		13.50	13.50			13.50		33.445	25.089	287.8	.177		5.49	92.7	5.8	.72	4.8	.21	.41	.45	53	53	
1	63	12.13		12.12	12.12			12.12		33.526	25.422	256.2	.204		4.85	79.6	9.9	1.02	0.8	.03	.13	.30	63	63	
1	73	11.46		11.45	11.45			11.45		33.569	25.580	241.4	.229		4.48	72.5	12.9	1.23	14.1	.02	.08	.22	73	73	
1	75	IS		11.32	11.31			11.31		33.571	25.607	238.9	.235		4.43	71.5									76
1	8V	10.63		10.62	10.62			10.62		33.594	25.748	225.7	.266		4.16	66.2	16.0	1.40	17.3	.01	.04	.10	89	89	
1	100	IS		10.26	10.25			10.25		33.682	25.881	213.3	.291		3.79	59.8									101
1	104	10.17		10.15	10.15			10.15		33.710	25.919	209.7	.299		3.68	58.0	20.4	1.61	20.5	.01	.03	.07	104	104	
1	124	9.64		9.63	9.63			9.63		33.772	26.056	197.0	.341		3.51	54.7	23.9	1.70	22.3	.00	.01	.05	125	125	
1	125	IS		9.62	9.61			9.61		33.775	26.061	196.5	.342		3.50	54.5									126
1	150	8.86		8.84	8.84			8.84		33.892	26.276	176.5	.389		3.19	48.9	29.6	1.89	25.4	.00	.03	.03	151	151	
1	181	8.33		8.32	8.32			8.32		33.980	26.426	162.6	.442		2.81	42.6	35.6	2.05	28.1	.00				1=2	
1	200	IS		8.13	8.11			8.11		34.011	26.481	157.7	.472		2.70	40.7								2	01
1	212	8.03		8.01	8.01			8.01		34.025	26.507	155.4	.490		2.64	39.7	39.6	2.17	29.3	.00				213	
1	243	7.75		7.73	7.73			7.73		34.049	26.568	150.1	.537		2.40	35.9	43.7	2.27	30.6	.00				244	
1	25C	IS		7.71	7.68			7.68		34.060	26.582	148.8	.548		2.29	34.2								252	
1	283	7.51		7.49	7.49			7.49		34.110	26.650	142.9	.597		1.78	26.5	50.6	2*49	33.1	.00				28	5
1	300	IS		7.33	7.30			7.30		34.117	26.681	140.1	.621		1.63	24.1								30	2
1	345	6.86		6.83	6.83			6.83		34.135	26.760	133.0	.682		1.31	19.2	60.1	2.73	36.2	.00				347	
1	400	IS		6.75	6.71			6.71		34.230	26.852	125.2	.753		.79	11.5								403	
1	422	6.74		6.70	6.70			6.70		34.269	26.885	122.4	.781		.60	8.8	69.0	2.98	38.1	.00				425	
1	500	6.35		6.30	6.30			6.30		34.310	26.969	115.2	.873		.38	5.5	76.9	3.11	39.7	.00				50	3
1	577	5.78		5.73	5.73			5.73		34.342	27.067	106.4	.958		.32	4.6	87.4	3.20	41.4	.00				581	

STATION 90 53

LATITUDE		LONGITUDE		DAY/NOAYR	MESSENGER		BOTTOM	WIND SPEED	WAVES		WEATHER		BAROMETER		DRY	WET	CLOUD	AHT	TYPE
32 39.2		119 29.0 W		06/11/85	1007	GMT	1313 M	350 06	KT					1018.5	MB 14	3 C	13.4 C		
CAST	DEPTH	TEMP		POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03		P04	N03	N02	CHL-A	PHAE0	PRESS	
	M	DEG C		DEG C		THETA			ML/L	PCT	UM/L		UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
1	0	16.41		16.41	33.627	24.598	333.1	.000	5.86	105.1	2.8	.46	.2	.00	.31	.21		0	
1	10	16.38		16.38	33.627	24.606	332.6	.033	5.90	105.7	2.8	.41	.2	.00	.34	.20		10	
1	20	ISL	15.82	15.82	33.611	24.722	321.9	.066	5.91	104.7								20	
1	21		15.76	15.75	33.610	24.735	320.7	.069	5.91	104.6	3.2	.45	.3	.02	.97	.56		21	
	30	ISL	15.30	15.29	33.593	24.825	312.4	.098	5.76	101.0								30	
1	31		15.24	15.24	33.592	24.836	311.4	.100	5.74	100.5	3.7	.52	1.4	.10	1.22	.75		31	
1	43		13.97	13.96	33.543	25.070	289.4	.136	5.45	93.0	5.9	.70	4.4	.26	.64	.50		43	
	50	ISL	13.18	13.18	33.541	25.228	274.6	.157	5.19	87.0								50	
1	52		13.01	13.00	33.540	25.262	271.3	.161	5.12	85.6	8.4	.90	7.9	.22	.30	.33		52	
1	63		12.44	12.43	33.563	25.392	259.1	.190	4.85	80.2	10.0	1.03	10.1	.14	.22	.28		63	
1	73		11.11	11.11	33.622	25.684	231.4	.215	4.15	66.7	15.2	1.35	16.0	.03	.11	.21		73	
	75	ISL	10.94	10.93	33.638	25.728	227.3	.220	4.04	64.7								76	
1	89		10.34	10.33	33.723	25.898	211.3	.250	3.60	56.9	20.3	1.61	20.1	.02	.05	.13		89	
	100	ISL	10.03	10.01	33.772	25.991	202.8	.274	3.41	53.6								101	
1	103		9.95	9.94	33.784	26.014	200.6	.281	3.37	52.9	23.3	1.75	22.1	.01	.03	.08		104	
1	124		9.43	9.42	33.884	26.178	185.4	.321	2.99	46.4	28.1	1.90	24.8	.01	.02	A .09	A	125	
	125	ISL	9.42	9.40	33.886	26.181	185.1	.322	2.98	46.2								126	
	150	ISL	8.99	8.97	33.956	26.305	173.7	.367	2.75	42.2								151	
1	151		8.97	8.95	33.959	26.311	173.2	.369	2.74	42.1	32.4	2.07	26.7	.01	.00	.05		152	
1	182		8.35	8.34	34.019	26.454	160.1	.420	2.59	39.2	37.7	2.18	28.8	.01				183	
	200	ISL	7.99	7.97	34.039	26.523	153.7	.449	2.45	36.9								201	
1	212		7.79	7.77	34.049	26.562	150.1	.467	2.34	35.0	43.4	2.33	30.8	.01				213	
1	243		7.49	7.46	34.081	26.630	144.0	.512	1.97	29.3	49.1	2.49	32.6	.00				244	
	250	ISL	7.41	7.39	34.087	26.646	142.7	.522	1.89	28.1								252	
1	283		7.11	7.09	34.117	26.711	136.8	.569	1.55	22.8	56.0	2.68	34.8	.00				285	
	300	ISL	7.01	6.98	34.144	26.747	133.6	.592	1.34	19.7								302	
1	344		6.84	6.81	34.218	26.829	126.5	.649	.84	12.3	64.6	2.95	37.2	.00				346	
	400	ISL	6.76	6.73	34.274	26.884	122.1	.718	.57	8.4								403	
1	421		6.72	6.68	34.287	26.900	120.9	.744	.53	7.7	70.0	3.10	38.1	.00				424	
1	499		6.16	6.11	34.305	26.989	113.0	.835	.40	5.8	79.5	3.21	40.1	.00				502	
	500	ISL	6.15	6.10	34.306	26.991	112.9	.836	.40	5.7								504	
1	577		5.64	5.59	34.339	27.082	104.7	.920	.32	4.6	88.4	3.32	41.6	.00				581	

A. SECOND FLOURONETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPHYTIN CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

RV NEW HORIZON			CALCOFI CRUISE 8511										STATION 90			60	
LATITUD	LONGITUDE	DAY/MO/YR	MESSENGER		BOTTOM	WIND SPEED		WAVES	WEATHER	BAROMETER		DRY	WET	CLOUD	AMI	TYPE	
F 32 25.3 N	119 5 7.6 U	06/11/85	0535	GMT	850 M	310 12	KY			1017.5	MB 16.8 C	14.5 C					
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	QILV	SI03	PO4	NO3	MO 2	CHL-A	PHAE0	PRESS	
	r	DEG C	DEC C		THETA			ML/L	PE%	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
	0	ISL	16.51	16.51	33.472	24.458	346.4	.000	5.72	102.7						0	
i	1		16.51	16.51	33.472	24.458	346.4	.003	5.72	102.7	2.1	.46	.2	.00	.13	.06	1
	10	ISL	16.50	16.50	33.470	24.458	346.7	.035	5.72	102.6							
1	11		16.50	16.50	33.470	24.459	346.7	.038	5.72	102.6	2.1	.39	.2	.00	.13	.06	11
	20	I	16.52	16.51	33.476	24.4 59	346.9	.069	5.73	102.8							20
1	22		16.52	16.52	33.478	24.4 59	347.0	.076	5.73	102.9	2.0	.03?	J	.00	.13	A .06 A	22
	30	ISL	16.54	16.54	33.512	24.482	345.1	.104	5.74	103.1							3 2
1	32		16.5 5	16.54	33.525	24.490	344.4	.110	5.74	103.1	1.9	.33	J	.00	.21	.10	32
1	4		15.90	15.90	33.447	24.578	336.3	.148	5.88	104.2	1.9	.35	.1	.00	.24	.15	33
	20	ISL	14.33	14.33	33.292	24.800	315.3	.171	6.11	104.8							50
1	53		13.72	13.71	33.242	24.889	306.8	.180	6.18	104.7	2.0	.39	.1	.00	.24	.25	23
1	67		13.03	13.02	33.224	25.014	295.1	.210	6.06	101.2	2.1	.45	.2	.03	.32	.27	33
1	74		12.58	12.57	33.257	25.127	284.6	.241	5.83	96.5	2.9	.52	1.5	.17	.21	.27	73
	75	ISL	12.57	12.56	33.270	25.140	283.4	.245	5.80	95.9							73
1	89		12.32	12.30	33.404	25.292	269.2	.283	5.41	89.1	5.0	.75	6.4	.03	.14	.19	39
	100	ISL	11.56	11.54	33.426	25.452	254.2	.313	5.06	82.0							101
1	105		11.21	11.19	33.436	25.523	247.4	.324	4.90	78.8	9.3	1.07	11.3	.01	.07	A .13 A	105
1	124		10.05	10.06	33.654	25.891	212.7	.370	3.90	61.3	19.1	1.51	20.0	.09	.02	.03	123
	125	ISL	10.05	10.04	33.658	25.898	212.0	.371	3.89	61.0							126
1	1		9.25	9.24	33.808	26.147	188.7	.422	3.53	54.5	25.3	1.75	23.0	.01	.01	.02	151
1	1*1		8.59	8.58	33.967	26.376	167.5	.476	2.96	45.1	33.3	1.98	26.9	.00			132
	200	ISL	8.3 5	8.33	33.999	26.438	161.8	.508	2.95	44.7							2 01
1	212		8.25	8.22	34.007	26.461	159.9	.527	2.94	44.4	36.1	2.07	27.7	.01			213
1	243		8.07	8.05	34.046	26.518	155.0	.575	2.51	37.8	40.3	2.23	29.5	.00			242
	25.13	ISL	7.93	7.91	34.050	26.542	152.7	.586	2.41	36.1							2 32
1	284		7.22	7.20	34.075	26.663	141.4	.637	1.91	28.2	51.7	2.51	33.6	= 01			236
	300	ISL	7.06	7.03	34.102	26.708	137.4	.659	1.64	24.1							30
1	346		6.78	6.75	34.186	26.813	128.0	.720	.001	13.6	64.0	2.91	37.3	.01			33^
	4 00	ISL	6.54	6.51	34.244	26.890	121.4	.787	.53	8.5							A 03
1	423		6.46	6.42	34.261	26.915	110.3	.815	.52	7.06	72.8	3.11	39.1	.00			3 23
	son	ISL	6.04	5.99	34.299	27.000	111.9	.904	.36	5.2							503
1	501		6.03	5.99	34.299	27.000	111.9	.905	.36	5.2	81.0	3.23	40.7	.00			3 33
1	578		5.69	5.64	34.330	27.069	106.1	.989	.29	3.1	88.0	3.31	41.8	.30			332

RV NEW HORIZON				CALCOFI CRUISE 8511										STATION 90				70
LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	TYPE						
32 05.0	120 38.5 W	06/11/85	0018 3 LI 3	3787 M	330 19	KT 340	07 05 1	1017.7	MB 17	.0 C	14.7 C	3;R	SC					
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	sva	DYN HT	OXYGEN	OH 7	SI03	P8 3	333	NO2	CHL-A	PHAE0	PRES			
i*	DEG C	DEG C		THETA			ML/L	PC?	UM/L	UM/L	UK/L	UM/L	UG/L	UG/L	D.BAR			
0	ISL 15.91	15.91	33.546	24.652	328.0	.000	5.82	103.3							0			
1	15.91	15.91	33.546	24.652	328.0	.003	5.82	103.3	2.4	.44	.0	.00	.33	.15	1			
17	ISL 15.90	15.90	33.548	24.655	327.9	.033	5.83	103.4							10			
11	15.90	15.89	33.548	24.656	327.9	.036	5.83	103.4	2.2	.33	.1	.00	.33	.13	13			
20	I 15.77	15.76	33.548	24.685	325.4	.065	5.81	102.7							2 3			
1	27	15.61	15.60	33.545	24.719	322.5	.088	5.77	101.8	2.1	.43	.1	.05	.96	.33	37		
30	ISL 15.51	15.51	33.541	24.736	320.8	.098	5.75	101.2							30			
1	42	15.15	15.15	33.527	24.805	314.6	.135	5.64	98.6	2.7	.39	.9	.13	.70	.33	33		
50	I 13.54	13.54	33.369	25.023	294.0	.160	5.54	93.7							12			
1	57	12.23	12.23	33.282	25.213	276.0	.179	5.42	89.0	5.0	.79	3.8	.12	.26	.32	3 7		
1	68	11.78	11.77	33.363	25.361	262.1	.209	5.06	82.4	8.0	.97	9.0	.023	.017	.26	33		
75	ISL 11.41	11.40	33.441	25.490	250.0	.228	4.76	76.8							73			
1	78	11.28	11.27	33.470	25.536	245.6	.234	4.65	74.9	11.5	1.16	12.9	.02	.0	.19	73		
1	93	10.75	10.74	33.560	25.701	230.2	.270	4.32	68.9	14.7	1.34	15.9	.01	.05	.13	93		
1	100	ISL 10.52	10.51	33.613	25.782	222.6	.287	4.11	65.3						101			
1	108	10.26	10.25	33.672	25.874	214.1	.305	3.86	60.9	19.5	1.59	20.0	.01	.003	.10	109		
1	123	9.73	9.72	33.762	26.033	199.1	.336	3.41	53.2	23.6	1.75	22.4	.00	.02	.06	122		
1	123	ISL 9.69	9.67	33.770	26.047	197.9	.339	3.38	52.6						123			
1	149	9.15	9.13	33.875	26.217	182.1	.385	3.03	46.7	29.1	1.92	25.4	= 00	.00	.03	130		
1	150	133 9.13	9.11	33.880	26.223	181.6	.386	3.02	46.6						151			
1	170	8.74	8.72	33.982	26.365	168.3	.422	2.86	43.7	33.2	2.05	26.9	.00	.00	.03	171		
1	190	8.45	8.43	34.009	26.431	162.4	.455	2.89	43.9	35.1	2.09	27.3	.00			121		
1	200	I 8.37	8.35	34.032	26.461	159.8	.471	2.67	40.5						231			
1	210	8.31	8.29	34.052	26.487	157.4	.486	2.42	36.6	38.9	2.24	29.3	.00			211		
1	242	7.94	7.91	34.075	26.560	150.9	.535	2.17	32.6	43.6	2.39	30.9	.01			233		
1	250	ISL 7.78	7.75	34.071	26.580	140.0	.548	2.16	32.4						232			
1	282	7.15	7.12	34.054	26.657	141.9	.595	2.12	31.3	51.0	2.50	33.1	.001			233		
1	300	ISL 6.90	6.87	34.062	26.697	133.3	.620	1.91	28.1						303			
1	345	6.49	6.46	34.109	26.790	129.9	.680	1.26	18.3	63.7	2.83	37.5	.00			337		
1	300	SSL 6.47	6.43	34.225	26.885	121.7	.749	.67	9.8						3 05			
1	421	6.45	6.42	34.264	26.917	119.0	.775	.51	7.3	72.4	3.10	39.1	a 00		3 33			
1	499	5.92	5.87	34.305	27.020	109.9	.863	.033	3.7	82.8	3.28	41.0	.00		033			
1	500	ISL 5.91	5.86	34.306	27.022	109.7	.865	.33	3.7						303			
1	578	5.53	5.48	34.345	27.099	103.0	.948	.26	3.07	91.8	3.33	42.0	.00		502			

A. SECOND FLOUROMETER READING NOT RECORDED, CHLOROPHYLL AND PHAEOPHYTIN CALCULATED WITH ASSUMED ACID RATIO INTERPOLATED FROM ADJACENT LEVELS.

