

**APPENDICES TO  
WATER QUALITY MONITORING  
IN MASSACHUSETTS AND CAPE COD BAYS:  
FEBRUARY - MARCH 1994**

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## LIST OF APPENDICES

<b>APPENDIX A:</b>	<b>STATION DATA TABLES AND INSTRUMENT CALIBRATION DATA .....</b>	<b>25pp</b>
<b>APPENDIX B:</b>	<b>VERTICAL PROFILE DATA FROM FARFIELD AND NEARFIELD STATIONS .....</b>	<b>131pp</b>
<b>APPENDIX C:</b>	<b>COMPARISON OF VERTICAL PROFILE DATA: SCATTER PLOTS .....</b>	<b>27pp</b>
<b>APPENDIX D:</b>	<b>METABOLISM DATA AND PRODUCTIVITY—IRRADIANCE MODELING .....</b>	<b>49pp</b>
<b>APPENDIX E:</b>	<b>PHYTOPLANKTON SPECIES DATA TABLES .....</b>	<b>16pp</b>
<b>APPENDIX F:</b>	<b>ZOOPLANKTON SPECIES DATA TABLES .....</b>	<b>8pp</b>

## 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 depth-averaged value bracketing the depth interval encompassed by the hydrocast bottle at closing. 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 both of the combined farfield/nearfield surveys followed by the March nearfield survey. Table A-2 lists data for the combined surveys, and the values for analytical replicates of a given bottle.

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

000001

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 l i n i t y  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

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

% Saturation = 100 \* DO / OXsat

Reference:

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

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)
W9401	F01P	02-16-94	1024	23.49	W94010551	-0.62	31.65	11.97	100.09	26.03	25.43	1.15	1.25	1.53	0.12	8.70	0.94	10.06
W9401	F01P	02-16-94	1025	17.60	W94010552	-0.72	31.57	12.05	100.41	25.88	25.36	1.54	1.37	1.43	0.12	8.46	0.93	10.01
W9401	F01P	02-16-94	1026	11.12	W94010553	-0.83	31.52	12.08	100.34	25.76	25.33	1.97	1.52	1.40	0.12	8.24	0.90	9.76
W9401	F01P	02-16-94	1027	4.47	W94010554	-0.83	31.52	12.13	100.74	25.75	25.33	1.65	1.53	1.29	0.12	8.32	0.93	9.86
W9401	F01P	02-16-94	1028	1.91	W94010555	-0.83	31.52	12.13	100.76	25.76	25.33	0.88	1.51	1.42	0.14	8.20	0.90	9.72
W9401	F02P	02-16-94	0826	28.05	W94010537	-0.52	31.57	12.95	108.51	26.05	25.36	16.94	2.31	0.23	0.03	0.18	0.30	0.23
W9401	F02P	02-16-94	0828	20.52	W94010538	-0.52	31.57	12.98	108.76	26.04	25.36	15.01	2.29	0.45	0.05	0.19	0.31	0.22
W9401	F02P	02-16-94	0829	12.73	W94010539	-0.55	31.55	12.78	106.98	26.00	25.34	11.14	1.80	0.25	0.05	1.44	0.42	1.58
W9401	F02P	02-16-94	0830	6.04	W94010540	-0.56	31.54	12.80	107.12	25.98	25.34	10.46	1.77	0.77	0.09	2.83	0.54	3.17
W9401	F02P	02-16-94	0831	2.17	W94010541	-0.56	31.53	12.77	106.86	25.97	25.33	8.94	1.89	0.53	0.12	2.88	0.53	3.38
W9401	F03	02-16-94	1153	14.11	W94010567	-0.09	31.72	11.80	100.14	26.50	25.47	0.88	1.22	2.32	0.16	9.70	1.06	10.09
W9401	F03	02-16-94	1154	7.26	W94010569	-0.09	31.72	11.89	100.90	26.49	25.46	0.75	1.25	2.33	0.16	9.80	1.05	10.17
W9401	F03	02-16-94	1154	10.15	W94010568	-0.08	31.72	11.77	99.89	26.50	25.46	0.85	1.24	2.30	0.16	9.78	1.11	10.17
W9401	F03	02-16-94	1155	4.01	W94010570	-0.09	31.72	11.90	100.98	26.49	25.46	0.43	1.24	2.33	0.17	9.78	1.05	10.19
W9401	F03	02-16-94	1156	3.46	W94010571	-0.09	31.72	12.00	101.82	26.49	25.46	0.43	1.25	2.45	0.17	9.59	1.04	10.02
W9401	F05	02-16-94	1340	19.68	W94010578	0.06	31.85	11.66	99.42	26.71	25.56	0.75	1.07	2.48	0.15	9.85	1.05	10.28
W9401	F05	02-16-94	1342	9.43	W94010580	-0.28	31.71	11.74	99.10	26.33	25.46	0.77	1.26	3.33	0.17	10.09	1.11	10.87
W9401	F05	02-16-94	1342	16.00	W94010579	-0.28	31.72	11.79	99.54	26.34	25.47	0.68	1.26	3.26	0.17	9.97	1.11	10.88
W9401	F05	02-16-94	1343	5.19	W94010581	-0.27	31.71	11.77	99.37	26.33	25.46	0.45	1.27	3.28	0.17	9.91	1.11	10.71
W9401	F05	02-16-94	1344	1.82	W94010582	-0.26	31.71	11.86	100.16	26.34	25.46	0.39	1.30	3.34	0.17	10.04	1.11	10.80
W9401	F06	02-16-94	1428	25.28	W94010589	1.37	32.16	11.57	102.33	28.01	25.74	1.20	0.77	0.38	0.10	9.14	0.93	8.73
W9401	F06	02-16-94	1429	14.84	W94010590	1.37	32.16	11.52	101.89	28.00	25.74	1.29	0.77	0.36	0.10	9.22	0.95	8.79
W9401	F06	02-16-94	1430	9.14	W94010591	1.38	32.16	11.59	102.54	28.01	25.74	1.35	0.78	0.57	0.13	9.04	0.98	8.60
W9401	F06	02-16-94	1431	6.73	W94010592	1.39	32.16	11.40	100.87	28.01	25.74	1.26	0.78	0.37	0.10	9.15	0.96	8.76
W9401	F06	02-16-94	1432	0.81	W94010593	1.40	32.14	11.44	101.25	27.99	25.71	0.78	1.21	0.57	0.13	9.02	0.96	8.60
W9401	F07	02-16-94	1536	47.34	W94010601	1.56	32.19	11.23	99.84	28.19	25.75	1.21	0.76	0.36	0.11	9.03	0.95	8.43
W9401	F07	02-16-94	1538	37.16	W94010602	1.58	32.19	11.19	99.54	28.21	25.75	1.26	0.73	0.31	0.11	9.11	0.95	8.48
W9401	F07	02-16-94	1539	22.84	W94010603	1.59	32.19	11.21	99.73	28.20	25.75	1.22	0.75	0.34	0.11	9.11	0.95	8.49
W9401	F07	02-16-94	1540	1.06	W94010605	1.58	32.16	11.31	100.58	28.16	25.72	2.19	1.07	0.32	0.12	9.09	0.96	8.48
W9401	F07	02-16-94	1540	12.74	W94010604	1.58	32.19	11.20	99.63	28.20	25.75	1.15	0.77	0.34	0.11	9.13	0.97	8.55
W9401	F10	02-16-94	1638	31.49	W94010612	1.15	32.13	11.49	101.02	27.81	25.73	0.83	0.74	0.86	0.13	9.51	1.00	9.41
W9401	F10	02-16-94	1639	23.31	W94010613	1.12	32.12	11.36	99.79	27.77	25.72	0.96	0.76	0.87	0.13	9.61	1.01	9.40
W9401	F10	02-16-94	1640	15.88	W94010614	1.13	32.12	11.32	99.47	27.78	25.73	0.92	0.76	0.89	0.13	9.62	1.00	9.41
W9401	F10	02-16-94	1641	6.73	W94010615	1.11	32.12	11.43	100.38	27.75	25.72	1.05	0.78	0.93	0.13	9.62	1.01	9.42
W9401	F10	02-16-94	1642	2.61	W94010616	1.08	32.11	11.35	99.60	27.72	25.72	1.12	0.77	0.97	0.14	9.57	1.03	9.46
W9401	F12	02-15-94	1616	89.42	W94010496	1.98	32.32	10.74	96.59	28.65	25.83	1.28	5.25	0.49	0.12	9.92	1.01	9.77
W9401	F12	02-15-94	1617	67.54	W94010497	1.90	32.30	10.78	96.75	28.57	25.81	0.79	0.69	0.51	0.13	9.64	1.02	9.82
W9401	F12	02-15-94	1618	43.64	W94010498	1.82	32.25	10.80	96.70	28.45	25.78	0.79	0.64	0.44	0.15	9.84	1.02	9.69
W9401	F12	02-15-94	1619	23.88	W94010499	1.81	32.25	10.75	96.22	28.43	25.78	0.86	0.63	0.42	0.14	9.88	1.01	9.68
W9401	F12	02-15-94	1621	2.16	W94010500	1.76	32.23	10.80	96.55	28.37	25.77	0.90	0.64	0.44	0.15	9.63	1.01	9.46
W9401	F13P	02-16-94	1736	18.61	W94010624	0.19	31.93	11.50	98.47	26.88	25.62	0.77	1.00	2.44	0.14	10.79	1.06	11.26
W9401	F13P	02-16-94	1736	24.02	W94010623	0.29	31.96	11.61	99.68	26.98	25.64	0.77	0.98	2.20	0.14	10.81	1.04	11.21
W9401	F13P	02-16-94	1737	13.45	W94010625	0.09	31.90	11.54	98.51	26.77	25.60	0.79	1.03	2.80	0.17	10.60	1.57	11.00
W9401	F13P	02-16-94	1738	5.71	W94010626	-0.00	31.86	11.50	97.90	26.66	25.57	0.79	1.05	2.94	0.16	10.79	1.07	11.17
W9401	F13P	02-16-94	1739	1.93	W94010627	-0.02	31.86	11.51	97.93	26.64	25.57	0.78	1.08	3.12	0.18	10.62	1.89	11.01
W9401	F14	02-08-94	1813	12.13	W94010306	0.45	31.60			26.83	25.35	0.76	0.73	4.02	0.23	6.21	0.80	11.48

000003

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)
W9401	F14	02-08-94	1813	14.55	W94010305	0.45	31.60			26.83	25.34	0.73	0.74	3.56	0.20	5.09	0.63	11.35
W9401	F14	02-08-94	1814	6.39	W94010307	0.44	31.59			26.81	25.33	0.74	0.75	3.04	0.26	7.87	0.80	11.49
W9401	F14	02-08-94	1815	1.72	W94010308	0.40	31.58			26.77	25.33	0.55	0.75	4.12	0.26	6.53	0.71	11.51
W9401	F14	02-08-94	1816	3.07	W94010310	0.40	31.58			26.77	25.33	0.59	0.75	4.48	0.29	5.54	0.63	11.34
W9401	F15	02-08-94	1731	34.24	W94010292	2.24	32.23			28.77	25.73	0.79	0.76	0.96	0.12	10.49	1.03	10.58
W9401	F15	02-08-94	1732	24.92	W94010293	1.07	31.98			27.62	25.61	1.25	0.70	1.15	0.12	9.80	0.98	9.35
W9401	F15	02-08-94	1733	16.04	W94010294	1.06	31.98			27.61	25.61	1.14	0.69	1.24	0.12	9.98	0.99	9.35
W9401	F15	02-08-94	1734	2.89	W94010296	1.06	31.98			27.60	25.61	1.09	0.69	1.07	0.11	9.88	0.98	9.30
W9401	F15	02-08-94	1734	7.28	W94010295	1.06	31.97			27.60	25.61	1.22	0.70	0.97	0.11	10.12	0.98	9.28
W9401	F16	02-08-94	1646	54.81	W94010254	3.33	32.55			29.95	25.90	0.70	1.15	0.21	0.11	11.37	0.99	11.20
W9401	F16	02-08-94	1647	41.61	W94010255	1.62	32.06			28.14	25.65	1.11	0.77	1.33	0.19	0.86	0.31	8.93
W9401	F16	02-08-94	1648	29.00	W94010256	1.54	32.05			28.06	25.64	1.14	0.74	0.17	0.11	0.64	0.22	8.80
W9401	F16	02-08-94	1650	2.85	W94010258	1.50	32.05			28.01	25.64	1.20	0.74	1.86	0.09	2.75	0.52	8.98
W9401	F16	02-08-94	1650	14.54	W94010257	1.53	32.05			28.04	25.64	1.19	0.75	0.22	0.24	1.96	0.22	8.91
W9401	F17	02-08-94	1556	65.72	W94010243	3.33	32.59			29.98	25.93	0.81	1.07	0.28	0.10	11.00	0.95	10.90
W9401	F17	02-08-94	1558	42.89	W94010244	2.12	32.27			28.71	25.77	0.88	0.65	2.73	0.09	4.13	0.66	10.47
W9401	F17	02-08-94	1559	31.81	W94010245	2.12	32.27			28.71	25.77	0.90	0.65	2.65	0.13	4.11	0.79	10.27
W9401	F17	02-08-94	1600	15.11	W94010246	1.98	32.23			28.55	25.76	1.02	0.65	2.45	0.12	4.12	0.77	10.24
W9401	F17	02-08-94	1601	2.11	W94010247	1.93	32.22			28.50	25.75	1.03	0.67	0.49	0.03	6.82	0.67	10.22
W9401	F18	02-08-94	1025	24.86	W94010155	1.26	32.17			27.93	25.76	0.85	0.60	0.75	0.11	10.37	1.01	10.46
W9401	F18	02-08-94	1026	16.65	W94010160	1.27	32.17			27.93	25.76	0.83	0.60	1.70	0.05	1.40	0.39	10.51
W9401	F18	02-08-94	1027	10.67	W94010161	1.27	32.17			27.93	25.76	0.95	0.60	0.96	0.11	10.49	0.98	10.51
W9401	F18	02-08-94	1028	2.45	W94010163	1.21	32.17			27.87	25.75	0.75	0.60	0.64	0.11	10.35	1.00	10.44
W9401	F18	02-08-94	1028	3.83	W94010162	1.22	32.16			27.88	25.75	0.97	0.60	1.69	0.07	4.36	0.58	10.53
W9401	F19	02-08-94	1451	76.76	W94010232	3.58	32.68			30.27	25.98	0.60	0.85	0.45	0.11	11.92	1.13	11.12
W9401	F19	02-08-94	1452	60.50	W94010233	2.95	32.51			29.60	25.90	0.69	0.59	0.35	0.11	11.79	1.06	11.01
W9401	F19	02-08-94	1454	40.55	W94010234	1.93	32.28			28.56	25.80	1.11	0.61	0.42	0.11	10.93	1.04	10.65
W9401	F19	02-08-94	1455	20.96	W94010235	1.89	32.25			28.50	25.78	1.09	0.62	0.41	0.12	10.82	1.04	10.54
W9401	F19	02-08-94	1456	3.27	W94010236	1.83	32.24			28.43	25.77	1.09	0.63	0.45	0.12	10.82	1.06	10.52
W9401	F22	02-15-94	1205	77.50	W94010423	3.34	32.77	10.02	93.56	30.15	26.08	0.84	2.69	0.28	0.11	12.20	1.07	11.18
W9401	F22	02-15-94	1207	59.44	W94010424	2.83	32.66	10.20	93.96	29.62	26.03	0.84	0.66	0.26	0.11	12.05	1.06	11.14
W9401	F22	02-15-94	1208	38.71	W94010425	2.59	32.60	10.29	94.18	29.37	26.01	0.86	0.66	0.36	0.12	12.13	1.06	11.31
W9401	F22	02-15-94	1209	19.55	W94010426	2.53	32.58	10.32	94.31	29.29	25.99	1.08	0.68	0.19	0.03	11.66	1.02	11.45
W9401	F22	02-15-94	1210	2.35	W94010427	2.38	32.50	10.33	93.98	29.09	25.94	0.39	0.69	0.41	0.12	11.90	1.05	11.58
W9401	F23P	02-08-94	0812	19.61	W94010072	0.95	31.82			27.40	25.49	0.78	0.79	5.23	0.16	9.76	1.09	11.39
W9401	F23P	02-08-94	0813	15.36	W94010073	0.86	31.67			27.21	25.38	0.75	0.79	4.91	0.18	9.76	1.14	11.61
W9401	F23P	02-08-94	0814	9.88	W94010074	0.51	31.46			26.77	25.23	0.57	0.91	5.75	0.20	9.79	1.17	11.71
W9401	F23P	02-08-94	0815	4.07	W94010075	0.49	31.41			26.71	25.19	0.53	0.92	6.15	0.20	10.04	1.19	12.02
W9401	F23P	02-08-94	0816	2.27	W94010076	0.49	31.41			26.70	25.18	0.50	0.92	6.13	0.21	9.91	1.17	11.94
W9401	F23P	02-15-94	0740	23.93	W94010329	-0.86	31.38			25.64	25.22	0.84	1.88	3.22	0.29	8.48	0.59	12.71
W9401	F23P	02-15-94	0741	17.63	W94010330	-1.05	31.20			25.35	25.07	0.74	1.79	7.65	0.24	10.38	1.19	12.82
W9401	F23P	02-15-94	0743	6.36	W94010332	-1.13	30.93			25.09	24.86	0.67	1.87	5.21	0.36	9.51	0.65	13.81
W9401	F23P	02-15-94	0745	2.50	W94010333	-1.09	30.84			25.05	24.78	0.56	1.92	4.89	0.34	9.08	0.64	13.96
W9401	F23P	02-15-94	0755	10.53	W94010338	-1.06	30.99			25.19	24.91	0.57	1.98	0.19	0.35	9.93	0.49	13.71
W9401	F24	02-08-94	0926	15.27	W94010094	1.14	32.07			27.74	25.68	0.81	0.66	1.13	0.13	10.61	1.04	10.75
W9401	F24	02-08-94	0926	21.52	W94010093	1.14	32.07			27.75	25.68	0.79	0.66	1.20	0.12	10.36	1.01	10.73

700004

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)
W9401	F24	02-08-94	0927	9.12	W94010095	1.14	32.07			27.74	25.68	0.83	0.66	5.00	0.16	0.07	0.47	10.72
W9401	F24	02-08-94	0928	2.96	W94010096	1.13	32.06			27.72	25.68	0.78	0.66	1.33	0.14	10.59	1.03	10.80
W9401	F24	02-08-94	0929	2.49	W94010097	1.12	32.06			27.71	25.68	0.75	0.66	1.32	0.14	10.45	1.05	10.54
W9401	F25	02-17-94	0725	12.80	W94010647	-0.59	31.61			26.02	25.39	0.56	1.18	5.55	0.24	10.89	1.18	11.60
W9401	F25	02-17-94	0726	8.53	W94010648	-0.67	31.54			25.91	25.34	0.58	1.18	5.83	0.26	11.06	1.21	11.75
W9401	F25	02-17-94	0727	2.52	W94010650	-0.82	31.46			25.72	25.28	0.48	1.22	6.19	0.27	11.13	1.23	11.80
W9401	F25	02-17-94	0727	5.98	W94010649	-0.69	31.54			25.88	25.34	0.71	1.19	5.96	0.27	10.97	1.19	11.66
W9401	F25	02-17-94	0728	2.57	W94010651	-0.83	31.44			25.70	25.27	0.40	1.22	6.71	0.29	11.09	1.23	12.44
W9401	F26	02-15-94	1313	50.42	W94010438	2.01	32.45	10.51	94.69	28.77	25.93	0.85	0.69	0.57	0.15	11.94	1.05	11.51
W9401	F26	02-15-94	1315	37.23	W94010439	1.59	32.32	10.65	94.83	28.32	25.86	0.88	0.75	0.63	0.15	12.15	1.07	11.93
W9401	F26	02-15-94	1316	24.89	W94010440	1.66	32.28	10.60	94.54	28.34	25.82	1.06	0.77	0.42	0.16	12.25	1.04	12.15
W9401	F26	02-15-94	1317	12.35	W94010441	1.80	32.27	10.54	94.33	28.43	25.80	1.07	0.82	0.61	0.15	12.29	1.05	12.00
W9401	F26	02-15-94	1318	2.30	W94010442	1.46	32.05	10.64	94.25	27.98	25.65	0.52	0.85	0.30	0.12	11.06	0.84	12.65
W9401	F27B	02-15-94	1410	100.23	W94010449	3.32	32.81	10.25	95.70	30.18	26.11	0.86	0.66	0.32	0.11	13.50	1.14	10.61
W9401	F27B	02-15-94	1412	74.02	W94010450	3.32	32.81	10.17	94.95	30.16	26.11	0.81	0.61	0.24	0.11	13.50	1.06	10.66
W9401	F27B	02-15-94	1413	48.79	W94010451	3.32	32.81	10.16	94.84	30.15	26.11	0.76	0.62	0.58	0.14	13.39	1.04	10.58
W9401	F27B	02-15-94	1415	23.23	W94010452	3.31	32.81	10.11	94.36	30.13	26.11	0.82	0.62	0.45	0.12	13.35	1.05	10.57
W9401	F27B	02-15-94	1416	2.36	W94010453	3.36	32.80	10.08	94.19	30.16	26.10	0.52	0.63	0.61	0.14	13.26	1.08	10.58
W9401	F28	02-15-94	1526	28.23	W94010473	2.22	32.39	10.46	94.72	28.89	25.87	0.65	0.67	0.39	0.10	10.88	1.02	10.44
W9401	F28	02-15-94	1527	22.12	W94010474	2.32	32.36	10.41	94.49	28.94	25.84	0.88	0.72	0.32	0.11	10.94	1.03	10.48
W9401	F28	02-15-94	1528	6.55	W94010476	1.97	32.27	10.68	96.01	28.57	25.78	0.79	0.66	0.28	0.10	10.42	1.00	9.85
W9401	F28	02-15-94	1528	13.13	W94010475	1.97	32.29	10.54	94.75	28.59	25.80	0.88	0.68	0.28	0.10	11.55	1.02	10.00
W9401	F28	02-15-94	1529	2.36	W94010477	1.97	32.26	10.65	95.72	28.56	25.78	0.55	0.65	0.21	0.11	10.33	0.98	9.66
W9401	F29	02-15-94	1800	62.41	W94010509	1.60	32.25	10.20	90.82	28.28	25.80	1.02	0.66	0.35	0.11	10.41	1.01	9.65
W9401	F29	02-15-94	1802	40.96	W94010510	1.51	32.23	10.18	90.40	28.18	25.79	1.45	0.69	0.28	0.10	10.22	1.01	9.32
W9401	F29	02-15-94	1803	19.67	W94010511	1.34	32.11	10.35	91.43	27.94	25.70	2.65	0.79	0.30	0.10	9.32	0.96	8.53
W9401	F29	02-15-94	1804	10.95	W94010512	0.81	31.93	10.66	92.76	27.36	25.59	3.69	0.97	0.43	0.11	8.04	0.90	7.25
W9401	F29	02-15-94	1805	2.72	W94010513	0.73	31.90	10.80	93.78	27.28	25.57	3.13	0.97	0.43	0.12	7.93	0.88	7.26
W9401	F30B	02-08-94	0713	12.97	W94010024	0.53	30.92			26.36	24.79	0.75	1.26	8.62	0.28	11.62	1.24	13.84
W9401	F30B	02-08-94	0715	4.86	W94010025	0.33	30.56			25.93	24.51	0.73	1.18	8.67	0.27	11.31	1.12	13.62
W9401	F30B	02-08-94	0716	2.42	W94010026	0.20	30.47			25.75	24.44	0.73	1.21	5.40	0.30	11.66	0.74	14.30
W9401	N01P	02-15-94	0854	27.14	W94010348	1.32	32.27			28.06	25.83	1.12	0.81	0.50	0.04	6.69	0.66	11.03
W9401	N01P	02-15-94	0855	19.52	W94010349	1.29	32.27			28.03	25.83	1.08	0.82	1.76	0.04	4.60	0.58	11.07
W9401	N01P	02-15-94	0858	12.05	W94010350	1.28	32.27			28.01	25.83	1.14	0.82	0.73	0.04	6.49	0.63	10.88
W9401	N01P	02-15-94	0900	5.99	W94010351	1.27	32.27			28.00	25.84	0.75	0.81	2.13	0.04	5.11	0.69	11.11
W9401	N01P	02-15-94	0901	2.43	W94010352	1.28	32.27			28.01	25.83	0.58	0.80	0.16	0.03	9.81	0.82	10.79
W9401	N01P	02-17-94	1625	28.84	W94010896	1.65	32.35	12.40	110.62	28.39	25.88	1.00	0.68	0.36	0.11	10.98	1.02	10.93
W9401	N01P	02-17-94	1626	20.86	W94010897	1.65	32.35	11.90	106.15	28.38	25.88	1.03	0.68	0.50	0.05	6.17	0.66	11.05
W9401	N01P	02-17-94	1627	14.19	W94010898	1.48	32.32	11.55	102.56	28.21	25.86	1.02	0.71	0.49	0.13	11.02	1.38	10.86
W9401	N01P	02-17-94	1628	1.21	W94010900	1.47	32.31	11.10	98.52	28.19	25.85	1.05	0.71	0.44	0.12	11.09	2.84	10.96
W9401	N01P	02-17-94	1628	7.05	W94010899	1.46	32.31	11.29	100.20	28.19	25.85	1.15	0.71	0.65	0.13	11.09	1.04	10.94
W9401	N02	02-17-94	1602	35.86	W94010885	1.62	32.35	11.00	98.05	28.36	25.87	1.00	0.73	0.12	0.05	6.38	0.63	11.17
W9401	N02	02-17-94	1603	26.79	W94010886	1.62	32.34	10.97	97.76	28.35	25.87	1.11	0.71	0.82	0.14	4.88	0.63	11.12
W9401	N02	02-17-94	1604	9.11	W94010888	1.73	32.35	10.97	98.06	28.44	25.87	1.05	0.68	1.78	0.09	4.83	0.72	11.22
W9401	N02	02-17-94	1604	18.64	W94010887	1.66	32.34	10.97	97.86	28.38	25.86	1.08	0.69	1.40	0.04	5.22	0.68	11.20
W9401	N02	02-17-94	1605	1.57	W94010889	1.70	32.35	10.97	97.97	28.41	25.87	0.95	0.68	0.76	0.19	5.25	0.59	11.06

000005



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)
W9401	N03	02-17-94	1539	43.44	W94010874	2.16	32.43	10.96	99.10	28.87	25.90	0.77	0.64	0.76	0.32	5.41	0.65	11.50
W9401	N03	02-17-94	1540	32.09	W94010875	1.66	32.32	11.12	99.21	28.38	25.85	1.24	0.67	0.04	0.04	10.15	0.85	11.20
W9401	N03	02-17-94	1541	10.92	W94010877	1.78	32.32	11.06	98.98	28.46	25.84	1.33	0.67	0.71	0.04	7.08	0.70	11.24
W9401	N03	02-17-94	1541	21.05	W94010876	1.69	32.33	11.07	98.84	28.40	25.85	1.35	0.68	1.06	0.22	5.40	0.64	11.25
W9401	N03	02-17-94	1542	1.47	W94010878	1.79	32.32	10.87	97.29	28.47	25.84	0.87	0.67	0.06	0.14	9.35	0.83	11.09
W9401	N04P	02-15-94	1008	35.12	W94010371	1.92	32.36	10.06	90.36	28.61	25.86	0.92	0.66	0.43	0.12	11.60	1.02	11.00
W9401	N04P	02-15-94	1009	35.21	W94010372	1.92	32.36	10.06	90.36	28.61	25.86	0.93	0.66	0.43	0.12	11.60	1.01	10.97
W9401	N04P	02-15-94	1010	22.27	W94010373	1.90	32.32	10.09	90.58	28.57	25.84	1.08	0.68	0.44	0.13	11.47	1.00	10.90
W9401	N04P	02-15-94	1011	10.80	W94010374	1.90	32.32	10.14	91.03	28.56	25.83	1.22	0.69	0.42	0.12	11.64	1.02	11.16
W9401	N04P	02-15-94	1012	2.56	W94010375	1.91	32.32	10.21	91.67	28.57	25.83	0.54	0.67	0.65	0.18	6.41	0.62	11.03
W9401	N04P	02-17-94	1512	47.99	W94010861	2.66	32.60	10.87	99.67	29.43	26.00	0.79	0.81	0.11	0.03	10.51	0.93	11.21
W9401	N04P	02-17-94	1513	35.56	W94010862	2.12	32.47	11.02	99.59	28.88	25.94	1.15	0.68	0.35	0.04	6.65	0.69	11.23
W9401	N04P	02-17-94	1514	24.58	W94010863	2.01	32.46	11.05	99.57	28.77	25.94	1.30	0.69	0.61	0.06	6.00	0.71	11.28
W9401	N04P	02-17-94	1515	1.53	W94010865	1.97	32.37	11.03	99.22	28.65	25.87	0.47	0.67	2.33	0.08	4.65	0.82	11.22
W9401	N04P	02-17-94	1515	11.45	W94010864	1.99	32.39	11.11	100.00	28.69	25.89	1.18	0.67	0.09	0.06	7.76	0.67	11.09
W9401	N05	02-17-94	1425	51.38	W94010849	2.60	32.59	10.67	97.68	29.37	26.00	0.78	0.69	0.15	0.14	11.37	0.97	11.28
W9401	N05	02-17-94	1426	27.40	W94010851	2.22	32.51	10.82	98.04	28.98	25.96	1.14	0.67	0.42	0.37	5.87	0.55	11.28
W9401	N05	02-17-94	1426	40.44	W94010850	2.34	32.53	10.75	97.72	29.10	25.97	0.95	0.67	0.15	0.94	7.13	0.76	11.34
W9401	N05	02-17-94	1427	13.13	W94010852	2.11	32.44	10.89	98.35	28.83	25.92	1.06	0.67	0.66	0.06	7.69	0.71	11.34
W9401	N05	02-17-94	1428	1.56	W94010853	2.03	32.38	11.02	99.27	28.70	25.87	0.45	0.65	0.32	0.35	6.02	0.54	11.23
W9401	N06	02-17-94	1358	47.54	W94010833	2.61	32.60	10.75	98.45	29.39	26.00	0.92	0.72	0.18	0.15	11.71	1.04	11.25
W9401	N06	02-17-94	1400	34.63	W94010835	2.30	32.52	10.86	98.61	29.06	25.96	0.95	0.67	0.51	0.10	6.69	0.65	11.25
W9401	N06	02-17-94	1401	23.01	W94010836	1.97	32.42	10.96	98.62	28.70	25.91	1.31	0.68	0.42	0.09	6.41	0.66	11.35
W9401	N06	02-17-94	1402	2.37	W94010838	1.99	32.37	11.06	99.53	28.66	25.86	0.52	0.66	0.38	0.05	7.41	0.73	11.15
W9401	N06	02-17-94	1402	6.95	W94010837	1.97	32.37	11.07	99.58	28.65	25.87	0.94	0.67	0.13	0.07	8.29	0.73	11.22
W9401	N07P	02-08-94	1335	47.28	W94010212	3.07	32.46			29.65	25.85	0.57	0.91	0.75	0.08	10.76	1.05	10.62
W9401	N07P	02-08-94	1336	36.30	W94010213	1.26	32.00			27.80	25.62	1.00	0.69	0.82	0.10	9.74	0.88	13.37
W9401	N07P	02-08-94	1337	23.70	W94010214	1.14	31.98			27.67	25.61	1.12	0.70	1.07	0.09	9.68	1.01	9.54
W9401	N07P	02-08-94	1338	10.95	W94010215	1.12	31.97			27.64	25.60	1.01	0.70	1.17	0.10	9.78	1.03	9.67
W9401	N07P	02-08-94	1339	2.62	W94010216	1.11	31.98			27.64	25.61	1.03	0.71	1.15	0.10	9.71	1.00	9.72
W9401	N07P	02-17-94	1303	48.13	W94010807	2.46	32.53	10.87	99.12	29.21	25.96	0.84	0.85	1.11	0.22	5.30	0.52	11.13
W9401	N07P	02-17-94	1304	37.32	W94010808	1.82	32.35	11.11	99.54	28.53	25.86	1.21	0.69	1.51	0.14	4.26	0.55	10.84
W9401	N07P	02-17-94	1305	24.97	W94010809	1.77	32.34	11.17	99.95	28.47	25.86	1.57	0.69	1.02	0.18	5.73	0.63	10.77
W9401	N07P	02-17-94	1306	9.32	W94010810	1.78	32.33	11.19	100.14	28.47	25.85	1.18	0.71	1.38	0.03	8.85	0.68	11.13
W9401	N07P	02-17-94	1307	1.49	W94010811	1.87	32.33	11.24	100.83	28.54	25.84	0.58	0.69	0.94	0.03	6.25	0.63	10.78
W9401	N08	02-17-94	1236	22.94	W94010797	1.41	32.30	11.65	103.23	28.14	25.85	0.95	0.64	0.53	0.11	11.11	1.00	10.62
W9401	N08	02-17-94	1236	31.04	W94010795	1.42	32.30	11.65	103.26	28.15	25.85	0.95	0.64	0.52	0.10	10.84	0.99	10.39
W9401	N08	02-17-94	1237	15.39	W94010798	1.35	32.29	11.64	102.99	28.09	25.84	0.93	0.65	0.58	0.11	11.18	1.02	10.63
W9401	N08	02-17-94	1238	2.57	W94010800	1.30	32.27	11.63	102.76	28.03	25.83	0.36	0.64	0.47	0.11	10.83	1.01	10.41
W9401	N08	02-17-94	1238	7.45	W94010799	1.29	32.28	11.66	102.98	28.02	25.84	0.52	0.64	0.46	0.11	10.93	1.03	10.46
W9401	N09	02-17-94	1149	31.74	W94010782	0.68	32.19	12.00	104.25	27.47	25.80	0.82	0.77	0.89	0.11	10.50	1.01	10.46
W9401	N09	02-17-94	1150	19.78	W94010783	0.68	32.19	11.87	103.14	27.47	25.80	0.84	0.81	0.70	0.11	10.62	1.02	10.49
W9401	N09	02-17-94	1151	6.35	W94010785	0.71	32.18	11.75	102.15	27.48	25.80	0.49	0.81	0.75	0.11	10.60	1.02	10.53
W9401	N09	02-17-94	1151	14.13	W94010784	0.68	32.19	11.66	101.30	27.46	25.80	0.86	0.81	0.96	0.11	10.72	1.03	10.54
W9401	N09	02-17-94	1152	2.63	W94010786	0.77	32.18	11.70	101.87	27.52	25.79	0.37	0.81	0.24	0.23	5.22	0.47	10.47
W9401	N10P	02-17-94	0750	22.48	W94010658	0.37	32.12	11.35	97.77	27.17	25.77	0.81	0.93	5.25	0.17	2.12	0.62	10.53

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)
W9401	N10P	02-17-94	0751	16.40	W94010659	0.28	32.12	11.18	96.06	27.09	25.77	0.89	0.97	3.49	0.22	4.40	0.61	10.63
W9401	N10P	02-17-94	0752	9.80	W94010660	0.15	32.10	11.29	96.67	26.97	25.76	0.77	0.99	2.83	0.22	5.69	0.95	10.47
W9401	N10P	02-17-94	0753	2.45	W94010662	-0.03	32.04	11.24	95.73	26.77	25.72	0.68	1.03	2.42	0.25	6.67	1.01	10.51
W9401	N10P	02-17-94	0753	5.53	W94010661	0.03	32.07	11.25	96.00	26.85	25.74	0.75	1.02	2.66	0.18	5.89	0.75	10.50
W9401	N11	02-17-94	1713	26.98	W94010918	0.57	32.19	11.12	96.33	27.38	25.81	0.79	0.84	3.82	0.14	0.83	0.49	10.18
W9401	N11	02-17-94	1714	13.27	W94010920	0.55	32.16	11.19	96.87	27.34	25.79	0.88	0.91	3.08	0.03	1.57	0.53	10.27
W9401	N11	02-17-94	1714	21.39	W94010919	0.57	32.19	11.14	96.49	27.37	25.81	0.81	0.85	1.58	0.49	4.69	0.55	10.48
W9401	N11	02-17-94	1715	2.43	W94010922	0.44	32.11	11.28	97.34	27.21	25.75	0.72	0.94	2.76	0.18	5.47	0.72	10.29
W9401	N11	02-17-94	1715	6.37	W94010921	0.47	32.11	11.23	96.98	27.24	25.75	0.77	0.93	0.22	0.17	5.62	0.62	10.39
W9401	N12	02-17-94	1650	24.87	W94010907	1.62	32.34	11.10	98.94	28.36	25.87	1.13	0.70	0.41	0.12	11.52	1.06	10.49
W9401	N12	02-17-94	1651	18.11	W94010908	1.62	32.33	11.09	98.84	28.34	25.86	1.14	0.70	0.40	0.12	11.47	1.06	10.47
W9401	N12	02-17-94	1652	5.47	W94010910	1.58	32.32	11.07	98.54	28.29	25.86	1.22	0.71	0.43	0.12	11.53	0.99	10.54
W9401	N12	02-17-94	1652	10.76	W94010909	1.58	32.32	11.09	98.74	28.30	25.86	1.18	0.71	0.42	0.11	11.57	1.03	10.50
W9401	N12	02-17-94	1653	2.44	W94010911	1.57	32.32	11.02	98.07	28.28	25.85	1.20	0.71	0.53	0.13	11.50	1.00	10.48
W9401	N13	02-17-94	1043	28.60	W94010745	1.63	32.36	11.12	99.14	28.37	25.88	0.95	0.68	0.58	0.13	11.55	1.03	10.41
W9401	N13	02-17-94	1044	20.50	W94010746	1.63	32.36	11.07	98.70	28.37	25.88	1.00	0.68	0.28	0.08	8.57	0.80	10.43
W9401	N13	02-17-94	1045	14.17	W94010747	1.63	32.36	11.18	99.69	28.37	25.88	1.05	0.69	0.74	0.05	5.82	0.62	10.42
W9401	N13	02-17-94	1046	2.41	W94010749	1.69	32.35	11.12	99.29	28.40	25.87	0.47	0.67	1.71	0.11	6.47	0.82	10.31
W9401	N13	02-17-94	1046	7.31	W94010748	1.65	32.35	11.12	99.20	28.38	25.88	0.69	0.68	0.38	0.05	11.15	0.98	10.50
W9401	N14	02-17-94	1023	29.20	W94010734	1.64	32.34	11.14	99.33	28.37	25.87	0.91	0.62	0.51	0.13	11.52	1.03	10.32
W9401	N14	02-17-94	1024	13.28	W94010736	1.28	32.29	11.20	98.90	28.03	25.85	0.94	0.66					
W9401	N14	02-17-94	1024	21.01	W94010735	1.41	32.31	11.13	98.64	28.16	25.86	1.06	0.66	0.52	0.14	11.54	1.04	10.36
W9401	N14	02-17-94	1025	7.81	W94010737	1.30	32.29	11.17	98.71	28.05	25.85	0.66	0.65	0.61	0.13	11.39	1.06	10.30
W9401	N14	02-17-94	1026	2.02	W94010738	1.34	32.30	11.22	99.24	28.08	25.85	0.56	0.65	0.47	0.12	11.10	1.03	9.98
W9401	N15	02-17-94	1001	28.25	W94010722	1.76	32.33	11.14	99.63	28.46	25.85	1.31	0.69	0.07	0.10	10.90	0.98	11.08
W9401	N15	02-17-94	1001	39.81	W94010721	1.99	32.40	11.08	99.75	28.71	25.89	0.88	0.69	0.16	0.10	10.90	0.98	11.03
W9401	N15	02-17-94	1002	17.86	W94010723	1.76	32.33	11.08	99.09	28.45	25.85	1.42	0.69	0.10	0.10	10.91	0.95	11.06
W9401	N15	02-17-94	1003	8.95	W94010724	1.75	32.33	11.08	99.09	28.44	25.85	1.12	0.69	0.09	0.10	10.88	0.96	11.04
W9401	N15	02-17-94	1004	2.72	W94010725	1.76	32.33	11.19	100.09	28.45	25.85	0.69	0.68	0.31	0.10	10.74	0.94	10.87
W9401	N16P	02-08-94	1229	28.54	W94010197	1.40	32.07			27.96	25.66	0.95	0.70	1.27	0.13	9.94	1.02	10.26
W9401	N16P	02-08-94	1229	38.33	W94010196	2.15	32.21			28.68	25.73	0.62	0.69	1.25	0.13	10.02	1.02	10.33
W9401	N16P	02-08-94	1230	18.07	W94010198	1.29	32.04			27.85	25.65	1.12	0.71	1.53	0.13	9.86	1.04	10.16
W9401	N16P	02-08-94	1231	8.65	W94010199	1.21	32.02			27.76	25.64	1.05	0.71	1.47	0.13	9.89	1.04	10.21
W9401	N16P	02-08-94	1232	2.77	W94010200	1.10	31.98			27.64	25.62	0.98	0.71	1.72	0.15	9.80	1.03	10.12
W9401	N16P	02-15-94	1048	38.97	W94010385	1.84	32.32	10.00	89.62	28.52	25.84	0.99	0.65	0.49	0.14	10.71	1.01	11.10
W9401	N16P	02-15-94	1049	28.76	W94010386	1.86	32.32	10.02	89.85	28.53	25.84	1.10	0.66	0.43	0.13	10.77	1.02	11.13
W9401	N16P	02-15-94	1050	18.36	W94010387	1.87	32.32	10.14	90.95	28.54	25.84	1.17	0.66	0.61	0.14	10.57	0.99	10.97
W9401	N16P	02-15-94	1051	8.99	W94010388	1.88	32.32	10.25	91.96	28.54	25.83	0.86	0.66	0.47	0.14	10.75	1.03	11.17
W9401	N16P	02-15-94	1052	2.54	W94010389	1.91	32.32	10.36	93.02	28.56	25.83	0.52	0.66	0.73	0.15	10.57	1.01	10.95
W9401	N16P	02-17-94	0935	40.55	W94010703	1.98	32.40	11.17	100.51	28.70	25.89	0.94	0.70	0.28	0.11	10.87	0.95	11.05
W9401	N16P	02-17-94	0936	30.87	W94010704	1.74	32.33	11.22	100.30	28.44	25.85	1.34	0.69	0.00	0.29	7.47	0.69	11.06
W9401	N16P	02-17-94	0937	19.66	W94010705	1.72	32.33	11.19	99.98	28.42	25.85	1.30	0.69	0.07	0.02	7.14	0.64	11.04
W9401	N16P	02-17-94	0938	2.89	W94010707	1.73	32.32	11.26	100.64	28.42	25.85	0.67	0.68	0.34	0.11	10.89	0.99	11.10
W9401	N16P	02-17-94	0938	9.78	W94010706	1.73	32.33	11.13	99.47	28.42	25.85	1.20	0.69	0.25	0.11	10.91	0.98	11.08
W9401	N17	02-17-94	0916	36.05	W94010692	1.60	32.31	11.28	100.47	28.32	25.85	1.12	0.65	0.75	0.03	7.06	0.71	11.21
W9401	N17	02-17-94	0917	17.11	W94010694	1.60	32.31	11.24	100.11	28.31	25.85	1.20	0.65	0.09	0.07	7.58	0.63	11.04

20000

**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)
W9401	N17	02-17-94	0917	25.63	W94010693	1.59	32.31	11.23	100.00	28.31	25.85	1.09	0.65	0.37	0.12	10.83	1.00	11.05
W9401	N17	02-17-94	0918	7.43	W94010695	1.57	32.32	11.23	99.95	28.28	25.85	0.85	0.65	0.11	0.01	10.61	0.93	10.94
W9401	N17	02-17-94	0919	1.21	W94010696	1.42	32.30	11.26	99.80	28.14	25.85	0.56	0.65	0.50	0.12	7.37	0.64	10.76
W9401	N18	02-17-94	0856	17.64	W94010682	1.36	32.31	11.22	99.31	28.11	25.86	1.25	0.67	0.30	0.10	10.73	0.98	10.80
W9401	N18	02-17-94	0856	22.74	W94010681	1.37	32.31	11.29	99.96	28.12	25.86	0.95	0.66	0.33	0.10	10.64	0.96	10.74
W9401	N18	02-17-94	0857	10.82	W94010683	1.13	32.28	11.29	99.30	27.89	25.85	0.99	0.69	0.41	0.10	10.59	1.00	10.68
W9401	N18	02-17-94	0858	2.60	W94010685	0.99	32.26	11.30	99.01	27.76	25.84	0.45	0.70	2.86	0.02	6.29	0.73	10.65
W9401	N18	02-17-94	0858	5.92	W94010684	1.02	32.26	11.26	98.76	27.79	25.84	0.62	0.69	0.47	0.10	10.57	1.00	10.65
W9401	N19	02-17-94	1125	23.37	W94010767	1.02	32.26	11.37	99.72	27.80	25.84	0.95	0.74	1.49	0.30	4.16	0.59	10.61
W9401	N19	02-17-94	1126	11.28	W94010769	0.92	32.24	11.35	99.27	27.70	25.83	0.88	0.75	2.45	0.11	5.87	0.79	10.61
W9401	N19	02-17-94	1126	17.70	W94010768	0.98	32.25	11.45	100.31	27.76	25.84	0.98	0.74	1.39	0.01	5.03	0.62	10.62
W9401	N19	02-17-94	1127	5.65	W94010770	0.89	32.23	11.36	99.27	27.67	25.83	0.64	0.77	2.69	0.17	4.29	0.76	10.62
W9401	N19	02-17-94	1128	3.07	W94010771	0.89	32.23	11.51	100.57	27.66	25.83	0.45	0.77	0.66	0.01	6.99	0.75	10.48
W9401	N20P	02-08-94	1112	30.08	W94010170	1.92	32.15			28.45	25.69	0.70	0.64	0.96	0.10	10.45	1.05	10.72
W9401	N20P	02-08-94	1113	21.52	W94010171	1.41	32.10			27.99	25.69	0.77	0.66	1.03	0.11	10.44	1.06	10.73
W9401	N20P	02-08-94	1114	13.25	W94010172	1.29	32.05			27.85	25.66	0.88	0.68	1.42	0.13	10.15	1.00	10.57
W9401	N20P	02-08-94	1115	4.95	W94010173	1.19	32.03			27.75	25.64	0.81	0.69	1.34	0.12	10.30	1.05	10.66
W9401	N20P	02-08-94	1116	2.68	W94010174	1.19	32.02			27.74	25.64	0.89	0.69	1.94	0.14	10.18	1.00	10.59
W9401	N20P	02-17-94	1104	20.25	W94010757	1.51	32.33	11.32	100.59	28.25	25.87	1.20	0.68	0.45	0.02	6.96	0.71	10.75
W9401	N20P	02-17-94	1104	27.70	W94010756	1.55	32.34	11.31	100.63	28.30	25.87	1.15	0.67	1.97	0.02	6.04	0.75	10.67
W9401	N20P	02-17-94	1105	12.50	W94010758	1.47	32.32	11.31	100.41	28.21	25.87	1.00	0.69	0.70	0.05	5.76	0.61	10.76
W9401	N20P	02-17-94	1106	1.90	W94010760	1.26	32.28	11.27	99.48	28.00	25.84	0.39	0.74	0.70	0.17	5.83	0.60	10.62
W9401	N20P	02-17-94	1106	6.60	W94010759	1.24	32.28	11.36	100.21	27.99	25.85	0.62	0.76	1.29	0.04	5.62	0.66	10.78
W9401	N21	02-17-94	0835	31.58	W94010670	1.53	32.33	10.73	95.40	28.27	25.87	0.90	0.63	0.49	0.11	10.68	0.99	10.67
W9401	N21	02-17-94	0836	23.46	W94010671	1.50	32.34	10.61	94.27	28.25	25.87	0.99	0.65	0.03	0.16	8.82	0.78	10.72
W9401	N21	02-17-94	0837	6.39	W94010673	1.26	32.30	10.77	95.08	28.02	25.86	0.80	0.66	0.38	0.10	10.59	0.98	10.42
W9401	N21	02-17-94	0837	15.17	W94010672	1.29	32.30	10.63	93.92	28.05	25.86	1.06	0.66	0.43	0.10	10.59	0.99	10.52
W9401	N21	02-17-94	0838	3.45	W94010674	1.28	32.30	10.88	96.08	28.03	25.86	0.55	0.65	0.51	0.10	10.60	0.98	10.28
W9402	F01P	03-02-94	0914	20.39	W94020253	-0.68	31.57	13.14	109.64	25.92	25.37	14.45	2.11	0.19	0.05	1.27	0.48	1.78
W9402	F01P	03-02-94	0915	14.13	W94020254	-0.69	31.57	13.18	109.94	25.91	25.36	13.53	2.04	0.34	0.06	1.49	0.45	2.03
W9402	F01P	03-02-94	0916	10.46	W94020255	-0.71	31.55	13.13	109.44	25.88	25.35	15.04	2.08	0.20	0.01	0.03	0.28	1.11
W9402	F01P	03-02-94	0917	2.70	W94020257	-0.70	31.55	13.19	109.96	25.88	25.35	7.57	2.05	0.22	0.01	0.05	0.23	0.76
W9402	F01P	03-02-94	0917	6.66	W94020256	-0.70	31.55	13.12	109.38	25.88	25.35	15.89	2.10	0.45	0.04	0.27	0.34	0.86
W9402	F02P	03-02-94	0742	25.46	W94020228	-0.36	31.68	15.27	128.60	26.26	25.44	11.72	1.70	0.31	0.03	0.68	0.36	0.60
W9402	F02P	03-02-94	0743	20.24	W94020229	-0.62	31.54	14.47	120.91	25.95	25.34	9.17	1.47	0.30	0.02	0.45	0.27	0.39
W9402	F02P	03-02-94	0744	13.32	W94020230	-0.85	31.46	13.67	113.45	25.71	25.28	10.68	1.76	0.27	0.00	0.09	0.24	0.11
W9402	F02P	03-02-94	0746	6.88	W94020232	-0.87	31.46	13.21	109.55	25.68	25.28	11.05	1.76	0.75	0.07	0.32	0.24	0.80
W9402	F02P	03-02-94	0747	2.87	W94020233	-0.88	31.46	12.95	107.37	25.67	25.28	6.19	1.75	0.77	0.06	0.29	0.24	0.60
W9402	F03	03-02-94	1022	11.35	W94020268	-0.46	31.69	11.96	100.45	26.17	25.45	1.02	1.87	2.20	0.14	9.91	0.97	9.67
W9402	F03	03-02-94	1023	8.56	W94020269	-0.48	31.68	11.93	100.14	26.15	25.44	0.86	1.85	2.26	0.14	10.11	1.03	9.64
W9402	F03	03-02-94	1024	5.86	W94020270	-0.50	31.67	12.00	100.68	26.13	25.44	0.63	1.81	2.28	0.15	9.87	1.01	9.59
W9402	F03	03-02-94	1025	2.49	W94020272	-0.48	31.67	12.05	101.15	26.14	25.44	0.39	1.70	0.18	0.13	10.04	0.80	9.39
W9402	F03	03-02-94	1025	2.60	W94020271	-0.46	31.68	12.07	101.39	26.17	25.44	0.43	1.73	2.46	0.15	10.20	1.03	9.55
W9402	F05	03-02-94	1211	13.20	W94020284	-0.02	31.92	12.78	108.80	26.70	25.62	1.17	2.30	3.58	0.09	5.18	0.53	9.33
W9402	F05	03-02-94	1211	16.28	W94020283	0.07	31.96	13.03	111.21	26.80	25.65	1.19	2.36	2.75	0.21	6.82	0.64	9.31
W9402	F05	03-02-94	1212	8.25	W94020285	-0.11	31.84	12.33	104.65	26.57	25.56	0.76	2.17	4.09	0.24	3.49	0.50	9.56

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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)
W9402	F05	03-02-94	1213	4.52	W94020286	-0.01	31.83	12.09	102.88	26.64	25.55	0.37	2.02	4.00	0.19	4.52	0.46	9.50
W9402	F05	03-02-94	1214	2.45	W94020287	-0.06	31.83	11.92	101.30	26.59	25.55	0.39	1.93	2.20	0.07	7.55	0.68	10.02
W9402	F06	03-02-94	1250	30.01	W94020298	1.50	32.46	11.28	100.30	28.35	25.97	1.77	1.25	0.29	0.11	9.65	0.85	8.24
W9402	F06	03-02-94	1251	24.75	W94020299	1.50	32.46	11.33	100.75	28.35	25.97	1.73	1.38	0.32	0.12	9.72	0.85	8.28
W9402	F06	03-02-94	1252	17.93	W94020300	1.44	32.42	11.39	101.10	28.26	25.94	2.50	0.98	0.15	0.14	7.76	0.66	7.99
W9402	F06	03-02-94	1253	9.36	W94020301	0.98	32.21	11.62	101.78	27.73	25.81	1.44	1.01	1.01	0.04	6.41	0.63	7.67
W9402	F06	03-02-94	1254	2.57	W94020302	0.96	32.16	11.87	103.86	27.66	25.77	0.55	0.97	1.61	0.03	5.54	0.61	7.64
W9402	F07	03-02-94	1332	52.14	W94020316	2.14	32.57	11.22	101.50	28.98	26.02	1.13	1.34	0.18	0.03	8.89	0.67	8.67
W9402	F07	03-02-94	1333	36.53	W94020317	1.28	32.24	11.38	100.47	28.00	25.81	1.33	0.79	0.60	0.04	7.03	0.65	7.94
W9402	F07	03-02-94	1335	8.56	W94020319	0.72	32.08	11.60	100.80	27.41	25.71	1.02	0.90	0.97	0.13	8.87	0.82	7.96
W9402	F07	03-02-94	1335	15.70	W94020318	0.76	32.12	11.66	101.47	27.48	25.74	1.35	0.88	0.95	0.14	8.84	0.83	7.83
W9402	F07	03-02-94	1336	2.07	W94020320	0.75	32.07	11.70	101.76	27.42	25.70	0.00	0.89	1.04	0.13	9.04	0.83	8.16
W9402	F10	03-02-94	1424	24.68	W94020330	1.71	32.50	11.53	103.11	28.55	25.99	2.36	0.70	1.27	0.16	4.30	0.43	8.24
W9402	F10	03-02-94	1424	31.33	W94020329	1.69	32.50	11.64	104.04	28.54	25.99	2.16	0.70	0.64	0.12	9.49	0.79	8.12
W9402	F10	03-02-94	1425	15.74	W94020331	1.69	32.49	11.50	102.80	28.53	25.99	2.32	0.71	3.01	0.16	2.83	0.53	8.22
W9402	F10	03-02-94	1426	6.66	W94020332	1.56	32.48	11.37	101.27	28.40	25.98	1.29	0.70	2.68	0.06	2.27	0.54	8.14
W9402	F10	03-02-94	1427	2.49	W94020333	1.55	32.44	11.48	102.19	28.36	25.95	0.75	0.68	0.39	0.12	9.16	0.79	8.03
W9402	F12	03-01-94	1550	85.46	W94020193	2.74	32.86	11.00	101.24	29.72	26.20	2.78	0.70	0.32	0.12	9.47	0.76	7.58
W9402	F12	03-01-94	1552	64.58	W94020194	2.72	32.85	10.98	101.00	29.69	26.19	2.52	0.69	0.27	0.12	9.47	0.75	7.57
W9402	F12	03-01-94	1553	38.08	W94020195	2.64	32.84	11.03	101.24	29.60	26.19	2.36	0.70	0.24	0.12	9.39	0.75	7.58
W9402	F12	03-01-94	1554	15.20	W94020196	2.39	32.78	11.14	101.57	29.34	26.17	3.30	0.73	0.33	0.12	8.93	0.74	7.59
W9402	F12	03-01-94	1555	1.97	W94020197	2.36	32.77	11.27	102.67	29.30	26.16	2.10	0.72	0.30	0.13	8.68	0.73	7.61
W9402	F13P	03-02-94	1506	25.64	W94020346	1.27	32.44	11.68	103.24	28.15	25.97	2.04	0.70	0.46	0.11	9.34	0.78	8.11
W9402	F13P	03-02-94	1507	18.46	W94020347	1.14	32.39	11.35	99.94	28.00	25.94	2.42	0.73	0.37	0.11	9.42	0.79	8.16
W9402	F13P	03-02-94	1509	13.58	W94020350	0.97	32.34	11.67	102.26	27.81	25.91	2.06	0.75	0.73	0.13	9.26	0.79	8.38
W9402	F13P	03-02-94	1510	5.60	W94020351	0.59	32.05	11.76	101.84	27.28	25.70	1.48	0.88	0.03	0.19	8.04	0.51	9.12
W9402	F13P	03-02-94	1511	1.50	W94020352	0.55	32.02	11.73	101.45	27.23	25.68	1.10	0.89	1.95	0.17	9.54	0.80	9.01
W9402	F14	03-05-94	1446	14.36	W94020542	0.98	32.09	11.50	100.63	27.63	25.71	2.89	2.01	2.49	0.02	4.89	0.40	7.63
W9402	F14	03-05-94	1447	12.20	W94020543	0.99	32.07	11.34	99.25	27.62	25.69	2.77	2.01	3.11	0.04	4.34	0.40	7.76
W9402	F14	03-05-94	1448	3.12	W94020545	0.89	31.84	11.32	98.65	27.36	25.51	1.86	2.00	3.06	0.03	4.79	0.44	8.15
W9402	F14	03-05-94	1448	7.13	W94020544	0.90	31.88	11.31	98.63	27.40	25.54	2.21	2.02	2.80	0.09	4.83	0.40	7.90
W9402	F14	03-05-94	1449	1.99	W94020546	0.89	31.84	11.48	100.06	27.36	25.51	1.16	1.96	3.43	0.25	4.35	0.41	8.13
W9402	F15	03-05-94	1403	33.98	W94020529	1.81	32.56	10.95	98.22	28.68	26.03	3.41	1.33	0.88	0.03	5.70	0.49	6.39
W9402	F15	03-05-94	1404	26.19	W94020530	1.81	32.55	11.09	99.48	28.68	26.03	3.76	1.34	0.75	0.16	1.50	0.18	6.35
W9402	F15	03-05-94	1405	16.66	W94020531	1.86	32.55	10.93	98.16	28.71	26.02	3.42	1.28	1.64	0.03	3.97	0.43	6.35
W9402	F15	03-05-94	1406	7.72	W94020532	1.94	32.55	11.08	99.71	28.77	26.02	3.88	1.31	0.93	0.03	5.17	0.46	6.50
W9402	F15	03-05-94	1407	2.29	W94020533	1.98	32.55	11.22	101.07	28.80	26.01	2.31	1.23	0.35	0.20	3.90	0.28	6.57
W9402	F16	03-05-94	1308	53.17	W94020514	1.95	32.54	11.14	100.28	28.80	26.01	2.71	2.15	0.63	0.13	8.93	0.70	7.34
W9402	F16	03-05-94	1309	39.13	W94020515	1.85	32.52	11.06	99.29	28.69	26.00	2.20	0.95	1.81	0.11	3.82	0.39	7.35
W9402	F16	03-05-94	1310	25.12	W94020516	1.89	32.52	11.12	99.93	28.72	25.99	2.65	0.93	1.64	0.04	4.75	0.49	7.46
W9402	F16	03-05-94	1311	8.28	W94020517	1.94	32.52	11.27	101.41	28.75	25.99	2.57	0.87	2.89	0.15	2.97	0.44	7.44
W9402	F16	03-05-94	1312	2.18	W94020518	1.97	32.52	11.25	101.29	28.77	25.99	1.24	0.85	2.61	0.13	2.81	0.44	7.15
W9402	F17	03-05-94	1204	73.36	W94020499	2.27	32.72	11.21	101.86	29.21	26.12	3.82	0.99	0.15	0.23	7.58	0.49	6.16
W9402	F17	03-05-94	1205	47.82	W94020500	1.92	32.59	11.31	101.75	28.80	26.05	2.94	0.95	0.63	0.30	1.61	0.10	6.03
W9402	F17	03-05-94	1206	31.78	W94020501	1.82	32.57	11.47	102.90	28.70	26.04	4.06	0.96	1.88	0.04	3.17	0.33	6.08
W9402	F17	03-05-94	1208	17.75	W94020502	1.81	32.56	11.30	101.37	28.68	26.03	4.18	0.95	0.81	0.13	7.67	0.57	6.50

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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)
W9402	F17	03-05-94	1209	2.12	W94020503	1.86	32.56	11.45	102.84	28.71	26.03	2.02	0.94	0.93	0.13	1.65	0.22	6.92
W9402	F18	03-01-94	0831	13.58	W94020079	1.02	32.40	10.65	93.49	27.90	25.95	2.37	0.74	0.50	0.10	9.44	0.72	8.32
W9402	F18	03-01-94	0831	19.12	W94020078	1.03	32.39	10.84	95.18	27.91	25.95	1.98	0.74	0.46	0.10	9.43	0.74	8.32
W9402	F18	03-01-94	0832	8.68	W94020080	1.03	32.40	10.84	95.18	27.91	25.95	1.90	0.74	0.49	0.10	9.53	0.75	8.35
W9402	F18	03-01-94	0833	2.35	W94020082	1.02	32.40	11.05	97.00	27.90	25.95	1.15	0.73	0.57	0.13	9.67	1.17	8.30
W9402	F18	03-01-94	0833	4.15	W94020081	1.02	32.40	10.99	96.48	27.90	25.95	1.42	0.74	0.47	0.12	9.72	0.73	8.31
W9402	F19	03-05-94	0955	75.55	W94020470	2.10	32.63	11.26	101.79	29.00	26.07	3.74	2.91	0.59	0.01	6.38	0.48	7.27
W9402	F19	03-05-94	0956	55.10	W94020471	1.93	32.60	11.42	102.78	28.83	26.06	4.11	0.89	0.98	0.02	6.33	0.47	6.42
W9402	F19	03-05-94	0957	34.95	W94020472	1.81	32.56	11.50	103.15	28.69	26.03	3.57	0.86	0.78	0.00	5.98	0.45	6.39
W9402	F19	03-05-94	0958	20.67	W94020473	1.79	32.55	11.56	103.63	28.66	26.03	4.14	0.84	0.15	0.47	6.26	0.44	6.30
W9402	F19	03-05-94	1000	0.88	W94020474	1.82	32.55	11.60	104.07	28.67	26.02	1.65	0.85	1.58	0.07	2.06	0.31	6.24
W9402	F22	03-01-94	1131	74.67	W94020125	1.91	32.57	12.12	109.00	28.80	26.03	3.90	0.99	0.25	0.11	8.84	0.70	7.86
W9402	F22	03-01-94	1132	58.80	W94020126	1.81	32.56	11.99	107.54	28.69	26.03	3.31	0.90	0.21	0.10	8.83	0.69	7.79
W9402	F22	03-01-94	1133	38.53	W94020127	1.69	32.54	11.95	106.83	28.57	26.02	3.45	0.90	0.20	0.10	8.53	0.65	7.42
W9402	F22	03-01-94	1134	15.32	W94020128	1.54	32.51	12.04	107.22	28.42	26.01	4.27	0.91	0.22	0.11	7.67	0.60	7.01
W9402	F22	03-01-94	1135	1.92	W94020129	1.60	32.51	12.00	107.01	28.46	26.01	1.68	0.91	0.75	0.11	7.65	0.69	7.04
W9402	F23P	03-01-94	0648	11.13	W94020040	-0.07	31.12	11.68	98.77	26.05	24.97	1.16	1.41	2.71	0.26	7.88	0.63	10.05
W9402	F23P	03-01-94	0648	15.51	W94020039	0.05	31.53	11.52	98.00	26.46	25.30	1.28	1.31	5.28	0.23	11.27	1.19	11.51
W9402	F23P	03-01-94	0649	7.04	W94020041	-0.06	31.04	11.70	98.88	25.99	24.91	1.01	1.42	5.84	0.26	12.04	1.04	13.08
W9402	F23P	03-01-94	0650	4.03	W94020042	-0.08	31.01	11.71	98.91	25.96	24.89	1.38	1.42	5.06	0.26	12.14	1.08	13.17
W9402	F23P	03-01-94	0651	2.80	W94020043	-0.08	31.00	11.71	98.90	25.95	24.88	1.09	1.42	5.94	0.27	12.21	1.01	13.22
W9402	F23P	03-05-94	0703	20.21	W94020415	0.54	31.65	11.25	97.03	26.94	25.37	3.09	5.81	7.13	0.26	9.35	1.14	10.23
W9402	F23P	03-05-94	0704	15.13	W94020416	0.51	31.57	11.33	97.59	26.85	25.31	2.41	4.73	6.51	0.25	8.99	1.27	10.05
W9402	F23P	03-05-94	0706	8.68	W94020417	0.47	31.38	11.33	97.35	26.67	25.17	1.87	3.92	4.79	0.27	7.58	0.75	10.69
W9402	F23P	03-05-94	0708	2.24	W94020419	0.38	31.10	11.30	96.68	26.38	24.94	1.64	3.10	6.65	0.28	10.34	1.11	11.13
W9402	F23P	03-05-94	0708	4.83	W94020418	0.41	31.18	11.12	95.26	26.46	25.00	1.70	3.35	1.62	0.28	8.14	0.34	11.20
W9402	F24	03-05-94	0741	18.29	W94020429	1.16	32.38	11.59	102.09	28.00	25.93	2.92	1.85	0.62	0.15	7.97	0.81	6.43
W9402	F24	03-05-94	0742	9.78	W94020431	1.04	32.33	11.67	102.46	27.87	25.90	3.25	1.83	0.82	0.15	8.17	0.82	6.58
W9402	F24	03-05-94	0742	13.73	W94020430	1.12	32.37	11.60	102.07	27.96	25.92	2.92	1.85	0.61	0.14	8.12	0.83	6.49
W9402	F24	03-05-94	0743	5.22	W94020432	0.96	32.30	11.69	102.39	27.77	25.88	2.50	1.87	0.78	0.15	8.09	0.81	6.87
W9402	F24	03-05-94	0744	2.08	W94020433	0.96	32.30	11.68	102.29	27.77	25.88	2.32	1.83	1.14	0.16	8.20	0.84	6.81
W9402	F25	03-02-94	1609	12.41	W94020364	0.73	32.12	11.77	102.34	27.45	25.75	1.67	0.84	2.41	0.19	9.29	0.97	9.09
W9402	F25	03-02-94	1610	8.69	W94020365	0.60	32.04	11.77	101.94	27.28	25.68	1.51	0.87	2.43	0.18	9.40	0.98	9.26
W9402	F25	03-02-94	1611	5.49	W94020366	0.56	32.01	11.72	101.37	27.22	25.66	1.31	0.87	2.47	0.18	9.36	0.98	9.25
W9402	F25	03-02-94	1612	1.98	W94020367	0.42	31.95	12.65	108.96	27.07	25.63	1.09	0.87	2.60	0.19	9.40	1.00	9.28
W9402	F25	03-02-94	1612	2.36	W94020368	0.43	31.96	13.02	112.21	27.09	25.63	1.29	0.87	2.61	0.19	9.44	0.98	9.37
W9402	F26	03-01-94	1243	49.30	W94020143	1.74	32.55	11.17	99.99	28.62	26.03	2.90	1.19	0.13	0.05	6.20	0.61	8.09
W9402	F26	03-01-94	1244	36.43	W94020144	1.75	32.55	11.29	101.11	28.63	26.03	2.47	1.16	0.17	0.16	4.77	0.48	8.20
W9402	F26	03-01-94	1245	23.47	W94020145	1.77	32.55	11.21	100.45	28.64	26.02	2.81	1.09	2.50	0.03	2.77	0.58	8.16
W9402	F26	03-01-94	1246	13.25	W94020146	1.15	32.35	11.71	103.10	27.97	25.90	5.92	1.15	2.77	0.01	1.25	0.47	7.04
W9402	F26	03-01-94	1247	2.43	W94020147	1.17	32.33	11.89	104.73	27.97	25.89	1.82	1.11	0.86	0.03	3.00	0.36	6.61
W9402	F27B	03-01-94	1337	88.62	W94020160	2.88	32.88	11.12	102.74	29.87	26.21	2.48	0.72	0.23	0.11	8.92	0.83	7.38
W9402	F27B	03-01-94	1338	64.25	W94020161	2.89	32.88	11.03	101.91	29.86	26.21	2.27	0.71	0.27	0.12	8.87	0.83	7.36
W9402	F27B	03-01-94	1340	40.33	W94020162	2.83	32.87	10.99	101.40	29.79	26.20	2.04	0.71	0.29	0.12	8.74	0.83	7.37
W9402	F27B	03-01-94	1341	9.24	W94020163	2.21	32.67	11.41	103.49	29.10	26.09	3.84	0.79	0.49	0.14	7.16	0.73	6.85
W9402	F27B	03-01-94	1342	2.29	W94020164	1.81	32.54	11.67	104.66	28.66	26.02	1.86	0.87	0.47	0.15	6.51	0.69	7.00

000010

**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)
W9402	F28	03-01-94	1504	27.20	W94020178	2.28	32.75	10.94	99.43	29.22	26.14	2.74	0.74	0.54	0.06	4.07	0.39	7.83
W9402	F28	03-01-94	1505	18.43	W94020179	2.25	32.73	11.03	100.16	29.18	26.14	2.80	0.75	0.62	0.14	3.85	0.41	7.87
W9402	F28	03-01-94	1506	12.10	W94020180	2.19	32.71	11.28	102.29	29.12	26.13	3.36	0.78	0.77	0.05	5.36	0.52	7.76
W9402	F28	03-01-94	1507	3.82	W94020181	2.12	32.67	11.36	102.79	29.02	26.09	2.92	0.79	0.30	0.06	6.74	0.58	7.54
W9402	F28	03-01-94	1508	2.44	W94020182	2.12	32.67	11.43	103.43	29.02	26.09	2.01	0.79	0.25	0.10	6.42	0.66	7.43
W9402	F29	03-01-94	1729	56.91	W94020206	1.07	32.20	11.74	103.06	27.81	25.79	3.54	1.04	0.58	0.11	7.99	0.88	7.03
W9402	F29	03-01-94	1730	45.52	W94020207	0.97	32.16	11.68	102.24	27.69	25.76	4.30	1.04	2.76	0.05	1.53	0.56	6.84
W9402	F29	03-01-94	1732	28.92	W94020208	0.80	32.08	11.76	102.41	27.48	25.71	3.81	1.07	2.36	0.02	0.07	0.51	6.17
W9402	F29	03-01-94	1733	2.54	W94020210	0.56	31.99	12.06	104.30	27.21	25.65	5.13	1.05	0.43	0.10	6.38	0.75	5.36
W9402	F29	03-01-94	1733	10.73	W94020209	0.57	32.00	11.97	103.55	27.22	25.65	5.12	1.06	0.65	0.11	6.38	0.76	5.53
W9402	F30B	03-05-94	0627	9.39	W94020403	0.51	31.57	16.85	145.11	26.84	25.31	1.79	3.55	3.53	0.21	8.26	0.69	11.84
W9402	F30B	03-05-94	0628	5.34	W94020404	0.54	31.15	12.87	110.62	26.55	24.97	1.58	2.95	4.65	0.23	7.56	0.69	11.82
W9402	F30B	03-05-94	0629	2.19	W94020405	0.56	29.85	12.11	103.24	25.56	23.93	1.32	2.12	2.10	0.06	9.53	0.56	15.81
W9402	F31B	03-02-94	1645	9.58	W94020377	0.67	32.03	11.76	102.03	27.33	25.67	1.23	0.85	4.11	0.21	9.57	1.14	9.80
W9402	F31B	03-02-94	1646	5.84	W94020378	0.56	31.92	11.58	100.11	27.16	25.60	1.53	0.91	3.16	0.20	9.17	1.01	9.45
W9402	F31B	03-02-94	1647	2.51	W94020379	0.29	31.69	11.71	100.36	26.77	25.42	1.01	1.04	4.12	0.21	9.34	1.27	9.75
W9402	N01P	03-01-94	0739	24.56	W94020062	1.41	32.47			28.29	25.99	2.30	0.75	0.47	0.13	8.93	0.89	8.25
W9402	N01P	03-01-94	0740	17.61	W94020063	1.33	32.46			28.20	25.98	2.30	0.74	0.44	0.13	9.15	0.88	8.44
W9402	N01P	03-01-94	0741	11.48	W94020064	1.24	32.45			28.12	25.98	2.33	0.74	0.48	0.13	9.19	0.89	8.47
W9402	N01P	03-01-94	0742	6.45	W94020065	1.19	32.47			28.09	26.00	2.24	0.74	0.83	0.14	9.06	1.07	8.35
W9402	N01P	03-01-94	0743	2.86	W94020066	1.21	32.44			28.09	25.98	1.70	0.73	0.63	0.14	9.07	1.00	8.34
W9402	N01P	03-06-94	0931	28.48	W94020620	1.43	32.43	11.68	103.66	28.27	25.95	4.12	1.42	0.36	0.12	7.07	0.54	4.73
W9402	N01P	03-06-94	0932	21.25	W94020621	1.40	32.42	11.65	103.29	28.23	25.95	4.18	1.38	0.72	0.12	7.15	0.59	4.75
W9402	N01P	03-06-94	0933	7.68	W94020623	1.40	32.42	11.67	103.49	28.23	25.94	3.80	1.38	0.14	0.12	7.05	0.59	4.86
W9402	N01P	03-06-94	0933	13.48	W94020622	1.39	32.42	11.75	104.17	28.22	25.95	4.11	1.40	0.69	0.13	7.07	0.60	4.78
W9402	N01P	03-06-94	0935	2.65	W94020624	1.41	32.41	11.57	102.62	28.23	25.94	2.62	1.39	0.13	0.21	6.69	0.52	4.87
W9402	N02	03-06-94	0959	33.21	W94020633	1.64	32.49	11.47	102.40	28.49	25.99	3.60	1.52	0.42	0.11	7.73	0.70	5.68
W9402	N02	03-06-94	1000	18.75	W94020635	1.42	32.41	11.62	103.08	28.24	25.94	4.64	1.37	0.30	0.12	6.87	0.63	4.65
W9402	N02	03-06-94	1000	25.41	W94020634	1.53	32.45	11.51	102.43	28.37	25.96	3.78	1.37	0.32	0.11	7.48	0.70	5.20
W9402	N02	03-06-94	1001	10.06	W94020636	1.41	32.41	11.68	103.59	28.23	25.94	5.71	1.30	0.27	0.12	6.24	0.59	4.30
W9402	N02	03-06-94	1002	2.46	W94020637	1.46	32.41	11.83	105.04	28.26	25.93	2.98	1.37	0.31	0.13	6.01	0.59	4.18
W9402	N03	03-06-94	1025	40.22	W94020646	1.91	32.56	11.38	102.33	28.77	26.03	3.44	1.06	0.42	0.12	8.34	0.74	6.29
W9402	N03	03-06-94	1026	31.42	W94020647	1.90	32.56	11.38	102.32	28.76	26.03	3.87	1.03	0.35	0.12	8.35	0.74	6.28
W9402	N03	03-06-94	1027	9.77	W94020649	1.91	32.56	11.28	101.45	28.76	26.02	4.36	1.04	0.31	0.11	8.19	0.73	6.24
W9402	N03	03-06-94	1027	19.97	W94020648	1.90	32.56	11.30	101.60	28.76	26.03	3.75	1.03	0.41	0.13	8.31	0.75	6.28
W9402	N03	03-06-94	1028	2.58	W94020650	1.95	32.56	11.35	102.19	28.79	26.02	2.23	1.03	0.37	0.12	8.05	0.73	6.20
W9402	N04P	03-01-94	0929	43.22	W94020095	2.08	32.62			28.96	26.06	2.31	0.81	0.42	0.13	9.55	0.91	8.68
W9402	N04P	03-01-94	0930	34.33	W94020096	2.08	32.62			28.95	26.06	2.02	0.80	0.45	0.13	9.49	0.91	8.67
W9402	N04P	03-01-94	0932	23.30	W94020097	2.12	32.61			28.98	26.05	2.17	0.80	0.57	0.13	9.53	0.95	8.72
W9402	N04P	03-01-94	0933	9.14	W94020098	2.13	32.62			28.98	26.05	1.87	0.79	4.36	0.04	0.03	0.35	8.75
W9402	N04P	03-01-94	0934	2.46	W94020099	2.13	32.61			28.98	26.05	0.89	0.78	0.55	0.14	9.26	0.91	8.70
W9402	N04P	03-06-94	1051	44.26	W94020659	1.92	32.56	11.33	101.93	28.79	26.03	3.48	1.09	0.32	0.12	8.36	0.73	6.39
W9402	N04P	03-06-94	1052	33.30	W94020660	1.92	32.56	11.23	101.03	28.78	26.03	3.28	1.06	0.34	0.11	8.44	0.76	6.47
W9402	N04P	03-06-94	1053	11.57	W94020662	1.93	32.56	11.26	101.32	28.78	26.02	3.63	1.06	0.32	0.11	8.26	0.73	6.36
W9402	N04P	03-06-94	1053	21.88	W94020661	1.93	32.56	11.27	101.41	28.78	26.02	3.57	1.06	0.36	0.12	8.37	0.75	6.47
W9402	N04P	03-06-94	1054	2.53	W94020663	1.97	32.56	11.29	101.68	28.80	26.02	2.37	1.04	0.30	0.12	8.18	0.74	6.44

000011

**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)
W9402	N05	03-06-94	1128	38.69	W94020673	1.94	32.56	11.38	102.43	28.80	26.02	3.26	1.06	0.24	0.12	8.55	0.76	6.60
W9402	N05	03-06-94	1128	49.66	W94020672	1.95	32.56	11.48	103.35	28.81	26.02	2.98	1.07	0.30	0.12	8.51	0.74	6.52
W9402	N05	03-06-94	1129	27.04	W94020674	1.88	32.55	11.35	102.00	28.73	26.02	3.22	1.02	0.23	0.12	8.71	0.78	6.68
W9402	N05	03-06-94	1130	15.90	W94020675	1.87	32.54	11.31	101.58	28.71	26.01	3.35	1.00	0.19	0.13	8.63	0.77	6.74
W9402	N05	03-06-94	1135	1.36	W94020679	1.95	32.53	11.42	102.78	28.76	26.00	1.97	0.98	0.22	0.12	8.43	0.76	6.68
W9402	N06	03-06-94	1201	46.72	W94020686	1.94	32.56	11.19	100.71	28.80	26.02	2.47	1.17	0.31	0.12	9.17	0.81	7.29
W9402	N06	03-06-94	1202	35.02	W94020687	1.94	32.56	11.05	99.44	28.79	26.02	2.33	1.13	0.29	0.12	9.29	0.83	7.53
W9402	N06	03-06-94	1203	14.83	W94020689	1.86	32.53	11.12	99.85	28.69	26.00	3.44	0.96	0.25	0.12	8.86	0.79	6.95
W9402	N06	03-06-94	1203	23.43	W94020688	1.87	32.53	11.16	100.23	28.71	26.00	2.79	0.99	0.23	0.13	8.95	0.80	6.92
W9402	N06	03-06-94	1204	2.58	W94020690	1.98	32.52	11.32	101.96	28.78	25.99	1.13	0.96	0.34	0.13	8.74	0.80	7.05
W9402	N07P	03-05-94	0901	45.28	W94020456	1.90	32.55	11.32	101.77	28.76	26.02	2.55	1.22	0.50	0.12	8.68	0.85	7.24
W9402	N07P	03-05-94	0902	34.48	W94020457	1.89	32.55	11.37	102.20	28.75	26.02	2.48	1.15	0.54	0.14	8.76	0.85	7.30
W9402	N07P	03-05-94	0903	22.67	W94020458	1.88	32.55	11.39	102.35	28.73	26.02	2.82	1.16	0.60	0.13	8.73	0.83	7.26
W9402	N07P	03-05-94	0904	11.43	W94020459	1.88	32.55	11.38	102.26	28.73	26.02	2.66	1.13	0.63	0.14	8.42	0.84	7.22
W9402	N07P	03-05-94	0905	0.89	W94020460	1.88	32.54	11.38	102.26	28.72	26.01	1.50	1.08	1.14	0.16	8.44	0.84	7.27
W9402	N07P	03-06-94	1251	40.06	W94020699	1.87	32.55	11.25	101.05	28.73	26.02	2.53	1.04	0.72	0.16	8.76	0.80	6.66
W9402	N07P	03-06-94	1252	15.91	W94020702	1.88	32.54	11.18	100.45	28.72	26.01	3.55	0.96	0.35	0.13	8.72	0.79	6.70
W9402	N07P	03-06-94	1252	30.19	W94020701	1.85	32.55	11.08	99.47	28.71	26.02	2.82	1.08	0.35	0.14	8.87	0.80	6.69
W9402	N07P	03-06-94	1253	2.51	W94020704	2.12	32.53	11.35	102.60	28.90	25.98	1.18	0.90	0.30	0.12	8.57	0.78	6.88
W9402	N07P	03-06-94	1253	6.86	W94020703	1.97	32.53	11.28	101.57	28.78	26.00	2.86	0.94	0.28	0.13	8.65	0.80	6.89
W9402	N08	03-06-94	1317	24.83	W94020715	1.75	32.53	11.38	101.91	28.61	26.01	3.51	1.14	0.38	0.14	7.88	0.71	5.86
W9402	N08	03-06-94	1318	20.19	W94020716	1.75	32.53	11.36	101.73	28.61	26.01	3.81	1.13	0.37	0.14	8.01	0.73	5.92
W9402	N08	03-06-94	1319	10.58	W94020717	1.76	32.53	11.37	155.59	28.61	26.01	4.24	1.11	0.31	0.12	7.89	0.72	5.89
W9402	N08	03-06-94	1320	6.11	W94020718	1.79	32.53	16.32	146.27	28.63	26.01	4.10	1.11	0.40	0.14	7.33	0.71	5.81
W9402	N08	03-06-94	1321	1.70	W94020719	1.94	32.51	13.07	117.60	28.74	25.98	1.75	1.09	0.41	0.13	6.96	0.72	5.54
W9402	N09	03-06-94	1342	29.85	W94020726	1.37	32.45	11.52	102.10	28.24	25.97	3.91	1.46	0.55	0.13	7.63	0.68	5.77
W9402	N09	03-06-94	1343	21.39	W94020727	1.34	32.44	11.57	102.45	28.20	25.97	4.28	1.51	0.27	0.16	7.69	0.68	5.83
W9402	N09	03-06-94	1344	5.53	W94020729	1.51	32.44	11.65	103.61	28.33	25.95	4.06	1.46	0.38	0.16	7.17	0.69	5.88
W9402	N09	03-06-94	1344	10.66	W94020728	1.37	32.44	11.59	102.69	28.22	25.96	5.24	1.52	0.25	0.15	7.37	0.68	5.81
W9402	N09	03-06-94	1345	1.54	W94020730	1.68	32.44	11.73	104.78	28.47	25.94	1.26	1.40	0.43	0.17	7.14	0.68	5.84
W9402	N10P	03-05-94	1517	22.17	W94020561	1.02	32.25	12.18	106.80	27.78	25.83	3.37	2.76	1.83	0.15	9.00	0.81	7.18
W9402	N10P	03-05-94	1518	18.45	W94020562	0.95	32.16	11.96	104.63	27.66	25.76	3.07	2.38	2.37	0.22	2.24	0.25	7.15
W9402	N10P	03-05-94	1519	12.57	W94020563	0.81	32.07	11.84	103.14	27.48	25.70	2.30	2.13	4.13	0.20	1.77	0.35	7.68
W9402	N10P	03-05-94	1520	6.75	W94020564	0.81	31.90	11.72	101.99	27.35	25.57	2.34	2.20	2.68	0.19	9.47	0.88	7.96
W9402	N10P	03-05-94	1521	2.33	W94020565	0.84	31.82	11.64	101.29	27.30	25.50	1.34	2.13	3.53	0.23	9.55	0.89	8.27
W9402	N10P	03-06-94	0811	22.59	W94020579	1.18	32.34	11.29	99.49	28.00	25.90	3.29	1.77	0.88	0.20	8.21	0.74	6.59
W9402	N10P	03-06-94	0812	17.69	W94020580	1.14	32.32	11.41	100.42	27.94	25.89	3.26	1.71	0.81	0.20	8.32	0.76	6.69
W9402	N10P	03-06-94	0813	9.63	W94020581	1.13	32.32	11.40	100.31	27.93	25.88	3.12	1.73					
W9402	N10P	03-06-94	0814	2.30	W94020583	1.12	32.32	11.47	100.90	27.92	25.88	3.25	1.76	0.99	0.22	8.33	0.77	6.76
W9402	N10P	03-06-94	0814	5.56	W94020582	1.12	32.32	11.37	100.02	27.92	25.88	3.88	1.71	0.93	0.22	8.30	0.76	6.68
W9402	N11	03-06-94	0840	27.06	W94020594	1.47	32.45	11.66	103.59	28.32	25.97	4.32	1.52	0.64	0.23	6.78	0.64	5.03
W9402	N11	03-06-94	0841	15.06	W94020596	1.44	32.45	11.57	102.72	28.29	25.97	4.28	1.45	0.51	0.23	6.90	0.65	5.13
W9402	N11	03-06-94	0841	21.60	W94020595	1.47	32.45	11.64	103.41	28.31	25.97	4.16	1.46	0.38	0.22	6.69	0.63	4.96
W9402	N11	03-06-94	0842	2.23	W94020598	1.30	32.33	11.70	103.41	28.07	25.88	2.99	1.50	1.12	0.27	7.09	0.68	5.75
W9402	N11	03-06-94	0842	8.33	W94020597	1.42	32.44	11.55	102.49	28.26	25.96	4.67	1.43	0.43	0.23	7.05	0.65	5.33
W9402	N12	03-06-94	0907	22.30	W94020607	1.47	32.45	11.59	102.98	28.32	25.96	4.53	1.39	0.48	0.13	6.62	0.60	4.83

000012

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)
W9402	N12	03-06-94	0908	12.79	W94020609	1.47	32.45	11.60	103.07	28.31	25.96	4.60	1.35	0.45	0.00	6.79	0.62	4.90
W9402	N12	03-06-94	0908	16.95	W94020608	1.47	32.45	11.57	102.81	28.31	25.96	5.18	1.39	0.46	0.13	6.61	0.65	4.86
W9402	N12	03-06-94	0909	3.02	W94020611	1.50	32.44	12.46	110.79	28.33	25.96	3.97	1.35	0.39	0.00	6.59	0.60	4.84
W9402	N12	03-06-94	0909	6.82	W94020610	1.48	32.45	11.59	103.00	28.31	25.96	5.21	1.34	0.39	0.00	6.85	0.62	4.84
W9402	N13	03-06-94	1451	25.06	W94020761	1.57	32.48	11.66	103.90	28.42	25.98	5.24	1.24	0.37	0.12	6.42	0.64	4.61
W9402	N13	03-06-94	1452	19.48	W94020762	1.58	32.47	11.68	104.08	28.42	25.98	4.80	1.24	0.35	0.13	6.48	0.68	4.67
W9402	N13	03-06-94	1453	9.64	W94020763	1.61	32.47	11.86	105.78	28.44	25.97	6.04	1.21	0.27	0.12	5.87	0.65	4.50
W9402	N13	03-06-94	1454	3.05	W94020764	1.81	32.48	12.02	107.76	28.61	25.97	3.86	1.17	0.25	0.13	5.68	0.66	4.58
W9402	N13	03-06-94	1455	1.05	W94020765	1.87	32.48	11.99	107.66	28.66	25.97	2.33	1.16	0.33	0.13	5.64	0.65	4.59
W9402	N14	03-06-94	1515	19.46	W94020773	1.77	32.53	11.43	102.40	28.62	26.01	3.87	1.16	0.33	0.12	7.53	0.74	5.59
W9402	N14	03-06-94	1515	28.57	W94020772	1.77	32.53	11.37	101.87	28.63	26.01	3.89	1.17	0.54	0.12	7.49	0.74	5.56
W9402	N14	03-06-94	1516	11.63	W94020774	1.84	32.53	11.60	104.11	28.68	26.00	5.05	1.12	0.34	0.12	6.71	0.73	5.43
W9402	N14	03-06-94	1517	2.54	W94020776	2.04	32.54	11.73	105.83	28.85	25.99	3.10	1.08	0.84	0.13	6.70	0.73	5.46
W9402	N14	03-06-94	1517	5.92	W94020775	2.04	32.54	11.68	105.37	28.85	26.00	4.05	1.09	0.34	0.12	6.73	0.72	5.50
W9402	N15	03-06-94	1536	39.29	W94020783	1.94	32.57	11.15	100.34	28.80	26.03	2.73	1.17	0.62	0.12	8.50	0.83	6.51
W9402	N15	03-06-94	1537	24.12	W94020784	1.93	32.57	11.17	100.51	28.79	26.03	2.78	1.11	0.46	0.12	8.49	0.81	6.49
W9402	N15	03-06-94	1538	13.84	W94020785	1.97	32.57	11.27	101.51	28.81	26.02	3.64	1.11	0.43	0.13	6.44	0.80	6.45
W9402	N15	03-06-94	1539	1.57	W94020787	2.26	32.56	11.45	103.91	29.05	26.00	2.02	1.01	0.54	0.13	6.07	0.78	6.24
W9402	N15	03-06-94	1539	7.44	W94020786	2.20	32.58	11.37	103.01	29.01	26.02	3.34	1.05	0.43	0.12	6.27	0.80	6.43
W9402	N16P	03-01-94	1015	36.56	W94020111	1.99	32.59			28.86	26.04	2.49	0.73	0.32	0.12	10.21	0.89	8.45
W9402	N16P	03-01-94	1016	24.45	W94020112	1.98	32.58			28.84	26.04	2.70	0.71	0.30	0.12	10.29	0.89	8.49
W9402	N16P	03-01-94	1017	5.36	W94020114	2.00	32.58			28.85	26.03	1.57	0.74	0.46	0.11	10.21	0.87	8.51
W9402	N16P	03-01-94	1017	12.69	W94020113	1.99	32.58			28.84	26.04	2.62	0.72	3.52	0.02	1.90	0.29	8.53
W9402	N16P	03-01-94	1018	3.00	W94020115	2.00	32.58			28.85	26.04	1.09	0.72	0.72	0.14	9.94	0.92	8.67
W9402	N16P	03-05-94	1045	35.63	W94020483	1.86	32.56	11.26	101.12	28.73	26.03	3.09	1.39	0.53	0.12	9.10	0.81	6.77
W9402	N16P	03-05-94	1046	25.22	W94020484	1.84	32.56	11.30	101.44	28.71	26.03	3.51	1.32	0.38	0.12	8.97	0.78	6.68
W9402	N16P	03-05-94	1047	18.22	W94020485	1.84	32.55	11.43	102.61	28.70	26.02	3.20	1.25	0.59	0.15	8.47	0.72	6.61
W9402	N16P	03-05-94	1048	8.66	W94020486	1.89	32.55	11.45	102.90	28.73	26.02	3.48	1.21	0.41	0.12	7.88	0.70	6.52
W9402	N16P	03-05-94	1049	1.93	W94020487	1.90	32.55	11.50	103.38	28.74	26.02	1.53	1.20	0.65	0.14	8.31	0.75	6.56
W9402	N16P	03-06-94	1558	36.98	W94020794	1.96	32.56	10.95	98.59	28.81	26.02	3.15	1.08	0.53	0.12	8.51	0.82	6.42
W9402	N16P	03-06-94	1601	20.59	W94020795	1.96	32.56	11.07	99.67	28.80	26.02	3.11	1.11	0.44	0.12	8.56	0.85	6.49
W9402	N16P	03-06-94	1602	14.61	W94020796	1.95	32.56	11.10	99.93	28.80	26.02	3.19	1.04	0.45	0.12	8.41	0.82	6.29
W9402	N16P	03-06-94	1603	7.13	W94020797	1.99	32.55	11.24	101.27	28.81	26.01	3.88	1.04	0.39	0.12	7.94	0.82	6.38
W9402	N16P	03-06-94	1604	1.63	W94020798	2.08	32.55	11.35	102.51	28.89	26.00	2.76	0.98	0.58	0.13	7.70	0.81	6.27
W9402	N17	03-06-94	1626	34.47	W94020805	1.93	32.56	10.68	96.10	28.79	26.03	2.41	1.05	0.46	0.14	8.68	0.84	6.62
W9402	N17	03-06-94	1627	24.75	W94020806	1.93	32.56	10.77	96.91	28.79	26.03	2.53	1.04	0.44	0.12	8.73	0.84	6.57
W9402	N17	03-06-94	1628	14.39	W94020807	1.95	32.56	10.93	98.38	28.79	26.02	4.02	1.05	0.32	0.12	8.26	0.79	6.32
W9402	N17	03-06-94	1629	7.64	W94020808	2.05	32.55	11.12	100.34	28.86	26.01	3.49	1.00	0.36	0.12	7.88	0.79	6.22
W9402	N17	03-06-94	1630	0.86	W94020809	2.08	32.55	11.24	101.52	28.88	26.00	3.24	1.10	0.43	0.13	7.61	0.76	6.12
W9402	N18	03-06-94	1650	24.82	W94020818	1.71	32.52	10.68	95.53	28.57	26.01	3.77	1.16	0.91	0.13	7.66	0.75	5.52
W9402	N18	03-06-94	1651	18.48	W94020819	1.72	32.52	10.76	96.27	28.58	26.01	3.70	1.15	0.45	0.13	7.70	0.75	5.54
W9402	N18	03-06-94	1652	5.83	W94020821	1.84	32.52	11.10	99.61	28.66	26.00	4.27	1.13	0.44	0.14	7.05	0.73	5.39
W9402	N18	03-06-94	1652	11.27	W94020820	1.76	32.52	10.98	98.34	28.60	26.00	4.30	1.13	0.38	0.13	7.23	0.73	5.43
W9402	N18	03-06-94	1653	1.66	W94020822	1.88	32.52	11.23	100.89	28.70	26.00	4.31	1.12	0.50	0.13	6.80	0.72	5.29
W9402	N19	03-06-94	1405	20.58	W94020739	1.40	32.45	14.32	126.99	28.25	25.97	3.96	1.98	0.53	0.14	7.27	0.72	5.24
W9402	N19	03-06-94	1407	15.76	W94020740	1.39	32.45	12.18	108.00	28.25	25.97	4.16	1.56	0.48	0.14	7.34	0.74	5.26

000013



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)
W9402	N19	03-06-94	1408	6.56	W94020742	1.41	32.43	11.99	106.35	28.24	25.95	5.04	1.58	0.53	0.14	6.90	0.74	5.40
W9402	N19	03-06-94	1408	10.60	W94020741	1.48	32.45	12.07	107.26	28.31	25.96	5.17	1.43	0.48	0.14	6.93	0.72	5.29
W9402	N19	03-06-94	1409	2.46	W94020743	1.60	32.41	11.85	105.61	28.38	25.92	1.89	1.55	0.87	0.15	6.94	0.75	5.59
W9402	N20P	03-05-94	0812	26.29	W94020442	1.35	32.45	11.45	101.43	28.22	25.98	3.56	1.81	0.26	0.12	8.25	0.73	6.13
W9402	N20P	03-05-94	0813	16.40	W94020443	1.32	32.45	11.50	101.77	28.19	25.97	3.54	1.72	0.26	0.12	8.35	0.75	6.15
W9402	N20P	03-05-94	0814	11.30	W94020444	1.31	32.45	11.65	103.07	28.18	25.97	4.07	1.67	0.26	0.12	8.36	0.74	6.15
W9402	N20P	03-05-94	0815	6.22	W94020445	1.30	32.44	11.57	102.35	28.17	25.97	3.90	1.64	0.46	0.14	8.18	0.77	6.24
W9402	N20P	03-05-94	0816	2.03	W94020446	1.30	32.44	11.62	102.79	28.16	25.97	3.49	1.66	0.68	0.15	8.19	0.80	6.29
W9402	N20P	03-06-94	1428	25.01	W94020750	1.62	32.49	12.42	110.82	28.48	25.99	4.22	1.35	0.46	0.13	6.71	0.69	4.79
W9402	N20P	03-06-94	1429	17.97	W94020751	1.62	32.49	12.29	109.65	28.47	25.99	4.82	1.23	0.41	0.13	6.63	0.69	4.74
W9402	N20P	03-06-94	1430	11.31	W94020752	1.67	32.49	12.40	110.77	28.50	25.98	5.93	1.20	0.37	0.14	5.86	0.68	4.62
W9402	N20P	03-06-94	1431	1.73	W94020754	1.91	32.50	12.30	110.58	28.71	25.97	2.40	1.19	0.40	0.14	5.97	0.69	4.64
W9402	N20P	03-06-94	1431	5.29	W94020753	1.88	32.49	12.38	111.20	28.68	25.97	4.40	1.15	0.62	0.14	5.87	0.68	4.63
W9402	N21	03-06-94	1712	30.65	W94020831	1.83	32.55	10.89	97.72	28.69	26.02	4.10	1.16	0.40	0.12	7.82	0.74	5.63
W9402	N21	03-06-94	1713	13.87	W94020833	1.80	32.54	11.01	98.71	28.65	26.01	4.36	1.12	0.30	0.12	7.45	0.74	5.53
W9402	N21	03-06-94	1713	19.31	W94020832	1.82	32.55	10.94	98.16	28.68	26.02	4.02	1.09	0.30	0.12	7.79	0.76	5.62
W9402	N21	03-06-94	1714	6.81	W94020834	2.00	32.54	11.23	101.21	28.81	26.00	4.60	1.05	0.29	0.12	6.99	0.73	5.43
W9402	N21	03-06-94	1715	1.06	W94020835	2.03	32.54	11.30	101.93	28.84	26.00	4.14	1.05	0.34	0.12	6.84	0.72	5.41
W9403	N01P	03-23-94	0842	29.24	W94030291	2.24	32.22			28.76	25.72	1.14	0.82	0.90	0.07	2.36	0.47	1.17
W9403	N01P	03-23-94	0844	20.44	W94030292	2.22	32.16			28.69	25.68	1.35	0.86	0.65	0.06	1.80	0.41	0.97
W9403	N01P	03-23-94	0845	13.49	W94030293	2.19	32.12			28.63	25.65	1.63	0.88	0.51	0.05	1.22	0.45	0.81
W9403	N01P	03-23-94	0846	7.35	W94030294	2.11	32.03			28.49	25.58	2.15	0.95	0.36	0.03	0.79	0.32	0.62
W9403	N01P	03-23-94	0847	0.78	W94030295	2.21	31.98			28.54	25.54	1.31	0.90	0.49	0.05	1.14	0.36	0.82
W9403	N02	03-23-94	0913	35.67	W94030302	2.15	32.29			28.75	25.79	0.68	1.09	1.33	0.07	2.93	0.56	1.82
W9403	N02	03-23-94	0915	25.82	W94030303	2.12	32.05			28.53	25.60	1.13	0.89	0.54	0.04	1.12	0.37	0.72
W9403	N02	03-23-94	0916	18.15	W94030304	2.14	32.02			28.52	25.57	1.94	0.90	0.49	0.02	0.88	0.32	0.66
W9403	N02	03-23-94	0917	8.89	W94030305	2.08	31.92			28.38	25.50	2.18	0.94	0.36	0.02	0.40	0.25	0.32
W9403	N02	03-23-94	0918	0.49	W94030306	2.26	31.88			28.49	25.45	1.40	0.90	0.35	0.01	0.29	0.27	0.25
W9403	N03	03-23-94	0944	43.50	W94030314	2.00	32.45			28.76	25.93	0.66	0.77	2.29	0.10	5.91	0.87	3.71
W9403	N03	03-23-94	0946	25.32	W94030315	1.98	32.31			28.62	25.82	0.58	0.73	1.92	0.10	4.55	0.72	2.76
W9403	N03	03-23-94	0947	18.02	W94030316	2.08	31.92			28.39	25.50	1.05	0.94	0.79	0.03	0.70	0.30	0.46
W9403	N03	03-23-94	0948	0.82	W94030318	2.28	31.84			28.48	25.42	2.26	0.89	0.35	0.01	0.17	0.17	0.22
W9403	N03	03-23-94	0948	7.53	W94030317	2.09	31.85			28.33	25.44	2.17	0.96	0.47	0.01	0.22	0.22	0.20
W9403	N04P	03-23-94	1013	45.94	W94030325	2.01	32.57			28.86	26.02	0.68	0.73	0.60	0.11	0.12	0.33	4.94
W9403	N04P	03-23-94	1014	34.84	W94030326	2.01	32.56			28.85	26.02	0.58	0.70	0.04	0.14	3.76	0.50	5.00
W9403	N04P	03-23-94	1015	23.84	W94030327	2.03	32.22			28.59	25.74	0.58	0.84	0.61	0.05	1.64	0.35	0.73
W9403	N04P	03-23-94	1016	11.38	W94030328	2.09	31.88			28.36	25.47	2.19	0.95	0.21	0.02	0.15	0.18	0.22
W9403	N04P	03-23-94	1017	0.90	W94030329	2.19	31.87			28.42	25.45	2.60	0.94	0.04	0.01	-0.01	0.14	0.31
W9403	N05	03-23-94	1048	46.57	W94030336	2.01	32.56			28.85	26.01	0.92	0.66	2.29	0.11	6.39	0.84	4.26
W9403	N05	03-23-94	1050	25.50	W94030337	2.02	32.40			28.72	25.88	0.58	0.76	1.63	0.09	4.60	0.67	2.74
W9403	N05	03-23-94	1051	14.53	W94030338	2.12	31.97			28.46	25.54	1.29	0.93	0.34	0.03	0.66	0.27	0.54
W9403	N05	03-23-94	1052	6.70	W94030339	2.12	31.91			28.41	25.49	2.32	0.95	0.17	0.02	0.08	0.17	0.26
W9403	N05	03-23-94	1054	0.74	W94030340	2.24	31.90			28.49	25.47	1.77	0.92	0.31	0.03	0.09	0.17	0.26
W9403	N06	03-23-94	1119	47.29	W94030347	2.02	32.55			28.86	26.01	1.20	0.70	0.08	0.13	0.63	0.24	4.43
W9403	N06	03-23-94	1121	24.56	W94030348	2.05	32.32			28.69	25.82	0.62	0.77	1.32	0.08	3.50	0.56	2.23
W9403	N06	03-23-94	1122	15.64	W94030349	2.12	32.05			28.52	25.60	1.57	0.89	0.36	0.03	0.39	0.22	0.34

000014

**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)
W9403	N06	03-23-94	1123	8.27	W94030350	2.16	31.96			28.48	25.52	2.34	0.93	0.20	0.02	0.07	0.18	0.27
W9403	N06	03-23-94	1124	0.72	W94030351	2.31	31.94			28.59	25.50	2.01	0.89	0.18	0.01	0.09	0.15	0.20
W9403	N07P	03-23-94	1154	40.46	W94030358	2.05	32.55			28.88	26.01	0.98	0.73	2.11	0.10	6.34	0.83	4.48
W9403	N07P	03-23-94	1155	29.32	W94030359	2.05	32.33			28.70	25.83	0.58	0.78	1.30	0.07	3.16	0.52	1.90
W9403	N07P	03-23-94	1156	18.29	W94030360	2.11	32.13			28.58	25.66	1.45	0.86	0.12	0.00	0.01	0.16	0.61
W9403	N07P	03-23-94	1158	1.95	W94030362	2.88	32.06			29.15	25.55	2.00	0.76	0.10	0.00	0.01	0.12	0.27
W9403	N07P	03-23-94	1158	9.17	W94030361	2.17	32.06			28.57	25.60	1.92	0.90	0.32	0.02	0.17	0.19	0.25
W9403	N08	03-23-94	1225	27.04	W94030369	2.09	32.32			28.73	25.82	0.44	0.87	0.06	0.01	-0.01	0.19	2.01
W9403	N08	03-23-94	1227	13.07	W94030371	2.16	32.14			28.62	25.67	1.46	0.88	0.69	0.05	1.00	0.36	0.78
W9403	N08	03-23-94	1227	19.65	W94030370	2.13	32.21			28.66	25.73	1.09	0.86	0.53	0.02	0.05	0.24	1.56
W9403	N08	03-23-94	1228	6.21	W94030372	2.17	32.10			28.60	25.64	2.13	0.91	0.53	0.04	0.57	0.34	0.57
W9403	N08	03-23-94	1229	0.80	W94030373	2.30	32.10			28.70	25.62	1.91	0.89	0.13	0.01	0.01	0.16	0.56
W9403	N09	03-23-94	1300	30.21	W94030380	2.12	32.26			28.70	25.77	0.66	1.24	0.94	0.07	1.54	0.47	1.13
W9403	N09	03-23-94	1301	22.16	W94030381	2.19	32.17			28.68	25.69	1.42	0.98	0.78	0.07	1.50	0.44	0.99
W9403	N09	03-23-94	1303	7.06	W94030383	2.19	32.12			28.63	25.65	1.41	0.92	0.44	0.04	0.87	0.30	0.76
W9403	N09	03-23-94	1303	15.04	W94030382	2.19	32.16			28.67	25.68	1.60	0.92	0.70	0.06	1.47	0.37	0.97
W9403	N09	03-23-94	1304	1.56	W94030385	2.54	32.01			28.82	25.53	2.48	0.89	0.53	0.04	0.40	0.20	0.52
W9403	N10P	03-23-94	0712	21.45	W94030257	2.24	32.09			28.66	25.62	13.70	1.28	0.73	0.07	0.98	0.34	0.80
W9403	N10P	03-23-94	0713	17.22	W94030259	2.25	32.09			28.66	25.62	1.57	1.16	0.72	0.06	0.89	0.31	0.79
W9403	N10P	03-23-94	0714	11.28	W94030260	2.25	32.08			28.65	25.62	1.60	1.05	0.80	0.06	0.89	0.28	0.75
W9403	N10P	03-23-94	0716	7.46	W94030261	2.24	32.08			28.65	25.62	1.55	0.98	1.13	0.06	0.88	0.31	0.76
W9403	N10P	03-23-94	0717	0.71	W94030262	2.25	32.08			28.65	25.61	1.58	0.96	0.18	0.01	-0.01	0.14	0.69
W9403	N11	03-23-94	0748	28.86	W94030269	2.21	32.15			28.69	25.68	1.09	0.90	0.77	0.06	1.48	0.36	0.56
W9403	N11	03-23-94	0749	22.07	W94030270	2.22	32.14			28.68	25.67	1.85	0.86	0.75	0.06	1.41	0.38	0.66
W9403	N11	03-23-94	0750	14.96	W94030271	2.17	32.11			28.62	25.65	1.63	0.88	0.69	0.06	1.07	0.35	0.77
W9403	N11	03-23-94	0751	7.39	W94030272	2.10	32.04			28.49	25.59	1.87	0.91	0.43	0.04	0.69	0.27	0.85
W9403	N11	03-23-94	0753	0.67	W94030273	2.10	32.02			28.47	25.58	1.67	0.90	0.63	0.04	0.58	0.24	0.93
W9403	N12	03-23-94	0816	19.15	W94030280	2.16	32.15			28.64	25.68	1.09	0.87	0.52	0.05	1.15	0.30	0.79
W9403	N12	03-23-94	0817	13.97	W94030281	2.11	32.01			28.48	25.57	1.62	0.93	0.33	0.03	0.56	0.25	0.54
W9403	N12	03-23-94	0818	8.58	W94030282	2.09	31.97			28.43	25.54	2.18	0.94	0.32	0.03	0.44	0.21	0.50
W9403	N12	03-23-94	0819	5.29	W94030283	2.09	31.97			28.43	25.54	1.46	0.94	0.41	0.03	0.41	0.34	0.54
W9403	N12	03-23-94	0820	0.66	W94030284	2.14	31.96			28.46	25.53	1.70	0.92	0.32	0.03	0.41	0.27	0.46
W9403	N13	03-23-94	1410	25.99	W94030414	2.18	32.24			28.73	25.75	0.57	0.87	1.20	0.02	0.00	0.16	1.29
W9403	N13	03-23-94	1411	19.52	W94030415	2.17	32.15			28.64	25.68	1.28	0.88	0.95	0.02	-0.02	0.11	0.90
W9403	N13	03-23-94	1412	12.95	W94030416	2.12	32.07			28.55	25.62	1.90	0.91	0.18	0.02	-0.02	0.09	0.76
W9403	N13	03-23-94	1413	6.85	W94030417	2.12	31.94			28.43	25.52	2.39	0.98	0.27	0.02	-0.02	0.06	0.57
W9403	N13	03-23-94	1414	0.81	W94030418	3.05	31.90			29.15	25.40	2.33	0.85	0.20	0.01	0.00	0.10	0.37
W9403	N14	03-23-94	1434	28.49	W94030425	2.09	32.30			28.71	25.80	0.47	0.91	1.35	0.07	2.92	0.58	1.85
W9403	N14	03-23-94	1435	20.43	W94030426	2.06	32.12			28.53	25.66	1.16	0.87	0.10	0.00	0.03	0.17	1.20
W9403	N14	03-23-94	1436	13.20	W94030427	2.10	31.91			28.39	25.49	1.75	0.98	0.11	0.03	0.46	0.20	0.46
W9403	N14	03-23-94	1437	6.49	W94030428	2.17	31.89			28.43	25.47	2.61	1.03	0.14	0.01	0.03	0.13	0.29
W9403	N14	03-23-94	1438	1.22	W94030429	3.20	31.90			29.27	25.40	2.36	0.82	0.16	0.00	0.03	0.13	0.28
W9403	N15	03-23-94	1457	38.40	W94030436	1.99	32.49			28.78	25.96	0.46	0.75	2.23	0.01	5.93	0.80	3.84
W9403	N15	03-23-94	1459	28.50	W94030437	2.02	32.41			28.73	25.90	0.61	0.82	1.89	0.09	4.98	0.75	3.18
W9403	N15	03-23-94	1500	19.79	W94030438	2.08	32.06			28.51	25.62	0.84	0.90	0.73	0.05	1.50	0.37	0.99
W9403	N15	03-23-94	1501	9.64	W94030439	2.16	31.86			28.40	25.45	1.99	1.01	0.30	0.02	0.21	0.19	0.25

000015

**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)
W9403	N15	03-23-94	1502	2.69	W94030440	2.34	31.85			28.53	25.42	2.53	0.94	0.29	0.02	0.14	0.16	0.27
W9403	N16P	03-23-94	1523	34.02	W94030447	2.04	32.41			28.76	25.90	1.01	0.72	1.52	0.07	3.37	0.58	2.05
W9403	N16P	03-23-94	1524	26.86	W94030448	2.08	32.26			28.66	25.77	0.75	0.83	1.32	0.07	2.95	0.54	1.76
W9403	N16P	03-23-94	1525	17.62	W94030449	2.14	32.01			28.51	25.56	1.51	0.92	0.49	0.03	0.70	0.30	0.67
W9403	N16P	03-23-94	1526	1.05	W94030451	3.45	31.89			29.47	25.36	1.84	0.77	0.40	0.02	0.13	0.17	0.21
W9403	N16P	03-23-94	1526	7.23	W94030450	2.28	31.89			28.52	25.46	2.69	0.93	0.28	0.02	0.14	0.19	0.23
W9403	N17	03-23-94	1548	34.12	W94030458	2.03	32.46			28.78	25.93	0.00	0.71	2.04	0.10	5.17	0.76	3.17
W9403	N17	03-23-94	1549	26.43	W94030459	2.07	32.37			28.75	25.86	0.74	0.79	1.77	0.09	4.17	0.68	2.55
W9403	N17	03-23-94	1550	19.31	W94030460	2.13	32.19			28.65	25.71	0.87	0.84	0.78	0.05	1.75	0.41	0.93
W9403	N17	03-23-94	1551	11.28	W94030461	2.18	32.09			28.60	25.62	2.12	0.95	0.36	0.02	0.44	0.28	0.36
W9403	N17	03-23-94	1552	0.97	W94030462	2.75	32.04			29.02	25.54	2.45	0.77	0.22	0.02	0.09	0.14	0.16
W9403	N18	03-23-94	1610	25.23	W94030469	2.14	32.24			28.70	25.75	0.61	0.77	1.09	0.06	1.93	0.45	1.23
W9403	N18	03-23-94	1611	20.48	W94030470	2.16	32.15			28.64	25.68	1.10	0.88	0.72	0.05	1.32	0.39	0.87
W9403	N18	03-23-94	1612	13.06	W94030471	2.17	32.10			28.60	25.64	2.24	0.94	0.34	0.03	0.64	0.31	0.55
W9403	N18	03-23-94	1613	6.32	W94030472	2.22	32.06			28.61	25.60	2.85	0.95	0.28	0.02	0.37	0.25	0.44
W9403	N18	03-23-94	1614	0.97	W94030473	3.07	32.06			29.31	25.53	2.35	0.79	0.22	0.02	0.17	0.19	0.30
W9403	N19	03-23-94	1325	20.34	W94030392	2.18	32.20			28.70	25.72	0.60	0.87	0.79	0.06	1.59	0.41	0.99
W9403	N19	03-23-94	1326	15.03	W94030393	2.19	32.19			28.69	25.70	1.59	0.87	0.71	0.06	1.51	0.40	0.98
W9403	N19	03-23-94	1327	9.36	W94030394	2.18	32.10			28.61	25.64	1.78	0.92	0.56	0.05	1.02	0.34	0.74
W9403	N19	03-23-94	1328	4.51	W94030395	2.20	32.06			28.59	25.60	2.27	0.96	0.47	0.04	0.61	0.28	0.64
W9403	N19	03-23-94	1329	1.01	W94030396	2.56	31.98			28.82	25.51	1.78	0.90	0.72	0.03	0.32	0.22	0.39
W9403	N20P	03-23-94	1348	25.44	W94030403	2.18	32.21			28.70	25.72	0.74	1.00	1.01	0.06	1.70	0.43	1.11
W9403	N20P	03-23-94	1349	19.96	W94030404	2.18	32.17			28.67	25.69	1.53	0.88	0.75	0.06	1.41	0.39	0.88
W9403	N20P	03-23-94	1350	12.25	W94030405	2.13	31.99			28.48	25.55	1.99	1.00	0.45	0.03	0.38	0.24	0.41
W9403	N20P	03-23-94	1351	6.42	W94030406	2.23	31.93			28.52	25.50	2.68	0.97	0.32	0.02	0.21	0.21	0.29
W9403	N20P	03-23-94	1352	1.01	W94030407	2.66	31.95			28.87	25.48	1.70	0.85	0.32	0.02	0.21	0.19	0.27
W9403	N21	03-23-94	1634	31.21	W94030480	2.11	32.29			28.71	25.79	0.76	0.78	0.43	0.01	0.01	0.15	1.24
W9403	N21	03-23-94	1635	24.09	W94030481	2.14	32.15			28.63	25.68	1.19	0.89	0.82	0.05	1.69	0.39	0.99
W9403	N21	03-23-94	1636	15.95	W94030482	2.14	32.03			28.52	25.58	1.99	0.95	0.31	0.02	0.10	0.19	0.35
W9403	N21	03-23-94	1637	7.36	W94030483	2.17	31.93			28.46	25.50	2.68	0.99	0.26	0.02	0.31	0.22	0.48
W9403	N21	03-23-94	1638	1.00	W94030484	2.61	31.88			28.78	25.43	2.47	0.91	0.25	0.01	0.08	0.13	0.24

000016

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	Re	Chl A (ug/L)	DOC (uM)	PHA (ug/L)	PON (uM)	POC (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
W9401	F01P	02-16-94	1026	11.12	W94010553	1	0.67	113.33	0.88	2.47	13.03	13.84	0.80	2.20
W9401	F01P	02-16-94	1026	11.12	W94010553	2	0.67	113.33	0.81	2.90	11.80	13.53	0.79	1.73
W9401	F01P	02-16-94	1028	1.91	W94010555	1	0.87	105.83	0.89	3.52	20.04	13.51	0.88	0.80
W9401	F01P	02-16-94	1028	1.91	W94010555	2	0.57	107.50	1.29	2.39	9.98	13.41	0.75	2.27
W9401	F02P	02-16-94	0828	20.52	W94010538	1	11.60	98.33	3.24	6.61	39.72	5.95	0.19	5.17
W9401	F02P	02-16-94	0828	20.52	W94010538	2	11.12	99.17	3.81	5.85	32.41	5.83	0.22	3.99
W9401	F02P	02-16-94	0831	2.17	W94010541	1	8.20	227.50	2.29	4.04	19.45	8.38	0.45	10.14 s
W9401	F02P	02-16-94	0831	2.17	W94010541	2	9.70	233.33	1.98	4.42	21.81	10.65	0.53	4.14
W9401	F06	02-16-94	1430	9.14	W94010591	1	0.96	106.67	0.82	1.53	5.48	13.44	0.96	1.67
W9401	F06	02-16-94	1430	9.14	W94010591	2	0.88	96.67	0.85	1.63	5.16	14.71	0.92	1.11
W9401	F06	02-16-94	1432	0.81	W94010593	1	1.05	90.00	0.91	2.19	7.54	13.83	0.91	1.52
W9401	F06	02-16-94	1432	0.81	W94010593	2	0.92	94.17	0.73	1.66	7.08	12.40	0.87	1.50
W9401	F13P	02-16-94	1737	13.45	W94010625	1	0.24	162.50	0.69	2.12	7.95	16.64	1.46	1.47
W9401	F13P	02-16-94	1737	13.45	W94010625	2	0.34	162.50	0.60	2.20	7.49	17.86	1.47	2.31
W9401	F13P	02-16-94	1739	1.93	W94010627	1	0.28	93.33	0.60	1.88	7.91	17.25	1.73	1.70
W9401	F13P	02-16-94	1739	1.93	W94010627	2	0.15	98.33	1.00	1.83	7.75	17.73	1.78	2.09
W9401	F23P	02-08-94	0814	9.88	W94010074	1	0.23	115.00	0.60	2.69	14.30	15.42	0.64	1.31
W9401	F23P	02-08-94	0814	9.88	W94010074	2	0.22	119.17	0.53	2.41	11.56	13.83	0.62	1.34
W9401	F23P	02-08-94	0816	2.27	W94010076	1	0.20	127.50	0.59	3.25	12.89	13.51	0.65	1.27
W9401	F23P	02-08-94	0816	2.27	W94010076	2	0.22	113.33	0.54	2.24	10.30	13.68	0.61	1.50
W9401	F23P	02-15-94	0745	2.50	W94010333	1	0.25	e	0.68	3.28	22.84	26.35	1.10	3.04
W9401	F23P	02-15-94	0745	2.50	W94010333	2	0.21	e	0.71	3.61	18.98	26.81	1.13	3.14
W9401	F23P	02-15-94	0755	10.53	W94010338	1	0.23	e	0.83	3.59	24.49	27.28	1.10	3.66
W9401	F23P	02-15-94	0755	10.53	W94010338	2	0.21	e	0.81	4.23	29.18	28.53	1.04	3.95
W9401	F25	02-17-94	0727	5.98	W94010649	1				2.67	11.64	21.90	0.35	
W9401	F25	02-17-94	0727	5.98	W94010649	2				2.97	14.43	20.65	0.40	
W9401	F25	02-17-94	0728	2.57	W94010651	1				2.56	11.30	23.21	0.33	
W9401	F25	02-17-94	0728	2.57	W94010651	2				2.94	12.76	21.93	0.39	
W9401	F27B	02-15-94	1413	48.79	W94010451	1	0.50		0.55	1.26	3.76	16.42	0.88	1.04
W9401	F27B	02-15-94	1413	48.79	W94010451	2	0.37		0.53	1.23	3.92	17.55	0.92	1.06
W9401	F27B	02-15-94	1416	2.36	W94010453	1	0.45		0.55	1.28	3.59	15.85	0.90	2.09
W9401	F27B	02-15-94	1416	2.36	W94010453	2	0.46		0.41	1.32	3.21	16.00	0.90	1.64
W9401	F30B	02-08-94	0715	4.86	W94010025	1	0.31	131.67	0.70	3.21	11.19	17.46	0.60	2.62
W9401	F30B	02-08-94	0715	4.86	W94010025	2	0.28	125.00	0.75	3.36	13.92	16.69	0.55	2.29
W9401	F30B	02-08-94	0716	2.42	W94010026	1	0.26	145.00	0.65	3.54	19.13	24.10	0.83	2.27
W9401	F30B	02-08-94	0716	2.42	W94010026	2	0.29	140.83	0.65	3.81	19.16	19.34	0.71	2.35
W9401	N01P	02-15-94	0858	12.05	W94010350	1	0.60	91.67	0.76	1.48	4.62	16.07	0.76	3.19
W9401	N01P	02-15-94	0858	12.05	W94010350	2	0.49	95.00	0.84	1.55	6.36	15.36	0.81	1.27
W9401	N01P	02-15-94	0901	2.43	W94010352	1	0.47	101.67	0.72	1.57	6.16	16.91	0.81	1.51
W9401	N01P	02-15-94	0901	2.43	W94010352	2	0.55	93.33	0.68	e	e	18.82	1.08	1.40
W9401	N04P	02-15-94	1010	22.27	W94010373	1	0.87	96.67	0.74	1.54	5.40	15.29	0.85	1.74
W9401	N04P	02-15-94	1010	22.27	W94010373	2	0.77	91.67	0.78	1.49	6.22	14.49	0.81	1.80
W9401	N04P	02-15-94	1012	2.56	W94010375	1	0.93	80.83	0.69	e	e	14.93	0.81	1.32
W9401	N04P	02-15-94	1012	2.56	W94010375	2	0.69	90.00	0.73	e	e	14.65	0.81	1.63
W9401	N07P	02-08-94	1337	23.70	W94010214	1	0.57	120.00	0.68	1.38	5.62	8.05	0.46	0.88
W9401	N07P	02-08-94	1337	23.70	W94010214	2	0.54	98.33	0.67	1.47	5.58	7.45	0.45	1.15
W9401	N07P	02-08-94	1339	2.62	W94010216	1	0.39	117.50	0.66	e	e	7.84	0.44	0.93
W9401	N07P	02-08-94	1339	2.62	W94010216	2	0.55	110.00	0.68	1.46	5.22	8.11	0.45	0.78
W9401	N10P	02-17-94	0752	9.80	W94010660	1	0.27		0.62	2.27	8.25			0.90
W9401	N10P	02-17-94	0752	9.80	W94010660	2	0.34		0.60	1.74	6.52			1.02

000017

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	Re	Chl A (ug/L)	DOC (uM)	PHA (ug/L)	PON (uM)	POC (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
W9401	N10P	02-17-94	0753	2.45	W94010662	1	0.24		0.66	2.43	8.82			1.00
W9401	N10P	02-17-94	0753	2.45	W94010662	2	0.28		0.60	2.14	7.13			1.35
W9401	N16P	02-08-94	1230	18.07	W94010198	1	0.51	113.33	0.62	2.10	5.58	8.54	0.47	1.32
W9401	N16P	02-08-94	1230	18.07	W94010198	2	0.47	103.33	0.57	2.78	11.15	9.91	0.48	1.54
W9401	N16P	02-08-94	1232	2.77	W94010200	1	0.46	115.00	0.65	2.50	6.67	8.72	0.50	1.27
W9401	N16P	02-08-94	1232	2.77	W94010200	2	0.55	108.33	0.75	2.32	8.16	9.19	0.51	1.66
W9401	N16P	02-15-94	1050	18.36	W94010387	1	0.82	80.83	0.63	2.15	8.89	15.27	0.80	0.95
W9401	N16P	02-15-94	1050	18.36	W94010387	2	0.76	84.17	0.84	2.56	11.52	19.03	0.90	0.61
W9401	N16P	02-15-94	1052	2.54	W94010389	1	0.85	133.33	0.88	2.49	8.58	15.24	0.81	0.73
W9401	N16P	02-15-94	1052	2.54	W94010389	2	0.59	170.00	0.64	2.35	12.83	15.59	0.82	e
W9401	N20P	02-08-94	1114	13.25	W94010172	1	0.32	123.33	0.62	1.49	8.92	9.14	0.61	1.24
W9401	N20P	02-08-94	1114	13.25	W94010172	2	0.29	110.00	0.61	1.86	10.16	8.51	0.52	1.21
W9401	N20P	02-08-94	1116	2.68	W94010174	1	0.38	109.17	0.55	2.10	13.79	8.13	0.47	1.41
W9401	N20P	02-08-94	1116	2.68	W94010174	2	0.34	101.67	0.68	2.20	11.96	13.24	0.74	1.13
W9402	F01P	03-02-94	0917	2.70	W94020257	1	9.69	116.67	3.84	7.81	46.57	5.96	0.33	e
W9402	F01P	03-02-94	0917	2.70	W94020257	2	10.45	115.00	2.25	4.94	26.53	6.95	0.36	4.18
W9402	F01P	03-02-94	0917	6.66	W94020256	1	11.49	108.33	1.58	5.15	28.00	5.96	0.34	4.10
W9402	F01P	03-02-94	0917	6.66	W94020256	2	10.94	107.50	1.43	5.62	29.26	6.78	0.45	2.36
W9402	F02P	03-02-94	0746	6.88	W94020232	1	5.73	145.00	2.19	4.87	27.54	7.28	0.24	3.87
W9402	F02P	03-02-94	0746	6.88	W94020232	2	5.19	148.33	2.85	3.65	21.63	9.00	0.31	2.56
W9402	F02P	03-02-94	0747	2.87	W94020233	1	5.41	140.00	2.47	4.36	25.96	7.43	0.45	2.32
W9402	F02P	03-02-94	0747	2.87	W94020233	2	4.82	140.83	2.63	4.42	25.98	7.18	0.25	2.23
W9402	F06	03-02-94	1252	17.93	W94020300	1	2.24	104.17	0.82	1.29	4.98	14.86	0.88	1.09
W9402	F06	03-02-94	1252	17.93	W94020300	2	1.52	100.00	0.90	1.92	8.03	14.31	0.84	1.12
W9402	F06	03-02-94	1254	2.57	W94020302	1	0.99	110.00	0.75	1.22	3.43	14.64	0.87	1.74
W9402	F06	03-02-94	1254	2.57	W94020302	2	0.98	109.17	0.79	1.30	5.21	15.59	0.88	1.46
W9402	F13P	03-02-94	1509	13.58	W94020350	1	0.29	96.67	0.61	1.55	13.32	13.60	0.90	1.43
W9402	F13P	03-02-94	1509	13.58	W94020350	2	0.25	92.50	0.70	1.28	4.77	16.23	0.85	0.80
W9402	F13P	03-02-94	1511	1.50	W94020352	1	0.42	130.83	0.66	1.56	6.95	15.85	0.87	1.82
W9402	F13P	03-02-94	1511	1.50	W94020352	2	0.32	156.67	0.61	1.64	6.50	16.17	0.86	1.34
W9402	F23P	03-01-94	0649	7.04	W94020041	1	0.65	e	0.62	2.21	12.73	23.91	0.64	2.32
W9402	F23P	03-01-94	0649	7.04	W94020041	2	0.41	e	0.66	1.72	9.99	23.93	0.73	2.09
W9402	F23P	03-01-94	0651	2.80	W94020043	1	0.93	e	0.69	2.28	13.70	22.98	0.83	2.31
W9402	F23P	03-01-94	0651	2.80	W94020043	2	0.85	e	0.67	2.23	11.99	23.43	0.87	2.32
W9402	F23P	03-05-94	0704	15.13	W94020416	1	2.38	327.50	2.32	4.25	39.66	26.29	1.05	
W9402	F23P	03-05-94	0704	15.13	W94020416	2	2.40	261.67	2.68	5.71	52.63	26.92	1.14	
W9402	F23P	03-05-94	0708	2.24	W94020419	1	1.12	210.83	1.12	3.96	26.91	25.84	0.96	5.07
W9402	F23P	03-05-94	0708	2.24	W94020419	2	1.06	197.50	1.08	3.88	e	29.21	1.36	5.21
W9402	F25	03-02-94	1610	8.69	W94020365	1				1.19	6.30	17.46	0.82	
W9402	F25	03-02-94	1610	8.69	W94020365	2				1.14	6.67	16.43	0.82	
W9402	F25	03-02-94	1612	2.36	W94020368	1				1.82	8.60	16.85	0.82	
W9402	F25	03-02-94	1612	2.36	W94020368	2				0.47	3.36	18.64	0.76	
W9402	F27B	03-01-94	1341	9.24	W94020163	1	0.81		0.85	2.44	13.30	13.64	0.52	1.23
W9402	F27B	03-01-94	1341	9.24	W94020163	2	0.75		0.76	1.78	8.81	12.93	0.47	1.48
W9402	F27B	03-01-94	1342	2.29	W94020164	1	0.75		0.94	2.54	e	12.81	0.46	1.91
W9402	F27B	03-01-94	1342	2.29	W94020164	2	0.74		0.90	2.24	11.68	15.51	0.50	1.40
W9402	F30B	03-05-94	0628	5.34	W94020404	1	0.96	198.33	1.13	2.56	22.62	25.72	0.72	5.52
W9402	F30B	03-05-94	0628	5.34	W94020404	2	1.15	237.50	1.31	2.44	20.45	26.48	0.69	5.48
W9402	F30B	03-05-94	0629	2.19	W94020405	1	0.88	378.33	1.01	2.51	16.74	27.82	0.75	3.55
W9402	F30B	03-05-94	0629	2.19	W94020405	2	0.91	234.17	0.89	1.87	15.55	26.83	1.56	3.44

000018

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	Re	Chl A (ug/L)	DOC (uM)	PHA (ug/L)	PON (uM)	POC (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
W9402	F31B	03-02-94	1646	5.84	W94020378	1	0.23		0.56	0.99	6.28	17.21	0.85	1.35
W9402	F31B	03-02-94	1646	5.84	W94020378	2	0.18		0.63	1.04	6.37	18.92	1.14	1.21
W9402	F31B	03-02-94	1647	2.51	W94020379	1	0.14		0.53	1.20	9.12	18.06	0.86	0.83
W9402	F31B	03-02-94	1647	2.51	W94020379	2	0.16		0.58	1.25	8.01	18.98	0.99	2.68
W9402	N01P	03-01-94	0742	6.45	W94020065	1	e	90.00	e	1.74	9.75	17.44	0.76	1.84
W9402	N01P	03-01-94	0742	6.45	W94020065	2	e	93.33	e	0.81	4.15	15.46	0.65	1.12
W9402	N01P	03-01-94	0743	2.86	W94020066	1	e	94.17	e	1.01	7.32	13.61	0.57	0.89
W9402	N01P	03-01-94	0743	2.86	W94020066	2	e	95.83	e	0.75	5.78	14.63	0.56	1.29
W9402	N04P	03-01-94	0933	9.14	W94020098	1	e	98.33	e	1.68	6.53	14.97	0.53	0.93
W9402	N04P	03-01-94	0933	9.14	W94020098	2	e	105.83	e	2.07	8.47	14.65	0.53	e
W9402	N04P	03-01-94	0934	2.46	W94020099	1	e	90.00	e	1.50	7.40	15.23	0.58	0.77
W9402	N04P	03-01-94	0934	2.46	W94020099	2	e	93.33	e	0.96	3.80	15.96	0.58	0.46
W9402	N07P	03-05-94	0904	11.43	W94020459	1	2.39	208.33	1.18	1.58	7.87	15.25	0.42	2.55
W9402	N07P	03-05-94	0904	11.43	W94020459	2	2.20	161.67	1.30	1.79	8.97	14.71	0.43	2.54
W9402	N07P	03-05-94	0905	0.89	W94020460	1	3.41	184.17	1.00	1.80	9.40	14.89	0.51	1.52
W9402	N07P	03-05-94	0905	0.89	W94020460	2	2.17	175.83	0.90	2.02	9.49	14.69	0.49	1.65
W9402	N10P	03-05-94	1518	18.45	W94020562	1	4.07	159.17	1.16	2.39	16.62	17.66	0.44	6.26
W9402	N10P	03-05-94	1518	18.45	W94020562	2	3.34	147.50	1.25	2.34	16.02	19.63	0.61	5.01
W9402	N10P	03-05-94	1521	2.33	W94020565	1	1.78	156.67	0.94	2.08	15.30	20.29	0.61	3.65
W9402	N10P	03-05-94	1521	2.33	W94020565	2	1.71	155.83	0.96	2.57	15.16	20.83	0.62	3.36
W9402	N16P	03-01-94	1017	12.69	W94020113	1	e	274.17	e	1.91	11.46	15.03	0.59	1.35
W9402	N16P	03-01-94	1017	12.69	W94020113	2	e	293.33	e	1.70	9.46	15.68	0.64	1.03
W9402	N16P	03-01-94	1018	3.00	W94020115	1	e	91.67	e	0.52	3.83	15.33	0.62	1.32
W9402	N16P	03-01-94	1018	3.00	W94020115	2	e	90.83	e	1.42	11.22	17.48	0.62	1.86
W9402	N16P	03-05-94	1047	18.22	W94020485	1	2.84	138.33	1.19	1.25	5.13	14.26	0.38	1.84
W9402	N16P	03-05-94	1047	18.22	W94020485	2	3.02	121.67	1.48	1.16	7.09	14.35	0.50	2.02
W9402	N16P	03-05-94	1049	1.93	W94020487	1	1.30	169.17	1.54	1.07	4.33	12.91	0.44	e
W9402	N16P	03-05-94	1049	1.93	W94020487	2	1.70	163.33	1.28	1.14	5.54	14.00	0.51	2.14
W9402	N20P	03-05-94	0815	6.22	W94020445	1	3.25	154.17	1.26	19.14	12.58	13.54	0.44	4.01
W9402	N20P	03-05-94	0815	6.22	W94020445	2	4.03	135.83	1.04	2.04	13.01	15.17	0.48	3.57
W9402	N20P	03-05-94	0816	2.03	W94020446	1	4.48	151.67	1.16	2.09	12.60	15.30	0.48	3.50
W9402	N20P	03-05-94	0816	2.03	W94020446	2	3.47	210.83	1.33	2.02	12.31	16.18	0.62	3.86

000019

## APPENDIX A

### STATION DATA TABLES AND INSTRUMENT CALIBRATION DATA

#### Part 2

#### Instrument Calibration Data for Fluorescence and Dissolved Oxygen

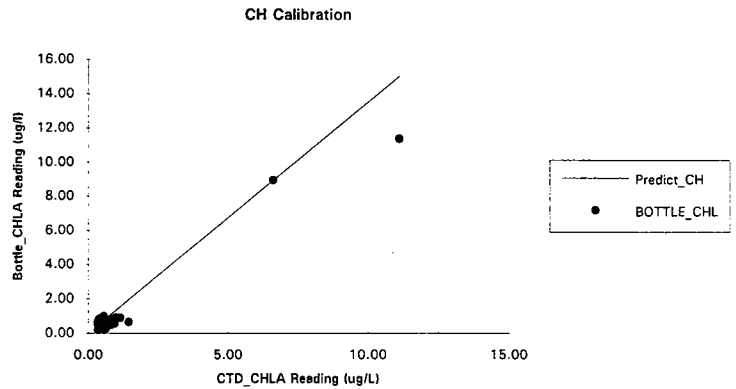
The average value of individual analytical replicates from chlorophyll ( $n=2$ ) and dissolved oxygen determinations ( $n=2$ ) was used to post-calibrate *in situ* sensor readings, where the CTD value is regarded as dependent on the bottle value. All regressions were forced through zero (top regression 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 instrument blank readings are near zero and the established practice of forcing through zero 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:

- W9401 = February 1994 combined survey
- W9402 = Early March 1994 combined survey
- W9403 = March 1994 nearfield survey.

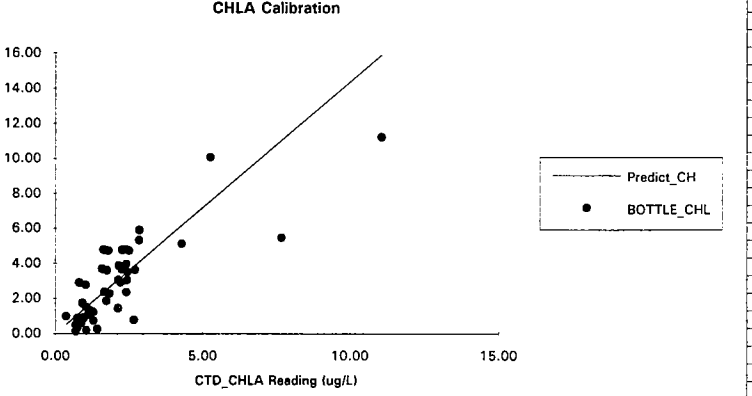
For the March 1994 nearfield survey (W9403), there were problems associated with both calibrations. The DO sensor was damaged during the towing survey day and the data did not give a reliable calibration. Extracted chlorophyll samples were compromised by improper storage and were not analyzed. The *in situ* fluorescence measurements were calibrated using the average slope from the chlorophyll calibrations for surveys W9402 and W9404 and the intercept was set at zero ( $y=0.73x$ ). These surveys bracket W9403 in time and should account for any large scale changes in the phytoplankton community that may have effected the extracted chlorophyll vs. fluorescence relationship. The average calibration used for survey W9403 provides a credible estimate of chlorophyll concentrations based on fluorescence. The calibration slopes for W9402 and W9404 were not significantly different from one another ( $0.697 \pm 0.043$  and  $0.768 \pm 0.038$ , respectively).

Survey W9401 Chlorophyll a Calibration															
MARKER	STATION	DEPTH	BOTTLE_CHL	CTD_CHLA	Predict_CH	Residual	Regression Statistics			Standard Deviation of Residual					
25	F30	4.86	0.30	0.55	0.73	-0.44				0.541					
26	F30	2.42	0.28	0.54	0.73	-0.45	Multiple R			0.280656694					
72	F23P	19.61	0.23	0.58	0.78	-0.55	R Square			0.07876818					
73	F23P	15.36	0.24	0.56	0.75	-0.51	Adjusted R Square			0.05876818					
74	F23P	9.88	0.23	0.42	0.57	-0.34	Standard Error			5.305397048					
75	F23P	4.07	0.21	0.39	0.53	-0.32	Observations			51					
76	F23P	2.27	0.21	0.37	0.50	-0.29									
172	N20P	13.25	0.31	0.65	0.88	-0.57	Analysis of Variance								
174	N20P	2.68	0.36	0.66	0.89	-0.53									
198	N16P	18.07	0.49	0.83	1.12	-0.63	Regression			df	Sum of Squares	Mean Square	F	Significance F	
200	N16P	2.77	0.51	0.73	0.98	-0.47	Residual			1	120.3338102	120.3338102	4.2751552	0.043974984	
214	N07P	23.70	0.55	0.83	1.12	-0.57	Total			50	1407.361892	28.14723783			
216	N07P	2.62	0.47	0.76	1.03	-0.55				51	1527.695702				
329	F23P	23.93	0.38	0.62	0.84	-0.46	Coefficients			Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
330	F23P	17.63	0.29	0.55	0.74	-0.45									
332	F23P	6.36	0.23	0.50	0.67	-0.44	Intercept			0	#N/A	#N/A	#N/A	#N/A	#N/A
333	F23P	2.50	0.23	0.41	0.56	-0.33	x1			0.741666683	0.354369285	2.092920337	0.041349954	0.029894736	1.45343863
338	F23P	10.53	0.22	0.43	0.57	-0.35									
350	N01P	12.05	0.55	0.84	1.14	-0.58									
352	N01P	2.43	0.51	0.43	0.58	-0.06	Regression Statistics								
373	N04P	22.27	0.82	0.80	1.08	-0.26									
375	N04P	2.58	0.81	0.40	0.54	0.27									
385	N16P	38.97	0.64	0.74	0.99	-0.35	Multiple R			0.292863279					
386	N16P	28.76	0.76	0.81	1.10	-0.33	R Square			0.0857689					
387	N16P	18.36	0.79	0.87	1.17	-0.38	Adjusted R Square			0.067111122					
388	N16P	8.99	0.64	0.64	0.86	-0.22	Standard Error			5.338858171					
389	N16P	2.54	0.72	0.38	0.52	0.20	Observations			51					
451	F27	48.79	0.44	0.56	0.76	-0.32	Analysis of Variance								
453	F27	2.36	0.45	0.39	0.52	-0.07									
538	F02P	20.52	11.36	11.13	15.01	-3.65				df	Sum of Squares	Mean Square	F	Significance F	
541	F02P	2.17	8.95	6.63	8.94	0.01	Regression			1	131.0287799	131.0287799	4.596951579	0.037016489	
553	F01P	11.12	0.67	1.46	1.97	-1.30	Residual			49	1396.668922	28.50340657			
555	F01P	1.91	0.72	0.65	0.88	-0.16	Total			50	1527.695702				
591	F06	9.14	0.92	1.00	1.35	-0.42									
593	F06	0.81	0.99	0.58	0.78	0.21	Coefficients			Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
625	F13P	13.45	0.29	0.59	0.79	-0.50									
627	F13P	1.93	0.21	0.58	0.78	-0.57	Intercept			-0.505105966	0.824595772	-0.612549789	0.542950087	-2.162192204	1.151980272
660	N10P	9.80	0.30	0.57	0.77	-0.47	x1			0.843333347	0.393336612	2.144050274	0.036915215	0.052894435	1.633772506
662	N10P	2.45	0.26	0.50	0.68	-0.41									
703	N16P	40.55	0.60	0.70	0.94	-0.34									
705	N16P	19.66	0.78	0.96	1.30	-0.51									
707	N16P	2.89	0.81	0.50	0.67	0.14									
807	N07P	48.13	0.47	0.62	0.84	-0.37									
809	N07P	24.97	0.91	1.16	1.57	-0.66									
811	N07P	1.49	0.85	0.43	0.58	0.27									
861	N04P	47.99	0.52	0.59	0.79	-0.27									
863	N04P	24.58	0.56	0.96	1.30	-0.74									
865	N04P	1.53	0.60	0.35	0.47	0.13									
896	N01P	28.84	0.53	0.74	1.00	-0.47									
898	N01P	14.19	0.48	0.76	1.02	-0.54									
900	N01P	1.21	0.47	0.78	1.05	-0.58									

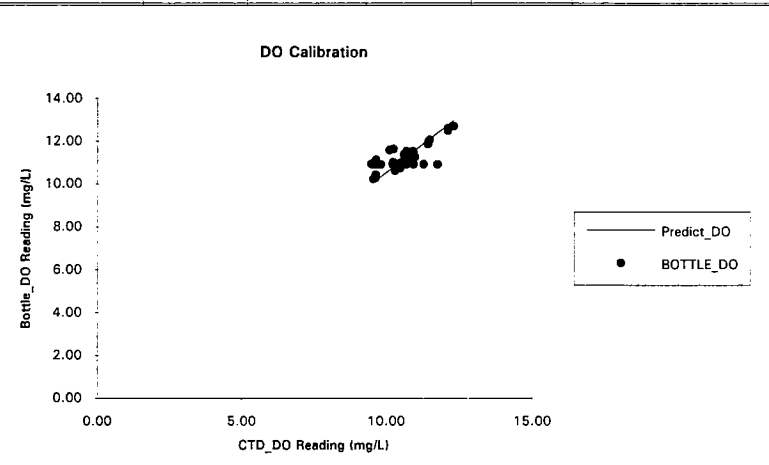




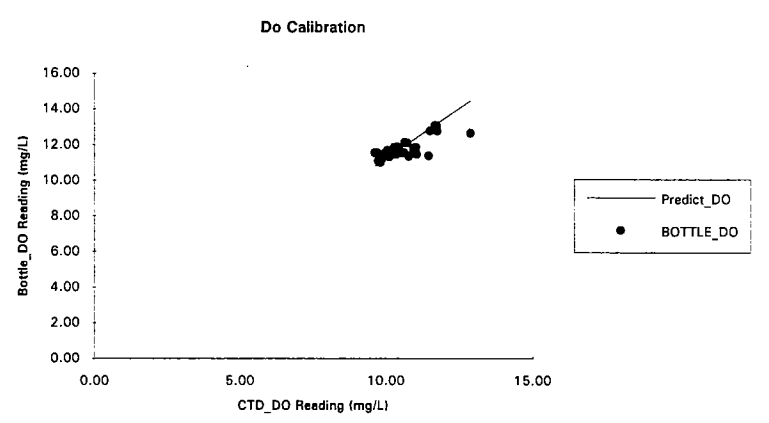
Survey W9402 Chlorophyll a Calibration													
MARKER	STATION	DEPTH	BOTTLE_CHL	CTD_CHLA	Predict_CH	Residual	Regression Statistics			Standard Deviation of Residual			
39	F23P	15.51	0.62	0.89	1.27	-0.65						1.564	
40	F23P	11.13	0.79	0.81	1.16	-0.37	Multiple R	0.805938819					
41	F23P	7.04	0.53	0.70	1.01	-0.48	R Square	0.649537381					
42	F23P	4.03	0.86	0.97	1.38	-0.52	Adjusted R Square	0.62779825					
43	F23P	2.80	0.89	0.76	1.09	-0.20	Standard Error	1.095598204					
163	F27	9.24	0.78	2.68	3.84	-3.06	Observations	47					
164	F27	2.29	0.74	1.30	1.86	-1.12							
232	F02P	6.88	5.46	7.70	11.05	-5.59	Analysis of Variance						
233	F02P	2.87	5.12	4.31	6.19	-1.07							
256	F01P	6.66	11.21	11.08	15.89	-4.68	Regression	1	102.5215916	102.5215916	85.25508247	5.95123E-12	
257	F01P	2.70	10.07	5.28	7.57	2.49	Residual	46	55.3162706	1.202527622			
300	F06	17.93	1.88	1.74	2.50	-0.62	Total	47	157.8378622				
302	F06	2.57	0.99	0.38	0.55	0.44							
350	F13P	13.58	0.27	1.44	2.06	-1.79	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
352	F13P	1.50	0.37	0.77	1.10	-0.73							
378	F31B	5.84	0.20	1.06	1.53	-1.32	Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
379	F31B	2.51	0.15	0.71	1.01	-0.87	x1	0.697350577	0.043367663	16.07996653	9.83117E-21	0.610056081	0.784645072
404	F30	5.34	1.06	1.10	1.58	-0.52							
405	F30	2.19	0.90	0.92	1.32	-0.42							
415	F23P	20.21	1.46	2.15	3.09	-1.63							
416	F23P	15.13	2.39	1.68	2.41	-0.01	Regression Statistics						
417	F23P	8.66	1.26	1.30	1.87	-0.61							
418	F23P	4.83	1.32	1.19	1.70	-0.38	Multiple R	0.812070573					
419	F23P	2.24	1.09	1.14	1.64	-0.55	R Square	0.659458616					
445	N20P	6.22	3.84	2.72	3.90	-0.25	Adjusted R Square	0.85189103					
446	N20P	2.03	3.97	2.43	3.49	0.48	Standard Error	1.082909715					
458	N07P	11.43	2.29	1.86	2.66	-0.37	Observations	47					
460	N07P	0.89	2.79	1.05	1.50	1.29							
483	N16P	35.63	3.05	2.16	3.09	-0.04	Analysis of Variance						
484	N16P	25.22	3.08	2.44	3.51	-0.43							
485	N16P	18.22	2.93	2.23	3.20	-0.27	Regression	1	104.0875382	104.0875382	87.14252991	4.2804E-12	
486	N16P	8.66	2.38	2.43	3.48	-1.11	Residual	45	53.750324	1.194451645			
487	N16P	1.93	1.50	1.07	1.53	-0.04	Total	46	157.8378622				
563	N10P	12.57	3.71	1.60	2.30	1.41							
565	N10P	2.33	1.74	0.93	1.34	0.41	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
579	N10P	22.59	4.77	2.29	3.29	1.48							
581	N10P	9.63	3.88	2.18	3.12	0.76	Intercept	0.28813532	0.251647321	1.144896573	0.258133137	-0.21870838	0.794979019
583	N10P	2.30	3.68	2.26	3.25	0.43	x1	0.63690523	0.068227543	9.335016331	3.46522E-12	0.49948791	0.77432255
620	N01P	28.48	5.91	2.87	4.12	1.79							
622	N01P	13.48	5.32	2.87	4.11	1.20							
624	N01P	2.65	4.74	1.82	2.62	2.13							
659	N04P	44.26	4.78	2.43	3.48	1.30							
662	N04P	11.57	4.74	2.53	3.63	1.11							
663	N04P	2.53	4.79	1.65	2.37	2.42							
699	N07P	40.06	3.62	1.77	2.53	1.09							
702	N07P	15.91	3.51	2.48	3.55	-0.04							
704	N07P	2.51	2.90	0.82	1.18	1.72							



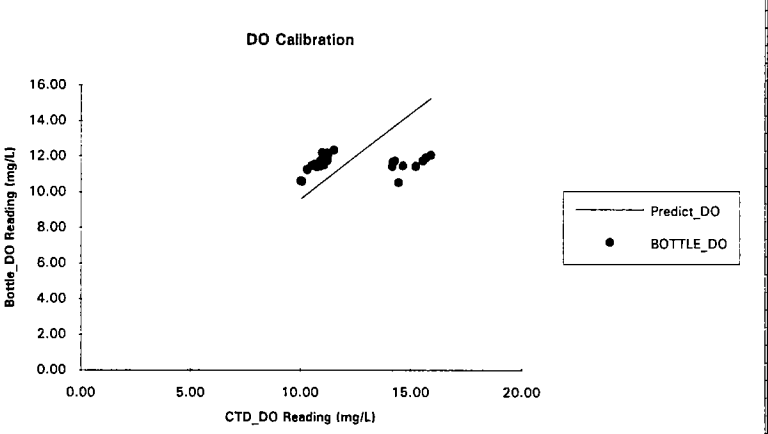
Survey W9401 Dissolved Oxygen Calibration															
MARKER	STATION	DEPTH	BOTTLE_DO	CTD_DO	Predict_DO	Residual	Regression Statistics			Standard Deviation of Residual					
372	N04P	35.21	10.92	9.56	10.06	0.85				0.462					
373	N04P	22.27	10.93	9.58	10.09	0.84	Multiple R			0.746466396					
375	N04P	2.56	10.91	9.70	10.21	0.70	R Square			0.55721208					
386	N16P	28.76	10.95	9.52	10.02	0.93	Adjusted R Square			0.538344156					
387	N16P	18.36	10.93	9.63	10.14	0.79	Standard Error			0.438586966					
389	N16P	2.54	10.91	9.84	10.36	0.55	Observations			54					
450	F27	74.02	10.44	9.66	10.17	0.27	Analysis of Variance								
451	F27	48.79	10.28	9.65	10.16	0.12									
453	F27	2.36	10.25	9.57	10.08	0.17									
497	F12	67.54	10.93	10.23	10.78	0.15	Regression			1	12.82956916	12.82956916	66.69612913	6.94525E-11	
498	F12	43.64	10.96	10.26	10.80	0.16	Residual			53	10.19500194	0.192358527			
500	F12	2.16	11.02	10.25	10.80	0.22	Total			54	23.0245711				
510	F29	40.96	11.14	9.67	10.18	0.96									
512	F29	10.95	11.58	10.13	10.66	0.92									
513	F29	2.72	11.63	10.26	10.80	0.83									
538	F02P	20.52	12.71	12.33	12.98	-0.27	Intercept			0	#N/A	#N/A	#N/A	#N/A	#N/A
539	F02P	12.73	12.60	12.14	12.78	-0.18	x1			0.949657864	0.005340656	177.8167058	1.95072E-76	0.938945869	0.960369858
541	F02P	2.17	12.50	12.13	12.77	-0.26									
552	F01P	17.60	11.86	11.44	12.05	-0.19									
553	F01P	11.12	12.00	11.47	12.08	-0.08									
555	F01P	1.91	12.06	11.52	12.13	-0.07	Regression Statistics								
591	F06	9.14	11.26	11.00	11.59	-0.32									
593	F06	0.81	11.24	10.86	11.44	-0.20	Multiple R			0.747006023					
624	F13P	18.61	11.43	10.92	11.50	-0.07	R Square			0.558017998					
625	F13P	13.45	11.49	10.96	11.54	-0.06	Adjusted R Square			0.549518345					
627	F13P	1.93	11.52	10.93	11.51	0.01	Standard Error			0.442380928					
659	N10P	16.40	11.37	10.62	11.18	0.19	Observations			54					
660	N10P	9.80	11.53	10.72	11.29	0.24	Analysis of Variance								
662	N10P	2.45	11.25	10.67	11.24	0.01									
703	N16P	40.55	10.92	10.61	11.17	-0.25									
704	N16P	30.87	11.09	10.66	11.22	-0.13	Regression			1	12.84812508	12.84812508	65.65184965	8.76769E-11	
705	N16P	19.66	11.11	10.63	11.19	-0.08	Residual			52	10.17644602	0.195700885			
706	N16P	9.78	11.04	10.57	11.13	-0.09	Total			53	23.0245711				
707	N16P	2.89	11.20	10.69	11.26	-0.06									
756	N20P	27.70	11.04	10.74	11.31	-0.27									
757	N20P	20.25	11.05	10.75	11.32	-0.27									
758	N20P	12.50	11.03	10.74	11.31	-0.28	Intercept			-0.419239664	1.361499725	-0.307924898	0.759346391	-3.151286886	2.312807558
759	N20P	6.60	11.15	10.79	11.36	-0.21	x1			0.987135585	0.121829742	8.1025829	7.67607E-11	0.742666488	1.231604682
760	N20P	1.90	11.18	10.70	11.27	-0.09									
807	N07P	48.13	10.68	10.33	10.87	-0.19									
808	N07P	37.32	10.92	10.55	11.11	-0.19									
809	N07P	24.97	11.02	10.61	11.17	-0.15									
810	N07P	9.32	11.00	10.63	11.19	-0.19									
811	N07P	1.49	11.05	10.68	11.24	-0.19									
861	N04P	47.99	10.63	10.32	10.87	-0.23									
862	N04P	35.56	10.77	10.46	11.02	-0.24									
863	N04P	24.58	10.74	10.49	11.05	-0.31									
864	N04P	11.45	10.96	10.55	11.11	-0.16									
865	N04P	1.53	10.97	10.47	11.03	-0.06									
896	N01P	28.84	10.91	11.78	12.40	-1.49									
897	N01P	20.86	10.93	11.30	11.90	-0.97									
898	N01P	14.19	10.93	10.96	11.55	-0.61									
899	N01P	7.05	10.93	10.72	11.29	-0.36									
900	N01P	1.21	11.02	10.54	11.10	-0.08									
CTD_DO Data Beyond This Point Not Available															
25	F30	4.86	11.33	-999.00											
26	F30	2.42	11.33	-999.00											
73	F23P	15.36	11.21	-999.00											
74	F23P	9.88	11.17	-999.00											
76	F23P	2.27	11.12	-999.00											
171	N20P	21.52	10.98	-999.00											
172	N20P	13.25	11.05	-999.00											
174	N20P	2.88	11.16	-999.00											
197	N16P	28.54	11.17	-999.00											
198	N16P	18.07	11.18	-999.00											
200	N16P	2.77	11.25	-999.00											
213	N07P	36.30	11.17	-999.00											
214	N07P	23.70	11.19	-999.00											
216	N07P	2.62	11.19	-999.00											
233	F19	60.50	10.42	-999.00											
234	F19	40.55	10.94	-999.00											
236	F19	3.27	11.01	-999.00											
330	F23P	17.63	11.41	-999.00											
333	F23P	2.50	11.22	-999.00											
338	F23P	10.53	11.24	-999.00											
349	N01P	19.52	11.13	-999.00											
350	N01P	12.05	11.18	-999.00											
352	N01P	2.43	11.16	-999.00											
648	F25	8.53	11.61	-999.00											
649	F25	5.98	11.61	-999.00											
651	F25	2.57	11.68	-999.00											



Survey W9402 Dissolved Oxygen Calibration													
MARKER	STATION	DEPTH	BOTTLE_DO	CTD_DO	Predict_DO	Residual	Regression Statistics			Standard Deviation of Residual			
40	F23P	11.13	11.64	10.41	11.66	-0.03						0.390	
41	F23P	7.04	11.66	10.43	11.69	-0.03	Multiple R	0.78606418					
43	F23P	2.80	11.60	10.44	11.70	-0.10	R Square	0.617896895					
65	N01P	6.45	11.55	9.73	10.90	0.65	Adjusted R Square	0.604909882					
66	N01P	2.86	11.55	9.65	10.82	0.74	Standard Error	0.347601519					
161	F27	64.25	11.01	9.82	11.01	0.00	Observations	78					
163	F27	9.24	11.54	10.17	11.40	0.14							
164	F27	2.29	11.82	10.40	11.65	0.16	Analysis of Variance						
194	F12	64.58	11.10	9.79	10.97	0.12							
196	F12	15.20	11.33	9.93	11.13	0.20	Regression	1	15.04490676	15.04490676	124.5162895	1.12062E-17	
197	F12	1.97	11.45	10.04	11.26	0.19	Residual	77	9.303664807	0.120826816			
207	F29	45.52	11.70	10.41	11.67	0.03	Total	78	24.34857157				
209	F29	10.73	12.12	10.67	11.96	0.16							
210	F29	2.54	12.11	10.74	12.04	0.07							
229	F02P	20.24	12.65	12.89	14.46	-1.81	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
232	F02P	6.88	12.76	11.77	13.20	-0.44	Intercept	0	#N/A	#N/A	#N/A	#N/A	
233	F02P	2.87	12.78	11.53	12.93	-0.15	x1	0.892029964	0.003374079	264.3773317	6.2237E-117	0.885311306	0.898748621
254	F01P	14.13	13.08	11.74	13.17	-0.08							
256	F01P	6.66	13.07	11.69	13.10	-0.03							
257	F01P	2.70	12.99	11.76	13.18	-0.19							
299	F06	24.75	11.51	10.10	11.32	0.19	Regression Statistics						
300	F06	17.93	11.53	10.15	11.38	0.15							
302	F06	2.57	11.57	10.57	11.85	-0.28	Multiple R	0.80033635					
347	F13P	18.46	11.47	10.11	11.34	0.13	R Square	0.640538272					
350	F13P	13.58	11.55	10.40	11.66	-0.11	Adjusted R Square	0.635808513					
352	F13P	1.50	11.68	10.45	11.71	-0.03	Standard Error	0.339356582					
378	F31B	5.84	11.61	10.32	11.57	0.04	Observations	78					
379	F31B	2.51	11.69	10.43	11.89	0.00							
404	F30	5.34	11.39	11.47	12.86	-1.47	Analysis of Variance						
405	F30	2.19	11.34	10.79	12.10	-0.76							
416	F23P	15.13	11.45	10.10	11.32	0.13	Regression	1	15.59619197	15.59619197	135.4272373	1.47422E-18	
417	F23P	8.68	11.43	10.09	11.31	0.11	Residual	76	8.752379601	0.115162889			
419	F23P	2.24	11.48	10.07	11.28	0.20	Total	77	24.34857157				
443	N20P	16.40	11.63	10.24	11.48	0.14							
445	N20P	6.22	11.65	10.31	11.55	0.10	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
446	N20P	2.03	11.69	10.36	11.61	0.08	Intercept	-2.408934831	1.101014804	-2.187922289	0.031708475	-4.60179867	-0.21607099
457	N07P	34.48	11.33	10.13	11.36	-0.04	x1	1.09841646	0.0943874	11.63732088	1.21413E-18	0.91042742	1.2864055
459	N07P	11.43	11.37	10.14	11.36	0.01							
460	N07P	0.89	11.40	10.14	11.36	0.03							
471	F19	55.10	11.41	10.17	11.40	0.00							
473	F19	20.67	11.59	10.30	11.55	0.04							
474	F19	0.88	11.58	10.34	11.59	-0.01							
484	N16P	25.22	11.41	10.06	11.28	0.12							
485	N16P	18.22	11.45	10.18	11.42	0.03							
487	N16P	1.93	11.52	10.25	11.49	0.03							
562	N10P	18.45	11.57	10.65	11.94	-0.38							
563	N10P	12.57	11.56	10.55	11.83	-0.27							
565	N10P	2.33	11.45	10.37	11.62	-0.17							
579	N10P	22.59	11.67	10.06	11.28	0.39							
580	N10P	17.69	11.65	10.16	11.39	0.26							
581	N10P	9.63	11.65	10.16	11.39	0.26							
582	N10P	5.56	11.67	10.13	11.35	0.32							
583	N10P	2.30	11.65	10.22	11.46	0.19							
620	N01P	28.48	11.74	10.41	11.67	0.07							
621	N01P	21.25	11.80	10.38	11.64	0.17							
622	N01P	13.48	11.86	10.47	11.74	0.12							
623	N01P	7.68	11.87	10.40	11.66	0.21							
624	N01P	2.65	11.86	10.31	11.56	0.31							
659	N04P	44.26	11.47	10.10	11.32	0.15							
660	N04P	33.30	11.49	10.01	11.22	0.27							
661	N04P	21.88	11.52	10.04	11.26	0.26							
662	N04P	11.57	11.52	10.03	11.25	0.27							
663	N04P	2.53	11.56	10.06	11.28	0.28							
699	N07P	40.06	11.41	10.02	11.23	0.18							
701	N07P	30.19	11.41	9.87	11.06	0.35							
702	N07P	15.91	11.52	9.96	11.17	0.35							
703	N07P	6.86	11.64	10.05	11.27	0.37							
704	N07P	2.51	11.59	10.11	11.34	0.25							
750	N20P	25.01	11.47	11.07	12.41	-0.94							
751	N20P	17.97	11.54	10.95	12.28	-0.73							
752	N20P	11.31	11.84	11.05	12.38	-0.54							
753	N20P	5.29	11.86	11.03	12.37	-0.51							
754	N20P	1.73	11.83	10.96	12.29	-0.46							
794	N16P	36.98	11.12	9.76	10.94	0.19							
795	N16P	20.59	11.17	9.86	11.05	0.12							
796	N16P	14.61	11.21	9.89	11.09	0.13							
797	N16P	7.13	11.40	10.01	11.22	0.18							
798	N16P	1.63	11.51	10.12	11.34	0.16							
CTD_DO Data Not Available for These Samples													
63	N01P	17.61	11.50	-999.00									
96	N04P	34.33	11.24	-999.00									
98	N04P	9.14	11.22	-999.00									
99	N04P	2.46	11.21	-999.00									
112	N16P	24.45	11.04	-999.00									
113	N16P	12.69	11.31	-999.00									
115	N16P	3.00	11.22	-999.00									



Survey W9403 Dissolved Oxygen Calibration															
MARKER	STATION	DEPTH	BOTTLE_DO	CTD_DO	Predict DO	Residual	Regression Statistics			Standard Deviation of Residual					
257	N10P	21.45	11.46	14.67	14.06	-2.60				1.900					
260	N10P	11.28	11.45	14.19	13.60	-2.15	Multiple R			#NUM!					
261	N10P	7.46	11.67	14.22	13.63	-1.97	R Square			-0.038605774					
262	N10P	0.71	11.75	14.32	13.72	-1.98	Adjusted R Square			-0.074320059					
291	N01P	29.24	11.43	10.92	10.46	0.97	Standard Error			1.982729856					
292	N01P	20.44	11.57	10.96	10.50	1.07	Observations			29					
293	N01P	13.49	11.51	11.10	10.64	0.87									
294	N01P	7.35	11.75	11.26	10.79	0.96	Analysis of Variance								
295	N01P	0.78	11.81	11.23	10.77	1.05									
325	N04P	45.94	10.60	10.10	9.68	0.92	df	Sum of Squares	Mean Square	F	Significance F				
326	N04P	34.84	10.65	10.04	9.63	1.02	1	-4.091538599	-4.091538599	-1.040781491	#NUM!				
327	N04P	23.84	11.77	10.95	10.50	1.27	28	110.0740951	3.931217681						
328	N04P	11.38	12.11	11.29	10.82	1.28	29	105.9825565							
329	N04P	0.90	12.10	11.21	10.74	1.36	Coefficients			Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
358	N07P	40.46	10.54	14.47	13.87	-3.33									
359	N07P	29.32	11.46	15.26	14.62	-3.16	Intercept			0	#N/A	#N/A	#N/A	#N/A	#N/A
360	N07P	18.29	11.74	15.57	14.92	-3.18	x1			1.043356787	0.03156801	33.05107857	1.43122E-24	0.878692576	1.108020997
361	N07P	9.17	12.08	15.94	15.28	-3.22									
362	N07P	1.95	11.91	15.72	15.07	-3.15									
403	N20P	25.44	11.47	10.53	10.10	1.37	Regression Statistics								
404	N20P	19.96	11.57	10.67	10.23	1.34									
405	N20P	12.25	12.12	11.05	10.59	1.53									
406	N20P	6.42	12.13	11.20	10.73	1.39	Multiple R			0.04785402					
407	N20P	1.01	12.20	11.02	10.56	1.64	R Square			0.002290007					
447	N16P	34.02	11.28	10.34	9.91	1.37	Adjusted R Square			-0.034662215					
448	N16P	26.86	11.42	10.76	10.32	1.10	Standard Error			1.978962089					
449	N16P	17.62	11.92	11.26	10.79	1.13	Observations			29					
450	N16P	7.23	12.35	11.56	11.08	1.27									
451	N16P	1.05	12.18	11.25	10.78	1.40	Analysis of Variance								
							df	Sum of Squares	Mean Square	F	Significance F				
							1	0.242700818	0.242700818	0.061972111	0.805289621				
							27	105.7398557	3.91628095						
							28	105.9825565							
							Coefficients			Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
Dissolved Oxygen Sensor Damaged							Intercept			9.846445693	9.359669547	1.052007835	0.301790702	-9.357997043	29.05088843
This Calibration is useless							x1			0.199775084	0.802496556	0.248941984	0.805222678	-1.446810735	1.846360904



## 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 occupation, there is a one-page set of profiles, with station, cruise code, date and time listed across the bottom.

