

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 77 60

LATITUDE 34 43.6 N LONGITUDE 121 33.2 W DAY/MO/YR 18/01/05 CAST TIME 1837 UTC SECCHI 12 m FOREL FOREL INCUBATION TIME 1215 - 1745 PST LAN 1217 PST CIVIL TWILIGHT 1746 PST INTEGRATED VALUE 785.3 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
2	14.32	33.007	24.581	6.03	103.3	2.8	0.25	0.4	0.03	1.96	0.55	77. A	23.6	20.6	22.1	0.21
8	14.25	33.009	24.598	6.04	103.3	2.9	0.24	0.4	0.03	2.09	0.57	36.	38.2	40.2	39.2	0.30
17	14.23	33.010	24.603	6.01	102.8	2.9	0.24	0.4	0.03	2.41	0.58	11.	29.9	30.2	30.0	0.19
25	14.21	33.013	24.610	5.98	102.2	2.9	0.26	0.5	0.03	2.90	0.47	4.1	13.0	13.6	13.3	0.16
33	13.95	33.101	24.732	5.58	94.9	3.4	0.41	2.2	0.22	0.76	0.40	1.5	1.6	1.7	1.7	0.08
40	13.43	33.158	24.882	5.35	90.0	4.6	0.55	4.2	0.27	0.33	0.28					
47	13.09	33.162	24.953	5.23	87.4	5.4	0.64	5.7	0.22	0.28	0.27	0.24	0.11	0.08	0.10	0.07

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 77 100

LATITUDE 33 23.0 N LONGITUDE 124 19.4 W DAY/MO/YR 17/01/05 CAST TIME 1817 UTC SECCHI 21 m FOREL FOREL INCUBATION TIME 1227 - 1759 PST LAN 1227 PST CIVIL TWILIGHT 1801 PST INTEGRATED VALUE 123.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
2	14.88	33.061	24.504	5.80	100.5	1.6	0.21	0.0	0.00	0.23	0.10	86. A	1.5	1.5	1.5	0.10
15	14.88	33.061	24.505	5.81	100.7	1.6	0.20	0.0	0.00	0.24	0.09	33.	2.7	2.7	2.7	0.07
30	14.80	33.055	24.518	5.81	100.5	1.5	0.21	0.0	0.00	0.29	0.12	11.	2.4	2.6	2.5	0.05
44	14.28	32.949	24.546	5.84	99.9	1.8	0.23	0.0	0.03	0.35	0.18	4.0	2.0	1.7	1.9	0.05
51	14.27	32.949	24.549	5.83	99.7	1.9	0.24	0.0	0.03	0.33	0.17					
57	14.28	32.964	24.558	5.84	99.9	1.9	0.24	0.0	0.04	0.33	0.19	1.6	0.62	0.53	0.58	0.10
68	13.99	32.972	24.625	5.88	100.0	1.9	0.24	0.0	0.03	0.29	0.16					
80	13.79	32.938	24.640	5.89	99.7	2.1	0.25	0.0	0.05	0.27	0.16	0.29	0.05	0.04	0.04	0.07

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 80 70

LATITUDE 33 49.1 N LONGITUDE 121 50.4 W DAY/MO/YR 16/01/05 CAST TIME 1752 UTC SECCHI 12 m FOREL FOREL INCUBATION TIME 1217 - 1755 PST LAN 1217 PST CIVIL TWILIGHT 1755 PST INTEGRATED VALUE 398.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
1	12.92	33.094	24.933	6.11	101.7	4.0	0.38	1.9	0.09	1.00	0.29	88. A	8.9	6.5	7.7	0.16
8	12.90	33.097	24.939	6.13	102.0	4.0	0.37	2.0	0.09	1.13	0.25	36.	21.0	21.2	21.1	0.21
13	12.81	33.188	25.028	6.10	101.4	5.1	0.44	3.2	0.13	1.02	0.31					
16	12.77	33.205	25.049	6.06	100.6	5.2	0.45	3.4	0.14	0.98	0.33	13.	13.7	14.0	13.9	0.16
25	12.77	33.207	25.051	6.00	99.6	5.3	0.47	3.7	0.16	1.04	0.36	4.1	7.8	8.0	7.9	0.11
32	12.75	33.213	25.059	5.93	98.4	5.4	0.50	4.0	0.17	0.75	0.38	1.7	2.0	2.4	2.2	0.07
39	12.74	33.221	25.068	5.88	97.6	5.5	0.51	4.2	0.18	0.53	0.33					
46	12.73	33.223	25.071	5.87	97.4	5.5	0.52	4.2	0.18	0.51	0.26	0.28	0.14	0.23	0.19	0.11

