

**APPENDICES TO
WATER QUALITY MONITORING
IN MASSACHUSETTS AND CAPE COD BAYS:
DECEMBER 1992, FEBRUARY AND MARCH 1993**

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APPENDIX A

STATION DATA TABLES AND INSTRUMENT CALIBRATION DATA

Part 1

Physical and Chemical Parameters at Discrete Bottle Measurement Depths

Depth, Temperature (Temp), Dissolved oxygen (DO), Conductivity (Cond), Sigma-T, Fluorescence (Flu), Salinity (Sal), and Beam Attenuation (Beam) were all obtained electronically from *in situ* readings made during the upcast of vertical profiling, during which water samples were taken by closing bottles. The table values represent a 20-sec time-averaged value bracketing the time of closing of a hydrocast bottle. Dissolved oxygen and fluorescence data represent post-survey calibrated values based on wet chemistry determinations made on a subset of the bottles (Appendix A, Part 2). The other parameters rely on factory calibrations of sensors to calculate values. The dissolved inorganic nutrient data (Table A-1) and additional measurements made at a subset of stations (Table A-2) represent direct analyses of water samples from bottles.

Data from all surveys represented in this report are included in the tables. Table A-1 lists the combined farfield/nearfield surveys followed by a chronological listing of other nearfield surveys. Table A-2 lists combined surveys, and the values for analytical replicates of a given bottle. No entry indicates that samples or readings were not collected, or that data were either not reported or were reported as suspect by the analytical laboratory.

Note that % saturation for dissolved oxygen has been calculated using an algorithm given on the following page.

Saturation Values of Oxygen in Sea Water (mg/L) based on Weiss (1970)

		Temperature (°C)																				
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
S a t u r a t i o n v a l u e s i n P P T	0	14.60	14.20	13.81	13.45	13.09	12.76	12.44	12.13	11.83	11.55	11.28	11.02	10.77	10.53	10.29	10.07	9.86	9.65	9.45	9.26	9.08
	1	14.50	14.10	13.72	13.36	13.01	12.67	12.35	12.05	11.76	11.47	11.21	10.95	10.70	10.46	10.23	10.01	9.80	9.59	9.40	9.21	9.02
	2	14.40	14.01	13.63	13.27	12.92	12.59	12.27	11.97	11.68	11.40	11.13	10.88	10.63	10.40	10.17	9.95	9.74	9.54	9.34	9.15	8.97
	3	14.31	13.91	13.54	13.18	12.84	12.51	12.19	11.89	11.61	11.33	11.06	10.81	10.57	10.33	10.11	9.89	9.68	9.48	9.28	9.10	8.92
	4	14.21	13.82	13.45	13.09	12.75	12.43	12.11	11.82	11.53	11.26	10.99	10.74	10.50	10.27	10.04	9.83	9.62	9.42	9.23	9.04	8.86
	5	14.11	13.72	13.36	13.00	12.67	12.34	12.04	11.74	11.46	11.18	10.92	10.67	10.43	10.20	9.98	9.77	9.56	9.36	9.17	8.99	8.81
	6	14.02	13.63	13.27	12.92	12.58	12.26	11.96	11.66	11.38	11.11	10.86	10.61	10.37	10.14	9.92	9.71	9.50	9.31	9.12	8.94	8.76
	7	13.92	13.54	13.18	12.83	12.50	12.18	11.88	11.59	11.31	11.04	10.79	10.54	10.30	10.08	9.86	9.65	9.45	9.25	9.06	8.88	8.71
	8	13.82	13.45	13.09	12.75	12.42	12.10	11.80	11.51	11.24	10.97	10.72	10.47	10.24	10.01	9.80	9.59	9.39	9.20	9.01	8.83	8.66
	9	13.73	13.36	13.00	12.66	12.33	12.02	11.72	11.44	11.16	10.90	10.65	10.41	10.18	9.95	9.74	9.53	9.33	9.14	8.96	8.78	8.61
	10	13.64	13.27	12.91	12.58	12.25	11.94	11.65	11.36	11.09	10.83	10.58	10.34	10.11	9.89	9.68	9.47	9.28	9.09	8.90	8.73	8.56
	11	13.54	13.18	12.83	12.49	12.17	11.87	11.57	11.29	11.02	10.76	10.52	10.28	10.05	9.83	9.62	9.42	9.22	9.03	8.85	8.67	8.51
	12	13.45	13.09	12.74	12.41	12.09	11.79	11.50	11.22	10.95	10.70	10.45	10.21	9.99	9.77	9.56	9.36	9.16	8.98	8.80	8.62	8.46
	13	13.36	13.00	12.66	12.33	12.01	11.71	11.42	11.15	10.88	10.63	10.38	10.15	9.92	9.71	9.50	9.30	9.11	8.92	8.74	8.57	8.41
	14	13.27	12.91	12.57	12.24	11.93	11.63	11.35	11.07	10.81	10.56	10.32	10.09	9.86	9.65	9.44	9.24	9.05	8.87	8.69	8.52	8.36
	15	13.18	12.82	12.49	12.16	11.85	11.56	11.27	11.00	10.74	10.49	10.25	10.02	9.80	9.59	9.38	9.19	9.00	8.82	8.64	8.47	8.31
	16	13.09	12.74	12.40	12.08	11.77	11.48	11.20	10.93	10.67	10.42	10.19	9.96	9.74	9.53	9.33	9.13	8.94	8.76	8.59	8.42	8.26
	17	13.00	12.65	12.32	12.00	11.70	11.41	11.13	10.86	10.60	10.36	10.12	9.90	9.68	9.47	9.27	9.08	8.89	8.71	8.54	8.37	8.21
	18	12.91	12.57	12.24	11.92	11.62	11.33	11.05	10.79	10.54	10.29	10.06	9.83	9.62	9.41	9.21	9.02	8.84	8.66	8.49	8.32	8.16
	19	12.82	12.48	12.15	11.84	11.54	11.26	10.98	10.72	10.47	10.23	9.99	9.77	9.56	9.35	9.16	8.97	8.78	8.61	8.44	8.27	8.11
	20	12.74	12.40	12.07	11.76	11.47	11.18	10.91	10.65	10.40	10.16	9.93	9.71	9.50	9.30	9.10	8.91	8.73	8.55	8.39	8.22	8.07
	21	12.65	12.31	11.99	11.68	11.39	11.11	10.84	10.58	10.33	10.10	9.87	9.65	9.44	9.24	9.04	8.86	8.68	8.50	8.33	8.17	8.02
	22	12.56	12.23	11.91	11.61	11.32	11.04	10.77	10.51	10.27	10.03	9.81	9.59	9.38	9.18	8.99	8.80	8.62	8.45	8.29	8.13	7.97
	23	12.48	12.15	11.83	11.53	11.24	10.96	10.70	10.45	10.20	9.97	9.74	9.53	9.32	9.12	8.93	8.75	8.57	8.40	8.24	8.08	7.92
	24	12.39	12.07	11.75	11.45	11.17	10.89	10.63	10.38	10.14	9.90	9.68	9.47	9.26	9.07	8.88	8.69	8.52	8.35	8.19	8.03	7.88
	25	12.31	11.98	11.67	11.38	11.09	10.82	10.56	10.31	10.07	9.84	9.62	9.41	9.21	9.01	8.82	8.64	8.47	8.30	8.14	7.98	7.83
	26	12.23	11.90	11.59	11.30	11.02	10.75	10.49	10.24	10.01	9.78	9.56	9.35	9.15	8.96	8.77	8.59	8.42	8.25	8.09	7.93	7.78
	27	12.14	11.82	11.52	11.23	10.95	10.68	10.42	10.18	9.94	9.72	9.50	9.29	9.09	8.90	8.71	8.54	8.37	8.20	8.04	7.89	7.74
	28	12.06	11.74	11.44	11.15	10.87	10.61	10.35	10.11	9.88	9.65	9.44	9.23	9.04	8.84	8.66	8.48	8.31	8.15	7.99	7.84	7.69
	29	11.98	11.66	11.36	11.08	10.80	10.54	10.29	10.05	9.81	9.59	9.38	9.18	8.98	8.79	8.61	8.43	8.26	8.10	7.94	7.79	7.65
	30	11.90	11.58	11.29	11.00	10.73	10.47	10.22	9.98	9.75	9.53	9.32	9.12	8.92	8.74	8.55	8.38	8.21	8.05	7.90	7.75	7.60
	31	11.81	11.51	11.21	10.93	10.66	10.40	10.15	9.92	9.69	9.47	9.26	9.06	8.87	8.68	8.50	8.33	8.16	8.00	7.85	7.70	7.56
	32	11.73	11.43	11.14	10.86	10.59	10.33	10.09	9.85	9.63	9.41	9.20	9.00	8.81	8.63	8.45	8.28	8.11	7.96	7.80	7.66	7.51
	33	11.65	11.35	11.06	10.78	10.52	10.26	10.02	9.79	9.56	9.35	9.14	8.95	8.76	8.57	8.40	8.23	8.07	7.91	7.76	7.61	7.47
	34	11.58	11.27	10.99	10.71	10.45	10.20	9.96	9.73	9.50	9.29	9.09	8.89	8.70	8.52	8.35	8.18	8.02	7.86	7.71	7.57	7.43
	35	11.50	11.20	10.91	10.64	10.38	10.13	9.89	9.66	9.44	9.23	9.03	8.83	8.65	8.47	8.29	8.13	7.97	7.81	7.66	7.52	7.38
	36	11.42	11.12	10.84	10.57	10.31	10.06	9.83	9.60	9.38	9.17	8.97	8.78	8.59	8.42	8.24	8.08	7.92	7.77	7.62	7.48	7.34
	37	11.34	11.05	10.77	10.50	10.24	10.00	9.76	9.54	9.32	9.11	8.92	8.72	8.54	8.36	8.19	8.03	7.87	7.72	7.57	7.43	7.29
	38	11.26	10.97	10.70	10.43	10.18	9.93	9.70	9.48	9.26	9.06	8.86	8.67	8.49	8.31	8.14	7.98	7.82	7.67	7.53	7.39	7.25
	39	11.19	10.90	10.62	10.36	10.11	9.87	9.64	9.41	9.20	9.00	8.80	8.61	8.43	8.26	8.09	7.93	7.78	7.63	7.48	7.34	7.21
	40	11.11	10.82	10.55	10.29	10.04	9.80	9.57	9.35	9.14	8.94	8.75	8.56	8.38	8.21	8.04	7.88	7.73	7.58	7.44	7.30	7.17

$$\begin{aligned}
 \text{OX}_{\text{sat}} = & 1.429 \cdot \text{EXP}(-173.4292 + 249.6339 \cdot (100 / (273.15 + T))) + 143.3483 \cdot \text{LN}((T + 273.15) / 100) \\
 & - 21.8492 \cdot ((T + 273.15) / 100) + \text{Salinity} \cdot (-0.033096 + 0.014259 \cdot (T + 273.15) / 100 - 0.0017 \cdot ((T + 273.15) / 100)^2)
 \end{aligned}$$

$$\% \text{ Saturation} = 100 \cdot \text{DO} / \text{OX}_{\text{sat}}$$

Reference:

Weiss, R.F., 1970: The Solubility of Nitrogen, Oxygen, and Argon in Water and Seawater. Deep-Sea Res., 17, 721-735

Table A-1: Physical and Chemical Parameters at Discrete Bottle Measurement Depths

Event Id	Station	Date	Time	Depth (m)	Temp (C)	Cond (mmhos/cm)	Sigma T	Flu (ug/L)	Sal (PSU)	BeamA (1/m)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MNF15	N01P	12-08-92	1424	2.70	7.10	32.52	24.94	1.23	31.87	0.78	9.06	92	0.34	0.36	6.61	0.84	8.31
MNF15	N01P	12-08-92	1421	8.50	7.11	32.52	24.93	1.44	31.86	0.78	9.00	91	0.55	0.36	6.53	0.82	8.27
MNF15	N01P	12-08-92	1418	16.20	7.12	32.53	24.94	1.45	31.87	0.79	8.99	91	0.29	0.35	6.62	0.88	8.44
MNF15	N01P	12-08-92	1415	23.50	7.14	32.55	24.94	1.52	31.87	0.80	8.96	91	0.35	0.35	6.90	0.87	8.93
MNF15	N04P	12-08-92	1058	2.10	7.40	32.78	24.91	1.02	31.88	0.67	9.16	94	0.15	0.31	5.29	0.76	6.40
MNF15	N04P	12-08-92	1054	13.50	7.41	32.79	24.91	1.32	31.88	0.67	9.18	94	0.39	0.31	5.32	0.72	6.39
MNF15	N04P	12-08-92	1050	27.80	7.42	32.81	24.91	1.21	31.88	0.69	9.13	94	0.20	0.31	5.41	0.75	6.52
MNF15	N04P	12-08-92	1047	41.50	7.45	32.85	24.91	1.32	31.89	0.70	9.11	93	0.21	0.31	5.44	0.81	6.56
MNF15	N05	12-08-92	1015	2.70	7.37	32.74	24.90	1.07	31.86	0.66	9.16	94	0.50	0.30	5.37	0.73	6.39
MNF15	N05	12-08-92	1012	12.70	7.38	32.75	24.90	1.30	31.86	0.66	9.18	94	0.96	0.32	5.36	0.73	6.37
MNF15	N05	12-08-92	1008	28.00	7.41	32.78	24.89	1.22	31.86	0.67	9.19	94	0.26	0.31	5.31	0.75	6.36
MNF15	N05	12-08-92	1004	42.10	7.39	32.78	24.90	1.36	31.87	0.68	9.22	94	0.70	0.34	5.33	0.74	6.42
MNF15	N06	12-08-92	0930	2.80	7.41	32.74	24.86	1.22	31.83	0.66	9.14	94	0.29	0.29	5.27	0.73	6.19
MNF15	N06	12-08-92	0926	13.70	7.39	32.73	24.87	1.29	31.82	0.67	9.19	94	0.26	0.28	5.25	0.72	6.09
MNF15	N06	12-08-92	0923	27.80	7.42	32.75	24.86	1.33	31.82	0.67	9.22	94	0.30	0.30	5.19	0.74	6.16
MNF15	N06	12-08-92	0919	38.60	7.39	32.76	24.89	1.26	31.85	0.68	9.25	95	0.43	0.31	5.24	0.74	6.16
MNF15	N07P	12-08-92	0833	2.80	7.40	32.72	24.86	1.16	31.82	0.66	9.06	93	0.42	0.31	5.06	0.71	5.91
MNF15	N07P	12-08-92	0829	16.00	7.44	32.77	24.86	2.51	31.83	0.66	9.06	93	0.90	0.26	5.15	0.70	5.94
MNF15	N07P	12-08-92	0826	31.90	7.42	32.76	24.86	2.49	31.83	0.66	9.05	93	0.33	0.31	5.01	0.72	5.93
MNF15	N07P	12-08-92	0822	40.70	7.43	32.78	24.87	2.42	31.83	0.67	8.77	90	0.49	0.33	5.14	0.72	6.02
MNF15	N10P	12-08-92	1555	2.30	5.59	30.51	24.48	0.89	31.05	1.06	9.43	92	8.35	0.73	7.59	1.23	9.09
MNF15	N10P	12-08-92	1552	7.10	5.74	30.70	24.52	0.88	31.12	1.04	9.41	92	5.48	0.71	7.37	0.94	8.91
MNF15	N10P	12-08-92	1550	11.50	5.92	30.95	24.59	0.98	31.23	1.01	9.36	92	6.84	0.63	7.30	1.13	8.44
MNF15	N10P	12-08-92	1540	17.30	6.67	31.94	24.81	0.80	31.63	0.92	9.36	94	1.08	0.53	6.36	0.67	7.72
MNF15	N11	12-08-92	1520	2.60	6.79	32.08	24.84	1.09	31.69	0.85	9.36	94	2.03	0.50	6.02	0.91	7.13
MNF15	N11	12-08-92	1517	8.30	6.67	31.98	24.85	1.26	31.68	0.86	9.42	95	2.16	0.51	6.04	0.90	7.03
MNF15	N11	12-08-92	1514	14.90	6.68	31.99	24.84	1.32	31.67	0.86	9.42	95	2.16	0.49	6.07	0.88	7.06
MNF15	N11	12-08-92	1511	23.70	6.67	31.97	24.84	1.22	31.67	0.86	9.36	94	2.22	0.49	6.05	0.86	6.95
MNF15	N12	12-08-92	1454	2.60	6.81	32.19	24.91	1.39	31.79	0.84	9.30	94	0.98	0.48	6.71	0.91	7.90
MNF15	N12	12-08-92	1451	7.50	6.83	32.21	24.91	1.39	31.78	0.84	9.28	94	0.95	0.46	6.71	0.89	7.83
MNF15	N12	12-08-92	1449	13.60	6.83	32.20	24.90	1.38	31.78	0.84	9.25	93	0.96	0.46	6.79	0.90	7.90
MNF15	N12	12-08-92	1446	20.60	6.85	32.23	24.91	1.42	31.79	0.84	9.23	93	1.01	0.45	6.72	0.90	7.85
MNF15	N14	12-08-92	1341	2.40	7.16	32.53	24.91	1.12	31.84	0.75	9.18	93	0.54	0.39	5.64	0.88	7.21
MNF15	N14	12-08-92	1338	9.10	7.17	32.53	24.90	1.70	31.82	0.75	9.17	93	0.66	0.39	5.64	0.86	7.11
MNF15	N14	12-08-92	1335	18.90	7.16	32.54	24.91	1.66	31.84	0.75	9.21	94	0.47	0.37	5.68	0.88	7.31
MNF15	N14	12-08-92	1332	28.20	7.17	32.55	24.91	1.70	31.84	0.75	9.16	93	0.48	0.37	5.67	0.89	7.27
MNF15	N16P	12-08-92	1142	2.80	7.47	32.87	24.92	1.14	31.91	0.75	9.07	93	0.50	0.37	5.21	0.85	6.81
MNF15	N16P	12-08-92	1139	14.20	7.47	32.87	24.92	1.49	31.91	0.75	9.06	93	0.61	0.38	5.25	0.85	6.90
MNF15	N16P	12-08-92	1135	24.50	7.47	32.87	24.92	1.35	31.91	0.76	9.12	93	0.61	0.37	5.30	0.84	6.94
MNF15	N16P	12-08-92	1132	31.90	7.48	32.89	24.93	1.34	31.92	0.76	9.09	93	0.08	0.37	5.27	0.76	6.98

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Table A-1: Physical and Chemical Parameters at Discrete Bottle Measurement Depths (continued)

Event Id	Station	Date	Time	Depth (m)	Temp (C)	Cond (umhos/cm)	Sigma T	Flu (ug/L)	Sal (PSU)	BeamA (1/m)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MNF15	N18	12-08-92	1218	2.70	7.42	32.79	24.90	1.23	31.87	0.77	9.16	94	0.63	0.38	5.08	0.82	6.75
MNF15	N18	12-08-92	1215	10.70	7.28	32.66	24.91	1.55	31.86	0.77	9.26	95	1.21	0.39	5.08	0.81	6.67
MNF15	N18	12-08-92	1212	17.00	7.25	32.62	24.90	1.49	31.84	0.77	9.28	95	0.13	0.41	5.10	0.80	6.70
MNF15	N18	12-08-92	1209	23.10	7.26	32.63	24.90	1.54	31.84	0.77	9.26	94	0.65	0.41	5.23	0.84	6.72
MNF15	N19	12-08-92	1633	2.50	6.95	32.29	24.88	1.19	31.76	0.81	9.34	95	0.60	0.45	5.53	0.82	6.85
MNF15	N19	12-08-92	1631	6.60	6.97	32.30	24.87	1.07	31.76	0.81	9.36	95	1.03	0.45	5.50	0.82	6.85
MNF15	N19	12-08-92	1628	10.50	6.93	32.26	24.87	1.21	31.75	0.81	9.41	95	1.37	0.45	5.57	0.91	6.87
MNF15	N19	12-08-92	1625	16.50	6.98	32.32	24.87	1.15	31.76	0.82	9.42	95	1.34	0.43	5.47	0.90	6.83
MNF15	N20P	12-08-92	1302	2.50	6.91	32.24	24.87	1.24	31.75	0.78	9.34	94	1.34	0.44	5.68	0.91	6.73
MNF15	N20P	12-08-92	1259	7.00	6.93	32.25	24.86	1.79	31.74	0.79	9.35	95	0.89	0.45	5.60	0.88	6.73
MNF15	N20P	12-08-92	1256	18.20	6.97	32.30	24.87	1.58	31.75	0.80	9.31	94	0.94	0.45	5.69	0.88	6.87
MNF15	N20P	12-08-92	1253	27.60	6.98	32.32	24.87	1.76	31.75	0.80	9.35	95	1.07	0.50	5.76	0.85	6.90

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9301	F01P	02-25-93	1410	3.08	W93010415	1.20	31.78	11.30	99	27.56	25.45	2.32	1.32	0.55	0.21	5.67	0.88	4.07
W9301	F01P	02-25-93	1409	5.07	W93010414	1.20	31.78	11.28	99	27.56	25.45	3.54	1.35	0.59	0.20	5.75	0.73	4.20
W9301	F01P	02-25-93	1408	11.99	W93010413	1.20	31.78	11.28	99	27.56	25.45	4.13	1.35	0.63	0.30	1.91	0.87	4.07
W9301	F01P	02-25-93	1407	18.39	W93010412	1.20	31.79	11.25	99	27.57	25.45	4.95	1.34	1.04	0.02	1.45	0.44	4.10
W9301	F01P	02-25-93	1406	24.59	W93010411	1.20	31.79	11.27	99	27.58	25.46	4.26	1.31	1.16	0.20	0.52	0.40	4.15
W9301	F02P	02-25-93	1122	2.81	W93010397	0.95	31.61	11.50	100	27.22	25.32	2.62	1.24	0.18	0.18	1.72	0.54	2.13
W9301	F02P	02-25-93	1121	5.33	W93010396	0.95	31.61	11.48	100	27.23	25.32	4.28	1.22	0.22	0.00	0.05	0.39	2.19
W9301	F02P	02-25-93	1120	12.14	W93010395	0.95	31.61	11.46	100	27.23	25.32	4.55	1.21	0.11	0.08	-0.01	2.34	2.19
W9301	F02P	02-25-93	1119	20.34	W93010394	0.95	31.61	11.44	100	27.24	25.32	4.74	1.22	0.50	0.15	2.57	0.64	2.24
W9301	F02P	02-25-93	1118	29.26	W93010393	0.95	31.61	11.45	100	27.24	25.32	4.52	1.23	0.83	0.07	0.12	0.46	2.24
W9301	F03	02-25-93	1548	3.31	W93010436	1.23	31.93	11.61	102	27.71	25.56	2.98	2.06	0.92	0.21	6.17	0.82	8.00
W9301	F03	02-25-93	1547	5.19	W93010435	1.25	31.93	11.58	102	27.72	25.56	3.26	1.97	2.08	0.01	6.54	0.77	8.04
W9301	F03	02-25-93	1546	8.13	W93010434	1.24	31.93	11.61	102	27.71	25.56	3.09	1.99	1.97	0.01	4.37	0.68	8.07
W9301	F03	02-25-93	1545	12.46	W93010433	1.25	31.93	11.63	102	27.72	25.56	3.16	2.04	3.76	0.21	1.23	0.86	8.07
W9301	F03	02-25-93	1544	14.41	W93010432	1.22	31.93	11.67	103	27.70	25.57	3.24	2.06	1.07	0.22	9.18	1.06	8.10
W9301	F04	02-25-93	0930	2.58	W93010384	1.12	31.69	11.49	101	27.42	25.38	3.32	1.20	0.11	0.17	2.45	0.54	2.17
W9301	F04	02-25-93	0929	9.67	W93010381	1.15	31.70	11.41	100	27.46	25.39	5.51	1.17	0.33	0.02	0.02	0.27	2.25
W9301	F04	02-25-93	0928	21.49	W93010380	2.15	32.21	10.62	96	28.68	25.73	2.01	1.04	0.40	0.26	2.14	0.37	6.92
W9301	F04	02-25-93	0927	43.79	W93010379	2.30	32.31	10.57	96	28.89	25.80	1.76	1.08	0.15	0.00	5.59	0.64	7.62
W9301	F04	02-25-93	0926	55.35	W93010378	2.29	32.31	10.57	96	28.89	25.80	1.67	1.04	2.04	0.04	0.01	0.42	7.64
W9301	F05	02-24-93	1137	2.13	W93010292	1.27	31.84	10.92	96	27.66	25.49	0.54	2.74	0.32	0.24	9.55	0.85	9.49
W9301	F05	02-24-93	1136	3.51	W93010291	1.28	31.85	10.89	96	27.67	25.49	0.67	2.74	1.79	0.02	5.31	0.57	9.68
W9301	F05	02-24-93	1135	6.54	W93010290	1.37	31.92	10.84	96	27.80	25.54	0.72	2.61	4.67	0.27	4.61	0.72	9.54
W9301	F05	02-24-93	1134	10.58	W93010289	1.65	32.09	10.70	95	28.17	25.66	0.63	2.12	0.22	0.00	8.04	0.67	9.19
W9301	F05	02-24-93	1133	15.80	W93010288	1.74	32.12	10.73	96	28.27	25.68	0.82	2.57	4.33	0.19	9.61	2.15	9.19
W9301	F06	02-24-93	1220	2.39	W93010303	2.38	32.44	11.09	101	29.05	25.89	0.20	1.07	0.82	0.15	8.56	1.37	8.31
W9301	F06	02-24-93	1219	6.64	W93010302	2.40	32.45	11.13	101	29.07	25.90	0.40	1.07	1.17	0.04	5.65	0.72	8.39
W9301	F06	02-24-93	1218	12.45	W93010301	2.39	32.44	11.16	102	29.06	25.90	0.41	1.07	0.25	0.02	6.37	0.59	8.30
W9301	F06	02-24-93	1217	20.83	W93010300	2.42	32.45	11.19	102	29.09	25.90	0.42	1.06	1.40	0.14	8.67	1.02	8.28
W9301	F06	02-24-93	1217	28.28	W93010299	2.42	32.46	11.33	103	29.11	25.90	0.39	1.05	0.16	0.01	3.94	0.65	8.29
W9301	F07	02-24-93	1302	3.18	W93010316	2.48	32.49	11.21	102	29.17	25.92	0.34	0.99	0.28	0.02	5.86	0.66	8.73
W9301	F07	02-24-93	1301	13.25	W93010315	2.49	32.49	11.21	102	29.18	25.92	0.40	0.99	1.08	0.14	8.51	37.03 s	8.64
W9301	F07	02-24-93	1300	26.26	W93010314	2.47	32.49	11.14	102	29.17	25.92	0.38	1.00	1.12	0.01	5.30	0.69	8.77
W9301	F07	02-24-93	1257	39.18	W93010313	2.45	32.49	11.15	102	29.16	25.92	0.35	1.02	0.48	0.04	6.15	0.73	8.81
W9301	F07	02-24-93	1256	53.24	W93010312	2.45	32.49	11.25	103	29.17	25.93	0.39	1.04	0.61	0.14	8.50	0.97	8.79
W9301	F08	02-24-93	1400	3.68	W93010327	2.72	32.55	11.04	101	29.42	25.96	0.38	0.94	0.55	0.06	5.88	0.70	8.87
W9301	F08	02-24-93	1359	18.98	W93010326	2.73	32.55	10.95	101	29.43	25.95	0.48	0.96	1.64	0.30	3.60	0.65	9.02
W9301	F08	02-24-93	1358	38.71	W93010325	2.74	32.56	10.90	100	29.46	25.96	0.45	0.94	0.16	0.01	6.35	0.78	9.09
W9301	F08	02-24-93	1356	58.92	W93010324	2.77	32.56	10.89	100	29.49	25.96	0.43	0.96	0.26	0.03	5.70	0.73	9.14
W9301	F08	02-24-93	1355	79.96	W93010323	2.78	32.56	10.85	100	29.51	25.96	0.45	0.96	0.19	0.04	6.24	1.51	9.28
W9301	F09	02-25-93	1840	2.22	W93010451	1.21	32.00		e	27.74	25.62	0.61	1.67	1.76	0.02	7.55	0.89	9.58
W9301	F09	02-25-93	1838	4.22	W93010450	1.21	32.00		e	27.74	25.62	0.57	1.72	1.14	0.03	6.49	0.64	9.67

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Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9301	F09	02-25-93	1837	9.30	W93010449	1.21	32.01	e		27.75	25.63	0.58	1.67	4.13	0.27	3.68	0.79	9.58
W9301	F09	02-25-93	1836	13.16	W93010448	1.28	32.04	e		27.83	25.65	0.61	1.66	3.44	0.02	5.58	0.72	9.55
W9301	F09	02-25-93	1835	15.57	W93010447	1.33	32.09	e		27.92	25.69	0.62	1.61	2.82	0.21	9.25	1.05	9.37
W9301	F10	02-25-93	1928	2.39	W93010466	2.26	32.47	10.71	97	28.97	25.93	0.46	0.93	0.53	0.09	4.28	0.65	8.92
W9301	F10	02-25-93	1928	5.99	W93010465	2.27	32.47	10.63	96	28.98	25.93	0.44	0.93	0.31	0.02	5.46	0.64	9.13
W9301	F10	02-25-93	1927	15.20	W93010464	2.28	32.47	10.47	95	28.99	25.93	0.50	0.94	0.75	0.01	4.38	0.64	9.12
W9301	F10	02-25-93	1926	21.00	W93010463	2.28	32.47	10.37	94	29.00	25.93	0.46	0.94	0.98	0.01	3.53	0.59	22.41
W9301	F10	02-25-93	1925	28.60	W93010462	2.28	32.47	10.35	94	29.00	25.93	0.44	0.94	0.18	0.01	3.27	0.54	9.10
W9301	F11	02-25-93	2025	3.20	W93010477	2.35	32.48	10.94	99	29.06	25.92	0.51	1.17	0.88	0.02	4.63	0.59	9.17
W9301	F11	02-25-93	2023	15.52	W93010476	2.37	32.48	10.82	98	29.08	25.92	0.47	0.98	0.55	0.02	6.78	0.69	9.21
W9301	F11	02-25-93	2022	20.79	W93010475	2.37	32.48	10.65	97	29.07	25.92	0.45	1.00	1.69	0.01	1.61	0.50	9.37
W9301	F11	02-25-93	2021	39.96	W93010474	2.36	32.48	10.56	96	29.08	25.92	0.45	1.00	2.01	0.02	3.51	0.61	9.36
W9301	F11	02-25-93	2019	46.96	W93010473	2.37	32.48	10.47	95	29.09	25.92	0.44	1.03	0.37	0.15	8.85	0.91	9.38
W9301	F12	02-24-93	1444	3.21	W93010339	2.80	32.56	11.05	102	29.49	25.95	0.39	1.05	0.65	0.14	8.79	0.94	9.27
W9301	F12	02-24-93	1443	23.26	W93010338	2.80	32.56	11.04	102	29.50	25.95	0.42	1.01	0.52	0.14	8.77	0.91	9.26
W9301	F12	02-24-93	1442	45.46	W93010337	2.83	32.56	10.96	101	29.54	25.95	0.43	1.01	0.69	0.01	5.14	0.70	9.27
W9301	F12	02-24-93	1440	68.39	W93010336	2.90	32.57	10.90	101	29.62	25.96	0.43	0.98	0.15	0.07	4.27	0.65	9.31
W9301	F12	02-24-93	1439	88.27	W93010335	3.13	32.61	10.75	100	29.84	25.97	0.45	1.10	0.34	0.01	6.69	0.69	9.67
W9301	F13P	02-24-93	1009	2.36	W93010278	1.36	31.84	10.84	96	27.74	25.49	0.53	2.22	3.42	0.27	4.93	1.70	9.15
W9301	F13P	02-24-93	1008	4.31	W93010277	1.37	31.86	10.81	95	27.76	25.50	0.56	2.23	4.75	0.27	4.45	1.11	9.14
W9301	F13P	02-24-93	1006	5.85	W93010276	1.39	31.87	10.73	95	27.78	25.51	0.63	2.26	4.01	0.23	9.30	1.08	8.91
W9301	F13P	02-24-93	1005	10.24	W93010275	1.61	32.02	10.54	94	28.08	25.61	0.62	2.15	0.46	0.25	8.77	0.84	8.84
W9301	F13P	02-24-93	1004	15.99	W93010274	1.87	32.17	10.44	94	28.41	25.71	0.43	1.90	2.03	0.19	8.75	1.21	8.12
W9301	F14	02-23-93	1134	2.09	W93010131	1.17	31.50	10.79	95	27.32	25.22	0.65	2.33	2.43	0.23	10.07	0.83	10.77
W9301	F14	02-23-93	1133	3.81	W93010130	1.22	31.57	10.75	94	27.41	25.27	0.75	2.36	3.25	0.20	8.55	0.88	10.67
W9301	F14	02-23-93	1132	8.20	W93010129	1.39	31.76	10.62	94	27.70	25.42	0.67	2.59	4.77	0.26	9.87	1.12	10.29
W9301	F14	02-23-93	1131	12.92	W93010128	1.70	32.02	10.51	94	28.16	25.61	0.87	3.19	3.89	0.21	9.50	1.06	9.58
W9301	F14	02-23-93	1130	17.92	W93010127	2.00	32.26	10.37	93	28.60	25.78	1.62	4.28	2.20	0.18	8.70	0.95	8.77
W9301	F15	02-23-93	1224	2.33	W93010142	2.60	32.49	10.83	99	29.27	25.91	0.14	0.97	0.41	0.02	6.42	0.50	8.19
W9301	F15	02-23-93	1223	9.49	W93010141	2.58	32.49	10.83	99	29.26	25.92	0.34	1.04	0.52	0.15	8.45	0.90	8.34
W9301	F15	02-23-93	1218	18.78	W93010140	2.60	32.50	10.84	99	29.28	25.92	0.39	1.07	0.83	0.02	5.96	0.72	8.33
W9301	F15	02-23-93	1216	28.87	W93010139	2.60	32.50	10.89	100	29.28	25.92	0.41	1.23	2.47	0.08	2.34	0.58	8.41
W9301	F15	02-23-93	1215	37.49	W93010138	2.60	32.50	10.89	100	29.29	25.92	0.45	1.27	0.52	0.15	8.51	0.92	8.32
W9301	F16	02-23-93	1304	1.96	W93010153	2.65	32.50	10.82	99	29.32	25.92	0.26	1.07	0.67	0.16	8.70	0.89	9.16
W9301	F16	02-23-93	1303	12.98	W93010152	2.57	32.51	10.78	99	29.27	25.93	0.45	1.13	0.23	0.01	6.94	0.71	9.13
W9301	F16	02-23-93	1302	28.83	W93010151	2.57	32.51	10.75	98	29.28	25.93	0.46	1.21	0.70	0.07	4.01	0.57	9.15
W9301	F16	02-23-93	1301	42.93	W93010150	2.57	32.51	10.72	98	29.28	25.93	0.42	1.21	0.14	0.02	7.83	0.79	9.15
W9301	F16	02-23-93	1300	56.77	W93010149	2.57	32.51	10.67	98	29.29	25.93	0.46	1.23	0.19	0.02	7.10	0.64	9.15
W9301	F17	02-23-93	1353	1.98	W93010166	3.06	32.53	10.69	99	29.68	25.91	0.15	0.88	0.12	0.01	5.92	0.65	9.24
W9301	F17	02-23-93	1352	26.11	W93010165	2.87	32.54	10.75	99	29.55	25.94	0.35	0.96	0.08	0.01	5.83	0.63	9.09
W9301	F17	02-23-93	1351	39.52	W93010164	2.88	32.55	10.76	99	29.56	25.94	0.30	0.95	1.11	0.28	4.76	0.72	9.15
W9301	F17	02-23-93	1350	49.87	W93010163	2.94	32.55	10.72	99	29.62	25.94	0.32	0.94	0.48	0.02	4.84	0.63	9.06

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Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9301	F17	02-23-93	1349	67.33	W93010162	2.96	32.57	10.62	98	29.66	25.95	0.46	1.54	0.72	0.14	8.86	0.94	9.88
W9301	F18	02-23-93	1752	1.43	W93010221	1.84	32.24	11.06	99	28.45	25.77	0.53	2.00	0.12	0.63	6.45	0.67	9.05
W9301	F18	02-23-93	1751	4.86	W93010220	1.82	32.24	11.01	99	28.43	25.78	0.47	2.03	0.86	0.00	5.82	0.64	9.16
W9301	F18	02-23-93	1750	9.14	W93010219	1.90	32.27	10.87	98	28.52	25.79	0.47	1.80	2.18	0.09	5.18	0.72	8.94
W9301	F18	02-23-93	1749	15.34	W93010218	1.90	32.30	10.80	97	28.54	25.82	0.39	1.78	0.11	0.02	3.47	0.31	8.91
W9301	F18	02-23-93	1748	21.10	W93010217	1.90	32.30	10.74	96	28.55	25.82	0.54	1.99	0.92	0.00	5.25	0.60	9.00
W9301	F19	02-23-93	1449	2.07	W93010177	3.55	32.69	10.67	100	30.23	25.99	0.17	0.88	0.10	0.11	8.49	0.88	9.36
W9301	F19	02-23-93	1448	17.66	W93010176	3.65	32.73	10.61	100	30.35	26.02	0.39	0.85	0.09	0.10	8.60	0.90	9.11
W9301	F19	02-23-93	1447	39.02	W93010175	3.71	32.75	10.59	100	30.43	26.03	0.32	0.84	0.19	0.02	5.16	0.70	8.98
W9301	F19	02-23-93	1445	62.28	W93010174	3.72	32.75	10.55	99	30.45	26.03	0.17	0.95	0.21	0.01	4.85	0.64	9.07
W9301	F19	02-23-93	1444	78.31	W93010173	3.72	32.76	10.37	98	30.46	26.03	0.55	1.98	4.14	0.08	-0.02	0.53	9.07
W9301	F20	02-23-93	1659	2.14	W93010210	2.39	32.38	11.00	100	29.01	25.85	0.40	0.98	0.74	0.02	5.67	0.69	9.54
W9301	F20	02-23-93	1658	6.91	W93010209	2.40	32.38	11.00	100	29.02	25.84	0.32	0.98	1.12	0.02	4.11	0.58	9.61
W9301	F20	02-23-93	1654	14.10	W93010208	2.39	32.39	10.63	97	29.02	25.85	0.19	1.02	1.30	0.18	3.66	0.64	9.55
W9301	F20	02-23-93	1653	23.56	W93010207	2.36	32.40	10.64	97	29.00	25.86	0.38	1.10	0.73	0.01	4.55	0.61	9.55
W9301	F20	02-23-93	1652	32.01	W93010206	2.36	32.39	10.66	97	29.01	25.86	0.34	1.20	0.06	0.01	4.43	0.46	9.59
W9301	F21	02-23-93	1620	1.63	W93010199	1.99	32.25	11.30	102	28.57	25.77	0.40	1.32	0.62	0.02	4.62	0.64	10.31
W9301	F21	02-23-93	1619	11.45	W93010198	1.99	32.26	11.21	101	28.58	25.78	0.42	1.31	1.64	0.01	3.73	0.56	10.29
W9301	F21	02-23-93	1618	26.05	W93010197	2.35	32.41	10.99	100	29.01	25.87	0.33	1.14	0.15	0.02	3.39	0.19	10.15
W9301	F21	02-23-93	1617	39.47	W93010196	2.39	32.43	11.01	100	29.06	25.88	0.20	1.17	1.59	0.01	2.17	0.42	10.11
W9301	F21	02-23-93	1615	53.45	W93010195	2.78	32.55	10.86	100	29.49	25.95	0.19	1.16	1.21	0.02	3.10	0.61	9.88
W9301	F22	02-23-93	1537	2.07	W93010188	3.72	32.73	10.79	102	30.40	26.01	0.20	0.79	0.51	0.08	8.88	0.97	9.04
W9301	F22	02-23-93	1536	16.58	W93010187	3.76	32.74	10.74	101	30.46	26.02	0.25	0.79	1.01	0.28	4.50	0.57	9.09
W9301	F22	02-23-93	1535	34.99	W93010186	3.71	32.74	10.69	101	30.42	26.02	0.33	0.82	0.23	0.07	9.00	0.91	9.05
W9301	F22	02-23-93	1533	54.05	W93010185	3.71	32.74	10.69	101	30.42	26.02	0.09	0.85	1.04	0.17	3.53	0.47	9.20
W9301	F22	02-23-93	1532	74.67	W93010184	3.70	32.74	10.75	101	30.42	26.02	0.31	0.87	3.22	0.14	1.50	0.52	9.27
W9301	F23P	02-23-93	0718	2.13	W93010066	0.84	30.33	10.57	91	26.14	24.30	0.81	2.68	9.02	0.36	11.70	1.06	12.90
W9301	F23P	02-23-93	0717	5.03	W93010065	0.89	30.75	10.49	91	26.51	24.64	0.91	2.87	4.71	0.32	8.39	0.92	11.74
W9301	F23P	02-23-93	0716	8.90	W93010064	1.01	30.98	10.40	90	26.78	24.82	1.08	3.44	8.03	0.33	10.87	0.97	11.41
W9301	F23P	02-23-93	0715	13.35	W93010063	0.99	30.97	10.34	90	26.76	24.80	0.93	3.30	5.06	0.38	8.48	0.87	11.44
W9301	F23P	02-23-93	0713	18.25	W93010062	1.07	31.10	10.19	89	26.92	24.91	0.95	3.42	8.40	0.32	10.86	1.08	11.17
W9301	F24	02-23-93	0811	2.07	W93010078	1.25	31.51	10.51	92	27.39	25.23	1.10	3.49	4.76	0.02	6.04	0.58	11.25
W9301	F24	02-23-93	0810	3.56	W93010077	1.35	31.65	10.44	92	27.57	25.33	1.06	3.43	2.55	0.22	9.78	0.89	10.61
W9301	F24	02-23-93	0809	6.78	W93010076	1.52	31.95	10.37	92	27.95	25.56	0.67	2.74	3.25	0.20	6.36	0.81	9.89
W9301	F24	02-23-93	0808	12.87	W93010075	1.80	32.22	10.25	92	28.40	25.76	0.92	2.64	4.21	0.18	3.75	0.75	9.24
W9301	F24	02-23-93	0808	18.40	W93010074	1.82	32.25	10.06	90	28.45	25.78	2.22	6.04	3.78	0.48	3.33	0.70	9.12
W9301	F25	02-24-93	1753	2.30	W93010356	0.94	31.18	10.56	92	26.88	24.98	0.70	2.11	4.40	0.28	9.65	1.15	11.41
W9301	F25	02-24-93	1753	3.53	W93010355	0.93	31.18	10.54	92	26.88	24.98	0.70	2.10	1.93	0.33	10.55	0.80	11.64
W9301	F25	02-24-93	1752	4.89	W93010354	0.94	31.19	10.57	92	26.89	24.99	0.73	2.11	1.92	0.33	10.41	0.98	11.49
W9301	F25	02-24-93	1751	8.66	W93010353	0.95	31.20	10.65	93	26.90	24.99	0.77	2.10	3.01	0.27	9.55	0.86	11.65
W9301	F25	02-24-93	1750	11.42	W93010352	0.95	31.20	10.77	94	26.91	24.99	0.72	2.12	4.54	0.29	10.53	0.96	11.64
W9301	N01P	02-24-93	0613	1.64	W93010236	1.86	32.33	10.90	98	28.53	25.84	0.40	1.59	0.66	0.00	7.39	0.71	8.18

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Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SI04 (uM)
W9301	N01P	02-24-93	0612	6.20	W93010235	1.92	32.33	10.88	98	28.58	25.84	0.33	1.57	1.79	0.19	4.38	0.61	8.07
W9301	N01P	02-24-93	0611	12.57	W93010234	1.92	32.33	10.84	97	28.58	25.84	0.32	1.56	0.10	0.00	8.14	0.67	8.23
W9301	N01P	02-24-93	0610	20.26	W93010233	2.26	32.41	10.72	97	28.93	25.88	0.20	1.47	0.79	0.00	6.58	0.70	8.34
W9301	N01P	02-24-93	0609	26.67	W93010232	2.27	32.42	10.72	97	28.95	25.88	0.41	1.67	0.74	0.16	7.19	0.73	8.37
W9301	N01P	02-26-93	0957	2.25	W93010525	2.00	32.41	11.06	100	28.71	25.90	0.27	0.96	0.55	0.11	5.57	0.67	9.61
W9301	N01P	02-26-93	0956	6.16	W93010524	1.99	32.41	11.00	99	28.70	25.90	0.37	0.98	0.60	0.12	8.84	0.79	9.65
W9301	N01P	02-26-93	0955	13.59	W93010523	1.98	32.41	10.99	99	28.70	25.90	0.49	0.97	0.53	0.11	8.75	0.87	9.48
W9301	N01P	02-26-93	0954	19.23	W93010522	1.98	32.41	10.91	98	28.70	25.90	0.44	0.97	1.04	0.00	1.75	0.41	9.63
W9301	N01P	02-26-93	0953	28.79	W93010521	1.98	32.41	10.90	98	28.71	25.90	0.43	0.98	1.86	0.00	3.41	0.55	9.51
W9301	N02	02-26-93	1021	2.12	W93010536	2.06	32.41	11.08	100	28.76	25.90	0.34	0.99	0.45	0.06	5.27	0.59	9.66
W9301	N02	02-26-93	1020	7.26	W93010535	2.06	32.41	11.02	99	28.76	25.90	0.42	1.01	2.33	0.00	1.93	0.48	9.46
W9301	N02	02-26-93	1019	14.62	W93010534	2.04	32.41	10.98	99	28.75	25.90	0.49	1.01	0.67	0.00	5.40	0.63	9.56
W9301	N02	02-26-93	1019	22.59	W93010533	2.04	32.41	11.00	99	28.75	25.90	0.46	1.01	0.10	0.00	6.47	0.74	9.49
W9301	N02	02-26-93	1018	32.63	W93010532	2.04	32.42	10.99	99	28.76	25.90	0.44	0.99	1.31	0.02	4.31	0.61	9.56
W9301	N03	02-26-93	1044	2.19	W93010547	2.15	32.43	10.97	99	28.84	25.90	0.37	0.98	4.80	0.09	1.50	0.61	10.15
W9301	N03	02-26-93	1043	8.77	W93010546	2.13	32.43	10.88	98	28.84	25.90	0.41	1.00	3.77	0.15	1.34	0.56	9.95
W9301	N03	02-26-93	1042	18.35	W93010545	2.12	32.43	10.84	98	28.83	25.90	0.45	1.00	1.42	0.00	4.39	0.56	9.57
W9301	N03	02-26-93	1042	28.85	W93010544	2.12	32.43	10.84	98	28.83	25.90	0.36	1.00	0.07	0.04	8.34	0.79	9.60
W9301	N03	02-26-93	1041	37.68	W93010543	2.12	32.43	10.83	98	28.84	25.90	0.32	1.00	0.50	0.11	8.67	0.87	9.42
W9301	N04P	02-24-93	0727	4.37	W93010252	2.08	32.37	10.61	96	28.75	25.86	0.15	1.29	1.01	0.01	5.39	0.63	8.98
W9301	N04P	02-24-93	0726	9.86	W93010251	2.12	32.37	10.39	94	28.78	25.86	0.33	1.21	0.11	0.02	8.68	0.81	9.02
W9301	N04P	02-24-93	0725	20.82	W93010250	2.32	32.43	10.03	91	29.00	25.89	0.23	1.20	0.62	0.08	4.96	0.64	8.92
W9301	N04P	02-24-93	0724	33.47	W93010249	3.33	32.66	9.68	90	30.02	25.98	0.17	0.96	0.27	0.11	8.88	1.87	8.65
W9301	N04P	02-24-93	0722	44.43	W93010248	3.36	32.66	9.68	90	30.06	25.99	0.19	0.98	3.29	0.06	0.95	0.59	8.67
W9301	N04P	02-26-93	1109	2.12	W93010558	1.58	32.28	11.41	102	28.26	25.82	0.40	1.16	0.32	0.00	6.56	0.65	10.04
W9301	N04P	02-26-93	1108	10.58	W93010557	1.52	32.28	11.34	101	28.21	25.82	0.54	1.22	0.26	0.00	5.87	0.60	9.83
W9301	N04P	02-26-93	1107	19.57	W93010556	1.70	32.32	11.19	100	28.40	25.84	0.55	1.18	0.43	0.00	5.83	0.64	10.22
W9301	N04P	02-26-93	1106	32.13	W93010555	2.08	32.39	11.00	99	28.78	25.88	0.42	1.05	0.22	0.00	6.40	0.62	9.81
W9301	N04P	02-26-93	1105	47.33	W93010554	2.97	32.58	10.64	98	29.67	25.96	0.39	0.88	0.52	0.18	5.36	0.54	9.38
W9301	N05	02-26-93	1136	2.08	W93010569	1.57	32.28	11.36	101	28.26	25.83	0.38	1.15	0.52	0.01	6.11	0.65	10.20
W9301	N05	02-26-93	1135	13.67	W93010568	1.63	32.31	11.21	100	28.33	25.84	0.50	1.19	1.46	0.00	3.41	0.50	10.19
W9301	N05	02-26-93	1134	30.10	W93010567	2.19	32.40	10.91	99	28.87	25.88	0.47	1.09	1.14	0.01	3.40	0.44	10.00
W9301	N05	02-26-93	1132	43.57	W93010566	3.41	32.66	10.47	98	30.11	25.98	0.35	0.85	1.27	0.28	3.72	0.61	9.63
W9301	N05	02-26-93	1131	50.11	W93010565	3.43	32.67	10.44	98	30.14	25.99	0.35	0.84	0.32	0.02	5.74	0.70	9.37
W9301	N06	02-26-93	1202	2.00	W93010580	1.99	32.38	11.30	102	28.67	25.87	0.18	1.10	1.57	0.00	3.44	0.51	9.95
W9301	N06	02-26-93	1201	13.74	W93010579	1.94	32.38	11.23	101	28.64	25.88	0.49	1.13	0.43	0.29	3.98	0.59	9.95
W9301	N06	02-26-93	1200	28.78	W93010578	2.68	32.52	10.86	100	29.37	25.93	0.43	1.02	1.05	0.00	2.82	0.57	9.67
W9301	N06	02-26-93	1159	38.32	W93010577	3.65	32.72	10.47	98	30.35	26.00	0.36	0.89	0.13	0.01	6.50	0.68	9.31
W9301	N06	02-26-93	1158	47.59	W93010576	3.66	32.72	10.48	99	30.37	26.01	0.35	0.90	0.34	0.10	8.82	0.93	9.23
W9301	N07P	02-24-93	0854	2.10	W93010264	2.42	32.42	10.93	99	29.06	25.87	0.24	1.04	0.64	0.12	8.75	1.11	10.78
W9301	N07P	02-24-93	0853	7.78	W93010263	2.44	32.42	10.86	99	29.08	25.87	0.33	1.03	0.70	0.12	8.96	0.96	9.24
W9301	N07P	02-24-93	0851	16.06	W93010262	2.42	32.42	10.82	98	29.07	25.87	0.30	1.04	1.00	0.01	5.28	0.91	9.22

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Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (umhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
W9301	N07P	02-24-93	0850	32.21	W93010261	2.50	32.44	10.76	98	29.16	25.88	0.36	1.04	1.12	0.02	5.01	0.71	9.40
W9301	N07P	02-24-93	0849	44.54	W93010260	2.58	32.50	10.67	98	29.28	25.92	0.31	1.02	0.68	0.05	4.83	0.62	8.82
W9301	N07P	02-26-93	1228	2.26	W93010590	2.29	32.44	11.41	104	28.97	25.90	0.34	1.05	1.24	0.00	3.30	0.46	9.81
W9301	N07P	02-26-93	1227	6.51	W9301589A	2.26	32.45	11.41	103	28.96	25.91	0.44	1.07	0.18	0.01	5.15	0.62	9.94
W9301	N07P	02-26-93	1226	15.40	W93010589	2.27	32.46	11.30	102	28.98	25.92	0.47	1.08	0.25	0.00	4.90	0.51	9.79
W9301	N07P	02-26-93	1225	35.29	W93010588	2.43	32.50	11.17	102	29.15	25.94	0.48	1.05	0.17	0.00	4.46	0.56	9.89
W9301	N07P	02-26-93	1224	48.15	W93010587	3.40	32.68	10.75	100	30.11	26.00	0.41	1.07	0.53	0.13	3.72	0.55	9.78
W9301	N08	02-26-93	1255	2.03	W93010605	2.02	32.39	11.43	103	28.70	25.88	0.39	1.08	0.29	0.01	5.83	0.62	10.03
W9301	N08	02-26-93	1254	6.79	W93010604	1.94	32.39	11.33	102	28.64	25.88	0.44	1.15	0.32	0.01	5.83	0.58	10.03
W9301	N08	02-26-93	1254	13.30	W93010603	1.91	32.39	11.26	101	28.62	25.89	0.54	1.13	0.47	0.13	3.03	0.48	10.09
W9301	N08	02-26-93	1253	22.85	W93010602	1.90	32.39	11.20	101	28.62	25.89	0.47	1.12	0.55	0.12	0.11	0.28	10.06
W9301	N08	02-26-93	1252	31.14	W93010601	1.90	32.40	11.19	100	28.63	25.90	0.40	1.08	0.59	0.11	8.56	0.85	9.83
W9301	N09	02-26-93	1320	1.81	W93010616	1.99	32.39	11.27	101	28.69	25.88	0.32	0.99	0.45	0.02	4.74	0.56	10.10
W9301	N09	02-26-93	1319	6.50	W93010615	1.90	32.39	11.20	101	28.62	25.89	0.34	1.04	0.78	0.47	2.15	0.52	10.28
W9301	N09	02-26-93	1318	15.77	W93010614	1.91	32.41	11.14	100	28.64	25.91	0.46	1.03	0.49	0.03	5.24	0.62	10.10
W9301	N09	02-26-93	1317	22.71	W93010613	2.05	32.45	10.97	99	28.79	25.92	0.43	0.91	1.23	0.29	2.15	0.47	9.70
W9301	N09	02-26-93	1316	32.82	W93010612	2.01	32.45	10.93	98	28.77	25.93	0.41	0.90	0.82	0.12	8.52	0.87	9.42
W9301	N10P	02-23-93	1051	2.12	W93010117	1.46	31.89	10.93	97	27.85	25.51	0.71	2.44	4.37	0.26	2.76	0.84	9.15
W9301	N10P	02-23-93	1050	3.52	W93010116	1.63	32.07	10.79	96	28.14	25.65	0.66	2.36	3.09	0.19	4.76	0.63	8.68
W9301	N10P	02-23-93	1049	7.15	W93010115	1.92	32.26	10.69	96	28.52	25.78	0.69	2.17	0.70	0.00	6.33	0.69	8.15
W9301	N10P	02-23-93	1047	16.03	W93010114	2.04	32.32	10.58	95	28.68	25.82	0.67	1.97	1.49	0.01	6.11	0.64	8.10
W9301	N10P	02-23-93	1046	24.49	W93010113	2.16	32.38	10.45	94	28.83	25.86	0.86	2.40	3.24	0.18	2.00	0.71	8.05
W9301	N10P	02-26-93	0836	2.83	W93010492	0.36	31.51	11.39	98	26.69	25.28	0.47	1.68	4.65	0.44	5.09	0.72	11.48
W9301	N10P	02-26-93	0835	3.91	W93010491	0.53	31.66	11.27	97	26.93	25.39	0.58	1.70	2.35	0.16	9.68	2.23	11.07
W9301	N10P	02-26-93	0834	4.98	W93010490	0.61	31.70	11.26	97	27.03	25.42	0.55	1.68	6.22	0.26	4.33	1.06	8.22
W9301	N10P	02-26-93	0833	14.52	W93010489	0.98	32.15	11.18	98	27.68	25.76	0.43	1.51	3.65	0.01	4.04	0.68	9.97
W9301	N10P	02-26-93	0831	21.83	W93010488	1.14	32.23	11.10	98	27.88	25.81	0.49	1.43	1.20	0.02	5.91	0.66	9.57
W9301	N11	02-26-93	0907	2.10	W93010503	1.83	32.42	11.08	99	28.58	25.92	0.28	1.01	0.95	0.27	4.17	0.58	9.02
W9301	N11	02-26-93	0906	6.55	W93010502	1.83	32.42	11.02	99	28.58	25.92	0.43	1.01	1.49	0.01	3.64	0.60	9.14
W9301	N11	02-26-93	0905	14.39	W93010501	1.82	32.42	10.91	98	28.58	25.92	0.40	1.02	1.73	0.01	2.85	0.51	9.10
W9301	N11	02-26-93	0904	21.29	W93010500	1.83	32.43	10.92	98	28.59	25.92	0.48	1.02	2.06	0.20	2.97	0.77	9.15
W9301	N11	02-26-93	0903	27.93	W93010499	1.88	32.43	10.85	97	28.64	25.92	0.39	1.00	1.41	0.06	5.63	0.72	9.04
W9301	N12	02-26-93	0932	1.98	W93010514	1.95	32.42	10.88	98	28.68	25.91	0.36	0.96	1.45	0.01	4.50	0.68	9.20
W9301	N12	02-26-93	0931	5.94	W93010513	1.95	32.42	10.83	97	28.68	25.91	0.46	0.98	1.92	0.01	2.83	0.54	9.26
W9301	N12	02-26-93	0931	12.32	W93010512	1.94	32.42	10.83	97	28.68	25.91	0.43	0.97	0.71	0.10	6.58	0.75	9.23
W9301	N12	02-26-93	0930	18.73	W93010511	1.94	32.42	10.83	97	28.68	25.91	0.41	0.97	0.69	0.01	4.47	0.57	9.23
W9301	N12	02-26-93	0929	24.69	W93010510	1.94	32.42	10.79	97	28.68	25.91	0.45	0.96	0.91	0.00	3.99	0.57	9.16
W9301	N13	02-26-93	1445	2.05	W93010651	1.83	32.36	11.25	101	28.53	25.87	0.39	1.04	0.62	0.01	4.40	0.62	10.01
W9301	N13	02-26-93	1445	5.51	W93010650	1.75	32.35	11.22	100	28.46	25.87	0.49	1.10	1.58	0.00	3.92	0.54	9.81
W9301	N13	02-26-93	1443	11.07	W93010649	1.71	32.36	11.22	100	28.43	25.88	0.52	1.12	1.71	0.01	2.91	0.46	9.84
W9301	N13	02-26-93	1442	20.77	W93010648	2.04	32.43	11.04	100	28.76	25.91	0.50	0.99	1.69	0.02	1.76	0.43	9.69
W9301	N13	02-26-93	1441	29.29	W93010647	2.04	32.43	11.01	99	28.77	25.91	0.51	0.97	0.96	0.01	4.62	0.60	9.68

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (ug/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9301	N14	02-26-93	1509	2.12	W93010662	1.66	32.30	11.48	102	28.34	25.83	0.36	1.12	0.87	0.12	8.70	0.91	9.95
W9301	N14	02-26-93	1507	6.58	W93010661	1.55	32.30	11.42	102	28.25	25.84	0.52	1.16	1.82	0.01	2.29	0.44	10.04
W9301	N14	02-26-93	1506	15.45	W93010660	1.61	32.32	11.38	101	28.32	25.85	0.53	1.15	1.03	0.01	5.19	0.66	9.95
W9301	N14	02-26-93	1505	22.14	W93010659	1.83	32.36	11.29	101	28.54	25.87	0.49	1.08	1.12	0.35	4.25	0.63	9.98
W9301	N14	02-26-93	1504	30.59	W93010658	2.14	32.41	11.18	101	28.84	25.89	0.44	0.97	0.80	0.05	5.87	0.64	9.72
W9301	N15	02-26-93	1534	2.19	W93010673	1.65	32.28	11.32	101	28.32	25.82	0.42	1.14	0.35	0.01	5.16	0.59	9.94
W9301	N15	02-26-93	1533	8.80	W93010672	1.52	32.28	11.32	101	28.22	25.83	0.54	1.18	0.88	0.01	4.92	0.62	10.05
W9301	N15	02-26-93	1532	19.08	W93010671	1.60	32.30	11.21	100	28.30	25.84	0.49	1.18	0.98	0.01	3.79	0.44	10.00
W9301	N15	02-26-93	1530	28.70	W93010670	1.97	32.36	11.06	99	28.66	25.86	0.55	1.11	0.05	0.01	5.35	0.52	9.80
W9301	N15	02-26-93	1529	40.31	W93010669	2.27	32.43	10.94	99	28.97	25.89	0.44	0.98	1.12	0.00	3.92	0.46	9.55
W9301	N16P	02-23-93	0950	2.10	W93010101	2.51	32.49	10.78	98	29.20	25.92	0.46	1.06	0.54	0.13	8.44	0.91	8.02
W9301	N16P	02-23-93	0949	9.28	W93010100	2.52	32.49	10.71	98	29.21	25.92	0.43	1.08	1.19	0.01	4.79	0.65	8.26
W9301	N16P	02-23-93	0947	21.20	W93010099	2.52	32.49	10.68	98	29.22	25.93	0.37	1.09	0.54	0.04	5.15	0.64	8.11
W9301	N16P	02-23-93	0946	28.20	W93010098	2.52	32.50	10.69	98	29.22	25.93	0.50	1.11	0.81	0.17	3.57	0.51	8.22
W9301	N16P	02-23-93	0945	40.86	W93010097	2.54	32.50	10.64	97	29.24	25.93	0.48	1.26	3.15	0.06	2.24	0.68	8.11
W9301	N16P	02-26-93	1557	2.02	W93010684	1.66	32.29	11.41	102	28.34	25.82	0.40	1.12	0.28	0.01	7.19	0.68	10.08
W9301	N16P	02-26-93	1556	8.62	W93010683	1.53	32.29	11.38	101	28.23	25.83	0.52	1.16	0.29	0.12	8.72	0.90	9.91
W9301	N16P	02-26-93	1555	18.92	W93010682	1.61	32.31	11.23	100	28.31	25.84	0.48	1.17	0.41	0.12	8.79	0.90	9.97
W9301	N16P	02-26-93	1553	29.15	W93010681	2.19	32.41	10.99	99	28.87	25.88	0.51	1.09	0.42	0.12	8.88	0.92	9.82
W9301	N16P	02-26-93	1552	38.56	W93010680	2.76	32.54	10.75	99	29.45	25.94	0.37	0.93	0.54	0.12	8.91	0.92	9.57
W9301	N17	02-26-93	1619	1.76	W93010695	1.88	32.35	11.19	100	28.57	25.86	0.42	1.06	0.38	0.01	4.88	0.57	9.83
W9301	N17	02-26-93	1618	5.86	W93010694	1.81	32.35	11.12	100	28.50	25.86	0.50	1.14	1.42	0.02	4.49	1.05	9.83
W9301	N17	02-26-93	1617	12.90	W93010693	1.78	32.35	11.09	99	28.48	25.86	0.59	1.15	2.87	0.20	1.80	0.53	9.64
W9301	N17	02-26-93	1615	24.94	W93010692	2.26	32.43	10.82	98	28.95	25.89	0.55	1.07	0.70	0.04	5.78	0.60	9.42
W9301	N17	02-26-93	1614	36.40	W93010691	2.77	32.54	10.59	97	29.47	25.94	0.38	0.90	2.13	0.02	2.37	0.55	9.49
W9301	N18	02-26-93	1642	1.91	W93010706	1.77	32.34	11.14	100	28.46	25.85	0.45	1.09	0.67	0.02	5.08	0.65	9.73
W9301	N18	02-26-93	1641	4.02	W93010705	1.76	32.34	11.10	99	28.46	25.86	0.45	1.11	0.19	0.01	5.19	0.65	9.83
W9301	N18	02-26-93	1641	10.08	W93010704	1.83	32.36	11.01	99	28.53	25.87	0.49	1.10	0.42	0.01	5.04	0.59	9.81
W9301	N18	02-26-93	1640	16.71	W93010703	1.91	32.38	10.97	99	28.61	25.88	0.49	1.04	0.28	0.01	2.47	0.44	9.78
W9301	N18	02-26-93	1638	24.12	W93010702	1.93	32.39	10.84	97	28.65	25.89	0.44	1.00	2.01	0.01	2.56	0.49	9.74
W9301	N19	02-26-93	1349	2.01	W93010629	1.89	32.37	11.45	103	28.59	25.88	0.33	1.03	0.13	0.00	5.93	0.65	9.70
W9301	N19	02-26-93	1348	3.27	W93010628	1.84	32.37	11.40	102	28.54	25.87	0.30	1.06	0.21	0.03	5.22	0.59	9.68
W9301	N19	02-26-93	1347	10.24	W93010627	1.83	32.38	11.34	102	28.54	25.88	0.50	1.09	0.12	0.37	5.17	0.56	9.80
W9301	N19	02-26-93	1346	16.72	W93010626	1.97	32.41	11.12	100	28.69	25.90	0.48	1.00	0.12	0.02	6.54	0.62	9.59
W9301	N19	02-26-93	1344	23.93	W93010625	2.02	32.43	11.05	100	28.75	25.91	0.38	0.93	1.80	0.01	3.29	0.44	9.53
W9301	N20P	02-23-93	0855	2.70	W93010089	2.13	32.40	10.59	96	28.81	25.88	0.58	1.73	0.55	0.30	6.15	1.21	7.91
W9301	N20P	02-23-93	0854	5.61	W93010088	2.13	32.40	10.52	95	28.81	25.88	0.55	1.72	0.86	0.02	6.75	0.70	7.90
W9301	N20P	02-23-93	0853	13.60	W93010087	2.16	32.41	10.48	95	28.85	25.88	0.52	1.63	1.24	0.00	4.94	0.58	7.80
W9301	N20P	02-23-93	0852	20.38	W93010086	2.24	32.43	10.40	94	28.93	25.89	0.45	1.43	0.97	0.01	4.61	0.54	7.81
W9301	N20P	02-23-93	0851	27.57	W93010085	2.39	32.46	10.21	93	29.08	25.91	0.92	2.52	0.33	0.01	5.24	0.63	7.62
W9301	N20P	02-26-93	1413	2.07	W93010640	1.84	32.36	11.39	102	28.54	25.87	0.38	1.05	0.83	0.08	8.15	0.88	9.54
W9301	N20P	02-26-93	1412	4.81	W93010639	1.75	32.35	11.37	102	28.46	25.86	0.44	1.10	0.40	0.08	8.23	0.88	9.57

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Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (ug/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9301	N20P	02-26-93	1411	10.39	W93010638	1.73	32.36	11.30	101	28.45	25.88	0.52	1.10	0.45	0.09	8.39	0.93	9.62
W9301	N20P	02-26-93	1410	21.37	W93010637	2.03	32.43	11.07	100	28.76	25.91	0.42	0.94	0.60	0.00	3.56	0.49	9.20
W9301	N20P	02-26-93	1409	29.14	W93010636	2.04	32.44	11.05	100	28.78	25.92	0.38	0.90	0.12	0.13	8.11	0.83	9.30
W9301	N21	02-26-93	1710	2.15	W93010717	1.65	32.31	11.17	100	28.34	25.84	0.49	1.12	1.55	0.00	3.55	0.49	9.99
W9301	N21	02-26-93	1709	7.01	W93010716	1.62	32.31	11.10	99	28.32	25.84	0.54	1.15	0.13	0.00	5.13	0.50	9.98
W9301	N21	02-26-93	1708	14.05	W93010715	1.61	32.32	11.03	98	28.32	25.85	0.48	1.16	1.58	0.00	0.66	0.36	9.85
W9301	N21	02-26-93	1707	22.17	W93010714	1.91	32.37	10.83	97	28.61	25.87	0.41	1.06	0.45	0.00	4.55	0.55	9.78
W9301	N21	02-26-93	1706	32.42	W93010713	2.04	32.41	10.68	96	28.76	25.89	0.39	0.93	0.18	0.00	6.36	0.89	9.53
W9302	F01P	03-11-93	1405	0.86	W93020527	1.71	32.07	11.44	102	28.20	25.64	4.79	1.48	0.87	0.15	5.32	0.68	5.08
W9302	F01P	03-11-93	1404	3.22	W93020526	1.71	32.07	11.43	102	28.20	25.64	5.81	1.47	1.13	0.01	2.43	0.43	5.19
W9302	F01P	03-11-93	1402	8.19	W93020525	1.70	32.08	11.40	102	28.20	25.65	4.98	1.47	0.66	1.03	-0.02	0.21	5.11
W9302	F01P	03-11-93	1401	16.75	W93020524	1.68	32.07	11.32	101	28.19	25.65	5.07	1.48	2.62	0.01	0.05	0.36	5.50
W9302	F01P	03-11-93	1400	24.62	W93020523	1.66	32.08	11.26	100	28.18	25.66	4.93	1.52	0.79	0.03	3.09	0.43	5.53
W9302	F02P	03-11-93	1203	1.88	W93020500	1.57	32.01	11.53	102	28.04	25.60	3.29	1.20	0.14	0.57	-0.01	0.20	3.24
W9302	F02P	03-11-93	1202	2.82	W93020499	1.57	32.01	11.53	102	28.04	25.60	3.11	1.22	0.78	0.01	0.08	0.33	3.25
W9302	F02P	03-11-93	1201	9.19	W93020498	1.56	32.01	11.53	102	28.03	25.61	5.49	1.19	0.71	0.70	0.00	0.29	3.23
W9302	F02P	03-11-93	1159	17.29	W93020497	1.56	32.01	11.46	102	28.04	25.61	5.38	1.18	0.13	0.00	0.10	0.18	3.43
W9302	F02P	03-11-93	1158	29.20	W93020496	1.50	32.04	11.26	100	28.02	25.64	3.90	1.09	1.71	0.14	4.46	0.65	4.16
W9302	F03	03-11-93	1525	0.95	W93020550	1.97	32.04	10.96	98	28.39	25.60	3.40	2.20	0.97	0.00	5.34	0.57	8.63
W9302	F03	03-11-93	1525	3.27	W93020549	1.97	32.04	10.97	98	28.39	25.60	4.15	2.24	0.09	0.07	6.04	0.62	8.65
W9302	F03	03-11-93	1524	6.98	W93020548	1.96	32.04	10.96	98	28.38	25.60	4.24	2.23	1.67	0.01	4.29	0.64	8.65
W9302	F03	03-11-93	1523	10.77	W93020547	1.96	32.04	10.97	98	28.39	25.60	4.01	2.24	1.07	0.00	5.05	0.56	8.63
W9302	F03	03-11-93	1522	14.83	W93020546	1.94	32.04	10.91	98	28.37	25.61	3.87	2.27	2.83	0.06	3.78	0.54	8.84
W9302	F05	03-10-93	1332	1.16	W93020390	1.87	31.73	10.96	98	28.06	25.36	0.63	3.27	3.97	0.20	9.50	1.05	11.19
W9302	F05	03-10-93	1331	3.69	W93020389	1.55	31.92	10.98	97	27.95	25.54	0.72	2.99	4.55	0.20	9.37	1.06	10.43
W9302	F05	03-10-93	1330	7.33	W93020388	1.40	31.96	10.94	97	27.86	25.57	0.88	3.25	3.52	0.20	1.87	0.72	10.50
W9302	F05	03-10-93	1329	11.97	W93020387	1.37	31.97	10.94	97	27.85	25.59	0.91	3.39	2.92	0.16	6.30	0.72	10.48
W9302	F05	03-10-93	1326	15.05	W93020386	1.37	31.98	10.98	97	27.86	25.59	0.90	3.54	1.82	0.01	8.52	0.79	10.46
W9302	F06	03-10-93	1414	1.05	W93020403	2.47	32.35	10.69	97	29.05	25.81	0.34	1.43	3.83	0.13	1.86	0.60	9.68
W9302	F06	03-10-93	1412	5.85	W93020402	1.78	32.35	10.74	96	28.48	25.86	0.35	1.52	0.98	0.02	6.12	0.69	9.58
W9302	F06	03-10-93	1411	12.02	W93020401	1.71	32.35	10.73	96	28.43	25.87	0.46	1.56	0.02	0.37	0.40	0.27	9.62
W9302	F06	03-10-93	1410	17.66	W93020400	1.69	32.35	10.72	96	28.42	25.87	0.44	1.57	2.85	0.02	-0.02	0.57	9.70
W9302	F06	03-10-93	1409	24.88	W93020399	1.69	32.35	10.70	96	28.42	25.87	0.47	1.58	3.21	0.32	0.69	0.57	9.78
W9302	F07	03-10-93	1453	1.43	W93020416	2.65	32.36	10.72	98	29.20	25.80	0.39	1.25	0.10	0.04	7.59	0.68	9.25
W9302	F07	03-10-93	1452	6.41	W93020415	1.92	32.36	10.79	97	28.61	25.86	0.41	1.34	0.32	0.00	5.53	0.50	9.24
W9302	F07	03-10-93	1452	13.87	W93020414	1.90	32.36	10.77	97	28.60	25.87	0.42	1.31	0.05	0.14	7.90	0.76	9.11
W9302	F07	03-10-93	1451	28.54	W93020413	1.82	32.36	10.73	96	28.54	25.87	0.40	1.37	0.12	0.01	8.22	0.79	9.34
W9302	F07	03-10-93	1449	48.31	W93020412	2.04	32.43	10.56	95	28.78	25.91	0.36	1.38	0.60	0.00	1.31	0.39	9.38
W9302	F08	03-10-93	1546	1.02	W93020428	2.77	32.49	10.55	97	29.41	25.90	0.17	1.05	2.92	0.18	1.62	0.49	8.93
W9302	F08	03-10-93	1545	18.59	W93020427	2.41	32.49	10.56	96	29.12	25.93	0.39	1.09	0.32	0.00	6.41	0.61	9.00
W9302	F08	03-10-93	1543	40.15	W93020426	2.38	32.50	10.52	96	29.11	25.94	0.28	1.11	0.06	0.93	4.89	0.81	8.97
W9302	F08	03-10-93	1543	49.63	W93020425	2.38	32.50	10.50	96	29.12	25.94	0.33	1.10	0.01	0.04	4.00	0.46	9.14

012

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9302	F08	03-10-93	1541	74.43	W93020424	2.40	32.52	10.40	95	29.16	25.96	0.30	1.14	0.16	0.01	5.48	0.54	9.96
W9302	F09	03-11-93	1735	1.72	W93020561	1.61	31.87	10.85	96	27.96	25.49	0.59	2.32	1.01	0.00	8.57	0.58	10.35
W9302	F09	03-11-93	1734	3.70	W93020560	1.61	31.88	10.83	96	27.97	25.50	0.48	2.28	2.71	0.04	8.18	0.67	10.39
W9302	F09	03-11-93	1733	6.42	W93020559	1.61	31.88	10.86	96	27.97	25.50	0.63	2.28	3.24	0.13	5.93	0.63	10.36
W9302	F09	03-11-93	1732	10.78	W93020558	1.61	31.88	10.82	96	27.97	25.50	0.55	2.27	2.22	0.00	8.00	0.68	10.39
W9302	F09	03-11-93	1731	15.63	W93020557	1.55	31.96	10.78	96	27.99	25.57	0.59	2.34	2.42	0.18	6.23	0.69	10.30
W9302	F10	03-10-93	1819	2.14	W93020474	1.73	32.26	10.76	96	28.37	25.80	0.46	1.84	1.43	0.02	5.19	0.56	9.81
W9302	F10	03-10-93	1818	6.33	W93020473	1.73	32.26	10.73	96	28.37	25.80	0.50	1.83	1.18	0.14	8.73	0.91	9.81
W9302	F10	03-10-93	1817	15.00	W93020472	1.73	32.27	10.71	96	28.38	25.81	0.49	1.95	1.31	0.14	8.71	0.91	9.78
W9302	F10	03-10-93	1814	27.05	W93020470	1.68	32.29	10.63	95	28.36	25.83	0.63	2.35	0.10	0.96	2.67	0.38	9.81
W9302	F10	03-10-93	1816	30.00	W93020471	1.66	32.30	10.64	95	28.36	25.83	0.65	2.54	0.60	0.15	8.18	0.83	9.90
W9302	F11	03-10-93	1739	2.06	W93020457	2.32	32.47	10.62	96	29.02	25.92	0.34	1.18	0.13	0.00	7.92	0.72	9.35
W9302	F11	03-10-93	1738	9.05	W93020456	2.37	32.48	10.58	96	29.07	25.93	0.31	1.18	0.66	0.10	6.88	0.73	9.46
W9302	F11	03-10-93	1737	20.30	W93020455	2.46	32.52	10.52	96	29.19	25.95	0.33	1.16	3.68	0.07	1.64	0.61	9.29
W9302	F11	03-10-93	1736	34.03	W93020454	2.42	32.53	10.41	95	29.17	25.96	0.36	1.34	0.17	0.01	4.83	0.53	9.73
W9302	F11	03-10-93	1735	44.05	W93020453	2.42	32.53	10.40	95	29.17	25.96	0.36	1.39	0.10	0.15	8.56	0.83	9.73
W9302	F12	03-10-93	1625	1.83	W93020440	2.92	32.50	10.55	97	29.54	25.90	0.25	1.00	0.10	0.15	5.24	0.61	9.35
W9302	F12	03-10-93	1624	23.72	W93020439	2.41	32.50	10.56	96	29.13	25.94	0.36	1.07	0.29	0.00	6.79	0.73	9.39
W9302	F12	03-10-93	1622	43.52	W93020438	2.39	32.52	10.52	96	29.14	25.95	0.33	1.13	0.02	0.07	7.08	0.70	9.60
W9302	F12	03-10-93	1621	63.94	W93020437	2.41	32.52	10.44	95	29.17	25.96	0.34	1.18	1.66	0.13	1.64	0.51	9.97
W9302	F12	03-10-93	1619	83.72	W93020436	2.41	32.52	10.43	95	29.18	25.96	0.39	1.21	0.69	0.12	8.78	0.93	10.16
W9302	F13P	03-10-93	1159	1.61	W93020361	1.59	31.94	10.82	96	28.00	25.55	0.51	2.35	4.61	0.24	4.79	0.61	10.61
W9302	F13P	03-10-93	1158	3.97	W93020360	1.57	31.95	10.83	96	27.99	25.56	0.57	2.36	3.21	0.02	7.11	0.65	10.61
W9302	F13P	03-10-93	1157	10.08	W93020359	1.50	31.94	10.83	96	27.93	25.56	0.58	2.48	5.11	0.07	4.12	0.70	10.62
W9302	F13P	03-10-93	1156	16.80	W93020358	1.44	31.95	10.86	96	27.89	25.57	0.61	2.59	4.58	0.24	6.13	0.70	10.64
W9302	F13P	03-10-93	1155	23.57	W93020357	1.37	32.03	10.90	96	27.91	25.64	0.82	3.40	4.25	0.20	9.28	0.94	10.53
W9302	F14	03-09-93	1212	1.63	W93020131	1.52	31.75	11.03	98	27.79	25.40	0.69	2.97	2.85	0.20	8.28	0.75	10.68
W9302	F14	03-09-93	1211	4.77	W93020130	1.52	31.75	11.03	98	27.79	25.40	0.76	3.00	3.09	0.22	8.17	0.79	10.71
W9302	F14	03-09-93	1209	10.20	W93020129	1.43	31.82	11.03	97	27.78	25.46	0.70	3.04	2.07	0.22	9.34	0.82	10.63
W9302	F14	03-09-93	1208	12.96	W93020128	1.39	31.86	11.02	97	27.78	25.49	0.70	3.05	3.19	0.24	6.36	0.71	10.49
W9302	F14	03-09-93	1207	19.34	W93020127	1.31	32.08	10.94	97	27.88	25.68	0.64	2.96	4.42	0.23	3.00	0.65	10.43
W9302	F15	03-09-93	1256	1.44	W93020142	1.97	32.30	10.88	98	28.60	25.81	0.36	1.53	0.06	0.03	7.50	0.71	9.71
W9302	F15	03-09-93	1256	7.86	W93020141	1.82	32.31	10.91	98	28.48	25.83	0.42	1.48	2.44	0.11	3.20	0.64	9.72
W9302	F15	03-09-93	1255	14.33	W93020140	1.72	32.34	10.93	98	28.43	25.86	0.39	1.33	0.37	0.04	2.89	0.35	9.60
W9302	F15	03-09-93	1253	26.52	W93020139	1.80	32.38	10.87	97	28.53	25.88	0.36	1.34	0.18	0.30	4.50	0.63	9.69
W9302	F15	03-09-93	1252	33.99	W93020138	2.00	32.43	10.69	96	28.74	25.91	0.46	1.46	1.17	0.10	5.07	0.60	9.86
W9302	F16	03-09-93	1410	1.75	W93020168	2.36	32.43	10.79	98	29.02	25.89	0.38	1.21	3.12	0.00	1.96	0.59	9.23
W9302	F16	03-09-93	1409	8.30	W93020167	2.37	32.46	10.73	98	29.05	25.91	0.39	1.24	3.63	0.13	1.64	0.59	9.32
W9302	F16	03-09-93	1408	14.90	W93020166	2.51	32.49	10.65	97	29.20	25.92	0.40	1.23	1.05	0.01	1.95	0.63	9.31
W9302	F16	03-09-93	1407	37.86	W93020165	2.56	32.57	10.47	96	29.32	25.98	0.42	1.52	0.32	0.01	5.81	0.61	9.57
W9302	F16	03-09-93	1405	54.05	W93020164	2.57	32.57	10.44	95	29.33	25.98	0.44	1.55	0.31	0.04	4.21	0.57	9.57
W9302	F17	03-09-93	1502	3.65	W93020188	2.00	32.36	10.94	98	28.67	25.85	0.37	1.23	0.36	0.13	7.85	0.88	8.91

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
W9302	F17	03-09-93	1501	5.75	W93020187	2.02	32.34	10.93	98	28.67	25.84	0.45	1.23	1.73	0.10	2.53	0.70	9.26
W9302	F17	03-09-93	1500	11.42	W93020186	2.37	32.48	10.71	97	29.08	25.93	0.32	1.13	0.78	0.01	3.74	0.57	9.07
W9302	F17	03-09-93	1458	33.08	W93020185	2.38	32.50	10.65	97	29.11	25.94	0.35	1.13	0.56	0.14	8.65	0.91	8.91
W9302	F17	03-09-93	1457	59.57	W93020184	2.46	32.54	10.57	96	29.21	25.96	0.32	1.30	0.57	0.13	8.67	0.88	9.31
W9302	F18	03-09-93	1857	0.77	W93020254	1.49	32.13	11.14	99	28.07	25.71	0.56	2.67	0.59	0.01	3.46	0.42	9.76
W9302	F18	03-09-93	1856	3.82	W93020253	1.49	32.13	11.11	99	28.07	25.71	0.65	2.66	0.09	0.09	5.91	0.56	9.95
W9302	F18	03-09-93	1855	8.96	W93020252	1.49	32.14	11.08	98	28.07	25.71	0.66	2.68	1.25	0.01	4.69	0.59	9.93
W9302	F18	03-09-93	1854	13.77	W93020251	1.47	32.14	10.99	97	28.07	25.72	0.69	2.68	2.61	0.01	2.81	0.54	9.95
W9302	F18	03-09-93	1854	17.84	W93020250	1.32	32.21	10.78	95	27.99	25.78	0.68	2.72	3.56	0.02	1.32	0.46	10.33
W9302	F19	03-09-93	1607	1.24	W93020199	1.63	32.15	11.07	99	28.20	25.72	0.50	1.75	3.65	0.03	0.12	0.55	9.34
W9302	F19	03-09-93	1606	6.95	W93020198	1.76	32.20	11.03	99	28.35	25.75	0.43	1.64	0.38	0.01	3.25	0.56	9.31
W9302	F19	03-09-93	1604	22.07	W93020197	2.08	32.38	10.78	97	28.76	25.87	0.38	1.24	0.78	0.02	6.45	0.70	9.07
W9302	F19	03-09-93	1603	47.28	W93020196	2.19	32.48	10.60	96	28.94	25.94	0.34	1.34	0.75	0.13	8.70	0.93	9.31
W9302	F19	03-09-93	1600	69.73	W93020195	2.40	32.53	10.51	96	29.16	25.96	0.34	1.35	0.67	0.13	8.71	1.13	9.30
W9302	F20	03-09-93	1810	0.98	W93020239	1.48	32.16	11.06	98	28.08	25.73	0.40	1.72	3.79	0.14	1.26	0.57	9.48
W9302	F20	03-09-93	1809	6.76	W93020238	1.47	32.16	11.04	98	28.08	25.74	0.30	1.73	0.79	0.00	4.88	0.64	9.55
W9302	F20	03-09-93	1807	15.70	W93020237	1.48	32.17	11.00	98	28.10	25.74	0.33	1.71	2.30	0.00	2.22	0.50	9.59
W9302	F20	03-09-93	1806	19.47	W93020236	1.52	32.21	10.91	97	28.16	25.77	0.25	1.61	0.93	0.01	5.31	0.61	9.57
W9302	F20	03-09-93	1805	26.47	W93020235	1.58	32.27	10.81	96	28.27	25.82	0.17	1.42	1.74	0.01	3.72	0.56	9.46
W9302	F21	03-09-93	1736	1.70	W93020228	2.01	32.29	10.92	98	28.62	25.80	0.37	1.38	2.98	0.00	2.13	0.56	8.97
W9302	F21	03-09-93	1735	9.51	W93020227	2.01	32.31	10.85	98	28.64	25.82	0.39	1.39	1.00	0.00	3.77	0.51	8.98
W9302	F21	03-09-93	1734	22.50	W93020226	2.11	32.45	10.67	96	28.84	25.92	0.28	1.25	0.14	0.12	8.36	0.83	8.94
W9302	F21	03-09-93	1733	37.77	W93020225	2.48	32.54	10.53	96	29.22	25.96	0.34	1.24	0.05	0.00	5.79	0.65	8.89
W9302	F21	03-09-93	1732	48.38	W93020224	2.77	32.59	10.36	95	29.52	25.99	0.29	1.25	0.37	0.11	8.62	0.87	8.94
W9302	F22	03-09-93	1652	1.48	W93020217	1.29	32.10	11.18	99	27.88	25.70	0.44	1.71	1.34	0.01	3.62	0.56	9.26
W9302	F22	03-09-93	1651	14.82	W93020216	1.17	32.14	11.11	98	27.82	25.73	0.45	1.62	0.51	0.12	7.84	0.82	9.26
W9302	F22	03-09-93	1650	36.25	W93020215	1.32	32.26	10.94	97	28.04	25.82	0.40	1.54	2.05	0.01	3.33	0.56	9.06
W9302	F22	03-09-93	1649	54.36	W93020214	1.91	32.41	10.70	96	28.66	25.90	0.32	1.30	0.04	0.13	8.17	0.82	9.09
W9302	F22	03-09-93	1647	68.17	W93020213	2.04	32.44	10.60	96	28.79	25.92	0.39	1.30	0.09	0.00	2.12	0.52	8.99
W9302	F23P	03-09-93	0655	1.76	W93020018	1.60	31.08	10.73	95	27.32	24.86	0.88	3.45	5.52	0.37	9.01	0.81	12.26
W9302	F23P	03-09-93	0654	4.24	W93020017	1.59	31.13	10.72	95	27.35	24.90	0.88	3.53	2.55	1.05	7.99	0.47	12.27
W9302	F23P	03-09-93	0653	6.92	W93020016	1.58	31.14	10.73	95	27.36	24.91	0.91	3.53	2.35	0.34	10.18	0.42	12.10
W9302	F23P	03-09-93	0652	9.98	W93020015	1.58	31.16	10.72	95	27.37	24.92	0.88	3.55	6.11	0.22	5.82	1.18	12.11
W9302	F23P	03-09-93	0651	14.06	W93020014	1.54	31.30	10.77	95	27.46	25.04	0.89	3.70	1.15	0.31	9.90	0.51	12.07
W9302	F24	03-09-93	0803	0.77	W93020045	1.52	31.48	10.81	96	27.58	25.19	0.78	3.31	5.01	0.29	7.76	0.69	10.81
W9302	F24	03-09-93	0802	2.94	W93020044	1.50	31.53	10.84	96	27.60	25.23	0.84	3.32	5.04	0.24	5.88	0.70	10.51
W9302	F24	03-09-93	0801	8.21	W93020043	1.37	31.85	11.03	97	27.75	25.49	0.88	3.48	4.80	0.16	5.20	0.50	10.10
W9302	F24	03-09-93	0759	11.89	W93020042	1.32	32.11	11.16	99	27.92	25.70	0.81	3.50	1.83	0.13	8.59	0.88	9.67
W9302	F24	03-09-93	0758	14.85	W93020041	1.31	32.17	11.08	98	27.96	25.75	0.82	3.38	4.76	0.20	1.75	0.54	9.78
W9302	F25	03-10-93	0619	2.35	W93020273	1.51	31.52	10.88	96	27.61	25.22	0.82	3.38	4.00	0.29	9.71	0.91	11.14
W9302	F25	03-10-93	0621	2.41	W93020274	1.51	31.52	10.89	96	27.60	25.22	0.83	3.17	2.68	0.32	9.54	0.54	11.11
W9302	F25	03-10-93	0618	4.41	W93020272	1.51	31.53	10.88	96	27.61	25.22	0.78	3.18	3.79	0.34	9.36	0.85	11.01

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
W9302	F25	03-10-93	0617	7.65	W93020271	1.52	31.53	10.87	96	27.61	25.22	0.81	3.21	4.49	0.29	9.66	0.90	11.21
W9302	F25	03-10-93	0615	11.45	W93020270	1.51	31.53	10.83	96	27.61	25.22	0.79	3.22	6.07	0.27	7.17	0.77	11.13
W9302	N01P	03-10-93	0719	1.30	W93020289	1.43	32.14	11.25	100	28.03	25.72	0.59	2.33	1.55	0.14	8.33	0.93	9.83
W9302	N01P	03-10-93	0718	3.02	W93020288	1.43	32.15	11.22	99	28.04	25.73	0.55	2.30	0.93	0.13	8.38	0.85	10.03
W9302	N01P	03-10-93	0716	8.45	W93020287	1.46	32.16	11.18	99	28.07	25.74	0.55	2.25	0.79	0.57	4.46	0.53	9.79
W9302	N01P	03-10-93	0715	15.98	W93020286	1.47	32.17	11.17	99	28.09	25.74	0.51	2.18	2.05	0.02	2.93	0.50	10.01
W9302	N01P	03-10-93	0712	24.96	W93020285	1.42	32.25	10.98	97	28.12	25.81	0.50	2.19	0.04	0.13	6.09	0.55	10.16
W9302	N01P	03-12-93	0934	1.63	W93020619	1.49	32.18	10.90	97	28.11	25.74	0.39	1.52	4.06	0.16	2.47	0.60	9.31
W9302	N01P	03-12-93	0933	7.05	W93020618	1.50	32.18	10.90	97	28.12	25.75	0.41	1.53	1.17	0.03	5.60	0.58	9.27
W9302	N01P	03-12-93	0932	12.87	W93020617	1.50	32.18	10.85	96	28.12	25.75	0.45	1.53	1.05	0.04	5.62	0.59	9.33
W9302	N01P	03-12-93	0932	17.81	W93020616	1.53	32.20	10.79	96	28.16	25.76	0.41	1.51	1.08	0.00	6.75	0.63	9.33
W9302	N01P	03-12-93	0931	25.10	W93020615	1.66	32.25	10.63	95	28.32	25.80	0.44	1.48	0.22	0.00	3.71	0.17	9.38
W9302	N02	03-12-93	1001	1.67	W93020630	1.50	32.19	11.00	98	28.12	25.75	0.31	1.44	1.39	0.22	8.08	0.82	8.90
W9302	N02	03-12-93	1000	11.01	W93020629	1.50	32.19	10.98	97	28.13	25.76	0.46	1.30	2.72	0.13	1.85	0.51	8.96
W9302	N02	03-12-93	0959	15.61	W93020628	1.50	32.19	10.97	97	28.13	25.76	0.39	1.30	0.74	0.25	8.18	0.83	9.02
W9302	N02	03-12-93	0958	23.06	W93020627	1.50	32.19	10.90	97	28.14	25.76	0.41	1.29	2.08	0.59	1.60	0.47	9.02
W9302	N02	03-12-93	0957	33.11	W93020626	1.82	32.36	10.60	95	28.53	25.87	0.37	1.21	1.20	0.21	4.68	0.55	9.41
W9302	N03	03-12-93	1028	2.35	W93020641	1.61	32.21	10.98	98	28.23	25.76	0.37	1.32	0.26	0.08	4.59	0.46	8.89
W9302	N03	03-12-93	1027	6.74	W93020640	1.62	32.21	10.97	98	28.24	25.76	0.48	1.28	1.00	0.05	3.75	0.52	8.89
W9302	N03	03-12-93	1026	13.67	W93020639	1.64	32.22	10.93	97	28.27	25.77	0.47	1.27	2.34	0.09	3.39	0.59	8.94
W9302	N03	03-12-93	1025	29.67	W93020638	1.90	32.38	10.57	95	28.62	25.88	0.29	1.01	1.43	0.08	3.40	0.58	9.34
W9302	N03	03-12-93	1024	41.71	W93020637	1.95	32.40	10.47	94	28.67	25.89	0.35	1.11	2.30	0.05	1.75	0.48	8.91
W9302	N04P	03-10-93	0954	1.36	W93020315	1.68	32.19	11.08	99	28.27	25.74	0.30	1.42	0.30	2.35	0.48	0.25	9.48
W9302	N04P	03-10-93	0953	5.82	W93020314	1.52	32.19	11.08	98	28.15	25.76	0.41	1.44	0.55	0.00	2.76	0.44	9.59
W9302	N04P	03-10-93	0951	14.33	W93020313	1.62	32.24	11.00	98	28.27	25.78	0.42	1.40	0.66	1.52	3.35	0.53	9.37
W9302	N04P	03-10-93	0949	28.32	W93020312	2.02	32.42	10.73	97	28.75	25.91	0.36	1.27	0.09	0.14	8.09	0.81	9.48
W9302	N04P	03-10-93	0947	44.26	W93020311	2.43	32.53	10.53	96	29.18	25.96	0.38	1.56	0.00	0.00	7.64	0.70	9.63
W9302	N04P	03-12-93	1058	1.20	W93020652	1.98	32.36	10.82	97	28.65	25.86	0.38	1.31	1.41	0.05	5.32	0.52	8.75
W9302	N04P	03-12-93	1057	9.04	W93020651	1.97	32.36	10.79	97	28.65	25.86	0.37	1.12	0.14	0.04	5.82	0.58	8.83
W9302	N04P	03-12-93	1055	24.44	W93020650	2.09	32.41	10.61	96	28.79	25.89	0.32	1.11	0.81	0.15	8.29	0.82	8.84
W9302	N04P	03-12-93	1054	33.02	W93020649	2.35	32.51	10.40	95	29.09	25.95	0.32	1.16	1.82	0.35	1.16	0.49	9.34
W9302	N04P	03-12-93	1053	44.35	W93020648	2.36	32.51	10.34	94	29.11	25.95	0.31	1.23	0.14	0.50	4.87	0.46	9.34
W9302	N05	03-12-93	1131	2.02	W93020663	1.90	32.36	10.89	98	28.59	25.86	0.27	1.16	0.10	0.09	8.08	0.77	8.75
W9302	N05	03-12-93	1130	9.37	W93020662	1.89	32.36	10.87	98	28.58	25.86	0.39	1.16	0.65	0.12	8.21	0.83	8.87
W9302	N05	03-12-93	1129	24.13	W93020661	1.90	32.36	10.83	97	28.60	25.87	0.36	1.14	0.56	0.08	6.30	0.64	8.80
W9302	N05	03-12-93	1127	39.69	W93020660	2.33	32.51	10.47	95	29.07	25.95	0.38	1.20	2.51	0.05	2.44	0.53	9.39
W9302	N05	03-12-93	1126	49.63	W93020659	2.34	32.51	10.39	94	29.09	25.95	0.30	1.18	0.37	1.88	2.51	0.22	8.89
W9302	N06	03-12-93	1201	1.34	W93020676	2.01	32.37	10.86	98	28.69	25.87	0.21	1.16	0.08	0.02	4.10	0.49	9.07
W9302	N06	03-12-93	1200	7.36	W93020675	2.00	32.37	10.87	98	28.68	25.87	0.36	1.11	1.40	0.01	4.44	0.63	9.19
W9302	N06	03-12-93	1159	14.82	W93020674	2.01	32.38	10.85	98	28.70	25.87	0.37	1.11	1.12	0.06	5.98	0.69	9.22
W9302	N06	03-12-93	1158	26.47	W93020673	2.05	32.39	10.80	97	28.75	25.88	0.34	1.10	4.11	0.18	1.00	0.63	9.41
W9302	N06	03-12-93	1157	43.60	W93020672	2.16	32.45	10.62	96	28.89	25.91	0.30	1.09	1.30	0.20	5.25	0.51	9.43

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Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9302	N07P	03-10-93	1056	0.99	W93020337	2.06	32.34	10.83	98	28.71	25.84	0.27	1.19	0.19	2.27	1.37	0.32	9.13
W9302	N07P	03-10-93	1055	5.59	W93020336	2.16	32.42	10.76	97	28.85	25.89	0.30	1.15	0.06	0.06	0.04	0.15	9.28
W9302	N07P	03-10-93	1054	12.45	W93020335	2.22	32.44	10.69	97	28.92	25.90	0.44	1.13	1.58	0.06	5.95	0.69	9.08
W9302	N07P	03-10-93	1053	28.05	W93020334	2.30	32.50	10.52	96	29.04	25.95	0.33	1.23	0.12	0.22	6.16	0.64	9.52
W9302	N07P	03-10-93	1051	42.89	W93020333	2.41	32.53	10.49	96	29.17	25.97	0.35	1.23	0.08	0.19	7.56	0.71	9.65
W9302	N07P	03-12-93	1255	2.67	W93020690	1.76	32.26	10.94	98	28.39	25.80	0.31	1.21	0.67	1.41	2.50	0.55	9.13
W9302	N07P	03-12-93	1254	5.73	W93020689	1.75	32.27	10.93	98	28.39	25.80	0.35	1.18	0.10	0.15	7.78	0.82	9.26
W9302	N07P	03-12-93	1252	13.64	W93020688	1.76	32.27	10.88	97	28.41	25.80	0.40	1.18	0.08	0.15	7.74	0.79	9.22
W9302	N07P	03-12-93	1251	31.62	W93020687	2.15	32.44	10.61	96	28.86	25.91	0.34	1.08	1.13	0.01	3.88	0.47	9.51
W9302	N07P	03-12-93	1250	40.62	W93020686	2.32	32.50	10.41	95	29.06	25.95	0.33	1.07	0.63	0.14	8.65	0.94	9.65
W9302	N08	03-12-93	1321	1.62	W93020703	1.66	32.23	10.87	97	28.29	25.78	0.26	1.23	0.15	0.03	4.41	0.64	9.53
W9302	N08	03-12-93	1320	5.63	W93020702	1.65	32.25	10.88	97	28.30	25.80	0.32	1.19	0.30	0.10	5.83	0.63	9.53
W9302	N08	03-12-93	1319	12.46	W93020701	1.64	32.26	10.83	97	28.30	25.80	0.40	1.20	1.44	0.02	4.43	0.64	9.56
W9302	N08	03-12-93	1318	19.71	W93020700	1.65	32.27	10.80	96	28.32	25.81	0.36	1.17	0.43	0.02	4.47	0.54	9.41
W9302	N08	03-12-93	1317	26.24	W93020699	1.66	32.28	10.75	96	28.34	25.81	0.37	1.18	0.43	0.03	3.48	0.44	9.47
W9302	N09	03-12-93	1350	1.33	W93020717	1.70	32.25	10.95	98	28.33	25.79	0.32	1.23	0.55	0.13	8.02	0.86	9.13
W9302	N09	03-12-93	1350	6.78	W93020716	1.68	32.25	10.96	98	28.33	25.80	0.35	1.17	0.08	0.04	6.47	0.70	9.28
W9302	N09	03-12-93	1349	15.87	W93020715	1.68	32.26	10.93	98	28.33	25.80	0.40	1.17	0.87	0.02	4.80	0.64	9.33
W9302	N09	03-12-93	1348	23.96	W93020714	1.68	32.26	10.91	97	28.34	25.80	0.38	1.17	1.14	0.10	5.94	0.73	9.32
W9302	N09	03-12-93	1347	31.97	W93020713	1.68	32.27	10.93	98	28.35	25.81	0.39	1.20	1.24	0.02	5.09	0.62	9.22
W9302	N10P	03-09-93	1103	0.78	W93020109	1.53	31.69	11.01	97	27.75	25.35	0.64	2.94	0.86	0.23	9.09	0.55	10.38
W9302	N10P	03-09-93	1102	4.23	W93020108	1.46	31.77	10.95	97	27.76	25.42	0.78	3.01	2.33	0.24	8.48	0.66	10.52
W9302	N10P	03-09-93	1101	10.05	W93020107	1.45	31.94	10.99	97	27.89	25.56	0.75	2.97	1.94	0.00	7.75	0.60	10.05
W9302	N10P	03-09-93	1100	17.48	W93020106	1.44	32.02	10.91	97	27.95	25.62	0.70	2.99	4.07	0.19	4.48	0.68	10.23
W9302	N10P	03-09-93	1058	24.56	W93020105	1.71	32.35	10.71	96	28.43	25.87	0.61	2.51	0.62	0.00	7.14	0.63	10.00
W9302	N10P	03-12-93	0814	3.42	W93020586	1.53	31.59	10.94	97	27.67	25.27	1.02	3.42	3.58	0.26	9.36	0.91	11.08
W9302	N10P	03-12-93	0812	9.51	W93020584	1.54	31.59	10.94	97	27.68	25.27	0.93	3.45	3.01	0.31	7.91	0.91	10.92
W9302	N10P	03-12-93	0811	15.83	W93020583	1.54	31.61	10.93	97	27.70	25.29	1.26	4.37	3.83	0.26	6.30	0.79	10.94
W9302	N10P	03-12-93	0810	19.85	W93020582	1.53	31.60	10.97	97	27.69	25.28	1.08	3.85	4.45	0.29	7.06	0.85	10.88
W9302	N11	03-12-93	0843	2.38	W93020597	1.48	32.09	11.03	98	28.03	25.68	0.46	1.79	3.34	0.18	2.84	0.67	9.84
W9302	N11	03-12-93	0842	9.43	W93020596	1.47	32.08	11.04	98	28.02	25.67	0.50	1.82		e	e	e	e
W9302	N11	03-12-93	0840	12.59	W93020595	1.48	32.13	11.03	98	28.07	25.71	0.49	1.73	1.15	0.00	5.39	0.64	9.71
W9302	N11	03-12-93	0839	18.95	W93020594	1.50	32.19	10.99	98	28.13	25.76	0.50	1.60	3.61	0.06	1.96	0.55	9.58
W9302	N11	03-12-93	0838	24.01	W93020593	1.50	32.20	10.91	97	28.14	25.76	0.46	1.54	2.78	0.03	3.44	0.65	9.41
W9302	N12	03-12-93	0909	1.40	W93020608	1.51	32.19	11.11	99	28.13	25.76	0.43	1.54	1.07	0.00	4.58	0.61	9.35
W9302	N12	03-12-93	0908	4.53	W93020607	1.51	32.19	11.16	99	28.14	25.75	0.40	1.48	3.79	0.00	0.02	0.54	9.34
W9302	N12	03-12-93	0907	9.37	W93020606	1.52	32.19	11.17	99	28.15	25.76	0.46	1.48	2.26	0.15	3.55	0.67	9.35
W9302	N12	03-12-93	0906	13.91	W93020605	1.51	32.19	11.21	100	28.14	25.76	0.53	1.48	2.23	0.00	1.18	0.41	9.35
W9302	N12	03-12-93	0905	18.31	W93020604	1.52	32.20	11.25	100	28.15	25.76	0.44	1.47	0.16	0.04	5.15	0.60	9.32
W9302	N13	03-12-93	1519	2.15	W93020766	1.65	32.21	11.09	99	28.26	25.76	0.28	1.25	2.89	0.07	2.75	0.62	9.06
W9302	N13	03-12-93	1518	5.92	W93020765	1.64	32.21	11.08	99	28.26	25.76	0.44	1.25	2.27	0.00	1.28	0.46	9.20
W9302	N13	03-12-93	1517	13.94	W93020764	1.62	32.22	11.09	99	28.25	25.77	0.38	1.24	1.34	0.01	4.21	0.60	9.17

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
W9302	N13	03-12-93	1516	21.19	W93020763	1.60	32.23	11.07	99	28.24	25.78	0.33	1.22	2.36	0.00	2.95	0.41	9.22
W9302	N13	03-12-93	1515	30.10	W93020762	1.65	32.26	11.01	98	28.31	25.80	0.37	1.18	0.53	0.01	6.87	0.55	9.40
W9302	N14	03-12-93	1545	2.00	W93020777	1.73	32.23	11.10	99	28.34	25.77	0.32	1.22	0.16	0.00	6.43	0.48	8.88
W9302	N14	03-12-93	1544	5.93	W93020776	1.72	32.23	11.08	99	28.34	25.77	0.39	1.23	3.39	0.13	1.90	0.57	8.79
W9302	N14	03-12-93	1543	11.37	W93020775	1.75	32.25	11.07	99	28.38	25.78	0.37	1.23	1.62	0.08	3.31	0.55	8.95
W9302	N14	03-12-93	1542	18.15	W93020774	1.79	32.29	10.98	98	28.45	25.81	0.33	1.17	1.94	0.25	1.08	0.49	9.09
W9302	N14	03-12-93	1541	28.34	W93020773	1.79	32.32	10.93	98	28.48	25.84	0.31	1.12	0.27	0.12	8.31	0.80	9.09
W9302	N15	03-12-93	1609	2.04	W93020788	1.98	32.36	10.90	98	28.65	25.86	0.40	1.12	0.56	0.04	4.40	0.52	8.91
W9302	N15	03-12-93	1608	7.66	W93020787	1.99	32.36	10.91	98	28.66	25.85	0.41	1.12	1.76	0.01	4.56	0.60	8.87
W9302	N15	03-12-93	1607	16.03	W93020786	1.96	32.36	10.84	97	28.64	25.86	0.28	1.13	0.78	0.04	3.91	0.54	9.06
W9302	N15	03-12-93	1606	24.80	W93020785	2.07	32.43	10.68	96	28.79	25.90	0.29	1.05	3.27	0.16	2.86	0.65	9.48
W9302	N15	03-12-93	1604	39.69	W93020784	2.21	32.46	10.67	97	28.94	25.92	0.26	1.06	2.89	0.04	5.97	0.63	9.29
W9302	N16P	03-09-93	0956	0.95	W93020085	1.40	32.12	11.21	99	27.99	25.71	0.42	1.56	0.51	1.78	1.72	0.37	9.27
W9302	N16P	03-09-93	0955	3.20	W93020084	1.35	32.13	11.23	99	27.95	25.71	0.46	1.57	1.69	0.00	3.69	0.55	9.44
W9302	N16P	03-09-93	0954	7.42	W93020083	1.31	32.14	11.18	99	27.93	25.73	0.44	1.55	0.79	0.00	5.83	0.68	9.27
W9302	N16P	03-09-93	0951	18.57	W93020081	1.72	32.35	10.85	97	28.44	25.87	0.38	1.38	0.77	0.00	4.48	0.54	9.44
W9302	N16P	03-09-93	0948	39.94	W93020079	2.07	32.44	10.67	96	28.80	25.92	0.34	1.25	3.31	0.01	1.00	0.60	9.38
W9302	N16P	03-12-93	1635	2.13	W93020800	1.87	32.33	10.86	97	28.54	25.84	0.33	1.12	0.23	0.32	6.36	0.59	8.87
W9302	N16P	03-12-93	1634	7.93	W93020799	1.88	32.33	10.87	98	28.55	25.84	0.36	1.12	3.10	0.18	0.51	0.47	8.98
W9302	N16P	03-12-93	1633	18.79	W93020798	1.87	32.33	10.85	97	28.55	25.84	0.35	1.13	2.21	0.02	1.94	0.46	8.99
W9302	N16P	03-12-93	1632	31.31	W93020797	1.88	32.35	10.76	97	28.57	25.86	0.34	1.12	1.89	0.01	2.86	0.52	9.17
W9302	N16P	03-12-93	1630	39.74	W93020796	2.14	32.44	10.52	95	28.86	25.91	0.30	1.07	0.71	0.02	5.19	0.62	9.28
W9302	N17	03-12-93	1701	2.54	W93020812	1.81	32.30	10.90	98	28.46	25.83	0.39	1.14	3.33	0.00	0.06	0.48	9.01
W9302	N17	03-12-93	1700	8.61	W93020811	1.82	32.31	10.91	98	28.48	25.83	0.36	1.14	3.91	0.16	0.21	0.51	9.13
W9302	N17	03-12-93	1658	16.83	W93020810	1.82	32.31	10.85	97	28.49	25.83	0.34	1.14	3.30	0.17	1.05	0.54	9.11
W9302	N17	03-12-93	1657	26.58	W93020809	1.80	32.31	10.78	97	28.48	25.83	0.38	1.12	0.61	0.13	8.52	0.87	9.27
W9302	N17	03-12-93	1656	35.67	W93020808	1.82	32.35	10.67	96	28.53	25.86	0.28	1.03	2.45	0.22	3.88	0.56	9.21
W9302	N18	03-12-93	1725	1.13	W93020823	1.60	32.23	11.00	98	28.24	25.78	0.40	1.16	0.11	0.07	7.49	0.75	9.21
W9302	N18	03-12-93	1724	4.25	W93020822	1.60	32.23	10.98	98	28.24	25.78	0.40	1.15	0.72	0.14	8.02	0.86	9.42
W9302	N18	03-12-93	1723	9.58	W93020821	1.60	32.23	10.94	97	28.24	25.78	0.42	1.15	0.69	0.13	8.03	0.85	9.55
W9302	N18	03-12-93	1723	14.04	W93020820	1.60	32.23	10.90	97	28.24	25.78	0.42	1.14	1.93	0.02	2.02	0.52	9.36
W9302	N18	03-12-93	1721	20.13	W93020819	1.58	32.23	10.85	97	28.23	25.78	0.36	1.12	0.22	0.14	4.98	0.58	9.33
W9302	N19	03-12-93	1412	1.51	W93020730	1.69	32.25	10.89	97	28.33	25.79	0.29	1.22	0.35	0.13	8.03	0.80	9.28
W9302	N19	03-12-93	1412	2.69	W93020729	1.69	32.25	10.93	98	28.32	25.79	0.29	1.19	2.72	0.01	0.03	0.54	9.30
W9302	N19	03-12-93	1411	7.80	W93020728	1.67	32.25	10.89	97	28.31	25.80	0.37	1.17	0.16	0.19	0.90	0.23	9.28
W9302	N19	03-12-93	1410	13.02	W93020727	1.65	32.25	10.86	97	28.30	25.79	0.37	1.16	2.13	0.01	3.01	0.55	9.24
W9302	N19	03-12-93	1410	18.81	W93020726	1.63	32.25	10.87	97	28.29	25.80	0.40	1.17	0.71	0.14	7.88	0.80	9.16
W9302	N20P	03-09-93	0841	0.73	W93020056	1.75	32.20	11.06	99	28.33	25.74	0.41	1.95	1.06	0.00	5.03	0.55	9.74
W9302	N20P	03-09-93	0840	3.37	W93020055	1.73	32.20	11.06	99	28.32	25.75	0.36	1.96	2.41	0.08	3.75	0.59	9.62
W9302	N20P	03-09-93	0839	8.21	W93020054	1.60	32.21	11.06	98	28.23	25.77	0.45	1.85	2.28	0.04	3.08	0.50	9.56
W9302	N20P	03-09-93	0838	18.09	W93020053	1.61	32.33	10.80	96	28.33	25.86	0.47	1.72	1.70	0.02	3.48	0.55	9.78
W9302	N20P	03-09-93	0836	28.68	W93020052	1.65	32.34	10.78	96	28.38	25.87	0.49	1.77	2.12	0.08	1.45	0.46	9.77

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
W9302	N20P	03-12-93	1456	0.99	W93020752	1.64	32.23	11.00	98	28.27	25.78	0.31	1.19	0.69	0.01	5.19	0.61	9.24
W9302	N20P	03-12-93	1455	5.27	W93020751	1.63	32.23	11.02	98	28.27	25.78	0.33	1.19	1.94	0.01	2.20	0.50	9.36
W9302	N20P	03-12-93	1454	10.98	W93020750	1.62	32.23	10.99	98	28.26	25.78	0.35	1.18	0.74	0.02	4.99	0.61	9.39
W9302	N20P	03-12-93	1453	18.72	W93020749	1.61	32.23	10.98	98	28.25	25.78	0.37	1.17	1.72	0.03	2.84	0.50	9.32
W9302	N20P	03-12-93	1447	25.74	W93020747	1.58	32.24	10.93	97	28.24	25.79	0.36	1.17	0.99	0.14	4.35	0.53	9.27
W9302	N21	03-12-93	1748	1.49	W93020834	1.75	32.26	10.93	98	28.39	25.80	0.35	1.18	0.27	0.00	6.17	0.63	9.16
W9302	N21	03-12-93	1747	5.79	W93020833	1.75	32.26	10.91	98	28.39	25.80	0.40	1.17	3.30	0.16	2.44	0.69	9.15
W9302	N21	03-12-93	1746	13.19	W93020832	1.76	32.26	10.90	97	28.40	25.80	0.37	1.17	4.26	0.03	0.52	0.52	9.29
W9302	N21	03-12-93	1745	20.78	W93020831	1.75	32.26	10.86	97	28.40	25.80	0.43	1.17	0.64	0.13	8.03	0.86	9.23
W9302	N21	03-12-93	1744	28.82	W93020830	1.75	32.26	10.80	97	28.39	25.80	0.41	1.17	0.72	0.13	7.90	0.84	9.10
W9303	N01P	03-24-93	0956	2.56	W93030072	0.89	31.69	11.52	100	27.24	25.39	0.72	1.20	2.10	0.00	6.41	0.56	9.32
W9303	N01P	03-24-93	0955	6.39	W93030071	1.63	32.10	11.46	102	28.16	25.68	0.78	1.17	3.15	0.15	1.06	0.50	8.98
W9303	N01P	03-24-93	0954	14.98	W93030070	1.61	32.11	11.44	102	28.15	25.68	1.08	1.11	0.12	0.05	5.27	0.47	8.89
W9303	N01P	03-24-93	0953	22.02	W93030069	1.33	32.17	11.25	99	27.98	25.75	0.87	0.98	1.91	0.01	3.34	0.56	9.30
W9303	N01P	03-24-93	0951	29.04	W93030068	1.33	32.18	11.15	99	27.99	25.76	0.71	0.91	5.25	0.27	0.68	0.38	9.15
W9303	N02	03-24-93	1033	2.84	W93030085	1.13	31.92	11.64	102	27.61	25.56	0.69	0.99	1.65	0.22	4.97	0.63	8.84
W9303	N02	03-24-93	1033	8.97	W93030084	1.63	32.11	11.54	103	28.17	25.68	0.85	1.08	4.23	0.13	0.64	0.53	8.90
W9303	N02	03-24-93	1032	18.65	W93030083	1.44	32.15	11.46	102	28.06	25.73	0.79	0.99	3.24	0.16	2.88	0.61	8.92
W9303	N02	03-24-93	1031	28.99	W93030082	1.33	32.20	11.40	101	28.00	25.77	0.61	0.87	3.52	0.06	1.20	0.49	9.60
W9303	N02	03-24-93	1025	35.64	W93030079	1.33	32.20	11.24	99	28.01	25.77	0.72	0.90	1.13	0.13	7.94	0.85	9.30
W9303	N03	03-24-93	1107	2.80	W93030096	1.14	31.97	11.56	102	27.66	25.60	0.79	0.86	0.27	0.02	7.08	0.69	8.43
W9303	N03	03-24-93	1106	9.59	W93030095	1.64	32.19	11.51	103	28.24	25.75	0.69	0.91	0.52	0.01	4.00	0.52	8.46
W9303	N03	03-24-93	1105	22.10	W93030094	1.46	32.22	11.34	101	28.13	25.79	0.82	0.92	0.77	0.04	3.48	0.49	8.45
W9303	N03	03-24-93	1104	31.65	W93030093	1.49	32.24	11.27	100	28.17	25.79	0.66	0.88	1.59	0.01	1.36	0.39	8.92
W9303	N03	03-24-93	1103	43.47	W93030092	1.52	32.24	11.20	99	28.20	25.80	0.61	0.85	0.49	0.33	4.85	0.37	8.73
W9303	N04P	03-24-93	1143	2.82	W93030107	1.25	32.04	11.66	103	27.80	25.65	0.68	0.81	0.41	0.01	3.39	0.40	7.56
W9303	N04P	03-24-93	1142	12.02	W93030106	1.61	32.21	11.59	103	28.24	25.76	0.85	0.88	3.04	0.01	0.64	0.37	7.74
W9303	N04P	03-24-93	1141	25.27	W93030105	1.59	32.22	11.49	102	28.23	25.77	1.03	0.87	0.87	0.33	3.99	0.55	7.84
W9303	N04P	03-24-93	1139	35.35	W93030104	1.57	32.25	11.35	101	28.25	25.80	0.87	0.88	1.75	0.04	0.03	0.48	7.88
W9303	N04P	03-24-93	1138	47.82	W93030103	1.89	32.36	11.08	99	28.60	25.86	0.67	0.92	1.00	0.14	7.15	0.83	7.85
W9303	N05	03-24-93	1214	2.75	W93030118	1.21	32.02	11.64	102	27.76	25.64	0.76	0.81	0.12	0.13	6.91	0.70	7.68
W9303	N05	03-24-93	1213	9.04	W93030117	1.65	32.20	11.61	103	28.26	25.76	0.72	0.85	1.16	0.00	3.37	0.51	7.71
W9303	N05	03-24-93	1212	21.09	W93030116	1.65	32.24	11.53	103	28.30	25.79	0.84	0.87	0.55	0.13	7.03	0.78	7.40
W9303	N05	03-24-93	1211	37.52	W93030115	1.92	32.36	11.07	99	28.62	25.87	0.74	0.87	0.83	0.15	7.65	0.84	8.27
W9303	N05	03-24-93	1210	51.99	W93030114	1.95	32.37	11.03	99	28.66	25.87	0.57	0.87	0.82	0.14	7.65	0.87	8.48
W9303	N06	03-24-93	1254	2.68	W93030129	1.26	32.01	11.75	104	27.79	25.63	0.76	0.81	2.87	0.03	6.37	0.40	7.66
W9303	N06	03-24-93	1253	11.74	W93030128	1.64	32.20	11.60	103	28.25	25.76	0.64	0.85	3.93	0.01	0.58	0.51	7.76
W9303	N06	03-24-93	1252	24.88	W93030127	1.46	32.21	11.48	102	28.12	25.77	0.71	0.88	0.24	0.03	3.19	0.29	7.93
W9303	N06	03-24-93	1251	37.21	W93030126	1.99	32.38	11.04	99	28.69	25.88	0.68	0.90	1.03	0.13	7.64	0.87	8.70
W9303	N06	03-24-93	1250	48.97	W93030125	2.06	32.40	10.95	99	28.78	25.89	0.80	0.97	1.92	0.00	2.01	0.42	9.12
W9303	N07P	03-24-93	1358	2.83	W93030144	1.45	32.01	11.83	105	27.94	25.61	0.81	0.86	2.03	0.02	3.18	0.46	7.50
W9303	N07P	03-24-93	1357	9.41	W93030143	1.46	32.01	11.81	105	27.95	25.62	0.95	0.87	1.08	0.14	5.22	0.58	7.44

Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
W9303	N07P	03-24-93	1356	21.50	W93030142	1.59	32.17	11.72	104	28.19	25.73	0.93	0.89	0.62	0.02	3.98	0.41	7.26
W9303	N07P	03-24-93	1355	32.18	W93030141	1.50	32.24	11.40	101	28.18	25.80	0.86	0.89	0.97	0.14	7.25	0.83	8.01
W9303	N07P	03-24-93	1354	49.31	W93030140	1.95	32.37	11.09	100	28.65	25.87	0.77	0.84	1.63	0.14	7.72	0.87	8.92
W9303	N08	03-24-93	1428	2.70	W93030155	1.31	31.83	11.66	103	27.69	25.48	0.83	0.98	0.87	0.02	6.93	0.54	8.38
W9303	N08	03-24-93	1427	5.18	W93030154	1.31	31.83	11.69	103	27.69	25.48	0.71	0.99	0.72	0.02	6.51	0.64	8.41
W9303	N08	03-24-93	1427	12.82	W93030153	1.48	32.02	11.60	103	27.98	25.62	0.91	0.95	1.69	0.02	4.05	0.54	8.28
W9303	N08	03-24-93	1426	23.78	W93030152	1.41	32.17	11.47	102	28.04	25.75	0.66	0.82	1.49	0.06	3.30	0.54	8.11
W9303	N08	03-24-93	1425	31.27	W93030151	1.42	32.19	11.42	101	28.07	25.76	0.74	0.80	0.84	0.01	3.82	0.47	8.04
W9303	N09	03-24-93	1456	2.72	W93030166	1.07	31.31	11.57	101	27.08	25.07	0.97	1.27	2.09	0.14	7.87	0.61	10.35
W9303	N09	03-24-93	1455	4.54	W93030165	1.37	31.53	11.53	102	27.50	25.23	0.90	1.28	1.31	0.07	8.24	0.65	9.96
W9303	N09	03-24-93	1454	14.76	W93030164	1.46	32.07	11.62	103	28.00	25.66	0.96	1.04	0.10	0.02	4.83	0.44	8.73
W9303	N09	03-24-93	1453	24.72	W93030163	1.37	32.17	11.44	101	28.01	25.75	0.80	0.90	0.92	0.13	7.49	0.83	8.55
W9303	N09	03-24-93	1452	34.17	W93030162	1.37	32.18	11.40	101	28.02	25.75	0.79	0.96	1.17	0.14	7.44	0.82	8.73
W9303	N10P	03-24-93	0822	2.47	W93030035	1.46	30.98	11.39	100	27.13	24.79	1.05	1.52	4.86	0.34	7.10	0.73	11.57
W9303	N10P	03-24-93	0821	4.50	W93030034	1.57	31.39	11.40	101	27.55	25.11	1.09	1.48	4.34	0.28	5.63	0.69	10.76
W9303	N10P	03-24-93	0820	8.92	W93030033	1.55	31.50	11.40	101	27.62	25.20	0.92	1.47	4.00	0.42	5.23	0.69	10.75
W9303	N10P	03-24-93	0819	13.86	W93030032	1.45	31.71	11.29	100	27.71	25.37	1.00	1.62	3.28	0.24	5.96	0.67	10.53
W9303	N10P	03-24-93	0817	21.38	W93030031	1.35	31.99	11.27	100	27.85	25.60	1.23	1.70	3.02	0.22	5.98	0.69	11.06
W9303	N11	03-24-93	0857	2.47	W93030048	1.50	31.45	11.36	100	27.53	25.16	0.99	1.51	3.49	0.12	6.26	0.61	10.76
W9303	N11	03-24-93	0856	4.39	W93030047	1.69	31.61	11.32	101	27.81	25.28	1.07	1.49	5.79	0.21	1.15	0.57	10.35
W9303	N11	03-24-93	0855	7.68	W93030046	1.47	31.94	11.34	100	27.90	25.56	0.93	1.20	3.65	0.22	2.50	0.59	9.68
W9303	N11	03-24-93	0854	18.22	W93030045	1.34	32.09	11.32	100	27.92	25.68	0.74	1.09	3.96	0.15	1.37	0.51	9.44
W9303	N11	03-24-93	0852	28.81	W93030044	1.27	32.13	11.17	99	27.90	25.72	0.86	1.08	0.30	0.11	5.80	0.48	9.47
W9303	N12	03-24-93	0924	2.80	W93030059	0.76	31.19	11.35	98	26.75	25.00	1.08	1.49	2.85	0.23	7.20	0.67	10.73
W9303	N12	03-24-93	0923	4.67	W93030058	0.93	31.34	11.41	99	27.00	25.11	1.01	1.46	3.49	0.22	5.86	0.63	10.26
W9303	N12	03-24-93	0922	9.00	W93030057	1.60	32.01	11.39	101	28.07	25.61	0.95	1.14	2.30	0.03	4.47	0.58	9.21
W9303	N12	03-24-93	0921	13.39	W93030056	1.42	32.14	11.32	100	28.02	25.72	0.92	1.04	1.56	0.01	1.52	0.45	8.88
W9303	N12	03-24-93	0920	19.40	W93030055	1.32	32.17	11.23	99	27.97	25.75	0.72	0.95	1.82	0.13	7.86	0.78	9.15
W9303	N13	03-24-93	1614	2.83	W93030199	1.04	31.38	11.63	101	27.12	25.13	0.77	1.30	2.39	0.02	4.82	0.50	10.14
W9303	N13	03-24-93	1613	3.47	W93030198	1.11	31.45	11.72	102	27.22	25.18	1.00	1.30	3.39	0.24	3.99	0.65	10.10
W9303	N13	03-24-93	1612	9.65	W93030197	1.61	32.12	11.63	103	28.16	25.69	1.05	1.06	2.52	0.04	2.11	0.58	9.07
W9303	N13	03-24-93	1611	18.91	W93030196	1.34	32.19	11.48	101	28.00	25.76	0.69	0.92	3.37	0.12	0.36	0.47	9.32
W9303	N13	03-24-93	1610	30.07	W93030195	1.34	32.19	11.39	101	28.01	25.77	0.73	0.91	3.67	0.04	0.56	0.48	9.42
W9303	N14	03-24-93	1639	2.61	W93030210	1.43	32.06	11.70	104	27.97	25.66	0.90	0.92	0.32	0.05	5.11	0.51	8.71
W9303	N14	03-24-93	1638	8.34	W93030209	1.44	32.06	11.67	103	27.98	25.66	0.81	0.94	1.80	0.05	3.47	0.56	8.76
W9303	N14	03-24-93	1637	15.04	W93030208	1.54	32.13	11.60	103	28.12	25.71	0.82	0.97	0.97	0.14	7.81	0.86	8.89
W9303	N14	03-24-93	1636	23.01	W93030207	1.37	32.21	11.41	101	28.04	25.78	0.74	0.86	0.85	0.13	8.04	0.91	9.40
W9303	N14	03-24-93	1635	30.10	W93030206	1.37	32.21	11.38	101	28.04	25.78	0.61	0.84	1.73	0.13	8.10	0.86	9.39
W9303	N15	03-24-93	1705	2.61	W93030221	1.36	32.07	11.67	103	27.91	25.67	0.73	0.86	0.72	0.01	4.65	0.58	8.47
W9303	N15	03-24-93	1704	6.43	W93030220	1.36	32.07	11.65	103	27.92	25.67	0.76	0.87	0.84	0.01	3.73	0.50	8.49
W9303	N15	03-24-93	1703	13.53	W93030219	1.40	32.08	11.63	103	27.96	25.68	0.82	0.87	0.97	0.02	3.69	0.47	8.74
W9303	N15	03-24-93	1702	26.23	W93030218	1.41	32.22	11.40	101	28.09	25.79	0.51	0.84	0.26	0.02	5.41	0.55	9.44

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Table A1. Physical and Chemical Parameters at Discrete Bottle Measurement Depths.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Temp (C)	Sal (PSU)	DO (mg/L)	Oxy Sat (%)	Cond (umhos/cm)	Sigma t	Flu (ug/L)	Beam (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
W9303	N15	03-24-93	1701	39.22	W93030217	1.48	32.23	11.35	101	28.15	25.79	0.45	0.81	0.75	0.02	5.27	0.46	9.58
W9303	N16P	03-24-93	1733	2.52	W93030232	1.38	32.06	11.73	104	27.93	25.66	0.55	0.85	0.12	0.10	3.04	0.42	8.24
W9303	N16P	03-24-93	1732	10.27	W93030231	1.40	32.08	11.72	104	27.96	25.67	0.70	0.85	0.62	0.01	3.87	0.50	8.26
W9303	N16P	03-24-93	1731	16.13	W93030230	1.51	32.17	11.62	103	28.12	25.74	0.63	0.92	1.10	0.40	0.69	0.43	8.61
W9303	N16P	03-24-93	1730	26.90	W93030229	1.44	32.22	11.38	101	28.11	25.78	0.72	0.84	2.65	0.01	0.08	0.48	8.95
W9303	N16P	03-24-93	1729	36.79	W93030228	1.50	32.23	11.29	100	28.17	25.79	0.58	0.81	1.20	0.29	1.20	0.43	8.97
W9303	N17	03-24-93	1801	1.93	W93030243	1.40	31.94	11.71	103	27.85	25.56	0.74	0.92	1.29	0.15	7.84	0.83	8.63
W9303	N17	03-24-93	1800	7.93	W93030242	1.45	32.02	11.69	104	27.96	25.63	0.91	0.88	1.04	0.14	7.77	0.87	8.49
W9303	N17	03-24-93	1800	18.33	W93030241	1.50	32.15	11.60	103	28.11	25.73	0.83	0.86	2.05	0.13	4.25	0.63	8.49
W9303	N17	03-24-93	1759	24.60	W93030240	1.46	32.20	11.43	101	28.11	25.77	0.67	0.81	0.23	0.13	0.24	0.21	8.58
W9303	N17	03-24-93	1758	36.18	W93030239	1.47	32.21	11.40	101	28.13	25.78	0.80	0.78	0.81	0.00	3.77	0.53	8.48
W9303	N18	03-24-93	1828	2.71	W93030254	1.31	31.76	11.64	103	27.64	25.42	0.85	1.09	1.39	0.01	6.52	0.58	9.35
W9303	N18	03-24-93	1827	4.72	W93030253	1.31	31.76	11.66	103	27.63	25.42	0.87	1.10	1.33	0.01	4.86	0.52	8.26
W9303	N18	03-24-93	1826	9.34	W93030252	1.46	32.04	11.54	102	27.98	25.64	0.98	1.03	1.53	0.01	3.71	0.41	8.93
W9303	N18	03-24-93	1825	16.42	W93030251	1.34	32.14	11.49	102	27.97	25.73	0.82	0.84	3.51	0.17	1.74	0.60	8.97
W9303	N18	03-24-93	1824	22.88	W93030250	1.36	32.15	11.43	101	27.99	25.73	0.71	0.85	2.44	0.09	0.98	0.60	8.80
W9303	N19	03-24-93	1520	2.66	W93030177	1.19	31.37	11.56	101	27.22	25.12	0.82	1.28	3.41	0.04	7.27	0.61	10.38
W9303	N19	03-24-93	1520	3.77	W93030176	1.20	31.38	11.54	101	27.24	25.12	1.14	1.30	1.56	0.13	7.82	0.70	10.21
W9303	N19	03-24-93	1519	8.55	W93030175	1.47	32.04	11.56	102	27.98	25.63	1.07	1.11	0.79	0.06	0.76	0.02	9.20
W9303	N19	03-24-93	1518	12.29	W93030174	1.35	32.10	11.42	101	27.94	25.70	0.93	1.03	4.41	0.16	0.55	0.64	9.21
W9303	N19	03-24-93	1517	20.83	W93030173	1.28	32.14	11.36	100	27.92	25.73	0.79	0.90	1.75	0.14	8.31	0.87	9.24
W9303	N20P	03-24-93	1545	3.18	W93030188	1.10	31.49	11.62	102	27.26	25.22	0.92	1.19	1.05	0.02	6.65	0.53	9.59
W9303	N20P	03-24-93	1544	3.38	W93030187	1.11	31.50	11.65	102	27.26	25.22	0.76	1.20	3.05	0.22	4.70	0.63	9.77
W9303	N20P	03-24-93	1543	6.69	W93030186	1.45	31.77	11.53	102	27.76	25.42	0.98	1.16	3.61	0.21	3.19	0.61	9.55
W9303	N20P	03-24-93	1542	19.93	W93030185	1.36	32.17	11.44	101	28.00	25.75	0.82	0.83	3.40	0.17	1.70	0.61	9.01
W9303	N20P	03-24-93	1541	28.48	W93030184	1.35	32.17	11.42	101	28.00	25.75	0.69	0.83	1.23	0.14	8.16	0.89	9.16
W9303	N21	03-24-93	1854	16.17	W93030263	1.47	32.17	11.55	102	28.09	25.74	0.80	0.91	1.01	0.01	5.28	0.63	8.76
W9303	N21	03-24-93	1854	21.94	W93030262	1.37	32.19	11.49	102	28.03	25.76	0.67	0.81	1.33	0.01	3.42	0.53	8.98
W9303	N21	03-24-93	1853	29.15	W93030261	1.37	32.19	11.49	102	28.04	25.76	0.68	0.81	1.32	0.32	2.94	0.50	8.86

e = Data not reported
s = Suspect data

Table A2. Chemical and Biological Parameters at Two Depths of Bioproductivity Stations and Special Station F25.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Rep	Chl A (ug/L)	DOC (uM)	PHA (ug/L)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
W9301	F01P	02-25-93	1410	3.04	W93010415	1	3.42	134.03	0.70	28.08	4.07	10.48	1.06	2.22
W9301	F01P	02-25-93	1410	3.04	W93010415	2	2.76	127.04	0.96	21.83	3.93	12.06	1.87	2.48
W9301	F01P	02-25-93	1408	12.02	W93010413	1	3.53	160.13	0.73	21.83	2.21	10.91	1.95	2.87
W9301	F01P	02-25-93	1408	12.02	W93010413	2	3.27	161.30	0.67	23.92	1.93	10.86	4.06	2.16
W9301	F02P	02-25-93	1122	2.52	W93010397	1	3.43	230.46	0.70	30.58		7.80	1.13	2.36
W9301	F02P	02-25-93	1122	2.52	W93010397	2	3.96	225.32	1.20	24.67	4.50	8.68	2.22	2.22
W9301	F02P	02-25-93	1120	12.45	W93010395	1	3.20	117.34	0.84	23.67	4.14	8.37	0.73	1.87
W9301	F02P	02-25-93	1120	12.45	W93010395	2	3.63	109.99	0.75	18.83	3.57	9.19	1.60	1.97
W9301	F13P	02-24-93	1009	2.15	W93010278	1	0.39	103.80	0.58	17.50	1.71	20.78	3.22	3.29
W9301	F13P	02-24-93	1009	2.15	W93010278	2	0.41	99.94	0.53	18.83	1.71	21.33	4.45	2.80
W9301	F13P	02-24-93	1006	6.60	W93010276	1	0.51	96.08	0.67	12.00		19.39	1.69	2.74
W9301	F13P	02-24-93	1006	6.60	W93010276	2	0.49	104.19	0.68	18.67	3.50	20.43	1.23	3.18
W9301	F23P	02-23-93	0718	2.00	W93010066	1	1.11	132.09	0.90	23.92	2.29	27.79	1.07	4.68
W9301	F23P	02-23-93	0718	2.00	W93010066	2	0.54	238.37	0.76	25.25		29.09	1.06	4.61
W9301	F23P	02-23-93	0716	9.62	W93010064	1	1.47	149.59	0.34	33.83		30.87	1.13	6.56
W9301	F23P	02-23-93	0716	9.62	W93010064	2	0.78	138.69	1.76	48.50	7.50	26.84	0.99	8.41
W9301	F25	02-24-93	1753	2.03	W93010356	1	0.27	98.39	0.54	22.83		23.86	1.62	3.24
W9301	F25	02-24-93	1753	2.03	W93010356	2	0.36	96.46	0.62	26.08	2.21	23.65	1.57	3.56
W9301	F25	02-24-93	1752	5.68	W93010354	1	0.32	104.96	0.64	26.42	4.00	22.10	1.94	3.73
W9301	F25	02-24-93	1752	5.68	W93010354	2	0.47	106.89	0.64	18.33	1.57	22.63	1.57	3.71
W9301	N01P	02-24-93	0613	2.32	W93010236	1	0.24	125.49	0.75	21.00	1.43	16.46	0.88	1.96
W9301	N01P	02-24-93	0613	2.32	W93010236	2	0.15	121.22	0.75	16.50	3.14	16.00	0.75	2.32
W9301	N01P	02-24-93	0611	13.26	W93010234	1	0.19	129.37	0.66	19.33		16.53	0.79	3.09
W9301	N01P	02-24-93	0611	13.26	W93010234	2	0.25	124.71	0.70	28.25	2.14	16.43	0.83	2.55
W9301	N04P	02-24-93	0727	5.00	W93010252	1	0.26	113.86	0.53	15.17		16.32	0.83	2.28
W9301	N04P	02-24-93	0727	5.00	W93010252	2	0.18	106.12	0.52	12.67		15.38	0.86	1.54
W9301	N04P	02-24-93	0725	21.46	W93010250	1	0.23	112.70	0.50	11.25		15.05	0.88	1.87
W9301	N04P	02-24-93	0725	21.46	W93010250	2	0.19	129.37	0.46	15.83		14.33	0.78	1.65
W9301	N07P	02-24-93	0854	2.40	W93010264	1	0.24	82.97	0.50	11.58		15.35	1.16	1.79
W9301	N07P	02-24-93	0854	2.40	W93010264	2	0.23	87.21	0.40	14.08	1.57	15.17	0.88	1.20
W9301	N07P	02-24-93	0851	16.75	W93010262	1	0.07	89.90	0.34	13.42		15.72	1.11	1.83
W9301	N07P	02-24-93	0851	16.75	W93010262	2	0.21	94.15	0.47	11.75	1.57	15.52	1.84	1.76
W9301	N10P	02-23-93	1051	1.97	W93010117	1	0.35	106.51	0.77	18.58		20.91	1.04	3.63
W9301	N10P	02-23-93	1051	1.97	W93010117	2	0.49	104.96	0.74	34.17	2.86	17.95	0.94	3.57
W9301	N10P	02-23-93	1049	7.81	W93010115	1	0.83	101.87	0.87	16.08		15.24	0.90	2.99
W9301	N10P	02-23-93	1049	7.81	W93010115	2	0.64	105.73	0.75	20.00	3.64	16.95	3.61	4.20
W9301	N16P	02-23-93	0950	2.34	W93010101	1	0.98	106.89	0.65	10.67		14.83	0.96	1.96
W9301	N16P	02-23-93	0950	2.34	W93010101	2	0.86		0.74	15.92	1.79	13.63	0.85	1.75
W9301	N16P	02-23-93	0947	21.94	W93010099	1	0.87	78.35	0.80	12.75		14.08	0.88	1.82
W9301	N16P	02-23-93	0947	21.94	W93010099	2	0.87	72.97	0.75	13.92	1.79	13.72	0.84	1.75
W9301	N20P	02-23-93	0855	2.16	W93010089	1	0.52	180.47	0.68	15.08	1.71	17.57	0.96	2.53
W9301	N20P	02-23-93	0855	2.16	W93010089	2	0.64	147.26	0.71	13.92	1.43	15.98	0.98	2.60

Table A2. Chemical and Biological Parameters at Two Depths of Bioproductivity Stations and Special Station F25.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Rep	Chl A (ug/L)	DOC (uM)	PHA (ug/L)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
W9301	N20P	02-23-93	0853	13.95	W93010087	1	0.45	246.29	0.62	15.67	2.07	16.51	0.85	3.47
W9301	N20P	02-23-93	0853	13.95	W93010087	2	0.59	258.60	0.85	21.17	1.86	14.50	0.81	3.01
W9302	F01P	03-11-93	1405	2.00	W93020527	1	4.36	137.91	0.90	23.42	5.07	12.32	0.67	2.09
W9302	F01P	03-11-93	1405	2.00	W93020527	2	4.05	137.13	0.64	22.75	4.79	14.19	0.73	2.55
W9302	F01P	03-11-93	1402	9.00	W93020525	1	4.60	116.30	0.94	22.92	4.86	13.48	0.64	2.23
W9302	F01P	03-11-93	1402	9.00	W93020525	2	4.29	116.30	0.69	21.50	4.86	13.38	0.65	2.00
W9302	F02P	03-11-93	1203	2.00	W93020500	1	4.90	555.70	1.20	21.08	4.71	11.31	0.61	1.17
W9302	F02P	03-11-93	1203	2.00	W93020500	2	5.37	558.61	1.29	21.17	4.43	11.54	0.65	1.29
W9302	F02P	03-11-93	1201	11.00	W93020498	1	4.21	126.71	0.86	21.25	4.50	12.18	0.57	2.70
W9302	F02P	03-11-93	1201	11.00	W93020498	2	4.68	126.32	0.96	18.75	4.00	12.98	0.67	1.70
W9302	F13P	03-10-93	1159	2.00	W93020361	1	0.47	115.31	0.57	16.83	2.71	26.90	0.90	2.73
W9302	F13P	03-10-93	1159	2.00	W93020361	2	0.33	122.25	0.60	19.58	2.57	20.76	0.96	2.48
W9302	F13P	03-10-93	1157	11.00	W93020359	1	0.33	157.85	0.59	18.83	3.71	24.65	1.08	2.78
W9302	F13P	03-10-93	1157	11.00	W93020359	2	0.26	155.91	0.54	19.75	3.64	25.47	0.81	2.07
W9302	F23P	03-09-93	0655	2.00	W93020018	1	0.54	241.97	0.85	28.42	4.93	26.91	0.80	5.38
W9302	F23P	03-09-93	0655	2.00	W93020018	2	0.57	199.56	0.78	29.17	4.64	27.93	0.68	4.60
W9302	F23P	03-09-93	0653	8.00	W93020016	1	0.51	140.80	0.92	32.75	4.93	27.27	0.82	6.30
W9302	F23P	03-09-93	0653	8.00	W93020016	2	0.72	137.70	0.82	27.92	5.21	28.86	0.82	5.56
W9302	F25	03-10-93	0621	3.00	W93020274	1	0.36	120.70	0.88	27.75	4.43	28.27	1.11	5.60
W9302	F25	03-10-93	0621	3.00	W93020274	2	0.34	121.09	0.82	15.75	2.57	28.80	1.11	5.69
W9302	F25	03-10-93	0618	5.00	W93020272	1	0.55	128.04	1.05	30.67	4.57	25.57	1.08	5.78
W9302	F25	03-10-93	0618	5.00	W93020272	2	0.45	146.22	0.87	24.42	4.71	28.87	1.15	6.61
W9302	N01P	03-10-93	0719	3.00	W93020289	1	0.50	110.92	0.61	17.17	2.21	16.74	0.90	2.96
W9302	N01P	03-10-93	0719	3.00	W93020289	2	0.47	110.92	0.66	9.92	1.71	19.38	1.15	2.42
W9302	N01P	03-10-93	0716	10.00	W93020287	1	0.38	103.23	0.58	10.25	1.79	16.46	0.71	2.80
W9302	N01P	03-10-93	0716	10.00	W93020287	2	0.43	114.76	0.60	11.08	1.64	16.35	0.87	2.00
W9302	N04P	03-10-93	0954	3.00	W93020315	1	0.55	108.22	0.39	4.67	1.00	15.25	0.68	2.28
W9302	N04P	03-10-93	0954	3.00	W93020315	2	0.55	110.53	0.36			23.41	1.07	1.51
W9302	N04P	03-10-93	0951	15.00	W93020313	1	0.95	141.39	0.48	6.00	1.29	15.09	0.85	1.66
W9302	N04P	03-10-93	0951	15.00	W93020313	2	0.44	130.57	0.45	3.08	0.86	15.14	0.70	1.64
W9302	N07P	03-10-93	1056	2.00	W93020337	1	0.37	109.38	0.38	3.33	1.07	18.54	0.82	1.14
W9302	N07P	03-10-93	1056	2.00	W93020337	2	0.28		0.36	5.17	1.00	14.85	0.74	
W9302	N07P	03-10-93	1054	14.00	W93020335	1	0.59	102.46	0.38	3.75	0.86	16.26	0.86	1.31
W9302	N07P	03-10-93	1054	14.00	W93020335	2	0.79	100.92	0.41	7.58	1.29	14.92	0.81	3.65
W9302	N10P	03-09-93	1103	2.00	W93020109	1	0.53	120.93	0.71	23.17	3.43	23.18	0.91	2.95
W9302	N10P	03-09-93	1103	2.00	W93020109	2	0.47	125.55	0.60	23.83	4.14	24.90	0.98	2.51
W9302	N10P	03-09-93	1101	11.00	W93020107	1	0.48	118.23	0.63	19.17	3.64	21.01	0.90	3.91
W9302	N10P	03-09-93	1101	11.00	W93020107	2	0.55	115.53	0.47	18.50	3.79	20.78	0.92	3.27
W9302	N16P	03-09-93	0956	2.00	W93020085	1	0.72	155.52	0.43	6.58	1.21	14.61	0.65	2.41
W9302	N16P	03-09-93	0956	2.00	W93020085	2	0.72	152.42	0.49	4.75	1.14	15.79	0.63	1.44
W9302	N16P	03-09-93	0954	9.00	W93020083	1	0.74	143.51	0.46	7.08	0.93	14.97	0.64	1.73
W9302	N16P	03-09-93	0954	9.00	W93020083	2	0.49	140.80	0.44	14.00	2.00	16.20	0.64	1.84
W9302	N20P	03-09-93	0841	2.00	W93020056	1	0.25	131.51	0.48	16.83	2.00	17.71	0.82	2.54

Table A2. Chemical and Biological Parameters at Two Depths of Bioproductivity Stations and Special Station F25.

Event	Station	Date	Time (EST)	Depth (M)	Sample id	Rep	Chl A (ug/L)	DOC (uM)	PHA (ug/L)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
W9302	N20P	03-09-93	0841	2.00	W93020056	2	0.23	129.58	0.48	6.17	1.00	18.81	0.99	2.00
W9302	N20P	03-09-93	0839	10.00	W93020054	1	0.42	117.62	0.42	6.42	1.36	15.66	0.72	2.62
W9302	N20P	03-09-93	0839	10.00	W93020054	2	0.33	118.78	0.54	8.08	1.00	17.50	0.96	2.97

023

APPENDIX A

STATION DATA TABLES AND INSTRUMENT CALIBRATION DATA

Part 2

Instrument Calibration Data for Fluorescence and Dissolved Oxygen

The average value of individual analytical replicates from chlorophyll ($n=2$) and dissolved oxygen determinations ($n=2$) was used to post-calibrate *in situ* sensor readings, where the CTD value is regarded as dependent on the bottle value. All regressions were forced through zero (top regression of statistics block and ANOVA table accompanying each survey and parameter). Tests of intercept significance (regression statistics and ANOVA table) suggest whether the intercept model had intercepts not significantly different from zero. Note that, as described on the next page, setting the intercept to zero can produce negative r^2 values, but since instrument blank readings are near zero and intercept tests showed non-significance, the practice was followed for all surveys.

For the survey series, to allow easy comparison of trends in calibration over time, all survey chlorophyll calibrations are given, followed by all survey dissolved oxygen calibrations. The sequence of surveys, coded as follows, is:

MNF15 = December 1992 nearfield survey
W9301 = February 1993 combined survey
W9302 = Mid-March 1993 combined survey
W9303 = Late March 1993 nearfield survey.

DOCUMENT:Q89472 23-JUN-1993 [W_EXCEL]
TITLE :Excel: LINEST() Returns Negative r^2 Value
PRODUCT :Microsoft Windows Excel
PROD/VER:4.00 | 4.00
OPER/SYS:WINDOWS | MACINTOSH
KEYWORDS:

The information in this article applies to:

- Microsoft Excel for Windows, version 4.0
 - Microsoft Excel for the Macintosh, version 4.0
-

Summary:

In Microsoft Excel, setting the CONST argument in the LINEST() function to FALSE can result in a negative value for r^2 (coefficient of determination).

Setting CONST to FALSE in LINEST() forces the best-fit line through the origin which may result in a much greater margin of error. Using TRUE for the CONST argument results in a best-fit line computed solely on your data.

More Information:

The LINEST() function uses the "least squares" method to calculate a straight line that best fits your data. LINEST() also returns additional regression statistics including a coefficient of determination which indicates how useful the equation is in predicting y-values. The coefficient of determination (r^2) should be a value between 0 and 1 where 0 indicates the equation is not helpful and 1 indicates a perfect correlation between the estimated and actual y-values.

If the CONST argument to LINEST() is FALSE then Excel assumes a value of zero for b in the equation $y=mx+b$, that is, the line is forced through the origin. Forcing the line through the origin causes the predictions Excel generates to be arbitrarily worse than average which can result in r^2 becoming negative.

The coefficient of determination (r^2) is given by the formula:

$$r^2 = 1 - SSE/SST$$

Where:

SSE = The error sum of squares. = $\sum (Y_i - \text{slope} \times X_i)^2$

SST = The total sum of squares. = $\sum (Y_i - \bar{Y})^2$

Forcing the best-fit line through the origin causes the estimates used in computing SSE to become arbitrarily large. As a result, the value SSE/SST may be greater than 1 causing the formula, $1 - SSE/SST$, to become negative.

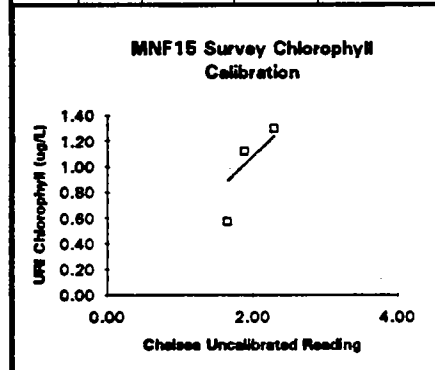
In general, forcing a best-fit line through the origin will likely result in a greater margin of error and, hence, less useful statistics.

Reference(s):

"Microsoft Excel Function Reference," version 4.0, pages 254-258

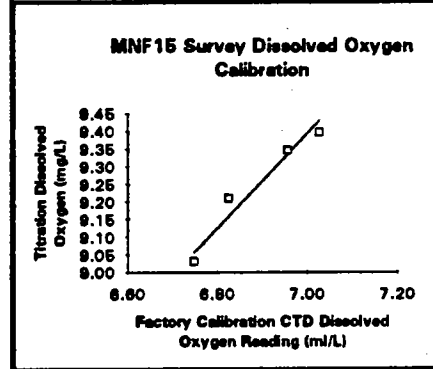
Additional reference words: 4.0 4.00

Marker	Station	Bottle CH	CTD CH	Predicted CH	Regression Statistics						
79	N04P	1.12	1.89	1.02							
122	N20P	1.30	2.30	1.24	Multiple R	#NUM!					
192	N10P	0.57	1.66	0.89	R Square	-0.8735					
					Adjusted R Square	-1.3736					
					Standard Error	0.44736					
					Observations	3					
					Analysis of Variance						
						df	Sum of Squares	Mean Square	F	Significance F	
					Regression	1	-0.1866189	-0.1866189	-0.93248	#NUM!	
					Residual	2	0.40028358	0.200131791			
					Total	3	0.21364468				
					Coefficients		Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
					Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
					x1	1.8598	0.24833658	7.489045232	0.00493	0.791296994	2.92831



Regression Statistics						
Multiple R	0.90535					
R Square	0.81966					
Adjusted R Square	0.83931					
Standard Error	0.18629					
Observations	3					
Analysis of Variance						
	df	Sum of Squares	Mean Square	F	Significance F	
Regression	1	0.17511535	0.175115353	4.54499	0.279218438	
Residual	1	0.03852933	0.038529329			
Total	2	0.21364468				
Coefficients		Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
Intercept	1.1717	0.38239953	3.064072919	0.09204	-3.88712588	6.03053
x1	0.78384	0.36767203	2.131897847	0.16668	-3.88785686	5.45564

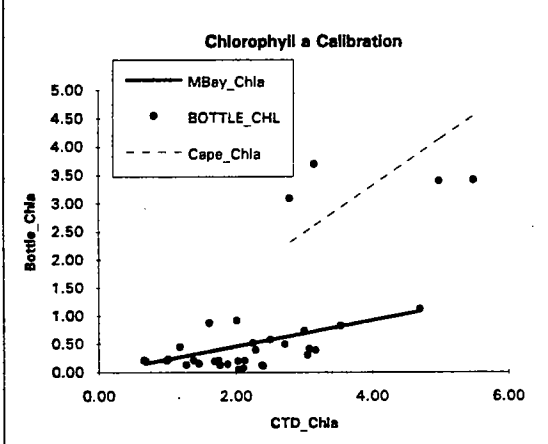
Marker	Station	Bottle DO	CTD DO	Predicted DO	Regression Statistics					
79	N04P	9.21	6.82	9.16						
122	N20P	9.35	6.96	9.34	Multiple R	0.97347				
148	N01P	9.03	6.75	9.06	R Square	0.94765				
192	N10P	9.40	7.03	9.43	Adjusted R Square	0.81432				
					Standard Error	0.02882				
					Observations	4				
					Analysis of Variance					
						df	Sum of Squares	Mean Square	F	Significance F
					Regression	1	0.04508928	0.045089287	64.3072	0.017820298
					Residual	3	0.00249134	0.000830448		
					Total	4	0.04758063			
					Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
					Intercept	0	#N/A	#N/A	#N/A	#N/A
					x1	0.74511	0.00155826	478.1692331	1.1E-10	0.740161563



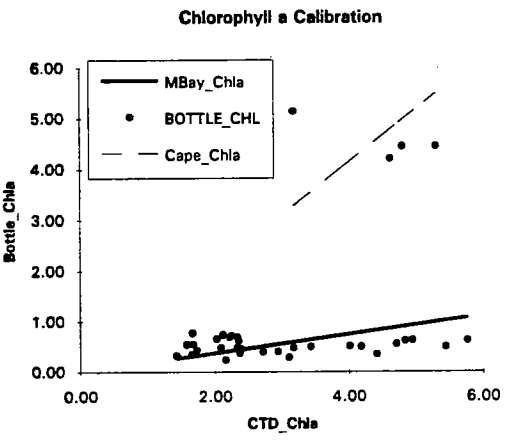
Regression Statistics						
Multiple R	0.97352					
R Square	0.94773					
Adjusted R Square	0.9216					
Standard Error	0.03527					
Observations	4					
Analysis of Variance						
	df	Sum of Squares	Mean Square	F	Significance F	
Regression	1	0.04510316	0.045103165	38.2842	0.028484828	
Residual	2	0.00248748	0.001243738			
Total	3	0.04759063				
Coefficients		Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
Intercept	-0.0644	1.15480572	-0.05576512	0.85904	-5.03312834	4.80433
x1	0.75207	0.12488831	6.021974732	0.00918	0.214722842	1.28943

Survey W9301 Chlorophyll a Calibration							
MARKER	STATION	DEPTH	BOTTLE_CHL	CTD_CHLA	MBay_Chla	Cape_Chla	Residual
64	F23P	8.90	1.13	4.70	1.08		0.04
66	F23P	2.13	0.83	3.54	0.81		0.01
87	N20P	13.60	0.52	2.28	0.52		0.00
89	N20P	2.70	0.58	2.51	0.58		0.00
99	N16P	21.20	0.87	1.82	0.37		0.60
101	N16P	2.10	0.92	2.02	0.46		0.46
115	N10P	7.15	0.74	3.00	0.69		0.04
117	N10P	2.12	0.42	3.08	0.71		-0.29
234	N01P	12.57	0.22	1.39	0.32		-0.10
236	N01P	1.84	0.20	1.76	0.40		-0.21
250	N04P	20.82	0.21	1.00	0.23		-0.02
252	N04P	4.37	0.22	0.67	0.15		0.07
262	N07P	16.06	0.14	1.28	0.30		-0.15
264	N07P	2.10	0.24	1.02	0.24		0.00
276	F13P	5.85	0.50	2.72	0.83		-0.13
278	F13P	2.36	0.40	2.30	0.53		-0.13
354	F25	4.89	0.40	3.17	0.73		-0.33
356	F25	2.30	0.32	3.06	0.70		-0.39
488	N10P	21.83	0.08	2.12	0.49		-0.41
490	N10P	4.98	0.12	2.41	0.55		-0.44
492	N10P	2.83	0.08	2.05	0.47		-0.42
521	N01P	28.79	0.15	1.88	0.43		-0.28
523	N01P	13.59	0.21	2.13	0.49		-0.28
525	N01P	2.25	0.45	1.19	0.27		0.18
554	N04P	47.33	0.20	1.70	0.39		-0.19
556	N04P	18.57	0.14	2.39	0.55		-0.41
558	N04P	2.12	0.21	1.75	0.40		-0.19
587	N07P	48.15	0.13	1.77	0.41		-0.28
589	N07P	16.40	0.20	2.04	0.47		-0.27
690	N07P	2.26	0.16	1.47	0.34		-0.18
415	F01P	3.08	3.09	2.79		2.32	0.77
397	F02P	2.81	3.70	3.15		2.62	1.08
413	F01P	11.99	3.40	4.98		4.13	-0.73
395	F02P	12.14	3.42	5.49		4.55	-1.14

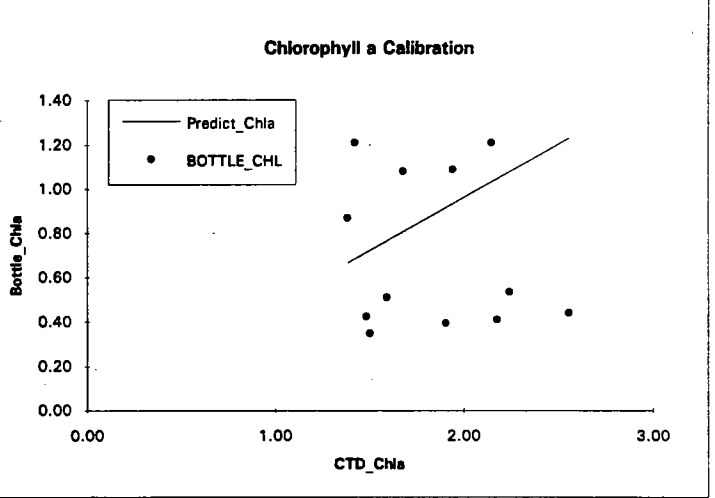
Regression Statistics without Stations F01P and F02P						
Standard Deviation of Residual						
Multiple R	#NUM!					0.234
R Square	-0.85354438					
Adjusted R Square	-0.88802713					
Standard Error	1.16085966					
Observations	30					
Analysis of Variance						
	df	Sum of Squares	Mean Square	F	Significance F	
Regression	1	-17.99618935	-17.9961894	-13.3542996	#NUM!	
Residual	29	39.08025933	1.34759515			
Total	30	21.08406998				
Coefficients						
	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
x1	4.34839959	0.463656308	9.37849764	1.9951E-10	3.400115447	5.29668373
Regression Statistics without Stations F01P and F02P						
Multiple R	0.56995191					
R Square	0.3247312					
Adjusted R Square	0.30061446					
Standard Error	0.7130772					
Observations	30					
Analysis of Variance						
	df	Sum of Squares	Mean Square	F	Significance F	
Regression	1	6.846655345	6.84665534	13.4649692	0.001011765	
Residual	28	14.23741463	0.50847909			
Total	29	21.08406998				
Coefficients						
	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
Intercept	1.50438195	0.215225638	6.98978973	1.0994E-07	1.063511724	1.94525218
x1	1.72772161	0.470837542	3.66946443	0.00097358	0.763253546	2.69218958
Regression Statistics with Stations F01P and F02P only						
Multiple R	0.12863783					
R Square	0.01654769				1.104	
Adjusted R Square	-0.31678564					
Standard Error	1.31976344					
Observations	4					
Analysis of Variance						
	df	Sum of Squares	Mean Square	F	Significance F	
Regression	1	0.087922004	0.087922	0.05047838	0.843099221	
Residual	3	5.225326606	1.74177654			
Total	4	5.31324861				
Coefficients						
	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
x1	1.20561549	0.193699212	6.22416312	0.00339279	0.589177574	1.82205342



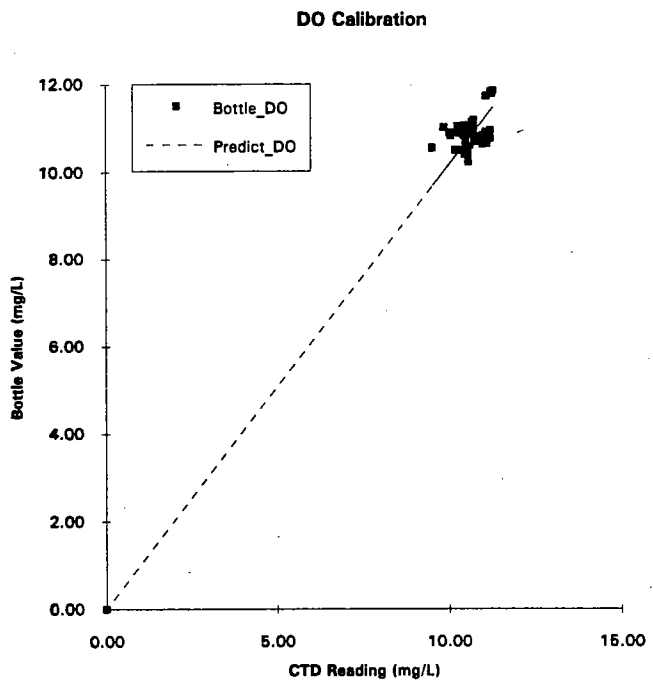
Survey W9302 Chlorophyll a Calibration																					
MARKER	STATION	DEPTH	BOTTLE_CHL	CTD_CHLA	MBay_Chla	Cape_Chla	Residual	Regression Statistics without Stations F01P and F02P													
16	F23P	6.92	0.62	4.84	0.91		-0.33														
18	F23P	1.76	0.66	4.71	0.88		-0.07	Multiple R	#NUM!	Standard Deviation of Residual											
64	N20P	8.21	0.98	2.38	0.45		-0.17	R Square	-0.31345139	0.978											
66	N20P	0.73	0.24	2.17	0.41		0.17	Adjusted R Square	-0.34793415												
83	N16P	7.42	0.62	2.36	0.44		0.30	Standard Error	1.445956405												
86	N16P	0.95	0.72	2.25	0.42		-0.24	Observations	30												
107	N10P	10.05	0.52	4.02	0.75		-0.14														
109	N10P	0.78	0.50	3.44	0.64		-0.28														
272	F25	4.41	0.60	4.18	0.78		-0.48	Analysis of Variance													
274	F25	2.41	0.35	4.42	0.83		-0.15	df	Sum of Squares	Mean Square	F	Significance F									
287	N01P	8.45	0.41	2.95	0.55		-0.11	Regression	1	-14.46986874	-14.4698687	-6.92076644	#NUM!								
289	N01P	1.30	0.49	3.18	0.59		0.28	Residual	29	60.6329078	2.090789924										
313	N04P	14.33	0.70	2.23	0.42		0.25	Total	30	46.16303907											
315	N04P	1.36	0.55	1.59	0.30		0.25	Coefficients					Standard Error	t Statistic	P-value	Lower 95%	Upper 95%				
335	N07P	12.45	0.69	2.34	0.44		0.06	Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A							
337	N07P	0.99	0.33	1.44	0.27		-0.29	x1	5.344352925	0.493498324	10.62952599	6.92683E-12	4.335034975	6.35367068							
359	F13P	10.08	0.30	3.11	0.58		-0.11														
361	F13P	1.61	0.40	2.73	0.51		-0.46														
582	N10P	19.85	0.62	5.77	1.08		-0.30														
584	N10P	9.51	0.83	4.95	0.93		-0.52														
585	N10P	3.42	0.50	5.45	1.02		0.05	Regression Statistics without Stations F01P and F02P													
615	N01P	25.10	0.49	2.34	0.44		0.02														
617	N01P	12.87	0.47	2.39	0.45		0.09	Multiple R	0.046130006												
619	N01P	1.63	0.49	2.10	0.39		0.04	R Square	0.002127977												
648	N04P	44.35	0.35	1.67	0.31		0.24	Adjusted R Square	-0.03351031												
660	N04P	24.44	0.56	1.69	0.32		0.27	Standard Error	1.282642434												
662	N04P	1.20	0.66	2.03	0.38		0.11	Observations	30												
666	N07P	40.62	0.44	1.74	0.33		0.34														
688	N07P	13.64	0.74	2.12	0.40		0.48	Analysis of Variance													
690	N07P	2.67	0.78	1.67	0.31		5.14	df	Sum of Squares	Mean Square	F	Significance F									
500	F02P	1.88	5.14	3.18		3.29	1.85	Regression	1	0.098233907	0.098233907	0.059710432	0.808735986								
527	F01P	0.68	4.21	4.62		4.79	-0.58	Residual	28	48.06480516	1.645171613										
525	F01P	8.19	4.45	4.80		4.98	-0.53	Total	29	46.16303907											
498	F02P	9.19	4.45	5.30		5.49	-1.05	Coefficients					Standard Error	t Statistic	P-value	Lower 95%	Upper 95%				
								Intercept	2.725683571	0.915989762	2.975746235	0.005841729	0.849412462	4.60197468							
								x1	0.418405469	1.712269998	0.244357181	0.808674845	-3.089024561	3.9258355							
								Regression Statistics with Stations F01P and F02P only													
								Multiple R	#NUM!												
								R Square	-0.80875782												
								Adjusted R Square	-1.24209115												
								Standard Error	1.281816077												
								Observations	4												
								Analysis of Variance													
								df	Sum of Squares	Mean Square	F	Significance F									
								Regression	1	-2.27410597	-2.27410597	-1.4282972	#NUM!								
								Residual	3	4.776539436	1.592178812										
								Total	4	2.502433466											
								Coefficients					Standard Error	t Statistic	P-value	Lower 95%	Upper 95%				
								Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A							
								x1	0.965207893	0.138032219	6.992627517	0.002200803	0.525927355	1.40448843							



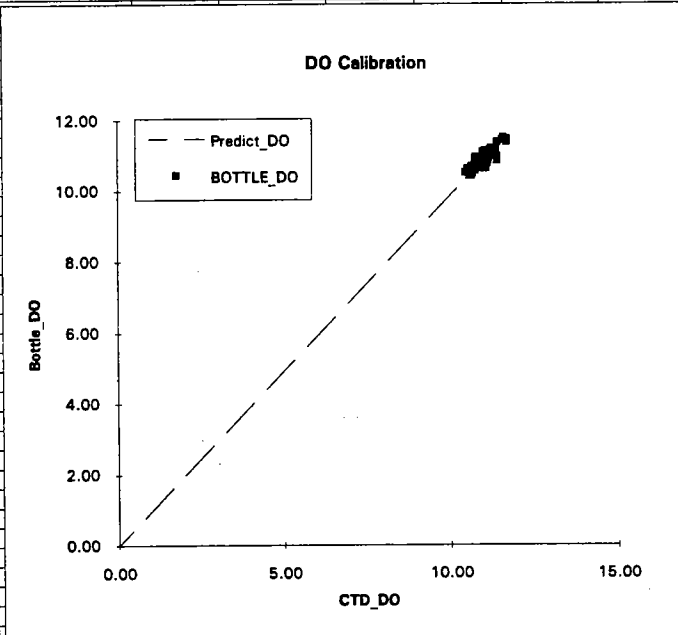
Survey W9303 Chlorophyll a Calibration																				
MARKER	STATION	DEPTH	BOTTLE_CHL	CTD_CHLA	Predict_Chla	Residual	Regression Statistics				Standard Deviation of Residual									
31	N10P	21.38	0.44	2.56	1.23	-0.79	Multiple R	#NUM!				0.42								
33	N10P	8.92	0.40	1.91	0.92	-0.52	R Square	-5.2711868												
35	N10P	2.47	0.41	2.18	1.05	-0.64	Adjusted R Square	-5.38207589												
68	N01P	29.04	0.43	1.48	0.71	-0.29	Standard Error	0.95763119												
70	N01P	14.98	0.54	2.24	1.08	-0.54	Observations	12												
72	N01P	2.56	0.35	1.50	0.72	-0.37	Analysis of Variance													
103	N04P	47.82	0.87	1.39	0.67	0.20	df	Sum of Squares	Mean Square	F	Significance F									
105	N04P	25.27	1.21	2.15	1.03	0.18	1	-8.479059046	-8.47906905	-9.24594045	#NUM!									
107	N04P	2.82	1.21	1.42	0.68	0.53	11	10.08763251	0.9170575											
140	N07P	49.31	0.51	1.59	0.77	-0.26	12	1.608573466												
142	N07P	21.50	1.09	1.94	0.93	0.16	Coefficients					Standard Error	t Statistic	P-value	Lower 95%	Upper 95%				
144	N07P	2.83	1.08	1.68	0.81	0.27	Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A					
							x1	2.07933208	0.351871188	5.9093559	7.1485E-05	1.304868427	2.85379574							
							Regression Statistics													
							Multiple R	0.17700841												
							R Square	0.03133198												
							Adjusted R Square	-0.06553482												
							Standard Error	0.39473709												
							Observations	12												
							Analysis of Variance													
							df	Sum of Squares	Mean Square	F	Significance F									
							Regression	1	0.050399789	0.05039979	0.32345424	0.5820857								
							Residual	10	1.558173677	0.15581737										
							Total	11	1.608573466											
							Coefficients									Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
							Intercept	1.97443005	0.266863357	7.3986552	1.3622E-05	1.379821333	2.56903877							
							x1	-0.19318412	0.339676101	-0.56873038	0.58096475	-0.95002977	0.56366153							



Survey W9301 Dissolved Oxygen Calibration													
MARKER	STATION	DEPTH	Bottle_DO	CTD_DO	Predict_DO	Residual	Regression Statistics			Standard Deviation of Residual			
62	F23P	18.12	10.89	10.04	10.19	0.89						0.390	
64	F23P	8.69	10.90	10.26	10.41	0.49	Multiple R	#NUM!					
66	F23P	2.04	10.92	10.40	10.66	0.36	R Square	-0.097582					
85	N20P	28.18	10.83	10.07	10.23	0.60	Adjusted R Square	-0.1112806					
87	N20P	12.78	10.87	10.32	10.49	0.39	Standard Error	0.38377213					
89	N20P	2.58	10.90	10.44	10.60	0.30	Observations	74					
97	N16P	41.15	10.82	10.47	10.63	0.19							
99	N16P	21.88	10.91	10.53	10.69	0.22	Analysis of Variance						
101	N16P	1.41	10.93	10.61	10.78	0.16	df	Sum of Squares	Mean Square	F	Significance F		
113	N10P	24.27	11.00	10.28	10.45	0.55	Regression	1	-0.955877788	-0.95587779	-6.4901613	#NUM!	
115	N10P	7.27	10.96	10.53	10.70	0.27	Residual	73	10.75151878	0.14728105			
117	N10P	2.10	11.08	10.75	10.92	0.17	Total	74	9.795638969				
173	F19	77.06	10.50	-10.21	10.37	0.13							
175	F19	38.43	10.50	10.42	10.59	-0.09	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
177	F19	2.04	10.41	10.50	10.87	-0.28							
184	F22	74.77	10.39	10.59	10.75	-0.37	Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
186	F22	35.05	10.58	10.53	10.70	-0.11	x1	0.98457518	0.004091258	240.853388	7.859E-108	0.976421313	0.99272906
188	F22	1.97	10.60	10.63	10.79	-0.20							
232	N01P	26.96	10.83	10.66	10.73	0.10							
234	N01P	13.01	10.98	10.67	10.84	0.14							
236	N01P	1.85	10.99	10.75	10.92	0.08	Regression Statistics						
248	N04P	44.51	10.55	9.54	9.69	0.87	Multiple R	0.40519377					
250	N04P	20.96	11.02	9.87	10.03	0.99	R Square	0.16418199					
252	N04P	4.49	10.84	10.45	10.61	0.23	Adjusted R Square	0.15257341					
260	N07P	44.34	10.68	10.50	10.87	0.01	Standard Error	0.33721431					
262	N07P	16.18	10.85	10.65	10.82	0.03	Observations	74					
264	N07P	2.44	10.75	10.74	10.90	-0.16							
274	F13P	16.12	11.03	10.28	10.44	0.59	Analysis of Variance						
276	F13P	6.34	11.01	10.56	10.73	0.28	df	Sum of Squares	Mean Square	F	Significance F		
278	F13P	2.36	11.01	10.67	10.84	0.17	Regression	1	1.608267646	1.60826755	14.143165	0.000342059	
286	F05	16.24	10.97	10.57	10.74	0.24	Residual	72	8.187371423	0.11371349			
290	F05	6.11	11.13	10.68	10.85	0.28	Total	73	9.795638969				
292	F05	2.10	11.18	10.75	10.91	0.27							
335	F12	88.06	10.52	10.59	10.75	-0.24	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
337	F12	44.42	10.74	10.80	10.97	-0.23							
339	F12	3.18	10.82	10.88	11.05	-0.24							
378	F04	55.62	10.99	10.38	10.54	0.44	Intercept	5.99288824	1.262033429	4.74859707	9.9596E-08	3.477072157	8.50870433
380	F04	21.43	11.07	10.46	11.62	0.45	x1	0.43525457	0.115738457	3.78073863	0.00033914	0.204538299	0.68597083
381	F04	8.56	11.82	11.24	11.42	0.41							
393	F02P	29.37	11.78	11.27	11.44	0.34							
395	F02P	11.50	11.83	11.28	11.45	0.37							
396	F02P	6.18	11.85	11.30	11.48	0.37							
411	F01P	26.10	11.71	11.10	11.28	0.43							
413	F01P	10.71	11.72	11.10	11.27	0.46							
414	F01P	5.05	11.73	11.11	11.29	0.45							
488	N10P	21.86	10.80	10.92	11.09	-0.29							
489	N10P	14.60	10.85	11.02	11.19	-0.34							
490	N10P	4.98	10.92	11.09	11.26	-0.34							
491	N10P	3.93	10.79	11.09	11.26	-0.47							
492	N10P	2.86	10.93	11.20	11.38	-0.45							
521	N01P	29.48	10.74	10.75	10.92	-0.18							
522	N01P	19.87	10.75	10.76	10.92	-0.18							
523	N01P	13.44	10.74	10.82	10.98	-0.25							
524	N01P	6.43	10.74	10.84	11.01	-0.27							
525	N01P	2.22	10.75	10.87	11.04	-0.30							
554	N04P	47.40	10.40	10.48	10.64	-0.24							
555	N04P	32.98	10.73	10.82	10.99	-0.26							
556	N04P	19.91	10.84	11.02	11.20	-0.36							
557	N04P	10.58	10.91	11.16	11.34	-0.43							
558	N04P	2.18	10.93	11.22	11.39	-0.47							
587	N07P	49.05	10.23	10.58	10.74	-0.51							
588	N07P	35.46	10.63	11.00	11.17	-0.54							
589	N07P	15.51	10.65	11.14	11.31	-0.66							
590	N07P	2.18	10.76	11.24	11.42	-0.66							
636	N20P	29.42	10.75	10.87	11.04	-0.29							
637	N20P	21.69	10.77	10.90	11.07	-0.30							
638	N20P	10.63	10.91	11.12	11.29	-0.38							
639	N20P	4.75	10.92	11.18	11.37	-0.45							
640	N20P	2.06	10.95	11.22	11.40	-0.45							
680	N16P	38.76	10.44	10.58	10.74	-0.31							
681	N16P	29.08	10.69	10.81	10.98	-0.30							
682	N16P	18.98	10.83	11.06	11.24	-0.41							
683	N16P	8.10	10.90	11.20	11.38	-0.48							
684	N16P	2.03	10.95	11.23	11.41	-0.46							
			0	0	0								

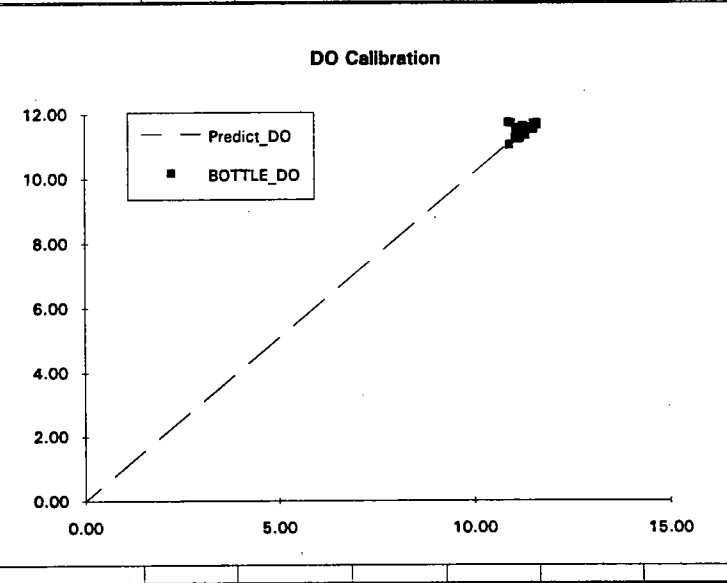


Survey W9302 Dissolved Oxygen Calibration													
MARKER	STATION	DEPTH	BOTTLE_DO	CTD_DO	Predict_DO	Residual	Regression Statistics			Standard Deviation of Residual			
14	F23P	14.06	10.67	10.92	10.77	-0.10						0.141	
16	F23P	8.92	10.83	10.88	10.73	-0.09	Multiple R	0.84049314					
18	F23P	1.78	10.66	10.88	10.73	-0.07	R Square	0.70642872					
52	N20P	28.88	10.80	10.93	10.78	0.02	Adjusted R Square	0.69214301					
64	N20P	8.21	11.07	11.22	11.06	0.00	Standard Error	0.14281399					
56	N20P	0.73	11.06	11.22	11.06	0.00	Observations	71					
78	N16P	39.94	10.89	10.81	10.86	0.03							
83	N16P	7.42	11.05	11.34	11.18	-0.13	Analysis of Variance						
85	N16P	0.95	11.20	11.37	11.21	-0.02							
105	N10P	24.56	10.64	10.88	10.71	-0.07	Regression	1	3.435534523	3.43553452	168.442944	3.43972E-20	
107	N10P	10.05	10.88	11.15	10.99	-0.13	Residual	70	1.42770846	0.02039584			
109	N10P	0.78	10.92	11.17	11.01	-0.09	Total	71	4.863242984				
195	F19	69.73	10.43	10.65	10.61	-0.08							
187	F19	22.07	10.81	10.93	10.78	0.03							
189	F19	1.24	11.20	11.23	11.07	0.12	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
213	F22	68.17	10.71	10.75	10.60	0.10	Intercept	0	#N/A	#N/A	#N/A	#N/A	
215	F22	36.25	10.96	11.09	10.94	0.02	x1	1.01411746	0.00156732	651.194146	8.288E-136	1.011011483	1.01722343
216	F22	14.82	11.05	11.26	11.10	-0.05							
285	N01P	24.96	10.78	11.13	10.97	-0.20							
287	N01P	8.45	11.15	11.34	11.18	-0.03							
289	N01P	1.30	10.85	11.40	11.25	-0.40	Regression Statistics						
311	N04P	44.26	10.49	10.68	10.53	-0.04							
313	N04P	14.33	10.92	11.15	10.99	-0.08	Multiple R	0.84652119					
316	N04P	1.36	11.09	11.24	11.08	0.00	R Square	0.71659812					
333	N07P	42.89	10.53	10.64	10.49	0.04	Adjusted R Square	0.71249085					
335	N07P	12.45	10.78	10.84	10.69	0.09	Standard Error	0.14133177					
337	N07P	0.99	10.66	10.98	10.83	-0.17	Observations	71					
357	F13P	23.57	10.79	11.05	10.90	-0.11							
359	F13P	10.08	10.73	10.99	10.83	-0.11	Analysis of Variance						
361	F13P	1.61	10.76	10.97	10.82	-0.06							
386	F05	15.05	11.01	11.14	10.98	0.03	Regression	1	3.4849908	3.4849908	174.470513	1.44149E-20	
388	F05	7.33	11.10	11.10	10.94	0.16	Residual	69	1.378252184	0.01997467			
390	F05	1.16	11.05	11.12	10.96	0.09	Total	70	4.863242984				
436	F12	83.72	10.49	10.58	10.43	0.06							
438	F12	43.52	10.59	10.66	10.51	0.07	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
440	F12	1.83	10.63	10.70	10.55	0.09	Intercept	1.17488207	0.746860826	1.57351508	0.12010887	-0.31466506	2.6644292
496	F02P	29.20	10.97	11.42	11.26	-0.29	x1	0.90619275	0.0686056	13.2087287	1.0945E-20	0.769328368	1.04305714
498	F02P	8.19	11.37	11.69	11.53	-0.15							
500	F02P	1.88	11.46	11.69	11.63	-0.07							
523	F01P	24.82	11.36	11.42	11.26	0.10							
525	F01P	8.19	11.43	11.56	11.39	0.04							
527	F01P	0.86	11.50	11.60	11.43	0.07							
582	N10P	19.85	10.76	11.12	10.97	-0.20							
583	N10P	15.83	10.65	11.08	10.93	-0.28							
584	N10P	9.51	10.63	11.09	10.94	-0.30							
588	N10P	3.42	10.64	11.09	10.93	-0.30							
616	N01P	25.10	10.93	10.78	10.63	0.30							
616	N01P	17.81	10.91	10.94	10.79	0.13							
617	N01P	12.87	11.08	11.00	10.85	0.23							
618	N01P	7.05	11.03	11.05	10.89	0.14							
619	N01P	1.63	11.11	11.05	10.90	0.22							
648	N04P	44.35	10.51	10.48	10.33	0.18							
649	N04P	33.02	10.61	10.55	10.40	0.21							
650	N04P	24.44	10.79	10.76	10.61	0.18							
651	N04P	9.04	10.91	10.94	10.79	0.12							
652	N04P	1.20	10.88	10.98	10.82	0.05							
686	N07P	40.62	10.57	10.56	10.41	0.16							
687	N07P	31.62	10.57	10.76	10.61	-0.04							
688	N07P	13.64	11.00	11.04	10.88	0.12							
689	N07P	5.73	11.05	11.08	10.93	0.12							
690	N07P	2.67	10.76	11.10	10.94	-0.19							
747	N20P	25.74	11.07	11.08	10.92	0.15							
749	N20P	18.72	11.06	11.13	10.98	0.08							
750	N20P	10.98	11.05	11.14	10.98	0.07							
751	N20P	5.27	11.13	11.17	11.02	0.11							
752	N20P	0.99	10.99	11.15	11.00	-0.01							
796	N16P	39.74	10.68	10.67	10.52	0.16							
797	N16P	31.31	10.82	10.91	10.75	0.06							
798	N16P	18.79	10.79	11.01	10.85	-0.08							
799	N16P	7.93	10.76	11.02	10.87	-0.10							
800	N16P	2.13	10.88	11.02	10.86	0.02							



Survey W9303 Dissolved Oxygen Calibration

MARKER	STATION	DEPTH	BOTTLE_DO	CTD_DO	Predict_DO	Residual	Regression Statistics	Standard Deviation of Residual
31	N10P	21.38	11.55	11.09	11.27	0.28		0.196
32	N10P	13.88	11.21	11.11	11.29	-0.08	Multiple R	0.21703708
33	N10P	8.92	11.29	11.22	11.40	-0.11	R Square	0.04710509
34	N10P	4.50	11.37	11.22	11.40	-0.03	Adjusted R Square	0.01262234
35	N10P	2.47	11.26	11.20	11.39	-0.13	Standard Error	0.1930292
68	N01P	29.04	11.70	10.97	11.15	0.56	Observations	30
69	N01P	22.02	11.25	11.07	11.25	0.00		
70	N01P	14.98	11.62	11.25	11.44	0.18	Analysis of Variance	
71	N01P	6.39	11.63	11.28	11.46	0.17		
72	N01P	2.56	11.52	11.33	11.52	0.01	Regression	
103	N04P	47.82	11.72	10.90	11.08	0.64	Residual	
104	N04P	35.35	11.35	11.17	11.35	0.00	Total	
105	N04P	25.27	11.54	11.31	11.49	0.04		
106	N04P	12.02	11.59	11.41	11.59	-0.01	Coefficients	
107	N04P	2.82	11.54	11.47	11.66	-0.12	Standard Error	
140	N07P	49.31	11.03	10.91	11.09	-0.06	t Statistic	
141	N07P	32.18	11.35	11.22	11.40	-0.04	P-value	
142	N07P	21.50	11.70	11.54	11.72	-0.02	Lower 95%	
143	N07P	9.41	11.64	11.62	11.81	-0.17	Upper 95%	
144	N07P	2.83	11.70	11.64	11.82	-0.12		
184	N20P	28.48	11.39	11.23	11.42	-0.02	Regression Statistics	
185	N20P	19.93	11.39	11.25	11.44	-0.05		
186	N20P	6.89	11.33	11.35	11.63	-0.20	Multiple R	0.47141328
187	N20P	3.38	11.53	11.46	11.65	-0.11	R Square	0.22223048
188	N20P	3.18	11.53	11.44	11.62	-0.09	Adjusted R Square	0.194453
228	N16P	36.79	11.29	11.11	11.29	-0.01	Standard Error	0.17747859
229	N16P	26.90	11.22	11.19	11.37	-0.16	Observations	30
230	N16P	16.13	11.55	11.43	11.82	-0.07		
231	N16P	10.27	11.63	11.53	11.72	-0.09	Analysis of Variance	
232	N16P	2.52	11.50	11.55	11.73	-0.23		
				0	0		df	
							Sum of Squares	
							Mean Square	
							F	
							Significance F	
							Coefficients	
							Standard Error	
							t Statistic	
							P-value	
							Lower 95%	
							Upper 95%	
							Intercept	
							x1	



APPENDIX B

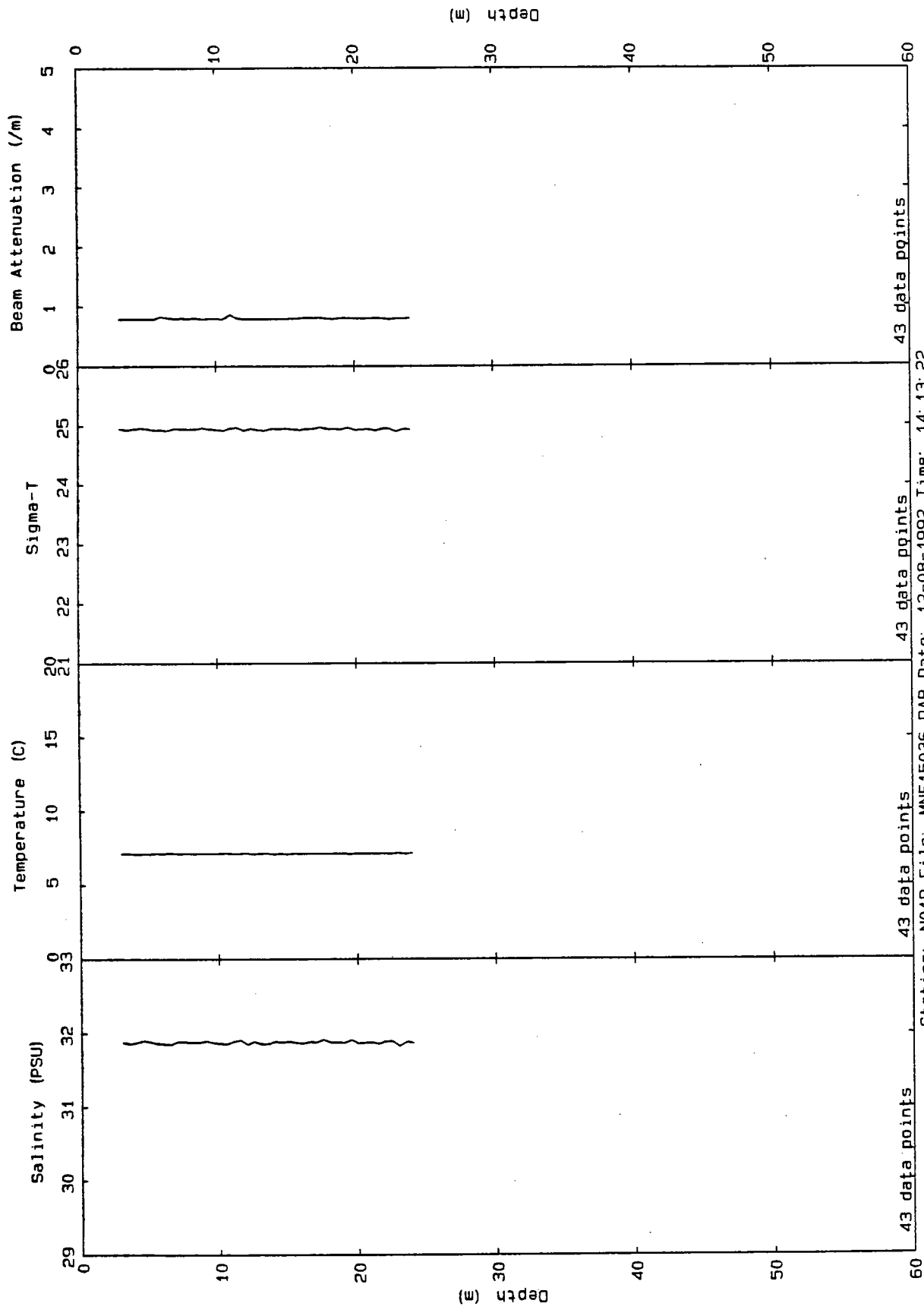
VERTICAL PROFILE DATA FROM FARFIELD AND NEARFIELD STATIONS

Only post-survey calibrated data are presented, where calibrations have been performed as given in Appendix A. The data are from the downcast at stations and, therefore, may not match precisely the data in Appendix A because bottles were closed on the upcast.