Where a panel is blank, no data were collected. Due to extremely cold air and water temperatures, this occurred for dissolved oxygen measurements at the following stations:

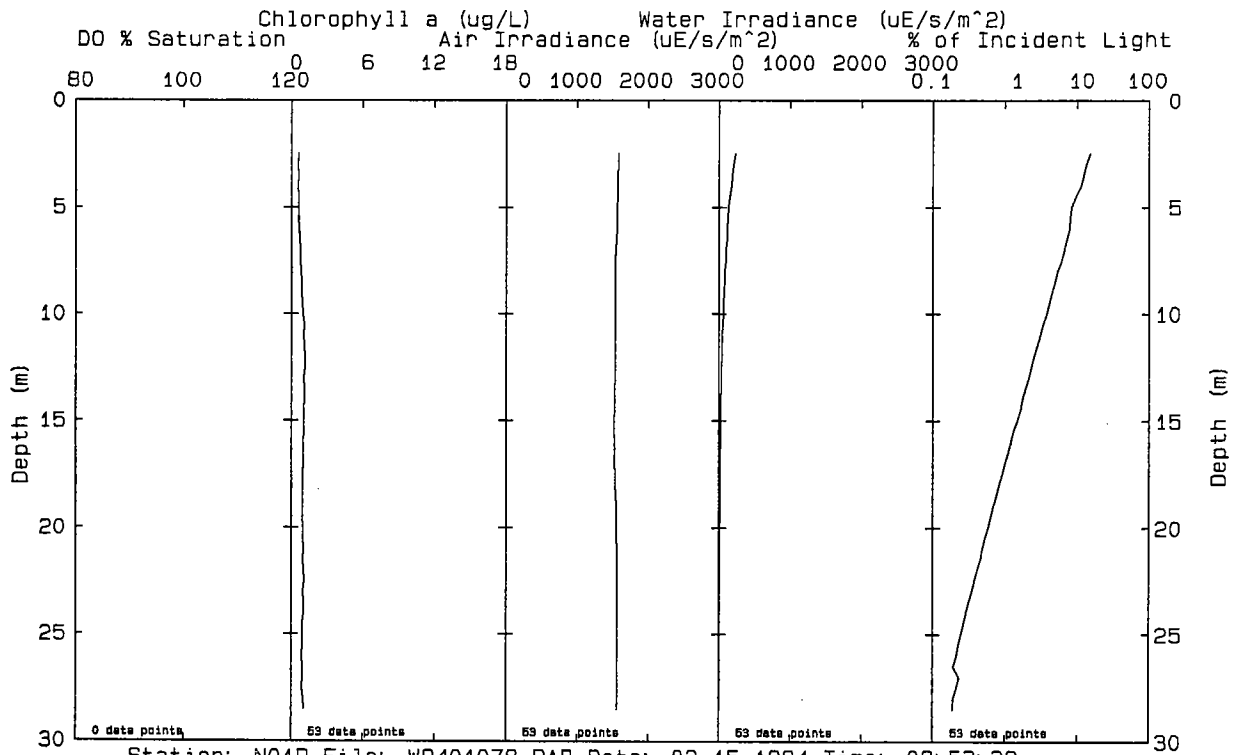
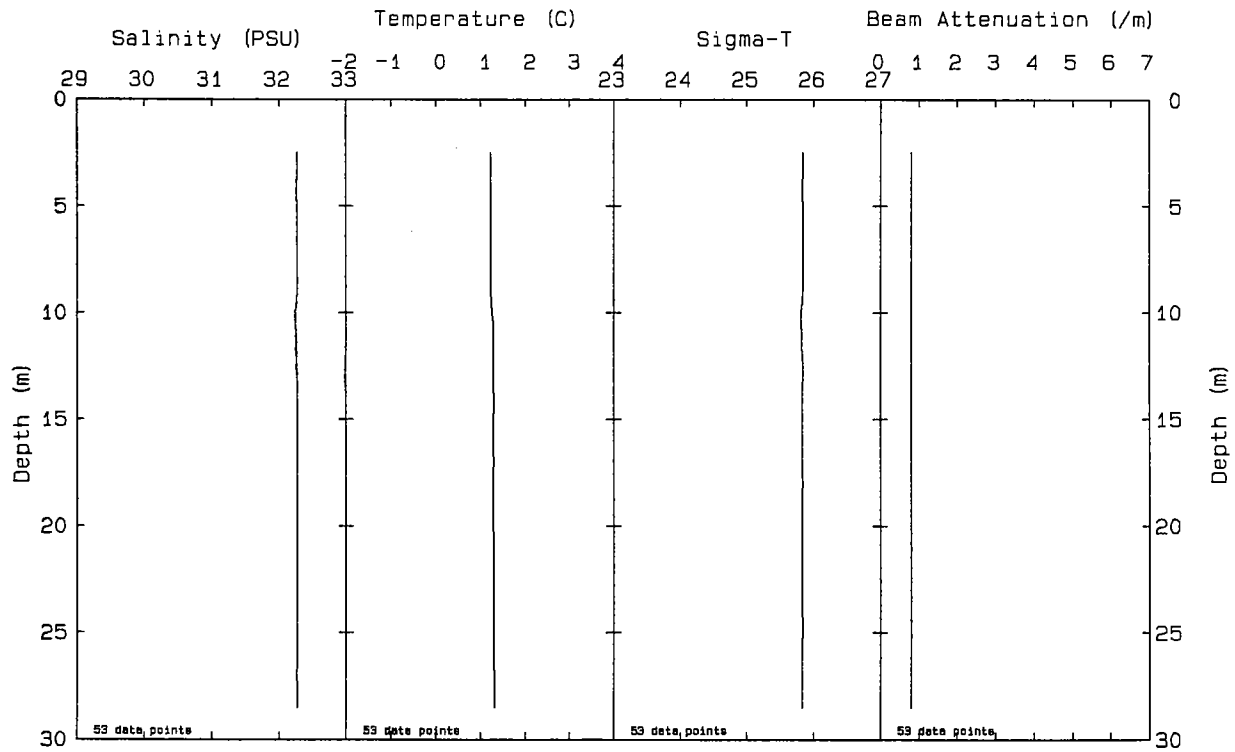
Station	File Name
F30	W9401011
F23P	W9401016
F24	W9401021
F18	W9401024
N20P	W9401027
N16P	W9401037
N07P	W9401042
F19	W9401048
F17	W9401051
F16	W9401054
F15	W9401059
F14	W9401063
F23P	W9401072
N01P	W9401078
F29	W9401121
F25	W9401165
N01P	W9402024
N04P	W9402035
N16P	W9402040

As mentioned in Appendix A part 2, the dissolved oxygen data for survey W9403 was not calibrated and is not shown in the profiles that follow.

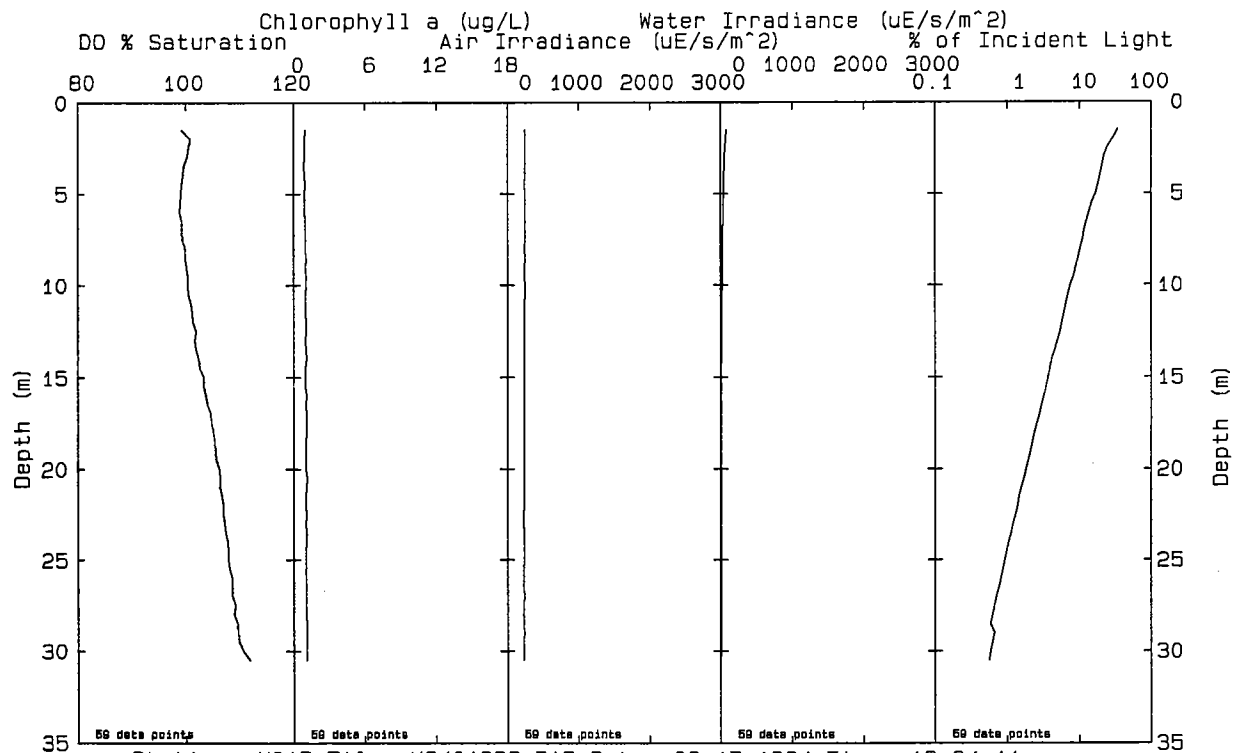
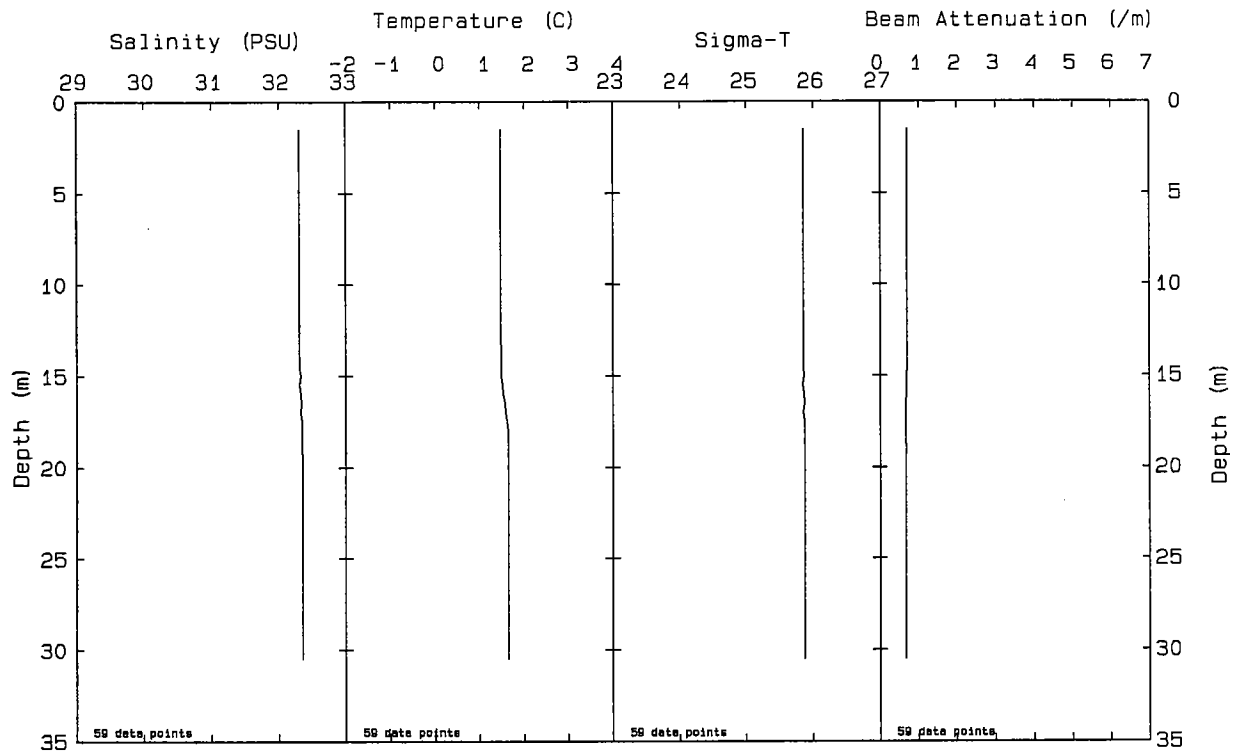
Due to darkness, irradiance readings were not available for the following stations:

Station	File Name
F16	W9401054
F15	W9401059
F14	W9401063
F29	W9401121
F13P	W9401156
N11	W9401242

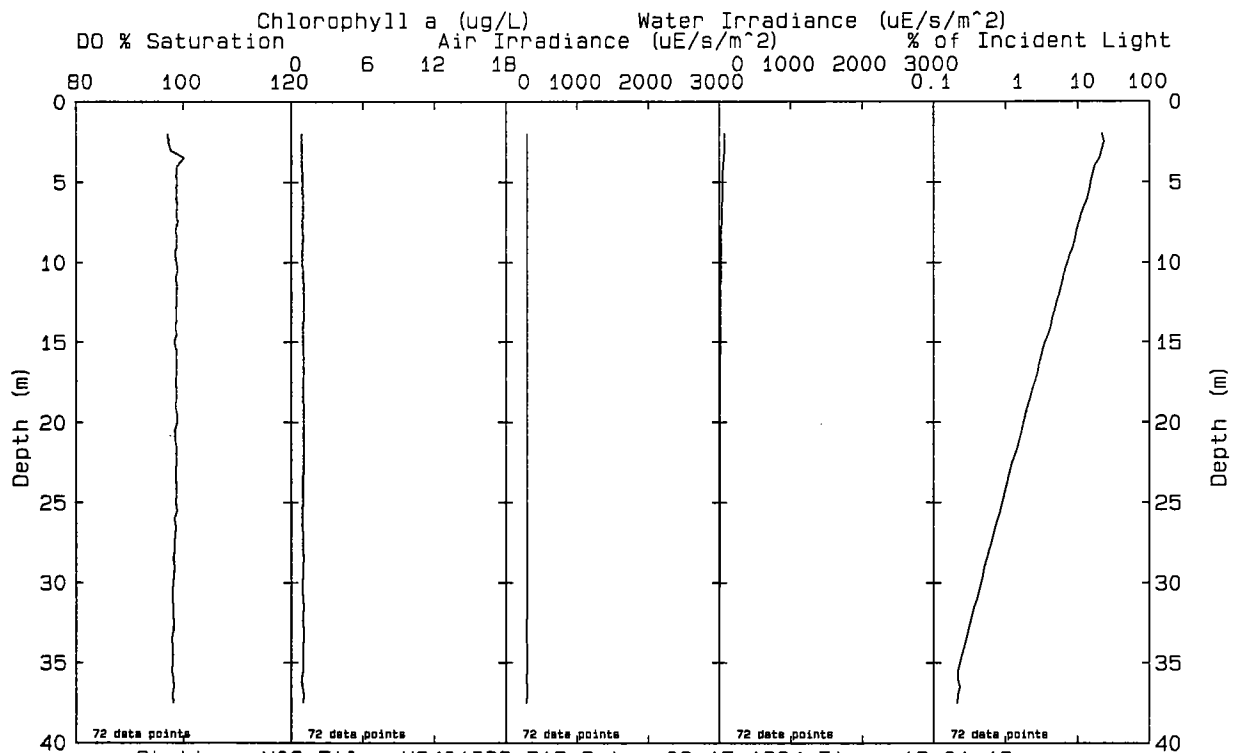
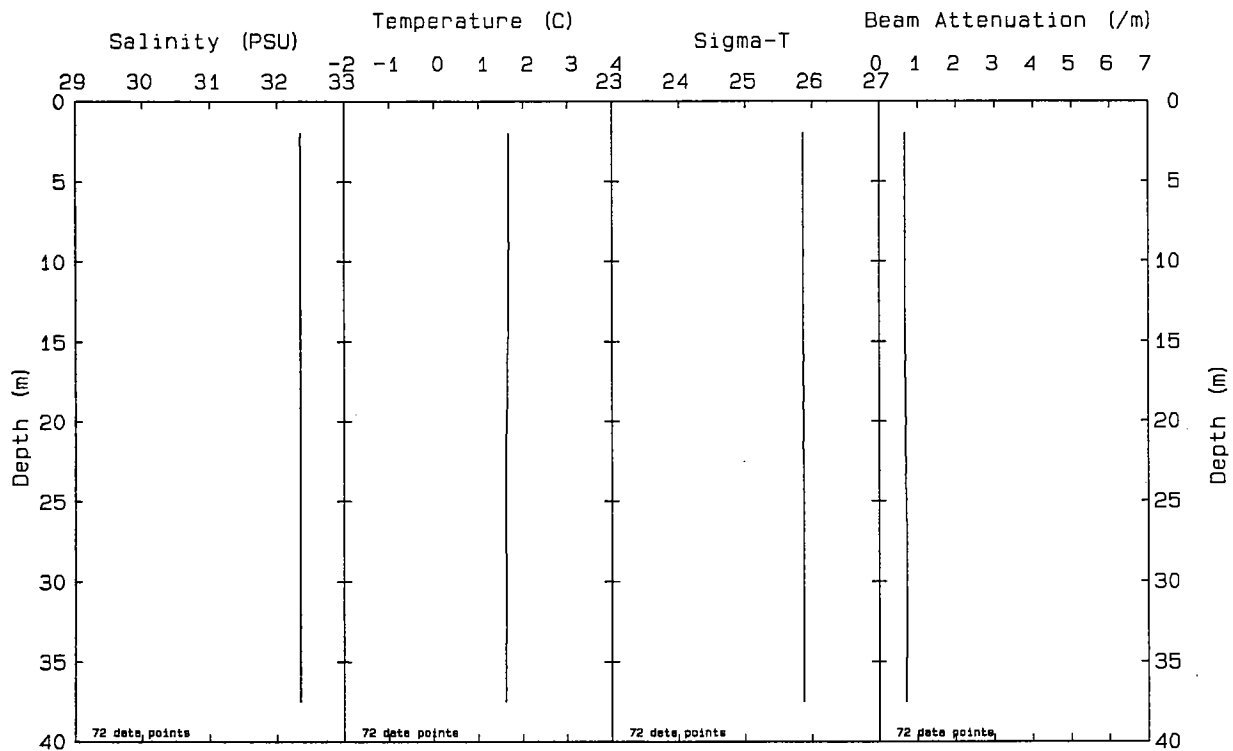
**February 1994 Profiles**

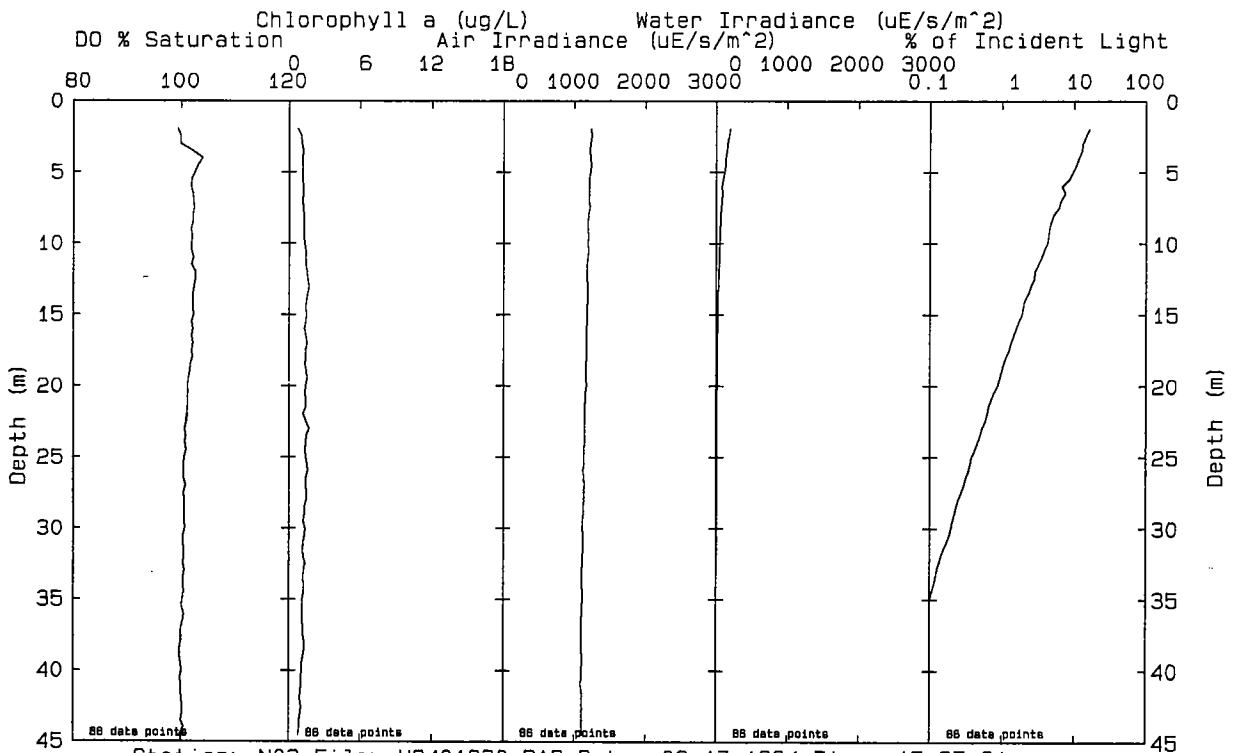
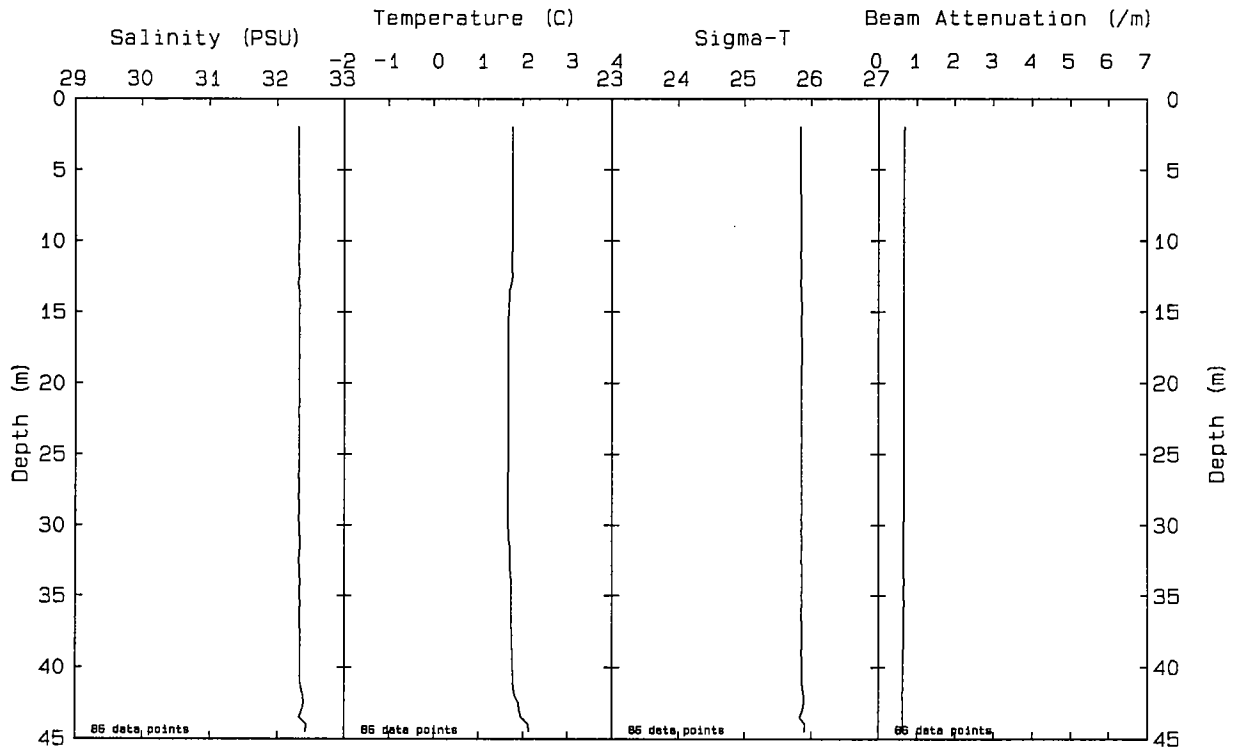


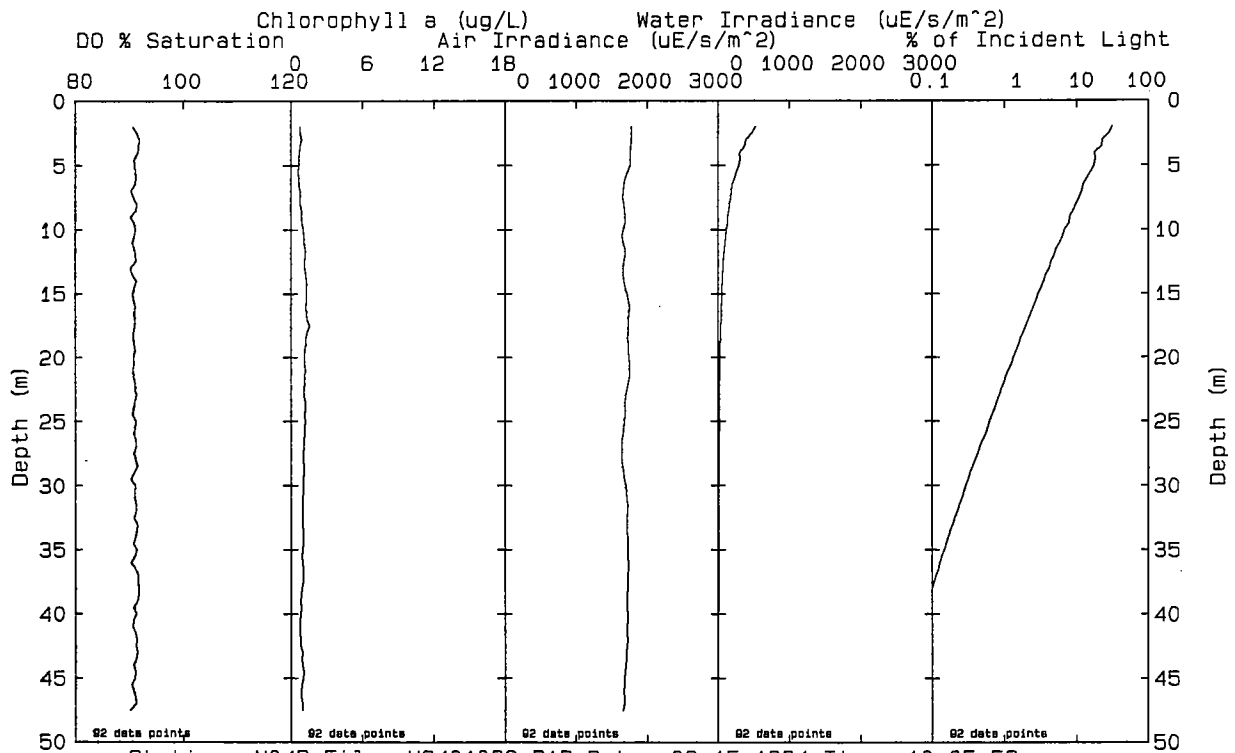
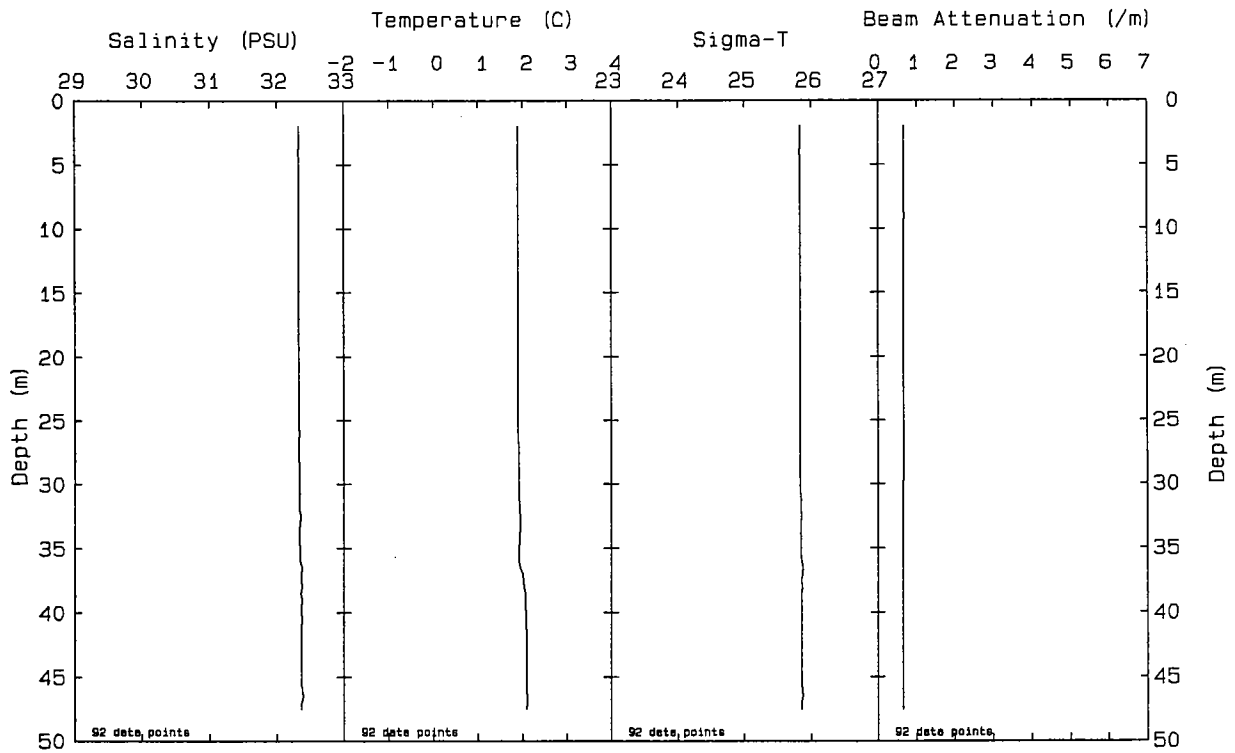
Station: N01P File: W9401078.PAB Date: 02-15-1994 Time: 08: 53: 32

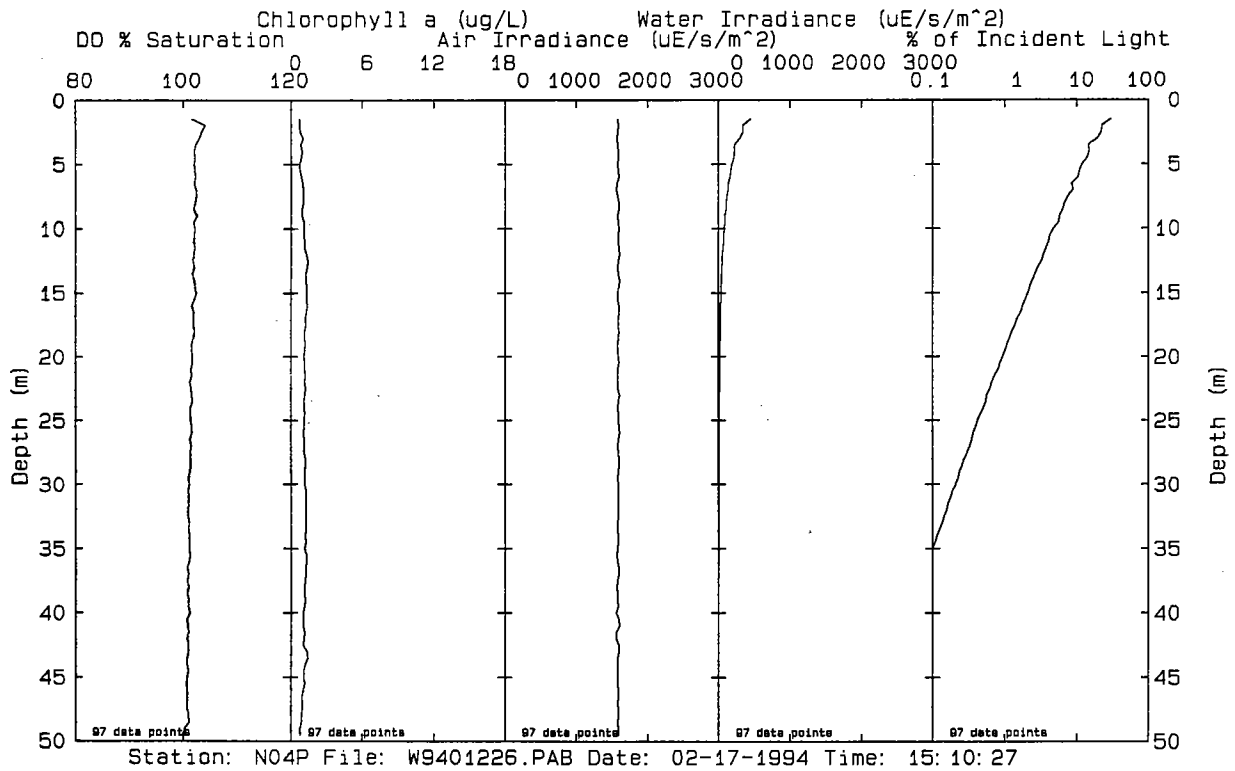
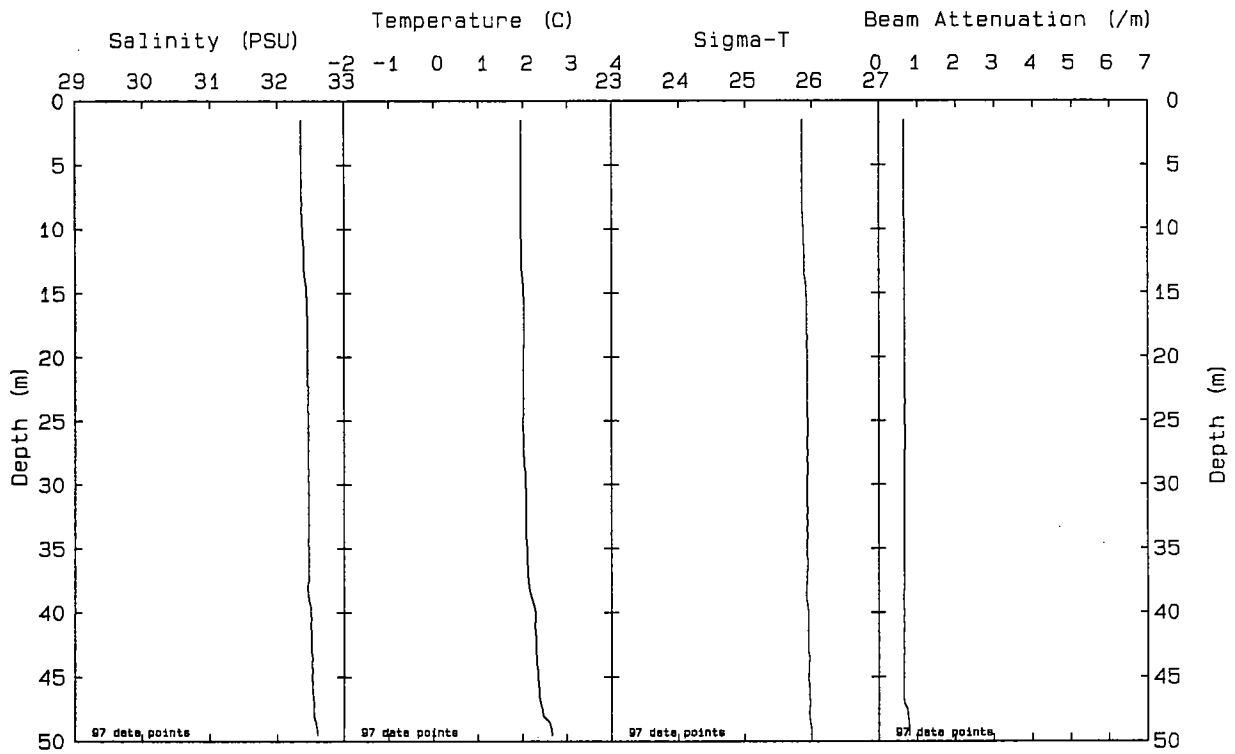


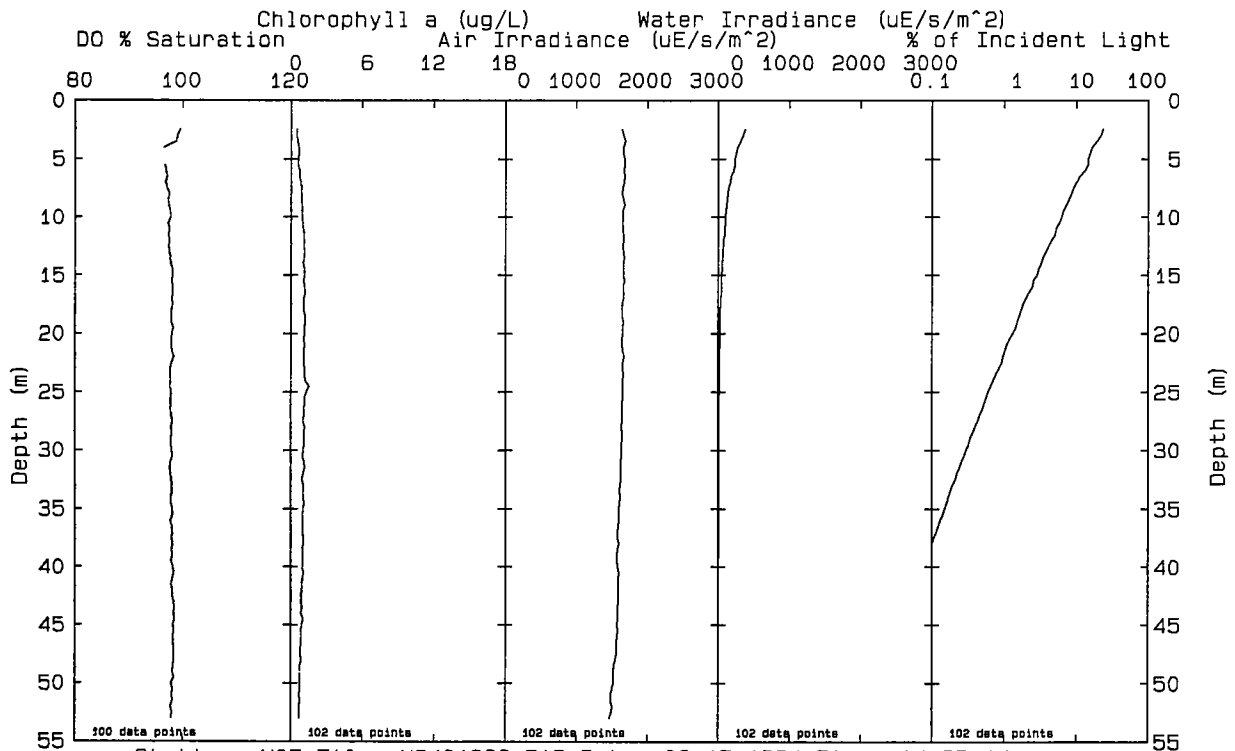
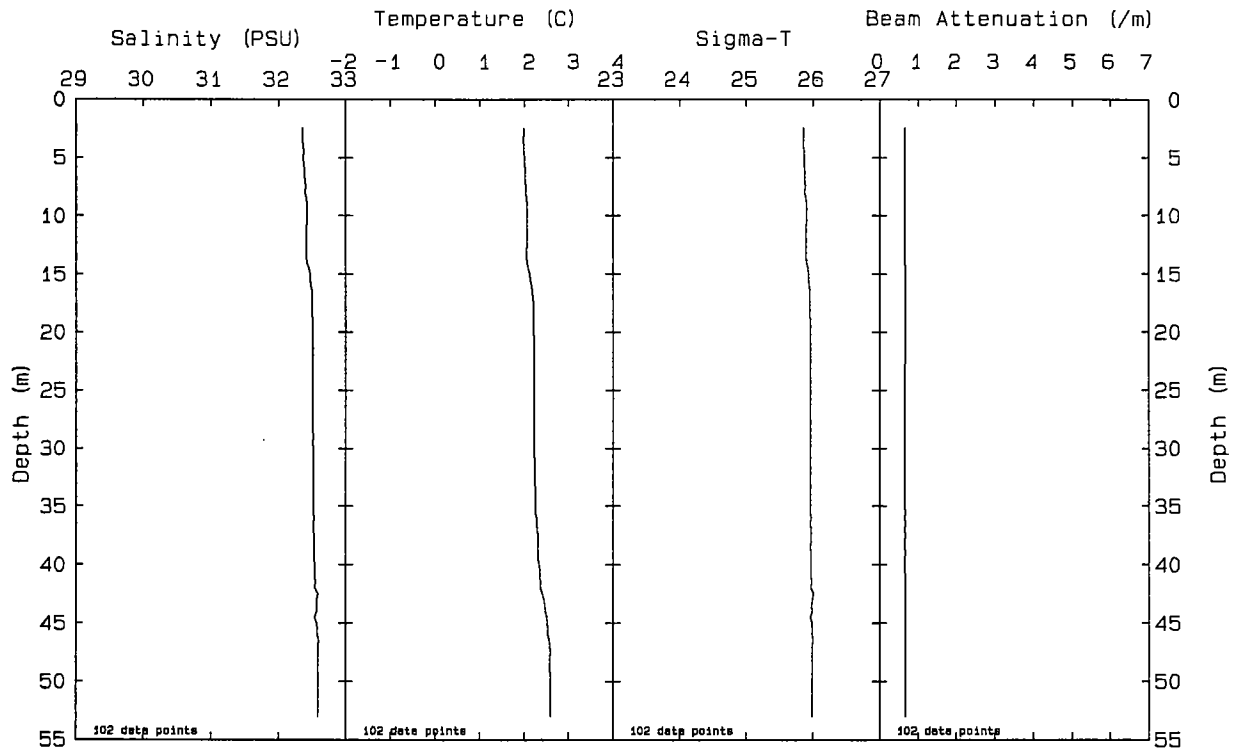


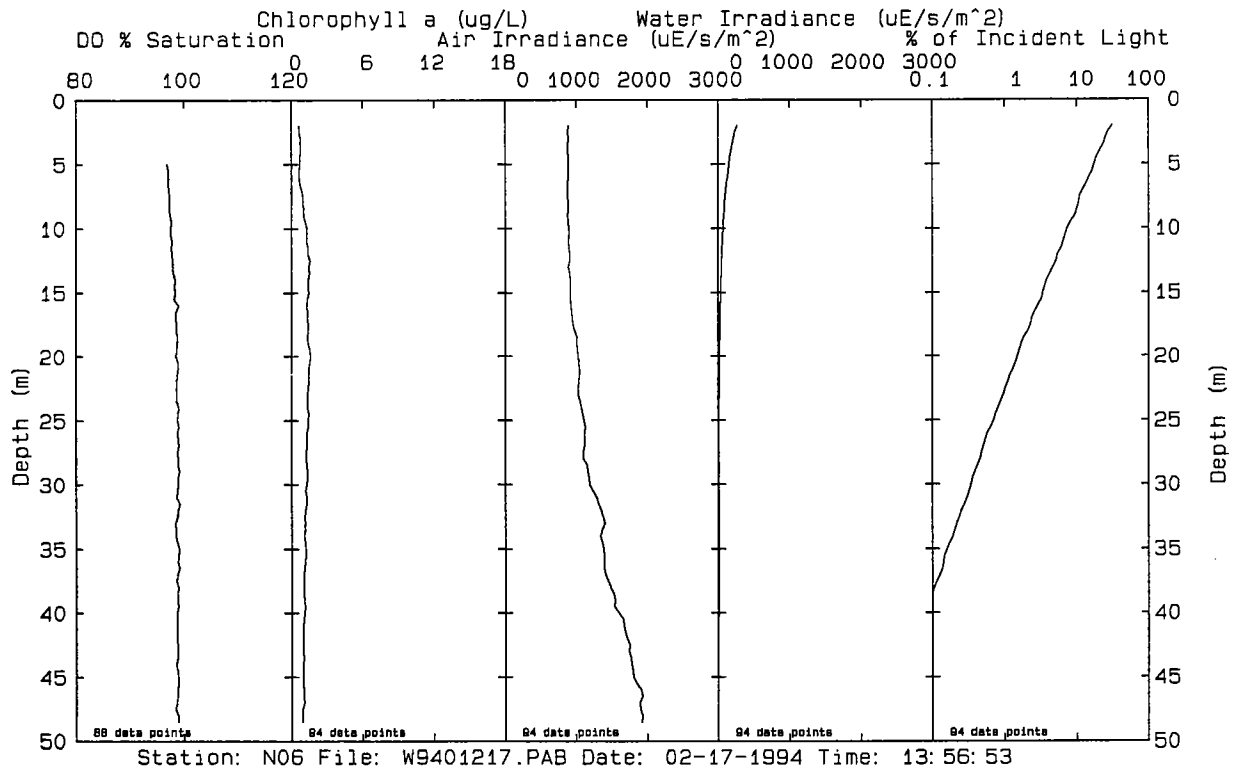
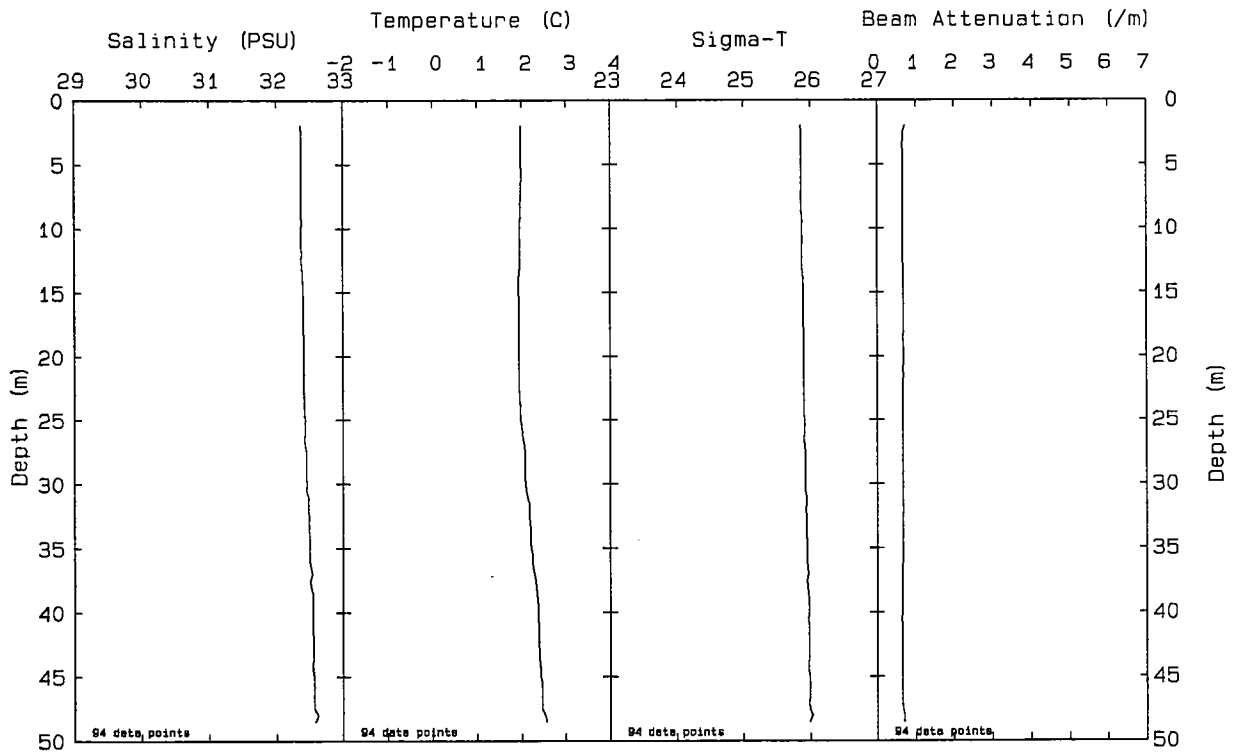


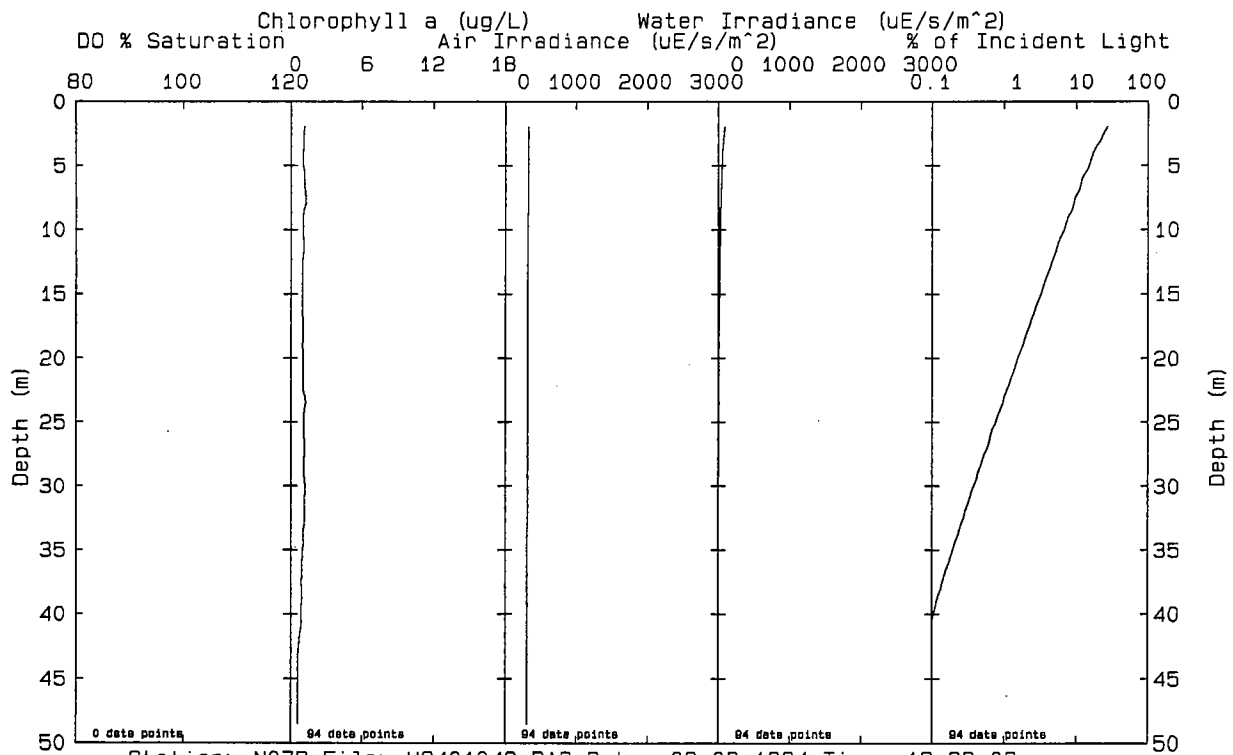
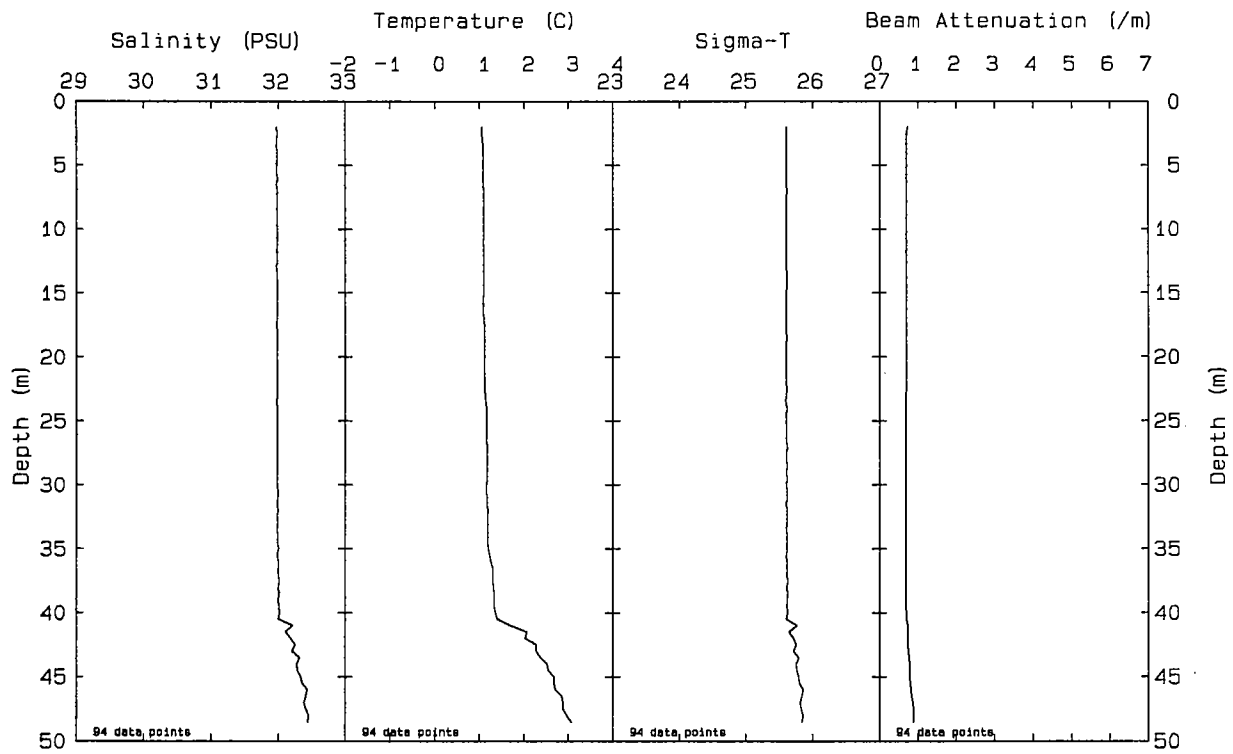


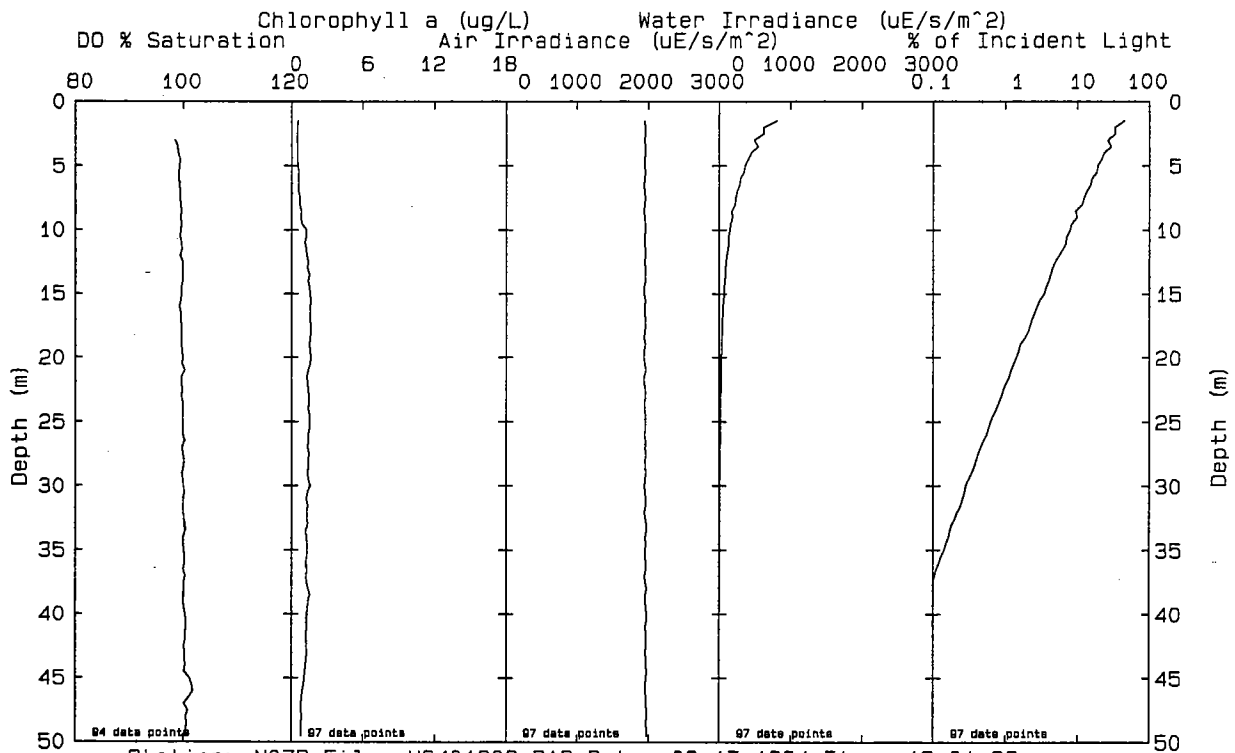
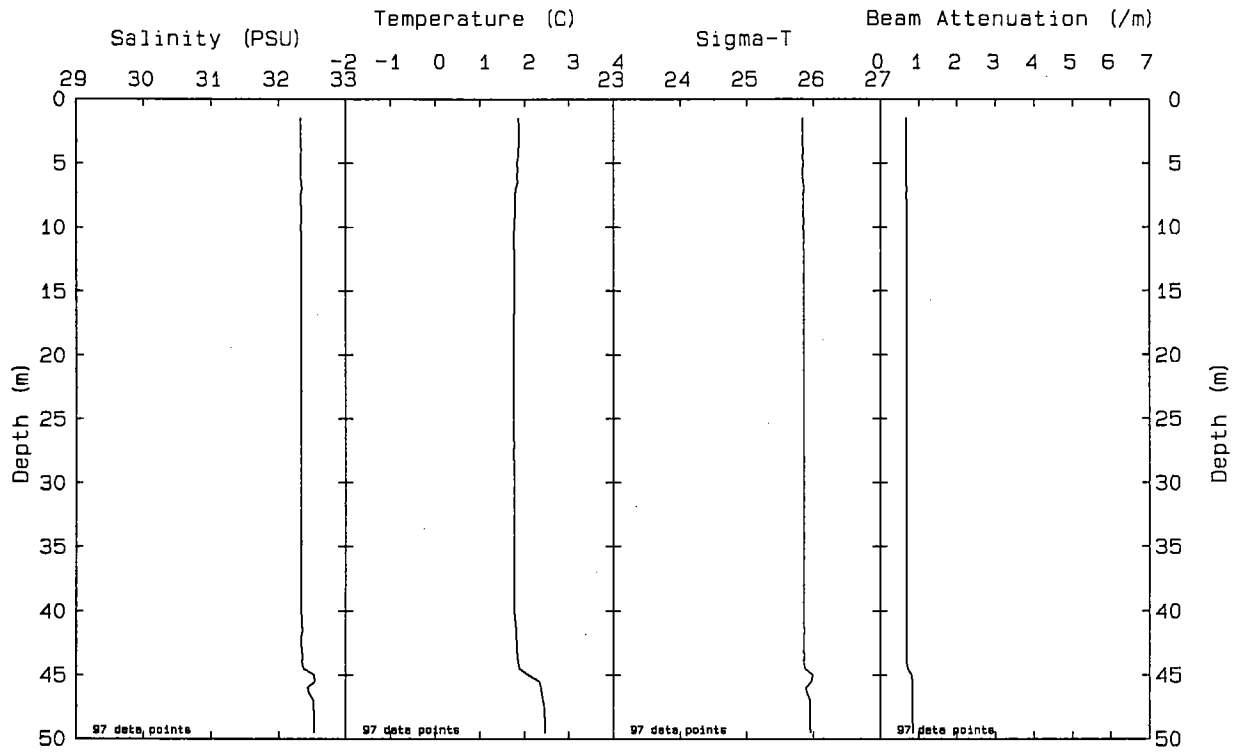






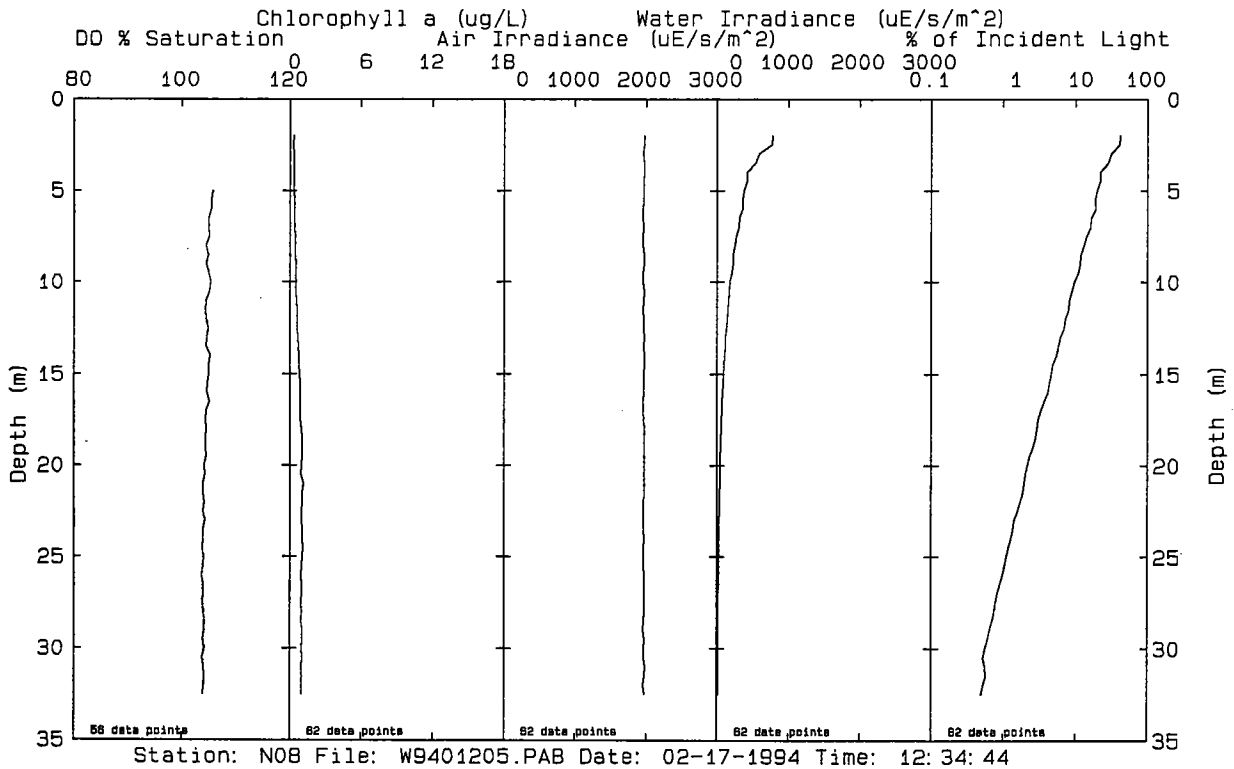
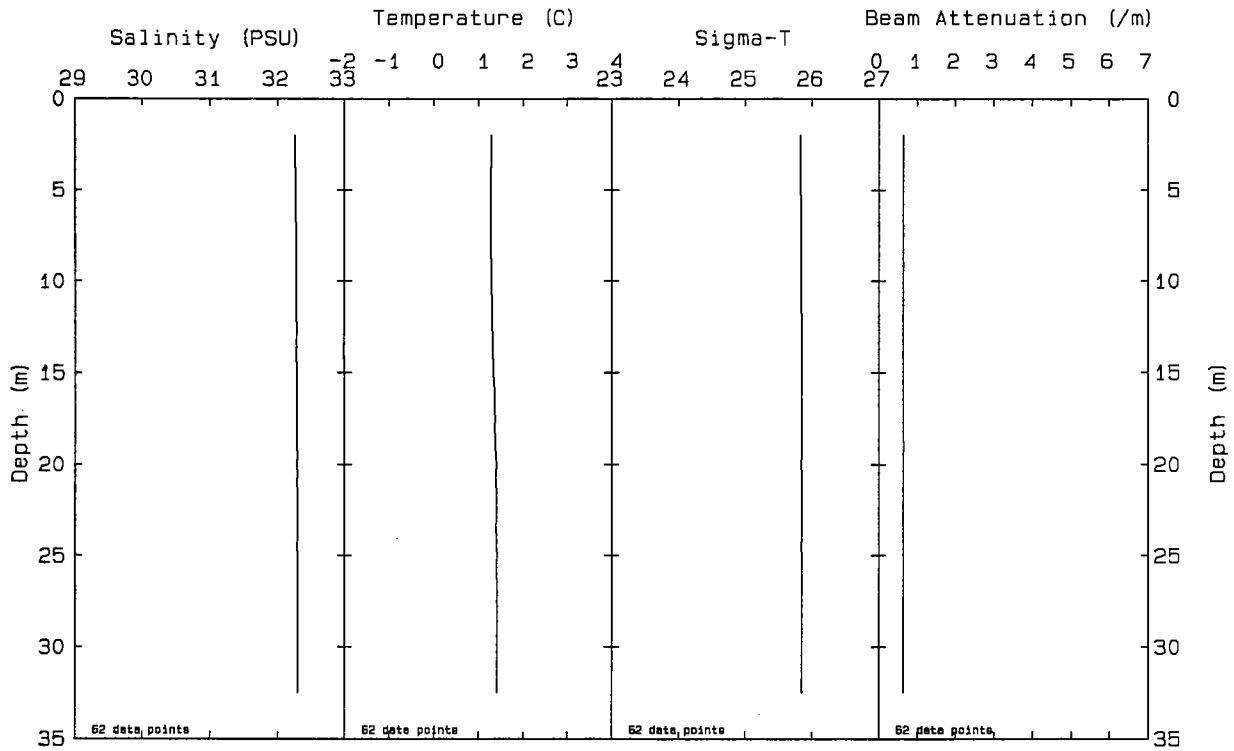


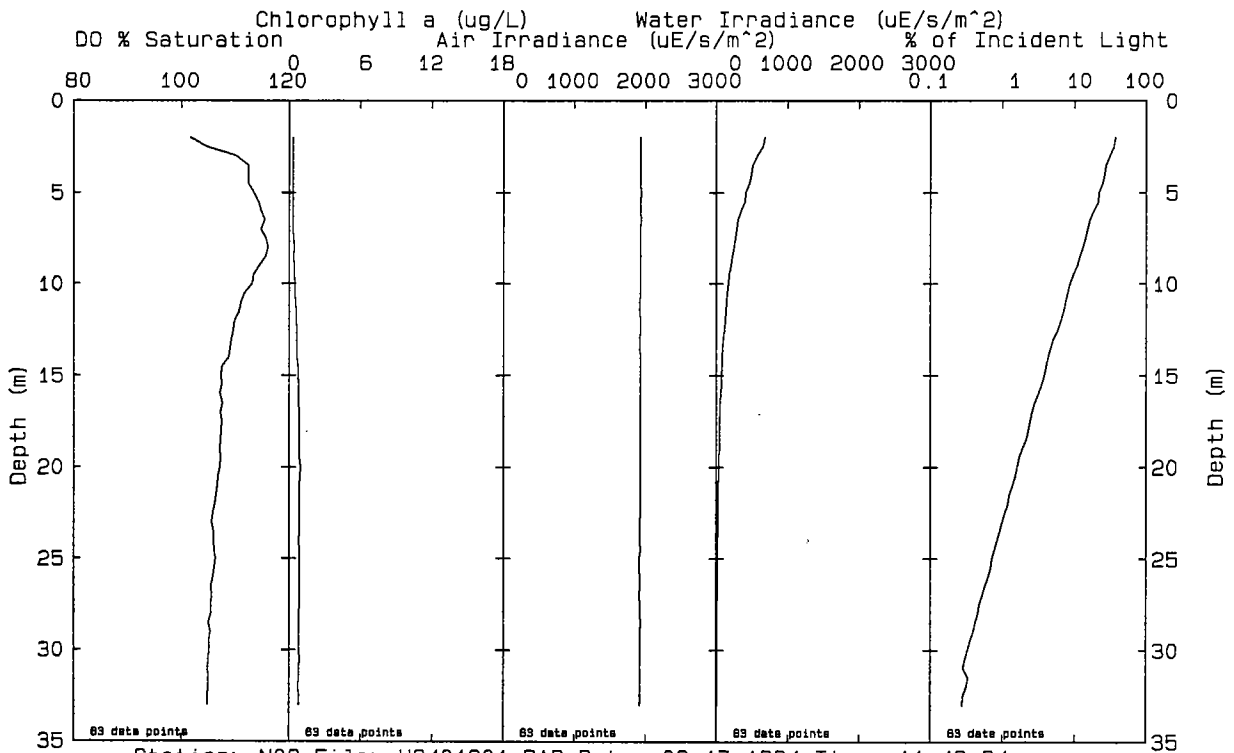
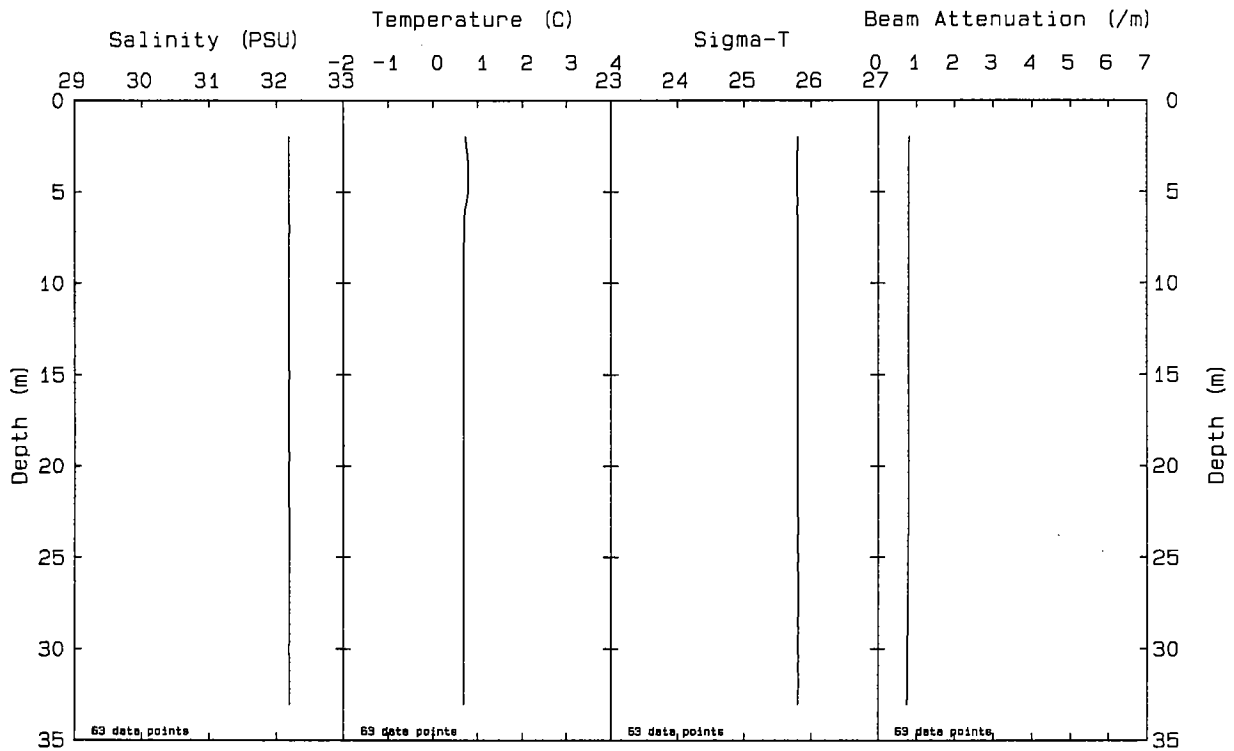




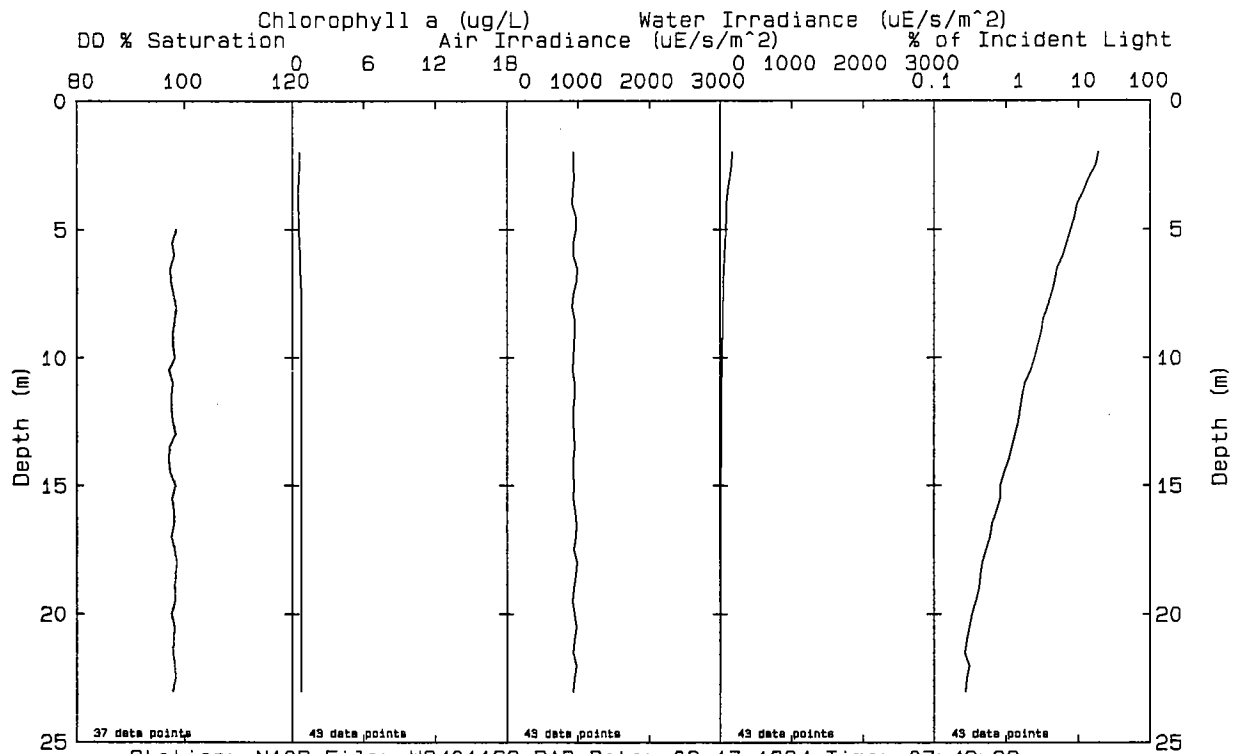
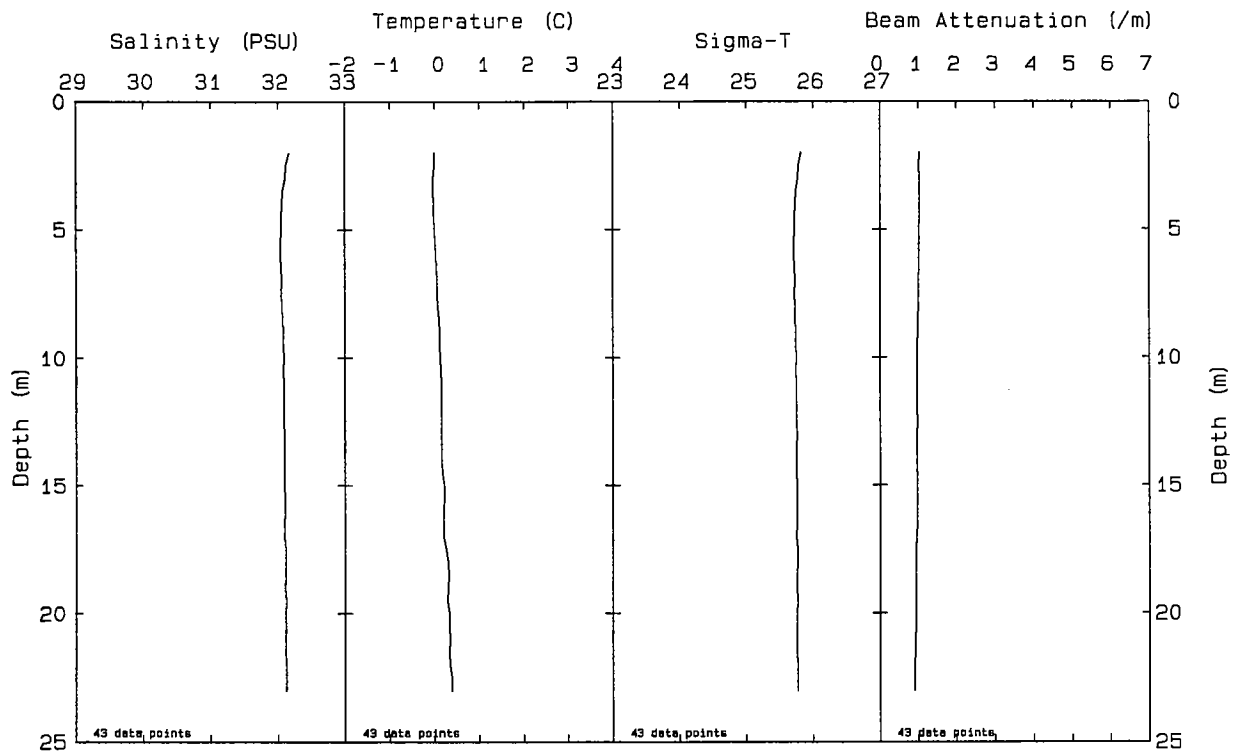
Station: N07P File: W9401209.PAB Date: 02-17-1994 Time: 13: 01: 38



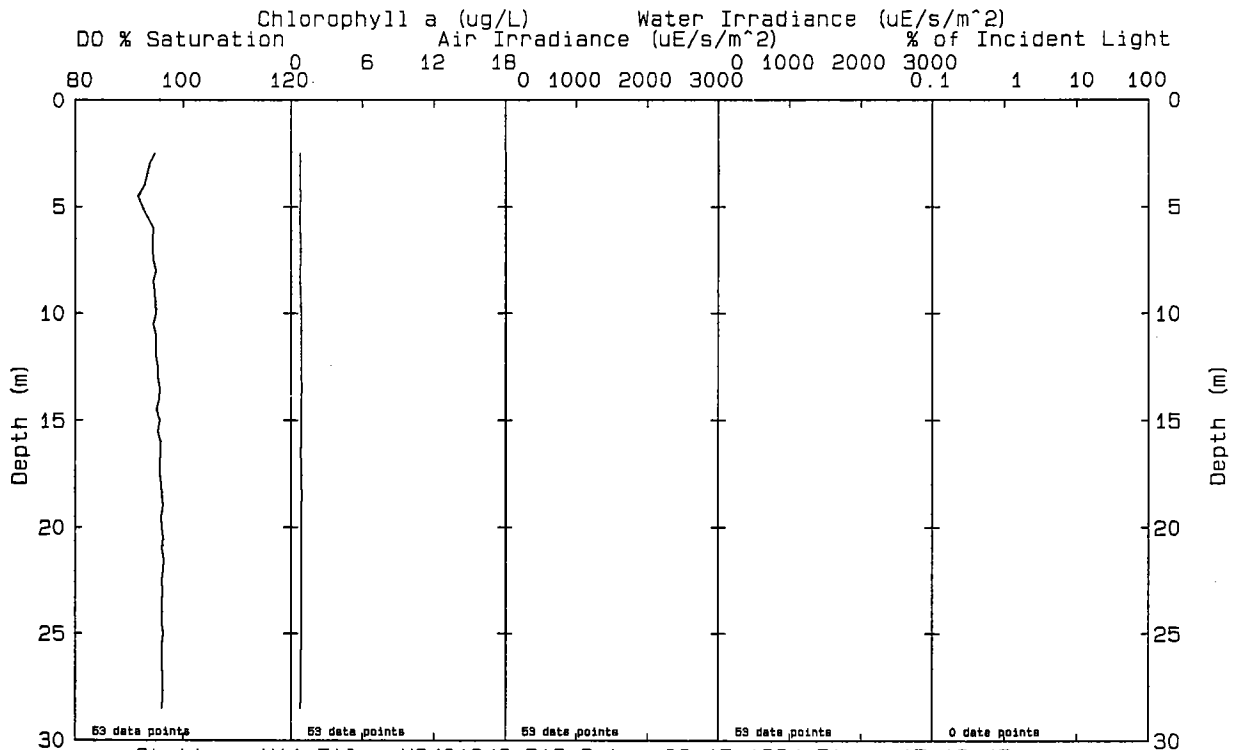
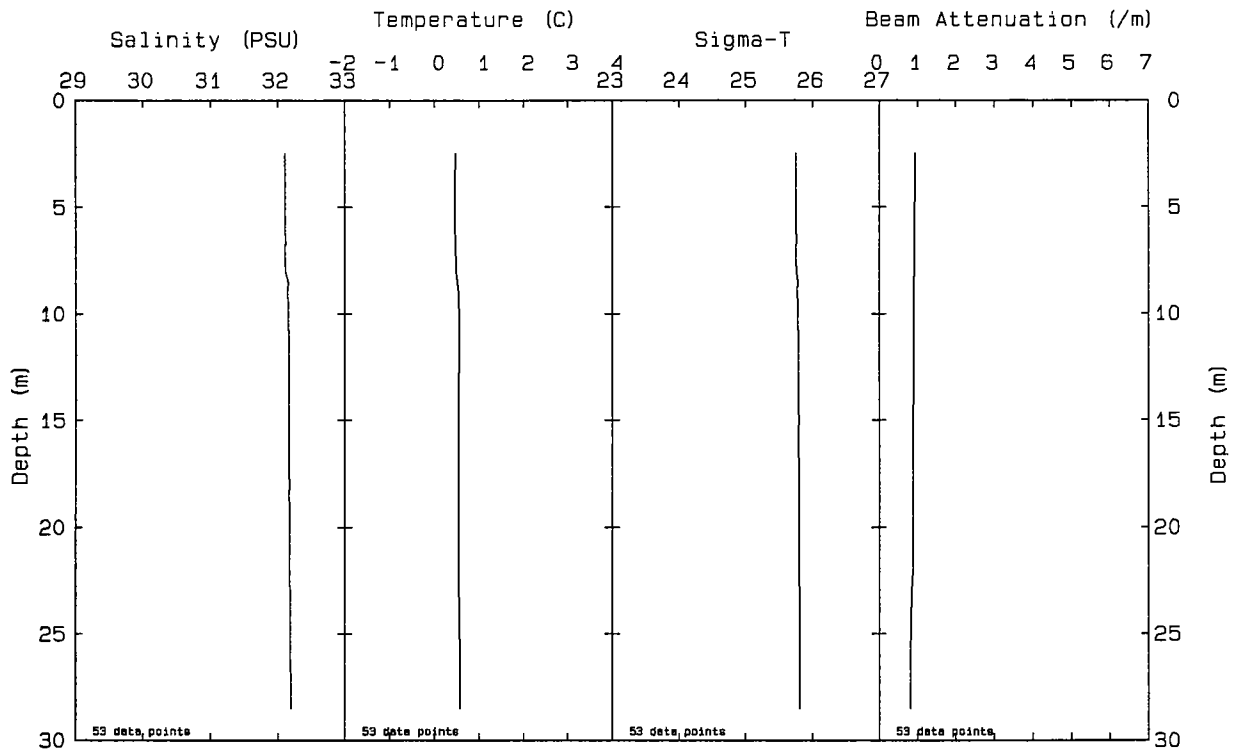




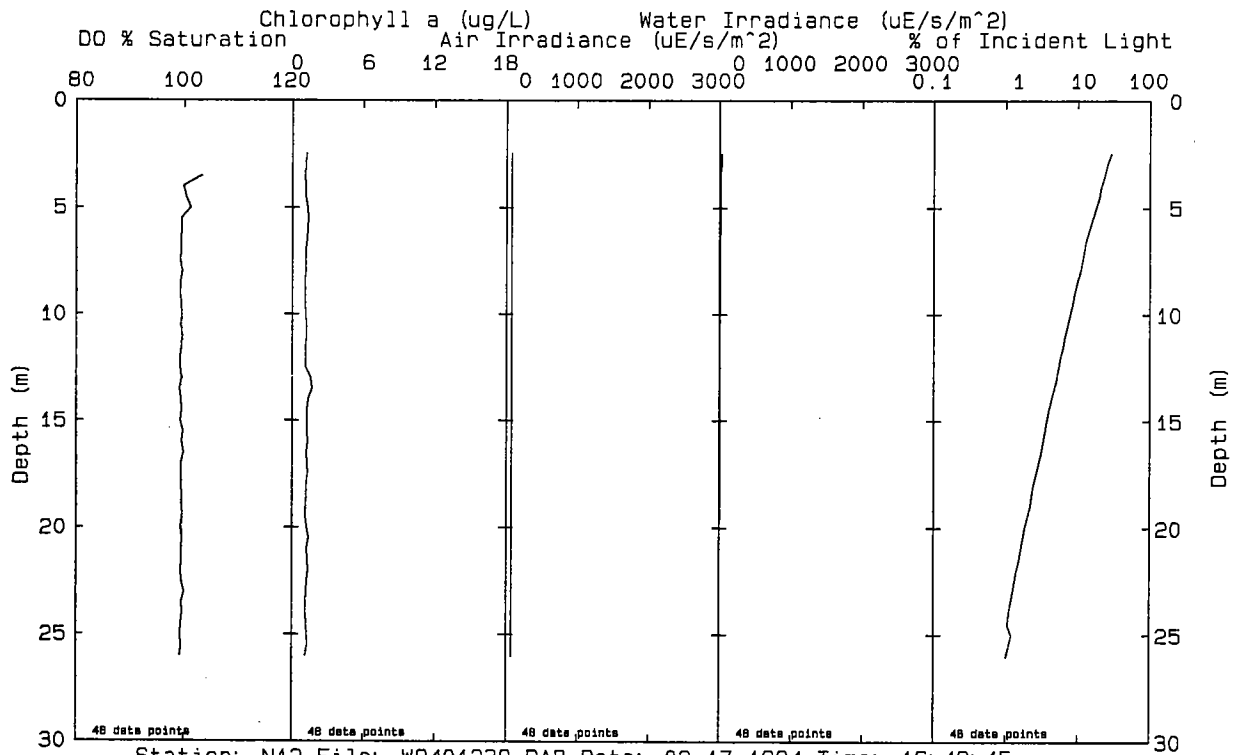
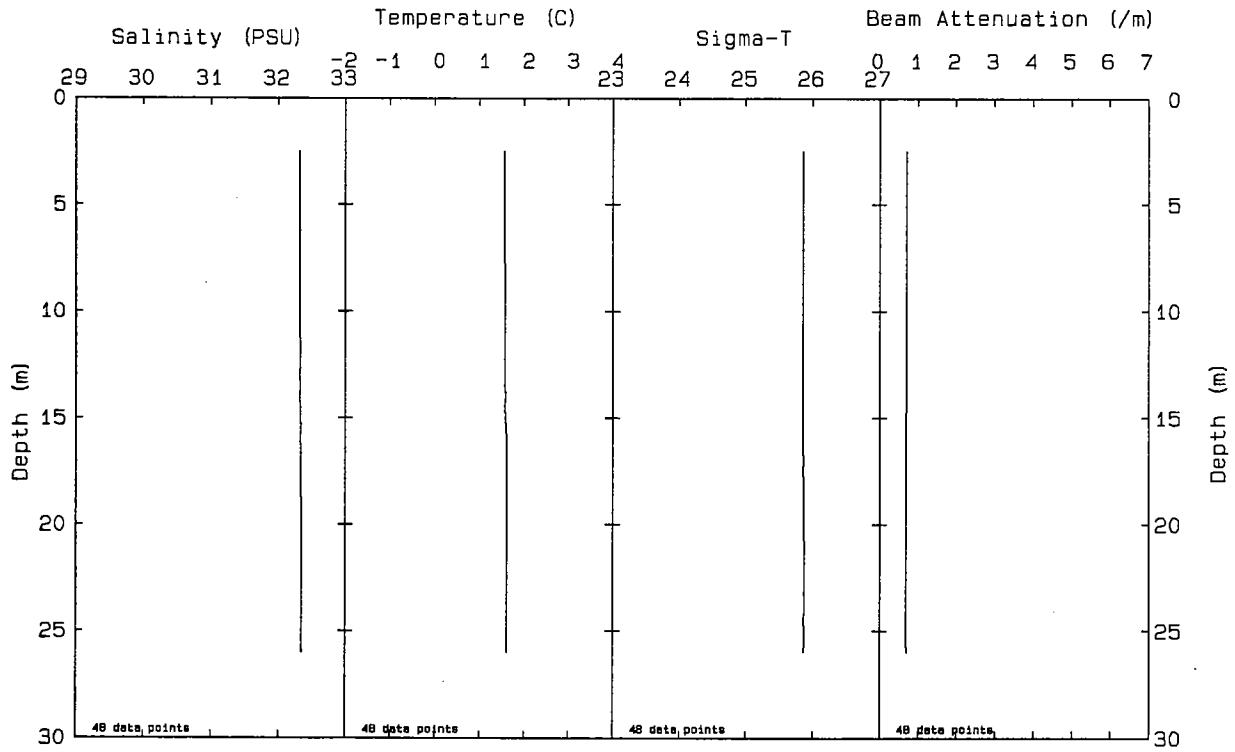
Station: N09 File: W9401201.PAB Date: 02-17-1994 Time: 11: 48: 34

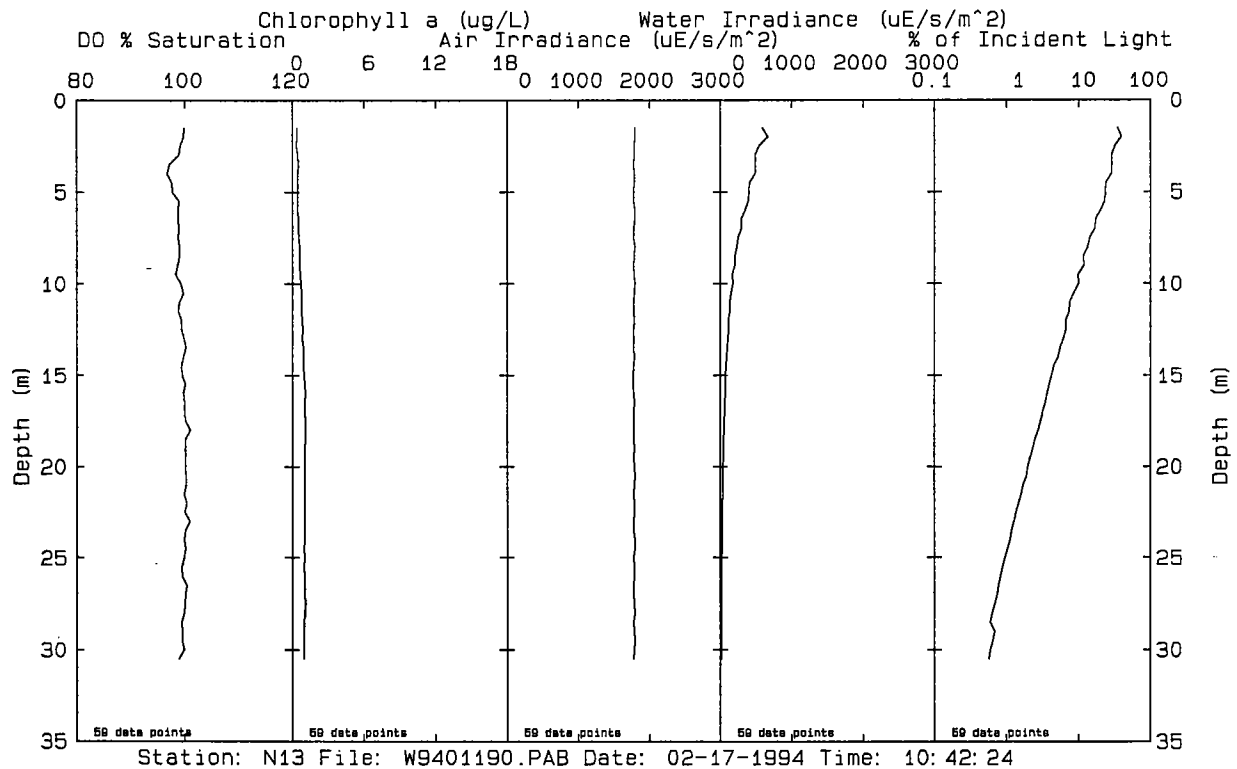
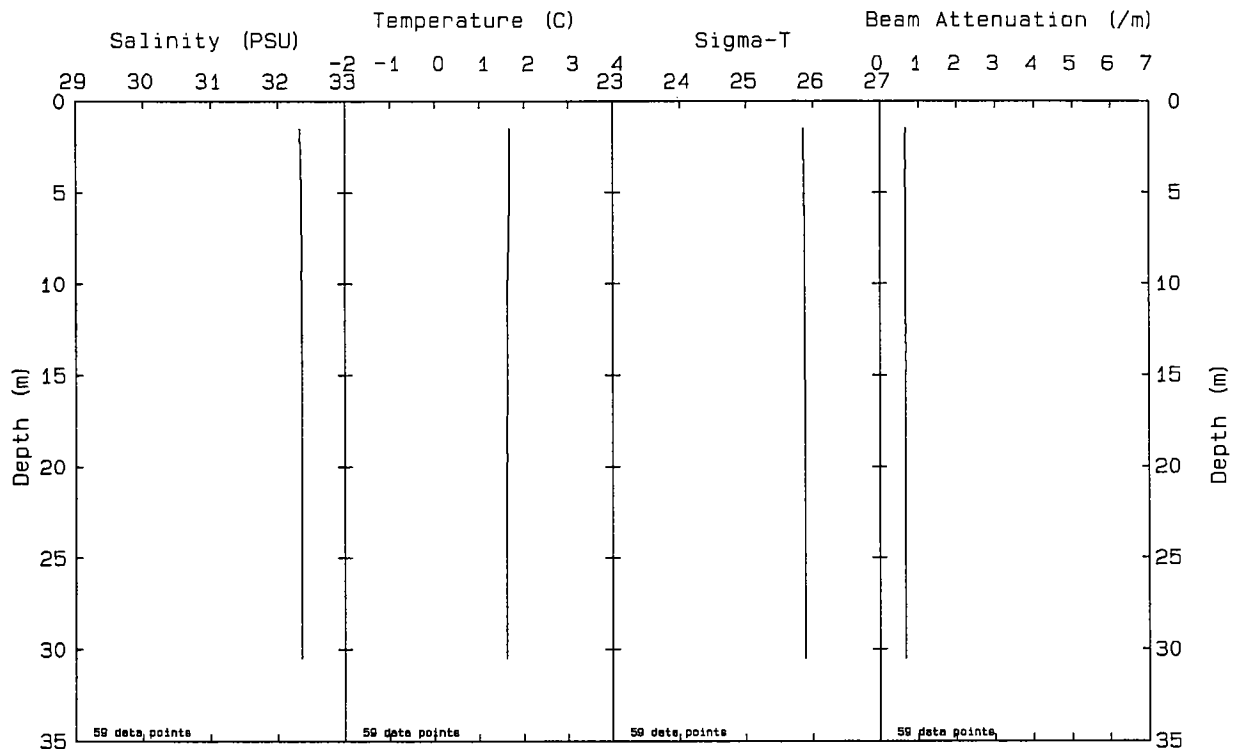


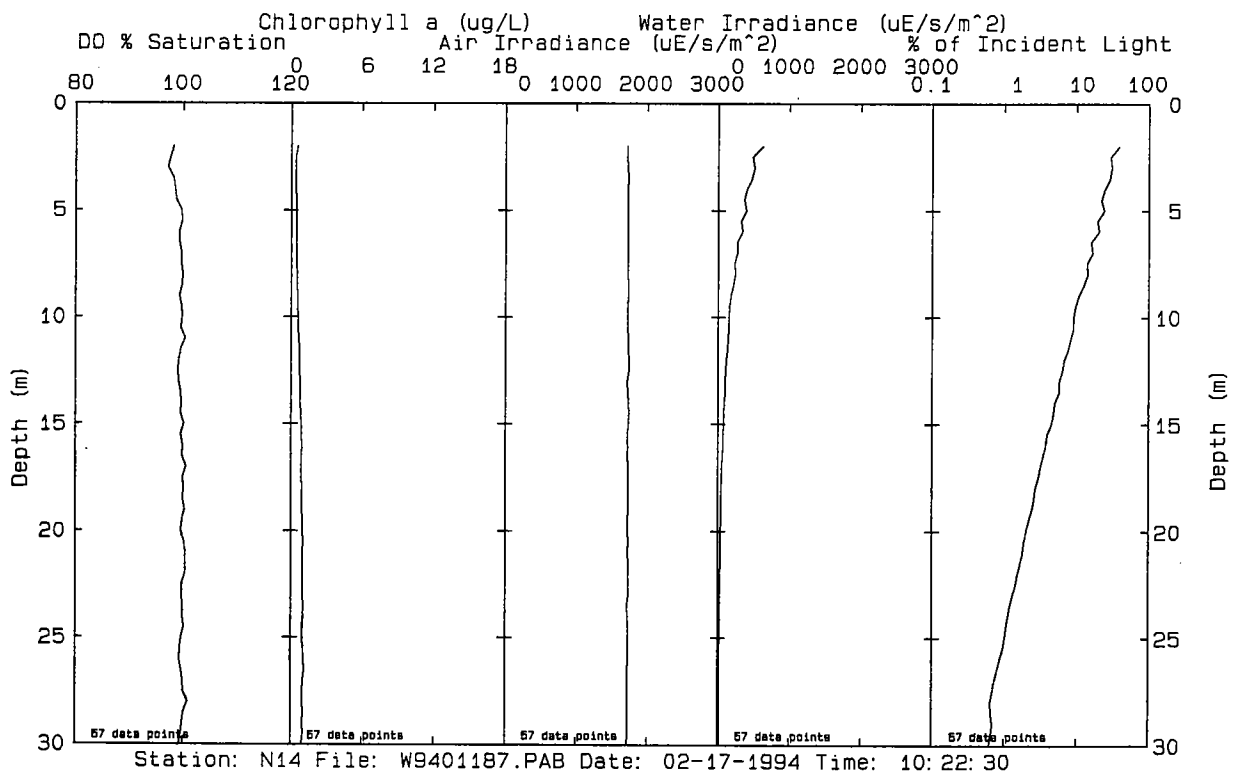
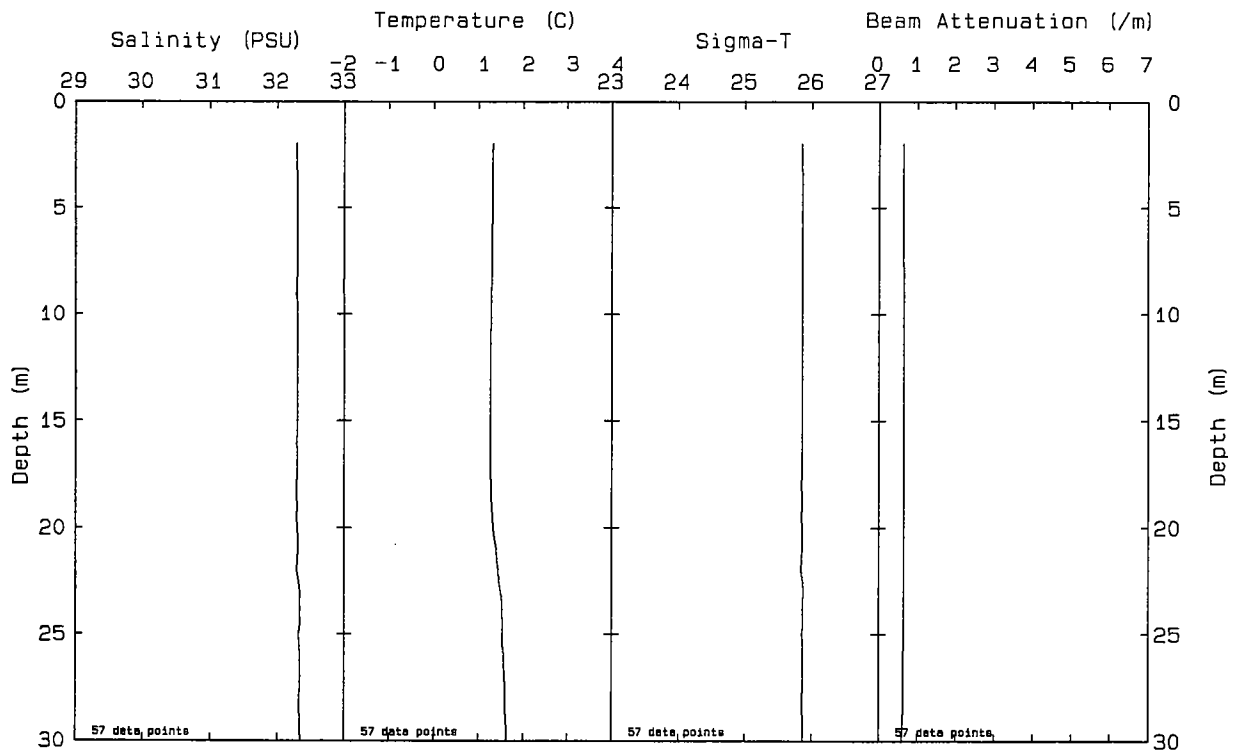
Station: N10P File: W9401168.PAB Date: 02-17-1994 Time: 07: 49: 22

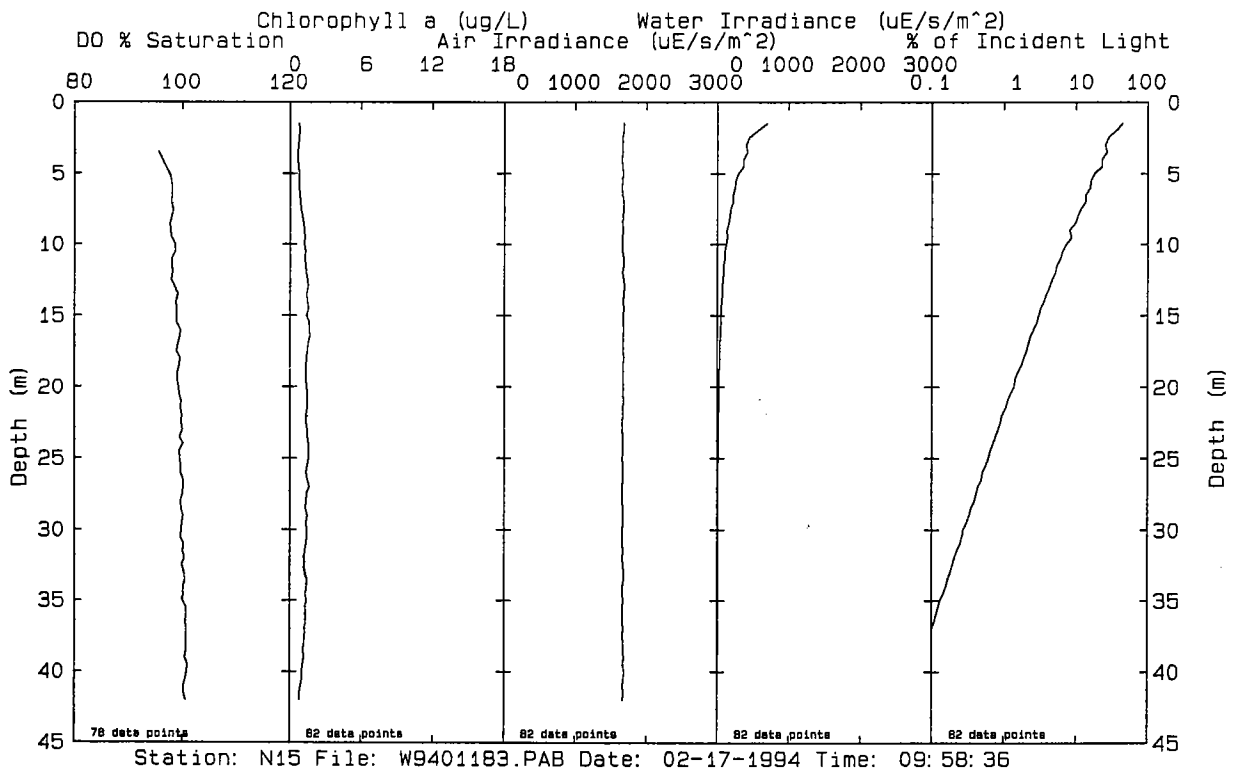
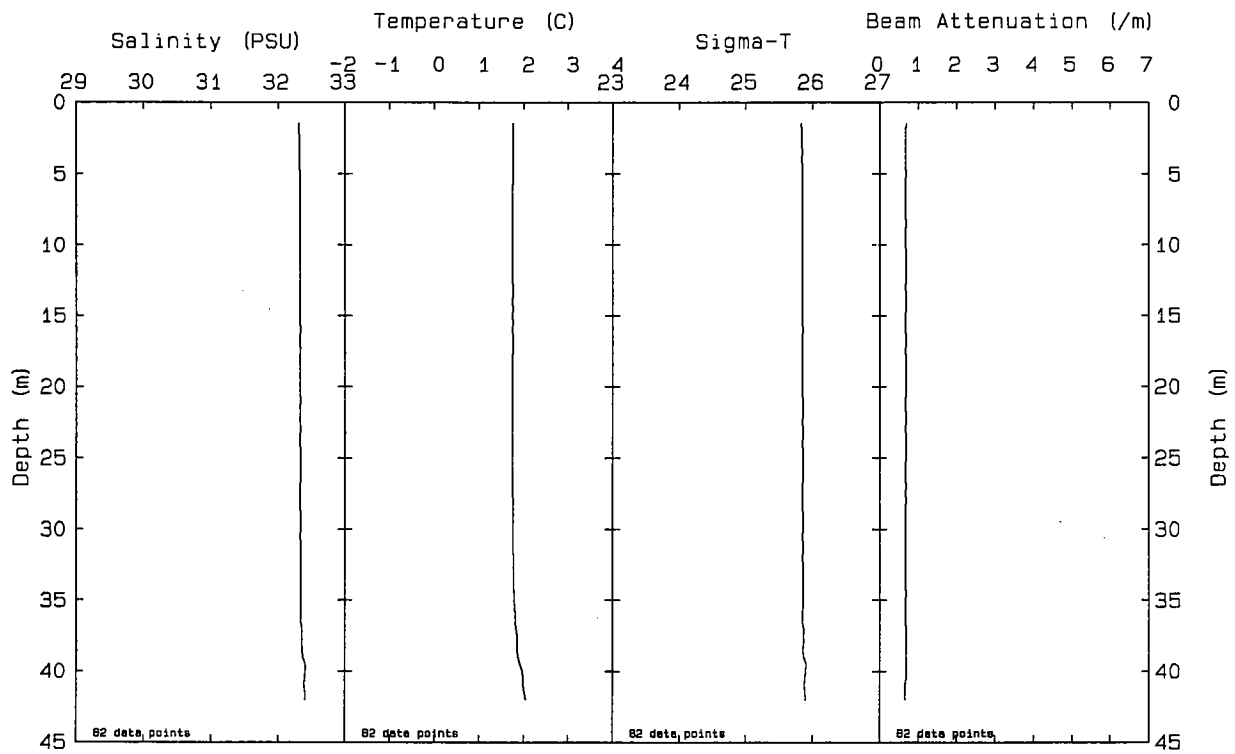


Station: N11 File: W9401242.PAB Date: 02-17-1994 Time: 17: 12: 45



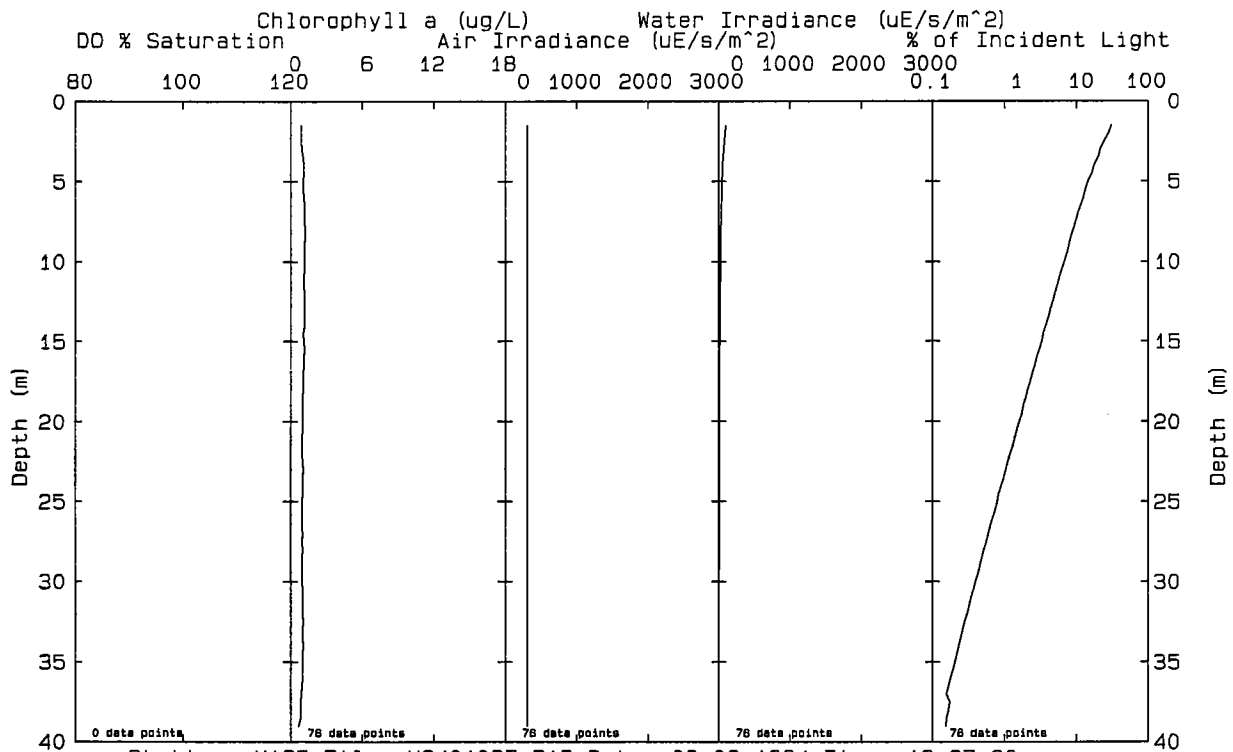
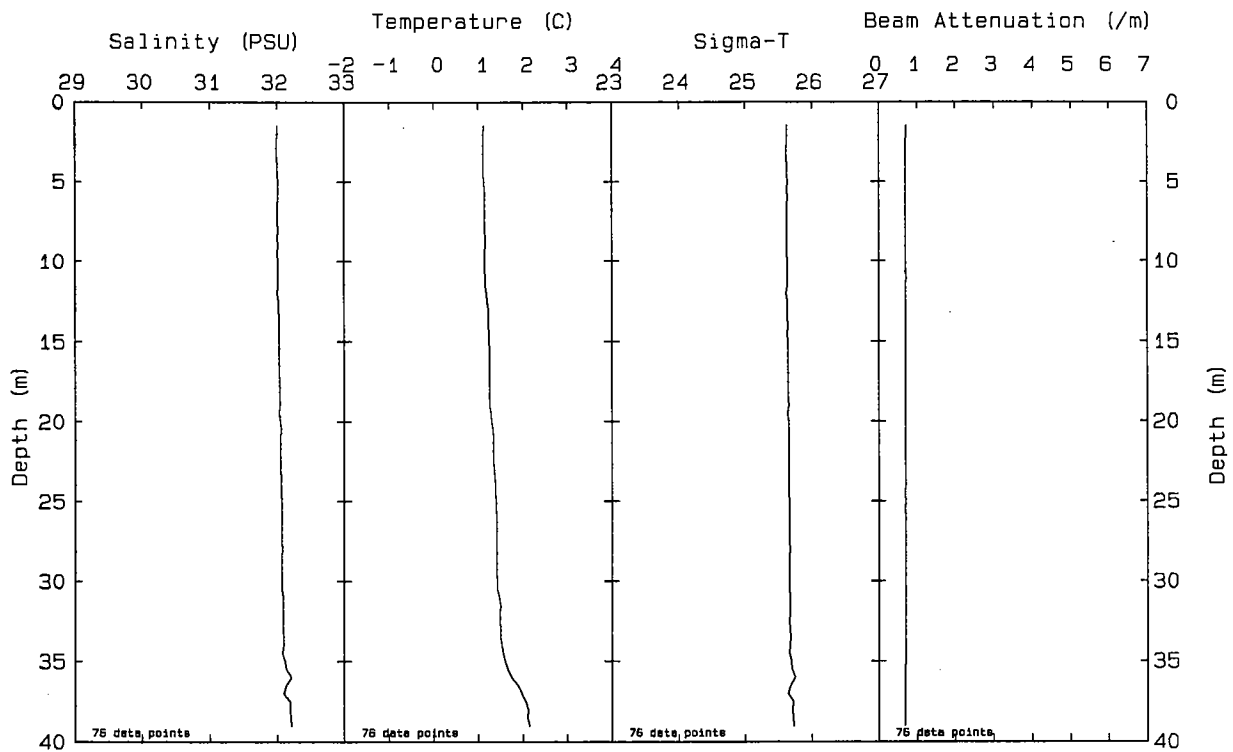




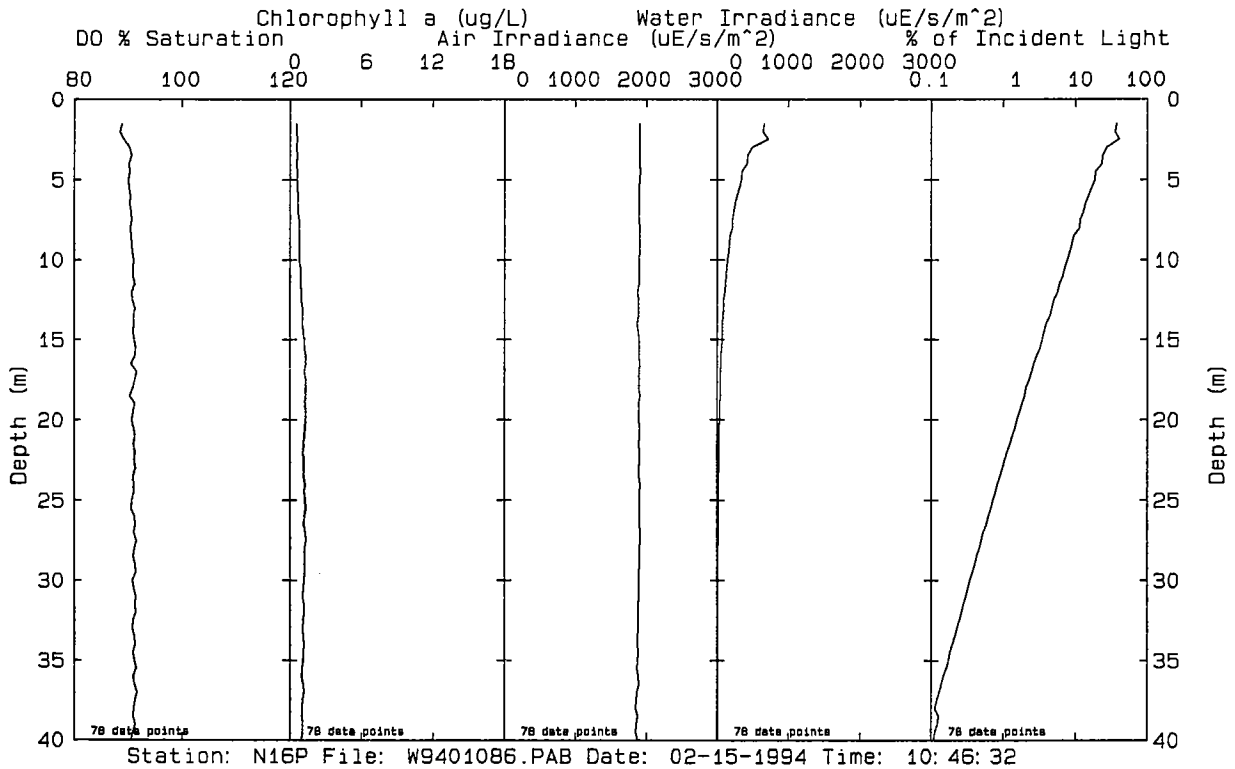
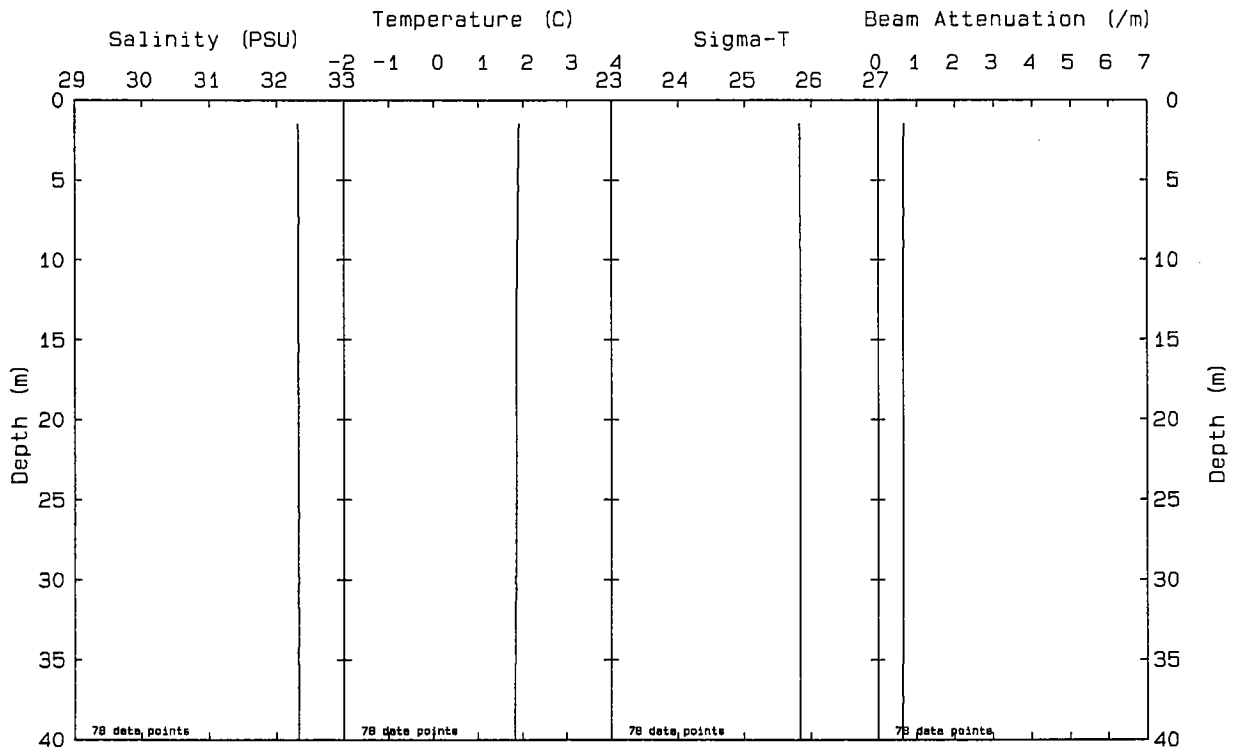


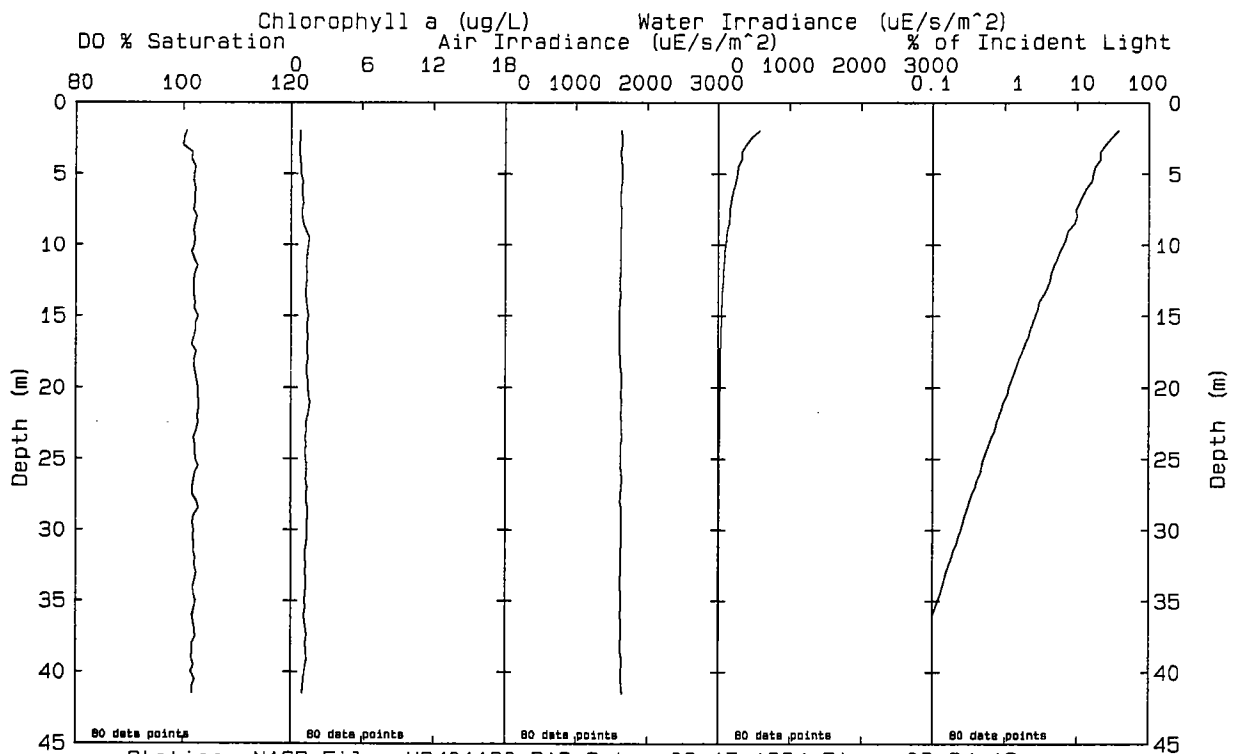
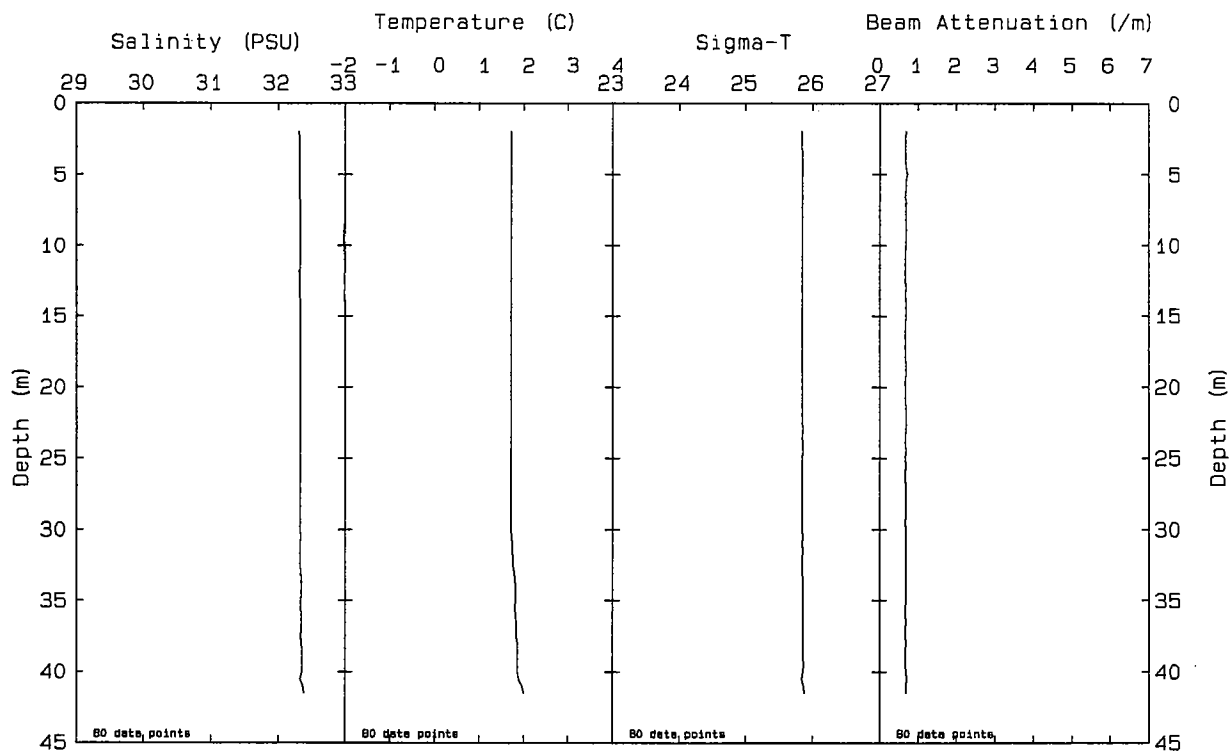
Station: N15 File: W9401183.PAB Date: 02-17-1994 Time: 09: 58: 36



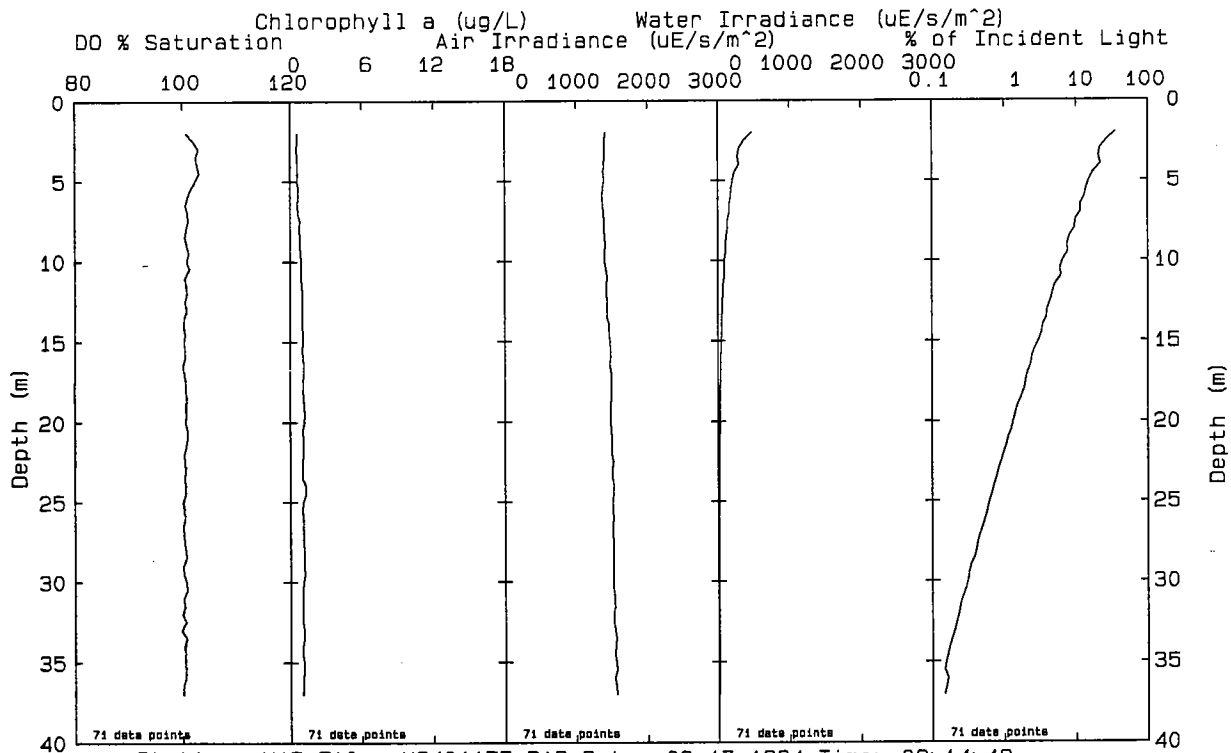
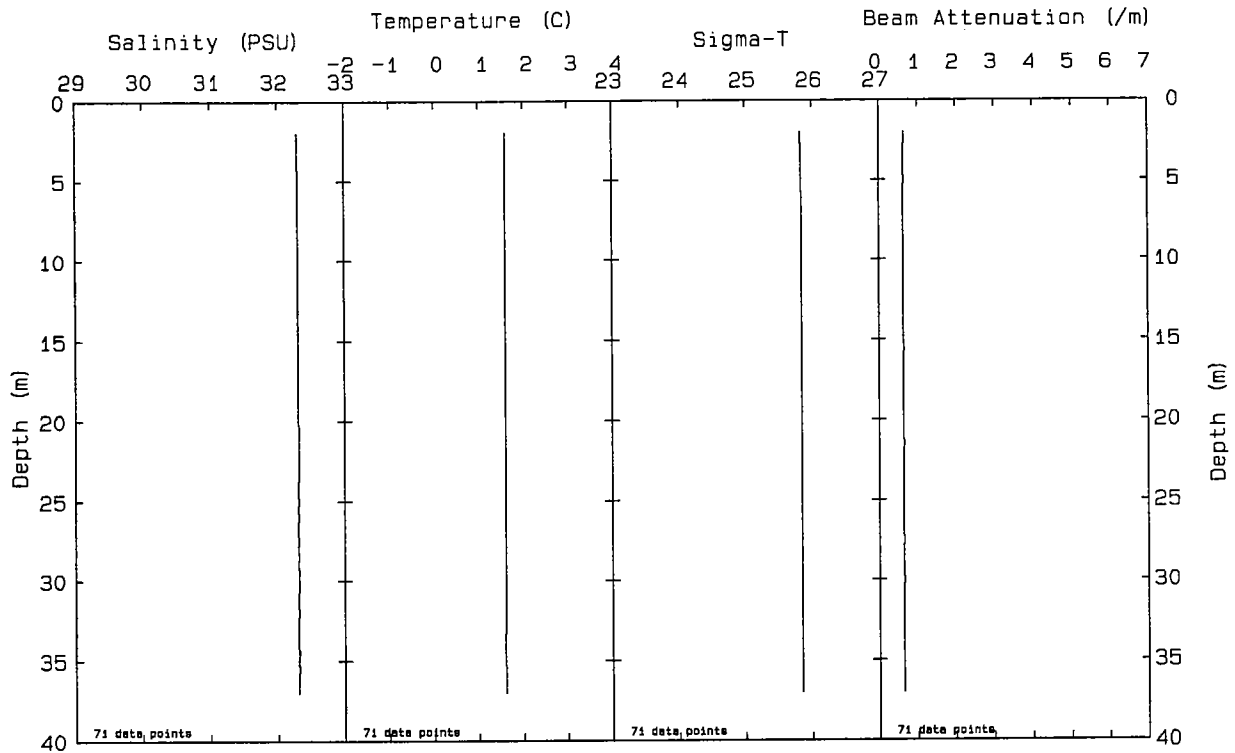


Station: N16P File: W9401037.PAB Date: 02-08-1994 Time: 12: 27: 20

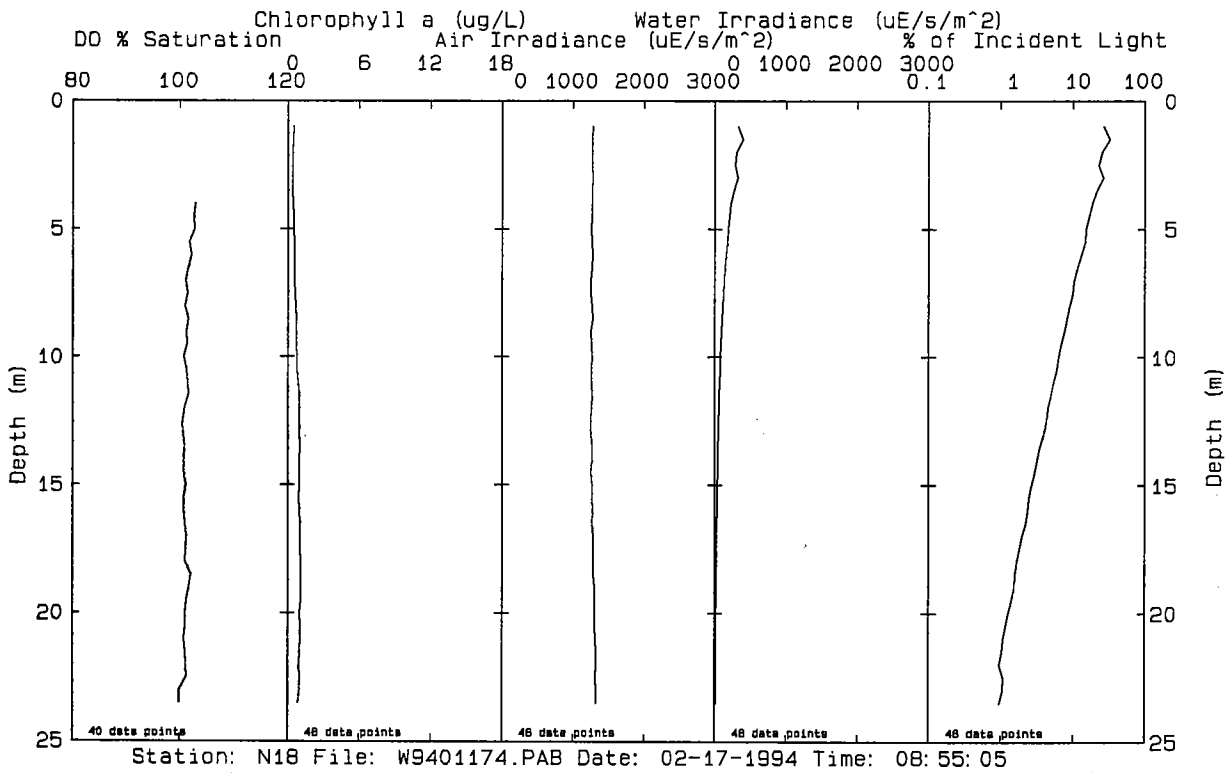
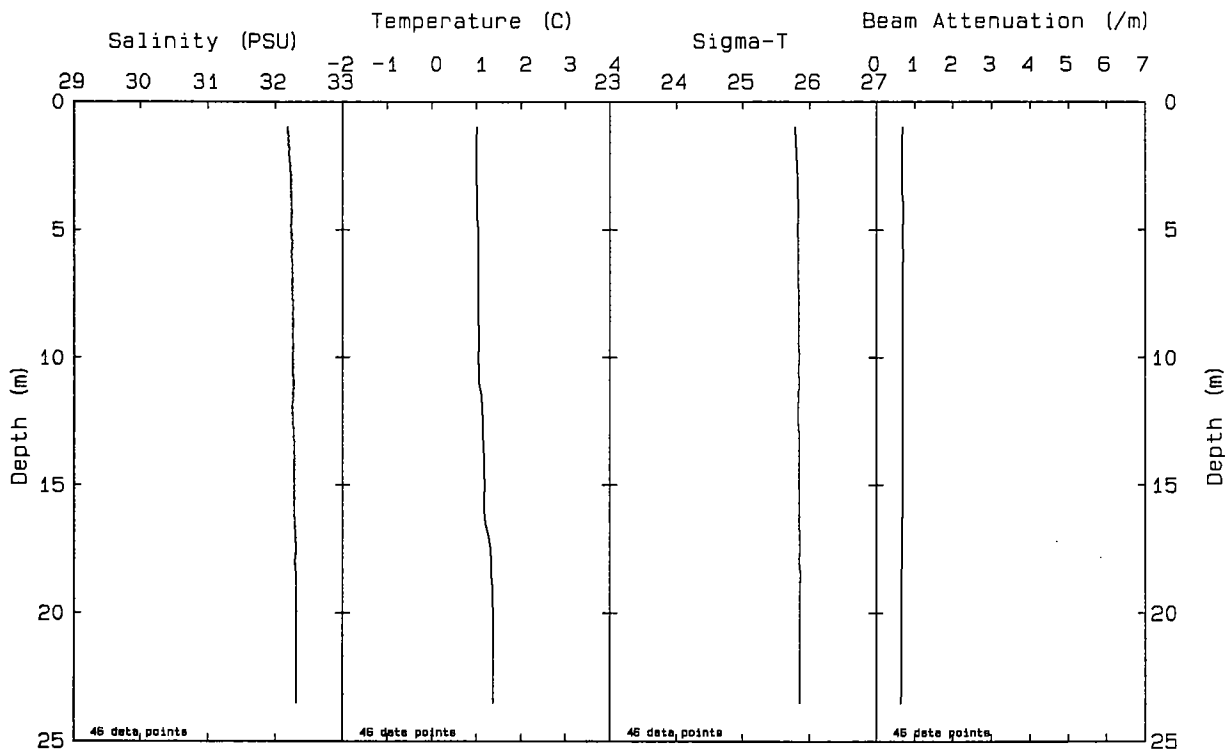


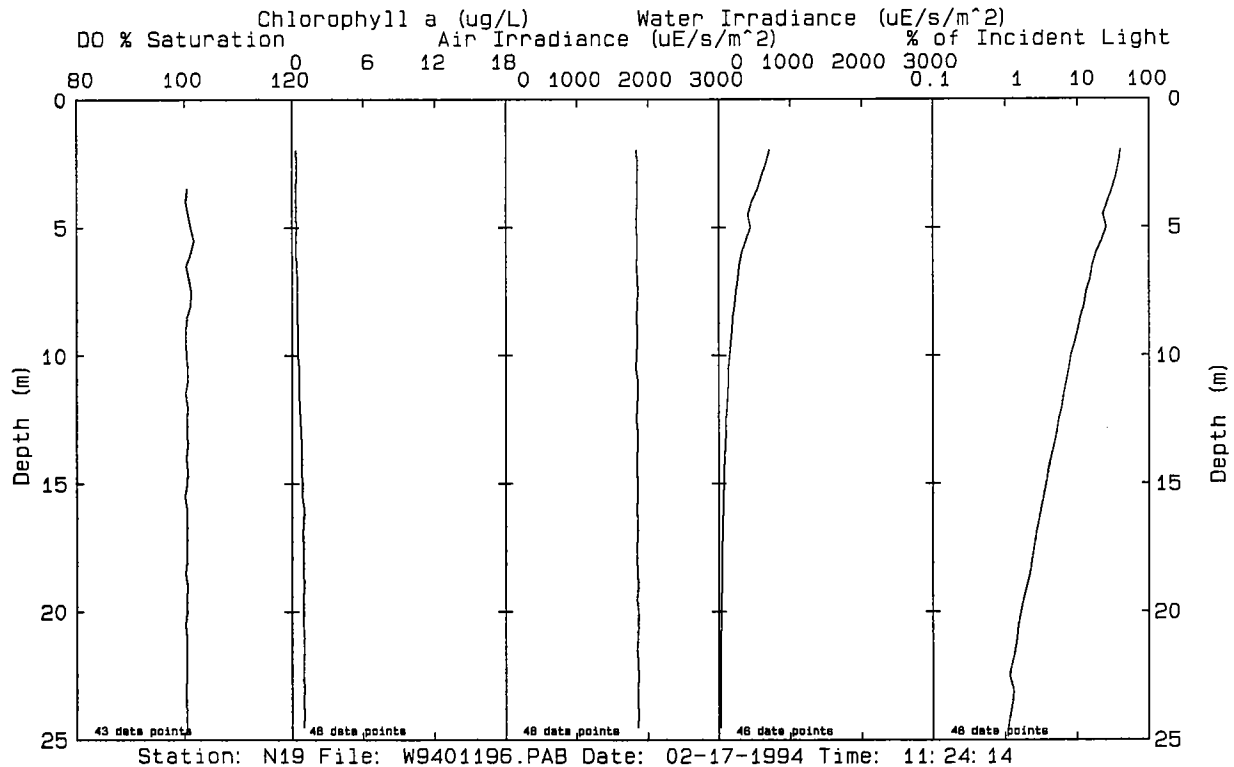
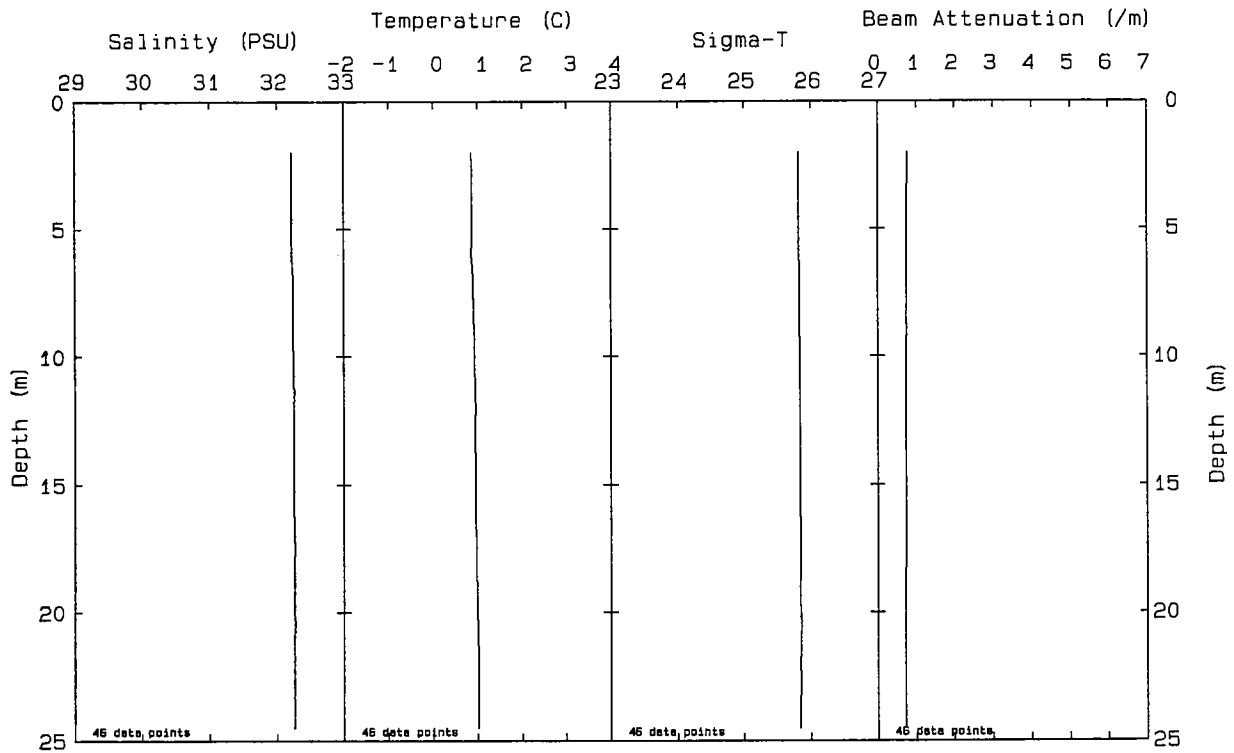


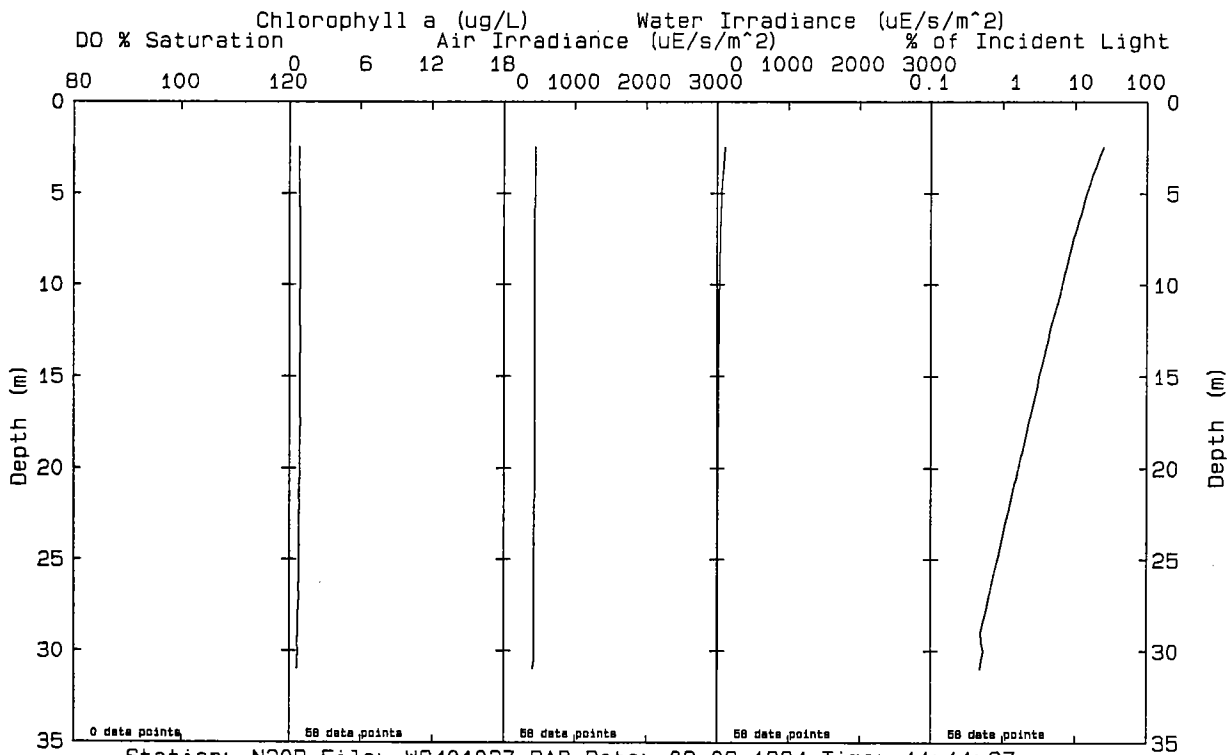
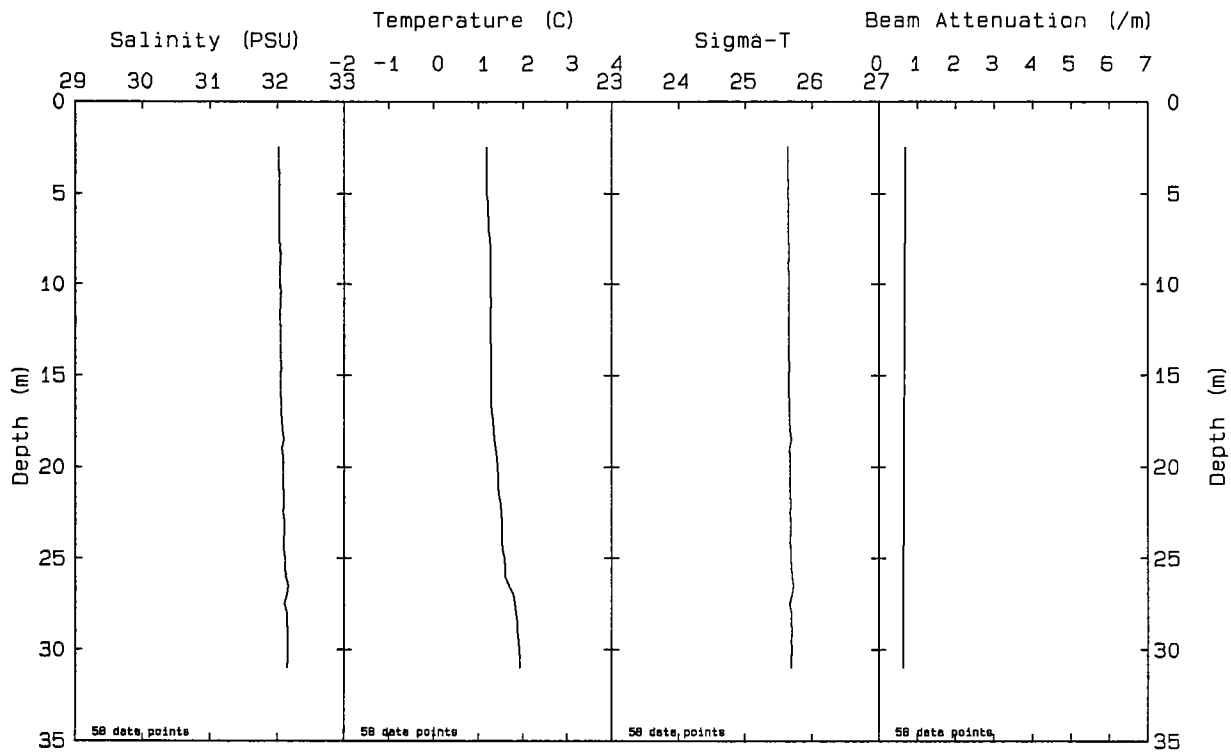
Station: N16P File: W9401180.PAB Date: 02-17-1994 Time: 09: 34: 16



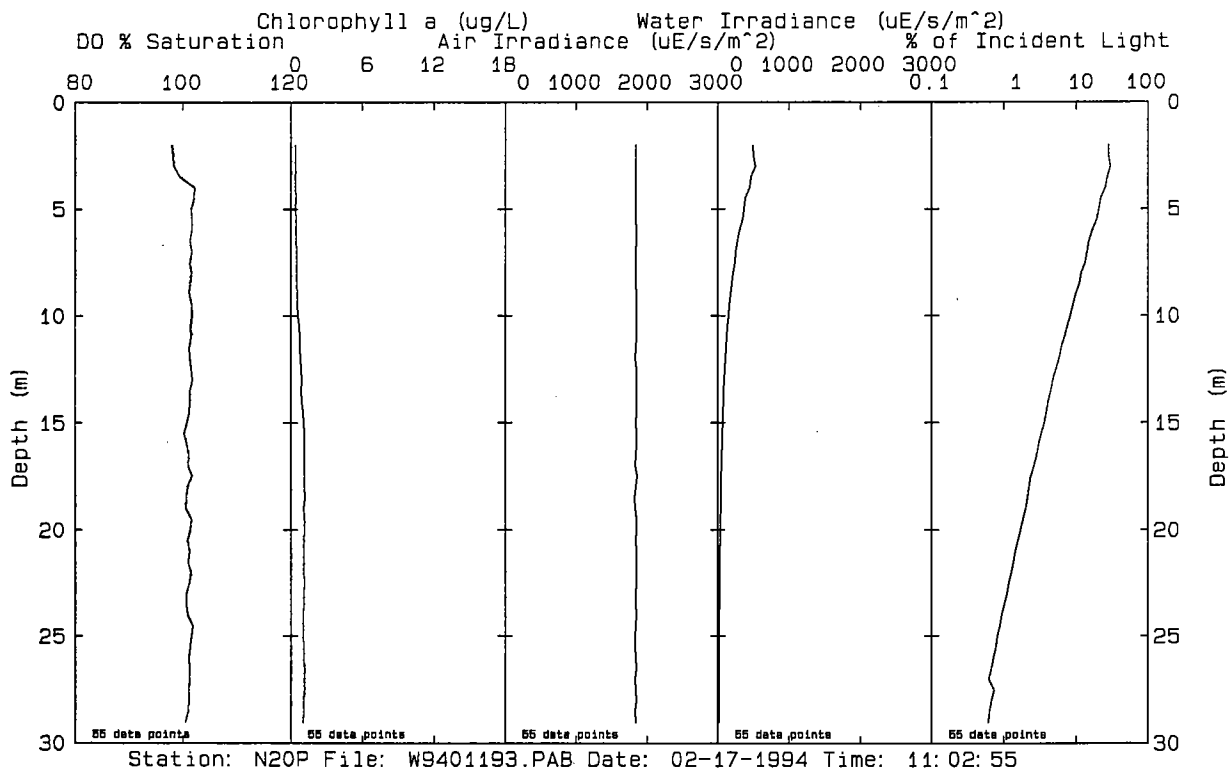
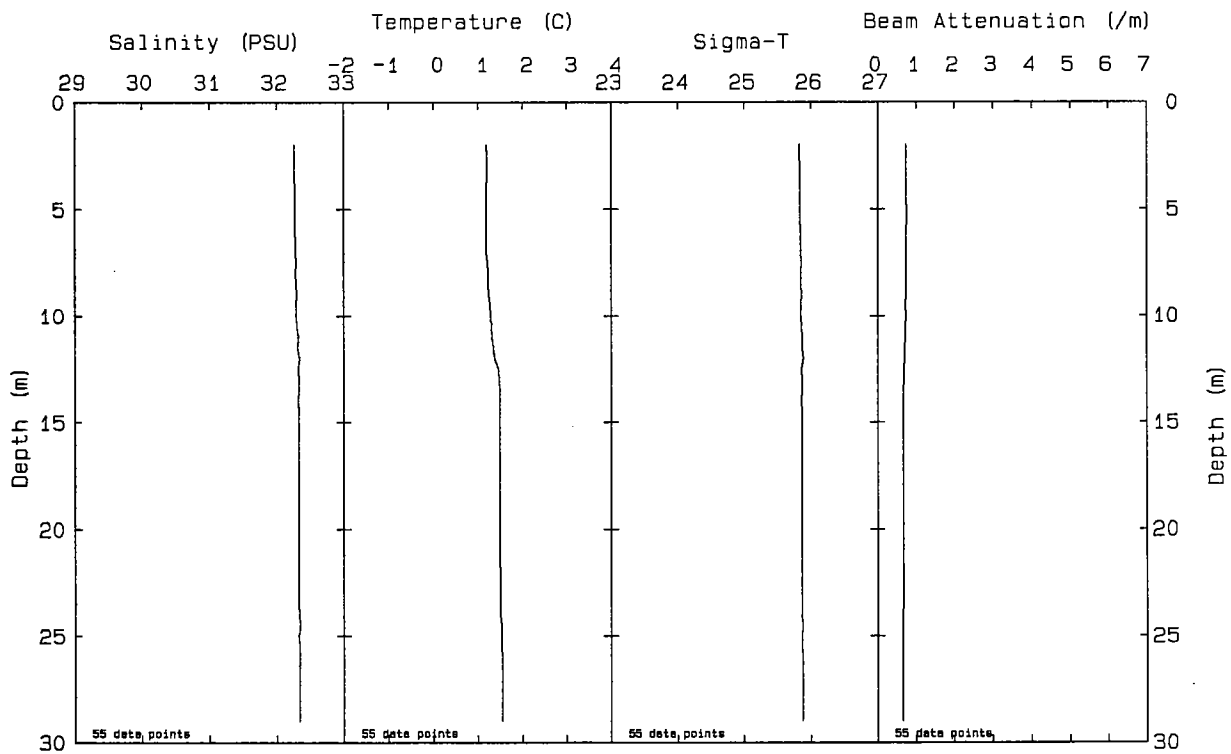
Station: N17 File: W9401177.PAB Date: 02-17-1994 Time: 09:14:49