LATITUDE		LONGITUDE	DAY/MO/YR	MESSENGER	BOTTO*		WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE		
31 44.9		121 19.5	05/11/85	1751	GMT	3695 M	340 13	KT 3 50	D3 04	t	1021.0	MB 16	.3 C 13.5 C	7/S	sc		
CAST DEPTH		TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S1 o 3	P04	N03	N02	CHL-A	PHAE0	PRESS	
M		D E G C	DEG C		THETA			ML/L	PCT	UM / L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAK	
	D	ISI	17.14	17.14	33.44?	24 if AL	362.7	.000	5.60	101.7						0	
1	1		17.14	17.14	! 3 . . .	24.288	36 2.7	.004	5.60	101.7	1.7	.32		.10	.04	1	
	10	ISL	17.13	17.13	33.441	24.289	362.8	.036	5.64	102.5						10	
1	12		17.13	17.13	33.441	24.290	362.9	.043	5.65	102.6	1.7	.33	.2	.00	.10	.05	12
	20	ISL	17.13	17.12	33.439	24.289	363.2	.073	5.64	102.5						20	
1	27		17.12	17.12	33.438	24.289	363.4	.098	5.64	102.4	1.7	.33	.1	.00	.10	.04	27
	30	ISL	17.12	17.11	33.438	24.290	363.4	.109	5.63	102.3						30	
1	37		17.10	17.09	33.436	24.293	363.3	.134	5.62	102.0	1.7	.34	.1	.00	.10	.04	37
	48		17.05	17.05	33*4216	24.297	363.4	.174	5.61	101.7	1.7		.1	.00	.12	.06	48
	50	ISL	17.01	17.00	33.422	24.304	362.8	.182	5.62	101.8						50	
1	58		16.86	16.85	33.408	24.329	360.6	.210	5.66	102.2	1.9	.31	.1	.00	.15	.08	58
1	73		14.94	14.93	33.316	24.689	326.5	.261	6.17	107.2	2.0	.34	.1	.00	.19	.18	73
	75	ISL	14.61	14.60	33.282	24.736	322.2	.268	6.17	106.4						76	
1	89		12.97	12.96	33.158	24.974	299.6	.311	6.15	102.5	2.4	.40	.4	.06	.32	.37	89
	100	ISL	12.69	12.67	33.291	25.134	284.7	.344	5.72	94.9						101	
1	104		12.66	12.64	33.345	25.182	280.2	.35*	5.56	92.2	4.0	.55	3.2	.17	.15	.27	104
1	124		11.38	11.36	33.452	25.505	249.7	.409	4.83	78.0	9.0	.92	10.9	.03	.08	.15	125
	125	I	11.35	11.34	33.457	25.514	248.9	.411	4.81	77.7						126	
1	149		10.33	10.32	33.651	25.845	217.7	.468	4.17	65.9	16.2	1.22	16.8	.01	.03	.06	150
	150	ISL	10.31	10.29	33.655	25.853	217.1	.469	4.16	65.7						151	
1	170		9.62	9.60	33.740	26.036	199.9	.511	3.79	59.0	21.5	1.51	20.5	.01	.01	.03	171
1	190		9.18	9.16	33.854	26.197	184.9	.549	3.15	48.6	27.9	1.80	24.7	.01			191
	200	ISL	8.96	8.94	33.899	26.266	178.5	.567	3.05	46.8						201	
1	211		8.74	8.72	33.939	26.332	172.3	.587	3.00	45.8	31.4	1.93	26.3	.01			212
1	241		8.32	8.29	34.009	26.452	161.3	.636	2.71	41.0	36.8	2.12	28.2	.01			242
	250	ISL	8.18	8.16	34.029	26.489	158.0	.651	2.56	38.6						252	
1	281		7.76	7.73	34.089	26.599	147.9	.699	2.01	30.1	46.0	2.39	31.8	.00			283
	300	ISL	7.58	7.55	34.115	26.645	143.7	.726	1.74	25.9						302	
1	343		7.2 5	7.22	34.163	26.729	136.2	.786	1.23	18.2	56.1	2.75	35.0	.00			345
	400	ISL	6.88	6.85	34.222	26.827	127.6	.862	.79	11.5						403	
1	418		6.77	6.74	34.237	26.854	125.3	.885	.69	10.1	66.5	3.03	37.5	.00			421
1	494		6.32	6.28	34.280	26.948	117.1	.976	.45	6.5	75.3	3.17	39.4	.00			497
	500	ISL	6.28	6.23	34.282	26.956	116.4	.983	.44	6.3						504	
1	565		5.67	5.62	34.297	27.045	108.2	1.061	.36	5.1	85.8	3.33	41.3	.00			573

ATTITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMI		TYPE		
31	25.3	121	59.9 W	05/11/85		1221	6MT	3975 M		330	11	KT					1019.5	MB	16	.1 C	13.7 C							
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXYGEN		OXY		SI		03	P04		N03		N02		CHL-A	
M		DEG C		DEG C				THETA		SVA				NL/L		PCT		ON/L		UM/L	UM/L		UM/L		UG/L		UG/L	
0		ISL	17.53	17.53		33.418		24.177		373.2		.000		5.59		102.3												
1	1		17.53	17.53		33.418		24.177		373.3		.004		5.59		102.3		1.9		.39	.1		.00		.08		.03	
	10	ISL	17.55	17.55		33.423		24.174		373.8		.037		5.58		102.2												
1	11		17.55	17.55		33.423		24.174		373.8		.041		5.58		102.2		1.6		.39	.1		.00		.08		.03	
	20	ISL	17.55	17.55		33.420		24.174		374.2		.075		5.59		102.4												
1	27		17.54	17.54		33.418		24.173		374.5		.101		5.60		102.5		1.7		.37	.1		.00		.09		.03	
	30	ISL	17.47	17.47		33.416		24.189		373.1		.112		5.61		102.6												
1	42		17.20	17.19		33.411		24.250		367.6		.156		5.67		103.1		1.6		.36	.1		.00		.15		.07	
	50	ISL	15.32	15.31		33.268		24.569		337.4		.185		5.99		104.8												
1	58		13.51	13.50		33.177		24.882		307.6		.210		6.22		104.9		1.6		.36	.1		.00		.32		.35	
1	68		12.86	12.85		33.195		25.024		294.3		.240		6.02		100.2		2.6		.46	.7		.09		.28		.38	
	75	ISL	12.18	12.17		33.195		25.156		282.0		.261		5.79		94.9												
1	79		11.86	11.85		33.195		25.215		276.2		.271		5.67		92.4		3.7		.60	3.8		.05		.15		.26	
1	94		11.55	11.53		33.254		25.320		266.6		.312		5.42		87.7		5.6		.75	6.5		.02		.10		.19	
	100	ISL	11.40	11.39		33.301		25.383		260.8		.328		5.26		85.0												
1	110		11.15	11.14		33.386		25.494		250.4		.353		4.99		80.1		8.6		.96	10.3		.01		.06		.14	
1	124		10.58	10.56		33.538		25.715		229.6		.389		4.48		71.1		13.2		1.19	14.7		.01		.03		.07	
	125	ISL	10.55	10.54		33.543		25.723		228.9		.390		4.46		70.8												
1	150		9.65	9.63		33.740		26.030		200.0		.444		3.70		57.6		21.7		1.51	21.2		.01		.01		.03	
1	171		9.27	9.25		33.822		26.157		188.3		.485		3.35		51.8		25.4		1.72	23.6		.01		.01		.02	
1	192		8.86	8.84		33.908		26.289		176.1		.523		3.12		47.8		29.3		1.88	25.3		.00					
	200	ISL	8.69	8.67		33.938		26.338		171.5		.536		3.07		46.8												
1	213		8.43	8.41		33.979		26.410		164.8		.558		2.98		45.2		33.5		2.02	27.0		.00					
1	244		8.08	8.05		34.036		26.510		155.7		.608		2.63		39.6		38.4		2.16	29.0		.00					
	250	ISL	8.01	7.99		34.049		26.529		154.0		.617		2.51		37.8												
1	284		7.70	7.67		34.110		26.623		145.6		.669		1.88		28.1				2.44	32.3		.00					
	300	ISL	7.56	7.53		34.123		26.654		142.8		.691		1.77		26.4												
1	347		7.14	7.11		34.152		26.736		135.5		.757		1.57		23.2		56.7		2.73	35.2		.01					
	400	ISL	6.75	6.71		34.209		26.835		126.8		.826		.96		14.0												
1	424		6.60	6.56		34.234		26.875		123.1		.857		.68		9.9		68.3		3.02	38.3		.01					
	500	ISL	6.21	6.17		34.283		26.965		115.5		.947		.41		5.9												
1	502		6.20	6.16		34.283		26.966		115.3		.949		.41		5.9		76.4		3.19	39.8		.01					
1	579		5.70	5.65		34.316		27.056		107.3		1.035		.32		4.6		84.8		3.25	41.3		.01					

PV NHW HORIZON				CALCOFI CRUISE 8511										STATION 90 100			
LATITUDE	L	ONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	ODD	TYPE				
31 05.S	4	22 39.7 W	05/11/85	0644	3569 M	340 12 KT			1019.0	MB 1fc	.5 C	15.2 C					
CST D	H	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO?	NO2	CHL-A	PHAE0	PRTS	
1	M	DE6 C	DE6 C		THETA			HL/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	U*/L	D.BA	
	0	ISL 17.96	17.96	33.403	24.061	384.2	.000	5.52	101.9							1	
1	1	ISL 17.96	17.96	33.403	24.061	384.3	.004	5.52	101.9	1.9	.38	.1	.00	.08	.03	1	
1	10	ISL 17.96	17.96	33.401	24.058	384.9	.038	5.55	102.4							10	
1	11	ISL 17.97	17.96	33.401	24.058	384.9	.042	5.55	102.4	1.8	.3*	.1	.00	.08	.02	11	
	20	ISL 17.95	17.95	33.400	24.061	384.9	.077	5.56	102.5							20	
1	27	ISL 17.94	17.93	33.400	24.065	384.8	.104	5.56	102.5	1.8	.36	.1	.00	.08	.03	27	
	30	ISL 17.93	17.92	33.401	24.067	384.7	.115	5.56	102.4							30	
1	42	ISL 17.90	17.89	33.401	24.074	384.4	.161	5.54	102.1	1.8	.35	.1	.00	.11	.05	4?	
	50	ISL 16.41	16.40	33.338	24.379	35.5.5	.191	5.90	105.7							50	
1	58	ISL 14.82	14.81	33.282	24.688	326.1	.218	6.24	108.1	2.0	.35	.1	.00	.16	.11	58	
1	68	ISL 13.83	13.82	33.200	24.834	312.5	.250	6.25	106.1	2.1	.37	.1	.00	.19	.20	68	
	75	ISL 13.36	13.35	33.260	24.976	299.1	.272	6.05	101.7							76	
1	78	ISL 13.23	13.22	33.291	25.026	294.4	.280	5.96	100.0	2.6	.40	.3	.08	.22	.27	78	
1	94	ISL 12.87	12.86	33.359	25.150	283.0	.326	5.67	94.4	3.2	.49	2.0	.15	.15	.24	94	
	100	ISL 12.64	12.62	33.404	25.231	275.4	.343	5.53	91.6							101	
1	109	ISL 12.28	12.26	33.464	25.347	264.6	.367			5.4	.66	6.2	.02	.10	.17	109	
1	124	ISL 11.59	11.57	33.520	25.520	248.4	.407	4.89	79.3	8.3	.87	9.7	.02	.06	.15	125	
	125	ISL 11.56	11.54	33.522	25.528	247.7	.409	4.87	79.0							126	
1	150	ISL 10.08	10.06	33.646	25.884	213.9	.467	4.17	65.5	16.4	1.29	17.3	.01	.02	.03	151	
1	170	ISL 9.51	9.49	33.753	26.064	197.1	.508	3.86	59.9	21.5	1.57	20.9	.01	.01	.02	171	
1	191	ISL 9.09	9.07	33.839	26.198	184.7	.548	3.48	53.6	25.6	1.72	23.4	.00			192	
	200	ISL 8.91	8.88	33.877	26.257	179.3	.564	3.38	51.9							201	
1	212	ISL 8.67	8.65	33.920	26.328	172.7	.585	3.29	50.2	29.4	1.86	25.2	.00			213	
1	243	ISL 8.20	8.18	33.979	26.446	161.8	.637	3.11	46.9	33.9	1.98	27.0	.00			244	
	250	ISL 8.09	8.06	33.989	26.471	159.6	.648	3.04	45.7							252	
1	284	ISL 7.57	7.54	34.022	26.573	150.2	.702	2.61	38.8	42.4	2.25	30.3	.00			286	
	300	ISL 7.34	7.31	34.033	26.614	146.5	.725	2.40	35.5							302	
1	347	ISL 6.73	6.70	34.058	26.718	136.9	.791	1.77	25.8	55.3	2.61	35.0	.00			349	
	400	ISL 6.22	6.18	34.092	26.812	128.4	.862	1.24	17.9							403	
1	424	ISL 6.02	5.98	34.110	26.852	124.8	.892	1.04	14.9	69.3	2.96	39.2	.00			427	
	500	ISL 5.45	5.41	34.188	26.984	112.7	.982	.58	8.2							504	
1	502	ISL 5.44	5.40	34.189	26.986	112.4	.984	.57	8.1	82.9	3.14	41.8	.00			505	
1	577	ISL 5.15	5.10	34.250	27.069	105.2	1.066	.38	5.3	91.0	3.28	42.8	.00			581	