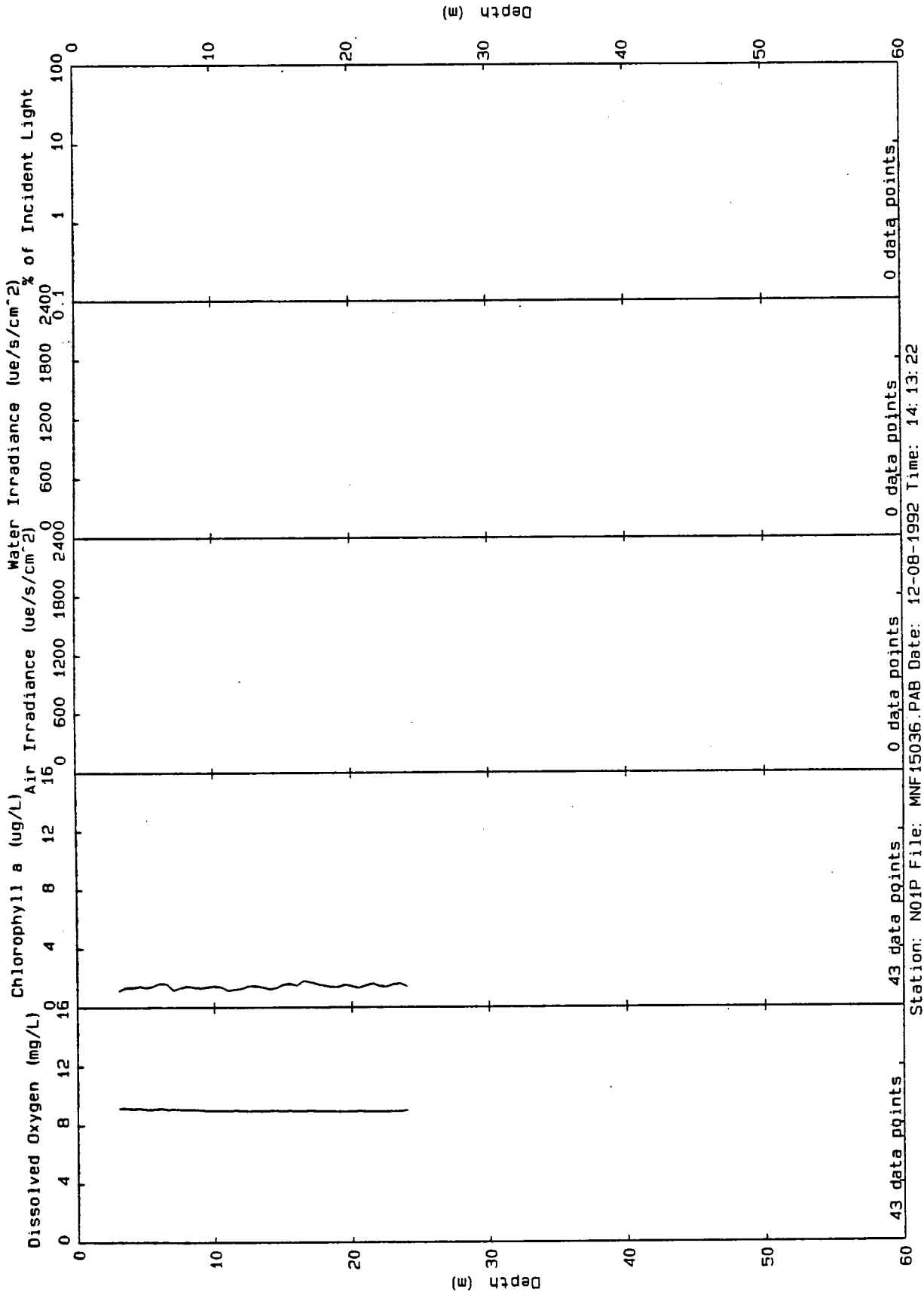
For each station there is a one- or two-page set of profiles, with station, cruise code, date and time listed across the bottom.

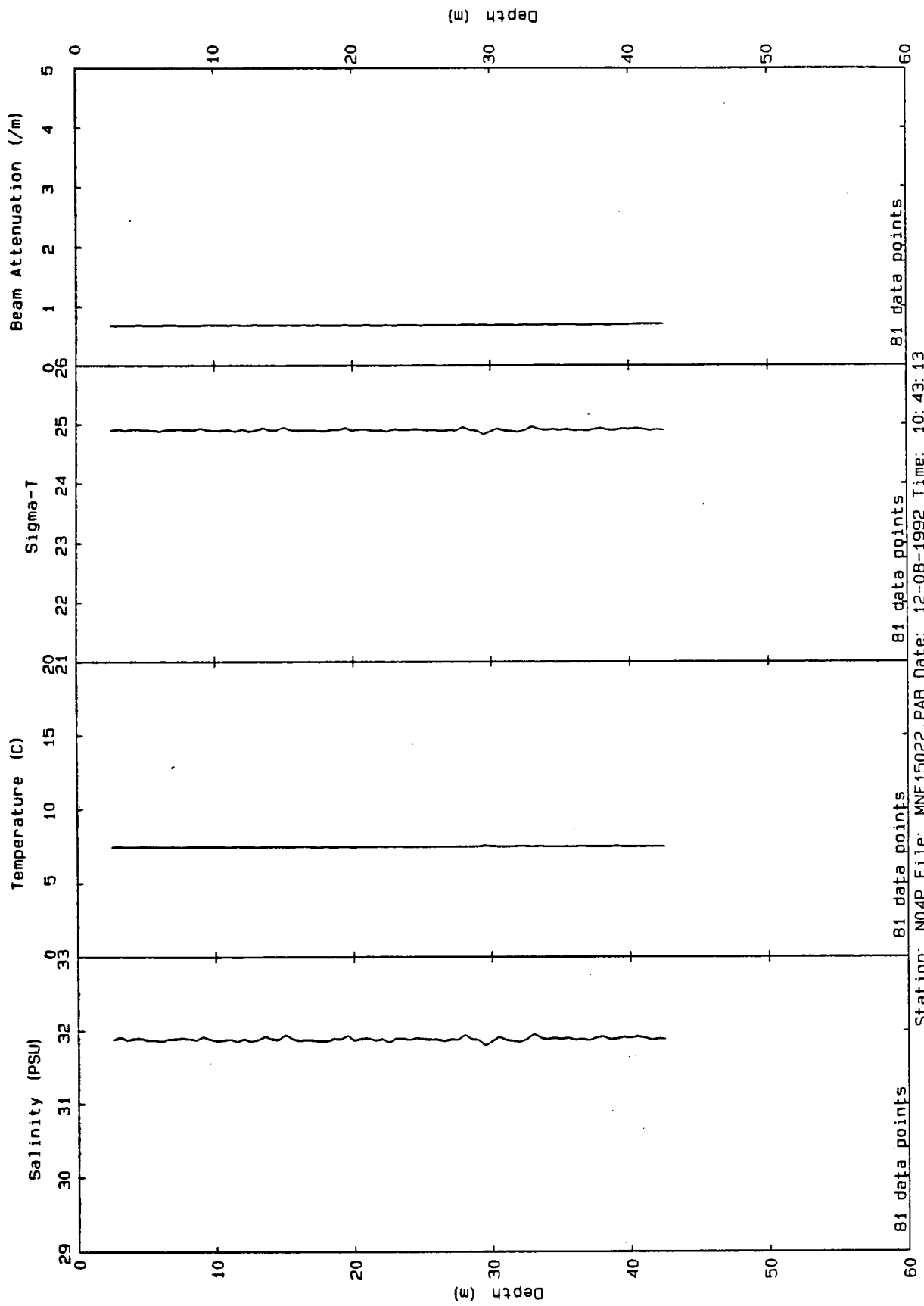
Where a panel is blank, no data were collected. For example, this occurred for irradiance readings in December, where only five stations were sampled before the sensor was damaged (see December 1992 survey report).

December 1992 Profiles

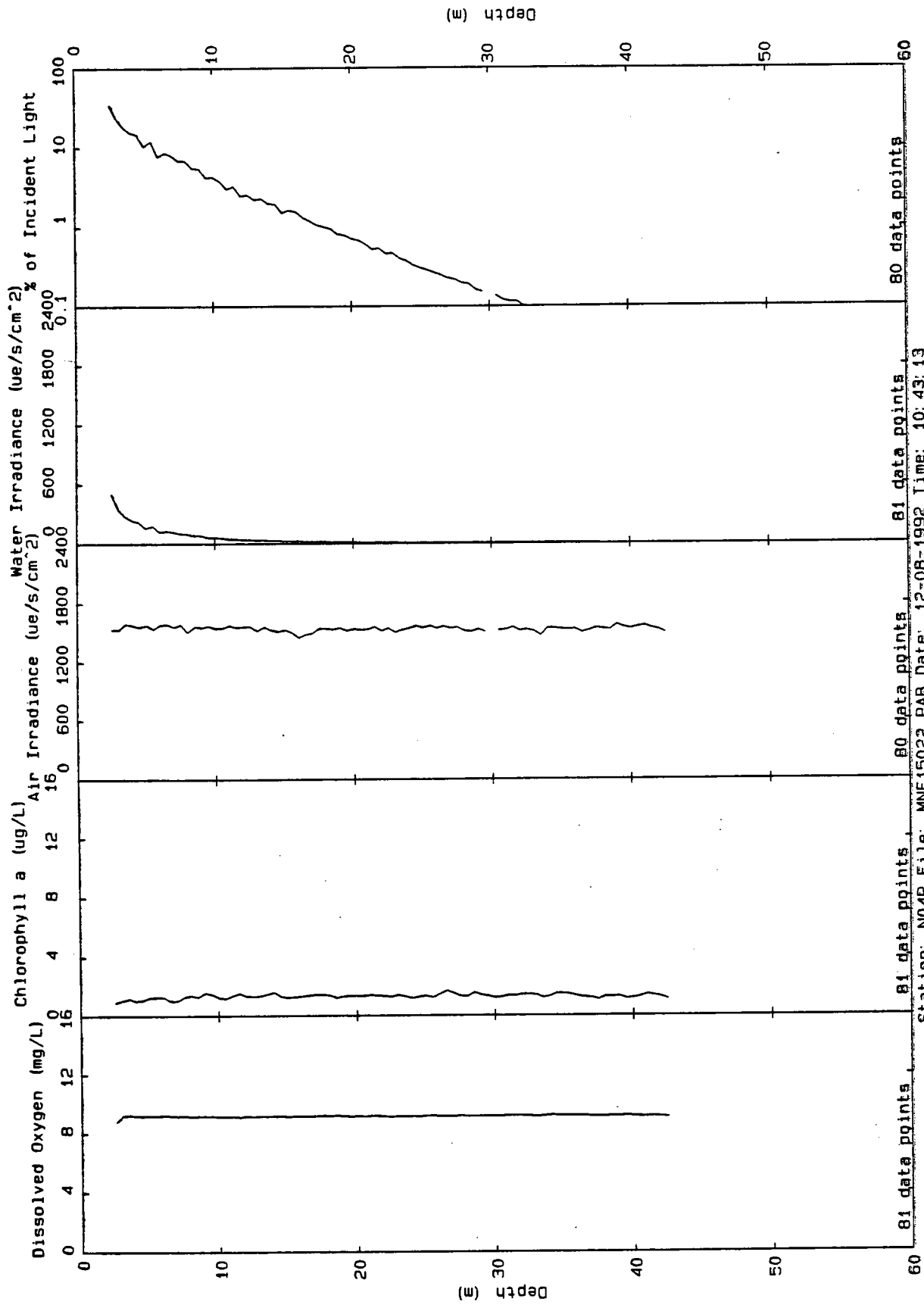


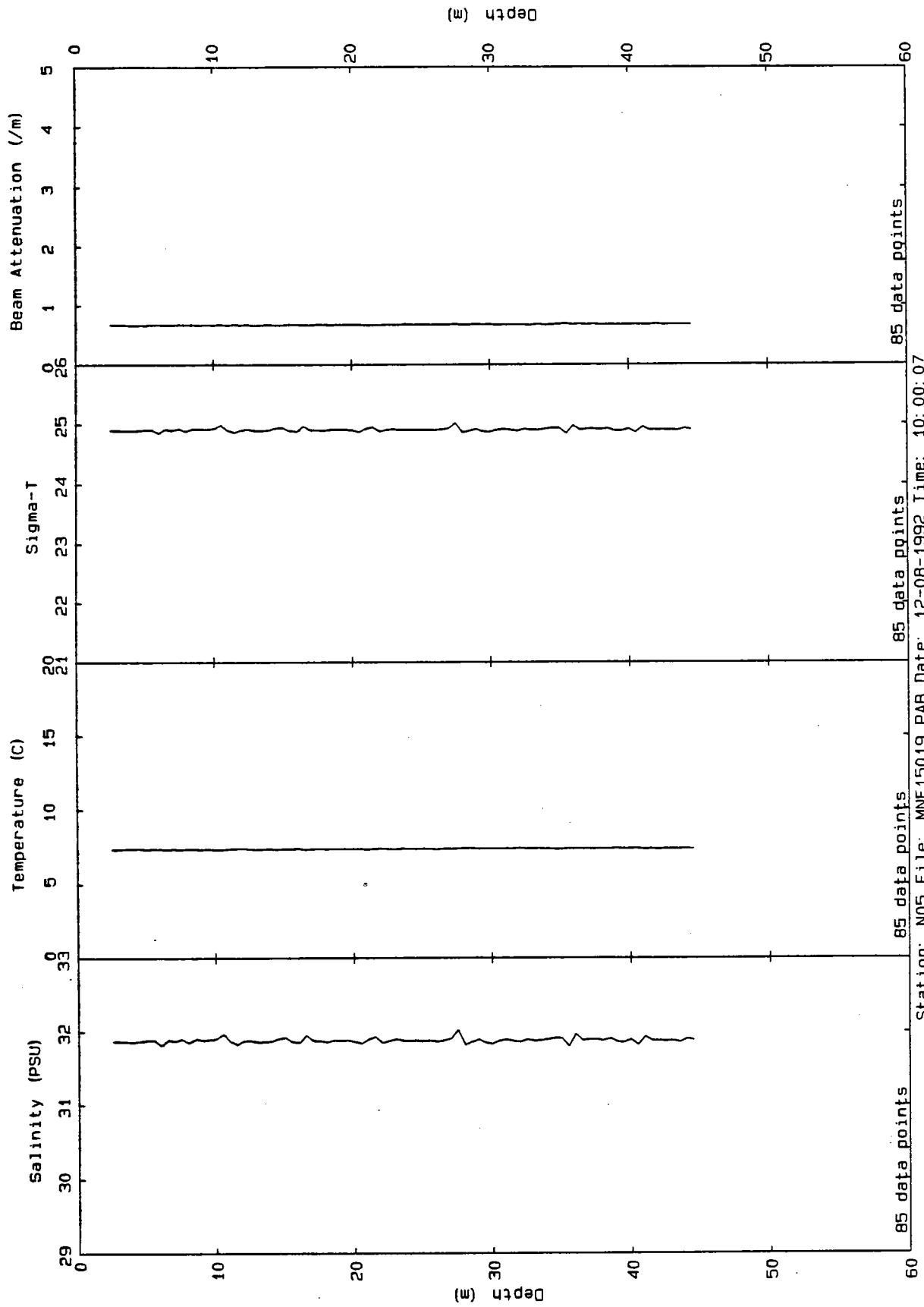
Station: N01P File: MNF15036.PAB Date: 12-08-1992 Time: 14:13:22



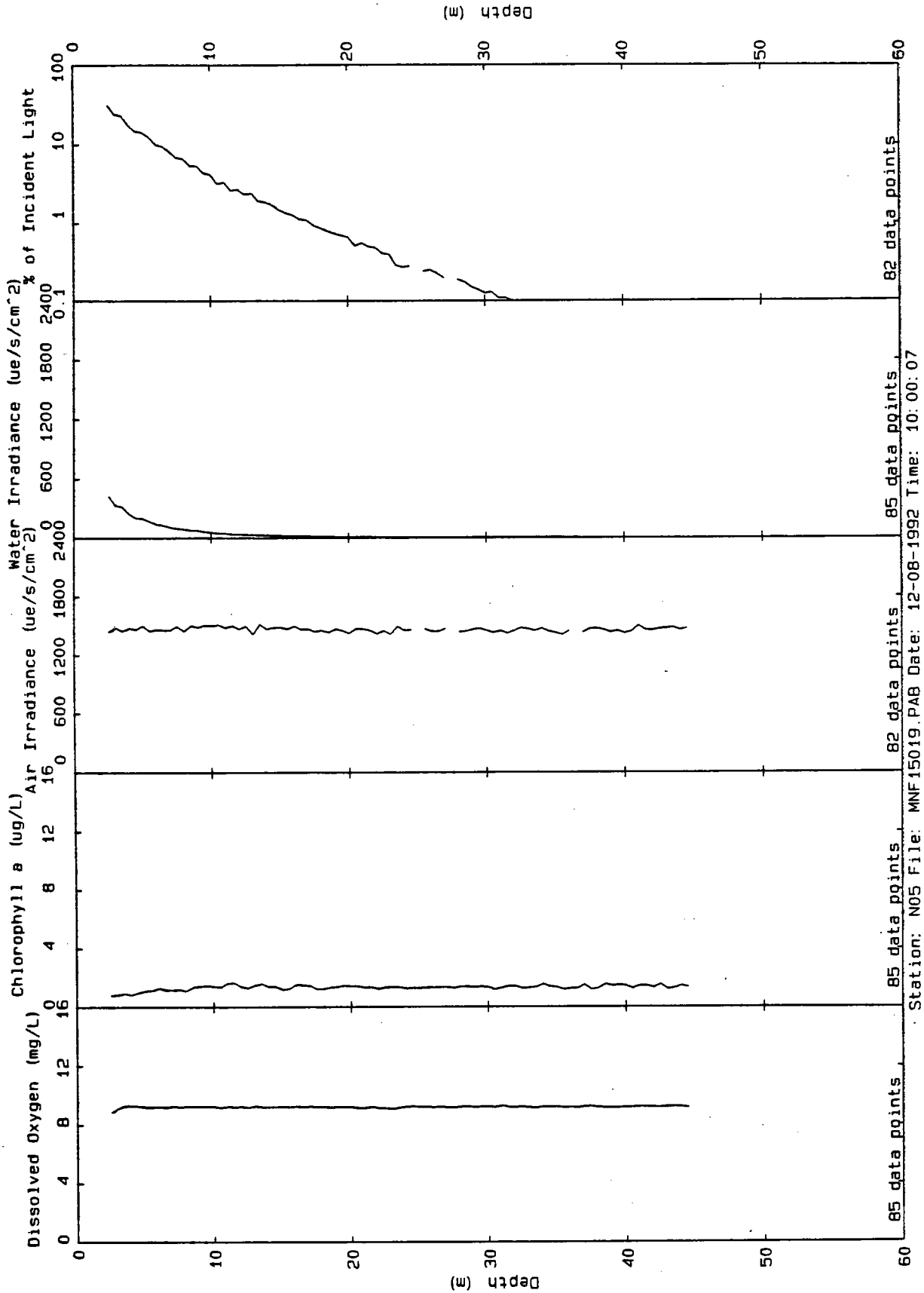


Station: N04P File: MNF15022.PAB Date: 12-08-1992 Time: 10:43:13

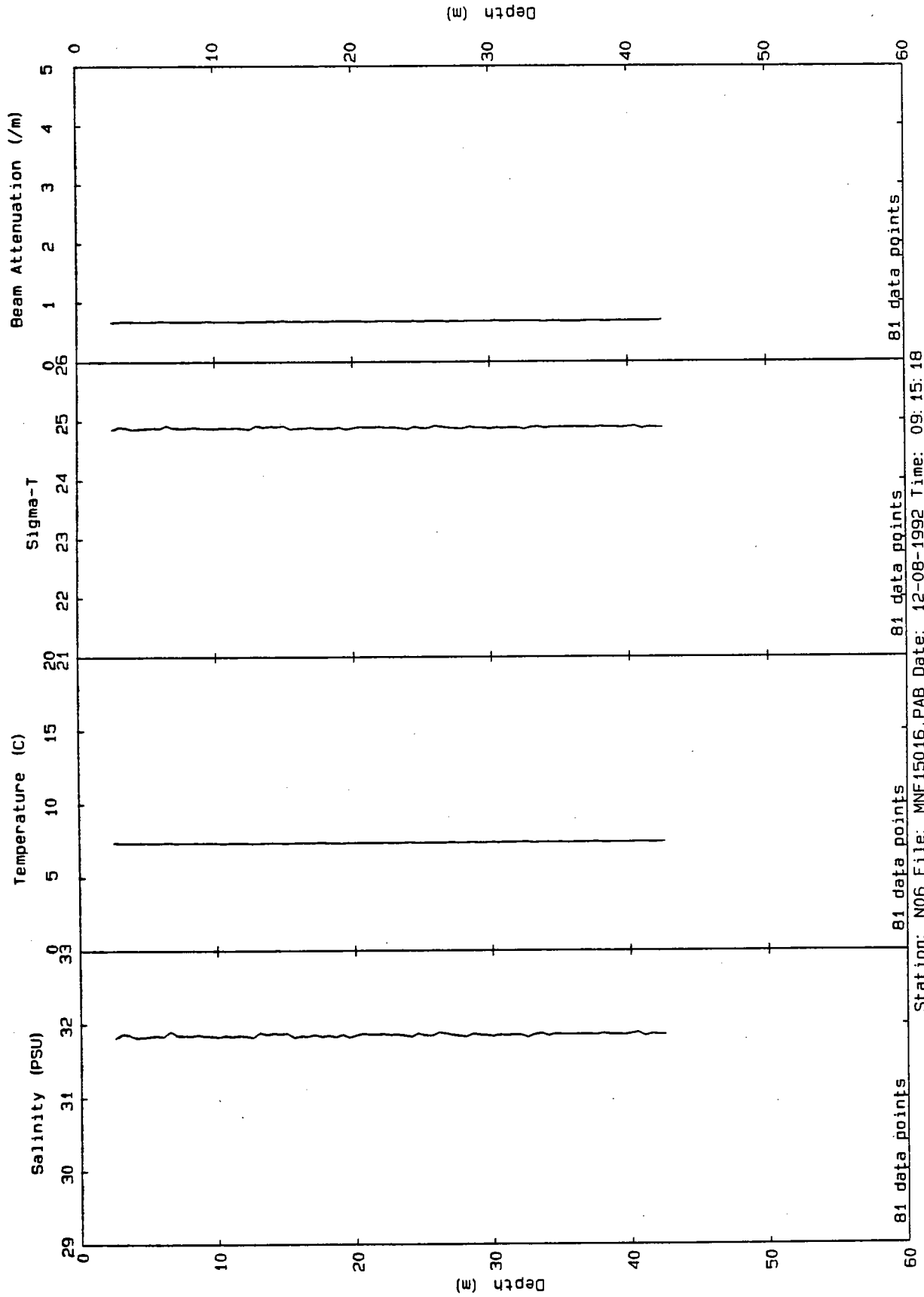


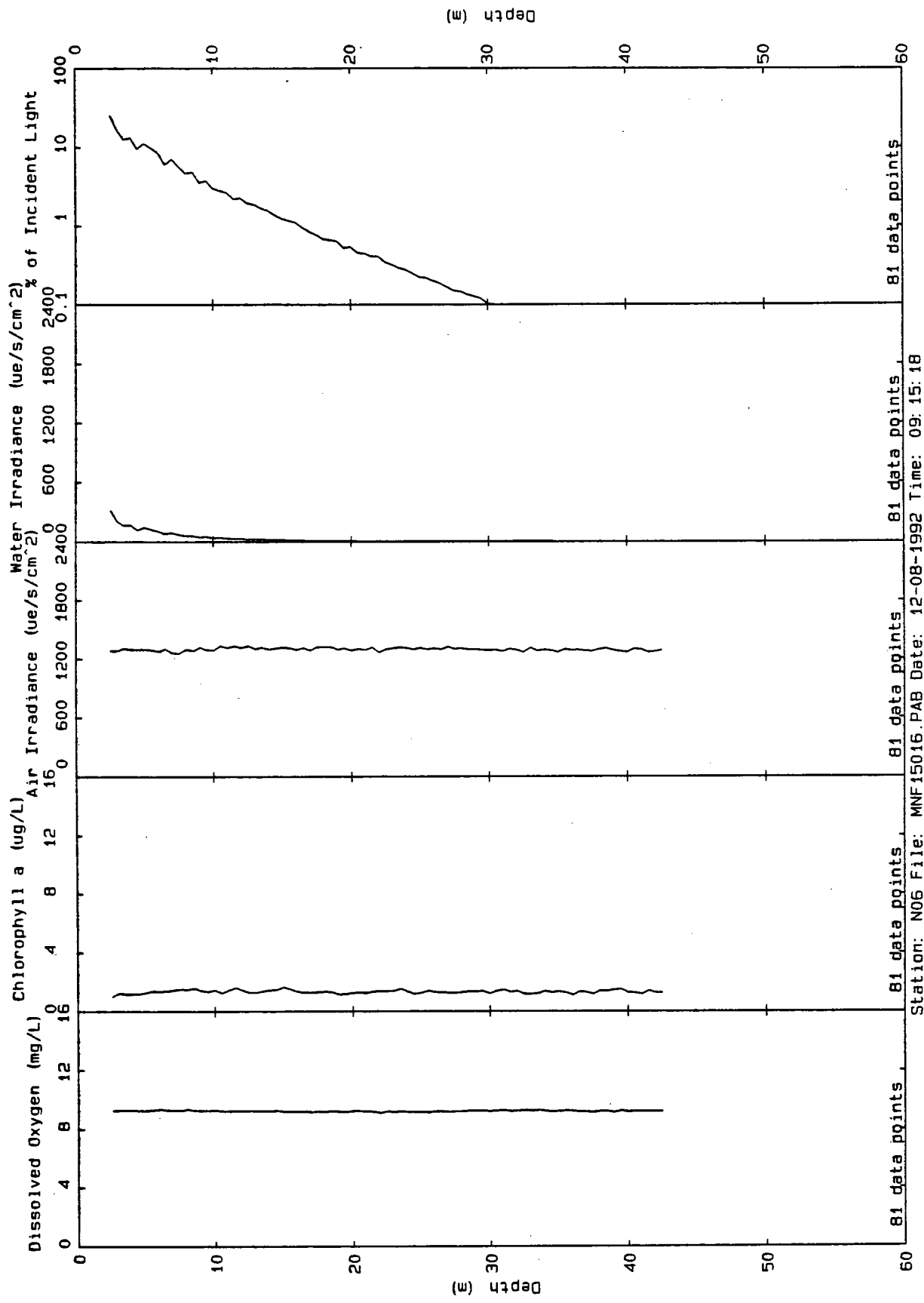


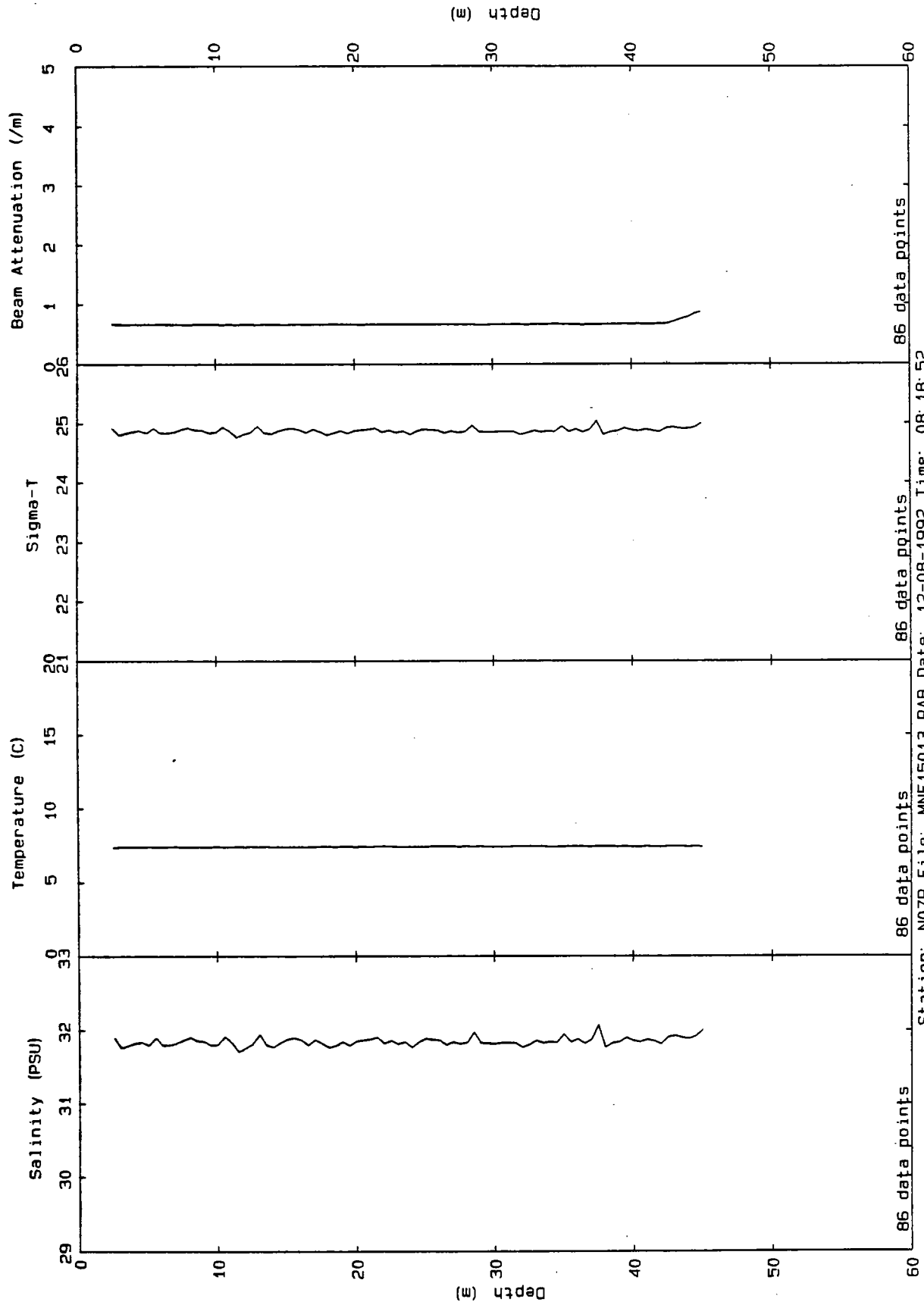
Station: N05 File: MNF15019.PAB Date: 12-08-1992 Time: 10:00:07

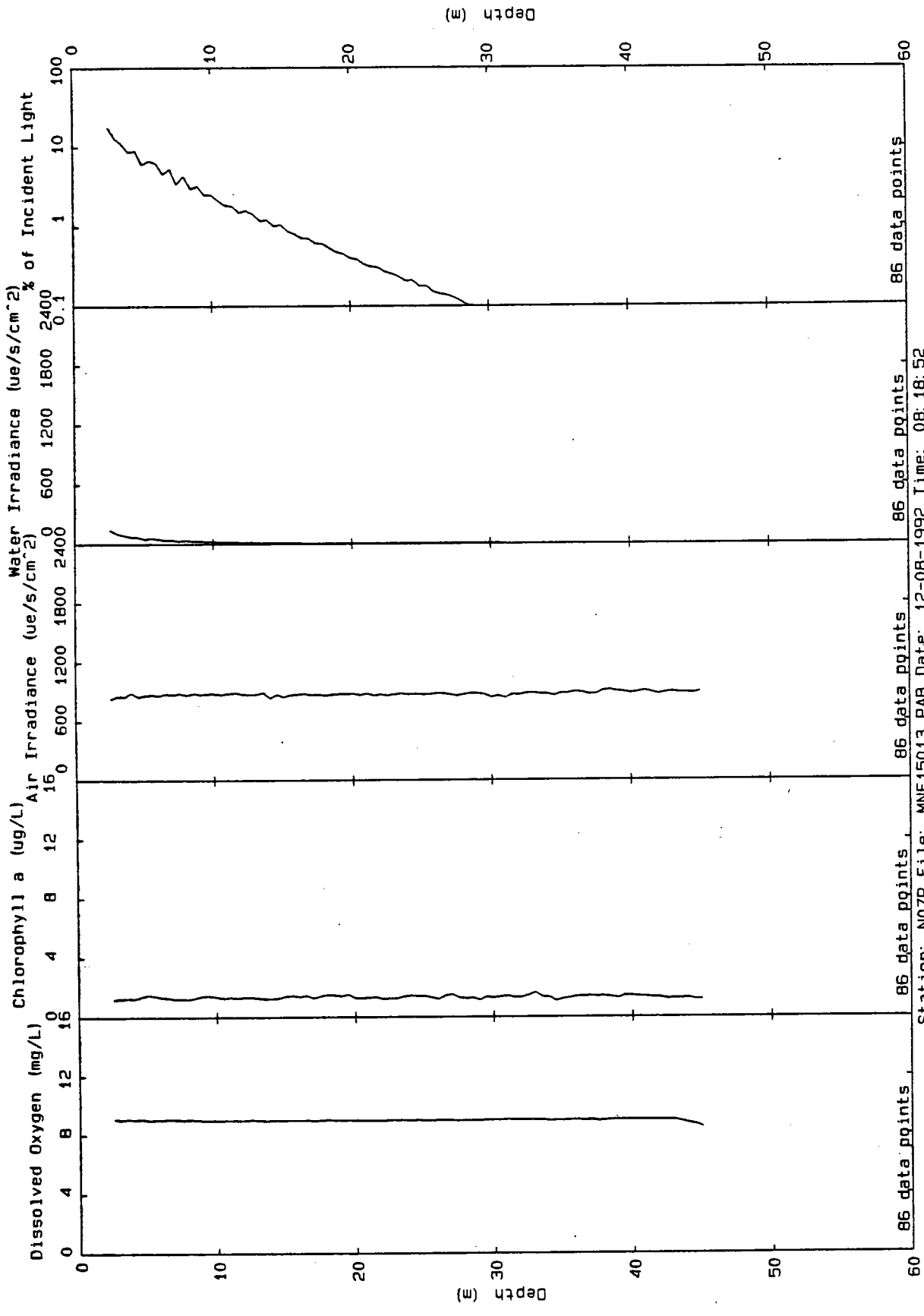


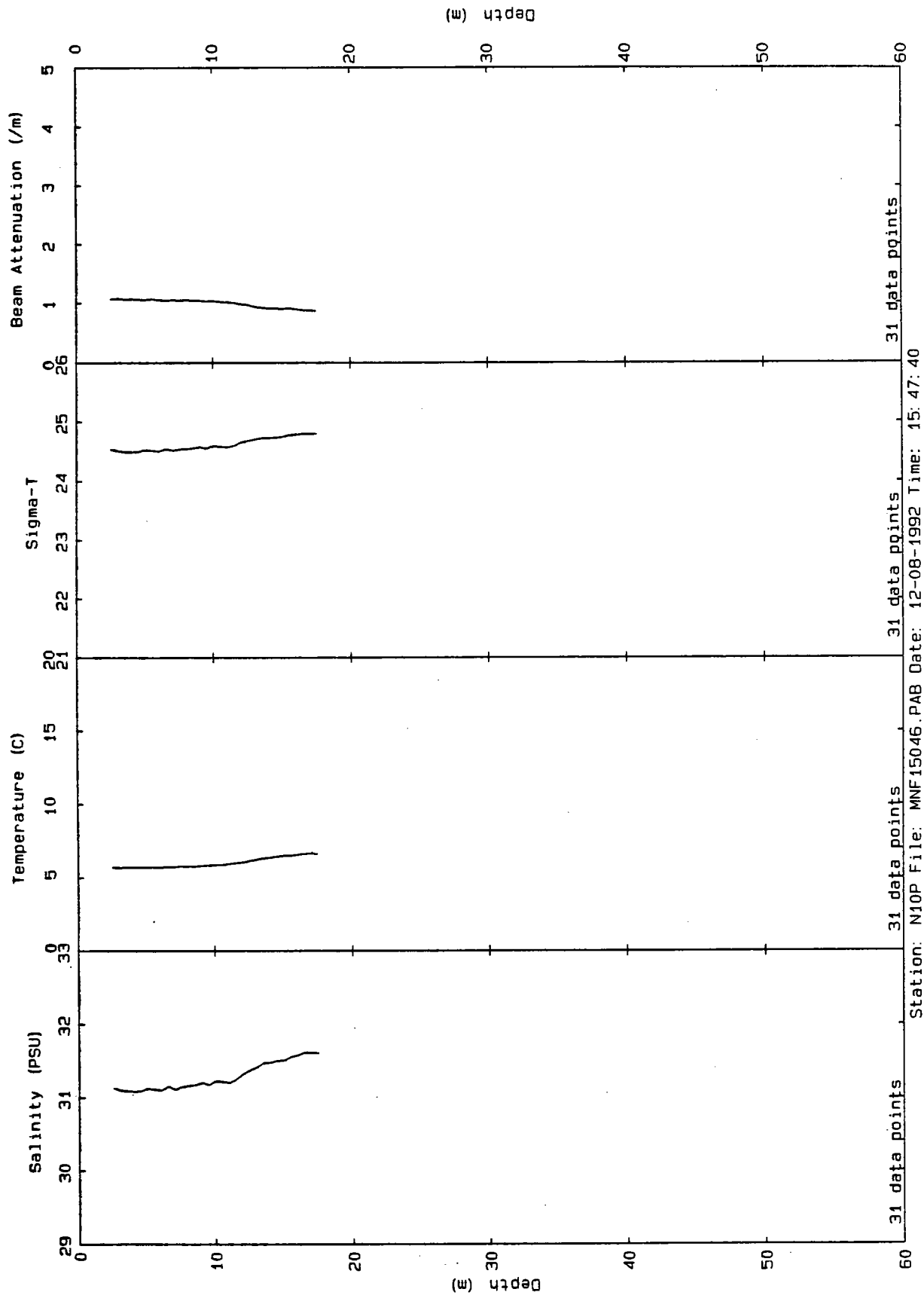
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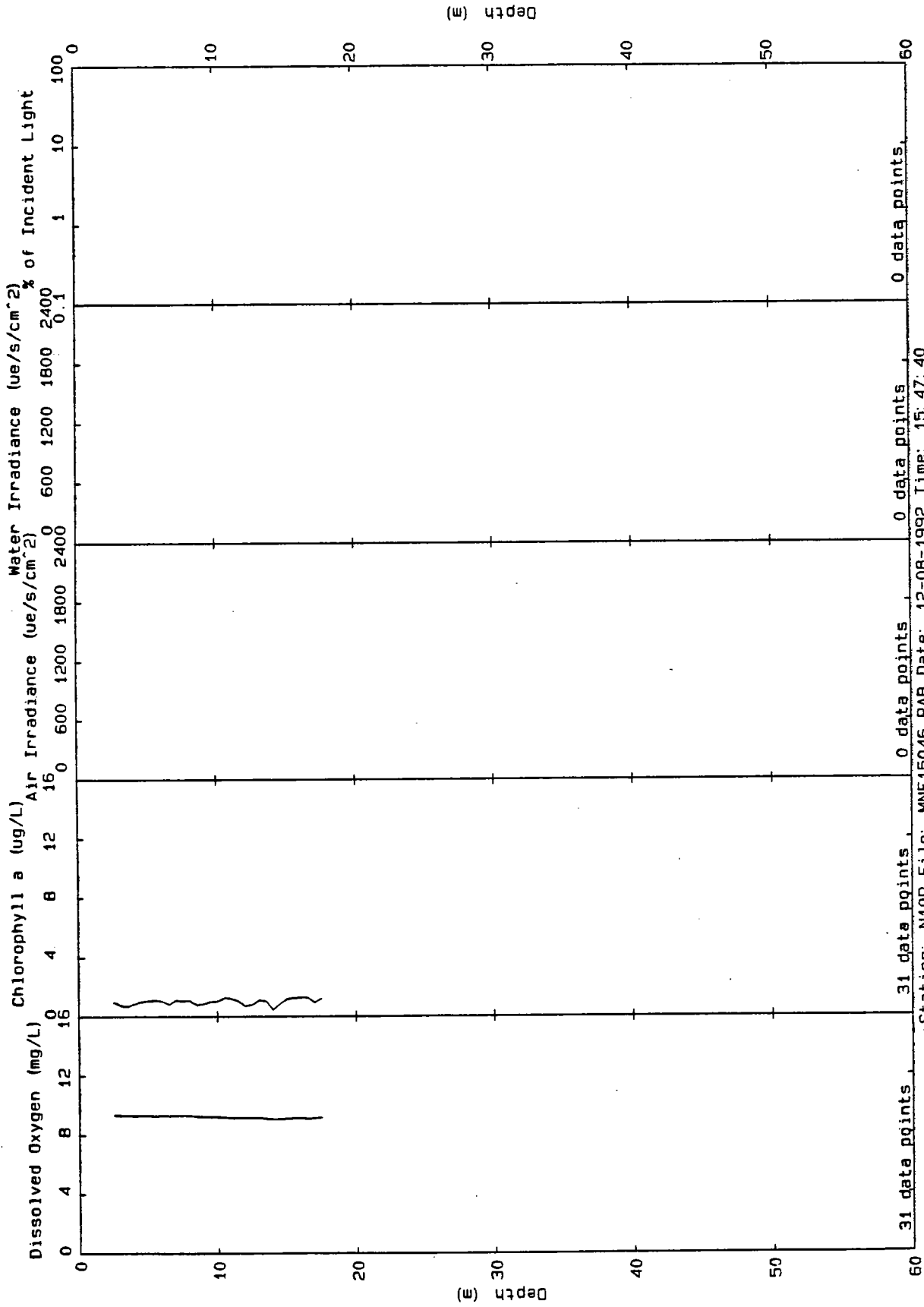




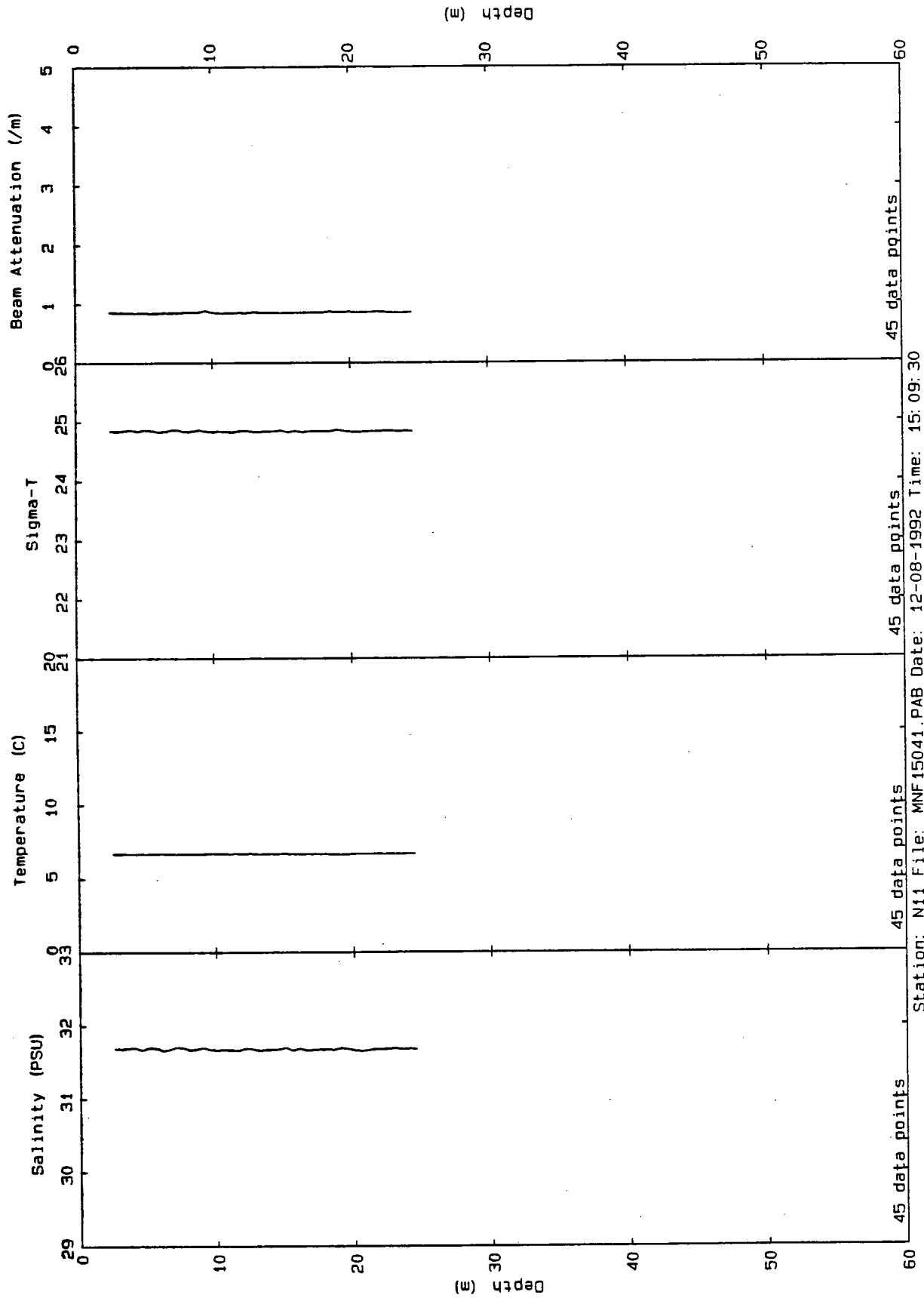


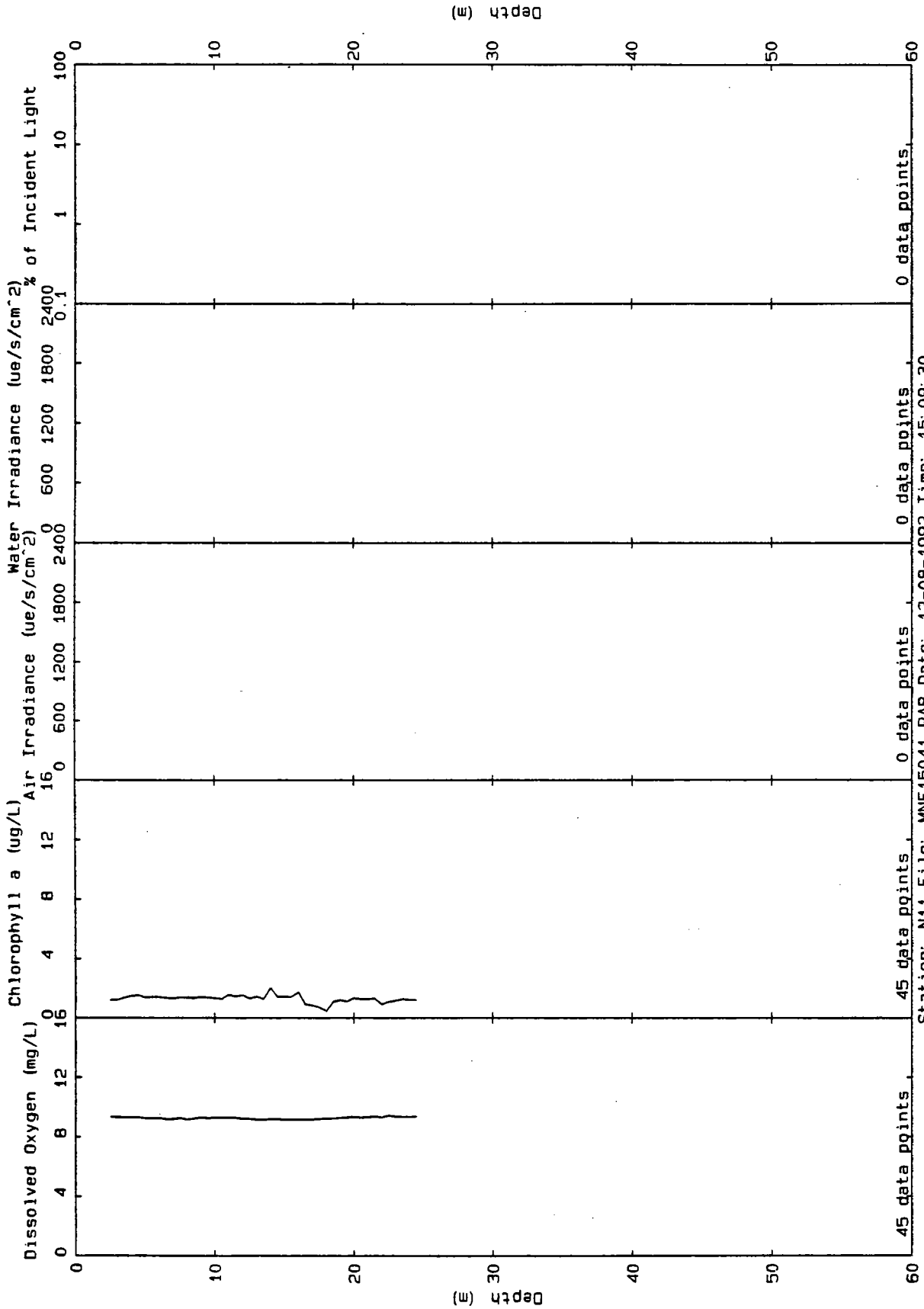


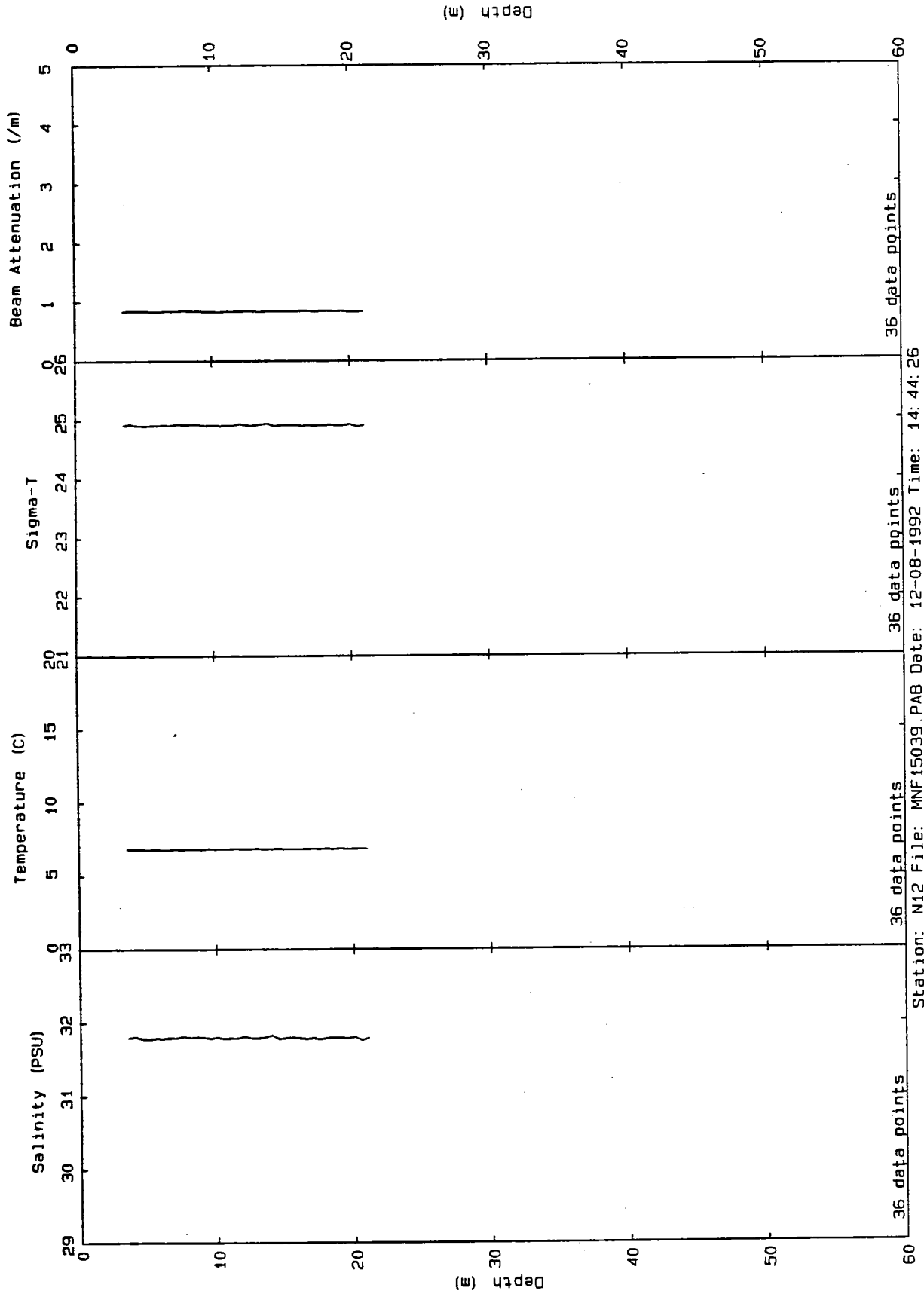


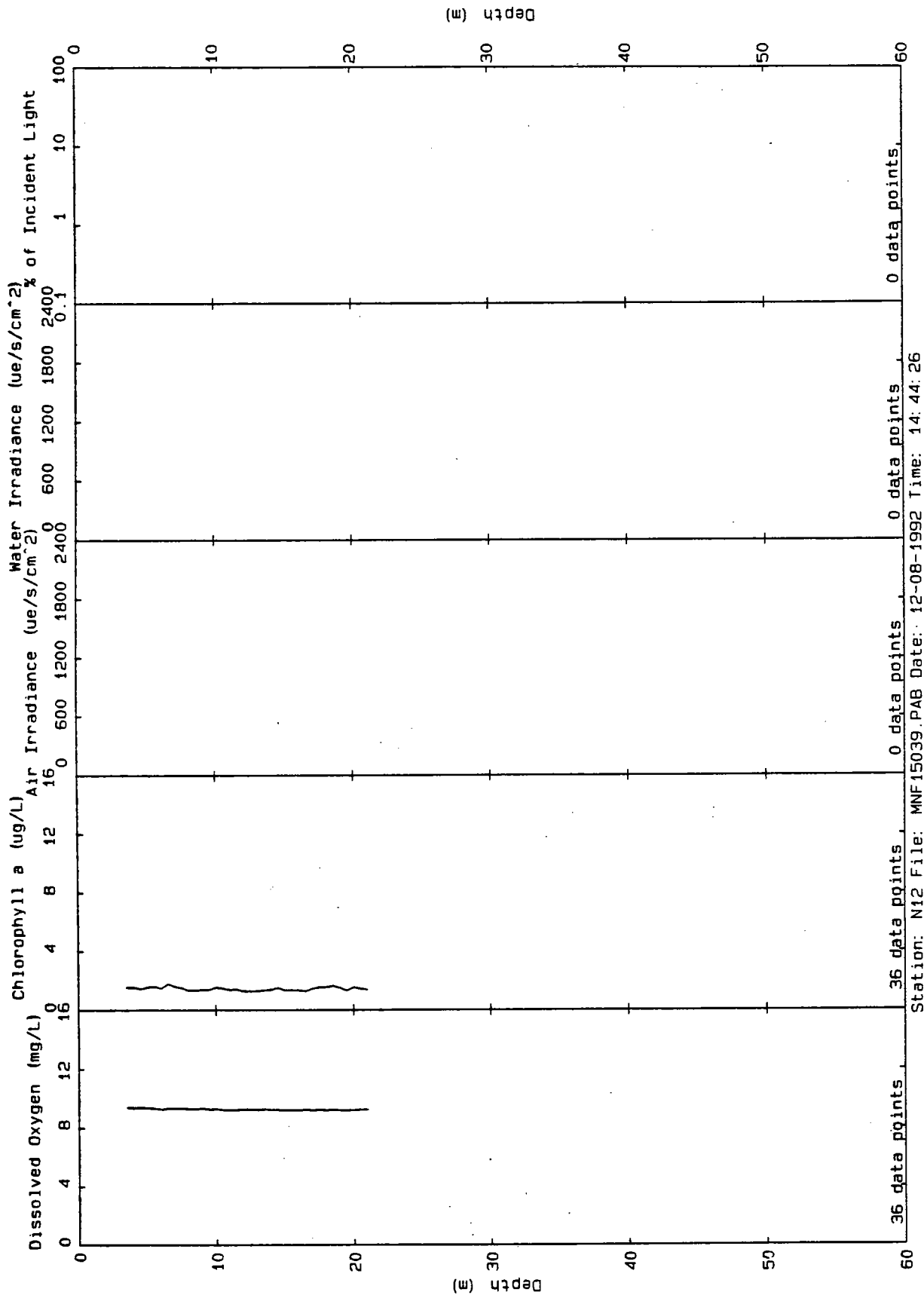


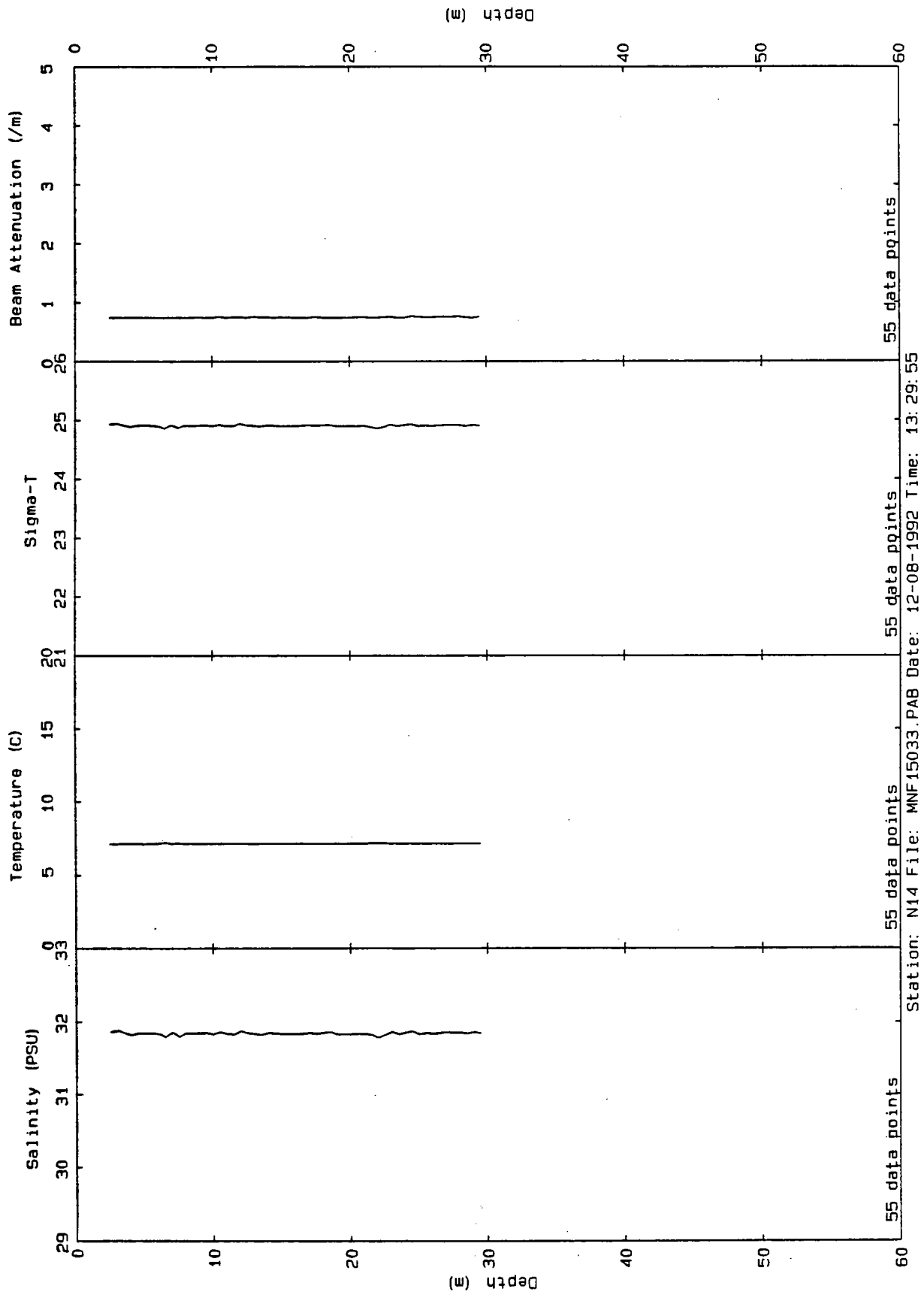
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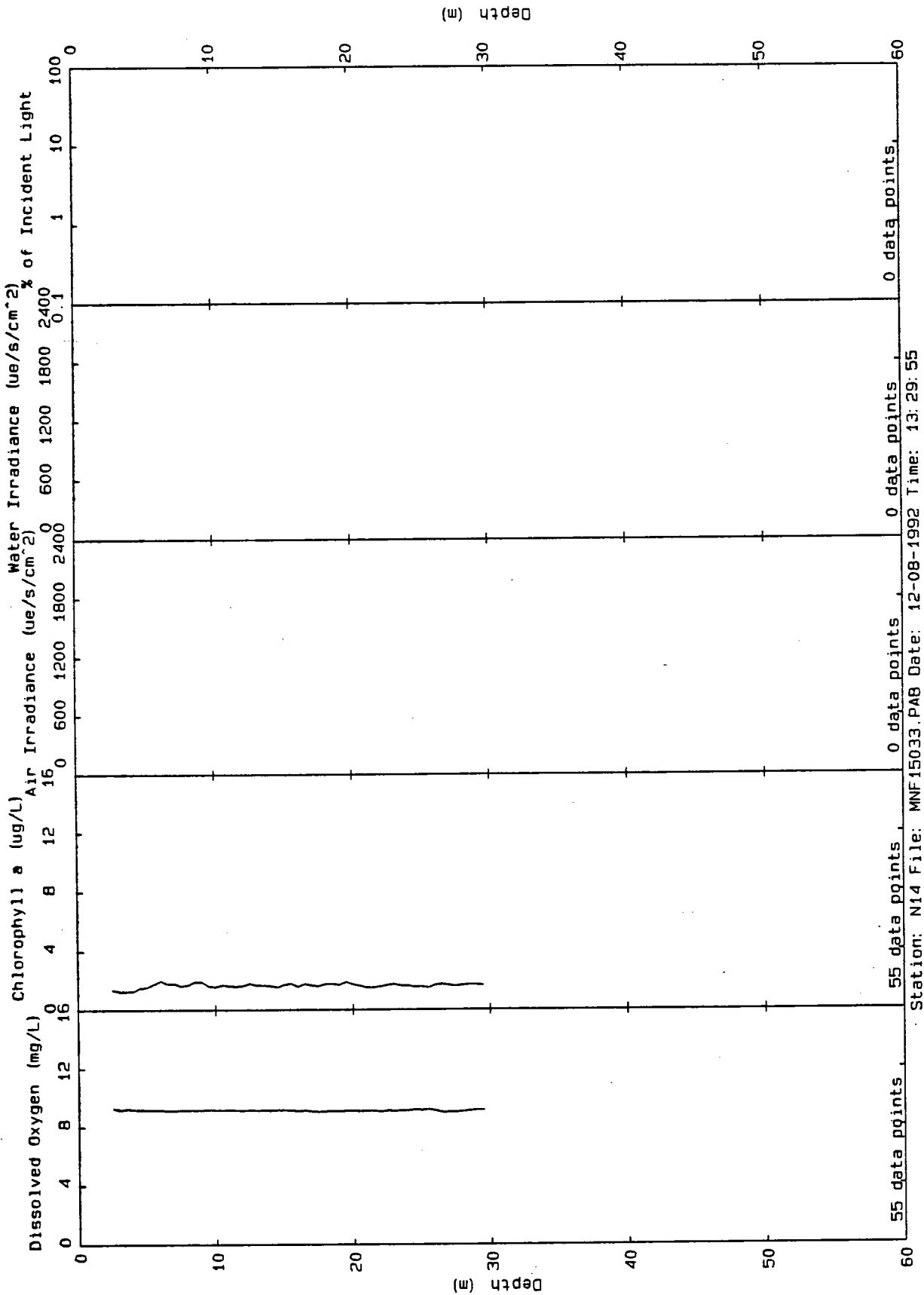




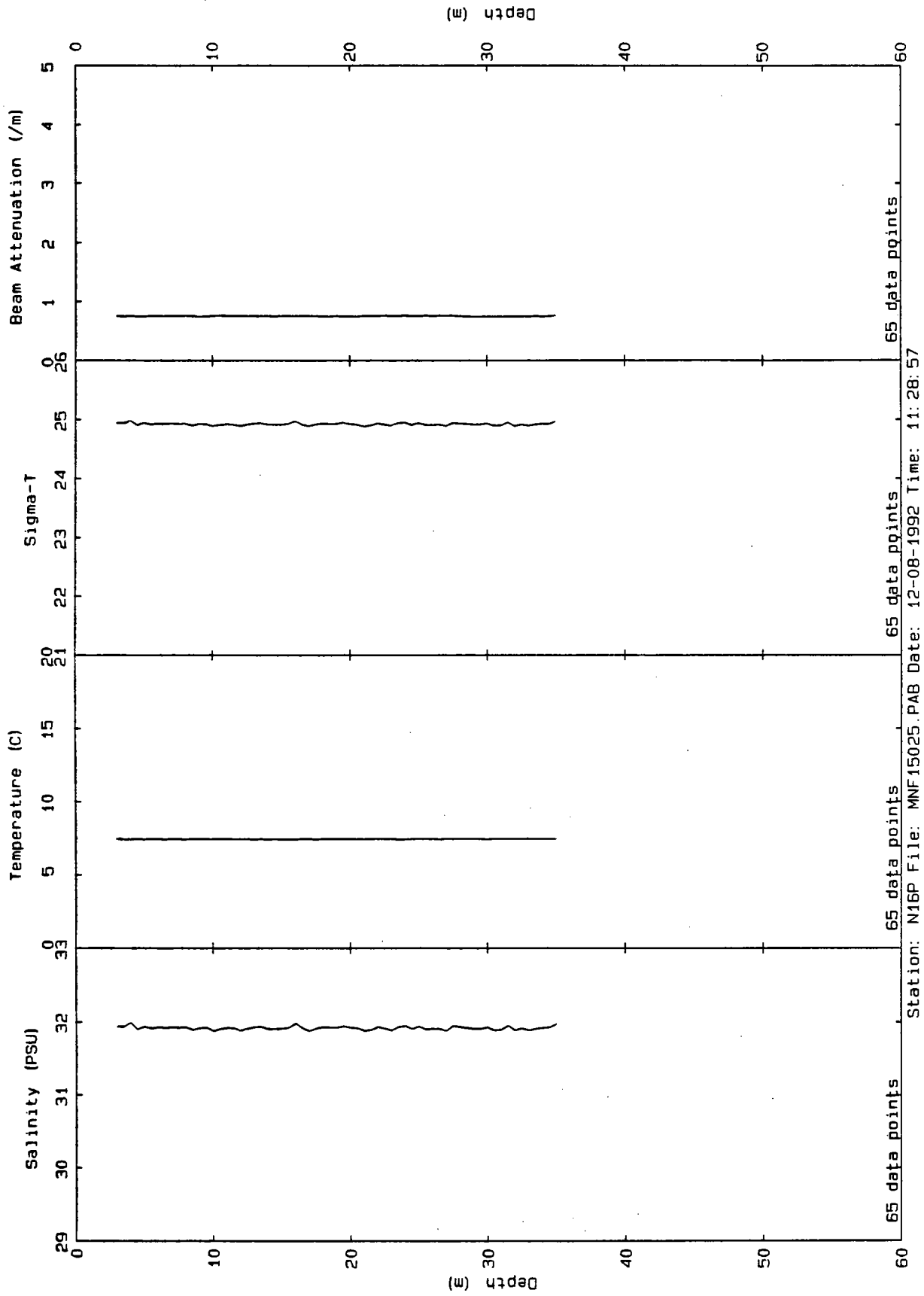




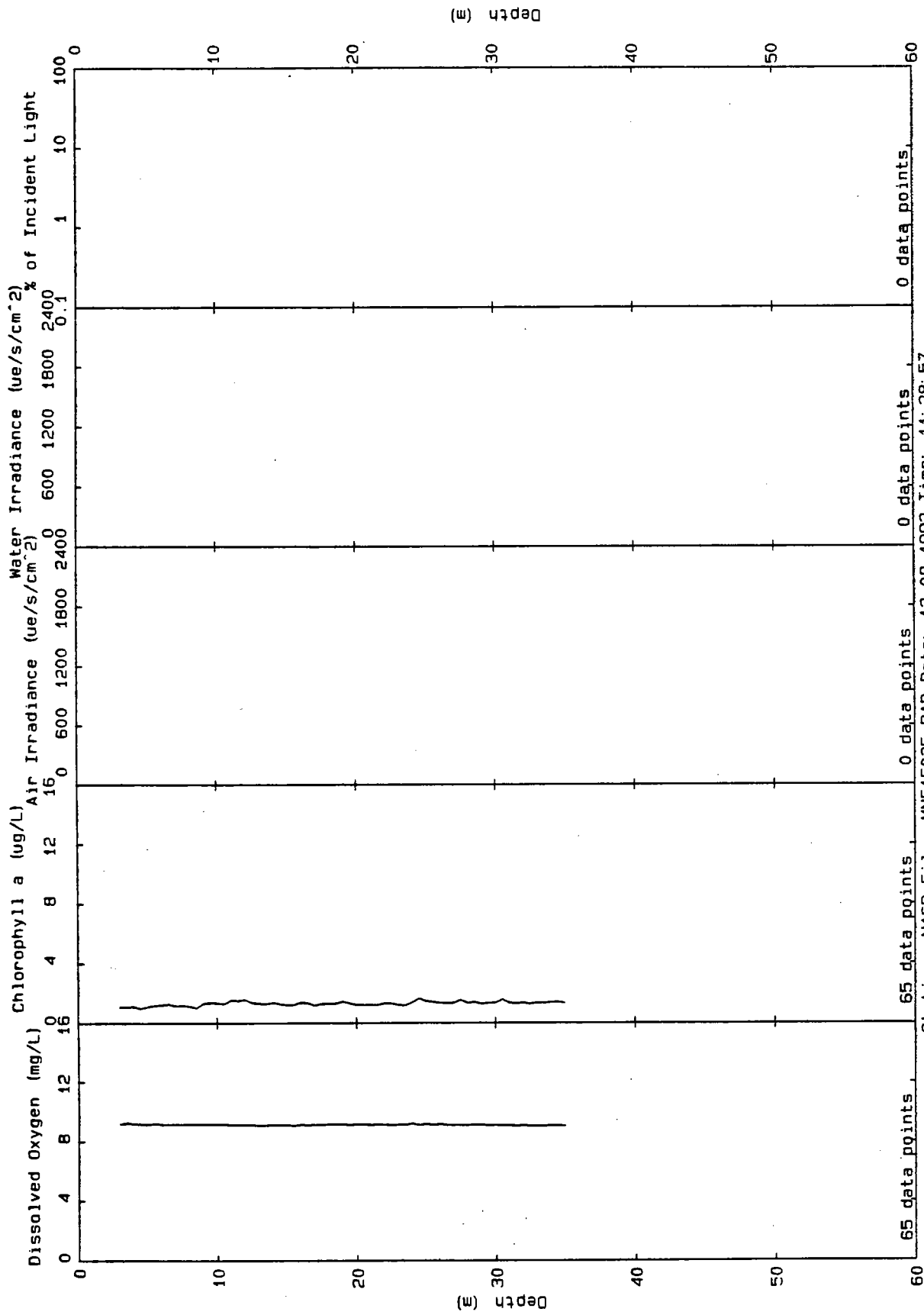
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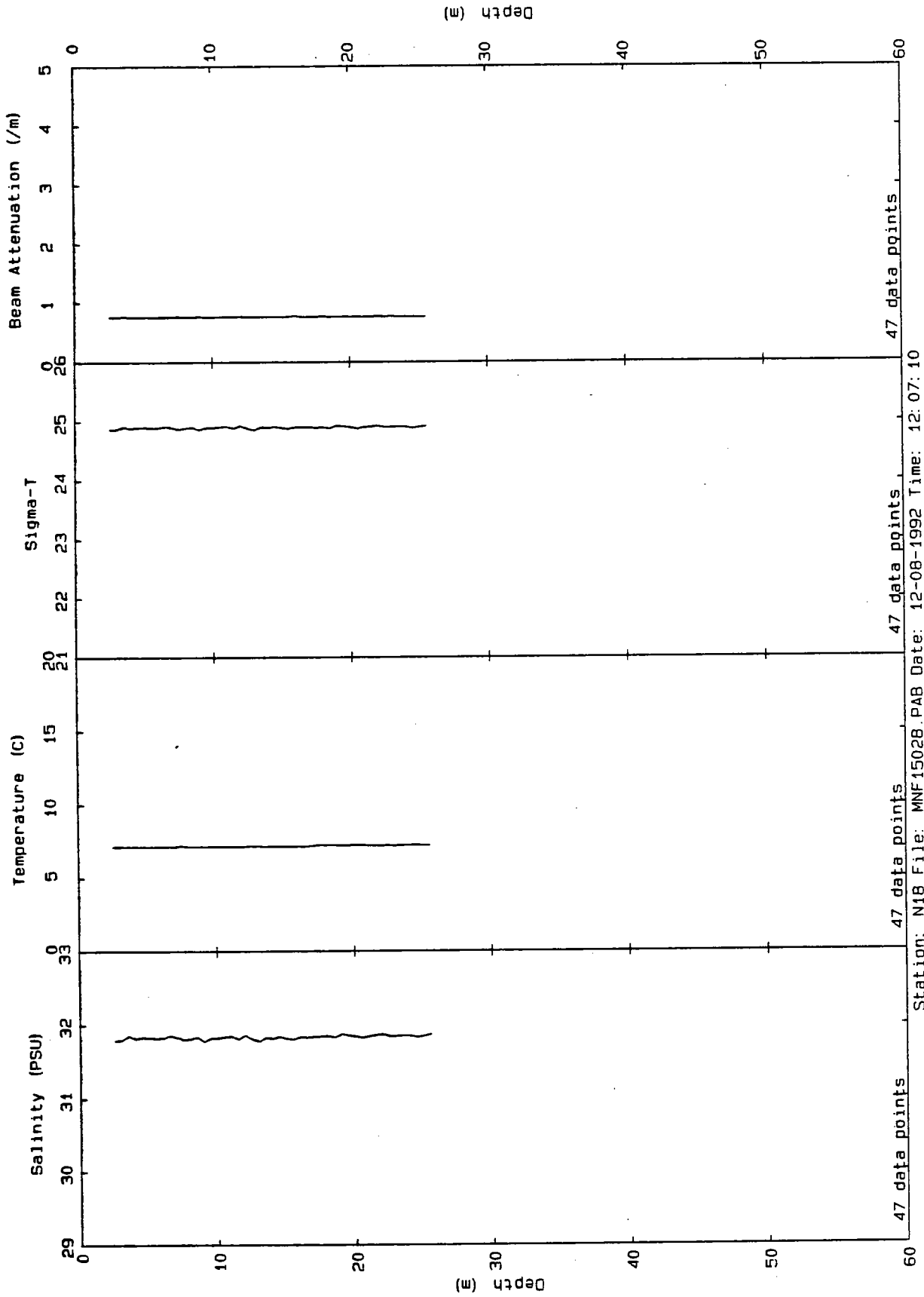
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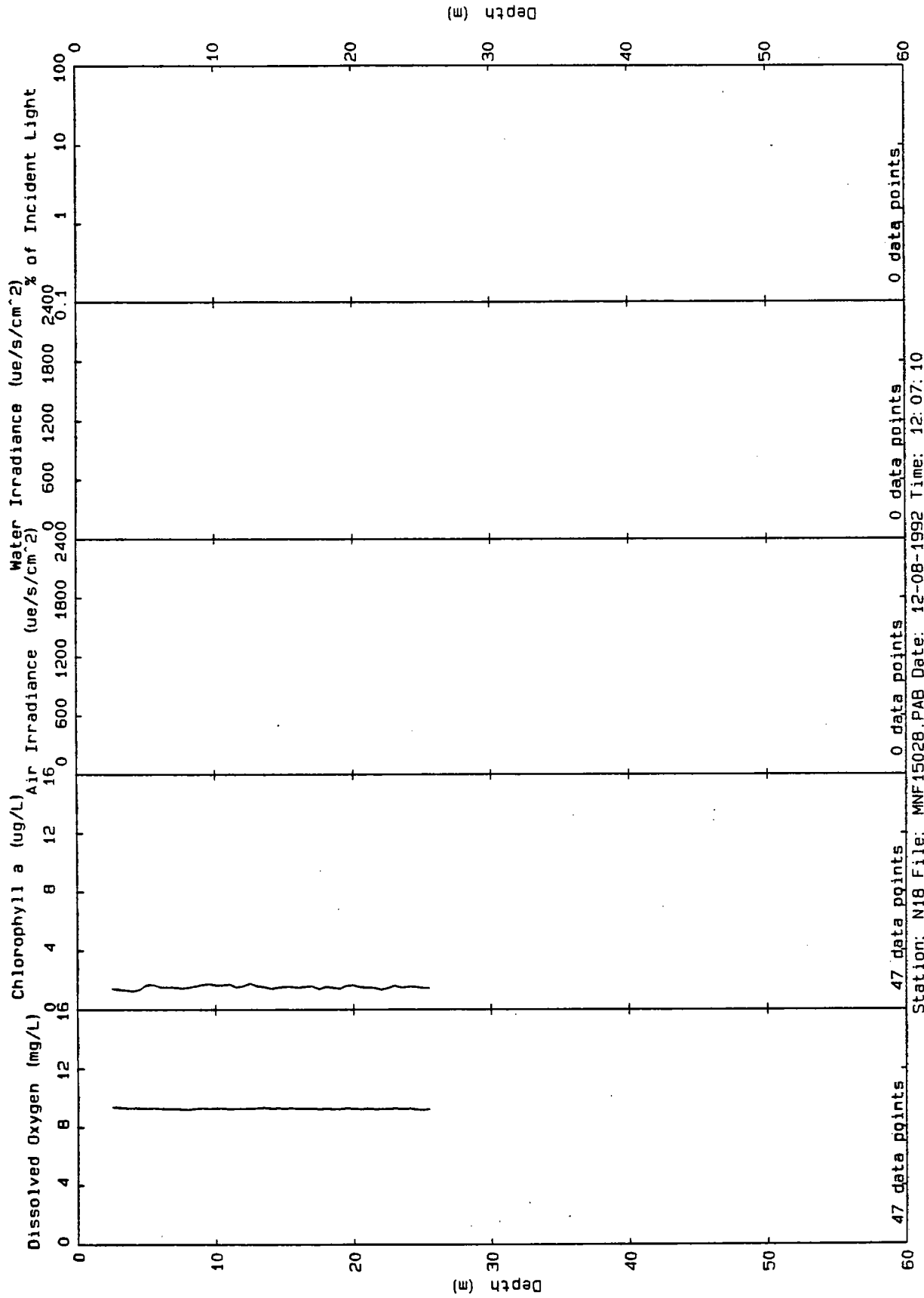


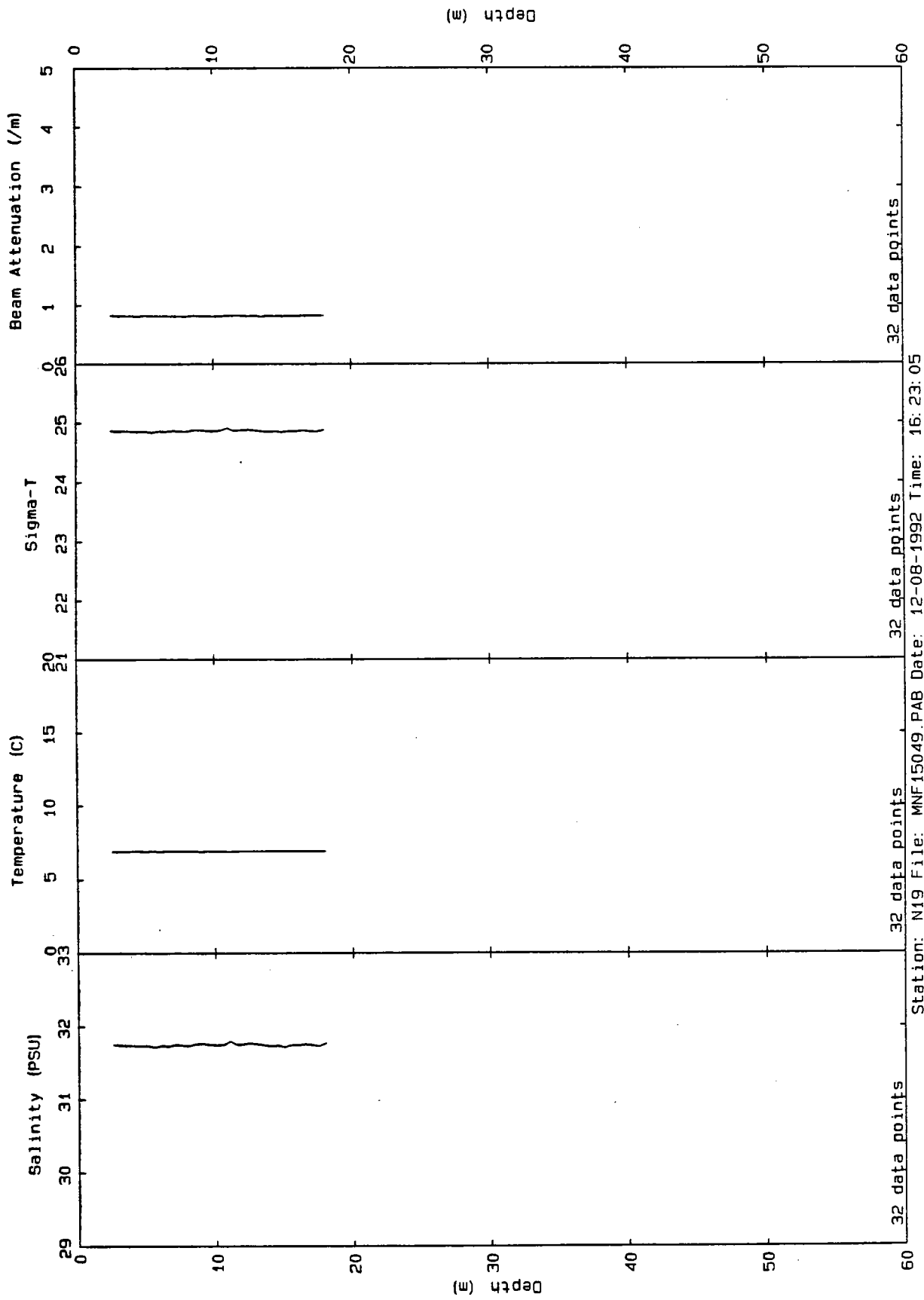
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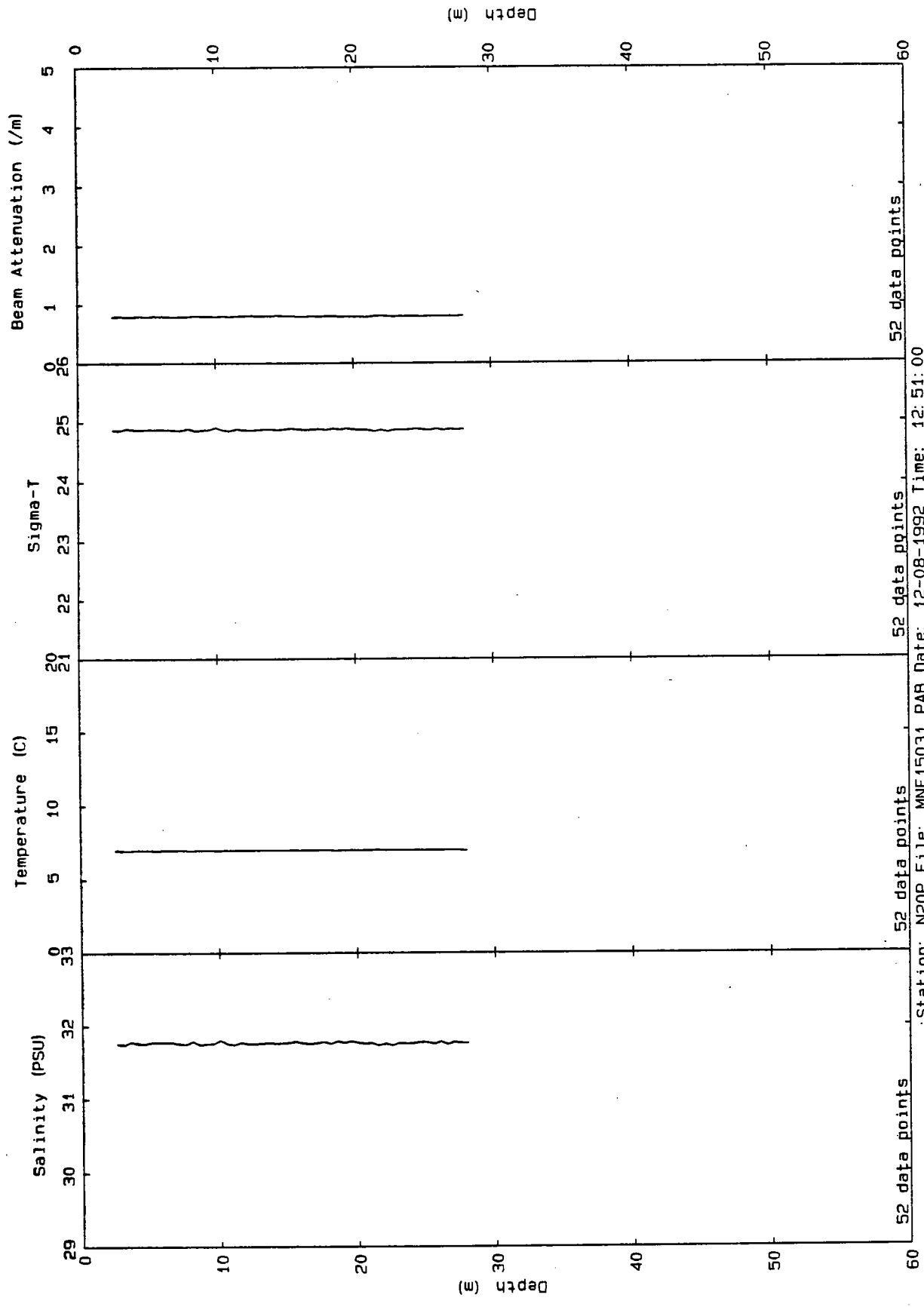
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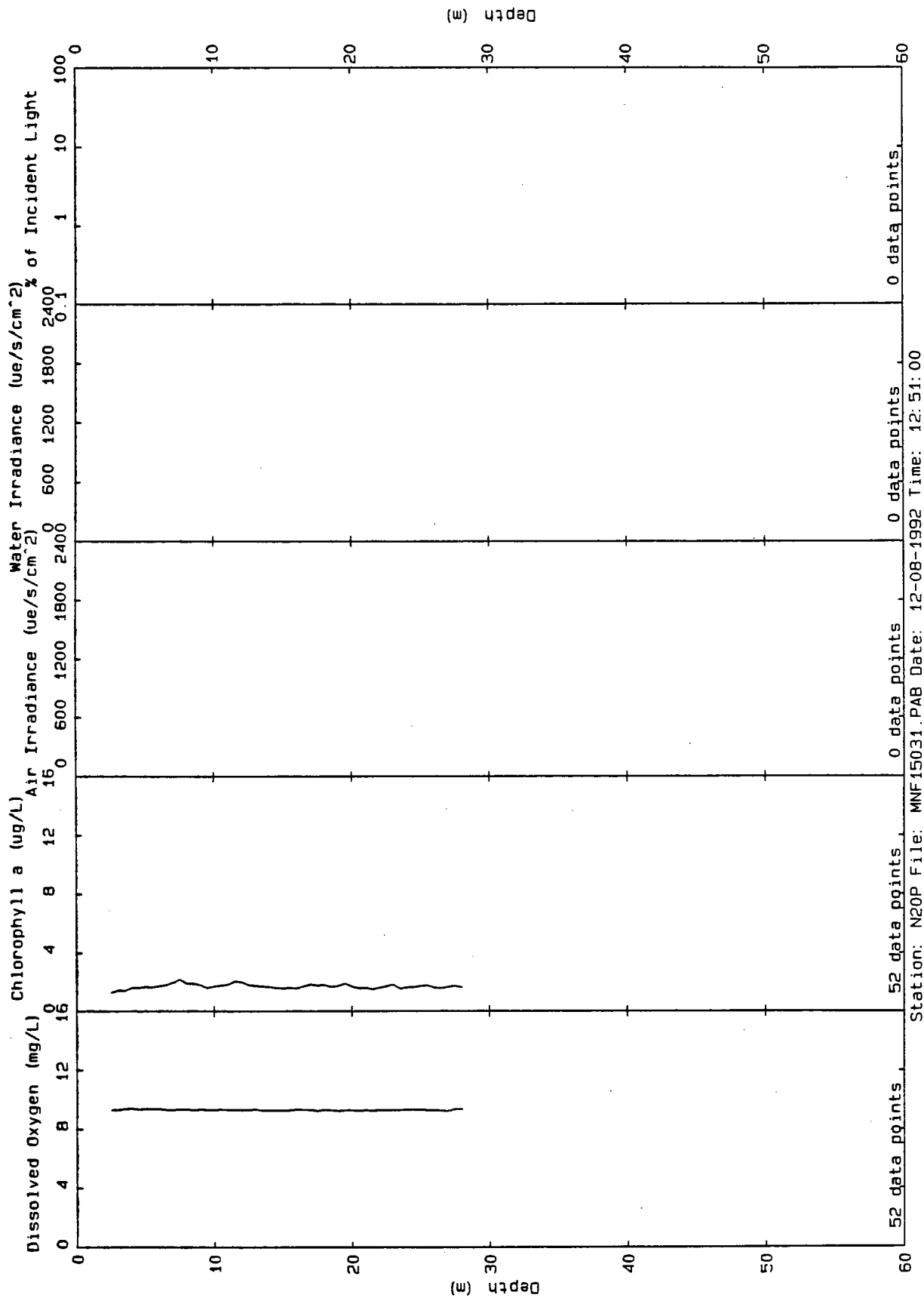


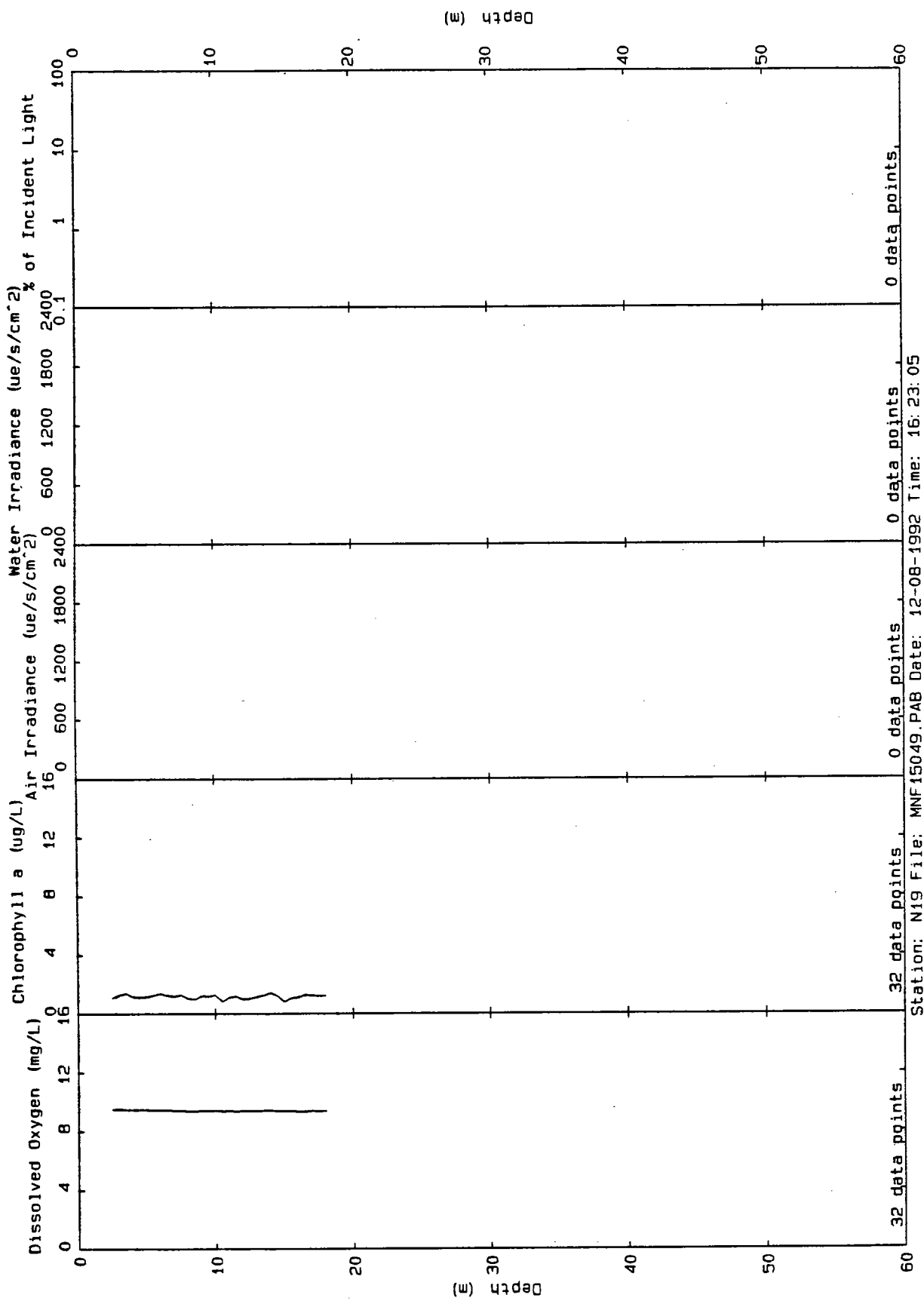




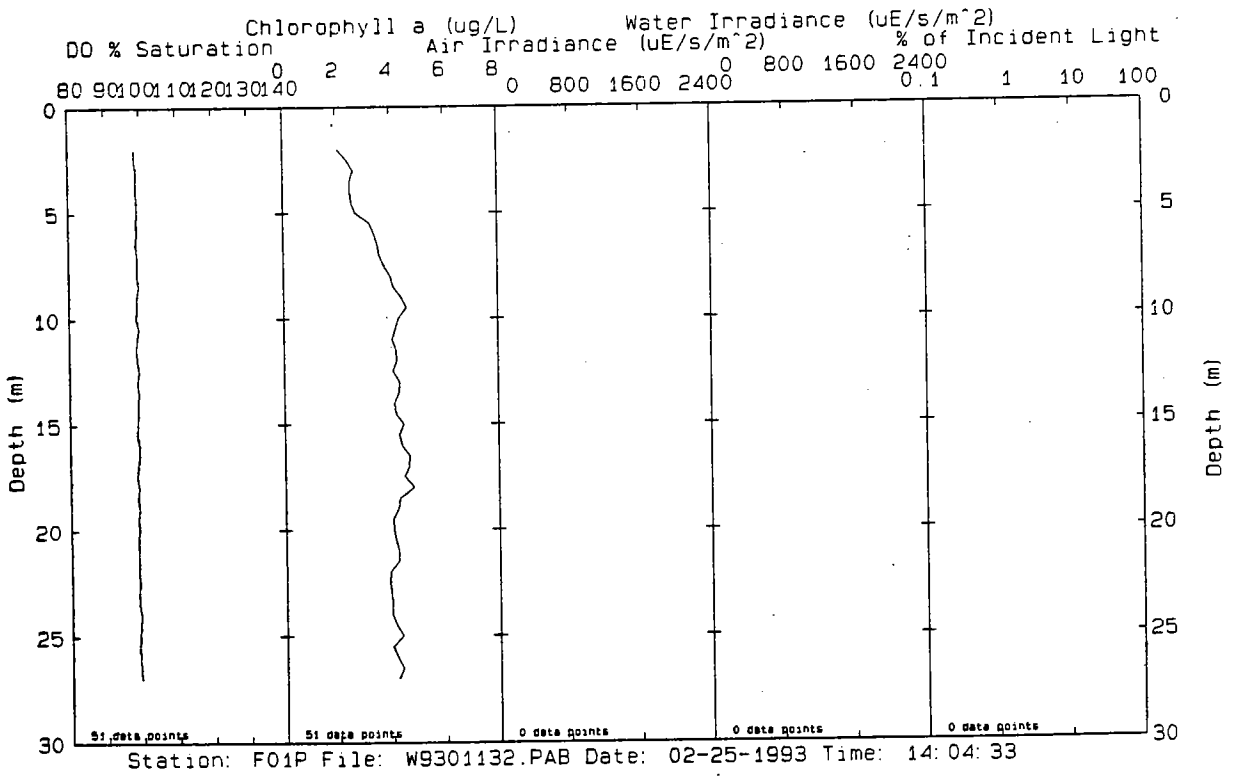
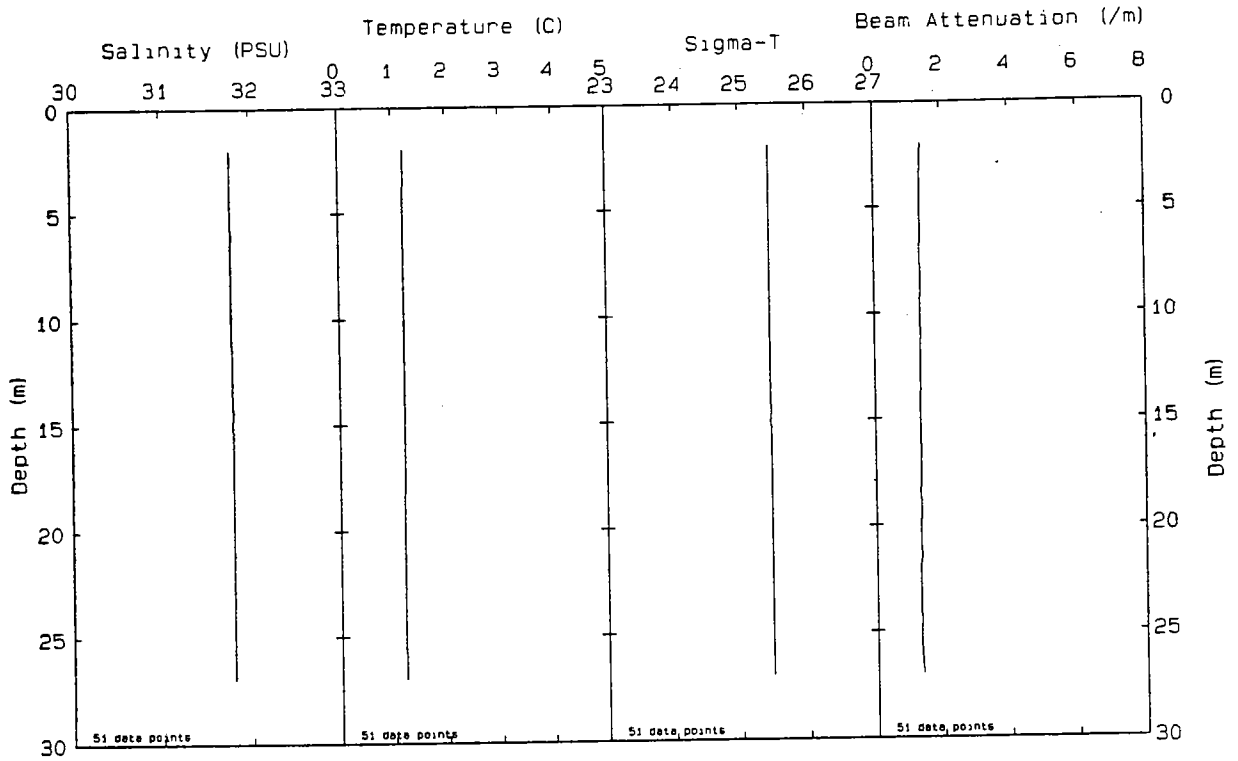
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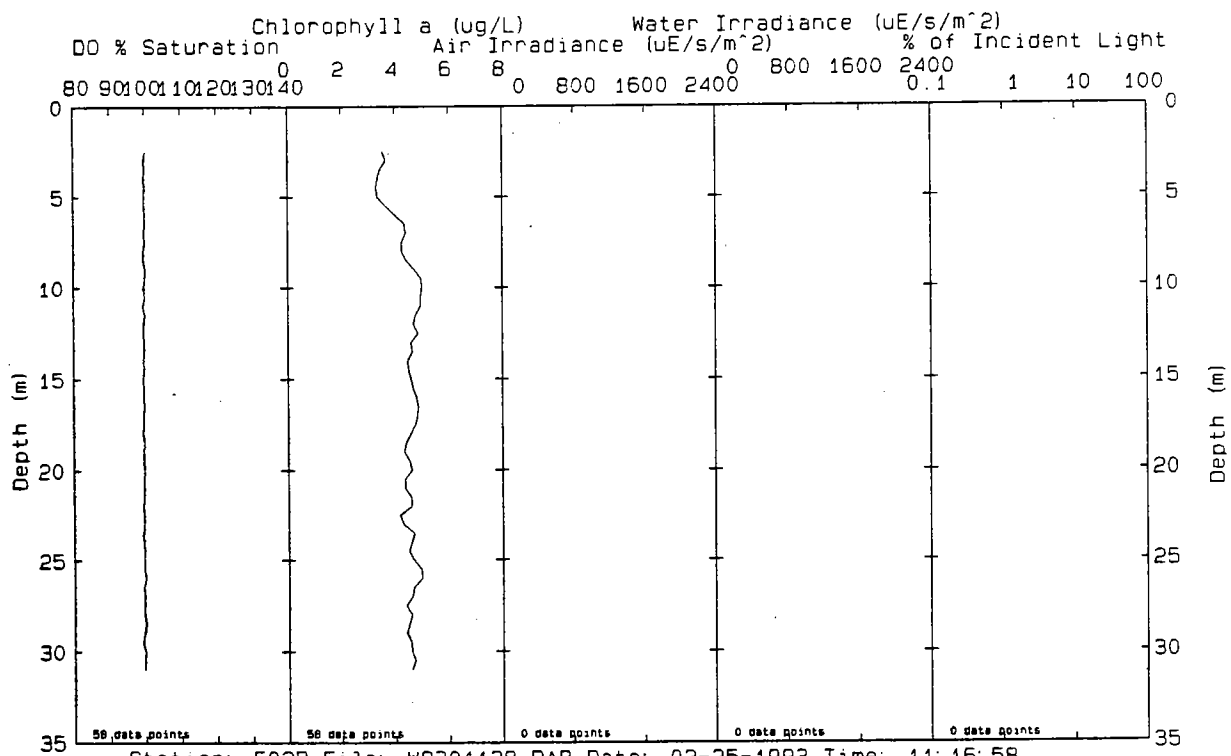
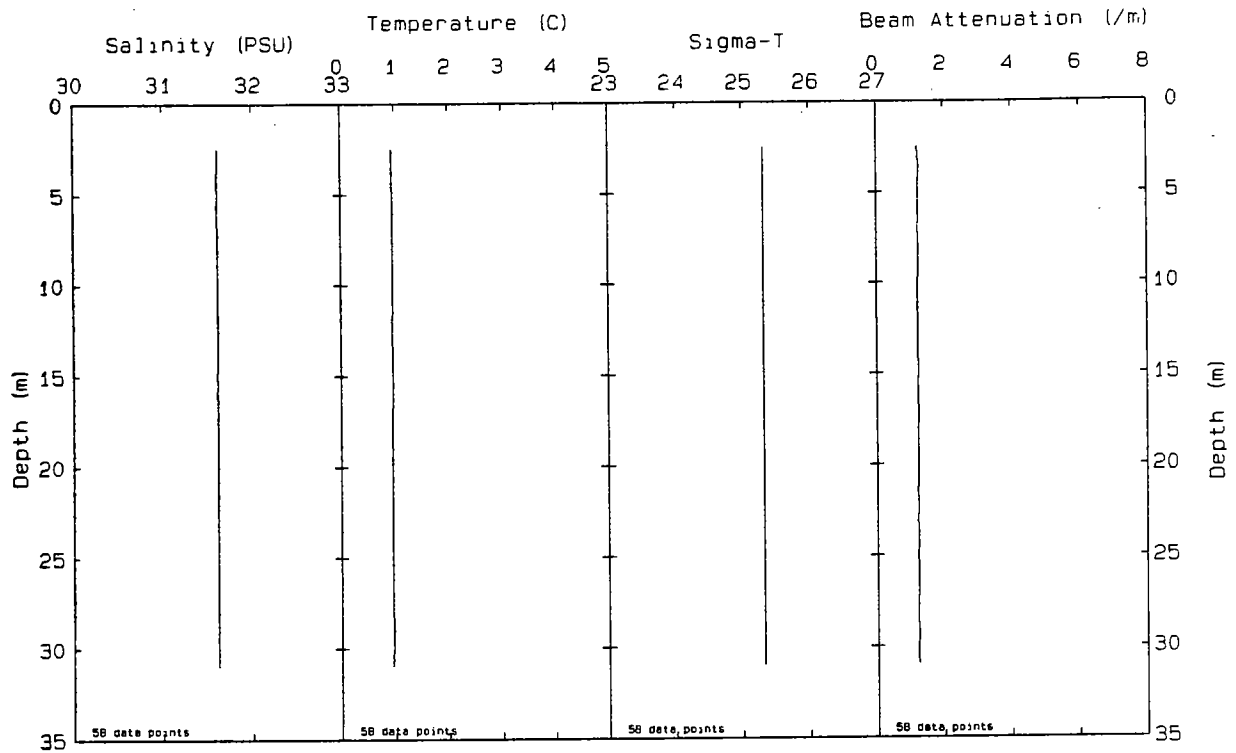




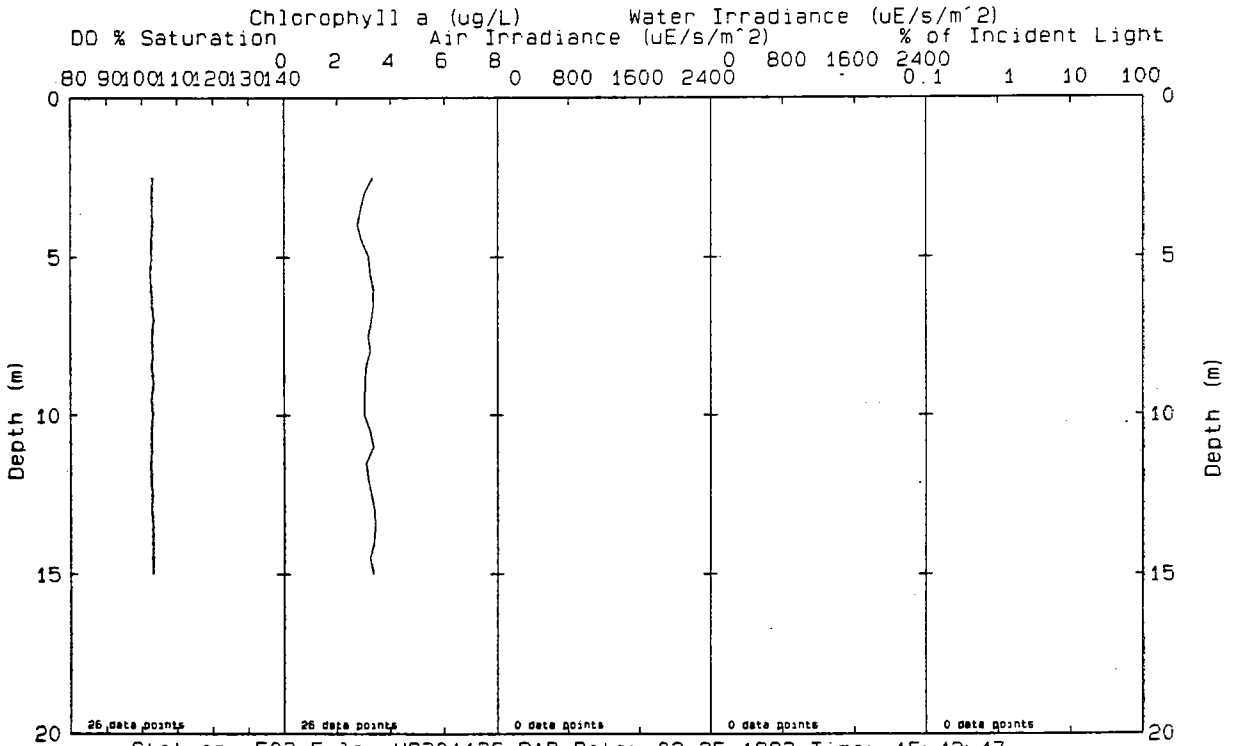
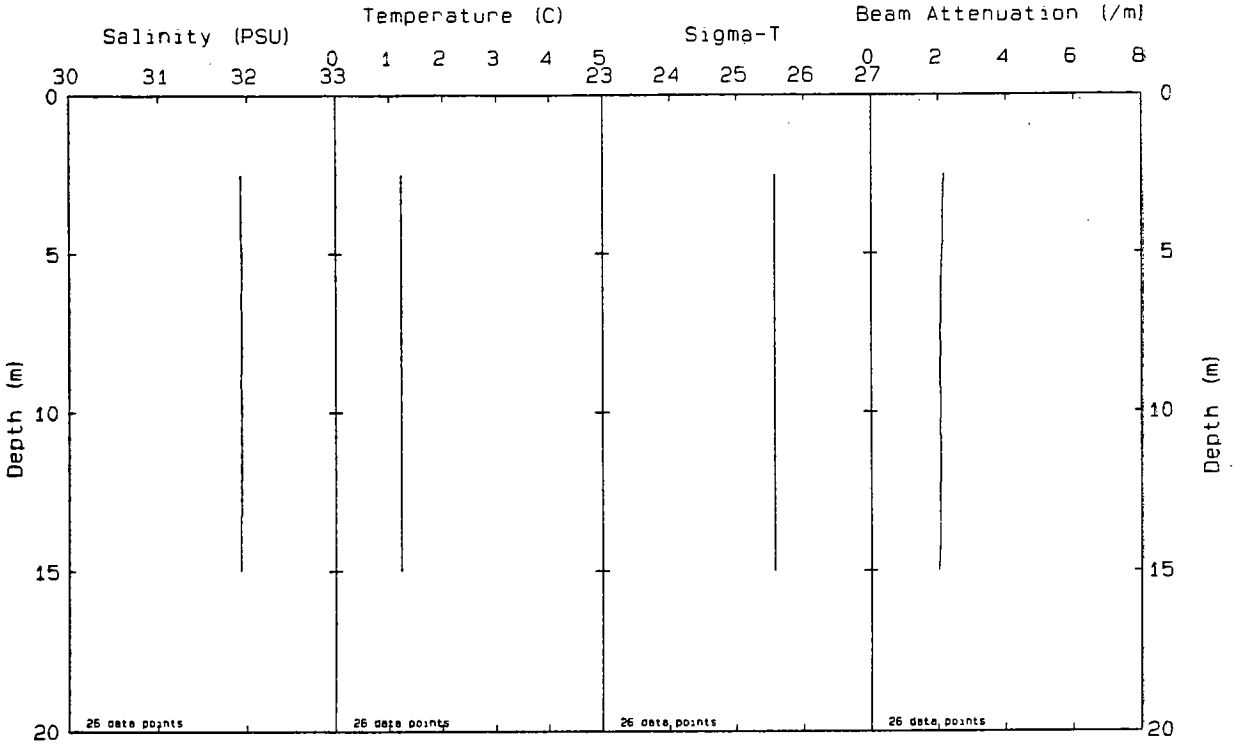


February 1993 Profiles

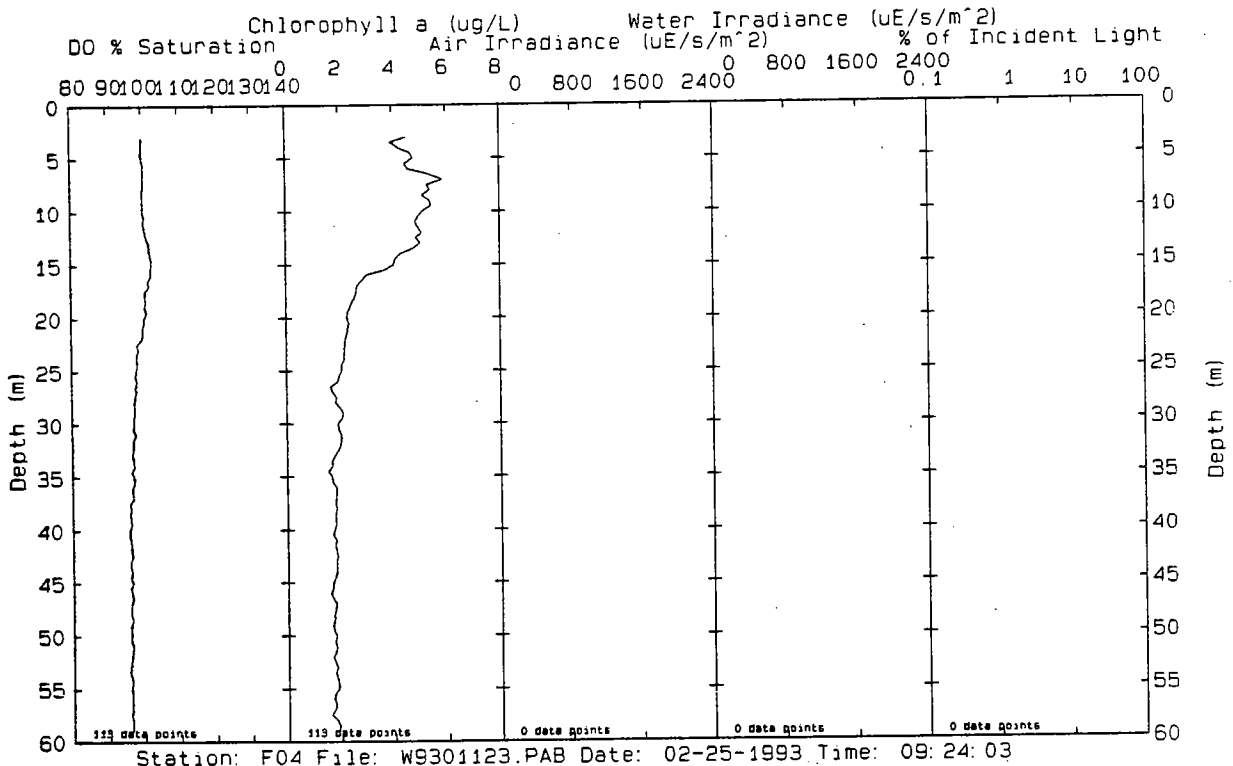
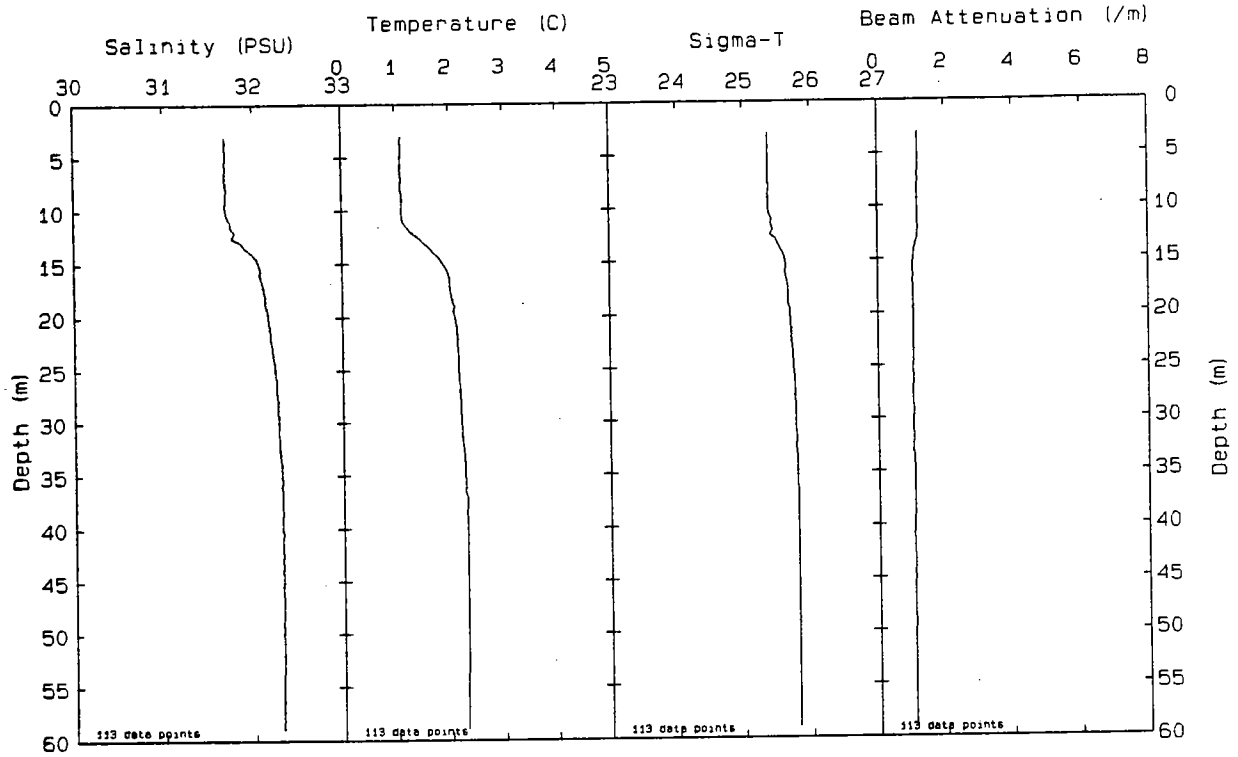


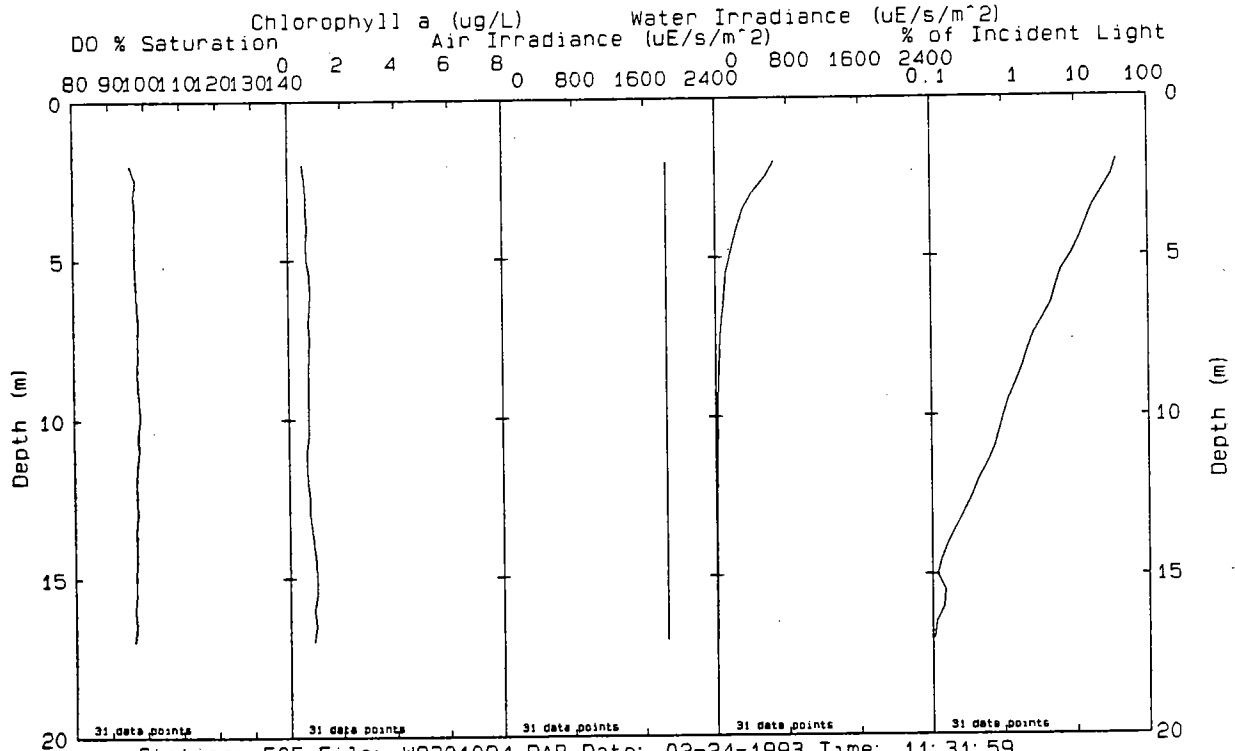
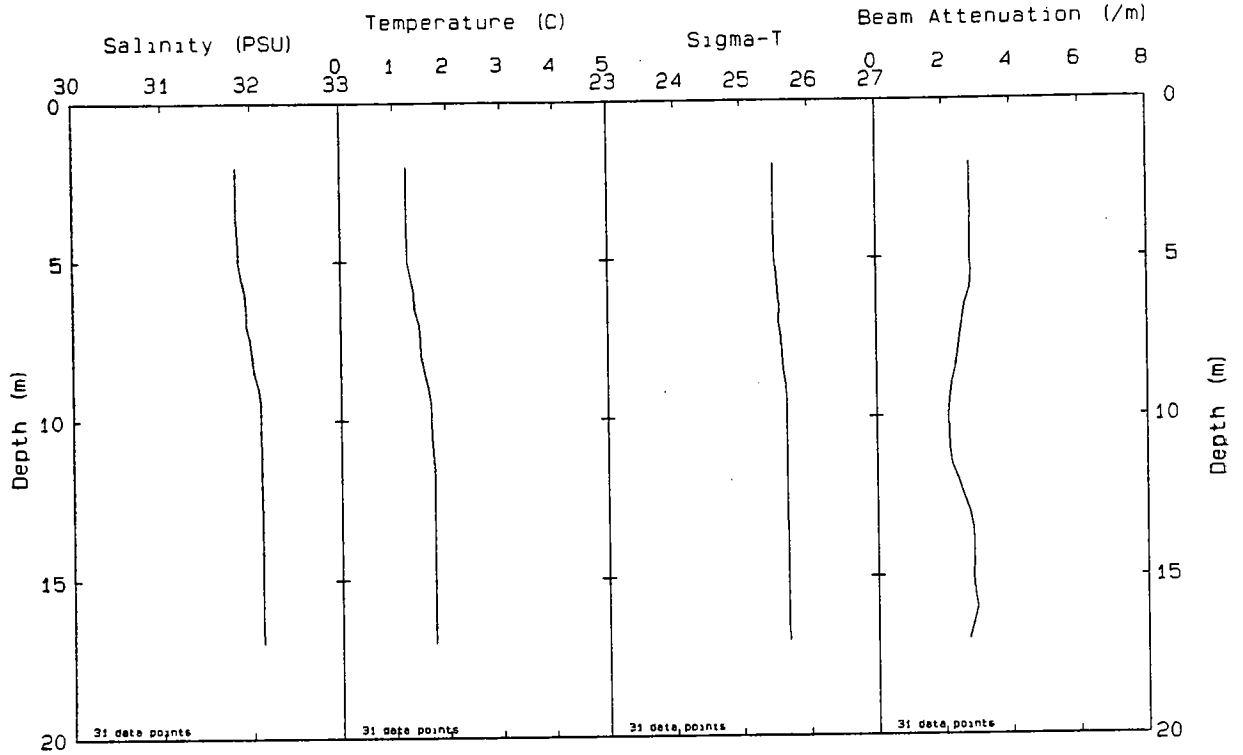


Station: F02P File: W9301128.PAB Date: 02-25-1993 Time: 11:16:58

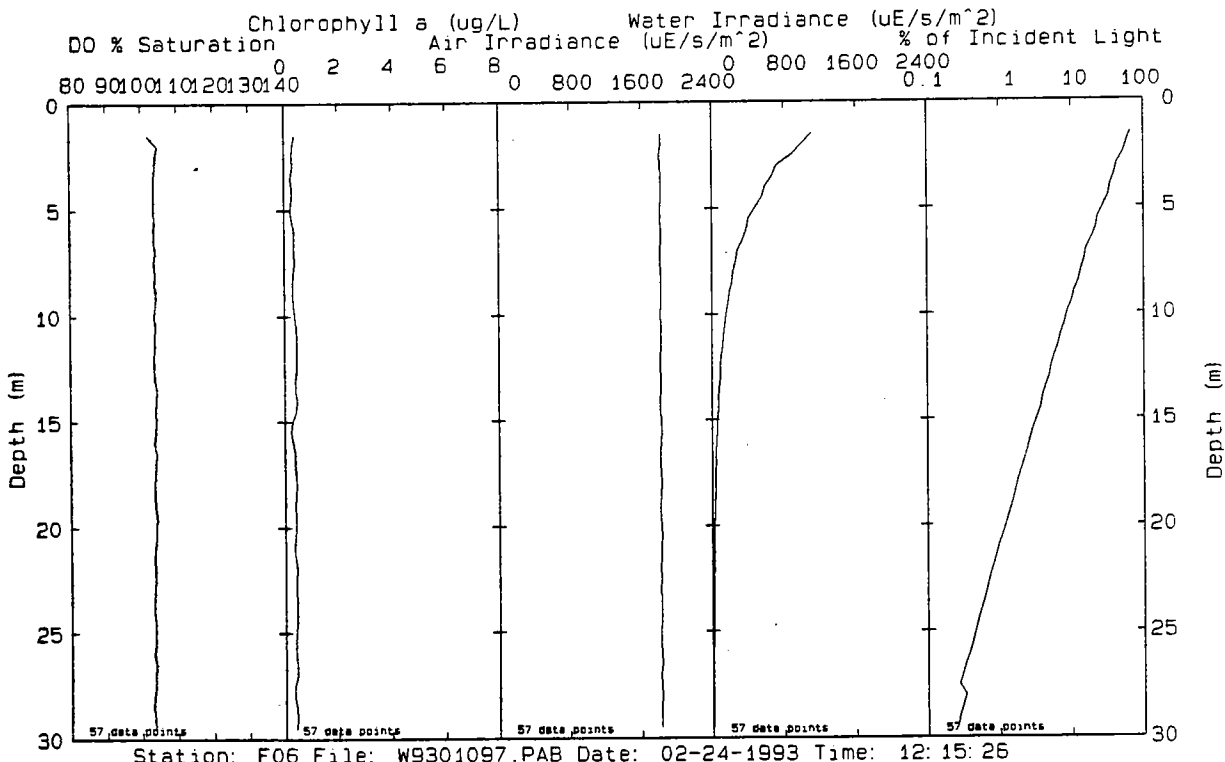
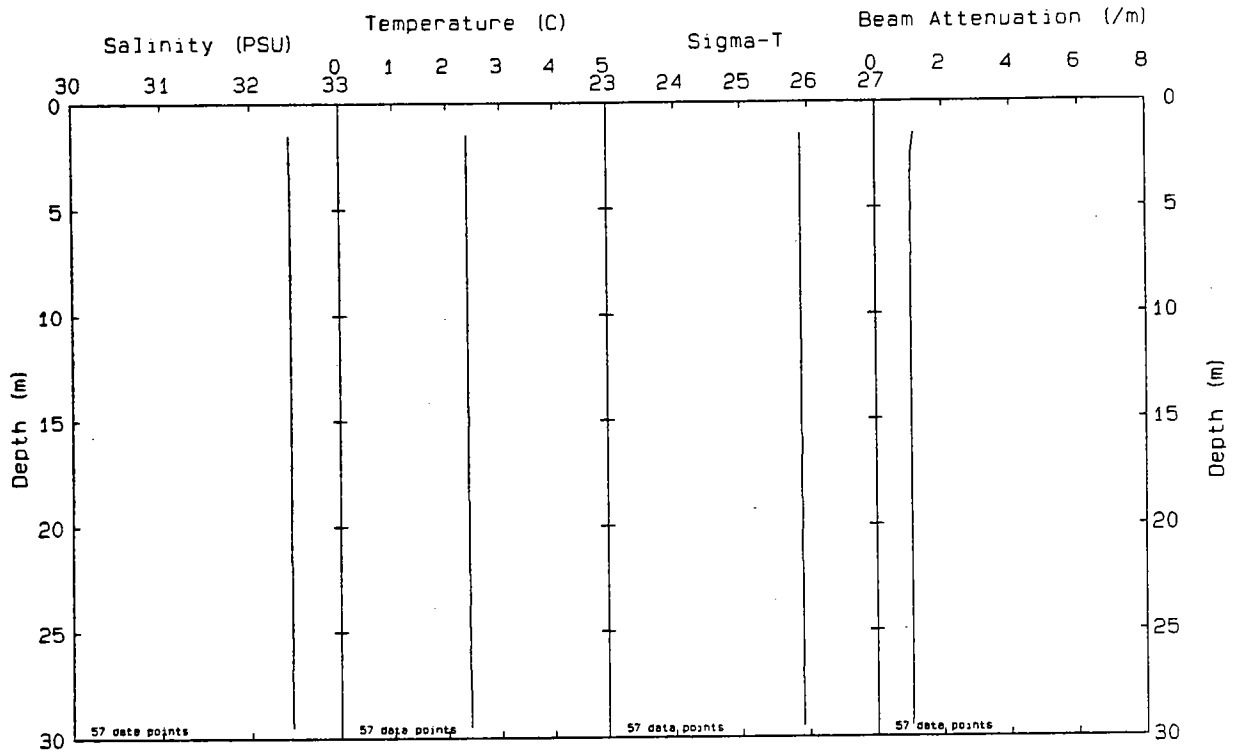


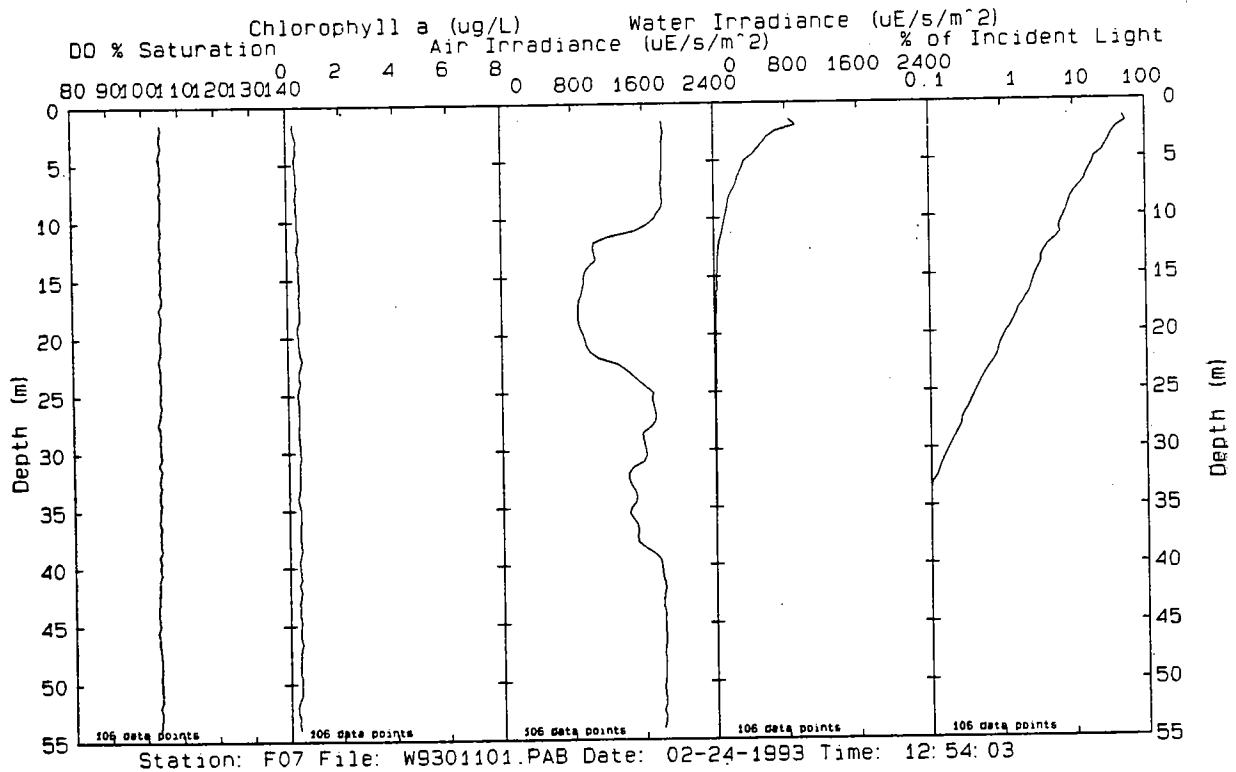
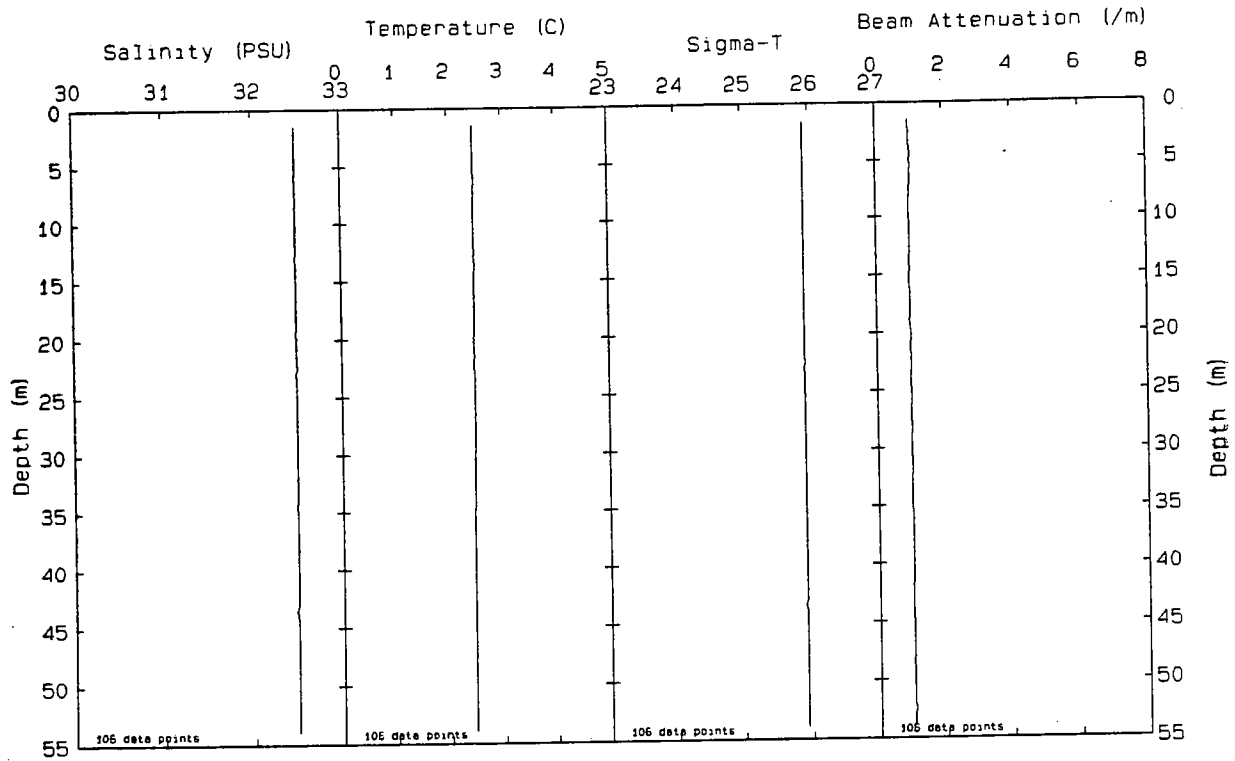
Station: F03 File: W9301136.PAB Date: 02-25-1993 Time: 15:42:47

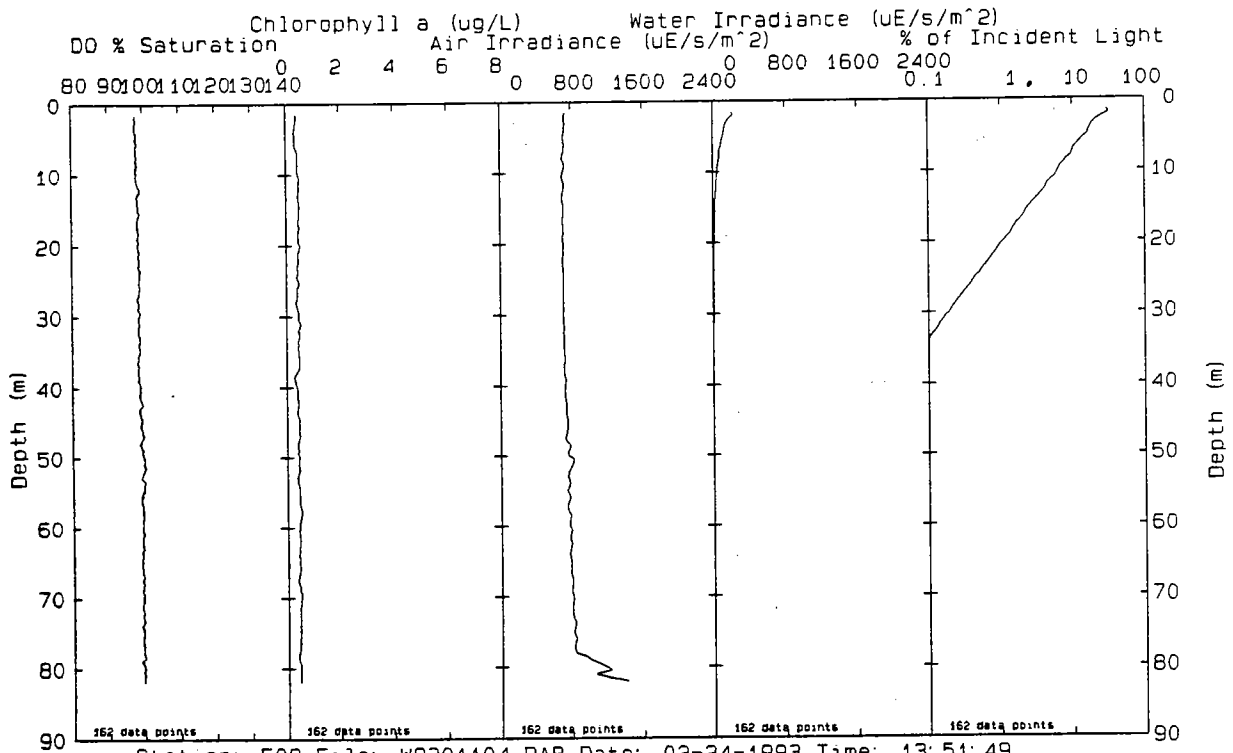
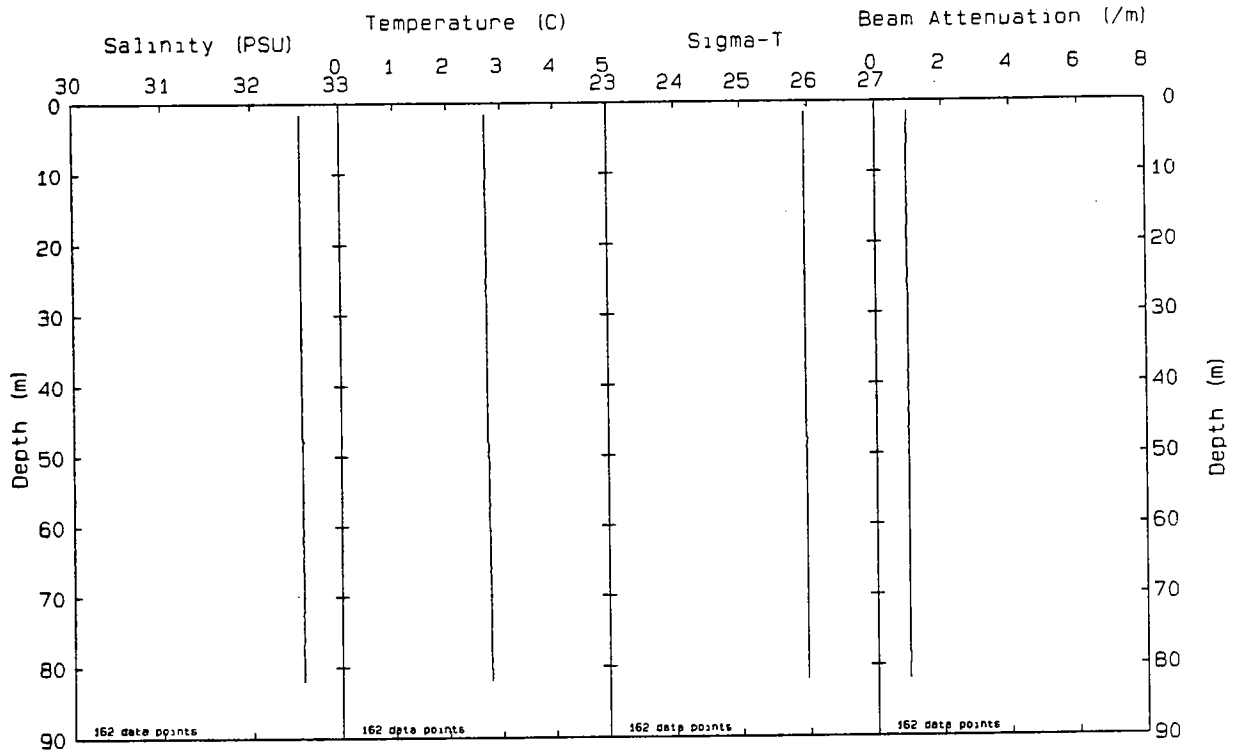




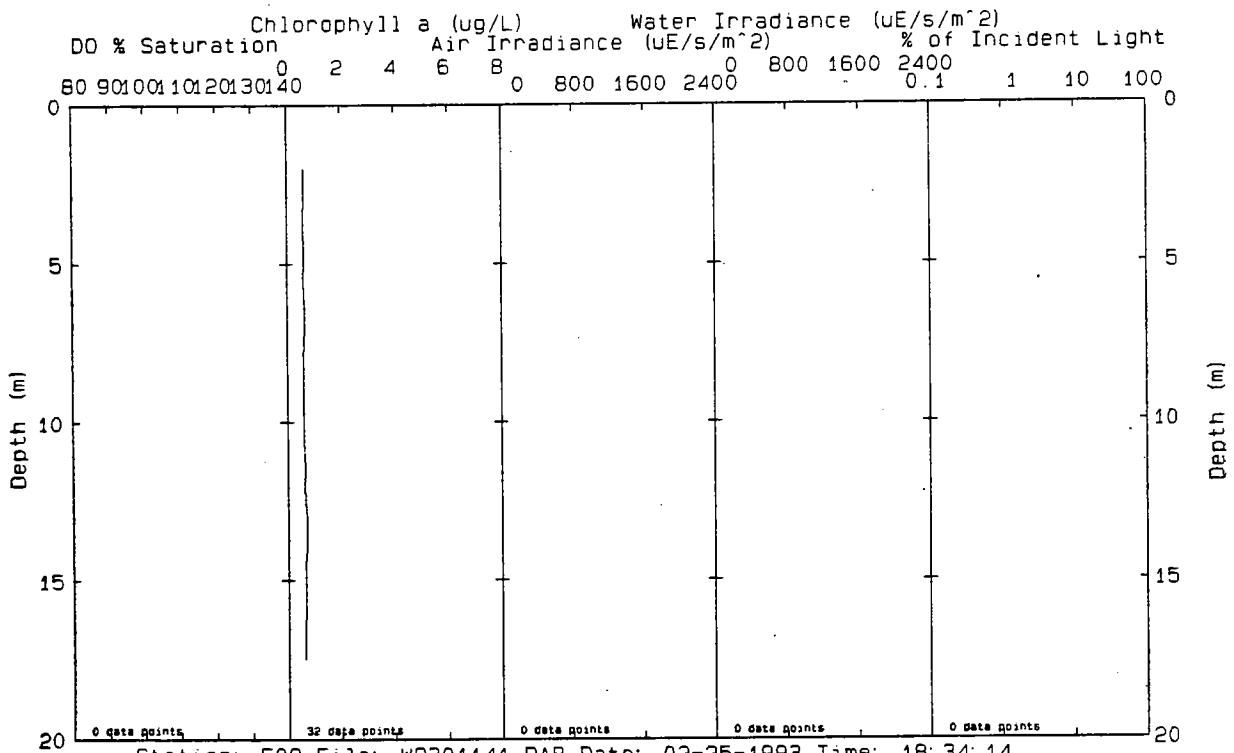
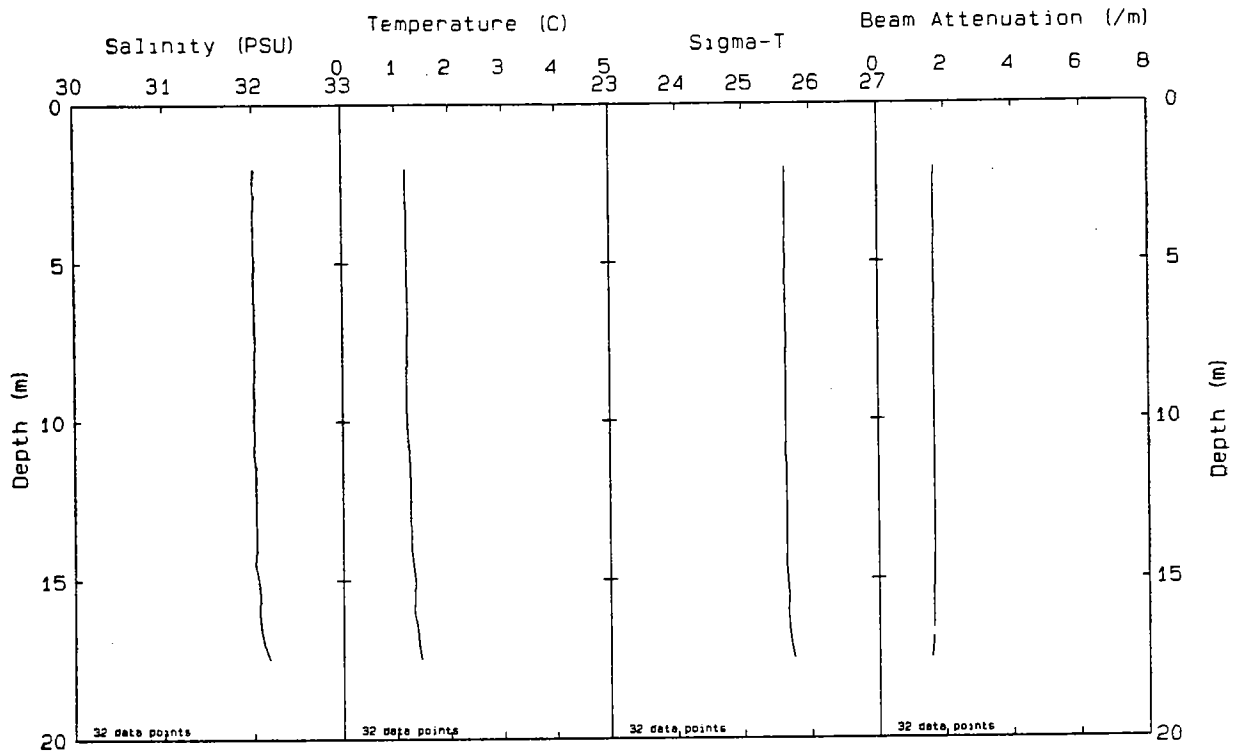
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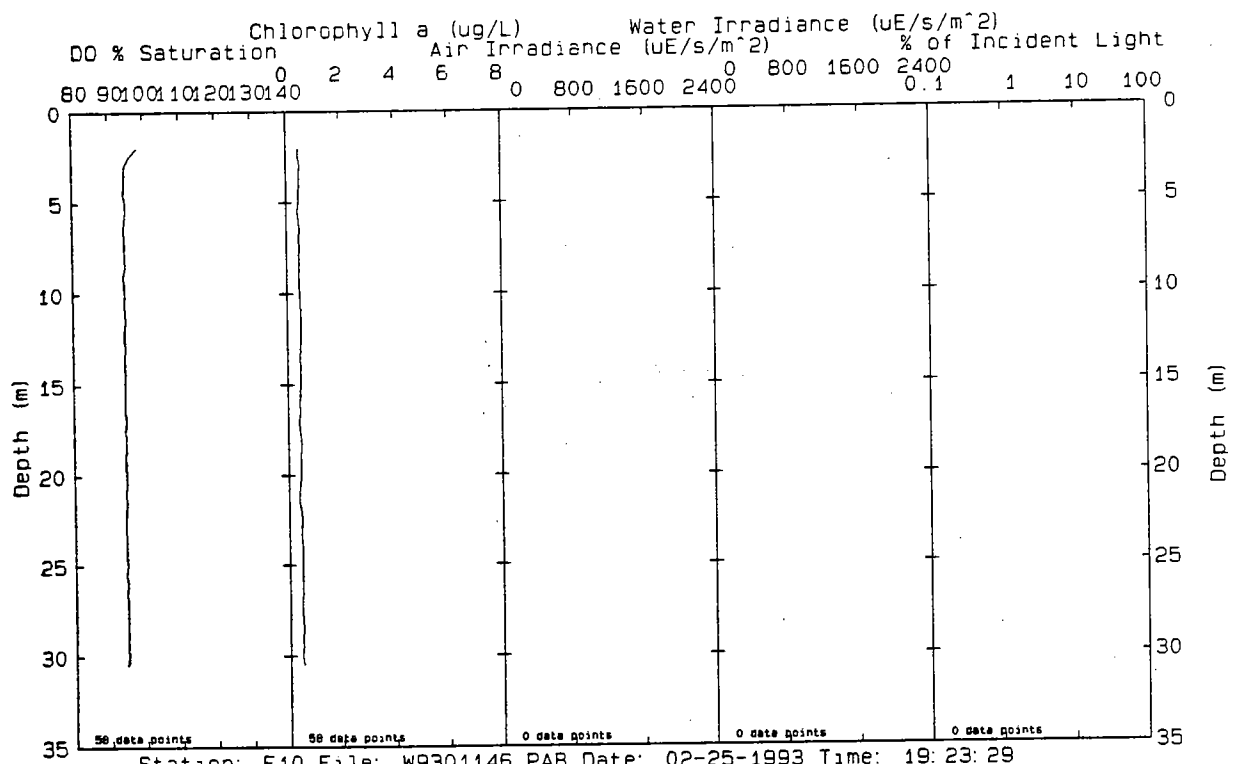
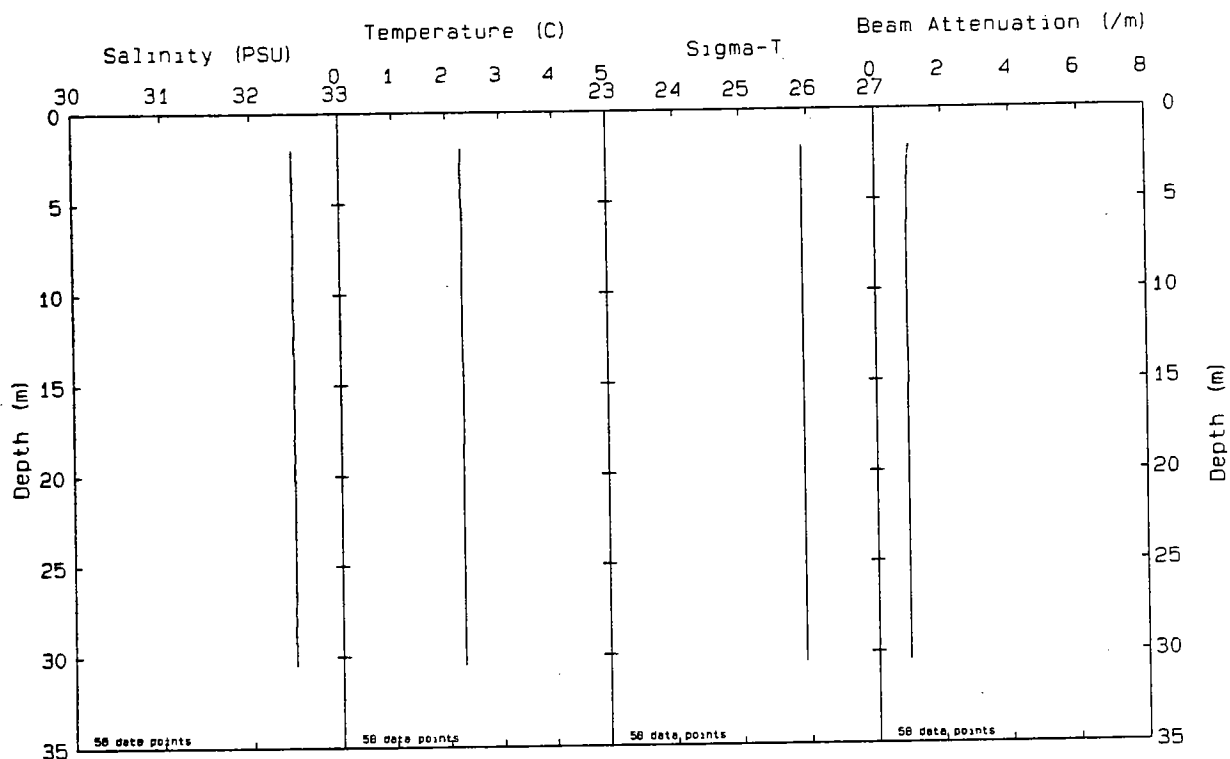




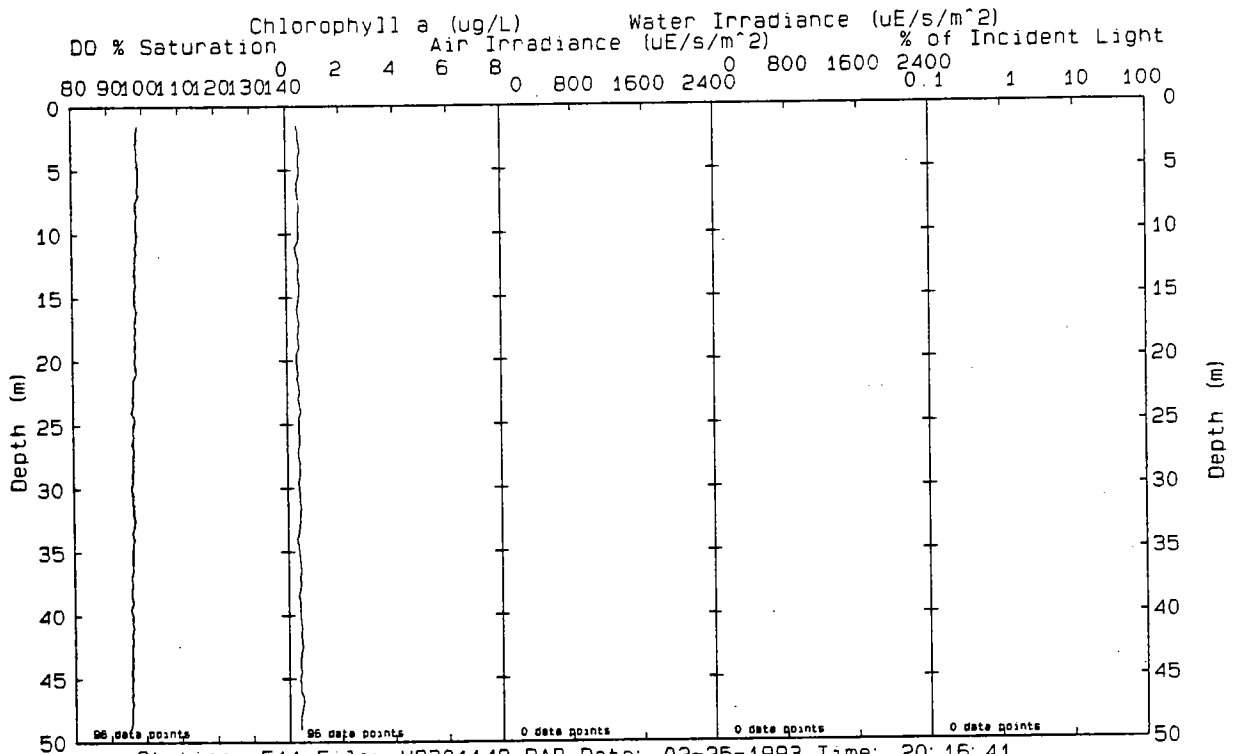
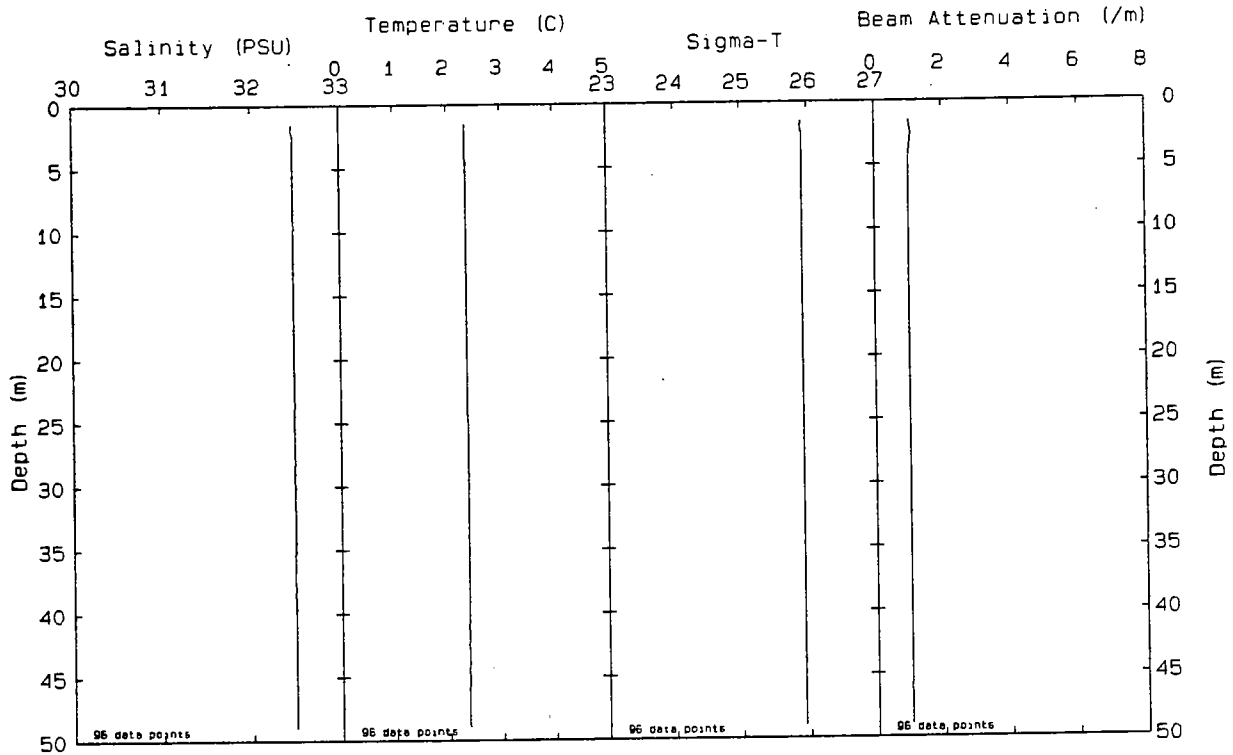
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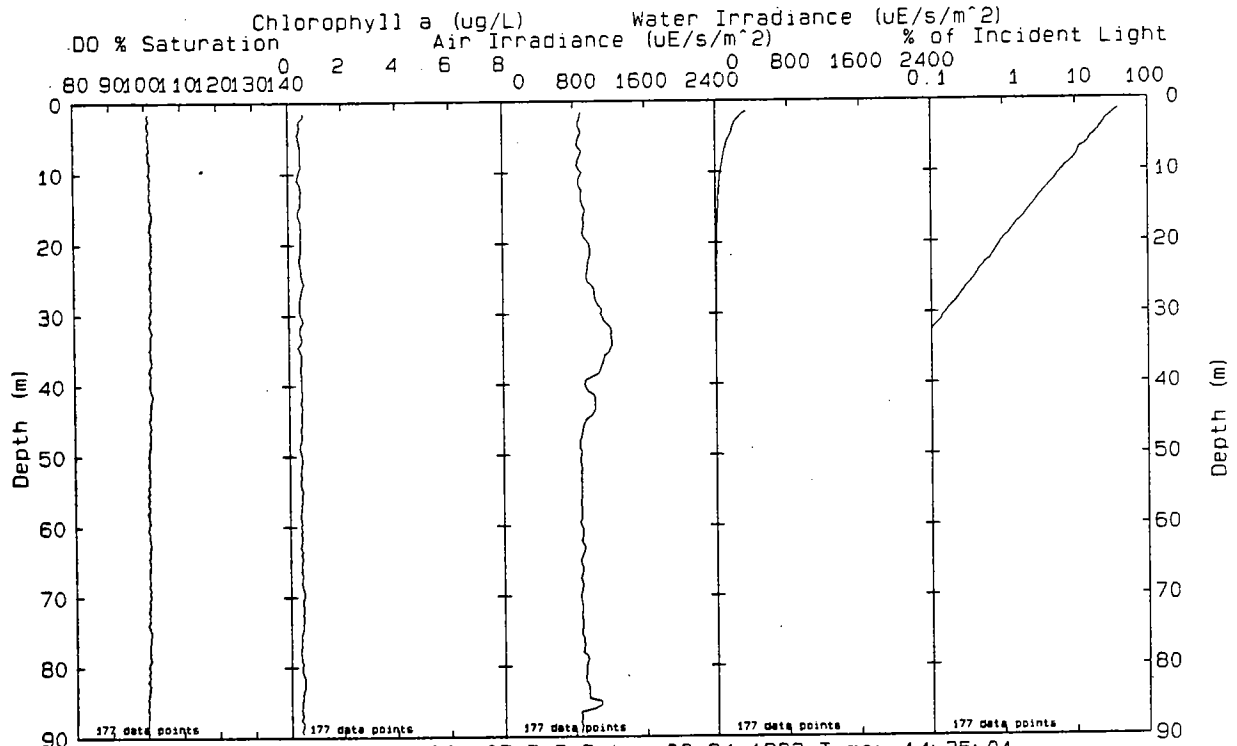
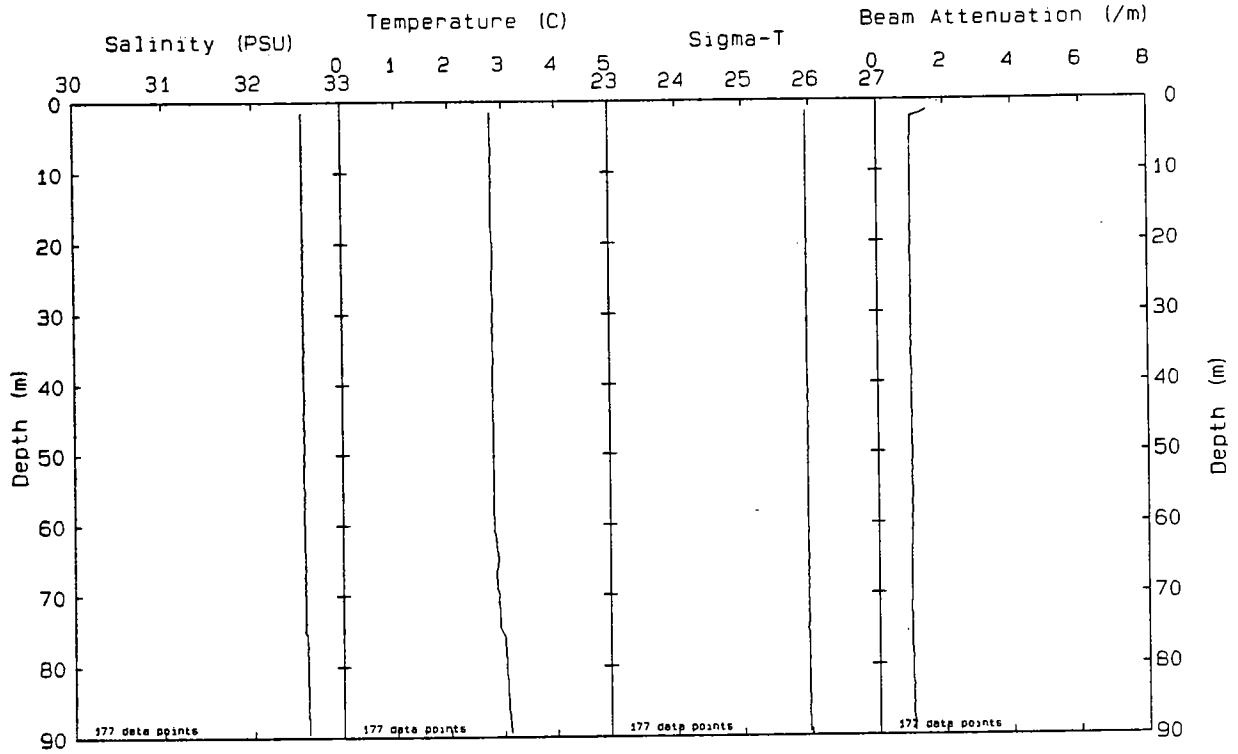
Station: F09 File: W9301141.PAB Date: 02-25-1993 Time: 18:34:14