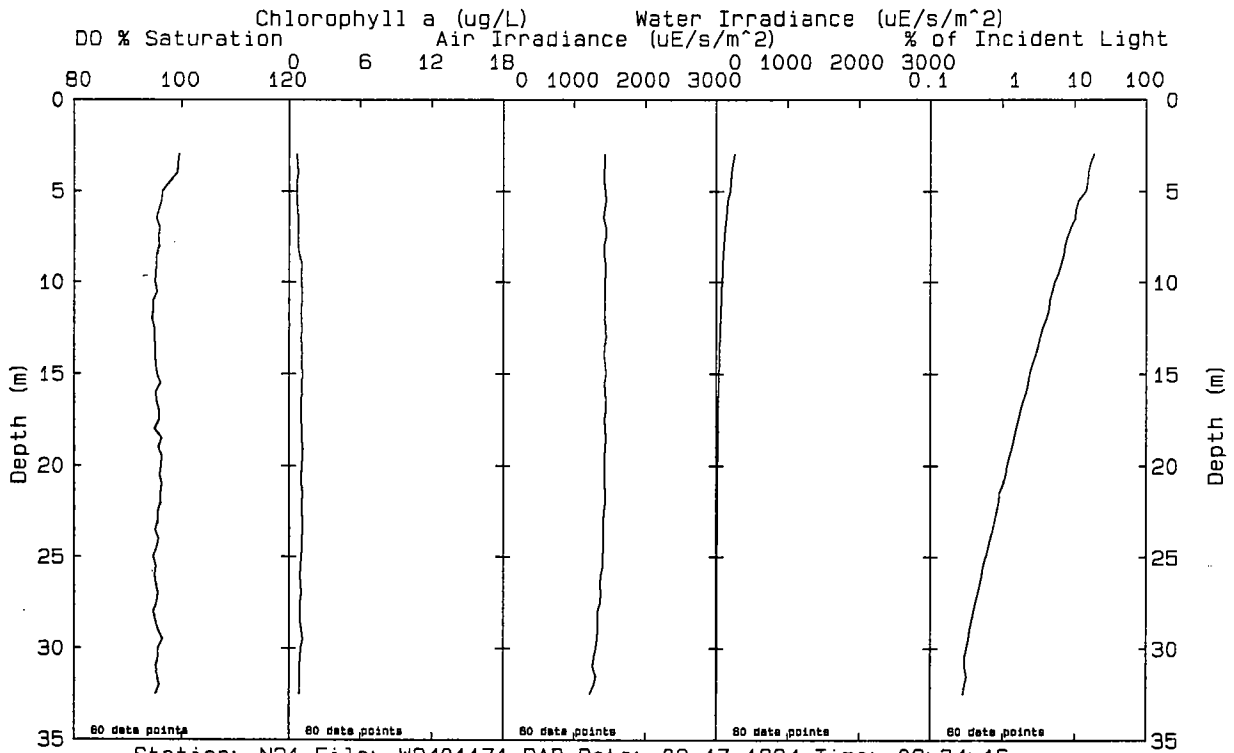
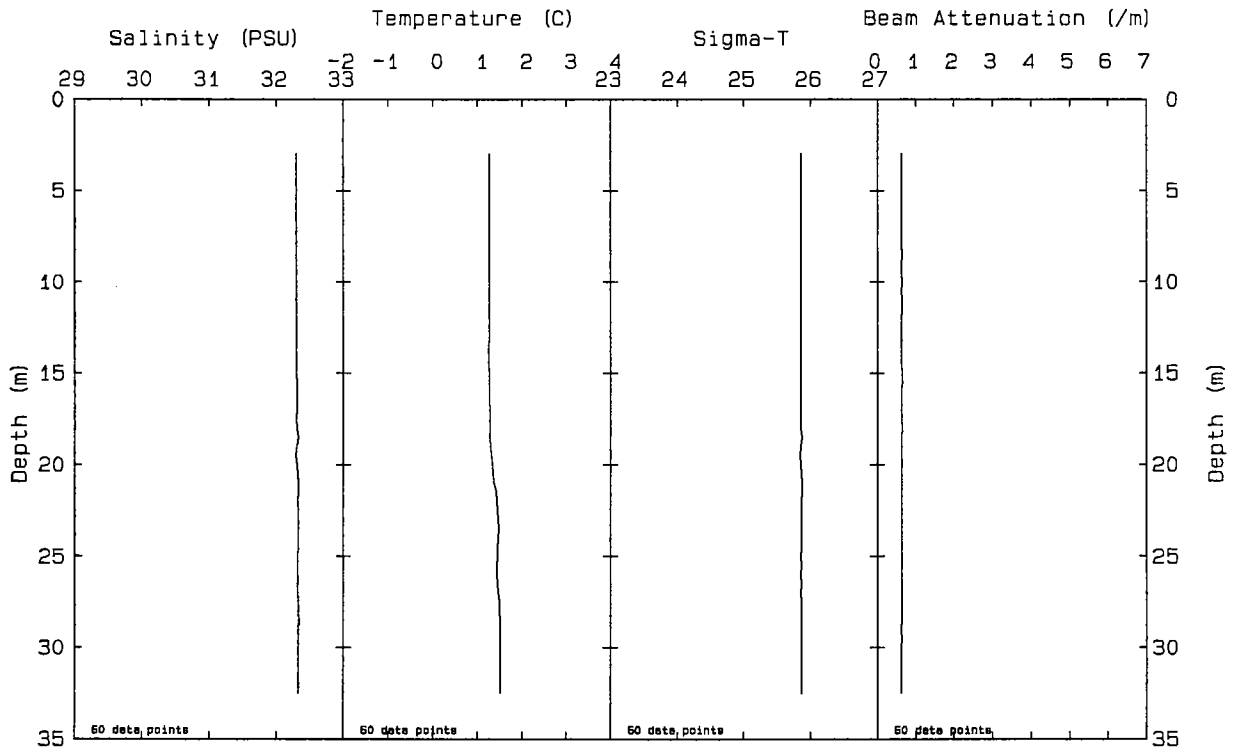


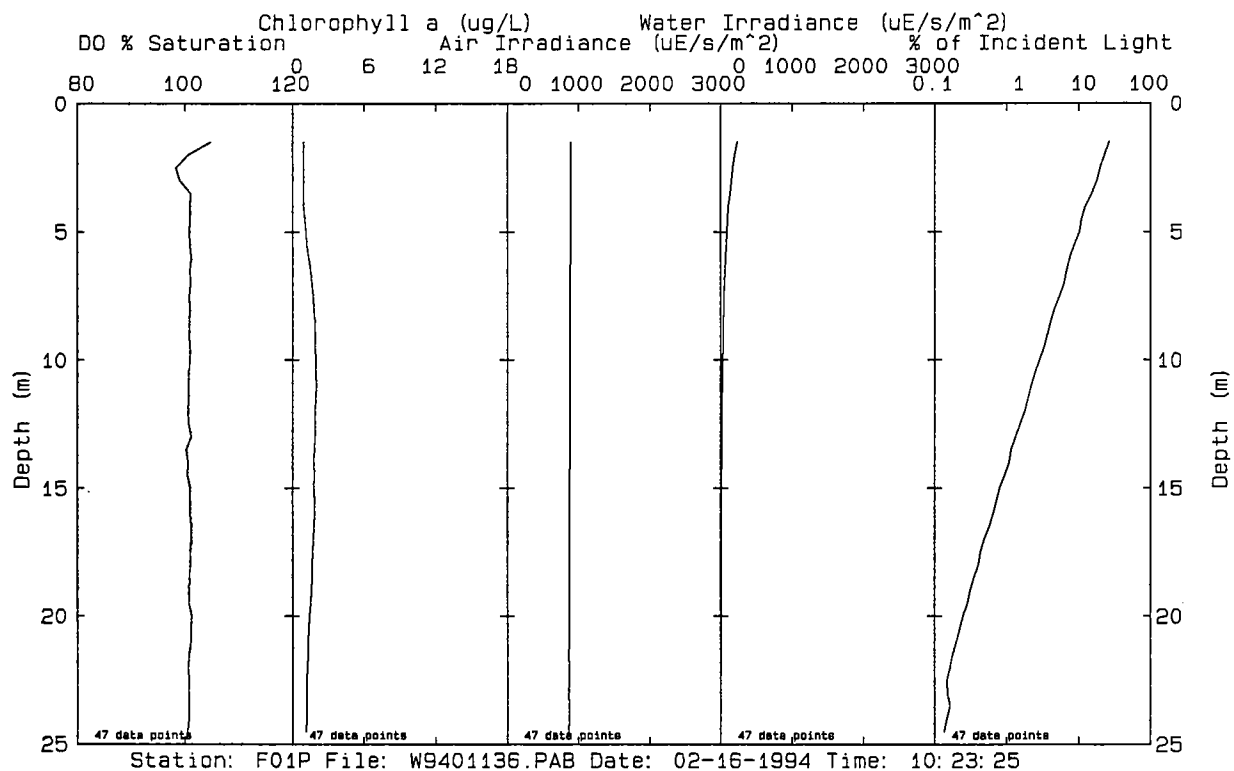
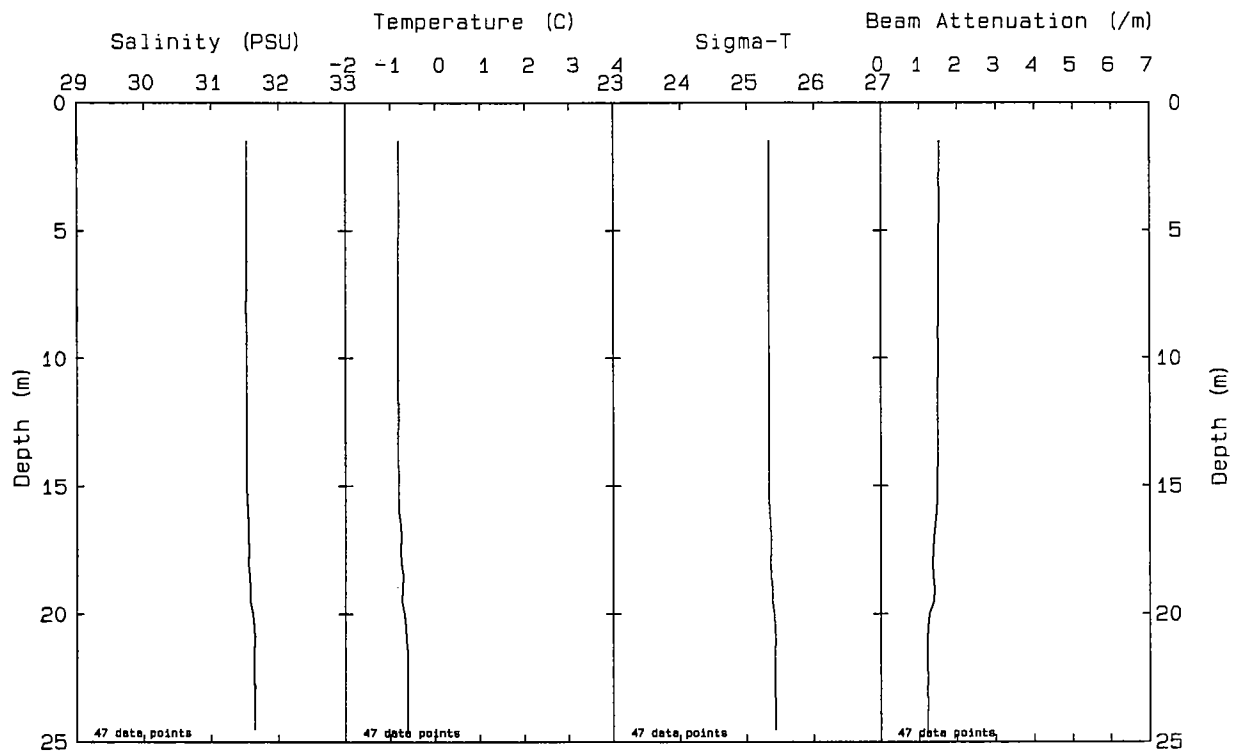


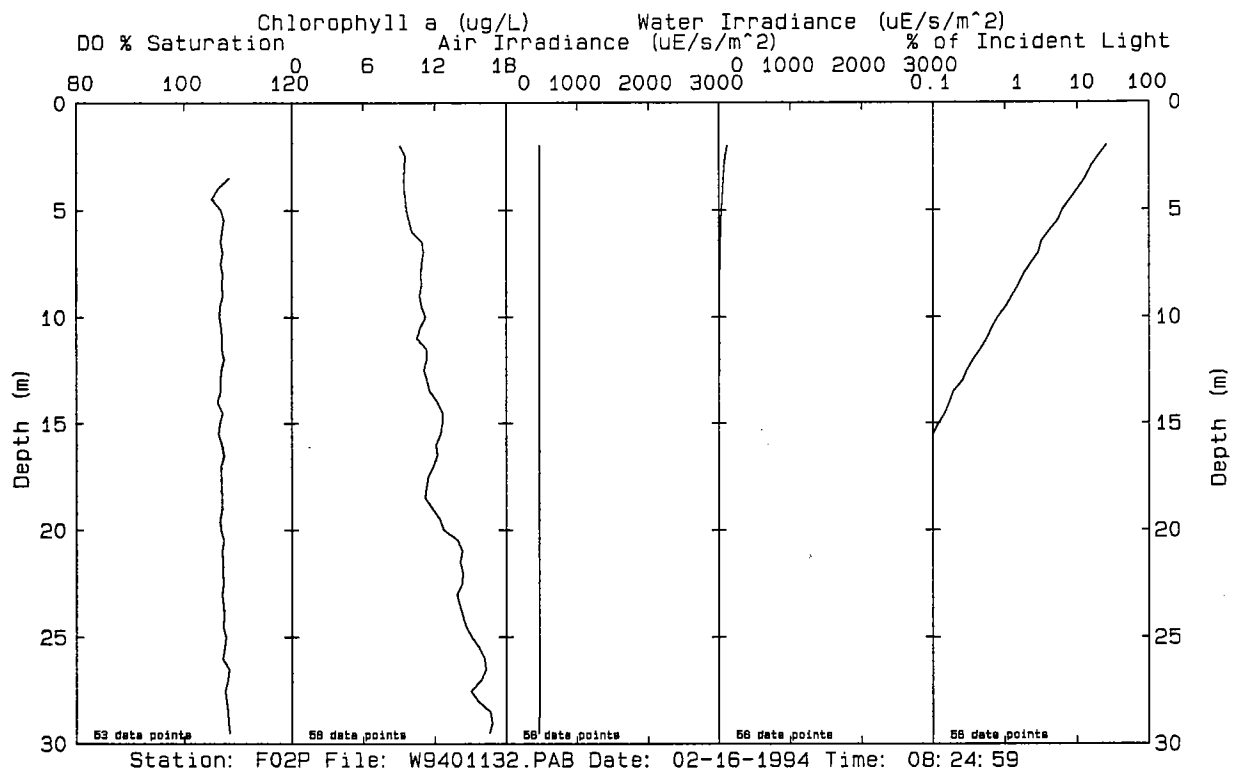
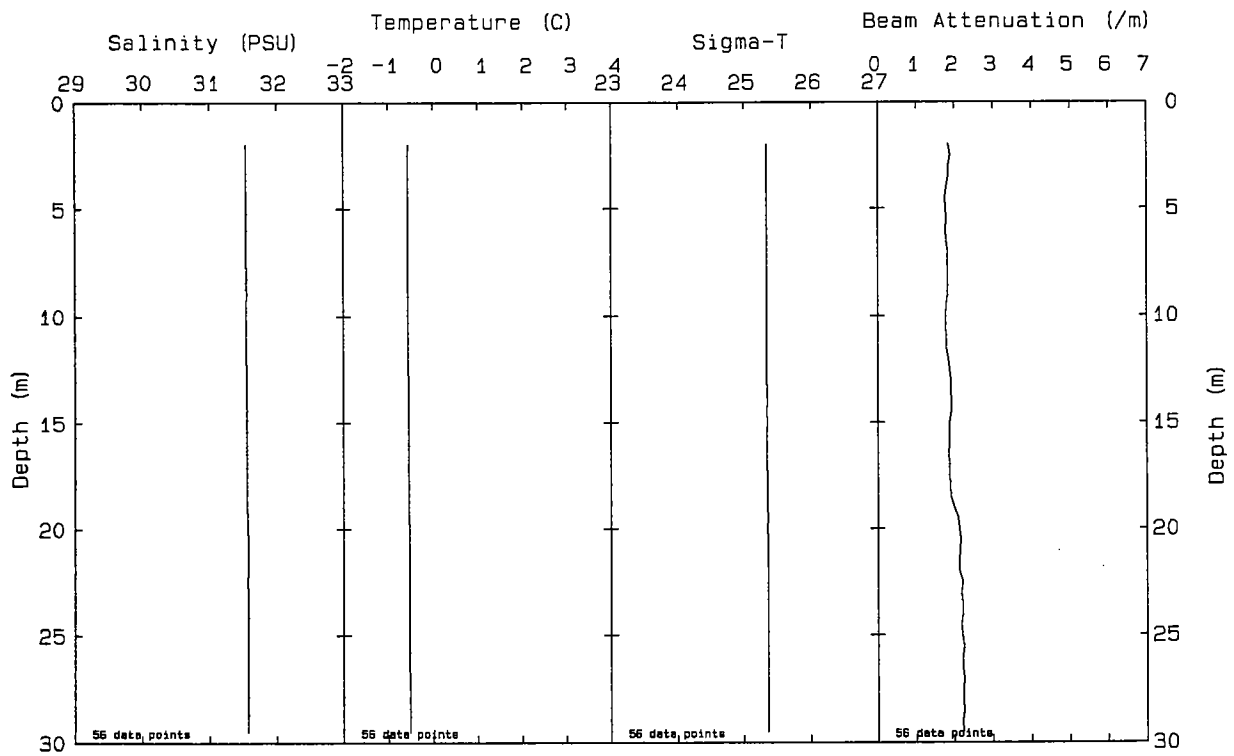
Station: N20P File: W9401027.PAB Date: 02-08-1994 Time: 11:11:27

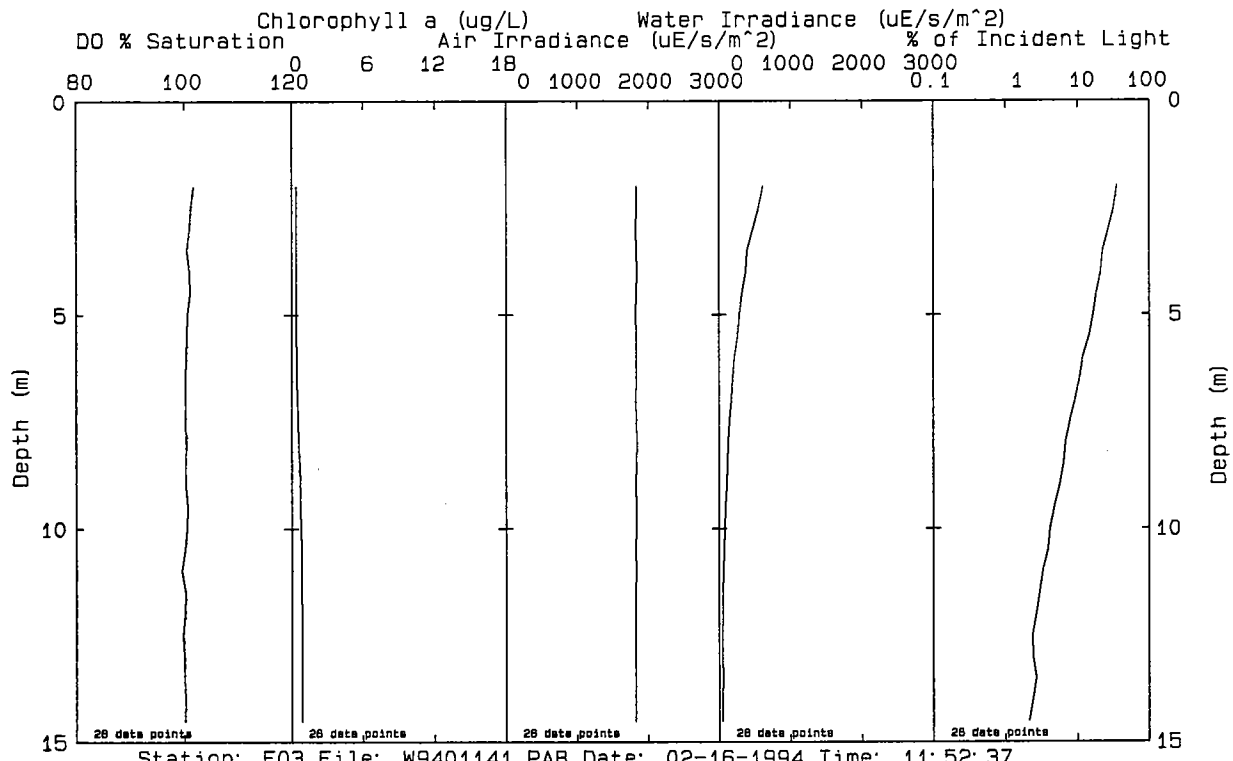
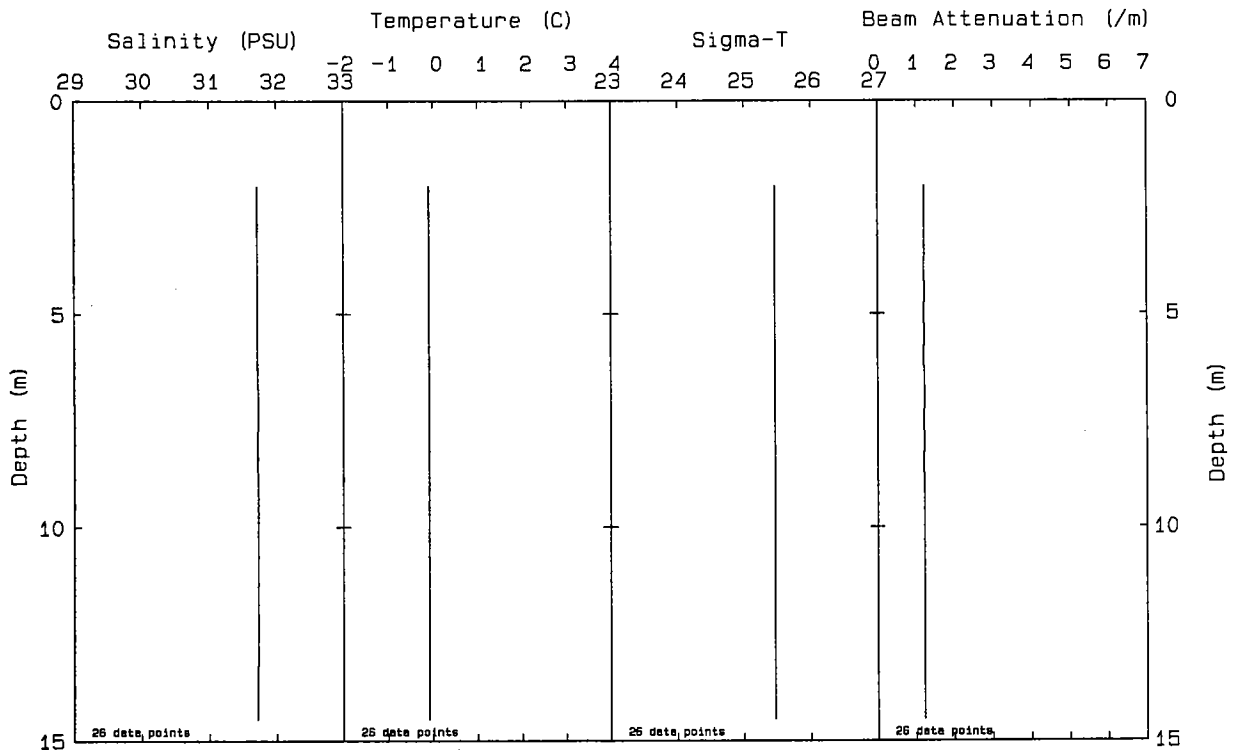




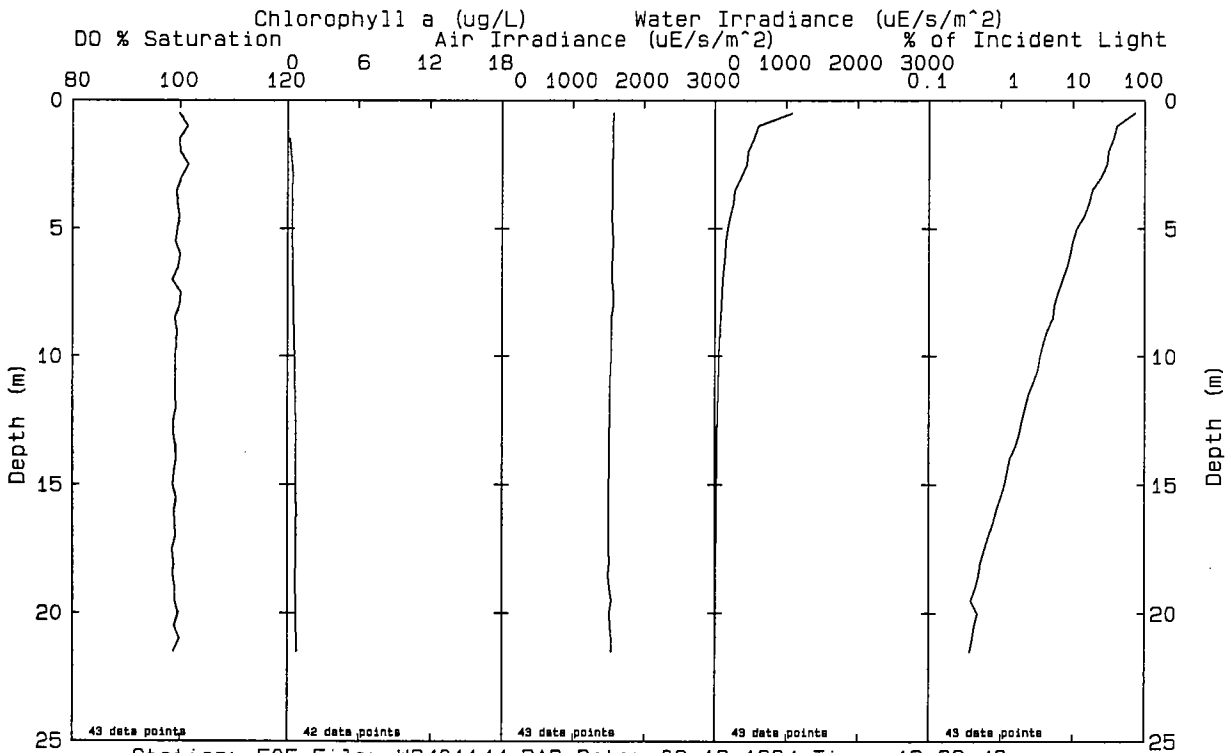
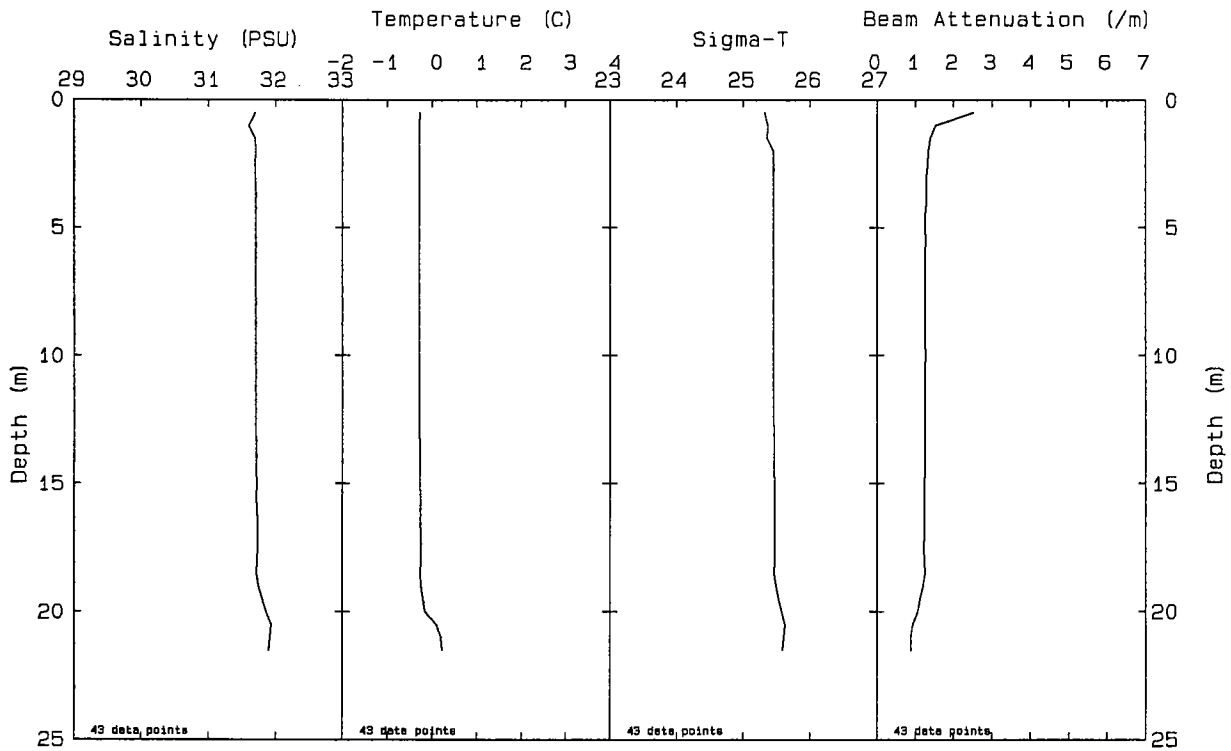




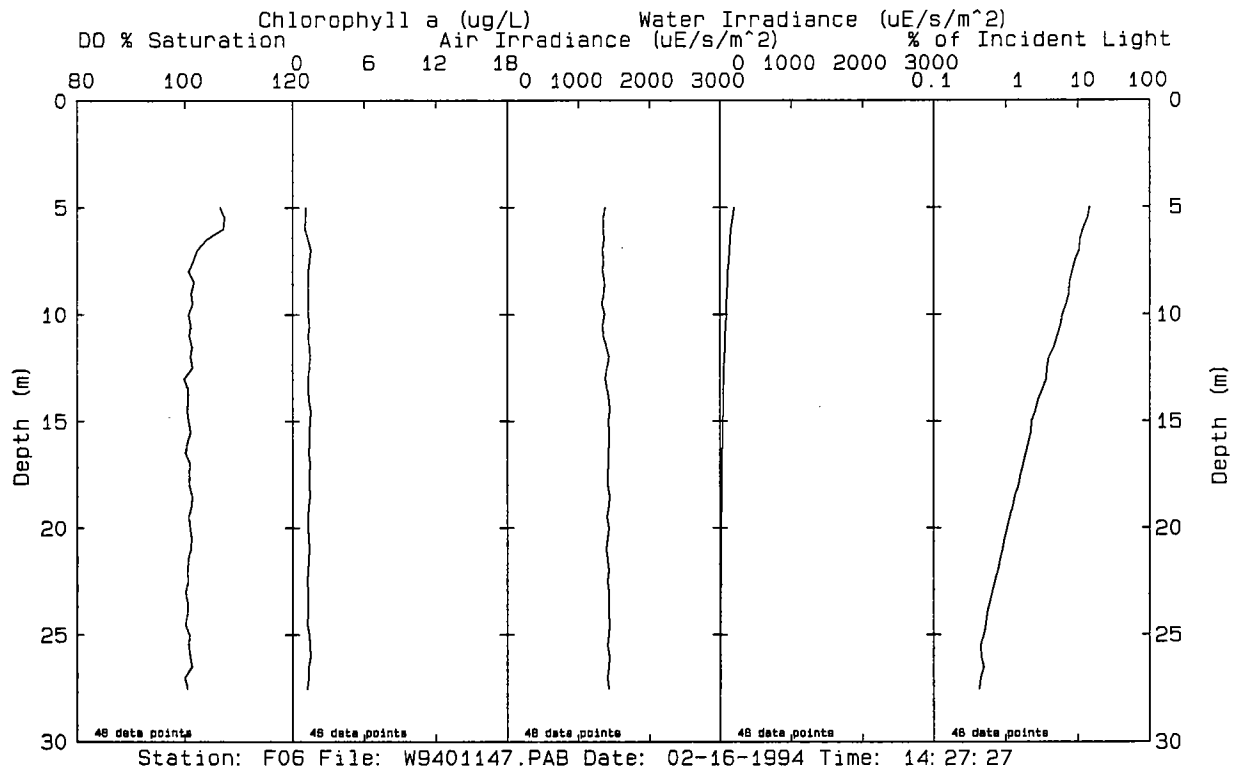
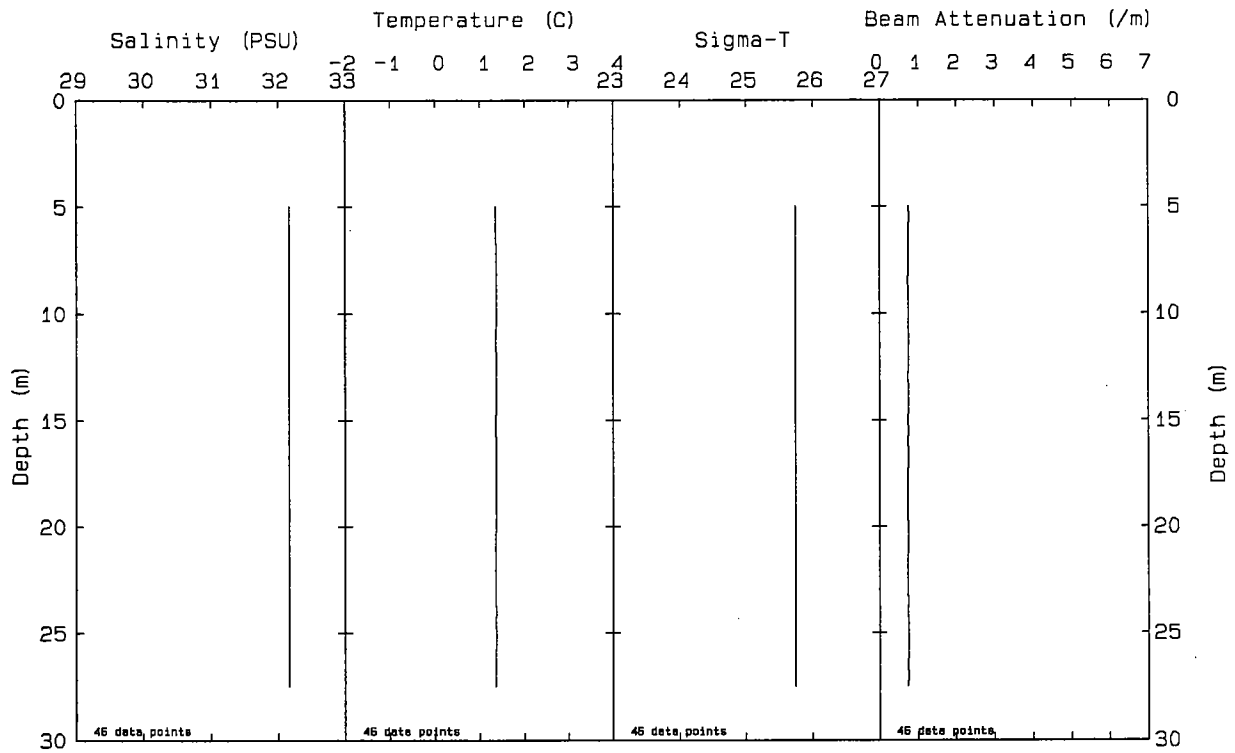


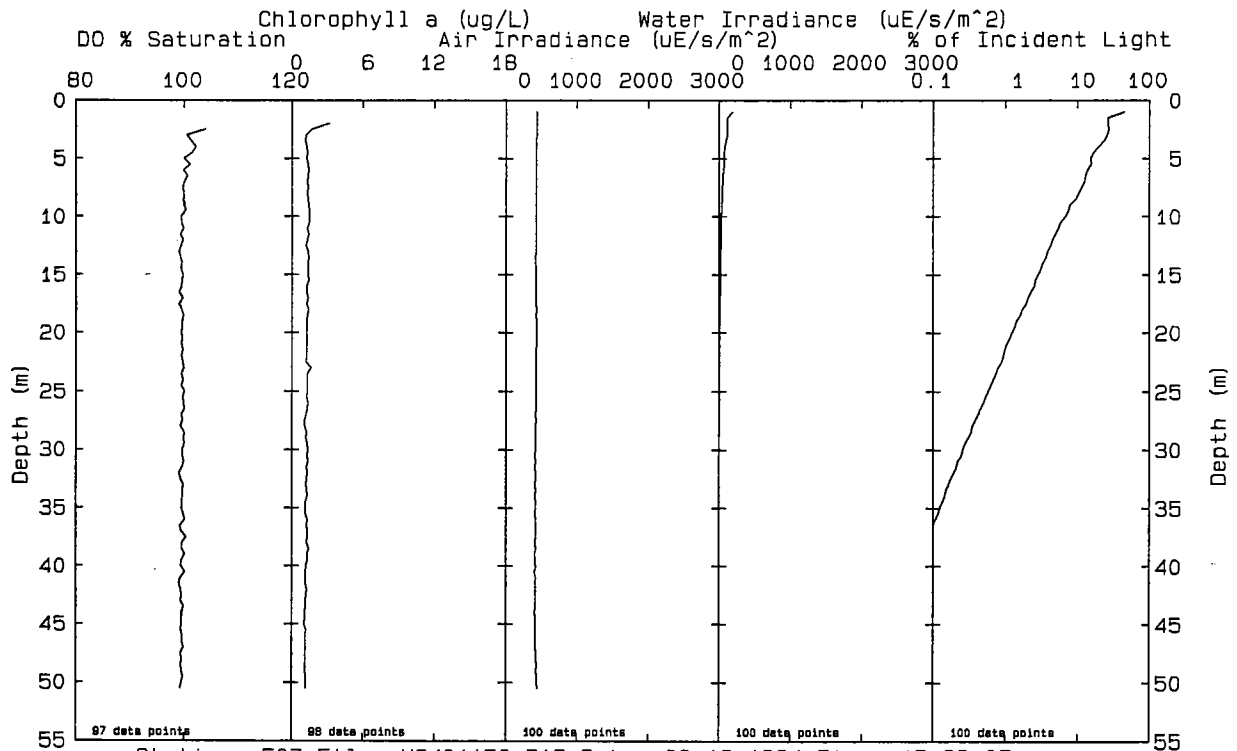
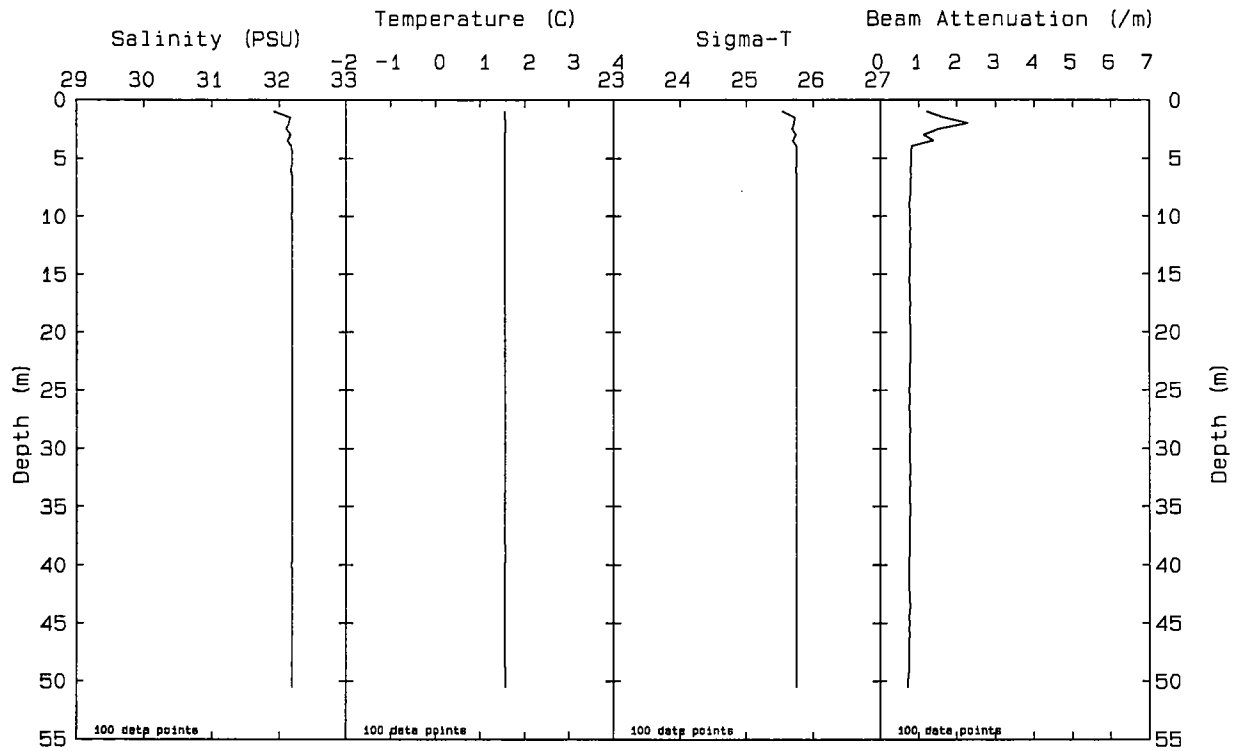


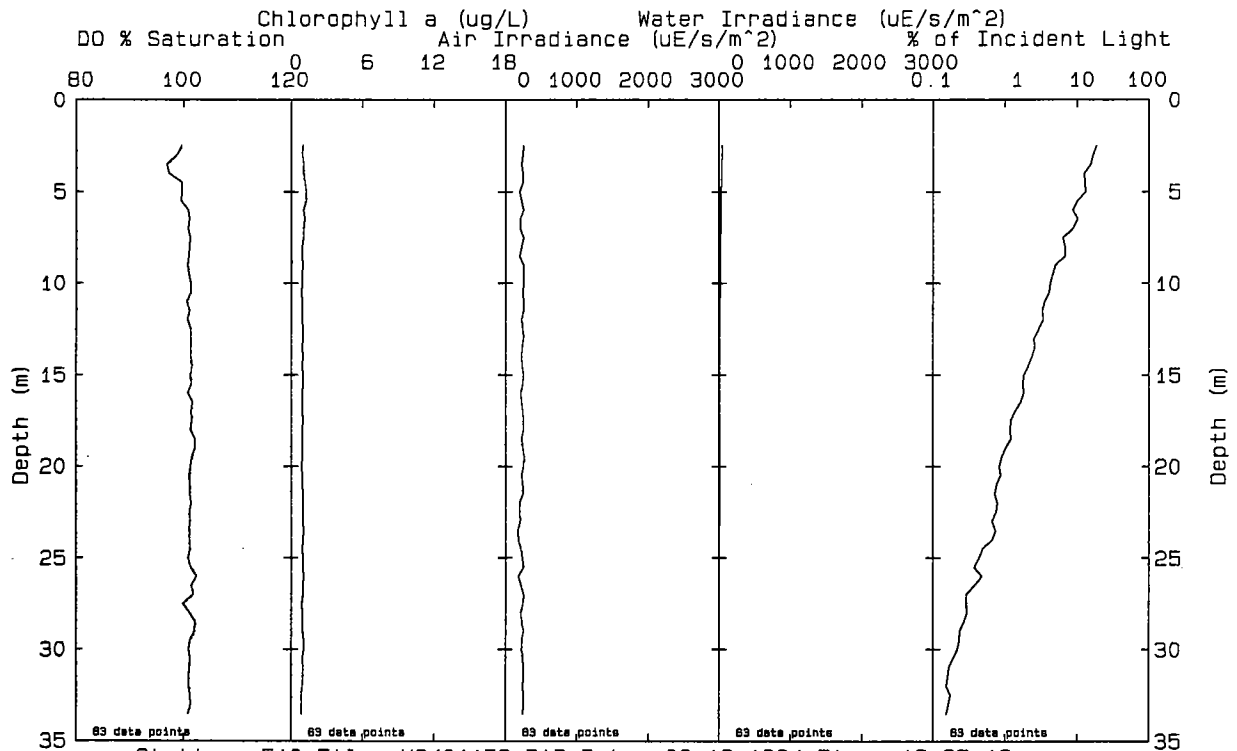
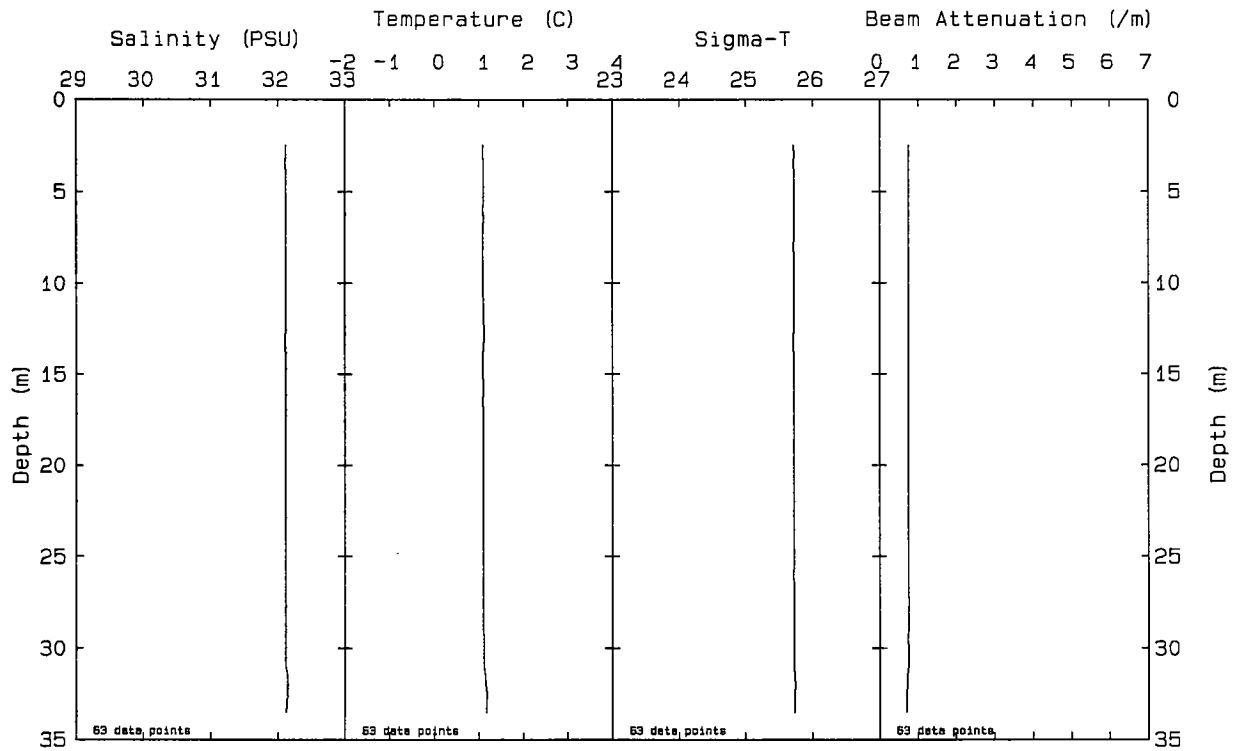
Station: F03 File: W9401141.PAB Date: 02-16-1994 Time: 11:52:37



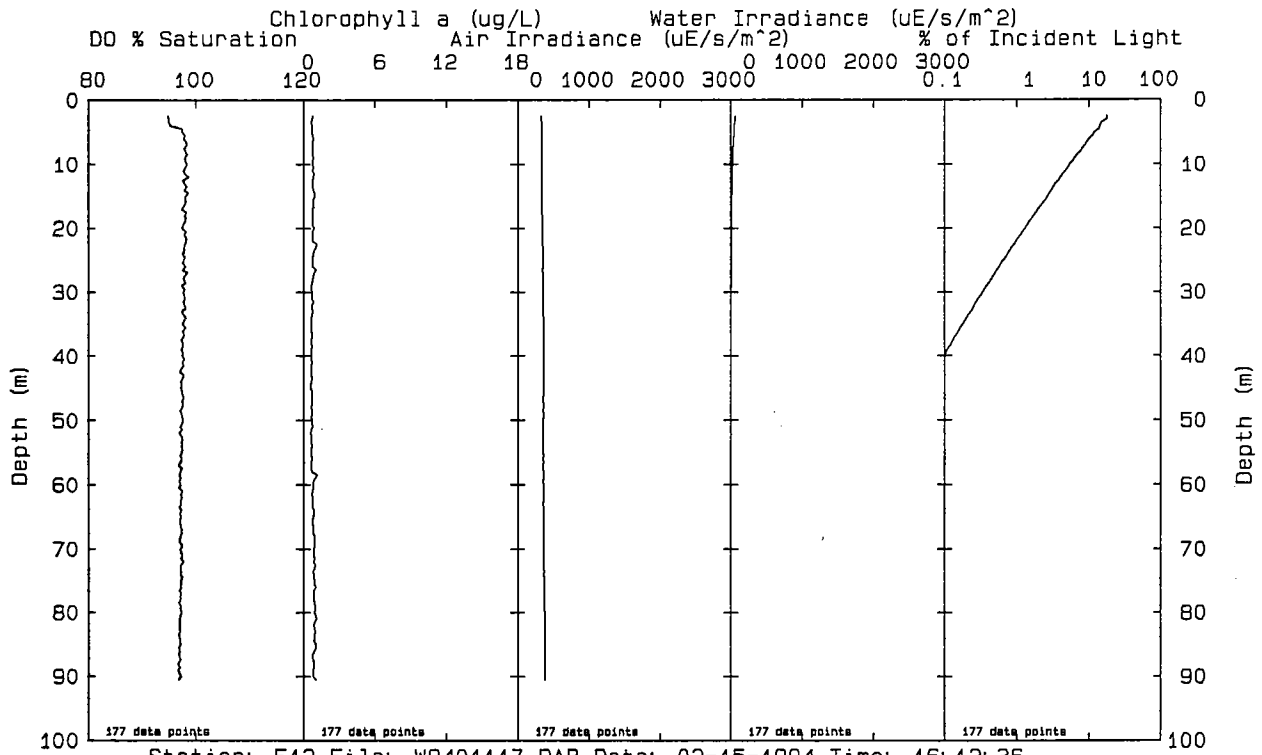
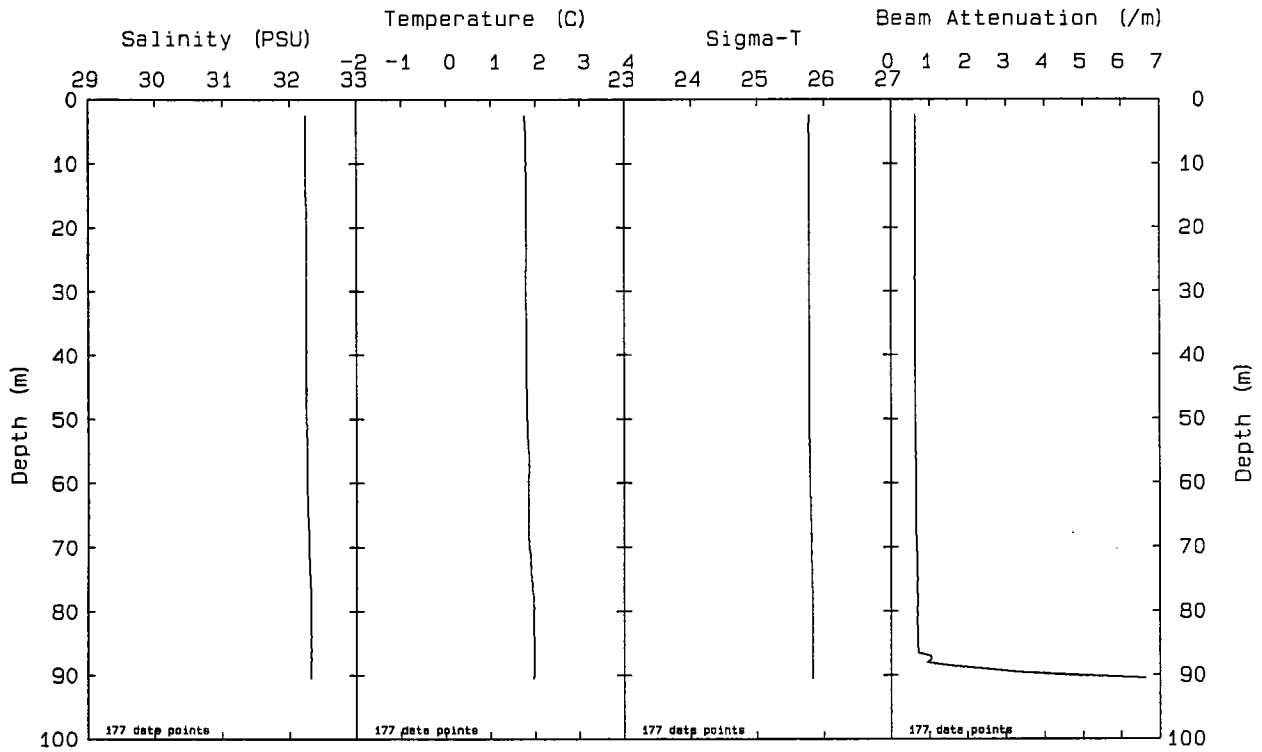
Station: F05 File: W9401144.PAB Date: 02-16-1994 Time: 13:39:43

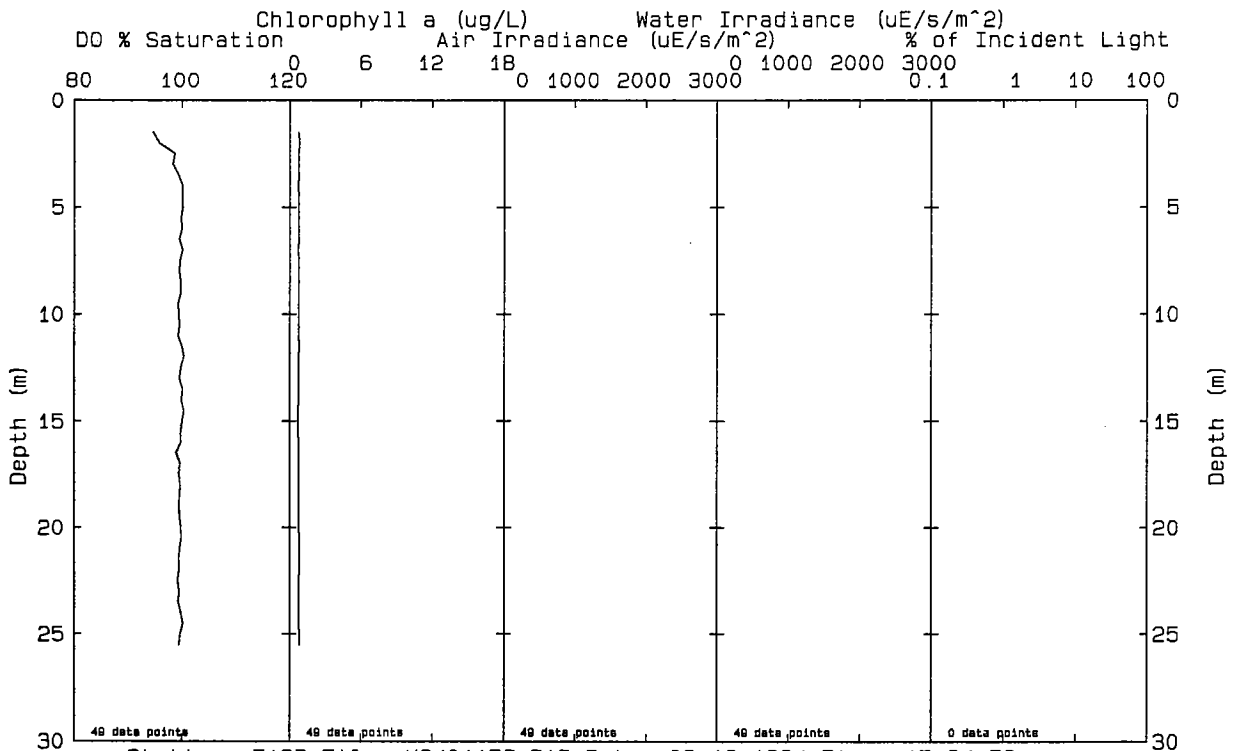
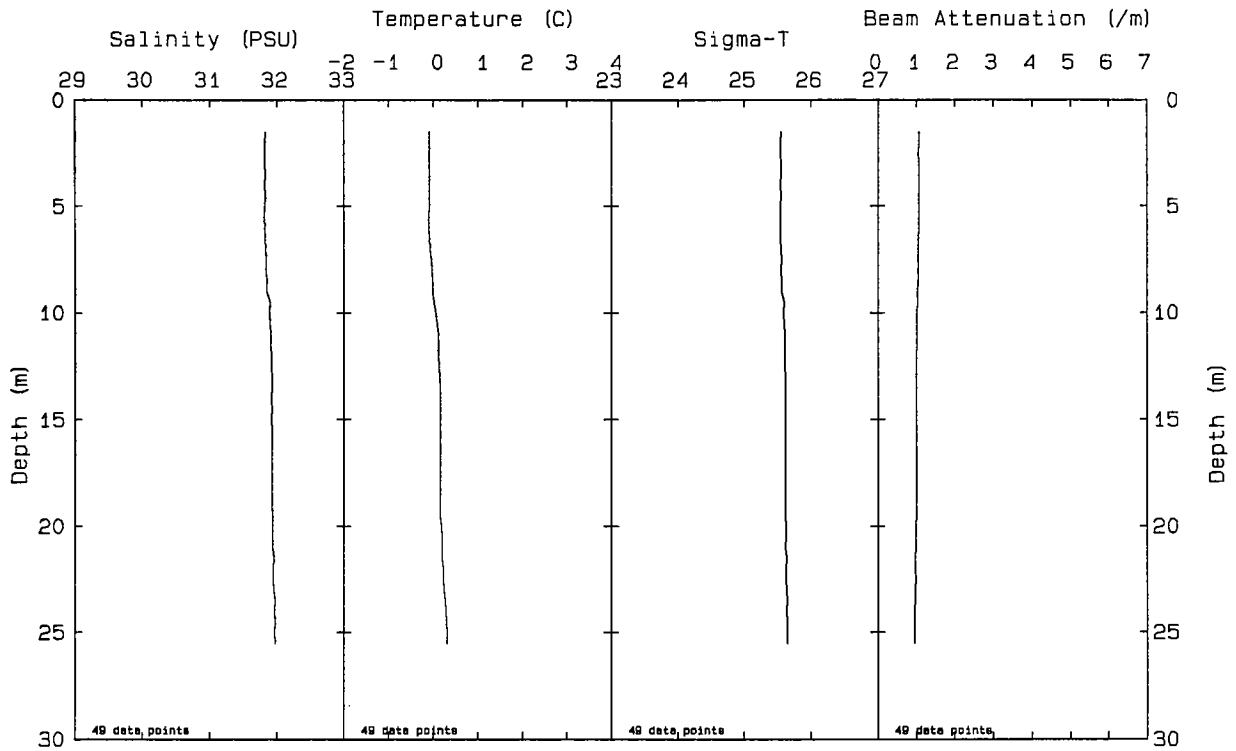


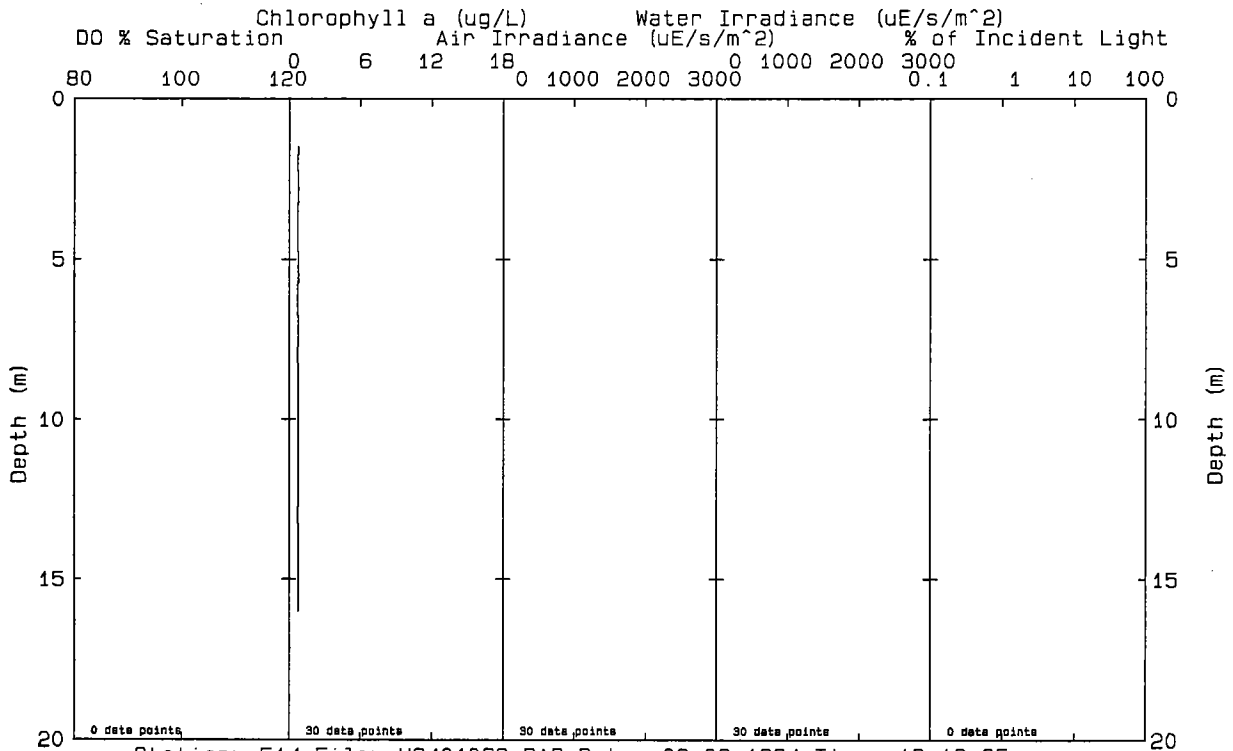
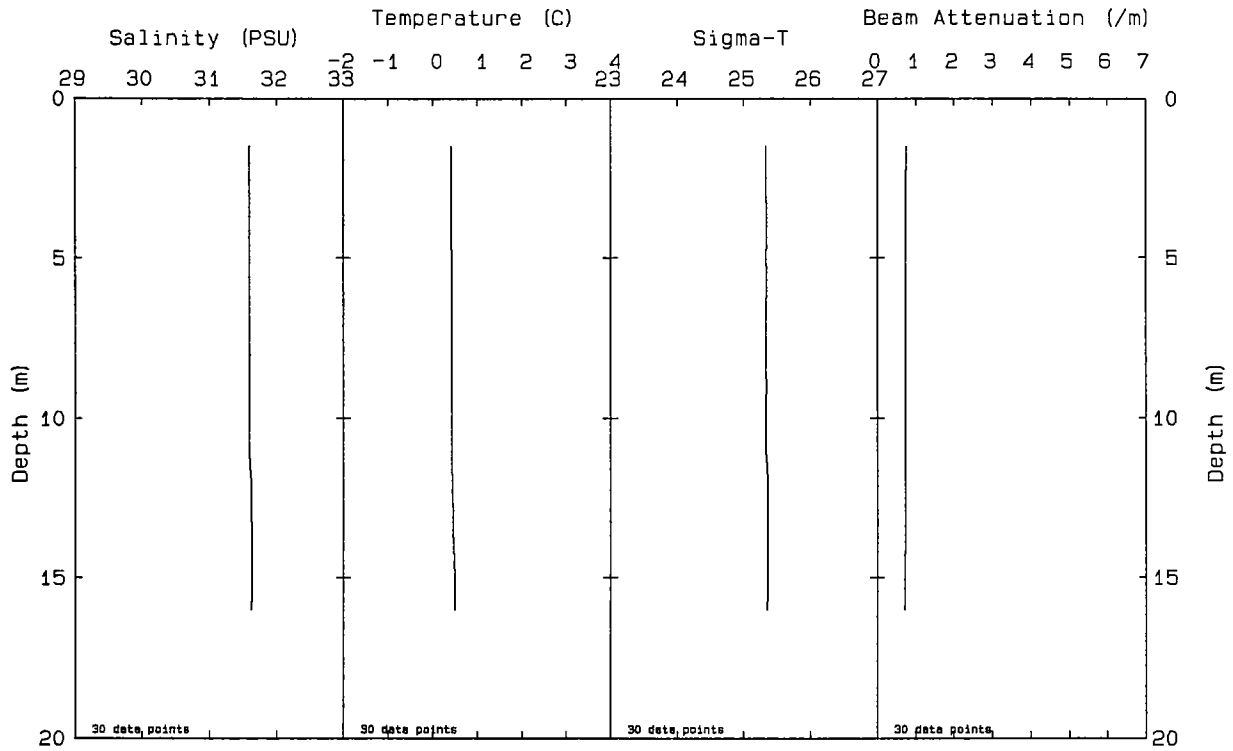


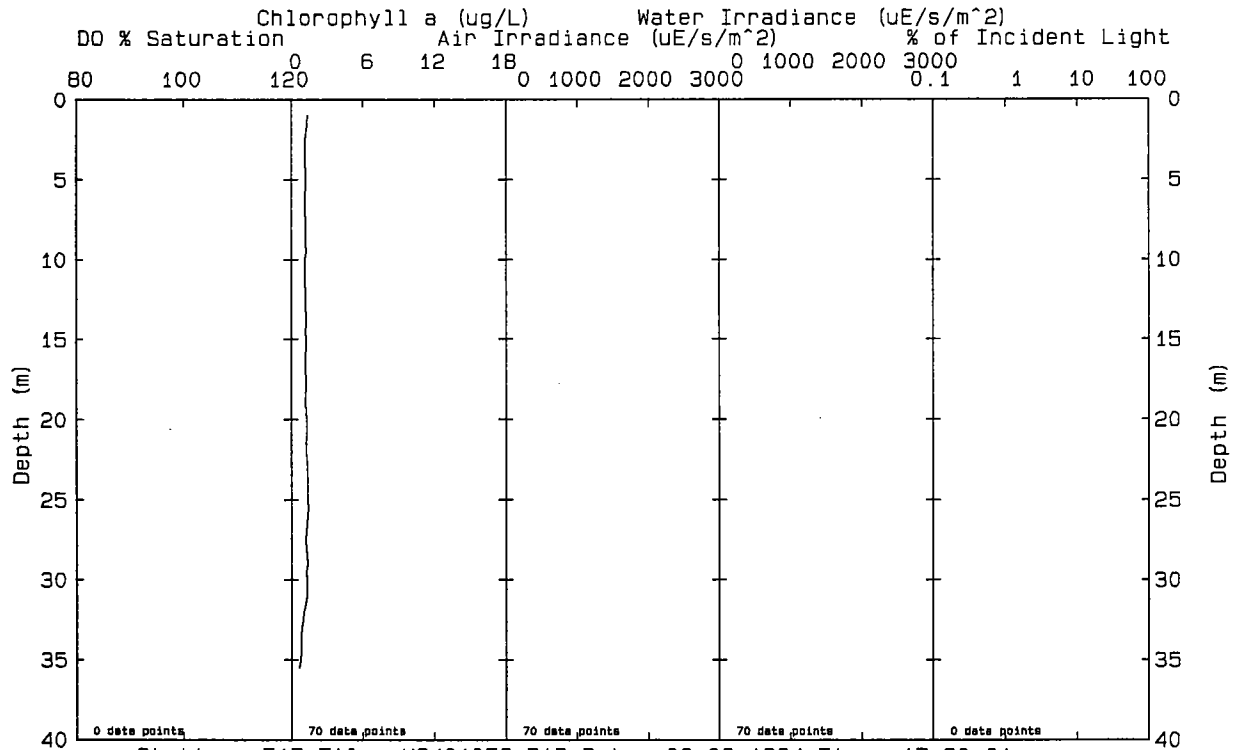
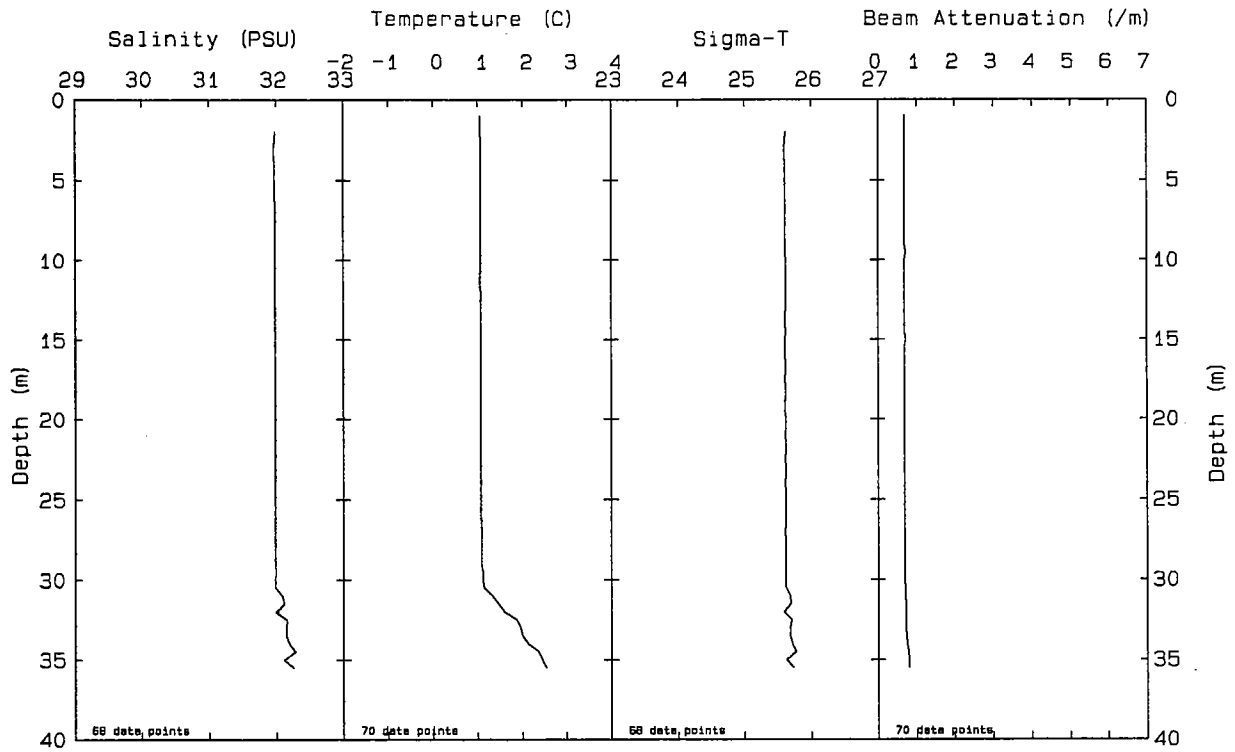




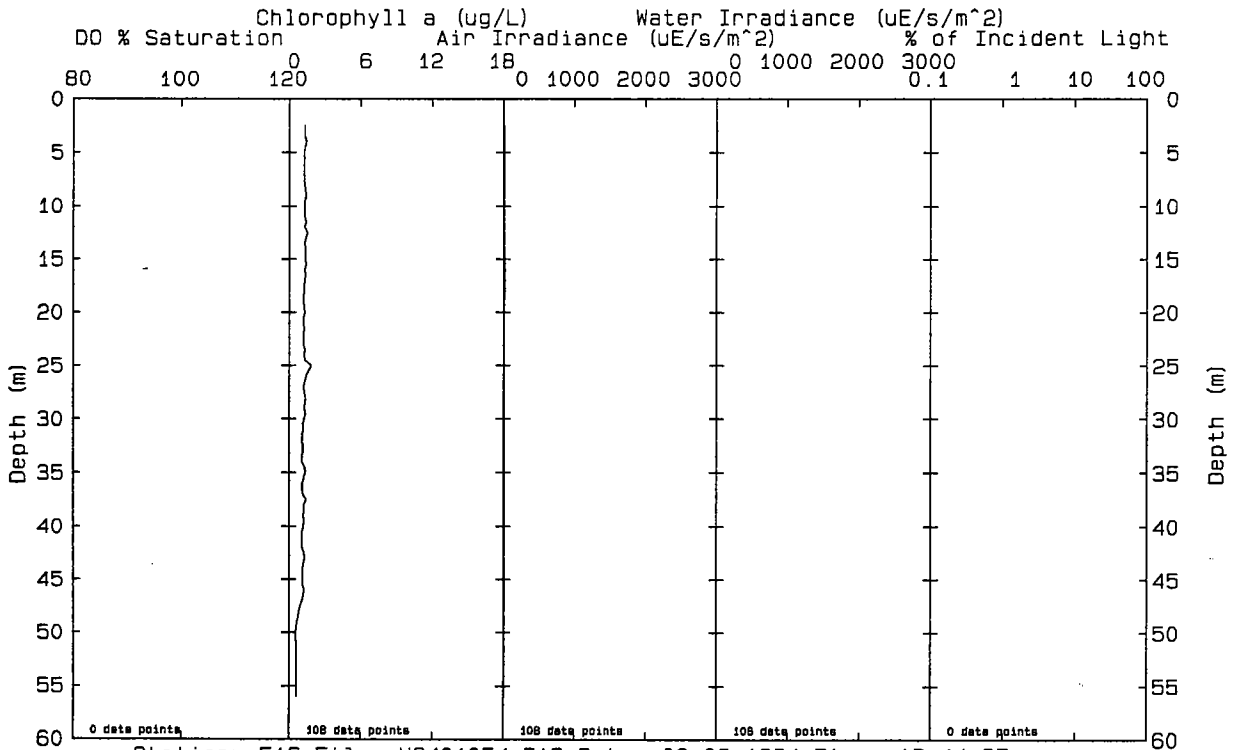
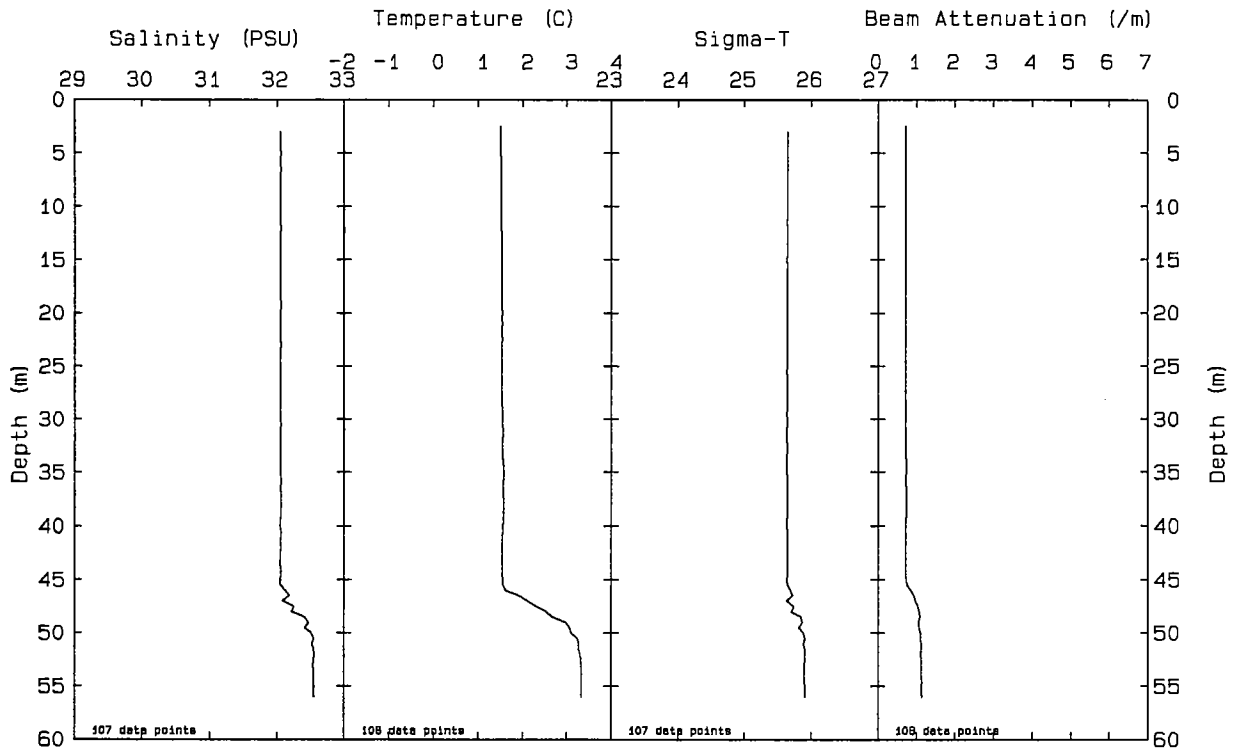




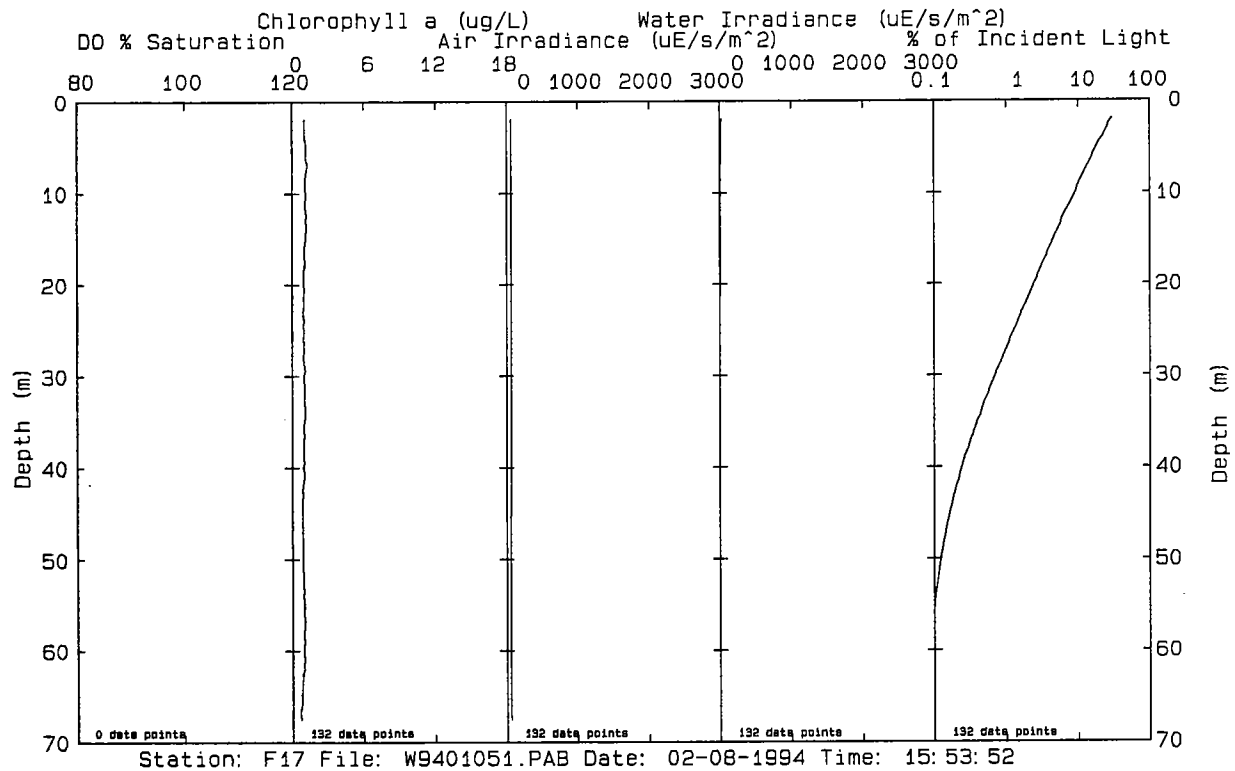
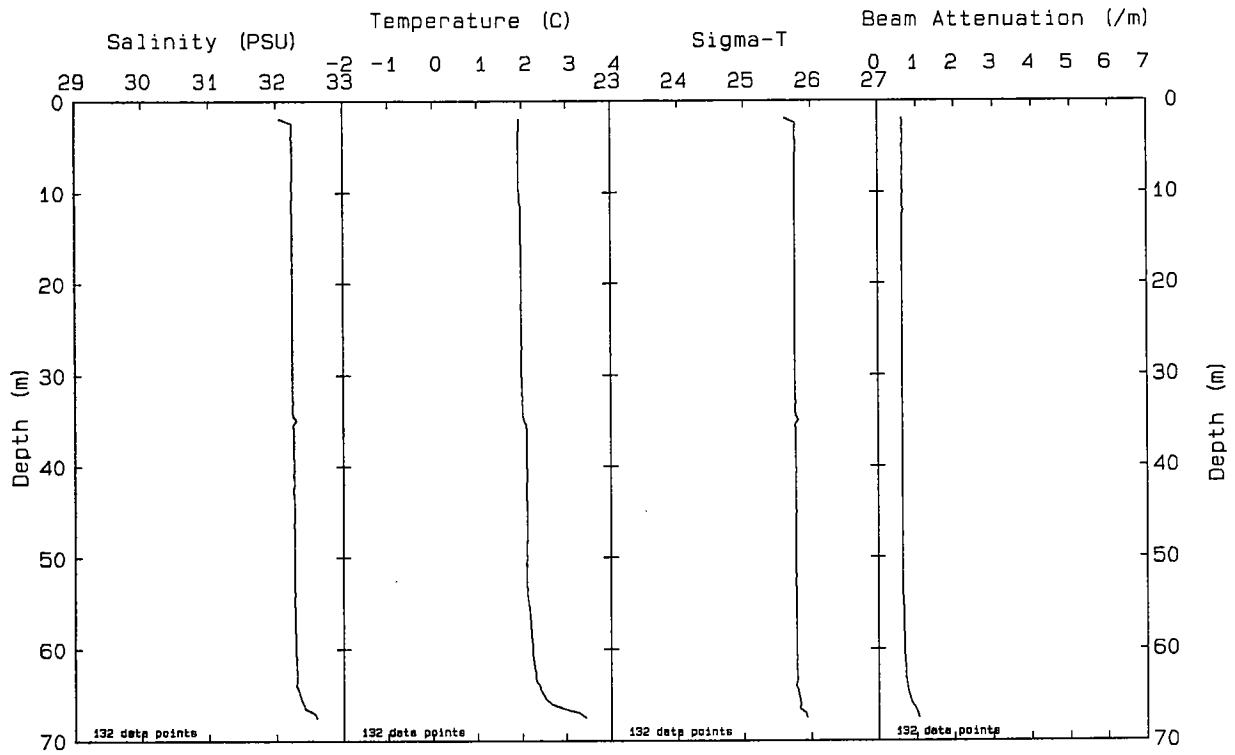


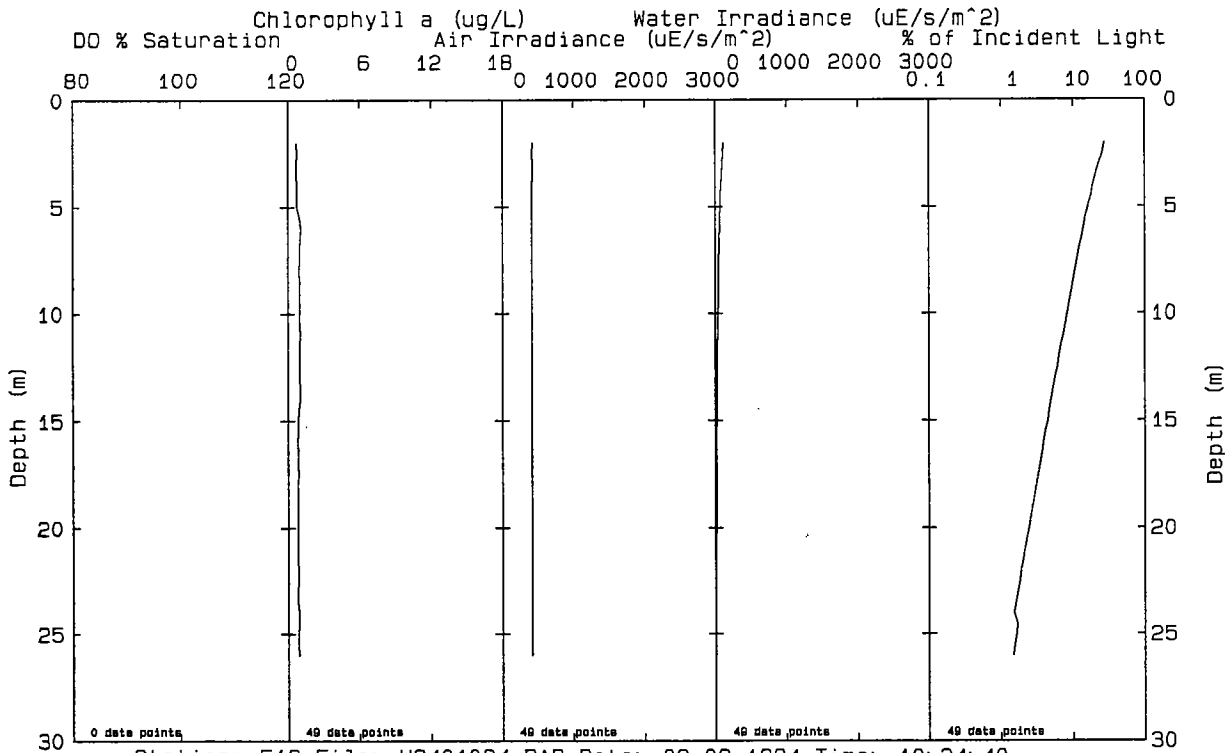
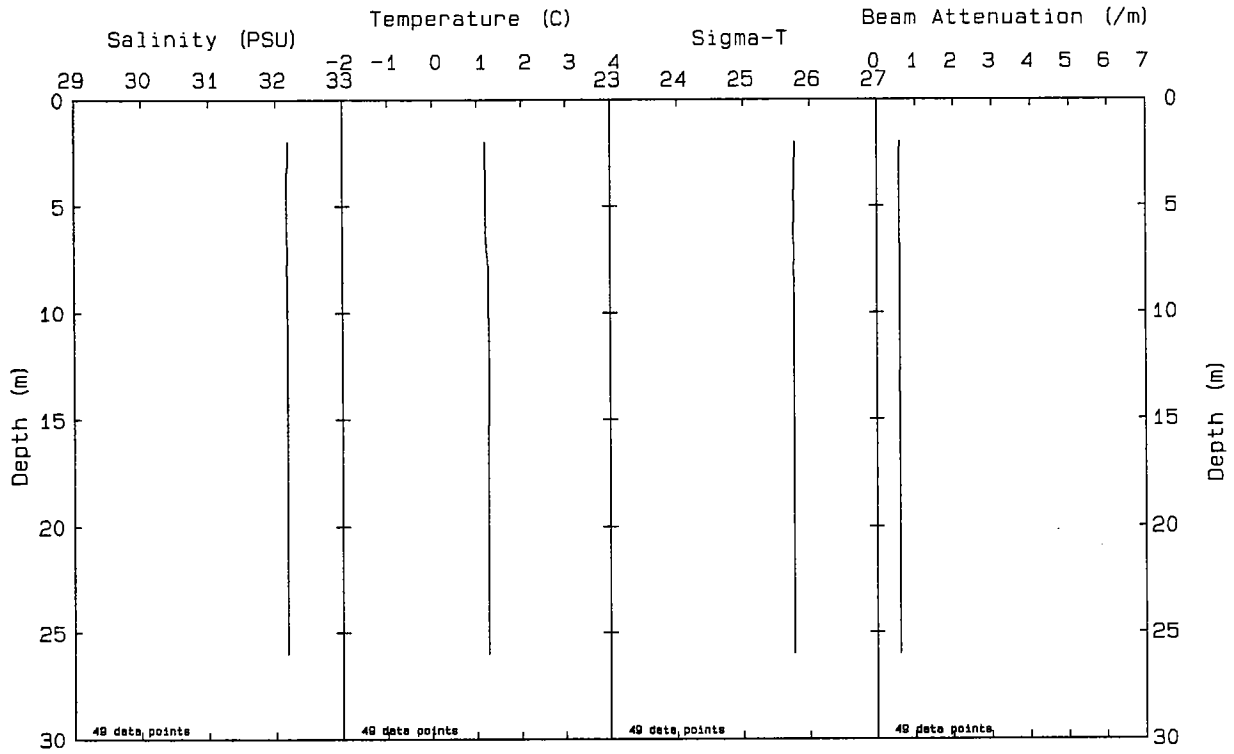


Station: F15 File: W9401059.PAB Date: 02-08-1994 Time: 17: 30: 01

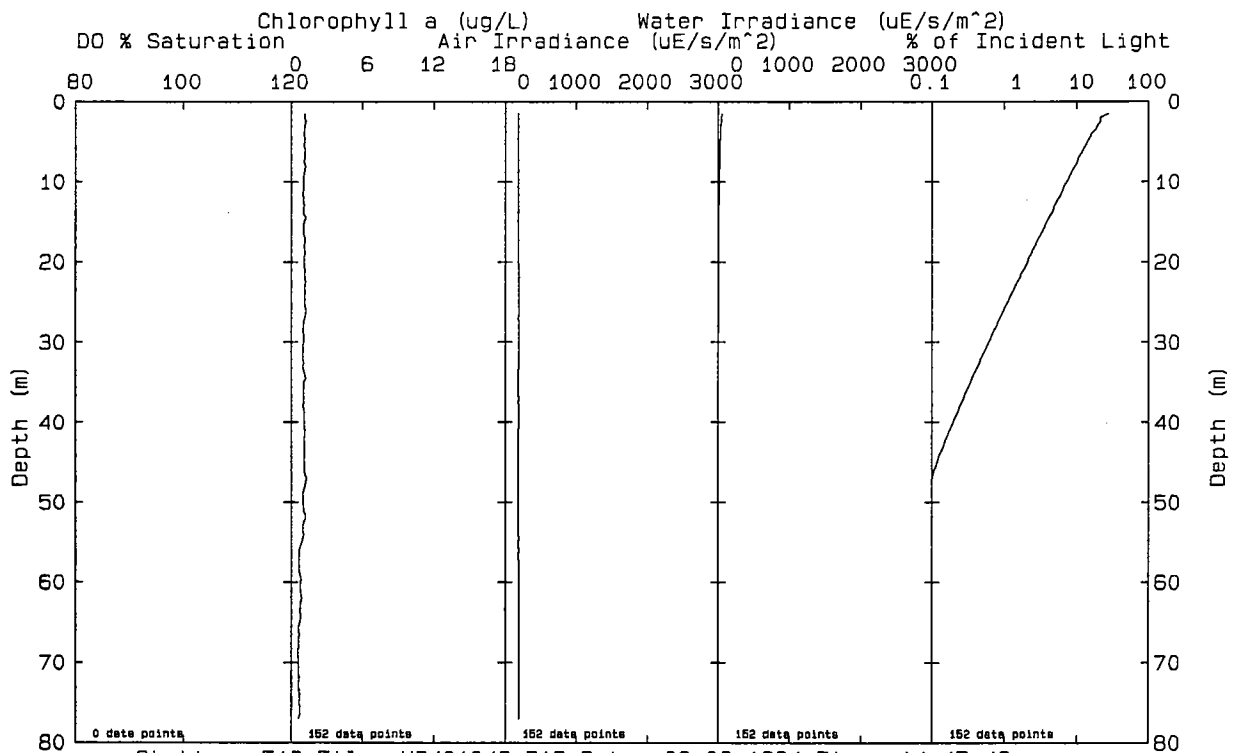
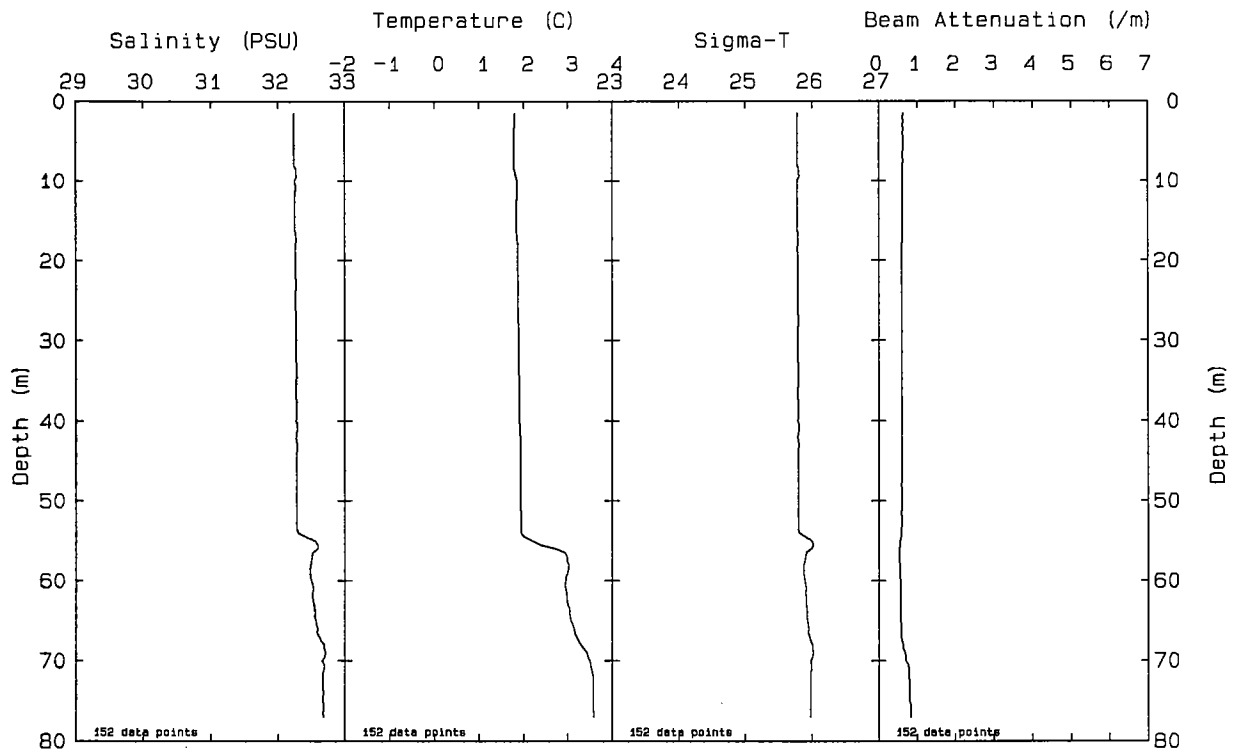


Station: F16 File: W9401054.PAB Date: 02-08-1994 Time: 16: 44: 37



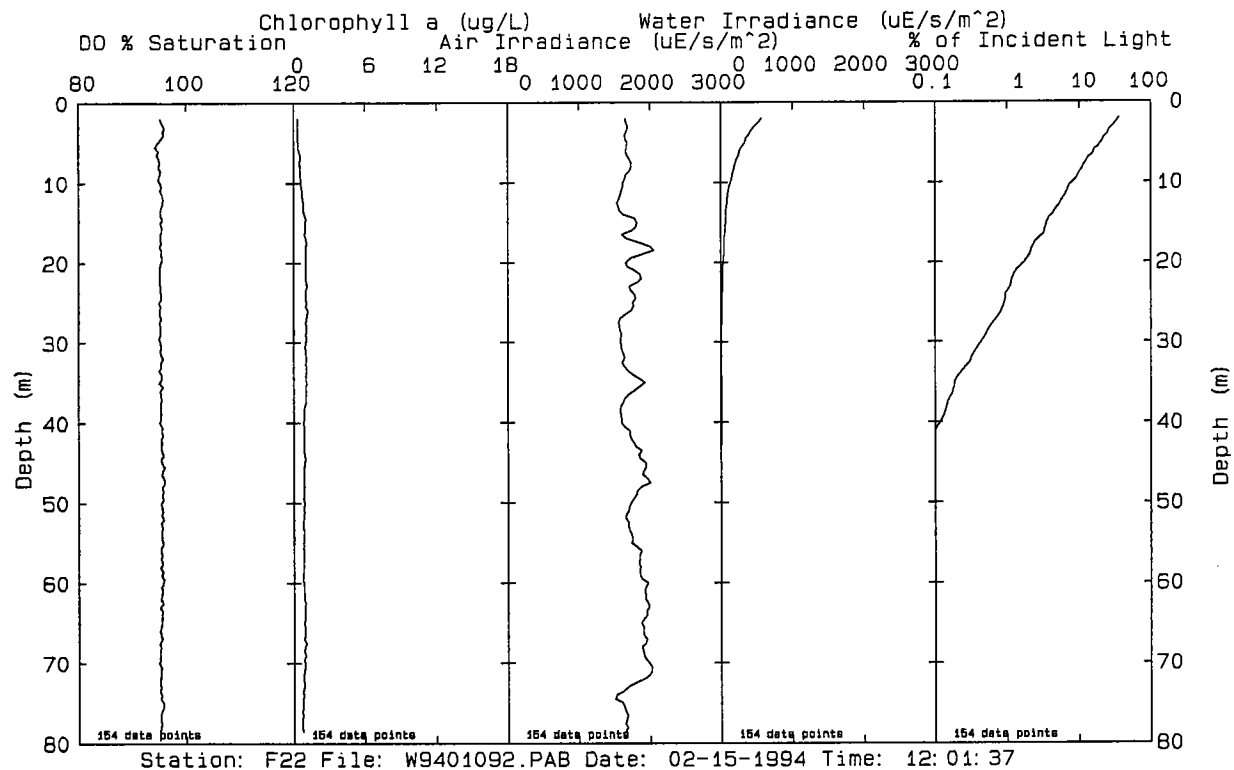
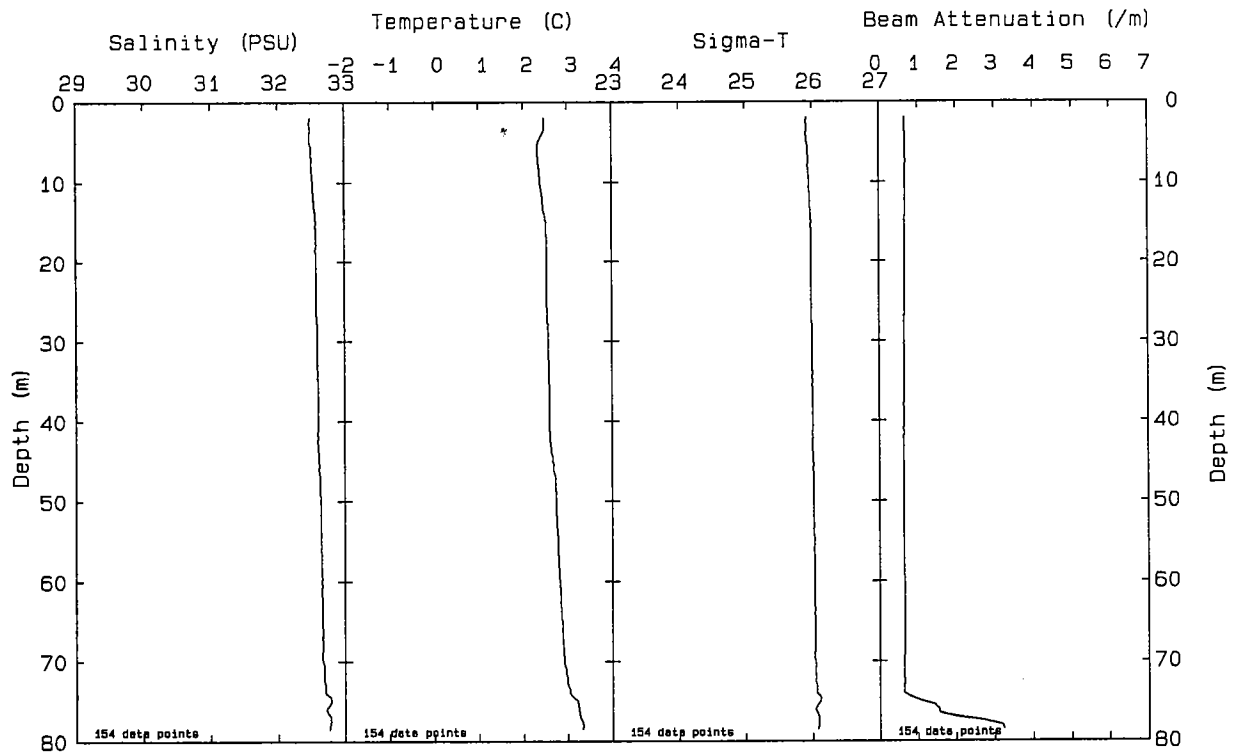


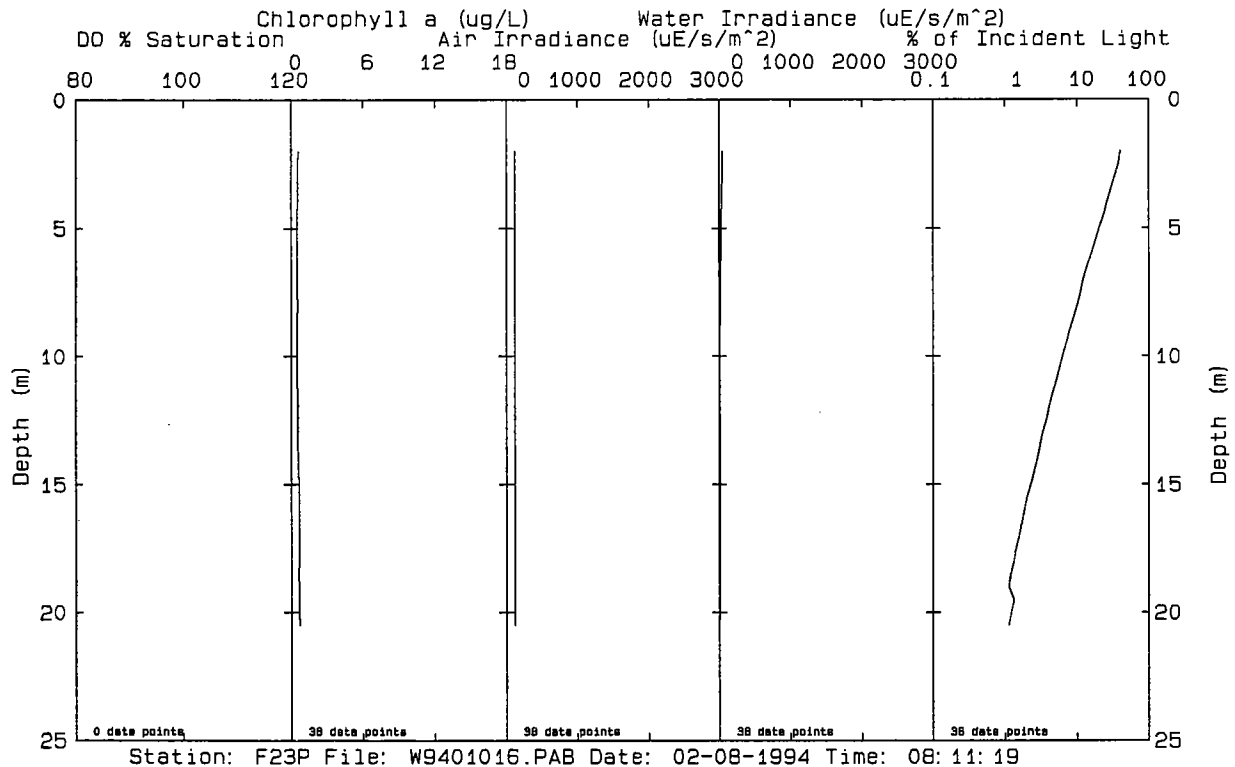
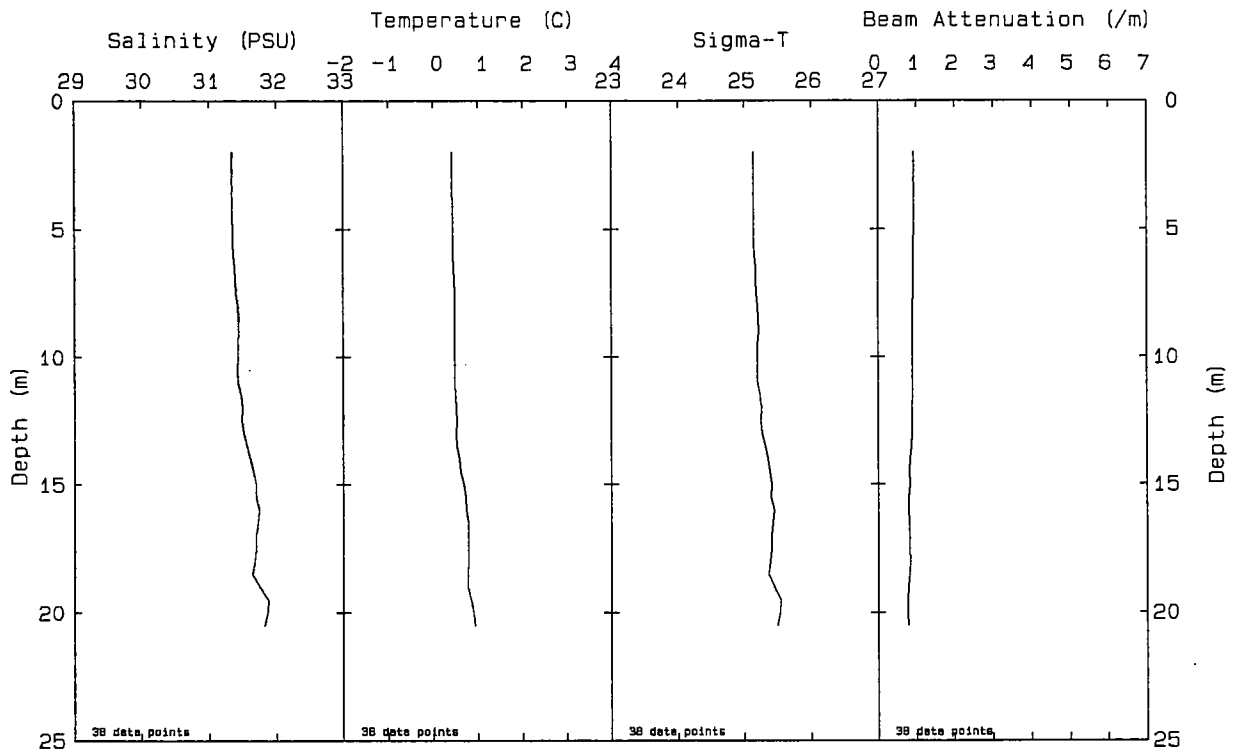
Station: F18 File: W9401024.PAB Date: 02-08-1994 Time: 10: 24: 40

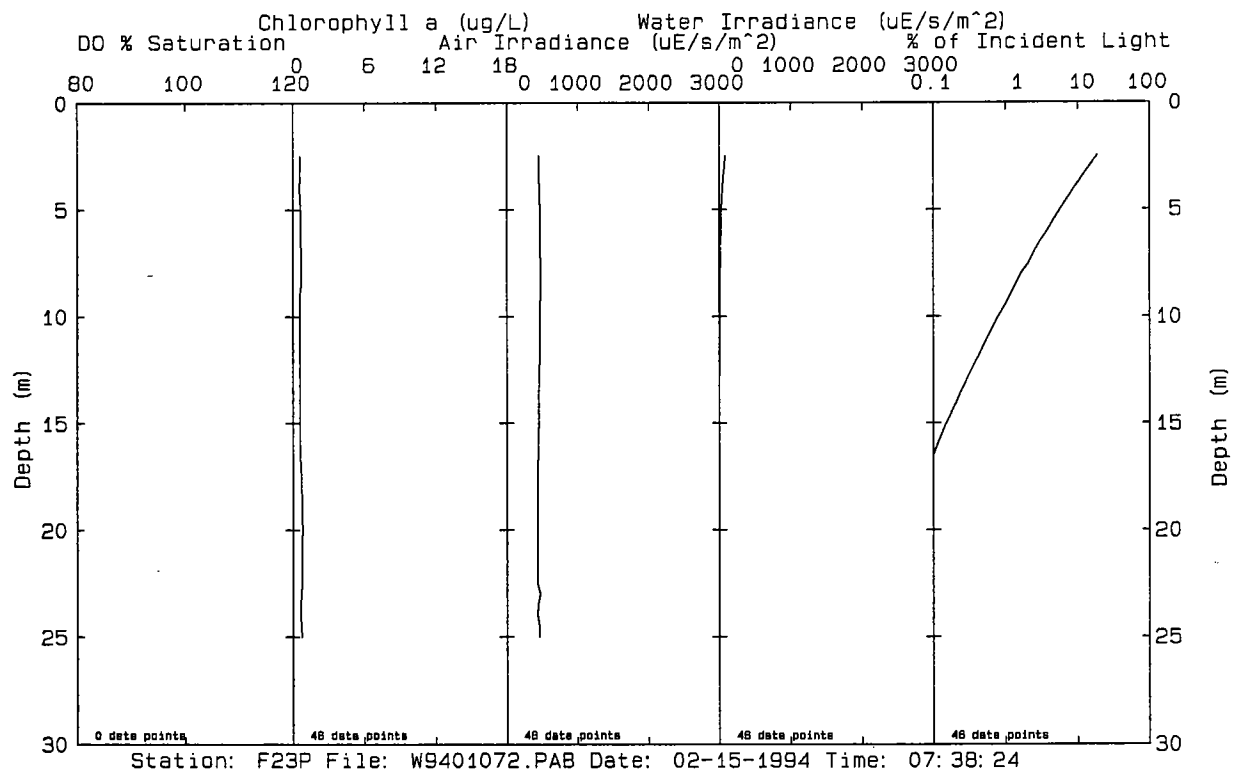
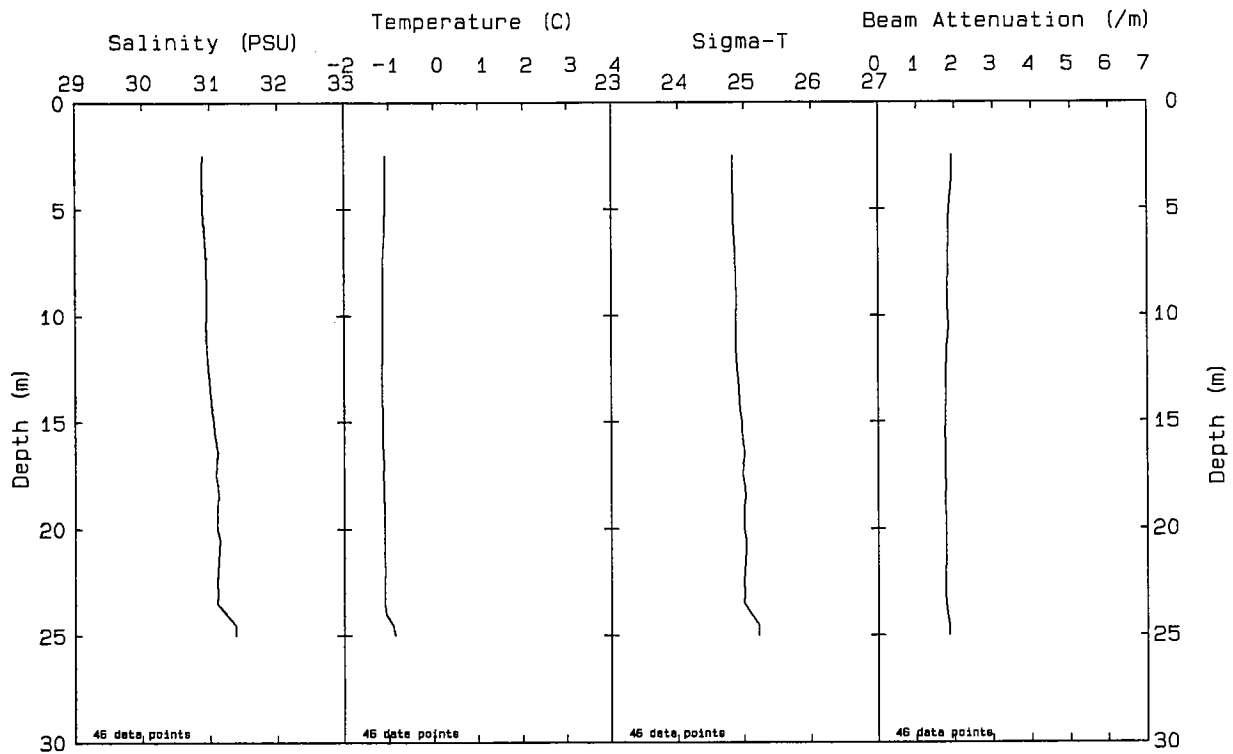


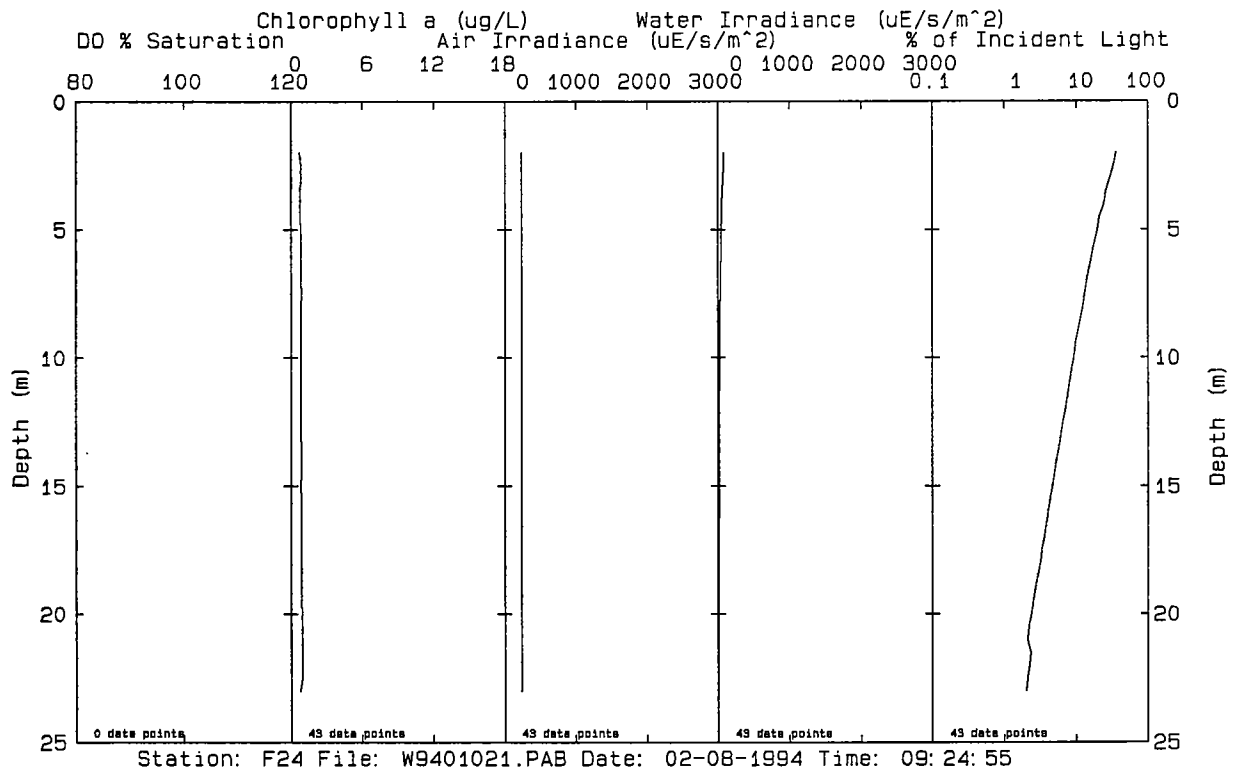
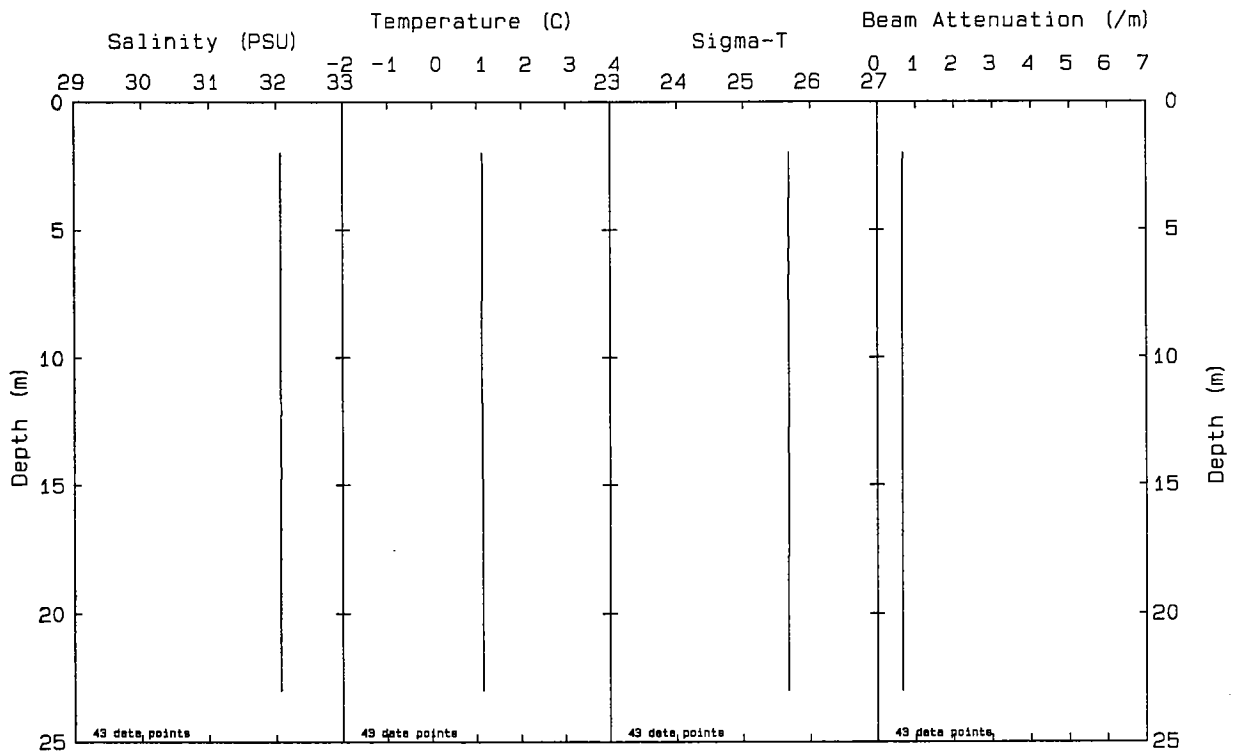
Station: F19 File: W9401048.PAB Date: 02-08-1994 Time: 14: 47: 46

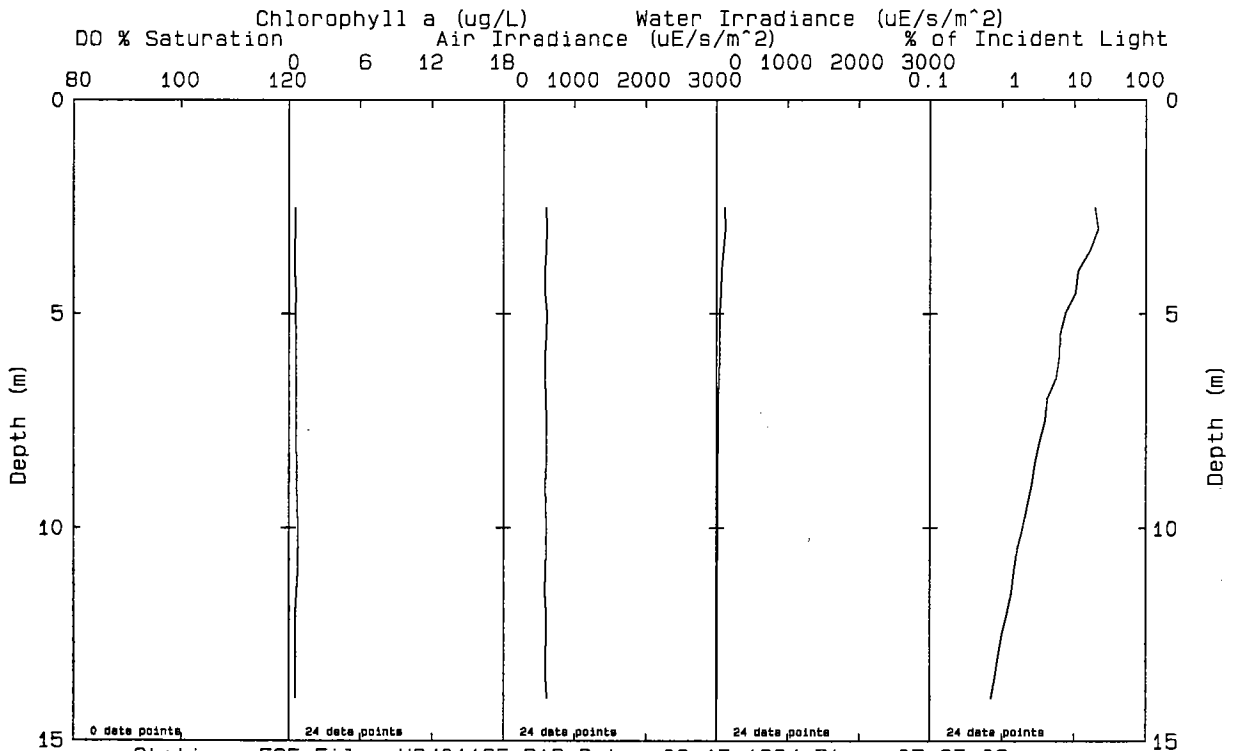
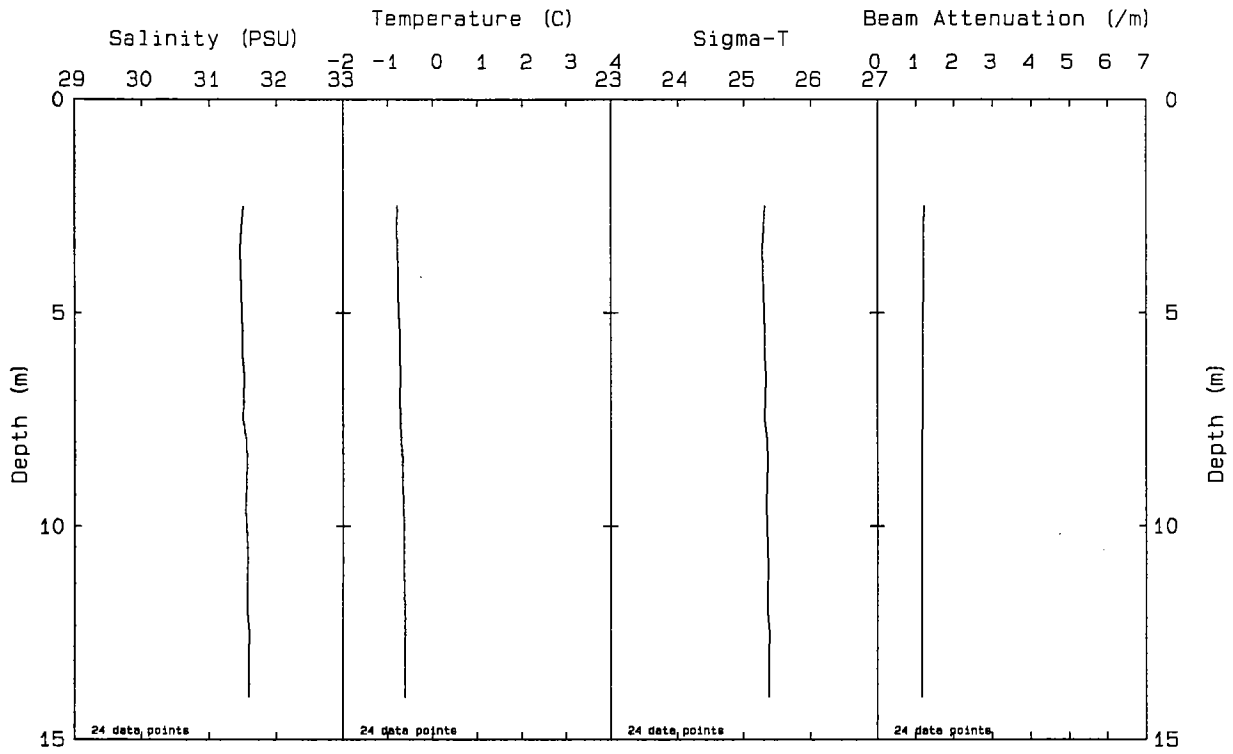




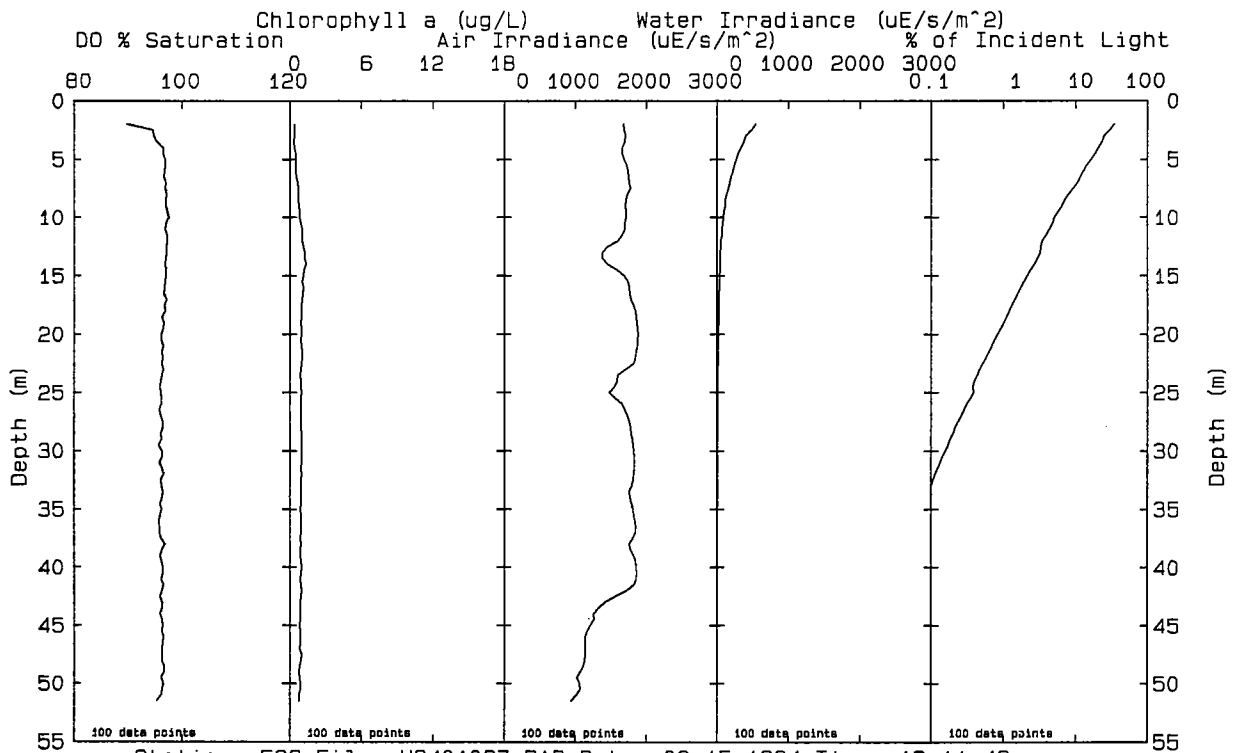
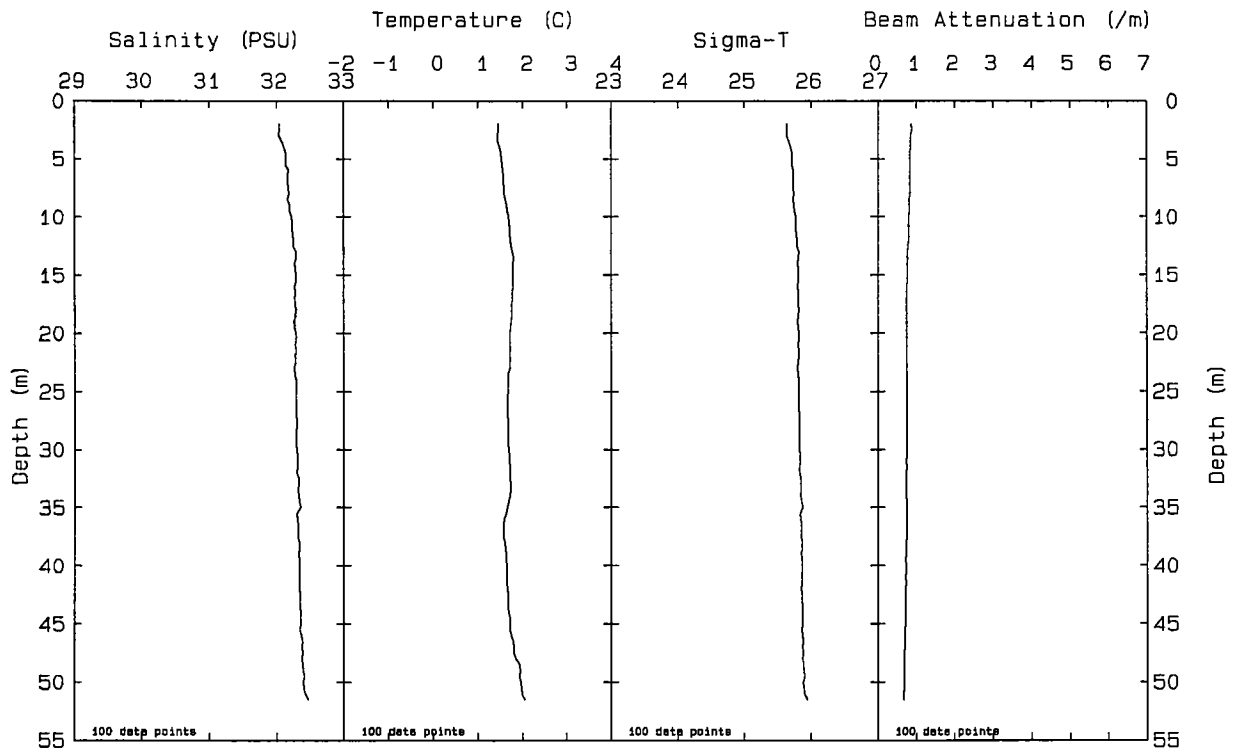




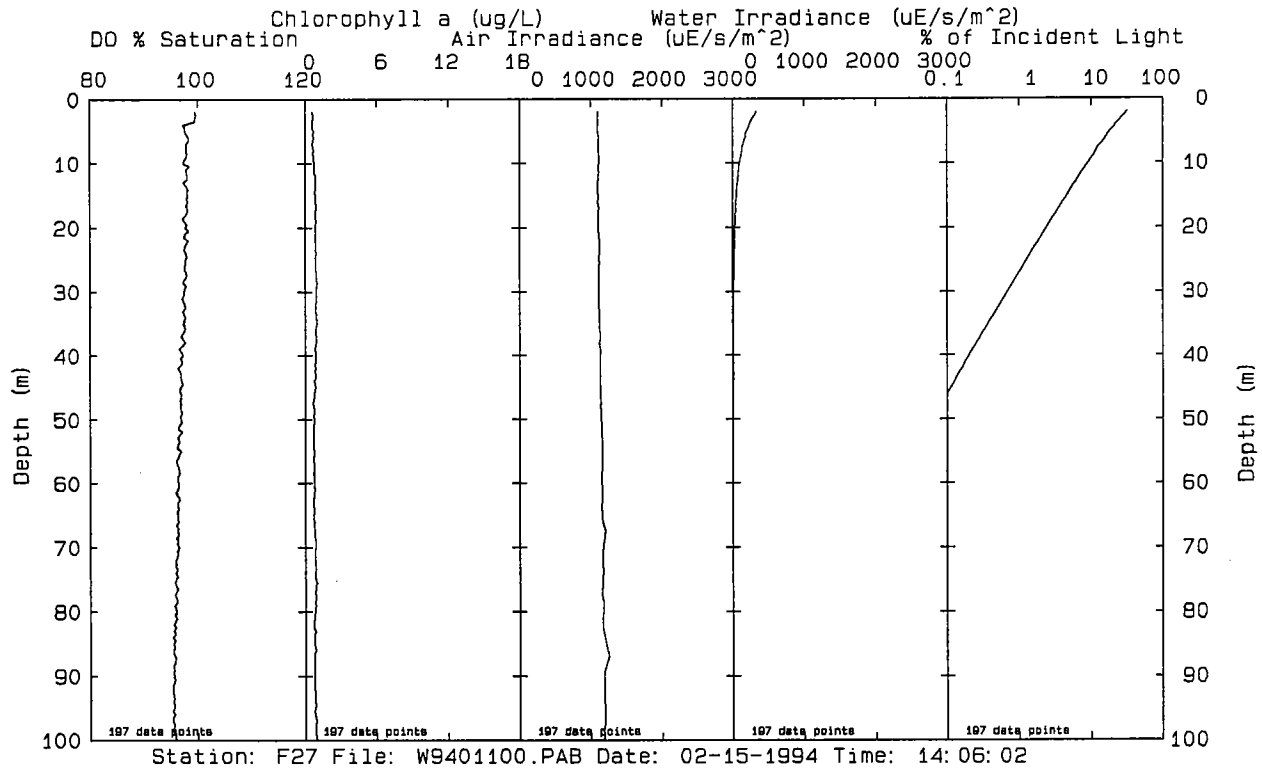
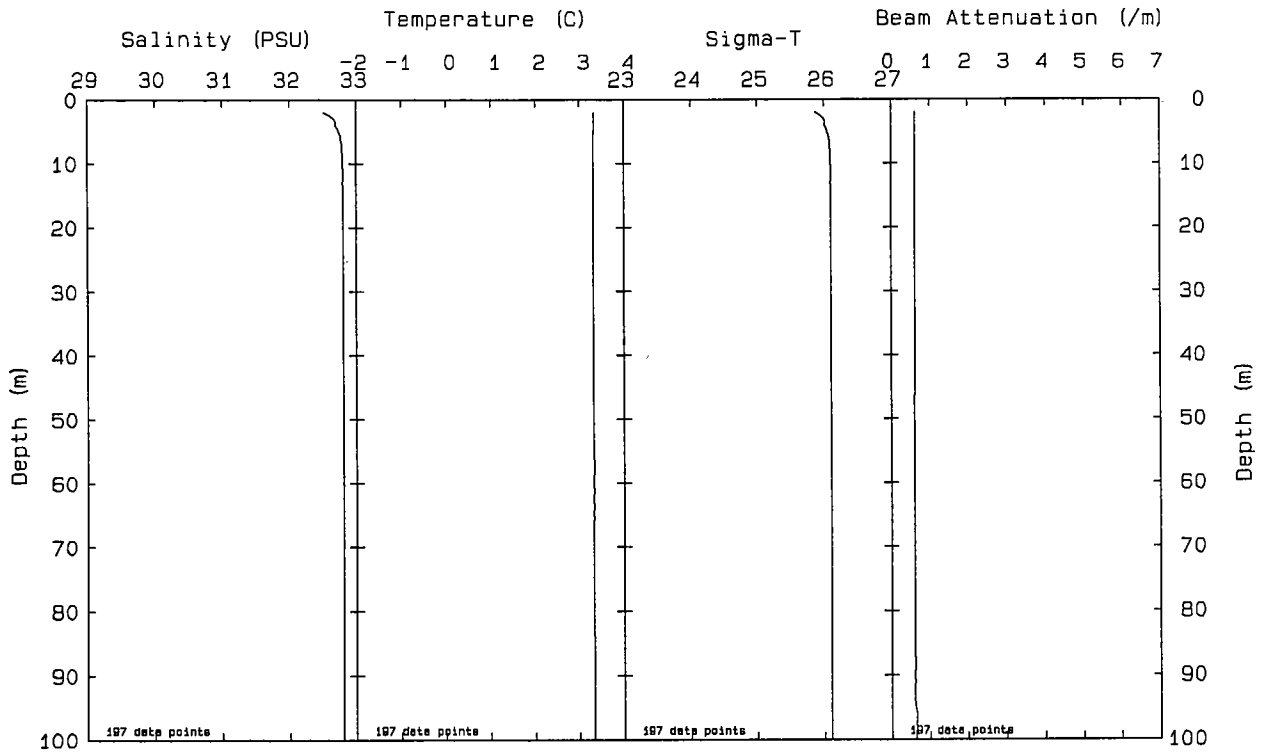


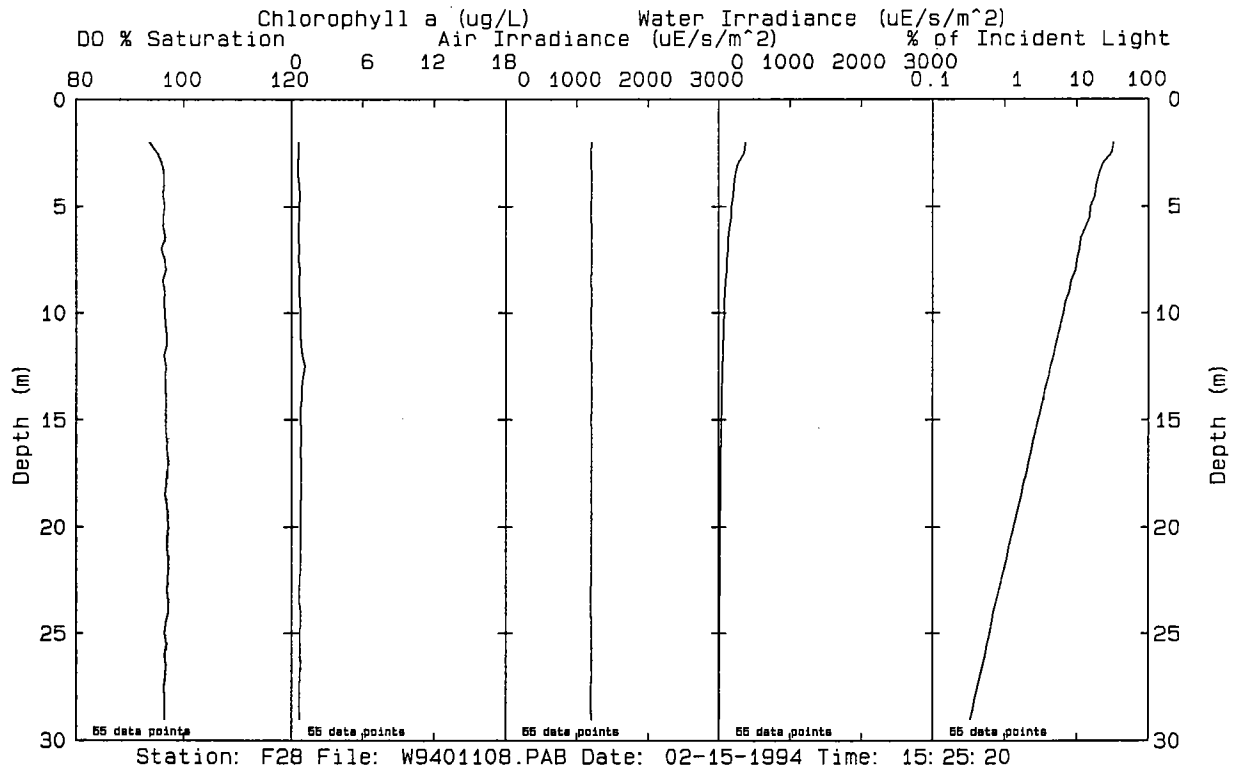
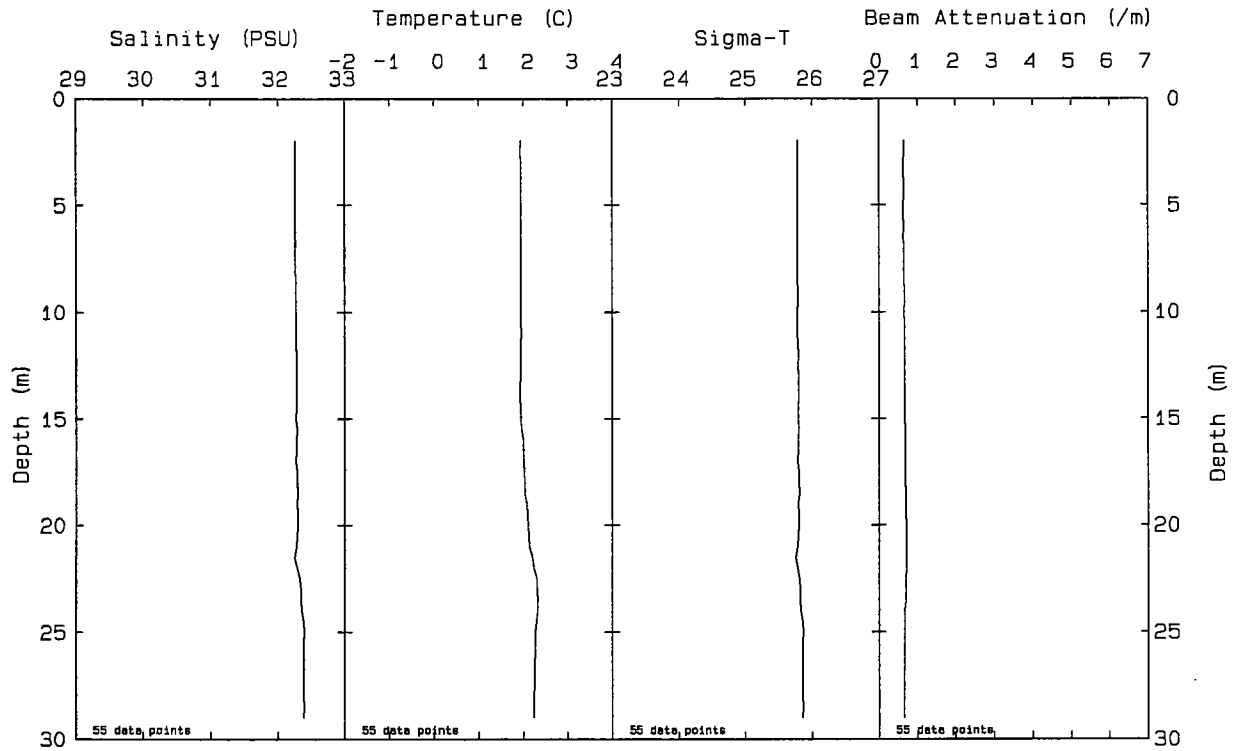


Station: F25 File: W9401165.PAB Date: 02-17-1994 Time: 07: 25: 06

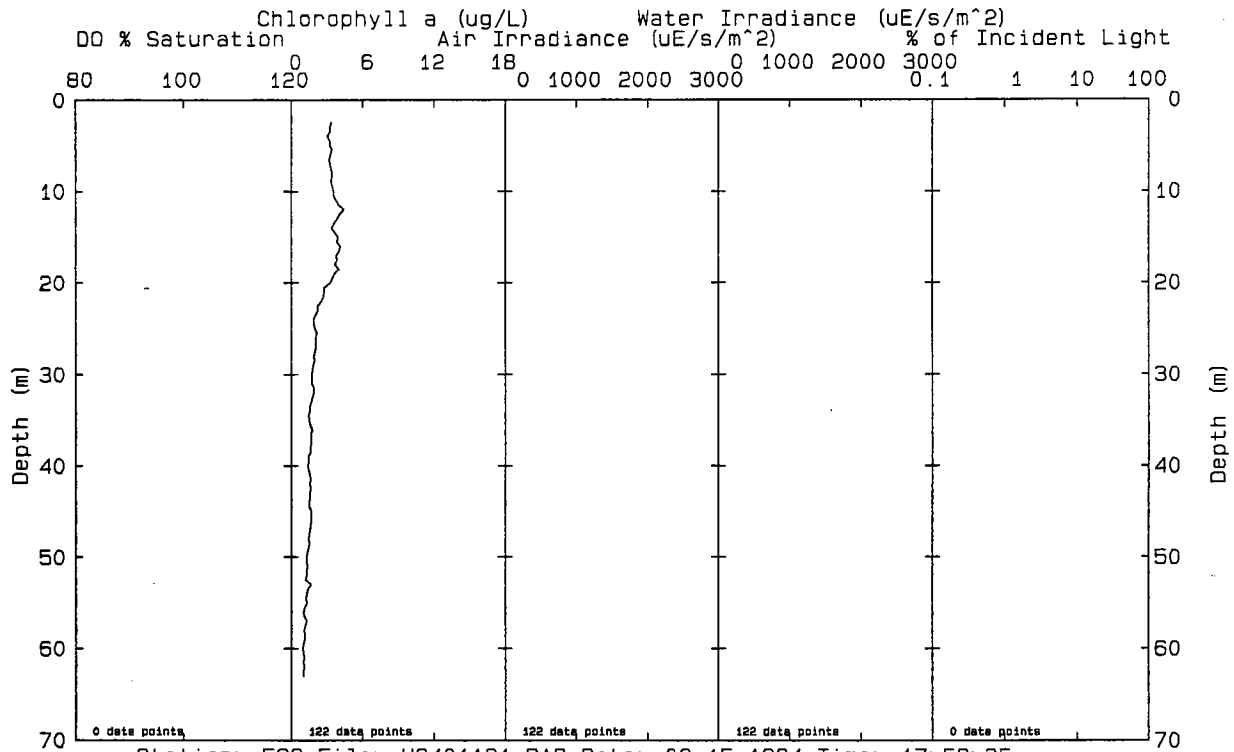
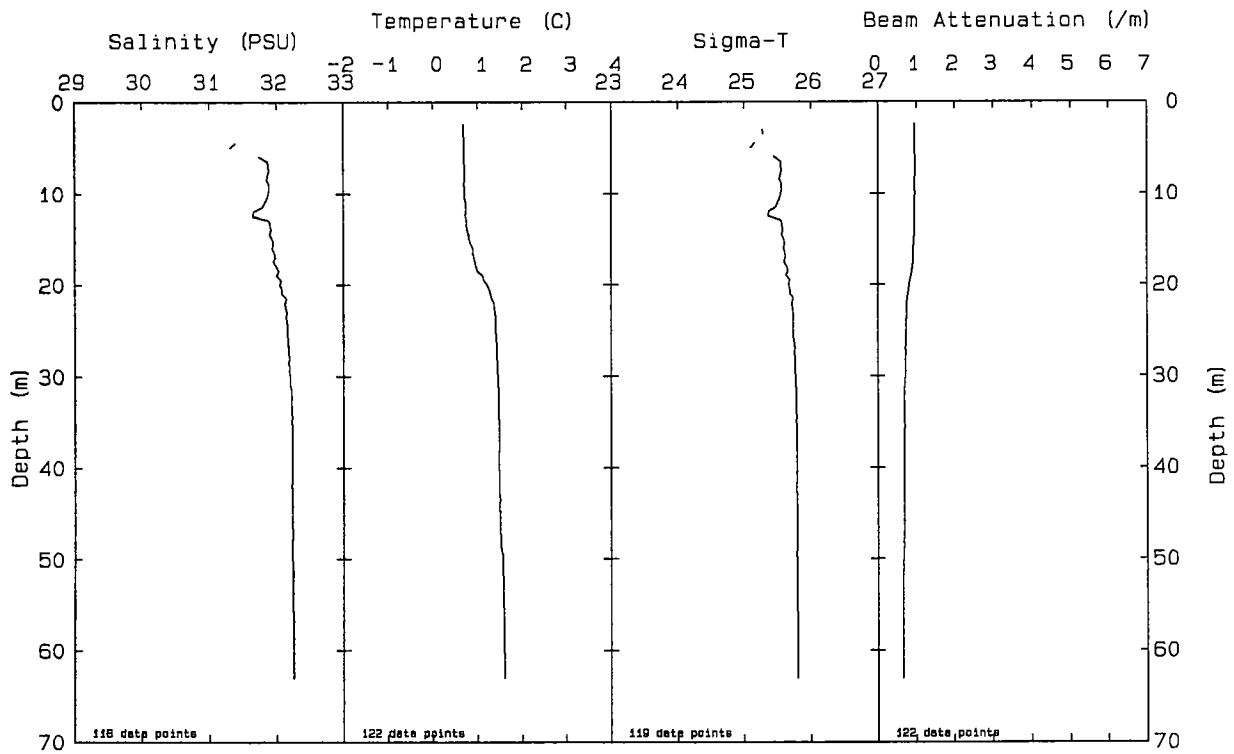


Station: F26 File: W9401097.PAB Date: 02-15-1994 Time: 13:11:48

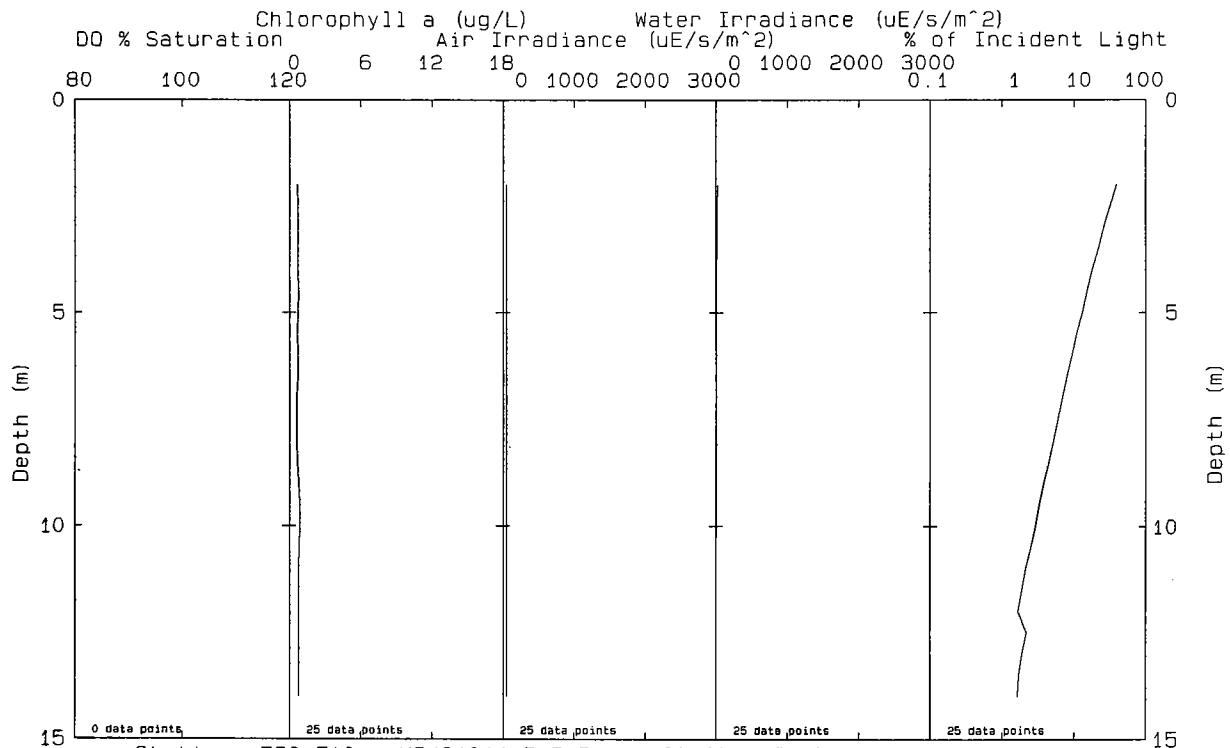
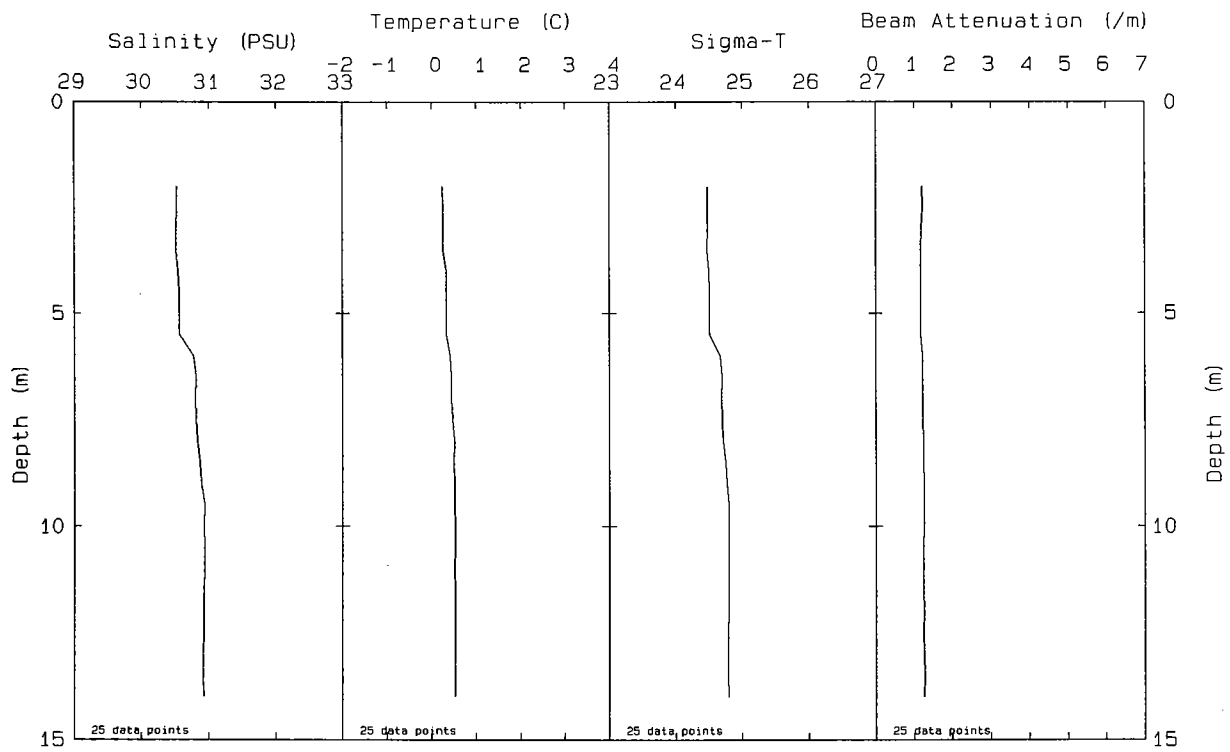








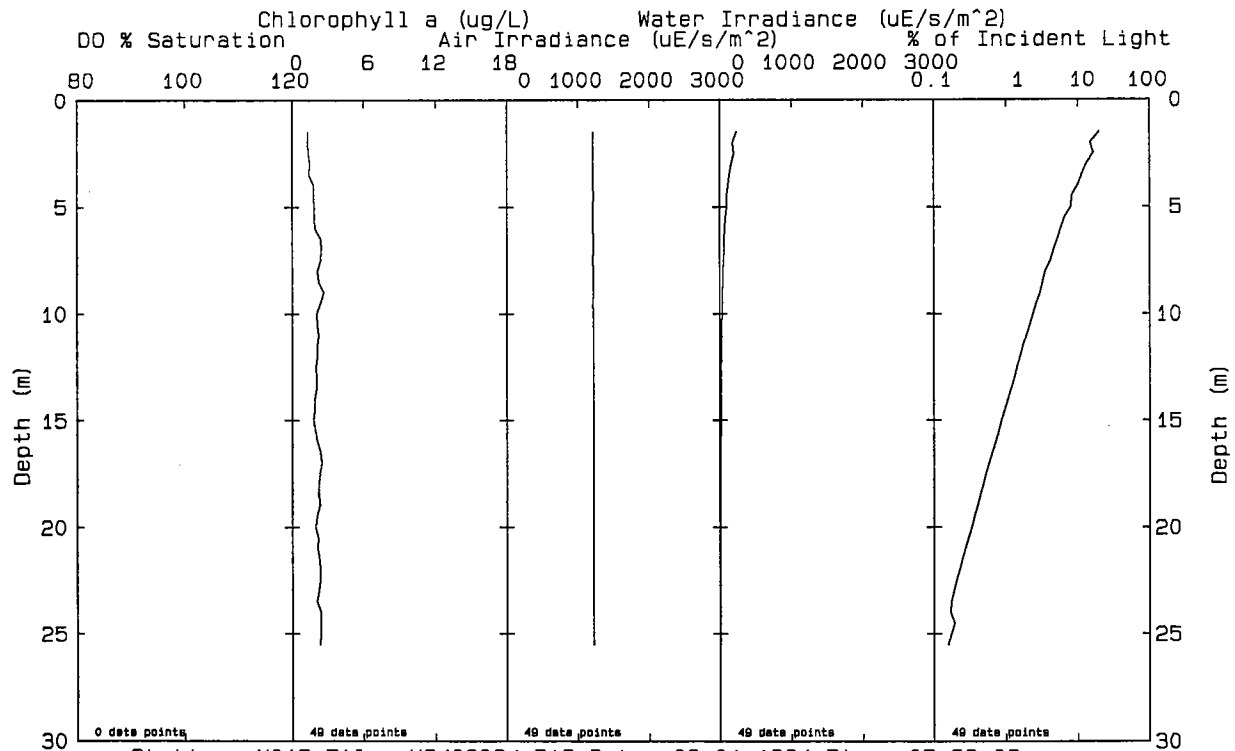
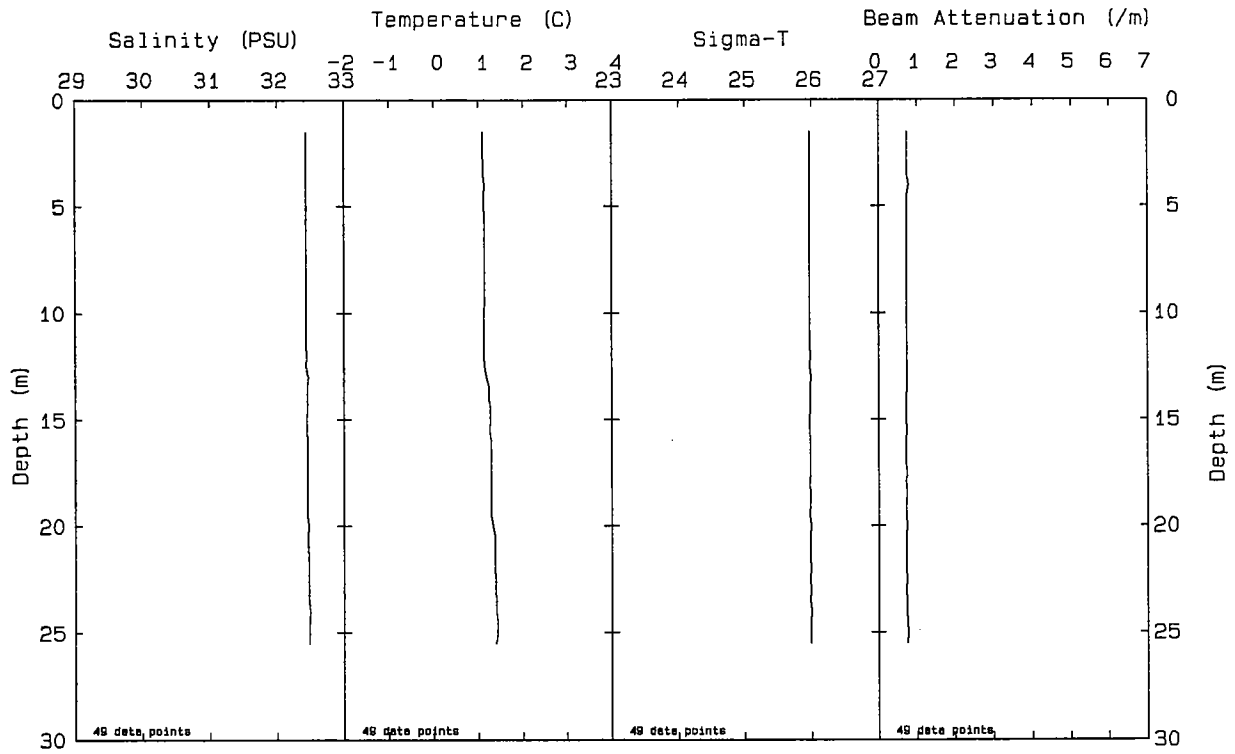
Station: F29 File: W9401121.PAB Date: 02-15-1994 Time: 17: 58: 35



