

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 76.7 60.0

LATITUDE		LONGITUDE		DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34 43.4 N		121 33.4 W		16/04/06	1801 UTC	12 m	1210 - 1904 PST					1206 PST	1903 PST	492.8 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	13.90	32.988	24.654	6.27	106.5	3.4	0.31	0.3	0.02	1.08	0.24	77. A	16.6	18.6	17.6	0.24	
7	13.89	32.987	24.655	6.26	106.3	3.3	0.31	0.3	0.02	1.19	0.24	41.	18.5	20.9	19.7	0.25	
17	13.32	33.256	24.979	6.42	107.9	2.2	0.37	1.7	0.08	2.26	0.62	11.	23.3	25.0	24.2	0.35	
23	12.91	33.342	25.128	6.09	101.5	3.2	0.57	3.6	0.14	1.43	0.61	5.3	8.0	8.1	8.0	0.18	
30	12.65	33.379	25.207	5.91	98.0	4.5	0.68	4.7	0.18	1.02	0.56	2.2	2.1	1.9	2.0	0.14	
42	11.72	33.546	25.514	5.35	87.1	10.5	1.05	9.0	0.25	0.36	0.37	0.46	0.19	0.20	0.20	0.03	

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 76.7 100.0

LATITUDE		LONGITUDE		DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
33 23.4 N		124 19.3 W		15/04/06	1756 UTC	33 m	1221 - 1909 PST					1217 PST	1909 PST	112.9 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	14.99	32.992	24.427	5.85	101.6	2.1	0.33	0.4	0.00	0.10	0.03	91. A	0.97	0.86	0.91	0.06	
10	14.96	32.993	24.435	5.82	101.0	2.1	0.32	0.4	0.00	0.10	0.02						
19	14.95	32.992	24.436	5.84	101.3	2.2	0.32	0.4	0.00	0.10	0.02	41.	1.4	1.3	1.4	0.06	
33	14.93	33.005	24.451	5.85	101.4	2.1	0.32	0.4	0.00	0.11	0.02						
47	14.81	33.050	24.512	5.84	101.0	2.1	0.32	0.4	0.00	0.14	0.04	11.	1.1	1.2	1.1	0.07	
58	14.80	33.077	24.535	5.84	101.0	2.0	0.31	0.3	0.00	0.17	0.05						
68	14.78	33.090	24.550	5.83	100.8	2.0	0.31	0.4	0.00	0.23	0.10	4.2	1.1	1.0	1.0	0.06	
80	14.23	33.016	24.610	5.85	100.0	2.0	0.33	0.3	0.00	0.34	0.30						
90	13.57	32.923	24.674	5.95	100.3	2.0	0.37	0.3	0.03	0.36	0.20	1.5	0.84	0.75	0.80	0.03	
102	13.32	33.079	24.845	5.64	94.6	2.9	0.48	1.9	0.21	0.26	0.20						
113	12.98	33.192	25.000	5.43	90.5	3.7	0.56	3.4	0.09	0.20	0.19						
124	11.91	33.305	25.293	5.13	83.7	6.1	0.77	7.1	0.02	0.10	0.12	0.31	0.06	0.05	0.06	0.01	

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 80.0 70.0

LATITUDE		LONGITUDE		DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
33 49.1 N		121 49.6 W		14/04/06	1734 UTC	17 m	1210 - 1910 PST					1208 PST	1908 PST	106.5 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	14.38	32.852	24.449	5.98	102.5	2.2	0.33	0.1	0.00	0.21	0.04	83. A	1.6	1.7	1.6	0.10	
11	14.19	32.877	24.509	6.02	102.8	2.4	0.32	0.0	0.00	0.21	0.05	37.	2.7	2.7	2.7	0.13	
25	13.76	32.883	24.602	6.08	102.9	2.2	0.33	0.0	0.00	0.24	0.07	10.	2.1	2.0	2.0	0.14	
36	13.68	32.905	24.636	6.06	102.4	2.3	0.33	0.0	0.00	0.40	0.13	3.9	2.0	1.9	1.9	0.09	
47	13.30	32.912	24.718	5.99	100.4	2.5	0.38	0.4	0.06	0.83	0.25	1.4	1.2	1.4	1.3	0.12	
64	12.94	33.012	24.867	5.73	95.4	3.6	0.51	2.0	0.26	0.51	0.26	0.31	0.08	0.14	0.11	0.12	