RV NFU HORIZON				CALCOFI CRUISE 8511										STATION 90 110			
LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CL	ODD	T				
30 44.9	123 20.0 W	05/11/85	0108	4034 M	300 09 KT	310 04 04	2	1018.4	MB 17	.8 C	14.0 C	3/8	SC				
CST D	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	NO3	NO2	CHL-A	PHAE0	PRESS	
1	M	DE6 C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
	0	ISL 18.66	18.66	33.664	24.088	381.7	.000	5.46	102.3		.37		.00	.07	.02	0	
1	10	ISL 18.66	18.66	33.660	24.085	382.3	.038	5.51	103.2	1.9	.33		.00	.06	.02	10	
	20	ISL 18.68	18.68	33.673	24.089	382.3	.076	5.49	102.9							20	
1	26	ISL 18.70	18.70	33.681	24.091	382.3	.099	5.47	102.5	1.9	.32	.1	.00	.06	.01	26	
	30	ISL 18.71	18.71	33.688	24.094	382.2	.115	5.47	102.5							30	
1	41	ISL 18.74	18.73	33.706	24.101	381.9	.156	5.46	102.4	1.8	.30		.00	.07	.02	41	
	50	ISL 18.77	18.76	33.717	24.102	382.2	.191	5.44	102.2							50	
1	57	ISL 18.79	18.78	33.724	24.102	382.4	.217	5.43	102.0	1.8	.30	.1	.00	.09	.04	57	
1	67	ISL 18.60	18.58	33.706	24.138	379.3	.255	5.51	103.1	1.8	.28	.1	.00	.11	.04	67	
	75	ISL 15.75	15.74	33.431	24.600	335.2	.284	6.03	106.6							76	
1	77	ISL 15.10	15.09	33.381	24.706	325.1	.290	6.14	107.1	1.9	.31	.0	.00	.14	.10	77	
1	93	ISL 13.63	13.62	33.290	24.945	302.6	.340	6.02	101.8	2.2	.35	.1	.01	.23	.20	93	
	100	ISL 13.39	13.38	33.294	24.997	298.5	.362	5.98	100.6							101	
1	108	ISL 13.25	13.24	33.299	25.029	295.0	.385	5.91	99.2	2.4	.38	.4	.08	.19	.19	108	
1	124	ISL 12.76	12.74	33.398	25.203	278.7	.430	5.54	92.1	3.8	.51	2.8	.09	.15	.16	124	
	125	ISL 12.70	12.69	33.413	25.226	276.6	.435	5.50	91.3							126	
1	148	ISL 11.75	11.73	33.615	25.564	244.8	.496	4.87	79.3	8.1	.79	9.1	.01	.07	.10	149	
	150	ISL 11.67	11.66	33.617	25.580	243.3	.499	4.84	78.8							151	
1	170	ISL 10.75	10.72	33.635	25.762	226.2	.547	4.56	72.7	12.3	1.04	13.2	.01	.04	.08	171	
1	191	ISL 9.89	9.87	33.770	26.014	202.5	.592	4.17	65.3	18.6	1.31	17.8	.00			192	
	200	ISL 9.54	9.51	33.800	26.096	194.8	.609	3.90	60.7							201	
1	210	ISL 9.16	9.14	33.827	26.178	187.1	.629	3.61	55.6	24.7	1.62	22.4	.00			211	
1	242	ISL 8.33	8.31	33.961	26.412	165.1	.685	3.20	48.4	32.6	1.87	26.3	.00			243	
	250	ISL 8.18	8.16	33.979	26.449	161.7	.698	3.12	47.1							252	
1	284	ISL 7.67	7.65	34.019	26.555	151.9	.750	2.79	41.6	40.9	2.12	29.3	.00			285	
	300	ISL 7.44	7.41	34.031	26.598	148.0	.775	2.55	37.8							302	
1	344	ISL 6.88	6.85	34.053	26.694	139.2	.838	1.87	27.4	53.5	2.51	34.2	.00			346	
	400	ISL 6.32	6.28	34.093	26.800	129.6	.914	1.24	17.9							403	
1	423	ISL 6.13	6.10	34.112	26.839	126.1	.942	1.04	15.0	67.1	2.85	38.6	.01			425	
1	500	ISL 5.61	5.57	34.188	26.965	114.7	1.035	.57	8.1	79.9	3.10	41.1	.00			503	
1	578	ISL 5.31	5.26	34.255	27.054	106.9	1.122	.35	4.9	89.2	3.25	42.3	.00			582	

RV NEW HORIZON STATION 90 120

LATITUD	LONG I	TUDF.	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE			
30 2	i	24 00.0 W	04/11/85	1942 GMT	G M T	4302 M	340 06	KT 3 40	04 04	2	1019.8	MB 18.8 C 15.2 C	8/8	SC		
CAST DEPTH	TEMP	P. V	P.	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI 03	PO4	NO3	NO2	CHL-A	PHAE0	PRESS
M	DEG C	DEG C			THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D. BAR
D	ISL	18.70	18.70	33.634	24.053	385.0	.000	5.45	102.1							6
1 1		18.70	18.70	33.634	24.053	385.0	.004	5.45	102.1	2.3	.43		.00	.07	.02	1
10	ISL	18.70	18.69	33.631	24.053	385.3	.039	5.46	102.3							10
1 11		18.70	18.69	33.631	24.053	385.4	.042	5.46	102.3	2.1	.40	.1	.00	.07	.02	11
20	ISL	18.70	18.69	33.631	24.053	385.7	.077	5.46	102.3							20
1 27		18.70	18.69	33.631	24.054	385.9	.104			2.0	.38	.1	.00	.07	-.02	27
30	ISL	18.70	18.69	33.631	24.054	385.9	.116	5.46	102.3							30
1 42		18.69	18.68	33.631	24.057	386.1	.161	5.46	102.3	1.9	.37	.1	.00	.06	.03	42
50	ISL	18.62	18.61	33.618	24.063	385.8	.193	5.49	102.7							50
1 58		18.56	18.55	33.605	24.070	385.5	.223	5.52	103.1	2.0	.37	.1	.00	.12	.03	58
1 68		16.01	15.99	33.455	24.562	338.7	.259	6.14	109.1	2.1	.36	.1	.00	.12	.06	68
75	ISL	15.05	15.04	33.430	24.755	320.4	.283	6.11	106.4							76
1 79		14.73	14.72	33.426	24.820	314.3	.295	6.09	105.4	2.1	.38	.1	.00	.14	.11	79
1 94		13.80	13.79	33.408	25.002	297.3	.340	5.92	100.6	2.4	.41	.2	.01	.19	.19	94
100	ISL	13.61	13.60	33.427	25.055	292.4	.359	5.82	98.5							101
1 110		13.31	13.29	33.456	25.139	284.5	.387	5.65	95.0	3.3	.51	1.5	.17	.16	.19	110
1 125		12.25	12.23	33.455	25.347	265.0	.428	5.32	87.5	5.3	.70	5.4	.02	.10	.13	125
1 150		11.19	11.18	33.677	25.714	230.4	.49 2	4.71	75.8	10.6	.99	11.4	.01	.04	.06	151
1 171		10.41	10.39	33.727	25.892	213.9	.538	4.39	69.5	15.0	1.24	15.2	.01	.02	.04	172
1 191		9.65	9.63	33.759	26.045	199.4	.579	4.00	62.3	20.6	1.52	19.5	.00			192
200	ISL	9.36	9.34	33.798	26.124	192.7	.597	3.81	59.0							201
1 212		9.02	9.00	33.857	26.223	182.7	.619	3.59	55.2	26.3	1.74	22.9	.01			213
1 243		8.46	8.44	33.963	26.394	166.9	.673	3.44	52.2	31.1	1.89	25.0	.01			244
250	ISL	8.35	8.32	33.975	26.420	164.5	.685	3.42	51.8							252
1 284		7.84	7.82	34.003	26.518	155.5	.738	3.23	48.4	37.7	2.05	27.2	.00			285
300	ISL	7.57	7.54	34.015	26.568	150.9	.764	2.94	43.8							302
1 345		6.88	6.84	34.046	26.689	139.7	.829	2.04	29.9	53.9	2.49	33.6	.00			347
400	ISL	6.41	6.37	34.089	26.786	131.0	.904	1.33	19.3							403
1 422		6.26	6.23	34.106	26.818	128.2	.931	1.13	16.3	66.9	2.87	38.1	.00			424
1 498		5.55	5.51	34.162	26.952	115.8	1.025	.66	9.4	81.7	3.11	41.1	.00			501
500	ISL	5.53	5.49	34.164	26.955	115.5	1.027	.65	9.2							504
1 574		5.01	4.96	34.217	27.059	105.9	1.109	.46	6.4	94.3	3.27	42.7	.00			578

RV NEW HORIZON CALCOFI CRUISE 8511 STATION 93 26.7

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRV		WET		CLOUD		TYPE							
32 57.1 N		117 18.3 W		01/11/85		1943		55 M		280 06		KT 280		03 05 4		1013.0		MB 19.0 C 15.4 C													
CAST DEPTH		TEMP		POT TEMP		SALINITY		SIGMA		SVA		DYN HT		OXV6EN		OXY		SI03		PO4		NO 3		NO2		CHL-A		PHAE0		PRES	
M		DEG C		DEG C				THETA						ML/L		PCT		UM/L		UM/L		UM/L		UN/L		UG/L		UG/L		DBAR	
1 0		19.11		19.11		33.652		23.964		393.5		.000		5.52		104.3		1.4		.29		.0		.00		.23		.05		0	
1 10		18.50		18.50		33.628		24.099		380.9		.039		5.70		106.4		1.5		.29		.0		.00		.28		.09		10	
20 ISL		15.19		15.19		33.420		24.714		322.6		.074		6.26		109.3														20	
1 21		14.86		14.86		33.407		24.775		316.8		.077		6.28		109.0		2.8		.41		.0		.03		.82		.36		21	
30 ISL		13.37		13.36		33.400		25.082		288.1		.104		5.44		91.5														30	
1 31		13.28		13.28		33.399		25.098		286.3		.107		5.34		89.7		6.0		.81		.3		.63		.50		.45		31	
1 41		12.83		12.83		33.443		25.221		274.8		.135		5.18		86.3		6.8		.85		2.0		.60		.29		.44		41	

RV NEW HORIZON CALCOFI CRUISE 8511 STATION 93 29

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AHT	TYPE		
32 52.5 N	117 28.1 W			01/11/85	2216	651 M	350 04	KT 270	03 06 4	1011.0	MB 19 .9 C	17.5 C					
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	PO4	NO3	CHL-A	PHAE0	PRESS		
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	D.BAR		
	0	ISL	19.57	19.57	33.668	23.859	404.3	.000	5.61	106.9					0		
1	1		19.57	19.57	33.668	23.859	403.6	.004	5.61	106.9	2.3	.48	.0	.00	.25	.07	1
	10	ISL	19.31	19.31	33.662	23.922	397.9	.040	5.63	106.7							10
1	11		19.28	19.28	33.661	23.928	397.3	.044	5.63	106.7	2.2	.44	.0	.00	.27	.08	11
	20	ISL	19.01	19.00	33.641	23.983	392.3	.080	5.73	108.0							20
1	21		18.98	18.97	33.639	23.989	391.8	.083	5.74	108.1	2.1	.42	.0	.00	.31	.09	21
	30	ISL	14.61	14.61	33.410	24.831	311.7	.115	6.38	110.2							30
1	51		14.16	14.16	33.400	24.919	303.4	.118	6.43	110.0	3.1	.53	.0	.00	.32	.23	31
1	42		13.01	13.00	33.426	25.174	279.4	.150	5.80	96.9	4.6	.67	1.4	.33	.61	.60	42
	50	ISL	12.56	12.55	33.460	25.289	268.6	.172	5.34	88.5							50
1	52		12.48	12.47	33.468	25.310	266.7	.177	5.25	86.8	7.1	.88	6.3	.16	.26	.48	52
1	62		11.99	11.98	33.520	25.444	254.1	.203	4.80	78.6	9.5	1.02	9.7	.03	.18	.33	62
1	72		11.58	11.57	33.561	25.552	244.0	.228	4.45	72.2	11.7	1.19	12.2	.02	.10	.26	72
	75	ISL	11.43	11.42	33.577	25.592	240.2	.236	4.33	70.1							76
1	87		10.97	10.96	33.634	25.719	228.4	.263	3.97	63.6	15.3	1.40	16.3	.02	.06	.26	87
	100	ISL	10.74	10.73	33.675	25.792	221.7	.293	3.74	59.6							101
1	103		10.70	10.69	33.682	25.804	220.6	.299	3.70	59.0	18.1	1.49	18.0	.02	.03	.13	103
1	123		9.97	9.95	33.776	26.005	201.9	.343	3.24	50.8	23.5	1.69	22.1	.01	.01	.06	124
	125	ISL	9.93	9.91	33.784	26.017	200.8	.346	3.21	50.4							126
1	148		9.57	9.55	33.891	26.161	187.6	.391	2.89	45.0	27.6	1.89	24.6	.01	.00	.04	149
	150	ISL	9.56	9.54	33.900	26.169	186.8	.394	2.86	44.5							151
1	179		9.34	9.32	34.027	26.305	174.4	.447	2.43	37.7	32.5	2.12	26.9	.01			180
	200	ISL	8.95	8.93	34.069	26.401	165.7	.482	2.34	35.9							201
1	209		8.80	8.78	34.083	26.436	162.5	.497	2.30	35.2	36.9	2.22	28.6	.01			210
1	240		8.72	8.69	34.148	26.500	157.0	.546	1.88	28.7	40.3	2.37	30.0	.01			241
	250	ISL	8.64	8.61	34.163	26.524	154.9	.562	1.78	27.1							252
1	281		8.34	8.32	34.196	26.595	148.6	.610	1.51	22.9	45.4	2.56	32.1	.01			283
	300	ISL	8.14	8.11	34.207	26.635	145.1	.637	1.37	20.6							302
1	343		7.68	7.64	34.228	26.720	137.5	.698	1.06	15.8	54.2	2.81	34.8	.01			345
	400	ISL	7.22	7.18	34.281	26.828	127.9	.774	.63	9.3							403
1	420		7.07	7.03	34.299	26.862	124.8	.799	.50	7.4	65.9	3.07	37.9	.01			423
1	497		6.49	6.44	34.321	26.959	116.3	.891	.36	5.2	74.8	3.20	39.9	.01			500
	500	ISL	6.46	6.41	34.322	26.964	115.9	.895	.35	5.1							504
1	573		5.81	5.76	34.344	27.065	106.5	.976	.24	5.4	86.8	3.34	41.7	.01			577

LAT T t j d F.				DAY/MO/YR	MESSENGER		BOTTOM	WIND SP	EED	WAVES	WEATHER	BAROMETER	DRY	WET	CLCUD	AMI	TYP											
32	50.4	N	1	17	3.3.2	W	0104	GMT	858	M	020	05	KT	260	03	06	4	1010.0	MB	20.0	C	17.9	C					
CAST	DEPTH			TEMP			POT	TEMP	SALINITY	f	SI6MA	SVA		DYN	HT	OXYGEN	OXV	SI03	P04	N03	N02	CHL-A	PHAE0	ARF.				
	M			DEG C			DEG C				TMETA					ML/L	PC?	UM/L	UM/L	UM/L	UM/L	UG/L	UP/L					
	0	ISL		19.68			19.68		33.673		23.835	406.7		.000		5.58	106.5											0
				19.68			19.68		33.673		23.835	405.8		.004		5.58	106.5	1.9	.35	.1	-60	.28	.06					1
				19.37			19.36		33.673		23.918	398.4		.040		5.66	107.5											10
1	11			19.33			19.33		33.673		23.924	397.7		.044		5.67	107.6	1.8	-30	.1	.00	.27	.08					11
	20	ISL					17.52		33.533		24.266	365.4		.079		6.12	112.1											20
1	21						17.27		33.516		24.312	361.0		.082		6.17	112.4	1.8	.33	.0	.00	.37	.13					21
	30	ISL		14.55			14.54		33.389		24.829	311.9		.112		6.42	110.7											30
1	31			14.30			14.29		33.384		24.879	387.2		.115		6.44	110.5	2.8	-.1	.0	*00	.33	.18					31
1	41			12.94			12.94		33.421		25.183	278.4		.144		5.76	96.1	4.6	.61	2.1	.35	.72	.68					41
	50	ISL		12.34			12.33		33.466		25.335	264.2		.169		5.14	84.7											50
1	52			12*26			12.26		33.475		25.357	262.2		.174		5.03	82.8	7-5	.87	8.1	.07	-.24	.40					52
1	62			11.78			11.77		33.529		25.491	249.7		.199		4.61	75 -1	#.9	1.03	11.2	.02	.12	.26					62
1	72			11.43			11.43		33.571		25.586	240.8		.224		4.35	70.4	12-3	1.16	13.3	.02	*0*	.20					72
	75	ISL		11.36			11.36		33.584		25.609	238*6		.232		4.26	68-*											76
1	88			11.15			11.14		33.631		25.685	231.8		.261		3.97	63.9	15.2	1.32	15.5	-.0f	*05	.16					88
	100	ISL		10.90			10.89		33.666		25.757	225.2		.290		3.78	60.5											101
1	104			10.82			10.80		33.675		25.777	223.1		.298		3-7*	59.6	17.4	1.44	17.6	.01	.03	.11					104
1	123			10.14			10.12		33.748		25.954	206.8		.340		3.38	53.2	21.5	1.61	21.0	.01	-.02	.09					123
	125	ISL		10.10			10.08		33.756		25.967	205.6		.344		3.35	52.7											126
1	149			9.63			9.61		33.871		26.136	189.9		.392		2.96	46.1	26.6	1.85	24.2	-.01	.01	.04					150
	150	ISL		9.61			9.59		33.875		26.141	189.5		.395		2.95	45.9											151
1	180			9.14			9.12		34.001		26.317	173.3		.448		2.57	39.6	32.3	2.05	26.7	.01							181
	200	ISL		8.89			8.87		34.064		26.406	165.1		.481		2.35	36.0											201
1	211			8.78			8.76		34.093		26.446	161.5		.499		2.23	34.1	37.0	2V2f-	28-6	-.00							212
1	242			8.59			8.56		34.155		26.526	154.5		-.548		1.85	28.2	41.5	2V59	30.3	.00							243
	250	ISL		8.54			8.51		34.170		26.545	152.8		.560		f-74	26.6											252
1	281			8.32			8.29		34.219		26.617	146.5		.607		1.37	20.8	4.7-fl	2.59	32.1	.00							283
	300	ISL		8.14			8.11		34.239		26.661	142.6		.634		1.17	17.7											302
1	343			7.69			7.65		34.270		26.752	134.4		.694		-.82	12.3	56.4	2.86	35.0	.00							345
	400	ISL		7.23			7.19		34.282		26.826	128.0		.769		.63	9-31											403
1	421			7.07			7.03		34.284		26.850	125.9		.796		.59	8.7	65.2	3.0 3	37.2	.0 0							424
1	499			6.44			6.39		34.321		26.966	115.6		.889		.35	5.1	75.7	3.19	39.6	.00							502
	500	ISL		6.43			6.38		34.322		26.968	115.4		-.891		.35	5.0											504
1	574			5.92			5.87		34.340		27.048	108.3		.973		.26	3.7	84.7	3.30	41.0	.01							578

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER		BOTTOM	WIND SPEED	*	AVES	WEATHER	BAROMETER	DRY	WET	CLOUD	T	
32 39.0		117 52.4 W		02/11/85	0457	BMT	538 M	350 06	KT			1012-5	MB f9	.6 C	17.7 C		
CAST	DEPTH	TEMP		POT TEMP	SALINITY	SIGMA	SVA	DYN H?	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C		DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	ISL	18.99	18.99	33.672	24.011	389.7	-000	5.55	104.6							0
1	1		18.99	18.99	33.672	24.011	389.1	.004	5.55	104.6	1.9	.32	.0	.00	.16	.05	1
	10	ISL	18.69	18.69	33.660	24.076	383.1	.039	5.62	105.3							10
1	11		18.66	18.66	33.659	24.083	38 2.5	.042	5.63	105.4	1.7	.30	.0	.00	.20	.07	11
	20	ISL	16.17	16.17	33.493	24.551	338.2	.075	5.93	105.8							20
	30	ISL	13.28	13.27	33.400	25.100	286.1	.106	6.07	102.0							30
1	31		13.01	13.01	33.398	25.151	281.3	.109	6.07	101.4	4.4	.45	.3	.06	1.89	.89	31
1	46		12.35	12.34	33.458	25.327	264.8	.149	5.07	83.6	7. 4	-80	7.1	.11	.36	.41	46
	50	ISL	12.21	12.20	33.478	25.370	26 0.9	.160	4.91	80.8							50
1	57		12.01	12.00	33.509	25.431	255-3	.178	4.73	77.4	9.4	.96	9.7	.04	.13	.37	57
1	72		11.73	11.72	33.553	25.518	247.3	.215	4.47	72.8	11.4	1.08	11.7	.04	.08	-.21	72
	75	ISL	11.67	11.66	33.562	25.537	245.6	.22 4	4.41	71.7							76
1	88		11.40	11.39	33.603	25.618	238.1	.254	4.16	67.3	13.5	1.20	13.9	.02	.05	.17	88
	100	ISL	11.02	11.00	33.665	25.736	227.2	.28 3	3.81	61.1							101
i	102		10.97	10.96	33.672	25.749	225.9	.286	3.77	60.4	16.9	1.41	16.8	.01	.03	.11	102
	125	ISL	10.71	10.69	33.723	25.836	218.2	.338	3.47	55.3							126
1	127		10.69	10.68	33.726	25.841	217.7	.344	3.45	55.0	19.3	1.52	18.7	.01	.02	.09	128
1	148		10.34	10.32	33.796	25.958	207.1	.388	3.14	49.7	22.8	1.68	21.1	.01	.01	.07	149
	150	ISL	10.32	10.30	33.802	25.966	206.3	.392	3.11	49.2							151
1	179		9.97	9.94	33.905	26.107	193.5	.450	2.70	42.4	26.9	1.84	24.0	.00	.01	.05	180
	200	ISL	9.55	9.53	33.978	26.233	181.8	.489	2.55	39.7							201
1	210		9.36	9.34	34.008	26.287	176.7	.507	2.50	38.7	31.7	2.03	26.4	.00	.00	.04	211
1	242		9.08	9.05	34.074	26.385	168.0	.561	2.30	35.4	35.2	2.11	27.8	.00			243
	250	ISL	9.02	8.99	34.102	26.417	165.2	.575	2.16	33.2							252
1	282		8.77	8.74	34.207	26.538	154.2	.627	1.54	23.6	4 2.4	2.45	30.7	.00			284
	300	ISL	8.57	8.54	34.237	26.594	149.2	.654	1.31	20-0							302
1	343		8.03	8.00	34.270	26.701	139.5	-.716	.93	14.0	52.5	2.75	33.7	.00			345
1	399		7.49	7.45	34.275	26.785	132.1	.791	.74	11.0	59.1	2.89	35.7	.00			401
	400	ISL	7.47	7.43	34.276	26.788	131.8	.793	.73	10.9							403
1	458		6.94	6.89	34.301	26.883	123.3	.867	.47	6.9	67.4	3.02	37.7	.00			461
	500	ISL	6.69	6.64	34.311	26.925	119.8	.918	.41	6.0							504
1	516	A	6.63	6.58	34.313	26.935	119.0	.937	.39	5.7	73.1	3.26	39.2	.13			519

A. CAST TOUCHED BOTTOM, MUD IN WATER SAMPLES.

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 40

LATITUDE	LONG I TUOE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLCUD	TYPE			
32 31.1	18 13.1 W	BL/11/85	! V 1 GMT	' -->	350 03 KT			1013.0	MB 18	.3 C	17.3 C				
CAST DEPTH	TEMP	'01 FL NF	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	S103	P04	N03	N02	CHL-A	PHAE0	FRES
M	DEG C	OEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	U&L	UG/L	D.BA
1 0	18.85	18.85	33.642	24.022	388.0	.000			1.6	.36	.1	.00	.18	.05	0
1 10	18.76	18.76	33.649	24.051	385.6	.039	5.64	105.8	1.5	.32	.1	.00	.20	.07	10
1 20	16.88	16.88	33.473	24.372	355.2	.076	6.10	110.2							20
1 22	16.44	16.44	33.437	24.447	348.1	.082	6.16	110.4	2.0	.36	.1	.00	.38	.05	22
1 30	15.08	15.08	33.346	24.681	326.1	.110	6.34	110.5							30
1 32	14.81	14.80	33.331	24.729	321.5	.116	6.36	110.2	2.1	.39	.1	.00	.37	.22	32
1 42	13.73	13.72	33.285	24.920	303.6	.147	6.28	106.4	2.4	.44	.1	.02	.79	.53	42
1 50	12.84	12.83	33.257	25.077	288.7	.171	6.01	99.9							50
1 53	12.57	12.56	33.253	25.126	284.1	.179	5.89	97.4	3.7	.58	2.2	.18	.44	.49	53
1 63	12.01	12.00	33.273	25.249	272.7	.207	5.51	90.1	4.6	.68	4.9	.07	.27	.45	63
1 73	11.18	11.17	33.292	25.416	256.9	.233	5.20	83.5	7.6	**3	9.1	.02	.12	.2*	73
1 75	11.16	11.15	33.321	25.443	254.4	.239	5.12	82.1							76
1 89	11.02	11.01	33.455	25.571	242.6	.273	4.64	74.3	11.5	1.16	13.4	.01	.08	.16	89
1 100	10.77	10.76	33.535	25.677	232.6	.300	4.36	69.5							101
1 106	10.62	10.61	33.567	25.730	227.8	.313	4.24	67.4	15.1	1.33	16.6	.01	.04	.10	106
1 124	10.02	10.01	33.676	25.917	210.3	.354	3.84	60.3	19.1	1.51	19.5	.01	.02	.06	125
1 125	10.01	9.99	33.678	25.922	209.9	.355	3.83	60.1							126
1 150	9.44	9.42	33.778	26.094	193.9	.406	3.53	54.7	23.6	1.68	22.4	.00	.01	.04	151
1 181	8.80	8.78	33.931	26.315	173.3	.463	3.25	49.7	29.6	1.86	24.9	.00			182
1 200	8.59	8.57	34.007	26.407	164.9	.495	2.84	43.3							201
1 212	8.50	8.48	34.045	26.452	160.9	.514	2.57	39.1	36.3	2.13	28.4	.00			213
1 243	8.25	8.22	34.106	26.539	153.1	.562	2.11	31.9	41.7	2.34	30.4	.00			244
1 250	8.15	8.12	34.106	26.554	151.6	.574	2.06	31.1							252
1 284	7.67	7.64	34.108	26.626	145.3	.625	1.88	28.1	47.7	2.46	32.5	.00			286
1 300	7.54	7.51	34.125	26.658	142.5	.647	1.70	25.3							302
1 346	7.30	7.26	34.190	26.744	134.9	.711	1.14	16.9	56.4	2.76	35.4	.00			348
1 400	7.03	6.99	34.256	26.834	127.1	.782	.78	11.5							403
1 422	6.93	6.89	34.277	26.865	124.4	.810	.68	10.0	66.1	3.02	37.7	.00			425
1 500	6.52	6.47	34.302	26.940	118.1	.903	.41	6.0	72.9	3.13	39.3	.00			503
1 576	5.94	5.89	34.338	27.043	108.8	.990	.30	4.3	83.4	3.26	41.2	.00			580

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 45

ATTITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMI	TYPE			
32 21.3		118 33.1 W		02/11/85	1328	GMT	1331 M	320 05	KT					1013.2		MB 16		.0 C 15.3 C								
CAST DEPTH		TEMP		POT TEMP	SALINITY	SIGMA		OXYGEN		OXY		SI03		UM/L		UM/L		UM/L		UG/L		UG/L		D.BAR		
M		DEG C		DEG C			THETA	SVA		ML/L		PCT		UM/L		UM/L		UM/L		UG/L		UG/L		D.BAR		
1	0	17.06		17.06	33.527	24.372		354.6		.000		5.60		101.6		1.9		.44		.2		.00		.11	.05	0
1	10	16.96		16.96	33.541	24.405		351.8		.035		5.62		101.8		1.8		.38		.0		.00		.12	.06	10
	20	ISL	16.90	16.90	33.586	24.454		347.5		.070		5.64		102.0												20
1	21	16.90		16.89	33.591	24.459		347.0		.073		5.64		102.1		1.8		.35		+0		.00		.15	.08	21
	30	ISL	16.53	16.53	33.567	24.527		340.8		.105		5.71		102.5												30
1	32	16.46		16.45	33.563	24.541		339.6		.111		5.72		102.6		1.6		.35		.0		.00		.22	.15	32
1	41	13.32		13.31	33.187	24.927		302.8		.140		6.15		103.3		2.2		.43		.1		.04		.54	.58	41
	50	ISL	12.81	12.80	33.221	25.054		289.8		.167		5.97		99.2												50
1	52	12.71		12.70	33.228	25.079		288.6		.172		5.90		97.9		2.9		.51		1.0		.12		.28	.37	52
1	62	11.71		11.70	33.182	25.234		274.1		.200		5.65		91.7		4.4		.66		4.3		.08		.31	.65	62
1	72	11.55		11.54	33.326	25.376		260.8		.227		5.13		83.1		7.5		.89		8.7		.02		.11	.21	72
	75	ISL	11.47	11.46	33.362	25.417		256.9		.235		5.03		81.4												76
1	88	11.02		11.01	33.485	25.594		240.4		.267		4.68		75.0		11.3		1.09		12.7		.01		.05	.12	88
	100	ISL	10.23	10.22	33.633	25.848		216.4		.295		4.00		63.1												101
1	103	10.07		10.06	33.661	25.897		211.7		.300		3.87		60.8		19.0		1.48		19.6		.01		.02	.06	103
1	123	9.52		9.51						.343		3.53		54.8		23.7		1.65		22.2		.01		.01	.04	124
	125	ISL	9.48	9.47	33.787	26.094		195.8		.346		3.52		54.6												126
1	149	9.03		9.01	33.856	26.221		181.7		.392		3.33		51.2		27.5		1.80		24.4		.01		.00	.04	150
	150	ISL	9.02	9.00	33.859	26.225		181.3		.393		3.31		50.9												151
1	181	8.75		8.73	33.977	26.359		169.1		.448		2.73		41.7		33.3		2.04		27.4		.00				182
	200	ISL	8.58	8.56	33.991	26.397		165.8		.479		2.72		41.5												201
1	212	8.45		8.43	33.993	26.419		163.9		.499		2.72		41.3		35.5		2.09		28.1		.00				213
1	243	7.99		7.96	34.044	26.529		153.9		.548		2.46		37.0		40.8		2.23		30.0		.01				244
	250	ISL	7.90	7.87	34.054	26.550		152.0		.559		2.37		35.5												252
1	284	7.52		7.49	34.092	26.635		144.3		.610		1.89		28.1		48.7		2.46		32.9		.01				286
	300	ISL	7.36	7.34	34.109	26.670		141.2		.632		1.69		25.1												302
1	346	6.94		6.91	34.151	26.762		132.9		.695		1.20		17.6		59.3		2.79		36.5		.01				348
	400	ISL	6.46	6.43	34.188	26.856		124.4		.765		.80		11.6												403
1	423	6.28		6.24	34.203	26.892		121.3		.794		.68		9.8		71.5		3.04		39.6		.00				426
1	500	5.86		5.82	34.256	26.988		112.9		.883		.42		6.0		81.2		3.17		41.3		.00				503
1	574	5.60		5.55	34.325	27.076		105.3		.964		.31		4.4		88.5		3.27		42.1		.00				578