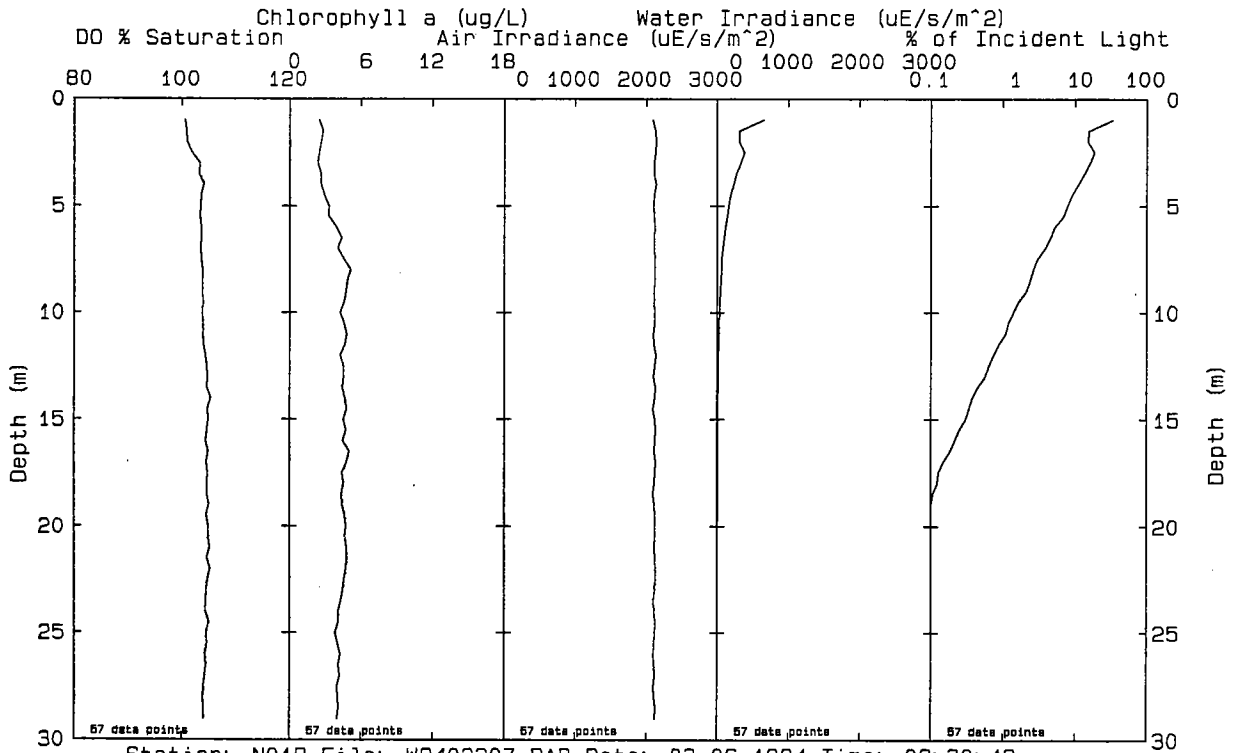
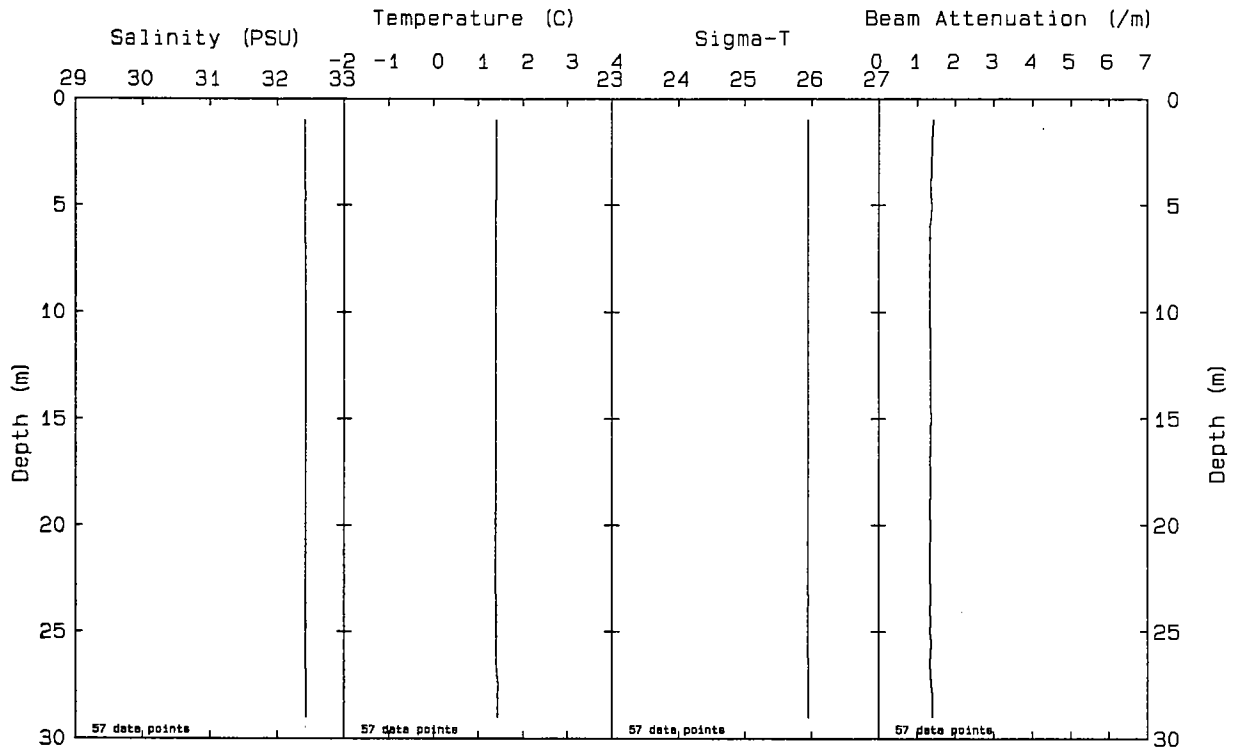
Station: F30 File: W9401011.PAB Date: 02-08-1994 Time: 07:16:20

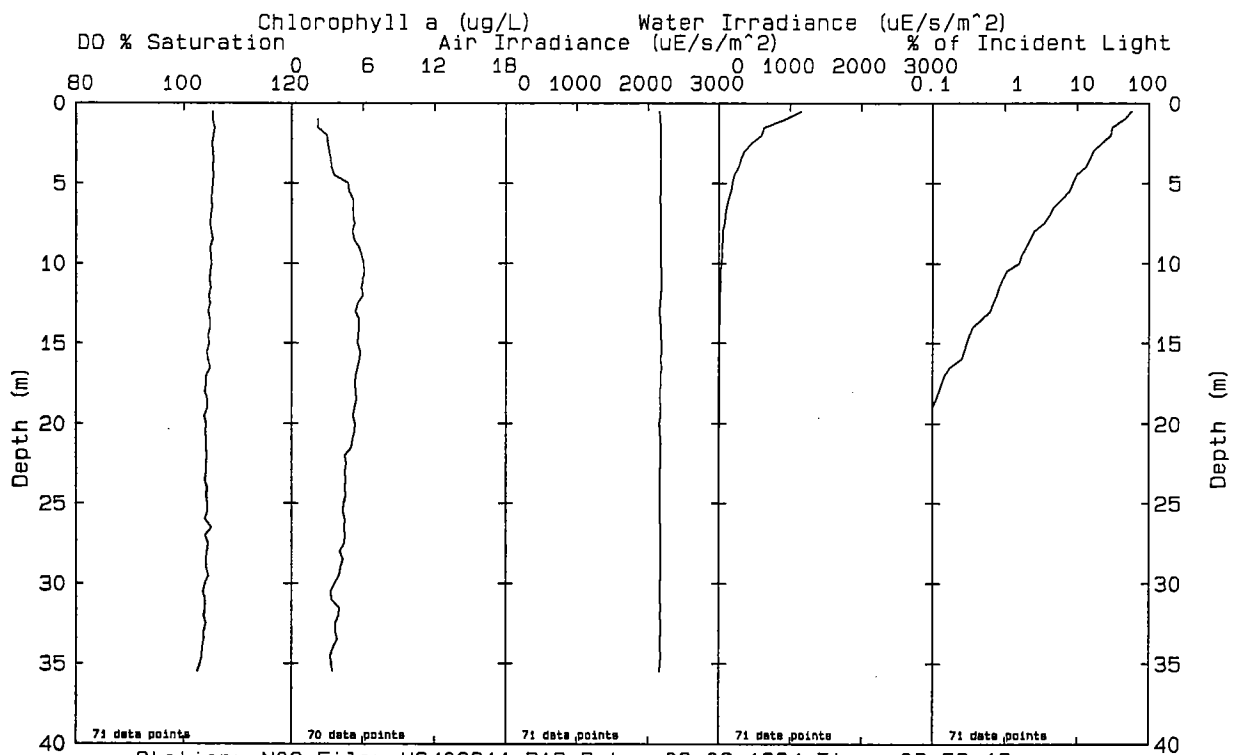
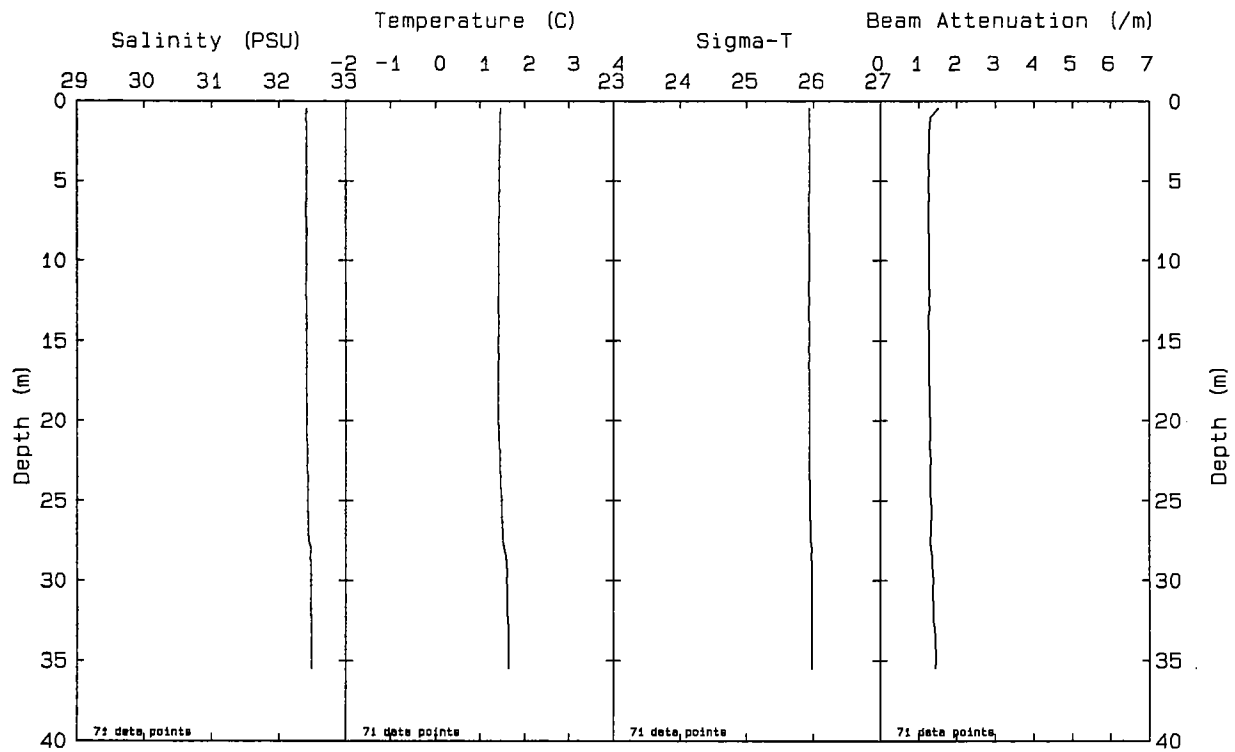
**Early March 1994 Profiles**

000030

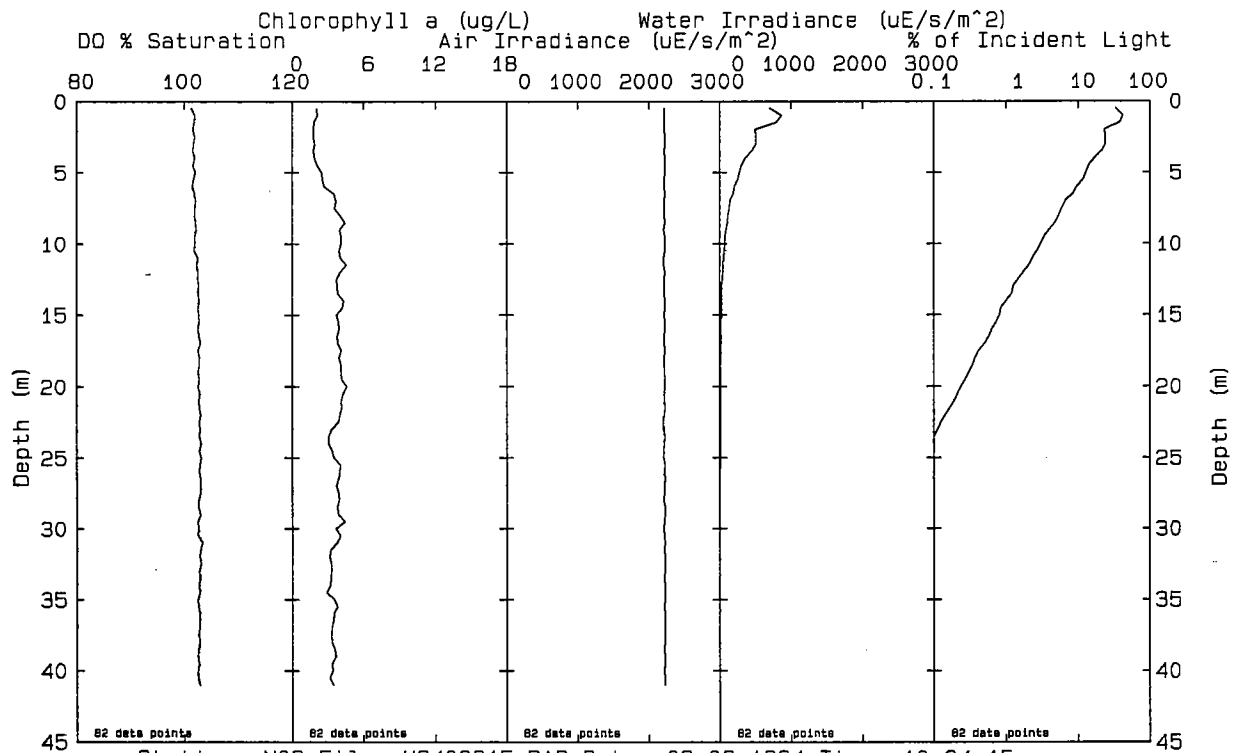
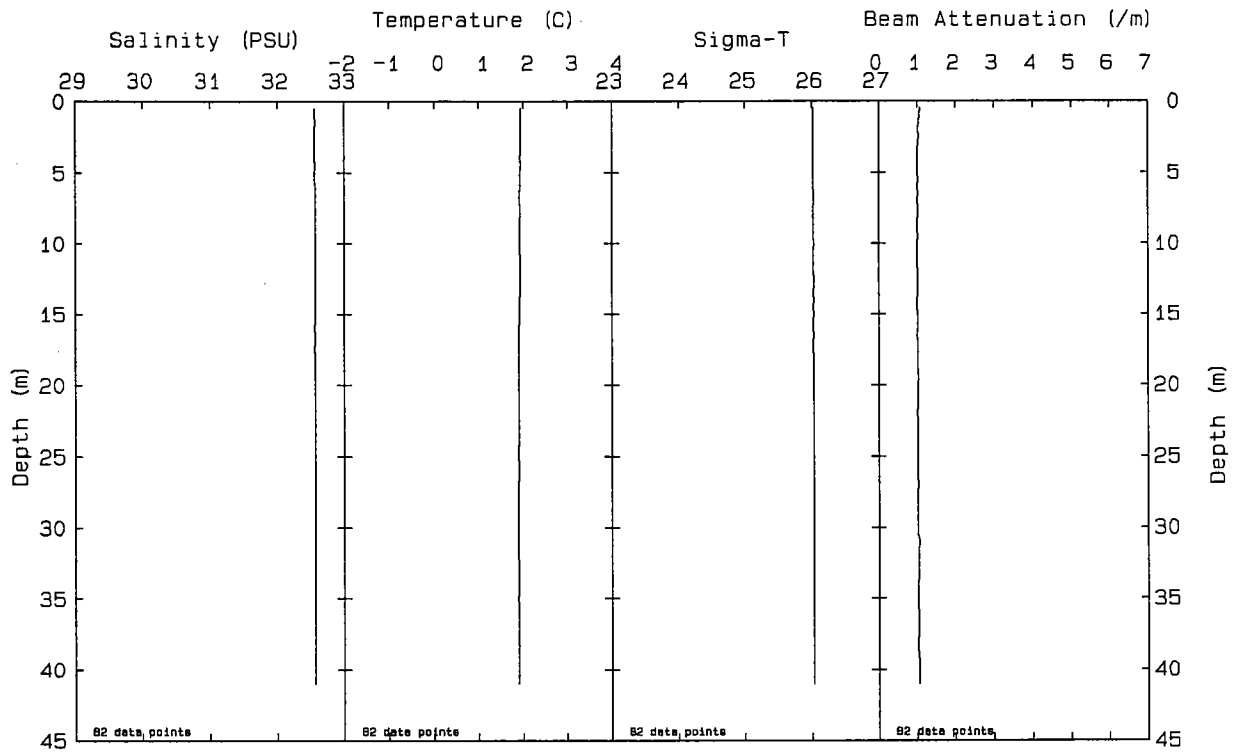


Station: N01P File: W9402024.PAB Date: 03-01-1994 Time: 07: 38: 08

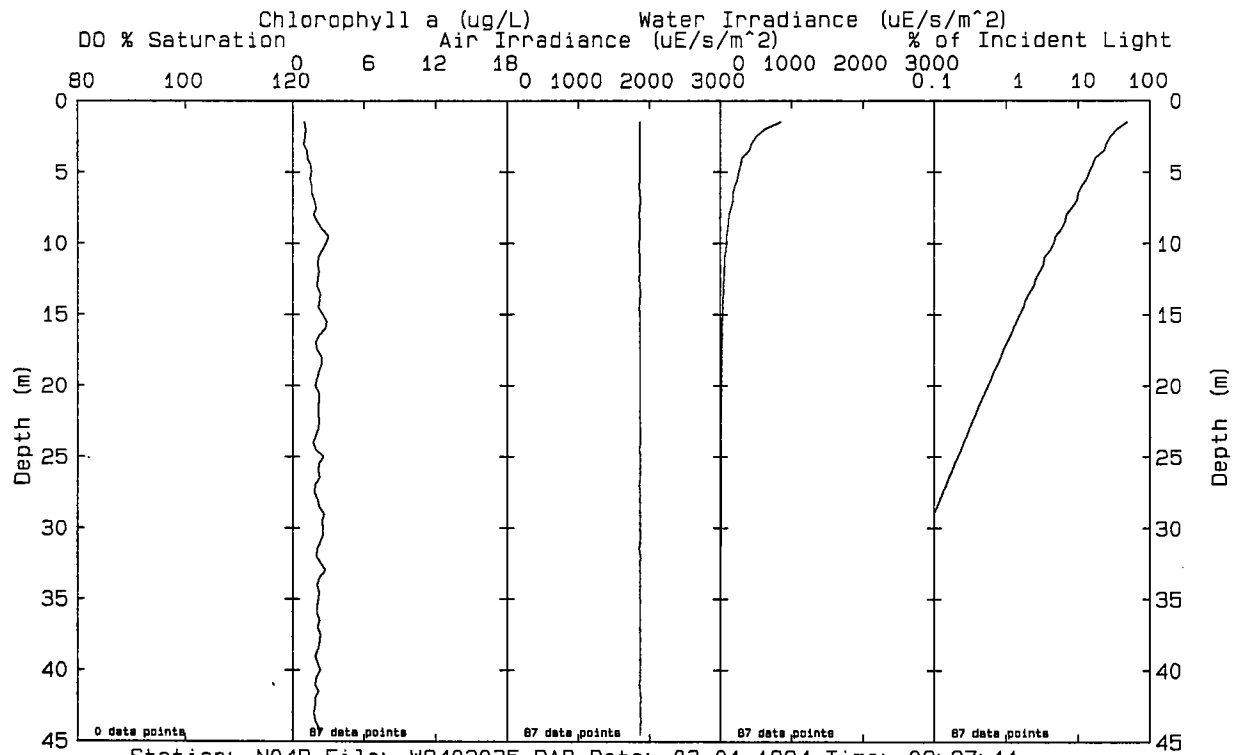
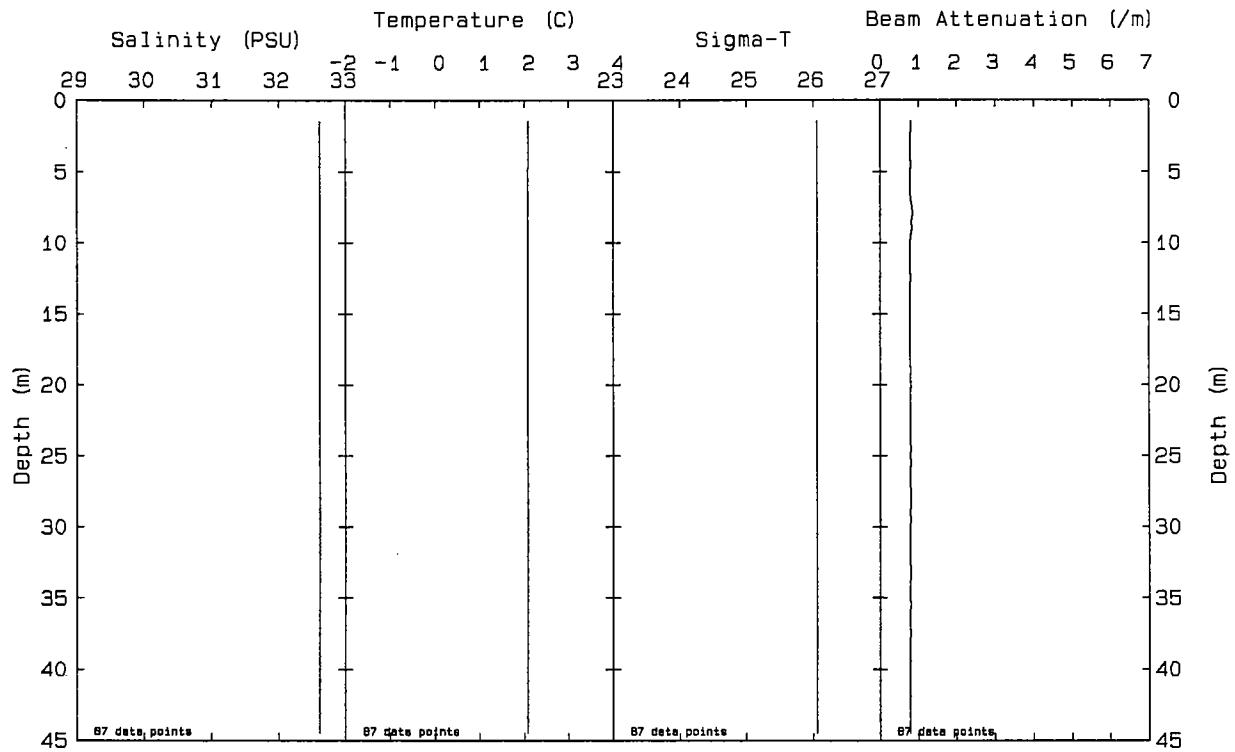




Station: N02 File: W9402211.PAB Date: 03-06-1994 Time: 09: 58: 19

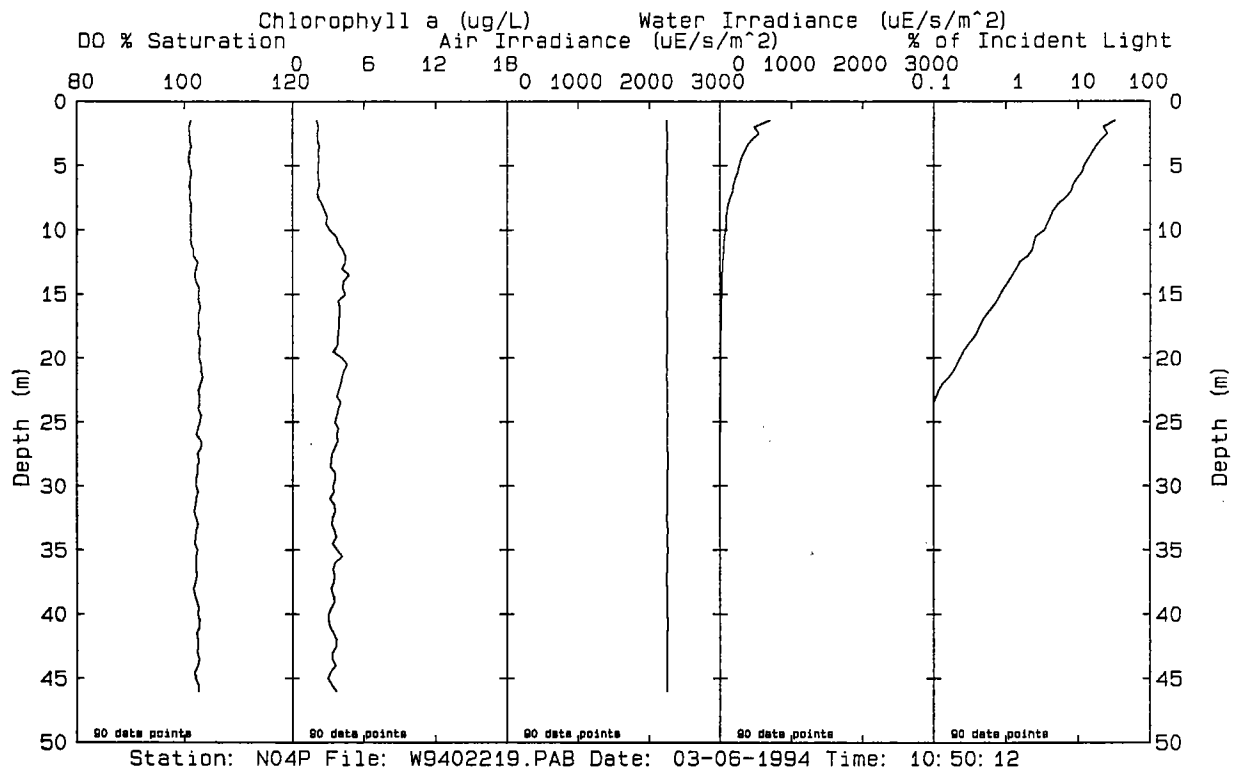
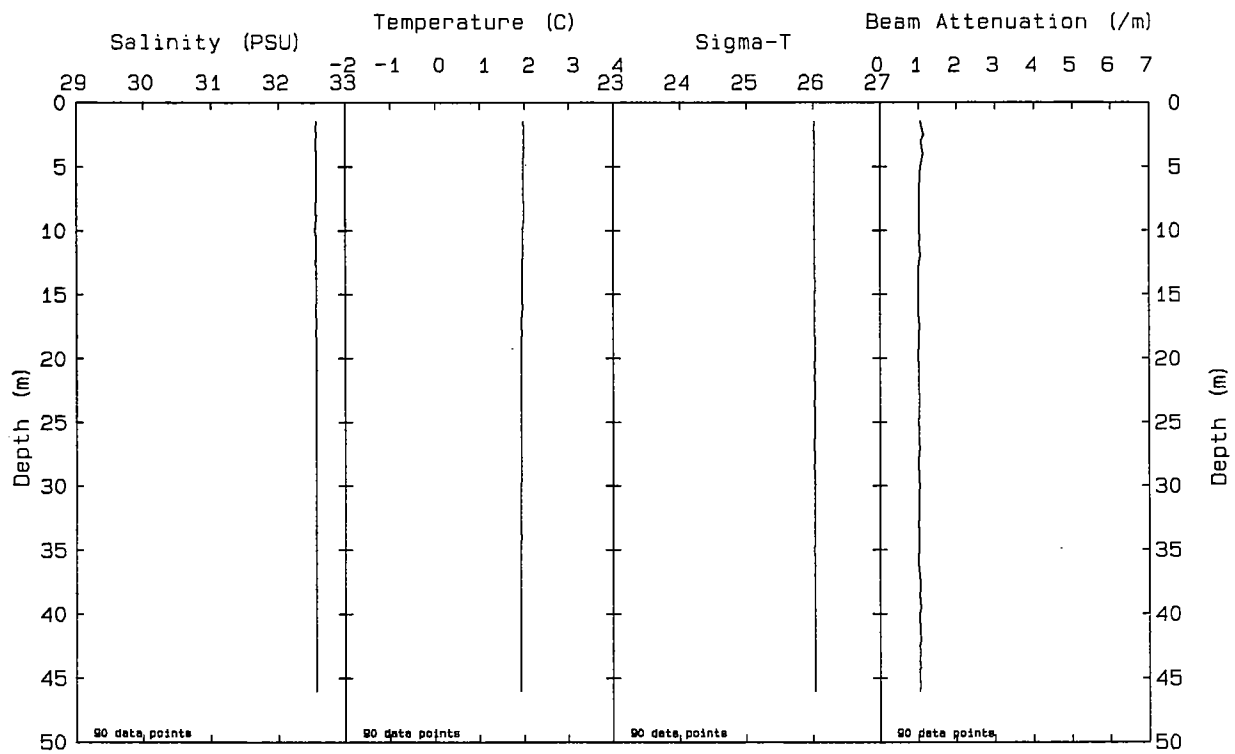


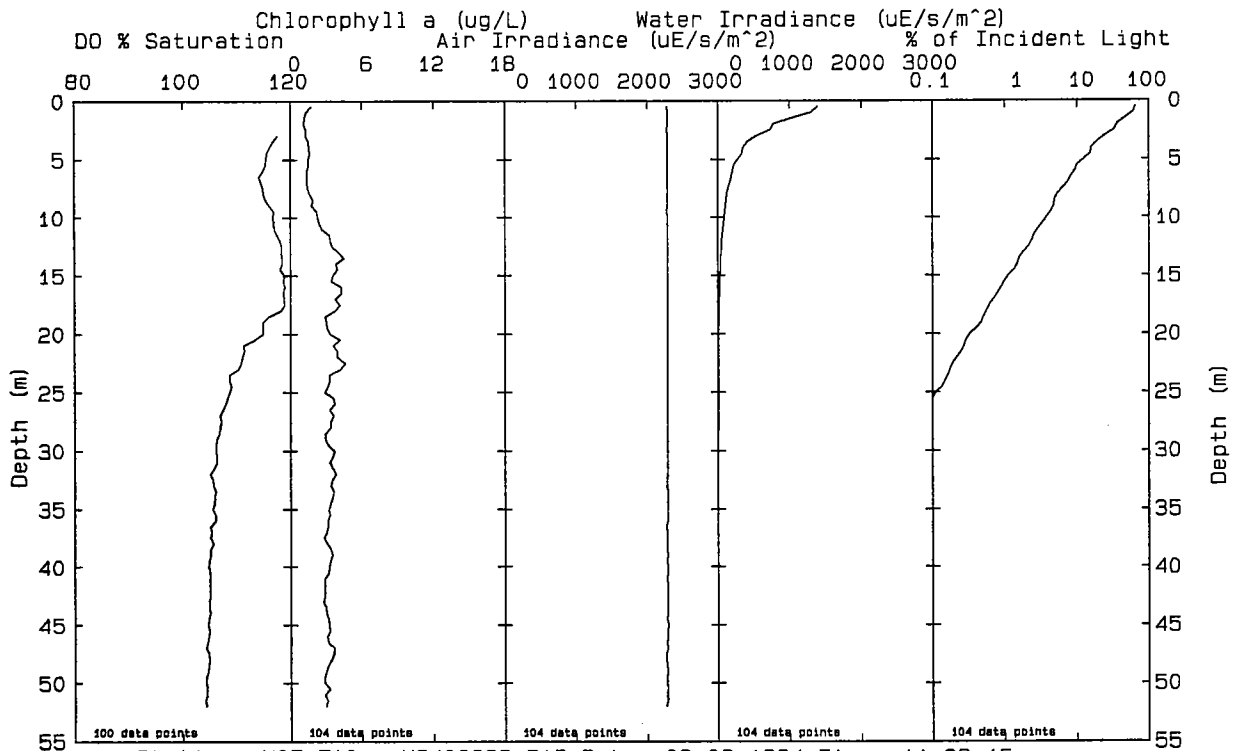
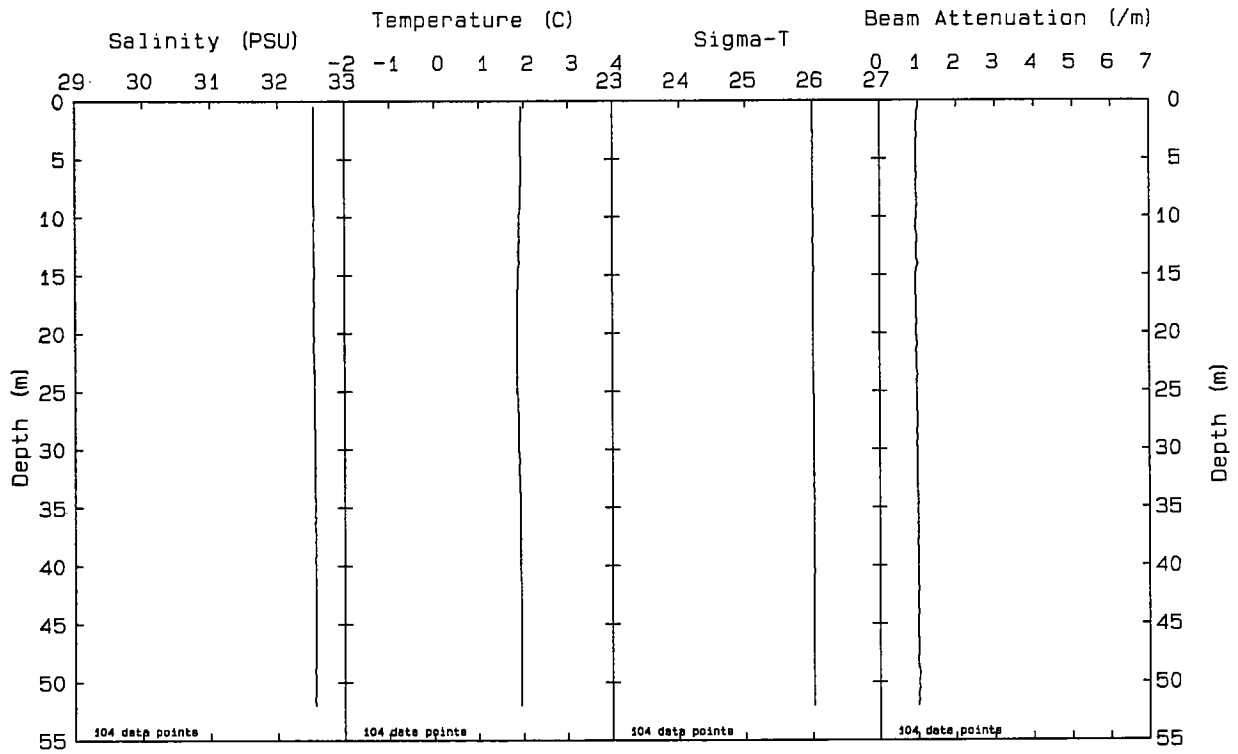
Station: N03 File: W9402215.PAB Date: 03-06-1994 Time: 10: 24: 15



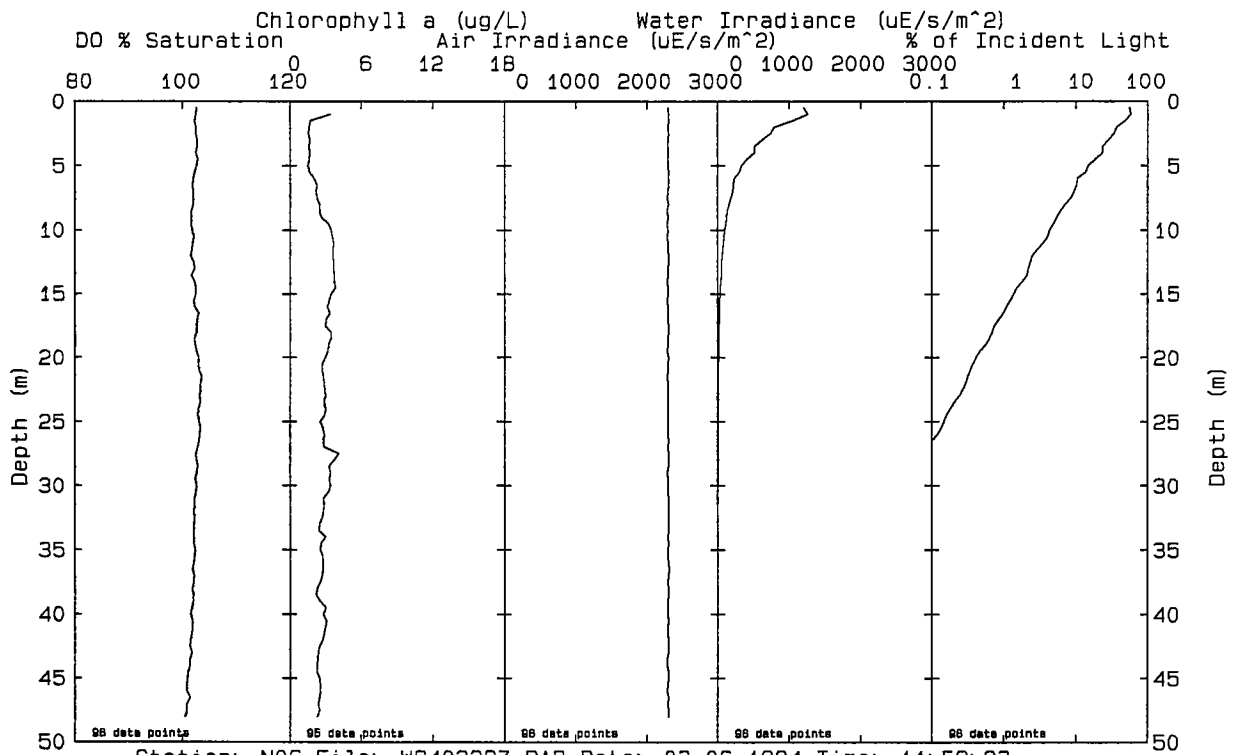
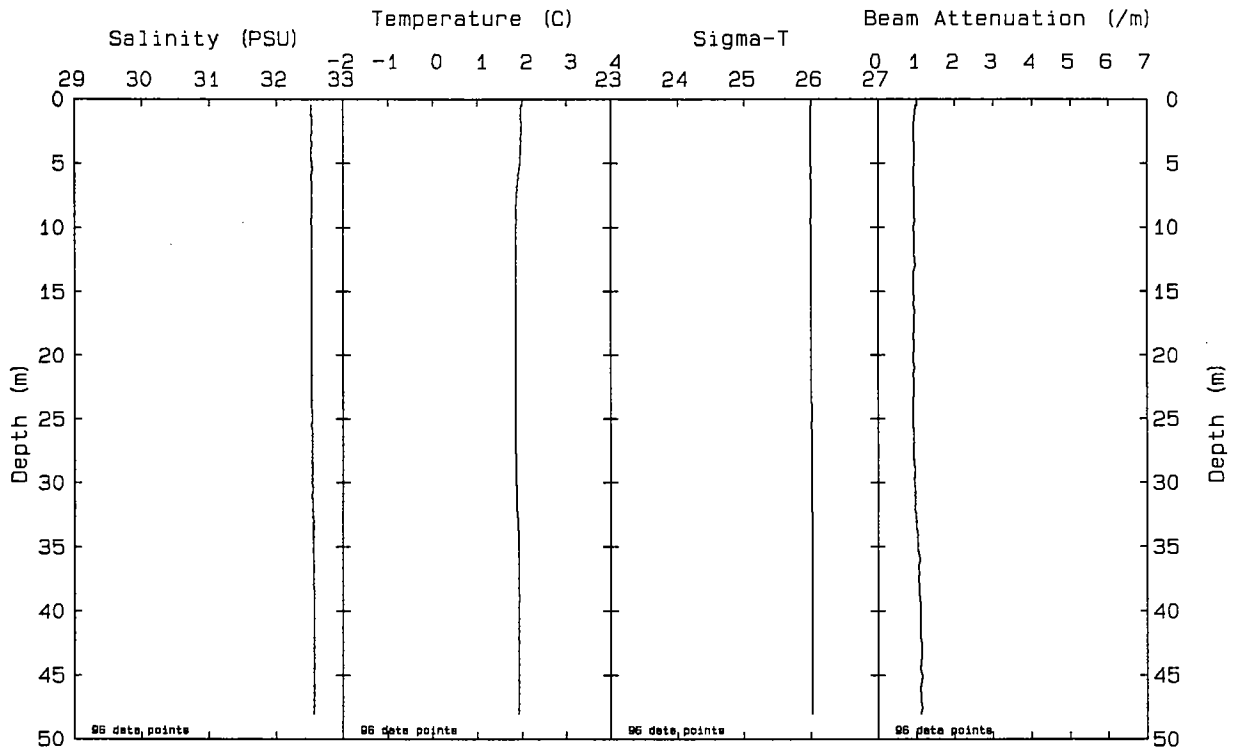
Station: N04P File: W9402035.PAB Date: 03-01-1994 Time: 09:27:11

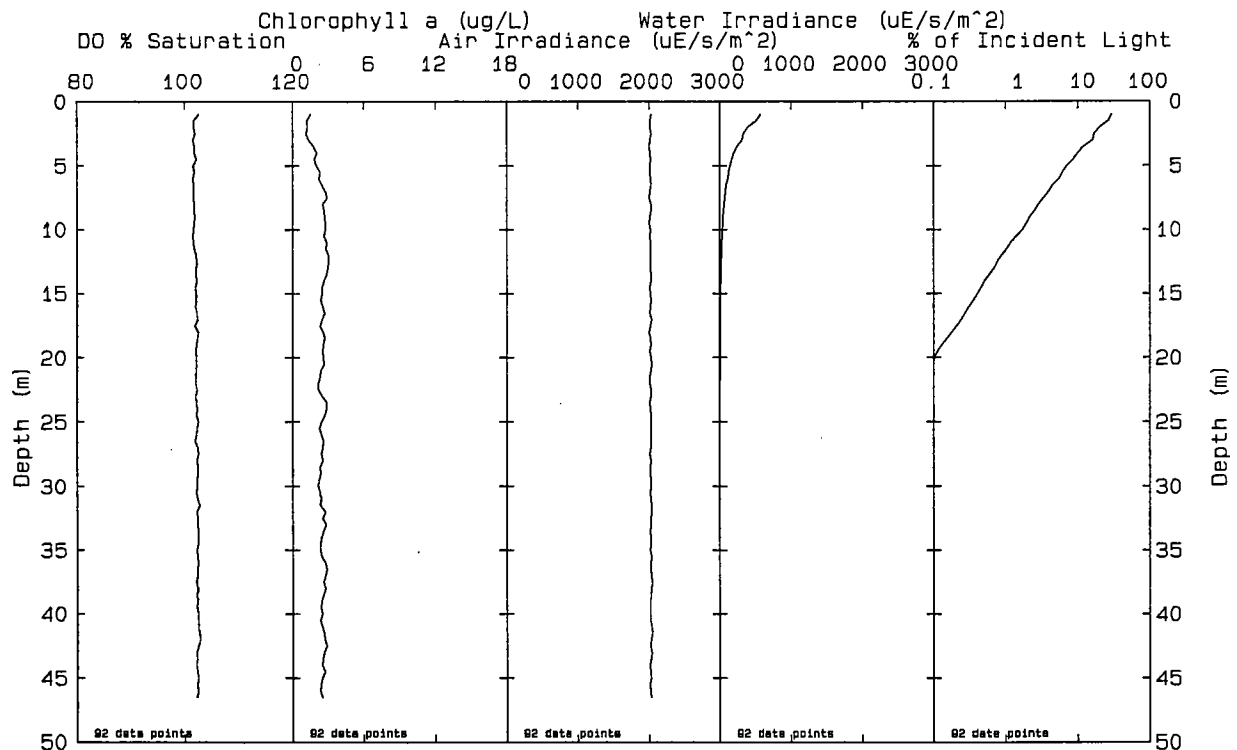
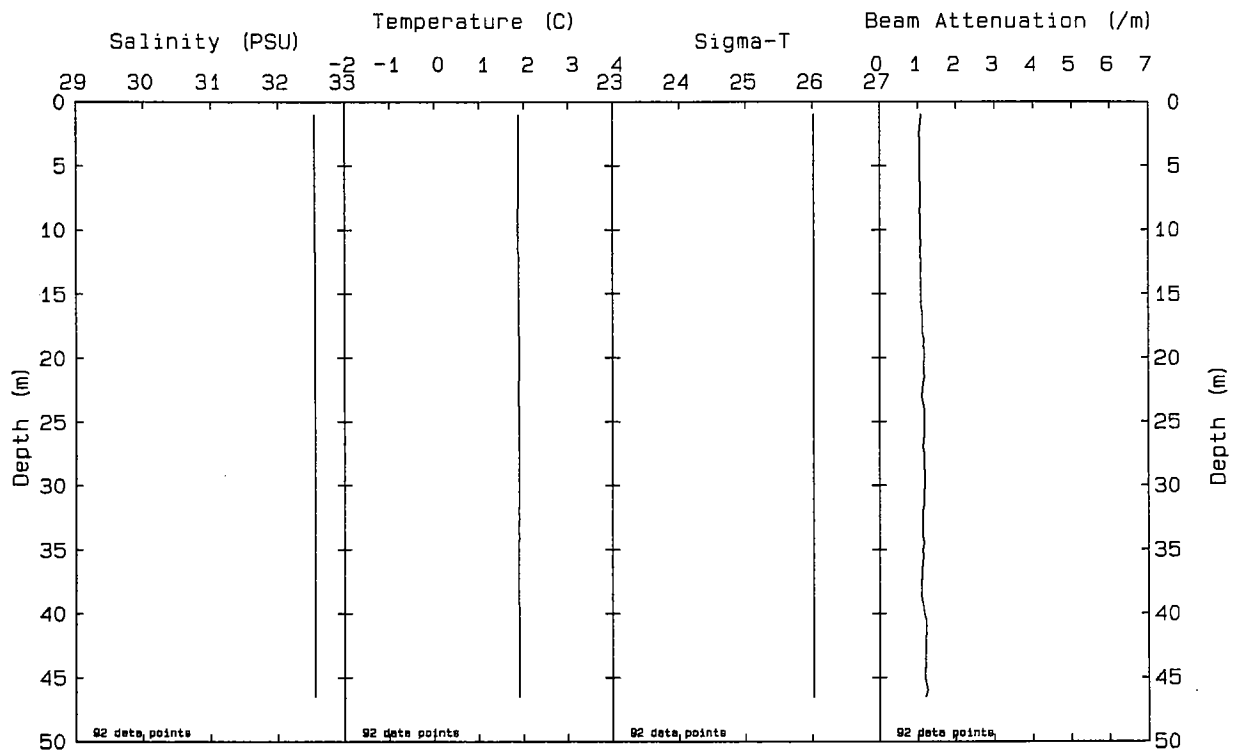




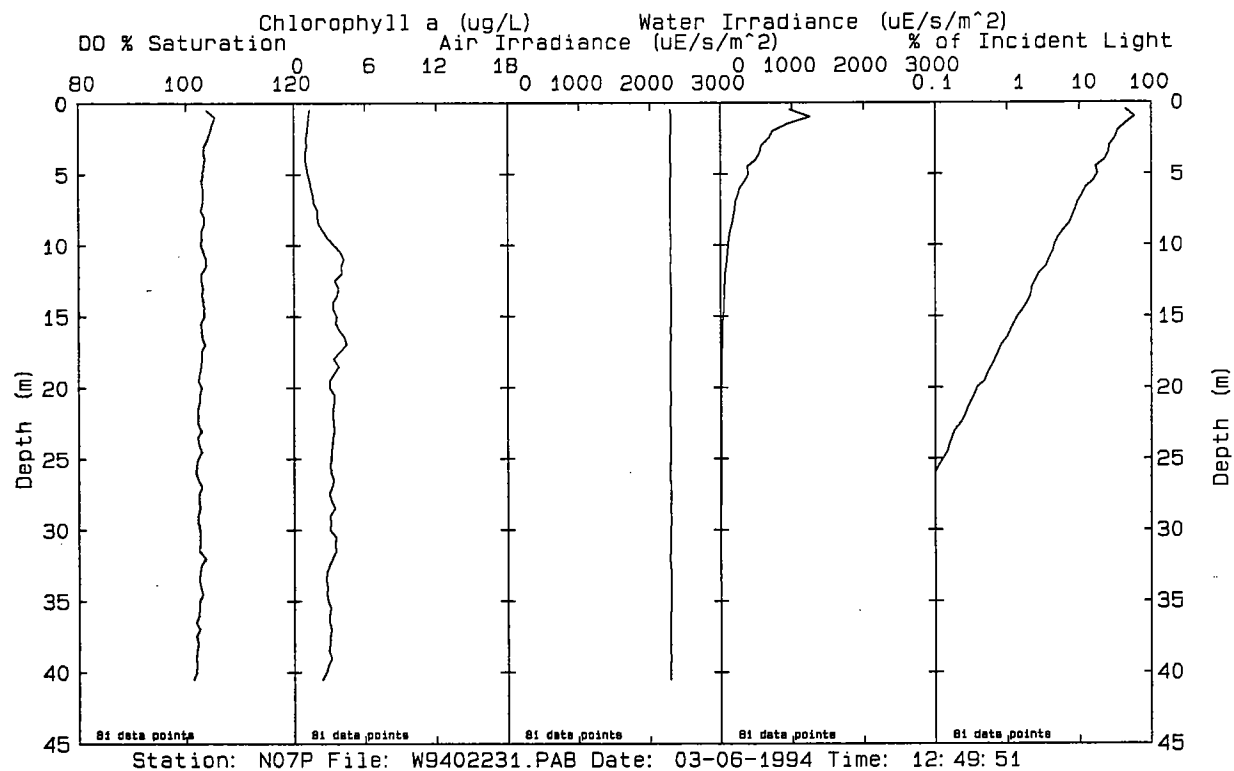
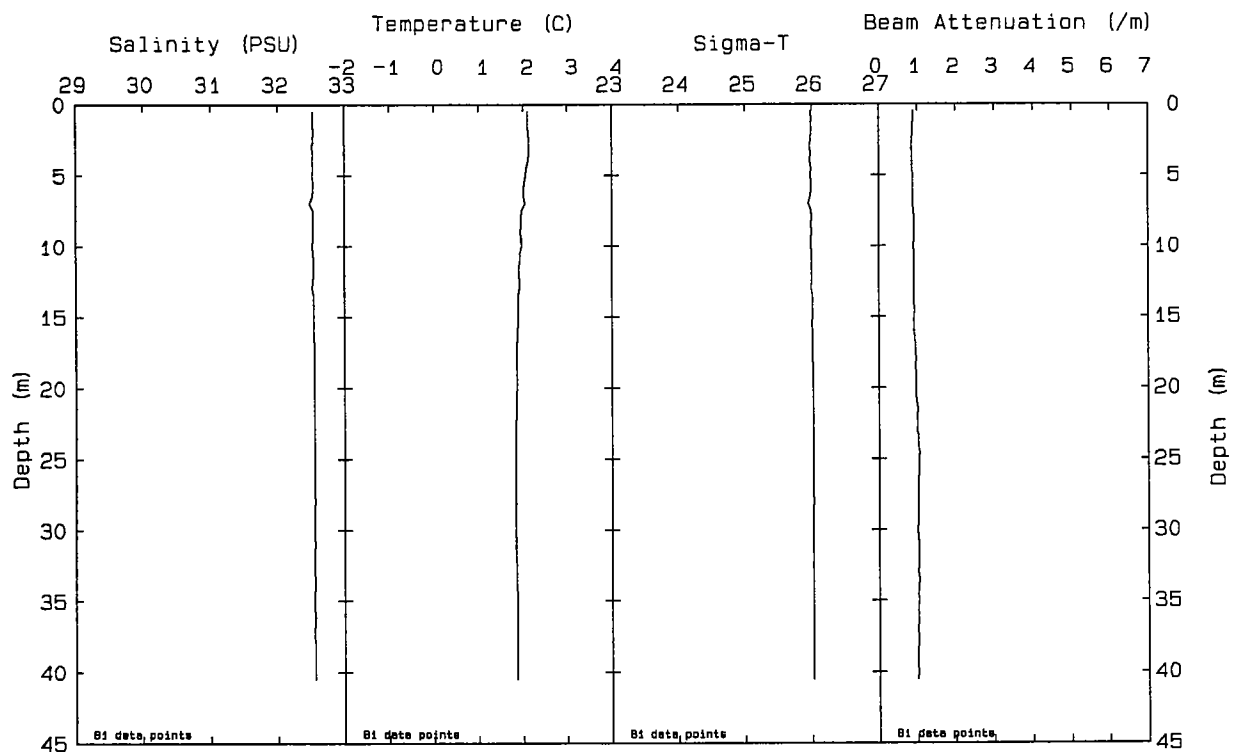


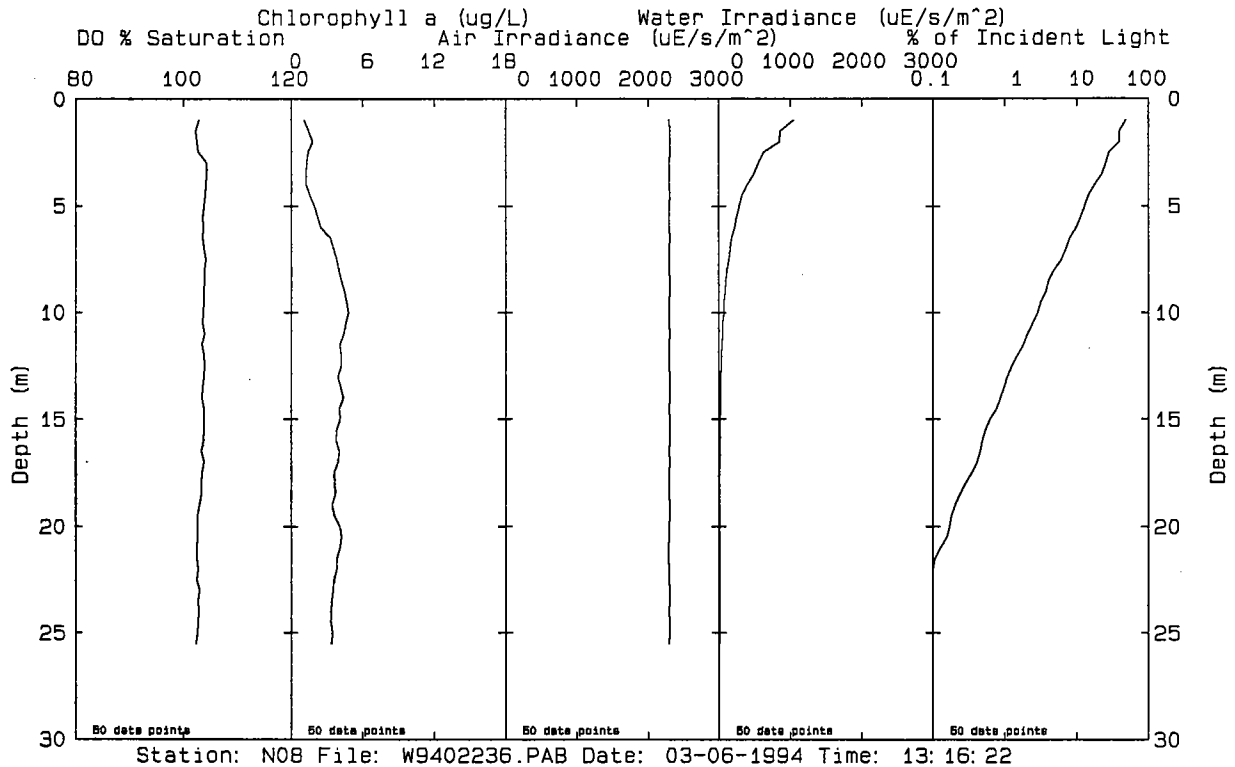
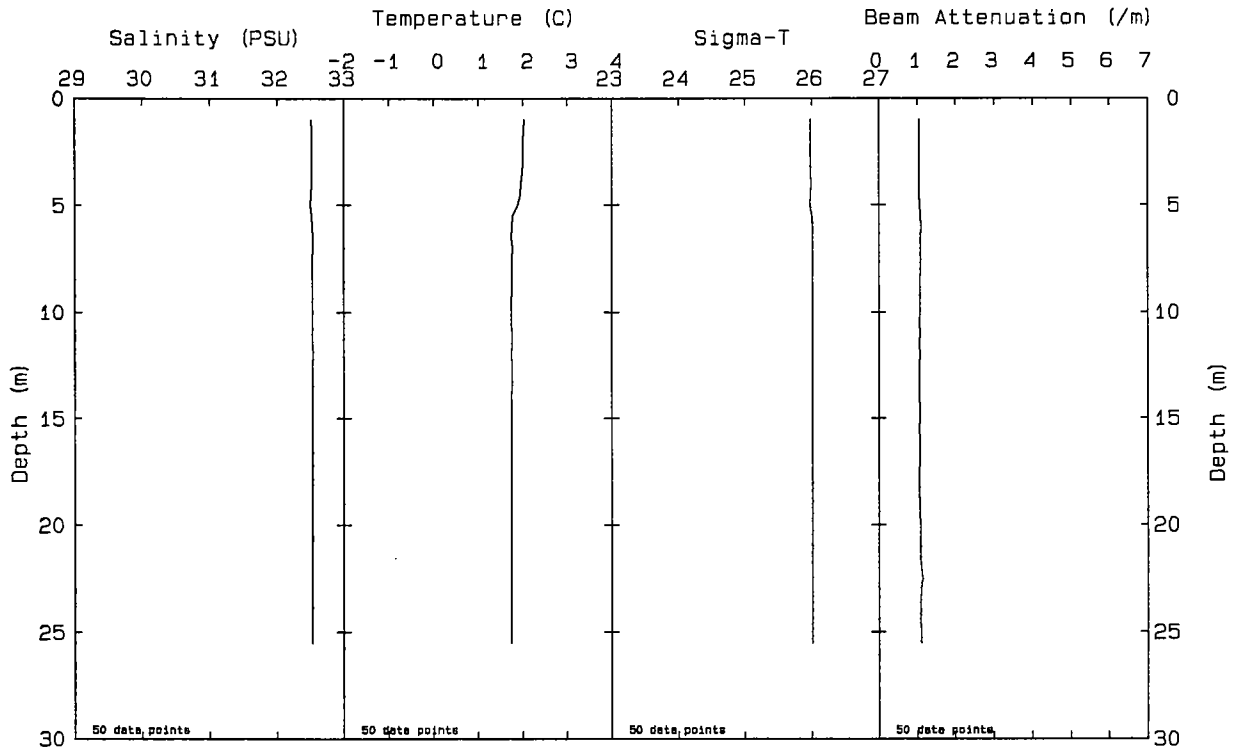
Station: N05 File: W9402223.PAB Date: 03-06-1994 Time: 11:26:15

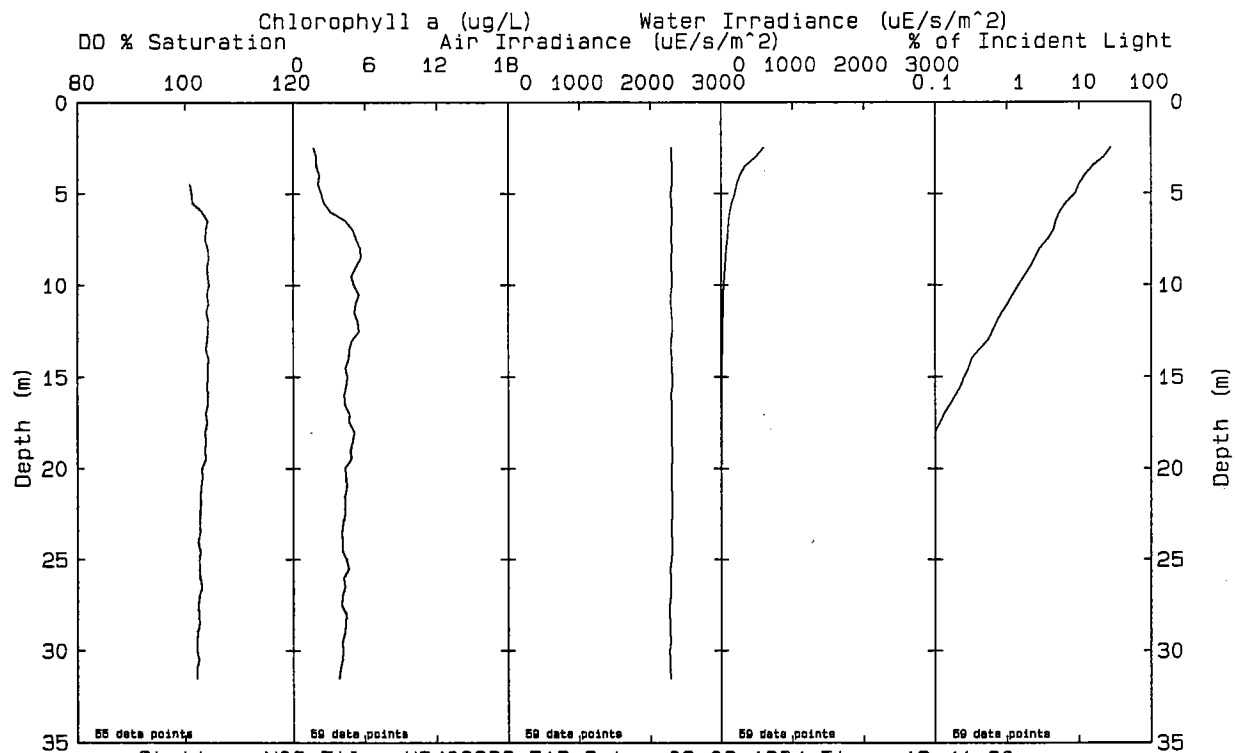
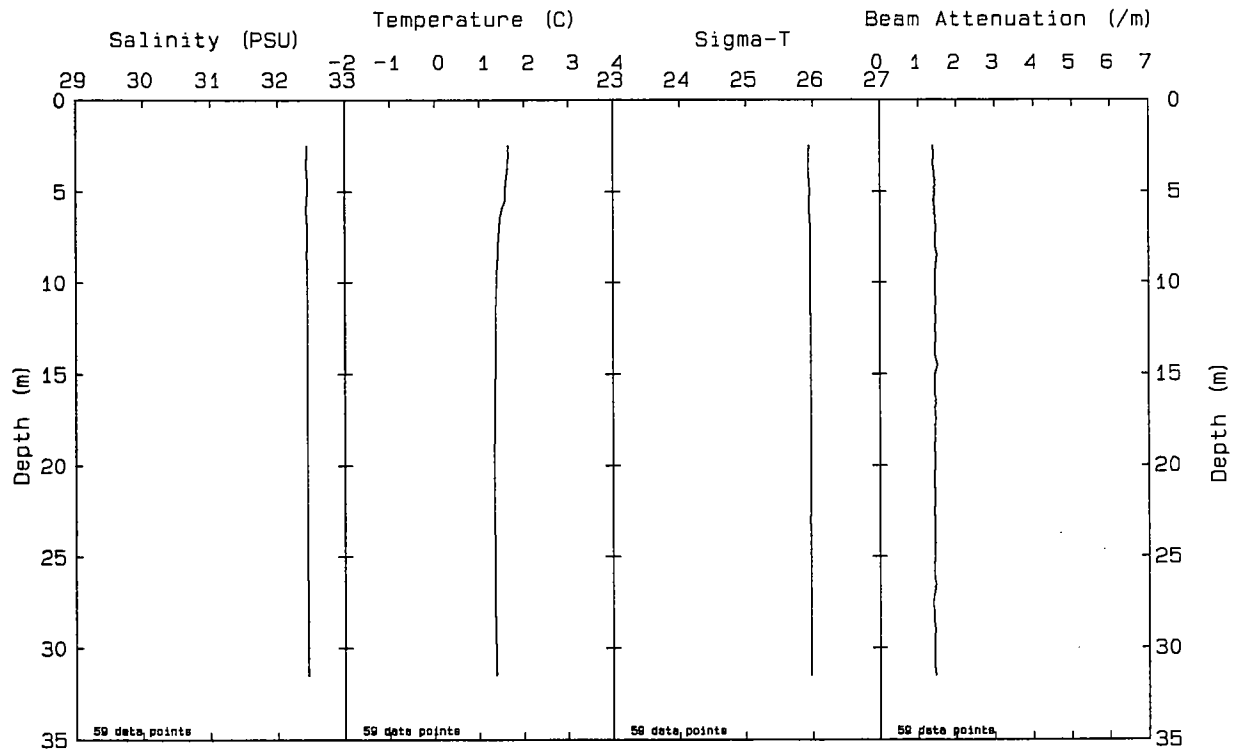




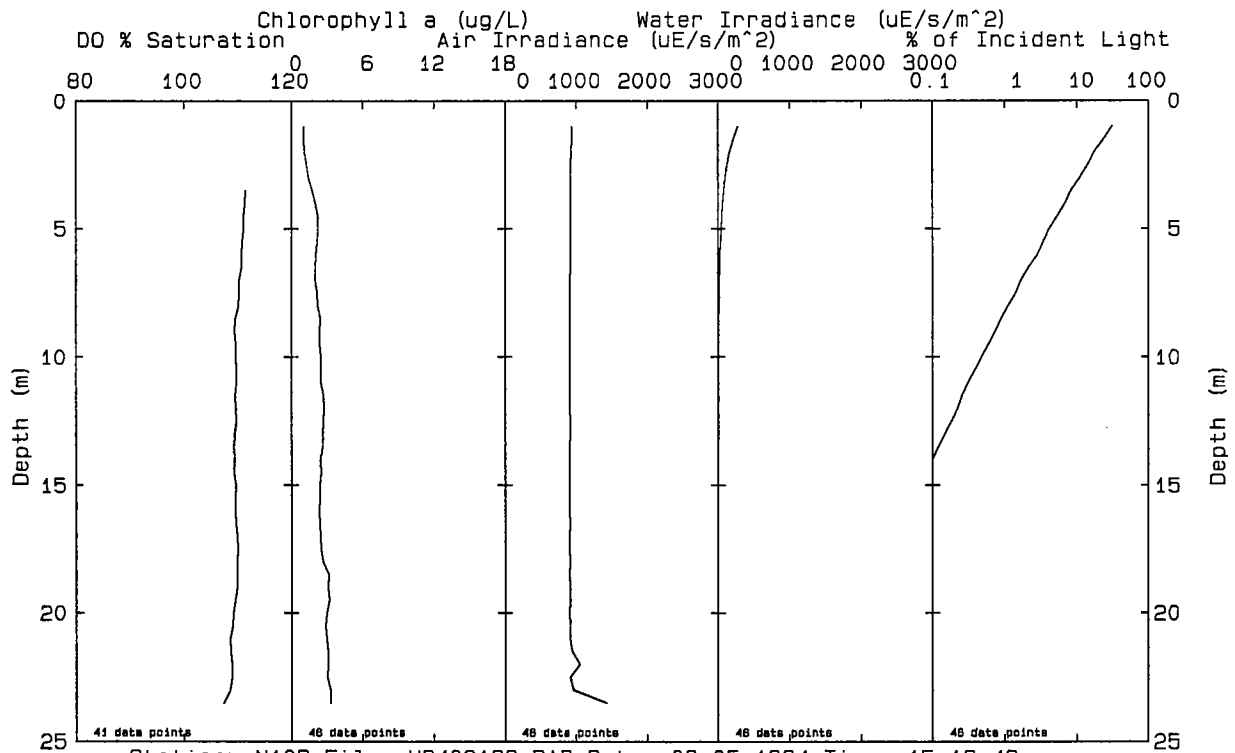
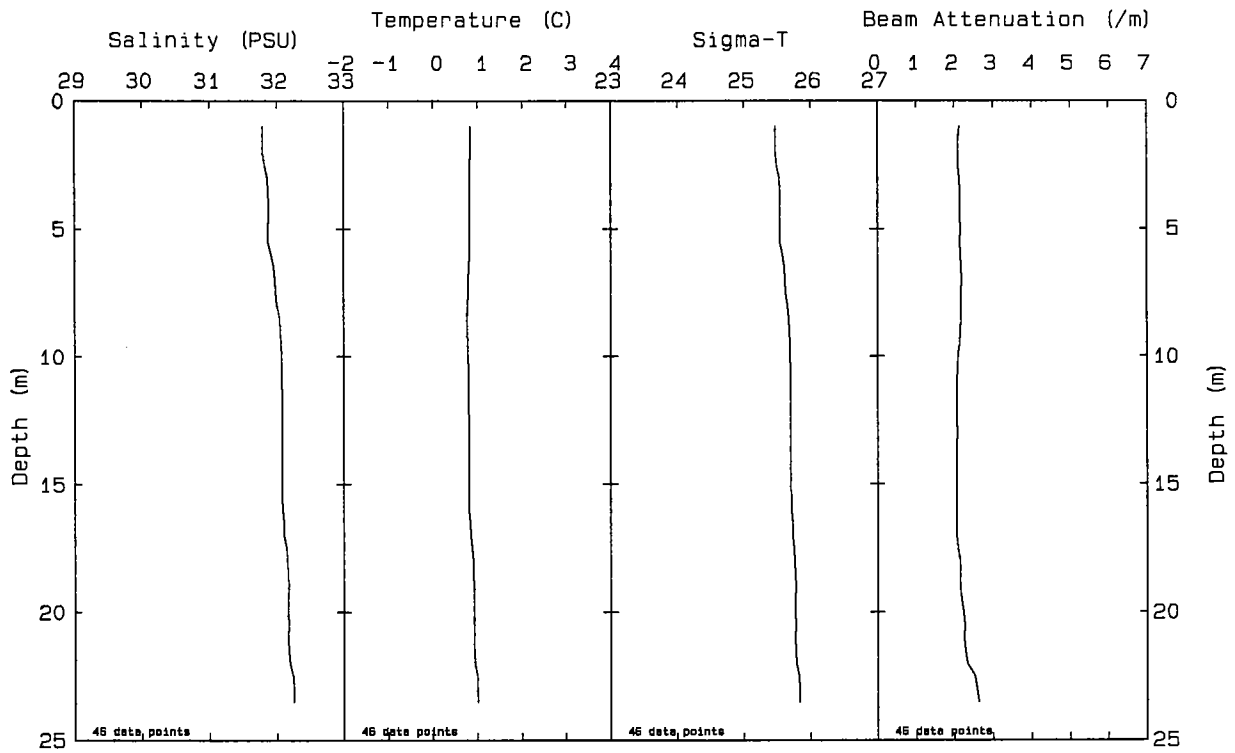
Station: N07P File: W9402154.PAB Date: 03-05-1994 Time: 08:59:54



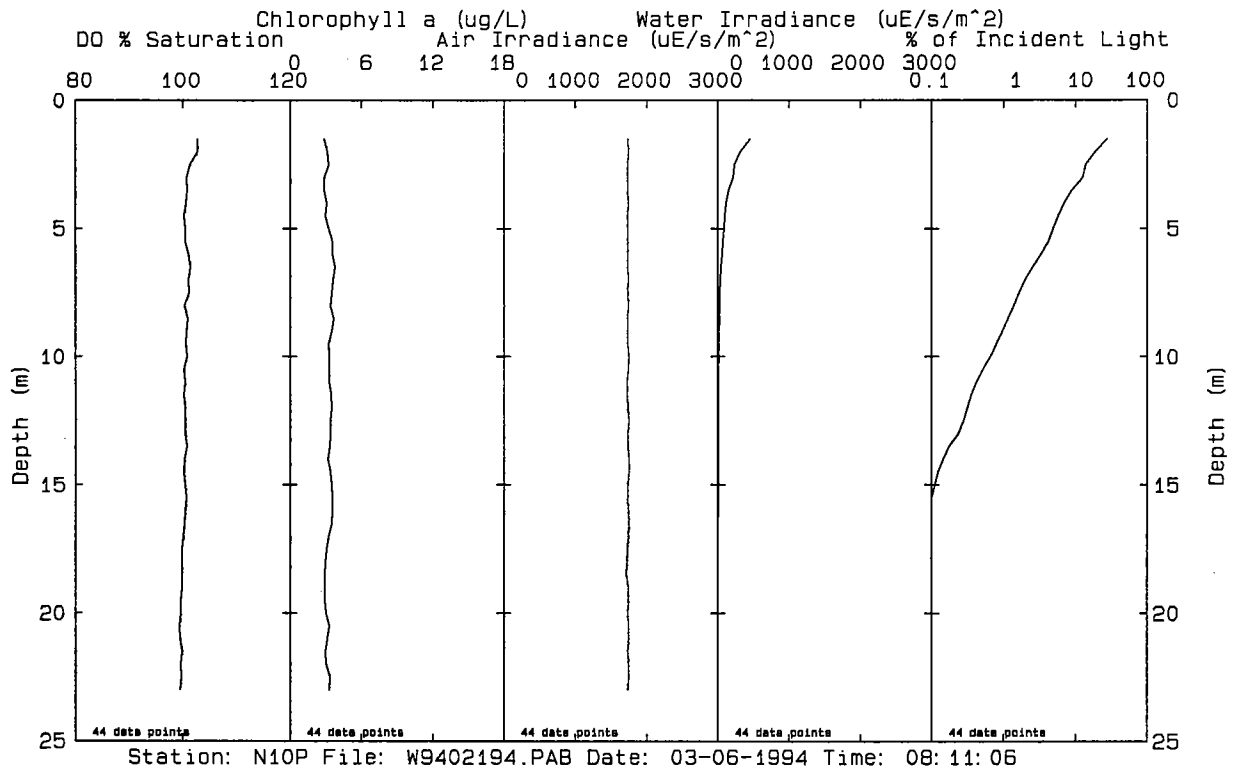
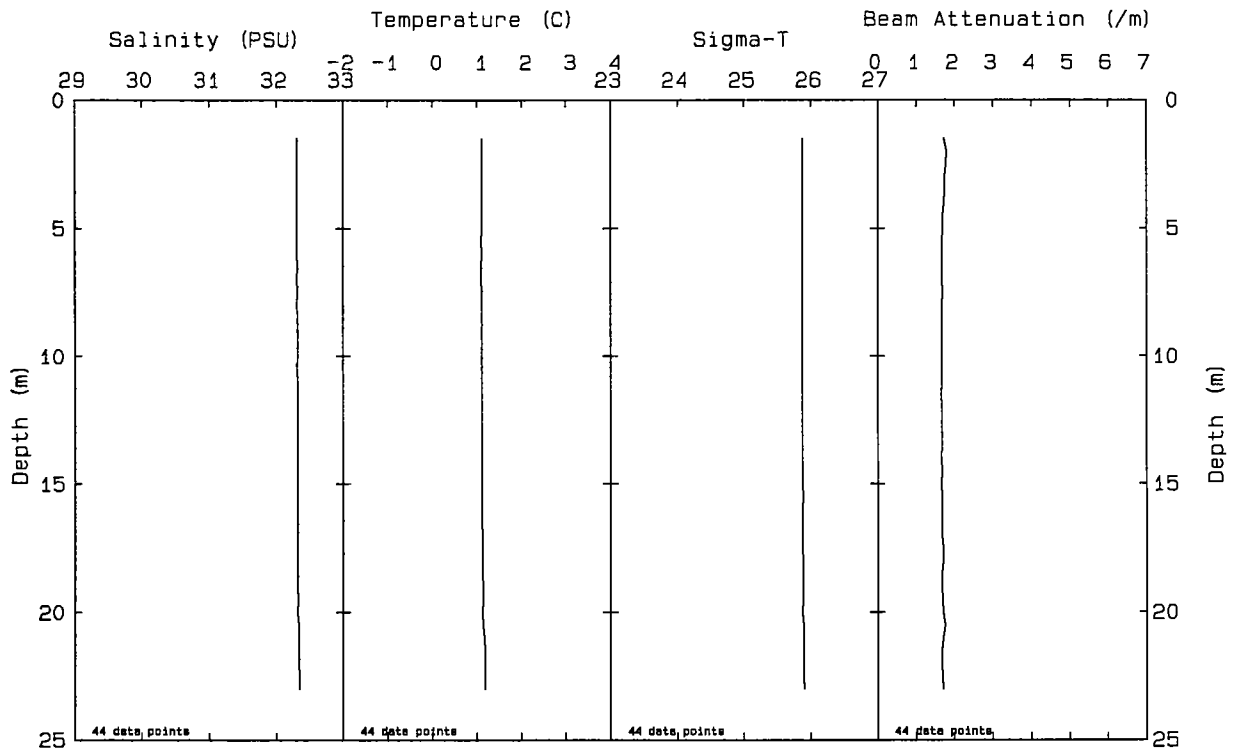


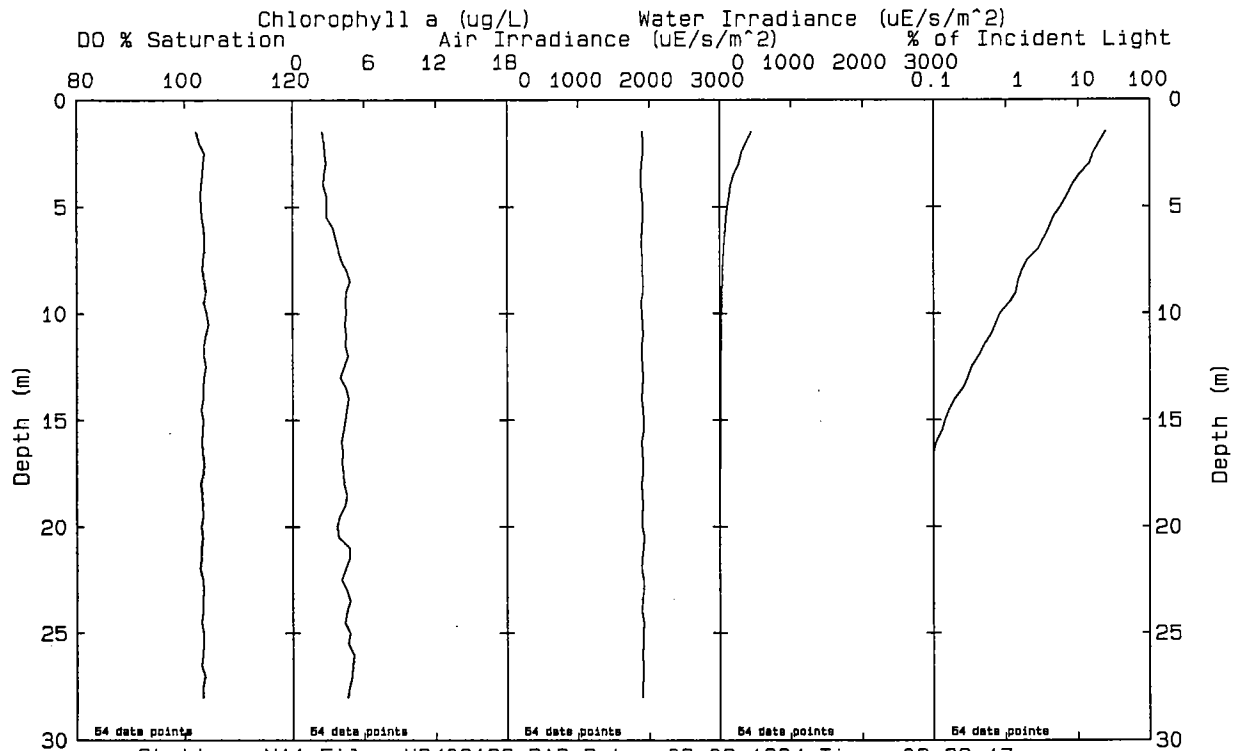
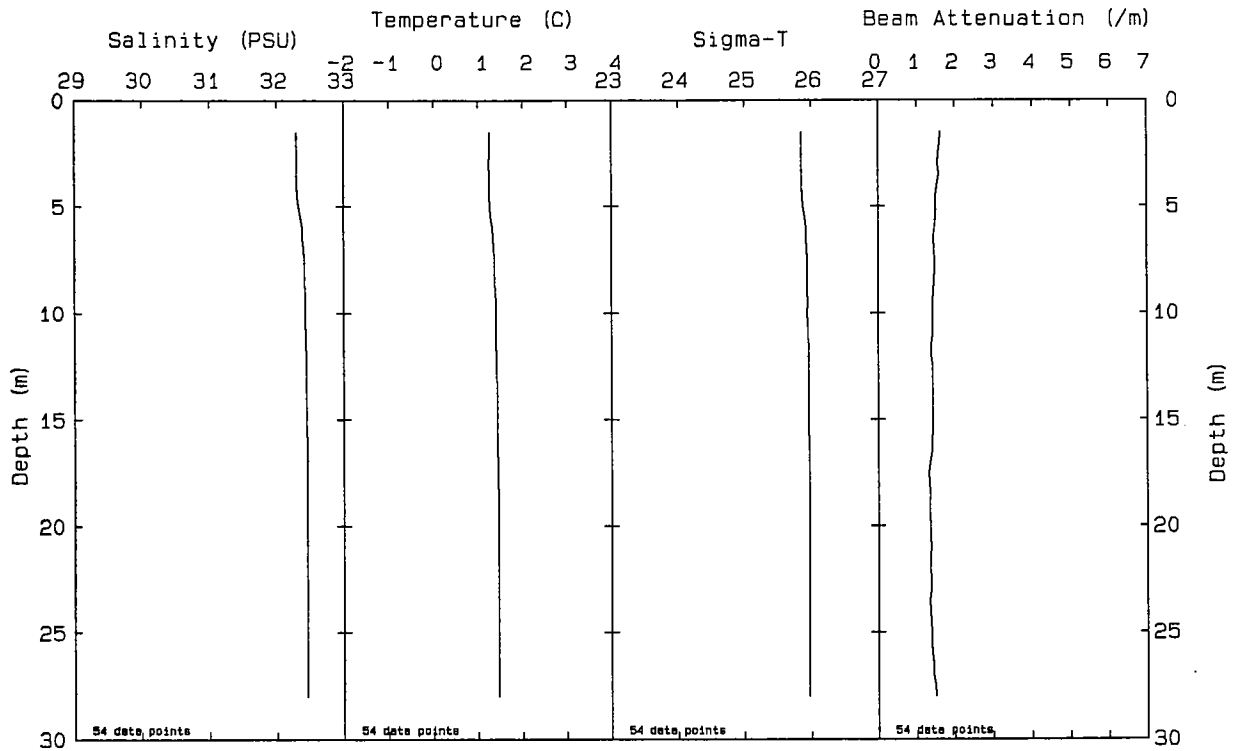


Station: N09 File: W9402239.PAB Date: 03-06-1994 Time: 13: 41: 20

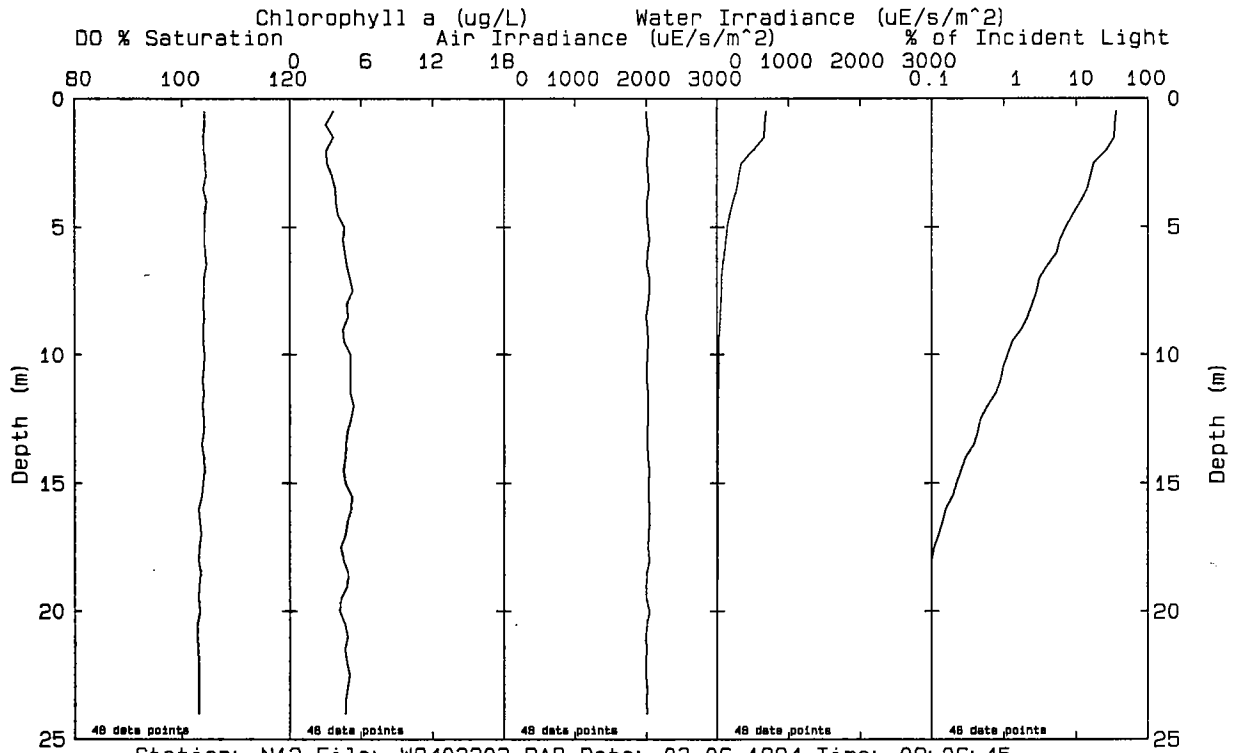
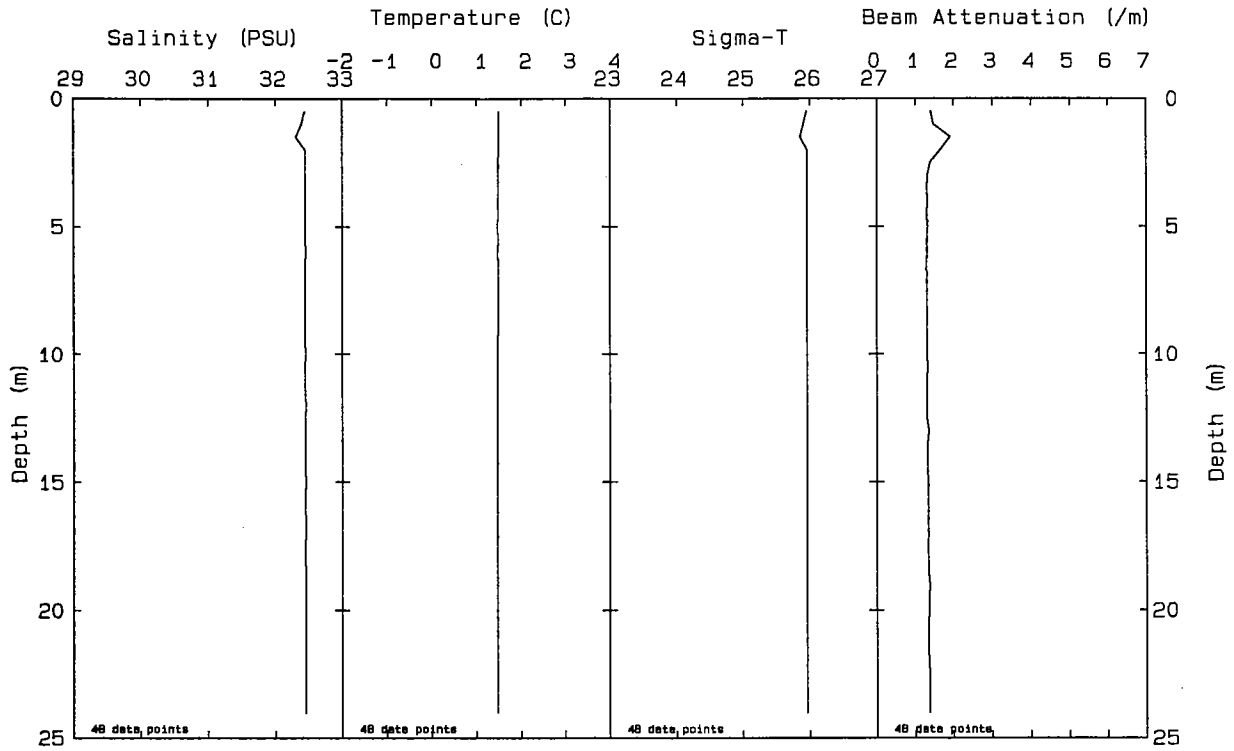


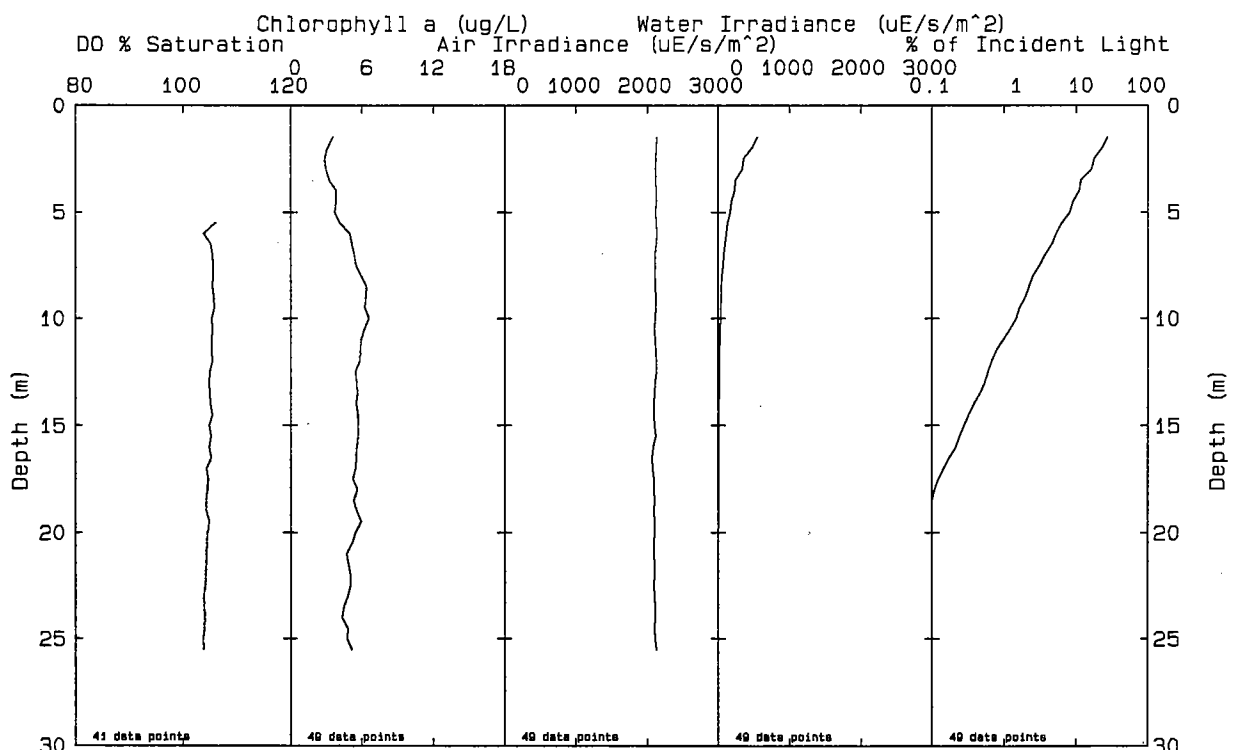
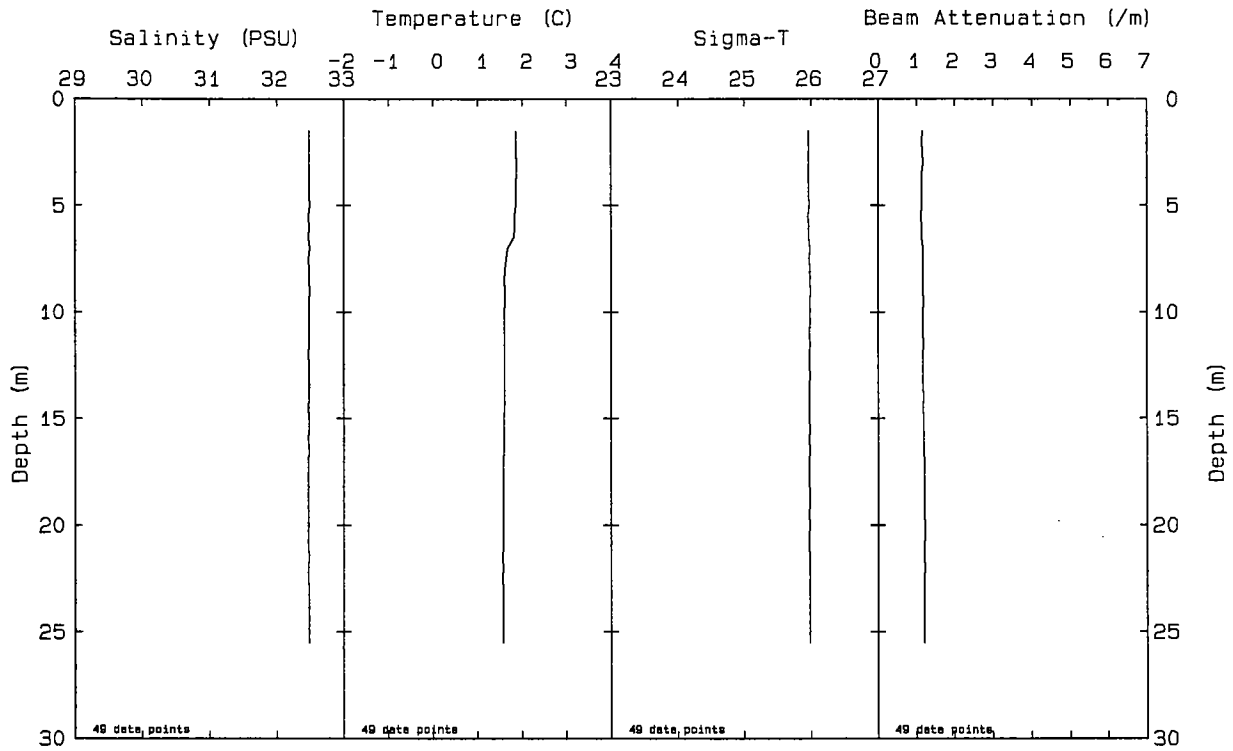




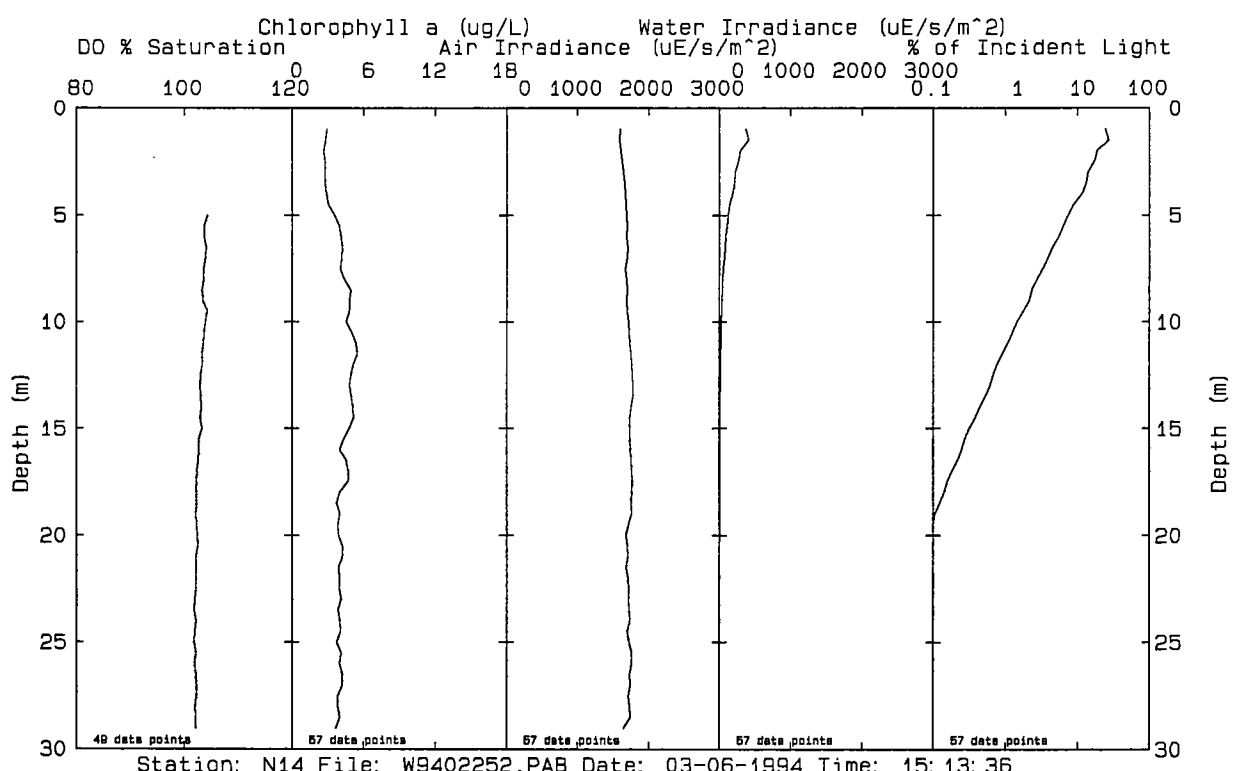
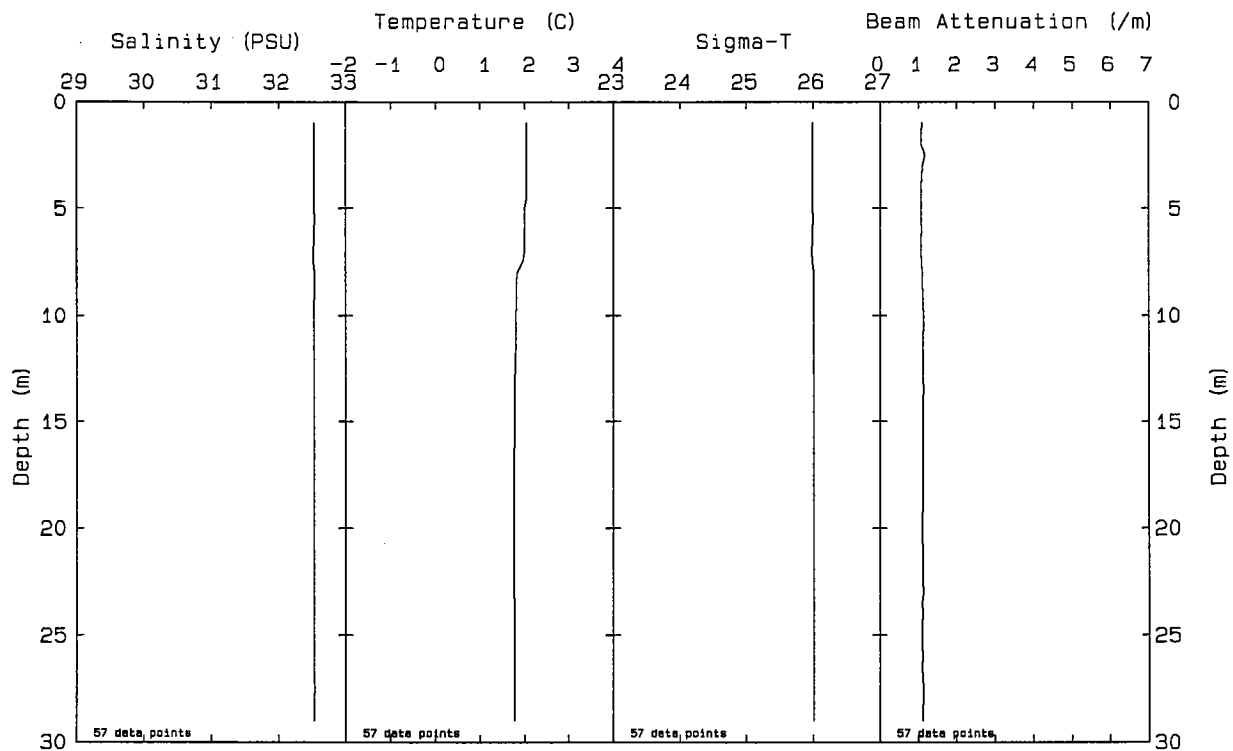


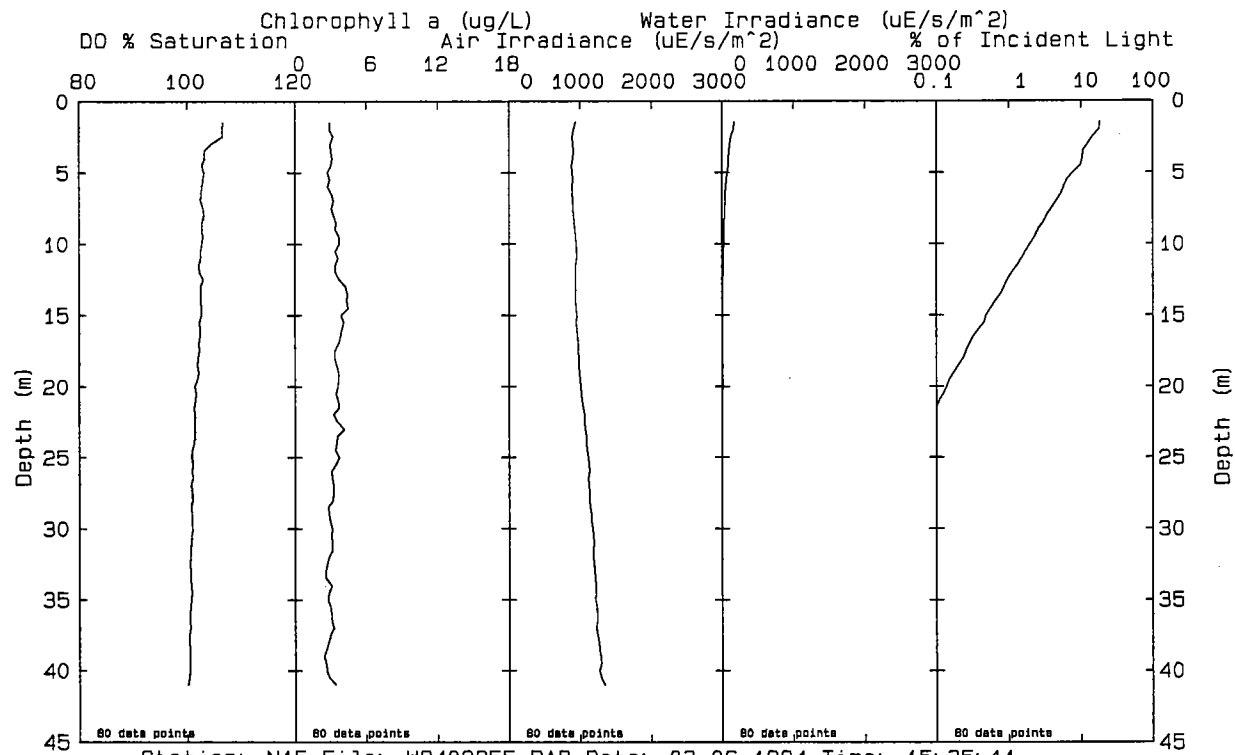
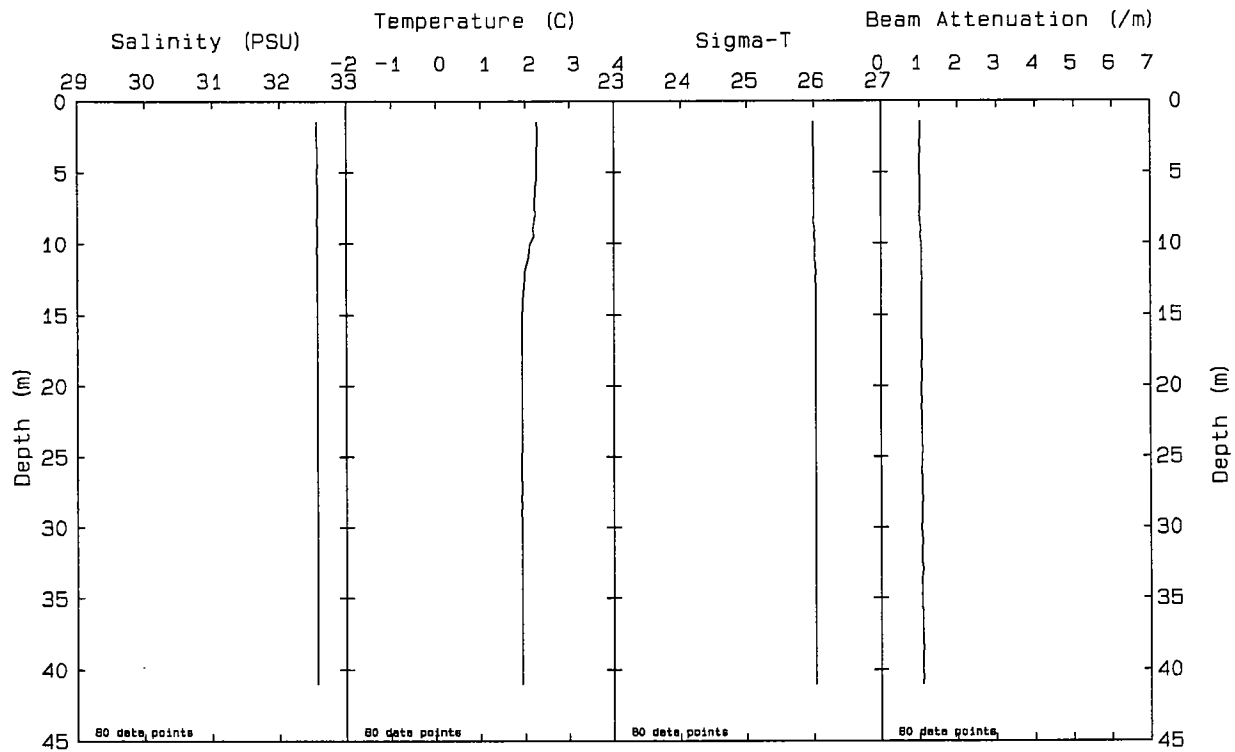
Station: N11 File: W9402199.PAB Date: 03-06-1994 Time: 08:39:17

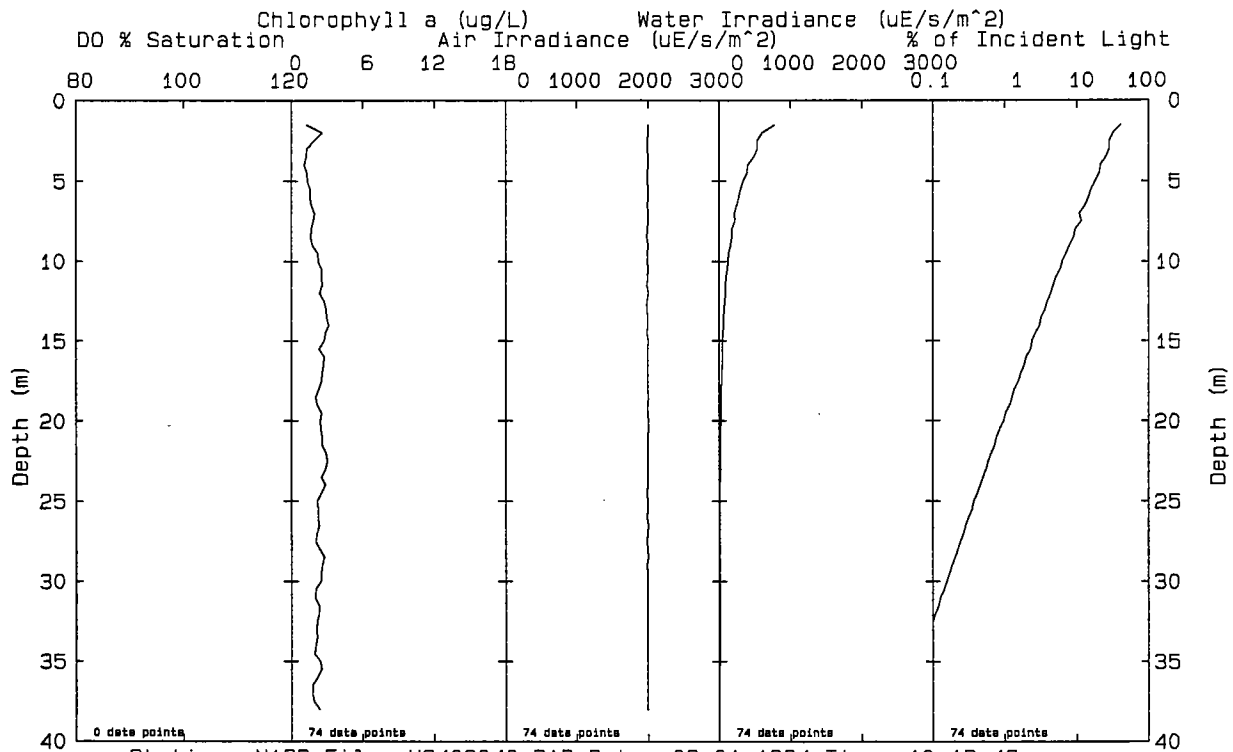
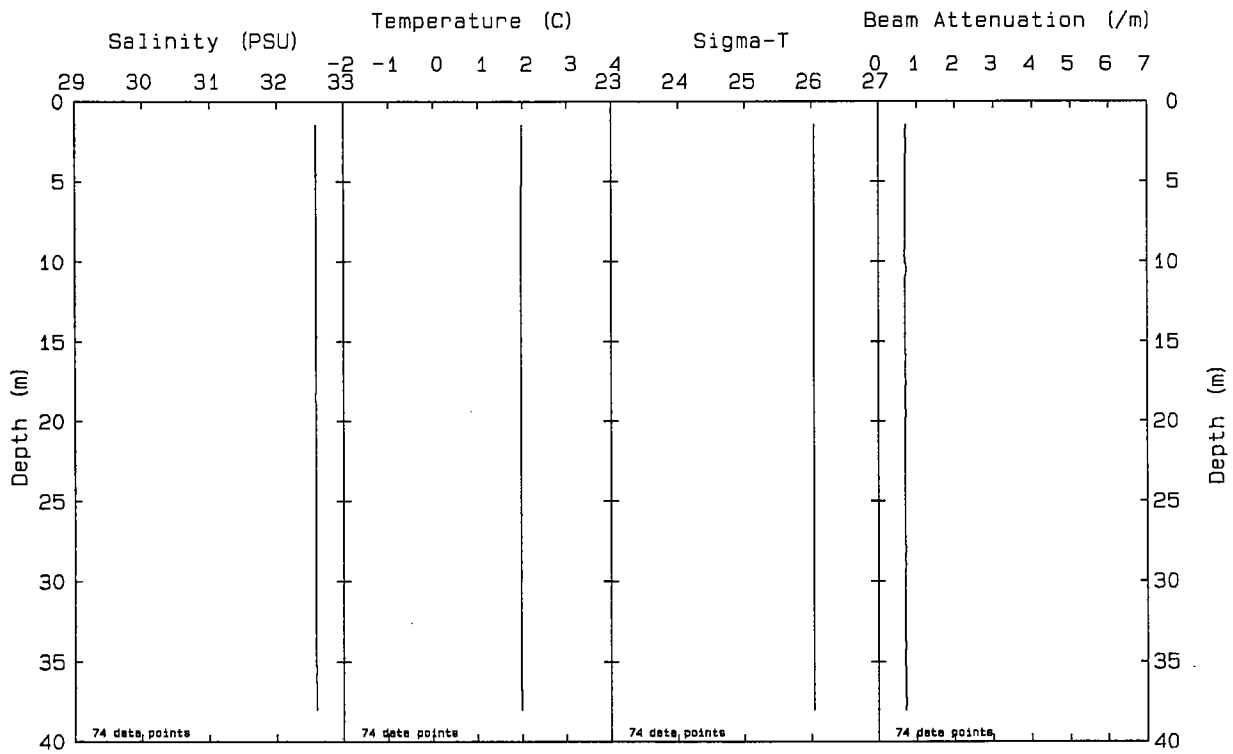




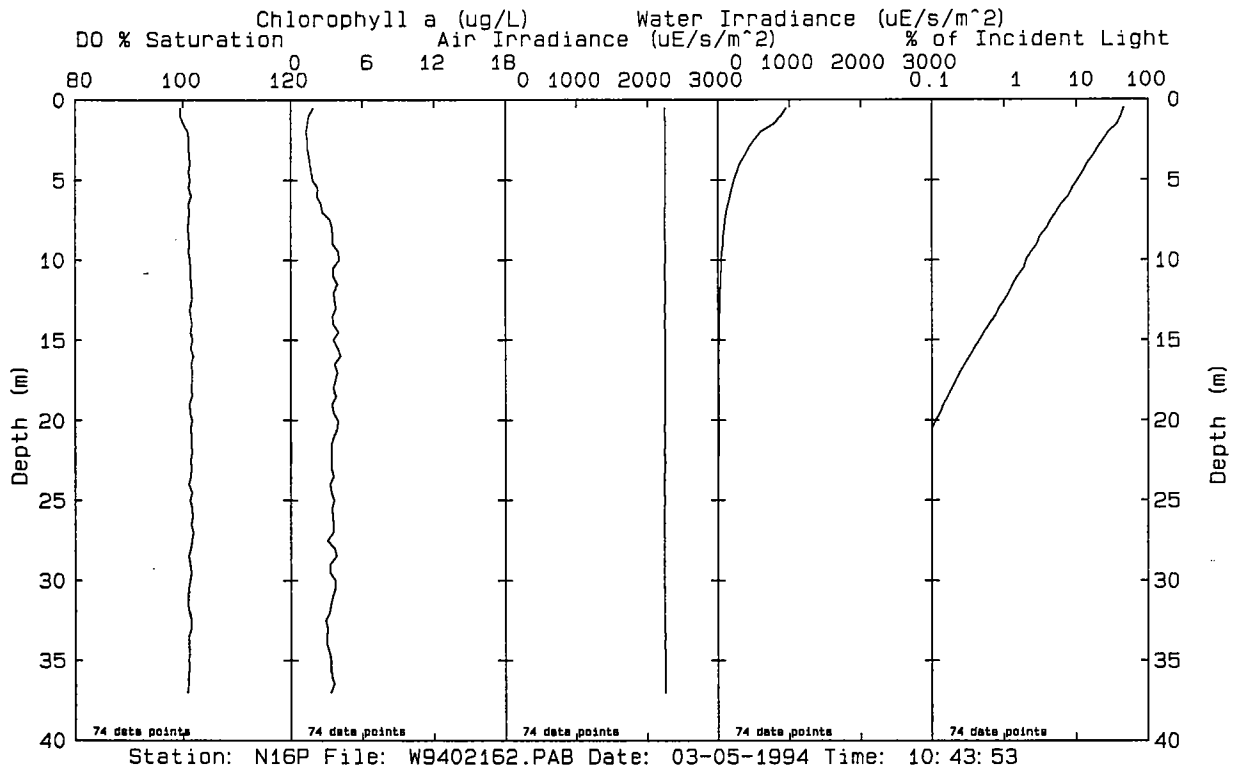
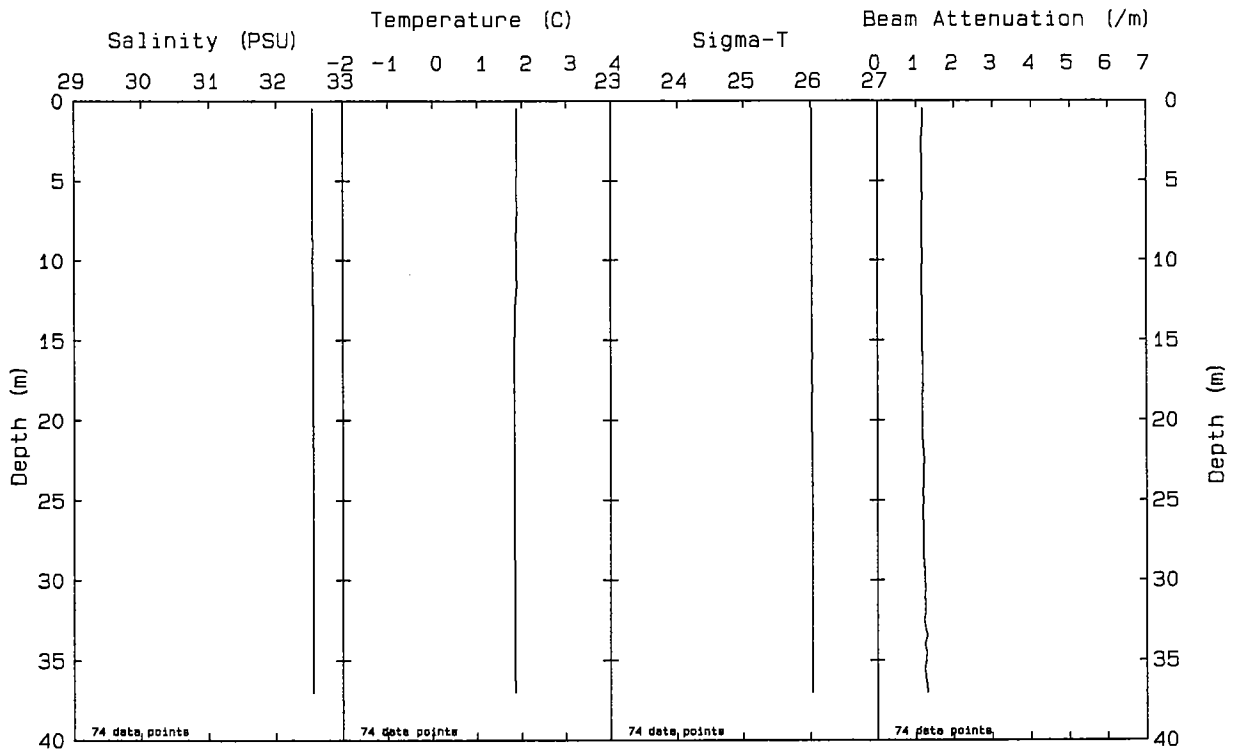
Station: N13 File: W9402249.PAB Date: 03-06-1994 Time: 14: 50: 28



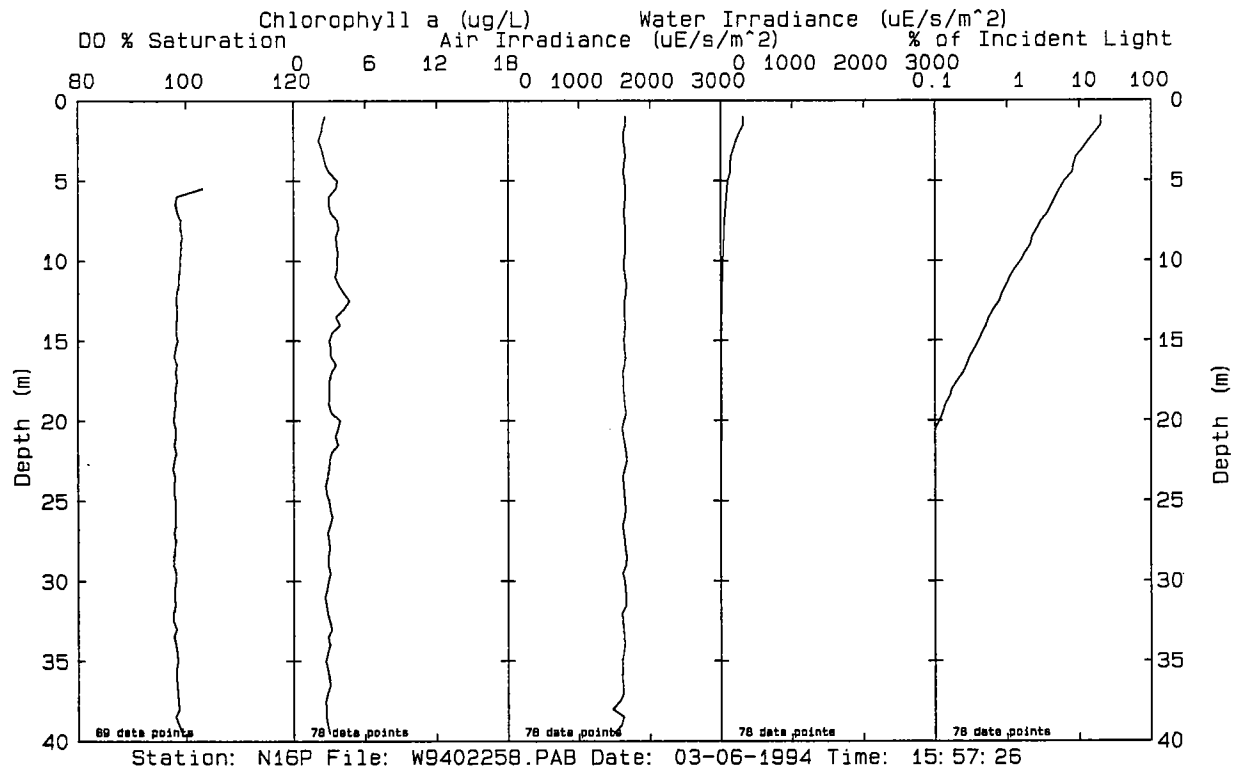
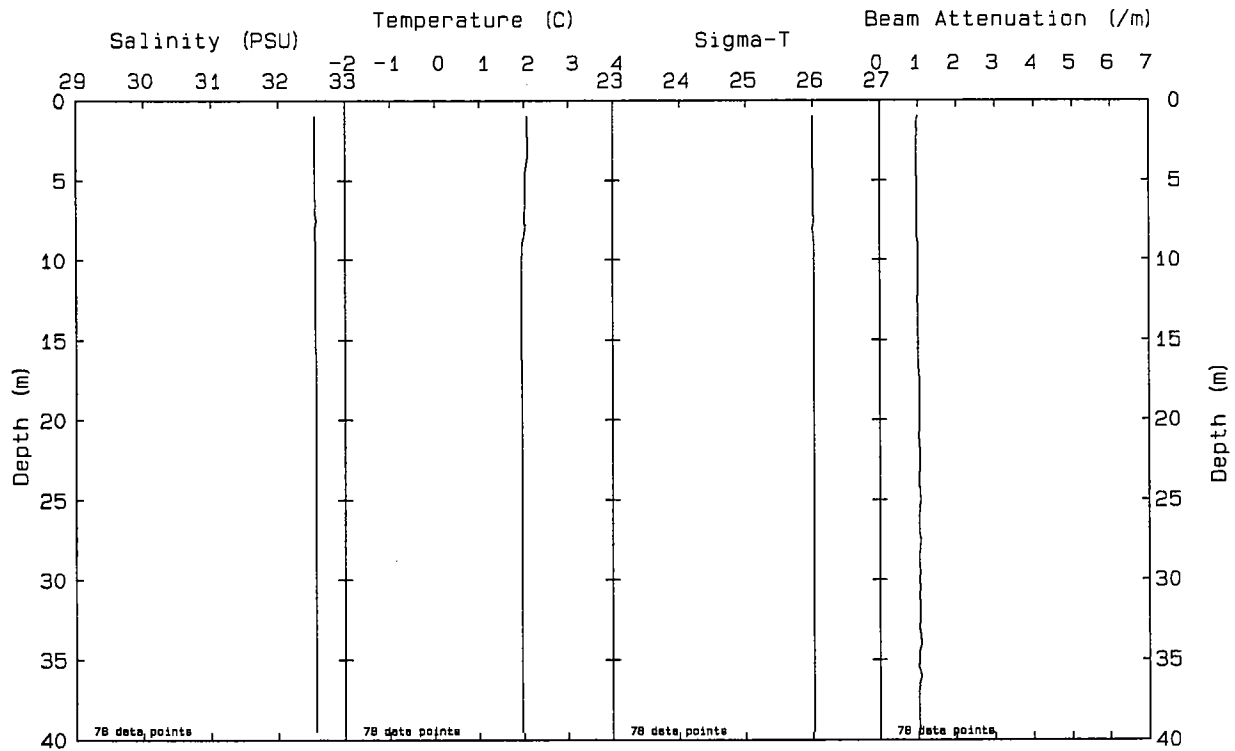


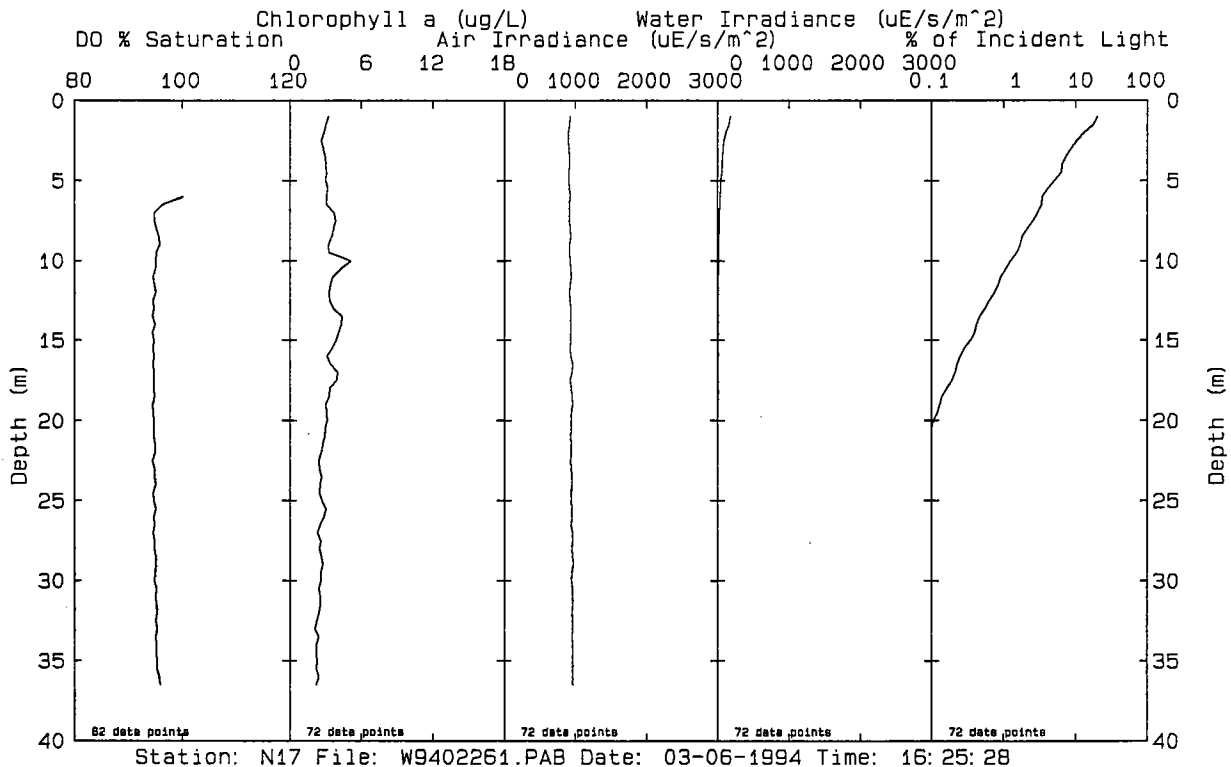
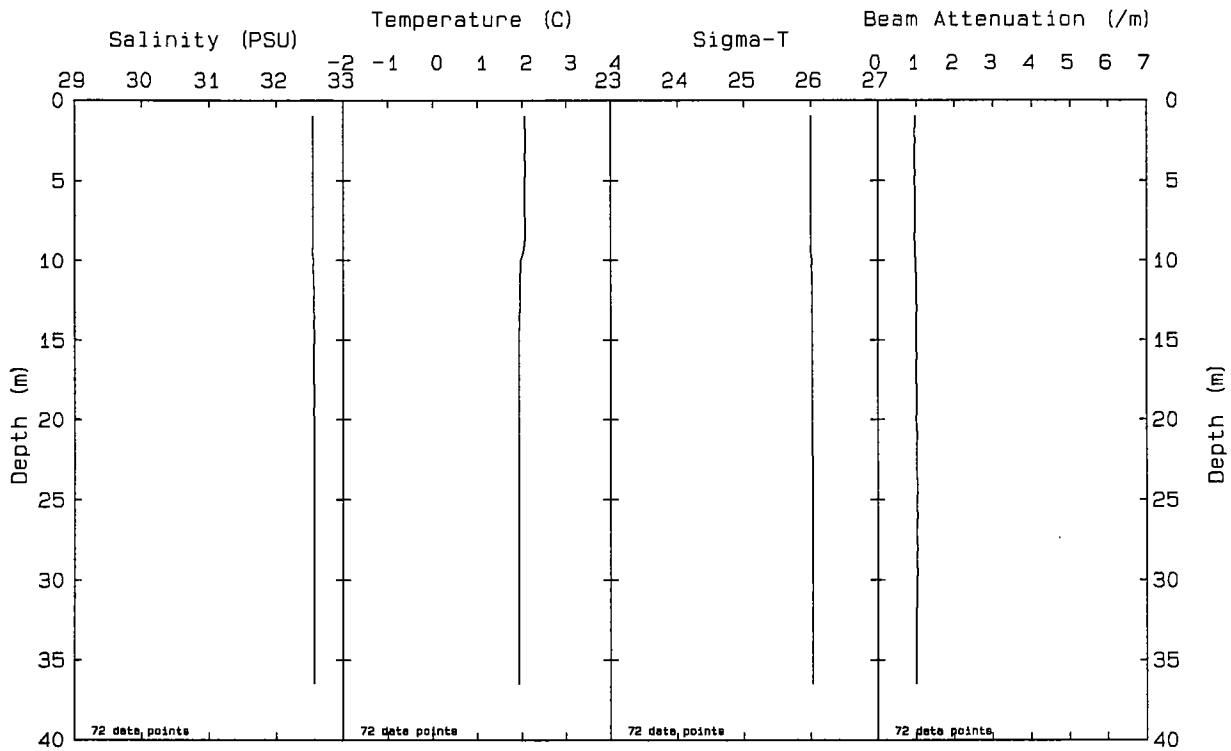


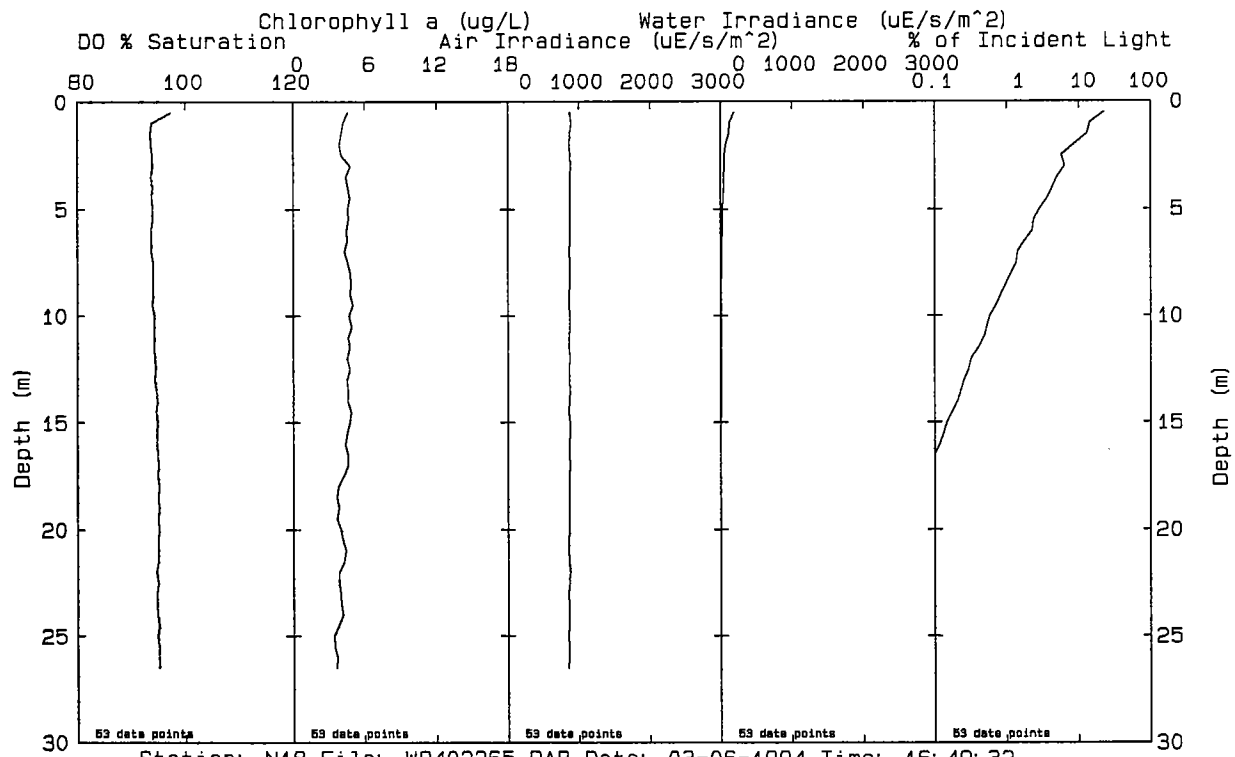
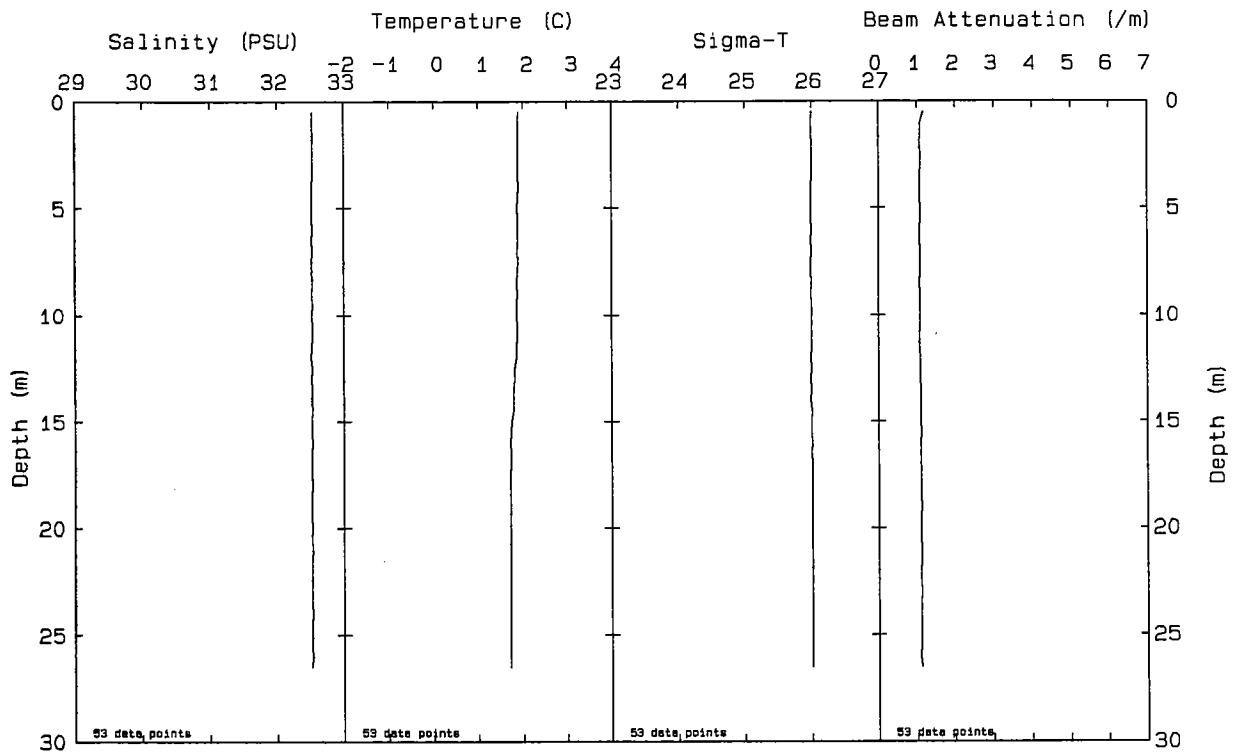
Station: N16P File: W9402040.PAB Date: 03-01-1994 Time: 10:13:49



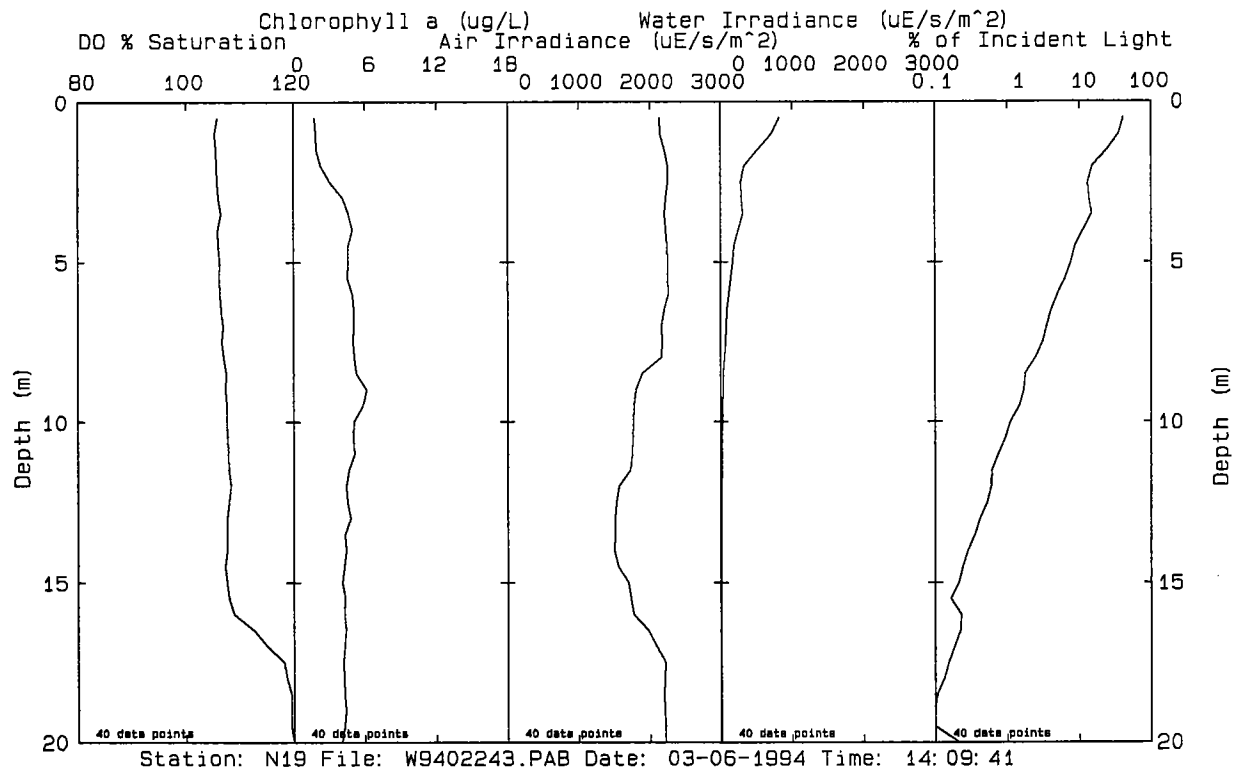
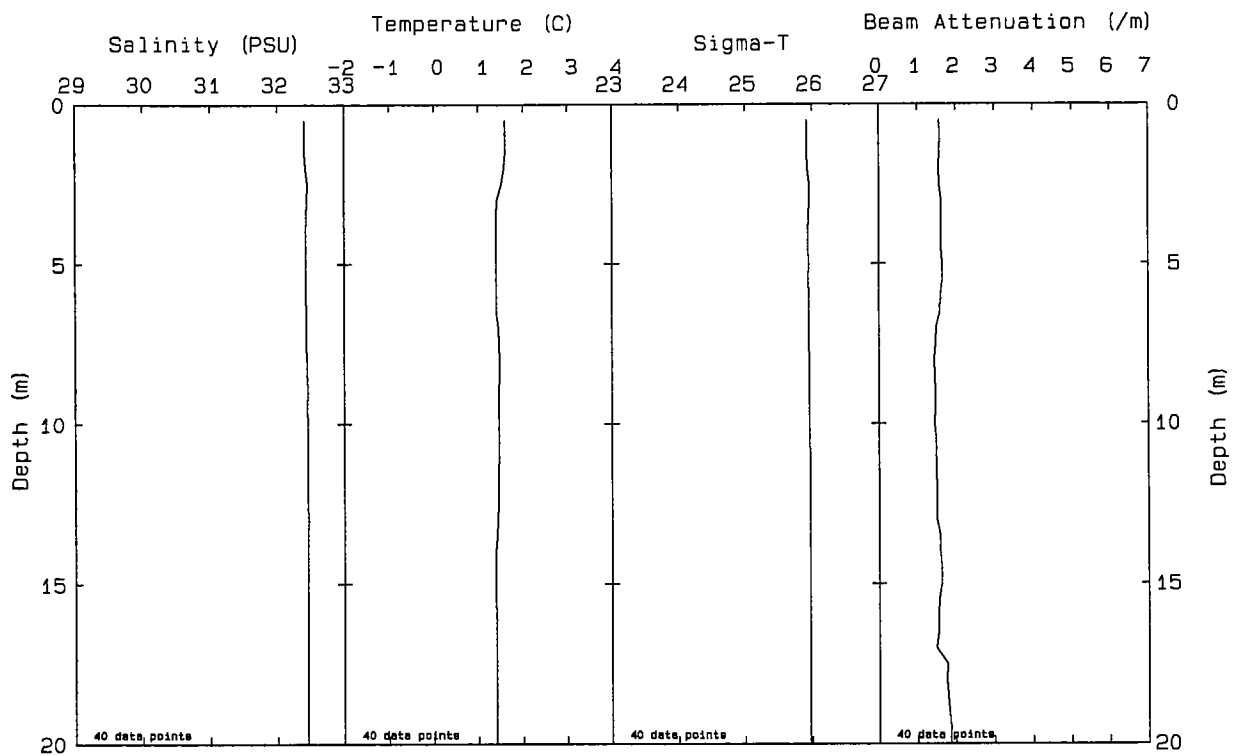


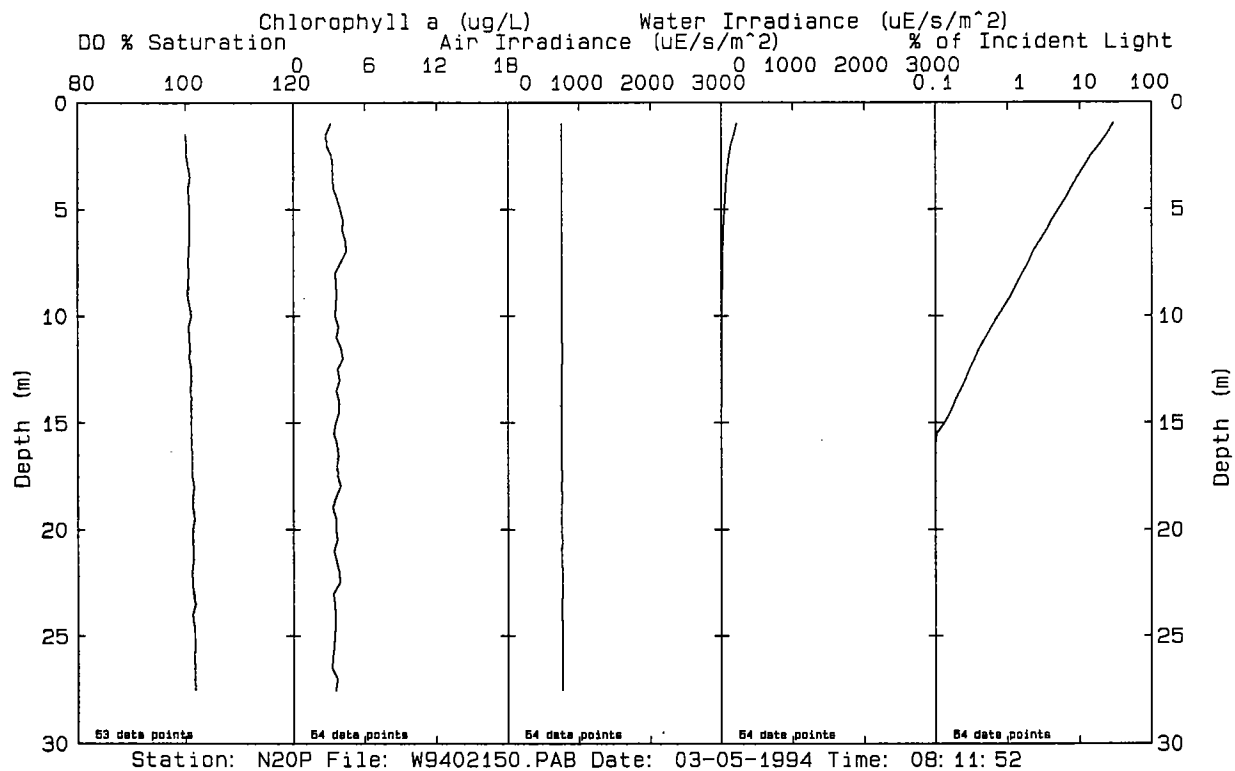
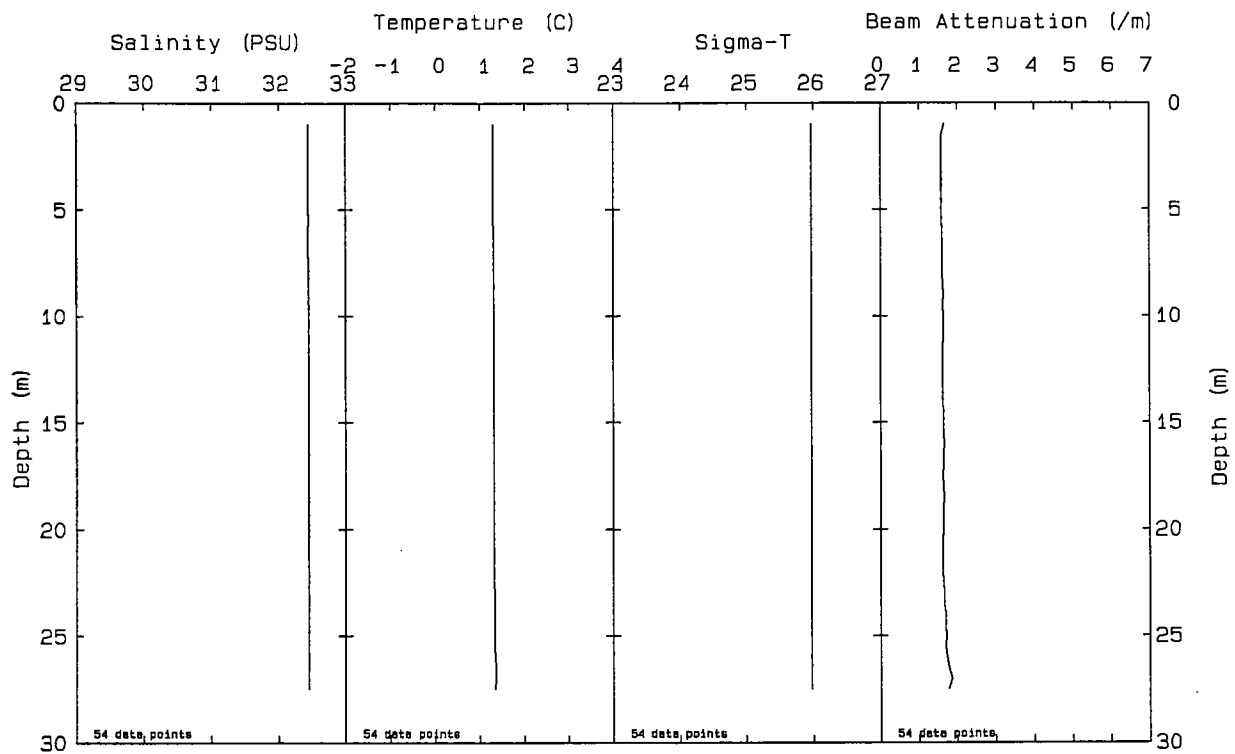


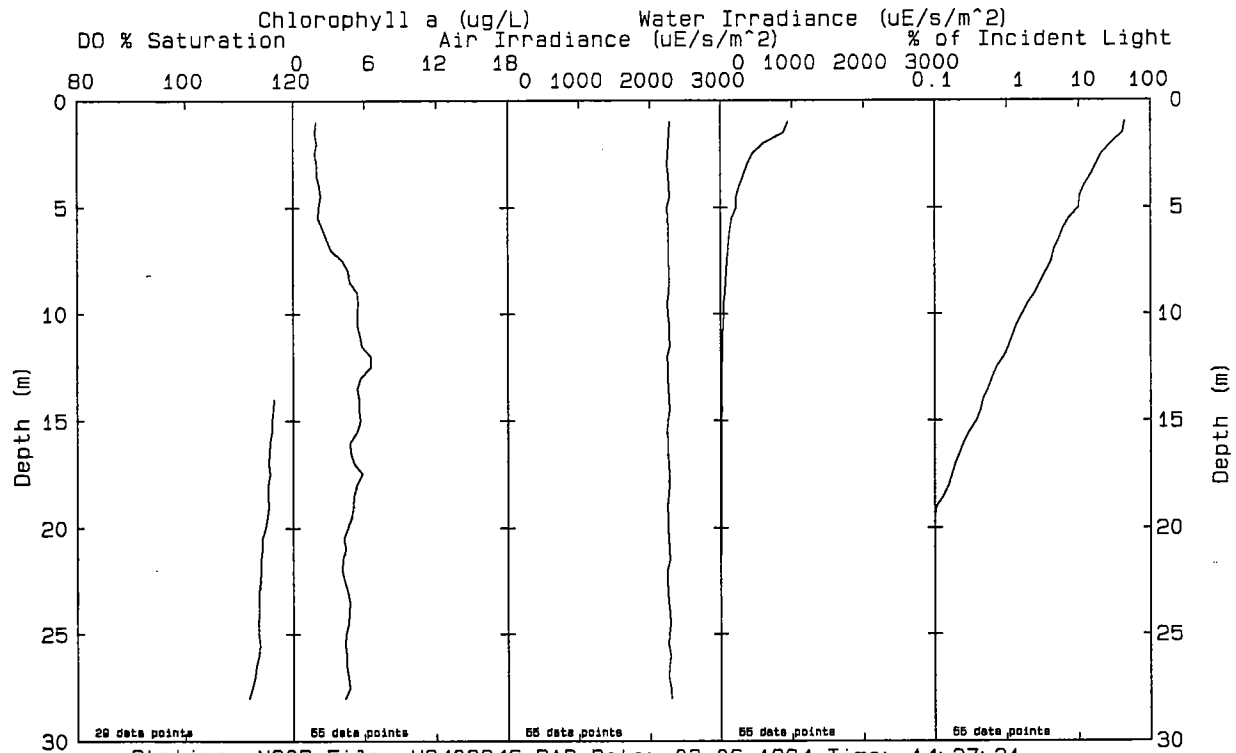
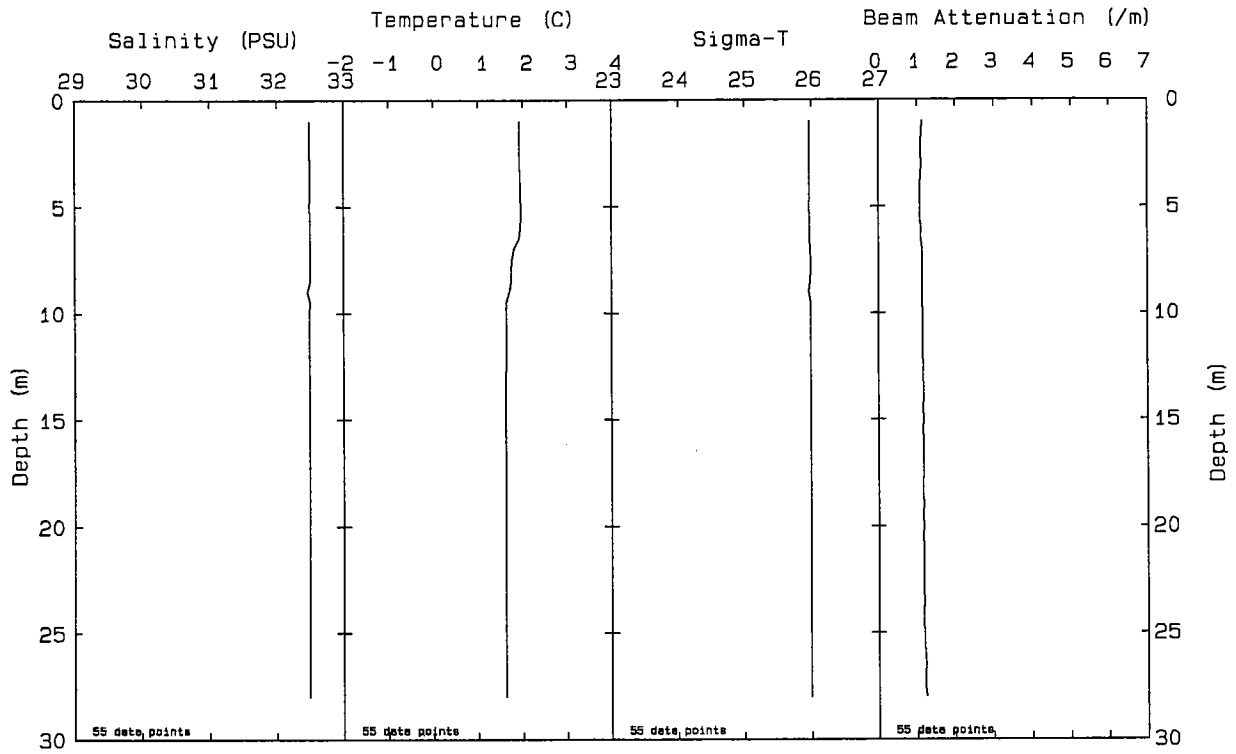


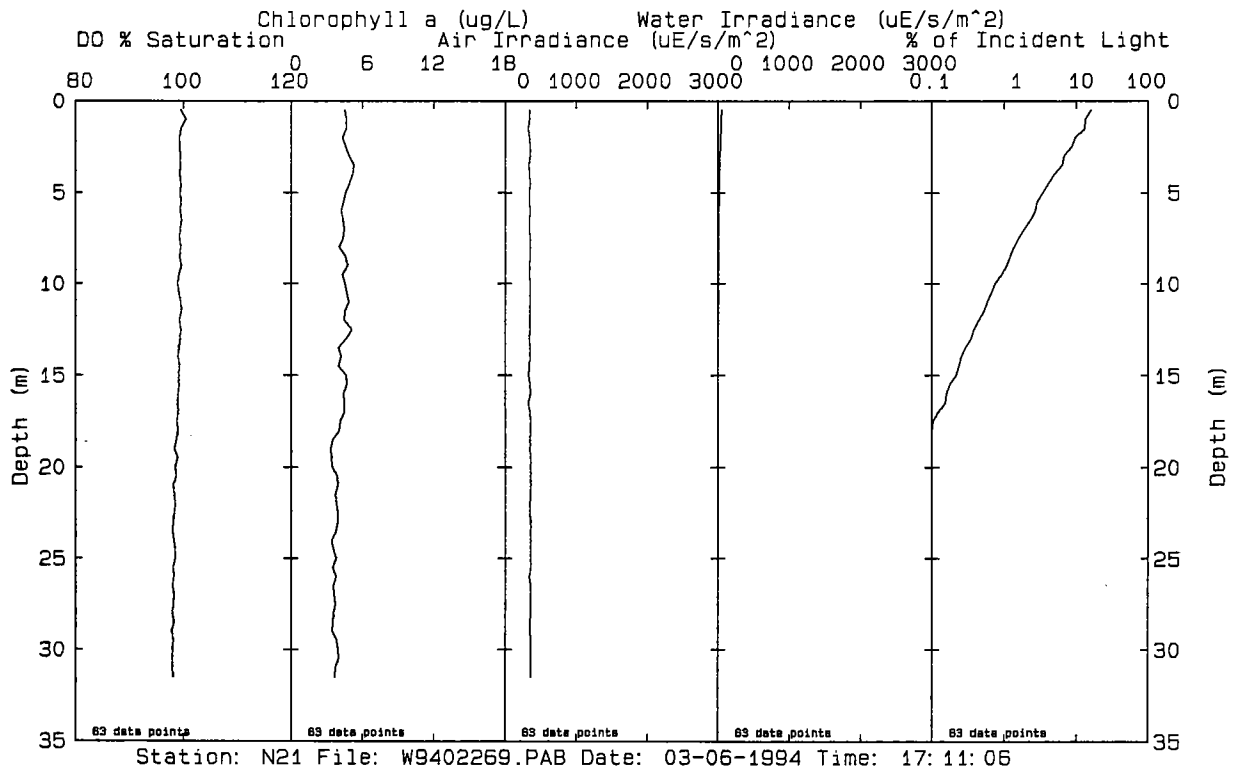
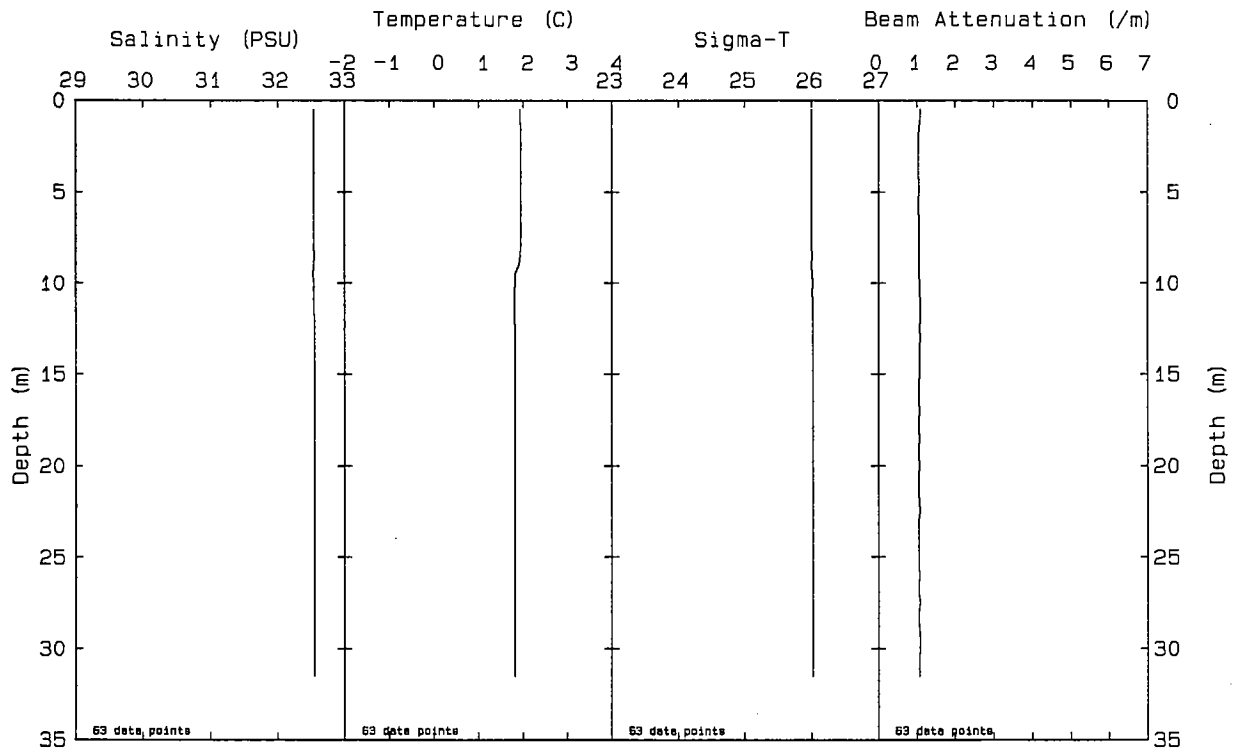