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 83 42

LATITUDE 34 10.9 N LONGITUDE 119 30.8 W DAY/MO/YR 15/01/05 CAST TIME 1750 UTC SECCHI 5 m FOREL FOREL INCUBATION TIME 1205 - 1738 PST LAN 1208 PST CIVIL TWILIGHT 1738 PST INTEGRATED VALUE 290.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
1	14.69	32.534	24.139	5.78	99.5	6.5	0.51	1.7	0.14	2.00	0.32	74. A	30.8	34.0	32.4	0.17
3	14.70	32.542	24.143	5.74	98.8	6.4	0.51	1.7	0.14	2.06	0.38	40.	55.5	46.2	50.8	0.21
7	14.72	32.564	24.156	5.71	98.3	6.2	0.44	1.7	0.14	1.53	0.29	12.	14.8	14.8	14.8	0.14
10	14.74	32.585	24.167	5.70	98.2	6.1	0.43	1.6	0.13	1.34	0.26	4.6	5.0	5.3	5.1	0.11
13	14.78	32.606	24.175	5.70	98.3	5.7	0.41	1.5	0.12	1.22	0.24	1.8	1.2	1.4	1.3	0.13
19	14.81	32.957	24.440	5.76	99.6	2.9	0.28	0.6	0.08	0.93	0.28	0.29	0.18	0.19	0.18	0.08

A) INCUBATION LIGHT INTENSITIES WERE 86, 37, 12, 4.0, 2.0, 0.0 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 83 70

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 14.8 N	121 26.7 W	14/01/05	1833 UTC	15 m		1215 - 1747 PST	1215 PST	1746 PST	340.3 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
2	13.42	33.071	24.816	5.96	100.3	3.2	0.34	1.2	0.09	0.92	0.15	81. A	5.2	4.5	4.8	0.10
10	13.36	33.070	24.827	5.96	100.1	3.1	0.34	1.2	0.09	0.98	0.21	36.	12.4	13.4	12.9	0.12
21	13.35	33.073	24.832	5.96	100.1	3.1	0.34	1.2	0.09	0.88	0.29	12.	10.1	11.0	10.5	0.12
32	13.34	33.070	24.832	5.94	99.7	3.1	0.34	1.3	0.09	0.77	0.28	3.8	6.2	6.2	6.2	0.09
40	12.60	33.109	25.008	5.49	90.8	5.7	0.60	5.4	0.12	0.36	0.19	1.7	1.2	1.0	1.1	0.06
48	11.78	33.158	25.201	5.03	81.8	8.4	0.86	9.6	0.08	0.22	0.09					
57	11.36	33.200	25.311	4.78	77.0	10.1	1.00	12.0	0.06	0.16	0.11	0.29	0.09	0.10	0.09	0.04