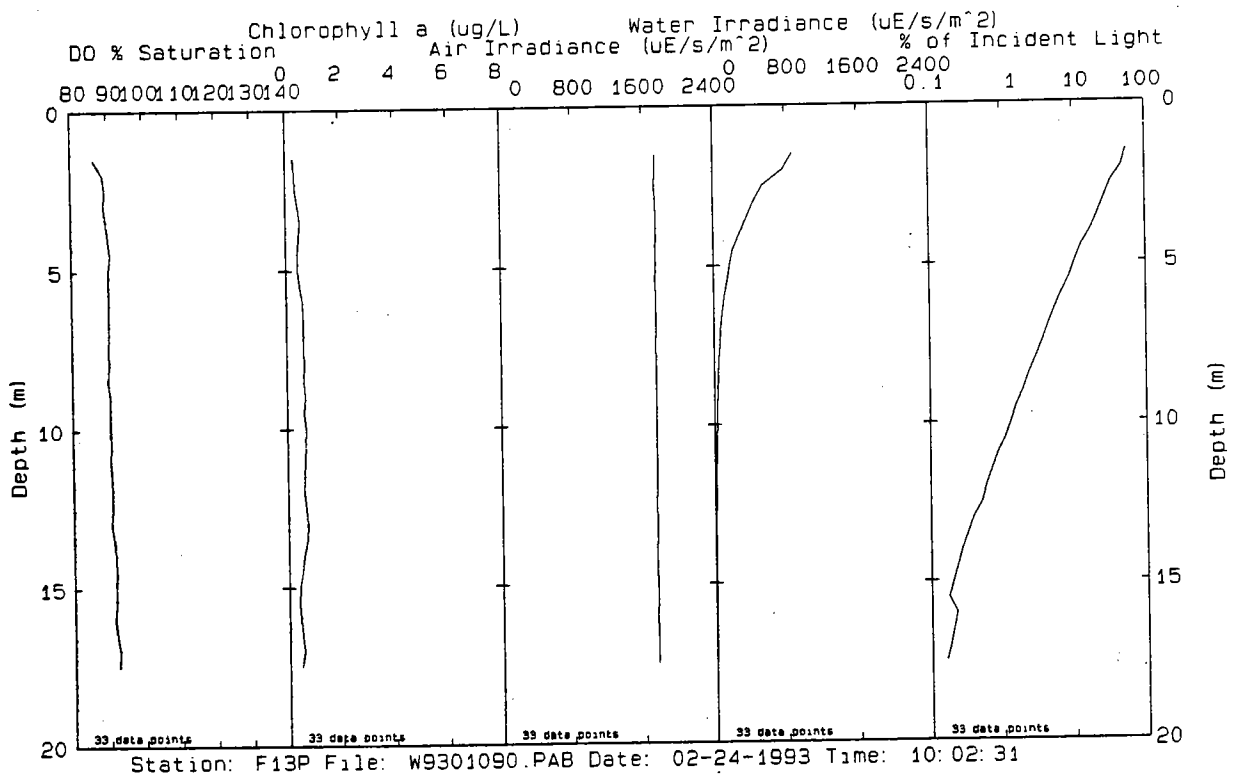
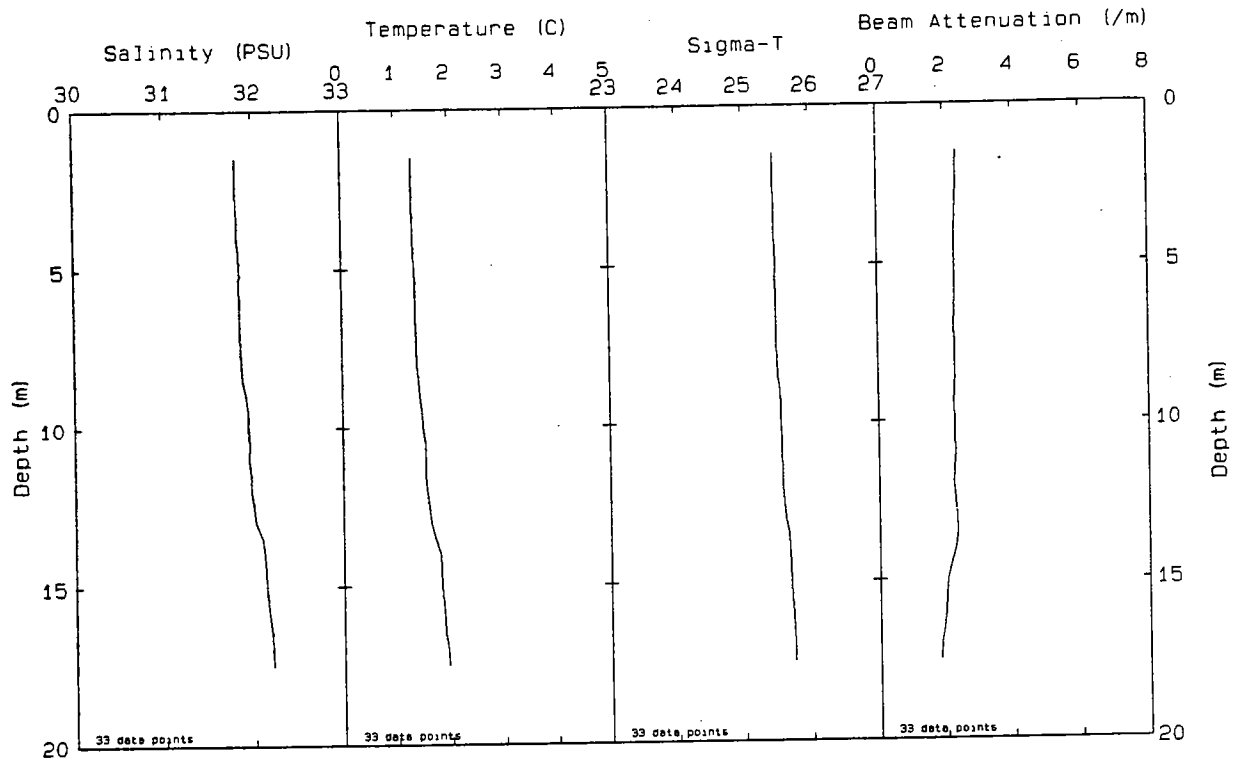
Station: F10 File: W9301146.PAB Date: 02-25-1993 Time: 19:23:29

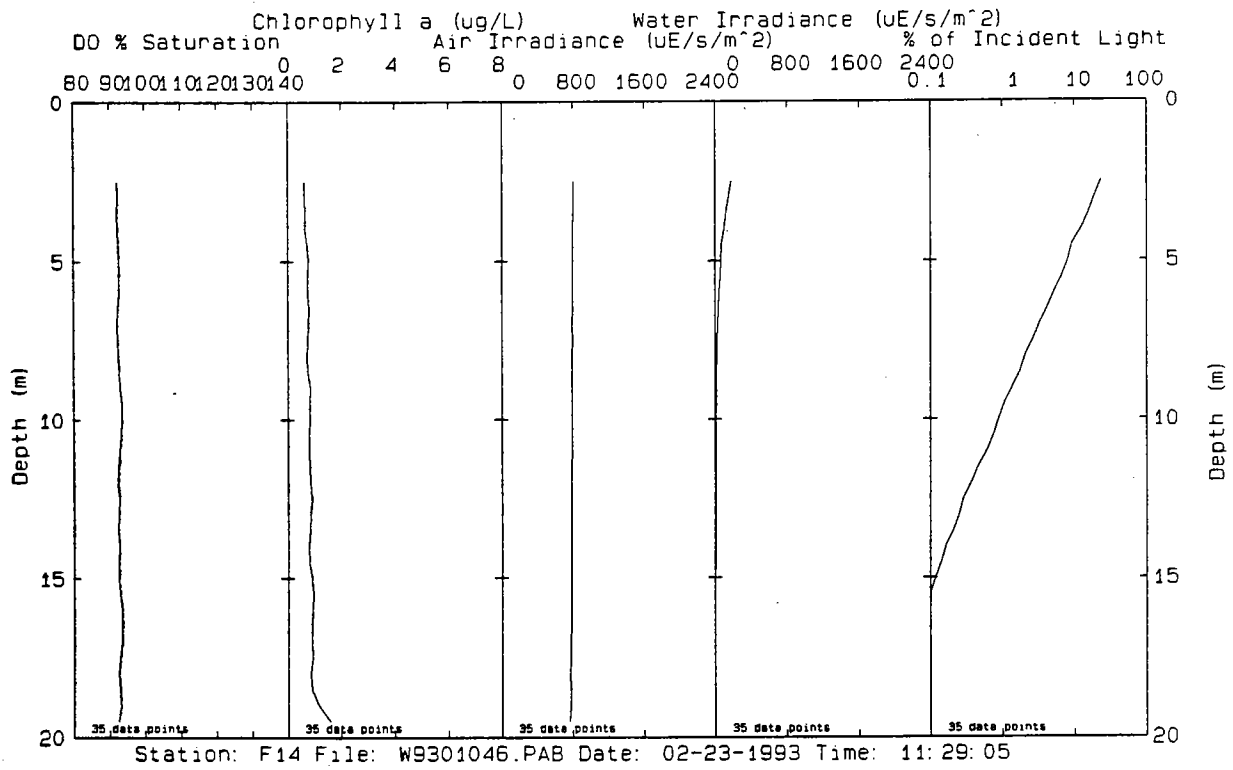
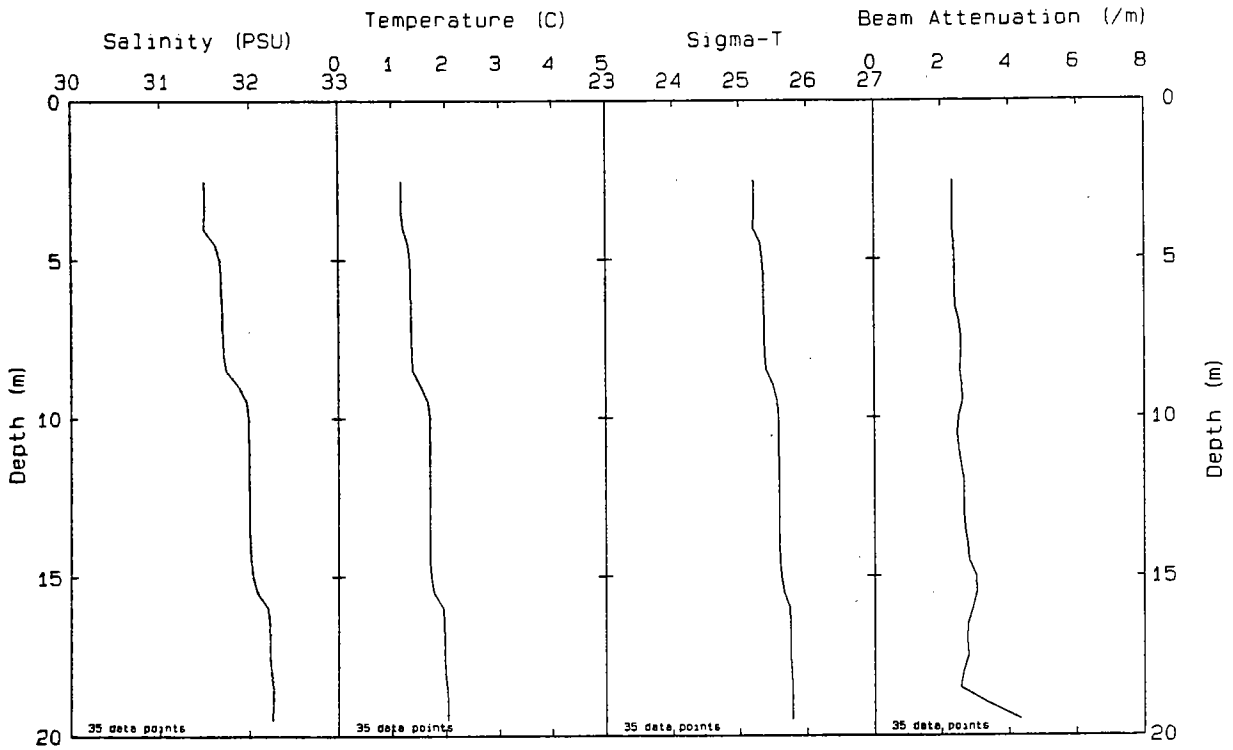


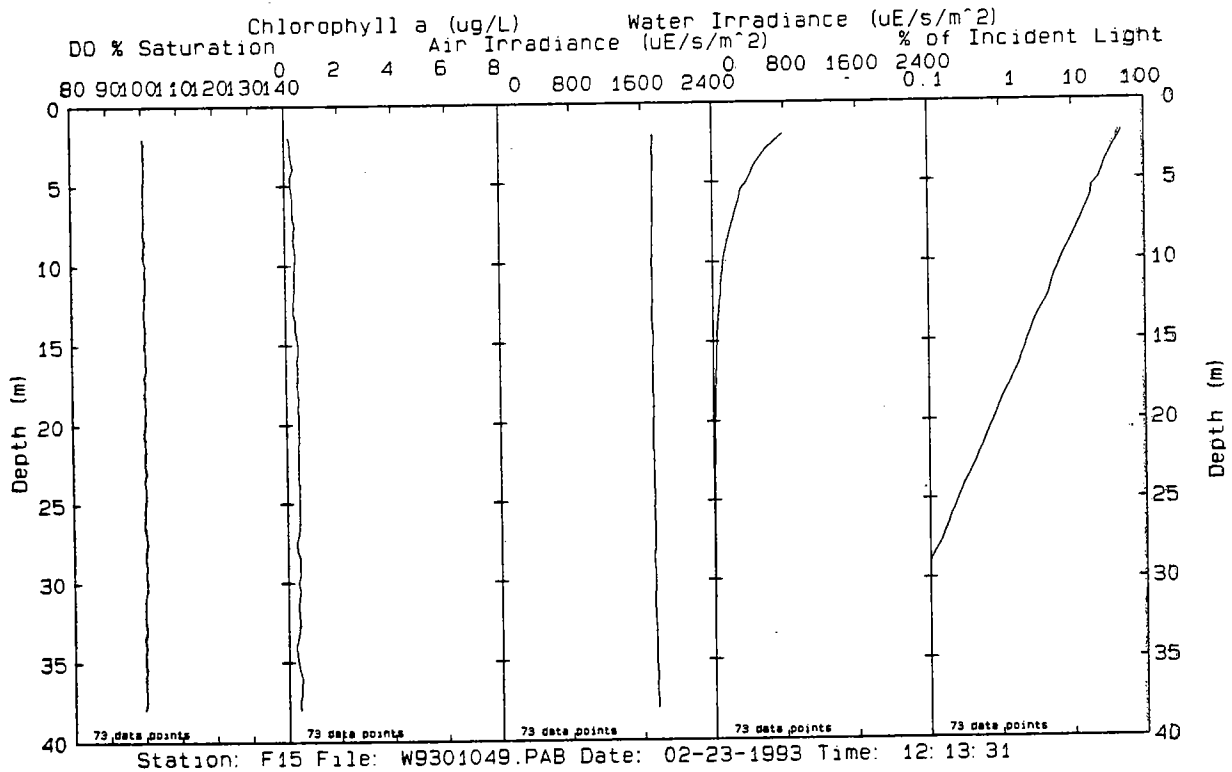
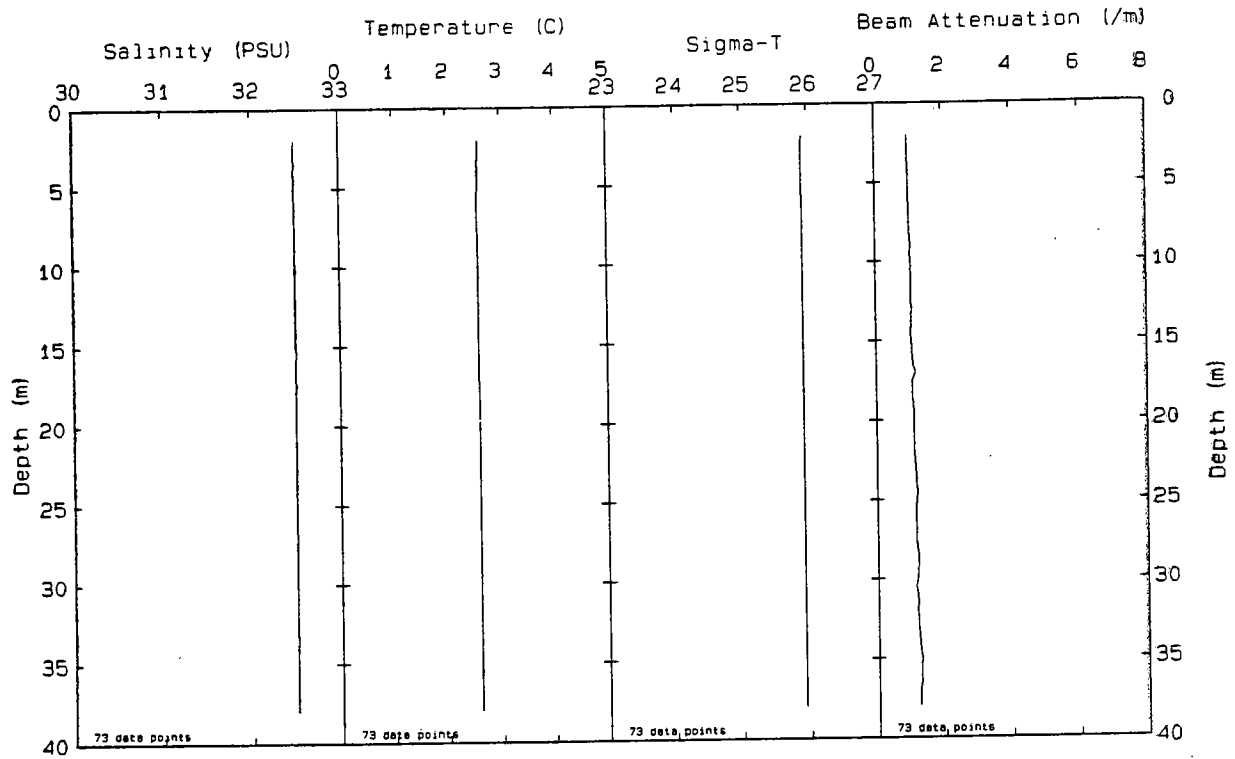
Station: F11 File: W9301149.PAB Date: 02-25-1993 Time: 20:16:41



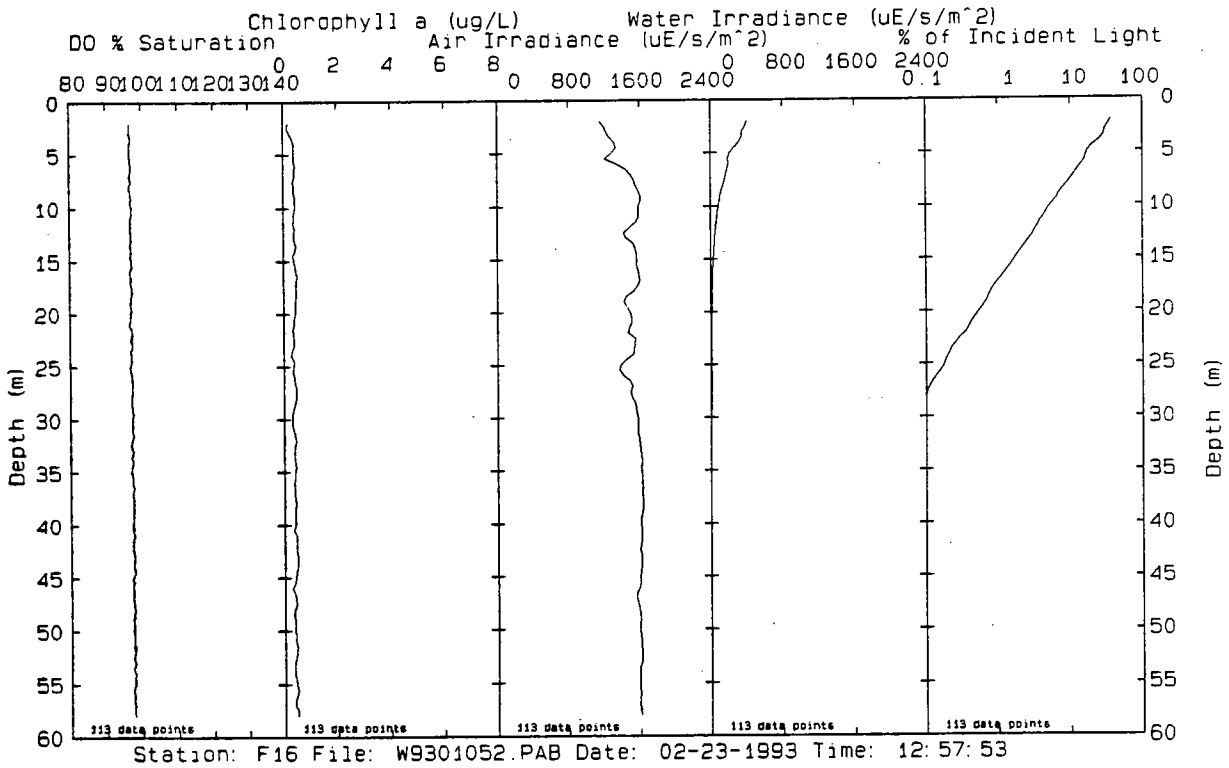
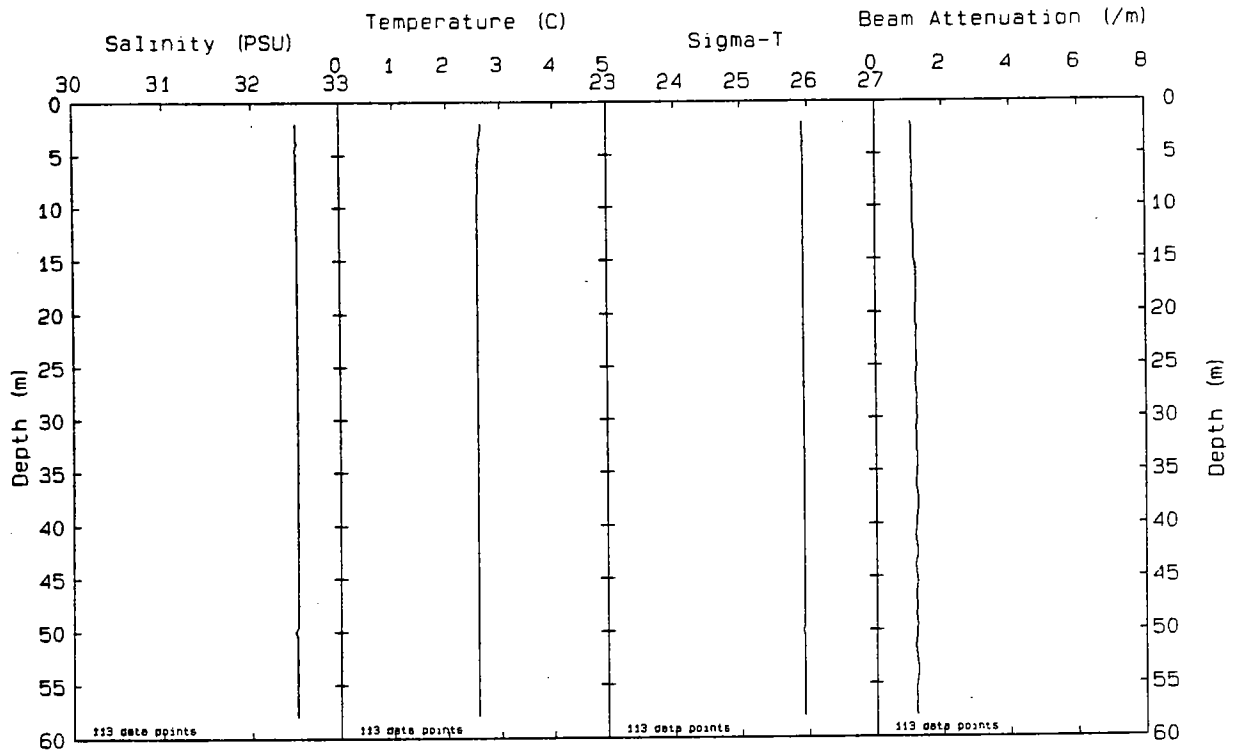
Station: F12 File: W9301107.PAB Date: 02-24-1993 Time: 14:35:01

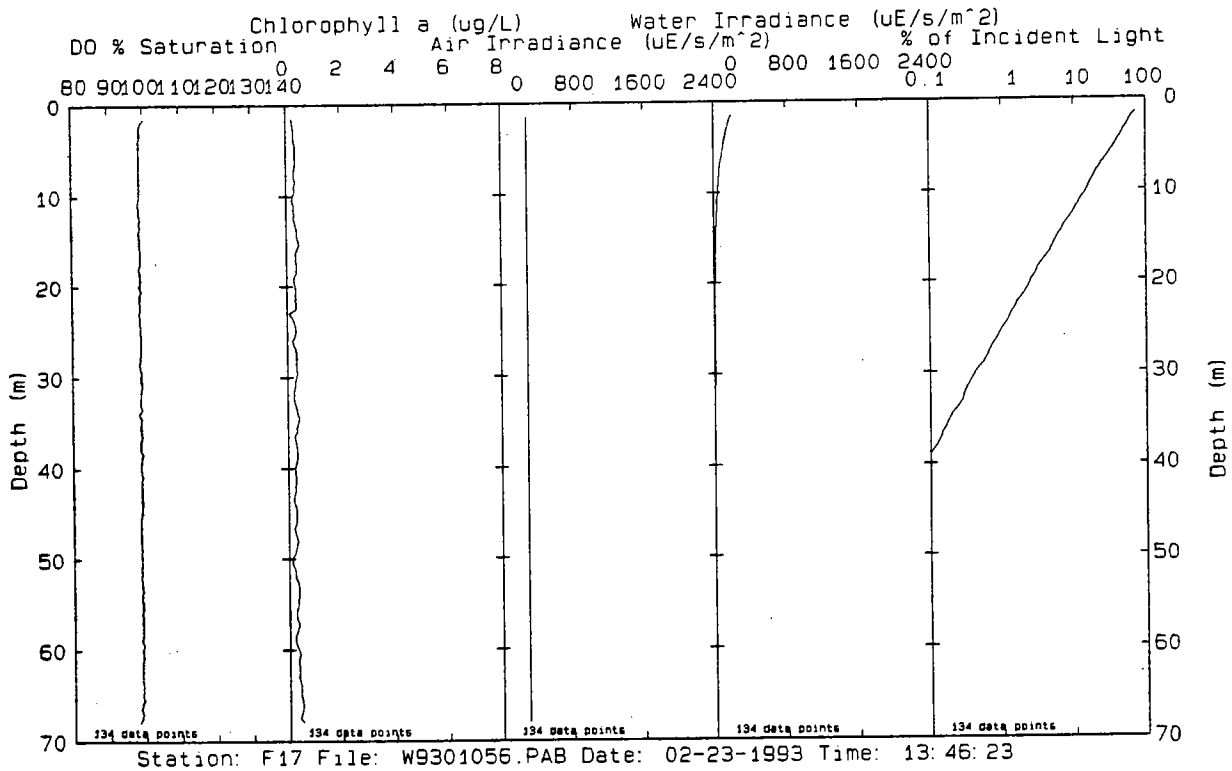
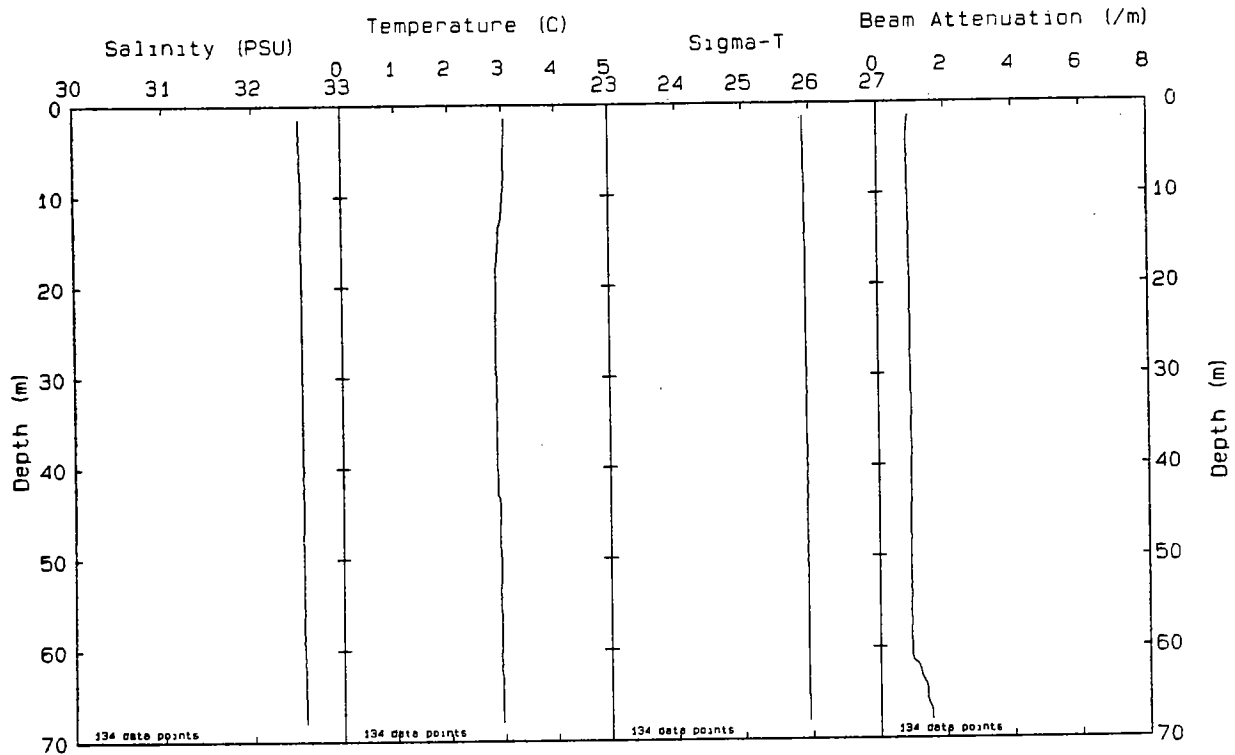


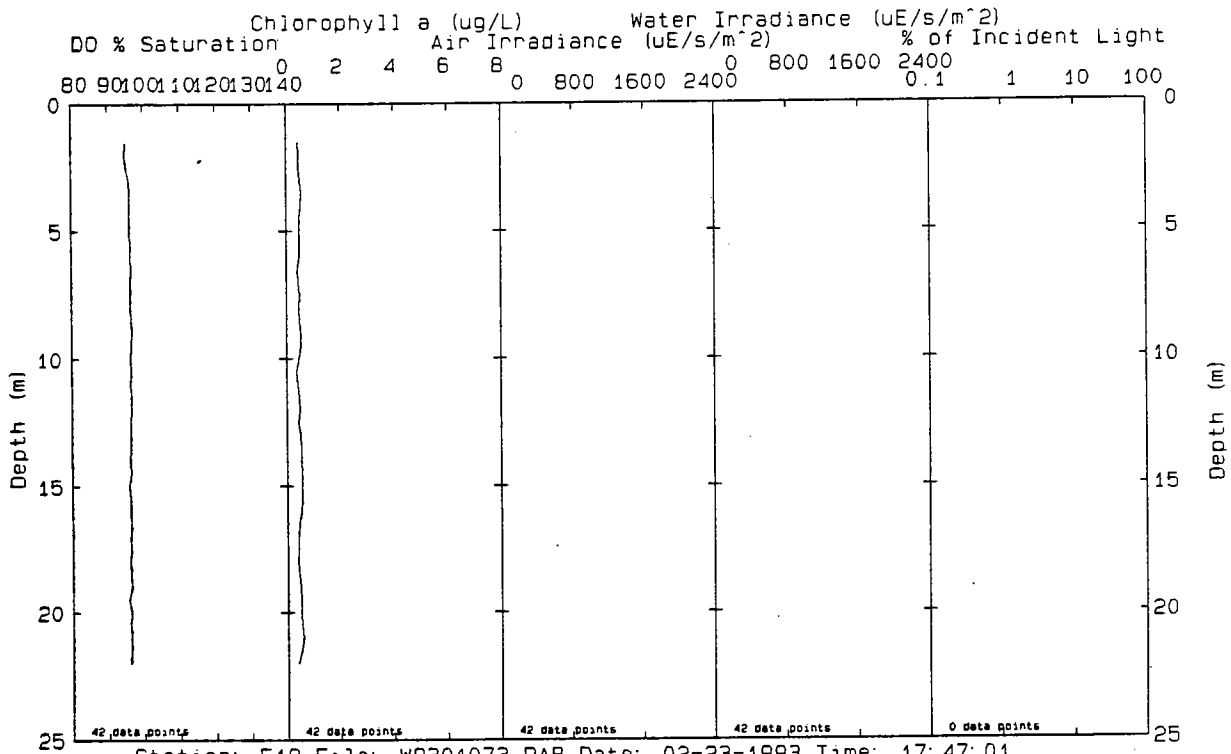
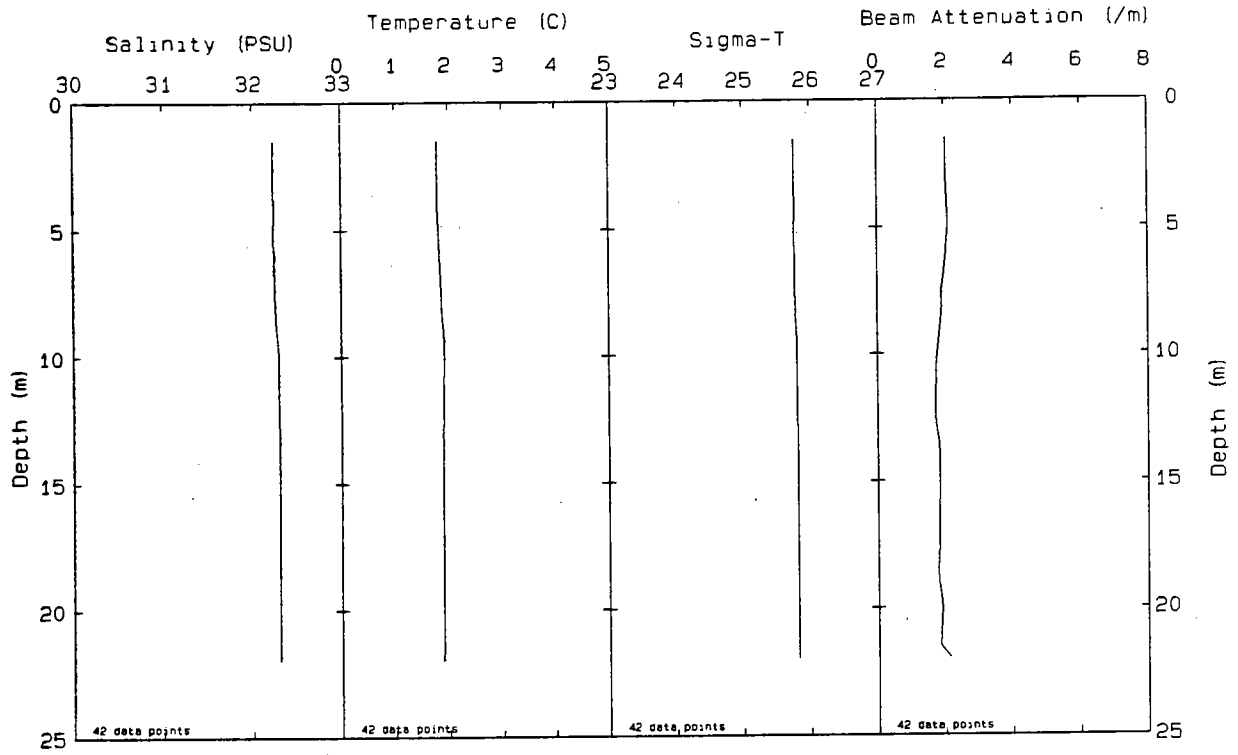




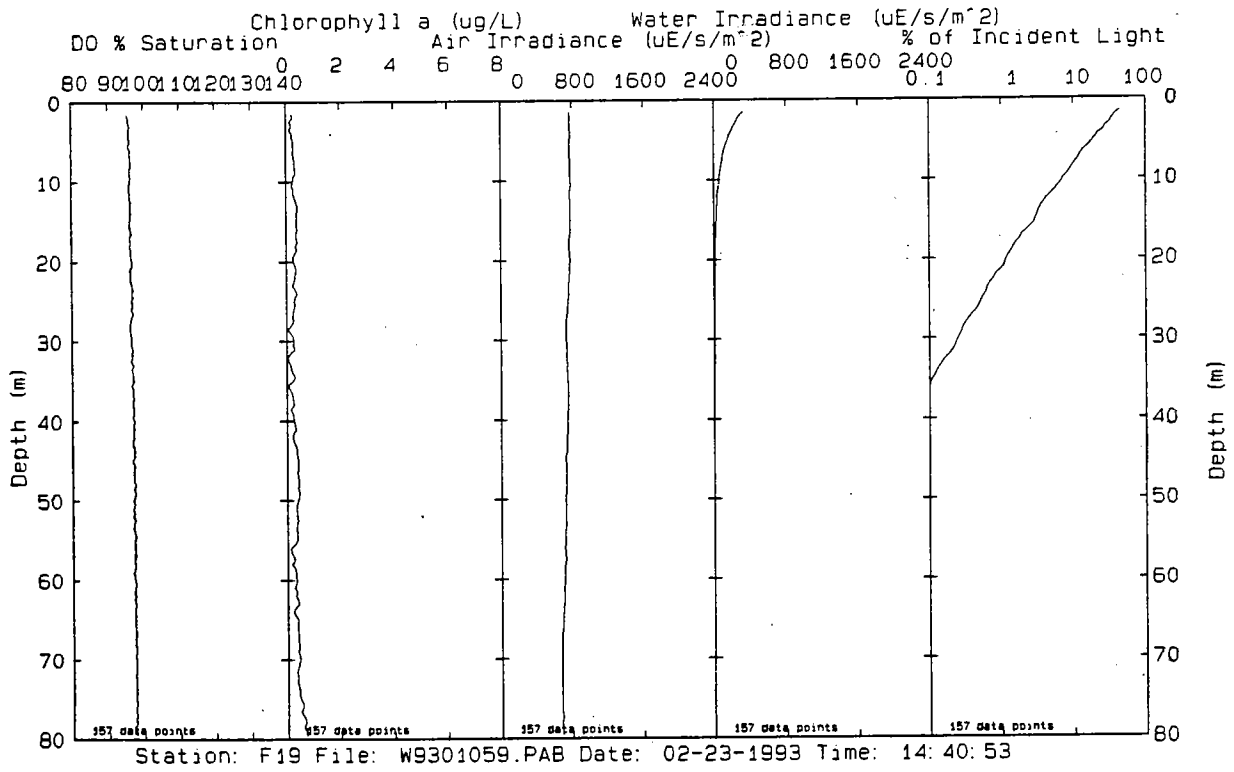
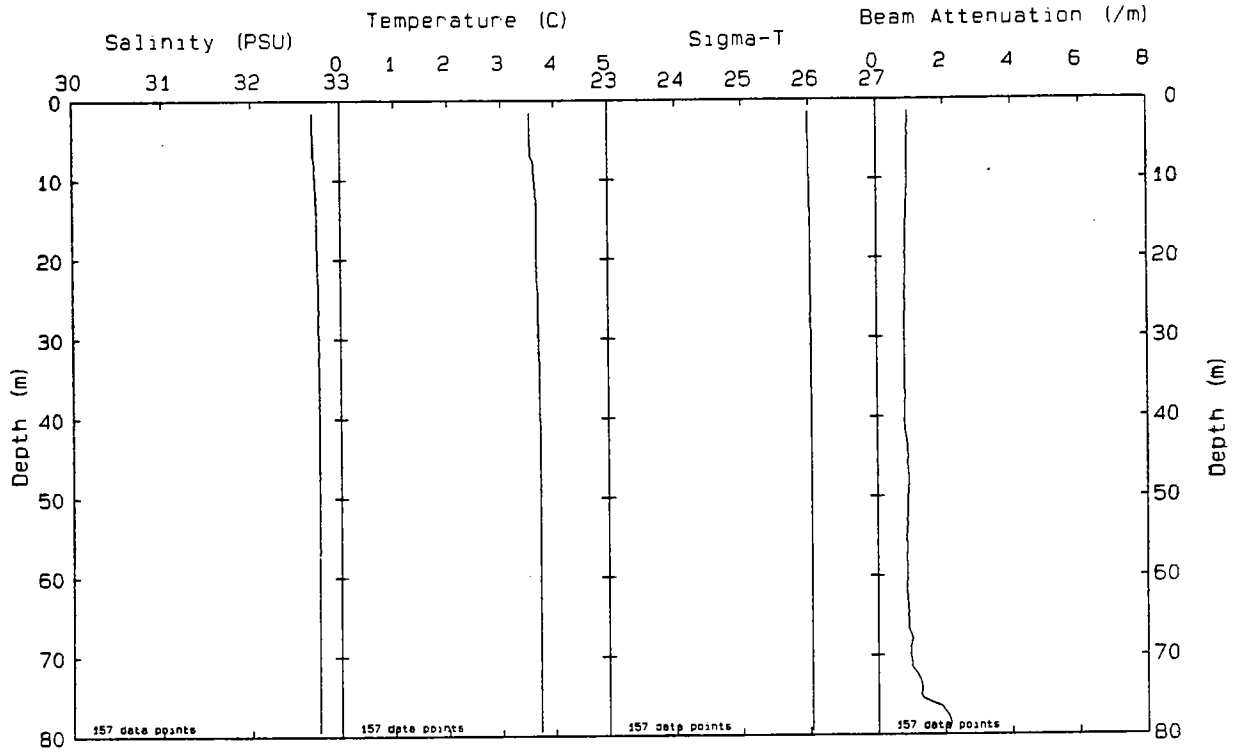
Station: F15 File: W9301049.PAB Date: 02-23-1993 Time: 12:13:31

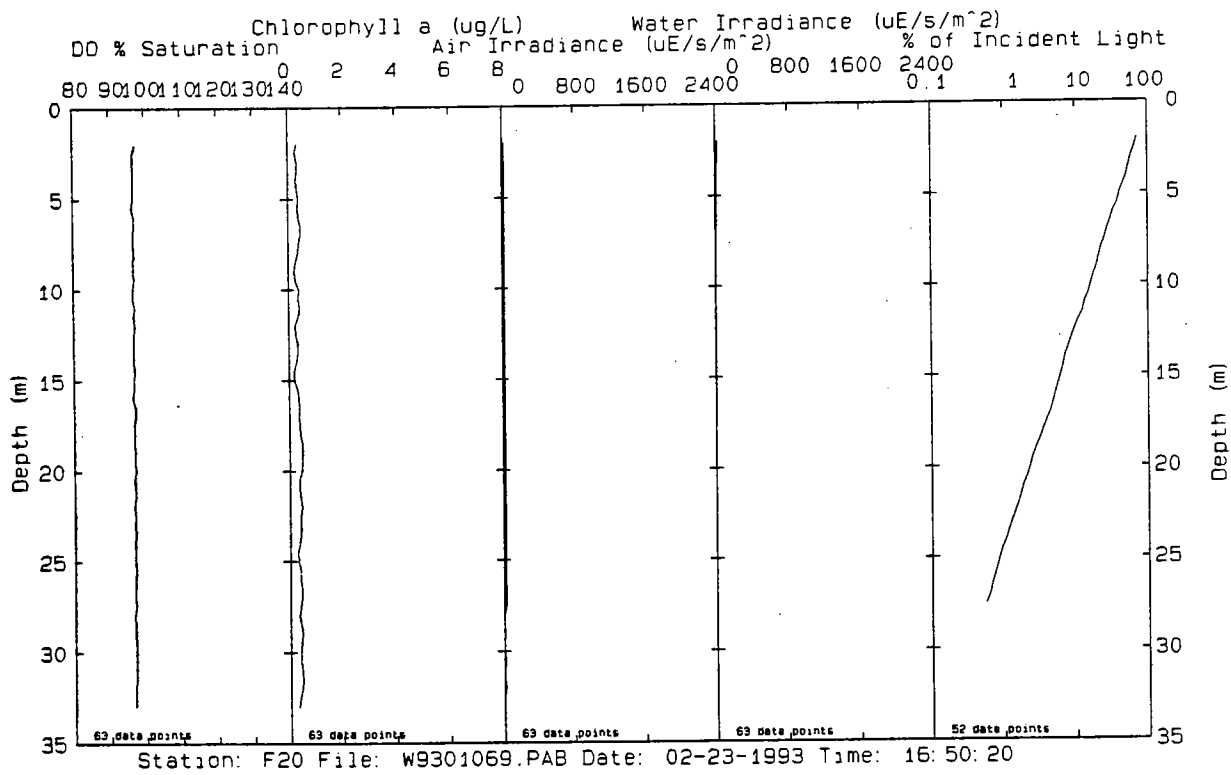
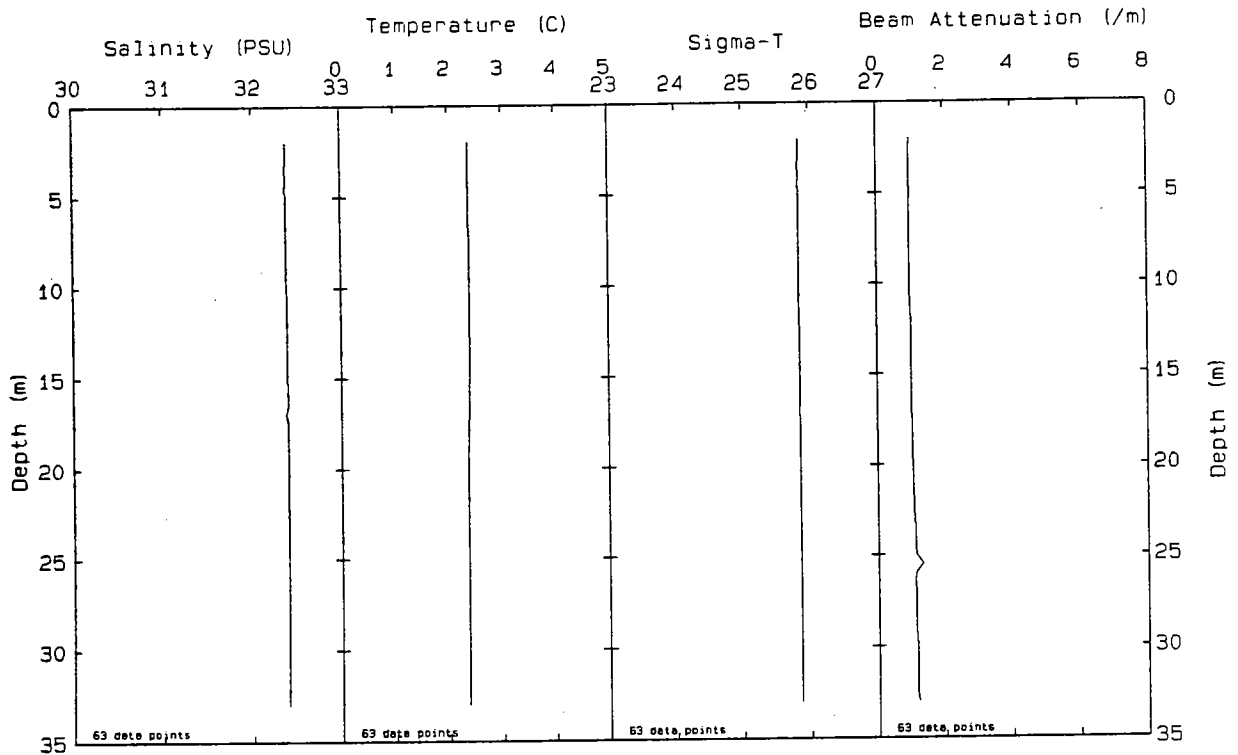


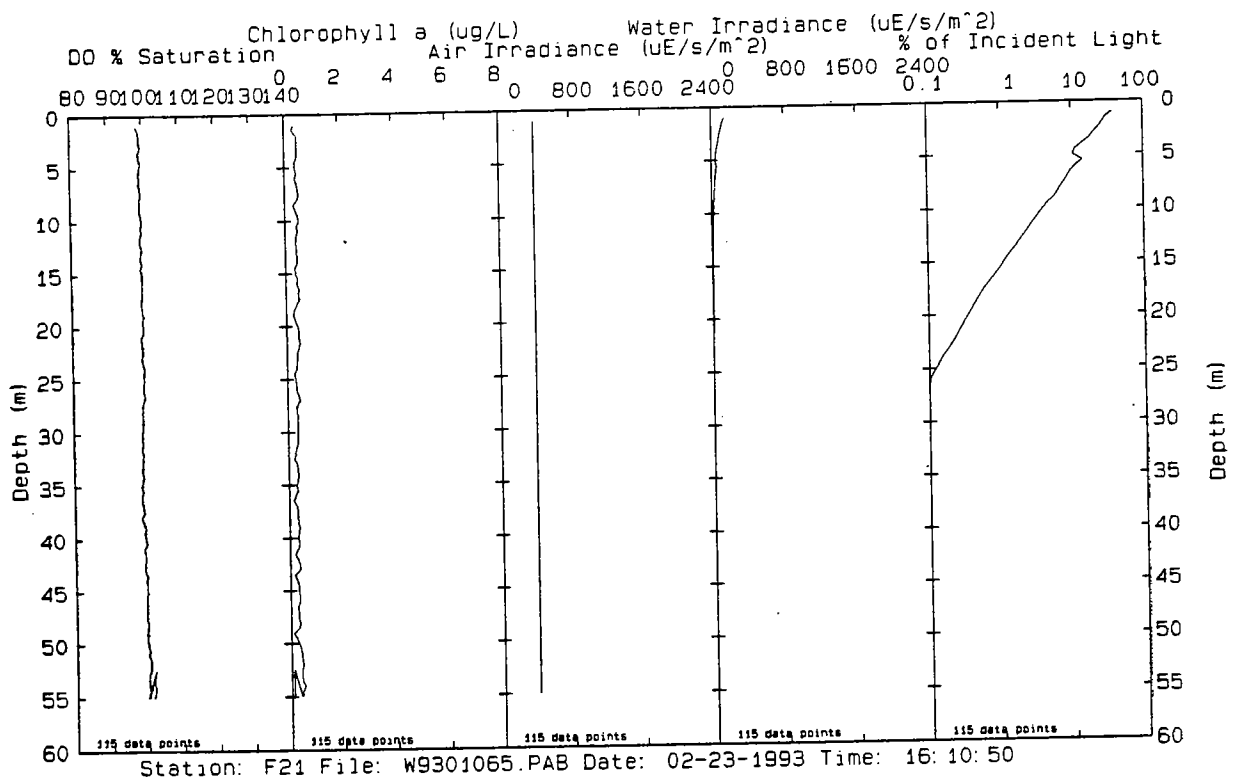
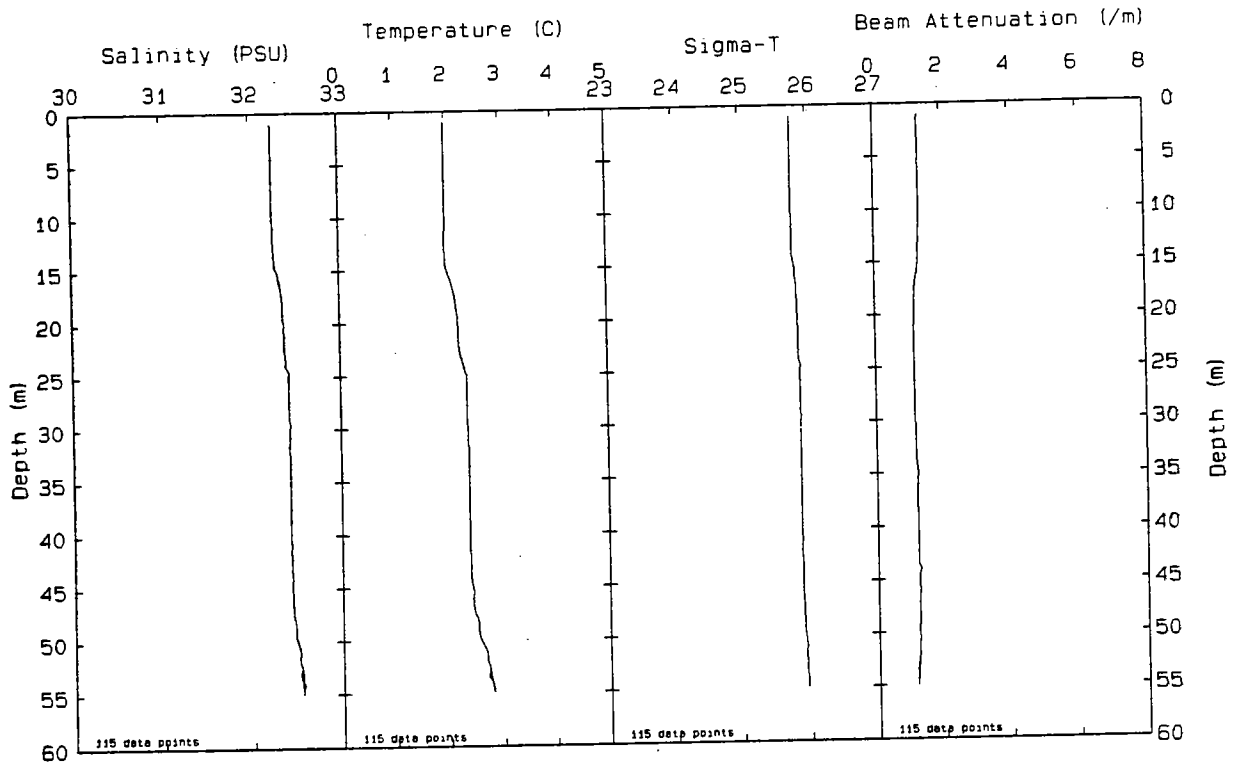


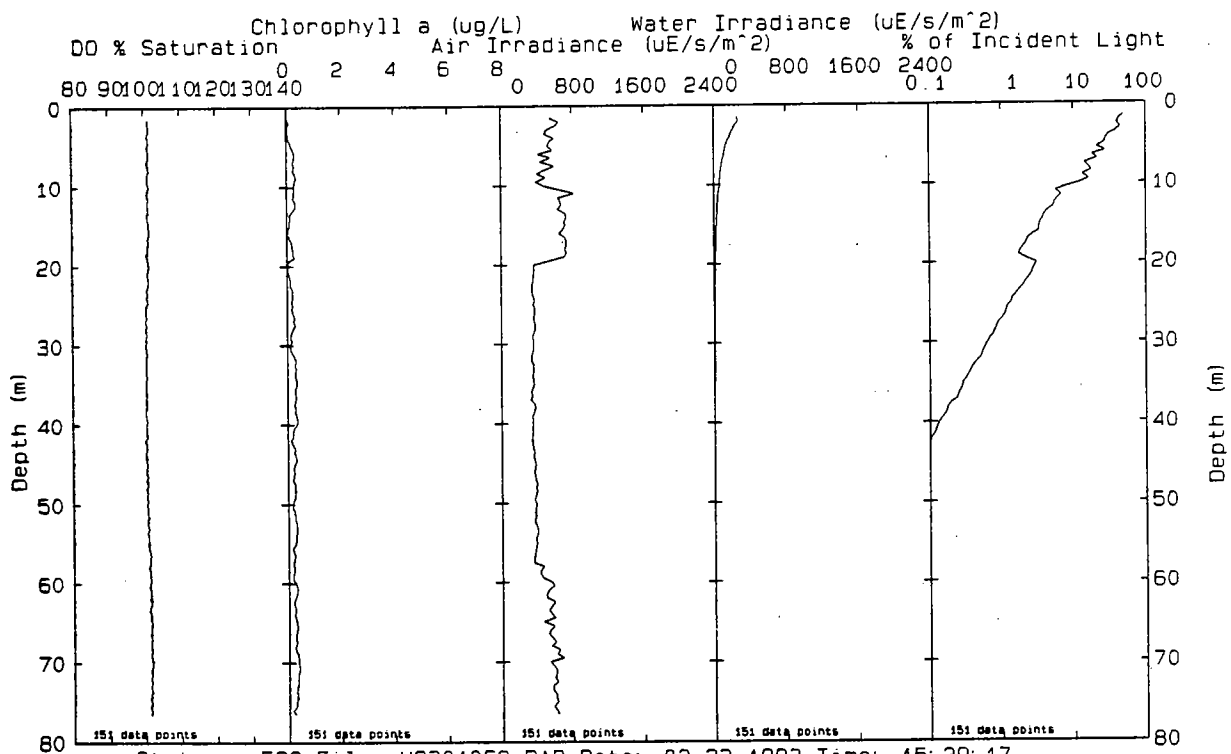
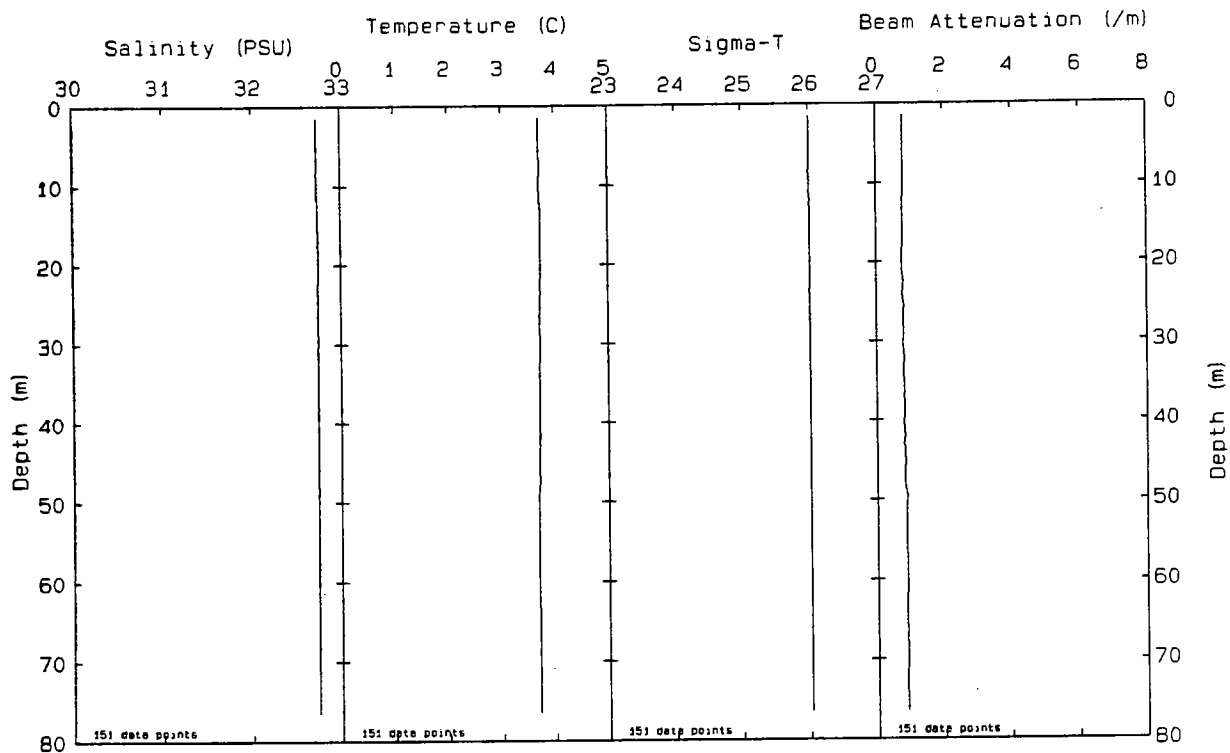


Station: F18 File: W9301073.PAB Date: 02-23-1993 Time: 17: 47: 01

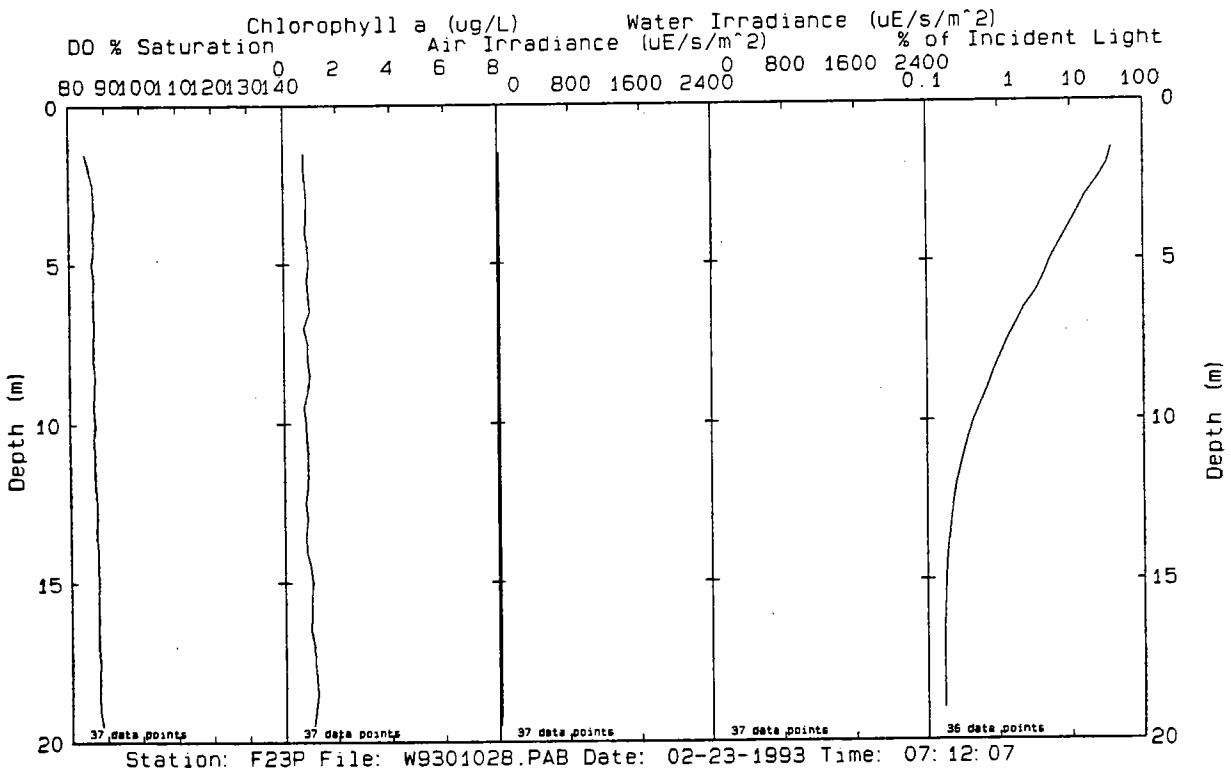
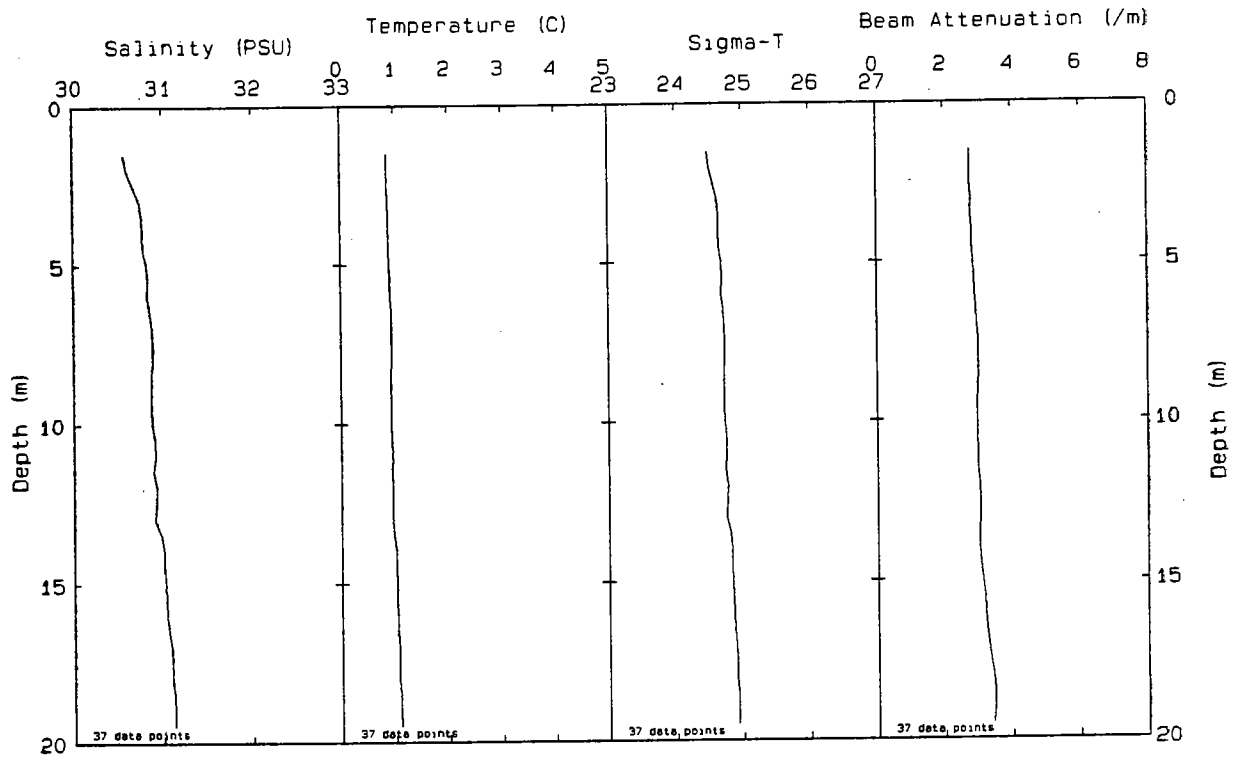


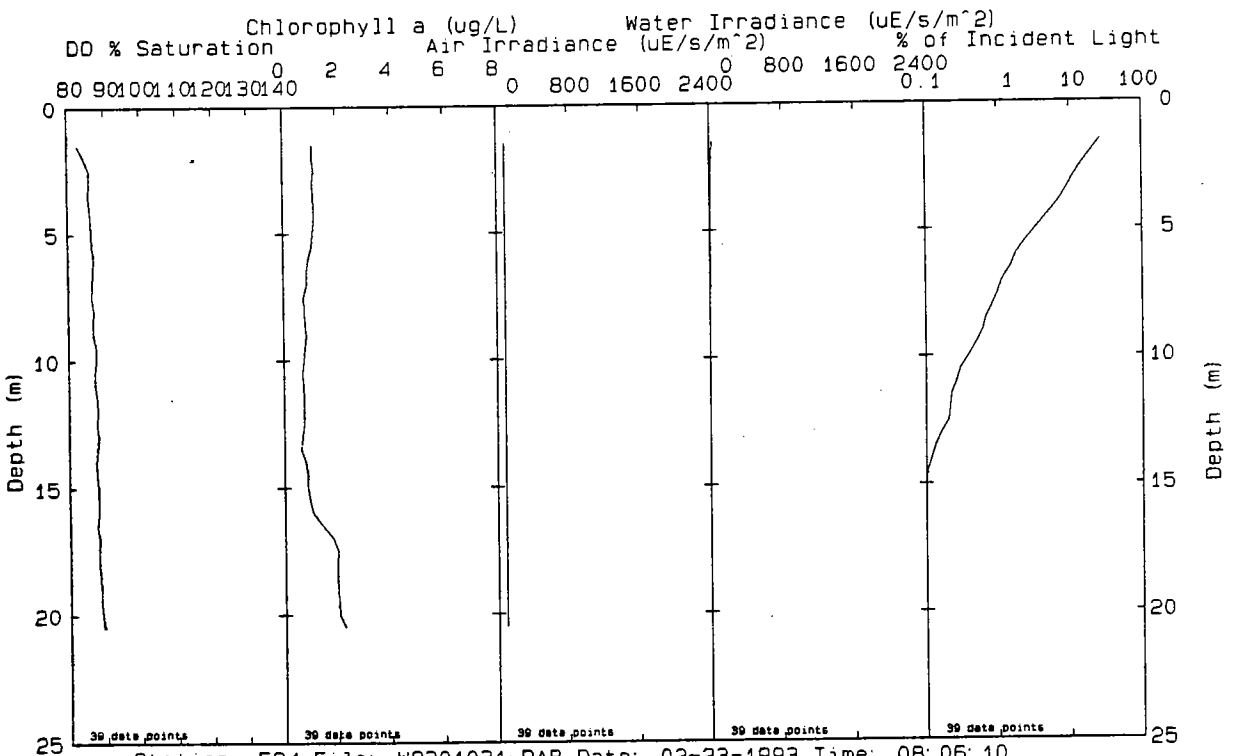
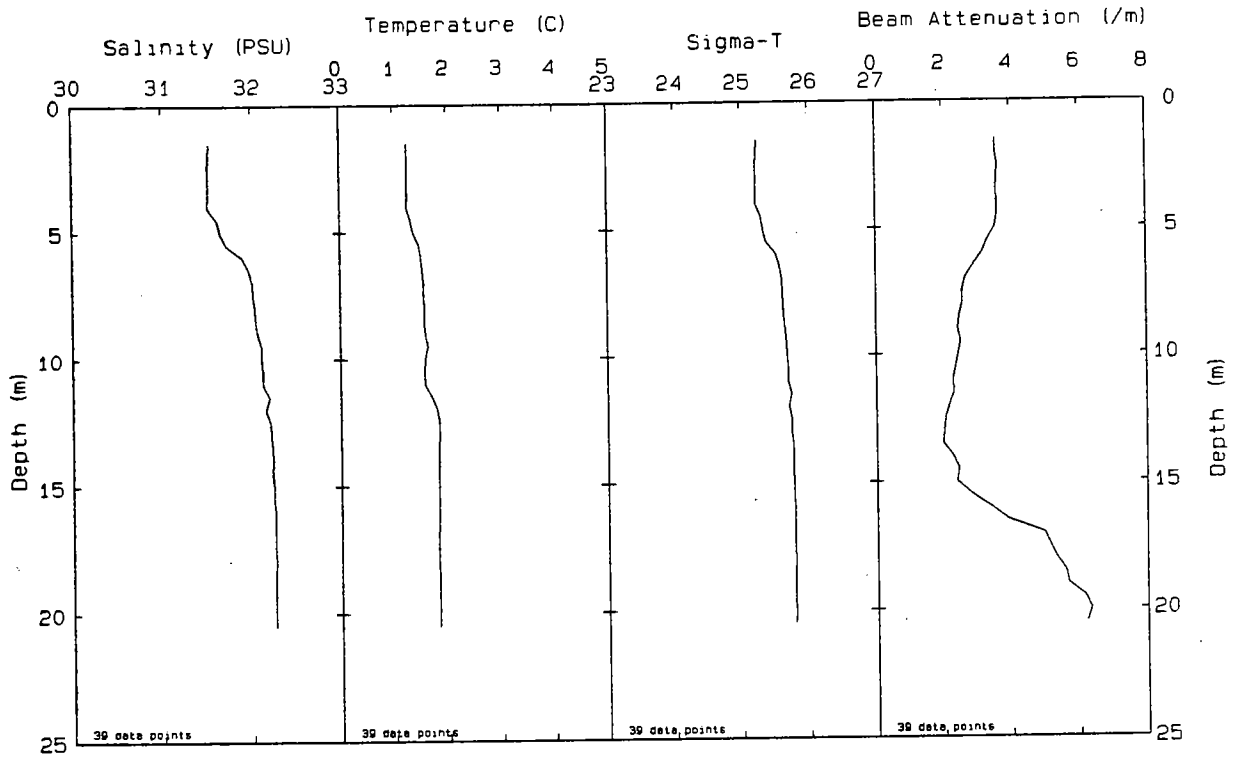




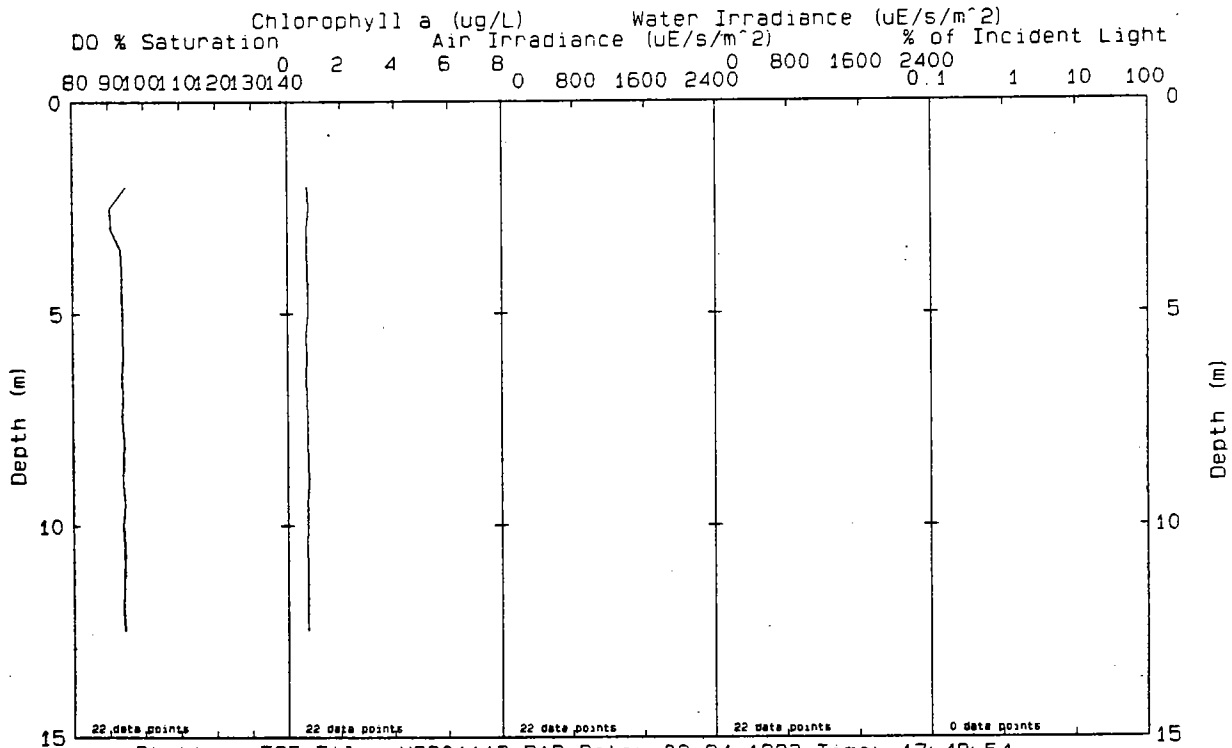
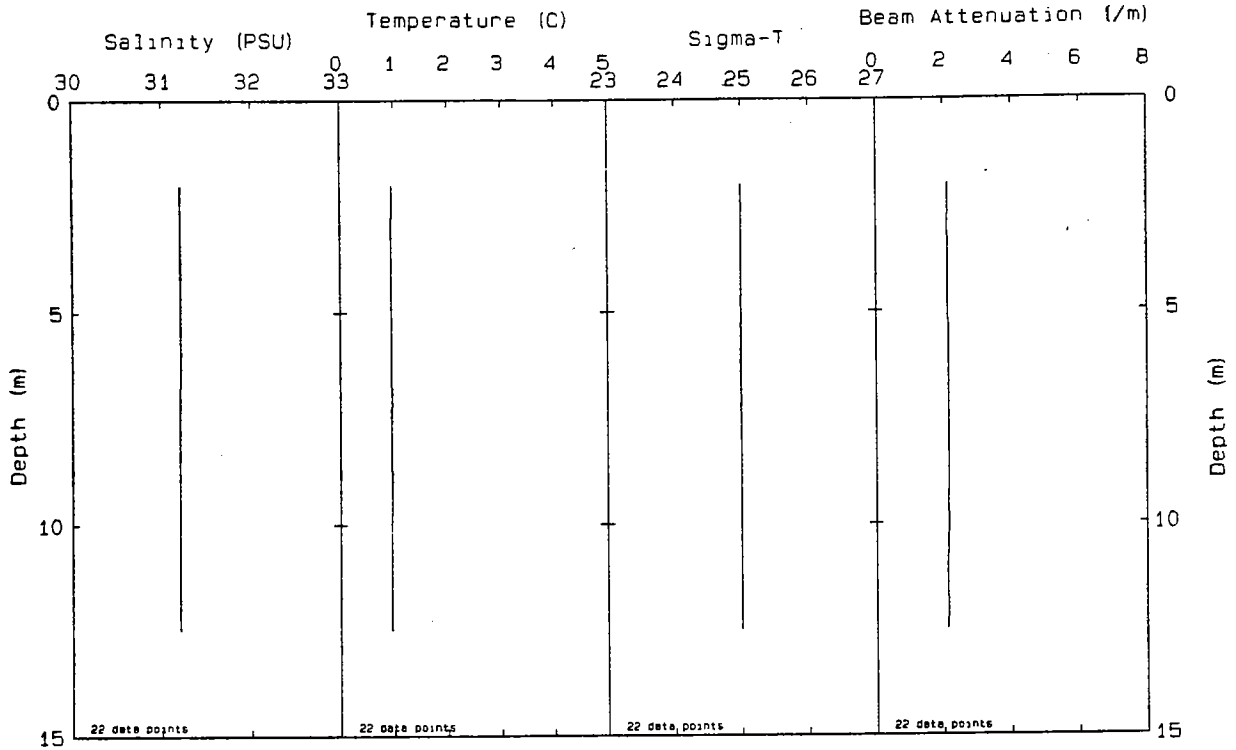


Station: F22 File: W9301062.PAB Date: 02-23-1993 Time: 15:29:17

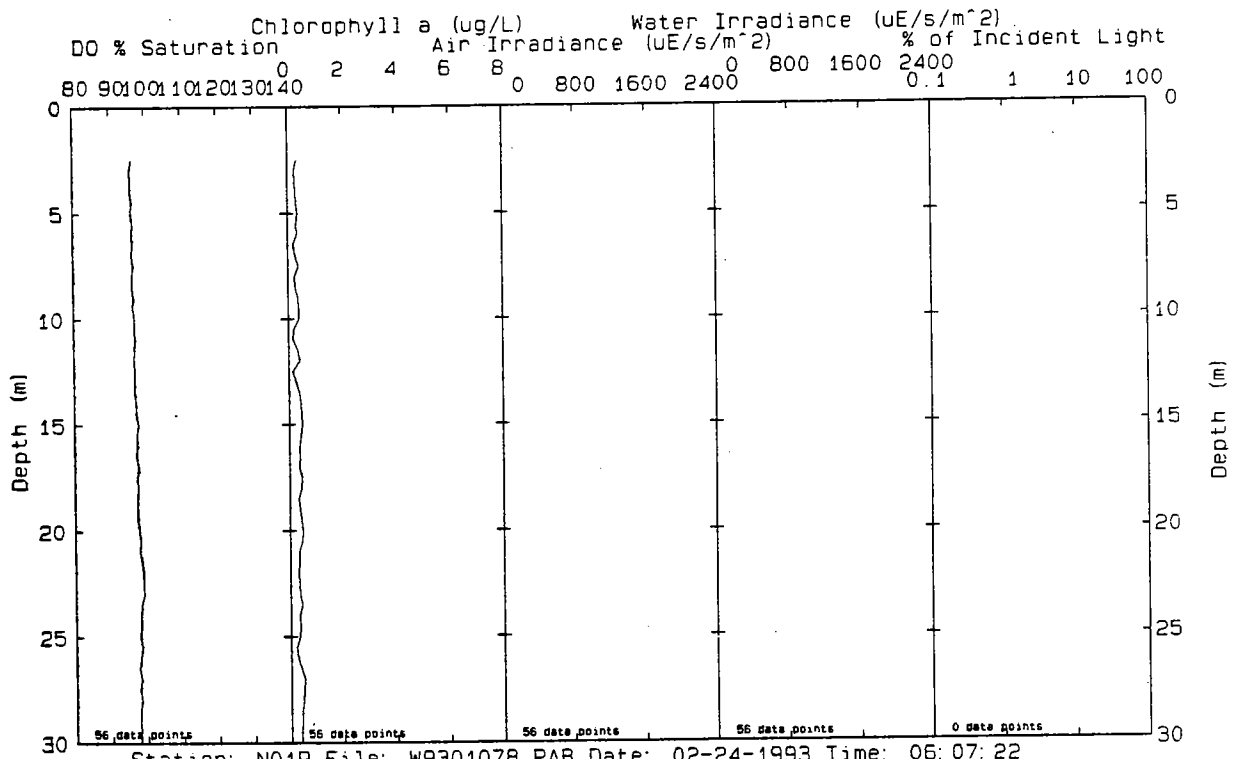
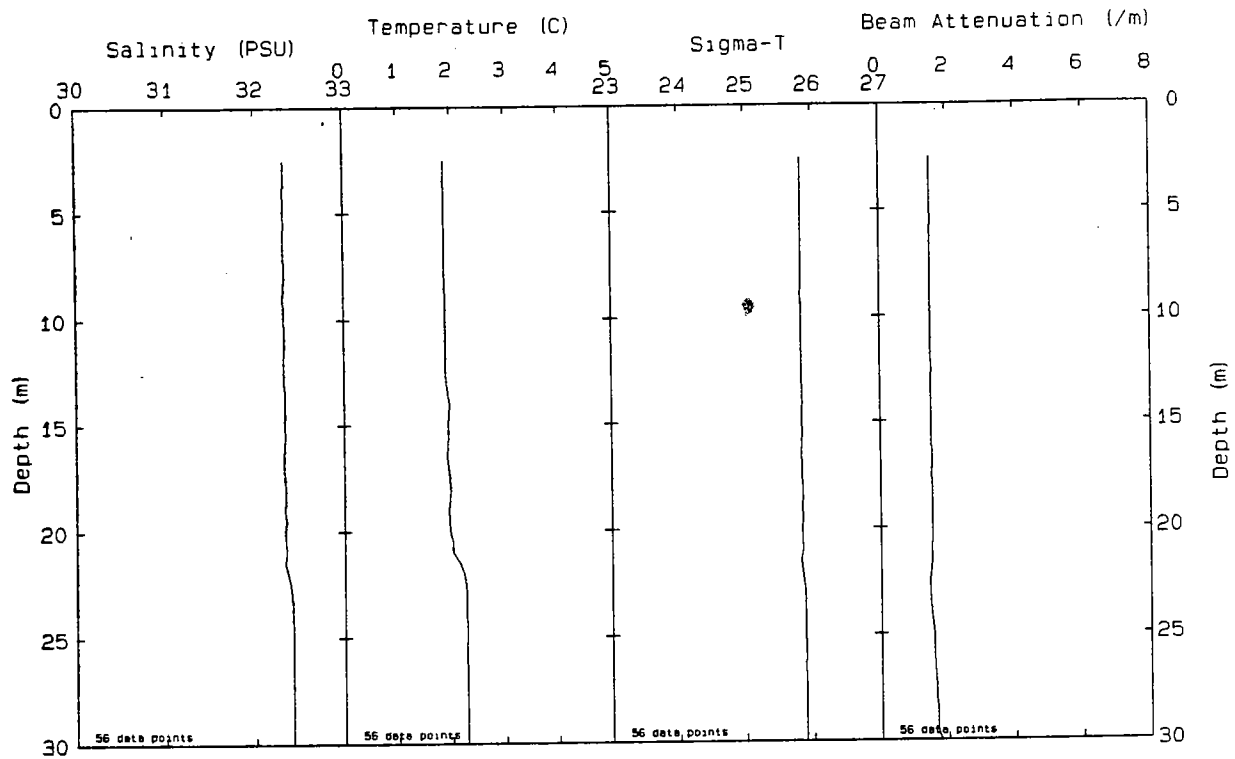




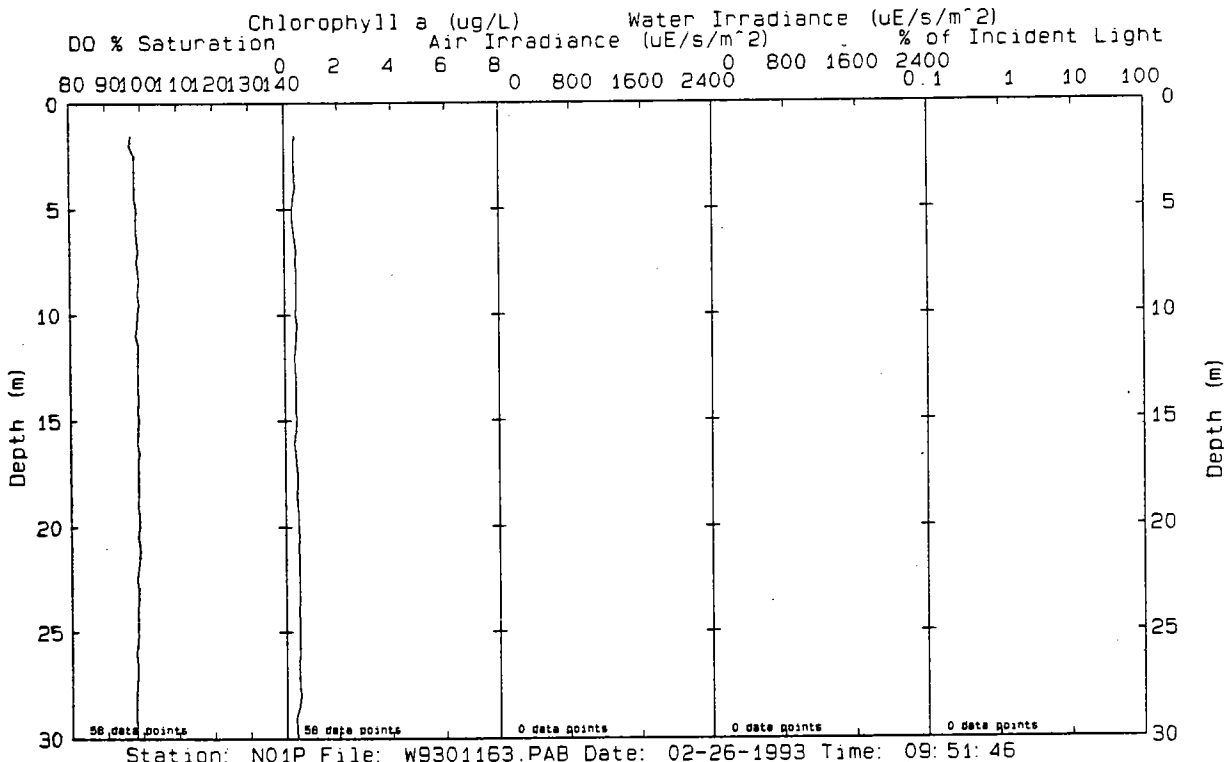
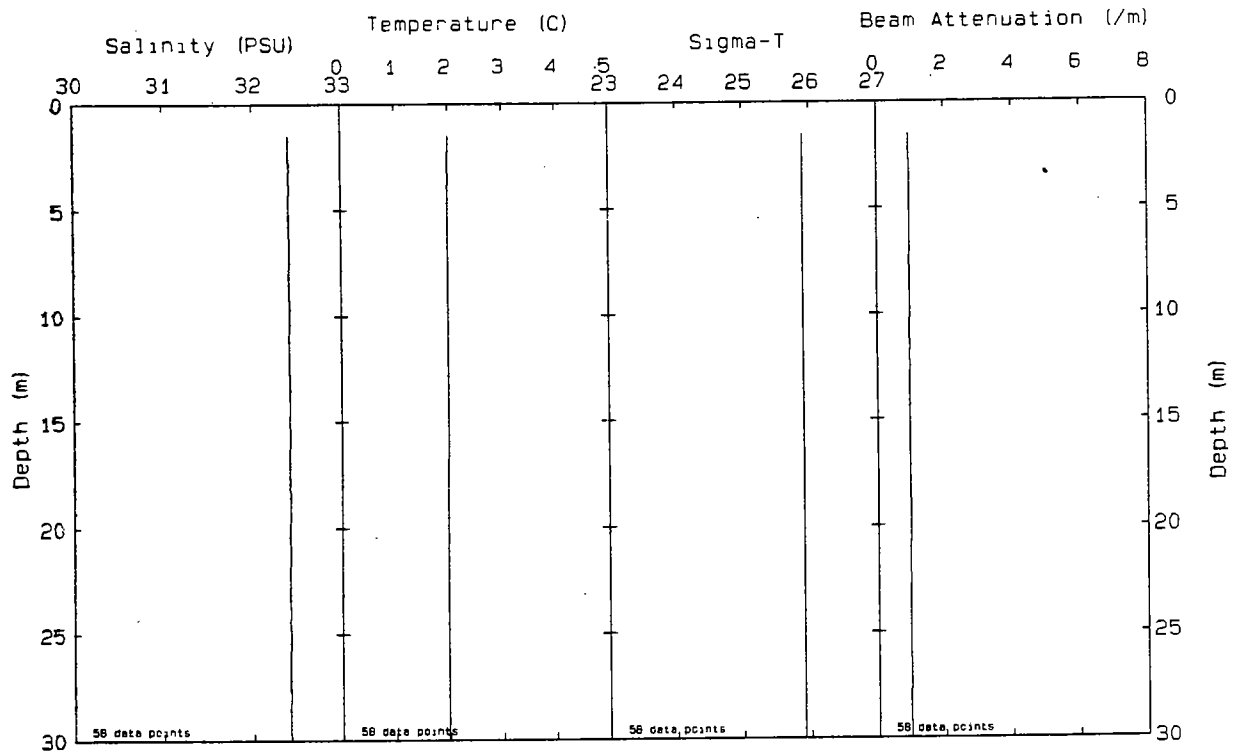
Station: F24 File: W9301031.PAB Date: 02-23-1993 Time: 08:06:10



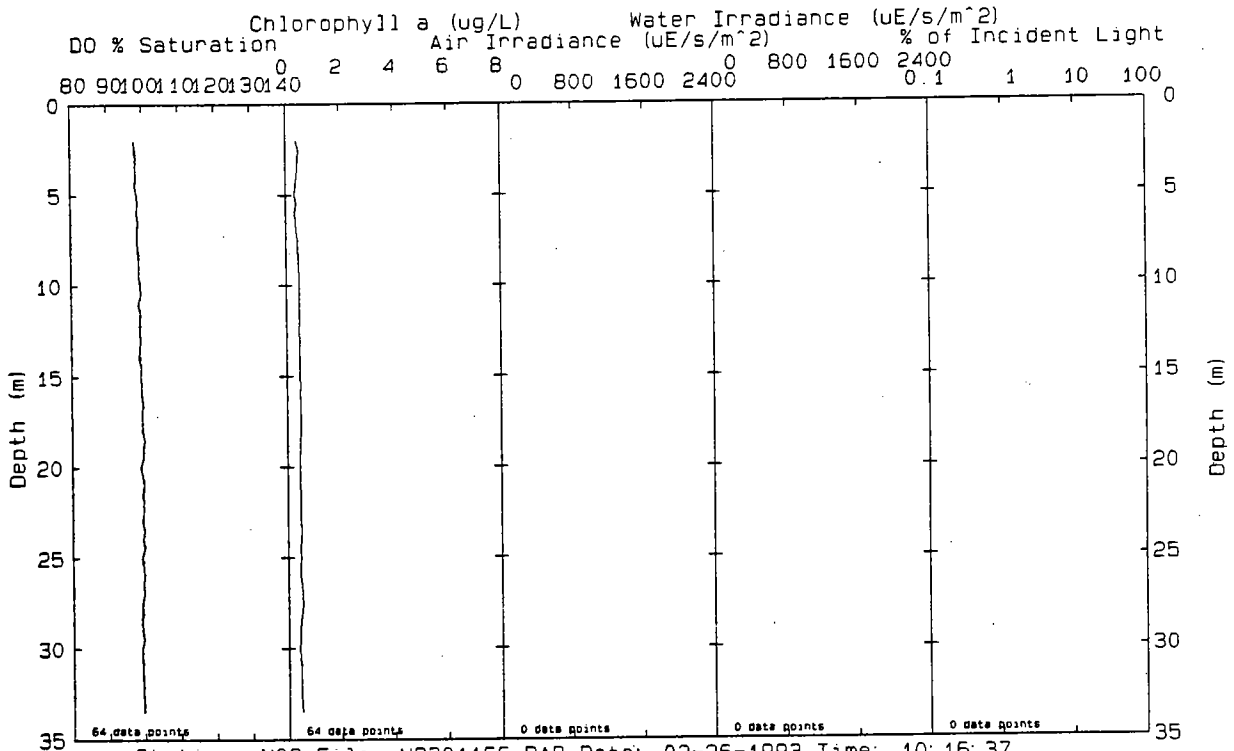
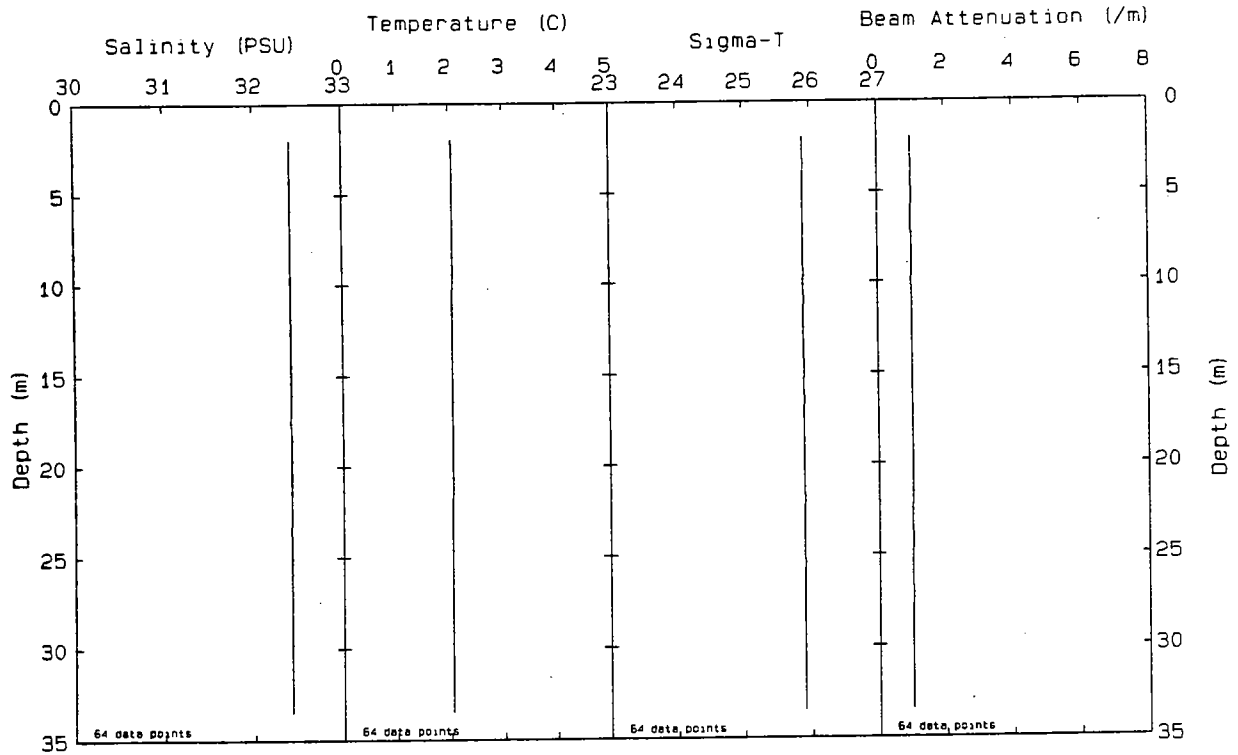
Station: F25 File: W9301113.PAB Date: 02-24-1993 Time: 17:48:54



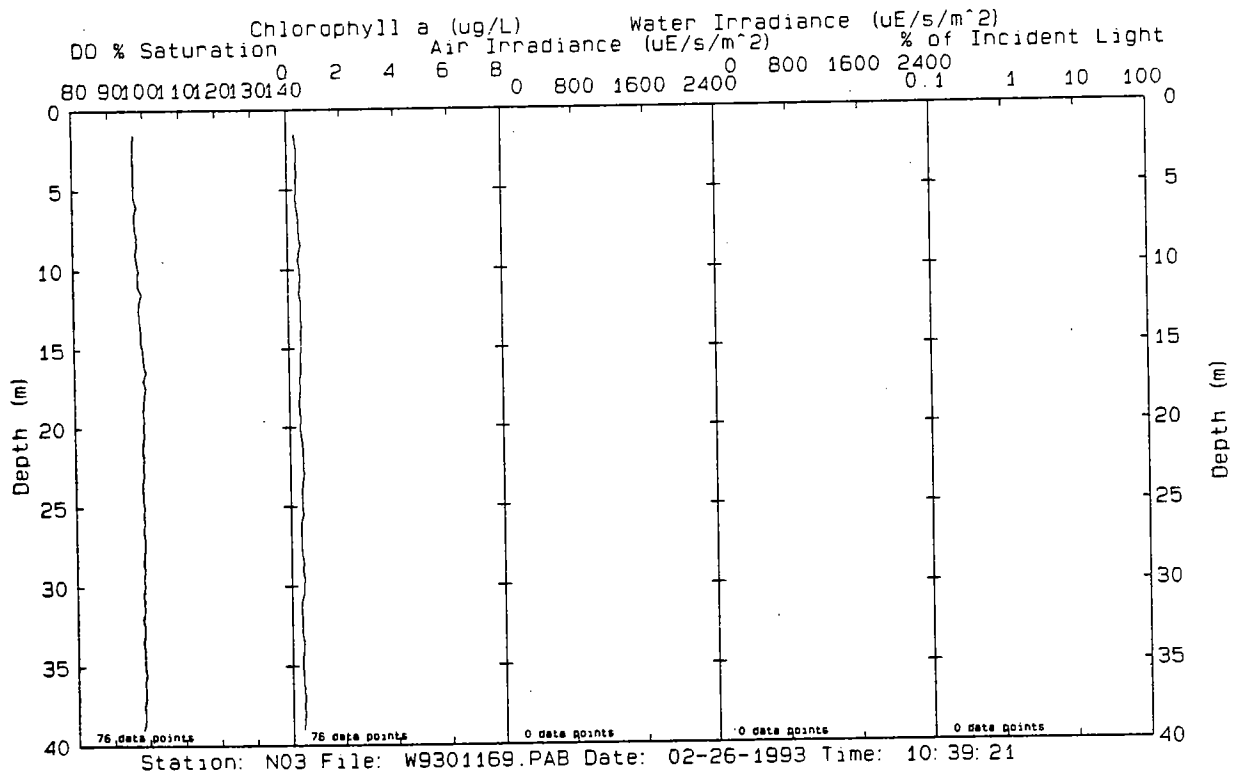
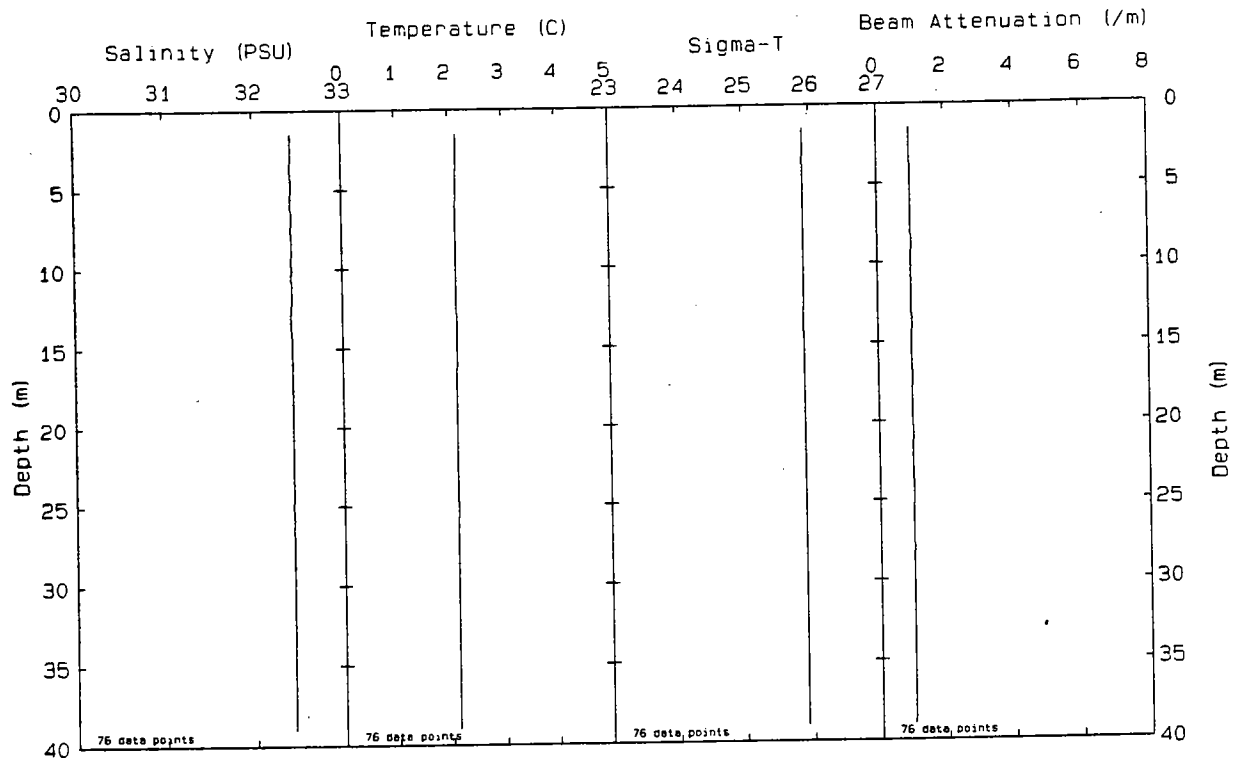
Station: NO1P File: W9301078.PAB Date: 02-24-1993 Time: 06:07:22



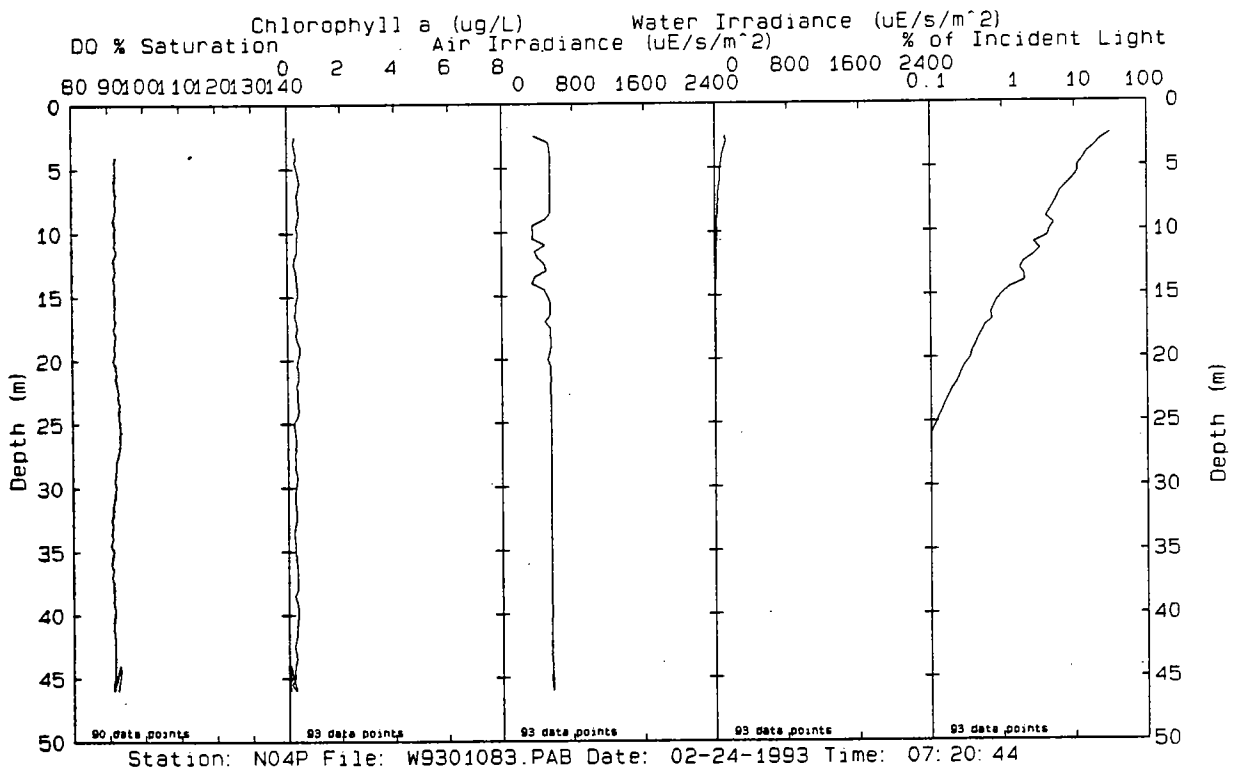
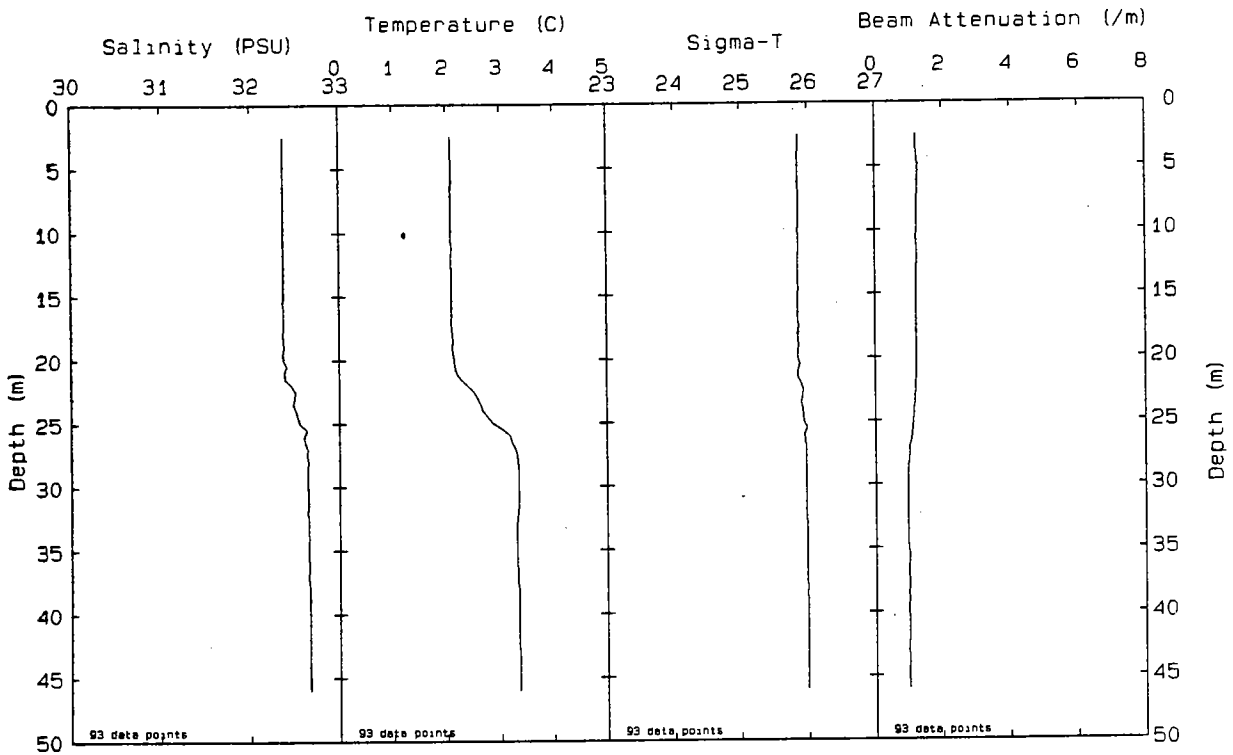
Station: N01P File: W9301163.PAB Date: 02-26-1993 Time: 09:51:46

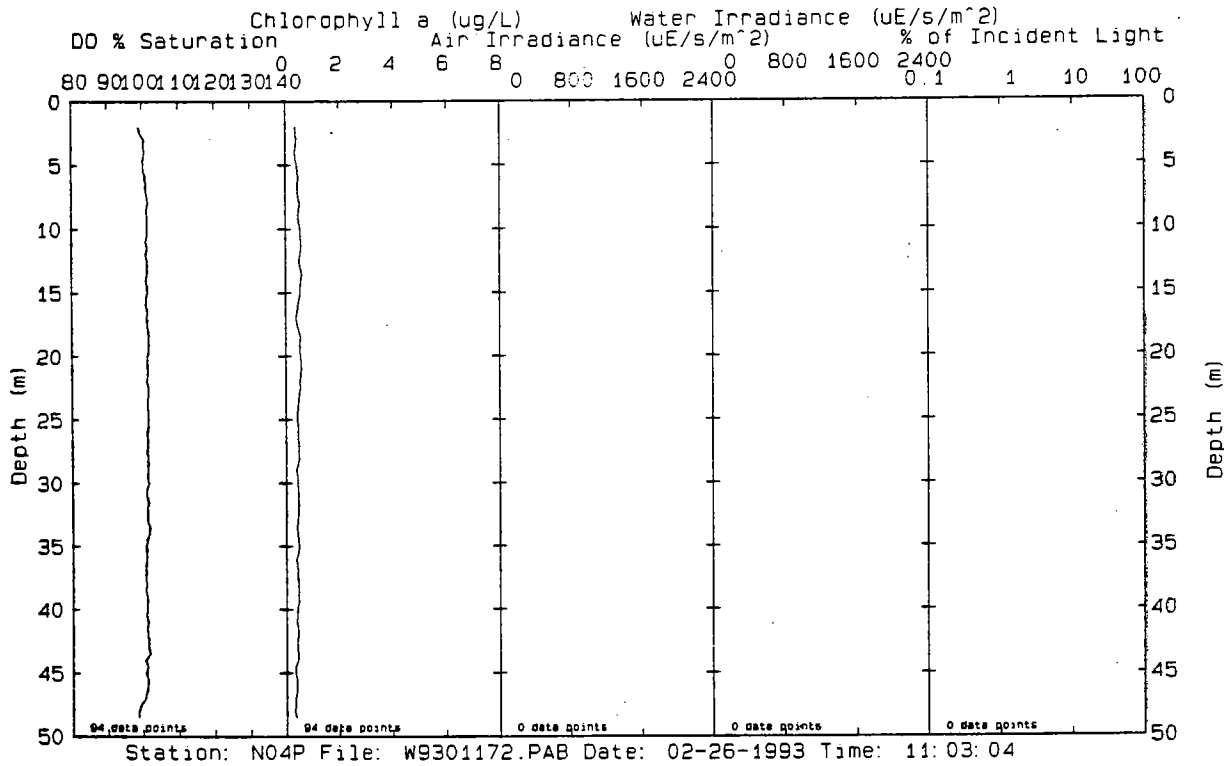
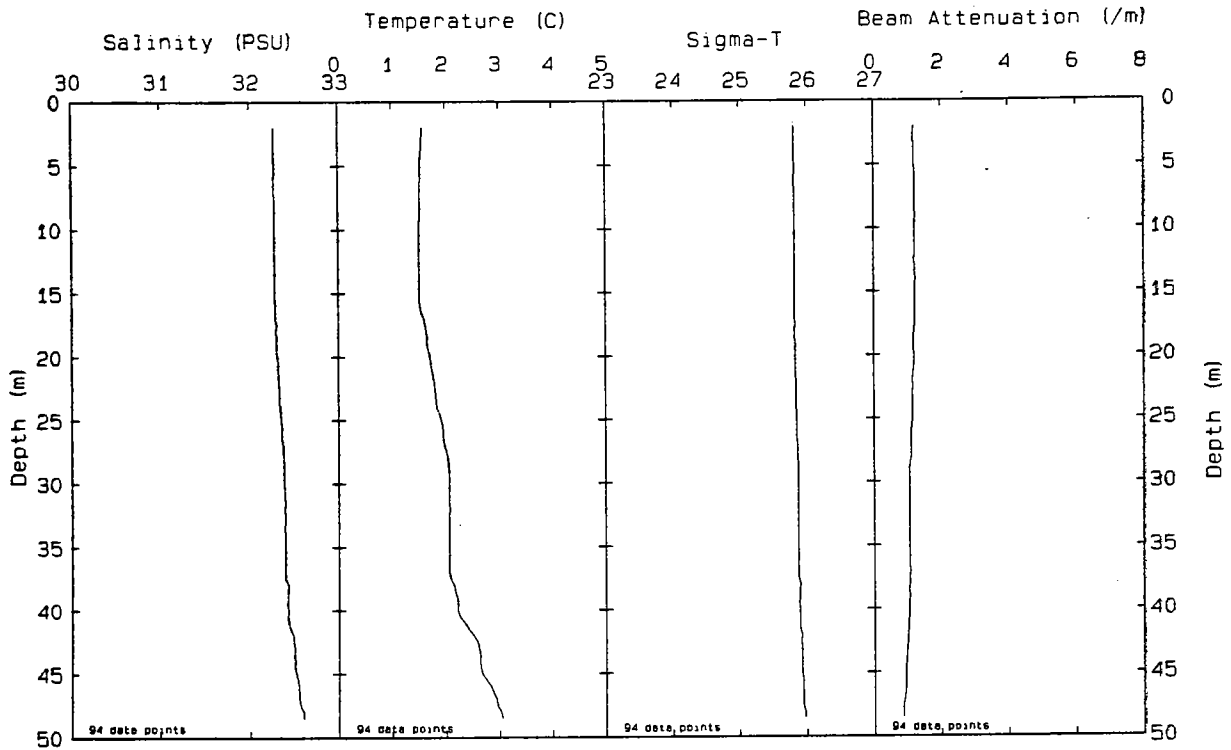


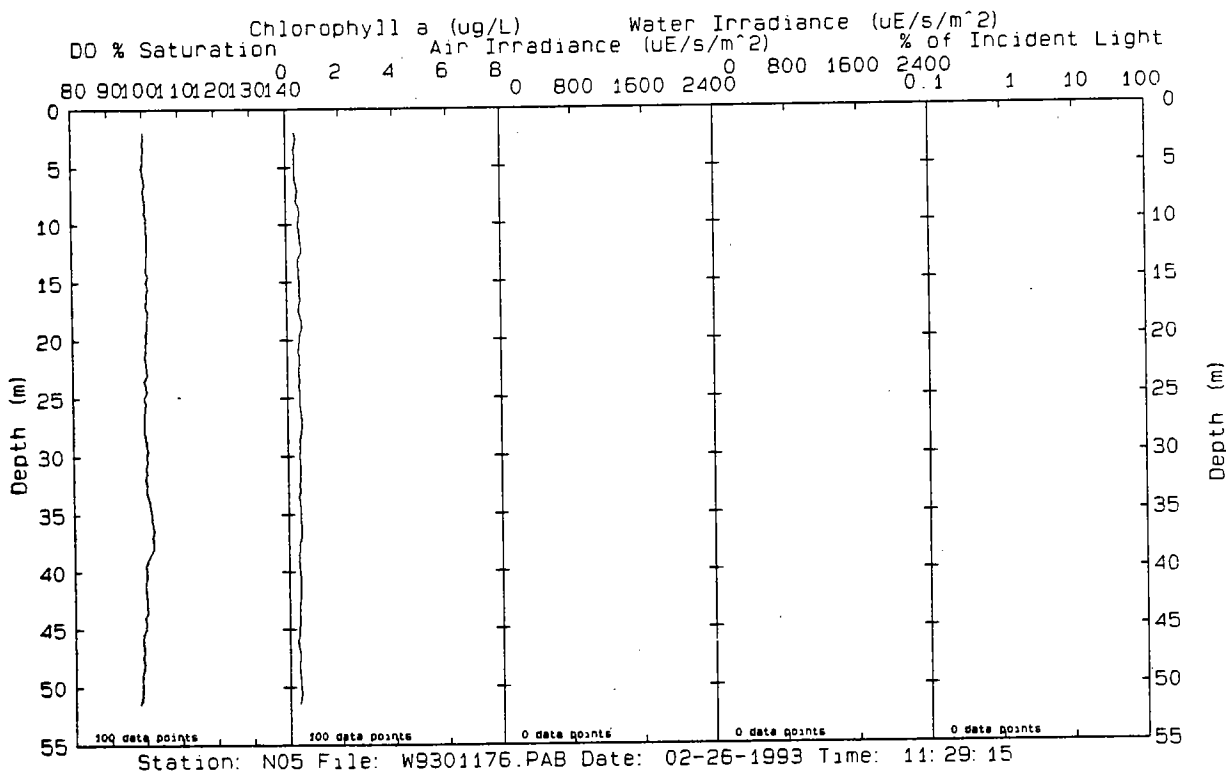
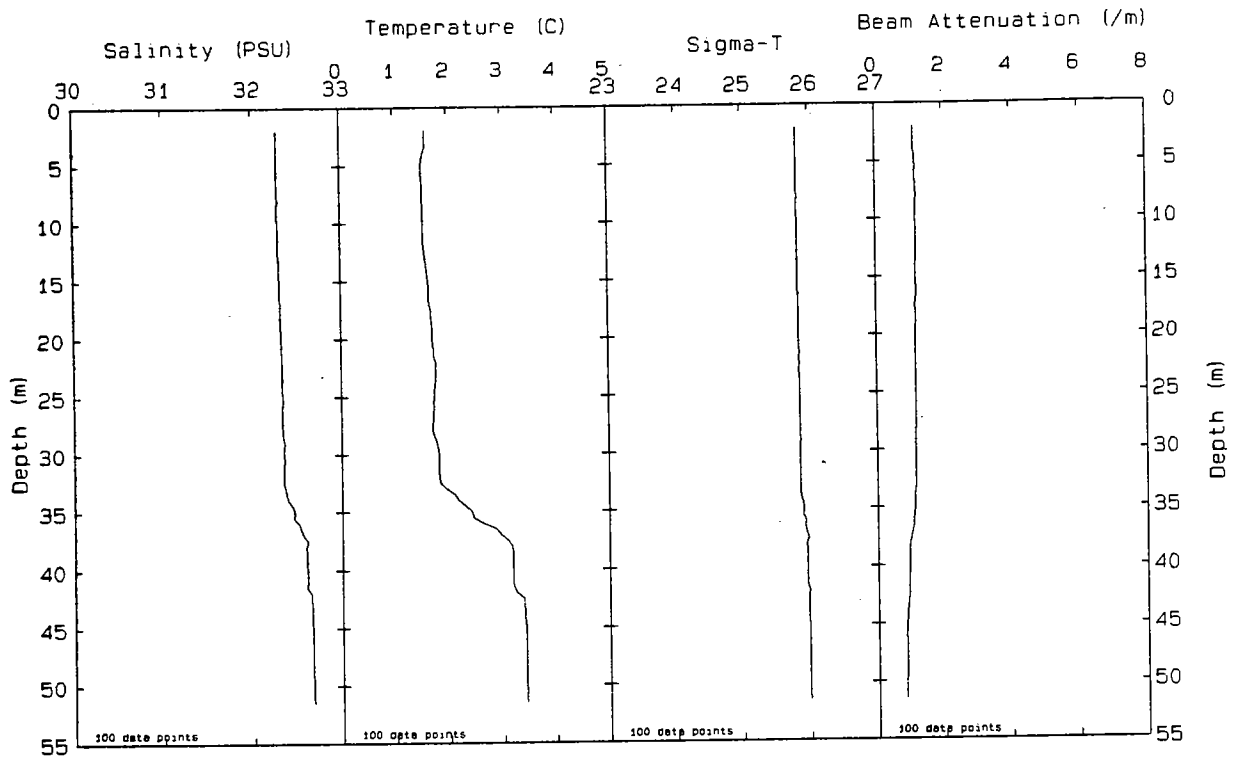
Station: N02 File: W9301166.PAB Date: 02-26-1993 Time: 10:16:37

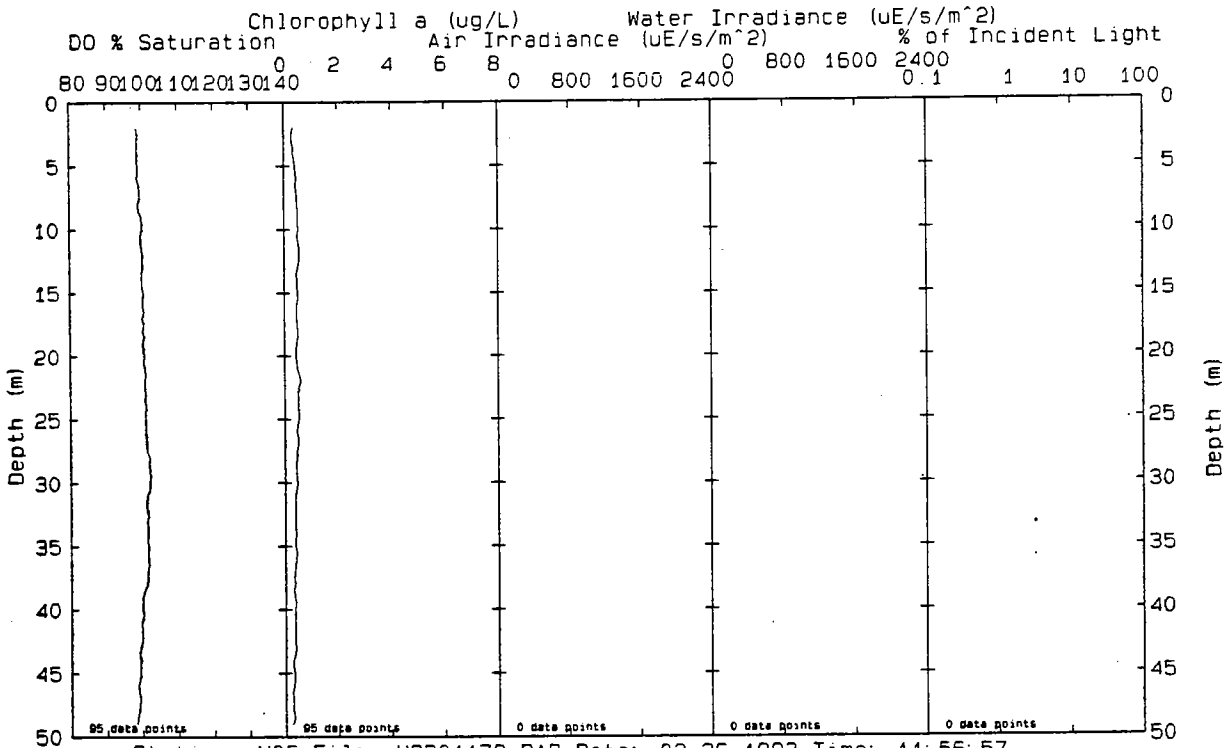
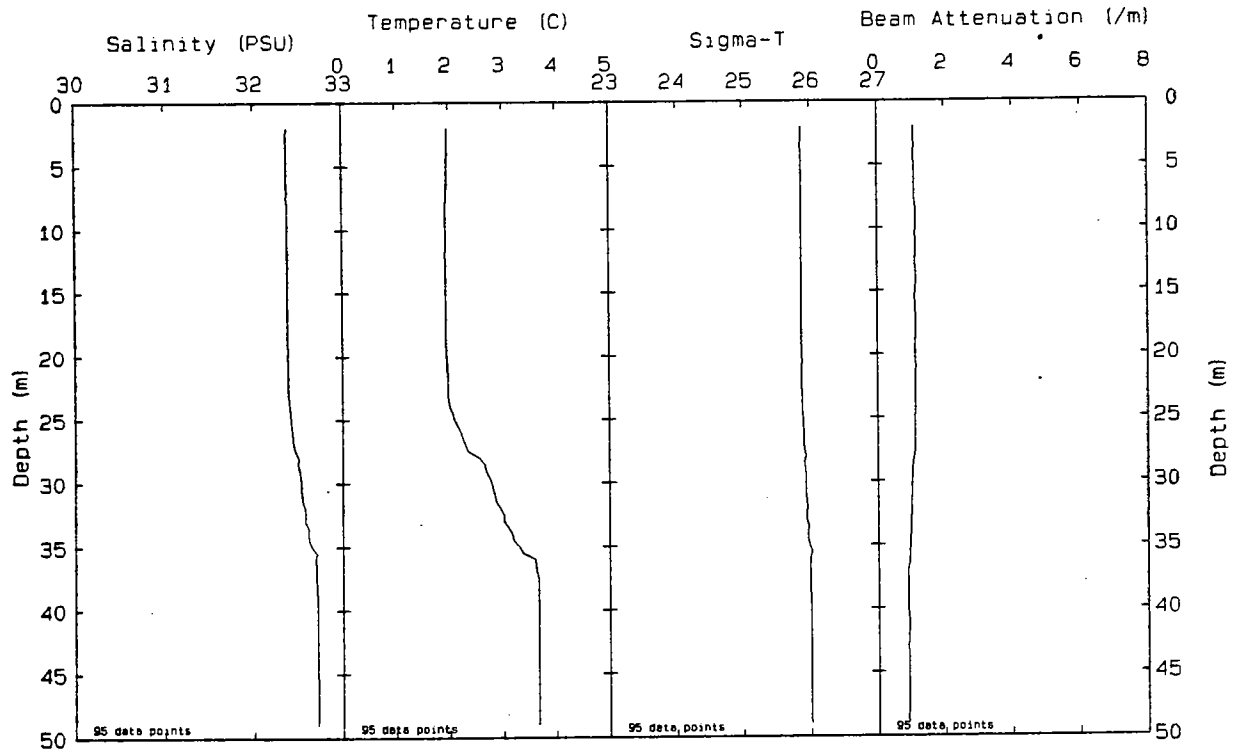


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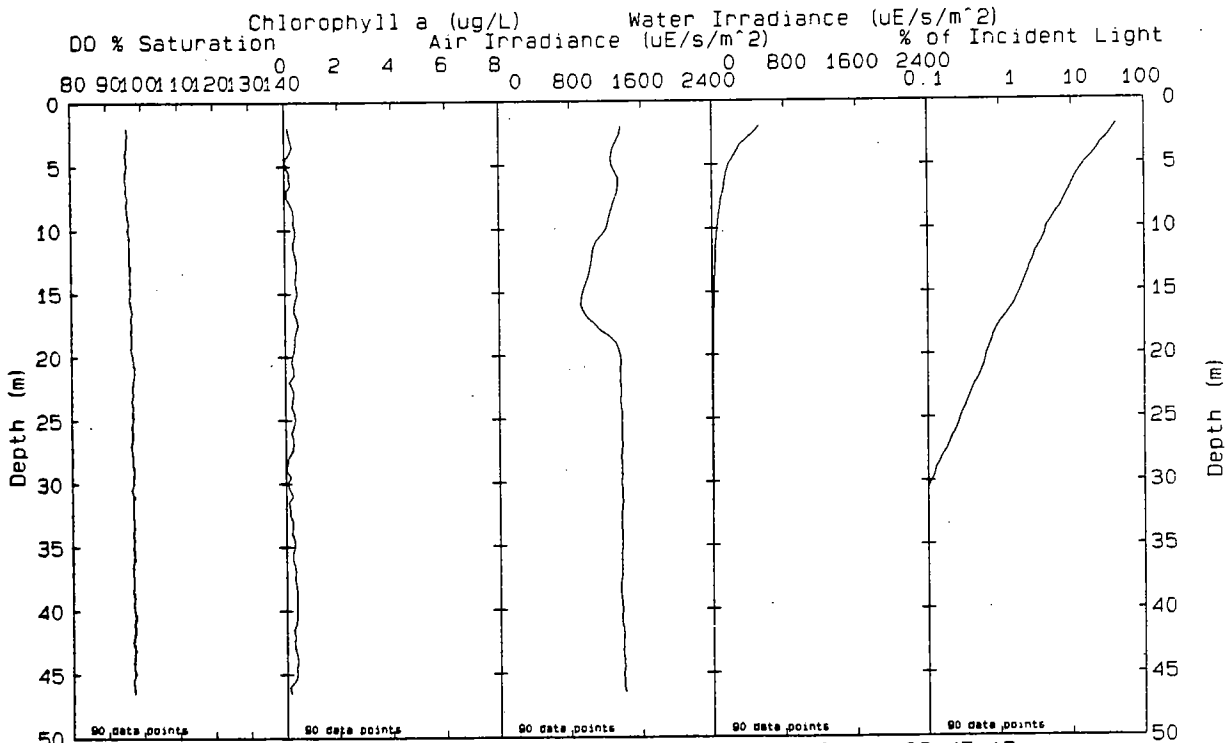
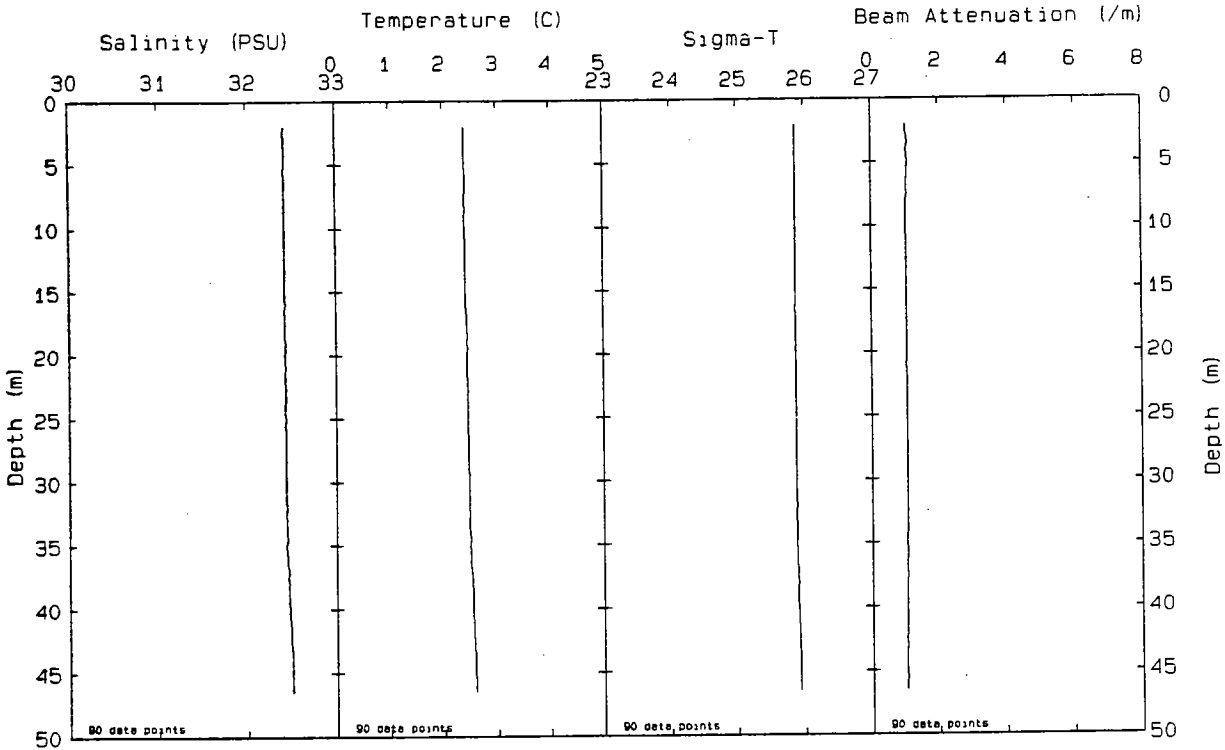




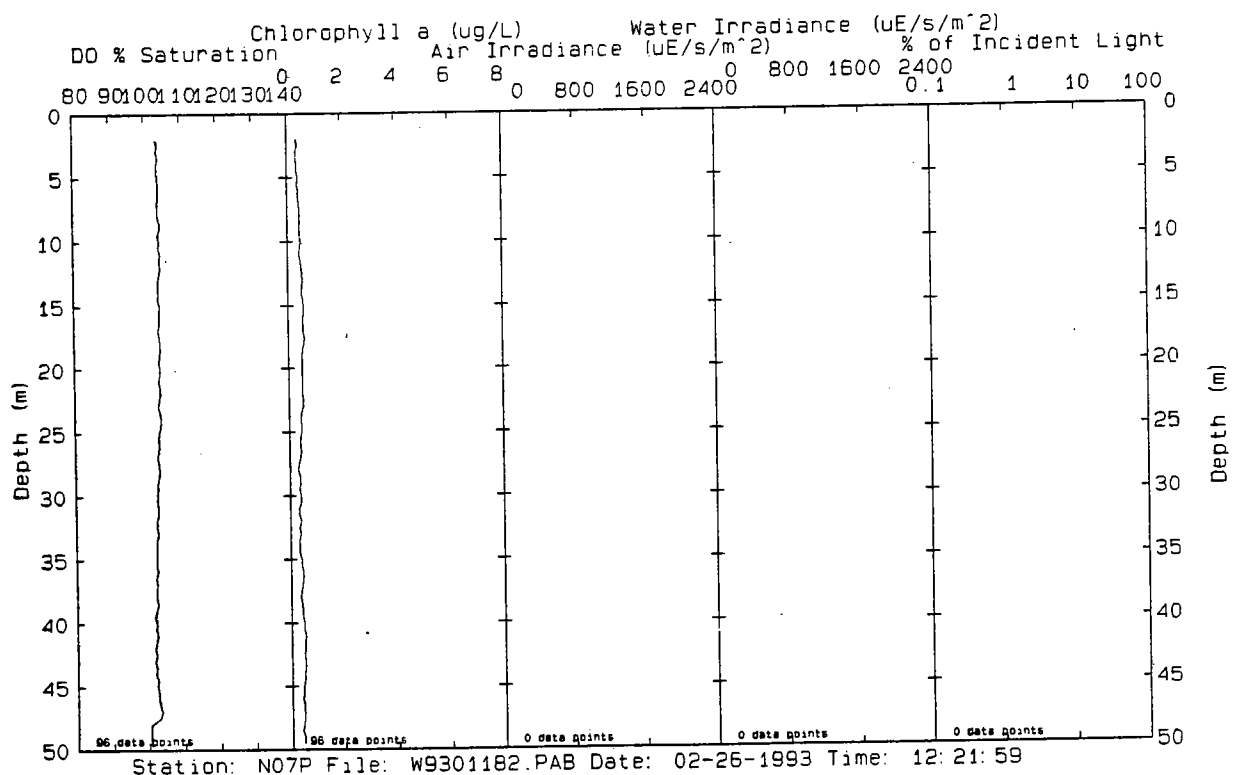
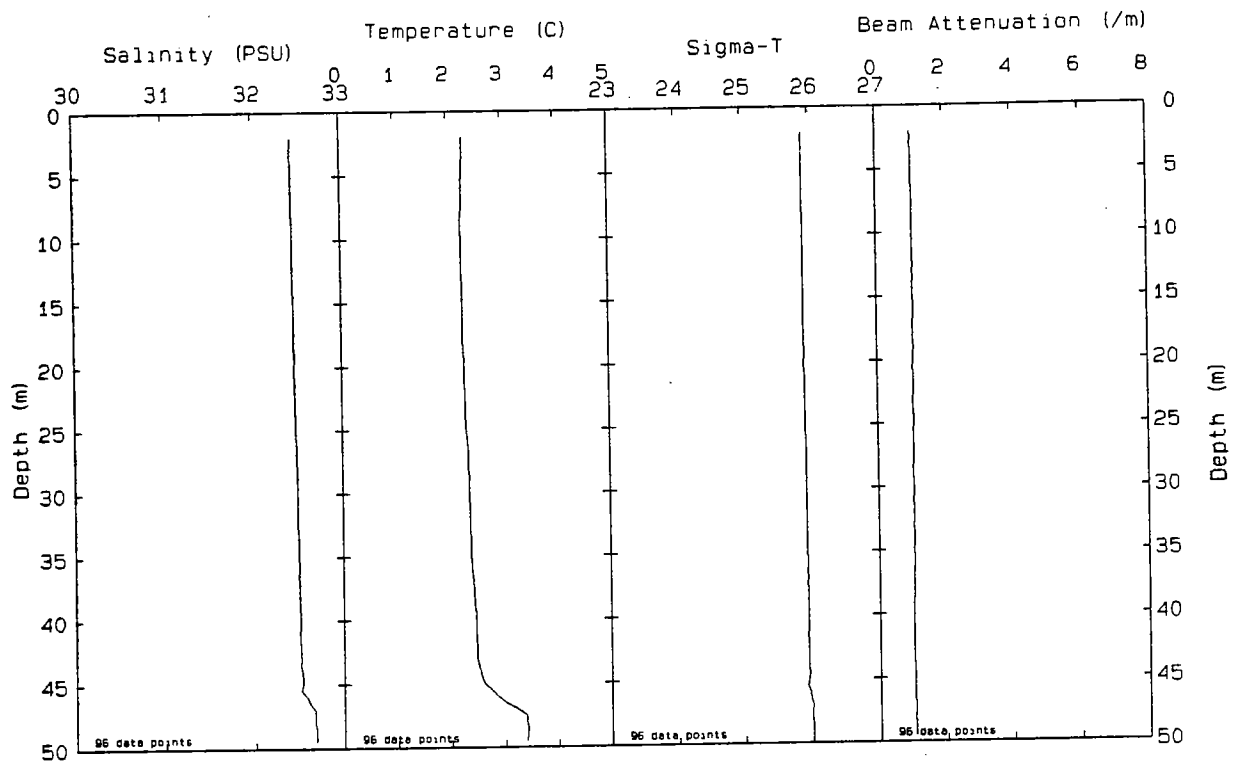


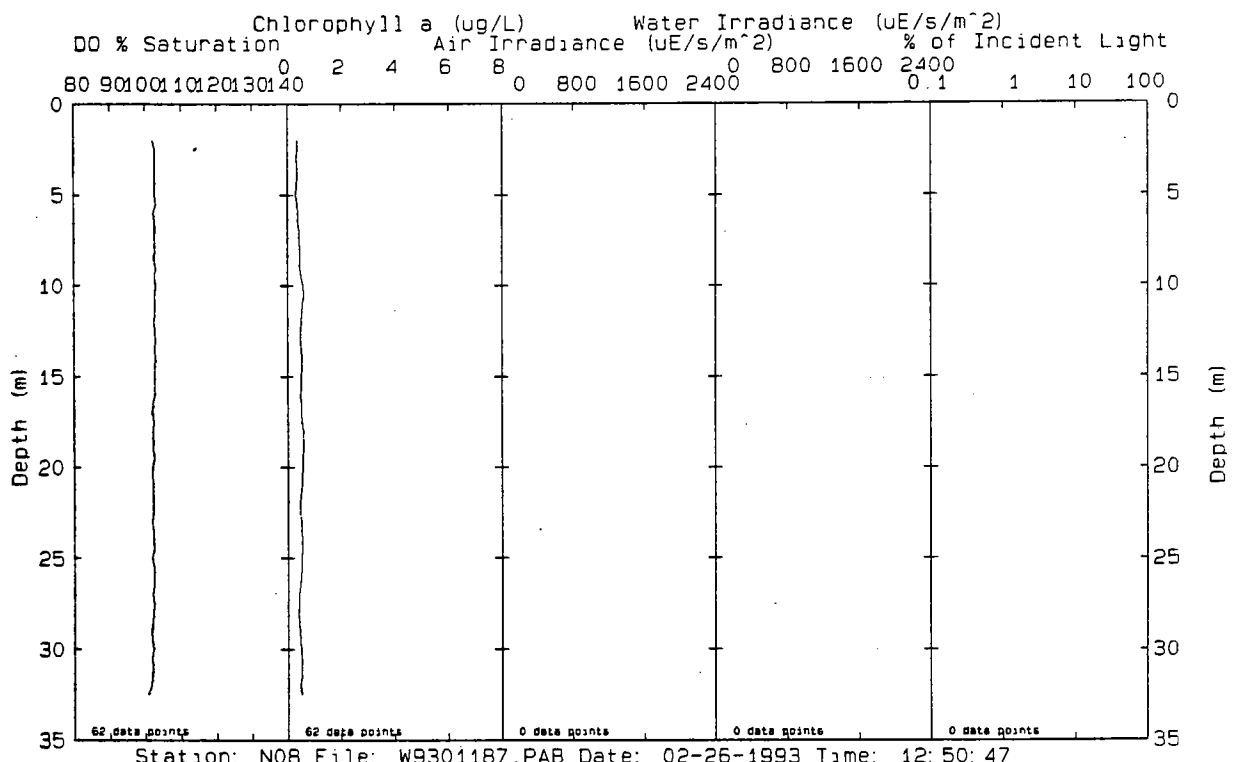
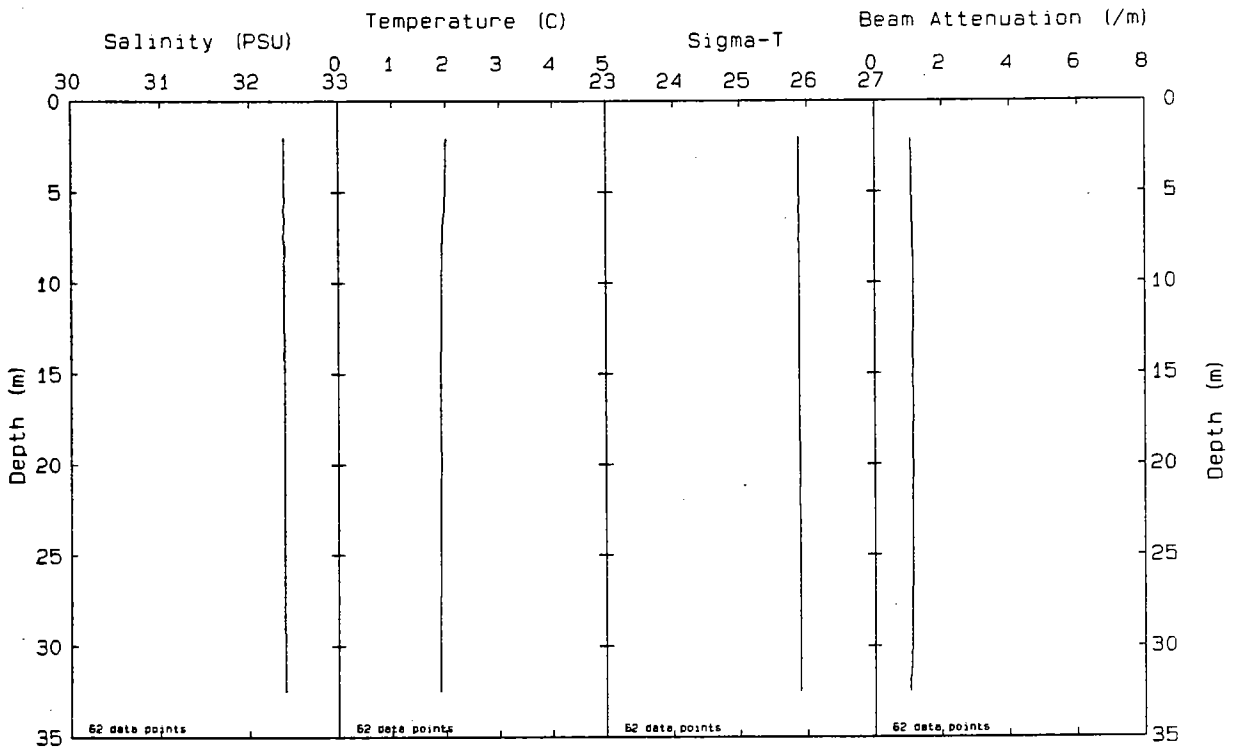


Station: N06 File: W9301179.PAB Date: 02-26-1993 Time: 11:56:57

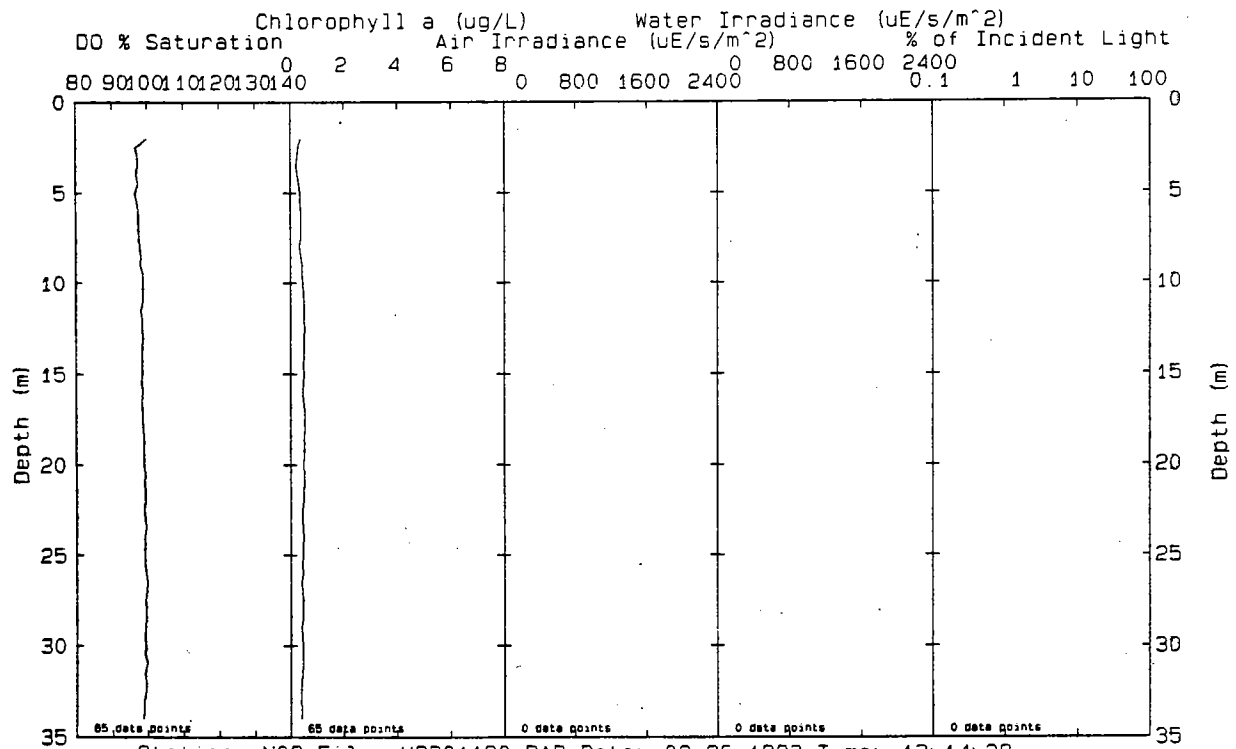
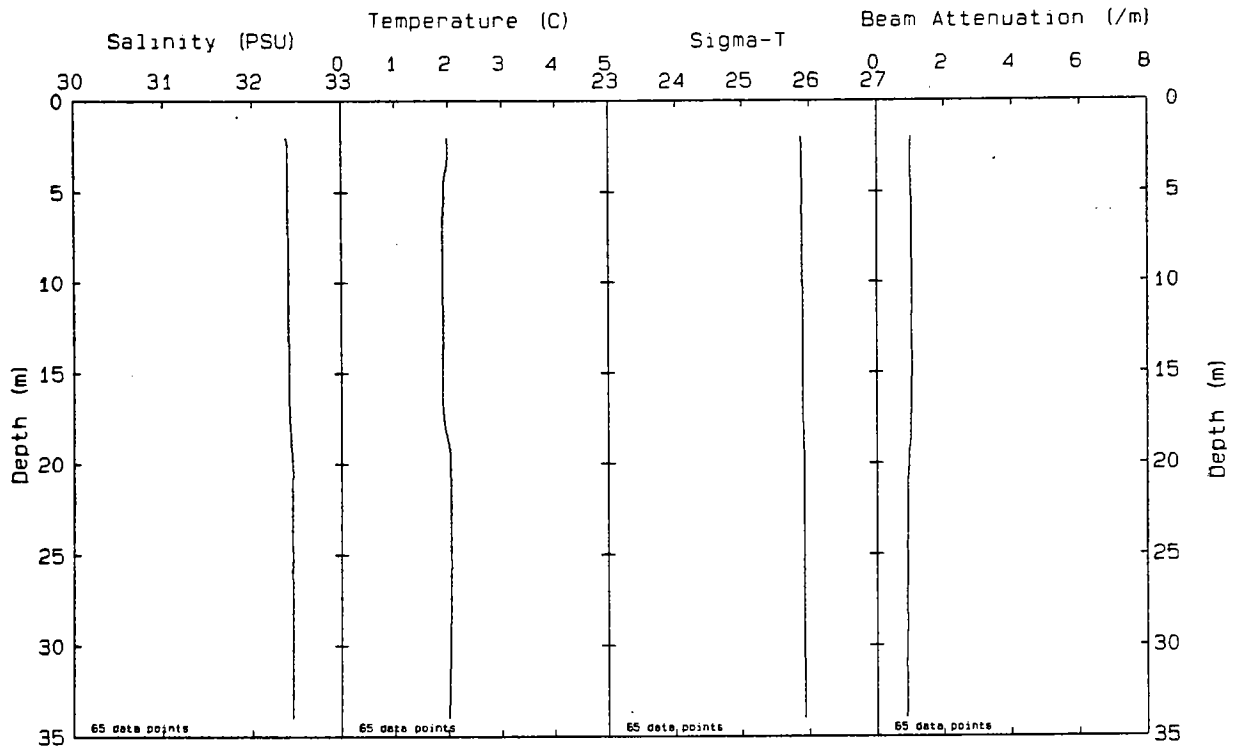


Station: N07P File: W9301086.PAB Date: 02-24-1993 Time: 08:47:17

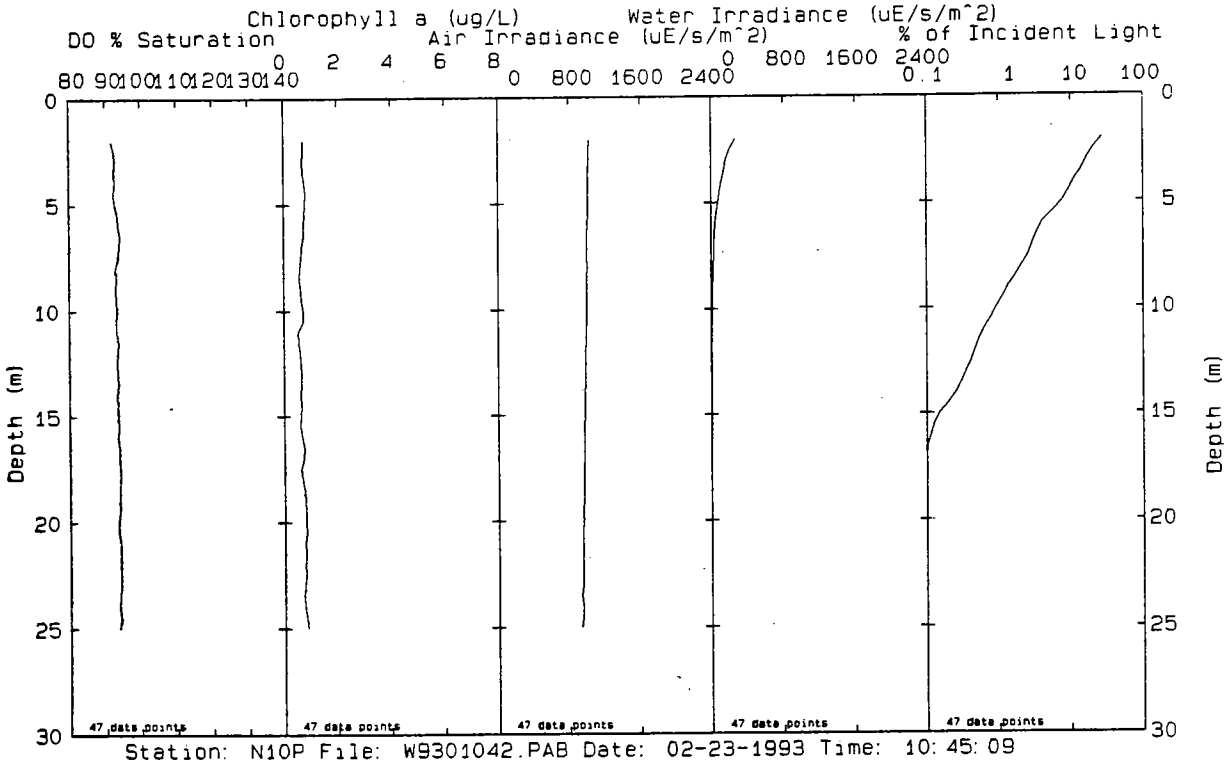
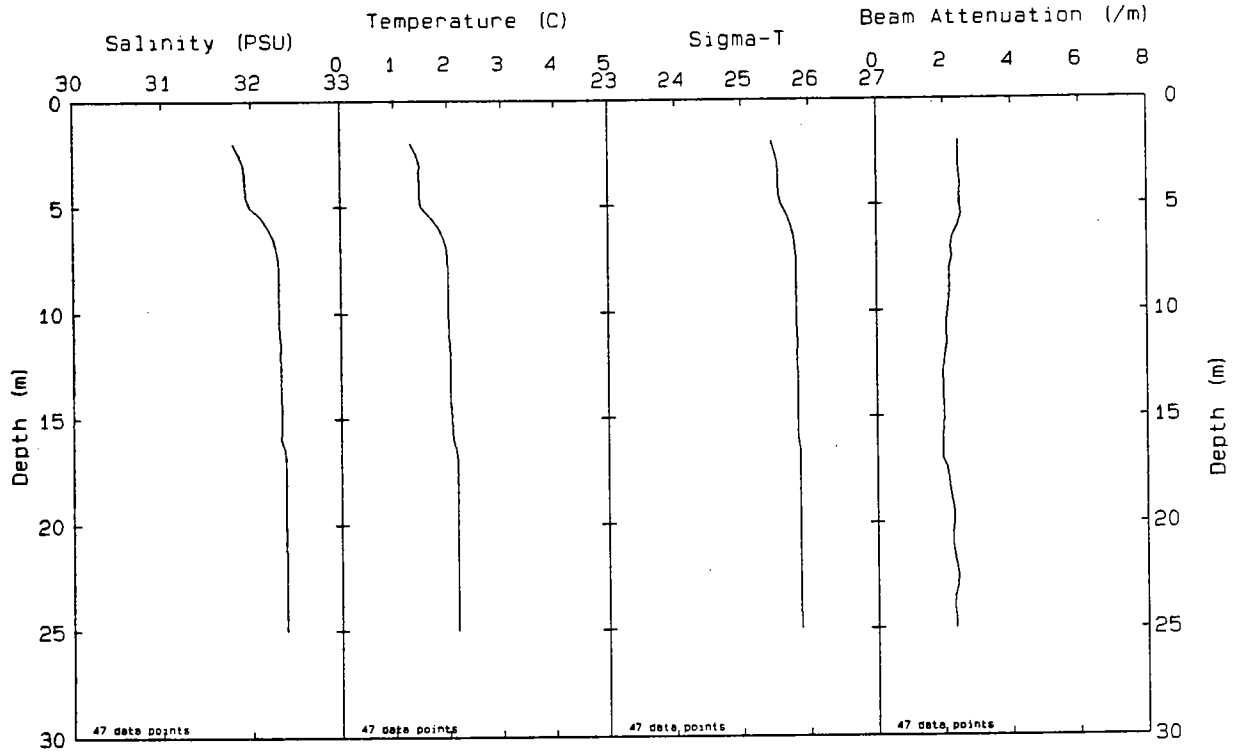


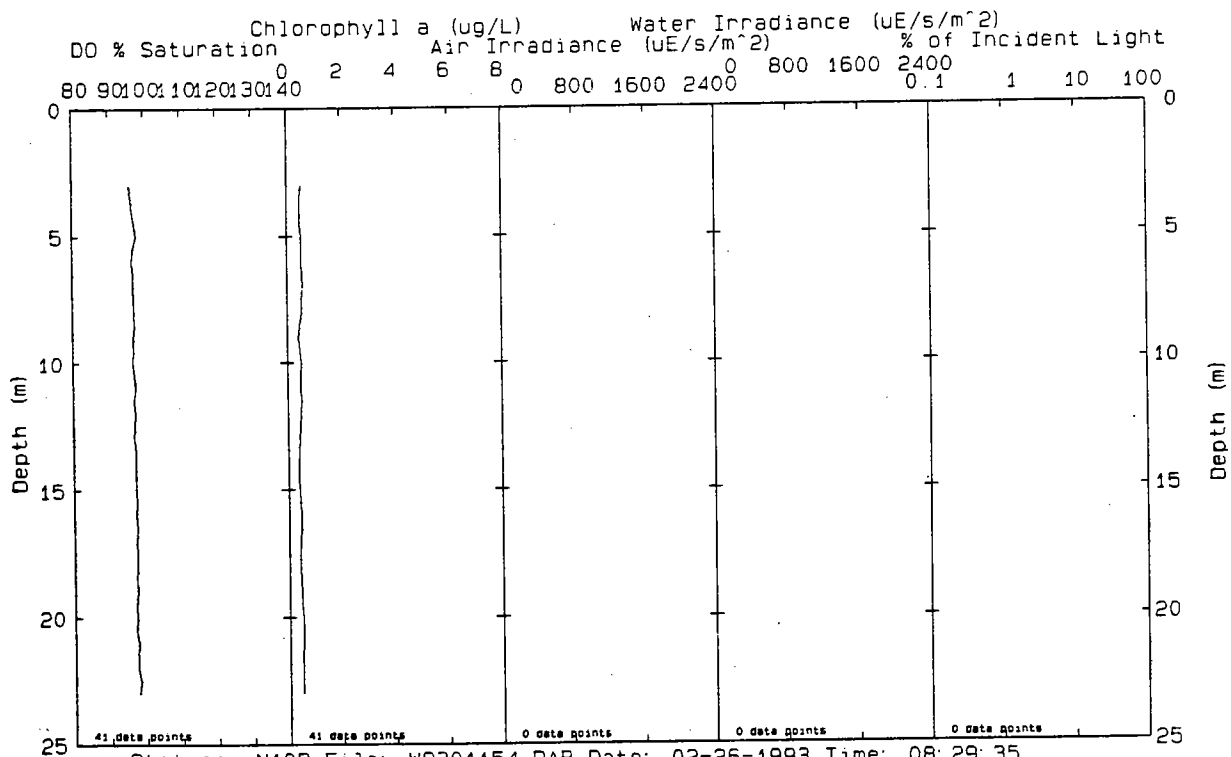
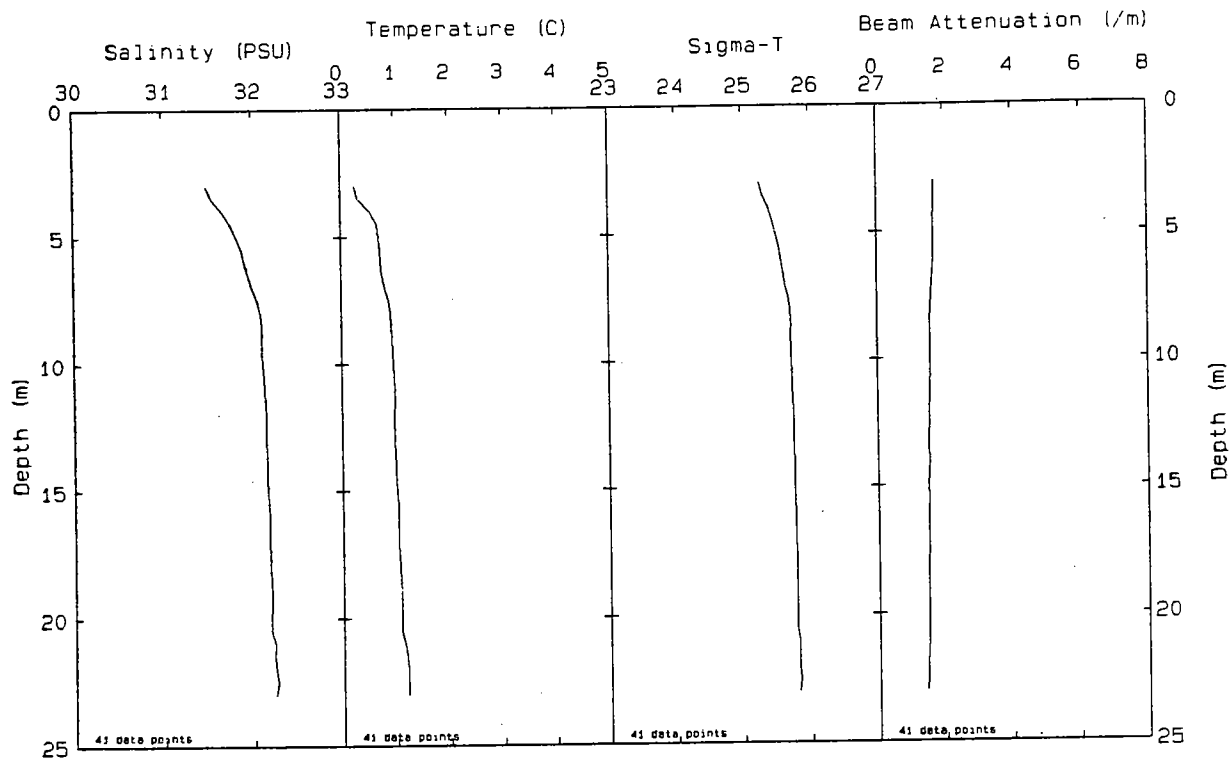


Station: N08 File: W9301187.PAB Date: 02-26-1993 Time: 12:50:47

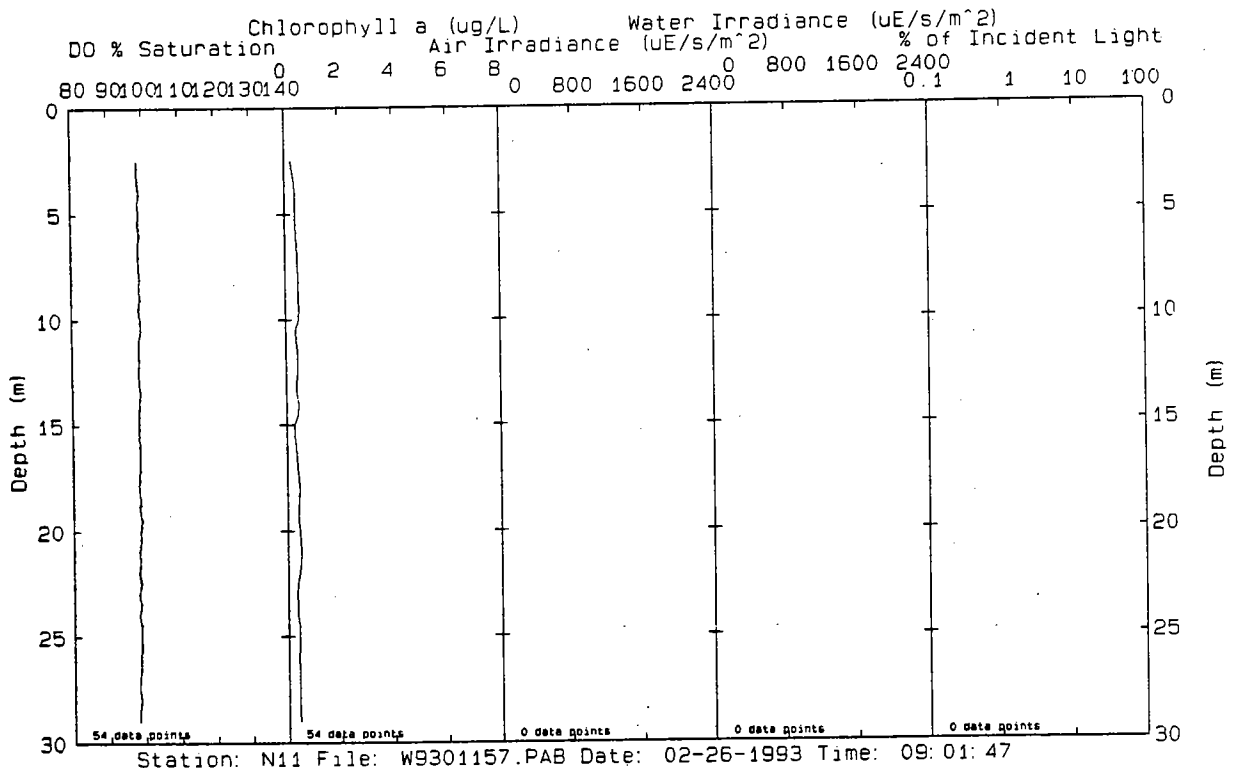
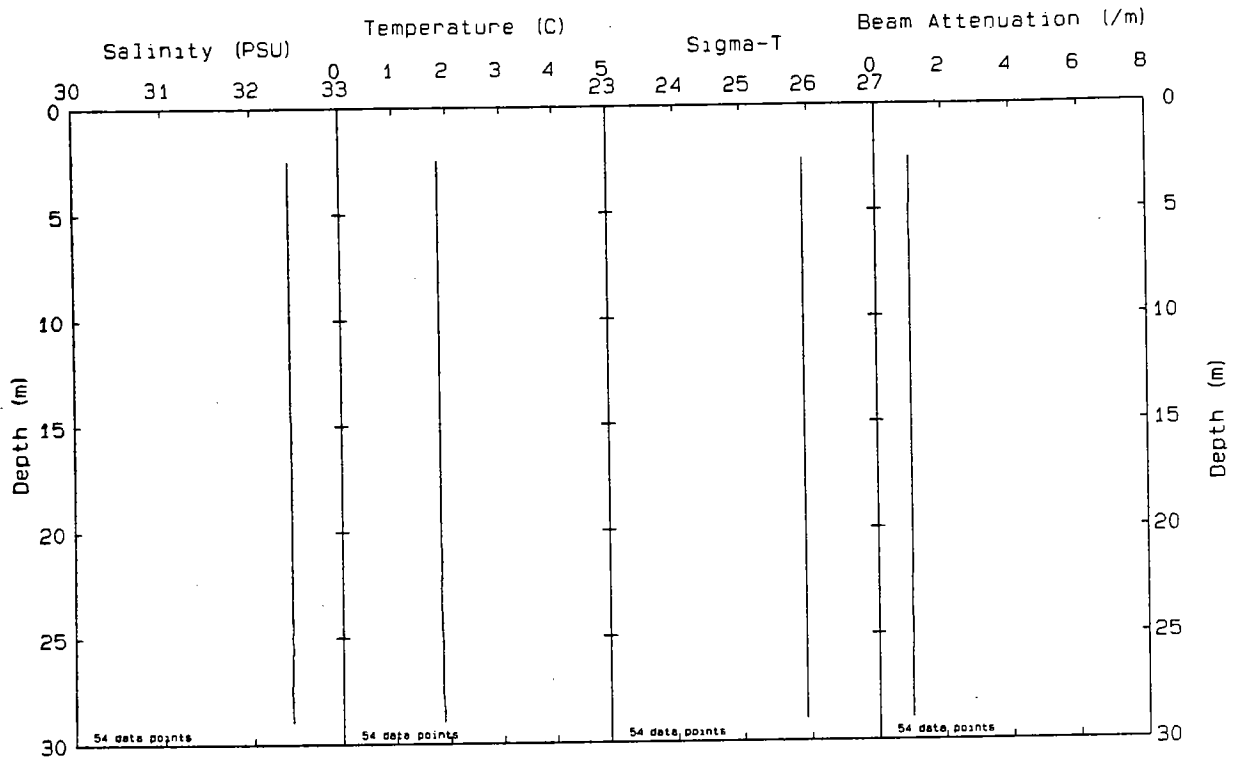


Station: N09 File: W9301190.PAB Date: 02-26-1993 Time: 13:14:28

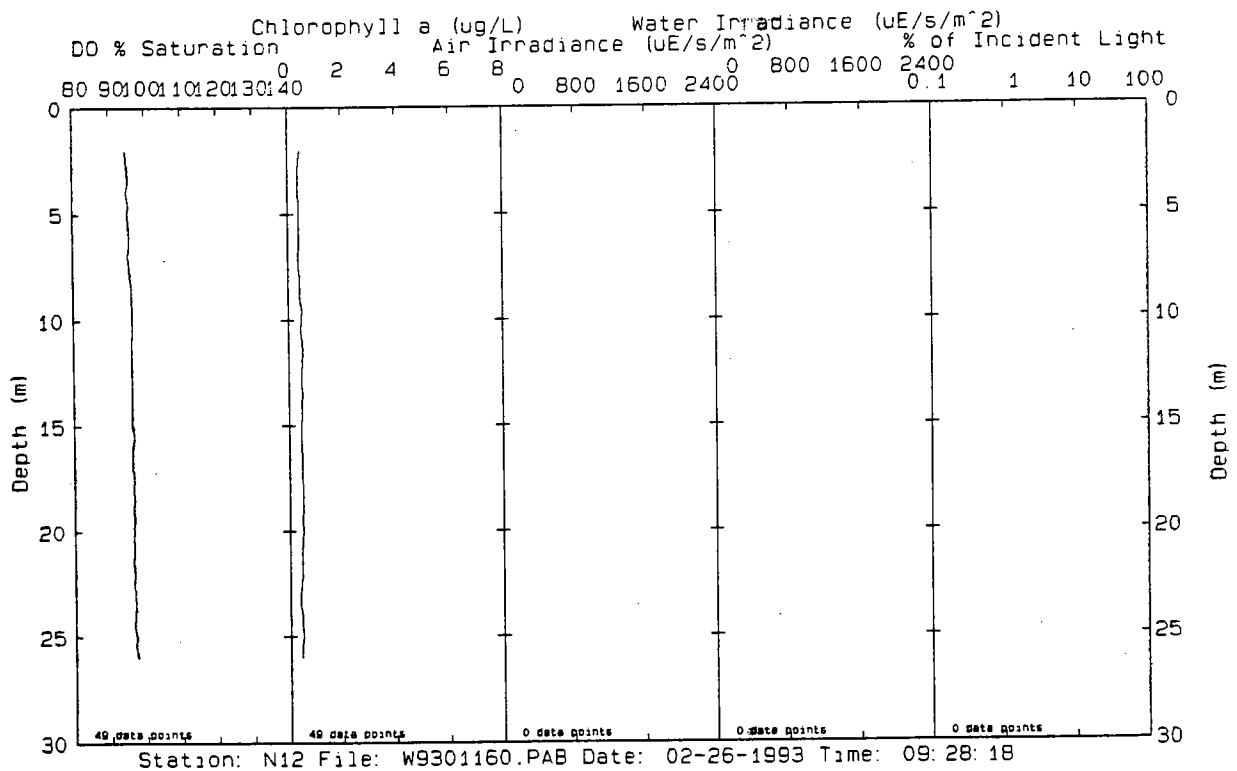
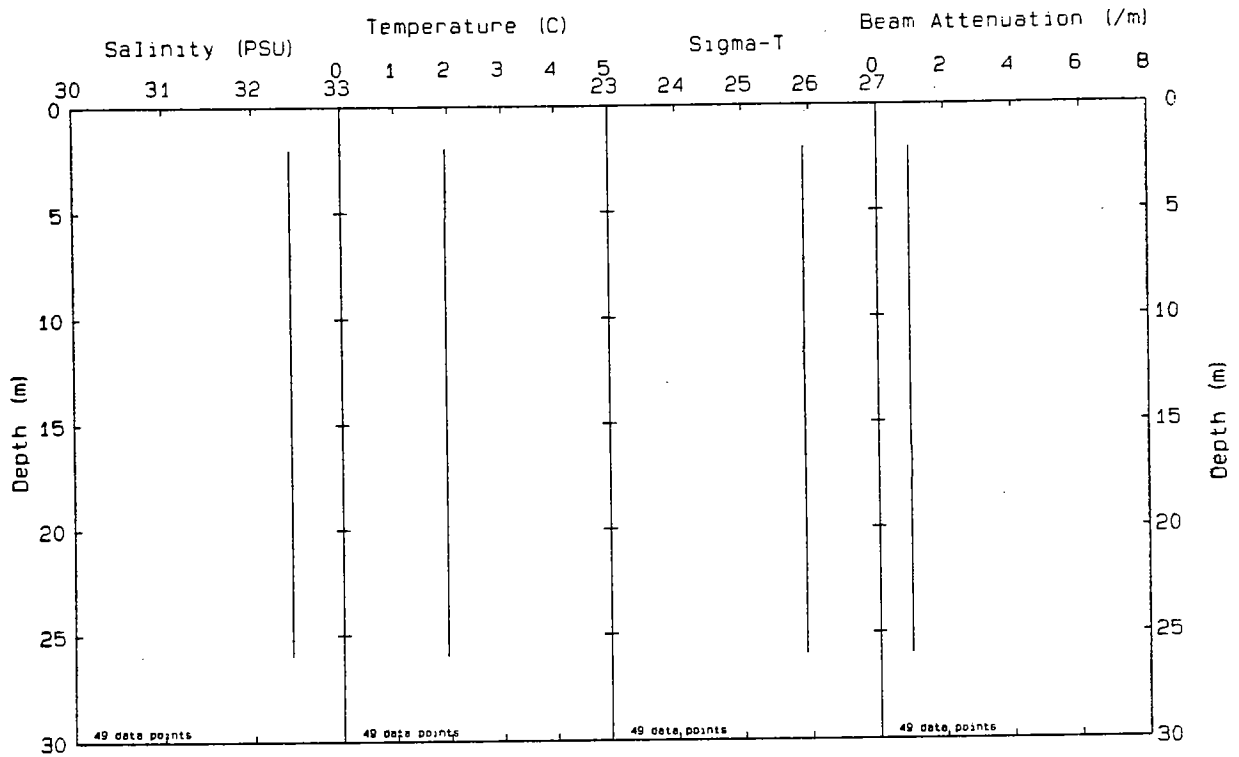


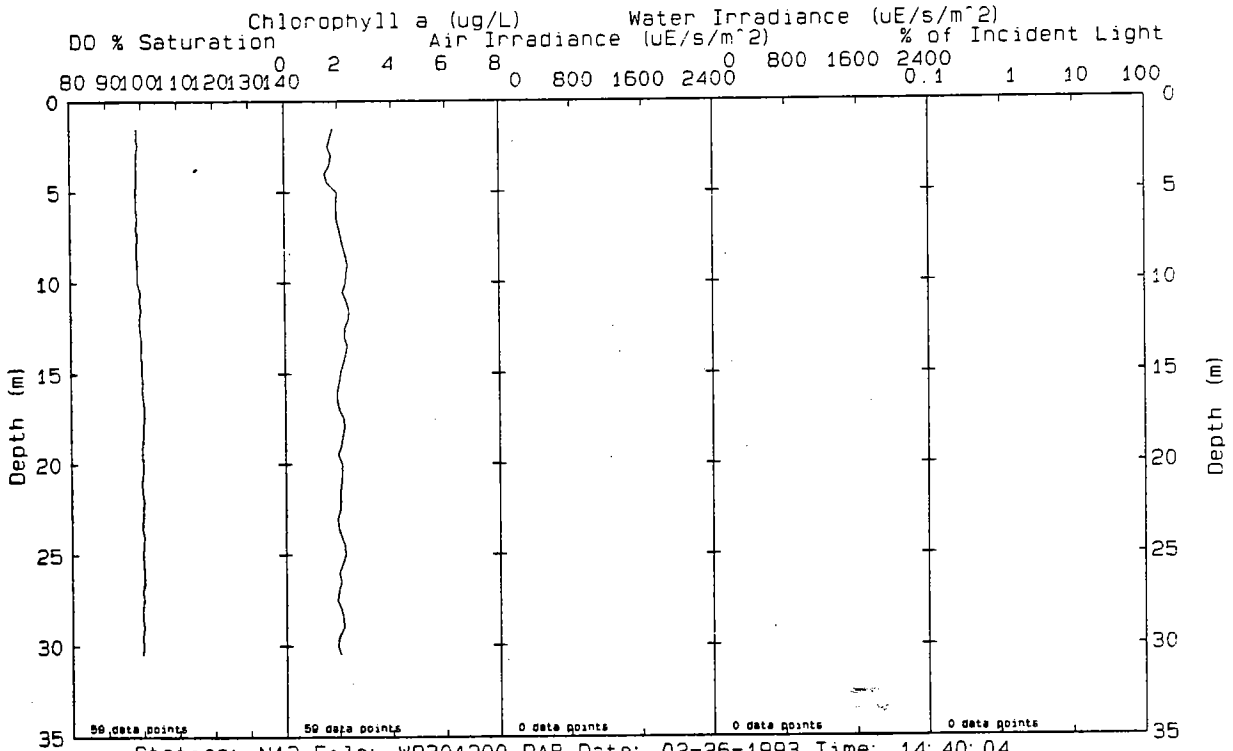
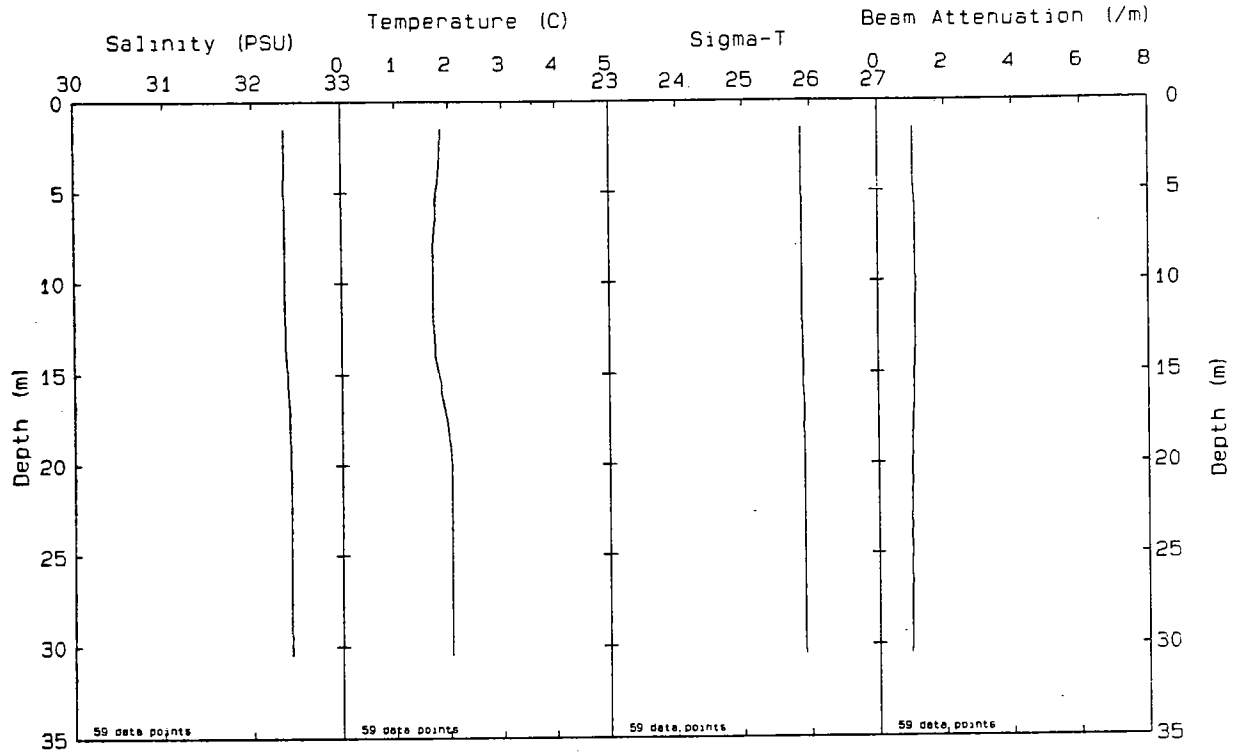