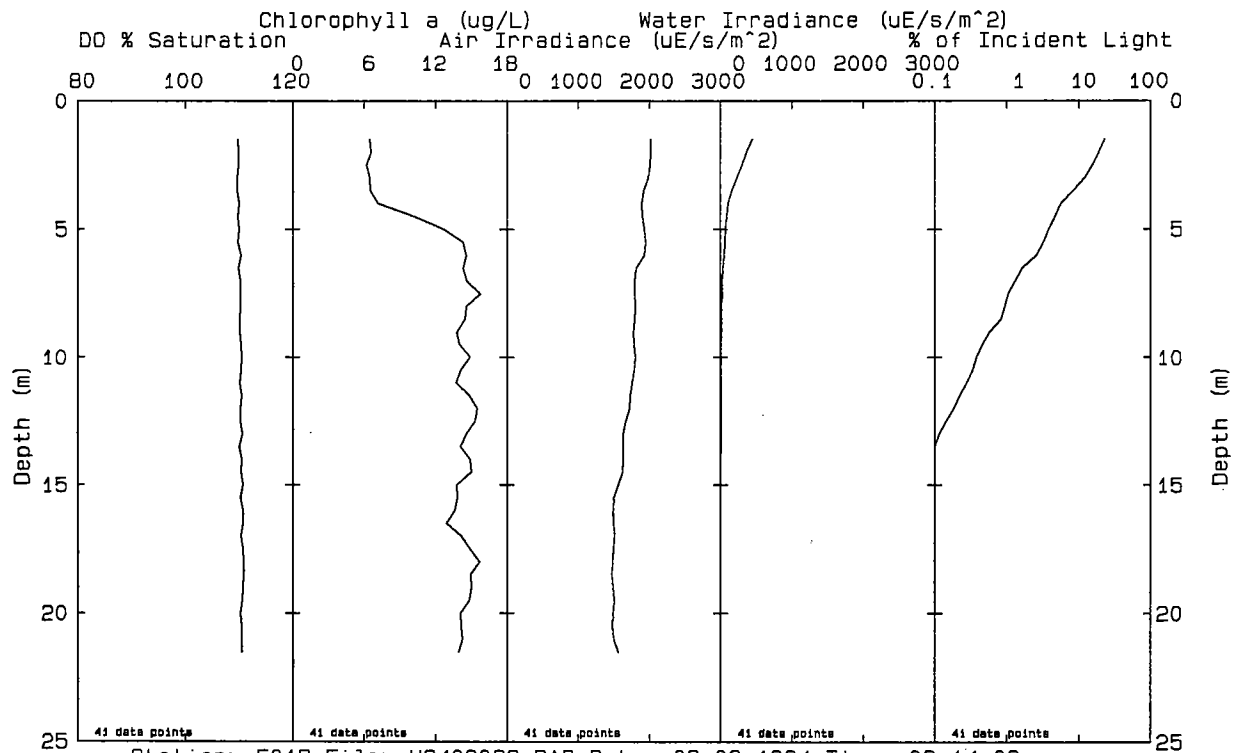
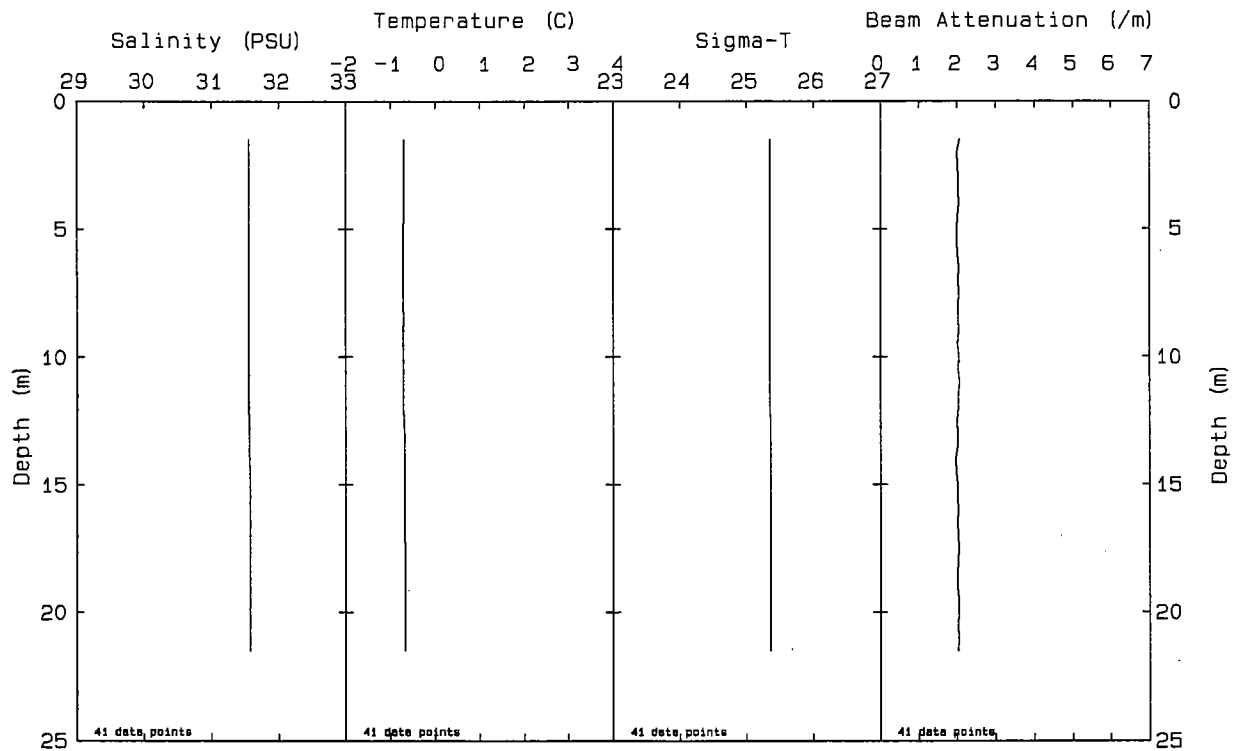
Station: N18 File: W9402265.PAB Date: 03-06-1994 Time: 16: 49: 32





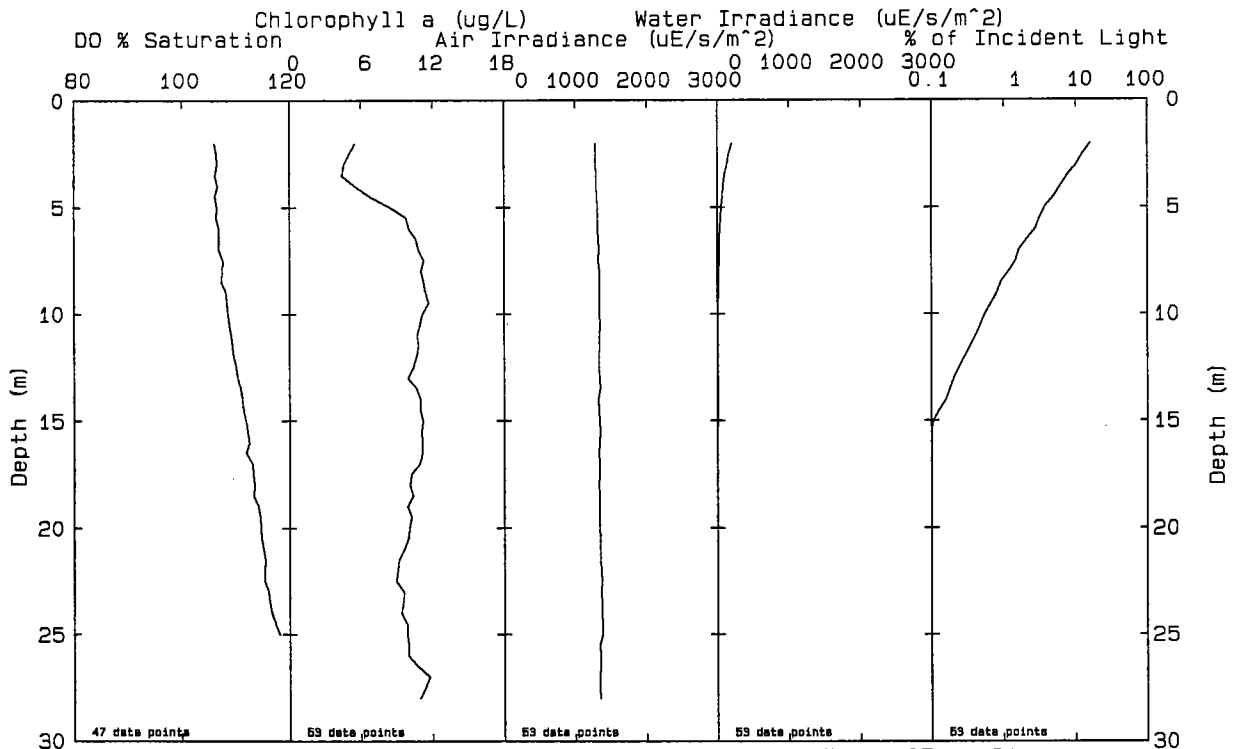
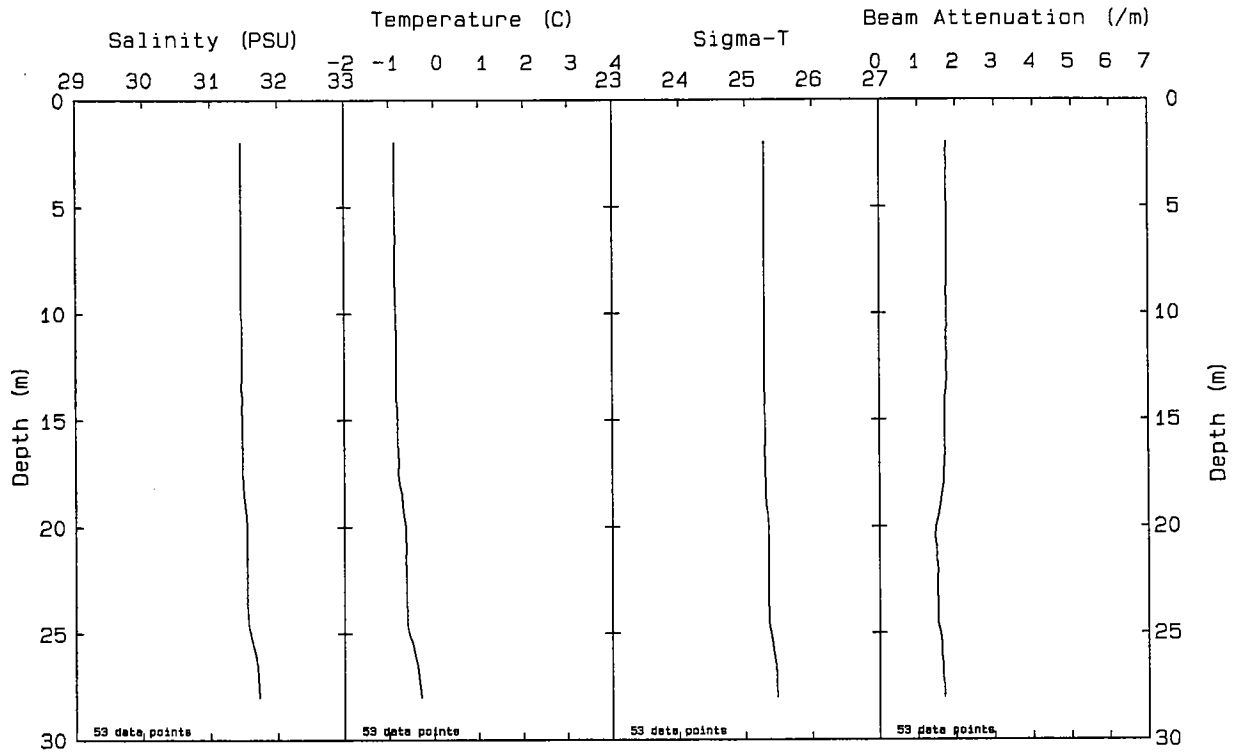




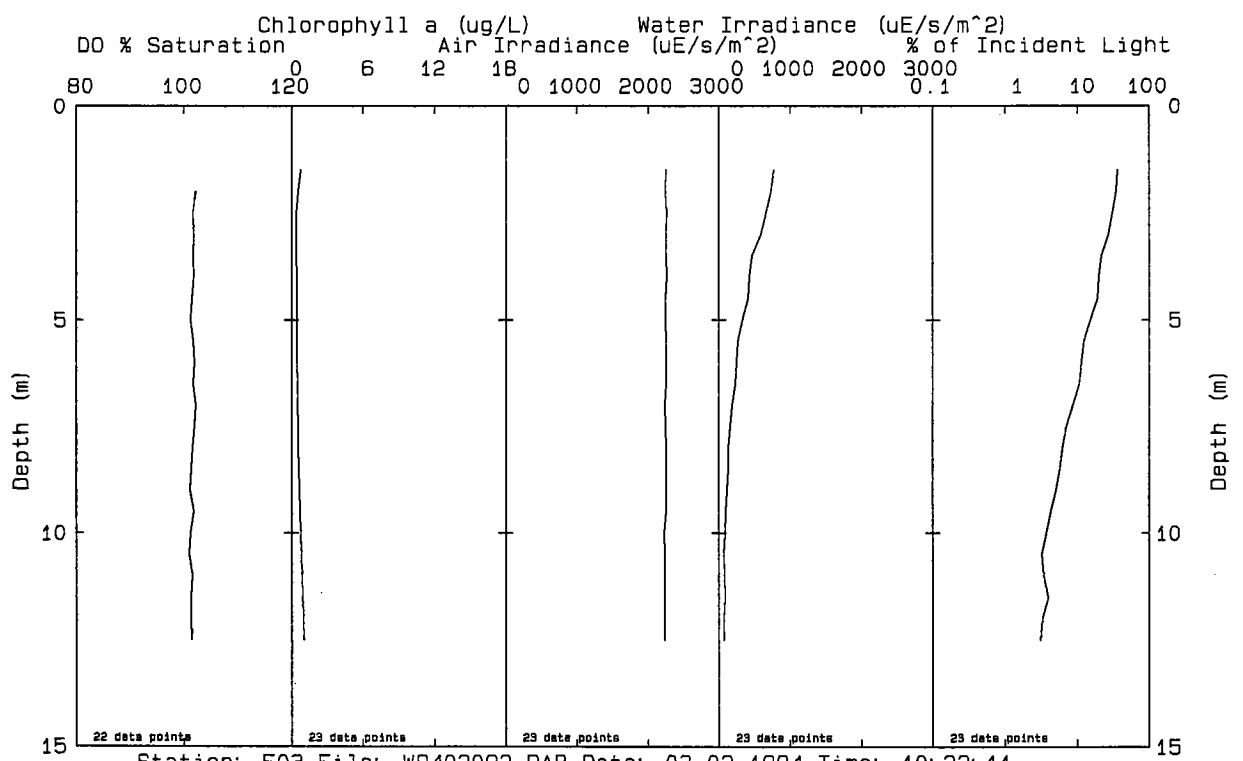
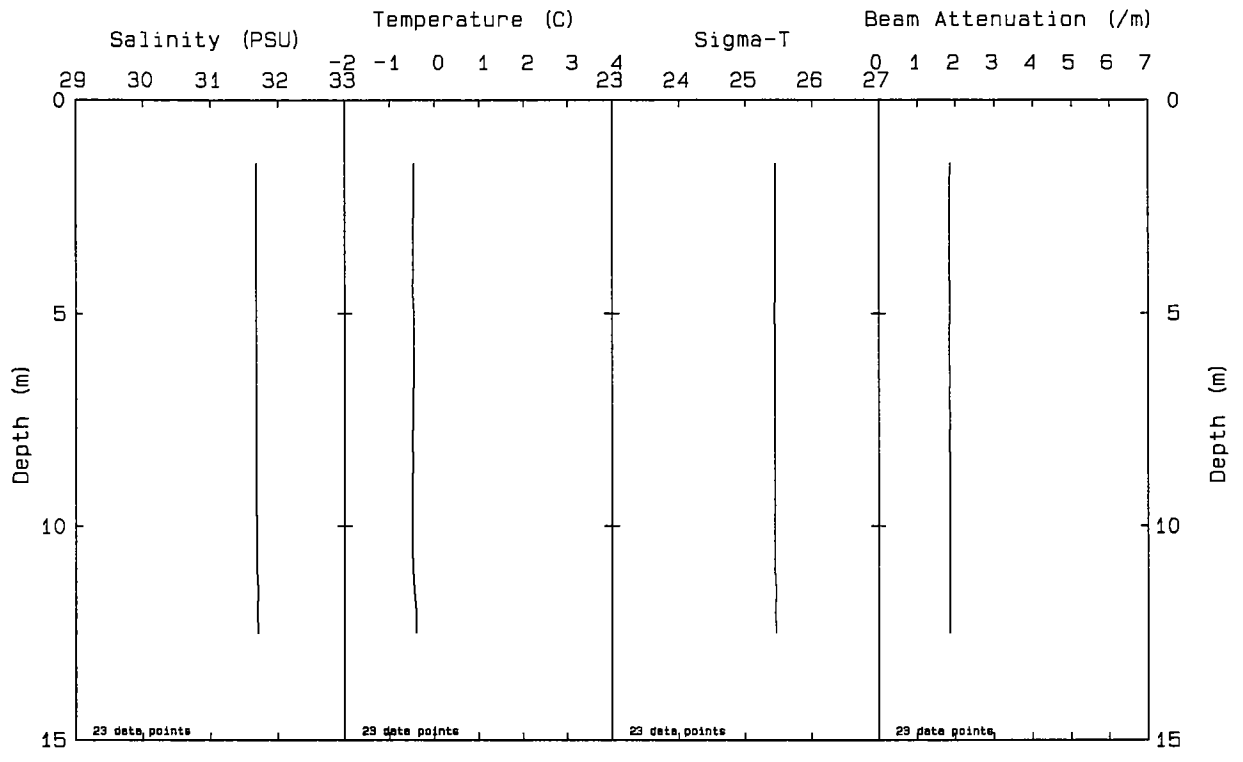


Station: F01P File: W9402088.PAB Date: 03-02-1994 Time: 09:14:02

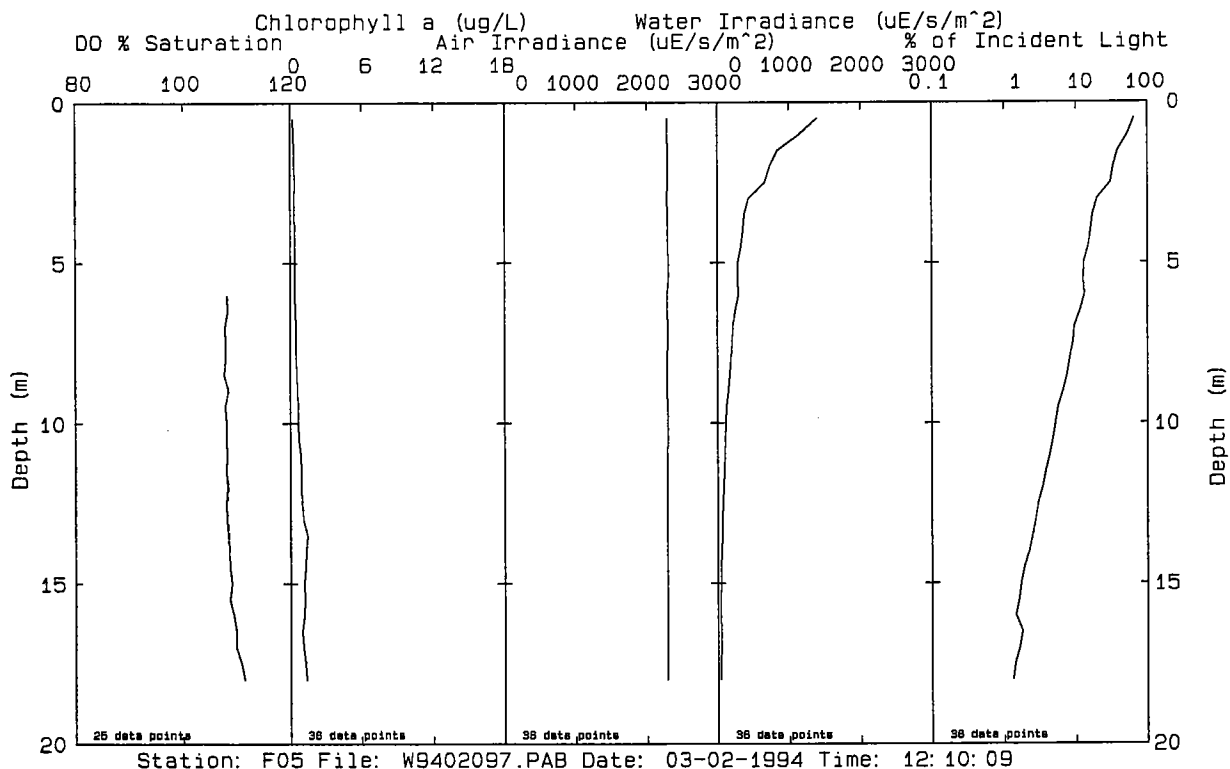
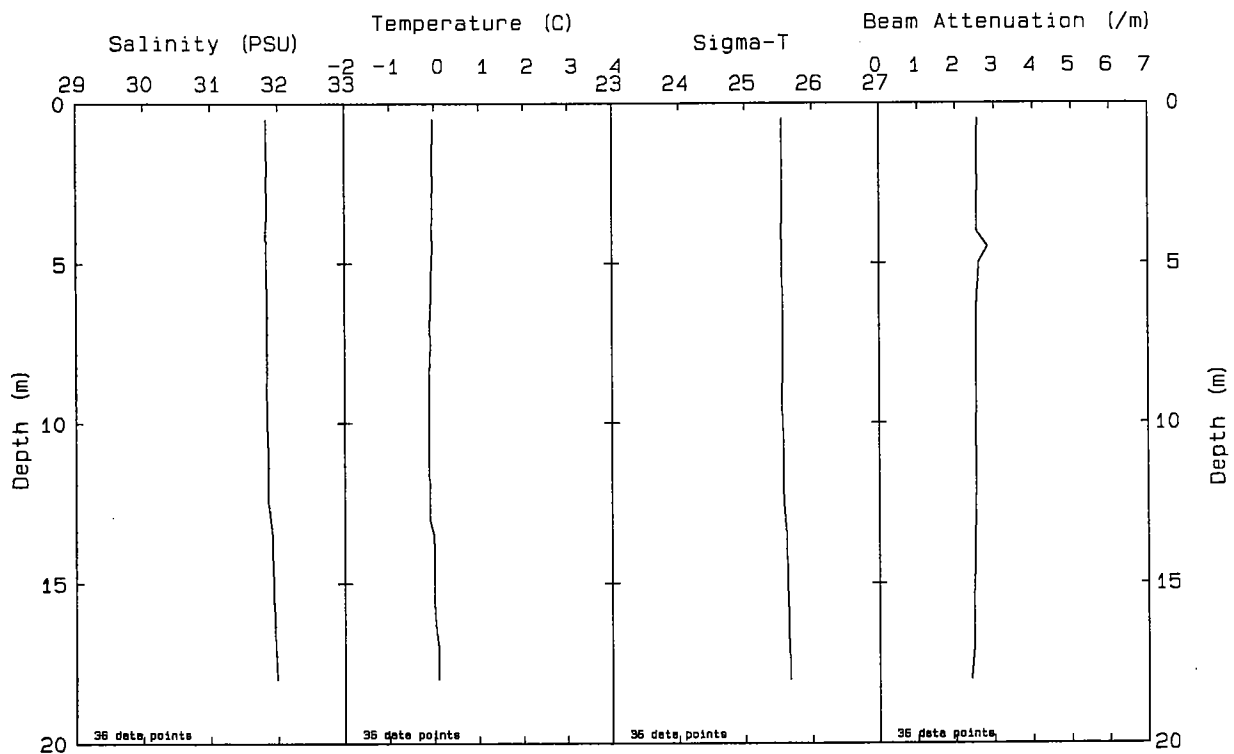


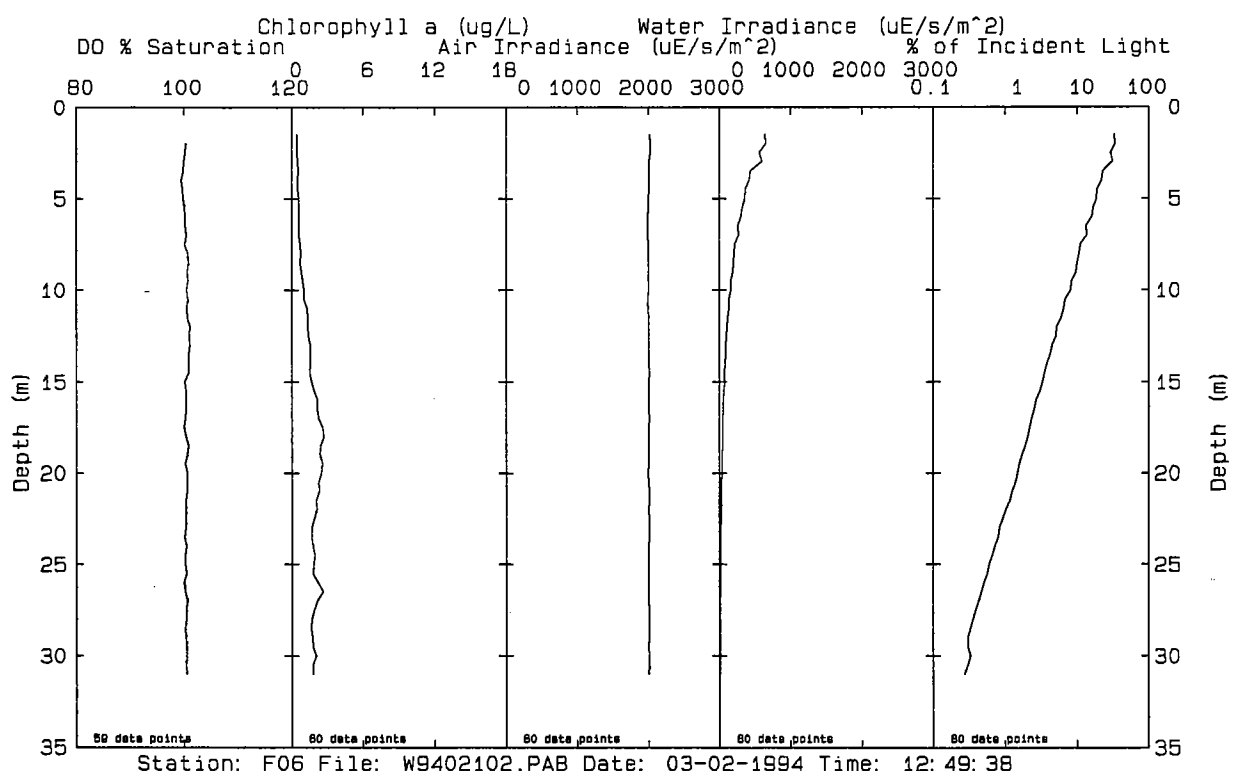
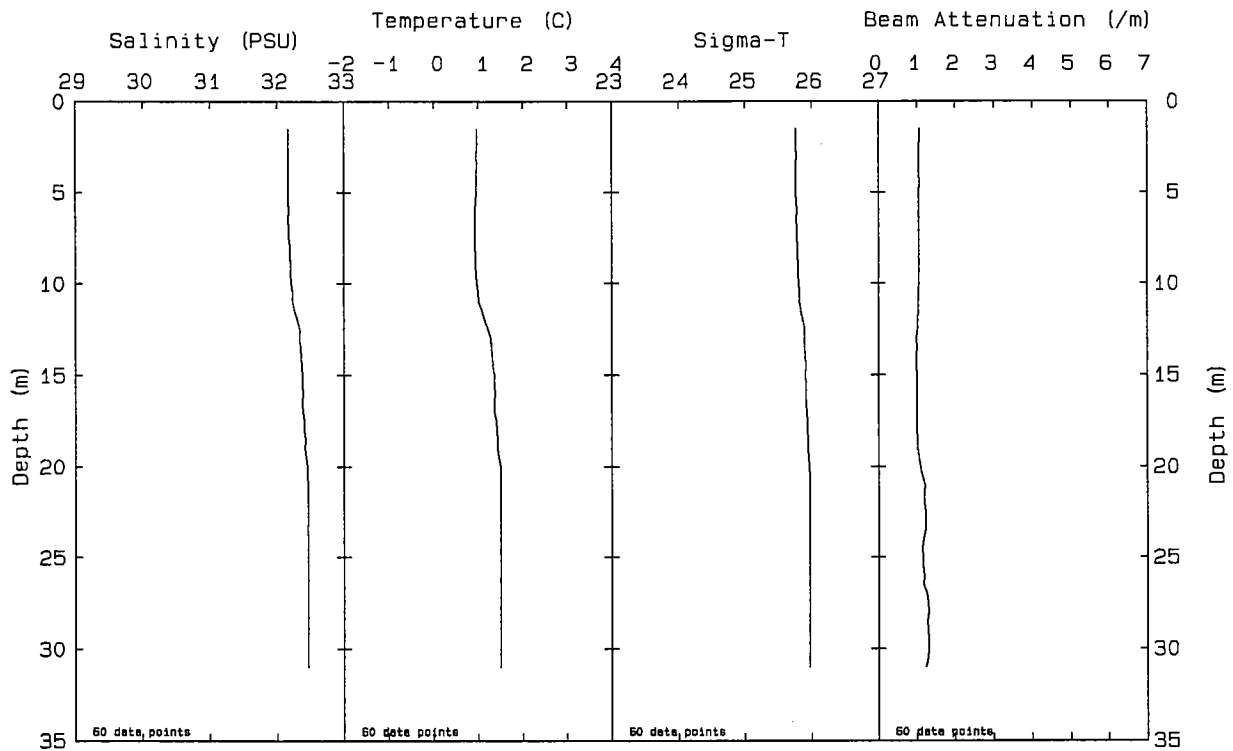


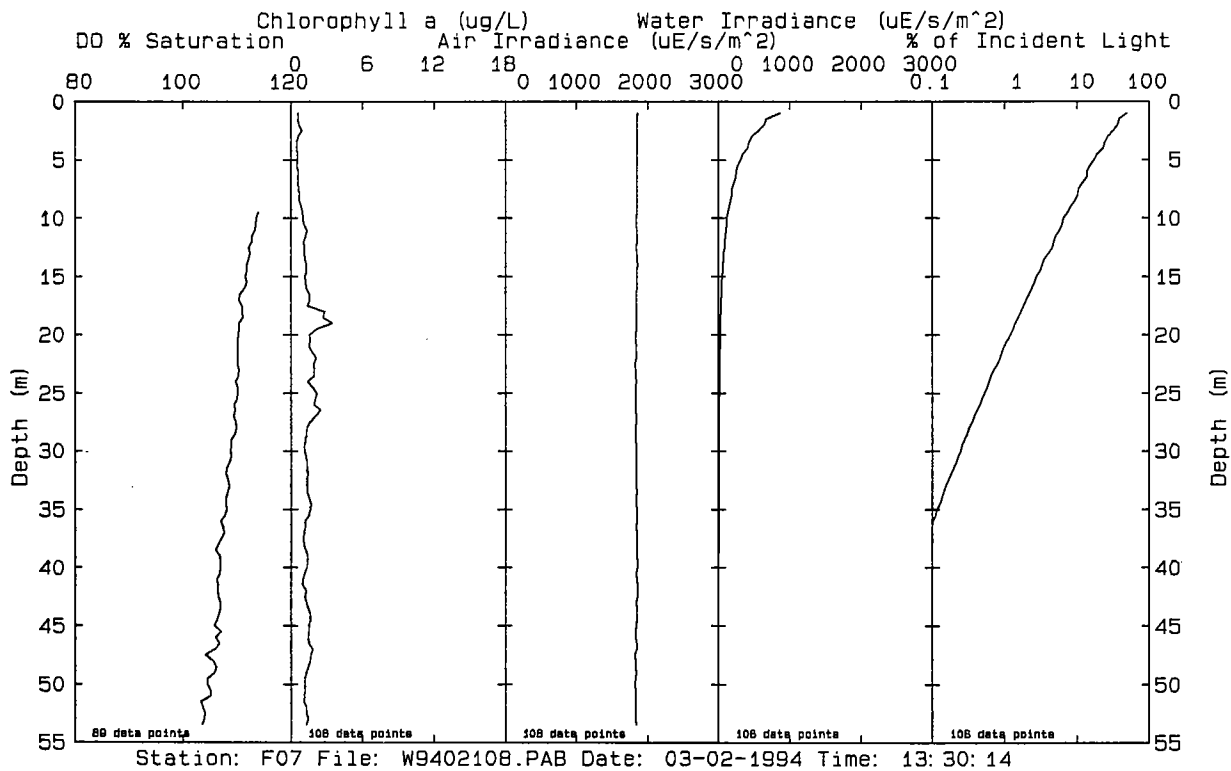
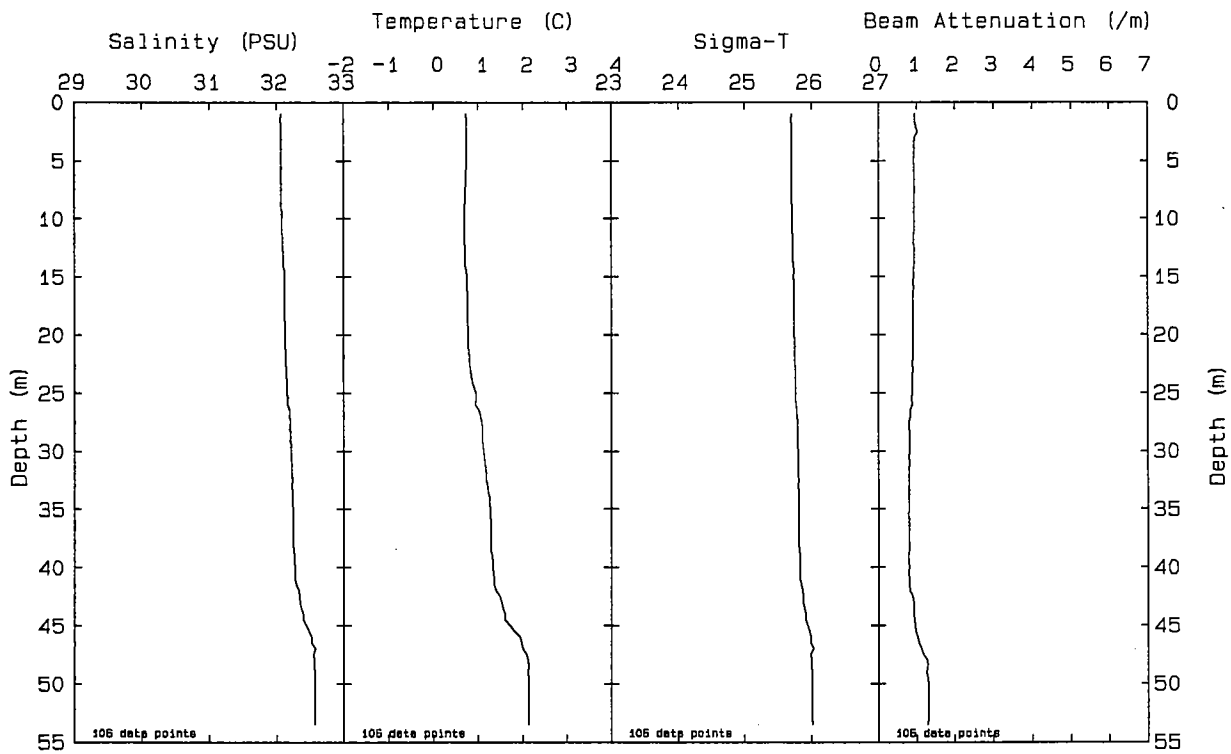
Station: F02P File: W9402080.PAB Date: 03-02-1994 Time: 07: 41: 31

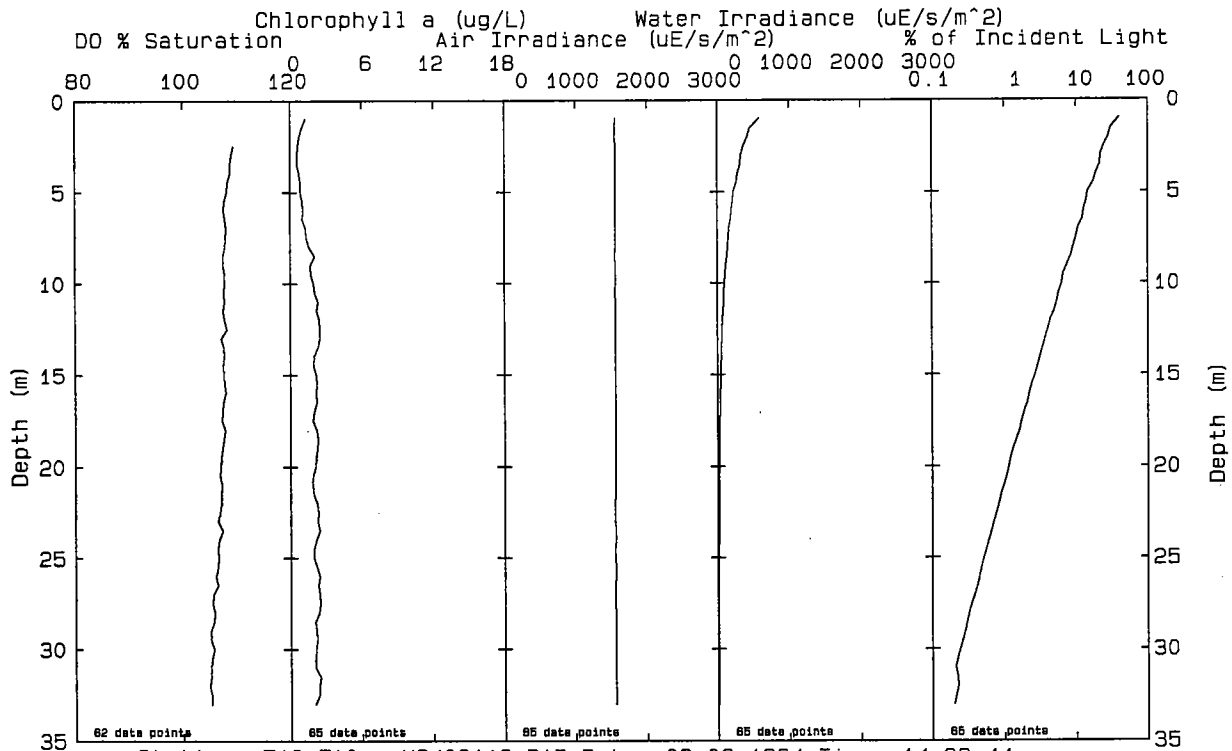
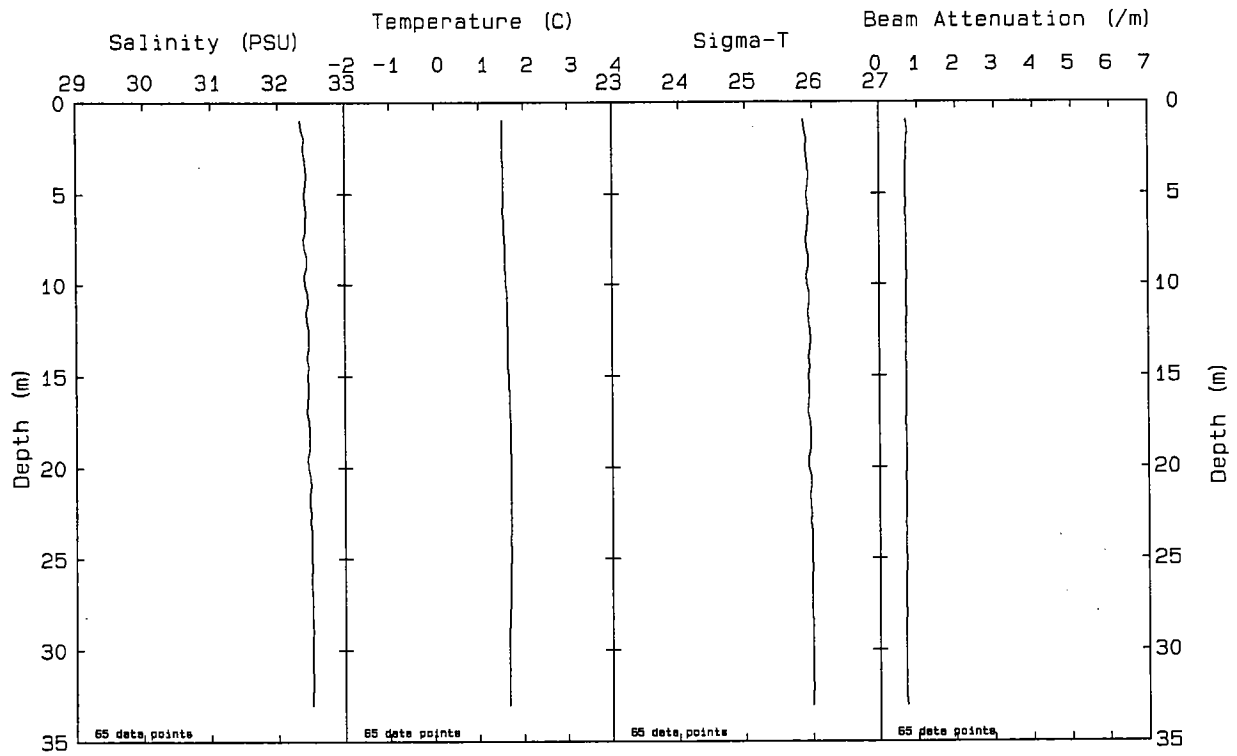


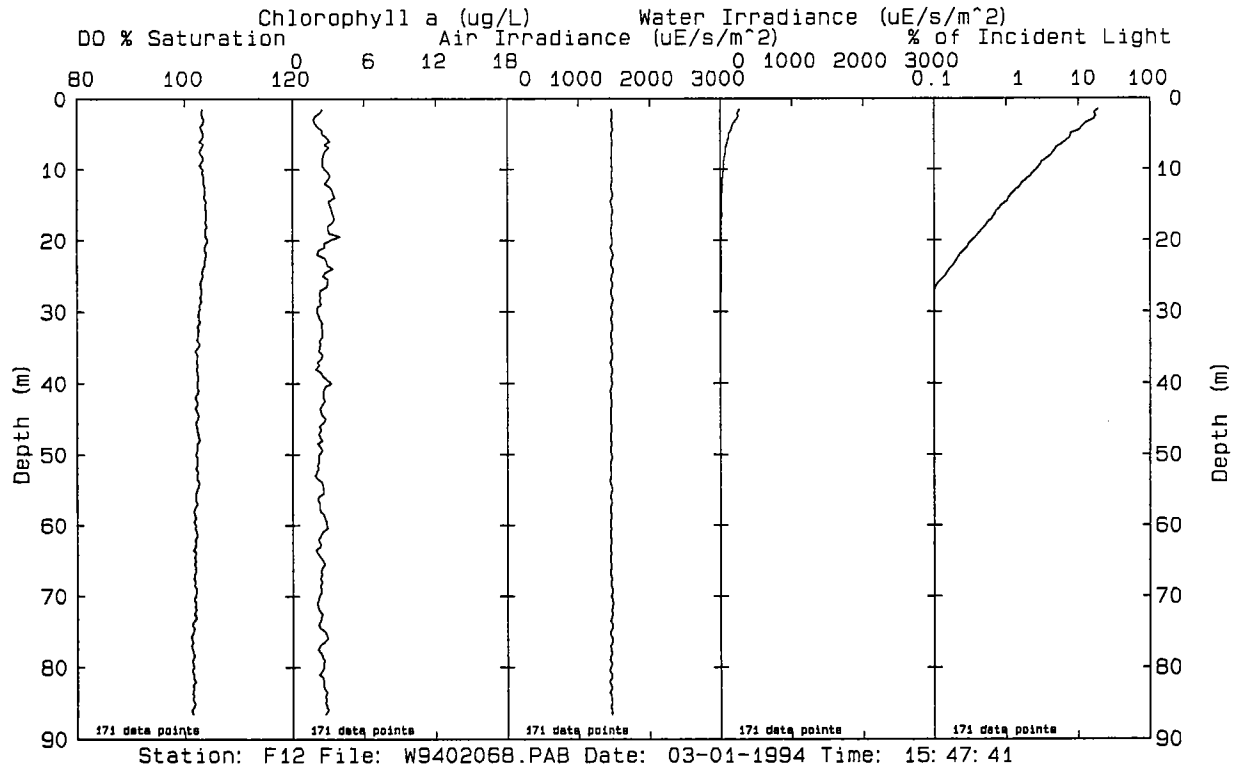
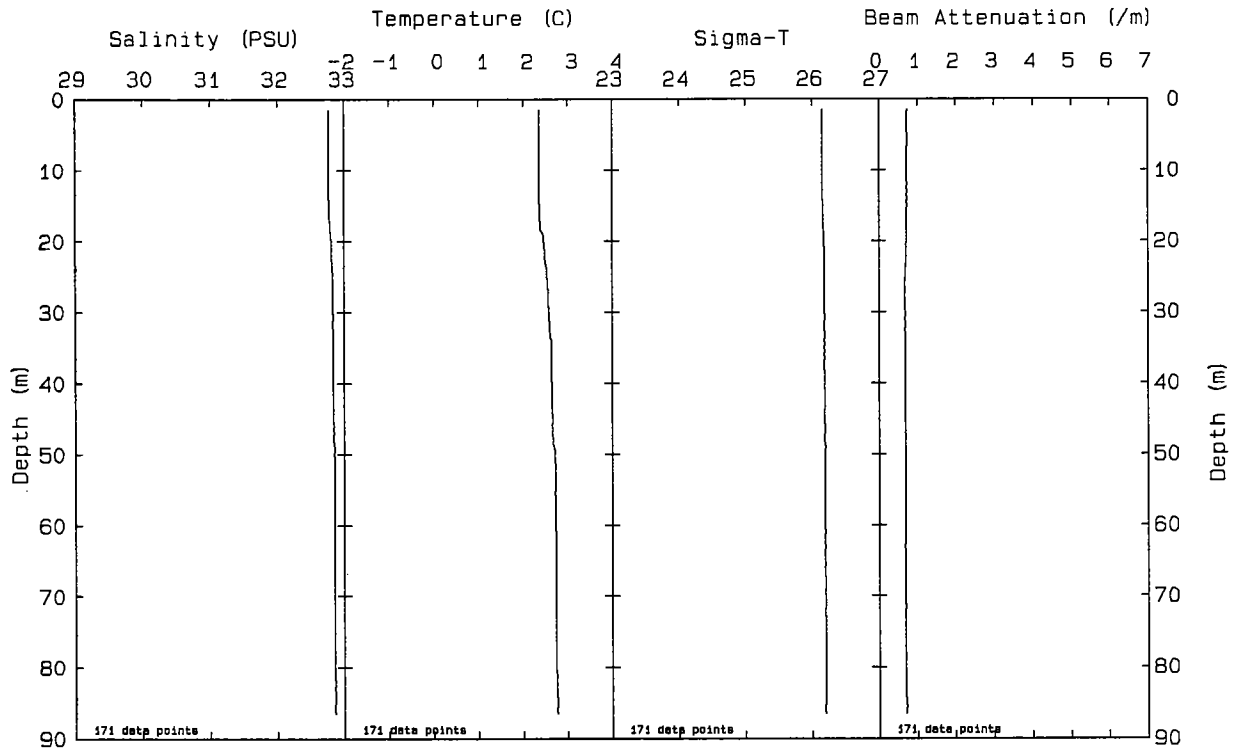
Station: F03 File: W9402092.PAB Date: 03-02-1994 Time: 10: 22: 11

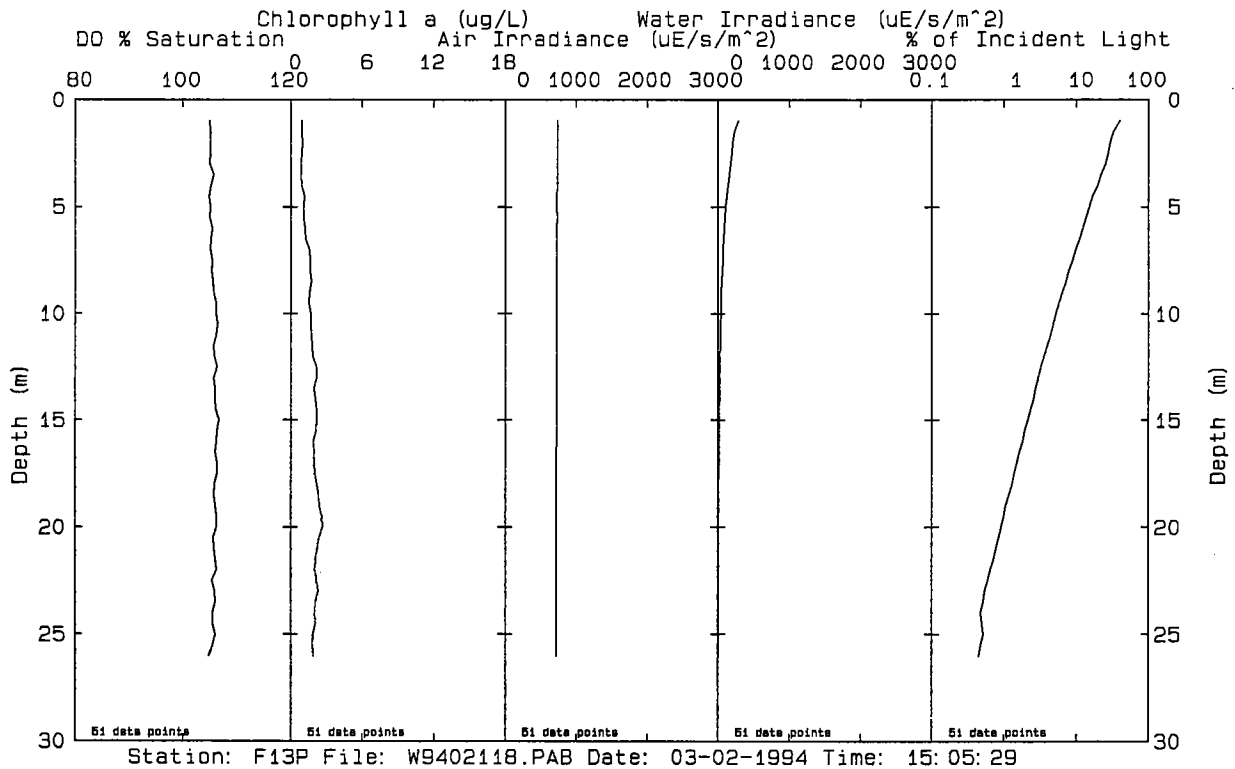
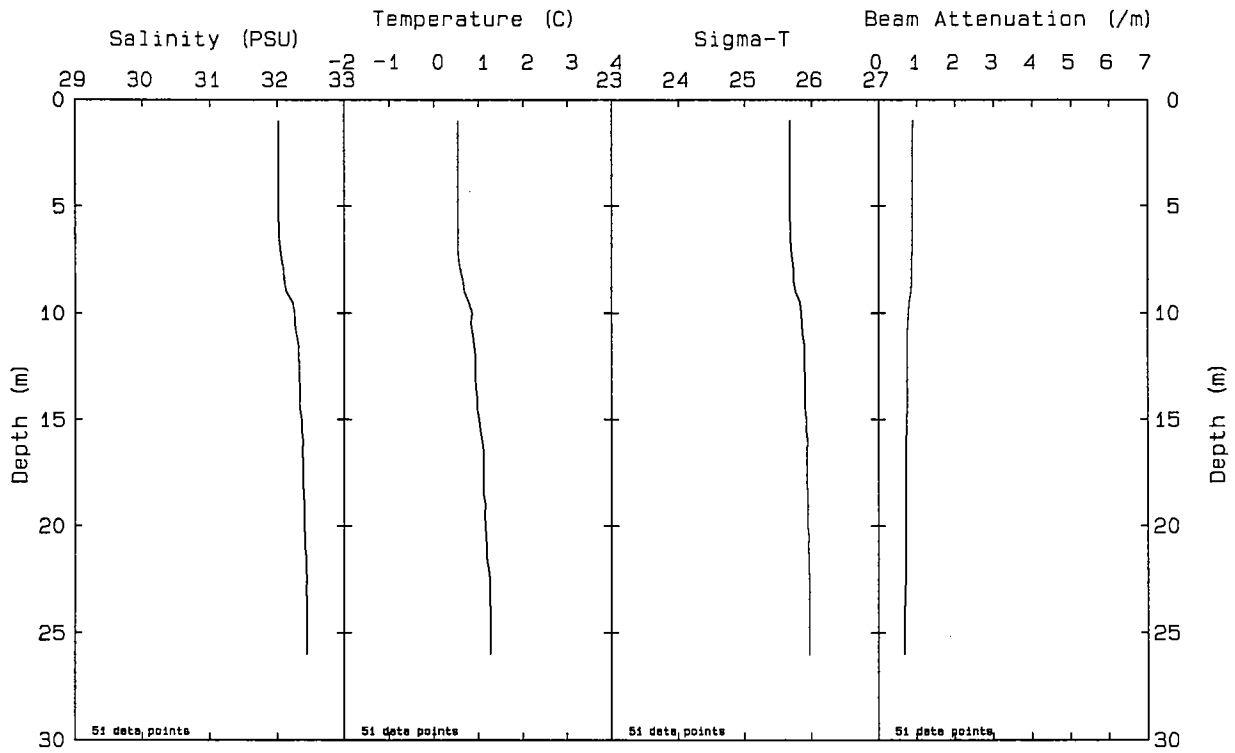






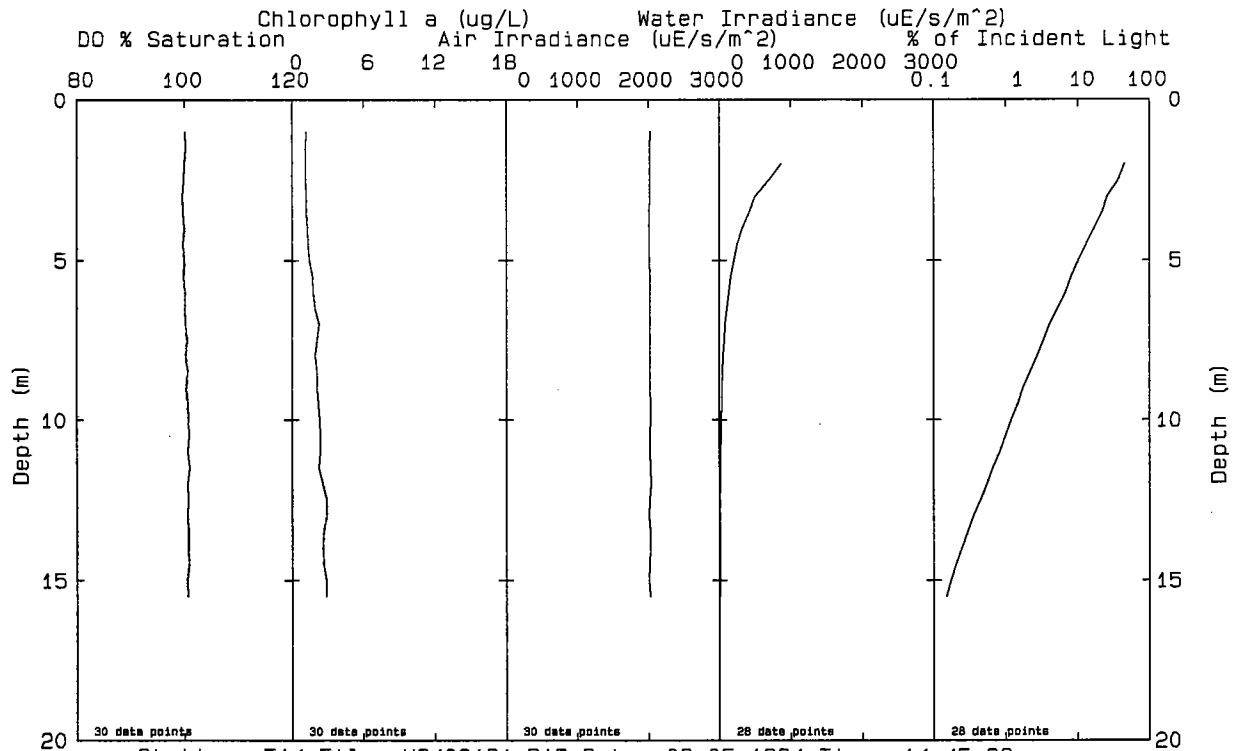
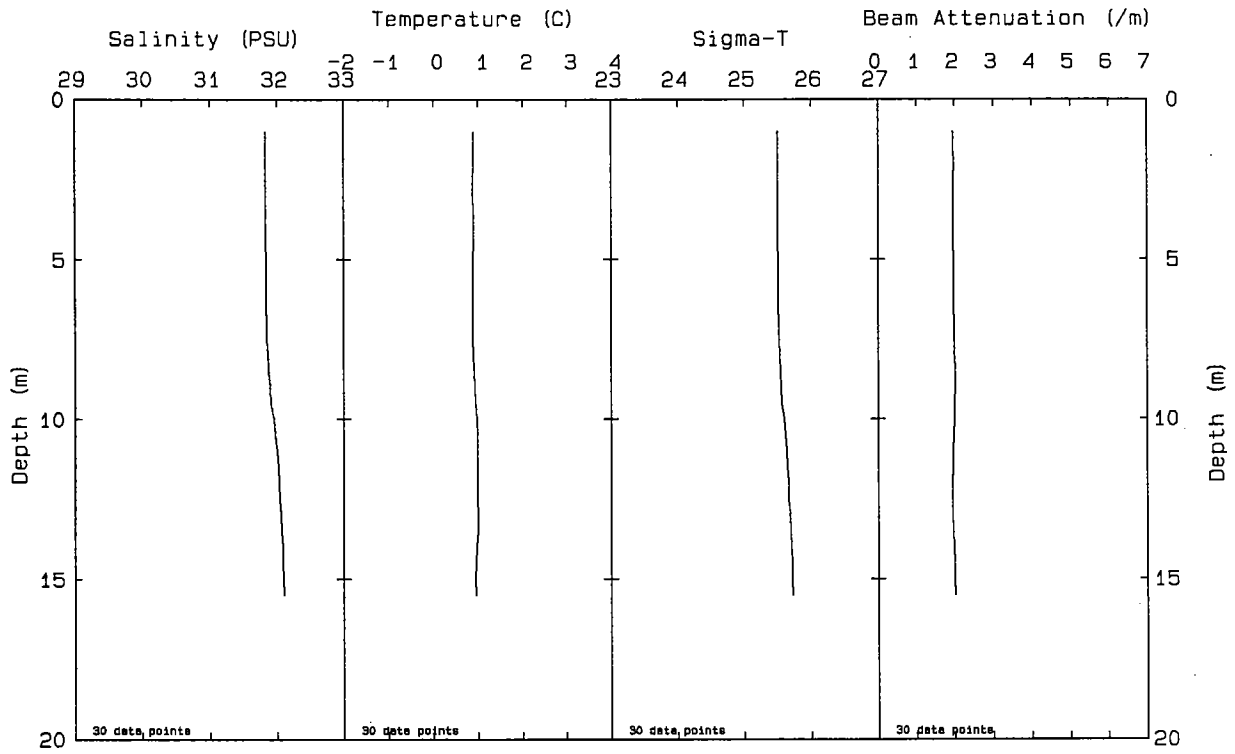




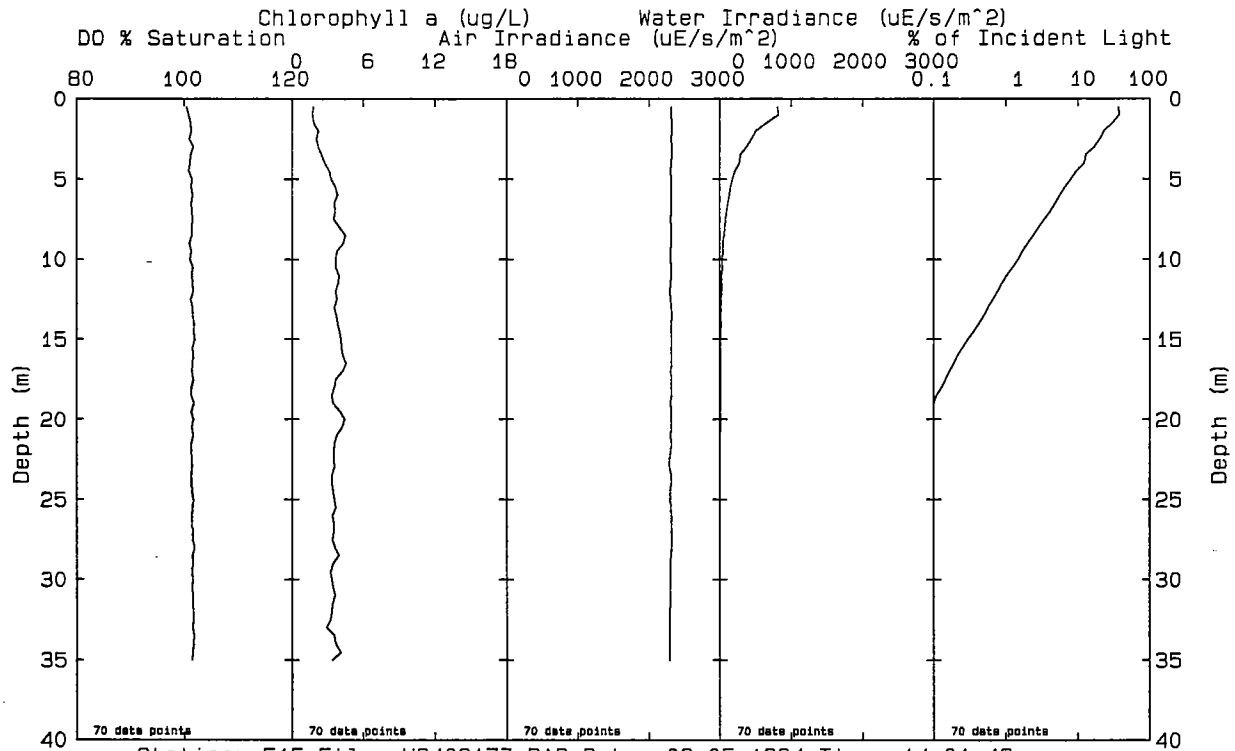
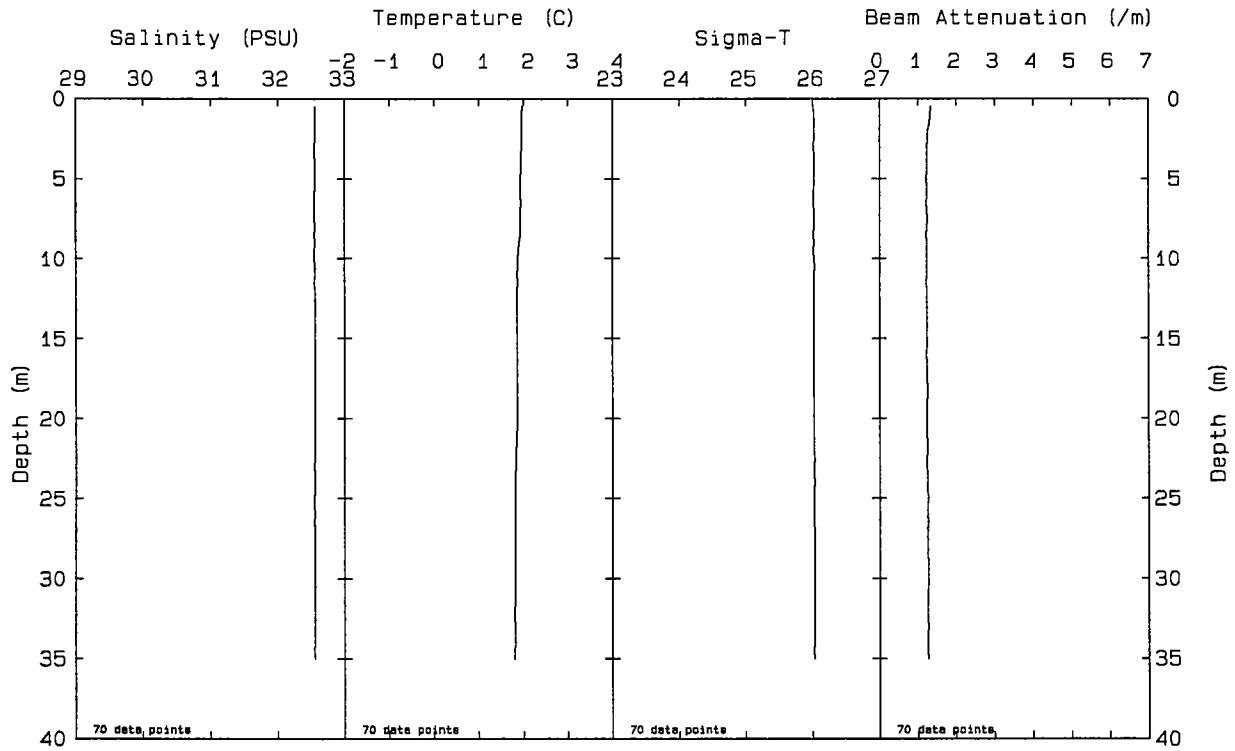


Station: F13P File: W9402118.PAB Date: 03-02-1994 Time: 15:05:29

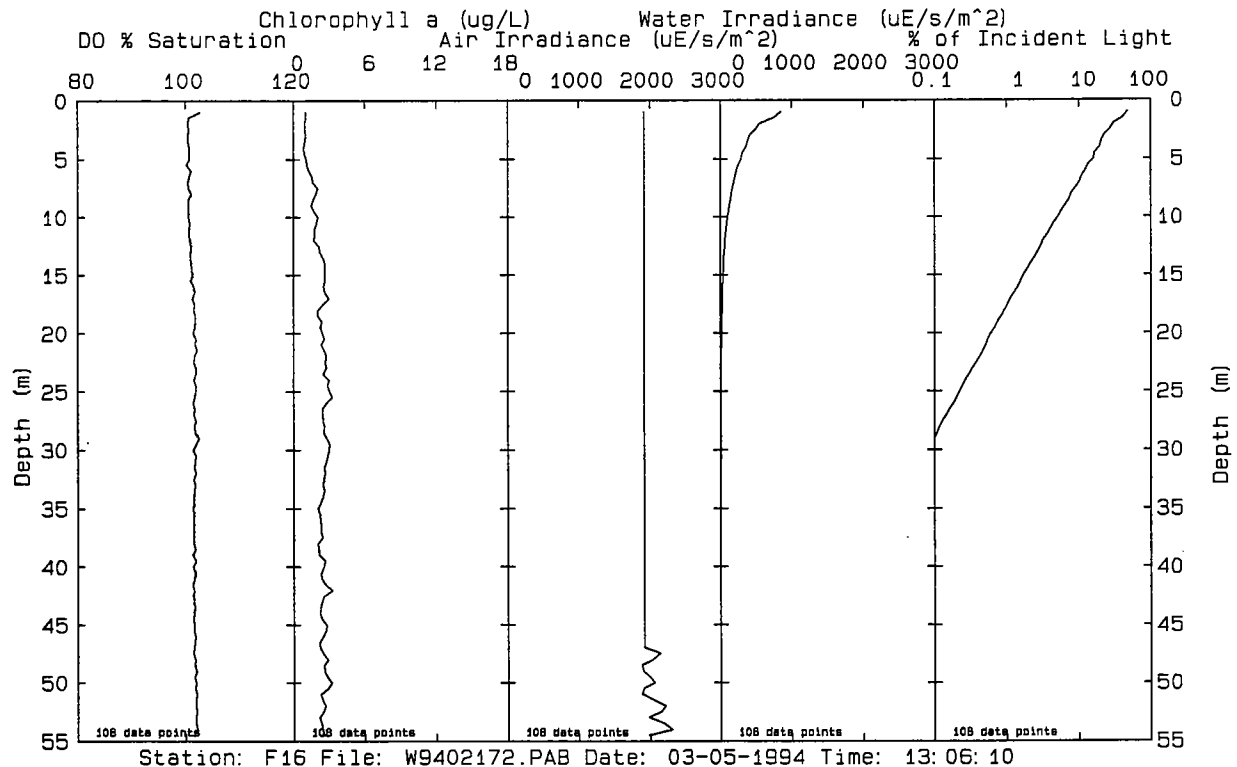
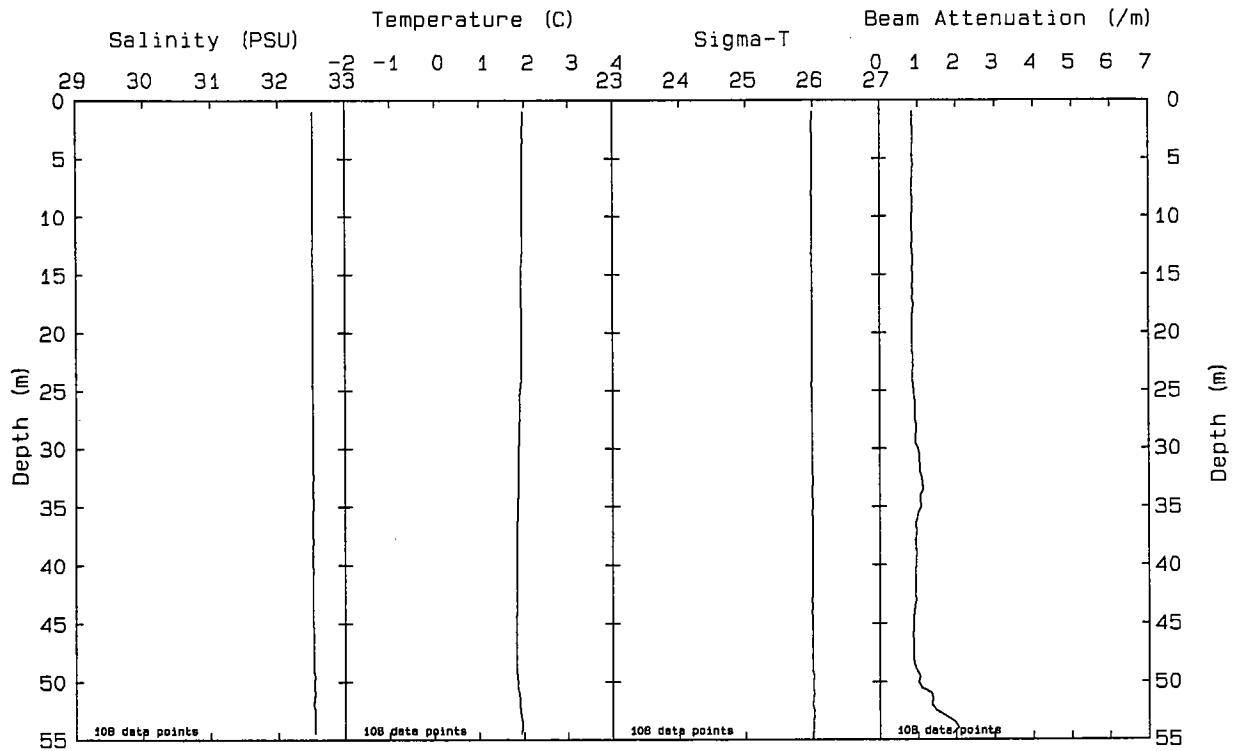




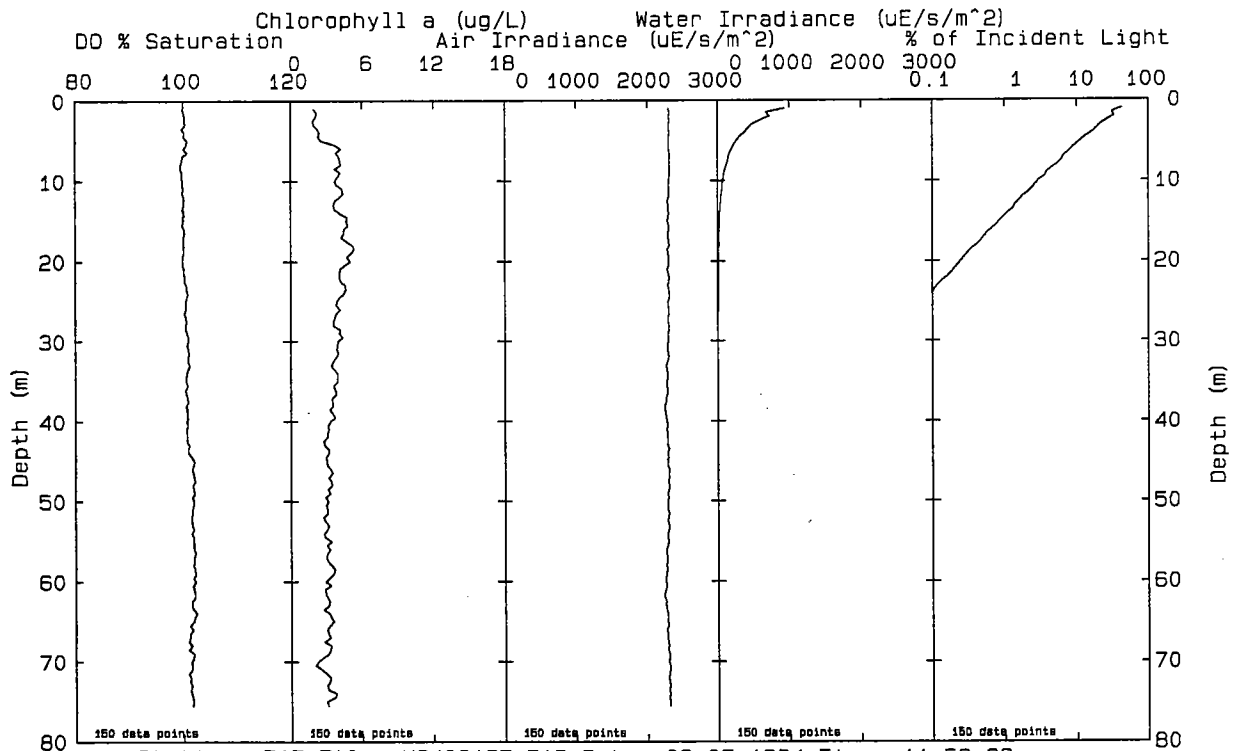
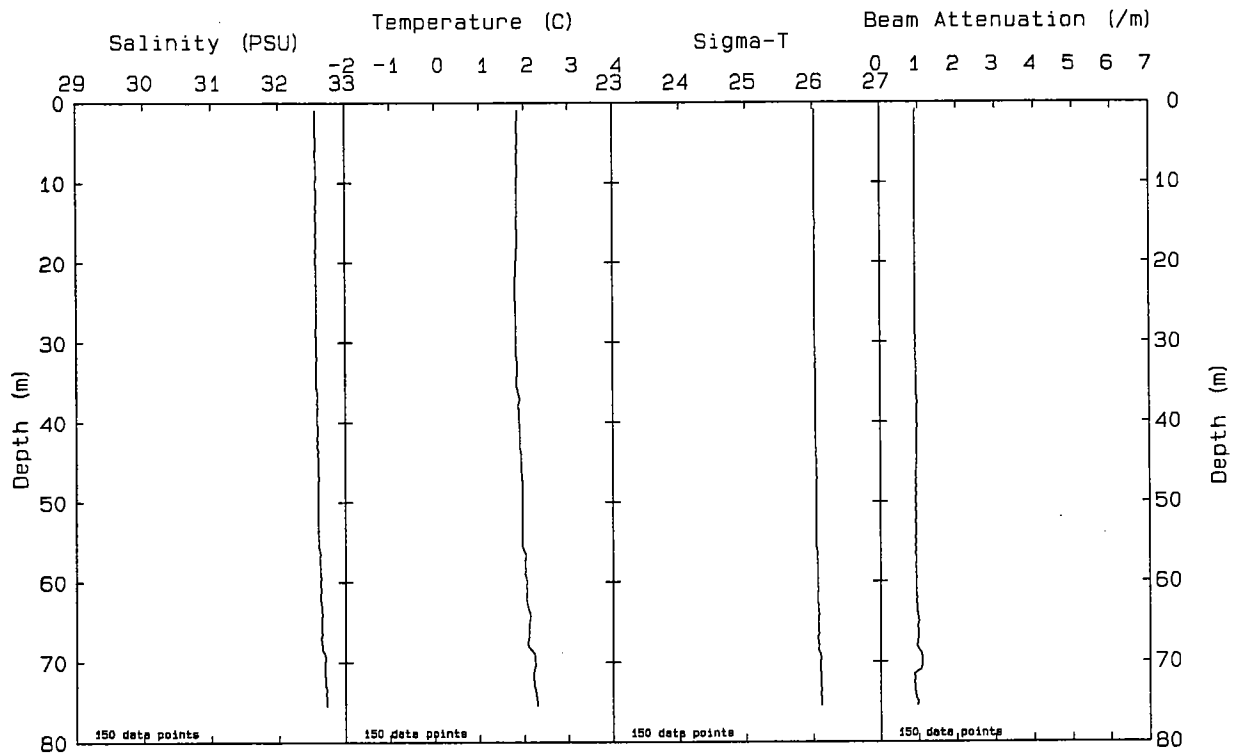
Station: F14 File: W9402181.PAB Date: 03-05-1994 Time: 14: 45: 32



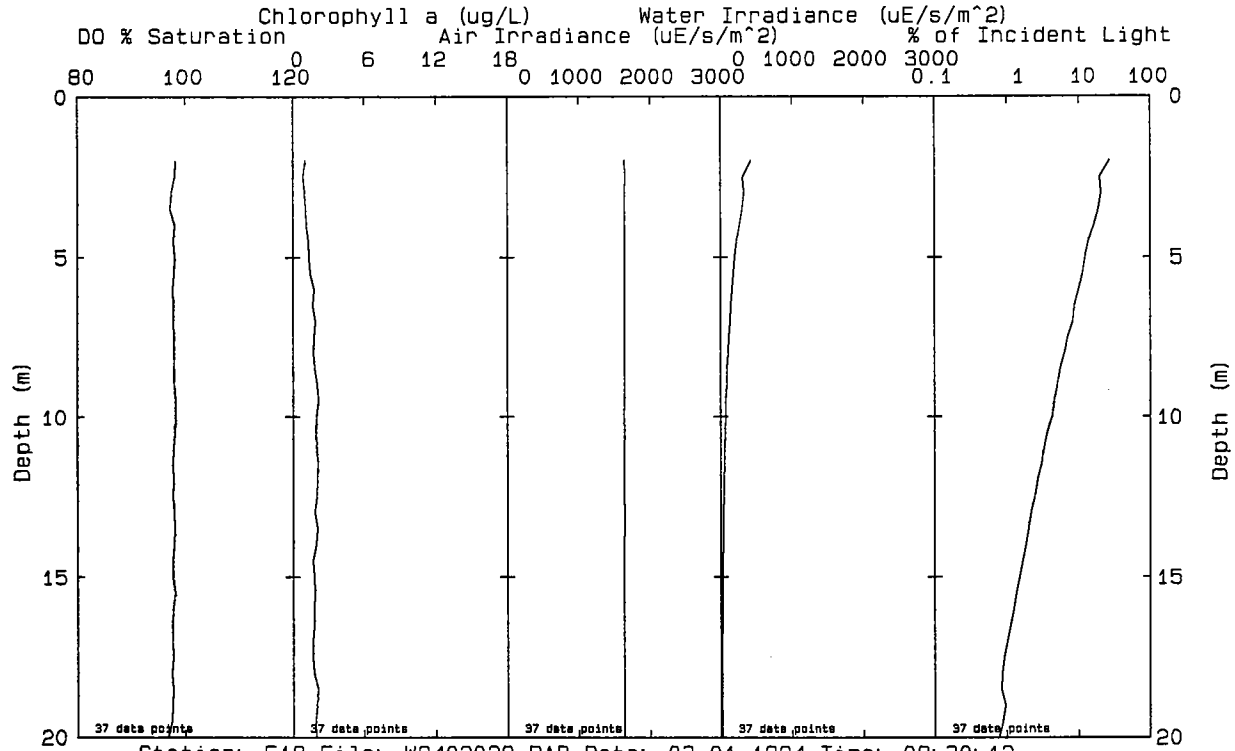
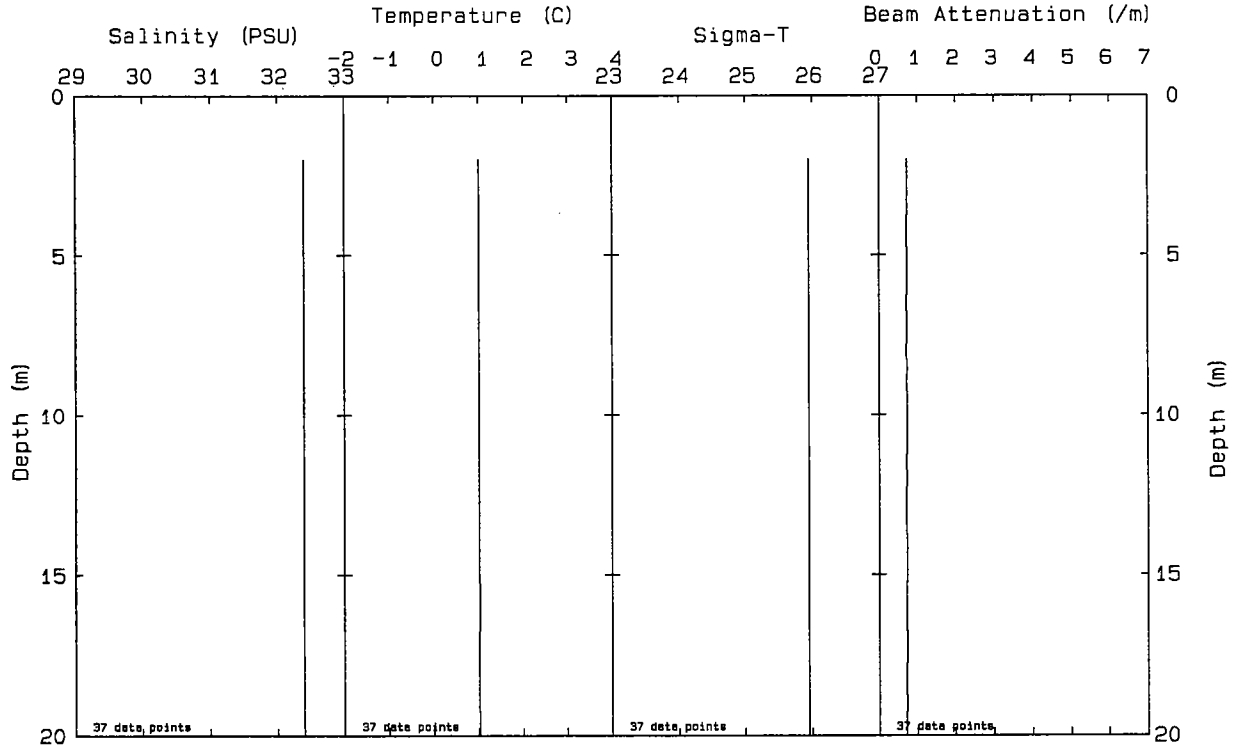
Station: F15 File: W9402177.PAB Date: 03-05-1994 Time: 14: 01: 48



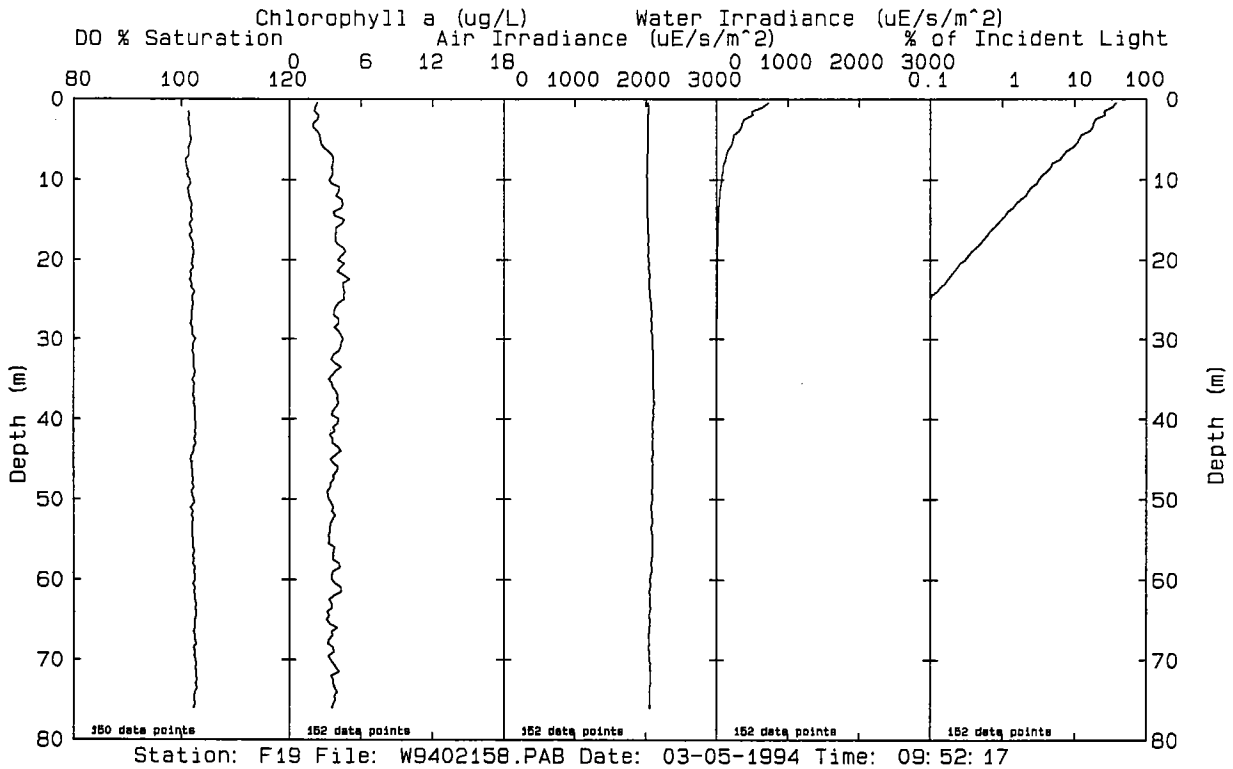
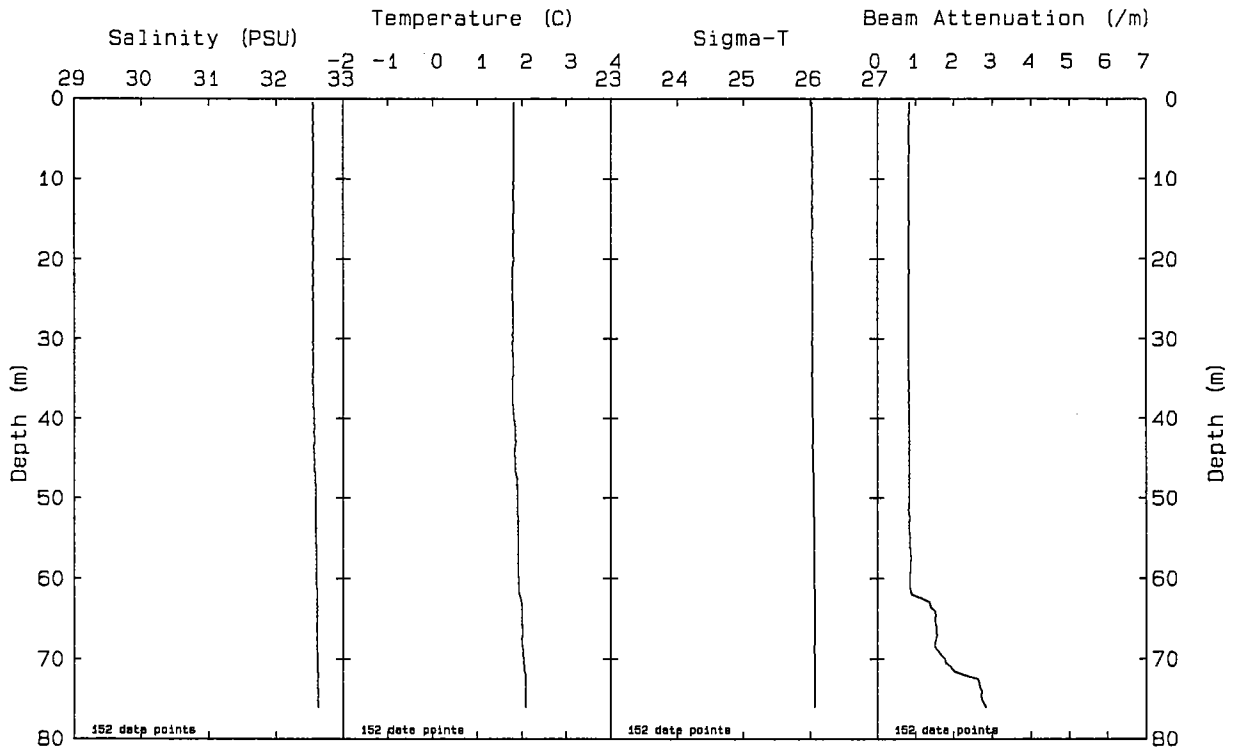
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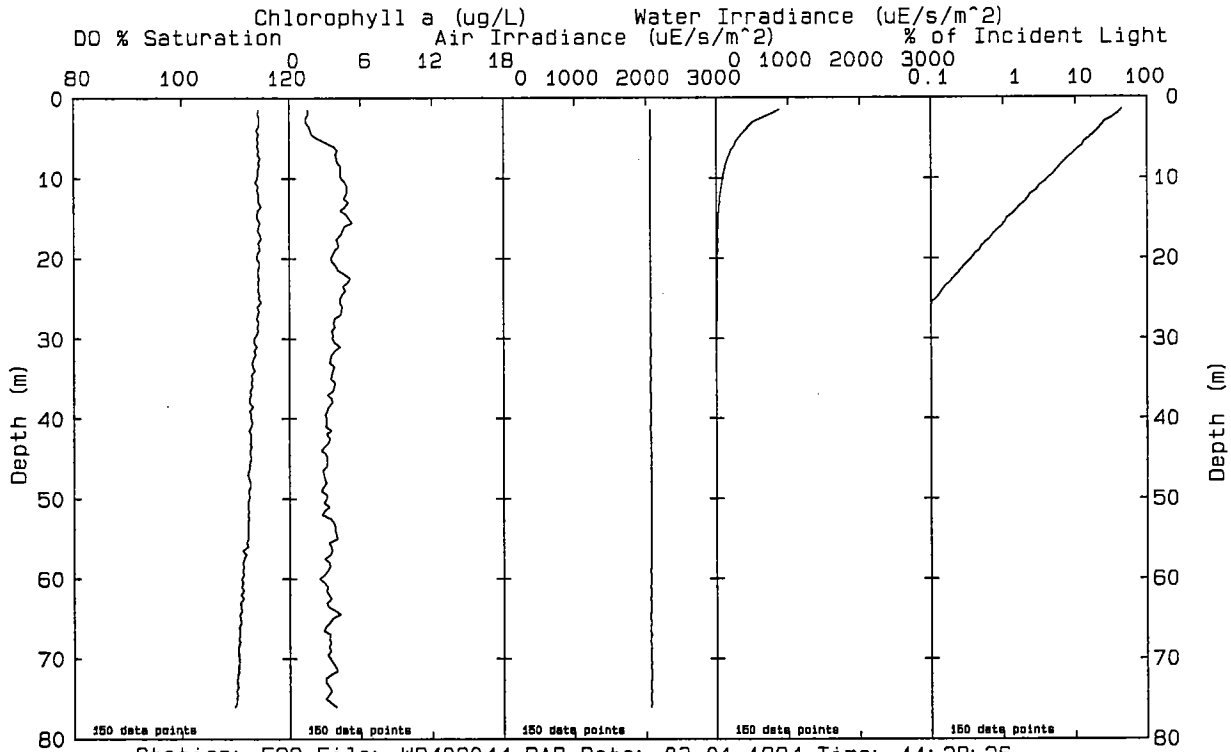
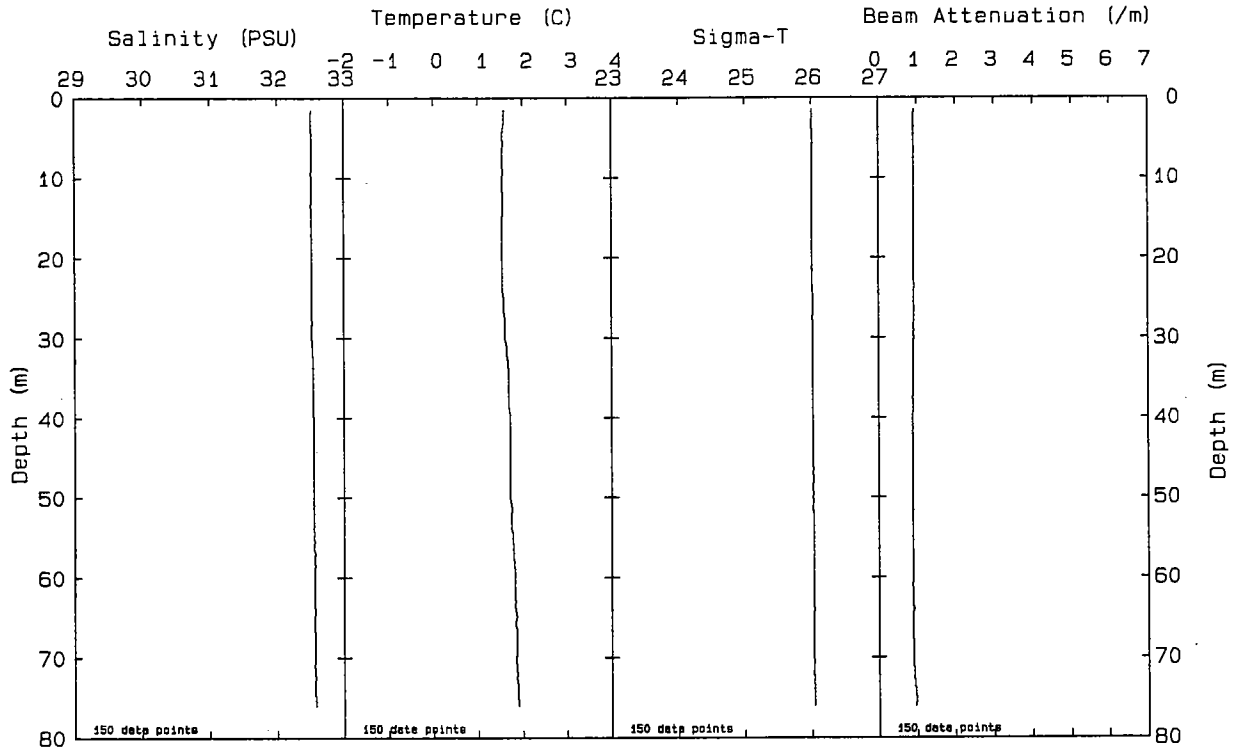


Station: F17 File: W9402167.PAB Date: 03-05-1994 Time: 11:59:39

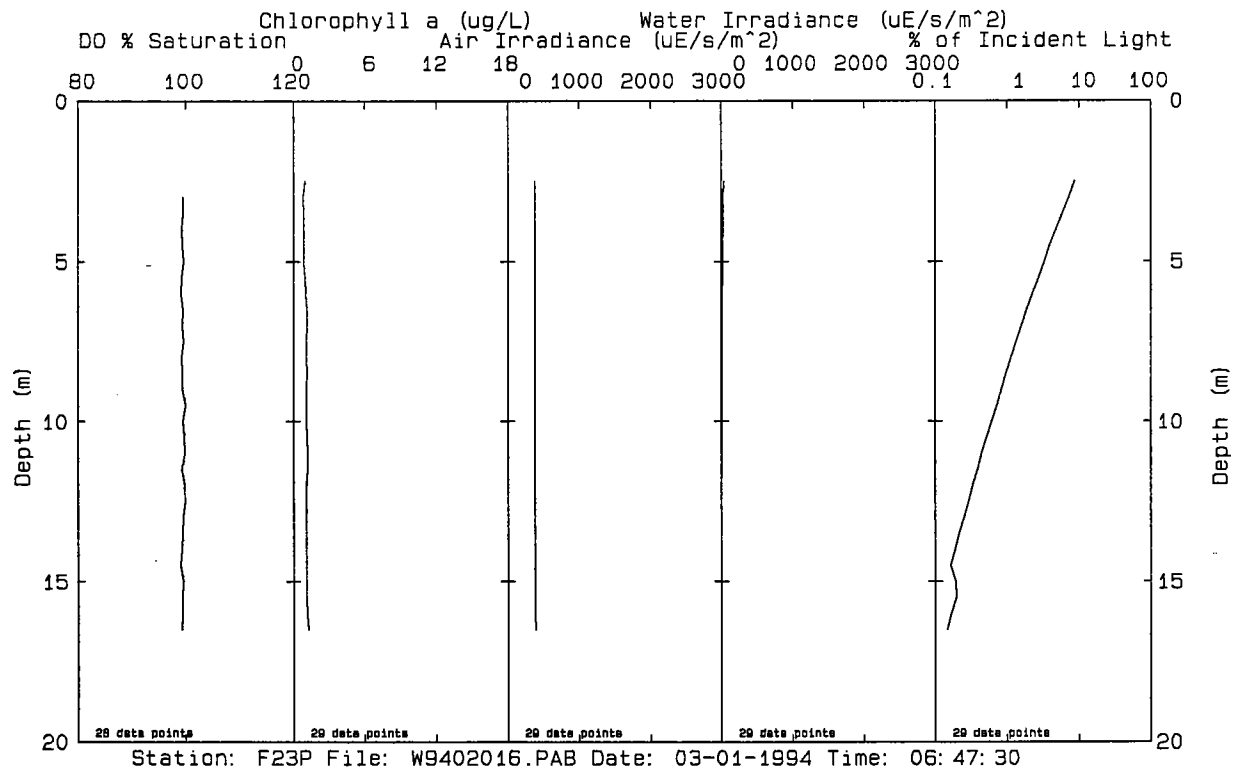
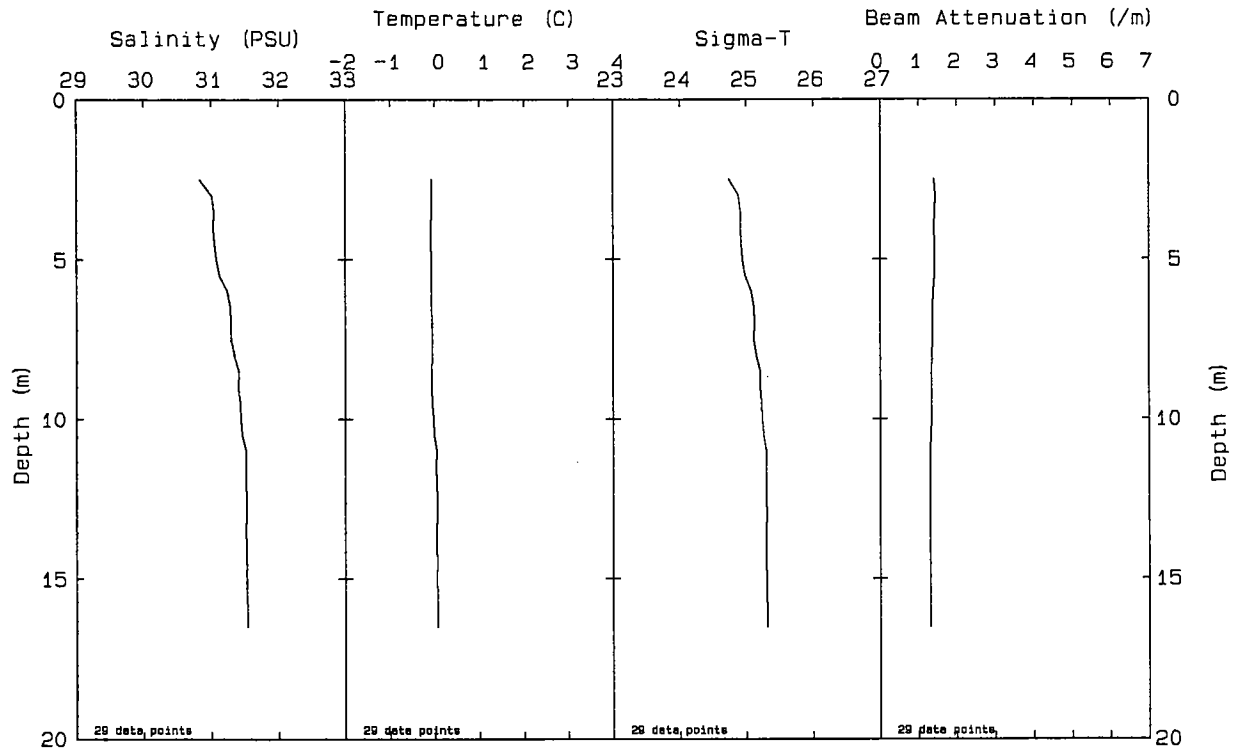


Station: F18 File: W9402029.PAB Date: 03-01-1994 Time: 08:30:12

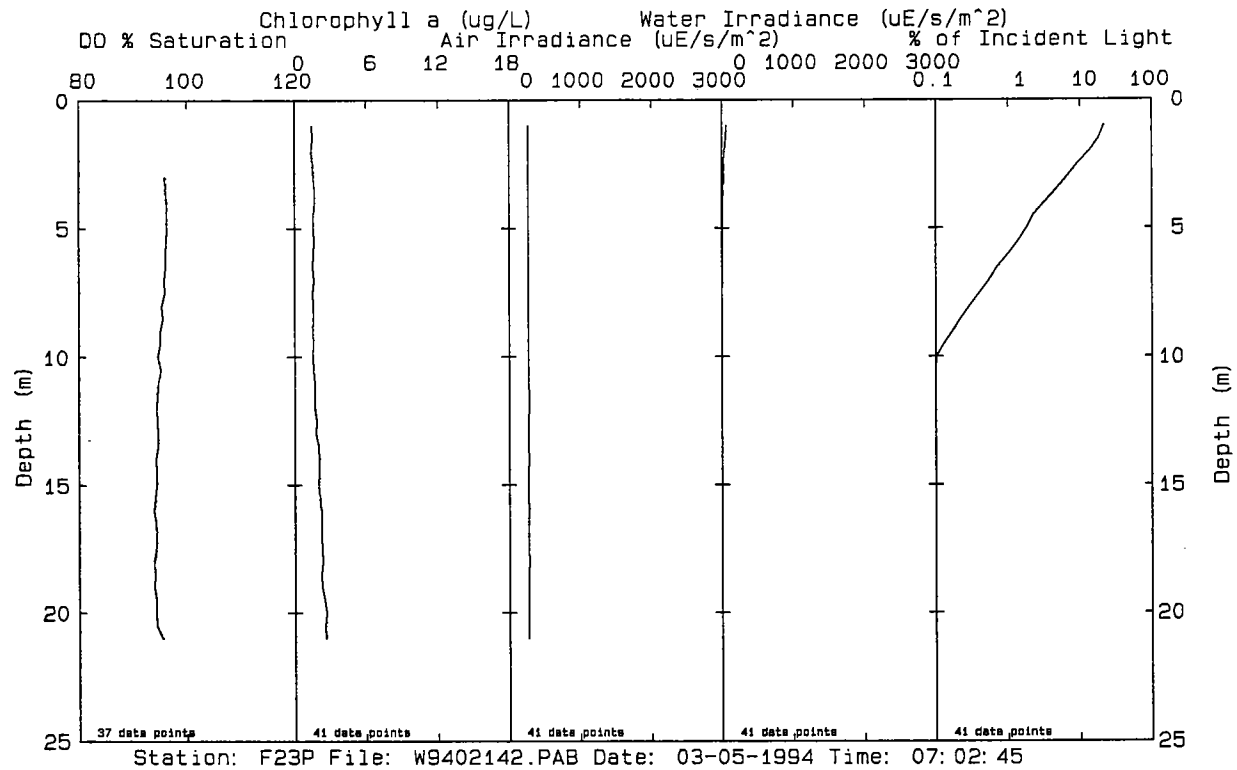
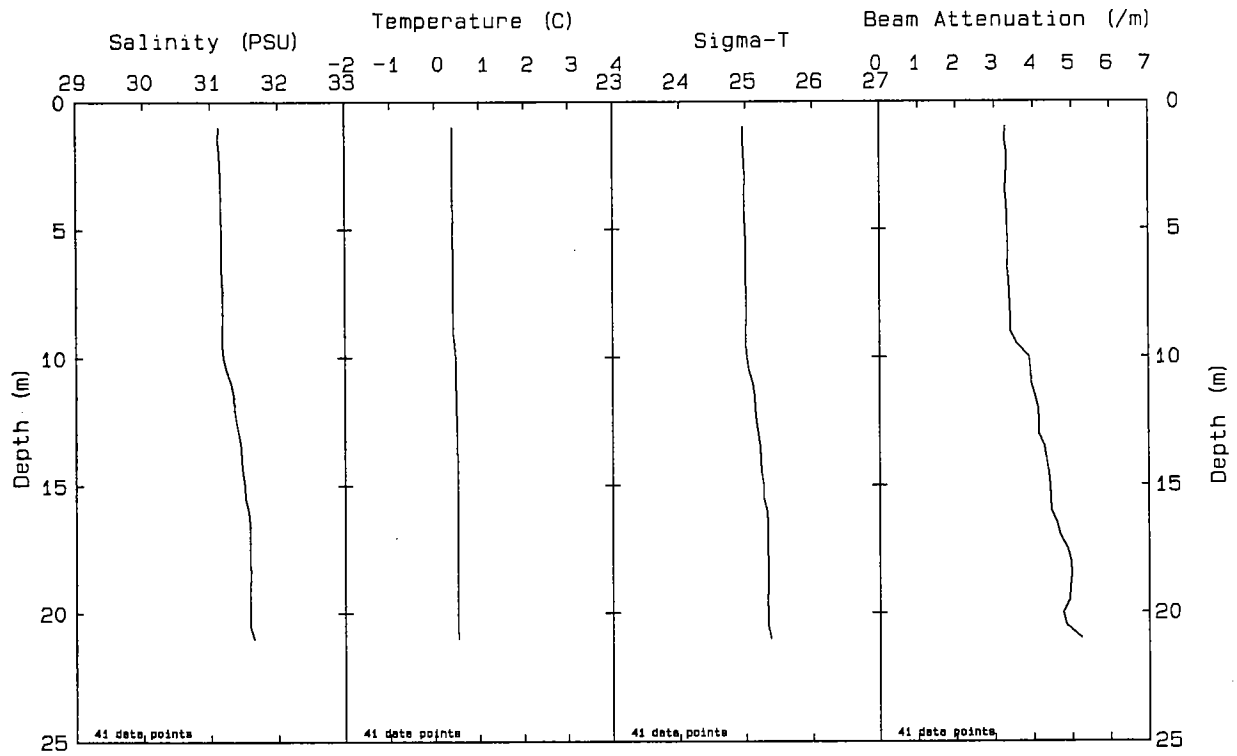


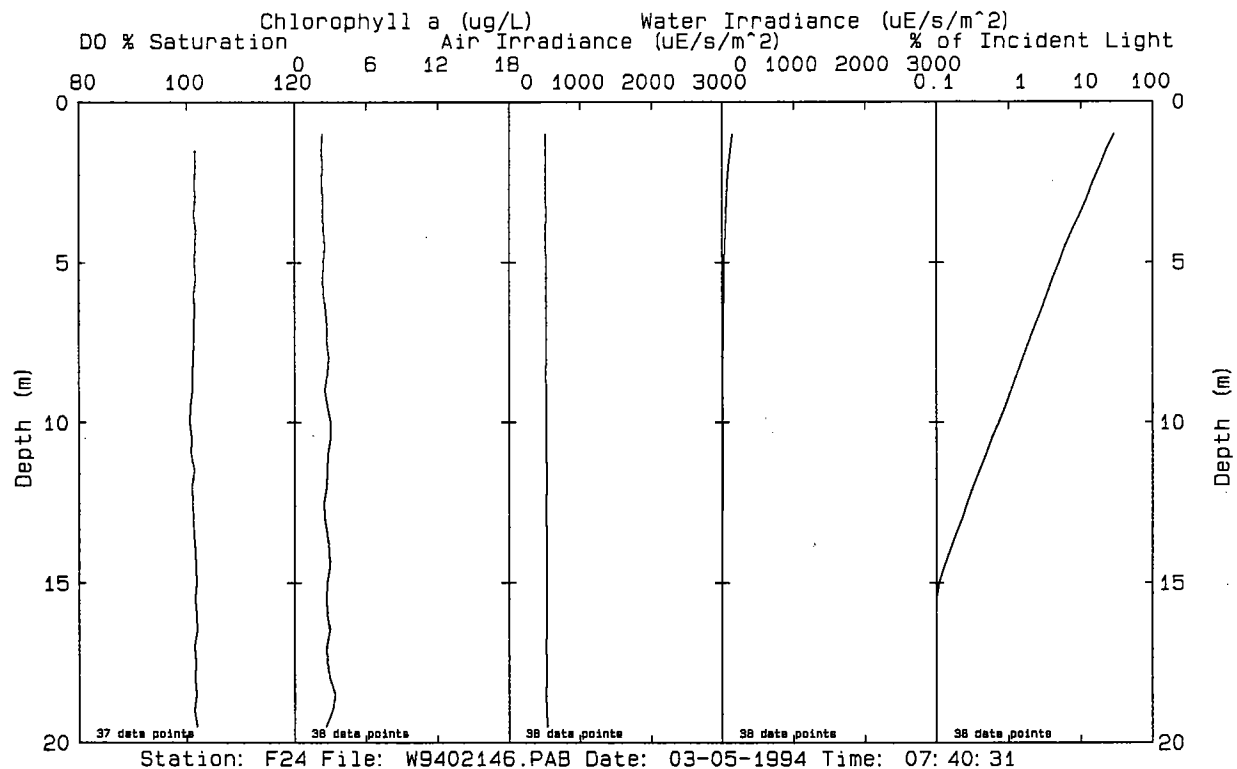
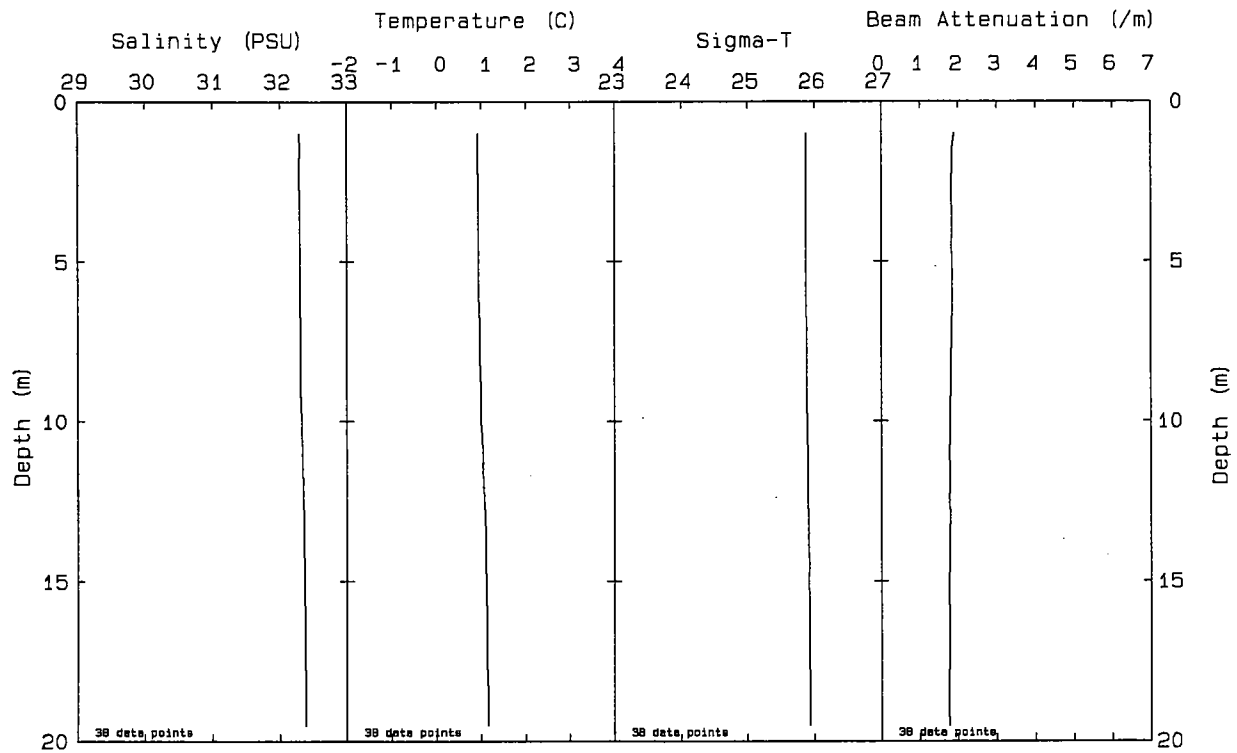


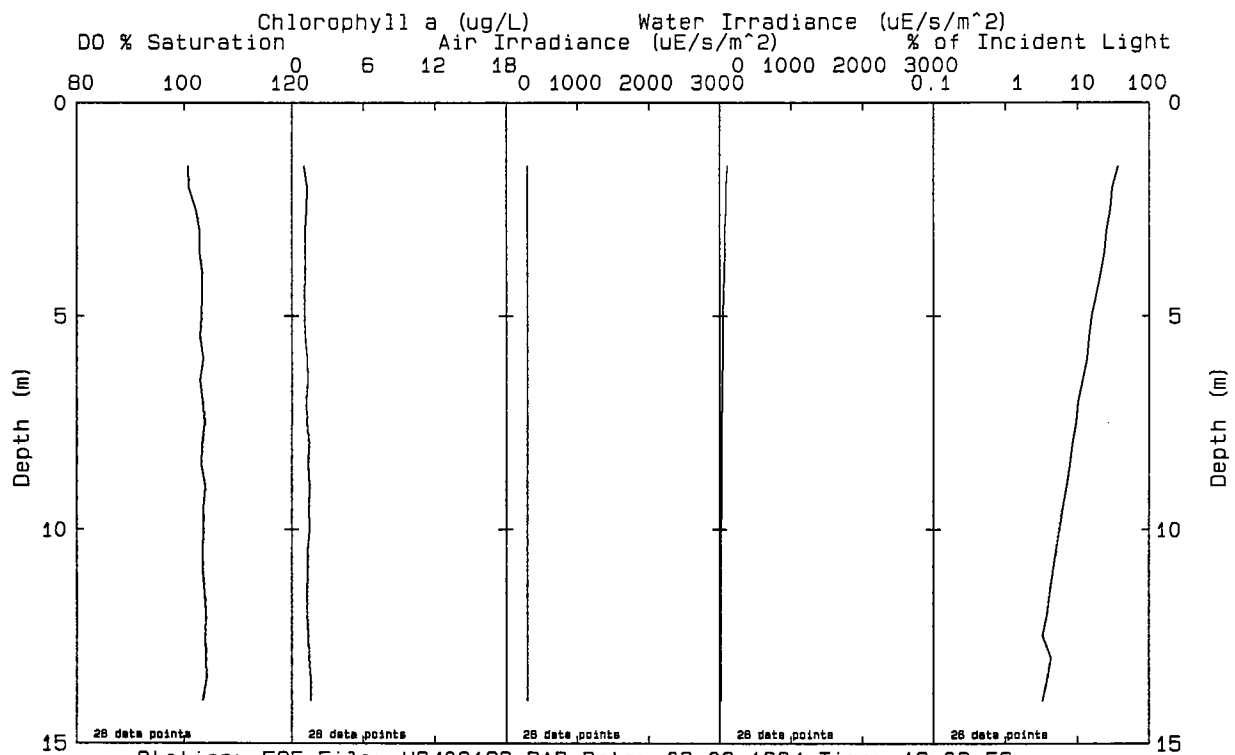
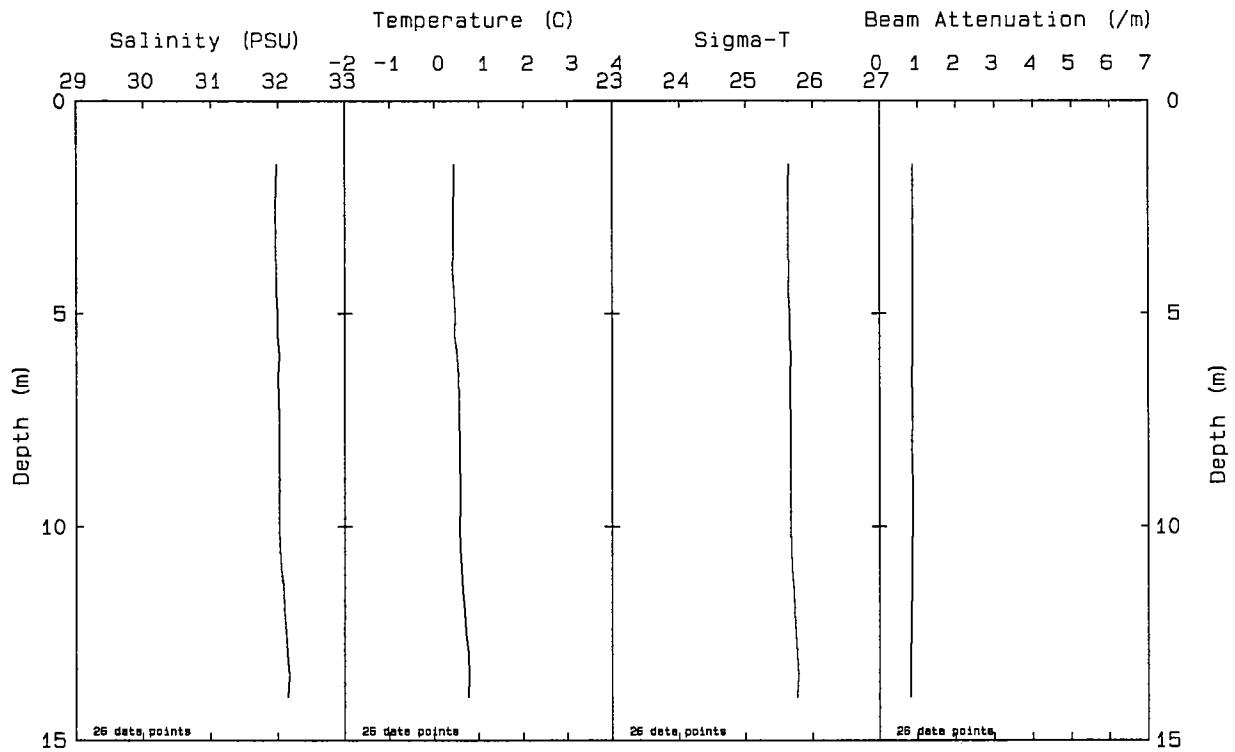
Station: F22 File: W9402044.PAB Date: 03-01-1994 Time: 11:28:25



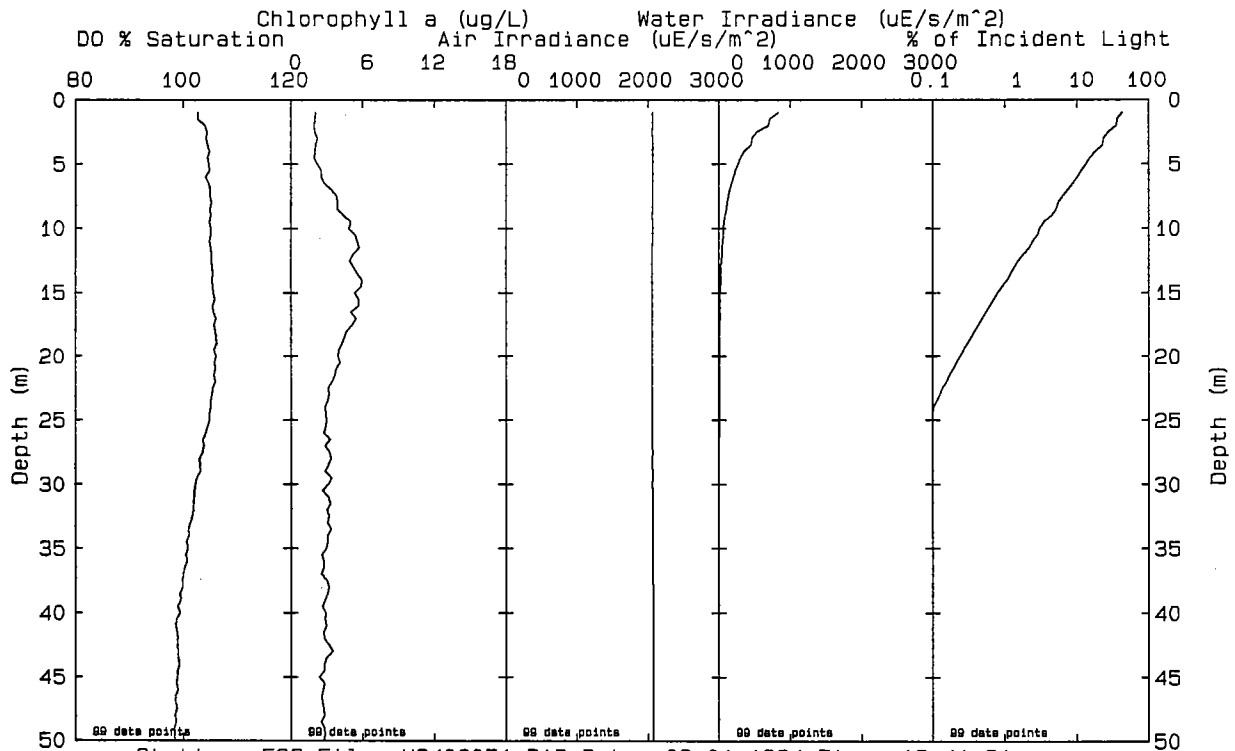
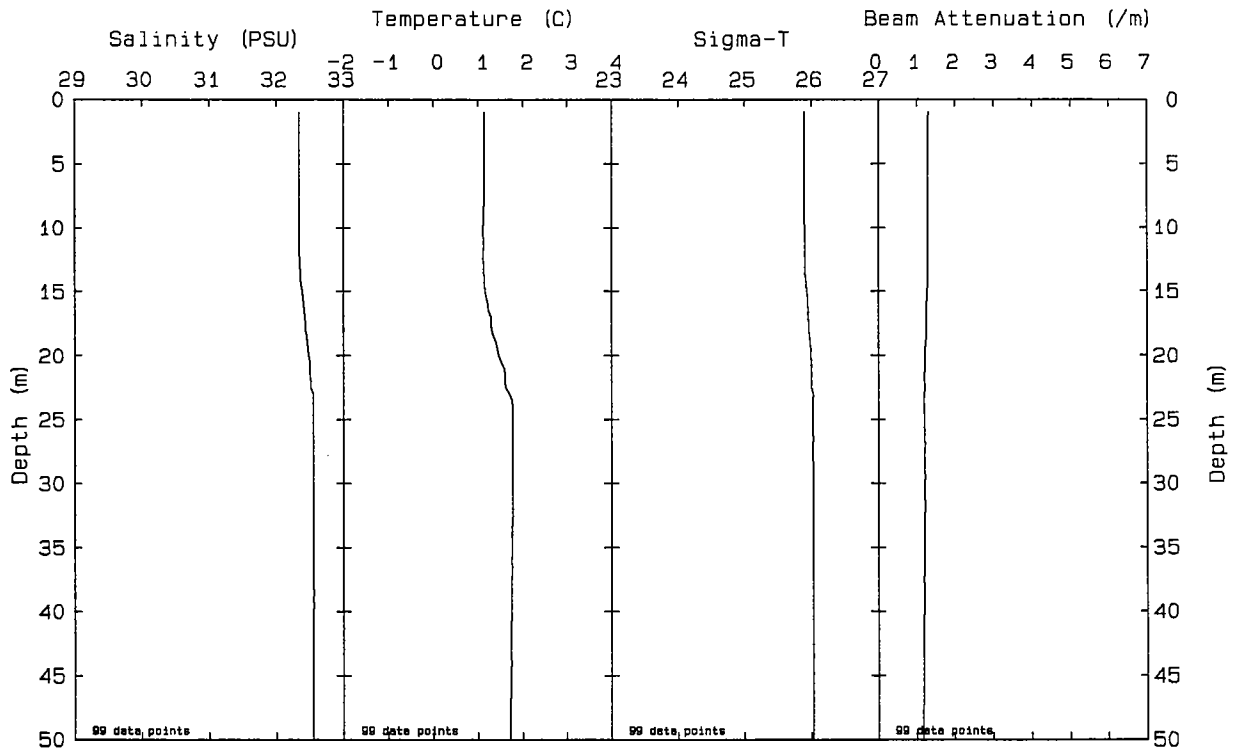




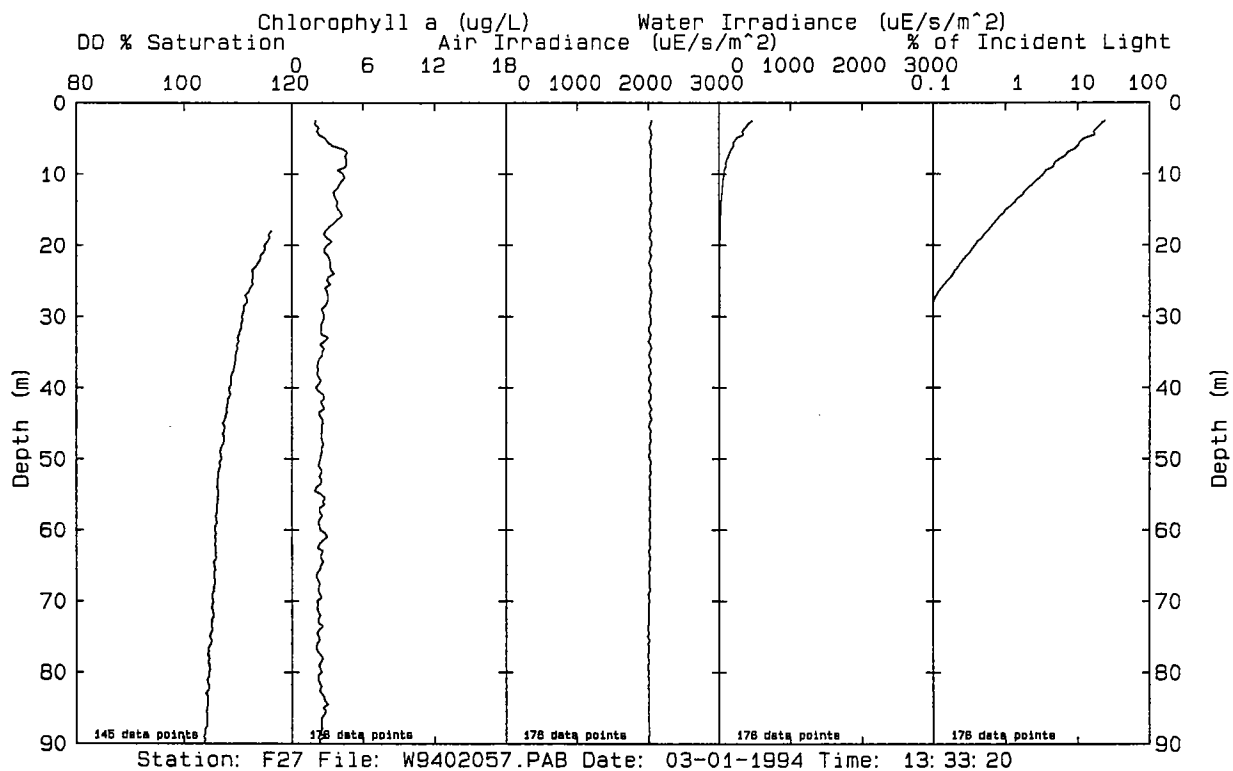
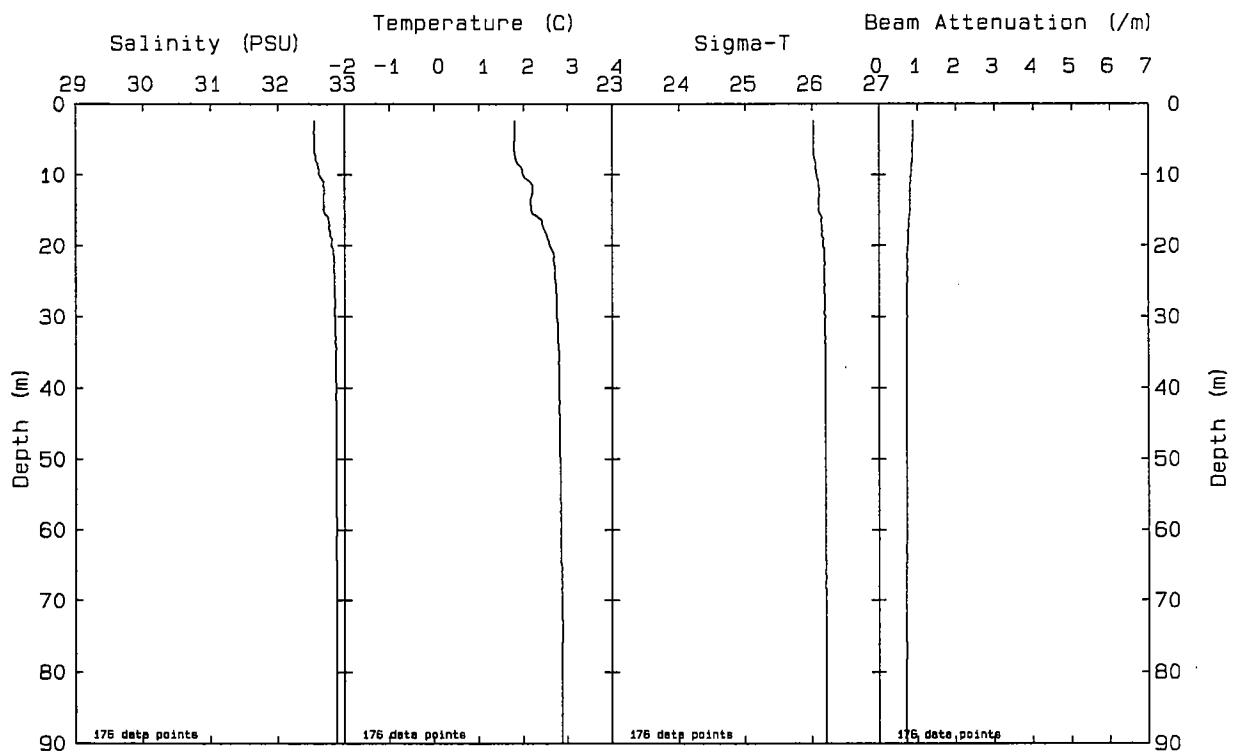


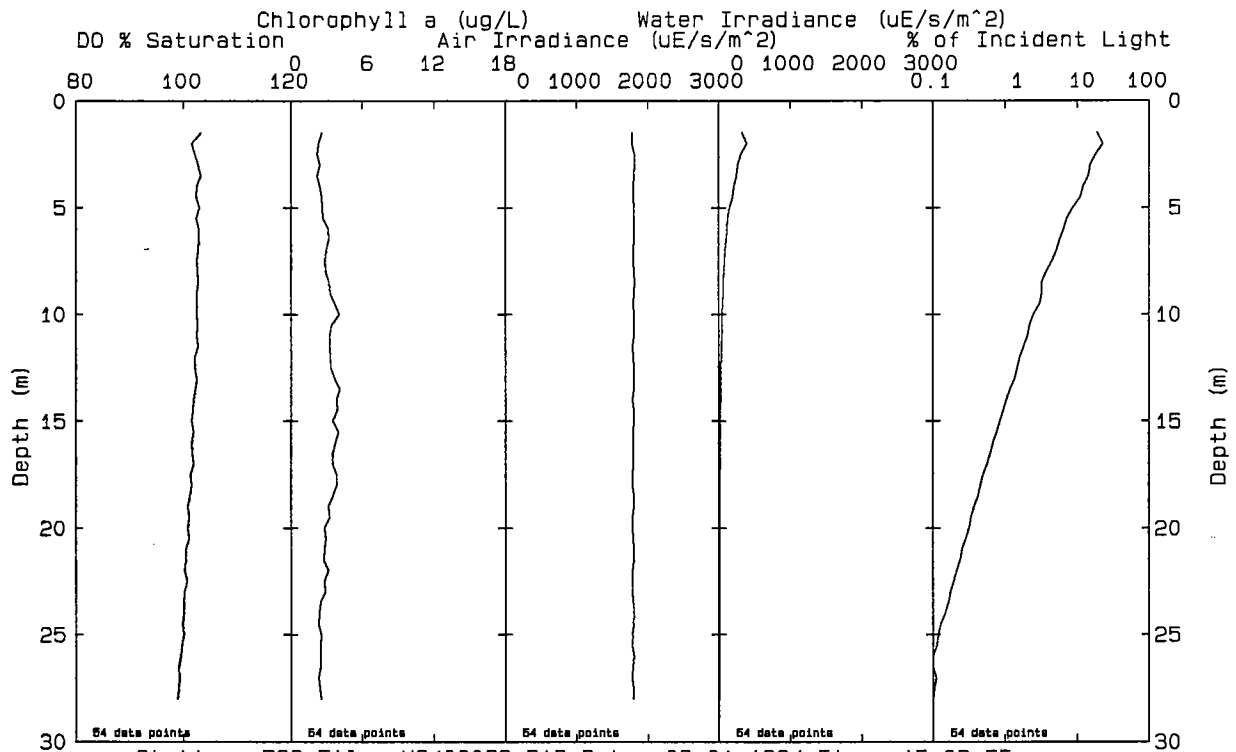
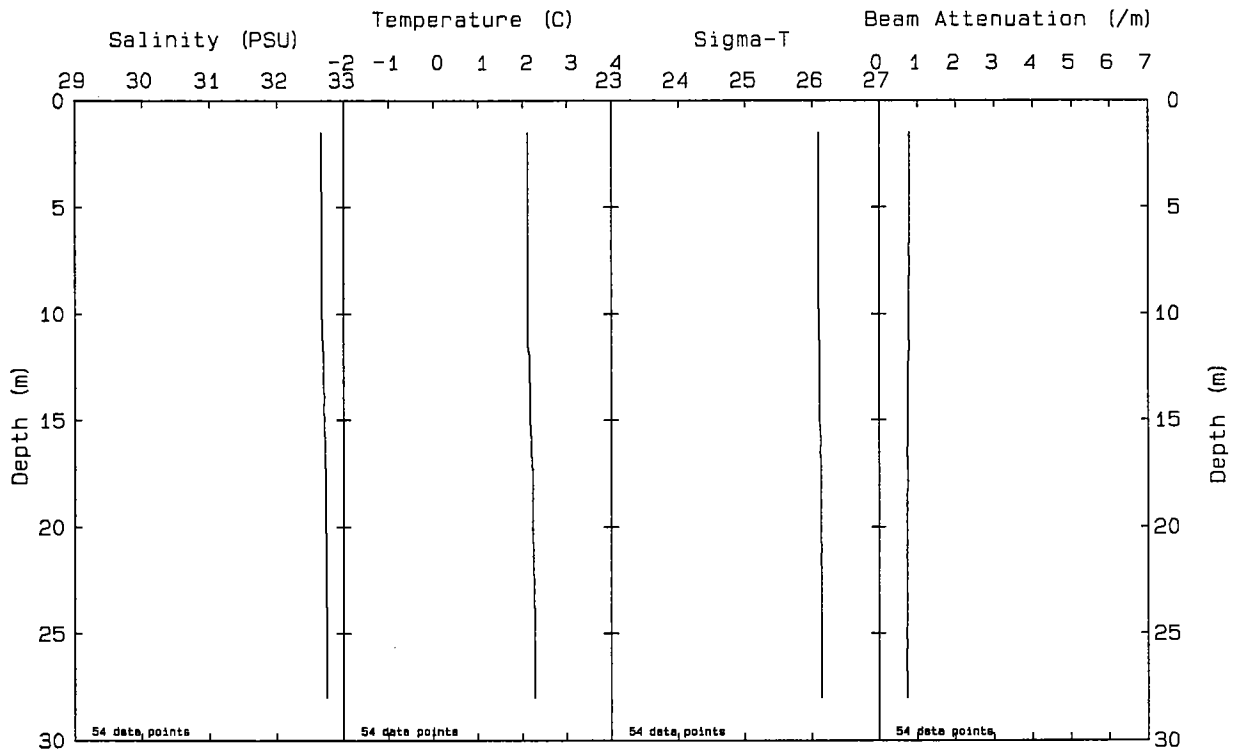


Station: F25 File: W9402123.PAB Date: 03-02-1994 Time: 16: 08: 58

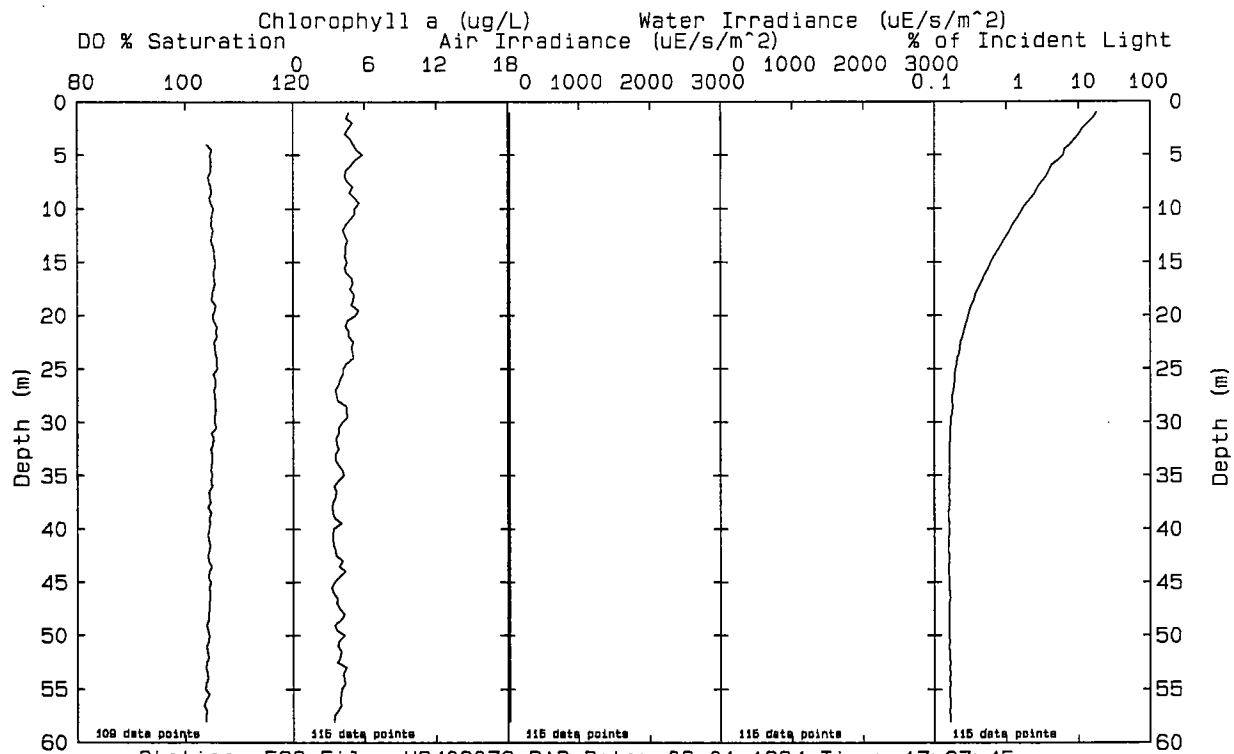
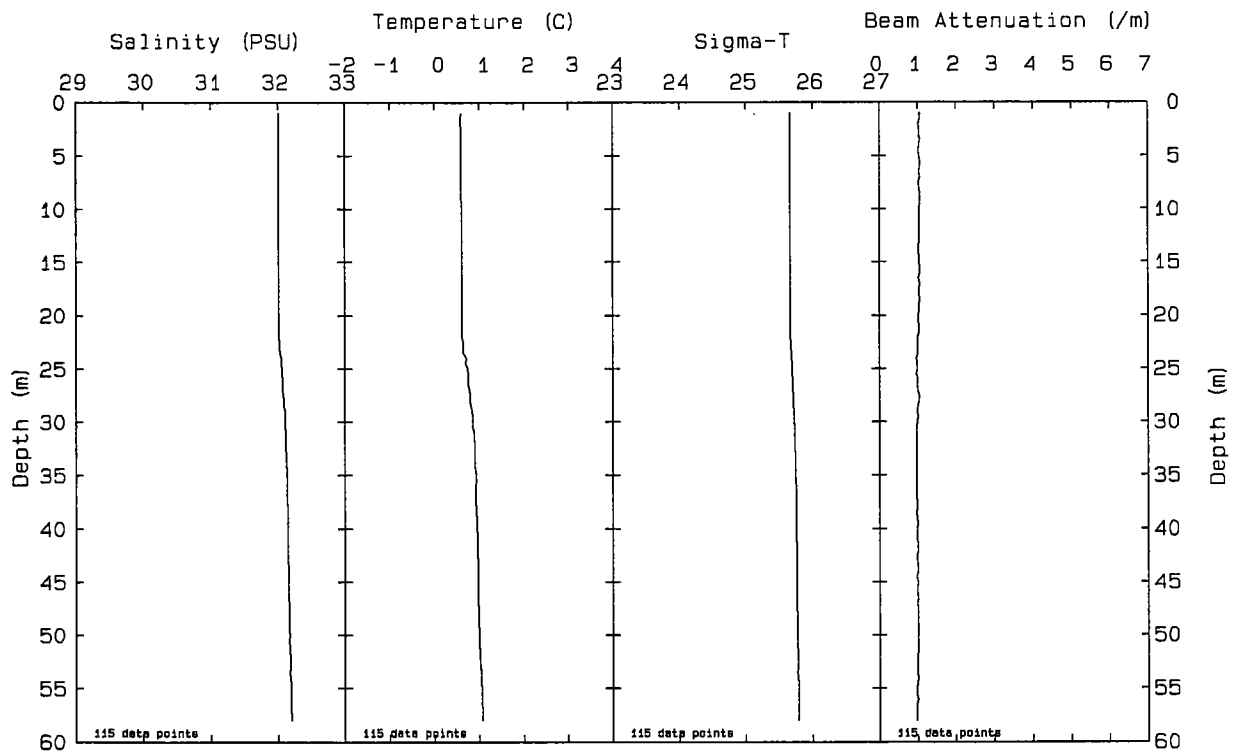


Station: F26 File: W9402051.PAB Date: 03-01-1994 Time: 12: 41: 31

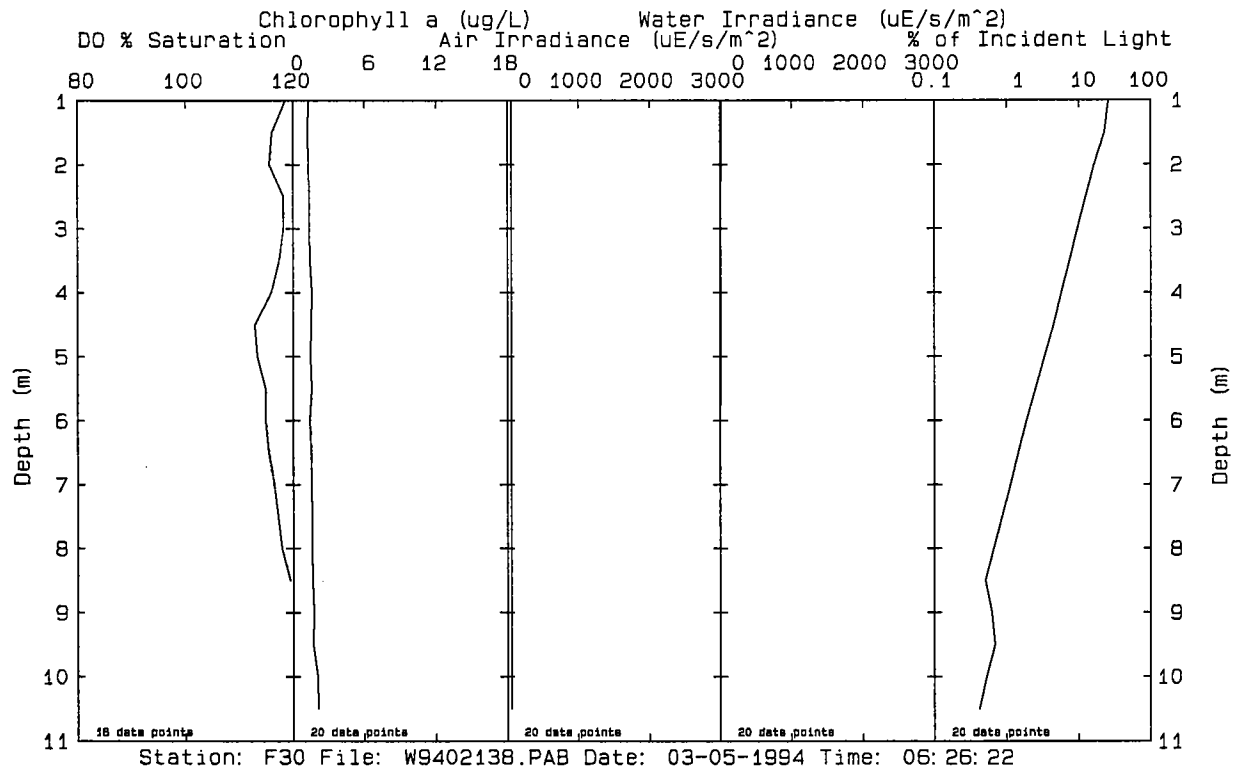
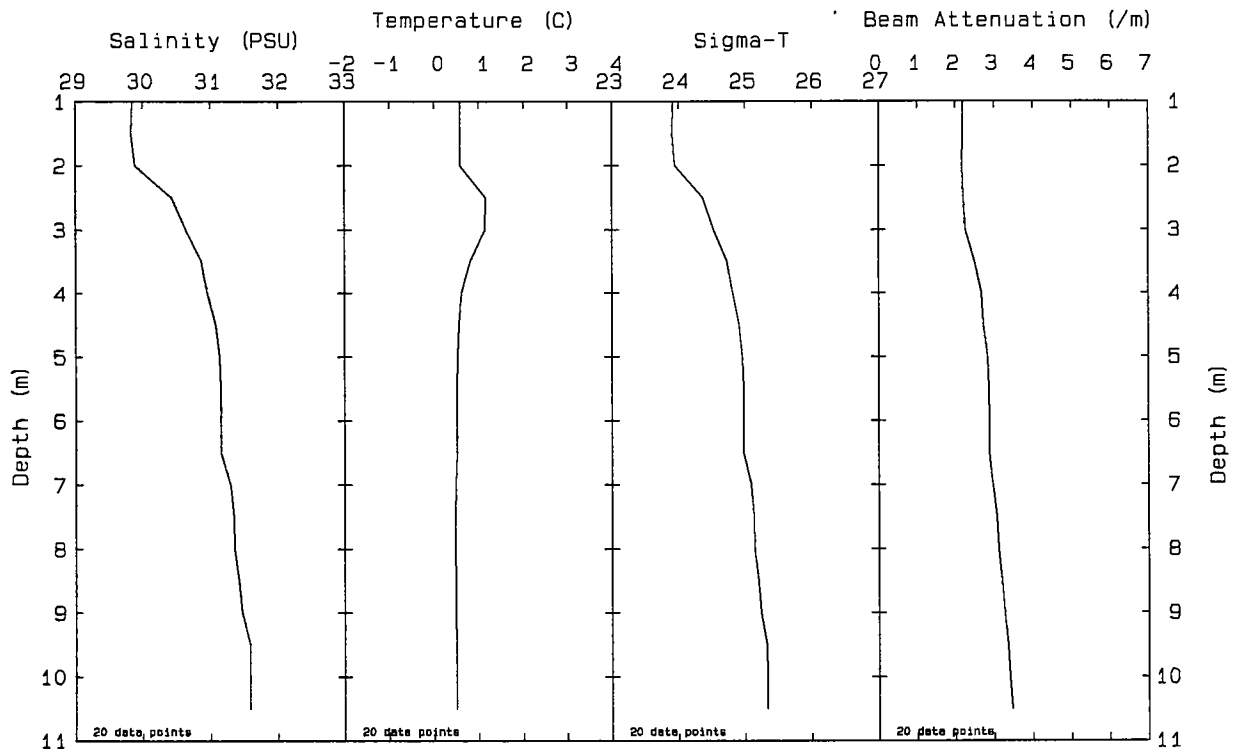




Station: F28 File: W9402063.PAB Date: 03-01-1994 Time: 15: 03: 55

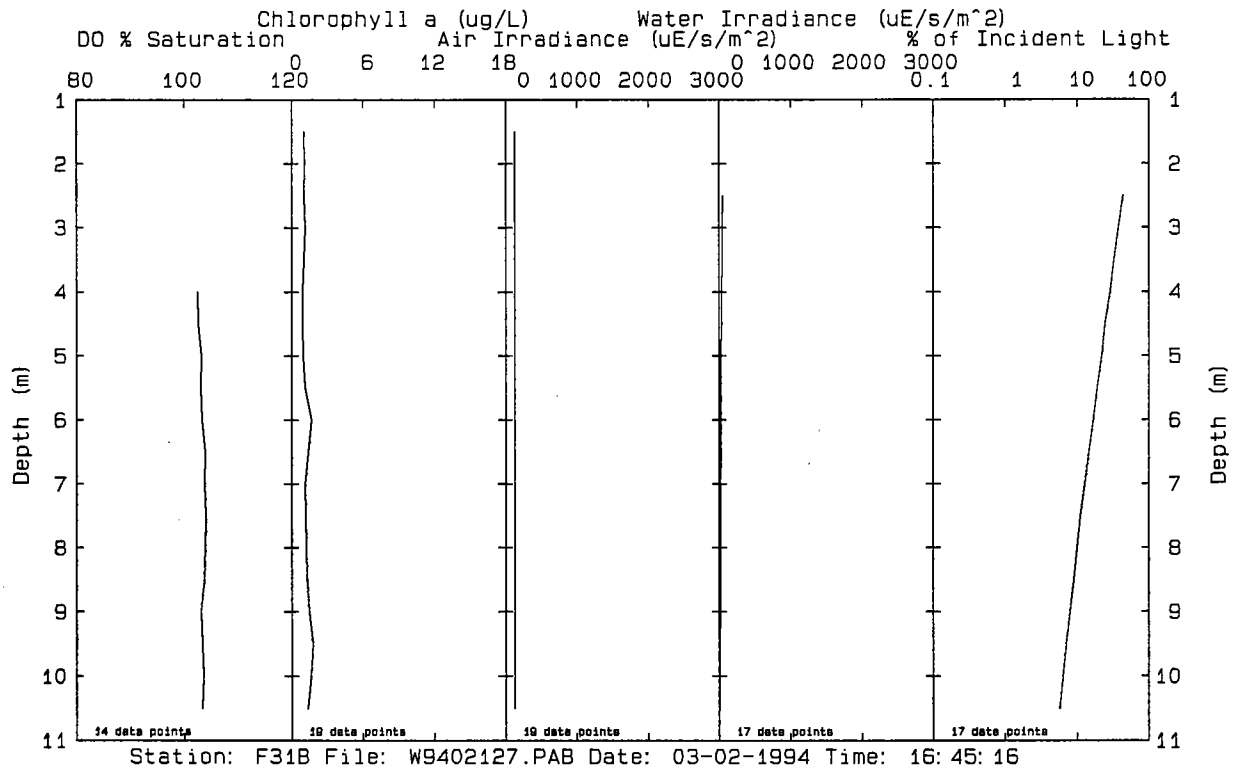
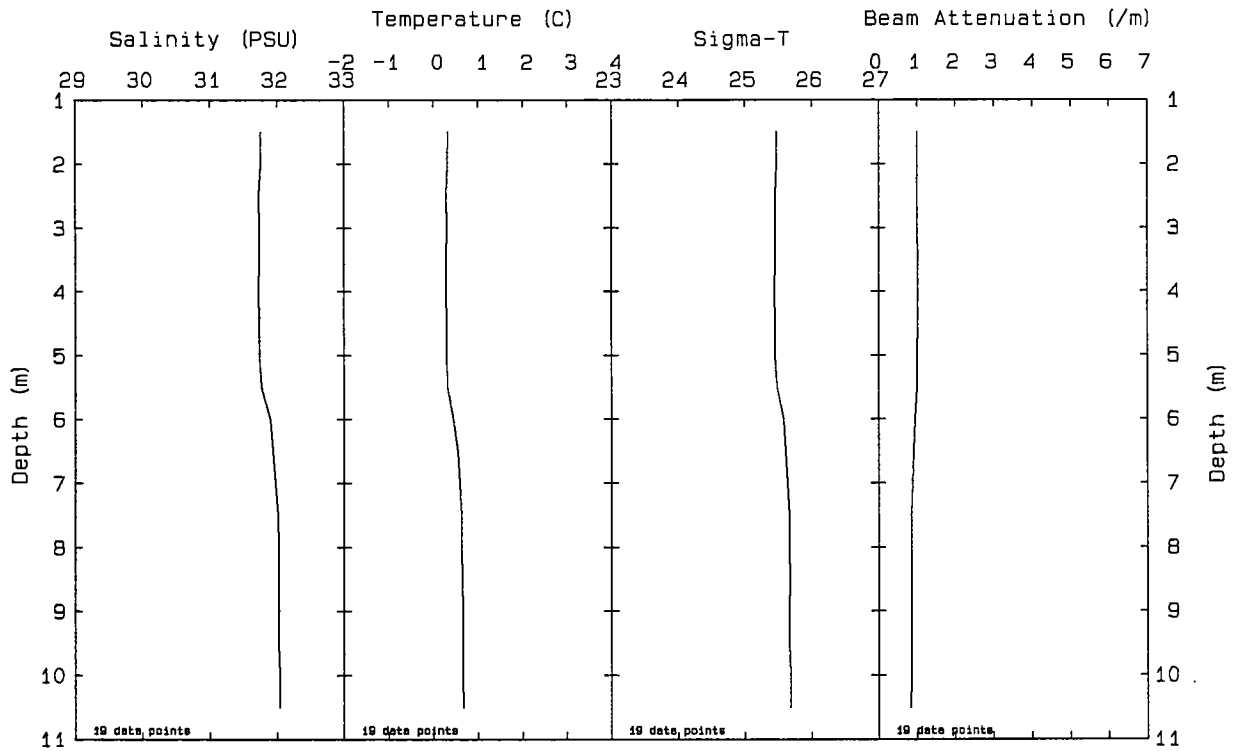


Station: F29 File: W9402072.PAB Date: 03-01-1994 Time: 17: 27: 45



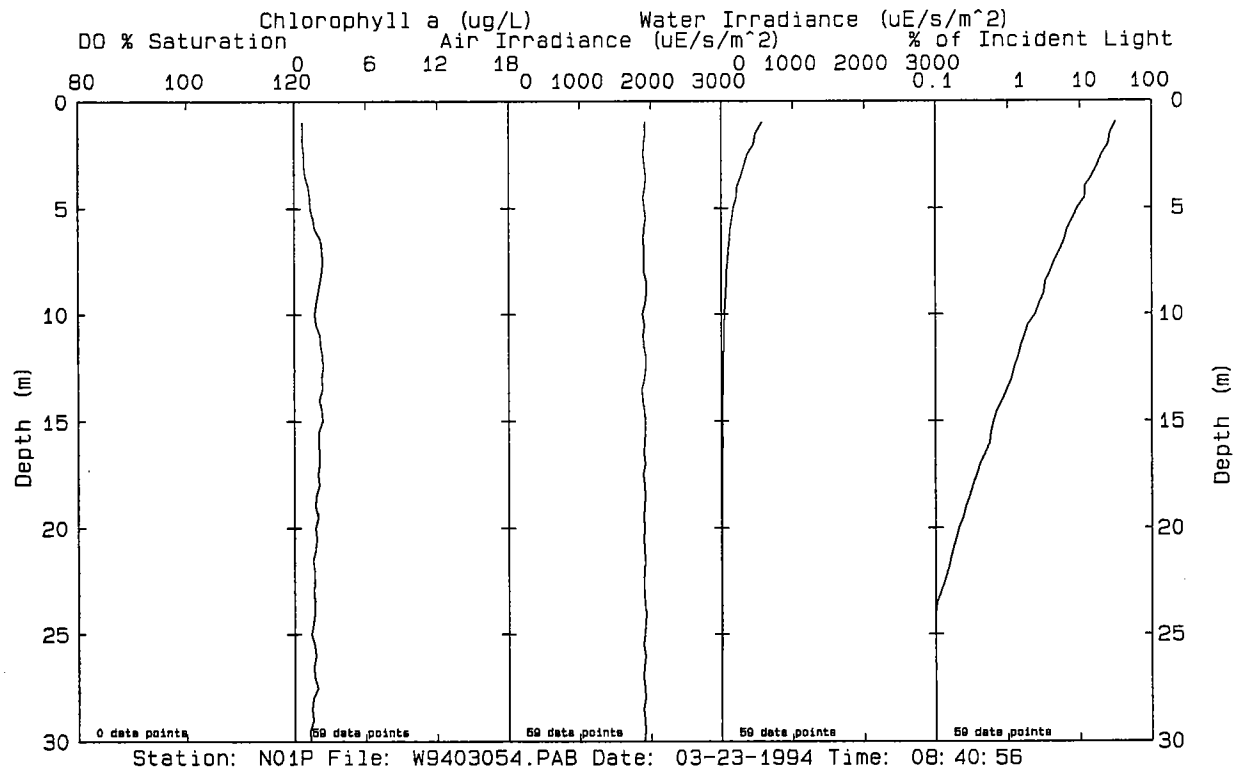
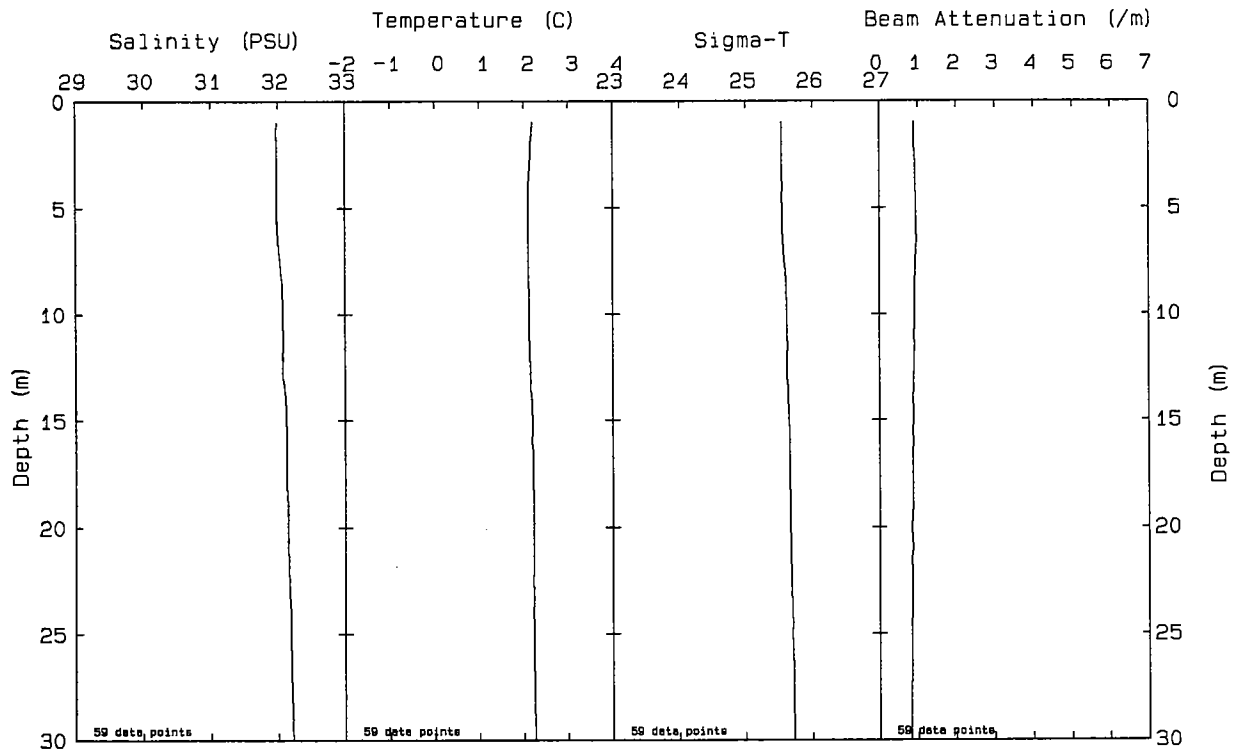
Station: F30 File: W9402138.PAB Date: 03-05-1994 Time: 06: 26: 22