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 81.8 46.9

LATITUDE		LONGITUDE		DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE			
34 17.0 N		120 1.5 W		13/04/06	1826 UTC	8 m	1203 - 1900 PST					1201 PST	1858 PST	894.6 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	12.90	33.471	25.229	6.56	109.4	6.3	0.51	3.5	0.15	5.24	0.25	68. A	30.4	35.1	32.8	0.58	
6	12.80	33.475	25.252	6.59	109.7	6.4	0.53	3.5	0.15	5.50	0.67	32.	69.7	62.0	65.8	0.69	
11	12.69	33.482	25.279	6.48	107.6	6.5	0.54	3.8	0.15	6.19	0.46	12.	52.5	58.5	55.5	0.54	
17	12.65	33.483	25.287	6.35	105.4	6.6	0.57	4.2	0.15	5.33	0.22	3.8	21.0	21.4	21.2	0.45	
22	12.61	33.485	25.297	6.30	104.5	6.7	0.58	4.5	0.15	4.49	0.32	1.5	6.8	5.7	6.2	0.34	
31	12.45	33.493	25.334	6.00	99.1	7.1	0.68	5.6	0.16	3.32	0.85	0.26	0.41	0.51	0.46	0.25	

A) INCUBATION LIGHT INTENSITIES WERE 94, 42, 11, 4.3, 1.5, 0.30 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON		CALCOFI CRUISE 0604										STATION 83.3 60.0				
LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE				
33 35.2 N	120 45.7 W	12/04/06	1841 UTC	11 m	1208 - 1902 PST					1204 PST	1855 PST	177.3 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	14.22	33.163	24.723	6.26	107.1	2.6	0.29	0.0	0.01	0.49	0.11	76. A	3.4	3.5	3.4	0.19
7	14.21	33.164	24.726	6.27	107.3	2.6	0.28	0.0	0.01	0.51	0.12	38.	7.5	7.0	7.2	0.18
11	14.22	33.164	24.724	6.24	106.8	2.6	0.28	0.0	0.00	0.50	0.11					
17	14.16	33.165	24.737	6.27	107.1	2.4	0.28	0.0	0.00	0.53	0.12	9.3	6.0	6.2	6.1	0.20
23	14.01	33.171	24.773	6.32	107.7	2.5	0.28	0.0	0.01	0.74	0.17	4.0	4.7	4.9	4.8	0.16
30	13.57	33.157	24.853	6.34	107.0	3.3	0.34	0.6	0.03	1.09	0.25	1.5	2.5	2.3	2.4	0.13
43	12.47	33.290	25.173	5.95	98.2	4.8	0.64	4.7	0.18	1.57	0.45	0.25	0.50	0.72	0.61	0.06

RV NEW HORIZON		CALCOFI CRUISE 0604										STATION 83.3 100.0				
LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE				
32 14.6 N	123 29.2 W	11/04/06	1901 UTC	31 m	1218 - 1903 PST					1215 PST	1903 PST	110.4 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	14.88	32.981	24.443	5.87	101.7	1.9	0.33	0.1	0.00	0.09	0.02	91. A	1.2	1.2	1.2	0.06
11	14.85	32.984	24.452	5.87	101.6	2.0	0.33	0.1	0.00	0.10	0.01					
18	14.82	32.980	24.455	5.88	101.7	2.0	0.33	0.1	0.00	0.10	0.02	41.	1.2	1.3	1.2	0.07
31	14.68	32.983	24.488	5.89	101.6	2.0	0.33	0.0	0.00	0.12	0.03					
45	14.54	32.980	24.516	5.89	101.3	1.9	0.33	0.0	0.00	0.16	0.08	11.	1.1	1.1	1.1	0.09
54	14.42	32.967	24.531	5.91	101.4	1.9	0.33	0.1	0.00	0.21	0.07					
64	14.26	32.953	24.554	5.92	101.2	1.9	0.33	0.0	0.00	0.27	0.09	4.2	1.0	0.99	1.0	0.07
74	14.02	32.931	24.587	5.94	101.1	1.9	0.34	0.0	0.00	0.42	0.14					
84	13.35	32.943	24.733	5.89	98.8	2.3	0.41	0.6	0.08	0.47	0.28	1.6	0.98	1.1	1.0	0.04
96	13.02	33.070	24.897	5.63	93.9	3.6	0.53	2.6	0.17	0.30	0.22					
107	12.94	33.174	24.994	5.48	91.3	4.0	0.60	3.9	0.12	0.30	0.22					
117	12.41	33.202	25.119	5.24	86.3	5.2	0.74	6.2	0.06	0.23	0.17	0.30	0.08	0.08	0.08	0.01