Station: N10P File: W9301154.PAB Date: 02-26-1993 Time: 08:29:35

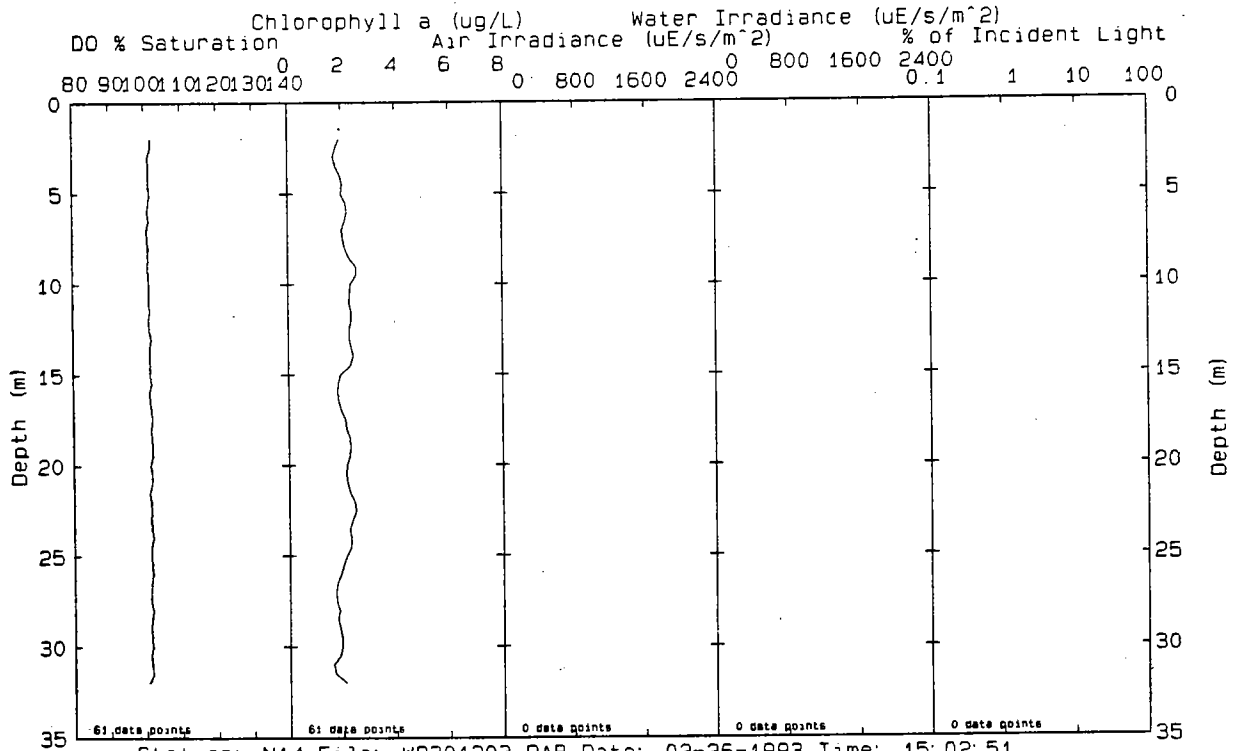
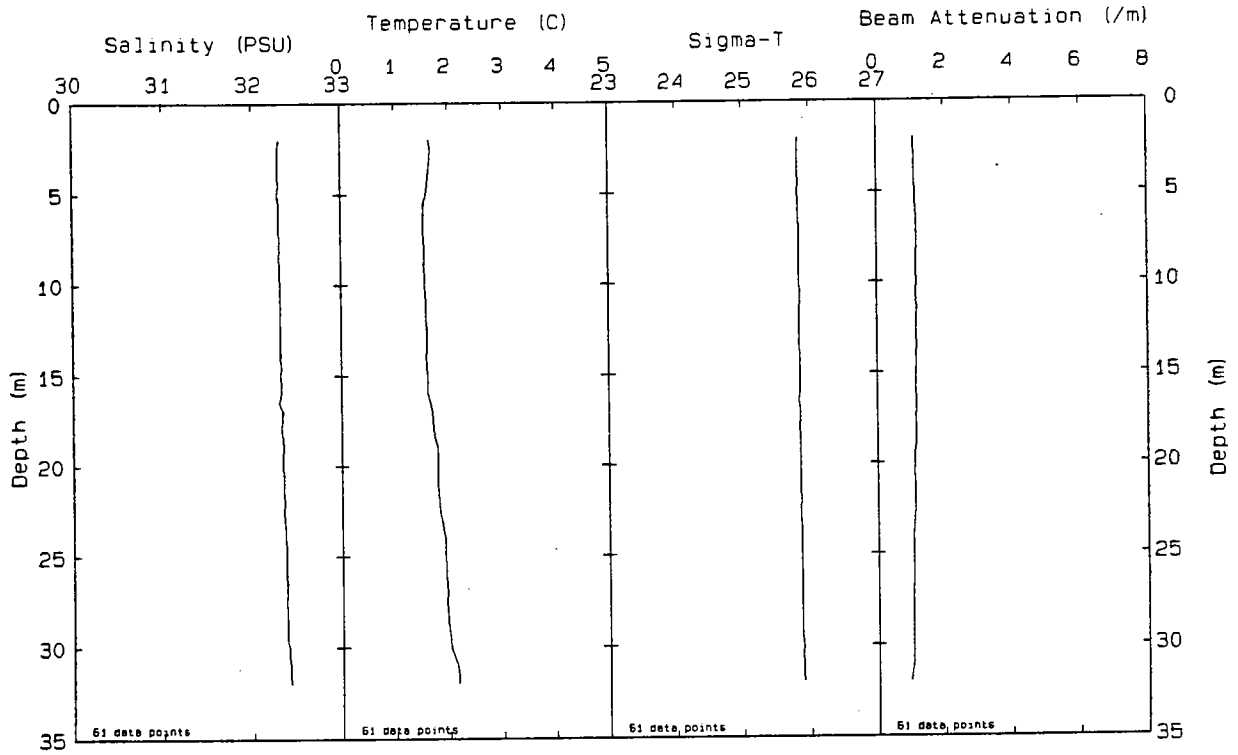


Station: N11 File: W9301157.PAB Date: 02-26-1993 Time: 09:01:47

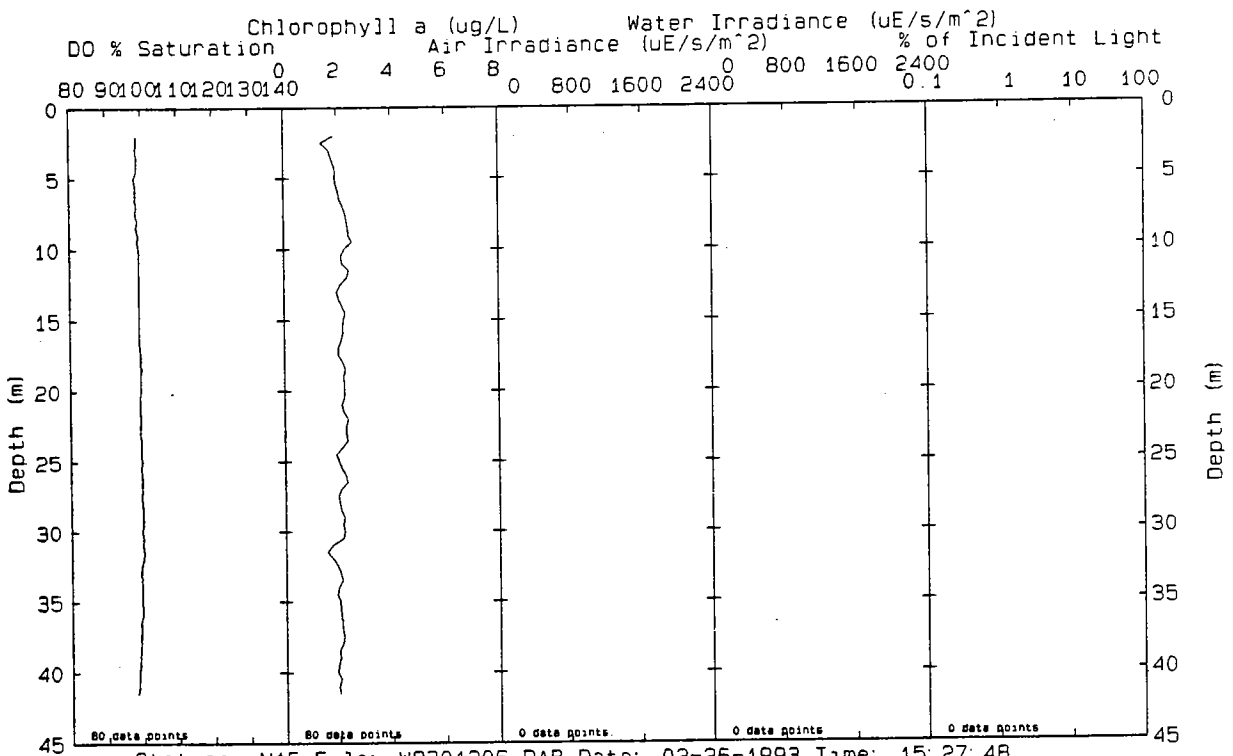
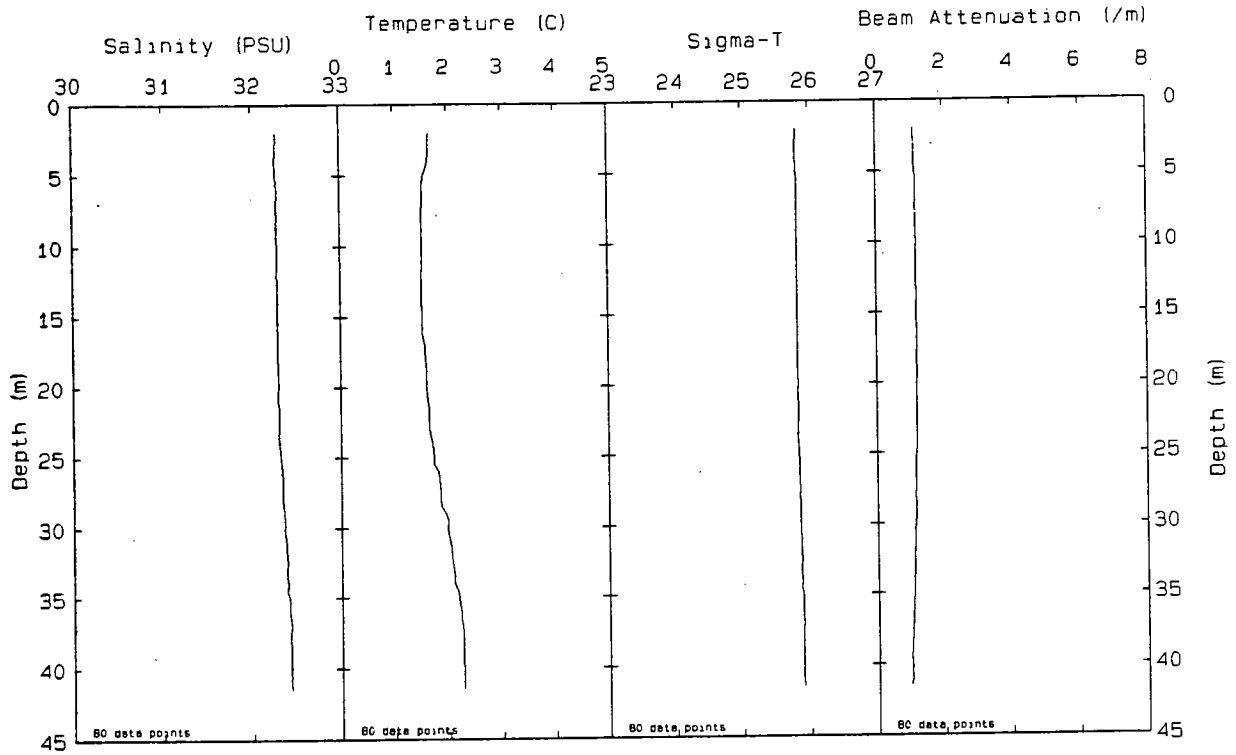




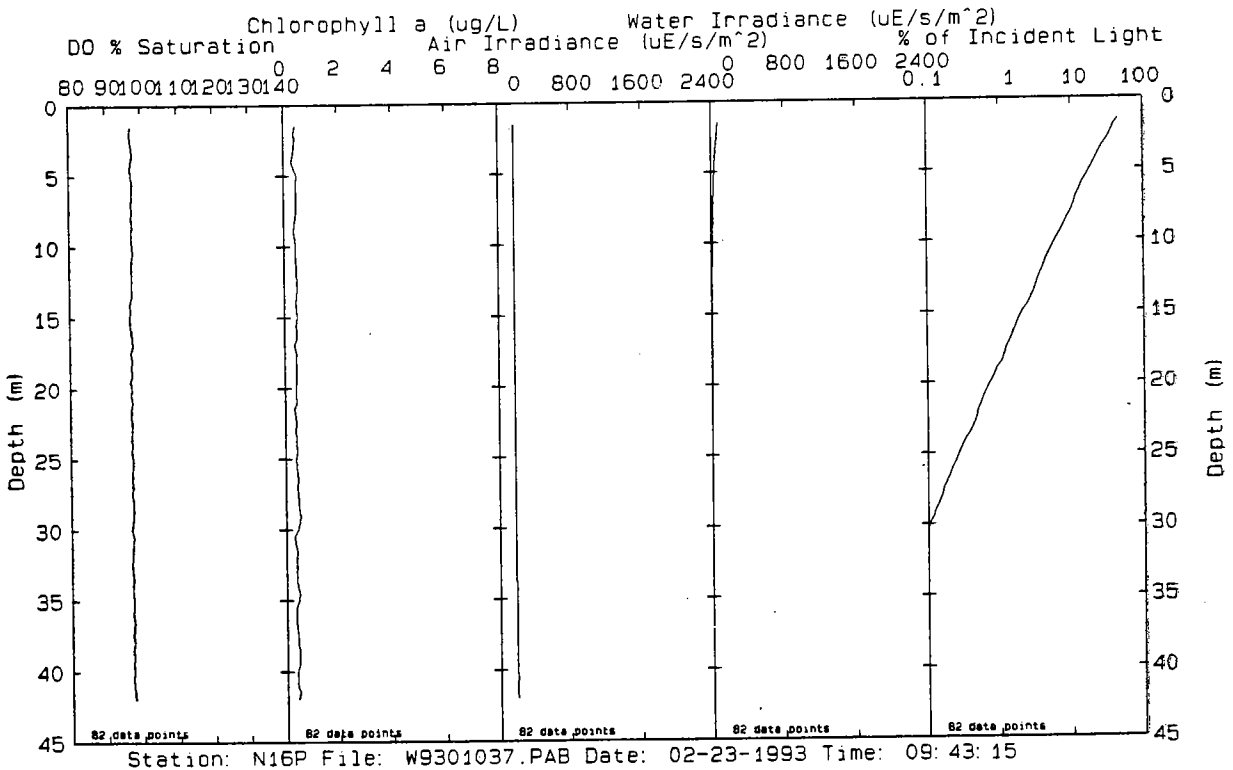
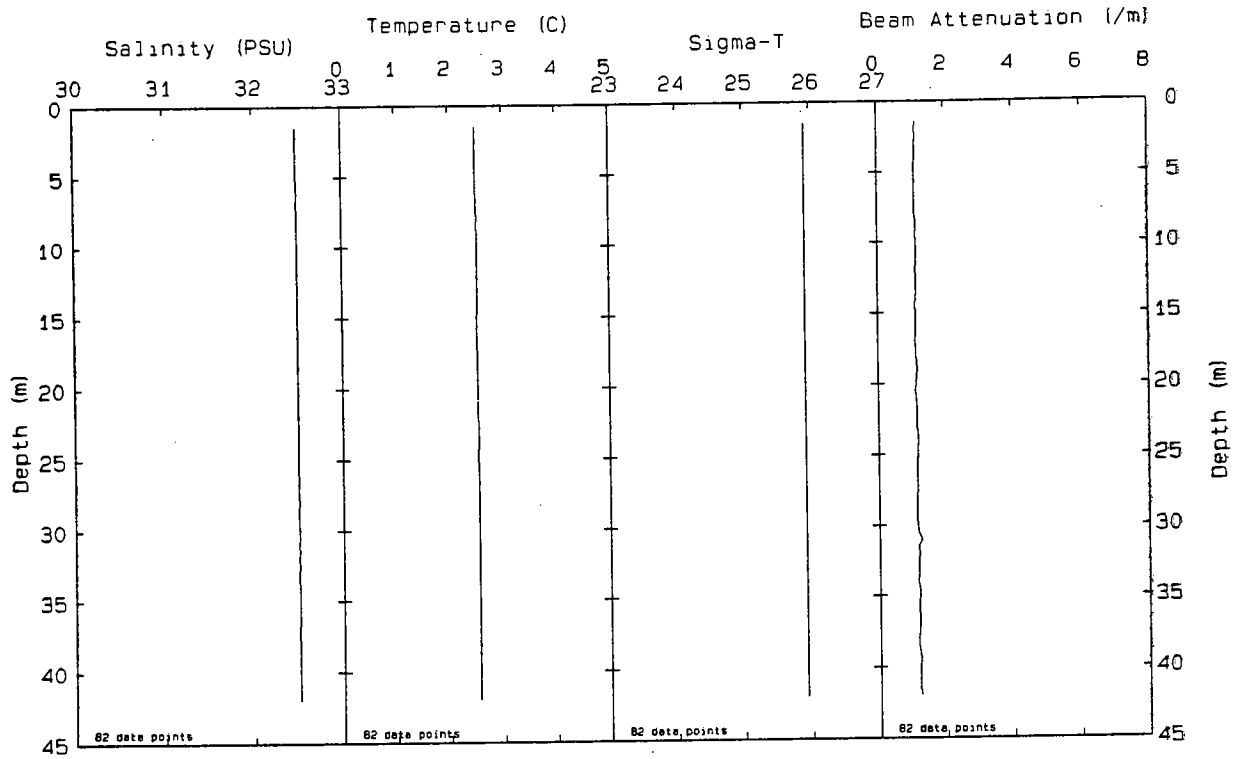
Station: N13 File: W9301200.PAB Date: 02-26-1993 Time: 14:40:04

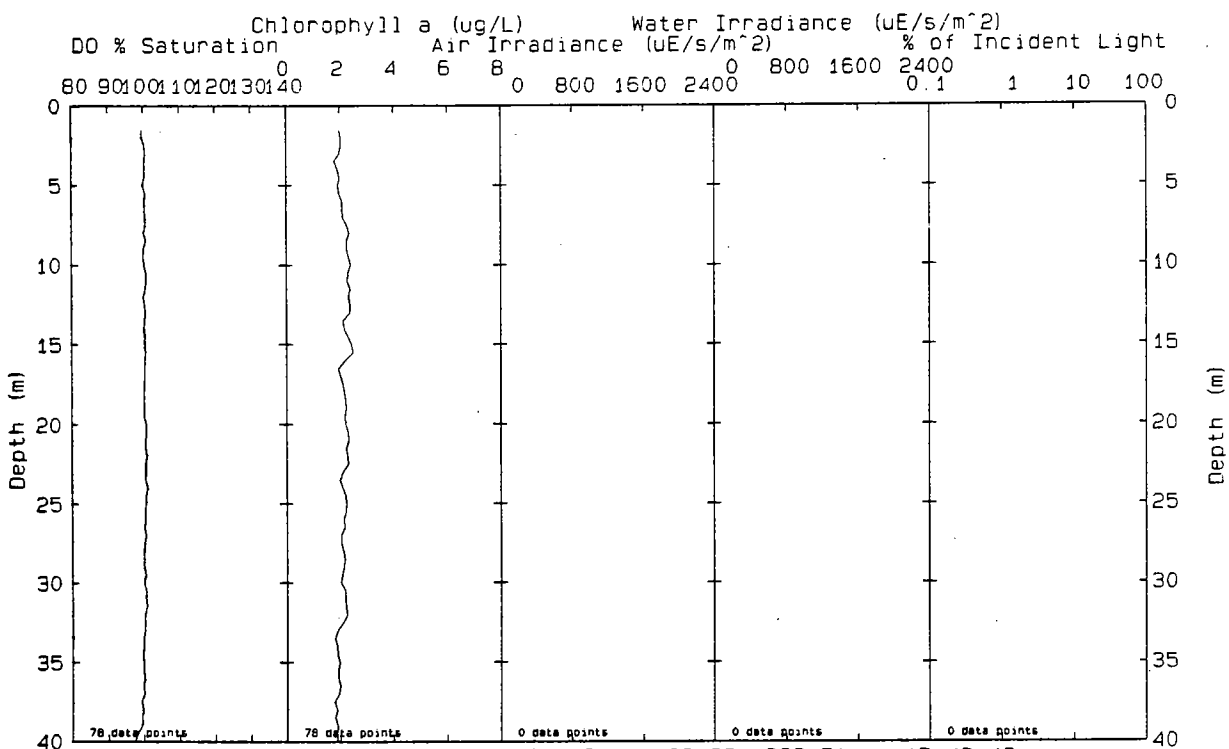
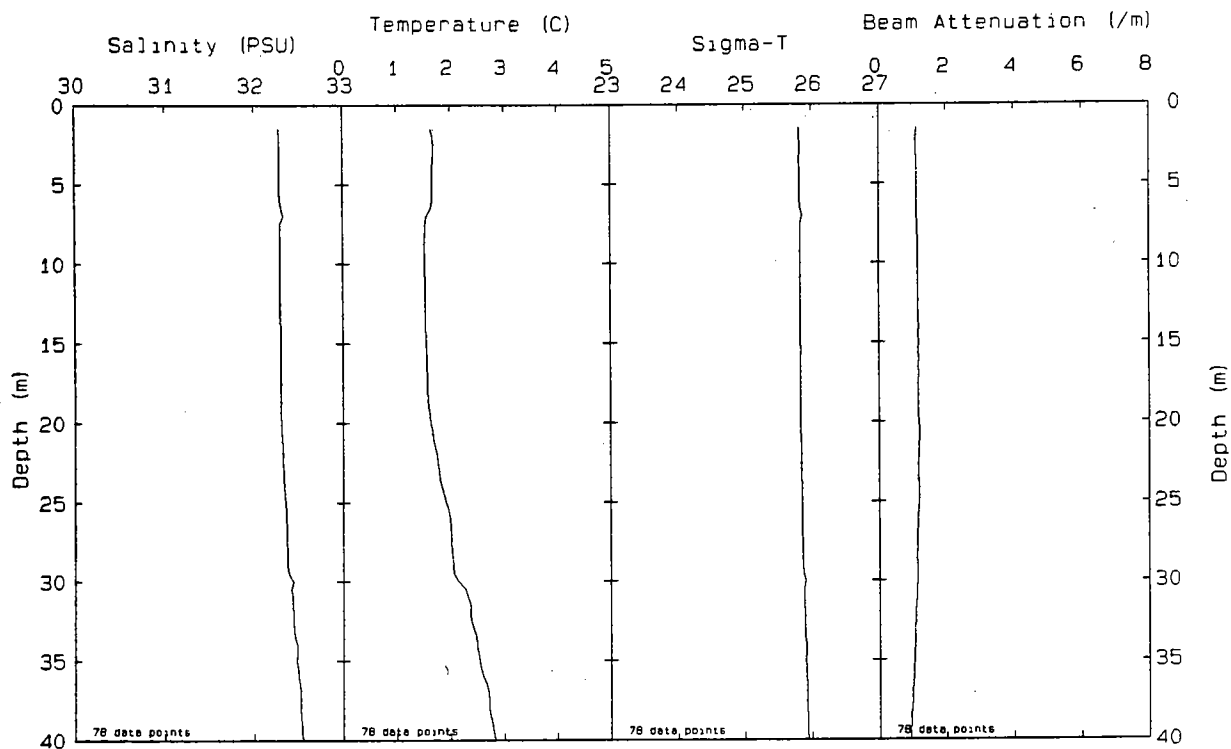


Station: N14 File: W9301203.PAB Date: 02-26-1993 Time: 15: 02: 51

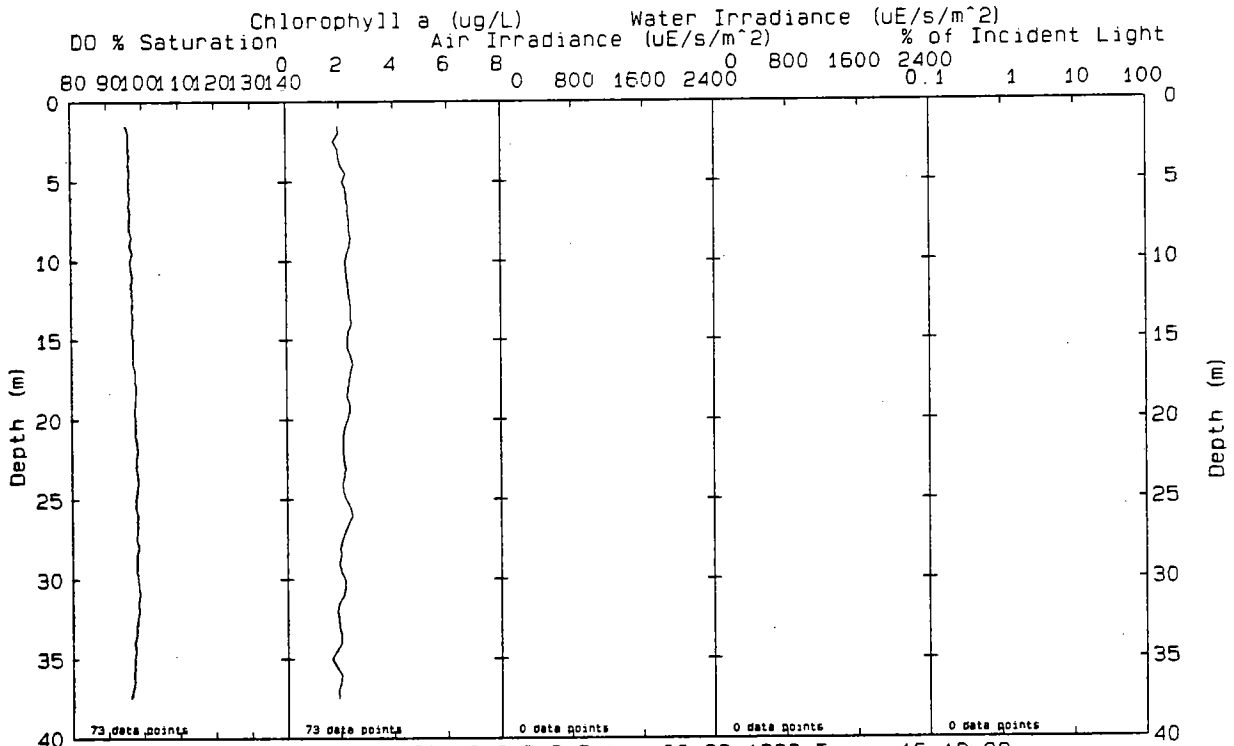
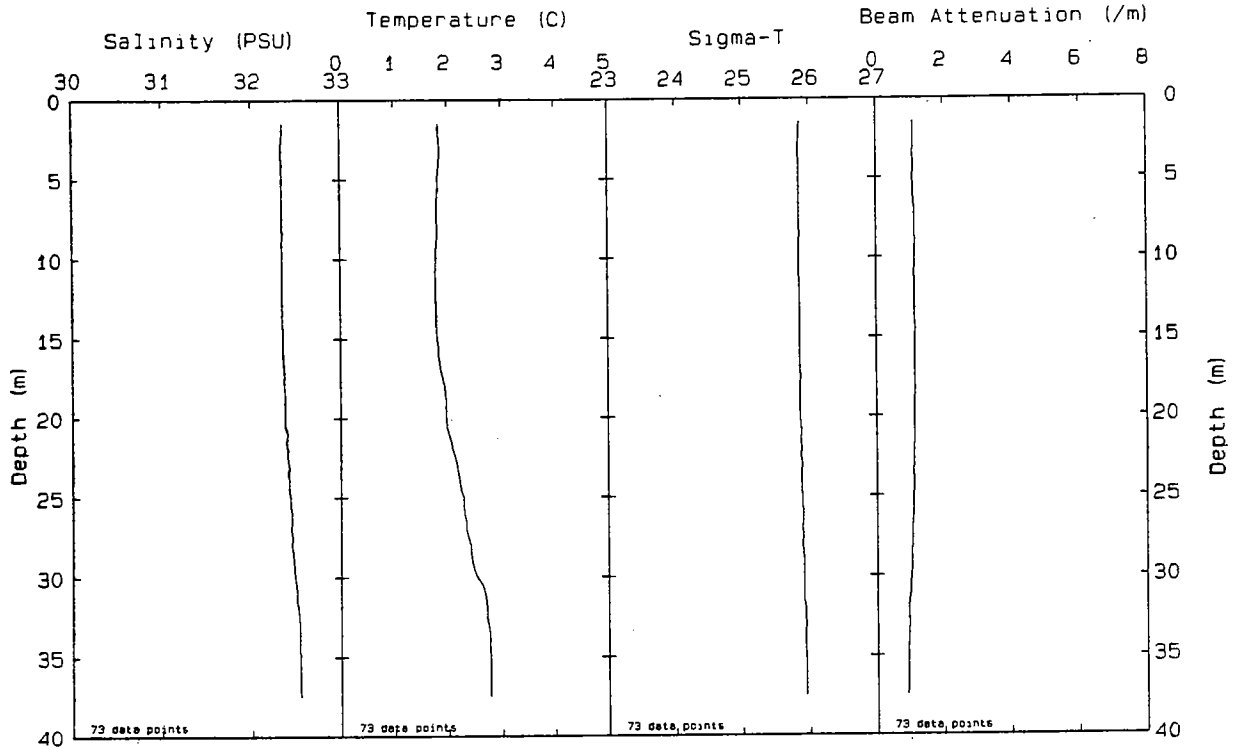


Station: N15 File: W9301206.PAB Date: 02-26-1993 Time: 15:27:48

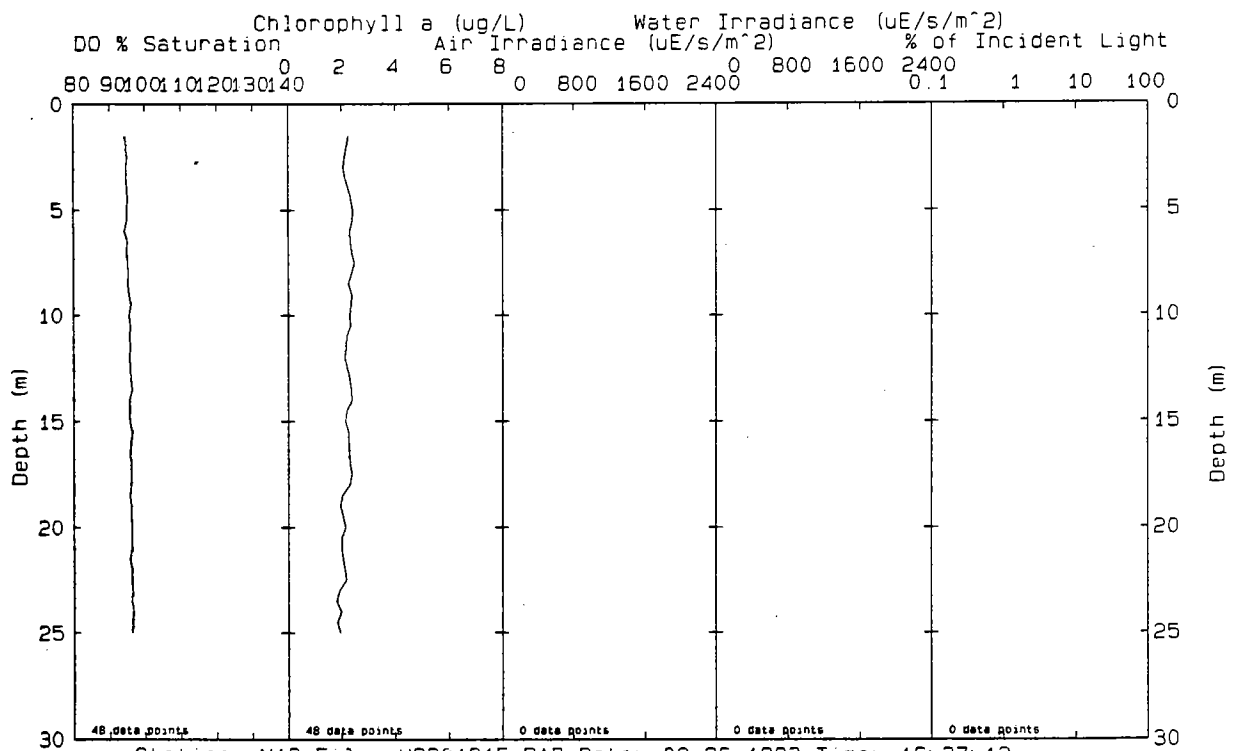
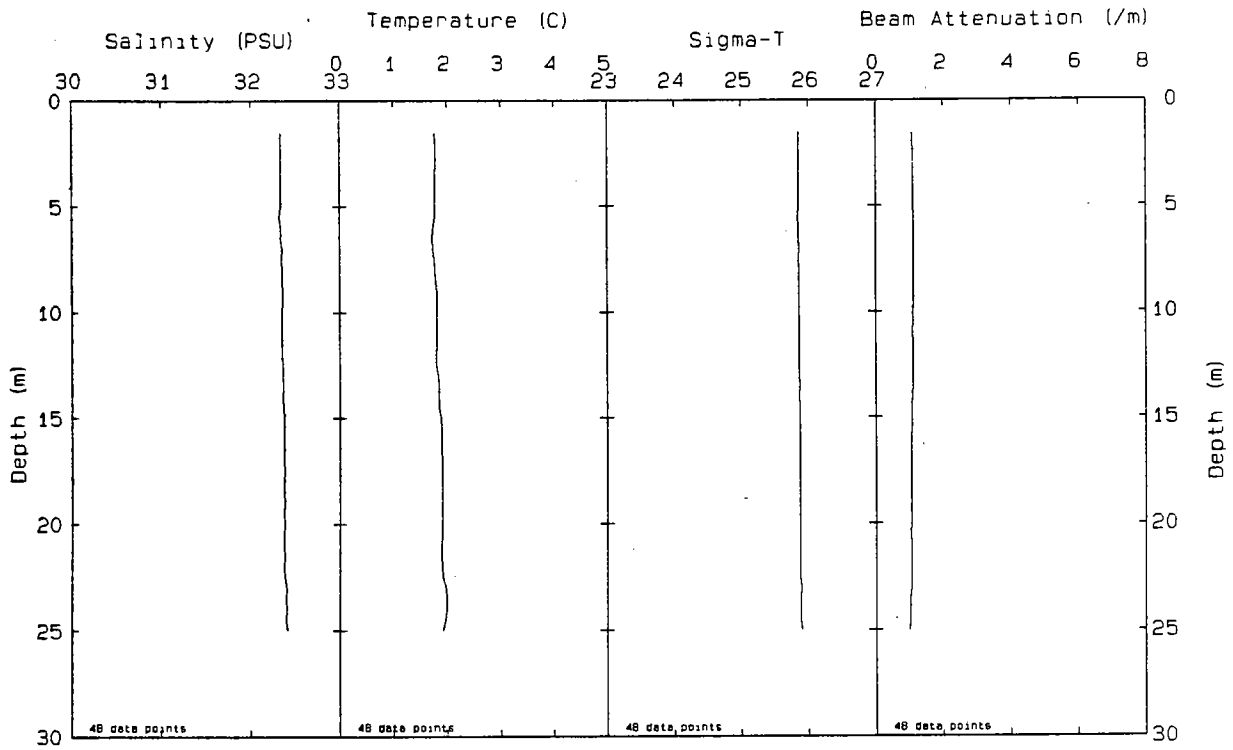




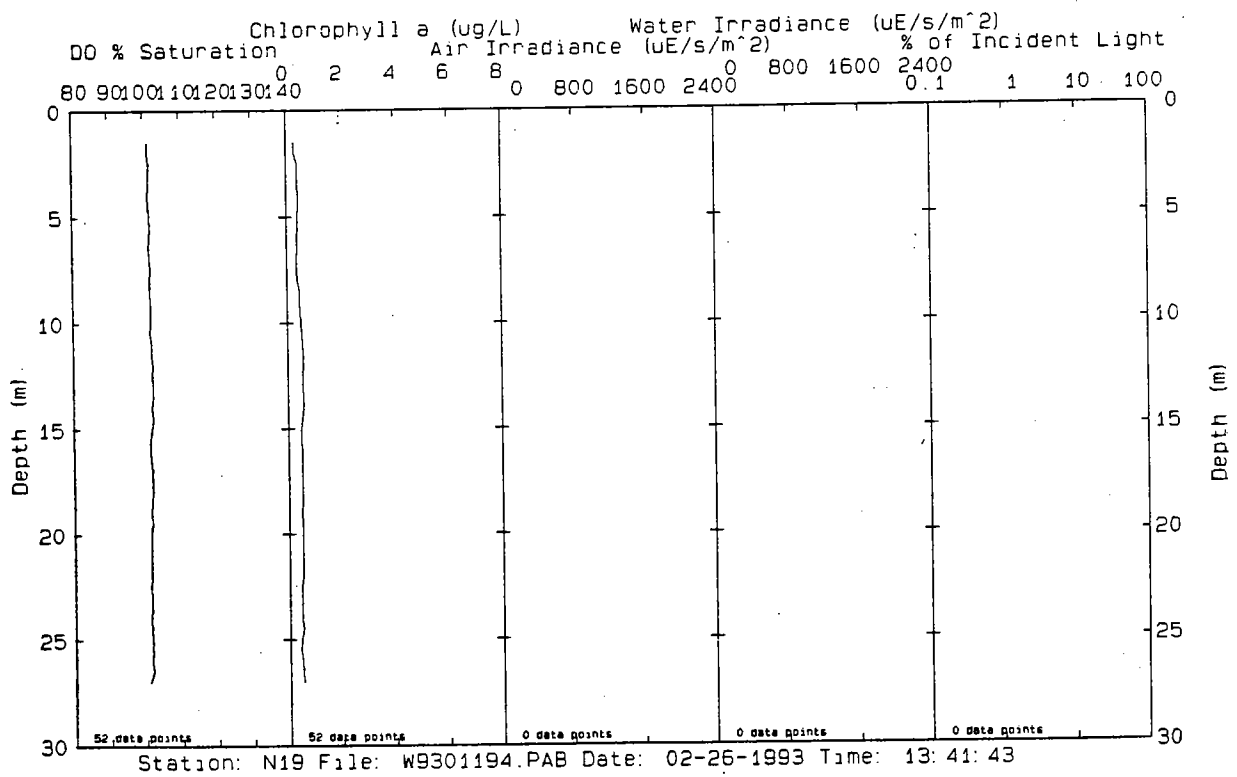
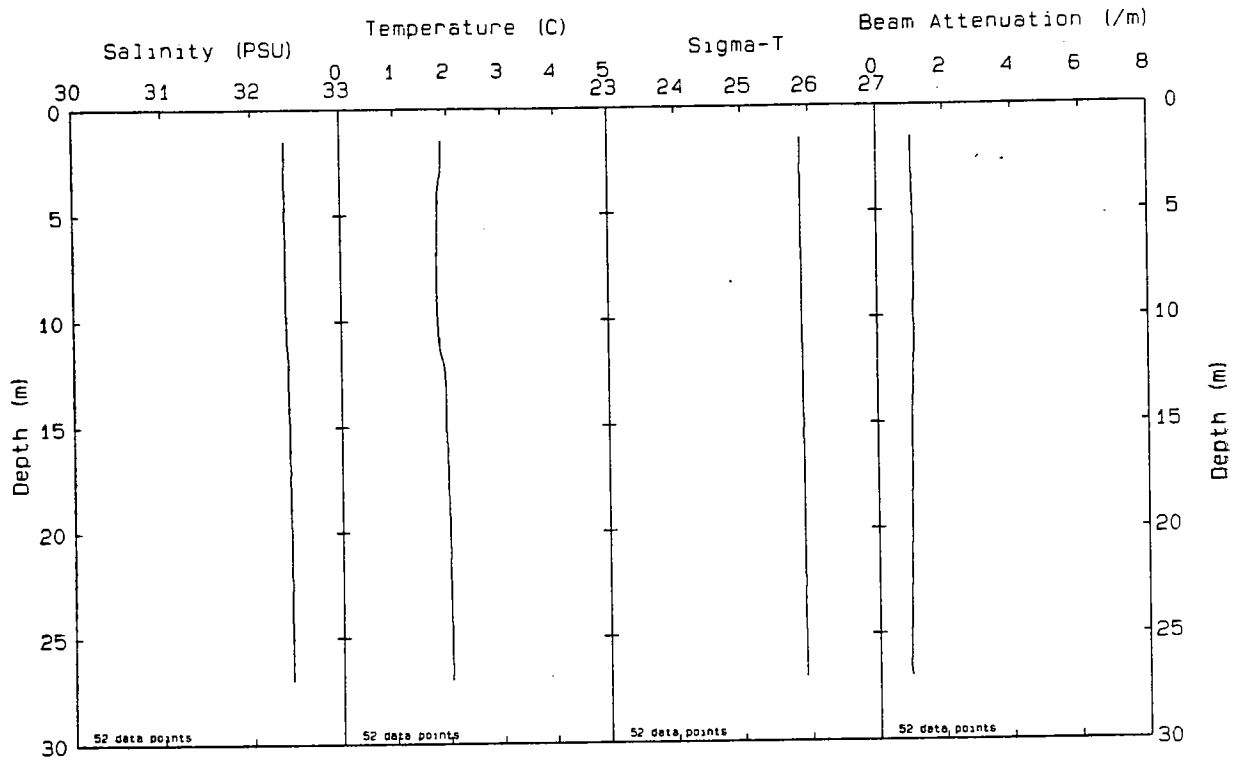
Station: N16P File: W9301209.PAB Date: 02-26-1993 Time: 15:49:43

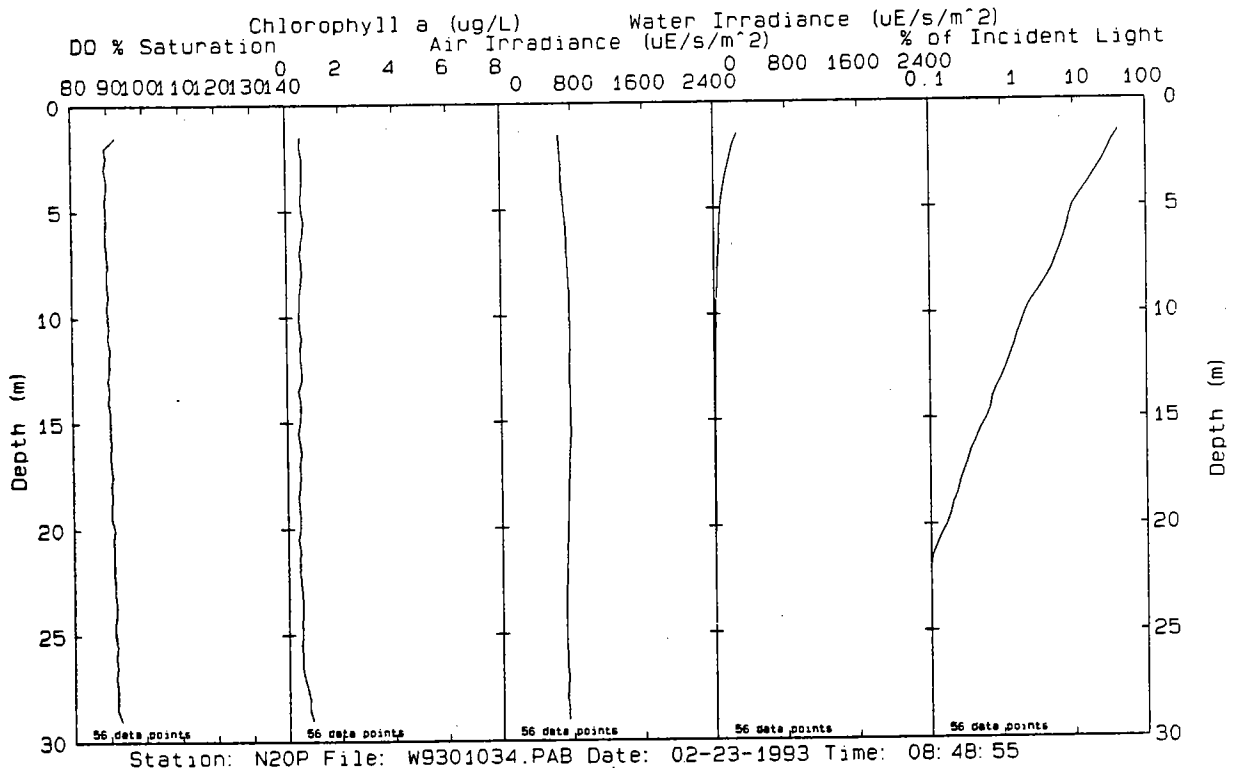
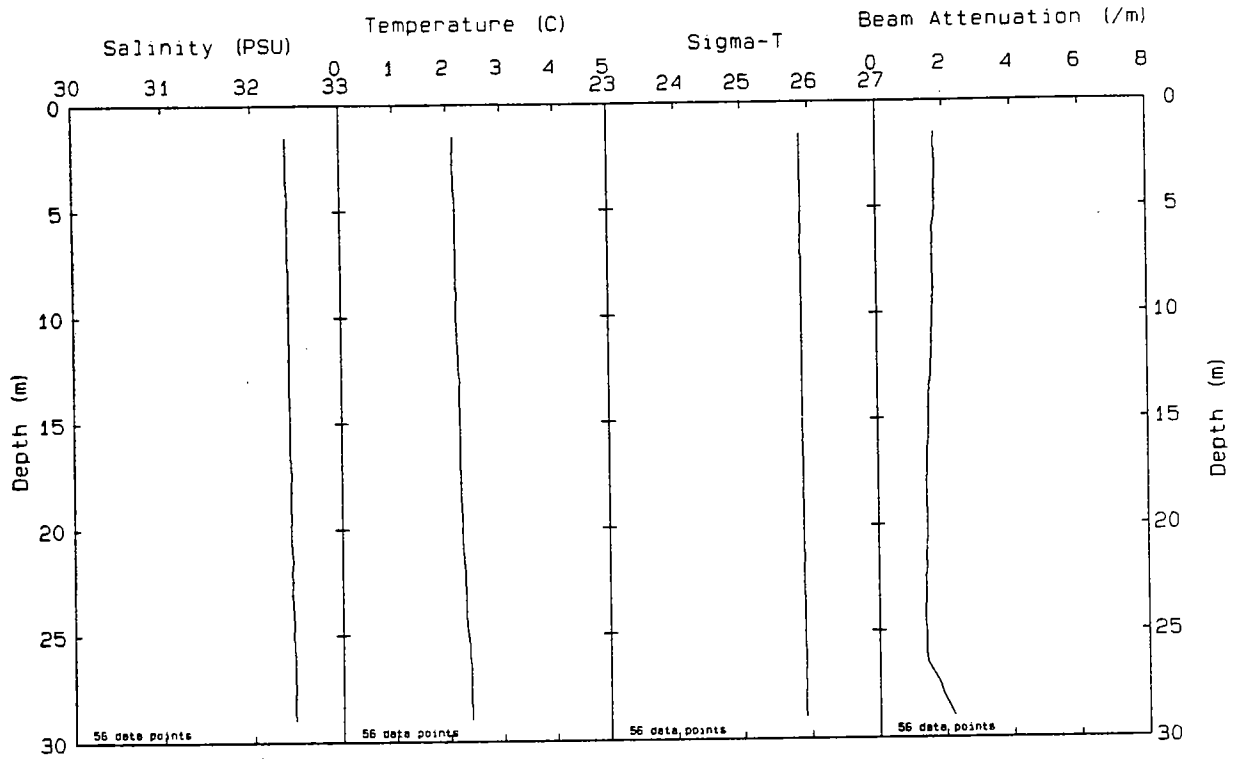


Station: N17 File: W9301212.PAB Date: 02-26-1993 Time: 16:12:22

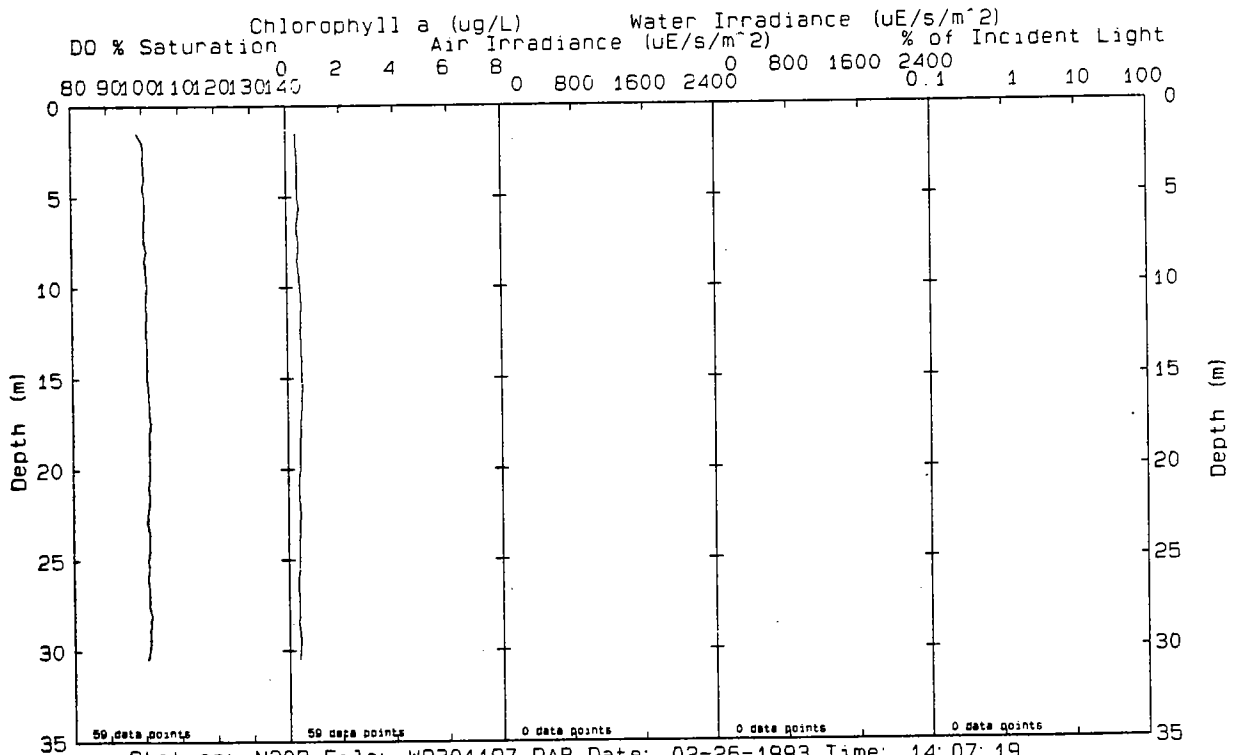
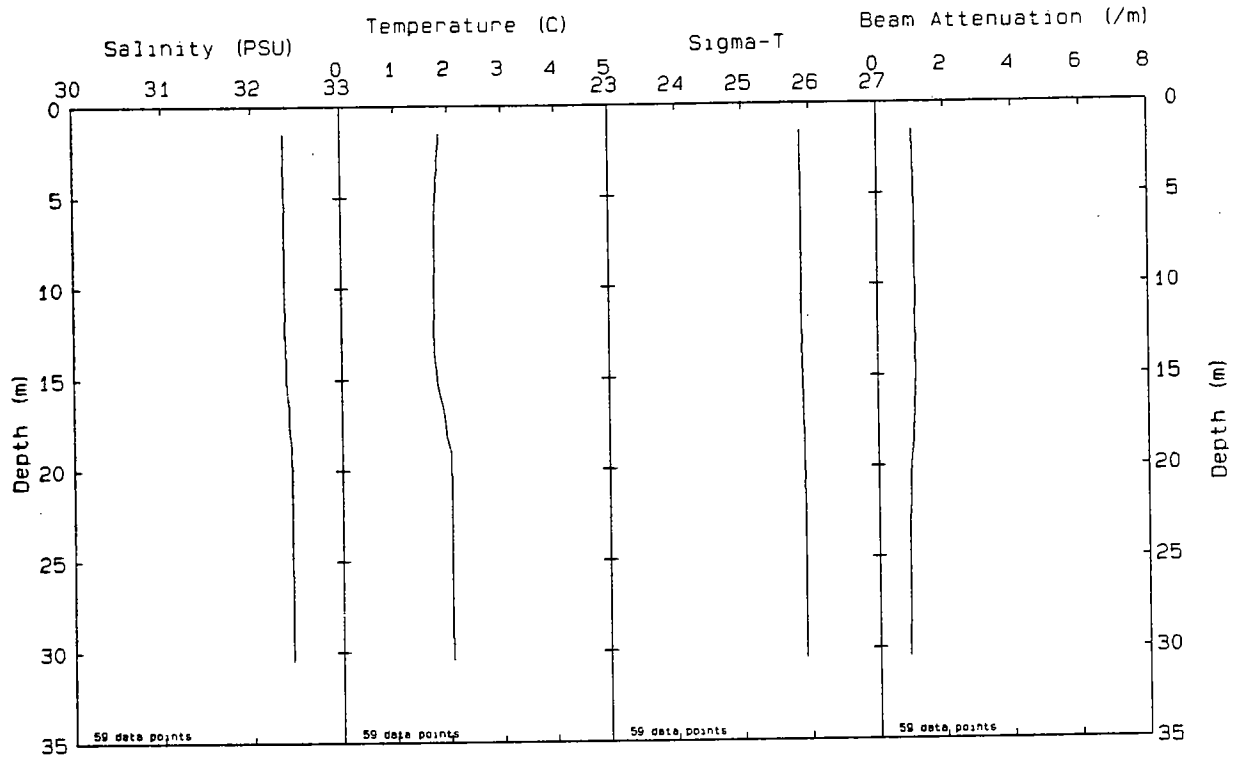


Station: N18 File: W9301215.PAB Date: 02-26-1993 Time: 16:37:12

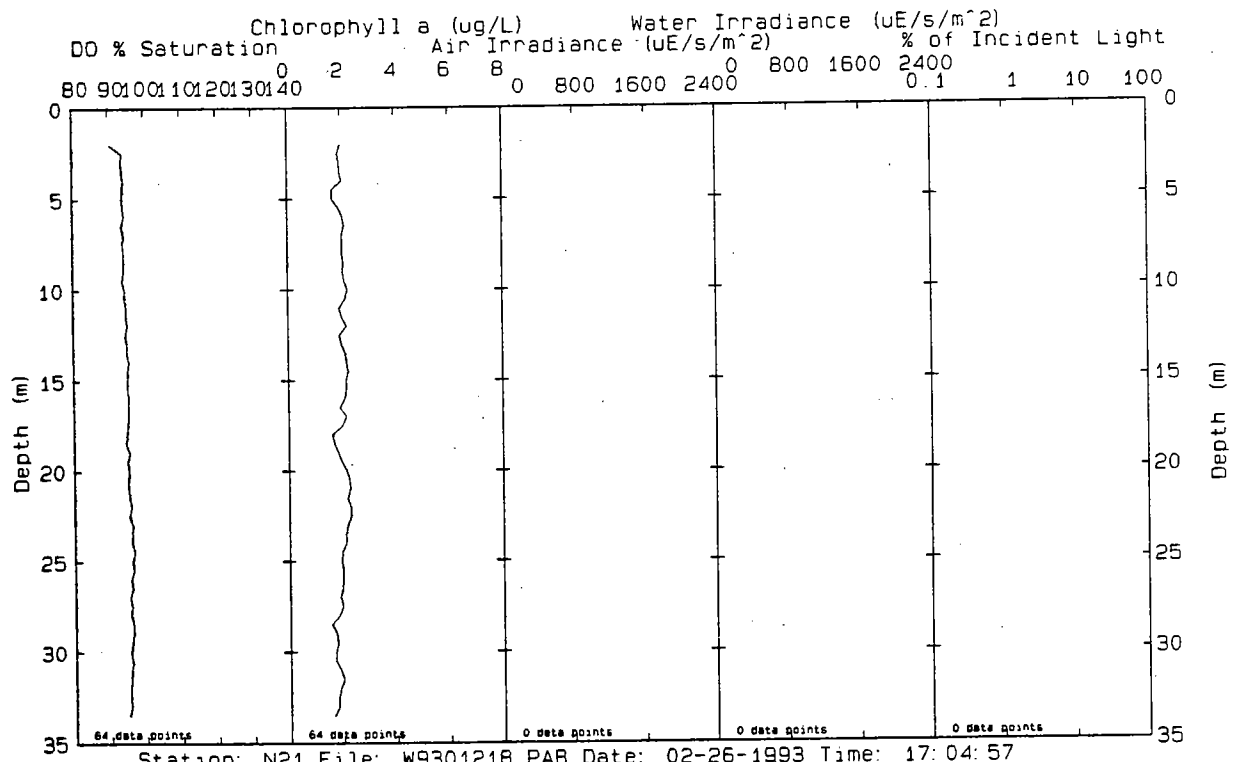
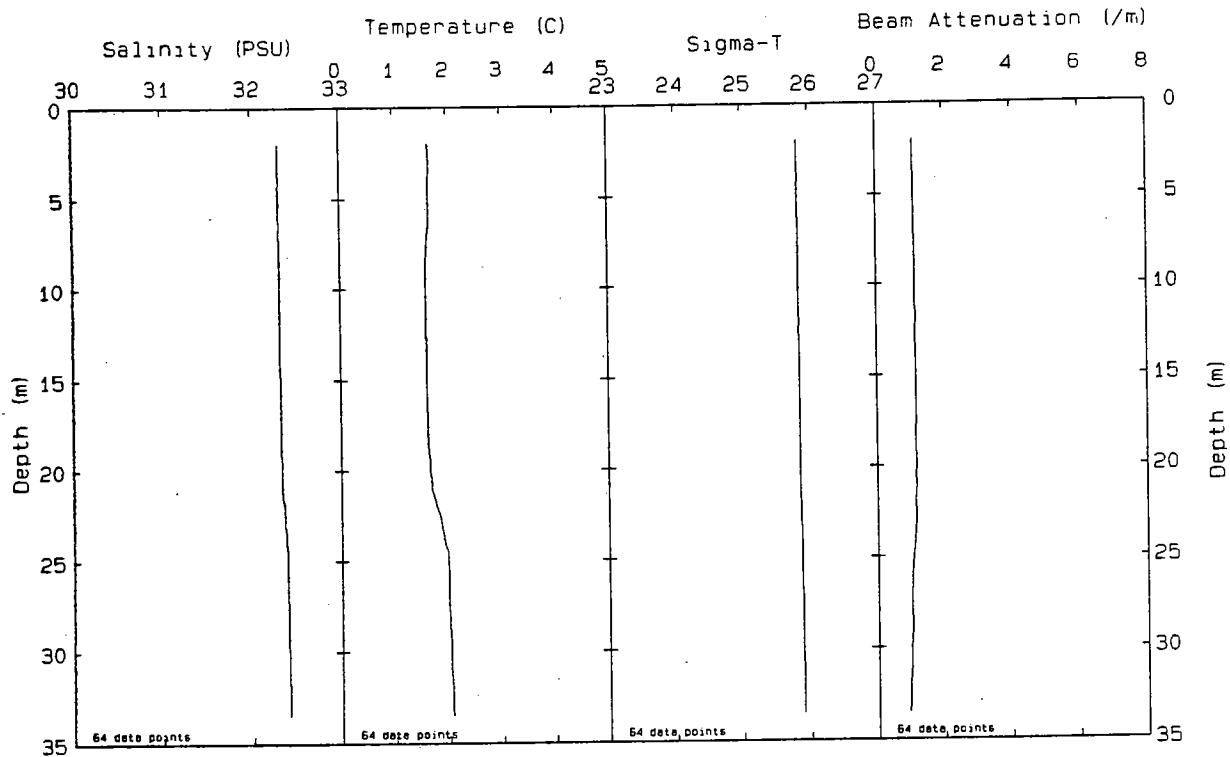




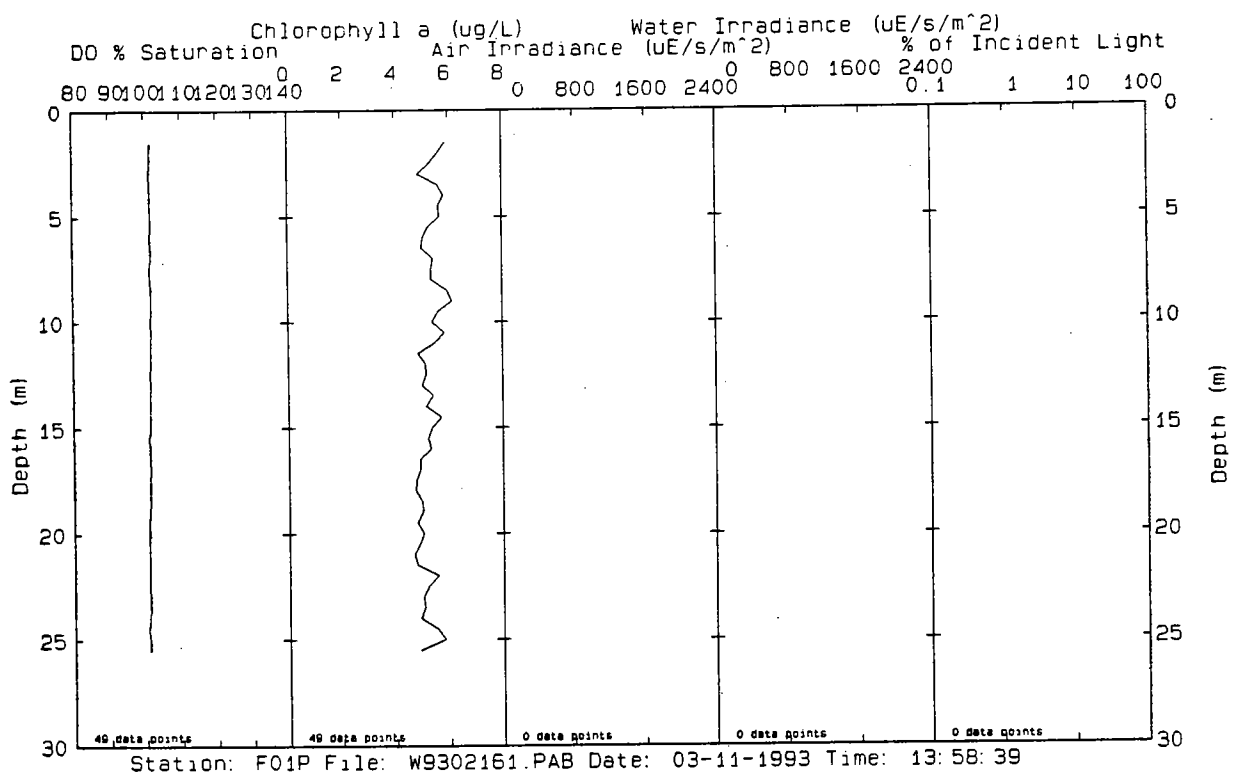
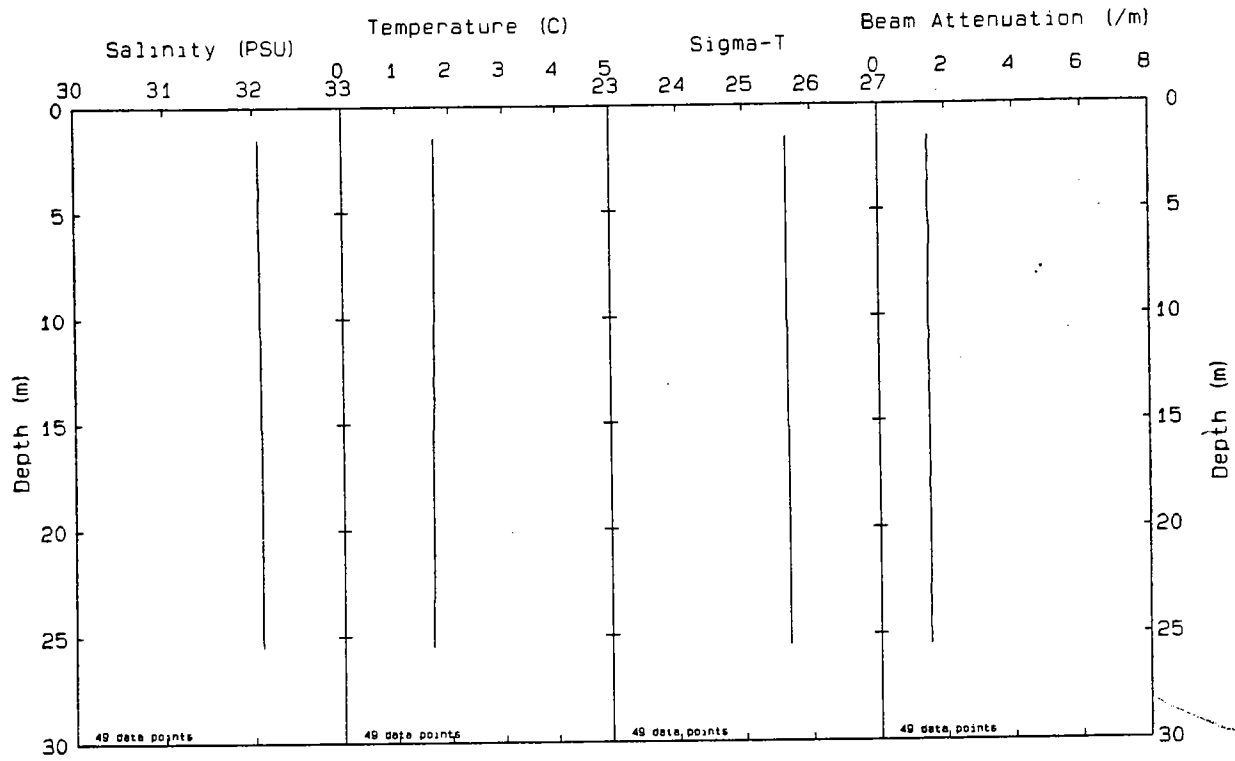
Station: N20P File: W9301034.PAB Date: 02-23-1993 Time: 08:48:55



Station: N20P File: W9301197.PAB Date: 02-26-1993 Time: 14:07:19

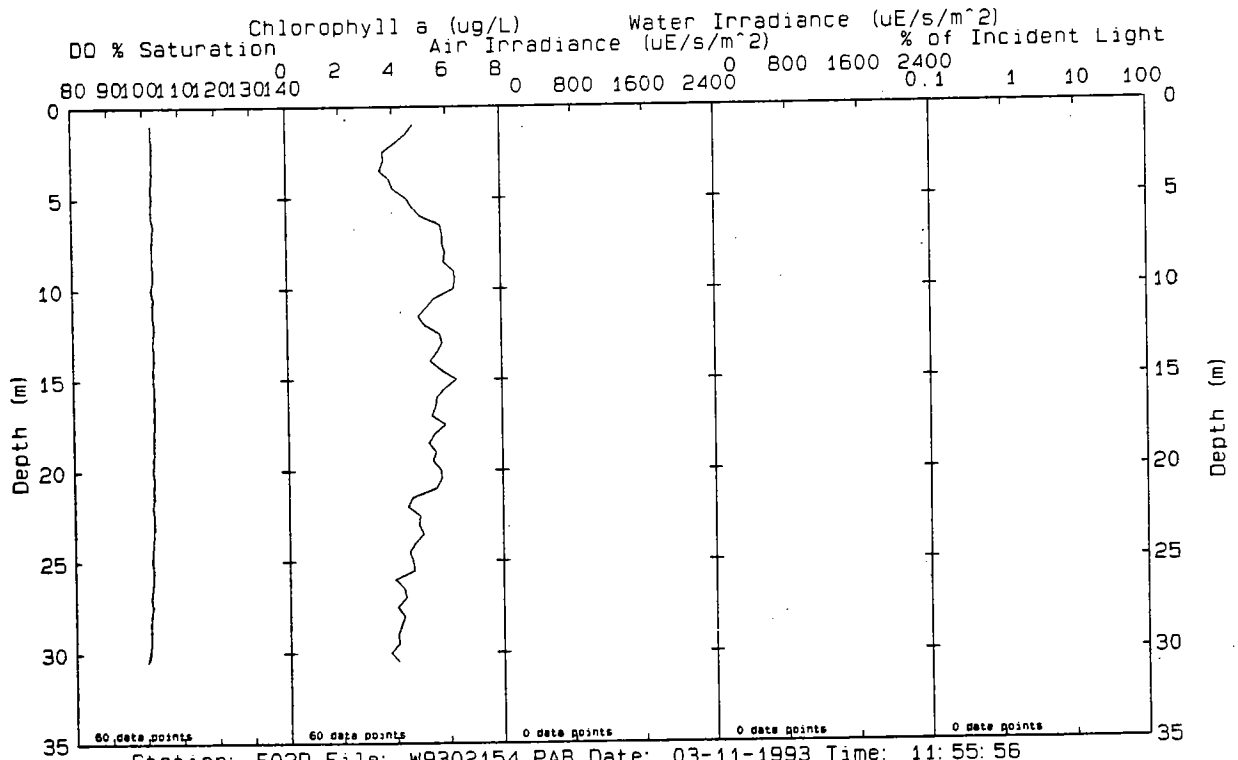
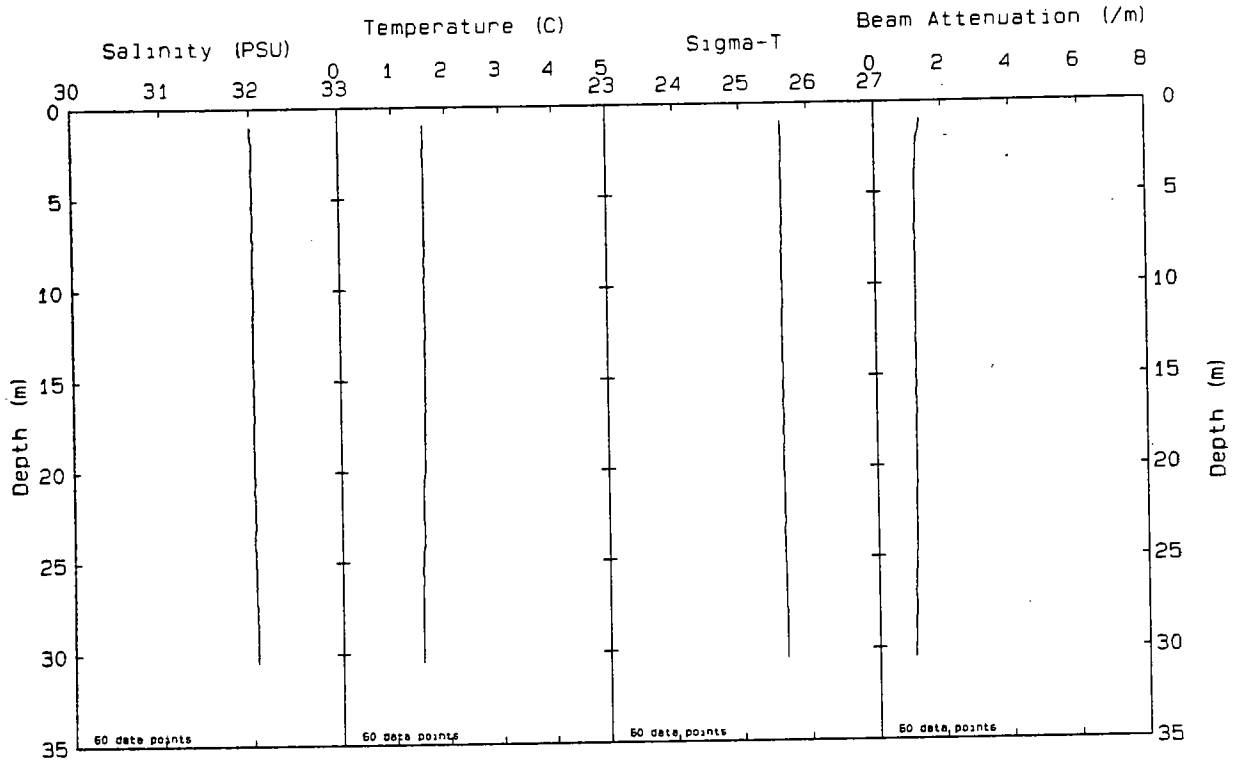


Station: N21 File: W9301218.PAB Date: 02-26-1993 Time: 17: 04: 57

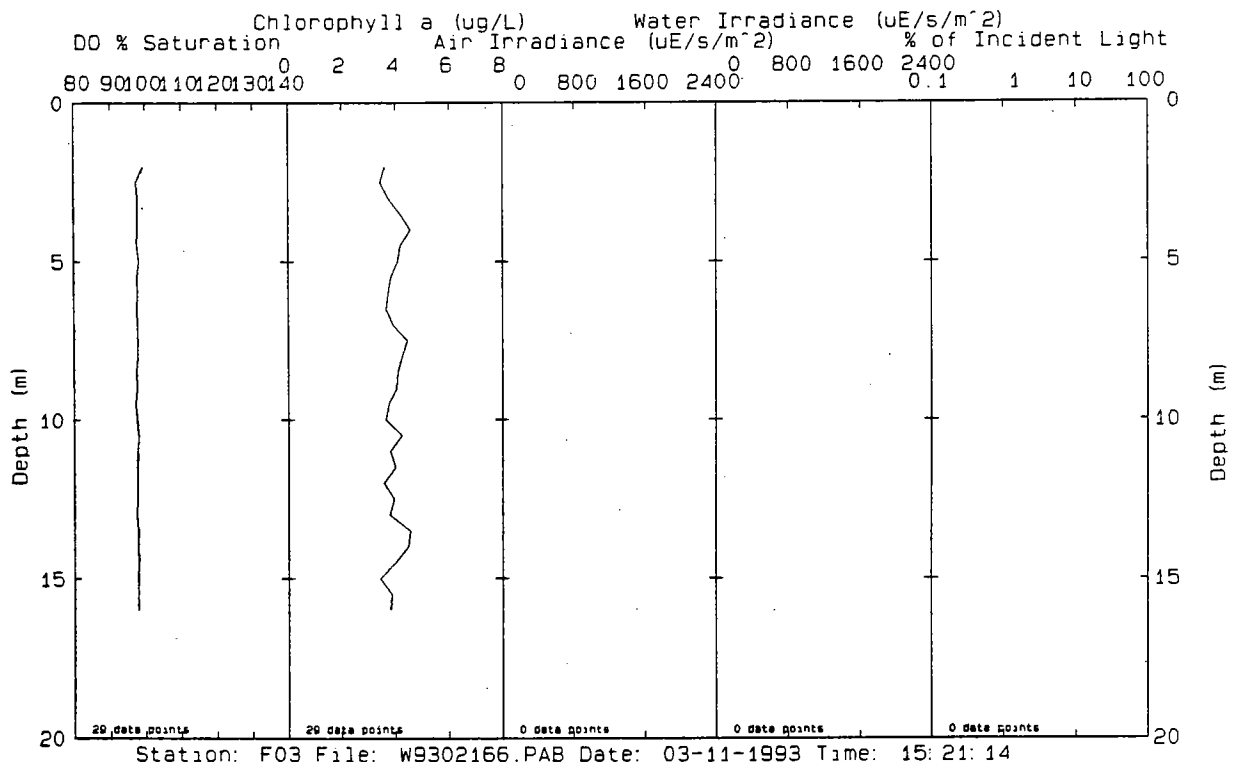
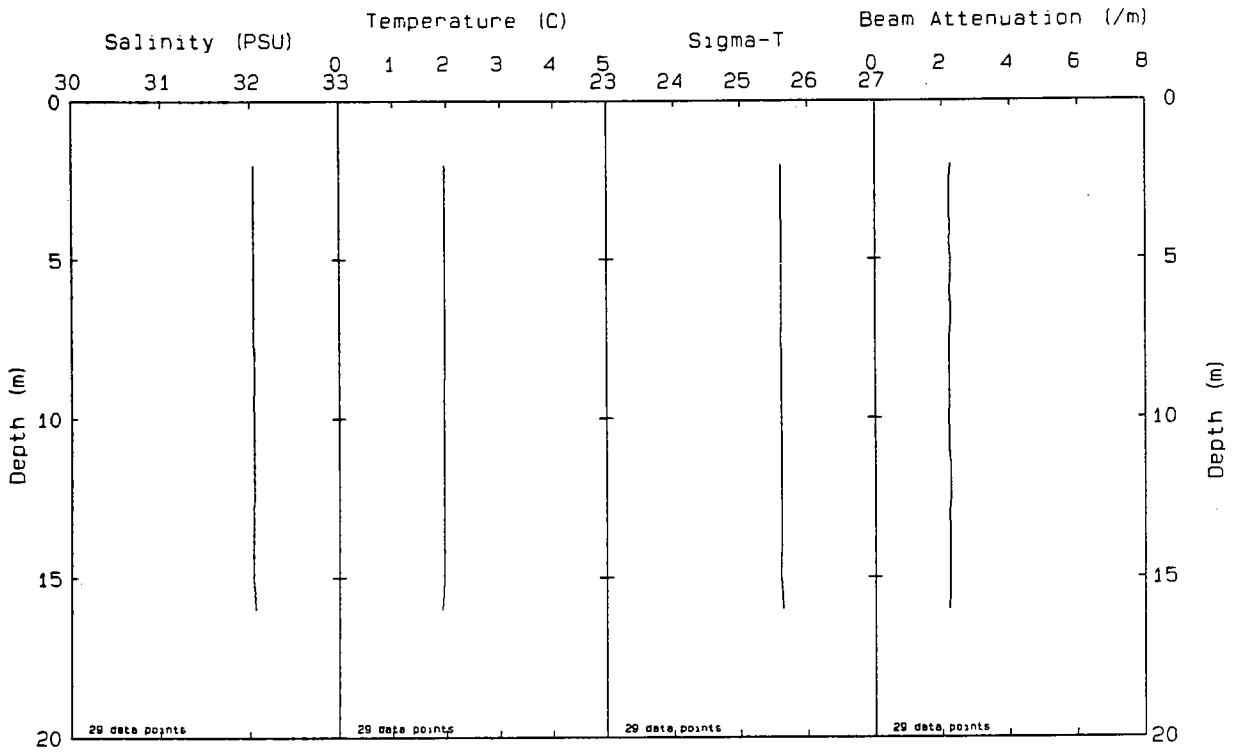


Station: F01P File: W9302161.PAB Date: 03-11-1993 Time: 13:58:39

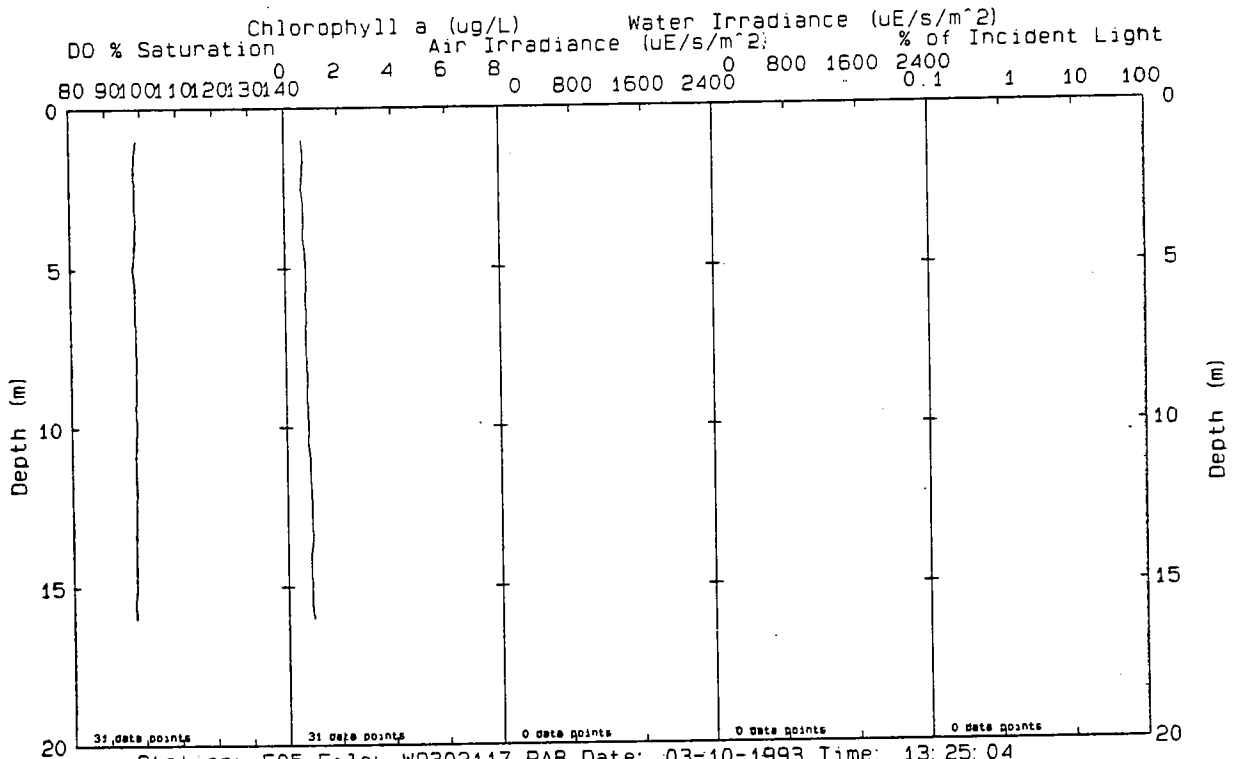
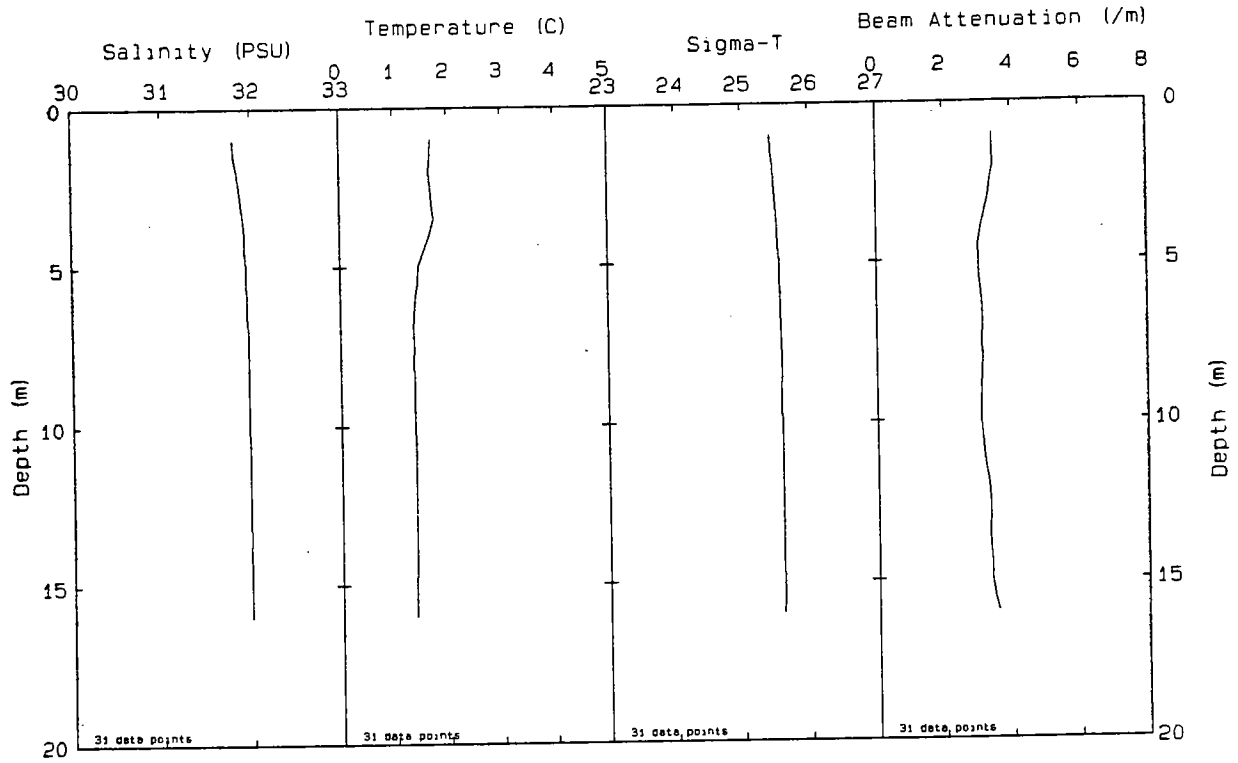
Mid-March 1993 Profiles



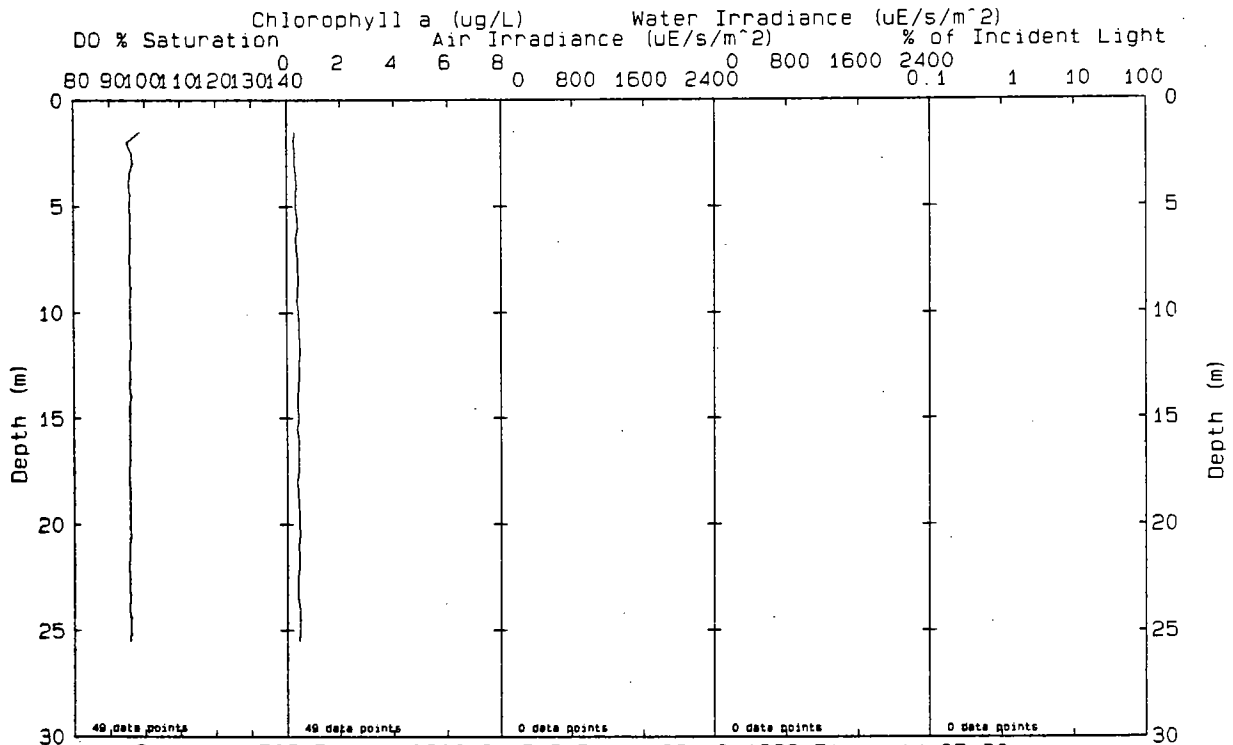
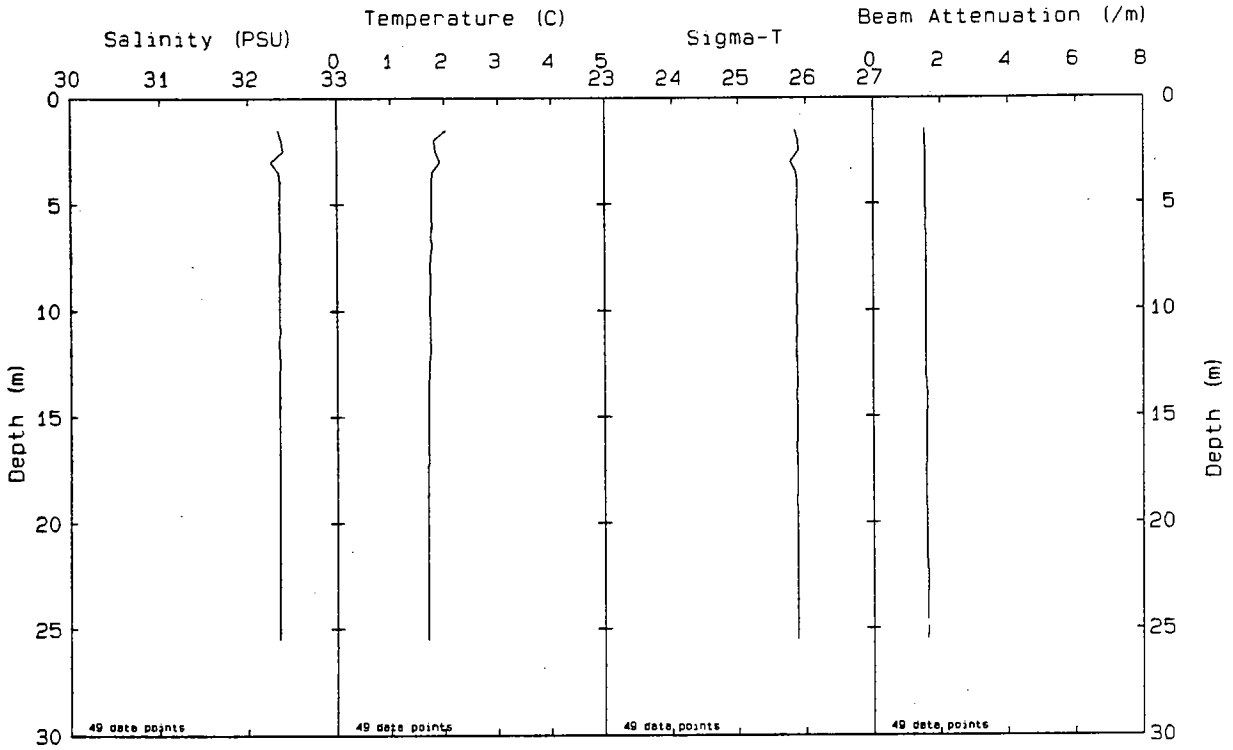
Station: F02P File: W9302154.PAB Date: 03-11-1993 Time: 11:55:56



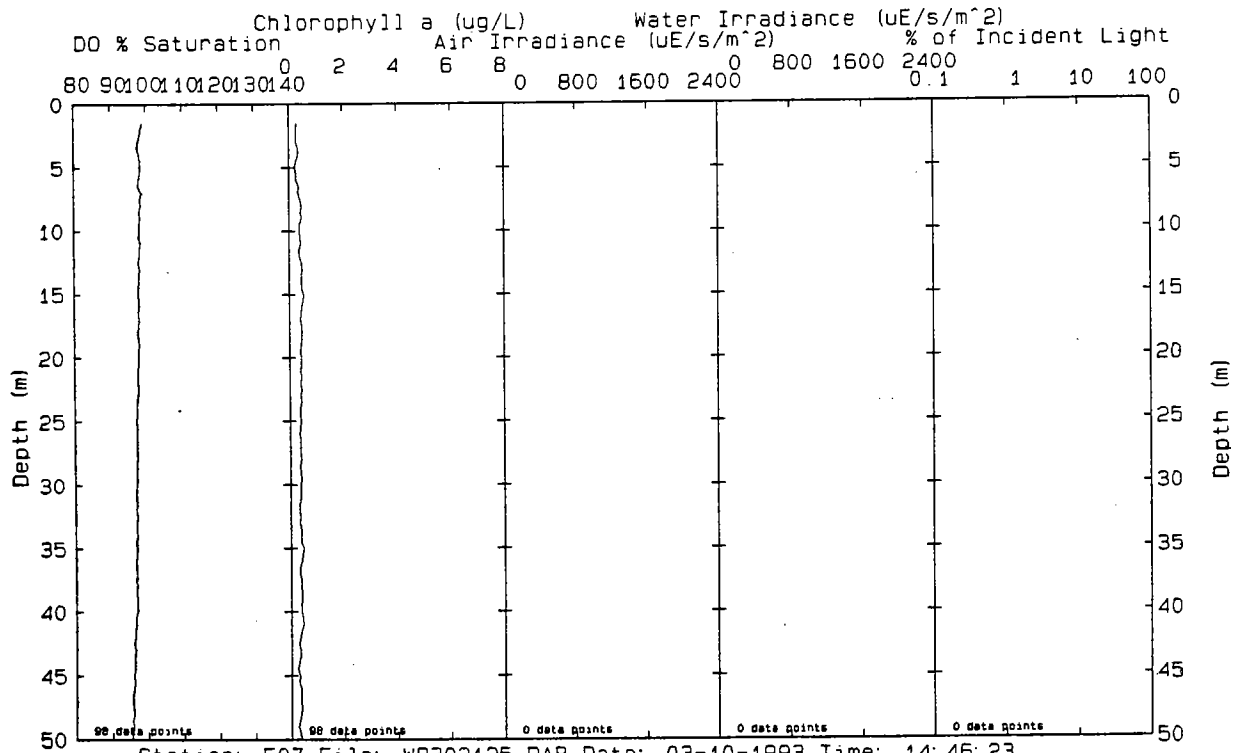
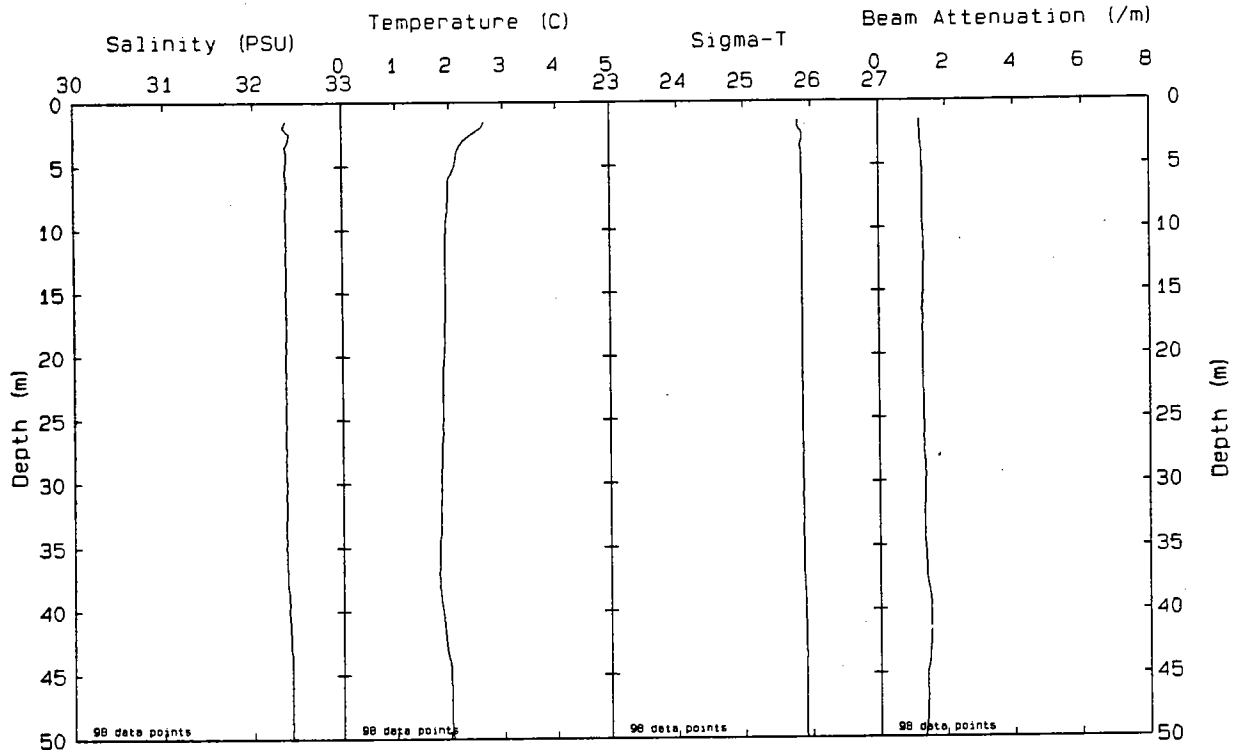
Station: F03 File: W9302166.PAB Date: 03-11-1993 Time: 15: 21: 14

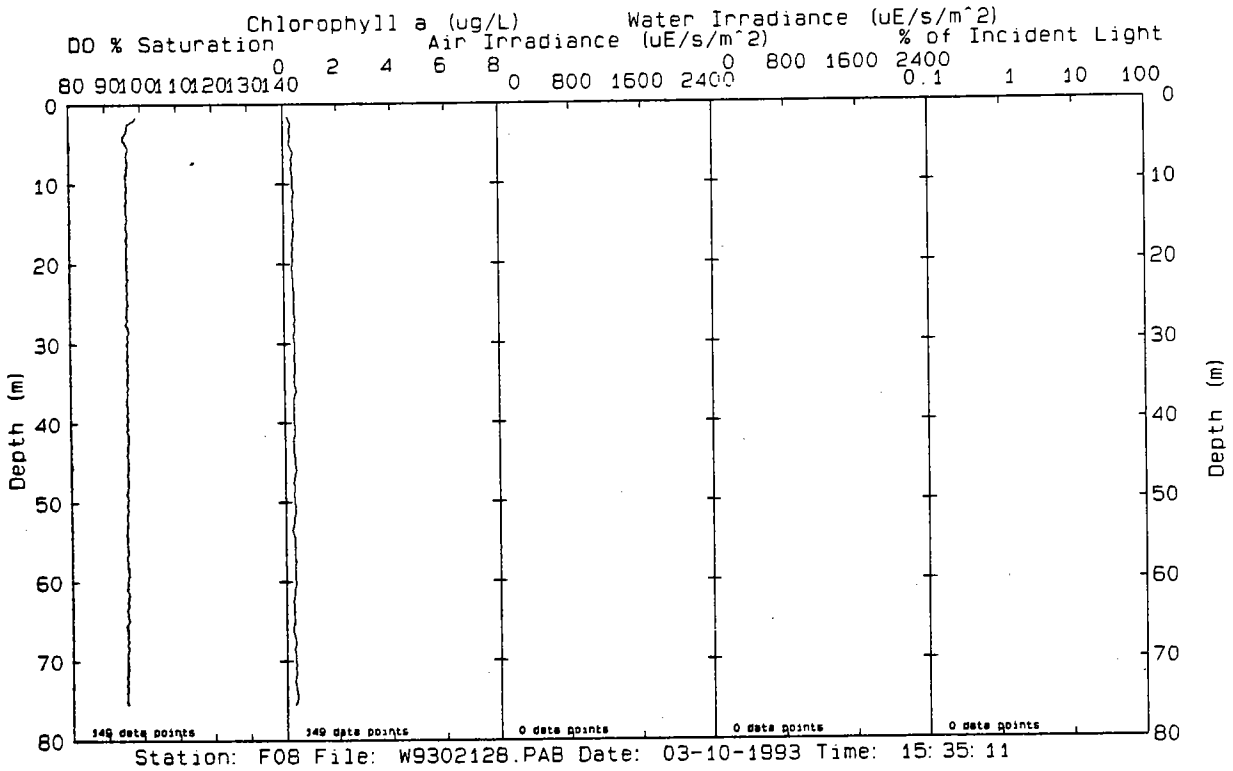
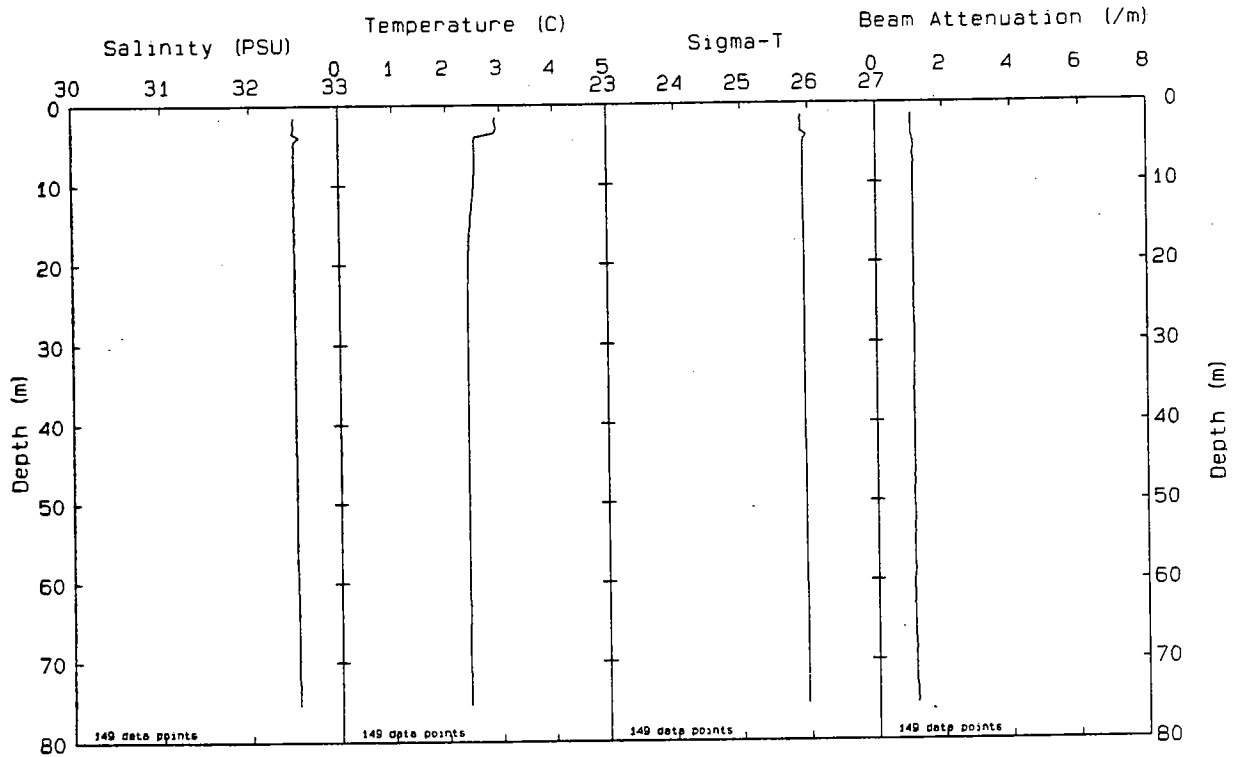


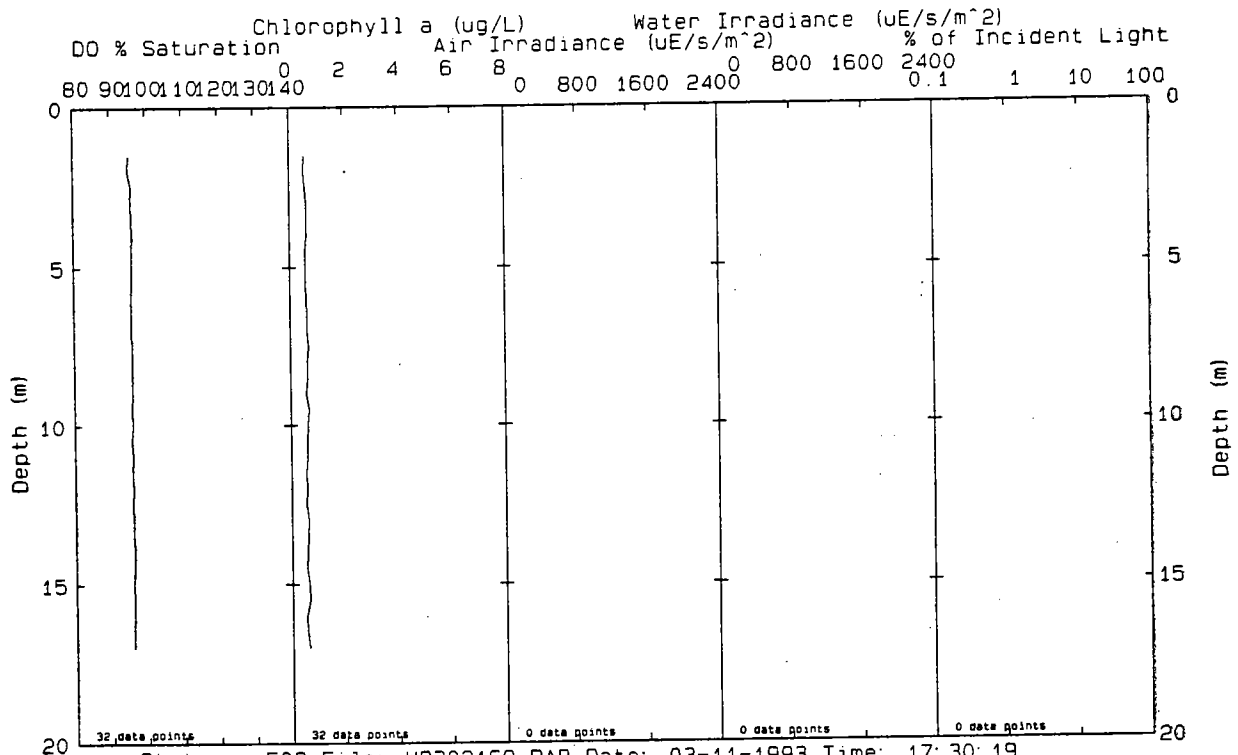
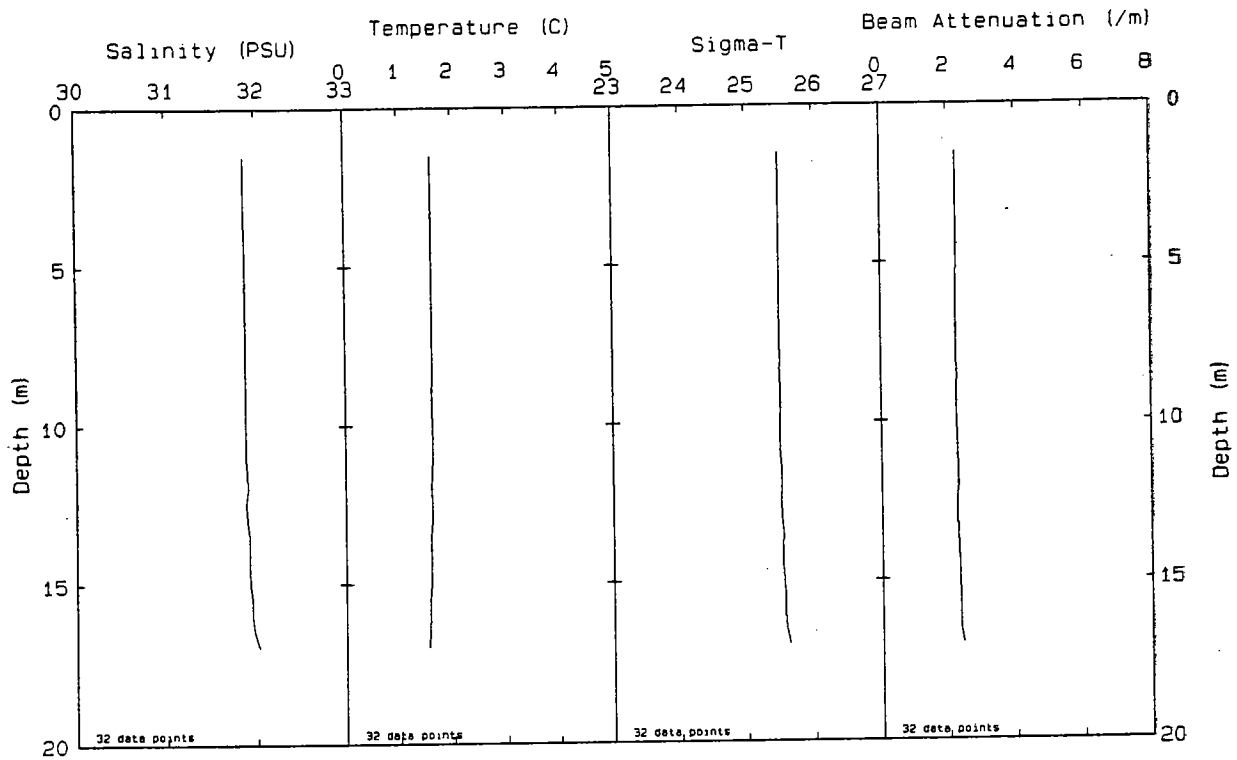
Station: F05 File: W9302117.PAB Date: 03-10-1993 Time: 13:25:04



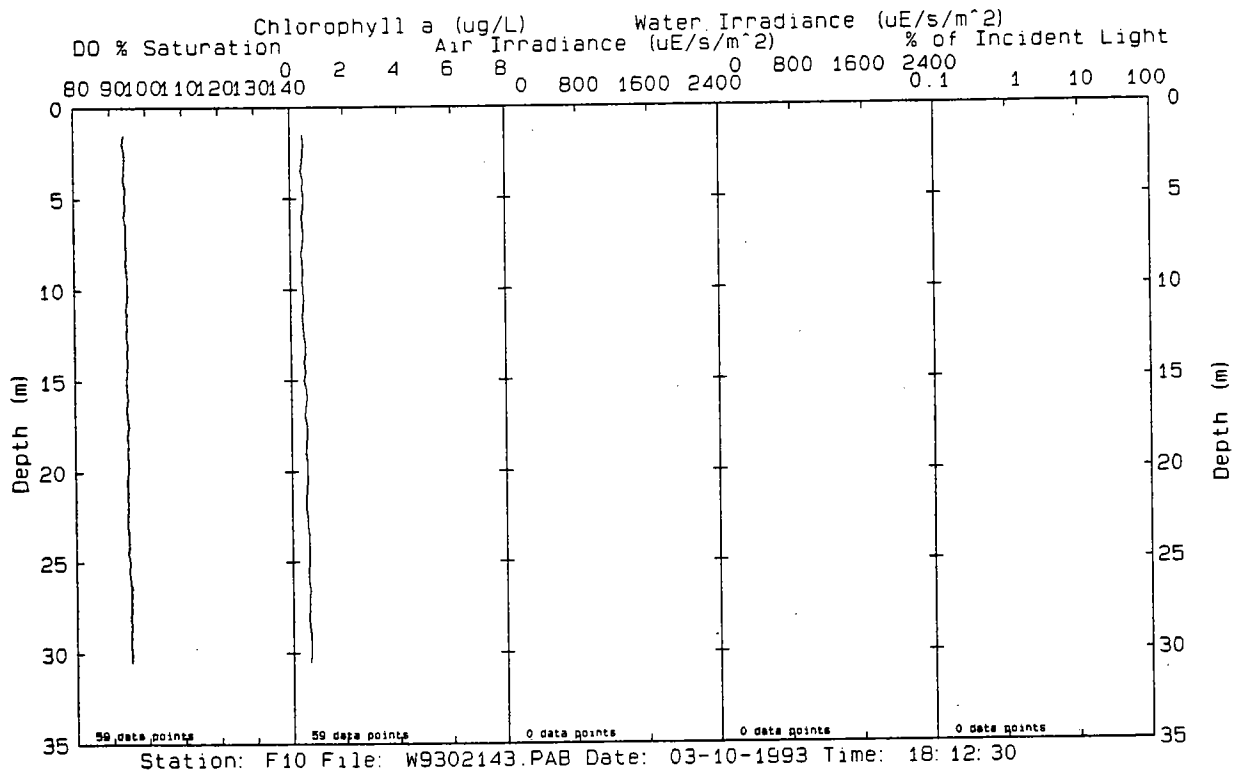
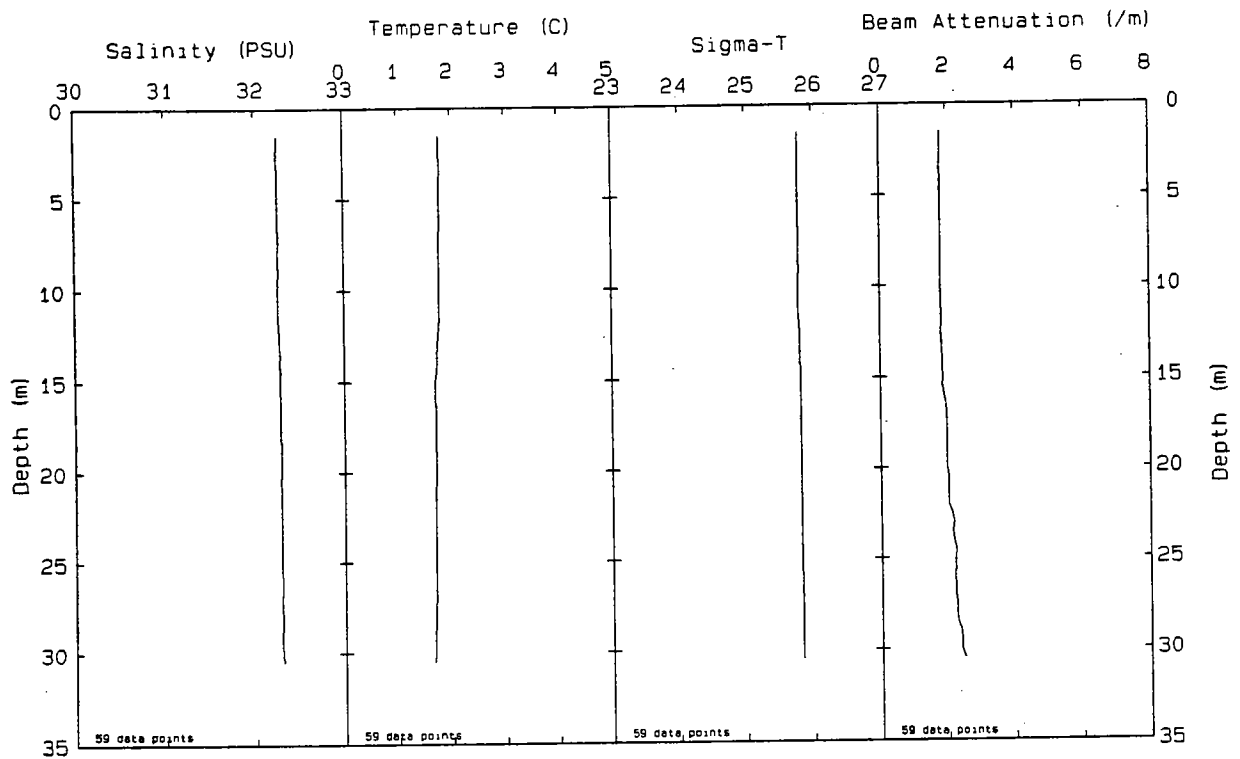
Station: F06 File: W9302121.PAB Date: 03-10-1993 Time: 14:07:60

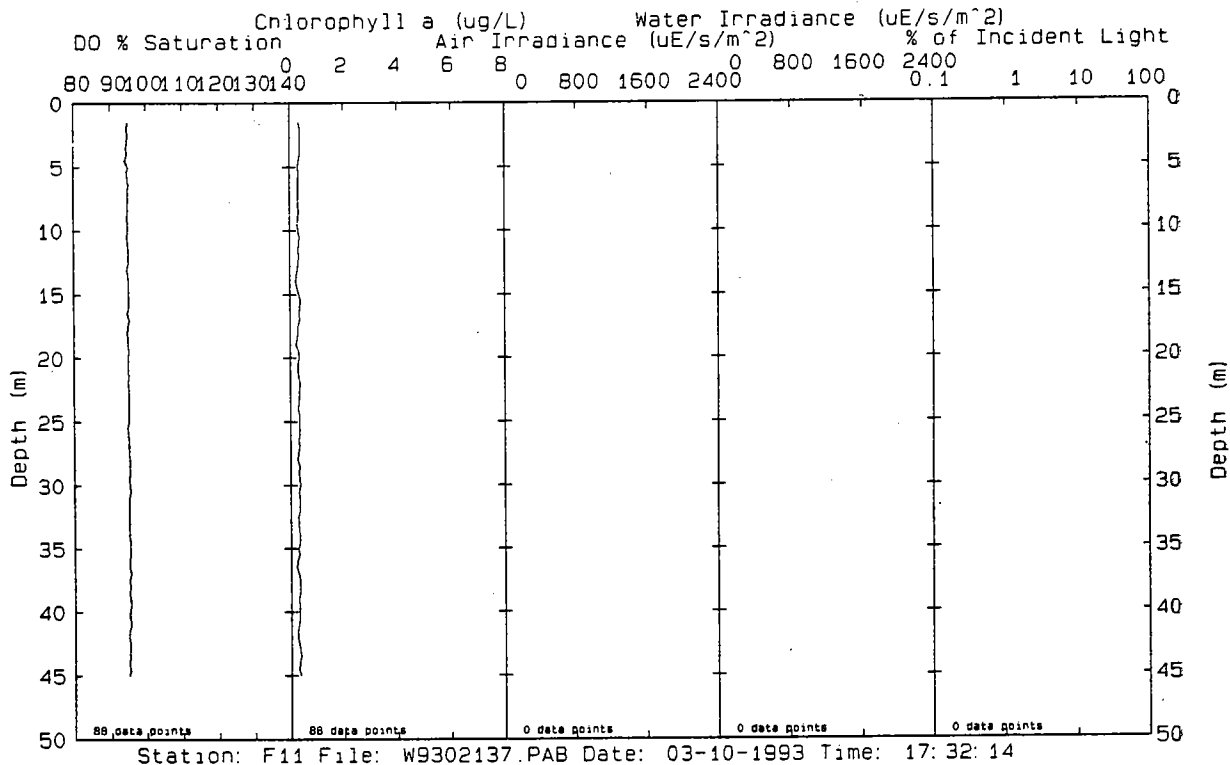
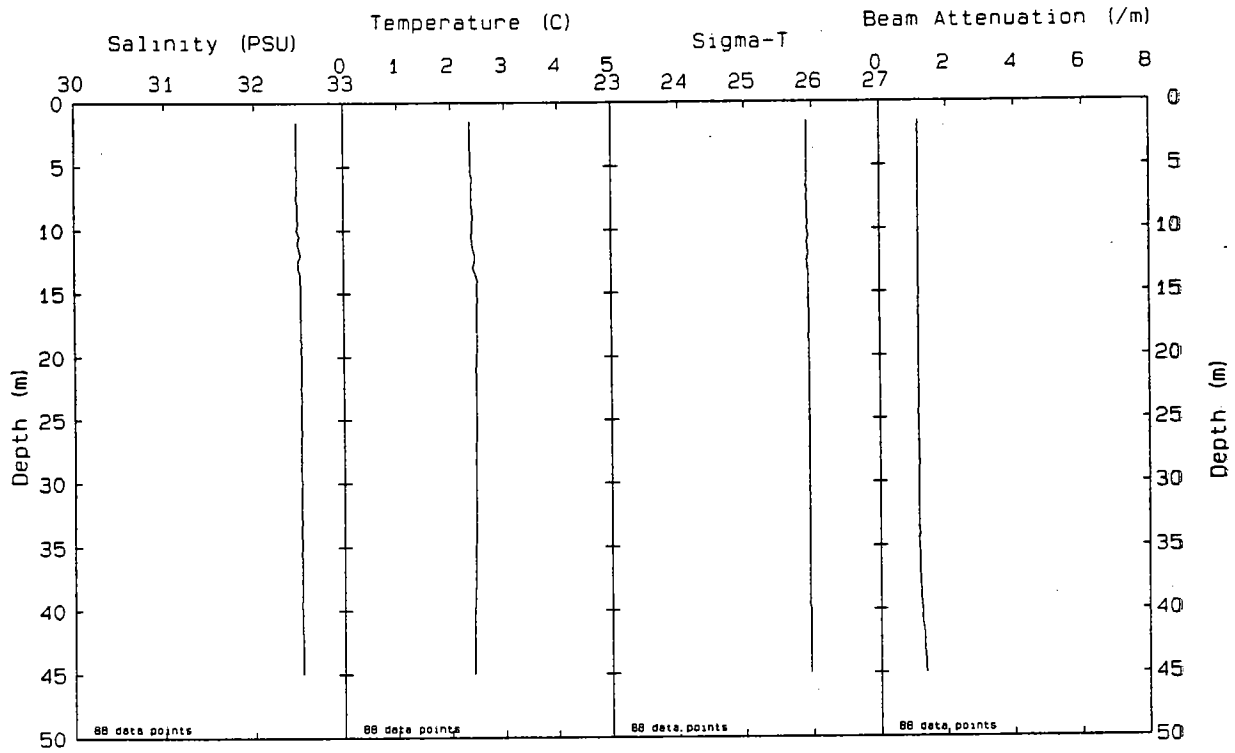


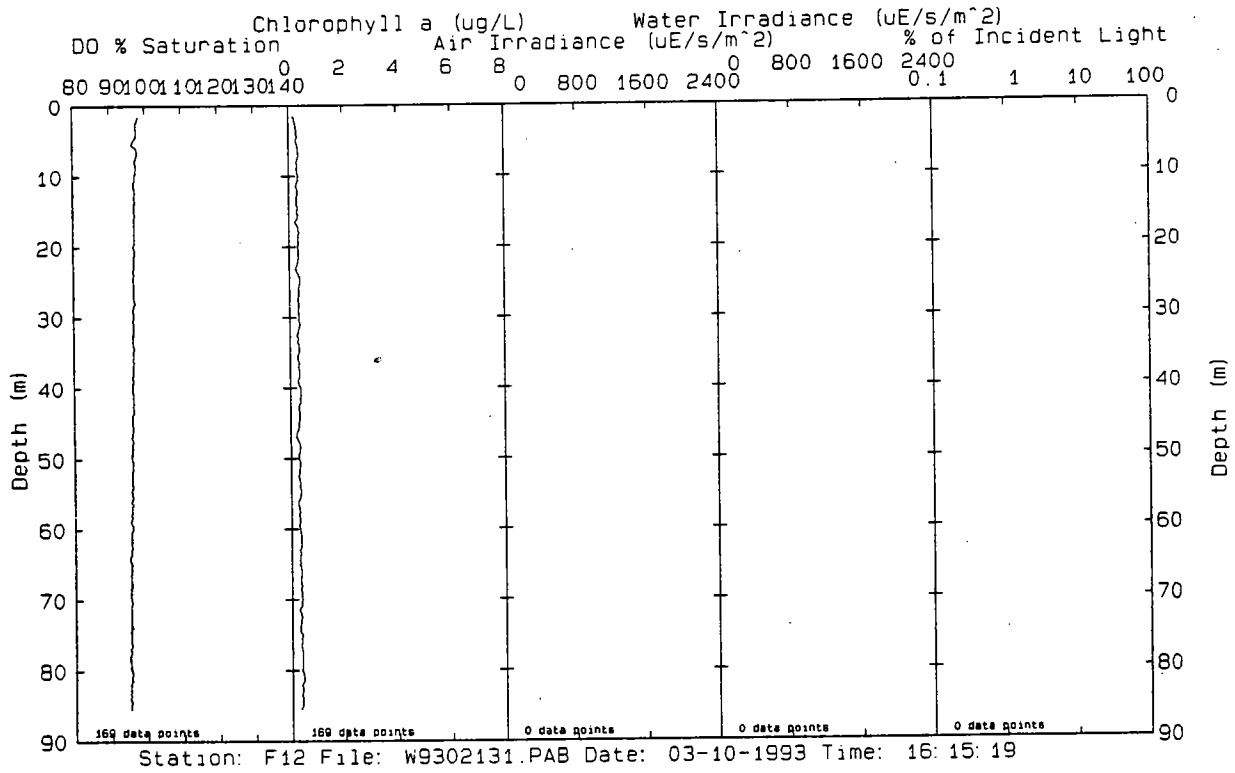
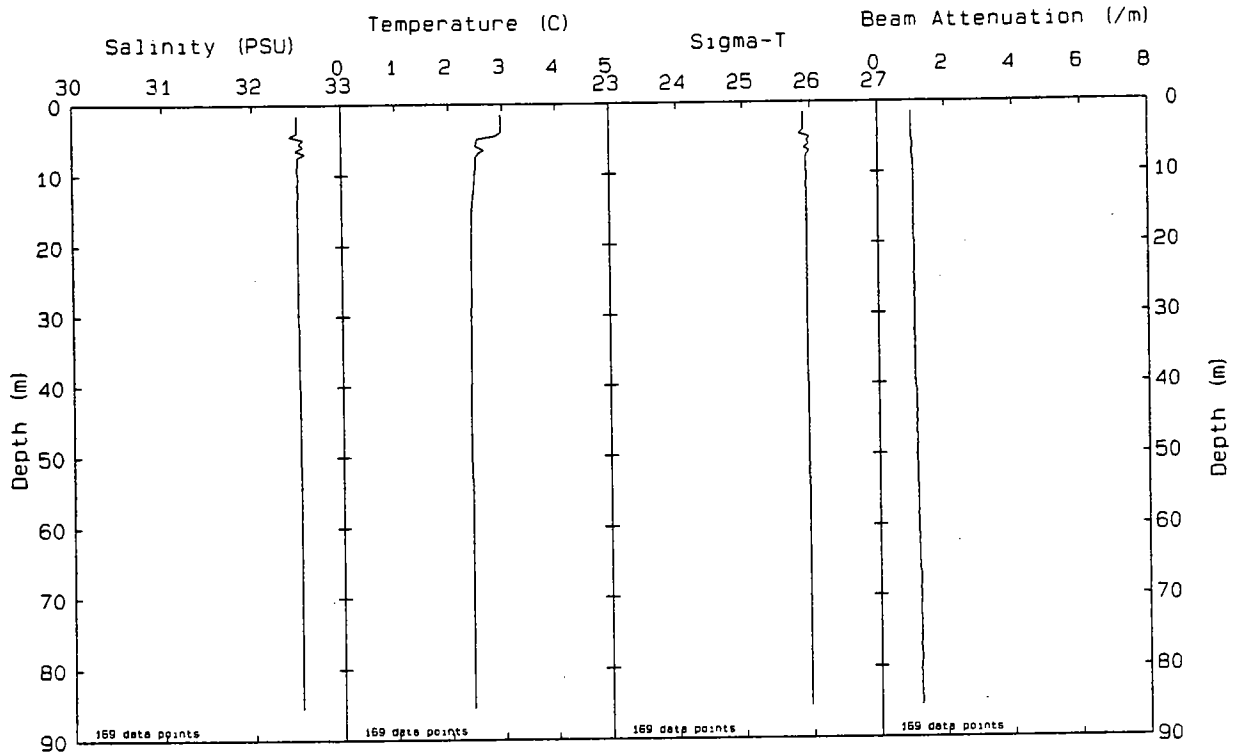


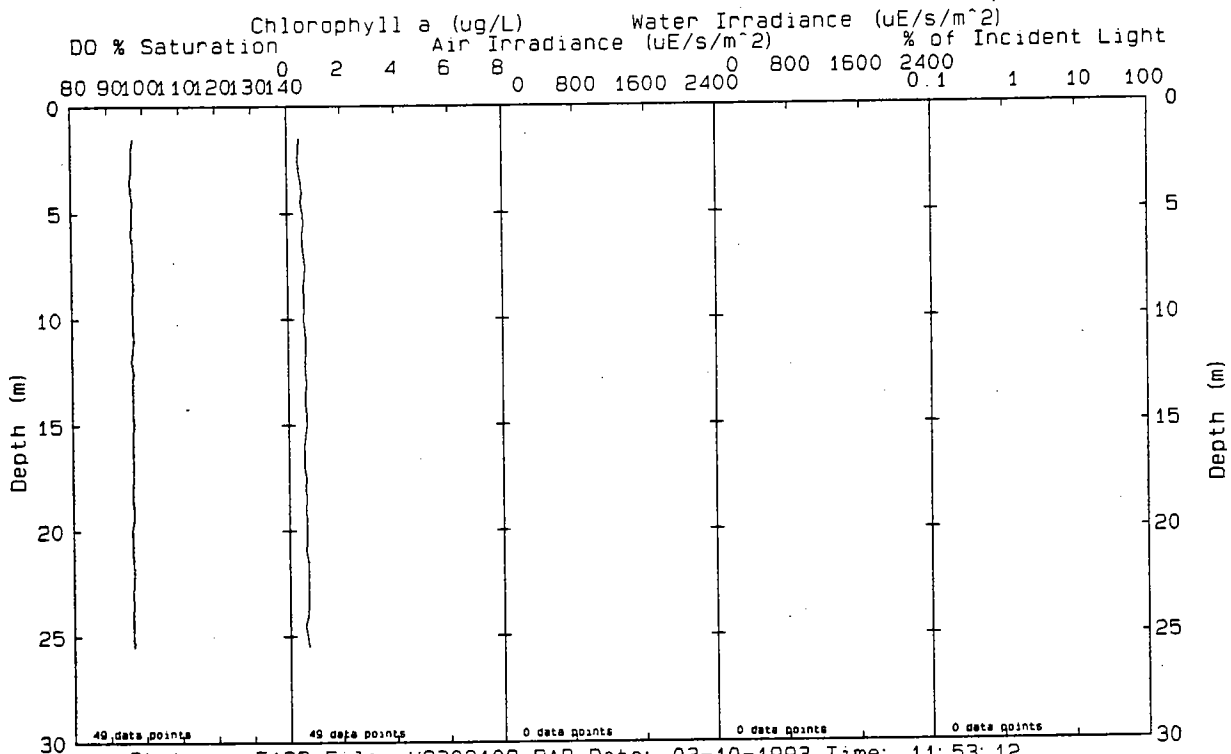
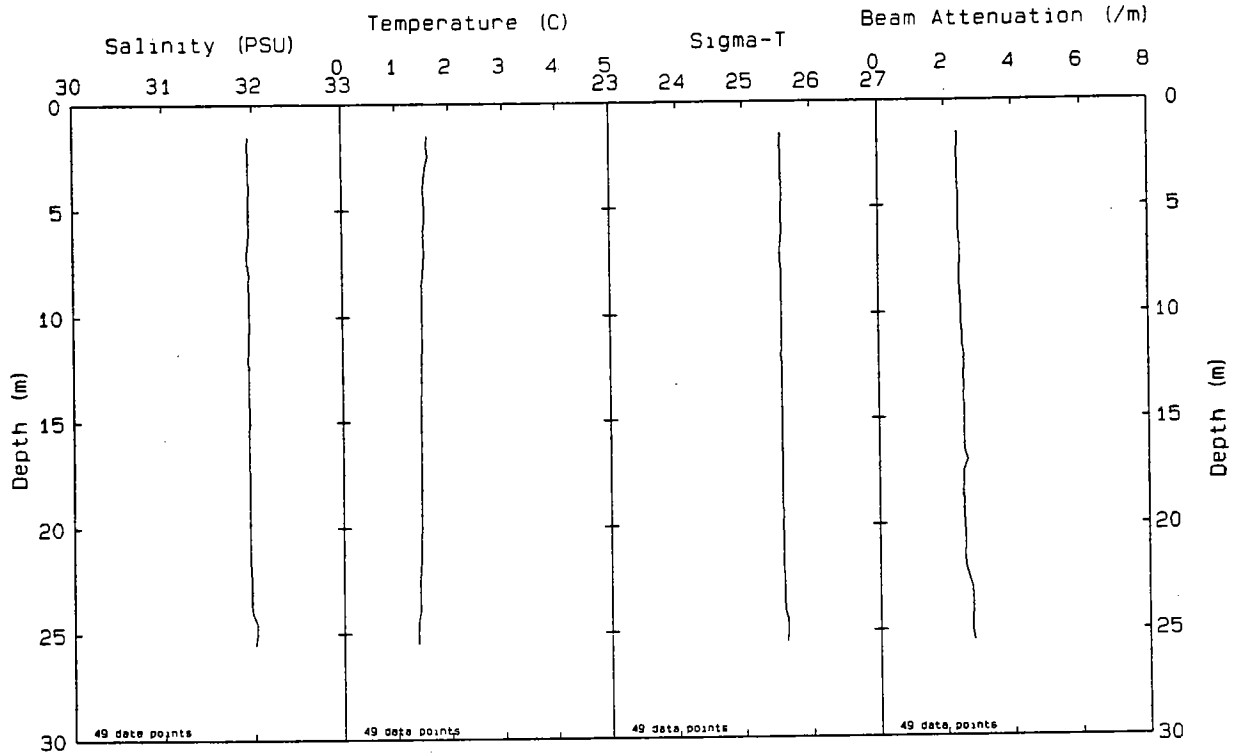


Station: F09 File: W9302169.PAB Date: 03-11-1993 Time: 17:30:19

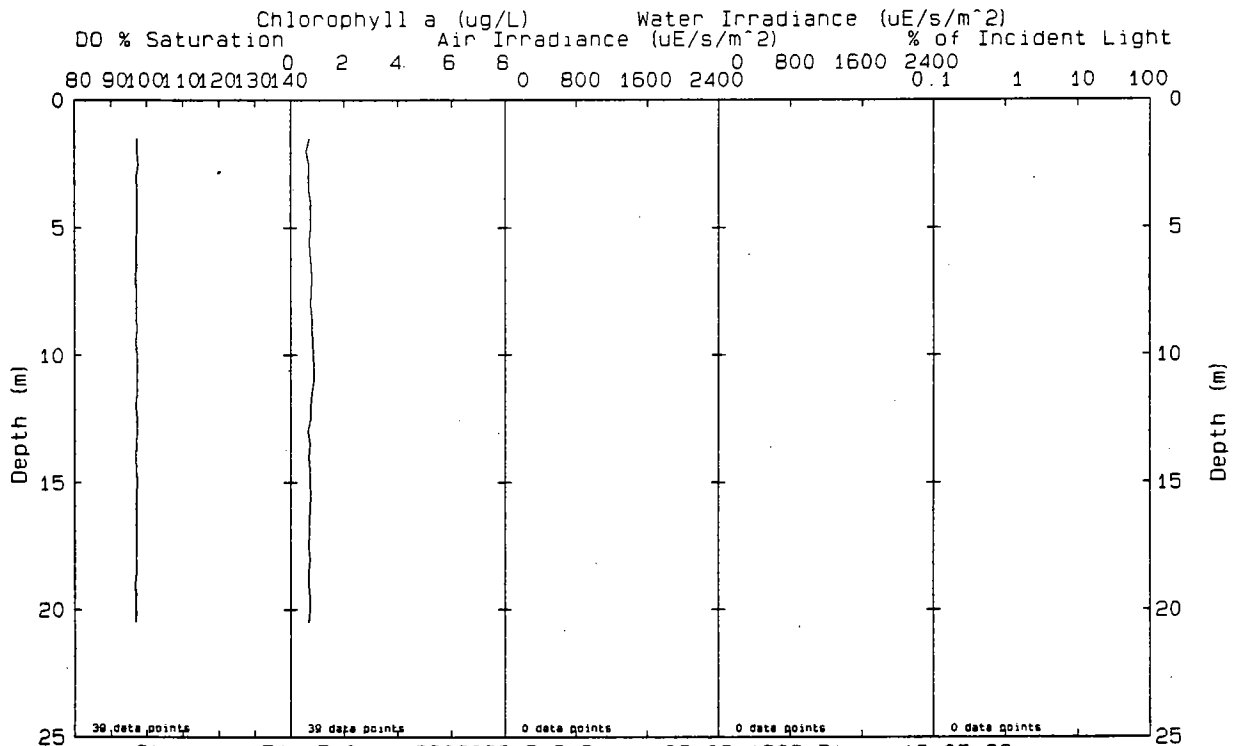
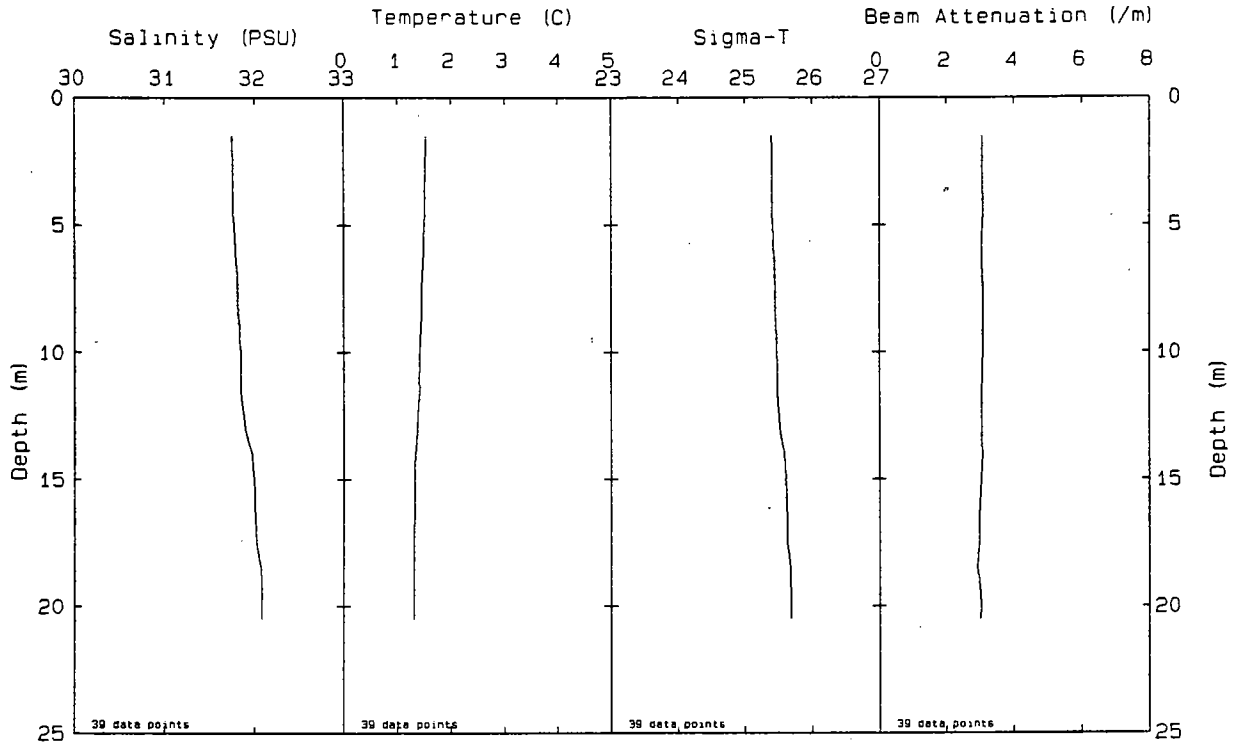




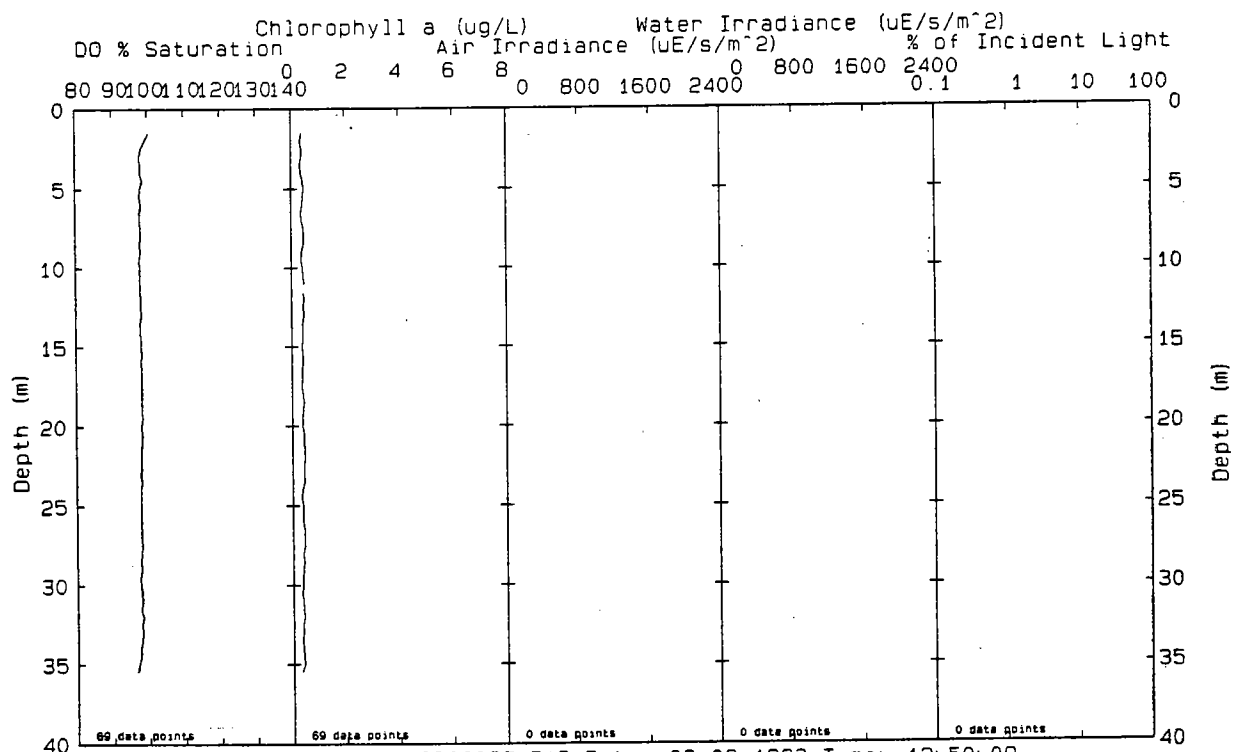
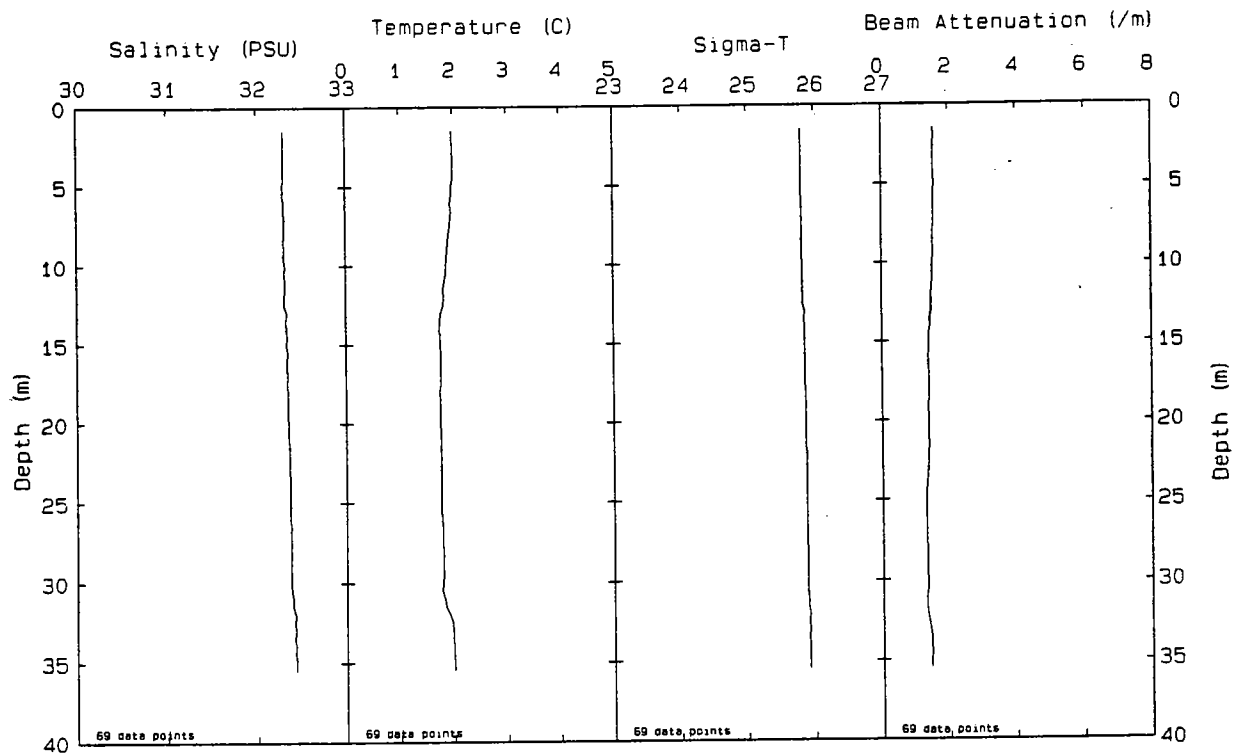




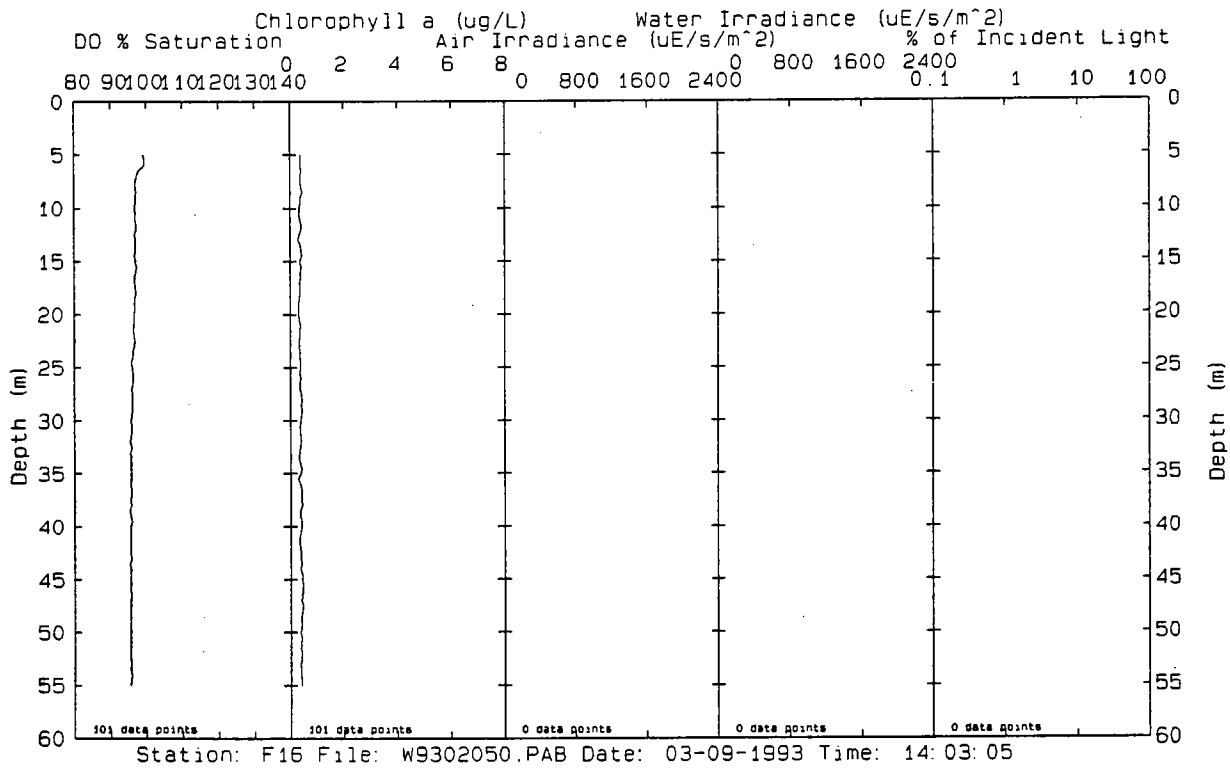
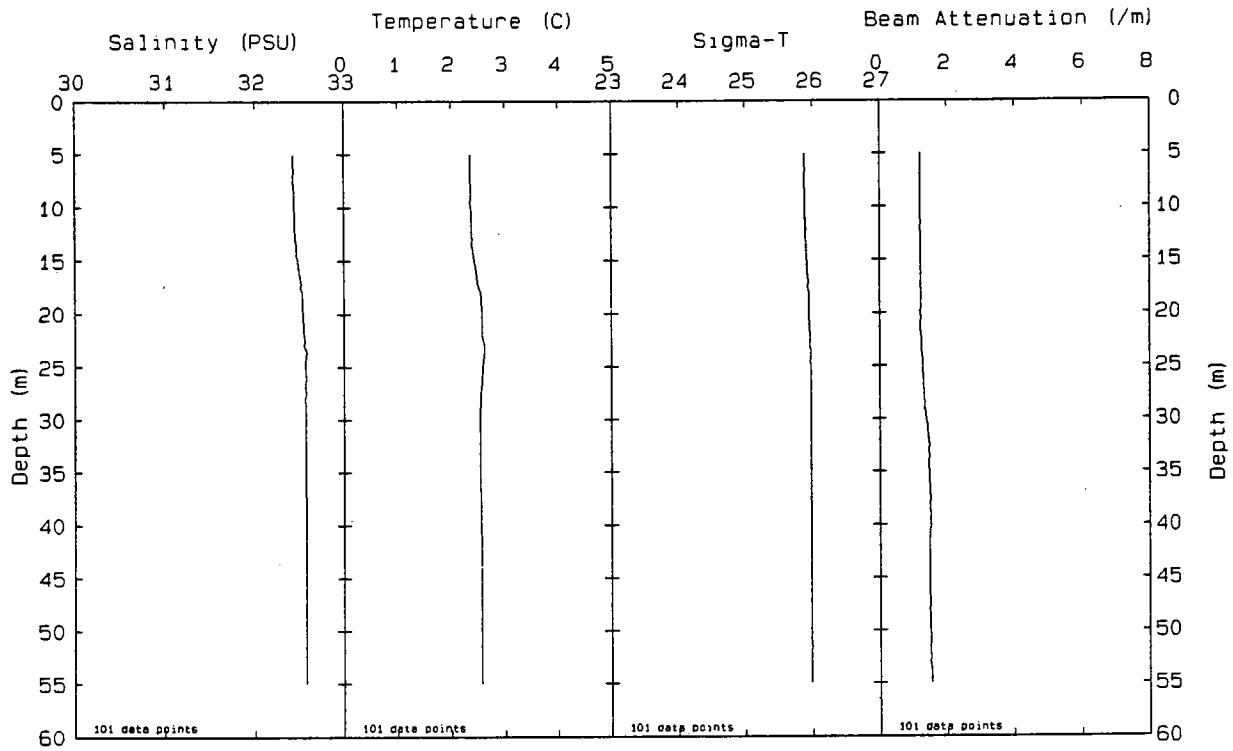
Station: F13P File: W9302109.PAB Date: 03-10-1993 Time: 11:53:12

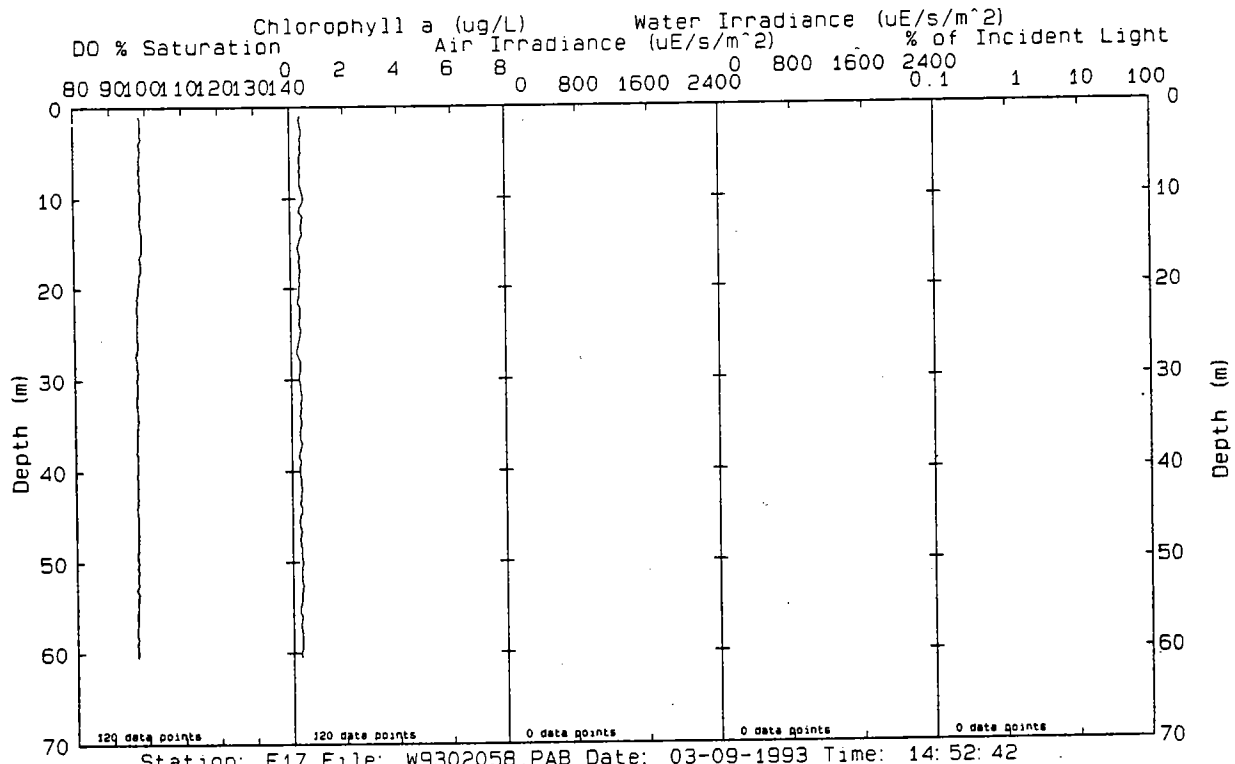
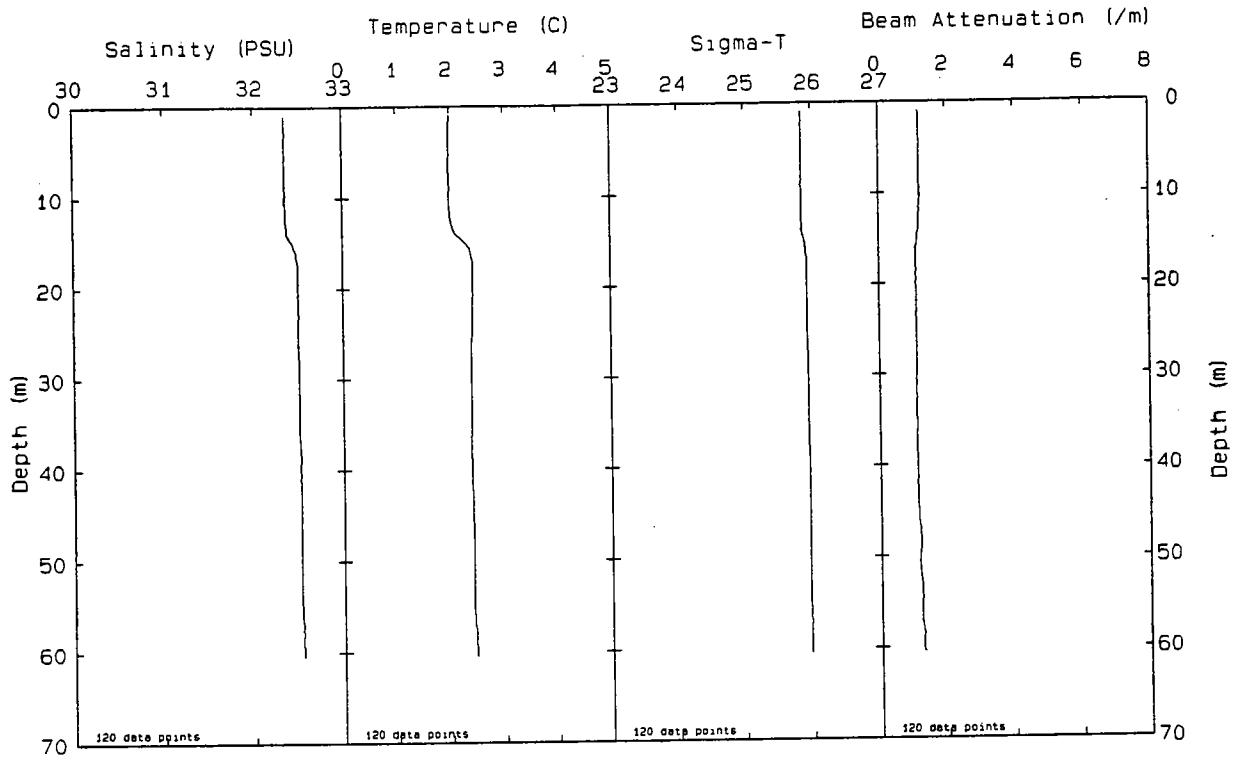


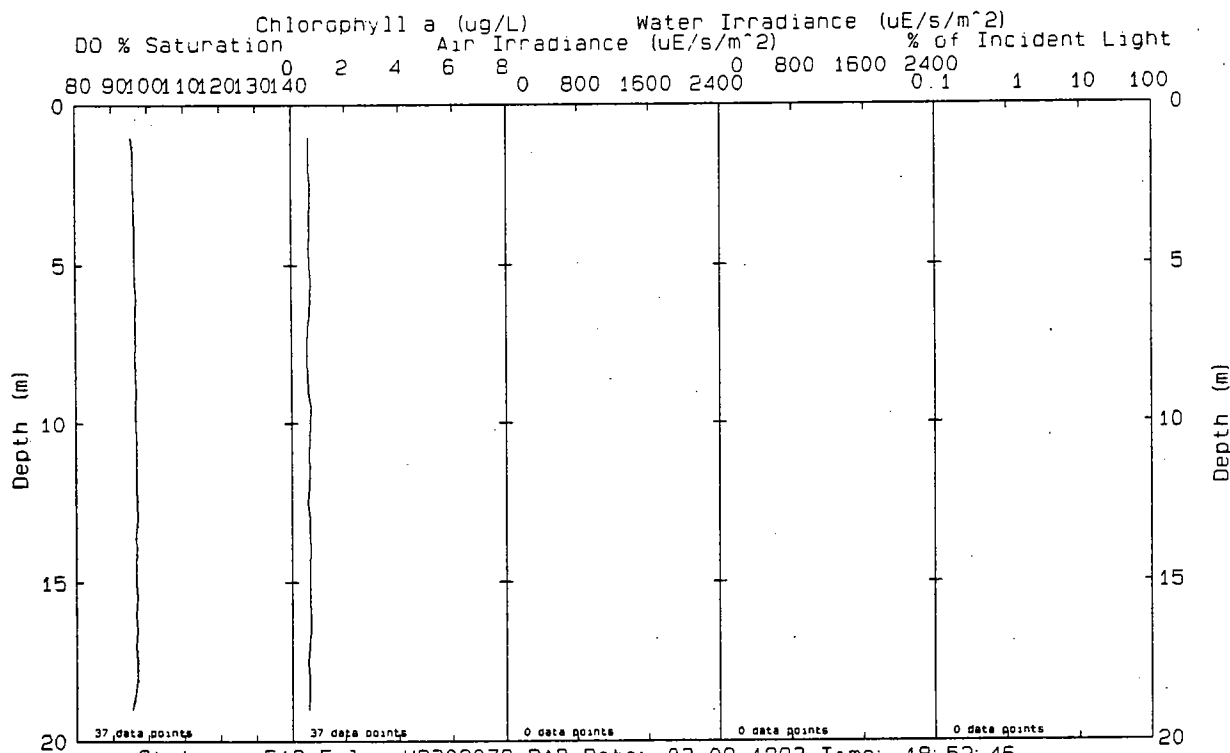
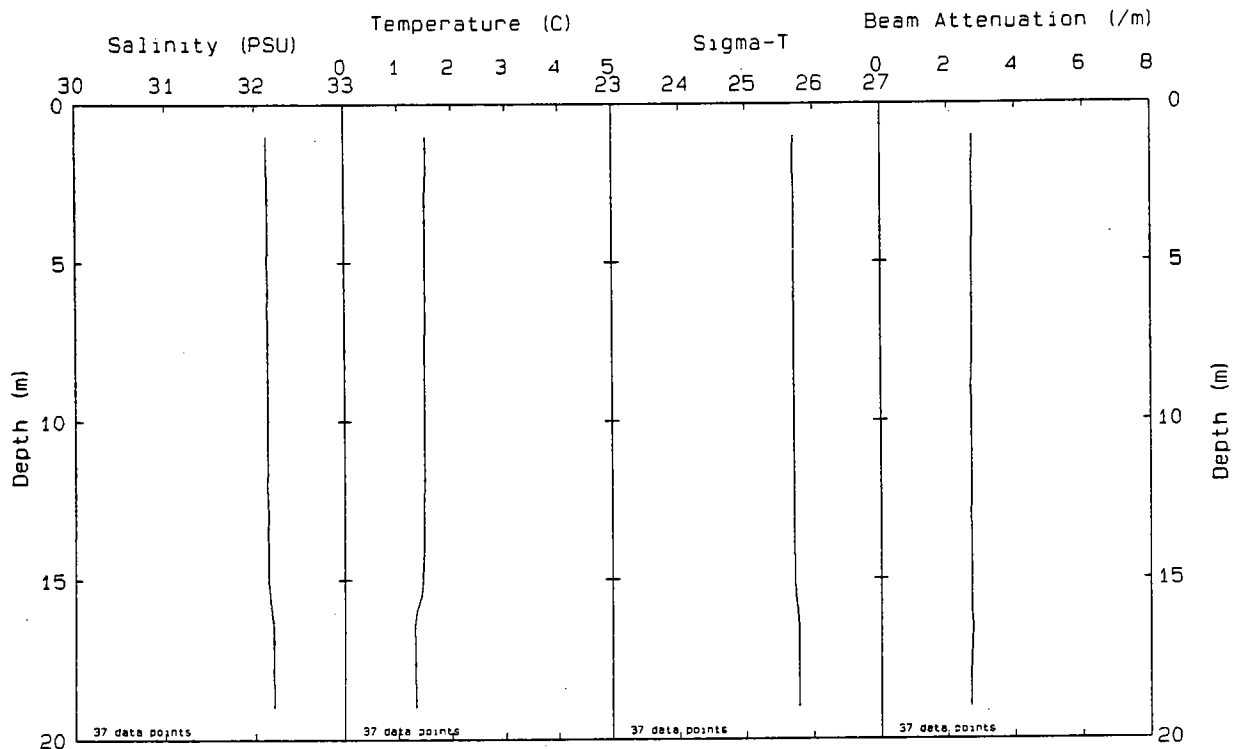
Station: F14 File: W9302033.PAB Date: 03-09-1993 Time: 12: 05: 33

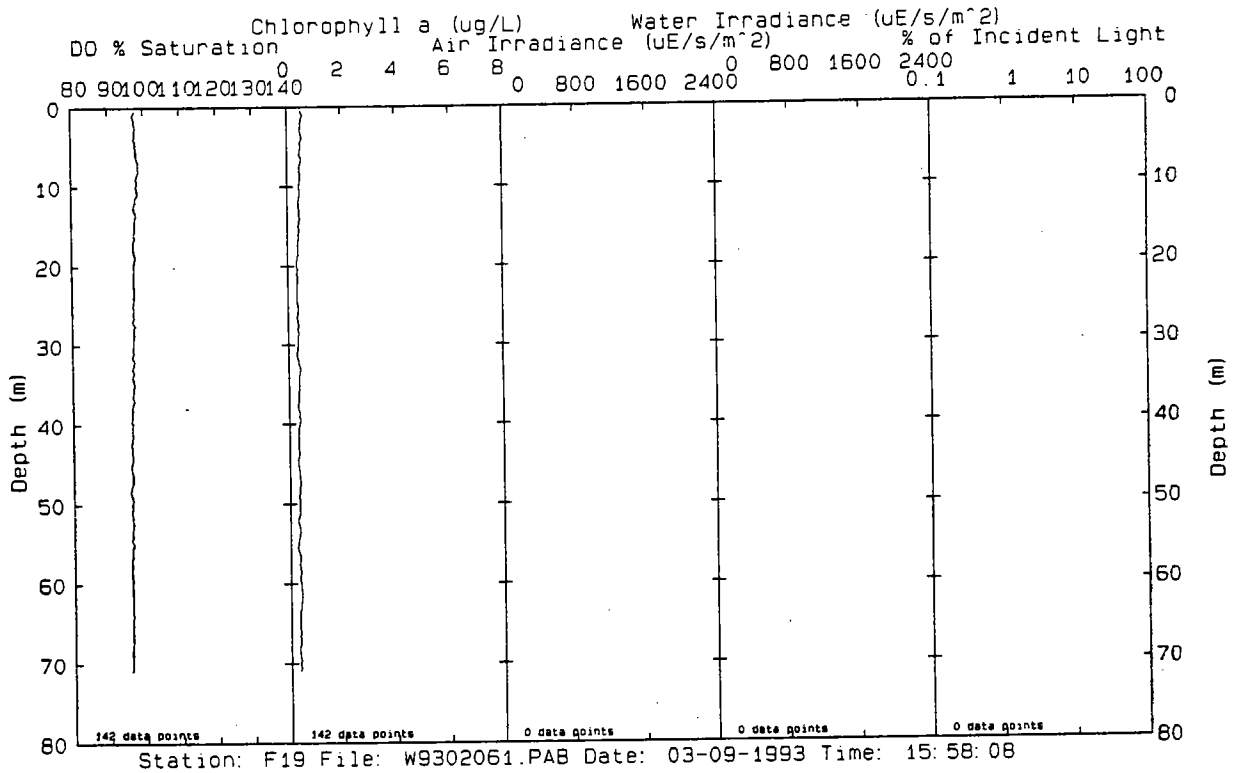
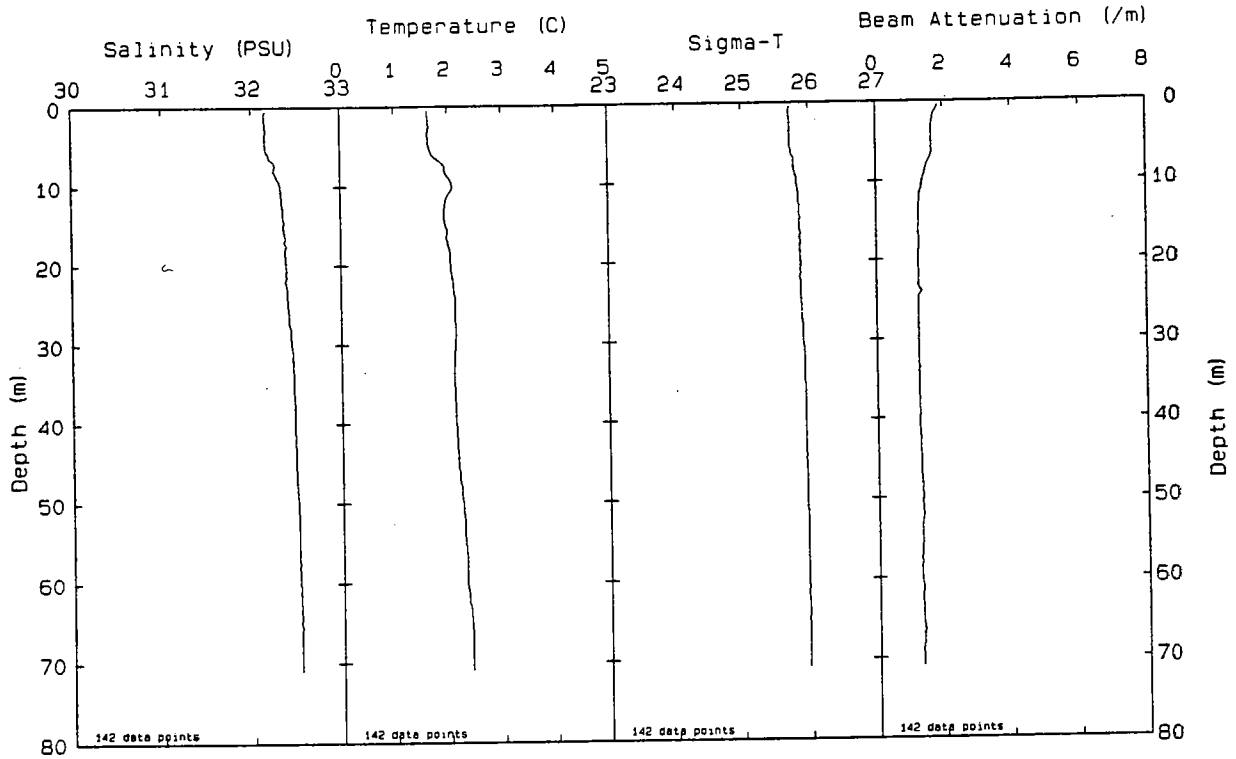


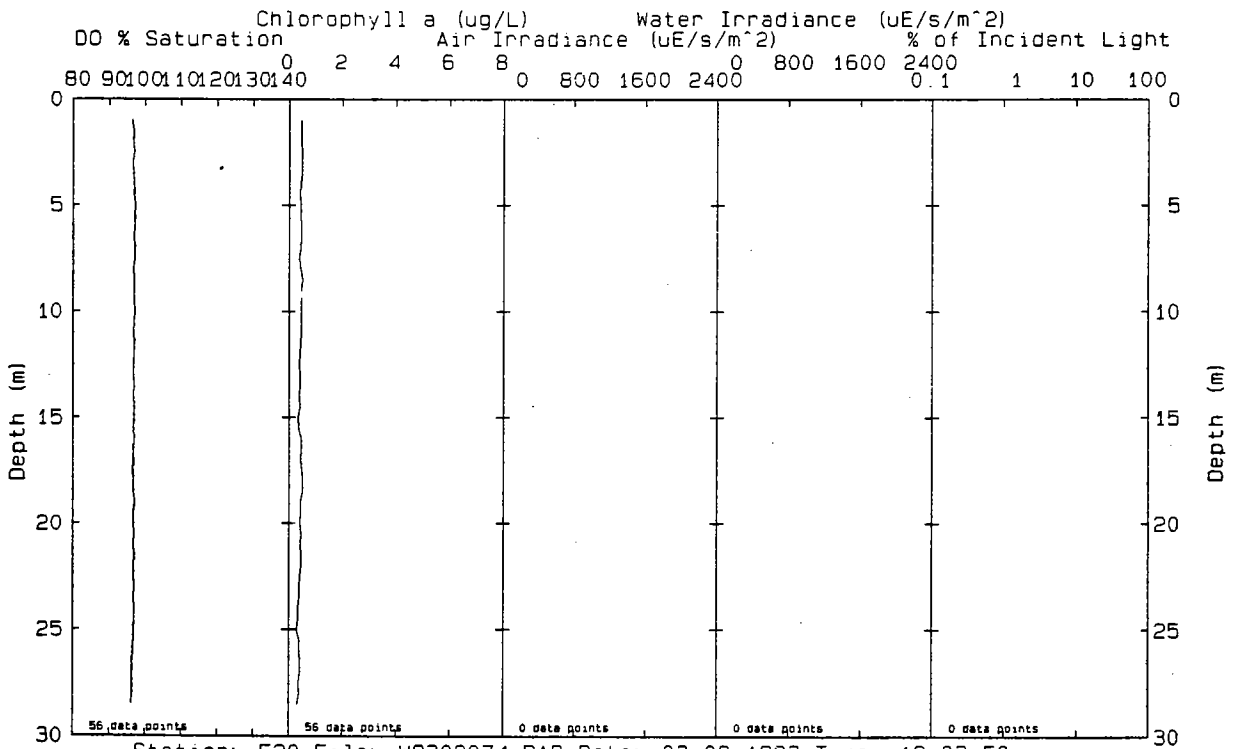
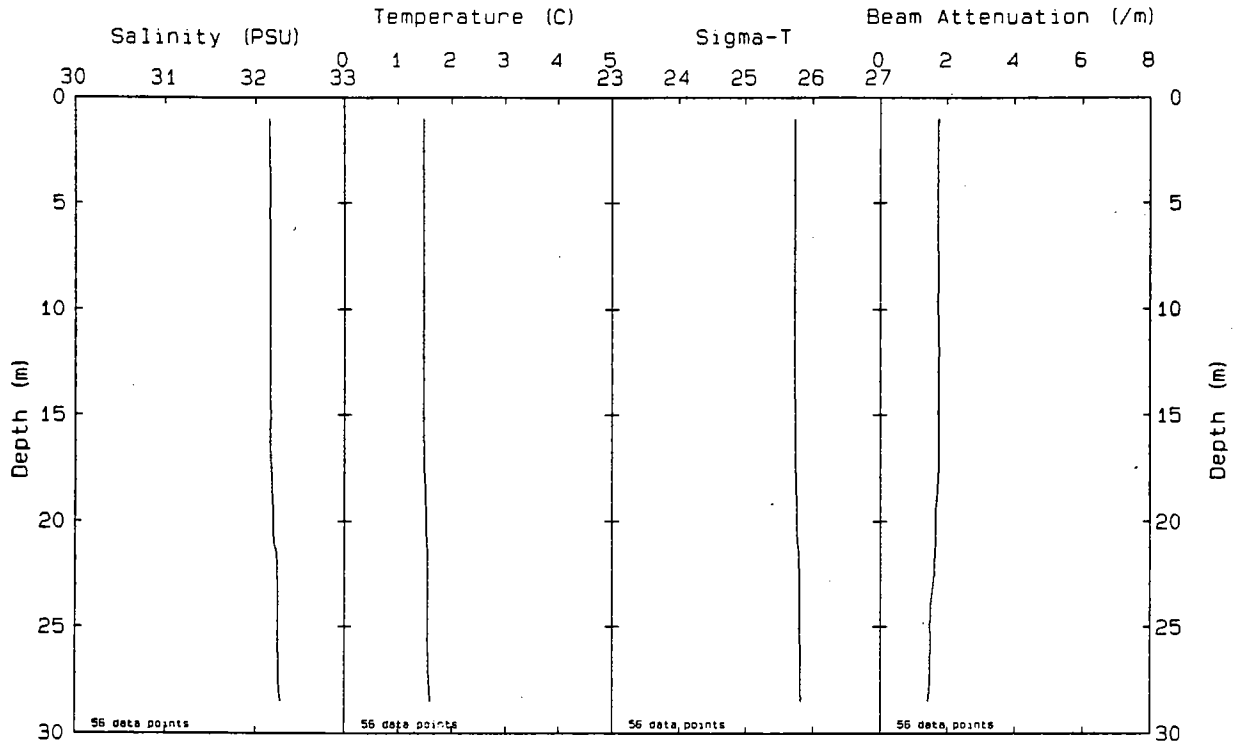
Station: F15 File: W9302036.PAB Date: 03-09-1993 Time: 12:50:09



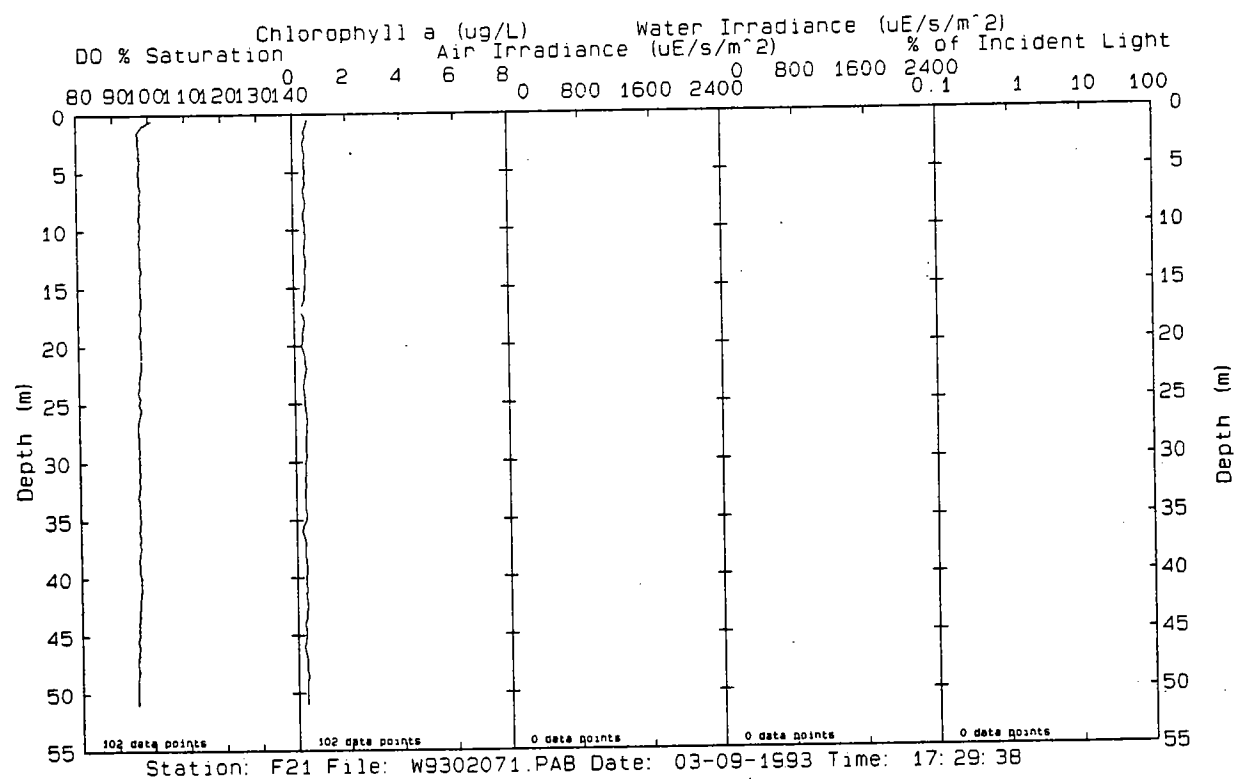
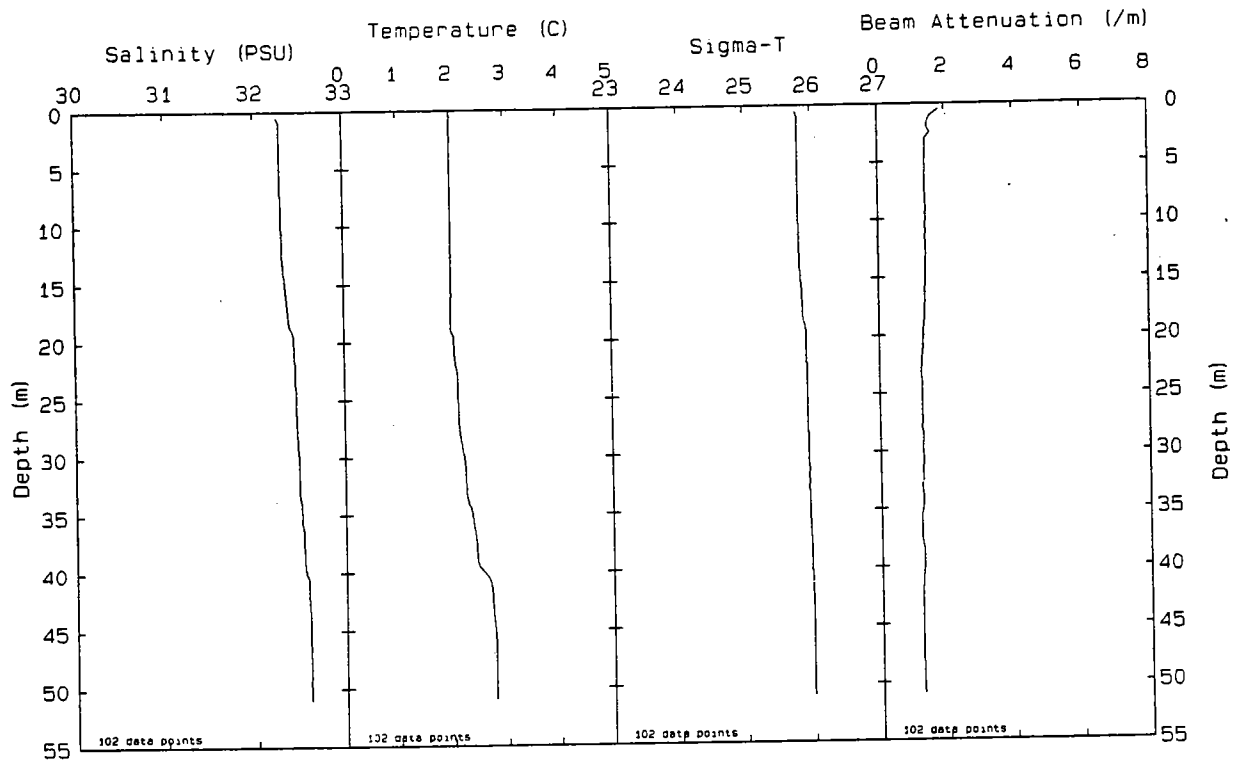


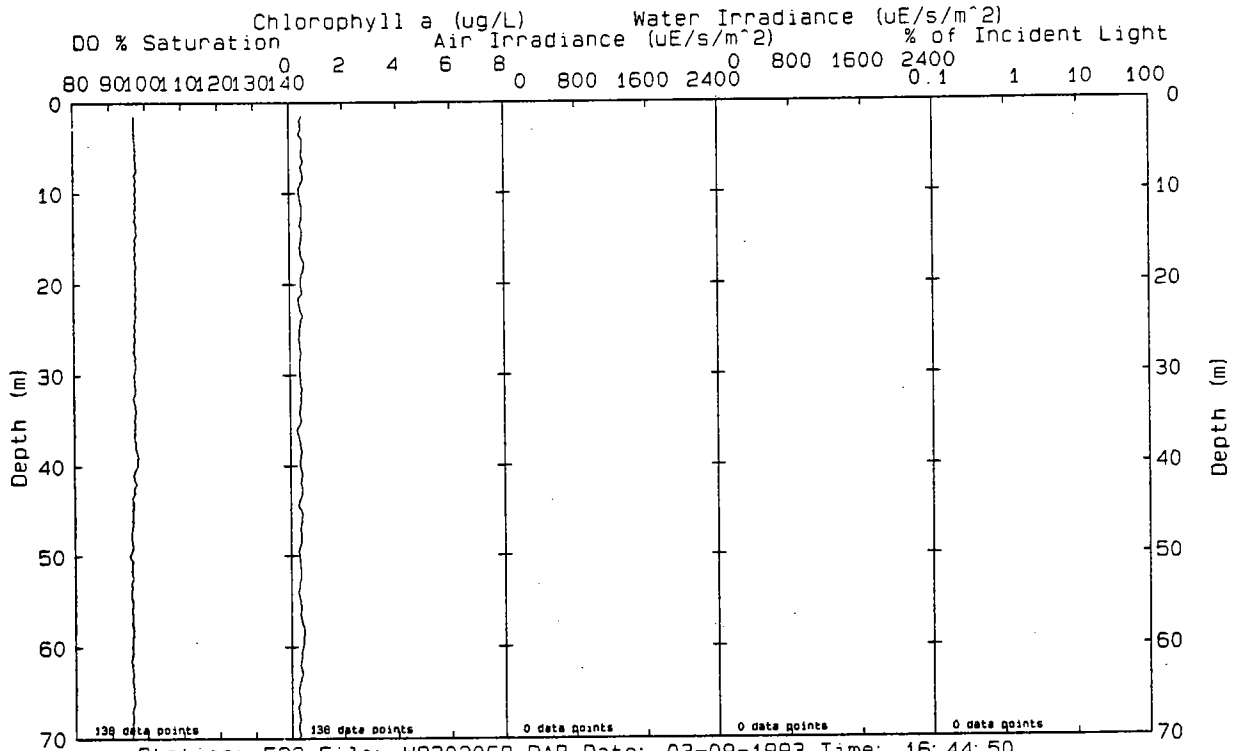
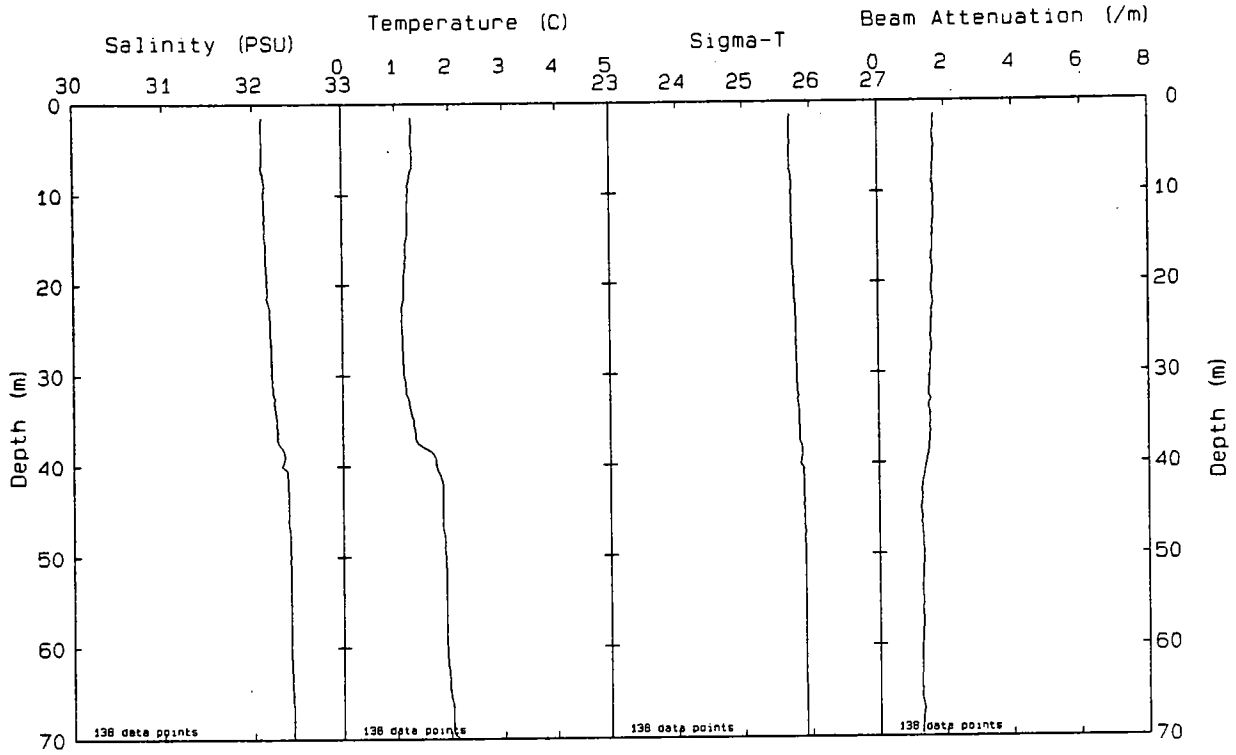




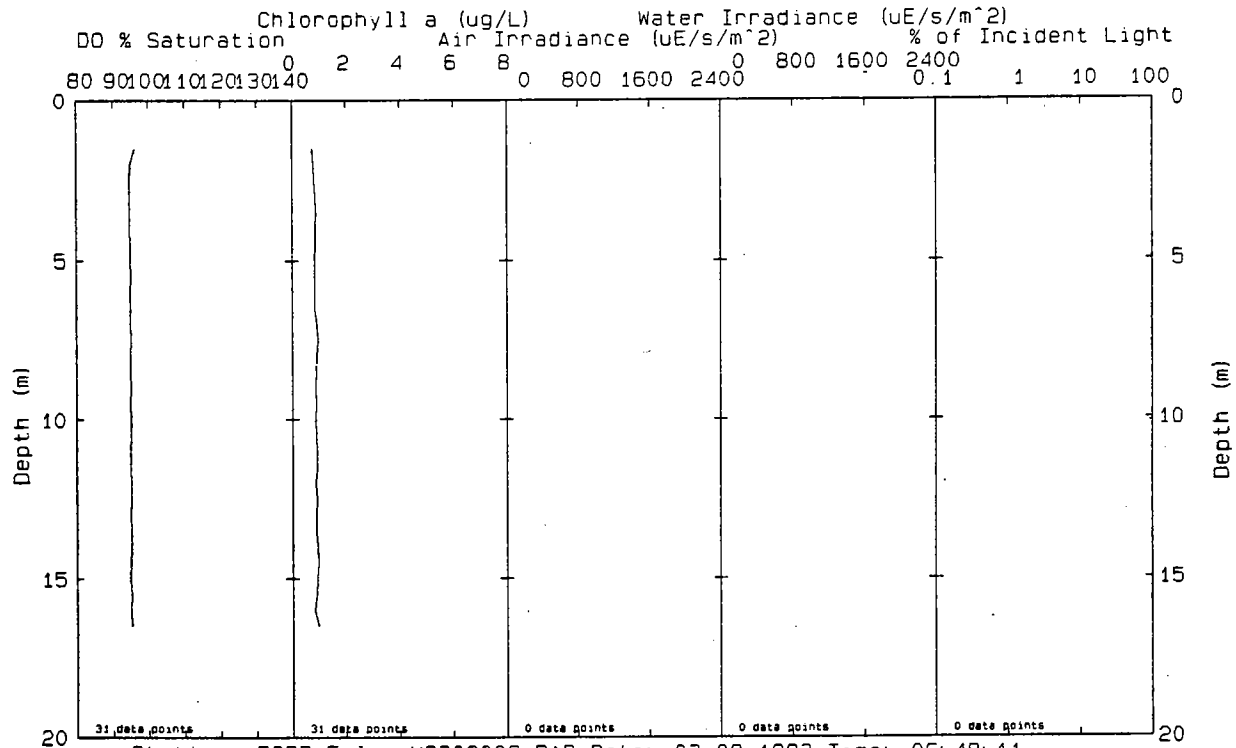
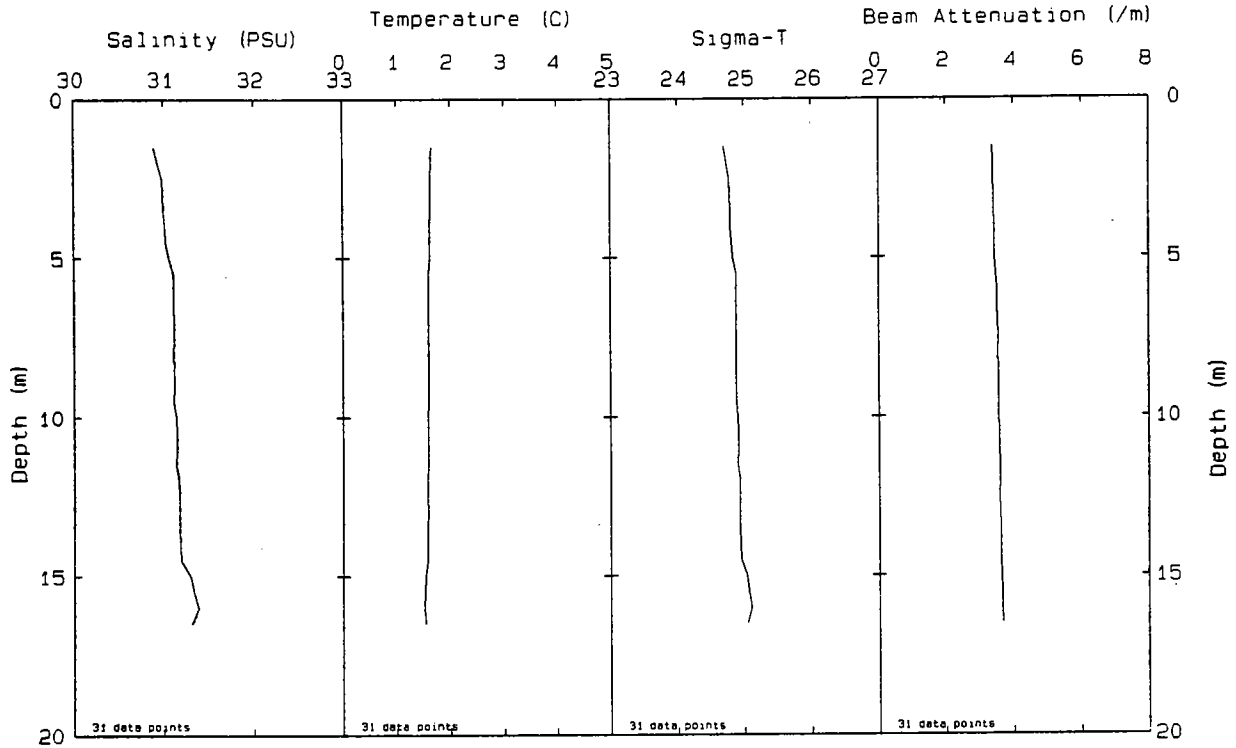


Station: F20 File: W9302074.PAB Date: 03-09-1993 Time: 18:03:50

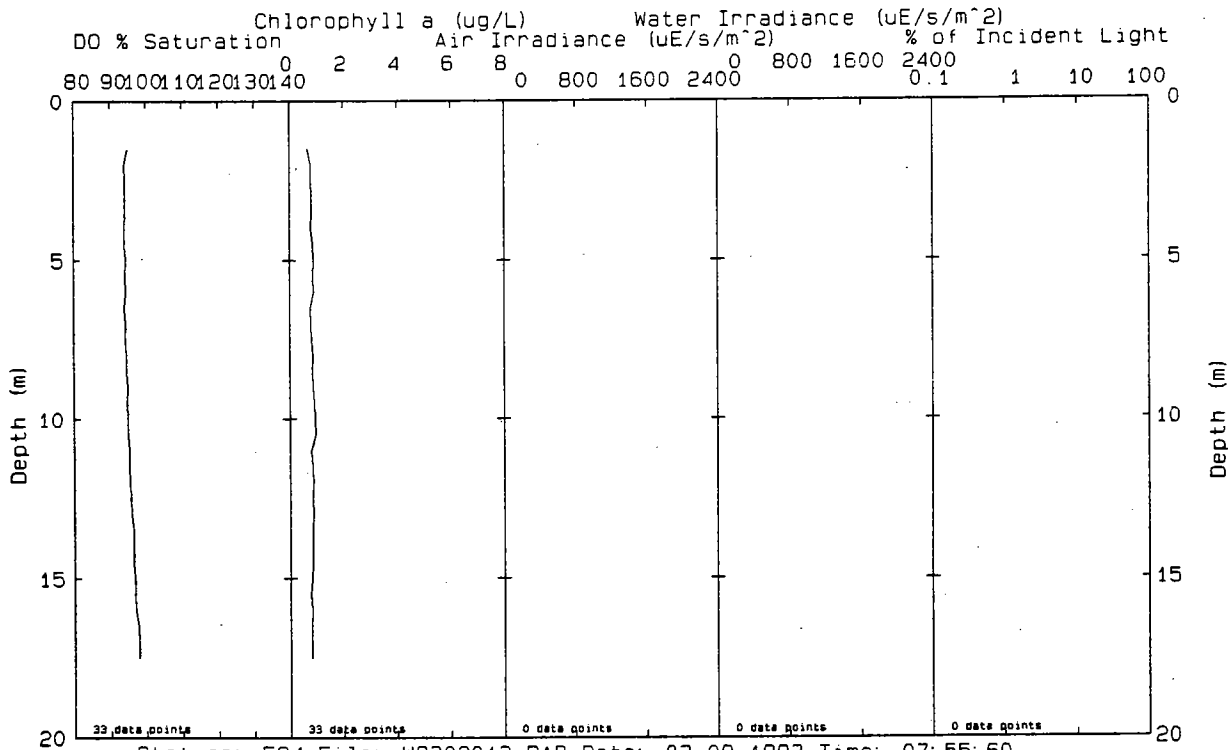
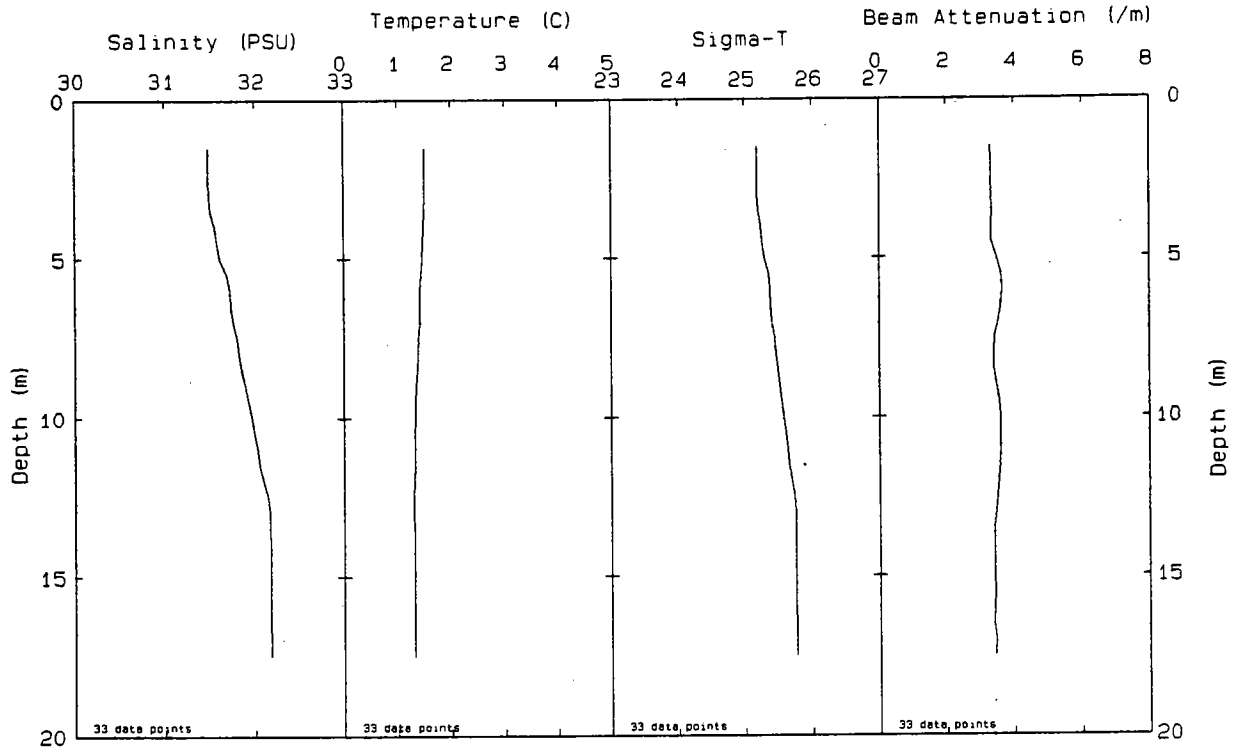




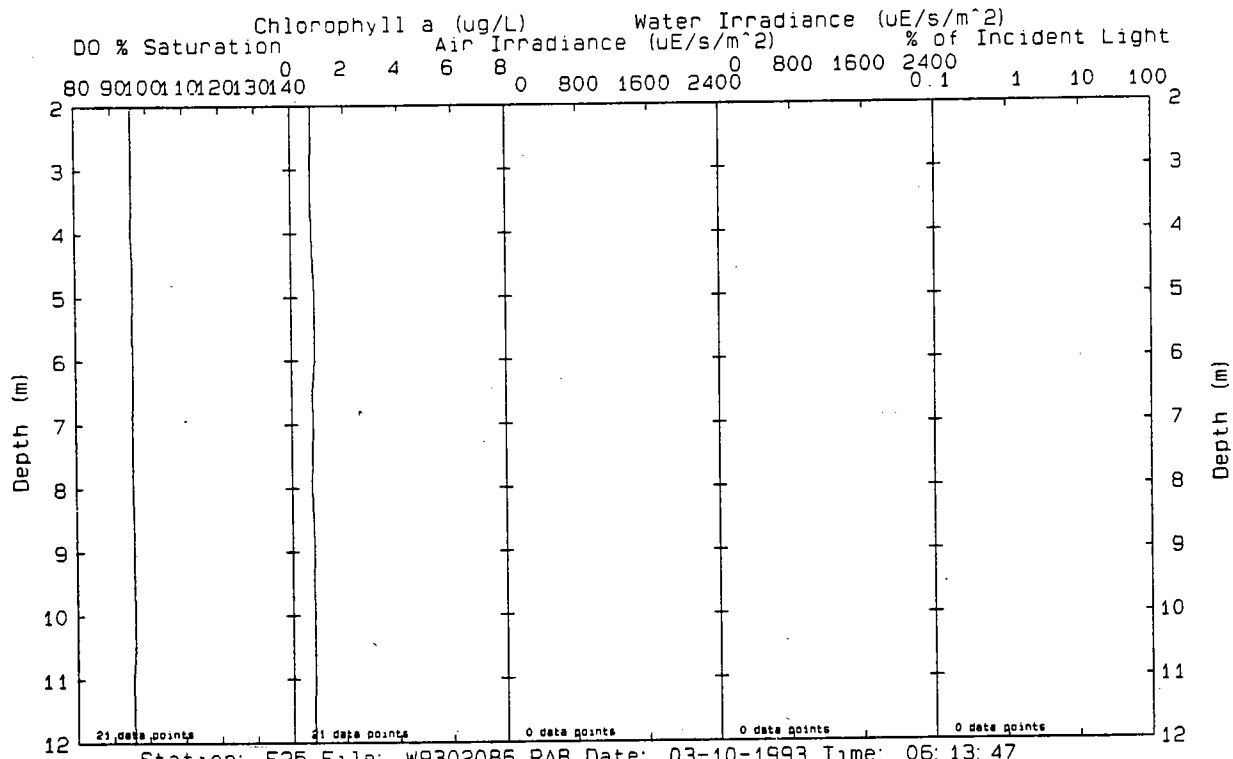
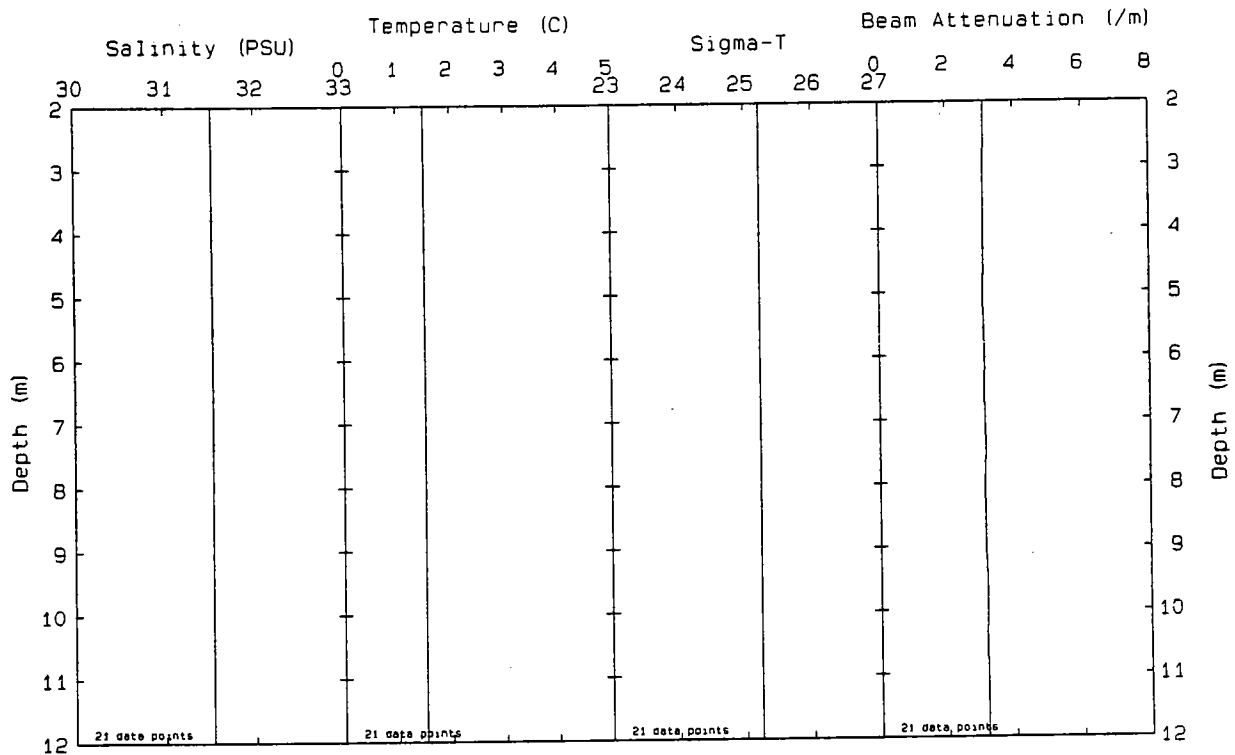
Station: F22 File: W9302068.PAB Date: 03-09-1993 Time: 16:44:50



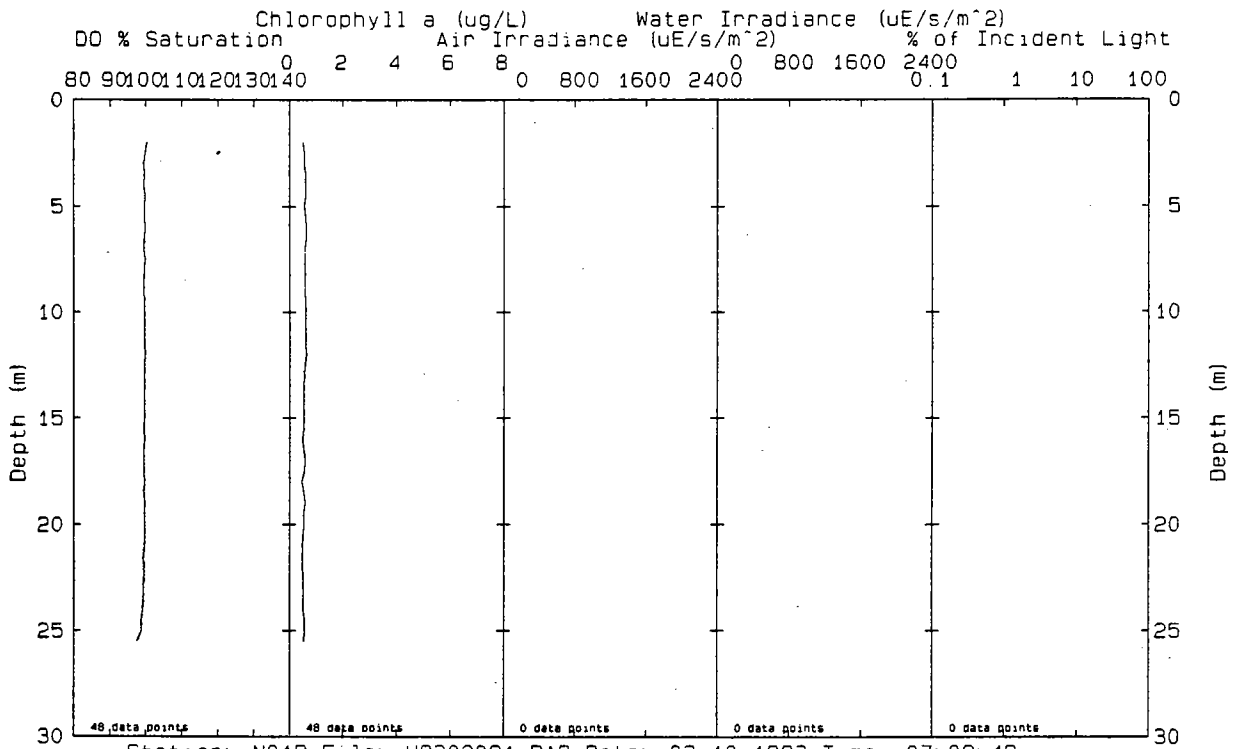
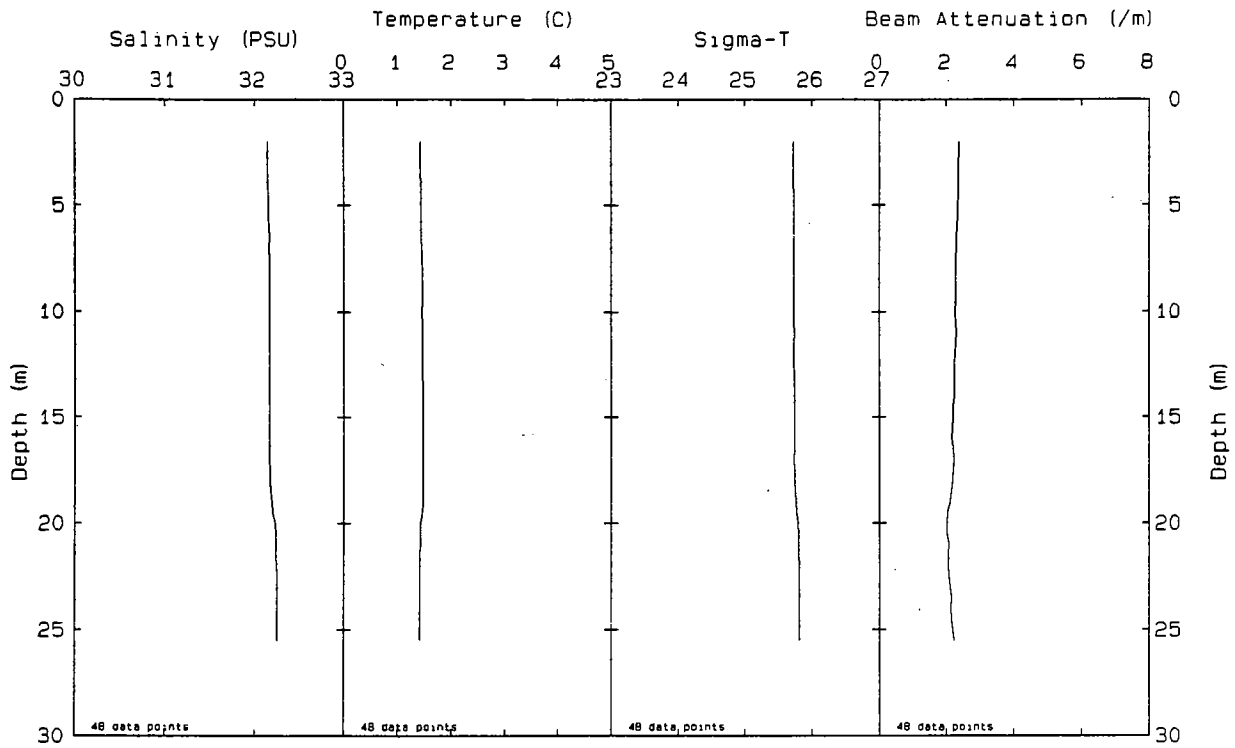
Station: F23P File: W9302006.PAB Date: 03-09-1993 Time: 06:48:11



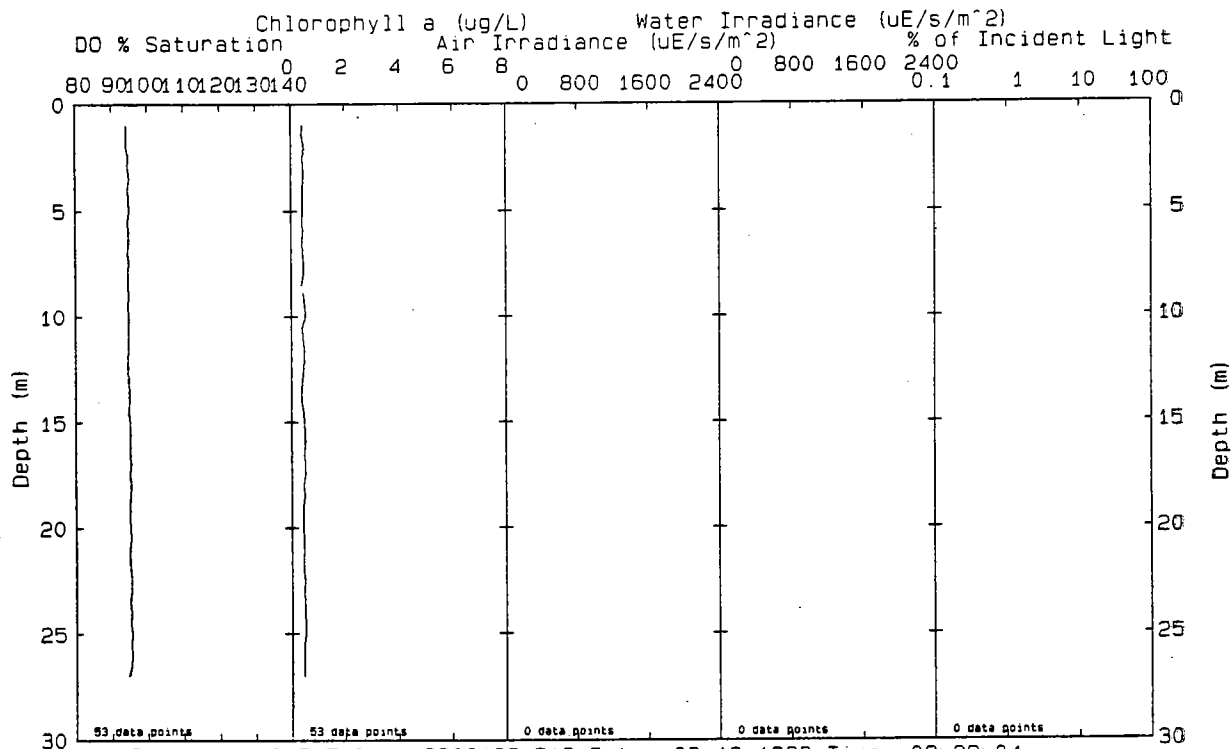
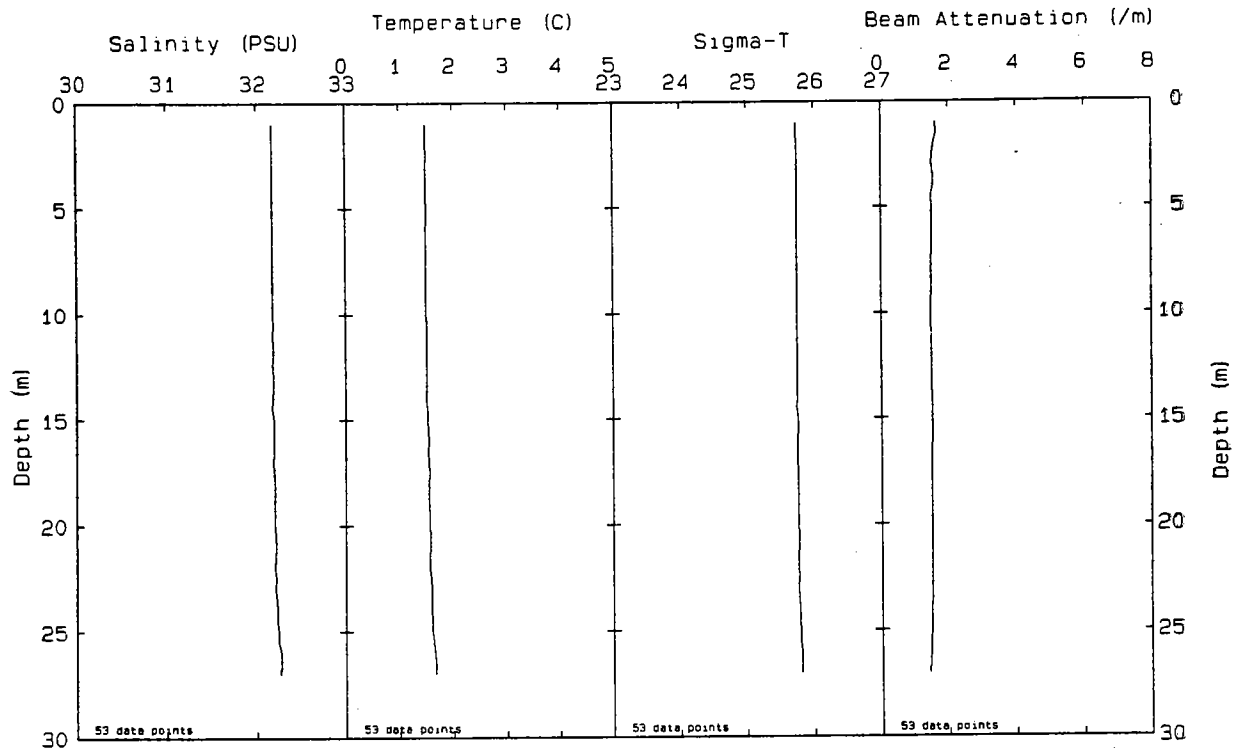
Station: F24 File: W9302013.PAB Date: 03-09-1993 Time: 07:55:60



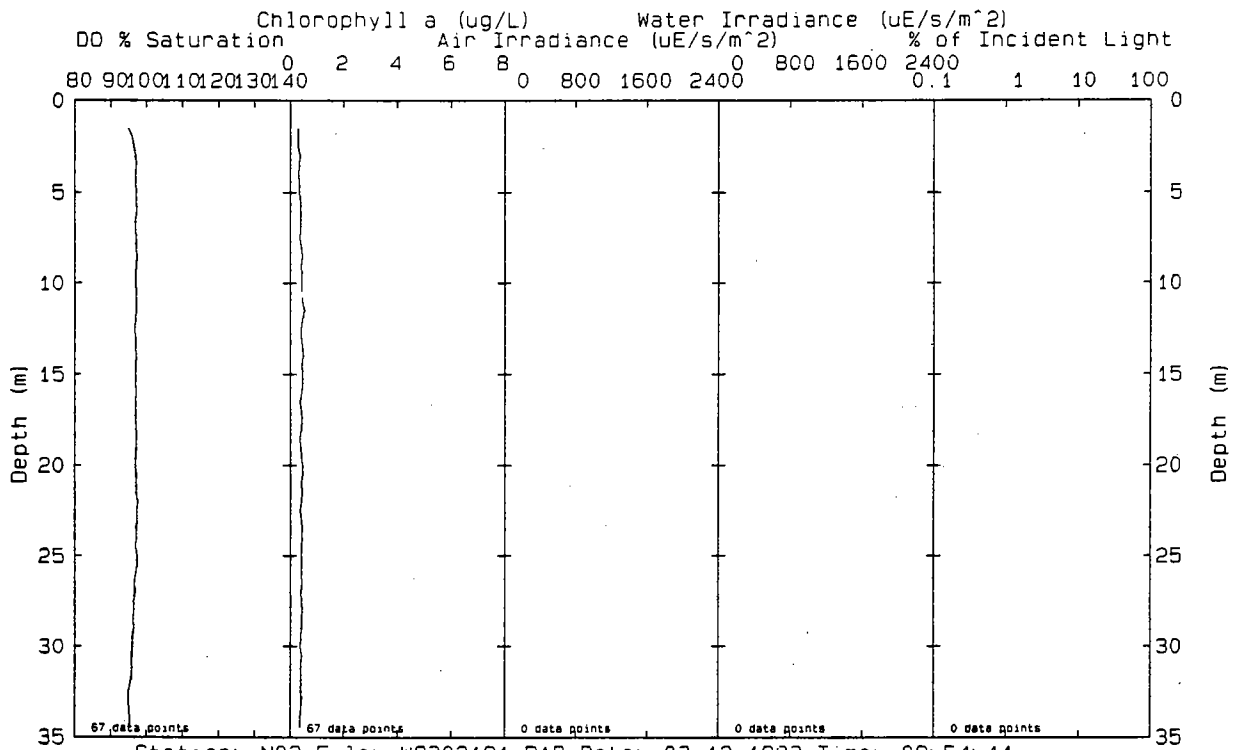
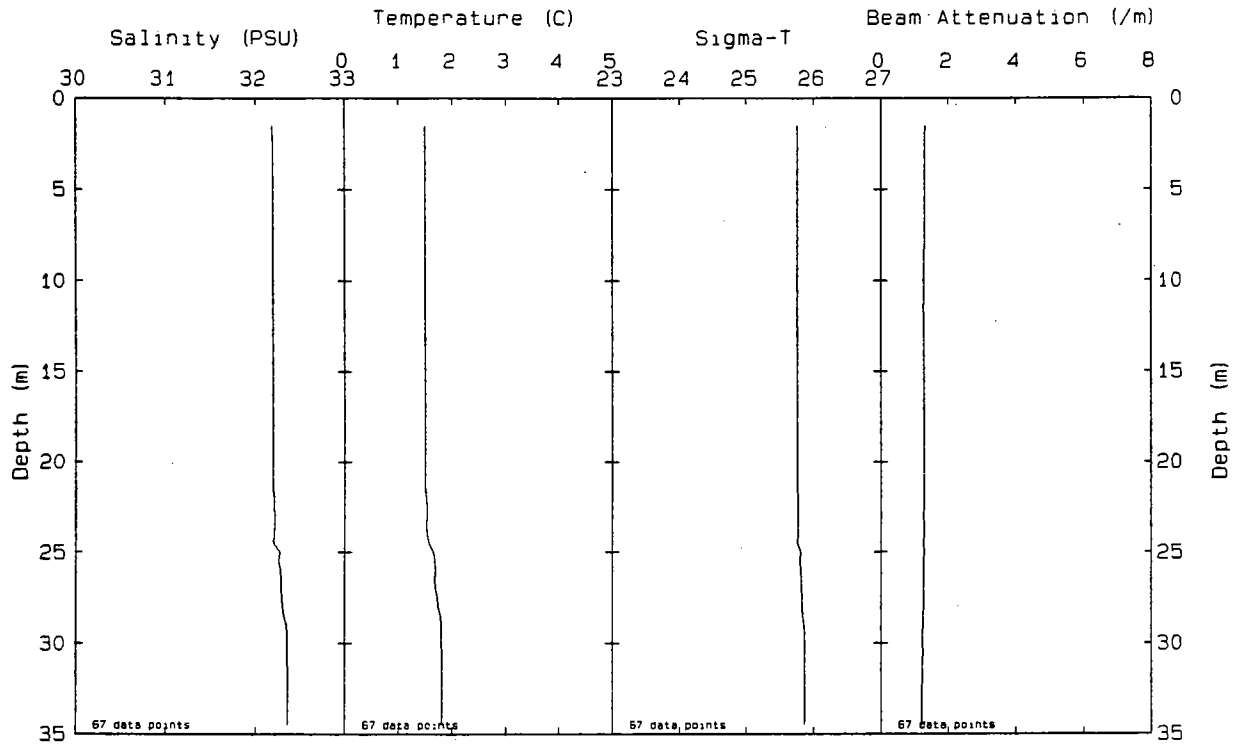
Station: F25 File: W9302086.PAB Date: 03-10-1993 Time: 06:13:47



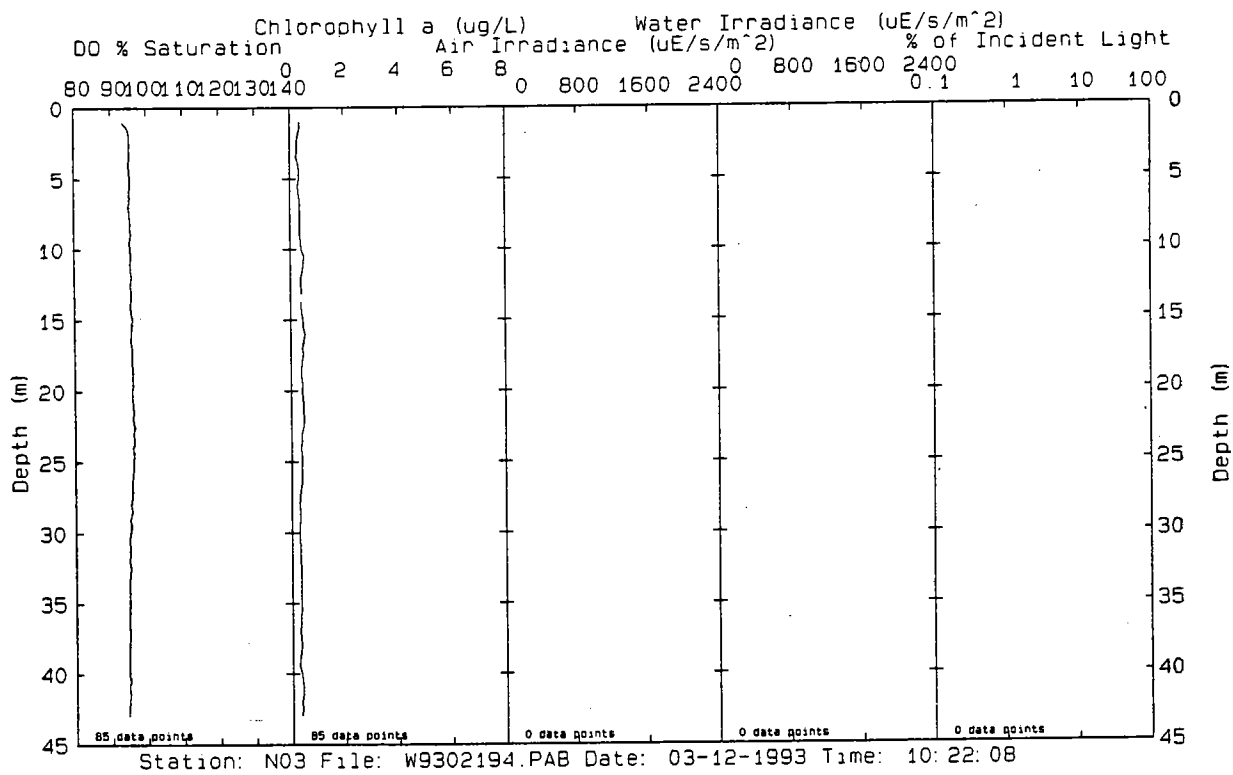
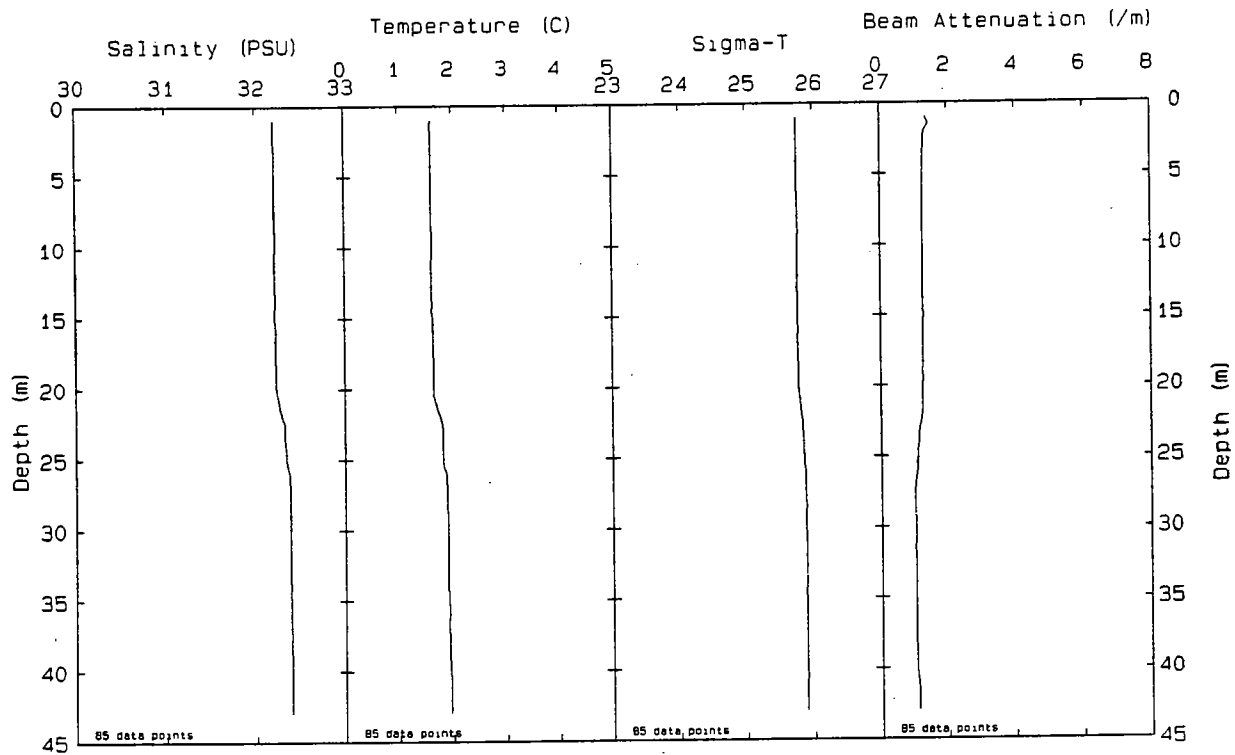
Station: N01P File: W9302091.PAB Date: 03-10-1993 Time: 07:09:49

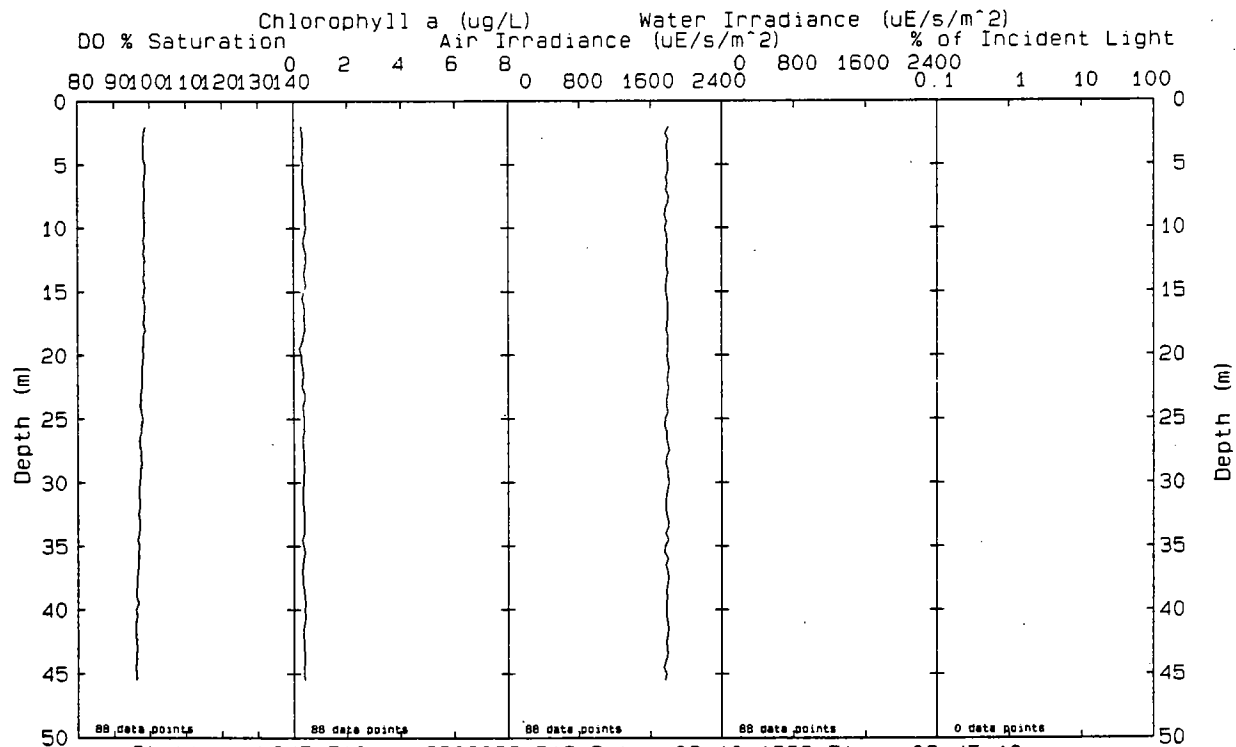
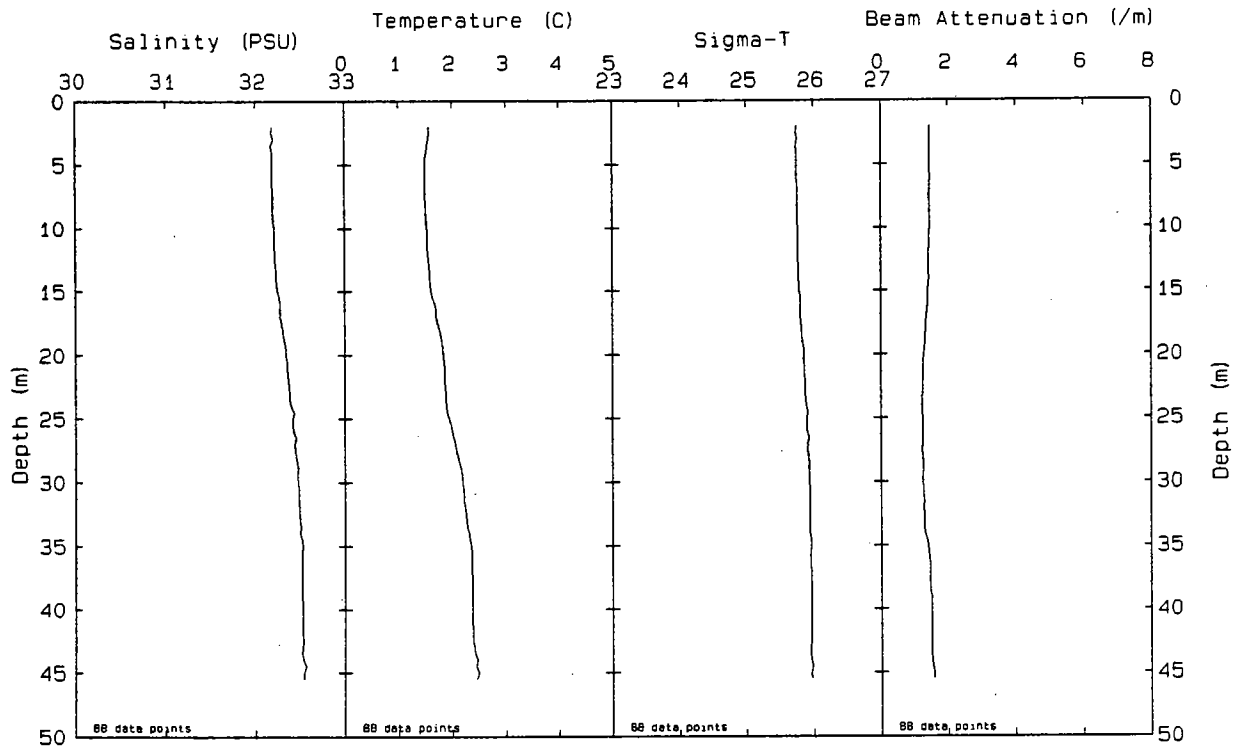


Station: N01P File: W9302188.PAB Date: 03-12-1993 Time: 09:29:04

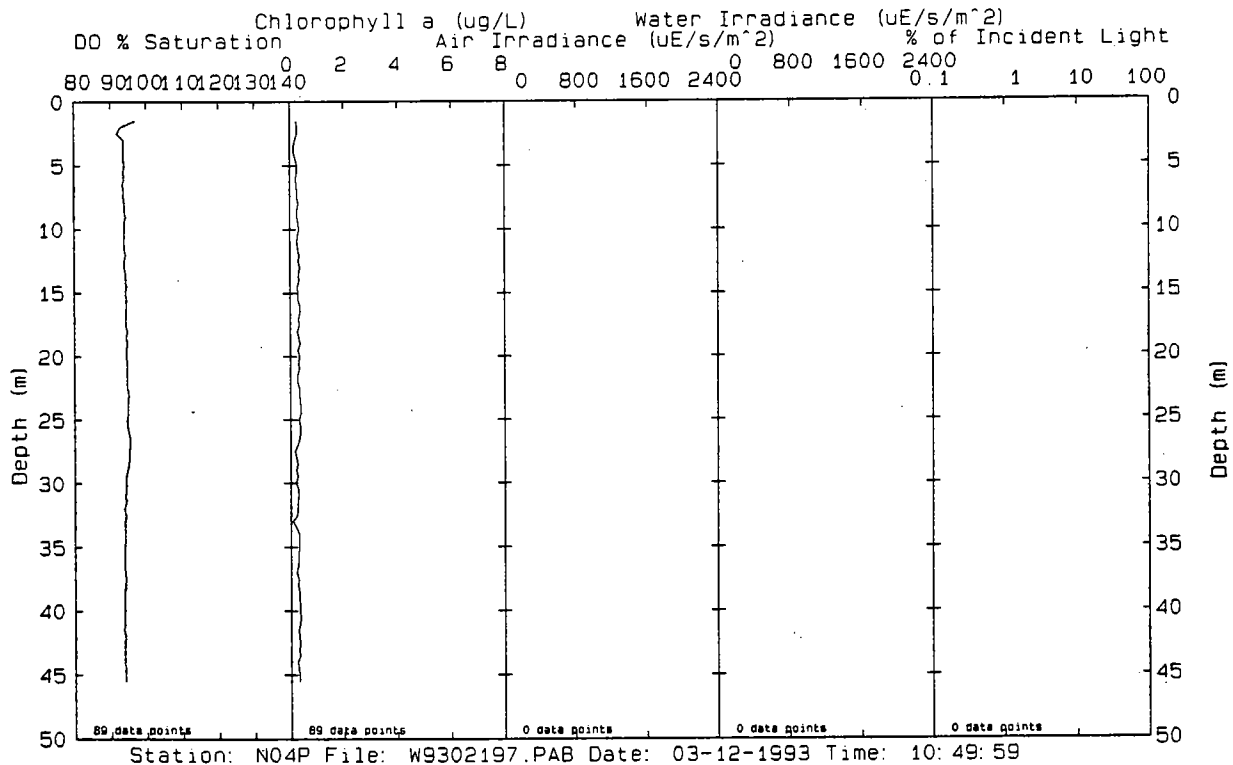
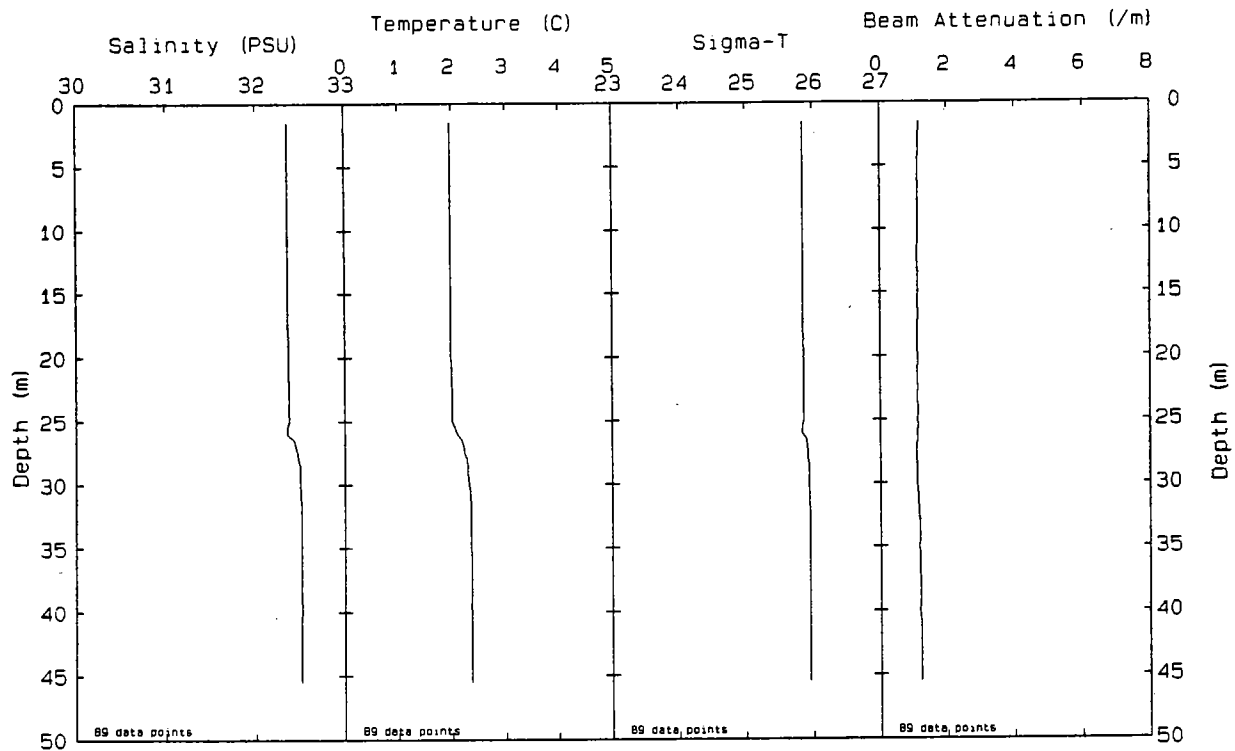


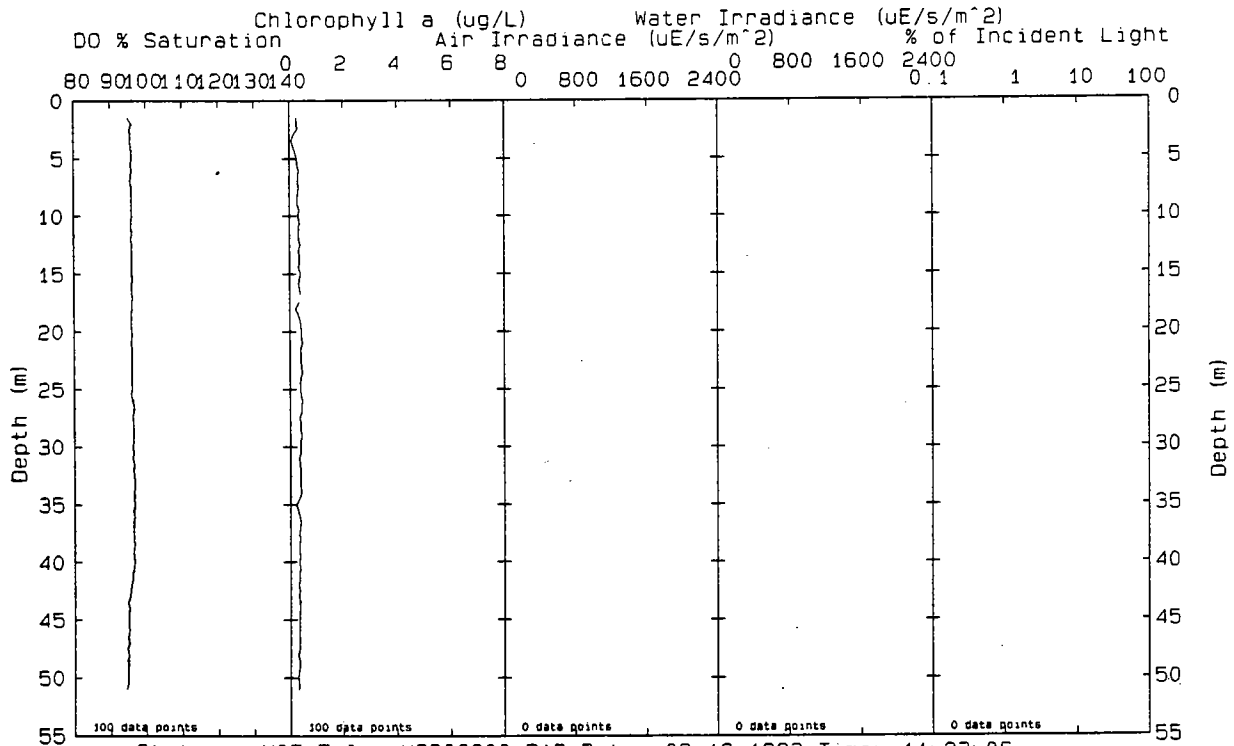
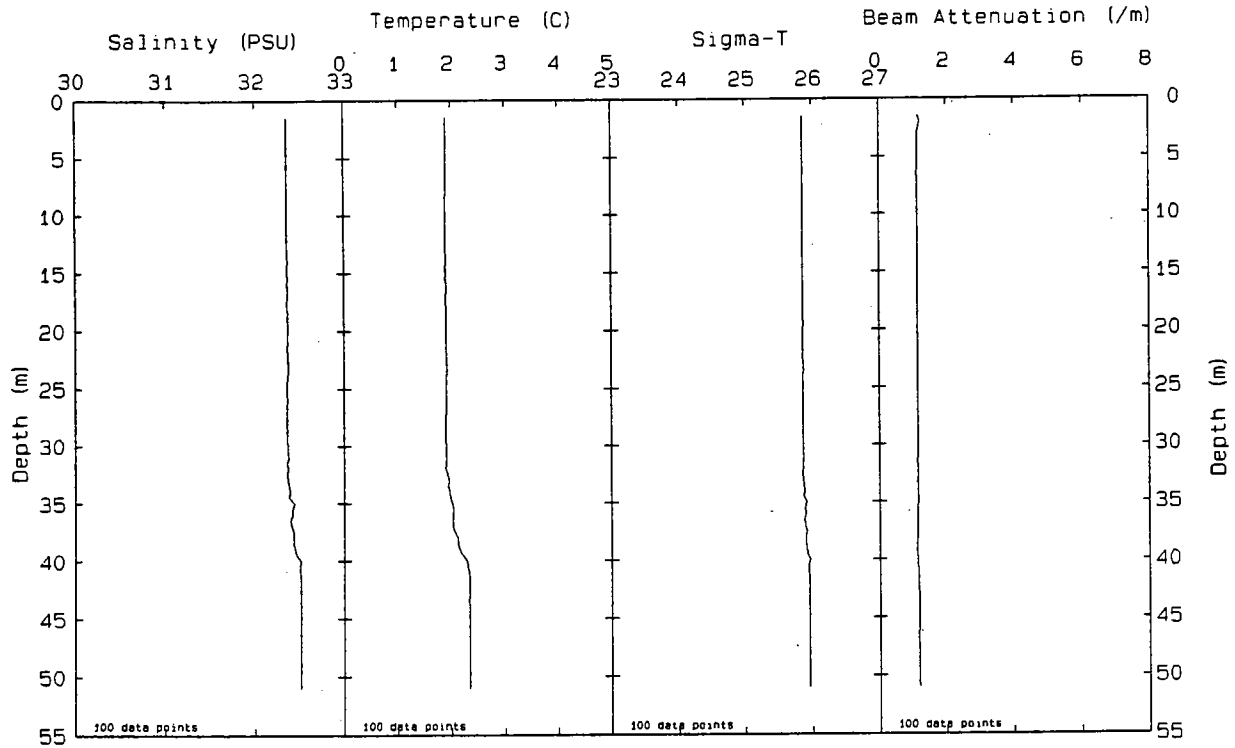
Station: N02 File: W9302191.PAB Date: 03-12-1993 Time: 09:54:44



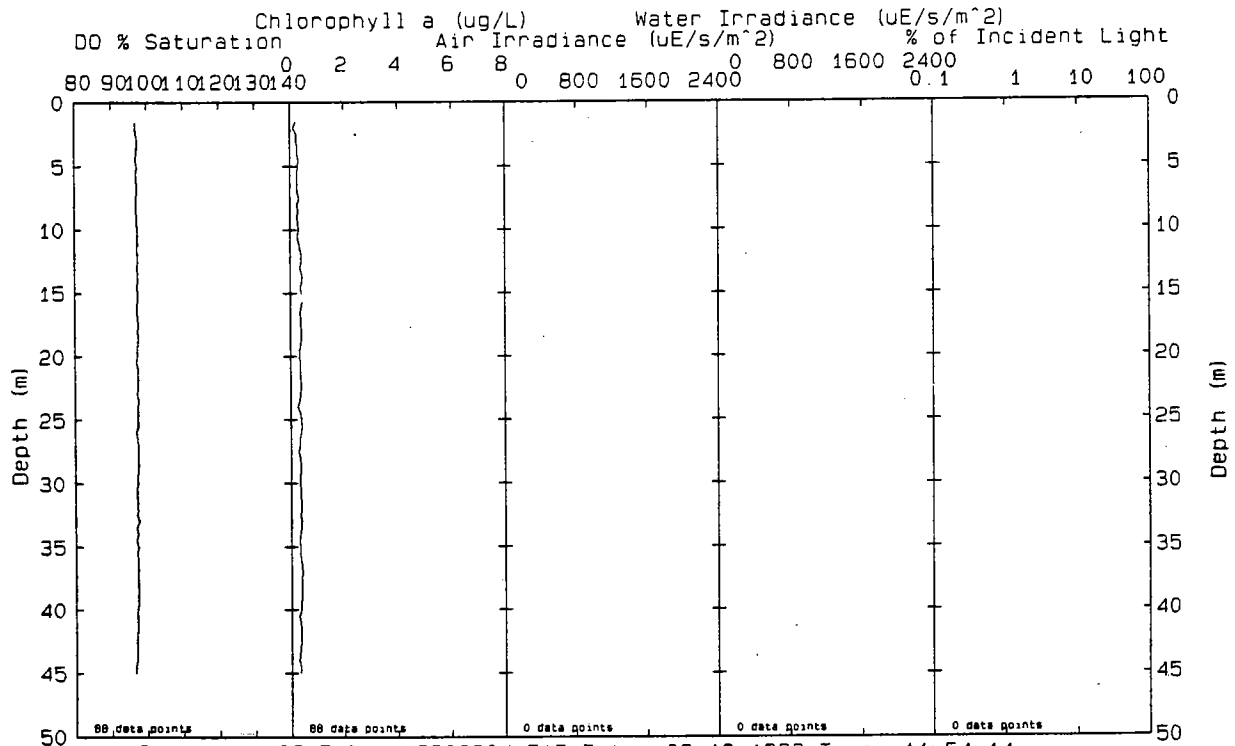
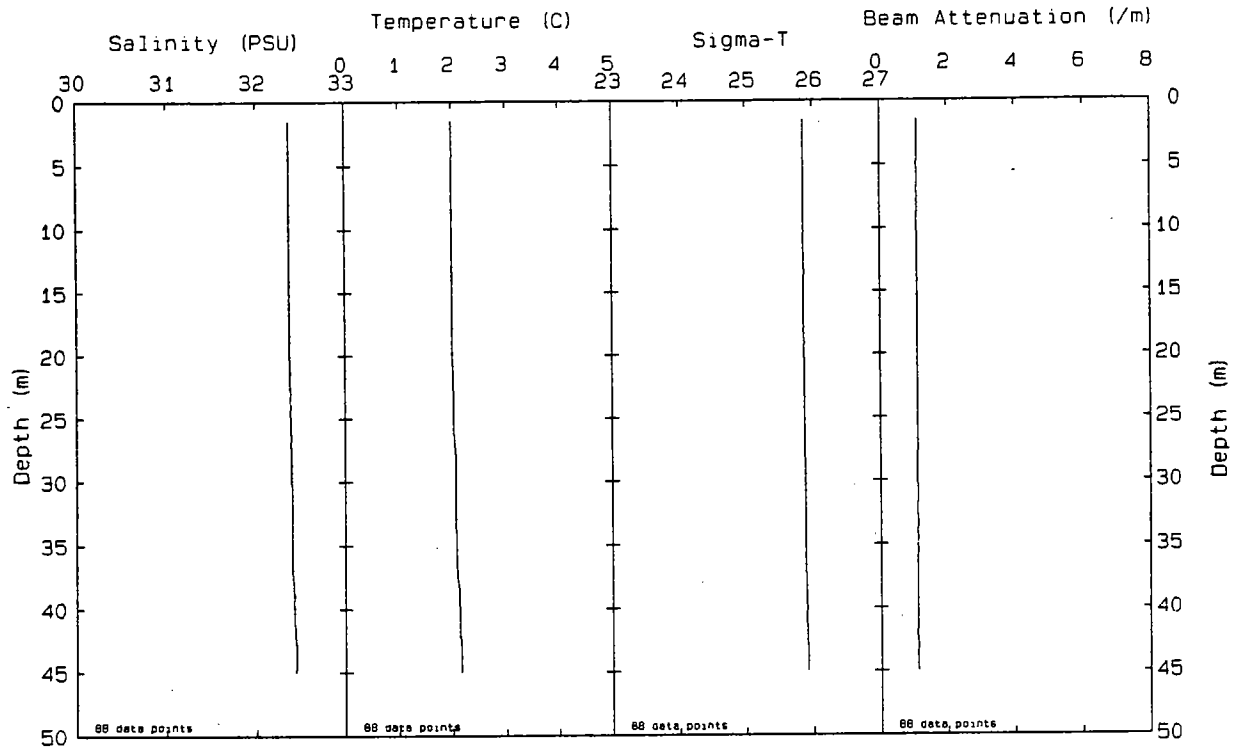


Station: N04P File: W9302098.PAB Date: 03-10-1993 Time: 09:45:10

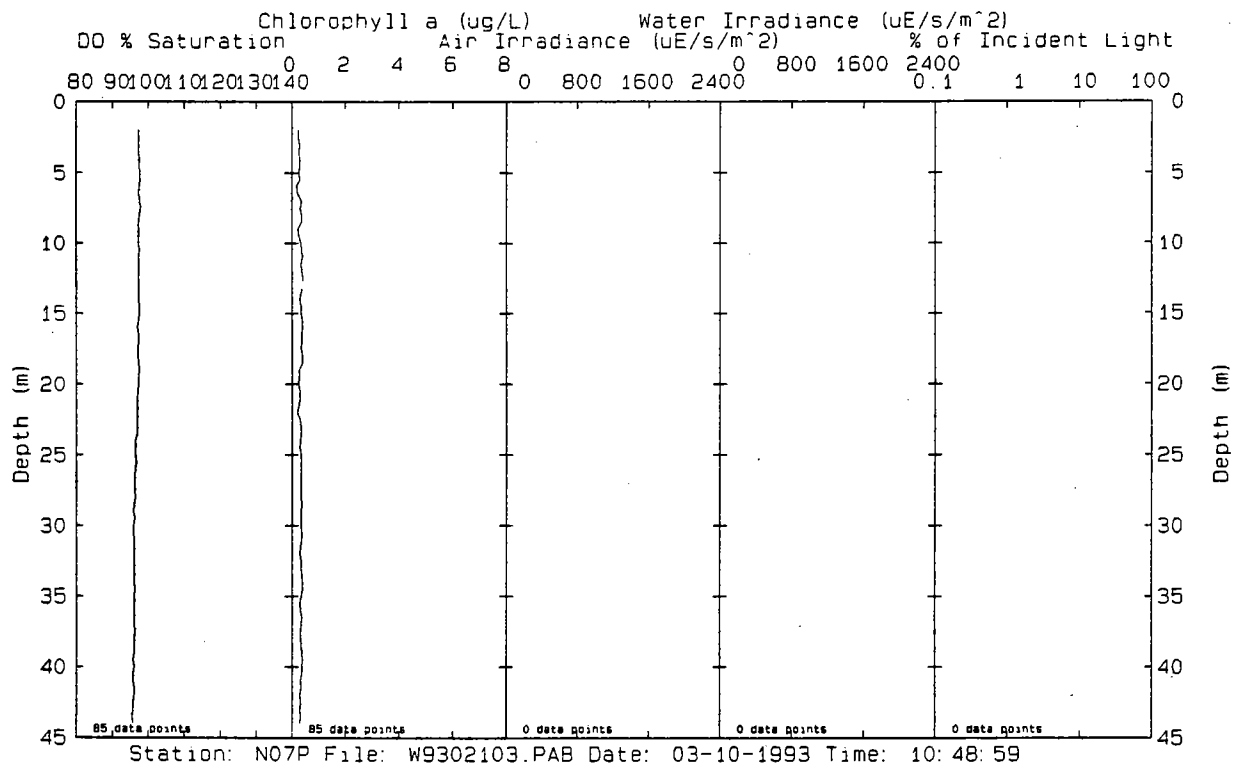
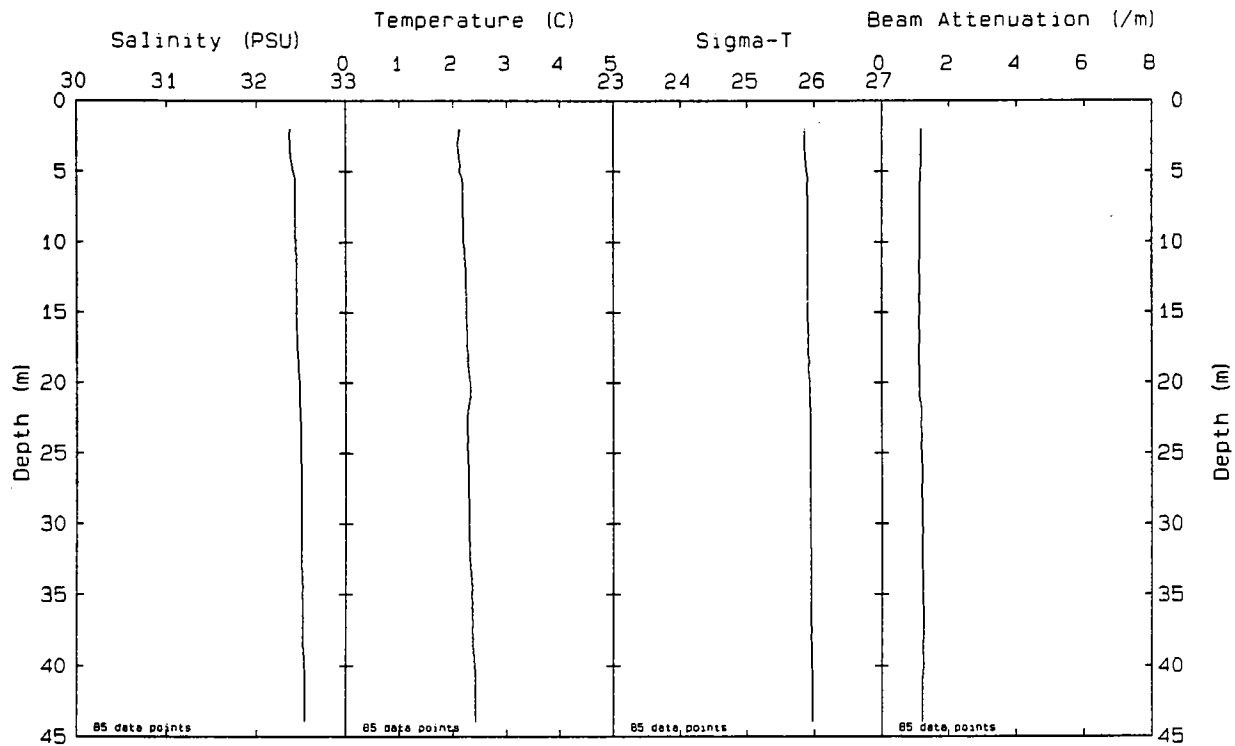


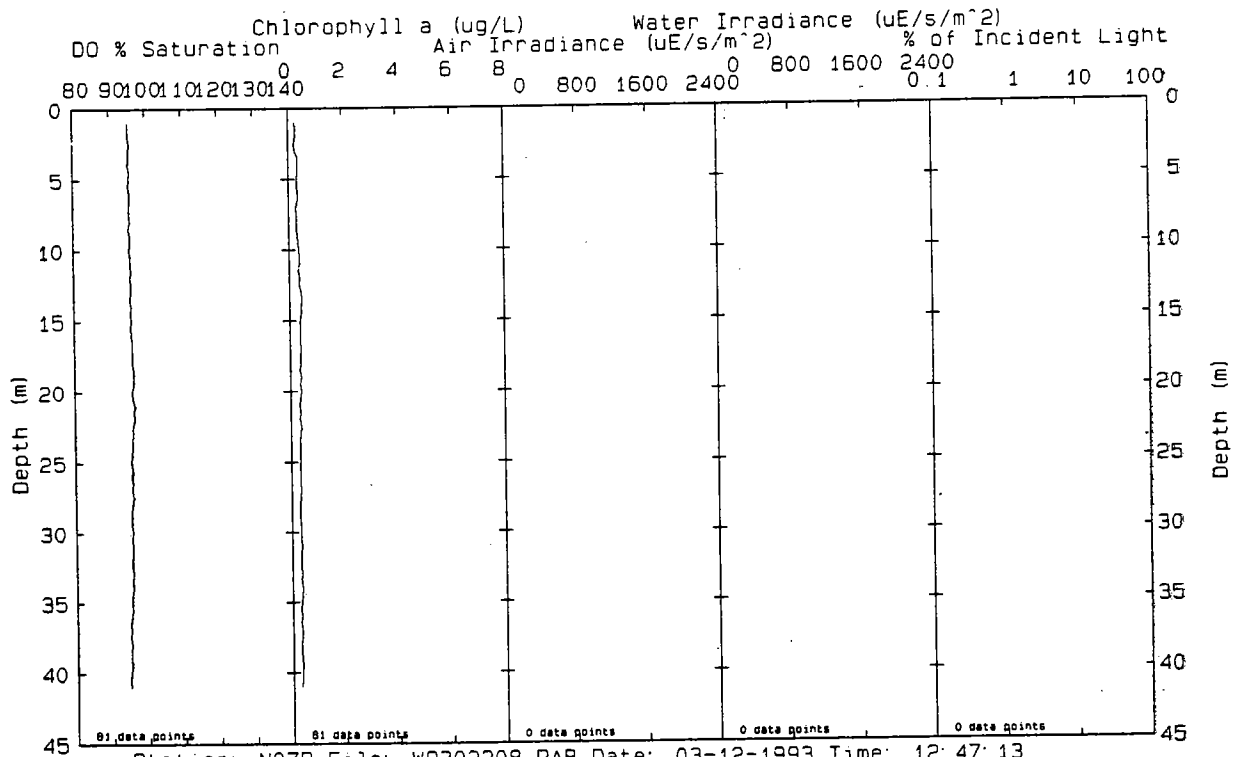
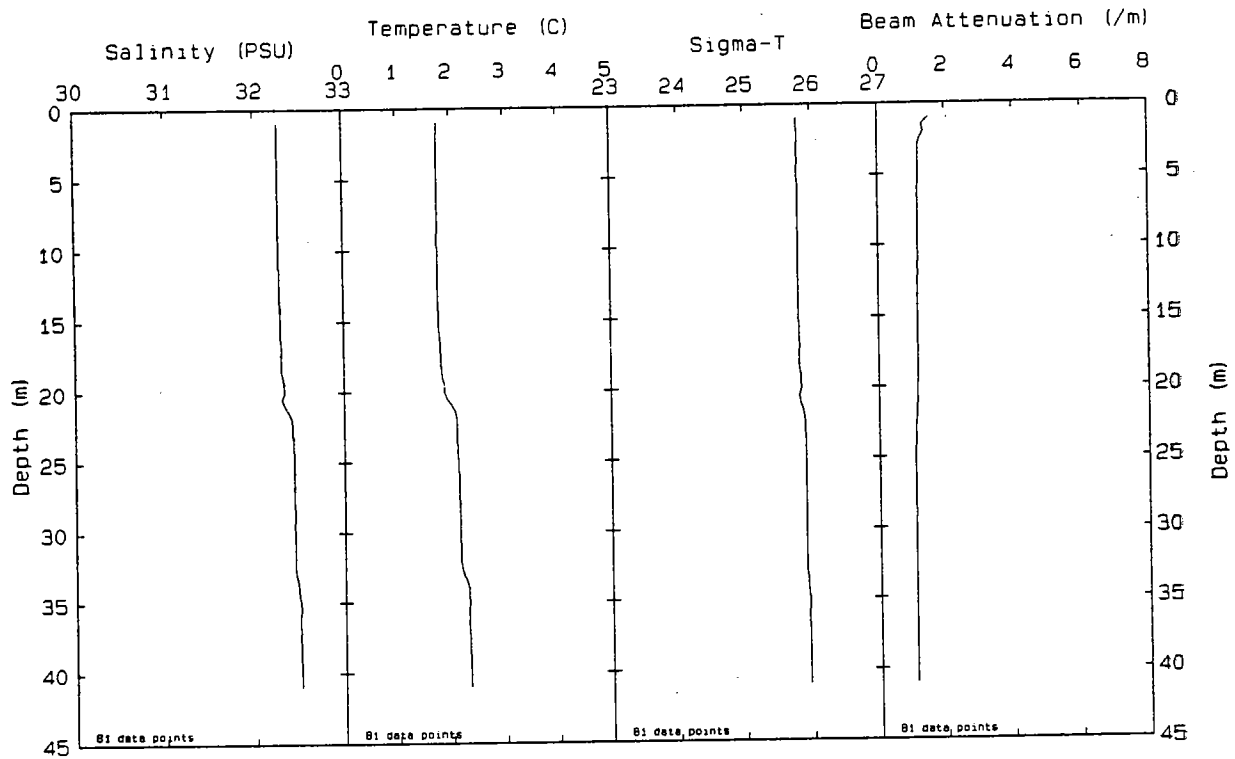


Station: N05 File: W9302200.PAB Date: 03-12-1993 Time: 11:23:06

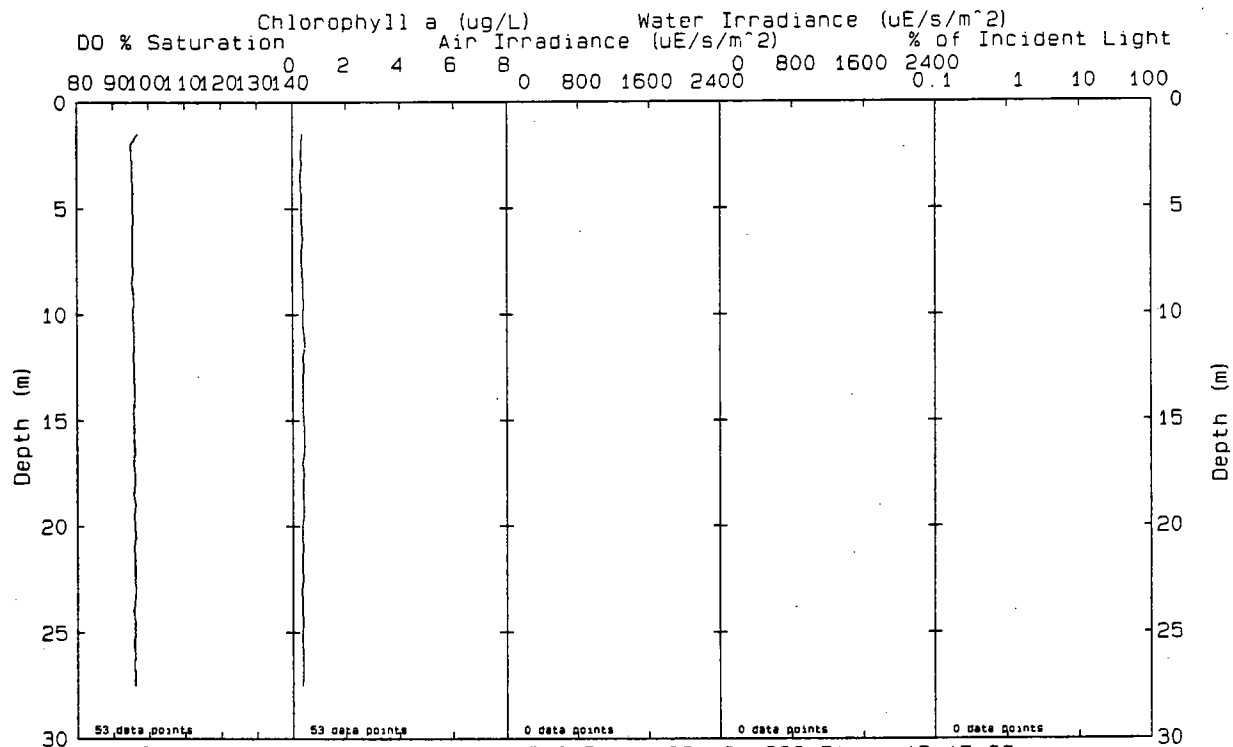
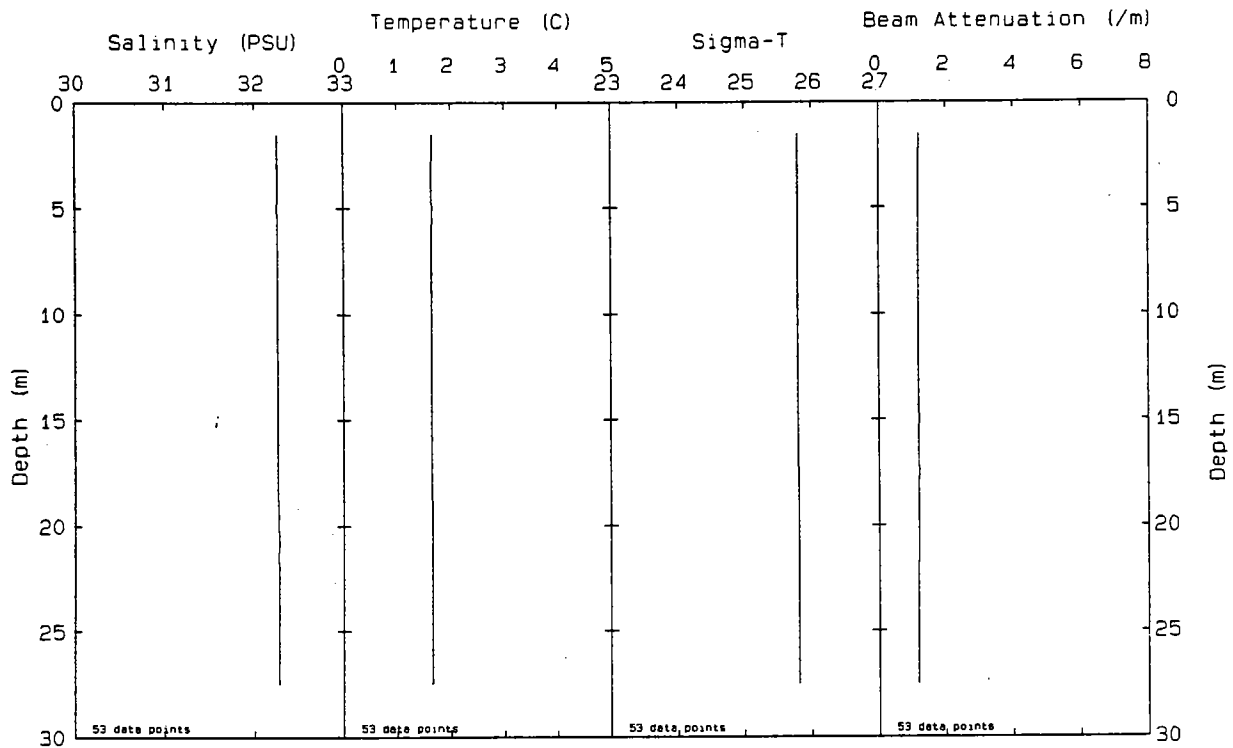


Station: N06 File: W9302204.PAB Date: 03-12-1993 Time: 11:54:14

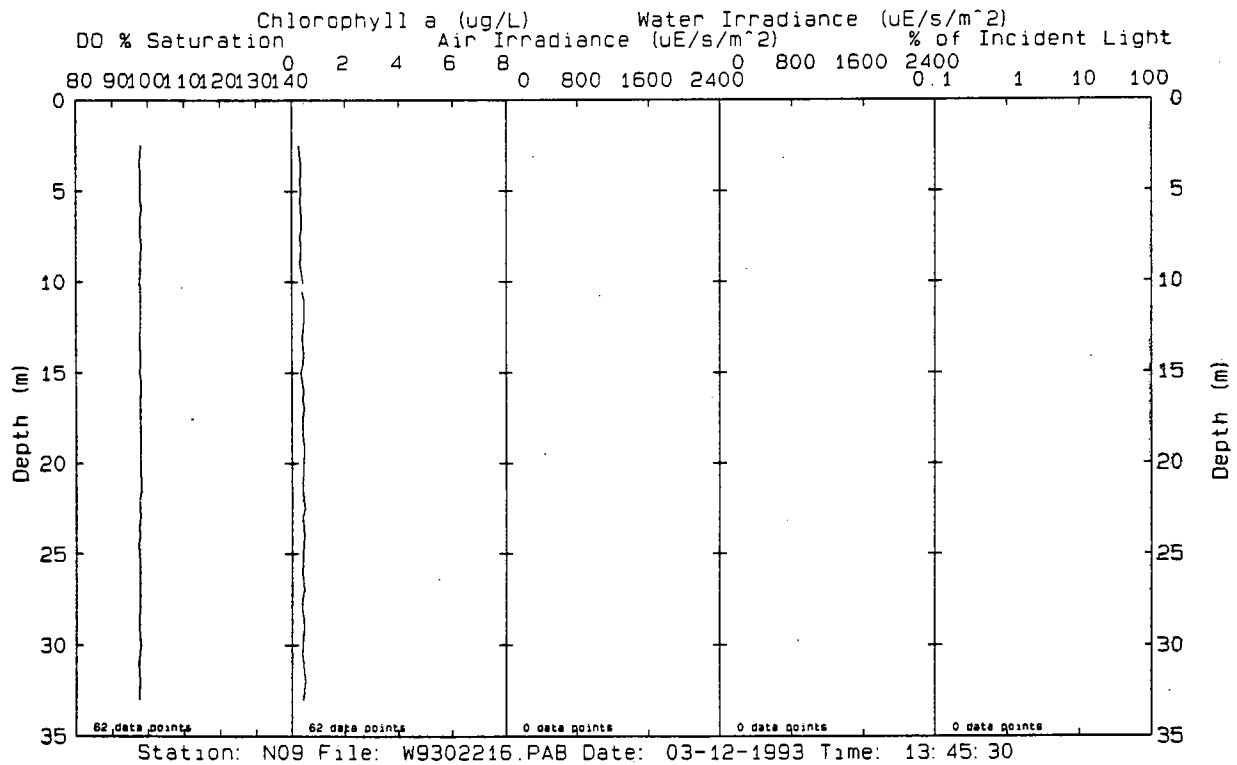
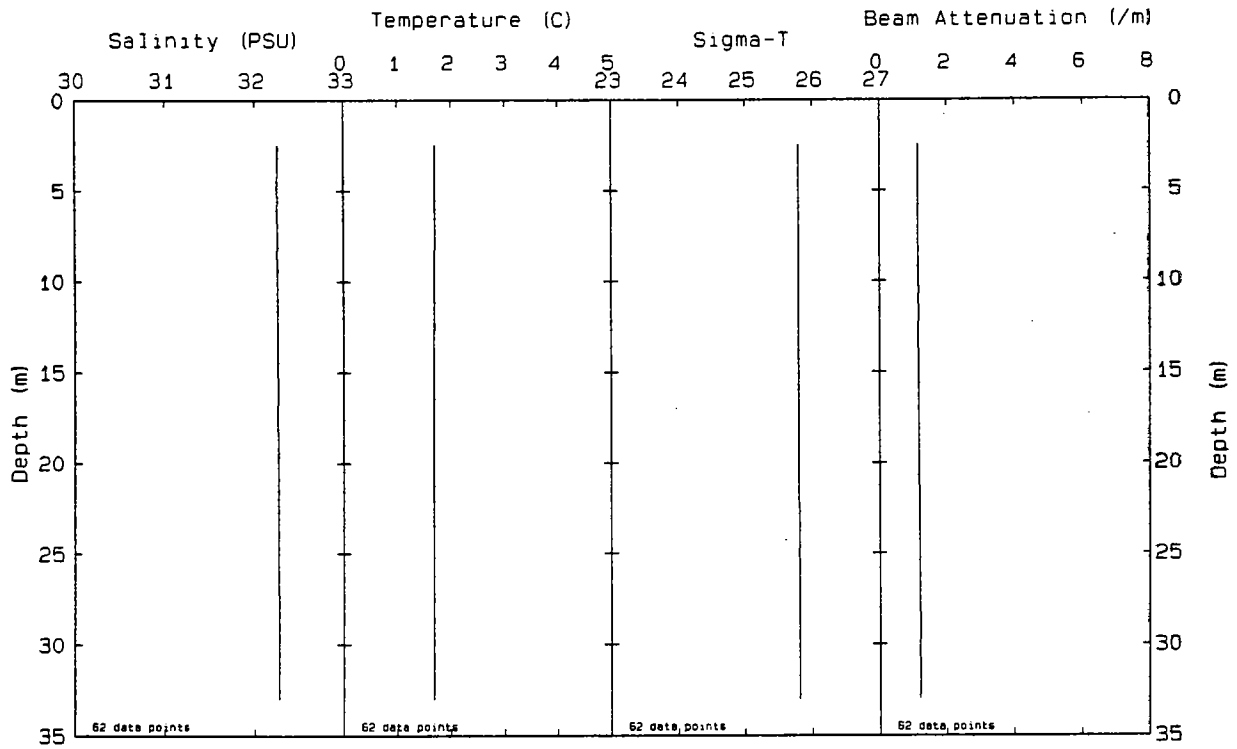




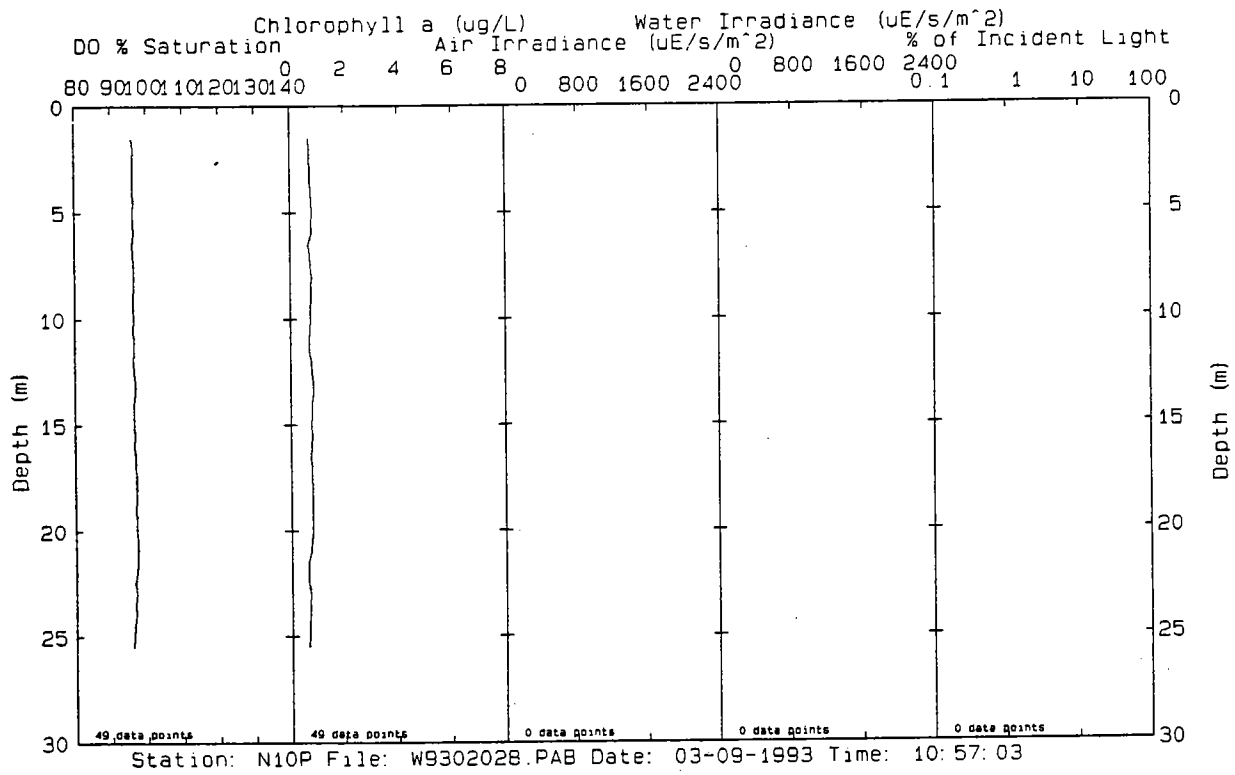
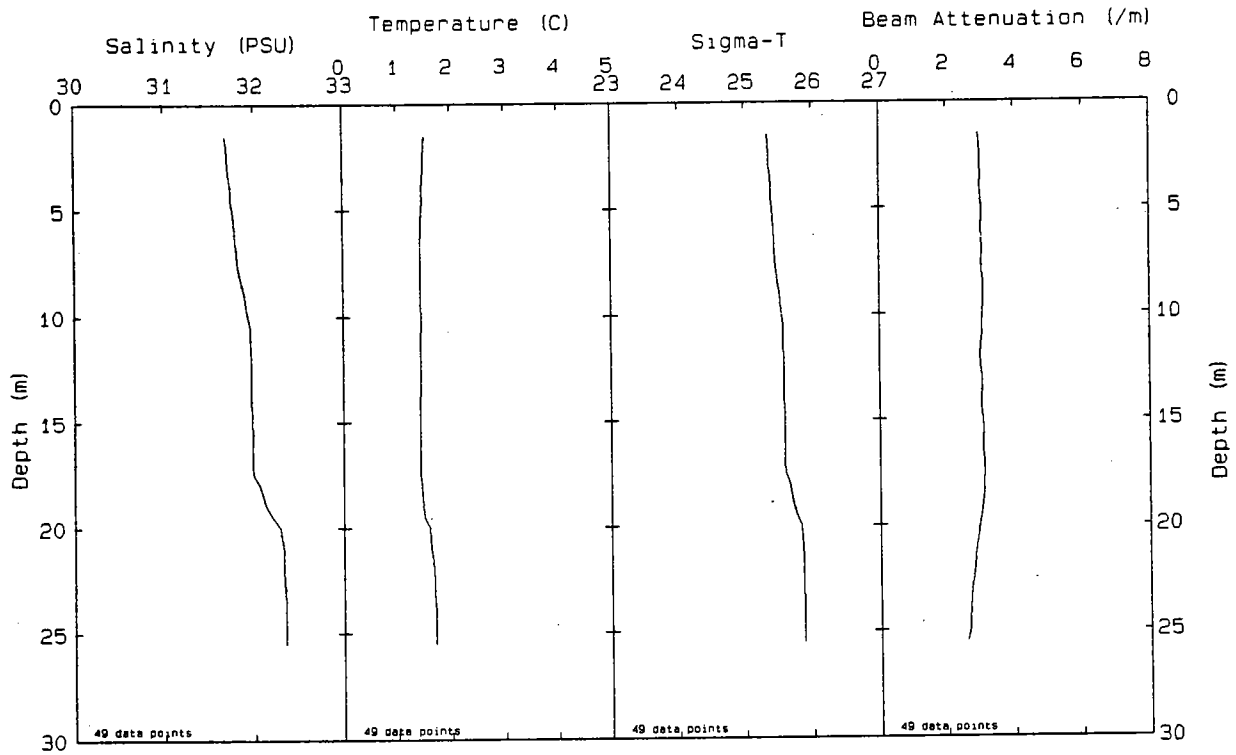
Station: N07P File: W9302208.PAB Date: 03-12-1993 Time: 12:47:13

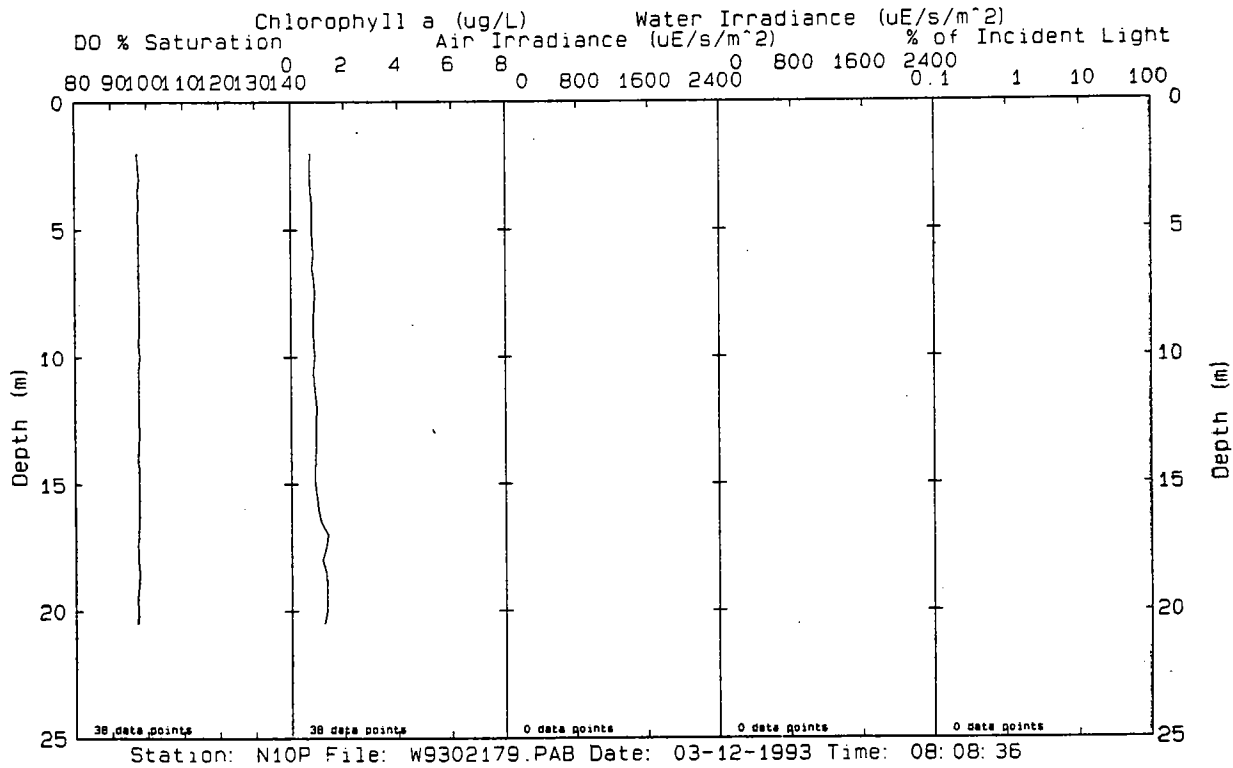
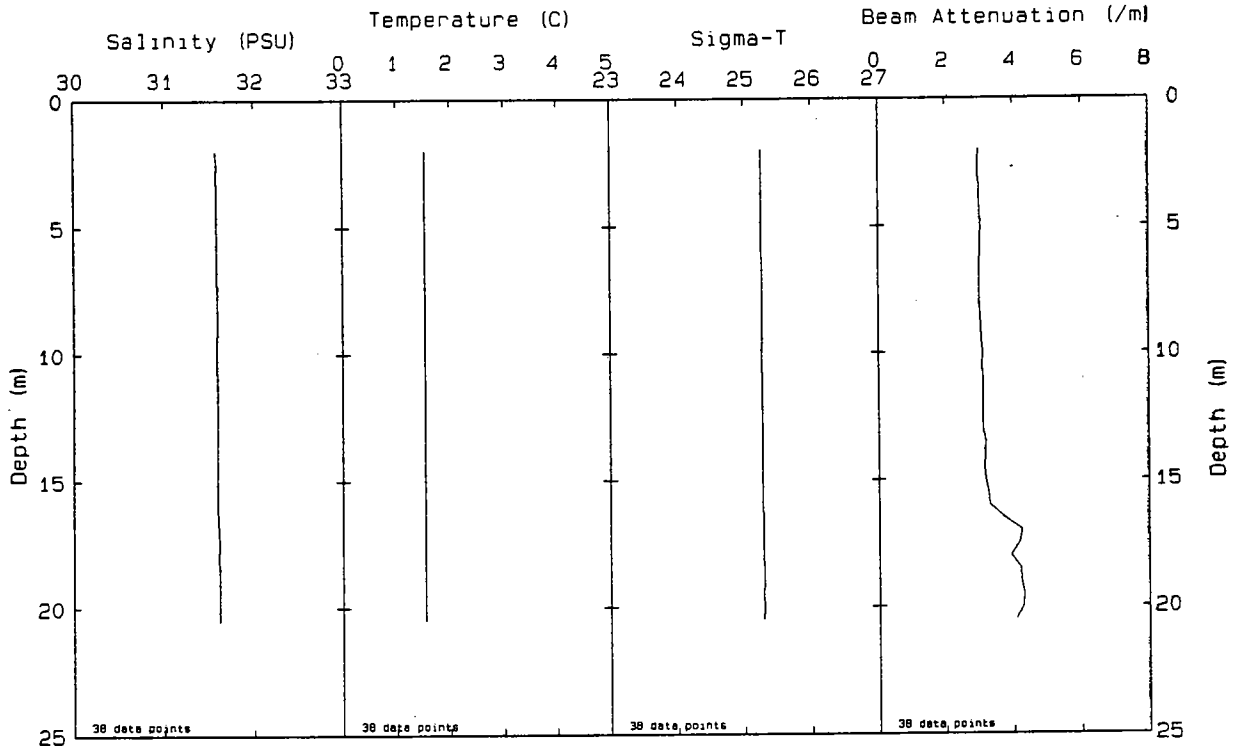


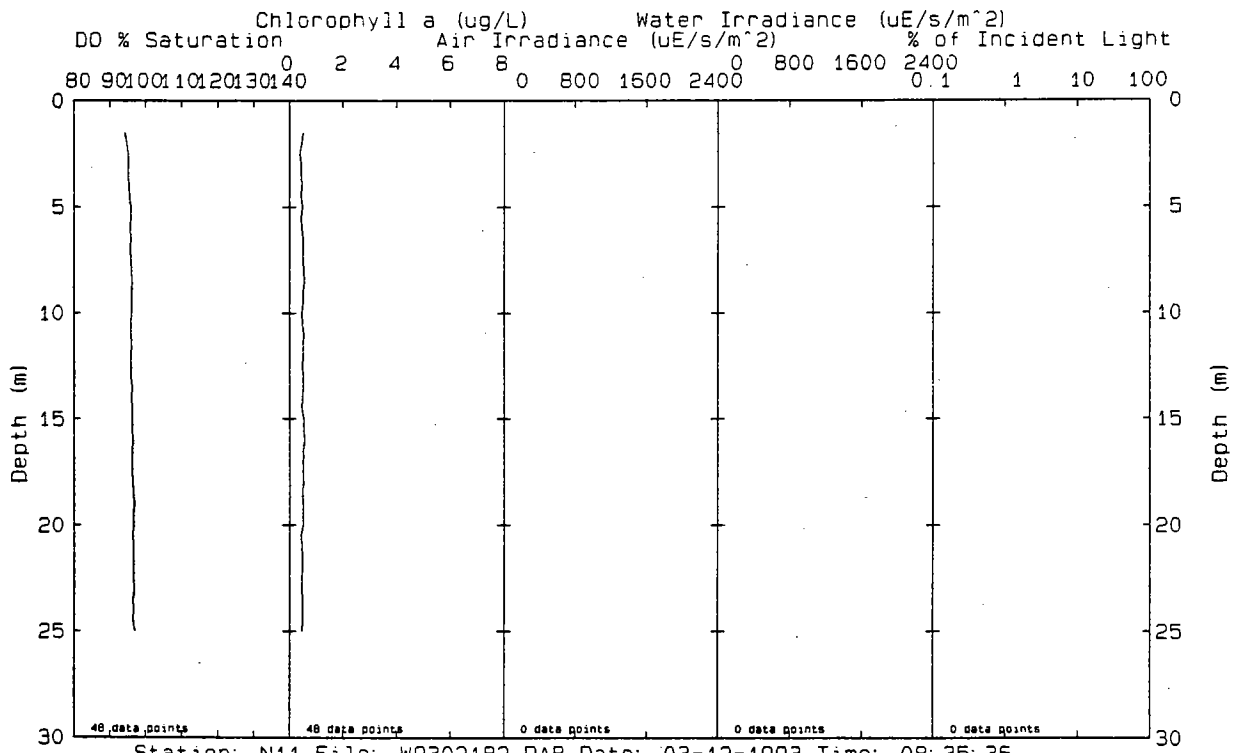
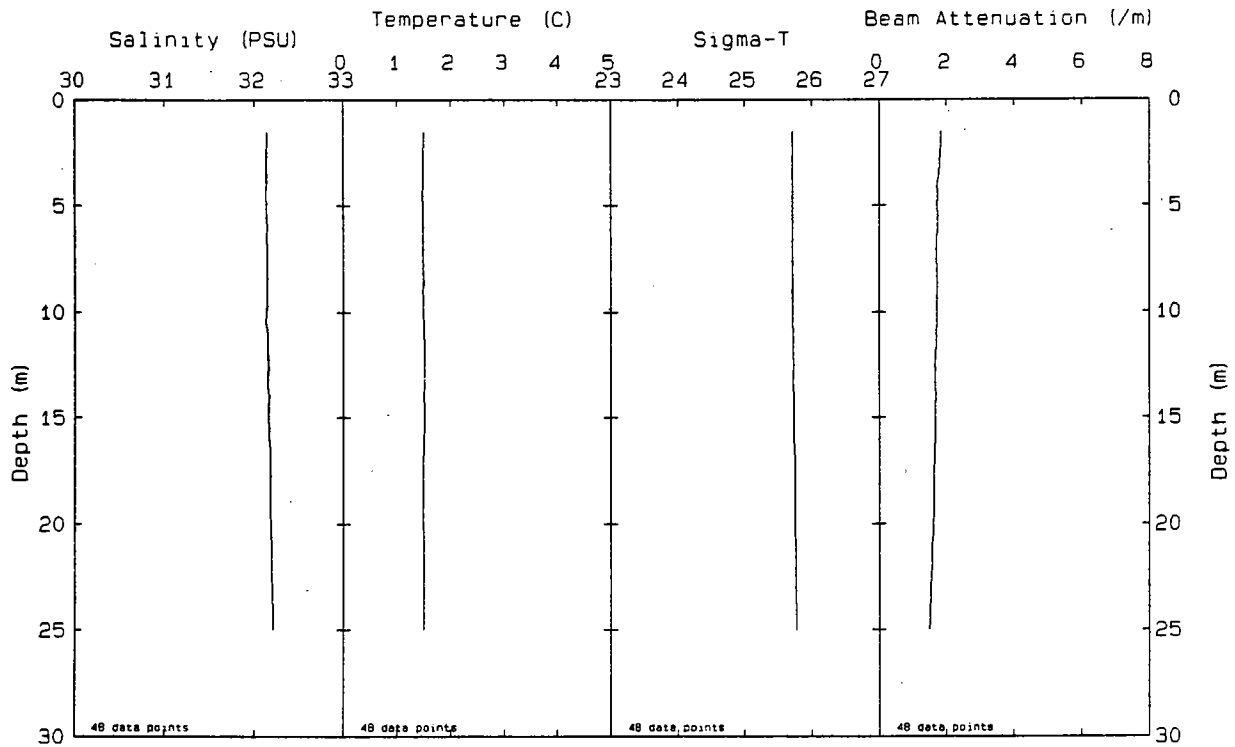
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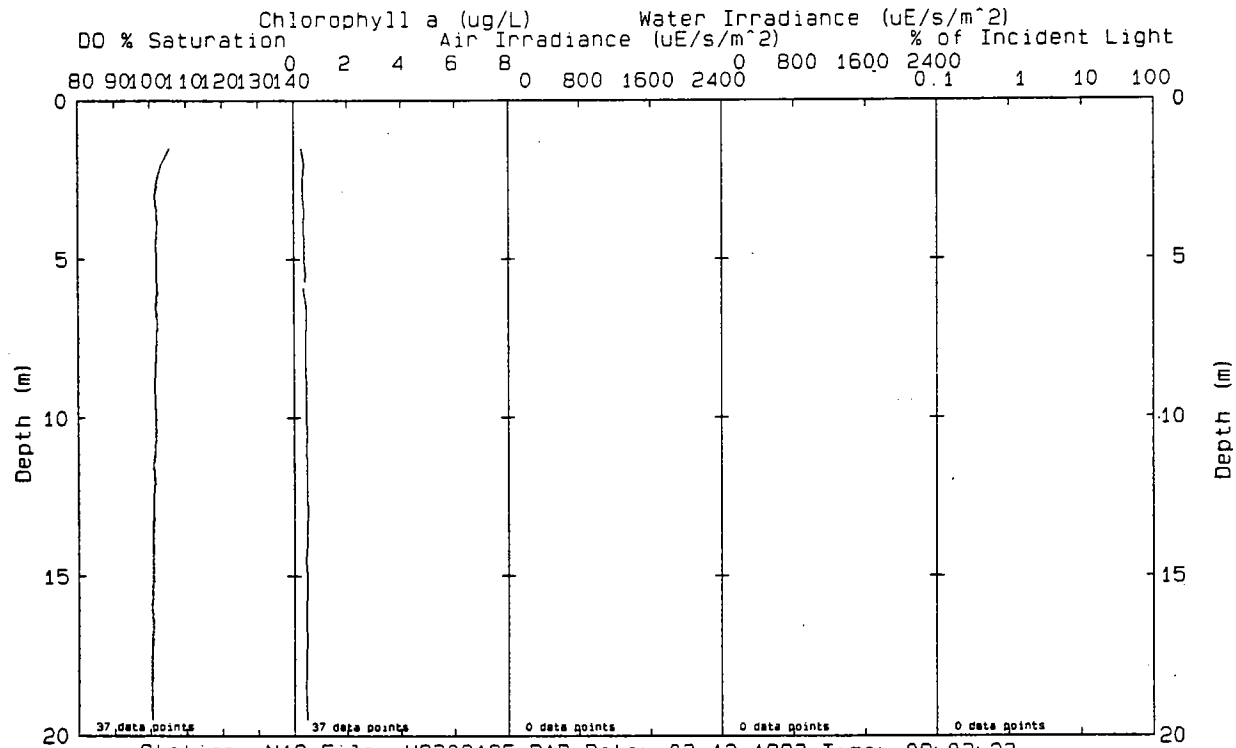
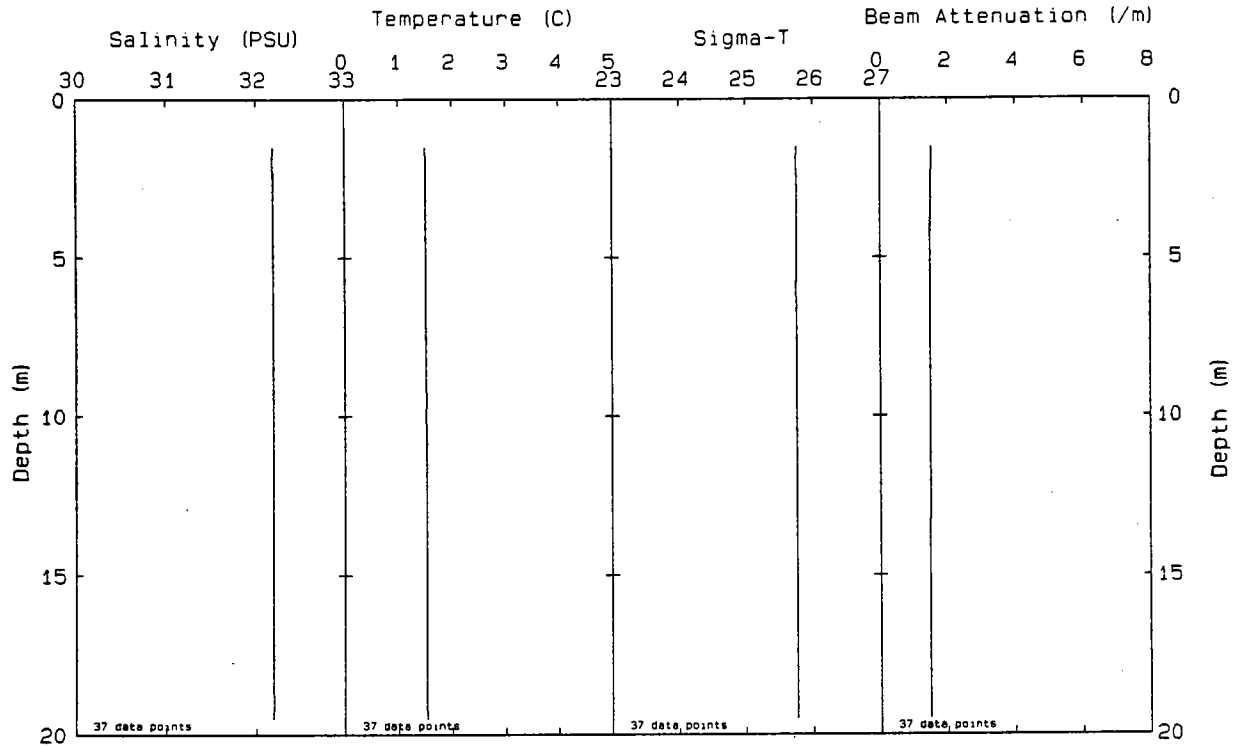
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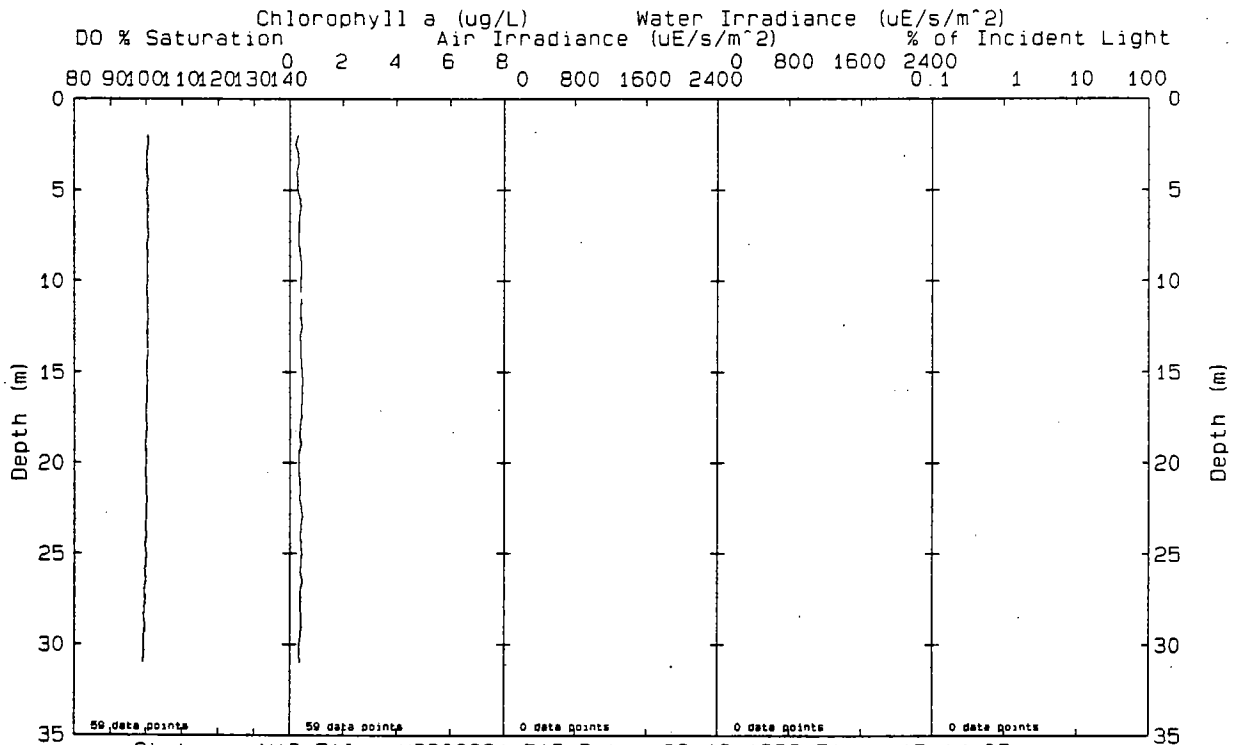
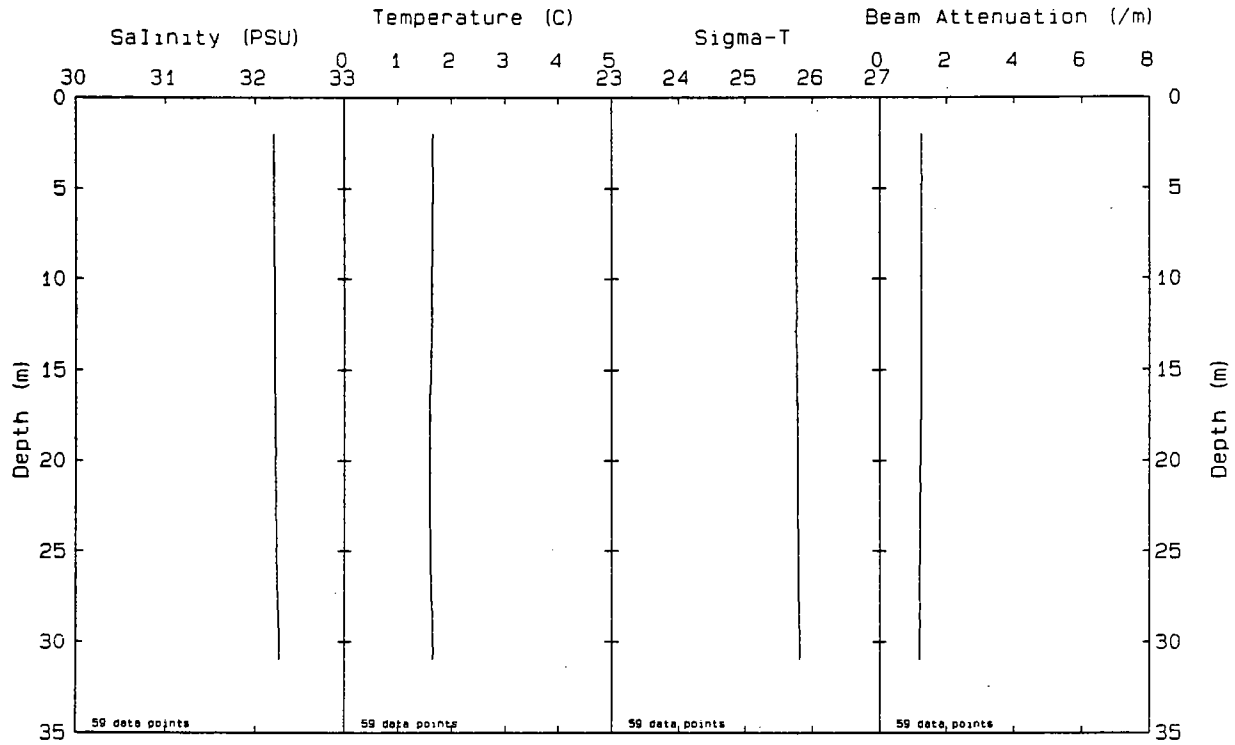




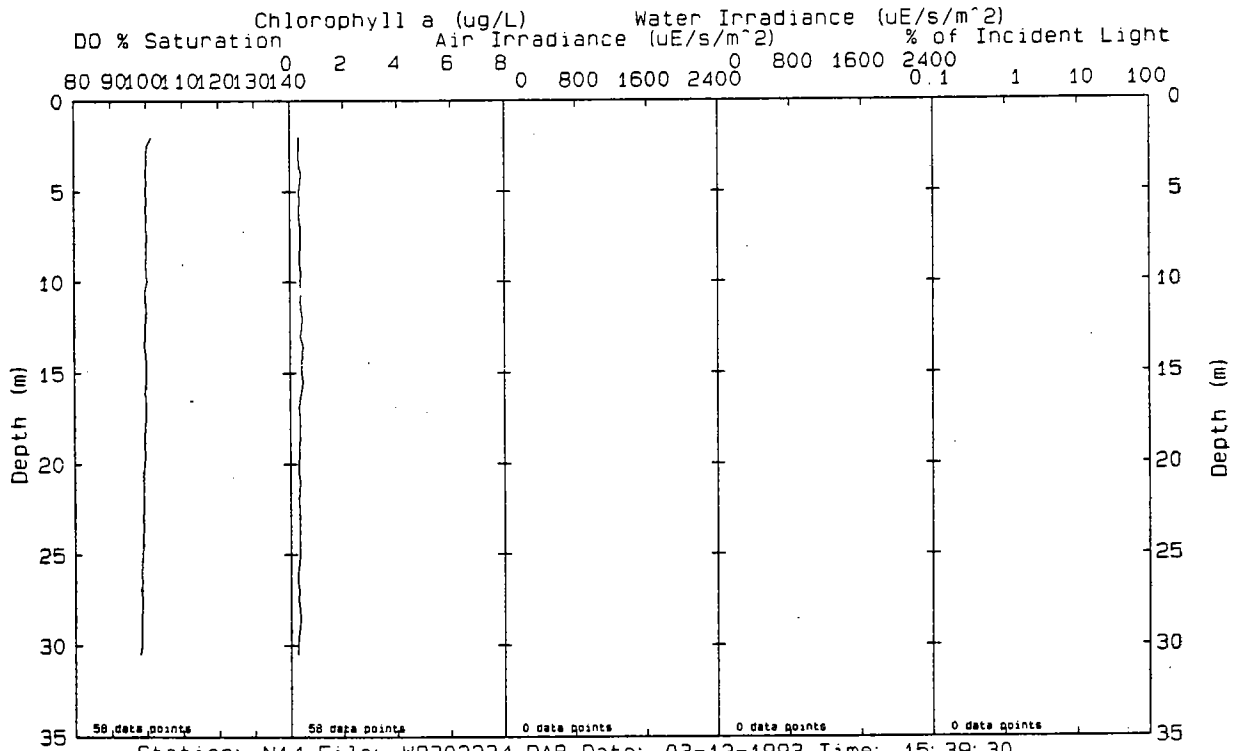
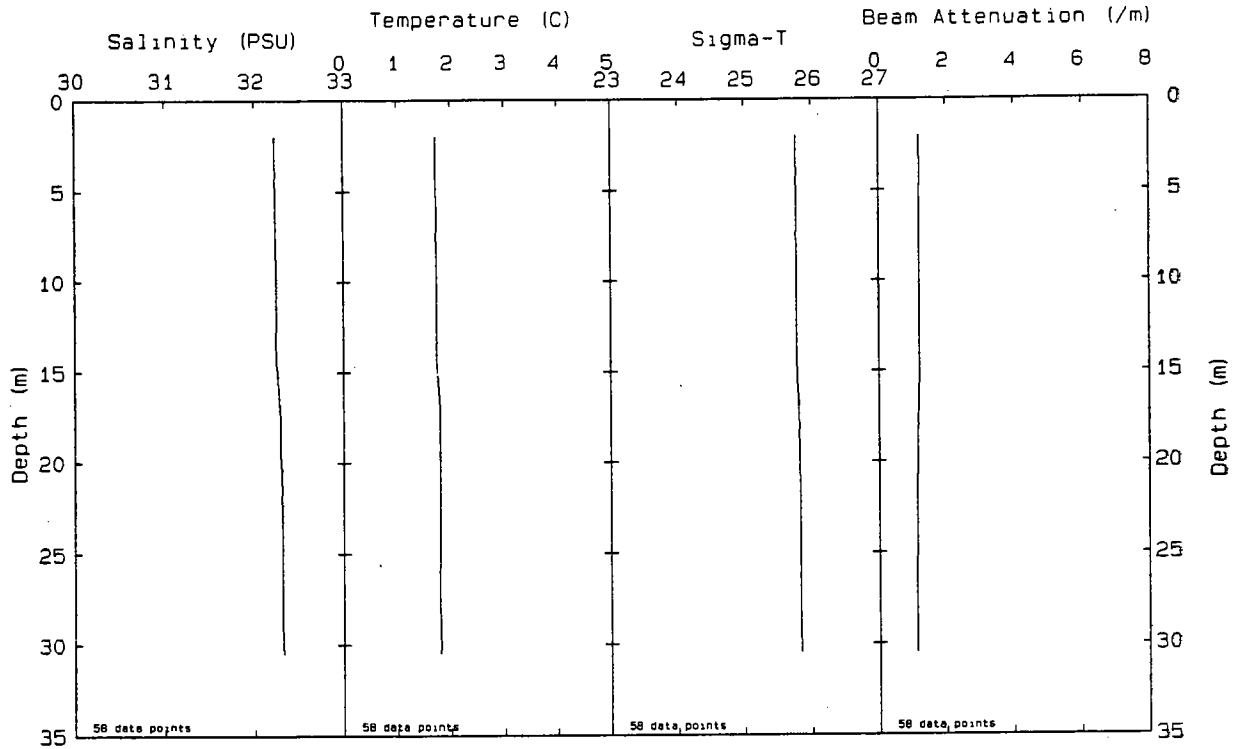
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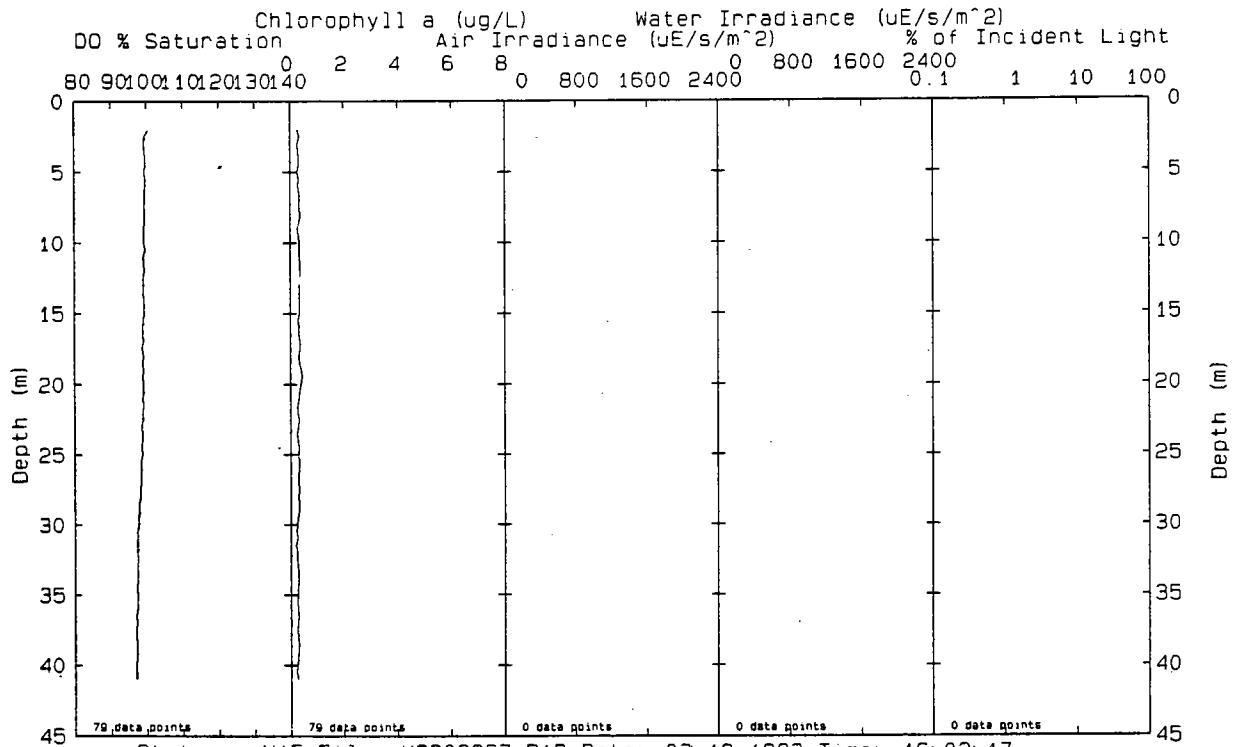
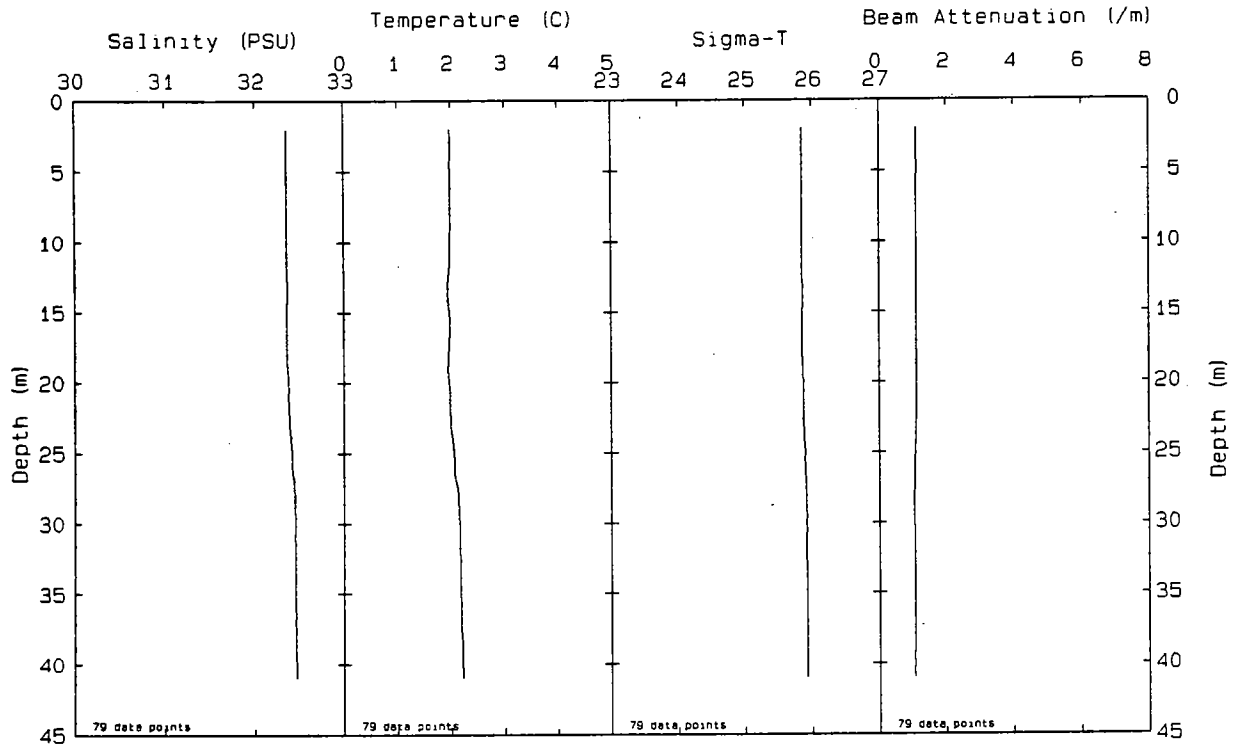
Station: N12 File: W9302185.PAB Date: 03-12-1993 Time: 09:03:23



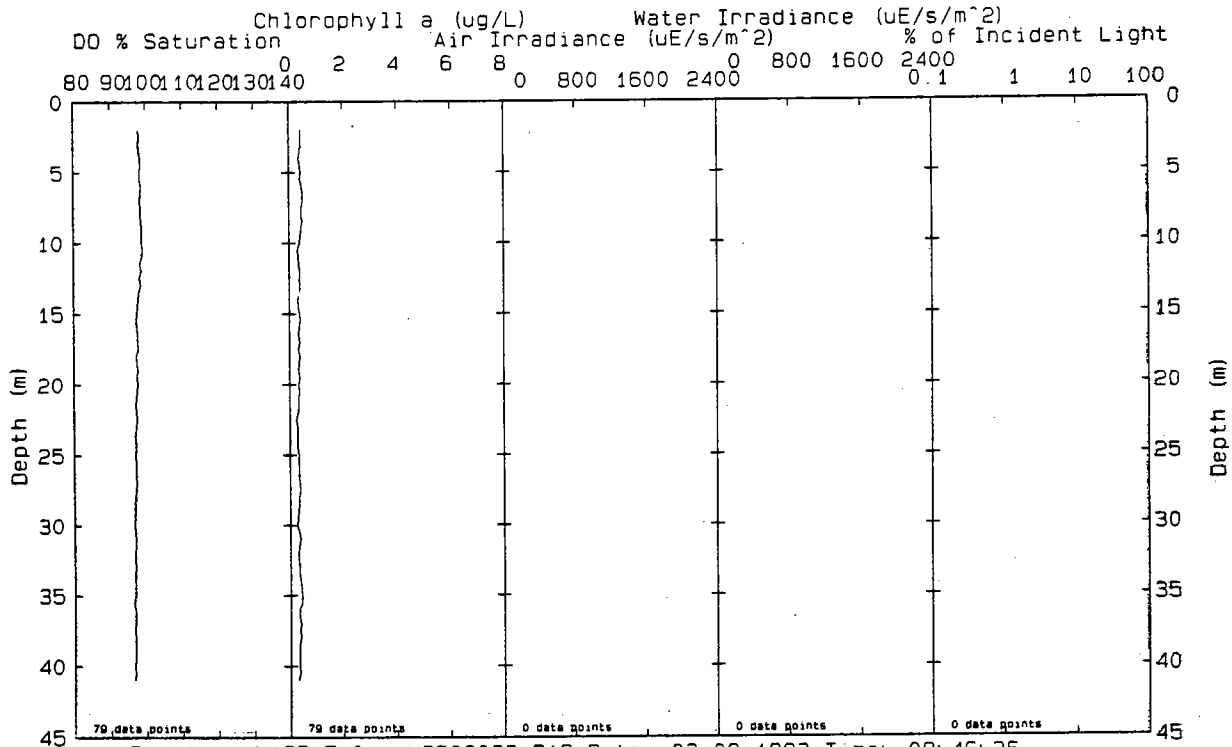
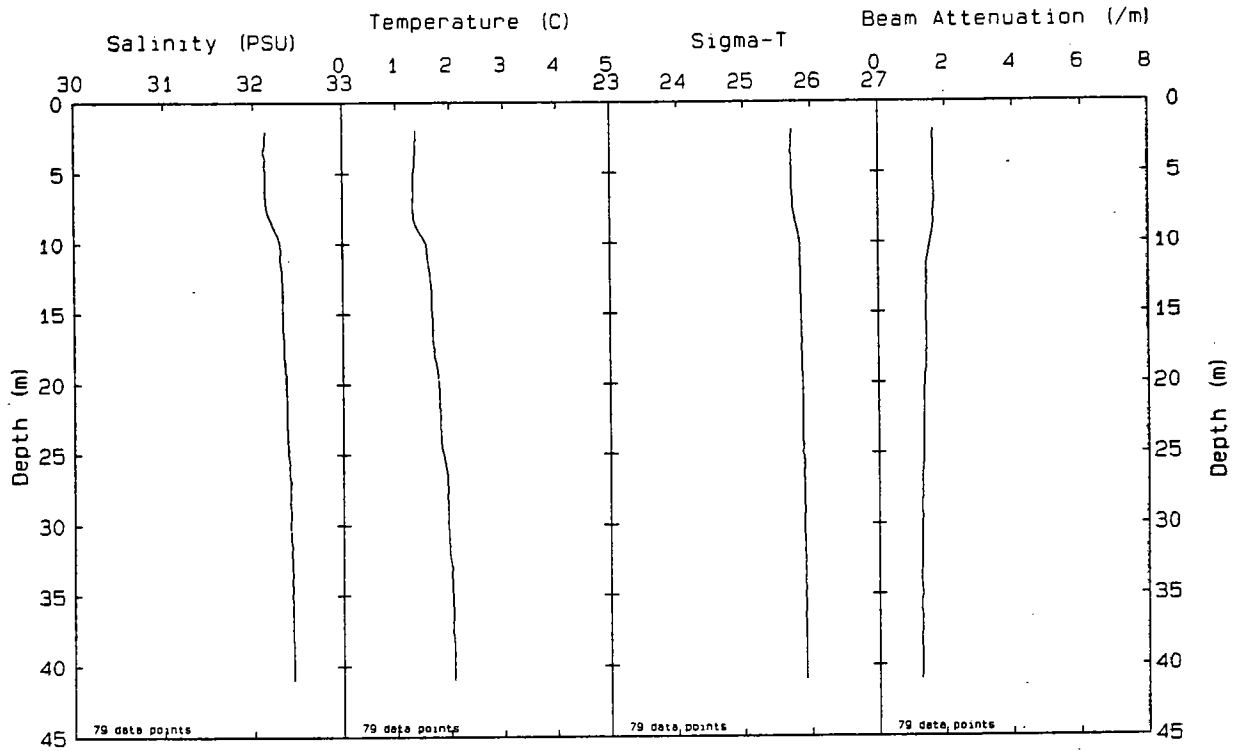
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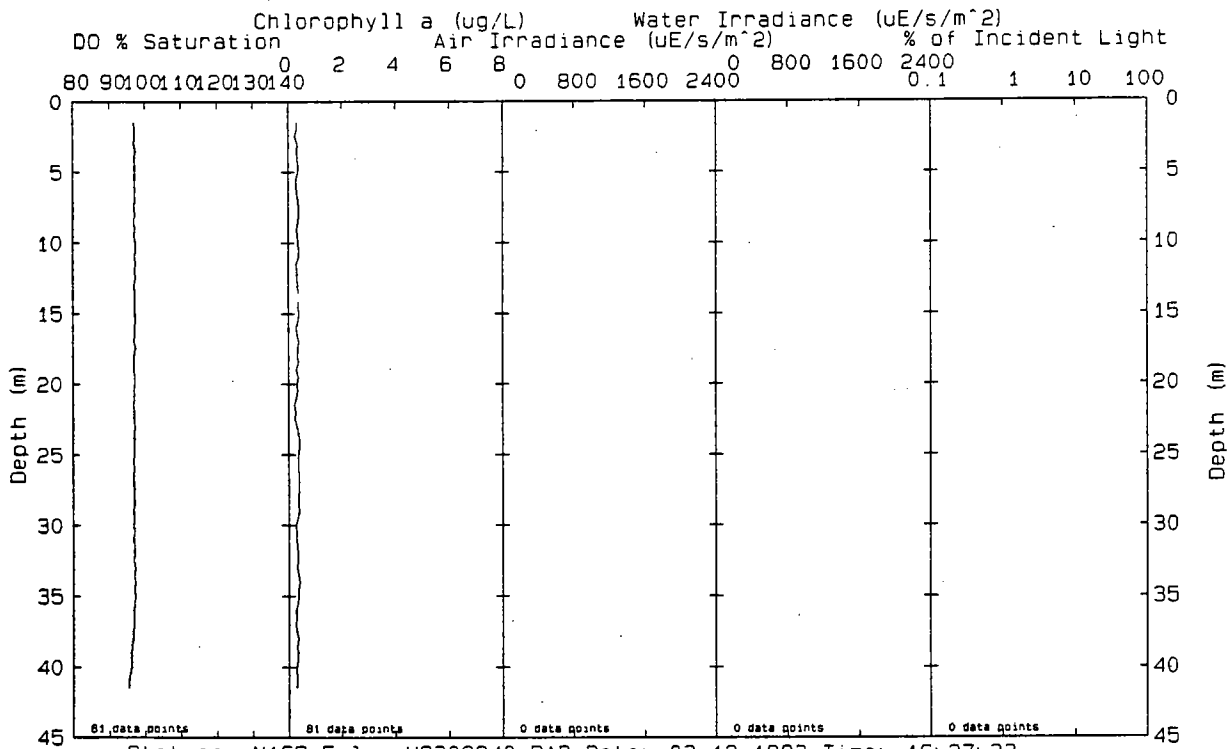
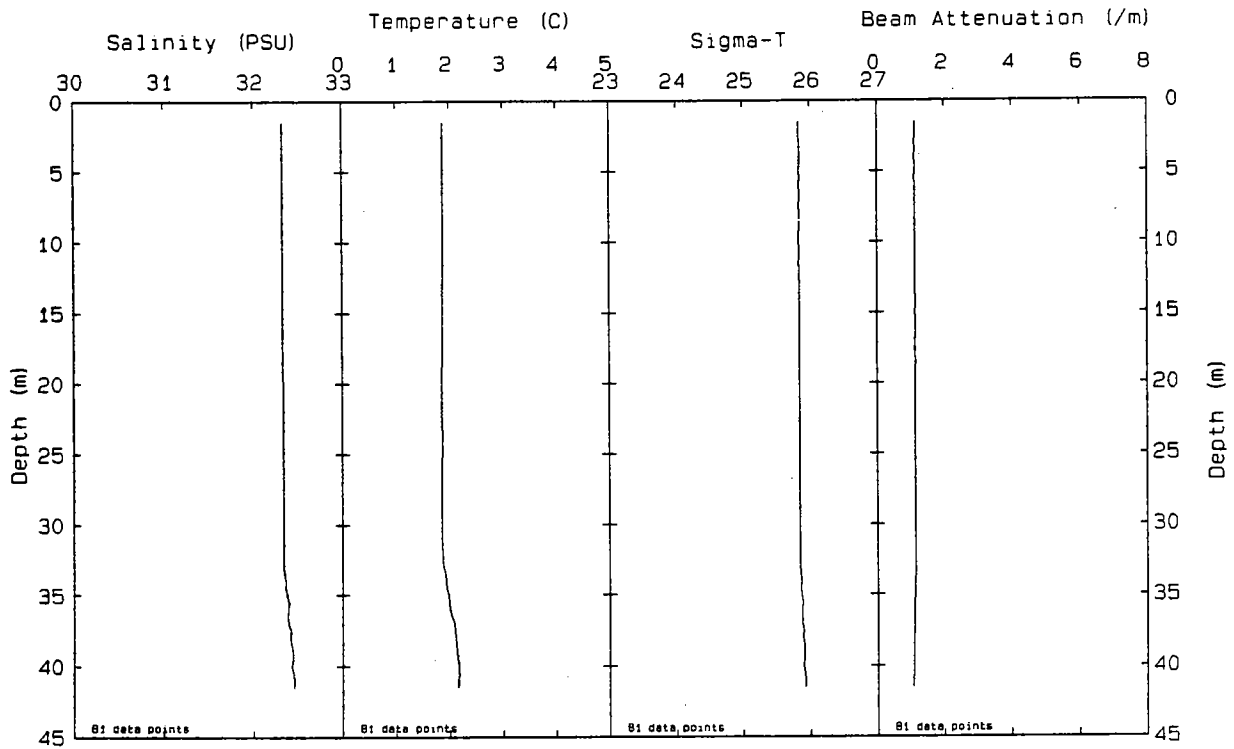
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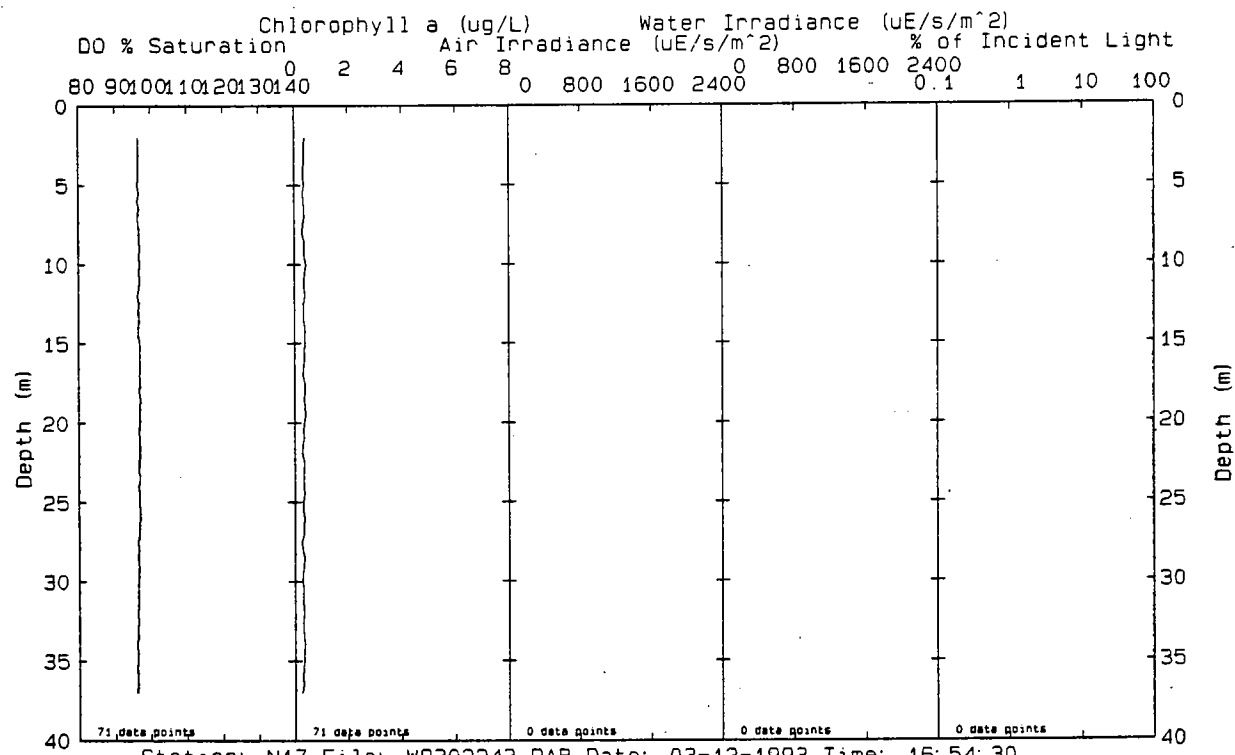
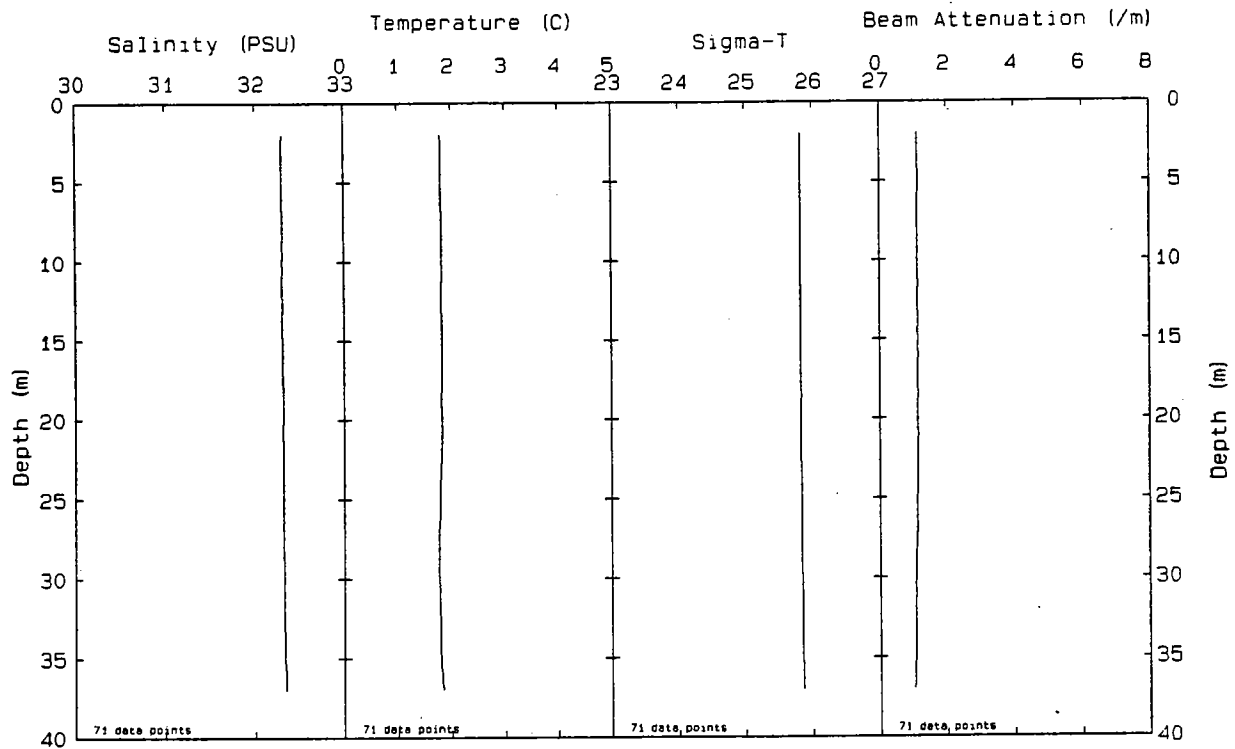
Station: N15 File: W9302237.PAB Date: 03-12-1993 Time: 16:02:17



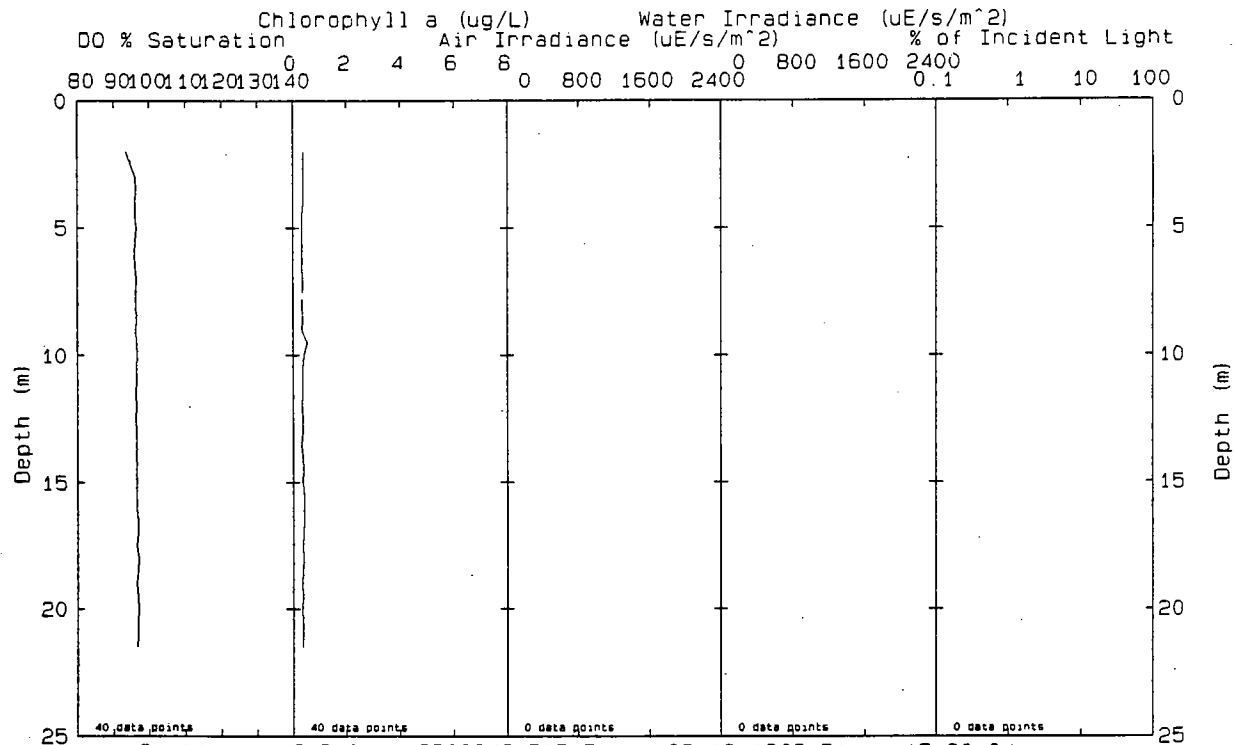
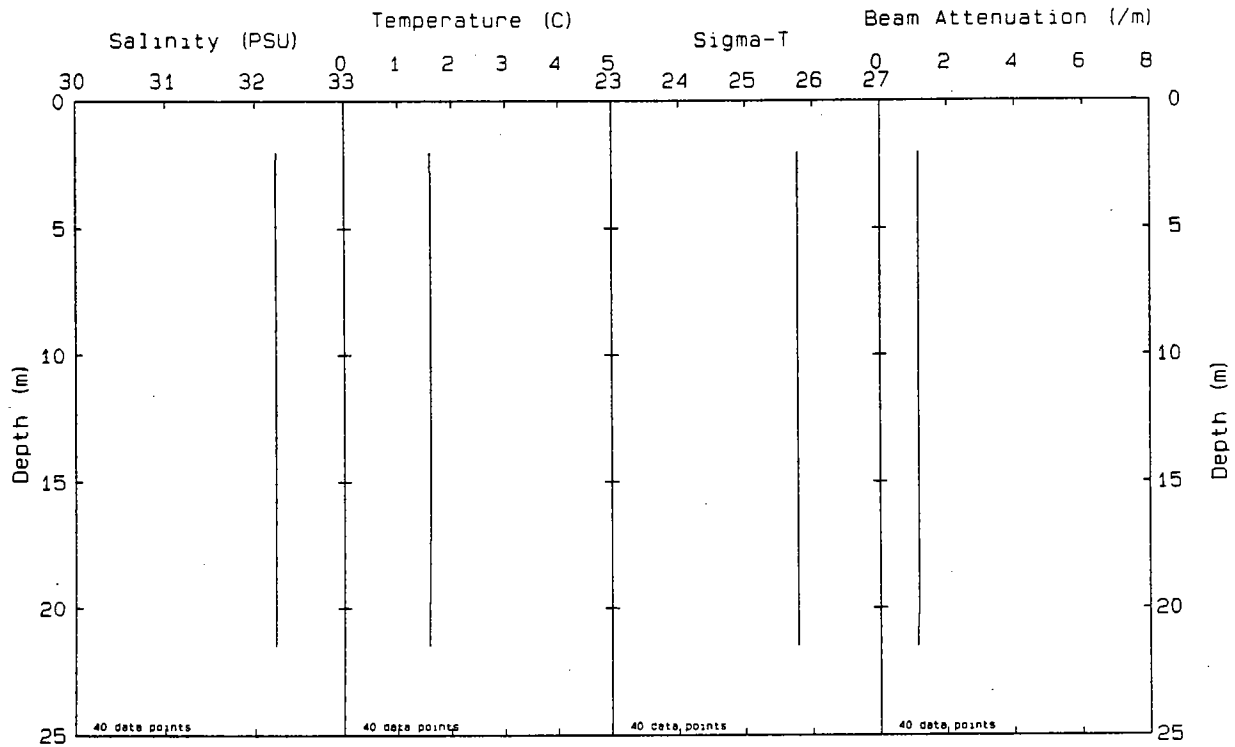
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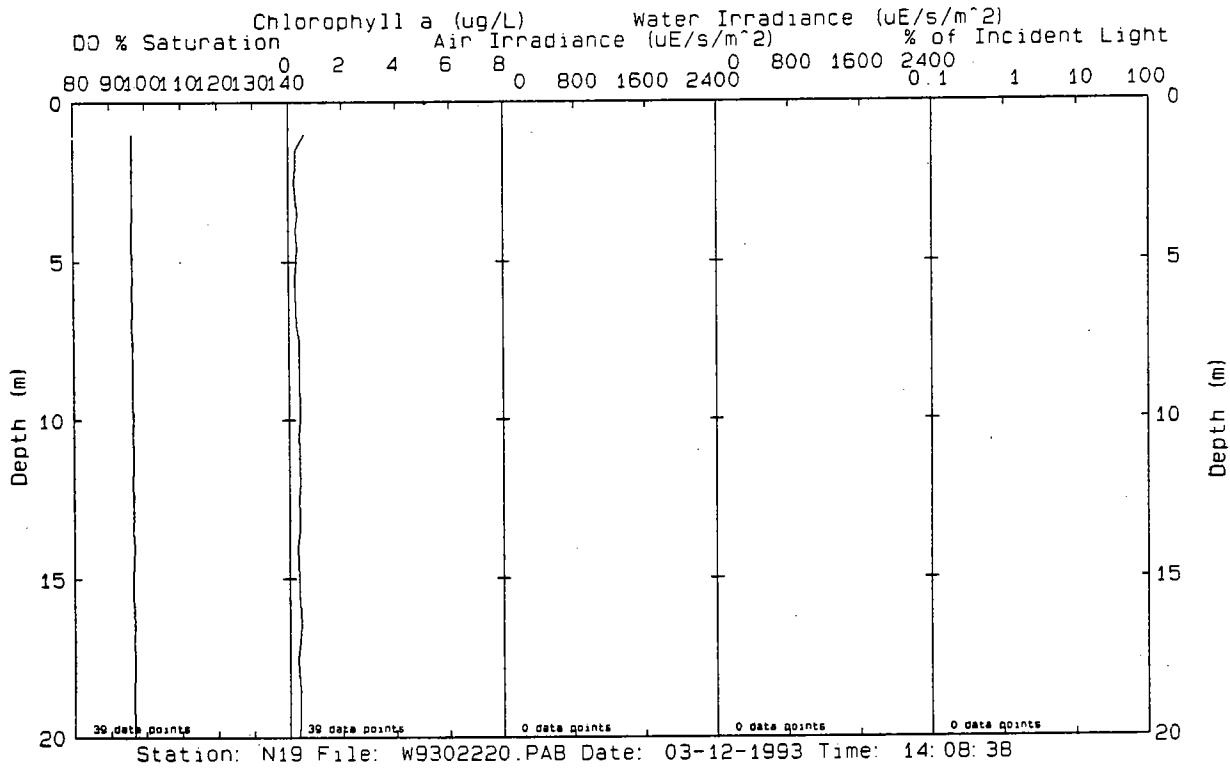
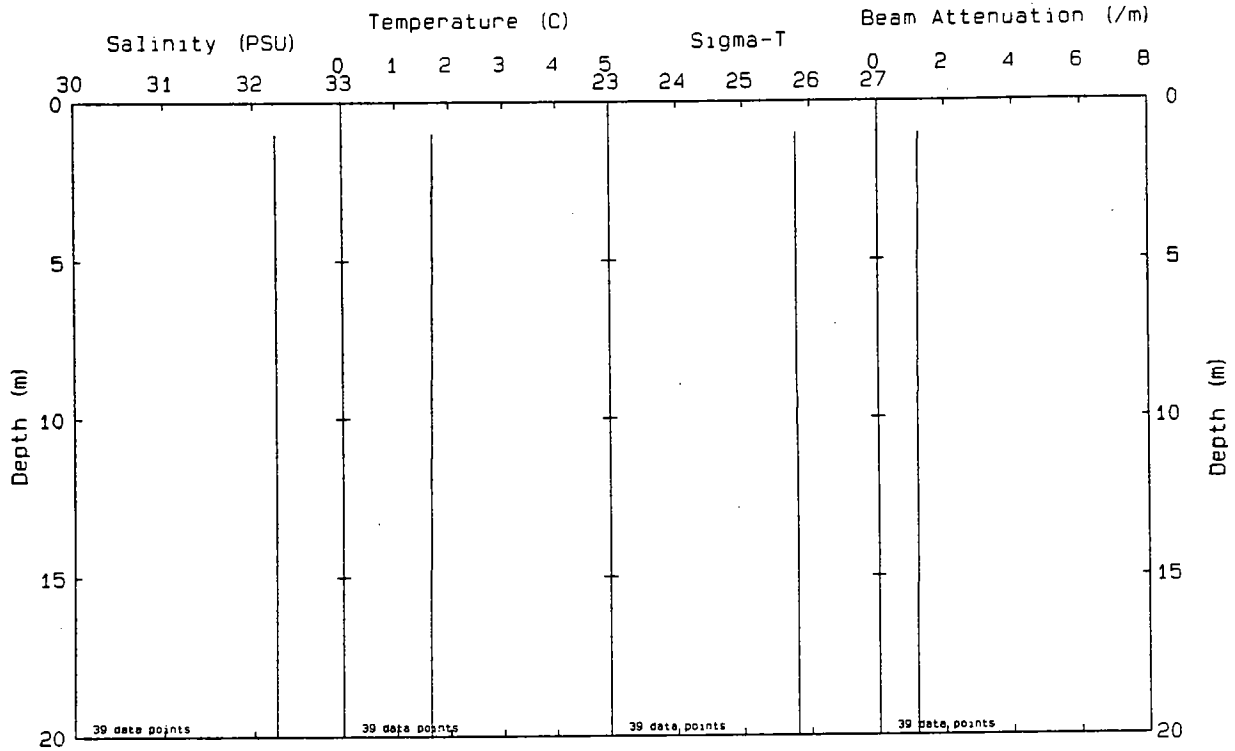
Station: N16P File: W9302240.PAB Date: 03-12-1993 Time: 16:27:33

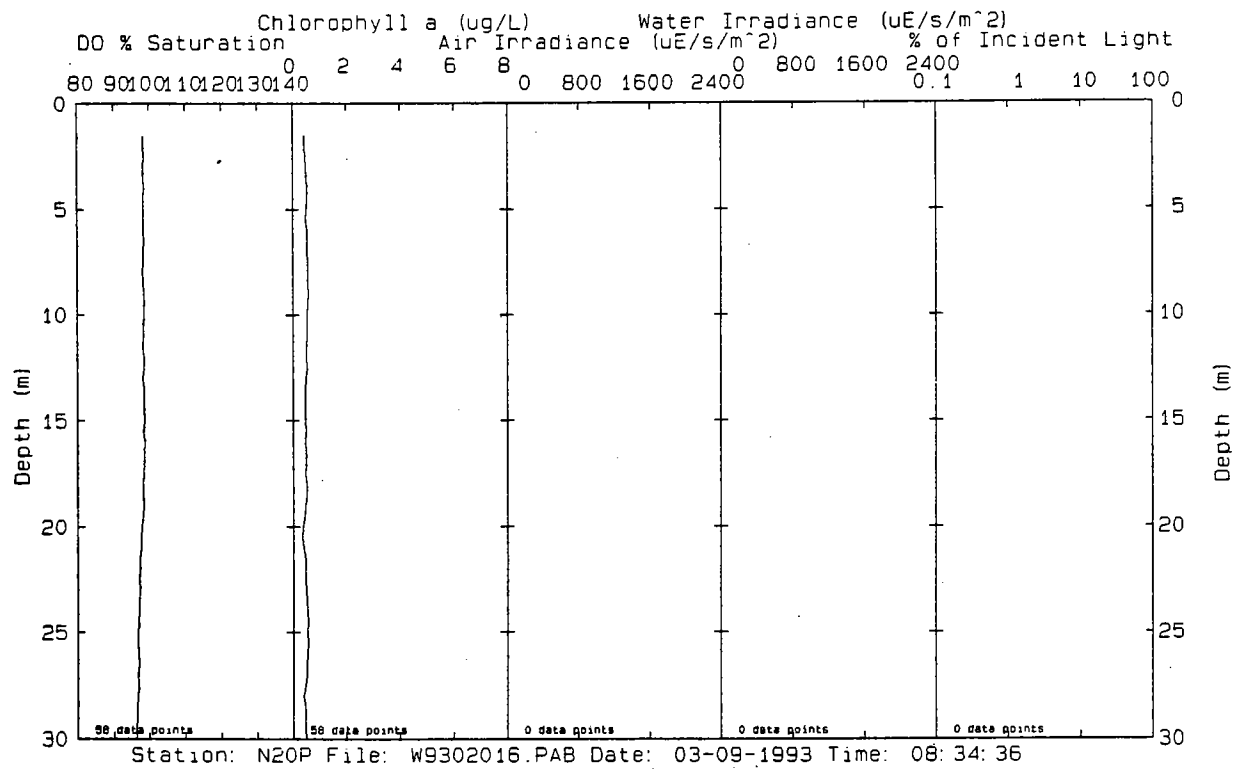
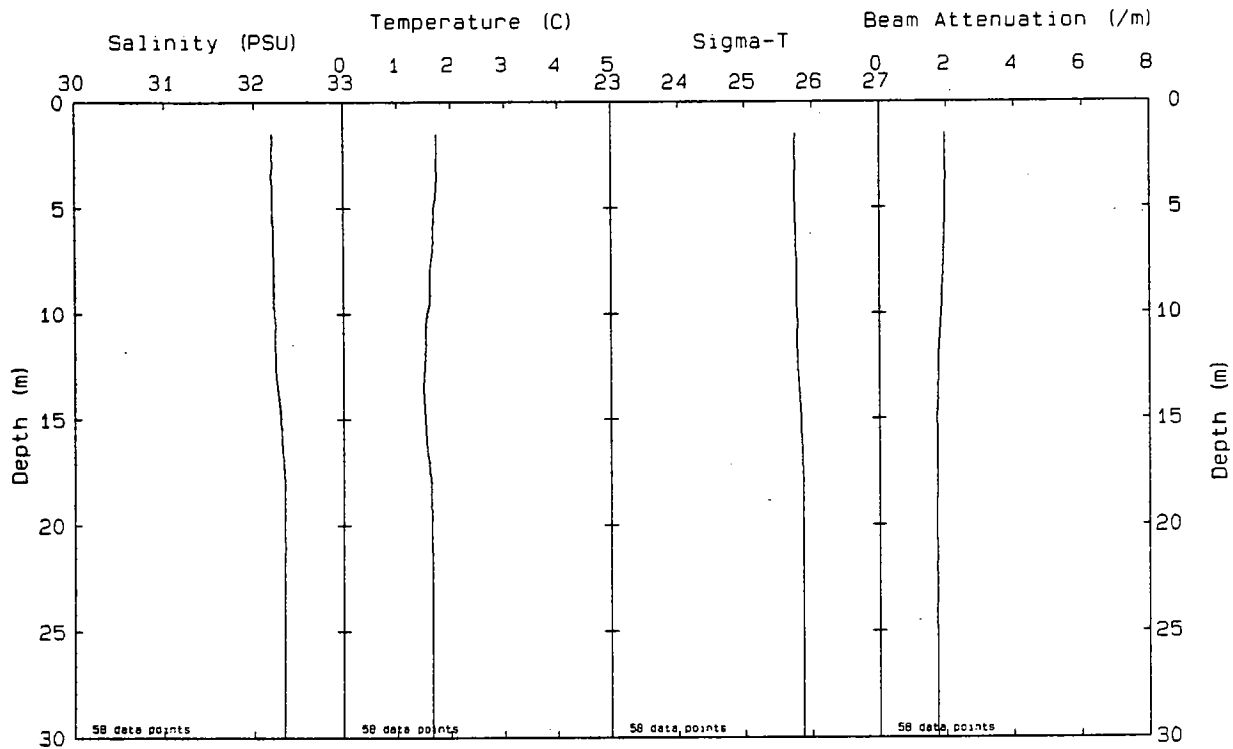


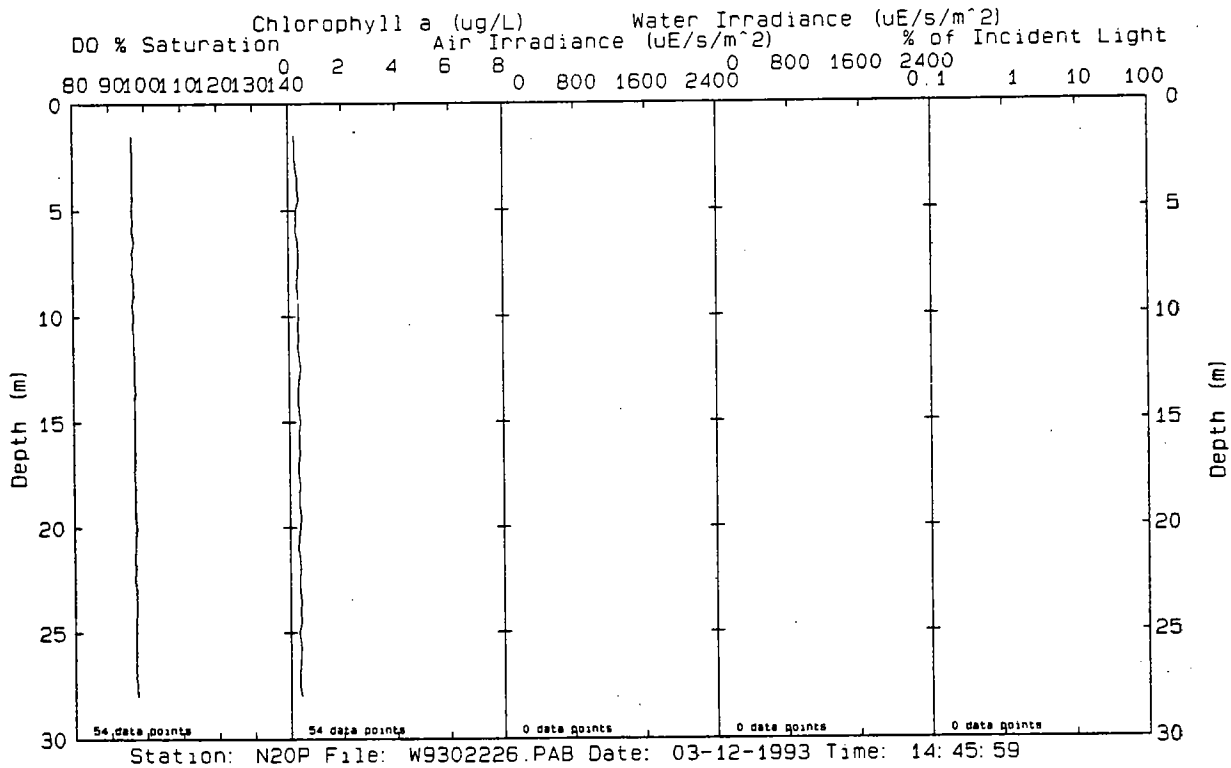
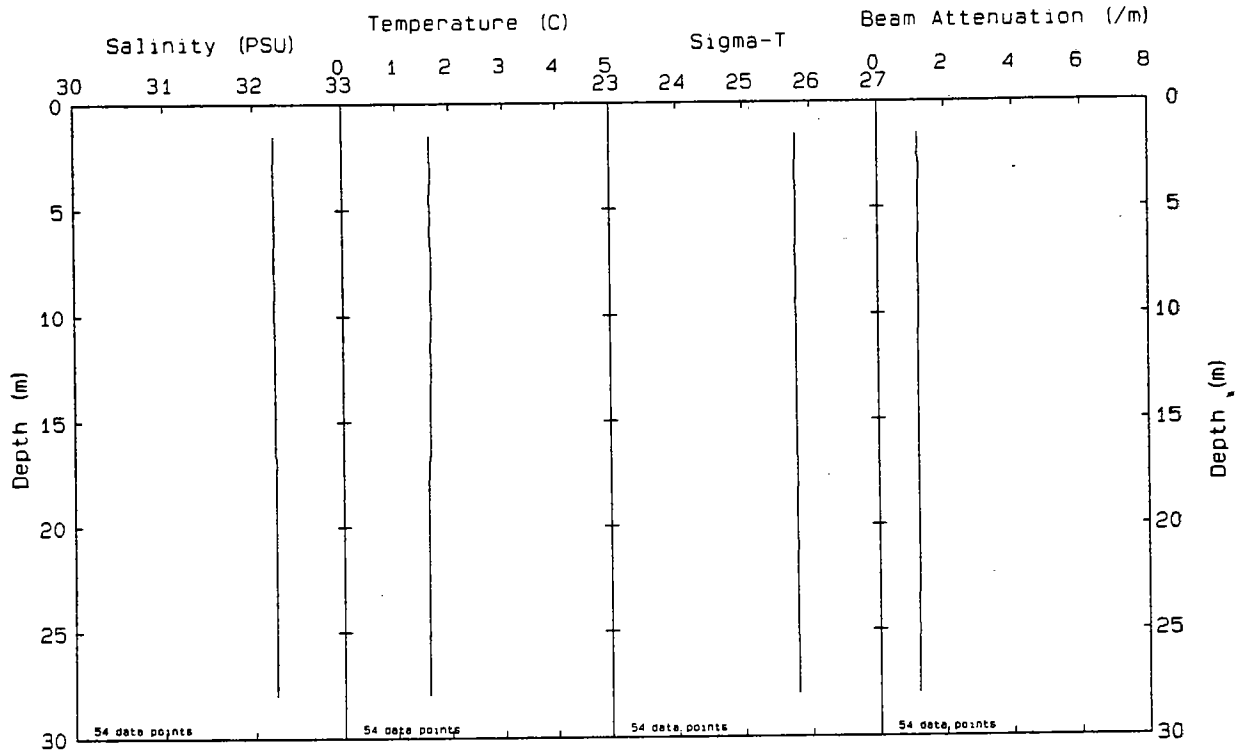
Station: N17 File: W9302243.PAB Date: 03-12-1993 Time: 16:54:30



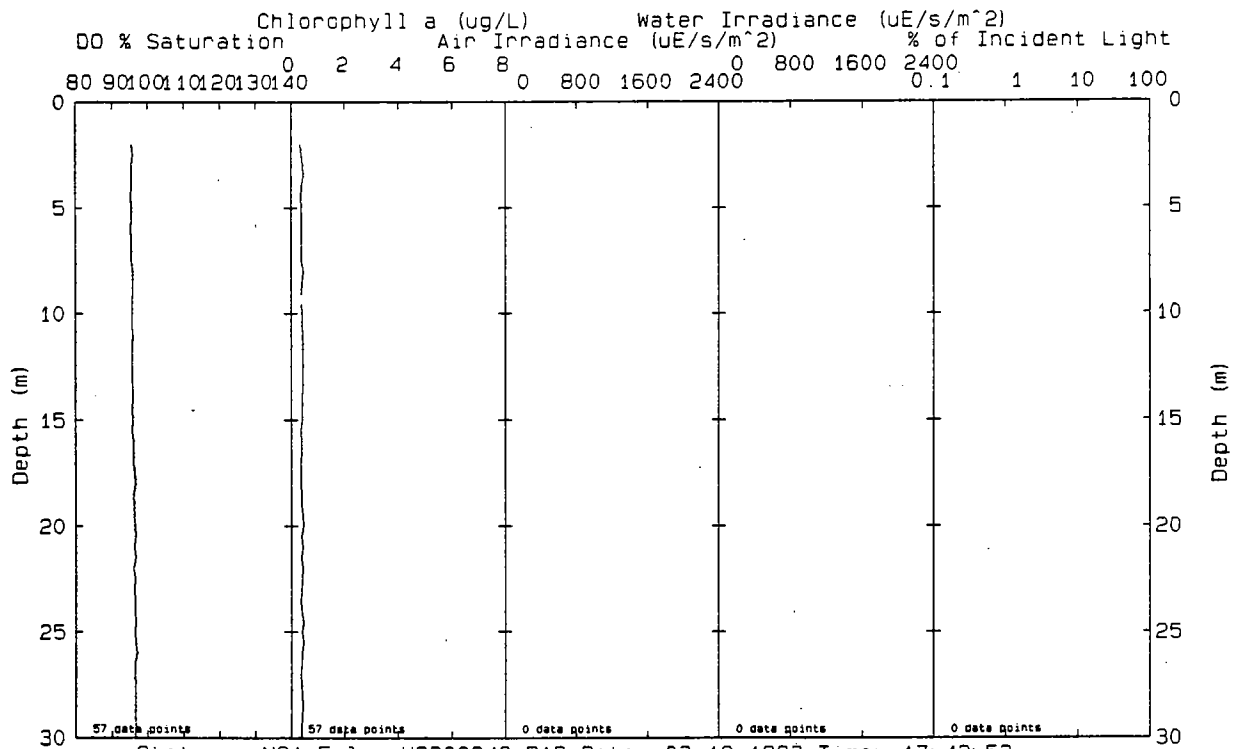
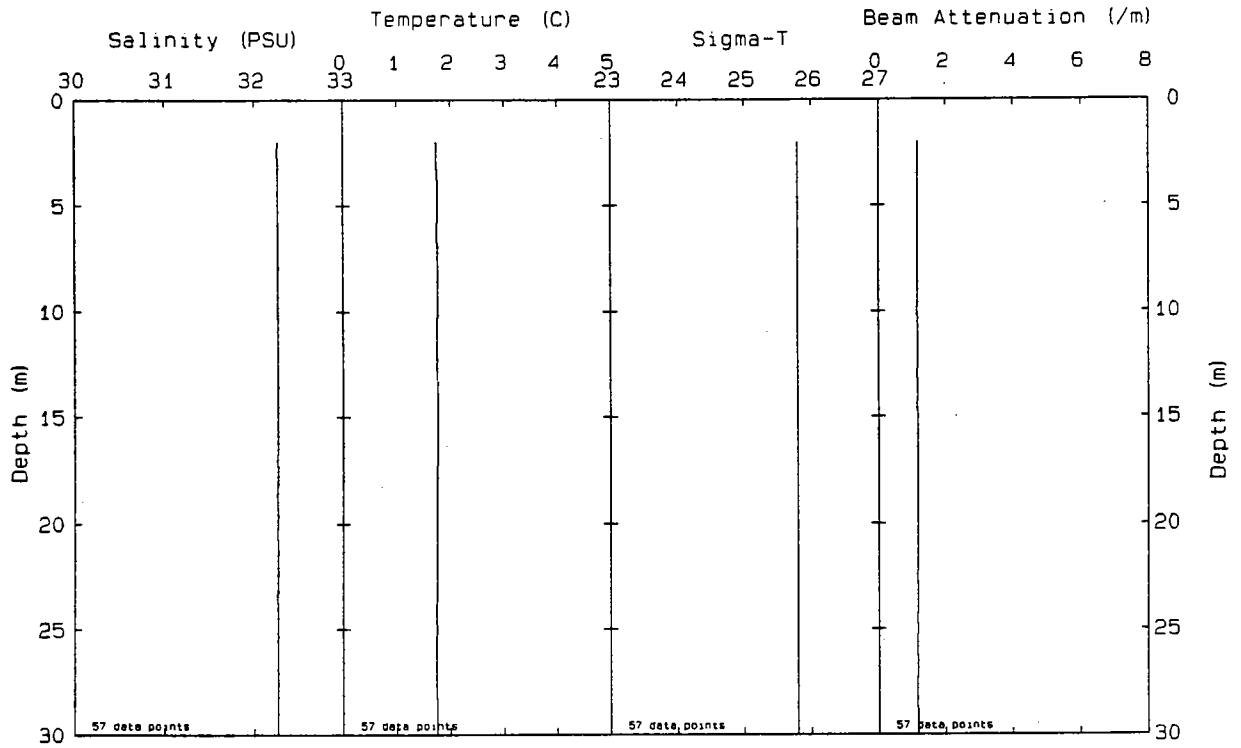
Station: N18 File: W9302246.PAB Date: 03-12-1993 Time: 17:20:04





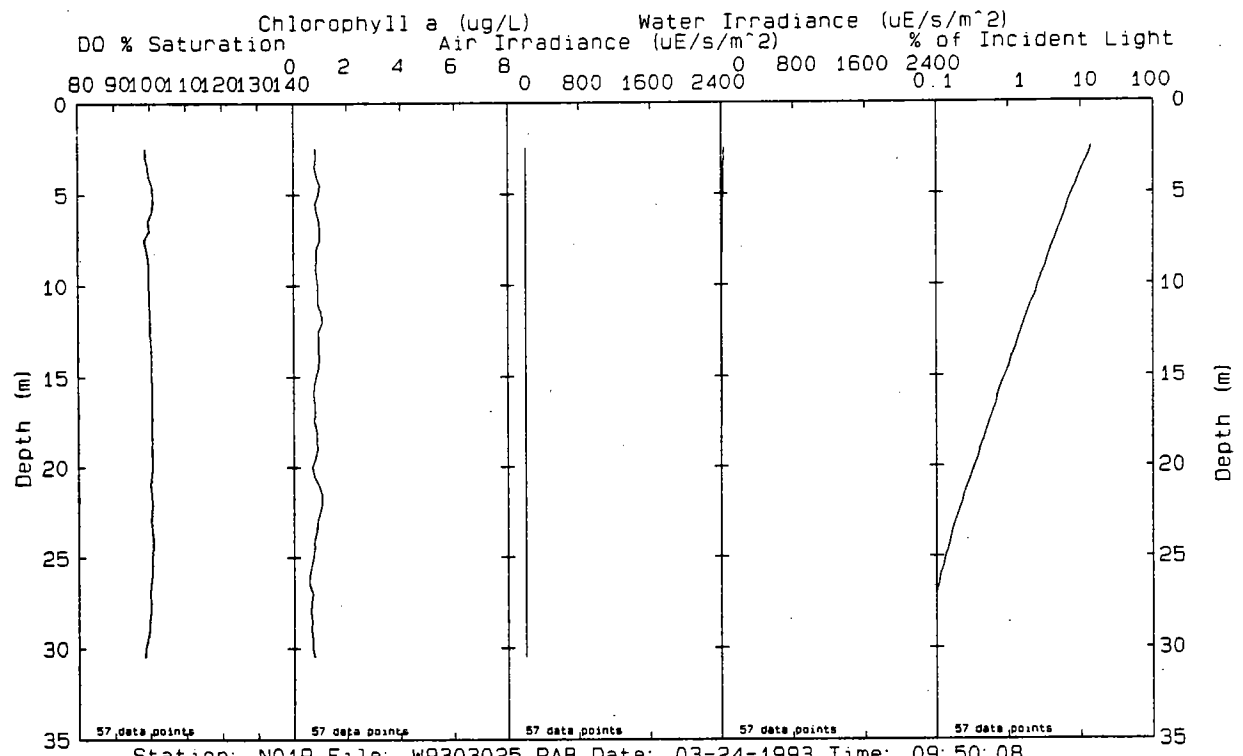
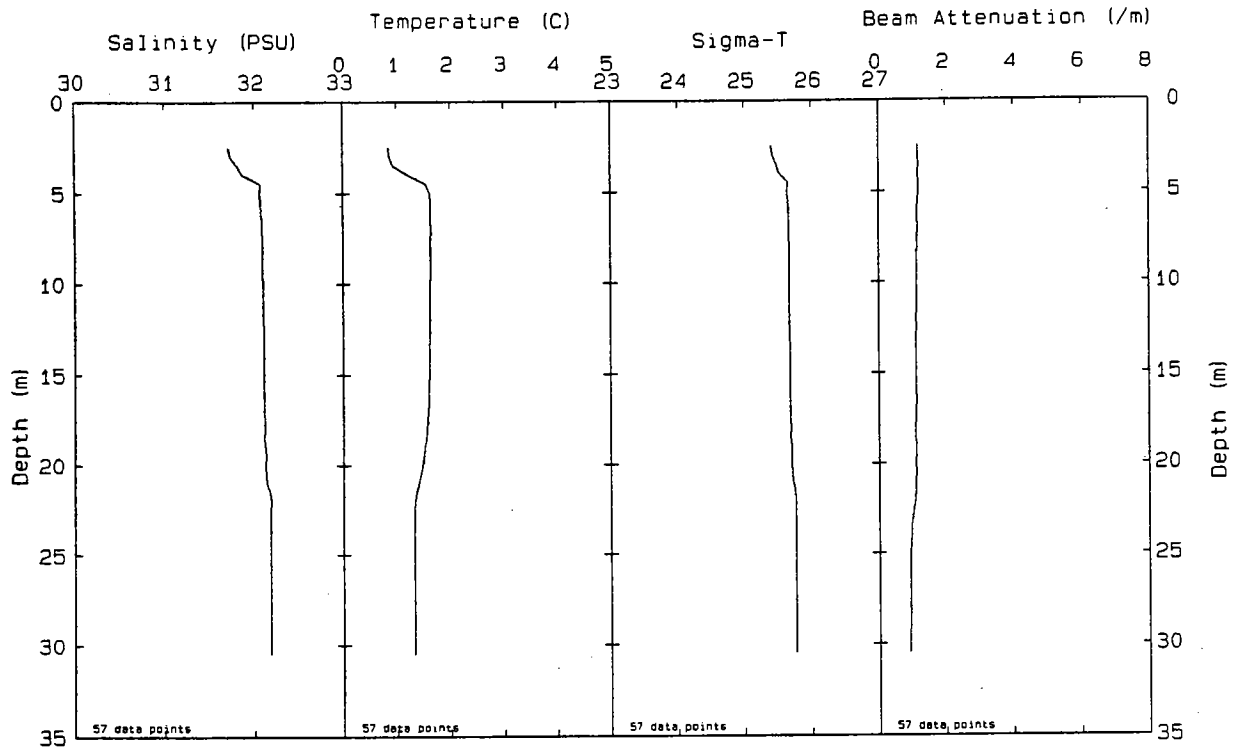


Station: N20P File: W9302226.PAB Date: 03-12-1993 Time: 14:45:59

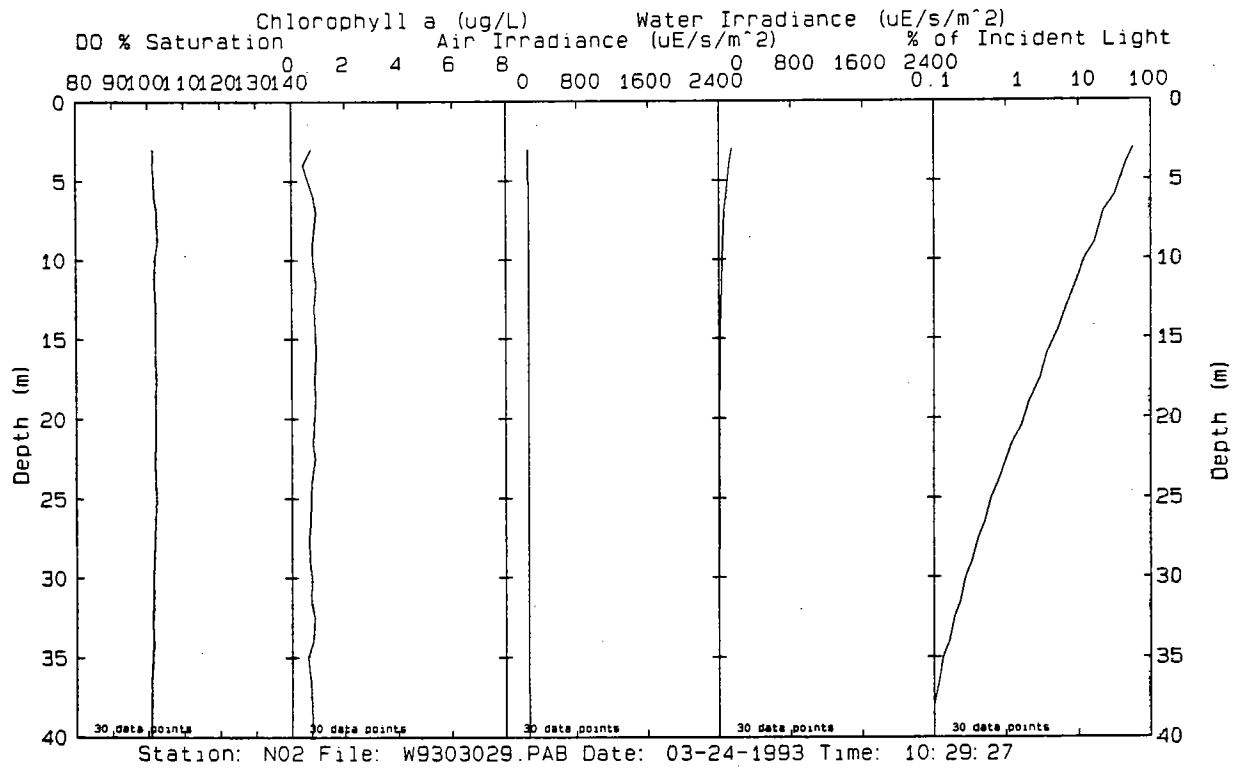
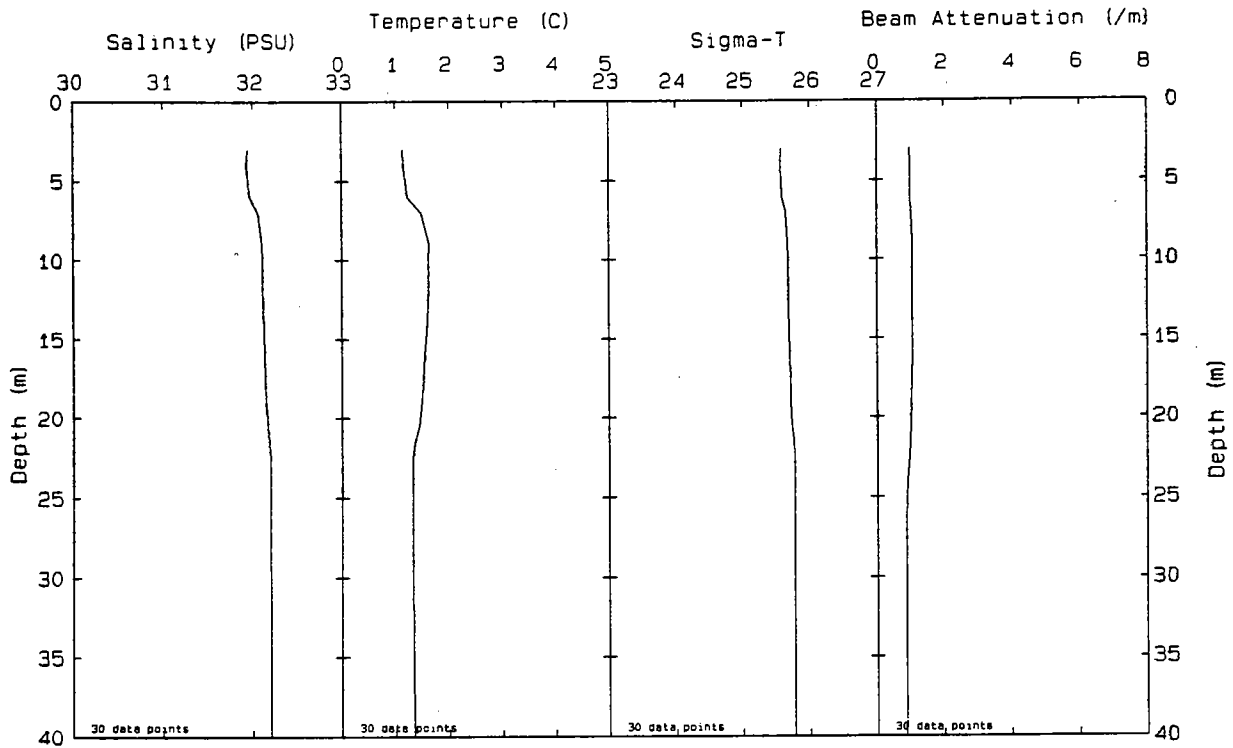


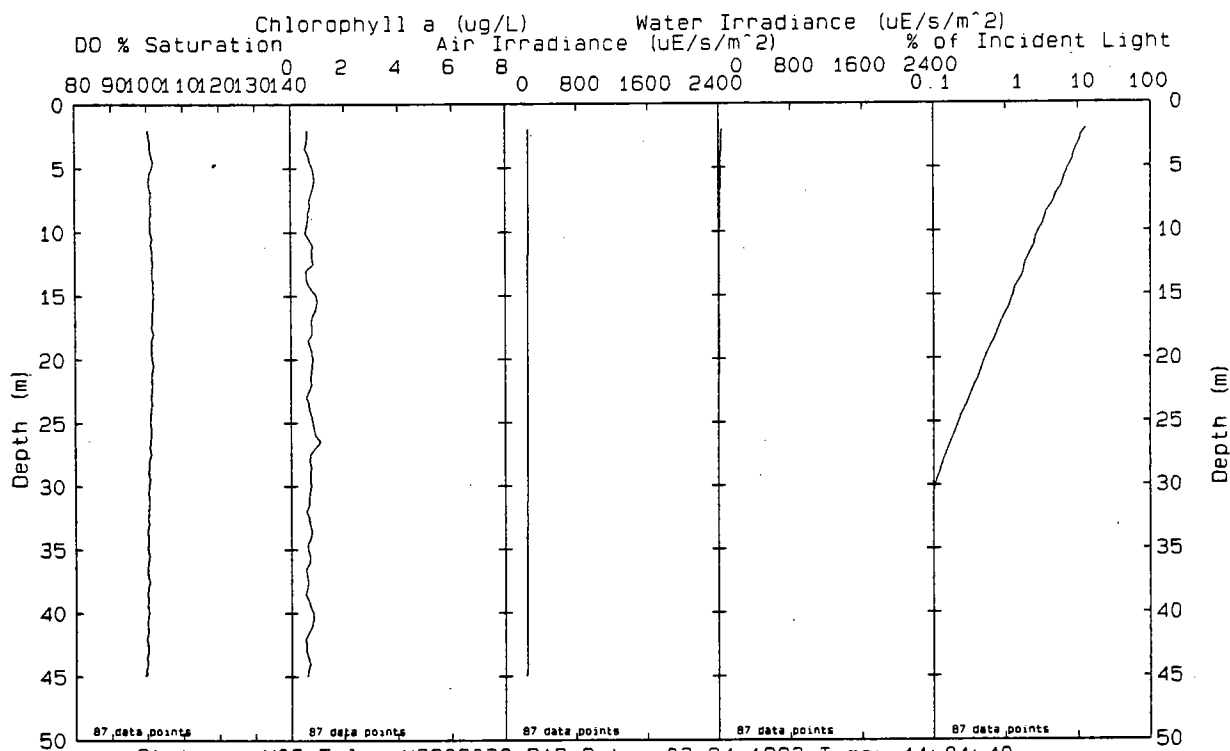
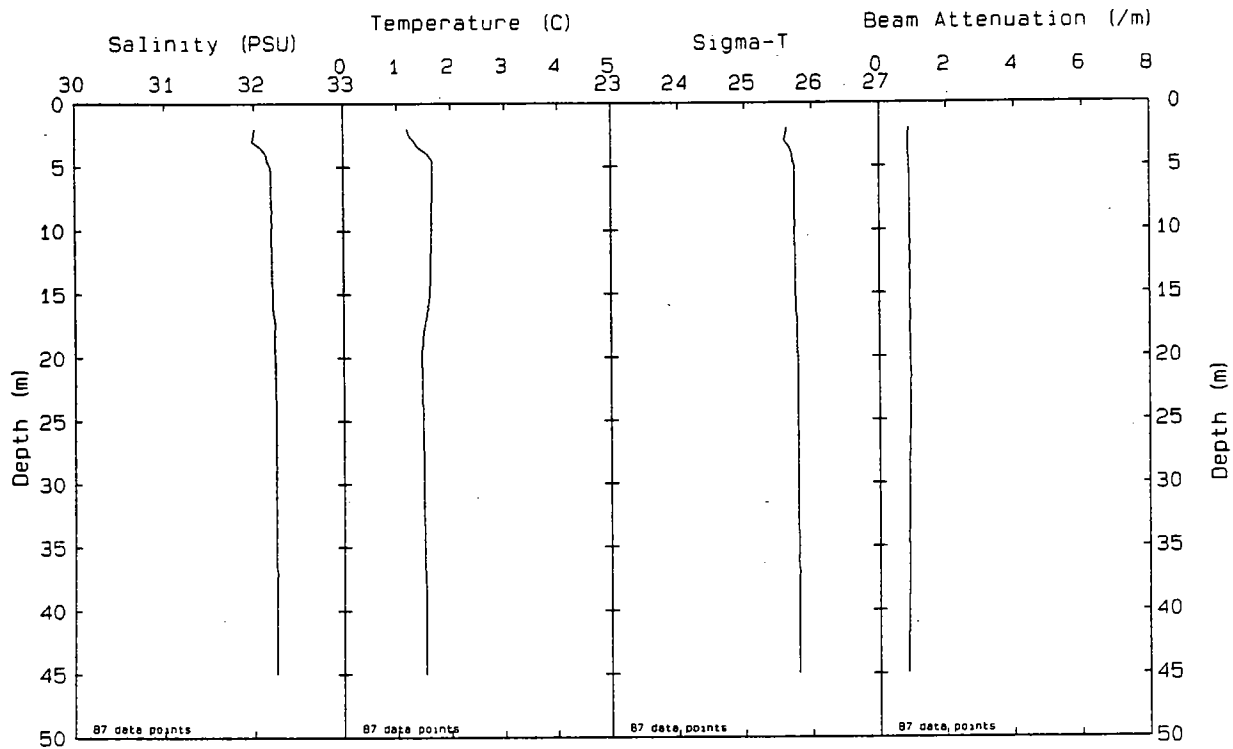
Station: N21 File: W9302249.PAB Date: 03-12-1993 Time: 17:42:53

Late March 1993 Profiles

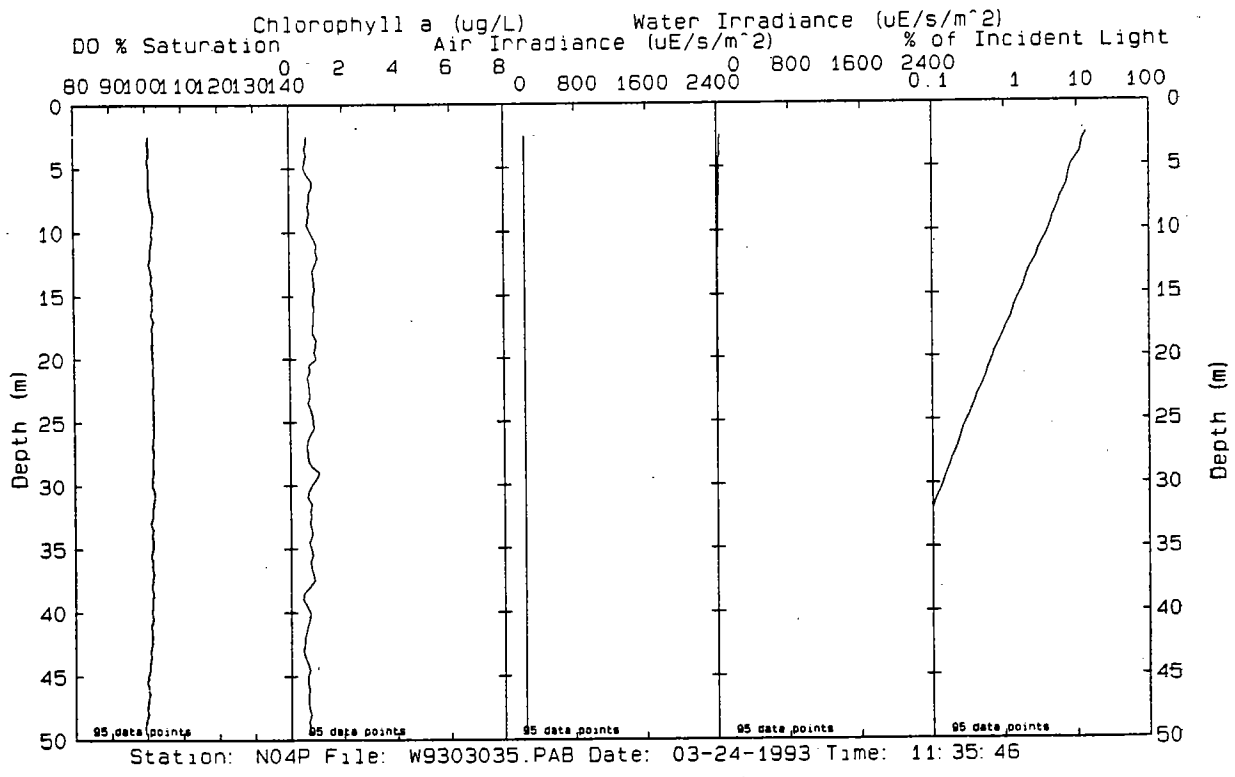
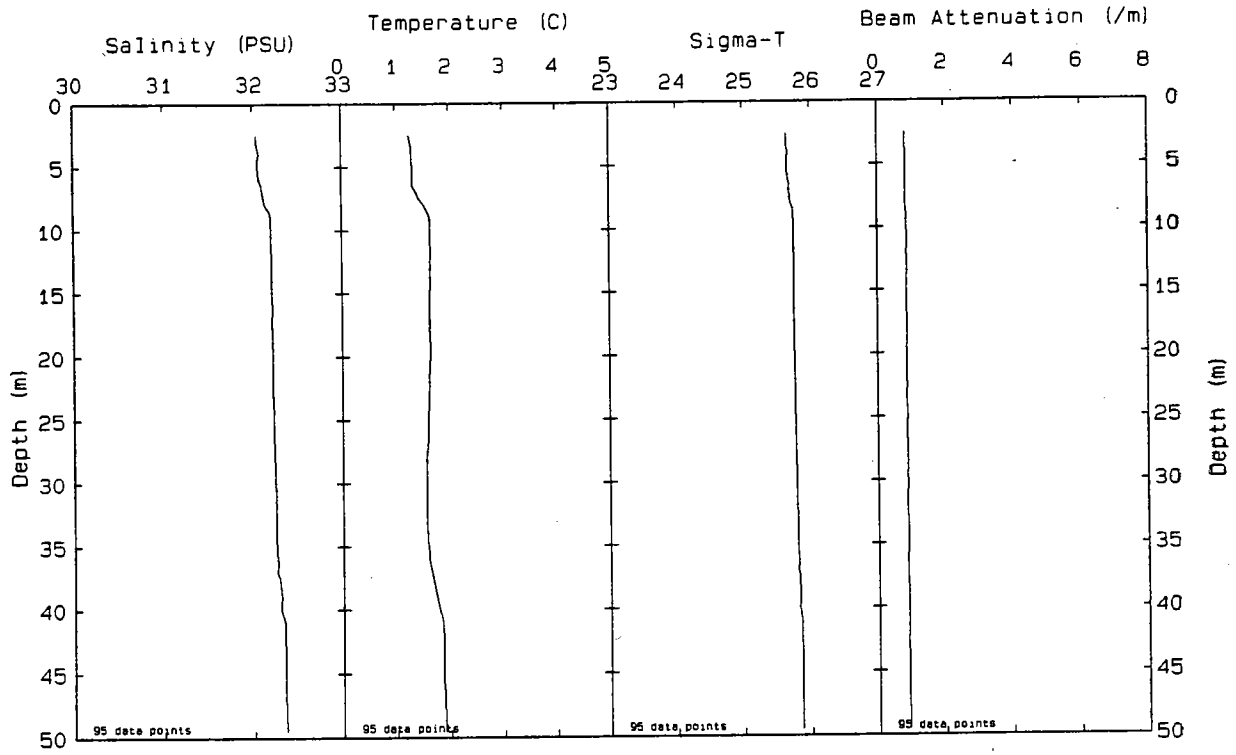


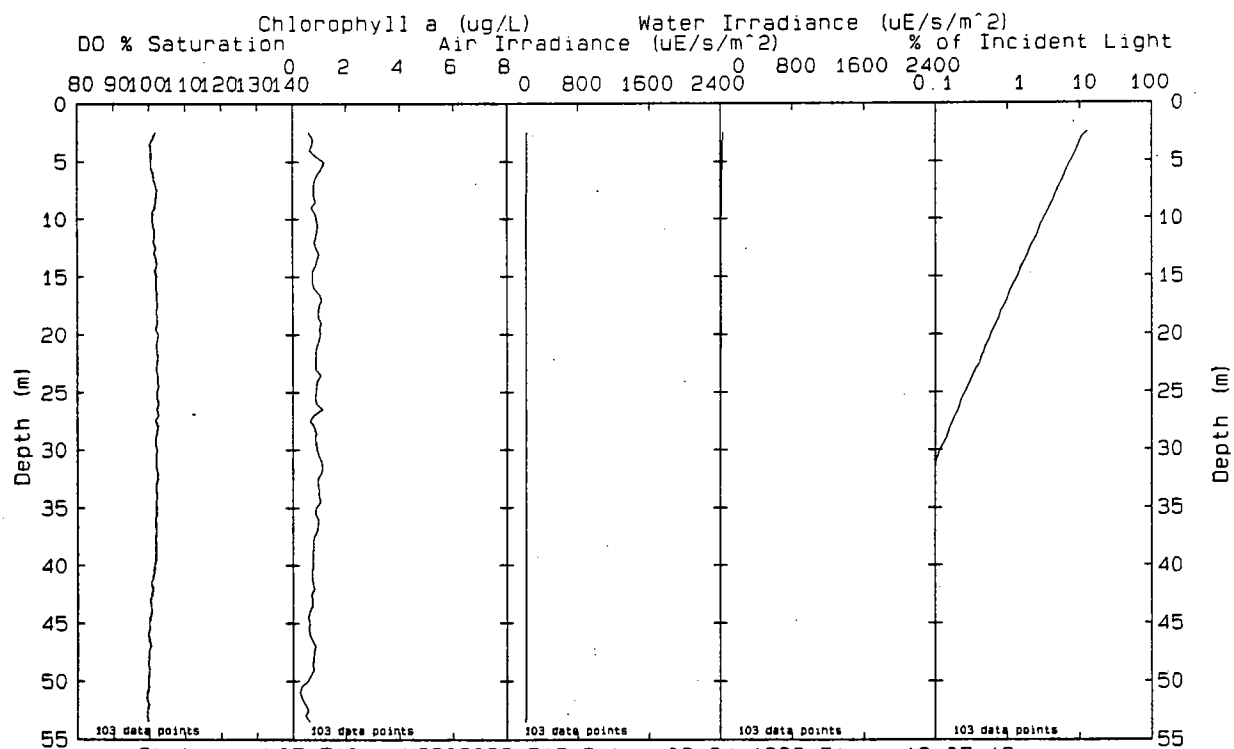
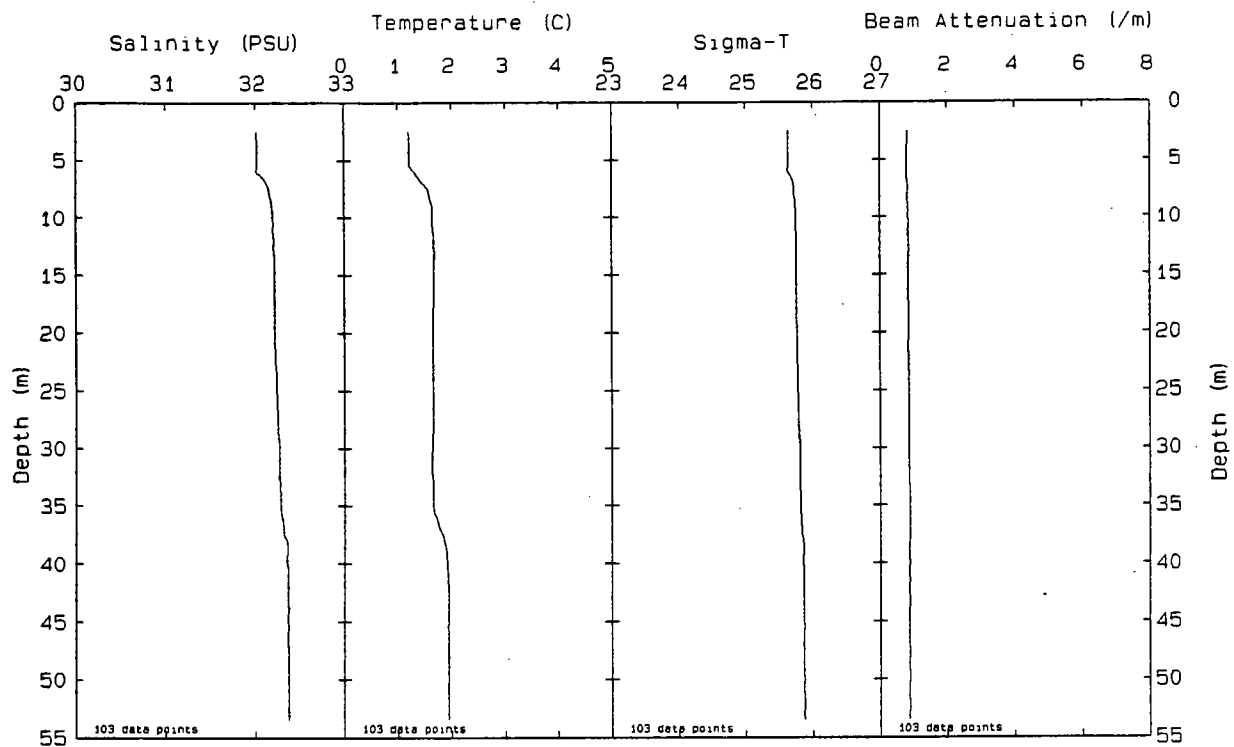
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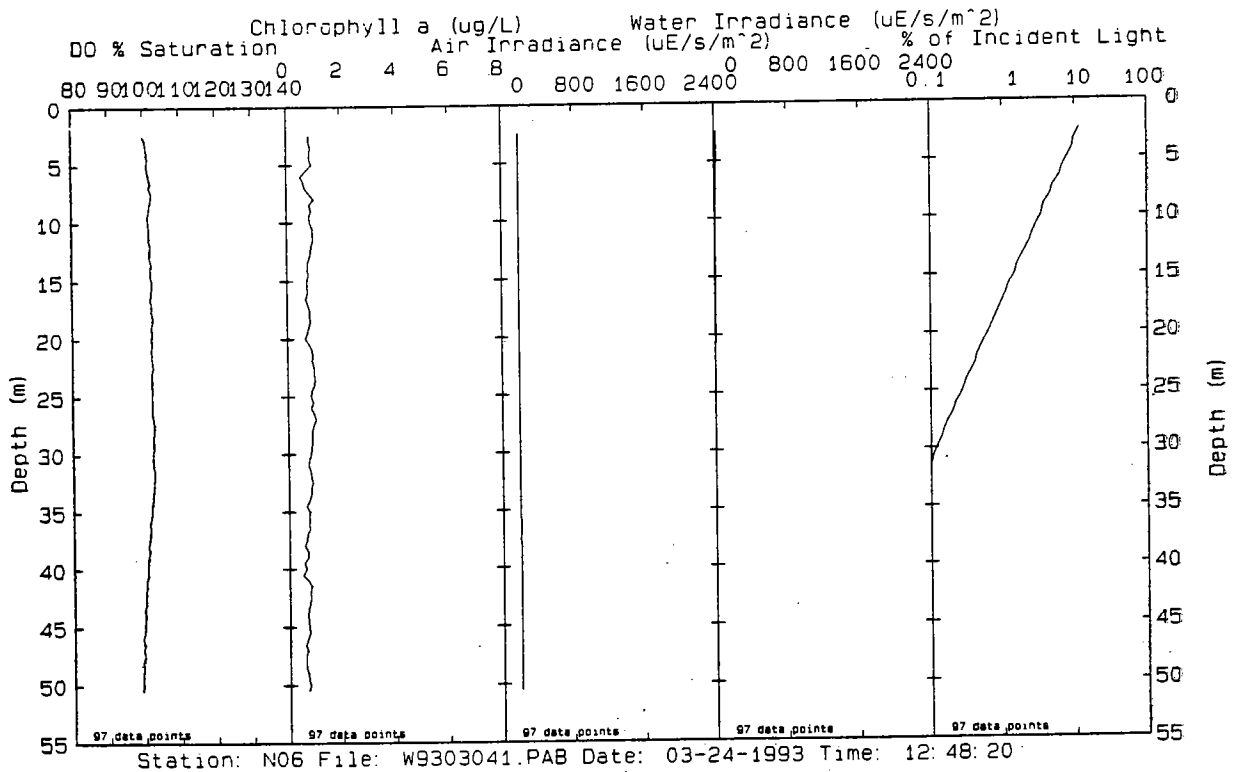
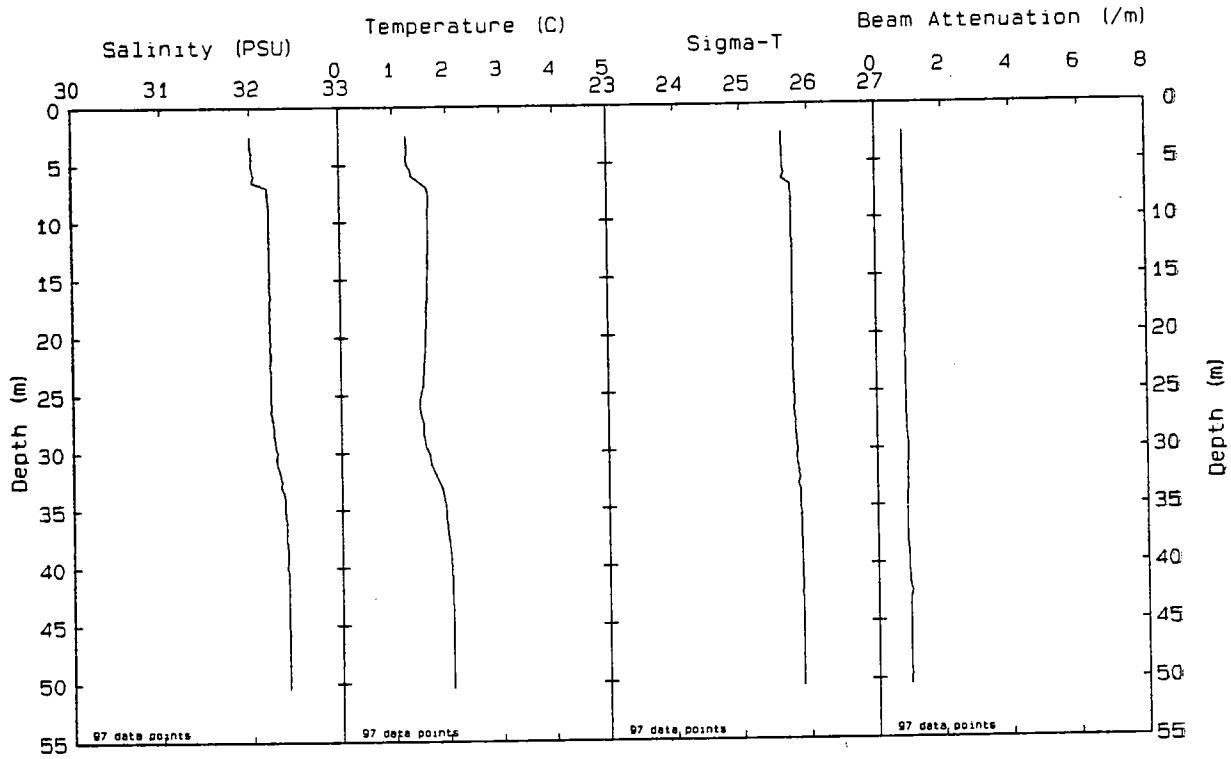


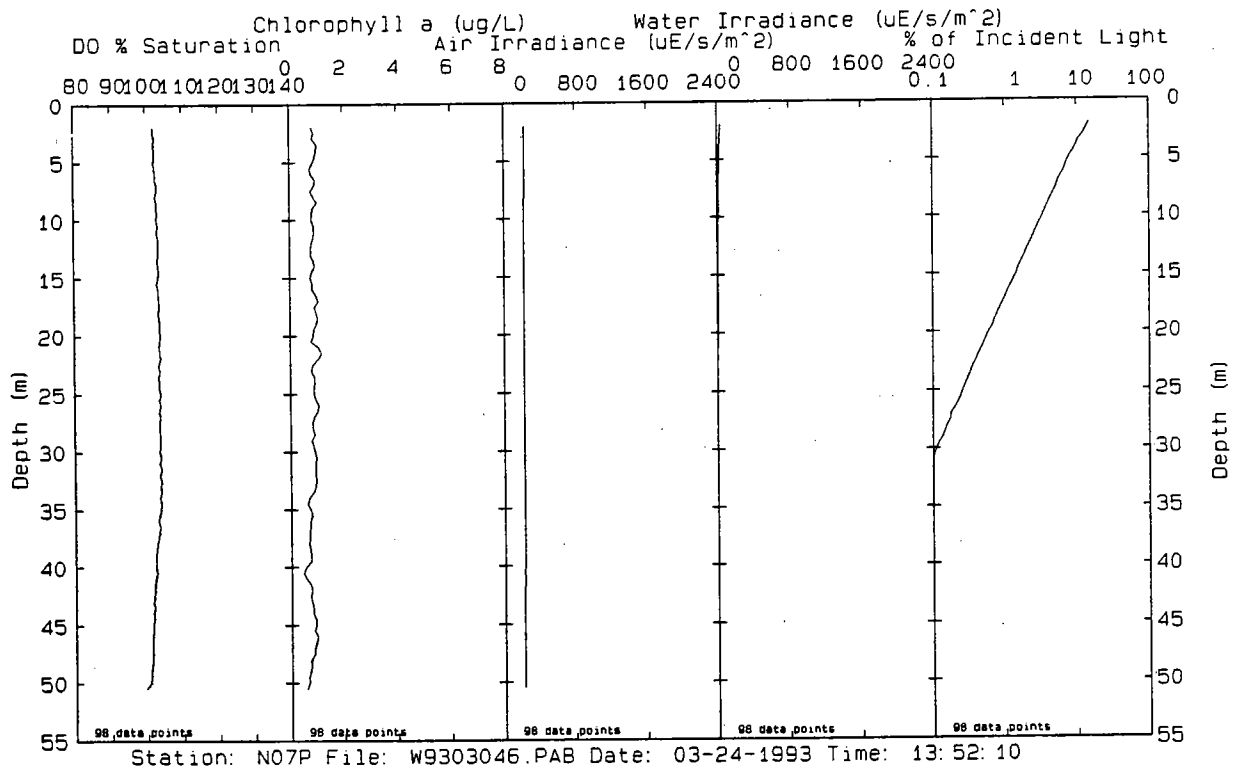
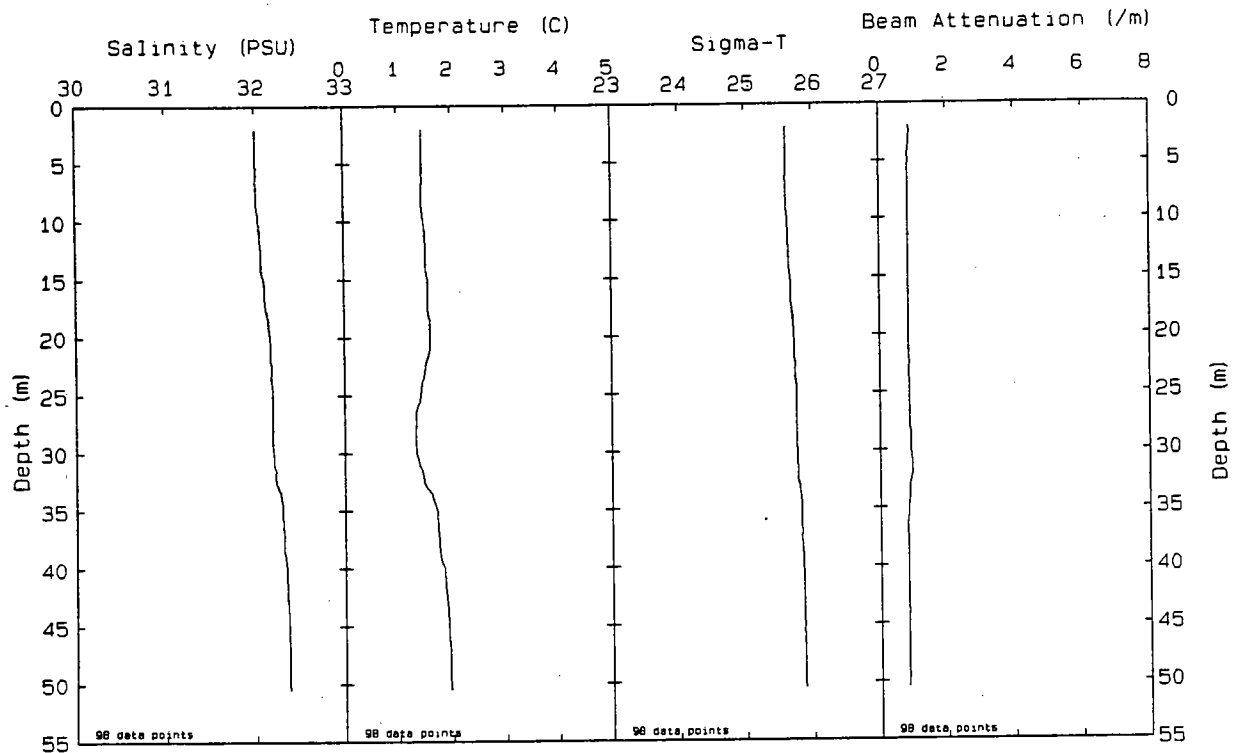
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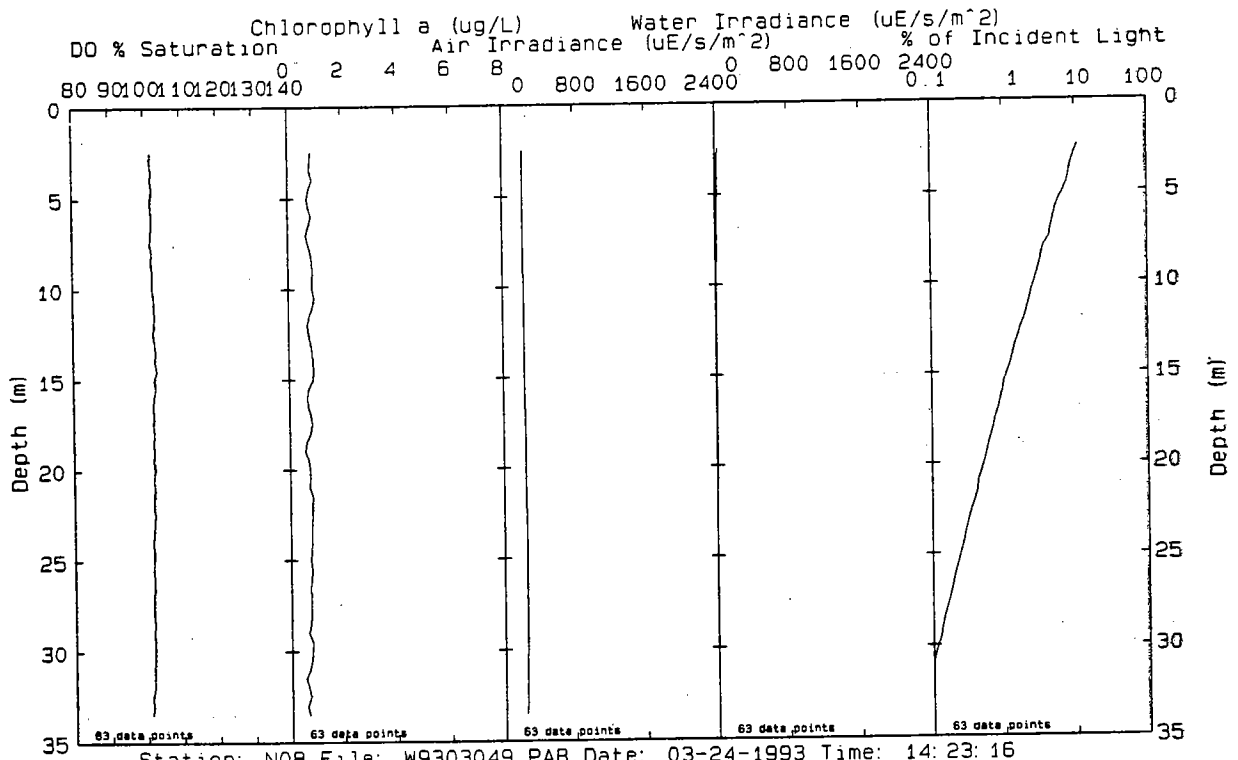
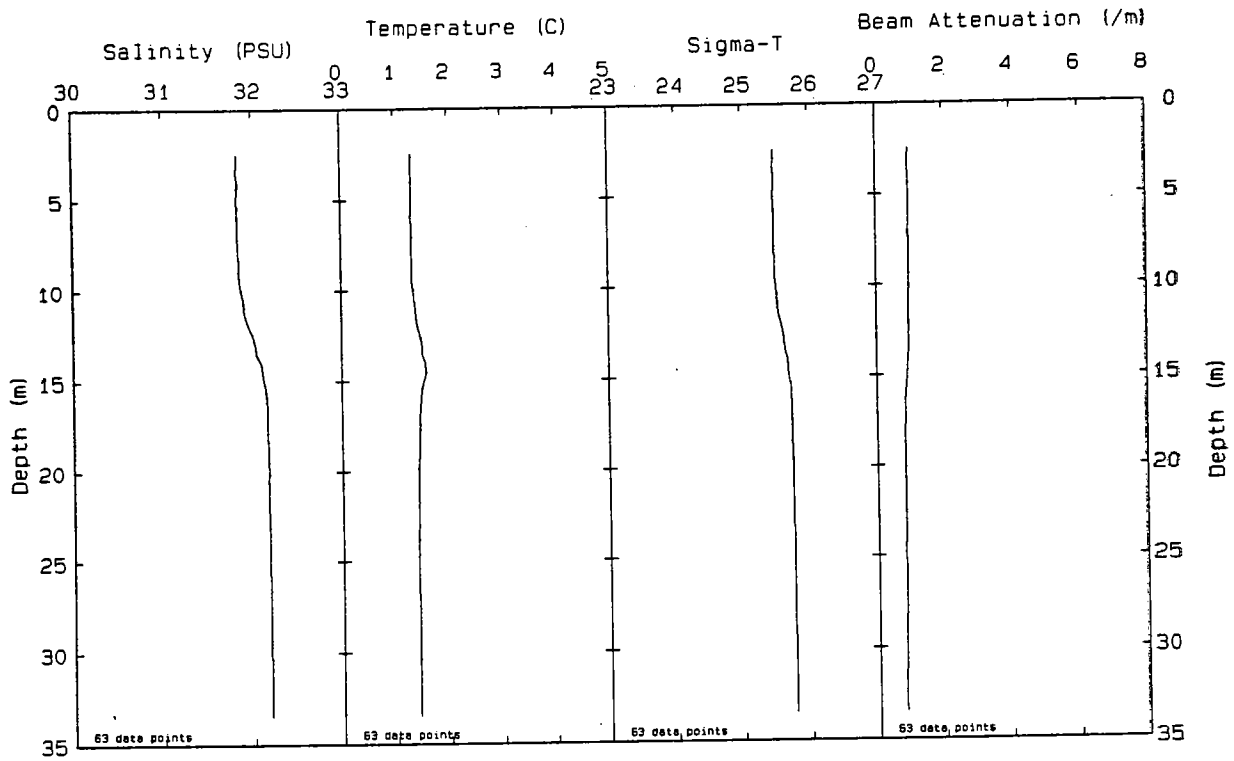


Station: N05 File: W9303038.PAB Date: 03-24-1993 Time: 12:07:16

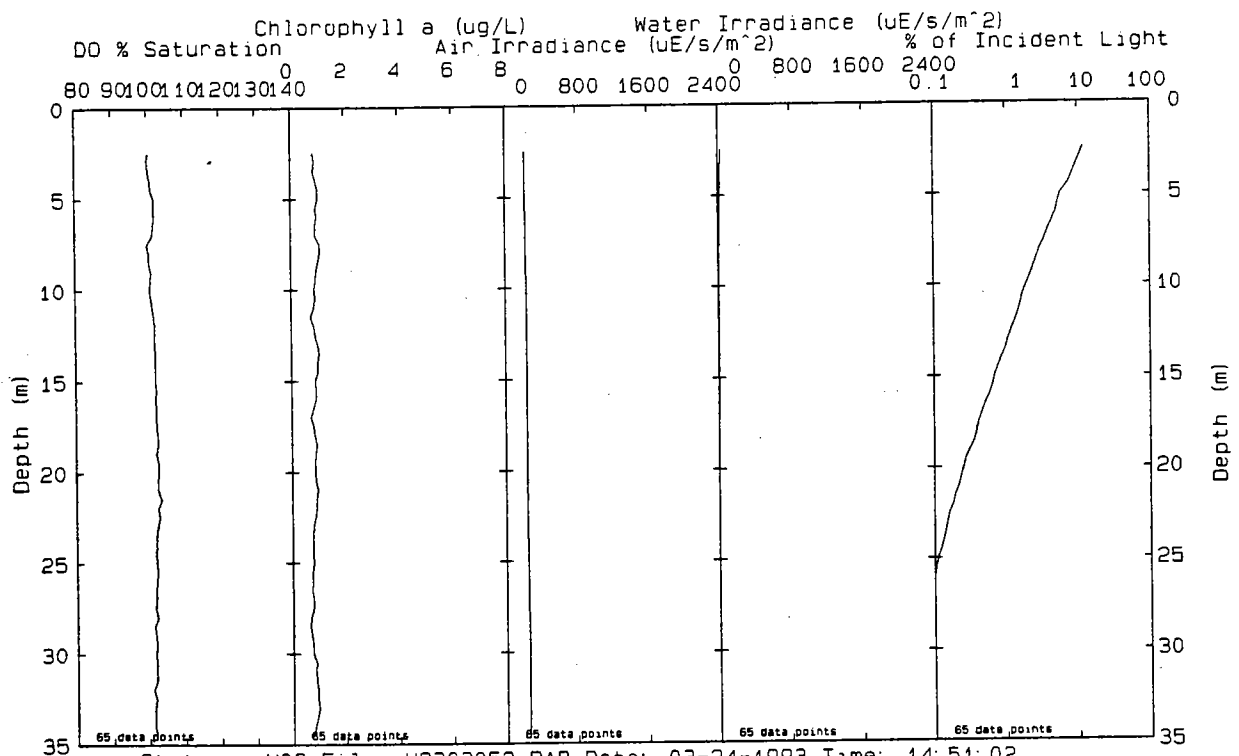
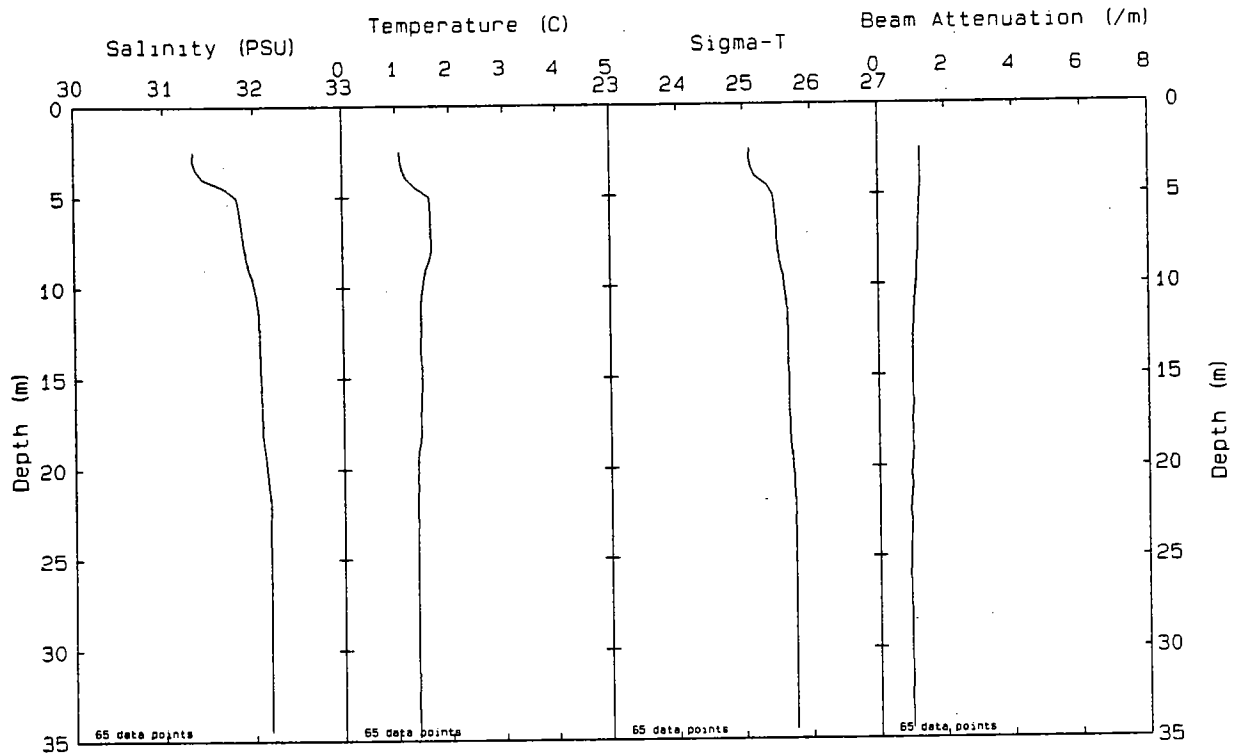




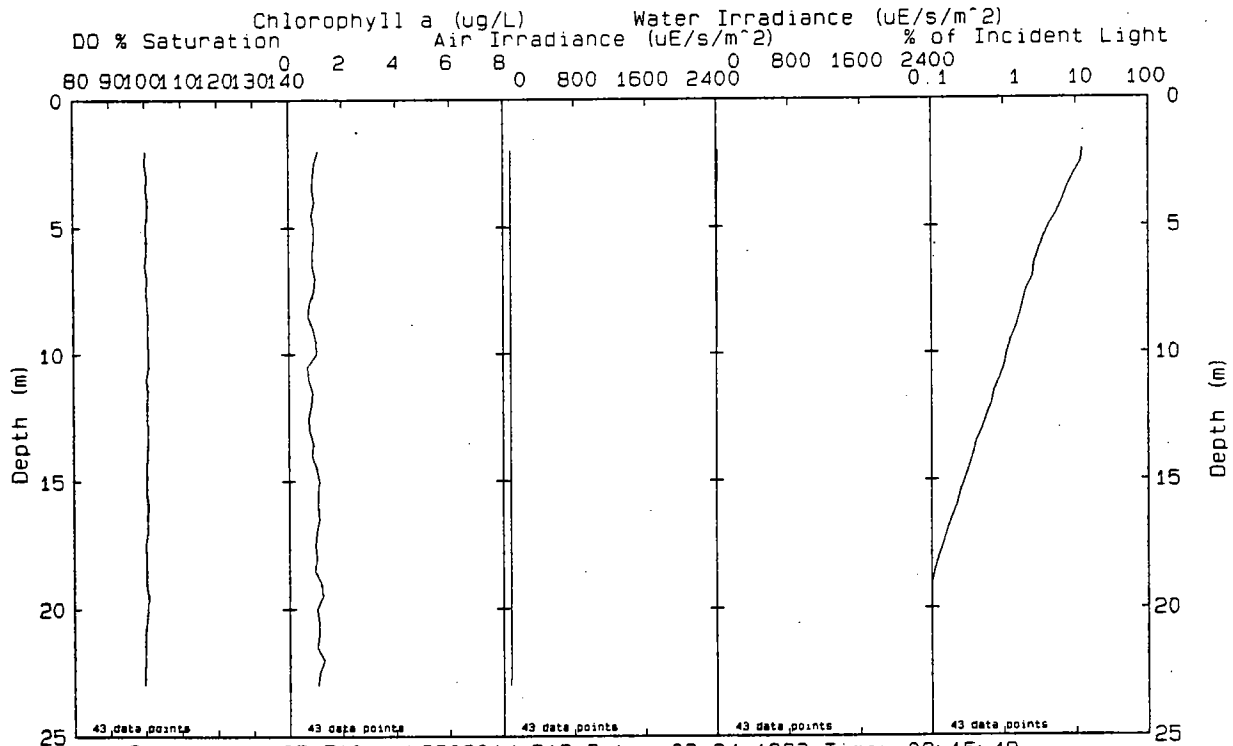
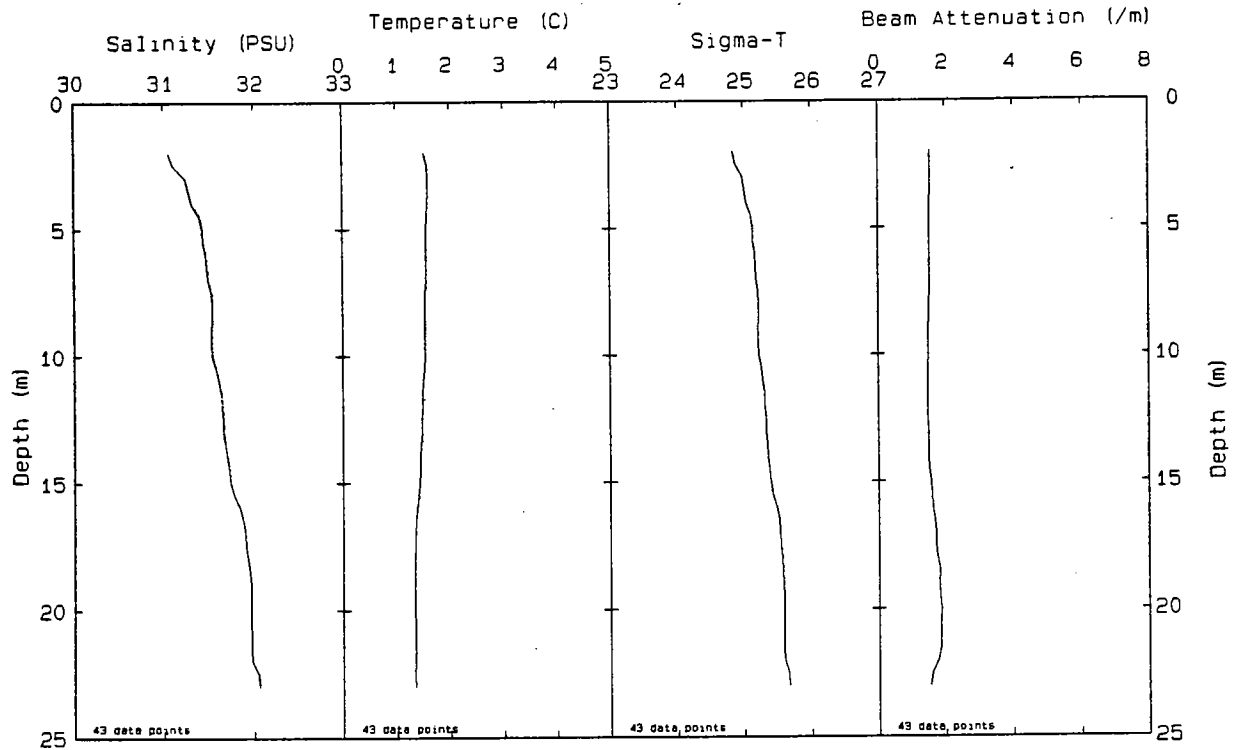
Station: N07P File: W9303046.PAB Date: 03-24-1993 Time: 13:52:10



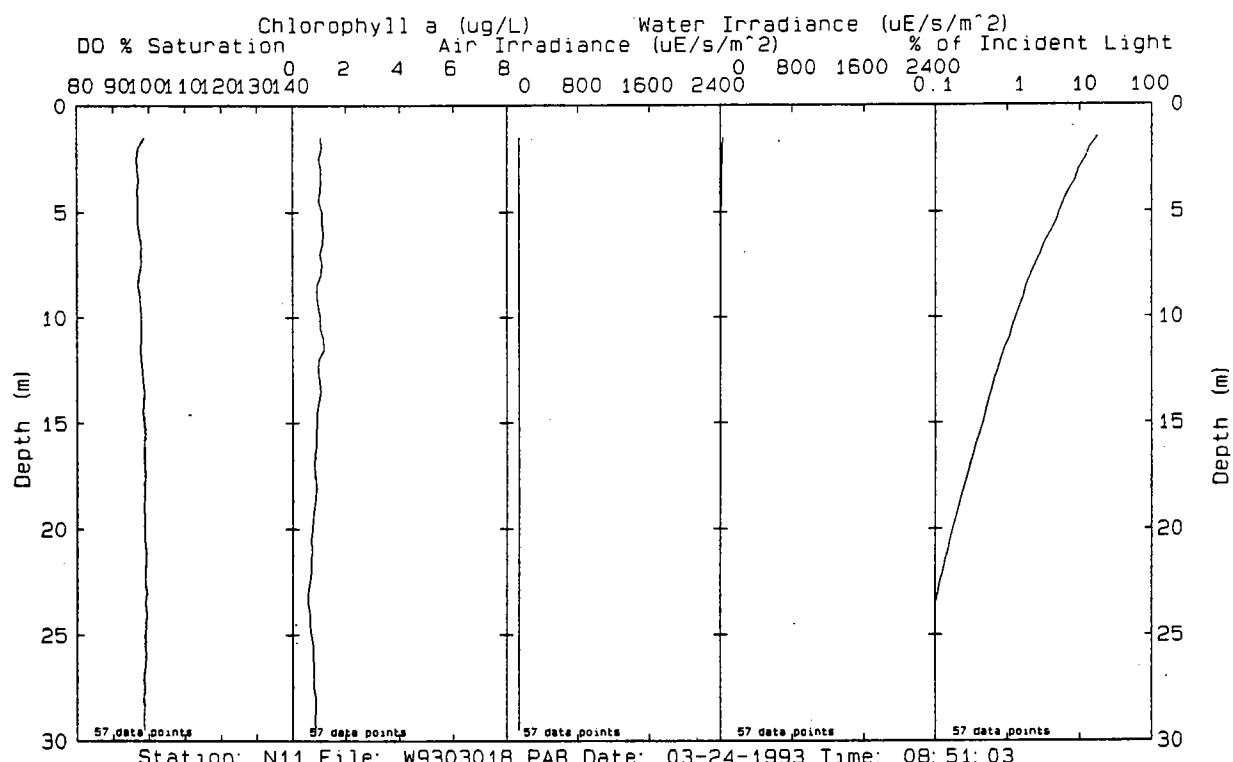
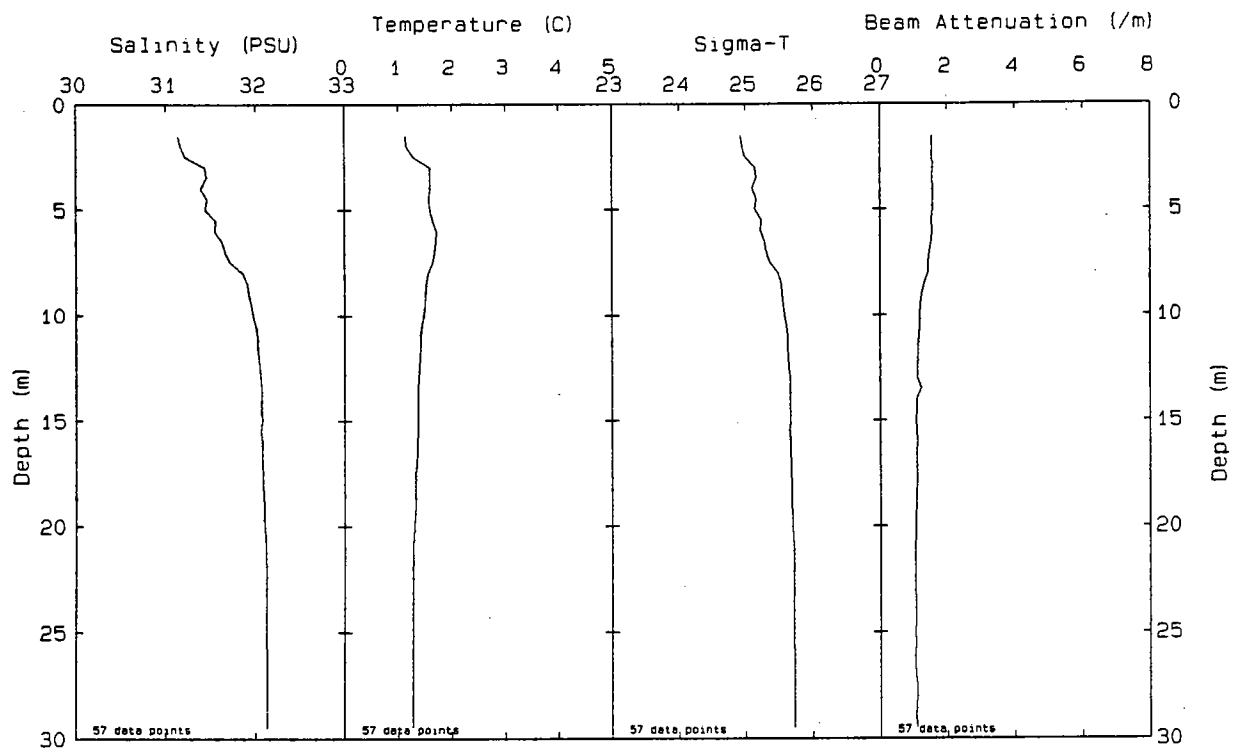
Station: N08 File: W9303049.PAB Date: 03-24-1993 Time: 14:23:16



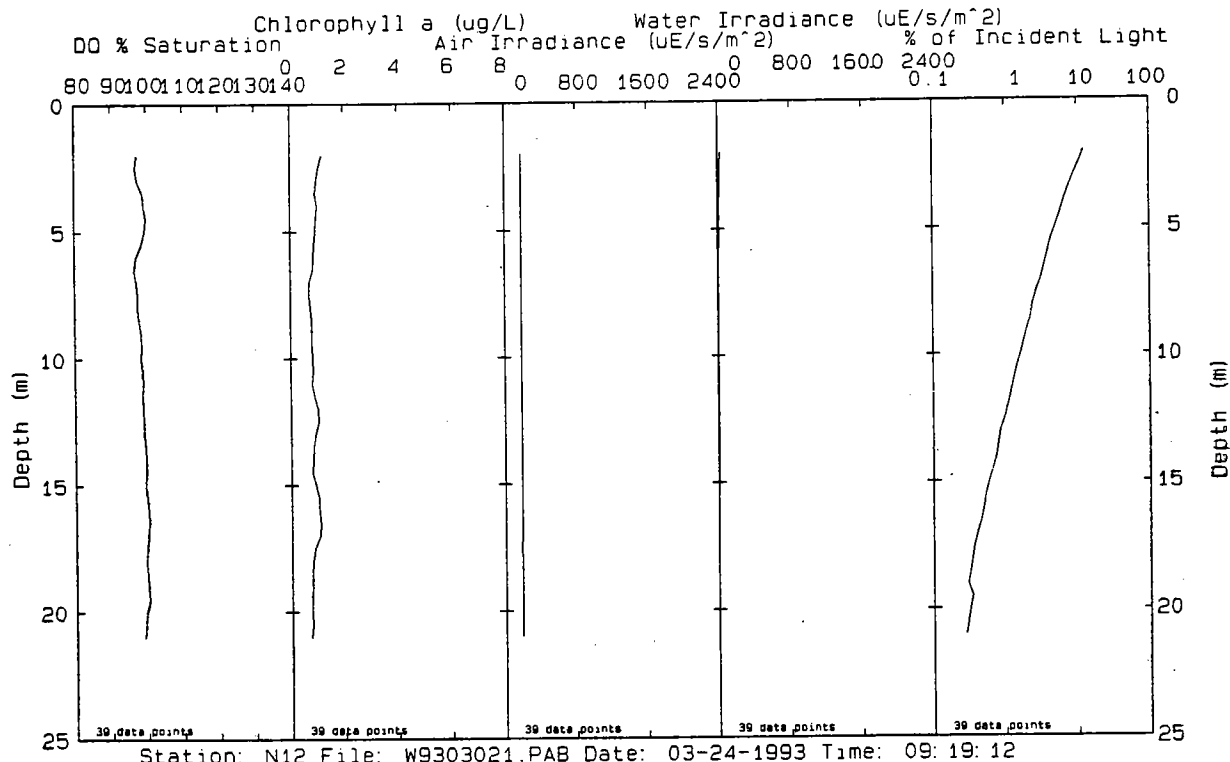
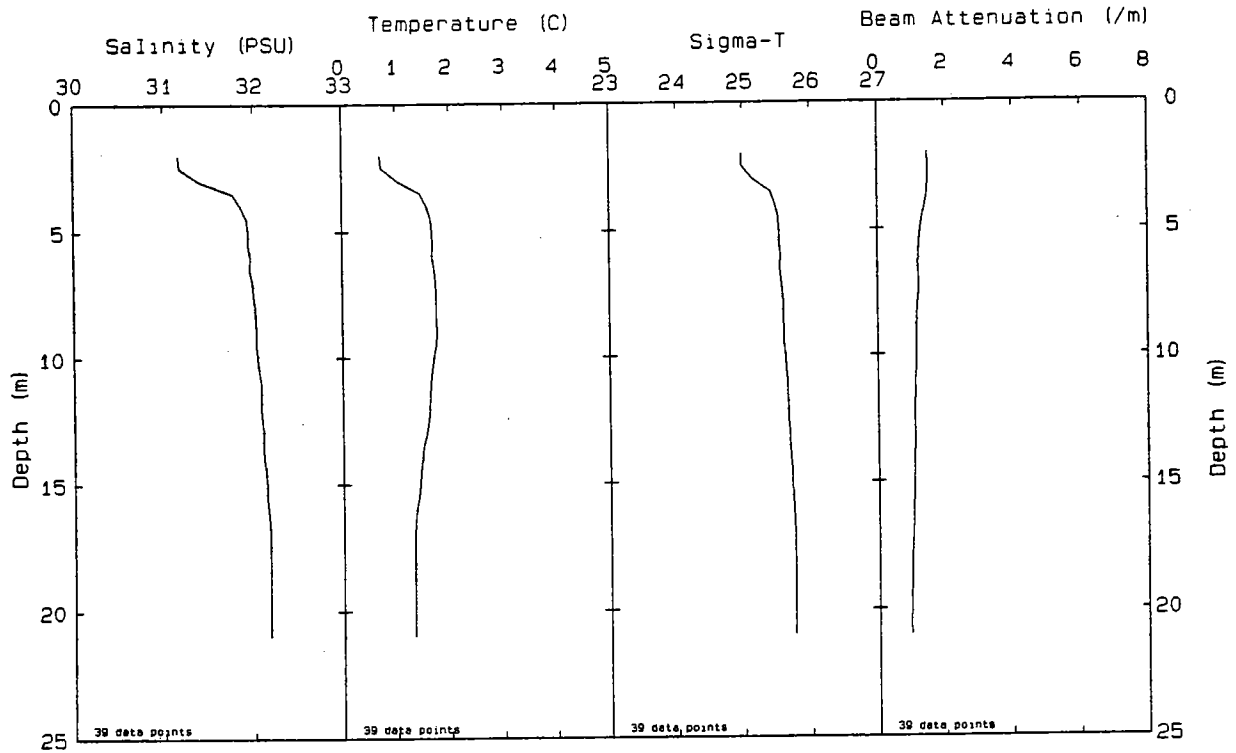
Station: N09 File: W9303052.PAB Date: 03-24-1993 Time: 14: 51: 02



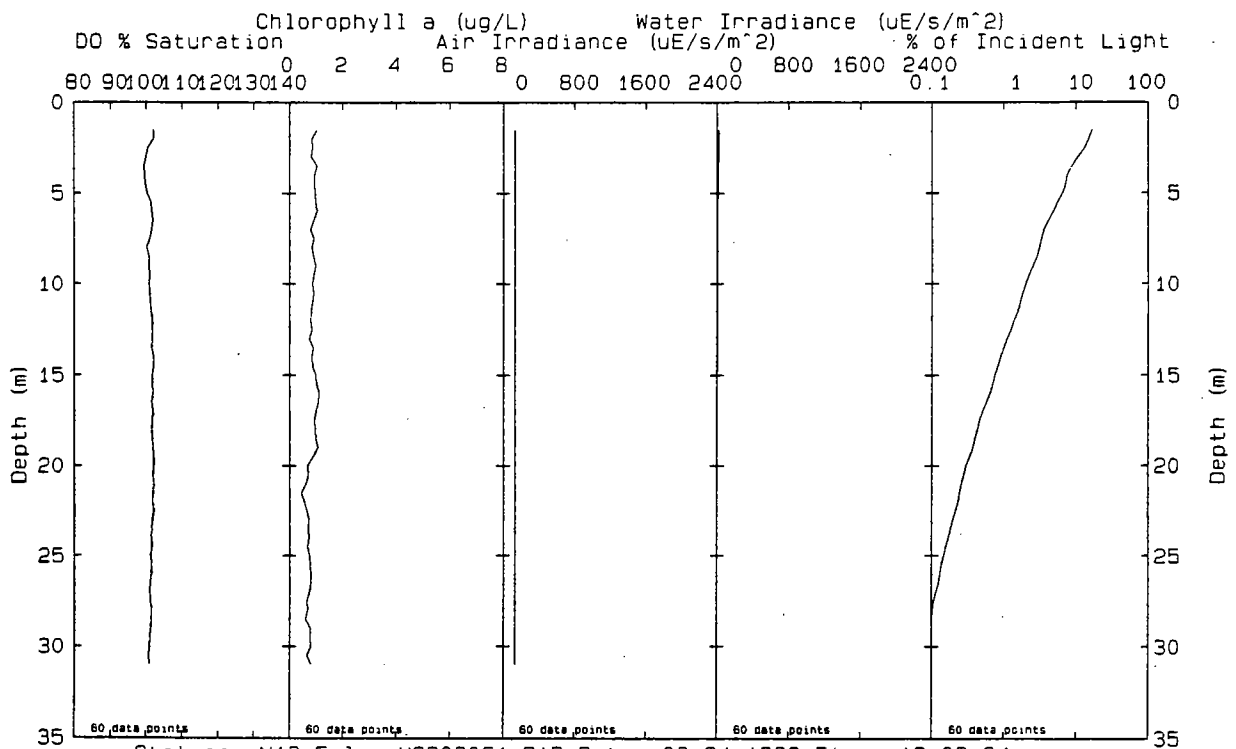
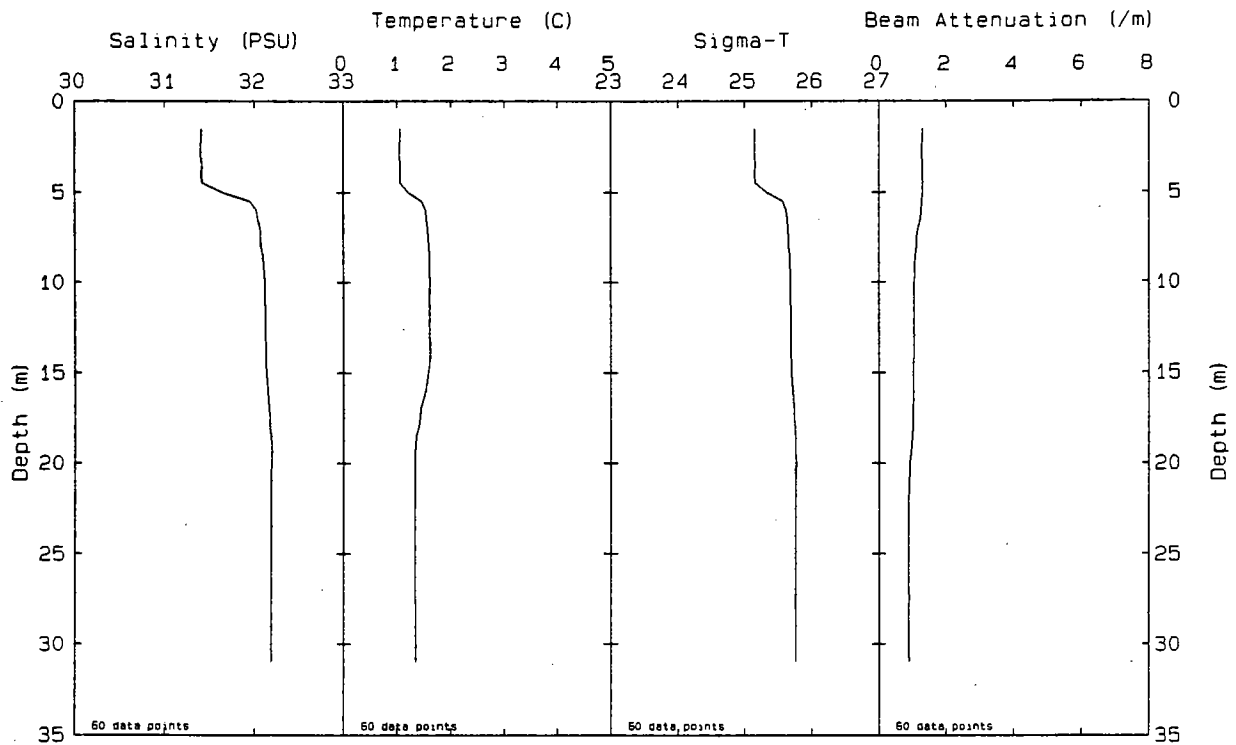
Station: N10P File: W9303014.PAB Date: 03-24-1993 Time: 08:15:49



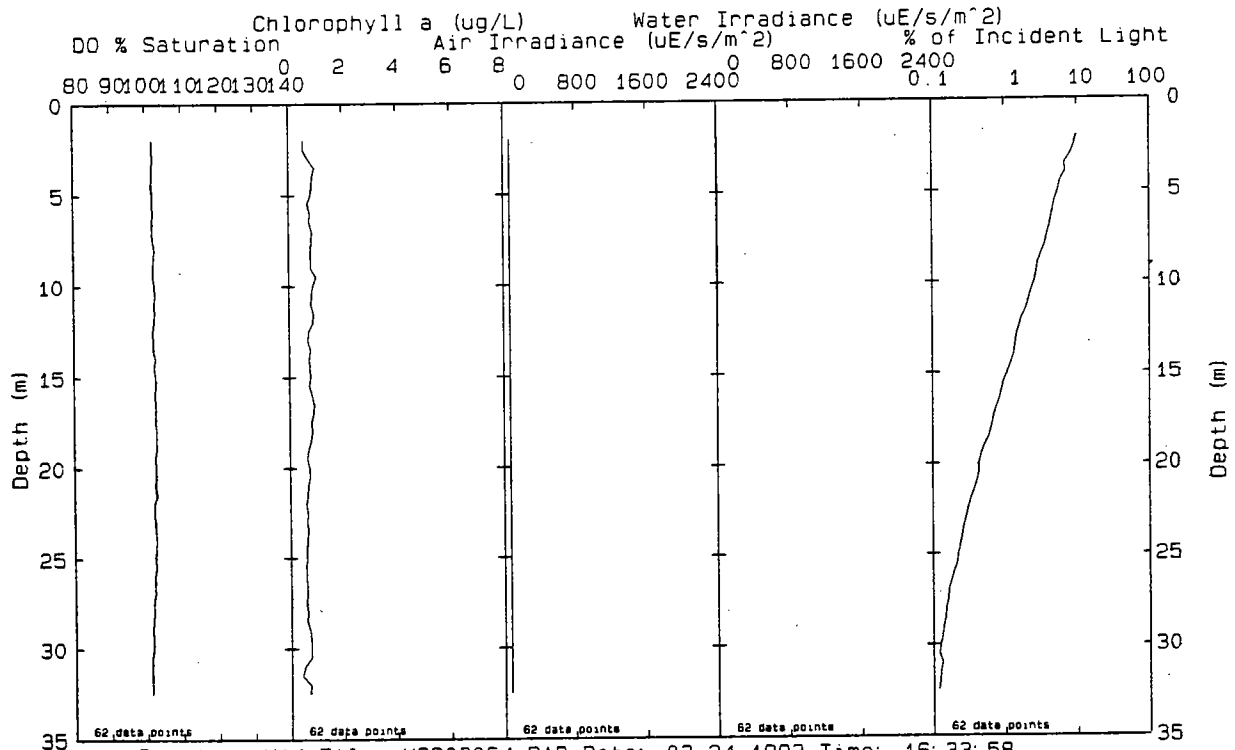
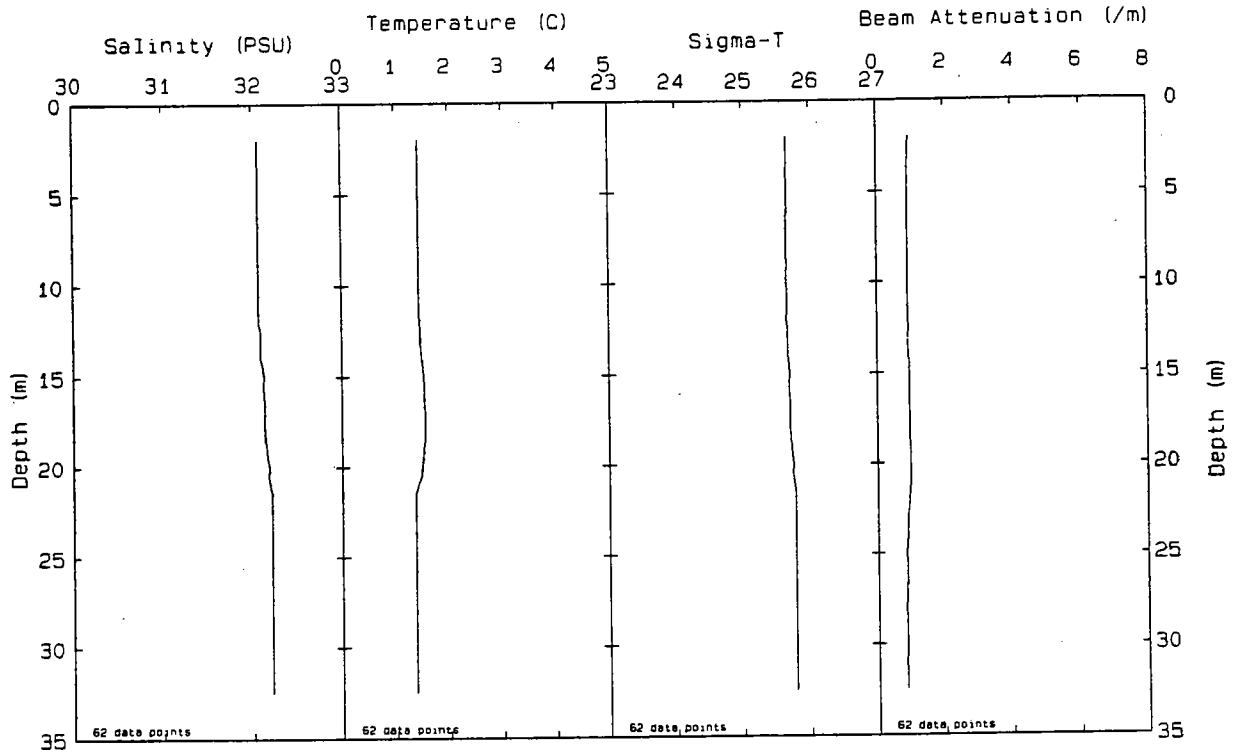
Station: N11 File: W9303018.PAB Date: 03-24-1993 Time: 08:51:03



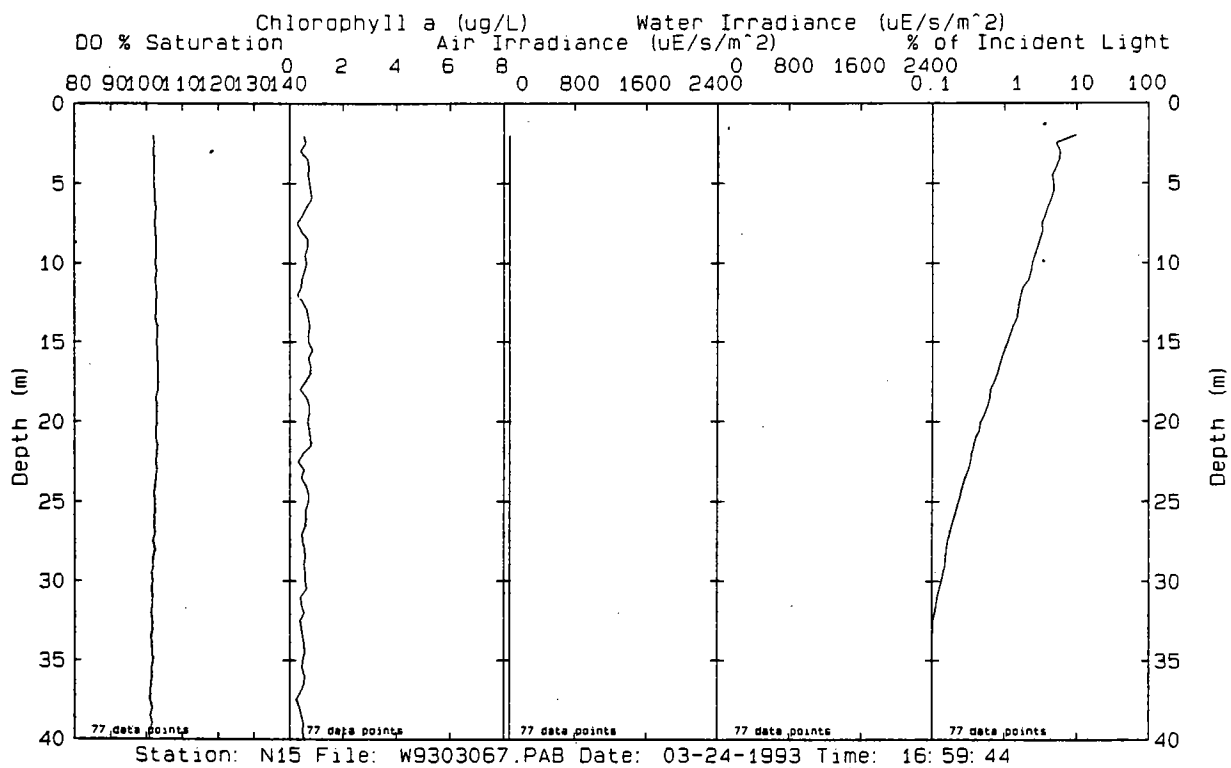
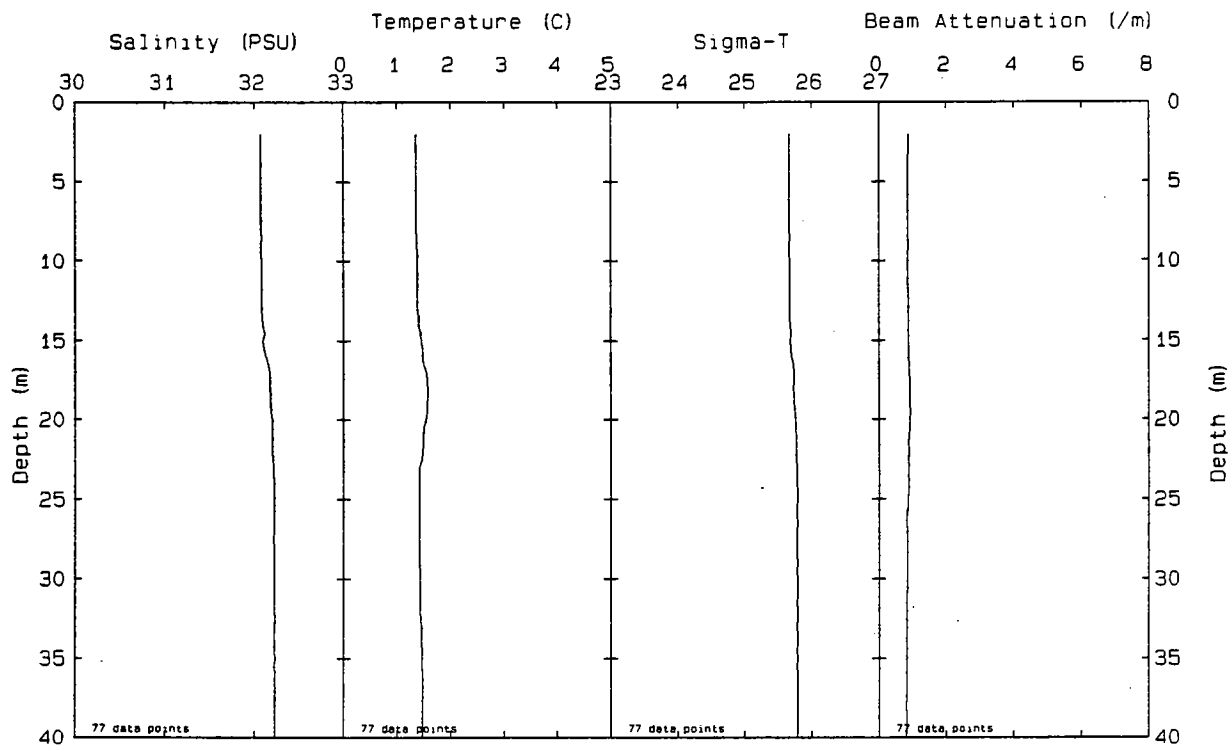
Station: N12 File: W9303021.PAB Date: 03-24-1993 Time: 09:19:12



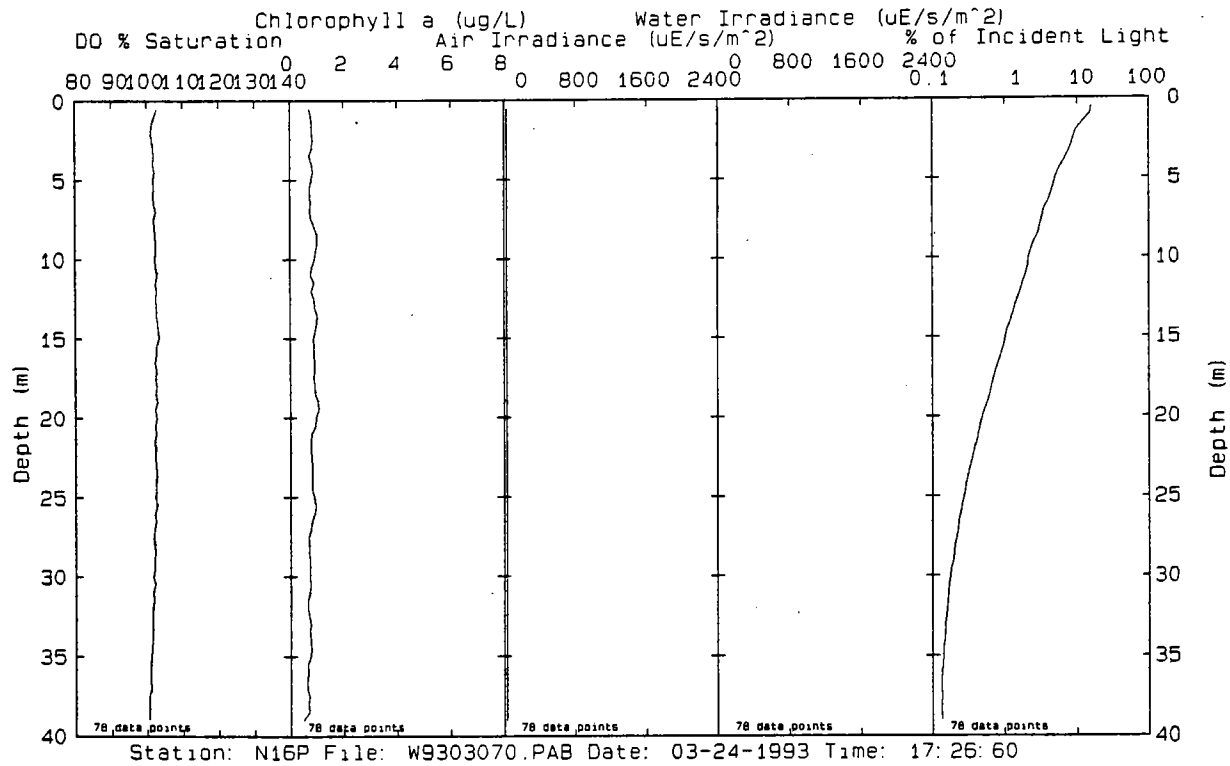
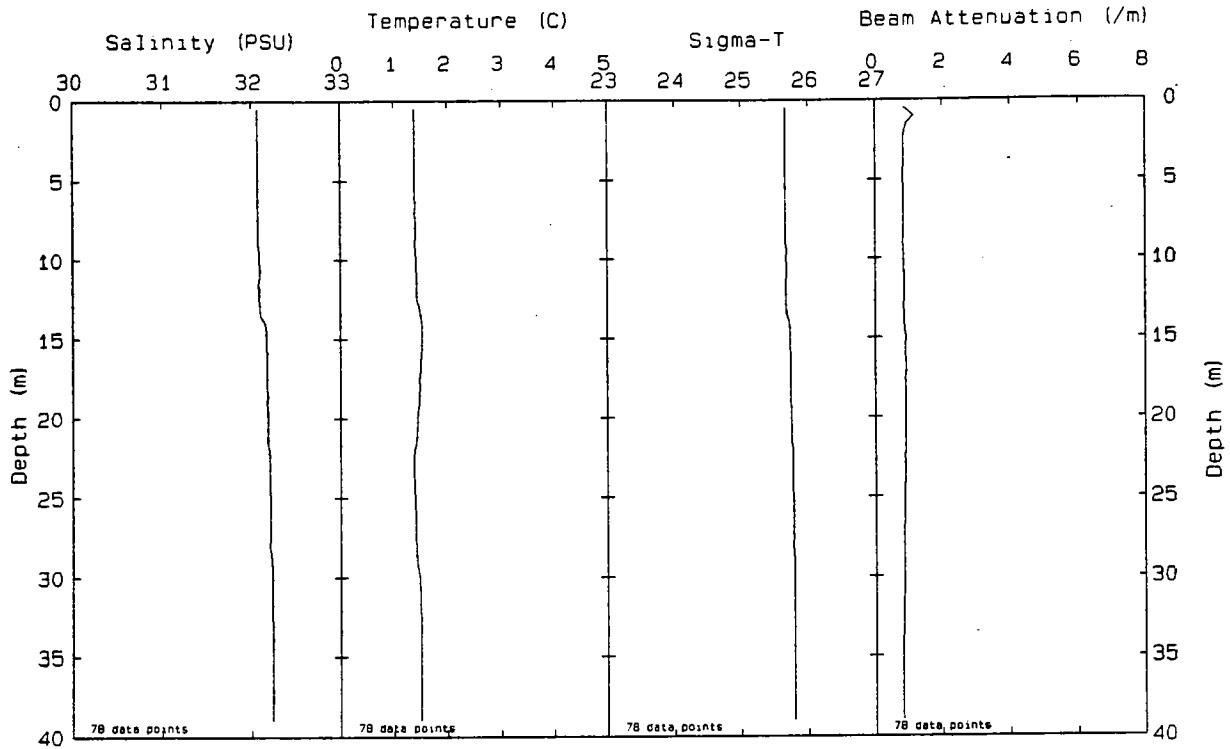
Station: N13 File: W9303061.PAB Date: 03-24-1993 Time: 16:08:24

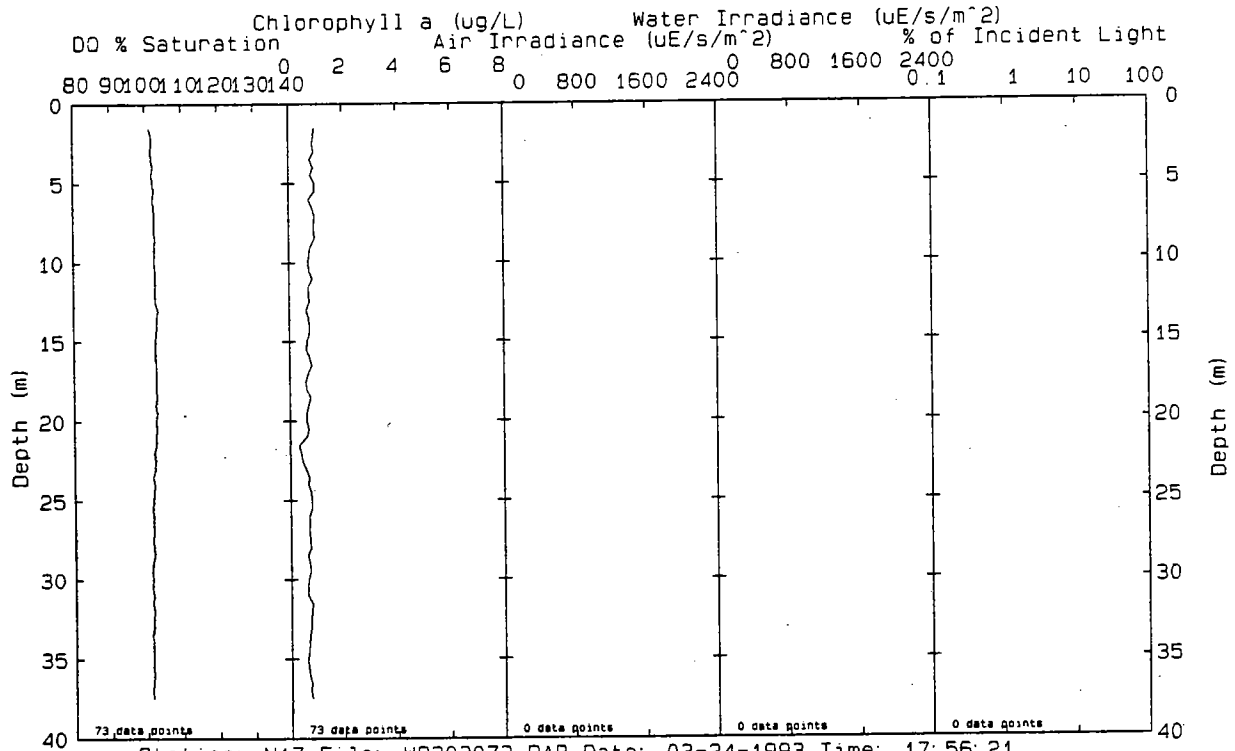
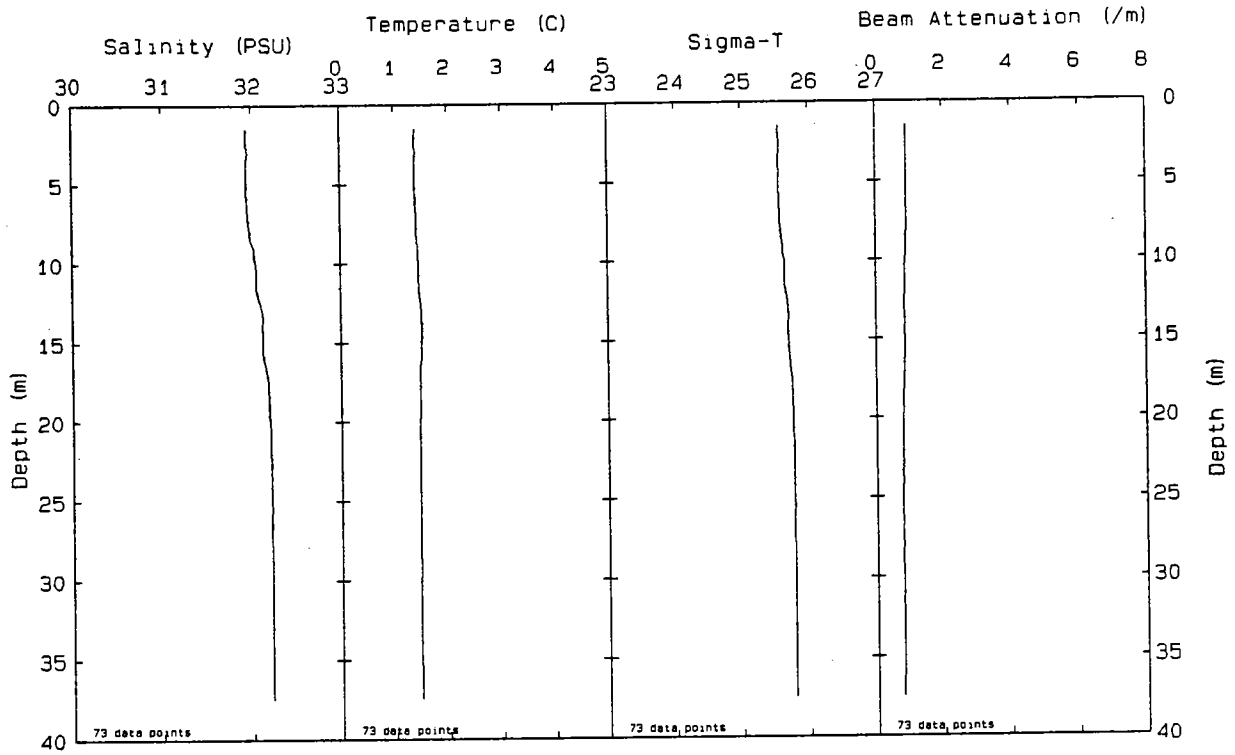


Station: N14 File: W9303064.PAB Date: 03-24-1993 Time: 16:33:58

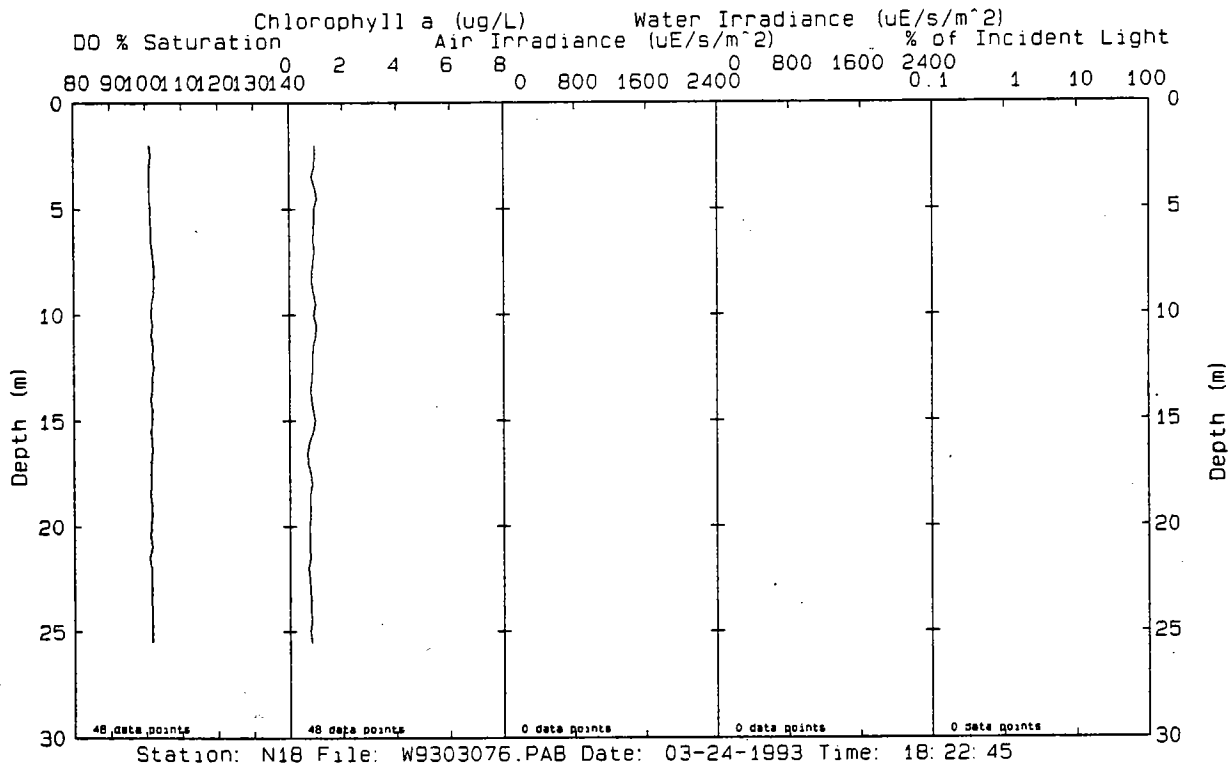
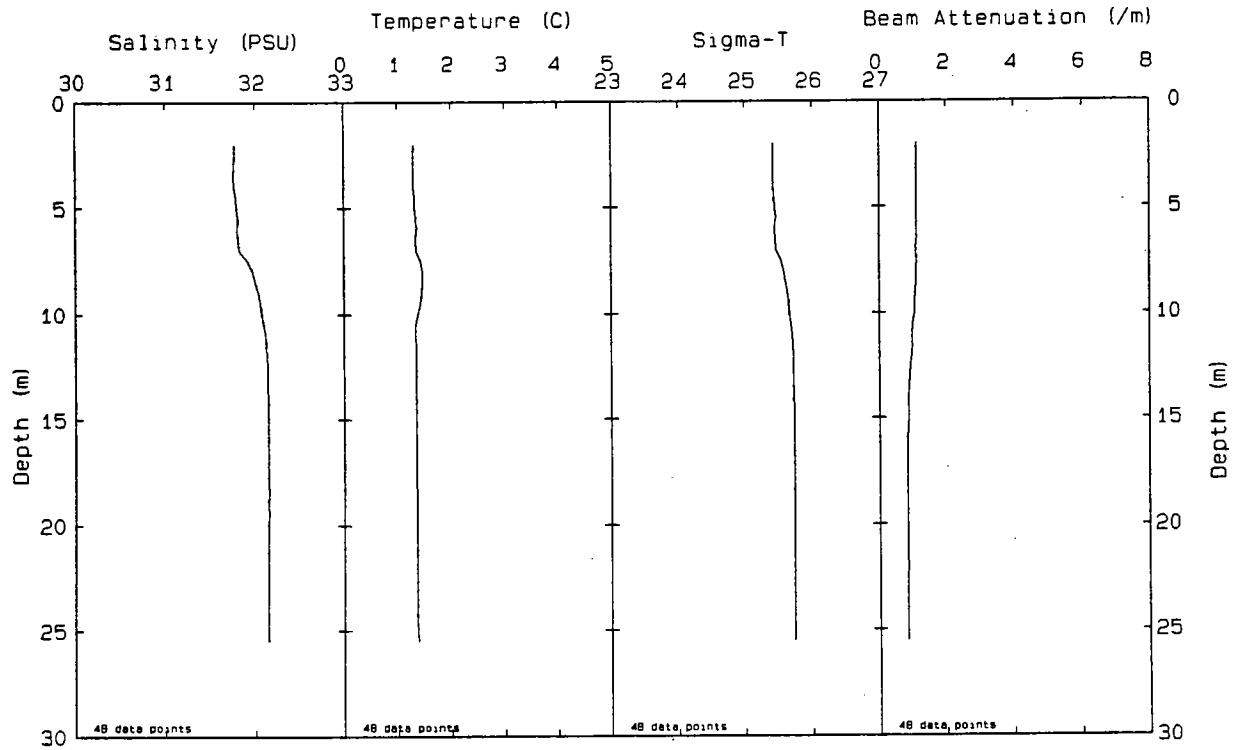


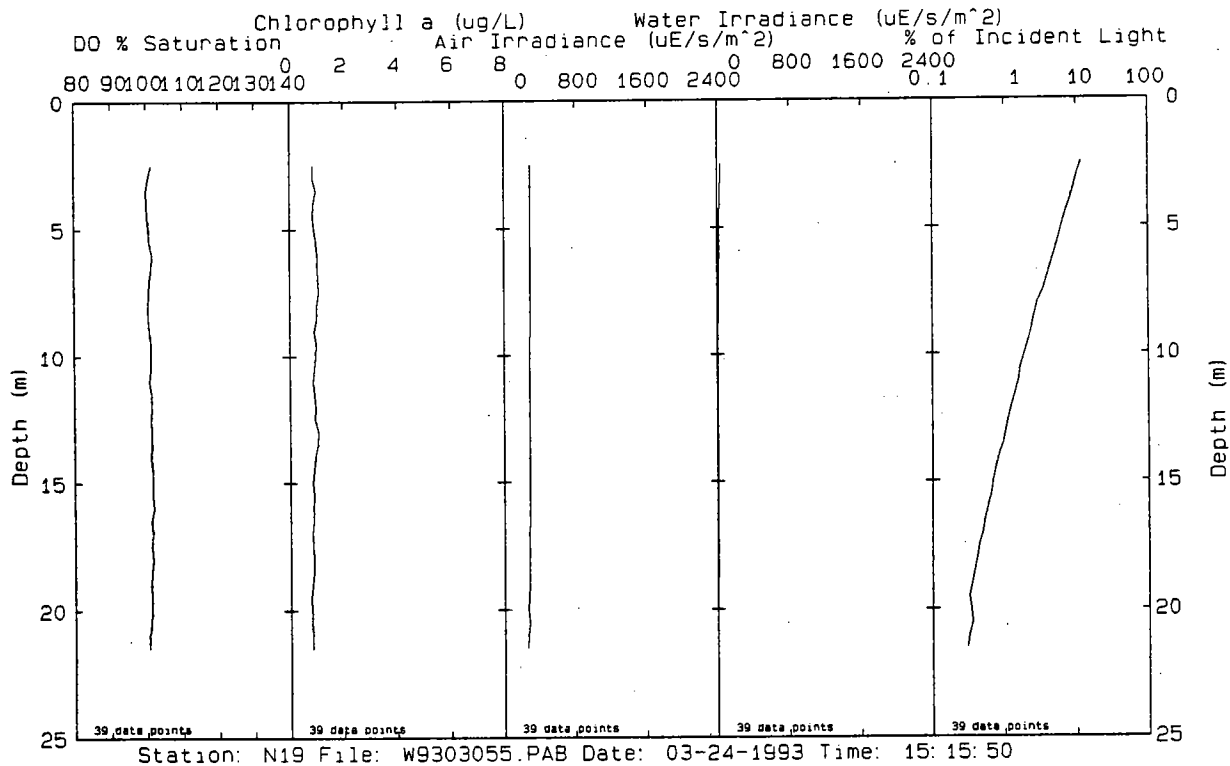
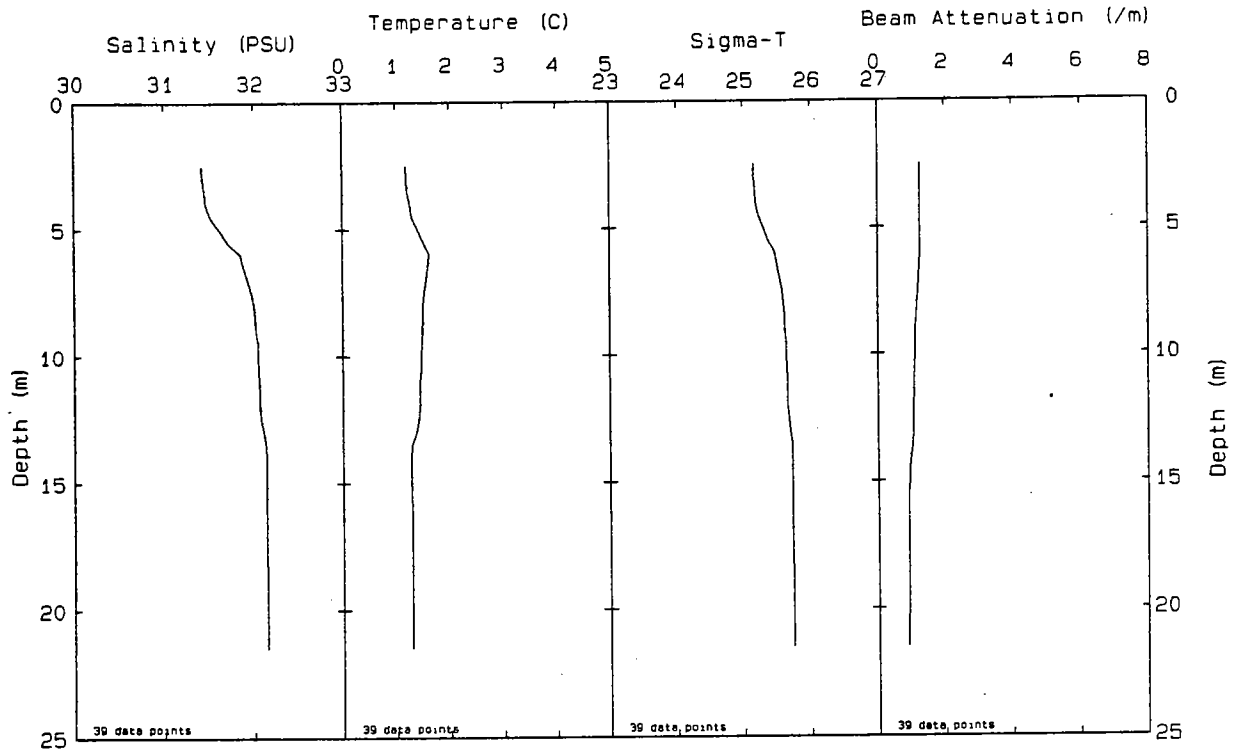
Station: N15 File: W9303067.PAB Date: 03-24-1993 Time: 16:59:44

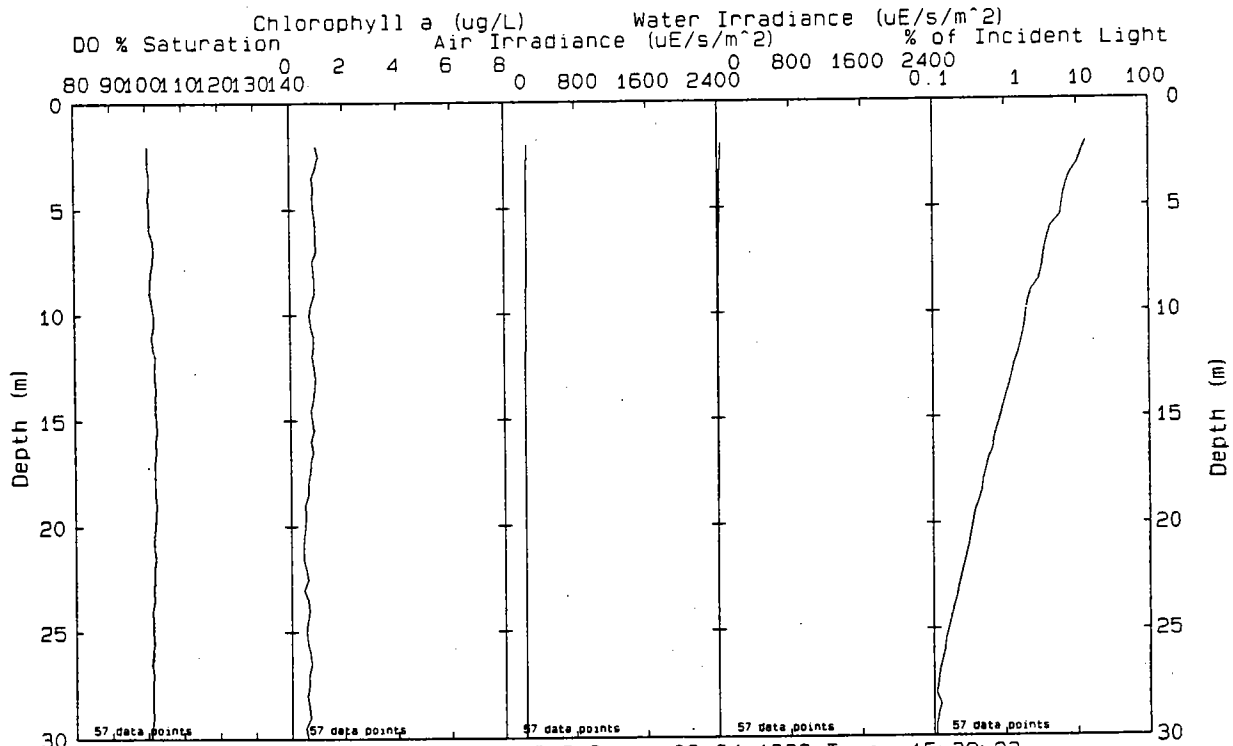
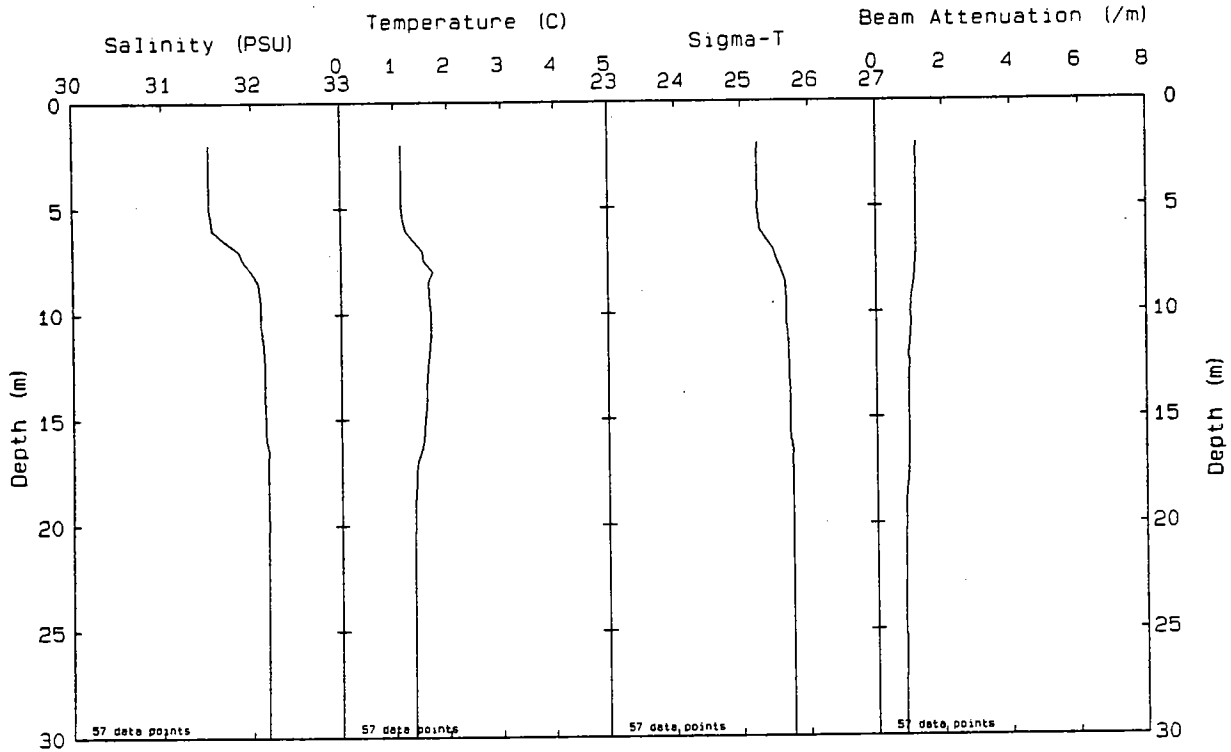




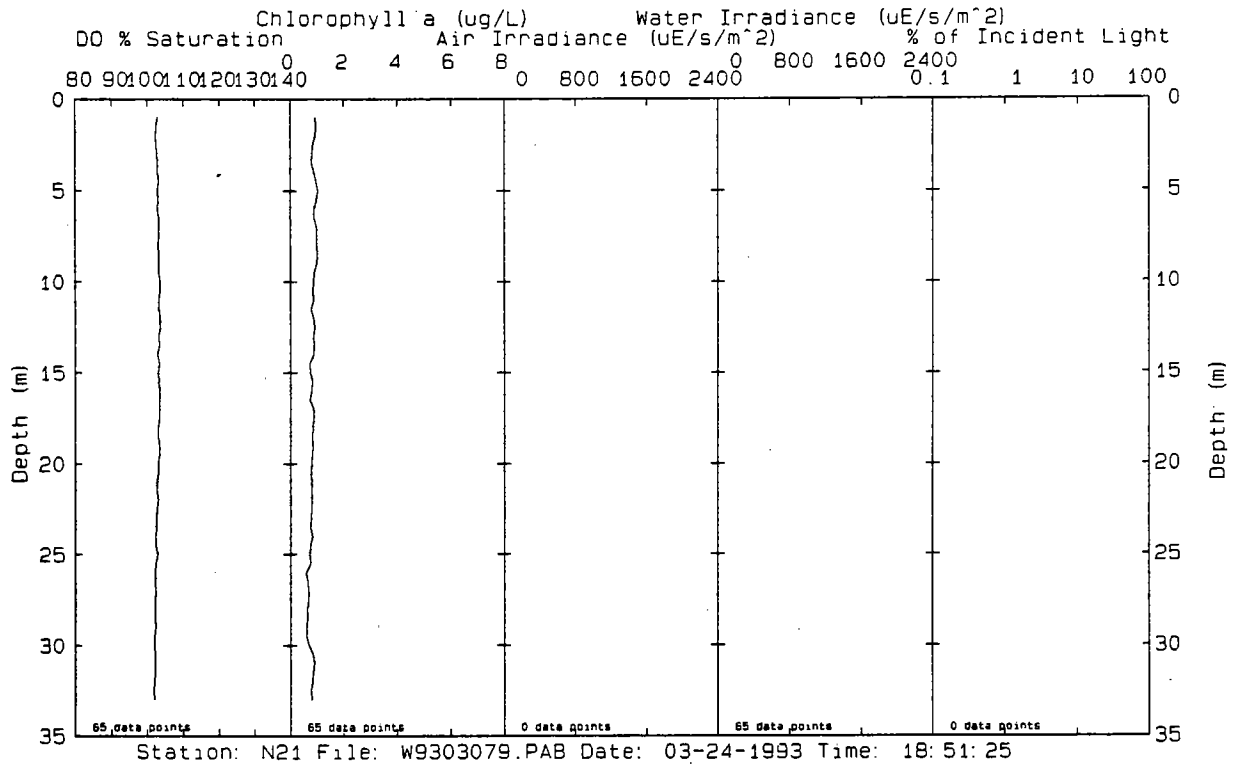
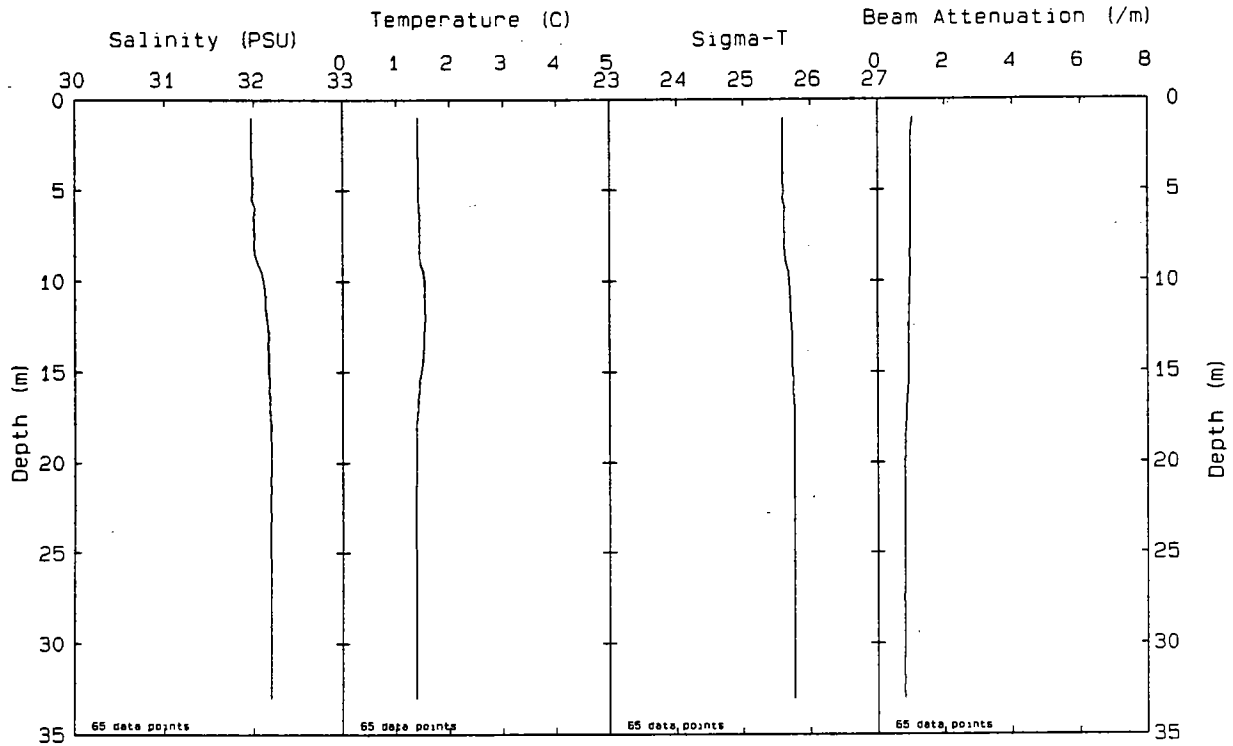
Station: N17 File: W9303073.PAB Date: 03-24-1993 Time: 17:56:21







Station: N2OP File: W9303058.PAB Date: 03-24-1993 Time: 15:39:23



APPENDIX C

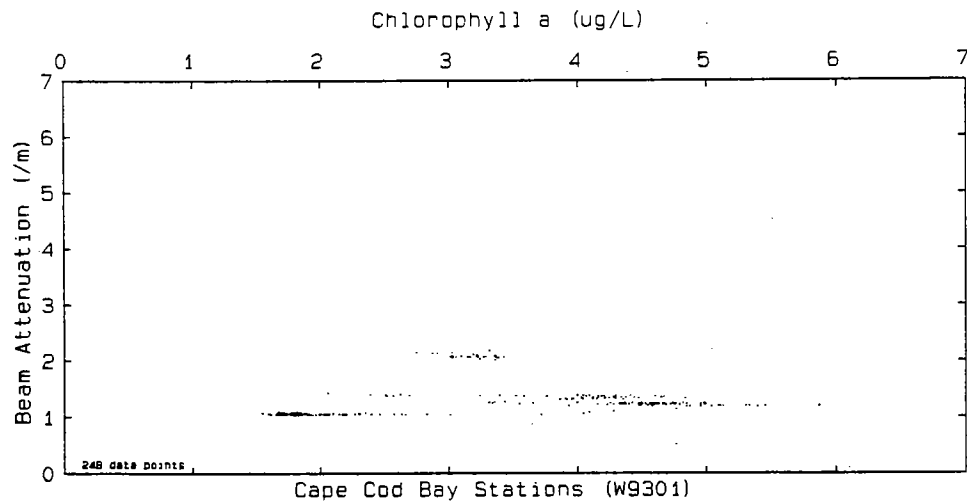
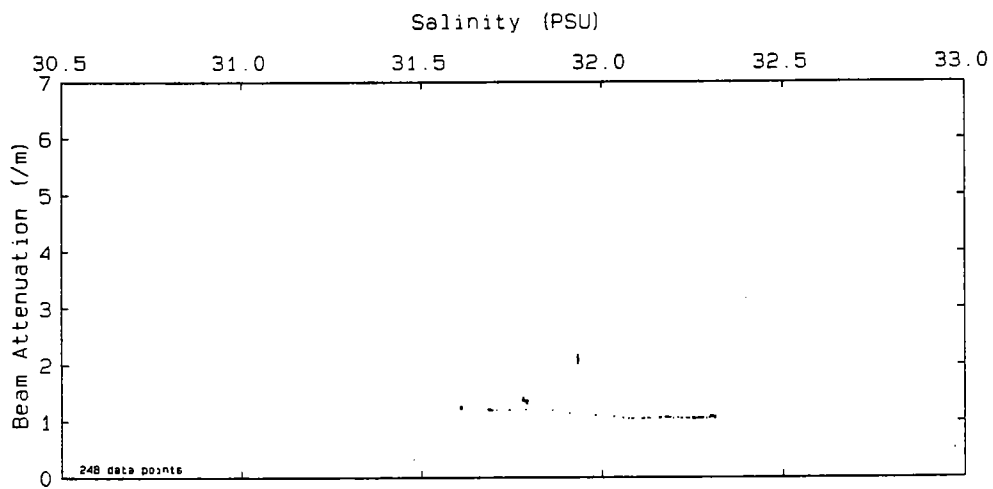
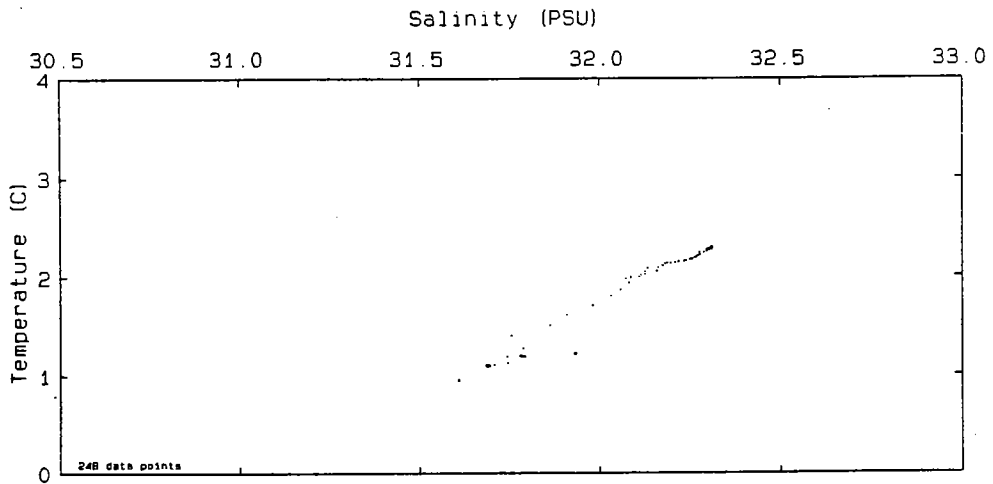
COMPARISON OF VERTICAL PROFILE DATA: SCATTER PLOTS

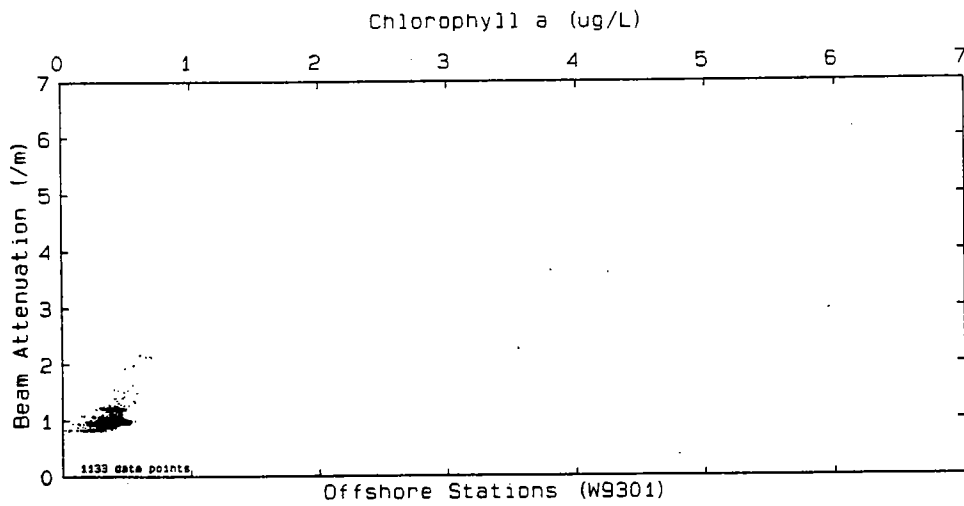
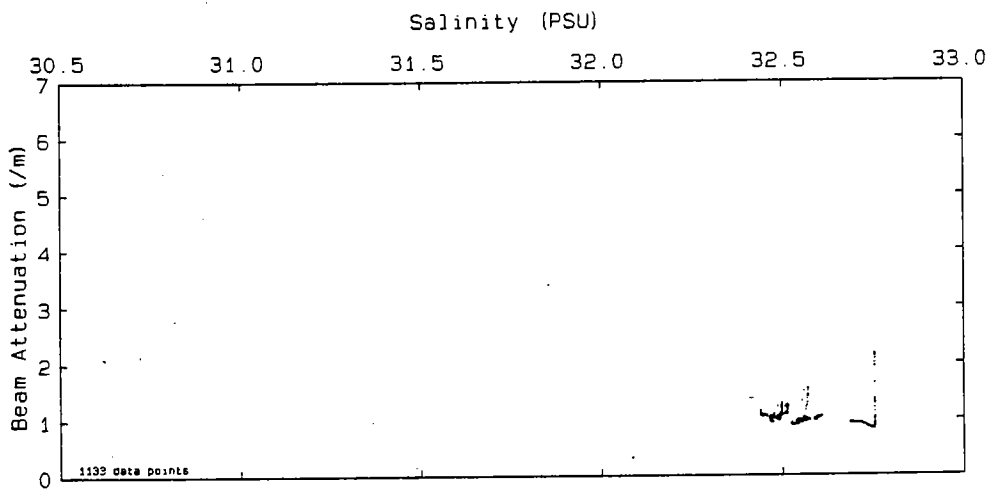
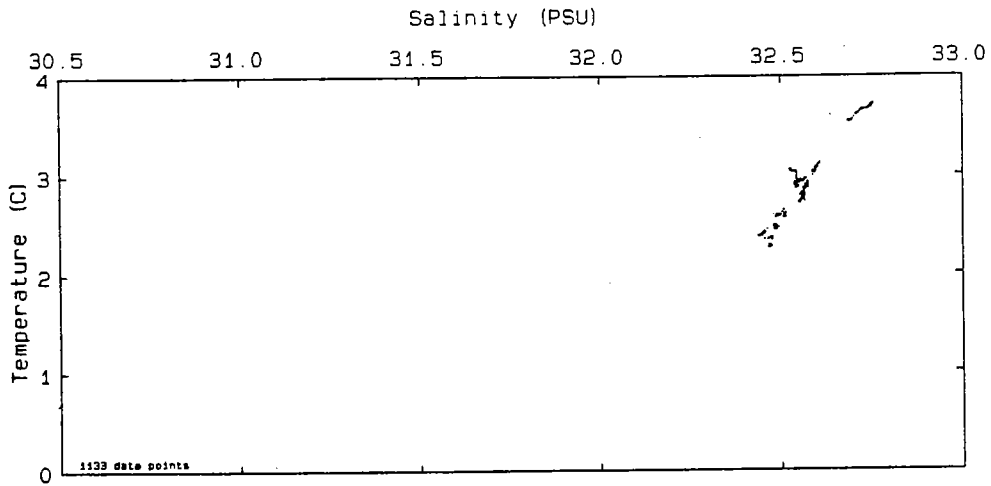
Parameter-Parameter Plots of Vertical Profile Data, Combined Surveys

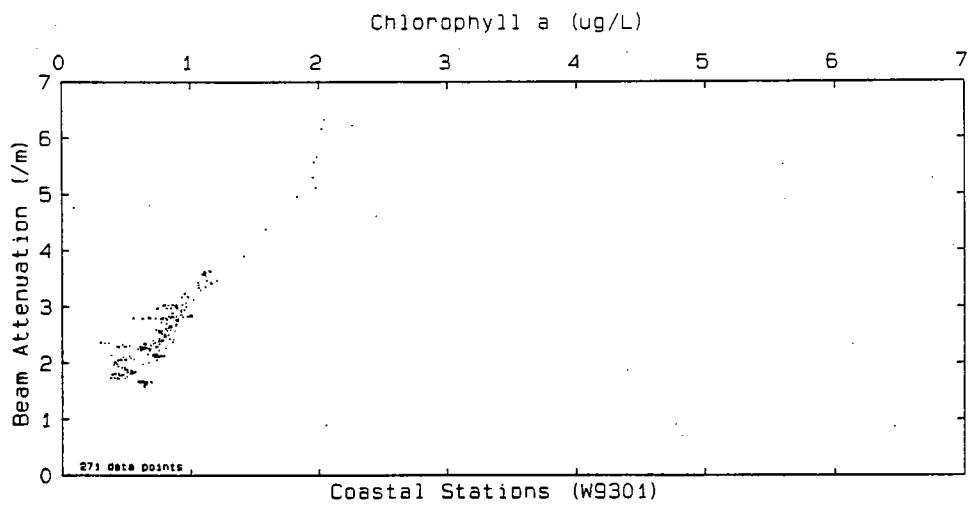
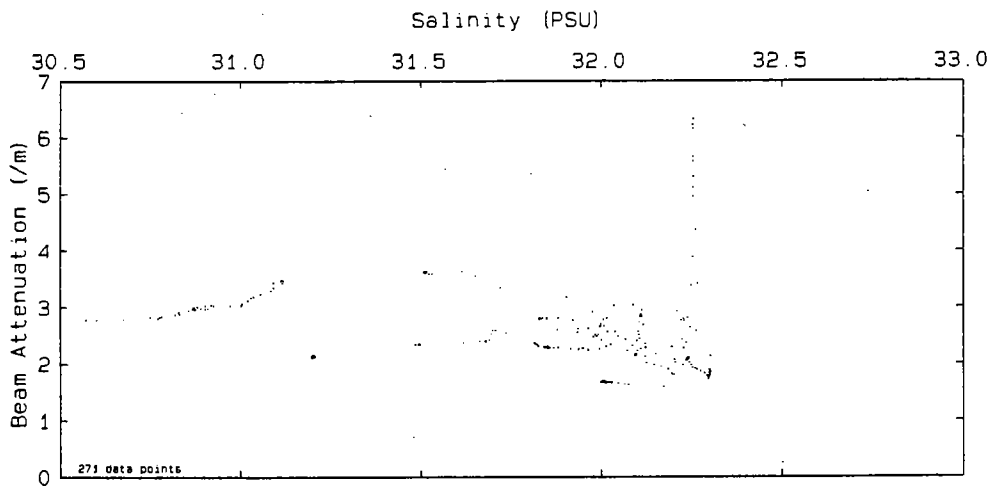
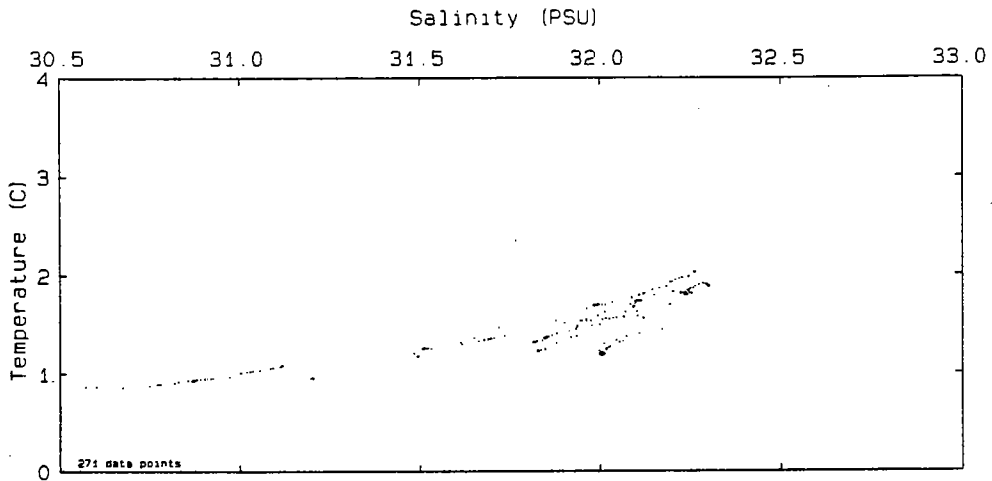
Note that for nearfield surveys, all plots are given as figures in the accompanying text report. For combined surveys, composite plots (all stations) are given as figures in the accompanying text report.

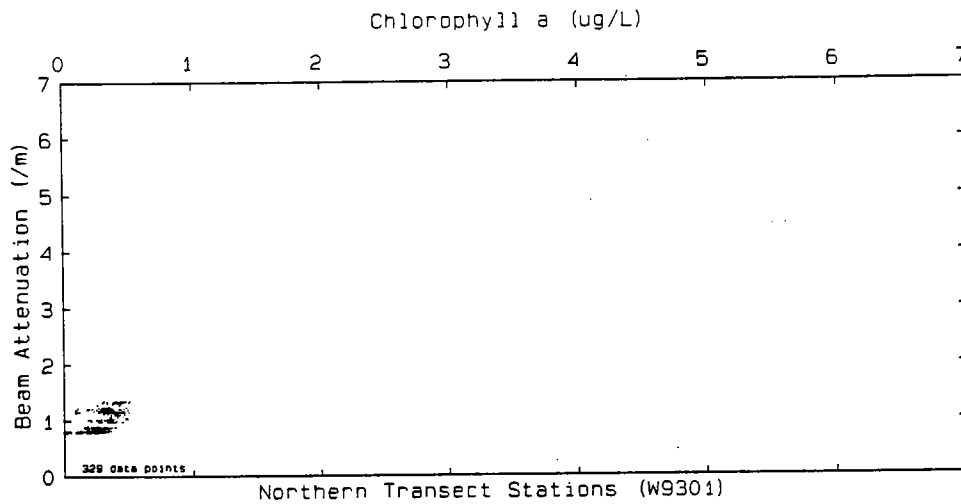
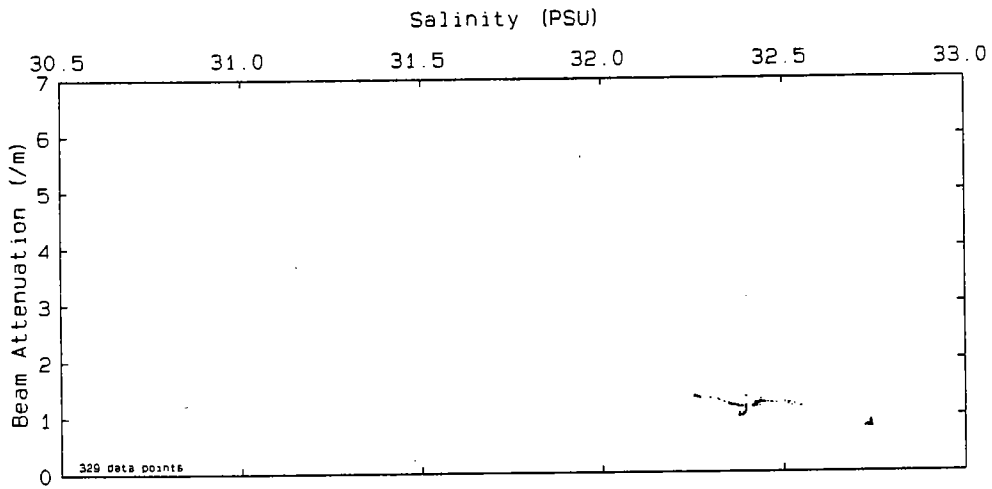
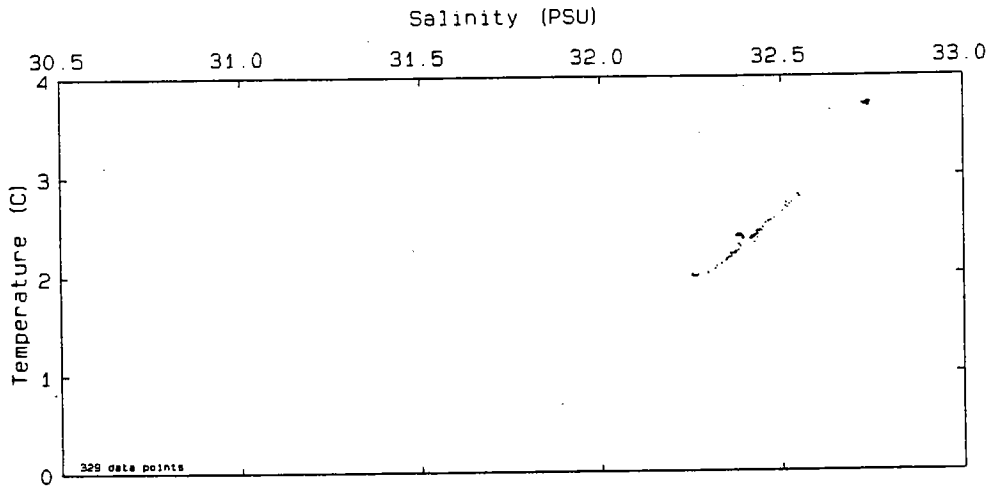
Plots separate stations by station groups as defined in the text report.

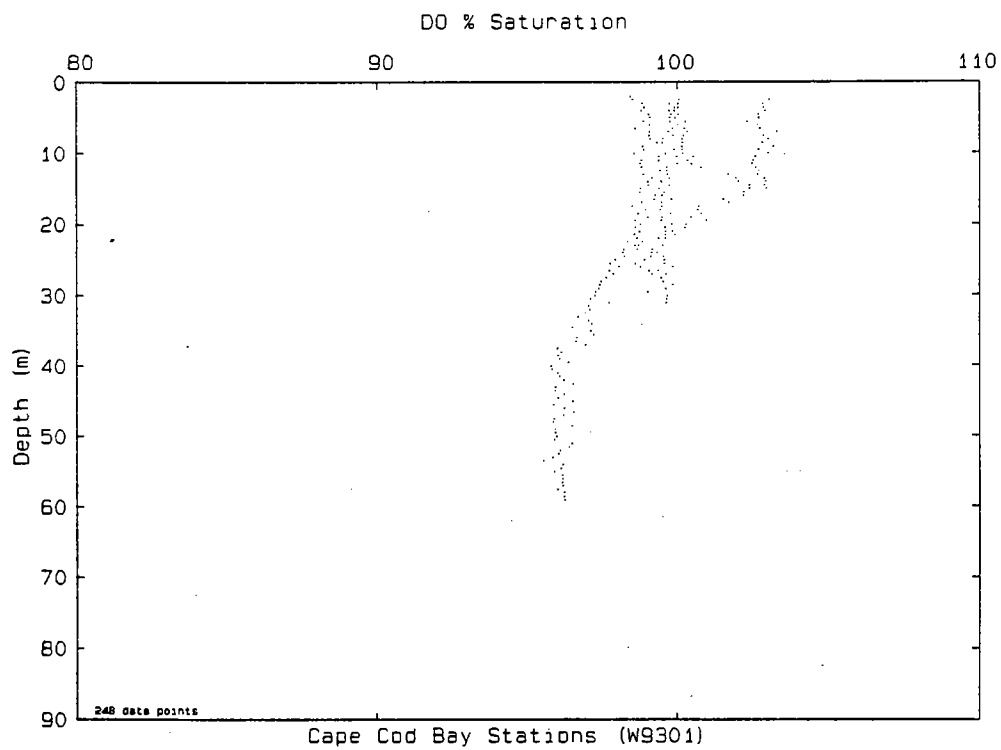
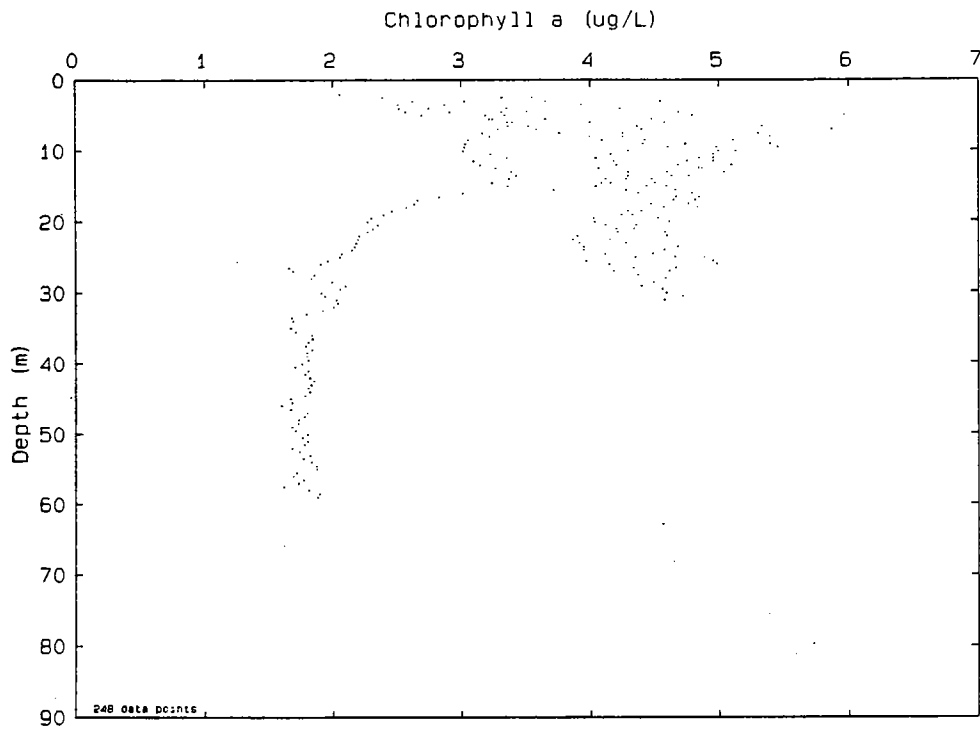
Data are as described in Appendix B and include the entire profile at each station.

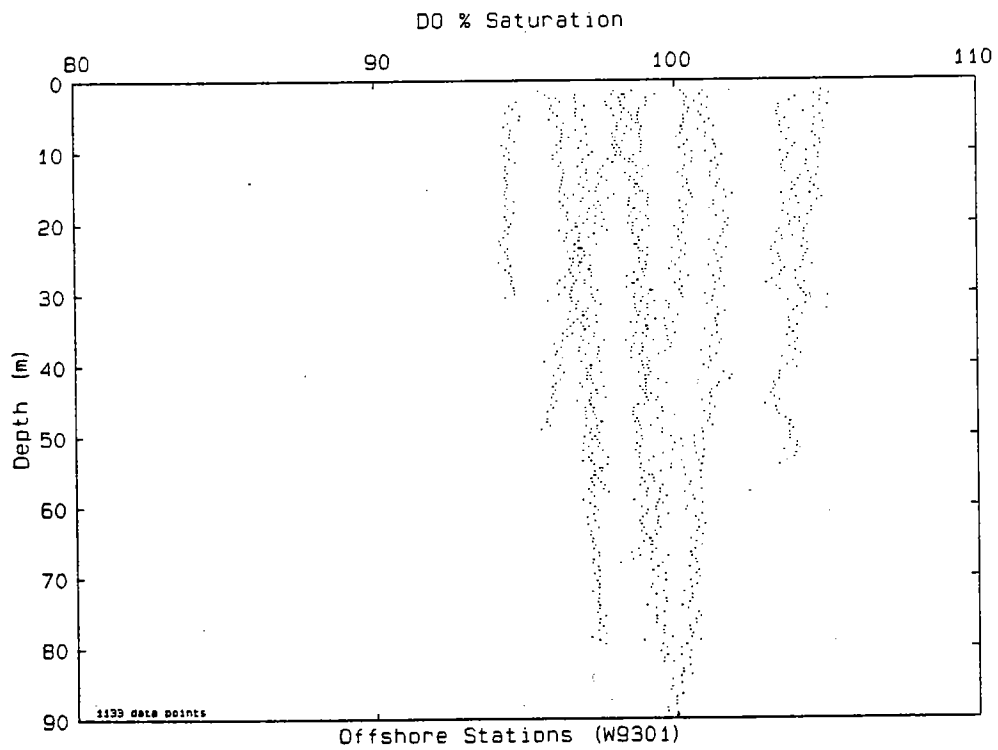
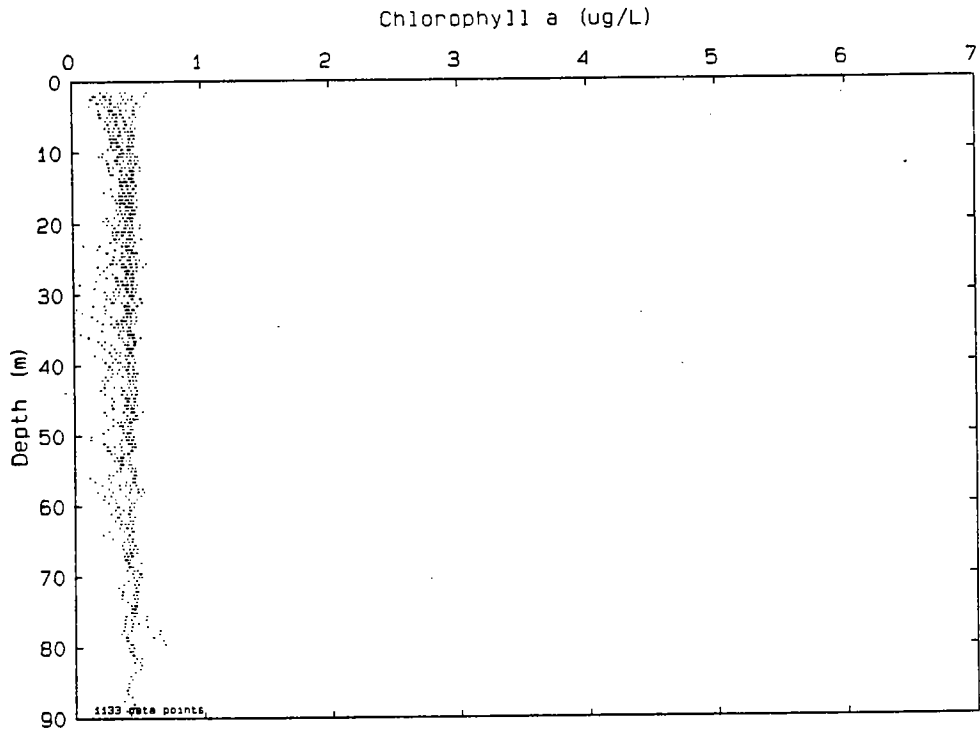


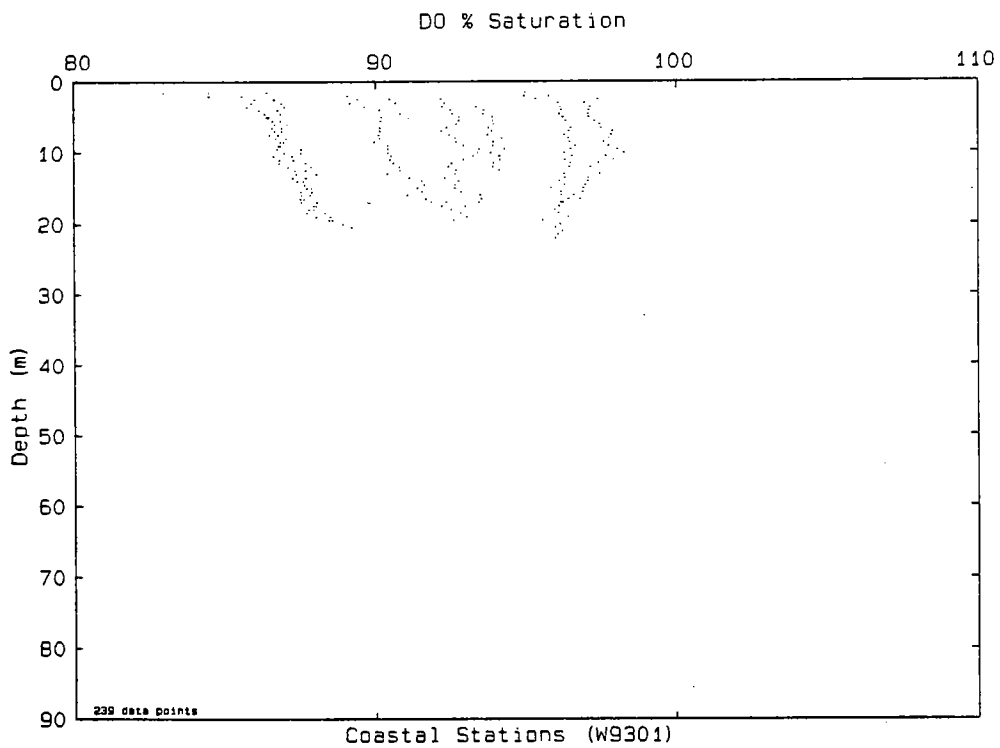
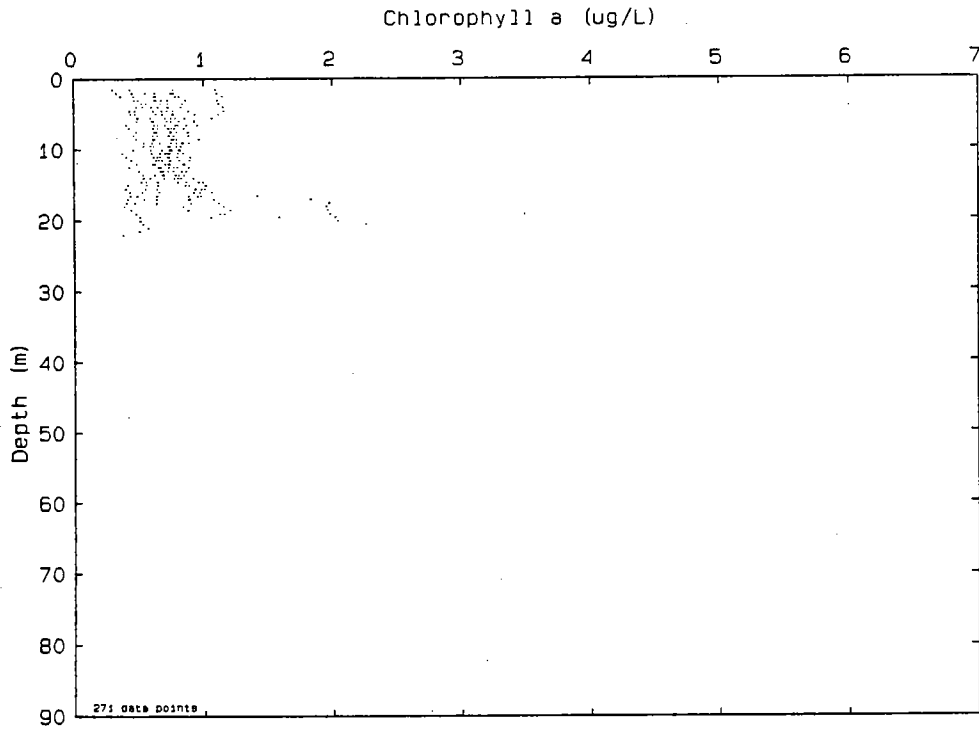


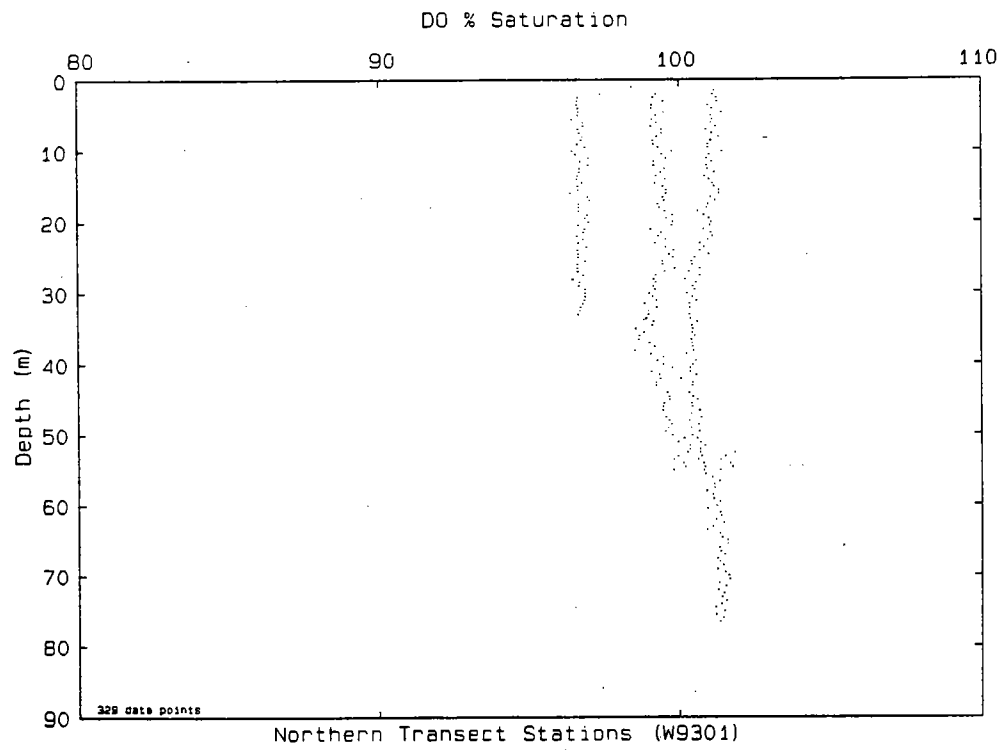
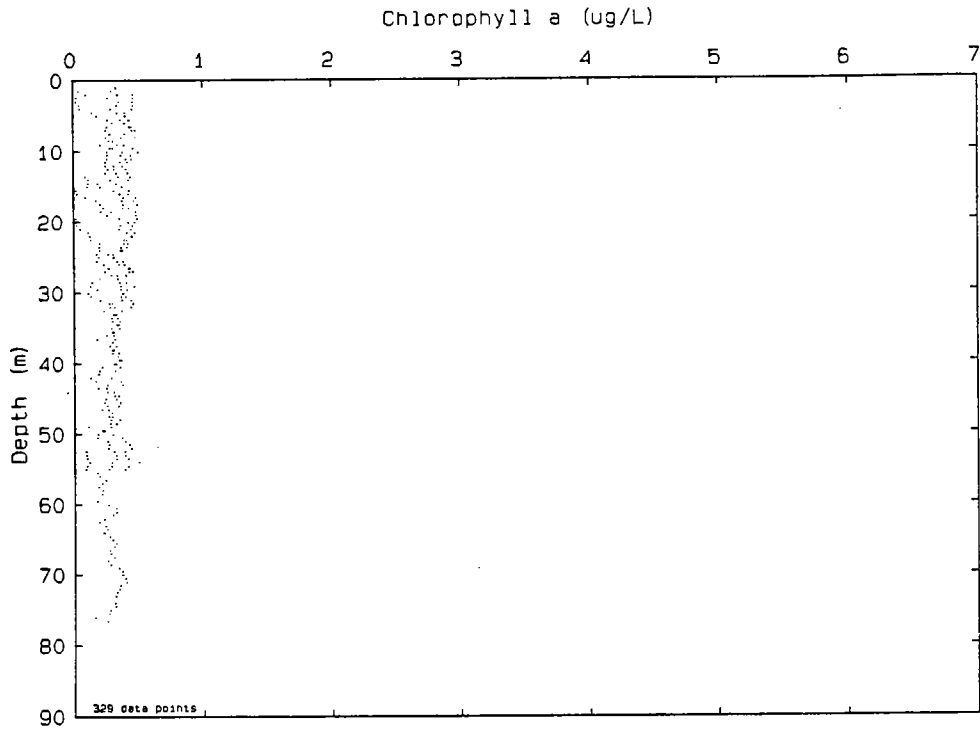


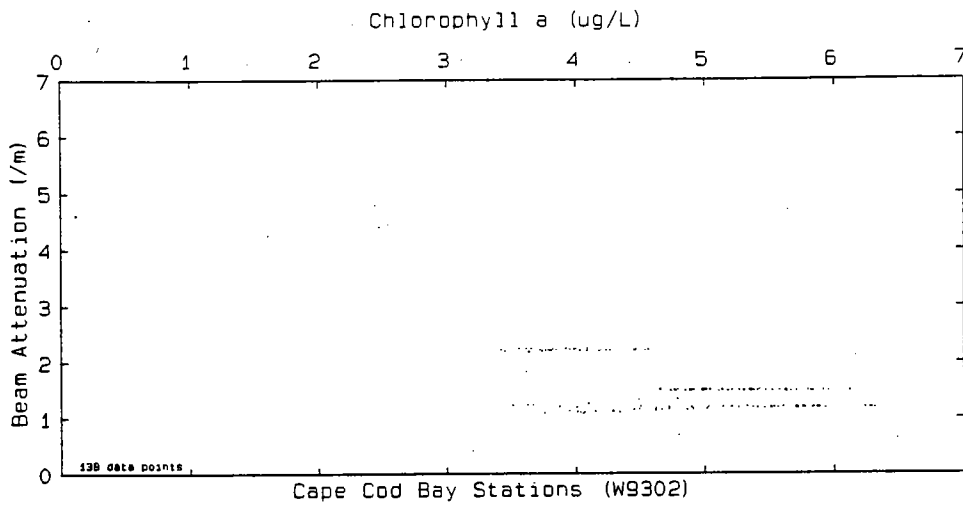
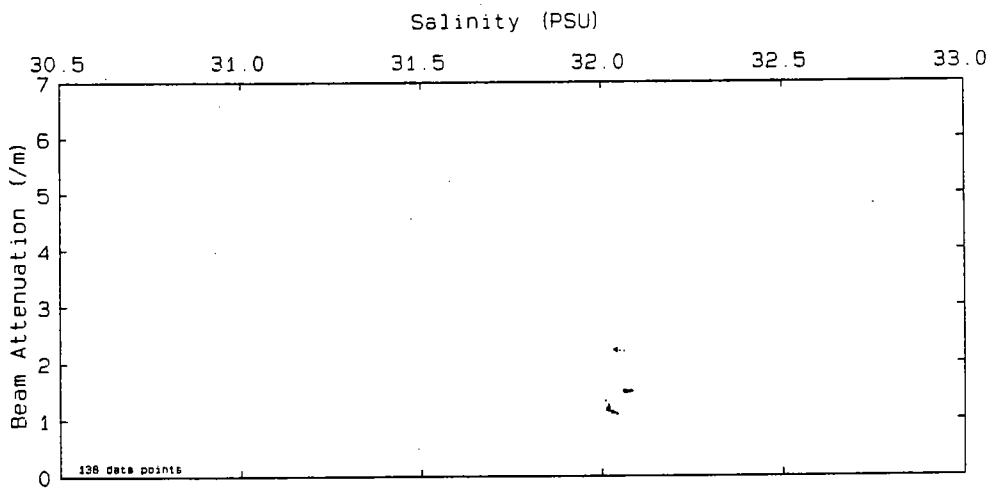
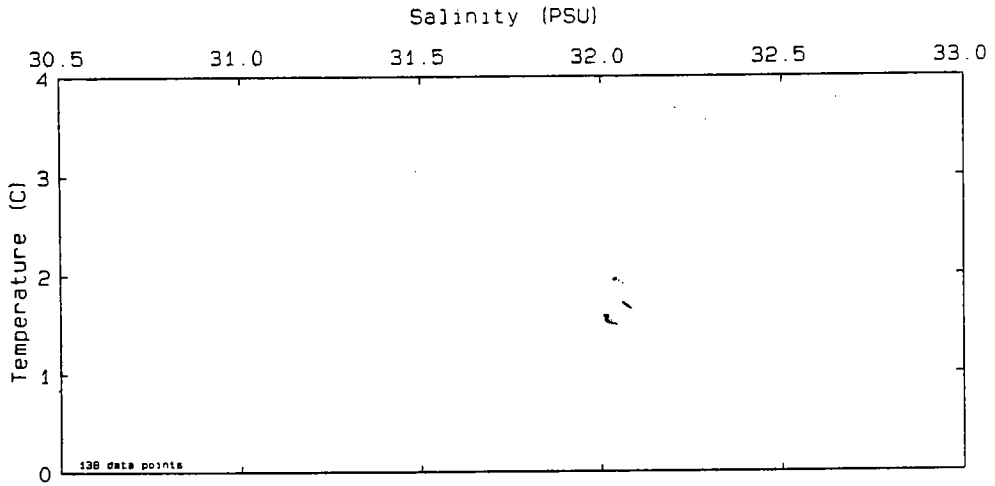


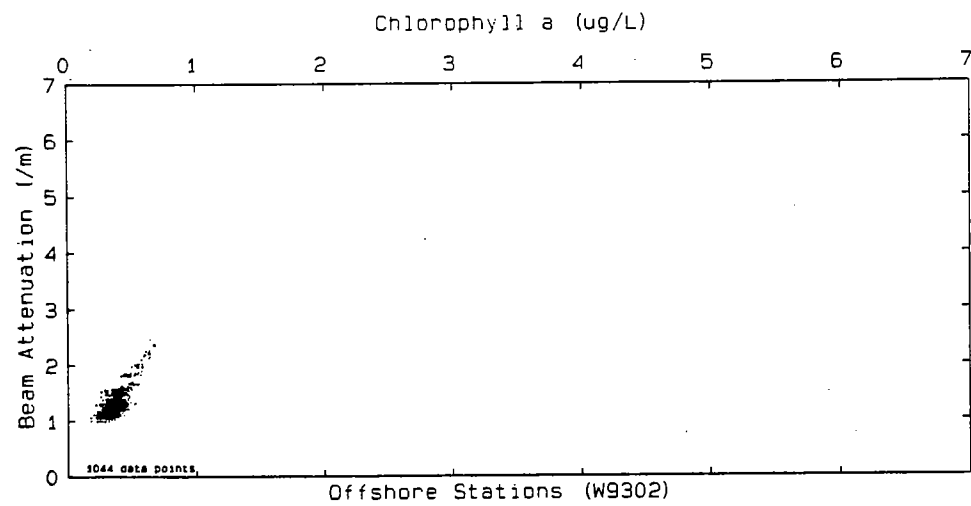
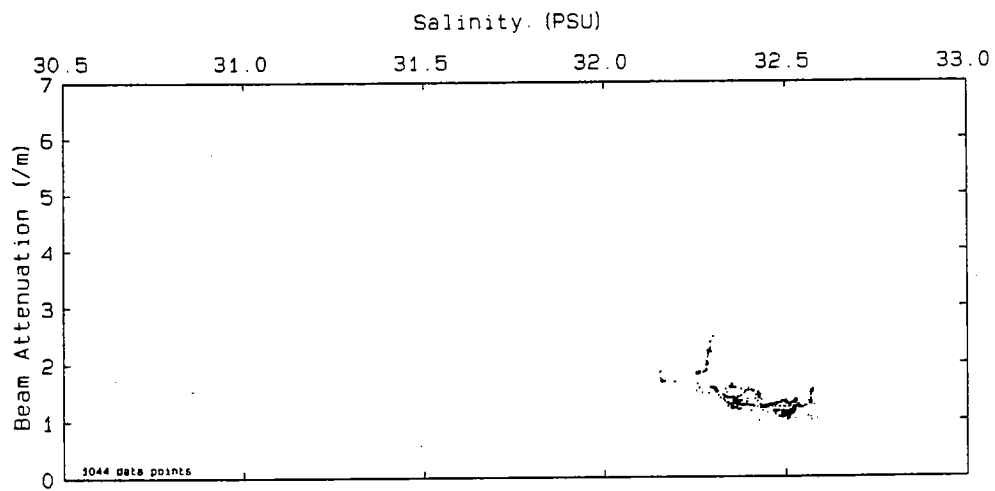
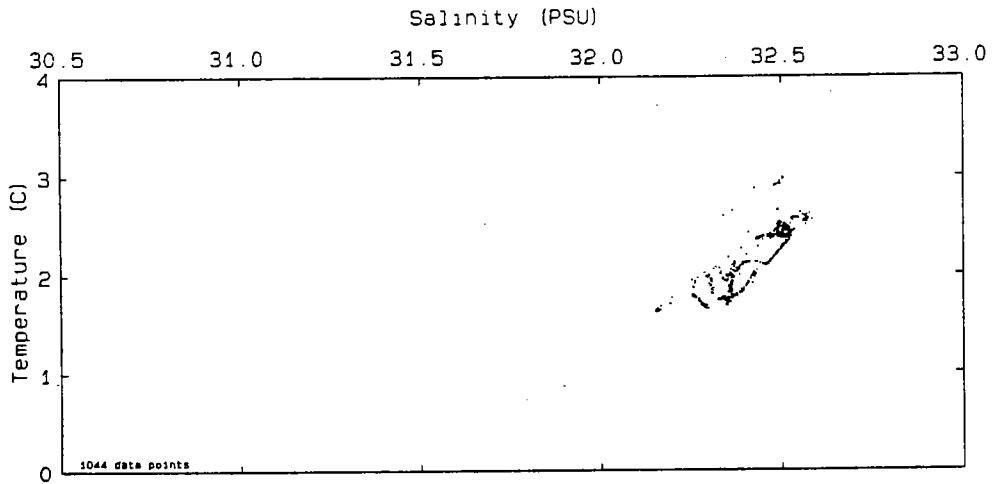


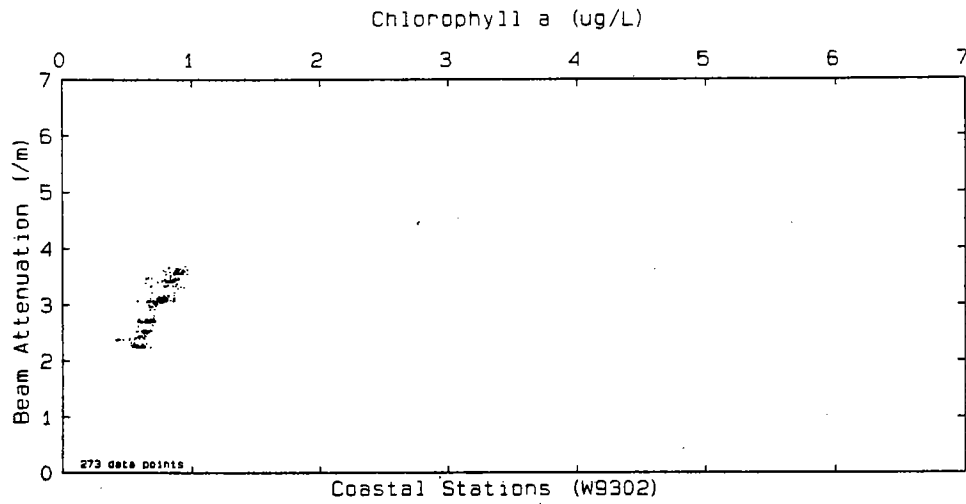
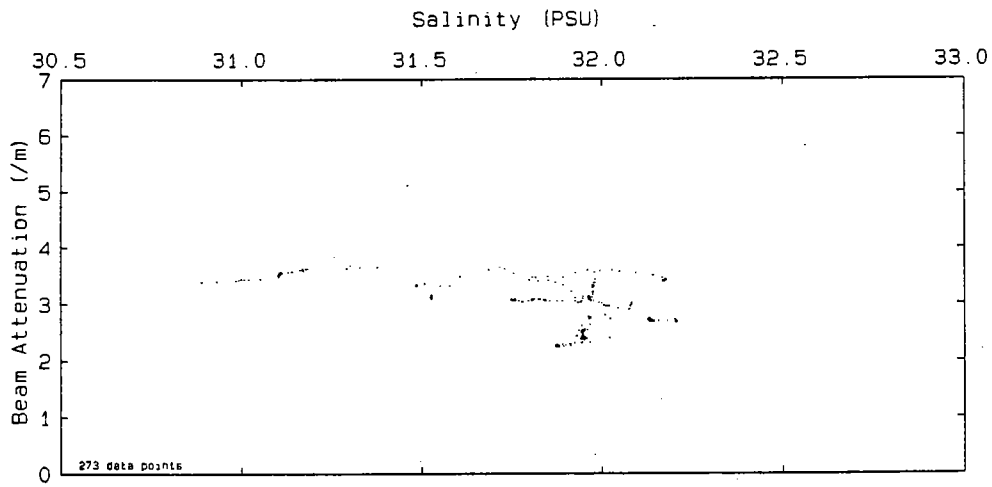
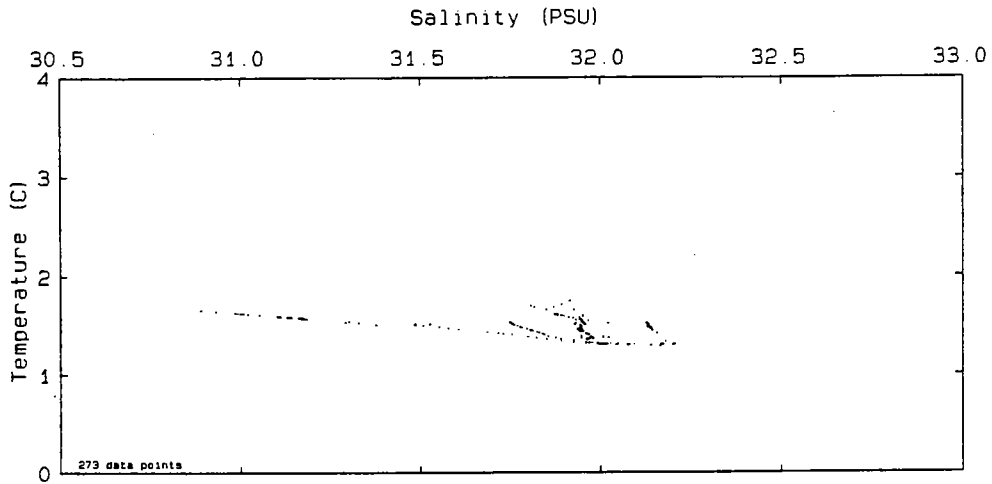


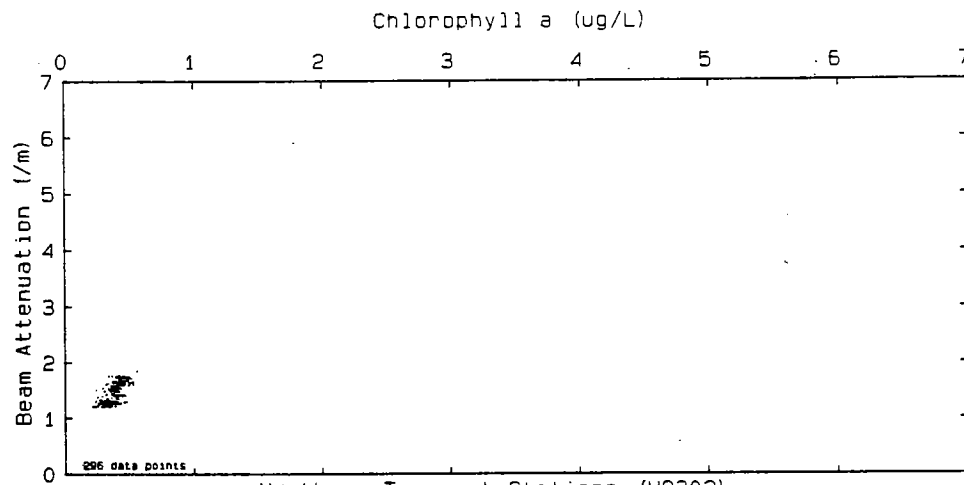
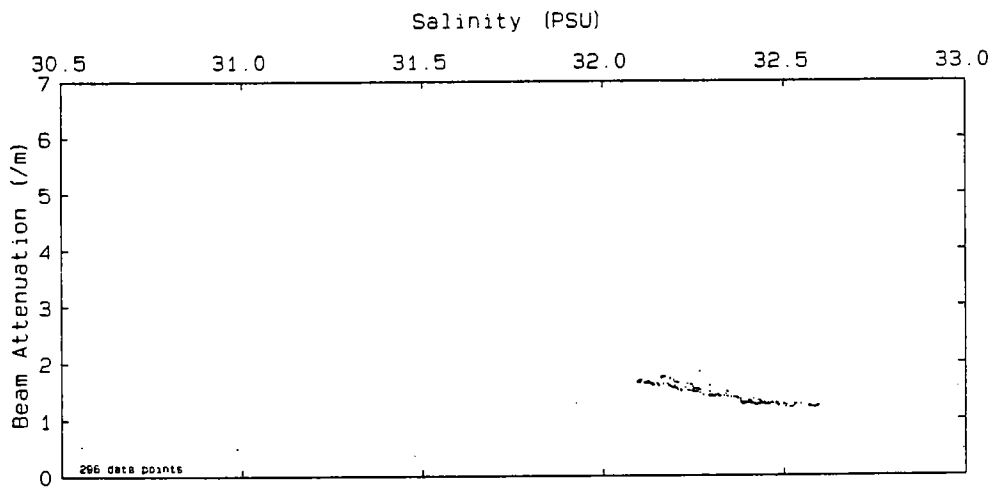
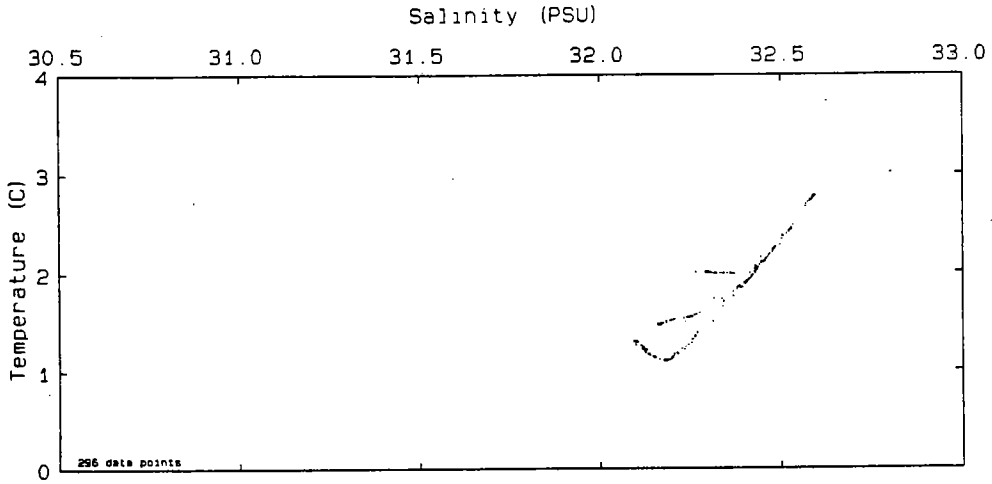




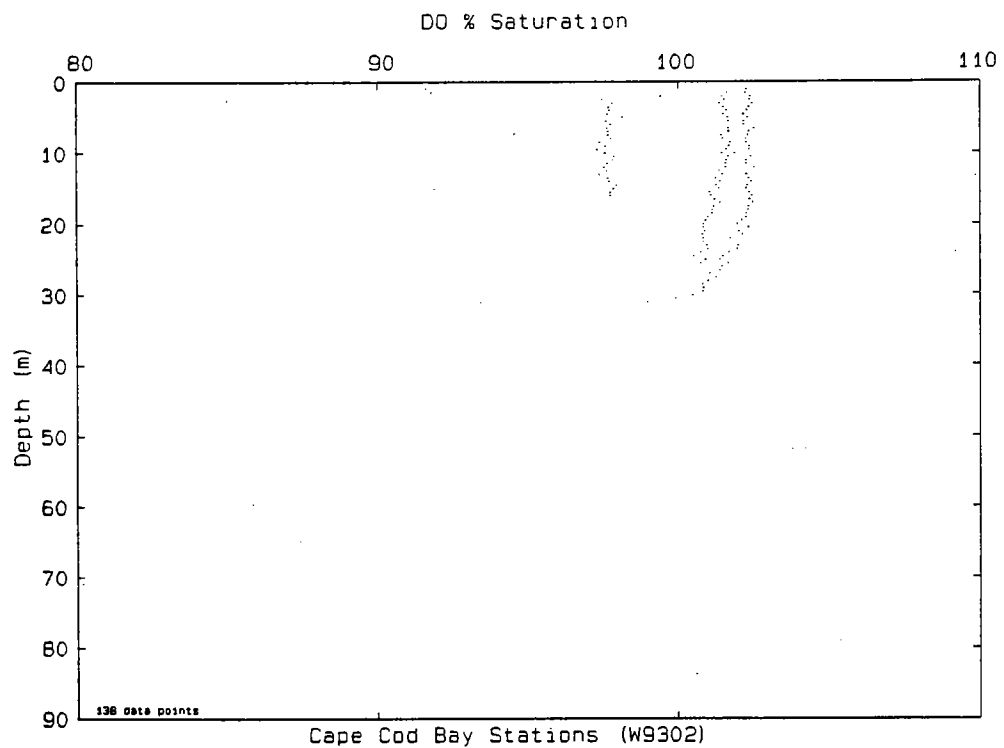
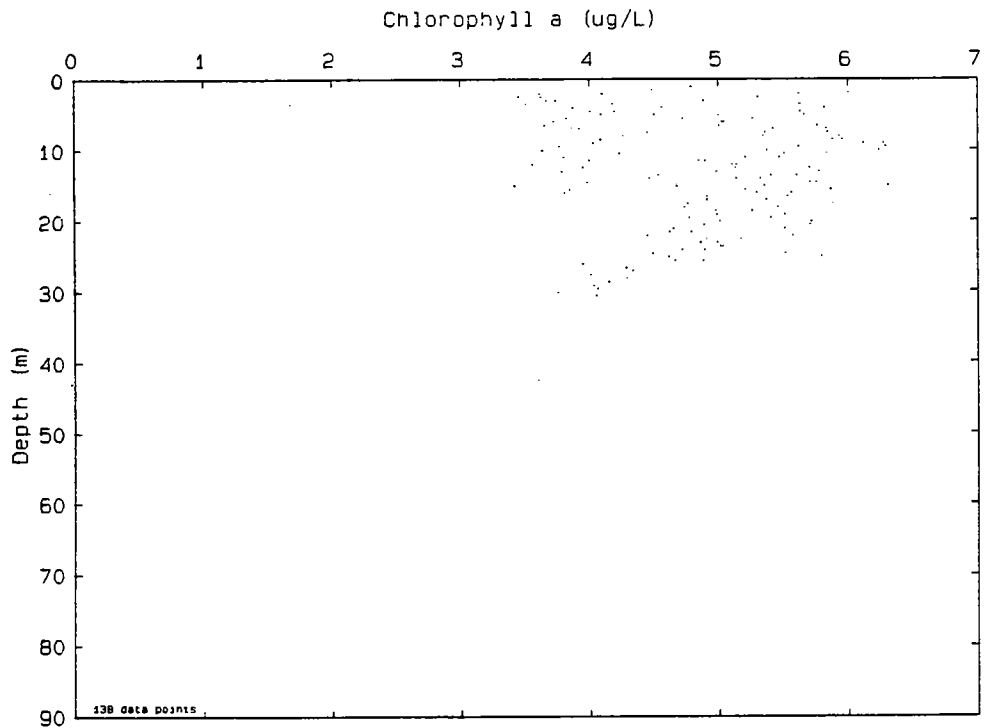


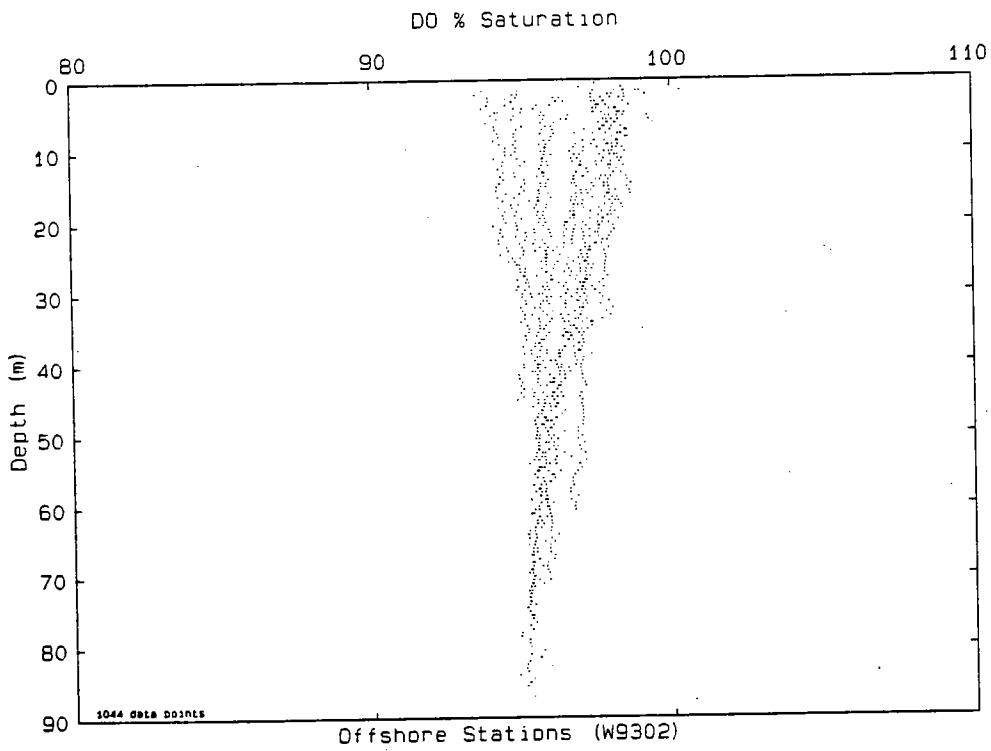
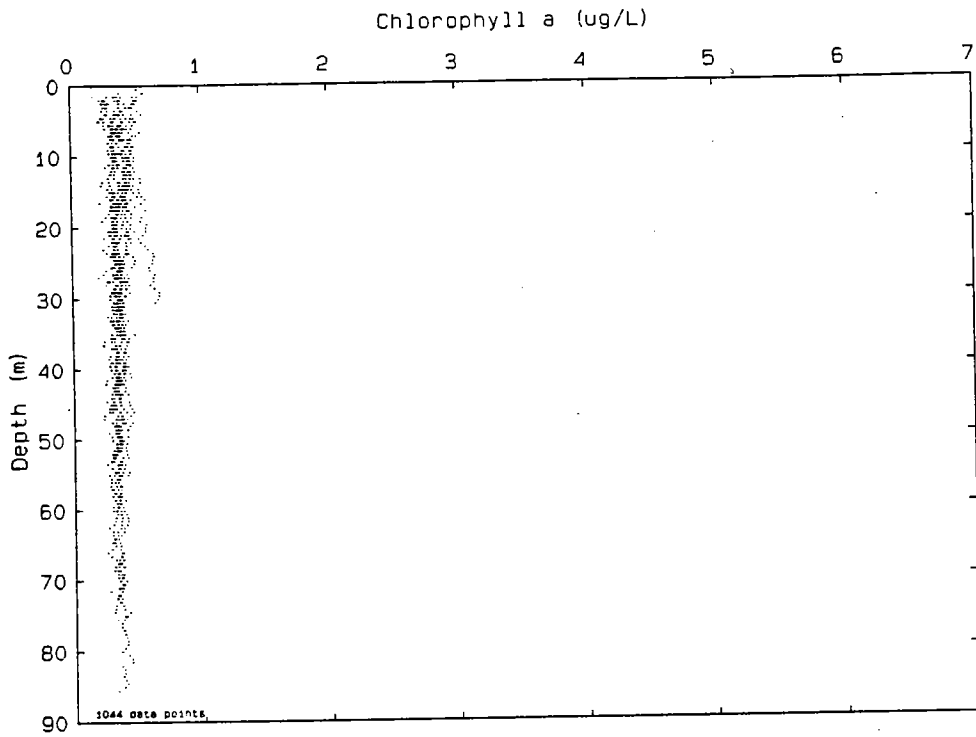


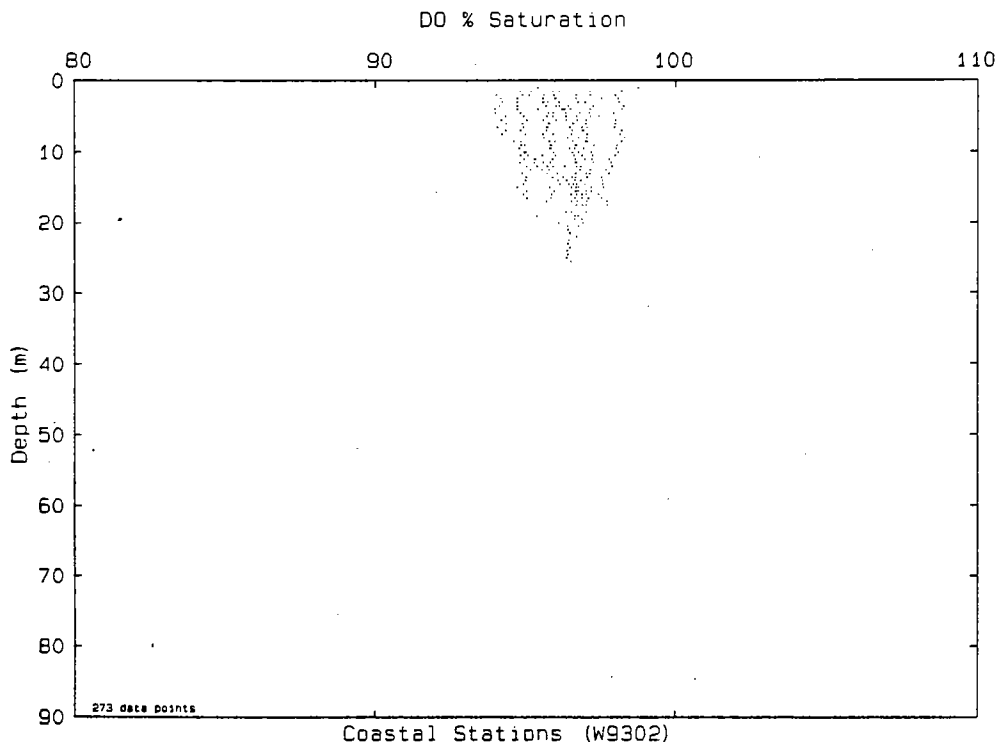
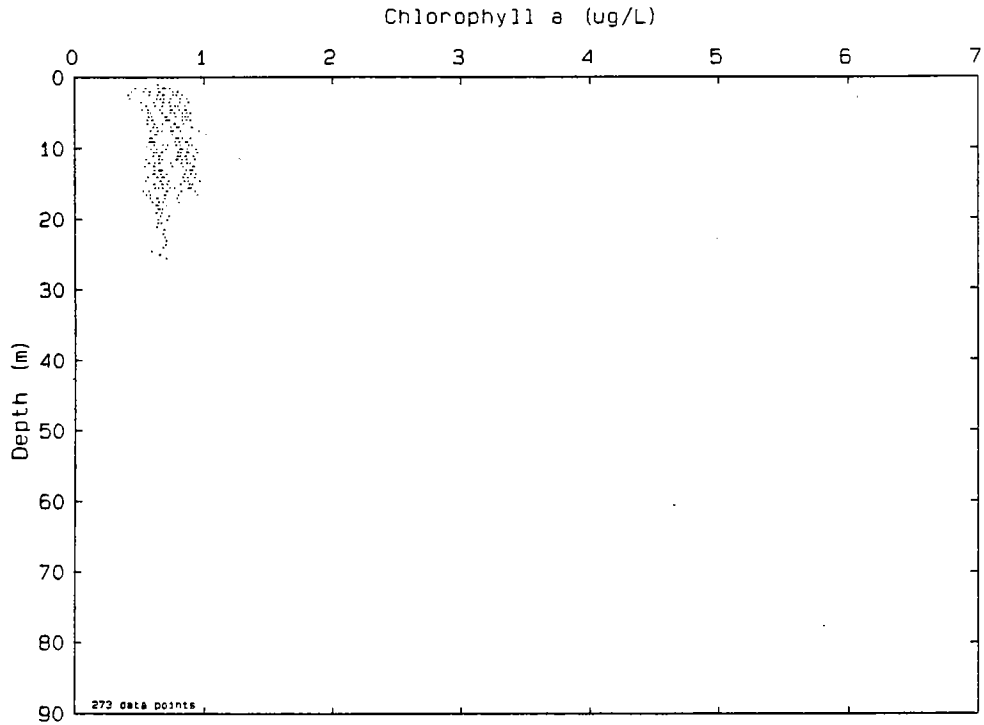


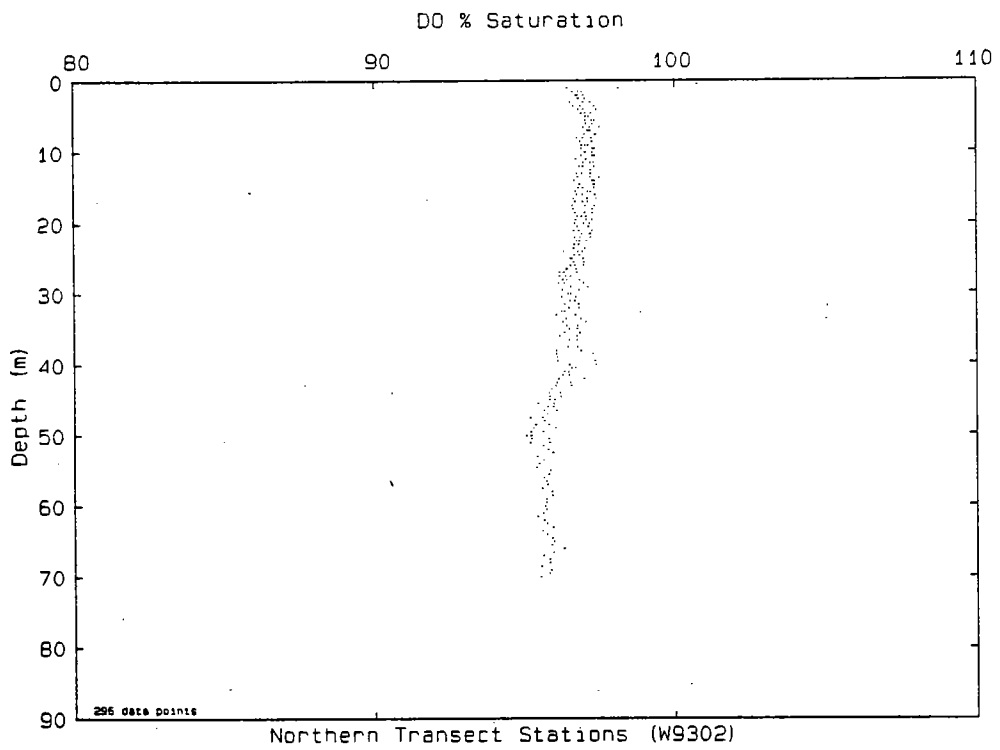
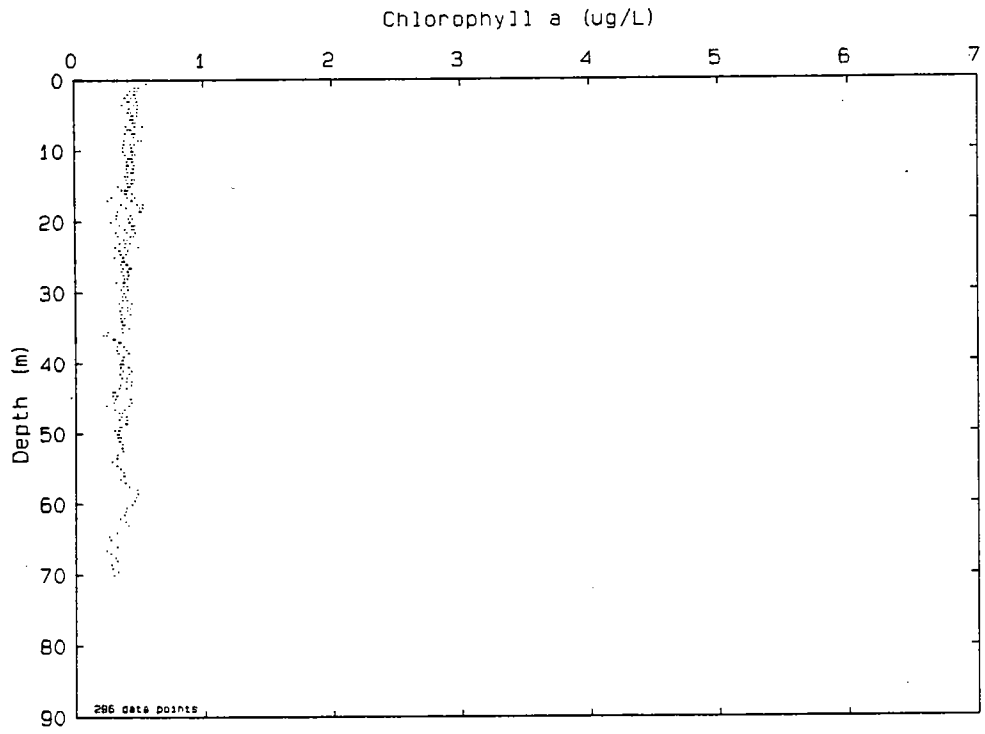


Northern Transect Stations (W9302)









APPENDIX D

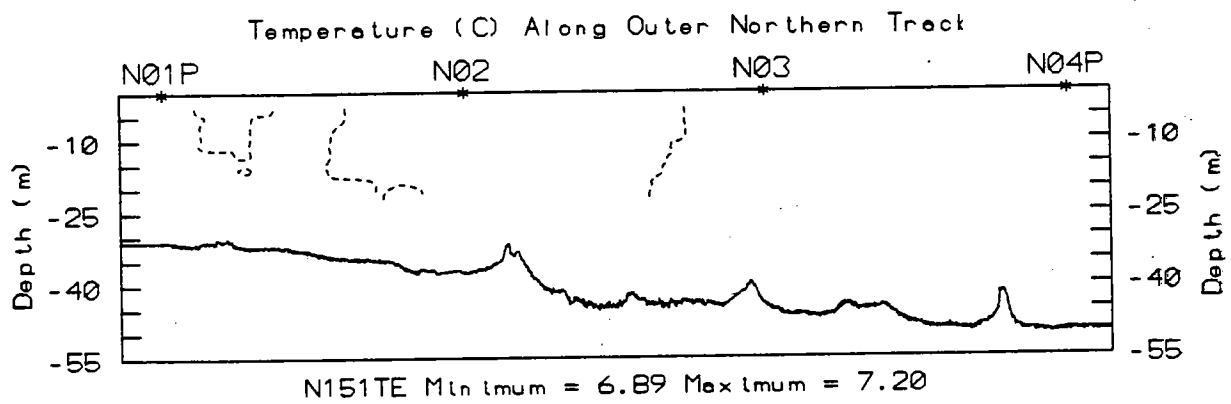
ADDITIONAL TOWING PROFILE DATA FROM NEARFIELD STATIONS IN DECEMBER 1992

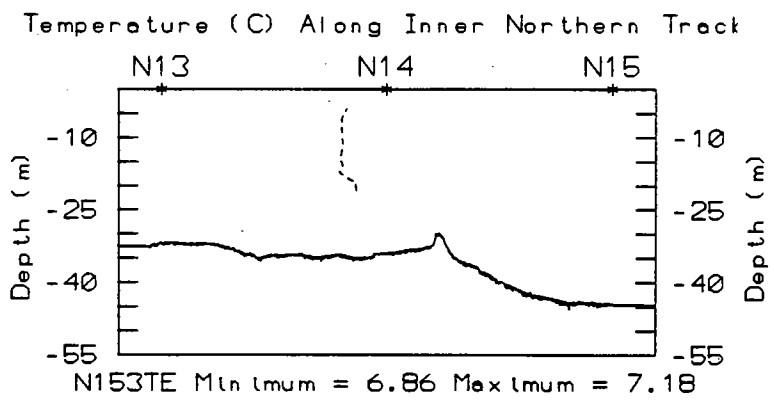
Sigma-T and chlorophyll (fluorescence) from towing tracks are contoured and compiled in figures in the accompanying text report. Temperatures for each towing leg of the nearfield track are presented below. Additional figures for December are provided here.

Data are from oscillating tow-yos from near surface to near bottom with a number of tow-yos between each station. The method for contouring was inverse distance to the second power; if no data were encountered horizontally for 500 m or vertically for 3 m, then the section is blanked out and not contoured. The minimum as well as maximum values encountered on a track are provided. Within a survey, the contour intervals are constant.

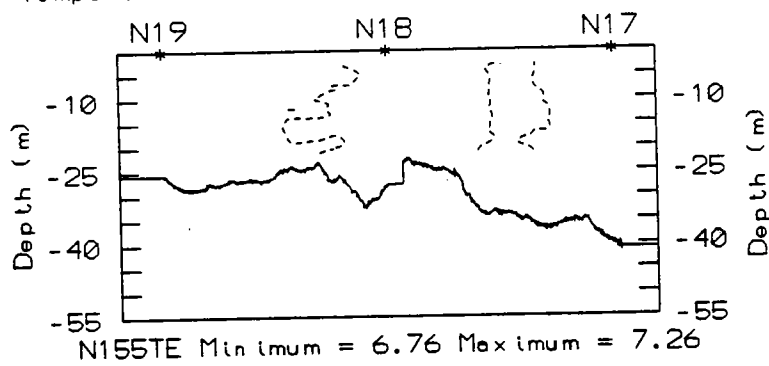
For the December 1992 survey, the overall minima/maxima and contour intervals were as follows:

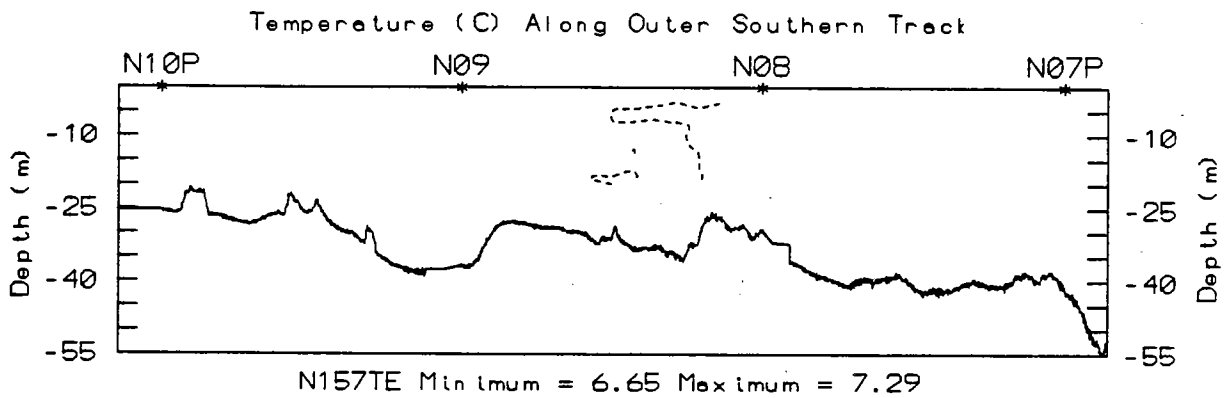
<u>Parameter</u>	<u>Minima</u>	<u>Maxima</u>	<u>Contour interval</u>
Temperature	6.5 °C	7.1 °C	0.2 °C
Sigma-T	24.85	25.0	0.05
Chlorophyll	0.3 µg L ⁻¹	1.8 µg L ⁻¹	0.3 µg L ⁻¹

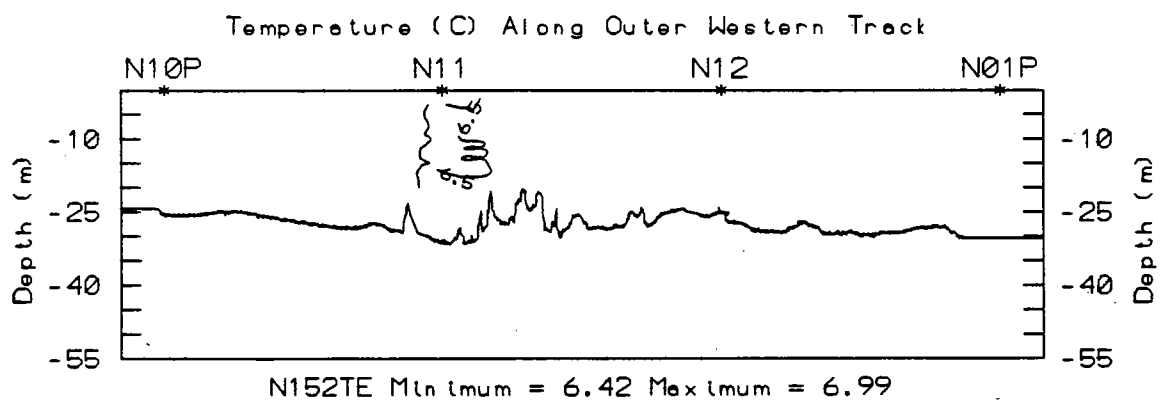




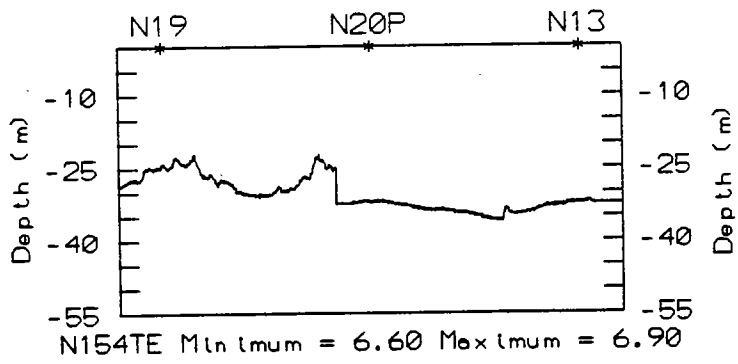
Temperature (C) Along Inner Southern Track



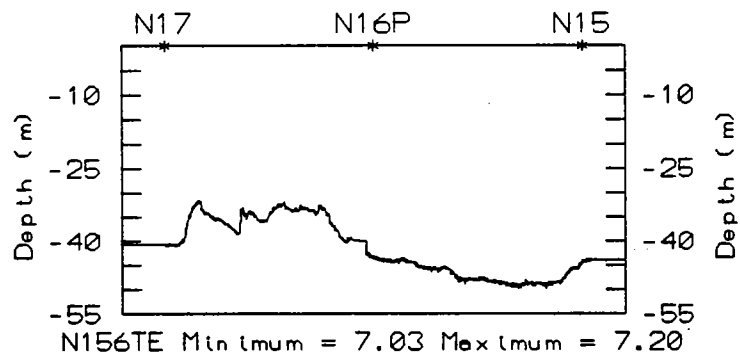


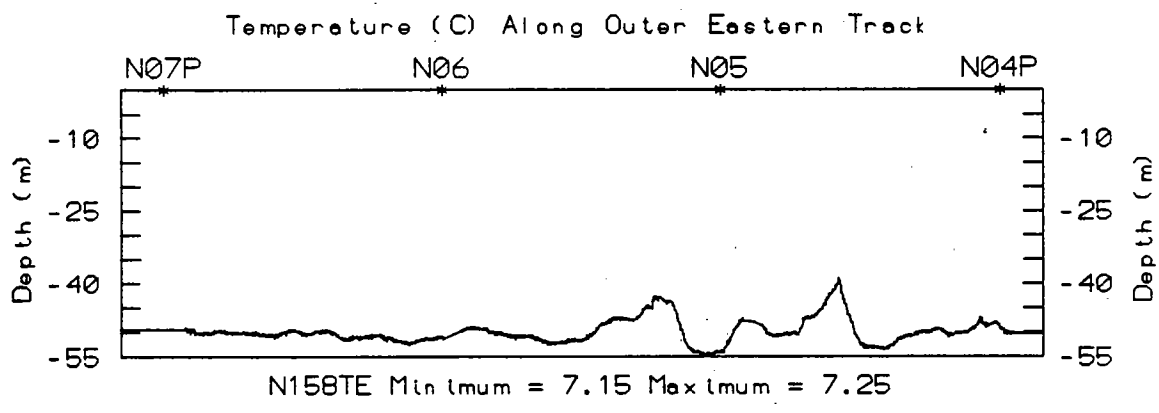


Temperature (C) Along Inner Western Track



Temperature (C) Along Inner Eastern Track





APPENDIX E

METABOLISM DATA AND PRODUCTIVITY—IRRADIANCE MODELING

Part 1

¹⁴C Incubation Data

Table E1-1 includes data from the February (W9301), March (W9302), and April (W9304) surveys. The table includes data for samples from the Bioproductivity stations that were incubated from surface and chlorophyll maximum depths (dark and light bottles). ¹⁴C-Production was calculated using measured DIC and after subtraction of the mean (n=3) dark bottle uptake rates as described in the text report. Where ¹⁴C (DPM) for a dark bottle are labeled with an "s" qualifies the data were suspect and not used in calculating production.

Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}/\text{m}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ² /hr)	Stock (DPM)
W9301	F01P	25-FEB-93	1410	3.08	W93010415					25.9	5.8		3493883.0
W9301	F01P	25-FEB-93	1410	3.08	W93010415	-3	DARK	0	705.1				
W9301	F01P	25-FEB-93	1410	3.08	W93010415	-2	DARK	0	500.2				
W9301	F01P	25-FEB-93	1410	3.08	W93010415	-1	DARK	0	673.7				
W9301	F01P	25-FEB-93	1410	3.08	W93010415	1	LIGHT	1181	18304.2			23.6	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	2	LIGHT	1556	17641.1			22.7	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	3	LIGHT	935	21149.5			27.4	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	4	LIGHT	1224	19521.0			25.2	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	5	LIGHT	464	40211.7			52.8	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	6	LIGHT	294	20301.0			26.2	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	7	LIGHT	188	19153.0			24.7	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	8	LIGHT	87	13332.0			16.9	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	9	LIGHT	46	5648.0			6.7	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	10	LIGHT	47	7462.5			9.1	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	11	LIGHT	8	1245.3			0.8	
W9301	F01P	25-FEB-93	1410	3.08	W93010415	12	LIGHT	6	1058.9			0.6	
W9301	F01P	25-FEB-93	1408	11.99	W93010413					25.9	5.8		3493883.0
W9301	F01P	25-FEB-93	1408	11.99	W93010413	-3	DARK	0	266.5				
W9301	F01P	25-FEB-93	1408	11.99	W93010413	-2	DARK	0	251.0				
W9301	F01P	25-FEB-93	1408	11.99	W93010413	-1	DARK	0	393.5				
W9301	F01P	25-FEB-93	1408	11.99	W93010413	1	LIGHT	1166	21711.5			28.6	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	2	LIGHT	1707	18550.7			24.4	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	3	LIGHT	726	25544.6			33.7	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	4	LIGHT	442	51441.4			68.3	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	5	LIGHT	532	44975.5			59.7	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	6	LIGHT	235	18633.1			24.5	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	7	LIGHT	282	22414.7			29.5	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	8	LIGHT	338	22008.7			29.0	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	9	LIGHT	107	6032.9			7.7	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	10	LIGHT	45	5178.5			6.5	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	11	LIGHT	6	1033.2			1.0	
W9301	F01P	25-FEB-93	1408	11.99	W93010413	12	LIGHT	3	420.8			0.2	
W9301	F02P	25-FEB-93	1122	2.81	W93010397					26.2	6.0		3493883.0
W9301	F02P	25-FEB-93	1122	2.81	W93010397	-3	DARK	0	1359.9				
W9301	F02P	25-FEB-93	1122	2.81	W93010397	-2	DARK	0	584.6				
W9301	F02P	25-FEB-93	1122	2.81	W93010397	-1	DARK	0	996.8				
W9301	F02P	25-FEB-93	1122	2.81	W93010397	1	LIGHT	1200	20600.2			26.0	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	2	LIGHT	915	21520.5			27.2	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	3	LIGHT	1331	18769.9			23.6	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	4	LIGHT	619	23067.6			29.2	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	5	LIGHT	357	36618.9			47.0	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}/\text{m}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ² /hr)	Stock (DPM)
W9301	F02P	25-FEB-93	1122	2.81	W93010397	6	LIGHT	225	19391.1			24.4	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	7	LIGHT	270	20029.8			25.2	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	8	LIGHT	71	12323.2			15.1	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	9	LIGHT	41	7429.8			8.7	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	10	LIGHT	27	5335.2			6.0	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	11	LIGHT	4	1497.4			0.9	
W9301	F02P	25-FEB-93	1122	2.81	W93010397	12	LIGHT	4	1342.8			0.7	
W9301	F02P	25-FEB-93	1120	12.14	W93010395					26.2	6.0		3493883.0
W9301	F02P	25-FEB-93	1120	12.14	W93010395	-3	DARK	0	518.0				
W9301	F02P	25-FEB-93	1120	12.14	W93010395	-2	DARK	0	1327.6	s			
W9301	F02P	25-FEB-93	1120	12.14	W93010395	-1	DARK	0	602.3				
W9301	F02P	25-FEB-93	1120	12.14	W93010395	1	LIGHT	1403	21174.3			27.0	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	2	LIGHT	969	23004.6			29.4	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	3	LIGHT	377	34566.6			44.6	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	4	LIGHT	399	34491.5			44.5	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	5	LIGHT	229	23508.9			30.1	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	6	LIGHT	258	21438.0			27.4	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	7	LIGHT	145	19519.7			26.8	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	8	LIGHT	33	6656.2			8.0	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	9	LIGHT	19	7684.7			9.3	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	10	LIGHT	2	529.5			-0.0	
W9301	F02P	25-FEB-93	1120	12.14	W93010395	11	LIGHT	5	1200.8			0.8	
W9301	F13P	24-FEB-93	1009	2.36	W93010278					26.1	6.0		3849497.0
W9301	F13P	24-FEB-93	1009	2.36	W93010278	-3	DARK	0	1268.4	s			
W9301	F13P	24-FEB-93	1009	2.36	W93010278	-2	DARK	0	362.0				
W9301	F13P	24-FEB-93	1009	2.36	W93010278	-1	DARK	0	489.3				
W9301	F13P	24-FEB-93	1009	2.36	W93010278	1	LIGHT	653	3658.7			3.8	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	2	LIGHT	1051	3147.3			3.2	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	3	LIGHT	497	3350.1			3.5	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	4	LIGHT	259	3299.0			3.4	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	5	LIGHT	233	3122.5			3.2	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	6	LIGHT	156	2404.7			2.3	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	7	LIGHT	204	2975.3			3.0	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	8	LIGHT	53	1857.5			1.7	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	9	LIGHT	37	1415.1			1.2	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	10	LIGHT	17	1131.2			0.8	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	11	LIGHT	4	312.1			-0.1	
W9301	F13P	24-FEB-93	1009	2.36	W93010278	12	LIGHT	5	316.3			-0.1	
W9301	F13P	24-FEB-93	1006	5.85	W93010276					26.0	6.0		3849497.0
W9301	F13P	24-FEB-93	1006	5.85	W93010276	-3	DARK	0	687.5				
W9301	F13P	24-FEB-93	1006	5.85	W93010276	-2	DARK	0	526.7				

Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9301	F13P	24-FEB-93	1006	5.85	W93010276	-1	DARK	0	1803.2				
W9301	F13P	24-FEB-93	1006	5.85	W93010276	1	LIGHT	659	3686.1				3.6
W9301	F13P	24-FEB-93	1006	5.85	W93010276	2	LIGHT	1031	3190.9				3.1
W9301	F13P	24-FEB-93	1006	5.85	W93010276	3	LIGHT	751	3265.0				3.1
W9301	F13P	24-FEB-93	1006	5.85	W93010276	4	LIGHT	398	4523.0				4.6
W9301	F13P	24-FEB-93	1006	5.85	W93010276	5	LIGHT	263	8470.1				9.3
W9301	F13P	24-FEB-93	1006	5.85	W93010276	6	LIGHT	156	3461.2				3.4
W9301	F13P	24-FEB-93	1006	5.85	W93010276	7	LIGHT	136	3208.1				3.1
W9301	F13P	24-FEB-93	1006	5.85	W93010276	8	LIGHT	94	2495.9				2.2
W9301	F13P	24-FEB-93	1006	5.85	W93010276	9	LIGHT	27	1380.5				0.9
W9301	F13P	24-FEB-93	1006	5.85	W93010276	10	LIGHT	24	1321.9				0.8
W9301	F13P	24-FEB-93	1006	5.85	W93010276	11	LIGHT	2	245.7				-0.4
W9301	F13P	24-FEB-93	1006	5.85	W93010276	12	LIGHT	5	315.2				-0.3
W9301	F23P	23-FEB-93	0718	2.13	W93010066					25.2	5.9		3818626.0
W9301	F23P	23-FEB-93	0718	2.13	W93010066	-3	DARK	0	446.3				
W9301	F23P	23-FEB-93	0718	2.13	W93010066	-2	DARK	0	492.5				
W9301	F23P	23-FEB-93	0718	2.13	W93010066	-1	DARK	0	461.0				
W9301	F23P	23-FEB-93	0718	2.13	W93010066	1	LIGHT	602	3443.3				3.6
W9301	F23P	23-FEB-93	0718	2.13	W93010066	2	LIGHT	753	3257.3				3.4
W9301	F23P	23-FEB-93	0718	2.13	W93010066	3	LIGHT	761	3219.1				3.3
W9301	F23P	23-FEB-93	0718	2.13	W93010066	4	LIGHT	1069	3114.3				3.2
W9301	F23P	23-FEB-93	0718	2.13	W93010066	5	LIGHT	296	3123.8				3.2
W9301	F23P	23-FEB-93	0718	2.13	W93010066	6	LIGHT	193	2806.2				2.8
W9301	F23P	23-FEB-93	0718	2.13	W93010066	7	LIGHT	126	2528.5				2.5
W9301	F23P	23-FEB-93	0718	2.13	W93010066	8	LIGHT	92	1956.5				1.8
W9301	F23P	23-FEB-93	0718	2.13	W93010066	9	LIGHT	30	1281.9				1.0
W9301	F23P	23-FEB-93	0718	2.13	W93010066	10	LIGHT	34	1792.0				1.6
W9301	F23P	23-FEB-93	0718	2.13	W93010066	11	LIGHT	7	468.9				0.0
W9301	F23P	23-FEB-93	0718	2.13	W93010066	12	LIGHT	6	818.0				0.4
W9301	F23P	23-FEB-93	0716	8.90	W93010064					26.0	5.9		3818626.0
W9301	F23P	23-FEB-93	0716	8.90	W93010064	-3	DARK	0	737.2				
W9301	F23P	23-FEB-93	0716	8.90	W93010064	-2	DARK	0	711.0				
W9301	F23P	23-FEB-93	0716	8.90	W93010064	-1	DARK	0	717.3				
W9301	F23P	23-FEB-93	0716	8.90	W93010064	1	LIGHT	807	4900.8				5.0
W9301	F23P	23-FEB-93	0716	8.90	W93010064	2	LIGHT	1104	3879.6				3.8
W9301	F23P	23-FEB-93	0716	8.90	W93010064	3	LIGHT	475	3684.7				3.6
W9301	F23P	23-FEB-93	0716	8.90	W93010064	4	LIGHT	333	5163.3				5.4
W9301	F23P	23-FEB-93	0716	8.90	W93010064	5	LIGHT	350	5138.1				5.3
W9301	F23P	23-FEB-93	0716	8.90	W93010064	6	LIGHT	213	4773.8				4.9
W9301	F23P	23-FEB-93	0716	8.90	W93010064	7	LIGHT	162	3348.4				3.2
W9301	F23P	23-FEB-93	0716	8.90	W93010064	8	LIGHT	204	3526.7				3.4

Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9301	F23P	23-FEB-93	0716	8.90	W93010064	9	LIGHT	28	1485.7			0.9	
W9301	F23P	23-FEB-93	0716	8.90	W93010064	10	LIGHT	14	1092.6			0.4	
W9301	F23P	23-FEB-93	0716	8.90	W93010064	11	LIGHT	6	784.3			0.1	
W9301	F23P	23-FEB-93	0716	8.90	W93010064	12	LIGHT	3	497.5			-0.3	
W9301	N01P	24-FEB-93	0613	1.64	W93010236					26.1	6.0		3849497.0
W9301	N01P	24-FEB-93	0613	1.64	W93010236	-3	DARK	0	275.5				
W9301	N01P	24-FEB-93	0613	1.64	W93010236	-2	DARK	0	943.0				
W9301	N01P	24-FEB-93	0613	1.64	W93010236	-1	DARK	0	267.6				
W9301	N01P	24-FEB-93	0613	1.64	W93010236	1	LIGHT	796	3227.5			3.5	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	2	LIGHT	1124	2537.1			2.7	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	3	LIGHT	1498	2226.0			2.3	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	4	LIGHT	966	3595.6			4.0	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	5	LIGHT	401	6409.7			7.4	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	6	LIGHT	273	3375.5			3.7	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	7	LIGHT	175	2875.4			3.1	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	8	LIGHT	81	3432.7			3.8	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	9	LIGHT	43	3447.8			3.8	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	10	LIGHT	44	2485.6			2.7	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	11	LIGHT	8	448.0			0.2	
W9301	N01P	24-FEB-93	0613	1.64	W93010236	12	LIGHT	5	478.9			0.2	
W9301	N01P	24-FEB-93	0611	12.57	W93010234					25.7	6.0		3849497.0
W9301	N01P	24-FEB-93	0611	12.57	W93010234	-3	DARK	0	193.8				
W9301	N01P	24-FEB-93	0611	12.57	W93010234	-2	DARK	0	257.5				
W9301	N01P	24-FEB-93	0611	12.57	W93010234	-1	DARK	0	263.0				
W9301	N01P	24-FEB-93	0611	12.57	W93010234	1	LIGHT	1102	3269.5			3.6	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	2	LIGHT	1489	1740.3			1.8	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	3	LIGHT	639	4154.0			4.6	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	4	LIGHT	377	3251.6			3.6	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	5	LIGHT	412	7541.6			8.6	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	6	LIGHT	219	2322.7			2.5	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	7	LIGHT	262	4104.6			4.6	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	8	LIGHT	314	3757.9			4.1	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	9	LIGHT	99	2230.3			2.3	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	10	LIGHT	42	871.4			0.7	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	11	LIGHT	6	466.9			0.3	
W9301	N01P	24-FEB-93	0611	12.57	W93010234	12	LIGHT	3	588.2			0.4	
W9301	N04P	24-FEB-93	0727	4.37	W93010252					26.2	6.0		3849497.0
W9301	N04P	24-FEB-93	0727	4.37	W93010252	-3	DARK	0	3064.3				
W9301	N04P	24-FEB-93	0727	4.37	W93010252	-2	DARK	0	1231.1				
W9301	N04P	24-FEB-93	0727	4.37	W93010252	-1	DARK	0	3371.2				
W9301	N04P	24-FEB-93	0727	4.37	W93010252	1	LIGHT	1088	3247.1			0.8	

Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM) (mg C/L)
W9301	N04P	24-FEB-93	0727	4.37	W93010252	2	LIGHT	1174	2785.1			0.3	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	3	LIGHT	839	3490.8			1.1	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	4	LIGHT	533	6279.3			4.4	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	5	LIGHT	298	7338.1			5.7	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	6	LIGHT	199	3447.2			1.1	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	7	LIGHT	239	3906.6			1.6	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	8	LIGHT	62	2441.8			-0.1	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	9	LIGHT	37	1579.7			-1.2	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	10	LIGHT	24	2325.0			-0.3	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	11	LIGHT	3	317.5			-2.7	
W9301	N04P	24-FEB-93	0727	4.37	W93010252	12	LIGHT	3	654.1			-2.3	
W9301	N04P	24-FEB-93	0725	20.82	W93010250					26.3	6.0		3849497.0
W9301	N04P	24-FEB-93	0725	20.82	W93010250	-3	DARK	0	1440.7				
W9301	N04P	24-FEB-93	0725	20.82	W93010250	-2	DARK	0	1895.3				
W9301	N04P	24-FEB-93	0725	20.82	W93010250	-1	DARK	0	1034.1				
W9301	N04P	24-FEB-93	0725	20.82	W93010250	1	LIGHT	1150	3213.0			2.1	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	2	LIGHT	1198	2881.3			1.7	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	3	LIGHT	862	3409.6			2.3	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	4	LIGHT	290	4181.8			3.2	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	5	LIGHT	318	5120.7			4.4	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	6	LIGHT	203	3552.6			2.5	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	7	LIGHT	229	3818.1			2.8	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	8	LIGHT	128	3931.0			2.9	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	9	LIGHT	17	3110.1			2.0	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	10	LIGHT	29	1860.6			0.5	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	11	LIGHT	2	390.5			-1.3	
W9301	N04P	24-FEB-93	0725	20.82	W93010250	12	LIGHT	4	782.8			-0.8	
W9301	N07P	24-FEB-93	0854	2.10	W93010264					26.2	6.0		3849497.0
W9301	N07P	24-FEB-93	0854	2.10	W93010264	-3	DARK	0	215.5				
W9301	N07P	24-FEB-93	0854	2.10	W93010264	-2	DARK	0	439.8				
W9301	N07P	24-FEB-93	0854	2.10	W93010264	-1	DARK	0	203.9				
W9301	N07P	24-FEB-93	0854	2.10	W93010264	1	LIGHT	583	4225.3			4.7	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	2	LIGHT	770	4822.2			5.4	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	3	LIGHT	1088	3935.1			4.3	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	4	LIGHT	772	4188.8			4.6	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	5	LIGHT	302	3819.8			4.2	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	6	LIGHT	198	3623.7			4.0	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	7	LIGHT	129	4680.1			5.2	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	8	LIGHT	94	2844.2			3.0	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	9	LIGHT	30	2439.8			2.6	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	10	LIGHT	35	2502.7			2.6	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}/\text{m}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9301	N07P	24-FEB-93	0854	2.10	W93010264	11	LIGHT	6	529.1			0.3	
W9301	N07P	24-FEB-93	0854	2.10	W93010264	12	LIGHT	7	717.0			0.5	
W9301	N07P	24-FEB-93	0851	16.06	W93010262					26.3	6.0		3849497.0
W9301	N07P	24-FEB-93	0851	16.06	W93010262	-3	DARK	0	286.0				
W9301	N07P	24-FEB-93	0851	16.06	W93010262	-2	DARK	0	513.6				
W9301	N07P	24-FEB-93	0851	16.06	W93010262	-1	DARK	0	734.6				
W9301	N07P	24-FEB-93	0851	16.06	W93010262	1	LIGHT	826	4380.9			4.6	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	2	LIGHT	1106	3118.6			3.1	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	3	LIGHT	510	4631.9			4.9	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	4	LIGHT	322	4549.8			4.8	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	5	LIGHT	350	3697.6			3.8	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	6	LIGHT	219	3920.1			4.1	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	7	LIGHT	167	3389.9			3.4	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	8	LIGHT	210	4525.7			4.8	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	9	LIGHT	28	2574.5			2.5	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	10	LIGHT	15	1460.7			1.1	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	11	LIGHT	6	576.6			0.1	
W9301	N07P	24-FEB-93	0851	16.06	W93010262	12	LIGHT	3	396.5			-0.1	
W9301	N10P	23-FEB-93	1051	2.12	W93010117					26.0	6.1		3818626.0
W9301	N10P	23-FEB-93	1051	2.12	W93010117	-3	DARK	0	289.2				
W9301	N10P	23-FEB-93	1051	2.12	W93010117	-2	DARK	0	351.2				
W9301	N10P	23-FEB-93	1051	2.12	W93010117	-1	DARK	0	446.2				
W9301	N10P	23-FEB-93	1051	2.12	W93010117	1	LIGHT	764	9732.7			11.0	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	2	LIGHT	1224	4557.8			4.9	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	3	LIGHT	567	4192.3			4.5	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	4	LIGHT	261	4990.4			5.5	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	5	LIGHT	296	5574.6			6.1	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	6	LIGHT	176	4372.6			4.7	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	7	LIGHT	42	5491.5			6.0	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	8	LIGHT	19	1389.1			1.2	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	9	LIGHT	59	3915.9			4.2	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	10	LIGHT	233	5048.4			5.5	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	11	LIGHT	5	1694.1			1.6	
W9301	N10P	23-FEB-93	1051	2.12	W93010117	12	LIGHT	5	6299.2			7.0	
W9301	N10P	23-FEB-93	1049	7.15	W93010115					26.2	6.1		3818626.0
W9301	N10P	23-FEB-93	1049	7.15	W93010115	-3	DARK	0	738.5				
W9301	N10P	23-FEB-93	1049	7.15	W93010115	-2	DARK	0	335.4				
W9301	N10P	23-FEB-93	1049	7.15	W93010115	-1	DARK	0	877.7				
W9301	N10P	23-FEB-93	1049	7.15	W93010115	1	LIGHT	772	5024.9			5.2	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	2	LIGHT	1113	4373.5			4.4	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	3	LIGHT	826	4965.3			5.1	

Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM) (mg C/L)
W9301	N10P	23-FEB-93	1049	7.15	W93010115	4	LIGHT	445	6193.9			6.6	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	5	LIGHT	326	6648.0			7.1	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	6	LIGHT	176	1013.3			0.4	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	7	LIGHT	106	5339.1			5.6	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	8	LIGHT	154	5111.5			5.3	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	9	LIGHT	30	2379.7			2.1	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	10	LIGHT	27	2507.3			2.2	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	11	LIGHT	2	805.4			0.2	
W9301	N10P	23-FEB-93	1049	7.15	W93010115	12	LIGHT	6	5468.5			5.7	
W9301	N16P	23-FEB-93	0950	2.10	W93010101					26.4	6.1		3818626.0
W9301	N16P	23-FEB-93	0950	2.10	W93010101	-2	DARK	0	454.7				
W9301	N16P	23-FEB-93	0950	2.10	W93010101	-1	DARK	0	272.7				
W9301	N16P	23-FEB-93	0950	2.10	W93010101	1	LIGHT	703	5032.9			5.6	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	2	LIGHT	1006	5860.8			6.6	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	3	LIGHT	1336	5197.2			5.8	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	4	LIGHT	820	5404.3			6.0	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	5	LIGHT	382	5954.8			6.7	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	6	LIGHT	239	5789.7			6.5	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	7	LIGHT	153	5188.1			5.8	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	8	LIGHT	71	3389.8			3.6	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	9	LIGHT	37	1671.9			1.6	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	10	LIGHT	38	1590.2			1.5	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	11	LIGHT	7	521.0			0.2	
W9301	N16P	23-FEB-93	0950	2.10	W93010101	12	LIGHT	5	661.7			0.0	
W9301	N16P	23-FEB-93	0947	21.20	W93010099					26.4	6.1		3818626.0
W9301	N16P	23-FEB-93	0947	21.20	W93010099	-3	DARK	0	368.3				
W9301	N16P	23-FEB-93	0947	21.20	W93010099	-2	DARK	0	483.5				
W9301	N16P	23-FEB-93	0947	21.20	W93010099	-1	DARK	0	156.5				
W9301	N16P	23-FEB-93	0947	21.20	W93010099	1	LIGHT	882	6253.8			7.1	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	2	LIGHT	1338	4914.3			5.5	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	3	LIGHT	520	6464.2			7.3	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	4	LIGHT	266	14346.7			16.7	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	5	LIGHT	410	9231.6			10.6	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	6	LIGHT	191	6857.9			7.8	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	7	LIGHT	230	8533.2			9.8	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	8	LIGHT	274	7740.3			8.8	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	9	LIGHT	87	2907.4			3.1	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	10	LIGHT	36	2793.9			2.9	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	11	LIGHT	5	834.4			0.6	
W9301	N16P	23-FEB-93	0947	21.20	W93010099	12	LIGHT	3	1024.4			0.8	
W9301	N20P	23-FEB-93	0855	2.70	W93010089					26.5	5.8		3818626.0

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9301	N20P	23-FEB-93	0855	2.70	W93010089	-3	DARK	0	372.0				
W9301	N20P	23-FEB-93	0855	2.70	W93010089	-2	DARK	0	631.6				
W9301	N20P	23-FEB-93	0855	2.70	W93010089	-1	DARK	0	472.6				
W9301	N20P	23-FEB-93	0855	2.70	W93010089	1	LIGHT	1072	3446.3			3.7	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	2	LIGHT	1155	3347.8			3.6	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	3	LIGHT	779	3003.3			3.1	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	4	LIGHT	492	4019.6			4.4	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	5	LIGHT	257	3479.8			3.7	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	6	LIGHT	197	3898.5			4.3	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	7	LIGHT	232	1347.3			1.1	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	8	LIGHT	61	1161.0			0.8	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	9	LIGHT	36	1999.9			1.9	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	10	LIGHT	23	3847.9			4.2	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	11	LIGHT	3	315.2			-0.2	
W9301	N20P	23-FEB-93	0855	2.70	W93010089	12	LIGHT	3	468.7			-0.0	
W9301	N20P	23-FEB-93	0853	13.60	W93010087					26.3	5.8		3818626.0
W9301	N20P	23-FEB-93	0853	13.60	W93010087	-3	DARK	0	210.6				
W9301	N20P	23-FEB-93	0853	13.60	W93010087	-2	DARK	0	1411.9	s			
W9301	N20P	23-FEB-93	0853	13.60	W93010087	-1	DARK	0	210.2				
W9301	N20P	23-FEB-93	0853	13.60	W93010087	1	LIGHT	1069	4261.3			5.0	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	2	LIGHT	1173	2953.6			3.4	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	3	LIGHT	795	3409.9			4.0	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	4	LIGHT	244	3795.4			4.4	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	5	LIGHT	302	3915.2			4.6	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	6	LIGHT	197	3838.9			4.5	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	7	LIGHT	222	3819.0			4.5	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	8	LIGHT	124	3166.9			3.7	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	9	LIGHT	28	1310.7			1.4	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	10	LIGHT	16	779.6			0.7	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	11	LIGHT	1	357.8			0.2	
W9301	N20P	23-FEB-93	0853	13.60	W93010087	12	LIGHT	4	478.3			0.3	
W9301	N20P	23-FEB-93	0853	13.60	W93010087					25.9	5.9		5491087.5
W9302	F01P	11-MAR-93	1405	0.86	W93020527								
W9302	F01P	11-MAR-93	1405	0.86	W93020527	-3	DARK	0	705.1				
W9302	F01P	11-MAR-93	1405	0.86	W93020527	-2	DARK	0	500.2				
W9302	F01P	11-MAR-93	1405	0.86	W93020527	-1	DARK	0	673.7				
W9302	F01P	11-MAR-93	1405	0.86	W93020527	1	LIGHT	1365	21702.8			17.7	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	2	LIGHT	991	21522.1			17.6	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	3	LIGHT	1527	21164.2			17.3	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	4	LIGHT	308	21405.9			17.5	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	5	LIGHT	630	24347.9			19.9	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	6	LIGHT	248	21684.1			17.7	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ² /hr)	Stock (DPM)
W9302	F01P	11-MAR-93	1405	0.86	W93020527	7	LIGHT	299	22303.4			18.2	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	8	LIGHT	78	11569.9			9.2	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	9	LIGHT	47	5873.1			4.4	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	10	LIGHT	30	5313.6			3.9	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	11	LIGHT	4	712.3			0.1	
W9302	F01P	11-MAR-93	1405	0.86	W93020527	12	LIGHT	4	838.7			0.2	
W9302	F01P	11-MAR-93	1402	8.19	W93020525					25.9	5.9		5491087.5
W9302	F01P	11-MAR-93	1402	8.19	W93020525	-3	DARK	0	341.2				
W9302	F01P	11-MAR-93	1402	8.19	W93020525	-2	DARK	0	700.3				
W9302	F01P	11-MAR-93	1402	8.19	W93020525	-1	DARK	0	700.8				
W9302	F01P	11-MAR-93	1402	8.19	W93020525	1	LIGHT	1397	17253.3			14.0	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	2	LIGHT	1473	15538.4			12.6	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	3	LIGHT	1006	15091.2			12.2	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	4	LIGHT	333	23458.9			19.2	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	5	LIGHT	325	20195.8			16.5	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	6	LIGHT	254	21975.5			18.0	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	7	LIGHT	286	21199.8			17.3	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	8	LIGHT	160	14960.8			12.1	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	9	LIGHT	36	6251.6			4.8	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	10	LIGHT	21	2599.3			1.7	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	11	LIGHT	2	561.0			-0.0	
W9302	F01P	11-MAR-93	1402	8.19	W93020525	12	LIGHT	3	1245.8			0.6	
W9302	F02P	11-MAR-93	1203	1.88	W93020500					25.7	5.9		5491087.5
W9302	F02P	11-MAR-93	1203	1.88	W93020500	-3	DARK	0	576.1				
W9302	F02P	11-MAR-93	1203	1.88	W93020500	-2	DARK	0	1050.9				
W9302	F02P	11-MAR-93	1203	1.88	W93020500	-1	DARK	0	1289.4				
W9302	F02P	11-MAR-93	1203	1.88	W93020500	1	LIGHT	732	27417.3			22.2	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	2	LIGHT	983	21919.5			17.6	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	3	LIGHT	1000	24662.9			19.9	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	4	LIGHT	1397	24241.5			19.5	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	5	LIGHT	384	24610.7			19.9	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	6	LIGHT	253	25126.4			20.3	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	7	LIGHT	165	21431.6			17.2	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	8	LIGHT	120	14103.8			11.0	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	9	LIGHT	39	8336.3			6.2	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	10	LIGHT	45	7864.6			5.8	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	11	LIGHT	9	1316.2			0.3	
W9302	F02P	11-MAR-93	1203	1.88	W93020500	12	LIGHT	7	1376.0			0.3	
W9302	F02P	11-MAR-93	1201	9.19	W93020498					25.8	5.9		5491087.5
W9302	F02P	11-MAR-93	1201	9.19	W93020498	-3	DARK	0	1486.1				
W9302	F02P	11-MAR-93	1201	9.19	W93020498	-2	DARK	0	670.4				

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9302	F02P	11-MAR-93	1201	9.19	W93020498	-1	DARK	0	1615.9				
W9302	F02P	11-MAR-93	1201	9.19	W93020498	1	LIGHT	1048	25642.2			20.6	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	2	LIGHT	1465	18673.5			14.7	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	3	LIGHT	657	20476.7			16.2	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	4	LIGHT	396	19183.0			15.1	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	5	LIGHT	413	18878.0			14.9	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	6	LIGHT	379	20518.8			16.3	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	7	LIGHT	213	18102.8			14.2	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	8	LIGHT	268	23962.7			19.2	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	9	LIGHT	36	8792.2			6.4	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	10	LIGHT	19	4911.1			3.1	
W9302	F02P	11-MAR-93	1201	9.19	W93020498	11	LIGHT	7	516.8			-0.6	
W9302	F13P	10-MAR-93	1159	1.61	W93020361					26.0	6.0		5450759.7
W9302	F13P	10-MAR-93	1159	1.61	W93020361	-3	DARK	0	684.8				
W9302	F13P	10-MAR-93	1159	1.61	W93020361	-2	DARK	0	1501.5	s			
W9302	F13P	10-MAR-93	1159	1.61	W93020361	-1	DARK	0	538.5				
W9302	F13P	10-MAR-93	1159	1.61	W93020361	1	LIGHT	828	3150.0			2.1	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	2	LIGHT	620	3911.8			2.8	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	3	LIGHT	1373	3664.4			2.5	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	4	LIGHT	284	3119.3			2.1	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	5	LIGHT	288	3532.2			2.4	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	6	LIGHT	203	3361.4			2.3	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	7	LIGHT	269	3755.9			2.6	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	8	LIGHT	68	1485.1			0.7	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	9	LIGHT	48	2233.9			1.4	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	10	LIGHT	22	617.7			0.0	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	11	LIGHT	5	743.9			0.1	
W9302	F13P	10-MAR-93	1159	1.61	W93020361	12	LIGHT	6	622.2			0.0	
W9302	F13P	10-MAR-93	1157	10.08	W93020359					25.9	6.0		5450759.7
W9302	F13P	10-MAR-93	1157	10.08	W93020359	-3	DARK	0	177.9				
W9302	F13P	10-MAR-93	1157	10.08	W93020359	-2	DARK	0	306.0				
W9302	F13P	10-MAR-93	1157	10.08	W93020359	-1	DARK	0	604.4				
W9302	F13P	10-MAR-93	1157	10.08	W93020359	1	LIGHT	863	3262.0			2.4	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	2	LIGHT	1344	3608.0			2.7	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	3	LIGHT	956	2974.6			2.2	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	4	LIGHT	497	3562.4			2.7	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	5	LIGHT	325	3412.3			2.5	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	6	LIGHT	203	2935.0			2.1	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	7	LIGHT	177	3140.5			2.3	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	8	LIGHT	123	2731.9			2.0	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	9	LIGHT	35	1634.9			1.1	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPN)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ² /hr)	Stock (DPN)
W9302	F13P	10-MAR-93	1157	10.08	W93020359	10	LIGHT	31	1351.1			0.8	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	11	LIGHT	2	179.5			-0.2	
W9302	F13P	10-MAR-93	1157	10.08	W93020359	12	LIGHT	6	224.3			-0.1	
W9302	F23P	09-MAR-93	0655	1.76	W93020018					26.4	6.0		5589164.7
W9302	F23P	09-MAR-93	0655	1.76	W93020018	-3	DARK	0	1178.4				
W9302	F23P	09-MAR-93	0655	1.76	W93020018	-2	DARK	0	1124.2				
W9302	F23P	09-MAR-93	0655	1.76	W93020018	-1	DARK	0	927.2				
W9302	F23P	09-MAR-93	0655	1.76	W93020018	1	LIGHT	842	6091.3			4.1	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	2	LIGHT	848	5114.9			3.3	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	3	LIGHT	1204	5654.3			3.8	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	4	LIGHT	339	5508.2			3.7	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	5	LIGHT	214	4876.0			3.1	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	6	LIGHT	140	5433.4			3.6	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	7	LIGHT	102	2804.1			1.4	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	8	LIGHT	33	2799.8			1.4	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	9	LIGHT	38	2523.2			1.2	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	10	LIGHT	7	1083.4			0.0	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	11	LIGHT	6	1333.2			0.2	
W9302	F23P	09-MAR-93	0655	1.76	W93020018	12	LIGHT	605	5449.9			3.6	
W9302	F23P	09-MAR-93	0653	6.92	W93020016					26.3	6.0		5589164.7
W9302	F23P	09-MAR-93	0653	6.92	W93020016	-3	DARK	0	849.7				
W9302	F23P	09-MAR-93	0653	6.92	W93020016	-2	DARK	0	848.3				
W9302	F23P	09-MAR-93	0653	6.92	W93020016	-1	DARK	0	1177.0				
W9302	F23P	09-MAR-93	0653	6.92	W93020016	1	LIGHT	1240	4725.2			3.2	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	2	LIGHT	336	7074.9			5.1	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	3	LIGHT	376	6467.3			4.6	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	4	LIGHT	240	5589.6			3.9	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	5	LIGHT	180	5190.5			3.6	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	6	LIGHT	227	4938.8			3.4	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	7	LIGHT	31	2029.0			1.0	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	8	LIGHT	16	1397.0			0.5	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	9	LIGHT	6	1765.5			0.8	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	10	LIGHT	3	1058.0			0.2	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	11	LIGHT	0	0.0			-0.7	
W9302	F23P	09-MAR-93	0653	6.92	W93020016	12	LIGHT	872	5546.5			3.9	
W9302	N01P	10-MAR-93	0719	1.30	W93020289					26.2	6.0		5450759.7
W9302	N01P	10-MAR-93	0719	1.30	W93020289	-3	DARK	0	95.2				
W9302	N01P	10-MAR-93	0719	1.30	W93020289	-2	DARK	0	98.3				
W9302	N01P	10-MAR-93	0719	1.30	W93020289	-1	DARK	0	138.8				
W9302	N01P	10-MAR-93	0719	1.30	W93020289	1	LIGHT	735	4028.8			3.3	
W9302	N01P	10-MAR-93	0719	1.30	W93020289	2	LIGHT	1003	5251.2			4.3	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9302	N01P	10-MAR-93	0719	1.30	W93020289	3	LIGHT	1015	3032.5				2.5
W9302	N01P	10-MAR-93	0719	1.30	W93020289	4	LIGHT	1435	3952.5				3.2
W9302	N01P	10-MAR-93	0719	1.30	W93020289	5	LIGHT	353	4152.8				3.4
W9302	N01P	10-MAR-93	0719	1.30	W93020289	6	LIGHT	258	4648.9				3.8
W9302	N01P	10-MAR-93	0719	1.30	W93020289	7	LIGHT	169	3517.2				2.9
W9302	N01P	10-MAR-93	0719	1.30	W93020289	8	LIGHT	123	3704.8				3.0
W9302	N01P	10-MAR-93	0719	1.30	W93020289	9	LIGHT	40	1110.2				0.8
W9302	N01P	10-MAR-93	0719	1.30	W93020289	10	LIGHT	46	1609.0				1.3
W9302	N01P	10-MAR-93	0719	1.30	W93020289	11	LIGHT	9	1349.4				1.0
W9302	N01P	10-MAR-93	0719	1.30	W93020289	12	LIGHT	8	1243.9				1.0
W9302	N01P	10-MAR-93	0716	8.45	W93020287					26.2	6.0		5450759.7
W9302	N01P	10-MAR-93	0716	8.45	W93020287	-3	DARK	0	1272.0				
W9302	N01P	10-MAR-93	0716	8.45	W93020287	-2	DARK	0	76.2				
W9302	N01P	10-MAR-93	0716	8.45	W93020287	-1	DARK	0	2359.5	s			
W9302	N01P	10-MAR-93	0716	8.45	W93020287	1	LIGHT	1065	2359.6				1.4
W9302	N01P	10-MAR-93	0716	8.45	W93020287	2	LIGHT	1502	2821.9				1.8
W9302	N01P	10-MAR-93	0716	8.45	W93020287	3	LIGHT	670	3033.2				2.0
W9302	N01P	10-MAR-93	0716	8.45	W93020287	4	LIGHT	386	4314.0				3.1
W9302	N01P	10-MAR-93	0716	8.45	W93020287	5	LIGHT	410	2114.4				1.2
W9302	N01P	10-MAR-93	0716	8.45	W93020287	6	LIGHT	285	3059.2				2.0
W9302	N01P	10-MAR-93	0716	8.45	W93020287	7	LIGHT	217	1892.4				1.0
W9302	N01P	10-MAR-93	0716	8.45	W93020287	8	LIGHT	274	2682.9				1.7
W9302	N01P	10-MAR-93	0716	8.45	W93020287	9	LIGHT	37	1130.6				0.4
W9302	N01P	10-MAR-93	0716	8.45	W93020287	10	LIGHT	19	753.0				0.1
W9302	N01P	10-MAR-93	0716	8.45	W93020287	11	LIGHT	8	223.0				-0.4
W9302	N01P	10-MAR-93	0716	8.45	W93020287	12	LIGHT	4	537.5				-0.1
W9302	N04P	10-MAR-93	0954	1.36	W93020315					25.8	6.0		5450759.7
W9302	N04P	10-MAR-93	0954	1.36	W93020315	-3	DARK	0	116.3				
W9302	N04P	10-MAR-93	0954	1.36	W93020315	-2	DARK	0	144.3				
W9302	N04P	10-MAR-93	0954	1.36	W93020315	-1	DARK	0	117.5				
W9302	N04P	10-MAR-93	0954	1.36	W93020315	1	LIGHT	1395	3291.2				2.6
W9302	N04P	10-MAR-93	0954	1.36	W93020315	2	LIGHT	944	3655.6				2.9
W9302	N04P	10-MAR-93	0954	1.36	W93020315	3	LIGHT	1525	3723.2				3.0
W9302	N04P	10-MAR-93	0954	1.36	W93020315	4	LIGHT	628	3425.2				2.7
W9302	N04P	10-MAR-93	0954	1.36	W93020315	5	LIGHT	282	3385.8				2.7
W9302	N04P	10-MAR-93	0954	1.36	W93020315	6	LIGHT	252	3640.0				2.9
W9302	N04P	10-MAR-93	0954	1.36	W93020315	7	LIGHT	304	4655.7				3.8
W9302	N04P	10-MAR-93	0954	1.36	W93020315	8	LIGHT	79	1714.3				1.3
W9302	N04P	10-MAR-93	0954	1.36	W93020315	9	LIGHT	48	1016.7				0.7
W9302	N04P	10-MAR-93	0954	1.36	W93020315	10	LIGHT	30	926.0				0.7
W9302	N04P	10-MAR-93	0954	1.36	W93020315	11	LIGHT	4	350.7				0.2

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9302	N04P	10-MAR-93	0954	1.36	W93020315	12	LIGHT	4	250.4			0.1	
W9302	N04P	10-MAR-93	0951	14.33	W93020313					25.9	6.0		5450759.7
W9302	N04P	10-MAR-93	0951	14.33	W93020313	-3	DARK	0	1895.3				
W9302	N04P	10-MAR-93	0951	14.33	W93020313	-2	DARK	0	1440.7				
W9302	N04P	10-MAR-93	0951	14.33	W93020313	-1	DARK	0	1034.1				
W9302	N04P	10-MAR-93	0951	14.33	W93020313	1	LIGHT	1445	5336.2			3.2	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	2	LIGHT	1488	4435.2			2.5	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	3	LIGHT	1035	6658.6			4.3	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	4	LIGHT	332	5405.7			3.3	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	5	LIGHT	306	3643.6			1.8	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	6	LIGHT	258	5985.1			3.8	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	7	LIGHT	163	5280.8			3.2	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	8	LIGHT	291	4666.6			2.7	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	9	LIGHT	37	2126.8			0.6	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	10	LIGHT	21	1574.5			0.1	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	11	LIGHT	2	1903.3			0.4	
W9302	N04P	10-MAR-93	0951	14.33	W93020313	12	LIGHT	5	803.3			-0.5	
W9302	N07P	10-MAR-93	1056	0.99	W93020337					25.9	6.0		5450759.7
W9302	N07P	10-MAR-93	1056	0.99	W93020337	-3	DARK	0	2501.1	s			
W9302	N07P	10-MAR-93	1056	0.99	W93020337	-2	DARK	0	353.1				
W9302	N07P	10-MAR-93	1056	0.99	W93020337	-1	DARK	0	139.9				
W9302	N07P	10-MAR-93	1056	0.99	W93020337	1	LIGHT	843	4346.1			3.4	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	2	LIGHT	1267	5402.9			4.3	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	3	LIGHT	1199	2859.5			2.2	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	4	LIGHT	1737	3320.0			2.6	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	5	LIGHT	470	4018.6			3.1	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	6	LIGHT	311	3326.2			2.6	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	7	LIGHT	199	5031.0			4.0	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	8	LIGHT	92	1798.7			1.3	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	9	LIGHT	49	1722.2			1.2	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	10	LIGHT	50	1571.3			1.1	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	11	LIGHT	9	1260.3			0.8	
W9302	N07P	10-MAR-93	1056	0.99	W93020337	12	LIGHT	6	760.1			0.4	
W9302	N07P	10-MAR-93	1054	12.45	W93020335					25.8	6.0		5450759.7
W9302	N07P	10-MAR-93	1054	12.45	W93020335	-3	DARK	0	1263.8				
W9302	N07P	10-MAR-93	1054	12.45	W93020335	-2	DARK	0	239.9				
W9302	N07P	10-MAR-93	1054	12.45	W93020335	-1	DARK	0	2560.7	s			
W9302	N07P	10-MAR-93	1054	12.45	W93020335	1	LIGHT	1232	4293.1			2.9	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	2	LIGHT	1707	3589.9			2.4	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	3	LIGHT	723	4607.0			3.2	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	4	LIGHT	413	4404.2			3.0	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9302	N07P	10-MAR-93	1054	12.45	W93020335	5	LIGHT	487	5027.3			3.5	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	6	LIGHT	249	3807.4			2.5	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	7	LIGHT	299	3692.6			2.4	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	8	LIGHT	358	4775.4			3.3	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	9	LIGHT	133	1827.7			0.9	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	10	LIGHT	47	1431.6			0.6	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	11	LIGHT	7	375.4			-0.3	
W9302	N07P	10-MAR-93	1054	12.45	W93020335	12	LIGHT	3	523.9			-0.2	
W9302	N10P	09-MAR-93	1103	0.78	W93020109					25.8	6.0		5589164.7
W9302	N10P	09-MAR-93	1103	0.78	W93020109	-3	DARK	0	813.4				
W9302	N10P	09-MAR-93	1103	0.78	W93020109	-2	DARK	0	1615.9	s			
W9302	N10P	09-MAR-93	1103	0.78	W93020109	-1	DARK	0	1063.0				
W9302	N10P	09-MAR-93	1103	0.78	W93020109	1	LIGHT	1224	4670.0			3.0	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	2	LIGHT	1058	4767.5			3.1	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	3	LIGHT	1675	5148.9			3.4	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	4	LIGHT	461	4836.2			3.1	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	5	LIGHT	304	3301.3			1.9	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	6	LIGHT	195	3363.2			1.9	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	7	LIGHT	90	2336.0			1.1	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	8	LIGHT	47	58.1			-0.7	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	9	LIGHT	49	1442.7			0.4	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	10	LIGHT	9	631.7			-0.2	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	11	LIGHT	6	694.7			-0.2	
W9302	N10P	09-MAR-93	1103	0.78	W93020109	12	LIGHT	832	4843.7			3.1	
W9302	N10P	09-MAR-93	1101	10.05	W93020107					25.8	6.0		5589164.7
W9302	N10P	09-MAR-93	1101	10.05	W93020107	-3	DARK	0	2309.2				
W9302	N10P	09-MAR-93	1101	10.05	W93020107	-2	DARK	0	689.8				
W9302	N10P	09-MAR-93	1101	10.05	W93020107	-1	DARK	0	3087.3				
W9302	N10P	09-MAR-93	1101	10.05	W93020107	1	LIGHT	1278	4951.5			2.4	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	2	LIGHT	1625	4613.4			2.1	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	3	LIGHT	665	4358.3			1.9	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	4	LIGHT	392	4772.1			2.2	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	5	LIGHT	473	4663.3			2.1	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	6	LIGHT	243	4969.2			2.4	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	7	LIGHT	292	4638.8			2.1	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	8	LIGHT	349	4688.0			2.1	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	9	LIGHT	111	1174.5			-0.7	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	10	LIGHT	46	1435.7			-0.5	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	11	LIGHT	7	548.1			-1.2	
W9302	N10P	09-MAR-93	1101	10.05	W93020107	12	LIGHT	3	467.3			-1.3	
W9302	N16P	09-MAR-93	0956	0.95	W93020085					25.8	6.0		5589164.7

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}/\text{m}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9302	N16P	09-MAR-93	0956	0.95	W93020085	-3	DARK	0	1775.9				
W9302	N16P	09-MAR-93	0956	0.95	W93020085	-2	DARK	0	1639.4				
W9302	N16P	09-MAR-93	0956	0.95	W93020085	-1	DARK	0	1884.7				
W9302	N16P	09-MAR-93	0956	0.95	W93020085	1	LIGHT	1163	6623.7			3.9	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	2	LIGHT	542	7685.4			4.7	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	3	LIGHT	240	6027.9			3.4	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	4	LIGHT	240	5797.9			3.2	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	5	LIGHT	174	4771.6			2.4	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	6	LIGHT	230	5466.5			2.9	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	7	LIGHT	58	2306.3			0.4	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	8	LIGHT	41	1926.2			0.1	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	9	LIGHT	19	1189.8			-0.5	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	10	LIGHT	5	1201.9			-0.5	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	11	LIGHT	5	644.4			-0.0	
W9302	N16P	09-MAR-93	0956	0.95	W93020085	12	LIGHT	735	7026.2			4.2	
W9302	N16P	09-MAR-93	0954	7.42	W93020083					25.7	6.0		5589164.7
W9302	N16P	09-MAR-93	0954	7.42	W93020083	-3	DARK	0	604.2				
W9302	N16P	09-MAR-93	0954	7.42	W93020083	-2	DARK	0	3519.2				
W9302	N16P	09-MAR-93	0954	7.42	W93020083	-1	DARK	0	834.0				
W9302	N16P	09-MAR-93	0954	7.42	W93020083	1	LIGHT	1143	7321.5			5.3	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	2	LIGHT	798	6305.8			4.5	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	3	LIGHT	403	4511.4			3.1	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	4	LIGHT	280	6964.9			5.0	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	5	LIGHT	174	3723.9			2.4	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	6	LIGHT	152	5192.1			3.6	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	7	LIGHT	105	4053.7			2.7	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	8	LIGHT	30	1385.5			0.5	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	9	LIGHT	27	1075.4			0.3	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	10	LIGHT	2	539.2			-0.1	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	11	LIGHT	5	511.0			-0.2	
W9302	N16P	09-MAR-93	0954	7.42	W93020083	12	LIGHT	781	5942.8			4.2	
W9302	N20P	09-MAR-93	0841	0.73	W93020056					26.2	6.0		5589164.7
W9302	N20P	09-MAR-93	0841	0.73	W93020056	-3	DARK	0	479.9				
W9302	N20P	09-MAR-93	0841	0.73	W93020056	-2	DARK	0	248.9				
W9302	N20P	09-MAR-93	0841	0.73	W93020056	-1	DARK	0	866.8				
W9302	N20P	09-MAR-93	0841	0.73	W93020056	1	LIGHT	1348	2952.8			2.0	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	2	LIGHT	915	3667.4			2.6	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	3	LIGHT	555	2703.2			1.8	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	4	LIGHT	258	2757.0			1.8	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	5	LIGHT	232	2194.5			1.4	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	6	LIGHT	279	3333.2			2.3	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9302	N20P	09-MAR-93	0841	0.73	W93020056	7	LIGHT	73	1519.4			0.8	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	8	LIGHT	44	1214.9			0.6	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	9	LIGHT	28	698.2			0.1	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	10	LIGHT	4	201.3			-0.3	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	11	LIGHT	4	106.3			-0.3	
W9302	N20P	09-MAR-93	0841	0.73	W93020056	12	LIGHT	1279	3450.0			2.4	
W9302	N20P	09-MAR-93	0839	8.21	W93020054					26.2	6.0		5589164.7
W9302	N20P	09-MAR-93	0839	8.21	W93020054	-3	DARK	0	206.4				
W9302	N20P	09-MAR-93	0839	8.21	W93020054	-2	DARK	0	667.9				
W9302	N20P	09-MAR-93	0839	8.21	W93020054	-1	DARK	0	163.0				
W9302	N20P	09-MAR-93	0839	8.21	W93020054	1	LIGHT	1392	3921.9			2.9	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	2	LIGHT	924	3268.1			2.4	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	3	LIGHT	273	3561.8			2.6	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	4	LIGHT	316	3153.6			2.3	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	5	LIGHT	237	3537.4			2.6	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	6	LIGHT	267	3324.8			2.4	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	7	LIGHT	149	2936.1			2.1	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	8	LIGHT	20	971.0			0.5	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	9	LIGHT	34	899.8			0.5	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	10	LIGHT	2	127.8			-0.2	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	11	LIGHT	5	296.8			-0.0	
W9302	N20P	09-MAR-93	0839	8.21	W93020054	12	LIGHT	1360	4671.9			3.5	
W9304	F01P	08-APR-93	1007	2.40	W93040401					25.3	6.0		6215385.3
W9304	F01P	08-APR-93	1007	2.40	W93040401	-3	DARK	0	435.9				
W9304	F01P	08-APR-93	1007	2.40	W93040401	-2	DARK	0	846.6				
W9304	F01P	08-APR-93	1007	2.40	W93040401	-1	DARK	0	329.9				
W9304	F01P	08-APR-93	1007	2.40	W93040401	1	LIGHT	1281	11664.5			7.9	
W9304	F01P	08-APR-93	1007	2.40	W93040401	2	LIGHT	919	11483.5			7.8	
W9304	F01P	08-APR-93	1007	2.40	W93040401	3	LIGHT	1452	11327.6			7.7	
W9304	F01P	08-APR-93	1007	2.40	W93040401	4	LIGHT	593	10293.3			7.0	
W9304	F01P	08-APR-93	1007	2.40	W93040401	5	LIGHT	292	9336.2			6.3	
W9304	F01P	08-APR-93	1007	2.40	W93040401	6	LIGHT	231	7642.7			5.1	
W9304	F01P	08-APR-93	1007	2.40	W93040401	7	LIGHT	279	8777.6			5.9	
W9304	F01P	08-APR-93	1007	2.40	W93040401	8	LIGHT	73	4573.7			2.9	
W9304	F01P	08-APR-93	1007	2.40	W93040401	9	LIGHT	44	2453.9			1.4	
W9304	F01P	08-APR-93	1007	2.40	W93040401	10	LIGHT	28	1886.7			1.0	
W9304	F01P	08-APR-93	1007	2.40	W93040401	11	LIGHT	4	184.8			-0.3	
W9304	F01P	08-APR-93	1007	2.40	W93040401	12	LIGHT	4	272.0			-0.2	
W9304	F01P	08-APR-93	1005	12.20	W93040399					25.3	6.0		6215385.3
W9304	F01P	08-APR-93	1005	12.20	W93040399	-3	DARK	0	232.3				
W9304	F01P	08-APR-93	1005	12.20	W93040399	-2	DARK	0	196.1				

Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9304	F01P	08-APR-93	1005	12.20	W93040399	-1	DARK	0	219.3				
W9304	F01P	08-APR-93	1005	12.20	W93040399	1	LIGHT	1358	17390.9			12.2	
W9304	F01P	08-APR-93	1005	12.20	W93040399	2	LIGHT	940	17411.7			12.2	
W9304	F01P	08-APR-93	1005	12.20	W93040399	3	LIGHT	319	16350.0			11.5	
W9304	F01P	08-APR-93	1005	12.20	W93040399	4	LIGHT	355	14436.8			10.1	
W9304	F01P	08-APR-93	1005	12.20	W93040399	5	LIGHT	236	14646.0			10.3	
W9304	F01P	08-APR-93	1005	12.20	W93040399	6	LIGHT	267	13543.1			9.5	
W9304	F01P	08-APR-93	1005	12.20	W93040399	7	LIGHT	149	11543.8			8.1	
W9304	F01P	08-APR-93	1005	12.20	W93040399	8	LIGHT	34	3564.1			2.4	
W9304	F01P	08-APR-93	1005	12.20	W93040399	9	LIGHT	19	1755.0			1.1	
W9304	F01P	08-APR-93	1005	12.20	W93040399	10	LIGHT	2	243.2			0.0	
W9304	F01P	08-APR-93	1005	12.20	W93040399	11	LIGHT	5	307.3			0.1	
W9304	F02P	08-APR-93	0841	2.10	W93040379					25.3	6.0		6215385.3
W9304	F02P	08-APR-93	0841	2.10	W93040379	-3	DARK	0	447.0				
W9304	F02P	08-APR-93	0841	2.10	W93040379	-2	DARK	0	973.5				
W9304	F02P	08-APR-93	0841	2.10	W93040379	-1	DARK	0	2115.8	s			
W9304	F02P	08-APR-93	0841	2.10	W93040379	1	LIGHT	598	22028.7			15.2	
W9304	F02P	08-APR-93	0841	2.10	W93040379	2	LIGHT	794	32530.2			22.7	
W9304	F02P	08-APR-93	0841	2.10	W93040379	3	LIGHT	872	28146.1			19.6	
W9304	F02P	08-APR-93	0841	2.10	W93040379	4	LIGHT	1212	28495.3			19.8	
W9304	F02P	08-APR-93	0841	2.10	W93040379	5	LIGHT	361	26343.7			18.3	
W9304	F02P	08-APR-93	0841	2.10	W93040379	6	LIGHT	221	21239.2			14.6	
W9304	F02P	08-APR-93	0841	2.10	W93040379	7	LIGHT	145	17653.7			12.1	
W9304	F02P	08-APR-93	0841	2.10	W93040379	8	LIGHT	105	15625.5			10.6	
W9304	F02P	08-APR-93	0841	2.10	W93040379	9	LIGHT	34	4952.0			3.0	
W9304	F02P	08-APR-93	0841	2.10	W93040379	10	LIGHT	39	5895.8			3.7	
W9304	F02P	08-APR-93	0841	2.10	W93040379	11	LIGHT	8	855.2			0.1	
W9304	F02P	08-APR-93	0841	2.10	W93040379	12	LIGHT	7	810.6			0.1	
W9304	F02P	08-APR-93	0841	9.10	W93040378					25.3	6.0		6215385.3
W9304	F02P	08-APR-93	0841	9.10	W93040378	-3	DARK	0	1281.1	s			
W9304	F02P	08-APR-93	0841	9.10	W93040378	-2	DARK	0	670.8				
W9304	F02P	08-APR-93	0841	9.10	W93040378	-1	DARK	0	488.5				
W9304	F02P	08-APR-93	0841	9.10	W93040378	1	LIGHT	876	31365.1			21.9	
W9304	F02P	08-APR-93	0841	9.10	W93040378	2	LIGHT	1338	26235.2			18.3	
W9304	F02P	08-APR-93	0841	9.10	W93040378	3	LIGHT	604	27782.8			19.4	
W9304	F02P	08-APR-93	0841	9.10	W93040378	4	LIGHT	375	24769.8			17.2	
W9304	F02P	08-APR-93	0841	9.10	W93040378	5	LIGHT	388	26206.4			18.3	
W9304	F02P	08-APR-93	0841	9.10	W93040378	6	LIGHT	244	26535.2			18.5	
W9304	F02P	08-APR-93	0841	9.10	W93040378	7	LIGHT	186	19568.4			13.5	
W9304	F02P	08-APR-93	0841	9.10	W93040378	8	LIGHT	234	24675.6			17.2	
W9304	F02P	08-APR-93	0841	9.10	W93040378	9	LIGHT	32	6541.2			4.2	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}/\text{m}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9304	F02P	08-APR-93	0841	9.10	W93040378	10	LIGHT	16	4967.5			3.1	
W9304	F02P	08-APR-93	0841	9.10	W93040378	11	LIGHT	7	962.6			0.3	
W9304	F02P	08-APR-93	0841	9.10	W93040378	12	LIGHT	3	501.4			-0.1	
W9304	F13P	07-APR-93	1036	2.10	W93040256					23.2	6.0		6156051.2
W9304	F13P	07-APR-93	1036	2.10	W93040256	-3	DARK	0	1452.0				
W9304	F13P	07-APR-93	1036	2.10	W93040256	-2	DARK	0	528.8				
W9304	F13P	07-APR-93	1036	2.10	W93040256	-1	DARK	0	1524.5				
W9304	F13P	07-APR-93	1036	2.10	W93040256	1	LIGHT	672	20128.5			12.5	
W9304	F13P	07-APR-93	1036	2.10	W93040256	2	LIGHT	499	19652.4			12.2	
W9304	F13P	07-APR-93	1036	2.10	W93040256	3	LIGHT	1176	19913.8			12.4	
W9304	F13P	07-APR-93	1036	2.10	W93040256	4	LIGHT	261	20168.7			12.6	
W9304	F13P	07-APR-93	1036	2.10	W93040256	5	LIGHT	243	16519.6			10.1	
W9304	F13P	07-APR-93	1036	2.10	W93040256	6	LIGHT	170	10364.8			6.1	
W9304	F13P	07-APR-93	1036	2.10	W93040256	7	LIGHT	226	14435.0			8.8	
W9304	F13P	07-APR-93	1036	2.10	W93040256	8	LIGHT	57	6301.9			3.4	
W9304	F13P	07-APR-93	1036	2.10	W93040256	9	LIGHT	40	4879.6			2.5	
W9304	F13P	07-APR-93	1036	2.10	W93040256	10	LIGHT	19	1969.0			0.5	
W9304	F13P	07-APR-93	1036	2.10	W93040256	11	LIGHT	4	1468.3			0.2	
W9304	F13P	07-APR-93	1036	2.10	W93040256	12	LIGHT	5	364.9			-0.5	
W9304	F13P	07-APR-93	1033	11.30	W93040254					23.3	6.0		6156051.2
W9304	F13P	07-APR-93	1033	11.30	W93040254	-3	DARK	0	758.9				
W9304	F13P	07-APR-93	1033	11.30	W93040254	-2	DARK	0	363.0				
W9304	F13P	07-APR-93	1033	11.30	W93040254	-1	DARK	0	624.3				
W9304	F13P	07-APR-93	1033	11.30	W93040254	1	LIGHT	697	47051.3			30.7	
W9304	F13P	07-APR-93	1033	11.30	W93040254	2	LIGHT	1127	45548.6			29.7	
W9304	F13P	07-APR-93	1033	11.30	W93040254	3	LIGHT	806	49695.3			32.5	
W9304	F13P	07-APR-93	1033	11.30	W93040254	4	LIGHT	396	45552.0			29.7	
W9304	F13P	07-APR-93	1033	11.30	W93040254	5	LIGHT	269	42030.2			27.4	
W9304	F13P	07-APR-93	1033	11.30	W93040254	6	LIGHT	170	40169.6			26.2	
W9304	F13P	07-APR-93	1033	11.30	W93040254	7	LIGHT	149	32869.5			21.4	
W9304	F13P	07-APR-93	1033	11.30	W93040254	8	LIGHT	103	25963.8			16.8	
W9304	F13P	07-APR-93	1033	11.30	W93040254	9	LIGHT	30	8080.5			5.0	
W9304	F13P	07-APR-93	1033	11.30	W93040254	10	LIGHT	26	5911.4			3.5	
W9304	F13P	07-APR-93	1033	11.30	W93040254	11	LIGHT	2	962.8			0.3	
W9304	F13P	07-APR-93	1033	11.30	W93040254	12	LIGHT	5	913.6			0.2	
W9304	F23P	06-APR-93	0656	2.20	W93040022					22.5	6.0		5948094.5
W9304	F23P	06-APR-93	0656	2.20	W93040022	-3	DARK	0	1751.6				
W9304	F23P	06-APR-93	0656	2.20	W93040022	-2	DARK	0	1371.8				
W9304	F23P	06-APR-93	0656	2.20	W93040022	-1	DARK	0	1020.8				
W9304	F23P	06-APR-93	0656	2.20	W93040022	1	LIGHT	644	15419.7			9.3	
W9304	F23P	06-APR-93	0656	2.20	W93040022	2	LIGHT	928	14403.0			8.6	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9304	F23P	06-APR-93	0656	2.20	W93040022	3	LIGHT	841	16709.3			10.1	
W9304	F23P	06-APR-93	0656	2.20	W93040022	4	LIGHT	1245	15415.1			9.3	
W9304	F23P	06-APR-93	0656	2.20	W93040022	5	LIGHT	345	15070.0			9.0	
W9304	F23P	06-APR-93	0656	2.20	W93040022	6	LIGHT	229	11917.8			7.0	
W9304	F23P	06-APR-93	0656	2.20	W93040022	7	LIGHT	149	11528.4			6.7	
W9304	F23P	06-APR-93	0656	2.20	W93040022	8	LIGHT	109	7846.4			4.3	
W9304	F23P	06-APR-93	0656	2.20	W93040022	9	LIGHT	35	3581.2			1.5	
W9304	F23P	06-APR-93	0656	2.20	W93040022	10	LIGHT	41	3289.3			1.3	
W9304	F23P	06-APR-93	0656	2.20	W93040022	11	LIGHT	8	886.3			-0.3	
W9304	F23P	06-APR-93	0656	2.20	W93040022	12	LIGHT	7	829.5			-0.4	
W9304	F23P	06-APR-93	0656	4.20	W93040021					22.4	6.0		5948094.5
W9304	F23P	06-APR-93	0656	4.20	W93040021	-3	DARK	0	523.7				
W9304	F23P	06-APR-93	0656	4.20	W93040021	-2	DARK	0	1371.5				
W9304	F23P	06-APR-93	0656	4.20	W93040021	-1	DARK	0					
W9304	F23P	06-APR-93	0656	4.20	W93040021	1	LIGHT	921	15538.3			9.6	
W9304	F23P	06-APR-93	0656	4.20	W93040021	2	LIGHT	1349	14659.6			9.0	
W9304	F23P	06-APR-93	0656	4.20	W93040021	3	LIGHT	624	14634.4			9.0	
W9304	F23P	06-APR-93	0656	4.20	W93040021	4	LIGHT	391	14449.6			8.9	
W9304	F23P	06-APR-93	0656	4.20	W93040021	5	LIGHT	389	13572.8			8.3	
W9304	F23P	06-APR-93	0656	4.20	W93040021	6	LIGHT	253	12650.0			7.7	
W9304	F23P	06-APR-93	0656	4.20	W93040021	7	LIGHT	192	10787.9			6.5	
W9304	F23P	06-APR-93	0656	4.20	W93040021	8	LIGHT	242	12838.9			7.8	
W9304	F23P	06-APR-93	0656	4.20	W93040021	9	LIGHT	33	4071.8			2.1	
W9304	F23P	06-APR-93	0656	4.20	W93040021	10	LIGHT	17	2726.9			1.2	
W9304	F23P	06-APR-93	0656	4.20	W93040021	11	LIGHT	7	1176.1			0.2	
W9304	F23P	06-APR-93	0656	4.20	W93040021	12	LIGHT	3	1184.2			0.2	
W9304	N01P	07-APR-93	0724	2.40	W93040212					24.1	6.0		6156051.2
W9304	N01P	07-APR-93	0724	2.40	W93040212	-3	DARK	0	1083.7				
W9304	N01P	07-APR-93	0724	2.40	W93040212	-2	DARK	0	1315.7				
W9304	N01P	07-APR-93	0724	2.40	W93040212	-1	DARK	0	667.7				
W9304	N01P	07-APR-93	0724	2.40	W93040212	1	LIGHT	592	39766.6			26.5	
W9304	N01P	07-APR-93	0724	2.40	W93040212	2	LIGHT	735	37750.2			25.2	
W9304	N01P	07-APR-93	0724	2.40	W93040212	3	LIGHT	809	35622.8			23.7	
W9304	N01P	07-APR-93	0724	2.40	W93040212	4	LIGHT	1110	36004.6			24.0	
W9304	N01P	07-APR-93	0724	2.40	W93040212	5	LIGHT	339	34671.4			23.0	
W9304	N01P	07-APR-93	0724	2.40	W93040212	6	LIGHT	203	28269.4			18.7	
W9304	N01P	07-APR-93	0724	2.40	W93040212	7	LIGHT	133	21998.0			14.4	
W9304	N01P	07-APR-93	0724	2.40	W93040212	8	LIGHT	96	19180.8			12.4	
W9304	N01P	07-APR-93	0724	2.40	W93040212	9	LIGHT	31	5027.8			2.7	
W9304	N01P	07-APR-93	0724	2.40	W93040212	10	LIGHT	36	8693.2			5.3	
W9304	N01P	07-APR-93	0724	2.40	W93040212	11	LIGHT	7	1092.2			0.0	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9304	N01P	07-APR-93	0724	2.40	W93040212	12	LIGHT	6	817.8			-0.1	
W9304	N01P	07-APR-93	0720	10.30	W93040210					24.6	6.0		6156051.2
W9304	N01P	07-APR-93	0720	10.30	W93040210	-3	DARK	0	1463.8				
W9304	N01P	07-APR-93	0720	10.30	W93040210	-2	DARK	0	650.0				
W9304	N01P	07-APR-93	0720	10.30	W93040210	-1	DARK	0	262.1				
W9304	N01P	07-APR-93	0720	10.30	W93040210	1	LIGHT	817	40663.9			28.1	
W9304	N01P	07-APR-93	0720	10.30	W93040210	2	LIGHT	1206	41022.7			28.3	
W9304	N01P	07-APR-93	0720	10.30	W93040210	3	LIGHT	561	41084.5			28.4	
W9304	N01P	07-APR-93	0720	10.30	W93040210	4	LIGHT	357	38212.4			26.4	
W9304	N01P	07-APR-93	0720	10.30	W93040210	5	LIGHT	364	40162.3			27.7	
W9304	N01P	07-APR-93	0720	10.30	W93040210	6	LIGHT	224	39828.4			27.5	
W9304	N01P	07-APR-93	0720	10.30	W93040210	7	LIGHT	171	31795.3			21.9	
W9304	N01P	07-APR-93	0720	10.30	W93040210	8	LIGHT	215	34069.8			23.5	
W9304	N01P	07-APR-93	0720	10.30	W93040210	9	LIGHT	29	6904.3			4.5	
W9304	N01P	07-APR-93	0720	10.30	W93040210	10	LIGHT	15	6868.3			4.5	
W9304	N01P	07-APR-93	0720	10.30	W93040210	11	LIGHT	6	1120.7			0.5	
W9304	N01P	07-APR-93	0720	10.30	W93040210	12	LIGHT	3	870.7			0.3	
W9304	N04P	07-APR-93	0827	2.70	W93040226					24.0	6.0		6156051.2
W9304	N04P	07-APR-93	0827	2.70	W93040226	-3	DARK	0	1952.8				
W9304	N04P	07-APR-93	0827	2.70	W93040226	-2	DARK	0	1348.3				
W9304	N04P	07-APR-93	0827	2.70	W93040226	-1	DARK	0	922.9				
W9304	N04P	07-APR-93	0827	2.70	W93040226	1	LIGHT	1209	20715.9			13.2	
W9304	N04P	07-APR-93	0827	2.70	W93040226	2	LIGHT	839	21986.6			14.0	
W9304	N04P	07-APR-93	0827	2.70	W93040226	3	LIGHT	1279	20068.2			12.7	
W9304	N04P	07-APR-93	0827	2.70	W93040226	4	LIGHT	557	18720.6			11.8	
W9304	N04P	07-APR-93	0827	2.70	W93040226	5	LIGHT	292	19112.6			12.1	
W9304	N04P	07-APR-93	0827	2.70	W93040226	6	LIGHT	215	19154.0			12.1	
W9304	N04P	07-APR-93	0827	2.70	W93040226	7	LIGHT	258	19469.7			12.3	
W9304	N04P	07-APR-93	0827	2.70	W93040226	8	LIGHT	67	7713.9			4.3	
W9304	N04P	07-APR-93	0827	2.70	W93040226	9	LIGHT	40	3314.1			1.3	
W9304	N04P	07-APR-93	0827	2.70	W93040226	10	LIGHT	26	4846.3			2.3	
W9304	N04P	07-APR-93	0827	2.70	W93040226	11	LIGHT	3	945.6			-0.3	
W9304	N04P	07-APR-93	0827	2.70	W93040226	12	LIGHT	3	686.2			-0.5	
W9304	N04P	07-APR-93	0824	24.10	W93040224					25.1	6.0		5450759.7
W9304	N04P	07-APR-93	0824	24.10	W93040224	-3	DARK	0	1574.5				
W9304	N04P	07-APR-93	0824	24.10	W93040224	-2	DARK	0	1448.5				
W9304	N04P	07-APR-93	0824	24.10	W93040224	-1	DARK	0	1157.2				
W9304	N04P	07-APR-93	0824	24.10	W93040224	1	LIGHT	1197	62923.9			49.6	
W9304	N04P	07-APR-93	0824	24.10	W93040224	2	LIGHT	1292	67048.6			52.9	
W9304	N04P	07-APR-93	0824	24.10	W93040224	3	LIGHT	885	67990.0			53.7	
W9304	N04P	07-APR-93	0824	24.10	W93040224	4	LIGHT	298	67913.7			53.6	

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9304	N04P	07-APR-93	0824	24.10	W93040224	5	LIGHT	332	65509.4			51.7	
W9304	N04P	07-APR-93	0824	24.10	W93040224	6	LIGHT	219	64738.5			51.1	
W9304	N04P	07-APR-93	0824	24.10	W93040224	7	LIGHT	247	64080.6			50.6	
W9304	N04P	07-APR-93	0824	24.10	W93040224	8	LIGHT	138	50822.9			39.9	
W9304	N04P	07-APR-93	0824	24.10	W93040224	9	LIGHT	31	17209.1			12.8	
W9304	N04P	07-APR-93	0824	24.10	W93040224	10	LIGHT	18	12697.4			9.1	
W9304	N04P	07-APR-93	0824	24.10	W93040224	11	LIGHT	2	2505.6			0.9	
W9304	N04P	07-APR-93	0824	24.10	W93040224	12	LIGHT	4	2152.1			0.6	
W9304	N07P	07-APR-93	0932	2.30	W93040242					24.5	6.0		6156051.2
W9304	N07P	07-APR-93	0932	2.30	W93040242	-3	DARK	0	1034.8				
W9304	N07P	07-APR-93	0932	2.30	W93040242	-2	DARK	0	1030.8				
W9304	N07P	07-APR-93	0932	2.30	W93040242	-1	DARK	0	1626.0				
W9304	N07P	07-APR-93	0932	2.30	W93040242	1	LIGHT	794	25258.4			16.7	
W9304	N07P	07-APR-93	0932	2.30	W93040242	2	LIGHT	1172	23474.1			15.5	
W9304	N07P	07-APR-93	0932	2.30	W93040242	3	LIGHT	1039	27098.3			18.0	
W9304	N07P	07-APR-93	0932	2.30	W93040242	4	LIGHT	1601	22909.5			15.1	
W9304	N07P	07-APR-93	0932	2.30	W93040242	5	LIGHT	465	24713.2			16.4	
W9304	N07P	07-APR-93	0932	2.30	W93040242	6	LIGHT	284	22012.6			14.5	
W9304	N07P	07-APR-93	0932	2.30	W93040242	7	LIGHT	182	20876.8			13.7	
W9304	N07P	07-APR-93	0932	2.30	W93040242	8	LIGHT	84	13949.5			8.9	
W9304	N07P	07-APR-93	0932	2.30	W93040242	9	LIGHT	44	7458.3			4.3	
W9304	N07P	07-APR-93	0932	2.30	W93040242	10	LIGHT	45	5587.0			3.0	
W9304	N07P	07-APR-93	0932	2.30	W93040242	11	LIGHT	8	508.9			-0.5	
W9304	N07P	07-APR-93	0932	2.30	W93040242	12	LIGHT	6	519.0			-0.5	
W9304	N07P	07-APR-93	0931	11.10	W93040241					25.5	6.0		6156051.2
W9304	N07P	07-APR-93	0931	11.10	W93040241	-3	DARK	0	564.8				
W9304	N07P	07-APR-93	0931	11.10	W93040241	-2	DARK	0	212.0				
W9304	N07P	07-APR-93	0931	11.10	W93040241	-1	DARK	0	968.9				
W9304	N07P	07-APR-93	0931	11.10	W93040241	1	LIGHT	1106	23261.5			16.4	
W9304	N07P	07-APR-93	0931	11.10	W93040241	2	LIGHT	1539	24240.6			17.1	
W9304	N07P	07-APR-93	0931	11.10	W93040241	3	LIGHT	663	25563.8			18.1	
W9304	N07P	07-APR-93	0931	11.10	W93040241	4	LIGHT	402	25342.1			17.9	
W9304	N07P	07-APR-93	0931	11.10	W93040241	5	LIGHT	451	21934.4			15.5	
W9304	N07P	07-APR-93	0931	11.10	W93040241	6	LIGHT	227	27555.9			19.5	
W9304	N07P	07-APR-93	0931	11.10	W93040241	7	LIGHT	273	20835.5			14.7	
W9304	N07P	07-APR-93	0931	11.10	W93040241	8	LIGHT	326	29017.6			20.6	
W9304	N07P	07-APR-93	0931	11.10	W93040241	9	LIGHT	103	5379.6			3.5	
W9304	N07P	07-APR-93	0931	11.10	W93040241	10	LIGHT	43	5778.0			3.8	
W9304	N07P	07-APR-93	0931	11.10	W93040241	11	LIGHT	6	685.5			0.1	
W9304	N07P	07-APR-93	0931	11.10	W93040241	12	LIGHT	3	609.7			0.0	
W9304	N10P	06-APR-93	1033	2.40	W93040077					23.5	6.0		5948094.5

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPN)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ² /hr)	Stock (DPN)
W9304	N10P	06-APR-93	1033	2.40	W93040077	-3	DARK	0	341.5				
W9304	N10P	06-APR-93	1033	2.40	W93040077	-2	DARK	0	481.7				
W9304	N10P	06-APR-93	1033	2.40	W93040077	-1	DARK	0	369.6				
W9304	N10P	06-APR-93	1033	2.40	W93040077	1	LIGHT	740	25945.2				17.6
W9304	N10P	06-APR-93	1033	2.40	W93040077	2	LIGHT	1315	25844.3				17.6
W9304	N10P	06-APR-93	1033	2.40	W93040077	3	LIGHT	569	27641.4				18.8
W9304	N10P	06-APR-93	1033	2.40	W93040077	4	LIGHT	280	26764.1				18.2
W9304	N10P	06-APR-93	1033	2.40	W93040077	5	LIGHT	259	27751.3				18.9
W9304	N10P	06-APR-93	1033	2.40	W93040077	6	LIGHT	188	18425.2				12.4
W9304	N10P	06-APR-93	1033	2.40	W93040077	7	LIGHT	249	22776.8				15.4
W9304	N10P	06-APR-93	1033	2.40	W93040077	8	LIGHT	63	11372.5				7.6
W9304	N10P	06-APR-93	1033	2.40	W93040077	9	LIGHT	44	4869.7				3.1
W9304	N10P	06-APR-93	1033	2.40	W93040077	10	LIGHT	21	3257.7				2.0
W9304	N10P	06-APR-93	1033	2.40	W93040077	11	LIGHT	5	438.7				0.0
W9304	N10P	06-APR-93	1033	2.40	W93040077	12	LIGHT	6	480.7				0.1
W9304	N10P	06-APR-93	1032	6.30	W93040076					23.8	6.0		5948094.5
W9304	N10P	06-APR-93	1032	6.30	W93040076	-3	DARK	0	237.3				
W9304	N10P	06-APR-93	1032	6.30	W93040076	-2	DARK	0	264.7				
W9304	N10P	06-APR-93	1032	6.30	W93040076	-1	DARK	0	741.3				
W9304	N10P	06-APR-93	1032	6.30	W93040076	1	LIGHT	776	42138.7				29.2
W9304	N10P	06-APR-93	1032	6.30	W93040076	2	LIGHT	1245	38584.9				26.7
W9304	N10P	06-APR-93	1032	6.30	W93040076	3	LIGHT	864	39152.3				27.1
W9304	N10P	06-APR-93	1032	6.30	W93040076	4	LIGHT	443	35399.1				24.5
W9304	N10P	06-APR-93	1032	6.30	W93040076	5	LIGHT	291	34868.2				24.1
W9304	N10P	06-APR-93	1032	6.30	W93040076	6	LIGHT	188	31057.7				21.4
W9304	N10P	06-APR-93	1032	6.30	W93040076	7	LIGHT	164	25303.0				17.4
W9304	N10P	06-APR-93	1032	6.30	W93040076	8	LIGHT	114	22654.6				15.6
W9304	N10P	06-APR-93	1032	6.30	W93040076	9	LIGHT	33	6855.2				4.5
W9304	N10P	06-APR-93	1032	6.30	W93040076	10	LIGHT	29	7266.9				4.8
W9304	N10P	06-APR-93	1032	6.30	W93040076	11	LIGHT	2	490.3				0.1
W9304	N10P	06-APR-93	1032	6.30	W93040076	12	LIGHT	6	564.4				0.1
W9304	N16P	06-APR-93	0931	2.40	W93040063					23.6	6.0		5948094.5
W9304	N16P	06-APR-93	0931	2.40	W93040063	-3	DARK	0	234.8				
W9304	N16P	06-APR-93	0931	2.40	W93040063	-2	DARK	0	960.8				
W9304	N16P	06-APR-93	0931	2.40	W93040063	-1	DARK	0	492.7				
W9304	N16P	06-APR-93	0931	2.40	W93040063	1	LIGHT	809	42383.3				29.2
W9304	N16P	06-APR-93	0931	2.40	W93040063	2	LIGHT	1123	36644.0				25.2
W9304	N16P	06-APR-93	0931	2.40	W93040063	3	LIGHT	1589	38641.2				26.6
W9304	N16P	06-APR-93	0931	2.40	W93040063	4	LIGHT	1042	44351.1				30.5
W9304	N16P	06-APR-93	0931	2.40	W93040063	5	LIGHT	480	40316.6				27.7
W9304	N16P	06-APR-93	0931	2.40	W93040063	6	LIGHT	284	35744.9				24.6

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{m}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9304	N16P	06-APR-93	0931	2.40	W93040063	7	LIGHT	182	35776.2			24.6	
W9304	N16P	06-APR-93	0931	2.40	W93040063	8	LIGHT	84	26714.1			18.3	
W9304	N16P	06-APR-93	0931	2.40	W93040063	9	LIGHT	44	11989.4			8.1	
W9304	N16P	06-APR-93	0931	2.40	W93040063	10	LIGHT	45	9448.5			6.3	
W9304	N16P	06-APR-93	0931	2.40	W93040063	11	LIGHT	8	1299.2			0.6	
W9304	N16P	06-APR-93	0931	2.40	W93040063	12	LIGHT	6	1201.5			0.0	
W9304	N16P	06-APR-93	0930	7.60	W93040062					24.1	6.0		5948094.5
W9304	N16P	06-APR-93	0930	7.60	W93040062	-3	DARK	0	507.1				
W9304	N16P	06-APR-93	0930	7.60	W93040062	-2	DARK	0	413.1				
W9304	N16P	06-APR-93	0930	7.60	W93040062	-1	DARK	0	282.1				
W9304	N16P	06-APR-93	0930	7.60	W93040062	1	LIGHT	1083	41569.4			29.1	
W9304	N16P	06-APR-93	0930	7.60	W93040062	2	LIGHT	1624	37318.0			26.1	
W9304	N16P	06-APR-93	0930	7.60	W93040062	3	LIGHT	710	35524.9			24.9	
W9304	N16P	06-APR-93	0930	7.60	W93040062	4	LIGHT	421	33274.0			23.3	
W9304	N16P	06-APR-93	0930	7.60	W93040062	5	LIGHT	486	36177.4			25.3	
W9304	N16P	06-APR-93	0930	7.60	W93040062	6	LIGHT	227	37053.4			25.9	
W9304	N16P	06-APR-93	0930	7.60	W93040062	7	LIGHT	273	34423.8			24.1	
W9304	N16P	06-APR-93	0930	7.60	W93040062	8	LIGHT	326	35862.9			25.1	
W9304	N16P	06-APR-93	0930	7.60	W93040062	9	LIGHT	103	10503.1			7.2	
W9304	N16P	06-APR-93	0930	7.60	W93040062	10	LIGHT	43	10759.7			7.3	
W9304	N16P	06-APR-93	0930	7.60	W93040062	11	LIGHT	6	1682.1			0.9	
W9304	N16P	06-APR-93	0930	7.60	W93040062	12	LIGHT	3	1293.0			0.6	
W9304	N20P	06-APR-93	0831	2.10	W93040047					23.4	6.0		5948094.5
W9304	N20P	06-APR-93	0831	2.10	W93040047	-3	DARK	0	299.4				
W9304	N20P	06-APR-93	0831	2.10	W93040047	-2	DARK	0	241.6				
W9304	N20P	06-APR-93	0831	2.10	W93040047	-1	DARK	0	252.2				
W9304	N20P	06-APR-93	0831	2.10	W93040047	1	LIGHT	1244	28655.3			19.5	
W9304	N20P	06-APR-93	0831	2.10	W93040047	2	LIGHT	1475	30543.3			20.8	
W9304	N20P	06-APR-93	0831	2.10	W93040047	3	LIGHT	910	28954.2			19.7	
W9304	N20P	06-APR-93	0831	2.10	W93040047	4	LIGHT	603	26471.3			18.0	
W9304	N20P	06-APR-93	0831	2.10	W93040047	5	LIGHT	278	22889.8			15.5	
W9304	N20P	06-APR-93	0831	2.10	W93040047	6	LIGHT	232	21377.6			14.5	
W9304	N20P	06-APR-93	0831	2.10	W93040047	7	LIGHT	279	24922.6			16.9	
W9304	N20P	06-APR-93	0831	2.10	W93040047	8	LIGHT	73	12777.1			8.6	
W9304	N20P	06-APR-93	0831	2.10	W93040047	9	LIGHT	44	7534.5			5.0	
W9304	N20P	06-APR-93	0831	2.10	W93040047	10	LIGHT	28	5686.3			3.7	
W9304	N20P	06-APR-93	0831	2.10	W93040047	11	LIGHT	4	592.3			0.2	
W9304	N20P	06-APR-93	0831	2.10	W93040047	12	LIGHT	4	610.7			0.2	
W9304	N20P	06-APR-93	0828	12.10	W93040045					23.4	6.0		5948094.5
W9304	N20P	06-APR-93	0828	12.10	W93040045	-3	DARK	0	339.2				
W9304	N20P	06-APR-93	0828	12.10	W93040045	-2	DARK	0	235.6				

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Table E1-1. C14 Production at Bioproductivity Stations in February, March, and April of 1993.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m ³ /hr)	Stock (DPM)
W9304	N20P	06-APR-93	0828	12.10	W93040045	-1	DARK	0	292.4				
W9304	N20P	06-APR-93	0828	12.10	W93040045	1	LIGHT	1307	48707.9			33.4	
W9304	N20P	06-APR-93	0828	12.10	W93040045	2	LIGHT	1353	46740.9			32.0	
W9304	N20P	06-APR-93	0828	12.10	W93040045	3	LIGHT	353	48895.3			33.5	
W9304	N20P	06-APR-93	0828	12.10	W93040045	4	LIGHT	342	53240.9			36.5	
W9304	N20P	06-APR-93	0828	12.10	W93040045	5	LIGHT	963	48431.2			33.2	
W9304	N20P	06-APR-93	0828	12.10	W93040045	6	LIGHT	237	48269.5			33.1	
W9304	N20P	06-APR-93	0828	12.10	W93040045	7	LIGHT	267	49128.5			33.7	
W9304	N20P	06-APR-93	0828	12.10	W93040045	8	LIGHT	149	37240.9			25.5	
W9304	N20P	06-APR-93	0828	12.10	W93040045	9	LIGHT	34	11861.6			8.0	
W9304	N20P	06-APR-93	0828	12.10	W93040045	10	LIGHT	19	6947.8			4.6	
W9304	N20P	06-APR-93	0828	12.10	W93040045	11	LIGHT	5	1367.5			0.7	
W9304	N20P	06-APR-93	0828	12.10	W93040045	12	LIGHT	2	944.3			0.5	

s = Suspect data, value not used in calculating production

e = Data not reported

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APPENDIX E

METABOLISM DATA AND PRODUCTIVITY—IRRADIANCE MODELING

Part 2

Summary of P-I Modeling

The modeling effort is described in Section 2 of the accompanying text report. All parameters were estimated using SAS (1985). For each survey, February and October, P-I incubations were performed using water from two depths (surface and chlorophyll maximum) at ten Bioproductivity stations. Volumetric net production rates for these are given in Table E1-1. The rates were normalized for each sample by dividing the volumetric rate by the average chlorophyll value for that sample (Appendix A), to yield an estimate of net production as $\mu\text{g C } (\mu\text{g Chl})^{-1} \text{ hr}^{-1}$ after correcting for each uptake; rates thus expressed were used in the modeling and graphics that follow.

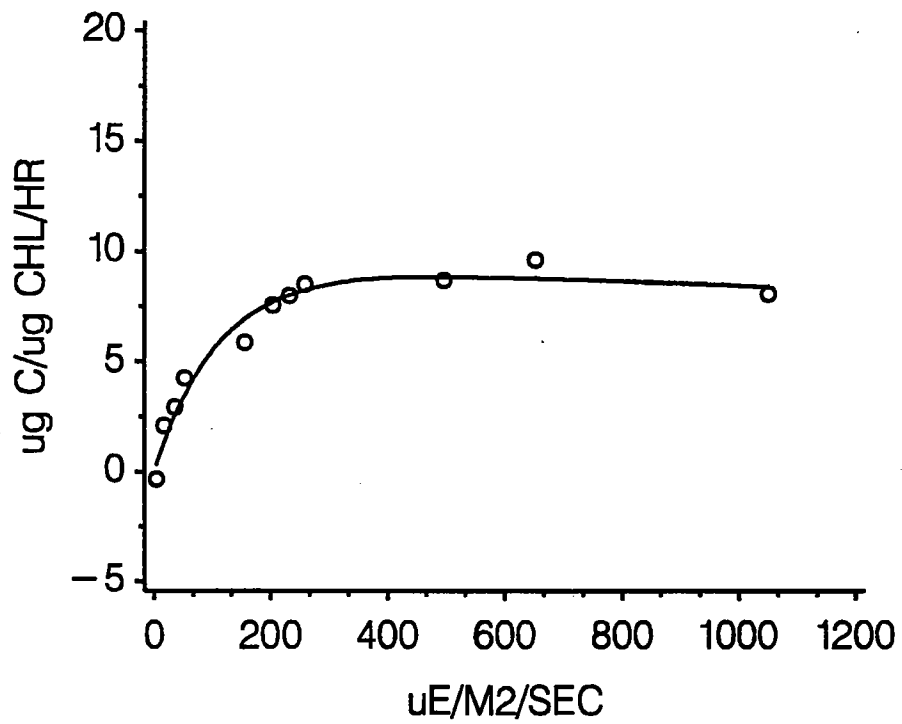
This appendix provides the following sequence for February data: modeled parameters for a 4-parameter model of Platt *et al.* (1980) (Table E2-1), followed by graphs of situations which were fit by this model; modeled parameters for a 3-parameter model of Platt and Jassby (1976) (Table E2-2), followed by graphs of situations which were fit by this model, which assumes zero photoinhibition. A similar sequence is presented, with Tables E2-3 and E2-4, for March data.

Table E2-1. P vs. I Curve Parameters for the Platt *et al.* (1980) Model: February 1993.
 Numbers in parentheses are standard errors of the estimates.

P VS I CURVE PARAMETERS FEBRUARY 1993
 MODEL PLATT ET AL, 1980

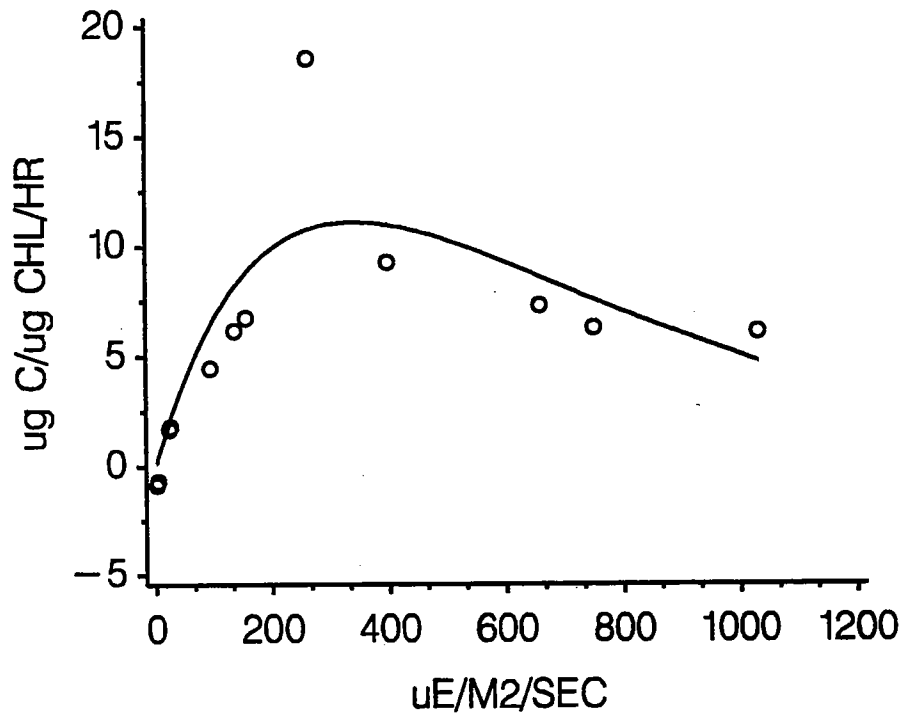
STA	DEPTH	P_SB	ALPHA	BETA	R_2
F13P	CHL	49.13(6.58)	0.090(0.022)	0.104(0.001)	0.738
F13P	SUR	9.50(0.34)	0.080(0.006)	0.001(0.001)	0.969
F1P	CHL	57.15(113.2)	0.062(0.002)	0.068(0.189)	0.742
F1P	SUR	49.25(3.34)	0.067(0.009)	0.063(0.001)	0.859
F23P	CHL	5.85(2.44)	0.031(0.005)	0.002(0.003)	0.919
F23P	SUR	4.00(1.90)	0.050(0.019)	0.000(0.046)	0.961
F2P	CHL	25.74(22.76)	0.067(0.013)	0.022(0.035)	0.938
F2P	SUR	14.40(2.59)	0.063(0.014)	0.009(0.005)	0.871
N10P	CHL	6.77(2.07)	0.192(0.142)	0.000(0.003)	0.205
N10P	SUR	.	.	.	.
N16P	CHL	22.27(4.35)	0.101(0.013)	0.024(0.017)	0.731
N16P	SUR	7.97(0.85)	0.071(0.009)	0.001(0.001)	0.976
N1P	CHL	.	.	.	.
N1P	SUR	28.94(7.36)	0.435(0.175)	0.014(0.012)	0.632
N20P	CHL	9.74(0.87)	0.109(0.023)	0.002(0.001)	0.962
N20P	SUR	.	.	.	.
N4P	CHL	27.18(24.47)	0.147(0.077)	0.026(0.047)	0.791
N4P	SUR	.	.	.	.
N7P	CHL	32.93(2.74)	0.642(0.207)	0.005(0.006)	0.908
N7P	SUR	19.54(1.00)	0.424(0.092)	0.000(0.000)	0.901

STATION F13P SURFACE



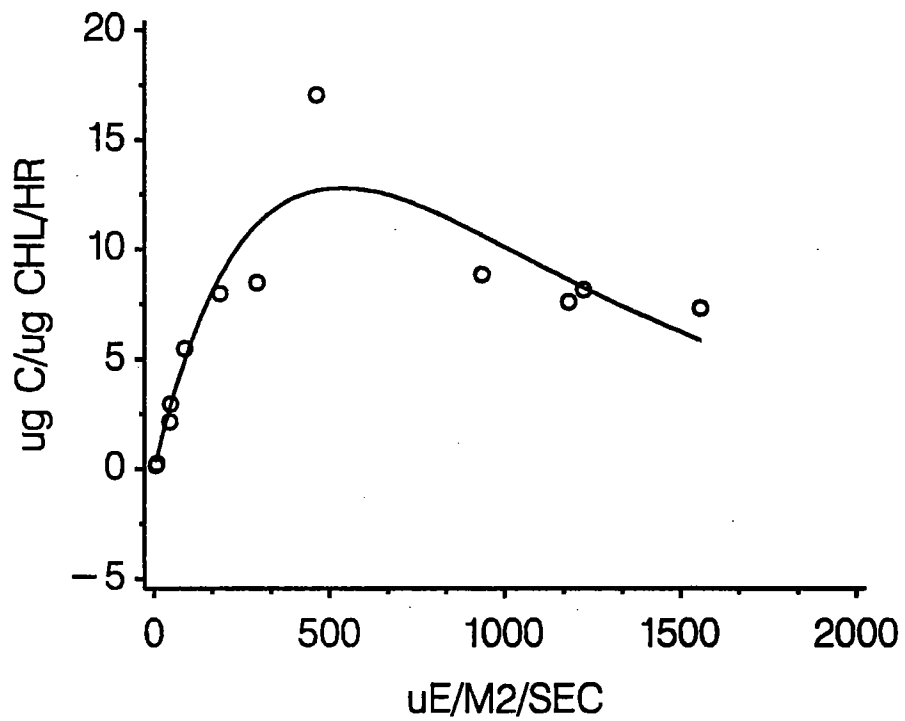
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION F13P CHLA MAXIMUM



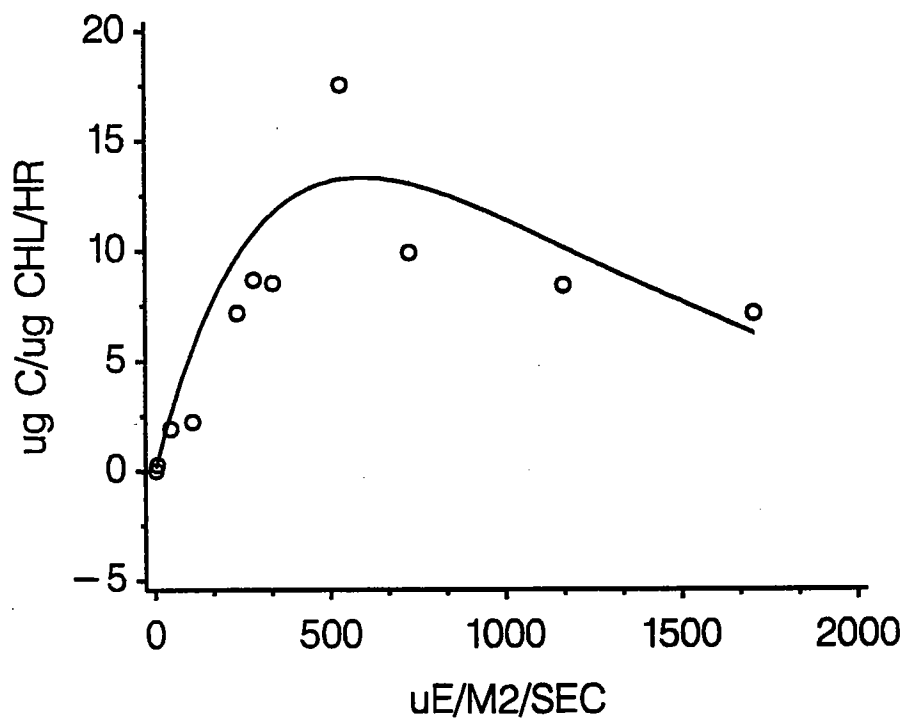
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION F1P SURFACE



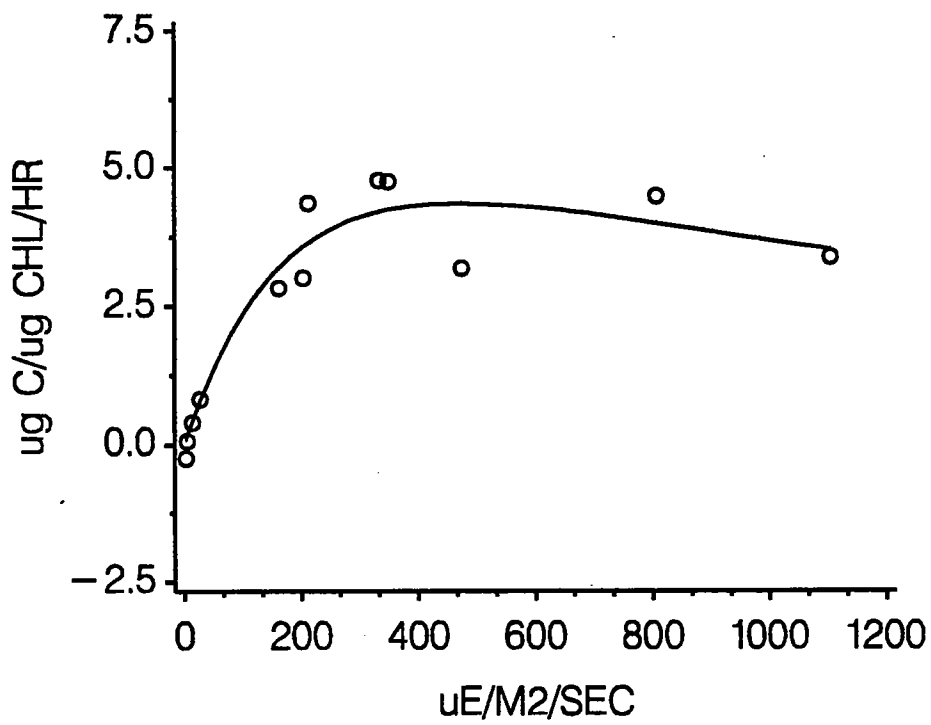
MODEL FROM PLATT ET AL., 1980
CRUISE NUMBER 1, FEB 1993

STATION F1P CHLA MAXIMUM



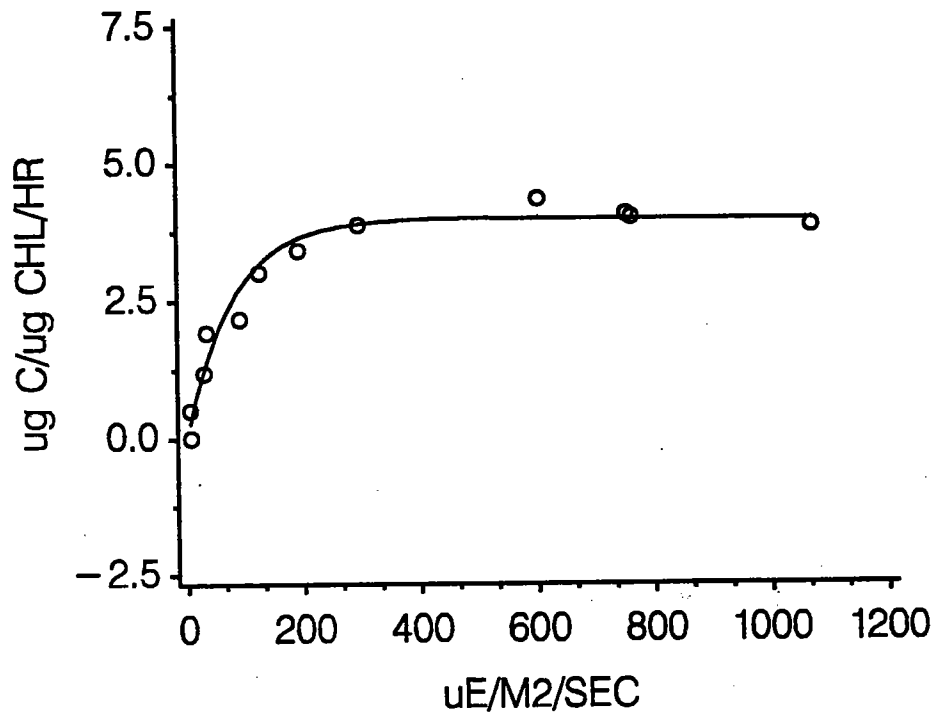
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION F23P CHLA MAXIMUM



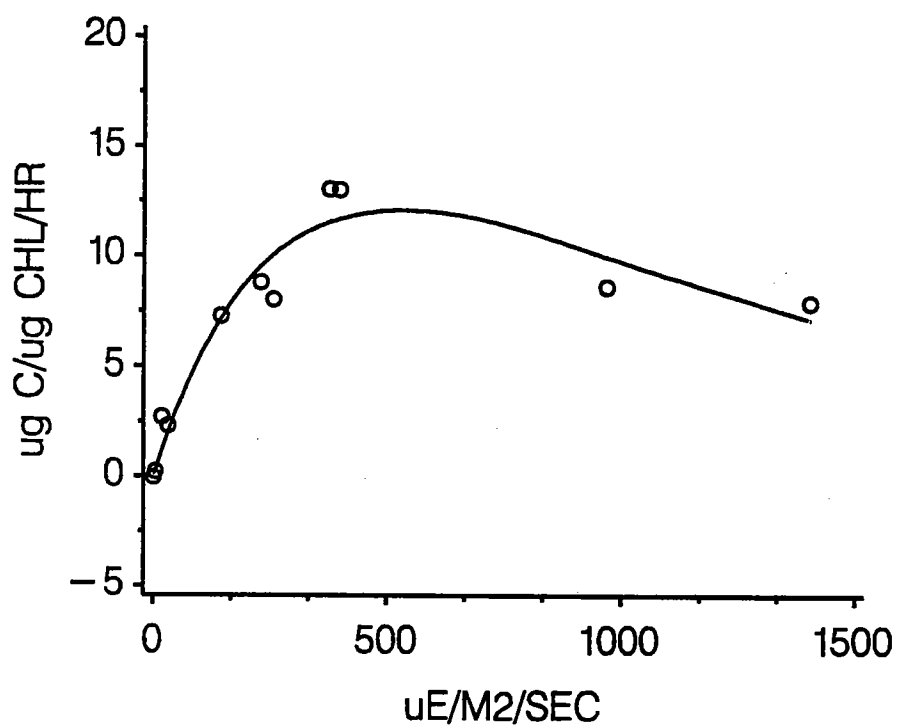
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION F23P SURFACE



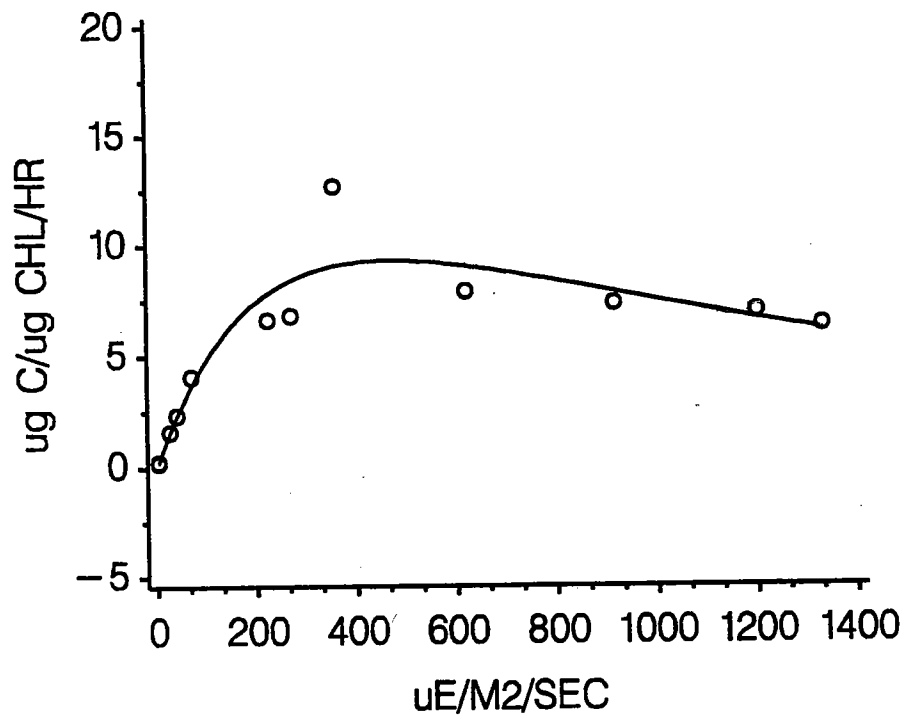
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION F2P CHLA MAXIMUM



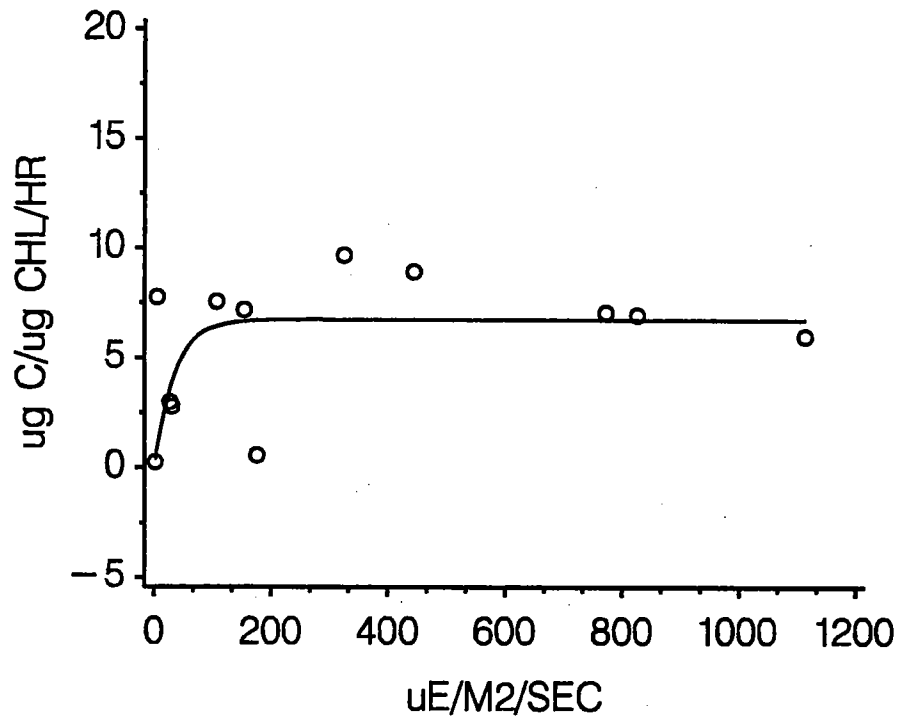
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION F2P SURFACE



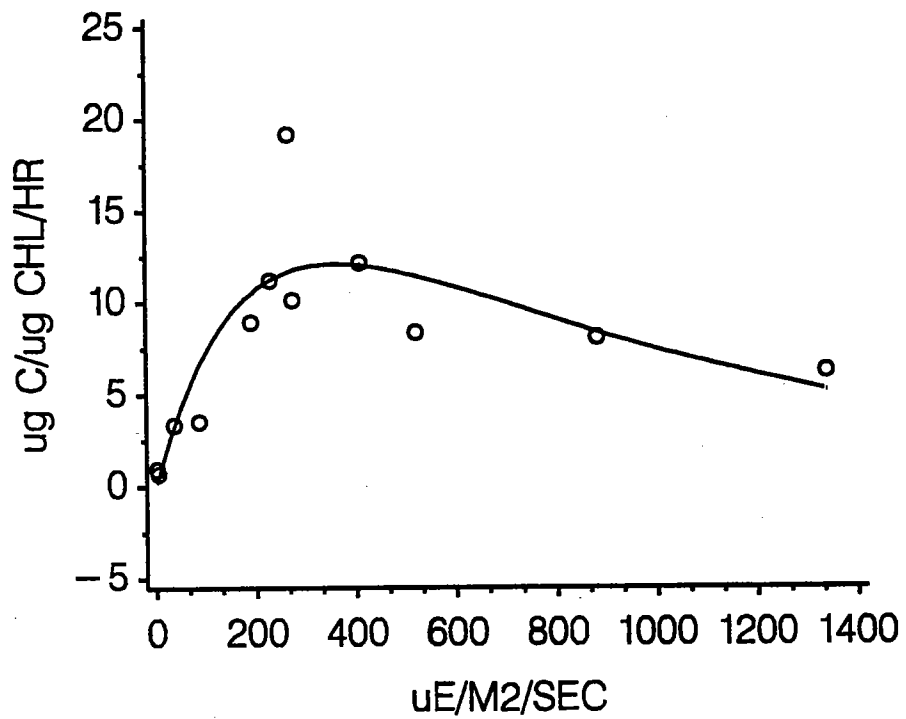
MODEL FROM PLATT ET AL., 1980
CRUISE NUMBER 1, FEB 1993

STATION N10P CHLA MAXIMUM



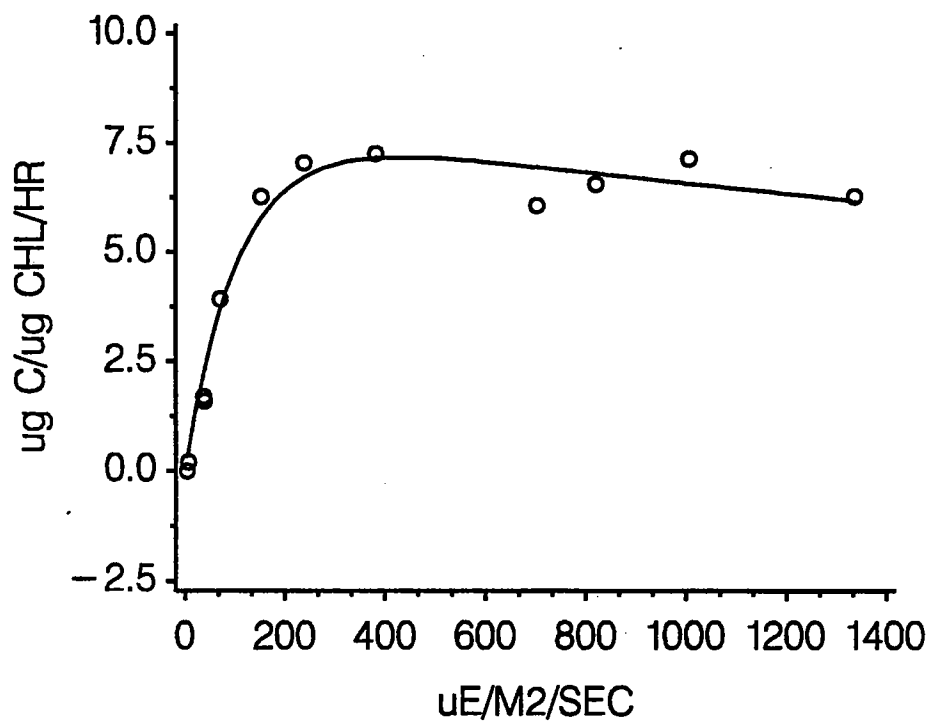
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION N16P CHLA MAXIMUM



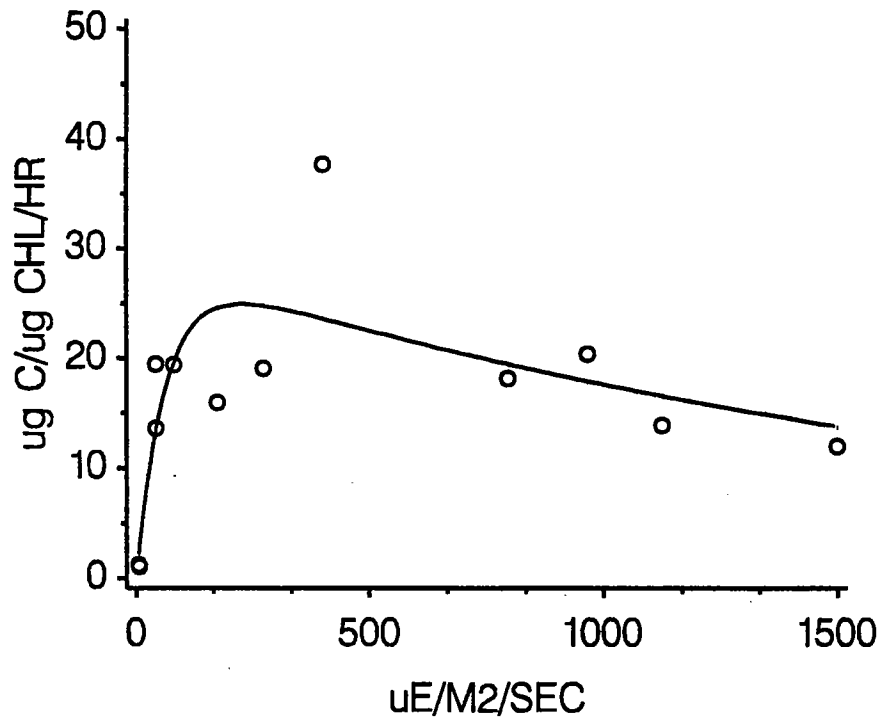
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION N16P SURFACE



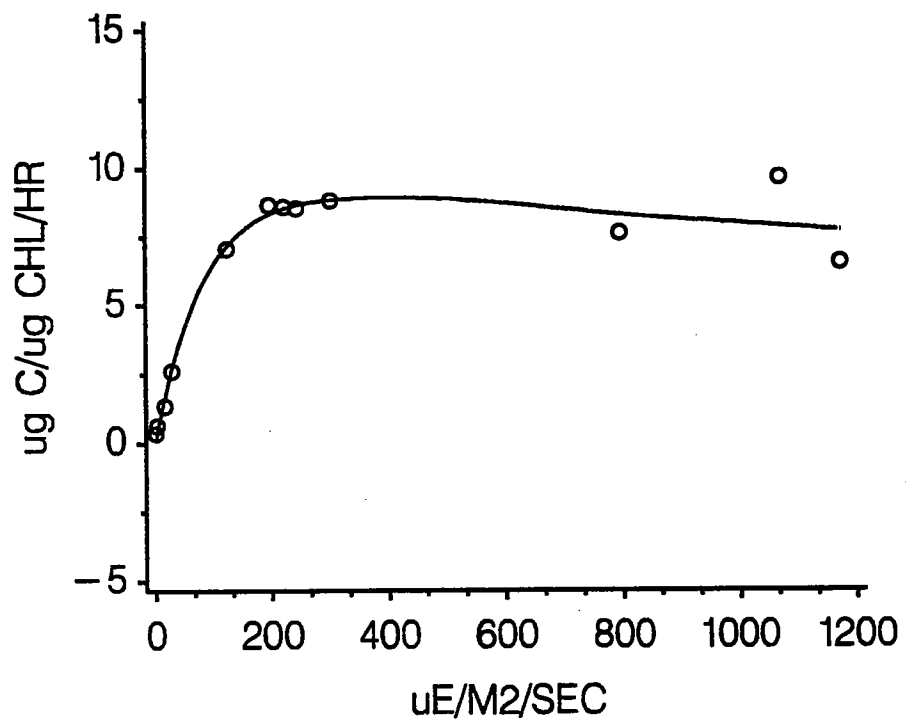
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION N1P SURFACE



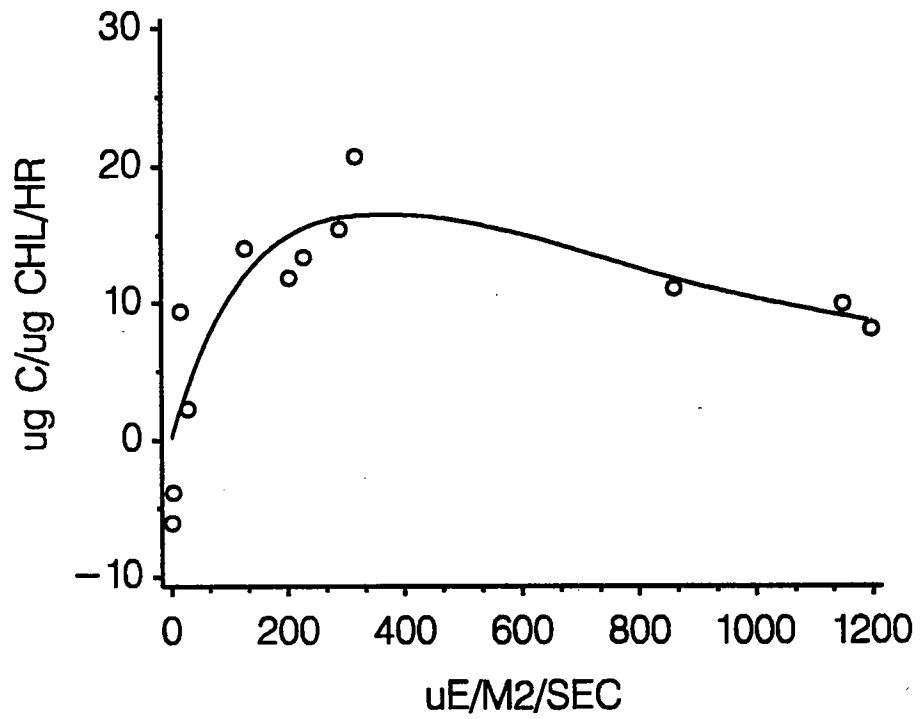
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION N20P CHLA MAXIMUM



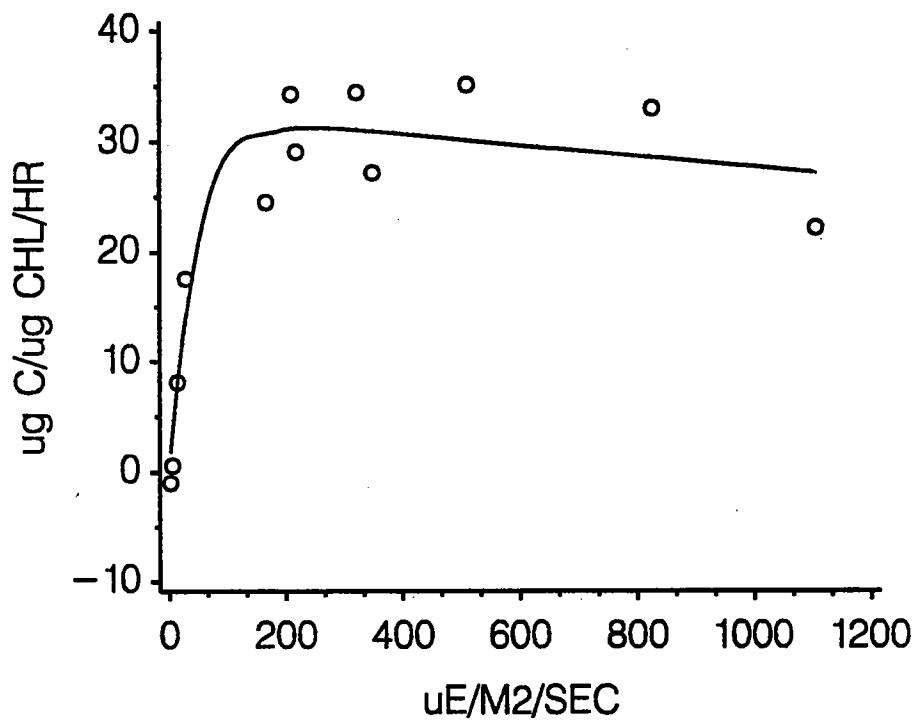
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION N4P CHLA MAXIMUM



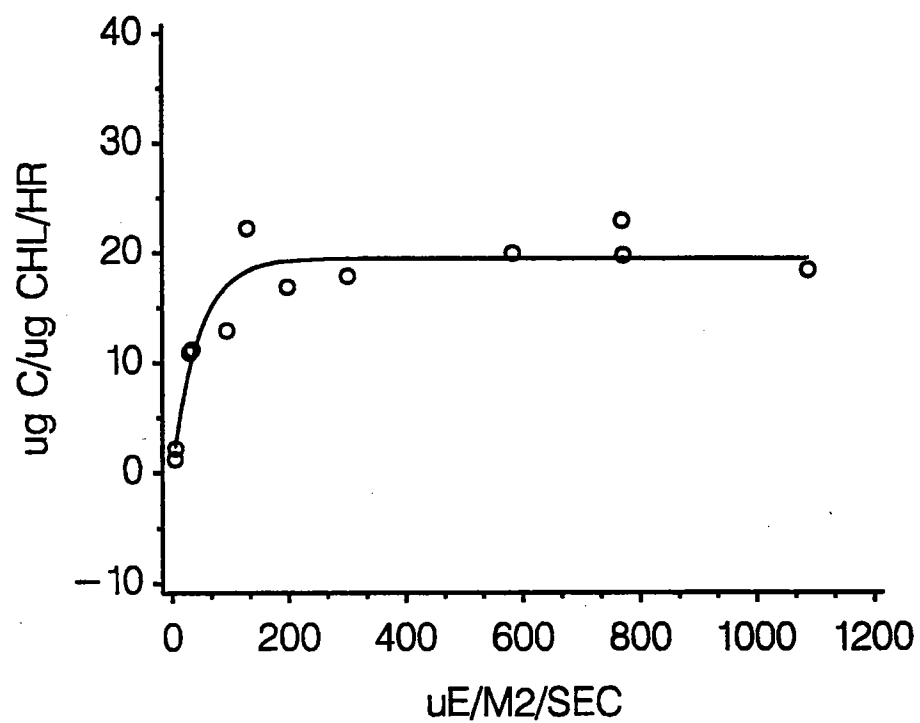
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION N7P CHLA MAXIMUM



MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

STATION N7P SURFACE



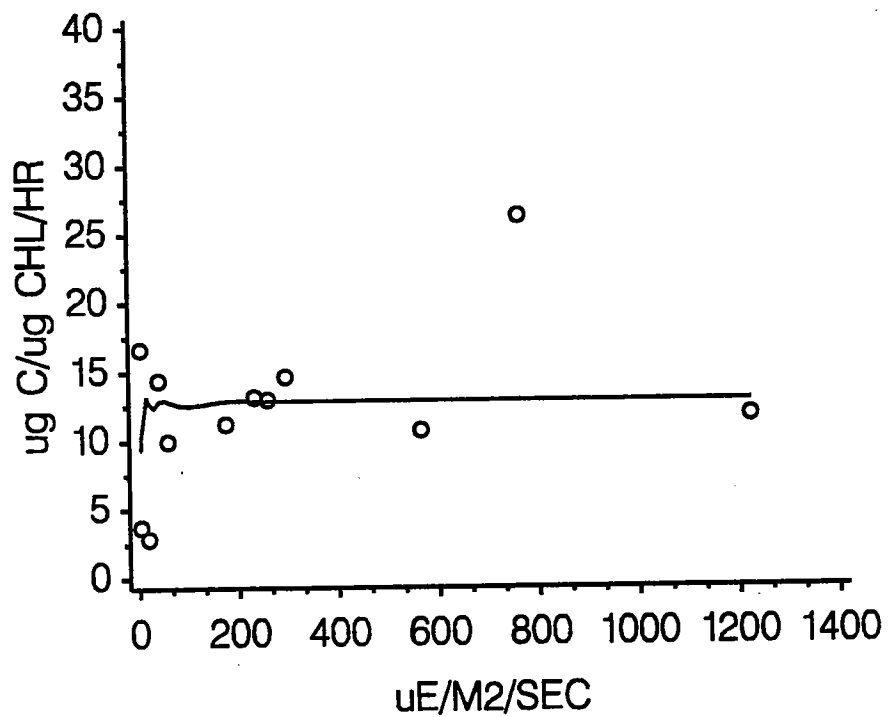
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 1, FEB 1993

Table E2-2. P vs. I Curve Parameters for the Platt and Jassby (1976) Model: February 1993.
 Numbers in parentheses are standard errors of the estimates.

P VS I CURVE PARAMETERS FEBRUARY 1993
 MODEL PLATT AND JASSBY, 1976

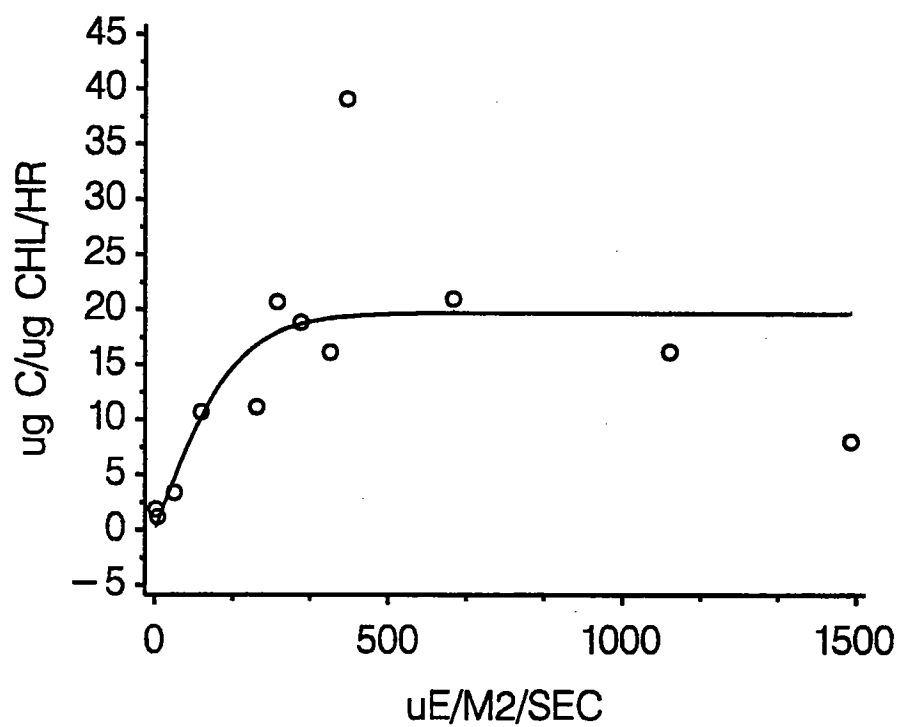
STATION	DEPTH	P _{MAX}	ALPHA	R ₂
F13P	CHL	.	.	.
	SUR	.	.	.
F1P	CHL	.	.	.
	SUR	.	.	.
F23P	CHL	.	.	.
	SUR	.	.	.
F2P	CHL	.	.	.
	SUR	.	.	.
N10P	CHL	.	.	.
	SUR	12.89 (1.94)	2.605 (2.138)	0.056
N16P	CHL	.	.	.
	SUR	.	.	.
N1P	CHL	19.79 (3.55)	0.113 (0.070)	0.520
	SUR	.	.	.
N20P	CHL	.	.	.
	SUR	5.29 (0.26)	0.342 (0.387)	0.493
N4P	CHL	.	.	.
	SUR	9.76 (4.55)	0.051 (0.070)	0.561
N7P	CHL	.	.	.
	SUR	.	.	.

STATION N10P SURFACE



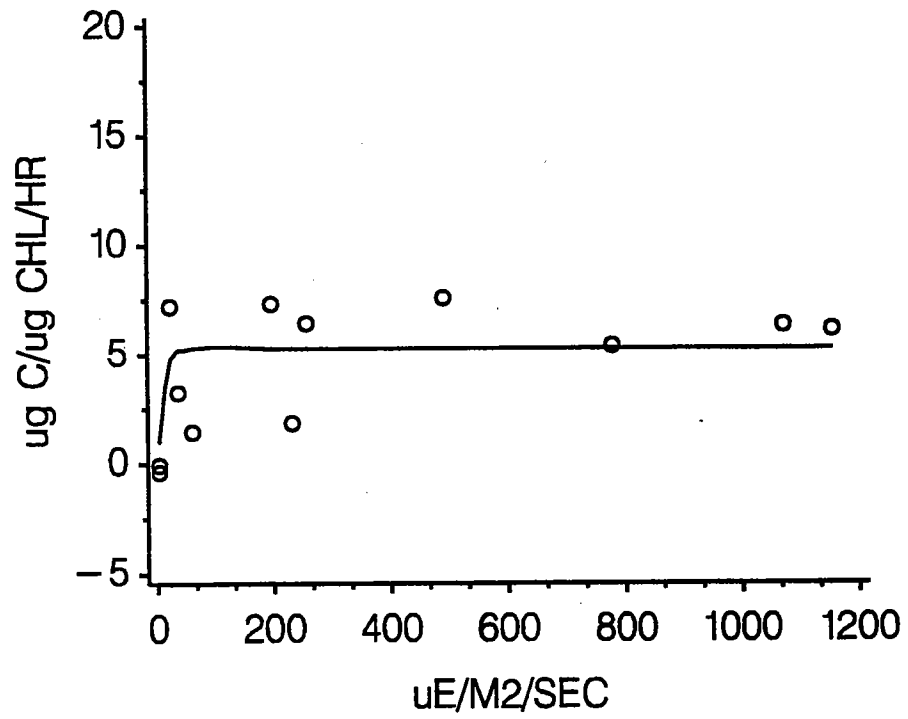
MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 1, FEB 1993

STATION N1P CHLA MAXIMUM



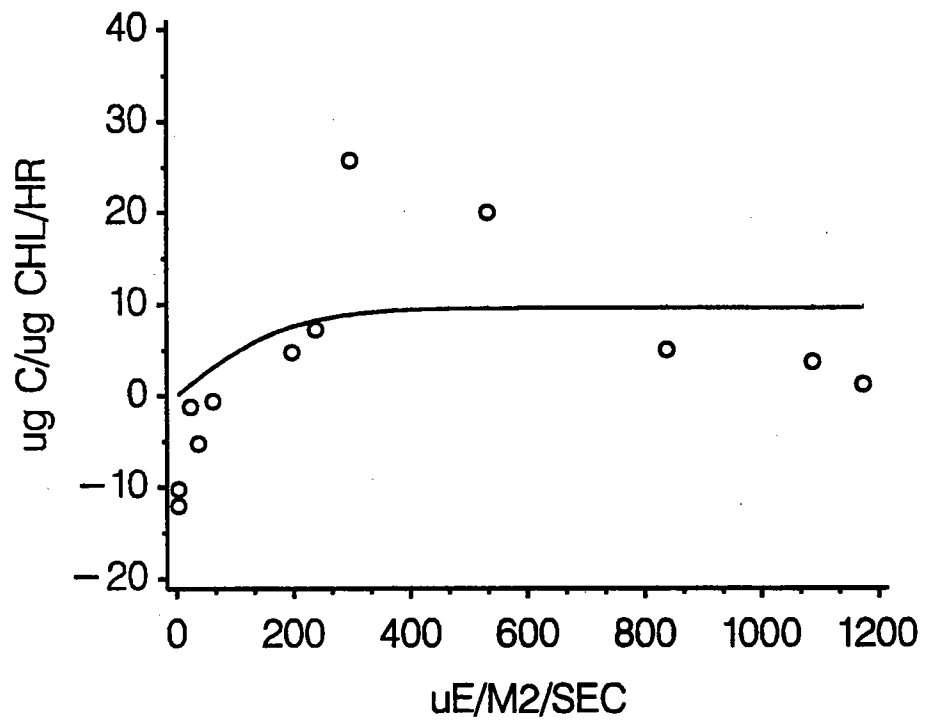
MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 1, FEB 1993

STATION N20P SURFACE



MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 1, FEB 1993

STATION N4P SURFACE



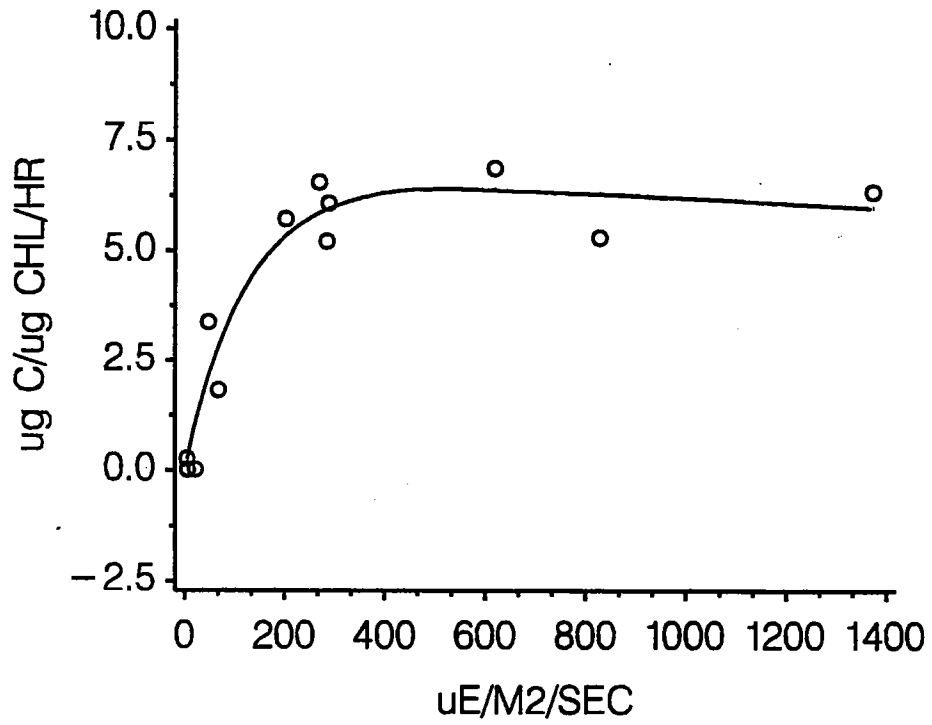
MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 1, FEB 1993

Table E2-3. P vs. I Curve Parameters for the Platt *et al.* (1980) Model: March 1993.
 Numbers in parentheses are standard errors of the estimates.

P VS I CURVE PARAMETERS MARCH 1993
 MODEL PLATT ET AL, 1980

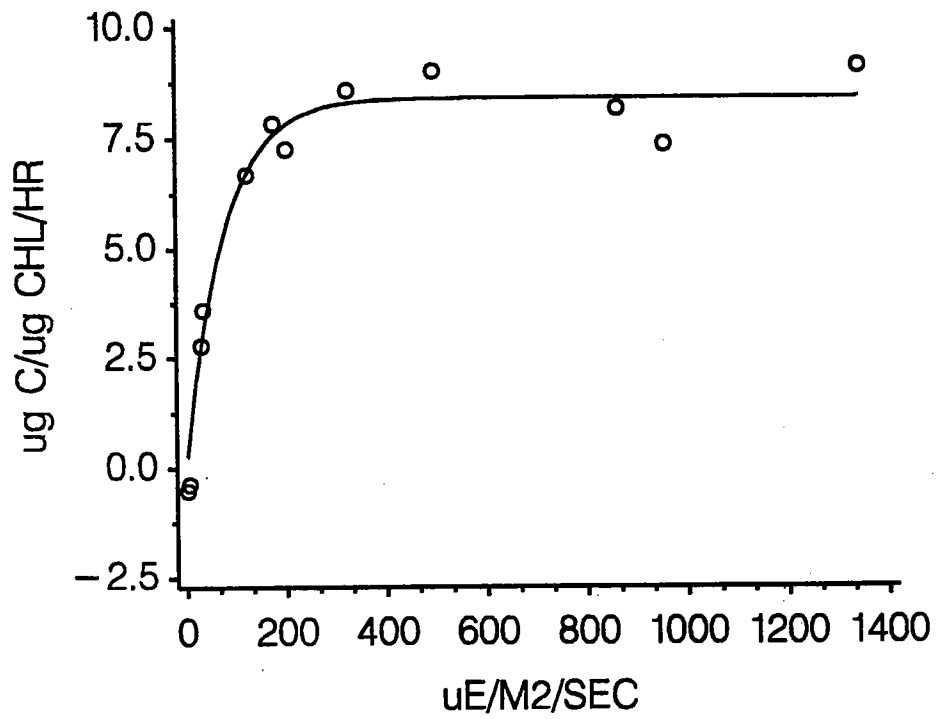
STA	DEPTH	P_SB	ALPHA	BETA	R_2
F13P	CHL	8.42 (0.31)	0.109(0.016)	0.000 (0.000)	0.973
F13P	SUR	6.83 (1.17)	0.053(0.004)	0.001 (0.001)	0.925
F1P	CHL	5.23 (0.77)	0.032(0.003)	0.002 (0.001)	0.965
F1P	SUR	5.26 (0.33)	0.034(0.002)	0.001 (0.000)	0.993
F23P	CHL	14.90(10.00)	0.048(0.008)	0.013 (0.016)	0.964
F23P	SUR	7.21 (2.49)	0.054(0.002)	0.000 (0.003)	0.906
F2P	CHL	3.75 (0.20)	0.044(0.014)	0.000 (0.000)	0.915
F2P	SUR	4.75 (0.54)	0.032(0.001)	0.001 (0.001)	0.974
N10P	CHL	13.29(114.8)	0.016(0.010)	0.009(0.120)	0.870
N10P	SUR	7.21 (3.81)	0.023(0.006)	0.001(0.003)	0.932
N16P	CHL	.	.	.	.
N16P	SUR	49.74 (0.62)	0.024(0.002)	0.060 (0.006)	0.979
N1P	CHL	6.83 (4.64)	0.028(0.012)	0.002 (0.005)	0.785
N1P	SUR	7.84 (0.06)	0.083(0.012)	0.001 (0.001)	0.819
N20P	CHL	.	.	.	.
N20P	SUR	.	.	.	.
N4P	CHL	.	.	.	.
N4P	SUR	6.54 (1.03)	0.045(0.004)	0.001 (0.001)	0.942
N7P	CHL	16.00(14.43)	0.019(0.002)	0.013(0.018)	0.964
N7P	SUR	11.06 (2.97)	0.094(0.036)	0.001(0.003)	0.792

STATION F13P SURFACE



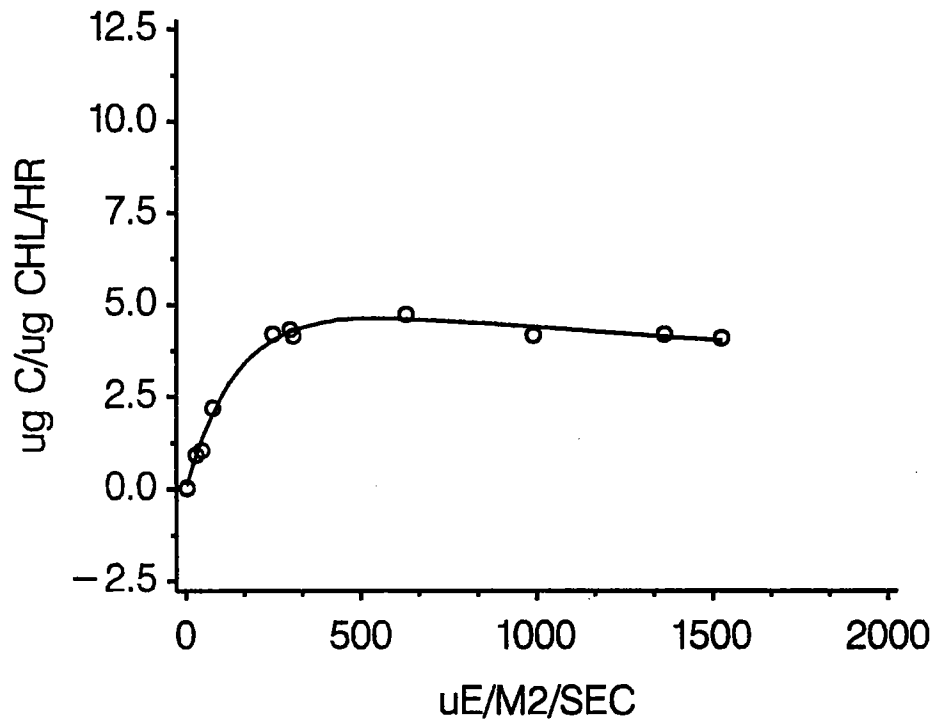
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION F13P CHLA MAXIMUM



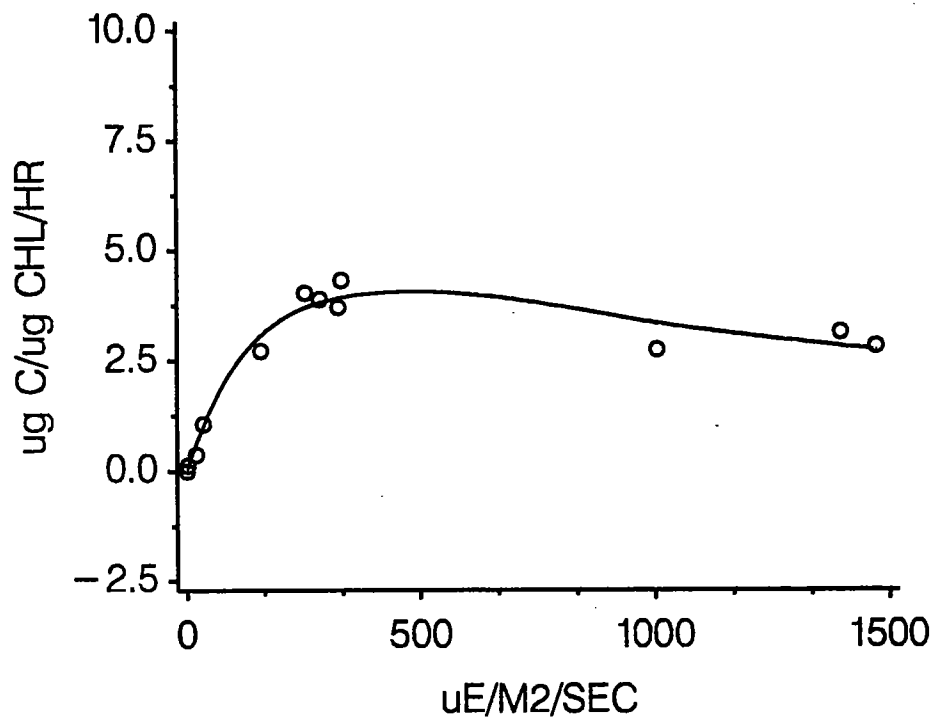
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION F1P SURFACE



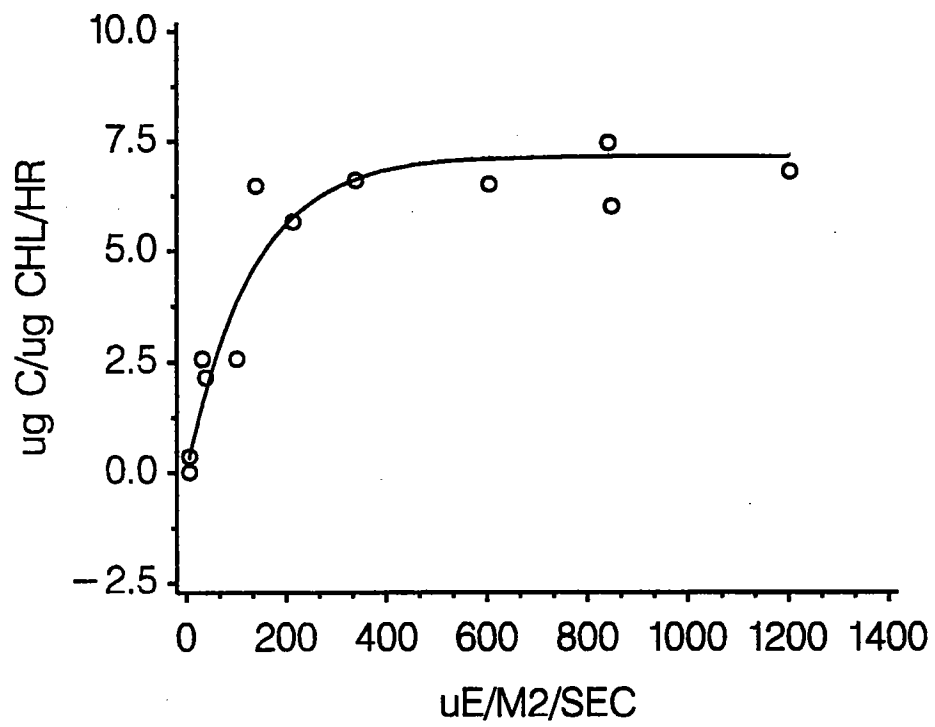
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION F1P CHLA MAXIMUM



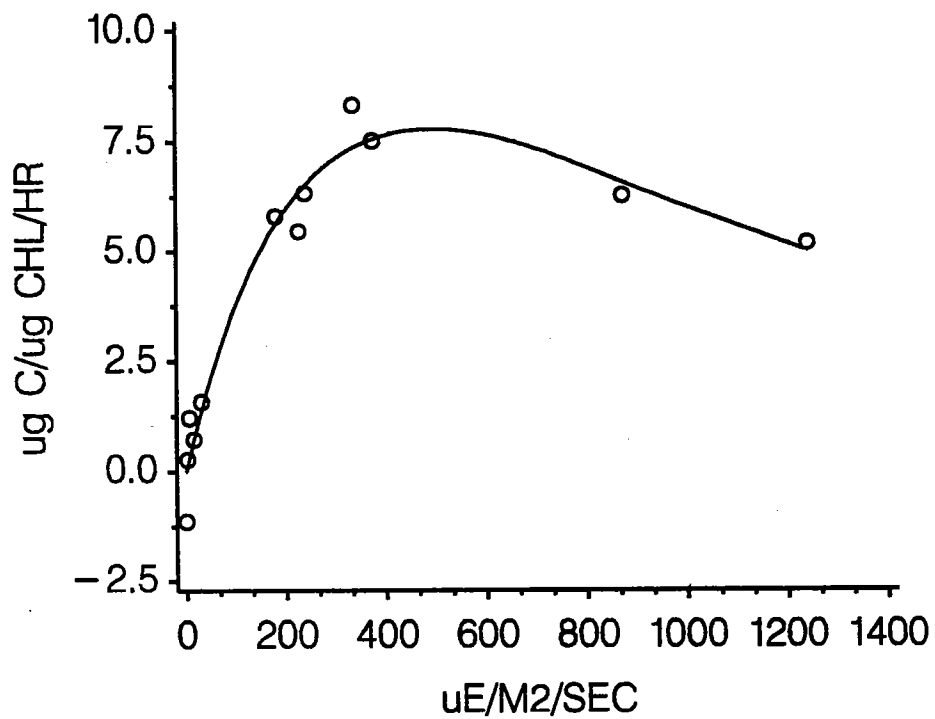
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION F23P SURFACE



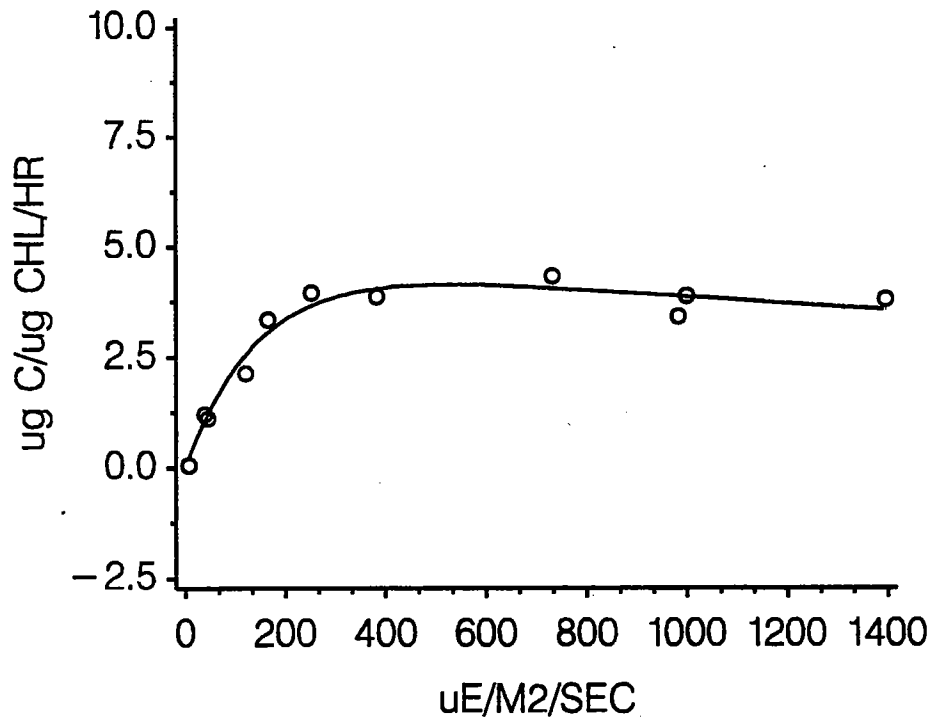
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION F23P CHLA MAXIMUM



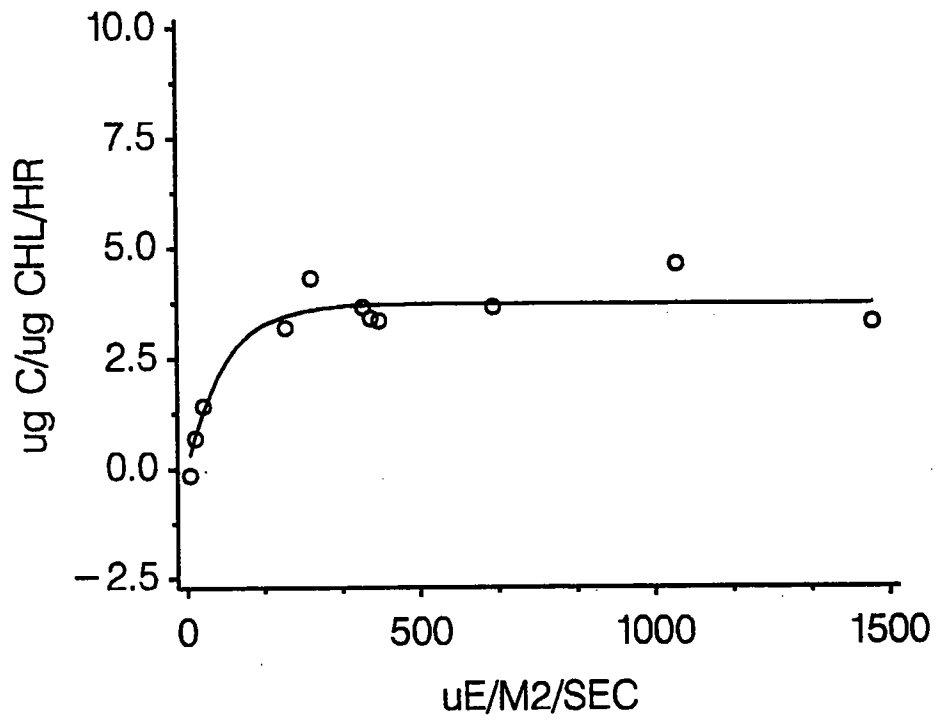
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION F2P SURFACE



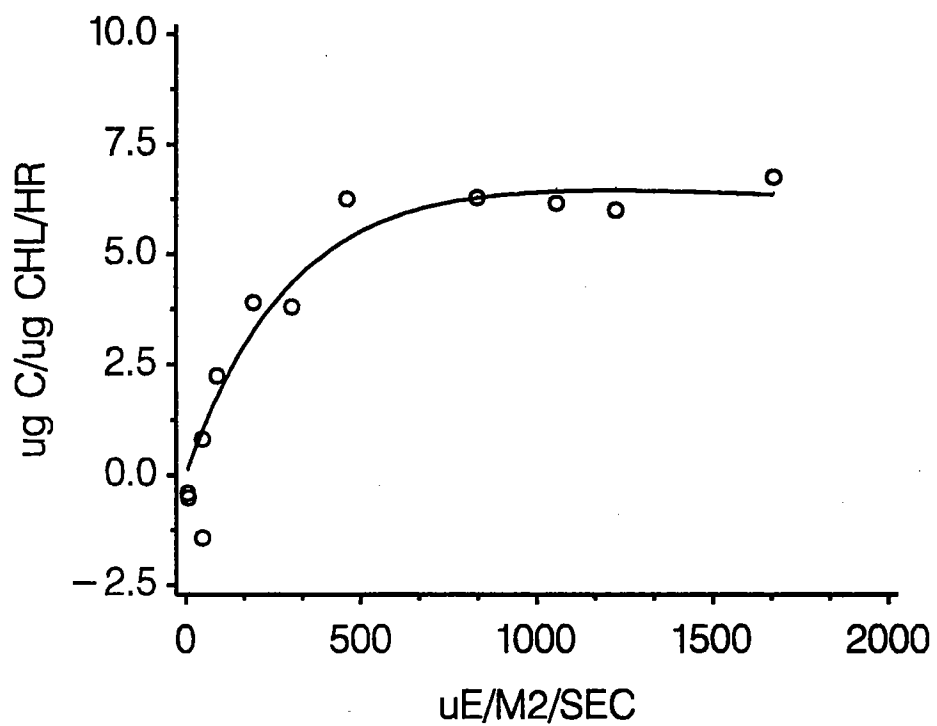
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION F2P CHLA MAXIMUM



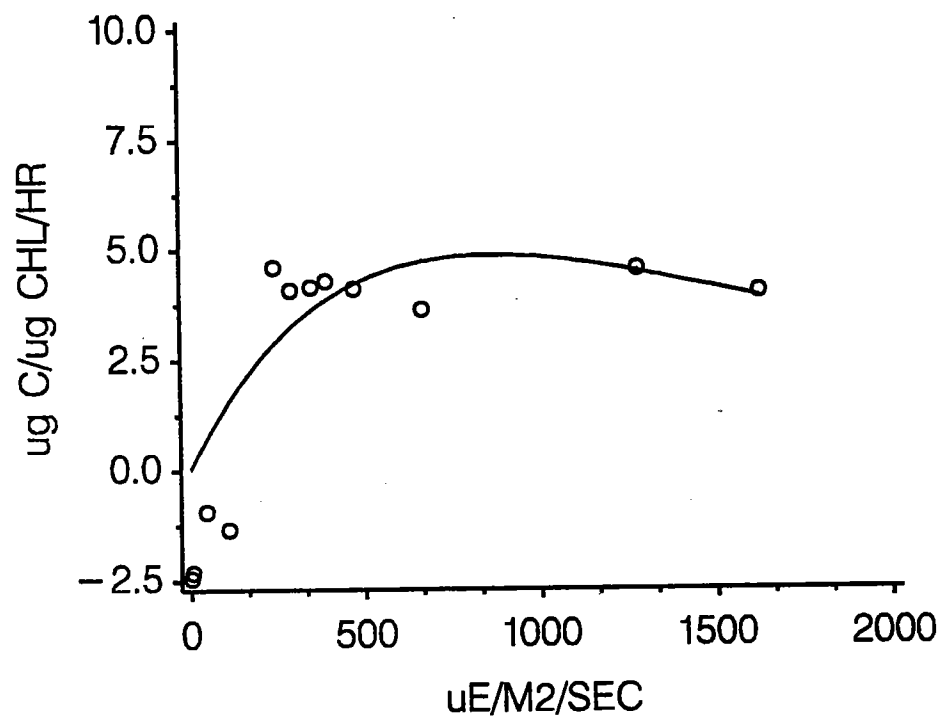
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N10P SURFACE



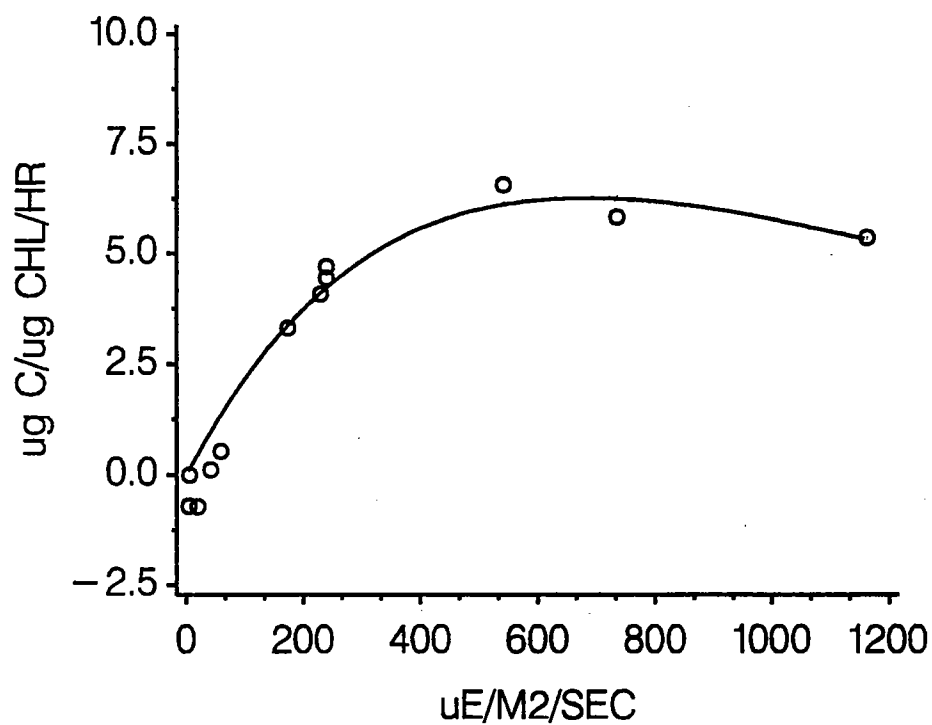
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N10P CHLA MAXIMUM



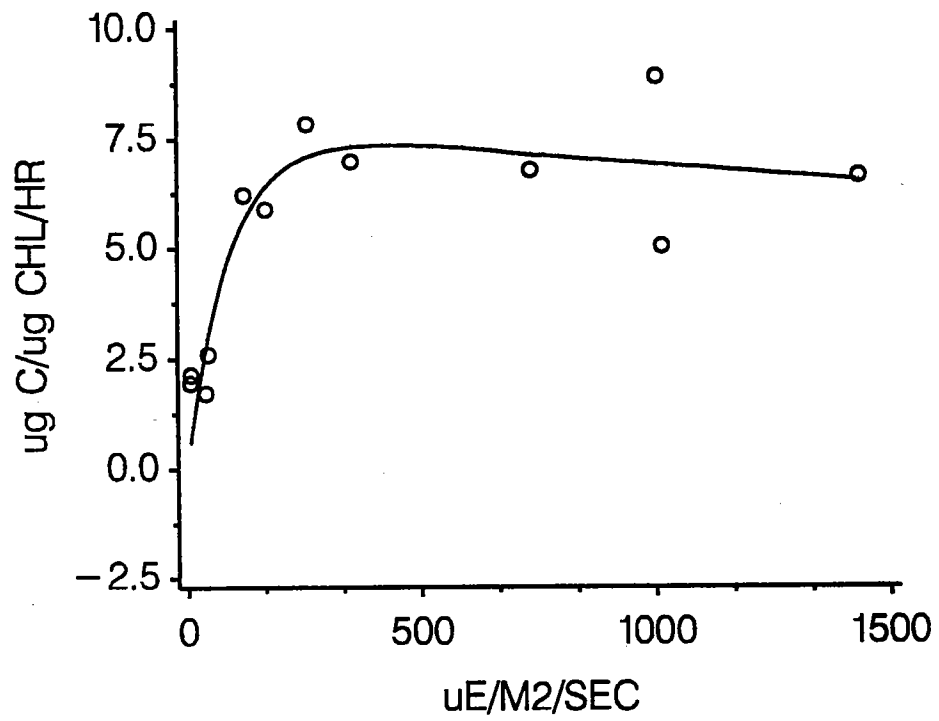
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N16P SURFACE



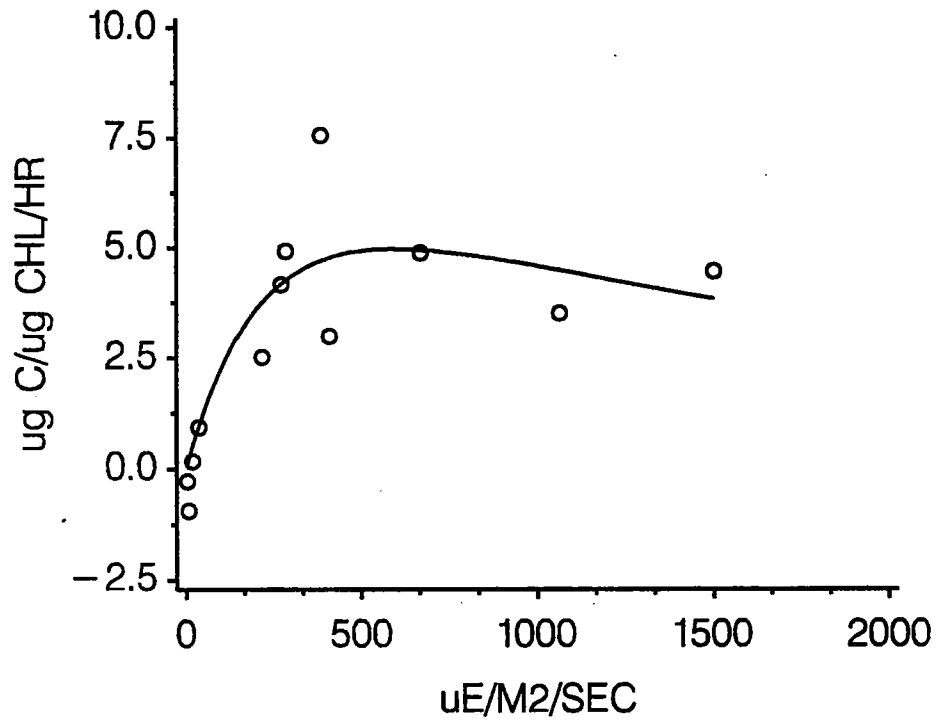
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N1P SURFACE



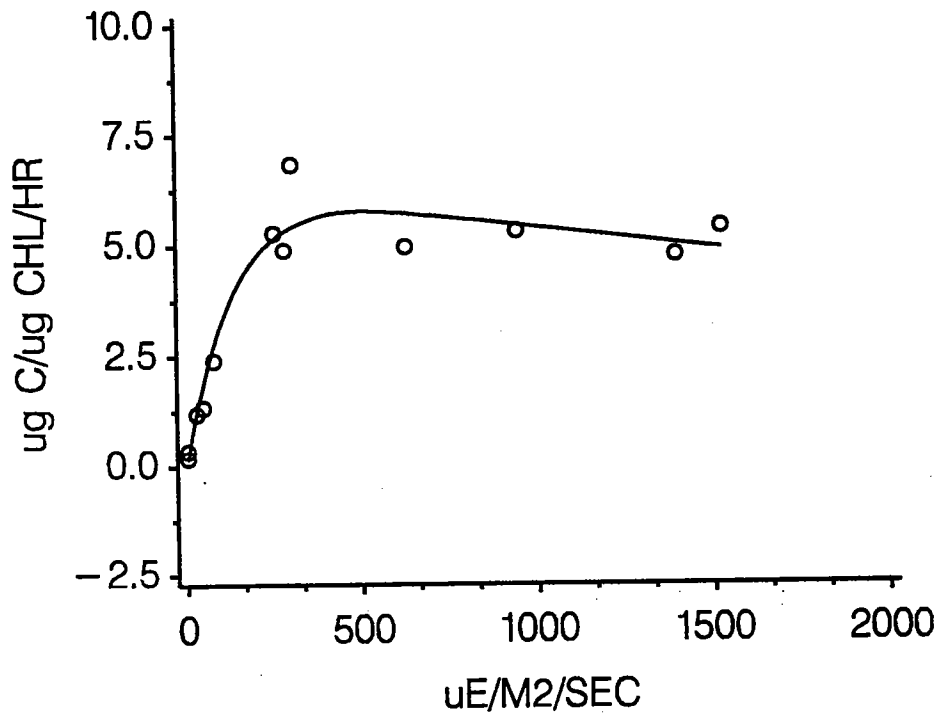
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N1P CHLA MAXIMUM



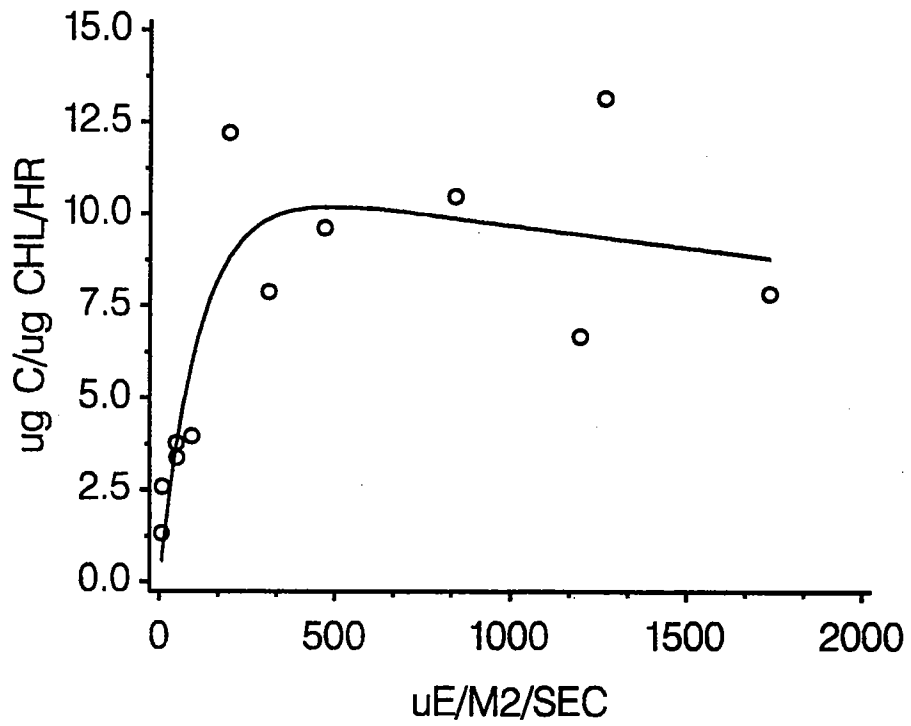
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N4P SURFACE



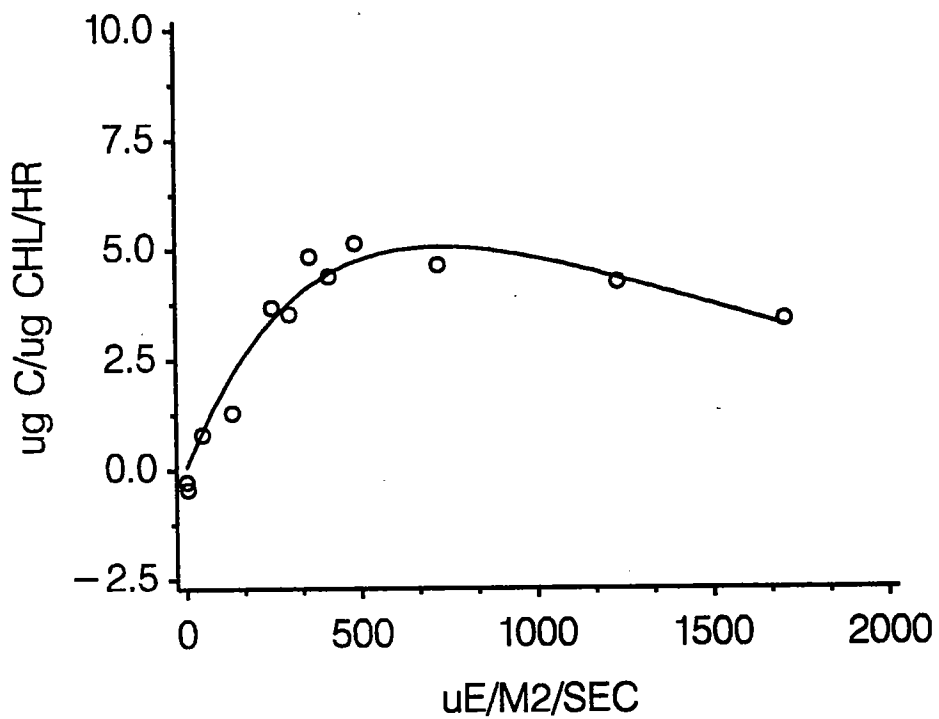
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N7P SURFACE



MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

STATION N7P CHLA MAXIMUM



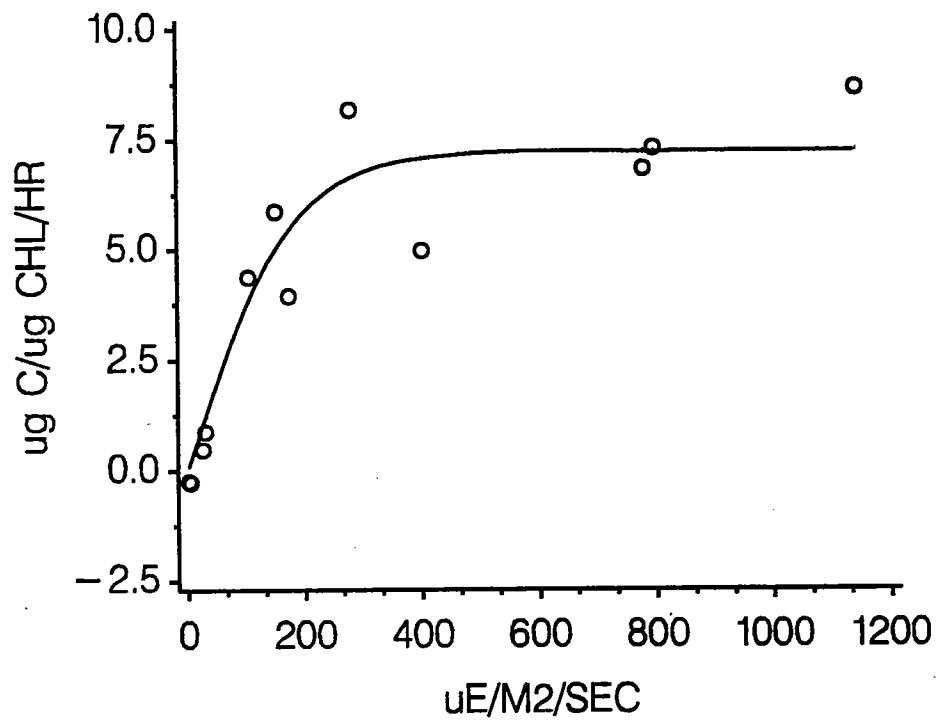
MODEL FROM PLATT ET AL, 1980
CRUISE NUMBER 2, MARCH 1993

Table E2-4. P vs. I Curve Parameters for the Platt and Jassby (1976) Model: March 1993.
 Numbers in parentheses are standard errors of the estimates.

P VS I CURVE PARAMETERS MARCH 1993
 MODEL PLATT AND JASSBY, 1976

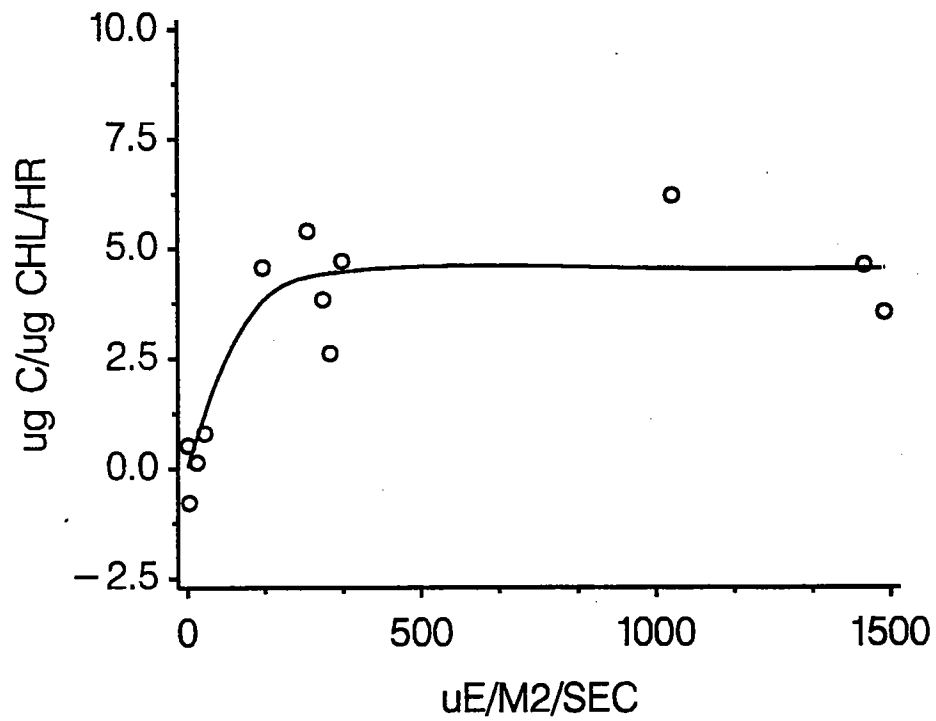
STATION	DEPTH	PMAX	ALPHA	R ₂
F13P	CHL	.	.	.
	SUR	.	.	.
F1P	CHL	.	.	.
	SUR	.	.	.
F23P	CHL	.	.	.
	SUR	.	.	.
F2P	CHL	.	.	.
	SUR	.	.	.
N10P	CHL	.	.	.
	SUR	.	.	.
N16P	CHL	7.25 (0.50)	0.040 (0.006)	0.896
	SUR	.	.	.
N1P	CHL	.	.	.
	SUR	.	.	.
N20P	CHL	7.59 (0.12)	0.042 (0.007)	0.942
	SUR	9.18 (0.37)	0.041 (0.004)	0.929
N4P	CHL	4.55 (0.43)	0.034 (0.011)	0.822
	SUR	.	.	.
N7P	CHL	.	.	.
	SUR	.	.	.

STATION N16P CHLA MAXIMUM



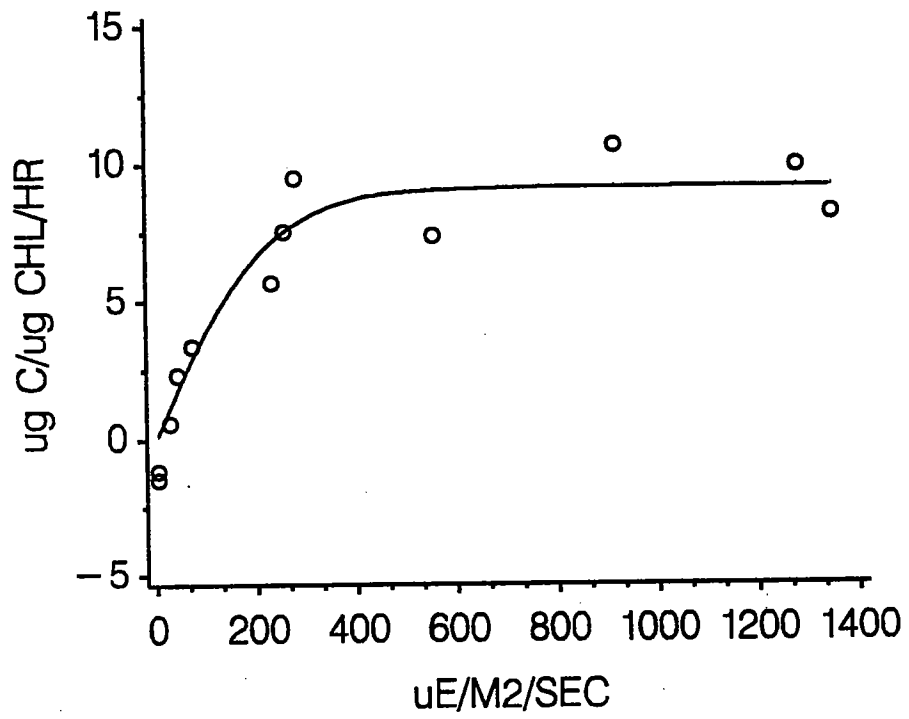
MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 2, MARCH 1993

STATION N4P CHLA MAXIMUM



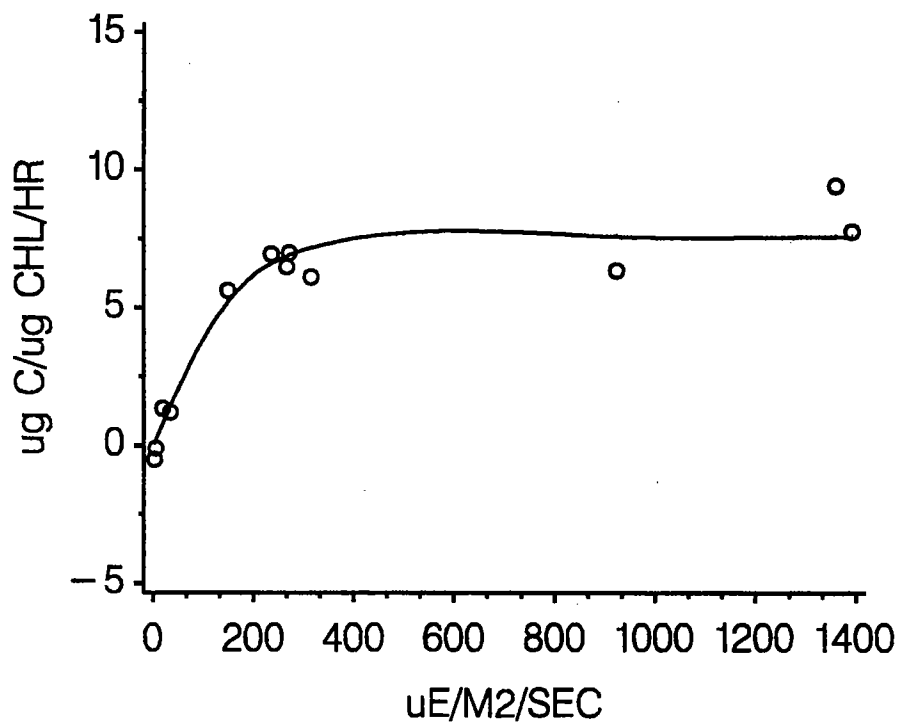
MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 2, MARCH 1993

STATION N20P SURFACE



MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 2, MARCH 1993

STATION N20P CHLA MAXIMUM



MODEL FROM PLATT AND JASSBY, 1976
CRUISE NUMBER 2, MARCH 1993

APPENDIX F

PHYTOPLANKTON SPECIES DATA TABLES

Data are for combined surveys and from station N10P from nearfield surveys during February and March 1993. Data is from whole-water sample analysis. All counts for screened (20 μm) samples are provided in a table in the text of the main report.

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010064	F23P	02-23-93	07:16	9.62	AMPHORA SPP.	.001
W93010064	F23P	02-23-93	07:16	9.62	CHAETOCEROS DEBILIS	.025
W93010064	F23P	02-23-93	07:16	9.62	CHAETOCEROS SOCIALIS	.01
W93010064	F23P	02-23-93	07:16	9.62	CHAETOCEROS SPP.<(10UM)	.012
W93010064	F23P	02-23-93	07:16	9.62	COCCONEIS SCUTELLUM	.001
W93010064	F23P	02-23-93	07:16	9.62	CRYPTOMONADS	.032
W93010064	F23P	02-23-93	07:16	9.62	CYLINDROTHECA CLOSTERIUM	.031
W93010064	F23P	02-23-93	07:16	9.62	DETONULA CONFERVACEA	.001
W93010064	F23P	02-23-93	07:16	9.62	EBRIA TRIPARTITIA	.001
W93010064	F23P	02-23-93	07:16	9.62	GYROSIGMA SPP.	.001
W93010064	F23P	02-23-93	07:16	9.62	MICROFLAGELLATES	.04
W93010064	F23P	02-23-93	07:16	9.62	NAVICULOID DIATOMS	.007
W93010064	F23P	02-23-93	07:16	9.62	NITZSCHIA SERIATA	.024
W93010064	F23P	02-23-93	07:16	9.62	PLEUROSIGMA (CF) AESTUARII	.004
W93010064	F23P	02-23-93	07:16	9.62	PROTOPERIDINIUM SPP.	.001
W93010064	F23P	02-23-93	07:16	9.62	RHIZOLENIA DELICATULA	.002
W93010064	F23P	02-23-93	07:16	9.62	SKELETONEMA COSTATUM	.086
W93010064	F23P	02-23-93	07:16	9.62	THALASSIONEMA NITZSCHOIDES	.006
W93010064	F23P	02-23-93	07:16	9.62	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.004
W93010064	F23P	02-23-93	07:16	9.62	THALASSIOSIRA SPP.	.003
W93010064	F23P	02-23-93	07:16	9.62	TOTAL PHYTOPLANKTON	.304
W93010064	F23P	02-23-93	07:16	9.62	UNID. CENTRALES	.005
W93010064	F23P	02-23-93	07:16	9.62	UNID. NAKED DINOFLAGELLATE	.001
W93010064	F23P	02-23-93	07:16	9.62	UNID. PENNALES	.003
W93010066	F23P	02-23-93	07:18	2	CHAETOCEROS DEBILIS	.013
W93010066	F23P	02-23-93	07:18	2	CHAETOCEROS SEPTENTRIONALIS	.001
W93010066	F23P	02-23-93	07:18	2	CHAETOCEROS SOCIALIS	.006
W93010066	F23P	02-23-93	07:18	2	CHAETOCEROS SPP.>(10UM)	.009
W93010066	F23P	02-23-93	07:18	2	COCCONEIS SCUTELLUM	.001
W93010066	F23P	02-23-93	07:18	2	CRYPTOMONADS	.031
W93010066	F23P	02-23-93	07:18	2	CYLINDROTHECA CLOSTERIUM	.014
W93010066	F23P	02-23-93	07:18	2	DETONULA CONFERVACEA	.002
W93010066	F23P	02-23-93	07:18	2	EBRIA TRIPARTITIA	.001
W93010066	F23P	02-23-93	07:18	2	GYRODINIUM SPP.	.001
W93010066	F23P	02-23-93	07:18	2	GYROSIGMA SPP.	.002
W93010066	F23P	02-23-93	07:18	2	LEPTOCYLINDRUS DANICUS	.002
W93010066	F23P	02-23-93	07:18	2	MICROFLAGELLATES	.05
W93010066	F23P	02-23-93	07:18	2	NAVICULA (CF) FORCIPATA	.001
W93010066	F23P	02-23-93	07:18	2	NAVICULOID DIATOMS	.009
W93010066	F23P	02-23-93	07:18	2	NITZSCHIA SERIATA	.015
W93010066	F23P	02-23-93	07:18	2	NITZSCHIA SPP.	.003
W93010066	F23P	02-23-93	07:18	2	PLEUROSIGMA SPP.	.001
W93010066	F23P	02-23-93	07:18	2	SKELETONEMA COSTATUM	.043
W93010066	F23P	02-23-93	07:18	2	THALASSIONEMA NITZSCHOIDES	.014
W93010066	F23P	02-23-93	07:18	2	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.001
W93010066	F23P	02-23-93	07:18	2	THALASSIOSIRA NORDENSKIOLDII	.001
W93010066	F23P	02-23-93	07:18	2	THALASSIOSIRA SPP.	.002
W93010066	F23P	02-23-93	07:18	2	TOTAL PHYTOPLANKTON	.228
W93010066	F23P	02-23-93	07:18	2	UNID. CENTRALES	.005
W93010066	F23P	02-23-93	07:18	2	UNID. NAKED DINOFLAGELLATE	.001
W93010066	F23P	02-23-93	07:18	2	UNID. PENNALES	.001
W93010087	N20P	02-23-93	08:53	13.95	CHAETOCEROS COMPRESSUS	.007
W93010087	N20P	02-23-93	08:53	13.95	CHAETOCEROS DEBILIS	.033
W93010087	N20P	02-23-93	08:53	13.95	CHAETOCEROS DECIPIENS	.011
W93010087	N20P	02-23-93	08:53	13.95	CHAETOCEROS SOCIALIS	.02
W93010087	N20P	02-23-93	08:53	13.95	CHAETOCEROS SPP. (10-20UM)	.012
W93010087	N20P	02-23-93	08:53	13.95	COCCONEIS SCUTELLUM	.001
W93010087	N20P	02-23-93	08:53	13.95	COSCINOSIRA POLYCHORDA	.003
W93010087	N20P	02-23-93	08:53	13.95	CRYPTOMONADS	.019
W93010087	N20P	02-23-93	08:53	13.95	CYLINDROTHECA CLOSTERIUM	.035
W93010087	N20P	02-23-93	08:53	13.95	DICTYOCHA SPECULUM	.001
W93010087	N20P	02-23-93	08:53	13.95	GYRODINIUM SPIRALE	.001

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010087	N20P	02-23-93	08:53	13.95	LEPTOCYLINDRUS DANICUS	.001
W93010087	N20P	02-23-93	08:53	13.95	MESODINIUM RUBRUM	.001
W93010087	N20P	02-23-93	08:53	13.95	MICROFLAGELLATES	.039
W93010087	N20P	02-23-93	08:53	13.95	NAVICULOID DIATOMS	.003
W93010087	N20P	02-23-93	08:53	13.95	NITZSCHIA SERIATA	.001
W93010087	N20P	02-23-93	08:53	13.95	NITZSCHIA SPP.	.001
W93010087	N20P	02-23-93	08:53	13.95	SKELETONEMA COSTATUM	.045
W93010087	N20P	02-23-93	08:53	13.95	THALASSIONEMA NITZSCHOIDES	.006
W93010087	N20P	02-23-93	08:53	13.95	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.009
W93010087	N20P	02-23-93	08:53	13.95	THALASSIOSIRA NORDENSKIOELDII	.002
W93010087	N20P	02-23-93	08:53	13.95	THALASSIOSIRA SPP.	.003
W93010087	N20P	02-23-93	08:53	13.95	TOTAL PHYTOPLANKTON	.262
W93010087	N20P	02-23-93	08:53	13.95	UNID. CENTRALES	.004
W93010087	N20P	02-23-93	08:53	13.95	UNID. NAKED DINOFLAGELLATE	.003
W93010087	N20P	02-23-93	08:53	13.95	UNID. PENNALES	.003
W93010089	N20P	02-23-93	08:55	2.16	CHAETOCEROS (cf) CERATOSPORUS	.001
W93010089	N20P	02-23-93	08:55	2.16	CHAETOCEROS COMPRESSUS	.004
W93010089	N20P	02-23-93	08:55	2.16	CHAETOCEROS DEBILIS	.039
W93010089	N20P	02-23-93	08:55	2.16	CHAETOCEROS SOCIALIS	.014
W93010089	N20P	02-23-93	08:55	2.16	CHAETOCEROS SPP. (10-20UM)	.02
W93010089	N20P	02-23-93	08:55	2.16	COCCONEIS SCUTELLUM	.001
W93010089	N20P	02-23-93	08:55	2.16	COSCINODISCUS OCLUS-IRIDIS	.002
W93010089	N20P	02-23-93	08:55	2.16	COSCINOSIRA POLYCHORDA	.003
W93010089	N20P	02-23-93	08:55	2.16	CRYPTOMONADS	.022
W93010089	N20P	02-23-93	08:55	2.16	CYLINDROTHECA CLOSTERIUM	.047
W93010089	N20P	02-23-93	08:55	2.16	DITYLUM BRIGHTWELLII	.001
W93010089	N20P	02-23-93	08:55	2.16	GYRODINIUM SPIRALE	.001
W93010089	N20P	02-23-93	08:55	2.16	GYRODINIUM SPP.	.001
W93010089	N20P	02-23-93	08:55	2.16	KATODINIUM ROTUNDATUM	.001
W93010089	N20P	02-23-93	08:55	2.16	MICROFLAGELLATES	.053
W93010089	N20P	02-23-93	08:55	2.16	NAVICULOID DIATOMS	.003
W93010089	N20P	02-23-93	08:55	2.16	NITZSCHIA SERIATA	.001
W93010089	N20P	02-23-93	08:55	2.16	NITZSCHIA SPP.	.002
W93010089	N20P	02-23-93	08:55	2.16	SCRIPPSIELLA TROCHOIDEA	.001
W93010089	N20P	02-23-93	08:55	2.16	SKELETONEMA COSTATUM	.029
W93010089	N20P	02-23-93	08:55	2.16	STEPHANOPYXIS TURRIS	.001
W93010089	N20P	02-23-93	08:55	2.16	THALASSIONEMA NITZSCHOIDES	.008
W93010089	N20P	02-23-93	08:55	2.16	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.011
W93010089	N20P	02-23-93	08:55	2.16	THALASSIOSIRA NORDENSKIOELDII	.001
W93010089	N20P	02-23-93	08:55	2.16	THALASSIOSIRA SPP.	.003
W93010089	N20P	02-23-93	08:55	2.16	TOTAL PHYTOPLANKTON	.277
W93010089	N20P	02-23-93	08:55	2.16	UNID. CENTRALES	.004
W93010089	N20P	02-23-93	08:55	2.16	UNID. NAKED DINOFLAGELLATE	.003
W93010089	N20P	02-23-93	08:55	2.16	UNID. PENNALES	.001
W93010099	N16P	02-23-93	09:47	21.94	CHAETOCEROS COMPRESSUS	.01
W93010099	N16P	02-23-93	09:47	21.94	CHAETOCEROS DEBILIS	.032
W93010099	N16P	02-23-93	09:47	21.94	CHAETOCEROS SOCIALIS	.02
W93010099	N16P	02-23-93	09:47	21.94	CHAETOCEROS SPP. (10-20UM)	.026
W93010099	N16P	02-23-93	09:47	21.94	COSCINODISCUS EXCENTRICUS	.001
W93010099	N16P	02-23-93	09:47	21.94	COSCINOSIRA POLYCHORDA	.002
W93010099	N16P	02-23-93	09:47	21.94	CRYPTOMONADS	.013
W93010099	N16P	02-23-93	09:47	21.94	CYANOPHYCEAE	.004
W93010099	N16P	02-23-93	09:47	21.94	CYLINDROTHECA CLOSTERIUM	.043
W93010099	N16P	02-23-93	09:47	21.94	DETONULA CONFERVACEA	.002
W93010099	N16P	02-23-93	09:47	21.94	MESODINIUM RUBRUM	.001
W93010099	N16P	02-23-93	09:47	21.94	MICROFLAGELLATES	.059
W93010099	N16P	02-23-93	09:47	21.94	NAVICULOID DIATOMS	.003
W93010099	N16P	02-23-93	09:47	21.94	NAVICULOID (LYRATE)	.002
W93010099	N16P	02-23-93	09:47	21.94	NITZSCHIA SPP.	.002
W93010099	N16P	02-23-93	09:47	21.94	PLEUROSIGMA (CF) AESTUARII	.001
W93010099	N16P	02-23-93	09:47	21.94	SCRIPPSIELLA TROCHOIDEA	.001
W93010099	N16P	02-23-93	09:47	21.94	SKELETONEMA COSTATUM	.038

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010099	N16P	02-23-93	09:47	21.94	STEPHANOPYXIS TURRIS	.002
W93010099	N16P	02-23-93	09:47	21.94	THALASSIONEMA NITZSCHOIDES	.014
W93010099	N16P	02-23-93	09:47	21.94	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.03
W93010099	N16P	02-23-93	09:47	21.94	THALASSIOSIRA NORDENSKIOELDII	.001
W93010099	N16P	02-23-93	09:47	21.94	THALASSIOSIRA SPP.	.002
W93010099	N16P	02-23-93	09:47	21.94	TOTAL PHYTOPLANKTON	.321
W93010099	N16P	02-23-93	09:47	21.94	UNID. CENTRALES	.013
W93010099	N16P	02-23-93	09:47	21.94	UNID. NAKED DINOFLAGELLATE	.002
W93010101	N16P	02-23-93	09:50	2.34	CERATAULINA PELAGICA	.001
W93010101	N16P	02-23-93	09:50	2.34	CHAETOCEROS (cf) CERATOSPORUS	.003
W93010101	N16P	02-23-93	09:50	2.34	CHAETOCEROS COMPRESSUS	.012
W93010101	N16P	02-23-93	09:50	2.34	CHAETOCEROS DECIPIENS	.016
W93010101	N16P	02-23-93	09:50	2.34	CHAETOCEROS SOCIALIS	.063
W93010101	N16P	02-23-93	09:50	2.34	CHAETOCEROS SPP. (10-20UM)	.013
W93010101	N16P	02-23-93	09:50	2.34	COSCINODISCUS EXCENTRICUS	.001
W93010101	N16P	02-23-93	09:50	2.34	CYANOPHYCEAE	.004
W93010101	N16P	02-23-93	09:50	2.34	CYLINDROTHECA CLOSTERIUM	.063
W93010101	N16P	02-23-93	09:50	2.34	GYRODINIUM SPIRALE	.001
W93010101	N16P	02-23-93	09:50	2.34	KATODINIUM ROTUNDATUM	.001
W93010101	N16P	02-23-93	09:50	2.34	LEPTOCYLINDRUS DANICUS	.003
W93010101	N16P	02-23-93	09:50	2.34	LICHOPHORA SPP.	.001
W93010101	N16P	02-23-93	09:50	2.34	MESODINIUM RUBRUM	.001
W93010101	N16P	02-23-93	09:50	2.34	MICROFLAGELLATES	.03
W93010101	N16P	02-23-93	09:50	2.34	NAVICULOID DIATOMS	.003
W93010101	N16P	02-23-93	09:50	2.34	NAVICULIDS (LYRATE)	.001
W93010101	N16P	02-23-93	09:50	2.34	NITZSCHIA SPP.	.001
W93010101	N16P	02-23-93	09:50	2.34	PROTOPERIDINIUM SPP.	.001
W93010101	N16P	02-23-93	09:50	2.34	SKELETONEMA COSTATUM	.046
W93010101	N16P	02-23-93	09:50	2.34	STEPHANOPYXIS TURRIS	.001
W93010101	N16P	02-23-93	09:50	2.34	THALASSIONEMA NITZSCHOIDES	.007
W93010101	N16P	02-23-93	09:50	2.34	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.014
W93010101	N16P	02-23-93	09:50	2.34	THALASSIOSIRA NORDENSKIOELDII	.001
W93010101	N16P	02-23-93	09:50	2.34	THALASSIOSIRA SPP.	.003
W93010101	N16P	02-23-93	09:50	2.34	TOTAL PHYTOPLANKTON	.294
W93010101	N16P	02-23-93	09:50	2.34	UNID. CENTRALES	.005
W93010101	N16P	02-23-93	09:50	2.34	UNID. NAKED DINOFLAGELLATE	.002
W93010101	N16P	02-23-93	09:50	2.34	UNID. PENNALES	.001
W93010115	N10P	02-23-93	10:49	7.81	CHAETOCEROS DEBILIS	.041
W93010115	N10P	02-23-93	10:49	7.81	CHAETOCEROS SOCIALIS	.03
W93010115	N10P	02-23-93	10:49	7.81	CHAETOCEROS SPP. (10-20UM)	.003
W93010115	N10P	02-23-93	10:49	7.81	COSCINODISCUS EXCENTRICUS	.001
W93010115	N10P	02-23-93	10:49	7.81	COSCINODISCUS OCLUS-IRIDIS	.001
W93010115	N10P	02-23-93	10:49	7.81	CRYPTONOMADS	.016
W93010115	N10P	02-23-93	10:49	7.81	CYLINDROTHECA CLOSTERIUM	.034
W93010115	N10P	02-23-93	10:49	7.81	LEPTOCYLINDRUS DANICUS	.007
W93010115	N10P	02-23-93	10:49	7.81	MICROFLAGELLATES	.049
W93010115	N10P	02-23-93	10:49	7.81	NAVICULOID DIATOMS	.004
W93010115	N10P	02-23-93	10:49	7.81	NAVICULIDS (LYRATE)	.001
W93010115	N10P	02-23-93	10:49	7.81	NITZSCHIA SPP.	.007
W93010115	N10P	02-23-93	10:49	7.81	PARALIA MARINA	.002
W93010115	N10P	02-23-93	10:49	7.81	SKELETONEMA COSTATUM	.039
W93010115	N10P	02-23-93	10:49	7.81	STEPHANOPYXIS TURRIS	.001
W93010115	N10P	02-23-93	10:49	7.81	THALASSIONEMA NITZSCHOIDES	.011
W93010115	N10P	02-23-93	10:49	7.81	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.008
W93010115	N10P	02-23-93	10:49	7.81	THALASSIOSIRA NORDENSKIOELDII	.001
W93010115	N10P	02-23-93	10:49	7.81	TOTAL PHYTOPLANKTON	.259
W93010115	N10P	02-23-93	10:49	7.81	TROPIDONEIS SPP.	.001
W93010115	N10P	02-23-93	10:49	7.81	UNID. CENTRALES	.003
W93010115	N10P	02-23-93	10:49	7.81	UNID. NAKED DINOFLAGELLATE	.001
W93010117	N10P	02-23-93	10:51	1.97	CHAETOCEROS COMPRESSUS	.003
W93010117	N10P	02-23-93	10:51	1.97	CHAETOCEROS DEBILIS	.047
W93010117	N10P	02-23-93	10:51	1.97	CHAETOCEROS SEPTENTRIONALIS	.001

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010117	N10P	02-23-93	10:51	1.97	CHAETOCEROS SOCIALIS	.03
W93010117	N10P	02-23-93	10:51	1.97	CHAETOCEROS SPP. (10-20UM)	.005
W93010117	N10P	02-23-93	10:51	1.97	COCCONEIS SCUTELLUM	.001
W93010117	N10P	02-23-93	10:51	1.97	COSCINODISCUS EXCENTRICUS	.001
W93010117	N10P	02-23-93	10:51	1.97	COSCINODISCUS OCULUS-IRIDIS	.001
W93010117	N10P	02-23-93	10:51	1.97	CRYPTOMONADS	.008
W93010117	N10P	02-23-93	10:51	1.97	CYLINDROTHECA CLOSTERIUM	.018
W93010117	N10P	02-23-93	10:51	1.97	GYMNODINIUM SPP.	.001
W93010117	N10P	02-23-93	10:51	1.97	GYRODINIUM SPIRALE	.002
W93010117	N10P	02-23-93	10:51	1.97	LEPTOCYLINDRUS DANICUS	.003
W93010117	N10P	02-23-93	10:51	1.97	MESODINIUM RUBRUM	.002
W93010117	N10P	02-23-93	10:51	1.97	MICROFLAGELLATES	.025
W93010117	N10P	02-23-93	10:51	1.97	NAVICULOID DIATOMS	.003
W93010117	N10P	02-23-93	10:51	1.97	NITZSCHIA (CF) DELICATISSIMA	.004
W93010117	N10P	02-23-93	10:51	1.97	NITZSCHIA SPP.	.006
W93010117	N10P	02-23-93	10:51	1.97	SKELETONEMA COSTATUM	.073
W93010117	N10P	02-23-93	10:51	1.97	THALASSIONEMA NITZSCHOIDES	.007
W93010117	N10P	02-23-93	10:51	1.97	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.006
W93010117	N10P	02-23-93	10:51	1.97	THALASSIOSIRA NORDENSKIOELDII	.001
W93010117	N10P	02-23-93	10:51	1.97	TOTAL PHYTOPLANKTON	.249
W93010117	N10P	02-23-93	10:51	1.97	UNID. CENTRALES	.001
W93010117	N10P	02-23-93	10:51	1.97	UNID. NAKED DINOFLAGELLATE	.001
W93010234	N01P	02-24-93	06:11	13.26	AMPHIDIUM SPP.	.002
W93010234	N01P	02-24-93	06:11	13.26	CHAETOCEROS COMPRESSUS	.014
W93010234	N01P	02-24-93	06:11	13.26	CHAETOCEROS DEBILIS	.069
W93010234	N01P	02-24-93	06:11	13.26	CHAETOCEROS SOCIALIS	.009
W93010234	N01P	02-24-93	06:11	13.26	CHAETOCEROS SPP. (10-20UM)	.003
W93010234	N01P	02-24-93	06:11	13.26	CORETHRON CRIOPHILUM	.001
W93010234	N01P	02-24-93	06:11	13.26	CRYPTOMONADS	.047
W93010234	N01P	02-24-93	06:11	13.26	CYLINDROTHECA CLOSTERIUM	.041
W93010234	N01P	02-24-93	06:11	13.26	DINOPHYSIS NORVEGICA	.001
W93010234	N01P	02-24-93	06:11	13.26	GRAMMATOPHORA MARINA	.001
W93010234	N01P	02-24-93	06:11	13.26	GYRODINIUM SPIRALE	.002
W93010234	N01P	02-24-93	06:11	13.26	LEPTOCYLINDRUS DANICUS	.013
W93010234	N01P	02-24-93	06:11	13.26	MICROFLAGELLATES	.048
W93010234	N01P	02-24-93	06:11	13.26	NAVICULOID DIATOMS	.005
W93010234	N01P	02-24-93	06:11	13.26	NAVICULOID (LYRATE)	.001
W93010234	N01P	02-24-93	06:11	13.26	NITZSCHIA SPP.	.008
W93010234	N01P	02-24-93	06:11	13.26	PLEUROSIGMA SPP.	.001
W93010234	N01P	02-24-93	06:11	13.26	SKELETONEMA COSTATUM	.033
W93010234	N01P	02-24-93	06:11	13.26	THALASSIONEMA NITZSCHOIDES	.009
W93010234	N01P	02-24-93	06:11	13.26	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.014
W93010234	N01P	02-24-93	06:11	13.26	THALASSIOSIRA NORDENSKIOELDII	.002
W93010234	N01P	02-24-93	06:11	13.26	THALASSIOSIRA SPP.	.001
W93010234	N01P	02-24-93	06:11	13.26	TOTAL PHYTOPLANKTON	.327
W93010234	N01P	02-24-93	06:11	13.26	UNID. CENTRALES	.001
W93010234	N01P	02-24-93	06:11	13.26	UNID. NAKED DINOFLAGELLATE	.002
W93010234	N01P	02-24-93	06:13	2.32	CHAETOCEROS DEBILIS	.012
W93010234	N01P	02-24-93	06:13	2.32	CHAETOCEROS SOCIALIS	.006
W93010234	N01P	02-24-93	06:13	2.32	CHAETOCEROS SPP. (10-20UM)	.005
W93010234	N01P	02-24-93	06:13	2.32	COCCONEIS SCUTELLUM	.001
W93010234	N01P	02-24-93	06:13	2.32	CRYPTOMONADS	.05
W93010234	N01P	02-24-93	06:13	2.32	CYLINDROTHECA CLOSTERIUM	.027
W93010234	N01P	02-24-93	06:13	2.32	GYRODINIUM SPIRALE	.001
W93010234	N01P	02-24-93	06:13	2.32	MICROFLAGELLATES	.053
W93010234	N01P	02-24-93	06:13	2.32	NAVICULOID DIATOMS	.002
W93010234	N01P	02-24-93	06:13	2.32	NAVICULOID (LYRATE)	.001
W93010234	N01P	02-24-93	06:13	2.32	NITZSCHIA SPP.	.003
W93010234	N01P	02-24-93	06:13	2.32	SKELETONEMA COSTATUM	.009
W93010234	N01P	02-24-93	06:13	2.32	THALASSIONEMA NITZSCHOIDES	.007
W93010234	N01P	02-24-93	06:13	2.32	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.008
W93010234	N01P	02-24-93	06:13	2.32	TOTAL PHYTOPLANKTON	.191

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010236	N01P	02-24-93	06:13	2.32	UNID. CENTRALES	.001
W93010236	N01P	02-24-93	06:13	2.32	UNID. NAKED DINOFLAGELLATE	.002
W93010250	N04P	02-24-93	07:25	21.46	CHAETOCEROS DEBILIS	.002
W93010250	N04P	02-24-93	07:25	21.46	CHAETOCEROS SOCIALIS	.008
W93010250	N04P	02-24-93	07:25	21.46	CHAETOCEROS SPP. (10-20UM)	.006
W93010250	N04P	02-24-93	07:25	21.46	COCCONEIS SCUTELLUM	.001
W93010250	N04P	02-24-93	07:25	21.46	CRYPTOMONADS	.029
W93010250	N04P	02-24-93	07:25	21.46	CYANOPHYCEAE	.091
W93010250	N04P	02-24-93	07:25	21.46	CYLINDROTHECA CLOSTERIUM	.031
W93010250	N04P	02-24-93	07:25	21.46	DITYLUM BRIGHTWELLII	.001
W93010250	N04P	02-24-93	07:25	21.46	KATODINIUM ROTUNDATUM	.001
W93010250	N04P	02-24-93	07:25	21.46	MESODINIUM RUBRUM	.001
W93010250	N04P	02-24-93	07:25	21.46	MICROFLAGELLATES	.044
W93010250	N04P	02-24-93	07:25	21.46	NAVICULOID DIATOMS	.003
W93010250	N04P	02-24-93	07:25	21.46	NITZSCHIA (CF) DELICATISSIMA	.017
W93010250	N04P	02-24-93	07:25	21.46	THALASSIONEMA NITZSCHOIDES	.007
W93010250	N04P	02-24-93	07:25	21.46	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.004
W93010250	N04P	02-24-93	07:25	21.46	THALASSIOSIRA NORDENSKIOELDII	.001
W93010250	N04P	02-24-93	07:25	21.46	TOTAL PHYTOPLANKTON	.249
W93010250	N04P	02-24-93	07:25	21.46	UNID. CENTRALES	.001
W93010250	N04P	02-24-93	07:25	21.46	UNID. NAKED DINOFLAGELLATE	.002
W93010252	N04P	02-24-93	07:27	5	CHAETOCEROS DEBILIS	.001
W93010252	N04P	02-24-93	07:27	5	CHAETOCEROS SOCIALIS	.013
W93010252	N04P	02-24-93	07:27	5	CHAETOCEROS SPP. (10-20UM)	.001
W93010252	N04P	02-24-93	07:27	5	CRYPTOMONADS	.037
W93010252	N04P	02-24-93	07:27	5	CYANOPHYCEAE	.003
W93010252	N04P	02-24-93	07:27	5	CYLINDROTHECA CLOSTERIUM	.049
W93010252	N04P	02-24-93	07:27	5	DITYLUM BRIGHTWELLII	.001
W93010252	N04P	02-24-93	07:27	5	LEPTOCYLINDRUS DANICUS	.001
W93010252	N04P	02-24-93	07:27	5	LICHOPHORA SPP.	.001
W93010252	N04P	02-24-93	07:27	5	MESODINIUM RUBRUM	.001
W93010252	N04P	02-24-93	07:27	5	MICROFLAGELLATES	.054
W93010252	N04P	02-24-93	07:27	5	NAVICULOID DIATOMS	.005
W93010252	N04P	02-24-93	07:27	5	NAVICULIDS (LYRATE)	.001
W93010252	N04P	02-24-93	07:27	5	NITZSCHIA (CF) DELICATISSIMA	.047
W93010252	N04P	02-24-93	07:27	5	SKELETONEMA COSTATUM	.008
W93010252	N04P	02-24-93	07:27	5	THALASSIONEMA NITZSCHOIDES	.006
W93010252	N04P	02-24-93	07:27	5	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.01
W93010252	N04P	02-24-93	07:27	5	THALASSIOSIRA NORDENSKIOELDII	.001
W93010252	N04P	02-24-93	07:27	5	TOTAL PHYTOPLANKTON	.244
W93010252	N04P	02-24-93	07:27	5	UNID. CENTRALES	.001
W93010252	N04P	02-24-93	07:27	5	UNID. NAKED DINOFLAGELLATE	.002
W93010252	N04P	02-24-93	07:27	5	UNID. PENNALES	.001
W93010262	N07P	02-24-93	08:51	16.75	CHAETOCEROS COMPRESSUS	.002
W93010262	N07P	02-24-93	08:51	16.75	CHAETOCEROS DEBILIS	.006
W93010262	N07P	02-24-93	08:51	16.75	CHAETOCEROS SOCIALIS	.005
W93010262	N07P	02-24-93	08:51	16.75	CHAETOCEROS SPP. (10-20UM)	.01
W93010262	N07P	02-24-93	08:51	16.75	COSCIODISCUS EXCENTRICUS	.001
W93010262	N07P	02-24-93	08:51	16.75	COSCIODISCUS OCLUS-IRIDIS	.002
W93010262	N07P	02-24-93	08:51	16.75	CRYPTOMONADS	.031
W93010262	N07P	02-24-93	08:51	16.75	CYANOPHYCEAE	.056
W93010262	N07P	02-24-93	08:51	16.75	CYLINDROTHECA CLOSTERIUM	.052
W93010262	N07P	02-24-93	08:51	16.75	DITYLUM BRIGHTWELLII	.001
W93010262	N07P	02-24-93	08:51	16.75	MESODINIUM RUBRUM	.001
W93010262	N07P	02-24-93	08:51	16.75	MICROFLAGELLATES	.04
W93010262	N07P	02-24-93	08:51	16.75	NAVICULOID DIATOMS	.002
W93010262	N07P	02-24-93	08:51	16.75	NITZSCHIA (CF) DELICATISSIMA	.01
W93010262	N07P	02-24-93	08:51	16.75	NITZSCHIA SPP.	.001
W93010262	N07P	02-24-93	08:51	16.75	PROTOPERIDINIUM BIPES	.001
W93010262	N07P	02-24-93	08:51	16.75	STEPHANOPYXIS TURRIS	.001
W93010262	N07P	02-24-93	08:51	16.75	SYNEDRA SPP.	.001
W93010262	N07P	02-24-93	08:51	16.75	THALASSIONEMA NITZSCHOIDES	.008

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010262	N07P	02-24-93	08:51	16.75	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.013
W93010262	N07P	02-24-93	08:51	16.75	THALASSIOSIRA SPP.	.001
W93010262	N07P	02-24-93	08:51	16.75	TOTAL PHYTOPLANKTON	.245
W93010262	N07P	02-24-93	08:51	16.75	UNID. CENTRALES	.002
W93010262	N07P	02-24-93	08:51	16.75	UNID. NAKED DINOFLAGELLATE	.001
W93010264	N07P	02-24-93	08:54	2.4	CHAETOCEROS DANICUS	.002
W93010264	N07P	02-24-93	08:54	2.4	CHAETOCEROS DEBILIS	.008
W93010264	N07P	02-24-93	08:54	2.4	CHAETOCEROS SOCIALIS	.017
W93010264	N07P	02-24-93	08:54	2.4	CHAETOCEROS SPP. (10-20UM)	.004
W93010264	N07P	02-24-93	08:54	2.4	COCCONEIS SCUTELLUM	.001
W93010264	N07P	02-24-93	08:54	2.4	CORETHRON CRIOPHILUM	.001
W93010264	N07P	02-24-93	08:54	2.4	CRYPTOMONADS	.025
W93010264	N07P	02-24-93	08:54	2.4	CYANOPHYCEAE	.015
W93010264	N07P	02-24-93	08:54	2.4	CYLINDROTHECA CLOSTERIUM	.068
W93010264	N07P	02-24-93	08:54	2.4	KATODINIUM ROTUNDATUM	.001
W93010264	N07P	02-24-93	08:54	2.4	LEPTOCYLINDRUS DANICUS	.001
W93010264	N07P	02-24-93	08:54	2.4	MICROFLAGELLATES	.067
W93010264	N07P	02-24-93	08:54	2.4	NAVICULOID DIATOMS	.008
W93010264	N07P	02-24-93	08:54	2.4	NITZSCHIA (CF) DELICATISSIMA	.032
W93010264	N07P	02-24-93	08:54	2.4	NITZSCHIA SPP.	.001
W93010264	N07P	02-24-93	08:54	2.4	SKELETONEMA COSTATUM	.001
W93010264	N07P	02-24-93	08:54	2.4	THALASSIONEMA NITZSCHOIDES	.009
W93010264	N07P	02-24-93	08:54	2.4	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.015
W93010264	N07P	02-24-93	08:54	2.4	THALASSIOSIRA NORDENSKIOELDII	.001
W93010264	N07P	02-24-93	08:54	2.4	TOTAL PHYTOPLANKTON	.283
W93010264	N07P	02-24-93	08:54	2.4	UNID. CENTRALES	.001
W93010264	N07P	02-24-93	08:54	2.4	UNID. NAKED DINOFLAGELLATE	.003
W93010264	N07P	02-24-93	08:54	2.4	UNID. PENNALES	.001
W93010276	F13P	02-24-93	10:06	6.6	CHAETOCEROS DEBILIS	.022
W93010276	F13P	02-24-93	10:06	6.6	CHAETOCEROS SEPTENTRIONALIS	.001
W93010276	F13P	02-24-93	10:06	6.6	CHAETOCEROS SOCIALIS	.02
W93010276	F13P	02-24-93	10:06	6.6	CHAETOCEROS SPP. (10-20UM)	.012
W93010276	F13P	02-24-93	10:06	6.6	COCCONEIS SCUTELLUM	.001
W93010276	F13P	02-24-93	10:06	6.6	CRYPTOMONADS	.052
W93010276	F13P	02-24-93	10:06	6.6	CYANOPHYCEAE	.004
W93010276	F13P	02-24-93	10:06	6.6	CYLINDROTHECA CLOSTERIUM	.033
W93010276	F13P	02-24-93	10:06	6.6	DICTYOCHA SPECULUM	.002
W93010276	F13P	02-24-93	10:06	6.6	KATODINIUM ROTUNDATUM	.001
W93010276	F13P	02-24-93	10:06	6.6	LEPTOCYLINDRUS DANICUS	.003
W93010276	F13P	02-24-93	10:06	6.6	LICHOPHORA SPP.	.001
W93010276	F13P	02-24-93	10:06	6.6	LITHODESMIUM (cf) UNDULATUM	.001
W93010276	F13P	02-24-93	10:06	6.6	MESODINIUM RUBRUM	.002
W93010276	F13P	02-24-93	10:06	6.6	MICROFLAGELLATES	.081
W93010276	F13P	02-24-93	10:06	6.6	NAVICULOID DIATOMS	.007
W93010276	F13P	02-24-93	10:06	6.6	NAVICULOIDS (LYRATE)	.002
W93010276	F13P	02-24-93	10:06	6.6	NITZSCHIA (CF) DELICATISSIMA	.024
W93010276	F13P	02-24-93	10:06	6.6	NITZSCHIA SERIATA	.002
W93010276	F13P	02-24-93	10:06	6.6	SKELETONEMA COSTATUM	.057
W93010276	F13P	02-24-93	10:06	6.6	STEPHANOPYXIS TURRIS	.001
W93010276	F13P	02-24-93	10:06	6.6	THALASSIONEMA NITZSCHOIDES	.013
W93010276	F13P	02-24-93	10:06	6.6	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.007
W93010276	F13P	02-24-93	10:06	6.6	TOTAL PHYTOPLANKTON	.349
W93010276	F13P	02-24-93	10:06	6.6	UNID. CENTRALES	.002
W93010276	F13P	02-24-93	10:06	6.6	UNID. NAKED DINOFLAGELLATE	.001
W93010278	F13P	02-24-93	10:09	2.15	ASTERIONELLOPSIS GLACIALIS	.002
W93010278	F13P	02-24-93	10:09	2.15	CERATAULINA PELAGICA	.001
W93010278	F13P	02-24-93	10:09	2.15	CHAETOCEROS COMPRESSUS	.003
W93010278	F13P	02-24-93	10:09	2.15	CHAETOCEROS DEBILIS	.019
W93010278	F13P	02-24-93	10:09	2.15	CHAETOCEROS SOCIALIS	.016
W93010278	F13P	02-24-93	10:09	2.15	CHAETOCEROS SPP. (10-20UM)	.012
W93010278	F13P	02-24-93	10:09	2.15	COCCONEIS SCUTELLUM	.001
W93010278	F13P	02-24-93	10:09	2.15	COSCINOISCUS OCLUS-IRIDIS	.001

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010278	F13P	02-24-93	10:09	2.15	CRYPTOMONADS	.033
W93010278	F13P	02-24-93	10:09	2.15	CYANOPHYCEAE	.009
W93010278	F13P	02-24-93	10:09	2.15	CYLINDROTHECA CLOSTERIUM	.035
W93010278	F13P	02-24-93	10:09	2.15	GYMNOINIUM SPP.	.001
W93010278	F13P	02-24-93	10:09	2.15	GYRODINIUM SPP.	.001
W93010278	F13P	02-24-93	10:09	2.15	LEPTOCYLINDRUS DANICUS	.001
W93010278	F13P	02-24-93	10:09	2.15	MESODINIUM RUBRUM	.001
W93010278	F13P	02-24-93	10:09	2.15	MICROFLAGELLATES	.046
W93010278	F13P	02-24-93	10:09	2.15	NAVICULOID DIATOMS	.005
W93010278	F13P	02-24-93	10:09	2.15	NAVICULOIDS (LYRATE)	.001
W93010278	F13P	02-24-93	10:09	2.15	NITZSCHIA (CF) DELICATISSIMA	.016
W93010278	F13P	02-24-93	10:09	2.15	NITZSCHIA SPP.	.002
W93010278	F13P	02-24-93	10:09	2.15	SKELETONEMA COSTATUM	.034
W93010278	F13P	02-24-93	10:09	2.15	STEPHANOPYXIS TURRIS	.001
W93010278	F13P	02-24-93	10:09	2.15	THALASSIONEMA NITZSCHOIDES	.009
W93010278	F13P	02-24-93	10:09	2.15	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.007
W93010278	F13P	02-24-93	10:09	2.15	THALASSIOSIRA NORDENSKIOELDII	.001
W93010278	F13P	02-24-93	10:09	2.15	TOTAL PHYTOPLANKTON	.261
W93010278	F13P	02-24-93	10:09	2.15	UNID. CENTRALES	.003
W93010278	F13P	02-24-93	10:09	2.15	UNID. NAKED DINOFLAGELLATE	.002
W93010395	F02P	02-25-93	11:20	12.45	ASTERIONELLOPSIS GLACIALIS	.047
W93010395	F02P	02-25-93	11:20	12.45	CHAETOCEROS COMPRESSUS	.057
W93010395	F02P	02-25-93	11:20	12.45	CHAETOCEROS DANICUS	.002
W93010395	F02P	02-25-93	11:20	12.45	CHAETOCEROS DEBILIS	.165
W93010395	F02P	02-25-93	11:20	12.45	CHAETOCEROS SEPTENTRIONALIS	.015
W93010395	F02P	02-25-93	11:20	12.45	CHAETOCEROS SOCIALIS	.153
W93010395	F02P	02-25-93	11:20	12.45	CHAETOCEROS SPORE	.002
W93010395	F02P	02-25-93	11:20	12.45	CHAETOCEROS SPP. (10-20UM)	.145
W93010395	F02P	02-25-93	11:20	12.45	CORETHRON CRIOPHILUM	.005
W93010395	F02P	02-25-93	11:20	12.45	CRYPTOMONADS	.03
W93010395	F02P	02-25-93	11:20	12.45	CYLINDROTHECA CLOSTERIUM	.007
W93010395	F02P	02-25-93	11:20	12.45	DITYLUM BRIGHTWELLII	.005
W93010395	F02P	02-25-93	11:20	12.45	GYRODINIUM SPIRALE	.002
W93010395	F02P	02-25-93	11:20	12.45	LEPTOCYLINDRUS DANICUS	.089
W93010395	F02P	02-25-93	11:20	12.45	MICROFLAGELLATES	.072
W93010395	F02P	02-25-93	11:20	12.45	NAVICULOIDS (LYRATE)	.012
W93010395	F02P	02-25-93	11:20	12.45	NITZSCHIA (CF) DELICATISSIMA	.005
W93010395	F02P	02-25-93	11:20	12.45	RHIZOLENIA DELICATULA	.03
W93010395	F02P	02-25-93	11:20	12.45	RHIZOLENIA HEBETATA F. SEMISPINA	.002
W93010395	F02P	02-25-93	11:20	12.45	SKELETONEMA COSTATUM	.035
W93010395	F02P	02-25-93	11:20	12.45	THALASSIONEMA NITZSCHOIDES	.027
W93010395	F02P	02-25-93	11:20	12.45	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.062
W93010395	F02P	02-25-93	11:20	12.45	THALASSIOSIRA NORDENSKIOELDII	.069
W93010395	F02P	02-25-93	11:20	12.45	THALASSIOSIRA SPP.	.015
W93010395	F02P	02-25-93	11:20	12.45	TOTAL PHYTOPLANKTON	1.078
W93010395	F02P	02-25-93	11:20	12.45	UNID. CENTRALES	.017
W93010395	F02P	02-25-93	11:20	12.45	UNID. NAKED DINOFLAGELLATE	.007
W93010397	F02P	02-25-93	11:22	2.52	AMPHIDINIUM SPP.	.003
W93010397	F02P	02-25-93	11:22	2.52	ASTERIONELLOPSIS GLACIALIS	.059
W93010397	F02P	02-25-93	11:22	2.52	CHAETOCEROS COMPRESSUS	.079
W93010397	F02P	02-25-93	11:22	2.52	CHAETOCEROS DEBILIS	.176
W93010397	F02P	02-25-93	11:22	2.52	CHAETOCEROS DECIPIENS	.005
W93010397	F02P	02-25-93	11:22	2.52	CHAETOCEROS SEPTENTRIONALIS	.005
W93010397	F02P	02-25-93	11:22	2.52	CHAETOCEROS SOCIALIS	.156
W93010397	F02P	02-25-93	11:22	2.52	CHAETOCEROS SPORE	.003
W93010397	F02P	02-25-93	11:22	2.52	CHAETOCEROS SPP. (10-20UM)	.094
W93010397	F02P	02-25-93	11:22	2.52	CRYPTOMONADS	.074
W93010397	F02P	02-25-93	11:22	2.52	CYLINDROTHECA CLOSTERIUM	.008
W93010397	F02P	02-25-93	11:22	2.52	DETONULA CONFERVACEA	.008
W93010397	F02P	02-25-93	11:22	2.52	DINOPHYSIS NORVEGICA	.003
W93010397	F02P	02-25-93	11:22	2.52	DITYLUM BRIGHTWELLII	.003
W93010397	F02P	02-25-93	11:22	2.52	GYRODINIUM SPIRALE	.003

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010397	F02P	02-25-93	11:22	2.52	LEPTOCYLINDRUS DANICUS	.163
W93010397	F02P	02-25-93	11:22	2.52	MICROFLAGELLATES	.071
W93010397	F02P	02-25-93	11:22	2.52	NAVICULOIDS (LYRATE)	.005
W93010397	F02P	02-25-93	11:22	2.52	RHIZOLENIA DELICATULA	.026
W93010397	F02P	02-25-93	11:22	2.52	RHIZOLENIA HEBETATA F. SEMISPINA	.005
W93010397	F02P	02-25-93	11:22	2.52	SKELETONEMA COSTATUM	.005
W93010397	F02P	02-25-93	11:22	2.52	STEPHANOPYXIS TURRIS	.003
W93010397	F02P	02-25-93	11:22	2.52	THALASSIONEMA NITZSCHOIDES	.018
W93010397	F02P	02-25-93	11:22	2.52	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.048
W93010397	F02P	02-25-93	11:22	2.52	THALASSIOSIRA NORDENSKIOELDII	.069
W93010397	F02P	02-25-93	11:22	2.52	TOTAL PHYTOPLANKTON	1.102
W93010397	F02P	02-25-93	11:22	2.52	UNID. CENTRALES	.013
W93010413	F01P	02-25-93	14:08	12.02	ASTERIONELLOPSIS GLACIALIS	.07
W93010413	F01P	02-25-93	14:08	12.02	CHAETOCEROS COMPRESSUS	.061
W93010413	F01P	02-25-93	14:08	12.02	CHAETOCEROS DEBILIS	.119
W93010413	F01P	02-25-93	14:08	12.02	CHAETOCEROS DECIPIENS	.004
W93010413	F01P	02-25-93	14:08	12.02	CHAETOCEROS SOCIALIS	.057
W93010413	F01P	02-25-93	14:08	12.02	CHAETOCEROS SPORE	.004
W93010413	F01P	02-25-93	14:08	12.02	CHAETOCEROS SPP. (10-20UM)	.1
W93010413	F01P	02-25-93	14:08	12.02	COSCINODISCUS OCLUS-IRIDIS	.002
W93010413	F01P	02-25-93	14:08	12.02	CRYPTOMONADS	.029
W93010413	F01P	02-25-93	14:08	12.02	CYLINDROTHECA CLOSTERIUM	.01
W93010413	F01P	02-25-93	14:08	12.02	DITYLUM BRIGHTWELLII	.002
W93010413	F01P	02-25-93	14:08	12.02	GYRODINIUM SPIRALE	.004
W93010413	F01P	02-25-93	14:08	12.02	LEPTOCYLINDRUS DANICUS	.025
W93010413	F01P	02-25-93	14:08	12.02	MICROFLAGELLATES	.086
W93010413	F01P	02-25-93	14:08	12.02	NAVICULOIDS (LYRATE)	.008
W93010413	F01P	02-25-93	14:08	12.02	NITZSCHIA (CF) DELICATISSIMA	.023
W93010413	F01P	02-25-93	14:08	12.02	NITZSCHIA SPP.	.004
W93010413	F01P	02-25-93	14:08	12.02	RHIZOLENIA DELICATULA	.033
W93010413	F01P	02-25-93	14:08	12.02	RHIZOLENIA HEBETATA F. SEMISPINA	.002
W93010413	F01P	02-25-93	14:08	12.02	SKELETONEMA COSTATUM	.027
W93010413	F01P	02-25-93	14:08	12.02	STEPHANOPYXIS TURRIS	.004
W93010413	F01P	02-25-93	14:08	12.02	THALASSIONEMA NITZSCHOIDES	.006
W93010413	F01P	02-25-93	14:08	12.02	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.037
W93010413	F01P	02-25-93	14:08	12.02	THALASSIOSIRA NORDENSKIOELDII	.053
W93010413	F01P	02-25-93	14:08	12.02	THALASSIOSIRA SPP.	.029
W93010413	F01P	02-25-93	14:08	12.02	TOTAL PHYTOPLANKTON	.82
W93010413	F01P	02-25-93	14:08	12.02	UNID. CENTRALES	.021
W93010415	F01P	02-25-93	14:10	3.04	ASTERIONELLOPSIS GLACIALIS	.06
W93010415	F01P	02-25-93	14:10	3.04	CHAETOCEROS COMPRESSUS	.084
W93010415	F01P	02-25-93	14:10	3.04	CHAETOCEROS DEBILIS	.05
W93010415	F01P	02-25-93	14:10	3.04	CHAETOCEROS SOCIALIS	.092
W93010415	F01P	02-25-93	14:10	3.04	CHAETOCEROS SPP. (10-20UM)	.07
W93010415	F01P	02-25-93	14:10	3.04	CRYPTOMONADS	.036
W93010415	F01P	02-25-93	14:10	3.04	CYANOPHYCEAE	.026
W93010415	F01P	02-25-93	14:10	3.04	CYLINDROTHECA CLOSTERIUM	.008
W93010415	F01P	02-25-93	14:10	3.04	DICTYOCHA SPECULUM	.002
W93010415	F01P	02-25-93	14:10	3.04	DITYLUM BRIGHTWELLII	.004
W93010415	F01P	02-25-93	14:10	3.04	GUINARDIA FLACCIDA	.008
W93010415	F01P	02-25-93	14:10	3.04	GYRODINIUM SPIRALE	.002
W93010415	F01P	02-25-93	14:10	3.04	LEPTOCYLINDRUS DANICUS	.032
W93010415	F01P	02-25-93	14:10	3.04	MESODINIUM RUBRUM	.002
W93010415	F01P	02-25-93	14:10	3.04	MICROFLAGELLATES	.096
W93010415	F01P	02-25-93	14:10	3.04	NAVICULOID DIATOMS	.004
W93010415	F01P	02-25-93	14:10	3.04	NAVICULOIDS (LYRATE)	.008
W93010415	F01P	02-25-93	14:10	3.04	NITZSCHIA (CF) DELICATISSIMA	.008
W93010415	F01P	02-25-93	14:10	3.04	NITZSCHIA SERIATA	.012
W93010415	F01P	02-25-93	14:10	3.04	RHIZOLENIA DELICATULA	.024
W93010415	F01P	02-25-93	14:10	3.04	RHIZOLENIA HEBETATA F. SEMISPINA	.002
W93010415	F01P	02-25-93	14:10	3.04	SKELETONEMA COSTATUM	.036
W93010415	F01P	02-25-93	14:10	3.04	THALASSIONEMA NITZSCHOIDES	.022

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93010415	F01P	02-25-93	14:10	3.04	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.048
W93010415	F01P	02-25-93	14:10	3.04	THALASSIOSIRA NORDENSKIOELDII	.068
W93010415	F01P	02-25-93	14:10	3.04	THALASSIOSIRA SPP.	.012
W93010415	F01P	02-25-93	14:10	3.04	TOTAL PHYTOPLANKTON	.845
W93010415	F01P	02-25-93	14:10	3.04	UNID. CENTRALES	.024
W93010415	F01P	02-25-93	14:10	3.04	UNID. DINOFLAGELLATES	.002
W93010415	F01P	02-25-93	14:10	3.04	UNID. NAKED DINOFLAGELLATE	.002
W93010492	N10P	02-26-93	08:36	2.71	CHAETOCEROS COMPRESSUS	.008
W93010492	N10P	02-26-93	08:36	2.71	CHAETOCEROS DEBILIS	.01
W93010492	N10P	02-26-93	08:36	2.71	CHAETOCEROS DECIPIENS	.001
W93010492	N10P	02-26-93	08:36	2.71	CHAETOCEROS SOCIALIS	.002
W93010492	N10P	02-26-93	08:36	2.71	CHAETOCEROS SPP. (10-20UM)	.004
W93010492	N10P	02-26-93	08:36	2.71	COCCONEIS SCUTELLUM	.001
W93010492	N10P	02-26-93	08:36	2.71	CRYPTOMONADS	.055
W93010492	N10P	02-26-93	08:36	2.71	CYANOPHYCEAE	.001
W93010492	N10P	02-26-93	08:36	2.71	CYLINDROTHECA CLOSTERIUM	.017
W93010492	N10P	02-26-93	08:36	2.71	GYRODINIUM SPIRALE	.001
W93010492	N10P	02-26-93	08:36	2.71	LITHODESMIUM (cf) UNDULATUM	.001
W93010492	N10P	02-26-93	08:36	2.71	MICROFLAGELLATES	.058
W93010492	N10P	02-26-93	08:36	2.71	NAVICULOID DIATOMS	.005
W93010492	N10P	02-26-93	08:36	2.71	NITZSCHIA (CF) DELICATISSIMA	.003
W93010492	N10P	02-26-93	08:36	2.71	NITZSCHIA SPP.	.001
W93010492	N10P	02-26-93	08:36	2.71	SKELETONEMA COSTATUM	.008
W93010492	N10P	02-26-93	08:36	2.71	THALASSIONEMA NITZSCHOIDES	.006
W93010492	N10P	02-26-93	08:36	2.71	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.007
W93010492	N10P	02-26-93	08:36	2.71	THALASSIOSIRA NORDENSKIOELDII	.002
W93010492	N10P	02-26-93	08:36	2.71	TOTAL PHYTOPLANKTON	.194
W93010492	N10P	02-26-93	08:36	2.71	UNID. CENTRALES	.002
W93020016	F23P	03-09-93	06:53	8	ACTINOPTYCHUS SENARIUS	.002
W93020016	F23P	03-09-93	06:53	8	AMPHIDIINIUM SPP.	.001
W93020016	F23P	03-09-93	06:53	8	CHAETOCEROS COMPRESSUS	.006
W93020016	F23P	03-09-93	06:53	8	CHAETOCEROS DEBILIS	.004
W93020016	F23P	03-09-93	06:53	8	CHAETOCEROS SOCIALIS	.007
W93020016	F23P	03-09-93	06:53	8	CHAETOCEROS SPP. (10-20UM)	.002
W93020016	F23P	03-09-93	06:53	8	CRYPTOMONADS	.051
W93020016	F23P	03-09-93	06:53	8	CYLINDROTHECA CLOSTERIUM	.019
W93020016	F23P	03-09-93	06:53	8	EBRIA TRIPARTITIA	.001
W93020016	F23P	03-09-93	06:53	8	GYRODINIUM SPP.	.001
W93020016	F23P	03-09-93	06:53	8	LICHOPHORA SPP.	.001
W93020016	F23P	03-09-93	06:53	8	MESODINIUM RUBRUM	.001
W93020016	F23P	03-09-93	06:53	8	MICROFLAGELLATES	.065
W93020016	F23P	03-09-93	06:53	8	NAVICULOID DIATOMS	.016
W93020016	F23P	03-09-93	06:53	8	NAVICULIDS (LYRATE)	.003
W93020016	F23P	03-09-93	06:53	8	NITZSCHIA (CF) DELICATISSIMA	.009
W93020016	F23P	03-09-93	06:53	8	NITZSCHIA SPP.	.001
W93020016	F23P	03-09-93	06:53	8	PLEUROSIGMA (CF) AESTUARII	.002
W93020016	F23P	03-09-93	06:53	8	PYRAMIMONAS/TETRAELEMIS SPP.	.001
W93020016	F23P	03-09-93	06:53	8	RHIZOLENIA DELICATULA	.001
W93020016	F23P	03-09-93	06:53	8	SKELETONEMA COSTATUM	.016
W93020016	F23P	03-09-93	06:53	8	THALASSIONEMA NITZSCHOIDES	.003
W93020016	F23P	03-09-93	06:53	8	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.008
W93020016	F23P	03-09-93	06:53	8	THALASSIOSIRA NORDENSKIOELDII	.001
W93020016	F23P	03-09-93	06:53	8	THALASSIOSIRA SPP.	.006
W93020016	F23P	03-09-93	06:53	8	TOTAL PHYTOPLANKTON	.23
W93020016	F23P	03-09-93	06:53	8	UNID. CENTRALES	.002
W93020016	F23P	03-09-93	06:53	8	UNID. NAKED DINOFLAGELLATE	.001
W93020016	F23P	03-09-93	06:53	8	UNID. PENNALES	.003
W93020018	F23P	03-09-93	06:55	2	ACNANTHES SPP.	.001
W93020018	F23P	03-09-93	06:55	2	ACTINOPTYCHUS SENARIUS	.001
W93020018	F23P	03-09-93	06:55	2	AMPHORA SPP.	.001
W93020018	F23P	03-09-93	06:55	2	CHAETOCEROS COMPRESSUS	.005
W93020018	F23P	03-09-93	06:55	2	CHAETOCEROS DEBILIS	.004

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93020018	F23P	03-09-93	06:55		2 CHAETOCEROS SOCIALIS	.015
W93020018	F23P	03-09-93	06:55		2 CHAETOCEROS SPP. (10-20UM)	.005
W93020018	F23P	03-09-93	06:55		2 COCCONEIS SCUTELLUM	.001
W93020018	F23P	03-09-93	06:55		2 CRYPTOMONADS	.084
W93020018	F23P	03-09-93	06:55		2 CYLINDROTHECA CLOSTERIUM	.018
W93020018	F23P	03-09-93	06:55		2 GYMNODINIUM SPP.	.001
W93020018	F23P	03-09-93	06:55		2 GYROSIGMA SPP.	.001
W93020018	F23P	03-09-93	06:55		2 LEPTOCYLINDRUS DANICUS	.002
W93020018	F23P	03-09-93	06:55		2 LICMOPHORA SPP.	.001
W93020018	F23P	03-09-93	06:55		2 MICROFLAGELLATES	.038
W93020018	F23P	03-09-93	06:55		2 NAVICULOID DIATOMS	.008
W93020018	F23P	03-09-93	06:55		2 NITZSCHIA (CF) DELICATISSIMA	.005
W93020018	F23P	03-09-93	06:55		2 NITZSCHIA SPP.	.001
W93020018	F23P	03-09-93	06:55		2 ODONTELLA SINENSIS	.003
W93020018	F23P	03-09-93	06:55		2 PLEUROSIGMA (CF) AESTUARII	.002
W93020018	F23P	03-09-93	06:55		2 RHIZOLENIA DELICATULA	.001
W93020018	F23P	03-09-93	06:55		2 SKELETONEMA COSTATUM	.009
W93020018	F23P	03-09-93	06:55		2 THALASSIONEMA NITZSCHOIDES	.003
W93020018	F23P	03-09-93	06:55		2 THALASSIOSIRA (cf) GRAVIDA/ROTULA	.007
W93020018	F23P	03-09-93	06:55		2 THALASSIOSIRA NORDENSKIOELDI	.002
W93020018	F23P	03-09-93	06:55		2 THALASSIOSIRA SPP.	.001
W93020018	F23P	03-09-93	06:55		2 TOTAL PHYTOPLANKTON	.223
W93020018	F23P	03-09-93	06:55		2 UNID. CENTRALES	.003
W93020018	F23P	03-09-93	06:55		2 UNID. PENNALES	.003
W93020054	N20P	03-09-93	08:39		10 CHAETOCEROS DEBILIS	.002
W93020054	N20P	03-09-93	08:39		10 CHAETOCEROS SPP. (10-20UM)	.003
W93020054	N20P	03-09-93	08:39		10 COCCONEIS SCUTELLUM	.001
W93020054	N20P	03-09-93	08:39		10 CRYPTOMONADS	.025
W93020054	N20P	03-09-93	08:39		10 CYLINDROTHECA CLOSTERIUM	.016
W93020054	N20P	03-09-93	08:39		10 GYMNODINIUM SPP.	.003
W93020054	N20P	03-09-93	08:39		10 GYRODINIUM SPIRALE	.001
W93020054	N20P	03-09-93	08:39		10 MESODINIUM RUBRUM	.002
W93020054	N20P	03-09-93	08:39		10 MICROFLAGELLATES	.031
W93020054	N20P	03-09-93	08:39		10 NAVICULOID DIATOMS	.007
W93020054	N20P	03-09-93	08:39		10 NITZSCHIA (CF) DELICATISSIMA	.01
W93020054	N20P	03-09-93	08:39		10 NITZSCHIA SPP.	.002
W93020054	N20P	03-09-93	08:39		10 PYRAMIMONAS/TETRASELMIS SPP.	.001
W93020054	N20P	03-09-93	08:39		10 THALASSIONEMA NITZSCHOIDES	.009
W93020054	N20P	03-09-93	08:39		10 THALASSIOSIRA (cf) GRAVIDA/ROTULA	.01
W93020054	N20P	03-09-93	08:39		10 TOTAL PHYTOPLANKTON	.126
W93020054	N20P	03-09-93	08:39		10 UNID. CENTRALES	.002
W93020054	N20P	03-09-93	08:39		10 UNID. NAKED DINOFLAGELLATE	.001
W93020056	N20P	03-09-93	08:41		2 CHAETOCEROS BOREALIS	.001
W93020056	N20P	03-09-93	08:41		2 CHAETOCEROS COMPRESSUS	.003
W93020056	N20P	03-09-93	08:41		2 CHAETOCEROS SOCIALIS	.013
W93020056	N20P	03-09-93	08:41		2 CHAETOCEROS SPP. (10-20UM)	.005
W93020056	N20P	03-09-93	08:41		2 CRYPTOMONADS	.03
W93020056	N20P	03-09-93	08:41		2 CYLINDROTHECA CLOSTERIUM	.03
W93020056	N20P	03-09-93	08:41		2 GYMNODINIUM SPP.	.003
W93020056	N20P	03-09-93	08:41		2 GYRODINIUM SPIRALE	.001
W93020056	N20P	03-09-93	08:41		2 GYRODINIUM SPP.	.001
W93020056	N20P	03-09-93	08:41		2 MICROFLAGELLATES	.034
W93020056	N20P	03-09-93	08:41		2 NAVICULOID DIATOMS	.007
W93020056	N20P	03-09-93	08:41		2 NITZSCHIA (CF) DELICATISSIMA	.017
W93020056	N20P	03-09-93	08:41		2 PARALIA MARINA	.001
W93020056	N20P	03-09-93	08:41		2 THALASSIONEMA NITZSCHOIDES	.007
W93020056	N20P	03-09-93	08:41		2 THALASSIOSIRA (cf) GRAVIDA/ROTULA	.007
W93020056	N20P	03-09-93	08:41		2 THALASSIOSIRA NORDENSKIOELDI	.001
W93020056	N20P	03-09-93	08:41		2 TOTAL PHYTOPLANKTON	.163
W93020083	N16P	03-09-93	09:54		9 CHAETOCEROS COMPRESSUS	.002
W93020083	N16P	03-09-93	09:54		9 CHAETOCEROS DEBILIS	.011
W93020083	N16P	03-09-93	09:54		9 CHAETOCEROS SOCIALIS	.007

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93020083	N16P	03-09-93	09:54	9	CHAETOCEROS SPP. (10-20UM)	.012
W93020083	N16P	03-09-93	09:54	9	CRYPTOMONADS	.02
W93020083	N16P	03-09-93	09:54	9	CYLINDROTHECA CLOSTERIUM	.017
W93020083	N16P	03-09-93	09:54	9	GYMNODINIUM SPP.	.002
W93020083	N16P	03-09-93	09:54	9	GYRODINIUM SPIRALE	.001
W93020083	N16P	03-09-93	09:54	9	MESODINIUM RUBRUM	.003
W93020083	N16P	03-09-93	09:54	9	MICROFLAGELLATES	.038
W93020083	N16P	03-09-93	09:54	9	NAVICULOID DIATOMS	.008
W93020083	N16P	03-09-93	09:54	9	NITZSCHIA (CF) DELICATISSIMA	.017
W93020083	N16P	03-09-93	09:54	9	NITZSCHIA SPP.	.001
W93020083	N16P	03-09-93	09:54	9	PARALIA MARINA	.003
W93020083	N16P	03-09-93	09:54	9	PYRAMIMONAS/TETRASELMIS SPP.	.001
W93020083	N16P	03-09-93	09:54	9	THALASSIONEMA NITZSCHOIDES	.001
W93020083	N16P	03-09-93	09:54	9	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.023
W93020083	N16P	03-09-93	09:54	9	THALASSIOSIRA NORDENSKIOELDII	.006
W93020083	N16P	03-09-93	09:54	9	THALASSIOSIRA SPP.	.001
W93020083	N16P	03-09-93	09:54	9	TOTAL PHYTOPLANKTON	.18
W93020083	N16P	03-09-93	09:54	9	UNID. CENTRALES	.002
W93020083	N16P	03-09-93	09:54	9	UNID. NAKED DINOFLAGELLATE	.001
W93020085	N16P	03-09-93	09:56	2	CHAETOCEROS COMPRESSUS	.004
W93020085	N16P	03-09-93	09:56	2	CHAETOCEROS DEBILIS	.008
W93020085	N16P	03-09-93	09:56	2	CHAETOCEROS DIDYMUS	.001
W93020085	N16P	03-09-93	09:56	2	CHAETOCEROS SOCIALIS	.008
W93020085	N16P	03-09-93	09:56	2	CHAETOCEROS SPP. (10-20UM)	.009
W93020085	N16P	03-09-93	09:56	2	CRYPTOMONADS	.016
W93020085	N16P	03-09-93	09:56	2	CYLINDROTHECA CLOSTERIUM	.02
W93020085	N16P	03-09-93	09:56	2	GYRODINIUM SPIRALE	.001
W93020085	N16P	03-09-93	09:56	2	MESODINIUM RUBRUM	.002
W93020085	N16P	03-09-93	09:56	2	MICROFLAGELLATES	.025
W93020085	N16P	03-09-93	09:56	2	NAVICULOID DIATOMS	.002
W93020085	N16P	03-09-93	09:56	2	NITZSCHIA (CF) DELICATISSIMA	.015
W93020085	N16P	03-09-93	09:56	2	SKELETONEMA COSTATUM	.001
W93020085	N16P	03-09-93	09:56	2	THALASSIONEMA NITZSCHOIDES	.002
W93020085	N16P	03-09-93	09:56	2	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.018
W93020085	N16P	03-09-93	09:56	2	THALASSIOSIRA NORDENSKIOELDII	.003
W93020085	N16P	03-09-93	09:56	2	TOTAL PHYTOPLANKTON	.14
W93020085	N16P	03-09-93	09:56	2	UNID. CENTRALES	.001
W93020085	N16P	03-09-93	09:56	2	UNID. NAKED DINOFLAGELLATE	.003
W93020107	N10P	03-09-93	11:01	11	CHAETOCEROS DEBILIS	.005
W93020107	N10P	03-09-93	11:01	11	CHAETOCEROS SOCIALIS	.005
W93020107	N10P	03-09-93	11:01	11	CHAETOCEROS SPP. (10-20UM)	.003
W93020107	N10P	03-09-93	11:01	11	CRYPTOMONADS	.045
W93020107	N10P	03-09-93	11:01	11	CYLINDROTHECA CLOSTERIUM	.014
W93020107	N10P	03-09-93	11:01	11	GYMNODINIUM SPP.	.001
W93020107	N10P	03-09-93	11:01	11	GYRODINIUM SPIRALE	.001
W93020107	N10P	03-09-93	11:01	11	LICMOPHORA SPP.	.002
W93020107	N10P	03-09-93	11:01	11	MICROFLAGELLATES	.049
W93020107	N10P	03-09-93	11:01	11	NAVICULA (CF) DISTANS	.002
W93020107	N10P	03-09-93	11:01	11	NAVICULOID DIATOMS	.015
W93020107	N10P	03-09-93	11:01	11	NITZSCHIA (CF) DELICATISSIMA	.007
W93020107	N10P	03-09-93	11:01	11	NITZSCHIA SPP.	.001
W93020107	N10P	03-09-93	11:01	11	RHIZOSOLENIA DELICATULA	.002
W93020107	N10P	03-09-93	11:01	11	THALASSIONEMA NITZSCHOIDES	.003
W93020107	N10P	03-09-93	11:01	11	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.011
W93020107	N10P	03-09-93	11:01	11	THALASSIOSIRA NORDENSKIOELDII	.002
W93020107	N10P	03-09-93	11:01	11	TOTAL PHYTOPLANKTON	.173
W93020107	N10P	03-09-93	11:01	11	UNID. CENTRALES	.001
W93020107	N10P	03-09-93	11:01	11	UNID. NAKED DINOFLAGELLATE	.001
W93020109	N10P	03-09-93	11:03	2	CHAETOCEROS DEBILIS	.005
W93020109	N10P	03-09-93	11:03	2	CHAETOCEROS SPP. (10-20UM)	.004
W93020109	N10P	03-09-93	11:03	2	CRYPTOMONADS	.035
W93020109	N10P	03-09-93	11:03	2	CYANOPHYCEAE	.002

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93020109	N10P	03-09-93	11:03	2	CYLINDROTHECA CLOSTERIUM	.011
W93020109	N10P	03-09-93	11:03	2	GYRODINIUM SPIRALE	.001
W93020109	N10P	03-09-93	11:03	2	MESODINIUM RUBRUM	.001
W93020109	N10P	03-09-93	11:03	2	MICROFLAGELLATES	.031
W93020109	N10P	03-09-93	11:03	2	NAVICULOID DIATOMS	.012
W93020109	N10P	03-09-93	11:03	2	NITZSCHIA (CF) DELICATISSIMA	.008
W93020109	N10P	03-09-93	11:03	2	PLEUROSIGMA (CF) AESTUARII	.001
W93020109	N10P	03-09-93	11:03	2	PYRAMIMONAS/TETRASELMIS SPP.	.001
W93020109	N10P	03-09-93	11:03	2	SKELETONEMA COSTATUM	.002
W93020109	N10P	03-09-93	11:03	2	THALASSIONEMA NITZSCHOIDES	.002
W93020109	N10P	03-09-93	11:03	2	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.013
W93020109	N10P	03-09-93	11:03	2	THALASSIOSIRA NORDENSKIOELDII	.002
W93020109	N10P	03-09-93	11:03	2	THALASSIOSIRA SPP.	.002
W93020109	N10P	03-09-93	11:03	2	TOTAL PHYTOPLANKTON	.14
W93020109	N10P	03-09-93	11:03	2	UNID. CENTRALES	.002
W93020109	N10P	03-09-93	11:03	2	UNID. NAKED DINOFLAGELLATE	.002
W93020287	N01P	03-10-93	07:16	10	CHAETOCEROS DEBILIS	.001
W93020287	N01P	03-10-93	07:16	10	CHAETOCEROS SPP.(<10UM)	.002
W93020287	N01P	03-10-93	07:16	10	CRYPTOMONADS	.015
W93020287	N01P	03-10-93	07:16	10	CYLINDROTHECA CLOSTERIUM	.022
W93020287	N01P	03-10-93	07:16	10	GYMNODINIUM SPP.	.001
W93020287	N01P	03-10-93	07:16	10	GYRODINIUM SPIRALE	.001
W93020287	N01P	03-10-93	07:16	10	MESODINIUM RUBRUM	.001
W93020287	N01P	03-10-93	07:16	10	MICROFLAGELLATES	.03
W93020287	N01P	03-10-93	07:16	10	NAVICULOID DIATOMS	.007
W93020287	N01P	03-10-93	07:16	10	NITZSCHIA (CF) DELICATISSIMA	.019
W93020287	N01P	03-10-93	07:16	10	RHIZOSOLENIA DELICATULA	.001
W93020287	N01P	03-10-93	07:16	10	THALASSIONEMA NITZSCHOIDES	.007
W93020287	N01P	03-10-93	07:16	10	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.008
W93020287	N01P	03-10-93	07:16	10	THALASSIOSIRA NORDENSKIOELDII	.001
W93020287	N01P	03-10-93	07:16	10	TOTAL PHYTOPLANKTON	.121
W93020287	N01P	03-10-93	07:16	10	UNID. CENTRALES	.001
W93020287	N01P	03-10-93	07:16	10	UNID. NAKED DINOFLAGELLATE	.001
W93020289	N01P	03-10-93	07:19	3	CHAETOCEROS DEBILIS	.003
W93020289	N01P	03-10-93	07:19	3	CHAETOCEROS SOCIALIS	.006
W93020289	N01P	03-10-93	07:19	3	CRYPTOMONADS	.011
W93020289	N01P	03-10-93	07:19	3	CYLINDROTHECA CLOSTERIUM	.02
W93020289	N01P	03-10-93	07:19	3	GYMNODINIUM SPP.	.002
W93020289	N01P	03-10-93	07:19	3	GYRODINIUM SPIRALE	.001
W93020289	N01P	03-10-93	07:19	3	MICROFLAGELLATES	.031
W93020289	N01P	03-10-93	07:19	3	NAVICULOID DIATOMS	.004
W93020289	N01P	03-10-93	07:19	3	NITZSCHIA (CF) DELICATISSIMA	.023
W93020289	N01P	03-10-93	07:19	3	PLEUROSIGMA SPP.	.001
W93020289	N01P	03-10-93	07:19	3	RHIZOSOLENIA DELICATULA	.002
W93020289	N01P	03-10-93	07:19	3	SKELETONEMA COSTATUM	.009
W93020289	N01P	03-10-93	07:19	3	THALASSIONEMA NITZSCHOIDES	.004
W93020289	N01P	03-10-93	07:19	3	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.011
W93020289	N01P	03-10-93	07:19	3	THALASSIOSIRA SPP.	.002
W93020289	N01P	03-10-93	07:19	3	TOTAL PHYTOPLANKTON	.133
W93020289	N01P	03-10-93	07:19	3	UNID. CENTRALES	.001
W93020289	N01P	03-10-93	07:19	3	UNID. NAKED DINOFLAGELLATE	.002
W93020313	N04P	03-10-93	09:51	15	CHAETOCEROS COMPRESSUS	.003
W93020313	N04P	03-10-93	09:51	15	CHAETOCEROS DEBILIS	.01
W93020313	N04P	03-10-93	09:51	15	CHAETOCEROS SOCIALIS	.002
W93020313	N04P	03-10-93	09:51	15	CHAETOCEROS SPP.(<10UM)	.005
W93020313	N04P	03-10-93	09:51	15	COCCONEIS SCUTELLUM	.001
W93020313	N04P	03-10-93	09:51	15	CRYPTOMONADS	.027
W93020313	N04P	03-10-93	09:51	15	CYLINDROTHECA CLOSTERIUM	.024
W93020313	N04P	03-10-93	09:51	15	MESODINIUM RUBRUM	.001
W93020313	N04P	03-10-93	09:51	15	MICROFLAGELLATES	.053
W93020313	N04P	03-10-93	09:51	15	NAVICULOID DIATOMS	.005
W93020313	N04P	03-10-93	09:51	15	NITZSCHIA (CF) DELICATISSIMA	.009

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93020313	N04P	03-10-93	09:51	15	PARALIA MARINA	.001
W93020313	N04P	03-10-93	09:51	15	PYRAMIMONAS/TETRAELEMIS SPP.	.002
W93020313	N04P	03-10-93	09:51	15	THALASSIONEMA NITZSCHOIDES	.008
W93020313	N04P	03-10-93	09:51	15	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.019
W93020313	N04P	03-10-93	09:51	15	THALASSIOSIRA NORDENSKIOELDII	.001
W93020313	N04P	03-10-93	09:51	15	THALASSIOSIRA SPP.	.001
W93020313	N04P	03-10-93	09:51	15	TOTAL PHYTOPLANKTON	.179
W93020313	N04P	03-10-93	09:51	15	UNID. NAKED DINOFLAGELLATE	.002
W93020315	N04P	03-10-93	09:54	3	CHAETOCEROS DEBILIS	.002
W93020315	N04P	03-10-93	09:54	3	CHAETOCEROS SOCIALIS	.001
W93020315	N04P	03-10-93	09:54	3	CHAETOCEROS SPP. (<10UM)	.006
W93020315	N04P	03-10-93	09:54	3	CRYPTOMONADS	.012
W93020315	N04P	03-10-93	09:54	3	CYLINDROTHECA CLOSTERIUM	.014
W93020315	N04P	03-10-93	09:54	3	DETONULA CONFERVACEA	.003
W93020315	N04P	03-10-93	09:54	3	GYRODINIUM SPIRALE	.001
W93020315	N04P	03-10-93	09:54	3	MICROFLAGELLATES	.04
W93020315	N04P	03-10-93	09:54	3	NAVICULOID DIATOMS	.005
W93020315	N04P	03-10-93	09:54	3	NITZSCHIA (CF) DELICATISSIMA	.013
W93020315	N04P	03-10-93	09:54	3	PYRAMIMONAS/TETRAELEMIS SPP.	.001
W93020315	N04P	03-10-93	09:54	3	THALASSIONEMA NITZSCHOIDES	.002
W93020315	N04P	03-10-93	09:54	3	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.013
W93020315	N04P	03-10-93	09:54	3	THALASSIOSIRA NORDENSKIOELDII	.003
W93020315	N04P	03-10-93	09:54	3	THALASSIOSIRA SPP.	.001
W93020315	N04P	03-10-93	09:54	3	TOTAL PHYTOPLANKTON	.123
W93020315	N04P	03-10-93	09:54	3	UNID. CENTRALES	.002
W93020315	N04P	03-10-93	09:54	3	UNID. NAKED DINOFLAGELLATE	.002
W93020335	N07P	03-10-93	10:54	14	CHAETOCEROS BOREALIS	.001
W93020335	N07P	03-10-93	10:54	14	CHAETOCEROS COMPRESSUS	.001
W93020335	N07P	03-10-93	10:54	14	CHAETOCEROS DEBILIS	.005
W93020335	N07P	03-10-93	10:54	14	CHAETOCEROS SOCIALIS	.002
W93020335	N07P	03-10-93	10:54	14	CHAETOCEROS SPP. (10-20UM)	.01
W93020335	N07P	03-10-93	10:54	14	CRYPTOMONADS	.023
W93020335	N07P	03-10-93	10:54	14	CYLINDROTHECA CLOSTERIUM	.039
W93020335	N07P	03-10-93	10:54	14	GLENODINIUM ROTUNDUM	.001
W93020335	N07P	03-10-93	10:54	14	GYRODINIUM SPP.	.002
W93020335	N07P	03-10-93	10:54	14	MICROFLAGELLATES	.06
W93020335	N07P	03-10-93	10:54	14	NAVICULOID DIATOMS	.009
W93020335	N07P	03-10-93	10:54	14	NAVICULOIDS (LYRATE)	.001
W93020335	N07P	03-10-93	10:54	14	NITZSCHIA (CF) DELICATISSIMA	.007
W93020335	N07P	03-10-93	10:54	14	THALASSIONEMA NITZSCHOIDES	.002
W93020335	N07P	03-10-93	10:54	14	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.027
W93020335	N07P	03-10-93	10:54	14	THALASSIOSIRA NORDENSKIOELDII	.002
W93020335	N07P	03-10-93	10:54	14	TOTAL PHYTOPLANKTON	.202
W93020335	N07P	03-10-93	10:54	14	UNID. CENTRALES	.003
W93020335	N07P	03-10-93	10:54	14	UNID. NAKED DINOFLAGELLATE	.003
W93020337	N07P	03-10-93	10:56	2	CHAETOCEROS COMPRESSUS	.001
W93020337	N07P	03-10-93	10:56	2	CHAETOCEROS DEBILIS	.006
W93020337	N07P	03-10-93	10:56	2	CHAETOCEROS SOCIALIS	.003
W93020337	N07P	03-10-93	10:56	2	CHAETOCEROS SPP. (10-20UM)	.008
W93020337	N07P	03-10-93	10:56	2	CRYPTOMONADS	.014
W93020337	N07P	03-10-93	10:56	2	CYLINDROTHECA CLOSTERIUM	.028
W93020337	N07P	03-10-93	10:56	2	DETONULA CONFERVACEA	.001
W93020337	N07P	03-10-93	10:56	2	GYRODINIUM ESTUARIALIS	.001
W93020337	N07P	03-10-93	10:56	2	MICROFLAGELLATES	.032
W93020337	N07P	03-10-93	10:56	2	NAVICULOID DIATOMS	.001
W93020337	N07P	03-10-93	10:56	2	NITZSCHIA (CF) DELICATISSIMA	.016
W93020337	N07P	03-10-93	10:56	2	PROTOPERIDINIUM BIPES	.001
W93020337	N07P	03-10-93	10:56	2	PYRAMIMONAS/TETRAELEMIS SPP.	.001
W93020337	N07P	03-10-93	10:56	2	SKELETONEMA COSTATUM	.004
W93020337	N07P	03-10-93	10:56	2	STEPHANOPYXIS TURRIS	.001
W93020337	N07P	03-10-93	10:56	2	THALASSIONEMA NITZSCHOIDES	.002
W93020337	N07P	03-10-93	10:56	2	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.017

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93020337	N07P	03-10-93	10:56	2	THALASSIOSIRA NORDENSKIGELDII	.001
W93020337	N07P	03-10-93	10:56	2	TOTAL PHYTOPLANKTON	.143
W93020337	N07P	03-10-93	10:56	2	UNID. CENTRALES	.001
W93020337	N07P	03-10-93	10:56	2	UNID. NAKED DINOFLAGELLATE	.003
W93020359	F13P	03-10-93	11:57	11	CHAETOCEROS COMPRESSUS	.002
W93020359	F13P	03-10-93	11:57	11	CHAETOCEROS DEBILIS	.002
W93020359	F13P	03-10-93	11:57	11	CHAETOCEROS SOCIALIS	.004
W93020359	F13P	03-10-93	11:57	11	CRYPTOMONADS	.035
W93020359	F13P	03-10-93	11:57	11	CYLINDROTHECA CLOSTERIUM	.014
W93020359	F13P	03-10-93	11:57	11	GRAMMATOPHORA MARINA	.002
W93020359	F13P	03-10-93	11:57	11	GYRODINIUM SPIRALE	.001
W93020359	F13P	03-10-93	11:57	11	MICROFLAGELLATES	.056
W93020359	F13P	03-10-93	11:57	11	NAVICULOID DIATOMS	.007
W93020359	F13P	03-10-93	11:57	11	NITZSCHIA (CF) DELICATISSIMA	.016
W93020359	F13P	03-10-93	11:57	11	ODONTELLA SINENSIS	.001
W93020359	F13P	03-10-93	11:57	11	PLEUROSIGMA (CF) AESTUARII	.001
W93020359	F13P	03-10-93	11:57	11	PYRAMIMONAS/TETRASELMIS SPP.	.002
W93020359	F13P	03-10-93	11:57	11	RHIZOLENIA DELICATULA	.002
W93020359	F13P	03-10-93	11:57	11	SKELETONEMA COSTATUM	.011
W93020359	F13P	03-10-93	11:57	11	THALASSIONEMA NITZSCHOIDES	.009
W93020359	F13P	03-10-93	11:57	11	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.008
W93020359	F13P	03-10-93	11:57	11	THALASSIOSIRA NORDENSKIOELDII	.001
W93020359	F13P	03-10-93	11:57	11	TOTAL PHYTOPLANKTON	.176
W93020359	F13P	03-10-93	11:57	11	UNID. NAKED DINOFLAGELLATE	.001
W93020361	F13P	03-10-93	11:59	2	CHAETOCEROS DEBILIS	.005
W93020361	F13P	03-10-93	11:59	2	CHAETOCEROS SOCIALIS	.003
W93020361	F13P	03-10-93	11:59	2	CHAETOCEROS SPP. (10-20UM)	.004
W93020361	F13P	03-10-93	11:59	2	COSCIINODISCUS EXCENTRICUS	.001
W93020361	F13P	03-10-93	11:59	2	CRYPTOMONADS	.02
W93020361	F13P	03-10-93	11:59	2	CYLINDROTHECA CLOSTERIUM	.017
W93020361	F13P	03-10-93	11:59	2	GYMNODINIUM SPP.	.001
W93020361	F13P	03-10-93	11:59	2	GYRODINIUM SPIRALE	.001
W93020361	F13P	03-10-93	11:59	2	GYRODINIUM SPP.	.001
W93020361	F13P	03-10-93	11:59	2	MICROFLAGELLATES	.047
W93020361	F13P	03-10-93	11:59	2	NAVICULOID DIATOMS	.005
W93020361	F13P	03-10-93	11:59	2	NITZSCHIA (CF) DELICATISSIMA	.014
W93020361	F13P	03-10-93	11:59	2	PYRAMIMONAS/TETRASELMIS SPP.	.001
W93020361	F13P	03-10-93	11:59	2	RHIZOLENIA DELICATULA	.001
W93020361	F13P	03-10-93	11:59	2	SKELETONEMA COSTATUM	.008
W93020361	F13P	03-10-93	11:59	2	THALASSIONEMA NITZSCHOIDES	.005
W93020361	F13P	03-10-93	11:59	2	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.008
W93020361	F13P	03-10-93	11:59	2	THALASSIOSIRA SPP.	.001
W93020361	F13P	03-10-93	11:59	2	TOTAL PHYTOPLANKTON	.152
W93020361	F13P	03-10-93	11:59	2	UNID. CENTRALES	.002
W93020361	F13P	03-10-93	11:59	2	UNID. NAKED DINOFLAGELLATE	.004
W93020498	F02P	03-11-93	12:01	11	ASTERIONELLOPSIS GLACIALIS	.022
W93020498	F02P	03-11-93	12:01	11	CHAETOCEROS COMPRESSUS	.081
W93020498	F02P	03-11-93	12:01	11	CHAETOCEROS DEBILIS	.283
W93020498	F02P	03-11-93	12:01	11	CHAETOCEROS DECIPIENS	.002
W93020498	F02P	03-11-93	12:01	11	CHAETOCEROS LACINOSUS	.007
W93020498	F02P	03-11-93	12:01	11	CHAETOCEROS SEPTENTRIONALIS	.007
W93020498	F02P	03-11-93	12:01	11	CHAETOCEROS SOCIALIS	.118
W93020498	F02P	03-11-93	12:01	11	CHAETOCEROS SPP. (10-20UM)	.091
W93020498	F02P	03-11-93	12:01	11	COCCONEIS SCUTELLUM	.002
W93020498	F02P	03-11-93	12:01	11	CRYPTOMONADS	.03
W93020498	F02P	03-11-93	12:01	11	DITYLUM BRIGHTWELLII	.007
W93020498	F02P	03-11-93	12:01	11	GYRODINIUM SPIRALE	.01
W93020498	F02P	03-11-93	12:01	11	LEPTOCYLINDRUS DANICUS	.121
W93020498	F02P	03-11-93	12:01	11	MICROFLAGELLATES	.074
W93020498	F02P	03-11-93	12:01	11	NAVICULOID DIATOMS	.005
W93020498	F02P	03-11-93	12:01	11	NAVICULOIDS (LYRATE)	.012
W93020498	F02P	03-11-93	12:01	11	NITZSCHIA SERIATA	.005

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93020498	F02P	03-11-93	12:01	11	RHIZOLENIA DELICATULA	.007
W93020498	F02P	03-11-93	12:01	11	SKELETONEMA COSTATUM	.02
W93020498	F02P	03-11-93	12:01	11	STEPHANOPYXIS TURRIS	.005
W93020498	F02P	03-11-93	12:01	11	THALASSIONEMA NITZSCHOIDES	.007
W93020498	F02P	03-11-93	12:01	11	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.02
W93020498	F02P	03-11-93	12:01	11	THALASSIOSIRA NORDENSKIOELDI	.148
W93020498	F02P	03-11-93	12:01	11	TOTAL PHYTOPLANKTON	1.099
W93020498	F02P	03-11-93	12:01	11	UNID. CENTRALES	.012
W93020500	F02P	03-11-93	12:03	2	ASTERIONELLOPSIS GLACIALIS	.058
W93020500	F02P	03-11-93	12:03	2	CHAETOCEROS BOREALIS	.003
W93020500	F02P	03-11-93	12:03	2	CHAETOCEROS COMPRESSUS	.106
W93020500	F02P	03-11-93	12:03	2	CHAETOCEROS DEBILIS	.28
W93020500	F02P	03-11-93	12:03	2	CHAETOCEROS DECIPIENS	.003
W93020500	F02P	03-11-93	12:03	2	CHAETOCEROS SEPTENTRIONALIS	.023
W93020500	F02P	03-11-93	12:03	2	CHAETOCEROS SOCIALIS	.097
W93020500	F02P	03-11-93	12:03	2	CHAETOCEROS SPP. (10-20UM)	.142
W93020500	F02P	03-11-93	12:03	2	CRYPTOMONADS	.016
W93020500	F02P	03-11-93	12:03	2	CYLINDROTHECA CLOSTERIUM	.016
W93020500	F02P	03-11-93	12:03	2	DITYLUM BRIGHTWELLII	.003
W93020500	F02P	03-11-93	12:03	2	GYRODINIUM SPIRALE	.01
W93020500	F02P	03-11-93	12:03	2	LEPTOCYLINDRUS DANICUS	.177
W93020500	F02P	03-11-93	12:03	2	MICROFLAGELLATES	.055
W93020500	F02P	03-11-93	12:03	2	NAVICULOIDS (LYRATE)	.016
W93020500	F02P	03-11-93	12:03	2	PLEUROSIGMA (CF) AESTUARII	.003
W93020500	F02P	03-11-93	12:03	2	PROTOPERIDINIUM SPP.	.003
W93020500	F02P	03-11-93	12:03	2	RHIZOLENIA FRAGILISSIMA	.006
W93020500	F02P	03-11-93	12:03	2	RHIZOLENIA HEBETATA F. SEMISPINA	.01
W93020500	F02P	03-11-93	12:03	2	SKELETONEMA COSTATUM	.042
W93020500	F02P	03-11-93	12:03	2	THALASSIONEMA NITZSCHOIDES	.026
W93020500	F02P	03-11-93	12:03	2	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.039
W93020500	F02P	03-11-93	12:03	2	THALASSIOSIRA NORDENSKIOELDI	.229
W93020500	F02P	03-11-93	12:03	2	TOTAL PHYTOPLANKTON	1.382
W93020500	F02P	03-11-93	12:03	2	UNID. CENTRALES	.016
W93020500	F02P	03-11-93	12:03	2	UNID. NAKED DINOFLAGELLATE	.003
W93020525	F01P	03-11-93	14:02	9	ASTERIONELLOPSIS GLACIALIS	.033
W93020525	F01P	03-11-93	14:02	9	CHAETOCEROS COMPRESSUS	.048
W93020525	F01P	03-11-93	14:02	9	CHAETOCEROS DEBILIS	.222
W93020525	F01P	03-11-93	14:02	9	CHAETOCEROS DECIPIENS	.004
W93020525	F01P	03-11-93	14:02	9	CHAETOCEROS SEPTENTRIONALIS	.007
W93020525	F01P	03-11-93	14:02	9	CHAETOCEROS SOCIALIS	.113
W93020525	F01P	03-11-93	14:02	9	CHAETOCEROS SPP. (10-20UM)	.083
W93020525	F01P	03-11-93	14:02	9	COSCIINODISCUS OCLUSUS-IRIDIS	.002
W93020525	F01P	03-11-93	14:02	9	CRYPTOMONADS	.024
W93020525	F01P	03-11-93	14:02	9	CYLINDROTHECA CLOSTERIUM	.007
W93020525	F01P	03-11-93	14:02	9	DETOMULA CONFERVACEA	.013
W93020525	F01P	03-11-93	14:02	9	GYRODINIUM SPIRALE	.007
W93020525	F01P	03-11-93	14:02	9	LEPTOCYLINDRUS DANICUS	.07
W93020525	F01P	03-11-93	14:02	9	MESODINIUM RUBRUM	.002
W93020525	F01P	03-11-93	14:02	9	MICROFLAGELLATES	.035
W93020525	F01P	03-11-93	14:02	9	NAVICULOID DIATOMS	.013
W93020525	F01P	03-11-93	14:02	9	NITZSCHIA (CF) DELICATISSIMA	.007
W93020525	F01P	03-11-93	14:02	9	NITZSCHIA SERIATA	.004
W93020525	F01P	03-11-93	14:02	9	RHIZOLENIA DELICATULA	.004
W93020525	F01P	03-11-93	14:02	9	RHIZOLENIA HEBETATA F. SEMISPINA	.002
W93020525	F01P	03-11-93	14:02	9	SKELETONEMA COSTATUM	.022
W93020525	F01P	03-11-93	14:02	9	STEPHANOPYXIS TURRIS	.002
W93020525	F01P	03-11-93	14:02	9	THALASSIONEMA NITZSCHOIDES	.004
W93020525	F01P	03-11-93	14:02	9	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.017
W93020525	F01P	03-11-93	14:02	9	THALASSIOSIRA NORDENSKIOELDI	.18
W93020525	F01P	03-11-93	14:02	9	TOTAL PHYTOPLANKTON	.945
W93020525	F01P	03-11-93	14:02	9	UNID. CENTRALES	.015
W93020525	F01P	03-11-93	14:02	9	UNID. NAKED DINOFLAGELLATE	.007

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93020527	F01P	03-11-93	14:05	2	ASTERIONELLOPSIS GLACIALIS	.038
W93020527	F01P	03-11-93	14:05	2	CHAETOCEROS COMPRESSUS	.088
W93020527	F01P	03-11-93	14:05	2	CHAETOCEROS CORONATUS	.003
W93020527	F01P	03-11-93	14:05	2	CHAETOCEROS DEBILIS	.271
W93020527	F01P	03-11-93	14:05	2	CHAETOCEROS DECIPIENS	.01
W93020527	F01P	03-11-93	14:05	2	CHAETOCEROS SEPTENTRIONALIS	.008
W93020527	F01P	03-11-93	14:05	2	CHAETOCEROS SOCIALIS	.055
W93020527	F01P	03-11-93	14:05	2	CHAETOCEROS SPP. (10-20UM)	.08
W93020527	F01P	03-11-93	14:05	2	COSCINODISCUS SPP.	.003
W93020527	F01P	03-11-93	14:05	2	CRYPTOMONADS	.023
W93020527	F01P	03-11-93	14:05	2	CYLINDROTHECA CLOSTERIUM	.015
W93020527	F01P	03-11-93	14:05	2	DITYLUM BRIGHTWELLII	.003
W93020527	F01P	03-11-93	14:05	2	GYRODINIUM SPIRALE	.005
W93020527	F01P	03-11-93	14:05	2	LEPTOCYLINDRUS DANICUS	.053
W93020527	F01P	03-11-93	14:05	2	MESODINIUM RUBRUM	.005
W93020527	F01P	03-11-93	14:05	2	MICROFLAGELLATES	.038
W93020527	F01P	03-11-93	14:05	2	NAVICULOID DIATOMS	.003
W93020527	F01P	03-11-93	14:05	2	NAVICULOID (LYRATE)	.01
W93020527	F01P	03-11-93	14:05	2	NITZSCHIA (CF) DELICATISSIMA	.01
W93020527	F01P	03-11-93	14:05	2	NITZSCHIA SERIATA	.003
W93020527	F01P	03-11-93	14:05	2	PLEUROSIGMA (CF) AESTUARII	.003
W93020527	F01P	03-11-93	14:05	2	PROTOPERIDINIUM SPP.	.003
W93020527	F01P	03-11-93	14:05	2	PYRAMIMONAS/TETRASELMIS SPP.	.003
W93020527	F01P	03-11-93	14:05	2	RHIZOLENIA DELICATULA	.013
W93020527	F01P	03-11-93	14:05	2	SKELETONEMA COSTATUM	.048
W93020527	F01P	03-11-93	14:05	2	STEPHANOPYXIS TURRIS	.003
W93020527	F01P	03-11-93	14:05	2	THALASSIONEMA NITZSCHOIDES	.018
W93020527	F01P	03-11-93	14:05	2	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.023
W93020527	F01P	03-11-93	14:05	2	THALASSIOSIRA NORDENSKIOELDII	.18
W93020527	F01P	03-11-93	14:05	2	TOTAL PHYTOPLANKTON	1.04
W93020527	F01P	03-11-93	14:05	2	UNID. CENTRALES	.015
W93020527	F01P	03-11-93	14:05	2	UNID. NAKED DINOFLAGELLATE	.015
W93020586	N10P	03-12-93	08:14	3	AMPHORA SPP.	.001
W93020586	N10P	03-12-93	08:14	3	CHAETOCEROS SPP. (10-20UM)	.004
W93020586	N10P	03-12-93	08:14	3	CRYPTOMONADS	.038
W93020586	N10P	03-12-93	08:14	3	CYANOPHYCEAE	.004
W93020586	N10P	03-12-93	08:14	3	CYLINDROTHECA CLOSTERIUM	.034
W93020586	N10P	03-12-93	08:14	3	DETONULA CONFERVACEA	.002
W93020586	N10P	03-12-93	08:14	3	DICTYOCHA SPECULUM	.001
W93020586	N10P	03-12-93	08:14	3	GYRODINIUM SPIRALE	.003
W93020586	N10P	03-12-93	08:14	3	MESODINIUM RUBRUM	.001
W93020586	N10P	03-12-93	08:14	3	MICROFLAGELLATES	.074
W93020586	N10P	03-12-93	08:14	3	NAVICULA (CF) DISTANS	.001
W93020586	N10P	03-12-93	08:14	3	NAVICULOID DIATOMS	.007
W93020586	N10P	03-12-93	08:14	3	NITZSCHIA (CF) DELICATISSIMA	.012
W93020586	N10P	03-12-93	08:14	3	PLEUROSIGMA (CF) AESTUARII	.002
W93020586	N10P	03-12-93	08:14	3	SKELETONEMA COSTATUM	.01
W93020586	N10P	03-12-93	08:14	3	STEPHANOPYXIS TURRIS	.002
W93020586	N10P	03-12-93	08:14	3	THALASSIONEMA NITZSCHOIDES	.002
W93020586	N10P	03-12-93	08:14	3	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.011
W93020586	N10P	03-12-93	08:14	3	TOTAL PHYTOPLANKTON	.211
W93020586	N10P	03-12-93	08:14	3	UNID. CENTRALES	.002
W93020586	N10P	03-12-93	08:14	3	UNID. NAKED DINOFLAGELLATE	.003
W93030035	N10P	03-24-93	08:22	2.5	CHAETOCEROS DEBILIS	.001
W93030035	N10P	03-24-93	08:22	2.5	CHAETOCEROS SPP. (10-20UM)	.004
W93030035	N10P	03-24-93	08:22	2.5	CRYPTOMONADS	.015
W93030035	N10P	03-24-93	08:22	2.5	CYANOPHYCEAE	.002
W93030035	N10P	03-24-93	08:22	2.5	CYLINDROTHECA CLOSTERIUM	.006
W93030035	N10P	03-24-93	08:22	2.5	DETONULA CONFERVACEA	.001
W93030035	N10P	03-24-93	08:22	2.5	GRAMMATOPHORA MARINA	.001
W93030035	N10P	03-24-93	08:22	2.5	LEPTOCYLINDRUS DANICUS	.001
W93030035	N10P	03-24-93	08:22	2.5	MICROFLAGELLATES	.073

Table F1. Phytoplankton Species Data for February and March 1993.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W93030035	N10P	03-24-93	08:22	2.5	NAVICULOID DIATOMS	.001
W93030035	N10P	03-24-93	08:22	2.5	NITZSCHIA (CF) DELICATISSIMA	.013
W93030035	N10P	03-24-93	08:22	2.5	SKELETONEMA COSTATUM	.005
W93030035	N10P	03-24-93	08:22	2.5	THALASSIONEMA NITZSCHOIDES	.002
W93030035	N10P	03-24-93	08:22	2.5	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.023
W93030035	N10P	03-24-93	08:22	2.5	THALASSIOSIRA NORDENSKIOLDII	.004
W93030035	N10P	03-24-93	08:22	2.5	TOTAL PHYTOPLANKTON	.158
W93030035	N10P	03-24-93	08:22	2.5	UNID. CENTRALES	.003
W93030035	N10P	03-24-93	08:22	2.5	UNID. NAKED DINOFLAGELLATE	.001

APPENDIX G

ZOOPLANKTON SPECIES DATA TABLES

Data are for combined farfield and nearfield surveys made during February and March 1993.

Table G1. Zooplankton Species Data for February and March 1993.

Event	Station	Date	Time	Taxon	Qual ¹	Individuals Per M3
W93010069	F23P	02-23-93	0726	ACARTIA HUDSONICA	F	45
W93010069	F23P	02-23-93	0726	ACARTIA HUDSONICA	C	45
W93010069	F23P	02-23-93	0726	BARNACLE NAUPLII	N	3912
W93010069	F23P	02-23-93	0726	COPEPOD NAUPLII	N	972
W93010069	F23P	02-23-93	0726	EURYTEMORA HERDMANI	F	45
W93010069	F23P	02-23-93	0726	EURYTEMORA HERDMANI	C	45
W93010069	F23P	02-23-93	0726	MICROSETELLA NORVEGICA		23
W93010069	F23P	02-23-93	0726	OITHONA SIMILIS	C	204
W93010069	F23P	02-23-93	0726	OITHONA SIMILIS	F	204
W93010069	F23P	02-23-93	0726	POLYCHAETE LARVAE		792
W93010069	F23P	02-23-93	0726	PSEUDOCALANUS NEWMANI	C	45
W93010069	F23P	02-23-93	0726	PSEUDOCALANUS NEWMANI	F	23
W93010069	F23P	02-23-93	0726	TEMORA LONGICORNIS	F	45
W93010069	F23P	02-23-93	0726	TEMORA LONGICORNIS	M	23
W93010069	F23P	02-23-93	0726	TORTANUS DISCAUDATUS	M	158
W93010069	F23P	02-23-93	0726	TORTANUS DISCAUDATUS	F	23
W93010069	F23P	02-23-93	0726	UNIDENTIFIED HARPACTICOID		181
W93010092	N20P	02-23-93	0902	BARNACLE NAUPLII	N	3235
W93010092	N20P	02-23-93	0902	BIVALVE VELIGER		277
W93010092	N20P	02-23-93	0902	CALANUS FINMARCHICUS	C	23
W93010092	N20P	02-23-93	0902	CENTROPAGES TYPICUS	F	23
W93010092	N20P	02-23-93	0902	COPEPOD NAUPLII	N	7832
W93010092	N20P	02-23-93	0902	GAMMARID AMPHIPOD		23
W93010092	N20P	02-23-93	0902	GASTROPOD VELIGER		23
W93010092	N20P	02-23-93	0902	METRIDIA LUCENS	M	23
W93010092	N20P	02-23-93	0902	METRIDIA LUCENS	C	23
W93010092	N20P	02-23-93	0902	MICROSETELLA NORVEGICA		370
W93010092	N20P	02-23-93	0902	OIKIOPLEURA DIOICA		92
W93010092	N20P	02-23-93	0902	OITHONA ATLANTICA	F	92
W93010092	N20P	02-23-93	0902	OITHONA SIMILIS	C	3789
W93010092	N20P	02-23-93	0902	OITHONA SIMILIS	M	46
W93010092	N20P	02-23-93	0902	OITHONA SIMILIS	F	1409
W93010092	N20P	02-23-93	0902	PARACALANUS PARVUS	C	508
W93010092	N20P	02-23-93	0902	PARACALANUS PARVUS	M	23
W93010092	N20P	02-23-93	0902	PARACALANUS PARVUS	F	23
W93010092	N20P	02-23-93	0902	POLYCHAETE LARVAE		3604
W93010092	N20P	02-23-93	0902	POLYCHAETE TROCHOPHORES		23
W93010092	N20P	02-23-93	0902	PSEUDOCALANUS NEWMANI	C	23
W93010092	N20P	02-23-93	0902	PSEUDOCALANUS NEWMANI	F	23
W93010092	N20P	02-23-93	0902	TORTANUS DISCAUDATUS	M	23
W93010104	N16P	02-23-93	1004	BARNACLE NAUPLII	N	129
W93010104	N16P	02-23-93	1004	BIVALVE VELIGER		60
W93010104	N16P	02-23-93	1004	CALANUS FINMARCHICUS	C	40
W93010104	N16P	02-23-93	1004	CENTROPAGES SPP.	C	10
W93010104	N16P	02-23-93	1004	CENTROPAGES TYPICUS	M	10
W93010104	N16P	02-23-93	1004	COPEPOD NAUPLII	N	3393
W93010104	N16P	02-23-93	1004	GASTROPOD VELIGER		50
W93010104	N16P	02-23-93	1004	MICROSETELLA NORVEGICA		89
W93010104	N16P	02-23-93	1004	OITHONA ATLANTICA	F	30
W93010104	N16P	02-23-93	1004	OITHONA ATLANTICA	C	10
W93010104	N16P	02-23-93	1004	OITHONA SIMILIS	F	635
W93010104	N16P	02-23-93	1004	OITHONA SIMILIS	C	1508
W93010104	N16P	02-23-93	1004	OITHONA SIMILIS	M	40
W93010104	N16P	02-23-93	1004	PARACALANUS PARVUS	C	139
W93010104	N16P	02-23-93	1004	POLYCHAETE LARVAE		109
W93010104	N16P	02-23-93	1004	PSEUDOCALANUS NEWMANI	F	10
W93010104	N16P	02-23-93	1004	PSEUDOCALANUS NEWMANI	C	30
W93010104	N16P	02-23-93	1004	TEMORA LONGICORNIS	C	10
W93010104	N16P	02-23-93	1004	TORTANUS DISCAUDATUS	F	10
W93010120	N10P	02-23-93	1059	BARNACLE NAUPLII	N	10896
W93010120	N10P	02-23-93	1059	BIVALVE VELIGER		162
W93010120	N10P	02-23-93	1059	CALANUS FINMARCHICUS	C	68

¹C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII
 MWR931.DOC JUNE 8, 1993

Table G1. Zooplankton Species Data for February and March 1993.

Event	Station	Date	Time	Taxon	Qual ¹	Individuals Per M3
W93010120	N10P	02-23-93	1059	COPEPOD NAUPLII	N	5306
W93010120	N10P	02-23-93	1059	GASTROPOD VELIGER		54
W93010120	N10P	02-23-93	1059	MEDUSA		14
W93010120	N10P	02-23-93	1059	METRIDIA LUCENS	F	27
W93010120	N10P	02-23-93	1059	MICROSETELLA NORVEGICA		324
W93010120	N10P	02-23-93	1059	OIKIOPLEURA DIOICA		68
W93010120	N10P	02-23-93	1059	OITHONA ATLANTICA	F	27
W93010120	N10P	02-23-93	1059	OITHONA SIMILIS	C	2390
W93010120	N10P	02-23-93	1059	OITHONA SIMILIS	F	1094
W93010120	N10P	02-23-93	1059	OITHONA SIMILIS	M	162
W93010120	N10P	02-23-93	1059	PARACALANUS PARVUS	C	189
W93010120	N10P	02-23-93	1059	POLYCHAETE LARVAE		7926
W93010120	N10P	02-23-93	1059	PSEUDOCALANUS NEWMANI	C	14
W93010120	N10P	02-23-93	1059	TEMORA LONGICORNIS	C	14
W93010120	N10P	02-23-93	1059	TEMORA LONGICORNIS	F	14
W93010120	N10P	02-23-93	1059	UNIDENTIFIED HARPACTICOID		27
W93010120	N10P	02-23-93	1059	UNIDENTIFIED LARVAE		14
W93010239	N01P	02-24-93	0624	BARNACLE NAUPLII	N	5768
W93010239	N01P	02-24-93	0624	BIVALVE VELIGER		155
W93010239	N01P	02-24-93	0624	CENTROPAGES SPP.	C	11
W93010239	N01P	02-24-93	0624	CENTROPAGES TYPICUS	M	11
W93010239	N01P	02-24-93	0624	CENTROPAGES TYPICUS	F	11
W93010239	N01P	02-24-93	0624	COPEPOD NAUPLII	N	2318
W93010239	N01P	02-24-93	0624	DECAPOD LARVAE		11
W93010239	N01P	02-24-93	0624	GASTROPOD VELIGER		55
W93010239	N01P	02-24-93	0624	METRIDIA LUCENS	C	11
W93010239	N01P	02-24-93	0624	METRIDIA LUCENS	F	11
W93010239	N01P	02-24-93	0624	MICROSETELLA NORVEGICA		388
W93010239	N01P	02-24-93	0624	OIKIOPLEURA DIOICA		111
W93010239	N01P	02-24-93	0624	OITHONA ATLANTICA	F	22
W93010239	N01P	02-24-93	0624	OITHONA SIMILIS	C	976
W93010239	N01P	02-24-93	0624	OITHONA SIMILIS	F	743
W93010239	N01P	02-24-93	0624	OITHONA SIMILIS	M	67
W93010239	N01P	02-24-93	0624	PARACALANUS PARVUS	C	388
W93010239	N01P	02-24-93	0624	PARACALANUS PARVUS	F	22
W93010239	N01P	02-24-93	0624	PARACALANUS PARVUS	M	33
W93010239	N01P	02-24-93	0624	POLYCHAETE LARVAE		4525
W93010239	N01P	02-24-93	0624	PSEUDOCALANUS NEWMANI	F	33
W93010239	N01P	02-24-93	0624	PSEUDOCALANUS NEWMANI	C	67
W93010239	N01P	02-24-93	0624	SAGITTA ELEGANS		11
W93010239	N01P	02-24-93	0624	TORTANUS DISCAUDATUS	F	11
W93010255	N04P	02-24-93	0739	BARNACLE NAUPLII	N	317
W93010255	N04P	02-24-93	0739	BIVALVE VELIGER		37
W93010255	N04P	02-24-93	0739	CALANUS FINMARCHICUS	C	56
W93010255	N04P	02-24-93	0739	CENTROPAGES SPP.	C	19
W93010255	N04P	02-24-93	0739	CENTROPAGES TYPICUS	F	19
W93010255	N04P	02-24-93	0739	COPEPOD NAUPLII	N	3946
W93010255	N04P	02-24-93	0739	GASTROPOD VELIGER		159
W93010255	N04P	02-24-93	0739	MICROSETELLA NORVEGICA		121
W93010255	N04P	02-24-93	0739	OITHONA ATLANTICA	C	56
W93010255	N04P	02-24-93	0739	OITHONA ATLANTICA	F	75
W93010255	N04P	02-24-93	0739	OITHONA SIMILIS	C	2071
W93010255	N04P	02-24-93	0739	OITHONA SIMILIS	M	56
W93010255	N04P	02-24-93	0739	OITHONA SIMILIS	F	718
W93010255	N04P	02-24-93	0739	PARACALANUS PARVUS	C	28
W93010255	N04P	02-24-93	0739	PARACALANUS PARVUS	F	28
W93010255	N04P	02-24-93	0739	POLYCHAETE LARVAE		84
W93010255	N04P	02-24-93	0739	POLYCHAETE TROCHOPHORES		9
W93010255	N04P	02-24-93	0739	TEMORA LONGICORNIS	C	9
W93010267	N07P	02-24-93	0902	BARNACLE NAUPLII	N	492
W93010267	N07P	02-24-93	0902	BIVALVE VELIGER		141
W93010267	N07P	02-24-93	0902	CALANUS FINMARCHICUS	C	234

¹C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII
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Table 61. Zooplankton Species Data for February and March 1993.

Event	Station	Date	Time	Taxon	Qual ¹	Individuals Per M3
W93010267	N07P	02-24-93	0902	CENTROPAGES TYPICUS	F	23
W93010267	N07P	02-24-93	0902	COPEPOD NAUPLII	N	5322
W93010267	N07P	02-24-93	0902	ECHINODERM PLUTEI		23
W93010267	N07P	02-24-93	0902	GASTROPOD VELIGER		188
W93010267	N07P	02-24-93	0902	MICROSETELLA NORVEGICA		94
W93010267	N07P	02-24-93	0902	OIKIOPLEURA DIOICA		70
W93010267	N07P	02-24-93	0902	OITHONA SIMILIS	M	23
W93010267	N07P	02-24-93	0902	OITHONA SIMILIS	F	938
W93010267	N07P	02-24-93	0902	OITHONA SIMILIS	C	2157
W93010267	N07P	02-24-93	0902	PARACALANUS PARVUS	C	47
W93010267	N07P	02-24-93	0902	POLYCHAETE LARVAE		375
W93010267	N07P	02-24-93	0902	TORTANUS DISCAUDATUS	C	23
W93010281	F13P	02-24-93	1015	BARNACLE NAUPLII	N	9642
W93010281	F13P	02-24-93	1015	CALANUS FINMARCHICUS	F	42
W93010281	F13P	02-24-93	1015	CALANUS FINMARCHICUS	C	83
W93010281	F13P	02-24-93	1015	CENTROPAGES TYPICUS	F	42
W93010281	F13P	02-24-93	1015	COPEPOD NAUPLII	N	6151
W93010281	F13P	02-24-93	1015	EURYTEMORA HERDMANI	F	42
W93010281	F13P	02-24-93	1015	METRIDIA LUCENS	C	83
W93010281	F13P	02-24-93	1015	METRIDIA LUCENS	F	42
W93010281	F13P	02-24-93	1015	MICROSETELLA NORVEGICA		208
W93010281	F13P	02-24-93	1015	OIKIOPLEURA DIOICA		42
W93010281	F13P	02-24-93	1015	OITHONA ATLANTICA	F	83
W93010281	F13P	02-24-93	1015	OITHONA SIMILIS	F	1413
W93010281	F13P	02-24-93	1015	OITHONA SIMILIS	C	1912
W93010281	F13P	02-24-93	1015	OITHONA SIMILIS	M	83
W93010281	F13P	02-24-93	1015	PARACALANUS PARVUS	C	332
W93010281	F13P	02-24-93	1015	PARACALANUS PARVUS	M	42
W93010281	F13P	02-24-93	1015	PARACALANUS PARVUS	F	83
W93010281	F13P	02-24-93	1015	POLYCHAETE LARVAE		4987
W93010281	F13P	02-24-93	1015	PSEUDOCALANUS NEWMANI	C	42
W93010281	F13P	02-24-93	1015	PSEUDOCALANUS NEWMANI	F	83
W93010281	F13P	02-24-93	1015	TORTANUS DISCAUDATUS	M	42
W93010400	F02P	02-25-93	1134	ACARTIA HUDSONICA	F	106
W93010400	F02P	02-25-93	1134	ACARTIA HUDSONICA	C	53
W93010400	F02P	02-25-93	1134	BARNACLE NAUPLII	N	240
W93010400	F02P	02-25-93	1134	BIVALVE VELIGER		80
W93010400	F02P	02-25-93	1134	COPEPOD NAUPLII	N	10511
W93010400	F02P	02-25-93	1134	EUCONCHOEICA SP.		27
W93010400	F02P	02-25-93	1134	EURYTEMORA HERDMANI	C	53
W93010400	F02P	02-25-93	1134	MICROSETELLA NORVEGICA		27
W93010400	F02P	02-25-93	1134	OIKIOPLEURA DIOICA		346
W93010400	F02P	02-25-93	1134	OITHONA ATLANTICA	C	27
W93010400	F02P	02-25-93	1134	OITHONA SIMILIS	C	1969
W93010400	F02P	02-25-93	1134	OITHONA SIMILIS	M	133
W93010400	F02P	02-25-93	1134	OITHONA SIMILIS	F	1783
W93010400	F02P	02-25-93	1134	PARACALANUS PARVUS	F	266
W93010400	F02P	02-25-93	1134	PARACALANUS PARVUS	M	80
W93010400	F02P	02-25-93	1134	PARACALANUS PARVUS	C	2555
W93010400	F02P	02-25-93	1134	POLYCHAETE LARVAE		8542
W93010400	F02P	02-25-93	1134	POLYCHAETE TROCHOPHORES		1091
W93010400	F02P	02-25-93	1134	PSEUDOCALANUS NEWMANI	C	133
W93010400	F02P	02-25-93	1134	PSEUDOCALANUS NEWMANI	M	80
W93010400	F02P	02-25-93	1134	PSEUDOCALANUS NEWMANI	F	213
W93010400	F02P	02-25-93	1134	TEMORA LONGICORNIS	C	80
W93010400	F02P	02-25-93	1134	TEMORA LONGICORNIS	M	27
W93010400	F02P	02-25-93	1134	TORTANUS DISCAUDATUS	F	53
W93010400	F02P	02-25-93	1134	TORTANUS DISCAUDATUS	C	426
W93010400	F02P	02-25-93	1134	UNIDENTIFIED LARVAE		27
W93010418	F01P	02-25-93	1417	ACARTIA HUDSONICA	F	32
W93010418	F01P	02-25-93	1417	ACARTIA HUDSONICA	C	356
W93010418	F01P	02-25-93	1417	CENTROPAGES SPP.	C	32

¹C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII
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Table G1. Zooplankton Species Data for February and March 1993.

Event	Station	Date	Time	Taxon	Qual ¹	Individuals Per M3
W93010418	F01P	02-25-93	1417	CENTROPAGES TYPICUS	F	32
W93010418	F01P	02-25-93	1417	COPEPOD NAUPLII	N	4234
W93010418	F01P	02-25-93	1417	MICROSETELLA NORVEGICA		32
W93010418	F01P	02-25-93	1417	OIKIOPLEURA DIOICA		453
W93010418	F01P	02-25-93	1417	OITHONA ATLANTICA	F	32
W93010418	F01P	02-25-93	1417	OITHONA SIMILIS	F	905
W93010418	F01P	02-25-93	1417	OITHONA SIMILIS	M	97
W93010418	F01P	02-25-93	1417	OITHONA SIMILIS	C	2263
W93010418	F01P	02-25-93	1417	PARACALANUS PARVUS	C	776
W93010418	F01P	02-25-93	1417	PARACALANUS PARVUS	F	32
W93010418	F01P	02-25-93	1417	PARACALANUS PARVUS	M	32
W93010418	F01P	02-25-93	1417	POLYCHAETE LARVAE		2036
W93010418	F01P	02-25-93	1417	PSEUDOCALANUS NEWMANI	C	65
W93010418	F01P	02-25-93	1417	TORTANUS DISCAUDATUS	C	32
W93010418	F01P	02-25-93	1417	TORTANUS DISCAUDATUS	F	32
W93010418	F01P	02-25-93	1417	TORTANUS DISCAUDATUS	F	21
W93020021	F23P	03-09-93	0708	ACARTIA HUDSONICA	C	21
W93020021	F23P	03-09-93	0708	ACARTIA HUDSONICA	N	810
W93020021	F23P	03-09-93	0708	BARNACLE NAUPLII	N	790
W93020021	F23P	03-09-93	0708	COPEPOD NAUPLII	N	83
W93020021	F23P	03-09-93	0708	EURYTEMORA HERDMANI	M	42
W93020021	F23P	03-09-93	0708	EURYTEMORA HERDMANI	F	42
W93020021	F23P	03-09-93	0708	OITHONA SIMILIS	C	208
W93020021	F23P	03-09-93	0708	OITHONA SIMILIS	F	42
W93020021	F23P	03-09-93	0708	PARACALANUS PARVUS	F	21
W93020021	F23P	03-09-93	0708	PARACALANUS PARVUS	C	42
W93020021	F23P	03-09-93	0708	POLYCHAETE LARVAE		104
W93020021	F23P	03-09-93	0708	PSEUDOCALANUS NEWMANI	M	21
W93020021	F23P	03-09-93	0708	PSEUDOCALANUS NEWMANI	F	42
W93020021	F23P	03-09-93	0708	TORTANUS DISCAUDATUS	M	312
W93020021	F23P	03-09-93	0708	TORTANUS DISCAUDATUS	F	42
W93020021	F23P	03-09-93	0708	UNIDENTIFIED HARPACTICOID		1060
W93020061	N20P	03-09-93	0849	BARNACLE NAUPLII	N	382
W93020061	N20P	03-09-93	0849	BIVALVE VELIGER		76
W93020061	N20P	03-09-93	0849	CALANUS FINMARCHICUS	C	210
W93020061	N20P	03-09-93	0849	CENTROPAGES SPP.	C	10
W93020061	N20P	03-09-93	0849	COPEPOD NAUPLII	N	5464
W93020061	N20P	03-09-93	0849	GASTROPOD VELIGER		525
W93020061	N20P	03-09-93	0849	METRIDIA LUCENS	C	10
W93020061	N20P	03-09-93	0849	MICROSETELLA NORVEGICA		420
W93020061	N20P	03-09-93	0849	OIKIOPLEURA DIOICA		86
W93020061	N20P	03-09-93	0849	OITHONA ATLANTICA	C	10
W93020061	N20P	03-09-93	0849	OITHONA ATLANTICA	F	57
W93020061	N20P	03-09-93	0849	OITHONA SIMILIS	C	3381
W93020061	N20P	03-09-93	0849	OITHONA SIMILIS	M	86
W93020061	N20P	03-09-93	0849	OITHONA SIMILIS	F	1423
W93020061	N20P	03-09-93	0849	PARACALANUS PARVUS	C	162
W93020061	N20P	03-09-93	0849	PARACALANUS PARVUS	F	10
W93020061	N20P	03-09-93	0849	POLYCHAETE LARVAE		1032
W93020061	N20P	03-09-93	0849	SAGITTA ELEGANS		10
W93020061	N20P	03-09-93	0849	TORTANUS DISCAUDATUS	F	10
W93020088	N16P	03-09-93	1005	BARNACLE NAUPLII	N	490
W93020088	N16P	03-09-93	1005	CALANUS FINMARCHICUS	C	19
W93020088	N16P	03-09-93	1005	CENTROPAGES SPP.	C	19
W93020088	N16P	03-09-93	1005	COPEPOD NAUPLII	N	4415
W93020088	N16P	03-09-93	1005	EUCONCHOEICA SP.		13
W93020088	N16P	03-09-93	1005	GASTROPOD VELIGER		121
W93020088	N16P	03-09-93	1005	HYPERIID AMPHIPOD		6
W93020088	N16P	03-09-93	1005	MICROSETELLA NORVEGICA		32
W93020088	N16P	03-09-93	1005	OIKIOPLEURA DIOICA		522
W93020088	N16P	03-09-93	1005	OITHONA SIMILIS	M	57
W93020088	N16P	03-09-93	1005	OITHONA SIMILIS	C	1520
W93020088	N16P	03-09-93	1005	OITHONA SIMILIS	F	579

¹C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII
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Table G1. Zooplankton Species Data for February and March 1993.

Event	Station	Date	Time	Taxon	Qual ¹	Individuals Per M3
W93020088	N16P	03-09-93	1005	PARACALANUS PARVUS	C	32
W93020088	N16P	03-09-93	1005	POLYCHAETE LARVAE		197
W93020088	N16P	03-09-93	1005	TORTANUS DISCAUDATUS	F	6
W93020121	N10P	03-09-93	1135	BARNACLE NAUPLII	N	922
W93020121	N10P	03-09-93	1135	CALANUS FINMARCHICUS	C	33
W93020121	N10P	03-09-93	1135	COPEPOD NAUPLII	N	1345
W93020121	N10P	03-09-93	1135	GASTROPOD VELIGER		54
W93020121	N10P	03-09-93	1135	MICROSETELLA NORVEGICA		98
W93020121	N10P	03-09-93	1135	OITHONA ATLANTICA	F	11
W93020121	N10P	03-09-93	1135	OITHONA SIMILIS	M	11
W93020121	N10P	03-09-93	1135	OITHONA SIMILIS	C	879
W93020121	N10P	03-09-93	1135	OITHONA SIMILIS	F	347
W93020121	N10P	03-09-93	1135	PARACALANUS PARVUS	C	22
W93020121	N10P	03-09-93	1135	POLYCHAETE LARVAE		325
W93020121	N10P	03-09-93	1135	SAGITTA ELEGANS		22
W93020121	N10P	03-09-93	1135	UNIDENTIFIED HARPACTICOID		33
W93020294	N01P	03-10-93	0731	BARNACLE NAUPLII	N	1614
W93020294	N01P	03-10-93	0731	CALANUS FINMARCHICUS	C	124
W93020294	N01P	03-10-93	0731	CENTROPAGES SPP.	C	11
W93020294	N01P	03-10-93	0731	COPEPOD NAUPLII	N	2348
W93020294	N01P	03-10-93	0731	EUCONCHOEICA SP.		11
W93020294	N01P	03-10-93	0731	GASTROPOD VELIGER		56
W93020294	N01P	03-10-93	0731	MICROSETELLA NORVEGICA		102
W93020294	N01P	03-10-93	0731	OIKIOPLEURA DIOICA		40
W93020294	N01P	03-10-93	0731	OITHONA ATLANTICA	F	11
W93020294	N01P	03-10-93	0731	OITHONA SIMILIS	C	1242
W93020294	N01P	03-10-93	0731	OITHONA SIMILIS	F	536
W93020294	N01P	03-10-93	0731	OITHONA SIMILIS	M	28
W93020294	N01P	03-10-93	0731	PARACALANUS PARVUS	F	17
W93020294	N01P	03-10-93	0731	PARACALANUS PARVUS	C	45
W93020294	N01P	03-10-93	0731	POLYCHAETE LARVAE		1044
W93020294	N01P	03-10-93	0731	PSEUDOCALANUS NEWMANI	C	11
W93020294	N01P	03-10-93	0731	SAGITTA ELEGANS		6
W93020294	N01P	03-10-93	0731	UNIDENTIFIED HARPACTICOID		6
W93020318	N04P	03-10-93	1002	ACARTIA HUDSONICA	C	15
W93020318	N04P	03-10-93	1002	BARNACLE NAUPLII	N	379
W93020318	N04P	03-10-93	1002	BIVALVE VELIGER		30
W93020318	N04P	03-10-93	1002	CALANUS FINMARCHICUS	C	35
W93020318	N04P	03-10-93	1002	COPEPOD NAUPLII	N	2073
W93020318	N04P	03-10-93	1002	EUCONCHOEICA SP.		10
W93020318	N04P	03-10-93	1002	GASTROPOD VELIGER		258
W93020318	N04P	03-10-93	1002	METRIDIA LUCENS	M	5
W93020318	N04P	03-10-93	1002	MICROSETELLA NORVEGICA		10
W93020318	N04P	03-10-93	1002	OIKIOPLEURA DIOICA		147
W93020318	N04P	03-10-93	1002	OITHONA SIMILIS	C	1148
W93020318	N04P	03-10-93	1002	OITHONA SIMILIS	M	25
W93020318	N04P	03-10-93	1002	OITHONA SIMILIS	F	303
W93020318	N04P	03-10-93	1002	PARACALANUS PARVUS	C	51
W93020318	N04P	03-10-93	1002	PARACALANUS PARVUS	F	5
W93020318	N04P	03-10-93	1002	POLYCHAETE LARVAE		293
W93020318	N04P	03-10-93	1002	SAGITTA ELEGANS		5
W93020340	N07P	03-10-93	1101	BARNACLE NAUPLII	N	499
W93020340	N07P	03-10-93	1101	BIVALVE VELIGER		18
W93020340	N07P	03-10-93	1101	CALANUS FINMARCHICUS	C	231
W93020340	N07P	03-10-93	1101	COPEPOD NAUPLII	N	3302
W93020340	N07P	03-10-93	1101	EUCONCHOEICA SP.		28
W93020340	N07P	03-10-93	1101	GASTROPOD VELIGER		259
W93020340	N07P	03-10-93	1101	OIKIOPLEURA DIOICA		148
W93020340	N07P	03-10-93	1101	OITHONA SIMILIS	M	37
W93020340	N07P	03-10-93	1101	OITHONA SIMILIS	F	499
W93020340	N07P	03-10-93	1101	OITHONA SIMILIS	C	1295
W93020340	N07P	03-10-93	1101	PARACALANUS PARVUS	F	9

¹C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII
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Table G1. Zooplankton Species Data for February and March 1993.

Event	Station	Date	Time	Taxon	Qual ¹	Individuals Per M3
W93020340	N07P	03-10-93	1101	PARACALANUS PARVUS	M	9
W93020340	N07P	03-10-93	1101	PARACALANUS PARVUS	C	83
W93020340	N07P	03-10-93	1101	POLYCHAETE LARVAE		92
W93020340	N07P	03-10-93	1101	TEMORA LONGICORNIS	C	9
W93020340	N07P	03-10-93	1101	TORTANUS DISCAUDATUS	F	9
W93020340	N07P	03-10-93	1101	TORTANUS DISCAUDATUS	M	18
W93020366	F13P	03-10-93	1205	BARNACLE NAUPLII	N	774
W93020366	F13P	03-10-93	1205	CALANUS FINMARCHICUS	C	139
W93020366	F13P	03-10-93	1205	COPEPOD NAUPLII	N	1676
W93020366	F13P	03-10-93	1205	EUCONCHOEICA SP.		18
W93020366	F13P	03-10-93	1205	GASTROPOD VELIGER		54
W93020366	F13P	03-10-93	1205	MICROSETELLA NORVEGICA		212
W93020366	F13P	03-10-93	1205	OIKIOPLEURA DIOICA		60
W93020366	F13P	03-10-93	1205	OITHONA SIMILIS	F	387
W93020366	F13P	03-10-93	1205	OITHONA SIMILIS	M	18
W93020366	F13P	03-10-93	1205	OITHONA SIMILIS	C	1161
W93020366	F13P	03-10-93	1205	PARACALANUS PARVUS	C	36
W93020366	F13P	03-10-93	1205	PARACALANUS PARVUS	F	24
W93020366	F13P	03-10-93	1205	POLYCHAETE LARVAE		768
W93020366	F13P	03-10-93	1205	POLYCHAETE TROCHOPHORES		6
W93020366	F13P	03-10-93	1205	PSEUDOCALANUS NEWMANI	F	6
W93020366	F13P	03-10-93	1205	TEMORA LONGICORNIS	C	6
W93020366	F13P	03-10-93	1205	UNIDENTIFIED HARPACTICOID		12
W93020504	F02P	03-11-93	1219	ACARTIA HUDSONICA	C	15
W93020504	F02P	03-11-93	1219	BARNACLE NAUPLII	N	232
W93020504	F02P	03-11-93	1219	CALANUS FINMARCHICUS	C	29
W93020504	F02P	03-11-93	1219	CALANUS FINMARCHICUS	F	15
W93020504	F02P	03-11-93	1219	CALANUS FINMARCHICUS	M	15
W93020504	F02P	03-11-93	1219	CENTROPAGES HAMATUS	F	15
W93020504	F02P	03-11-93	1219	COPEPOD NAUPLII	N	3323
W93020504	F02P	03-11-93	1219	EURYTEMORA HERDMANI	C	15
W93020504	F02P	03-11-93	1219	EURYTEMORA HERDMANI	F	15
W93020504	F02P	03-11-93	1219	EURYTEMORA HERDMANI	M	73
W93020504	F02P	03-11-93	1219	GASTROPOD VELIGER		15
W93020504	F02P	03-11-93	1219	MICROSETELLA NORVEGICA		15
W93020504	F02P	03-11-93	1219	OIKIOPLEURA DIOICA		580
W93020504	F02P	03-11-93	1219	OITHONA ATLANTICA	F	29
W93020504	F02P	03-11-93	1219	OITHONA SIMILIS	C	1016
W93020504	F02P	03-11-93	1219	OITHONA SIMILIS	F	551
W93020504	F02P	03-11-93	1219	OITHONA SIMILIS	M	73
W93020504	F02P	03-11-93	1219	PARACALANUS PARVUS	F	218
W93020504	F02P	03-11-93	1219	PARACALANUS PARVUS	C	639
W93020504	F02P	03-11-93	1219	POLYCHAETE LARVAE		1640
W93020504	F02P	03-11-93	1219	PSEUDOCALANUS NEWMANI	M	29
W93020504	F02P	03-11-93	1219	PSEUDOCALANUS NEWMANI	F	160
W93020504	F02P	03-11-93	1219	PSEUDOCALANUS NEWMANI	C	102
W93020504	F02P	03-11-93	1219	TEMORA LONGICORNIS	C	44
W93020504	F02P	03-11-93	1219	TEMORA LONGICORNIS	M	15
W93020504	F02P	03-11-93	1219	TORTANUS DISCAUDATUS	C	102
W93020504	F02P	03-11-93	1219	TORTANUS DISCAUDATUS	F	15
W93020530	F01P	03-11-93	1416	ACARTIA HUDSONICA	M	10
W93020530	F01P	03-11-93	1416	ACARTIA HUDSONICA	F	10
W93020530	F01P	03-11-93	1416	BARNACLE NAUPLII	N	405
W93020530	F01P	03-11-93	1416	CALANUS FINMARCHICUS	C	182
W93020530	F01P	03-11-93	1416	CALANUS FINMARCHICUS	F	41
W93020530	F01P	03-11-93	1416	CALANUS FINMARCHICUS	M	20
W93020530	F01P	03-11-93	1416	CENTROPAGES TYPICUS	F	10
W93020530	F01P	03-11-93	1416	COPEPOD NAUPLII	N	3301
W93020530	F01P	03-11-93	1416	EUCONCHOEICA SP.		20
W93020530	F01P	03-11-93	1416	GASTROPOD VELIGER		91
W93020530	F01P	03-11-93	1416	MICROSETELLA NORVEGICA		61
W93020530	F01P	03-11-93	1416	OIKIOPLEURA DIOICA		1023

¹C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII
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Table G1. Zooplankton Species Data for February and March 1993.

Event	Station	Date	Time	Taxon	Qual ¹	Individuals Per M3
W93020530	F01P	03-11-93	1416	OITHONA ATLANTICA	F	41
W93020530	F01P	03-11-93	1416	OITHONA SIMILIS	F	1235
W93020530	F01P	03-11-93	1416	OITHONA SIMILIS	M	41
W93020530	F01P	03-11-93	1416	OITHONA SIMILIS	C	2380
W93020530	F01P	03-11-93	1416	PARACALANUS PARVUS	F	10
W93020530	F01P	03-11-93	1416	PARACALANUS PARVUS	C	41
W93020530	F01P	03-11-93	1416	POLYCHAETE LARVAE		3058
W93020530	F01P	03-11-93	1416	PSEUDOCALANUS NEWMANI	C	10
W93020530	F01P	03-11-93	1416	PSEUDOCALANUS NEWMANI	F	30
W93020530	F01P	03-11-93	1416	SAGITTA ELEGANS		10
W93020530	F01P	03-11-93	1416	TEMORA LONGICORNIS	C	10
W93020530	F01P	03-11-93	1416	TORTANUS DISCAUDATUS	C	30

¹C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII
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