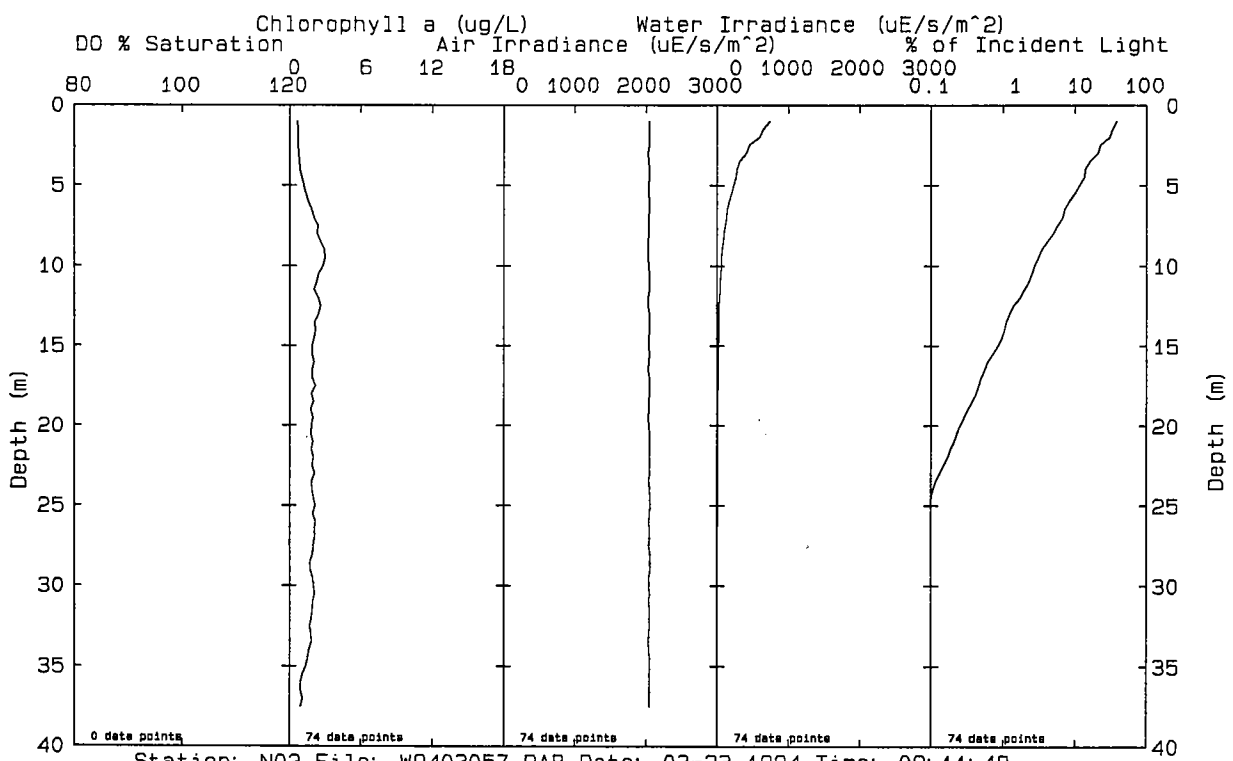
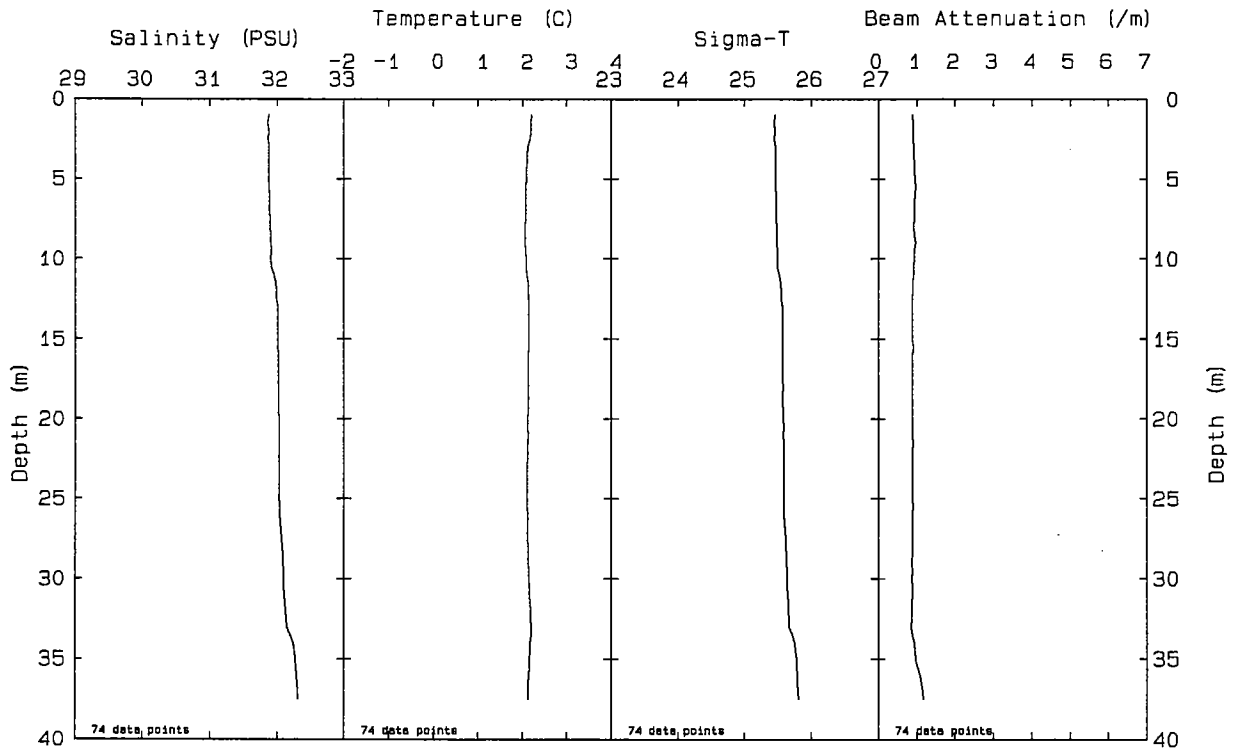


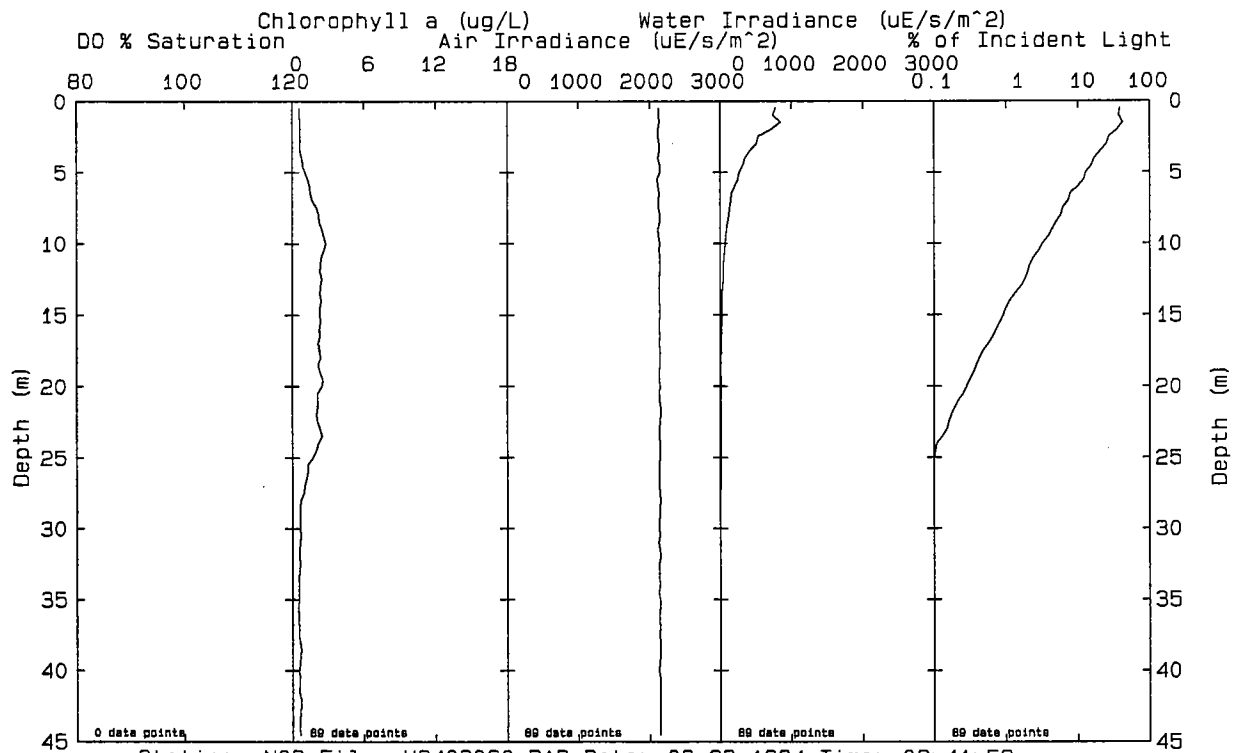
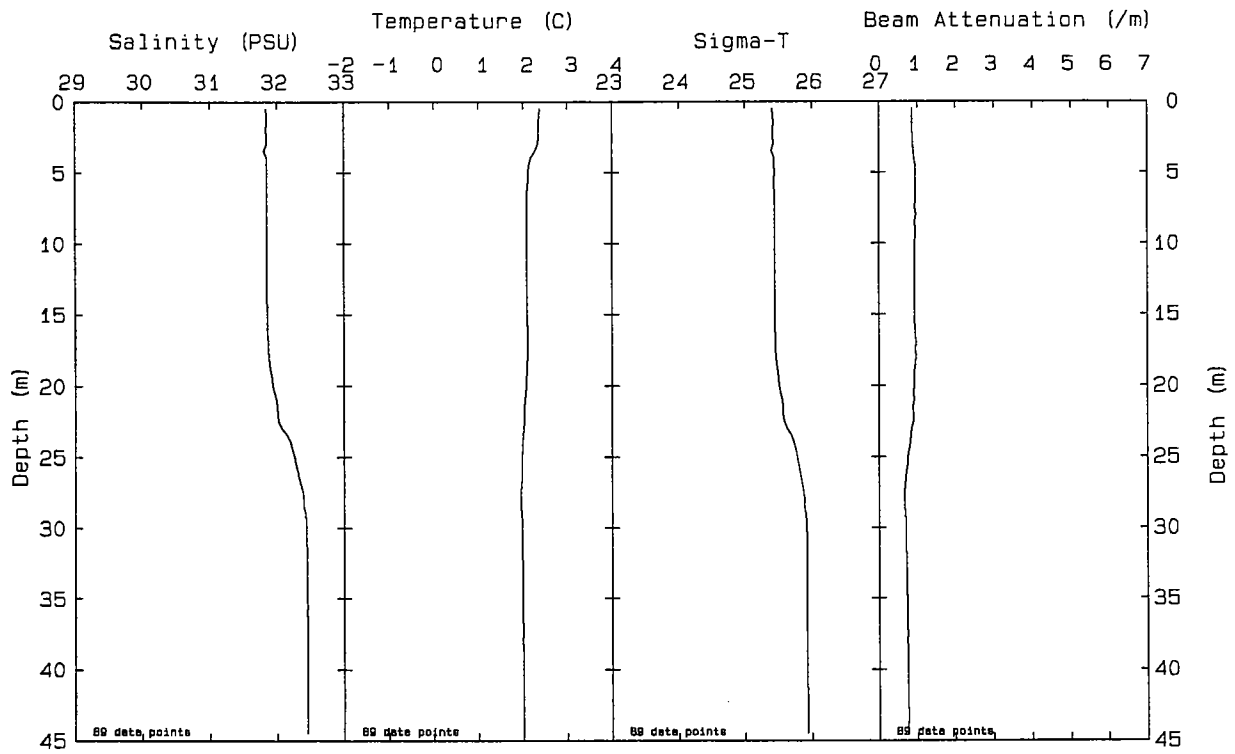


**March 1994 Profiles**

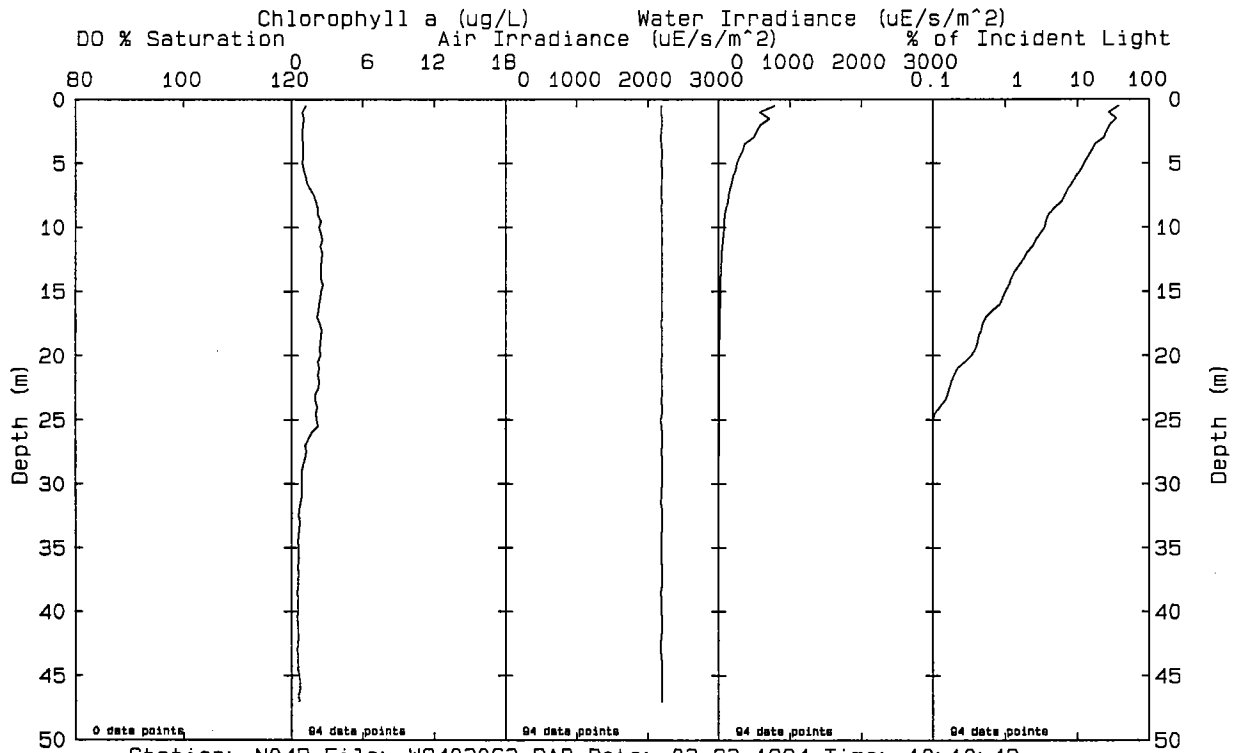
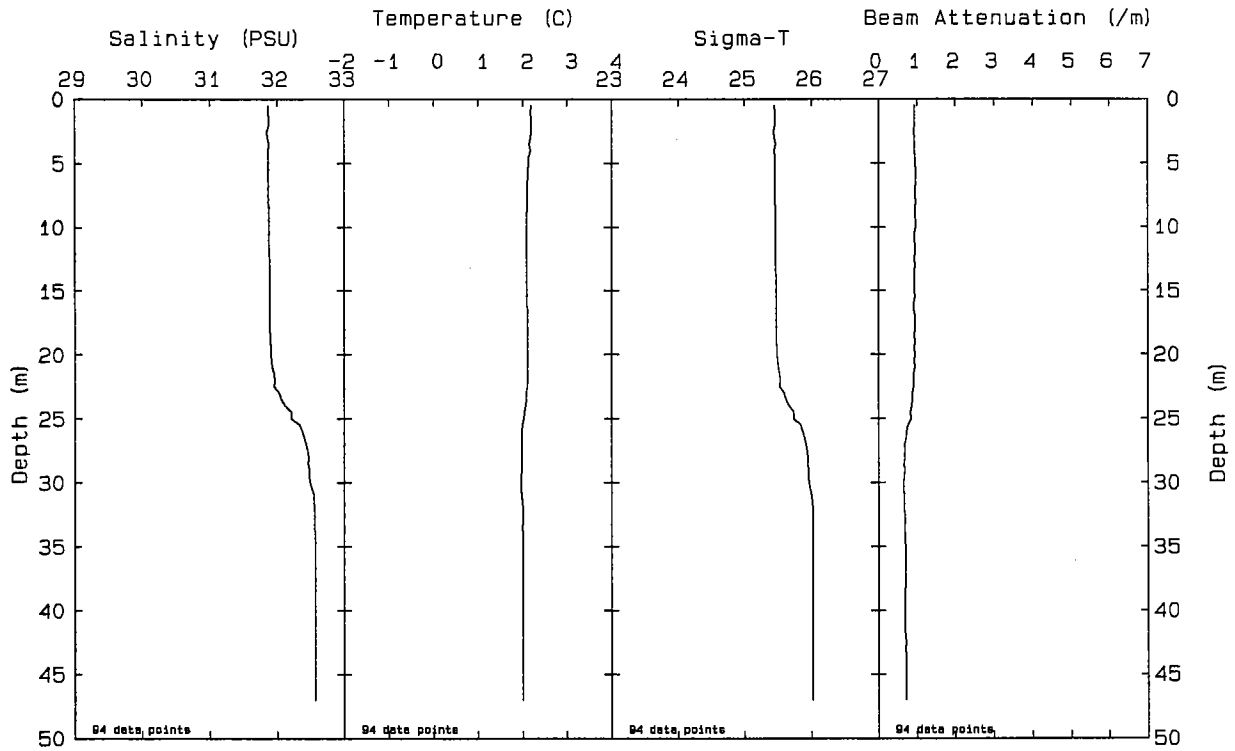
000135



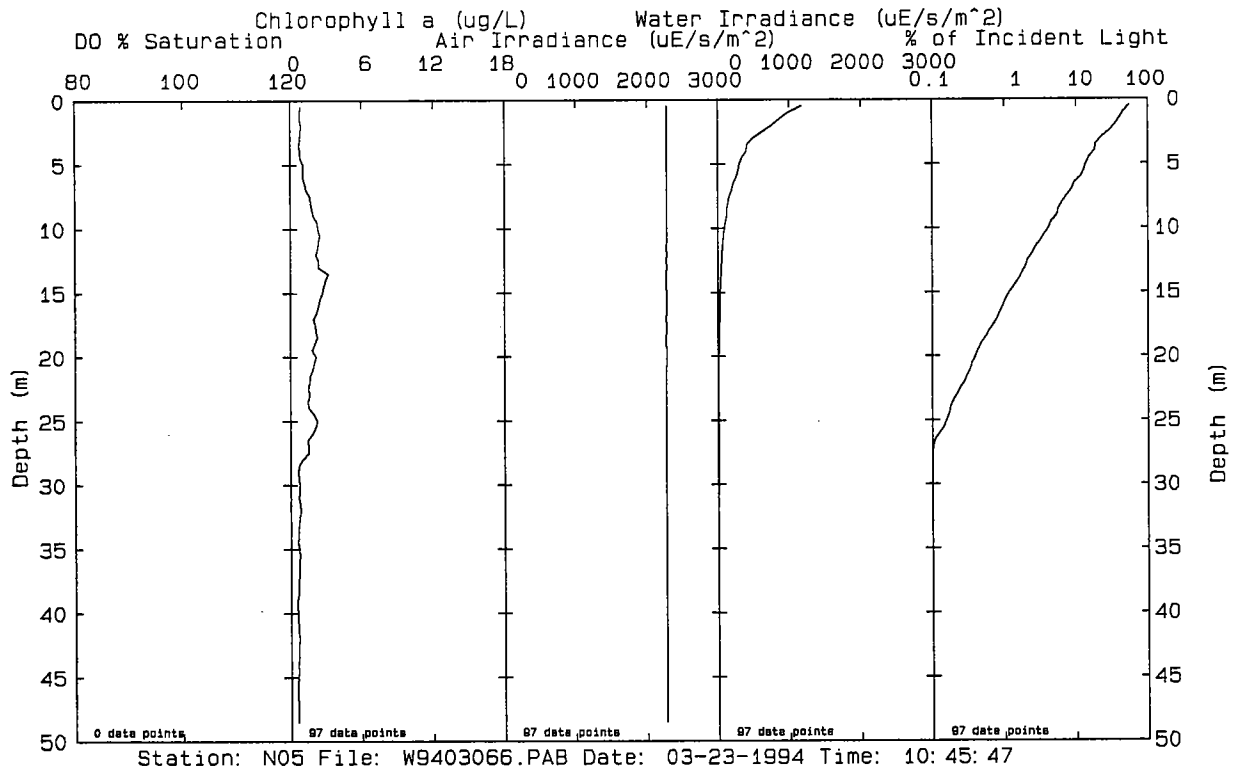
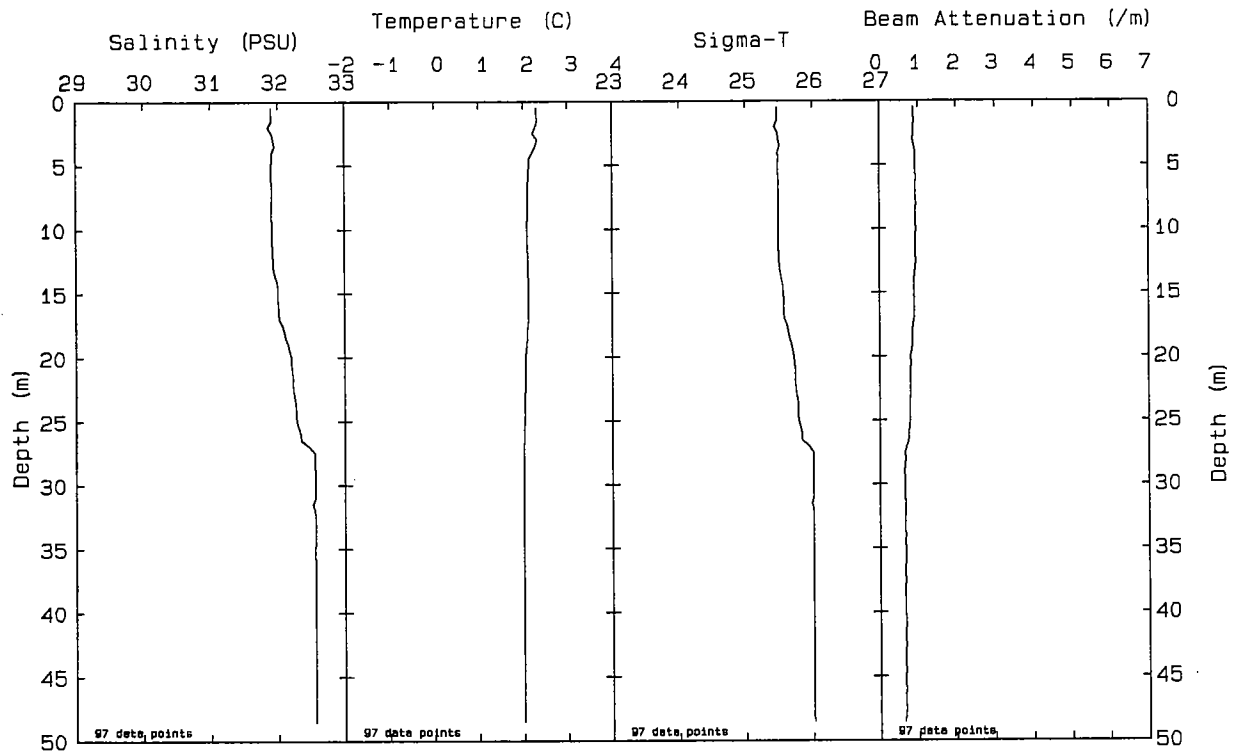


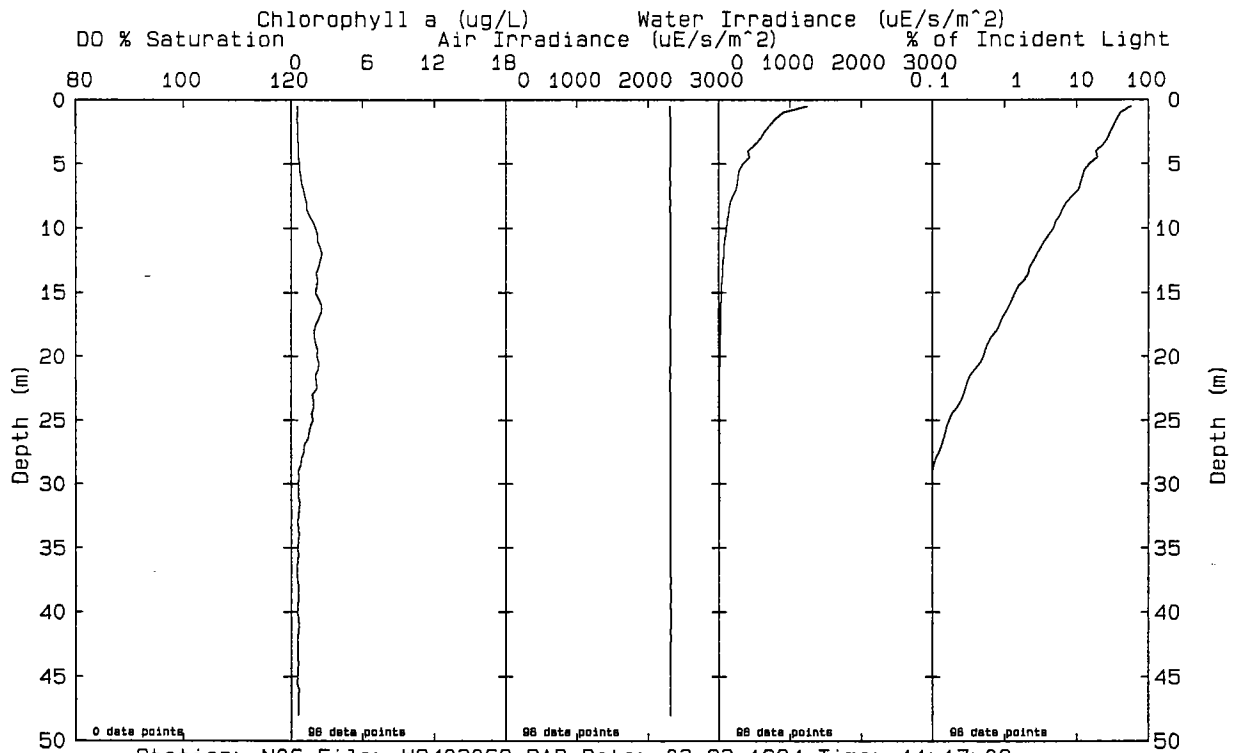
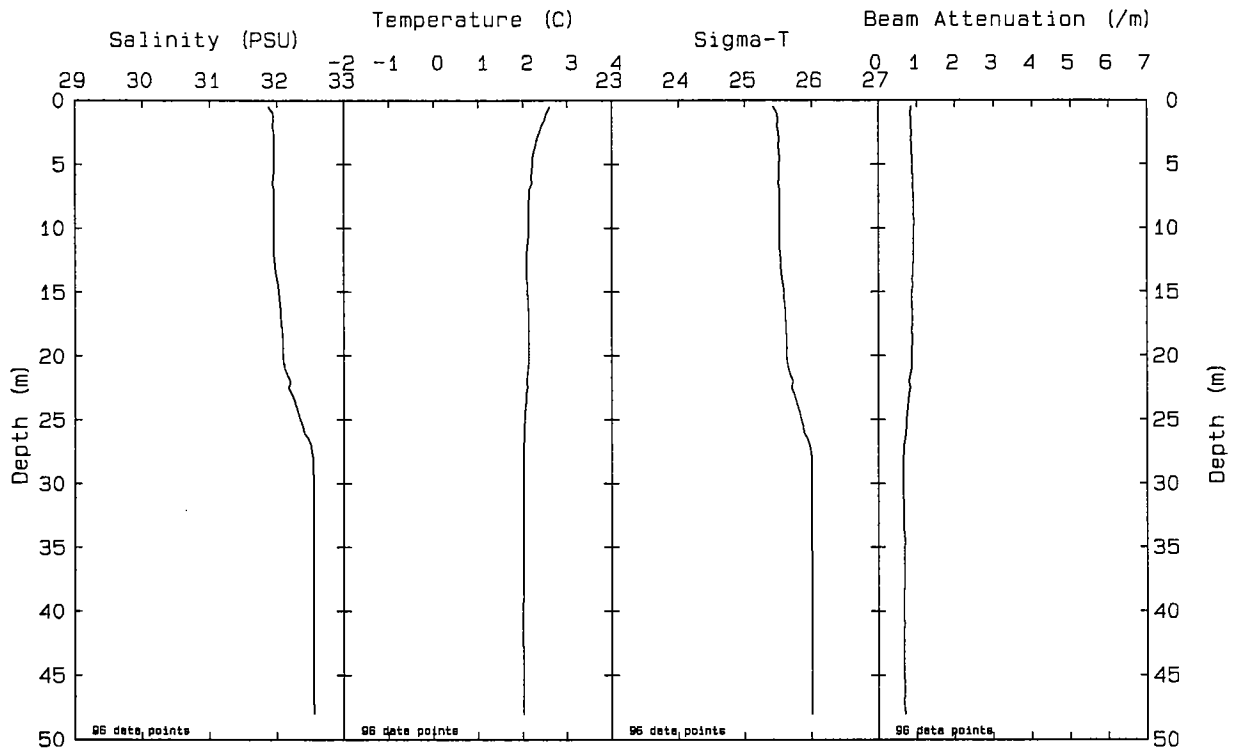


Station: N03 File: W9403060.PAB Date: 03-23-1994 Time: 09: 41: 59



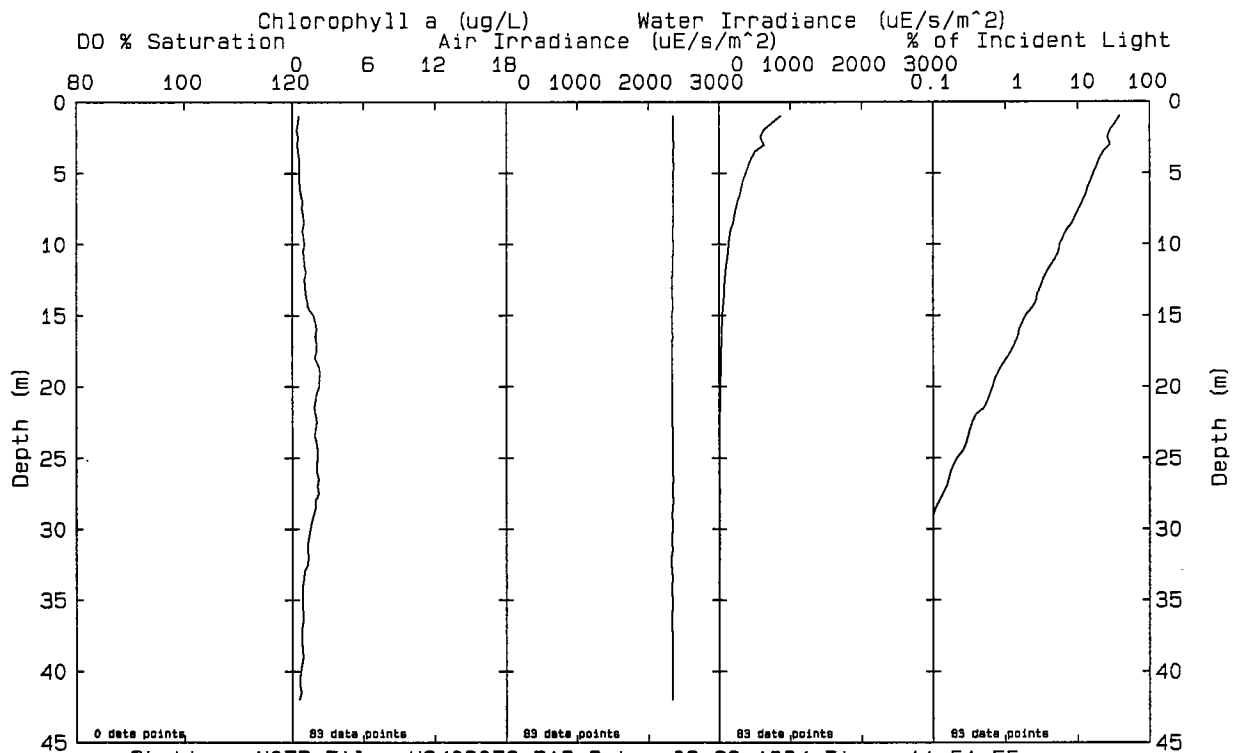
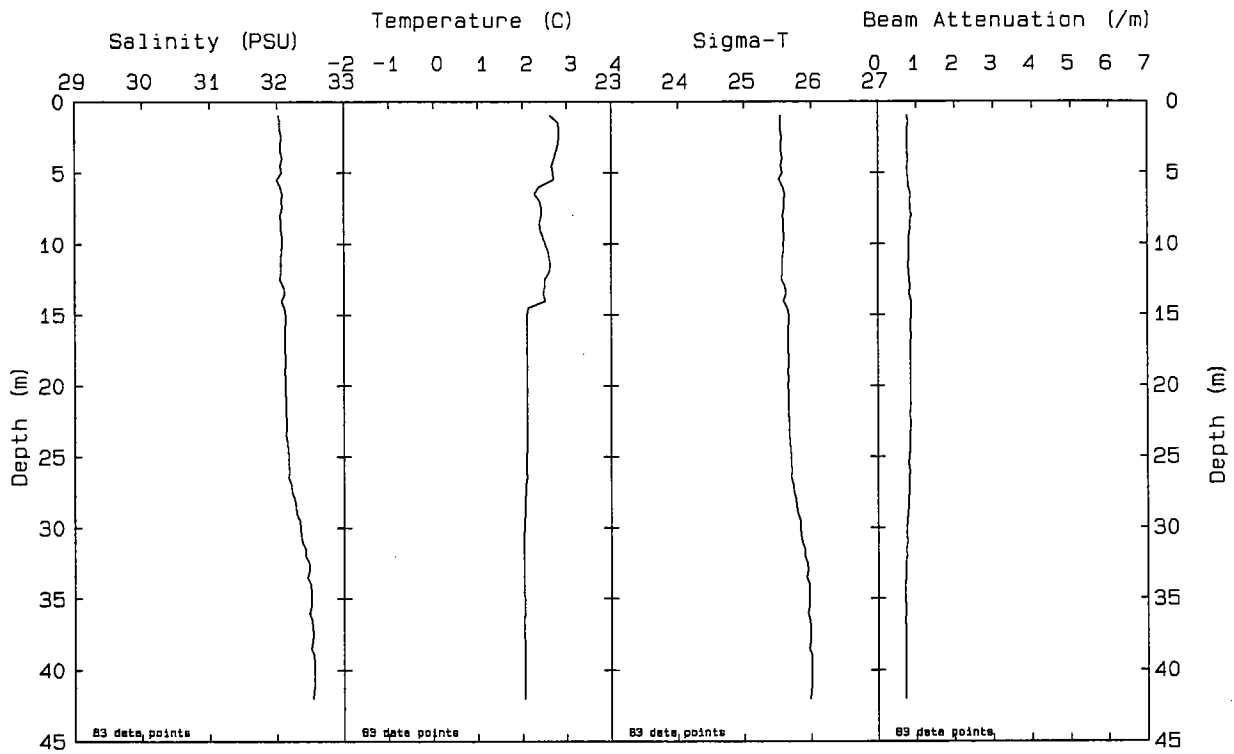
Station: N04P File: W9403063.PAB Date: 03-23-1994 Time: 10: 10: 42



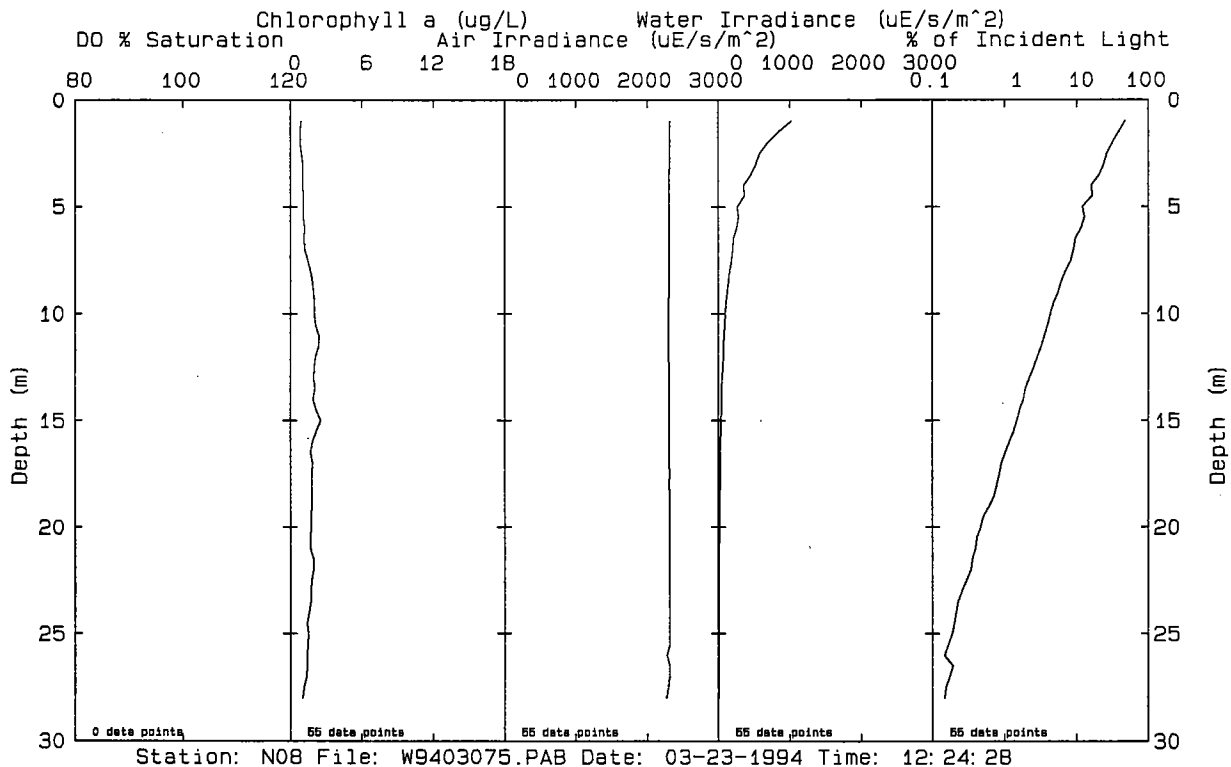
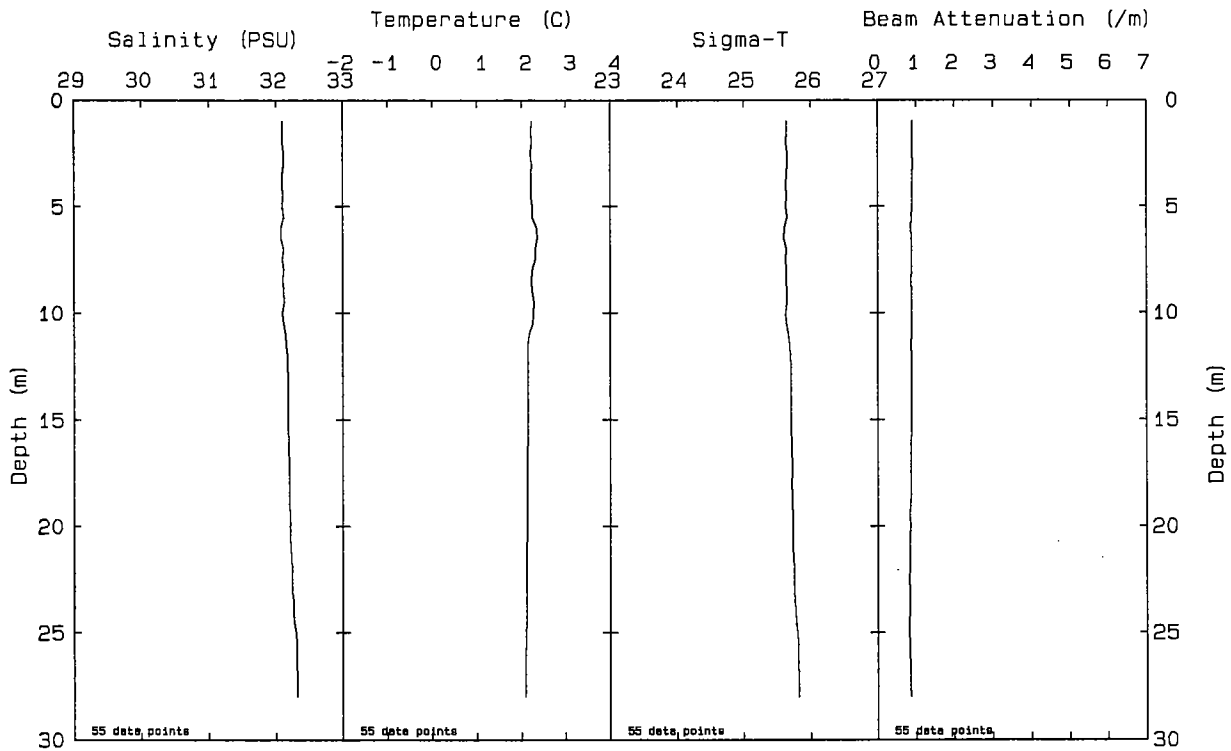


Station: N06 File: W9403069.PAB Date: 03-23-1994 Time: 11:17:02

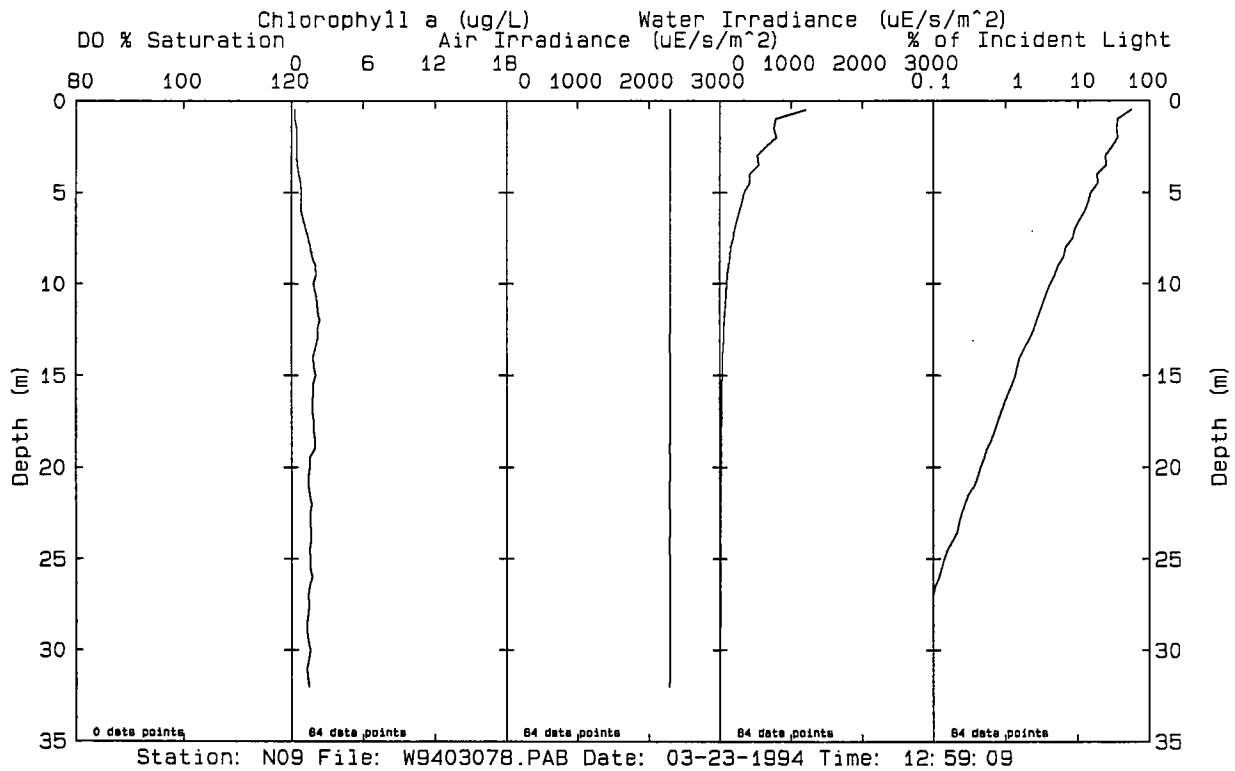
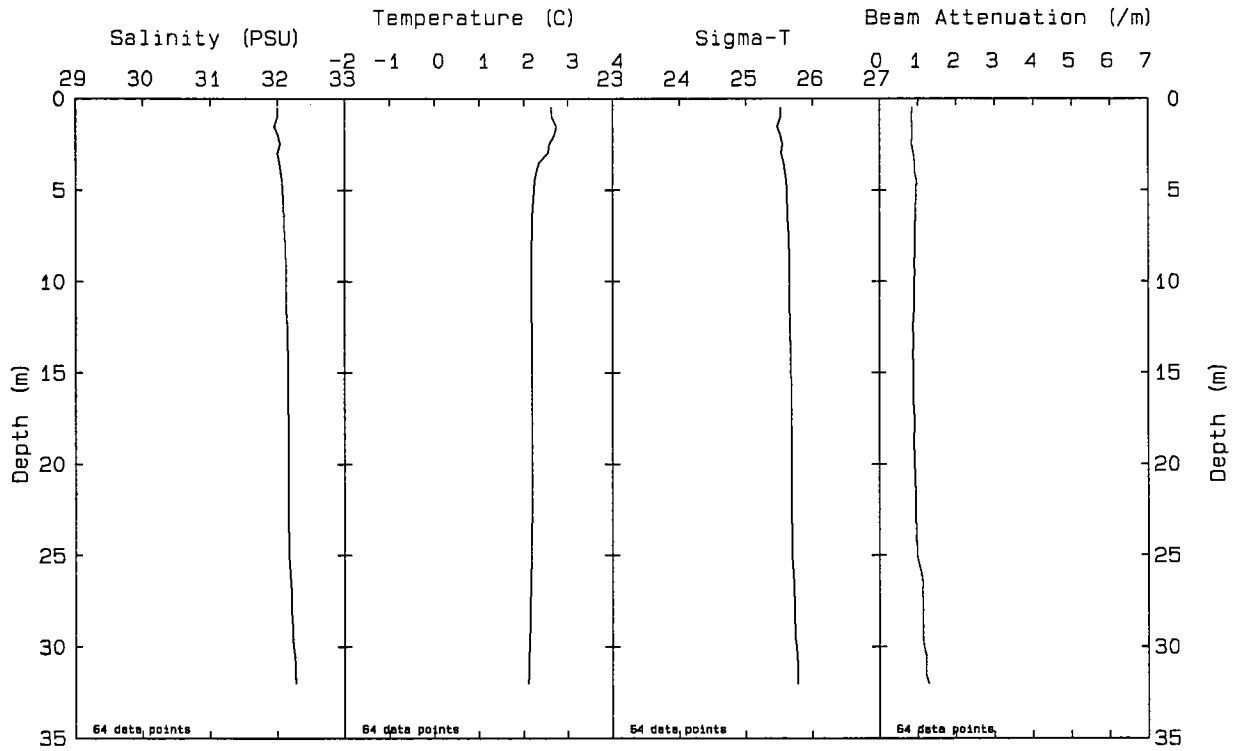




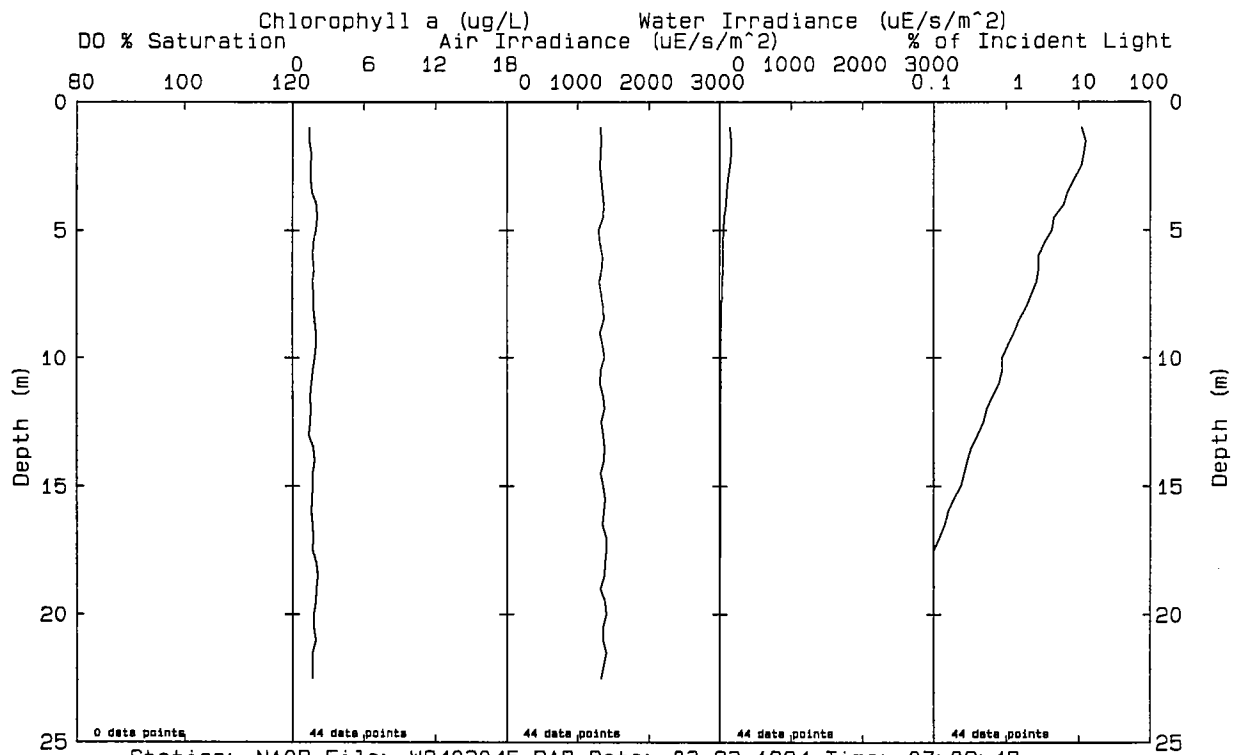
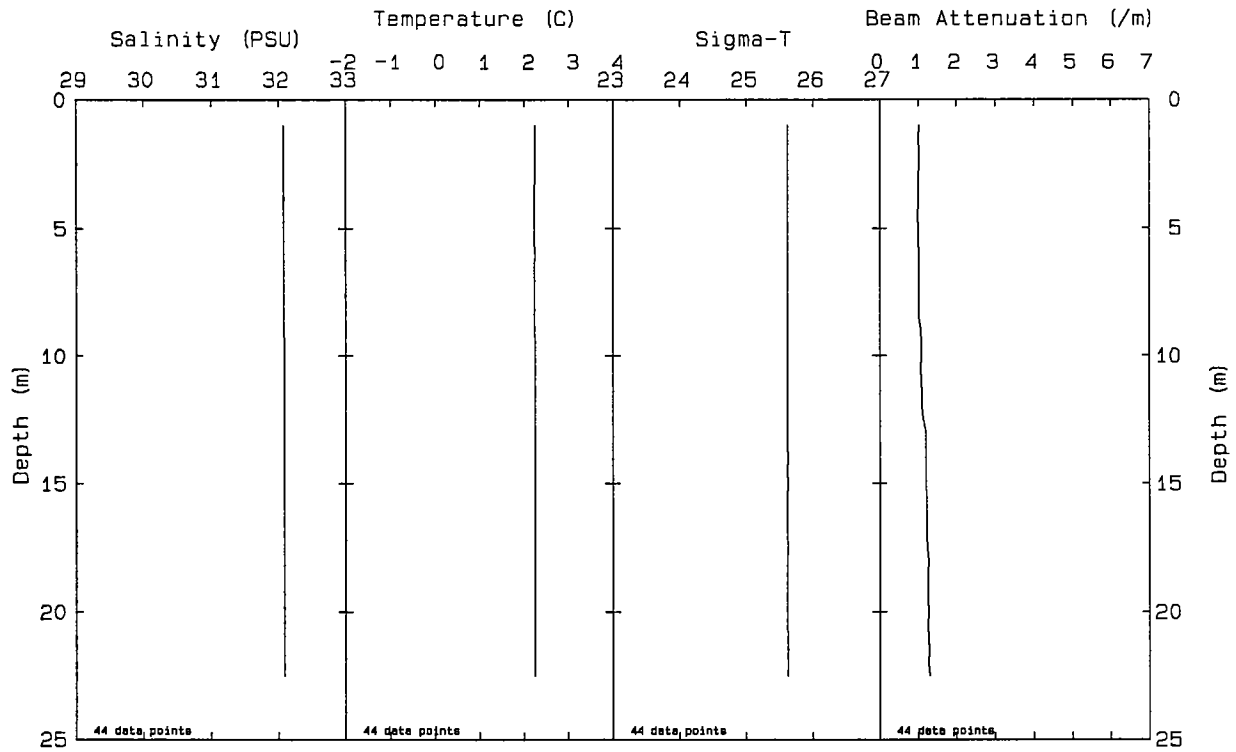
Station: N07P File: W9403072.PAB Date: 03-23-1994 Time: 11:51:55



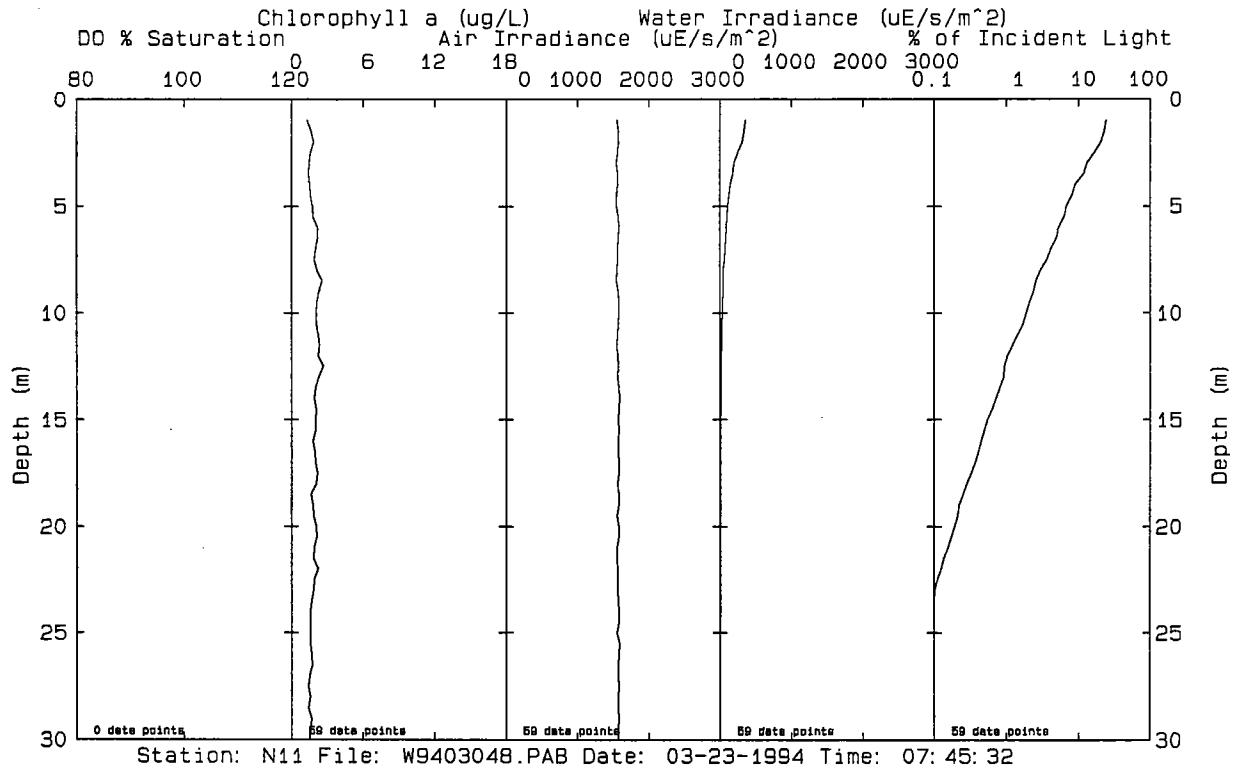
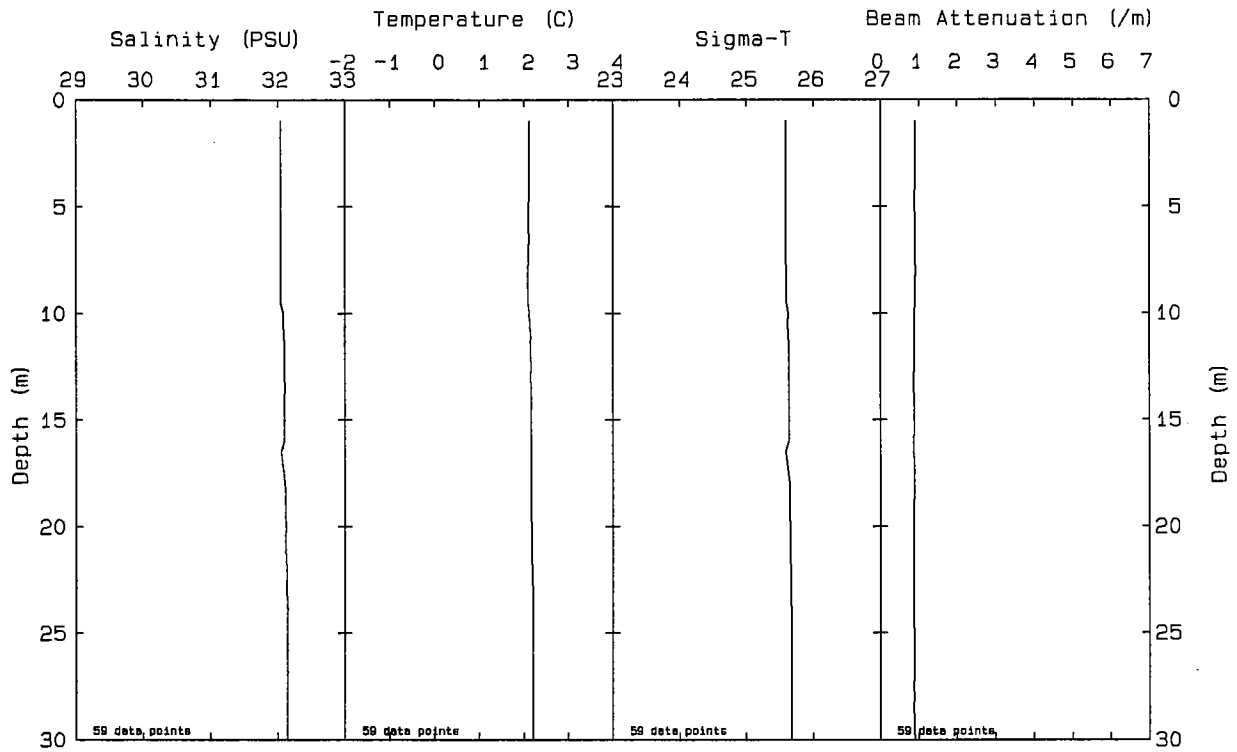
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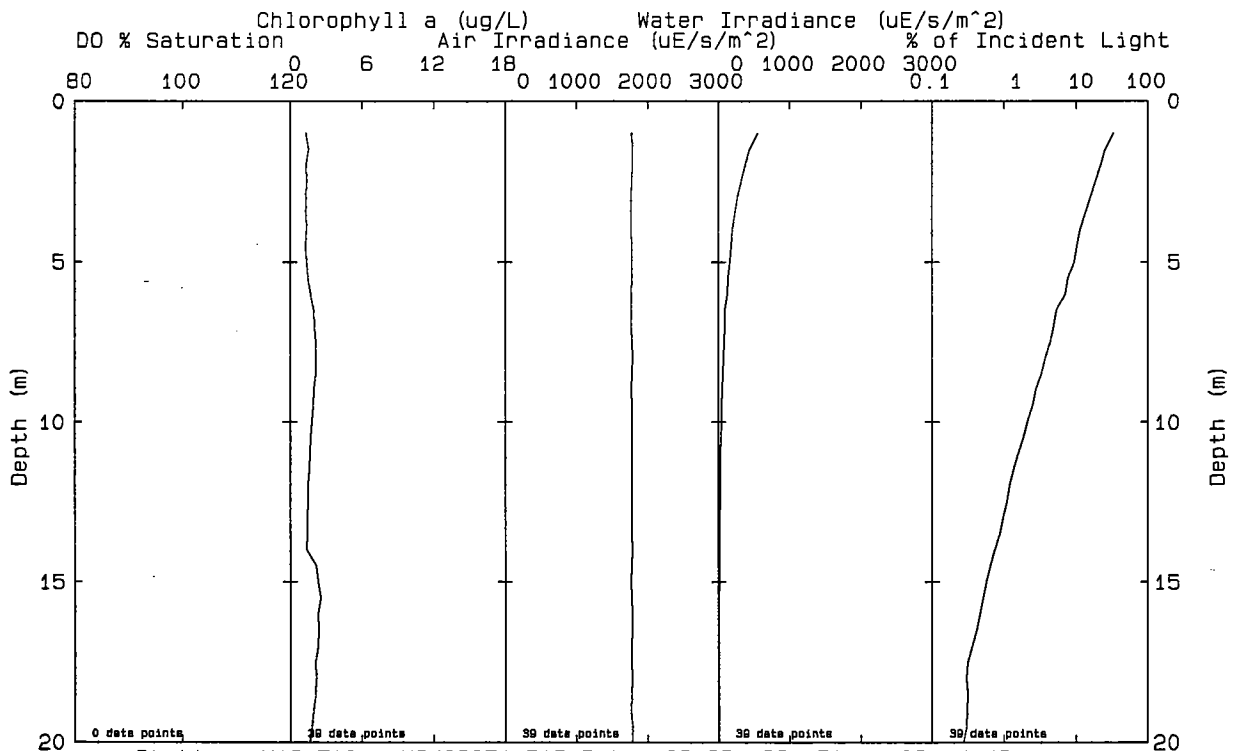
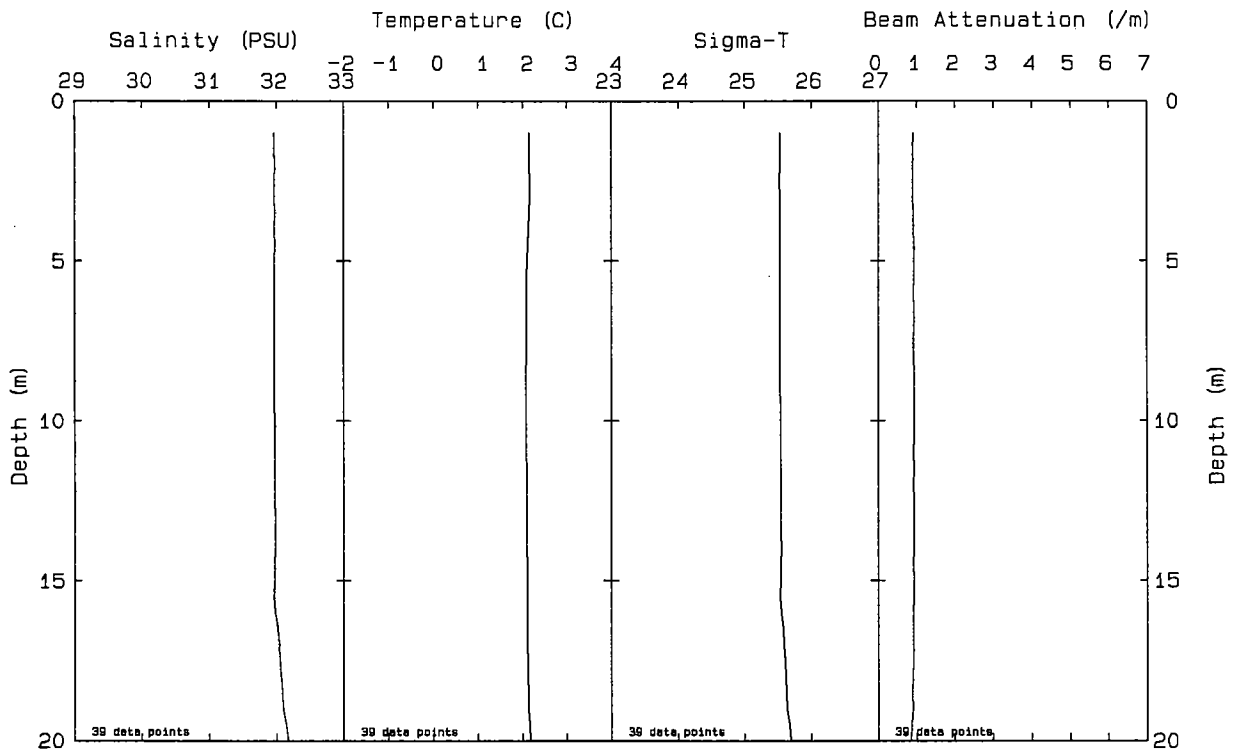


Station: N09 File: W9403078.PAB Date: 03-23-1994 Time: 12: 59: 09

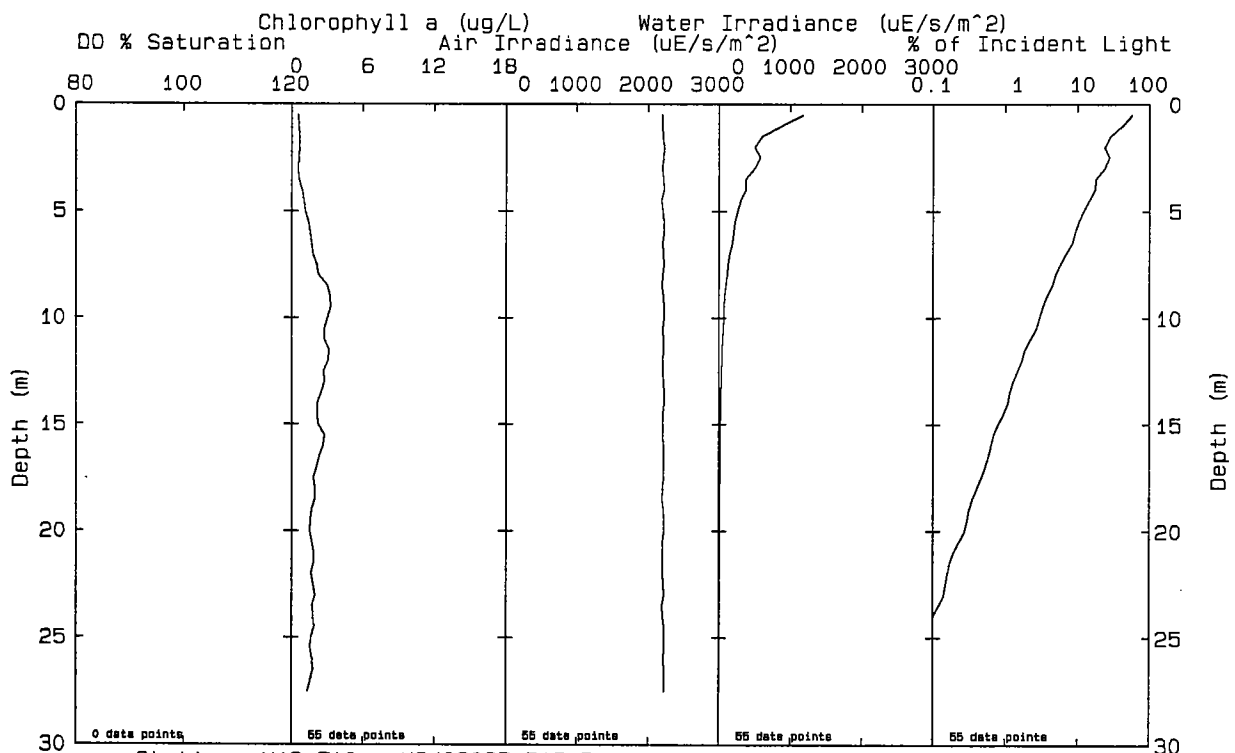
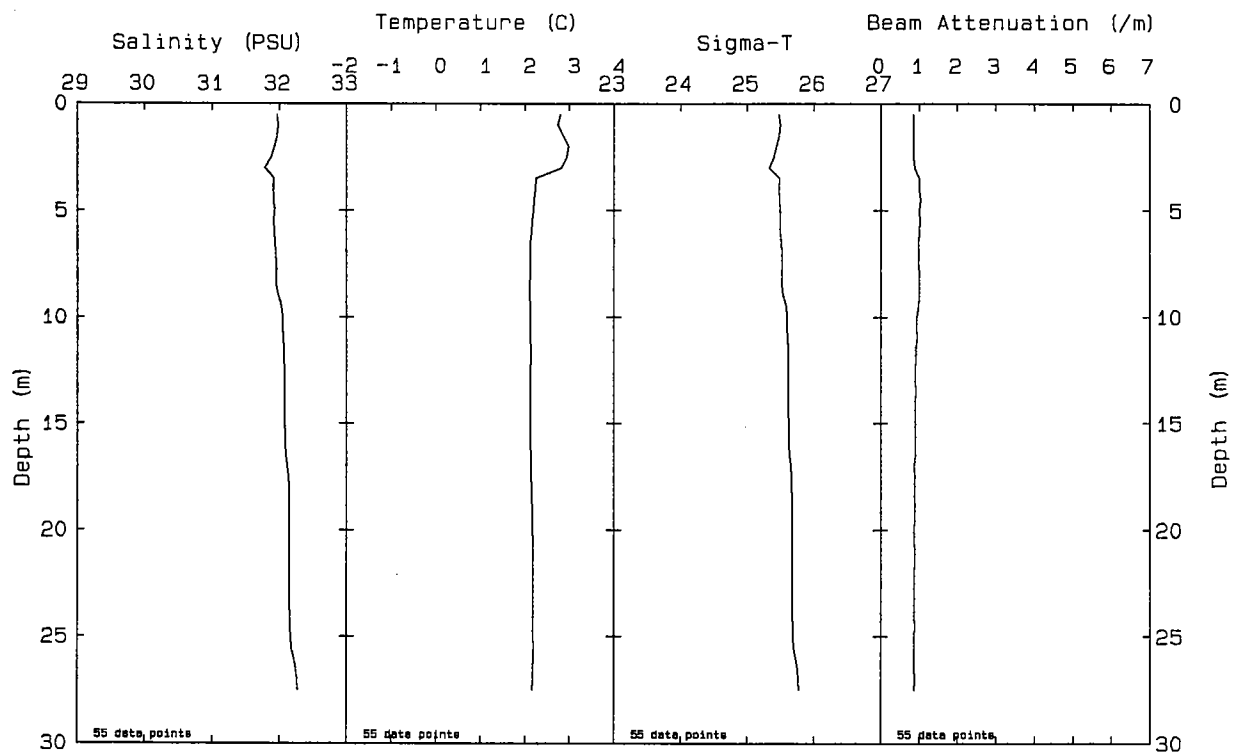


Station: N10P File: W9403045.PAB Date: 03-23-1994 Time: 07:09:48

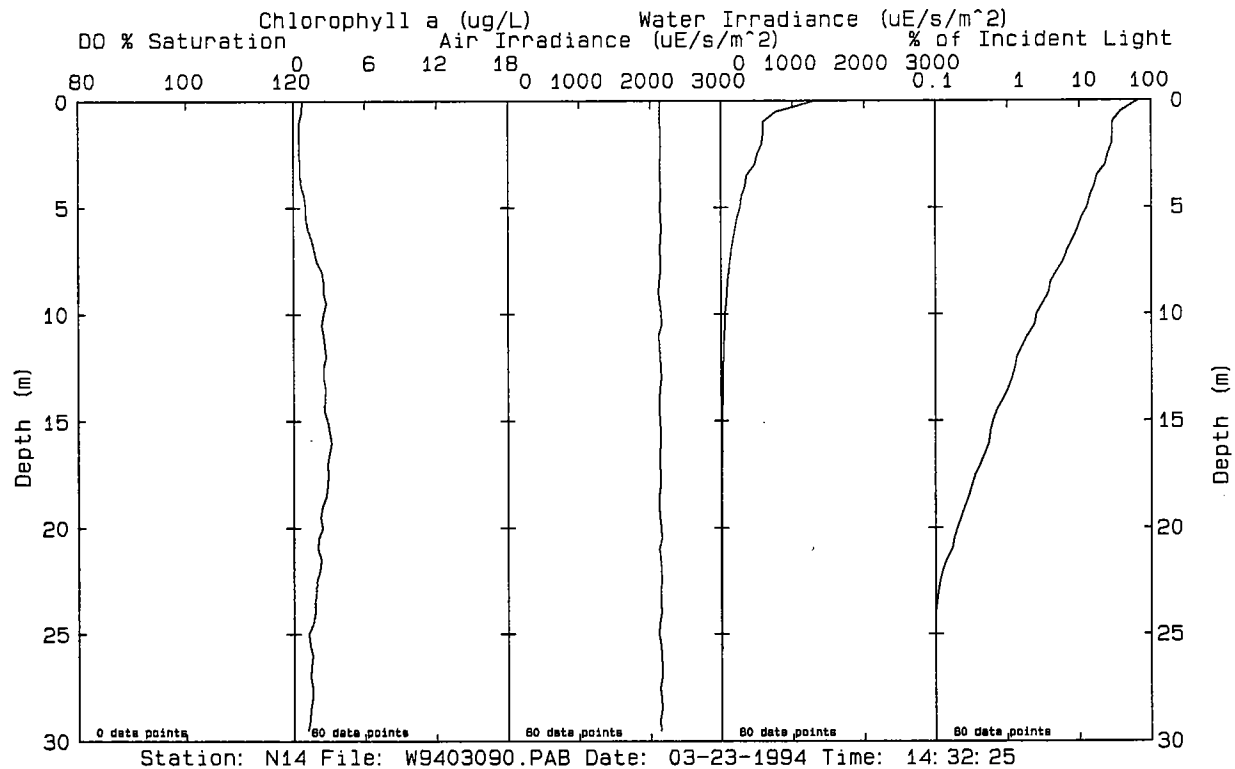
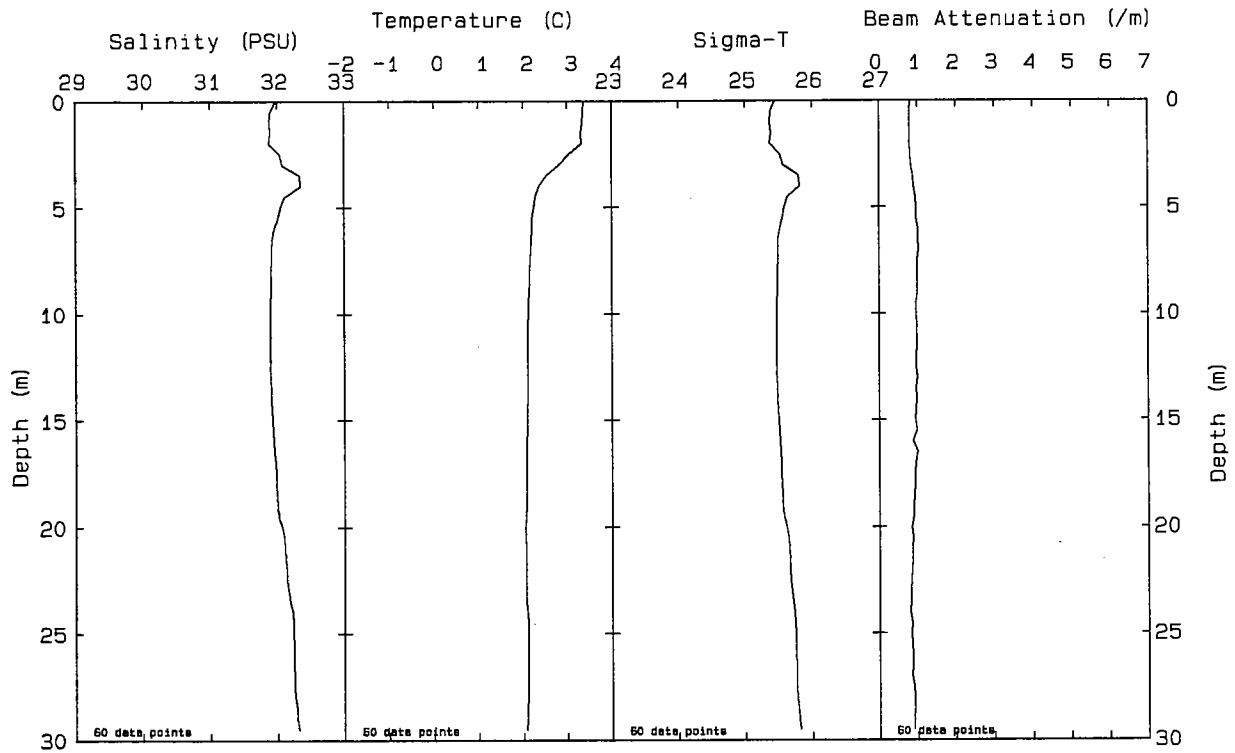




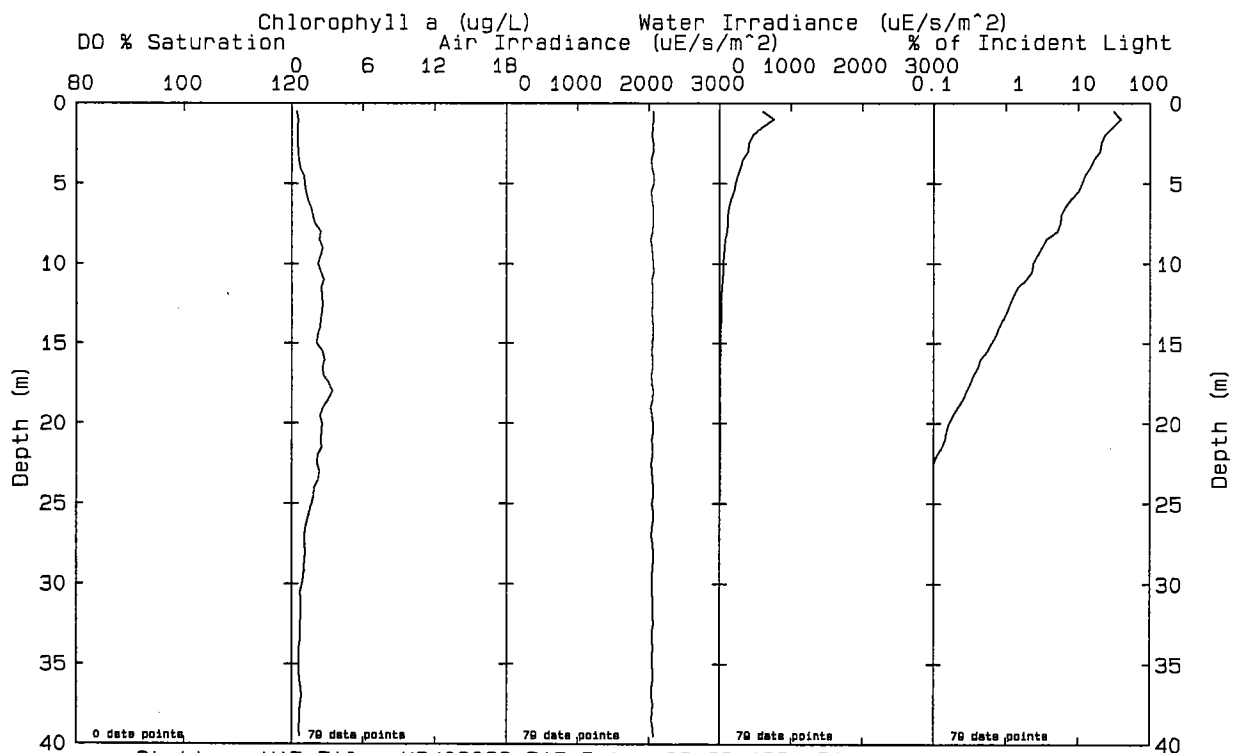
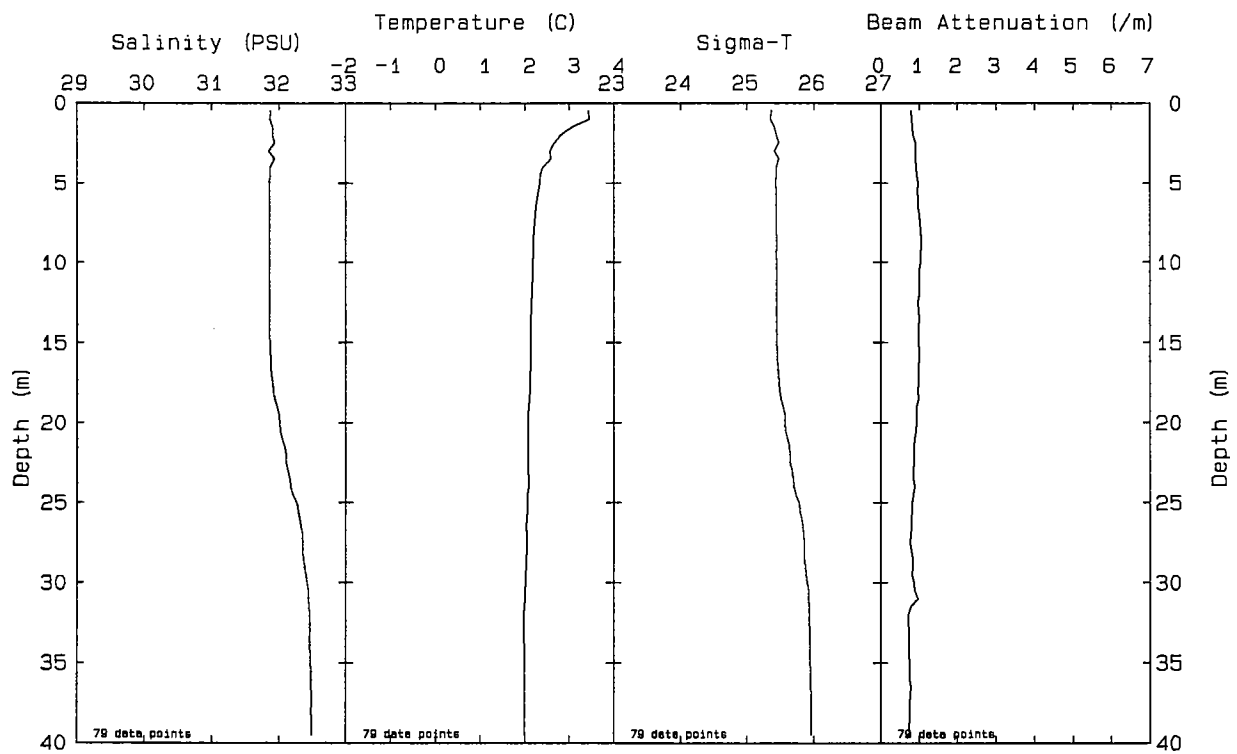
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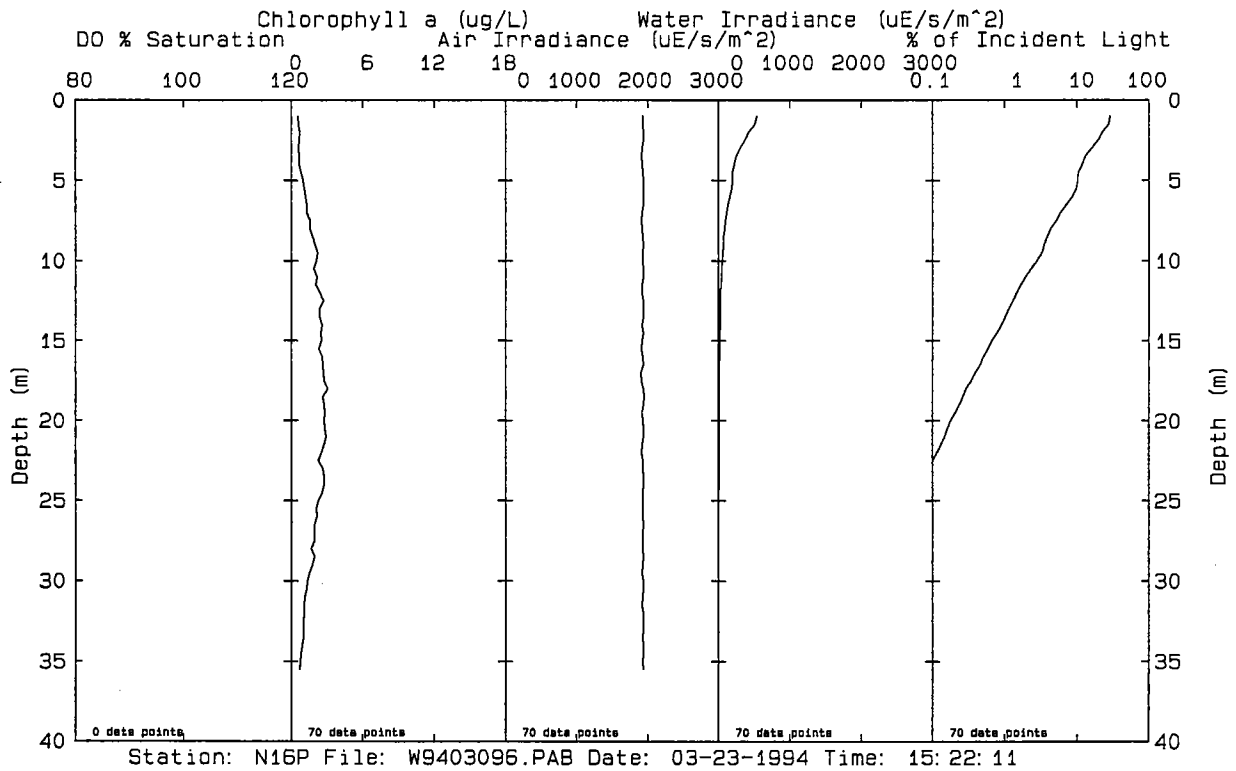
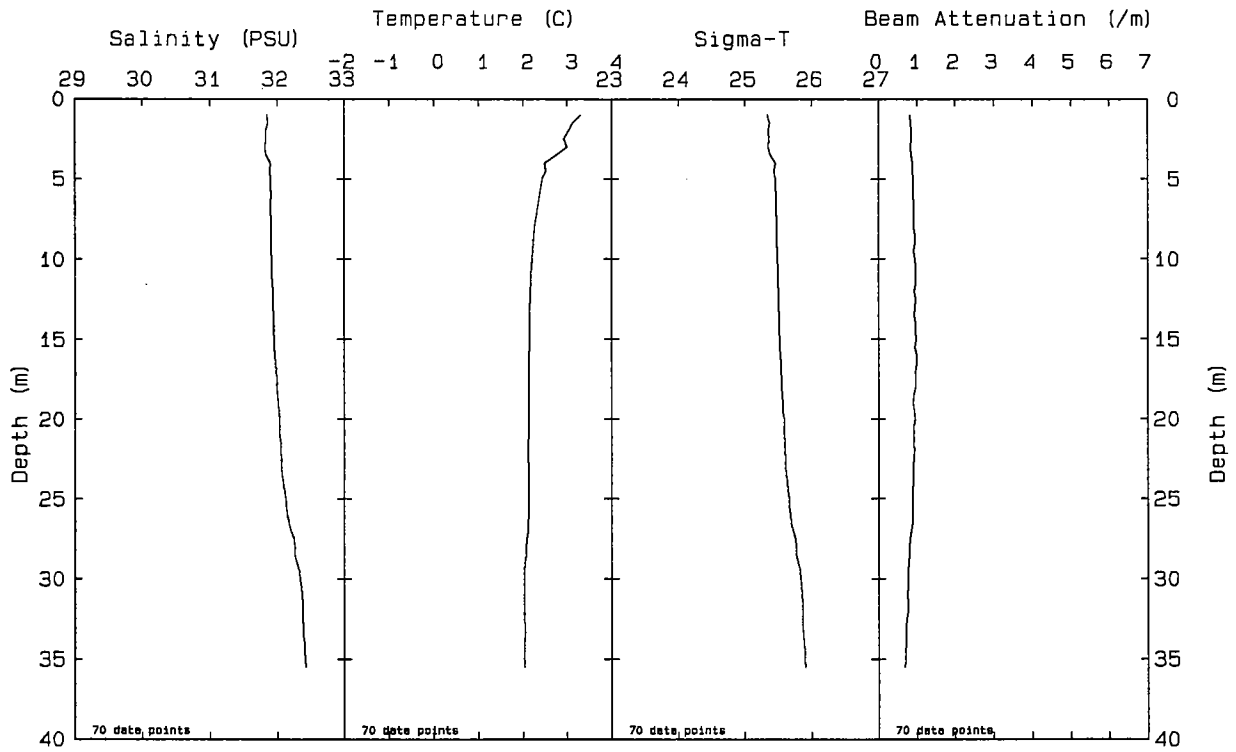
Station: N13 File: W9403087.PAB Date: 03-23-1994 Time: 14: 08: 35

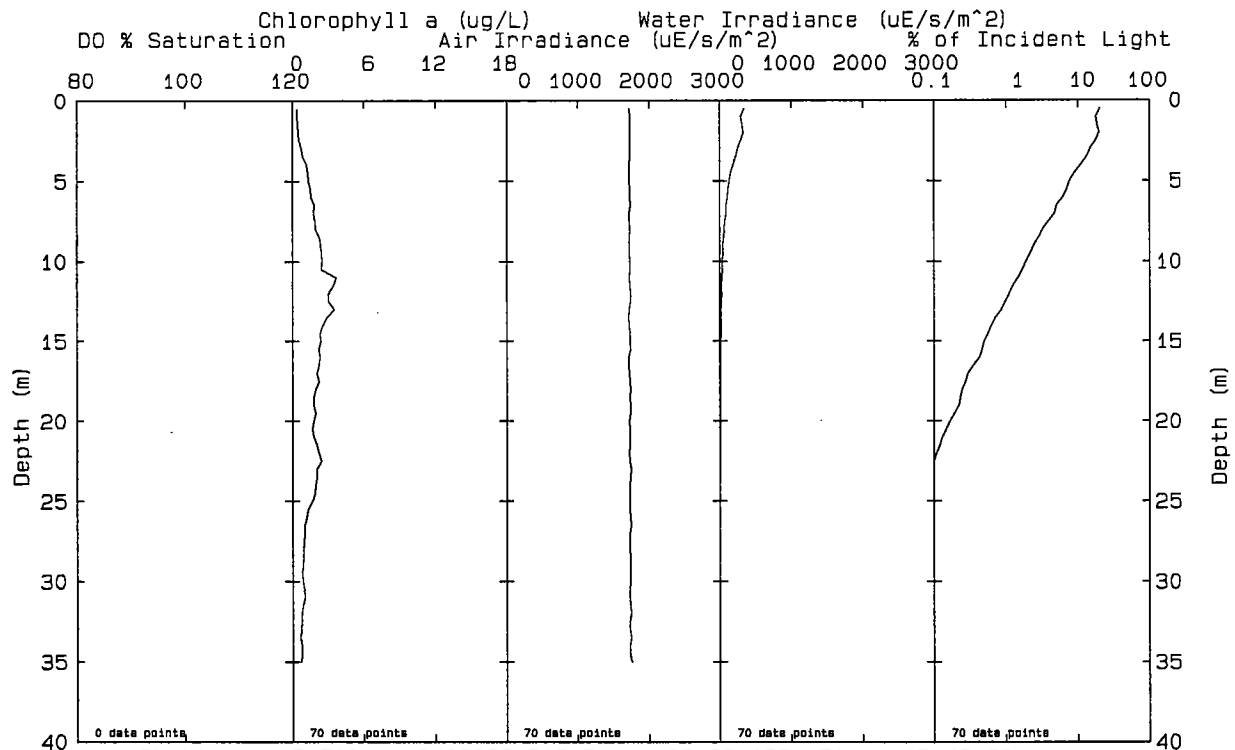
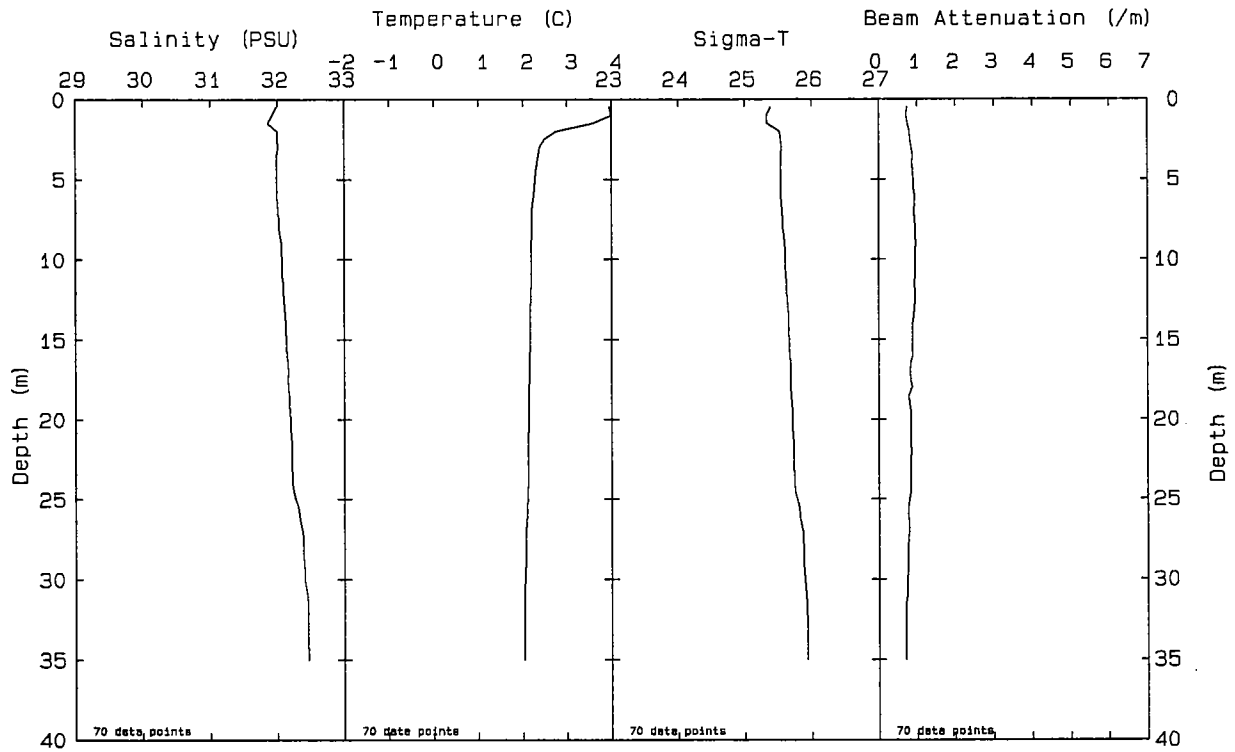




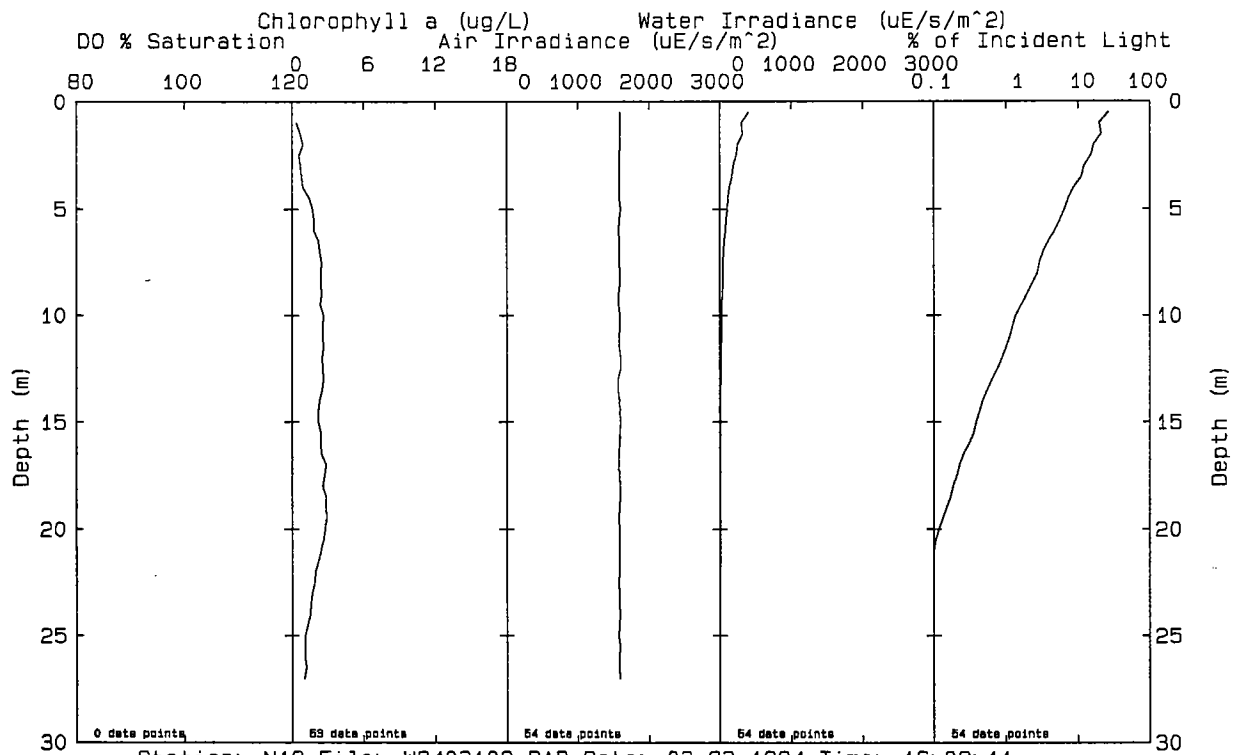
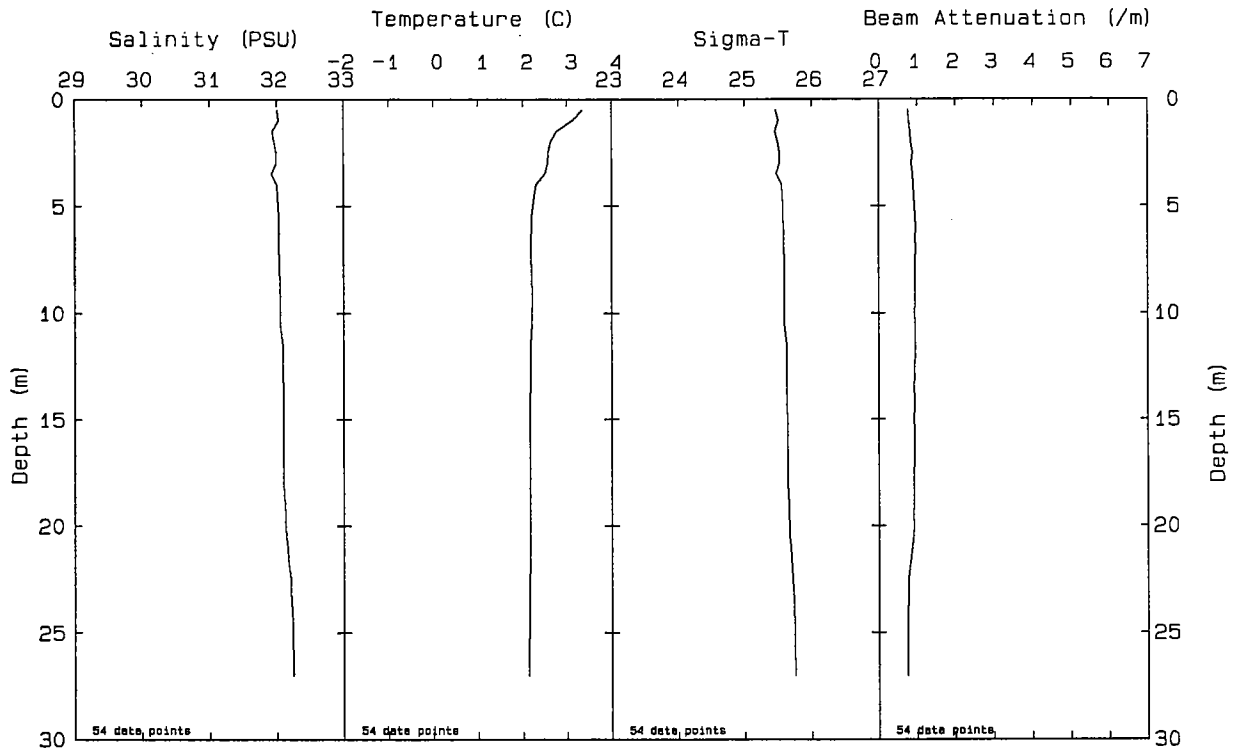


Station: N15 File: W9403093.PAB Date: 03-23-1994 Time: 14: 55: 28

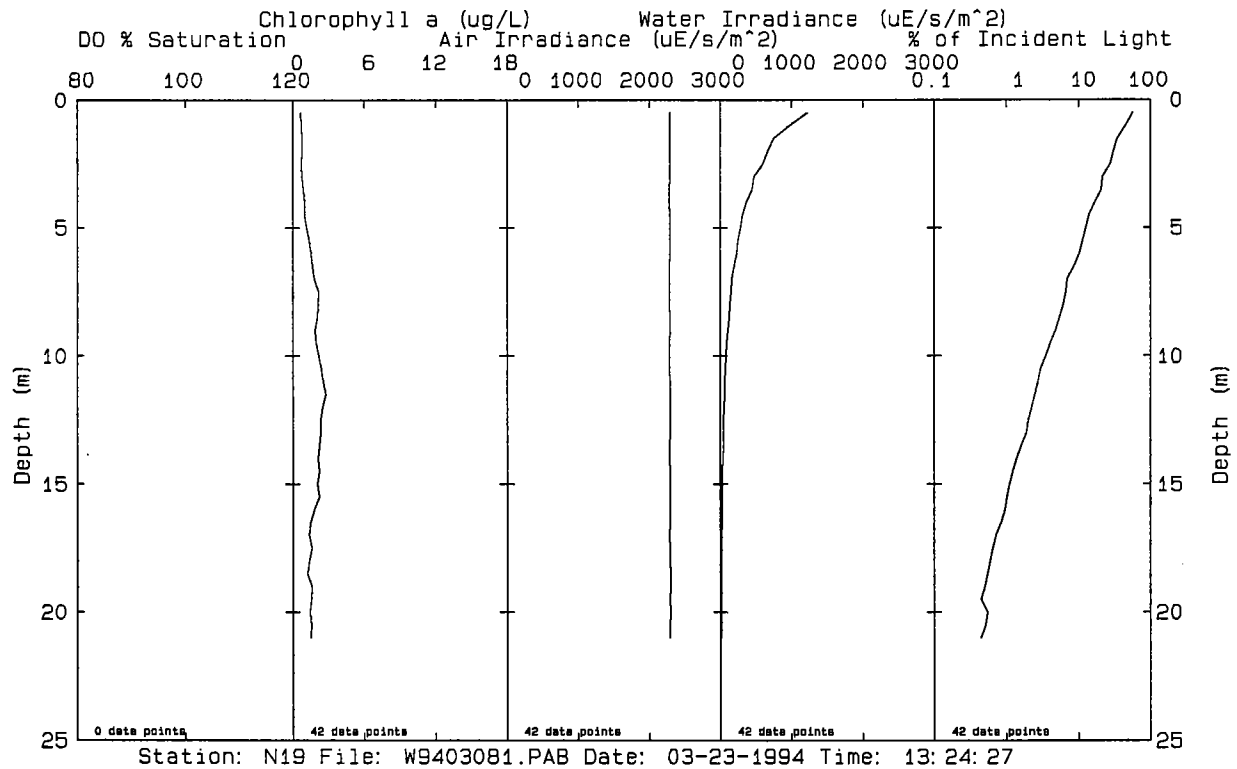
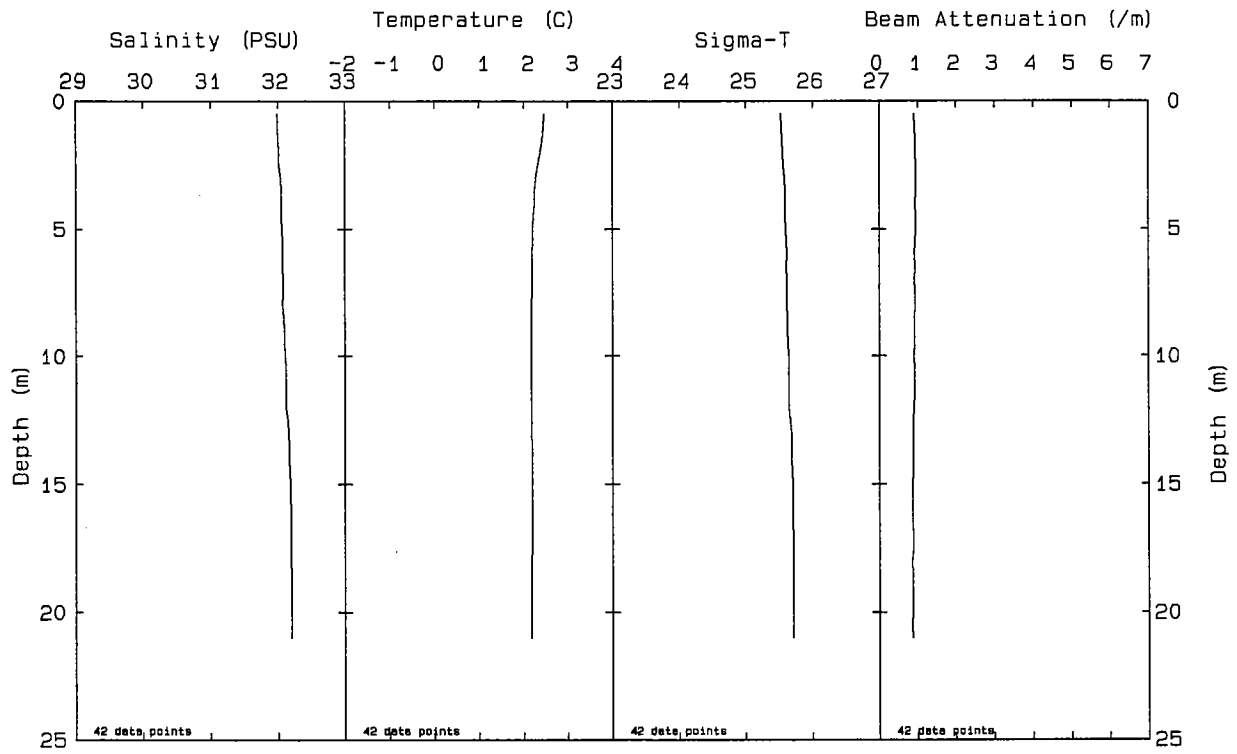


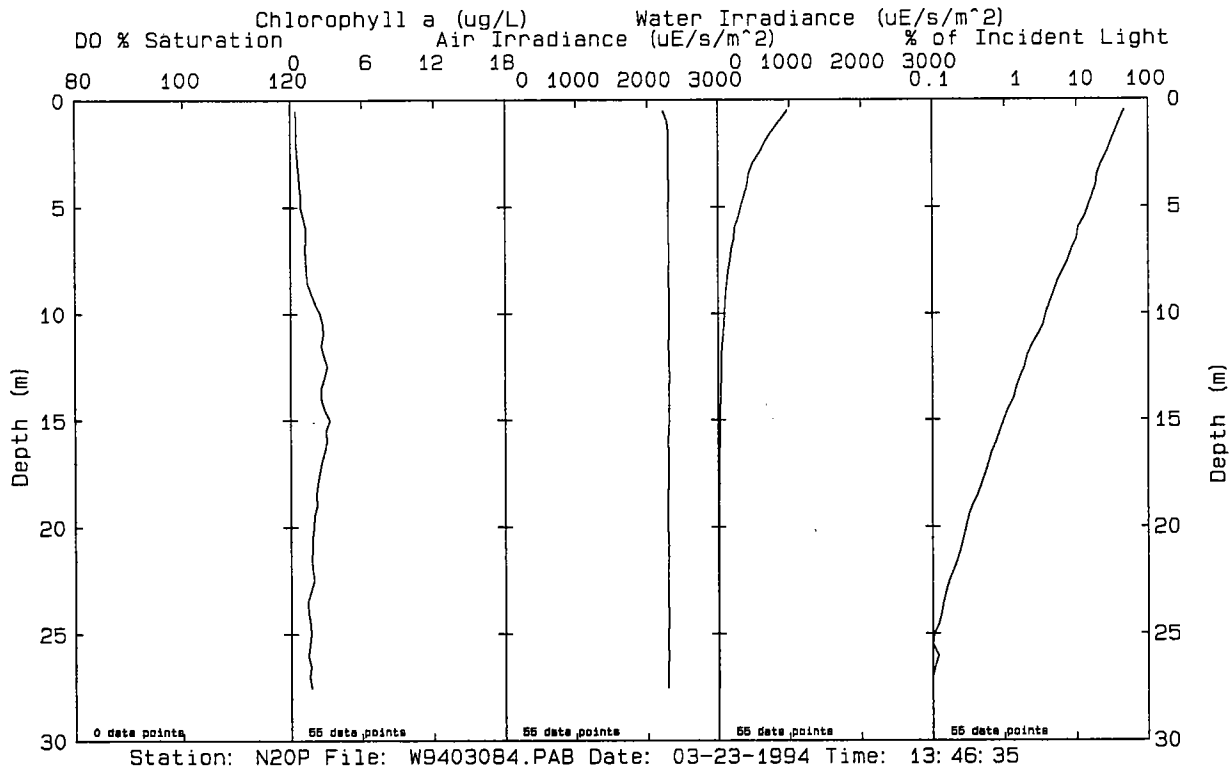
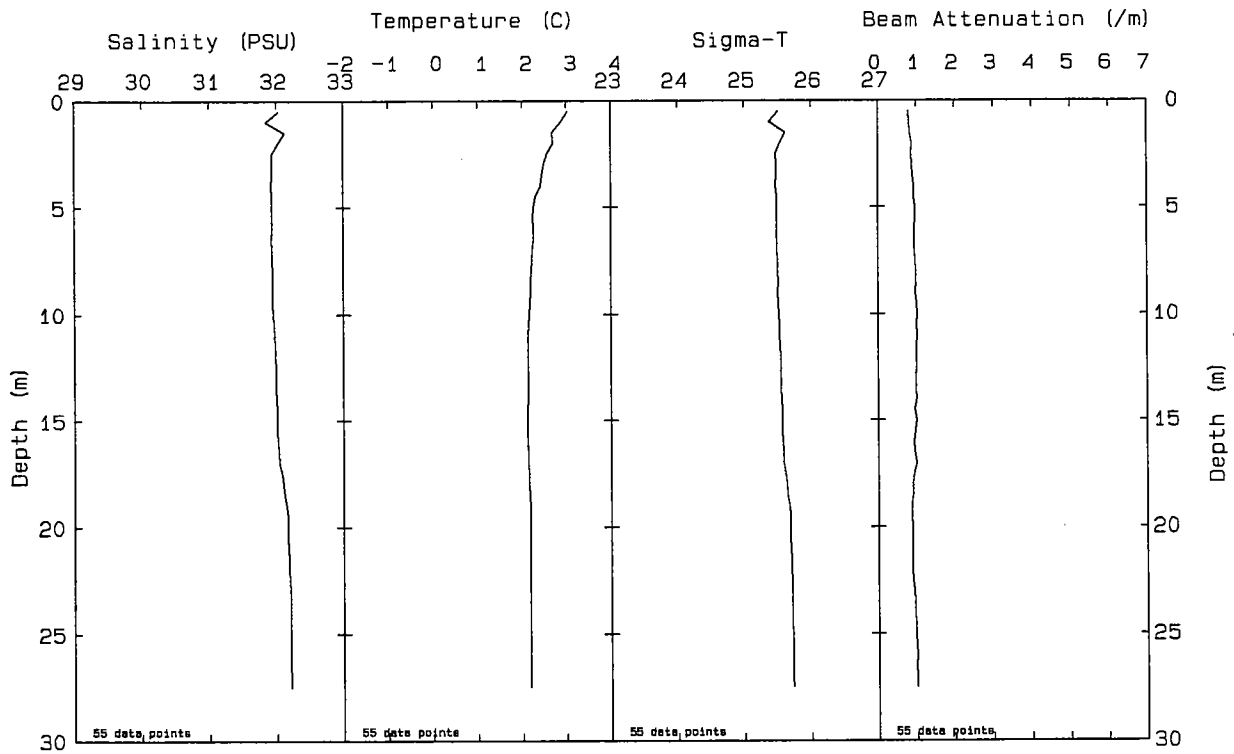


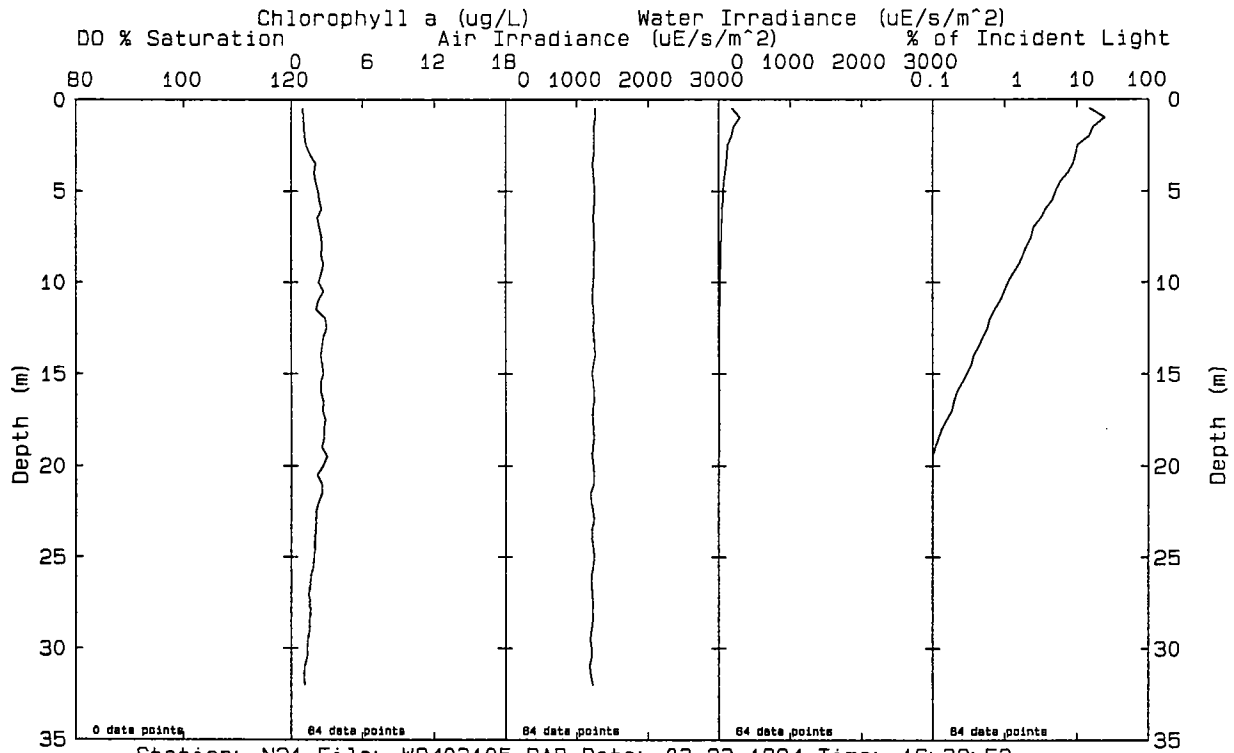
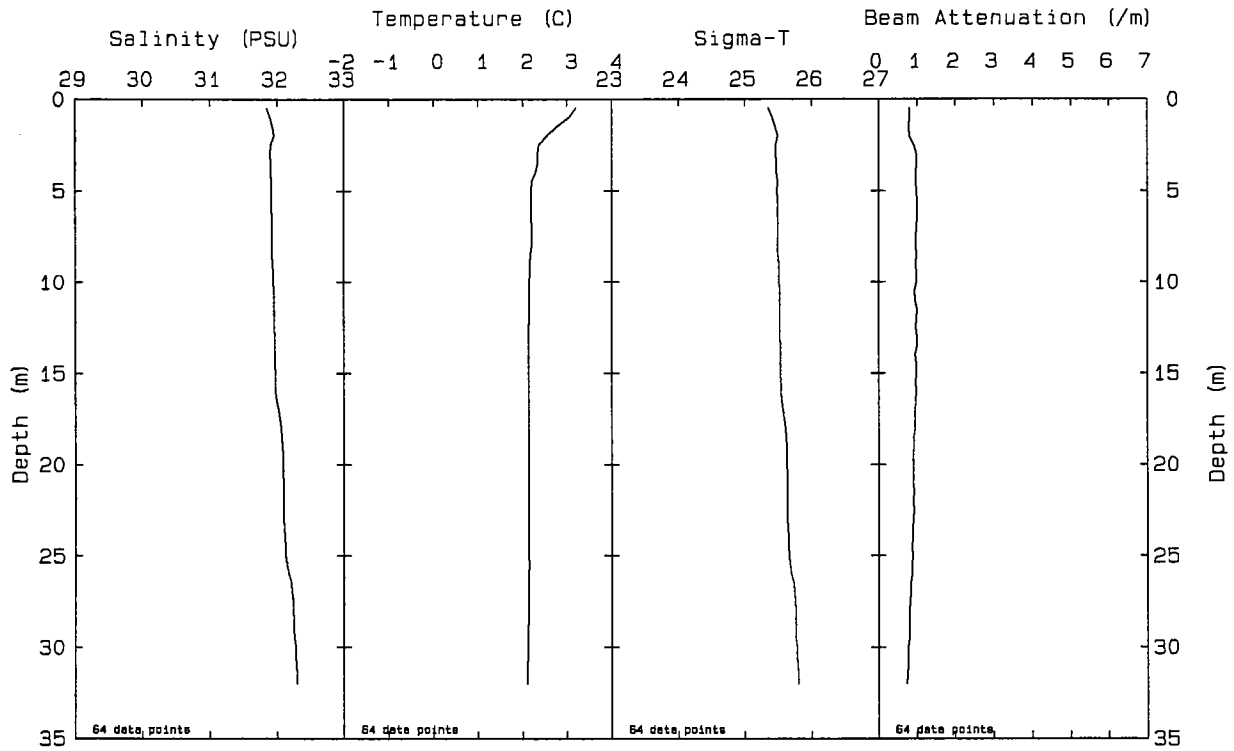
Station: N17 File: W9403099.PAB Date: 03-23-1994 Time: 15: 46: 20



Station: N18 File: W9403102.PAB Date: 03-23-1994 Time: 16:09:11







Station: N21 File: W9403105.PAB Date: 03-23-1994 Time: 16:32:52

## **APPENDIX C**

### **COMPARISON OF VERTICAL PROFILE DATA: SCATTER PLOTS**

#### **Parameter-Parameter Plots of Vertical Profile Data, Combined Surveys**

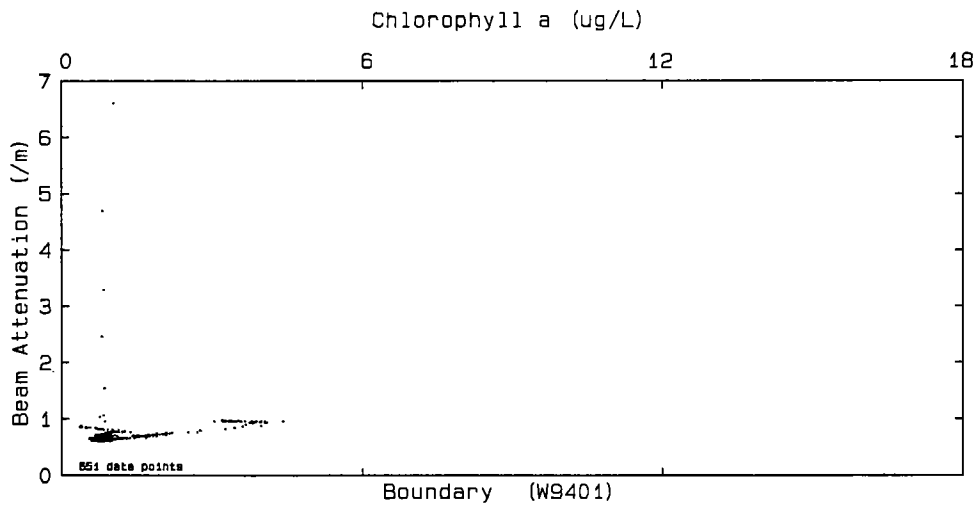
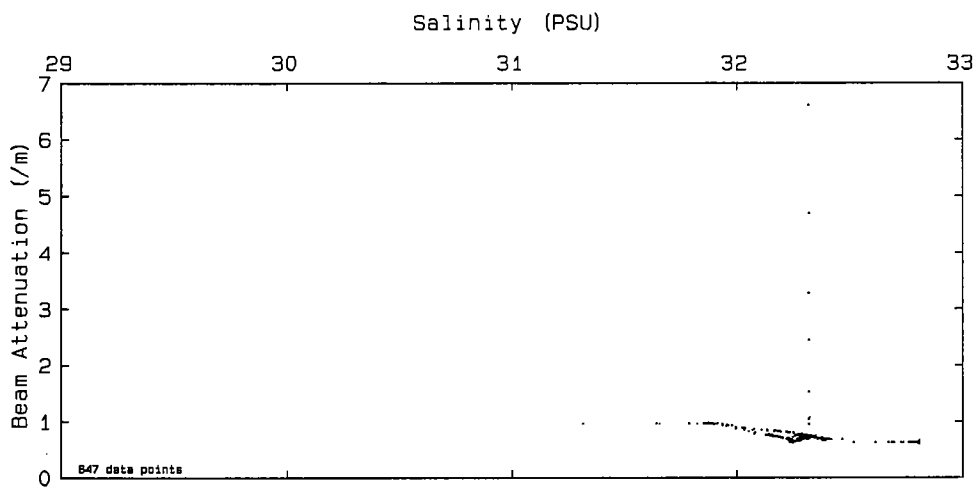
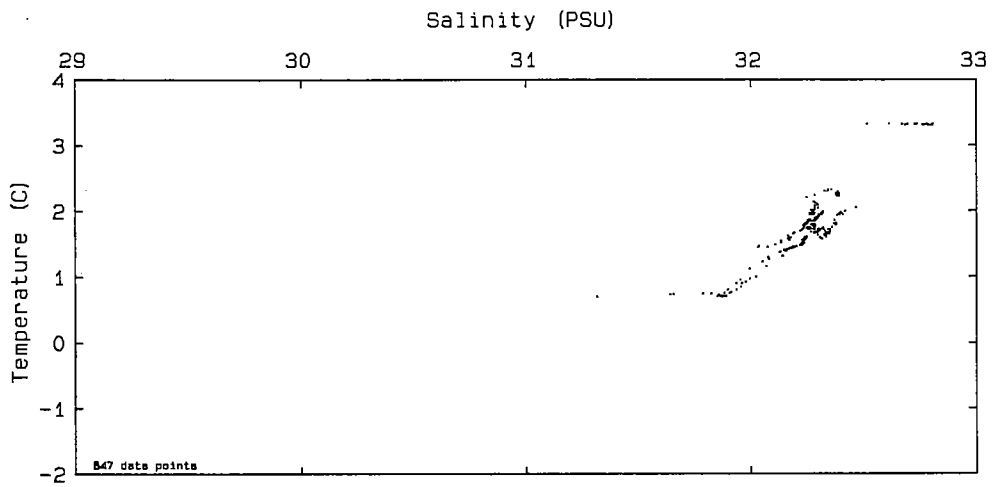
Note that for nearfield surveys, all plots are given as figures in the accompanying text report. For combined surveys, composite plots (all stations) are given as figures in the accompanying text report.

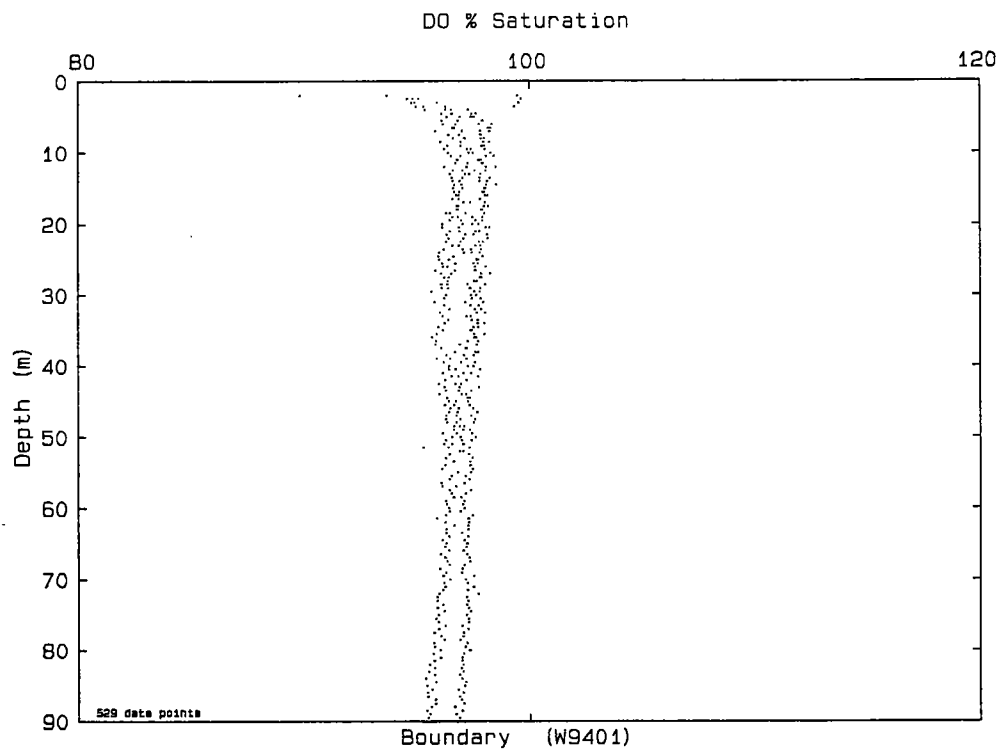
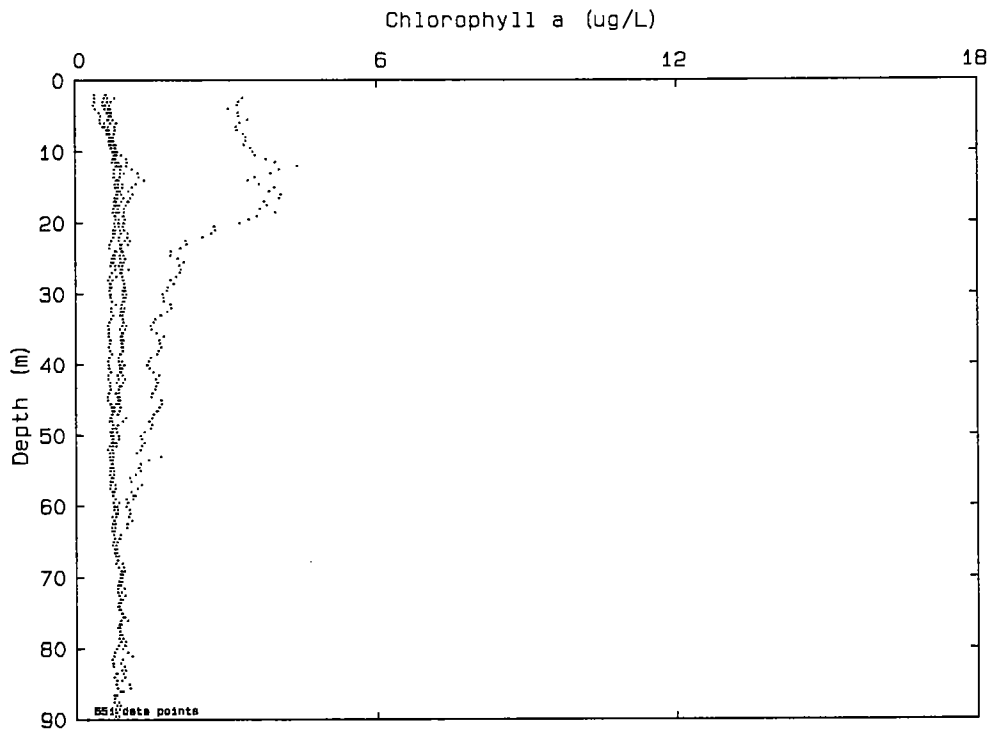
The plots for the February (W9401) and Early March (W9402) given here separate stations by station groups as defined in the text report.

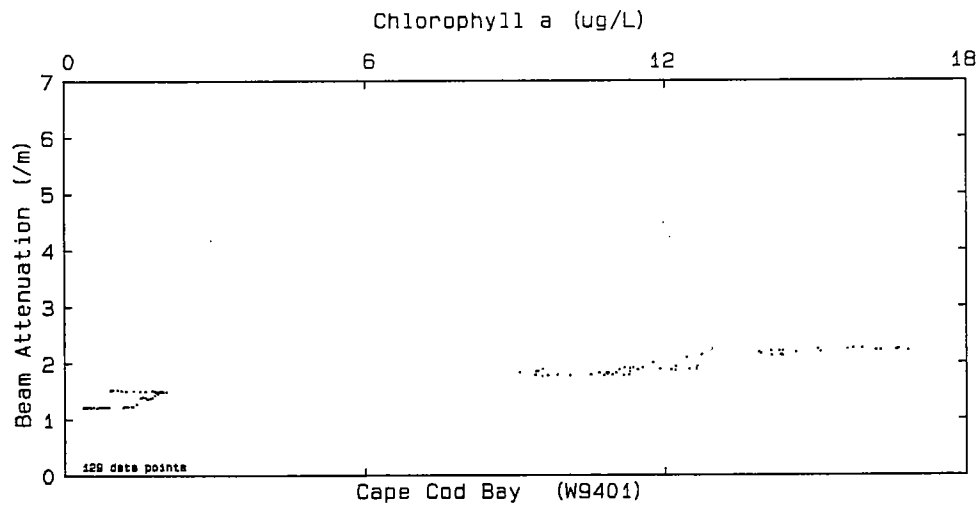
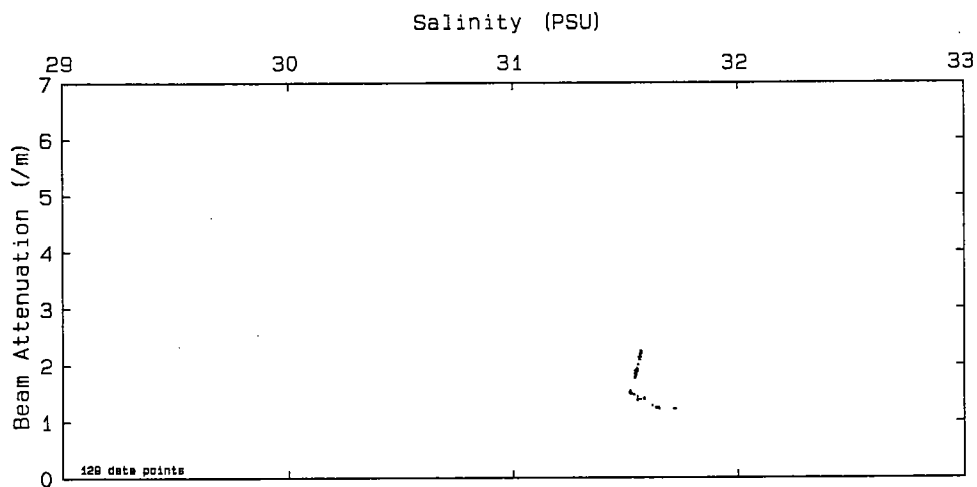
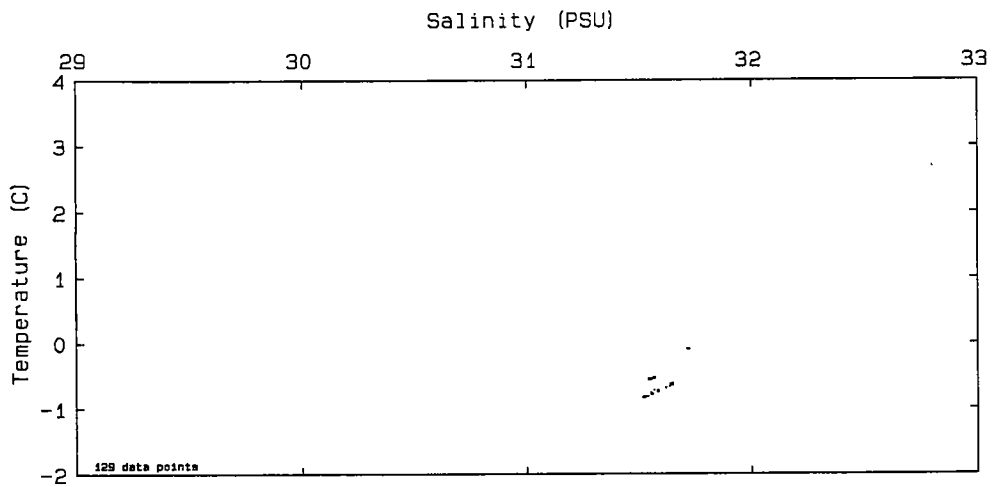
Data are as described in Appendix B and include the entire profile at each station.

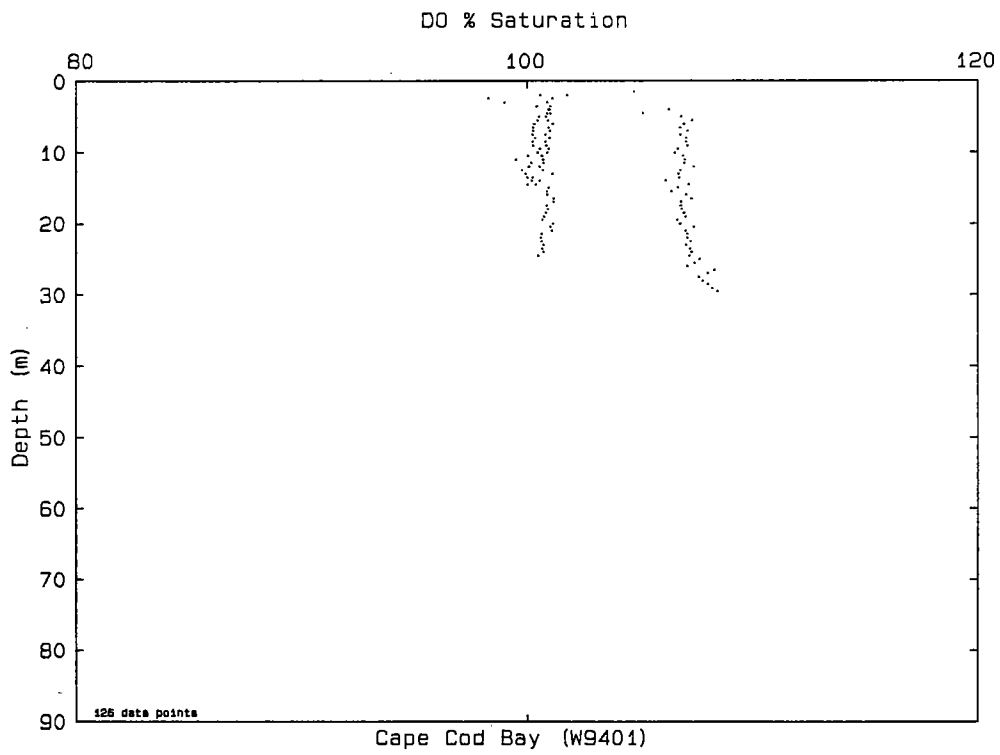
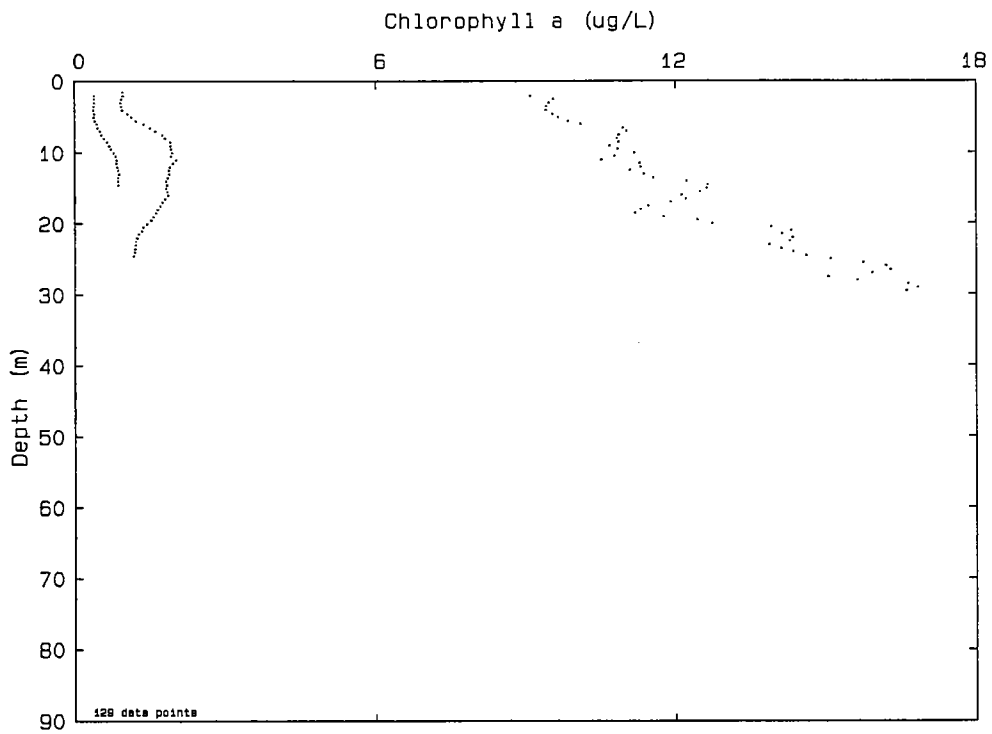


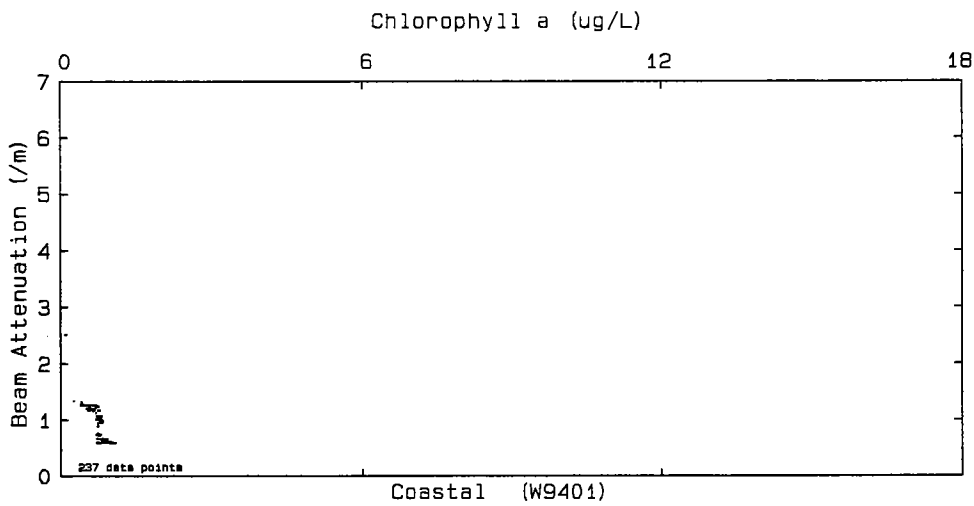
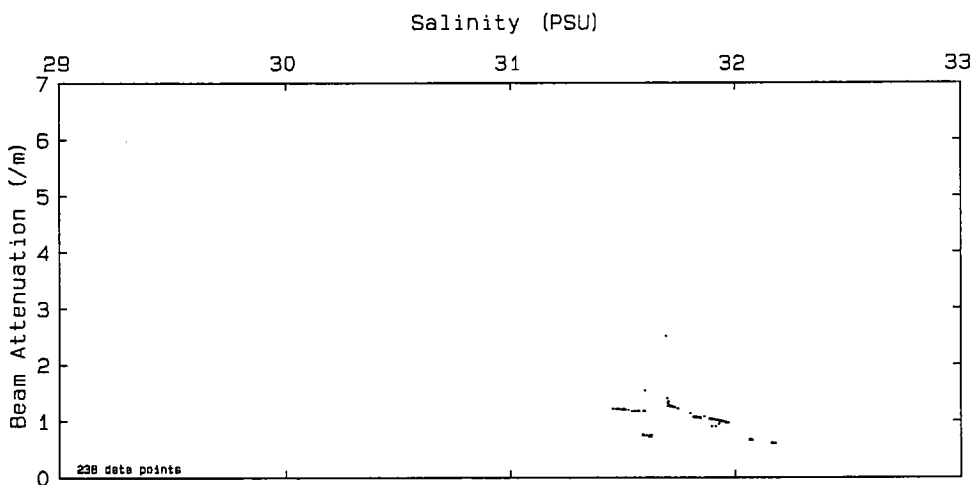
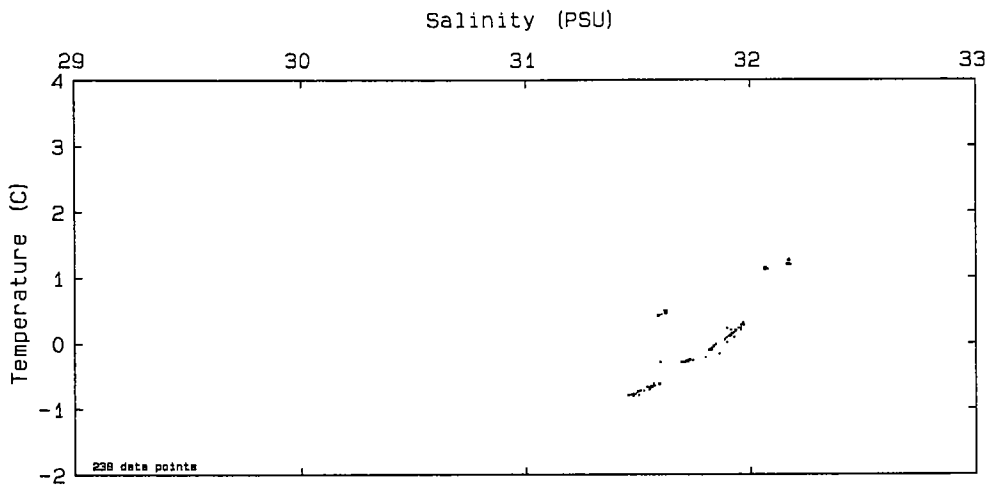
**February 1994 Scatter Plots**

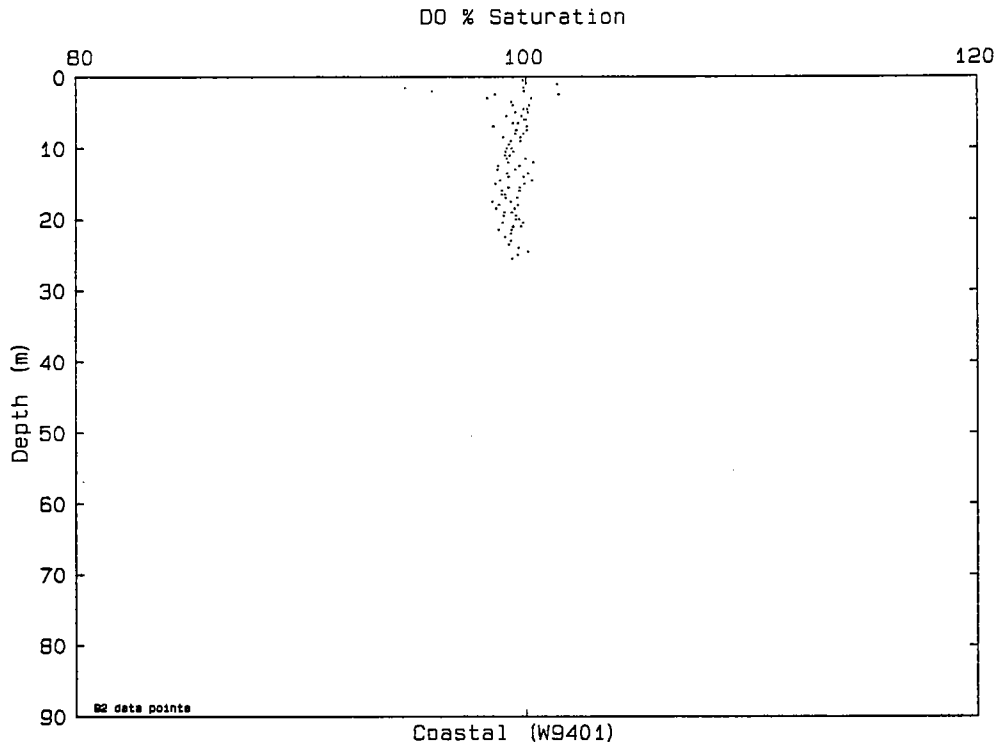
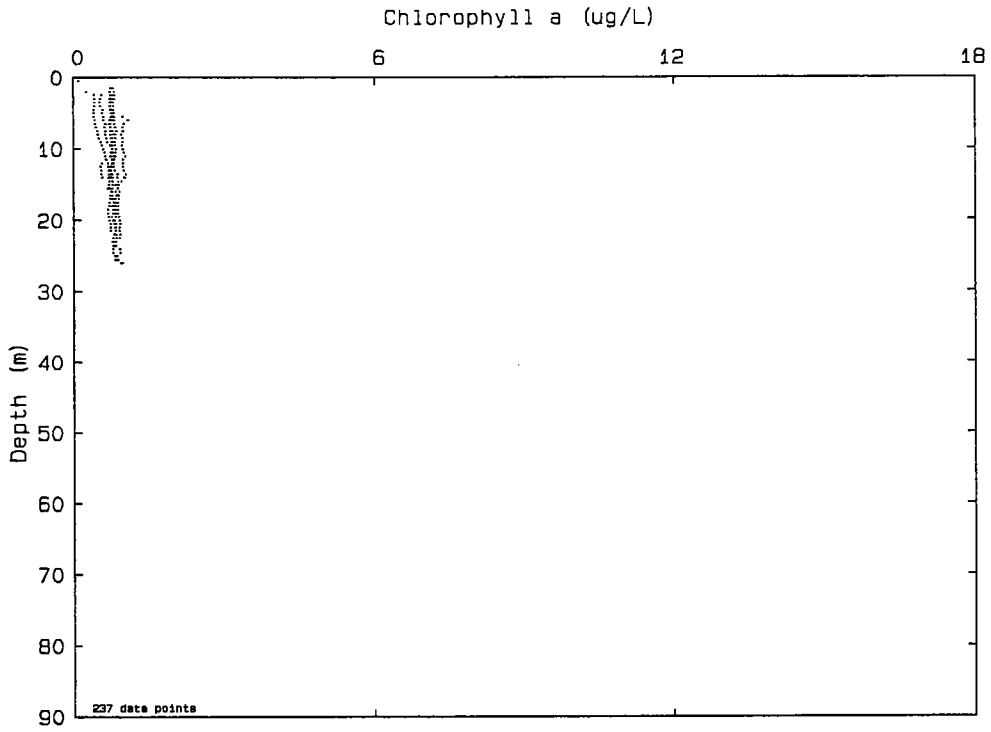


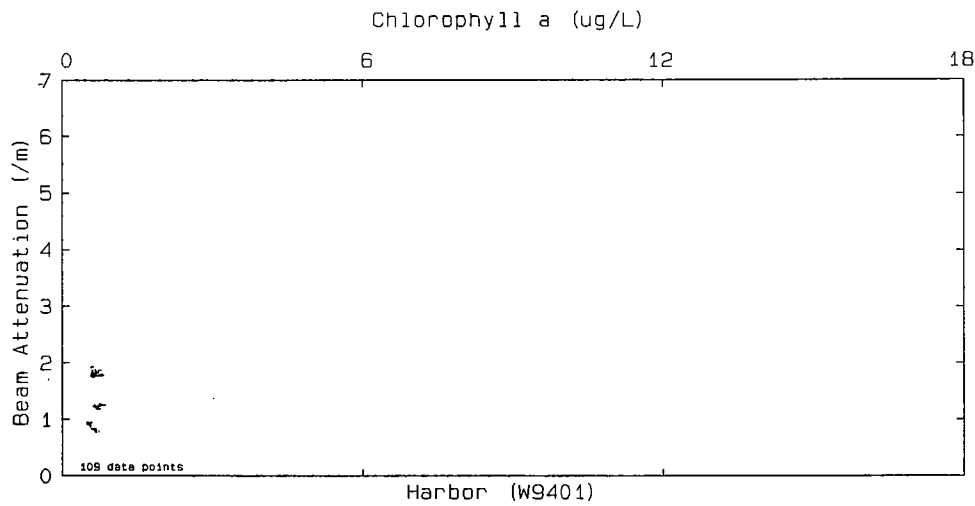
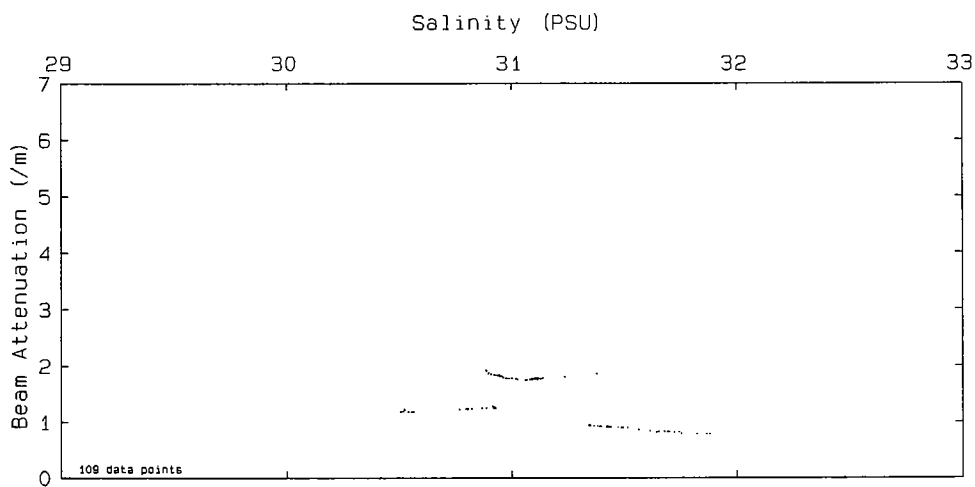
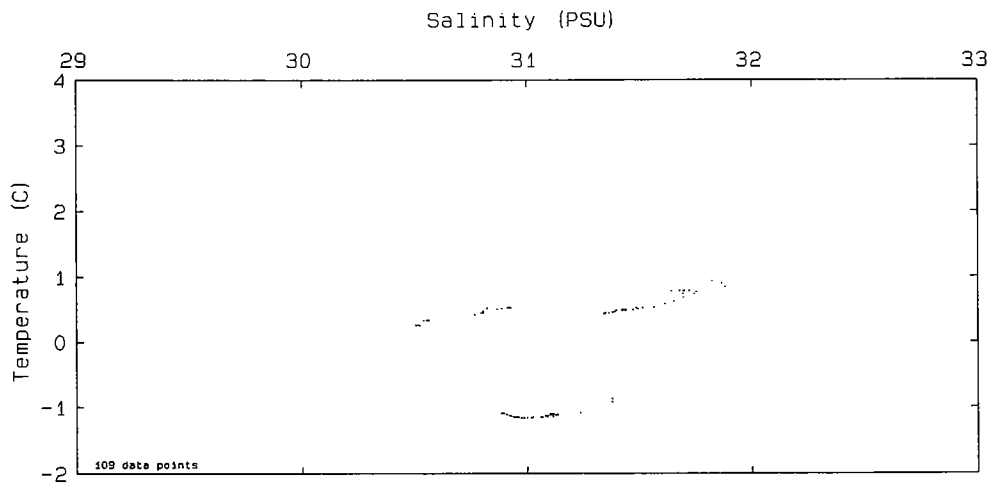




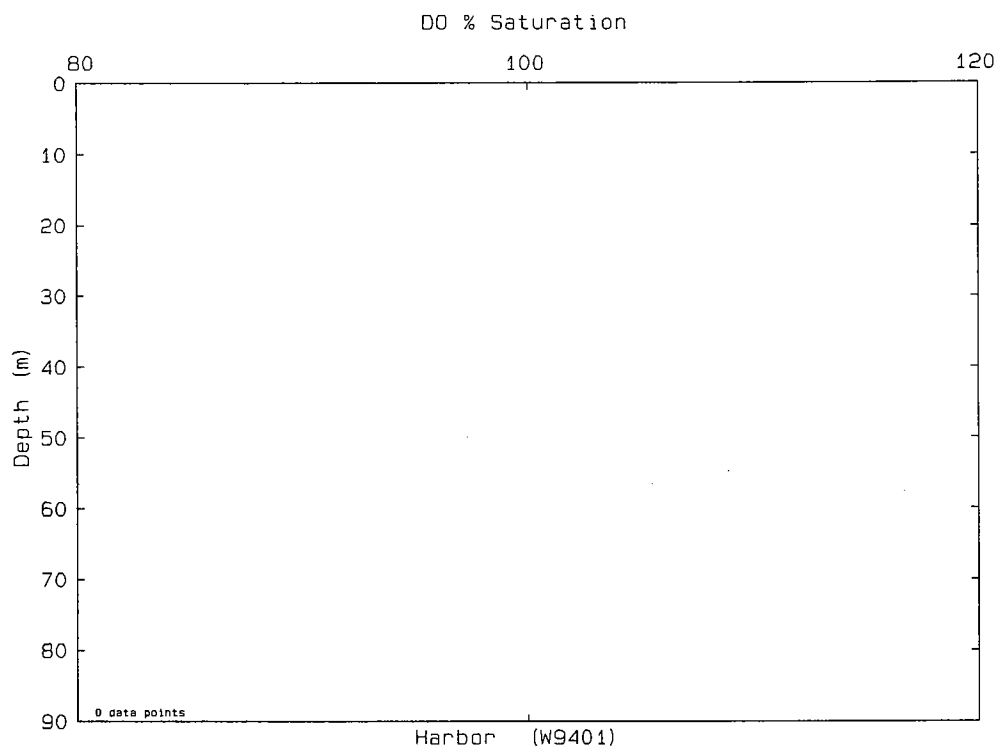
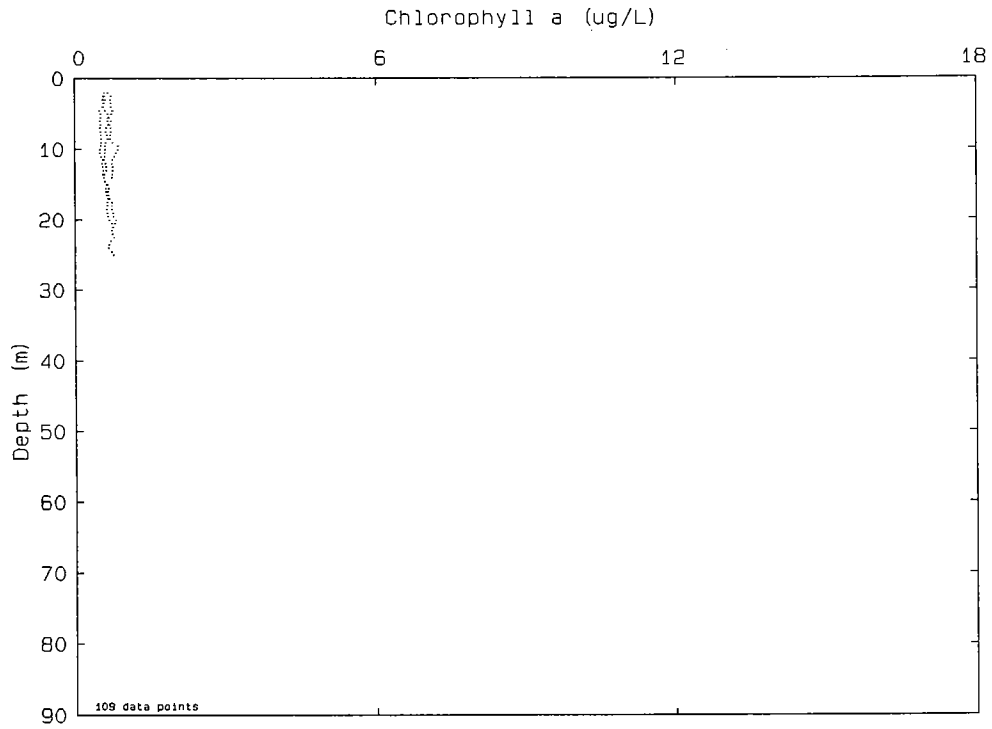


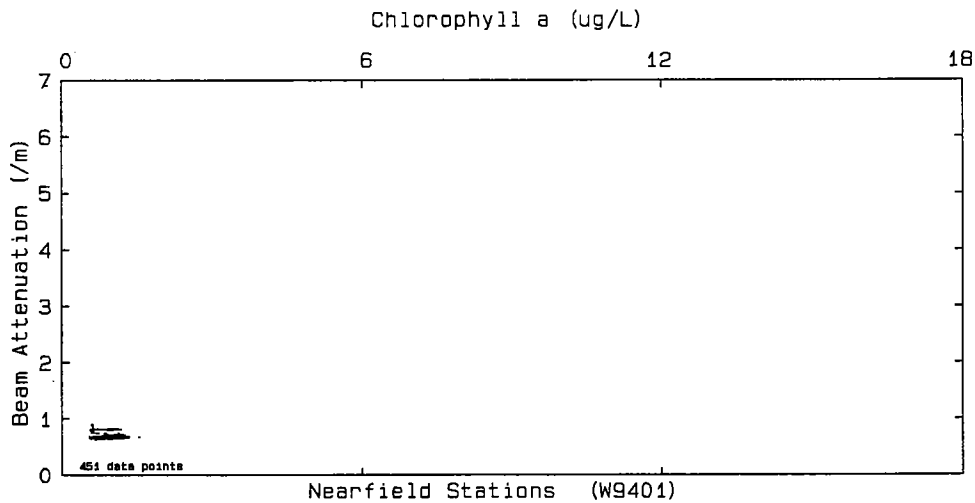
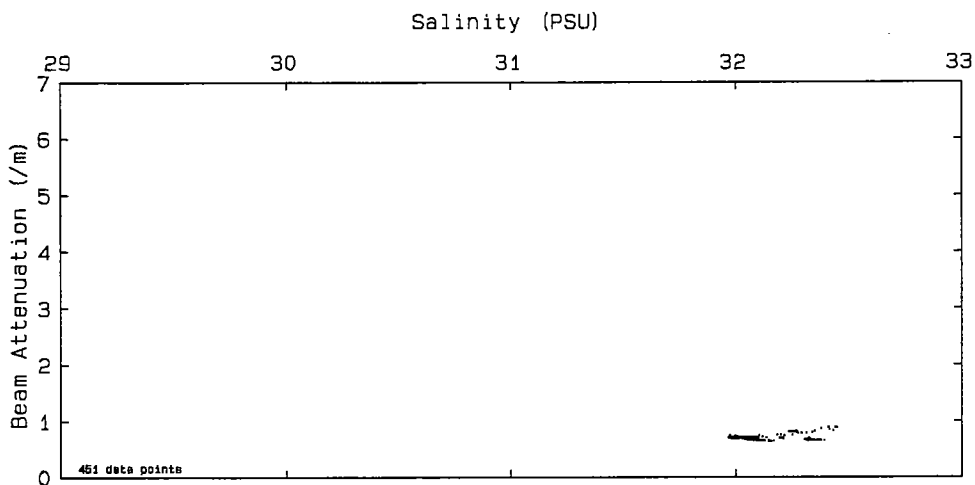
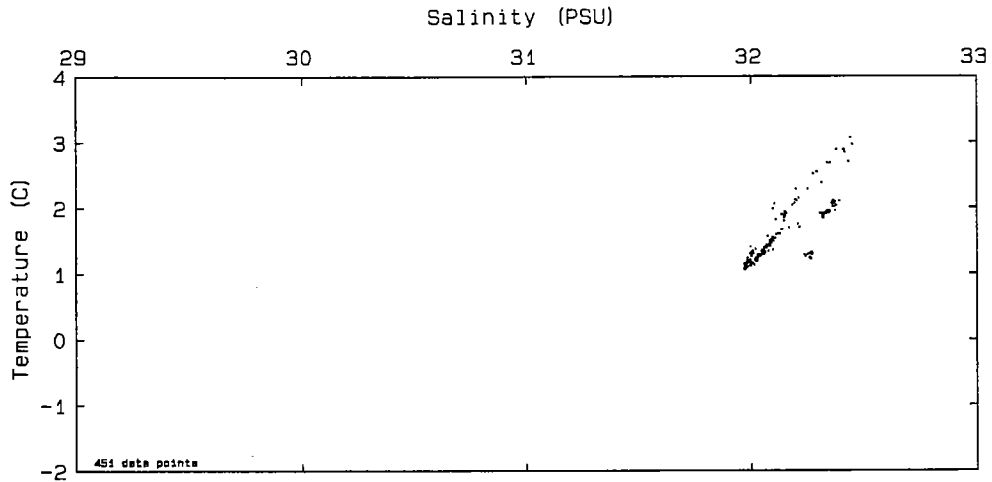