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMI	TYPE	32	10.8
N 118 53.3 W	02/11/85	1730 GMT	1479 M	230 05 KT	300 03 05		0	1015.5 MB	16.8 C	16.1 C	0/8					
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXY6EN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	W	DE6 C	DE6 C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1	0	17.42	17.42	33.661	24.388	353.1	.000	5.58	102.1	2.2	.45	.1	.00	.19	.06	0
	10	ISL 17.35	17.35	33.661	24.405	351.7	.035	5.66	103.4							10
1	11	17.34	17.34	33.661	24.407	351.5	.039	5.66	103.4	2.1	.41	.1	.00	.18	.06	11
	20	ISL 17.11	17.18	33.657	24.442	348.6	.070	5.61	102.2							20
1	21	17.17	17.16	33.656	24.446	348.3	.073	5.61	102.1	2.0	.38	.1	.00	.21	.09	21
	30	ISL 16.25	16.25	33.591	24.609	333.0	.104	5.72	102.3							30
1	31	16.12	16.12	33.580	24.630	331.0	.107	5.74	102.3	1.9	.40	.1	.00	.38	.19	31
	41	13.92	13.91	33.328	24.914	304.1	.139	5.95	101.3	2.7	.48	.3	.08	.80	.53	41
	50	ISL 12.44	12.44	33.171	25.086	287.9	.166	5.87	96.7							50
1	52	12.27	12.26	33.164	25.114	285.2	.171	5.85	96.1	3.5	.59	1.9	.22	.42	.53	52
	62	12.51	12.50	33.449	25.289	265.9	.199	5.10	84.4	7.7	.86	7.7	.09	.22	.39	62
1	73	11.84	11.83	33.505	25.460	252.8	.227	4.76	77.6	10.5	1.07	11.1	.03	.11	.29	73
	75	ISL 11.68	11.67	33.515	25.498	249.3	.233	4.68	76.0							76
1	88	10.40	10.79	33.576	25.704	229.9	.263	4.22	67.3	15.1	1.37	16.2	.01	.07	.17	83
	100	ISL 10.05	10.04	33.677	25.912	210.2	.291	3.82	60.0							101
1	104	9.20	9.87	33.705	25.962	205.5	.298	3.73	58.4	20.4	1.60	20.4	.00	.02	.06	104
	124	9.56	9.55	33.763	26.062	196.5	.340	3.58	55.7	22.9	1.70	21.8	.00	.01	.05	125
	125	ISL 9.5 5	9.54	33.765	26.065	196.2	.341	3.57	55.5							126
1	149	9.11	9.09	33.853	26.205	183.2	.387	3.28	50.5	27.2		24.2	.00	.00	.03	150
	150	ISL 9.09	9.07	33.856	26.211	182.7	.388	3.27	50.3							151
1	180	8.35	8.34	33.971	26.416	163.6	.440	2.89	43.8	34.4	2.08	27.7	.00			181
	2 00	ISL 8.11	8.09	34.012	26.485	157.3	.472	2.69	40.5							201
1	211	8.00	7.98	34.027	26.513	154.9	.489	2.57	38.6	39.4	2.25	29.5	.00			212
	242	7.59	7.57	34.072	26.608	146.2	.536	2.08	31.0	46.3	2.46	32.1	.00			243
	250	ISL 7.5 3	7.50	34.086	26.628	144.4	.548	1.98	29.5							252
1	282	7.34	7.31	34.133	26.693	132.7	.594	1.67	24.7	53.4	2.66	34.3	.00			284
	300	ISL 7.22	7.19	34.148	26.721	136.2	.618	1.53	22.6							302
1	345	6.94	6.91	34.177	26.783	130.9	.678	1.22	17.9	60.8	2.89	36.7	.00			347
	400	ISL 6.70	6.66	34.231	26.860	124.3	.748	.91	13.3							403
1	422	6.60	6.57	34.252	26.888	121.9	.776	.81	11.8	69.8	3.08	38.7	.00			425
	498	6.20	6.16	34.287	26.969	115.0	.865	.61	8.8	77.3	3.21	40.2	.00			501
	500	ISL 6.19	6.15	34.289	26.972	114.8	.868	.60	8.7							504
1	575	5.90	5.85	34.334	27.045	108.5	.951	.30	4.3	84.2	3.31	41.3	.00			579

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 55

LATITUDE		LONGITUDE		DAY/MO/YR		MESSENGER		BOTTOM		WIND SPEED		WAVES		WEATHER		BAROMETER		DRY		WET		CLOUD		AMT TYPE	
32 00.8 N		119 13.9 W		02/11/85		2210 GMT		2973 M		100 05 KT		280 03 04		0		1012.3 MB		18.7 C		17.1 C		0/5			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYNHT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS									
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR									
1	0	17.26	17.26	33.482	24.289	362.5	.000	5.85	106.6	2.1	.47	.1	.00	.12	.04	0									
1	10	16.49	16.48	33.512	24.493	343.3	.03 5	6.03	108.2	1.8	.43	.0	.00	.18	.09	10									
	20	ISL 16.27	16.27	33.541	24.566	336.7	.069	5.94	106.2							20									
1	21	16.27	16.26	33.543	24.568	336.6	.072	5.93	106.0	1.5	.41	.1	.00			21									
	30	ISL 16.25	16.25	33.552	24.579	335.8	.103	5.97	106.6							30									
1	31	16.25	16.24	33.554	24.581	335.7	.106	5.97	106.6	1.3	.40	.1	.00	.32	.15	31									
	41	15.38	15.37	33.409	24.665	327.9	.139	6.15	107.9	1.6	-.41	.1	.00	.30	.22	41									
	50	ISL 13.74	13.73	33.273	24.908	304.9	.168	6.10	103.4							50									
1	52	13.44	13.43	33.258	24.958	300.2	.173	6.08	102.4	2.2	.47	.2	.04	.33	.35	52									
	62	13.01	13.01	33.313	25.085	288.3	.203	6.05	101.1	2.9	.54	1.3	.14	.25	.37	62									
1	72	12.76	12.75	33.320	25.141	283.3	.231	5.87	97.5	3.5	.62	2.8	.13	.21	.36	72									
	75	ISL 12.57	12.56	33.330	25.187	279.0	.240	5.76	95.3							76									
1	88	11.67	11.66	33.403	25.412	257.7	.274	5.26	85.4	7.2	.90	9.0	.02	.11	.19	88									
	100	ISL 10.93	10.92	33.530	25.646	235.6	.305	4.76	76.2							101									
1	103	10.79	10.78	33.557	25.691	231.4	.311	4.66	74.3	12.7	1.21	14.3	.01	.05	.12	103									
1	123	10.04	10.03	33.683	25.919	210.1	.357	3.78	59.4	19.6	1.55	20.1	.01	.02	.06	124									
	125	ISL 9.99	9.98	33.693	25.935	208.6	.360	3.75	58.9							126									
1	149	9.33	9.31	33.823	26.147	188.7	.408	3.52	54.5	25.5	1.87	23.4	.01	.01	.03	150									
	150	ISL 9.31	9.29	33.827	26.153	188.3	.410	3.51	54.3							151									
1	180	8.80	8.78	33.944	26.326	172.3	.464	3.14	48.0	31.2	2.07	26.2	.00			181									
	200	ISL 8.39	8.37	33.991	26.426	163.0	.497	3.19	48.4							201									
1	211	8.18	8.16	34.009	26.472	15 8.8	.515	3.22	48.6	35.8	2.15	27.3	.00			212									
	242	7.83	7.81	34.031	26.541	152.6	.563	2.87	43.0	40.9	2.25	29.3	.00			243									
	250	ISL 7.72	7.70	34.034	26.560	150.9	.575	2.76	41.2							252									
1	283	7.25	7.23	34.044	26.635	144.1	.625	2.31	34.1	48.1	2.39	32.1	.00			285									
	300	ISL 7.02	6.99	34.052	26.674	140.5	.648	2.11	31.0							302									
1	346	6.48	6.44	34.088	26.775	131.2	.711	1.61	23.4	61.7	2.81	37.0	.00			348									
	400	ISL 6.23	6.20	34.172	26.873	122.6	.779	1.08	15.5							403									
1	422	6.19	6.16	34.210	26.909	119.6	.806	.89	12.8	73.1	3.09	39.6	.00			425									
	500	6.00	5.96	34.312	27.015	110.5	.895	.50	7.2	81.6	3.24	40.8	.00			503									
1	578	5.67	5.62	34.339	27.078	105.1	.980	.46	6.6	87.5	3.30	41.7	.00			582									

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
31 50.7 N		119 34.4 W		03/11/85	0216 GMT	2973 M	080 03 KT				1013.4 MB	18.3 C	17.1 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	ISL 17.78	17.77	33.436	24.130	381.3	.000	5.65	103.9							0
1	1	17.78	17.77	33.436	24.130	377.7	.004	5.65	103.9	1.8	.51	.1	.00	.12	.07	1
1	10	16.80	16.79	33.440	24.366	355.5	.037	5.70	102.9	1.7	.46	.1	.00	.13	.08	10
	20	ISL 16.77	16.77	33.455	24.385	354.0	.072	5.71	103.0							20
1	21	16.77	16.76	33.457	24.387	353.9	.076	5.71	103.0	1.6	.44	.1	.00	.20	.10	21
	30	ISL 16.74	16.74	33.480	24.410	352.0	.108	5.68	102.4							30
1	31	16.74	16.74	33.483	24.413	351.7	.111	5.68	102.4	1.8	.43	.1	.00	.22	.11	31
1	41	16.5 5	16.54	33.470	24.448	348.7	.146	5.72	102.7	1.7	.44	.1	.00	.27	.14	41
	50	ISL 15.99	15.98	33.416	24.534	340.7	.177	5.86	104.1							50
1	51	15.92	15.91	33.409	24.546	339.7	.180	5.88	104.3	1.8	.44	.1	.00	.32	.23	51
1	62	14.23	14.22	33.265	24.801	315.5	.216	6.20	106.2	2.0	.46	.1	.01	.32	.29	62
1	72	13.41	13.40	33.217	24.934	303.1	.247	6.09	102.5	2.0	.49	.1	.04	.26	.32	72
	75	ISL 13.20	13.19	33.237	24.991	297.7	.256	5.99	100.4							76
1	87	12.57	12.56	33.334	25.189	279.1	.290	5.60	92.7	3.9	.68	3.9	.09	.17	.25	87
	100	ISL 11.86	11.85	33.356	25.341	264.9	.326	5.29	86.2							101
1	103	11.74	11.72	33.359	25.367	262.4	.333	5.23	85.0	6.5	.88	8.1	.03	.10	.19	103
1	123	10.83	10.81	33.524	25.660	234.9	.385	4.57	72.9	12.0	1.21	13.8	.01	.04	.10	124
	125	ISL 10.77	10.75	33.538	25.681	232.8	.389	4.50	71.7							126
1	149	9.92	9.90	33.734	25.980	204.8	.442	3.53	55.3	21.8	1.67	21.6	.01	.01	.06	150
	150	ISL 9.90	9.88	33.738	25.986	204.3	.443	3.53	55.2							151
1	180	9.18	9.16	33.845	26.188	185.5	.502	3.42	52.7	25.9	1.81	23.4	.01			181
	200	ISL 8.92	8.90	33.934	26.300	175.2	.538	2.90	44.5							201
1	211	8.78	8.76	33.975	26.354	170.2	.557	2.64	40.4	33.1	2.10	27.5	.01			212
1	242	8.08	8.05	34.004	26.484	158.1	.607	2.78	41.9	37.6	2.19	28.9	.00			243
	250	ISL 7.97	7.95	34.016	26.509	155.9	.620	2.70	40.6							252
1	283	7.66	7.63	34.059	26.589	148.7	.671	2.22	33.1	45.1	2.40	31.4	.00			285
	300	ISL 7.45	7.42	34.073	26.630	145.0	.695	2.02	30.0							302
1	344	6.89	6.86	34.097	26.727	136.2	.757	1.55	22.7	57.3	2.72	35.5	.00			346
	400	ISL 6.32	6.28	34.120	26.821	127.6	.831	1.13	16.4							403
1	422	6.13	6.09	34.130	26.854	124.6	.859	1.00	14.4	70.0	2.98	38.9	.00			425
1	499	5.60	5.56	34.198	26.974	113.8	.950	.57	8.1	82.7	3.19	41.5	.00			502
	500	ISL 5.59	5.55	34.199	26.976	113.6	.952	.56	8.0							504
1	576	5.38	5.33	34.297	27.079	104.6	1.035	.31	4.4	91.2	3.35	42.5	.00			580

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE	
31 3.1.1 N		120 15.2 W		03/11/85	0739 GMT	2973 M	180 07 XT				1015.6 MB	17.1 C	16.4 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	ISL 17.39	17.39	33.408	24.201	371.3	.000	5.59	102.0							0
1	1	17.39	17.39	33.408	24.201	371.0	.004	5.59	102.0	2.0	.46	.1	.00	.07	.03	1
1	10	ISL 17.29	17.28	33.405	24.225	369.0	.037	5.64	102.7							10
1	11	17.28	17.28	33.405	24.226	368.9	.041	5.64	102.7	1.9	.44	.1	.00	.09	.03	11
	20	ISL 17.29	17.28	33.409	24.227	369.1	.074	5.63	102.6							20
1	21	17.29	17.28	33.409	24.227	369.1	.077	5.63	102.5	1.8	.41	.1	.00	.09	.04	21
	30	ISL 17.26	17.26	33.410	24.234	368.8	.111	5.64	102.7							30
1	31	17.26	17.26	33.410	24.235	368.7	.114	5.64	102.7	1.8	.41	.1	.00	.10	.04	31
1	41	17.16	17.15	33.404	24.254	367.2	.151	5.68	103.2	1.8	.40	.1	.00	.14	.06	41
	50	ISL 15.54	15.53	33.294	24.542	340.0	.183	6.16	108.3							50
1	52	15.17	15.16	33.275	24.609	333.6	.189	6.25	109.1	1.9	.42	.1	.00	.22	.19	52
1	61	14.10	14.09	33.263	24.826	313.1	.218	6.26	106.9	2.0	.44	.1	.00	.36	.31	61
1	71	13.15	13.14	33.205	24.975	299.0	.249	6.12	102.4	2.5	.48	.3	.04	.32	.30	71
	75	ISL 12.94	12.93	33.211	25.021	294.7	.261	6.01	100.2							76
1	87	12.53	12.53				.295	5.66	93.6	4.0	.63	3.9	.15	.16	.26	87
	100	ISL 11.83	11.82	33.302	25.305	268.3	.332	5.22	85.0							101
1	102	11.75	11.73	33.308	25.325	266.3	.336	5.17	84.1	6.8	.89	8.7	.02	.10	.18	102
1	122	11.03	11.01	33.504	25.608	239.8	.389	4.69	75.2	11.4	1.14	13.1	.01	.05	.11	123
	125	ISL 10.93	10.91	33.524	25.643	236.6	.395	4.61	73.7							126
1	148	10.01	9.99	33.691	25.931	209.4	.447	3.84	60.3	19.8	1.54	20.2	.01	.01	.03	149
	150	ISL 9.95	9.94	33.704	25.951	207.6	.450	3.78	59.3							151
1	179	9.11	9.10	33.880	26.227	181.8	.507	3.03	46.7	29.1	1.88	25.4	.00			180
	200	ISL 8.71	8.69	33.941	26.337	171.6	.544	3.06	46.8							201
1	210	8.57	8.55	33.959	26.374	168.2	.561	3.08	46.9	32.7	1.97	26.3	.00			211
1	242	8.28	8.25	34.029	26.474	159.2	.613	2.60	39.3	38.1	2.19	28.8	.00			243
	250	ISL 8.19	8.17	34.045	26.500	157.0	.626	2.48	37.5							252
1	283	7.83	7.80	34.096	26.594	148.3	.677	2.04	30.6	45.7	2.40	31.6	.00			285
	300	ISL 7.63	7.60	34.112	26.636	144.6	.701	1.84	27.4							302
1	345	7.07	7.04	34.138	26.734	135.6	.764	1.37	20.2	57.2	2.74	35.4	.00			347
	400	ISL 6.42	6.39	34.151	26.832	126.7	.837	1.01	14.6							403
1	422	6.20	6.16	34.158	26.867	123.5	.865	.89	12.8	70.8	2.97	39.0	.00			425
1	499	5.83	5.79	34.247	26.984	113.1	.955	.46	6.6	81.1	3.19	41.0	.00			502
	500	ISL 5.83	5.78	34.248	26.986	113.0	.956	.46	6.5							504
1	574	5.46	5.41	34.312	27.082	104.4	1.037	.27	3.8	90.1	3.32	42.4	.00			578

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 80

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AKT	TYPE	
31 10.7 N		120 55.5 W		03/11/85	1331 GMT	3880 M	310 06 KT				1015.7 MB	16.2 C	14.9 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN H.T	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
	0	ISL	17.36	17.36	33.331	24.149	375.8	.000	5.58	101.7						0
1	1		17*36	17.36	33.331	24.149	375.9	.004	5.58	101.7	2.0	.47	.2	.00	.08	.03
	10	ISL	17.37	17.37	33.330	24.147	376.3	.038	5.61	102.3						10
1	11		17.37	17.37	33.330	24.147	376.4	.041	5.61	102.3	1.8	.43	.2	.00	.08	.03
	20	ISL	17.31	17.31	33.324	24.156	375.9	.075	5.63	102.5						20
1	22		17.30	17.30	33.322	24.158	375.7	.082	5.63	102.5	1.8	.42	.1	.00	.08	.04
	30	ISL	17.2ft	17.28	33.321	24.162	375.7	.113	5.62	102.4						30
1	32		17.25	17.28	33.321	24.162	375.7	.120	5.62	102.3	1.7	.41	.1	.00	.09	.04
1	42		17.29	17.28	33.325	24.163	375.9	.157	5.60	102.0	1.7	.40	.1	.00	.10	.04
	50	ISL	16.98	16.97	33.318	24.232	369.6	.188	5.67	102.5						50
1	53		16.87	16.86	33.315	24.255	367.5	.198	5.69	102.7	1.6	.40	.1	.00	.14	.06
1	63		14.29	14.28	33.245	24.774	318.1	.232	6.23	106.8	1.8	.42	.1	.00	.25	.19
1	73		13.29	13.28	33.231	24.968	299.8	.263	6.10	102.4	2.2	.48	.4	.07	.39	.36
	75	ISL	13.17	13.16	33.252	25.008	296.1	.270	6.01	100.6						76
1	89		12.78	12.77	33.403	25.202	277.9	.309	5.41	90.0	4.4	.63	3.4	.19	.18	.21
	100	ISL	12.51	12.50	33.464	25.302	268.6	.340	5.20	86.1						101
1	104		12.39	12.38	33.479	25.336	265.4	.349	5.14	84.8	6.2	.77	6.5	.04	.13	.17
1	124		10.77	10.76	33.615	25.740	227.3	.401	4.20	67.0	13.0	1.14	13.9	.01	.05	.03
1	125	ISL	10.75	10.73	33.617	25.747	226.7	.402	4.19	66.8						126
1	150		9.1fc4	9.82	33.701	25.968	205.9	.457	3.96	61.9	19.2	1.45	19.0	.01	.02	.03
1	181		9.00	8.98	33.877	26.242	180.3	.516	3.10	47.6	29.2	1.88	25.5	.00		182
	200	ISL	8.65	8.62	33.964	26.366	168.9	.549	2.77	42.3						201
1	212		8.47	8.45	34.006	26.426	163.3	.569	2.61	39.7	36.0	2.12	28.4	.00		213
1	243		8.13	8.11	34.058	26.519	154.9	.618			41.0	2.30	30.2	.00		244
	250	ISL	8.05	8.03	34.071	26.540	153.0	.629	2.11	31.7						252
1	283		7.70	7.68	34.121	26.631	144.8	.679	1.72	25.7	49.1	2.54	32.9	.00		285
	300	ISL	7.55	7.52	34.140	26.669	141.4	.703	1.53	22.8						332
1	345		7.16	7.13	34.183	26.757	133.5	.765	1.07	15.8	59.0	2.82	36.0	.00		347
	400	ISL	6.75	6.71	34.232	26.854	125.0	.836	.67	9.8						403
1	422		6.59	6.55	34.249	26.888	121.9	.863	.56	8.2	70.0	3.08	38.7	.00		425
1	500		6.13	6.11				.955			78.5	3.19	40.0	.01		503
1	577		5.72	5.67	34.325	27.060	106.9	1.040	.28	4.0	87.0	3.31	41.6	.01		581

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 90

LATITUDE		LONGITUDE		DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 50.6 N		121 36.0 W		03/11/85	1930 GMT	4836 M		350	03 05	1	1016.8 MB	18.9 C	16.5 C				
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXY6EN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS	
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR	
	0	ISL	18.09	18.09	33.549	24.140	377.1	.000	5.53	102.4						0	
1	1		18.09	18.09	33.549	24.140	376.8	.004	5.53	102.4	2.8	.44	.2	.00	.11	.04	1
	10	ISL	17.99	17.99	33.548	24.165	374.7	.038	5.57	102.9							10
1	11		17.98	17.98	33.548	24.166	374.6	.041	5.57	102.9	2.5	.42	.1	.00	.12	.04	11
	20	ISL	17.98	17.98	33.550	24.168	374.7	.075	5.56	102.7							20
1	27		17.98	17.97	33.550	24.169	374.8	.101	5.5 5	102.5	2.4	.40	.1	.00	.16	.06	27
	30	ISL	17.74	17.74	33.517	24.202	371.8	.112	5.69	104.7							30
1	42		16.21	16.20	33.337	24.424	351.0	.155	6.26	111.6	2.6	.42	.1	.00	.26	.20	42
	50	ISL	14.37	14.36	33.186	24.711	323.8	.183	6.30	108.1							50
1	56		12.75	12.74	33.100	24.972	298.9	.207	6.33	105.0	3.0	.50	.1	.01	.57	.43	58
1	68		12.00	11.99	33.101	25.117	285.3	.236	5.98	97.6	3.7	.62	2.0	.20	.35	.39	68
	75	ISL	11.83	11.82	33.193	25.220	275.7	.256	5.68	92.5							76
1	79		11.80	11.79	33.251	25.271	270.9	.267	5.53	90.0	6.0	.82	6.4	.03	.16	.28	79
1	94		11.39	11.37	33.407	25.468	252.5	.306	4.99	80.6	9.3	1.04	10.9	.01	.08	.22	94
	100	ISL	11.13	11.12	33.463	25.558	244.1	.321	4.77	76.6							101
1	110		10.71	10.70	33.542	25.694	231.3	.344	4.44	70.7	14.2	1.31	15.5	.01	.05	.09	110
1	124		10.04	10.02	33.665	25.906	211.4	.377	3.94	61.9	19.5	1.55	19.7	.01	.01	.04	125
	125	ISL	10.02	10.01	33.667	25.910	211.0	.378	3.93	61.7							126
1	150		9.58	9.56	33.746	26.047	198.4	.430	3.60	56.0	23.4	1.69	22.1	.00	.00	.03	151
1	171		9.10	9.08	33.873	26.223	181.9	.470	3.07	47.3	28.9	1.93	25.4	.00	.00	.03	172
1	192		8.83	8.81	33.965	26.338	171.4	.507	2.72	41.7	33.4	2.09	27.3	.01			193
	200	ISL	8.67	8.64	33.983	26.378	167.7	.520	2.71	41.4							201
1	212		8.42	8.39	34.002	26.431	162.8	.540	2.70	41.0	36.6	2.15	28.4	.00			213
1	243		8.05	8.02	34.050	26.524	154.3	.589	2.40	36.1	41.4	2.28	30.1	.00			244
	250	ISL	7.94	7.91	34.058	26.548	152.2	.600	2.32	34.8							252
1	284		7.40	7.37	34.089	26.650	142.9	.651	1.91	28.3	50.6	2.51	33.0	.01			286
	300	ISL	7.18	7.15	34.101	26.690	139.2	.673	1.71	25.2							302
1	346		6.64	6.61	34.132	26.788	130.2	.735	1.19	17.3	63.0	2.82	37.2	.00			348
	400	ISL	6.24	6.21	34.159	26.862	123.6	.803	.88	12.7							403
1	423		6.10	6.06	34.169	26.888	121.4	.832	.80	11.5	74.0	3.03	39.8	.00			426
	500	ISL	5.50	5.46	34.195	26.983	112.9	.922	.58	8.3							504
1	502		5.49	5.45	34.195	26.985	112.7	.923	.58	8.2	85.2	3.16	41.9	.00			505
1	579		5.28	5.23	34.276	27.075	104.9	1.008	.35	4.9	92.0	3.26	42.9	.00			583

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	ANT	TYPE	30	30.5
N 122 15.7 W	04/11/85	0132 GMT	3924 M	090 03 KT	090 04 05	1	1014.4 MB	17.8 C	15.7 C	2/8	ST				
CAST DEPTH	TEMP	POT T/FMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0	18.31	18.31	33.457	24.016	388.5	.000	5.55	103.1	2.4	.44	.2	.00	.06	.02	0
1 10	17.46	17.46	33.388	24.170	374.2	.038	5.65	103.2	2.2	.42	.2	.00	.10	.04	10
1 20	ISL 17.38	17.38	33.383	24.185	373.2	.075	5.64	103.0							20
1 26	17.34	17.34	33.380	24.192	372.6	.098	5.64	102.8	2.0	.41	.2	.00	.13	.06	26
1 30	ISL 17.34	17.34	33.381	24.194	372.6	.113	5.63	102.7							30
1 36	17.34	17.34	33.382	24.194	372.7	.135	5.63	102.6	1.9	.41	.2	.00	.15	.07	36
1 47	17.28	17.27	33.379	24.207	371.9	.175	5.65	102.9	1.8	.39	.2	.00	.21	.10	47
1 50	ISL 16.80	16.79	33.383	24.323	361.0	.187	5.81	104.8							50
1 57	15.62	15.62	33.398	24.603	334.4	.211	6.15	108.4	2.2	.38	.2	.00	.15	.10	57
1 73	14.32	14.31	33.369	24.864	309.8	.262	6.04	103.7	2.4	.40	.2	.00	.17	.25	73
1 75	ISL 14.14	14.13	33.354	24.890	307.5	.269	6.03	103.1							76
1 89	13.20	13.19	33.295	25.035	293.9	.310	5.89	98.7	2.6	.47	.5	.10	.14	.26	89
1 100	ISL 12.71	12.70	33.374	25.194	279.0	.343	5.55	92.2							101
1 104	12.57	12.55	33.407	25.247	273.9	.353	5.43	89.9	4.6	.69	4.7	.04	.09	.19	104
1 124	11.40	11.39	33.511	25.547	245.8	.407	4.84	78.2	9.3	.98	10.5	.01	.05	.11	125
1 125	ISL 11.37	11.36	33.513	25.554	245.1	.408	4.82	77.9							126
1 150	10.14	10.13	33.628	25.860	216.3	.467	4.17	65.6	16.9	1.36	17.3	.00	.02	.04	151
1 171	9.58	9.56	33.757	26.056	198.0	.510	3.87	60.2	21.6	1.55	20.2	.00	.01	.02	172
1 192	9.02	9.00	33.840	26.210	183.6	.550	3.50	53.8	27.0	1.78	23.7	.00			193
1 200	ISL 8.84	8.82	33.871	26.263	178.6	.564	3.41	52.2							201
1 212	8.60	8.58	33.914	26.334	172.1	.585	3.31	50.4	31.0	1.91	25.5	.00			213
1 243	8.18	8.15	33.976	26.447	161.7	.636	3.14	47.4	35.7	2.02	27.2	.00			244
1 250	ISL 8.05	8.03	33.986	26.473	159.3	.648	3.05	45.9							252
1 284	7.47	7.44	34.021	26.586	148.9	.701	2.54	37.7	44.8	2.27	30.8	.00			286
1 300	ISL 7.27	7.24	34.033	26.624	145.4	.724	2.32	34.3							302
1 346	6.78	6.75	34.060	26.713	137.4	.789	1.73	25.3	56.8	2.62	35.3	.00			348
1 400	ISL 6.33	6.29	34.088	26.796	130.0	.861	1.27	18.4							403
1 422	6.17	6.13	34.101	26.826	127.3	.890	1.12	16.1	68.3	2.90	38.7	.00			425
1 500	5.67	5.63	34.170	26.943	116.8	.984	.64	9.1	80.7	3.09	41.1	.00			503
1 574	5.18	5.13	34.240	27.057	106.4	1.067	.39	5.5	92.5	3.25	42.9	.00			578

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE		
30 10.4	122 55.7 U	04/11/85	0727 GMT	4052 M	270 03 KT			1016.0 MB	17.9 C	14.8 C					
CAST DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
n	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	UG/L	D.BAR
1 0	18.99	18.99	33.802	24.108	379.7	.000	5.42	102.2	2.0	.35	.2	.00	.05	.02	0
1 10	18.99	18.98	33.799	24.109	380.1	.038	5.42	102.2	1.9	.35	.2	.00	.05	.02	10
1 20	ISL 18.99	18.99	33.803	24.111	380.3	.076	5.42	102.2							20
1 26	19.00	18.99	33.806	24.112	380.3	.098	5.42	102.2	1.9	.33	.2	.00	.05	.03	26
1 30	ISL 19.00	18.99	33.808	24.113	380.3	.114	5.42	102.3							30
1 37	19.00	19.00	33.812	24.116	380.4	.140	5.43	102.4	1.9	.34	.2	.00	.05	.03	37
1 47	19.01	19.01	33.813	24.114	380.9	.178	5.42	102.3	2.0	.32	.2	.00	.05	.02	47
1 50	ISL 19.01	19.00	33.814	24.117	380.8	.190	5.42	102.3							50
1 58	18.99	18.98	33.815	24.123	380.5	.220	5.43	102.4	2.0	.32	.2	.00	.06	.02	58
1 74	15.60	15.59	33.554	24.728	323.0	.276	6.03	106.3	2.0	.34	.2	.00	.10	.09	74
1 75	ISL 15.39	15.38	33.527	24.754	320.5	.280	6.03	105.9							76
1 89	13.76	13.77	33.336	24.949	302.1	.323	6.03	102.3	2.1	*39	.2	.00	.15	.15	89
1 100	ISL 13.85	13.83	33.497	25.062	291.8	.356	5.78	98.4							101
1 105	13.87	13.86	33.552	25.098	288.4	.370	5.66	96.4	2.9	.43	.8	.12	.14	.21	105
1 125	14.46	14.44	33.934	25.272	272.7	.428	5.28	91.2	3.9	.49	2.9	.04	.22	.08	126
1 150	ISL 12.15	12.13	33.679	25.540	247.3	.492	4.95	81.3							151
1 151	11.99	11.97	33.662	25.555	245.8	.495	4.93	80.7	7.8	.83	8.4	.02	.05	.13	152
1 171	11.05	11.03	33.730	25.782	224.4	.542	4.67	75.0	11.8	1.04	12.4	.01	.02	.06	172
1 192	9.99	9.97	33.747	25.979	205.9	.587	4.18	65.6	18.1	1.36	17.5	.01			193
1 200	ISL 9.74	9.72	33.780	26.047	199.5	.603	4.08	63.6							201
1 214	9.37	9.34	33.848	26.162	188.8	.630	3.92	60.7	23.1	1.56	20.7	.00			215
1 243	8.58	8.55	33.960	26.374	168.8	.682	3.44	52.4	31.6	1.84	25.2	.00			244
1 250	ISL 8.44	8.41	33.975	26.407	165.7	.694	3.39	51.5							252
1 284	7.90	7.87	34.012	26.517	155.6	.747	3.21	48.1	38.3	2.02	27.3	.00			285
1 300	ISL 7.62	7.59	34.022	26.566	151.2	.773	2.97	44.2							302
1 345	6.95	6.91	34.042	26.676	141.0	.839	2.19	32.1	52.6	2.42	33.3	.00			347
1 400	ISL 6.36	6.33	34.088	26.791	130.5	.913	1.40	20.3							403
1 422	6.18	6.14	34.109	26.830	126.9	.941	1.15	16.6	68.5	2.84	38.5	.00			424
1 499	5.64	5.60	34.185	26.958	115.3	1.035	.61	8.7	81.8	3.09	41.4	.00			502
1 500	ISL 5.64	5.59	34.187	26.960	115.1	1.036	.60	8.6							504
1 577	5.33	5.29	34.269	27.063	106.1	1.121	.36	5.1	91.3	3.23	42.6	.00			581

LATITUDE		LONGITUDE	OAY/MO/YR	MESSENGER	BOTTOM		WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD	AMT	TYPE	
29 50.9 N		123 35.1 W	04/11/85	1322 GMT	4014 M	310 03 KT					1017.4 MB	18.0 C	15.5 C			
CAST	DEPTH	TEMP	POT TEMP	SALINITY	SIGMA	SVA	DYN HT	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	PRESS
	M	DEG C	DEG C		THETA			ML/L	PCT	UM/L	UM/L	UM/L	UM/L	UG/L	US/L	D.BAR
1	0	19.21	19.21	33.852	24.091	381.4	.000	5.37	101.7	2.4	.36	.2	.00	.05	.02	0
1	10	19.20	19.20	33.847	24.091	381.8	.038	5.37	101.7	2.2	.34	.2	.00	.05	.02	10
	20	ISL 19.21	19.21	33.849	24.089	382.3	.076	5.39	102.2							20
1	27	19.22	19.22	33.850	24.088	382.6	.103	5.40	102.3	2.1	.34	.3	.00	.05	.02	27
	30	ISL 19.22	19.21	33.849	24.089	382.7	.115	5.39	102.1							30
1	36	19.21	19.20	33.847	24.090	382.8	.137	5.37	101.7	2.0	.32	.2	.00	.05	.02	36
1	47	19.21	19.20	33.843	24.088	383.4	.179	5.38	101.9	2.0	.32	.2	.00	.06	.02	47
	50	ISL 19.12	19.11	33.842	24.109	381.6	.191	5.40	102.1							50
1	57	18.94	18.93	33.840	24.153	377.5	.217	5.47	103.1	2.1	.31	.1	.00	.09	.03	57
1	73	16.63	16.62	33.767	24.658	329.8	.273	5.89	106.1	2.1	.29	.1	.00	.10	.09	73
	75	ISL 16.46	16.45	33.769	24.699	326.2	.281	5.88	105.6							76
1	89	15.85	15.84	33.779	24.847	312.2	.324	5.81	103.1	2.2	.30	.2	.00	.12	.13	89
	100	ISL 15.62	15.60	33.846	24.951	302.7	.359	5.71	101.0							101
1	104	15.60	15.58	33.879	24.980	299.9	.370	5.68	100.3	2.4	.31	.1	.03	.16	.16	104
1	125	15.94	15.92	34.207	25.156	284.0	.431	5.47	97.5	2.7	.29	.3	.19	.14	.19	125
1	149	15.07	15.05	34.162	25.317	269.3	.500	5.20	91.0	4.2	.45	2.8	.02	.06	.11	150
	150	ISL 15.00	14.98	34.152	25.324	268.6	.502	5.19	90.8							151
1	176	12.55	12.53	33.830	25.580	244.1	.554	4.89	81.1	7.6	.73	7.8	.01	.04	.05	171
1	191	11 .00	10.98	33.730	25.791	224.1	.603	4.59	73.6	12.4	1.04	12.6	.01			192
	200	ISL 10.59	10.57	33.744	25.875	216.2	.622	4.54	72.2							201
1	211	10.17	10.15	33.784	25.978	206.5	.645	4.48	70.6	16.0	1.21	15.6	.00			212
1	242	9.10	9.07	33.922	26.263	179.6	.705	4.00	61.6	24.7	1.54	21.2	.00			243
	250	ISL 8.88	8.85	33.944	26.315	174.7	.719	3.93	60.2							252
1	284	8.12	8.09	34.001	26.477	159.6	.775	3.63	54.7	34.1	1.81	25.2	.00			285
	300	ISL 7.82	7.79	34.016	26.532	154.5	.801	3.34	49.9							302
1	345	7.13	7.10	34.034	26.644	144.2	.869	2.45	36.1	49.3	2.28	31.8	.00			347
	400	ISL 6.45	6.41	34.057	26.755	133.9	.945	1.71	24.8							403
1	422	6.24	6.20	34.071	26.793	130.4	.973	1.47	21.2	65.0	2.70	37.3	.00			424
1	500	5.52	5.78	34.182	26.934	117.8	1.071	.70	10.0	78.3	3.01	40.5	.00			503
1	577	5.43	5.38	34.245	27.033	109.0	1.158	.44	6.2	88.2	3.19	42.4	.00			581

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 77 60

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI DEPTH		INCUBATION TIME			LAN		CIVIL TWILIGHT		INTEGRATED VALUE	
34 42.8 N		121 33.3 W		11/10/85		1831 GMT		11 m		1134 - 1730 PST			1138 PST		1716 PST		353.7 mg C/m2	
DEPTH		TEMP	SALINITY	SIGMA	DISS O2	OXY	SI03	P04	N03	N02	CHL	PHAE0	LIGHT	UPTAKE		(MGC/M3)		
m		DBG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	Ug/1	X	1	2	MEAN	DARK	
1		14.61	33.548	24.938	5.97	103.2	3.6	0.46	0.9	0.09	1.14	0.48	92	8.6	8.8	8.7	0.18	
8		14.61	33.548	24.938	5.85	101.1	3.4	0.46	0.9	0.09	1.09	0.39	33	25.2	20.1	22.7	0.18	
11		14.59	33.548	24.941	5.86	101.3	3.3	0.46	0.8	0.09	1.07	0.45	22	15.7	15.9	15.8	0.18	
15		14.61	33.548	24.939	5.85	101.1	3.2	0.44	0.7	0.09	1.09	0.44	12.5	11.2	11.8	11.5	0.21	
27		14.59	33.546	24.941	5.87	101.4	3.2	0.46	0.9	0.10	1.08	0.46	2.7	4.0	4.4	4.2	0.19	
39		14.57	33.545	24.944	5.88	101.6	3.3	0.46	0.9	0.09	1.11	0.48	0.5	0.41	0.71	0.56	0.16	

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 77 100

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI DEPTH		INCUBATION TIME		LAN		CIVIL TWILIGHT		INTEGRATED VALUE	
33 23.7 N		124 20.7 W		11/11/85		1832 GMT		15 m		1128 - 1750 PST		1127 PST		1719 PST		59.0 mg C/m2	
DEPTH		TEMP	SALINITY	SIGMA	DISS O2	OXY	SI03	P04	N03	N02	CHL	PHAE0	LIGHT	UPTAKE		(MGC/M3)	
m		DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	%	1	2	MEAN	DARK
1		15.22	33.143	24.494	5.86	102.3	2.3	0.40	0.1	0.00	0.22	0.06	92	0.18	0.14	0.16	0.12
11		15.23	33.142	24.490	5.86	102.3	2.2	0.40	0.1	0.00	0.21	0.06	33	1.9	2.0	1.9	0.11
15		15.23	33.142	24.492	5.85	102.1	2.4	0.39	0.1	0.00	0.21	0.08	22	1.6	1.9	1.8	0.12
21		15.24	33.141	24.488	5.85	102.2	2.0	0.39	0.1	0.00	0.22	0.07	12.5	1.8	1.8	1.8	0.13
36		15.23	33.142	24.492	5.86	102.3	2.0	0.38	0.1	0.00	0.22	0.08	2.7	0.85	0.91	0.88	0.12
53		15.11	33.160	24.532	5.89	102.6	2.7	0.36	0.1	0.00	0.30	0.10	0.5	0.49	0.15	0.32	0.10

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 80 65

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI DEPTH		INCUBATION TIME		LAN		CIVIL TWILIGHT		INTEGRATED VALUE	
33 59.8 N		121 28.5 W		11/13/85		1844 GMT		20 m		1145 - 1730 PST		1149 PST		1727 PST		192.3 mg C/m2	
DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 mL/L	OXY PCT	SI03 um/1	P04 um/1	N03 um/1	N02 um/1	CHL ug/1	PHAE0 ug/1	LIGHT %	UPTAKE		(MGC/M3)		
													1	2	MEAN	DARK	
1	14.82	33.360	24.748	5.87	101.8	2.7	0.43	0.2	0.00	0.37	0.15	92	1.1	1.1	1.1	0.14	
15	14.76	33.359	24.759	5.92	102.5	2.6	0.43	0.2	0.00	0.37	0.18	33	4.8	5.3	5.1	0.17	
21	14.76	33.358	24.760	5.94	102.9	2.6	0.43	0.2	0.00	0.38	0.19	22	4.2	5.1	4.6	0.16	
28	14.77	33.358	24.758	6.01	104.1	2.6	0.43	0.1	0.00	0.39	0.18	12.5	5.7	5.1	5.4	0.14	
49	11.32	33.044	25.197	5.96	95.9	4.2	0.77	4.3	0.04	0.27	0.33	2.7	1.3	1.1	1.2	0.12	
72	10.70	33.375	25.565	4.87	77.5	10.6	1.21	12.8	0.01	0.07	0.10	0.5	0.05	0.06	0.05	0.11	

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 80 110

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		SECCHI DEPTH		INCUBATION TIME		LAN		CIVIL TWILIGHT		INTEGRATED VALUE	
32 30.8 N		124 37.9 W		11/12/85		1855 GMT		30m		1135 - 1741 PST		1135 PST		1744 PST		88.6 mg C/m2	
DEPTH		TEMP	SALINITY	SIGMA	DISS O2	OXY	SI03	P04	N03	N02	CHL	PHAE0	LIGHT	UPTAKE (MGC/M3)			
m		DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	X	1	2	MEAN	DARK
1		17.03	33.431	24.303	5.80	105.1	1.5	0.28	0.2	0.00	0.13	0.04	92	0.1	0.22	0.16	0.11
22		17.03	33.430	24.304	5.66	102.6	1.8	0.26	0.1	0.00	0.12	0.04	33	1.1	1.1	1.1	0.10
30		17.02	33.430	24.307	5.65	102.4	1.9	0.26	0.1	0.00	0.12	0.04	22	1.4	1.6	1.5	0.13
41		17.04	33.429	24.302	5.65	102.4	1.8	0.25	0.1	0.00	0.12	0.05	12.5	1.1	1.1	1.1	0.13
72		14.75	33.291	24.712	6.22	107.6	2.2	0.26	0.1	0.00	0.22	0.18	2.7	0.95	0.97	0.96	0.12
106		12.61	33.276	25.137	5.77	95.5	3.4	0.42	1.7	0.14	0.13	0.17	0.5	0.12	0.13	0.13	0.08

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION- 83 42

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED. VMUE 34 10.5
 N 119 30.7 W 11/09/85 1925 GMT 23 m 1155 - 1740 PST 1142 PST 1727 PST 330.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 mL/L	OXY PCT	SI03 um/1	PO4 um/1	NO3 um/1	NO2 um/1	CHL ug/1	PHAE0 ug/1	LIGHT %	I	UPTAKE 2	(MGC/M3) MEAN	DARK
0	17.48	33.615	24.338	5.75	105.3	2.4	0.37	0.2	0.00	0.36	0.12	92	6.9	7.5	7.2	0.17
16	16.67	33.584	24.506	5.79	104.3	2.6	0.37	0.3	0.01	0.53	0.19	33	12.7	11.4	12.1	0.17
23	16.24	33.524	24.560	5.95	106.2	2.7	0.38	0.3	0.01	0.51	0.26	22	5.7	5.4	5.6	0.15
31	15.77	33.472	24.627	6.09	107.7	2.7	0.37	0.1	0.00	0.50	0.23	12.5	4.3	3.9	4.1	0.14
55	12.26	33.459	25.344	5.17	85.1	7.6	0.90	8.1	0.12	0.38	0.35	2.7	0.97	1.0	1.0	0.10
80	11.26	33.599	25.640	4.23	68.2	14.0	1.28	15.0	0.02	0.09	0.17	0.5	0.12	0.08	0.10	0.08

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 87 35

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE 33 49.2
 N 118 37.9 W 11/07/85 1819 GMT 28 m 1135 - 1730 PST 1139 PST 1727 PST 191.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 mL/L	OXY PCT	SI03 um/1	PO4 um/1	NO3 um/1	NO2 um/1	CHL ug/1	PHAE0 ug/1	LIGHT %	1	UPTAKE 2	(MGC/M3) MEAN	DARK
0	18.73	33.655	24.062	5.64	105.8	1.5	0.32	0.1	0.00	0.22	0.06	92	3.4	3.8	3.6	0.20
19	18.54	33.653	24.108	5.66	105.8	1.5	0.31	0.1	0.00	0.30	0.09	33	4.2	3.9	4.1	0.19
27	16.34	33.464	24.491	6.07	108.6	2.2	0.42	0.1	0.01	0.57	0.26	22	4.0	5.1	4.5	0.17
37	13.41	33.314	25.007	6.34	106.8	2.8	0.46	0.1	0.01	0.55	0.36	12.5	2.1	2.2	2.1	0.15
66	11.87	33.483	25.437	4.90	80.0	8.1	1.00	10.0	0.03	0.22	0.37	2.7	0.57	0.64	0.61	0.10
98	10.65	33.667	25.802	3.81	60.6	16.4	1.46	18.0	0.01	0.06	0.11	0.5	0.13	0.09	0.11	0.09

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 87 70

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE 32 39.4
 N 121 02.7 W 11/08/85 1812 GMT 17 m 1138 - 1736 PST 1140 PST 1736 PST 155.0 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 mL/L	OXY PCT	SI03 um/1	PO4 um/1	NO3 um/1	NO2 um/1	CHL ug/1	PHAE0 ug/1	LIGHT %	1	UPTAKE 2	MEAN	DARK
1	16.65	33.625	24.543	5.66	102.0	3.0	0.39	0.0	0.00	0.33	0.12	92	1.3	1.3	1.3	0.19
12	16.65	33.623	24.540	5.68	102.3	2.5	0.37	0.0	0.00	0.32	0.14	33	4.4	5.5	4.9	0.19
18	16.63	33.622	24.545	5.67	102.1	2.8	0.36	0.0	0.00	0.32	0.15	22	4.0	4.3	4.2	0.18
24	16.64	33.622	24.543	5.67	102.1	2.2	0.35	0.0	0.00	0.33	0.13	12.5	3.1	3.2	3.1	0.17
41	15.45	33.550	24.757	5.85	102.9	2.2	0.38	0.0	0.00	0.58	0.38	2.7	2.4	2.3	2.3	0.40
61	12.67	33.456	25.265	5.01	83.1	7.9	0.92	7.8	0.13	0.27	0.37	0.5	0.15	0.16	0.15	0.12

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 90 80

LATITUDE LONGITUDE MO/DAY/YR MESSENGER SECCHI DEPTH INCUBATION TIME LAN CIVIL TWILIGHT INTEGRATED VALUE
 31 45.0 N 121 19.8 W 11/05/85 1842 GMT 26 m 1157 - 1738 PST 1149 PST 1736 PST 57.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 mL/L	OXY PCT	SI03 um/1	PO4 um/1	NO3 um/1	NO2 um/1	CHL ug/1	PHAE0 ug/1	LIGHT %	1	UPTAK 2	(MGC/M MEAN	DARK
0	17.13	33.441	24.289	5.66	102.8	2.1	0.42	0.2	0.00	0.10	0.03	92	0.21	0.18	0.19	0.10
19	17.14	33.438	24.283	5.61	101.9	2.0	0.37	0.1	0.00	0.10	0.03	33	1.2	1.1	1.1	0.10
26	17.14	33.439	24.286	5.60	101.7	2.0	0.37	0.1	0.00	0.10	0.03	22	0.92	0.86	0.89	0.10
35	17.14	33.440	24.286	5.61	101.9	1.9	0.36	0.1	0.00	0.18	0.04	12.5	0.78	0.78	0.78	0.10
62	16.81	33.405	24.339	5.67	102.3	1.8	0.36	0.2	0.00	0.18	0.08	2.7	0.41	0.70	0.55	0.09
92	12.83	33.174	25.016	6.08	101.1	2.6	0.47	0.6	0.09	0.33	0.30	0.5	0.30	0.26	0.28	0.09

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 90 120

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER	SECCHI DEPTH		INCUBATION TIME					LAN	CIVIL TWILIGHT		INTEGRATED VALUE	
30 25.3 N		124 00.1 W		11/04/85		1856 GMT	50 m		1155 - 1753 PST					1200 PST	1750 PST		82.3 mg C/m2	
DEPT	TEMP	SALINIT	SIGMA	DISS	OXY	SI03	P04	N03	N02	CHL	PHAE0	LIGHT	UPTAK		(MGC/M		VALUE	
H	DEG C	Y	THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	%	1	2	3)	MEAN	DARK	
0	18.69	33.627	24.051	5.45	102.1	2.1	0.40	0.2	0.00	0.07	0.03	92	0.80	0.78	0.79	0.11		
34	18.71	33.627	24.047	5.45	102.1	2.0	0.37	0.2	0.00	0.08	0.02	33	0.86	0.95	0.90	0.09		
47	18.69	33.630	24.054	5.43	101.7	2.0	0.37	0.2	0.00	0.07	0.02	22	0.86	0.92	0.89	0.11		
67	16.18	33.450	24.519	6.14	109.4	2.0	0.35	0.2	0.00	0.11	0.06	12.5	0.54	0.58	0.56	0.16		
119	12.99	33.464	25.209	5.53	92.4	3.9	0.55	2.7	0.11	0.20	0.20	2.7	0.23	0.25	0.24	0.10		
174	10.48	33.734	25.885	4.61	73.1	13.8	1.12	14.3	0.01	0.02	0.03	0.5	0*	0*	0*	0.08		

* Dark uptake exceeded light uptake.

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 50

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER	SECCHI DEPTH		INCUBATION TIME					LAN	CIVIL TWILIGHT		INTEGRATED VALUE	
32 11.0 N		118 53.0 W		11/02/85		1925 GMT	24 m		1202 - 1734 PST					1139 PST	1734 PST		155.2 mg C/m2	
DEPT	TEMP	SALINIT	SIGMA	DISS	OXY	SI03	P04	N03	N02	CHL	PHAE0	LIGHT	UPTAK		(MGC/M		VALUE	
m	DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	%	1	2	3)	MEAN	DARK	
0	17.82	33.662	24.292	5.58	102.9	2.1	0.39	0.0	0.00	0.18	0.05	92	2.3	1.7	2.0	0.16		
16	17.23	33.660	24.433	5.62	102.4	1.9	0.36	0.0	0.00	0.18	0.07	33	1.5	2.8	2.2	0.18		
24	17.13	33.654	24.452	5.61	102.0	1.8	0.37	0.0	0.00	0.21	0.09	22	1.6	1.6	1.6	0.15		
33	16.10	33.559	24.620	5.80	103.3	1.8	0.38	0.0	0.01	0.47	0.23	12.5	3.2	2.7	2.9	0.12		
57	12.61	33.267	25.129	5.64	93.4	4.6	0.65	3.3	0.25	0.44	0.50	2.7	1.7	1.6	1.7	0.14		
84	11.69	33.531	25.509	4.62	75.1	11.3	1.09	12.2	0.05	0.11	0.28	0.5	1.1	0.11	0.59	0.10		

RV NEW HORIZON

CALCOFI CRUISE 8511

STATION 93 90

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER	SECCHI DEPTH		INCUBATION TIME					LAN	CIVIL TWILIGHT		INTEGRATED VALUE	
30 50.6 N		121 35.7 W		11/03/85		1856 GMT	33 m		1150 - 1745 PST					1150 PST	1745 PST		113.0 mg C/m2	
DEPT	TEMP	SALINIT	SIGMA	DISS	OXY	SI03	P04	N03	N02	CHL	PHAE0	LIGHT	UPTAK		(MGC/M		VALUE	
m	DEG C		THETA	mL/L	PCT	um/1	um/1	um/1	um/1	ug/1	ug/1	%	1	2	3)	MEAN	DARK	
0	18.07	33.549	24.145	5.52	102.2	2.0	0.48	0.1	0.00	0.12	0.04	92	0.66	0.70	0.68	0.16		
23	17.99	33.550	24.166	5.54	102.4	1.9	0.44	0.1	0.00	0.13	0.04	33	1.8	1.9	1.8	0.16		
32	17.96	33.544	24.171	5.54	102.3	1.6	0.44	0.1	0.00	0.15	0.05	22	1.5	1.8	1.7	0.16		
44	17.76	33.529	24.208	5.59	102.8	1.5	0.43	0.1	0.00	0.21	0.09	12.5	1.9	1.8	1.9	0.12		
78	11.78	33.264	25.284	5.50	89.5	5.6	0.80	6.5	0.04	0.15	0.26	2.7	0.38	0.42	0.40	0.09		
116	10.39	33.592	25.789	4.23	66.9	15.6	1.36	17.2	0.01	0.03	0.05	0.5	0.02	0.02	0.02	0.08		

Secchi Disk Observations

CalCOFI Cruise 8511

Line	Sta.	Day	Mo	Local Time (+8: PST)	Depth (m)	Weather	Clouds Type/Amt
77	60	10	11	1026	11	1	SC 3/8
77	70	10	11	1505	15	1	sc 7/8
77	100	11	11	1027	15	1	SC 3/8
77	110	11	11	1428	14	1	cu 5/8
80	55	13	11	1624	14	0	0 0
80	60	13	11	1248	14	0	0 0
80	65	13	11	1039	20	0	0 0
80	70	13	11	0640	16	1	cu 1/8
80	100	12	11	1452	30	1	sc 6/8
80	110	12	11	1050	30	1	sc 7/8
82	46	9	11	1658	8	1	- -
83	40.6	9	11	1330	14	1	sc 1/8
83	42	9	11	1120	23	1	ST 7/8
83	70	8	11	1426	11	1	sc 7/8
87	35	7	11	1014	28	1	ST 7/8
87	40	7	11	1217	32	1	cc 1/8
87	45	7	11	1613	17	1	cc 2/8
87	70	8	11	1007	17	1	sc 6/8
90	47	6	11	0555	30	1	sc 1/8
90	70	5	11	1543	13	1	sc 6/8
90	80	5	11	1037	26	1	sc 7/8
90	110	4	11	1632	34	2	sc 8/8
90	120	4	11	1051	50	2	sc 8/8
91	36	6	11	1606	18	0	0 0
93	26.7	1	11	1135	18	4	0 0
93	29	1	11	1343	19	4	0 0
93	30	1	11	1628	16	4	0 0
93	50	2	11	1120	24	0	0 0
93	55	2	11	1336	23	0	0 0
93	90	3	11	1051	33	1	ST 6/8
93	100	3	11	1659	33	1	ST 2/8
93.4	26.4	1	11	1100	9	-	- -

CalCOFI Cruise 8511

MACROZOOPLANKTON BIOMASS

Net Mesh Size: 0.505 mm

Line	Sta.	Position		Date Mo/Day	Time (GMT)		Water Volume Strained (m³)	Max. Tow Depth (m)	Volume per 1000 m³ Strained	
					Start	End			Total (cm³)	Small (cm³)
77	51	35	01.7N 120 55.8W	11/10	1025	1047	429	215	91	91
77	55	34	53.2N 121 12.1W	11/10	1405	1427	415	209	58	58
77	60	34	42.5N 121 33.2W	11/10	1840	1902	437	209	69	69
77	70	34	22.6N 122 14.5W	11/11	0010	0032	467	205	34	34
77	80	34	03.8N 122 57.4W	11/11	0615	0637	455	209	571	571
77	90	33	42.6N 123 38.7W	11/11	1150	1212	445	20	238	238
77	100	33	23.5N 124 20.0W	11/11	1705	1727	453	20	499	499
77	110	33	03.2N 125 01.6W	11/11	2340	0004	537	21	15	15
77	120	32	43.5N 125 42.5W	11/12	0512	0534	419	21	45	45
80	51	34	27.4N 120 31.3W	11/14	0425	0431	123	58	146	146
80	55	34	19.3N 120 49.4W	11/14	0135	0157	423	209	182	182
80	60	34	09.3N 121 09.3W	11/13	2155	2217	411	218	832	501
80	70	33	49.6N 121 50.3 W	11/13	1545	1607	442	207	580	580
80	80	33	29.6N 122 32.0W	11/13	1025	1047	416	220	539	539
80	90	33	09.1N 123 13.0W	11/13	0507	0529	429	211	681	681
80	100	32	48.7N 123 54.5W	11/12	2358	0020	448	207	256	29
80	110	32	29.8N 124 36.9W	11/12	1750	1812	480	209	192	33
80	120	32	08.8N 125 17.8W	11/12	1050	1115	548	268	44	44
82	46	34	15.9N 119 57.7W	11/10	0213	0235	436	210	57	57
83	40.6	34	13.5N 119 24.8W	11/9	2150	2153	51	23	40	40
83	42	34	10.9N 119 31.1W	11/9	2040	2052	230	106	30	30
83	51	33	52.5N 120 08.4W	11/9	1310	1320	221	85	27	27
83	60	33	34.7N 120 45.3W	11/9	0615	0637	468	212	64	53
83	70	33	14.5N 121 28.1W	11/8	2333	2355	354	220	1307	421
87	33	33	53.0N 118 29.9W	11/7	1450	1456	104	49	116	116
87	35	33	49.3N 118 38.0W	11/7	1710	1732	397	215	76	58
87	40	33	39.1N 118 58.0W	11/7	2155	2217	409	214	142	142
87	45	33	29.6N 119 20.3W	11/8	0155	0217	417	211	221	221
87	50	33	19.3N 119 40.2W	11/8	0433	0441	138	64	145	145
87	55	33	09.3N 120.00.5W	11/8	0750	0812	403	226	159	159
87	60	32	59.4N 120 21.5W	11/8	1125	1147	412	214	189	148
87	70	32	39.7N 121 02.6W	11/8	1650	1712	430	212	172	121
90	28	33	29.0N 117 46.1W	11/7	0925	0931	108	47	130	130
90	30	33	25.5N 117 54.2W	11/7	0730	0752	391	214	135	135
90	35	33	14.7N 118 15.3W	11/7	0347	0409	411	206	92	92
90	47	32	51.6N 119 03.8W	11/6	1510	1532	424	207	2028	2028
90	53	32	39.6N 119 29.2W	11/6	1040	1102	397	221	166	166
90	60	32	25.6N 119 57.9W	11/6	0600	0622	408	208	191	179
90	70	32	04.9N 120 38.8W	11/6	0045	0107	408	210	191	191
90	80	31	45.0N 121 20.1W	11/5	1855	1917	421	215	394	394
90	90	31	25.6N 122 00.3W	11/5	1255	1317	415	210	101	101
90	100	31	05.5N 122 40.0W	11/5	0710	0732	412	211	134	53
90	110	30	45.2N 123 19.9W	11/5	0135	0157	395	210	33	33
90	120	30	26.0N 124 00.1W	11/4	2015	2037	398	214	38	38
91	36	33	06.7N 118 15.5W	11/7	0110	0132	403	210	55	55
93	26.7	32	56.9N 117 18.5W	11/1	2012	2018	100	49	120	120
93	29	32	52.3N 117 28.3W	11/1	2245	2307	385	209	140	140
93	30	32	50.4N 117 32.6W	11/2	0135	0157	392	206	148	148
93	35	32	38.4N 117 53.3W	11/2	0600	0622	400	209	198	185
93	40	32	31.2N 118 13.6W	11/2	0945	1007	392	216	128	128
93	45	32	21.2N 118 33.3W	11/2	1400	1422	394	212	548	548
93	50	32	10.9N 118 53.3W	11/2	1755	1817	407	212	59	59
93	55	32	00.7N 119 14.2W	11/2	2305	2327	399	216	55	55
93	60	31	50.7N 119 34.5W	11/3	0245	0307	425	208	162	139
93	70	31	31.2N 120 15.6W	11/3	0805	0827	420	210	179	179
93	80	31	10.8N 120 55.6W	11/3	1400	1422	418	208	249	60
93	90	30	51.0N 121 36.3W	11/3	2000	2022	405	215	44	44
93	100	30	30.5N 122 15.9W	11/4	0235	0257	407	210	258	258
93	110	30	10.7N 122 55.7W	11/4	0800	0822	398	217	38	38
93	120	29	50.9N 123 35.2W	11/4	1350	1412	406	209	32	32

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