RV NEW HORIZON		CALCOFI CRUISE 0604										STATION 86.7 33.0				
LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE				
33 53.3 N	118 29.2 W	08/04/06	1854 UTC	10 m	1202 - 1850 PST					1156 PST	1847 PST	613.8 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	13.31	33.470	25.146	5.97	100.4	6.3	0.61	4.6	0.21	2.29	0.22	74. A	43.0	42.9	42.9	0.69
6	12.62	33.481	25.292	5.56	92.2	7.0	0.72	6.3	0.24	2.35	0.20	40.	46.1	47.3	46.7	0.56
11	12.15	33.490	25.389	5.14	84.4	8.1	0.89	8.4	0.26	1.87	0.24					
14	12.07	33.501	25.413	5.02	82.3	8.4	0.94	8.8	0.25	1.19	0.24	12.	15.3	14.6	14.9	0.36
21	12.08	33.518	25.424	5.03	82.5	8.5	0.92	8.6	0.24	0.88	0.31	4.0	5.4	5.9	5.7	0.19
28	11.88	33.517	25.461	4.79	78.2	9.5	1.02	9.9	0.23	0.65	0.28	1.4	1.3	1.1	1.2	0.31
38	10.97	33.641	25.724	3.40	54.5	17.4	1.68	15.4	0.21	0.29	0.66	0.29	0.03	0.03	0.03	0.13

RV NEW HORIZON		CALCOFI CRUISE 0604										STATION 86.7 55.0				
LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME					LAN	CIVIL TWILIGHT	INTEGRATED VALUE				
33 9.1 N	120 1.0 W	09/04/06	1726 UTC	13 m	1205 - 1855 PST					1202 PST	1855 PST	586.5 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
2	13.41	33.269	24.971	6.29	105.9	4.2	0.41	1.9	0.08	1.16	0.22	79. A	4.5	13.5	9.0	0.26
8	13.41	33.268D	24.970	6.29	105.9	4.2	0.41	1.9	0.08	1.17	0.21	39.	24.7	23.4	24.0	0.25
11	13.36	33.268	24.980	6.29	105.8	4.3	0.54	2.2	0.10	1.37	0.15					
19	12.75	33.327	25.147	6.10	101.3	5.0	0.56	4.2	0.17	2.13	0.38	11.	24.6	24.6	24.6	0.29
20	12.76	33.324	25.143			5.0	0.56	4.1	0.17							
27	12.47	33.380	25.243	5.82	96.1	5.4	0.68	5.4	0.20	1.34	0.46	4.1	9.2	9.5	9.3	0.15
37	12.31	33.477	25.349	5.64	92.9	6.3	0.79	6.4	0.14	0.79	0.41	1.3	1.7	1.6	1.7	0.12
42	12.28	33.490	25.365	5.58	91.9	6.5	0.80	6.5	0.14	0.75	0.28					
49	12.13	33.520	25.417	5.43	89.1	7.1	0.87	7.1	0.15	0.66	0.36	0.31	0.21	0.27	0.24	0.02

A) INCUBATION LIGHT INTENSITIES WERE 94, 42, 11, 4.3, 1.5, 0.30 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 86.7 90.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
31 59.3 N	122 24.1 W	10/04/06	1819 UTC	16 m	1220 - 1903 PST	1211 PST	1903 PST	283.3 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	14.81	33.200	24.626	6.10	105.7	2.4	0.29	0.0	0.01	0.38	0.09	83. A	3.8	4.6	4.2	0.15
10	14.64	33.209	24.670			2.2	0.28	0.0	0.01	0.52	0.06	38.	7.1	7.8	7.4	0.15
17	14.39	33.216	24.728	6.21	106.7	2.1	0.28	0.0	0.01	0.51	0.13					
24	14.24	33.233	24.773	6.22	106.5	1.9	0.28	0.1	0.01	0.68	0.16	10.	7.8	7.6	7.7	0.16
34	13.76	33.288	24.915	6.07	103.0	2.4	0.37	1.3	0.06	0.95	0.28	3.8	6.0	5.7	5.8	0.14
45	12.64	33.414	25.237	5.55	92.0	5.1	0.71	5.1	0.36	0.63	0.24	1.3	1.6	1.8	1.7	0.03
52	12.42	33.423	25.286	5.33	88.0	6.2	0.80	6.8	0.48	0.39	0.18					
61	11.88	33.455	25.414	4.79	78.2	9.7	1.04	11.3	0.07	0.16	0.14	0.29	0.07	0.05	0.06	0.03

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 90.0 45.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
32 55.0 N	118 55.8 W	07/04/06	1838 UTC	10 m	1204 - 1830 PST	1158 PST	1843 PST	759.5 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
2	13.17	33.463	25.169	6.42	107.7	4.6	0.44	3.5	0.15	2.94	0.00	74. A	31.6	31.1	31.4	0.42
7	12.92	33.454	25.212	6.39	106.6	4.4	0.43	3.3	0.15	3.56	0.16	34.	64.1	68.1	66.1	0.91
11	12.72	33.449	25.247	6.17	102.5	4.8	0.51	3.9	0.16	2.13	0.43					
14	12.65	33.455	25.266	6.10	101.2	4.9	0.53	4.2	0.17	2.12	0.39	12.	20.6	22.2	21.4	0.34
21	12.10	33.498	25.405	5.52	90.5	7.8	0.82	7.3	0.22	1.33	0.57	4.0	8.4	9.0	8.7	0.24
28	11.43	33.525	25.551	4.91	79.4	11.0	1.10	10.9	0.31	0.50	0.36	1.4	1.3	1.1	1.2	0.10
38	11.21	33.577	25.631	4.60	74.1	13.5	1.25	12.6	0.26	0.27	0.29	0.29	0.13	0.14	0.14	0.04

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 90.0 80.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
31 45.5 N	121 19.6 W	06/04/06	1741 UTC	22 m	1208 - 1852 PST	1208 PST	1851 PST	162.4 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	15.05	33.145	24.532	5.90	102.7	2.2	0.34	0.2	0.00	0.18	0.05	87. A	0.99	1.1	1.0	0.07
13	14.91	33.140	24.559	5.90	102.4	2.0	0.33	0.1	0.00	0.19	0.05	40.	2.6	2.7	2.7	0.09
23	14.90	33.139	24.561	5.90	102.3	2.0	0.33	0.1	0.00	0.19	0.05					
32	14.85	33.144	24.575	5.92	102.6	2.1	0.33	0.0	0.00	0.21	0.06	11.	2.6	2.6	2.6	0.08
46	14.11	33.156	24.742	6.04	103.1	2.3	0.33	0.0	0.00	0.44	0.18	4.0	3.1	3.3	3.2	0.09
53	13.44	33.200	24.913	5.73	96.5	3.3	0.52	2.3	0.25	0.56	0.40					
60	12.87	33.234	25.053	5.43	90.4	4.6	0.68	5.0	0.16	0.34	0.32	1.5	1.4	1.3	1.4	0.04
72	12.62	33.267	25.127	5.32	88.1	5.5	0.77	6.5	0.07	0.25	0.24					
83	11.63	33.308	25.346	4.77	77.4	9.0	1.07	11.4	0.02	0.11	0.10	0.31	0.06	0.08	0.07	0.01

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 90.0 110.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
30 44.8 N	123 20.5 W	05/04/06	1923 UTC	29 m	1234 - 1902 PST	1216 PST	1857 PST	77.9 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	15.49	33.168	24.453	5.77	101.3	2.0	0.31	0.1	0.00	0.09	0.01	90. A	0.30	0.37	0.33	0.07
17	15.47	33.165	24.456	5.77	101.3	1.8	0.31	0.1	0.00	0.10	0.04	41.	1.1	1.1	1.1	0.06
30	15.47	33.165	24.457	5.77	101.2	1.9	0.31	0.0	0.00	0.10	0.01					
43	15.44	33.163	24.462	5.77	101.2	1.9	0.31	0.0	0.00	0.11	0.00	10.	1.0	1.1	1.0	0.07
51	15.41	33.159	24.466	5.77	101.1	1.8	0.31	0.0	0.00	0.12	0.01					
61	15.38	33.153	24.468	5.79	101.4	1.9	0.31	0.0	0.00	0.13	0.01	4.0	0.72	0.68	0.70	0.06
70	14.87	33.128	24.560	5.83	101.0	1.9	0.31	0.0	0.00	0.21	0.05					
76	14.65	33.076	24.567													
78	14.60	33.071	24.574	5.86	101.0	2.0	0.32	0.1	0.00	0.27	0.10	1.6	0.62	0.68	0.65	0.06
90	14.19	33.166	24.734	5.70	97.4	2.5	0.41	0.9	0.06	0.55	0.22					
101	13.10	33.211	24.991	5.46	91.3	3.9	0.58	3.5	0.04	0.35	0.22					
109	12.49	33.260	25.148	5.29	87.3	4.7	0.67	5.1	0.03	0.24	0.16	0.31	0.14	0.16	0.15	0.02

A) INCUBATION LIGHT INTENSITIES WERE 94, 42, 11, 4.3, 1.5, 0.30 PERCENT RESPECTIVELY.

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 93.3 26.7

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
32 57.7 N	117 18.5 W	01/04/06	1949 UTC	14 m	1224 - 1840 PST	1153 PST	1838 PST	283.9 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	14.60	33.426	24.845	6.52	112.6	1.2	0.21	0.0	0.01	0.88	0.16	80. A	7.7	7.5	7.6	0.25
9	14.42	33.426	24.884	6.57	113.1	0.9	0.20	0.0	0.01	0.88	0.16	37.	12.3	11.7	12.0	0.32
15	13.63	33.440	25.059	6.35	107.5	2.2	0.24	0.1	0.03	1.92	0.34					
20	12.04	33.441	25.372	4.25	69.6	10.0	1.01	9.9	0.28	0.91	0.26	11.	8.5	8.6	8.5	0.18
29	11.00	33.520	25.624	3.60	57.7	15.0	1.44	16.5	0.20	0.67	0.25	4.2	3.9	4.3	4.1	0.11
39	10.62	33.630	25.777	3.21	51.0	18.7	1.70	19.6	0.15	0.40	0.25	1.4	0.80	0.79	0.80	0.08
46	10.40	33.685	25.858	3.01	47.7	20.6	1.79	21.0	0.15	0.31	0.27					
53	10.29	33.721	25.905	2.90	45.8	21.8	1.83	21.9	0.15	0.27	0.25	0.30	0.07	0.09	0.08	0.13

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 93.3 40.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
32 31.0 N	118 12.5 W	02/04/06	1726 UTC	24 m	1158 - 1842 PST	1156 PST	1841 PST	282.4 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
1	15.05	33.401	24.729	5.93	103.3	2.4	0.33	0.1	0.00	0.29	0.01	94. A	3.9	3.9	3.9	0.09
8	14.95	33.401	24.751	5.93	103.1	2.4	0.33	0.1	0.00	0.31	0.01					
15	14.92	33.400	24.757	5.93	103.1	2.3	0.32	0.0	0.00	0.27	0.03	38.	4.9	5.2	5.0	0.11
24	14.66	33.395	24.809	5.98	103.4	2.3	0.32	0.1	0.00	0.40	0.08					
34	14.46	33.396	24.853	5.97	102.8	2.4	0.35	0.2	0.03	0.54	0.08	11.	5.5	6.0	5.7	0.09
42	13.72	33.387	25.000	5.78	98.0	3.5	0.50	2.1	0.15	0.57	0.05					
49	13.26	33.387	25.094	5.67	95.2	4.2	0.60	3.4	0.24	0.58	0.13	4.4	3.6	3.7	3.7	0.09
58	11.98	33.391	25.345	4.72	77.2	8.8	1.03	10.4	0.17	0.33	0.20					
66	11.15	33.442	25.537	4.22	67.8	12.2	1.28	14.3	0.07	0.22	0.19	1.5	0.60	0.59	0.59	0.03
78	10.26	33.570	25.793	3.67	57.9	17.4	1.57	18.9	0.03	0.10	0.10					
91	10.12	33.608	25.847	3.57	56.1	18.5	1.62	19.7	0.02	0.08	0.07	0.30	0.02	0.03	0.02	0.03

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 93.3 70.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
31 30.4 N	120 13.8 W	03/04/06	1833 UTC	18 m	1210 - 1855 PST	1204 PST	1849 PST	254.1 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
1	14.51	33.055	24.578	6.07	104.4	2.5	0.33	0.1	0.01	0.32	0.07	92. A	5.9	5.9	5.9	0.12
10	14.60	33.138	24.624	6.11	105.3	2.4	0.33	0.3	0.02	0.46	0.08	43.	6.9	6.8	6.8	0.13
18	14.22	33.302	24.831	6.22	106.5	2.5	0.35	0.7	0.04	0.63	0.06					
26	14.11	33.313	24.862	6.22	106.3	2.5	0.36	0.8	0.05	0.61	0.11	11.	5.3	5.7	5.5	0.14
37	13.74	33.357	24.973	6.20	105.2	2.7	0.40	1.4	0.07	0.67	0.16	4.3	3.0	3.4	3.2	0.12
45	13.54	33.383	25.034	6.03	101.9	3.2	0.46	2.3	0.10	0.69	0.17					
51	13.17	33.384	25.109	5.76	96.6	4.1	0.58	3.6	0.18	0.65	0.20	1.3	1.4	1.5	1.4	0.08
59	13.02	33.414	25.163	5.73	95.8	4.3	0.61	4.0	0.20	0.59	0.15					
68	12.05	33.397	25.337	4.82	78.9	8.7	1.02	10.7	0.10	0.26	0.16	0.30	0.08	0.09	0.08	0.05

RV NEW HORIZON

CALCOFI CRUISE 0604

STATION 93.3 110.0

LATITUDE	LONGITUDE	DAY/MO/YR	CAST TIME	SECCHI	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE								
30 10.6 N	122 55.7 W	04/04/06	1913 UTC	22 m	1220 - 1701 PST	1215 PST	1859 PST	162.3 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	15.96	33.129	24.319	5.83	103.3	2.1	0.33	0.1	0.00	0.14	0.02	87. A	1.7	1.9	1.8	0.07
13	15.92	33.130	24.329	5.85	103.6	2.1	0.33	0.1	0.00	0.14	0.03	40.	2.5	2.5	2.5	0.08
22	15.14	33.167	24.530	6.00	104.6	2.1	0.33	0.1	0.00	0.21	0.04					
32	14.61	33.179	24.654	6.07	104.7	2.2	0.33	0.1	0.00	0.26	0.04	11.	2.3	2.6	2.5	0.09
38	14.41	33.188	24.703	6.09	104.6	2.0	0.33	0.1	0.00	0.34	0.12					
46	13.67	33.192	24.860	5.85	99.0	2.6	0.46	1.4	0.12	0.65	0.37	4.0	3.8	3.8	3.8	0.07
54	12.91	33.255	25.061	5.48	91.3	4.6	0.71	5.2	0.30	0.42	0.34					
62	12.59	33.298	25.157	5.26	87.1	5.6	0.82	7.1	0.14	0.28	0.26	1.3	0.66	0.71	0.69	0.03
72	11.87	33.312	25.305	4.88	79.6	8.0	1.00	10.1	0.03	0.16	0.15					
83	11.41	33.395	25.454	4.63	74.8	10.4	1.19	13.0	0.02	0.08	0.08	0.31	0.03	0.03	0.03	0.03

A) INCUBATION LIGHT INTENSITIES WERE 94, 42, 11, 4.3, 1.5, 0.30 PERCENT RESPECTIVELY.