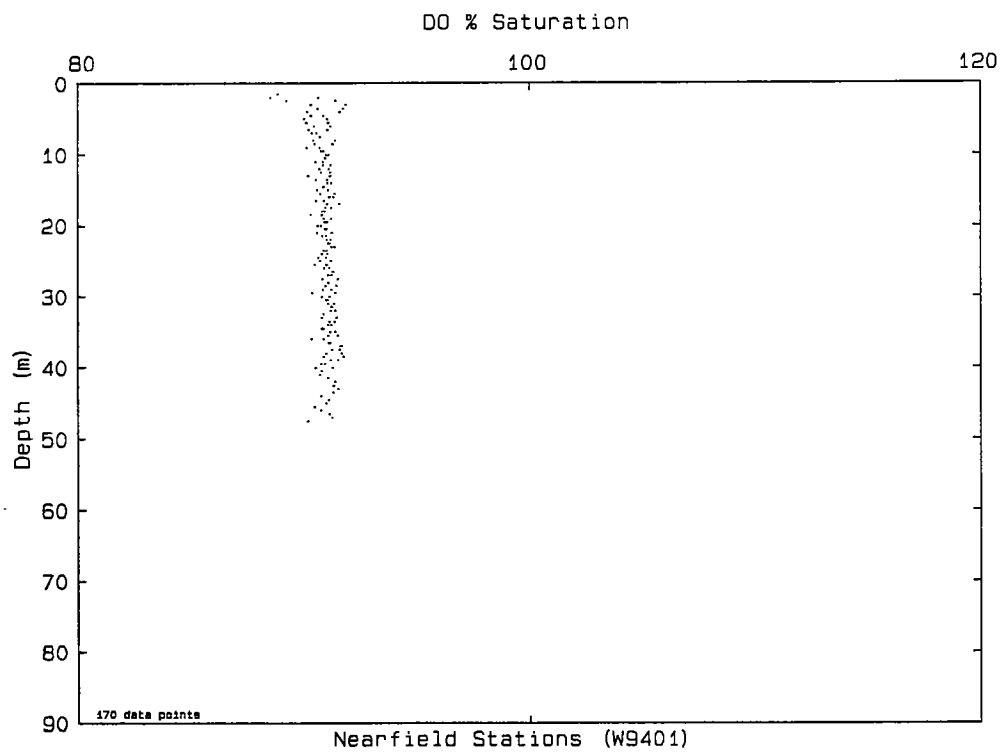
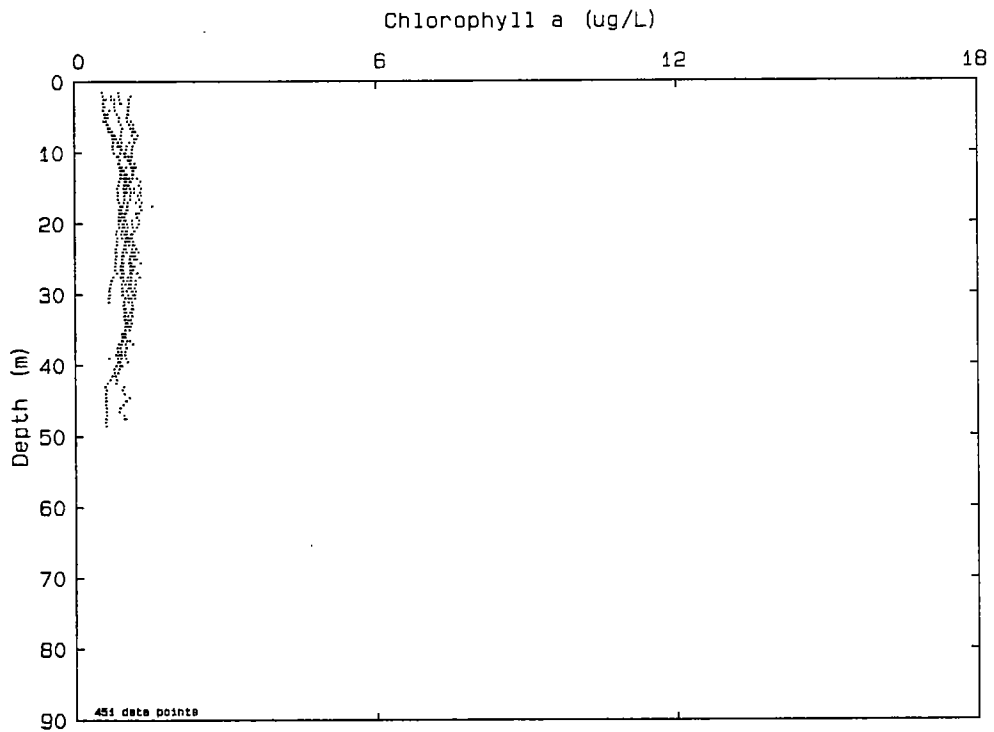


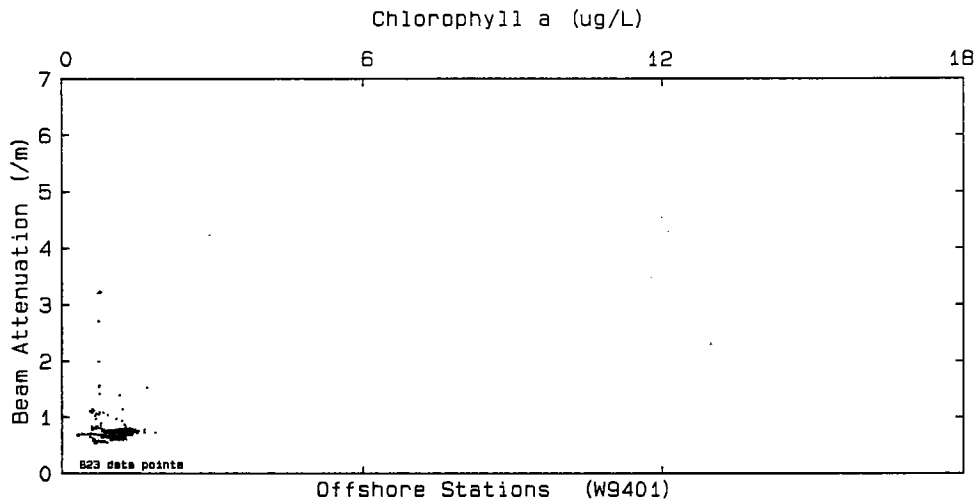
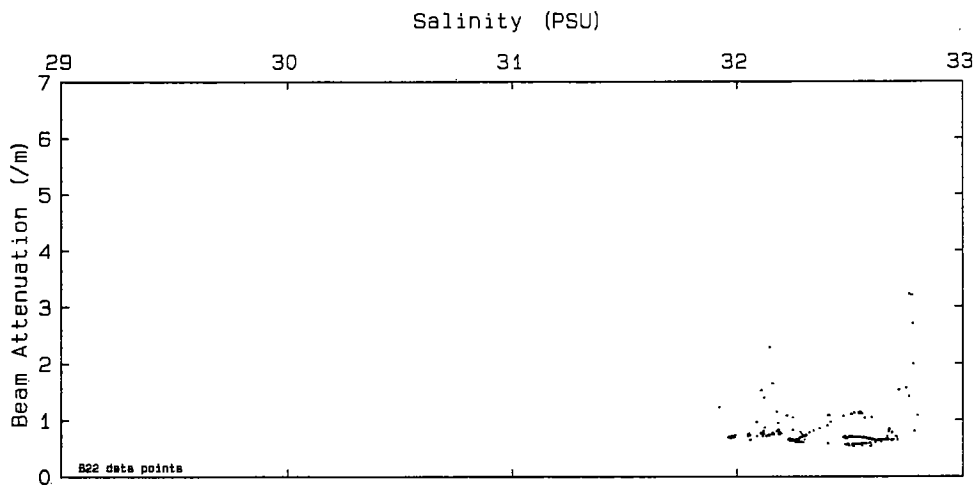
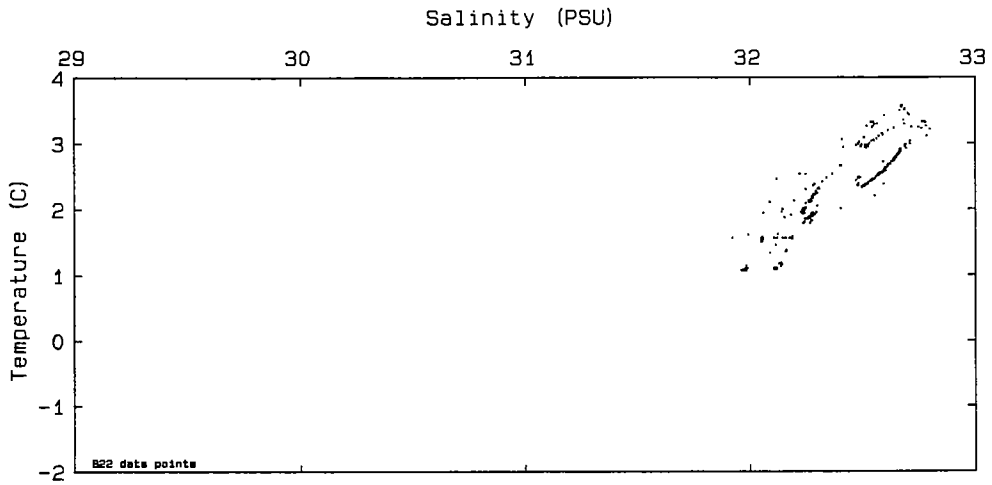


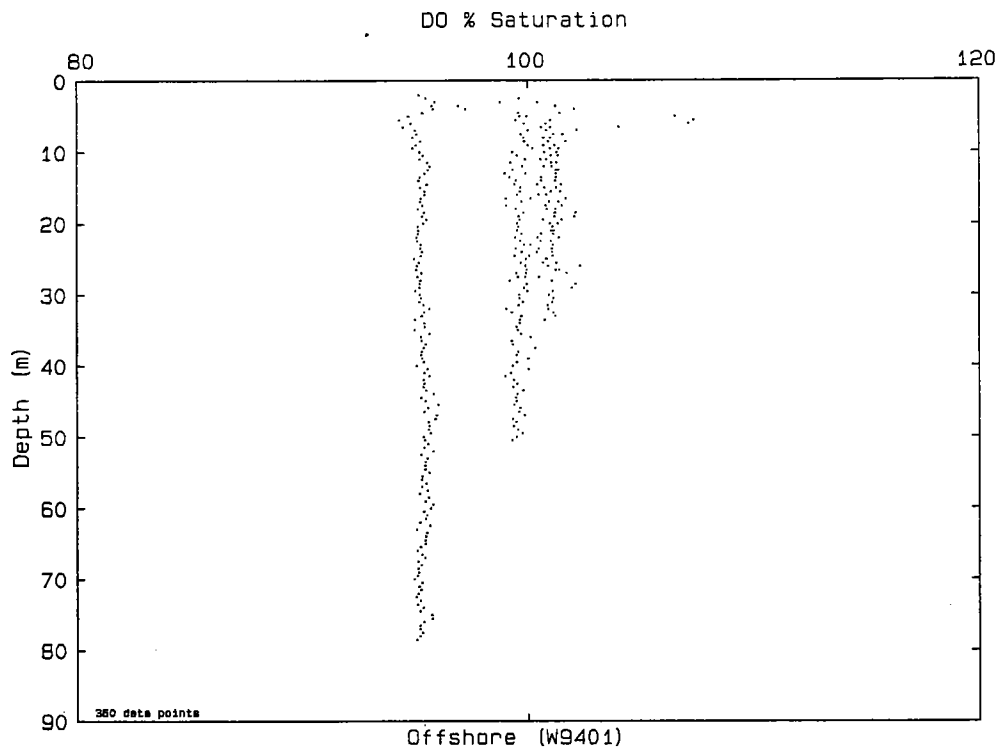
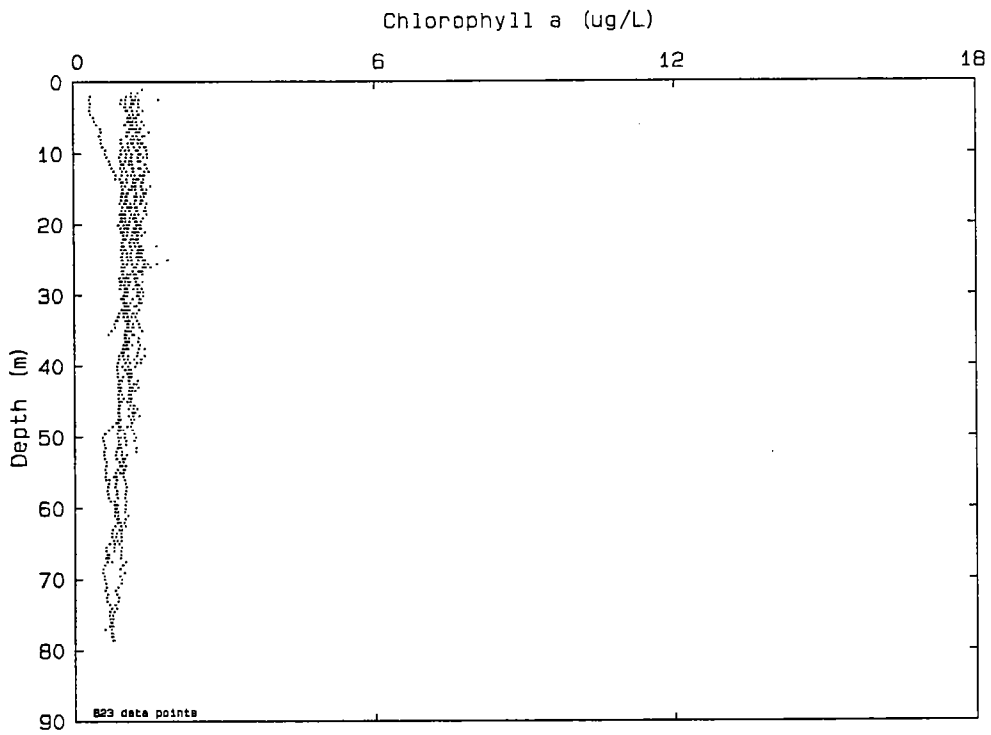




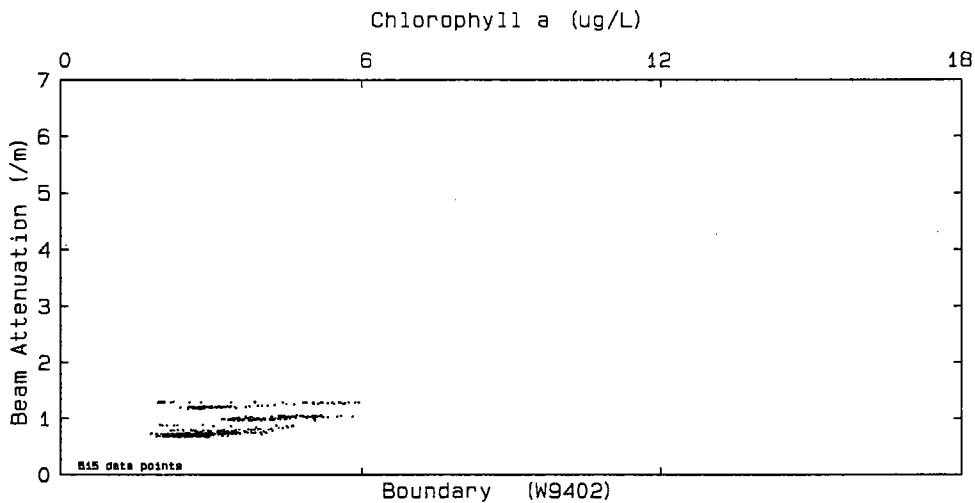
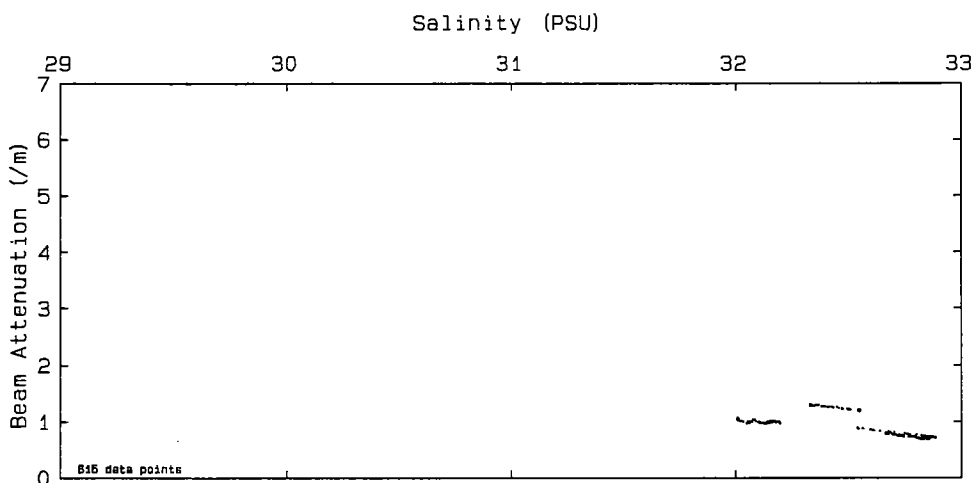
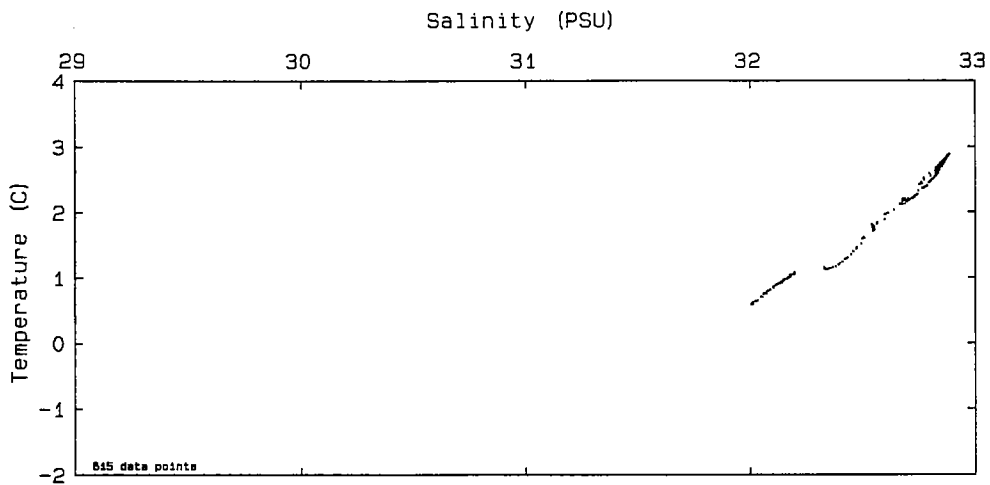


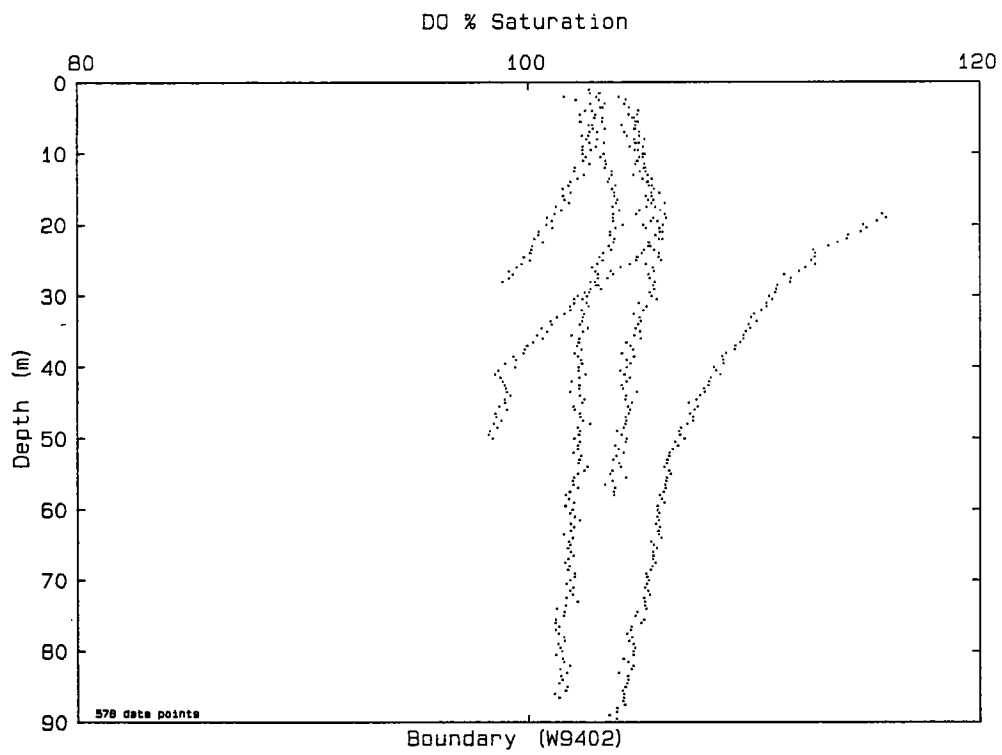
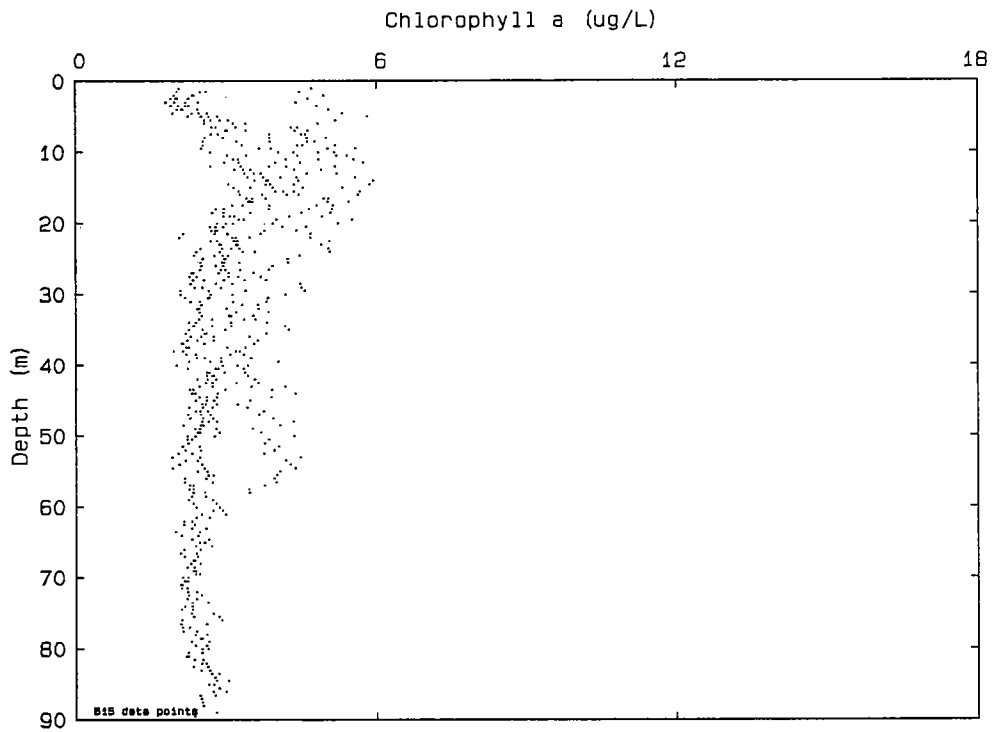




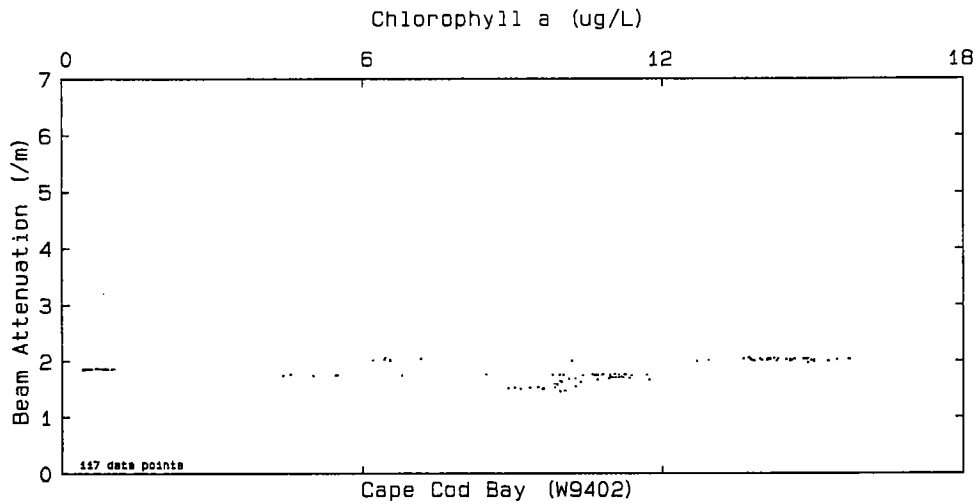
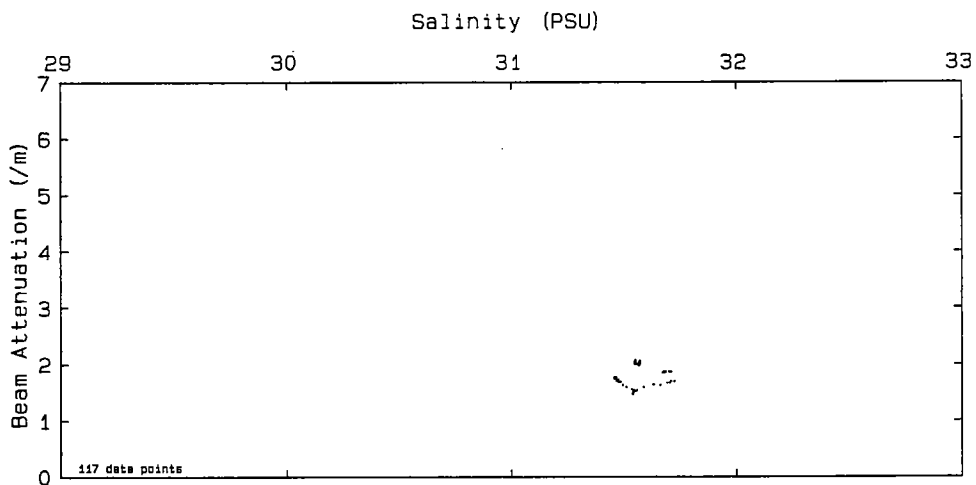
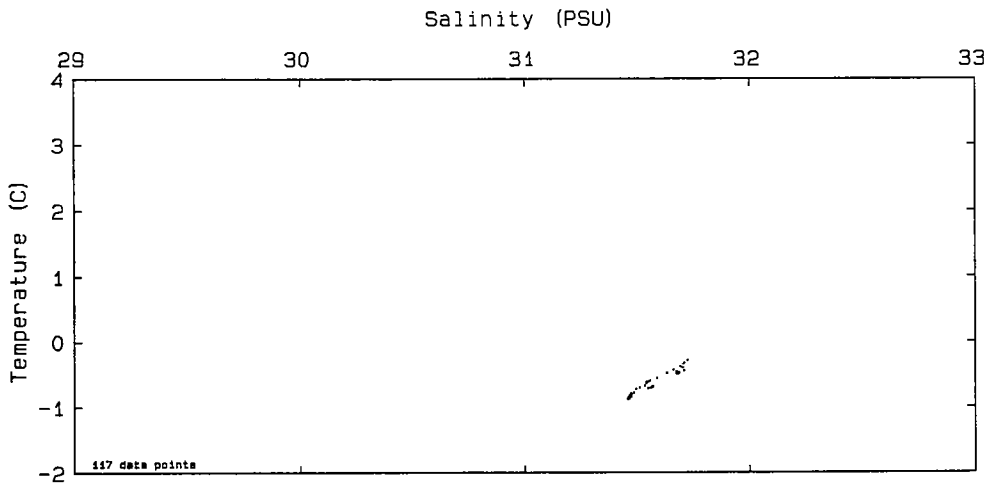


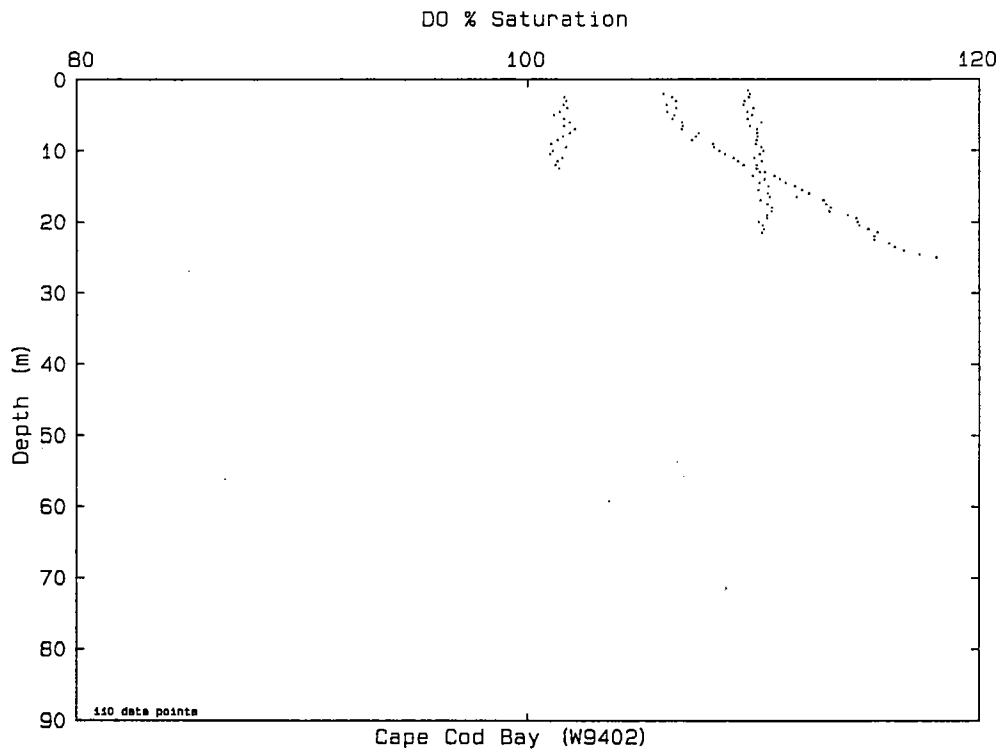
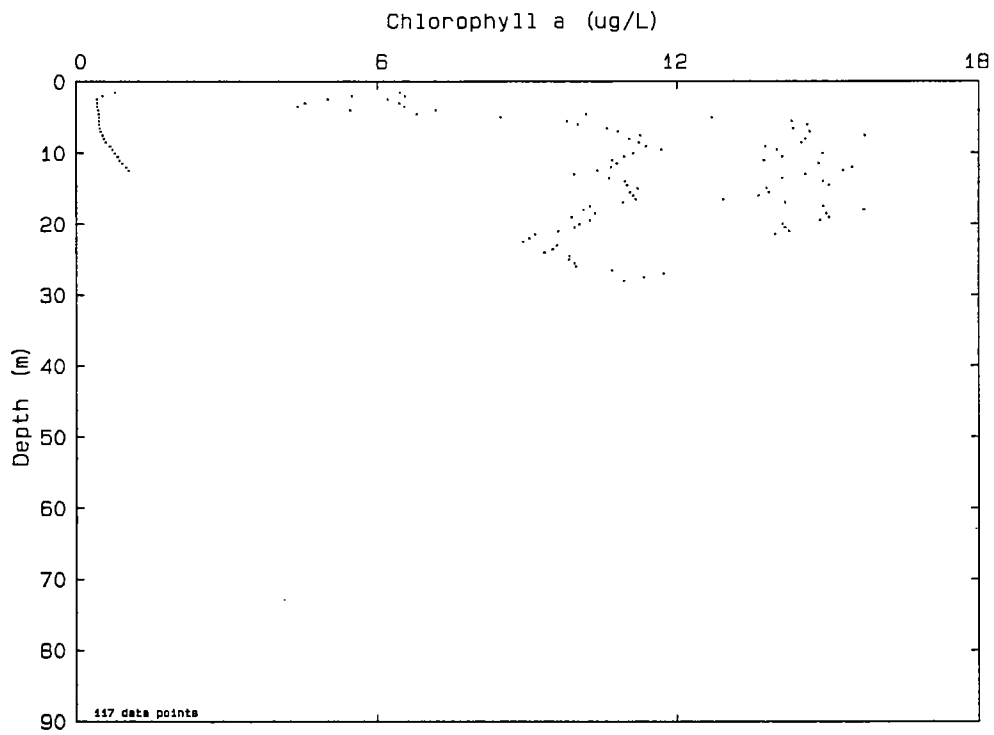
**Early March 1994 Scatter Plots**

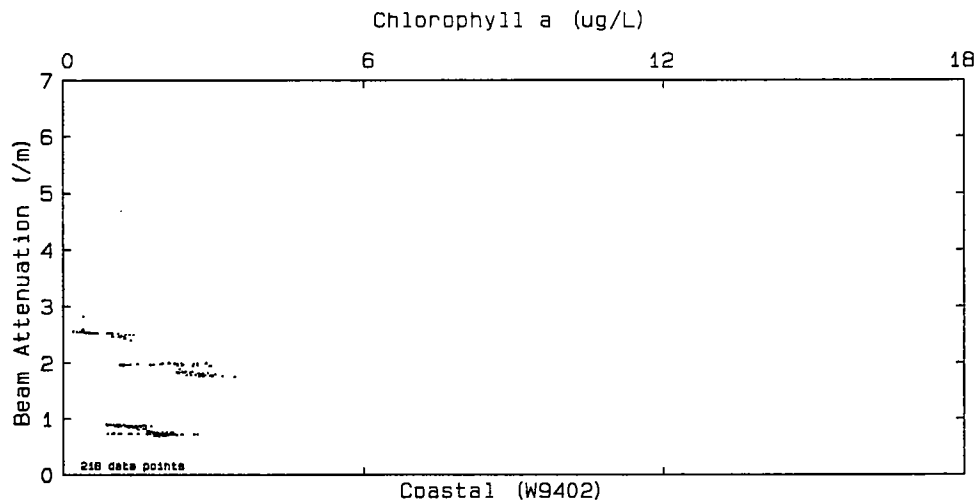
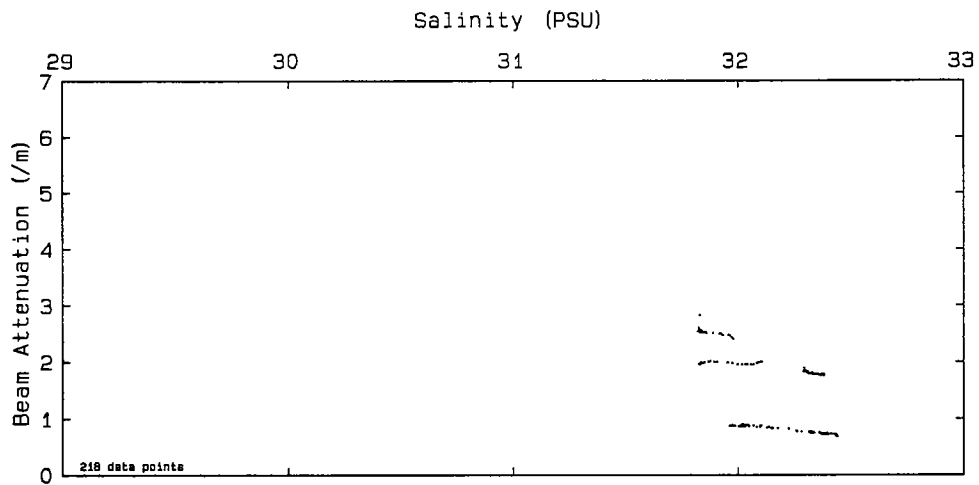
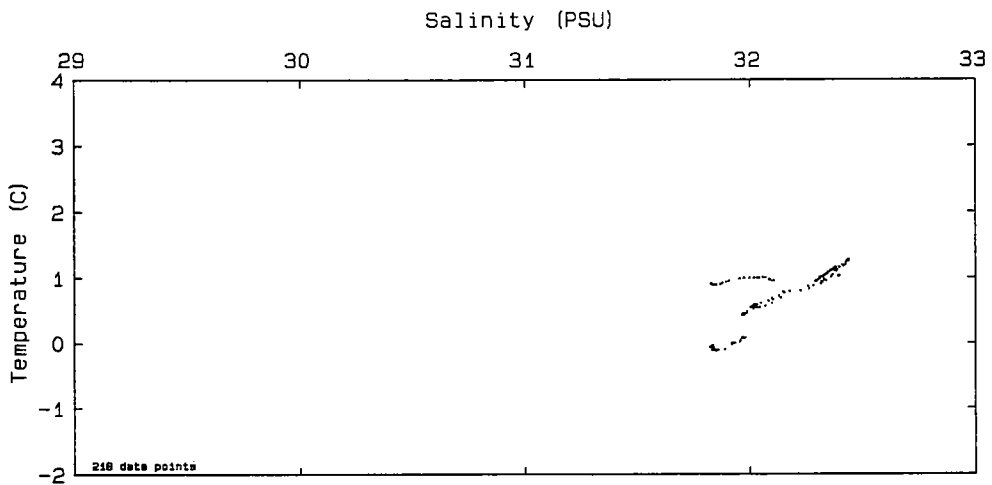


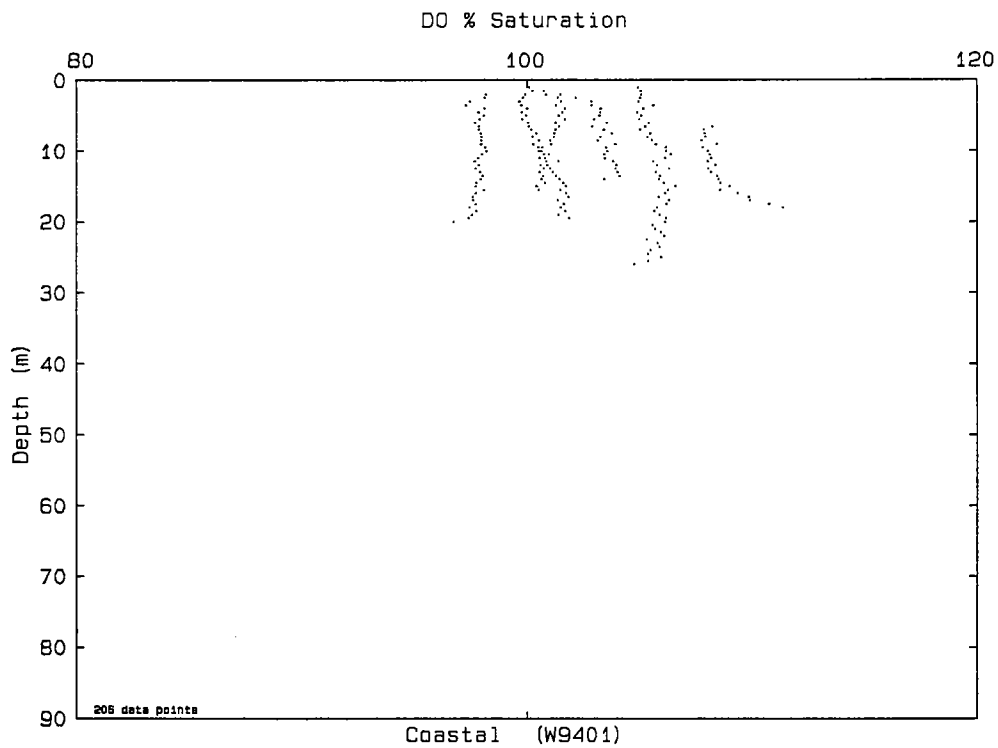
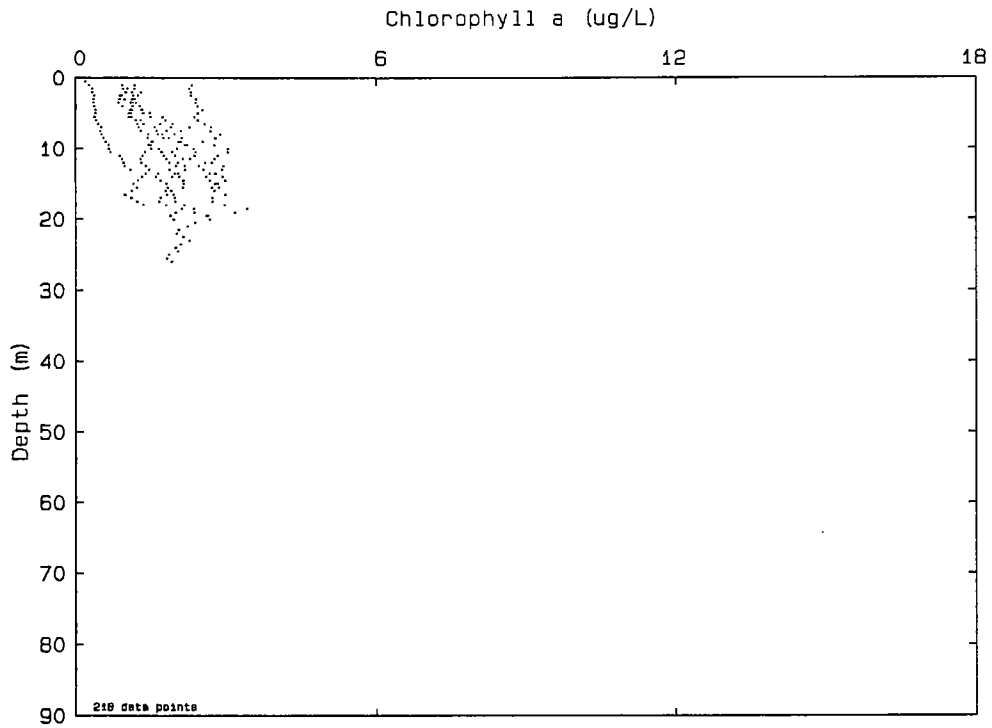


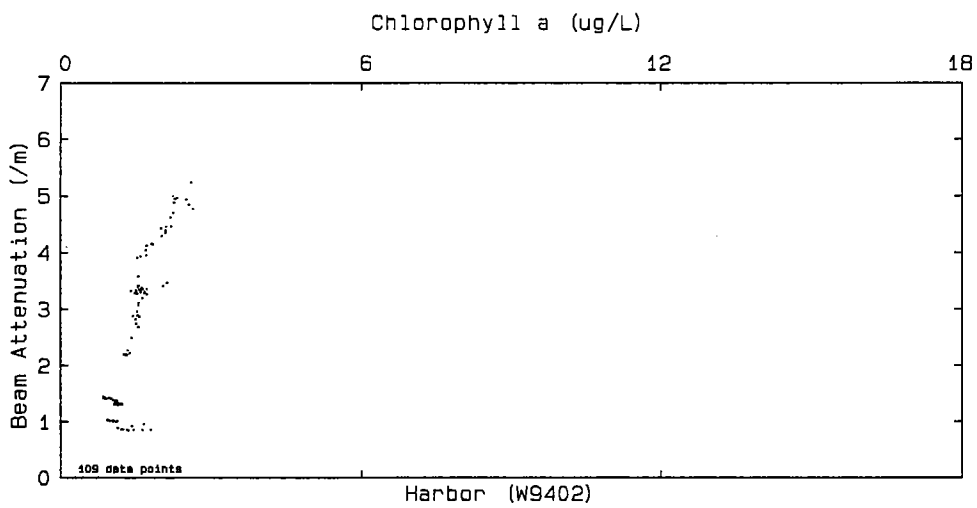
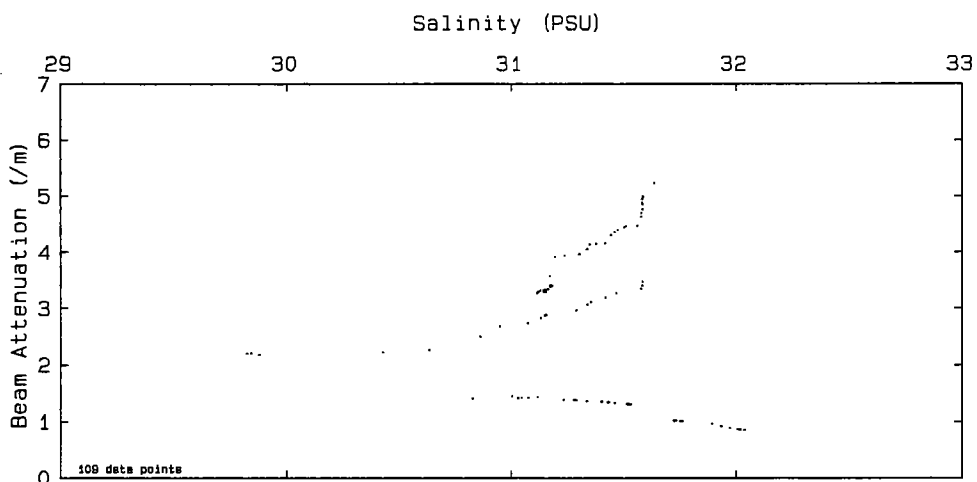
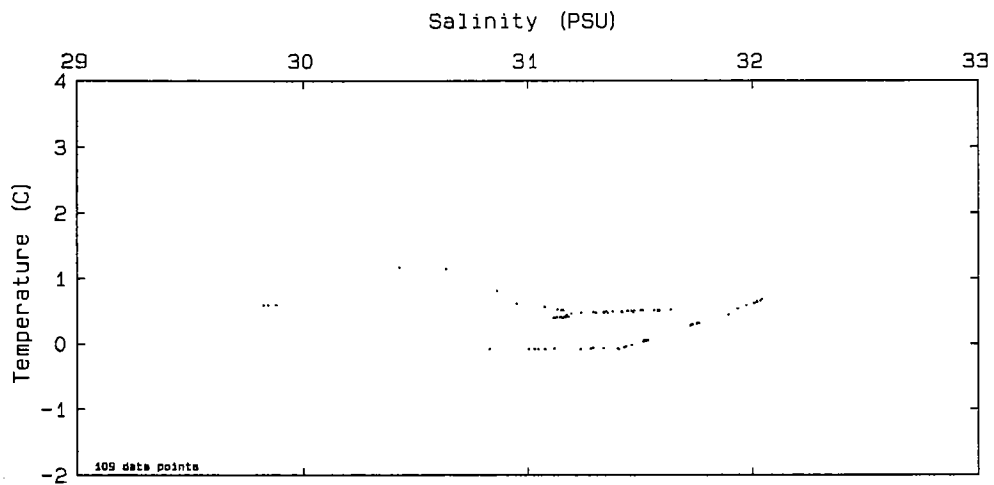


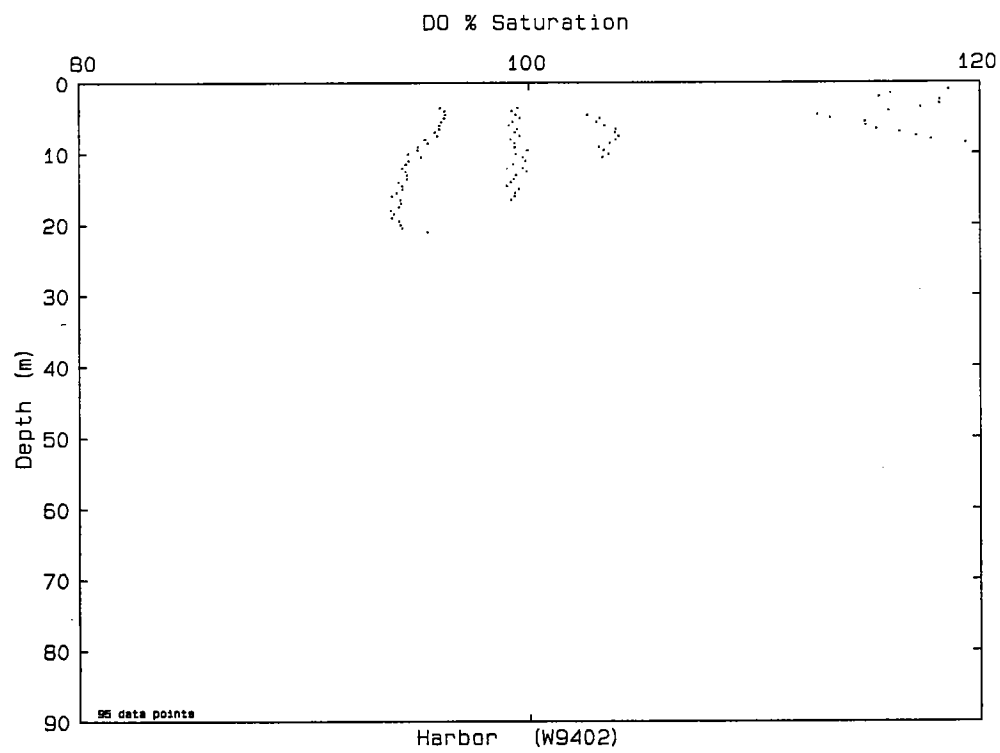
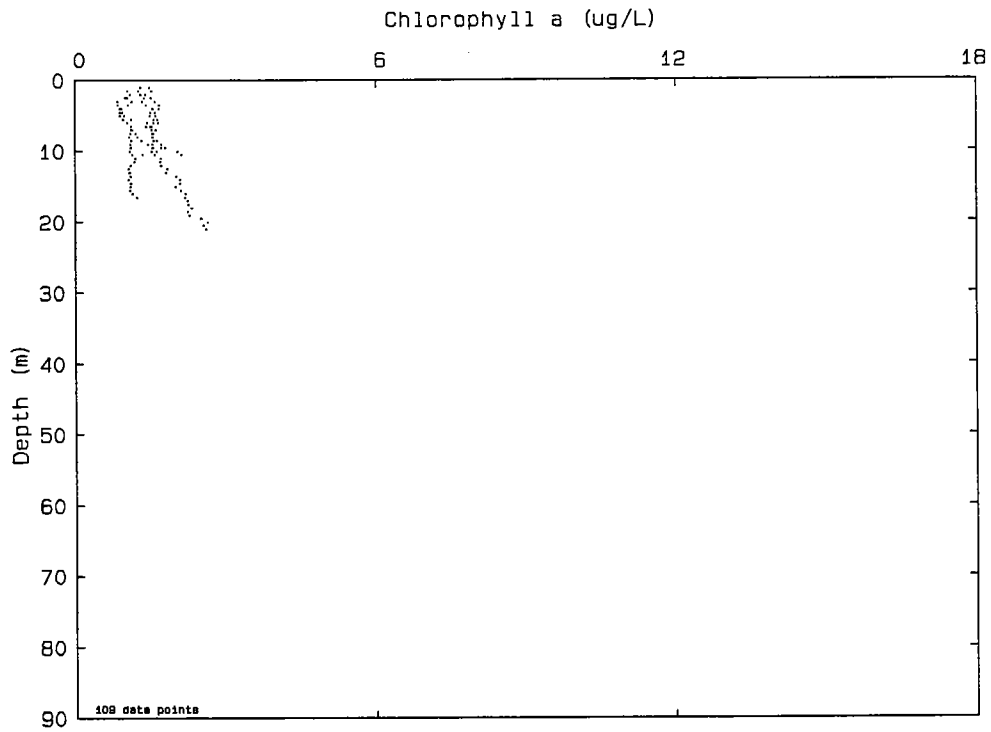


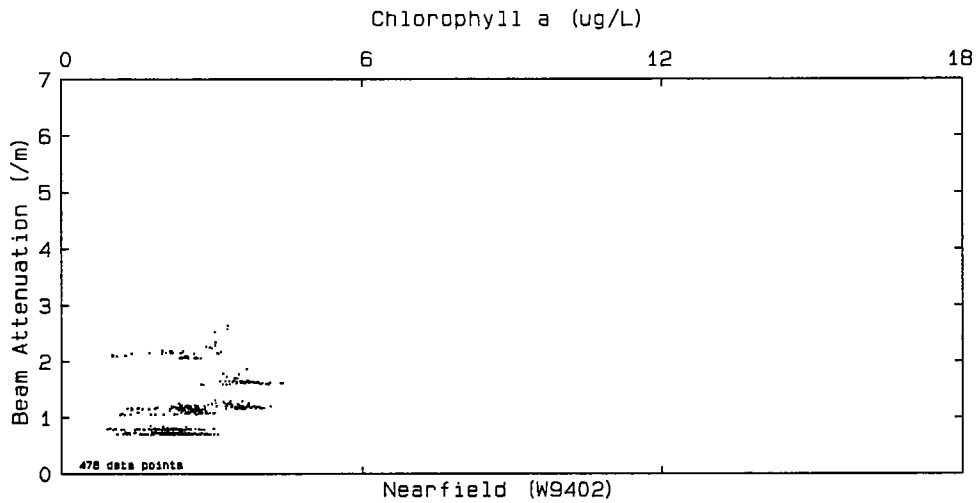
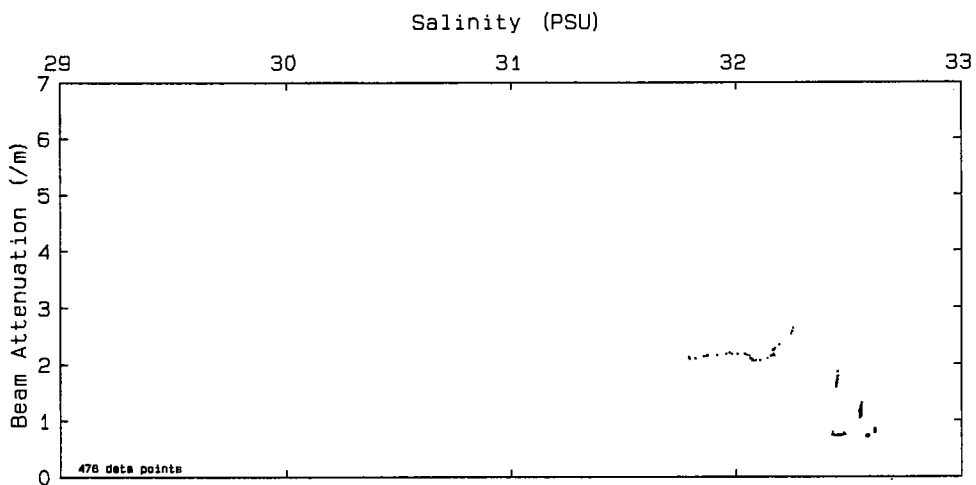
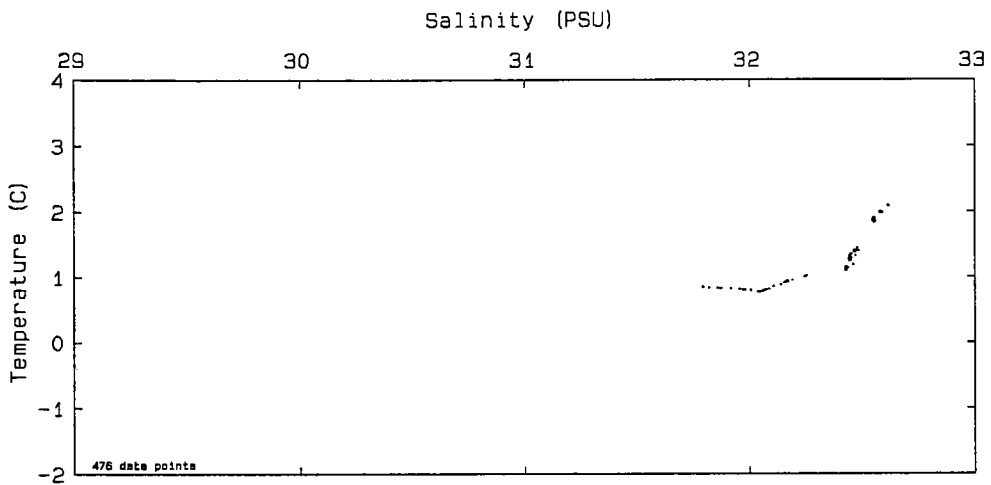


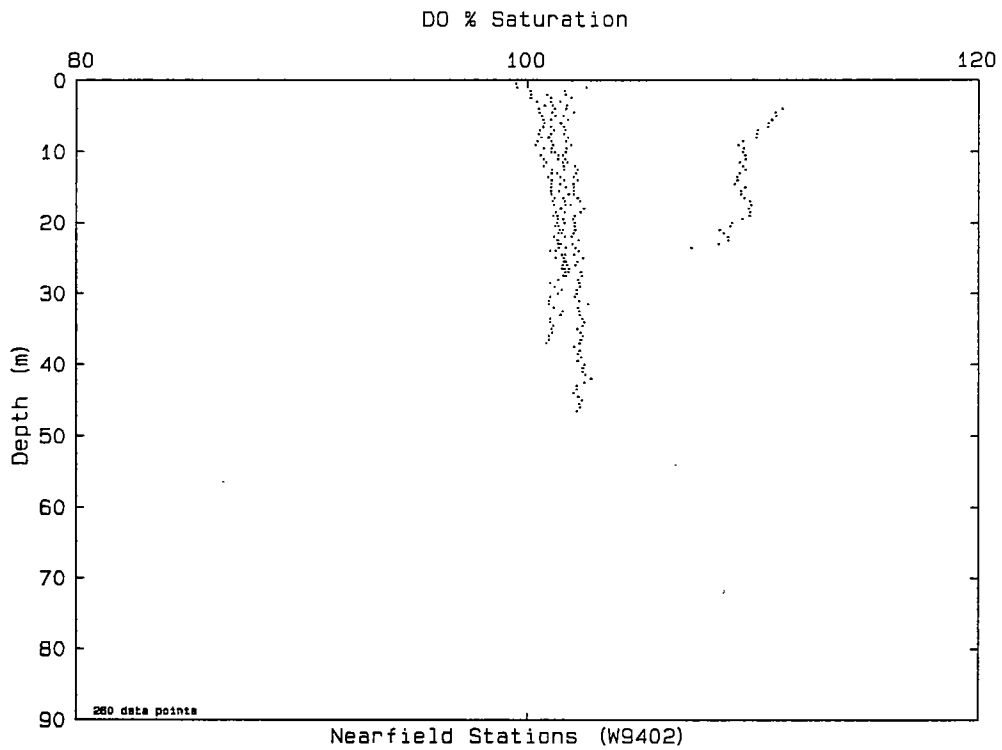
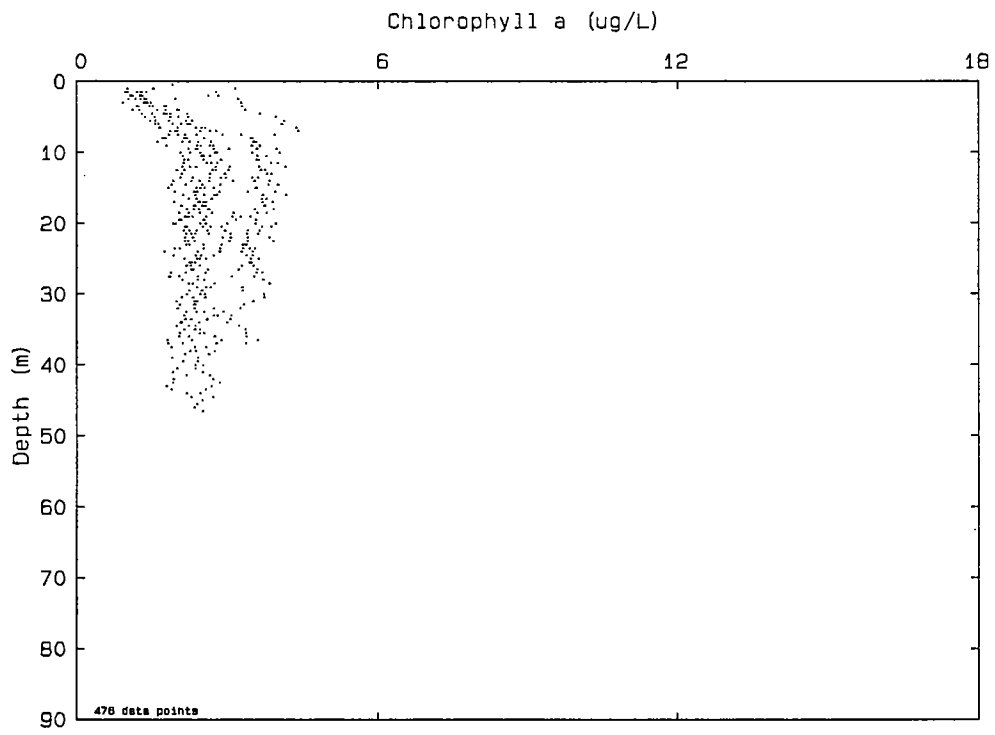




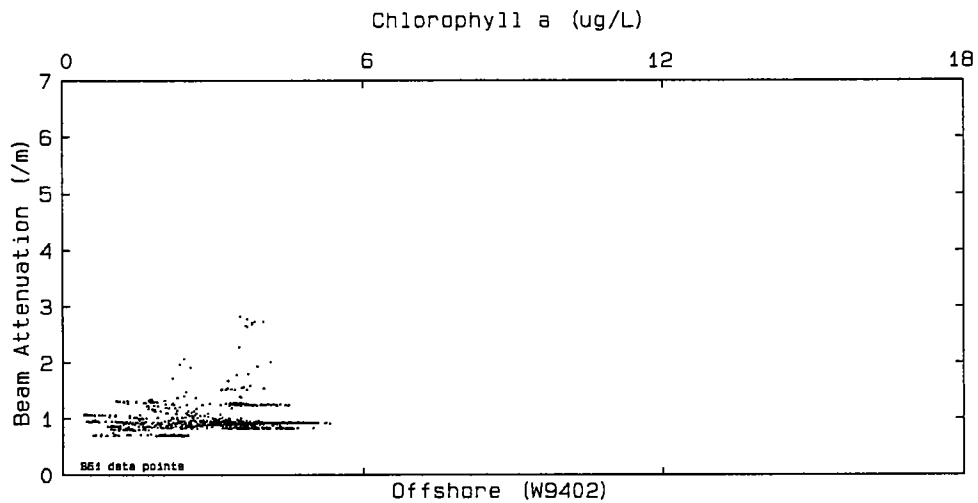
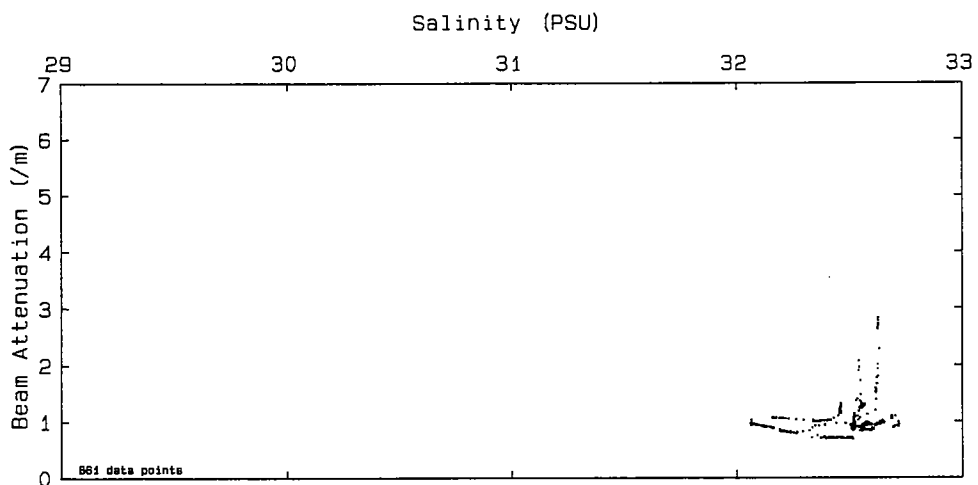
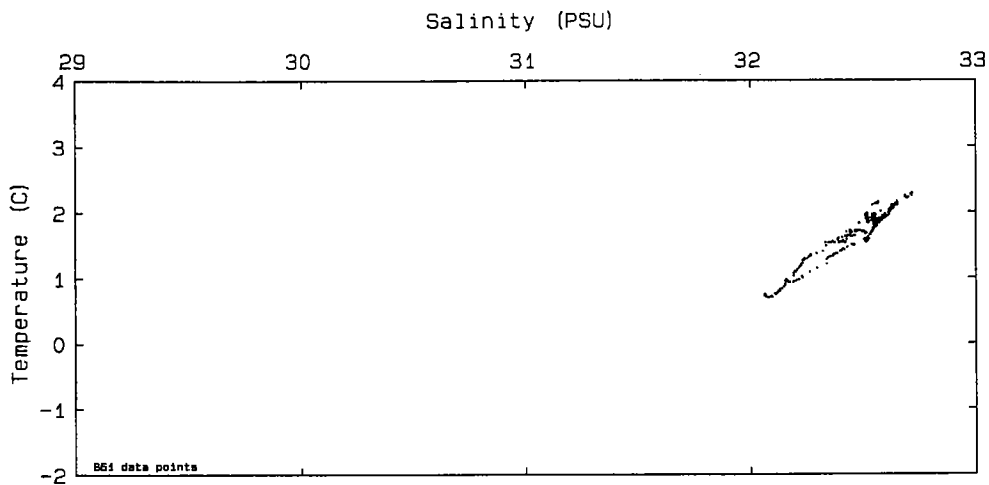


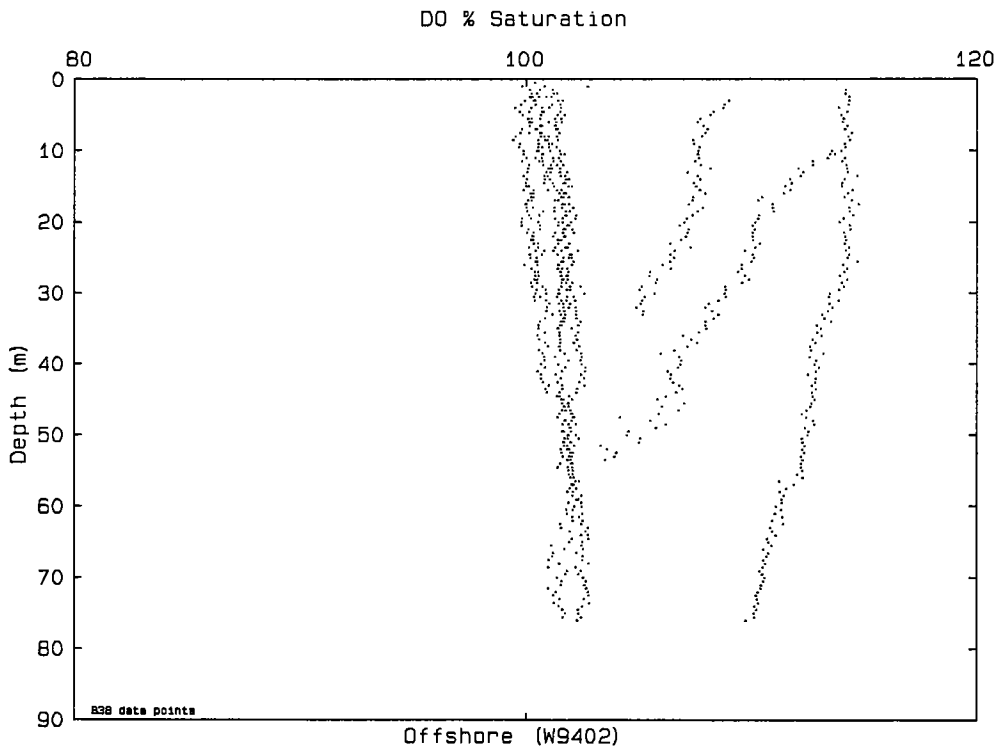
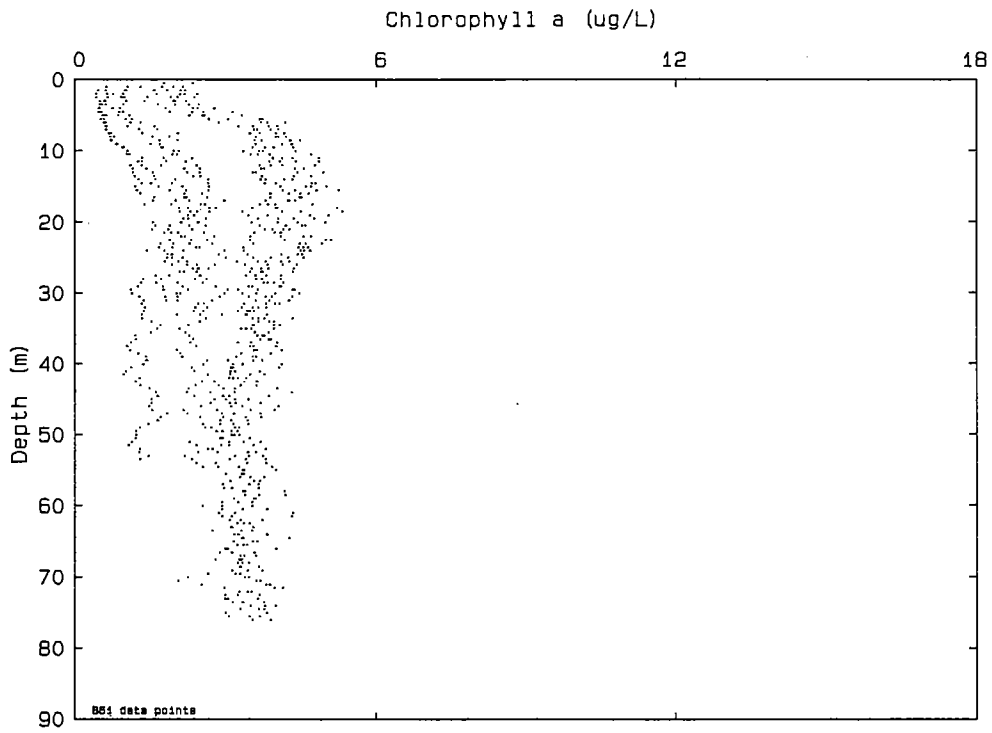












## APPENDIX D

### METABOLISM DATA AND PRODUCTIVITY IRRADIANCE MODELING

#### Part 1

#### <sup>14</sup>C Incubation Data

Table D1-1 includes data from the February (W9401) and Early March (W9402) surveys. The table includes data for samples from BioProductivity stations F23P and N16P that were incubated from surface, mid-surface, mid-depth, and mid-bottom depths (dark and light bottles). <sup>14</sup>C-production was calculated using measured dissolved inorganic carbon and after subtraction of the mean (n=3) dark bottle uptake rates as described in the text report. Where <sup>14</sup>C (DPM) for a dark bottle are labeled with an s qualifier the data were suspect and were not used in calculating production. In Appendix D, Part 2, the criterion used for rejecting suspect data is given.

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9401	F23P	08-FEB-94	0816	2.27	W94010076					4771256.0	25.9	4.9	
W9401	F23P	08-FEB-94	0816	2.27	W94010076	-3	DARK	0	247.0				
W9401	F23P	08-FEB-94	0816	2.27	W94010076	-2	DARK	0	280.1	s			
W9401	F23P	08-FEB-94	0816	2.27	W94010076	-1	DARK	0	246.6				
W9401	F23P	08-FEB-94	0816	2.27	W94010076	1	LIGHT	1232	795.3				0.6
W9401	F23P	08-FEB-94	0816	2.27	W94010076	2	LIGHT	911	577.1				0.4
W9401	F23P	08-FEB-94	0816	2.27	W94010076	3	LIGHT	1416	362.9				0.1
W9401	F23P	08-FEB-94	0816	2.27	W94010076	4	LIGHT	1975	394.9				0.2
W9401	F23P	08-FEB-94	0816	2.27	W94010076	5	LIGHT	533	682.3				0.5
W9401	F23P	08-FEB-94	0816	2.27	W94010076	6	LIGHT	210	594.0				0.4
W9401	F23P	08-FEB-94	0816	2.27	W94010076	7	LIGHT	22	495.8				0.3
W9401	F23P	08-FEB-94	0816	2.27	W94010076	8	LIGHT	21	344.7				0.1
W9401	F23P	08-FEB-94	0816	2.27	W94010076	9	LIGHT	210	607.5				0.4
W9401	F23P	08-FEB-94	0816	2.27	W94010076	10	LIGHT	82	502.0				0.3
W9401	F23P	08-FEB-94	0816	2.27	W94010076	11	LIGHT	3	226.7				-0.0
W9401	F23P	08-FEB-94	0816	2.27	W94010076	12	LIGHT	4	564.1				0.4
W9401	F23P	15-FEB-94	0745	2.50	W94010333					4704308.0	26.0	5.0	
W9401	F23P	15-FEB-94	0745	2.50	W94010333	-3	DARK	0	1694.5				
W9401	F23P	15-FEB-94	0745	2.50	W94010333	-2	DARK	0	988.2				
W9401	F23P	15-FEB-94	0745	2.50	W94010333	-1	DARK	0	1570.0				
W9401	F23P	15-FEB-94	0745	2.50	W94010333	1	LIGHT	814	3050.7				1.9
W9401	F23P	15-FEB-94	0745	2.50	W94010333	2	LIGHT	1254	6371.2				5.8
W9401	F23P	15-FEB-94	0745	2.50	W94010333	3	LIGHT	2047	3095.6				1.9
W9401	F23P	15-FEB-94	0745	2.50	W94010333	4	LIGHT	1350	3233.1				2.1
W9401	F23P	15-FEB-94	0745	2.50	W94010333	5	LIGHT	380	9855.0				9.8
W9401	F23P	15-FEB-94	0745	2.50	W94010333	6	LIGHT	208	3357.0				2.3
W9401	F23P	15-FEB-94	0745	2.50	W94010333	7	LIGHT	22	5085.9				4.3
W9401	F23P	15-FEB-94	0745	2.50	W94010333	8	LIGHT	21	7833.6				7.5
W9401	F23P	15-FEB-94	0745	2.50	W94010333	9	LIGHT	208	3276.3				2.2
W9401	F23P	15-FEB-94	0745	2.50	W94010333	10	LIGHT	82	2463.8				1.2
W9401	F23P	15-FEB-94	0745	2.50	W94010333	11	LIGHT	4	2183.5				0.9
W9401	F23P	15-FEB-94	0745	2.50	W94010333	12	LIGHT	3	11173.0				11.3
W9401	F23P	08-FEB-94	0815	4.07	W94010075					4771256.0	26.2	4.9	
W9401	F23P	08-FEB-94	0815	4.07	W94010075	-3	DARK	0	151.0				
W9401	F23P	08-FEB-94	0815	4.07	W94010075	-2	DARK	0	492.8				
W9401	F23P	08-FEB-94	0815	4.07	W94010075	-1	DARK	0	119.9				
W9401	F23P	08-FEB-94	0815	4.07	W94010075	1	LIGHT	695	527.7				0.3
W9401	F23P	08-FEB-94	0815	4.07	W94010075	2	LIGHT	1025	450.3				0.2
W9401	F23P	08-FEB-94	0815	4.07	W94010075	3	LIGHT	253	499.1				0.3
W9401	F23P	08-FEB-94	0815	4.07	W94010075	4	LIGHT	208	672.1				0.5
W9401	F23P	08-FEB-94	0815	4.07	W94010075	5	LIGHT	1632	295.1				0.0

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9401	F23P	08-FEB-94	0815	4.07	W94010075	6	LIGHT	224	287.2				0.0
W9401	F23P	08-FEB-94	0815	4.07	W94010075	7	LIGHT	20	325.3				0.1
W9401	F23P	08-FEB-94	0815	4.07	W94010075	8	LIGHT	13	307.9				0.1
W9401	F23P	08-FEB-94	0815	4.07	W94010075	9	LIGHT	62	515.6				0.3
W9401	F23P	08-FEB-94	0815	4.07	W94010075	10	LIGHT	323	867.1				0.7
W9401	F23P	08-FEB-94	0815	4.07	W94010075	11	LIGHT	2	156.0				-0.1
W9401	F23P	08-FEB-94	0815	4.07	W94010075	12	LIGHT	2	174.3				-0.1
W9401	F23P	15-FEB-94	0743	6.36	W94010332					4704308.0	26.5	5.2	
W9401	F23P	15-FEB-94	0743	6.36	W94010332	-3	DARK	0	6823.6				
W9401	F23P	15-FEB-94	0743	6.36	W94010332	-2	DARK	0	1000.4				
W9401	F23P	15-FEB-94	0743	6.36	W94010332	-1	DARK	0	7374.9				
W9401	F23P	15-FEB-94	0743	6.36	W94010332	1	LIGHT	183	2334.2				-3.1
W9401	F23P	15-FEB-94	0743	6.36	W94010332	2	LIGHT	605	1560.7				-4.0
W9401	F23P	15-FEB-94	0743	6.36	W94010332	3	LIGHT	975	6404.8				1.5
W9401	F23P	15-FEB-94	0743	6.36	W94010332	4	LIGHT	1595	2005.4				-3.5
W9401	F23P	15-FEB-94	0743	6.36	W94010332	5	LIGHT	223	5234.7				0.2
W9401	F23P	15-FEB-94	0743	6.36	W94010332	6	LIGHT	212	2077.3				-3.4
W9401	F23P	15-FEB-94	0743	6.36	W94010332	7	LIGHT	306	1844.5				-3.7
W9401	F23P	15-FEB-94	0743	6.36	W94010332	8	LIGHT	59	1775.0				-3.8
W9401	F23P	15-FEB-94	0743	6.36	W94010332	9	LIGHT	12	7381.3				2.7
W9401	F23P	15-FEB-94	0743	6.36	W94010332	10	LIGHT	19	2959.9				-2.4
W9401	F23P	15-FEB-94	0743	6.36	W94010332	11	LIGHT	2	1524.0				-4.1
W9401	F23P	15-FEB-94	0743	6.36	W94010332	12	LIGHT	2	7979.9				3.3
W9401	F23P	08-FEB-94	0814	9.88	W94010074					4771256.0	25.5	5.6	
W9401	F23P	08-FEB-94	0814	9.88	W94010074	-3	DARK	0	154.1				
W9401	F23P	08-FEB-94	0814	9.88	W94010074	-2	DARK	0	162.4				
W9401	F23P	08-FEB-94	0814	9.88	W94010074	-1	DARK	0	180.5				
W9401	F23P	08-FEB-94	0814	9.88	W94010074	1	LIGHT	105	724.4				0.6
W9401	F23P	08-FEB-94	0814	9.88	W94010074	2	LIGHT	851	727.4				0.6
W9401	F23P	08-FEB-94	0814	9.88	W94010074	3	LIGHT	842	642.0				0.5
W9401	F23P	08-FEB-94	0814	9.88	W94010074	4	LIGHT	1357	508.2				0.3
W9401	F23P	08-FEB-94	0814	9.88	W94010074	5	LIGHT	1434	681.4				0.5
W9401	F23P	08-FEB-94	0814	9.88	W94010074	6	LIGHT	238	735.1				0.6
W9401	F23P	08-FEB-94	0814	9.88	W94010074	7	LIGHT	24	393.3				0.2
W9401	F23P	08-FEB-94	0814	9.88	W94010074	8	LIGHT	179	671.7				0.5
W9401	F23P	08-FEB-94	0814	9.88	W94010074	9	LIGHT	25	313.7				0.1
W9401	F23P	08-FEB-94	0814	9.88	W94010074	10	LIGHT	33	288.6				0.1
W9401	F23P	08-FEB-94	0814	9.88	W94010074	11	LIGHT	2	207.7				0.0
W9401	F23P	08-FEB-94	0814	9.88	W94010074	12	LIGHT	2	163.6				-0.0
W9401	F23P	15-FEB-94	0755	10.53	W94010338					4704308.0	26.4	5.7	
W9401	F23P	15-FEB-94	0755	10.53	W94010338	-3	DARK	0	527.1				

090186

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9401	F23P	15-FEB-94	0755	10.53	W94010338	-2	DARK	0	6336.8	s			
W9401	F23P	15-FEB-94	0755	10.53	W94010338	-1	DARK	0	421.9				
W9401	F23P	15-FEB-94	0755	10.53	W94010338	1	LIGHT	115	5175.0				4.9
W9401	F23P	15-FEB-94	0755	10.53	W94010338	2	LIGHT	1619	1779.8				1.4
W9401	F23P	15-FEB-94	0755	10.53	W94010338	3	LIGHT	189	2972.6				2.6
W9401	F23P	15-FEB-94	0755	10.53	W94010338	4	LIGHT	863	1362.2				0.9
W9401	F23P	15-FEB-94	0755	10.53	W94010338	5	LIGHT	939	2431.5				2.0
W9401	F23P	15-FEB-94	0755	10.53	W94010338	6	LIGHT	252	1351.6				0.9
W9401	F23P	15-FEB-94	0755	10.53	W94010338	7	LIGHT	25	7769.1				7.5
W9401	F23P	15-FEB-94	0755	10.53	W94010338	8	LIGHT	189	1351.4				0.9
W9401	F23P	15-FEB-94	0755	10.53	W94010338	9	LIGHT	26	7534.7				7.3
W9401	F23P	15-FEB-94	0755	10.53	W94010338	10	LIGHT	35	1167.1				0.7
W9401	F23P	15-FEB-94	0755	10.53	W94010338	11	LIGHT	2	5448.5				5.1
W9401	F23P	15-FEB-94	0755	10.53	W94010338	12	LIGHT	2	5940.6				5.7
W9401	F23P	08-FEB-94	0813	15.36	W94010073					4771256.0	26.0	5.7	
W9401	F23P	08-FEB-94	0813	15.36	W94010073	-3	DARK	0	223.5				
W9401	F23P	08-FEB-94	0813	15.36	W94010073	-2	DARK	0	121.9				
W9401	F23P	08-FEB-94	0813	15.36	W94010073	-1	DARK	0	141.3				
W9401	F23P	08-FEB-94	0813	15.36	W94010073	1	LIGHT	441	716.1				0.6
W9401	F23P	08-FEB-94	0813	15.36	W94010073	2	LIGHT	658	959.2				0.8
W9401	F23P	08-FEB-94	0813	15.36	W94010073	3	LIGHT	997	344.7				0.2
W9401	F23P	08-FEB-94	0813	15.36	W94010073	4	LIGHT	1403	604.0				0.4
W9401	F23P	08-FEB-94	0813	15.36	W94010073	5	LIGHT	237	698.6				0.5
W9401	F23P	08-FEB-94	0813	15.36	W94010073	6	LIGHT	153	756.0				0.6
W9401	F23P	08-FEB-94	0813	15.36	W94010073	7	LIGHT	54	516.0				0.4
W9401	F23P	08-FEB-94	0813	15.36	W94010073	8	LIGHT	228	1258.8				1.1
W9401	F23P	08-FEB-94	0813	15.36	W94010073	9	LIGHT	16	340.3				0.2
W9401	F23P	08-FEB-94	0813	15.36	W94010073	10	LIGHT	11	315.8				0.2
W9401	F23P	08-FEB-94	0813	15.36	W94010073	11	LIGHT	2	347.5				0.2
W9401	F23P	08-FEB-94	0813	15.36	W94010073	12	LIGHT	2	517.6				0.4
W9401	F23P	15-FEB-94	0741	17.63	W94010330					4704308.0	26.4	5.9	
W9401	F23P	15-FEB-94	0741	17.63	W94010330	-3	DARK	0	7393.3				
W9401	F23P	15-FEB-94	0741	17.63	W94010330	-2	DARK	0	10433.0				
W9401	F23P	15-FEB-94	0741	17.63	W94010330	-1	DARK	0	9960.9				
W9401	F23P	15-FEB-94	0741	17.63	W94010330	1	LIGHT	708	1344.0				-7.9
W9401	F23P	15-FEB-94	0741	17.63	W94010330	2	LIGHT	679	3598.7				-5.7
W9401	F23P	15-FEB-94	0741	17.63	W94010330	3	LIGHT	257	1320.6				-8.0
W9401	F23P	15-FEB-94	0741	17.63	W94010330	4	LIGHT	1622	2289.9				-7.0
W9401	F23P	15-FEB-94	0741	17.63	W94010330	5	LIGHT	1025	1348.1				-7.9
W9401	F23P	15-FEB-94	0741	17.63	W94010330	6	LIGHT	169	7057.2				-2.2
W9401	F23P	15-FEB-94	0741	17.63	W94010330	7	LIGHT	60	1037.5				-8.3

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9401	F23P	15-FEB-94	0741	17.63	W94010330	8	LIGHT	128	12074.9				2.8
W9401	F23P	15-FEB-94	0741	17.63	W94010330	9	LIGHT	12	7628.4				-1.6
W9401	F23P	15-FEB-94	0741	17.63	W94010330	10	LIGHT	18	4357.1				-4.9
W9401	F23P	15-FEB-94	0741	17.63	W94010330	11	LIGHT	2	951.5				-8.3
W9401	F23P	15-FEB-94	0741	17.63	W94010330	12	LIGHT	2	6649.5				-2.6
W9401	N16P	15-FEB-94	1052	2.54	W94010389					4704308.0	26.3	5.8	
W9401	N16P	15-FEB-94	1052	2.54	W94010389	-3	DARK	0	375.5				
W9401	N16P	15-FEB-94	1052	2.54	W94010389	-2	DARK	0	289.0				
W9401	N16P	15-FEB-94	1052	2.54	W94010389	-1	DARK	0	166.4				
W9401	N16P	15-FEB-94	1052	2.54	W94010389	1	LIGHT	1238	3112.1				2.9
W9401	N16P	15-FEB-94	1052	2.54	W94010389	2	LIGHT	1997	2054.1				1.8
W9401	N16P	15-FEB-94	1052	2.54	W94010389	3	LIGHT	753	5186.2				5.0
W9401	N16P	15-FEB-94	1052	2.54	W94010389	4	LIGHT	363	2682.9				2.5
W9401	N16P	15-FEB-94	1052	2.54	W94010389	5	LIGHT	394	3575.3				3.4
W9401	N16P	15-FEB-94	1052	2.54	W94010389	6	LIGHT	259	3493.3				3.3
W9401	N16P	15-FEB-94	1052	2.54	W94010389	7	LIGHT	269	2726.8				2.5
W9401	N16P	15-FEB-94	1052	2.54	W94010389	8	LIGHT	365	2045.0				1.8
W9401	N16P	15-FEB-94	1052	2.54	W94010389	9	LIGHT	18	1830.1				1.6
W9401	N16P	15-FEB-94	1052	2.54	W94010389	10	LIGHT	11	981.1				0.7
W9401	N16P	15-FEB-94	1052	2.54	W94010389	11	LIGHT	2	733.3				0.5
W9401	N16P	15-FEB-94	1052	2.54	W94010389	12	LIGHT	3	526.0				0.3
W9401	N16P	08-FEB-94	1232	2.77	W94010200					4771256.0	25.6	4.9	
W9401	N16P	08-FEB-94	1232	2.77	W94010200	-3	DARK	0	722.1				
W9401	N16P	08-FEB-94	1232	2.77	W94010200	-2	DARK	0	464.8				
W9401	N16P	08-FEB-94	1232	2.77	W94010200	-1	DARK	0	369.3				
W9401	N16P	08-FEB-94	1232	2.77	W94010200	1	LIGHT	1378	700.5				0.2
W9401	N16P	08-FEB-94	1232	2.77	W94010200	2	LIGHT	1922	580.8				0.0
W9401	N16P	08-FEB-94	1232	2.77	W94010200	3	LIGHT	739	795.6				0.3
W9401	N16P	08-FEB-94	1232	2.77	W94010200	4	LIGHT	345	645.4				0.1
W9401	N16P	08-FEB-94	1232	2.77	W94010200	5	LIGHT	389	1489.1				1.1
W9401	N16P	08-FEB-94	1232	2.77	W94010200	6	LIGHT	261	1667.2				1.3
W9401	N16P	08-FEB-94	1232	2.77	W94010200	7	LIGHT	368	3019.0				2.8
W9401	N16P	08-FEB-94	1232	2.77	W94010200	8	LIGHT	271	613.1				0.1
W9401	N16P	08-FEB-94	1232	2.77	W94010200	9	LIGHT	18	615.8				0.1
W9401	N16P	08-FEB-94	1232	2.77	W94010200	10	LIGHT	11	575.1				0.0
W9401	N16P	08-FEB-94	1232	2.77	W94010200	11	LIGHT	3	193.6				-0.4
W9401	N16P	08-FEB-94	1232	2.77	W94010200	12	LIGHT	2	2114.5				1.8
W9401	N16P	08-FEB-94	1231	8.65	W94010199					4771256.0	25.7	5.0	
W9401	N16P	08-FEB-94	1231	8.65	W94010199	-3	DARK	0	1142.2				
W9401	N16P	08-FEB-94	1231	8.65	W94010199	-2	DARK	0	269.0				
W9401	N16P	08-FEB-94	1231	8.65	W94010199	-1	DARK	0	208.7				

000188

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPH)	Stock (DPH)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9401	N16P	08-FEB-94	1231	8.65	W94010199	1	LIGHT	1100	1638.5				1.2
W9401	N16P	08-FEB-94	1231	8.65	W94010199	2	LIGHT	1567	3055.1				2.8
W9401	N16P	08-FEB-94	1231	8.65	W94010199	3	LIGHT	939	1518.6				1.1
W9401	N16P	08-FEB-94	1231	8.65	W94010199	4	LIGHT	556	2733.6				2.5
W9401	N16P	08-FEB-94	1231	8.65	W94010199	5	LIGHT	258	2695.5				2.4
W9401	N16P	08-FEB-94	1231	8.65	W94010199	6	LIGHT	231	6665.4				6.9
W9401	N16P	08-FEB-94	1231	8.65	W94010199	7	LIGHT	26	4948.5				5.0
W9401	N16P	08-FEB-94	1231	8.65	W94010199	8	LIGHT	22	9351.0				10.0
W9401	N16P	08-FEB-94	1231	8.65	W94010199	9	LIGHT	170	7789.8				8.2
W9401	N16P	08-FEB-94	1231	8.65	W94010199	10	LIGHT	218	8360.7				8.8
W9401	N16P	08-FEB-94	1231	8.65	W94010199	11	LIGHT	2	1243.5				0.8
W9401	N16P	08-FEB-94	1231	8.65	W94010199	12	LIGHT	1	1199.5				0.7
W9401	N16P	15-FEB-94	1051	8.99	W94010388					4704308.0	26.5	5.7	
W9401	N16P	15-FEB-94	1051	8.99	W94010388	-3	DARK	0	97.3				
W9401	N16P	15-FEB-94	1051	8.99	W94010388	-2	DARK	0	165.0				
W9401	N16P	15-FEB-94	1051	8.99	W94010388	-1	DARK	0	89.1				
W9401	N16P	15-FEB-94	1051	8.99	W94010388	1	LIGHT	971	3752.1				3.8
W9401	N16P	15-FEB-94	1051	8.99	W94010388	2	LIGHT	932	2606.7				2.6
W9401	N16P	15-FEB-94	1051	8.99	W94010388	3	LIGHT	1496	3239.5				3.2
W9401	N16P	15-FEB-94	1051	8.99	W94010388	4	LIGHT	483	5070.7				5.1
W9401	N16P	15-FEB-94	1051	8.99	W94010388	5	LIGHT	220	6757.2				6.9
W9401	N16P	15-FEB-94	1051	8.99	W94010388	6	LIGHT	218	2745.3				2.7
W9401	N16P	15-FEB-94	1051	8.99	W94010388	7	LIGHT	21	1954.6				1.9
W9401	N16P	15-FEB-94	1051	8.99	W94010388	8	LIGHT	25	1246.1				1.2
W9401	N16P	15-FEB-94	1051	8.99	W94010388	9	LIGHT	207	2773.0				2.7
W9401	N16P	15-FEB-94	1051	8.99	W94010388	10	LIGHT	160	2548.9				2.5
W9401	N16P	15-FEB-94	1051	8.99	W94010388	11	LIGHT	1	362.5				0.3
W9401	N16P	15-FEB-94	1051	8.99	W94010388	12	LIGHT	2	241.1				0.1
W9401	N16P	08-FEB-94	1230	18.07	W94010198					4771256.0	25.3	5.7	
W9401	N16P	08-FEB-94	1230	18.07	W94010198	-3	DARK	0	540.0				
W9401	N16P	08-FEB-94	1230	18.07	W94010198	-2	DARK	0	2506.7				
W9401	N16P	08-FEB-94	1230	18.07	W94010198	-1	DARK	0	1375.4				
W9401	N16P	08-FEB-94	1230	18.07	W94010198	1	LIGHT	1321	1775.5				0.3
W9401	N16P	08-FEB-94	1230	18.07	W94010198	2	LIGHT	1388	4687.9				3.1
W9401	N16P	08-FEB-94	1230	18.07	W94010198	3	LIGHT	570					-1.4
W9401	N16P	08-FEB-94	1230	18.07	W94010198	4	LIGHT	140	1939.5				0.5
W9401	N16P	08-FEB-94	1230	18.07	W94010198	5	LIGHT	140	2494.9				1.0
W9401	N16P	08-FEB-94	1230	18.07	W94010198	6	LIGHT	184					-1.4
W9401	N16P	08-FEB-94	1230	18.07	W94010198	7	LIGHT	20	5592.7				4.0
W9401	N16P	08-FEB-94	1230	18.07	W94010198	8	LIGHT	4	2269.1				0.8
W9401	N16P	08-FEB-94	1230	18.07	W94010198	9	LIGHT	248	1678.6				0.2



Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light uEm/m <sup>2</sup> /sec	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9401	N16P	08-FEB-94	1230	18.07	W94010198	10	LIGHT	296	1731.7				0.3
W9401	N16P	08-FEB-94	1230	18.07	W94010198	11	LIGHT	2	1106.1				-0.4
W9401	N16P	08-FEB-94	1230	18.07	W94010198	12	LIGHT	1	2077.4				0.6
W9401	N16P	15-FEB-94	1050	18.36	W94010387					4704308.0	26.4	6.1	
W9401	N16P	15-FEB-94	1050	18.36	W94010387	-3	DARK	0	1048.3				
W9401	N16P	15-FEB-94	1050	18.36	W94010387	-2	DARK	0	122.1				
W9401	N16P	15-FEB-94	1050	18.36	W94010387	-1	DARK	0	364.1				
W9401	N16P	15-FEB-94	1050	18.36	W94010387	1	LIGHT	1299	2646.7				2.1
W9401	N16P	15-FEB-94	1050	18.36	W94010387	2	LIGHT	1468	2283.7				1.7
W9401	N16P	15-FEB-94	1050	18.36	W94010387	3	LIGHT	549	3964.4				3.4
W9401	N16P	15-FEB-94	1050	18.36	W94010387	4	LIGHT	108	2691.1				2.1
W9401	N16P	15-FEB-94	1050	18.36	W94010387	5	LIGHT	124	2275.0				1.7
W9401	N16P	15-FEB-94	1050	18.36	W94010387	6	LIGHT	196	3673.8				3.1
W9401	N16P	15-FEB-94	1050	18.36	W94010387	7	LIGHT	263	3047.7				2.5
W9401	N16P	15-FEB-94	1050	18.36	W94010387	8	LIGHT	314	2883.9				2.3
W9401	N16P	15-FEB-94	1050	18.36	W94010387	9	LIGHT	5	560.1				0.0
W9401	N16P	15-FEB-94	1050	18.36	W94010387	10	LIGHT	22	1030.3				0.5
W9401	N16P	15-FEB-94	1050	18.36	W94010387	11	LIGHT	1	225.7				-0.3
W9401	N16P	15-FEB-94	1050	18.36	W94010387	12	LIGHT	2	812.1				0.3
W9401	N16P	08-FEB-94	1229	28.54	W94010197					4771256.0	26.0	5.7	
W9401	N16P	08-FEB-94	1229	28.54	W94010197	-3	DARK	0	885.5				
W9401	N16P	08-FEB-94	1229	28.54	W94010197	-2	DARK	0	326.6				
W9401	N16P	08-FEB-94	1229	28.54	W94010197	-1	DARK	0	681.5				
W9401	N16P	08-FEB-94	1229	28.54	W94010197	1	LIGHT	972	809.4				0.2
W9401	N16P	08-FEB-94	1229	28.54	W94010197	2	LIGHT	1436	6981.6				6.4
W9401	N16P	08-FEB-94	1229	28.54	W94010197	3	LIGHT	875	1433.6				0.8
W9401	N16P	08-FEB-94	1229	28.54	W94010197	4	LIGHT	258	1934.1				1.3
W9401	N16P	08-FEB-94	1229	28.54	W94010197	5	LIGHT	223	6924.0				6.4
W9401	N16P	08-FEB-94	1229	28.54	W94010197	6	LIGHT	209	2529.3				1.9
W9401	N16P	08-FEB-94	1229	28.54	W94010197	7	LIGHT	116	1383.8				0.8
W9401	N16P	08-FEB-94	1229	28.54	W94010197	8	LIGHT	166	2932.4				2.3
W9401	N16P	08-FEB-94	1229	28.54	W94010197	9	LIGHT	16	3914.3				3.3
W9401	N16P	08-FEB-94	1229	28.54	W94010197	10	LIGHT	8	9381.5				8.8
W9401	N16P	08-FEB-94	1229	28.54	W94010197	11	LIGHT	2	5189.7				4.6
W9401	N16P	08-FEB-94	1229	28.54	W94010197	12	LIGHT	1	5247.3				4.7
W9401	N16P	15-FEB-94	1049	28.76	W94010386					4704308.0	26.5	6.3	
W9401	N16P	15-FEB-94	1049	28.76	W94010386	-3	DARK	0	608.6				
W9401	N16P	15-FEB-94	1049	28.76	W94010386	-2	DARK	0	756.2				
W9401	N16P	15-FEB-94	1049	28.76	W94010386	-1	DARK	0	681.3				
W9401	N16P	15-FEB-94	1049	28.76	W94010386	1	LIGHT	1023	2800.2				2.0
W9401	N16P	15-FEB-94	1049	28.76	W94010386	2	LIGHT	1671	2572.2				1.8

000190

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9401	N16P	15-FEB-94	1049	28.76	W94010386	3	LIGHT	229	2420.4				1.6
W9401	N16P	15-FEB-94	1049	28.76	W94010386	4	LIGHT	985	2769.1				2.0
W9401	N16P	15-FEB-94	1049	28.76	W94010386	5	LIGHT	273	3125.6				2.3
W9401	N16P	15-FEB-94	1049	28.76	W94010386	6	LIGHT	232	3586.7				2.7
W9401	N16P	15-FEB-94	1049	28.76	W94010386	7	LIGHT	18	3205.0				2.4
W9401	N16P	15-FEB-94	1049	28.76	W94010386	8	LIGHT	9	621.2				-0.1
W9401	N16P	15-FEB-94	1049	28.76	W94010386	9	LIGHT	128	3319.3				2.5
W9401	N16P	15-FEB-94	1049	28.76	W94010386	10	LIGHT	183	3164.4				2.3
W9401	N16P	15-FEB-94	1049	28.76	W94010386	11	LIGHT	1	1033.2				0.3
W9401	N16P	15-FEB-94	1049	28.76	W94010386	12	LIGHT	2	1489.0				0.8
W9402	F23P	05-MAR-94	0708	2.24	W94020419					5567328.0	26.2	5.3	
W9402	F23P	05-MAR-94	0708	2.24	W94020419	-3	DARK	0	7842.7				
W9402	F23P	05-MAR-94	0708	2.24	W94020419	-2	DARK	0	8080.3				
W9402	F23P	05-MAR-94	0708	2.24	W94020419	-1	DARK	0	8569.5				
W9402	F23P	05-MAR-94	0708	2.24	W94020419	1	LIGHT	288		e			e
W9402	F23P	05-MAR-94	0708	2.24	W94020419	2	LIGHT	834	13956.6				5.5
W9402	F23P	05-MAR-94	0708	2.24	W94020419	3	LIGHT	1093	13550.8				5.1
W9402	F23P	05-MAR-94	0708	2.24	W94020419	4	LIGHT	1216	12908.5				4.5
W9402	F23P	05-MAR-94	0708	2.24	W94020419	5	LIGHT	1843	12478.7				4.1
W9402	F23P	05-MAR-94	0708	2.24	W94020419	6	LIGHT	190	10736.5				2.4
W9402	F23P	05-MAR-94	0708	2.24	W94020419	7	LIGHT	20	4286.8				-3.7
W9402	F23P	05-MAR-94	0708	2.24	W94020419	8	LIGHT	19	13417.7				5.0
W9402	F23P	05-MAR-94	0708	2.24	W94020419	9	LIGHT	190	8346.6				0.2
W9402	F23P	05-MAR-94	0708	2.24	W94020419	10	LIGHT	74	7211.9				-0.9
W9402	F23P	05-MAR-94	0708	2.24	W94020419	11	LIGHT	4	2174.6				-5.6
W9402	F23P	05-MAR-94	0708	2.24	W94020419	12	LIGHT	2	2395.0				-5.4
W9402	F23P	01-MAR-94	0651	2.80	W94020043					5558642.0	25.7	5.2	
W9402	F23P	01-MAR-94	0651	2.80	W94020043	-3	DARK	0	1118.3				
W9402	F23P	01-MAR-94	0651	2.80	W94020043	-2	DARK	0	1116.0				
W9402	F23P	01-MAR-94	0651	2.80	W94020043	-1	DARK	0	1170.3				
W9402	F23P	01-MAR-94	0651	2.80	W94020043	1	LIGHT	339		e			e
W9402	F23P	01-MAR-94	0651	2.80	W94020043	2	LIGHT	1271	4321.2				3.0
W9402	F23P	01-MAR-94	0651	2.80	W94020043	3	LIGHT	871	4587.2				3.3
W9402	F23P	01-MAR-94	0651	2.80	W94020043	4	LIGHT	1408	4981.4				3.6
W9402	F23P	01-MAR-94	0651	2.80	W94020043	5	LIGHT	2155	4317.8				3.0
W9402	F23P	01-MAR-94	0651	2.80	W94020043	6	LIGHT	216	4576.6				3.2
W9402	F23P	01-MAR-94	0651	2.80	W94020043	7	LIGHT	22	1946.7				0.8
W9402	F23P	01-MAR-94	0651	2.80	W94020043	8	LIGHT	22	1819.0				0.7
W9402	F23P	01-MAR-94	0651	2.80	W94020043	9	LIGHT	85	3015.5				1.8
W9402	F23P	01-MAR-94	0651	2.80	W94020043	10	LIGHT	216	3645.8				2.4
W9402	F23P	01-MAR-94	0651	2.80	W94020043	11	LIGHT	5	1373.8				0.2

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9402	F23P	01-MAR-94	0651	2.80	W94020043	12	LIGHT	3	1512.3				0.4
W9402	F23P	01-MAR-94	0650	4.03	W94020042					5558642.0	25.7	5.1	
W9402	F23P	01-MAR-94	0650	4.03	W94020042	-3	DARK	0	1118.8				
W9402	F23P	01-MAR-94	0650	4.03	W94020042	-2	DARK	0	1058.3				
W9402	F23P	01-MAR-94	0650	4.03	W94020042	-1	DARK	0	1142.1				
W9402	F23P	01-MAR-94	0650	4.03	W94020042	1	LIGHT	664		e			e
W9402	F23P	01-MAR-94	0650	4.03	W94020042	2	LIGHT	1023	979.3				-0.1
W9402	F23P	01-MAR-94	0650	4.03	W94020042	3	LIGHT	1667	4426.1				3.2
W9402	F23P	01-MAR-94	0650	4.03	W94020042	4	LIGHT	186	4088.5				2.8
W9402	F23P	01-MAR-94	0650	4.03	W94020042	5	LIGHT	170	4241.5				3.0
W9402	F23P	01-MAR-94	0650	4.03	W94020042	6	LIGHT	227	4260.8				3.0
W9402	F23P	01-MAR-94	0650	4.03	W94020042	7	LIGHT	21	1511.6				0.4
W9402	F23P	01-MAR-94	0650	4.03	W94020042	8	LIGHT	13	1530.0				0.4
W9402	F23P	01-MAR-94	0650	4.03	W94020042	9	LIGHT	326	64.8				-1.0
W9402	F23P	01-MAR-94	0650	4.03	W94020042	10	LIGHT	63	2556.4				1.4
W9402	F23P	01-MAR-94	0650	4.03	W94020042	11	LIGHT	2	4824.6				3.5
W9402	F23P	01-MAR-94	0650	4.03	W94020042	12	LIGHT	2	1240.9				0.1
W9402	F23P	05-MAR-94	0708	4.83	W94020418					5567328.0	26.5	5.2	
W9402	F23P	05-MAR-94	0708	4.83	W94020418	-3	DARK	0	8969.0				
W9402	F23P	05-MAR-94	0708	4.83	W94020418	-2	DARK	0	5341.0				
W9402	F23P	05-MAR-94	0708	4.83	W94020418	-1	DARK	0	8634.8				
W9402	F23P	05-MAR-94	0708	4.83	W94020418	1	LIGHT	463		e			e
W9402	F23P	05-MAR-94	0708	4.83	W94020418	2	LIGHT	138	12433.3				4.6
W9402	F23P	05-MAR-94	0708	4.83	W94020418	3	LIGHT	171	14799.1				6.8
W9402	F23P	05-MAR-94	0708	4.83	W94020418	4	LIGHT	769	14066.5				6.1
W9402	F23P	05-MAR-94	0708	4.83	W94020418	5	LIGHT	1240	14482.7				6.5
W9402	F23P	05-MAR-94	0708	4.83	W94020418	6	LIGHT	166	11588.1				3.8
W9402	F23P	05-MAR-94	0708	4.83	W94020418	7	LIGHT	46	5960.6				-1.6
W9402	F23P	05-MAR-94	0708	4.83	W94020418	8	LIGHT	239	23348.1				15.0
W9402	F23P	05-MAR-94	0708	4.83	W94020418	9	LIGHT	15	4934.8				-2.6
W9402	F23P	05-MAR-94	0708	4.83	W94020418	10	LIGHT	9	4072.4				-3.4
W9402	F23P	05-MAR-94	0708	4.83	W94020418	11	LIGHT	1	2945.6				-4.5
W9402	F23P	05-MAR-94	0708	4.83	W94020418	12	LIGHT	2	4586.5				-2.9
W9402	F23P	01-MAR-94	0649	7.04	W94020041					5558642.0	25.9	5.3	
W9402	F23P	01-MAR-94	0649	7.04	W94020041	-3	DARK	0	46.9				
W9402	F23P	01-MAR-94	0649	7.04	W94020041	-2	DARK	0	55.7				
W9402	F23P	01-MAR-94	0649	7.04	W94020041	-1	DARK	0	57.3				
W9402	F23P	01-MAR-94	0649	7.04	W94020041	1	LIGHT	804		e			e
W9402	F23P	01-MAR-94	0649	7.04	W94020041	2	LIGHT	767	51.9				-0.0
W9402	F23P	01-MAR-94	0649	7.04	W94020041	3	LIGHT	1238	51.0				-0.0
W9402	F23P	01-MAR-94	0649	7.04	W94020041	4	LIGHT	1485	67.4				0.0

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9402	F23P	01-MAR-94	0649	7.04	W94020041	5	LIGHT	98	4089.6				3.7
W9402	F23P	01-MAR-94	0649	7.04	W94020041	6	LIGHT	225	4001.2				3.7
W9402	F23P	01-MAR-94	0649	7.04	W94020041	7	LIGHT	31	2121.3				1.9
W9402	F23P	01-MAR-94	0649	7.04	W94020041	8	LIGHT	23	2004.8				1.8
W9402	F23P	01-MAR-94	0649	7.04	W94020041	9	LIGHT	169	69.4				0.0
W9402	F23P	01-MAR-94	0649	7.04	W94020041	10	LIGHT	22	2179.7				2.0
W9402	F23P	01-MAR-94	0649	7.04	W94020041	11	LIGHT	2	1156.0				1.0
W9402	F23P	01-MAR-94	0649	7.04	W94020041	12	LIGHT	1	58.5				0.0
W9402	F23P	05-MAR-94	0706	8.68	W94020417					5567328.0	26.4	5.8	
W9402	F23P	05-MAR-94	0706	8.68	W94020417	-3	DARK	0	8001.0				
W9402	F23P	05-MAR-94	0706	8.68	W94020417	-2	DARK	0	7908.5				
W9402	F23P	05-MAR-94	0706	8.68	W94020417	-1	DARK	0	8218.2				
W9402	F23P	05-MAR-94	0706	8.68	W94020417	1	LIGHT	960		e			e
W9402	F23P	05-MAR-94	0706	8.68	W94020417	2	LIGHT	838	16165.1				7.0
W9402	F23P	05-MAR-94	0706	8.68	W94020417	3	LIGHT	1226	14504.4				5.6
W9402	F23P	05-MAR-94	0706	8.68	W94020417	4	LIGHT	1653	13812.5				5.0
W9402	F23P	05-MAR-94	0706	8.68	W94020417	5	LIGHT	128	9245.0				1.0
W9402	F23P	05-MAR-94	0706	8.68	W94020417	6	LIGHT	244	11708.5				3.2
W9402	F23P	05-MAR-94	0706	8.68	W94020417	7	LIGHT	34	3508.9				-3.9
W9402	F23P	05-MAR-94	0706	8.68	W94020417	8	LIGHT	25	3297.2				-4.1
W9402	F23P	05-MAR-94	0706	8.68	W94020417	9	LIGHT	24	3657.1				-3.8
W9402	F23P	05-MAR-94	0706	8.68	W94020417	10	LIGHT	184	9997.4				1.7
W9402	F23P	05-MAR-94	0706	8.68	W94020417	11	LIGHT	2	1424.3				-5.7
W9402	F23P	05-MAR-94	0706	8.68	W94020417	12	LIGHT	2	3979.1				-3.5
W9402	F23P	01-MAR-94	0648	11.13	W94020040					5558642.0	25.7	5.3	
W9402	F23P	01-MAR-94	0648	11.13	W94020040	-3	DARK	0	1374.5				
W9402	F23P	01-MAR-94	0648	11.13	W94020040	-2	DARK	0	997.3				
W9402	F23P	01-MAR-94	0648	11.13	W94020040	-1	DARK	0	1069.9				
W9402	F23P	01-MAR-94	0648	11.13	W94020040	1	LIGHT	455		e			e
W9402	F23P	01-MAR-94	0648	11.13	W94020040	2	LIGHT	944	5908.3				4.4
W9402	F23P	01-MAR-94	0648	11.13	W94020040	3	LIGHT	1478	5672.3				4.2
W9402	F23P	01-MAR-94	0648	11.13	W94020040	4	LIGHT	609	6178.4				4.7
W9402	F23P	01-MAR-94	0648	11.13	W94020040	5	LIGHT	217	4487.8				3.1
W9402	F23P	01-MAR-94	0648	11.13	W94020040	6	LIGHT	153	5602.4				4.1
W9402	F23P	01-MAR-94	0648	11.13	W94020040	7	LIGHT	16	1705.8				0.5
W9402	F23P	01-MAR-94	0648	11.13	W94020040	8	LIGHT	11	984.8				-0.2
W9402	F23P	01-MAR-94	0648	11.13	W94020040	9	LIGHT	230	5416.7				4.0
W9402	F23P	01-MAR-94	0648	11.13	W94020040	10	LIGHT	55	2224.9				1.0
W9402	F23P	01-MAR-94	0648	11.13	W94020040	11	LIGHT	2	1157.6				0.0
W9402	F23P	01-MAR-94	0648	11.13	W94020040	12	LIGHT	2	983.6				-0.2
W9402	F23P	05-MAR-94	0704	15.13	W94020416					5567328.0	26.6	5.7	

000193

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9402	F23P	05-MAR-94	0704	15.13	W94020416	-3	DARK	0	4537.0				
W9402	F23P	05-MAR-94	0704	15.13	W94020416	-2	DARK	0	6588.6				
W9402	F23P	05-MAR-94	0704	15.13	W94020416	-1	DARK	0	8437.1				
W9402	F23P	05-MAR-94	0704	15.13	W94020416	1	LIGHT	475		e			e
W9402	F23P	05-MAR-94	0704	15.13	W94020416	2	LIGHT	687	16761.6				9.0
W9402	F23P	05-MAR-94	0704	15.13	W94020416	3	LIGHT	904	17376.4				9.5
W9402	F23P	05-MAR-94	0704	15.13	W94020416	4	LIGHT	1349	16553.3				8.8
W9402	F23P	05-MAR-94	0704	15.13	W94020416	5	LIGHT	206	12204.3				5.0
W9402	F23P	05-MAR-94	0704	15.13	W94020416	6	LIGHT	143	10641.9				3.6
W9402	F23P	05-MAR-94	0704	15.13	W94020416	7	LIGHT	10	3223.1				-2.9
W9402	F23P	05-MAR-94	0704	15.13	W94020416	8	LIGHT	15	2899.2				-3.2
W9402	F23P	05-MAR-94	0704	15.13	W94020416	9	LIGHT	214	13671.4				6.3
W9402	F23P	05-MAR-94	0704	15.13	W94020416	10	LIGHT	51	5221.2				-1.1
W9402	F23P	05-MAR-94	0704	15.13	W94020416	11	LIGHT	1	1965.1				-4.0
W9402	F23P	05-MAR-94	0704	15.13	W94020416	12	LIGHT	2	1803.5				-4.1
W9402	N16P	05-MAR-94	1049	1.93	W94020487					5567328.0	26.5	5.1	
W9402	N16P	05-MAR-94	1049	1.93	W94020487	-3	DARK	0	469.6				
W9402	N16P	05-MAR-94	1049	1.93	W94020487	-2	DARK	0	654.3				
W9402	N16P	05-MAR-94	1049	1.93	W94020487	-1	DARK	0	677.6				
W9402	N16P	05-MAR-94	1049	1.93	W94020487	1	LIGHT	315		e			e
W9402	N16P	05-MAR-94	1049	1.93	W94020487	2	LIGHT	663	37845.1				36.2
W9402	N16P	05-MAR-94	1049	1.93	W94020487	3	LIGHT	294	30502.2				29.1
W9402	N16P	05-MAR-94	1049	1.93	W94020487	4	LIGHT	1745	41693.5				40.0
W9402	N16P	05-MAR-94	1049	1.93	W94020487	5	LIGHT	1238	40764.3				39.1
W9402	N16P	05-MAR-94	1049	1.93	W94020487	6	LIGHT	236	28177.4				26.8
W9402	N16P	05-MAR-94	1049	1.93	W94020487	7	LIGHT	333	29843.7				28.4
W9402	N16P	05-MAR-94	1049	1.93	W94020487	8	LIGHT	245	23179.3				22.0
W9402	N16P	05-MAR-94	1049	1.93	W94020487	9	LIGHT	10	4137.4				3.4
W9402	N16P	05-MAR-94	1049	1.93	W94020487	10	LIGHT	16	6695.6				5.9
W9402	N16P	05-MAR-94	1049	1.93	W94020487	11	LIGHT	3	1527.0				0.9
W9402	N16P	05-MAR-94	1049	1.93	W94020487	12	LIGHT	2	955.4				0.3
W9402	N16P	01-MAR-94	1018	3.00	W94020115					5558642.0	26.3	5.2	
W9402	N16P	01-MAR-94	1018	3.00	W94020115	-3	DARK	0	332.2				
W9402	N16P	01-MAR-94	1018	3.00	W94020115	-2	DARK	0	869.4				
W9402	N16P	01-MAR-94	1018	3.00	W94020115	-1	DARK	0	278.4				
W9402	N16P	01-MAR-94	1018	3.00	W94020115	1	LIGHT	359		e			e
W9402	N16P	01-MAR-94	1018	3.00	W94020115	2	LIGHT	307	12320.4				11.3
W9402	N16P	01-MAR-94	1018	3.00	W94020115	3	LIGHT	712	13502.0				12.4
W9402	N16P	01-MAR-94	1018	3.00	W94020115	4	LIGHT	2017	12967.3				11.9
W9402	N16P	01-MAR-94	1018	3.00	W94020115	5	LIGHT	1294	13500.3				12.4
W9402	N16P	01-MAR-94	1018	3.00	W94020115	6	LIGHT	268	14489.5				13.4

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9402	N16P	01-MAR-94	1018	3.00	W94020115	7	LIGHT	279	12435.7				11.4
W9402	N16P	01-MAR-94	1018	3.00	W94020115	8	LIGHT	379	13962.9				12.8
W9402	N16P	01-MAR-94	1018	3.00	W94020115	9	LIGHT	19	3871.3				3.2
W9402	N16P	01-MAR-94	1018	3.00	W94020115	10	LIGHT	11	3639.8				3.0
W9402	N16P	01-MAR-94	1018	3.00	W94020115	11	LIGHT	3	1112.1				0.6
W9402	N16P	01-MAR-94	1018	3.00	W94020115	12	LIGHT	2	802.7				0.3
W9402	N16P	01-MAR-94	1017	5.36	W94020114					5558642.0	26.3	5.2	
W9402	N16P	01-MAR-94	1017	5.36	W94020114	-3	DARK	0	1112.6				
W9402	N16P	01-MAR-94	1017	5.36	W94020114	-2	DARK	0	843.2				
W9402	N16P	01-MAR-94	1017	5.36	W94020114	-1	DARK	0	680.0				
W9402	N16P	01-MAR-94	1017	5.36	W94020114	1	LIGHT	517		e			e
W9402	N16P	01-MAR-94	1017	5.36	W94020114	2	LIGHT	1045	16063.2				14.7
W9402	N16P	01-MAR-94	1017	5.36	W94020114	3	LIGHT	978	15548.4				14.2
W9402	N16P	01-MAR-94	1017	5.36	W94020114	4	LIGHT	1639	14585.8				13.2
W9402	N16P	01-MAR-94	1017	5.36	W94020114	5	LIGHT	199	13046.9				11.8
W9402	N16P	01-MAR-94	1017	5.36	W94020114	6	LIGHT	233	11886.7				10.6
W9402	N16P	01-MAR-94	1017	5.36	W94020114	7	LIGHT	27	3826.0				2.8
W9402	N16P	01-MAR-94	1017	5.36	W94020114	8	LIGHT	22	4420.3				3.4
W9402	N16P	01-MAR-94	1017	5.36	W94020114	9	LIGHT	220	13413.4				12.1
W9402	N16P	01-MAR-94	1017	5.36	W94020114	10	LIGHT	171	10031.1				8.8
W9402	N16P	01-MAR-94	1017	5.36	W94020114	11	LIGHT	2	966.9				0.1
W9402	N16P	01-MAR-94	1017	5.36	W94020114	12	LIGHT	1	1283.6				0.4
W9402	N16P	05-MAR-94	1048	8.66	W94020486					5567328.0	26.6	5.1	
W9402	N16P	05-MAR-94	1048	8.66	W94020486	-3	DARK	0	652.7	s			
W9402	N16P	05-MAR-94	1048	8.66	W94020486	-2	DARK	0	359.2				
W9402	N16P	05-MAR-94	1048	8.66	W94020486	-1	DARK	0	372.3				
W9402	N16P	05-MAR-94	1048	8.66	W94020486	1	LIGHT	376		e			e
W9402	N16P	05-MAR-94	1048	8.66	W94020486	2	LIGHT	170	27268.9				26.3
W9402	N16P	05-MAR-94	1048	8.66	W94020486	3	LIGHT	700	45809.6				44.4
W9402	N16P	05-MAR-94	1048	8.66	W94020486	4	LIGHT	1169	42491.9				41.2
W9402	N16P	05-MAR-94	1048	8.66	W94020486	5	LIGHT	762	42196.0				40.9
W9402	N16P	05-MAR-94	1048	8.66	W94020486	6	LIGHT	171	25058.5				24.1
W9402	N16P	05-MAR-94	1048	8.66	W94020486	7	LIGHT	162	25031.0				24.1
W9402	N16P	05-MAR-94	1048	8.66	W94020486	8	LIGHT	125	20919.5				20.1
W9402	N16P	05-MAR-94	1048	8.66	W94020486	9	LIGHT	20	5712.6				5.2
W9402	N16P	05-MAR-94	1048	8.66	W94020486	10	LIGHT	16	5716.8				5.2
W9402	N16P	05-MAR-94	1048	8.66	W94020486	11	LIGHT	2	962.4				0.6
W9402	N16P	05-MAR-94	1048	8.66	W94020486	12	LIGHT	1	765.6				0.4
W9402	N16P	01-MAR-94	1017	12.69	W94020113					5558642.0	26.5	5.5	
W9402	N16P	01-MAR-94	1017	12.69	W94020113	-3	DARK	0	841.2				
W9402	N16P	01-MAR-94	1017	12.69	W94020113	-2	DARK	0	508.4				

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}/\text{m}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9402	N16P	01-MAR-94	1017	12.69	W94020113	-1	DARK	0	481.9				
W9402	N16P	01-MAR-94	1017	12.69	W94020113	1	LIGHT	464		e			e
W9402	N16P	01-MAR-94	1017	12.69	W94020113	2	LIGHT	1339	16231.9				14.1
W9402	N16P	01-MAR-94	1017	12.69	W94020113	3	LIGHT	1139	16061.5				14.0
W9402	N16P	01-MAR-94	1017	12.69	W94020113	4	LIGHT	115	10760.7				9.2
W9402	N16P	01-MAR-94	1017	12.69	W94020113	5	LIGHT	99	10664.2				9.1
W9402	N16P	01-MAR-94	1017	12.69	W94020113	6	LIGHT	174	13569.1				11.7
W9402	N16P	01-MAR-94	1017	12.69	W94020113	7	LIGHT	235	14495.3				12.6
W9402	N16P	01-MAR-94	1017	12.69	W94020113	8	LIGHT	280	14124.5				12.2
W9402	N16P	01-MAR-94	1017	12.69	W94020113	9	LIGHT	4	2690.3				1.9
W9402	N16P	01-MAR-94	1017	12.69	W94020113	10	LIGHT	19	5633.0				4.5
W9402	N16P	01-MAR-94	1017	12.69	W94020113	11	LIGHT	2	662.2				0.0
W9402	N16P	01-MAR-94	1017	12.69	W94020113	12	LIGHT	1	577.7				-0.0
W9402	N16P	05-MAR-94	1047	18.22	W94020485					5567328.0	26.7	5.6	
W9402	N16P	05-MAR-94	1047	18.22	W94020485	-3	DARK	0	217.4				
W9402	N16P	05-MAR-94	1047	18.22	W94020485	-2	DARK	0	472.0				
W9402	N16P	05-MAR-94	1047	18.22	W94020485	-1	DARK	0	1357.0				
W9402	N16P	05-MAR-94	1047	18.22	W94020485	1	LIGHT	579		e			e
W9402	N16P	05-MAR-94	1047	18.22	W94020485	2	LIGHT	1258	42899.2				38.1
W9402	N16P	05-MAR-94	1047	18.22	W94020485	3	LIGHT	1516	42838.9				38.1
W9402	N16P	05-MAR-94	1047	18.22	W94020485	4	LIGHT	137	19617.2				17.1
W9402	N16P	05-MAR-94	1047	18.22	W94020485	5	LIGHT	190	18977.6				16.5
W9402	N16P	05-MAR-94	1047	18.22	W94020485	6	LIGHT	190	27005.1				23.8
W9402	N16P	05-MAR-94	1047	18.22	W94020485	7	LIGHT	21	4532.2				3.5
W9402	N16P	05-MAR-94	1047	18.22	W94020485	8	LIGHT	4	3045.0				2.1
W9402	N16P	05-MAR-94	1047	18.22	W94020485	9	LIGHT	255	28405.5				25.0
W9402	N16P	05-MAR-94	1047	18.22	W94020485	10	LIGHT	304	29448.6				26.0
W9402	N16P	05-MAR-94	1047	18.22	W94020485	11	LIGHT	2	832.6				0.1
W9402	N16P	05-MAR-94	1047	18.22	W94020485	12	LIGHT	1	1358.0				0.6
W9402	N16P	01-MAR-94	1016	24.45	W94020112					5558642.0	26.3	5.5	
W9402	N16P	01-MAR-94	1016	24.45	W94020112	-3	DARK	0	672.1				
W9402	N16P	01-MAR-94	1016	24.45	W94020112	-2	DARK	0	1027.6	s			
W9402	N16P	01-MAR-94	1016	24.45	W94020112	-1	DARK	0	654.9				
W9402	N16P	01-MAR-94	1016	24.45	W94020112	1	LIGHT	925		e			e
W9402	N16P	01-MAR-94	1016	24.45	W94020112	2	LIGHT	939	15848.5				13.8
W9402	N16P	01-MAR-94	1016	24.45	W94020112	3	LIGHT	1493	14600.3				12.6
W9402	N16P	01-MAR-94	1016	24.45	W94020112	4	LIGHT	244	11924.9				10.2
W9402	N16P	01-MAR-94	1016	24.45	W94020112	5	LIGHT	225	12198.6				10.5
W9402	N16P	01-MAR-94	1016	24.45	W94020112	6	LIGHT	153	11937.9				10.2
W9402	N16P	01-MAR-94	1016	24.45	W94020112	7	LIGHT	8	1805.7				1.0
W9402	N16P	01-MAR-94	1016	24.45	W94020112	8	LIGHT	17	2225.0				1.4

Table D1-1. C14 Production at Bioproductivity Stations in February and March of 1994.

Event	Station	Date	Time	Depth (M)	Sample id	Rep	Level	Light $\mu\text{Em}^2/\text{sec}$	C14 (DPM)	Stock (DPM)	Dissolved Inorganic Carbon (mg C/L)	Length of incubation (hours)	Production (Dark corrected) (mg C/m <sup>3</sup> /hr)
W9402	N16P	01-MAR-94	1016	24.45	W94020112	9	LIGHT	167	11675.8				10.0
W9402	N16P	01-MAR-94	1016	24.45	W94020112	10	LIGHT	116	8169.2				6.8
W9402	N16P	01-MAR-94	1016	24.45	W94020112	11	LIGHT	2	643.7				-0.0
W9402	N16P	01-MAR-94	1016	24.45	W94020112	12	LIGHT	1	453.3				-0.2
W9402	N16P	05-MAR-94	1046	25.22	W94020484					5567328.0	26.7	5.5	
W9402	N16P	05-MAR-94	1046	25.22	W94020484	-3	DARK	0	683.2				
W9402	N16P	05-MAR-94	1046	25.22	W94020484	-2	DARK	0	275.4				
W9402	N16P	05-MAR-94	1046	25.22	W94020484	-1	DARK	0	547.7				
W9402	N16P	05-MAR-94	1046	25.22	W94020484	1	LIGHT	842					
W9402	N16P	05-MAR-94	1046	25.22	W94020484	2	LIGHT	1335	37585.3				33.9
W9402	N16P	05-MAR-94	1046	25.22	W94020484	3	LIGHT	929	38275.6				34.5
W9402	N16P	05-MAR-94	1046	25.22	W94020484	4	LIGHT	221	23845.3				21.3
W9402	N16P	05-MAR-94	1046	25.22	W94020484	5	LIGHT	248	25408.0				22.8
W9402	N16P	05-MAR-94	1046	25.22	W94020484	6	LIGHT	139	20747.5				18.5
W9402	N16P	05-MAR-94	1046	25.22	W94020484	7	LIGHT	155	19998.9				17.8
W9402	N16P	05-MAR-94	1046	25.22	W94020484	8	LIGHT	108	17386.6				15.4
W9402	N16P	05-MAR-94	1046	25.22	W94020484	9	LIGHT	15	3844.7				3.1
W9402	N16P	05-MAR-94	1046	25.22	W94020484	10	LIGHT	8	2847.3				2.1
W9402	N16P	05-MAR-94	1046	25.22	W94020484	11	LIGHT	1	1170.0				0.6
W9402	N16P	05-MAR-94	1046	25.22	W94020484	12	LIGHT	2	1154.0				0.6

s = Suspect data, value not used in calculating production

e = Data not reported

000197



## APPENDIX D

### 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). P-I incubations were performed using water from four depths (surface, mid-surface, mid-depth, and mid-bottom) at BioProductivity stations F23P and N16P twice per combined survey. Volumetric net production rates for these are given in Table D1-1. 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 dark uptake; rates thus expressed were used in the modeling and graphics that follow.

Table D2-1 summarizes the statistics used as a basis for rejecting certain outliers in the dark bottle replicates for surveys W9401 and W9402. This appendix provides the modeled data in chronological order. For each sampling date, the following sequence is used: modeled parameters for a 3-parameter model of Platt *et al.* (1980), followed by graphs of situations which were fit by this model; modeled parameters for a 2-parameter model of Webb *et al.* (1974), followed by graphs of situations which were fit by this model, which assumes zero photoinhibition. During the February survey, the results for a number of incubations showed a high degree of scatter and were not able to be fit by either model (raw data are presented in Table D1-1: graphs are not presented). The early March data were all fit by the Webb *et al.* (1974) model.

Note that no incubation samples were taken from the bottom sampling depth. The sample qualifiers used in Tables D2-1 to D2-7 are explained as follows:

<u>D2-1 Qualifier (BOT)</u>	<u>D2-2 to D2-7 Qualifier</u>	<u>Relative Sample Bottle Depth</u>
4	bottom	mid-bottom
6	mid-bottom	mid-depth
8	mid-surface	mid-surface
10	surface	surface

**Table D2-1a. Basis for excluding dark bottle outliers using the Dixon Criteria for high values (X\_3) and low values (X\_1) [Survey W9401]. Note that COL1, COL2, and COL3 are replicate dark bottle values (dpm).**

6

THE DIXON CRITERION CRUISE 9401  
9:25 Wednesday, June 29, 1994

OBS	SAMPNUM	STA	BOT	_NAME_	COL1	COL2	COL3	X_N	X_1
1	W94010073	F23P	4	DARKDPM	121.91	141.33	223.49	0.80882	0.19118
2	W94010074	F23P	6	DARKDPM	154.09	162.41	180.53	0.68533	0.31467
3	W94010075	F23P	8	DARKDPM	119.90	151.04	492.76	0.91648	0.08352
4	W94010076	F23P	10	DARKDPM	246.59	246.98	280.12	0.98837	0.01163
5	W94010197	N16P	4	DARKDPM	326.62	681.49	885.52	0.36506	0.63494
6	W94010198	N16P	6	DARKDPM	540.01	1375.38	2506.67	0.57523	0.42477
7	W94010199	N16P	8	DARKDPM	208.70	268.96	1142.20	0.93545	0.06455
8	W94010200	N16P	10	DARKDPM	369.30	464.81	722.07	0.72926	0.27074
9	W94010330	F23P	4	DARKDPM	7393.27	9960.88	10433.01	0.15532	0.84468
10	W94010332	F23P	8	DARKDPM	1000.39	6823.58	7374.88	0.08649	0.91351
11	W94010333	F23P	10	DARKDPM	988.23	1570.01	1694.47	0.17623	0.82377
12	W94010338	F23P	6	DARKDPM	421.93	527.11	6336.75	0.98222	0.01778
13	W94010386	N16P	4	DARKDPM	608.59	681.33	756.17	0.50711	0.49289
14	W94010387	N16P	6	DARKDPM	122.08	364.08	1048.29	0.73872	0.26128
15	W94010388	N16P	8	DARKDPM	89.12	97.32	165.03	0.89198	0.10802
16	W94010389	N16P	10	DARKDPM	166.43	288.97	375.54	0.41399	0.58601

7

THE DIXON CRITERION CRUISE 9401  
HIGH DARK VALUES TO BE REJECTED P<0.05  
9:25 Wednesday, June 29, 1994

OBS	SAMPNUM	STA	BOT	_NAME_	COL1	COL2	COL3	X_N	X_1
1	W94010076	F23P	10	DARKDPM	246.59	246.98	280.12	0.98837	0.011631
2	W94010338	F23P	6	DARKDPM	421.93	527.11	6336.75	0.98222	0.017782

000199

**Table D2-1b. Basis for excluding dark bottle outliers using the Dixon Criteria for high values (X<sub>3</sub>) and low values (X<sub>1</sub>) [Survey W9402]. Note that COL1, COL2, and COL3 are replicate dark bottle values (dpm).**

THE DIXON CRITERION									CRUISE 9402	1
									9:23 Tuesday, July 5, 1994	
OBS	SAMPNUM	STA	BOT	_NAME_	COL1	COL2	COL3	X_N	X_1	
1	W94020040	F23P	4	DARKDPM	997.27	1069.90	1374.52	0.80748	0.19252	
2	W94020041	F23P	6	DARKDPM	46.87	55.74	57.26	0.14629	0.85371	
3	W94020042	F23P	8	DARKDPM	1058.27	1118.77	1142.13	0.27856	0.72144	
4	W94020043	F23P	10	DARKDPM	1116.02	1118.29	1170.32	0.95820	0.04180	
5	W94020112	N16P	4	DARKDPM	654.91	672.08	1027.61	0.95393	0.04607	
6	W94020113	N16P	6	DARKDPM	481.86	508.44	841.16	0.92602	0.07398	
7	W94020114	N16P	8	DARKDPM	680.05	843.24	1112.57	0.62270	0.37730	
8	W94020115	N16P	10	DARKDPM	278.38	332.18	869.43	0.90898	0.09102	
9	W94020416	F23P	4	DARKDPM	4537.01	6588.60	8437.15	0.47397	0.52603	
10	W94020417	F23P	6	DARKDPM	7908.54	8000.99	8218.22	0.70147	0.29853	
11	W94020418	F23P	8	DARKDPM	5340.96	8634.82	8968.95	0.09210	0.90790	
12	W94020419	F23P	10	DARKDPM	7842.70	8080.25	8569.48	0.67315	0.32685	
13	W94020484	N16P	4	DARKDPM	275.37	547.67	683.17	0.33227	0.66773	
14	W94020485	N16P	6	DARKDPM	217.41	471.96	1356.99	0.77663	0.22337	
15	W94020486	N16P	8	DARKDPM	359.17	372.26	652.69	0.95540	0.04460	
16	W94020487	N16P	10	DARKDPM	469.56	654.26	677.62	0.11228	0.88772	

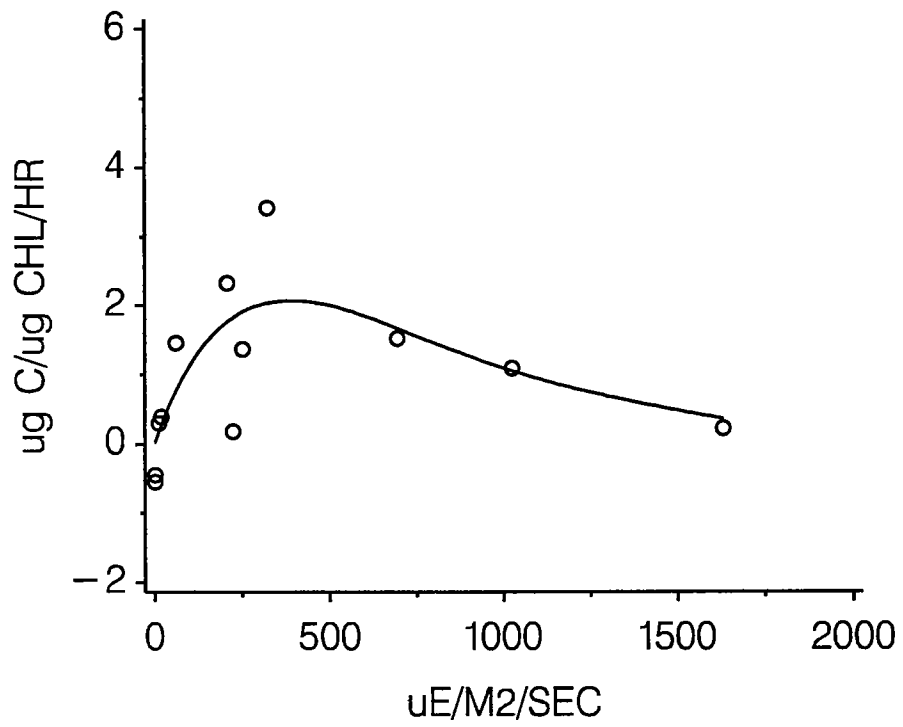
THE DIXON CRITERION									CRUISE 9402	2
HIGH DARK VALUES TO BE REJECTED P<0.05										
									9:23 Tuesday, July 5, 1994	
OBS	SAMPNUM	STA	BOT	_NAME_	COL1	COL2	COL3	X_N	X_1	
1	W94020043	F23P	10	DARKDPM	1116.02	1118.29	1170.32	0.95820	0.041805	
2	W94020112	N16P	4	DARKDPM	654.91	672.08	1027.61	0.95393	0.046069	
3	W94020486	N16P	8	DARKDPM	359.17	372.26	652.69	0.95540	0.044597	

**Table D2-2. P-I modeling using the Platt *et al.* (1980) model: February 8, 1994. Numbers in parentheses are standard errors of the estimates.**

P VS I CURVE PARAMETERS W9401 FEB 8, 1994  
 MODEL PLATT ET AL. 1980

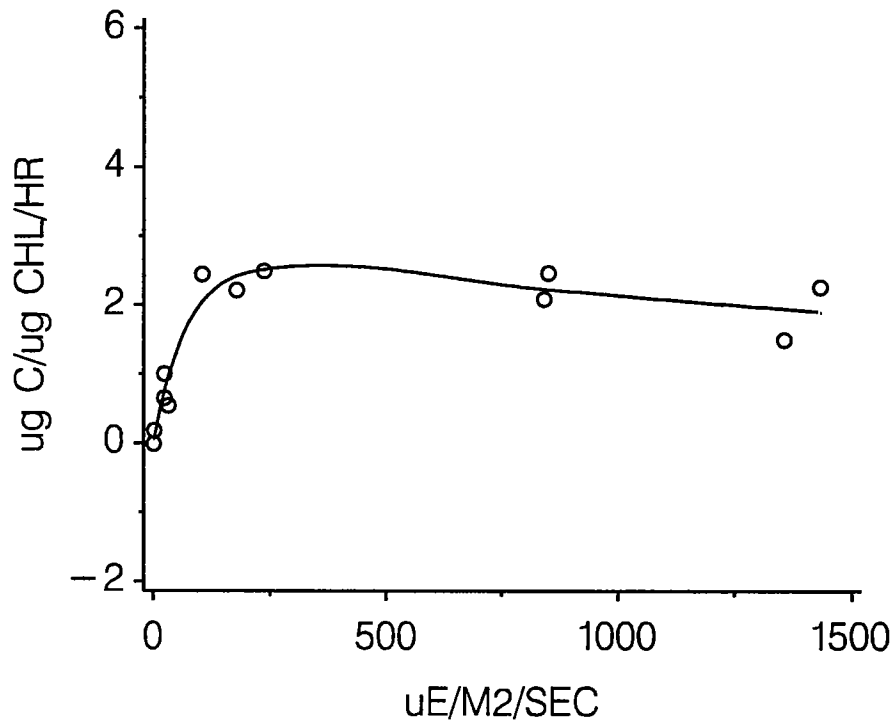
STA	DEPTH	P_SB	ALPHA	BETA	R_2
F23P	SUR	.	.	.	.
F23P	ISUR	50.05 (0.27)	0.015 (0.005)	0.123 (0.0360)	0.58
F23P	IBOT	2.82 (0.21)	0.037 (0.008)	0.001 (0.0003)	0.91
F23P	BOT	.	.	.	.
N16P	SUR	.	.	.	.
N16P	ISUR	.	.	.	.
N16P	IBOT	.	.	.	.
N16P	BOT	.	.	.	.

STATION F23P INTERMED SURFACE



PLATT ET AL, 1980 MODEL  
SURVEY W9401 FEB 8, 1994

STATION F23P INTERMED BOTTOM



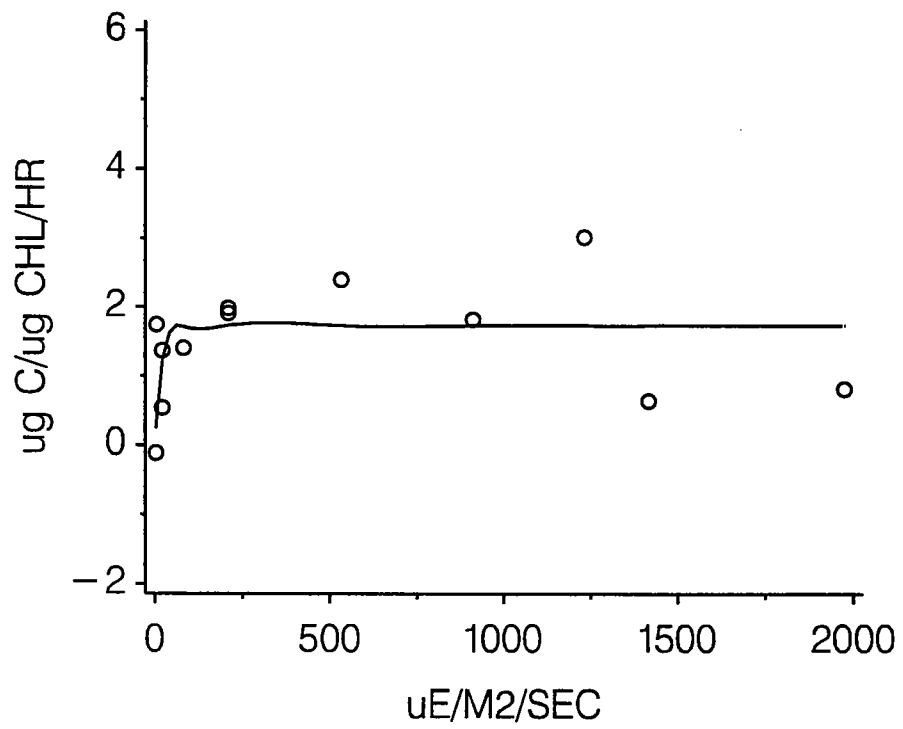
PLATT ET AL, 1980 MODEL  
SURVEY W9401 FEB 8, 1994

**Table D2-3. P-I modeling using the Webb *et al.* (1974) model: February 8, 1994. Numbers in parentheses are standard errors of the estimates.**

P VS I CURVE PARAMETERS W9401 FEB 8, 1994  
 MODEL WEBB ET AL. 1974

STATION	DEPTH	P MAX	ALPHA	R_2
F23P	SUR	1.73 (0.29)	0.100(0.087)	0.22
F23P	ISUR	.	.	.
F23P	IBOT	.	.	.
F23P	BOT	2.51 (0.41)	0.061(0.053)	0.37
N16P	SUR	1.44 (0.03)	0.026(0.118)	0.02
N16P	ISUR	.	.	.
N16P	IBOT	.	.	.
N16P	BOT	.	.	.

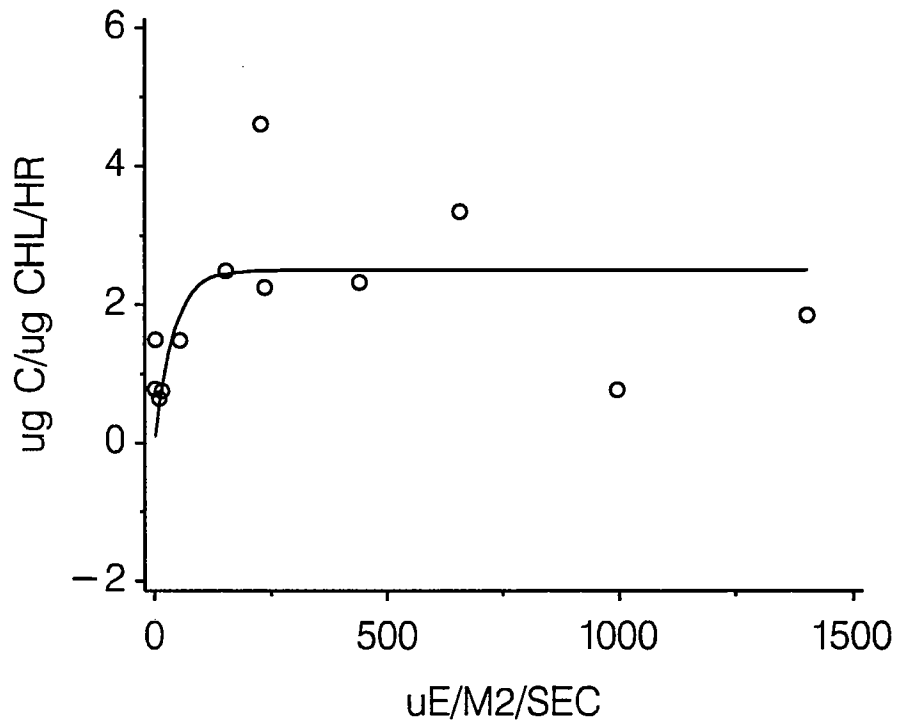
STATION F23P SURFACE



WEBB ET AL. 1974 MODEL  
SURVEY W9401 FEB 8, 1994

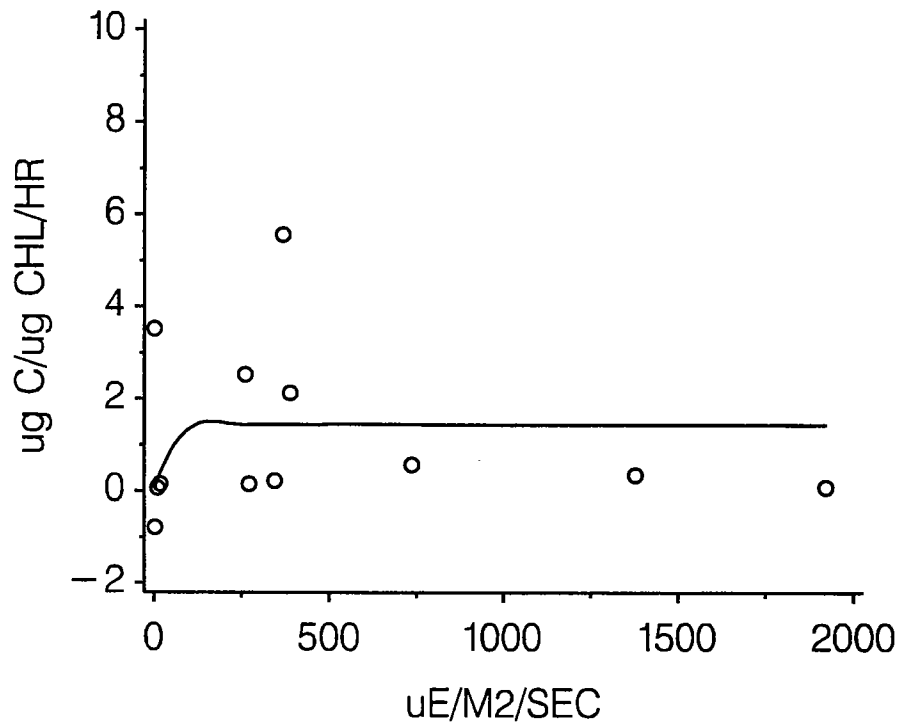


STATION F23P BOTTOM



WEBB ET AL. 1974 MODEL  
SURVEY W9401 FEB 8, 1994

STATION N16P SURFACE



WEBB ET AL. 1974 MODEL  
SURVEY W9401 FEB 8, 1994

**Table D2-4. P-I modeling using the Platt *et al.* (1980) model: February 15, 1994. Note that none of the data were fit by this model.**

P VS I CURVE PARAMETERS W9401 FEB 15, 1994  
 MODEL PLATT ET AL. 1980

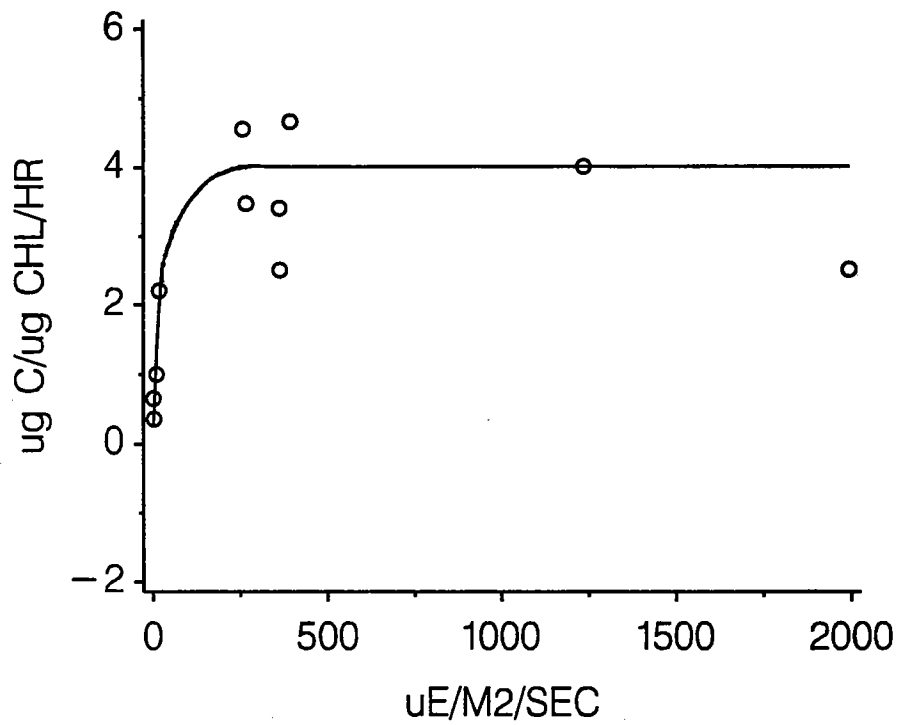
STA	DEPTH	P_SB		ALPHA		BETA		R_2
F23P	SUR	.	.	.	.	.	.	.
F23P	ISUR	.	.	.	.	.	.	.
F23P	IBOT	.	.	.	.	.	.	.
F23P	BOT	.	.	.	.	.	.	.
N16P	SUR	.	.	.	.	.	.	.
N16P	ISUR	.	.	.	.	.	.	.
N16P	IBOT	.	.	.	.	.	.	.
N16P	BOT	.	.	.	.	.	.	.