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 83 110

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 54.8 N	124 10.8 W	13/01/05	1748 UTC	25 m		1226 - 1755 PST	1226 PST	1758 PST	137.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
3	14.73	32.843	24.368	5.81	100.3	1.5	0.24	0.0	0.00	0.24	0.08	83. A	1.5	1.7	1.6	0.06
16	14.73	32.831	24.359	5.83	100.6	1.5	0.24	0.0	0.00	0.23	0.09	37.	3.1	3.3	3.2	0.05
25	14.72	32.831	24.362	5.82	100.4	1.5	0.24	0.0	0.00	0.23	0.09					
34	14.72	32.831	24.362	5.82	100.4	1.5	0.23	0.0	0.00	0.24	0.09	12.	2.6	2.3	2.4	0.04
43	14.72	32.831	24.362	5.82	100.4	1.5	0.23	0.0	0.00	0.23	0.10					
52	14.72	32.833	24.364	5.82	100.4	1.5	0.23	0.0	0.00	0.26	0.09	4.1	1.1	1.1	1.1	0.04
60	14.61	32.849	24.400	5.81	100.0	1.6	0.23	0.0	0.01	0.31	0.17					
66	14.46	32.864	24.444	5.82	99.9	1.7	0.24	0.0	0.02	0.30	0.16	1.7	0.53	0.46	0.49	0.03
77	14.30	32.871	24.483	5.85	100.1	1.7	0.25	0.0	0.02	0.29	0.16					
86	14.05	32.886	24.547	5.84	99.4	1.9	0.28	0.2	0.08	0.26	0.09					
96	13.24	32.920	24.738	5.81	97.2	2.5	0.38	1.5	0.11	0.23	0.14	0.28	0.07	0.08	0.07	0.03

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 87 50

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 19.3 N	119 39.9 W	11/01/05	1945 UTC	14 m		1210 - 1738 PST	1207 PST	1740 PST	202.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
1	14.66	33.117	24.594	5.80	100.1	2.1	0.27	0.4	0.04	0.72	0.32	52.	1.6	2.5	2.1	0.09
6	14.66	33.119	24.596	5.80	100.1	2.0	0.27	0.4	0.04	0.68	0.31					
10	14.65	33.118	24.598	5.80	100.1	2.0	0.26	0.4	0.04	0.71	0.37	33.	11.0	11.5	11.2	1.2
20	14.65	33.118	24.598	5.80	100.1	2.0	0.27	0.4	0.04	0.73	0.34	11.	7.2	8.6	7.9	0.08
29	14.61	33.122	24.610	5.77	99.5	2.2	0.27	0.5	0.04	0.69	0.33	4.2	3.8	4.0	3.9	0.08
37	14.40	33.140	24.668	5.64	96.8	2.7	0.34	1.6	0.06	0.46	0.26	1.7	1.0	0.83	0.93	0.05
46	14.24	33.133	24.697	5.58	95.5	3.2	0.38	2.1	0.07	0.44	0.25					
52	13.60	33.179	24.864	5.31	89.7	5.0	0.54	4.7	0.10	0.30	0.18	0.33	0.07	0.08	0.08	0.06

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 87 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 19.7 N	121 43.4 W	12/01/05	1753 UTC	13 m		1215 - 1750 PST	1215 PST	1753 PST	154.3 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m3)			
													1	2	MEAN	DARK
1	14.25	32.981	24.576	5.91	101.1	2.5	0.28	0.0	0.01	0.51	0.19	89. A	0.97	1.8	1.4	0.07
9	14.24	32.980	24.578	5.91	101.0	2.5	0.26	0.0	0.01	0.54	0.21	35.	8.2	7.3	7.8	0.07
18	14.24	32.979	24.577	5.90	100.9	2.5	0.26	0.0	0.01	0.53	0.19	12.	5.1	5.4	5.3	0.08
28	14.22	32.988	24.588	5.90	100.8	2.5	0.26	0.0	0.02	0.53	0.18	3.7	2.6	2.7	2.6	0.07
35	14.21	32.989	24.592	5.89	100.6	2.5	0.26	0.0	0.02	0.52	0.19	1.6	0.90	0.71	0.80	0.06
43	14.13	33.107	24.699	5.84	99.7	2.6	0.29	0.6	0.07	0.39	0.19					
48	13.78	33.137	24.795	5.68	96.3	3.0	0.39	1.8	0.17	0.30	0.18	0.35	0.09	0.10	0.09	0.04

A) INCUBATION LIGHT INTENSITIES WERE 86, 37, 12, 4.0, 2.0, 0.0 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 90 30

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33 25.4 N	117 54.3 W	10/01/05	1734 UTC	17 m		1200 - 1735 PST	1200 PST	1734 PST	169.1 mg C/m ²

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m ³)			
													1	2	MEAN	DARK
2	15.51	32.909	24.250	5.75	100.8	1.6	0.25	0.0	0.00	0.65	0.25	83. A	10.1	9.7	9.9	0.07
11	15.47	33.186	24.472	5.74	100.7	1.6	0.24	0.0	0.00	0.64	0.24	37.	6.2	6.0	6.1	0.06
24	15.42	33.195	24.490	5.72	100.3	1.6	0.23	0.0	0.00	0.63	0.26	11.	2.2	2.6	2.4	0.05
35	15.36	33.196	24.505	5.72	100.2	1.7	0.22	0.0	0.01	0.57	0.26	4.2	0.54	0.62	0.58	0.04
46	15.31	33.201	24.520	5.69	99.5	1.8	0.23	0.0	0.02	0.45	0.24	1.6	0.16	0.13	0.15	0.04
55	15.16	33.206	24.557	5.61	97.8	2.2	0.27	0.5	0.08	0.33	0.24					
65	13.62	33.210	24.885	5.09	86.0	5.2	0.60	4.9	0.03	0.22	0.30	0.28	0.02	0.02	0.02	0.04

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 90 60

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 25.1 N	119 57.1 W	09/01/05	1834 UTC	16 m		1208 - 1738 PST	1207 PST	1738 PST	89.3 mg C/m ²

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m ³)			
													1	2	MEAN	DARK
2	15.05	33.079	24.481	5.78	100.5	1.5	0.29	0.0	0.00	0.41	0.15	83. A	5.1	4.9	5.0	0.12
12	15.04	33.080	24.485	5.78	100.5	1.5	0.29	0.0	0.00	0.40	0.15	32.	3.4	3.5	3.5	0.10
16	15.04	33.080	24.485	5.78	100.5	1.5	0.26	0.0	0.00	0.39	0.16					
23	15.03	33.083	24.489	5.77	100.3	1.6	0.25	0.0	0.00	0.40	0.17	11.	1.1	1.2	1.2	0.08
34	14.94	33.084	24.510	5.78	100.3	1.5	0.25	0.0	0.00	0.43	0.16	3.8	0.30	0.30	0.30	0.06
42	14.84	33.082	24.530	5.77	99.9	1.6	0.26	0.0	0.01	0.42	0.22	1.8	0.10	0.08	0.09	0.05
53	13.50	33.017	24.759	5.73	96.5	2.6	0.39	1.6	0.13	0.46	0.48					
62	12.51	32.996	24.938	5.57	91.9	3.9	0.52	3.8	0.09	0.33	0.48	0.26	0.01	0.02	0.02	0.03

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 90 100

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31 5.1 N	122 39.6 W	08/01/05	1743 UTC	20 m		1215 - 1750 PST	1218 PST	1749 PST	90.1 mg C/m ²

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m ³)			
													1	2	MEAN	DARK
2	14.72	32.885	24.403	5.84	100.8	1.7	0.29	0.0	0.00	0.22	0.09	86. A	3.1	3.2	3.2	0.07
14	14.72	32.886	24.404	5.83	100.6	1.8	0.27	0.0	0.00	0.23	0.10	34.	2.7	2.6	2.7	0.07
27	14.71	32.886	24.406	5.84	100.7	1.7	0.25	0.0	0.00	0.28	0.07	13.	1.3	1.3	1.3	0.06
42	14.54	32.947	24.490	5.84	100.4	1.9	0.26	0.0	0.00	0.44	0.17	4.0	0.60	0.63	0.62	0.05
52	13.77	32.996	24.688	5.76	97.5	2.5	0.35	1.1	0.12	0.41	0.27	1.8	0.30	0.25	0.27	0.04
64	13.12	32.939	24.775	5.77	96.4	3.0	0.41	1.7	0.09	0.39	0.34					
76	11.94	33.043	25.083	5.34	87.0	5.3	0.65	6.3	0.01	0.18	0.18	0.29	0.02	0.03	0.02	0.02

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 93 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32 57.6 N	117 18.3 W	04/01/05	1940 UTC	9 m		1234 - 1725 PST	1154 PST	1736 PST	114.0 mg C/m ²

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	OXYGEN mL/L	OXY PCT	SI03 uM/L	P04 uM/L	N03 uM/L	N02 uM/L	CHL-A ug/L	PHAE0 ug/L	LIGHT PCT	UPTAKE (mg C/m ³)			
													1	2	MEAN	DARK
1	15.28	32.980	24.355	5.77	100.8	2.2	0.36	0.1	0.00	0.61	0.25	84. A	6.4	5.9	6.1	0.07
6	15.29	33.000	24.368	5.77	100.8	2.2	0.35	0.1	0.00	0.66	0.23	36.	7.7	7.9	7.8	0.09
12	15.40	33.152	24.461	5.74	100.6	1.8	0.36	0.1	0.00	0.72	0.31	13.	5.1	5.2	5.2	0.09
19	15.32	33.195	24.512	5.72	100.1	1.9	0.36	0.2	0.02	0.80	0.34	3.9	2.1	2.2	2.1	0.05
24	15.23	33.185	24.525	5.68	99.2	2.1	0.38	0.3	0.04	0.72	0.30	1.7	0.16	0.65	0.41	0.05
34	15.16	33.177	24.534	5.67	98.9	2.1	0.40	0.3	0.04	0.47	0.28	0.30	0.05	0.05	0.05	0.04

A) INCUBATION LIGHT INTENSITIES WERE 86, 37, 12, 4.0, 2.0, 0.0 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 93 45

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE							
32 21.3 N	118 34.1 W	05/01/05	1728 UTC	21 m		1155 - 1723 PST	1159 PST	1733 PST	343.6 mg C/m ²							
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m ³)			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
2	15.40	33.226	24.518	5.77	101.2	2.1	0.33	0.0	0.00	0.57	0.04	86. A	2.7	3.4	3.0	0.10
14	15.33	33.222	24.531	5.77	101.0	2.2	0.33	0.0	0.00	0.64	0.15	36.	9.6	9.9	9.7	0.11
22	15.32	33.222	24.533	5.76	100.8	2.1	0.33	0.0	0.00	0.68	0.13					
29	15.32	33.221	24.533	5.76	100.8	2.1	0.34	0.0	0.00	0.67	0.13	12.	8.4	8.6	8.5	0.09
36	14.57	33.181	24.664	5.57	96.0	3.3	0.49	1.3	0.09	0.87	0.48					
45	13.00	33.179	24.984	4.94	82.4	6.5	0.88	6.8	0.04	0.40	0.44	3.7	2.7	2.8	2.7	0.04
57	12.46	33.211	25.115	4.69	77.4	8.0	1.02	9.2	0.02	0.28	0.31	1.6	1.0	0.95	0.99	0.05
68	11.70	33.301	25.328	4.24	68.9	11.2	1.23	12.9	0.01	0.13	0.15					
81	11.09	33.304	25.441	4.26	68.3	12.1	1.29	14.3	0.01	0.10	0.14	0.27	0.13	0.09	0.11	0.02

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 93 80

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE							
31 10.6 N	120 56.0 W	06/01/05	1755 UTC	33 m		1205 - 1740 PST	1210 PST	1747 PST	302.5 mg C/m ²							
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m ³)			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
3	15.51	33.110	24.405	5.72	100.4	1.6	0.32	0.0	0.00	0.17	0.06	87. A	0.84	1.0	0.93	0.10
14	15.48	33.109	24.411	5.74	100.7	1.6	0.31	0.0	0.00	0.17	0.06					
22	15.46	33.112	24.418	5.71	100.1	1.6	0.32	0.0	0.00	0.19	0.05	36.	2.9	2.8	2.8	0.10
34	14.88	32.978	24.441	5.80	100.5	1.7	0.34	0.0	0.00	0.24	0.09					
45	14.87	33.061	24.508	5.83	101.0	1.7	0.34	0.0	0.00	0.37	0.18	12.	5.0	5.5	5.3	0.10
50	14.84	33.090	24.537	5.83	101.0	1.6	0.34	0.0	0.00	0.47	0.20					
57	14.80	33.098	24.552	5.78	100.0	1.6	0.35	0.0	0.00	0.50	0.30					
69	12.89	32.956	24.834	5.84	97.1	2.8	0.50	1.6	0.08	0.40	0.41	4.0	3.2	3.3	3.3	0.02
78	12.43	32.939	24.910	5.65	93.0	3.7	0.62	3.4	0.04	0.33	0.26					
88	11.81	32.923	25.014	5.51	89.5	4.7	0.74	5.5	0.04	0.29	0.33	1.7	1.3	1.3	1.3	0.04
102	10.65	33.042	25.315	5.00	79.3	9.1	1.10	11.6	0.02	0.12	0.21					
113	9.72	33.201	25.596	4.71	73.2	13.6	1.35	14.6	0.01	0.03	0.05					
125	9.52	33.383	25.771	4.35	67.4	16.9	1.46	18.0	0.00	0.01	0.03	0.30	0.01	0.01	0.01	0.02

RV NEW HORIZON

CALCOFI CRUISE 0501

STATION 93 120

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	FOREL	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE							
29 50.5 N	123 35.1 W	07/01/05	1930 UTC	37 m		1230 - 1755 PST	1220 PST	1758 PST	123.6 mg C/m ²							
DEPTH	TEMP	SALINITY	SIGMA	OXYGEN	OXY	SI03	P04	N03	N02	CHL-A	PHAE0	LIGHT	UPTAKE (mg C/m ³)			
m	DEG C		THETA	ml/L	PCT	uM/L	uM/L	uM/L	uM/L	ug/L	ug/L	PCT	1	2	MEAN	DARK
4	16.70	33.349	24.319	5.57	100.3	1.8	0.28	0.0	0.01	0.13	0.03	85. A	0.55	0.53	0.54	0.08
14	16.70	33.348	24.318	5.57	100.3	1.9	0.25	0.0	0.01	0.14	0.03					
25	16.60	33.339	24.335	5.59	100.4	1.6	0.24	0.0	0.01	0.14	0.04	35.	1.6	1.7	1.6	0.09
37	16.53	33.332	24.346	5.59	100.3	1.7	0.23	0.0	0.01	0.14	0.04					
50	16.52	33.332	24.349	5.59	100.2	1.7	0.22	0.0	0.01	0.15	0.04	13.	1.3	1.1	1.2	0.08
60	16.52	33.332	24.349	5.60	100.4	1.6	0.21	0.0	0.00	0.16	0.05					
69	16.51	33.332	24.352	5.59	100.2	1.6	0.20	0.0	0.01	0.17	0.04					
77	16.49	33.333	24.358	5.59	100.2	1.7	0.20	0.0	0.00	0.19	0.04	4.1	0.78	0.76	0.77	0.05
83	15.75	33.355	24.542	5.67	100.2	1.9	0.20	0.0	0.01	0.29	0.16					
88	15.12	33.386	24.705	5.74	100.1	2.3	0.22	0.1	0.05	0.34	0.26					
98	13.82	33.211	24.845	5.52	93.7	3.2	0.39	2.0	0.11	0.31	0.24	1.7	0.83	0.99	0.91	0.03
109	13.39	33.394	25.075	5.39	90.8	4.0	0.41	3.1	0.04	0.23	0.18					
119	12.10	33.249	25.214	5.11	83.7	6.4	0.70	7.6	0.02	0.16	0.12					
130	11.87	33.432	25.399	5.19	84.7	6.5	0.62	7.1	0.02	0.10	0.10					
141	10.84	33.433	25.587	5.00	79.8	9.7	0.84	10.7	0.01	0.05	0.06	0.29	0.01	0.01	0.01	0.03

A) INCUBATION LIGHT INTENSITIES WERE 86, 37, 12, 4.0, 2.0, 0.0 PERCENT RESPECTIVELY.