**Table D2-5. P-I modeling using the Webb *et al.* (1974) model: February 15, 1994. Numbers in parentheses are standard errors of the estimates.**

P VS I CURVE PARAMETERS W9401 FEB 15, 1994  
 MODEL WEBB ET AL. 1974

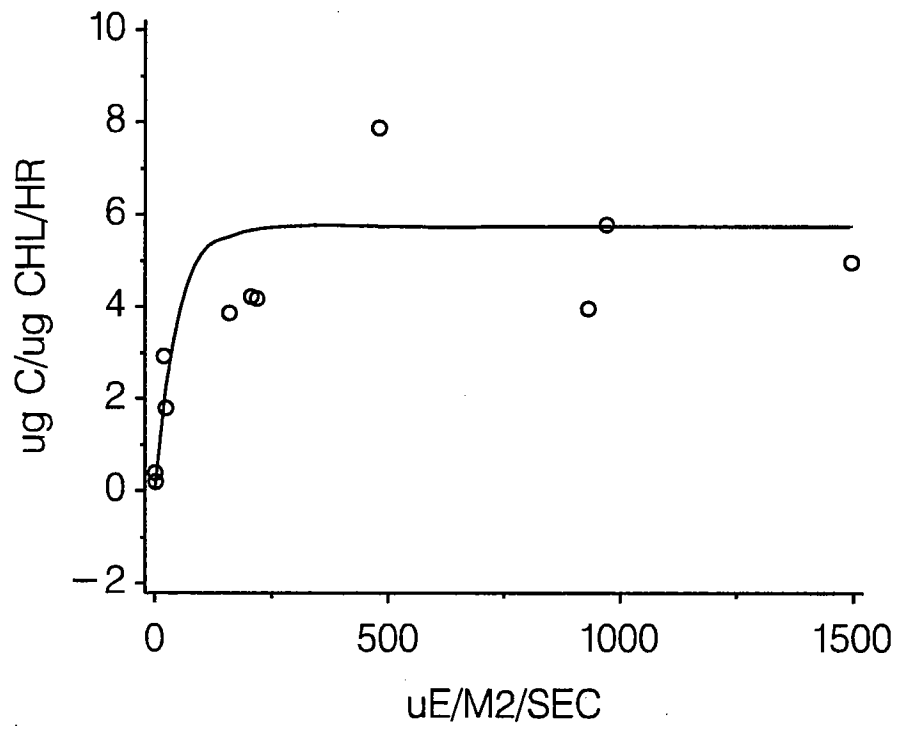
STATION	DEPTH	PMAX	ALPHA	R_2
F23P	SUR	.	.	.
F23P	ISUR	.	.	.
F23P	IBOT	.	.	.
F23P	BOT	.	.	.
N16P	SUR	4.01 (0.43)	0.149(1.000)	0.63
N16P	ISUR	5.76 (0.77)	0.115(0.094)	0.58
N16P	IBOT	3.15 (0.27)	0.047(0.014)	0.85
N16P	BOT	2.83 (0.06)	0.199(0.099)	0.66

STATION N16P SURFACE



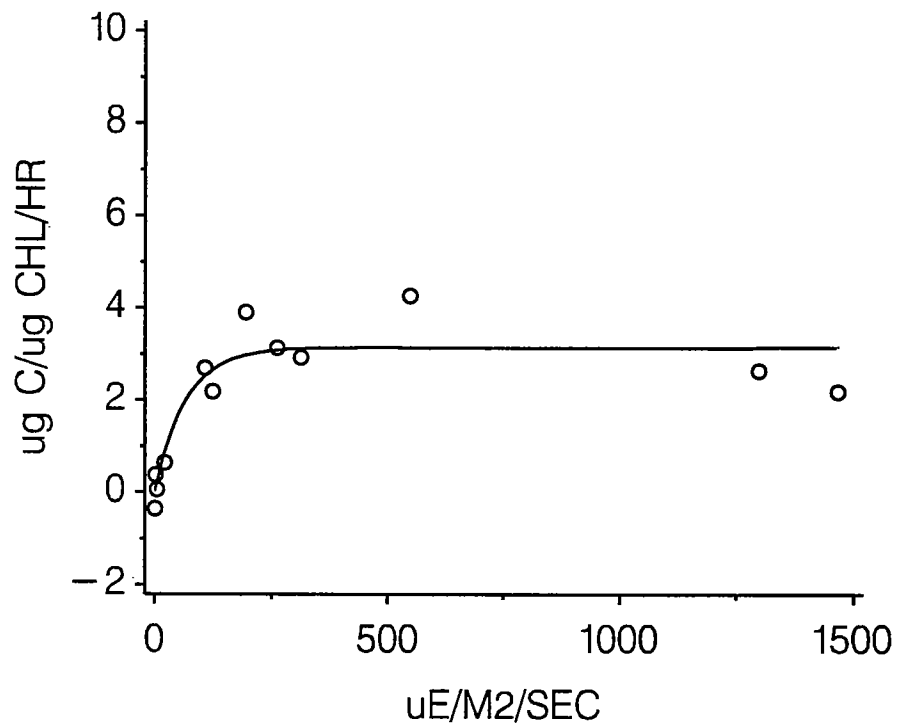
WEBB ET AL. 1974 MODEL  
SURVEY W9401 FEB 15, 1994

STATION N16P INTERMED SURFACE



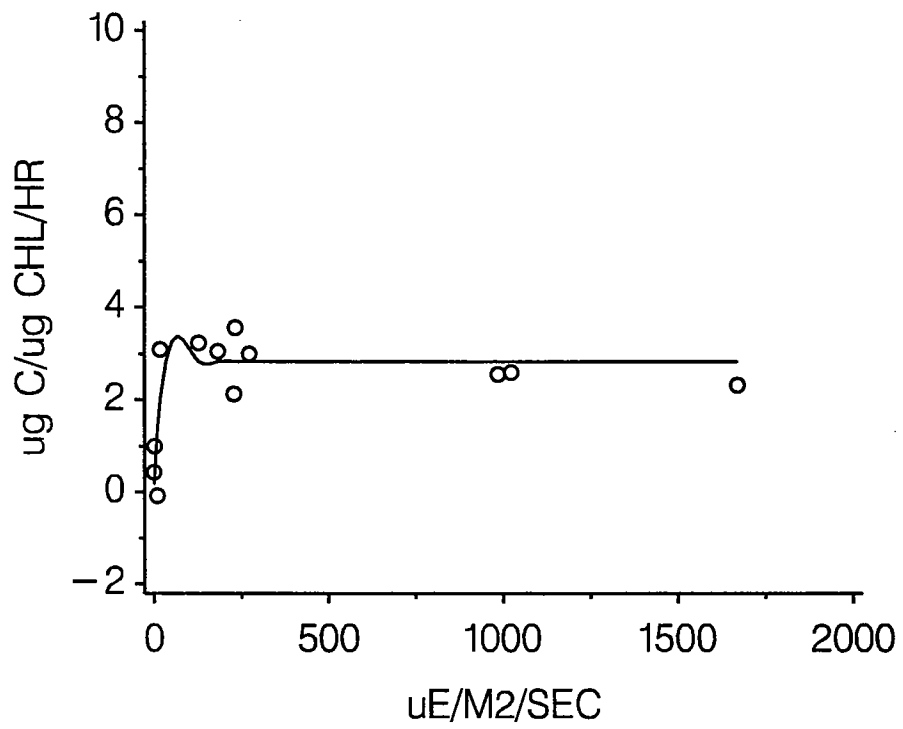
WEBB ET AL. 1974 MODEL  
SURVEY W9401 FEB 15, 1994

STATION N16P INTERMED BOTTOM



WEBB ET AL. 1974 MODEL  
SURVEY W9401 FEB 15, 1994

STATION N16P BOTTOM



WEBB ET AL. 1974 MODEL  
SURVEY W9401 FEB 15, 1994

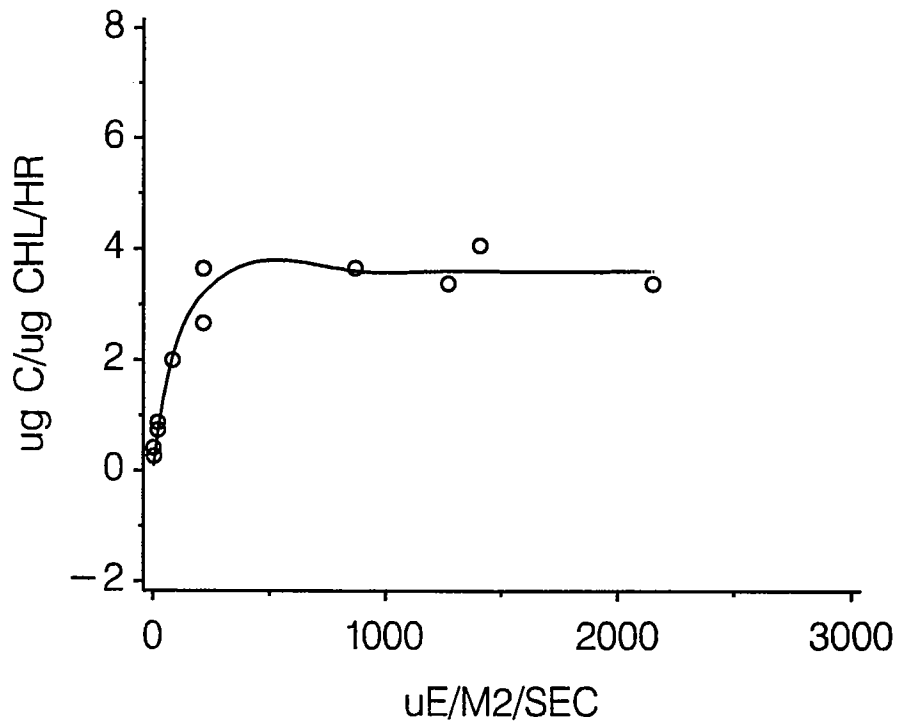


**Table D2-6. P-I modeling using the Webb *et al.* (1974) model: March 1, 1994. Numbers in parentheses are standard errors of the estimates. Note that the data for N16P are not normalized to chlorophyll.**

P VS I CURVE PARAMETERS W9402 MARCH 1, 1994  
 MODEL WEBB ET AL. 1974

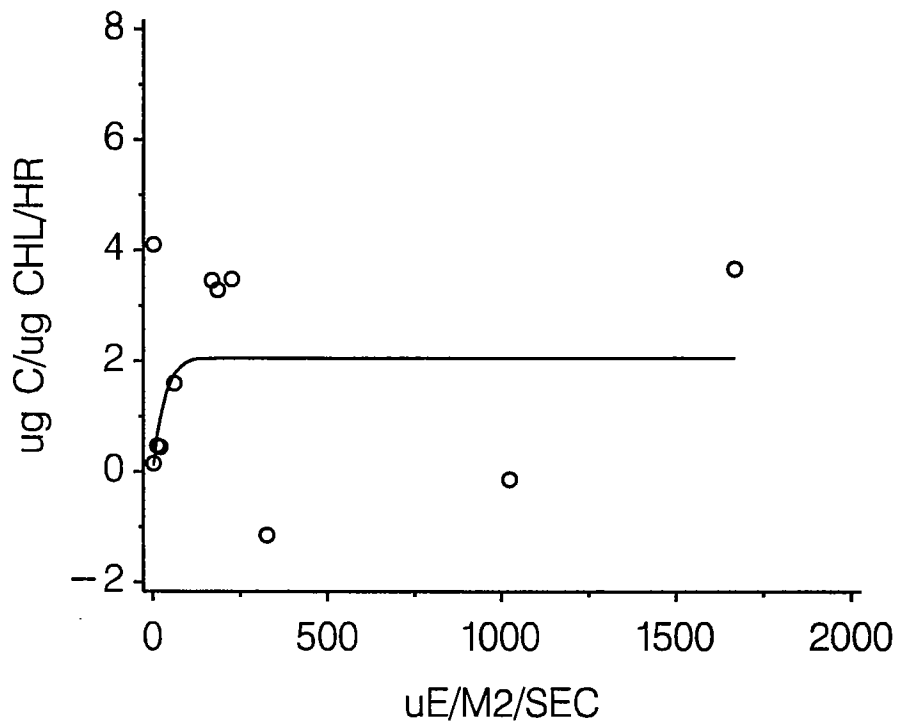
STATION	DEPTH	P MAX	ALPHA	R_2
F23P	SUR	3.61 (0.04)	0.036 (0.006)	0.96
F23P	ISUR	2.06 (0.86)	0.065 (0.129)	0.01
F23P	IBOT	2.75 (0.93)	0.782 (1.850)	0.08
F23P	BOT	5.57 (0.29)	0.045 (0.007)	0.96
N16P	SUR	12.25 (0.23)	0.229 (0.023)	0.99
N16P	ISUR	13.96 (0.09)	0.106 (0.008)	0.98
N16P	IBOT	13.60 (0.43)	0.154 (0.016)	0.98
N16P	BOT	13.10 (0.10)	0.099 (0.007)	0.99

STATION F23P SURFACE



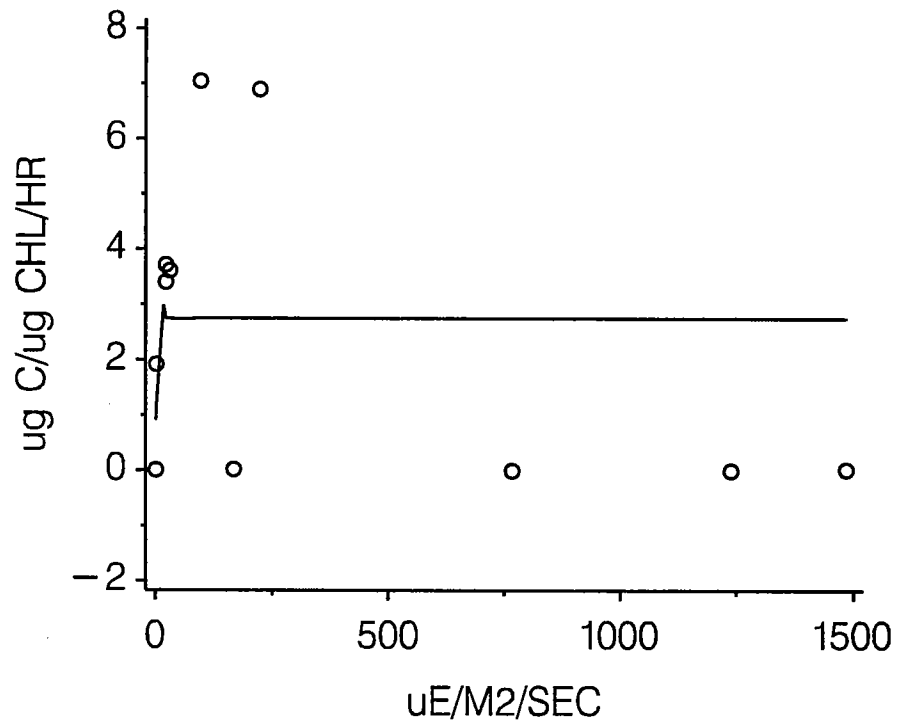
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994

STATION F23P INTERMED SURFACE



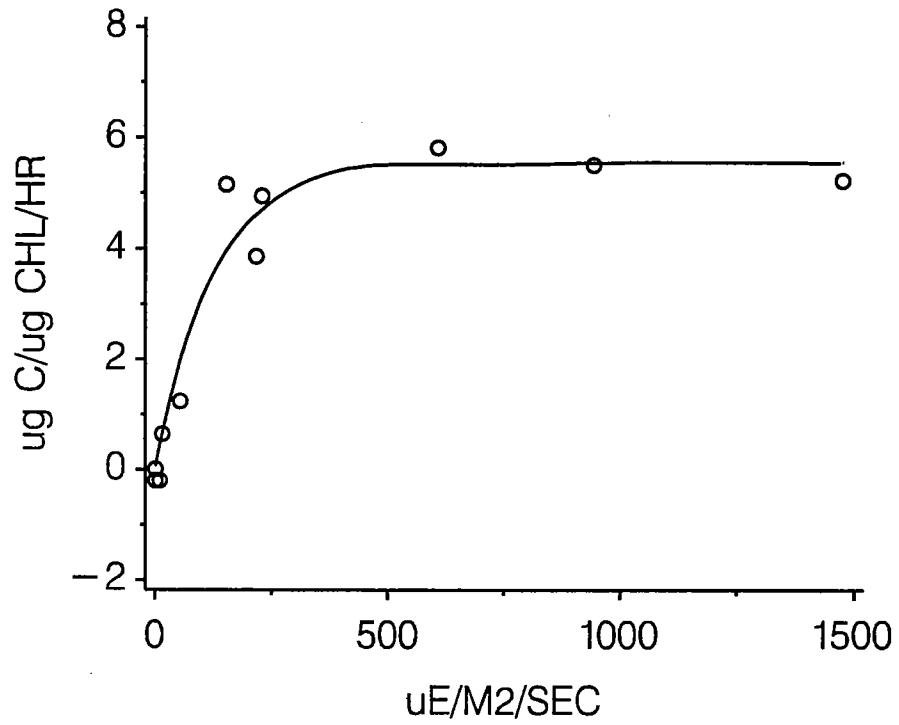
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994

STATION F23P INTERMED BOTTOM



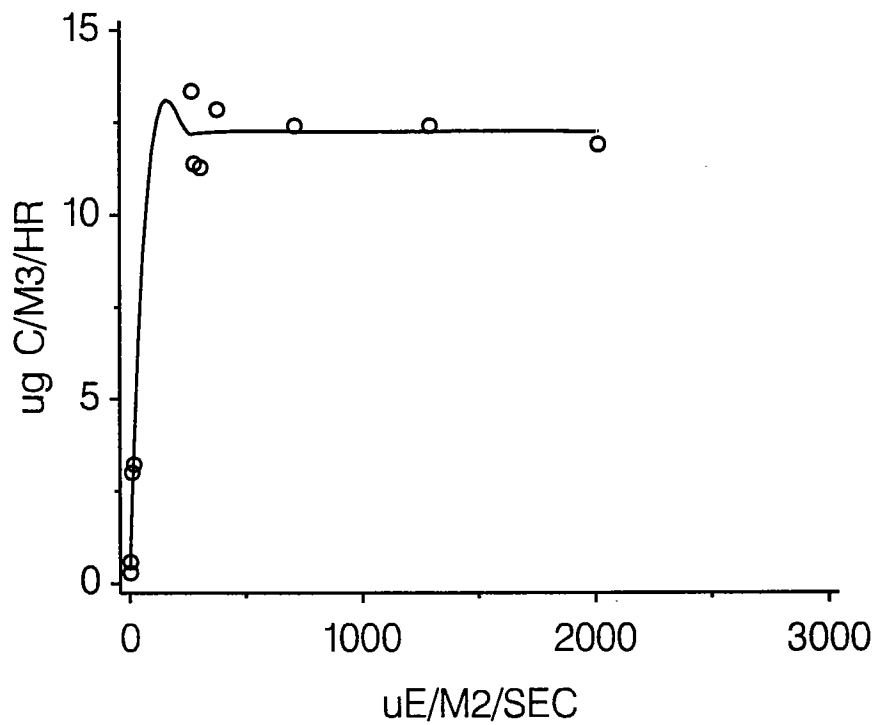
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994

STATION F23P BOTTOM



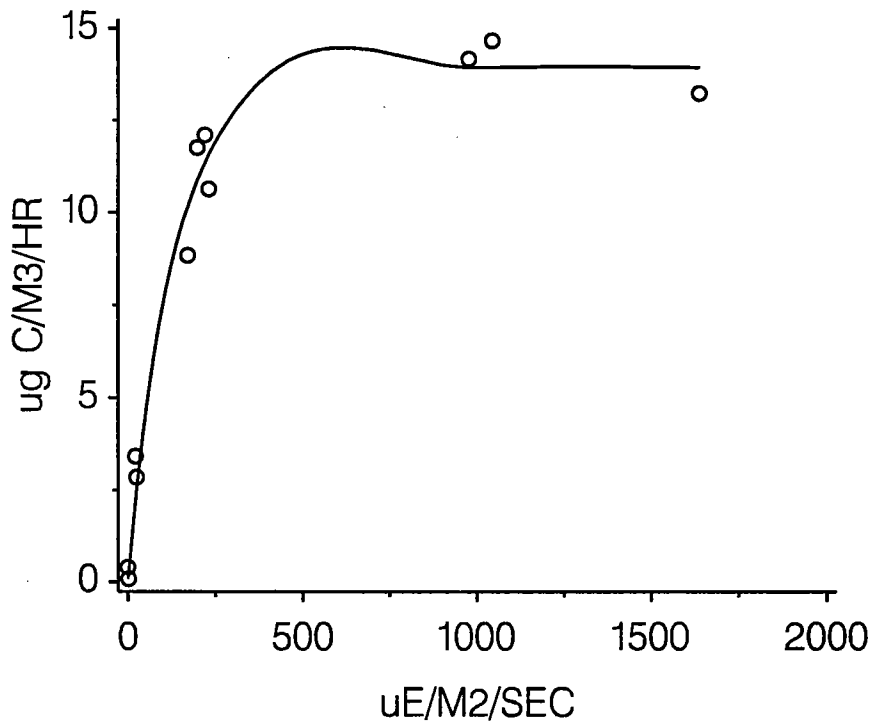
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994

STATION N16P SURFACE



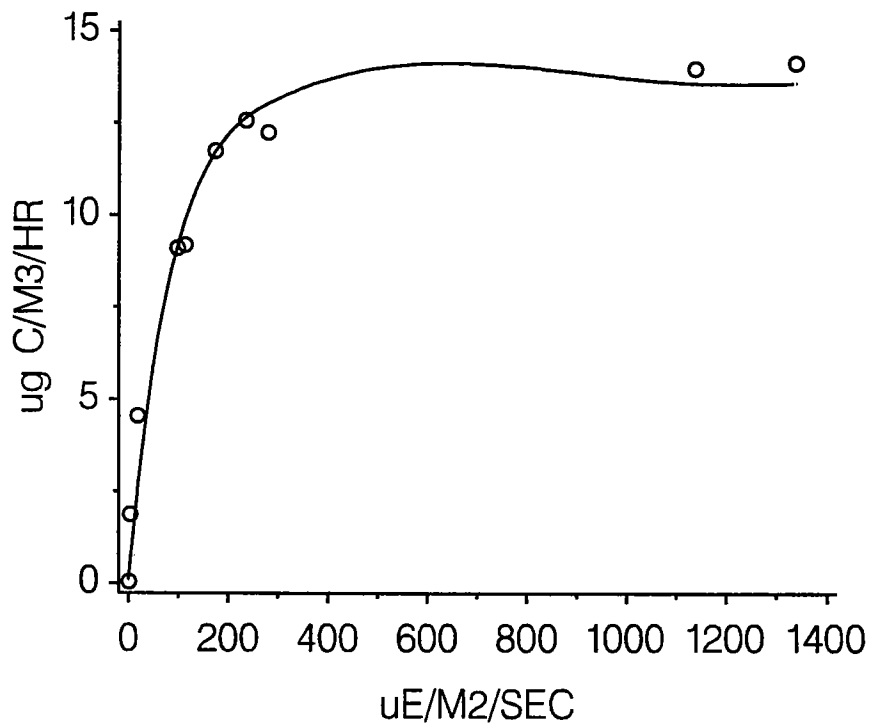
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994

STATION N16P INTERMED SURFACE



WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994

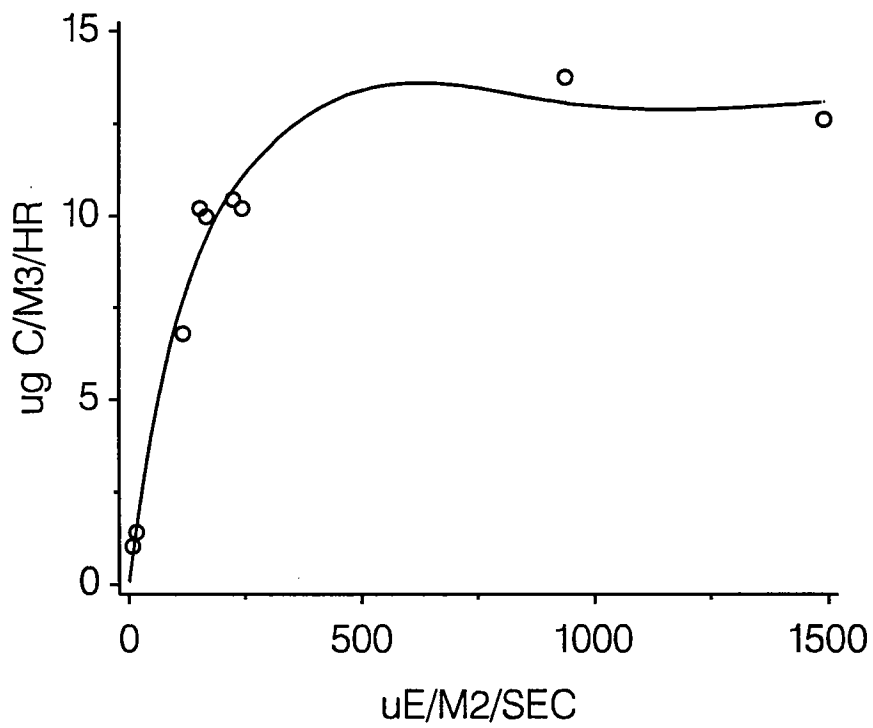
STATION N16P INTERMED BOTTOM



WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994



STATION N16P BOTTOM



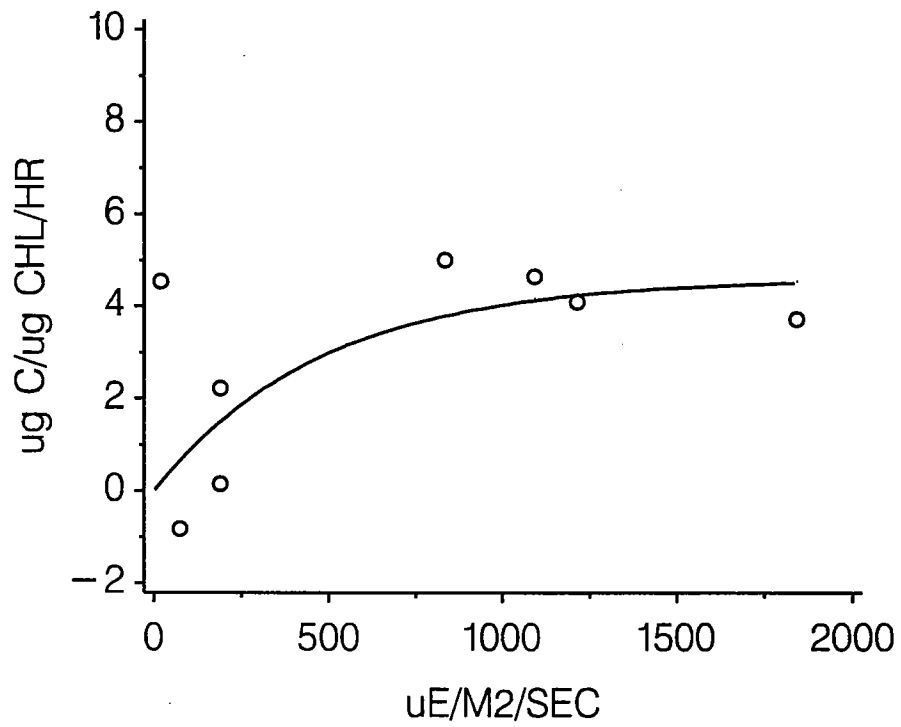
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 1, 1994

**Table D2-7. P-I modeling using the Webb *et al.* (1974) model: March 5, 1994. Numbers in parentheses are standard errors of the estimates.**

P VS I CURVE PARAMETERS W9402 MARCH 5, 1994  
 MODEL WEBB ET AL. 1974

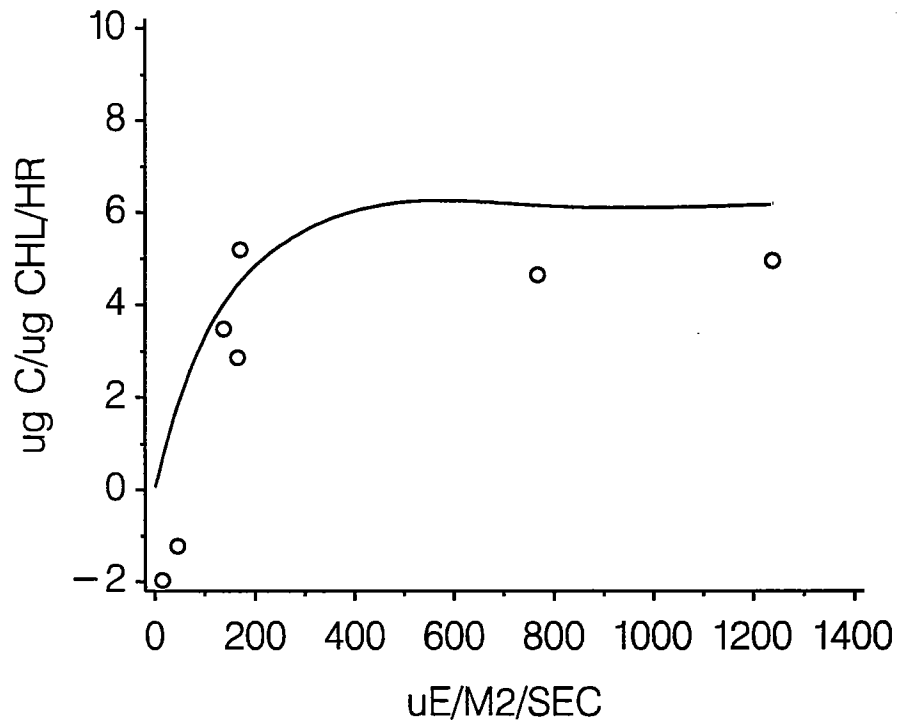
STATION	DEPTH	P MAX	ALPHA	R_2
F23P	SUR	4.67 (0.00)	0.009 (0.000)	0.56
F23P	ISUR	6.19 (2.19)	0.047 (0.036)	0.76
F23P	IBOT	5.08 (3.25)	0.009 (0.011)	0.85
F23P	BOT	4.06 (0.94)	0.013 (0.007)	0.95
N16P	SUR	26.21 (0.04)	0.109 (0.007)	0.99
N16P	ISUR	17.93 (0.24)	0.095 (0.004)	0.99
N16P	IBOT	13.02 (0.47)	0.053 (0.003)	0.99
N16P	BOT	11.09 (0.10)	0.055 (0.002)	0.99

STATION F23P SURFACE



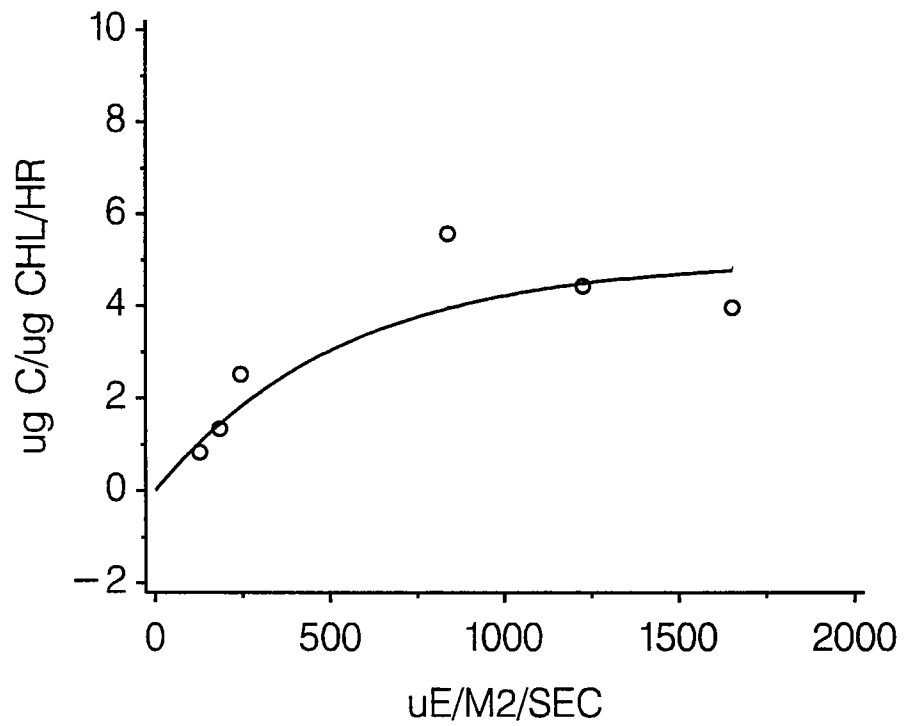
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

STATION F23P INTERMED SURFACE



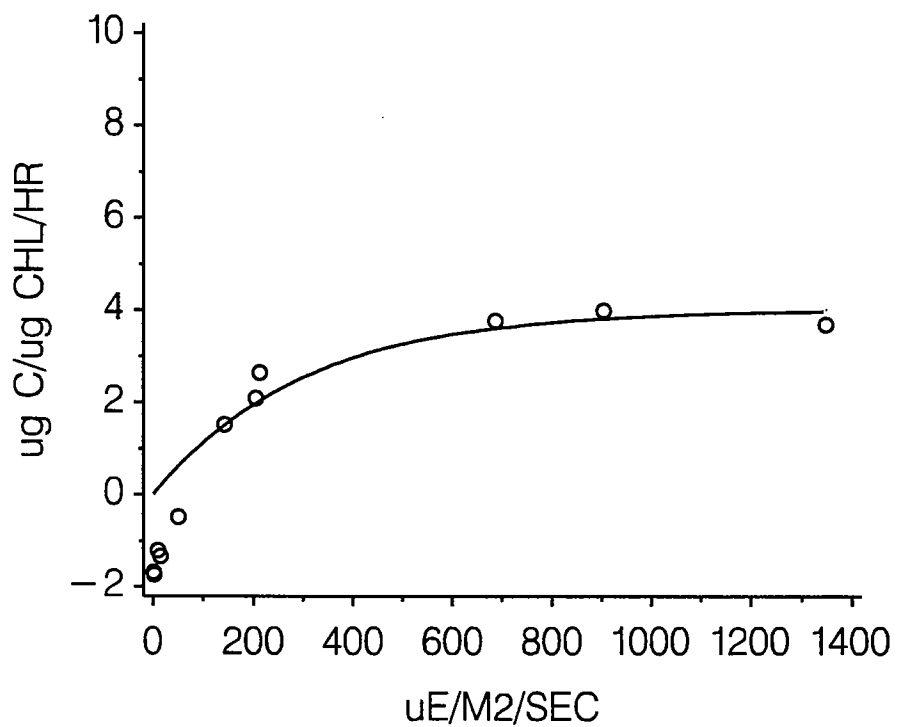
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

STATION F23P INTERMED BOTTOM



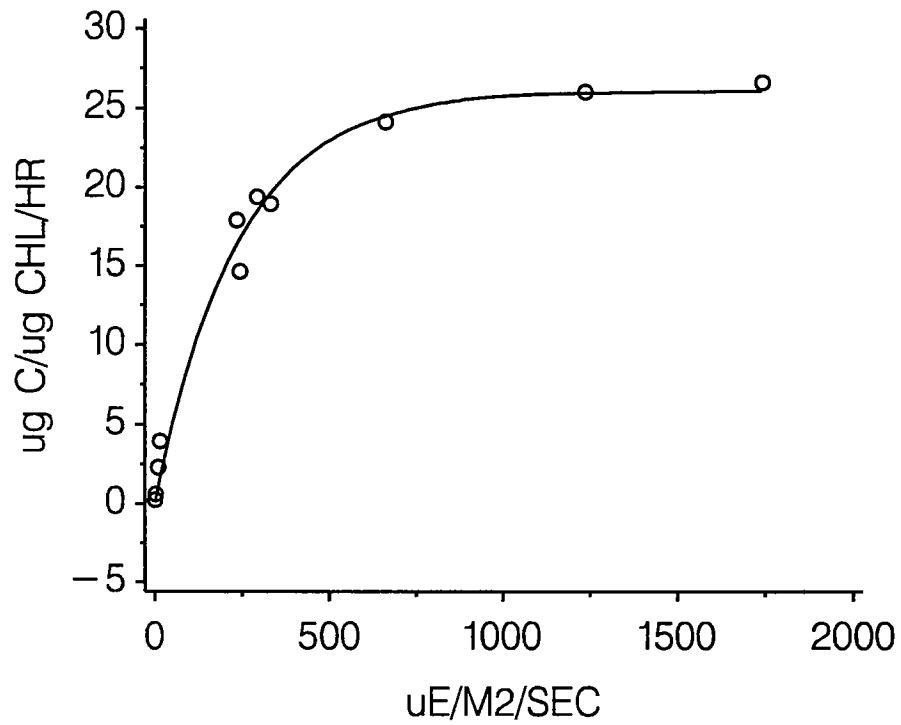
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

STATION F23P BOTTOM



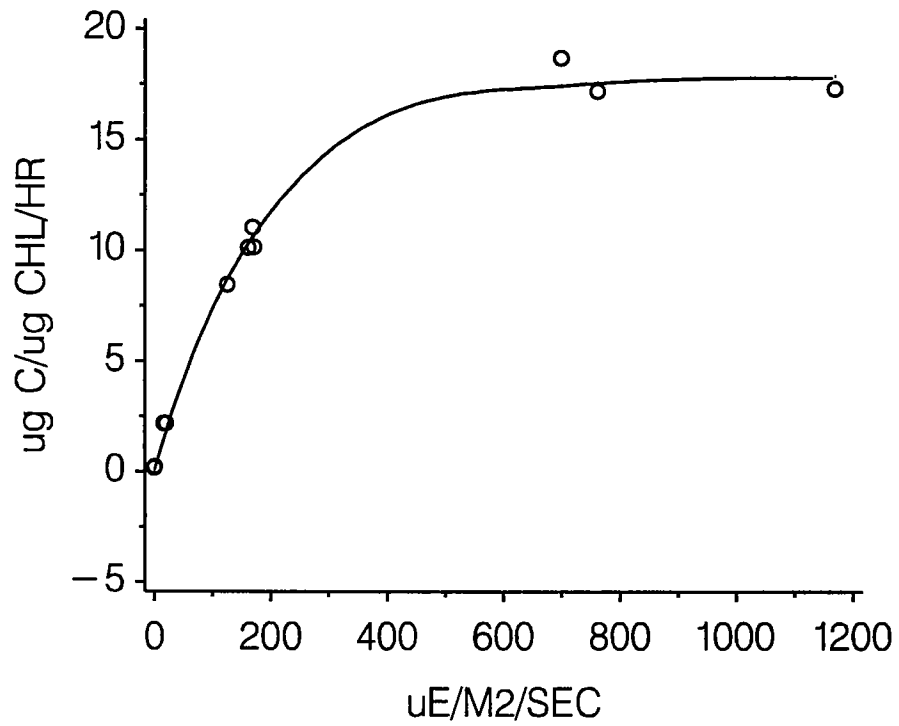
WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

STATION N16P SURFACE



WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

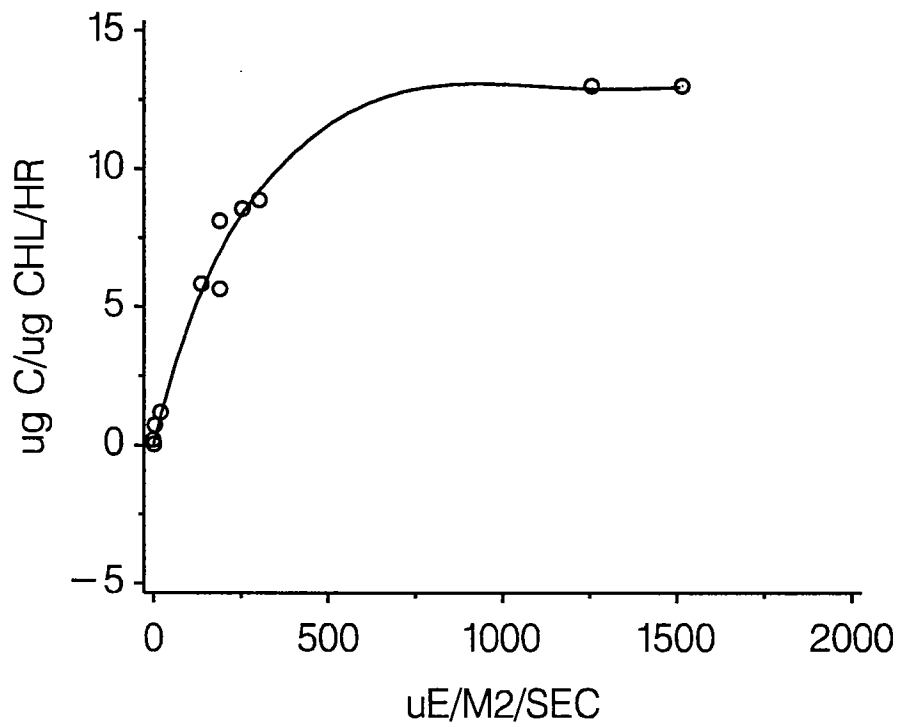
STATION N16P INTERMED SURFACE



WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

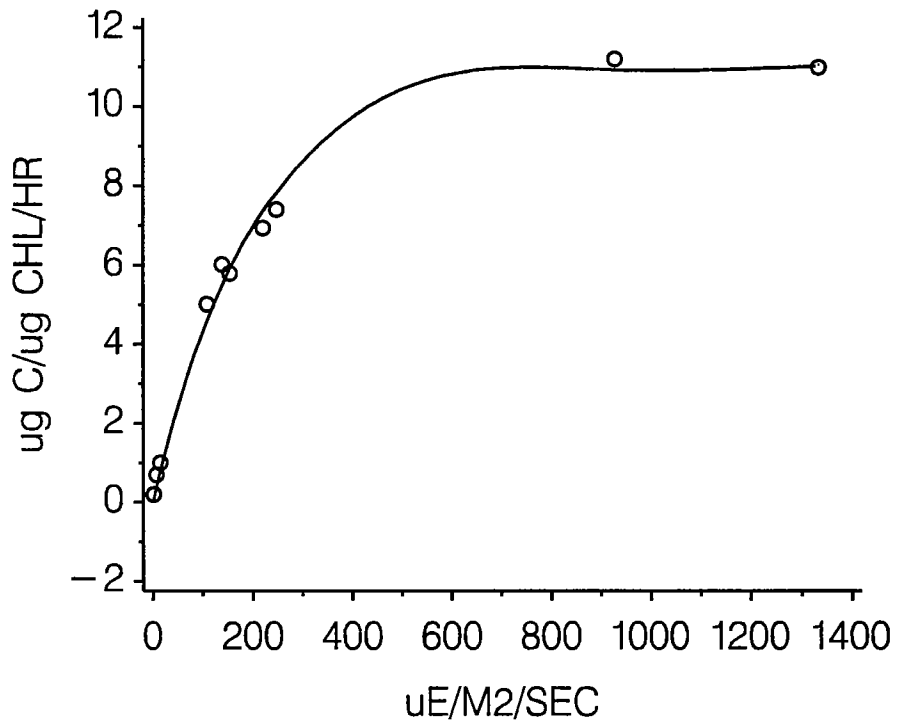


STATION N16P INTERMED BOTTOM



WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

STATION N16P BOTTOM



WEBB ET AL. 1974 MODEL  
SURVEY W9402 MARCH 5, 1994

## **APPENDIX D**

### **METABOLISM DATA AND PRODUCTIVITY IRRADIANCE MODELING**

#### **Part 3**

#### **Respiration Data**

No respiration measurements were made during the winter combined farfield/nearfield surveys (W9401 and W9402).

## APPENDIX E

### PHYTOPLANKTON SPECIES DATA TABLE

A complete listing, by survey, is given for taxonomic analyses of whole-water samples analyzed for W9401, W9402, and W9403 (Table E-1). All counts for screened (20  $\mu\text{m}$ ) samples for W9401, W9402, and W9403 are given in the text report.

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94010074	F23P	02-08-94	08:14	10.75	ASTERIONELLOPSIS GLACIALIS	.002
W94010074	F23P	02-08-94	08:14	10.75	CHAETOCEROS SOCIALIS	.003
W94010074	F23P	02-08-94	08:14	10.75	CHAETOCEROS SPP. (10-20UM)	.002
W94010074	F23P	02-08-94	08:14	10.75	COCCONEIS SCUTELLUM	.001
W94010074	F23P	02-08-94	08:14	10.75	CRYPTOMONADS	.017
W94010074	F23P	02-08-94	08:14	10.75	CYLINDROTHECA CLOSTERIUM	.001
W94010074	F23P	02-08-94	08:14	10.75	GRAMMATOPHORA MARINA	.001
W94010074	F23P	02-08-94	08:14	10.75	KATODINIUM ROTUNDATUM	.001
W94010074	F23P	02-08-94	08:14	10.75	LEPTOCYLINDRUS DANICUS	.002
W94010074	F23P	02-08-94	08:14	10.75	MICROFLAGELLATES	.214
W94010074	F23P	02-08-94	08:14	10.75	NAVICULOID DIATOMS	.004
W94010074	F23P	02-08-94	08:14	10.75	PLEUROSIGMA SPP.	.002
W94010074	F23P	02-08-94	08:14	10.75	SKELETONEMA COSTATUM	.006
W94010074	F23P	02-08-94	08:14	10.75	THALASSIONEMA NITZSCHOIDES	.004
W94010074	F23P	02-08-94	08:14	10.75	THALASSIOSIRA NORDENSKIOLDII	.001
W94010074	F23P	02-08-94	08:14	10.75	THALASSIOSIRA SPP.	.001
W94010074	F23P	02-08-94	08:14	10.75	UNID. ATHECATE DINOFLAGELLATE	.003
W94010074	F23P	02-08-94	08:14	10.75	UNID. CENTRALES	.001
W94010076	F23P	02-08-94	08:16	2.27	CHAETOCEROS SPP. (10-20UM)	.001
W94010076	F23P	02-08-94	08:16	2.27	CHAETOCEROS SPP. (<10UM)	.002
W94010076	F23P	02-08-94	08:16	2.27	COCCONEIS SCUTELLUM	.001
W94010076	F23P	02-08-94	08:16	2.27	CRYPTOMONADS	.009
W94010076	F23P	02-08-94	08:16	2.27	CYLINDROTHECA CLOSTERIUM	.002
W94010076	F23P	02-08-94	08:16	2.27	GYRODINIUM SPP.	.001
W94010076	F23P	02-08-94	08:16	2.27	LEPTOCYLINDRUS DANICUS	.001
W94010076	F23P	02-08-94	08:16	2.27	LEPTOCYLINDRUS MINIMUS	.002
W94010076	F23P	02-08-94	08:16	2.27	MICROFLAGELLATES	.188
W94010076	F23P	02-08-94	08:16	2.27	NAVICULOID DIATOMS	.004
W94010076	F23P	02-08-94	08:16	2.27	SKELETONEMA COSTATUM	.006
W94010076	F23P	02-08-94	08:16	2.27	THALASSIONEMA NITZSCHOIDES	.003
W94010076	F23P	02-08-94	08:16	2.27	THALASSIOSIRA (cf) ECCENTRICA	.001
W94010076	F23P	02-08-94	08:16	2.27	THALASSIOSIRA SPP.	.001
W94010076	F23P	02-08-94	08:16	2.27	UNID. ATHECATE DINOFLAGELLATE	.001
W94010076	F23P	02-08-94	08:16	2.27	UNID. CENTRALES	.002
W94010172	N20P	02-08-94	11:14	14.16	ASTERIONELLOPSIS GLACIALIS	.001
W94010172	N20P	02-08-94	11:14	14.16	CHAETOCEROS SOCIALIS	.001
W94010172	N20P	02-08-94	11:14	14.16	CHAETOCEROS SPP. (<10UM)	.001
W94010172	N20P	02-08-94	11:14	14.16	CRYPTOMONADS	.015
W94010172	N20P	02-08-94	11:14	14.16	CYLINDROTHECA CLOSTERIUM	.003
W94010172	N20P	02-08-94	11:14	14.16	DETONULA CONFERVACEA	.001
W94010172	N20P	02-08-94	11:14	14.16	KATODINIUM ROTUNDATUM	.001
W94010172	N20P	02-08-94	11:14	14.16	LEPTOCYLINDRUS DANICUS	0
W94010172	N20P	02-08-94	11:14	14.16	MICROFLAGELLATES	.09
W94010172	N20P	02-08-94	11:14	14.16	NAVICULOID DIATOMS	.001
W94010172	N20P	02-08-94	11:14	14.16	PLEUROSIGMA SPP.	.001
W94010172	N20P	02-08-94	11:14	14.16	PROTOPERIDINIUM SPP.	0
W94010172	N20P	02-08-94	11:14	14.16	PYRAMIMONAS/TETRASELMIS SPP.	0
W94010172	N20P	02-08-94	11:14	14.16	SKELETONEMA COSTATUM	.01
W94010172	N20P	02-08-94	11:14	14.16	THALASSIONEMA NITZSCHOIDES	.007
W94010172	N20P	02-08-94	11:14	14.16	THALASSIOSIRA SPP.	.002
W94010172	N20P	02-08-94	11:14	14.16	UNID. ATHECATE DINOFLAGELLATE	0
W94010172	N20P	02-08-94	11:14	14.16	UNID. CENTRALES	.003
W94010174	N20P	02-08-94	11:16	2.8	ASTERIONELLOPSIS GLACIALIS	.001
W94010174	N20P	02-08-94	11:16	2.8	CHAETOCEROS SPP. (<10UM)	.001
W94010174	N20P	02-08-94	11:16	2.8	CRYPTOMONADS	.038
W94010174	N20P	02-08-94	11:16	2.8	CYLINDROTHECA CLOSTERIUM	0
W94010174	N20P	02-08-94	11:16	2.8	GYMNODINIUM SPP.	.001
W94010174	N20P	02-08-94	11:16	2.8	KATODINIUM ROTUNDATUM	.002
W94010174	N20P	02-08-94	11:16	2.8	LEPTOCYLINDRUS DANICUS	.002
W94010174	N20P	02-08-94	11:16	2.8	MICROFLAGELLATES	.133
W94010174	N20P	02-08-94	11:16	2.8	NAVICULOID DIATOMS	.002
W94010174	N20P	02-08-94	11:16	2.8	PROTOPERIDINIUM SPP.	0
W94010174	N20P	02-08-94	11:16	2.8	PYRAMIMONAS/TETRASELMIS SPP.	.001

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94010174	N20P	02-08-94	11:16	2.8	RHIZOSOLENIA DELICATULA	.001
W94010174	N20P	02-08-94	11:16	2.8	SKELETONEMA COSTATUM	.012
W94010174	N20P	02-08-94	11:16	2.8	THALASSIONEMA NITZSCHOIDES	.005
W94010174	N20P	02-08-94	11:16	2.8	THALASSIOSIRA SPP.	0
W94010174	N20P	02-08-94	11:16	2.8	UNID. ATHECATE DINOFLAGELLATE	.002
W94010174	N20P	02-08-94	11:16	2.8	UNID. CENTRALES	.001
W94010198	N16P	02-08-94	12:30	19.04	ASTERIONELLOPSIS GLACIALIS	.002
W94010198	N16P	02-08-94	12:30	19.04	CHAETOCEROS DECIPIENS	.002
W94010198	N16P	02-08-94	12:30	19.04	CHAETOCEROS SOCIALIS	.003
W94010198	N16P	02-08-94	12:30	19.04	CHAETOCEROS SPP.(<10UM)	.003
W94010198	N16P	02-08-94	12:30	19.04	CRYPTOMONADS	.067
W94010198	N16P	02-08-94	12:30	19.04	CYLINDROTHECA CLOSTERIUM	.002
W94010198	N16P	02-08-94	12:30	19.04	GYRODINIUM SPIRALE	.001
W94010198	N16P	02-08-94	12:30	19.04	KATODINIUM ROTUNDATUM	.001
W94010198	N16P	02-08-94	12:30	19.04	MICROFLAGELLATES	.153
W94010198	N16P	02-08-94	12:30	19.04	PLEUROSIGMA SPP.	.001
W94010198	N16P	02-08-94	12:30	19.04	PROTOPERIDINIUM SPP.	.001
W94010198	N16P	02-08-94	12:30	19.04	SKELETONEMA COSTATUM	.016
W94010198	N16P	02-08-94	12:30	19.04	THALASSIONEMA NITZSCHOIDES	.008
W94010198	N16P	02-08-94	12:30	19.04	THALASSIOSIRA SPP.	.001
W94010198	N16P	02-08-94	12:30	19.04	UNID. ATHECATE DINOFLAGELLATE	.001
W94010198	N16P	02-08-94	12:30	19.04	UNID. CENTRALES	.004
W94010200	N16P	02-08-94	12:32	2.74	ASTERIONELLOPSIS GLACIALIS	.001
W94010200	N16P	02-08-94	12:32	2.74	CHAETOCEROS SOCIALIS	.003
W94010200	N16P	02-08-94	12:32	2.74	CHAETOCEROS SPP. (10-20UM)	.001
W94010200	N16P	02-08-94	12:32	2.74	CHAETOCEROS SPP.(<10UM)	.001
W94010200	N16P	02-08-94	12:32	2.74	CRYPTOMONADS	.088
W94010200	N16P	02-08-94	12:32	2.74	CYLINDROTHECA CLOSTERIUM	.002
W94010200	N16P	02-08-94	12:32	2.74	GYMNODINIUM SPP.	.001
W94010200	N16P	02-08-94	12:32	2.74	GYRODINIUM SPIRALE	.002
W94010200	N16P	02-08-94	12:32	2.74	LEPTOCYLINDRUS MINIMUS	.002
W94010200	N16P	02-08-94	12:32	2.74	LICMOPHORA SPP.	.001
W94010200	N16P	02-08-94	12:32	2.74	MICROFLAGELLATES	.199
W94010200	N16P	02-08-94	12:32	2.74	NAVICULOID DIATOMS	.001
W94010200	N16P	02-08-94	12:32	2.74	NITZSCHIA SPP.	.001
W94010200	N16P	02-08-94	12:32	2.74	PYRAMIMONAS/TETRASELMIS SPP.	.002
W94010200	N16P	02-08-94	12:32	2.74	SKELETONEMA COSTATUM	.014
W94010200	N16P	02-08-94	12:32	2.74	THALASSIONEMA NITZSCHOIDES	.009
W94010200	N16P	02-08-94	12:32	2.74	THALASSIOSIRA NORDENSKIOLDII	.001
W94010200	N16P	02-08-94	12:32	2.74	UNID. ATHECATE DINOFLAGELLATE	.004
W94010200	N16P	02-08-94	12:32	2.74	UNID. CENTRALES	.004
W94010214	N07P	02-08-94	13:37	24.6	CHAETOCEROS SPP. (10-20UM)	.001
W94010214	N07P	02-08-94	13:37	24.6	CORETHRON CRIOPHILUM	.001
W94010214	N07P	02-08-94	13:37	24.6	CRYPTOMONADS	.061
W94010214	N07P	02-08-94	13:37	24.6	CYLINDROTHECA CLOSTERIUM	.001
W94010214	N07P	02-08-94	13:37	24.6	DETONULA CONFERVACEA	.001
W94010214	N07P	02-08-94	13:37	24.6	DICTYOCOA FIBULA	.001
W94010214	N07P	02-08-94	13:37	24.6	GYMNODINIUM SPP.	.001
W94010214	N07P	02-08-94	13:37	24.6	LEPTOCYLINDRUS DANICUS	.002
W94010214	N07P	02-08-94	13:37	24.6	MICROFLAGELLATES	.176
W94010214	N07P	02-08-94	13:37	24.6	NAVICULOID DIATOMS	.001
W94010214	N07P	02-08-94	13:37	24.6	PLEUROSIGMA SPP.	.001
W94010214	N07P	02-08-94	13:37	24.6	RHIZOSOLENIA DELICATULA	.001
W94010214	N07P	02-08-94	13:37	24.6	RHIZOSOLENIA FRAGILISSIMA	.001
W94010214	N07P	02-08-94	13:37	24.6	SKELETONEMA COSTATUM	.024
W94010214	N07P	02-08-94	13:37	24.6	THALASSIONEMA NITZSCHOIDES	.01
W94010214	N07P	02-08-94	13:37	24.6	THALASSIOSIRA SPP.	.002
W94010214	N07P	02-08-94	13:37	24.6	UNID. CENTRALES	.003
W94010216	N07P	02-08-94	13:39	2.72	ASTERIONELLOPSIS GLACIALIS	.001
W94010216	N07P	02-08-94	13:39	2.72	CHAETOCEROS DECIPIENS	.001
W94010216	N07P	02-08-94	13:39	2.72	CORETHRON CRIOPHILUM	.001
W94010216	N07P	02-08-94	13:39	2.72	CRYPTOMONADS	.056
W94010216	N07P	02-08-94	13:39	2.72	CYLINDROTHECA CLOSTERIUM	.001

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94010216	N07P	02-08-94	13:39	2.72	GYMNODINIUM SPP.	.002
W94010216	N07P	02-08-94	13:39	2.72	MICROFLAGELLATES	.196
W94010216	N07P	02-08-94	13:39	2.72	NAVICULOID DIATOMS	.001
W94010216	N07P	02-08-94	13:39	2.72	RHIZOSOLENIA FRAGILISSIMA	.003
W94010216	N07P	02-08-94	13:39	2.72	SKELETONEMA COSTATUM	.021
W94010216	N07P	02-08-94	13:39	2.72	THALASSIONEMA NITZSCHOIDES	.012
W94010216	N07P	02-08-94	13:39	2.72	THALASSIOSIRA SPP.	.001
W94010216	N07P	02-08-94	13:39	2.72	UNID. CENTRALES	.003
W94010350	N01P	02-15-94	08:58	13.02	ASTERIONELLOPSIS GLACIALIS	.002
W94010350	N01P	02-15-94	08:58	13.02	CRYPTOMONADS	.038
W94010350	N01P	02-15-94	08:58	13.02	CYLINDROTHECA CLOSTERIUM	.007
W94010350	N01P	02-15-94	08:58	13.02	DETONULA CONFERVACEA	.003
W94010350	N01P	02-15-94	08:58	13.02	GRAMMATOPHORA MARINA	.001
W94010350	N01P	02-15-94	08:58	13.02	LICHOPHORA SPP.	.001
W94010350	N01P	02-15-94	08:58	13.02	MICROFLAGELLATES	.23
W94010350	N01P	02-15-94	08:58	13.02	NAVICULOID DIATOMS	.005
W94010350	N01P	02-15-94	08:58	13.02	PLEUROSIGMA SPP.	.002
W94010350	N01P	02-15-94	08:58	13.02	PROROCENTRUM TRIESTINUM	.004
W94010350	N01P	02-15-94	08:58	13.02	SKELETONEMA COSTATUM	.024
W94010350	N01P	02-15-94	08:58	13.02	THALASSIONEMA NITZSCHOIDES	.009
W94010350	N01P	02-15-94	08:58	13.02	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.002
W94010350	N01P	02-15-94	08:58	13.02	THALASSIOSIRA NORDENSKIOLDII	.003
W94010350	N01P	02-15-94	08:58	13.02	THALASSIOSIRA SPP.	.007
W94010350	N01P	02-15-94	08:58	13.02	UNID. CENTRALES	.004
W94010352	N01P	02-15-94	09:01	2.47	CERATIUM FUSUS	.001
W94010352	N01P	02-15-94	09:01	2.47	CHAETOCEROS DEBILIS	.001
W94010352	N01P	02-15-94	09:01	2.47	CHAETOCEROS DECIPIENS	.002
W94010352	N01P	02-15-94	09:01	2.47	CHAETOCEROS SPP. (<10UM)	.002
W94010352	N01P	02-15-94	09:01	2.47	COCCONEIS SCUTELLUM	.001
W94010352	N01P	02-15-94	09:01	2.47	CRYPTOMONADS	.032
W94010352	N01P	02-15-94	09:01	2.47	CYLINDROTHECA CLOSTERIUM	.008
W94010352	N01P	02-15-94	09:01	2.47	DETONULA CONFERVACEA	.002
W94010352	N01P	02-15-94	09:01	2.47	KATODINIUM ROTUNDATUM	.001
W94010352	N01P	02-15-94	09:01	2.47	MICROFLAGELLATES	.214
W94010352	N01P	02-15-94	09:01	2.47	NITZSCHIA SPP.	.002
W94010352	N01P	02-15-94	09:01	2.47	PLEUROSIGMA SPP.	.001
W94010352	N01P	02-15-94	09:01	2.47	PROROCENTRUM MINIMUM	.001
W94010352	N01P	02-15-94	09:01	2.47	PROROCENTRUM TRIESTINUM	.002
W94010352	N01P	02-15-94	09:01	2.47	SKELETONEMA COSTATUM	.026
W94010352	N01P	02-15-94	09:01	2.47	THALASSIONEMA NITZSCHOIDES	.011
W94010352	N01P	02-15-94	09:01	2.47	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.001
W94010352	N01P	02-15-94	09:01	2.47	THALASSIOSIRA NORDENSKIOLDII	.001
W94010352	N01P	02-15-94	09:01	2.47	THALASSIOSIRA SPP.	.005
W94010352	N01P	02-15-94	09:01	2.47	UNID. ATHECATE DINOFLAGELLATE	.001
W94010352	N01P	02-15-94	09:01	2.47	UNID. CENTRALES	.003
W94010373	N04P	02-15-94	10:10	23.18	CHAETOCEROS DECIPIENS	.015
W94010373	N04P	02-15-94	10:10	23.18	CHAETOCEROS SPP. (10-20UM)	.002
W94010373	N04P	02-15-94	10:10	23.18	CHAETOCEROS SPP. (<10UM)	.002
W94010373	N04P	02-15-94	10:10	23.18	CRYPTOMONADS	.047
W94010373	N04P	02-15-94	10:10	23.18	CYLINDROTHECA CLOSTERIUM	.009
W94010373	N04P	02-15-94	10:10	23.18	GYRODINIUM SPIRALE	.001
W94010373	N04P	02-15-94	10:10	23.18	KATODINIUM ROTUNDATUM	.001
W94010373	N04P	02-15-94	10:10	23.18	MICROFLAGELLATES	.229
W94010373	N04P	02-15-94	10:10	23.18	NAVICULOID DIATOMS	.003
W94010373	N04P	02-15-94	10:10	23.18	NAVICULOIDS (LYRATE)	.002
W94010373	N04P	02-15-94	10:10	23.18	PLEUROSIGMA SPP.	.001
W94010373	N04P	02-15-94	10:10	23.18	PROROCENTRUM TRIESTINUM	.001
W94010373	N04P	02-15-94	10:10	23.18	RHIZOSOLENIA DELICATULA	.002
W94010373	N04P	02-15-94	10:10	23.18	SKELETONEMA COSTATUM	.016
W94010373	N04P	02-15-94	10:10	23.18	THALASSIONEMA NITZSCHOIDES	.017
W94010373	N04P	02-15-94	10:10	23.18	THALASSIOSIRA (cf) ECCENTRICA	.001
W94010373	N04P	02-15-94	10:10	23.18	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.009
W94010373	N04P	02-15-94	10:10	23.18	THALASSIOSIRA NORDENSKIOLDII	.003

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94010373	N04P	02-15-94	10:10	23.18	THALASSIOSIRA SPP.	.002
W94010373	N04P	02-15-94	10:10	23.18	UNID. ATHECATE DINOFLAGELLATE	.001
W94010373	N04P	02-15-94	10:10	23.18	UNID. CENTRALES	.003
W94010375	N04P	02-15-94	10:12	2.6	ACTINOPTYCHUS SENARIUS	.001
W94010375	N04P	02-15-94	10:12	2.6	CHAETOCEROS DECIPIENS	.001
W94010375	N04P	02-15-94	10:12	2.6	CHAETOCEROS SPP.(<10UM)	.005
W94010375	N04P	02-15-94	10:12	2.6	CORETHRON CRIOPHILUM	.001
W94010375	N04P	02-15-94	10:12	2.6	CRYPTOMONADS	.043
W94010375	N04P	02-15-94	10:12	2.6	CYLINDROTHECA CLOSTERIUM	.006
W94010375	N04P	02-15-94	10:12	2.6	DETONULA CONFERVACEA	.002
W94010375	N04P	02-15-94	10:12	2.6	MICROFLAGELLATES	.177
W94010375	N04P	02-15-94	10:12	2.6	NAVICULOID DIATOMS	.003
W94010375	N04P	02-15-94	10:12	2.6	NITZSCHIA SPP.	.001
W94010375	N04P	02-15-94	10:12	2.6	PLEUROSIGMA SPP.	.002
W94010375	N04P	02-15-94	10:12	2.6	PROTOPERIDINIUM SPP.	.001
W94010375	N04P	02-15-94	10:12	2.6	SKELETONEMA COSTATUM	.017
W94010375	N04P	02-15-94	10:12	2.6	THALASSIONEMA NITZSCHOIDES	.018
W94010375	N04P	02-15-94	10:12	2.6	THALASSIOSIRA (cf) ECCENTRICA	.001
W94010375	N04P	02-15-94	10:12	2.6	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.004
W94010375	N04P	02-15-94	10:12	2.6	THALASSIOSIRA NORDENSKIOLDII	.003
W94010375	N04P	02-15-94	10:12	2.6	THALASSIOSIRA SPP.	.007
W94010375	N04P	02-15-94	10:12	2.6	UNID. ATHECATE DINOFLAGELLATE	.002
W94010375	N04P	02-15-94	10:12	2.6	UNID. CENTRALES	.004
W94010538	F02P	02-16-94	08:28	21.58	ASTERIONELLOPSIS GLACIALIS	.013
W94010538	F02P	02-16-94	08:28	21.58	CHAETOCEROS COMPRESSUS	.095
W94010538	F02P	02-16-94	08:28	21.58	CHAETOCEROS DECIPIENS	.013
W94010538	F02P	02-16-94	08:28	21.58	CHAETOCEROS SPP. (10-20UM)	.095
W94010538	F02P	02-16-94	08:28	21.58	CHAETOCEROS SPP.(<10UM)	.045
W94010538	F02P	02-16-94	08:28	21.58	CRYPTOMONADS	.07
W94010538	F02P	02-16-94	08:28	21.58	DETONULA CONFERVACEA	.083
W94010538	F02P	02-16-94	08:28	21.58	GYRODINIUM SPIRALE	.013
W94010538	F02P	02-16-94	08:28	21.58	LEPTOCYLINDRUS DANICUS	.07
W94010538	F02P	02-16-94	08:28	21.58	MICROFLAGELLATES	1.133
W94010538	F02P	02-16-94	08:28	21.58	NAVICULOID DIATOMS	.006
W94010538	F02P	02-16-94	08:28	21.58	RHIZOLENIA DELICATULA	.083
W94010538	F02P	02-16-94	08:28	21.58	RHIZOLENIA SETIGERA	.006
W94010538	F02P	02-16-94	08:28	21.58	SKELETONEMA COSTATUM	1.374
W94010538	F02P	02-16-94	08:28	21.58	THALASSIONEMA NITZSCHOIDES	.045
W94010538	F02P	02-16-94	08:28	21.58	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.057
W94010538	F02P	02-16-94	08:28	21.58	THALASSIOSIRA NORDENSKIOLDII	.045
W94010538	F02P	02-16-94	08:28	21.58	THALASSIOSIRA SPP.	.064
W94010538	F02P	02-16-94	08:28	21.58	UNID. CENTRALES	.045
W94010541	F02P	02-16-94	08:31	2.32	ASTERIONELLOPSIS GLACIALIS	.013
W94010541	F02P	02-16-94	08:31	2.32	CHAETOCEROS COMPRESSUS	.211
W94010541	F02P	02-16-94	08:31	2.32	CHAETOCEROS DECIPIENS	.026
W94010541	F02P	02-16-94	08:31	2.32	CHAETOCEROS SOCIALIS	.026
W94010541	F02P	02-16-94	08:31	2.32	CHAETOCEROS SPP. (10-20UM)	.058
W94010541	F02P	02-16-94	08:31	2.32	CRYPTOMONADS	.243
W94010541	F02P	02-16-94	08:31	2.32	DETONULA CONFERVACEA	.089
W94010541	F02P	02-16-94	08:31	2.32	LEPTOCYLINDRUS DANICUS	.058
W94010541	F02P	02-16-94	08:31	2.32	MICROFLAGELLATES	1.247
W94010541	F02P	02-16-94	08:31	2.32	NAVICULOID (LYRATE)	.006
W94010541	F02P	02-16-94	08:31	2.32	RHIZOLENIA DELICATULA	.083
W94010541	F02P	02-16-94	08:31	2.32	SKELETONEMA COSTATUM	1.016
W94010541	F02P	02-16-94	08:31	2.32	THALASSIONEMA NITZSCHOIDES	.038
W94010541	F02P	02-16-94	08:31	2.32	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.083
W94010541	F02P	02-16-94	08:31	2.32	THALASSIOSIRA SPP.	.038
W94010541	F02P	02-16-94	08:31	2.32	UNID. CENTRALES	.032
W94010553	F01P	02-16-94	10:26	12.02	CHAETOCEROS COMPRESSUS	.028
W94010553	F01P	02-16-94	10:26	12.02	CHAETOCEROS SEPTENTRIONALIS	.002
W94010553	F01P	02-16-94	10:26	12.02	CHAETOCEROS SPP. (10-20UM)	.005
W94010553	F01P	02-16-94	10:26	12.02	CHAETOCEROS SPP.(<10UM)	.002
W94010553	F01P	02-16-94	10:26	12.02	CRYPTOMONADS	.08



Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94010553	F01P	02-16-94	10:26	12.02	MICROFLAGELLATES	.776
W94010553	F01P	02-16-94	10:26	12.02	NAVICULOID DIATOMS	.002
W94010553	F01P	02-16-94	10:26	12.02	RHIZOSOLENIA DELICATULA	.007
W94010553	F01P	02-16-94	10:26	12.02	RHIZOSOLENIA SETIGERA	.002
W94010553	F01P	02-16-94	10:26	12.02	SKELETONEMA COSTATUM	.101
W94010553	F01P	02-16-94	10:26	12.02	THALASSIONEMA NITZSCHOIDES	.002
W94010553	F01P	02-16-94	10:26	12.02	THALASSIOSIRA SPP.	.005
W94010553	F01P	02-16-94	10:26	12.02	UNID. CENTRALES	.005
W94010555	F01P	02-16-94	10:28	2.6	ASTERIONELLOPSIS GLACIALIS	.005
W94010555	F01P	02-16-94	10:28	2.6	CHAETOCEROS COMPRESSUS	.047
W94010555	F01P	02-16-94	10:28	2.6	CHAETOCEROS SPP. (10-20UM)	.009
W94010555	F01P	02-16-94	10:28	2.6	CHAETOCEROS SPP. (<10UM)	.009
W94010555	F01P	02-16-94	10:28	2.6	CRYPTOMONADS	.093
W94010555	F01P	02-16-94	10:28	2.6	DETONULA CONFERVACEA	.004
W94010555	F01P	02-16-94	10:28	2.6	LEPTOCYLINDRUS DANICUS	.005
W94010555	F01P	02-16-94	10:28	2.6	MICROFLAGELLATES	.617
W94010555	F01P	02-16-94	10:28	2.6	NAVICULOID DIATOMS	.005
W94010555	F01P	02-16-94	10:28	2.6	SKELETONEMA COSTATUM	.026
W94010555	F01P	02-16-94	10:28	2.6	THALASSIONEMA NITZSCHOIDES	.004
W94010555	F01P	02-16-94	10:28	2.6	UNID. CENTRALES	.002
W94010625	F13P	02-16-94	17:37	14.4	CHAETOCEROS DECIPIENS	.003
W94010625	F13P	02-16-94	17:37	14.4	CHAETOCEROS SPP. (10-20UM)	.004
W94010625	F13P	02-16-94	17:37	14.4	CRYPTOMONADS	.055
W94010625	F13P	02-16-94	17:37	14.4	CYLINDROTHECA CLOSTERIUM	.003
W94010625	F13P	02-16-94	17:37	14.4	MICROFLAGELLATES	.283
W94010625	F13P	02-16-94	17:37	14.4	NAVICULOID DIATOMS	.003
W94010625	F13P	02-16-94	17:37	14.4	SKELETONEMA COSTATUM	.002
W94010625	F13P	02-16-94	17:37	14.4	THALASSIONEMA NITZSCHOIDES	.008
W94010625	F13P	02-16-94	17:37	14.4	THALASSIOSIRA SPP.	.003
W94010625	F13P	02-16-94	17:37	14.4	UNID. ATHECATE DINOFLAGELLATE	.003
W94010627	F13P	02-16-94	17:39	2.53	CHAETOCEROS DECIPIENS	.001
W94010627	F13P	02-16-94	17:39	2.53	COCCONEIS SCUTELLUM	.001
W94010627	F13P	02-16-94	17:39	2.53	CRYPTOMONADS	.06
W94010627	F13P	02-16-94	17:39	2.53	DICTYOCHA SPECULUM	.001
W94010627	F13P	02-16-94	17:39	2.53	GYRODINIUM SPIRALE	.001
W94010627	F13P	02-16-94	17:39	2.53	GYRODINIUM SPP.	.001
W94010627	F13P	02-16-94	17:39	2.53	MICROFLAGELLATES	.241
W94010627	F13P	02-16-94	17:39	2.53	NAVICULOID DIATOMS	.006
W94010627	F13P	02-16-94	17:39	2.53	NITZSCHIA SPP.	.001
W94010627	F13P	02-16-94	17:39	2.53	PYRAMIMONAS/TETRASELMIS SPP.	.002
W94010627	F13P	02-16-94	17:39	2.53	THALASSIONEMA NITZSCHOIDES	.006
W94010627	F13P	02-16-94	17:39	2.53	UNID. CENTRALES	.002
W94010660	N10P	02-17-94	07:52	10.79	ASTERIONELLOPSIS GLACIALIS	.001
W94010660	N10P	02-17-94	07:52	10.79	COCCONEIS SCUTELLUM	.001
W94010660	N10P	02-17-94	07:52	10.79	CRYPTOMONADS	.05
W94010660	N10P	02-17-94	07:52	10.79	GYMNODINIUM SPP.	.002
W94010660	N10P	02-17-94	07:52	10.79	KATODINIUM ROTUNDATUM	.001
W94010660	N10P	02-17-94	07:52	10.79	MICROFLAGELLATES	.177
W94010660	N10P	02-17-94	07:52	10.79	NAVICULOID DIATOMS	.004
W94010660	N10P	02-17-94	07:52	10.79	THALASSIONEMA NITZSCHOIDES	.002
W94010660	N10P	02-17-94	07:52	10.79	UNID. ATHECATE DINOFLAGELLATE	.001
W94010662	N10P	02-17-94	07:53	2.55	ASTERIONELLOPSIS GLACIALIS	0
W94010662	N10P	02-17-94	07:53	2.55	CHAETOCEROS SPP. (<10UM)	.001
W94010662	N10P	02-17-94	07:53	2.55	CRYPTOMONADS	.037
W94010662	N10P	02-17-94	07:53	2.55	CYLINDROTHECA CLOSTERIUM	.001
W94010662	N10P	02-17-94	07:53	2.55	DICTYOCHA FIBULA	0
W94010662	N10P	02-17-94	07:53	2.55	DICTYOCHA SPECULUM	.001
W94010662	N10P	02-17-94	07:53	2.55	GYMNODINIUM SPP.	.001
W94010662	N10P	02-17-94	07:53	2.55	LEPTOCYLINDRUS DANICUS	.001
W94010662	N10P	02-17-94	07:53	2.55	MICROFLAGELLATES	.16
W94010662	N10P	02-17-94	07:53	2.55	NAVICULOID DIATOMS	.004
W94010662	N10P	02-17-94	07:53	2.55	PYRAMIMONAS/TETRASELMIS SPP.	.001
W94010662	N10P	02-17-94	07:53	2.55	THALASSIONEMA NITZSCHOIDES	.005

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94010662	N10P	02-17-94	07:53	2.55	THALASSIOSIRA SPP.	.001
W94010662	N10P	02-17-94	07:53	2.55	UNID. ATHECATE DINOFLAGELLATE	0
W94010662	N10P	02-17-94	07:53	2.55	UNID. CENTRALES	.002
W94020041	F23P	03-01-94	06:49	8	CHAETOCEROS DECIPIENS	.001
W94020041	F23P	03-01-94	06:49	8	CHAETOCEROS SOCIALIS	.004
W94020041	F23P	03-01-94	06:49	8	CHAETOCEROS SPP. (10-20UM)	.005
W94020041	F23P	03-01-94	06:49	8	CHAETOCEROS SPP. (<10UM)	.007
W94020041	F23P	03-01-94	06:49	8	COCCONEIS SCUTELLUM	0
W94020041	F23P	03-01-94	06:49	8	CRYPTOMONADS	.006
W94020041	F23P	03-01-94	06:49	8	CYLINDROTHECA CLOSTERIUM	.001
W94020041	F23P	03-01-94	06:49	8	DETONULA CONFERVACEA	.001
W94020041	F23P	03-01-94	06:49	8	GYRO/PLEUROSIGMA SPP.	0
W94020041	F23P	03-01-94	06:49	8	GYRODINIUM SPIRALE	0
W94020041	F23P	03-01-94	06:49	8	MICROFLAGELLATES	.075
W94020041	F23P	03-01-94	06:49	8	NAVICULOID DIATOMS	.006
W94020041	F23P	03-01-94	06:49	8	NAVICULIDS (LYRATE)	.002
W94020041	F23P	03-01-94	06:49	8	ODONTELLA (CF) ALTERNANS	0
W94020041	F23P	03-01-94	06:49	8	PYRAMIMONAS/TETRASELMIS SPP.	0
W94020041	F23P	03-01-94	06:49	8	SKELETONEMA COSTATUM	.015
W94020041	F23P	03-01-94	06:49	8	THALASSIONEMA NITZSCHOIDES	.01
W94020041	F23P	03-01-94	06:49	8	THALASSIOSIRA (CF) CONSTRICTA	.009
W94020041	F23P	03-01-94	06:49	8	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.002
W94020041	F23P	03-01-94	06:49	8	THALASSIOSIRA ANGUSTE-LINEATA	.002
W94020041	F23P	03-01-94	06:49	8	THALASSIOSIRA NORDENSKIOLDII	.002
W94020041	F23P	03-01-94	06:49	8	THALASSIOSIRA SPP.	.015
W94020041	F23P	03-01-94	06:49	8	UNID. ATHECATE DINOFLAGELLATE	.001
W94020041	F23P	03-01-94	06:49	8	UNID. CENTRALES	.006
W94020043	F23P	03-01-94	06:51	2.8	AMPHORA SPP.	0
W94020043	F23P	03-01-94	06:51	2.8	ASTERIONELLOPSIS GLACIALIS	.001
W94020043	F23P	03-01-94	06:51	2.8	CHAETOCEROS DECIPIENS	.002
W94020043	F23P	03-01-94	06:51	2.8	CHAETOCEROS SPP. (10-20UM)	.003
W94020043	F23P	03-01-94	06:51	2.8	COCCONEIS SCUTELLUM	0
W94020043	F23P	03-01-94	06:51	2.8	CRYPTOMONADS	.006
W94020043	F23P	03-01-94	06:51	2.8	CYLINDROTHECA CLOSTERIUM	.005
W94020043	F23P	03-01-94	06:51	2.8	GYROSIGMA SPP.	0
W94020043	F23P	03-01-94	06:51	2.8	LICHOPHORA SPP.	.001
W94020043	F23P	03-01-94	06:51	2.8	MICROFLAGELLATES	.094
W94020043	F23P	03-01-94	06:51	2.8	NAVICULOID DIATOMS	.006
W94020043	F23P	03-01-94	06:51	2.8	PARALIA MARINA	.001
W94020043	F23P	03-01-94	06:51	2.8	SKELETONEMA COSTATUM	.009
W94020043	F23P	03-01-94	06:51	2.8	THALASSIONEMA NITZSCHOIDES	.02
W94020043	F23P	03-01-94	06:51	2.8	THALASSIOSIRA (CF) CONSTRICTA	.003
W94020043	F23P	03-01-94	06:51	2.8	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.014
W94020043	F23P	03-01-94	06:51	2.8	THALASSIOSIRA ANGUSTE-LINEATA	.003
W94020043	F23P	03-01-94	06:51	2.8	THALASSIOSIRA SPP.	.013
W94020043	F23P	03-01-94	06:51	2.8	UNID. PENNALES	.004
W94020065	N01P	03-01-94	07:42	7.47	ASTERIONELLOPSIS GLACIALIS	.001
W94020065	N01P	03-01-94	07:42	7.47	CHAETOCEROS BOREALIS	.002
W94020065	N01P	03-01-94	07:42	7.47	CHAETOCEROS COMPRESSUS	.007
W94020065	N01P	03-01-94	07:42	7.47	CHAETOCEROS SPP. (10-20UM)	.009
W94020065	N01P	03-01-94	07:42	7.47	CHAETOCEROS SPP. (<10UM)	.006
W94020065	N01P	03-01-94	07:42	7.47	CORETHRON CRIOPHILUM	.001
W94020065	N01P	03-01-94	07:42	7.47	CRYPTOMONADS	.005
W94020065	N01P	03-01-94	07:42	7.47	CYLINDROTHECA CLOSTERIUM	.002
W94020065	N01P	03-01-94	07:42	7.47	GYRO/PLEUROSIGMA SPP.	.002
W94020065	N01P	03-01-94	07:42	7.47	GYRODINIUM SPIRALE	.002
W94020065	N01P	03-01-94	07:42	7.47	KATODINIUM ROTUNDATUM	.002
W94020065	N01P	03-01-94	07:42	7.47	LICHOPHORA SPP.	.002
W94020065	N01P	03-01-94	07:42	7.47	MICROFLAGELLATES	.041
W94020065	N01P	03-01-94	07:42	7.47	NAVICULOID DIATOMS	.001
W94020065	N01P	03-01-94	07:42	7.47	PHAEOCYSTIS POUCHETII	.002
W94020065	N01P	03-01-94	07:42	7.47	STEPHANOPYXIS TURRIS	.001
W94020065	N01P	03-01-94	07:42	7.47	THALASSIONEMA NITZSCHOIDES	.036

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020065	N01P	03-01-94	07:42	7.47	THALASSIOSIRA (CF) CONSTRICTA	.003
W94020065	N01P	03-01-94	07:42	7.47	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.005
W94020065	N01P	03-01-94	07:42	7.47	THALASSIOSIRA ANGUSTE-LINEATA	.029
W94020065	N01P	03-01-94	07:42	7.47	THALASSIOSIRA NORDENSKIOLDII	.008
W94020065	N01P	03-01-94	07:42	7.47	THALASSIOSIRA SPP.	.029
W94020065	N01P	03-01-94	07:42	7.47	UNID. CENTRALES	.005
W94020066	N01P	03-01-94	07:43	2.86	ASTERIONELLOPSIS GLACIALIS	.001
W94020066	N01P	03-01-94	07:43	2.86	CHAETOCEROS COMPRESSUS	.004
W94020066	N01P	03-01-94	07:43	2.86	CHAETOCEROS DEBILIS	.001
W94020066	N01P	03-01-94	07:43	2.86	CHAETOCEROS DECIPIENS	.003
W94020066	N01P	03-01-94	07:43	2.86	CHAETOCEROS SPP. (10-20UM)	.001
W94020066	N01P	03-01-94	07:43	2.86	CHAETOCEROS SPP.(<10UM)	.004
W94020066	N01P	03-01-94	07:43	2.86	COCCONEIS SCUTELLUM	.001
W94020066	N01P	03-01-94	07:43	2.86	CRYPTOMONADS	.004
W94020066	N01P	03-01-94	07:43	2.86	CYLINDROTHECA CLOSTERIUM	.001
W94020066	N01P	03-01-94	07:43	2.86	GYRODINIUM SPIRALE	.001
W94020066	N01P	03-01-94	07:43	2.86	GYROSIGMA SPP.	.001
W94020066	N01P	03-01-94	07:43	2.86	LEPTOCYLINDRUS MINIMUS	.001
W94020066	N01P	03-01-94	07:43	2.86	LICHOPHORA SPP.	.001
W94020066	N01P	03-01-94	07:43	2.86	MICROFLAGELLATES	.016
W94020066	N01P	03-01-94	07:43	2.86	NAVICULOIDS (LYRATE)	.001
W94020066	N01P	03-01-94	07:43	2.86	NITZSCHIA SPP.	.001
W94020066	N01P	03-01-94	07:43	2.86	PARALIA MARINA	.004
W94020066	N01P	03-01-94	07:43	2.86	PHAEOCYSTIS POUCHETII	.001
W94020066	N01P	03-01-94	07:43	2.86	PROTOPERIDINIUM BREVE	.001
W94020066	N01P	03-01-94	07:43	2.86	RHIZOLENIA DELICATULA	.001
W94020066	N01P	03-01-94	07:43	2.86	STEPHANOPYXIS TURRIS	.001
W94020066	N01P	03-01-94	07:43	2.86	THALASSIONEMA NITZSCHOIDES	.025
W94020066	N01P	03-01-94	07:43	2.86	THALASSIOSIRA (CF) CONSTRICTA	.004
W94020066	N01P	03-01-94	07:43	2.86	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.002
W94020066	N01P	03-01-94	07:43	2.86	THALASSIOSIRA ANGUSTE-LINEATA	.075
W94020066	N01P	03-01-94	07:43	2.86	THALASSIOSIRA NORDENSKIOLDII	.002
W94020066	N01P	03-01-94	07:43	2.86	THALASSIOSIRA SPP.	.011
W94020066	N01P	03-01-94	07:43	2.86	UNID. ATHECATE DINOFLAGELLATE	.001
W94020066	N01P	03-01-94	07:43	2.86	UNID. CENTRALES	.003
W94020098	N04P	03-01-94	09:33	10.11	ASTERIONELLOPSIS GLACIALIS	.002
W94020098	N04P	03-01-94	09:33	10.11	CERATIUM LONGIPES	0
W94020098	N04P	03-01-94	09:33	10.11	CHAETOCEROS COMPRESSUS	.001
W94020098	N04P	03-01-94	09:33	10.11	CHAETOCEROS DEBILIS	.001
W94020098	N04P	03-01-94	09:33	10.11	CHAETOCEROS DECIPIENS	.003
W94020098	N04P	03-01-94	09:33	10.11	CHAETOCEROS SOCIALIS	.003
W94020098	N04P	03-01-94	09:33	10.11	CHAETOCEROS SPP. (10-20UM)	.001
W94020098	N04P	03-01-94	09:33	10.11	CHAETOCEROS SPP.(<10UM)	.002
W94020098	N04P	03-01-94	09:33	10.11	CRYPTOMONADS	.003
W94020098	N04P	03-01-94	09:33	10.11	DICTYOCHEA FIBULA	0
W94020098	N04P	03-01-94	09:33	10.11	GYRO/PLEUROSIGMA SPP.	.002
W94020098	N04P	03-01-94	09:33	10.11	GYRODINIUM SPIRALE	0
W94020098	N04P	03-01-94	09:33	10.11	KATODINIUM ROTUNDATUM	0
W94020098	N04P	03-01-94	09:33	10.11	LEPTOCYLINDRUS MINIMUS	.002
W94020098	N04P	03-01-94	09:33	10.11	MICROFLAGELLATES	.017
W94020098	N04P	03-01-94	09:33	10.11	NAVICULOIDS (LYRATE)	.001
W94020098	N04P	03-01-94	09:33	10.11	PHAEOCYSTIS POUCHETII	.001
W94020098	N04P	03-01-94	09:33	10.11	RHIZOLENIA DELICATULA	.001
W94020098	N04P	03-01-94	09:33	10.11	RHIZOLENIA FRAGILISSIMA	.001
W94020098	N04P	03-01-94	09:33	10.11	THALASSIONEMA NITZSCHOIDES	.023
W94020098	N04P	03-01-94	09:33	10.11	THALASSIOSIRA ANGUSTE-LINEATA	.077
W94020098	N04P	03-01-94	09:33	10.11	THALASSIOSIRA NORDENSKIOLDII	.004
W94020098	N04P	03-01-94	09:33	10.11	THALASSIOSIRA SPP.	.009
W94020098	N04P	03-01-94	09:33	10.11	THALASSOTHRIX FRAUENFELDII	0
W94020098	N04P	03-01-94	09:33	10.11	UNID. ATHECATE DINOFLAGELLATE	.001
W94020098	N04P	03-01-94	09:33	10.11	UNID. CENTRALES	.001
W94020099	N04P	03-01-94	09:34	2.38	ASTERIONELLOPSIS GLACIALIS	.001
W94020099	N04P	03-01-94	09:34	2.38	CHAETOCEROS BOREALIS	.001

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020099	N04P	03-01-94	09:34	2.38	CHAETOCEROS DEBILIS	.003
W94020099	N04P	03-01-94	09:34	2.38	CHAETOCEROS DECIPIENS	.001
W94020099	N04P	03-01-94	09:34	2.38	CHAETOCEROS SOCIALIS	.006
W94020099	N04P	03-01-94	09:34	2.38	CHAETOCEROS SPP. (10-20UM)	.005
W94020099	N04P	03-01-94	09:34	2.38	CHAETOCEROS SPP.(<10UM)	.005
W94020099	N04P	03-01-94	09:34	2.38	CRYPTOMONADS	.004
W94020099	N04P	03-01-94	09:34	2.38	CYLINDROTHECA CLOSTERIUM	.002
W94020099	N04P	03-01-94	09:34	2.38	GYRO/PLEUROSIGMA SPP.	.003
W94020099	N04P	03-01-94	09:34	2.38	GYRODINIUM SPIRALE	.001
W94020099	N04P	03-01-94	09:34	2.38	KATODINIUM ROTUNDATUM	.001
W94020099	N04P	03-01-94	09:34	2.38	MICROFLAGELLATES	.017
W94020099	N04P	03-01-94	09:34	2.38	NAVICULOID DIATOMS	.001
W94020099	N04P	03-01-94	09:34	2.38	NAVICULOIDS (LYRATE)	.001
W94020099	N04P	03-01-94	09:34	2.38	PHAEOCYSTIS POUCHETII	.002
W94020099	N04P	03-01-94	09:34	2.38	THALASSIONEMA NITZSCHOIDES	.019
W94020099	N04P	03-01-94	09:34	2.38	THALASSIOSIRA (CF) CONSTRICTA	.005
W94020099	N04P	03-01-94	09:34	2.38	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.007
W94020099	N04P	03-01-94	09:34	2.38	THALASSIOSIRA ANGUSTE-LINEATA	.066
W94020099	N04P	03-01-94	09:34	2.38	THALASSIOSIRA NORDENSKIOLDII	.01
W94020099	N04P	03-01-94	09:34	2.38	THALASSIOSIRA SPP.	.01
W94020099	N04P	03-01-94	09:34	2.38	UNID. CENTRALES	.002
W94020113	N16P	03-01-94	10:17	13.67	ASTERIONELLOPSIS GLACIALIS	.001
W94020113	N16P	03-01-94	10:17	13.67	CHAETOCEROS COMPRESSUS	.003
W94020113	N16P	03-01-94	10:17	13.67	CHAETOCEROS DEBILIS	.002
W94020113	N16P	03-01-94	10:17	13.67	CHAETOCEROS DECIPIENS	.006
W94020113	N16P	03-01-94	10:17	13.67	CHAETOCEROS SOCIALIS	.003
W94020113	N16P	03-01-94	10:17	13.67	CHAETOCEROS SPP. (10-20UM)	.004
W94020113	N16P	03-01-94	10:17	13.67	CHAETOCEROS SPP.(<10UM)	.004
W94020113	N16P	03-01-94	10:17	13.67	CORETHRON CRIOPHILUM	.001
W94020113	N16P	03-01-94	10:17	13.67	CRYPTOMONADS	.002
W94020113	N16P	03-01-94	10:17	13.67	CYLINDROTHECA CLOSTERIUM	.001
W94020113	N16P	03-01-94	10:17	13.67	DICTYOCHA SPECULUM	.001
W94020113	N16P	03-01-94	10:17	13.67	GYRO/PLEUROSIGMA SPP.	.001
W94020113	N16P	03-01-94	10:17	13.67	KATODINIUM ROTUNDATUM	.001
W94020113	N16P	03-01-94	10:17	13.67	MICROFLAGELLATES	.02
W94020113	N16P	03-01-94	10:17	13.67	NAVICULOID DIATOMS	.001
W94020113	N16P	03-01-94	10:17	13.67	NAVICULOIDS (LYRATE)	.001
W94020113	N16P	03-01-94	10:17	13.67	PHAEOCYSTIS POUCHETII	.002
W94020113	N16P	03-01-94	10:17	13.67	RHIZOLENIA DELICATULA	.003
W94020113	N16P	03-01-94	10:17	13.67	THALASSIONEMA NITZSCHOIDES	.023
W94020113	N16P	03-01-94	10:17	13.67	THALASSIOSIRA (CF) CONSTRICTA	.005
W94020113	N16P	03-01-94	10:17	13.67	THALASSIOSIRA (cf) ECCENTRICA	.001
W94020113	N16P	03-01-94	10:17	13.67	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.014
W94020113	N16P	03-01-94	10:17	13.67	THALASSIOSIRA ANGUSTE-LINEATA	.065
W94020113	N16P	03-01-94	10:17	13.67	THALASSIOSIRA NORDENSKIOLDII	.008
W94020113	N16P	03-01-94	10:17	13.67	THALASSIOSIRA SPP.	.015
W94020113	N16P	03-01-94	10:17	13.67	THALASSOTHRIX FRAUENFELDII	.001
W94020113	N16P	03-01-94	10:17	13.67	UNID. ATHECATE DINOFLAGELLATE	.001
W94020113	N16P	03-01-94	10:17	13.67	UNID. CENTRALES	.003
W94020115	N16P	03-01-94	10:18	3.03	ASTERIONELLOPSIS GLACIALIS	.001
W94020115	N16P	03-01-94	10:18	3.03	CHAETOCEROS DECIPIENS	.006
W94020115	N16P	03-01-94	10:18	3.03	CHAETOCEROS SOCIALIS	.004
W94020115	N16P	03-01-94	10:18	3.03	CHAETOCEROS SPP. (10-20UM)	.006
W94020115	N16P	03-01-94	10:18	3.03	CORETHRON CRIOPHILUM	.001
W94020115	N16P	03-01-94	10:18	3.03	CRYPTOMONADS	.005
W94020115	N16P	03-01-94	10:18	3.03	CYLINDROTHECA CLOSTERIUM	.002
W94020115	N16P	03-01-94	10:18	3.03	MICROFLAGELLATES	.02
W94020115	N16P	03-01-94	10:18	3.03	NAVICULOIDS (LYRATE)	.003
W94020115	N16P	03-01-94	10:18	3.03	PHAEOCYSTIS POUCHETII	.004
W94020115	N16P	03-01-94	10:18	3.03	RHIZOLENIA DELICATULA	.004
W94020115	N16P	03-01-94	10:18	3.03	STEPHANOPYXIS TURRIS	.001
W94020115	N16P	03-01-94	10:18	3.03	THALASSIONEMA NITZSCHOIDES	.022
W94020115	N16P	03-01-94	10:18	3.03	THALASSIOSIRA (CF) CONSTRICTA	.002

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020115	N16P	03-01-94	10:18	3.03	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.014
W94020115	N16P	03-01-94	10:18	3.03	THALASSIOSIRA ANGUSTE-LINEATA	.038
W94020115	N16P	03-01-94	10:18	3.03	THALASSIOSIRA NORDENSKIOLDII	.008
W94020115	N16P	03-01-94	10:18	3.03	THALASSIOSIRA SPP.	.035
W94020115	N16P	03-01-94	10:18	3.03	UNID. CENTRALES	.001
W94020232	F02P	03-02-94	07:46	7.83	ASTERIONELLOPSIS GLACIALIS	.006
W94020232	F02P	03-02-94	07:46	7.83	CHAETOCEROS COMPRESSUS	.071
W94020232	F02P	03-02-94	07:46	7.83	CHAETOCEROS DEBILIS	.009
W94020232	F02P	03-02-94	07:46	7.83	CHAETOCEROS DECIPIENS	.003
W94020232	F02P	03-02-94	07:46	7.83	CHAETOCEROS SEPTENTRIONALIS	.003
W94020232	F02P	03-02-94	07:46	7.83	CHAETOCEROS SOCIALIS	.026
W94020232	F02P	03-02-94	07:46	7.83	CHAETOCEROS SPP. (10-20UM)	.035
W94020232	F02P	03-02-94	07:46	7.83	CHAETOCEROS SPP. (<10UM)	.018
W94020232	F02P	03-02-94	07:46	7.83	CRYPTOMONADS	.029
W94020232	F02P	03-02-94	07:46	7.83	CYLINDROTHECA CLOSTERIUM	.003
W94020232	F02P	03-02-94	07:46	7.83	GYRODINIUM SPIRALE	.003
W94020232	F02P	03-02-94	07:46	7.83	LEPTOCYLINDRUS MINIMUS	.029
W94020232	F02P	03-02-94	07:46	7.83	MICROFLAGELLATES	.065
W94020232	F02P	03-02-94	07:46	7.83	NAVICULOID DIATOMS	.003
W94020232	F02P	03-02-94	07:46	7.83	NITZSCHIA SPP.	.003
W94020232	F02P	03-02-94	07:46	7.83	PHAEOCYSTIS POUCHETII	2.38
W94020232	F02P	03-02-94	07:46	7.83	PROTOPERIDINIUM BREVE	.003
W94020232	F02P	03-02-94	07:46	7.83	RHIZOSOLENIA DELICATULA	.009
W94020232	F02P	03-02-94	07:46	7.83	THALASSIONEMA NITZSCHOIDES	.029
W94020232	F02P	03-02-94	07:46	7.83	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.041
W94020232	F02P	03-02-94	07:46	7.83	THALASSIOSIRA ANGUSTE-LINEATA	.006
W94020232	F02P	03-02-94	07:46	7.83	THALASSIOSIRA NORDENSKIOLDII	.009
W94020232	F02P	03-02-94	07:46	7.83	THALASSIOSIRA SPP.	.044
W94020232	F02P	03-02-94	07:46	7.83	UNID. ATHECATE DINOFLAGELLATE	.003
W94020232	F02P	03-02-94	07:46	7.83	UNID. CENTRALES	.009
W94020233	F02P	03-02-94	07:47	2.81	AMPHORA SPP.	.002
W94020233	F02P	03-02-94	07:47	2.81	ASTERIONELLOPSIS GLACIALIS	.012
W94020233	F02P	03-02-94	07:47	2.81	CHAETOCEROS COMPRESSUS	.054
W94020233	F02P	03-02-94	07:47	2.81	CHAETOCEROS DEBILIS	.01
W94020233	F02P	03-02-94	07:47	2.81	CHAETOCEROS DECIPIENS	.002
W94020233	F02P	03-02-94	07:47	2.81	CHAETOCEROS SEPTENTRIONALIS	.002
W94020233	F02P	03-02-94	07:47	2.81	CHAETOCEROS SOCIALIS	.017
W94020233	F02P	03-02-94	07:47	2.81	CHAETOCEROS SPP. (10-20UM)	.071
W94020233	F02P	03-02-94	07:47	2.81	CHAETOCEROS SPP. (<10UM)	.017
W94020233	F02P	03-02-94	07:47	2.81	CORETHRON CRIOPHILUM	.007
W94020233	F02P	03-02-94	07:47	2.81	CRYPTOMONADS	.039
W94020233	F02P	03-02-94	07:47	2.81	GYRODINIUM SPIRALE	.005
W94020233	F02P	03-02-94	07:47	2.81	KATODINIUM ROTUNDATUM	.007
W94020233	F02P	03-02-94	07:47	2.81	LEPTOCYLINDRUS MINIMUS	.063
W94020233	F02P	03-02-94	07:47	2.81	MICROFLAGELLATES	.09
W94020233	F02P	03-02-94	07:47	2.81	NAVICULOIDS (LYRATE)	.005
W94020233	F02P	03-02-94	07:47	2.81	PHAEOCYSTIS POUCHETII	2.793
W94020233	F02P	03-02-94	07:47	2.81	PROTOPERIDINIUM BIPES	.002
W94020233	F02P	03-02-94	07:47	2.81	PROTOPERIDINIUM SPP.	.002
W94020233	F02P	03-02-94	07:47	2.81	PYRAMIMONAS/TETRASELMIS SPP.	.002
W94020233	F02P	03-02-94	07:47	2.81	RHIZOSOLENIA DELICATULA	.007
W94020233	F02P	03-02-94	07:47	2.81	THALASSIONEMA NITZSCHOIDES	.02
W94020233	F02P	03-02-94	07:47	2.81	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.022
W94020233	F02P	03-02-94	07:47	2.81	THALASSIOSIRA ANGUSTE-LINEATA	.007
W94020233	F02P	03-02-94	07:47	2.81	THALASSIOSIRA NORDENSKIOLDII	.015
W94020233	F02P	03-02-94	07:47	2.81	THALASSIOSIRA SPP.	.037
W94020233	F02P	03-02-94	07:47	2.81	UNID. ATHECATE DINOFLAGELLATE	.005
W94020233	F02P	03-02-94	07:47	2.81	UNID. CENTRALES	.007
W94020256	F01P	03-02-94	09:17	7.54	ASTERIONELLOPSIS GLACIALIS	.015
W94020256	F01P	03-02-94	09:17	7.54	CHAETOCEROS COMPRESSUS	.169
W94020256	F01P	03-02-94	09:17	7.54	CHAETOCEROS DEBILIS	.015
W94020256	F01P	03-02-94	09:17	7.54	CHAETOCEROS SOCIALIS	.012
W94020256	F01P	03-02-94	09:17	7.54	CHAETOCEROS SPORE	.006

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020256	F01P	03-02-94	09:17	7.54	CHAETOCEROS SPP. (10-20UM)	.027
W94020256	F01P	03-02-94	09:17	7.54	CHAETOCEROS SPP.(<10UM)	.05
W94020256	F01P	03-02-94	09:17	7.54	CORETHRON CRIOPHILUM	.003
W94020256	F01P	03-02-94	09:17	7.54	COSCINODISCUS OCLUS-IRIDIS	.003
W94020256	F01P	03-02-94	09:17	7.54	CRYPTOMONADS	.024
W94020256	F01P	03-02-94	09:17	7.54	CYLINDROTHECA CLOSTERIUM	.006
W94020256	F01P	03-02-94	09:17	7.54	LEPTOCYLINDRUS MINIMUS	.015
W94020256	F01P	03-02-94	09:17	7.54	MICROFLAGELLATES	.071
W94020256	F01P	03-02-94	09:17	7.54	NAVICULOID (LYRATE)	.012
W94020256	F01P	03-02-94	09:17	7.54	PHAEOCYSTIS POUCHETII	2.935
W94020256	F01P	03-02-94	09:17	7.54	RHIZOLENIA DELICATULA	.009
W94020256	F01P	03-02-94	09:17	7.54	SKELETONEMA COSTATUM	.041
W94020256	F01P	03-02-94	09:17	7.54	THALASSIONEMA NITZSCHOIDES	.038
W94020256	F01P	03-02-94	09:17	7.54	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.086
W94020256	F01P	03-02-94	09:17	7.54	THALASSIOSIRA NORDENSKIOLDII	.009
W94020256	F01P	03-02-94	09:17	7.54	THALASSIOSIRA SPP.	.027
W94020256	F01P	03-02-94	09:17	7.54	UNID. ATHECATE DINOFLAGELLATE	.012
W94020256	F01P	03-02-94	09:17	7.54	UNID. CENTRALES	.015
W94020257	F01P	03-02-94	09:17	2.68	CHAETOCEROS COMPRESSUS	.064
W94020257	F01P	03-02-94	09:17	2.68	CHAETOCEROS DEBILIS	.064
W94020257	F01P	03-02-94	09:17	2.68	CHAETOCEROS SPP. (10-20UM)	.095
W94020257	F01P	03-02-94	09:17	2.68	CHAETOCEROS SPP.(<10UM)	.028
W94020257	F01P	03-02-94	09:17	2.68	CORETHRON CRIOPHILUM	.003
W94020257	F01P	03-02-94	09:17	2.68	CRYPTOMONADS	.031
W94020257	F01P	03-02-94	09:17	2.68	DETONULA CONFERVACEA	.009
W94020257	F01P	03-02-94	09:17	2.68	LEPTOCYLINDRUS MINIMUS	.052
W94020257	F01P	03-02-94	09:17	2.68	MICROFLAGELLATES	.037
W94020257	F01P	03-02-94	09:17	2.68	NAVICULOID (LYRATE)	.009
W94020257	F01P	03-02-94	09:17	2.68	PHAEOCYSTIS POUCHETII	3.024
W94020257	F01P	03-02-94	09:17	2.68	RHIZOLENIA DELICATULA	.015
W94020257	F01P	03-02-94	09:17	2.68	SKELETONEMA COSTATUM	.018
W94020257	F01P	03-02-94	09:17	2.68	THALASSIONEMA NITZSCHOIDES	.018
W94020257	F01P	03-02-94	09:17	2.68	THALASSIOSIRA (CF) CONSTRICTA	.043
W94020257	F01P	03-02-94	09:17	2.68	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.104
W94020257	F01P	03-02-94	09:17	2.68	THALASSIOSIRA ANGUSTE-LINEATA	.006
W94020257	F01P	03-02-94	09:17	2.68	THALASSIOSIRA NORDENSKIOLDII	.028
W94020257	F01P	03-02-94	09:17	2.68	THALASSIOSIRA SPP.	.04
W94020257	F01P	03-02-94	09:17	2.68	UNID. ATHECATE DINOFLAGELLATE	.003
W94020257	F01P	03-02-94	09:17	2.68	UNID. CENTRALES	.009
W94020350	F13P	03-02-94	15:09	14.48	CHAETOCEROS BOREALIS	.001
W94020350	F13P	03-02-94	15:09	14.48	CHAETOCEROS DECIPIENS	.003
W94020350	F13P	03-02-94	15:09	14.48	CHAETOCEROS SPP. (10-20UM)	.006
W94020350	F13P	03-02-94	15:09	14.48	CHAETOCEROS SPP.(<10UM)	.002
W94020350	F13P	03-02-94	15:09	14.48	CRYPTOMONADS	.003
W94020350	F13P	03-02-94	15:09	14.48	CYLINDROTHECA CLOSTERIUM	.002
W94020350	F13P	03-02-94	15:09	14.48	DETONULA CONFERVACEA	.001
W94020350	F13P	03-02-94	15:09	14.48	GYRO/PLEUROSIGMA SPP.	.001
W94020350	F13P	03-02-94	15:09	14.48	GYRODINIUM SPIRALE	.001
W94020350	F13P	03-02-94	15:09	14.48	KATODINIUM ROTUNDATUM	.001
W94020350	F13P	03-02-94	15:09	14.48	MICROFLAGELLATES	.017
W94020350	F13P	03-02-94	15:09	14.48	NAVICULOID DIATOMS	.001
W94020350	F13P	03-02-94	15:09	14.48	NAVICULOID (LYRATE)	.004
W94020350	F13P	03-02-94	15:09	14.48	PHAEOCYSTIS POUCHETII	.002
W94020350	F13P	03-02-94	15:09	14.48	SKELETONEMA COSTATUM	.001
W94020350	F13P	03-02-94	15:09	14.48	THALASSIONEMA NITZSCHOIDES	.025
W94020350	F13P	03-02-94	15:09	14.48	THALASSIOSIRA (CF) CONSTRICTA	.004
W94020350	F13P	03-02-94	15:09	14.48	THALASSIOSIRA (cf) ECCENTRICA	.002
W94020350	F13P	03-02-94	15:09	14.48	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.021
W94020350	F13P	03-02-94	15:09	14.48	THALASSIOSIRA ANGUSTE-LINEATA	.004
W94020350	F13P	03-02-94	15:09	14.48	THALASSIOSIRA NORDENSKIOLDII	.004
W94020350	F13P	03-02-94	15:09	14.48	THALASSIOSIRA SPP.	.036
W94020350	F13P	03-02-94	15:09	14.48	UNID. ATHECATE DINOFLAGELLATE	.001
W94020350	F13P	03-02-94	15:09	14.48	UNID. CENTRALES	.002

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020352	F13P	03-02-94	15:11	2.67	ASTERIONELLOPSIS GLACIALIS	.001
W94020352	F13P	03-02-94	15:11	2.67	CHAETOCEROS DEBILIS	.003
W94020352	F13P	03-02-94	15:11	2.67	CHAETOCEROS DECIPIENS	.002
W94020352	F13P	03-02-94	15:11	2.67	CHAETOCEROS SPP. (10-20UM)	.003
W94020352	F13P	03-02-94	15:11	2.67	CHAETOCEROS SPP.(<10UM)	.002
W94020352	F13P	03-02-94	15:11	2.67	CRYPTOMONADS	.004
W94020352	F13P	03-02-94	15:11	2.67	GYRODINIUM SPIRALE	.001
W94020352	F13P	03-02-94	15:11	2.67	LEPTOCYLINDRUS MINIMUS	.001
W94020352	F13P	03-02-94	15:11	2.67	MICROFLAGELLATES	.014
W94020352	F13P	03-02-94	15:11	2.67	NAVICULOID DIATOMS	.003
W94020352	F13P	03-02-94	15:11	2.67	PHAEOCYSTIS POUCHETII	.001
W94020352	F13P	03-02-94	15:11	2.67	THALASSIONEMA NITZSCHOIDES	.019
W94020352	F13P	03-02-94	15:11	2.67	THALASSIOSIRA (CF) CONSTRICTA	.001
W94020352	F13P	03-02-94	15:11	2.67	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.016
W94020352	F13P	03-02-94	15:11	2.67	THALASSIOSIRA ANGUSTE-LINEATA	.004
W94020352	F13P	03-02-94	15:11	2.67	THALASSIOSIRA NORDENSKIOLDII	.004
W94020352	F13P	03-02-94	15:11	2.67	THALASSIOSIRA SPP.	.037
W94020352	F13P	03-02-94	15:11	2.67	UNID. ATHECATE DINOFLAGELLATE	.001
W94020417	F23P	03-05-94	07:06	9.59	CHAETOCEROS COMPRESSUS	.001
W94020417	F23P	03-05-94	07:06	9.59	CHAETOCEROS DEBILIS	.003
W94020417	F23P	03-05-94	07:06	9.59	CHAETOCEROS DECIPIENS	.001
W94020417	F23P	03-05-94	07:06	9.59	CHAETOCEROS SPP. (10-20UM)	.001
W94020417	F23P	03-05-94	07:06	9.59	CHAETOCEROS SPP.(<10UM)	.004
W94020417	F23P	03-05-94	07:06	9.59	COCCONEIS SCUTELLUM	.001
W94020417	F23P	03-05-94	07:06	9.59	CORETHRON CRIOPHILUM	.001
W94020417	F23P	03-05-94	07:06	9.59	CRYPTOMONADS	.004
W94020417	F23P	03-05-94	07:06	9.59	CYANOPHYCEAE	.004
W94020417	F23P	03-05-94	07:06	9.59	CYLINDROTHECA CLOSTERIUM	.003
W94020417	F23P	03-05-94	07:06	9.59	DIPLONEIS (CF) CRABRO	.001
W94020417	F23P	03-05-94	07:06	9.59	GYMNODINIUM SPP.	.001
W94020417	F23P	03-05-94	07:06	9.59	GYRO/PLEUROSIGMA SPP.	.001
W94020417	F23P	03-05-94	07:06	9.59	GYROSIGMA SPP.	.002
W94020417	F23P	03-05-94	07:06	9.59	LEPTOCYLINDRUS MINIMUS	.002
W94020417	F23P	03-05-94	07:06	9.59	MICROFLAGELLATES	.018
W94020417	F23P	03-05-94	07:06	9.59	NAVICULOID DIATOMS	.015
W94020417	F23P	03-05-94	07:06	9.59	NITZSCHIA SPP.	.001
W94020417	F23P	03-05-94	07:06	9.59	PARALIA MARINA	.002
W94020417	F23P	03-05-94	07:06	9.59	SKELETONEMA COSTATUM	.021
W94020417	F23P	03-05-94	07:06	9.59	STEPHANOPYXIS TURRIS	.001
W94020417	F23P	03-05-94	07:06	9.59	THALASSIONEMA NITZSCHOIDES	.021
W94020417	F23P	03-05-94	07:06	9.59	THALASSIOSIRA (CF) CONSTRICTA	.002
W94020417	F23P	03-05-94	07:06	9.59	THALASSIOSIRA (cf) ECCENTRICA	.001
W94020417	F23P	03-05-94	07:06	9.59	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.052
W94020417	F23P	03-05-94	07:06	9.59	THALASSIOSIRA ANGUSTE-LINEATA	.001
W94020417	F23P	03-05-94	07:06	9.59	THALASSIOSIRA NORDENSKIOLDII	.003
W94020417	F23P	03-05-94	07:06	9.59	THALASSIOSIRA SPP.	.008
W94020417	F23P	03-05-94	07:06	9.59	UNID. CENTRALES	.001
W94020419	F23P	03-05-94	07:08	2.22	ASTERIONELLOPSIS GLACIALIS	.001
W94020419	F23P	03-05-94	07:08	2.22	CHAETOCEROS DECIPIENS	.002
W94020419	F23P	03-05-94	07:08	2.22	CHAETOCEROS SPP. (10-20UM)	.003
W94020419	F23P	03-05-94	07:08	2.22	CHAETOCEROS SPP.(<10UM)	.002
W94020419	F23P	03-05-94	07:08	2.22	COCCONEIS SCUTELLUM	.001
W94020419	F23P	03-05-94	07:08	2.22	CORETHRON CRIOPHILUM	.001
W94020419	F23P	03-05-94	07:08	2.22	CRYPTOMONADS	.004
W94020419	F23P	03-05-94	07:08	2.22	CYLINDROTHECA CLOSTERIUM	.004
W94020419	F23P	03-05-94	07:08	2.22	GYRO/PLEUROSIGMA SPP.	.001
W94020419	F23P	03-05-94	07:08	2.22	LEPTOCYLINDRUS MINIMUS	.001
W94020419	F23P	03-05-94	07:08	2.22	MICROFLAGELLATES	.018
W94020419	F23P	03-05-94	07:08	2.22	NAVICULOID DIATOMS	.011
W94020419	F23P	03-05-94	07:08	2.22	NAVICULOIDS (LYRATE)	.003
W94020419	F23P	03-05-94	07:08	2.22	SKELETONEMA COSTATUM	.015
W94020419	F23P	03-05-94	07:08	2.22	THALASSIONEMA NITZSCHOIDES	.015
W94020419	F23P	03-05-94	07:08	2.22	THALASSIOSIRA (CF) CONSTRICTA	.003

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020419	F23P	03-05-94	07:08	2.22	THALASSIOSIRA (cf) ECCENTRICA	.001
W94020419	F23P	03-05-94	07:08	2.22	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.051
W94020419	F23P	03-05-94	07:08	2.22	THALASSIOSIRA ANGUSTE-LINEATA	.003
W94020419	F23P	03-05-94	07:08	2.22	THALASSIOSIRA NORDENSKIOLDII	.002
W94020419	F23P	03-05-94	07:08	2.22	THALASSIOSIRA SPP.	.004
W94020419	F23P	03-05-94	07:08	2.22	UNID. ATHECATE DINOFLAGELLATE	.003
W94020419	F23P	03-05-94	07:08	2.22	UNID. CENTRALES	.001
W94020445	N20P	03-05-94	08:15	7.1	CHAETOCEROS DEBILIS	.005
W94020445	N20P	03-05-94	08:15	7.1	CHAETOCEROS DECIPIENS	.005
W94020445	N20P	03-05-94	08:15	7.1	CHAETOCEROS SPORE	.001
W94020445	N20P	03-05-94	08:15	7.1	CHAETOCEROS SPP. (10-20UM)	.004
W94020445	N20P	03-05-94	08:15	7.1	CHAETOCEROS SPP.(<10UM)	.006
W94020445	N20P	03-05-94	08:15	7.1	COCCONEIS SCUTELLUM	.001
W94020445	N20P	03-05-94	08:15	7.1	COSCINODISCUS OCLUS-IRIDIS	.001
W94020445	N20P	03-05-94	08:15	7.1	CRYPTOMONADS	.001
W94020445	N20P	03-05-94	08:15	7.1	CYLINDROTHECA CLOSTERIUM	.002
W94020445	N20P	03-05-94	08:15	7.1	GRAMMATOPHORA MARINA	.001
W94020445	N20P	03-05-94	08:15	7.1	MICROFLAGELLATES	.008
W94020445	N20P	03-05-94	08:15	7.1	NAVICULOID DIATOMS	.003
W94020445	N20P	03-05-94	08:15	7.1	NAVICULOIDS (LYRATE)	.002
W94020445	N20P	03-05-94	08:15	7.1	NITZSCHIA SPP.	.001
W94020445	N20P	03-05-94	08:15	7.1	RHIZOSOLENTIA SETIGERA	.001
W94020445	N20P	03-05-94	08:15	7.1	STEPHANOPYXIS TURRIS	.002
W94020445	N20P	03-05-94	08:15	7.1	THALASSIONEMA NITZSCHOIDES	.021
W94020445	N20P	03-05-94	08:15	7.1	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.148
W94020445	N20P	03-05-94	08:15	7.1	THALASSIOSIRA ANGUSTE-LINEATA	.011
W94020445	N20P	03-05-94	08:15	7.1	THALASSIOSIRA NORDENSKIOLDII	.002
W94020445	N20P	03-05-94	08:15	7.1	THALASSIOSIRA SPP.	.02
W94020445	N20P	03-05-94	08:15	7.1	UNID. ATHECATE DINOFLAGELLATE	.001
W94020445	N20P	03-05-94	08:15	7.1	UNID. CENTRALES	.003
W94020446	N20P	03-05-94	08:16	2.07	CHAETOCEROS DEBILIS	.004
W94020446	N20P	03-05-94	08:16	2.07	CHAETOCEROS DECIPIENS	.005
W94020446	N20P	03-05-94	08:16	2.07	CHAETOCEROS SOCIALIS	.003
W94020446	N20P	03-05-94	08:16	2.07	CHAETOCEROS SPP. (10-20UM)	.003
W94020446	N20P	03-05-94	08:16	2.07	CHAETOCEROS SPP.(<10UM)	.005
W94020446	N20P	03-05-94	08:16	2.07	CRYPTOMONADS	.002
W94020446	N20P	03-05-94	08:16	2.07	CYLINDROTHECA CLOSTERIUM	.003
W94020446	N20P	03-05-94	08:16	2.07	GYRO/PLEUROSIGMA SPP.	.002
W94020446	N20P	03-05-94	08:16	2.07	GYRODINIUM SPIRALE	.001
W94020446	N20P	03-05-94	08:16	2.07	MICROFLAGELLATES	.01
W94020446	N20P	03-05-94	08:16	2.07	NAVICULOID DIATOMS	.001
W94020446	N20P	03-05-94	08:16	2.07	NAVICULOIDS (LYRATE)	.002
W94020446	N20P	03-05-94	08:16	2.07	PROTOPERIDINIUM SPP.	.001
W94020446	N20P	03-05-94	08:16	2.07	STEPHANOPYXIS TURRIS	.001
W94020446	N20P	03-05-94	08:16	2.07	THALASSIONEMA NITZSCHOIDES	.022
W94020446	N20P	03-05-94	08:16	2.07	THALASSIOSIRA (CF) CONSTRICTA	.001
W94020446	N20P	03-05-94	08:16	2.07	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.087
W94020446	N20P	03-05-94	08:16	2.07	THALASSIOSIRA ANGUSTE-LINEATA	.012
W94020446	N20P	03-05-94	08:16	2.07	THALASSIOSIRA SPP.	.055
W94020446	N20P	03-05-94	08:16	2.07	UNID. ATHECATE DINOFLAGELLATE	.001
W94020446	N20P	03-05-94	08:16	2.07	UNID. CENTRALES	.002
W94020459	N07P	03-05-94	09:04	12.49	CHAETOCEROS BOREALIS	.002
W94020459	N07P	03-05-94	09:04	12.49	CHAETOCEROS DEBILIS	.008
W94020459	N07P	03-05-94	09:04	12.49	CHAETOCEROS DECIPIENS	.002
W94020459	N07P	03-05-94	09:04	12.49	CHAETOCEROS SPP. (10-20UM)	.007
W94020459	N07P	03-05-94	09:04	12.49	CHAETOCEROS SPP.(<10UM)	.002
W94020459	N07P	03-05-94	09:04	12.49	CORETHRON CRIPHILUM	.001
W94020459	N07P	03-05-94	09:04	12.49	CRYPTOMONADS	.001
W94020459	N07P	03-05-94	09:04	12.49	CYLINDROTHECA CLOSTERIUM	.004
W94020459	N07P	03-05-94	09:04	12.49	GYRO/PLEUROSIGMA SPP.	.001
W94020459	N07P	03-05-94	09:04	12.49	MICROFLAGELLATES	.012
W94020459	N07P	03-05-94	09:04	12.49	NAVICULOIDS (LYRATE)	.002
W94020459	N07P	03-05-94	09:04	12.49	PROTOPERIDINIUM BIPES	.001



Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020459	N07P	03-05-94	09:04	12.49	STEPHANOPYXIS TURRIS	.001
W94020459	N07P	03-05-94	09:04	12.49	THALASSIONEMA NITZSCHOIDES	.024
W94020459	N07P	03-05-94	09:04	12.49	THALASSIOSIRA (CF) CONSTRICTA	.001
W94020459	N07P	03-05-94	09:04	12.49	THALASSIOSIRA (cf) ECCENTRICA	.001
W94020459	N07P	03-05-94	09:04	12.49	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.076
W94020459	N07P	03-05-94	09:04	12.49	THALASSIOSIRA ANGUSTE-LINEATA	.008
W94020459	N07P	03-05-94	09:04	12.49	THALASSIOSIRA SPP.	.028
W94020459	N07P	03-05-94	09:04	12.49	UNID. ATHECATE DINOFLAGELLATE	.001
W94020459	N07P	03-05-94	09:04	12.49	UNID. CENTRALES	.002
W94020460	N07P	03-05-94	09:05	1.96	CHAETOCEROS DEBILIS	.005
W94020460	N07P	03-05-94	09:05	1.96	CHAETOCEROS DECIPIENS	.007
W94020460	N07P	03-05-94	09:05	1.96	CHAETOCEROS SOCIALIS	.002
W94020460	N07P	03-05-94	09:05	1.96	CHAETOCEROS SPP. (10-20UM)	.007
W94020460	N07P	03-05-94	09:05	1.96	CHAETOCEROS SPP. (<10UM)	.003
W94020460	N07P	03-05-94	09:05	1.96	CRYPTOMONADS	.003
W94020460	N07P	03-05-94	09:05	1.96	CYLINDROTHECA CLOSTERIUM	.004
W94020460	N07P	03-05-94	09:05	1.96	GYMNODINIUM SPP.	0
W94020460	N07P	03-05-94	09:05	1.96	GYRODINIUM SPIRALE	0
W94020460	N07P	03-05-94	09:05	1.96	MICROFLAGELLATES	.022
W94020460	N07P	03-05-94	09:05	1.96	NAVICULOIDS (LYRATE)	.002
W94020460	N07P	03-05-94	09:05	1.96	PHAEOCYSTIS POUCHETII	.002
W94020460	N07P	03-05-94	09:05	1.96	THALASSIONEMA NITZSCHOIDES	.017
W94020460	N07P	03-05-94	09:05	1.96	THALASSIOSIRA (CF) CONSTRICTA	.003
W94020460	N07P	03-05-94	09:05	1.96	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.033
W94020460	N07P	03-05-94	09:05	1.96	THALASSIOSIRA ANGUSTE-LINEATA	.007
W94020460	N07P	03-05-94	09:05	1.96	THALASSIOSIRA NORDENSKIOLDII	.001
W94020460	N07P	03-05-94	09:05	1.96	THALASSIOSIRA SPP.	.017
W94020460	N07P	03-05-94	09:05	1.96	UNID. ATHECATE DINOFLAGELLATE	.001
W94020460	N07P	03-05-94	09:05	1.96	UNID. CENTRALES	.001
W94020485	N16P	03-05-94	10:47	19.17	ASTERIONELLOPSIS GLACIALIS	.001
W94020485	N16P	03-05-94	10:47	19.17	CHAETOCEROS DEBILIS	.015
W94020485	N16P	03-05-94	10:47	19.17	CHAETOCEROS DECIPIENS	.004
W94020485	N16P	03-05-94	10:47	19.17	CHAETOCEROS SOCIALIS	.005
W94020485	N16P	03-05-94	10:47	19.17	CHAETOCEROS SPP. (10-20UM)	.011
W94020485	N16P	03-05-94	10:47	19.17	CHAETOCEROS SPP. (<10UM)	.011
W94020485	N16P	03-05-94	10:47	19.17	COCCONEIS SCUTELLUM	.001
W94020485	N16P	03-05-94	10:47	19.17	CORETHRON CRIOPHILUM	.001
W94020485	N16P	03-05-94	10:47	19.17	CRYPTOMONADS	.003
W94020485	N16P	03-05-94	10:47	19.17	CYLINDROTHECA CLOSTERIUM	.005
W94020485	N16P	03-05-94	10:47	19.17	GRAMMATOPHORA MARINA	.001
W94020485	N16P	03-05-94	10:47	19.17	GYMNODINIUM SPP.	.001
W94020485	N16P	03-05-94	10:47	19.17	GYRODINIUM SPP.	.001
W94020485	N16P	03-05-94	10:47	19.17	MICROFLAGELLATES	.011
W94020485	N16P	03-05-94	10:47	19.17	NAVICULOID DIATOMS	.002
W94020485	N16P	03-05-94	10:47	19.17	NAVICULOIDS (LYRATE)	.003
W94020485	N16P	03-05-94	10:47	19.17	PHAEOCYSTIS POUCHETII	.004
W94020485	N16P	03-05-94	10:47	19.17	THALASSIONEMA NITZSCHOIDES	.01
W94020485	N16P	03-05-94	10:47	19.17	THALASSIOSIRA (CF) CONSTRICTA	.002
W94020485	N16P	03-05-94	10:47	19.17	THALASSIOSIRA (cf) ECCENTRICA	.001
W94020485	N16P	03-05-94	10:47	19.17	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.12
W94020485	N16P	03-05-94	10:47	19.17	THALASSIOSIRA ANGUSTE-LINEATA	.007
W94020485	N16P	03-05-94	10:47	19.17	THALASSIOSIRA NORDENSKIOLDII	.004
W94020485	N16P	03-05-94	10:47	19.17	THALASSIOSIRA SPP.	.031
W94020485	N16P	03-05-94	10:47	19.17	UNID. CENTRALES	.002
W94020487	N16P	03-05-94	10:49	1.78	ASTERIONELLOPSIS GLACIALIS	.001
W94020487	N16P	03-05-94	10:49	1.78	CHAETOCEROS DEBILIS	.007
W94020487	N16P	03-05-94	10:49	1.78	CHAETOCEROS DECIPIENS	.004
W94020487	N16P	03-05-94	10:49	1.78	CHAETOCEROS SPP. (10-20UM)	.006
W94020487	N16P	03-05-94	10:49	1.78	CHAETOCEROS SPP. (<10UM)	.007
W94020487	N16P	03-05-94	10:49	1.78	COSGINODISCUS OCLUS-IRIDIS	.001
W94020487	N16P	03-05-94	10:49	1.78	CRYPTOMONADS	.003
W94020487	N16P	03-05-94	10:49	1.78	CYLINDROTHECA CLOSTERIUM	.003
W94020487	N16P	03-05-94	10:49	1.78	GYMNODINIUM SPP.	.001

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020487	N16P	03-05-94	10:49	1.78	GYRO/PLEUROSIGMA SPP.	.001
W94020487	N16P	03-05-94	10:49	1.78	GYRODINIUM SPIRALE	.001
W94020487	N16P	03-05-94	10:49	1.78	MICROFLAGELLATES	.012
W94020487	N16P	03-05-94	10:49	1.78	NAVICULOIDS (LYRATE)	.001
W94020487	N16P	03-05-94	10:49	1.78	OOONTELLA (CF) ALTERNANS	.001
W94020487	N16P	03-05-94	10:49	1.78	THALASSIONEMA NITZSCHOIDES	.012
W94020487	N16P	03-05-94	10:49	1.78	THALASSIOSIRA (CF) CONSTRICTA	.002
W94020487	N16P	03-05-94	10:49	1.78	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.126
W94020487	N16P	03-05-94	10:49	1.78	THALASSIOSIRA ANGUSTE-LINEATA	.012
W94020487	N16P	03-05-94	10:49	1.78	THALASSIOSIRA NORDENSKIOLDII	.002
W94020487	N16P	03-05-94	10:49	1.78	THALASSIOSIRA SPP.	.029
W94020487	N16P	03-05-94	10:49	1.78	UNID. ATHECATE DINOFLAGELLATE	.001
W94020487	N16P	03-05-94	10:49	1.78	UNID. CENTRALES	.002
W94020562	N10P	03-05-94	15:18	19.35	CHAETOCEROS BOREALIS	.001
W94020562	N10P	03-05-94	15:18	19.35	CHAETOCEROS DEBILIS	.006
W94020562	N10P	03-05-94	15:18	19.35	CHAETOCEROS DECIPIENS	.002
W94020562	N10P	03-05-94	15:18	19.35	CHAETOCEROS SPP. (10-20UM)	.004
W94020562	N10P	03-05-94	15:18	19.35	CHAETOCEROS SPP. (<10UM)	.001
W94020562	N10P	03-05-94	15:18	19.35	CRYPTOMONADS	.001
W94020562	N10P	03-05-94	15:18	19.35	CYLINDROTHECA CLOSTERIUM	.003
W94020562	N10P	03-05-94	15:18	19.35	GRAMMATOPHORA MARINA	.001
W94020562	N10P	03-05-94	15:18	19.35	MICROFLAGELLATES	.011
W94020562	N10P	03-05-94	15:18	19.35	NAVICULOID DIATOMS	.004
W94020562	N10P	03-05-94	15:18	19.35	NAVICULOIDS (LYRATE)	.002
W94020562	N10P	03-05-94	15:18	19.35	RHIZOLENIA SETIGERA	.001
W94020562	N10P	03-05-94	15:18	19.35	THALASSIONEMA NITZSCHOIDES	.012
W94020562	N10P	03-05-94	15:18	19.35	THALASSIOSIRA (CF) CONSTRICTA	.002
W94020562	N10P	03-05-94	15:18	19.35	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.102
W94020562	N10P	03-05-94	15:18	19.35	THALASSIOSIRA ANGUSTE-LINEATA	.005
W94020562	N10P	03-05-94	15:18	19.35	THALASSIOSIRA NORDENSKIOLDII	.002
W94020562	N10P	03-05-94	15:18	19.35	THALASSIOSIRA SPP.	.021
W94020562	N10P	03-05-94	15:18	19.35	UNID. ATHECATE DINOFLAGELLATE	.002
W94020562	N10P	03-05-94	15:18	19.35	UNID. CENTRALES	.001
W94020565	N10P	03-05-94	15:21	2.15	CHAETOCEROS DEBILIS	.005
W94020565	N10P	03-05-94	15:21	2.15	CHAETOCEROS DECIPIENS	.003
W94020565	N10P	03-05-94	15:21	2.15	CHAETOCEROS SPP. (10-20UM)	.002
W94020565	N10P	03-05-94	15:21	2.15	CHAETOCEROS SPP. (<10UM)	.004
W94020565	N10P	03-05-94	15:21	2.15	COCCONEIS SCUTELLUM	.001
W94020565	N10P	03-05-94	15:21	2.15	CRYPTOMONADS	.001
W94020565	N10P	03-05-94	15:21	2.15	CYLINDROTHECA CLOSTERIUM	.004
W94020565	N10P	03-05-94	15:21	2.15	LICHOPHORA SPP.	.001
W94020565	N10P	03-05-94	15:21	2.15	MICROFLAGELLATES	.012
W94020565	N10P	03-05-94	15:21	2.15	NAVICULOID DIATOMS	.007
W94020565	N10P	03-05-94	15:21	2.15	THALASSIONEMA NITZSCHOIDES	.016
W94020565	N10P	03-05-94	15:21	2.15	THALASSIOSIRA (CF) CONSTRICTA	.003
W94020565	N10P	03-05-94	15:21	2.15	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.071
W94020565	N10P	03-05-94	15:21	2.15	THALASSIOSIRA ANGUSTE-LINEATA	.004
W94020565	N10P	03-05-94	15:21	2.15	THALASSIOSIRA SPP.	.01
W94020565	N10P	03-05-94	15:21	2.15	UNID. ATHECATE DINOFLAGELLATE	.001
W94020583	N10P	03-06-94	08:14	2.12	CHAETOCEROS DEBILIS	.007
W94020583	N10P	03-06-94	08:14	2.12	CHAETOCEROS DECIPIENS	.002
W94020583	N10P	03-06-94	08:14	2.12	CHAETOCEROS SOCIALIS	.002
W94020583	N10P	03-06-94	08:14	2.12	CHAETOCEROS SPP. (10-20UM)	.002
W94020583	N10P	03-06-94	08:14	2.12	CHAETOCEROS SPP. (<10UM)	.006
W94020583	N10P	03-06-94	08:14	2.12	CRYPTOMONADS	.001
W94020583	N10P	03-06-94	08:14	2.12	CYLINDROTHECA CLOSTERIUM	.002
W94020583	N10P	03-06-94	08:14	2.12	GYRO/PLEUROSIGMA SPP.	.001
W94020583	N10P	03-06-94	08:14	2.12	MICROFLAGELLATES	.015
W94020583	N10P	03-06-94	08:14	2.12	NAVICULOID DIATOMS	.003
W94020583	N10P	03-06-94	08:14	2.12	NAVICULOIDS (LYRATE)	0
W94020583	N10P	03-06-94	08:14	2.12	SKELETONEMA COSTATUM	.001
W94020583	N10P	03-06-94	08:14	2.12	STEPHANOPYXIS TURRIS	.001
W94020583	N10P	03-06-94	08:14	2.12	THALASSIONEMA NITZSCHOIDES	.015

Table E1. Phytoplankton Species Data for February, March 1994.

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Millions of Cells per Liter
W94020583	N10P	03-06-94	08:14	2.12	THALASSIOSIRA (CF) CONSTRICTA	.001
W94020583	N10P	03-06-94	08:14	2.12	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.122
W94020583	N10P	03-06-94	08:14	2.12	THALASSIOSIRA ANGUSTE-LINEATA	.004
W94020583	N10P	03-06-94	08:14	2.12	THALASSIOSIRA SPP.	.02
W94020583	N10P	03-06-94	08:14	2.12	UNID. ATHECATE DINOFLAGELLATE	.001
W94020583	N10P	03-06-94	08:14	2.12	UNID. CENTRALES	.001
W94030262	N10P	03-23-94	07:17	1.64	CHAETOCEROS BOREALIS	.002
W94030262	N10P	03-23-94	07:17	1.64	CHAETOCEROS COMPRESSUS	.034
W94030262	N10P	03-23-94	07:17	1.64	CHAETOCEROS DEBILIS	.048
W94030262	N10P	03-23-94	07:17	1.64	CHAETOCEROS DECIPIENS	.006
W94030262	N10P	03-23-94	07:17	1.64	CHAETOCEROS SOCIALIS	.012
W94030262	N10P	03-23-94	07:17	1.64	CHAETOCEROS SPP. (10-20UM)	.018
W94030262	N10P	03-23-94	07:17	1.64	CHAETOCEROS SPP.(<10UM)	.152
W94030262	N10P	03-23-94	07:17	1.64	CORETHRON CRIOPHILUM	.001
W94030262	N10P	03-23-94	07:17	1.64	CRYPTOMONADS	.007
W94030262	N10P	03-23-94	07:17	1.64	CYLINDROTHECA CLOSTERIUM	.001
W94030262	N10P	03-23-94	07:17	1.64	GYRODINIUM SPIRALE	.003
W94030262	N10P	03-23-94	07:17	1.64	MICROFLAGELLATES	.04
W94030262	N10P	03-23-94	07:17	1.64	NAVICULOIDS (LYRATE)	.001
W94030262	N10P	03-23-94	07:17	1.64	NITZSCHIA (CF) DELICATISSIMA	.001
W94030262	N10P	03-23-94	07:17	1.64	PHAEOCYSTIS POUCHETII	.004
W94030262	N10P	03-23-94	07:17	1.64	PROTOPERIDINIUM SPP.	.001
W94030262	N10P	03-23-94	07:17	1.64	RHIZOLENIA FRAGILISSIMA	.005
W94030262	N10P	03-23-94	07:17	1.64	STEPHANOPYXIS TURRIS	.001
W94030262	N10P	03-23-94	07:17	1.64	THALASSIONEMA NITZSCHOIDES	.004
W94030262	N10P	03-23-94	07:17	1.64	THALASSIOSIRA (CF) CONSTRICTA	.002
W94030262	N10P	03-23-94	07:17	1.64	THALASSIOSIRA (cf) GRAVIDA/ROTULA	.075
W94030262	N10P	03-23-94	07:17	1.64	THALASSIOSIRA SPP.	.01
W94030262	N10P	03-23-94	07:17	1.64	UNID. ATHECATE DINOFLAGELLATE	.001

## APPENDIX F

### ZOOPLANKTON SPECIES DATA TABLE

A complete listing for surveys W9401 and W9402 is given for taxonomic analyses of zooplankton net tow samples (Table F-1).

Table F1. Zooplankton Species Data for February, March 1994.

Event	Station	Date	Time	Taxon	Qual*	Individuals Per M3
W94010079	F23P	02-08-94	08:24	ACARTIA HUDSONICA	F	37
W94010079	F23P	02-08-94	08:24	ACARTIA HUDSONICA	C	74
W94010079	F23P	02-08-94	08:24	BARNACLE NAUPLII	N	223
W94010079	F23P	02-08-94	08:24	COPEPOD NAUPLII	N	2828
W94010079	F23P	02-08-94	08:24	MEDUSA		37
W94010079	F23P	02-08-94	08:24	MICROSETELLA NORVEGICA		521
W94010079	F23P	02-08-94	08:24	OITHONA SIMILIS	F	484
W94010079	F23P	02-08-94	08:24	OITHONA SIMILIS	M	37
W94010079	F23P	02-08-94	08:24	OITHONA SIMILIS	C	372
W94010079	F23P	02-08-94	08:24	PARACALANUS PARVUS	M	112
W94010079	F23P	02-08-94	08:24	PARACALANUS PARVUS	C	1823
W94010079	F23P	02-08-94	08:24	PARACALANUS PARVUS	F	223
W94010079	F23P	02-08-94	08:24	PSEUDOCALANUS NEWMANI	M	37
W94010079	F23P	02-08-94	08:24	PSEUDOCALANUS NEWMANI	F	186
W94010079	F23P	02-08-94	08:24	PSEUDOCALANUS NEWMANI	C	856
W94010079	F23P	02-08-94	08:24	TEMORA LONGICORNIS	F	74
W94010079	F23P	02-08-94	08:24	TEMORA LONGICORNIS	M	372
W94010079	F23P	02-08-94	08:24	UNIDENTIFIED HARPACTICOID		37
W94010179	N20P	02-08-94	11:28	BARNACLE NAUPLII	N	48
W94010179	N20P	02-08-94	11:28	BIVALVE VELIGER		12
W94010179	N20P	02-08-94	11:28	CENTROPAGES SPP.	C	24
W94010179	N20P	02-08-94	11:28	CENTROPAGES TYPICUS	F	24
W94010179	N20P	02-08-94	11:28	CENTROPAGES TYPICUS	M	24
W94010179	N20P	02-08-94	11:28	COPEPOD NAUPLII	N	5127
W94010179	N20P	02-08-94	11:28	MICROSETELLA NORVEGICA		12
W94010179	N20P	02-08-94	11:28	OITHONA ATLANTICA	C	12
W94010179	N20P	02-08-94	11:28	OITHONA ATLANTICA	F	24
W94010179	N20P	02-08-94	11:28	OITHONA SIMILIS	M	36
W94010179	N20P	02-08-94	11:28	OITHONA SIMILIS	F	1237
W94010179	N20P	02-08-94	11:28	OITHONA SIMILIS	C	1417
W94010179	N20P	02-08-94	11:28	PARACALANUS CRASSIROSTRIS	F	24
W94010179	N20P	02-08-94	11:28	PARACALANUS PARVUS	F	108
W94010179	N20P	02-08-94	11:28	PARACALANUS PARVUS	M	36
W94010179	N20P	02-08-94	11:28	PARACALANUS PARVUS	C	360
W94010179	N20P	02-08-94	11:28	PSEUDOCALANUS NEWMANI	F	72
W94010179	N20P	02-08-94	11:28	PSEUDOCALANUS NEWMANI	C	120
W94010179	N20P	02-08-94	11:28	PSEUDOCALANUS NEWMANI	M	24
W94010179	N20P	02-08-94	11:28	TEMORA LONGICORNIS	F	24
W94010179	N20P	02-08-94	11:28	TEMORA LONGICORNIS	M	24
W94010203	N16P	02-08-94	12:43	BIVALVE VELIGER		180
W94010203	N16P	02-08-94	12:43	CENTROPAGES SPP.	C	60
W94010203	N16P	02-08-94	12:43	CENTROPAGES TYPICUS	F	30
W94010203	N16P	02-08-94	12:43	COPEPOD NAUPLII	N	7572
W94010203	N16P	02-08-94	12:43	GASTROPOD VELIGER		30
W94010203	N16P	02-08-94	12:43	MICROSETELLA NORVEGICA		451
W94010203	N16P	02-08-94	12:43	OIKIOPLEURA DIOICA		60
W94010203	N16P	02-08-94	12:43	OITHONA SIMILIS	F	1322
W94010203	N16P	02-08-94	12:43	OITHONA SIMILIS	C	3095
W94010203	N16P	02-08-94	12:43	OITHONA SIMILIS	M	30
W94010203	N16P	02-08-94	12:43	PARACALANUS PARVUS	F	150
W94010203	N16P	02-08-94	12:43	PARACALANUS PARVUS	C	451
W94010203	N16P	02-08-94	12:43	PARACALANUS PARVUS	M	60
W94010203	N16P	02-08-94	12:43	PSEUDOCALANUS NEWMANI	F	60
W94010203	N16P	02-08-94	12:43	PSEUDOCALANUS NEWMANI	M	60
W94010203	N16P	02-08-94	12:43	PSEUDOCALANUS NEWMANI	C	120
W94010203	N16P	02-08-94	12:43	TEMORA LONGICORNIS	F	210
W94010203	N16P	02-08-94	12:43	TEMORA LONGICORNIS	M	210
W94010221	N07P	02-08-94	13:53	BARNACLE NAUPLII	N	17
W94010221	N07P	02-08-94	13:53	BIVALVE VELIGER		35
W94010221	N07P	02-08-94	13:53	CENTROPAGES SPP.	C	69

\* C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII

Table F1. Zooplankton Species Data for February, March 1994.

Event	Station	Date	Time	Taxon	Qual*	Individuals Per M3
W94010221	N07P	02-08-94	13:53	COPEPOD NAUPLII	N	10309
W94010221	N07P	02-08-94	13:53	GASTROPOD VELIGER		69
W94010221	N07P	02-08-94	13:53	MICROSETELLA NORVEGICA		623
W94010221	N07P	02-08-94	13:53	OITHONA ATLANTICA	F	52
W94010221	N07P	02-08-94	13:53	OITHONA SIMILIS	M	138
W94010221	N07P	02-08-94	13:53	OITHONA SIMILIS	C	2491
W94010221	N07P	02-08-94	13:53	OITHONA SIMILIS	F	1557
W94010221	N07P	02-08-94	13:53	PARACALANUS PARVUS	M	121
W94010221	N07P	02-08-94	13:53	PARACALANUS PARVUS	C	2162
W94010221	N07P	02-08-94	13:53	PARACALANUS PARVUS	F	138
W94010221	N07P	02-08-94	13:53	POLYCHAETE LARVAE		17
W94010221	N07P	02-08-94	13:53	PSEUDOCALANUS NEWMANI	F	363
W94010221	N07P	02-08-94	13:53	PSEUDOCALANUS NEWMANI	C	259
W94010221	N07P	02-08-94	13:53	PSEUDOCALANUS NEWMANI	M	121
W94010221	N07P	02-08-94	13:53	SAGITTA ELEGANS		17
W94010221	N07P	02-08-94	13:53	TEMORA LONGICORNIS	F	104
W94010221	N07P	02-08-94	13:53	TEMORA LONGICORNIS	M	208
W94010355	N01P	02-15-94	09:07	BARNACLE NAUPLII	N	31
W94010355	N01P	02-15-94	09:07	BIVALVE VELIGER		15
W94010355	N01P	02-15-94	09:07	CALANUS FINMARCHICUS	F	31
W94010355	N01P	02-15-94	09:07	CENTROPAGES SPP.	C	31
W94010355	N01P	02-15-94	09:07	COPEPOD NAUPLII	N	2937
W94010355	N01P	02-15-94	09:07	GASTROPOD VELIGER		108
W94010355	N01P	02-15-94	09:07	MICROSETELLA NORVEGICA		881
W94010355	N01P	02-15-94	09:07	OIKIOPLEURA DIOICA		15
W94010355	N01P	02-15-94	09:07	OITHONA ATLANTICA	F	62
W94010355	N01P	02-15-94	09:07	OITHONA ATLANTICA	C	15
W94010355	N01P	02-15-94	09:07	OITHONA SIMILIS	F	711
W94010355	N01P	02-15-94	09:07	OITHONA SIMILIS	C	989
W94010355	N01P	02-15-94	09:07	OITHONA SIMILIS	M	46
W94010355	N01P	02-15-94	09:07	PARACALANUS CRASSIROSTRIS	F	31
W94010355	N01P	02-15-94	09:07	PARACALANUS PARVUS	F	46
W94010355	N01P	02-15-94	09:07	PARACALANUS PARVUS	C	356
W94010355	N01P	02-15-94	09:07	PSEUDOCALANUS NEWMANI	F	93
W94010355	N01P	02-15-94	09:07	PSEUDOCALANUS NEWMANI	M	15
W94010355	N01P	02-15-94	09:07	PSEUDOCALANUS NEWMANI	C	77
W94010355	N01P	02-15-94	09:07	TEMORA LONGICORNIS	F	15
W94010355	N01P	02-15-94	09:07	UNIDENTIFIED HARPACTICOID		15
W94010378	N04P	02-15-94	10:17	ACARTIA HUDSONICA	C	35
W94010378	N04P	02-15-94	10:17	BARNACLE NAUPLII	N	47
W94010378	N04P	02-15-94	10:17	BIVALVE VELIGER		117
W94010378	N04P	02-15-94	10:17	CENTROPAGES SPP.	C	59
W94010378	N04P	02-15-94	10:17	CENTROPAGES TYPICUS	F	12
W94010378	N04P	02-15-94	10:17	CENTROPAGES TYPICUS	M	23
W94010378	N04P	02-15-94	10:17	COPEPOD NAUPLII	N	6318
W94010378	N04P	02-15-94	10:17	GASTROPOD VELIGER		59
W94010378	N04P	02-15-94	10:17	MICROSETELLA NORVEGICA		351
W94010378	N04P	02-15-94	10:17	OIKIOPLEURA DIOICA		246
W94010378	N04P	02-15-94	10:17	OITHONA ATLANTICA	C	59
W94010378	N04P	02-15-94	10:17	OITHONA ATLANTICA	F	140
W94010378	N04P	02-15-94	10:17	OITHONA SIMILIS	F	620
W94010378	N04P	02-15-94	10:17	OITHONA SIMILIS	M	59
W94010378	N04P	02-15-94	10:17	OITHONA SIMILIS	C	1100
W94010378	N04P	02-15-94	10:17	PARACALANUS CRASSIROSTRIS	F	12
W94010378	N04P	02-15-94	10:17	PARACALANUS PARVUS	C	140
W94010378	N04P	02-15-94	10:17	PARACALANUS PARVUS	F	23
W94010378	N04P	02-15-94	10:17	PSEUDOCALANUS NEWMANI	F	12
W94010378	N04P	02-15-94	10:17	PSEUDOCALANUS NEWMANI	C	59
W94010378	N04P	02-15-94	10:17	SAGITTA ELEGANS		12
W94010378	N04P	02-15-94	10:17	TEMORA LONGICORNIS	F	12

\* C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII

Table F1. Zooplankton Species Data for February, March 1994.

Event	Station	Date	Time	Taxon	Qual*	Individuals Per M3
W94010378	N04P	02-15-94	10:17	TEMORA LONGICORNIS	C	23
W94010544	F02P	02-16-94	08:38	BARNACLE NAUPLII	N	178
W94010544	F02P	02-16-94	08:38	BIVALVE VELIGER		36
W94010544	F02P	02-16-94	08:38	CENTROPAGES HAMATUS	M	36
W94010544	F02P	02-16-94	08:38	CENTROPAGES SPP.	C	36
W94010544	F02P	02-16-94	08:38	COPEPOD NAUPLII	N	10090
W94010544	F02P	02-16-94	08:38	GASTROPOD VELIGER		36
W94010544	F02P	02-16-94	08:38	MICROSETELLA NORVEGICA		285
W94010544	F02P	02-16-94	08:38	OITHONA SIMILIS	F	1604
W94010544	F02P	02-16-94	08:38	OITHONA SIMILIS	M	250
W94010544	F02P	02-16-94	08:38	OITHONA SIMILIS	C	2888
W94010544	F02P	02-16-94	08:38	PARACALANUS PARVUS	M	71
W94010544	F02P	02-16-94	08:38	PARACALANUS PARVUS	C	677
W94010544	F02P	02-16-94	08:38	PARACALANUS PARVUS	F	285
W94010544	F02P	02-16-94	08:38	POLYCHAETE LARVAE		36
W94010544	F02P	02-16-94	08:38	PSEUDOCALANUS NEWMANI	C	71
W94010544	F02P	02-16-94	08:38	PSEUDOCALANUS NEWMANI	M	143
W94010544	F02P	02-16-94	08:38	PSEUDOCALANUS NEWMANI	F	250
W94010544	F02P	02-16-94	08:38	TEMORA LONGICORNIS	F	71
W94010544	F02P	02-16-94	08:38	TEMORA LONGICORNIS	M	36
W94010558	F01P	02-16-94	10:34	ACARTIA HUDSONICA	F	30
W94010558	F01P	02-16-94	10:34	ACARTIA HUDSONICA	C	76
W94010558	F01P	02-16-94	10:34	ACARTIA HUDSONICA	M	15
W94010558	F01P	02-16-94	10:34	BARNACLE NAUPLII	N	30
W94010558	F01P	02-16-94	10:34	BIVALVE VELIGER		15
W94010558	F01P	02-16-94	10:34	CENTROPAGES HAMATUS	F	15
W94010558	F01P	02-16-94	10:34	CENTROPAGES HAMATUS	M	15
W94010558	F01P	02-16-94	10:34	CENTROPAGES SPP.	C	106
W94010558	F01P	02-16-94	10:34	COPEPOD NAUPLII	N	5907
W94010558	F01P	02-16-94	10:34	EURYTEMORA HERDMANI	C	15
W94010558	F01P	02-16-94	10:34	MICROSETELLA NORVEGICA		91
W94010558	F01P	02-16-94	10:34	OITHONA ATLANTICA	F	15
W94010558	F01P	02-16-94	10:34	OITHONA SIMILIS	F	547
W94010558	F01P	02-16-94	10:34	OITHONA SIMILIS	M	15
W94010558	F01P	02-16-94	10:34	OITHONA SIMILIS	C	774
W94010558	F01P	02-16-94	10:34	PARACALANUS PARVUS	F	167
W94010558	F01P	02-16-94	10:34	PARACALANUS PARVUS	M	15
W94010558	F01P	02-16-94	10:34	PARACALANUS PARVUS	C	1473
W94010558	F01P	02-16-94	10:34	PSEUDOCALANUS NEWMANI	M	61
W94010558	F01P	02-16-94	10:34	PSEUDOCALANUS NEWMANI	C	288
W94010558	F01P	02-16-94	10:34	PSEUDOCALANUS NEWMANI	F	91
W94010558	F01P	02-16-94	10:34	TEMORA LONGICORNIS	F	15
W94010558	F01P	02-16-94	10:34	TEMORA LONGICORNIS	C	15
W94010558	F01P	02-16-94	10:34	TORTANUS DISCAUDATUS	M	15
W94010558	F01P	02-16-94	10:34	TORTANUS DISCAUDATUS	C	15
W94010630	F13P	02-16-94	17:44	BARNACLE NAUPLII	N	97
W94010630	F13P	02-16-94	17:44	BIVALVE VELIGER		58
W94010630	F13P	02-16-94	17:44	CENTROPAGES SPP.	C	117
W94010630	F13P	02-16-94	17:44	COPEPOD NAUPLII	N	4520
W94010630	F13P	02-16-94	17:44	GASTROPOD VELIGER		19
W94010630	F13P	02-16-94	17:44	MICROSETELLA NORVEGICA		1052
W94010630	F13P	02-16-94	17:44	OITHONA ATLANTICA	F	39
W94010630	F13P	02-16-94	17:44	OITHONA SIMILIS	F	701
W94010630	F13P	02-16-94	17:44	OITHONA SIMILIS	C	1227
W94010630	F13P	02-16-94	17:44	PARACALANUS PARVUS	F	97
W94010630	F13P	02-16-94	17:44	PARACALANUS PARVUS	C	1149
W94010630	F13P	02-16-94	17:44	PARACALANUS PARVUS	M	19
W94010630	F13P	02-16-94	17:44	PSEUDOCALANUS NEWMANI	F	136
W94010630	F13P	02-16-94	17:44	PSEUDOCALANUS NEWMANI	M	19
W94010630	F13P	02-16-94	17:44	PSEUDOCALANUS NEWMANI	C	312

\* C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII

Table F1. Zooplankton Species Data for February, March 1994.

Event	Station	Date	Time	Taxon	Qual*	Individuals Per M3
W94010630	F13P	02-16-94	17:44	TEMORA LONGICORNIS	C	39
W94010665	N10P	02-17-94	08:01	BARNACLE NAUPLII	N	68
W94010665	N10P	02-17-94	08:01	BIVALVE VELIGER		41
W94010665	N10P	02-17-94	08:01	CENTROPAGES TYPICUS	M	14
W94010665	N10P	02-17-94	08:01	CENTROPAGES TYPICUS	F	14
W94010665	N10P	02-17-94	08:01	COPEPOD NAUPLII	N	3554
W94010665	N10P	02-17-94	08:01	MICROSETELLA NORVEGICA		694
W94010665	N10P	02-17-94	08:01	OITHONA ATLANTICA	F	41
W94010665	N10P	02-17-94	08:01	OITHONA SIMILIS	M	27
W94010665	N10P	02-17-94	08:01	OITHONA SIMILIS	C	776
W94010665	N10P	02-17-94	08:01	OITHONA SIMILIS	F	613
W94010665	N10P	02-17-94	08:01	PARACALANUS PARVUS	M	14
W94010665	N10P	02-17-94	08:01	PARACALANUS PARVUS	C	1049
W94010665	N10P	02-17-94	08:01	PARACALANUS PARVUS	F	109
W94010665	N10P	02-17-94	08:01	PSEUDOCALANUS NEWMANI	F	327
W94010665	N10P	02-17-94	08:01	PSEUDOCALANUS NEWMANI	M	54
W94010665	N10P	02-17-94	08:01	PSEUDOCALANUS NEWMANI	C	82
W94010665	N10P	02-17-94	08:01	PTEROPOD		68
W94010665	N10P	02-17-94	08:01	SAGITTA ELEGANS		27
W94010665	N10P	02-17-94	08:01	TEMORA LONGICORNIS	F	177
W94010665	N10P	02-17-94	08:01	TEMORA LONGICORNIS	M	123
W94010665	N10P	02-17-94	08:01	TEMORA LONGICORNIS	C	41
W94020048	F23P	03-01-94	06:55	ACARTIA HUDSONICA	F	14
W94020048	F23P	03-01-94	06:55	BARNACLE NAUPLII	N	1838
W94020048	F23P	03-01-94	06:55	BIVALVE VELIGER		14
W94020048	F23P	03-01-94	06:55	CENTROPAGES HAMATUS	M	14
W94020048	F23P	03-01-94	06:55	COPEPOD NAUPLII	N	1389
W94020048	F23P	03-01-94	06:55	EURYTEMORA HERDMANI	C	14
W94020048	F23P	03-01-94	06:55	GASTROPOD VELIGER		14
W94020048	F23P	03-01-94	06:55	MICROSETELLA NORVEGICA		286
W94020048	F23P	03-01-94	06:55	OITHONA ATLANTICA	F	27
W94020048	F23P	03-01-94	06:55	OITHONA SIMILIS	F	368
W94020048	F23P	03-01-94	06:55	OITHONA SIMILIS	C	354
W94020048	F23P	03-01-94	06:55	PARACALANUS PARVUS	F	68
W94020048	F23P	03-01-94	06:55	PARACALANUS PARVUS	C	286
W94020048	F23P	03-01-94	06:55	POLYCHAETE LARVAE		749
W94020048	F23P	03-01-94	06:55	PSEUDOCALANUS NEWMANI	F	54
W94020048	F23P	03-01-94	06:55	PSEUDOCALANUS NEWMANI	C	54
W94020048	F23P	03-01-94	06:55	SAGITTA ELEGANS		27
W94020048	F23P	03-01-94	06:55	TEMORA LONGICORNIS	F	82
W94020048	F23P	03-01-94	06:55	TEMORA LONGICORNIS	M	150
W94020048	F23P	03-01-94	06:55	TEMORA LONGICORNIS	C	41
W94020048	F23P	03-01-94	06:55	UNIDENTIFIED HARPACTICOID		54
W94020071	N01P	03-01-94	07:53	BARNACLE NAUPLII	N	180
W94020071	N01P	03-01-94	07:53	CALANUS FINMARCHICUS	C	18
W94020071	N01P	03-01-94	07:53	CENTROPAGES SPP.	C	90
W94020071	N01P	03-01-94	07:53	CENTROPAGES TYPICUS	M	18
W94020071	N01P	03-01-94	07:53	COPEPOD NAUPLII	N	6013
W94020071	N01P	03-01-94	07:53	GASTROPOD VELIGER		216
W94020071	N01P	03-01-94	07:53	MEDUSA		18
W94020071	N01P	03-01-94	07:53	MICROSETELLA NORVEGICA		846
W94020071	N01P	03-01-94	07:53	OIKIOPLEURA DIOICA		612
W94020071	N01P	03-01-94	07:53	OITHONA ATLANTICA	C	72
W94020071	N01P	03-01-94	07:53	OITHONA ATLANTICA	F	126
W94020071	N01P	03-01-94	07:53	OITHONA SIMILIS	F	1296
W94020071	N01P	03-01-94	07:53	OITHONA SIMILIS	C	2268
W94020071	N01P	03-01-94	07:53	OITHONA SIMILIS	M	144
W94020071	N01P	03-01-94	07:53	PARACALANUS PARVUS	F	90
W94020071	N01P	03-01-94	07:53	PARACALANUS PARVUS	C	450
W94020071	N01P	03-01-94	07:53	POLYCHAETE LARVAE		216

\* C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII



Table F1. Zooplankton Species Data for February, March 1994.

Event	Station	Date	Time	Taxon	Qual*	Individuals Per M3
W94020071	N01P	03-01-94	07:53	PSEUDOCALANUS NEWMANI	F	54
W94020071	N01P	03-01-94	07:53	PSEUDOCALANUS NEWMANI	M	54
W94020071	N01P	03-01-94	07:53	PSEUDOCALANUS NEWMANI	C	54
W94020071	N01P	03-01-94	07:53	TEMORA LONGICORNIS	F	18
W94020071	N01P	03-01-94	07:53	TEMORA LONGICORNIS	C	36
W94020071	N01P	03-01-94	07:53	TEMORA LONGICORNIS	M	18
W94020071	N01P	03-01-94	07:53	UNIDENTIFIED HARPACTICOID		36
W94020102	N04P	03-01-94	09:39	CALANUS FINMARCHICUS	F	45
W94020102	N04P	03-01-94	09:39	CENTROPAGES SPP.	C	45
W94020102	N04P	03-01-94	09:39	CENTROPAGES TYPICUS	M	22
W94020102	N04P	03-01-94	09:39	COPEPOD NAUPLII	N	4612
W94020102	N04P	03-01-94	09:39	GASTROPOD VELIGER		270
W94020102	N04P	03-01-94	09:39	MICROSETELLA NORVEGICA		675
W94020102	N04P	03-01-94	09:39	OIKIOPLEURA DIOICA		337
W94020102	N04P	03-01-94	09:39	OITHONA ATLANTICA	F	157
W94020102	N04P	03-01-94	09:39	OITHONA ATLANTICA	C	67
W94020102	N04P	03-01-94	09:39	OITHONA SIMILIS	F	1215
W94020102	N04P	03-01-94	09:39	OITHONA SIMILIS	C	1485
W94020102	N04P	03-01-94	09:39	OITHONA SIMILIS	M	112
W94020102	N04P	03-01-94	09:39	PARACALANUS CRASSIROSTRIS	F	22
W94020102	N04P	03-01-94	09:39	PARACALANUS PARVUS	C	990
W94020102	N04P	03-01-94	09:39	PARACALANUS PARVUS	F	67
W94020102	N04P	03-01-94	09:39	POLYCHAETE LARVAE		67
W94020102	N04P	03-01-94	09:39	PSEUDOCALANUS NEWMANI	F	90
W94020102	N04P	03-01-94	09:39	PSEUDOCALANUS NEWMANI	C	90
W94020118	N16P	03-01-94	10:23	BIVALVE VELIGER		19
W94020118	N16P	03-01-94	10:23	CALANUS FINMARCHICUS	F	19
W94020118	N16P	03-01-94	10:23	CENTROPAGES SPP.	C	19
W94020118	N16P	03-01-94	10:23	CENTROPAGES TYPICUS	F	19
W94020118	N16P	03-01-94	10:23	COPEPOD NAUPLII	N	5036
W94020118	N16P	03-01-94	10:23	GASTROPOD VELIGER		744
W94020118	N16P	03-01-94	10:23	MEDUSA		19
W94020118	N16P	03-01-94	10:23	MICROSETELLA NORVEGICA		591
W94020118	N16P	03-01-94	10:23	OIKIOPLEURA DIOICA		630
W94020118	N16P	03-01-94	10:23	OITHONA ATLANTICA	C	76
W94020118	N16P	03-01-94	10:23	OITHONA ATLANTICA	F	343
W94020118	N16P	03-01-94	10:23	OITHONA SIMILIS	F	877
W94020118	N16P	03-01-94	10:23	OITHONA SIMILIS	C	1965
W94020118	N16P	03-01-94	10:23	OITHONA SIMILIS	M	57
W94020118	N16P	03-01-94	10:23	PARACALANUS PARVUS	F	19
W94020118	N16P	03-01-94	10:23	PARACALANUS PARVUS	C	477
W94020118	N16P	03-01-94	10:23	PARACALANUS PARVUS	M	19
W94020118	N16P	03-01-94	10:23	POLYCHAETE LARVAE		38
W94020118	N16P	03-01-94	10:23	PSEUDOCALANUS NEWMANI	F	38
W94020118	N16P	03-01-94	10:23	PSEUDOCALANUS NEWMANI	M	19
W94020118	N16P	03-01-94	10:23	PSEUDOCALANUS NEWMANI	C	38
W94020238	F02P	03-02-94	07:56	COPEPOD NAUPLII	N	12613
W94020238	F02P	03-02-94	07:56	MICROSETELLA NORVEGICA		62
W94020238	F02P	03-02-94	07:56	OIKIOPLEURA DIOICA		125
W94020238	F02P	03-02-94	07:56	OITHONA SIMILIS	F	937
W94020238	F02P	03-02-94	07:56	OITHONA SIMILIS	M	125
W94020238	F02P	03-02-94	07:56	OITHONA SIMILIS	C	2560
W94020238	F02P	03-02-94	07:56	PARACALANUS PARVUS	F	187
W94020238	F02P	03-02-94	07:56	PARACALANUS PARVUS	C	1686
W94020238	F02P	03-02-94	07:56	POLYCHAETE LARVAE		1374
W94020238	F02P	03-02-94	07:56	PSEUDOCALANUS NEWMANI	F	187
W94020238	F02P	03-02-94	07:56	PSEUDOCALANUS NEWMANI	M	62
W94020238	F02P	03-02-94	07:56	PSEUDOCALANUS NEWMANI	C	187
W94020238	F02P	03-02-94	07:56	TEMORA LONGICORNIS	F	62
W94020238	F02P	03-02-94	07:56	TEMORA LONGICORNIS	C	125

\* C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII

Table F1. Zooplankton Species Data for February, March 1994.

Event	Station	Date	Time	Taxon	Qual*	Individuals Per M3
W94020260	F01P	03-02-94	09:25	BARNACLE NAUPLII	N	96
W94020260	F01P	03-02-94	09:25	COPEPOD NAUPLII	N	15188
W94020260	F01P	03-02-94	09:25	OITHONA SIMILIS	M	96
W94020260	F01P	03-02-94	09:25	OITHONA SIMILIS	C	669
W94020260	F01P	03-02-94	09:25	OITHONA SIMILIS	F	191
W94020260	F01P	03-02-94	09:25	PARACALANUS PARVUS	F	764
W94020260	F01P	03-02-94	09:25	PARACALANUS PARVUS	M	96
W94020260	F01P	03-02-94	09:25	PARACALANUS PARVUS	C	4107
W94020260	F01P	03-02-94	09:25	POLYCHAETE LARVAE		2961
W94020260	F01P	03-02-94	09:25	PSEUDOCALANUS NEWMANI	F	669
W94020260	F01P	03-02-94	09:25	PSEUDOCALANUS NEWMANI	C	287
W94020260	F01P	03-02-94	09:25	PSEUDOCALANUS NEWMANI	M	96
W94020260	F01P	03-02-94	09:25	TEMORA LONGICORNIS	C	96
W94020260	F01P	03-02-94	09:25	TEMORA LONGICORNIS	F	96
W94020355	F13P	03-02-94	15:16	BARNACLE NAUPLII	N	149
W94020355	F13P	03-02-94	15:16	CENTROPAGES HAMATUS	M	25
W94020355	F13P	03-02-94	15:16	CENTROPAGES SPP.	C	74
W94020355	F13P	03-02-94	15:16	COPEPOD NAUPLII	N	4143
W94020355	F13P	03-02-94	15:16	EUCONCHOEICA SP.		25
W94020355	F13P	03-02-94	15:16	GASTROPOD VELIGER		25
W94020355	F13P	03-02-94	15:16	MICROSETELLA NORVEGICA		25
W94020355	F13P	03-02-94	15:16	OIKIOPLEURA DIOICA		273
W94020355	F13P	03-02-94	15:16	OITHONA ATLANTICA	F	50
W94020355	F13P	03-02-94	15:16	OITHONA SIMILIS	F	595
W94020355	F13P	03-02-94	15:16	OITHONA SIMILIS	M	25
W94020355	F13P	03-02-94	15:16	OITHONA SIMILIS	C	1340
W94020355	F13P	03-02-94	15:16	PARACALANUS PARVUS	F	174
W94020355	F13P	03-02-94	15:16	PARACALANUS PARVUS	M	50
W94020355	F13P	03-02-94	15:16	PARACALANUS PARVUS	C	546
W94020355	F13P	03-02-94	15:16	POLYCHAETE LARVAE		248
W94020355	F13P	03-02-94	15:16	PSEUDOCALANUS NEWMANI	C	25
W94020355	F13P	03-02-94	15:16	PSEUDOCALANUS NEWMANI	F	149
W94020355	F13P	03-02-94	15:16	TEMORA LONGICORNIS	C	25
W94020449	N20P	03-05-94	08:20	BARNACLE NAUPLII	N	290
W94020449	N20P	03-05-94	08:20	COPEPOD NAUPLII	N	2941
W94020449	N20P	03-05-94	08:20	MICROSETELLA NORVEGICA		472
W94020449	N20P	03-05-94	08:20	OIKIOPLEURA DIOICA		454
W94020449	N20P	03-05-94	08:20	OITHONA SIMILIS	F	581
W94020449	N20P	03-05-94	08:20	OITHONA SIMILIS	M	91
W94020449	N20P	03-05-94	08:20	OITHONA SIMILIS	C	890
W94020449	N20P	03-05-94	08:20	PARACALANUS PARVUS	F	18
W94020449	N20P	03-05-94	08:20	PARACALANUS PARVUS	C	290
W94020449	N20P	03-05-94	08:20	POLYCHAETE LARVAE		926
W94020449	N20P	03-05-94	08:20	PSEUDOCALANUS NEWMANI	C	18
W94020449	N20P	03-05-94	08:20	PSEUDOCALANUS NEWMANI	F	18
W94020449	N20P	03-05-94	08:20	UNIDENTIFIED HARPACTICOID		18
W94020463	N07P	03-05-94	09:12	BARNACLE NAUPLII	N	19
W94020463	N07P	03-05-94	09:12	CALANUS FINMARCHICUS	C	57
W94020463	N07P	03-05-94	09:12	CENTROPAGES SPP.	C	57
W94020463	N07P	03-05-94	09:12	CENTROPAGES TYPICUS	F	19
W94020463	N07P	03-05-94	09:12	CENTROPAGES TYPICUS	M	19
W94020463	N07P	03-05-94	09:12	COPEPOD NAUPLII	N	4592
W94020463	N07P	03-05-94	09:12	GASTROPOD VELIGER		631
W94020463	N07P	03-05-94	09:12	MEDUSA		19
W94020463	N07P	03-05-94	09:12	MICROSETELLA NORVEGICA		880
W94020463	N07P	03-05-94	09:12	OIKIOPLEURA DIOICA		325
W94020463	N07P	03-05-94	09:12	OITHONA ATLANTICA	F	325
W94020463	N07P	03-05-94	09:12	OITHONA ATLANTICA	C	115
W94020463	N07P	03-05-94	09:12	OITHONA SIMILIS	F	880
W94020463	N07P	03-05-94	09:12	OITHONA SIMILIS	M	96

\* C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII

Table F1. Zooplankton Species Data for February, March 1994.

Event	Station	Date	Time	Taxon	Qual*	Individuals Per M3
W94020463	N07P	03-05-94	09:12	OITHONA SIMILIS	C	2105
W94020463	N07P	03-05-94	09:12	PARACALANUS CRASSIROSTRIS	F	38
W94020463	N07P	03-05-94	09:12	PARACALANUS PARVUS	F	134
W94020463	N07P	03-05-94	09:12	PARACALANUS PARVUS	C	1148
W94020463	N07P	03-05-94	09:12	POLYCHAETE LARVAE		115
W94020463	N07P	03-05-94	09:12	PSEUDOCALANUS NEWMANI	C	77
W94020463	N07P	03-05-94	09:12	PSEUDOCALANUS NEWMANI	F	38
W94020568	N10P	03-05-94	15:25	BARNACLE NAUPLII	N	3131
W94020568	N10P	03-05-94	15:25	BIVALVE VELIGER		18
W94020568	N10P	03-05-94	15:25	CALANUS FINMARCHICUS	F	18
W94020568	N10P	03-05-94	15:25	CALANUS FINMARCHICUS	C	18
W94020568	N10P	03-05-94	15:25	CENTROPAGES SPP.	C	37
W94020568	N10P	03-05-94	15:25	COPEPOD NAUPLII	N	3665
W94020568	N10P	03-05-94	15:25	GASTROPOD VELIGER		18
W94020568	N10P	03-05-94	15:25	MICROSETELLA NORVEGICA		645
W94020568	N10P	03-05-94	15:25	OIKIOPLEURA DIOICA		258
W94020568	N10P	03-05-94	15:25	OITHONA ATLANTICA	F	18
W94020568	N10P	03-05-94	15:25	OITHONA SIMILIS	F	755
W94020568	N10P	03-05-94	15:25	OITHONA SIMILIS	M	111
W94020568	N10P	03-05-94	15:25	OITHONA SIMILIS	C	995
W94020568	N10P	03-05-94	15:25	PARACALANUS PARVUS	F	37
W94020568	N10P	03-05-94	15:25	PARACALANUS PARVUS	C	332
W94020568	N10P	03-05-94	15:25	POLYCHAETE LARVAE		939
W94020568	N10P	03-05-94	15:25	PSEUDOCALANUS NEWMANI	F	129
W94020568	N10P	03-05-94	15:25	PSEUDOCALANUS NEWMANI	C	55
W94020568	N10P	03-05-94	15:25	TEMORA LONGICORNIS	F	18
W94020568	N10P	03-05-94	15:25	TEMORA LONGICORNIS	M	18
W94020568	N10P	03-05-94	15:25	TEMORA LONGICORNIS	C	74

\* C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII