

**Appendices to Report 1993-01  
"Water quality monitoring in  
Massachusetts and Cape Cod Bays:  
April-August 1992."**

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**Massachusetts Water Resources Authority**

**Environmental Quality Department  
Report ENQUAD ms-007**



**FINAL REPORT**

**APPENDICES TO  
WATER QUALITY MONITORING  
IN MASSACHUSETTS AND CAPE COD BAYS:  
APRIL - AUGUST 1992**

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## APPENDIX A

### STATION DATA TABLES AND INSTRUMENT CALIBRATION DATA

#### Part 1

##### Physical and Chemical Parameters at Discrete Bottle Measurement Depths

Depth, Temperature (Temp), Dissolved oxygen (DO), Conductivity (Cond), Sigma-T, Fluorescence (Flu), Salinity (Sal), and Beam Attenuation (Beam) all were obtained electronically from *in situ* readings made during the upcast of vertical profiling during which water samples were taken by closing bottles. The table values represent a 20-sec time-averaged value bracketing the time of closing of a hydrocast bottle. Dissolved oxygen and fluorescence data represent post-cruise 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.

Note that all surveys represented in this report are included in the tables. Table A-1 lists the combined farfield/nearfield surveys (late August and October) followed by a chronological listing of other nearfield surveys. Table A-2 lists both combined surveys and the values for analytical replicates (Rep) of samples taken from a given hydrocast bottle. No entry indicates that samples or readings were not collected, or that data were not reported or were reported as suspect by the analytical laboratory. Note that there was a malfunction of the Royce dissolved oxygen sensor on 6/25/92; nearfield stations sampled on that day have no dissolved oxygen data (see also Appendix B).

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MFF03	F01P	04-07-92	0805	2.06	4.24	30.00	25.17	0.83	31.74	1.52	11.38	108	0.32	0.01	0.06	0.08	0.61
MFF03	F01P	04-07-92	0804	5.26	4.18	29.97	25.20	1.43	31.77	1.63	11.77	111	0.06	0.00	0.00	0.17	1.17
MFF03	F01P	04-07-92	0803	10.42	4.13	29.97	25.23	2.01	31.80	1.69	11.90	113	0.83	0.00	0.02	0.13	1.48
MFF03	F01P	04-07-92	0802	14.89	4.10	29.95	25.24	2.08	31.81	1.75	11.59	110	0.04	0.00	0.00	0.24	1.46
MFF03	F01P	04-07-92	0800	21.22	4.08	29.97	25.27	2.31	31.85	1.82	11.63	110	0.06	0.00	0.00	0.23	2.05
MFF03	F02P	04-07-92	0943	1.69	4.03	30.10	25.45	1.32	32.06	1.66	11.72	111	0.26	0.00	0.02	0.29	3.82
MFF03	F02P	04-07-92	0942	6.71	3.71	29.83	25.47	3.77	32.05	2.05	11.47	108	0.03	0.00	0.00	0.41	4.62
MFF03	F02P	04-07-92	0941	13.56	3.66	29.79	25.47	3.81	32.05	2.24	11.57	108	0.07	0.00	0.00	0.54	4.11
MFF03	F02P	04-07-92	0940	18.93	3.66	29.78	25.47	3.57	32.05	2.24	11.64	109	0.04	0.00	0.00	0.43	4.32
MFF03	F02P	04-07-92	0938	26.13	3.66	29.79	25.47	3.72	32.05	2.28	11.68	109	0.03	0.00	0.00	0.37	3.81
MFF03	F02P	04-07-92	1037	1.69	3.90	29.97	25.44	2.00	32.03	1.88	11.85	112	0.06	0.00	0.00	0.27	4.26
MFF03	F02P	04-07-92	1036	5.99	3.66	29.78	25.47	3.56	32.05	2.15	11.74	110	0.06	0.00	0.00	0.37	3.74
MFF03	F02P	04-07-92	1035	9.67	3.64	29.76	25.47	3.98	32.05	2.27	11.75	110	0.06	0.00	0.00	0.35	3.80
MFF03	F02P	04-07-92	1033	19.85	3.63	29.76	25.47	4.19	32.04	2.30	11.91	111	0.06	0.00	0.00	0.42	4.95
MFF03	F02P	04-07-92	1032	27.15	3.63	29.76	25.47	4.06	32.04	2.36	12.01	112	0.05	0.00	0.00	0.42	4.25
MFF03	F03	04-07-92	0640	2.18	4.16	29.97	25.21	2.04	31.78	1.80	8.51	81	0.67	0.00	0.00	0.23	1.62
MFF03	F03	04-07-92	0640	6.42	4.16	29.97	25.21	3.05	31.78	1.86	8.54	95	0.15	0.00	0.00	0.29	1.46
MFF03	F03	04-07-92	0638	9.17	4.16	29.97	25.21	2.31	31.78	1.88	8.47	80	0.11	0.00	0.00	0.27	1.47
MFF03	F03	04-07-92	0637	13.10	4.17	28.76	24.21	3.02	30.52	1.93	8.61	81	0.59	0.00	0.00	0.29	1.29
MFF03	F04	04-07-92	1215	1.91	4.22	30.15	25.33	0.49	31.93	1.44	10.64	101	0.28	0.00	0.00	0.30	3.92
MFF03	F04	04-07-92	1214	13.59	3.71	29.76	25.41	1.66	31.97	1.56	10.73	101	0.67	0.00	0.00	0.35	3.57
MFF03	F04	04-07-92	1212	29.56	3.31	29.53	25.52	1.06	32.07	1.40	10.59	98	0.14	0.12	0.01	0.37	4.97
MFF03	F04	04-07-92	1211	44.97	3.29	29.54	25.55	1.34	32.11	1.41	10.72	100	2.25	0.00	0.00	0.47	4.69
MFF03	F04	04-07-92	1210	58.57	3.31	29.58	25.57	1.31	32.13	1.44	11.57	108	1.05	0.01	-0.01	0.51	4.44
MFF03	F05	04-08-92	0726	1.72	4.45	30.14	25.12	2.37	31.70	1.48	11.61	111	0.11	0.00	0.00	0.31	2.98
MFF03	F05	04-08-92	0725	5.35	4.44	30.13	25.12	2.57	31.71	1.52	11.49	109	0.13	0.00	0.00	0.34	3.00
MFF03	F05	04-08-92	0724	10.36	4.39	30.13	25.16	2.55	31.75	1.50	11.72	112	0.13	0.00	0.00	0.29	3.41
MFF03	F05	04-08-92	0749	13.87	4.01	30.03	25.39	4.72	31.99	2.16	12.21	115	0.15	0.00	0.00	0.32	4.70
MFF03	F06	04-07-92	1721	2.28	4.08	30.22	25.52	2.51	32.15	1.29	12.04	114	0.07	0.00	0.00	0.34	8.24
MFF03	F06	04-07-92	1720	7.97	4.08	30.23	25.52	2.62	32.16	1.27	11.99	114	0.07	0.00	0.00	0.31	7.46
MFF03	F06	04-07-92	1719	13.75	3.91	30.11	25.56	2.51	32.18	1.33	11.97	113	0.05	0.00	0.00	0.38	7.72
MFF03	F06	04-07-92	1718	20.10	3.80	30.02	25.57	3.48	32.19	1.63	11.73	110	0.05	0.00	0.00	0.43	7.88
MFF03	F06	04-07-92	1717	26.80	3.79	30.02	25.57	3.69	32.19	1.73	11.80	111	0.10	0.00	0.00	0.44	7.45
MFF03	F07	04-07-92	1643	2.91	3.78	30.04	25.61	2.48	32.24	1.23	11.99	113	0.09	0.00	0.00	0.42	6.04
MFF03	F07	04-07-92	1642	9.73	3.74	30.01	25.62	2.76	32.24	1.28	11.87	112	0.07	0.00	0.00	0.41	6.05
MFF03	F07	04-07-92	1641	22.78	3.49	29.81	25.64	2.68	32.24	1.42	11.61	108	0.49	0.00	0.26	0.47	5.99
MFF03	F07	04-07-92	1640	38.93	3.45	29.78	25.64	2.65	32.24	1.39	11.37	106	0.40	0.00	0.00	0.44	6.76
MFF03	F07	04-07-92	1639	51.13	3.43	29.77	25.65	2.92	32.24	1.43	11.53	108	0.24	0.00	0.00	0.44	6.73
MFF03	F08	04-07-92	1448	1.79	3.81	30.09	25.63	3.02	32.26	1.69	11.59	109	0.07	0.00	0.00	0.40	7.51
MFF03	F08	04-07-92	1447	10.80	3.72	30.02	25.64	3.77	32.27	1.65	11.53	108	0.17	0.00	0.00	0.41	7.56
MFF03	F08	04-07-92	1446	20.13	3.54	29.88	25.66	3.33	32.27	1.56	11.05	103	0.31	0.00	0.00	0.45	7.14
MFF03	F08	04-07-92	1444	61.54	3.36	29.76	25.69	2.03	32.28	1.30	10.59	99	1.19	0.05	0.29	0.48	5.77
MFF03	F08	04-07-92	1441	80.09	3.32	29.77	25.72	1.05	32.33	1.45	10.48	98	1.22	0.08	0.98	0.55	8.85
MFF03	F09	04-08-92	1605	1.64	5.73	31.19	24.96	0.47	31.68	0.67	11.65	115	0.12	0.00	0.00	0.31	6.37
MFF03	F09	04-08-92	1604	4.96	4.54	30.20	25.10	0.56	31.69	0.72	11.58	111	0.11	0.00	0.01	0.32	7.74
MFF03	F09	04-08-92	1602	10.81	4.36	30.11	25.16	1.54	31.74	0.93	12.00	114	0.09	0.00	0.00	0.30	6.03

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SI04 (uM)
MFF03	F09	04-08-92	1600	14.36	4.33	30.11	25.19	1.69	31.77	1.01	12.29	117	0.11	0.00	0.00	0.30	5.78
MFF03	F09	04-08-92	1559	17.25	4.13	30.07	25.32	2.54	31.92	1.24	12.50	118	0.08	0.00	0.00	0.33	7.77
MFF03	F10	04-08-92	1653	1.84	4.76	30.58	25.25	0.31	31.91	0.51	11.85	114	0.11	0.00	0.00	0.30	9.17
MFF03	F10	04-08-92	1652	8.64	4.27	30.24	25.36	0.93	31.98	0.65	12.15	115	0.11	0.00	0.04	0.32	8.86
MFF03	F10	04-08-92	1651	19.30	3.85	29.99	25.50	3.33	32.11	1.23	11.91	112	0.10	0.00	0.01	0.41	9.05
MFF03	F10	04-08-92	1648	25.22	3.81	29.96	25.50	4.62	32.11	1.75	11.68	110	0.09	0.00	0.00	0.50	9.27
MFF03	F10	04-08-92	1646	30.05	3.80	29.96	25.50	4.92	32.11	1.81	11.68	110	0.10	0.00	0.01	0.43	8.48
MFF03	F11	04-07-92	1536	2.34	4.21	30.27	25.44	1.64	32.08	1.25	12.05	114	0.19	0.00	0.04	0.39	8.76
MFF03	F11	04-07-92	1535	11.74	3.92	30.03	25.47	2.57	32.08	1.42	12.04	114	0.16	0.00	0.05	0.34	8.07
MFF03	F11	04-07-92	1534	24.16	3.73	29.92	25.53	3.27	32.14	1.74	11.65	109	0.14	0.00	0.03	0.40	7.69
MFF03	F11	04-07-92	1533	38.36	3.69	29.95	25.59	2.86	32.20	1.57	11.53	108	0.13	0.00	0.02	0.43	7.53
MFF03	F11	04-07-92	1531	49.77	3.44	29.80	25.67	1.65	32.27	1.51	10.76	100	1.22	0.10	0.83	0.50	9.55
MFF03	F11	04-07-92	1559	3.59	4.18	30.24	25.45	2.25	32.08	1.21	12.01	114	0.25	0.00	0.03	0.39	8.11
MFF03	F11	04-07-92	1558	11.86	4.02	30.12	25.47	2.46	32.09	1.32	11.98	113	0.26	0.00	0.04	0.39	8.78
MFF03	F11	04-07-92	1557	24.81	3.73	29.92	25.53	3.62	32.13	1.71	11.55	108	0.23	0.00	0.04	0.47	8.53
MFF03	F11	04-07-92	1556	36.92	3.70	29.95	25.58	3.01	32.19	1.55	11.31	106	0.28	0.00	0.08	0.45	7.57
MFF03	F11	04-07-92	1555	51.65	3.45	29.81	25.67	1.97	32.27	1.54	10.94	102	0.88	0.07	0.89	0.53	10.37
MFF03	F12	04-07-92	1354	2.02	4.23	30.25	25.41	1.20	32.04	1.38	11.85	113	0.23	0.00	0.02	0.41	8.82
MFF03	F12	04-07-92	1353	14.67	3.77	29.89	25.47	3.36	32.06	1.67	11.82	111	0.23	0.00	0.01	0.46	8.11
MFF03	F12	04-07-92	1352	28.53	3.64	29.88	25.57	3.94	32.17	1.73	11.39	107	0.27	0.01	0.34	0.53	7.81
MFF03	F12	04-07-92	1350	69.67	3.39	29.85	25.74	1.50	32.36	1.56	10.19	95	0.95	0.10	2.15	0.59	9.40
MFF03	F12	04-07-92	1349	89.38	3.38	29.86	25.76	1.46	32.37	3.56	10.08	94	1.62	0.10	4.67	0.69	11.31
MFF03	F13P	04-08-92	0843	1.80	4.51	30.10	25.03	1.17	31.60	1.13	11.31	108	0.18	0.00	0.05	0.14	5.17
MFF03	F13P	04-08-92	0842	5.35	4.49	30.09	25.04	1.83	31.60	1.14	11.52	110	0.06	0.00	0.00	0.27	5.52
MFF03	F13P	04-08-92	0840	7.36	4.43	30.06	25.06	1.89	31.63	1.11	11.53	110	1.58	0.05	0.16	0.25	5.69
MFF03	F13P	04-08-92	0838	16.55	4.14	29.97	25.23	1.65	31.80	1.14	11.9	113	0.05	0.00	0.00	0.31	8.09
MFF03	F14	04-08-92	1514	2.26	5.06	30.46	24.89	2.43	31.49	1.65	12.24	118	0.10	0.00	0.00	0.28	4.79
MFF03	F14	04-08-92	1513	7.22	4.79	30.31	24.98	3.10	31.57	1.48	12.52	120	0.10	0.00	0.00	0.29	4.89
MFF03	F14	04-08-92	1512	12.00	4.56	30.15	25.03	2.39	31.60	1.34	12.41	119	0.07	0.00	0.00	0.29	5.34
MFF03	F14	04-08-92	1511	16.57	4.31	30.03	25.14	3.34	31.71	1.62	12.36	117	0.06	0.00	0.00	0.41	8.41
MFF03	F15	04-08-92	1434	1.91	4.80	30.39	25.04	0.36	31.65	0.59	12.03	116	0.16	0.00	0.02	0.30	9.45
MFF03	F15	04-08-92	1433	6.79	4.30	29.98	25.10	0.33	31.66	0.59	12.05	114	0.16	0.00	0.00	0.29	9.51
MFF03	F15	04-08-92	1431	15.13	3.86	29.87	25.37	0.82	31.95	0.69	12.25	115	0.26	0.00	0.00	0.34	9.55
MFF03	F15	04-08-92	1430	25.53	3.66	29.84	25.52	5.41	32.11	1.83	11.83	111	0.31	0.00	0.16	0.50	9.94
MFF03	F15	04-08-92	1428	35.33	3.59	29.86	25.60	6.88	32.20	2.63	11.41	107	0.19	0.00	0.00	0.32	10.10
MFF03	F16	04-08-92	1355	1.65	4.55	30.34	25.21	0.27	31.83	1.40	11.57	111	0.22	0.00	0.00	0.31	9.11
MFF03	F16	04-08-92	1354	10.49	4.18	30.12	25.33	0.69	31.93	0.64	11.72	111	0.26	0.00	0.00	0.33	8.43
MFF03	F16	04-08-92	1352	30.00	3.85	29.96	25.46	3.08	32.06	1.24	11.47	108	0.21	0.00	0.00	0.42	8.48
MFF03	F16	04-08-92	1350	39.50	3.65	29.91	25.59	3.48	32.19	1.32	11.32	106	0.18	0.00	0.00	0.40	8.06
MFF03	F16	04-08-92	1348	55.63	3.40	29.82	25.71	3.58	32.32	2.34	10.53	98	1.39	0.14	2.00	0.63	10.24
MFF03	F17	04-08-92	1300	1.76	4.31	30.23	25.32	0.46	31.94	1.18	11.8	112	0.20	0.00	0.00	0.37	9.05
MFF03	F17	04-08-92	1259	10.68	3.80	29.88	25.44	1.67	32.02	1.01	11.71	110	0.34	0.00	0.00	0.39	8.97
MFF03	F17	04-08-92	1257	25.33	3.63	29.84	25.54	3.86	32.14	1.39	11.24	105	0.21	0.00	0.00	0.47	8.62
MFF03	F17	04-08-92	1255	49.89	3.51	29.87	25.67	2.29	32.28	1.04	10.97	103	0.34	0.00	0.58	0.45	6.81
MFF03	F17	04-08-92	1253	74.81	3.35	29.79	25.72	2.11	32.32	1.66	10.47	98	1.80	0.11	0.64	0.58	9.47
MFF03	F18	04-10-92	1705	1.32	5.19	30.80	25.08	0.78	31.75	0.70	12.23	119	0.20	0.00	0.00	0.22	9.31

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MFF03	F18	04-10-92	1704	8.53	4.82	30.47	25.10	0.85	31.72	0.68	12.45	120	0.08	0.00	0.00	0.21	9.02
MFF03	F18	04-10-92	1703	16.10	4.00	29.89	25.27	2.12	31.84	0.99	12.7	120	0.06	0.00	0.00	0.28	9.35
MFF03	F18	04-10-92	1702	20.79	4.04	29.94	25.28	4.95	31.86	1.80	12.53	118	0.15	0.00	0.00	0.36	10.07
MFF03	F18	04-10-92	1700	23.59	4.05	29.95	25.28	4.84	31.86	1.79	11.96	133	0.09	0.00	0.00	0.34	10.24
MFF03	F19	04-10-92	1227	1.46	4.76	30.21	24.92	0.40	31.49	0.57	11.84	114	0.12	0.00	0.00	0.27	9.45
MFF03	F19	04-10-92	1226	20.61	3.72	29.77	25.40	1.87	31.97	0.77	12.07	113	0.26	0.00	0.00	0.38	7.66
MFF03	F19	04-10-92	1224	36.83	3.64	29.88	25.57	3.75	32.17	1.31	11.53	108	1.41	0.00	0.00	0.48	7.33
MFF03	F19	04-10-92	1223	56.78	3.37	29.79	25.71	2.44	32.32	1.09	10.93	102	2.73	0.04	0.44	0.58	7.29
MFF03	F19	04-10-92	1220	77.86	3.49	29.98	25.78	2.87	32.42	2.20	10.28	96	3.88	0.23	4.90	0.72	13.51
MFF03	F20	04-10-92	1604	1.82	5.15	30.66	24.99	0.44	31.63	0.56	11.9	115	0.09	0.00	0.00	0.26	8.82
MFF03	F20	04-10-92	1603	9.57	4.38	30.02	25.07	0.85	31.63	0.60	12.31	117	0.15	0.00	0.00	0.34	9.44
MFF03	F20	04-10-92	1602	16.98	3.91	29.82	25.28	2.96	31.83	1.17	12.41	117	0.46	0.00	0.00	0.36	9.30
MFF03	F20	04-10-92	1601	26.94	3.76	29.77	25.36	3.43	31.93	1.28	12.42	117	0.14	0.00	0.00	0.37	9.12
MFF03	F20	04-10-92	1559	34.98	3.62	29.81	25.52	8.67	32.10	2.73	11.62	109	1.61	0.00	0.00	0.54	10.02
MFF03	F21	04-10-92	1520	1.55	5.68	31.03	24.87	0.34	31.55	0.50	12.12	119	0.11	0.00	0.00	0.22	8.50
MFF03	F21	04-10-92	1518	9.53	4.18	29.82	25.05	0.96	31.59	0.70	12.66	120	0.09	0.00	0.00	0.27	8.89
MFF03	F21	04-10-92	1517	21.33	3.83	29.73	25.26	2.56	31.81	1.06	12.58	118	0.18	0.00	0.00	0.29	8.44
MFF03	F21	04-10-92	1515	44.10	3.54	29.85	25.63	3.76	32.23	1.41	11.51	108	1.59	0.00	0.00	0.49	8.02
MFF03	F21	04-10-92	1513	55.09	3.53	29.93	25.70	10.47	32.32	3.42	11.22	105	4.73	0.07	3.60	0.91	10.76
MFF03	F22	04-10-92	1332	1.78	5.10	30.44	24.84	0.46	31.43	1.29	11.81	114	0.15	0.00	0.00	0.25	9.12
MFF03	F22	04-10-92	1331	15.95	4.08	29.71	25.04	1.55	31.55	0.77	12.17	115	3.91	0.00	0.00	0.16	9.62
MFF03	F22	04-10-92	1328	34.11	3.73	29.91	25.51	3.28	32.11	1.18	11.71	110	0.16	0.00	0.00	0.42	7.99
MFF03	F22	04-10-92	1327	55.53	3.48	29.93	25.75	2.99	32.38	1.31	10.54	99	2.86	0.23	3.04	0.69	8.59
MFF03	F22	04-10-92	1325	75.22	3.54	30.04	25.79	2.66	32.44	1.53	10.45	98	2.75	0.15	5.15	0.71	9.68
MFF03	F22	04-10-92	1400	1.58	4.86	30.27	24.89	0.43	31.46	0.60	11.94	115	0.24	0.07	0.02	0.23	8.92
MFF03	F22	04-10-92	1359	14.72	4.28	29.82	24.97	1.17	31.49	0.69	12.32	117	0.12	0.00	0.00	0.29	8.74
MFF03	F22	04-10-92	1358	35.39	3.73	29.91	25.52	3.17	32.12	1.15	11.68	110	1.69	0.00	0.00	0.43	7.74
MFF03	F22	04-10-92	1357	55.10	3.45	29.89	25.74	2.89	32.36	1.38	10.49	98	3.24	0.08	2.27	0.68	8.46
MFF03	F22	04-10-92	1354	76.10	3.54	30.04	25.79	2.76	32.44	1.69	10.52	99	0.09	0.17	2.82	0.38	11.46
MFF03	F23P	04-10-92	0625	1.69	5.26	30.39	24.66	4.54	31.23	2.56	11.28	109	8.28	0.10	0.31	0.69	5.96
MFF03	F23P	04-10-92	0624	5.33	5.12	30.43	24.80	4.99	31.39	2.57	11.29	109	4.08	0.00	0.00	0.62	6.39
MFF03	F23P	04-10-92	0623	10.48	5.07	30.43	24.85	5.13	31.44	2.54	11.39	110	7.21	0.09	0.17	0.33	6.86
MFF03	F23P	04-10-92	0621	14.50	4.94	30.39	24.92	5.10	31.52	2.30	11.42	110	1.28	0.00	0.00	0.51	6.61
MFF03	F23P	04-10-92	0651	19.05	4.71	30.35	25.07	4.61	31.68	2.11	11.52	110	2.41	0.00	0.00	0.43	5.88
MFF03	F24	04-10-92	1759	1.39	5.24	30.84	25.08	1.10	31.75	0.85	11.31	110	0.15	0.00	0.00	0.26	8.36
MFF03	F24	04-10-92	1758	4.97	5.10	30.72	25.09	1.40	31.75	0.90	11.25	109	0.14	0.00	0.00	0.25	8.42
MFF03	F24	04-10-92	1757	10.10	4.63	30.41	25.21	1.28	31.84	0.82	11.34	109	0.11	0.00	0.00	0.26	8.29
MFF03	F24	04-10-92	1756	13.31	4.41	30.30	25.30	1.11	31.92	0.82	11.21	107	0.10	0.00	0.00	0.24	8.87
MFF03	F24	04-10-92	1755	18.35	4.26	30.21	25.34	2.85	31.96	1.35	10.82	103	0.14	0.00	0.00	0.33	9.03
MFF03	F25	04-08-92	1814	1.78	5.07	30.39	24.81	4.13	31.40	2.00	12.27	118	4.14	0.07	0.12	0.40	6.59
MFF03	F25	04-08-92	1813	5.44	4.94	30.35	24.89	4.00	31.48	1.97	11.95	115	1.60	0.00	0.06	0.35	4.98
MFF03	F25	04-08-92	1812	9.60	4.82	30.32	24.97	3.68	31.56	1.94	11.84	114	1.01	0.00	0.01	0.35	5.59
MFF03	F25	04-08-92	1811	13.11	4.75	30.31	25.01	4.12	31.60	1.96	11.77	113	1.10	0.00	0.01	0.40	5.60
MFF03	F25	04-08-92	1833	1.70	5.17	30.40	24.74	3.73	31.31	2.10	12.42	120	0.14	0.00	0.00	0.23	12.64
MFF03	F25	04-08-92	1832	5.97	5.03	30.37	24.83	4.04	31.41	2.05	12.23	118	1.12	0.00	0.00	0.42	4.46
MFF03	F25	04-08-92	1831	9.54	4.90	30.33	24.91	4.14	31.49	2.03	12.34	119	0.65	0.00	0.00	0.30	4.05

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	S104 (uM)
MFF03	F25	04-08-92	1830	12.54	4.85	30.32	24.93	4.32	31.52	2.03	12.38	119	1.88	0.00	0.00	0.38	5.26
MFF03	N01P	04-12-92	0914	1.97	4.53	30.17	25.08	0.98	31.66	0.72	10.43	100	1.56	0.04	0.02	0.21	8.61
MFF03	N01P	04-12-92	0914	7.11	4.52	30.20	25.11	1.44	31.70	0.83	10.98	105	0.07	0.00	0.00	0.22	8.71
MFF03	N01P	04-12-92	0913	16.72	4.56	30.27	25.14	1.23	31.74	0.97	11.47	110	0.95	0.03	0.02	0.22	8.99
MFF03	N01P	04-12-92	0912	22.79	4.42	30.16	25.16	1.17	31.75	0.84	11.59	110	0.58	0.00	0.04	0.37	8.55
MFF03	N01P	04-12-92	0910	28.00	4.41	30.19	25.18	0.78	31.78	0.67	11.03	105	0.05	0.00	0.00	0.28	8.47
MFF03	N02	04-12-92	0959	1.93	4.44	30.11	25.10	1.03	31.68	0.67	10.45	100	0.20	0.03	-0.01	0.23	7.32
MFF03	N02	04-12-92	0959	9.93	4.40	30.14	25.16	1.12	31.75	0.67	10.65	101	0.12	0.00	0.00	0.27	7.04
MFF03	N02	04-12-92	0957	19.22	4.39	30.17	25.19	1.18	31.78	0.65	11.55	110	0.15	0.00	0.00	0.89	7.18
MFF03	N02	04-12-92	0956	24.97	4.40	30.20	25.21	0.77	31.81	0.59	11.55	110	0.25	0.00	0.00	0.41	6.87
MFF03	N02	04-12-92	0955	36.10	4.13	30.06	25.31	1.64	31.90	0.87	10.52	100	0.15	0.00	0.00	1.20	7.68
MFF03	N03	04-12-92	1026	1.73	4.43	30.19	25.18	0.59	31.78	0.54	11.14	106	1.54	0.00	0.00	0.42	8.15
MFF03	N03	04-12-92	1026	9.30	4.40	30.19	25.21	0.55	31.80	0.54	11.39	108	0.15	0.00	0.00	0.33	6.81
MFF03	N03	04-12-92	1025	21.66	4.37	30.19	25.22	0.61	31.82	0.52	11.53	110	0.71	0.00	0.00	0.27	6.86
MFF03	N03	04-12-92	1024	34.28	4.10	30.05	25.33	0.95	31.92	0.65	11.47	109	0.96	0.00	0.00	0.27	6.86
MFF03	N03	04-12-92	1022	42.79	3.68	29.86	25.51	4.47	32.10	1.70	10.41	98	0.19	0.00	0.00	2.67	7.88
MFF03	N04P	04-10-92	1036	1.59	5.09	30.75	25.12	0.37	31.79	0.53	11.35	110	7.63	0.13	0.16	0.47	10.03
MFF03	N04P	04-10-92	1035	9.85	4.49	30.26	25.19	0.47	31.80	0.51	11.56	110	0.11	0.00	0.04	0.34	9.33
MFF03	N04P	04-10-92	1033	24.96	3.81	29.92	25.46	0.94	32.05	0.64	11.71	110	0.10	0.00	0.02	0.31	8.33
MFF03	N04P	04-10-92	1031	37.86	3.56	29.91	25.67	4.61	32.29	1.59	10.69	100	0.81	0.69	0.48	0.45	8.45
MFF03	N04P	04-10-92	1029	45.37	3.54	29.94	25.71	4.19	32.33	1.89	10.54	99	1.97	0.14	1.17	0.59	9.45
MFF03	N04P	04-12-92	1052	1.68	4.34	29.95	25.03	0.57	31.58	0.55	11.17	106	0.34	0.00	0.04	0.22	8.09
MFF03	N04P	04-12-92	1052	10.02	4.33	29.96	25.05	0.71	31.60	0.58	11.39	108	0.21	0.00	0.00	0.31	6.89
MFF03	N04P	04-12-92	1051	24.23	4.13	29.90	25.17	1.08	31.72	0.62	11.53	109	0.17	0.00	0.00	0.32	7.05
MFF03	N04P	04-12-92	1050	37.14	3.74	29.90	25.49	1.67	32.09	0.87	11.26	106	0.39	0.00	0.00	0.42	6.58
MFF03	N04P	04-12-92	1049	46.43	3.60	29.88	25.60	5.33	32.20	1.93	10.43	116	1.53	0.00	0.00	0.48	7.36
MFF03	N05	04-12-92	1118	1.72	4.36	29.98	25.05	0.65	31.60	0.55	11.23	107	0.22	0.00	0.00	0.22	8.10
MFF03	N05	04-12-92	1118	11.96	4.30	29.97	25.08	0.81	31.64	0.60	11.32	107	0.20	0.00	0.00	0.28	8.02
MFF03	N05	04-12-92	1117	24.13	4.24	30.07	25.22	0.54	31.81	0.54	11	104	0.18	0.00	0.00	0.28	8.28
MFF03	N05	04-12-92	1116	40.90	3.68	29.91	25.56	4.05	32.16	1.59	10.42	98	1.83	0.00	0.00	0.43	8.34
MFF03	N05	04-12-92	1115	50.76	3.64	29.91	25.59	4.45	32.20	1.72	10.37	97	0.69	0.00	0.00	0.57	8.35
MFF03	N06	04-12-92	1146	1.59	4.32	30.00	25.10	0.44	31.66	0.55	11.41	108	0.15	0.00	0.05	0.25	8.26
MFF03	N06	04-12-92	1146	10.99	4.24	30.03	25.19	0.59	31.77	0.55	11.52	109	0.15	0.00	0.07	0.30	8.01
MFF03	N06	04-12-92	1145	25.39	4.19	30.07	25.27	0.69	31.86	0.50	11.72	111	0.14	0.00	0.04	0.29	7.96
MFF03	N06	04-12-92	1144	39.19	3.77	29.94	25.51	1.35	32.11	0.73	10.98	103	0.12	0.00	0.05	0.32	7.69
MFF03	N06	04-12-92	1143	47.29	3.62	29.93	25.62	4.76	32.23	1.81	10.62	100	2.19	0.00	0.08	0.52	9.16
MFF03	N07P	04-08-92	1136	5.36	4.24	29.87	25.05	0.39	31.59	0.61	11.24	106	0.07	0.02	0.02	0.21	8.91
MFF03	N07P	04-08-92	1134	15.22	3.86	29.84	25.34	0.93	31.91	0.74	11.39	107	0.07	0.00	0.00	0.45	9.43
MFF03	N07P	04-08-92	1133	25.86	3.61	29.84	25.57	6.19	32.16	2.11	10.44	98	0.46	0.12	0.09	0.40	8.37
MFF03	N07P	04-08-92	1131	34.26	3.54	29.87	25.64	5.24	32.25	1.87	10.1	94	0.48	0.00	1.28	0.62	9.68
MFF03	N07P	04-08-92	1130	45.39	3.52	29.90	25.69	6.57	32.31	2.26	9.93	110	1.10	0.09	2.79	0.78	10.16
MFF03	N07P	04-12-92	1211	1.65	4.45	30.22	25.19	0.44	31.79	0.47	10.86	104	0.30	0.01	0.10	0.28	7.82
MFF03	N07P	04-12-92	1210	13.05	4.40	30.23	25.24	0.55	31.84	0.47	11.14	106	0.69	0.00	0.01	0.26	7.83
MFF03	N07P	04-12-92	1209	25.40	4.17	30.13	25.34	0.97	31.95	0.57	10.61	101	0.23	0.00	0.02	0.33	7.96
MFF03	N07P	04-12-92	1208	39.98	3.64	29.89	25.58	7.04	32.18	2.33	10.18	95	1.54	0.00	0.04	0.57	8.54
MFF03	N07P	04-12-92	1207	47.89	3.61	29.91	25.62	5.57	32.23	1.95	10.27	96	1.79	0.00	0.04	0.54	8.26

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MFF03	N08	04-12-92	1240	1.63	4.53	30.22	25.12	0.75	31.72	0.69	10.34	99	0.25	0.00	0.00	0.28	8.56
MFF03	N08	04-12-92	1240	5.86	4.40	30.13	25.15	1.15	31.74	0.74	10.45	99	0.31	0.00	0.01	0.29	8.85
MFF03	N08	04-12-92	1239	14.30	4.28	30.09	25.22	1.53	31.80	0.80	10.57	100	0.29	0.00	0.01	0.36	8.34
MFF03	N08	04-12-92	1238	23.78	4.22	30.09	25.26	2.47	31.85	1.27	10.49	100	0.30	0.00	0.08	0.32	8.51
MFF03	N08	04-12-92	1238	28.29	4.19	30.08	25.27	2.74	31.86	1.36	10.11	96	0.30	0.00	0.05	0.32	8.64
MFF03	N09	04-12-92	1303	1.78	4.63	30.30	25.12	0.99	31.72	0.80	10.17	97	0.61	0.00	0.01	0.30	7.94
MFF03	N09	04-12-92	1303	7.28	4.39	30.14	25.18	1.06	31.76	0.67	10.42	99	0.33	0.00	0.00	0.31	8.67
MFF03	N09	04-12-92	1302	12.87	4.36	30.14	25.19	1.03	31.78	0.63	10.66	101	0.62	0.00	0.05	0.43	8.89
MFF03	N09	04-12-92	1301	22.02	4.38	30.17	25.20	1.13	31.80	0.64	10.79	103	0.25	0.00	0.00	0.33	8.61
MFF03	N09	04-12-92	1300	31.36	4.23	30.11	25.26	1.81	31.86	1.08	10.19	97	0.25	0.00	0.00	0.36	8.94
MFF03	N10P	04-08-92	1007	3.22	4.76	30.13	24.84	4.14	31.39	1.97	11.49	110	1.60	0.07	0.15	0.36	4.09
MFF03	N10P	04-08-92	1005	7.15	4.53	30.10	25.01	3.17	31.57	1.74	11.45	109	0.05	0.00	0.00	0.34	5.40
MFF03	N10P	04-08-92	1003	13.30	4.42	30.09	25.10	2.79	31.67	1.51	11.85	113	0.07	0.00	0.06	0.23	5.77
MFF03	N10P	04-08-92	1002	15.23	4.39	30.08	25.11	2.68	31.69	1.49	11.94	114	0.09	0.00	0.00	0.30	6.16
MFF03	N10P	04-08-92	1001	20.39	4.03	29.94	25.30	3.94	31.87	1.78	12.16	115	0.08	0.00	0.00	0.37	8.95
MFF03	N10P	04-12-92	0748	2.27	5.36	30.62	24.78	3.35	31.39	1.91	11.29	110	0.97	0.00	0.06	0.43	4.26
MFF03	N10P	04-12-92	0747	6.52	5.26	30.65	24.88	3.35	31.51	1.89	11.35	110	0.73	0.00	0.04	0.50	5.28
MFF03	N10P	04-12-92	0746	9.57	5.17	30.62	24.94	3.44	31.57	1.83	11.26	109	0.20	0.00	0.01	0.34	4.90
MFF03	N10P	04-12-92	0746	16.00	4.58	30.38	25.21	3.62	31.84	2.02	11.48	110	0.22	0.00	0.03	0.38	8.14
MFF03	N10P	04-12-92	0744	21.14	4.58	30.38	25.22	3.29	31.84	1.95	11.16	107	0.22	0.00	0.03	0.37	9.09
MFF03	N11	04-12-92	0819	2.08	4.81	30.47	25.11	2.46	31.74	1.31	11.07	106	0.21	0.00	0.02	0.31	7.74
MFF03	N11	04-12-92	0818	5.98	4.75	30.46	25.14	2.24	31.77	1.20	11.1	107	0.19	0.00	0.04	0.31	8.12
MFF03	N11	04-12-92	0818	14.36	4.70	30.45	25.18	2.00	31.82	1.18	11.58	111	0.22	0.00	0.02	0.30	8.34
MFF03	N11	04-12-92	0817	18.43	4.69	30.45	25.19	1.89	31.82	1.18	11.59	111	0.16	0.00	0.00	0.30	8.36
MFF03	N11	04-12-92	0816	27.57	4.62	30.41	25.22	2.01	31.85	1.18	11.49	110	0.13	0.00	0.02	0.33	8.88
MFF03	N12	04-12-92	0845	1.70	4.63	30.29	25.11	0.56	31.71	0.66	11.08	106	0.26	0.00	0.02	0.27	8.76
MFF03	N12	04-12-92	0845	5.83	4.66	30.35	25.13	0.91	31.74	0.73	11.35	109	0.18	0.00	0.02	0.27	8.68
MFF03	N12	04-12-92	0844	14.15	4.66	30.37	25.14	0.89	31.76	0.86	11.38	109	0.20	0.00	0.01	0.28	8.80
MFF03	N12	04-12-92	0843	19.57	4.65	30.37	25.15	1.14	31.76	0.99	11.63	111	0.25	0.00	0.01	0.26	9.26
MFF03	N12	04-12-92	0842	24.97	4.65	30.38	25.16	1.17	31.78	0.99	11.48	110	0.21	0.00	0.02	0.29	8.74
MFF03	N13	04-12-92	1412	1.84	4.81	30.38	25.03	0.72	31.64	0.61	10.07	97	0.80	0.00	0.00	0.29	8.61
MFF03	N13	04-12-92	1412	4.85	4.73	30.39	25.11	0.74	31.72	0.63	10.45	100	5.50	0.02	0.05	0.28	9.22
MFF03	N13	04-12-92	1411	13.27	4.69	30.39	25.13	0.87	31.75	0.68	10.58	101	0.16	0.00	0.00	0.29	8.65
MFF03	N13	04-12-92	1410	20.39	4.65	30.36	25.14	0.97	31.75	0.72	10.61	102	0.15	0.00	0.01	0.29	8.72
MFF03	N13	04-12-92	1409	27.57	4.64	30.38	25.16	1.16	31.78	0.96	10.28	98	0.14	0.00	0.00	0.32	8.82
MFF03	N14	04-12-92	1436	1.75	4.70	30.34	25.09	0.98	31.69	0.66	10.11	97	0.11	0.00	0.01	0.27	9.11
MFF03	N14	04-12-92	1436	5.29	4.56	30.25	25.12	1.08	31.72	0.69	10.37	99	1.43	0.00	0.02	0.26	10.34
MFF03	N14	04-12-92	1435	14.28	4.51	30.22	25.13	1.04	31.72	0.71	10.61	101	0.18	0.00	0.03	0.32	8.90
MFF03	N14	04-12-92	1434	19.82	4.48	30.22	25.16	1.58	31.76	1.02	10.51	100	0.14	0.00	0.02	0.28	9.39
MFF03	N14	04-12-92	1433	28.34	4.36	30.16	25.21	2.40	31.80	1.20	10.15	97	0.59	0.00	0.02	0.29	9.71
MFF03	N15	04-12-92	1459	1.44	4.45	30.09	25.07	0.56	31.64	0.53	10.46	100	0.63	0.00	0.01	0.25	8.70
MFF03	N15	04-12-92	1458	10.08	4.40	30.05	25.08	0.71	31.64	0.54	10.58	118	0.20	0.00	0.01	0.29	8.25
MFF03	N15	04-12-92	1457	19.29	4.40	30.10	25.12	0.78	31.69	0.53	10.68	102	0.15	0.00	0.02	0.27	8.18
MFF03	N15	04-12-92	1456	29.53	4.30	30.16	25.26	0.75	31.86	0.52	10.39	99	0.17	0.00	0.03	0.23	8.13
MFF03	N15	04-12-92	1456	40.83	3.75	29.91	25.50	3.40	32.10	1.25	10.25	96	0.85	0.00	0.01	0.40	8.46
MFF03	N16P	04-10-92	0929	1.74	4.66	30.25	25.04	0.34	31.63	0.52	10.68	102	0.07	0.00	0.00	0.10	8.47

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MFF03	N16P	04-10-92	0927	5.92	4.42	30.16	25.16	0.41	31.75	0.58	11.3	108	0.08	0.00	0.00	0.34	8.15
MFF03	N16P	04-10-92	0926	11.91	3.86	29.85	25.35	1.09	31.92	0.88	11.48	108	0.13	0.00	0.04	0.37	10.01
MFF03	N16P	04-10-92	0924	25.70	3.73	29.86	25.47	4.82	32.06	1.76	10.67	100	0.08	0.00	0.02	0.27	8.91
MFF03	N16P	04-10-92	0922	35.56	3.63	29.86	25.56	5.37	32.15	1.97	10.67	100	1.06	0.00	0.03	0.49	8.42
MFF03	N16P	04-12-92	1523	1.89	4.47	30.10	25.06	0.62	31.63	0.53	10.73	102	0.86	0.00	0.00	0.26	8.20
MFF03	N16P	04-12-92	1522	9.41	4.36	30.04	25.10	0.63	31.67	0.54	10.89	104	0.10	0.00	0.00	0.29	8.31
MFF03	N16P	04-12-92	1521	18.77	4.36	30.12	25.17	0.63	31.76	0.49	11.19	106	0.10	0.00	0.00	0.28	8.17
MFF03	N16P	04-12-92	1520	28.32	4.40	30.21	25.22	0.57	31.82	0.47	10.96	104	0.19	0.00	0.00	0.27	8.05
MFF03	N16P	04-12-92	1520	38.75	4.08	30.05	25.34	1.63	31.94	0.82	10.6	100	0.10	0.00	0.01	0.35	8.67
MFF03	N17	04-12-92	1547	1.36	4.42	30.09	25.10	0.61	31.67	0.53	10.49	100	0.16	0.00	0.00	0.27	8.12
MFF03	N17	04-12-92	1547	8.95	4.38	30.14	25.17	0.65	31.76	0.48	10.93	104	0.33	0.00	0.04	0.33	8.13
MFF03	N17	04-12-92	1546	15.28	4.42	30.20	25.19	0.45	31.79	0.45	11.07	105	0.24	0.00	0.00	0.29	8.19
MFF03	N17	04-12-92	1545	26.62	4.36	30.20	25.25	0.51	31.85	0.47	11.23	107	0.42	0.00	0.00	0.28	8.33
MFF03	N17	04-12-92	1544	36.04	4.05	30.04	25.36	2.25	31.96	0.96	10.96	104	0.18	0.00	0.00	0.37	8.87
MFF03	N18	04-12-92	1612	2.05	4.51	30.21	25.13	0.75	31.72	0.62	10.42	99	1.68	0.00	0.00	0.29	8.69
MFF03	N18	04-12-92	1612	4.40	4.50	30.20	25.13	0.97	31.72	0.61	10.7	102	0.23	0.00	0.00	0.30	8.72
MFF03	N18	04-12-92	1611	11.35	4.48	30.19	25.13	0.91	31.72	0.62	10.98	105	0.28	0.00	0.00	0.22	9.04
MFF03	N18	04-12-92	1610	17.69	4.43	30.15	25.14	0.99	31.73	0.63	10.98	105	1.00	0.00	0.00	0.27	8.78
MFF03	N18	04-12-92	1609	23.10	4.40	30.18	25.19	1.56	31.79	0.92	10.45	100	1.23	0.00	0.00	0.30	9.15
MFF03	N19	04-12-92	1324	1.78	4.87	30.51	25.09	1.35	31.73	0.99	9.91	95	0.22	0.00	0.00	0.32	7.77
MFF03	N19	04-12-92	1324	5.91	4.79	30.46	25.12	1.60	31.74	0.98	9.92	95	0.28	0.00	0.01	0.32	8.66
MFF03	N19	04-12-92	1323	9.87	4.46	30.23	25.18	1.16	31.79	0.74	10.25	98	0.19	0.00	0.00	0.31	8.21
MFF03	N19	04-12-92	1322	14.32	4.41	30.19	25.19	1.27	31.79	0.71	10.13	97	0.19	0.00	0.01	0.31	8.44
MFF03	N19	04-12-92	1321	20.59	4.37	30.18	25.22	2.09	31.81	1.12	9.88	94	0.25	0.00	0.00	0.35	9.71
MFF03	N20P	04-10-92	0817	1.47	4.64	30.30	25.10	0.40	31.70	0.68	10.34	99	1.09	0.00	0.00	0.21	8.28
MFF03	N20P	04-10-92	0816	4.86	4.57	30.24	25.11	0.43	31.70	0.49	10.91	104	0.09	0.00	0.00	0.33	8.64
MFF03	N20P	04-10-92	0811	25.02	3.97	30.02	25.41	1.91	32.01	0.98	11.14	105	0.45	0.03	0.06	0.43	8.07
MFF03	N20P	04-12-92	1350	1.75	4.54	30.24	25.14	0.73	31.74	0.64	10.34	99	0.23	0.00	0.00	0.25	8.99
MFF03	N20P	04-12-92	1349	5.85	4.47	30.22	25.18	1.28	31.77	0.74	10.43	99	0.17	0.00	0.00	0.33	8.59
MFF03	N20P	04-12-92	1348	13.79	4.53	30.29	25.18	1.33	31.79	0.87	10.55	101	0.28	0.00	0.02	0.32	8.68
MFF03	N20P	04-12-92	1348	23.18	4.60	30.37	25.20	1.96	31.82	1.17	10.65	102	0.22	0.00	0.00	0.29	8.69
MFF03	N20P	04-12-92	1347	26.61	4.60	30.38	25.20	2.62	31.82	1.24	10.24	98	0.21	0.00	0.00	0.29	8.68
MFF03	N21	04-12-92	1649	1.65	4.57	30.24	25.11	0.76	31.70	0.62	10.65	102	0.29	0.00	0.00	0.28	8.87
MFF03	N21	04-12-92	1648	9.12	4.51	30.20	25.12	0.82	31.71	0.62	10.88	104	1.32	0.00	0.00	0.25	8.85
MFF03	N21	04-12-92	1647	18.11	4.37	30.14	25.18	1.10	31.77	0.75	10.92	104	1.83	0.00	0.00	0.29	9.87
MFF03	N21	04-12-92	1646	27.23	4.34	30.17	25.23	2.57	31.83	1.35	10.81	103	0.30	0.00	0.00	0.31	9.64
MFF03	N21	04-12-92	1645	31.34	4.26	30.12	25.26	3.71	31.85	1.61	10.58	100	0.31	0.00	0.00	0.39	9.40
MNF04	N01P	04-29-92	1002	1.08	6.01	30.16	23.83	0.23	30.28	0.78	10.02	98	0.34	0.00	0.00	0.15	18.28
MNF04	N01P	04-29-92	0959	6.76	5.80	30.16	23.99	0.33	30.45	0.79	10.1	99	0.29	0.00	0.00	0.18	9.56
MNF04	N01P	04-29-92	0957	13.84	5.85	30.37	24.14	0.39	30.65	0.82	9.96	98	3.75	0.00	0.00	0.29	9.55
MNF04	N01P	04-29-92	0954	21.45	5.57	30.46	24.44	0.36	31.00	0.79	10.15	99	0.93	0.00	0.00	0.24	14.67
MNF04	N01P	04-29-92	0952	27.82	5.36	30.56	24.71	0.43	31.31	0.91	10.12	98	1.29	0.00	0.00	0.34	11.04
MNF04	N02	04-29-92	1045	0.98	5.94	30.13	23.85	0.25	30.31	0.80	10.32	101	0.21	0.00	0.00	0.10	10.81
MNF04	N02	04-29-92	1043	7.57	5.30	30.05	24.31	0.35	30.79	0.73	10.49	101	0.15	0.00	0.00	0.17	8.78
MNF04	N02	04-29-92	1040	17.03	5.01	30.02	24.53	0.30	31.03	0.69	10.6	102	0.20	0.00	0.00	0.22	8.15
MNF04	N02	04-29-92	1037	26.42	4.77	30.37	25.05	0.30	31.65	0.73	10.45	100	0.61	0.00	0.00	0.21	13.23

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MNFO4	N02	04-29-92	1035	35.82	4.79	30.42	25.07	0.24	31.69	0.70	10.95	105	0.25	0.00	0.00	0.27	20.63
MNFO4	N03	04-29-92	1119	1.23	5.96	30.21	23.91	0.24	30.38	0.77	10.3	101	0.82	0.00	0.00	0.19	13.01
MNFO4	N03	04-29-92	1117	7.42	5.46	30.18	24.29	0.32	30.79	0.75	10.44	101	0.19	0.00	0.00	0.25	8.33
MNFO4	N03	04-29-92	1114	17.16	5.01	30.19	24.68	0.34	31.22	0.73	10.65	103	0.18	0.00	0.00	0.31	7.48
MNFO4	N03	04-29-92	1112	25.87	4.69	30.22	24.97	0.27	31.55	0.72	10.64	102	0.15	0.00	0.00	0.26	7.16
MNFO4	N03	04-29-92	1109	35.77	4.71	30.39	25.12	0.31	31.73	0.72	10.74	103	0.43	0.00	0.00	0.22	7.94
MNFO4	N04P	04-29-92	1151	0.98	6.15	30.30	23.83	0.22	30.31	0.79	10.28	101	1.70	0.00	0.00	0.20	10.37
MNFO4	N04P	04-29-92	1148	9.87	5.41	30.15	24.31	0.15	30.80	0.73	10.39	101	0.20	0.00	0.00	0.26	6.18
MNFO4	N04P	04-29-92	1145	20.96	4.74	30.22	24.93	0.34	31.50	0.75	10.58	101	0.44	0.00	0.02	0.32	5.33
MNFO4	N04P	04-29-92	1143	31.67	4.49	30.24	25.17	0.39	31.77	0.74	10.27	98	0.16	0.00	0.00	0.34	8.18
MNFO4	N04P	04-29-92	1140	45.83	4.40	30.34	25.33	0.29	31.97	0.75	10.78	103	1.21	0.00	0.00	0.36	8.75
MNFO4	N05	04-29-92	1243	1.13	5.88	30.58	24.29	0.19	30.86	0.75	10.26	114	0.17	0.00	0.00	0.19	8.02
MNFO4	N05	04-29-92	1239	8.82	5.30	30.66	24.86	0.15	31.49	0.73	10.21	99	0.15	0.00	0.00	0.26	6.22
MNFO4	N05	04-29-92	1237	24.46	4.80	30.53	25.17	0.33	31.81	0.73	10.2	98	0.19	0.00	0.00	0.35	8.14
MNFO4	N05	04-29-92	1233	40.25	4.30	30.32	25.39	0.27	32.03	0.72	10.42	99	4.78	0.00	0.00	0.37	10.89
MNFO4	N05	04-29-92	1230	51.65	3.87	30.04	25.52	1.01	32.13	1.21	9.83	93	2.01	0.06	0.40	0.55	11.35
MNFO4	N06	04-29-92	1318	0.95	5.51	31.01	24.99	0.12	31.68	0.71	10.19	100	0.20	0.00	0.00	0.30	8.09
MNFO4	N06	04-29-92	1315	13.32	4.75	30.54	25.22	0.29	31.87	0.76	10.16	98	0.20	0.00	0.00	0.33	7.87
MNFO4	N06	04-29-92	1312	25.16	4.15	30.06	25.30	0.62	31.89	0.94	9.92	94	0.20	0.00	0.00	0.40	9.99
MNFO4	N06	04-29-92	1309	40.33	3.79	30.04	25.58	1.52	32.20	1.28	9.03	85	1.97	0.02	0.70	0.56	11.03
MNFO4	N06	04-29-92	1306	46.07	3.78	30.04	25.60	1.80	32.22	1.47	9.68	91	1.69	0.05	1.65	0.63	11.66
MNFO4	N07P	04-29-92	1351	1.05	5.84	31.00	24.71	0.13	31.38	0.73	9.9	97	0.21	0.00	0.00	0.27	7.36
MNFO4	N07P	04-29-92	1348	6.07	5.36	30.93	25.05	0.20	31.73	0.70	9.89	96	0.21	0.00	0.00	0.33	7.83
MNFO4	N07P	04-29-92	1345	24.10	4.64	30.45	25.23	0.44	31.86	0.76	9.3	89	0.16	0.00	0.00	0.35	8.13
MNFO4	N07P	04-29-92	1342	40.48	3.92	30.09	25.52	1.55	32.14	1.30	8.85	83	1.51	0.07	0.68	0.56	11.86
MNFO4	N07P	04-29-92	1339	46.83	3.85	30.08	25.57	1.69	32.19	1.50	9.27	87	1.68	0.05	1.84	0.69	12.75
MNFO4	N08	04-29-92	1438	0.99	5.80	30.46	24.26	0.20	30.80	0.83	9.84	96	0.20	0.00	0.00	0.23	8.25
MNFO4	N08	04-29-92	1436	4.87	5.39	30.29	24.45	0.25	30.98	0.75	10.17	99	0.27	0.00	0.00	0.26	8.34
MNFO4	N08	04-29-92	1433	12.40	4.95	30.27	24.80	0.34	31.37	0.76	10.22	98	0.61	0.00	0.00	0.32	7.72
MNFO4	N08	04-29-92	1430	20.27	4.90	30.35	24.92	0.41	31.51	0.75	10.36	100	0.95	0.00	0.00	0.29	8.23
MNFO4	N08	04-29-92	1428	28.52	4.83	30.38	25.00	0.33	31.61	0.75	10.54	101	1.21	0.00	0.00	0.17	8.60
MNFO4	N09	04-29-92	1510	1.12	5.91	30.51	24.21	0.31	30.76	0.81	9.92	97	0.23	0.00	0.00	0.26	9.34
MNFO4	N09	04-29-92	1507	5.27	5.69	30.46	24.35	0.35	30.90	0.77	9.88	97	1.64	0.00	0.00	0.28	9.73
MNFO4	N09	04-29-92	1504	12.20	5.67	30.53	24.43	0.35	30.99	0.78	9.73	95	0.67	0.00	0.09	0.34	9.55
MNFO4	N09	04-29-92	1502	19.04	6.17	31.13	24.53	0.51	31.20	1.00	9.49	94	0.22	0.00	0.00	0.31	8.93
MNFO4	N09	04-29-92	1459	26.00	6.16	31.12	24.53	0.49	31.20	0.99	9.83	97	5.09	0.00	0.00	0.24	9.92
MNFO4	N10P	04-29-92	0808	1.00	6.05	30.77	24.33	0.58	30.92	0.74	12.5	123	0.95	0.00	0.00	0.24	9.23
MNFO4	N10P	04-29-92	0804	5.02	6.13	30.87	24.34	0.38	30.96	0.76	12.53	124	0.98	0.00	0.00	0.24	9.71
MNFO4	N10P	04-29-92	0801	10.76	6.03	30.80	24.36	0.51	30.97	0.79	12.14	120	0.23	0.00	0.00	0.25	8.71
MNFO4	N10P	04-29-92	0758	15.95	5.84	30.68	24.42	0.40	31.01	0.74	11.82	116	0.29	0.00	0.00	0.27	8.86
MNFO4	N10P	04-29-92	0758	15.95	5.76	30.59	24.41	0.41	30.98	0.71	12	117	0.26	0.00	0.00	0.28	8.66
MNFO4	N11	04-29-92	0901	0.69	5.65	30.22	24.17	0.30	30.67	0.73	11.36	111	0.23	0.00	0.00	0.23	9.65
MNFO4	N11	04-29-92	0858	5.56	5.80	30.46	24.26	0.36	30.80	0.74	12.16	119	0.21	0.00	0.00	0.24	9.25
MNFO4	N11	04-29-92	0855	12.04	6.22	30.99	24.37	0.48	31.01	0.77	12.08	120	0.52	0.00	0.00	0.28	8.95
MNFO4	N11	04-29-92	0852	18.45	6.31	31.20	24.48	0.48	31.15	0.80	12.68	126	0.28	0.00	0.00	0.27	8.71
MNFO4	N11	04-29-92	0849	25.62	6.28	31.19	24.49	0.44	31.16	0.82	11.69	116	0.27	0.00	0.00	0.25	8.84

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MNF04	N12	04-29-92	0933	0.98	5.79	30.12	23.96	0.28	30.42	0.87	10.11	99	0.19	0.00	0.00	0.20	9.79
MNF04	N12	04-29-92	0931	4.78	5.77	30.25	24.10	0.37	30.59	0.82	10.1	99	0.18	0.00	0.00	0.23	9.37
MNF04	N12	04-29-92	0928	10.57	5.72	30.35	24.22	0.45	30.74	0.82	10.32	101	0.24	0.00	0.00	0.24	9.57
MNF04	N12	04-29-92	0926	15.49	5.70	30.40	24.29	0.47	30.82	0.82	10.59	103	0.25	0.00	0.00	0.27	9.64
MNF04	N12	04-29-92	0923	20.98	5.63	30.37	24.31	0.49	30.84	0.82	10.62	104	0.21	0.00	0.00	0.25	9.17
MNF04	N13	04-29-92	1703	1.43	6.02	30.37	24.00	0.36	30.50	0.83	9.88	97	0.33	0.00	0.00	0.20	8.80
MNF04	N13	04-29-92	1700	7.16	5.91	30.35	24.06	0.39	30.57	0.74	9.86	97	0.43	0.00	0.00	0.21	8.46
MNF04	N13	04-29-92	1657	12.97	5.19	30.08	24.42	0.28	30.92	0.68	10.09	97	0.33	0.00	0.00	0.24	8.29
MNF04	N13	04-29-92	1654	21.98	5.23	30.37	24.65	0.41	31.21	0.73	10.15	98	0.32	0.00	0.00	0.25	9.17
MNF04	N13	04-29-92	1651	25.32	5.04	30.19	24.65	0.34	31.19	0.70	10.41	100	0.31	0.00	0.00	0.25	7.78
MNF04	N14	04-29-92	1736	1.70	5.50	30.41	24.46	0.35	31.01	0.80	9.84	96	0.17	0.00	0.00	0.21	6.78
MNF04	N14	04-29-92	1734	6.65	5.41	30.40	24.53	0.36	31.08	0.74	9.98	97	0.14	0.00	0.00	0.24	6.22
MNF04	N14	04-29-92	1732	14.15	5.06	30.28	24.72	0.38	31.27	0.72	10.14	98	0.15	0.00	0.00	0.25	6.06
MNF04	N14	04-29-92	1729	19.67	4.93	30.29	24.84	0.33	31.41	0.71	10.28	99	0.18	0.00	0.00	0.26	6.10
MNF04	N14	04-29-92	1726	29.45	4.76	30.33	25.02	0.39	31.61	0.72	10.4	100	0.37	0.00	0.00	0.25	8.10
MNF04	N15	04-29-92	1807	1.83	5.45	30.54	24.62	0.30	31.21	0.81	9.81	95	0.10	0.00	0.00	0.24	5.88
MNF04	N15	04-29-92	1805	5.90	5.42	30.54	24.65	0.22	31.24	0.76	9.87	96	0.12	0.00	0.00	0.25	5.87
MNF04	N15	04-29-92	1803	14.04	5.26	30.44	24.70	0.18	31.28	0.76	10.03	97	0.16	0.00	0.00	0.24	5.31
MNF04	N15	04-29-92	1801	29.27	5.01	30.52	24.98	0.36	31.60	0.76	9.97	96	0.19	0.00	0.00	0.31	8.10
MNF04	N15	04-29-92	1758	34.79	4.93	30.62	25.14	0.19	31.79	0.69	9.94	96	0.14	0.00	0.00	0.26	5.49
MNF04	N16P	04-29-92	1838	1.64	5.64	31.01	24.89	0.20	31.58	0.77	9.67	95	0.09	0.00	0.00	0.29	7.89
MNF04	N16P	04-29-92	1836	12.04	5.17	30.63	24.94	0.10	31.58	0.74	9.84	95	0.11	0.00	0.00	0.27	8.20
MNF04	N16P	04-29-92	1834	18.13	5.06	30.62	25.03	0.09	31.67	0.73	9.9	96	0.08	0.00	0.00	0.30	8.10
MNF04	N16P	04-29-92	1831	25.74	4.66	30.38	25.15	0.25	31.77	0.81	9.92	95	0.09	0.00	0.00	0.31	8.75
MNF04	N16P	04-29-92	1829	34.71	4.33	30.28	25.34	0.45	31.97	0.83	9.69	92	0.12	0.00	0.00	0.34	8.61
MNF04	N19	04-29-92	1548	1.93	6.01	30.42	24.04	0.31	30.56	0.75	9.94	98	0.97	0.00	0.00	0.16	10.42
MNF04	N19	04-29-92	1545	5.46	6.03	30.44	24.05	0.34	30.57	0.73	9.96	98	0.09	0.00	0.00	0.18	8.96
MNF04	N19	04-29-92	1541	10.11	5.72	30.25	24.14	0.34	30.64	0.74	10	98	0.10	0.00	0.00	0.23	9.22
MNF04	N19	04-29-92	1538	15.23	5.81	30.70	24.47	0.63	31.06	0.84	9.97	98	0.38	0.00	0.00	0.31	8.94
MNF04	N19	04-29-92	1535	18.28	5.79	30.70	24.47	0.47	31.07	0.82	10.43	102	1.47	0.00	0.17	0.40	8.91
MNF04	N20P	04-29-92	1627	1.70	6.07	30.40	23.98	0.45	30.49	0.90	9.99	98	0.10	0.00	0.00	0.13	8.98
MNF04	N20P	04-29-92	1624	4.53	6.05	30.40	24.00	0.24	30.51	0.74	9.95	98	0.11	0.00	0.00	0.17	8.87
MNF04	N20P	04-29-92	1621	10.17	5.46	30.15	24.27	0.37	30.77	0.71	10	97	0.12	0.00	0.00	0.25	9.22
MNF04	N20P	04-29-92	1618	15.33	5.83	30.69	24.44	0.47	31.03	0.84	9.73	95	0.12	0.00	0.00	0.27	9.39
MNF04	N20P	04-29-92	1614	25.25	5.35	30.44	24.62	0.47	31.19	0.79	10.1	98	0.12	0.00	0.00	0.25	8.82
MNF05	N01P	05-19-92	0942	1.95	9.41	32.87	23.31	0.22	30.21	1.05	8.67	92	0.12	0.00	0.00	0.02	2.82
MNF05	N01P	05-19-92	0939	4.84	9.34	32.82	23.32	0.38	30.21	1.06	8.48	90	0.13	0.00	0.00	0.10	3.98
MNF05	N01P	05-19-92	0935	12.25	8.37	32.23	23.63	0.37	30.43	0.99	7.96	83	0.13	0.00	0.00	0.05	3.92
MNF05	N01P	05-19-92	0931	17.82	6.81	31.32	24.16	0.23	30.83	0.91	7.98	80	1.70	0.04	1.19	0.36	9.96
MNF05	N01P	05-19-92	0927	26.17	5.86	30.98	24.66	0.18	31.32	0.94	8.54	95	0.30	0.00	0.00	0.11	2.76
MNF05	N02	05-19-92	1045	1.86	9.31	32.68	23.23	0.19	30.10	0.96	8.88	94	0.12	0.00	0.00	0.04	2.72
MNF05	N02	05-19-92	1043	5.84	9.15	32.60	23.30	0.27	30.15	1.01	8.74	92	0.11	0.00	0.00	0.14	4.23
MNF05	N02	05-19-92	1039	10.47	8.23	32.08	23.63	0.33	30.40	0.95	8.69	97	0.10	0.00	0.00	0.14	4.53
MNF05	N02	05-19-92	1035	26.91	5.33	30.76	24.92	0.18	31.57	0.91	8.16	79	0.14	0.03	1.59	0.43	12.79
MNF05	N02	05-19-92	1031	34.54	4.79	30.56	25.20	0.13	31.84	1.00	8.38	81	0.18	0.00	0.01	0.05	2.63
MNF05	N03	05-19-92	1131	1.52	9.61	32.70	23.01	0.24	29.87	0.84	8.71	93	0.13	0.00	0.00	0.02	3.08

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MNF05	N03	05-19-92	1128	7.24	9.07	32.38	23.19	0.18	30.00	0.87	8.8	92	0.11	0.00	0.00	0.12	3.74
MNF05	N03	05-19-92	1125	13.05	8.00	31.95	23.71	0.40	30.46	0.88	8.82	91	0.26	0.00	0.00	0.32	10.50
MNF05	N03	05-19-92	1121	28.15	5.19	30.72	25.00	0.10	31.65	0.88	8.02	78	0.88	0.07	1.97	0.58	13.18
MNF05	N03	05-19-92	1117	40.38	4.41	30.37	25.35	0.14	31.99	0.97	8.01	76	0.12	0.00	0.00	0.23	4.28
MNF05	N04P	05-19-92	1218	2.01	9.80	32.77	22.91	0.11	29.78	0.72	8.63	92	0.08	0.00	0.00	0.05	3.36
MNF05	N04P	05-19-92	1214	7.86	9.28	32.42	23.05	0.18	29.85	0.79	8.63	91	0.08	0.04	-0.04	0.15	3.52
MNF05	N04P	05-19-92	1210	15.44	7.30	31.40	23.82	0.36	30.48	0.81	8.82	89	1.34	0.02	0.44	0.31	4.97
MNF05	N04P	05-19-92	1206	26.26	5.65	30.87	24.74	0.19	31.39	0.76	8.12	80	0.21	0.00	1.09	0.37	10.50
MNF05	N04P	05-19-92	1201	44.54	4.13	30.21	25.44	0.16	32.07	1.05	7.88	75	1.65	0.03	0.66	0.35	6.40
MNF05	N05	05-19-92	1324	2.12	9.98	32.89	22.86	0.15	29.75	0.74	8.77	94	0.36	0.00	0.00	0.06	3.42
MNF05	N05	05-19-92	1314	8.30	9.01	32.28	23.15	0.18	29.93	0.79	8.93	94	0.13	0.00	0.00	0.04	3.51
MNF05	N05	05-19-92	1311	16.35	7.78	31.72	23.69	0.41	30.40	0.86	8.87	91	0.17	0.00	0.41	0.23	6.25
MNF05	N05	05-19-92	1307	28.86	5.27	30.66	24.88	0.06	31.51	0.76	8.42	82	4.75	0.08	1.82	0.73	12.56
MNF05	N05	05-19-92	1303	43.91	4.27	30.30	25.40	0.02	32.03	0.97	8.27	79	2.27	0.04	1.76	0.63	12.44
MNF05	N06	05-19-92	1402	1.47	10.04	33.00	22.90	0.16	29.81	0.73	8.93	96	0.11	0.00	0.00	0.00	3.36
MNF05	N06	05-19-92	1400	8.43	9.05	32.30	23.14	0.32	29.92	0.77	9	94	0.34	0.00	0.03	0.23	3.69
MNF05	N06	05-19-92	1358	15.72	7.70	31.70	23.74	0.43	30.45	0.84	8.9	91	0.11	0.00	0.00	0.12	8.73
MNF05	N06	05-19-92	1354	32.82	4.77	30.53	25.19	0.15	31.83	0.85	8.5	82	3.42	0.03	1.47	0.69	12.33
MNF05	N06	05-19-92	1351	47.09	4.26	30.28	25.40	0.12	32.03	0.96	8.7	83	0.12	0.00	0.00	0.19	4.16
MNF05	N07P	05-19-92	1451	1.45	10.21	33.15	22.88	0.07	29.82	0.80	8.54	92	0.12	0.00	0.00	0.09	3.43
MNF05	N07P	05-19-92	1449	7.85	9.06	32.28	23.12	0.19	29.90	0.78	8.64	91	0.10	0.00	0.00	0.21	3.39
MNF05	N07P	05-19-92	1446	16.03	7.73	31.75	23.76	0.34	30.47	0.84	8.75	89	0.86	0.00	0.74	0.28	9.73
MNF05	N07P	05-19-92	1443	36.44	4.65	30.43	25.20	0.09	31.83	0.92	8.24	79	0.87	0.00	1.54	0.53	14.72
MNF05	N07P	05-19-92	1440	47.20	4.20	30.26	25.44	0.14	32.07	1.26	8.17	78	0.21	0.00	0.00	0.00	3.44
MNF05	N08	05-19-92	1549	0.93	9.83	32.88	22.98	0.18	29.87	0.79	8.54	91	0.37	0.00	0.00	0.01	3.47
MNF05	N08	05-19-92	1546	5.44	9.11	32.49	23.25	0.32	30.08	0.84	8.67	91	0.58	0.00	0.08	0.29	3.68
MNF05	N08	05-19-92	1544	12.76	8.04	31.99	23.70	0.42	30.46	0.88	8.85	91	0.13	0.02	0.14	0.08	4.11
MNF05	N08	05-19-92	1542	22.16	6.55	31.20	24.28	0.22	30.94	0.73	8.84	88	0.12	0.00	0.00	0.07	6.48
MNF05	N08	05-19-92	1539	27.91	5.62	30.83	24.73	0.18	31.37	0.76	8.92	87	0.12	0.00	0.00	0.00	3.44
MNF05	N09	05-19-92	1624	1.03	10.73	33.88	23.02	0.48	30.11	1.39	8.39	92	0.44	0.01	0.00	0.26	4.10
MNF05	N09	05-19-92	1622	5.79	9.83	33.19	23.22	0.79	30.18	1.30	8.48	91	0.19	0.00	0.00	0.16	3.70
MNF05	N09	05-19-92	1620	10.14	8.49	32.37	23.65	0.52	30.47	1.06	8.34	87	0.21	0.00	0.00	0.20	6.03
MNF05	N09	05-19-92	1617	24.56	6.06	31.05	24.55	0.21	31.21	0.85	8.6	85	0.18	0.00	0.00	0.11	6.41
MNF05	N09	05-19-92	1615	30.94	5.87	30.98	24.65	0.22	31.30	0.93	8.83	87	0.49	0.03	0.12	0.23	4.60
MNF05	N10P	05-19-92	0644	1.73	10.29	33.36	22.98	0.65	29.96	1.57	7.73	83	2.05	0.11	0.75	0.21	5.35
MNF05	N10P	05-19-92	0640	4.95	9.96	33.19	23.11	0.64	30.06	1.38	7.76	83	4.13	0.07	0.71	0.57	5.17
MNF05	N10P	05-19-92	0637	9.74	9.73	33.08	23.20	0.56	30.14	1.32	7.77	83	0.78	0.00	0.00	0.30	5.34
MNF05	N10P	05-19-92	0633	15.60	9.58	33.00	23.27	0.54	30.19	1.29	7.8	83	2.55	0.10	0.61	0.48	5.31
MNF05	N10P	05-19-92	0628	19.82	8.80	32.54	23.53	0.46	30.38	1.19	8.07	84	0.40	0.00	0.00	0.27	5.44
MNF05	N11	05-19-92	0756	1.27	9.96	33.17	23.09	0.38	30.05	1.21	8.26	89	0.34	0.00	0.00	0.08	3.69
MNF05	N11	05-19-92	0753	8.05	9.86	33.10	23.12	0.52	30.06	1.13	8.18	88	0.34	0.00	0.00	0.15	4.48
MNF05	N11	05-19-92	0749	12.28	8.28	32.17	23.66	0.34	30.44	0.99	8.03	83	0.18	0.00	0.00	0.23	5.42
MNF05	N11	05-19-92	0745	18.17	6.90	31.43	24.18	0.19	30.87	0.95	8.33	84	0.11	0.00	0.00	0.00	6.22
MNF05	N11	05-19-92	0742	25.86	6.46	31.24	24.38	0.19	31.06	1.11	8.55	85	0.14	0.00	0.00	0.01	4.27
MNF05	N12	05-19-92	0901	1.99	9.54	32.89	23.22	0.26	30.12	1.04	8.31	88	0.14	0.00	0.00	0.14	3.49
MNF05	N12	05-19-92	0858	5.83	9.44	32.84	23.26	0.38	30.15	1.04	8.39	89	0.14	0.00	0.00	0.09	3.65

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MNF05	N12	05-19-92	0855	9.47	9.13	32.64	23.35	0.49	30.20	1.01	8.18	86	0.13	0.02	0.46	0.27	5.49
MNF05	N12	05-19-92	0852	15.66	6.65	31.28	24.26	0.23	30.93	0.94	8.28	83	0.18	0.00	0.00	0.25	6.03
MNF05	N12	05-19-92	0849	20.87	6.55	31.27	24.34	0.26	31.01	1.06	8.6	86	0.13	0.00	0.00	0.14	3.41
MNF05	N16P	05-19-92	1735	0.93	9.63	32.90	23.15	0.36	30.05	0.90	8.74	93	0.14	0.00	0.00	0.14	2.96
MNF05	N16P	05-19-92	1733	8.19	8.38	32.12	23.54	0.43	30.31	0.90	8.75	91	0.13	0.00	0.00	0.16	3.80
MNF05	N16P	05-19-92	1730	15.34	7.05	31.39	24.02	0.30	30.69	0.77	8.58	86	0.14	0.00	0.00	0.24	6.22
MNF05	N16P	05-19-92	1728	25.38	5.91	30.97	24.61	0.21	31.26	0.74	8.19	81	0.24	0.03	1.37	0.46	11.36
MNF05	N16P	05-19-92	1726	36.90	4.59	30.44	25.26	0.22	31.89	0.93	8.44	81	0.12	0.00	0.00	0.06	3.22
MNF05	N17	05-19-92	1807	0.96	9.62	32.87	23.13	0.34	30.02	0.86	8.75	93	0.14	0.00	0.00	0.09	3.05
MNF05	N17	05-19-92	1805	7.40	9.52	32.79	23.15	0.34	30.03	0.89	8.67	92	0.19	0.00	0.00	0.15	3.17
MNF05	N17	05-19-92	1803	13.50	7.47	31.66	23.90	0.41	30.61	0.85	8.62	88	0.94	0.02	0.57	0.37	4.94
MNF05	N17	05-19-92	1800	23.93	6.09	31.00	24.48	0.21	31.13	0.72	8.49	84	0.18	0.00	0.67	0.43	10.91
MNF05	N17	05-19-92	1758	33.34	4.91	30.57	25.11	0.21	31.75	0.86	8.78	85	0.13	0.00	0.00	0.11	3.19
MNF05	N19	05-19-92	1851	0.70	10.75	33.87	23.00	0.61	30.09	1.34	8.58	94	0.18	0.00	0.00	0.16	3.81
MNF05	N19	05-19-92	1849	4.12	10.46	33.67	23.08	0.64	30.13	1.28	8.4	91	0.09	0.00	0.00	0.25	4.24
MNF05	N19	05-19-92	1847	9.59	7.24	31.65	24.08	0.32	30.80	0.91	8.47	86	0.09	0.00	0.00	0.15	4.97
MNF05	N19	05-19-92	1844	14.84	6.72	31.34	24.26	0.24	30.94	0.84	8.51	85	0.13	0.00	0.00	0.22	5.75
MNF05	N19	05-19-92	1842	19.58	6.55	31.27	24.34	0.22	31.02	0.88	8.76	87	0.31	0.00	0.00	0.39	4.41
MNF05	N20P	05-19-92	1658	0.86	10.33	33.54	23.08	0.53	30.11	1.26	8.61	93	0.13	0.00	0.00	0.19	3.44
MNF05	N20P	05-19-92	1656	7.25	9.30	32.76	23.30	0.67	30.18	1.16	8.64	91	0.17	0.00	0.00	0.20	4.88
MNF05	N20P	05-19-92	1653	11.13	7.86	31.91	23.79	0.47	30.54	0.99	8.44	87	0.82	0.04	0.83	0.35	6.73
MNF05	N20P	05-19-92	1650	20.15	6.38	31.19	24.40	0.22	31.07	0.99	8.26	82	0.23	0.00	0.00	0.23	7.42
MNF05	N20P	05-19-92	1648	25.78	5.97	31.02	24.60	0.23	31.26	0.93	8.54	84	0.12	0.00	0.00	0.18	3.27
MFF04	F01P	06-22-92	1457	1.40	16.74	39.71	22.29	0.79	30.72	0.90	8.27	103	0.12	0.00	0.00	0.10	2.39
MFF04	F01P	06-22-92	1456	6.93	13.48	37.13	23.18	1.08	30.98	0.96	8.31	97	0.09	0.00	0.00	0.34	7.50
MFF04	F01P	06-22-92	1455	11.80	8.76	33.49	24.34	2.02	31.40	1.14	8.5	89	0.12	0.00	0.00	0.55	19.41
MFF04	F01P	06-22-92	1453	18.01	6.40	31.71	24.85	5.44	31.64	1.39	10.06	100	0.09	0.00	0.00	0.42	8.98
MFF04	F01P	06-22-92	1449	22.22	5.95	31.34	24.90	2.14	31.64	1.46	8.93	88	0.55	0.04	0.83	0.67	13.40
MFF04	F02P	06-22-92	1135	1.74	17.08	40.08	22.25	0.19	30.77	0.83	8.26	103	1.28	0.00	0.57	0.19	2.38
MFF04	F02P	06-22-92	1133	8.35	16.54	39.63	22.40	0.33	30.80	0.85	8.44	104	0.20	0.00	0.00	0.20	2.91
MFF04	F02P	06-22-92	1131	11.35	12.83	36.54	23.29	0.79	30.95	0.92	9.62	110	0.14	0.00	0.00	0.12	1.66
MFF04	F02P	06-22-92	1129	22.29	5.87	31.31	24.95	6.33	31.68	1.36	9.08	90	1.83	0.01	0.78	0.50	11.74
MFF04	F02P	06-22-92	1128	26.09	5.42	30.99	25.04	0.81	31.73	1.52	8.4	82	0.92	0.03	0.09	0.71	17.42
MFF04	F02P	06-22-92	1206	1.78	17.14	40.12	22.24	0.31	30.77	0.81	8.3	104	0.19	0.00	0.00	0.12	2.38
MFF04	F02P	06-22-92	1205	7.71	16.10	39.38	22.59	0.50	30.92	0.85	8.62	106	0.28	0.00	0.00	0.17	3.01
MFF04	F02P	06-22-92	1203	10.76	12.88	36.74	23.39	0.75	31.10	0.93	9.86	113	0.15	0.00	0.00	0.14	2.22
MFF04	F02P	06-22-92	1200	22.45	5.79	31.28	24.99	8.57	31.73	1.59	9.17	90	1.06	0.00	0.20	0.50	11.11
MFF04	F02P	06-22-92	1158	25.94	5.39	30.97	25.05	1.26	31.74	1.51	8.53	83	1.02	0.00	0.16	0.49	11.89
MFF04	F03	06-22-92	1609	1.66	12.69	36.63	23.47	2.12	31.15	1.56	9.31	107	0.21	0.00	0.00	0.28	5.45
MFF04	F03	06-22-92	1608	4.66	10.38	34.80	24.02	2.42	31.33	1.45	9.53	104	0.26	0.00	0.00	0.35	5.78
MFF04	F03	06-22-92	1606	8.04	8.89	33.58	24.30	3.59	31.38	1.44	9.61	101	0.19	0.00	0.00	0.41	7.30
MFF04	F03	06-22-92	1604	12.00	6.58	31.88	24.85	1.79	31.66	0.96	9.64	97	1.20	0.04	1.01	0.59	9.05
MFF04	F04	06-22-92	2209	5.05	16.65	39.64	22.32	0.45	30.72	0.87	8.46	105	1.48	0.00	0.00	0.13	1.56
MFF04	F04	06-22-92	2207	10.17	11.45	35.66	23.79	0.86	31.26	0.93	10.02	112	1.56	0.00	0.02	0.15	1.35
MFF04	F04	06-22-92	2206	17.88	7.03	32.37	24.88	1.40	31.78	0.75	10.59	107	1.75	0.00	0.30	0.33	2.60
MFF04	F04	06-22-92	2203	28.10	5.00	30.73	25.18	0.83	31.85	0.70	10.16	98	2.93	0.07	2.93	0.65	4.90

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MFF04	F04	06-22-92	2202	56.10	4.58	30.44	25.26	1.02	31.90	1.17	9.97	95	4.14	0.10	3.65	0.75	7.36
MFF04	F05	06-22-92	1732	1.82	15.65	38.72	22.52	1.02	30.70	0.94	9.04	110	0.26	0.00	0.00	0.08	1.45
MFF04	F05	06-22-92	1731	5.45	12.71	36.54	23.40	1.13	31.06	0.94	9.72	111	0.51	0.00	0.02	0.22	3.02
MFF04	F05	06-22-92	1730	10.19	9.00	33.75	24.34	1.84	31.46	1.03	10.49	111	0.28	0.00	0.00	0.24	2.97
MFF04	F05	06-22-92	1728	14.05	8.28	33.22	24.52	2.04	31.54	1.04	10.52	110	0.30	0.00	0.00	0.16	3.09
MFF04	F06	06-22-92	1816	1.70	16.30	39.05	22.21	1.24	30.48	0.99	9.23	113	0.18	0.00	0.00	0.01	0.19
MFF04	F06	06-22-92	1815	8.39	13.43	37.12	23.21	1.29	31.00	0.99	9.89	115	0.29	0.00	0.00	0.07	0.83
MFF04	F06	06-22-92	1813	15.28	8.52	33.26	24.35	1.78	31.37	0.88	10.47	110	0.15	0.00	0.00	0.20	1.13
MFF04	F06	06-22-92	1811	21.26	7.33	32.47	24.70	2.96	31.60	1.03	10.71	109	0.16	0.00	0.00	0.29	1.93
MFF04	F06	06-22-92	1810	25.93	6.43	31.75	24.84	1.33	31.64	0.74	10.39	104	2.10	0.05	1.62	0.52	3.46
MFF04	F07	06-22-92	1914	2.61	16.18	39.05	22.30	1.19	30.57	0.98	8.98	110	0.62	0.00	0.00	0.03	0.48
MFF04	F07	06-22-92	1913	8.26	14.71	37.84	22.67	1.39	30.64	1.00	9.66	115	0.66	0.03	0.08	0.05	0.28
MFF04	F07	06-22-92	1911	14.71	8.68	33.37	24.31	2.08	31.35	0.87	10.24	108	1.03	0.02	0.10	0.28	1.72
MFF04	F07	06-22-92	1910	30.09	6.09	31.48	24.90	0.99	31.65	0.67	10.39	103	0.89	0.11	1.81	0.37	3.32
MFF04	F07	06-22-92	1908	48.00	4.50	30.36	25.26	0.91	31.89	0.72	10.58	101	2.61	0.14	4.16	0.66	5.30
MFF04	F08	06-22-92	2002	3.17	13.61	37.15	23.09	1.25	30.89	0.95	9.48	111	0.87	0.04	0.23	0.00	0.84
MFF04	F08	06-22-92	2000	8.53	11.38	35.39	23.64	1.39	31.05	0.91	10.05	112	0.17	0.00	0.00	0.11	0.85
MFF04	F08	06-22-92	1958	20.33	8.06	32.94	24.47	1.87	31.44	0.85	10.28	107	0.36	0.00	0.02	0.14	0.79
MFF04	F08	06-22-92	1956	50.34	4.50	30.34	25.24	1.13	31.87	0.70	10.56	101	0.16	0.00	0.00	0.23	1.70
MFF04	F08	06-22-92	1954	75.94	4.07	30.10	25.39	1.11	31.99	1.10	10.23	97	2.18	0.13	4.57	0.66	5.09
MFF04	F09	06-23-92	0807	1.43	12.21	36.23	23.59	1.11	31.18	1.88	9.53	108	0.22	0.00	0.00	0.21	2.35
MFF04	F09	06-23-92	0806	8.05	11.67	35.78	23.70	1.24	31.19	0.97	9.64	108	0.36	0.00	0.00	0.24	2.07
MFF04	F09	06-23-92	0804	12.25	10.18	34.64	24.06	2.08	31.33	1.14	9.87	107	0.26	0.00	0.00	0.33	2.78
MFF04	F09	06-23-92	0802	14.85	8.63	33.47	24.43	1.97	31.49	1.10	10.08	106	0.29	0.00	0.00	0.35	3.48
MFF04	F09	06-23-92	0800	17.45	8.08	33.05	24.55	1.77	31.55	1.11	10.14	105	0.43	0.00	0.00	0.27	3.79
MFF04	F10	06-23-92	0730	3.78	11.63	35.64	23.62	0.98	31.09	0.96	9.71	109	0.23	0.00	0.00	0.19	1.64
MFF04	F10	06-23-92	0731	4.42	12.36	36.19	23.43	0.80	31.01	0.96	9.46	108	0.42	0.00	0.00	0.18	1.22
MFF04	F10	06-23-92	0726	13.79	9.06	33.73	24.28	1.77	31.39	0.99	9.81	104	0.34	0.00	0.00	0.28	2.93
MFF04	F10	06-23-92	0725	17.57	6.91	32.12	24.76	1.38	31.61	0.89	10.04	101	1.28	0.06	1.60	0.53	4.81
MFF04	F10	06-23-92	0723	29.50	5.56	31.10	25.03	1.05	31.74	0.88	10.02	98	0.27	0.10	2.64	0.48	6.52
MFF04	F11	06-22-92	2147	1.78	11.31	35.42	23.70	1.58	31.14	0.98	9.98	111	0.22	0.00	0.00	0.16	1.06
MFF04	F11	06-22-92	2146	12.69	9.41	33.91	24.13	1.69	31.26	0.94	10.32	110	0.19	0.00	0.00	0.24	1.26
MFF04	F11	06-22-92	2143	19.28	7.51	32.51	24.58	2.95	31.48	1.08	10.21	105	0.18	0.00	0.00	0.31	2.12
MFF04	F11	06-22-92	2141	30.25	5.65	31.16	25.00	0.99	31.71	0.78	10.04	99	2.32	0.09	2.62	0.61	5.42
MFF04	F11	06-22-92	2140	47.74	4.46	30.35	25.29	1.07	31.91	1.04	10.09	96	2.35	0.00	3.97	0.64	8.53
MFF04	F12	06-22-92	2043	2.13	14.00	37.47	23.00	1.32	30.87	1.01	9.47	111	0.23	0.00	0.00	0.15	0.58
MFF04	F12	06-22-92	2042	9.22	10.64	35.08	24.01	1.23	31.37	0.80	10.43	114	0.40	0.00	0.00	0.11	0.70
MFF04	F12	06-22-92	2038	30.44	5.27	31.03	25.21	1.59	31.93	0.72	10.68	104	0.63	0.06	2.16	0.52	3.38
MFF04	F12	06-22-92	2037	44.98	4.08	30.09	25.38	1.08	31.98	0.91	10.14	96	3.10	0.25	5.03	0.80	6.13
MFF04	F12	06-22-92	2035	84.59	4.01	30.10	25.44	1.01	32.04	0.97	9.94	94	3.37	0.30	5.21	0.84	7.71
MFF04	F13P	06-23-92	1008	2.32	12.22	36.05	23.44	2.74	30.99	1.90	9.75	110	1.01	0.00	0.18	0.43	0.80
MFF04	F13P	06-23-92	1007	5.81	11.98	35.99	23.59	3.62	31.14	1.87	9.73	110	0.22	0.00	0.00	0.36	0.82
MFF04	F13P	06-23-92	1005	8.91	10.61	34.76	23.79	6.40	31.08	2.04	9.69	106	0.25	0.00	0.00	0.38	1.47
MFF04	F13P	06-23-92	1004	11.43	10.53	34.72	23.83	5.99	31.11	1.93	9.63	105	0.24	0.00	0.00	0.43	1.66
MFF04	F13P	06-23-92	1003	18.15	7.25	32.39	24.70	1.56	31.59	1.12	9.69	99	0.61	0.00	0.96	0.44	5.41
MFF04	F14	06-23-92	1410	1.73	12.36	36.12	23.38	3.62	30.95	2.48	9.89	112	0.53	0.00	0.00	0.50	1.22

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MFF04	F14	06-23-92	1409	5.31	12.03	35.89	23.47	5.41	30.99	2.32	10.1	114	0.18	0.00	0.00	0.35	0.86
MFF04	F14	06-23-92	1408	7.43	11.97	35.85	23.49	5.06	31.00	2.26	10.16	115	0.21	0.00	0.00	0.32	0.79
MFF04	F14	06-23-92	1406	12.81	11.61	35.57	23.59	3.96	31.04	2.06	10.37	116	0.39	0.00	0.00	0.37	0.34
MFF04	F15	06-23-92	1453	1.92	13.08	36.68	23.19	1.42	30.88	1.30	9.71	112	0.22	0.00	0.00	0.35	0.63
MFF04	F15	06-23-92	1453	5.91	11.82	35.75	23.54	2.19	31.04	1.40	9.84	111	0.13	0.00	0.00	0.34	0.70
MFF04	F15	06-23-92	1451	12.60	6.69	31.96	24.81	10.25	31.63	2.17	10.27	103	0.31	0.00	0.21	0.53	1.60
MFF04	F15	06-23-92	1449	19.02	5.66	31.17	25.00	1.64	31.72	0.93	9.96	98	1.93	0.08	2.58	0.63	5.15
MFF04	F15	06-23-92	1447	35.76	4.79	30.56	25.19	1.23	31.84	1.12	9.89	95	0.36	0.08	3.60	0.57	7.67
MFF04	F16	06-23-92	1540	1.87	12.33	36.13	23.41	1.22	30.98	1.08	9.38	107	0.15	0.00	0.00	0.28	0.86
MFF04	F16	06-23-92	1539	14.26	7.01	32.19	24.74	3.70	31.60	1.33	9.98	101	0.58	0.05	0.92	0.56	3.27
MFF04	F16	06-23-92	1532	20.46	5.72	31.23	25.00	1.12	31.72	0.79	9.96	98	0.48	0.08	2.34	0.47	4.80
MFF04	F16	06-23-92	1530	31.49	4.64	30.43	25.21	0.95	31.85	0.83	10.03	96	1.81	0.13	3.60	0.64	5.94
MFF04	F16	06-23-92	1527	55.47	4.25	30.20	25.33	1.10	31.94	1.16	10.17	97	1.03	0.22	4.94	0.70	8.50
MFF04	F17	06-23-92	1621	2.37	13.96	37.58	23.11	1.22	31.00	1.08	9.35	110	0.33	0.00	0.00	0.24	0.53
MFF04	F17	06-23-92	1619	16.10	6.89	32.09	24.76	2.47	31.60	0.97	10.69	108	0.16	0.02	0.02	0.31	1.85
MFF04	F17	06-23-92	1617	23.44	5.75	31.19	24.95	2.15	31.66	0.87	10.92	107	1.36	0.06	1.24	0.50	4.20
MFF04	F17	06-23-92	1614	39.91	4.60	30.54	25.34	1.28	32.00	0.72	10.62	102	2.56	0.39	6.34	0.91	6.70
MFF04	F17	06-23-92	1611	69.56	3.87	29.98	25.45	1.03	32.05	0.93	10.27	97	0.98	0.40	6.59	0.70	6.94
MFF04	F18	06-23-92	2142	1.79	9.60	34.15	24.17	1.84	31.35	1.14	10.16	109	0.21	0.00	0.00	0.31	0.86
MFF04	F18	06-23-92	2141	5.52	8.78	33.55	24.37	2.39	31.45	1.20	10.32	109	0.59	0.00	0.00	0.36	0.70
MFF04	F18	06-23-92	2140	9.81	6.31	31.62	24.84	5.13	31.62	1.40	10.2	102	1.32	0.03	0.88	0.60	2.59
MFF04	F18	06-23-92	2138	15.50	5.85	31.27	24.93	1.29	31.65	0.84	9.78	96	3.07	0.08	2.33	0.77	5.60
MFF04	F18	06-23-92	2137	20.31	5.67	31.14	24.97	1.17	31.68	0.90	9.52	93	3.52	0.09	2.61	0.79	7.30
MFF04	F19	06-23-92	1735	1.82	13.72	37.72	23.41	1.04	31.33	0.92	9.55	112	1.16	0.00	0.00	0.15	1.15
MFF04	F19	06-23-92	1734	8.95	11.96	36.31	23.85	1.16	31.46	0.96	9.76	110	0.11	0.00	0.00	0.12	1.61
MFF04	F19	06-23-92	1731	24.91	5.06	30.83	25.21	1.34	31.90	0.71	10.72	104	2.07	0.15	3.47	0.58	4.36
MFF04	F19	06-23-92	1730	33.86	4.29	30.23	25.33	1.51	31.95	0.75	10.44	99	2.27	0.31	5.63	0.74	5.40
MFF04	F19	06-23-92	1726	76.00	3.86	29.96	25.44	1.10	32.03	1.08	10.29	97	2.60	0.39	6.72	0.86	7.18
MFF04	F20	06-23-92	2035	1.95	10.77	35.25	24.04	1.39	31.44	0.94	10.3	113	0.85	0.00	0.00	0.25	1.00
MFF04	F20	06-23-92	2034	11.54	9.70	34.22	24.13	1.48	31.32	0.94	10.41	112	0.13	0.00	0.00	0.22	1.10
MFF04	F20	06-23-92	2033	20.86	6.62	31.81	24.74	4.53	31.53	1.52	9.96	100	0.20	0.00	0.00	0.35	2.33
MFF04	F20	06-23-92	2032	25.38	5.43	30.97	25.02	1.44	31.71	0.88	9.57	93	0.82	0.11	2.88	0.61	6.06
MFF04	F20	06-23-92	2031	31.56	5.34	30.91	25.04	1.17	31.72	0.85	9.79	95	1.22	0.08	2.89	0.63	6.25
MFF04	F21	06-23-92	1937	1.72	12.86	36.94	23.56	0.96	31.31	0.86	9.7	112	0.17	0.00	0.00	0.13	1.32
MFF04	F21	06-23-92	1935	5.66	11.63	35.92	23.83	1.00	31.35	0.87	10.09	113	0.86	0.00	0.00	0.15	1.25
MFF04	F21	06-23-92	1933	18.62	5.92	31.35	24.93	1.40	31.67	0.74	10.28	101	3.87	0.11	2.16	0.45	4.19
MFF04	F21	06-23-92	1932	30.79	4.91	30.59	25.13	1.06	31.77	0.78	9.85	95	3.41	0.13	3.99	0.76	6.73
MFF04	F21	06-23-92	1930	54.10	4.59	30.40	25.22	1.09	31.84	0.97	9.6	92	6.07	0.13	4.13	0.86	9.18
MFF04	F22	06-23-92	1817	2.00	14.72	38.45	23.09	0.95	31.19	0.85	9.04	108	0.20	0.00	0.00	0.11	1.13
MFF04	F22	06-23-92	1816	9.14	12.03	36.39	23.85	1.12	31.48	0.92	9.96	113	0.45	0.00	0.00	0.16	1.46
MFF04	F22	06-23-92	1815	20.04	6.82	32.35	25.04	1.49	31.94	0.83	10.8	109	0.79	0.00	0.38	0.36	2.80
MFF04	F22	06-23-92	1813	35.47	4.55	30.43	25.29	1.54	31.93	0.74	10.5	100	1.41	0.29	4.98	0.64	4.71
MFF04	F22	06-23-92	1810	75.86	3.82	29.94	25.46	0.90	32.05	0.88	10.2	96	3.40	0.38	6.89	0.80	6.80
MFF04	F22	06-23-92	1843	2.10	14.11	37.96	23.26	0.95	31.23	0.86	9.51	112	0.37	0.00	0.00	0.06	1.15
MFF04	F22	06-23-92	1843	9.38	11.86	36.25	23.88	1.01	31.48	0.89	9.98	113	0.41	0.00	0.00	0.11	1.31
MFF04	F22	06-23-92	1841	20.39	6.11	31.68	25.07	1.59	31.87	0.81	10.65	106	0.70	0.06	1.27	0.37	3.43

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (nmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MFF04	F22	06-23-92	1839	38.67	4.09	30.06	25.34	1.27	31.94	0.73	10.24	97	0.18	0.00	0.00	0.12	1.42
MFF04	F22	06-23-92	1837	75.38	3.81	29.93	25.45	0.95	32.04	0.95	10.08	95	2.62	0.38	6.81	0.79	7.22
MFF04	F23P	06-24-92	1212	1.70	12.80	36.28	23.13	7.15	30.73	2.99	9.18	105	0.18	0.10	0.30	0.50	2.16
MFF04	F23P	06-24-92	1211	4.99	12.11	35.80	23.34	5.62	30.84	2.60	8.96	101	0.25	0.00	0.00	0.55	1.87
MFF04	F23P	06-24-92	1209	10.56	11.11	35.09	23.63	4.08	30.98	2.12	9.07	100	0.59	0.06	0.58	0.60	2.24
MFF04	F23P	06-24-92	1206	15.37	10.84	34.91	23.72	3.73	31.04	2.06	9.13	100	3.29	0.09	0.70	0.94	2.33
MFF04	F23P	06-24-92	1205	23.15	9.53	33.98	24.07	2.78	31.22	1.72	9.19	98	0.62	0.09	0.64	0.47	2.39
MFF04	F24	06-23-92	2229	1.90	11.58	35.43	23.51	5.64	30.93	2.62	9.86	110	0.76	0.02	0.35	0.43	1.39
MFF04	F24	06-23-92	2227	7.06	10.87	34.62	23.47	3.94	30.73	1.99	9.02	99	0.54	0.12	2.24	0.58	6.02
MFF04	F24	06-23-92	2226	11.24	6.71	31.90	24.74	2.00	31.55	1.29	9.18	102	3.13	0.11	2.41	0.87	6.45
MFF04	F24	06-23-92	2225	15.93	5.99	31.38	24.91	1.69	31.65	1.17	9.49	94	3.11	0.10	2.42	0.85	6.46
MFF04	F25	06-23-92	1313	1.85	12.06	35.88	23.44	2.83	30.96	2.34	9.71	110	0.25	0.00	0.00	0.41	1.48
MFF04	F25	06-23-92	1312	5.75	10.92	34.99	23.72	5.67	31.05	2.13	9.56	105	0.19	0.00	0.00	0.40	1.82
MFF04	F25	06-23-92	1310	7.70	9.96	34.28	23.97	5.60	31.17	1.99	9.53	103	0.38	0.00	0.53	0.47	2.56
MFF04	F25	06-23-92	1309	8.87	8.87	33.46	24.22	4.59	31.28	1.72	9.76	103	0.25	0.03	0.89	0.46	3.16
MFF04	F25	06-23-92	1331	1.65	12.08	35.86	23.41	3.20	30.92	2.41	9.65	109	1.00	0.02	0.14	0.51	1.34
MFF04	F25	06-23-92	1330	4.76	11.52	35.43	23.56	5.15	30.98	2.26	9.69	108	0.22	0.00	0.00	0.39	1.42
MFF04	F25	06-23-92	1328	7.72	11.25	35.25	23.64	5.56	31.02	2.16	9.52	106	0.23	0.00	0.00	0.40	1.69
MFF04	F25	06-23-92	1327	9.74	10.06	34.37	23.94	4.48	31.16	1.81	9.32	101	0.30	0.00	0.00	0.45	2.51
MFF04	N01P	06-24-92	0719	2.17	10.80	35.10	23.91	1.84	31.27	1.28	9.98	110	0.54	0.00	0.00	0.27	1.31
MFF04	N01P	06-24-92	0717	6.31	9.16	33.81	24.26	1.76	31.38	0.99	10.19	108	0.15	0.00	0.00	0.29	1.31
MFF04	N01P	06-24-92	0715	18.32	6.02	31.44	24.94	6.58	31.69	1.48	10.67	106	0.23	0.07	1.23	0.42	4.71
MFF04	N01P	06-24-92	0714	21.74	5.68	31.19	25.00	1.13	31.72	0.71	10.65	105	1.98	0.07	1.98	0.53	4.41
MFF04	N01P	06-24-92	0711	28.88	5.20	30.81	25.07	1.11	31.75	0.87	10.22	99	2.95	0.08	2.59	0.67	5.74
MFF04	N01P	06-25-92	0709	0.37	10.72	34.92	23.78	3.61	31.13	1.55			0.39	0.02	0.00	0.31	0.45
MFF04	N01P	06-25-92	0707	5.33	10.71	34.91	23.83	4.21	31.15	1.41			0.34	0.02	0.01	0.25	0.37
MFF04	N01P	06-25-92	0704	10.18	10.10	34.56	24.06	2.12	31.32	0.96			0.10	0.02	0.00	0.22	0.51
MFF04	N01P	06-25-92	0701	18.88	6.65	31.87	24.77	2.94	31.57	0.98			0.71	0.02	0.03	0.54	2.57
MFF04	N01P	06-25-92	0658	27.25	5.98	31.34	24.87	1.86	31.60	0.92			0.76	0.03	1.40	0.48	6.38
MFF04	N02	06-25-92	0813	0.66	11.89	36.09	23.66	0.83	31.25	1.14			0.12	0.01	-0.01	0.14	1.00
MFF04	N02	06-25-92	0811	11.66	9.79	34.35	24.16	1.66	31.38	0.83			0.16	0.01	0.00	0.21	0.88
MFF04	N02	06-25-92	0808	21.73	6.46	31.72	24.80	6.31	31.59	1.31			0.52	0.01	-0.01	0.46	1.16
MFF04	N02	06-25-92	0803	27.89	5.75	31.17	24.93	4.67	31.64	1.29			1.23	0.02	1.11	0.89	2.86
MFF04	N02	06-25-92	0800	34.63	5.46	30.97	24.99	1.27	31.67	0.73			0.63	0.02	1.08	0.40	6.44
MFF04	N03	06-25-92	0851	0.94	12.61	36.60	23.50	0.42	31.16	0.81			0.09	0.01	-0.01	0.15	1.21
MFF04	N03	06-25-92	0849	8.83	10.87	35.23	23.94	0.80	31.33	0.78			0.10	0.00	0.00	0.18	1.06
MFF04	N03	06-25-92	0847	17.15	6.82	32.03	24.76	0.89	31.60	0.71			0.69	0.01	0.64	0.38	4.26
MFF04	N03	06-25-92	0842	26.17	5.48	30.97	24.98	1.37	31.66	0.79			0.20	0.02	1.31	0.46	5.62
MFF04	N03	06-25-92	0839	43.26	5.07	30.68	25.06	1.14	31.71	1.40			0.20	0.15	3.55	0.57	7.94
MFF04	N04P	06-24-92	0820	1.84	13.44	37.40	23.41	0.78	31.26	0.86	9.54	111	0.01	0.00	0.01	0.12	1.37
MFF04	N04P	06-24-92	0819	9.44	9.07	33.85	24.37	1.07	31.51	0.83	10.87	115	0.10	0.00	0.00	0.21	1.88
MFF04	N04P	06-24-92	0817	15.02	6.53	31.82	24.83	1.78	31.63	0.86	10.76	108	0.20	0.01	-0.01	0.30	3.60
MFF04	N04P	06-24-92	0815	30.34	4.95	30.63	25.13	1.00	31.78	0.83	9.93	96	3.11	0.10	3.32	0.71	6.18
MFF04	N04P	06-24-92	0812	46.01	4.64	30.44	25.21	1.02	31.84	0.85	10.26	98	1.92	0.14	4.22	0.65	7.17
MFF04	N04P	06-25-92	0924	0.38	13.40	37.54	23.24	0.96	31.12	0.80			0.61	0.01	0.00	0.16	1.27
MFF04	N04P	06-25-92	0922	10.29	11.73	35.87	23.71	1.12	31.22	0.81			0.63	0.02	0.03	0.26	1.85

00014

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SI04 (uM)
MFF04	N04P	06-25-92	0919	20.43	5.59	31.10	25.00	0.85	31.71	0.68			0.87	0.10	2.28	0.64	4.78
MFF04	N04P	06-25-92	0916	29.94	4.84	30.52	25.12	0.77	31.75	0.80			0.85	0.09	3.29	0.57	6.23
MFF04	N04P	06-25-92	0912	44.90	4.63	30.39	25.18	0.72	31.80	0.84			1.16	0.19	4.00	0.65	7.14
MFF04	N05	06-25-92	1013	0.67	14.23	37.95	23.15	0.64	31.13	0.75			0.55	0.01	0.02	0.16	1.65
MFF04	N05	06-25-92	1010	9.99	10.40	35.28	24.38	1.06	31.78	0.75			0.55	0.01	0.04	0.19	1.26
MFF04	N05	06-25-92	1007	20.38	5.47	31.00	25.01	1.24	31.71	0.69			0.53	0.01	0.04	0.22	3.32
MFF04	N05	06-25-92	1004	28.57	5.05	30.67	25.07	1.11	31.72	0.72			0.80	0.09	3.58	0.58	7.48
MFF04	N05	06-25-92	1001	46.78	4.78	30.51	25.15	1.05	31.79	0.77			0.58	0.03	3.89	0.60	7.76
MFF04	N06	06-25-92	1046	0.78	14.37	38.39	23.14	0.73	31.18	0.77			0.66	0.02	0.03	0.41	1.46
MFF04	N06	06-25-92	1044	6.48	12.23	36.56	23.80	0.97	31.47	0.79			0.65	0.01	-0.01	0.13	1.55
MFF04	N06	06-25-92	1042	13.59	6.30	31.62	24.85	1.22	31.62	0.72			0.65	0.02	-0.01	0.40	4.05
MFF04	N06	06-25-92	1038	29.63	4.96	30.60	25.09	1.14	31.74	0.70			0.64	0.02	3.09	0.48	6.15
MFF04	N06	06-25-92	1034	45.12	4.72	30.46	25.16	1.17	31.79	0.78			0.64	0.02	3.40	0.57	7.47
MFF04	N07P	06-23-92	1111	2.24	11.82	35.83	23.61	1.03	31.12	1.04	9.81	110	1.51	0.15	4.28	0.62	8.27
MFF04	N07P	06-23-92	1110	6.97	9.48	34.01	24.16	1.40	31.31	1.01	10.08	108	1.09	0.10	3.11	0.54	5.69
MFF04	N07P	06-23-92	1108	13.65	6.48	31.78	24.83	1.84	31.63	0.96	10.12	101	1.28	0.11	3.51	0.62	5.70
MFF04	N07P	06-23-92	1104	27.68	4.83	30.55	25.16	1.25	31.80	0.76	10.38	100	0.07	0.00	0.00	0.28	0.87
MFF04	N07P	06-23-92	1102	42.20	4.56	30.39	25.23	1.08	31.86	0.99	9.97	95	0.06	0.00	0.00	0.27	1.09
MFF04	N07P	06-25-92	1128	0.51	11.82	36.64	23.63	1.11	31.32	0.86			0.15	0.02	0.03	0.09	1.51
MFF04	N07P	06-25-92	1126	9.35	8.19	33.08	24.49	1.26	31.48	0.82			0.20	0.03	0.02	0.26	1.62
MFF04	N07P	06-25-92	1123	16.13	5.62	31.11	24.98	2.80	31.69	0.88			0.51	0.03	0.07	0.44	3.85
MFF04	N07P	06-25-92	1121	25.10	5.22	30.82	25.06	1.22	31.73	0.74			1.56	0.15	3.05	0.73	6.55
MFF04	N07P	06-25-92	1117	45.29	4.93	30.59	25.11	1.01	31.75	0.79			0.27	0.22	2.27	0.47	7.65
MFF04	N08	06-25-92	1202	0.69	11.93	36.62	23.44	1.26	31.16	1.22			0.29	0.03	0.04	0.32	0.50
MFF04	N08	06-25-92	1200	4.61	11.78	35.86	23.65	1.58	31.17	1.10			0.15	0.03	0.00	0.23	0.45
MFF04	N08	06-25-92	1157	9.75	8.44	33.31	24.46	2.19	31.49	0.91			0.34	0.03	0.06	0.47	1.36
MFF04	N08	06-25-92	1155	16.14	6.59	31.83	24.79	3.37	31.59	0.98			0.67	0.06	0.49	0.48	2.68
MFF04	N08	06-25-92	1152	25.22	5.60	31.07	24.96	1.71	31.66	0.81			0.74	0.02	0.66	0.27	6.15
MFF04	N09	06-25-92	1232	0.44	12.30	36.35	23.37	2.81	31.02	1.67			0.20	0.02	-0.02	0.36	0.93
MFF04	N09	06-25-92	1231	6.78	11.83	35.76	23.54	4.07	31.03	1.56			0.34	0.02	-0.01	0.33	0.58
MFF04	N09	06-25-92	1227	11.70	6.62	31.83	24.76	3.94	31.56	1.17			0.22	0.02	0.00	0.35	3.70
MFF04	N09	06-25-92	1225	15.39	5.99	31.35	24.88	4.11	31.62	1.14			1.32	0.17	1.20	0.68	5.02
MFF04	N09	06-25-92	1222	29.61	5.41	30.93	25.00	1.54	31.68	1.02			1.42	0.09	2.99	0.72	7.67
MFF04	N10P	06-23-92	1210	1.33	11.70	35.58	23.52	2.99	30.97	2.53	9.73	109	0.39	0.06	0.21	0.48	1.47
MFF04	N10P	06-23-92	1208	4.00	11.35	35.27	23.57	4.88	30.96	2.47	9.69	108	0.20	0.00	0.00	0.40	1.41
MFF04	N10P	06-23-92	1206	8.83	10.30	34.50	23.85	6.84	31.09	2.14	9.78	106	0.03	0.00	0.00	0.35	1.35
MFF04	N10P	06-23-92	1203	13.16	8.40	33.15	24.37	3.22	31.37	1.64	9.51	99	0.30	0.00	1.19	0.49	4.13
MFF04	N10P	06-23-92	1202	18.27	6.86	32.06	24.76	2.08	31.60	1.51	9.66	97	0.20	0.12	1.93	0.54	6.02
MFF04	N10P	06-25-92	1303	0.59	11.49	35.48	23.55	3.77	31.00	2.13			0.30	0.03	-0.03	0.59	2.39
MFF04	N10P	06-25-92	1301	5.28	10.89	34.94	23.70	5.23	31.03	2.05			1.68	0.04	0.18	0.68	2.45
MFF04	N10P	06-25-92	1258	10.44	9.23	33.76	24.16	4.57	31.26	1.48			0.63	0.04	-0.04	0.52	2.15
MFF04	N10P	06-25-92	1255	15.00	7.33	32.35	24.60	3.76	31.47	1.19			1.20	0.04	-0.04	0.58	3.16
MFF04	N10P	06-25-92	1253	20.29	6.98	32.08	24.66	4.01	31.50	1.19			0.57	0.04	-0.04	0.63	3.20
MFF04	N11	06-25-92	1332	0.78	12.31	36.30	23.31	3.49	30.94	2.20			1.53	0.03	-0.03	0.58	1.31
MFF04	N11	06-25-92	1329	6.42	11.16	35.24	23.70	5.21	31.09	1.66			0.36	0.04	-0.04	0.37	0.84
MFF04	N11	06-25-92	1327	13.42	6.72	31.89	24.73	2.50	31.53	1.04			1.33	0.04	1.02	0.64	4.90

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MFF04	N11	06-25-92	1324	18.41	6.00	31.36	24.88	2.59	31.62	1.05			1.66	0.14	2.15	0.76	5.85
MFF04	N11	06-25-92	1322	25.19	5.54	31.01	24.96	1.53	31.65	1.05			2.83	0.18	3.00	0.91	8.03
MFF04	N12	06-25-92	1401	0.81	12.72	36.40	23.28	5.02	30.91	2.55			0.17	0.03	-0.03	0.51	0.87
MFF04	N12	06-25-92	1359	3.10	11.54	35.43	23.54	6.16	30.96	2.33			0.43	0.02	-0.02	0.52	0.80
MFF04	N12	06-25-92	1357	6.45	11.32	35.31	23.62	5.85	31.02	2.06			0.53	0.02	-0.02	0.40	0.61
MFF04	N12	06-25-92	1354	14.81	7.54	32.57	24.61	2.76	31.52	0.91			0.38	0.01	-0.01	0.36	1.57
MFF04	N12	06-25-92	1352	20.12	6.15	31.48	24.85	3.92	31.61	1.04			0.37	0.01	-0.01	0.34	3.52
MFF04	N13	06-25-92	1430	0.67	13.46	37.34	23.35	1.29	31.19	1.14			0.21	0.03	-0.03	0.19	1.05
MFF04	N13	06-25-92	1427	7.35	11.30	35.52	23.81	2.07	31.25	1.09			0.24	0.03	-0.03	0.19	0.49
MFF04	N13	06-25-92	1425	12.28	8.96	33.72	24.35	1.82	31.46	0.86			0.26	0.03	-0.03	0.25	1.64
MFF04	N13	06-25-92	1422	24.01	5.80	31.22	24.93	3.96	31.65	0.97			1.72	0.10	0.61	0.62	4.45
MFF04	N13	06-25-92	1421	27.00	5.52	31.00	24.97	1.25	31.65	0.84			0.76	0.13	2.54	0.70	6.88
MFF04	N14	06-25-92	1458	0.71	14.13	38.05	23.18	0.82	31.18	0.81			0.19	0.00	0.00	0.13	1.12
MFF04	N14	06-25-92	1455	7.98	11.36	35.88	24.01	1.32	31.54	0.78			0.04	0.00	0.00	0.10	1.59
MFF04	N14	06-25-92	1453	15.15	6.76	31.99	24.78	1.88	31.61	0.79			0.03	0.02	0.35	0.36	2.87
MFF04	N14	06-25-92	1450	25.14	5.94	31.33	24.90	3.72	31.64	0.92			0.16	0.03	0.37	0.39	4.06
MFF04	N14	06-25-92	1447	26.72	5.72	31.19	24.96	1.86	31.68	0.74			0.50	0.02	0.77	0.47	4.31
MFF04	N15	06-25-92	1529	0.86	14.03	37.86	23.19	1.08	31.15	0.80			0.07	0.00	0.00	0.09	1.04
MFF04	N15	06-25-92	1526	7.83	11.65	35.88	23.79	1.29	31.31	0.80			0.10	0.00	0.00	0.05	1.24
MFF04	N15	06-25-92	1524	20.28	5.94	31.32	24.90	1.20	31.63	0.69			1.60	0.06	2.03	0.55	4.37
MFF04	N15	06-25-92	1520	24.87	5.46	30.97	24.99	1.28	31.68	0.72			0.28	0.00	1.72	0.21	5.41
MFF04	N15	06-25-92	1517	42.08	4.94	30.63	25.12	1.10	31.77	0.78			0.16	0.10	3.20	0.48	6.87
MFF04	N16P	06-24-92	0900	1.96	11.53	35.70	23.75	1.49	31.23	1.23	9.92	111	0.35	0.00	0.06	0.28	0.94
MFF04	N16P	06-24-92	0859	9.63	7.22	32.38	24.73	1.28	31.62	0.86	11.06	113	0.29	0.00	0.01	0.30	0.98
MFF04	N16P	06-24-92	0857	14.45	6.36	31.72	24.89	2.79	31.68	1.01	11.02	110	0.69	0.01	0.43	0.44	2.79
MFF04	N16P	06-24-92	0856	19.75	5.39	30.92	25.01	1.16	31.69	0.77	9.99	97	2.83	0.08	2.44	0.68	5.02
MFF04	N16P	06-24-92	0854	38.23	4.80	30.53	25.17	1.07	31.80	0.87	9.76	94	0.68	0.13	3.82	0.52	7.68
MFF04	N16P	06-25-92	1559	0.69	13.77	37.84	23.27	1.17	31.22	0.85			0.00	0.00	0.00	0.19	1.33
MFF04	N16P	06-25-92	1556	6.02	11.83	36.06	23.76	1.20	31.32	0.86			0.00	0.00	0.00	0.28	1.26
MFF04	N16P	06-25-92	1554	13.70	7.64	32.71	24.63	1.29	31.58	0.75			0.48	0.03	-0.01	0.42	3.17
MFF04	N16P	06-25-92	1551	19.46	5.50	30.99	24.98	1.44	31.66	0.70			0.69	0.00	1.66	0.49	5.43
MFF04	N16P	06-25-92	1547	35.58	4.98	30.64	25.10	1.14	31.75	0.81			0.25	0.12	3.50	0.61	7.71
MFF04	N17	06-25-92	1633	0.90	12.54	36.46	23.47	2.44	31.12	1.27			0.06	0.00	0.00	0.22	0.28
MFF04	N17	06-25-92	1631	6.69	12.27	36.22	23.52	2.42	31.11	1.24			0.41	0.00	0.00	0.34	0.58
MFF04	N17	06-25-92	1627	13.52	6.72	31.95	24.78	2.46	31.60	0.87			0.41	0.00	0.00	0.43	3.09
MFF04	N17	06-25-92	1624	19.97	5.26	30.81	25.03	1.09	31.69	0.68			1.25	0.07	2.99	0.63	5.22
MFF04	N17	06-25-92	1621	34.85	5.11	30.72	25.07	1.26	31.72	0.76			0.42	0.06	3.05	0.55	7.05
MFF04	N18	06-25-92	1722	0.52	12.15	36.21	23.52	3.42	31.13	1.55			0.17	0.00	0.00	0.13	0.18
MFF04	N18	06-25-92	1719	4.92	11.42	35.57	23.75	2.59	31.20	1.21			0.15	0.00	0.01	0.31	0.25
MFF04	N18	06-25-92	1716	10.30	9.99	34.52	24.12	2.32	31.37	1.04			0.06	0.00	0.00	0.28	0.77
MFF04	N18	06-25-92	1714	15.73	6.09	31.47	24.90	5.79	31.65	1.23			0.31	0.00	0.00	0.49	3.12
MFF04	N18	06-25-92	1711	20.09	5.44	30.97	25.01	1.89	31.70	0.82			0.67	0.11	2.68	0.67	6.49
MFF04	N19	06-25-92	1758	0.72	12.94	36.71	23.28	5.46	31.00	2.15			0.11	0.02	0.00	0.30	0.28
MFF04	N19	06-25-92	1756	5.02	12.30	36.14	23.44	5.28	31.01	1.99			0.13	0.03	-0.02	0.33	0.65
MFF04	N19	06-25-92	1753	8.94	7.92	32.85	24.52	2.77	31.48	0.94			0.62	0.02	0.00	0.28	1.67
MFF04	N19	06-25-92	1751	15.80	6.62	31.84	24.77	4.63	31.58	1.14			0.14	0.02	0.03	0.36	1.83

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MFF04	N19	06-25-92	1747	24.84	5.29	30.86	25.05	1.49	31.72	0.91			2.24	0.14	3.12	0.88	7.87
MFF04	N20P	06-24-92	0944	1.46	11.96	36.02	23.63	1.61	31.18	1.14	9.8	111	0.06	0.00	0.00	0.19	0.77
MFF04	N20P	06-24-92	0941	6.08	10.81	35.03	23.84	1.77	31.18	1.13	10.13	111	0.07	0.00	0.00	0.29	0.54
MFF04	N20P	06-24-92	0939	12.40	6.13	31.48	24.88	3.91	31.63	1.39	9.78	97	0.48	0.00	0.54	0.50	4.03
MFF04	N20P	06-24-92	0938	20.25	5.23	30.83	25.07	1.22	31.74	1.04	9.39	91	3.47	0.07	3.19	0.84	7.81
MFF04	N20P	06-24-92	0937	26.81	5.07	30.73	25.11	1.19	31.77	1.03	9.61	93	3.41	0.08	3.28	0.82	7.85
MFF04	N20P	06-25-92	1834	0.76	12.02	35.99	23.56	4.50	31.12	1.74			0.15	0.02	-0.02	0.28	0.31
MFF04	N20P	06-25-92	1832	4.93	11.48	35.59	23.71	3.34	31.17	1.39			0.11	0.02	-0.02	0.24	0.40
MFF04	N20P	06-25-92	1829	13.71	7.53	32.61	24.66	1.85	31.58	0.82			0.12	0.02	-0.02	0.30	2.48
MFF04	N20P	06-25-92	1826	21.13	5.71	31.17	24.96	4.21	31.67	1.10			1.29	0.11	-0.03	0.70	3.19
MFF04	N20P	06-25-92	1824	28.10	5.35	30.91	25.03	2.12	31.71	0.91			0.56	0.69	1.08	0.55	6.45
MFF04	N21	06-25-92	1901	0.95	13.50	37.47	23.41	1.32	31.28	0.85			0.22	0.01	-0.01	0.25	1.41
MFF04	N21	06-25-92	1859	5.11	12.75	36.79	23.53	1.29	31.25	0.90			0.35	0.01	0.00	0.26	1.32
MFF04	N21	06-25-92	1857	13.18	7.46	32.55	24.66	1.75	31.58	0.80			0.12	0.01	-0.01	0.30	2.00
MFF04	N21	06-25-92	1854	20.62	5.83	31.25	24.93	4.94	31.65	1.15			0.31	0.01	-0.01	0.40	3.06
MFF04	N21	06-25-92	1851	23.64	5.61	31.08	24.96	2.83	31.66	0.93			0.71	0.03	1.80	0.56	5.08
MNF07	N01P	07-15-92	0750	0.94	14.78	38.26	22.91	1.97	30.97	1.10	9.55	114	0.28	0.04	0.07	0.30	1.12
MNF07	N01P	07-15-92	0748	7.06	12.46	36.61	23.65	3.01	31.33	1.12	10.02	114	0.48	0.04	0.07	0.34	0.69
MNF07	N01P	07-15-92	0746	13.85	10.24	34.85	24.17	2.80	31.48	1.03	9.91	108	0.35	0.05	0.08	0.51	0.79
MNF07	N01P	07-15-92	0744	20.50	7.80	32.82	24.60	1.50	31.56	0.80	9.9	102	0.17	0.08	0.25	0.46	2.28
MNF07	N01P	07-15-92	0742	27.09	7.53	32.55	24.59	1.50	31.50	0.80	10.39	106	0.54	0.10	1.06	0.55	4.06
MNF07	N02	07-15-92	0816	1.24	14.59	38.04	22.91	1.82	30.91	1.07	9.67	115	0.34	0.03	0.09	0.29	1.42
MNF07	N02	07-15-92	0815	10.70	9.83	34.33	24.11	2.55	31.32	1.06	10.69	115	0.37	0.03	0.06	0.36	0.98
MNF07	N02	07-15-92	0813	15.92	8.04	32.93	24.49	2.84	31.46	0.99	10.56	109	0.77	0.03	0.07	0.42	0.95
MNF07	N02	07-15-92	0810	25.08	6.53	31.78	24.79	1.17	31.58	0.69	10.16	102	1.31	0.06	0.37	0.52	1.51
MNF07	N02	07-15-92	0808	34.86	6.28	31.56	24.81	1.21	31.57	0.78	10.33	103	1.61	0.13	2.17	0.69	4.14
MNF07	N03	07-15-92	0843	2.33	14.80	38.20	22.85	1.93	30.90	1.09	9.67	116	0.24	0.01	0.04	0.26	1.29
MNF07	N03	07-15-92	0842	6.46	11.80	35.91	23.68	2.64	31.21	1.08	10.43	117	0.59	0.04	0.02	0.30	1.15
MNF07	N03	07-15-92	0840	11.08	8.21	33.11	24.49	2.25	31.49	0.92	10.69	111	0.59	0.03	0.05	0.37	1.05
MNF07	N03	07-15-92	0837	29.82	5.57	31.01	24.94	1.13	31.62	0.72	10.01	98	1.00	0.13	1.95	0.66	1.47
MNF07	N03	07-15-92	0834	42.59	5.46	30.96	24.97	0.87	31.65	0.81	9.73	95	2.55	0.20	3.99	0.85	6.10
MNF07	N04P	07-15-92	0911	0.88	14.31	37.89	23.04	1.95	31.01	1.05	9.28	110	0.30	0.02	-0.01	0.28	1.48
MNF07	N04P	07-15-92	0909	10.21	9.58	34.21	24.21	2.76	31.41	1.03	10.42	112	0.17	0.02	0.00	0.24	1.11
MNF07	N04P	07-15-92	0907	14.70	7.16	32.23	24.64	2.44	31.50	0.93	10.56	107	0.37	0.05	0.26	0.50	1.81
MNF07	N04P	07-15-92	0905	27.17	5.48	30.93	24.94	1.15	31.62	0.69	9.74	95	1.40	0.14	2.16	0.70	1.71
MNF07	N04P	07-15-92	0902	45.06	5.19	30.72	24.99	0.92	31.64	0.71	9.77	95	2.89	0.23	4.21	0.83	4.26
MNF07	N05	07-15-92	0937	1.10	14.88	38.29	22.85	1.61	30.92	1.05	9.21	110	0.16	0.02	-0.01	0.16	1.34
MNF07	N05	07-15-92	0935	9.49	11.54	35.83	23.82	2.07	31.34	1.01	10.59	119	1.01	0.01	0.23	0.28	1.43
MNF07	N05	07-15-92	0933	14.35	12.27	36.17	23.46	2.04	31.06	1.04	9.57	109	0.76	0.03	0.05	0.36	1.56
MNF07	N05	07-15-92	0930	25.14	5.10	30.62	24.99	0.95	31.62	0.67	9.91	96	1.04	0.14	2.66	0.63	3.62
MNF07	N05	07-15-92	0927	50.87	4.71	30.38	25.09	0.83	31.70	0.72	9.74	93	2.17	0.32	5.15	0.83	6.77
MNF07	N06	07-15-92	1001	1.15	14.75	38.23	22.91	1.64	30.96	1.06	9.48	113	0.30	0.02	0.00	0.26	1.37
MNF07	N06	07-15-92	0959	11.56	7.29	32.34	24.63	2.06	31.51	0.88	11.18	114	0.47	0.03	-0.01	0.37	0.92
MNF07	N06	07-15-92	0957	14.86	6.82	31.98	24.73	1.92	31.55	0.85	11.02	111	0.28	0.03	0.02	0.44	1.61
MNF07	N06	07-15-92	0955	24.83	5.16	30.67	24.99	1.16	31.63	0.68	10.04	97	0.83	0.12	1.52	0.56	2.95
MNF07	N06	07-15-92	0952	50.47	4.66	30.35	25.11	0.96	31.72	0.71	9.82	94	3.13	0.35	5.35	0.84	7.47

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (nmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MNF07	N07P	07-15-92	1025	1.22	14.63	38.11	22.93	1.73	30.95	1.08	9.63	115	0.39	0.02	0.02	0.25	1.40
MNF07	N07P	07-15-92	1023	9.00	8.56	33.45	24.46	1.94	31.53	0.90	11.1	116	0.20	0.03	-0.02	0.33	1.20
MNF07	N07P	07-15-92	1021	14.55	6.02	31.35	24.85	2.04	31.58	0.78	10.65	105	0.48	0.05	0.28	0.46	2.00
MNF07	N07P	07-15-92	1019	25.51	5.08	30.62	25.01	1.07	31.64	0.69	9.81	95	1.92	0.21	3.75	0.76	3.26
MNF07	N07P	07-15-92	1016	43.01	4.73	30.40	25.10	1.00	31.71	0.74	9.75	94	2.89	0.32	5.27	0.83	7.39
MNF07	N08	07-15-92	1050	0.99	13.26	37.06	23.31	2.04	31.09	1.13	10.21	118	0.30	0.04	0.00	0.26	1.10
MNF07	N08	07-15-92	1049	9.72	7.92	32.83	24.51	3.04	31.46	0.99	10.84	112	0.53	0.03	0.03	0.43	1.38
MNF07	N08	07-15-92	1046	13.16	6.80	31.97	24.73	2.57	31.55	0.87	10.46	105	1.06	0.05	0.34	0.53	1.43
MNF07	N08	07-15-92	1045	16.08	6.32	31.60	24.82	1.40	31.58	0.74	10.21	102	1.02	0.10	1.43	0.64	2.73
MNF07	N08	07-15-92	1042	27.98	6.13	31.46	24.85	1.26	31.60	0.71	10.34	103	0.23	0.15	1.61	0.46	3.26
MNF07	N09	07-15-92	1115	1.49	14.92	38.41	22.91	2.92	31.00	1.32	9.77	117	0.85	0.03	0.01	0.30	0.63
MNF07	N09	07-15-92	1113	6.38	12.65	36.66	23.53	6.07	31.21	1.57	10.47	120	0.37	0.03	0.02	0.44	0.81
MNF07	N09	07-15-92	1111	10.61	9.52	34.14	24.23	3.08	31.41	1.03	10.58	113	0.37	0.03	0.01	0.39	1.25
MNF07	N09	07-15-92	1109	16.73	6.54	31.79	24.79	1.46	31.59	0.81	10.12	101	1.78	0.09	1.19	0.59	2.69
MNF07	N09	07-15-92	1107	28.98	6.36	31.66	24.83	1.43	31.61	0.87	9.93	99	1.71	0.12	1.90	0.71	4.56
MNF07	N10P	07-15-92	0641	1.12	12.76	36.72	23.48	5.68	31.18	1.73	9.23	106	0.91	0.06	0.13	0.47	2.29
MNF07	N10P	07-15-92	0639	5.18	12.09	36.17	23.63	4.95	31.21	1.60	9.32	105	0.24	0.13	0.20	0.51	2.12
MNF07	N10P	07-15-92	0637	10.05	11.76	35.91	23.72	4.85	31.24	1.54	9.39	106	2.18	0.08	0.67	0.70	1.85
MNF07	N10P	07-15-92	0635	14.95	10.63	35.07	24.01	4.17	31.37	1.39	9.65	106	0.27	0.01	0.02	0.51	2.09
MNF07	N10P	07-15-92	0633	19.74	10.30	34.69	23.99	3.56	31.27	1.30	9.57	104	2.46	0.06	0.98	0.60	2.40
MNF07	N11	07-15-92	0707	1.36	14.45	38.03	23.02	4.06	31.01	1.37	9.63	114	0.82	0.02	0.04	0.31	1.09
MNF07	N11	07-15-92	0705	3.92	13.35	37.16	23.31	6.96	31.10	1.78	9.96	116	0.37	0.02	0.04	0.45	0.63
MNF07	N11	07-15-92	0702	9.53	11.96	36.11	23.70	5.78	31.27	1.60	9.55	108	0.26	0.01	0.02	0.40	0.51
MNF07	N11	07-15-92	0700	15.39	7.87	32.85	24.56	1.76	31.52	0.95	9.93	103	1.30	0.07	0.60	0.62	2.46
MNF07	N11	07-15-92	0658	25.34	7.41	32.45	24.62	1.63	31.51	0.91	10.28	105	0.55	0.06	0.07	0.45	3.44
MNF07	N12	07-15-92	0727	1.15	13.98	37.71	23.18	3.98	31.10	1.39	10.01	118	0.53	0.02	0.07	0.35	0.83
MNF07	N12	07-15-92	0725	4.08	13.56	37.38	23.30	4.67	31.14	1.49	9.95	116	0.28	0.02	0.02	0.29	0.27
MNF07	N12	07-15-92	0723	7.39	13.21	37.14	23.41	4.07	31.20	1.43	9.89	115	0.32	0.02	0.01	0.34	0.55
MNF07	N12	07-15-92	0721	13.51	12.82	36.81	23.50	3.97	31.22	1.39	9.94	114	0.75	0.02	0.15	0.35	0.65
MNF07	N13	07-15-92	1418	0.86	14.55	38.10	22.99	2.86	31.00	1.21	9.66	115	0.30	0.02	0.03	0.25	1.03
MNF07	N13	07-15-92	1416	5.11	11.97	36.00	23.60	2.59	31.15	1.15	10.57	119	0.28	0.01	0.02	0.29	1.08
MNF07	N13	07-15-92	1414	9.94	8.36	33.18	24.42	2.43	31.44	0.98	10.55	110	0.50	0.02	0.02	0.33	1.09
MNF07	N13	07-15-92	1412	20.32	6.50	31.77	24.81	1.41	31.61	0.83	9.91	99	1.36	0.07	1.06	0.58	3.29
MNF07	N13	07-15-92	1410	28.22	6.40	31.67	24.81	1.35	31.59	0.89	10.35	103	1.59	0.10	1.90	0.69	5.34
MNF07	N14	07-15-92	1439	0.63	15.19	38.52	22.75	2.17	30.87	1.13	9.33	112	0.19	0.03	0.15	0.26	1.28
MNF07	N14	07-15-92	1437	4.76	13.02	36.79	23.32	2.91	31.04	1.13	10.28	118	0.39	0.02	0.02	0.22	1.29
MNF07	N14	07-15-92	1436	9.47	10.02	34.54	24.11	2.65	31.37	1.01	10.63	115	0.16	0.01	0.02	0.30	1.28
MNF07	N14	07-15-92	1434	16.99	6.53	31.77	24.79	1.44	31.58	0.76	10.07	101	0.78	0.06	0.72	0.52	2.49
MNF07	N14	07-15-92	1431	30.45	6.25	31.55	24.83	1.15	31.59	0.79	10.13	101	1.47	0.12	2.07	0.70	4.82
MNF07	N15	07-15-92	1503	1.30	15.25	38.53	22.71	2.05	30.84	1.13	9.27	112	0.23	0.01	0.14	0.26	1.31
MNF07	N15	07-15-92	1501	4.92	12.24	36.31	23.61	2.92	31.22	1.13	10.11	115	0.29	0.01	0.02	0.25	1.35
MNF07	N15	07-15-92	1459	13.25	8.94	33.65	24.32	3.24	31.41	1.05	10.6	112	0.15	0.02	0.00	0.36	1.27
MNF07	N15	07-15-92	1457	25.38	5.40	30.87	24.95	1.05	31.62	0.69	9.89	96	1.07	0.16	2.66	0.67	2.35
MNF07	N15	07-15-92	1454	41.76	5.25	30.77	25.00	1.08	31.65	0.72	9.84	96	2.29	0.22	3.91	0.78	4.99
MNF07	N16P	07-15-92	1245	0.55	15.13	38.47	22.77	1.88	30.88	1.11	9.37	113	0.19	0.01	0.11	0.27	1.33
MNF07	N16P	07-15-92	1243	5.89	14.07	37.70	23.11	2.29	31.03	1.12	10	118	0.27	0.01	0.03	0.28	1.30

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MNF07	N16P	07-15-92	1241	11.02	8.13	33.04	24.49	2.00	31.48	0.93	10.85	113	0.97	0.01	0.16	0.31	1.10
MNF07	N16P	07-15-92	1240	20.29	5.39	30.85	24.95	1.09	31.61	0.69	10.11	99	0.22	0.04	0.04	0.42	1.96
MNF07	N16P	07-15-92	1236	39.44	5.30	30.83	25.00	1.00	31.66	0.76	9.76	95	2.30	0.20	4.09	0.78	5.88
MNF07	N17	07-15-92	1308	1.13	15.11	38.45	22.77	1.96	30.87	1.10	9.5	114	0.38	0.01	0.02	0.25	1.33
MNF07	N17	07-15-92	1305	6.77	11.97	36.06	23.64	2.34	31.21	1.06	10.53	119	0.15	0.01	0.03	0.28	1.33
MNF07	N17	07-15-92	1303	10.56	8.60	33.41	24.40	2.11	31.46	0.91	10.6	111	0.19	0.01	0.04	0.35	0.86
MNF07	N17	07-15-92	1301	20.37	5.85	31.25	24.91	1.12	31.63	0.74	10.03	99	1.86	0.11	2.12	0.70	3.66
MNF07	N17	07-15-92	1258	37.37	5.64	31.09	24.94	0.92	31.64	0.75	9.83	96	2.72	0.16	3.65	0.78	5.50
MNF07	N18	07-15-92	1329	0.67	14.41	38.06	23.08	3.23	31.08	1.28	9.74	116	0.61	0.01	0.11	0.34	0.97
MNF07	N18	07-15-92	1327	4.69	12.77	36.76	23.50	3.52	31.21	1.25	10.35	119	0.20	0.01	0.01	0.29	0.77
MNF07	N18	07-15-92	1325	7.92	9.82	34.33	24.12	2.68	31.33	1.06	10.62	114	0.34	0.02	0.04	0.36	1.26
MNF07	N18	07-15-92	1323	16.87	6.39	31.66	24.81	1.40	31.59	0.76	10.16	101	0.70	0.31	0.45	0.57	3.19
MNF07	N18	07-15-92	1321	23.94	6.45	31.70	24.79	1.42	31.57	0.77	10.63	106	0.36	0.28	0.54	0.43	3.66
MNF07	N19	07-15-92	1350	0.78	13.44	37.27	23.32	7.33	31.14	1.93	10.51	122	0.60	0.03	0.04	0.33	0.51
MNF07	N19	07-15-92	1348	4.02	12.49	36.56	23.59	4.98	31.25	1.56	10.47	120	0.28	0.02	-0.01	0.35	0.33
MNF07	N19	07-15-92	1346	7.61	10.05	34.62	24.15	3.58	31.42	1.16	10.79	117	0.54	0.01	-0.01	0.38	0.77
MNF07	N19	07-15-92	1345	12.11	9.25	33.88	24.24	3.67	31.37	1.11	10.54	112	0.87	0.01	0.01	0.39	1.39
MNF07	N19	07-15-92	1343	16.11	8.83	33.43	24.22	2.83	31.28	1.03	10.92	115	1.03	0.06	0.73	0.56	2.91
MNF07	N20P	07-15-92	1155	0.15	15.17	38.54	22.79	3.16	30.91	1.48	9.6	116	0.90	0.03	0.28	0.28	0.94
MNF07	N20P	07-15-92	1152	5.55	12.85	36.85	23.50	3.78	31.23	1.30	10.39	119	0.64	0.01	0.02	0.38	0.81
MNF07	N20P	07-15-92	1150	10.60	8.51	33.32	24.40	3.49	31.44	1.08	10.98	115	0.29	0.02	0.02	0.38	1.10
MNF07	N20P	07-15-92	1148	16.74	6.76	31.97	24.76	1.86	31.58	0.84	10.35	104	0.80	0.02	0.24	0.48	1.61
MNF07	N20P	07-15-92	1146	23.16	6.64	31.83	24.74	1.51	31.54	0.78	10.97	110	1.17	0.09	1.64	0.66	3.55
MNF07	N21	07-15-92	1220	0.85	14.86	38.31	22.88	2.45	30.95	1.18	9.63	115	0.98	0.01	0.23	0.23	1.08
MNF07	N21	07-15-92	1217	6.90	11.29	35.46	23.77	2.67	31.20	1.10	10.69	119	0.58	0.02	0.04	0.32	1.10
MNF07	N21	07-15-92	1216	11.87	7.77	32.73	24.55	2.41	31.49	0.93	10.46	108	0.71	0.02	0.05	0.38	1.05
MNF07	N21	07-15-92	1214	20.20	6.38	31.66	24.82	1.27	31.60	0.74	10.28	103	1.23	0.09	1.63	0.61	2.72
MNF07	N21	07-15-92	1210	30.37	6.34	31.63	24.82	1.33	31.59	0.74	10.37	103	1.23	0.10	1.96	0.65	3.71
MNF08	N01P	07-29-92	0826	1.28	16.63	39.91	22.51	0.54	30.97	1.34	9.04	112	0.37	0.02	0.02	0.46	1.77
MNF08	N01P	07-29-92	0824	4.87	16.12	39.43	22.61	1.34	30.95	1.53	9.27	114	0.41	0.02	0.04	0.53	2.04
MNF08	N01P	07-29-92	0821	7.07	13.77	37.47	23.19	2.16	31.05	1.62	9.28	109	0.18	0.02	0.02	0.50	2.30
MNF08	N01P	07-29-92	0819	15.78	8.05	32.93	24.48	1.12	31.44	0.99	10.67	111	0.18	0.01	0.01	0.34	3.06
MNF08	N01P	07-29-92	0815	28.36	6.12	31.44	24.84	0.45	31.59	0.90	9.72	96	0.77	0.02	0.01	0.32	7.58
MNF08	N02	07-29-92	0901	1.42	17.93	41.02	22.17	0.34	30.92	0.90	8.38	107	0.10	0.01	0.02	0.22	1.52
MNF08	N02	07-29-92	0858	5.83	14.31	38.02	23.13	0.72	31.12	1.23	9.75	115	0.12	0.02	0.01	0.33	1.60
MNF08	N02	07-29-92	0855	17.93	7.35	32.39	24.61	1.53	31.49	1.12	10.74	110	0.11	0.01	0.03	0.34	2.78
MNF08	N02	07-29-92	0852	26.84	5.75	31.15	24.91	0.49	31.61	0.75	10.02	98	0.19	0.02	0.02	0.33	5.52
MNF08	N02	07-29-92	0850	36.63	5.30	30.81	24.99	0.46	31.65	1.04	9.81	95	2.75	0.30	4.96	0.87	8.49
MNF08	N03	07-29-92	0930	1.36	18.10	41.20	22.15	0.26	30.95	0.82	8.5	108	0.14	0.01	0.02	0.02	1.38
MNF08	N03	07-29-92	0928	10.60	11.49	35.90	23.93	0.50	31.45	0.95	11.58	130	0.13	0.02	0.02	0.25	1.66
MNF08	N03	07-29-92	0925	21.31	7.26	32.32	24.64	1.74	31.51	1.12	11.09	113	0.16	0.03	0.02	0.38	2.49
MNF08	N03	07-29-92	0922	32.22	5.63	31.08	24.94	0.48	31.64	0.71	10.43	102	0.73	0.30	2.71	0.54	4.38
MNF08	N03	07-29-92	0919	43.49	5.39	30.88	24.97	0.41	31.64	0.74	10.33	101	0.64	0.03	-0.01	0.25	6.14
MNF08	N04P	07-29-92	0959	1.05	17.93	41.07	22.20	0.24	30.96	0.88	8.86	113	0.14	0.01	0.02	0.21	1.39
MNF08	N04P	07-29-92	0957	9.84	12.93	36.85	23.44	0.37	31.16	0.92	10.32	119	0.19	0.01	0.01	0.23	1.55
MNF08	N04P	07-29-92	0954	20.79	7.72	32.67	24.54	1.25	31.46	1.08	10.91	112	0.15	0.01	0.03	0.41	2.71

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MNF08	N04P	07-29-92	0951	35.04	5.99	31.32	24.85	0.53	31.57	0.69	10.5	104	0.63	0.23	2.24	0.54	3.34
MNF08	N04P	07-29-92	0948	47.81	5.19	30.76	25.03	0.39	31.68	0.74	10.33	100	0.14	0.46	0.45	0.20	6.23
MNF08	N05	07-29-92	1037	1.31	18.09	41.19	22.15	0.28	30.95	0.81	8.3	106	0.10	0.04	0.04	0.21	1.41
MNF08	N05	07-29-92	1034	12.70	12.25	36.29	23.59	0.47	31.19	0.95	10.64	121	0.10	0.04	0.02	0.23	1.50
MNF08	N05	07-29-92	1031	26.36	6.44	31.66	24.76	0.64	31.53	0.75	10.43	104	0.42	0.21	1.67	0.58	3.78
MNF08	N05	07-29-92	1028	37.67	5.73	31.16	24.92	0.55	31.63	0.71	10.54	104	0.10	0.04	0.01	0.04	4.32
MNF08	N05	07-29-92	1025	48.83	5.07	30.66	25.04	0.44	31.68	0.71	10.31	100	0.45	0.05	1.25	0.52	6.19
MNF08	N06	07-29-92	1107	1.25	18.32	41.44	22.12	0.27	30.98	0.82	8.24	106	0.17	0.02	0.06	0.18	1.50
MNF08	N06	07-29-92	1105	11.41	15.47	39.03	22.87	0.48	31.11	0.91	9.36	114	0.10	0.01	0.05	0.18	1.45
MNF08	N06	07-29-92	1102	22.15	8.25	33.11	24.46	1.05	31.46	1.01	11.12	116	0.27	0.02	0.10	0.41	2.45
MNF08	N06	07-29-92	1059	37.35	5.96	31.38	24.92	0.72	31.67	0.71	11.05	109	0.31	0.14	1.45	0.51	2.96
MNF08	N06	07-29-92	1056	48.41	4.72	30.41	25.11	0.40	31.73	0.73	10.38	100	2.34	0.43	5.38	0.81	7.25
MNF08	N07P	07-29-92	1142	1.10	18.93	42.00	21.98	0.25	30.99	0.79	8.38	109	0.13	0.02	0.02	0.18	1.53
MNF08	N07P	07-29-92	1139	10.10	14.02	38.04	23.38	0.44	31.37	0.91	9.97	118	0.12	0.01	0.03	0.23	1.62
MNF08	N07P	07-29-92	1136	21.63	7.15	32.24	24.66	1.94	31.52	1.15	10.99	112	0.12	0.04	0.44	0.44	2.78
MNF08	N07P	07-29-92	1134	31.44	6.06	31.47	24.92	0.82	31.68	0.75	11.05	109	0.64	0.10	1.26	0.53	2.74
MNF08	N07P	07-29-92	1131	46.27	4.83	30.48	25.09	0.41	31.71	0.79	10.21	98	2.21	0.47	1.33	0.55	7.91
MNF08	N08	07-29-92	1233	1.31	18.79	41.80	21.96	0.30	30.93	0.87	8.26	107	0.11	0.02	0.03	0.13	1.59
MNF08	N08	07-29-92	1230	5.66	16.87	40.14	22.46	0.68	30.98	1.28	9.14	114	0.12	0.02	0.03	0.28	1.75
MNF08	N08	07-29-92	1228	10.90	14.11	37.93	23.23	1.49	31.20	1.35	10.15	120	0.13	0.03	0.03	0.37	2.91
MNF08	N08	07-29-92	1223	19.03	7.72	32.82	24.66	1.01	31.63	0.99	11.38	117	1.07	0.04	0.06	0.43	2.41
MNF08	N08	07-29-92	1220	32.45	5.87	31.27	24.91	0.48	31.63	0.75	10.52	104	1.60	0.25	2.90	0.70	4.95
MNF08	N09	07-29-92	1301	1.41	17.74	40.92	22.26	0.81	30.98	1.60	9.24	117	0.11	0.03	0.01	0.44	2.44
MNF08	N09	07-29-92	1259	4.12	14.52	38.12	23.03	1.46	31.05	1.84	9.58	114	0.12	0.03	0.04	0.58	4.37
MNF08	N09	07-29-92	1256	6.41	12.95	36.84	23.41	1.53	31.13	1.63	9.46	109	0.09	0.03	0.01	0.47	15.74
MNF08	N09	07-29-92	1254	14.87	7.90	32.82	24.51	0.83	31.46	0.97	10.52	109	0.10	0.03	0.01	0.35	4.47
MNF08	N09	07-29-92	1251	32.45	6.38	31.65	24.81	0.58	31.58	0.99	10.39	104	0.12	0.04	0.01	0.16	5.98
MNF08	N10P	07-29-92	0652	1.14	16.16	39.51	22.63	1.11	30.99	1.61	8.86	109	0.15	0.03	0.04	0.50	3.19
MNF08	N10P	07-29-92	0649	3.22	15.61	39.00	22.74	1.78	30.97	1.90	8.53	104	0.48	0.04	0.42	0.58	4.86
MNF08	N10P	07-29-92	0647	12.79	11.07	35.33	23.85	1.16	31.26	1.40	9.27	103	1.17	0.13	0.95	0.68	5.08
MNF08	N10P	07-29-92	0644	21.47	7.10	32.20	24.67	0.72	31.52	1.10	10.12	103	1.60	0.16	1.93	0.67	6.59
MNF08	N11	07-29-92	0731	1.25	16.16	39.50	22.62	0.90	30.98	1.60	9.32	115	0.15	0.03	0.01	0.48	2.28
MNF08	N11	07-29-92	0729	4.57	16.08	39.44	22.65	1.50	30.99	1.63	9.35	115	0.16	0.04	0.01	0.54	2.23
MNF08	N11	07-29-92	0727	11.36	12.35	36.28	23.49	1.44	31.09	1.54	9.21	105	1.53	0.06	0.23	0.68	2.85
MNF08	N11	07-29-92	0724	18.51	7.35	32.39	24.61	0.62	31.50	1.05	9.92	101	0.24	0.03	0.50	0.52	5.66
MNF08	N11	07-29-92	0721	27.05	6.97	32.10	24.69	0.62	31.53	1.10	10.08	102	0.12	0.03	0.01	0.04	6.03
MNF08	N12	07-29-92	0758	1.38	17.56	40.75	22.30	0.43	30.98	0.96	8.54	108	0.18	0.03	0.03	0.29	1.36
MNF08	N12	07-29-92	0756	3.99	16.82	40.10	22.47	0.77	30.98	1.20	8.85	110	0.36	0.05	0.04	0.38	1.58
MNF08	N12	07-29-92	0754	7.74	14.51	38.03	22.97	1.78	30.97	1.73	8.84	105	2.40	0.17	0.79	0.82	4.59
MNF08	N12	07-29-92	0751	14.27	8.08	32.96	24.48	1.07	31.45	1.01	10.43	108	0.78	0.08	0.71	0.56	3.55
MNF08	N12	07-29-92	0749	22.58	6.35	31.61	24.80	0.64	31.57	1.26	10.16	101	1.59	0.21	2.65	0.71	6.48
MNF08	N13	07-29-92	1419	1.33	18.15	41.28	22.16	0.87	30.97	1.56	9.28	119	0.10	0.04	0.00	0.37	2.28
MNF08	N13	07-29-92	1417	3.38	16.60	39.93	22.55	0.85	31.01	1.46	9.94	123	0.11	0.03	0.02	0.27	2.90
MNF08	N13	07-29-92	1416	5.97	12.68	36.70	23.54	0.80	31.23	1.09	11.06	127	0.11	0.02	0.02	0.28	1.86
MNF08	N13	07-29-92	1413	17.70	7.16	32.28	24.69	1.43	31.56	0.98	11.11	113	0.11	0.10	0.01	0.42	2.45
MNF08	N13	07-29-92	1410	27.72	5.97	31.33	24.88	0.59	31.61	0.98	9.97	99	2.54	0.24	3.13	0.82	7.44

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
MNF08	N14	07-29-92	1441	1.46	18.85	41.92	21.99	0.63	30.98	1.29	9.11	118	0.12	0.04	0.01	0.21	1.69
MNF08	N14	07-29-92	1439	4.08	17.63	40.83	22.30	0.80	31.00	1.40	9.65	122	0.11	0.03	0.02	0.35	1.83
MNF08	N14	07-29-92	1437	9.06	15.78	39.20	22.73	1.63	31.01	1.61	10.23	125	0.11	0.04	0.01	0.42	1.92
MNF08	N14	07-29-92	1435	16.80	8.61	33.52	24.48	1.08	31.56	1.01	11.55	121	0.10	0.02	0.02	0.20	1.92
MNF08	N14	07-29-92	1432	28.45	5.88	31.26	24.89	0.60	31.61	0.82	10.37	102	1.14	0.32	3.00	0.65	7.00
MNF08	N15	07-29-92	1509	1.39	18.77	41.80	21.98	0.37	30.94	1.06	8.94	116	0.10	0.03	0.00	0.12	1.51
MNF08	N15	07-29-92	1507	8.21	14.61	38.36	23.12	0.55	31.19	1.07	10.51	125	0.09	0.04	0.01	0.18	1.63
MNF08	N15	07-29-92	1504	20.49	6.48	31.77	24.82	0.90	31.62	0.82	11.21	112	0.10	0.03	0.01	0.02	2.74
MNF08	N15	07-29-92	1502	30.45	5.62	31.07	24.94	0.46	31.64	0.74	10.44	102	0.80	0.40	2.05	0.52	5.35
MNF08	N15	07-29-92	1459	38.86	5.55	31.02	24.95	0.49	31.64	0.73	10.35	101	1.75	0.04	0.01	0.42	5.90
MNF08	N16P	07-29-92	1535	1.26	19.33	42.33	21.85	0.28	30.96	0.87	8.6	112	0.13	0.03	0.02	0.25	3.41
MNF08	N16P	07-29-92	1533	8.86	14.46	38.22	23.15	0.62	31.18	1.00	10.14	121	0.14	0.02	0.03	0.17	1.67
MNF08	N16P	07-29-92	1530	21.71	6.57	31.82	24.79	1.32	31.60	1.00	11.32	113	0.63	0.04	0.38	0.34	5.56
MNF08	N16P	07-29-92	1528	28.91	5.63	31.08	24.94	0.56	31.64	0.73	10.44	102	0.14	0.04	0.03	0.30	4.50
MNF08	N16P	07-29-92	1526	35.54	5.61	31.07	24.94	0.47	31.64	0.73	10.47	103	0.31	0.03	0.02	0.14	1.55
MNF08	N17	07-29-92	1600	1.29	18.45	41.53	22.07	0.82	30.96	1.34	9.31	120	0.13	0.04	-0.01	0.30	1.90
MNF08	N17	07-29-92	1558	3.84	17.11	40.36	22.41	0.76	30.99	1.17	9.53	119	0.15	0.08	0.47	0.29	2.87
MNF08	N17	07-29-92	1556	7.93	13.44	37.27	23.32	1.97	31.14	1.58	10.2	119	0.16	0.03	0.00	0.27	1.90
MNF08	N17	07-29-92	1554	20.02	7.80	32.85	24.62	0.85	31.58	0.92	11.43	118	0.12	0.04	0.00	0.02	4.77
MNF08	N17	07-29-92	1551	33.71	5.87	31.27	24.91	0.57	31.64	0.75	10.71	106	0.29	0.04	0.01	0.24	5.72
MNF08	N18	07-29-92	1627	1.18	18.65	41.75	22.05	1.12	30.99	1.41	9.17	118	0.10	0.01	0.05	0.29	1.97
MNF08	N18	07-29-92	1625	3.23	15.45	38.91	22.81	1.47	31.01	1.82	10.26	124	0.09	0.03	0.02	0.47	2.90
MNF08	N18	07-29-92	1623	5.57	13.37	37.20	23.32	2.41	31.13	1.82	10.11	117	0.10	0.03	0.05	0.17	4.17
MNF08	N18	07-29-92	1621	14.32	7.42	32.48	24.64	1.12	31.54	0.99	10.81	110	0.13	0.01	0.04	0.30	1.88
MNF08	N18	07-29-92	1618	25.10	6.71	31.90	24.74	0.72	31.55	0.86	10.62	107	0.89	0.16	1.88	0.57	4.67
MNF08	N19	07-29-92	1324	1.29	18.86	41.87	21.95	0.60	30.93	1.04	8.69	112	0.63	0.02	0.05	0.24	1.78
MNF08	N19	07-29-92	1322	3.49	15.75	39.18	22.74	1.66	31.02	2.01	9.81	120	0.18	0.02	0.03	0.59	3.54
MNF08	N19	07-29-92	1320	6.95	12.56	36.53	23.51	2.18	31.17	1.74	10.18	116	0.77	0.08	0.37	0.60	3.20
MNF08	N19	07-29-92	1318	12.99	9.16	33.87	24.31	1.22	31.44	1.08	11.03	117	0.35	0.03	0.16	0.38	2.46
MNF08	N19	07-29-92	1316	20.41	6.75	31.93	24.74	0.64	31.55	0.99	10.28	103	1.33	0.16	2.07	0.63	5.62
MNF08	N20P	07-29-92	1353	1.40	18.02	41.14	22.17	0.44	30.95	1.16	9.13	116	0.12	0.03	0.00	0.21	4.20
MNF08	N20P	07-29-92	1350	2.85	16.65	39.96	22.52	0.71	30.99	1.53	9.71	120	0.12	0.03	0.00	0.45	2.25
MNF08	N20P	07-29-92	1348	7.03	13.18	37.12	23.42	1.73	31.21	1.60	10.93	127	0.17	0.03	0.00	0.43	2.30
MNF08	N20P	07-29-92	1345	14.68	8.18	33.05	24.47	1.38	31.46	1.15	10.83	113	0.13	0.03	0.00	0.08	3.81
MNF08	N20P	07-29-92	1341	27.66	6.07	31.40	24.86	0.58	31.60	0.88	10.39	103	0.10	0.03	0.01	0.35	6.10
MNF08	N21	07-29-92	1648	1.15	18.99	41.99	21.92	0.53	30.94	1.00	8.79	114	0.10	0.02	0.03	0.15	1.65
MNF08	N21	07-29-92	1646	5.34	16.09	39.49	22.68	1.39	31.03	1.52	9.84	121	0.12	0.02	0.03	0.30	2.36
MNF08	N21	07-29-92	1644	15.14	7.37	32.43	24.63	1.21	31.53	1.11	10.69	109	0.11	0.02	0.05	0.13	4.34
MNF08	N21	07-29-92	1642	19.45	6.47	31.70	24.78	0.72	31.56	0.94	10.69	107	0.15	0.02	0.04	0.24	5.46
MNF09	N01P	08-12-92	1159	1.29	16.26	39.55	22.57	0.62	30.95	1.32	9.63	119	0.14	0.03	0.01	0.29	0.85
MNF09	N01P	08-12-92	1156	5.72	14.17	37.86	23.14	1.40	31.09	1.43	9.97	118	0.20	0.03	0.05	0.32	1.09
MNF09	N01P	08-12-92	1154	13.04	8.85	33.63	24.38	2.68	31.47	0.99	10.23	108	0.19	0.03	0.03	0.37	3.55
MNF09	N01P	08-12-92	1151	21.53	6.84	32.04	24.75	1.03	31.58	0.76	9.49	96	1.14	0.27	1.81	0.54	4.54
MNF09	N01P	08-12-92	1149	28.67	6.02	31.41	24.90	1.06	31.64	1.06	9.06	90	2.37	0.39	3.97	0.72	8.93
MNF09	N02	08-12-92	1134	1.20	15.81	39.29	22.77	2.78	31.07	1.26	9.45	115	0.14	0.01	0.07	0.32	1.52
MNF09	N02	08-12-92	1132	7.83	12.58	36.65	23.59	1.23	31.27	1.15	10	114	0.13	0.01	0.04	0.35	2.16

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MNF09	N02	08-12-92	1129	14.58	8.15	33.09	24.52	2.71	31.52	1.00	10.17	106	0.34	0.09	0.47	0.48	3.69
MNF09	N02	08-12-92	1127	25.12	6.61	31.88	24.80	1.27	31.62	0.80	9.45	95	0.92	0.30	2.39	0.61	5.29
MNF09	N02	08-12-92	1124	36.18	5.95	31.38	24.93	0.97	31.67	1.00	9.1	90	1.55	0.37	3.91	0.73	7.25
MNF09	N03	08-12-92	1100	1.66	14.83	38.40	22.97	0.83	31.05	1.06	9.58	115	0.12	0.02	0.02	0.29	2.24
MNF09	N03	08-12-92	1057	7.16	10.94	35.31	23.95	0.87	31.36	1.00	10.35	114	0.13	0.02	0.02	0.33	2.98
MNF09	N03	08-12-92	1054	16.70	7.54	32.60	24.64	2.86	31.56	1.04	10.57	108	0.40	0.07	0.46	0.42	3.27
MNF09	N03	08-12-92	1051	30.64	6.27	31.62	24.87	1.20	31.64	0.76	9.82	98	0.42	0.23	1.81	0.54	4.00
MNF09	N03	08-12-92	1048	43.02	5.63	31.14	24.99	0.86	31.70	0.84	9	88	2.01	0.40	4.65	0.78	7.81
MNF09	N04P	08-12-92	1026	1.30	15.74	39.13	22.72	9.48	30.98	0.98	9.11	111	0.13	0.01	0.01	0.26	2.80
MNF09	N04P	08-12-92	1023	8.24	12.63	36.63	23.52	1.06	31.20	0.97	9.94	114	0.14	0.01	0.02	0.32	3.06
MNF09	N04P	08-12-92	1021	17.75	7.79	32.82	24.61	2.34	31.56	0.96	10.27	106	0.20	0.07	0.50	0.44	3.40
MNF09	N04P	08-12-92	1018	32.68	6.07	31.45	24.89	1.09	31.64	0.75	9.77	97	0.60	0.29	2.39	0.59	4.35
MNF09	N04P	08-12-92	1015	46.08	5.39	30.96	25.03	0.95	31.72	0.78	9.31	91	1.50	0.39	5.11	0.78	6.36
MNF09	N05	08-12-92	0940	1.29	15.65	39.05	22.74	0.64	30.98	0.91	8.98	109	0.18	0.01	0.06	0.20	2.75
MNF09	N05	08-12-92	0935	6.86	11.61	35.82	23.78	0.99	31.28	0.97	10.45	117	0.37	0.01	0.03	0.33	3.28
MNF09	N05	08-12-92	0931	21.41	7.16	32.33	24.72	2.35	31.60	0.99	10.67	108	0.12	0.03	0.06	0.38	2.76
MNF09	N05	08-12-92	0928	34.04	5.41	30.95	25.02	0.95	31.70	0.72	9.3	91	1.45	0.40	4.72	0.73	5.25
MNF09	N05	08-12-92	0925	49.06	5.21	30.85	25.09	0.76	31.77	0.76	9.04	88	0.71	0.37	5.62	0.67	6.52
MNF09	N06	08-12-92	0907	1.61	15.49	38.93	22.79	0.28	31.01	0.94	9.13	111	0.30	0.01	0.03	0.26	2.69
MNF09	N06	08-12-92	0905	9.80	11.29	35.58	23.85	1.19	31.31	0.98	10.17	113	0.11	0.00	0.06	0.31	2.60
MNF09	N06	08-12-92	0903	20.15	6.74	32.06	24.85	3.09	31.70	1.11	10.08	101	0.11	0.09	0.63	0.48	2.14
MNF09	N06	08-12-92	0900	28.04	5.71	31.19	24.97	1.19	31.69	0.74	9.41	92	0.35	0.40	3.79	0.63	4.23
MNF09	N06	08-12-92	0857	46.46	5.18	30.82	25.10	0.63	31.77	0.79	9.02	88	0.11	0.11	5.26	0.60	6.85
MNF09	N07P	08-12-92	0836	1.15	15.57	39.07	22.81	3.93	31.06	1.17	9.12	111	0.26	0.01	0.02	0.27	1.91
MNF09	N07P	08-12-92	0833	6.33	14.72	38.38	23.05	1.69	31.13	1.21	9.27	111	0.40	0.01	0.05	0.33	2.33
MNF09	N07P	08-12-92	0831	16.61	7.01	32.25	24.79	2.11	31.66	0.97	10.37	105	1.27	0.04	0.23	0.42	2.72
MNF09	N07P	08-12-92	0828	31.34	5.49	31.09	25.07	0.81	31.78	0.74	9.17	90	1.94	0.36	4.86	0.75	5.02
MNF09	N07P	08-12-92	0825	47.05	5.23	30.90	25.12	0.87	31.81	0.83	8.99	87	1.16	0.33	5.75	0.69	6.57
MNF09	N08	08-12-92	1416	1.59	16.19	39.62	22.68	0.67	31.06	1.28	9.34	115	0.12	0.01	0.01	0.30	1.91
MNF09	N08	08-12-92	1412	6.82	15.24	38.81	22.91	1.84	31.10	1.39	9.39	113	0.17	0.01	0.03	0.38	1.78
MNF09	N08	08-12-92	1410	14.28	8.17	33.11	24.53	2.33	31.53	0.97	9.91	103	0.13	0.01	0.40	0.42	3.47
MNF09	N08	08-12-92	1408	19.96	6.48	31.78	24.83	1.09	31.63	0.77	9.49	95	0.16	0.11	2.75	0.54	5.30
MNF09	N08	08-12-92	1406	25.57	6.38	31.72	24.86	1.17	31.65	0.76	9.56	95	1.07	0.30	3.01	0.67	5.31
MNF09	N09	08-12-92	1347	1.18	16.08	39.56	22.73	0.91	31.10	1.58	9.59	118	0.10	0.02	0.01	0.35	1.56
MNF09	N09	08-12-92	1344	5.07	13.65	37.52	23.32	1.80	31.20	1.44	9.92	116	0.21	0.02	0.09	0.46	2.36
MNF09	N09	08-12-92	1342	9.57	9.34	34.04	24.29	2.51	31.46	1.04	10.17	109	0.10	0.03	0.07	0.40	2.52
MNF09	N09	08-12-92	1339	19.40	6.45	31.75	24.83	0.99	31.62	0.82	9.32	93	1.35	0.32	2.98	0.74	6.04
MNF09	N09	08-12-92	1336	31.09	6.37	31.69	24.85	1.10	31.63	0.87	9.29	93	1.28	0.33	3.21	0.73	6.66
MNF09	N10P	08-12-92	1315	1.10	15.11	38.64	22.90	1.37	31.04	1.86	10.12	122	0.17	0.04	0.03	0.38	1.06
MNF09	N10P	08-12-92	1313	4.42	12.31	36.32	23.57	4.54	31.18	1.83	10.03	114	0.34	0.11	0.37	0.58	2.56
MNF09	N10P	08-12-92	1311	9.09	10.97	35.31	23.92	4.61	31.32	1.41	9.68	107	0.08	0.04	0.03	0.47	3.74
MNF09	N10P	08-12-92	1308	14.23	7.85	32.84	24.57	1.63	31.53	1.00	9.32	96	1.20	0.21	1.71	0.64	5.42
MNF09	N10P	08-12-92	1306	20.96	6.59	31.84	24.80	1.20	31.61	1.02	9.41	94	1.61	0.32	2.93	0.76	6.87
MNF09	N11	08-12-92	1251	1.45	15.19	38.70	22.88	2.65	31.04	1.75	10.14	122	0.12	0.04	0.01	0.41	1.36
MNF09	N11	08-12-92	1249	3.65	13.84	37.48	23.14	5.50	31.02	2.42	10.81	127	0.14	0.04	0.02	0.39	1.11
MNF09	N11	08-12-92	1246	6.08	12.95	36.75	23.35	7.88	31.05	2.10	9.79	113	0.47	0.15	0.46	0.58	2.33

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

Event	Station	Date	Time (EST)	Depth (M)	Temp (C)	Cond (mmhos/cm)	Sigma t	Flu (ug/L)	Sal (PSU)	Beam (1/M)	DO (mg/L)	Oxy Sat (%)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SIO4 (uM)
MNF09	N11	08-12-92	1244	15.55	7.91	32.87	24.54	1.62	31.50	0.99	9.01	93	0.11	0.04	0.02	0.36	6.17
MNF09	N11	08-12-92	1241	27.71	6.57	31.82	24.79	1.12	31.59	1.05	9.2	92	0.13	0.06	0.01	0.38	7.45
MNF09	N12	08-12-92	1226	1.52	16.09	39.46	22.66	0.79	31.00	1.56	9.56	117	0.10	0.04	0.02	0.34	1.33
MNF09	N12	08-12-92	1224	5.94	11.42	35.64	23.80	5.45	31.27	1.68	9.83	110	0.09	0.03	0.02	0.48	2.70
MNF09	N12	08-12-92	1221	9.88	9.34	34.02	24.28	2.32	31.44	1.00	10.14	108	0.09	0.03	0.01	0.40	3.08
MNF09	N12	08-12-92	1219	18.32	7.64	32.68	24.62	2.09	31.55	0.92	10.14	104	0.08	0.03	0.00	0.43	4.02
MNF09	N13	08-12-92	1629	1.59	16.42	39.81	22.62	0.42	31.05	1.37	9.39	116	0.12	0.03	0.04	0.35	1.64
MNF09	N13	08-12-92	1626	5.17	15.83	39.29	22.75	2.52	31.05	1.48	9.63	118	0.13	0.03	0.05	0.36	1.39
MNF09	N13	08-12-92	1624	10.81	9.48	34.14	24.26	2.36	31.44	1.02	10.47	112	0.17	0.04	0.04	0.43	2.63
MNF09	N13	08-12-92	1621	17.72	7.46	32.54	24.65	1.85	31.56	0.87	9.8	100	0.46	0.19	1.29	0.54	3.87
MNF09	N13	08-12-92	1619	26.26	6.28	31.62	24.86	1.07	31.64	0.86	9.43	94	1.72	0.35	3.33	0.76	6.96
MNF09	N15	08-12-92	1701	1.05	15.74	39.21	22.77	0.17	31.05	1.17	9.27	113	0.11	0.02	0.00	0.30	1.93
MNF09	N15	08-12-92	1659	6.51	11.06	35.38	23.90	1.21	31.31	1.00	10.35	115	0.12	0.02	0.04	0.33	2.88
MNF09	N15	08-12-92	1656	15.78	8.40	33.31	24.49	2.51	31.53	1.05	10.69	112	0.17	0.03	0.00	0.37	2.35
MNF09	N15	08-12-92	1653	26.75	6.34	31.66	24.85	1.08	31.63	0.76	9.29	93	1.81	0.37	3.10	0.73	5.97
MNF09	N15	08-12-92	1651	38.21	5.78	31.26	24.97	0.81	31.70	0.77	9.11	90	1.91	0.41	4.26	0.80	6.85
MNF09	N16P	08-12-92	1515	1.13	15.77	39.23	22.77	0.24	31.05	1.10	9.21	112	0.11	0.03	0.04	0.31	2.04
MNF09	N16P	08-12-92	1513	8.16	10.30	34.78	24.07	1.22	31.37	0.99	10.44	114	0.20	0.02	0.06	0.37	2.88
MNF09	N16P	08-12-92	1511	15.98	7.71	32.73	24.60	2.52	31.54	1.02	10.12	104	0.49	0.16	1.08	0.54	3.82
MNF09	N16P	08-12-92	1508	26.40	6.24	31.59	24.87	1.00	31.64	0.76	9.49	94	1.45	0.32	2.83	0.68	4.90
MNF09	N16P	08-12-92	1505	39.24	5.79	31.28	24.98	0.71	31.71	0.76	9.25	91	1.83	0.38	4.12	0.76	6.24
MNF09	N17	08-12-92	1452	1.20	15.85	39.32	22.76	0.39	31.07	1.17	9.41	115	0.10	0.02	0.05	0.34	1.87
MNF09	N17	08-12-92	1450	6.67	14.01	37.81	23.23	1.72	31.17	1.33	9.91	117	0.11	0.02	0.04	0.39	1.97
MNF09	N17	08-12-92	1447	12.61	8.87	33.66	24.38	2.59	31.47	1.04	10.42	110	0.18	0.06	0.26	0.45	3.32
MNF09	N17	08-12-92	1444	26.36	6.65	31.91	24.80	1.09	31.62	0.80	9.56	96	0.17	0.05	0.25	0.38	4.59
MNF09	N17	08-12-92	1440	35.76	6.08	31.48	24.91	0.97	31.66	0.76	9.35	93	1.37	0.36	3.64	0.74	5.77
MNF09	N18	08-12-92	1740	1.43	16.02	39.47	22.73	2.13	31.07	1.43	9.65	118	0.12	0.04	0.03	0.40	1.65
MNF09	N18	08-12-92	1738	6.00	14.97	38.62	23.00	2.19	31.14	1.39	9.67	116	0.12	0.03	0.02	0.38	1.68
MNF09	N18	08-12-92	1735	11.86	8.86	33.66	24.39	2.75	31.49	1.08	10.33	109	0.30	0.07	0.31	0.48	3.06
MNF09	N18	08-12-92	1733	17.42	7.00	32.18	24.74	1.43	31.60	0.85	9.71	98	0.75	0.27	2.08	0.61	4.66
MNF09	N18	08-12-92	1731	22.80	6.71	31.96	24.79	1.33	31.62	0.83	9.5	96	0.84	0.28	2.40	0.64	5.13
MNF09	N19	08-12-92	1805	1.72	16.35	39.83	22.69	2.61	31.13	1.49	9.6	119	0.15	0.02	0.06	0.42	1.56
MNF09	N19	08-12-92	1803	4.54	15.31	38.90	22.91	3.02	31.11	1.54	9.79	118	0.10	0.03	0.02	0.42	1.53
MNF09	N19	08-12-92	1801	8.69	11.99	36.07	23.64	7.08	31.20	1.86	10.05	113	0.10	0.04	0.02	0.50	2.76
MNF09	N19	08-12-92	1758	14.95	8.17	33.12	24.53	2.18	31.54	0.94	10	104	0.10	0.05	0.43	0.42	3.32
MNF09	N19	08-12-92	1756	20.07	6.63	31.89	24.81	1.28	31.62	0.88	9.56	96	1.28	0.30	2.96	0.71	6.67
MNF09	N20P	08-12-92	1606	1.29	16.55	39.99	22.63	0.37	31.10	1.39	9.28	115	0.13	0.03	0.00	0.41	1.66
MNF09	N20P	08-12-92	1604	4.55	16.03	39.50	22.73	2.14	31.08	1.44	9.67	119	0.11	0.03	0.00	0.39	1.57
MNF09	N20P	08-12-92	1602	8.88	12.31	36.33	23.57	8.05	31.18	2.03	10.7	122	0.19	0.04	0.01	0.46	1.47
MNF09	N20P	08-12-92	1559	18.14	6.90	32.09	24.75	1.43	31.59	0.84	9.43	95	0.11	0.25	1.88	0.55	5.01
MNF09	N20P	08-12-92	1557	25.77	6.37	31.69	24.85	0.89	31.63	0.81	9.55	95	0.83	0.31	2.77	0.66	5.79
MNF09	N21	08-12-92	1544	1.42	16.05	39.49	22.71	0.17	31.06	1.29	9.34	115	0.11	0.02	0.01	0.34	1.51
MNF09	N21	08-12-92	1541	6.13	15.31	38.88	22.90	1.89	31.10	1.36	9.56	116	0.17	0.02	0.02	0.39	1.62
MNF09	N21	08-12-92	1539	12.08	8.38	33.27	24.48	2.84	31.51	1.04	10.25	107	0.15	0.08	0.31	0.47	3.37
MNF09	N21	08-12-92	1536	18.67	6.92	32.12	24.75	1.34	31.60	0.81	9.49	96	1.11	0.27	2.09	0.66	4.69
MNF09	N21	08-12-92	1534	25.98	6.30	31.65	24.87	1.07	31.65	0.81	9.53	95	1.14	0.32	2.90	0.71	5.73

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Table A-2. Chemical and biological parameters at two depths of bioproductivity stations and special station f25 (early April and June 1992)

Event	Station	Date	Time (EST)	Depth (M)	Rep	Chl A (ug/L)	Phaeo. (ug/L)	DOC (uM)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
MFF03	F01P	04-07-92	0805	2.06	1	0.29	0.68	118.00	29.58	4.29	10.31	0.40	1.57
MFF03	F01P	04-07-92	0805	2.06	2	0.26	0.77	120.00	21.50		10.09	0.37	1.67
MFF03	F01P	04-07-92	0803	10.42	1	0.36	0.91	113.00	29.67	4.21	15.78	0.51	1.93
MFF03	F01P	04-07-92	0803	10.42	2	0.25	1.20	115.00	30.58	4.07	15.76	0.51	2.45
MFF03	F02P	04-07-92	0943	1.69	1	1.27	0.62	98.00			8.78	0.64	1.13
MFF03	F02P	04-07-92	0943	1.69	2	1.32	0.62	149.00			9.25	0.69	1.39
MFF03	F02P	04-07-92	1037	1.69	1	0.57	0.78	108.00	28.00	5.79	12.40	0.60	1.35
MFF03	F02P	04-07-92	1037	1.69	2	0.52	0.78	114.00	26.92	5.00	14.18	0.61	2.54
MFF03	F02P	04-07-92	1035	9.67	1	1.37	0.86	122.00	42.75	6.29	8.50	0.52	2.24
MFF03	F02P	04-07-92	1035	9.67	2	1.27	1.02	236.00	36.75	5.36	10.51	0.63	2.31
MFF03	F02P	04-07-92	0941	13.56	1	0.79	1.06	938.00			8.27	0.53	2.41
MFF03	F02P	04-07-92	0941	13.56	2	1.14	0.97	165.00			12.21	0.72	1.83
MFF03	F13P	04-08-92	0843	1.80	1	1.67	0.96	89.00	31.25	5.43	11.47	0.42	1.85
MFF03	F13P	04-08-92	0843	1.80	2	1.58	0.88	109.00	23.25	3.71	11.17	0.42	0.86
MFF03	F13P	04-08-92	0840	7.36	1	1.81	0.79	139.00	31.17	5.71	8.78	0.35	1.67
MFF03	F13P	04-08-92	0840	7.36	2	1.80	0.83	144.00	26.83	4.64	10.13	0.36	1.32
MFF03	F23P	04-10-92	0625	1.69	1	5.24	1.69	156.00	62.42	11.29	18.70	0.82	4.47
MFF03	F23P	04-10-92	0625	1.69	2	4.82	1.80	224.00	45.83	9.86	18.04	0.83	4.00
MFF03	F23P	04-10-92	0623	10.48	1	5.13	1.82	160.00	51.17	8.64	15.77	0.66	4.17
MFF03	F23P	04-10-92	0623	10.48	2	5.40	2.01	162.00	50.25	10.07	15.85	0.71	4.60
MFF03	F25	04-08-92	1833	1.70	1	3.95	2.29	126.00	41.25	4.21	12.48	0.98	3.48
MFF03	F25	04-08-92	1833	1.70	2	4.07	2.53	134.00	40.00	5.57	10.18	0.55	3.44
MFF03	F25	04-08-92	1814	1.78	1	3.51	2.07	125.00	41.17	5.36	9.31	0.60	3.45
MFF03	F25	04-08-92	1814	1.78	2	3.46	2.13	129.00	44.75	5.00	12.25	0.71	3.63
MFF03	F25	04-08-92	1813	5.44	1	2.62	1.91	130.00	45.92	3.21	10.43	0.71	1.69
MFF03	F25	04-08-92	1813	5.44	2	3.01	1.63	132.00	49.17	3.71	10.86	0.72	2.91
MFF03	F25	04-08-92	1832	5.97	1	3.81	2.58	110.00	47.83	3.36	8.92	0.61	2.77
MFF03	F25	04-08-92	1832	5.97	2	3.63	2.53	108.00	47.33	5.07	10.33	0.68	4.12
MFF03	N01P	04-12-92	0914	1.97	1	0.80	0.59	710.00	12.92		10.93	0.38	2.77
MFF03	N01P	04-12-92	0914	1.97	2	0.74	0.76	714.00	15.25		12.06	0.40	1.24
MFF03	N01P	04-12-92	0913	16.72	1	1.31	0.82	110.00	19.33	2.50	15.88	0.52	3.19
MFF03	N01P	04-12-92	0913	16.72	2	1.18	0.81	209.00	17.00		12.06	0.50	4.18
MFF03	N04P	04-10-92	1036	1.59	1	0.28	1.21	104.00	12.92		8.54	0.42	1.34
MFF03	N04P	04-10-92	1036	1.59	2	0.45	1.07	98.00	6.08	4.36	11.07	0.46	1.04
MFF03	N04P	04-10-92	1031	37.86	1	5.12	1.68	118.00	31.92	3.64	12.05	0.71	2.02
MFF03	N04P	04-10-92	1031	37.86	2	5.25	1.48	110.00	27.50	2.29	13.46	0.70	6.91
MFF03	N07P	04-08-92	1136	5.36	1	0.88	1.14	111.00	68.17	5.79	8.29	0.39	1.02
MFF03	N07P	04-08-92	1136	5.36	2	0.76	1.17	122.00	17.25		8.61	0.37	0.76
MFF03	N07P	04-08-92	1133	25.86	1	11.12	-1.60	114.00	49.92	9.79	13.03	0.69	1.06
MFF03	N07P	04-08-92	1133	25.86	2	6.84	1.74	108.00	48.92		12.20	0.67	2.69
MFF03	N10P	04-08-92	1007	3.22	1	2.42	1.47	127.00	42.75	8.07	10.98	0.53	2.80
MFF03	N10P	04-08-92	1007	3.22	2	3.09	1.41	120.00	45.50	6.07	13.76	0.60	2.78
MFF03	N10P	04-08-92	1003	13.30	1	2.14	1.39	133.00	34.42	7.36	9.28	0.47	2.41
MFF03	N10P	04-08-92	1003	13.30	2	2.52	1.36	159.00	30.00	4.29	9.57	0.46	
MFF03	N16P	04-10-92	0929	1.74	1	0.87	1.23	96.00	9.25		6.25	0.32	1.69
MFF03	N16P	04-10-92	0929	1.74	2	0.74	1.10	151.00	10.83		8.98	0.35	1.38
MFF03	N16P	04-10-92	0924	25.70	1	5.85	1.74	117.00	31.33	8.36	9.88	0.57	4.72

Table A-2. Chemical and biological parameters at two depths of bioproductivity stations and special station f25 (early April and June 1992)

Event	Station	Date	Time (EST)	Depth (M)	Rep	Chl A (ug/L)	Phaeo. (ug/L)	DOC (uM)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
MFF03	N16P	04-10-92	0924	25.70	2	5.68	2.00	121.00	28.92	9.86	7.99	0.60	2.86
MFF03	N20P	04-10-92	0817	1.47	1	0.76	1.26	99.00	37.92		10.49	0.41	1.98
MFF03	N20P	04-10-92	0817	1.47	2	0.84	1.19	117.00	23.50		11.58	0.38	
MFF03	N20P	04-10-92	0811	25.02	1	1.11	0.64	221.00	218.92	12.71	10.43	0.48	2.22
MFF03	N20P	04-10-92	0811	25.02	2	1.31	0.56	219.00	34.92		8.94	0.49	2.70
MFF04	F01P	06-22-92	1457	1.40	1	0.42	0.29	172.00	10.92	0.93	8.16	0.28	0.85
MFF04	F01P	06-22-92	1457	1.40	2	0.30	0.29	166.00	11.83	1.00	8.19	0.33	0.45
MFF04	F01P	06-22-92	1453	18.01	1	6.26	0.90	125.00	51.58	7.07	7.82	0.57	3.31
MFF04	F01P	06-22-92	1453	18.01	2	6.46	0.96	117.00	32.58	5.50	10.87	0.64	3.31
MFF04	F02P	06-22-92	1135	1.74	1	0.37	0.21	122.00	13.25		9.13	0.34	1.48
MFF04	F02P	06-22-92	1135	1.74	2	0.27	0.21	122.00	13.17		9.79	0.34	0.73
MFF04	F02P	06-22-92	1206	1.78	1	0.38	0.26	114.00	10.75		7.78	0.28	0.26
MFF04	F02P	06-22-92	1206	1.78	2	0.39	0.21	106.00	7.42	0.36	8.02	0.29	0.73
MFF04	F02P	06-22-92	1129	22.29	1	7.28	1.01	107.00	47.17	6.36	12.59	0.58	3.29
MFF04	F02P	06-22-92	1129	22.29	2	8.32	0.80	107.00	50.33	7.93	12.12	0.62	3.77
MFF04	F02P	06-22-92	1200	22.45	1	8.89	0.13	107.00	61.33	9.36	8.20	0.50	3.04
MFF04	F02P	06-22-92	1200	22.45	2	7.42	1.89	116.00	56.33	8.71	8.11	0.50	4.11
MFF04	F13P	06-23-92	1008	2.32	1	3.53	1.58	118.00	25.42	3.43	8.82	0.48	1.81
MFF04	F13P	06-23-92	1008	2.32	2	3.29	1.55	116.00	24.42	3.21	10.42	0.58	1.55
MFF04	F13P	06-23-92	1005	8.91	1	5.69	2.10	115.00	23.00	3.21	8.44	0.51	2.41
MFF04	F13P	06-23-92	1005	8.91	2	5.69	1.91	113.00	25.08	3.64	8.95	0.50	2.71
MFF04	F23P	06-24-92	1212	1.70	1	4.57	2.02	128.00	34.42	5.14	11.95	0.64	2.46
MFF04	F23P	06-24-92	1212	1.70	2	6.07	2.42	134.00	33.83	5.29	11.93	0.93	
MFF04	F23P	06-24-92	1209	10.56	1	3.38	1.62	116.00	26.50	3.71	11.08	1.42	
MFF04	F23P	06-24-92	1209	10.56	2	3.54	2.02	118.00	25.83	3.50	11.95	0.74	
MFF04	F25	06-23-92	1331	1.65	1	4.60	1.40	118.00	25.50	3.21			1.73
MFF04	F25	06-23-92	1331	1.65	2	4.86	1.55	118.00	24.58	4.14			1.71
MFF04	F25	06-23-92	1313	1.85	1	3.90	1.45	116.00	36.08	4.43	9.16	0.53	2.00
MFF04	F25	06-23-92	1313	1.85	2	3.97	1.37	115.00	24.58	3.43	9.16	0.51	1.78
MFF04	F25	06-23-92	1310	7.70	1	4.59	1.78	108.00	17.92	2.29	10.31	0.59	1.82
MFF04	F25	06-23-92	1310	7.70	2	4.34	1.73	116.00	24.42	3.21	9.91	0.53	0.41
MFF04	F25	06-23-92	1328	7.72	1	3.69	1.63	118.00	23.83	3.00			3.70
MFF04	F25	06-23-92	1328	7.72	2	4.05	1.37	117.00	19.58	3.43			1.36
MFF04	N01P	06-24-92	0719	2.17	1	3.72	0.96	110.00	16.25	2.29	8.02	0.25	0.84
MFF04	N01P	06-24-92	0719	2.17	2	3.69	0.94	108.00	15.00	2.00	8.94	0.37	1.73
MFF04	N01P	06-24-92	0715	18.32	1	1.64	0.78	131.00	12.67	1.64	9.88	0.40	1.34
MFF04	N01P	06-24-92	0715	18.32	2	1.55	0.94	130.00	22.67	4.07	11.54		0.93
MFF04	N04P	06-24-92	0820	1.84	1	0.75	1.06	103.00	10.67	1.64	7.45		0.50
MFF04	N04P	06-24-92	0820	1.84	2	0.73	1.19	102.00	9.92	1.07	6.41	0.47	0.54
MFF04	N04P	06-24-92	0817	15.02	1	0.92	0.60	87.00	11.17	2.64	8.29	0.41	0.64
MFF04	N04P	06-24-92	0817	15.02	2	0.86	0.49	93.00	8.25	2.00	7.89	0.38	1.92
MFF04	N07P	06-23-92	1111	2.24	1	0.49	0.58	99.00	11.42	2.36	12.75	0.77	1.39
MFF04	N07P	06-23-92	1111	2.24	2	0.54	0.85	96.00	17.58	3.00	11.95	0.73	0.91
MFF04	N07P	06-23-92	1108	13.65	1	0.29	0.48	82.00	4.50		6.73	0.30	0.46
MFF04	N07P	06-23-92	1108	13.65	2	0.26	0.54	89.00	5.25	1.64	7.04	0.33	0.25
MFF04	N10P	06-23-92	1210	1.33	1	5.99	1.43	117.00	31.50	5.29	13.26	0.55	2.17
MFF04	N10P	06-23-92	1210	1.33	2	6.30	1.84	129.00	26.67	5.14	8.25	0.57	2.51

Table A-2. Chemical and biological parameters at two depths of bioproductivity stations and special station f25 (early April and June 1992)

Event	Station	Date	Time (EST)	Depth (M)	Rep	Chl A (ug/L)	Phaeo. (ug/L)	DOC (uM)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
MFF04	N10P	06-23-92	1206	8.83	1	6.20	1.48	105.00	29.00	5.71	7.95	0.52	1.89
MFF04	N10P	06-23-92	1206	8.83	2	6.64	1.55	105.00	36.75	7.43	7.80	0.48	1.90
MFF04	N16P	06-24-92	0900	1.96	1	0.67	0.76	103.00	11.67	2.64	10.27	0.31	1.30
MFF04	N16P	06-24-92	0900	1.96	2	0.70	0.70	100.00	12.75	2.64	10.43	0.32	0.80
MFF04	N16P	06-24-92	0857	14.45	1	1.52	0.74	94.00	9.50	2.43	9.05	0.46	1.31
MFF04	N16P	06-24-92	0857	14.45	2	1.46	0.71	92.00	7.67	2.00	9.05	0.38	0.86
MFF04	N20P	06-24-92	0944	1.46	1	0.82	0.47	99.00	13.33	2.57	9.74	0.45	0.88
MFF04	N20P	06-24-92	0944	1.46	2	0.87	0.43	103.00	15.17	4.64	14.32	0.35	0.58
MFF04	N20P	06-24-92	0939	12.40	1	4.20	1.77	92.00	26.08	8.36	10.57	0.66	1.58
MFF04	N20P	06-24-92	0939	12.40	2	4.74	1.71	96.00	16.92	3.57	11.45	0.66	1.36

00026

## APPENDIX A

### STATION DATA TABLES AND INSTRUMENT CALIBRATION DATA

#### Part 2

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

Values from individual analytical replicates from chlorophyll ( $n=2$ ) and dissolved oxygen determinations ( $n=2$ ) were used to post-calibrate *in situ* sensor readings, where the CTD value is regarded as dependent on the bottle value. Data not included in the regression are indicated in the tables summarizing the results of regression analyses for each survey and parameter. For MFF03, 3 samples were not used in the regression. Two of these were replicates of a sample giving a concentration far outside the range for other samples and these were discarded for this reason. The other was an outlier that unduly influenced the regression slope. For the same cruise (MFF03), the two DO samples were not used in the regression. These were replicates from one bottle. All regressions were forced through zero; the regression slope was similar to the mean CTD/chlorophyll ratio even in the case for nearfield cruises where only a few samples were available for calibration.

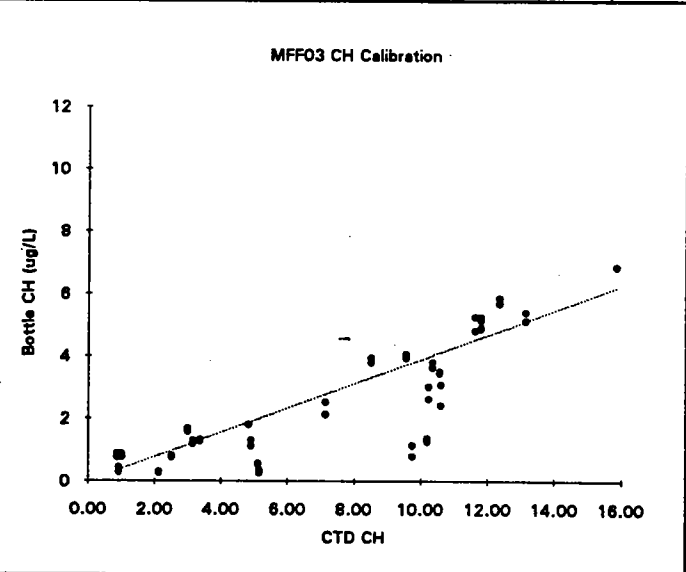
We noted that the calibration changed from winter through spring but was similar throughout the summer. All chlorophyll calibrations are given, then followed by all dissolved oxygen calibrations. The sequence of surveys, coded as follows, is:

MFF03 = early April combined survey  
MFF04 = June combined survey  
MNF04 = late April nearfield survey  
MNF05 = May nearfield survey  
MNF07 = mid-July nearfield survey  
MNF08 = late July nearfield survey  
MNF09 = mid-August nearfield survey.

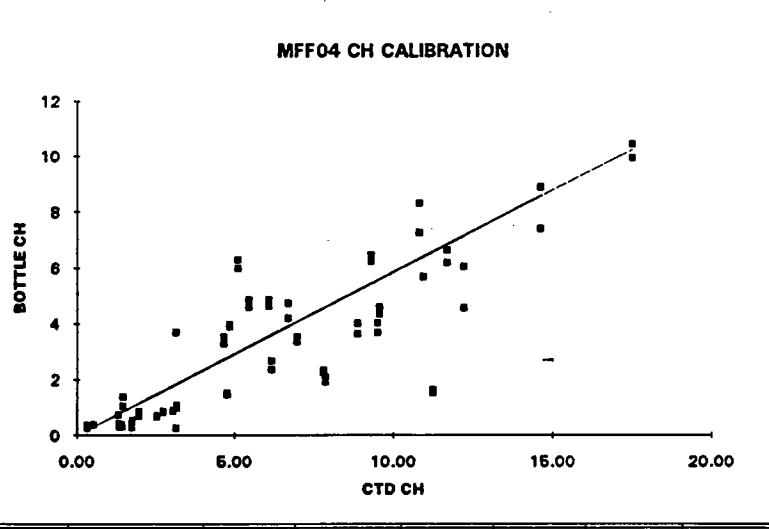
Note that no dissolved oxygen titration data were available for MNF05 (May). The calibration regression for MNF04 (late April) was used to calibrate sensor readings for the May nearfield survey; the slope of the regression for late April data was very similar to (97% of) the slope for the survey in June, suggesting relative stability over this period. Note also that the extracted chlorophyll data used for calibration for combined cruises are the same as reported in Appendix A, Table A-2. The dissolved oxygen data used for calibration for combined cruises are the same as the initials reported in Appendix E.

00027

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	EVENT ID	STAT I	Marker	CTD	Bottle	Predicted	Regression Statistics (Y is Column D, X is Column E, and Forced through zero)								
3	MFF03	N18P	470	0.97	0.97	0.34	Multiple R	0.781104							
4	MFF03	N18P	470	0.97	0.74	0.34	R Square	0.635445							
5	MFF03	N04P	470	0.94	0.28	0.37	Adjusted R Square	0.807325							
6	MFF03	N04P	470	0.94	0.45	0.37	Standard Error	2.823488							
7	MFF03	N07P	282	1.00	0.88	0.39	Observations	55							
8	MFF03	N07P	282	1.00	0.78	0.39									
9	MFF03	N20P	458	1.03	0.78	0.40									
10	MFF03	N20P	458	1.03	0.84	0.40	Analysis of Variance								
11	MFF03	F01P	34	2.13	0.29	0.83	d/	Sum of Squares	Mean Square	F	Significance F				
12	MFF03	F01P	34	2.13	0.29	0.83	Regression	1	821.880	821.880	80.326	4.833E-13			
13	MFF03	N01P	800	2.52	0.8	0.98	Residual	54	371.865	6.887					
14	MFF03	N01P	800	2.52	0.74	0.98	Total	55	893.345						
15	MFF03	F13P	201	3.00	1.67	1.17									
16	MFF03	F13P	201	3.00	1.88	1.17	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%			
17	MFF03	N01P	801	3.18	1.21	1.23									
18	MFF03	N01P	801	3.18	1.18	1.23	Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A		
19	MFF03	F02P	88	3.27	1.27	1.32	x1	2.5803	0.1181	22.0814	5.64E-20	2.3275	2.7831		
20	MFF03	F02P	88	3.27	1.32	1.32									
21	MFF03	F13P	199	4.83	1.81	1.88									
22	MFF03	F13P	199	4.83	1.9	1.88	Regression Statistics (Y is Column D, X is Column E)								
23	MFF03	N20P	454	4.80	1.11	1.81	Multiple R	0.8543							
24	MFF03	N20P	454	4.80	1.31	1.91	R Square	0.7298							
25	MFF03	F02P	81	5.11	0.57	2.00	Adjusted R Square	0.7247							
26	MFF03	F02P	81	5.11	0.52	2.00	Standard Error	2.2505							
27	MFF03	F01P	31	5.15	0.38	2.01	Observations	55							
28	MFF03	F01P	31	5.15	0.26	2.01									
29	MFF03	N10P	283	7.14	2.14	2.79									
30	MFF03	N10P	283	7.14	2.52	2.79	Analysis of Variance								
31	MFF03	F10	369	8.51	3.95	3.33	d/	Sum of Squares	Mean Square	F	Significance F				
32	MFF03	F10	369	8.51	3.8	3.33	Regression	1	724.811	724.811	143.127	1.10749E-18			
33	MFF03	F25	381	9.86	3.95	3.73	Residual	53	288.434	5.085					
34	MFF03	F25	381	9.86	4.07	3.73	Total	54	893.345						
35	MFF03	F02P	83	9.78	0.79	3.81									
36	MFF03	F02P	83	9.78	1.14	3.81	Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%			
37	MFF03	F02P	78	10.19	1.37	3.98									
38	MFF03	F02P	78	10.19	1.27	3.98	Intercept	2.2838902	0.501410482	4.51484488	3.9E-05	1.267088827	3.2883817		
39	MFF03	F25	372	10.23	2.82	4.00	x1	1.8888389	0.184588385	11.9835784	8.3E-17	1.838754883	2.2888231		
40	MFF03	F25	372	10.23	3.01	4.00									
41	MFF03	F25	380	10.35	3.81	4.04									
42	MFF03	F25	380	10.35	3.63	4.04									
43	MFF03	F25	373	10.57	3.51	4.13	CTD Average	7.04							
44	MFF03	F25	373	10.57	3.48	4.13	Bottle Average	2.43							
45	MFF03	N10P	285	10.80	2.42	4.14	Bottle/CTD Ratio	0.3448							
46	MFF03	N10P	285	10.80	3.09	4.14									
47	MFF03	F23P	443	11.63	5.24	4.54									
48	MFF03	F23P	443	11.63	4.82	4.54									
49	MFF03	N04P	478	11.81	5.12	4.61									
50	MFF03	N04P	478	11.81	4.92	4.61									
51	MFF03	N04P	478	11.81	4.87	4.61									
52	MFF03	N04P	478	11.81	5.25	4.61									
53	MFF03	N18P	467	12.34	5.85	4.82									
54	MFF03	N18P	467	12.34	5.88	4.82									
55	MFF03	F23P	441	13.13	5.13	5.13									
56	MFF03	F23P	441	13.13	5.4	5.13									
57	MFF03	N07P	280	15.88	8.84	6.18									
58	MFF03	N07P	280	15.88	11.12	not used									
59	MFF03	F21	521	26.80	188.23	not used									
60	MFF03	F21	521	26.80	143.46	not used									
61	Notes: (1) Predicted CH = 0.3906(1/Cell 118) * Col. D														
62															
63															
64															
65															
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68															
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Survey MFF04 Chlorophyll a Calibration (06/02)					
Marker	Station	Bottle CH	CTD CH	Predicted CH	
F02P	81	7.28	10.83	6.34	
F02P	81	8.32	10.83	6.34	
F02P	86	0.37	0.33	0.19	
F02P	86	0.27	0.33	0.19	
F02P	182	8.86	14.05	0.58	
F02P	182	7.42	14.05	0.58	
F02P	187	0.38	0.53	0.31	
F02P	187	0.38	0.53	0.31	
F01P	118	0.28	0.31	5.45	
F01P	118	0.40	0.31	5.45	
F01P	120	0.42	1.35	0.79	
F01P	120	0.3	1.35	0.79	
F13P	240	5.80	10.85	0.41	
F13P	248	5.80	10.85	0.41	
F13P	252	3.53	4.08	2.74	
F13P	252	3.20	4.08	2.74	
N07P	285	0.29	3.15	1.85	
N07P	285	0.28	3.15	1.85	
N07P	288	0.46	1.77	1.04	
N07P	288	0.54	1.77	1.04	
N10P	283	0.2	11.70	0.85	
N10P	283	0.84	11.70	0.85	
N10P	286	5.80	5.12	3.00	
N10P	286	0.3	5.12	3.00	
F25	295	4.50	0.58	5.81	
F25	295	4.34	0.58	5.81	
F25	297	3.8	4.85	2.94	
F25	297	3.07	4.85	2.94	
F25	303	3.89	0.51	5.57	
F25	303	4.05	0.51	5.57	
F25	305	4.8	5.47	3.20	
F25	305	4.86	5.47	3.20	
F15	329	0.95	17.53	10.27	
F15	329	10.44	17.53	10.27	
N01P	443	1.84	11.25	0.50	
N01P	443	1.55	11.25	0.50	
N01P	447	3.72	3.15	1.85	
N01P	447	3.69	3.15	1.85	
N04P	458	0.92	3.04	1.78	
N04P	458	0.86	3.04	1.78	
N04P	461	0.75	1.34	0.78	
N04P	461	0.73	1.34	0.78	
N18P	473	1.52	4.77	2.79	
N18P	473	1.48	4.77	2.79	
N18P	475	0.87	2.55	1.50	
N18P	475	0.7	2.55	1.50	
N20P	487	4.2	0.89	3.82	
N20P	487	4.74	0.89	3.82	
N20P	489	0.82	2.75	1.81	
N20P	489	0.87	2.75	1.81	
F23P	505	3.38	0.80	4.09	
F23P	505	3.54	0.80	4.09	
F23P	507	4.57	12.23	7.18	
F23P	507	6.07	12.23	7.18	
N01P	585	0.89	3.18	1.86	
N01P	585	1.08	3.18	1.86	
N01P	588	2.69	0.17	3.82	
N01P	588	2.38	0.17	3.82	
N04P	620	1.05	1.46	0.86	
N04P	620	1.38	1.46	0.86	
N04P	622	0.38	1.45	0.85	
N04P	622	0.31	1.45	0.85	
N07P	652	0.29	1.78	1.03	
N07P	652	0.44	1.78	1.03	
N10P	682	3.68	0.89	5.20	
N10P	682	4.03	0.89	5.20	
N10P	683	4.86	0.10	3.57	
N10P	683	4.86	0.10	3.57	
N18P	728	0.88	1.89	1.18	
N18P	728	0.89	1.89	1.18	
N19	752	1.83	7.87	4.81	
N19	752	2.08	7.87	4.81	
N20P	782	2.33	7.81	4.57	
N20P	782	2.27	7.81	4.57	



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	EVENT ID	STAT ID	Marker	CTD CH	Bottle CH	Perf. CH								
2	MINF04	NO4P	124	1.21	0.33	0.394								
3	MINF04	NO4P	124	1.21	0.49	0.394								
4	MINF04	N10P	41	1.66	0.49	0.508								
5	MINF04	N10P	41	1.66	0.51	0.508								
6	MINF04	N06	155	4.69	1.46	1.524								
7	MINF04	N06	155	4.69	1.57	1.524								
8														
9														
10		Average CTD	2.49											
11		Average Bottle	0.81											
12		Bottle/CTD Ratio	0.33											
13														
14														
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16														
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MINF04 CH CALIBRATION						
	Sum of Squares	Mean Square	F	Significance F	Lower 95%	Upper 95%
Regression	14.49893	14.49893	399.543	3.94732E-06		
Residual	5 0.197545	0.037509				
Total	6 14.69638					

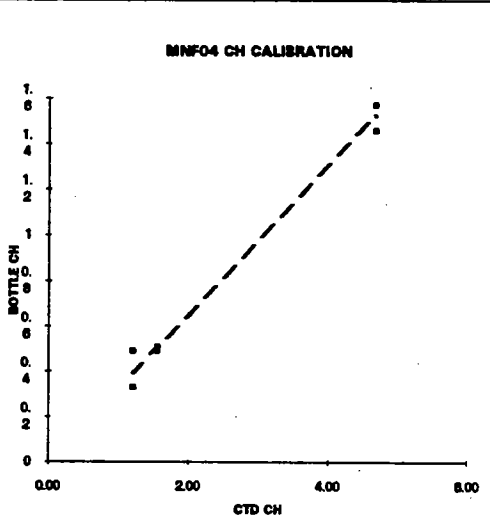
	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
Intercept	0 #N/A	#N/A	#N/A	#N/A	#N/A
x1	3.078181148	0.082993	37.08971	2.8E-08	2.864841565

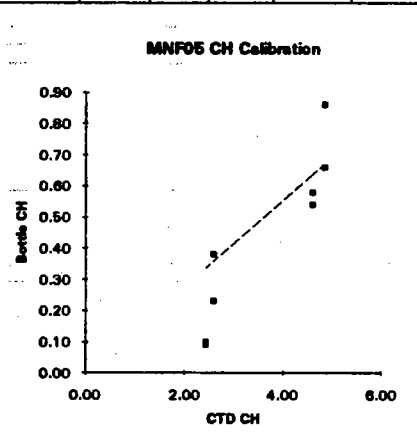
MINF04 CH CALIBRATION						
	Sum of Squares	Mean Square	F	Significance F	Lower 95%	Upper 95%
Regression	14.49888	14.49888	309.321	6.13803E-06		
Residual	4 0.187493	0.046873				
Total	5 14.68638					

	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
Intercept	-0.00555809	0.167008	-0.03328	0.97474	-0.48924883
x1	3.083131241	0.176302	17.58763	1.1E-06	2.598413484

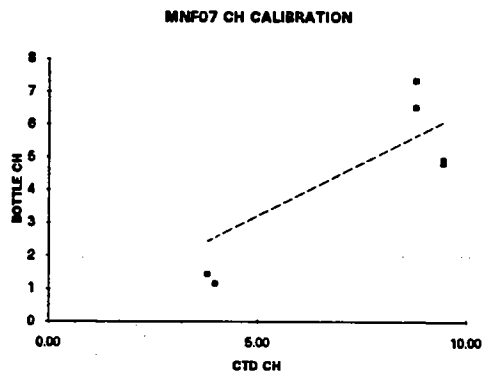


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2	EVENT ID	STAT ID	Marker	CTD CH	Bottle CH	Perd. CH		Regression Statistics						
3	MNF05	N07P	182	2.44	0.00	0.337		Multiple R	0.20708064					
4	MNF05	N07P	182	2.44	0.10	0.337		R Square	0.042874067					
5	MNF05	N04P	130	2.80	0.23	0.360		Adjusted R Square	-0.099983076					
6	MNF05	N04P	130	2.80	0.38	0.360		Standard Error	1.189878448					
7	MNF05	N10P	30	4.82	0.54	0.638		Observations	8					
8	MNF05	N10P	30	4.82	0.68	0.638								
9	MNF05	N20P	215	4.87	0.88	0.872								
10	MNF05	N20P	215	4.87	0.88	0.872		Analysis of Variance						
11								df	Sum of Squares	Mean Square	F	Significance F		
12		CTD Average	3.631					Regression	1	0.428412708	0.428412708	0.313662185	0.586773782	
13		Bottle Average	0.430					Residual	7	8.653037776	1.236148252			
14		Bottle/CTD Ratio	0.118					Total	8	9.081450484				
15														
16								Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
17								Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
18								x1	7.243008002	0.822706161	8.803026321	2.17623E-05	5.287650841	8.188426182
19														
20								Regression Statistics						
21								Multiple R	0.91780037					
22								R Square	0.841896845					
23								Adjusted R Square	0.815861838					
24								Standard Error	0.812970417					
25								Observations	8					
26								Analysis of Variance						
27								df	Sum of Squares	Mean Square	F	Significance F		
28								Regression	1	8.413618658	8.413618658	31.87370901	0.001313518	
29								Residual	6	1.578831863	0.263138649			
30								Total	7	9.992450521				
31														
32								Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%	
33								Intercept	1.927202606	0.360846372	5.30888019	0.0008824	1.074211731	2.781183279
34								x1	3.848420337	0.808452456	4.74620955	0.000770841	2.240367484	5.658473181
35														
36														
37														
38														
39														

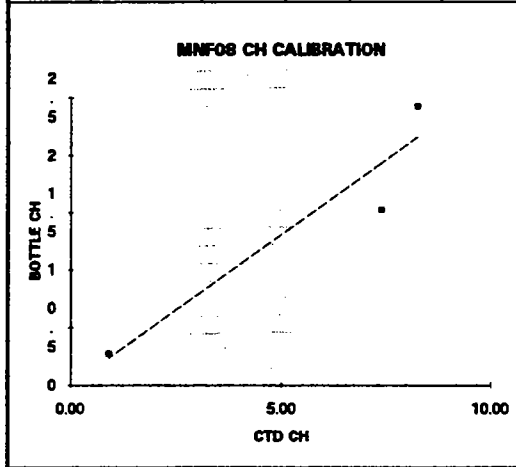


Survey MNF07 Chlorophyll a Calibration (07/15/02)

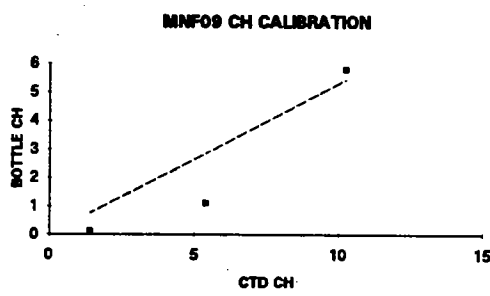
EVENT_ID	STAT_1	Marker	CTD CH	BOTTLE CH	PRED. CH	Regression Statistics						
MNF07	NDP	169	3.80	1.42	2.48							
MNF07	NDP	169	3.80	1.44	2.48	Multiple R	0.870084500					
MNF07	NDB	205	3.98	1.15	2.885	R Square	0.45005927					
MNF07	NDB	205	3.98	1.15	2.885	Adjusted R Square	0.307202127					
MNF07	NDP	113	8.80	6.54	6.885	Standard Error	2.084307743					
MNF07	NDP	113	8.80	7.34	6.885	Observations	8					
MNF07	NDG	216	8.48	4.83	6.091							
MNF07	NDG	216	8.48	4.82	6.091							
						Analysis of Variance						
						df	Sum of Squares	Mean Square	F	Significance F		
Average CTD						6510	24.88717202	24.88717202	5.728644415	0.053772105		
Average Bottle						3589	30.41037138	4.344338789				
Bottle/CTD Ratio						0.853	65.29754338					
							Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
Intercept						0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
b1						1.552799829	0.189884914	8.152155238	1.63788E-05	1.151606147	1.953663112	
						Regression Statistics						
						Multiple R	0.917579078					
						R Square	0.841951384					
						Adjusted R Square	0.815809824					
						Standard Error	1.209603844					
						Observations	8					
						Analysis of Variance						
						df	Sum of Squares	Mean Square	F	Significance F		
Regression						1	46.55784208	46.55784208	31.98299755	0.001314858		
Residual						6	8.739701334	1.456616889				
Total						7	55.29754338					
							Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
Intercept						2.939590639	0.782119006	3.857123097	0.006234887	1.074748825	4.804432454	
b1						0.992024275	0.175468252	5.653582718	0.000771801	0.562688617	1.421379934	



Survey MNFOS Chlorophyll a Calibration (7/29/92)						
EVENT ID	STAT I	Marker	CTD CH	BOTTLE CH	PRED. CH	Regression Statistics
MNFOS	N04P	197	0.92	0.27	0.24	Multiple R
MNFOS	N07P	210	7.30	1.32	1.93	0.944382493
MNFOS	N01P	99	8.27	3.42	2.18	R Square
						0.891958293
						Adjusted R Square
						0.391858293
						Standard Error
						1.320742805
						Observations
						3
						Analysis of Variance
						df
						Sum of Squares
						Mean Square
						F
						Significance F
						Regression
						1
						28.77183095
						28.77183095
						18.49425217
						0.153694911
						Residual
						2
						3.488722056
						1.744361028
						Total
						3
						32.26055272
						Coefficients
						Standard Error
						t Statistic
						P-value
						Lower 95%
						Upper 95%
						Intercept
						0
						#N/A
						#N/A
						#N/A
						#N/A
						#N/A
						#N/A
						px1
						3.922469275
						0.460110864
						8.307713586
						0.003654474
						1.842770832
						6.802167918
						Regression Statistics
						Multiple R
						0.948944291
						R Square
						0.900485298
						Adjusted R Square
						0.800900537
						Standard Error
						1.791671732
						Observations
						3
						Analysis of Variance
						df
						Sum of Squares
						Mean Square
						F
						Significance F
						Regression
						1
						29.05058512
						29.05058512
						9.049773338
						0.204308980
						Residual
						1
						3.210087584
						3.210087584
						Total
						2
						32.26055272
						Coefficients
						Standard Error
						t Statistic
						P-value
						Lower 95%
						Upper 95%
						Intercept
						0.572800571
						1.944556227
						0.294617794
						0.798052402
						-24.13491042
						25.28071158
						px1
						3.529750924
						1.173343602
						3.008284119
						0.065013364
						-11.37892924
						18.43843108



Survey MNF09 Chlorophyll a Calibration (8/12/93)						
EVENT ID	STAT 1	Marker	CTD CH	BOTTLE CH	PRED. CH	Regression Statistics
MNF09	N05	48	1.430088	0.13	0.761	
MNF09	N05	96	5.408408	1.115	2.863	Multiple R
MNF09	N12	197	10.2727	5.79	5.439	R Square
						Adjusted R Square
						Standard Error
						Observations
<b>Analysis of Variance</b>						
						df
Average CTD	5.705558					Sum of Squares
Average Bottle	2.345					Mean Square
Bottle/CTD Ratio	0.411017133					F
						Significance F
						Regression
						Residual
						Total
<b>Coefficients</b>						
						Standard Error
						t Statistic
						P-value
						Lower 95%
						Upper 95%
						Intercept
						x1
<b>Regression Statistics</b>						
						Multiple R
						R Square
						Adjusted R Square
						Standard Error
						Observations
<b>Analysis of Variance</b>						
						df
						Sum of Squares
						Mean Square
						F
						Significance F
						Regression
						Residual
						Total
<b>Coefficients</b>						
						Standard Error
						t Statistic
						P-value
						Lower 95%
						Upper 95%
						Intercept
						x1



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2	EVENT ID	STAT I	Marker	CTD DO	Bottle DO	Pred. DO		Regression Statistics						
3	MFF03	N07P	278	7.24	10.27	not used		Multiple R	0.330834117					
4	MFF03	N07P	278	7.24	11.66	not used		R Square	0.10951739					
5	MFF03	F12	101	7.35	10.39	10.06		Adjusted R Square	0.096432883					
6	MFF03	F12	101	7.35	10.13	10.06		Standard Error	0.363815327					
7	MFF03	N20P	458	7.54	11.36	10.34		Observations	72					
8	MFF03	N20P	458	7.54	11.30	10.34								
9	MFF03	N20P	458	7.54	11.33	10.34								
10	MFF03	N01P	603	7.61	11.32	10.43		Analysis of Variance						
11	MFF03	N01P	603	7.61	11.20	10.43		df	Sum of Squares	Mean Square	F	Significance F		
12	MFF03	N01P	603	7.61	11.30	10.43		Regression	1	1.155787445	1.155787445	8.732045	0.0042589	
13	MFF03	N07P	280	7.61	10.64	10.44		Residual	71	9.397873048	0.132361592			
14	MFF03	N07P	280	7.61	10.77	10.44		Total	72	10.55348049				
15	MFF03	N07P	280	7.61	10.63	10.44								
16	MFF03	N04P	473	7.68	10.15	10.54		Coefficients	Standard Error	t-Statistic	P-value	Lower 95%	Upper 95%	
17	MFF03	N04P	473	7.68	9.99	10.54		Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
18	MFF03	F04	95	7.75	11.02	10.64		x1	0.728878119	0.003832881	190.1734881	5.1E-99	0.7212338	0.738518
19	MFF03	F04	95	7.75	11.02	10.64		1/x1	1.371975256					
20	MFF03	N16P	467	7.78	10.84	10.67		Regression Statistics						
21	MFF03	N16P	467	7.78	10.84	10.67		Multiple R	0.498354839					
22	MFF03	N16P	467	7.78	11.10	10.67		R Square	0.248357545					
23	MFF03	N16P	470	7.78	11.44	10.68		Adjusted R Square	0.237818798					
24	MFF03	N16P	470	7.78	11.52	10.68		Standard Error	0.338830876					
25	MFF03	N04P	476	7.79	10.13	10.69		Observations	72					
26	MFF03	N04P	476	7.79	10.22	10.69								
27	MFF03	N04P	476	7.79	10.25	10.69								
28	MFF03	N20P	454	8.12	11.40	11.14		Analysis of Variance						
29	MFF03	N20P	454	8.12	11.47	11.14		df	Sum of Squares	Mean Square	F	Significance F		
30	MFF03	N20P	454	8.12	11.46	11.14		Regression	1	2.621031541	2.621031541	23.12939	8.395E-08	
31	MFF03	N07P	282	8.19	11.67	11.24		Residual	70	7.932426949	0.113320414			
32	MFF03	N07P	282	8.19	11.57	11.24		Total	71	10.55348049				
33	MFF03	N07P	282	8.19	11.64	11.24								
34	MFF03	F23P	443	8.22	10.88	11.28		Coefficients	Standard Error	t-Statistic	P-value	Lower 95%	Upper 95%	
35	MFF03	F23P	443	8.22	10.94	11.28		Intercept	3.489589899	0.970453481	3.5958446	0.000593	1.5540931	5.426107
36	MFF03	F23P	443	8.22	11.16	11.28		x1	0.417201482	0.088748869	4.809301987	8.23E-08	0.2441885	0.590218
37	MFF03	F13P	201	8.25	11.72	11.31								
38	MFF03	F13P	201	8.25	11.69	11.31								
39	MFF03	F13P	201	8.25	11.72	11.31								
40	MFF03	N04P	479	8.28	11.18	11.35								
41	MFF03	N04P	479	8.28	11.29	11.35								
42	MFF03	N04P	479	8.28	11.22	11.35								
43	MFF03	N04P	479	8.28	11.22	11.35		Average CTD	8.153					
44	MFF03	F01P	34	8.29	11.32	11.38		Average Bottle	11.178					
45	MFF03	F01P	34	8.29	11.34	11.38		Bottle/CTD Ratio	1.371					
46	MFF03	F01P	34	8.29	11.43	11.38								
47	MFF03	F23P	441	8.31	11.01	11.39								
48	MFF03	F23P	441	8.31	10.86	11.39								
49	MFF03	F23P	441	8.31	11.20	11.39								
50	MFF03	N01P	601	8.36	11.00	11.47								
51	MFF03	N01P	601	8.36	11.06	11.47								
52	MFF03	N01P	601	8.36	11.14	11.47								
53	MFF03	N10P	265	8.37	11.25	11.49								
54	MFF03	N10P	265	8.37	11.55	11.49								
55	MFF03	N10P	265	8.37	11.47	11.49								
56	MFF03	F13P	199	8.40	11.55	11.53								
57	MFF03	F13P	199	8.40	11.64	11.53								
58	MFF03	F13P	199	8.40	10.13	11.53								
59	MFF03	F04	91	8.43	10.76	11.57								
60	MFF03	F04	91	8.43	10.79	11.57								
61	MFF03	N04P	477	8.54	11.63	11.71								
62	MFF03	N04P	477	8.54	11.70	11.71								
63	MFF03	F02P	78	8.57	11.35	11.75								
64	MFF03	F02P	78	8.57	11.38	11.75								
65	MFF03	F02P	78	8.57	11.50	11.75								
66	MFF03	N10P	263	8.64	11.18	11.85								
67	MFF03	N10P	263	8.64	11.36	11.85								
68	MFF03	N10P	263	8.64	11.37	11.85								
69	MFF03	F02P	81	8.64	11.53	11.85								
70	MFF03	F02P	81	8.64	11.51	11.85								
71	MFF03	F02P	81	8.64	11.51	11.85								
72	MFF03	F12	105	8.64	11.97	11.85								
73	MFF03	F12	105	8.64	11.97	11.85								
74	MFF03	F01P	31	8.68	11.28	11.90								
75	MFF03	F01P	31	8.68	11.26	11.90								
76	MFF03	F01P	31	8.68	11.35	11.90								
77	MFF03	F01P	31	8.68	11.35	11.90								

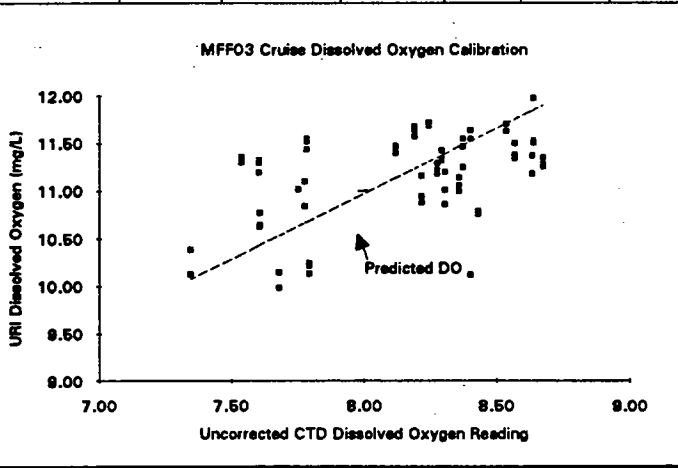
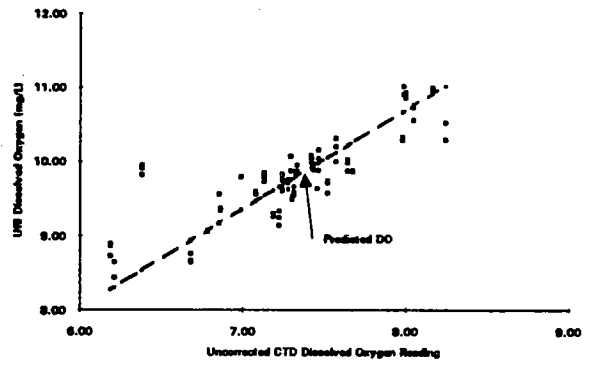
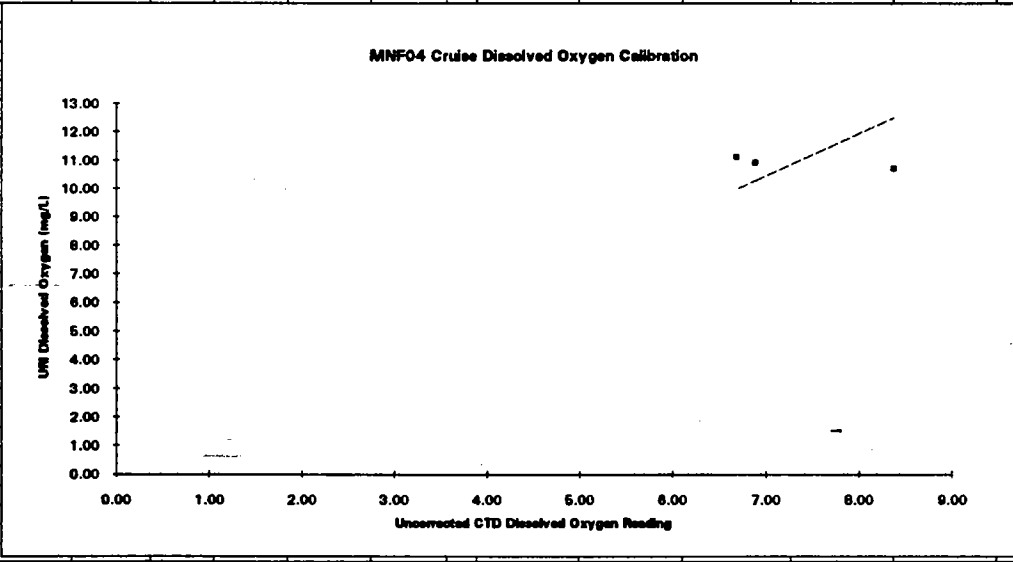


Table with columns A-N containing data for 100 MFF04 cruises. Columns include Event ID, Station ID, Marker, CTD DO, Bottle DO, Prod. DO, Regression Statistics (Multiple R, R Square, Adjusted R Square, Standard Error, Observations), Analysis of Variance (Sum of Squares, Mean Square, F, Significance F), Regression coefficients (Intercept, x1, 1/x1), and Coefficients (Standard Error, t Statistic, P-value, Lower 95%, Upper 95%).

MFF04 Cruise Dissolved Oxygen Calibration

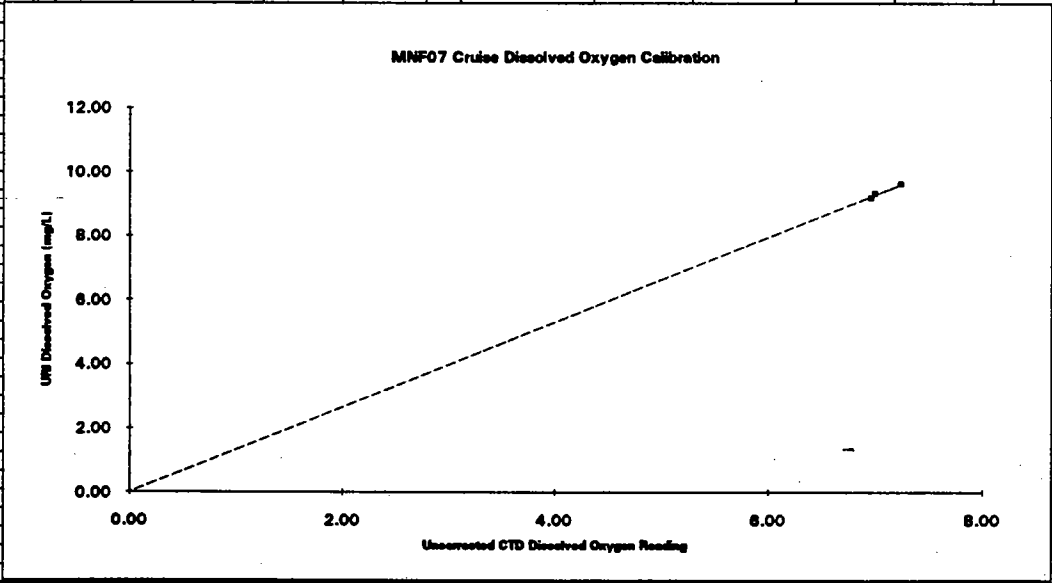


1	A	B	C	D	E	F	G	H	I	J	K	L	M	N
2	EVENT ID	STAT ID	Marker	CTD DO	Bottle DO	Fun.DO	Regression Statistics							
3	MNFM4	N10P	45	8.37	10.67	12.50								
4	MNFM4	N10P	45	8.37	10.71	12.50	Multiple R	#NUM!						
5	MNFM4	N04P	130	6.88	10.90	10.28	R Square	-0.30808804						
6	MNFM4	N04P	130	6.88	10.90	10.28	Adjusted R Squ	-0.50808804						
7	MNFM4	N20P	227	6.69	11.12	9.99	Standard Error	0.942873247						
8	MNFM4	N20P	227	6.69	11.11	9.99	Observations	6						
9														
10							Analysis of Variance							
11	Average CTD	7.315					df	Sum of Squares	Mean Square	F	Significance F			
12	Average Bottle	10.903					Regression	1	-1.041277008	-1.04127701	-1.17177416	#NUM!		
13	Bottle/CTD Ratio	1.491					Residual	5	4.443184267	0.888632861				
14							Total	6	3.401867249					
15														
16														
17							Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%		
18							Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
19							x1	0.669727436	0.035294249	18.97654026	1.38461E-06	0.579001	0.780454	
20							1/x1	1.483						
21														
22							Regression Statistics							
23														
24							Multiple R	0.909488935						
25							R Square	0.826352144						
26							Adjusted R Squ	0.78189018						
27							Standard Error	0.386399894						
28							Observations	6						
29														
30							Analysis of Variance							
31							df	Sum of Squares	Mean Square	F	Significance F			
32							Regression	1	2.807764935	2.807764935	18.90322684	0.012178		
33							Residual	4	0.594132314	0.148533078				
34							Total	5	3.401867249					
35														
36														
37							Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%		
38							Intercept	50.09293838	9.840390878	5.09054368	0.003800395	22.77158	77.4143	
39							x1	-3.92372655	0.902465741	-4.34778449	0.007374578	-6.42638	-1.41807	
40														
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**Survey MNF07 Dissolved Oxygen Calibration (07/15/92)**

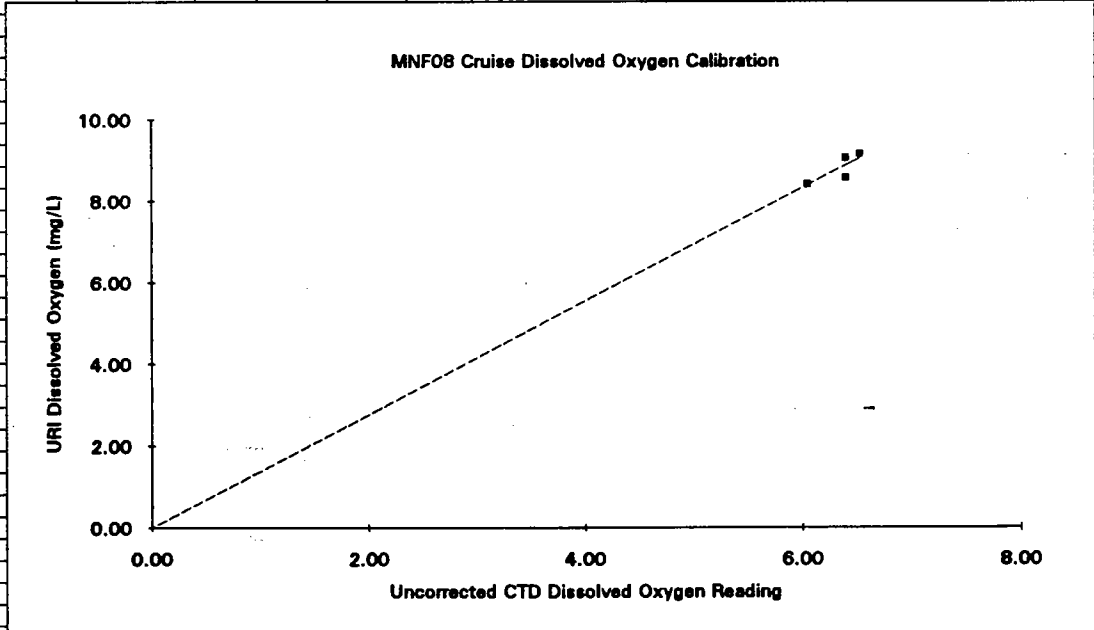
EVENT ID	STAT ID	Marker	CTD DO	Bottle DO	Predict DO	Regression Statistics							
MNF07	N04P	170	7.00	9.33	9.29	Multiple R	0.99220836						
MNF07	N04P	170	7.00	9.32	9.29	R Square	0.9825941995						
MNF07	N10P	113	8.96	9.17	9.23	Adjusted R Square	0.725941995						
MNF07	N10P	113	8.96	9.17	9.23	Standard Error	0.037043928						
MNF07	N20P	228	7.24	9.60	9.60	Observations	6						
MNF07	N20P	228	7.24	9.63	9.60								
			0	0	0	Analysis of Variance							
						df	Sum of Squares	Mean Square	F	Significance F			
	Average CTD	7.068				Regression	1	0.085680482	0.085680482	82.42380452	0.001388159		
	Average Bottle	9.372				Residual	5	0.008861225	0.001772245				
	Bottle/CTD Ratio	1.326				Total	6	0.09221707					
						Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%		
						Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
						x1	0.754129564	0.00181338	467.4220186	6.47199E-16	0.749982244	0.758276984	
						Regression Statistics							
						Multiple R	0.973138908						
						R Square	0.946999137						
						Adjusted R Square	0.933749921						
						Standard Error	0.03601332						
						Observations	6						
						Analysis of Variance							
						df	Sum of Squares	Mean Square	F	Significance F			
						Regression	1	0.087617877	0.087617877	71.47048861	0.001072506		
						Residual	4	0.00480373	0.001225933				
						Total	5	0.09221707					
						Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%		
						Intercept	0.91921348	0.727443664	1.263621537	0.262077752	-1.100496103	2.908025063	
						x1	0.656083738	0.077808118	8.454020855	0.000380181	0.440814185	0.671563308	



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**Survey MNF08 Dissolved Oxygen Calibration (07/29/92)**

EVENT ID	STAT ID	Marker	CTD DO	Bottle DO	Prod. DO	Regression Statistics						
MNF08	N10P	48	6.40	9.04	8.86	Multiple R	0.888451					
MNF08	N01P	105	6.53	9.15	8.04	R Square	0.4468268					
MNF08	N04P	157	6.40	8.55	8.86	Adjusted R Square	0.1134934					
MNF08	N07P	214	6.06	8.40	8.38	Standard Error	0.1527186					
			0		0	Observations	4					
		Average CTD	6.342			Analysis of Variance						
		Average Bottle	8.780				df	Sum of Squares	Mean Square	F	Significance F	
		Bottle/CTD Ratio	1.384									
						Regression	1	0.066517649	0.066517649	2.4232659	0.260834898	
						Residual	3	0.08988941	0.02332298			
						Total	4	0.12640649				
							Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
						Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A
						x1	0.722022	0.008891453	83.07283908	1.269E-07	0.894381844	0.7488821
						Regression Statistics						
						Multiple R	0.8103154					
						R Square	0.6568111					
						Adjusted R Square	0.4849186					
						Standard Error	0.147387					
						Observations	4					
						Analysis of Variance						
							df	Sum of Squares	Mean Square	F	Significance F	
						Regression	1	0.083052429	0.083052429	3.8242994	0.189684592	
						Residual	2	0.043434082	0.021717031			
						Total	3	0.12648649				
							Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
						Intercept	2.2912411	2.072824149	1.106371886	0.3498837	-6.62740767	11.20989
						x1	0.4613908	0.23593526	1.955581803	0.1454783	-0.55376762	1.4766388



Survey MNF09 Dissolved Oxygen Calibration (08/12/92)											
EVENT ID	STAT ID	Marker	CTD DO	Bottle DO	Prod. DO	Regression Statistics					
MNF09	ND4	84	6.95	9.19	9.11						
MNF09	ND1P	143	7.55	9.63	9.63	Multiple R	0.97833481				
MNF09	NMP	293	7.72	10.80	10.12	R Square	0.957625629				
			0		0	Adjusted R Square	0.87923429				
						Standard Error	0.87923429				
						Observations	3				
						Analysis of Variance					
			Average CTD	5.386		df	Sum of Squares	Mean Square	F	Significance F	
			Average Bottle	9.624		Regression	0.234302156	0.234302156	45.19634973	0.00000092	
			Bottle/CTD Ratio	1.748		Residual	0.012575787	0.006287894			
						Total	0.246877943				
						Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
			Intercept	0		0	N/A	N/A	N/A	N/A	N/A
			x1	0.763018702		0.88475414	368.8942331	5.53568-07	0.742543273	0.783474131	
			x2	1.511							
						Regression Statistics					
			Multiple R	0.99475861							
			R Square	0.98974864							
			Adjusted R Square	0.979953928							
			Standard Error	0.854548058							
			Observations	3							
						Analysis of Variance					
			df	Sum of Squares	Mean Square	F	Significance F				
			Regression	0.292805525	0.292805525	98.77017892	0.000000214				
			Residual	0.002974618	0.002974618						
			Total	0.295780143							
						Coefficients	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
			Intercept	-1.021168895		0.382539579	-1.796579384	0.314257665	-13.88867734	0.844334627	
			x1	0.932463457		0.89370433	9.538318315	0.888973305	-0.239357841	2.321884753	

**MNF09 Cruise Dissolved Oxygen Calibration**

Wet Dissolved Oxygen (mg/L)

Uncorrected CTD Dissolved Oxygen Reading

## APPENDIX B

### VERTICAL PROFILE DATA FROM FARFIELD AND NEARFIELD STATIONS

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

For each station there is a two-page set of profiles, with station, cruise code, date and time listed across the bottom. The first page includes panels for salinity, temperature, sigma-t, and beam attenuation. The second page has panels for dissolved oxygen, chlorophyll, and a three-panel set for irradiance. For the early April to June surveys, irradiance was measured by hand-lowering a Licor sensor. For those surveys, a tabular listing of readings is provided at the end of month's set of profiles (Tables B-1, B-2, B-3, B-4). Starting in June, a Biospherical sensor was mounted on the rosette sampling frame and integrated in the BOSS system, so continuous irradiance readings and the ratio of the deck cell to underwater cell are plotted in the station panel sets.

#### Additional Notes for Appendix B

##### All Profiles

Gaps in Profiles are due to data spikes that are flagged and not plotted.

##### Early April Profiles

There are no continuous data for the irradiance set. Table B-1 gives Licor-measured irradiance data for each 'P' station.

##### Late April Profiles

There are no continuous data for the irradiance set. Table B-2 gives Licor—measured irradiance data for each "P" station.

##### May Profiles

There are no continuous data for the irradiance set. Table B-3 gives Licor-measured irradiance data for each 'P' station.

##### June Profiles

Irradiance sets for stations F20, E22, F24 and F18 are not valid because sampling was near sunset and later.

There are no continuous data for irradiance set for nearfield stations sampled on 06/25/1992.

Due to malfunction of Royce dissolved oxygen sensor, the nearfield stations sampled on 06/25/1992 do not have dissolved oxygen data.

Table B-4 gives Licor irradiance data for each 'P' station.

##### Mid-July Profiles

No continuous data for irradiance set.

##### Late July Profiles

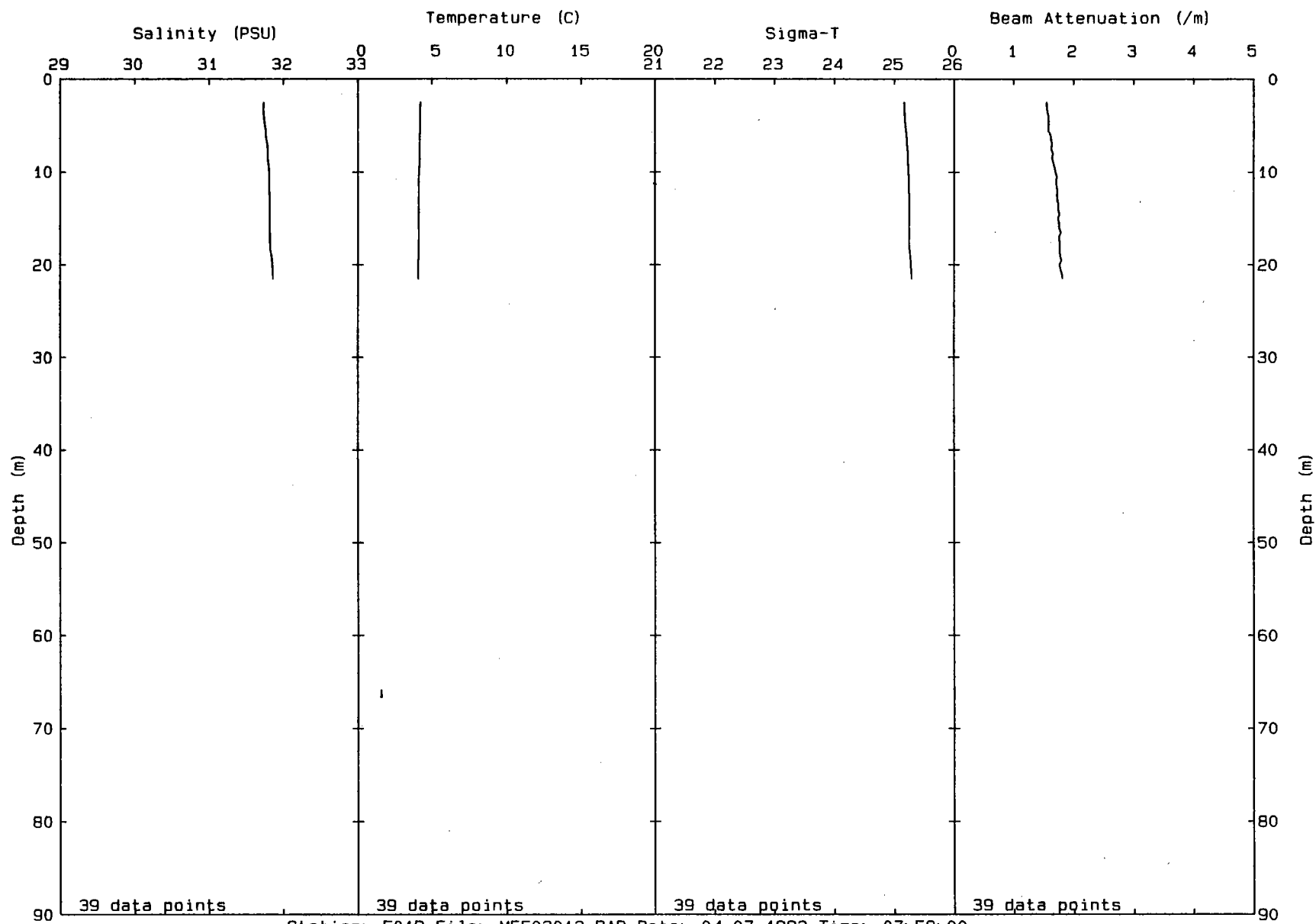
No notes

##### Mid-August Profiles

No notes

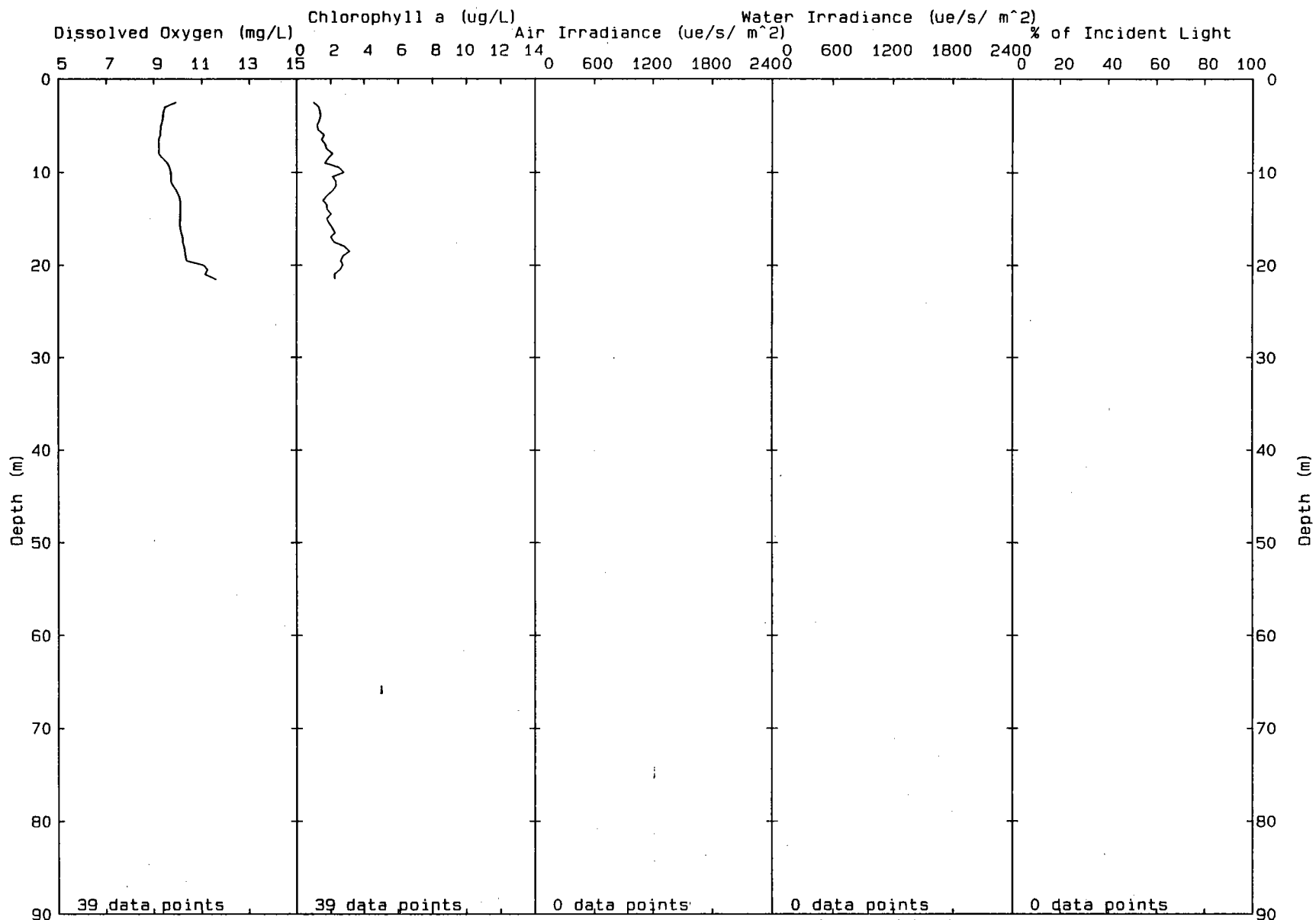
**Early April Profiles**

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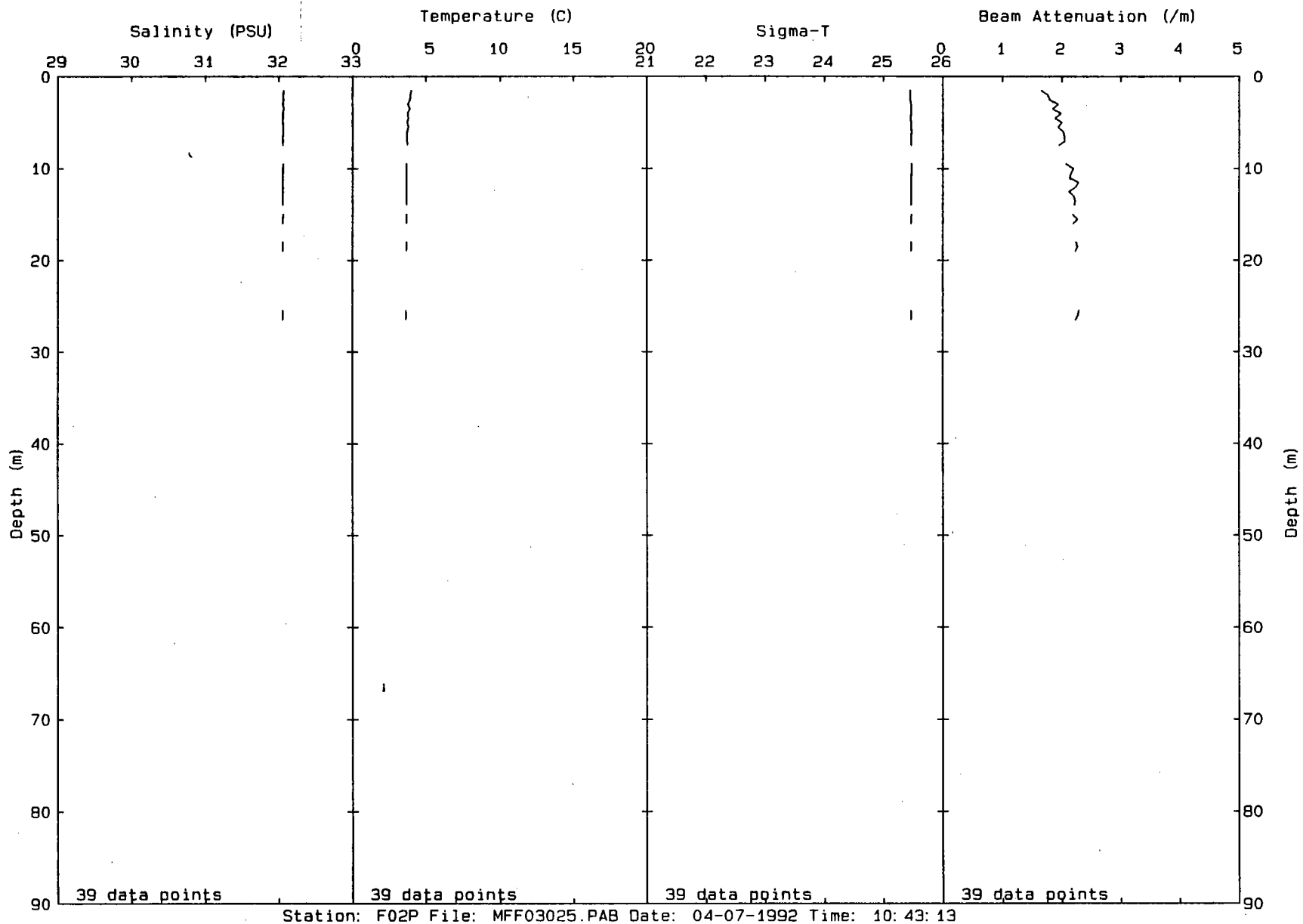
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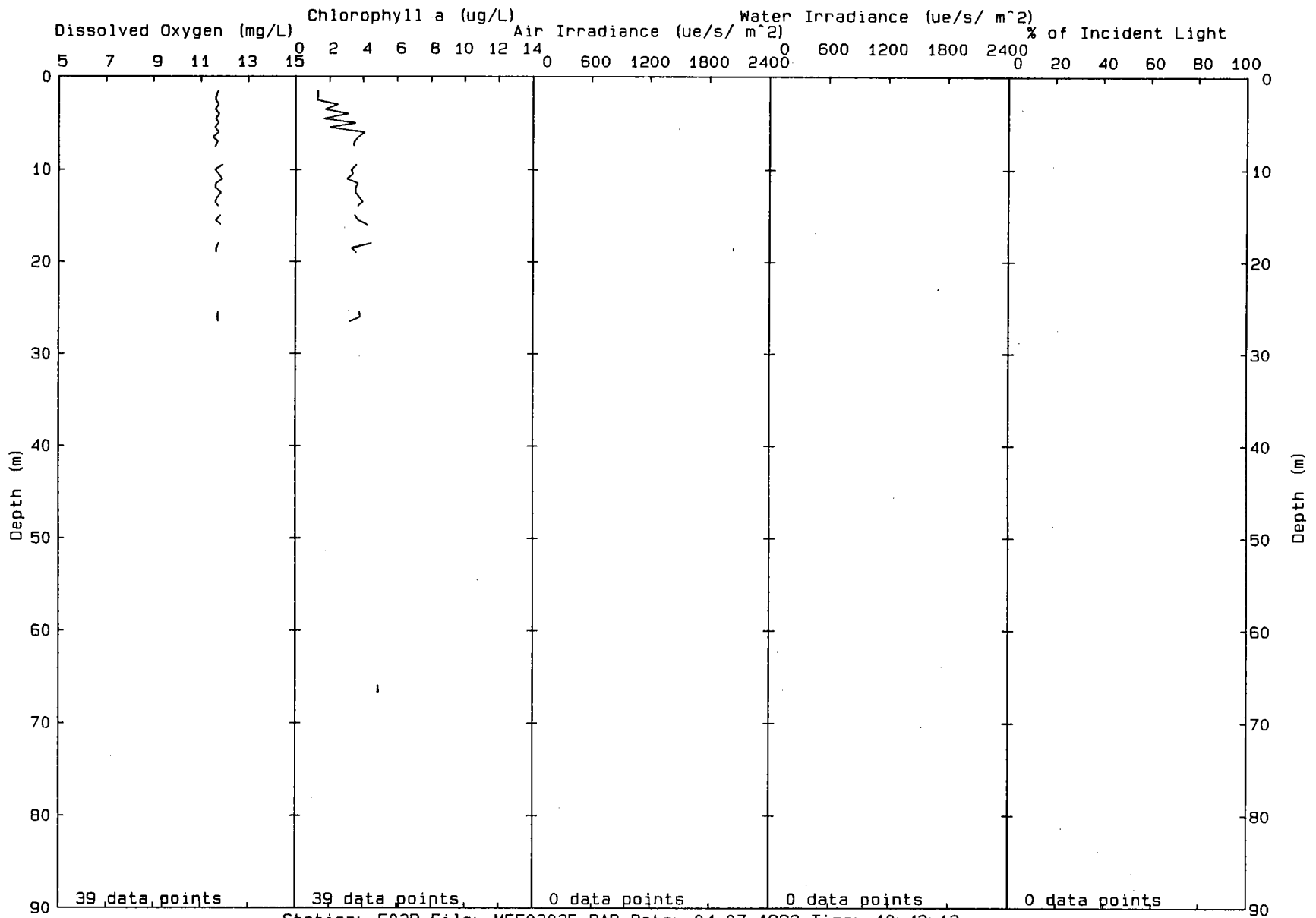


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00044

00045

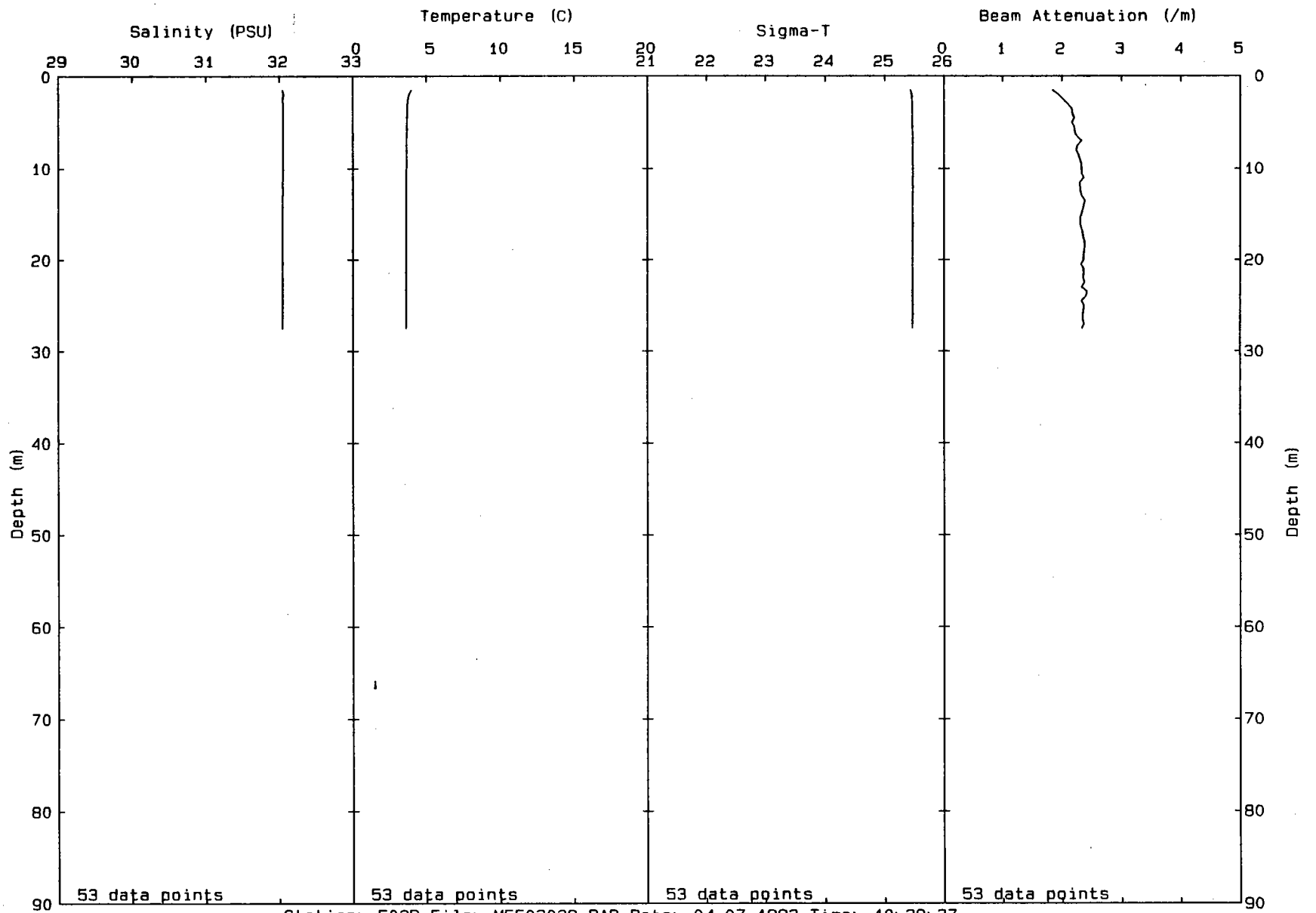




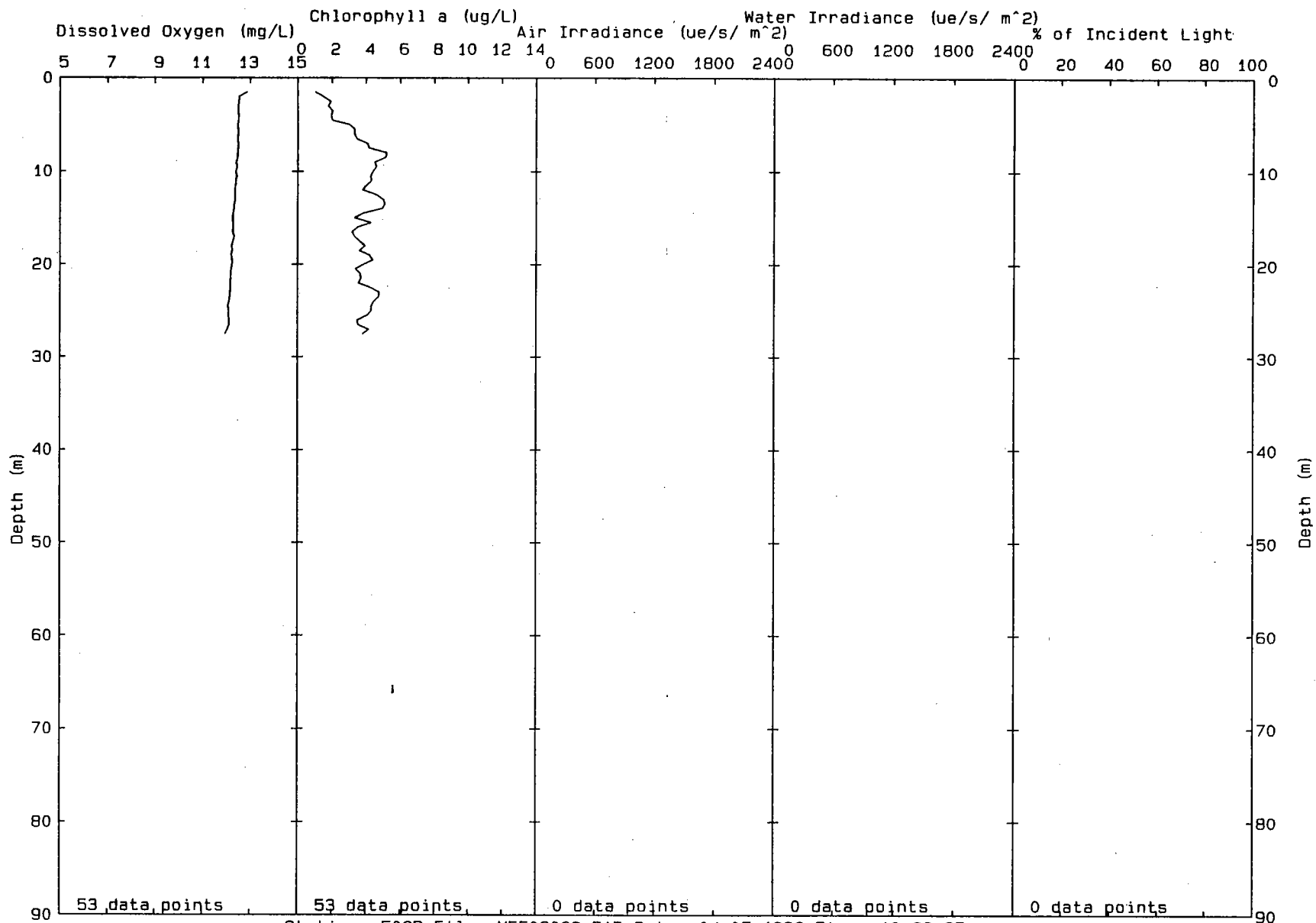
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00047

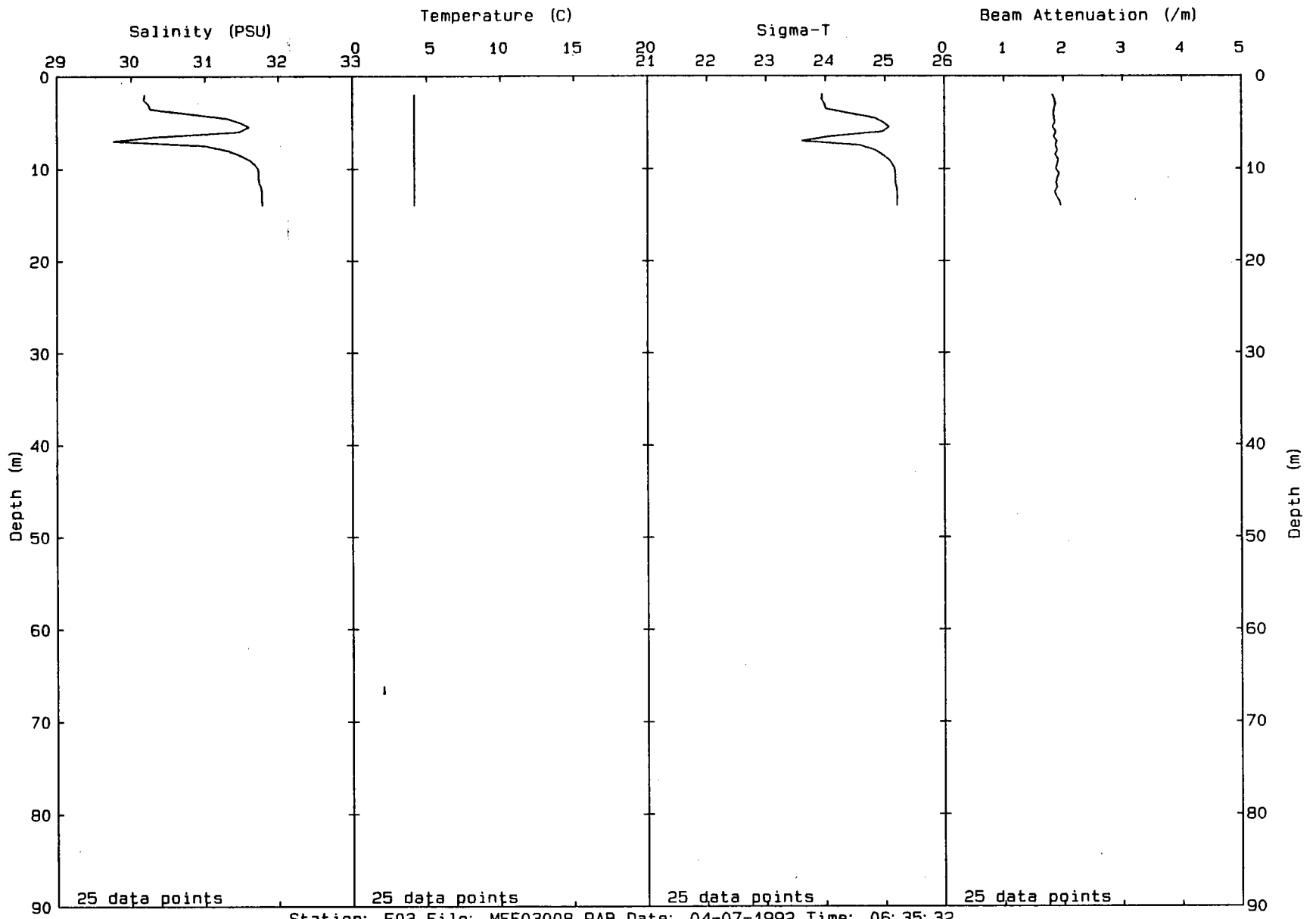


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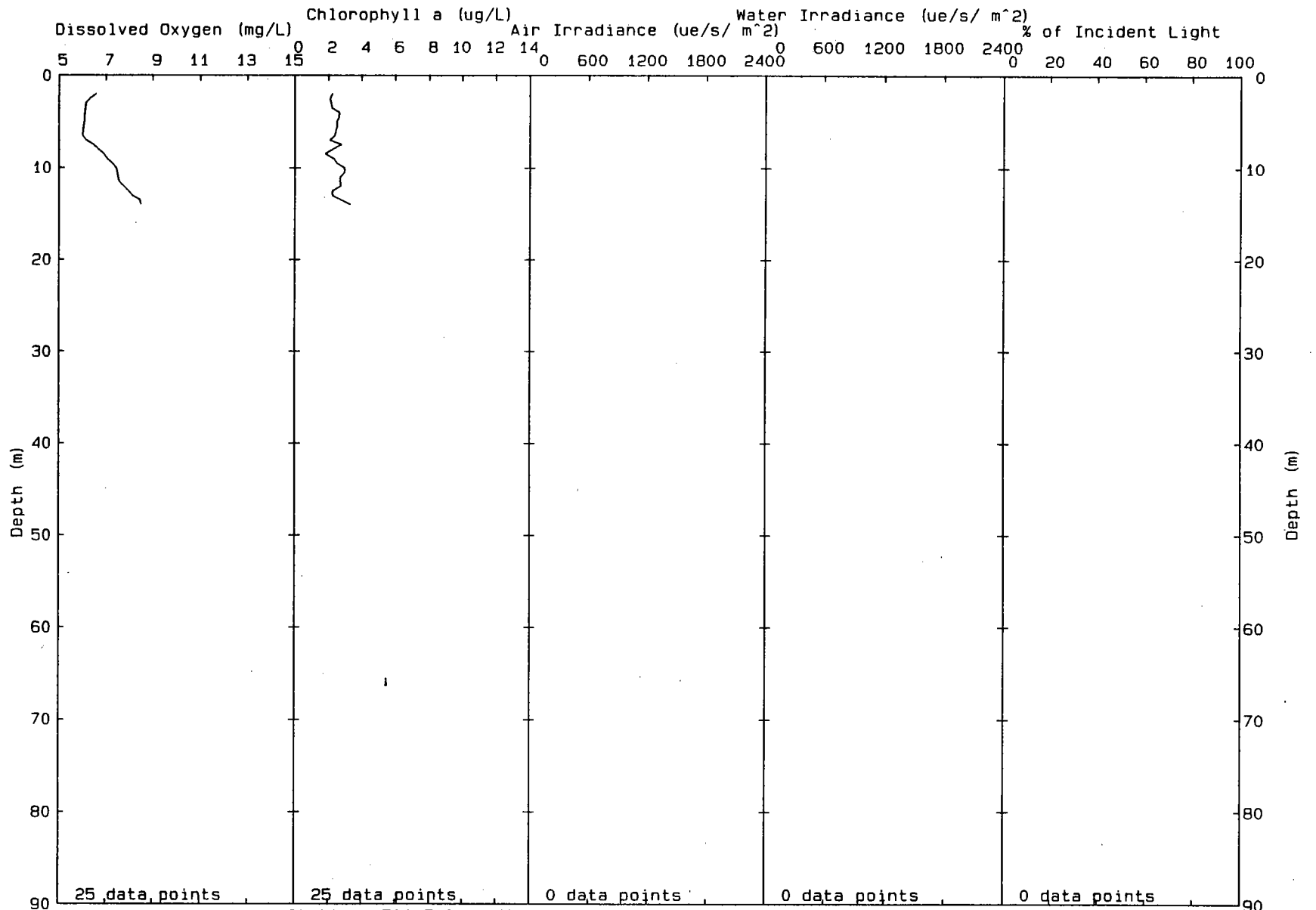
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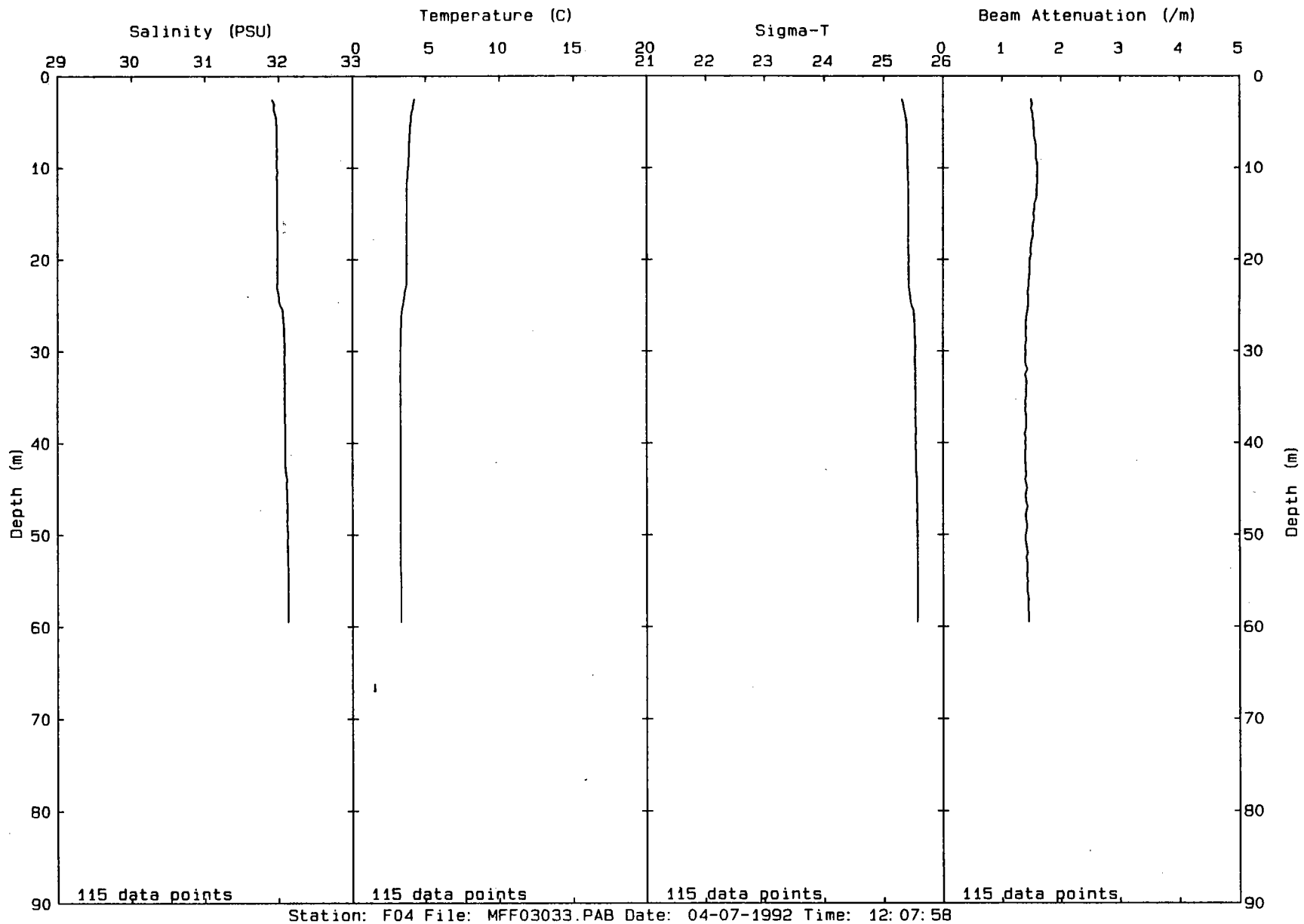
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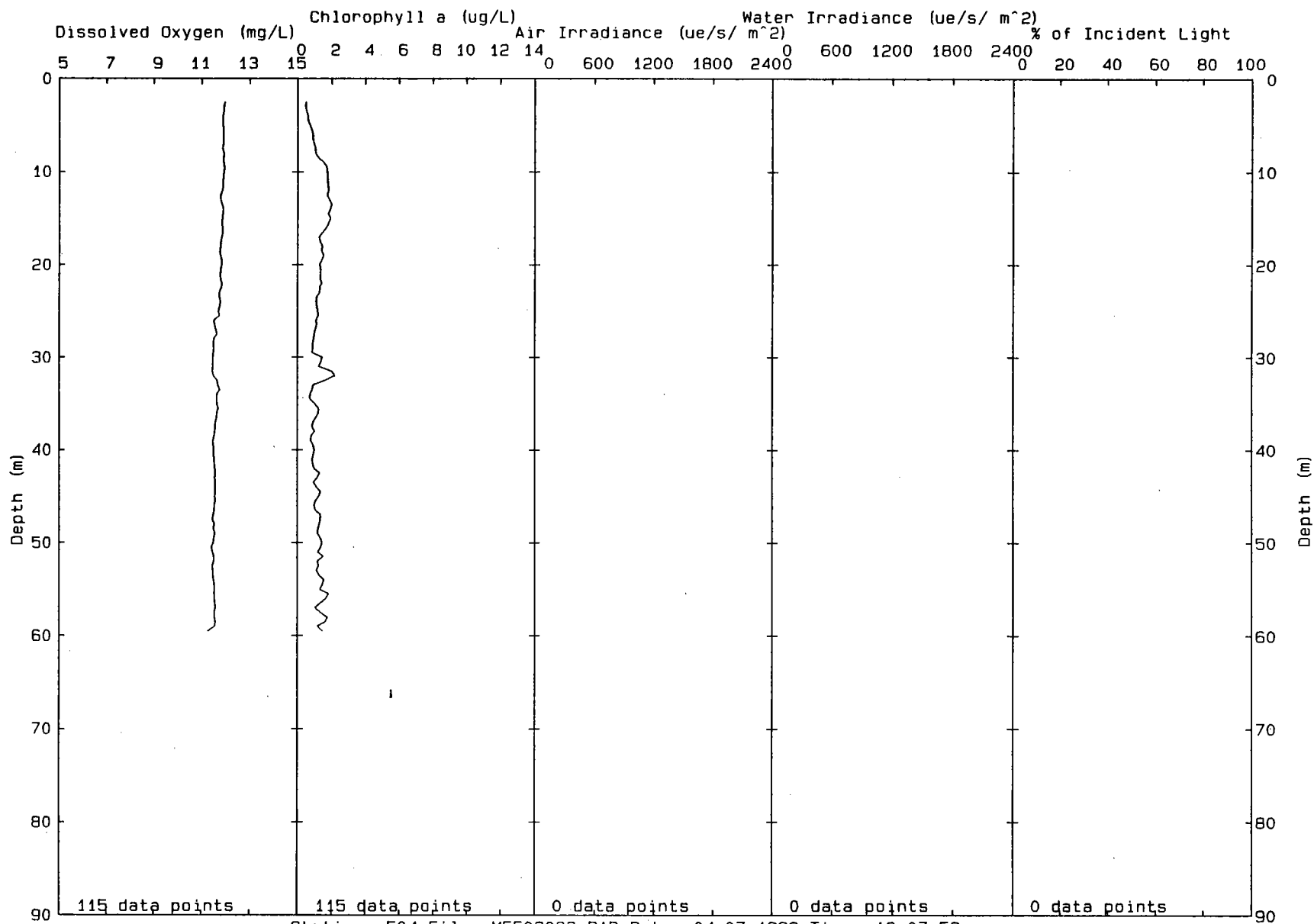
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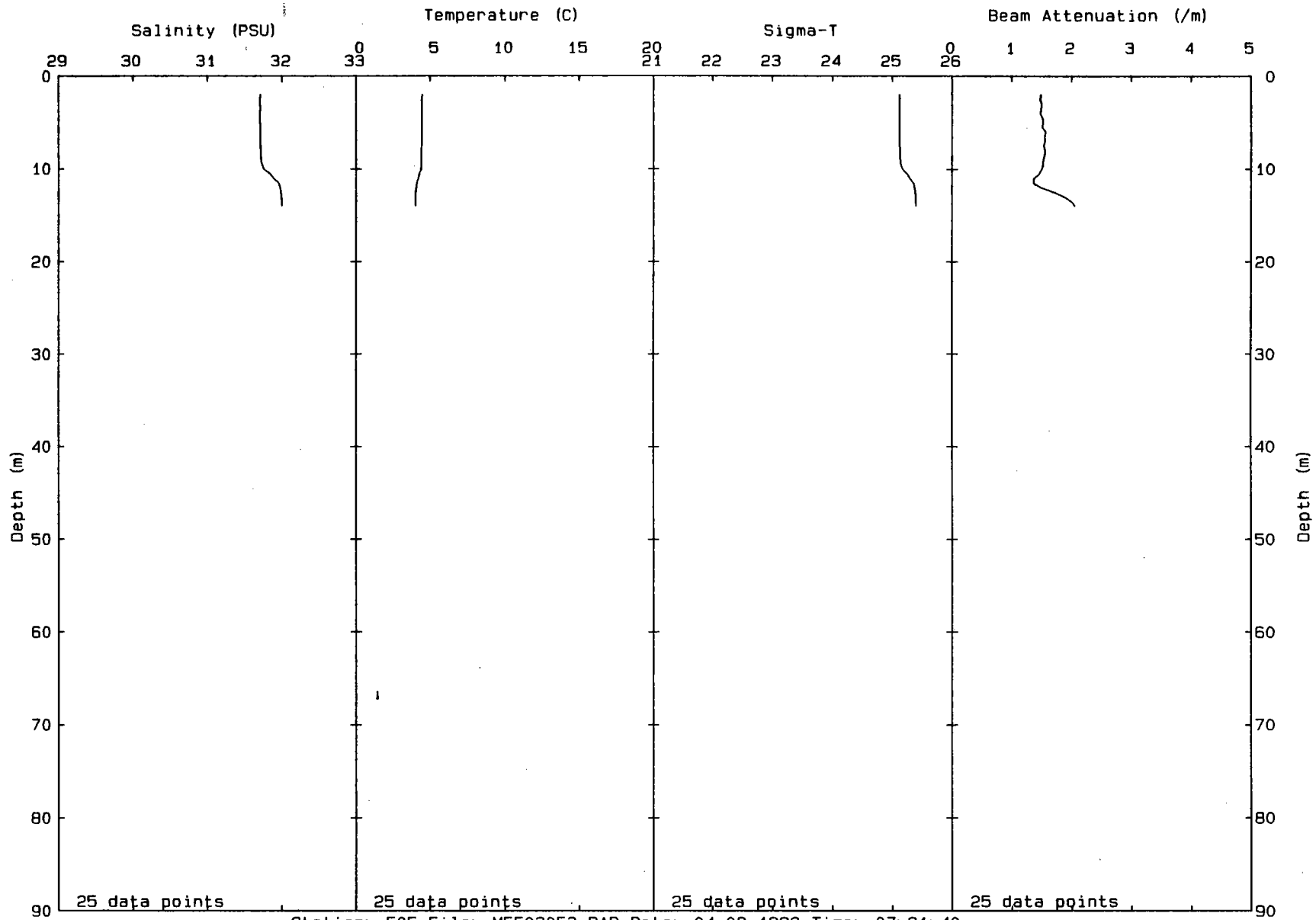


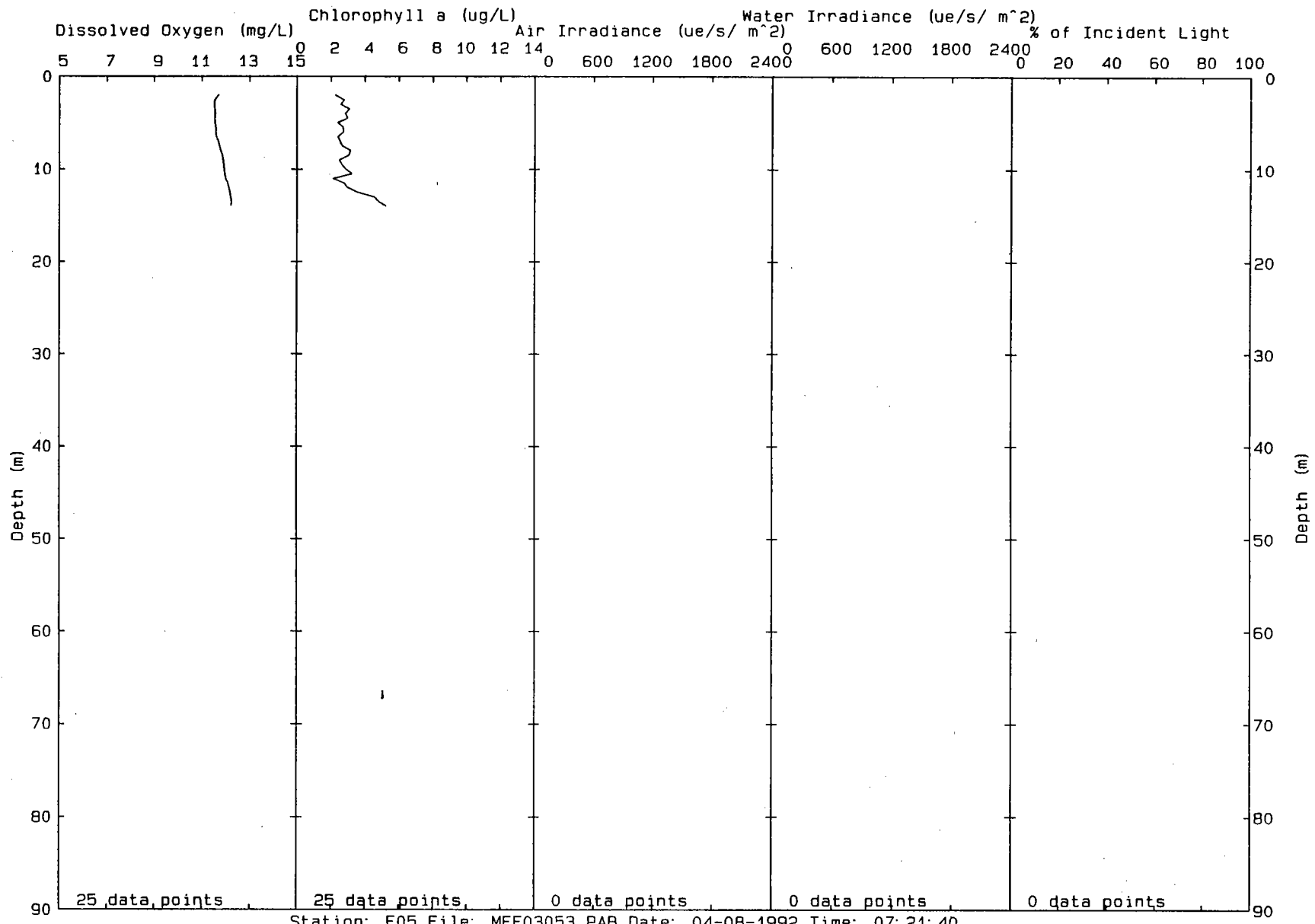


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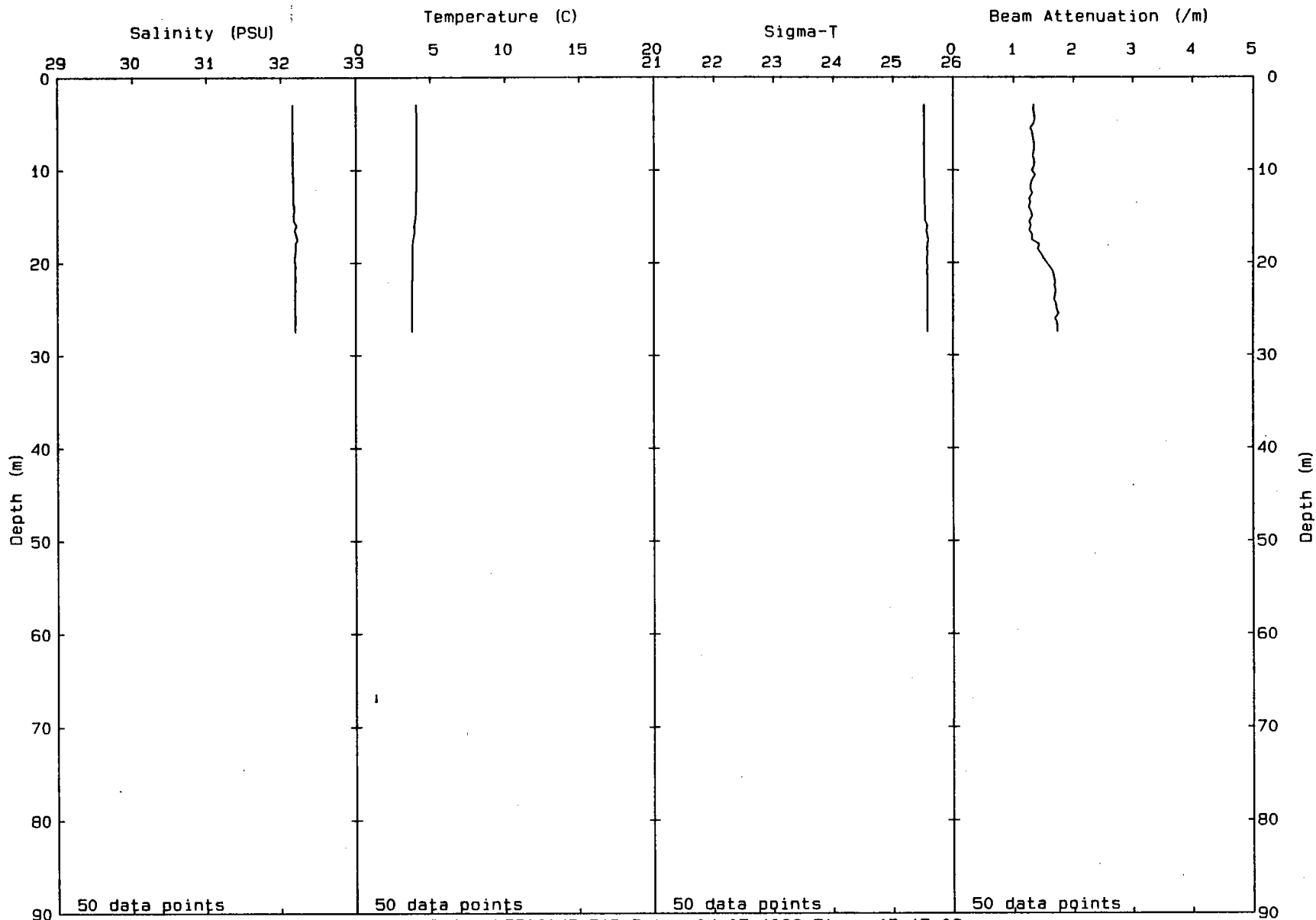




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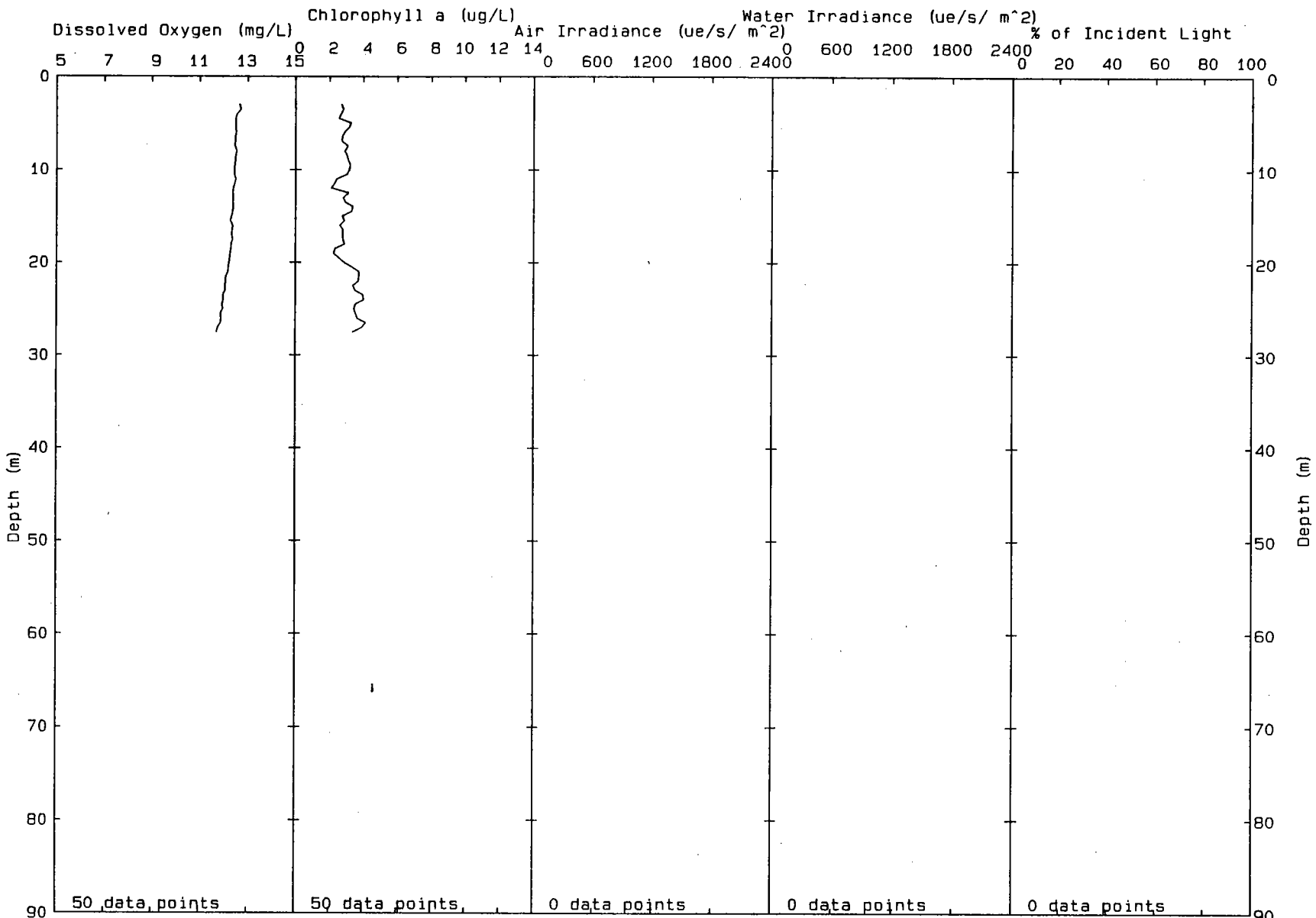
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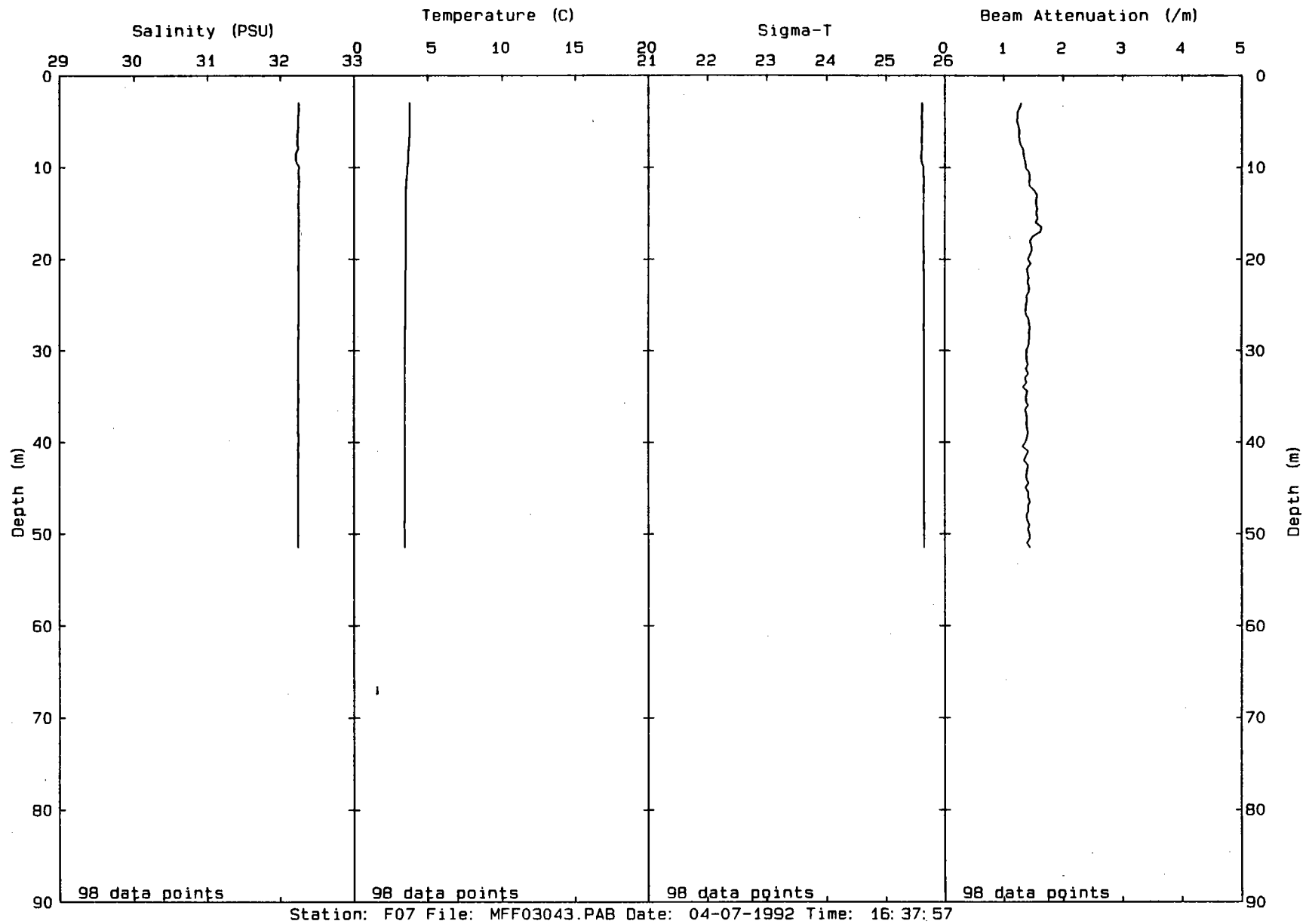
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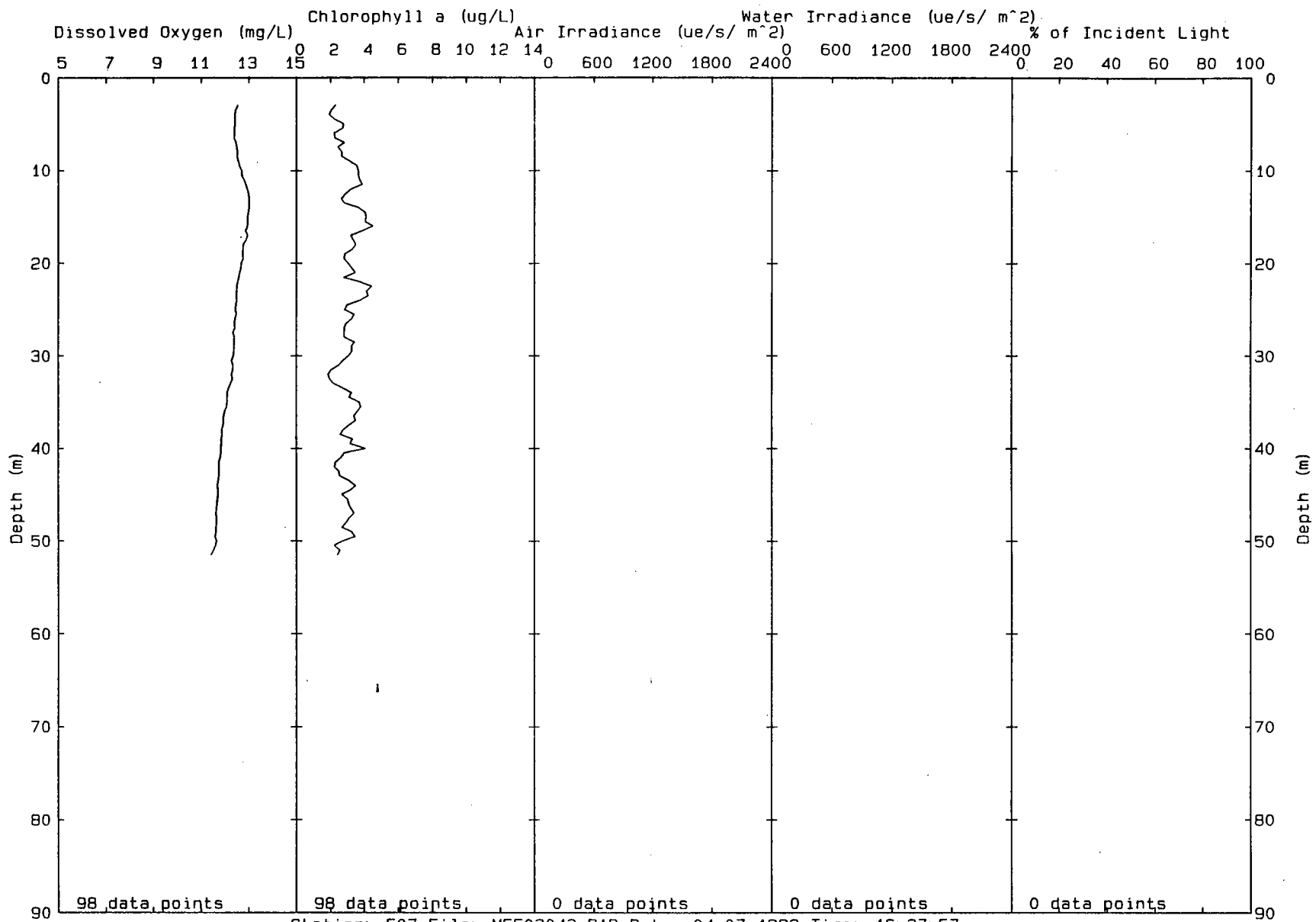
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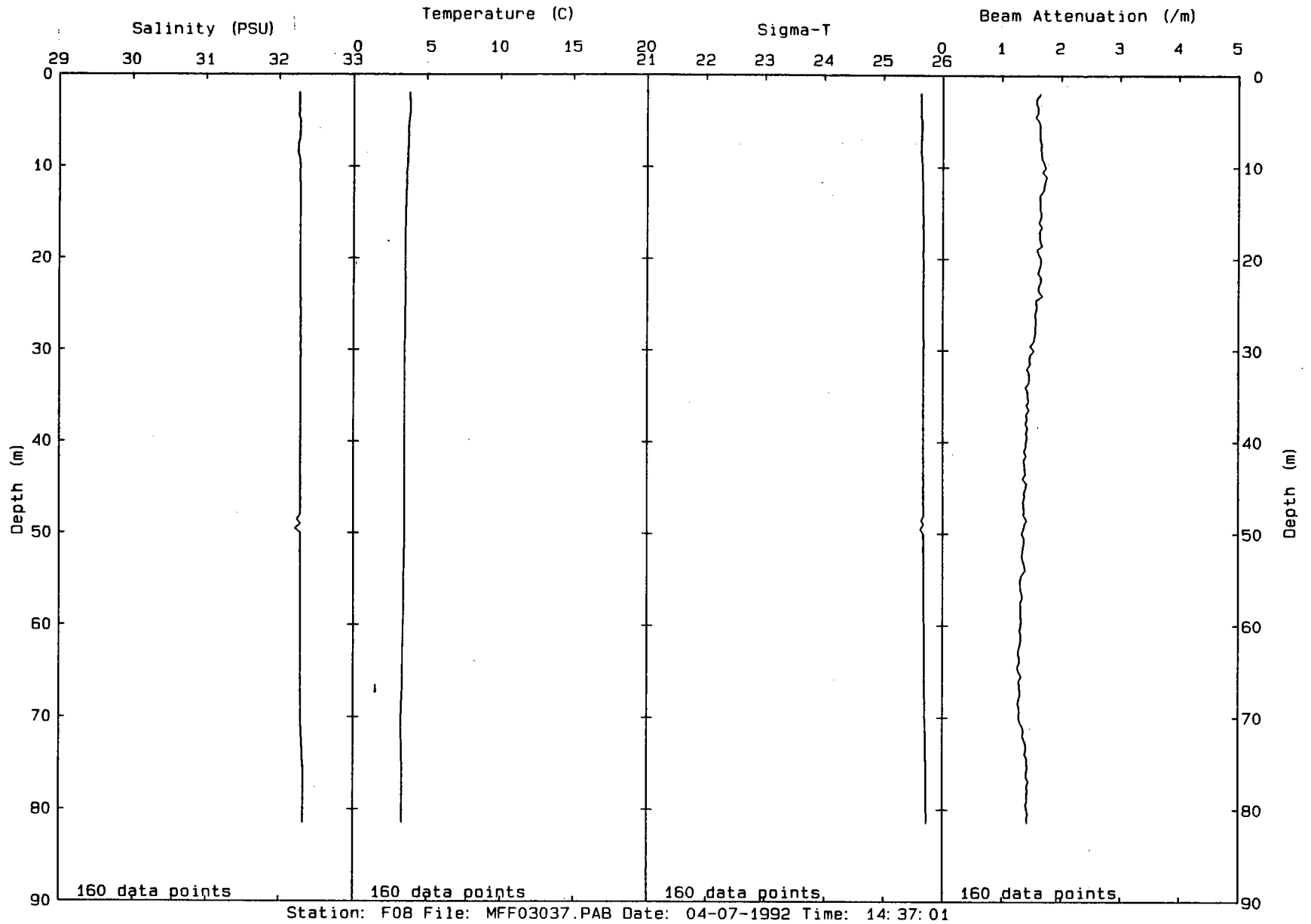




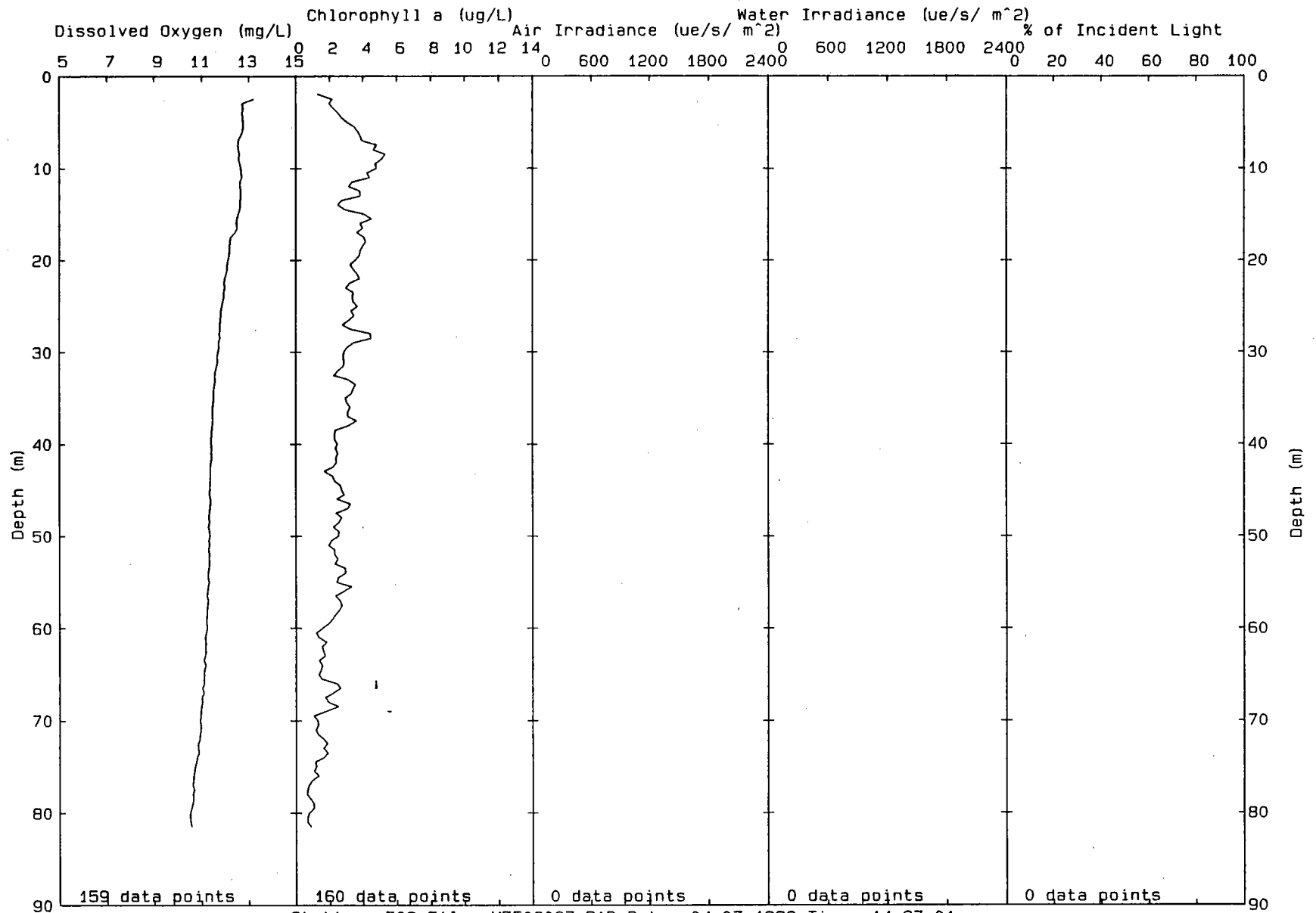
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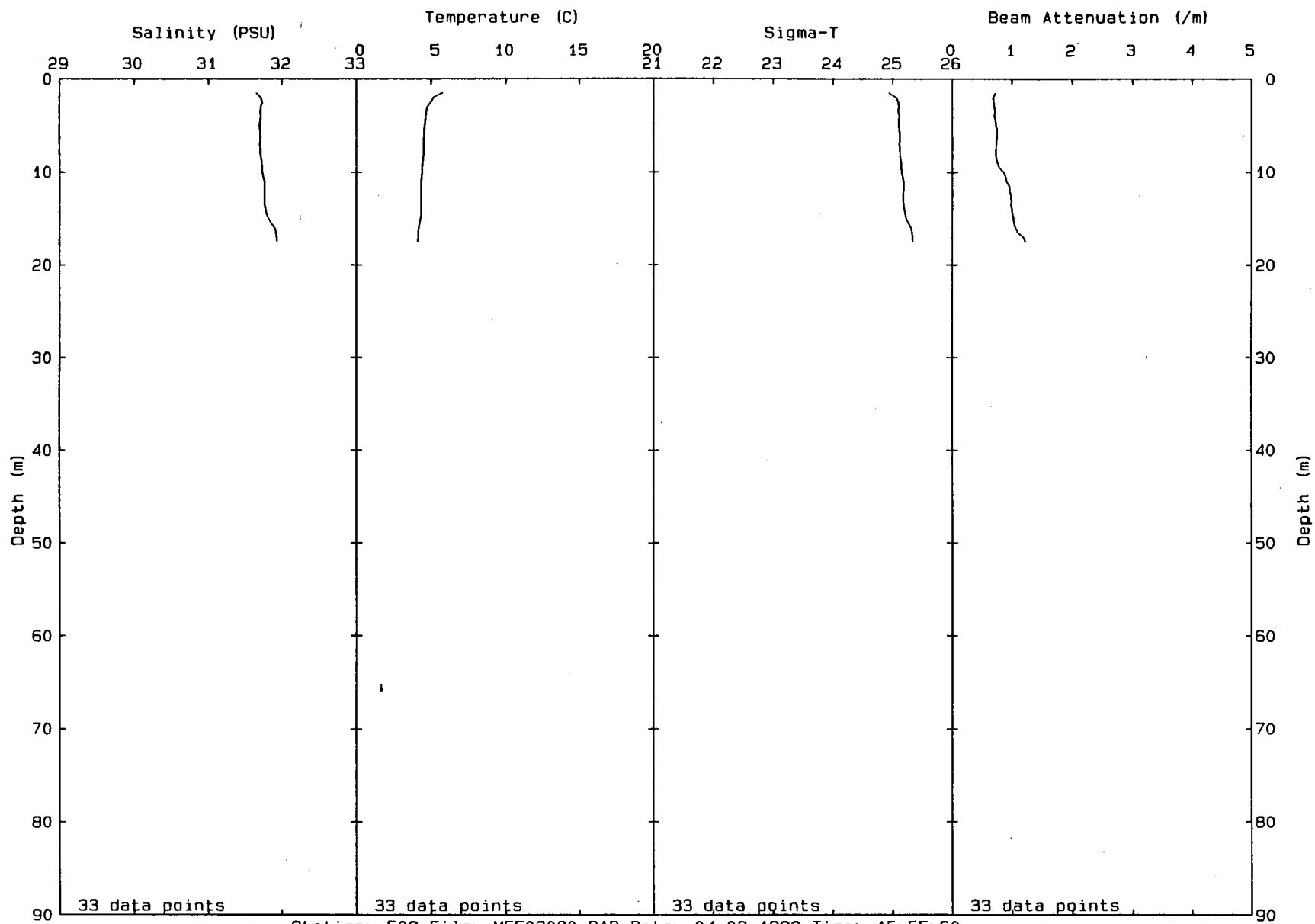


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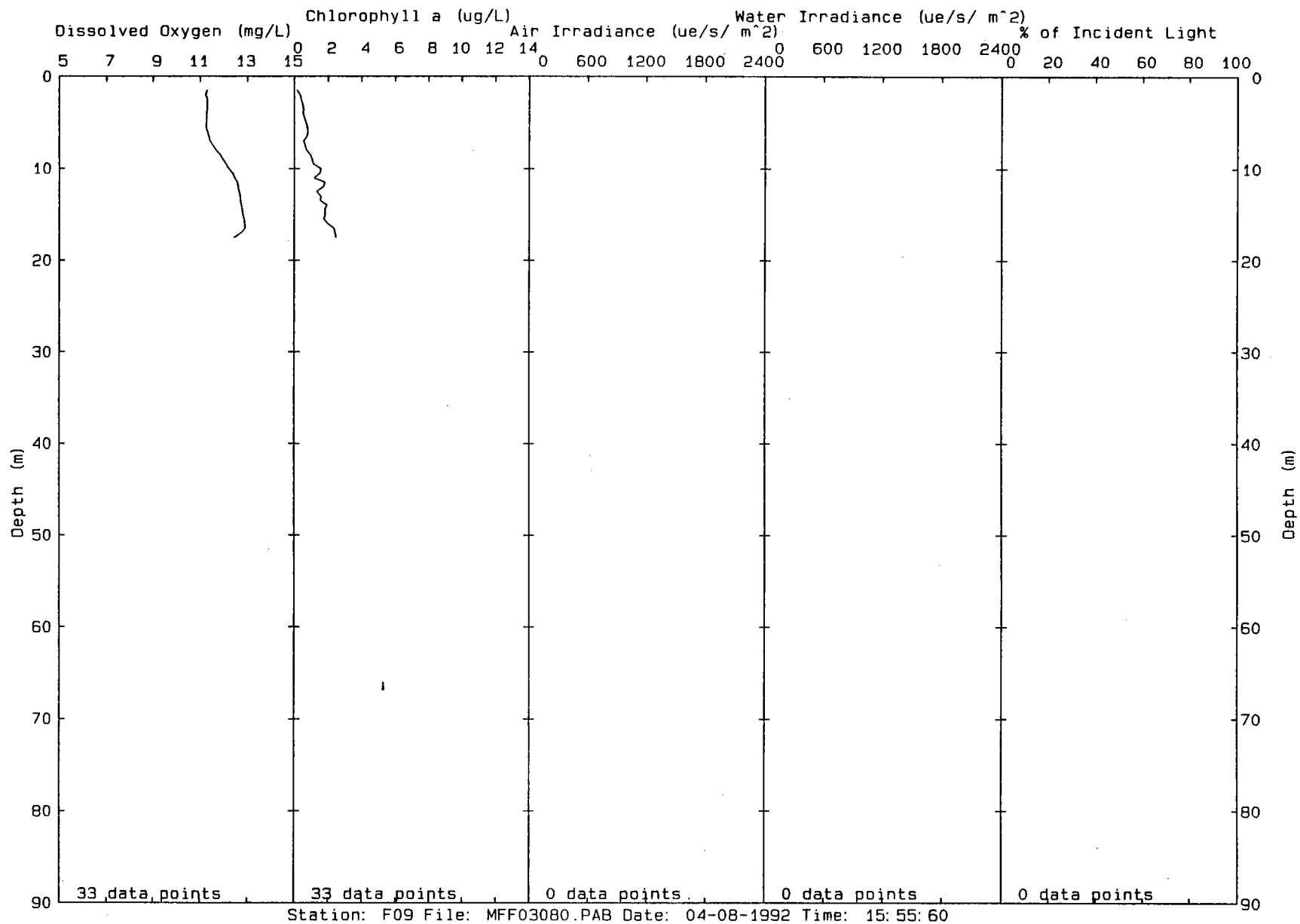
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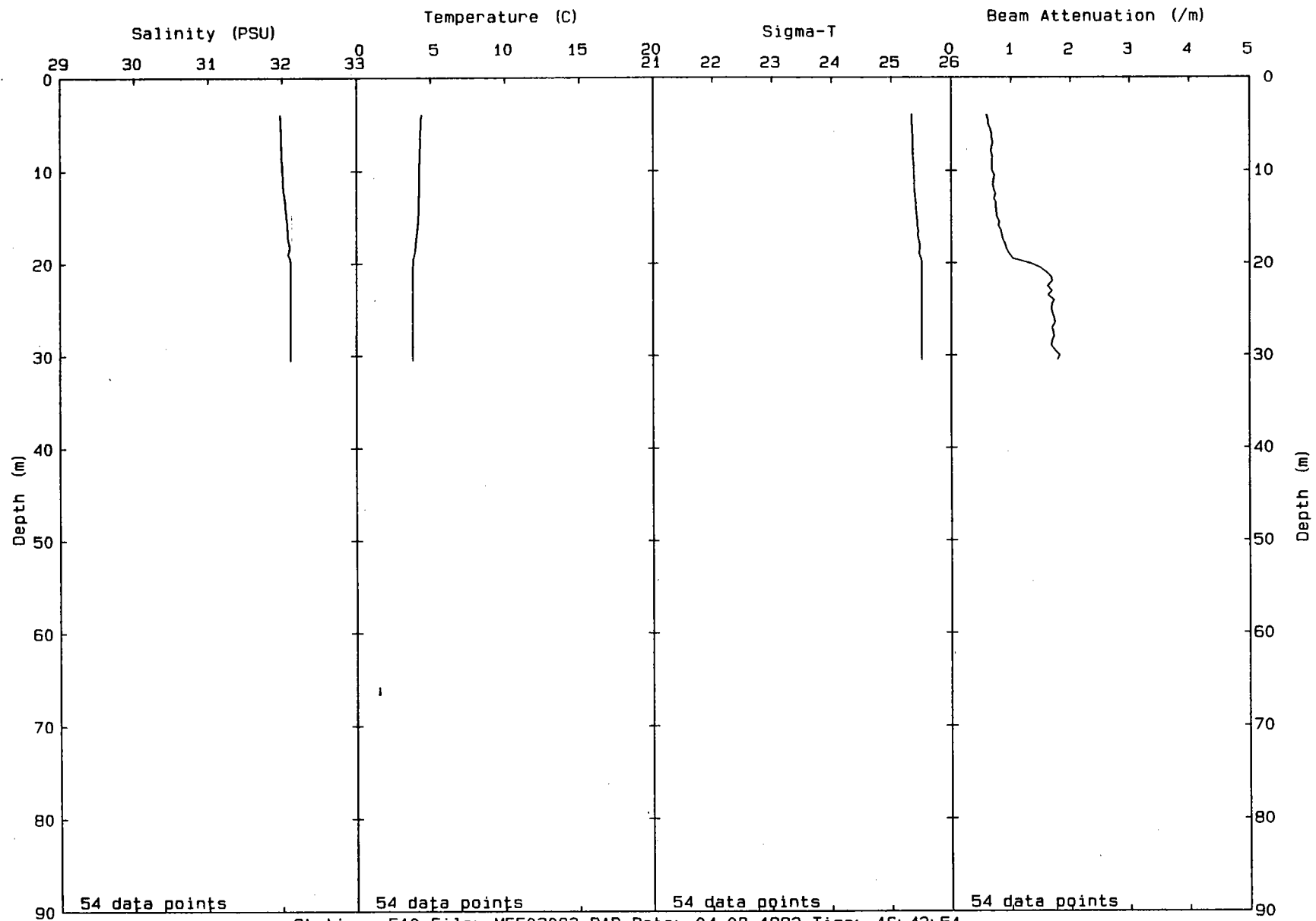


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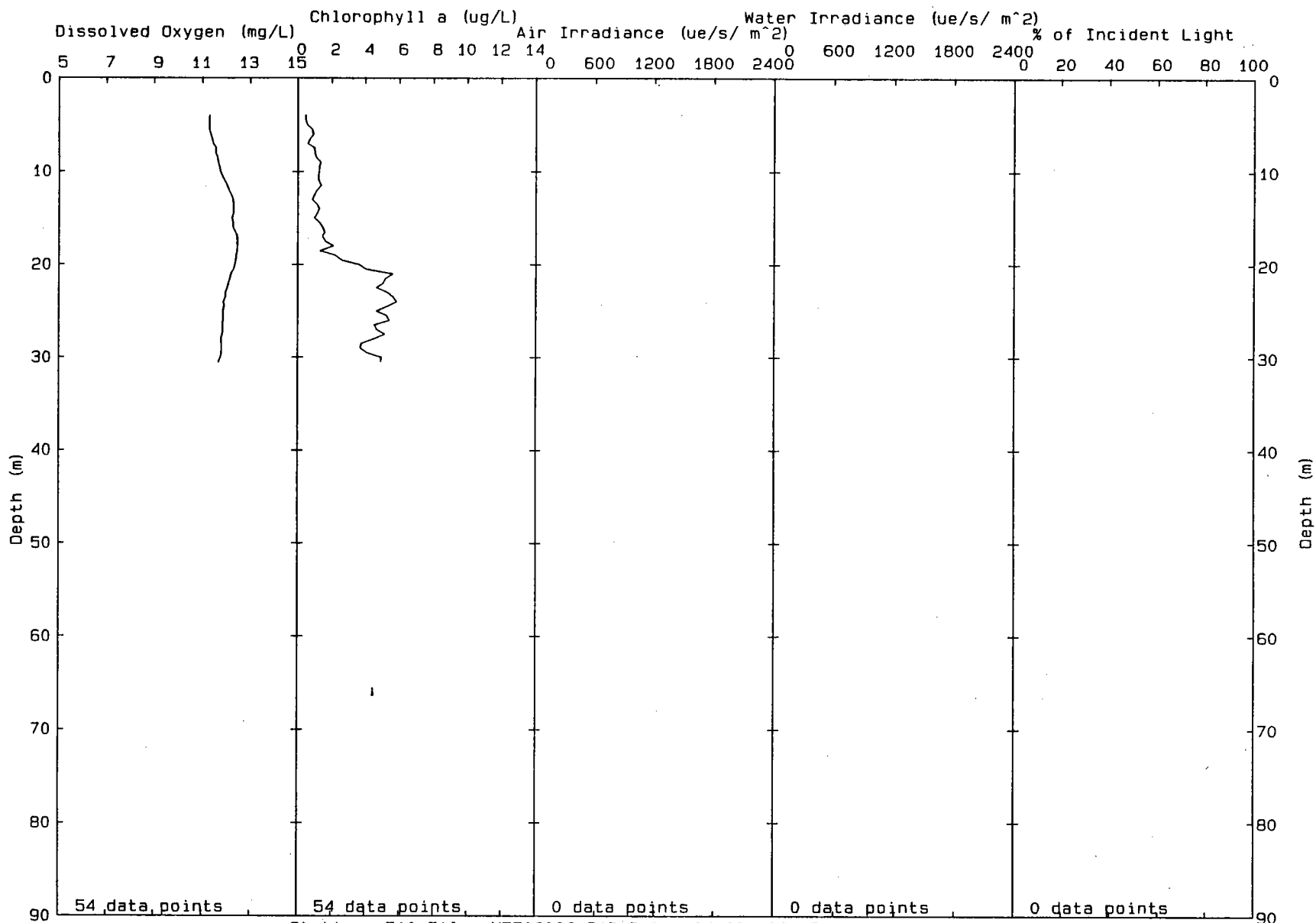


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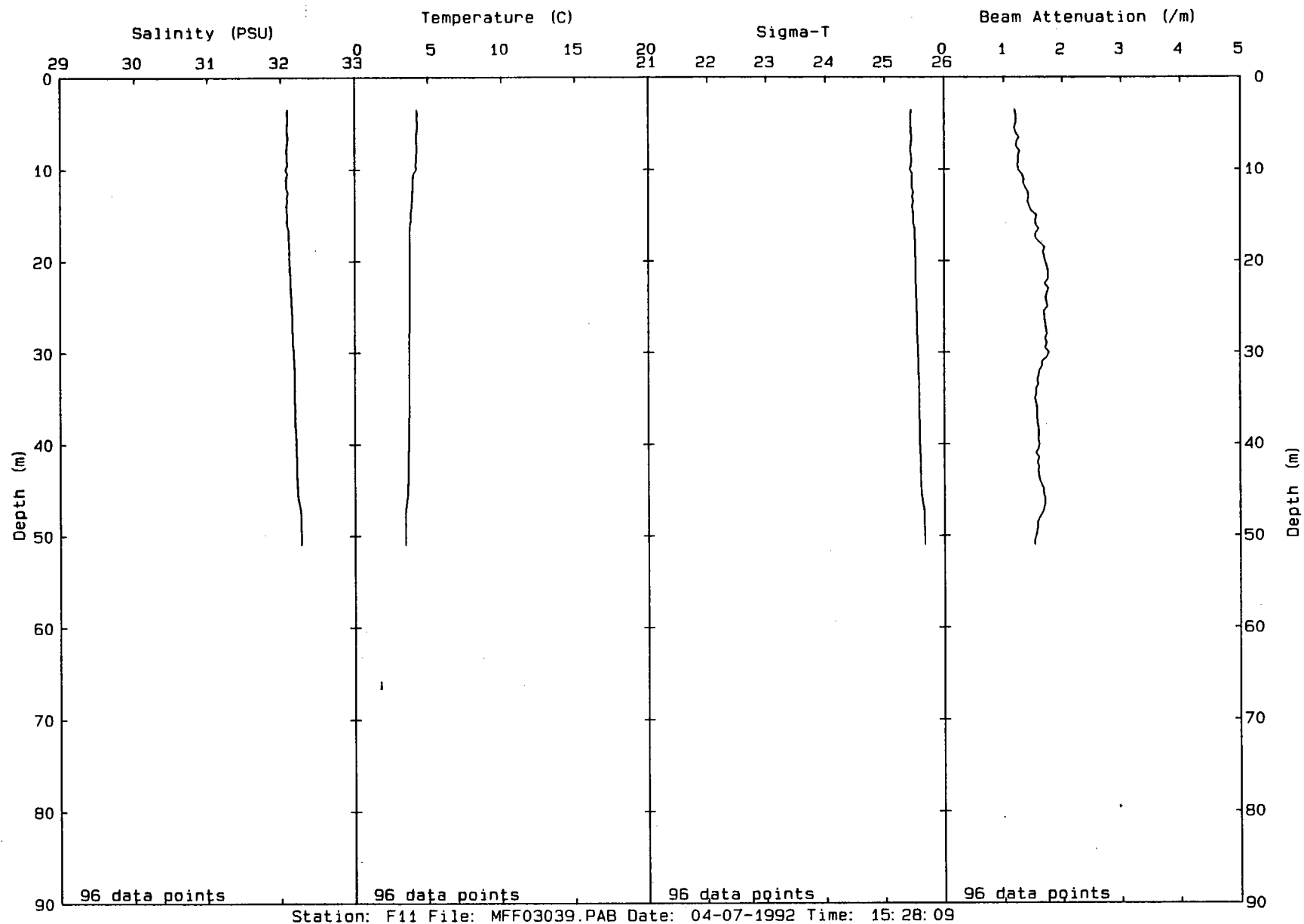
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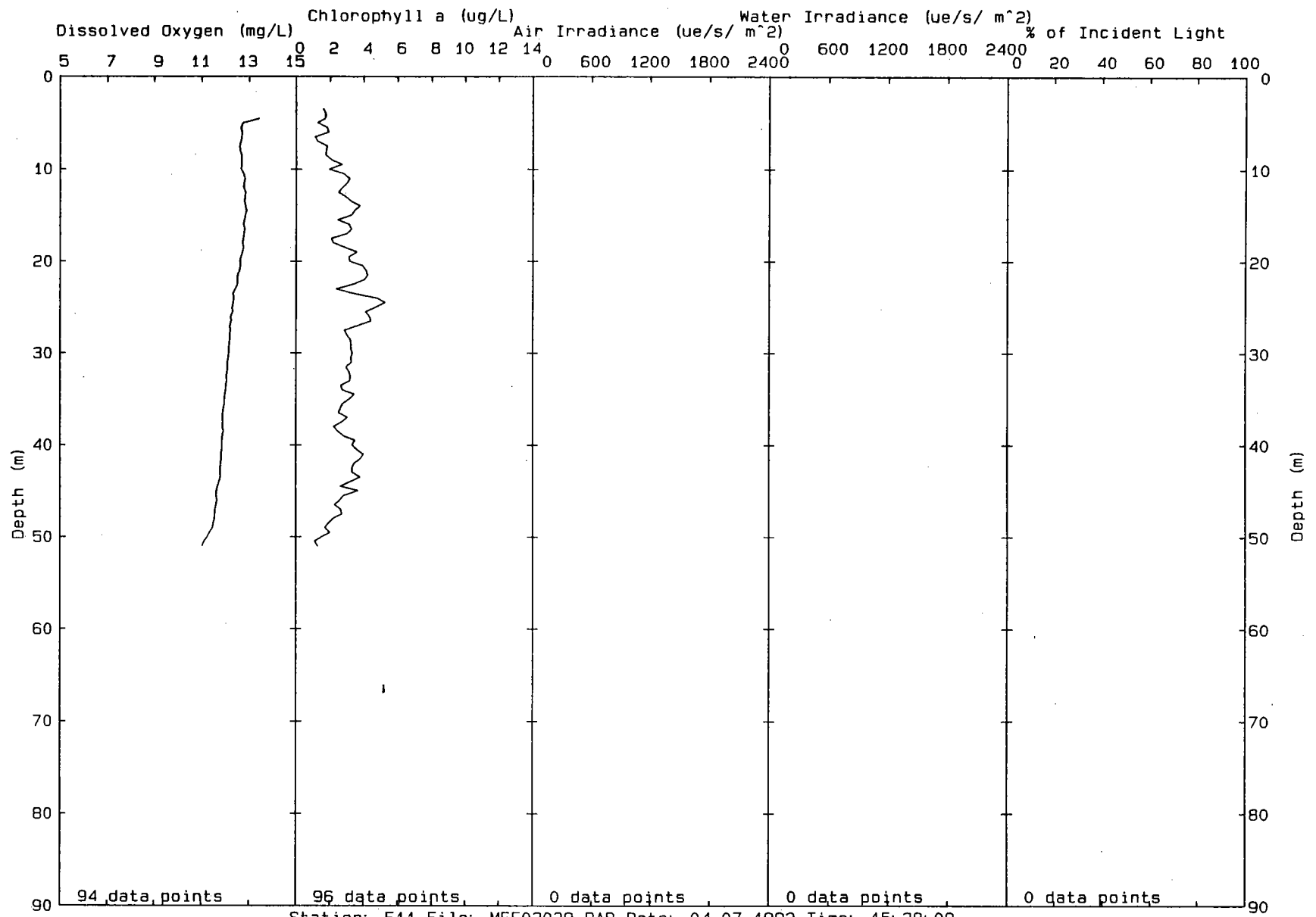


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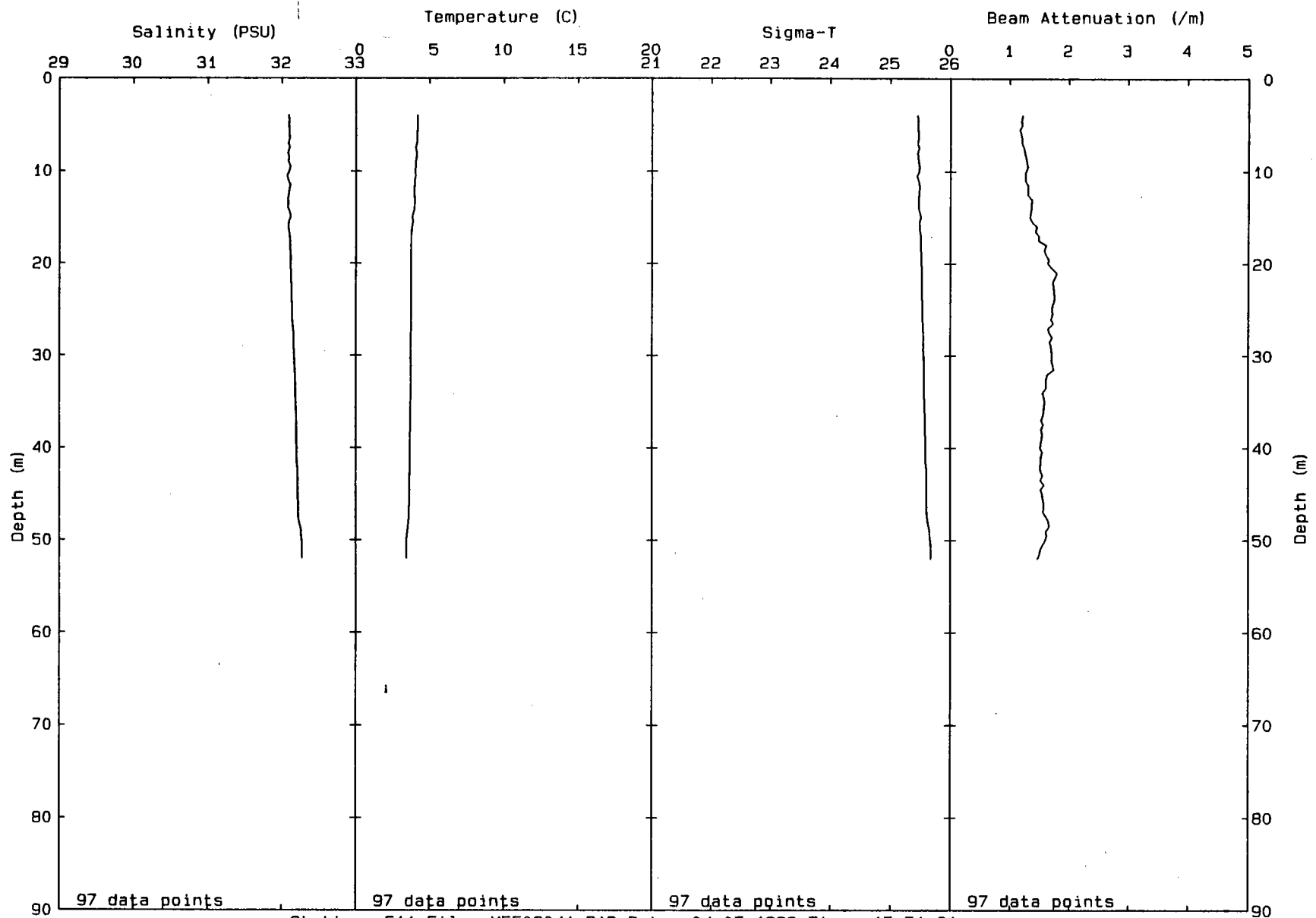


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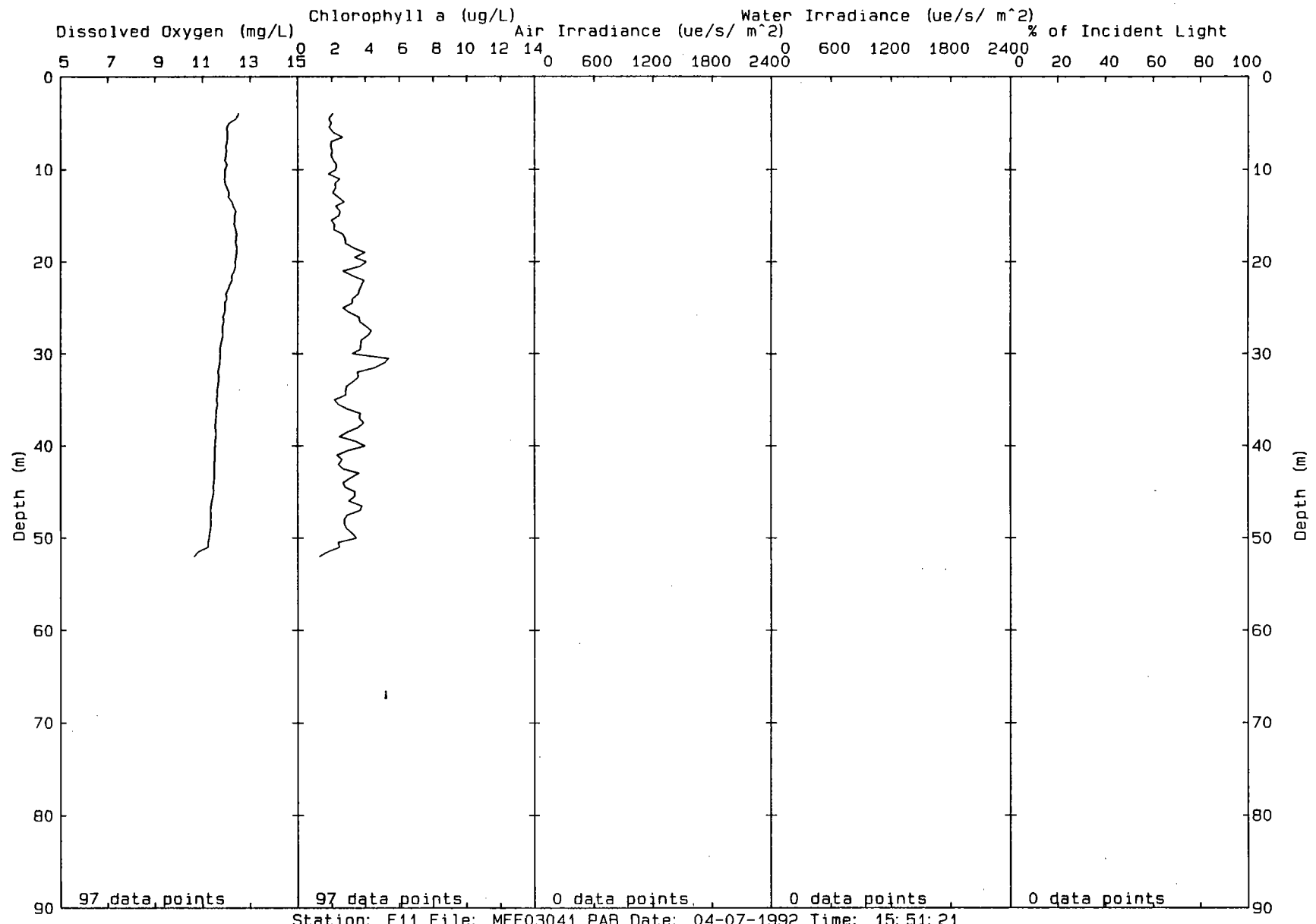
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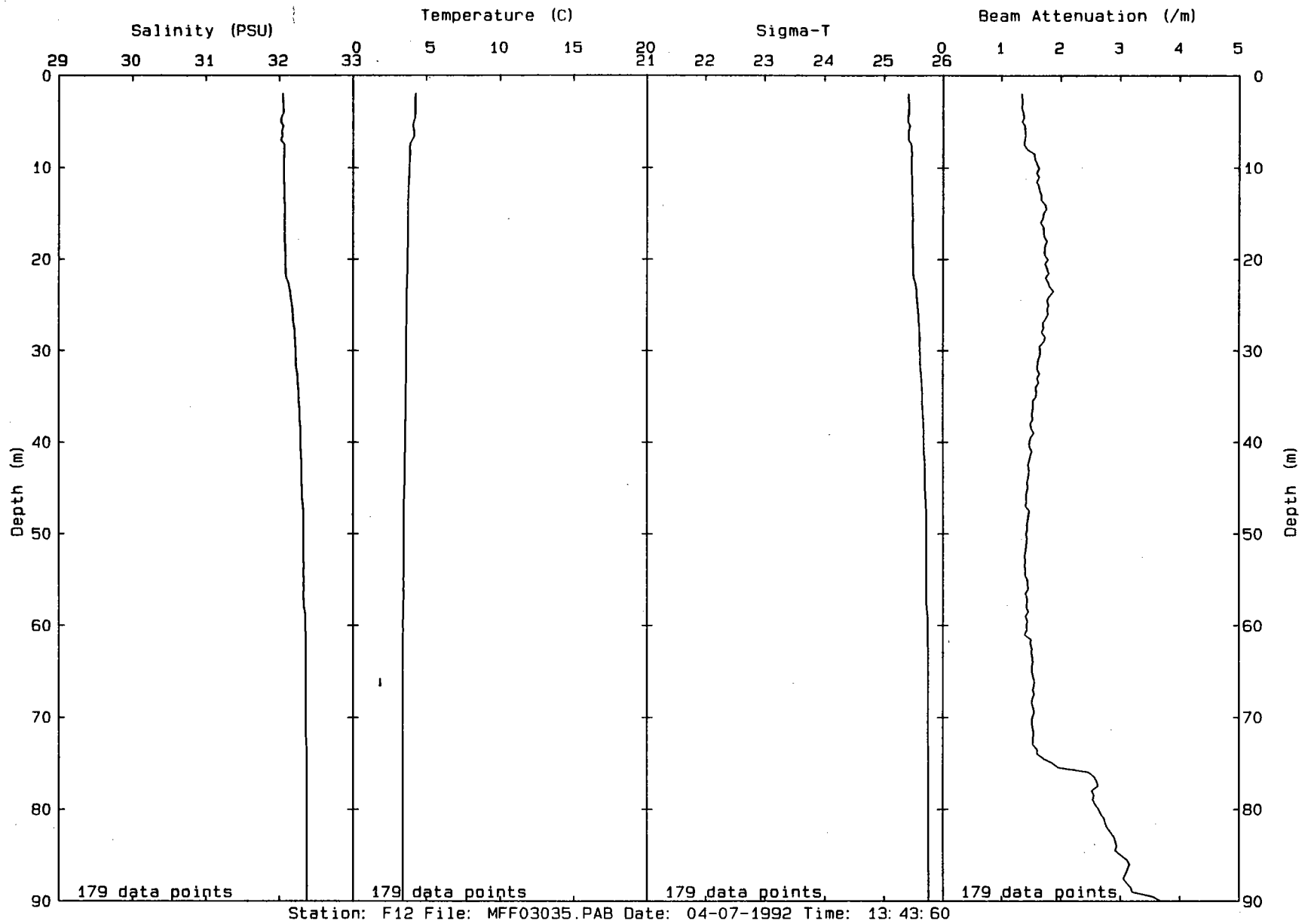


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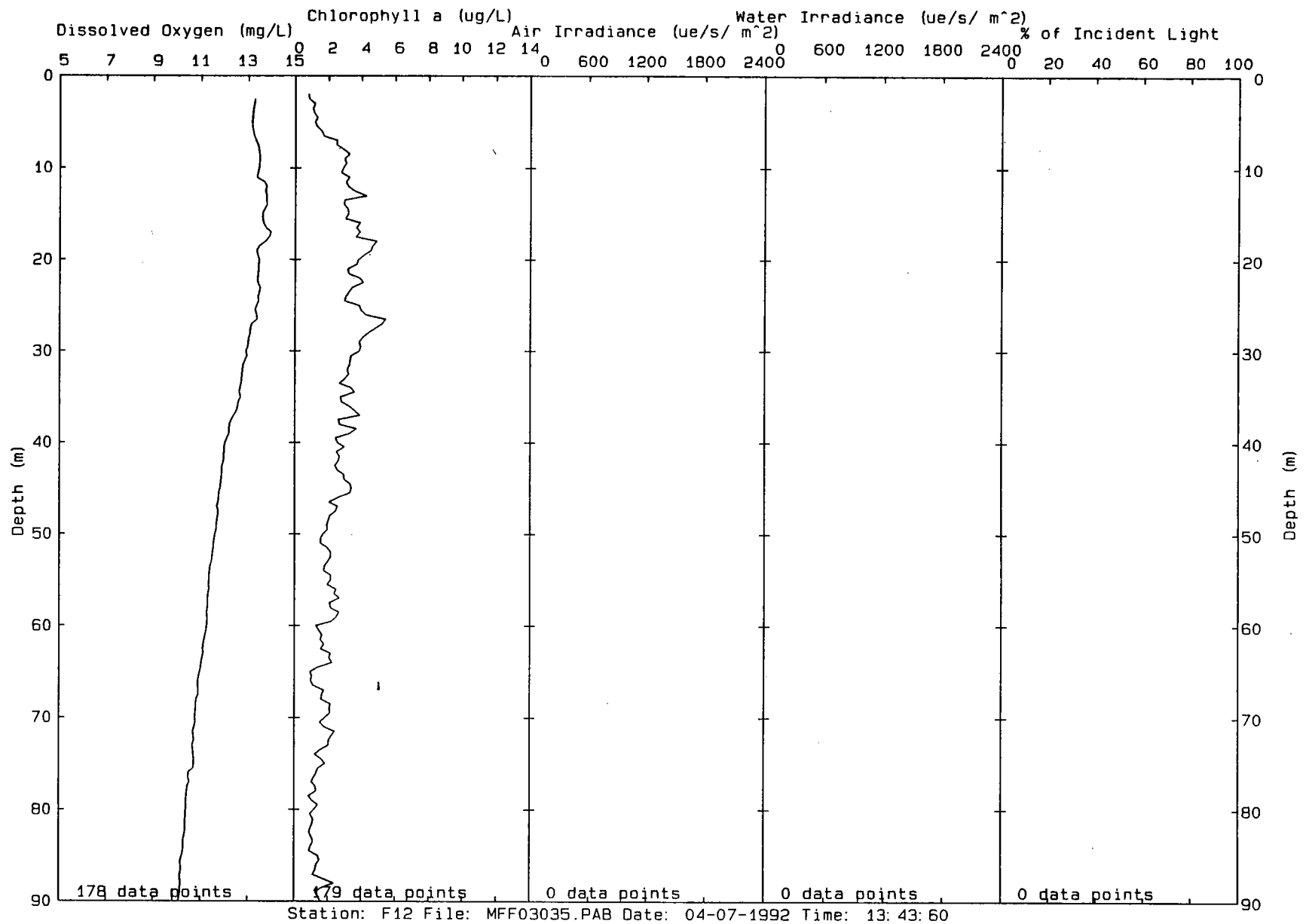
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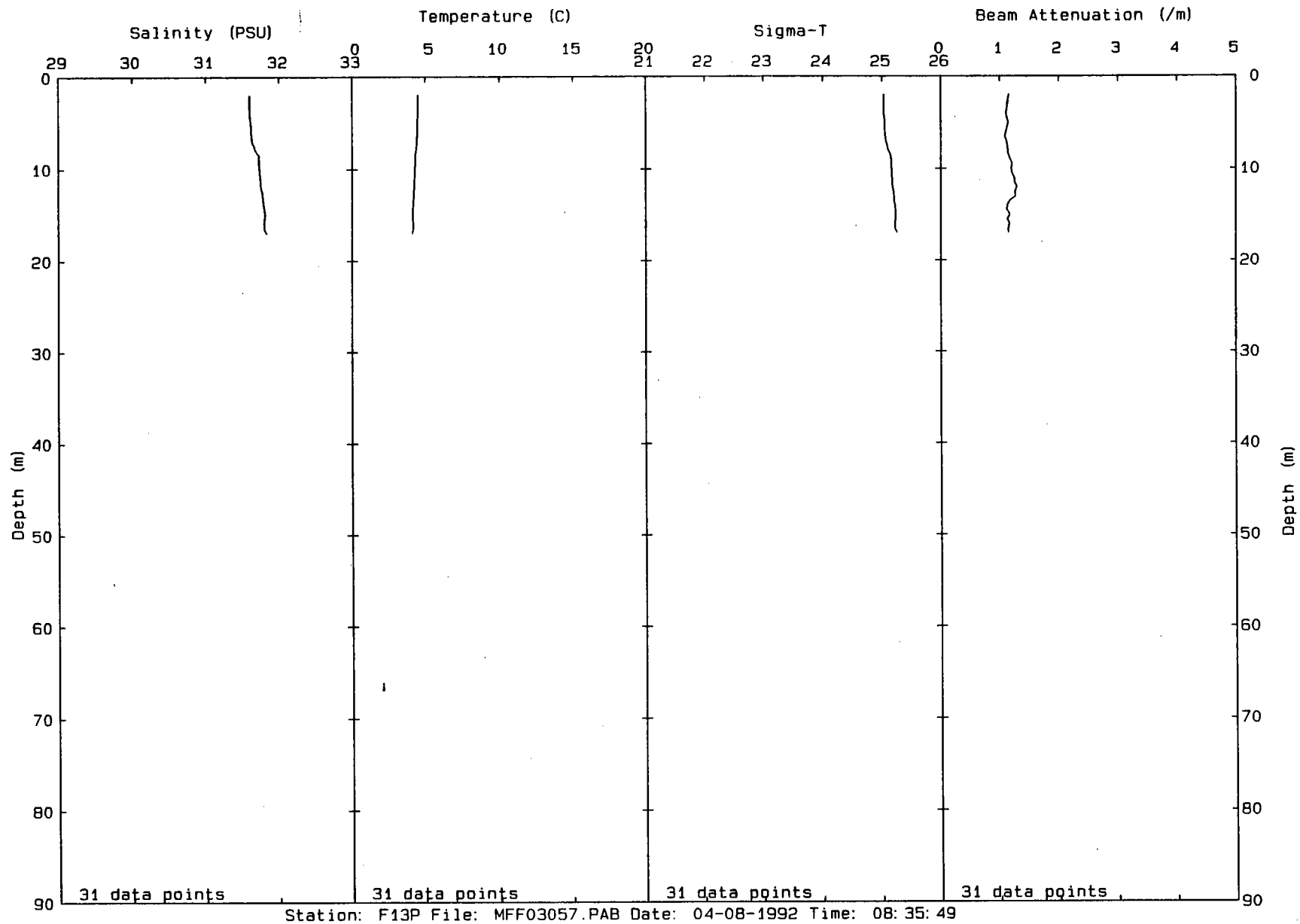
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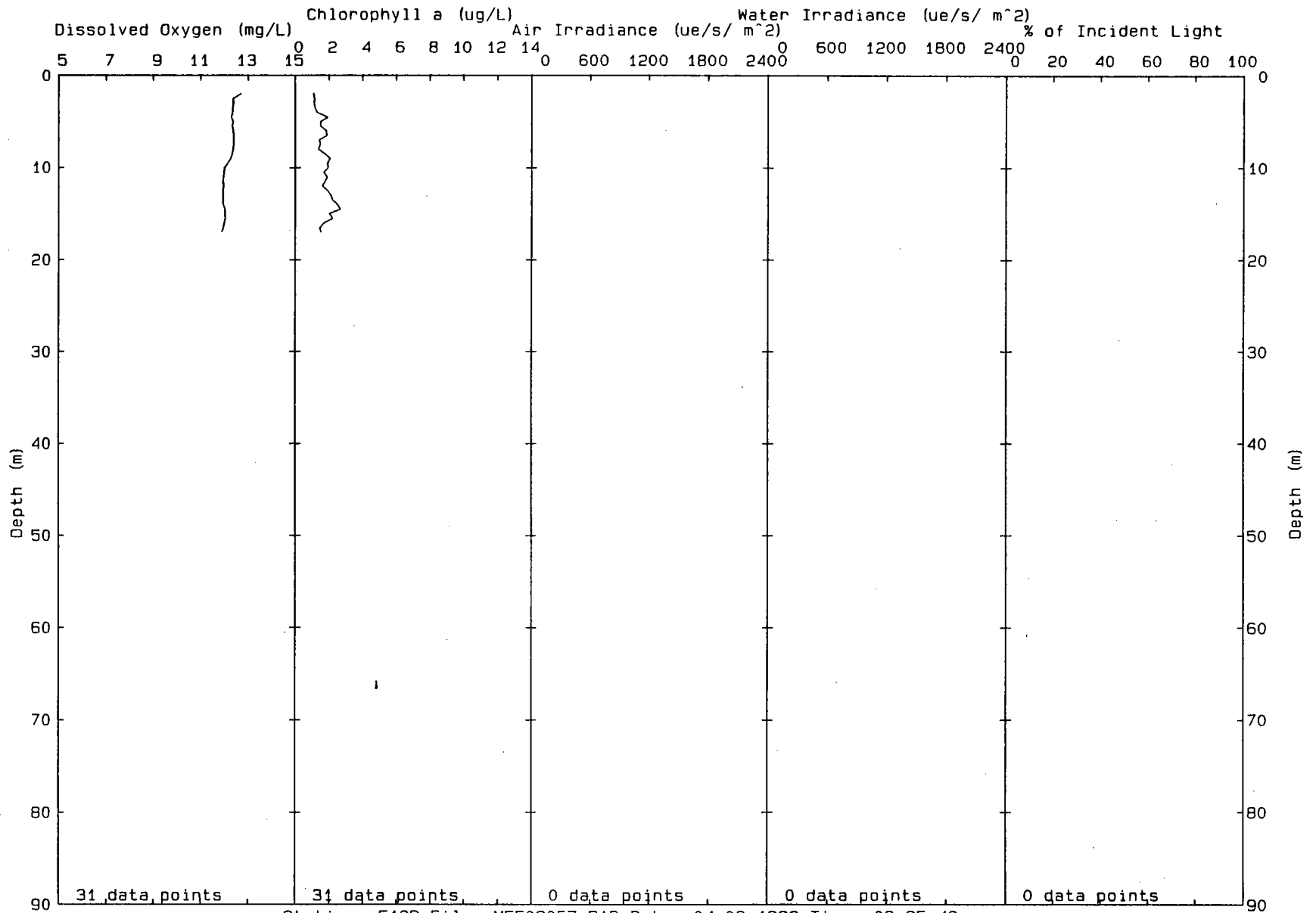
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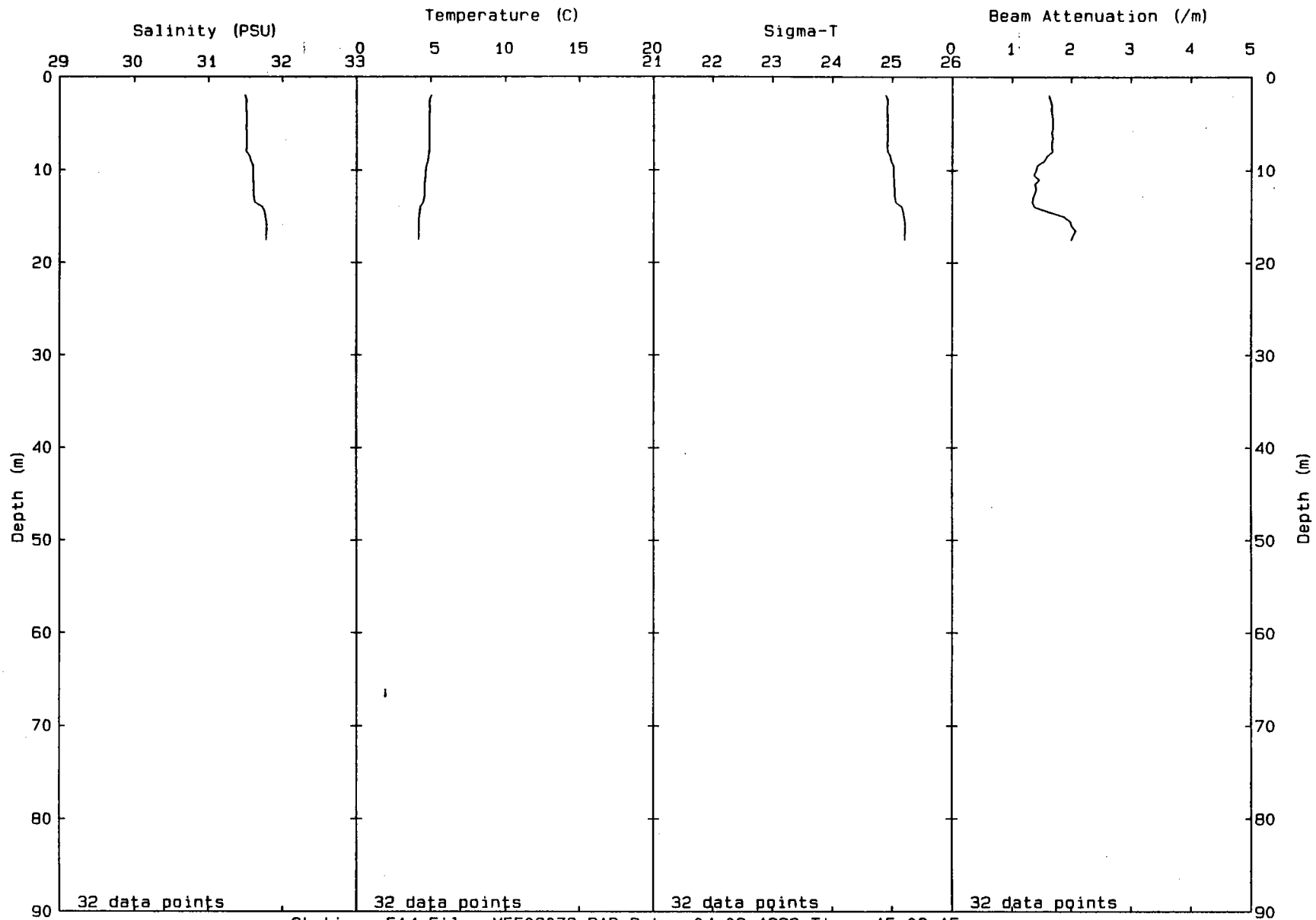
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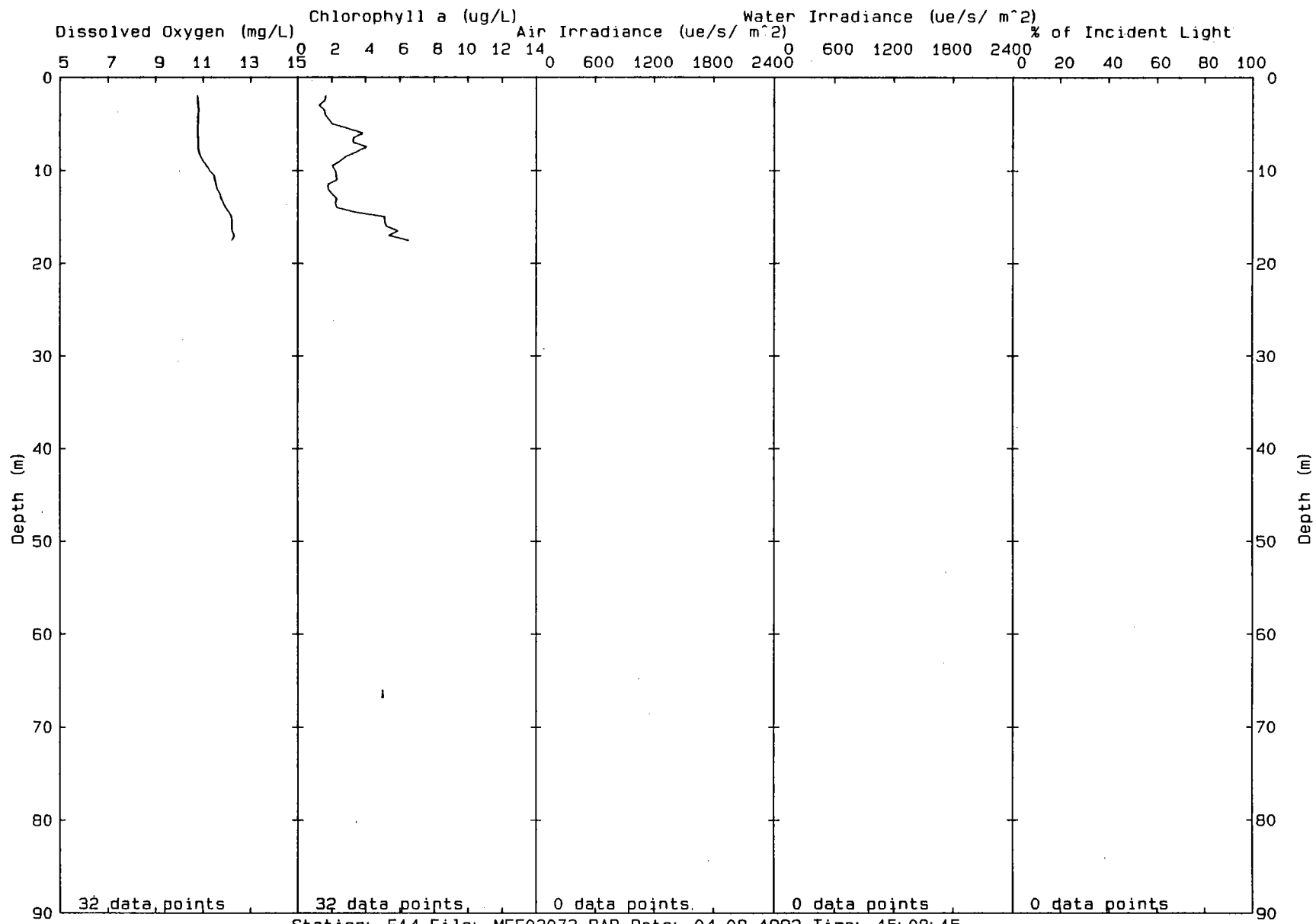


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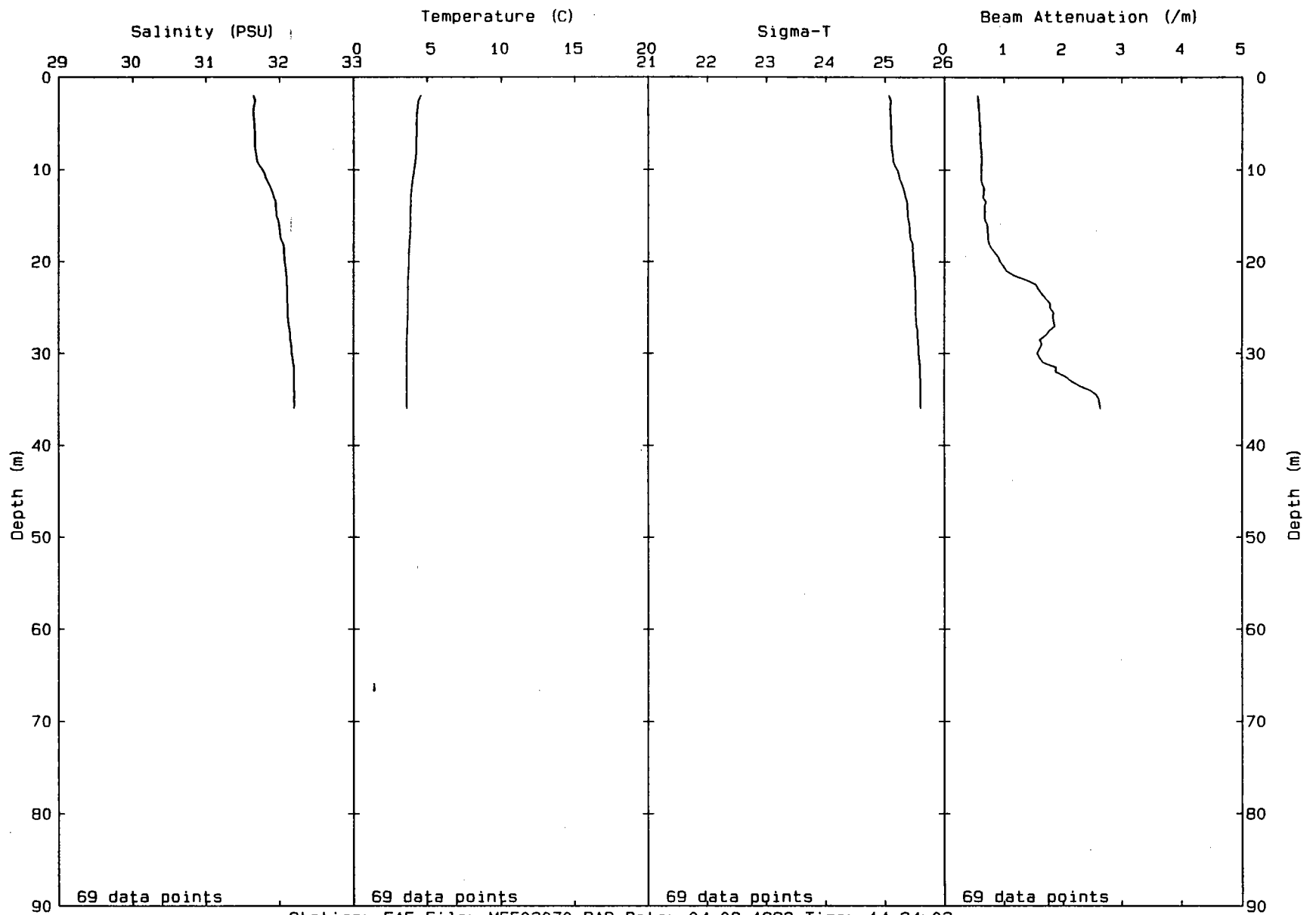
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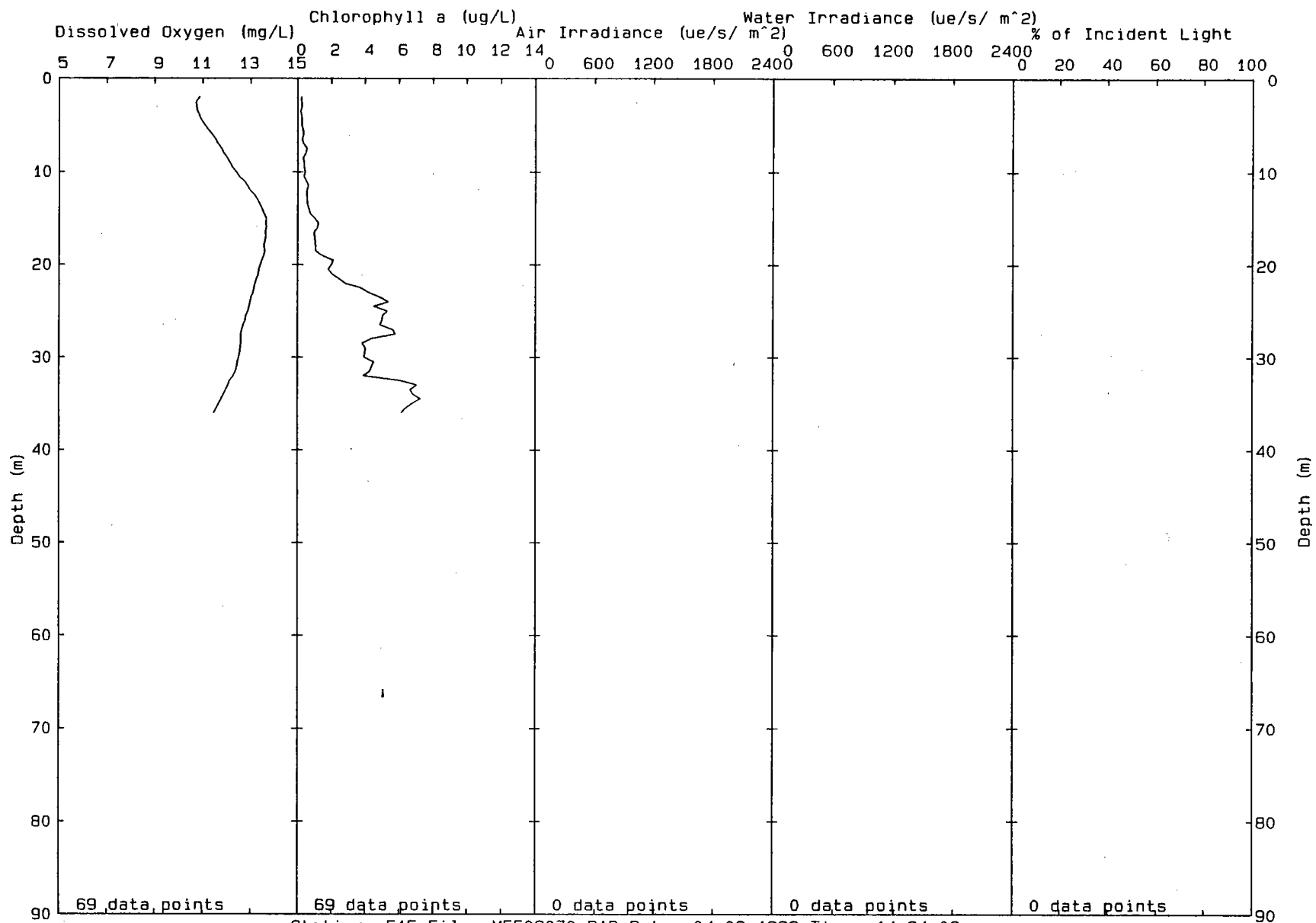
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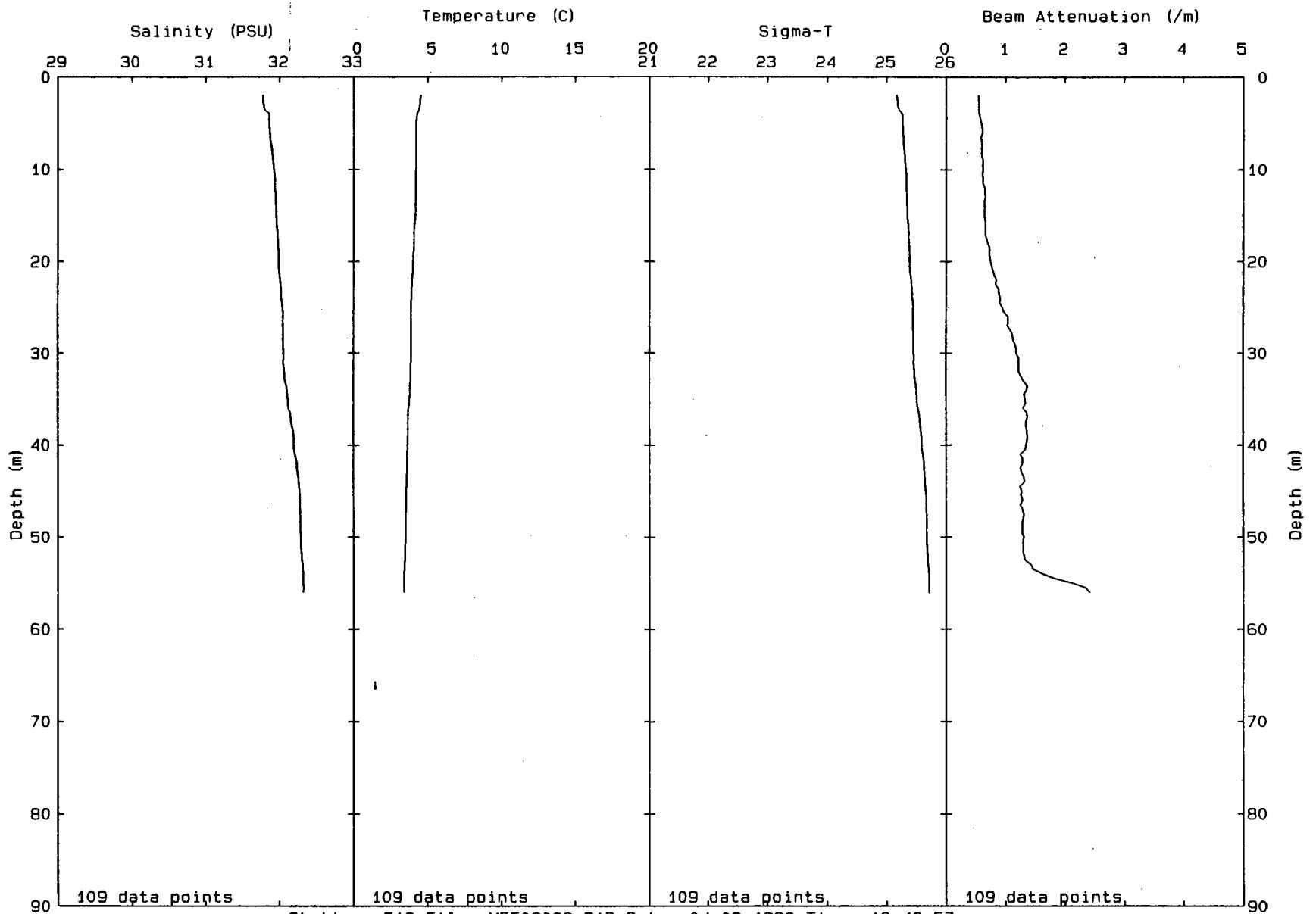
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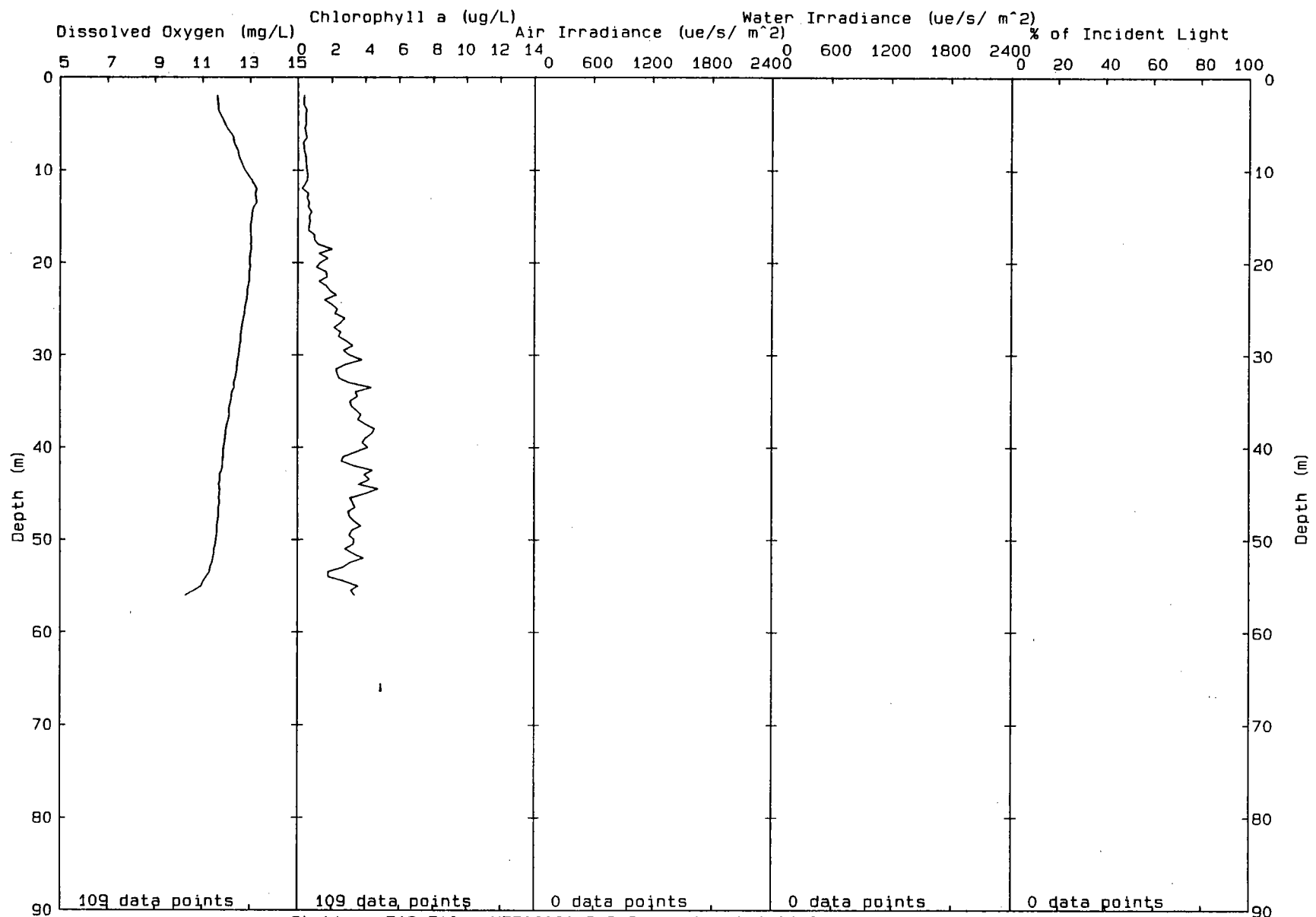
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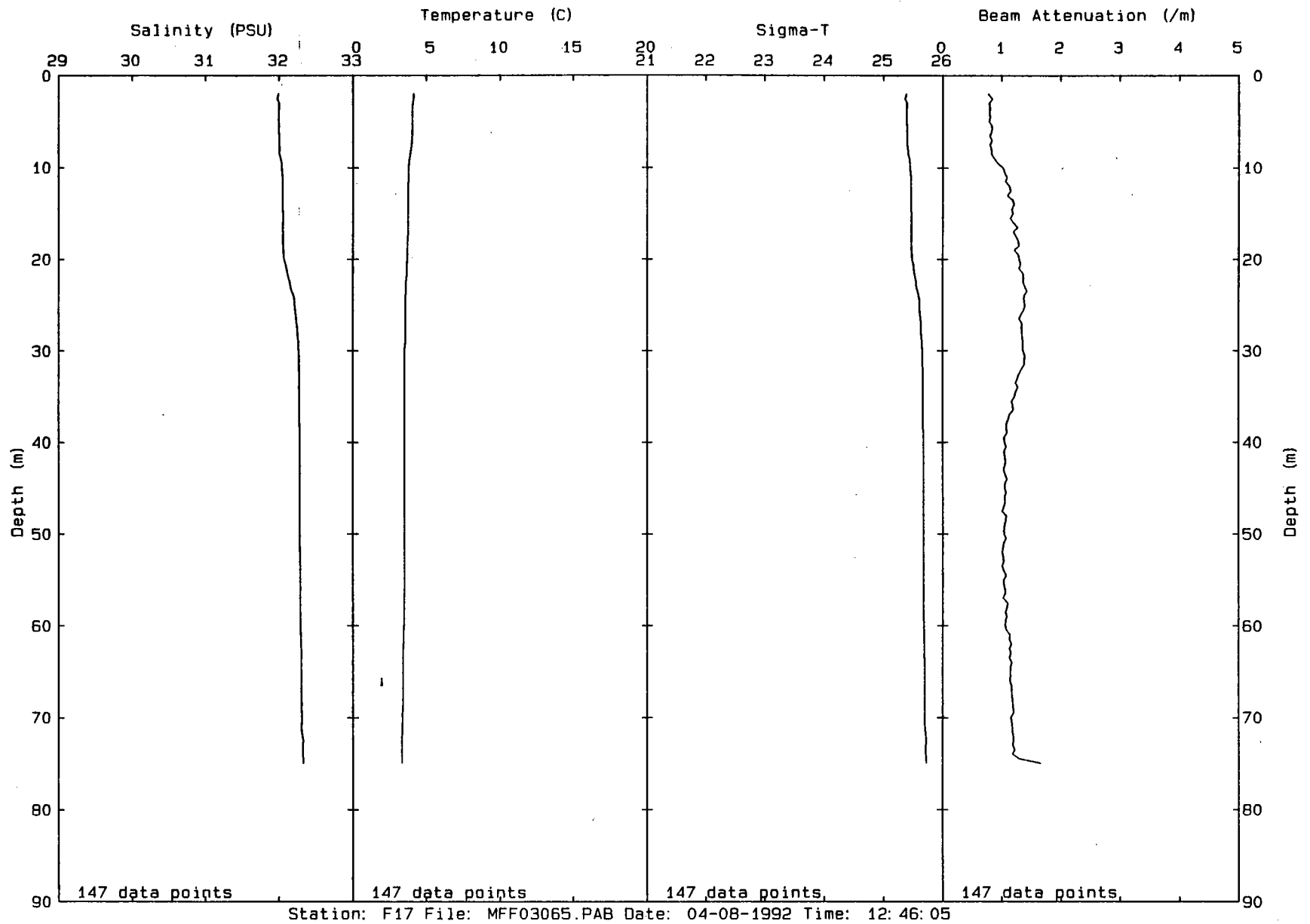
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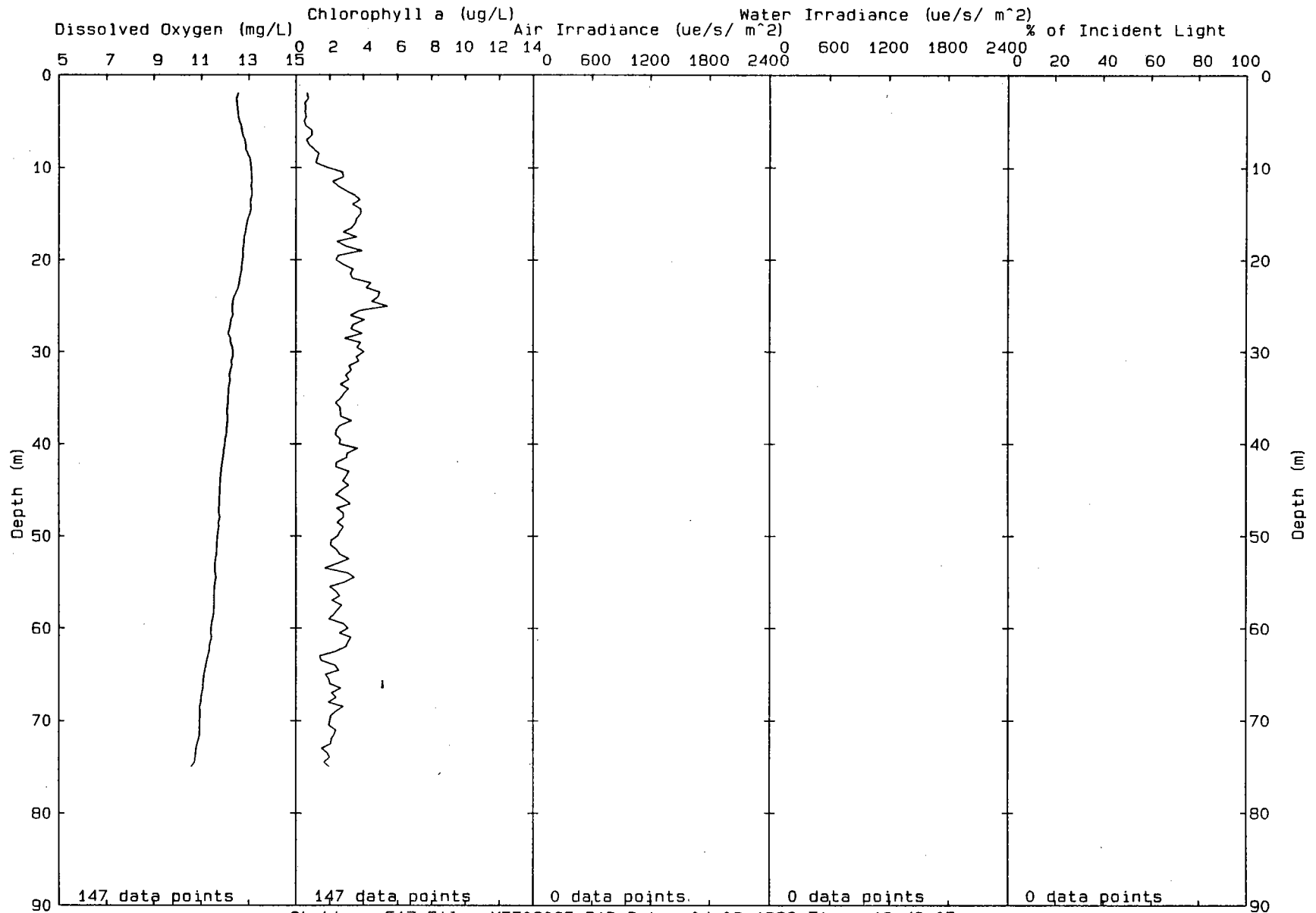


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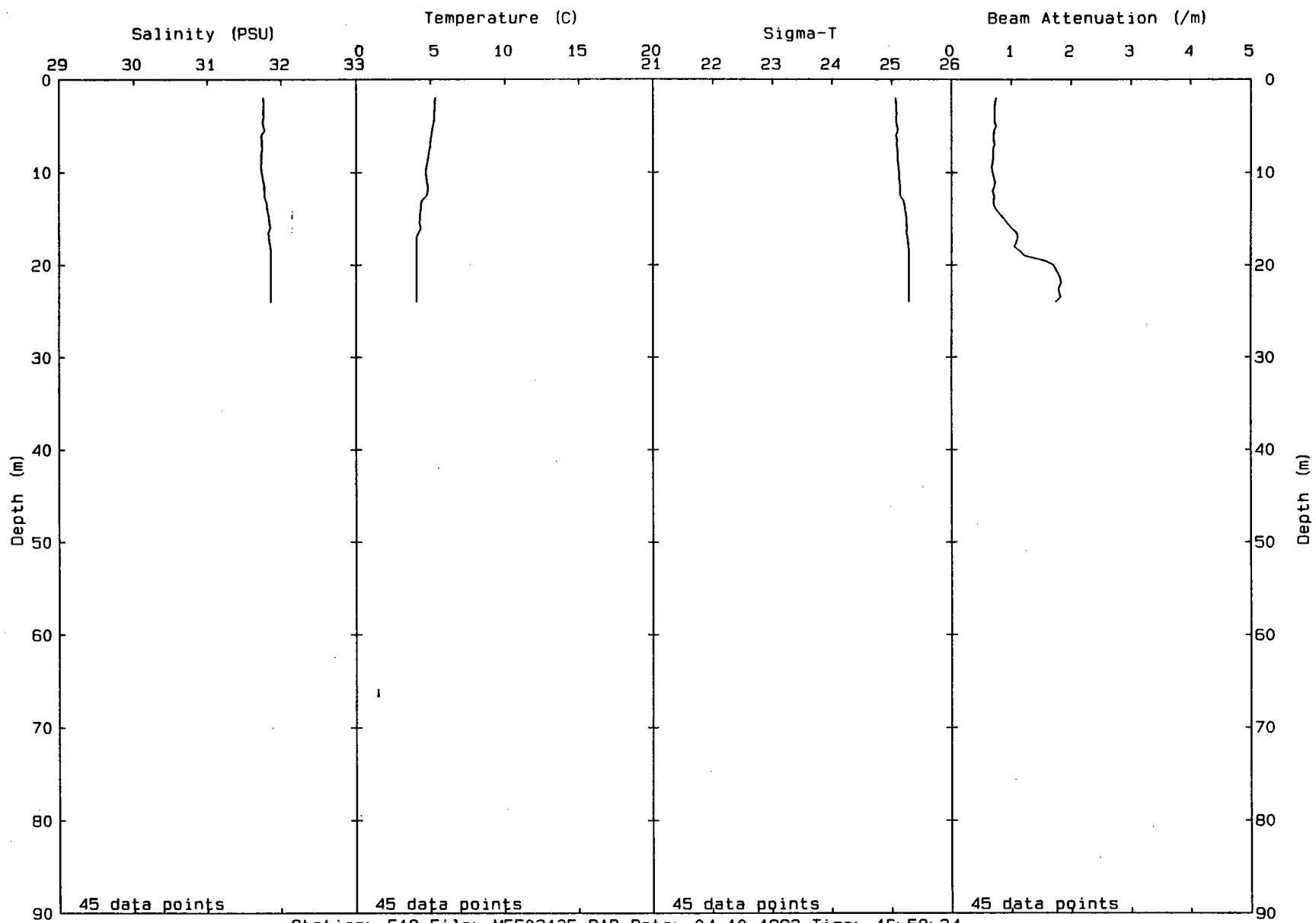


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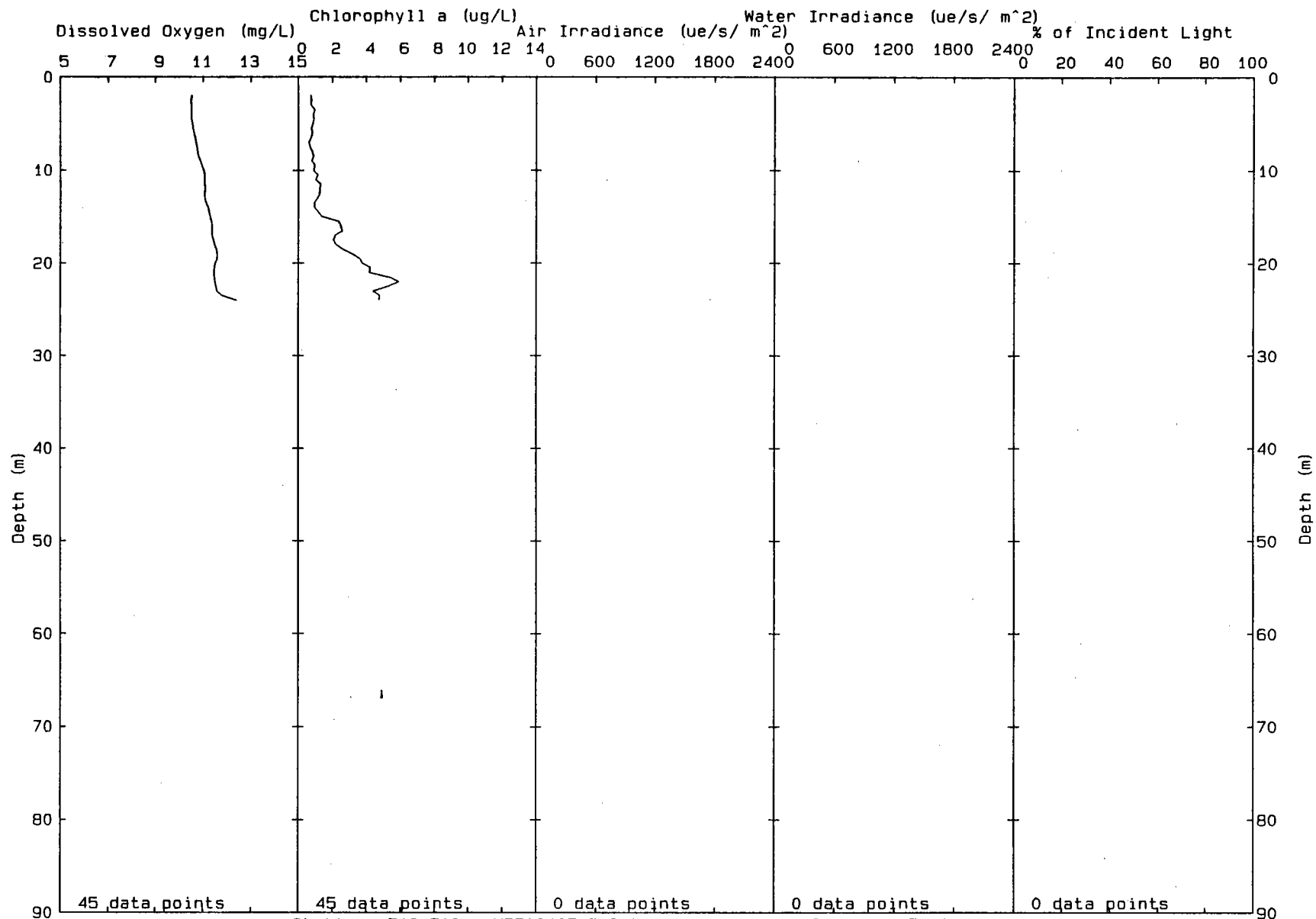
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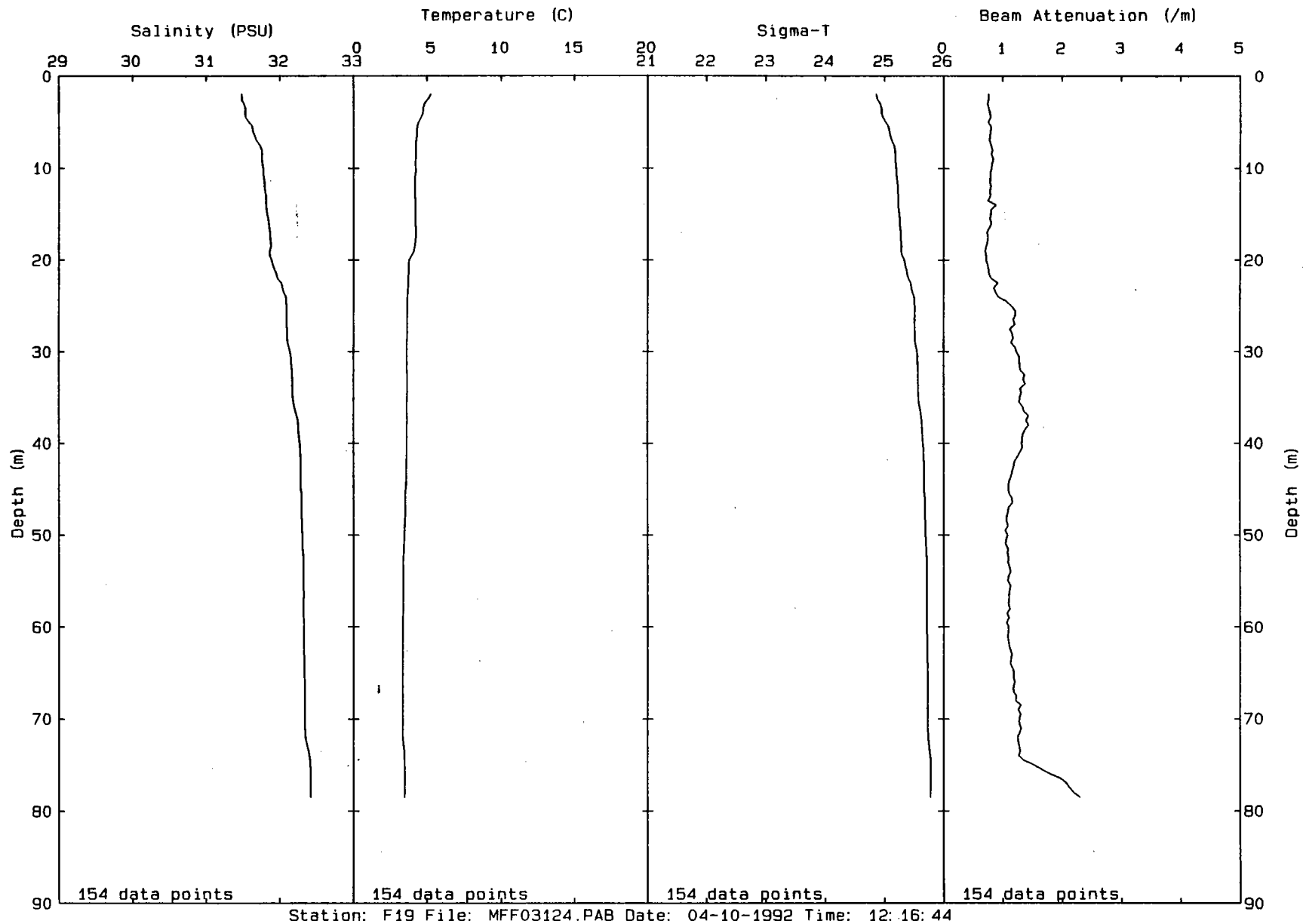
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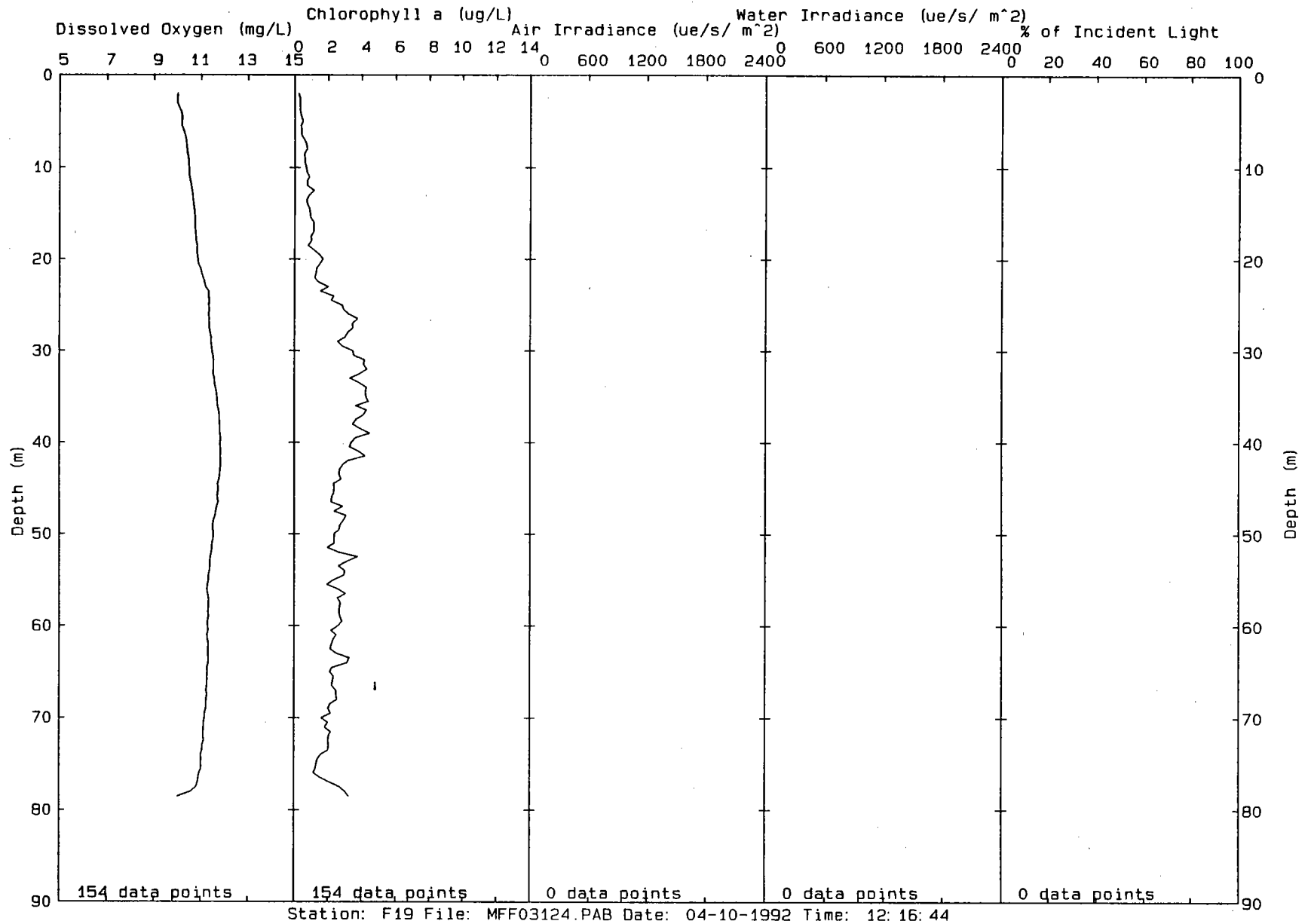


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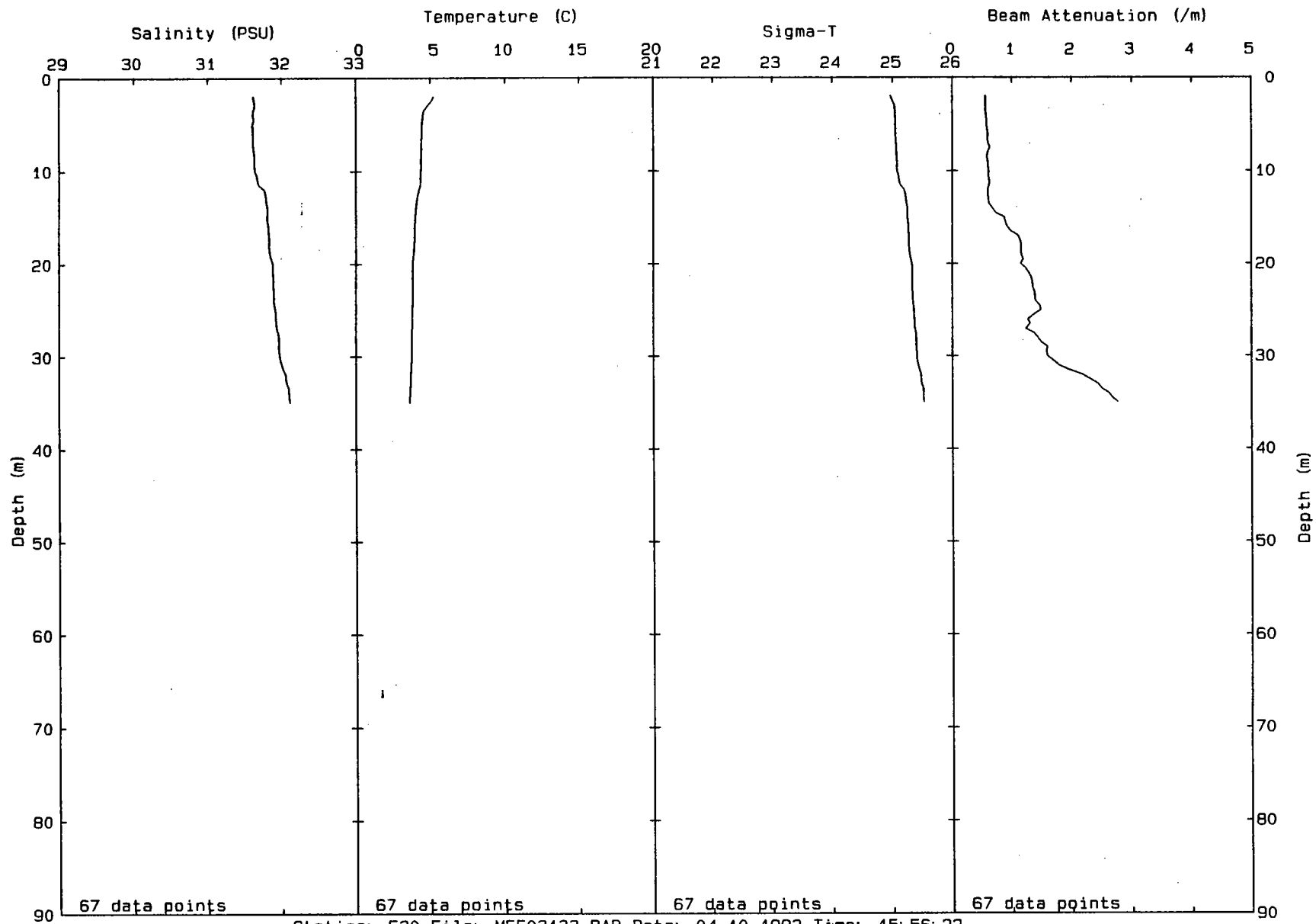
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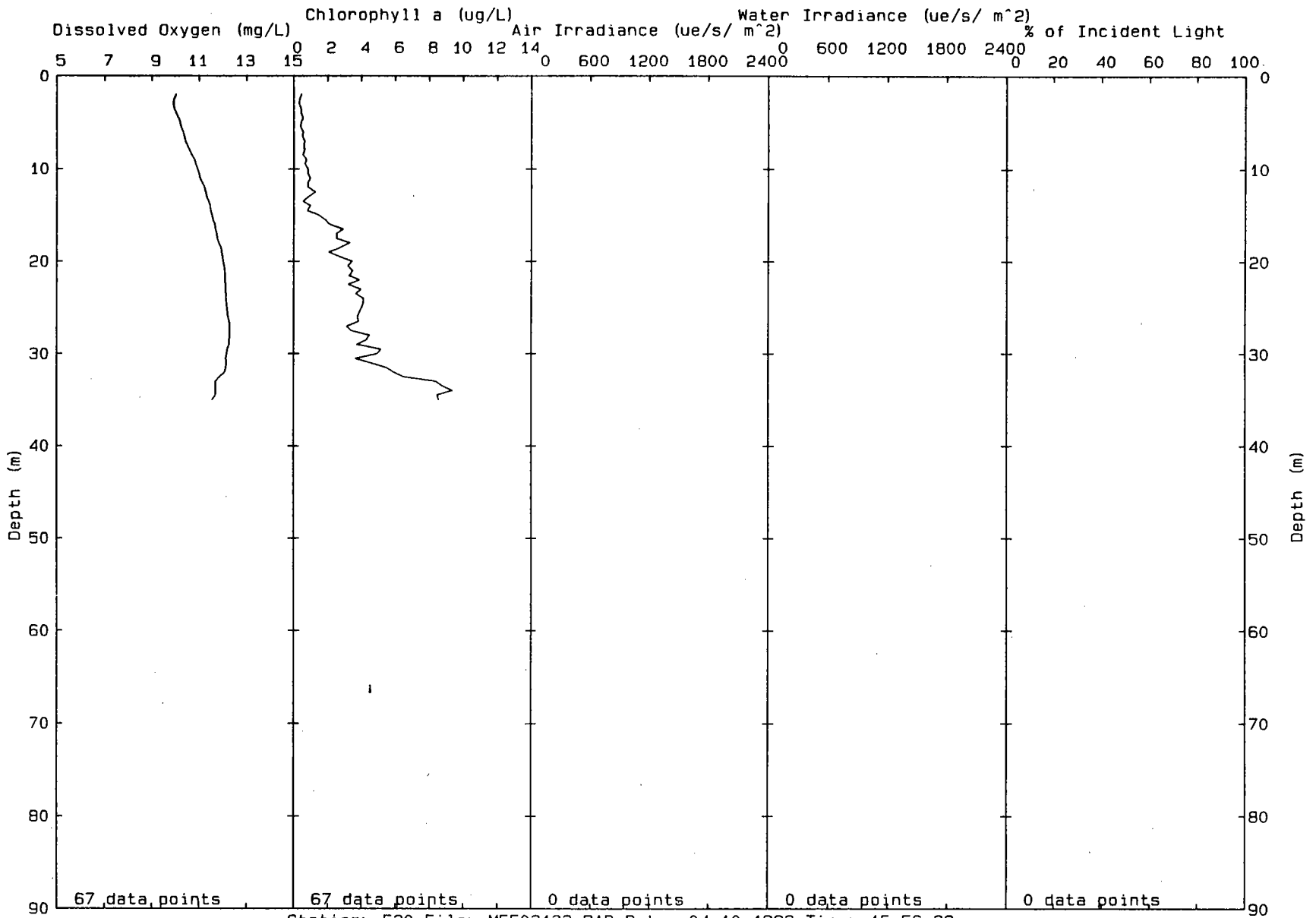


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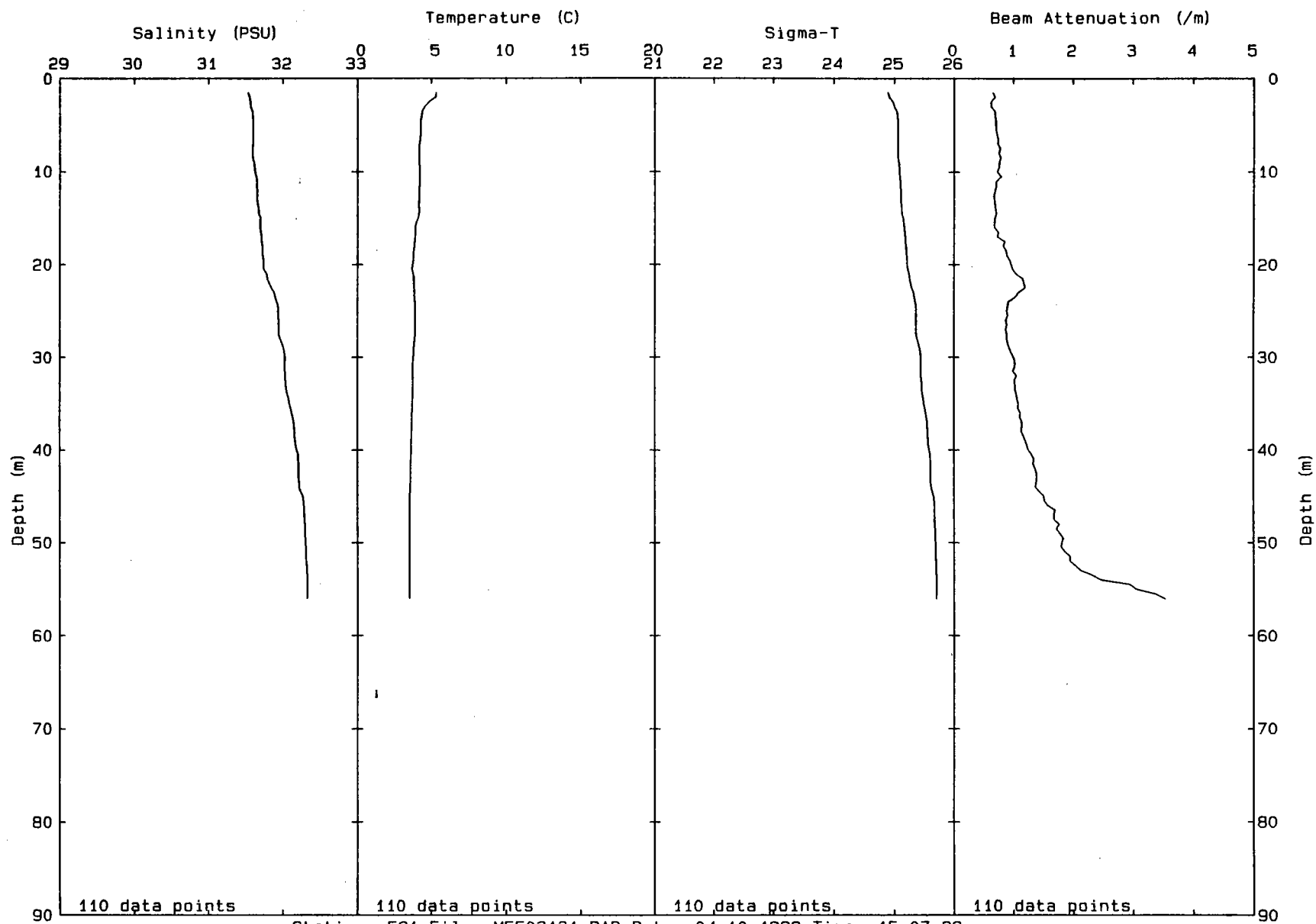
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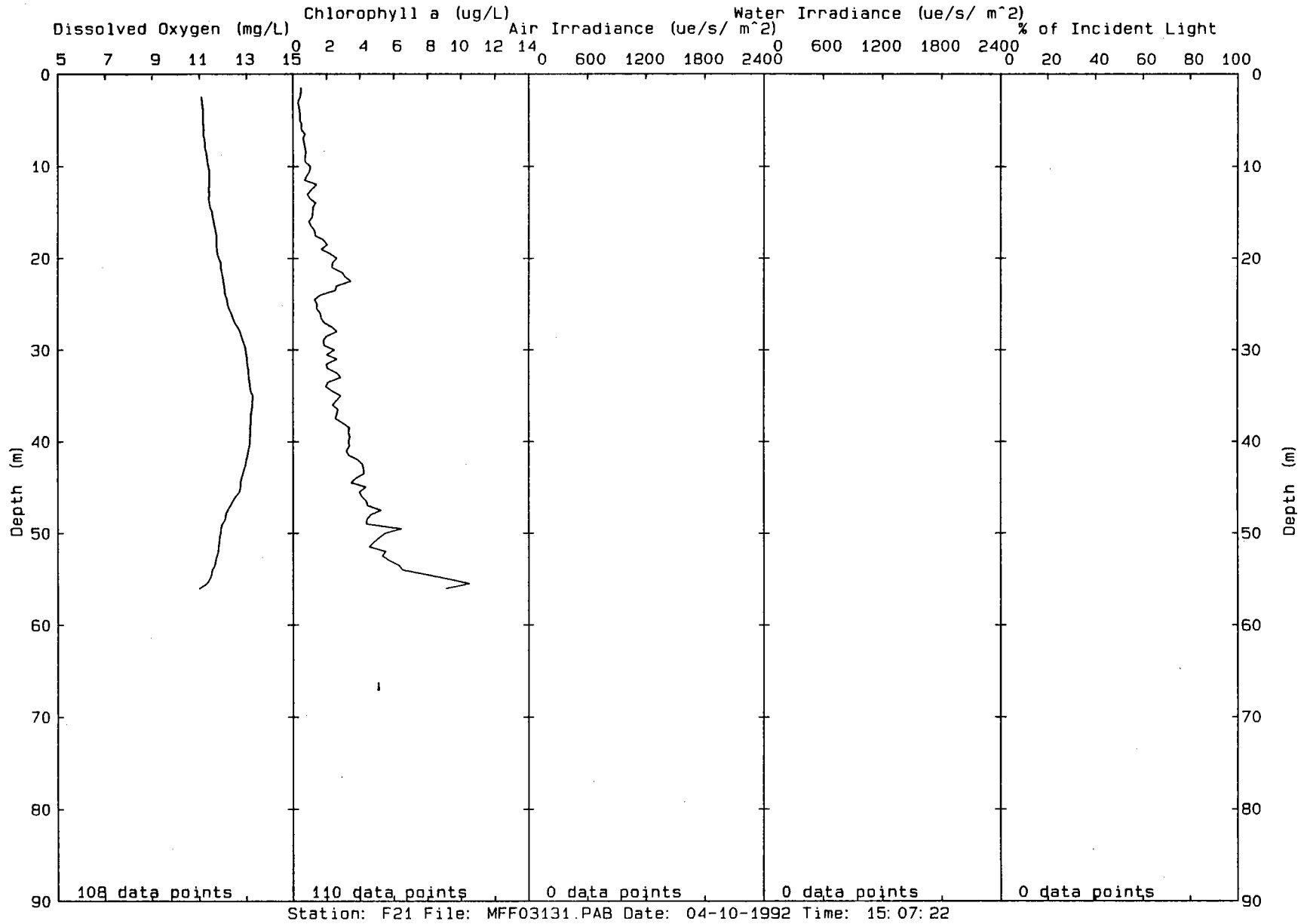
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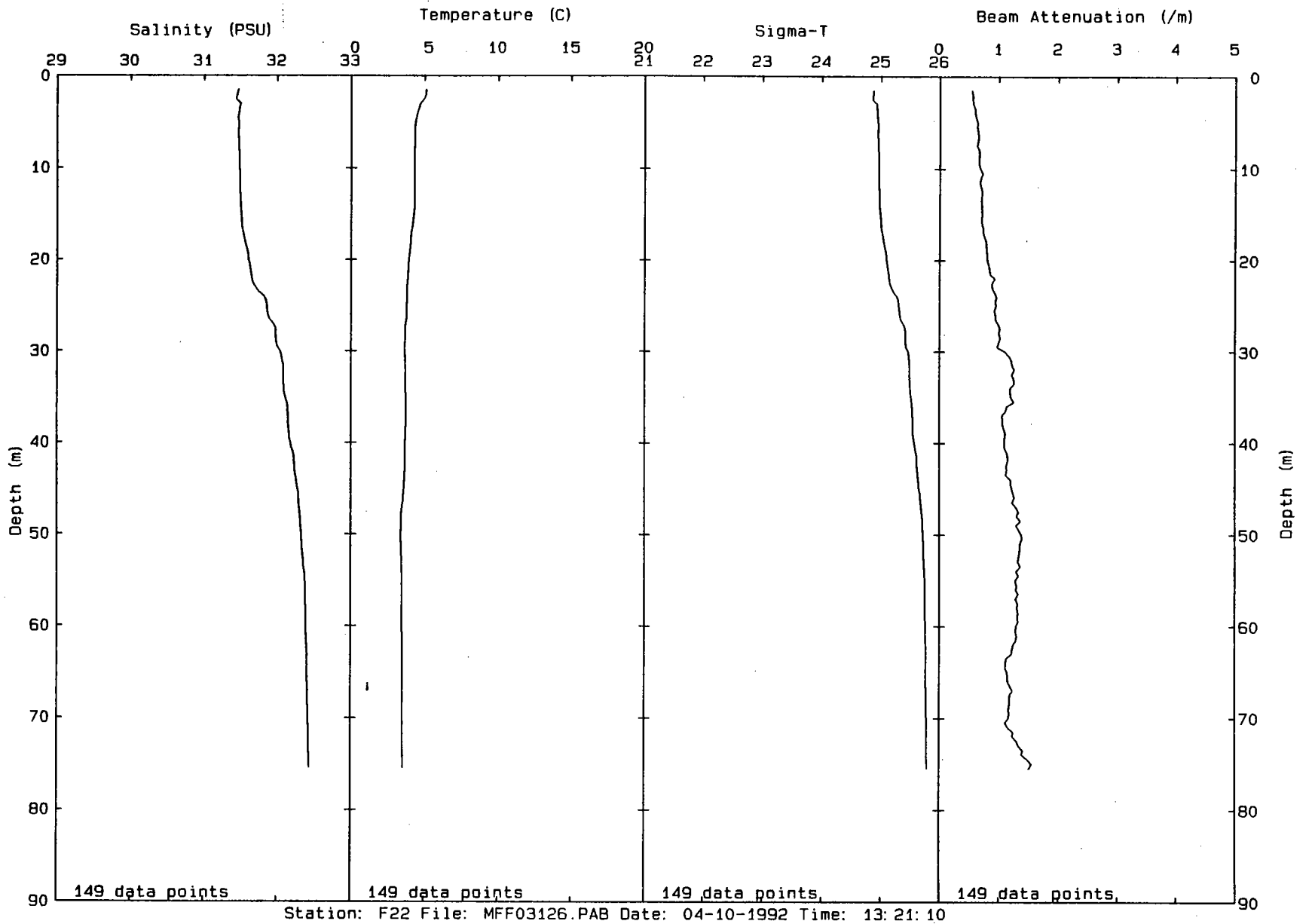


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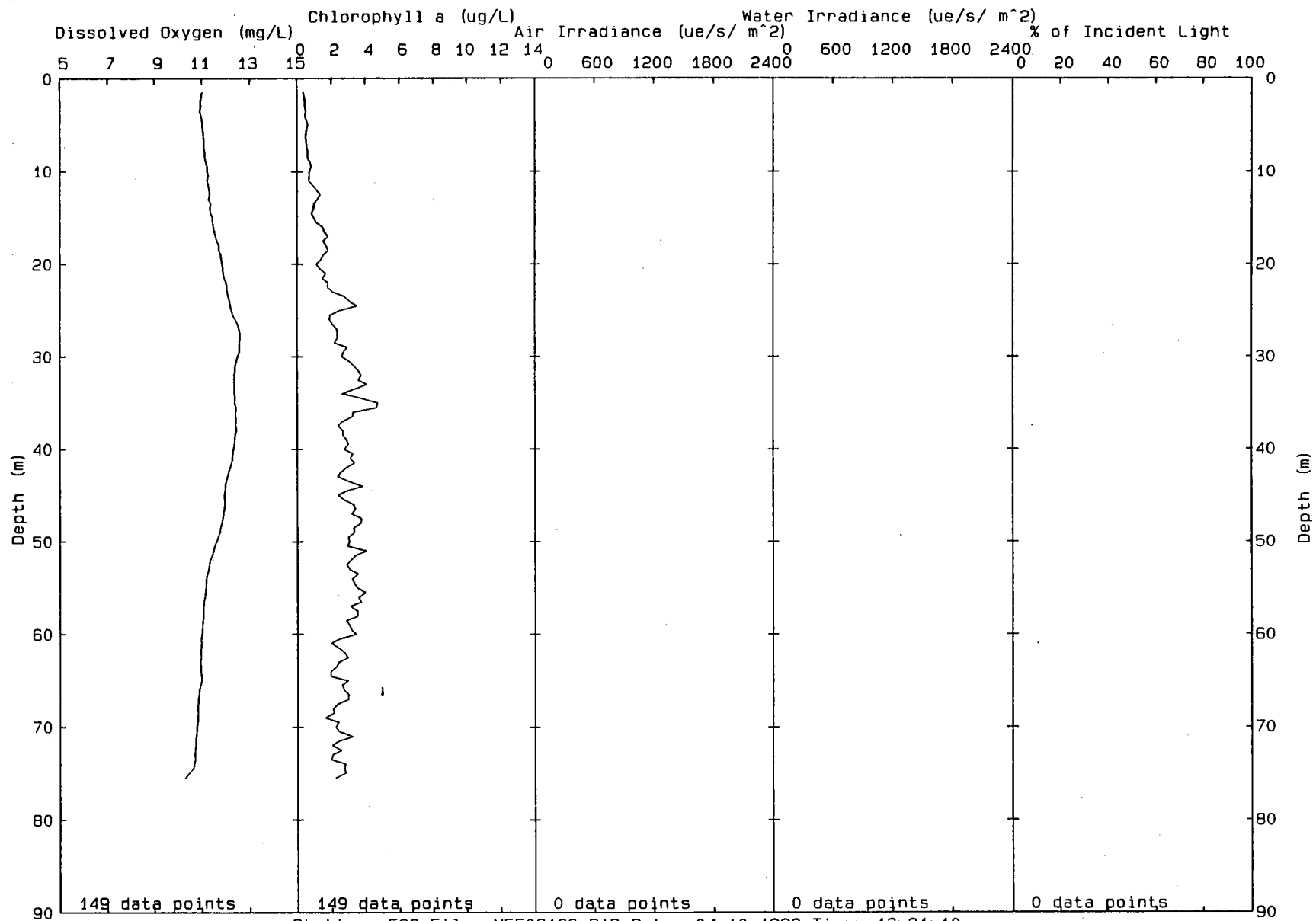
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68000

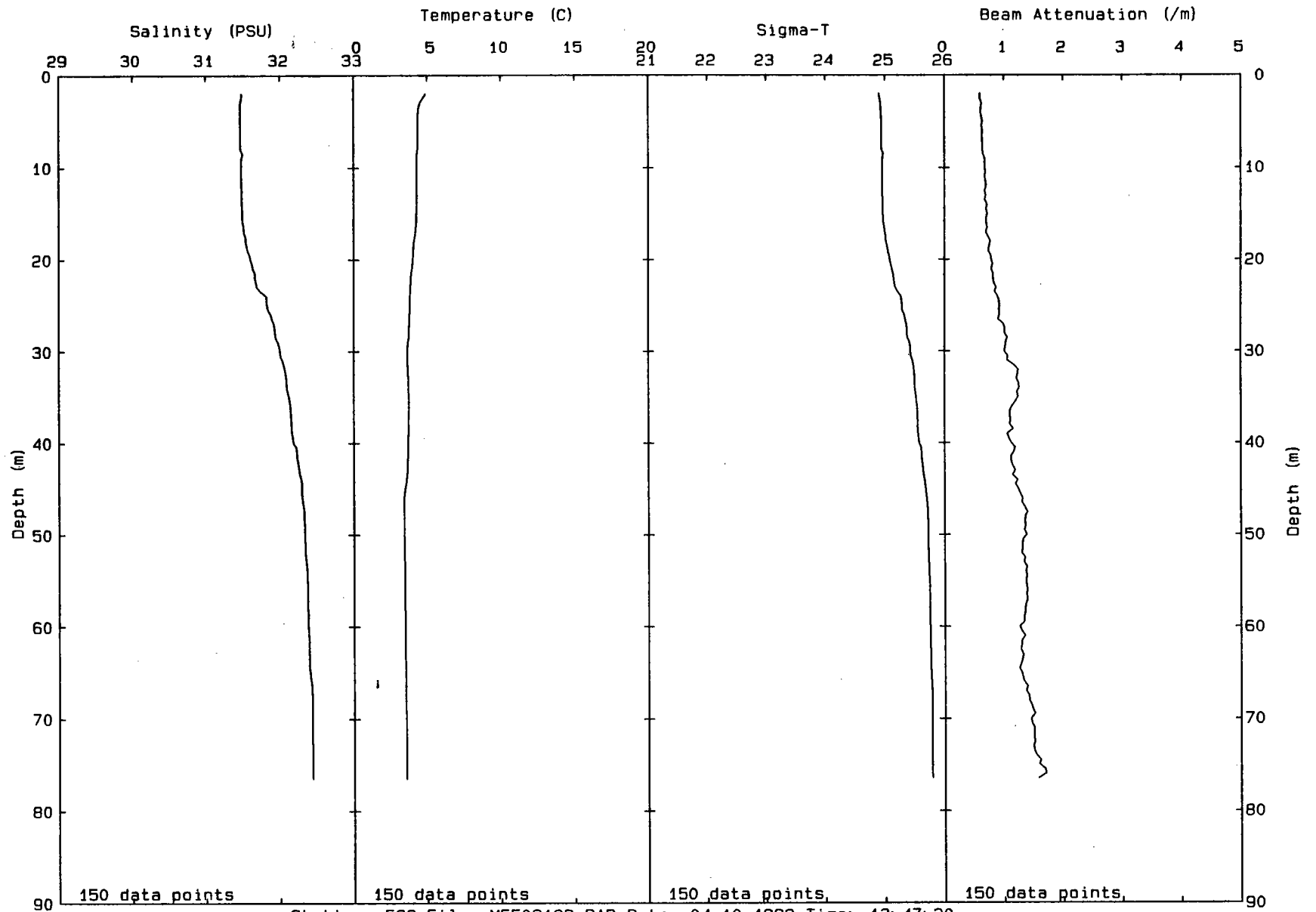


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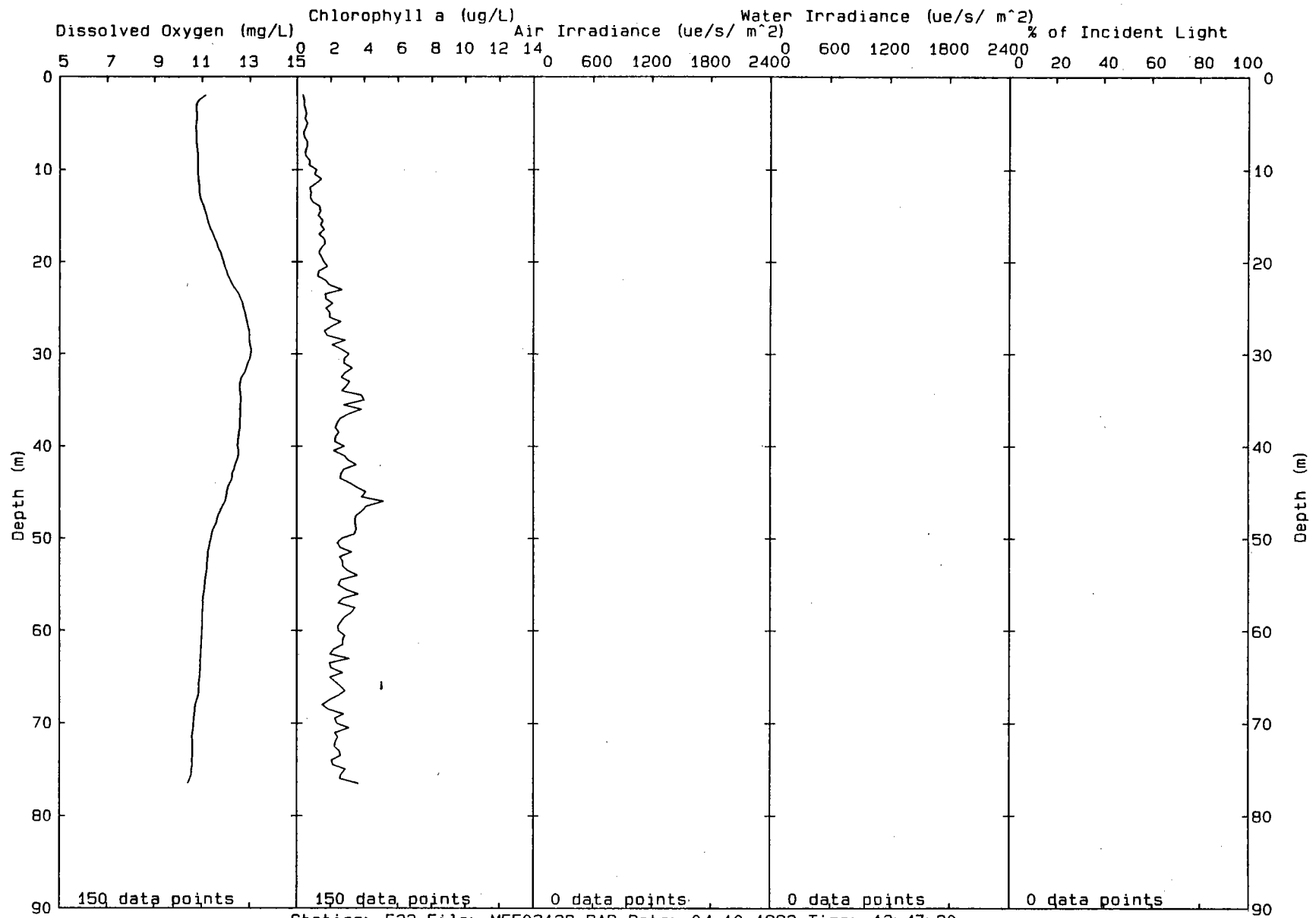
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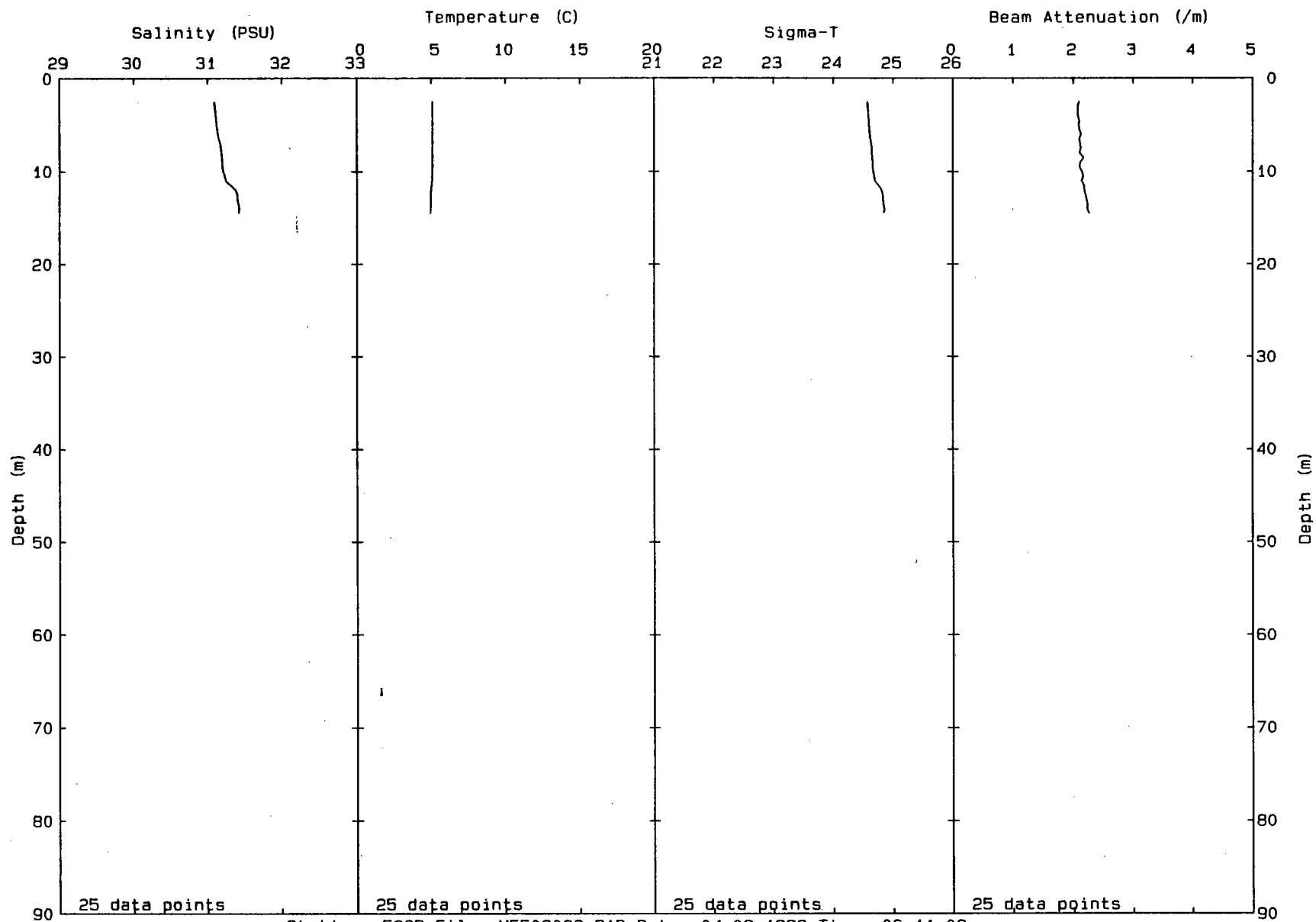
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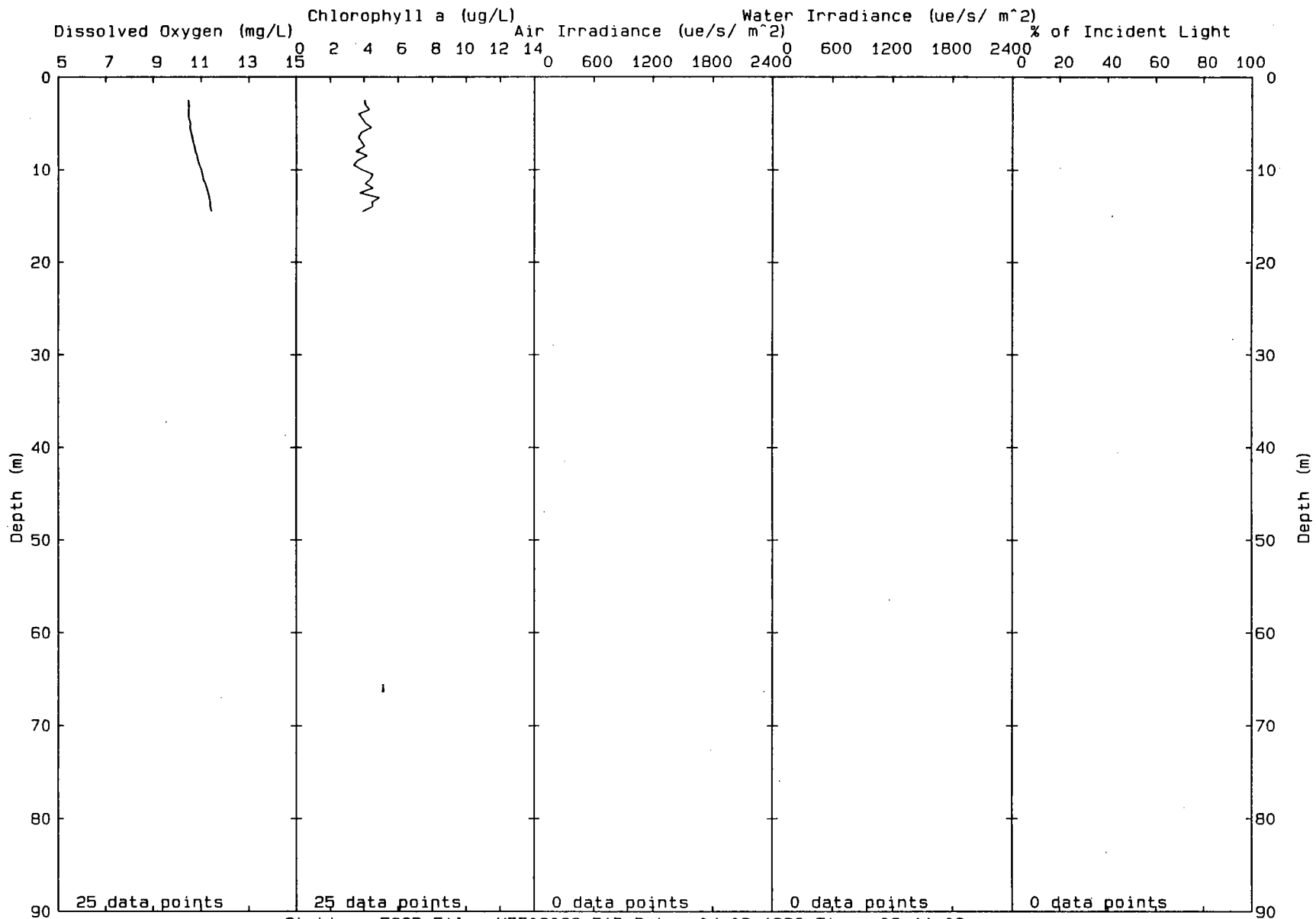
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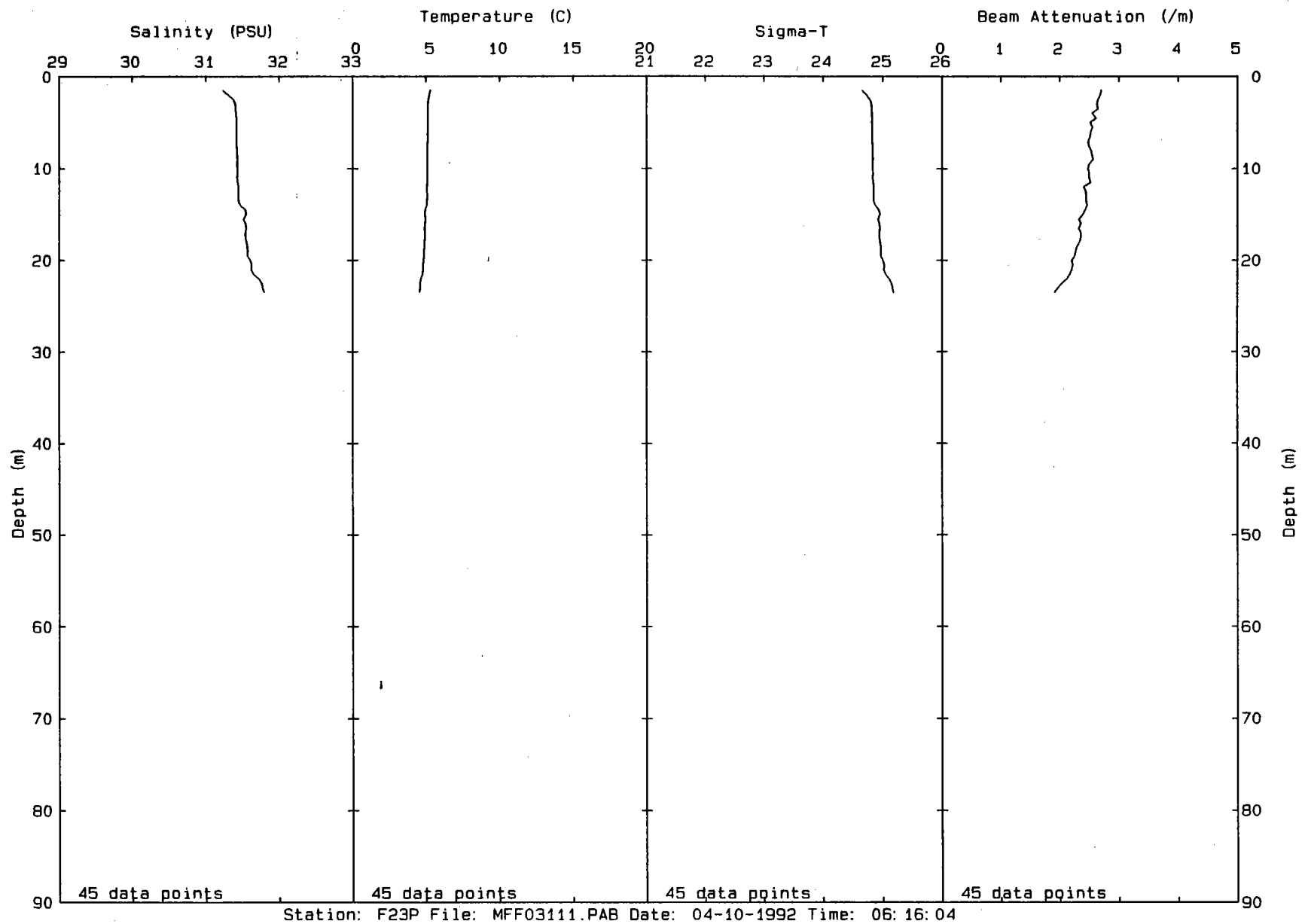
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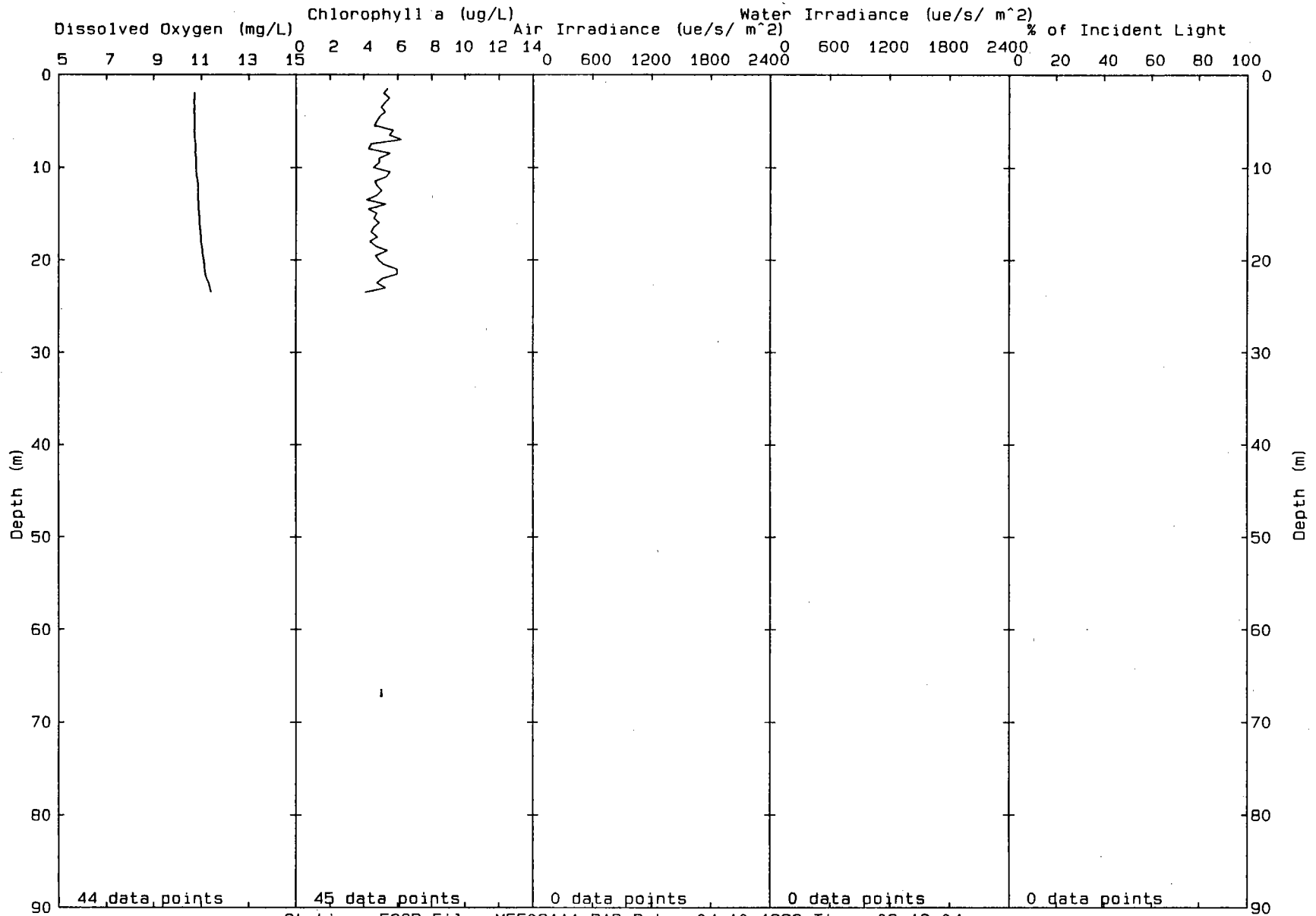


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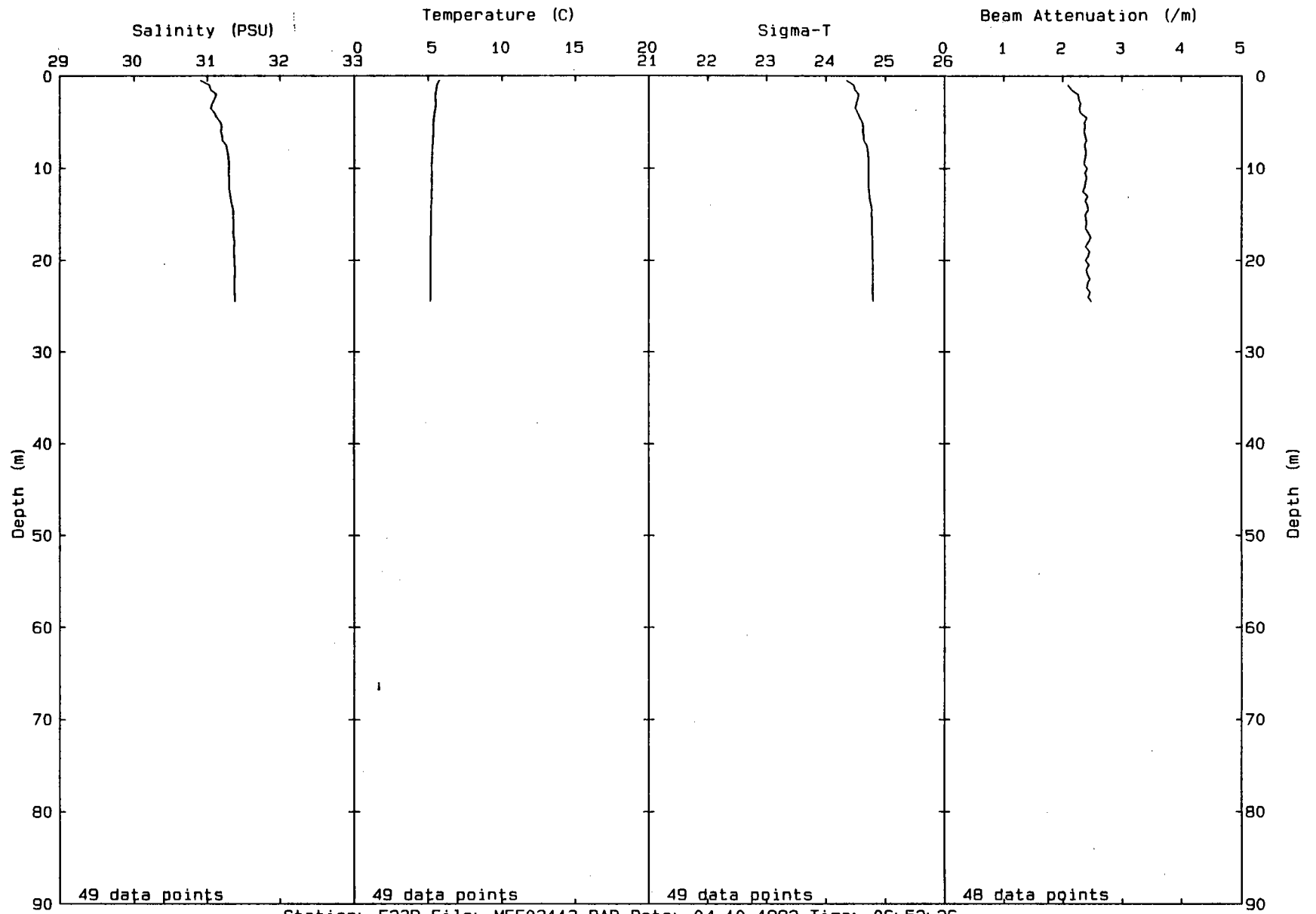


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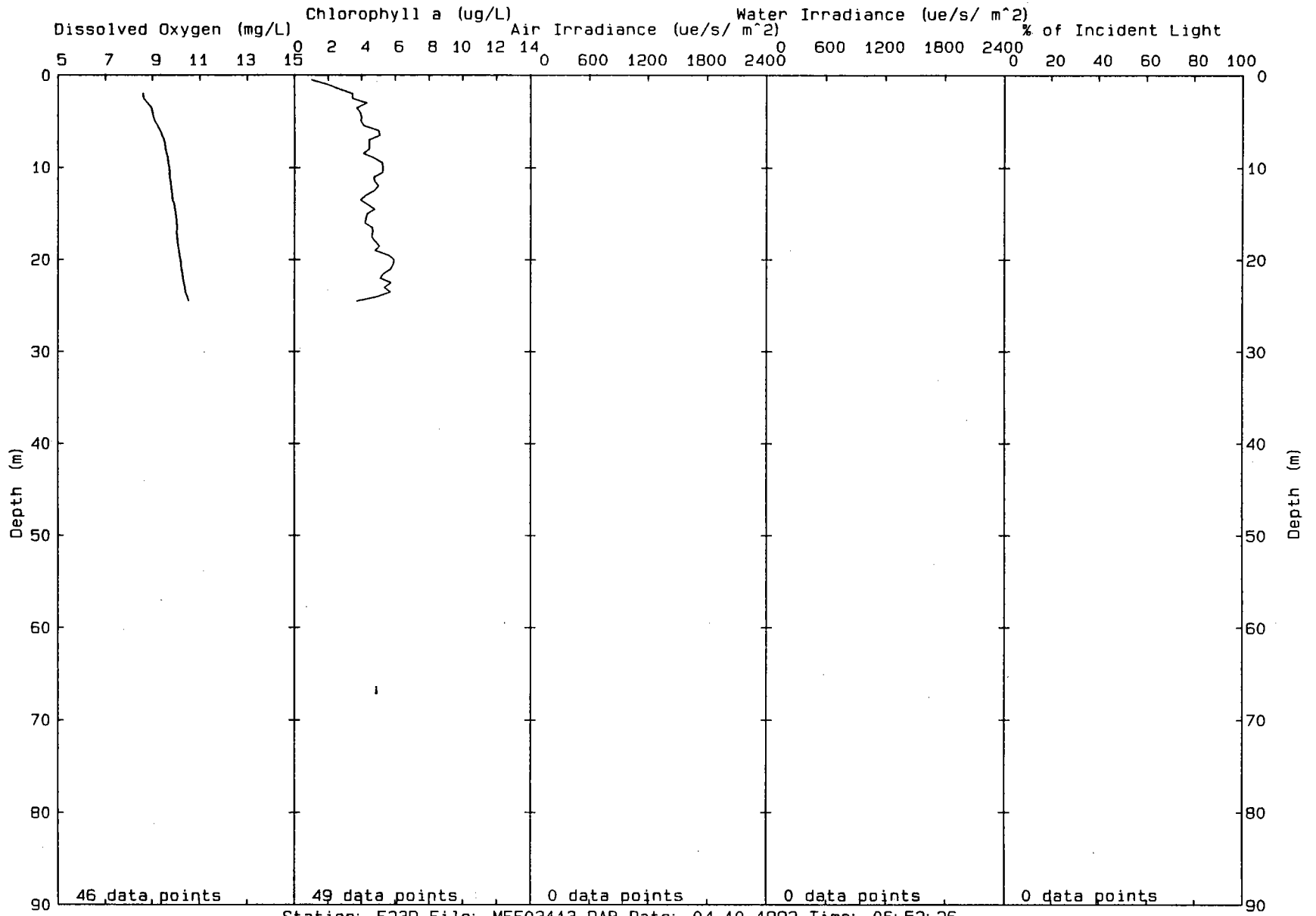


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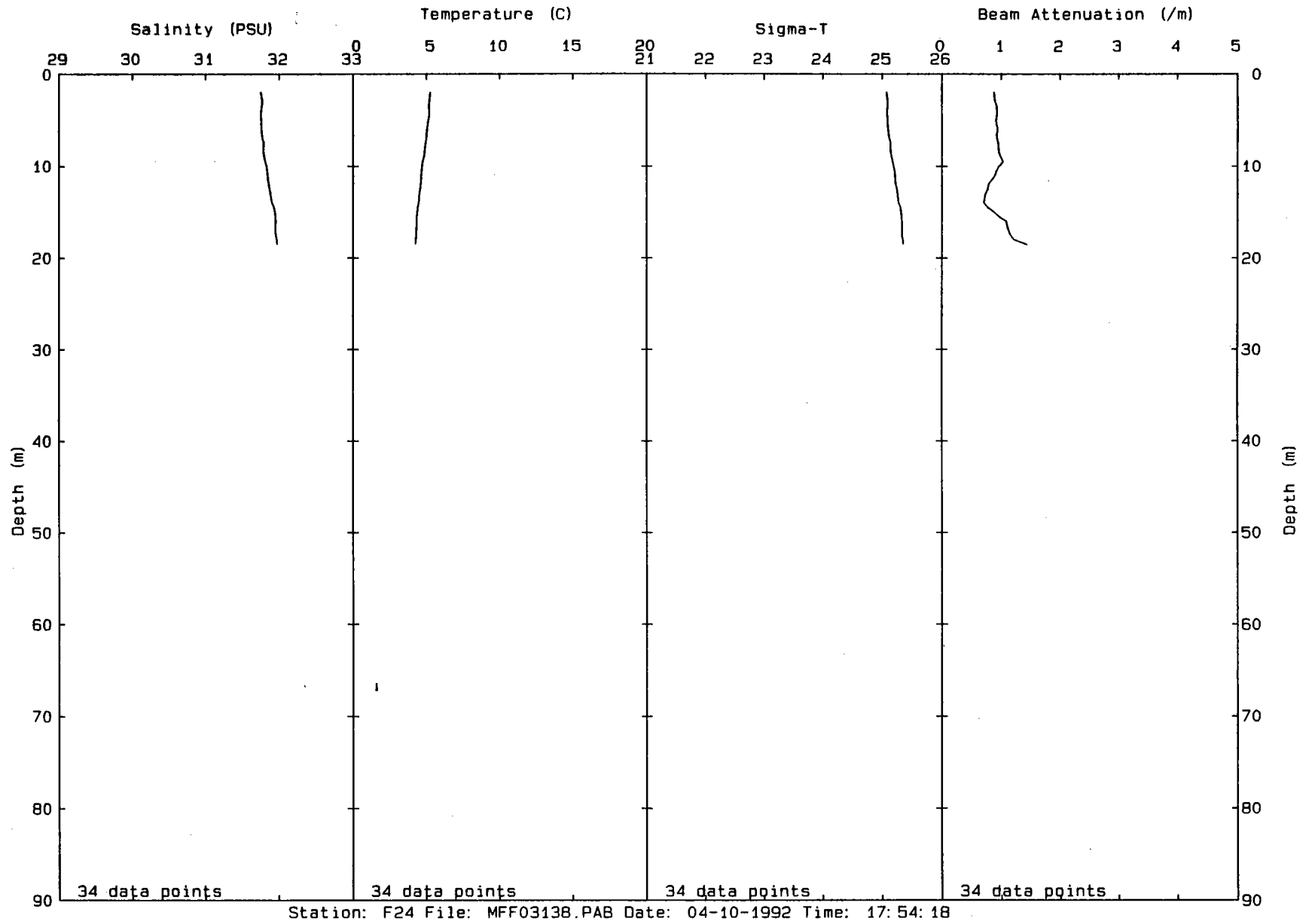


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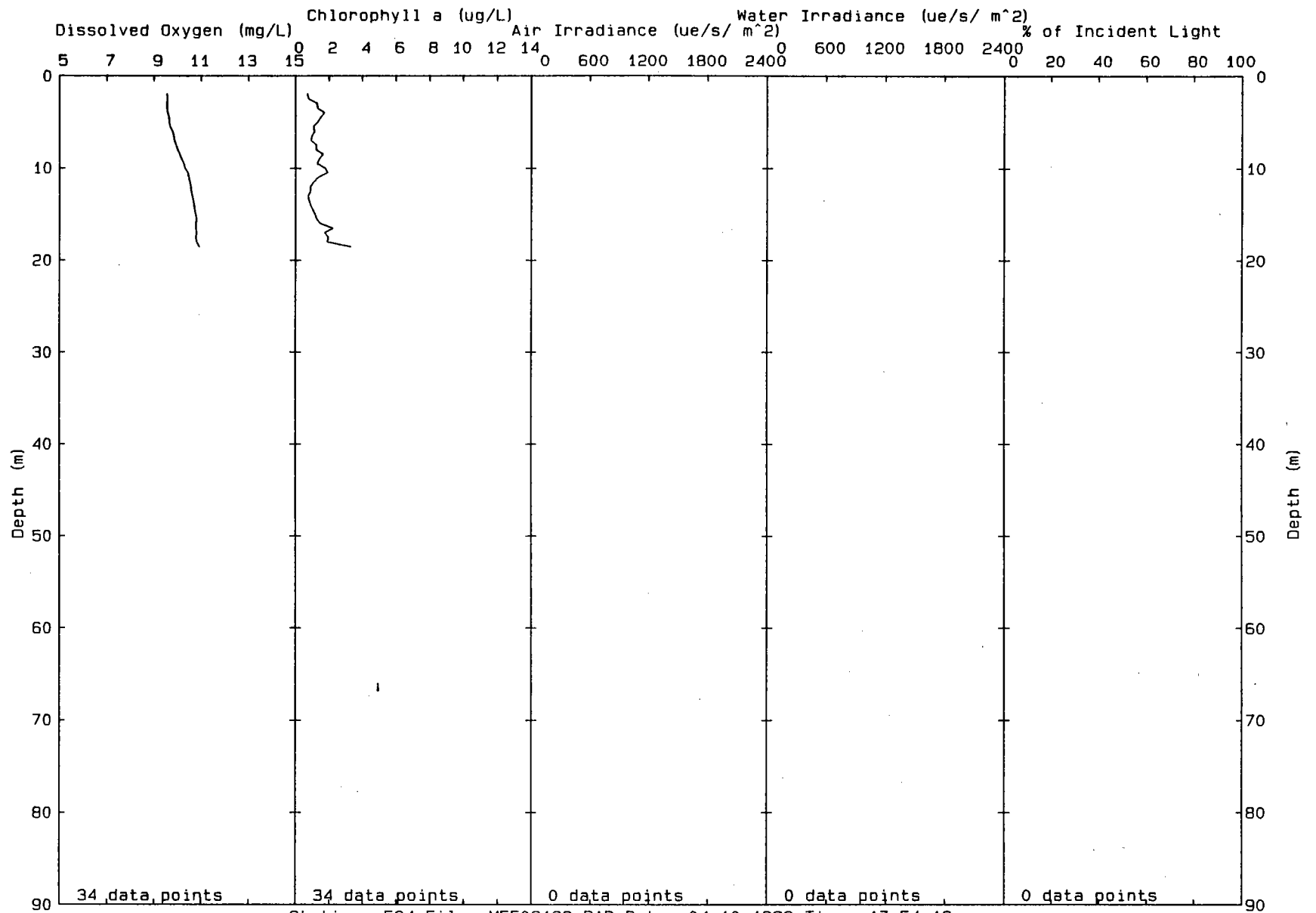


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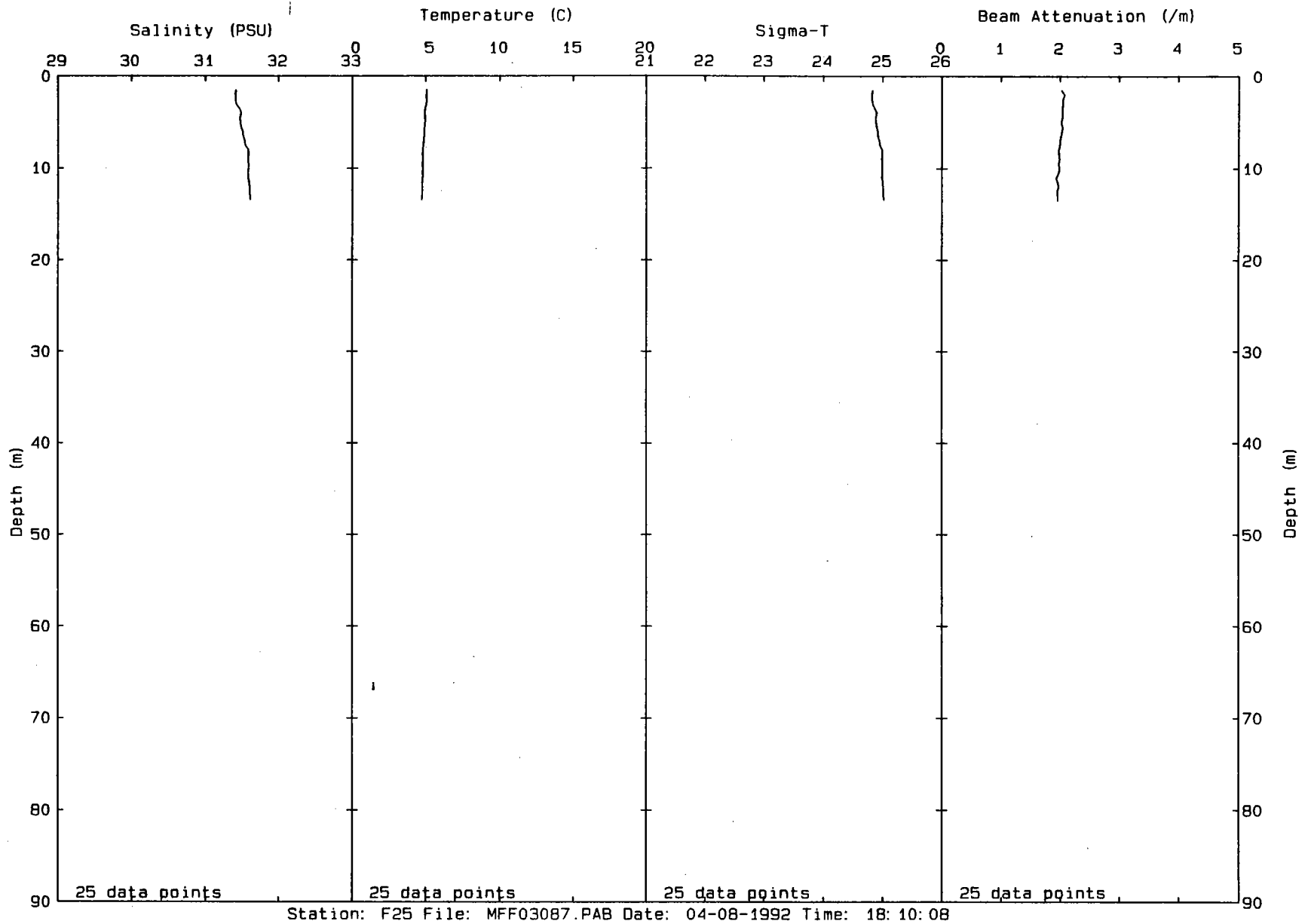
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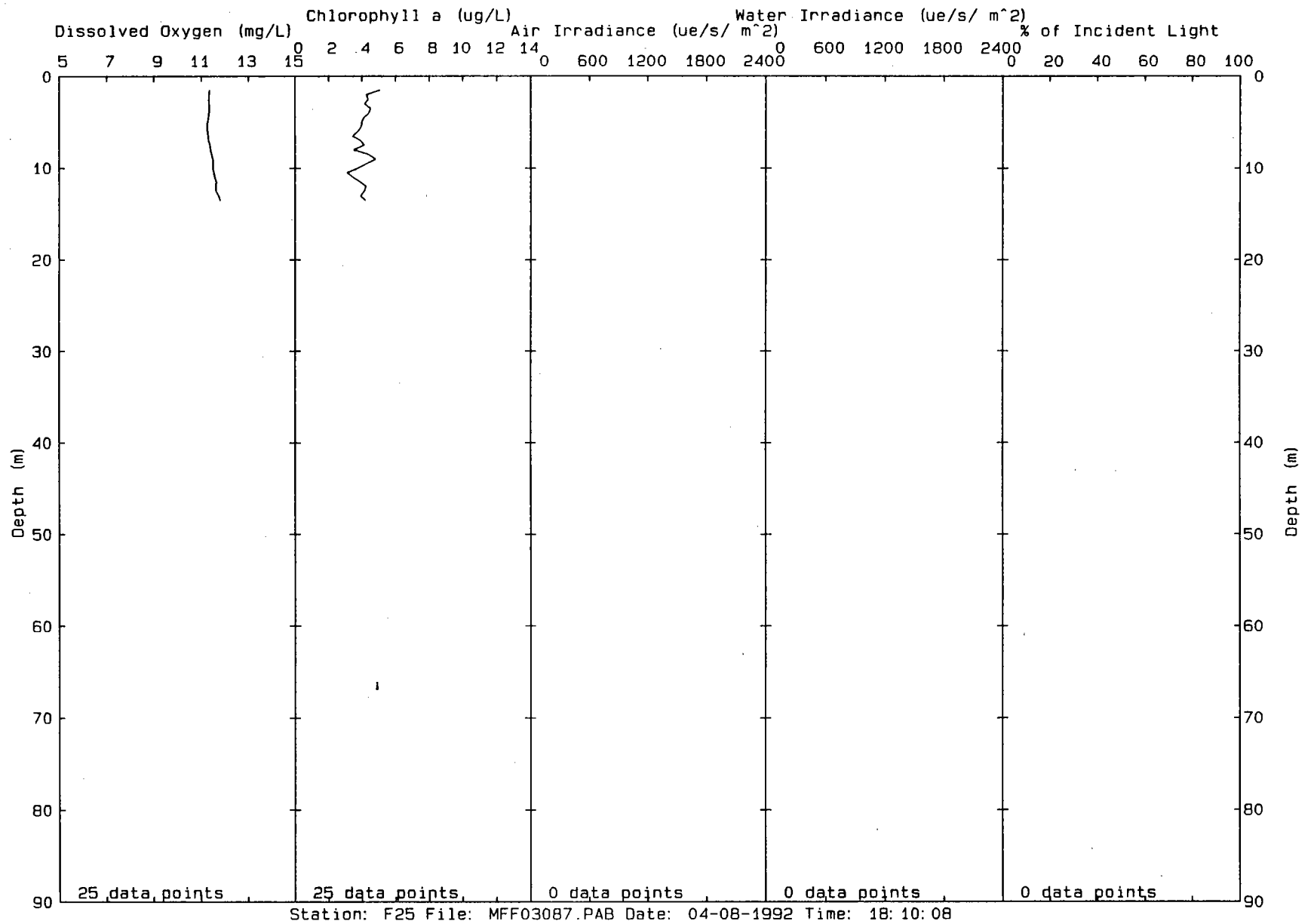
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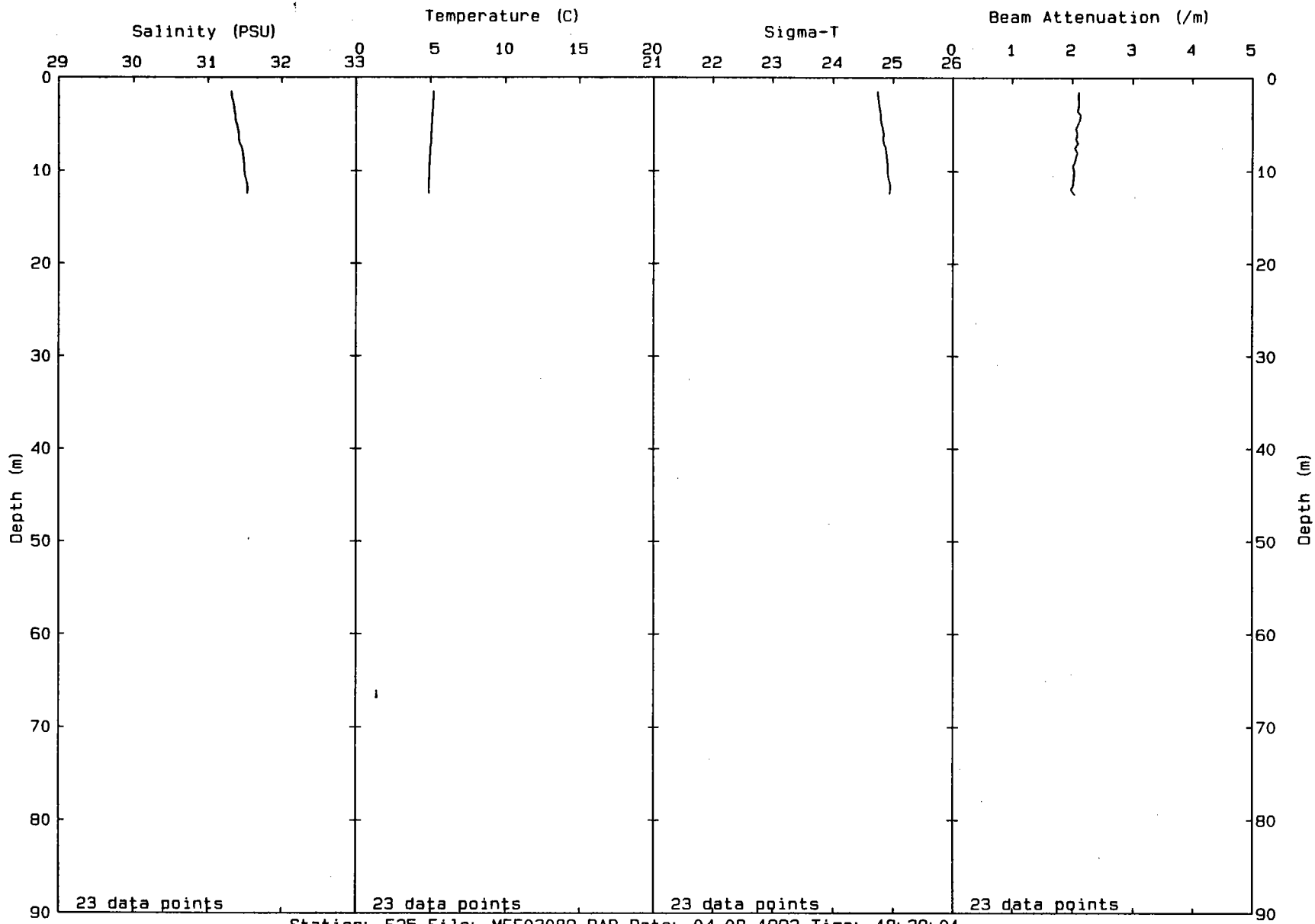
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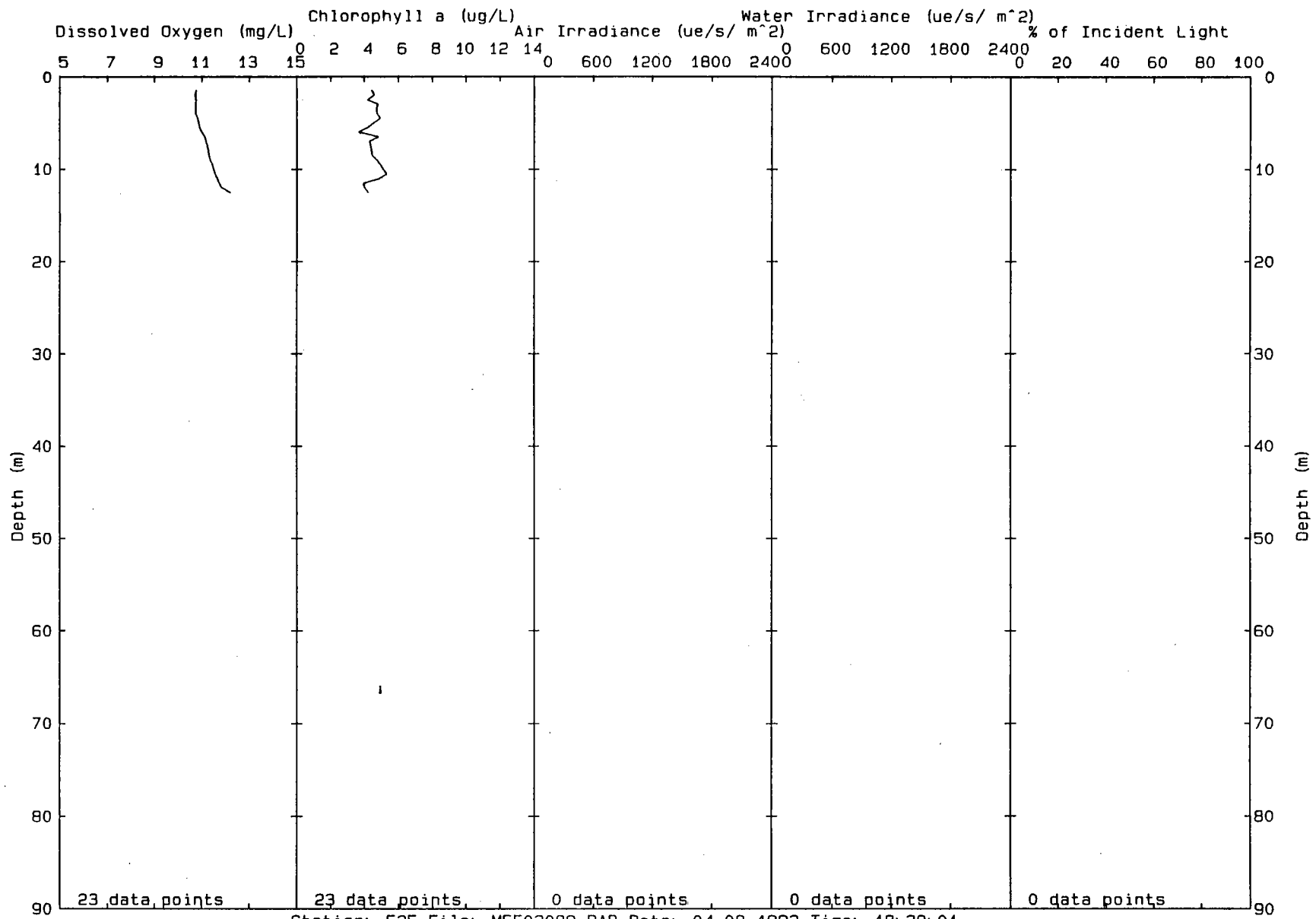
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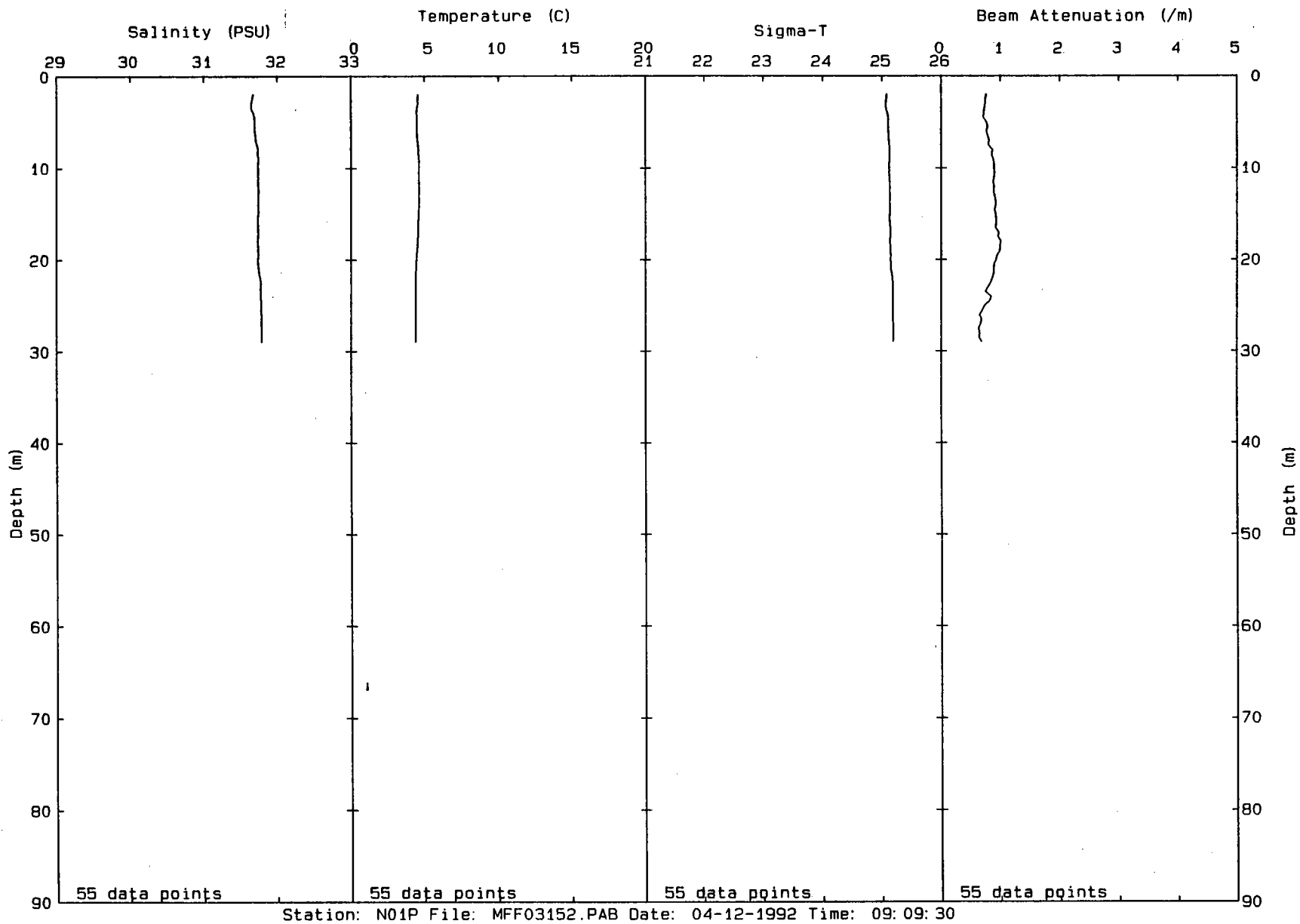


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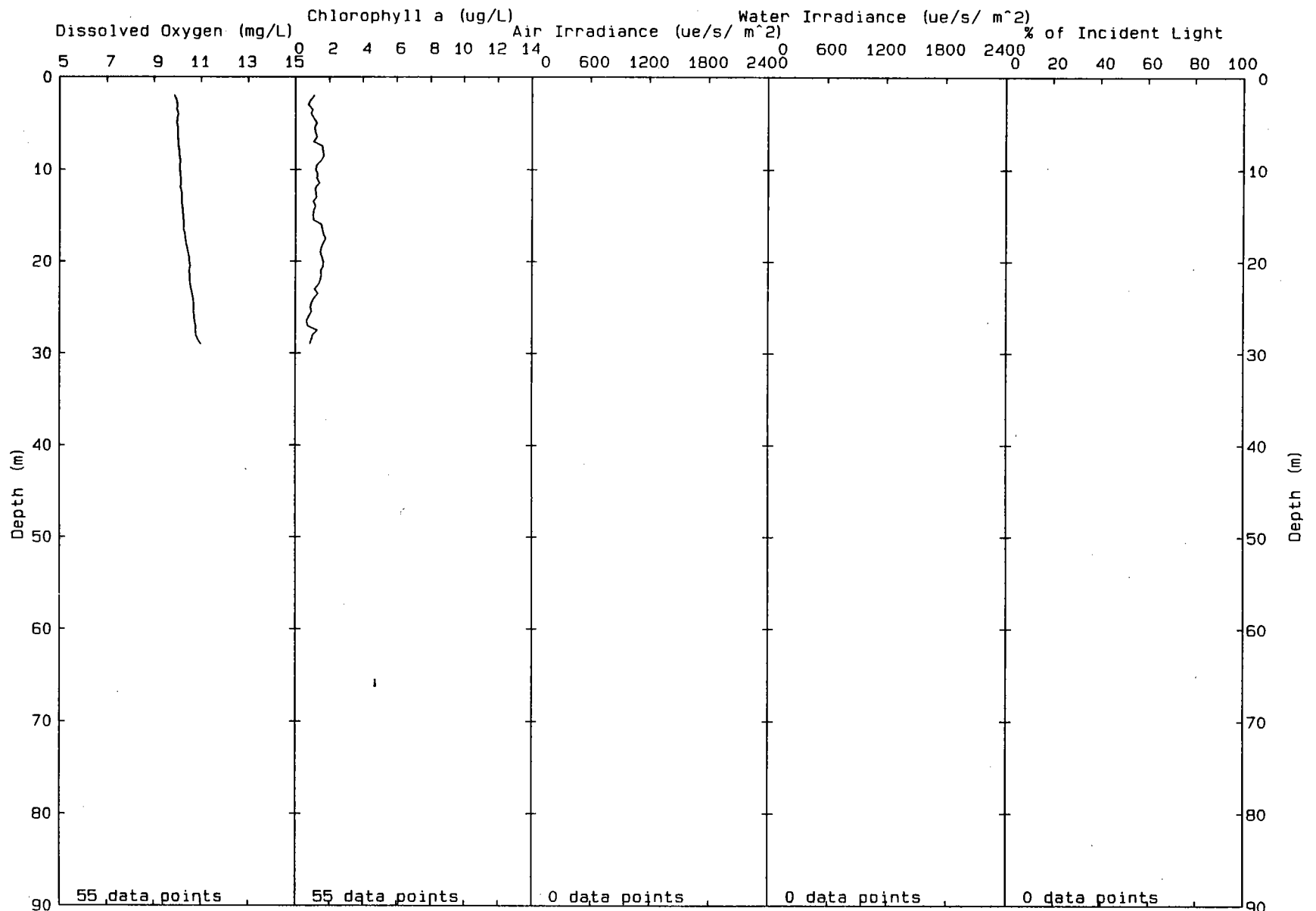


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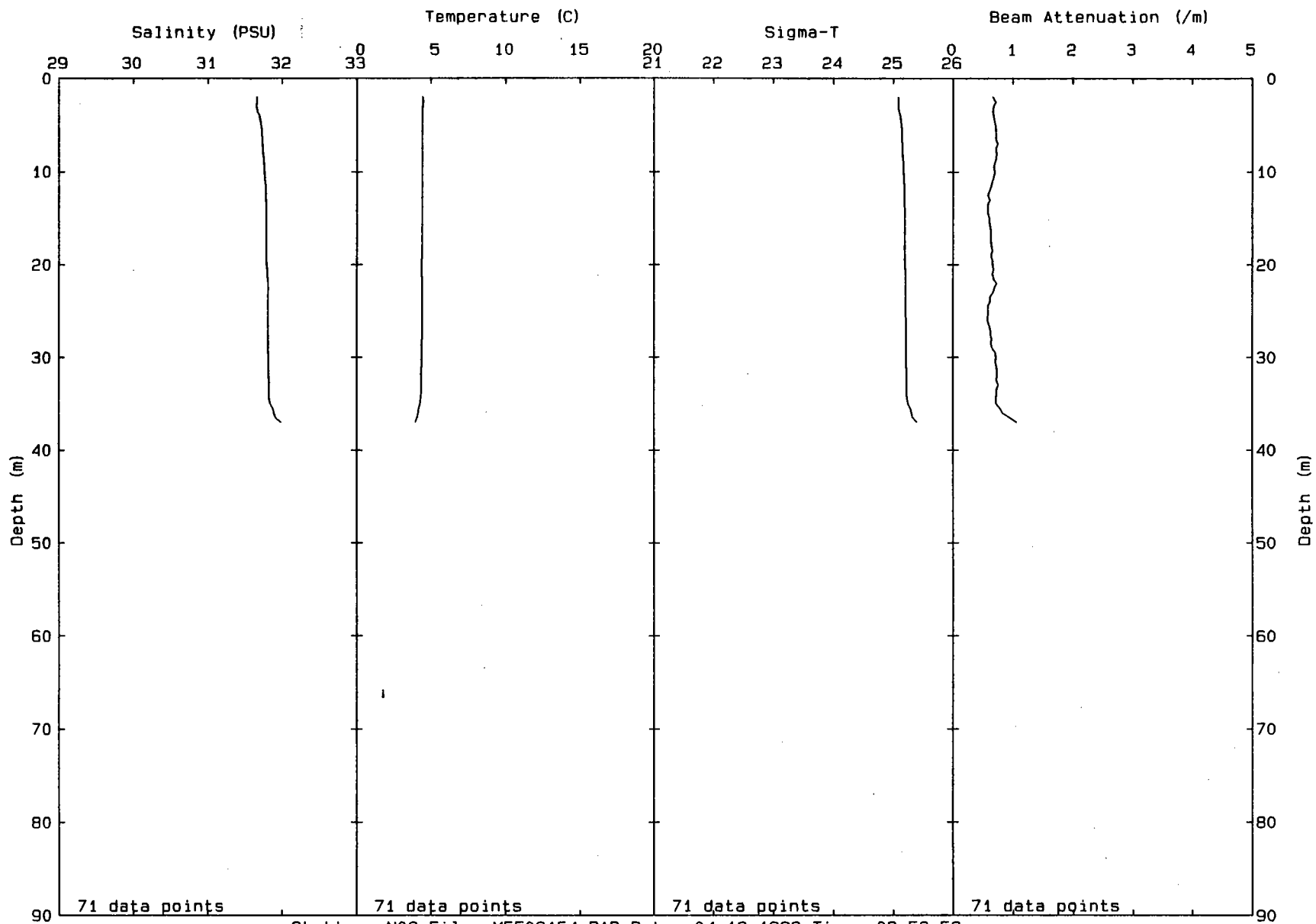


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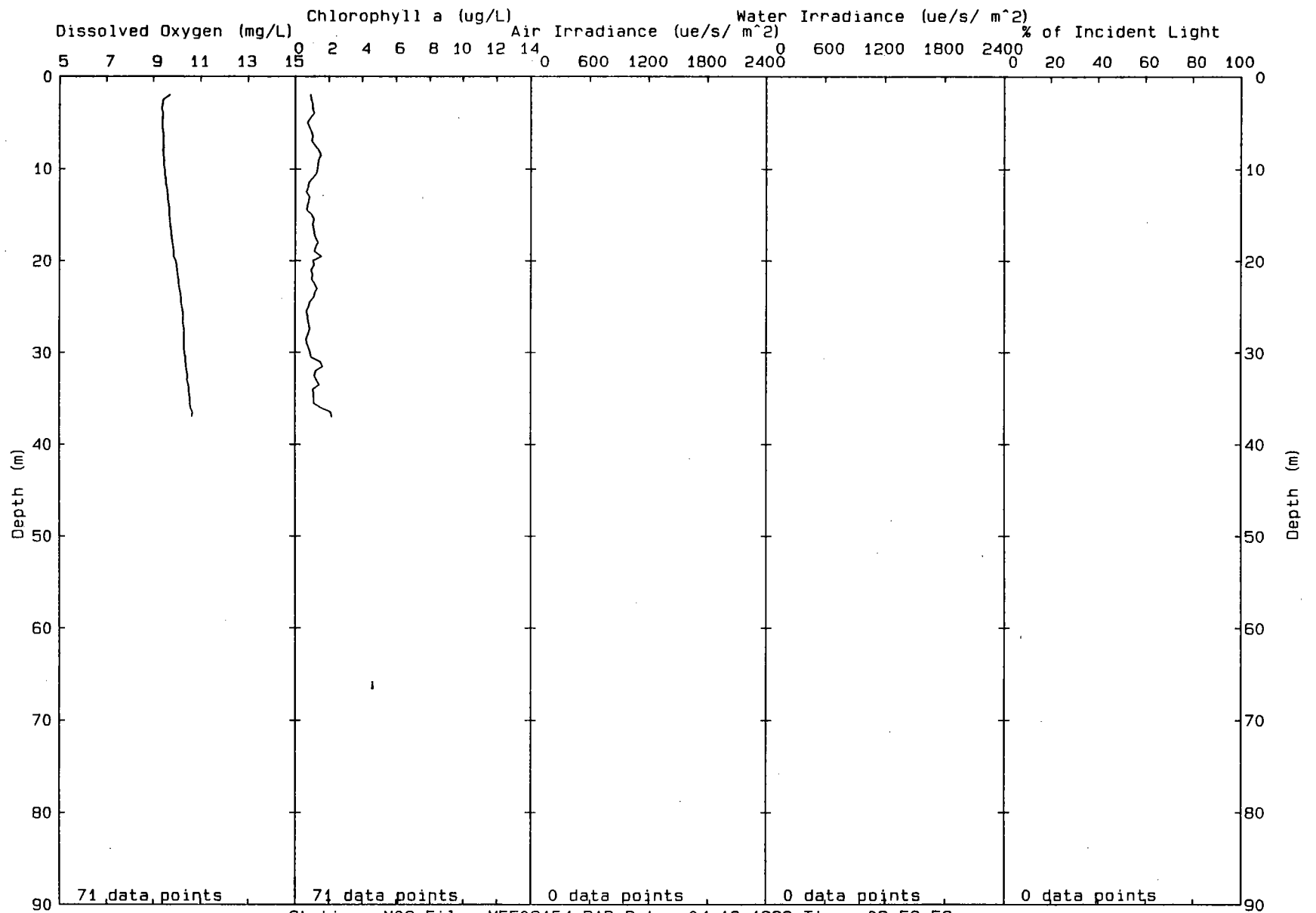
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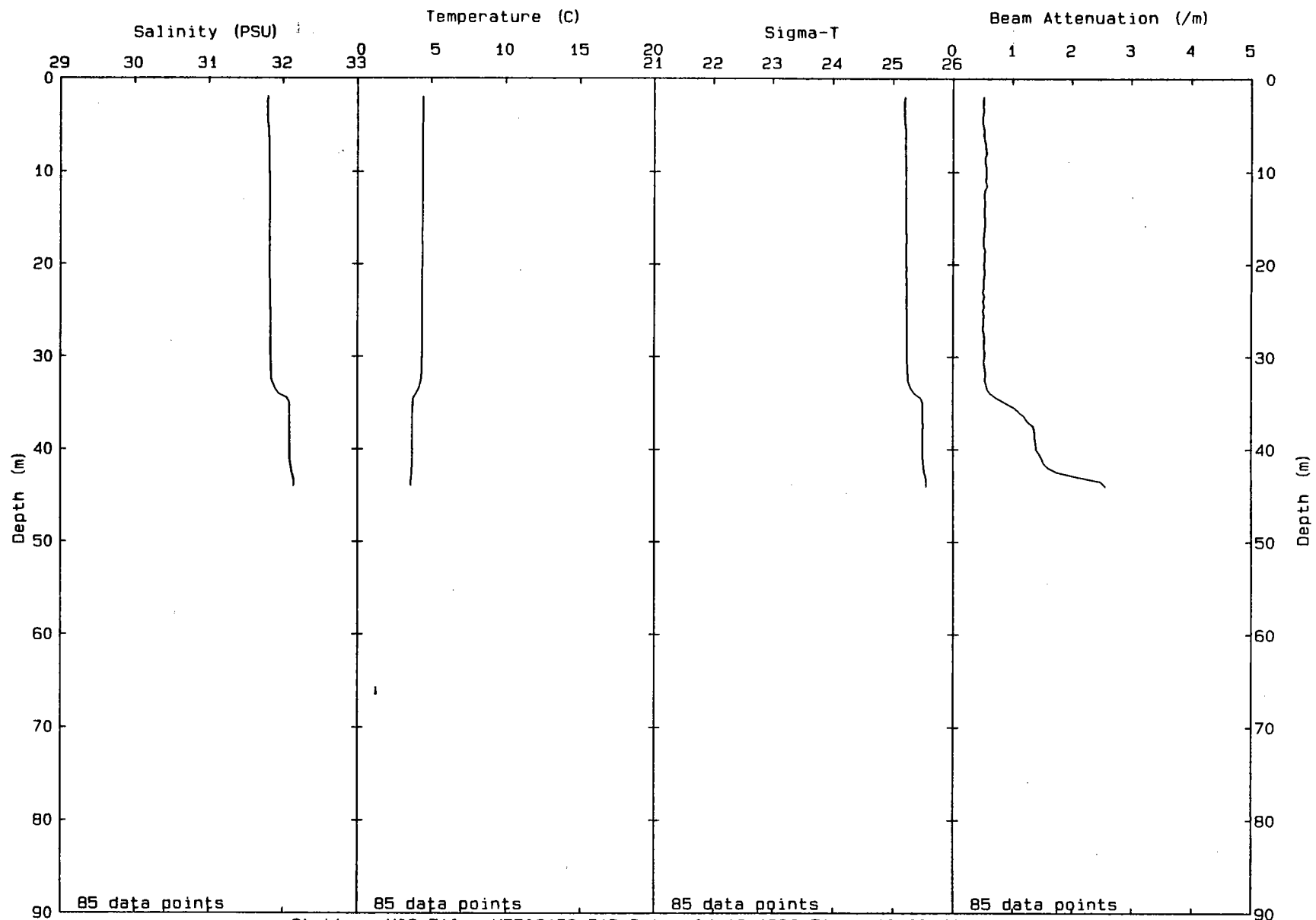
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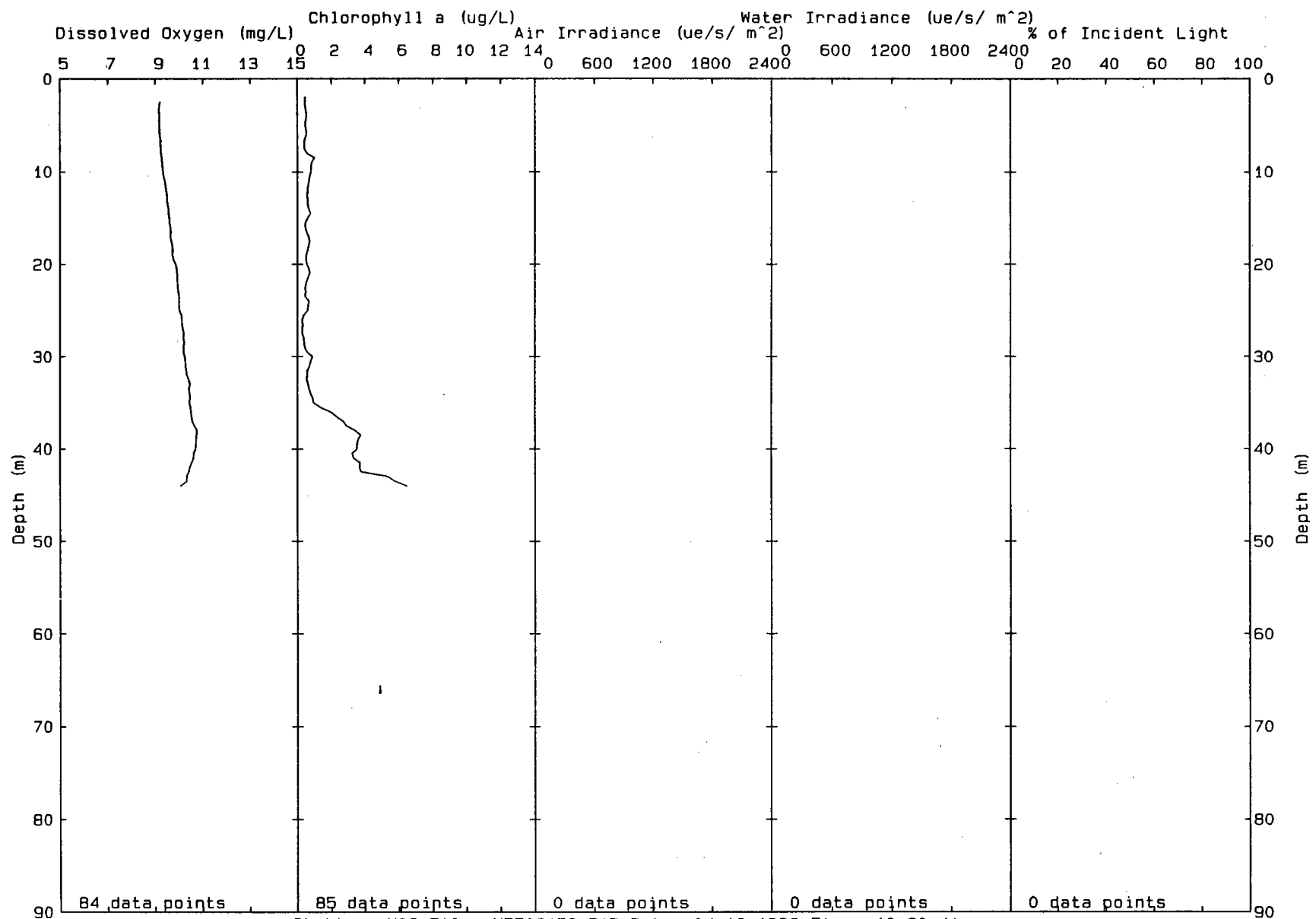


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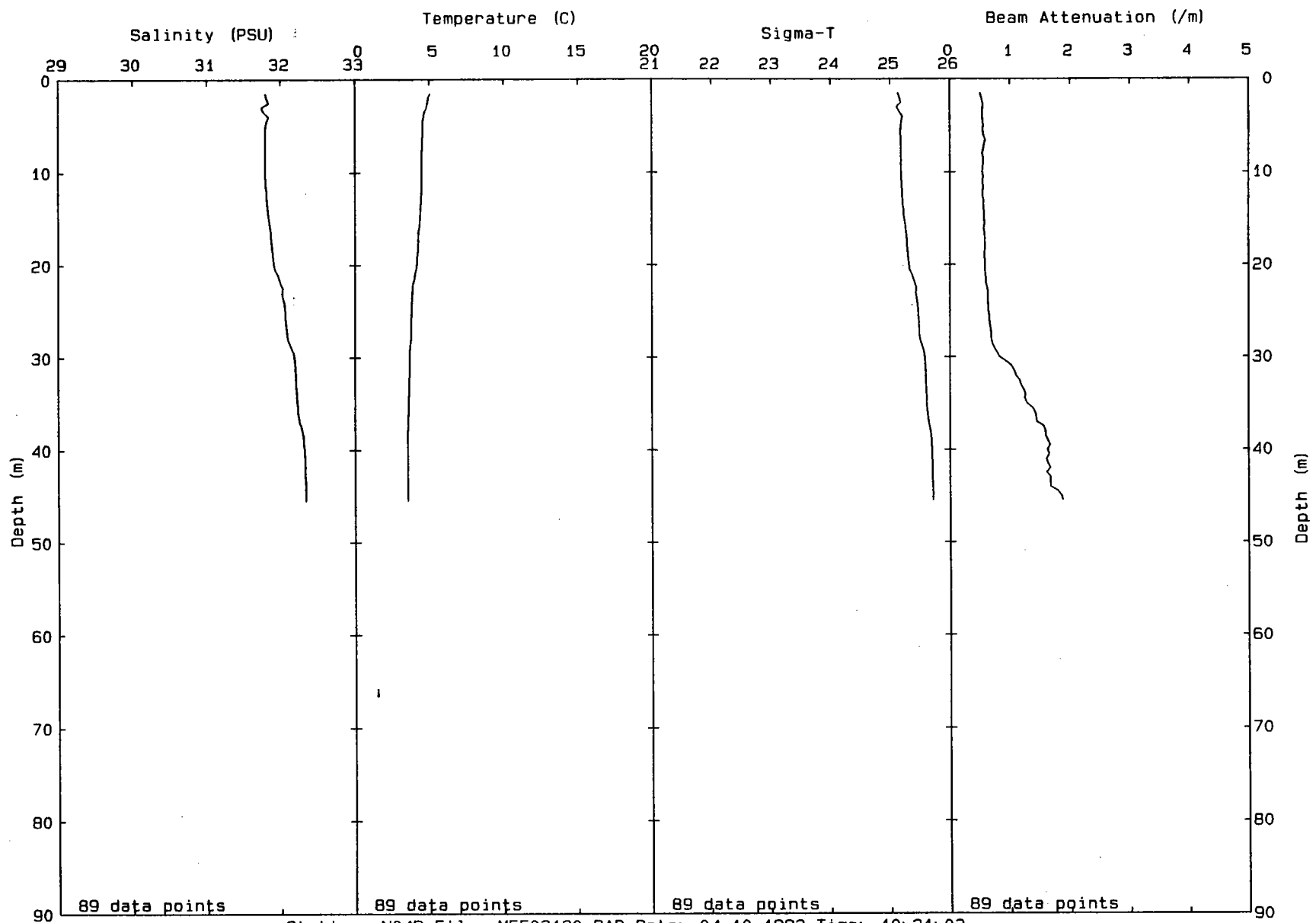
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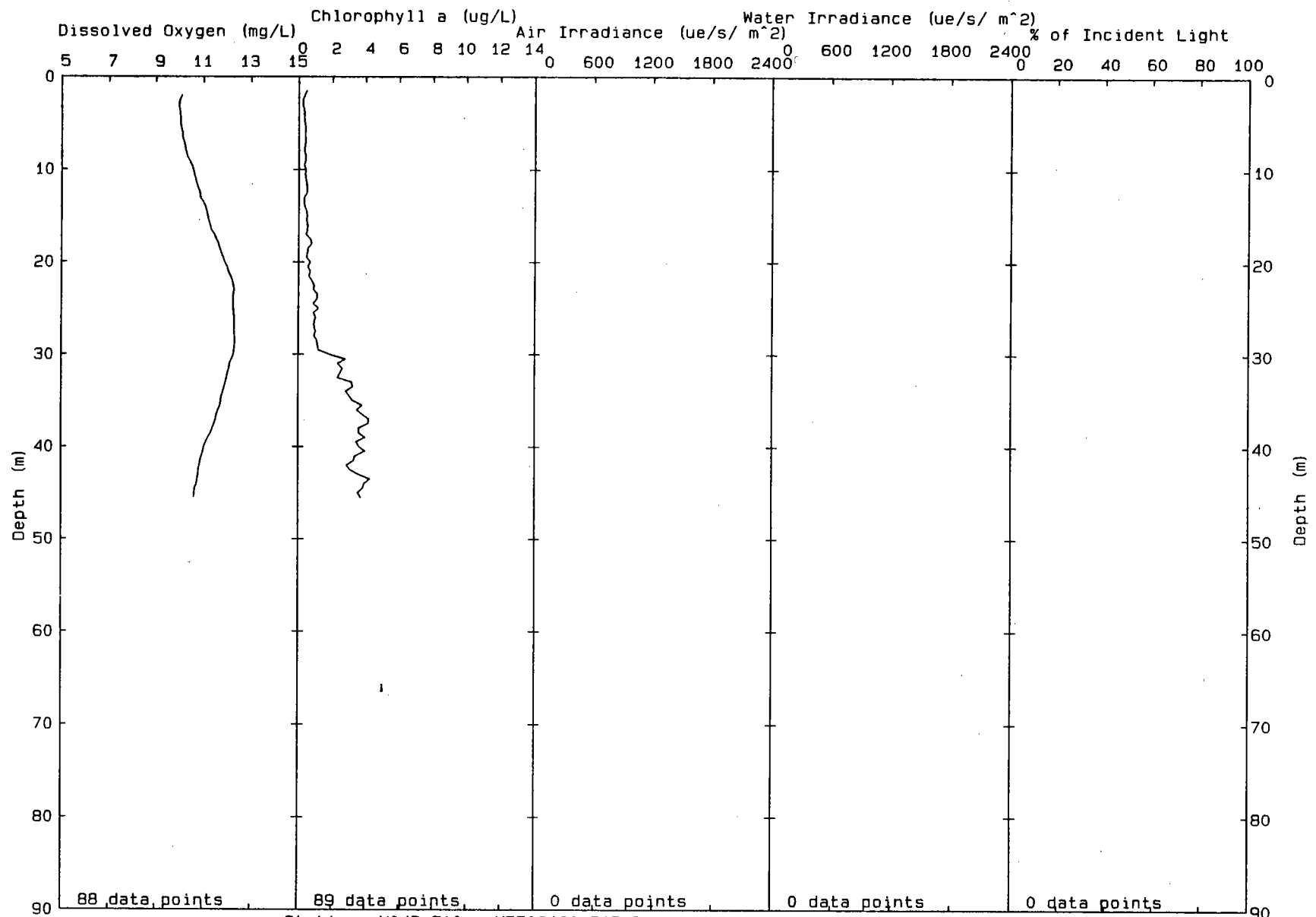
00110

00111



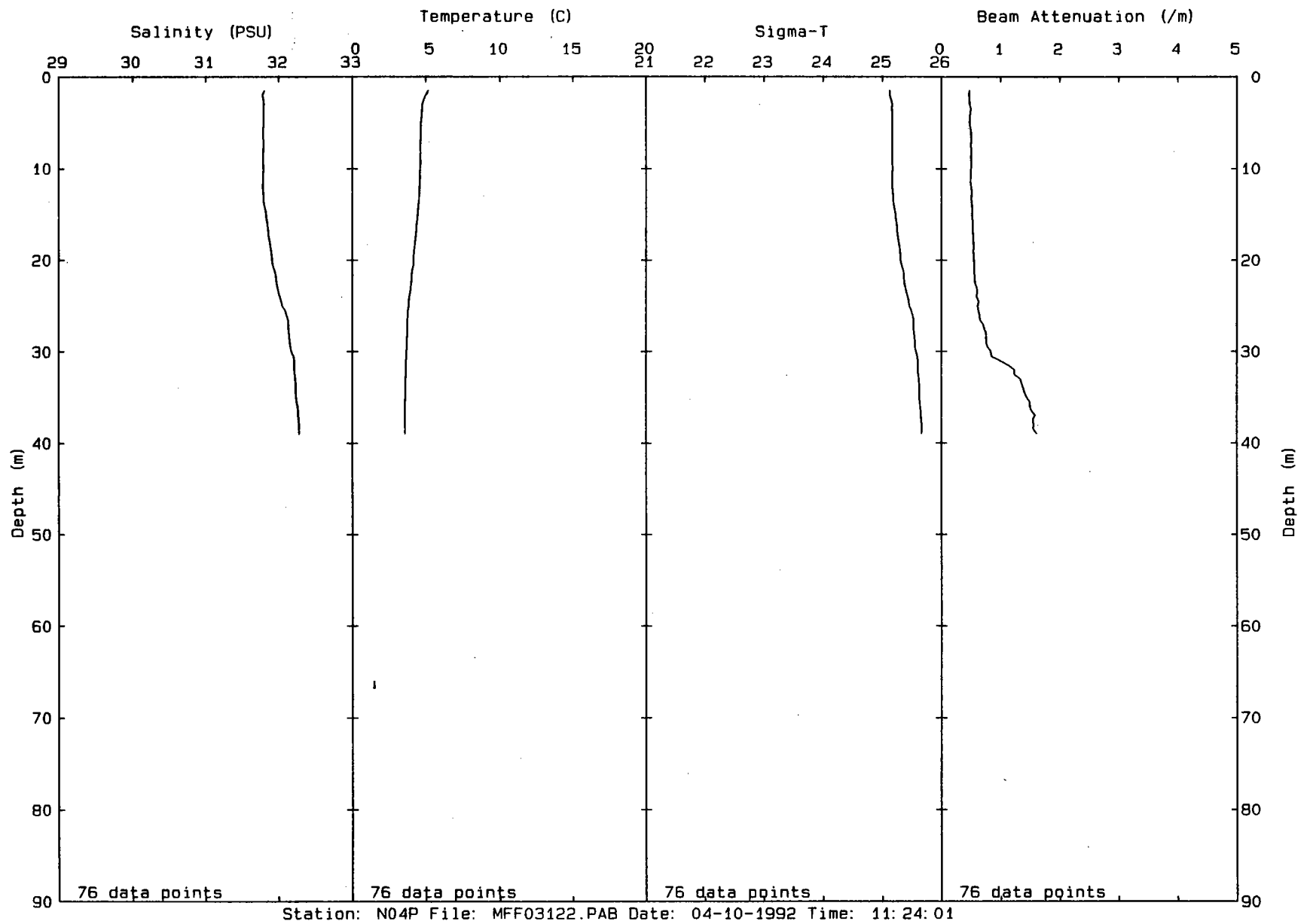
Station: N04P File: MFF03120.PAB Date: 04-10-1992 Time: 10:21:03

00112

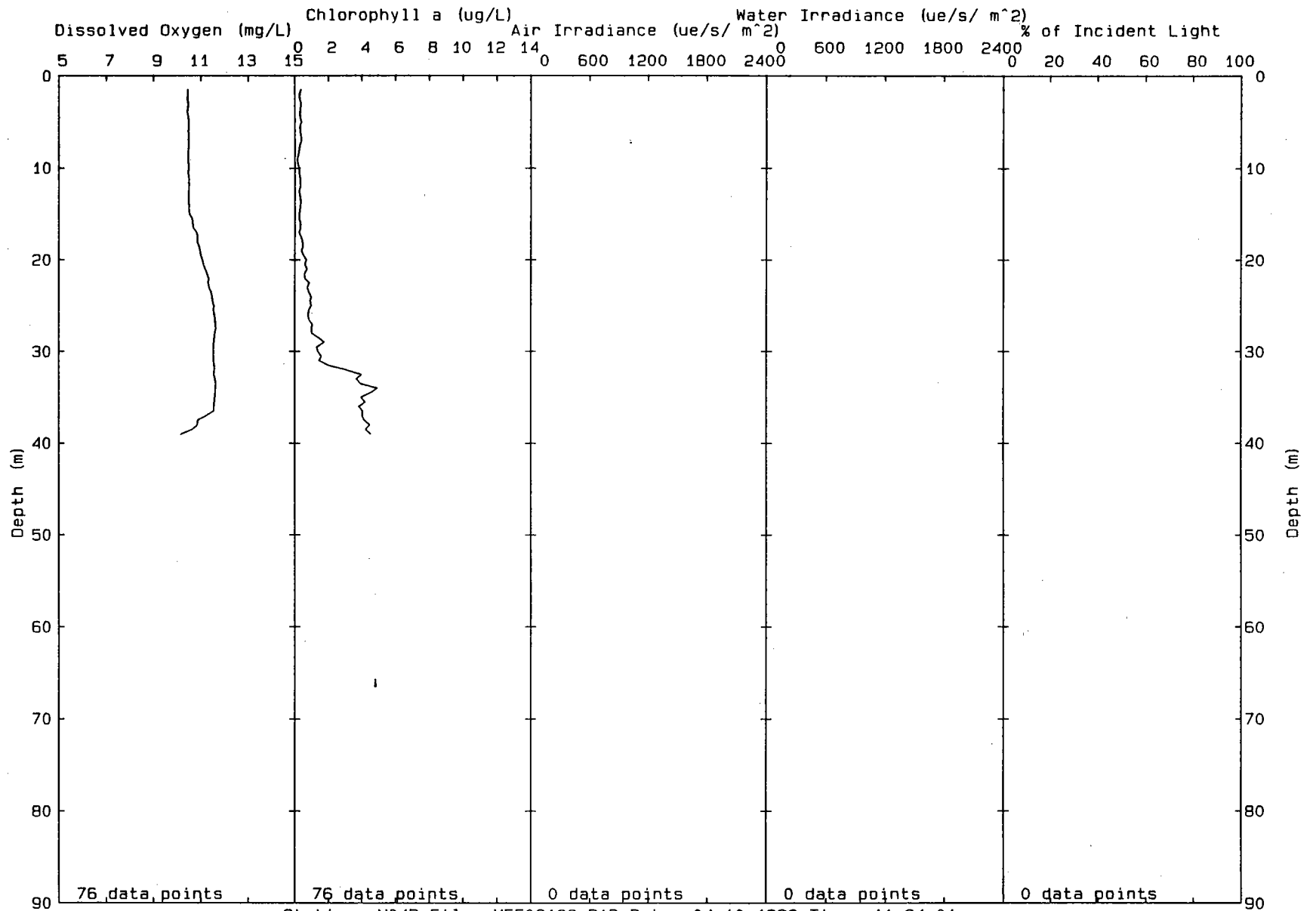


Station: N04P File: MFF03120.PAB Date: 04-10-1992 Time: 10: 21: 03

00113

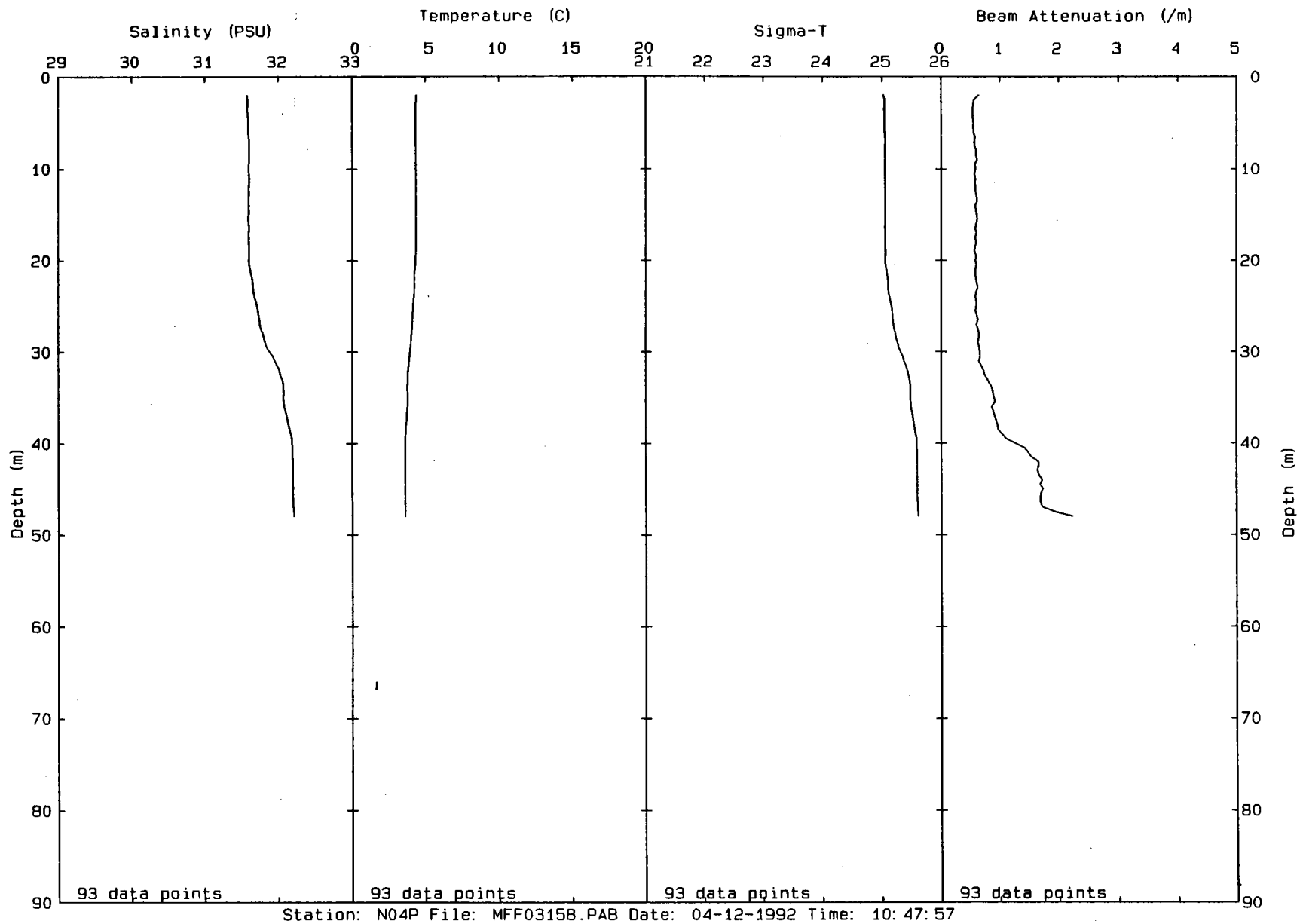


00114

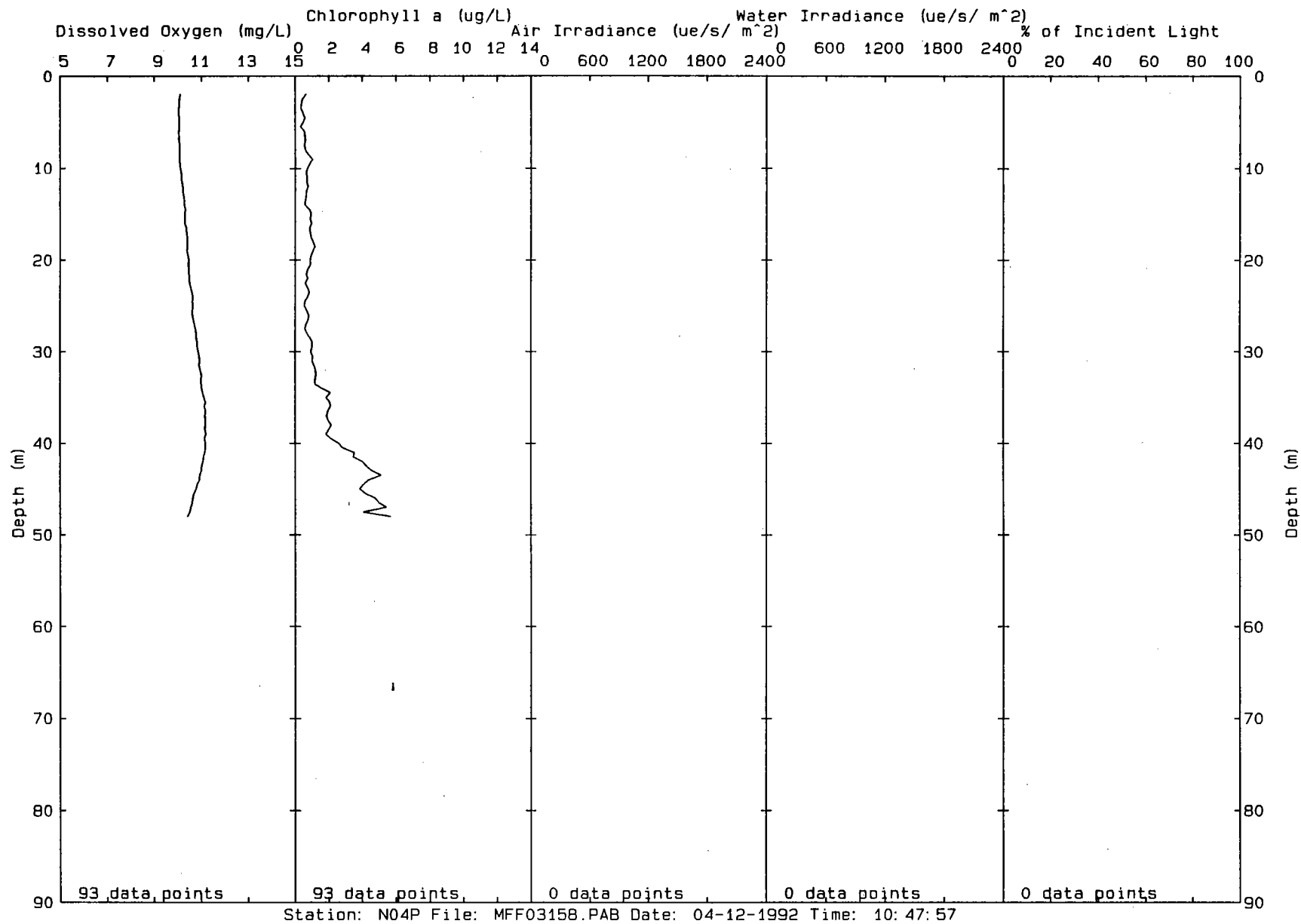


Station: N04P File: MFF03122.PAB Date: 04-10-1992 Time: 11:24:01

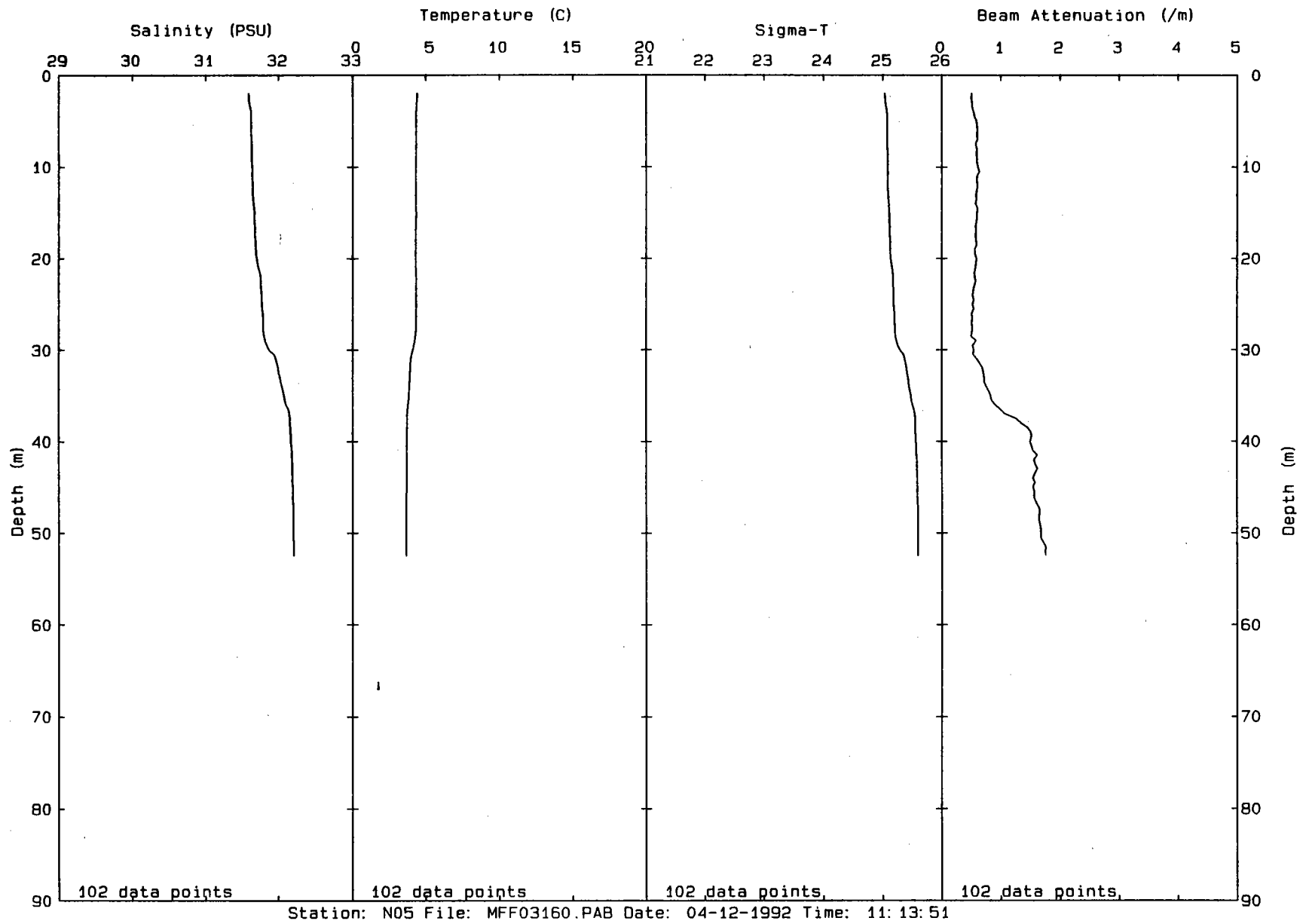
00115



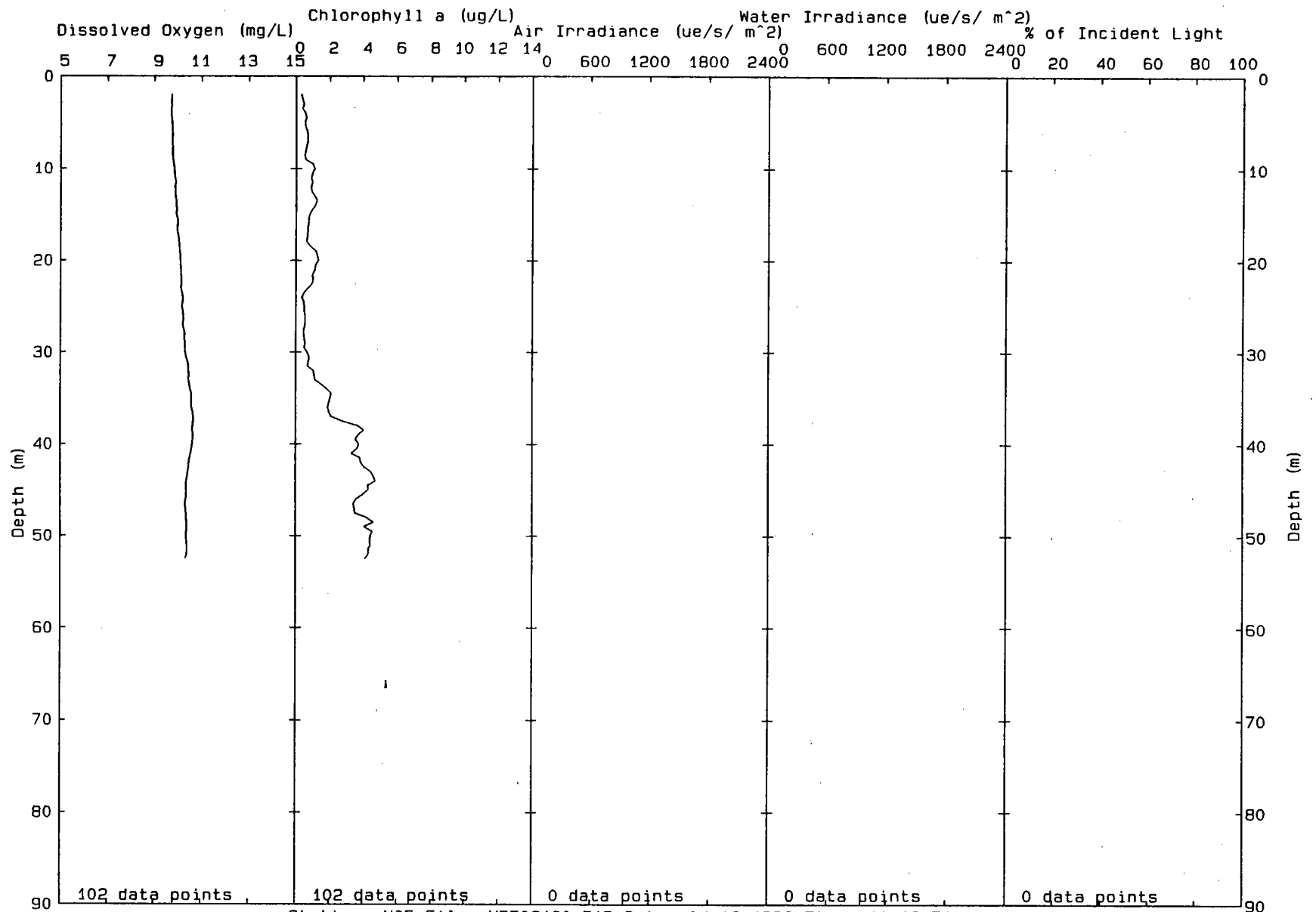
00116



00117

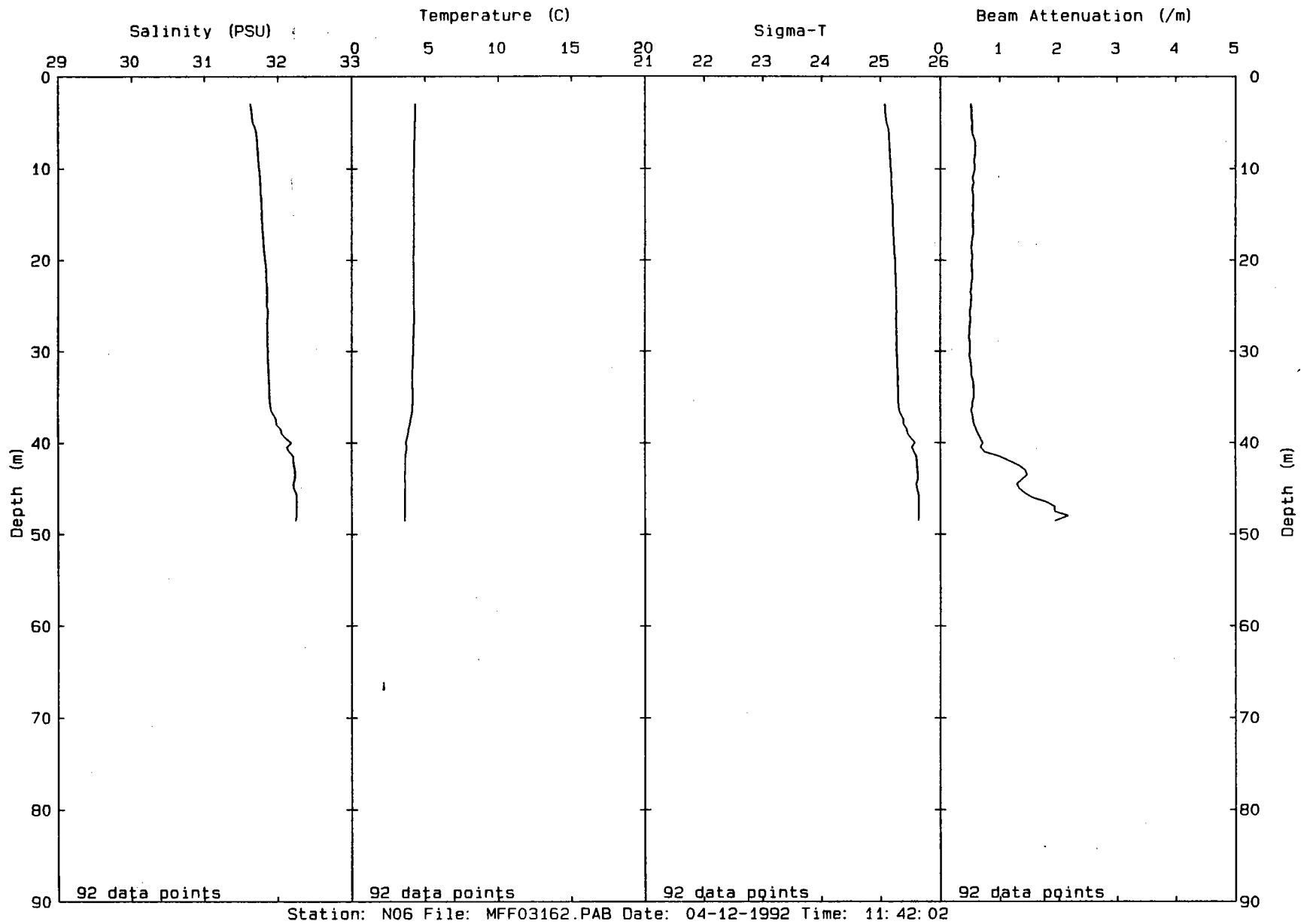


00118

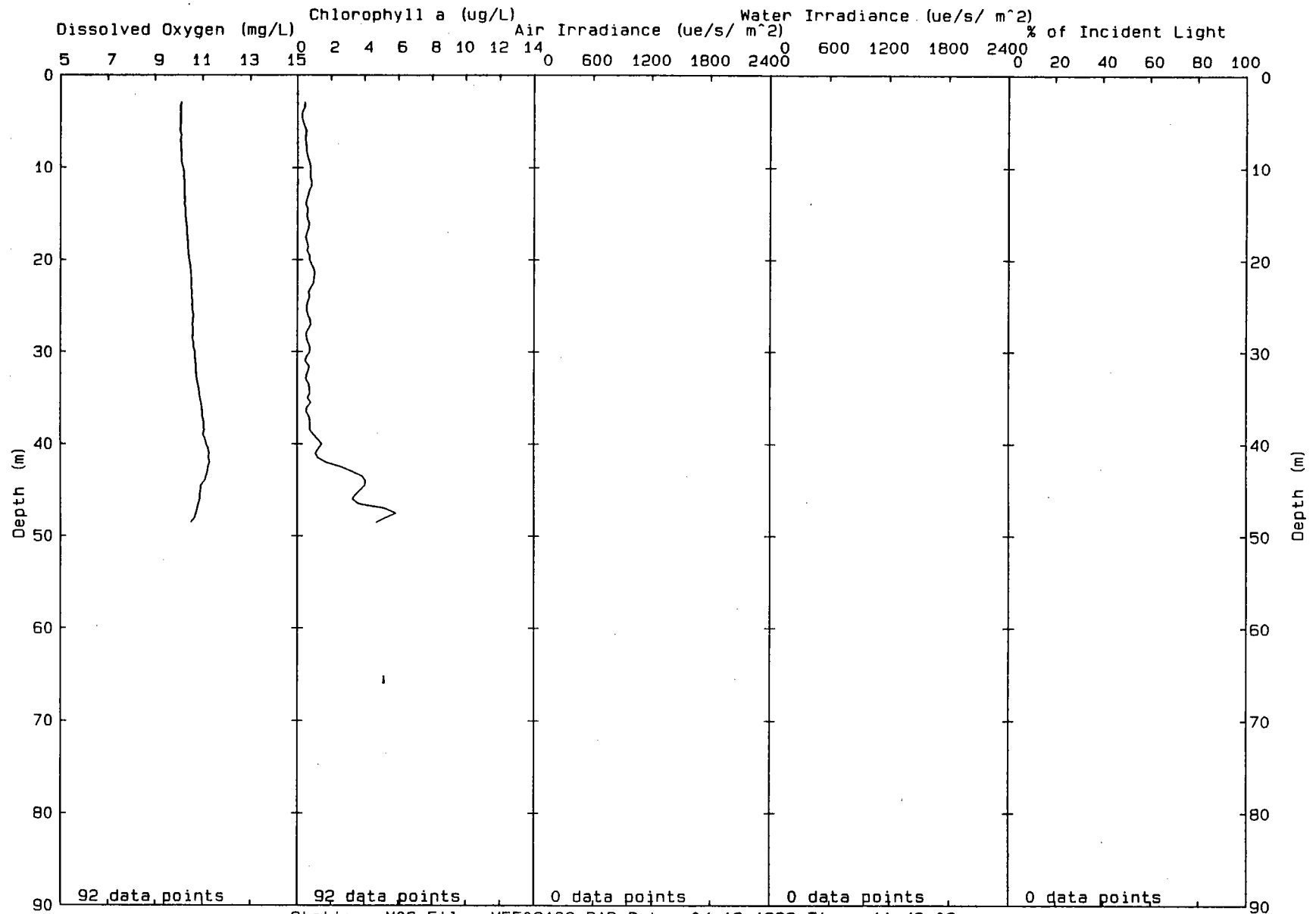


Station: N05 File: MFF03160.PAB Date: 04-12-1992 Time: 11: 13: 51

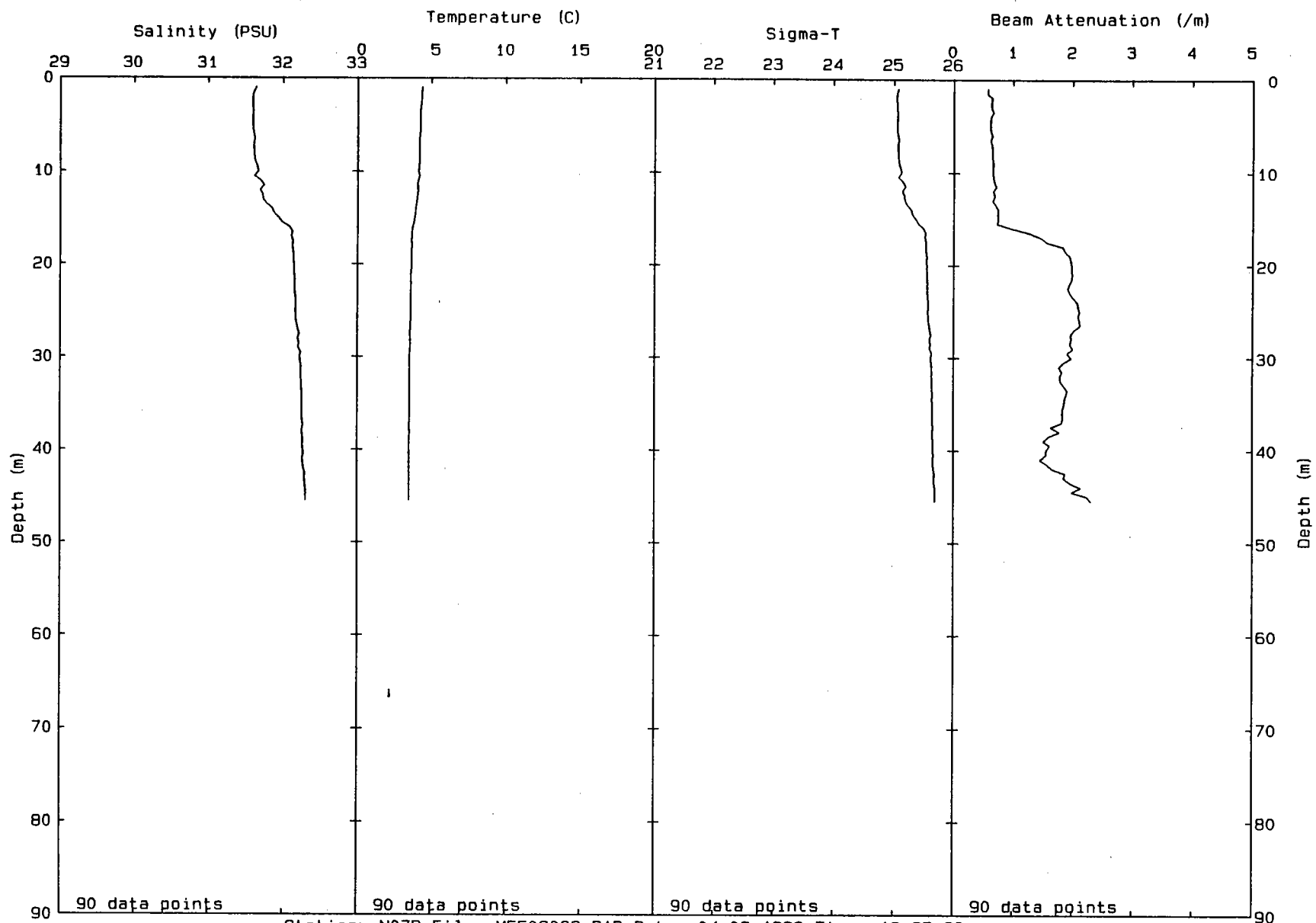
00119



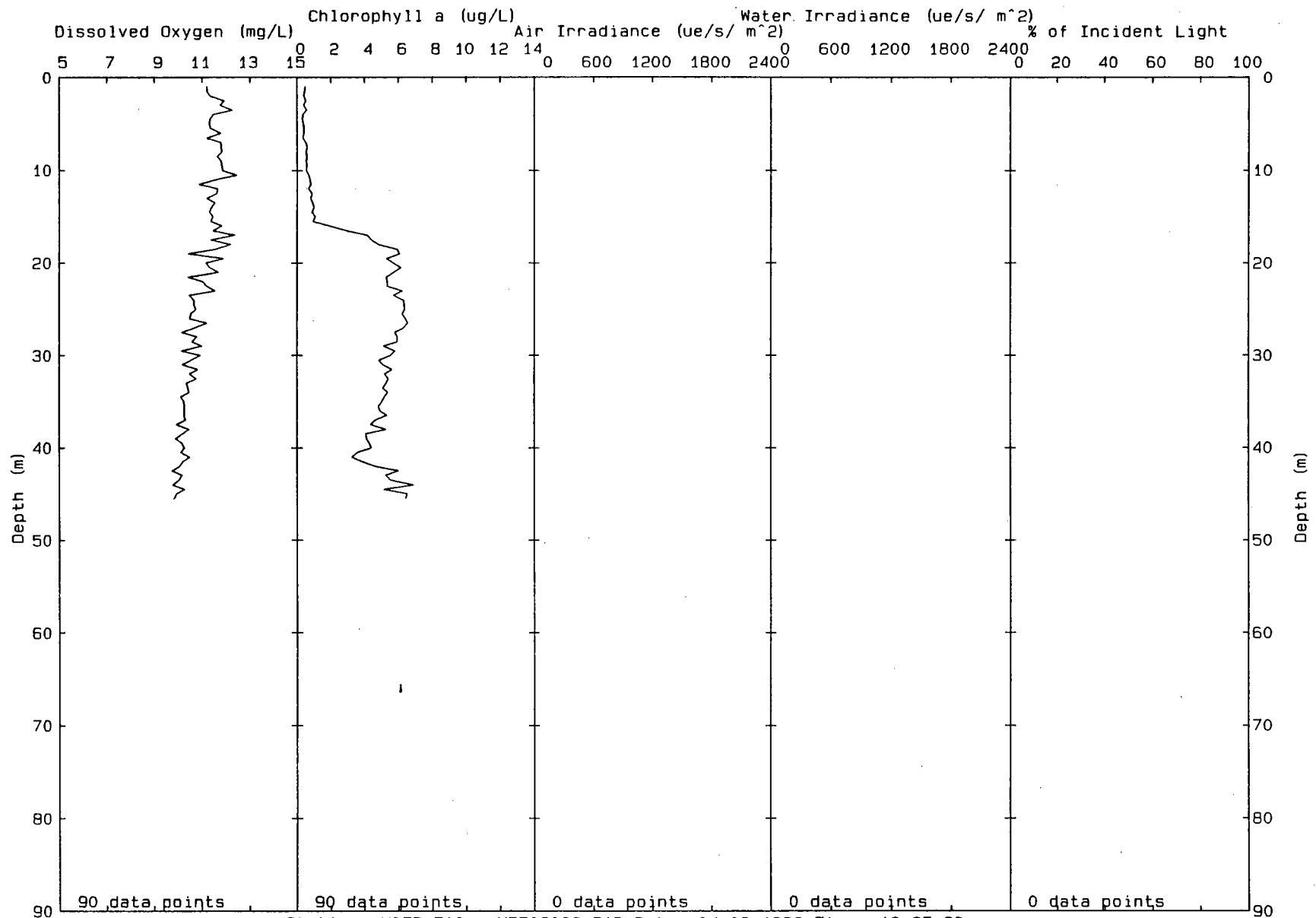
00120



00121



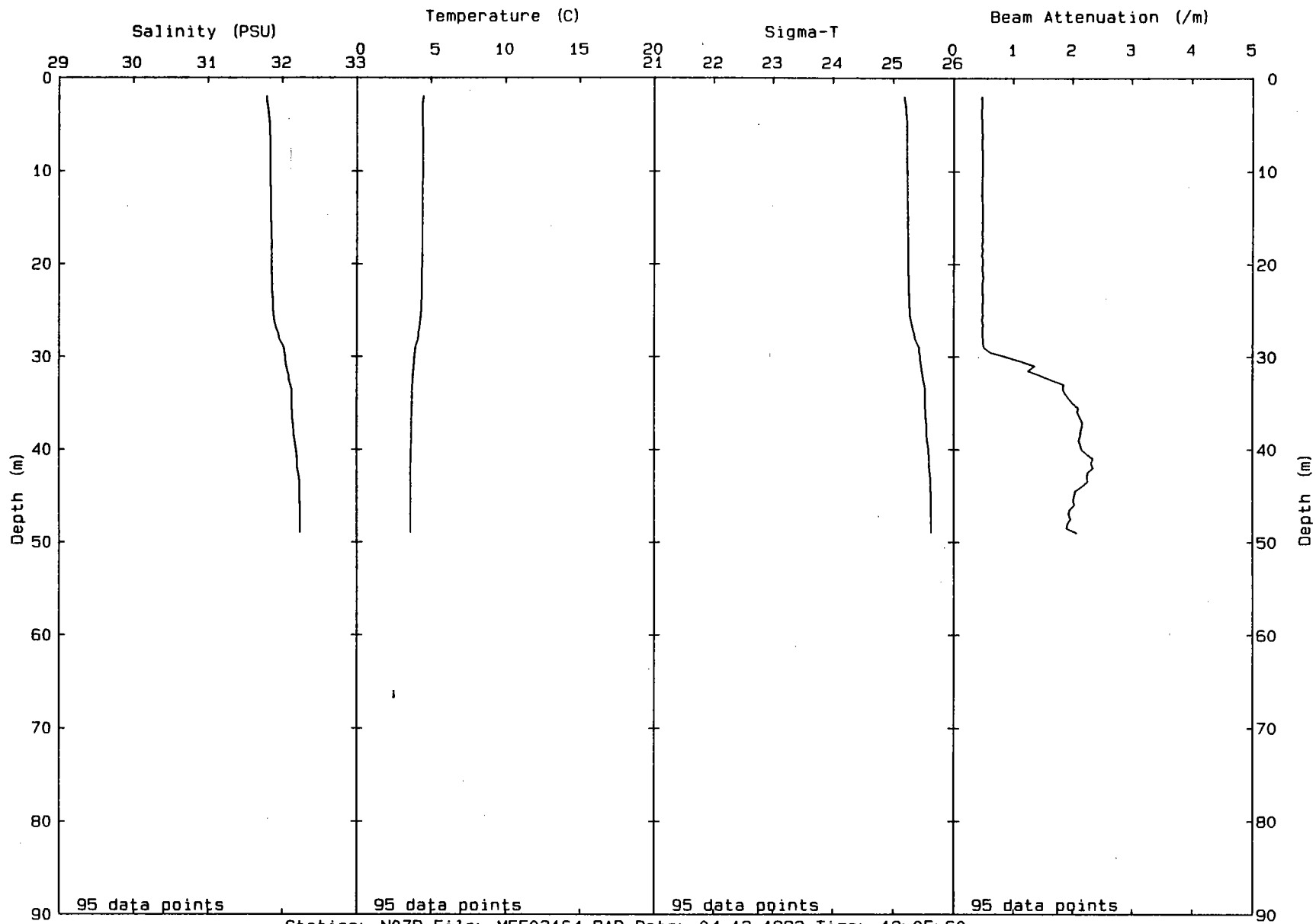
Station: N07P File: MFF03063.PAB Date: 04-08-1992 Time: 12:37:38



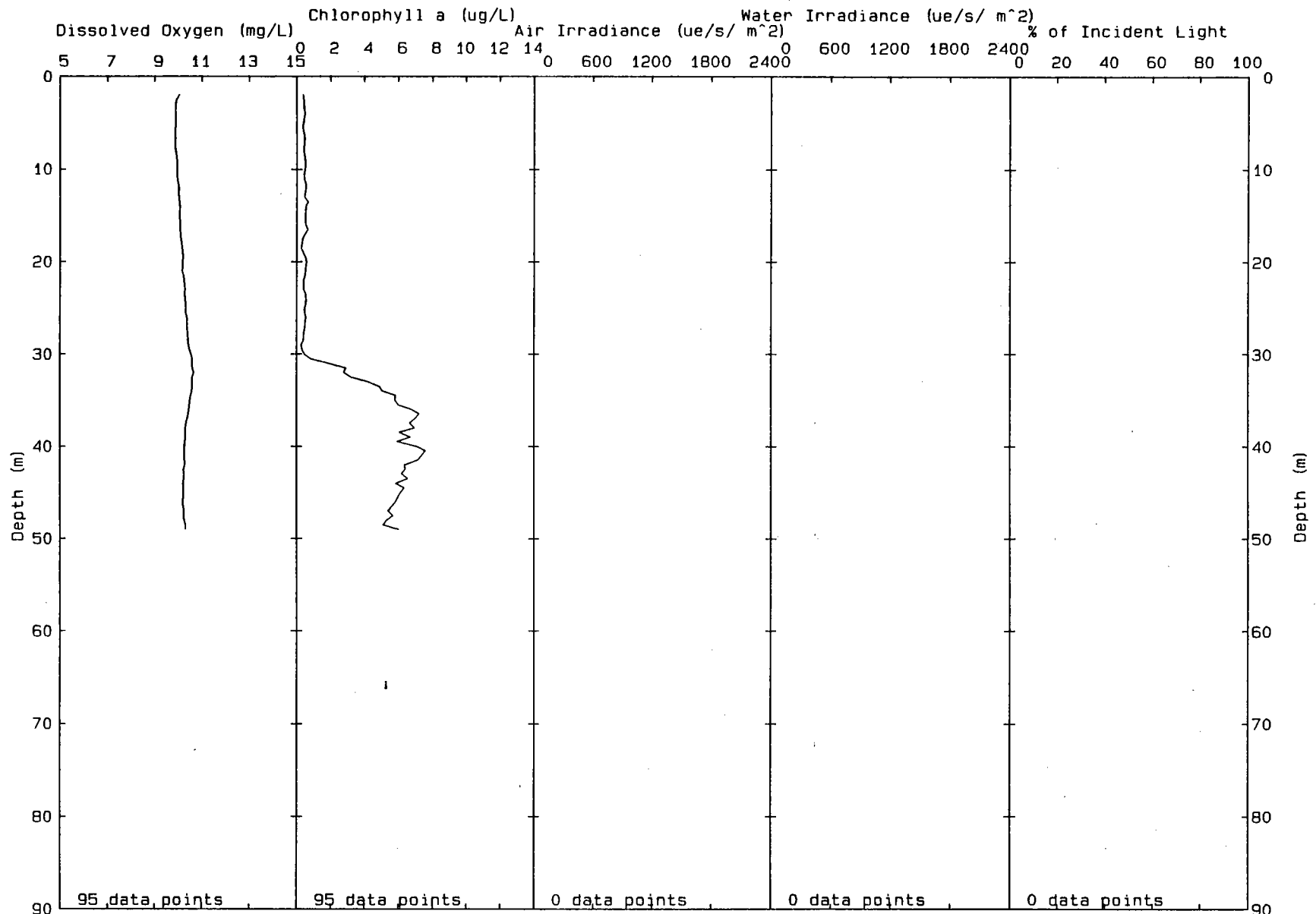
Station: N07P File: MFF03063.PAB Date: 04-08-1992 Time: 12:37:38

00122

00123



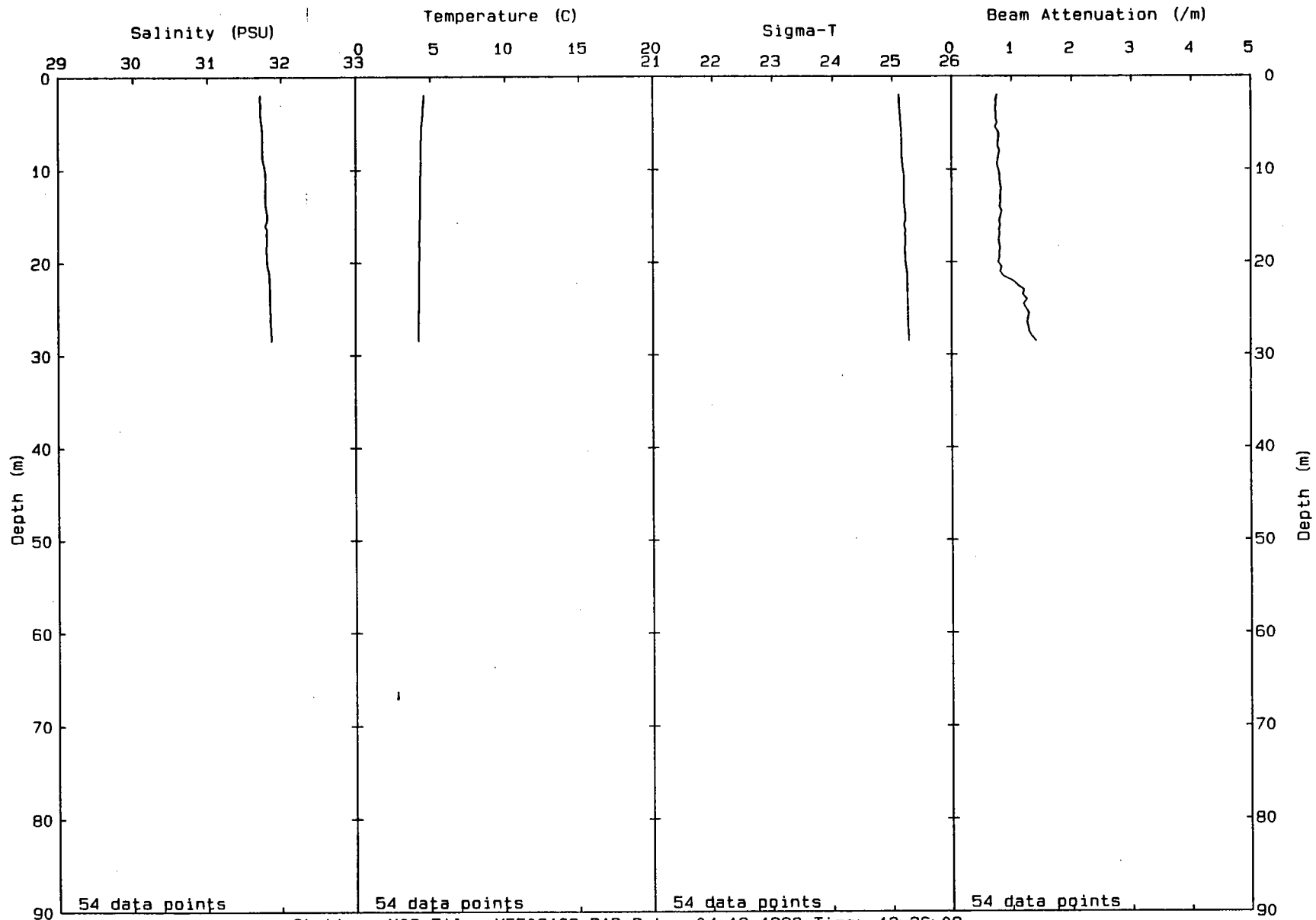
Station: N07P File: MFF03164.PAB Date: 04-12-1992 Time: 12: 05: 60



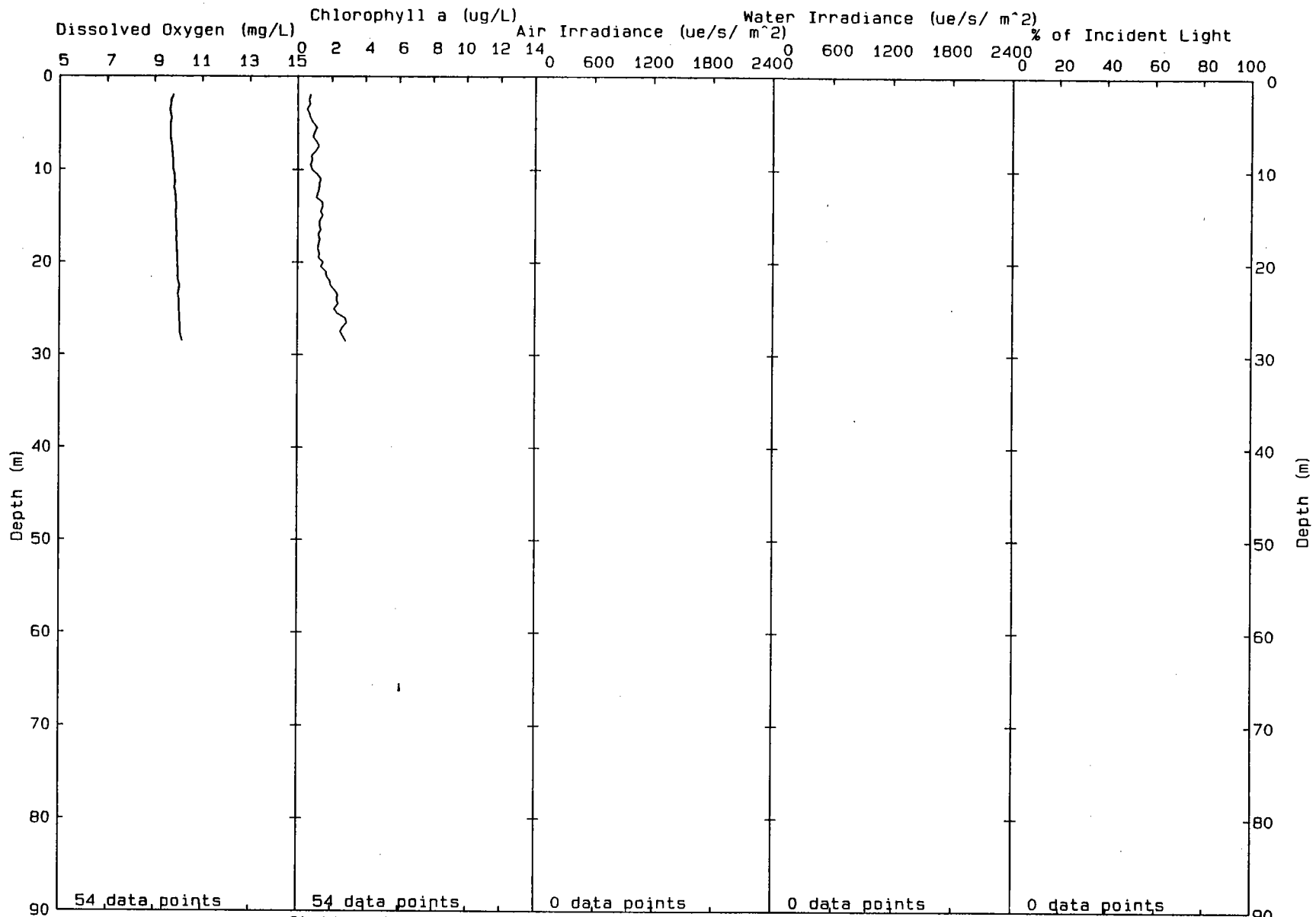
Station: N07P File: MFF03164.PAB Date: 04-12-1992 Time: 12:05:60

00124

00125

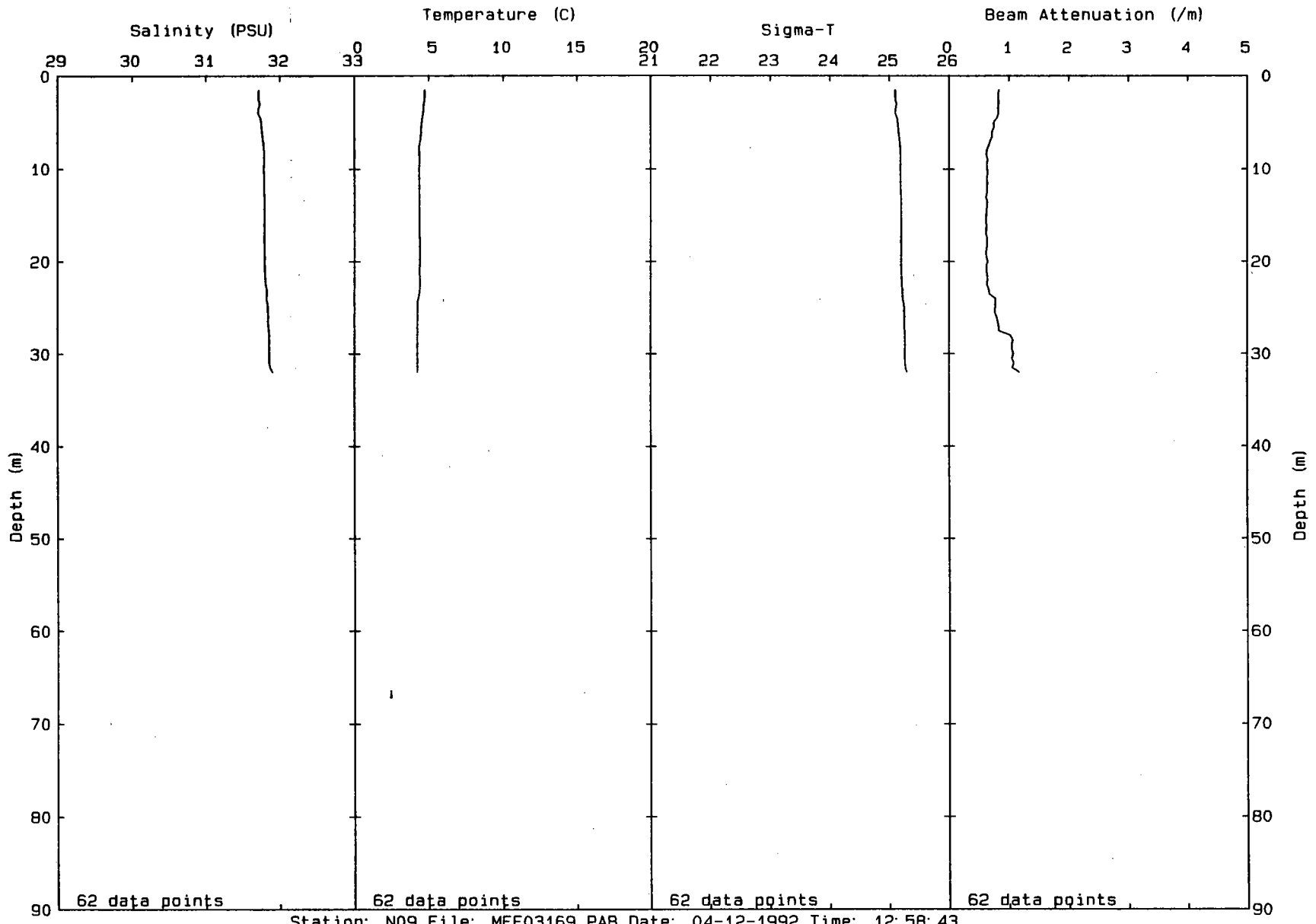


Station: N08 File: MFF03166.PAB Date: 04-12-1992 Time: 12:36:08

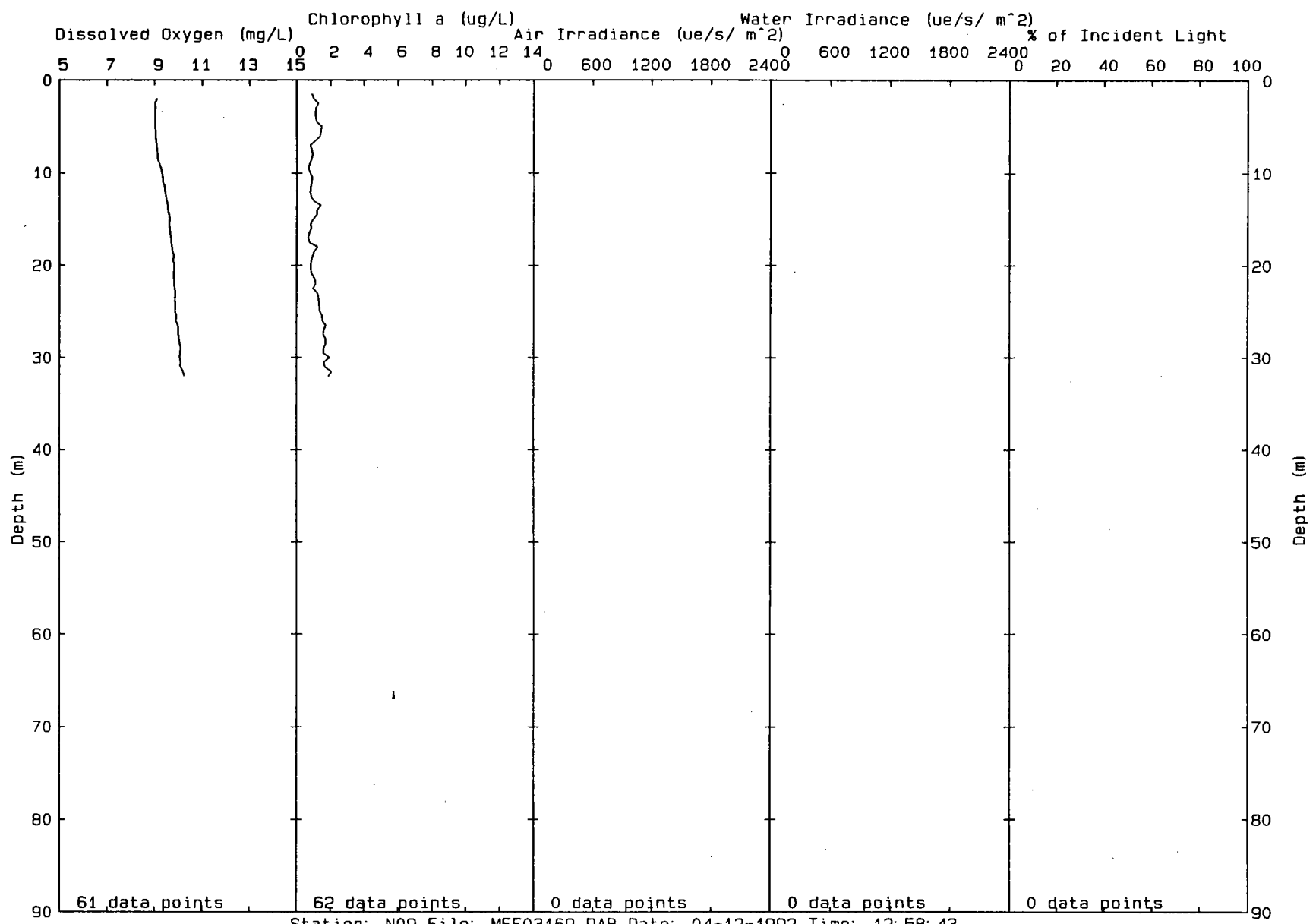


Station: NOB File: MFF03166.PAB Date: 04-12-1992 Time: 12:36:08

00126



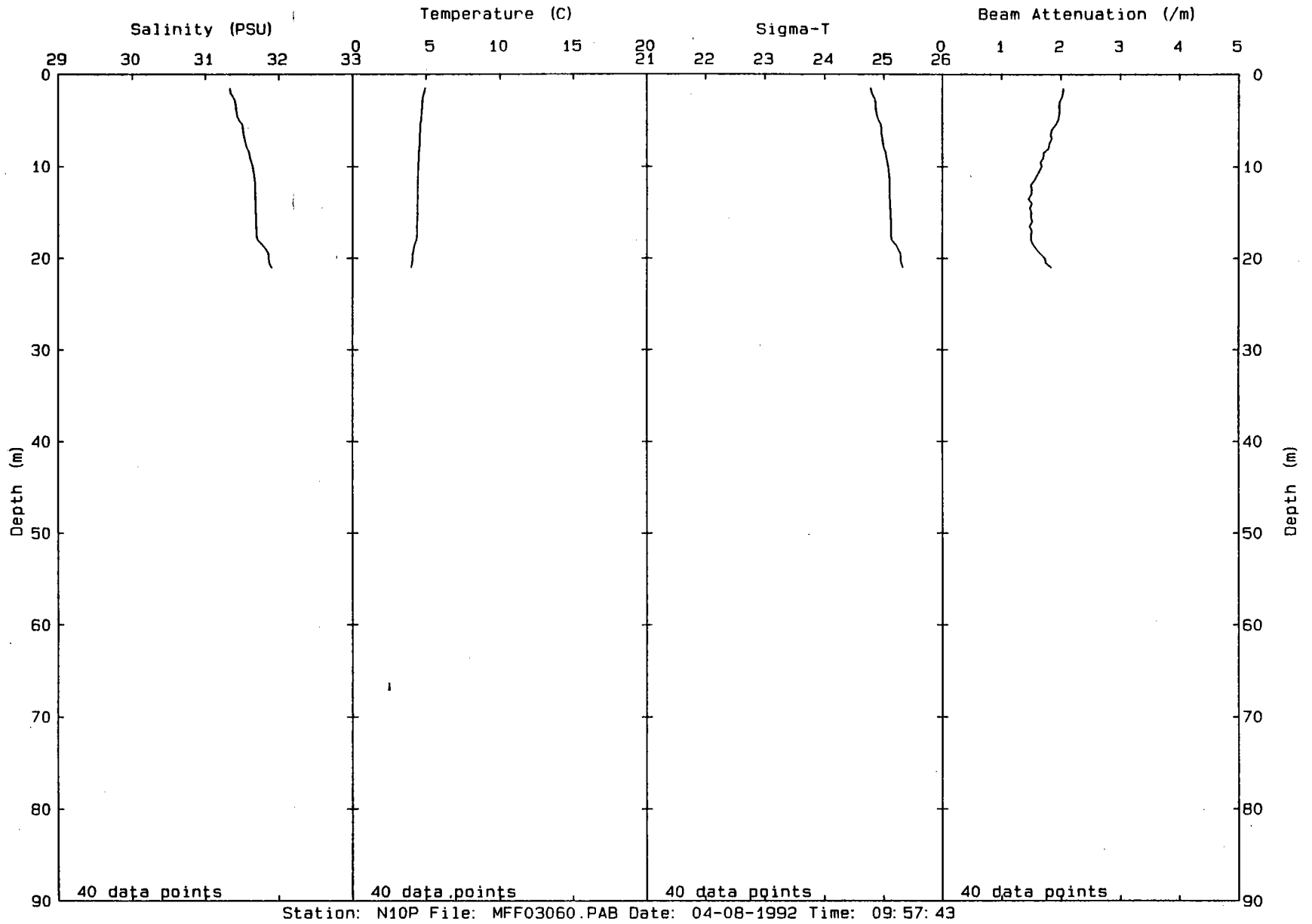
00127

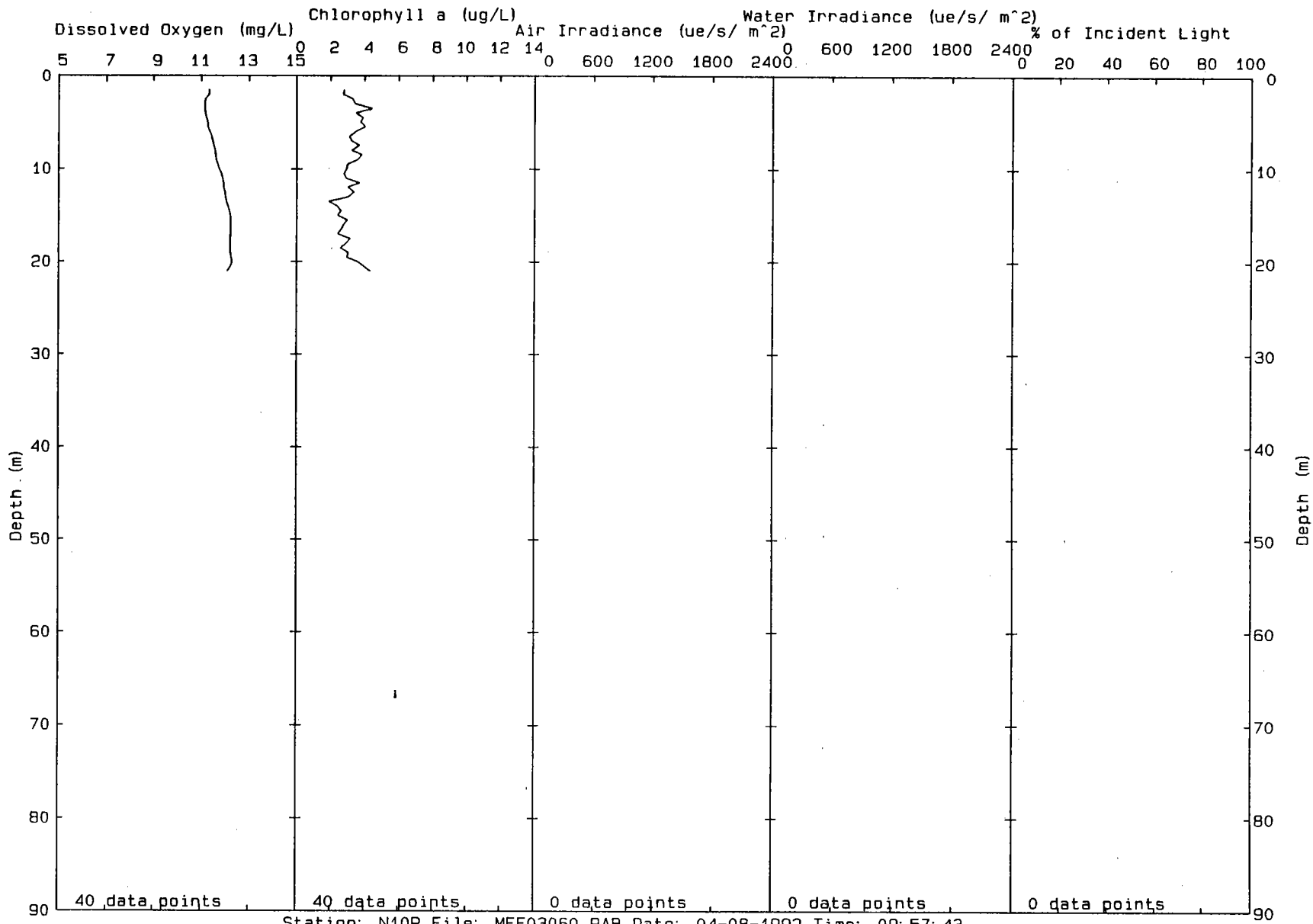


Station: N09 File: MFF03169.PAB Date: 04-12-1992 Time: 12:58:43

00128

00129

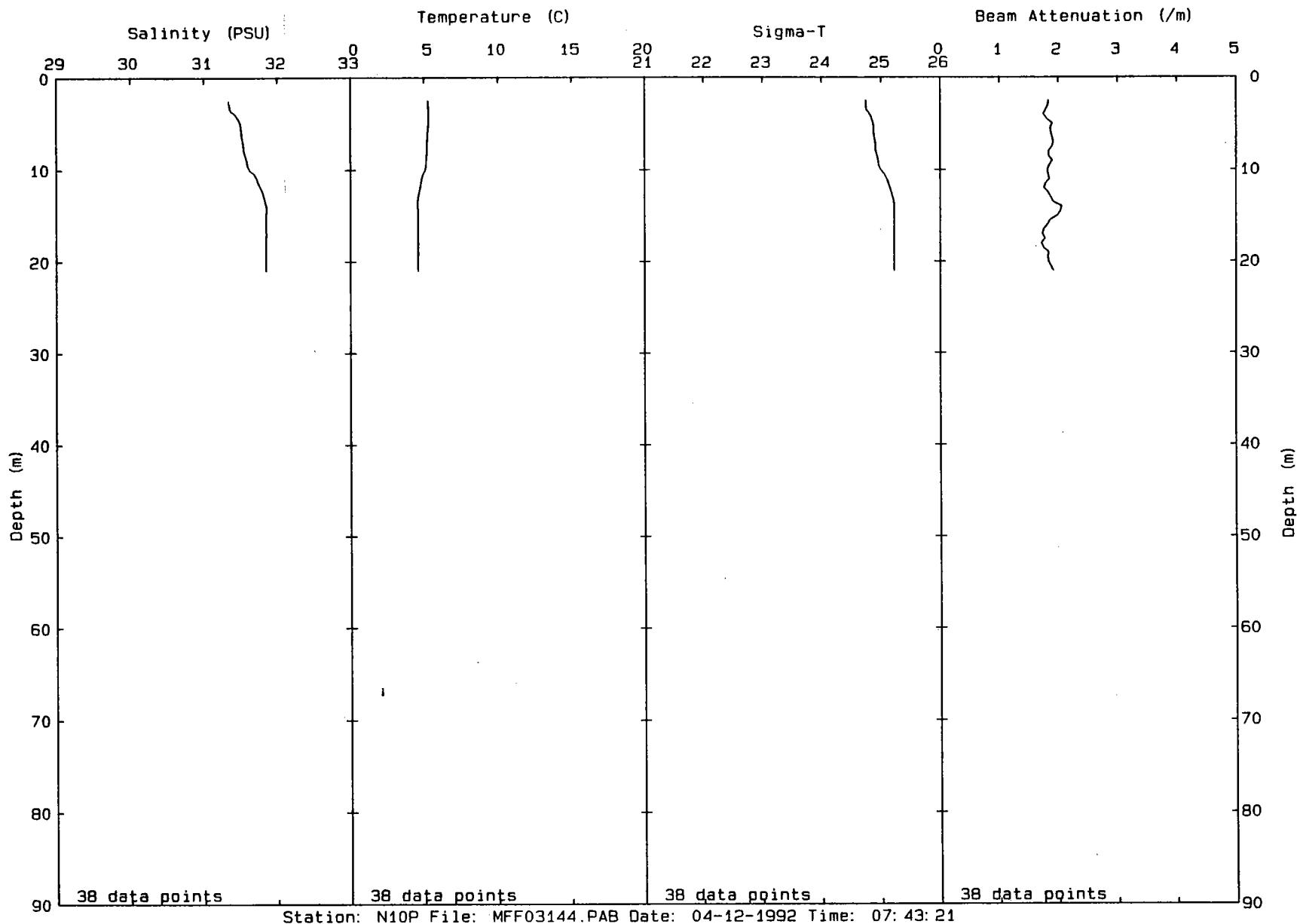


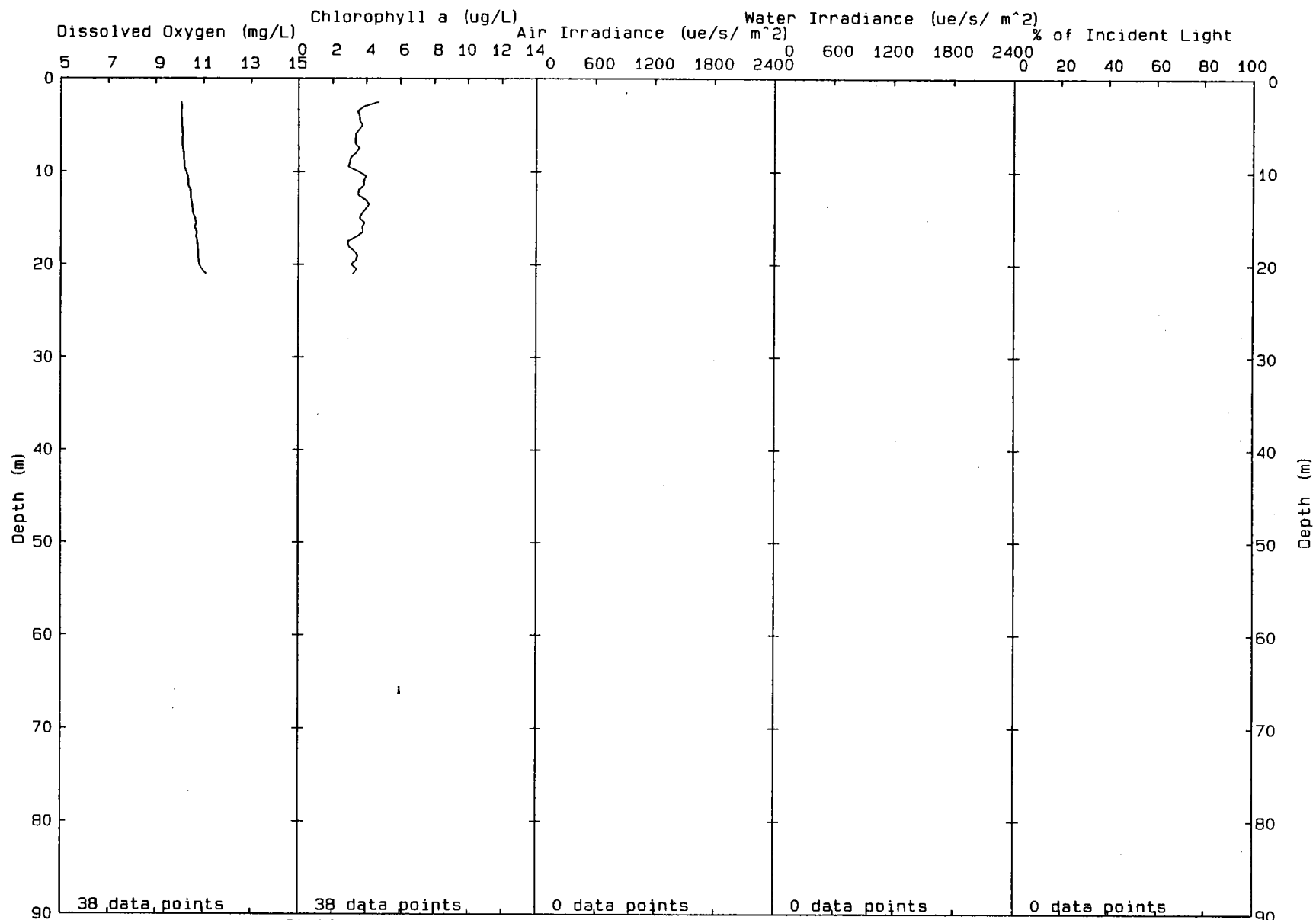


Station: N10P File: MFF03060.PAB Date: 04-08-1992 Time: 09:57:43

00130

00131

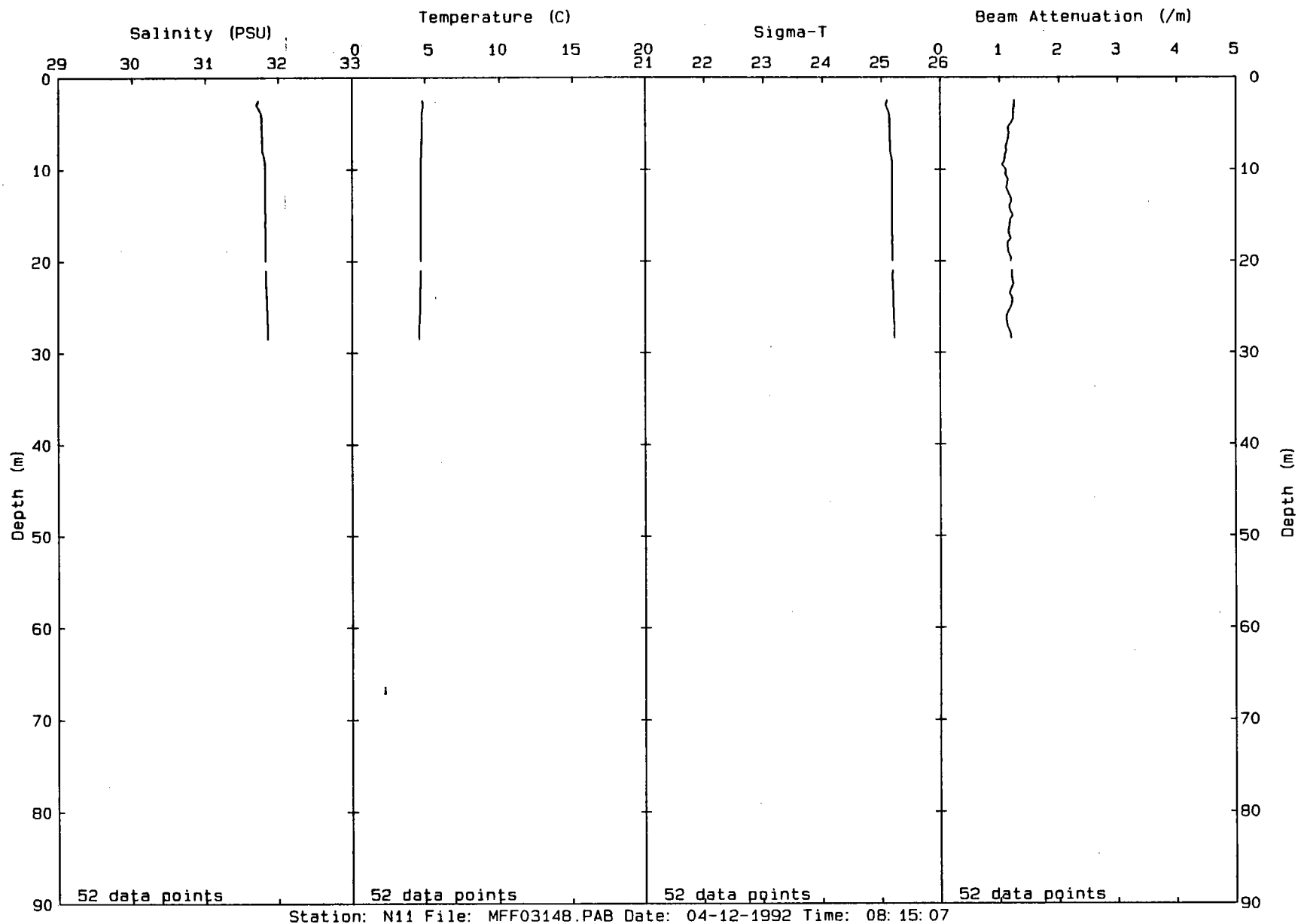


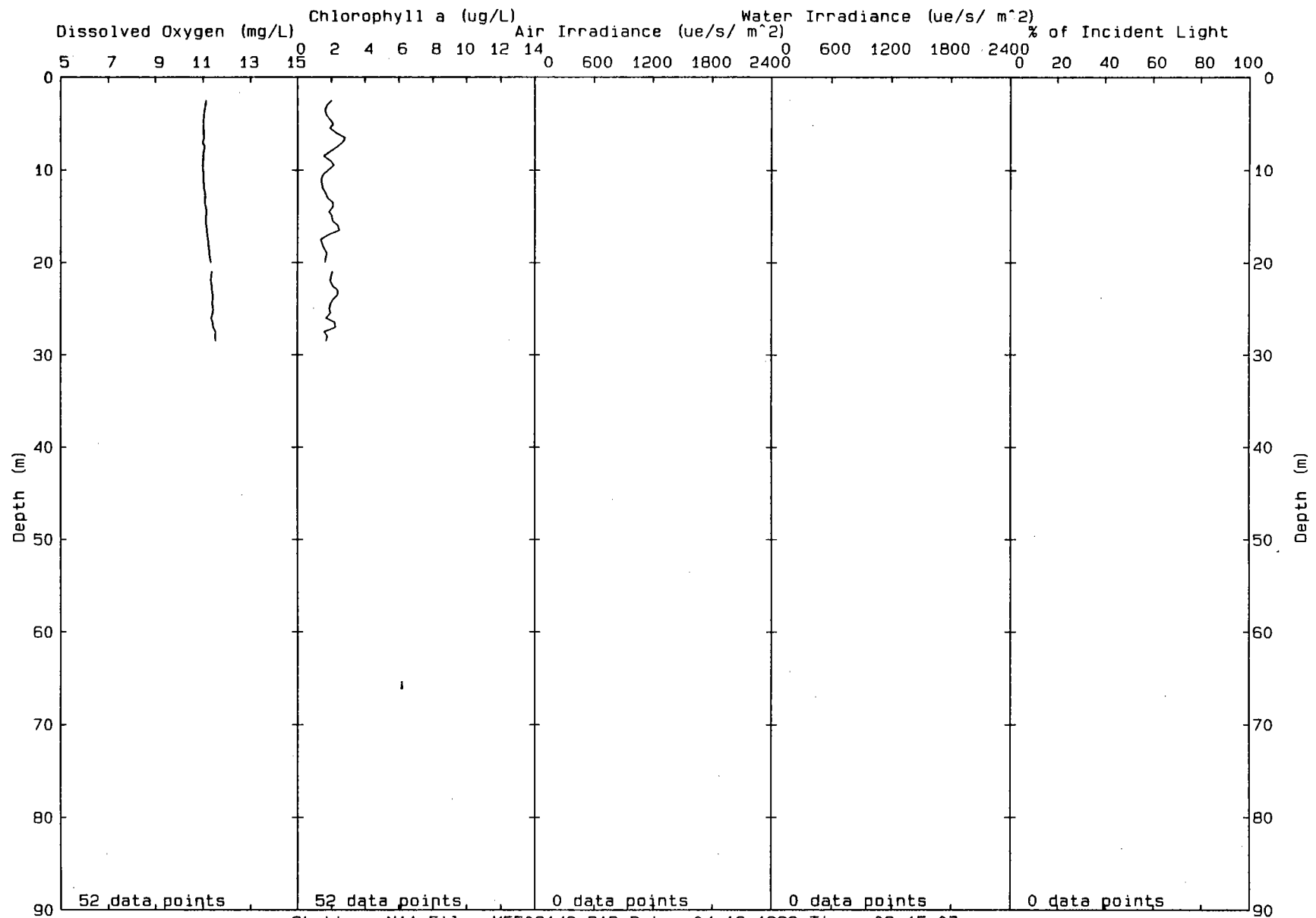


Station: N10P File: MFF03144.PAB Date: 04-12-1992 Time: 07:43:21

00132

00133

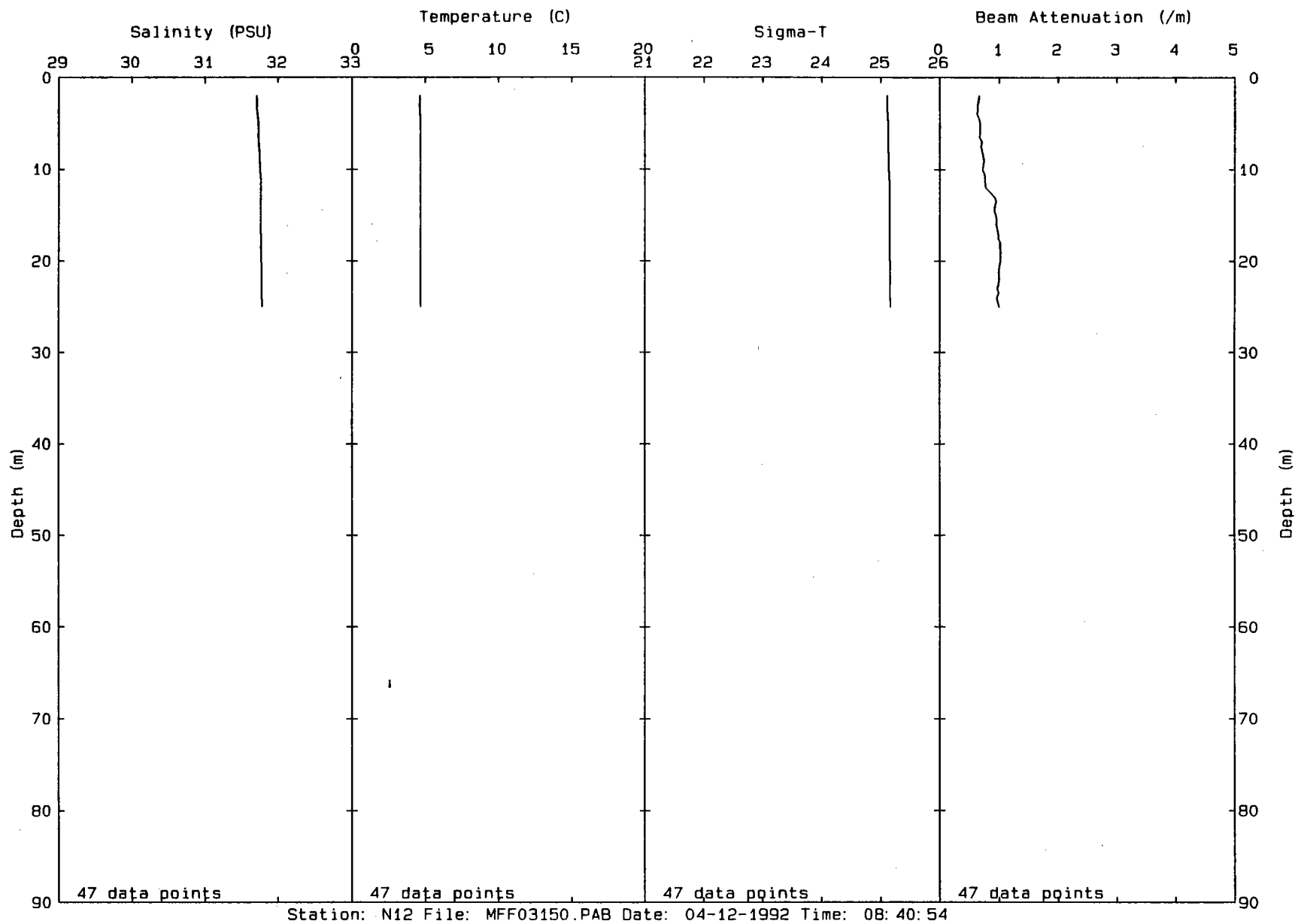


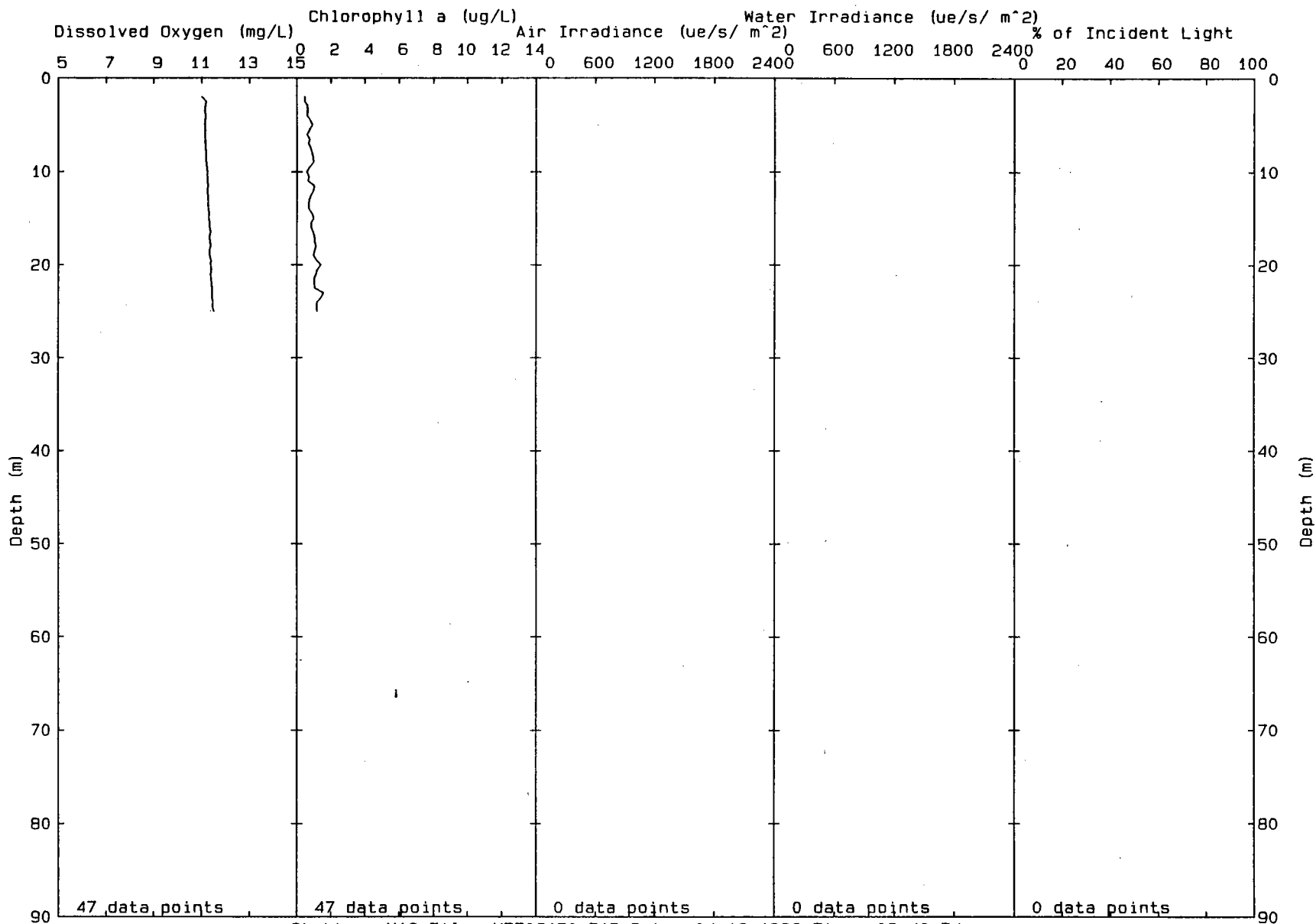


Station: N11 File: MFF03148.PAB Date: 04-12-1992 Time: 08:15:07

00134

00135

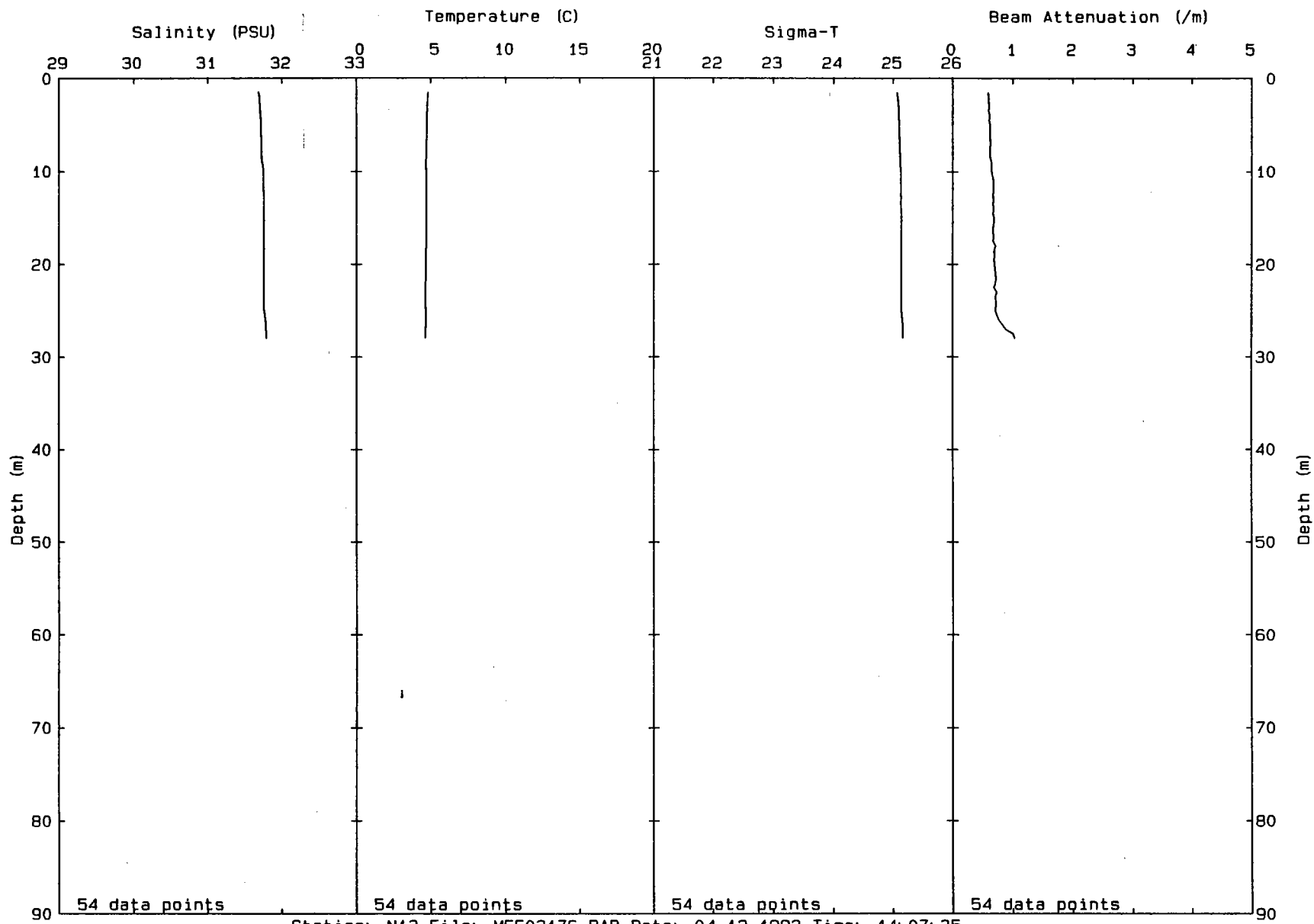




Station: N12 File: MFF03150.PAB Date: 04-12-1992 Time: 08:40:54

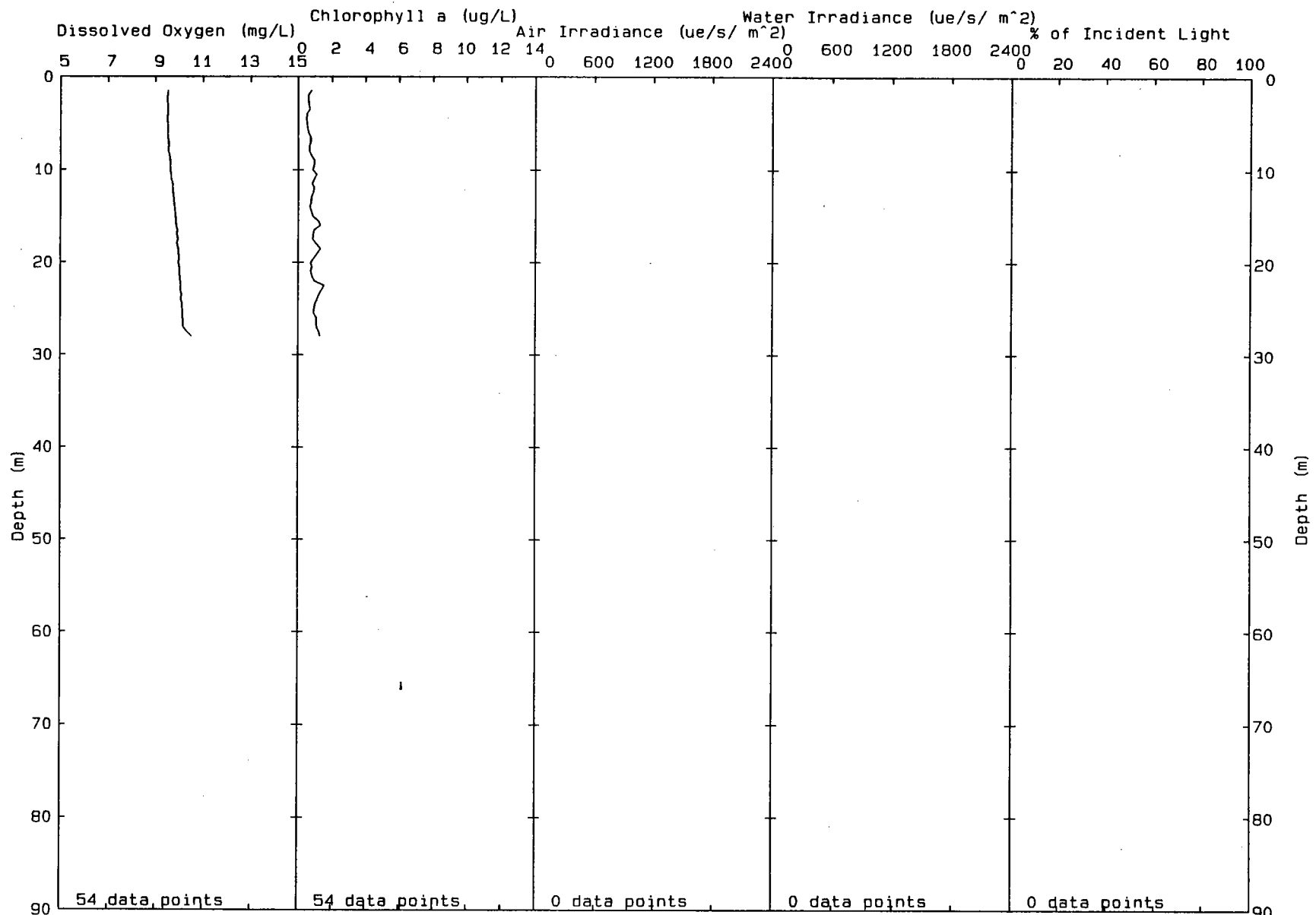
00136

00137



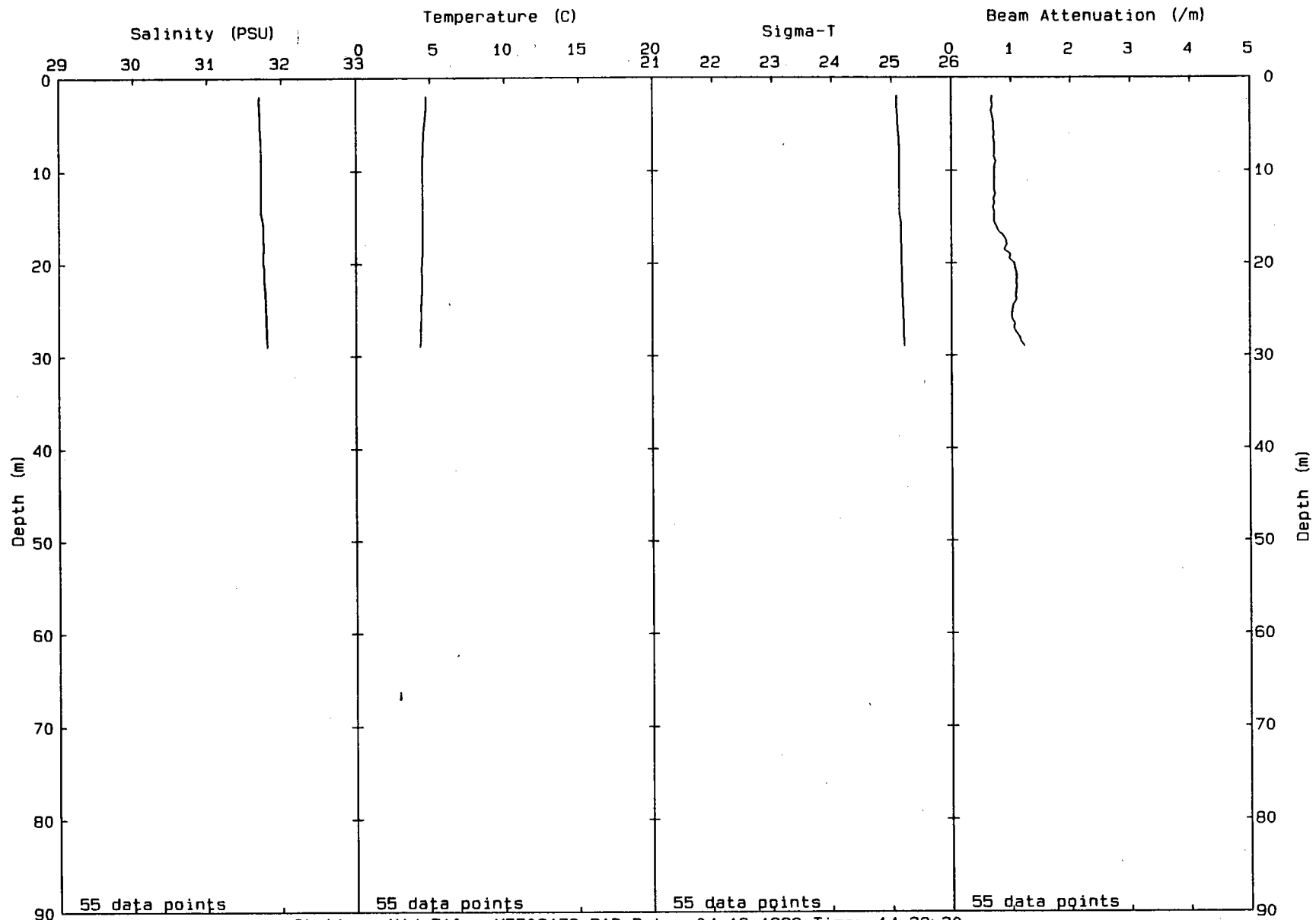
Station: N13 File: MFF03176.PAB Date: 04-12-1992 Time: 14:07:35

00138

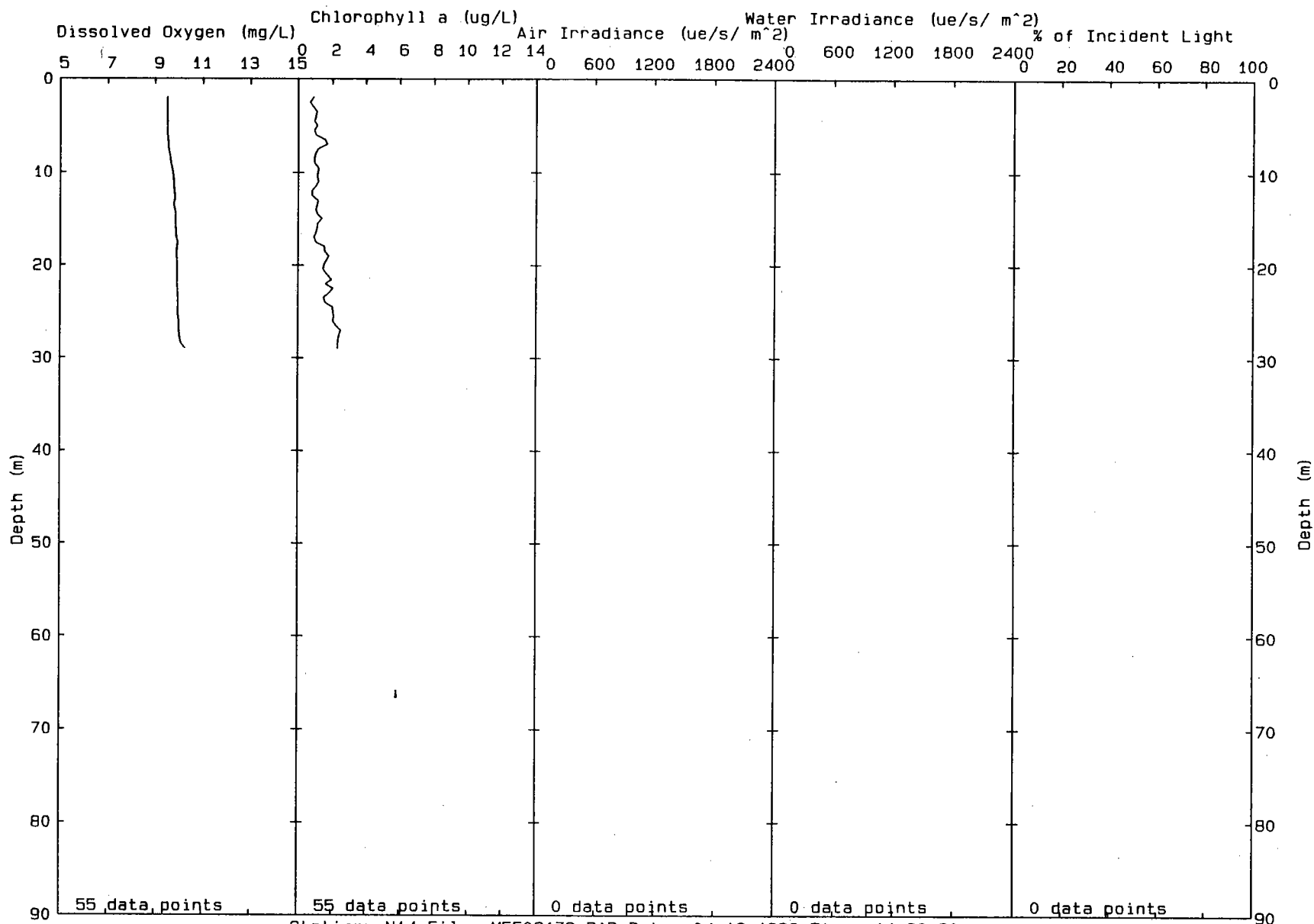


Station: N13 File: MFF03176.PAB Date: 04-12-1992 Time: 14: 07: 35

00139



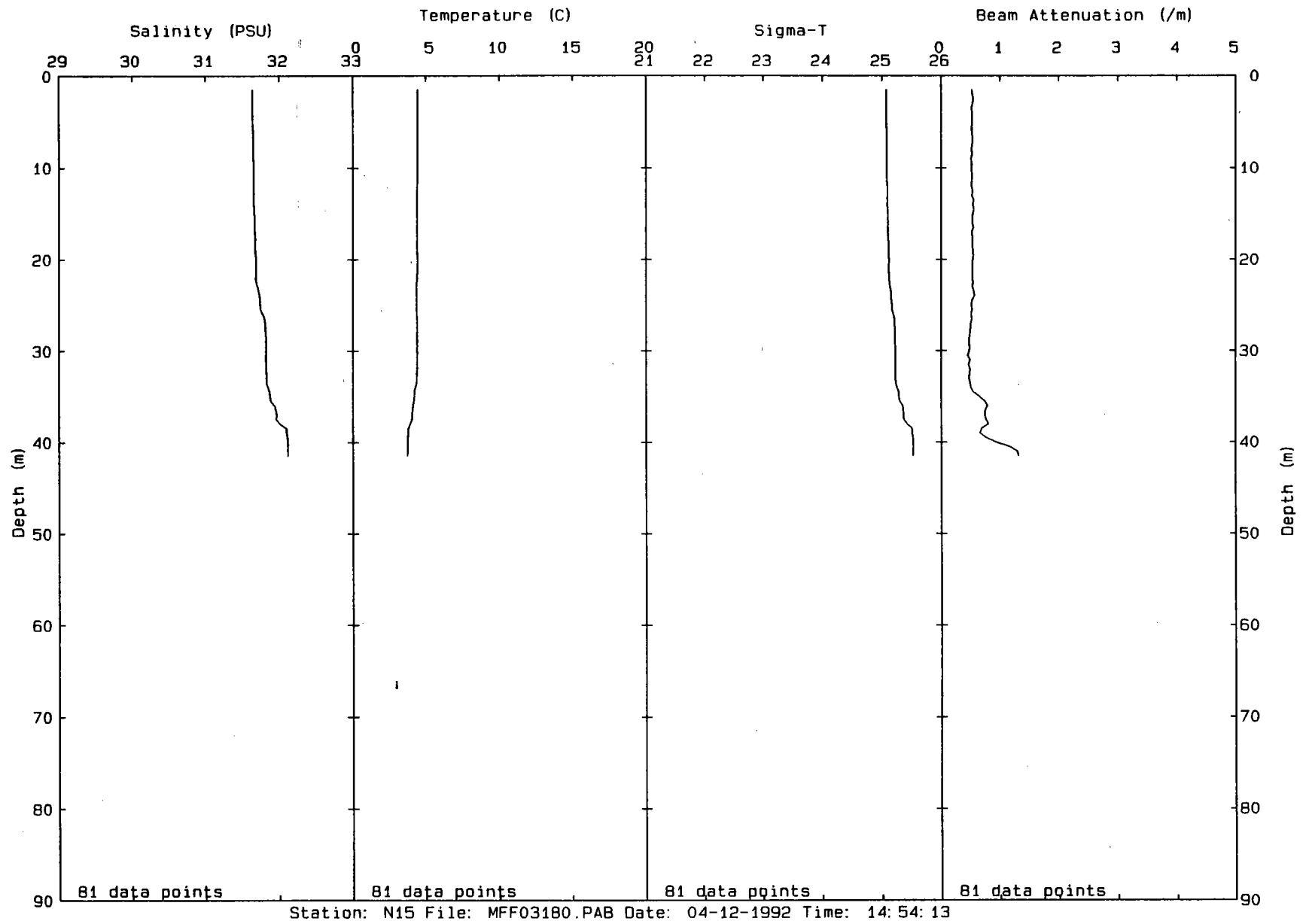
Station: N14 File: MFF03178.PAB Date: 04-12-1992 Time: 14:32:30

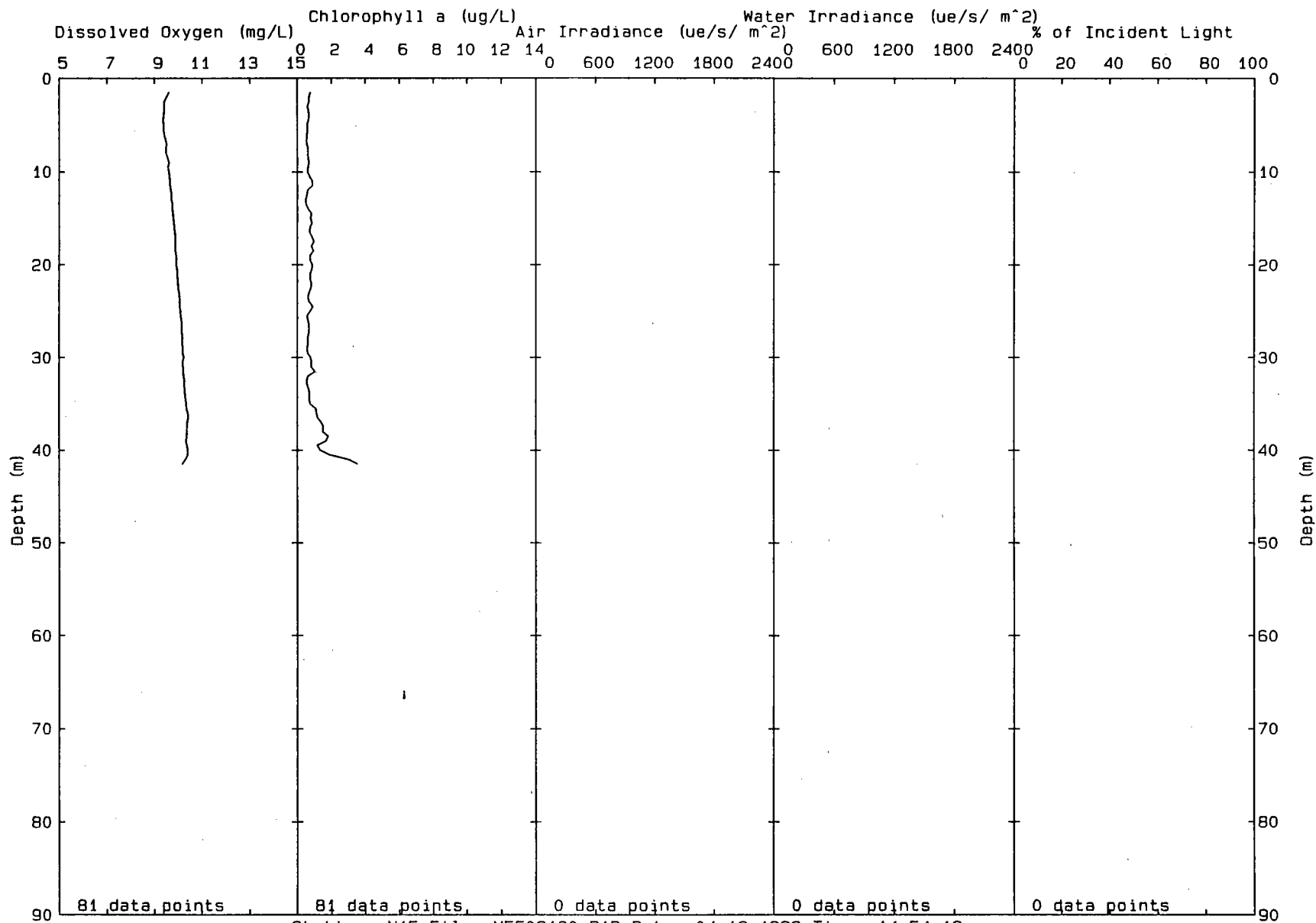


Station: N14 File: MFF03178.PAB Date: 04-12-1992 Time: 14:32:30

00140

00141

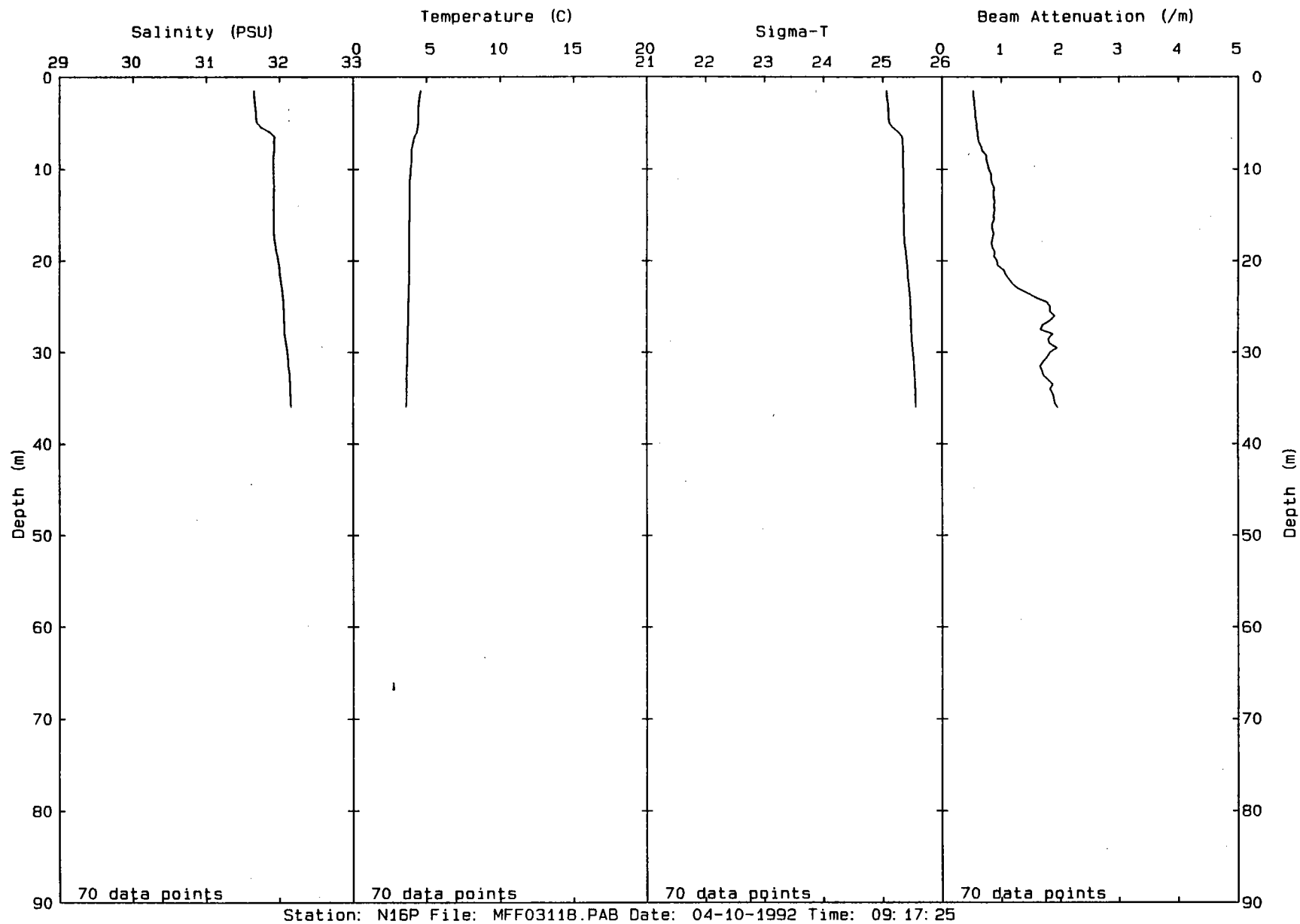




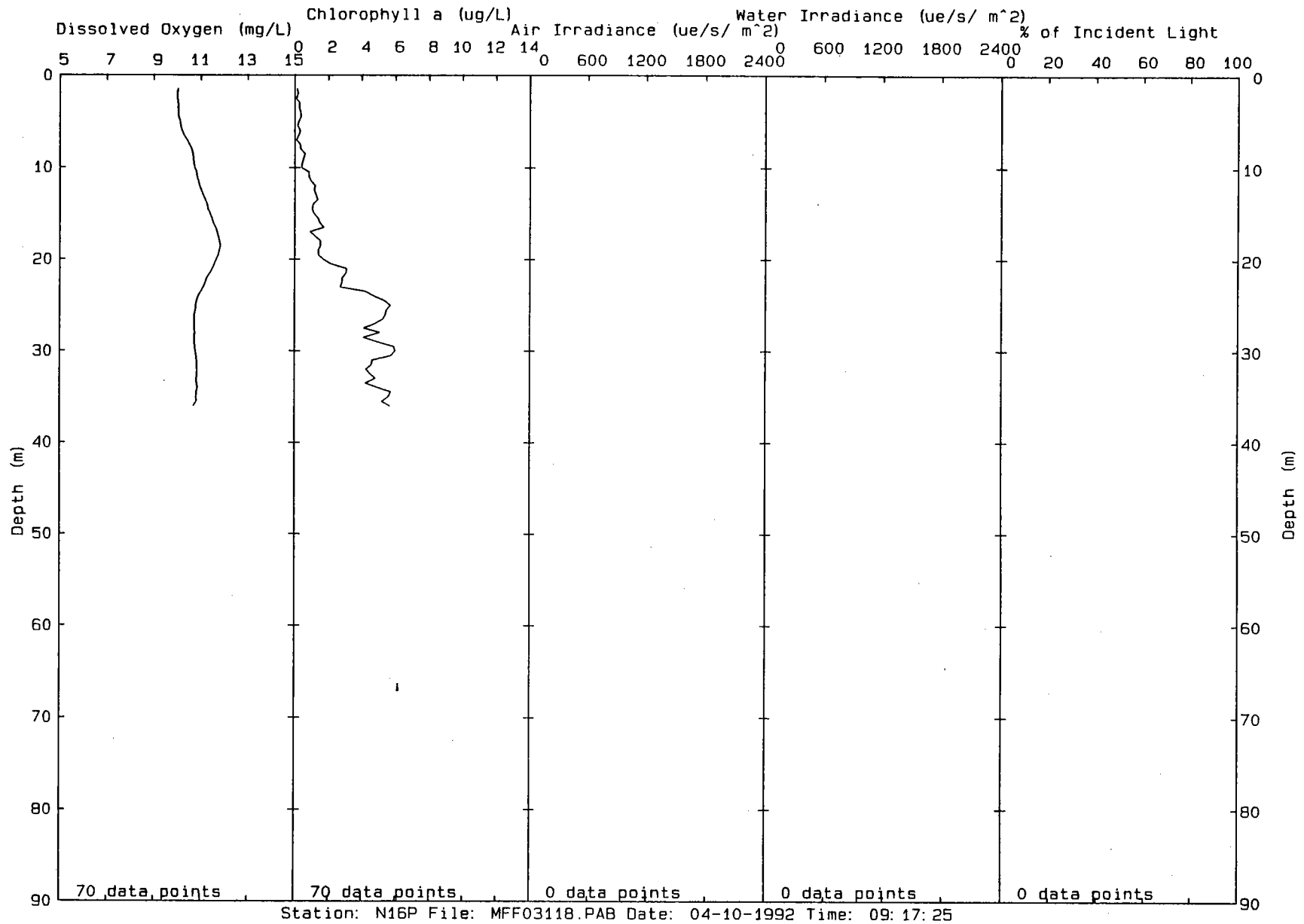
Station: N15 File: MFF03180.PAB Date: 04-12-1992 Time: 14:54:13

00142

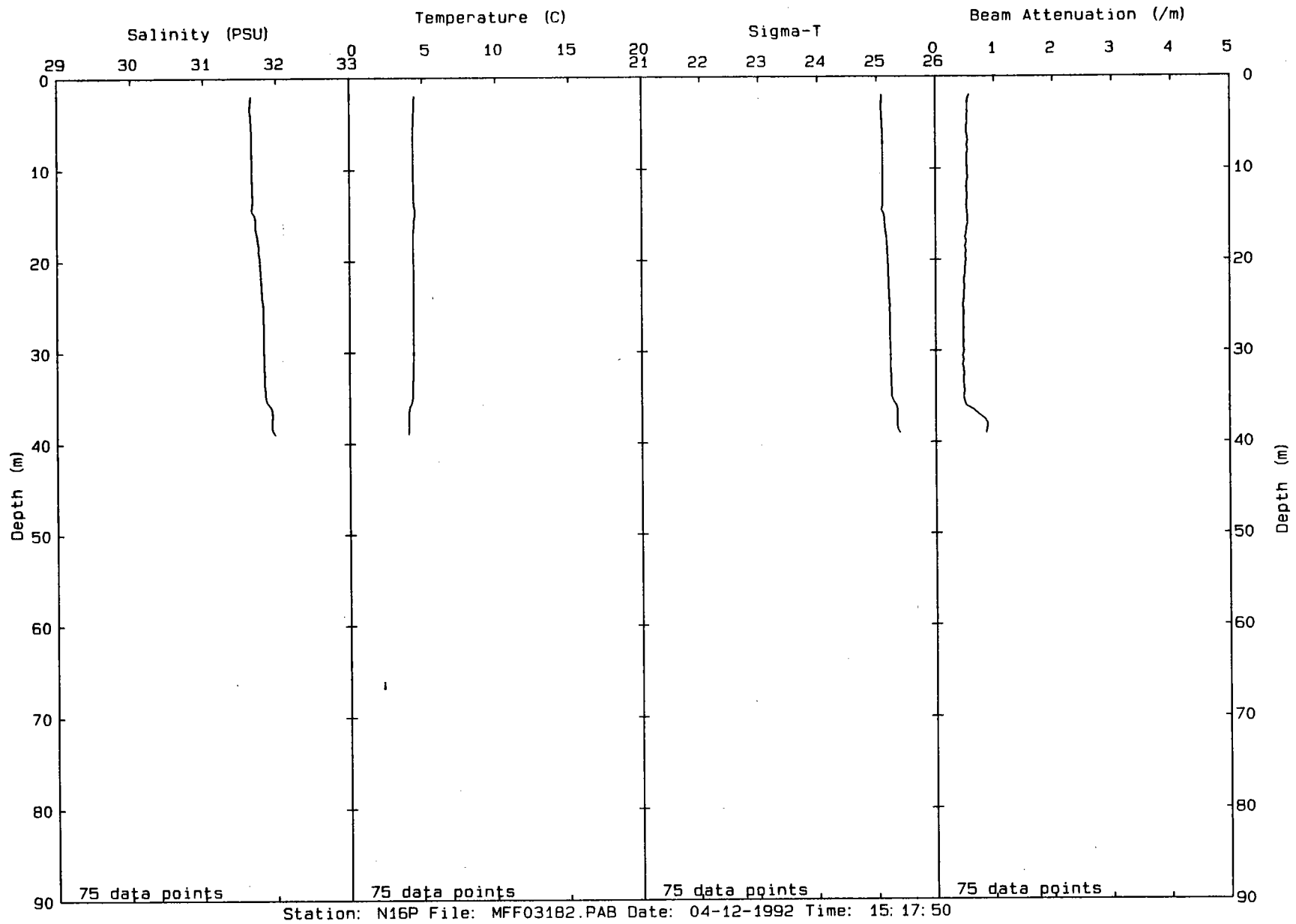
00143



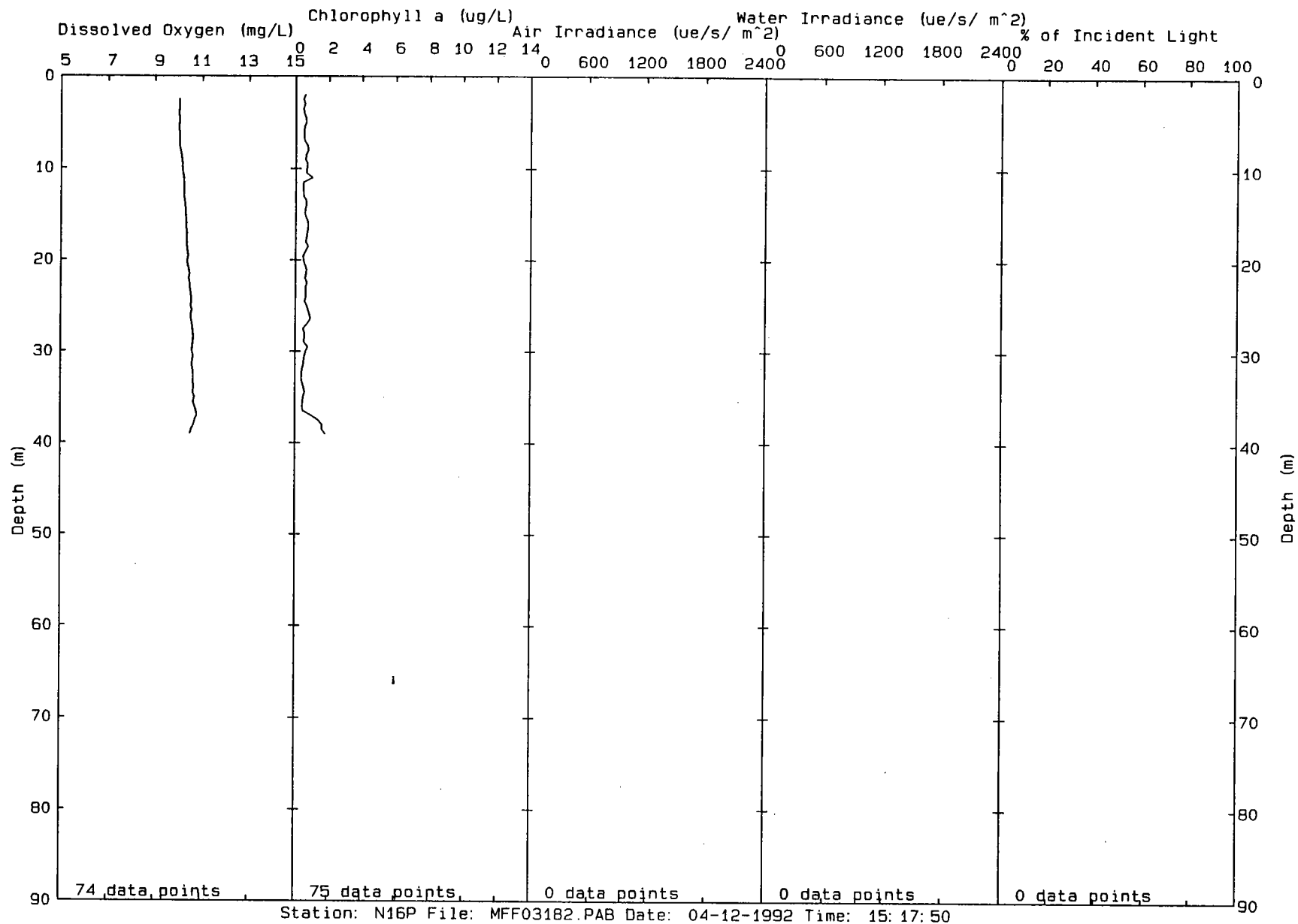
00144



00145

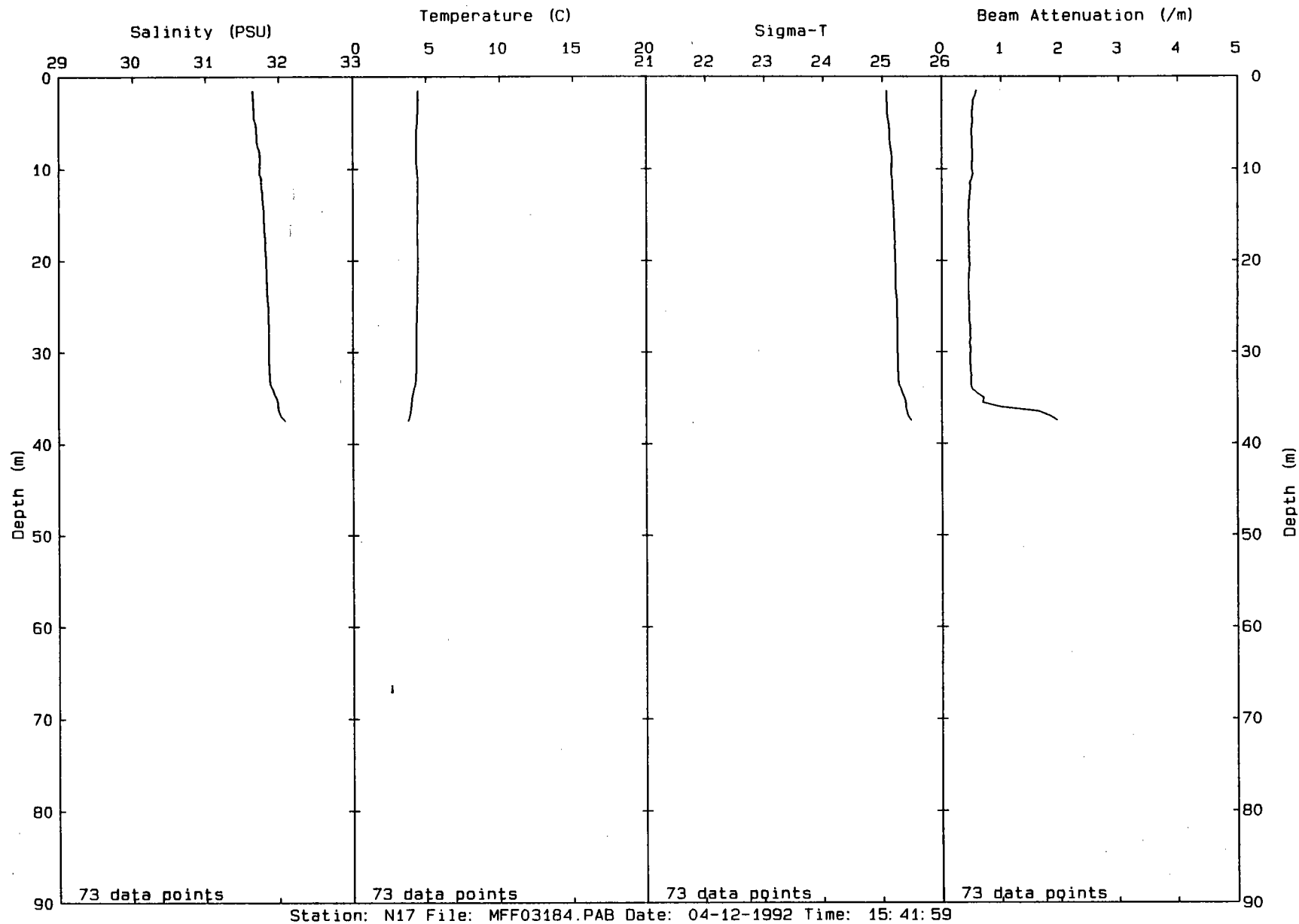


00146

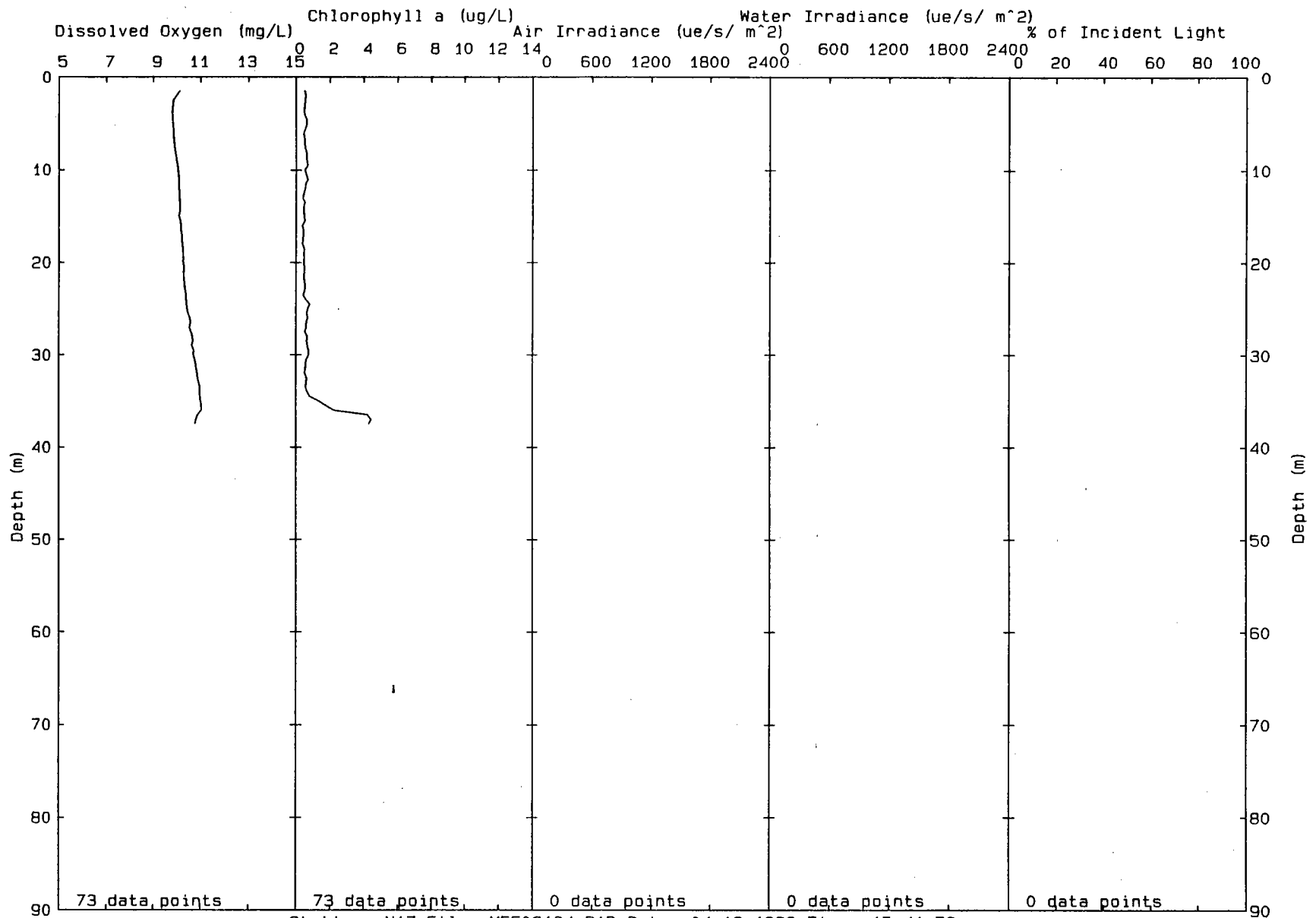


Station: N16P File: MFF03182.PAB Date: 04-12-1992 Time: 15: 17: 50

00147

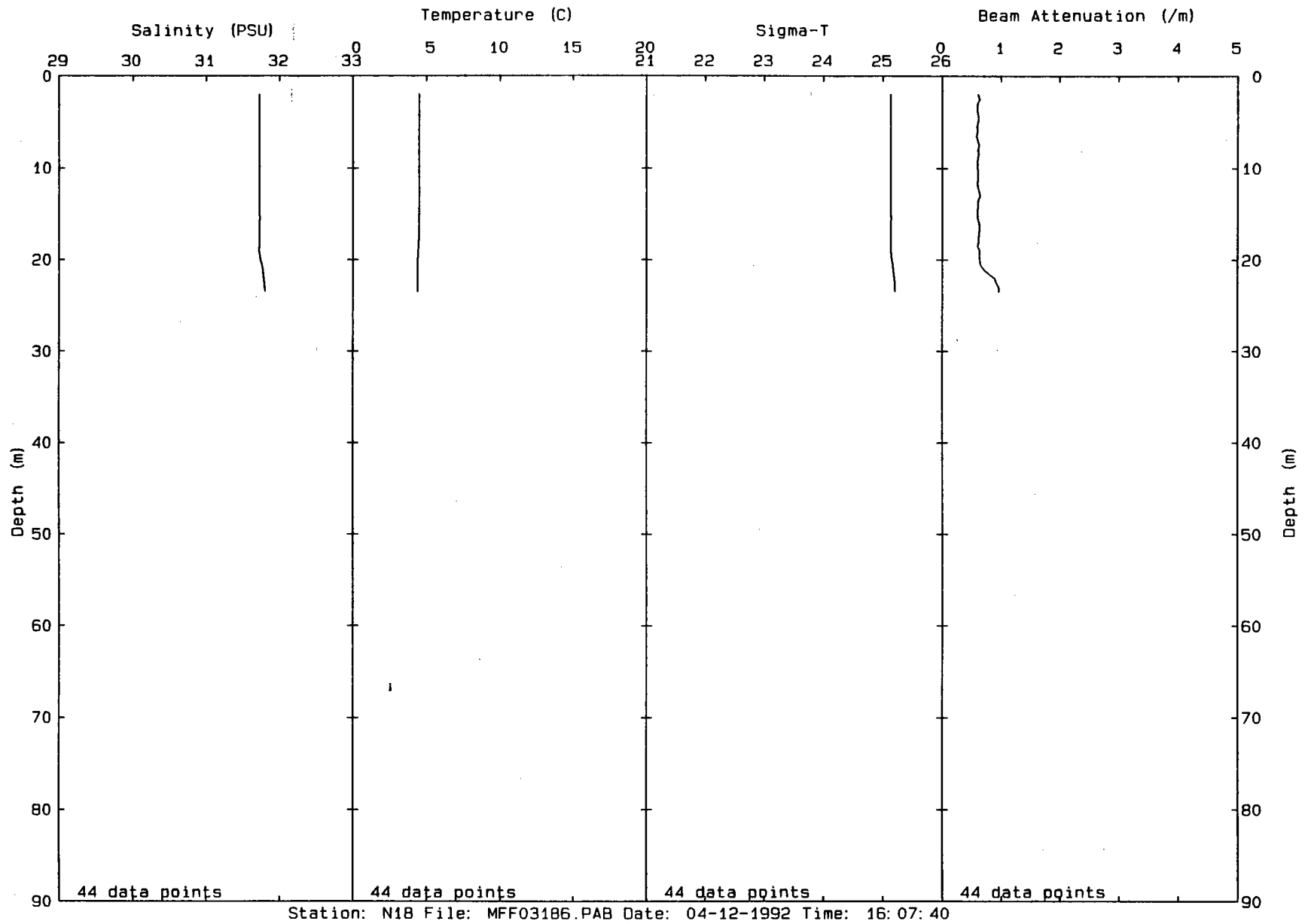


00148

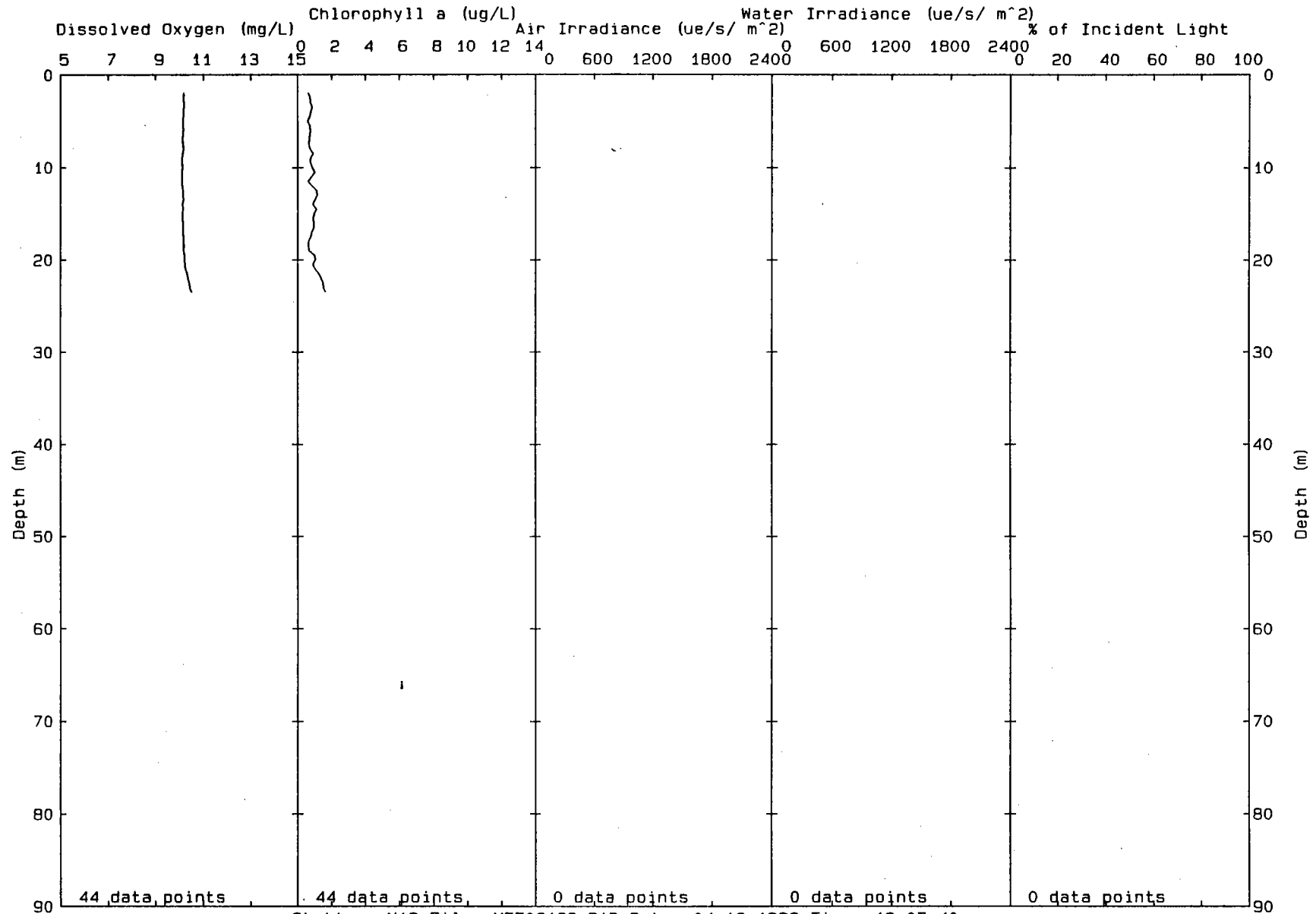


Station: N17 File: MFF03184.PAB Date: 04-12-1992 Time: 15: 41: 59

00149

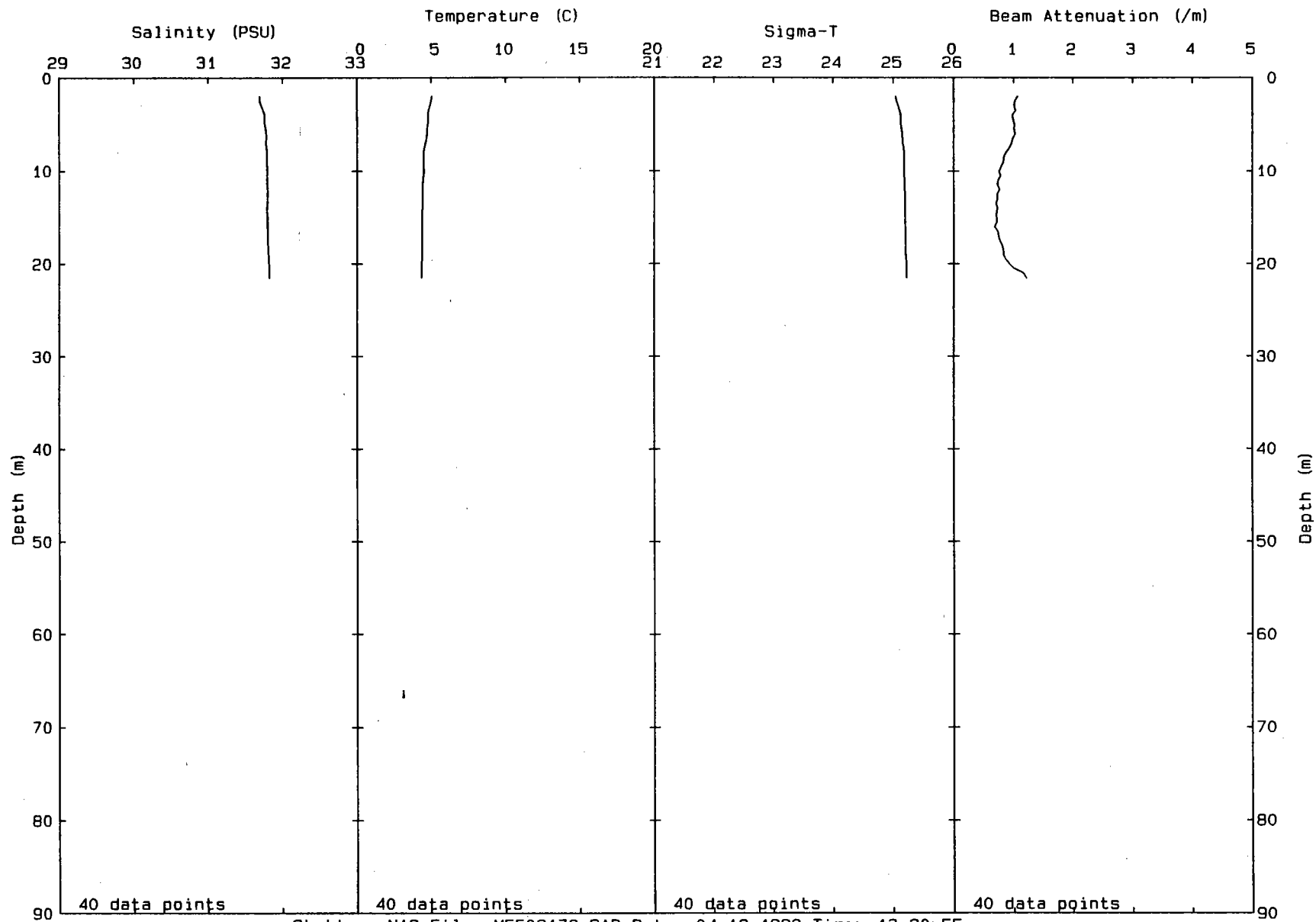


00150

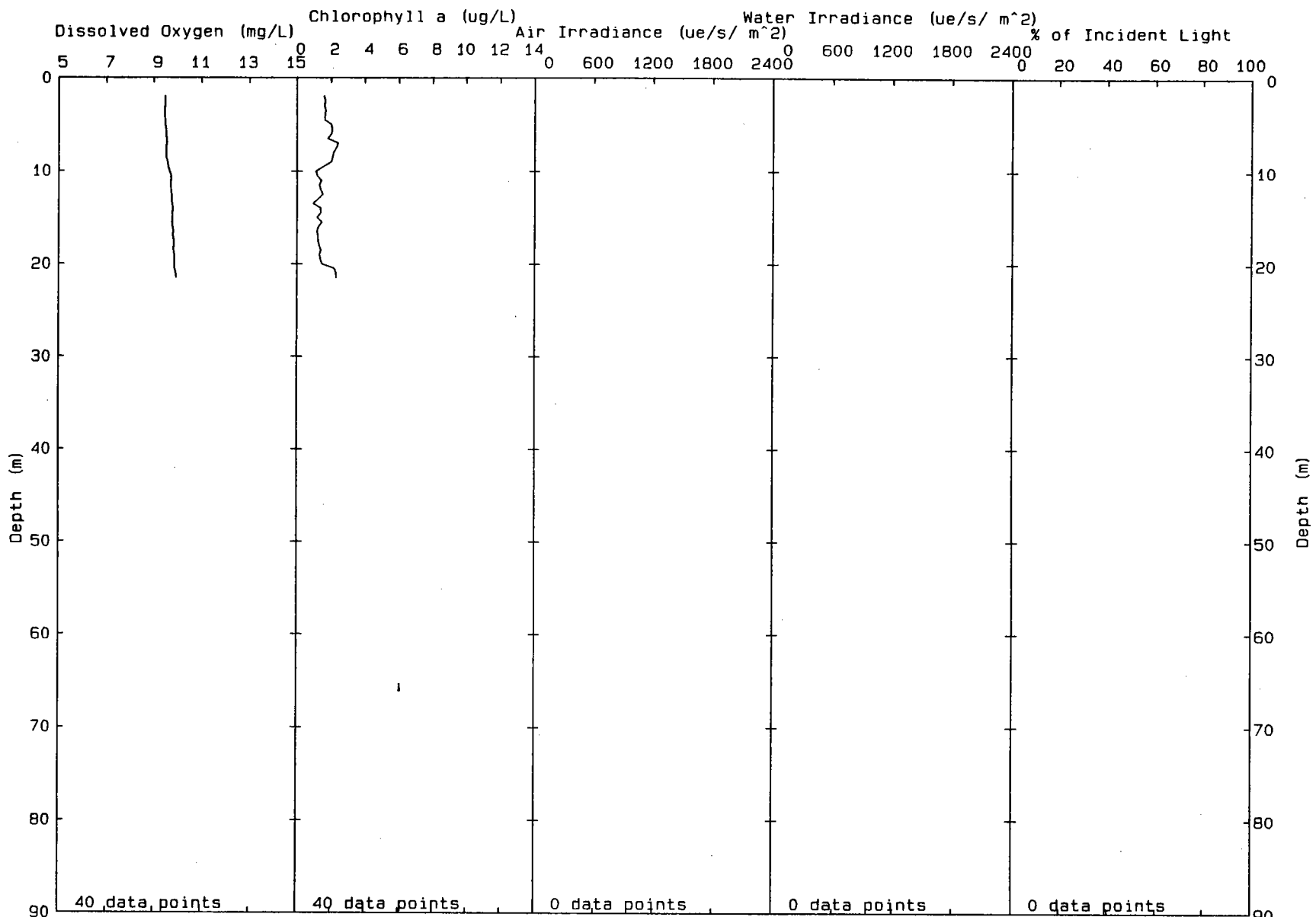


Station: N18 File: MFF03186.PAB Date: 04-12-1992 Time: 16:07:40

00151



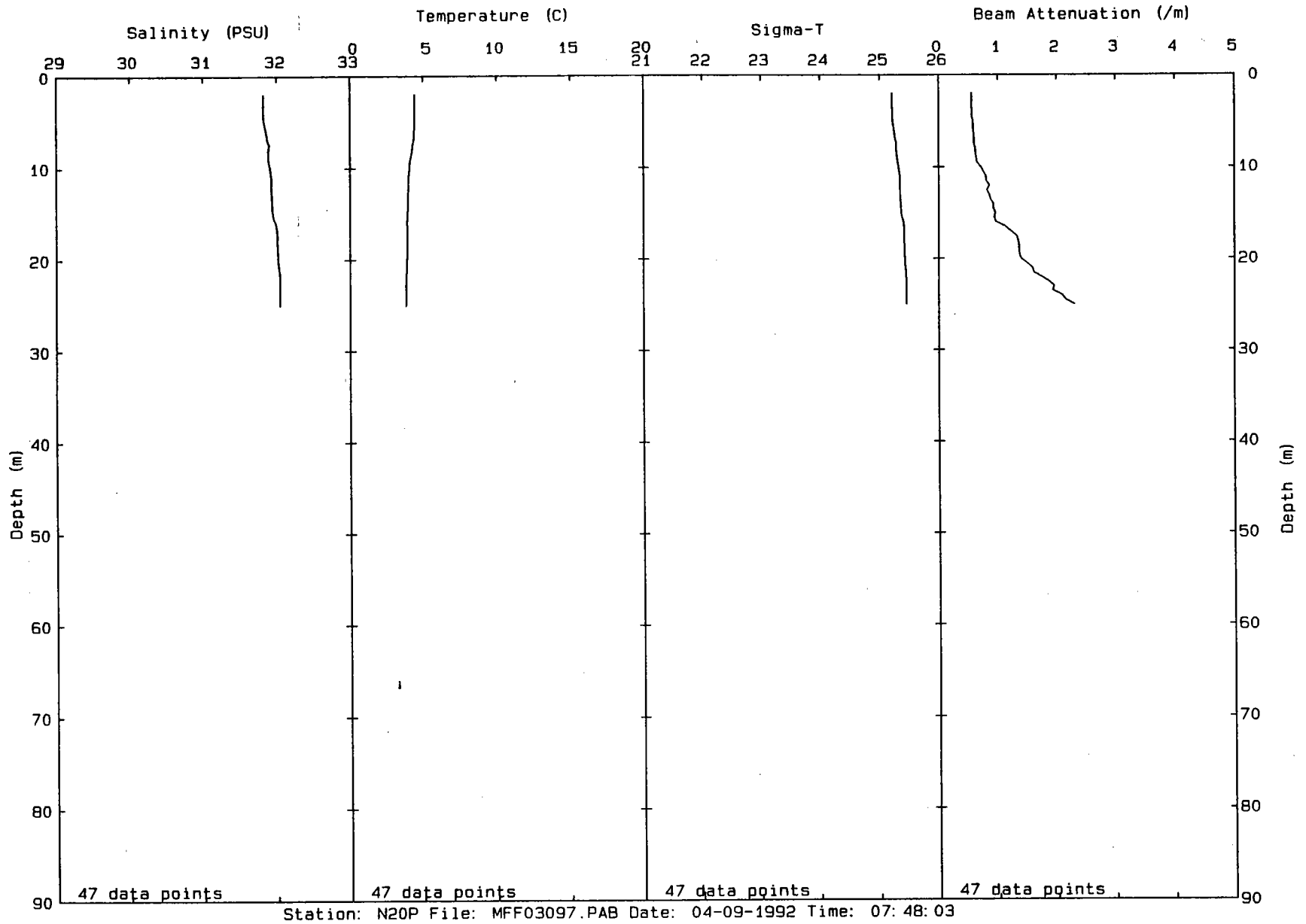
Station: N19 File: MFF03172.PAB Date: 04-12-1992 Time: 13:20:55

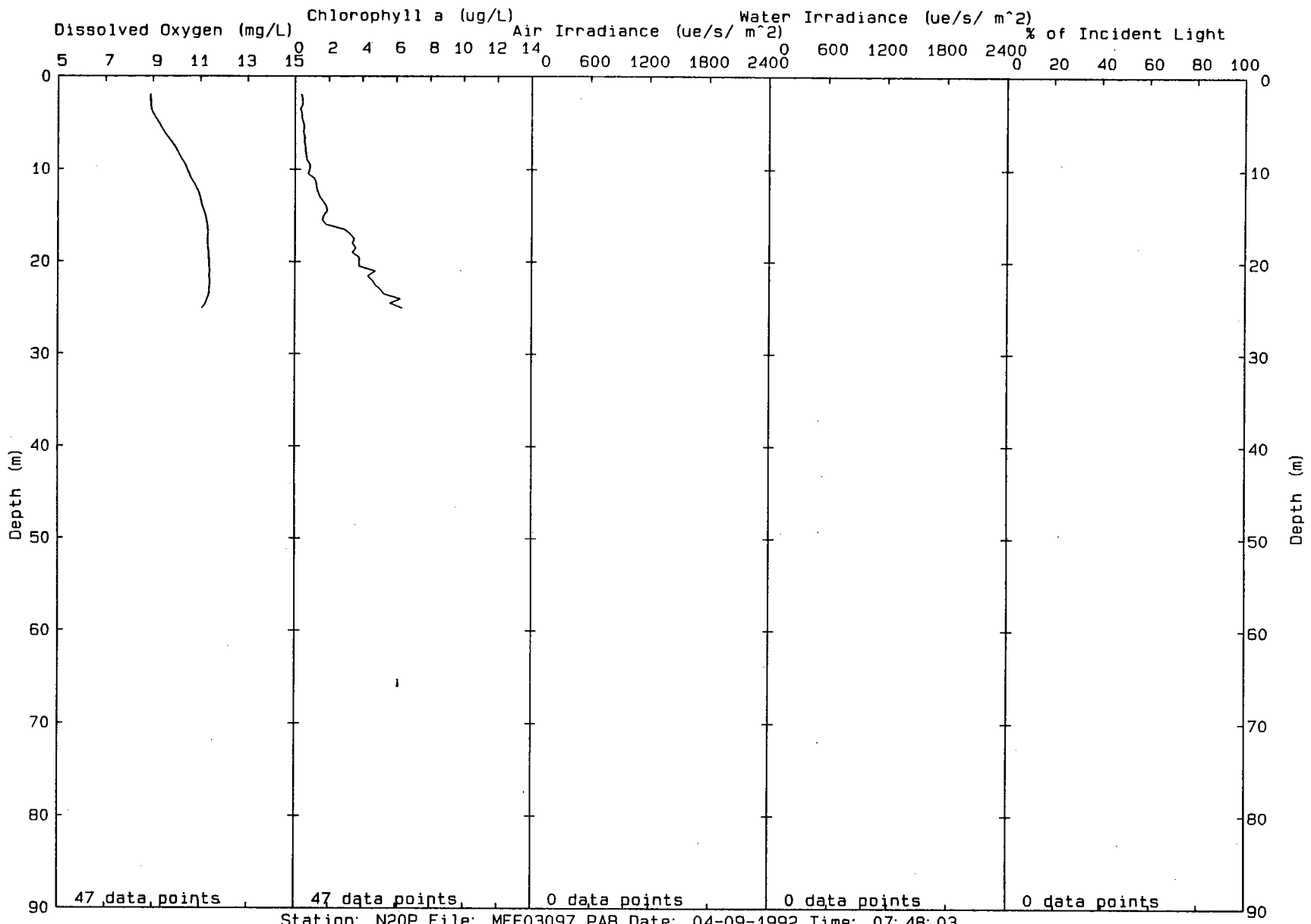


Station: N19 File: MFF03172.PAB Date: 04-12-1992 Time: 13: 20: 55

00152

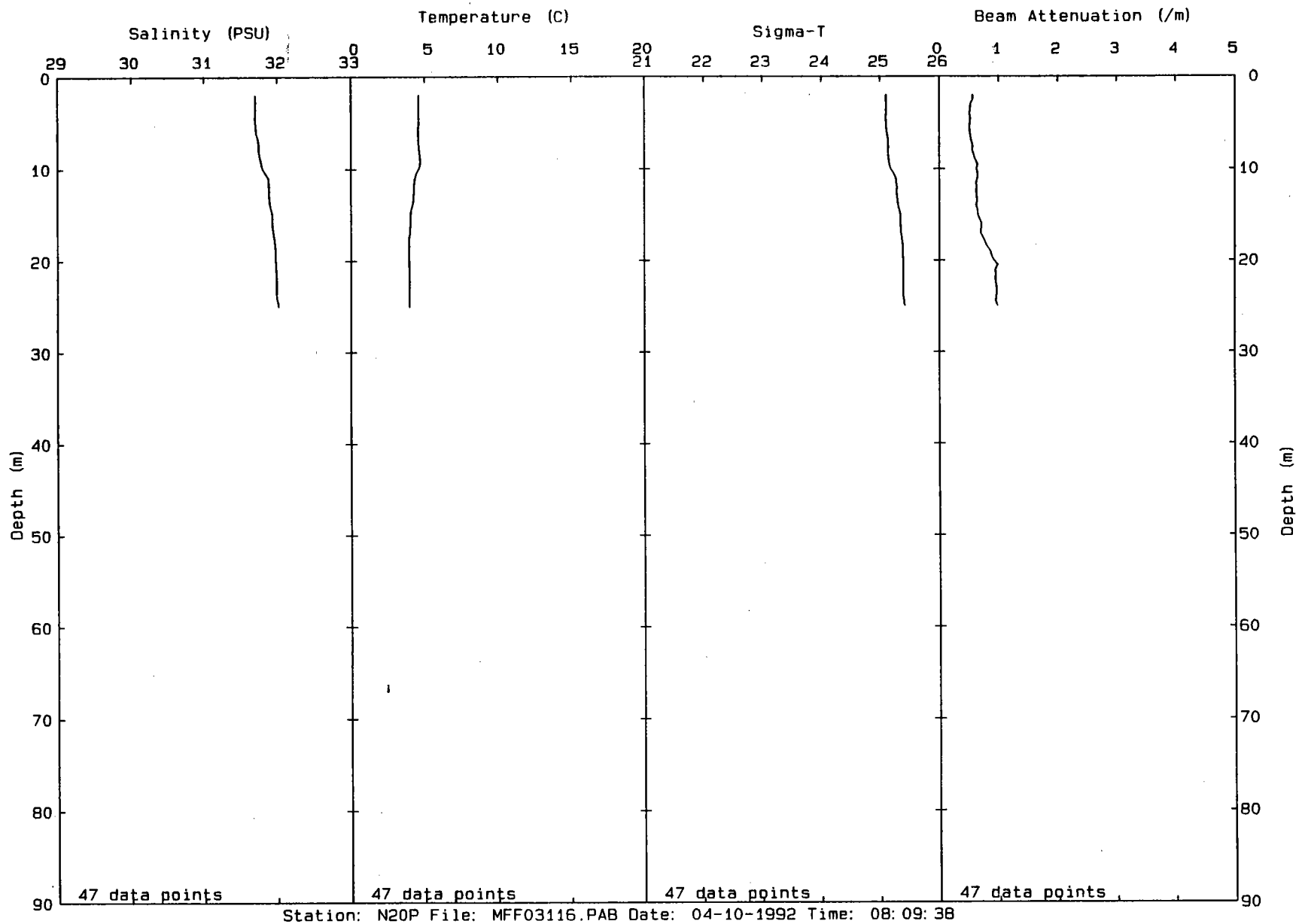
00153

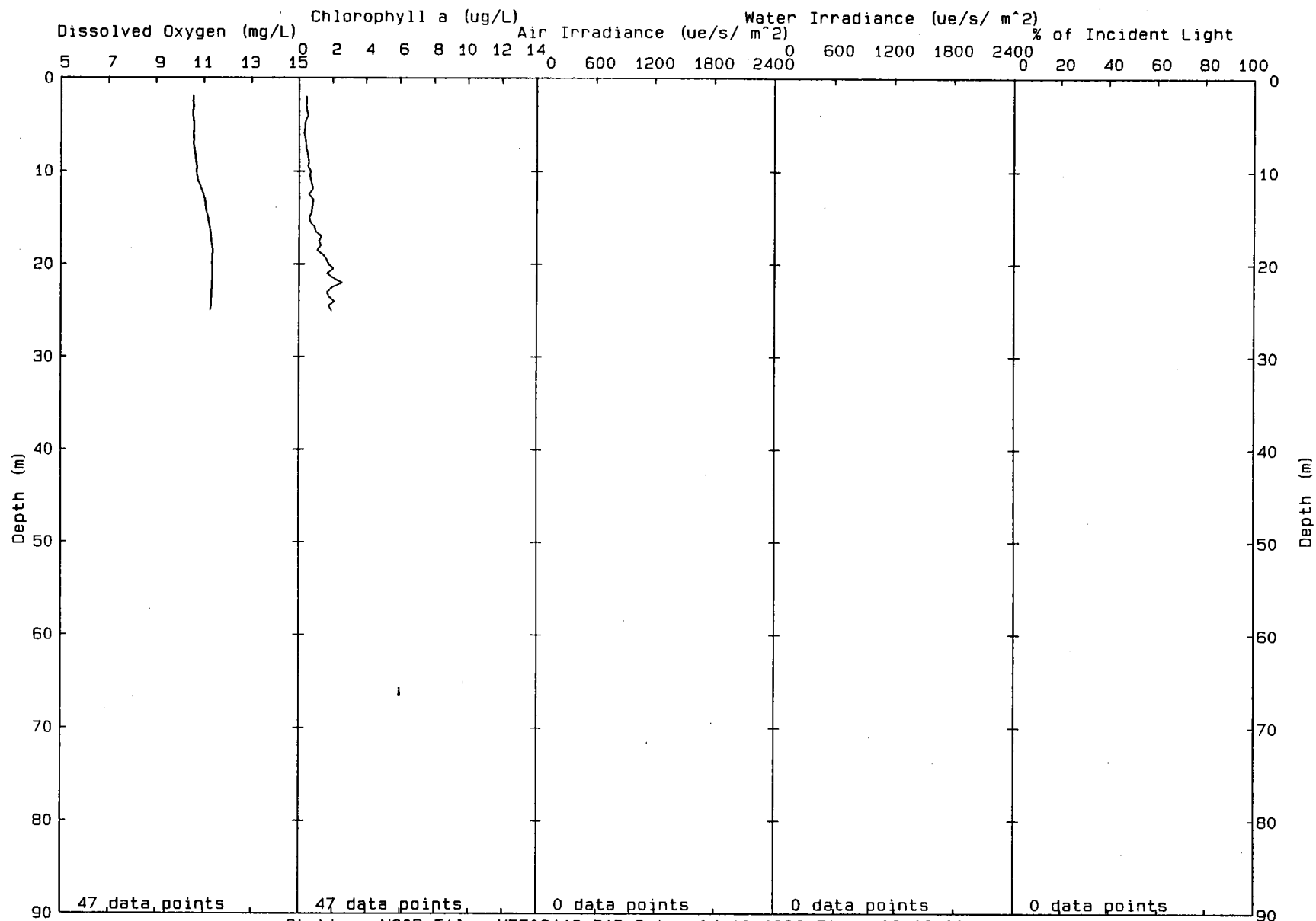




00154

00155

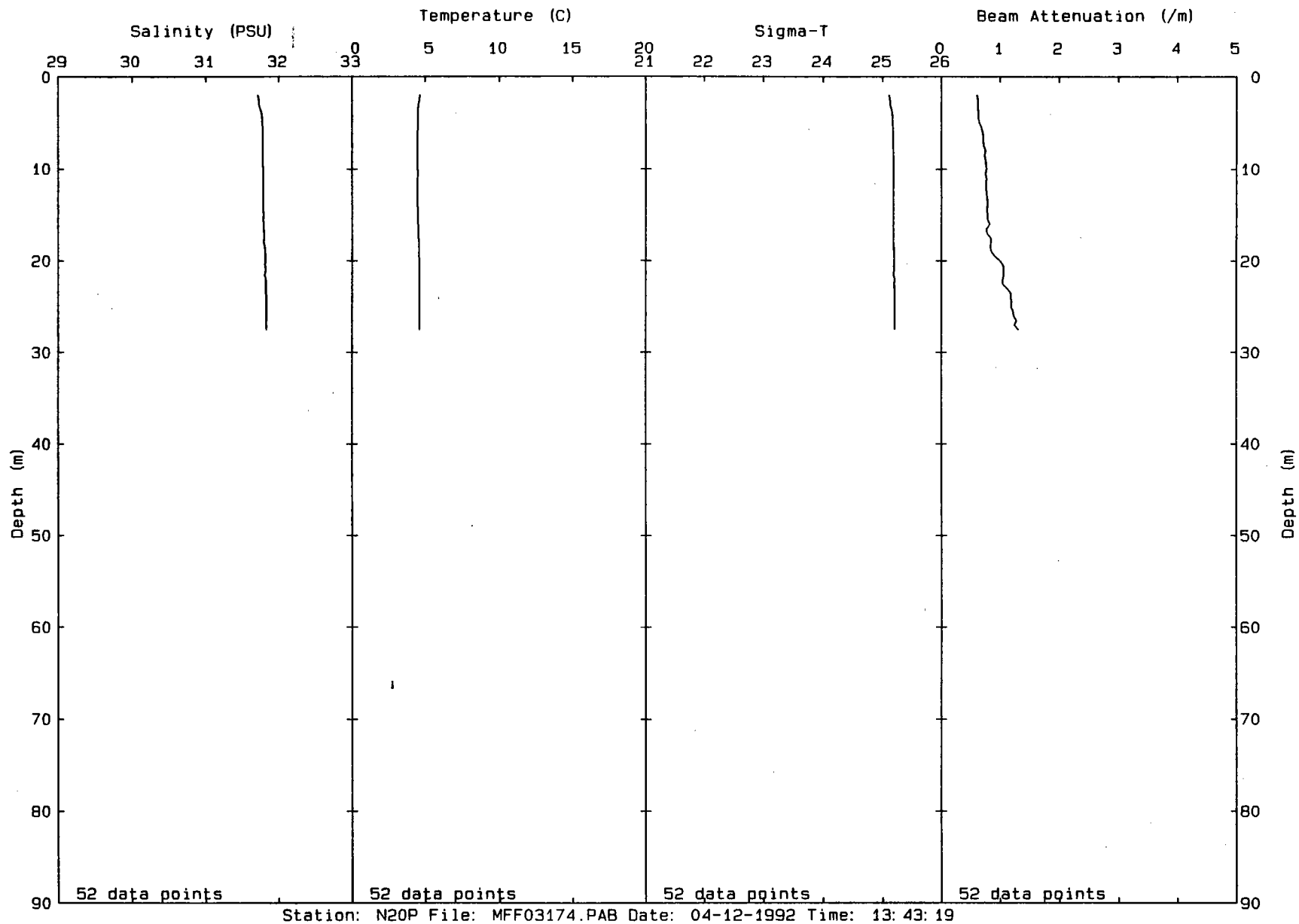




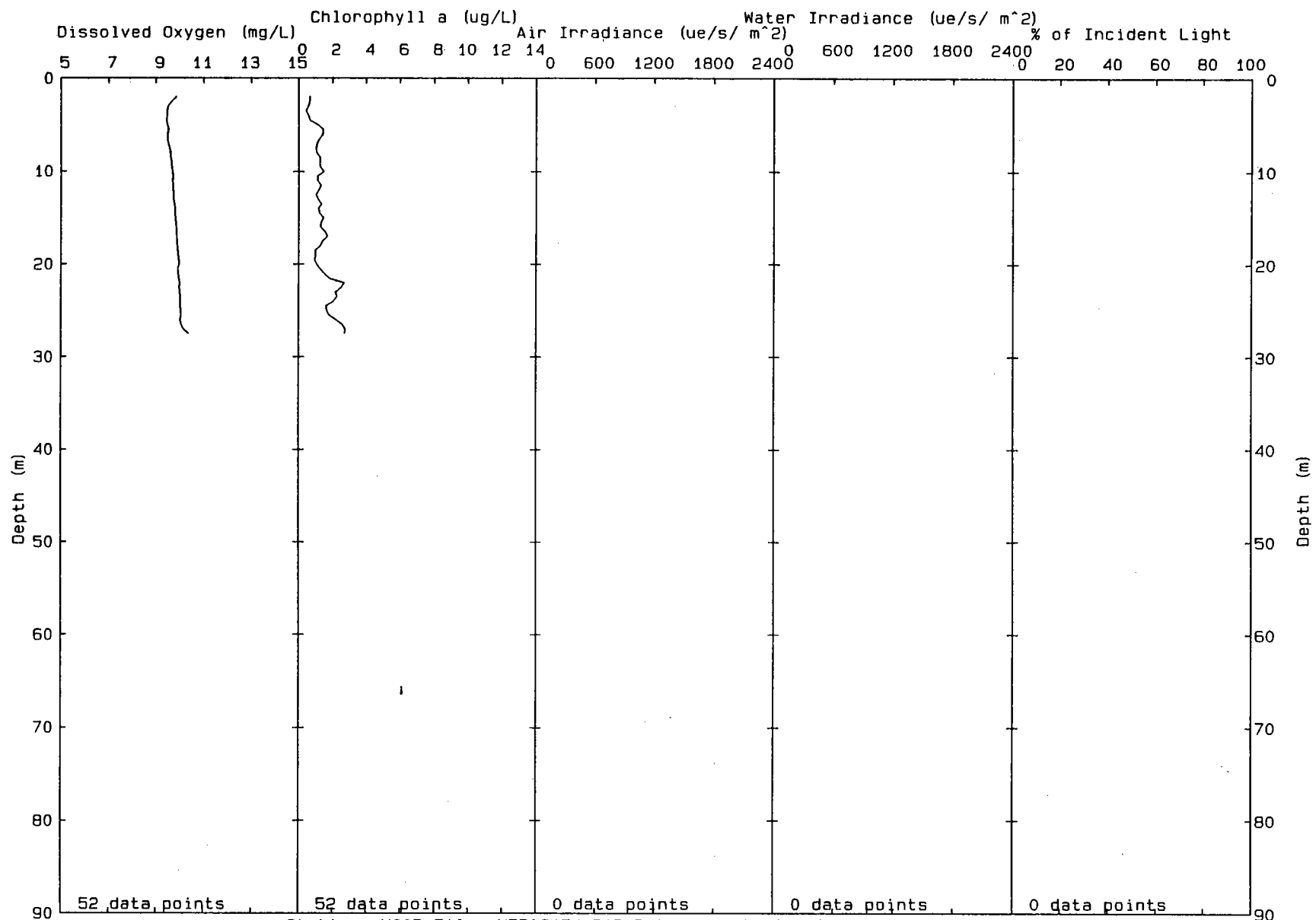
Station: N20P File: MFF03116.PAB Date: 04-10-1992 Time: 08:09:38

00156

00157

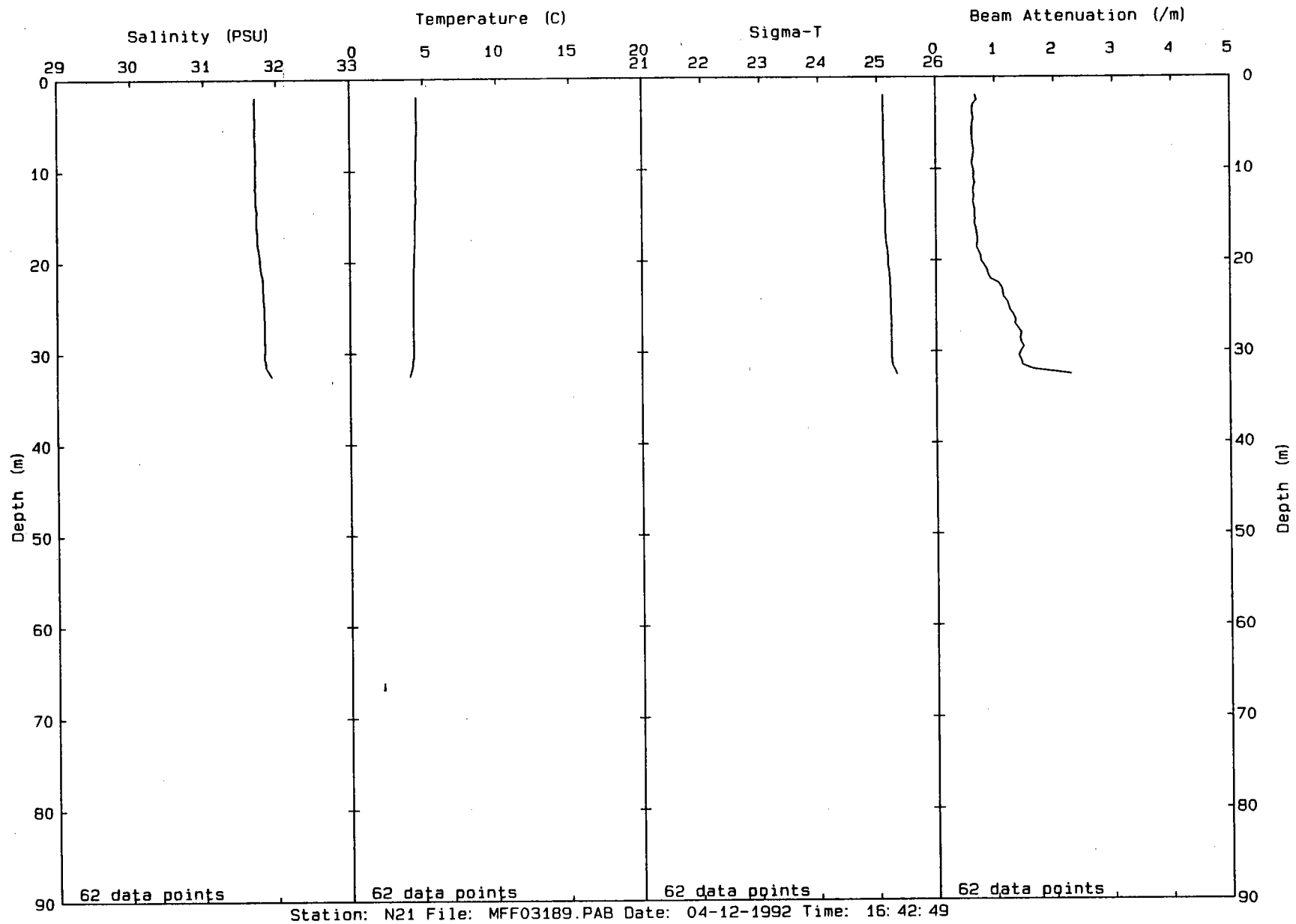


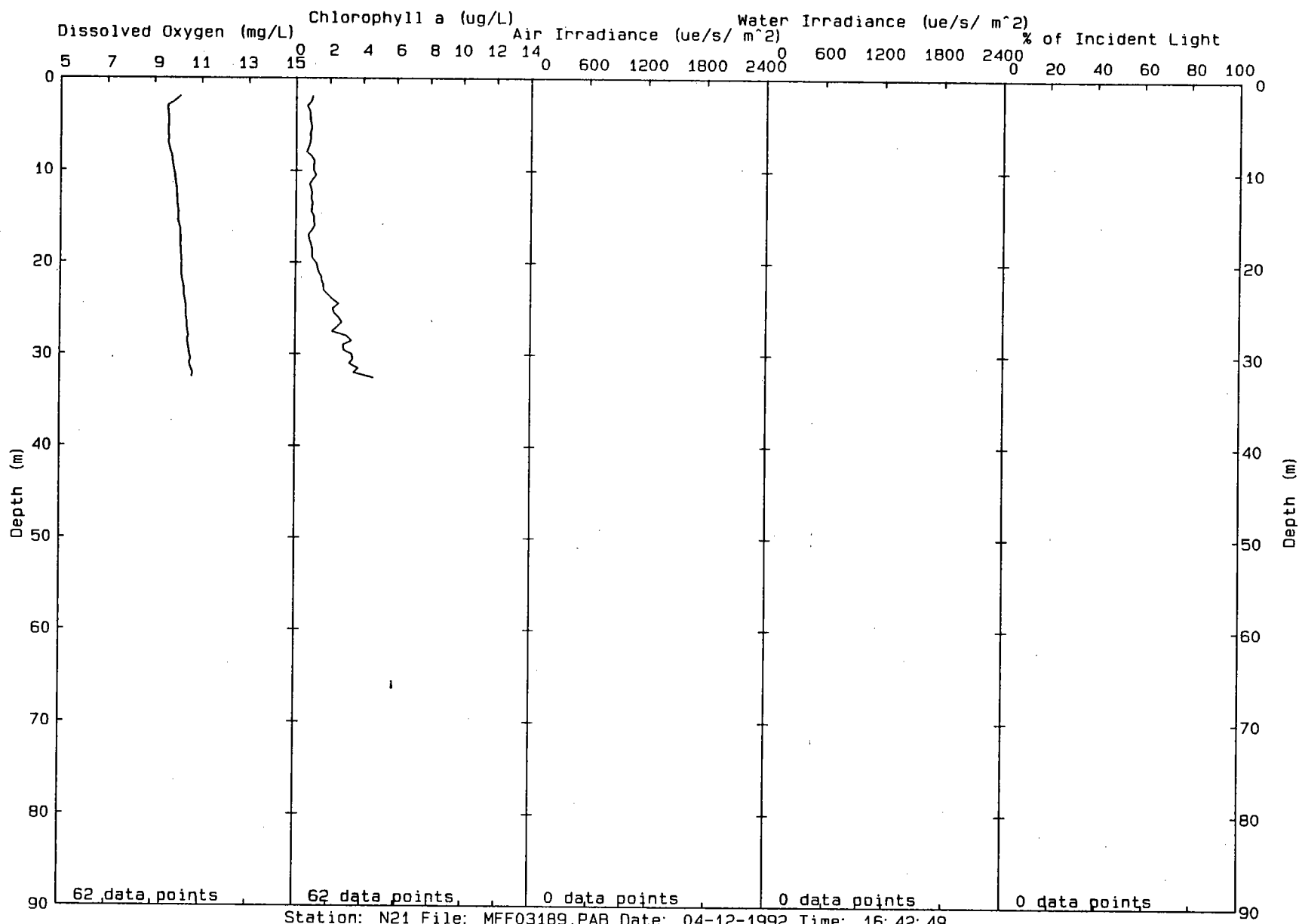
00158



Station: N20P File: MFF03174.PAB Date: 04-12-1992 Time: 13:43:19

00159





Station: N21 File: MFF03189.PAB Date: 04-12-1992 Time: 16:42:49

09100

**TABLE B-1. IRRADIANCE DATA FROM EARLY APRIL 1992 (FARFIELD/NEARFIELD).**

<b>STATION</b>	<b>DATE</b>	<b>TIME</b>	<b>WIREOUT</b>	<b>WIRE ANGLE<sup>a</sup></b>	<b>APPROX DEPTH<sup>b</sup></b>	<b>IN SITU LIGHT<sup>c</sup></b>	<b>DECK CELL<sup>d</sup></b>	<b>LIGHT/ DECK CELL</b>
F01P	4/07/92	09:15	AIR		AIR	1940.4	958	2.026
F01P	4/07/92	09:15	1		1	798.4	1064	0.750
F01P	4/07/92	09:15	2		2	598.8	1064	0.563
F01P	4/07/92	09:15	3		3	424.2	1064	0.399
F01P	4/07/92	09:15	4		4	319.4	1091	0.293
F01P	4/07/92	09:15	5		5	239.5	1117	0.214
F01P	4/07/92	09:15	10		10	199.6	1144	0.175
F01P	4/07/92	09:15	15		15	15.0	1144	0.013
F01P	4/07/92	09:15	20		20	5.0	1170	0.004
F02P	4/07/92	11:18	AIR		AIR	1293.6	825	1.569
F02P	4/07/92	11:18	1		1	598.8	825	0.726
F02P	4/07/92	11:18	2		2	439.1	825	0.533
F02P	4/07/92	11:18	3		3	309.4	851	0.363
F02P	4/07/92	11:18	4		4	209.6	851	0.246
F02P	4/07/92	11:18	5		5	149.7	878	0.171
F02P	4/07/92	11:18	10		10	30.9	904	0.034
F02P	4/07/92	11:18	15		15	7.0	904	0.008
F02P	4/07/92	11:18	20		20	1.5	904	0.002
F02P	4/07/92	11:18	25		25	0.4	904	0.000
F02P	4/07/92	11:48	AIR		AIR	1176.0	692	1.700

00161

STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
F02P	4/07/92	11:48	1		1	538.9	692	0.779
F02P	4/07/92	11:48	2		2	359.3	692	0.519
F02P	4/07/92	11:48	3		3	259.5	692	0.375
F02P	4/07/92	11:48	4		4	179.6	692	0.260
F02P	4/07/92	11:48	5		5	129.7	718	0.181
F02P	4/07/92	11:48	10		10	25.0	718	0.035
F02P	4/07/92	11:48	15		15	5.0	718	0.007
F02P	4/07/92	11:48	20		20	1.0	718	0.001
F02P	4/07/92	11:48	25		25	0.3	745	0.000
F03	4/07/92	07:53	AIR		AIR	382.2	665	0.575
F03	4/07/92	07:53	1		1	399.2	612	0.653
F03	4/07/92	07:53	2		2	299.4	612	0.489
F03	4/07/92	07:53	3		3	299.4	718	0.417
F03	4/07/92	07:53	4		4	149.7	559	0.268
F03	4/07/92	07:53	5		5	109.8	559	0.197
F03	4/07/92	07:53	10		10	23.0	585	0.039
F03	4/07/92	07:53	15		15	7.0	612	0.011
F04	4/07/92	13:23	AIR		AIR	2205.0	1330	1.658
F04	4/07/92	13:23	1		1	998.0	1410	0.708
F04	4/07/92	13:23	2		2	798.4	1330	0.600
F04	4/07/92	13:23	3		3	598.8	1357	0.441

00162

STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
F04	4/07/92	13:23	4		4	479.0	1357	0.353
F04	4/07/92	13:23	5		5	359.3	1330	0.270
F04	4/07/92	13:23	10		10	129.7	1357	0.096
F04	4/07/92	13:23	15		15	39.9	1250	0.032
F04	4/07/92	13:23	20		20	14.0	1250	0.011
F04	4/07/92	13:23	25		25	6.5	1303	0.005
F04	4/07/92	13:23	30		30	2.2	1224	0.002
F04	4/07/92	13:23	35		35	0.8	1250	0.001
F04	4/07/92	13:23	40		40	0.3	1250	0.000
F10	4/08/92	18:09	AIR		AIR	1176.0	319	3.684
F10	4/08/92	18:09	1		1	199.6	319	0.625
F10	4/08/92	18:09	2		2	149.7	319	0.469
F10	4/08/92	18:09	3		3	129.7	319	0.406
F10	4/08/92	18:09	4		4	109.8	346	0.317
F10	4/08/92	18:09	5		5	84.8	333	0.255
F10	4/08/92	18:09	10		10	39.9	333	0.120
F10	4/08/92	18:09	15		15	17.0	346	0.049
F10	4/08/92	18:09	20		20	5.6	333	0.017
F10	4/08/92	18:09	25		25	2.0	346	0.006
F10	4/08/92	18:09	30		30	0.5	346	0.001
F12	4/07/92	15:02	AIR		AIR	2058.0	1170	1.758

00163

STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
F12	4/07/92	15:02	1		1	948.1	1170	0.810
F12	4/07/92	15:02	2		2	698.6	1224	0.571
F12	4/07/92	15:02	3		3	548.9	1250	0.439
F12	4/07/92	15:02	4		4	459.1	1277	0.360
F12	4/07/92	15:02	5		5	339.3	1250	0.271
F12	4/07/92	15:02	10		10	109.8	1250	0.088
F12	4/07/92	15:02	15	15	14	41.9	1250	0.034
F12	4/07/92	15:02	20	15	19	17.0	1250	0.014
F12	4/07/92	15:02	25	15	24	6.0	1250	0.005
F13P	4/08/92	10:20	AIR		AIR	793.8	466	1.705
F13P	4/08/92	10:20	1		1	299.4	479	0.625
F13P	4/08/92	10:20	2		2	219.6	479	0.459
F13P	4/08/92	10:20	3		3	159.7	479	0.334
F13P	4/08/92	10:20	4		4	119.8	479	0.250
F13P	4/08/92	10:20	5		5	89.8	479	0.188
F13P	4/08/92	10:20	10		10	29.9	479	0.063
F13P	4/08/92	10:20	15		15	10.0	492	0.020
F17	4/08/92	14:07	AIR		AIR	2646.0	1649	1.604
F17	4/08/92	14:07	1		1	1397.2	1596	0.875
F17	4/08/92	14:07	2		2	998.0	1596	0.625
F17	4/08/92	14:07	3		3	848.3	1569	0.541

00164

STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
F17	4/08/92	14:07	4		4	698.6	1569	0.445
F17	4/08/92	14:07	5		5	598.8	1596	0.375
F17	4/08/92	14:07	10		10	229.5	1569	0.146
F17	4/08/92	14:07	15		15	69.9	1596	0.044
F17	4/08/92	14:07	20		20	22.0	1569	0.014
F17	4/08/92	14:07	25		25	6.5	1569	0.004
F17	4/08/92	14:07	30		30	1.8	1569	0.001
F19	4/10/92	13:39	AIR		AIR	2469.6	1889	1.308
F19	4/10/92	13:39	1	15	1	1497.0	1889	0.793
F19	4/10/92	13:39	2	15	2	998.0	1889	0.528
F19	4/10/92	13:39	3	15	3	848.3	1889	0.449
F19	4/10/92	13:39	4	15	4	698.6	1889	0.370
F19	4/10/92	13:39	5	15	5	598.8	1889	0.317
F19	4/10/92	13:39	10	15	10	269.5	1889	0.143
F19	4/10/92	13:39	15	15	14	129.7	1889	0.069
F19	4/10/92	13:39	20	15	19	64.9	1889	0.034
F19	4/10/92	13:39	25	15	24	29.9	1889	0.016
F19	4/10/92	13:39	30	15	29	13.0	1889	0.007
F19	4/10/92	13:39	35	15	34	5.0	1889	0.003
F19	4/10/92	13:39	40	15	39	1.8	1889	0.001
F20	4/10/92	17:08	AIR		AIR	1881.6	798	2.358

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STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
F20	4/10/92	17:08	1		1	499.0	745	0.670
F20	4/10/92	17:08	2		2	449.1	745	0.603
F20	4/10/92	17:08	3		3	349.3	745	0.469
F20	4/10/92	17:08	4		4	279.4	745	0.375
F20	4/10/92	17:08	5		5	219.6	745	0.295
F20	4/10/92	17:08	10		10	99.8	745	0.134
F20	4/10/92	17:08	15		15	44.9	745	0.060
F20	4/10/92	17:08	20		20	13.0	745	0.017
F20	4/10/92	17:08	25		25	4.0	745	0.005
F20	4/10/92	17:08	30		30	1.0	745	0.001
F21	4/10/92	15:40	AIR		AIR	2352.0	1357	1.734
F21	4/10/92	15:40	1		1	1097.8	1330	0.825
F21	4/10/92	15:40	2		2	898.2	1277	0.703
F21	4/10/92	15:40	3		3	698.6	1250	0.559
F21	4/10/92	15:40	4		4	499.0	1197	0.417
F21	4/10/92	15:40	5		5	449.1	1170	0.384
F21	4/10/92	15:40	10		10	169.7	1117	0.152
F21	4/10/92	15:40	15		15	79.8	1117	0.071
F21	4/10/92	15:40	20		20	33.9	1064	0.032
F21	4/10/92	15:40	25		25	12.0	1064	0.011
F21	4/10/92	15:40	30		30	5.5	1117	0.005

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STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
F21	4/10/92	15:40	35		35	2.5	1117	0.002
F22		15:05	AIR		AIR	2352.0	1463	1.608
F22		15:05	1		1	1197.6	1436	0.834
F22		15:05	2		2	998.0	1436	0.695
F22		15:05	3		3	698.6	1410	0.496
F22		15:05	4		4	598.8	1330	0.450
F22		15:05	5		5	499.0	1330	0.375
F22		15:05	10		10	229.5	1330	0.173
F22		15:05	15		15	948.1	1330	0.713
F22		15:05	20		20	41.9	1330	0.032
F22		15:05	25		25	18.0	1330	0.014
F22		15:05	30		30	7.0	1330	0.005
F22		15:05	35		35	2.5	1357	0.002
F22		15:05	40		40	1.0	1383	0.001
F23P	4/10/92	08:01	AIR		AIR	1411.2	638	2.211
F23P	4/10/92	08:01	1		1	349.3	612	0.571
F23P	4/10/92	08:01	2		2	129.7	585	0.222
F23P	4/10/92	08:01	3		3	84.8	612	0.139
F23P	4/10/92	08:01	4		4	49.9	638	0.078
F23P	4/10/92	08:01	5		5	34.9	665	0.053
F23P	4/10/92	08:01	10		10	12.0	718	0.017

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STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
F23P	4/10/92	08:01	15		15	6.0	718	0.008
F23P	4/09/92	07:50	AIR		AIR	1117.2	479	2.333
F23P	4/09/92	07:50	1		1	299.4	505	0.592
F23P	4/09/92	07:50	2		2	159.7	479	0.334
F23P	4/09/92	07:50	3		3	89.8	505	0.178
F23P	4/09/92	07:50	4		4	57.9	505	0.115
F23P	4/09/92	07:50	5		5	36.9	612	0.060
F23P	4/09/92	07:50	10		10	5.0	665	0.008
F23P	4/09/92	07:50	15		15	0.6	665	0.001
N01P	4/12/92	10:27	AIR		AIR	588.0	372	1.579
N01P	4/12/92	10:27	1		1	289.4	399	0.725
N01P	4/12/92	10:27	2		2	209.6	399	0.525
N01P	4/12/92	10:27	3		3	154.7	399	0.388
N01P	4/12/92	10:27	4		4	134.7	399	0.338
N01P	4/12/92	10:27	5		5	99.8	399	0.250
N01P	4/12/92	10:27	10		10	41.9	399	0.105
N01P	4/12/92	10:27	15		15	17.0	399	0.043
N01P	4/12/92	10:27	20		20	6.5	399	0.016
N01P	4/12/92	10:27	25		25	3.0	399	0.008
N04P	4/10/92	11:50	AIR		AIR	2528.4	1889	1.339
N04P	4/10/92	11:50	1		1	1397.2	1889	0.740

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STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
N04P	4/10/92	11:50	2		2	1097.8	1862	0.590
N04P	4/10/92	11:50	3		3	898.2	1862	0.482
N04P	4/10/92	11:50	4		4	848.3	1889	0.449
N04P	4/10/92	11:50	5		5	798.4	1889	0.423
N04P	4/10/92	11:50	10		10	399.2	1915	0.208
N04P	4/10/92	11:50	15		15	199.6	1889	0.106
N04P	4/10/92	11:50	20		20	119.8	1862	0.064
N04P	4/10/92	11:50	25		25	59.9	1915	0.031
N04P	4/10/92	11:50	30		30	28.9	1889	0.015
N04P	4/10/92	11:50	35		35	9.5	1889	0.005
N04P	4/10/92	11:50	40		40	2.5	1862	0.001
N07P	4/08/92	13:07	AIR		AIR	2822.4	1968	1.434
N07P	4/08/92	13:07	1		1	1497.0	1915	0.782
N07P	4/08/92	13:07	2		2	1197.6	1915	0.625
N07P	4/08/92	13:07	3		3	898.2	1942	0.463
N07P	4/08/92	13:07	4		4	848.3	1942	0.437
N07P	4/08/92	13:07	5		5	648.7	1995	0.325
N07P	4/08/92	13:07	10		10	299.4	1995	0.150
N07P	4/08/92	13:07	15		15	129.7	1995	0.065
N07P	4/08/92	13:07	20		20	21.0	1995	0.011
N07P	4/08/92	13:07	25		25	3.5	2022	0.002

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STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
N07P	4/08/92	13:07	30		30	0.8	1995	0.000
N10P	4/08/92	11:42	AIR		AIR	2234.4	1436	1.556
N10P	4/08/92	11:42	1		1	748.5	1224	0.612
N10P	4/08/92	11:42	2		2	399.2	1064	0.375
N10P	4/08/92	11:42	3		3	249.5	1037	0.241
N10P	4/08/92	11:42	4		4	139.7	1011	0.138
N10P	4/08/92	11:42	5		5	109.8	1037	0.106
N10P	4/08/92	11:42	10		10	26.9	1197	0.023
N10P	4/08/92	11:42	15		15	9.0	1569	0.006
N10P	4/08/92	11:42	20		20	1.7	958	0.002
N16P	4/10/92	10:38	AIR		AIR	2469.6	1702	1.451
N16P	4/10/92	10:38	1		1	1297.4	1702	0.762
N16P	4/10/92	10:38	2		2	998.0	1676	0.596
N16P	4/10/92	10:38	3		3	898.2	1702	0.528
N16P	4/10/92	10:38	4		4	748.5	1702	0.440
N16P	4/10/92	10:38	5		5	598.8	1702	0.352
N16P	4/10/92	10:38	10		10	269.5	1702	0.158
N16P	4/10/92	10:38	15		15	99.8	1649	0.061
N16P	4/10/92	10:38	20		20	39.9	1676	0.024
N16P	4/10/92	10:38	25		25	9.0	1676	0.005
N20P	4/10/92	09:31	AIR		AIR	1999.2	1170	1.708

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STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
N20P	4/10/92	09:31	1		1	1097.8	1037	1.058
N20P	4/10/92	09:31	2		2	818.4	1144	0.715
N20P	4/10/92	09:31	3		3	548.9	1170	0.469
N20P	4/10/92	09:31	4		4	469.1	1170	0.401
N20P	4/10/92	09:31	5		5	429.1	1197	0.359
N20P	4/10/92	09:31	10		10	189.6	1330	0.143
N20P	4/10/92	09:31	15		15	94.8	1330	0.071
N20P	4/10/92	09:31	20		20	39.9	1330	0.030
N20P	4/10/92	09:31	25		25	10.0	1357	0.007
N20P	4/09/92	09:42	AIR		AIR	2410.8	1197	2.014
N20P	4/09/92	09:42	1		1	1097.8	1330	0.825
N20P	4/09/92	09:42	2		2	698.6	1224	0.571
N20P	4/09/92	09:42	3		3	598.8	904	0.662
N20P	4/09/92	09:42	4		4	519.0	1011	0.513
N20P	4/09/92	09:42	5		5	449.1	1277	0.352
N20P	4/09/92	09:42	10		10	219.6	1330	0.165
N20P	4/09/92	09:42	15	17.5	14	81.8	1250	0.065
N20P	4/09/92	09:42	20	17.5	19	24.0	1250	0.019
N20P	4/09/92	09:42	25	17.5	24	5.5	1011	0.005

<sup>a</sup> The wire angle was visually estimated: the table value represents the mid-point of a range if thus recorded. Usually, no entry was recorded if angle was < 15 degrees.

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<sup>b</sup> Approximate depth = wireout (cos  $\theta$ ) where  $\theta$  = wire angle visually estimated.

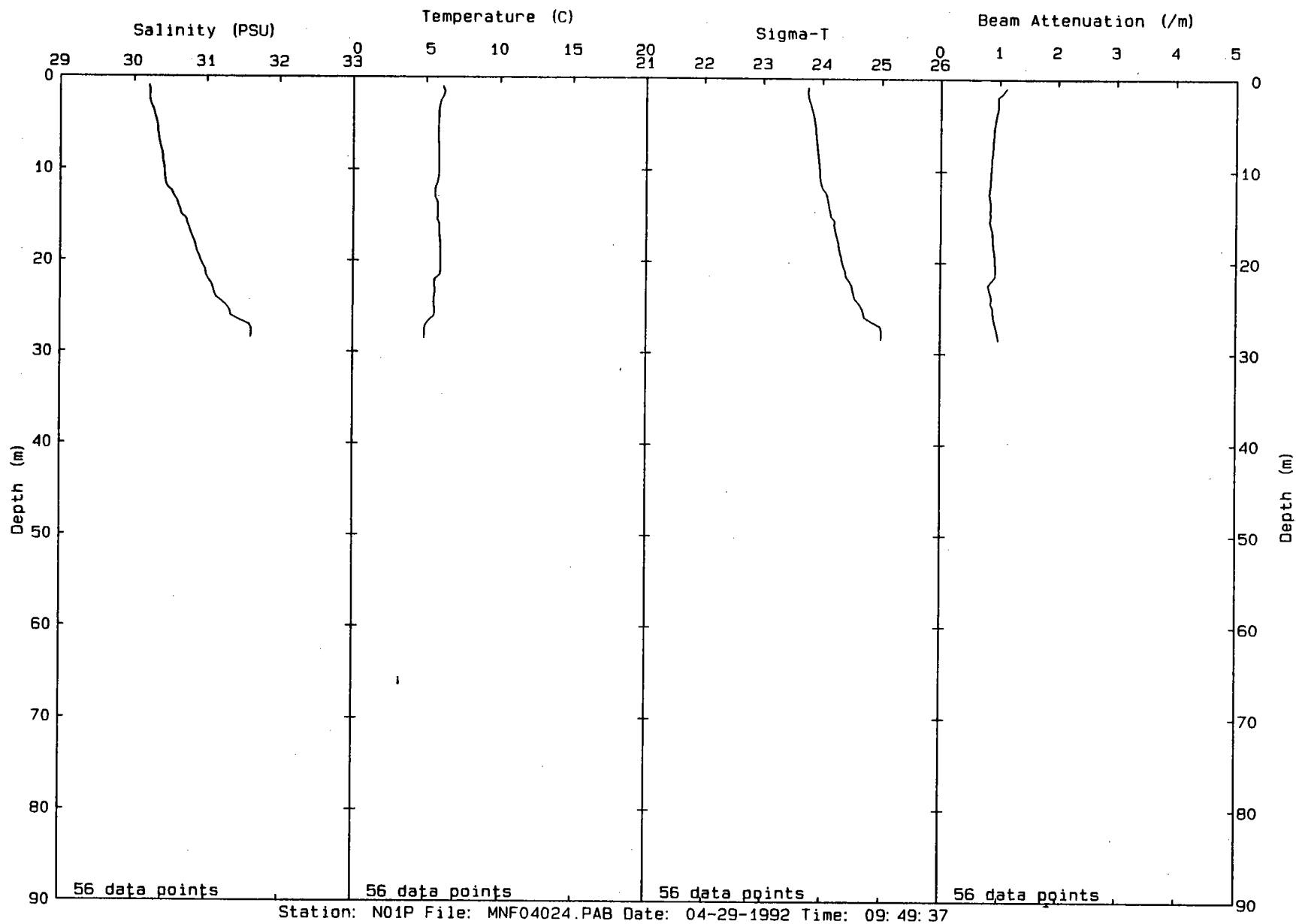
<sup>c</sup> The meter/( $4\pi$ , spherical) sensor pair reading was corrected to provide the actual light values in air and in underwater. The recorded reading in air was multiplied by 0.588 and the recorded reading in water was multiplied by 0.998. These factors were based upon post-cruise calibration of the meter/sensor pair. Units are  $\mu\text{Einsteins}/\text{m}^2/\text{sec}$ , as for deck cell.

<sup>d</sup> Deck cell (cosine sensor, flat plane) readings were made using an uncalibrated meter sensor pair. Post-cruise calibration was performed; recorded readings of this sensor-meter pair were multiplied by 2.66 to arrive at actual values in air.

00172

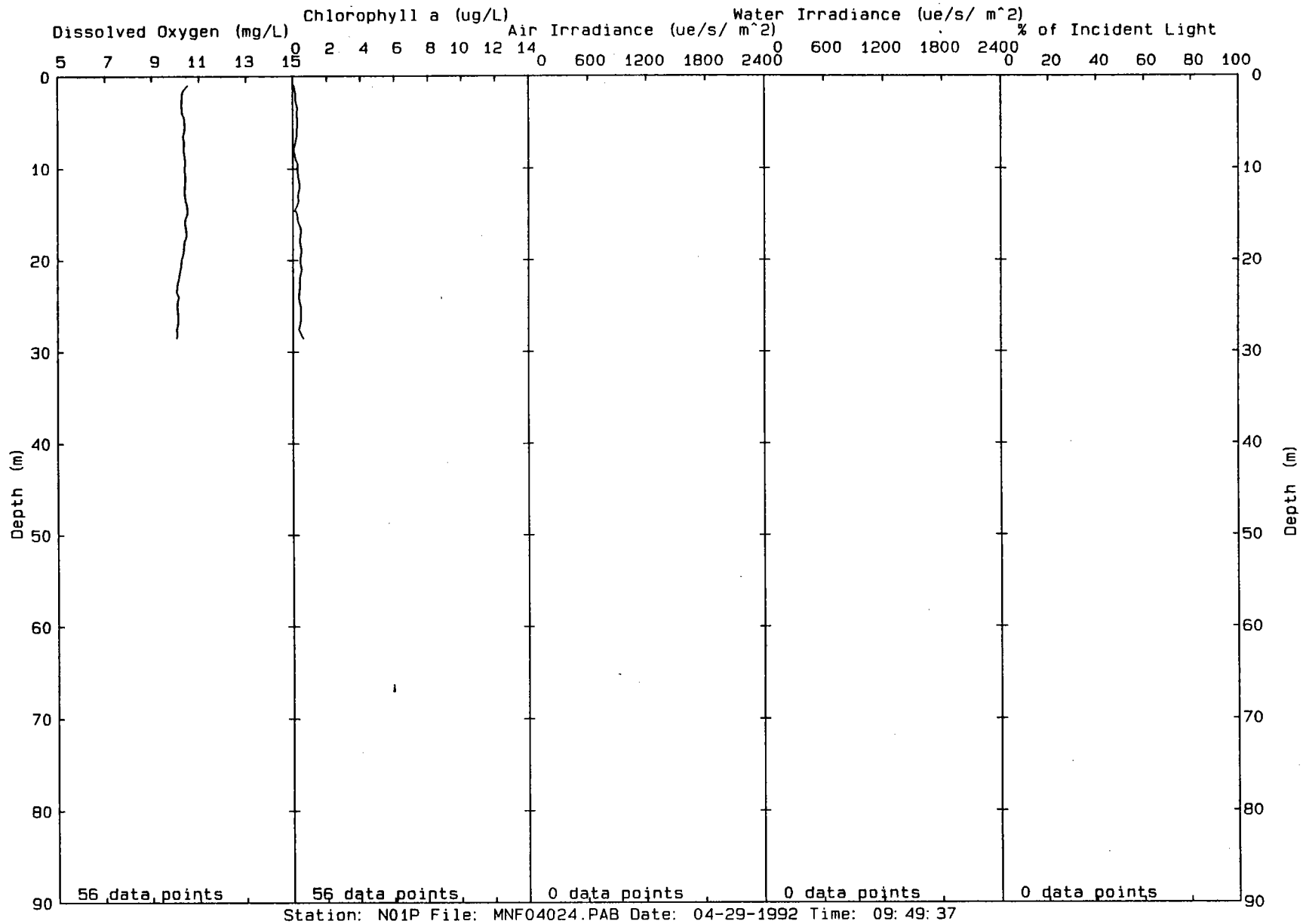
**Late April Profiles**

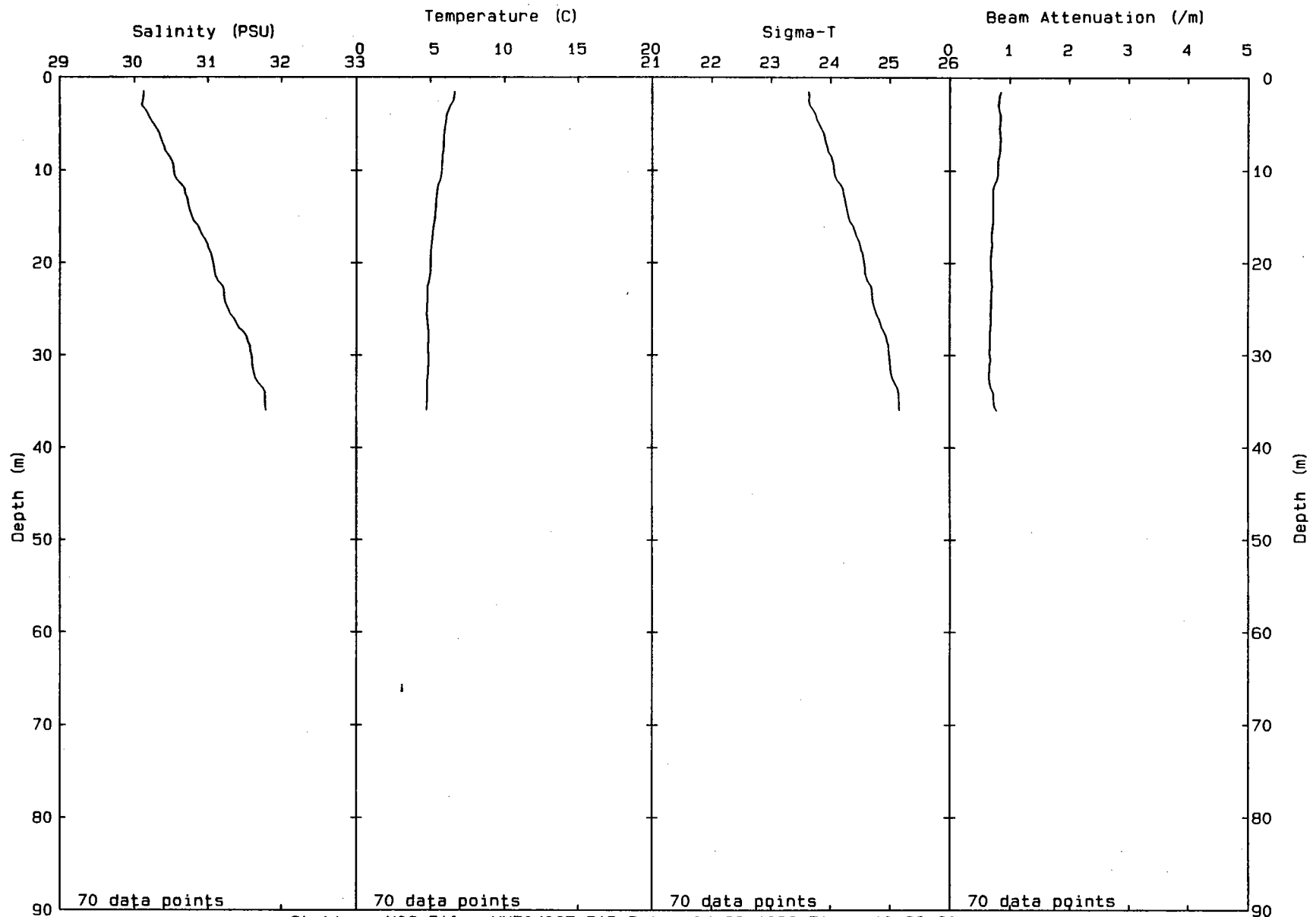
**00173**



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00175

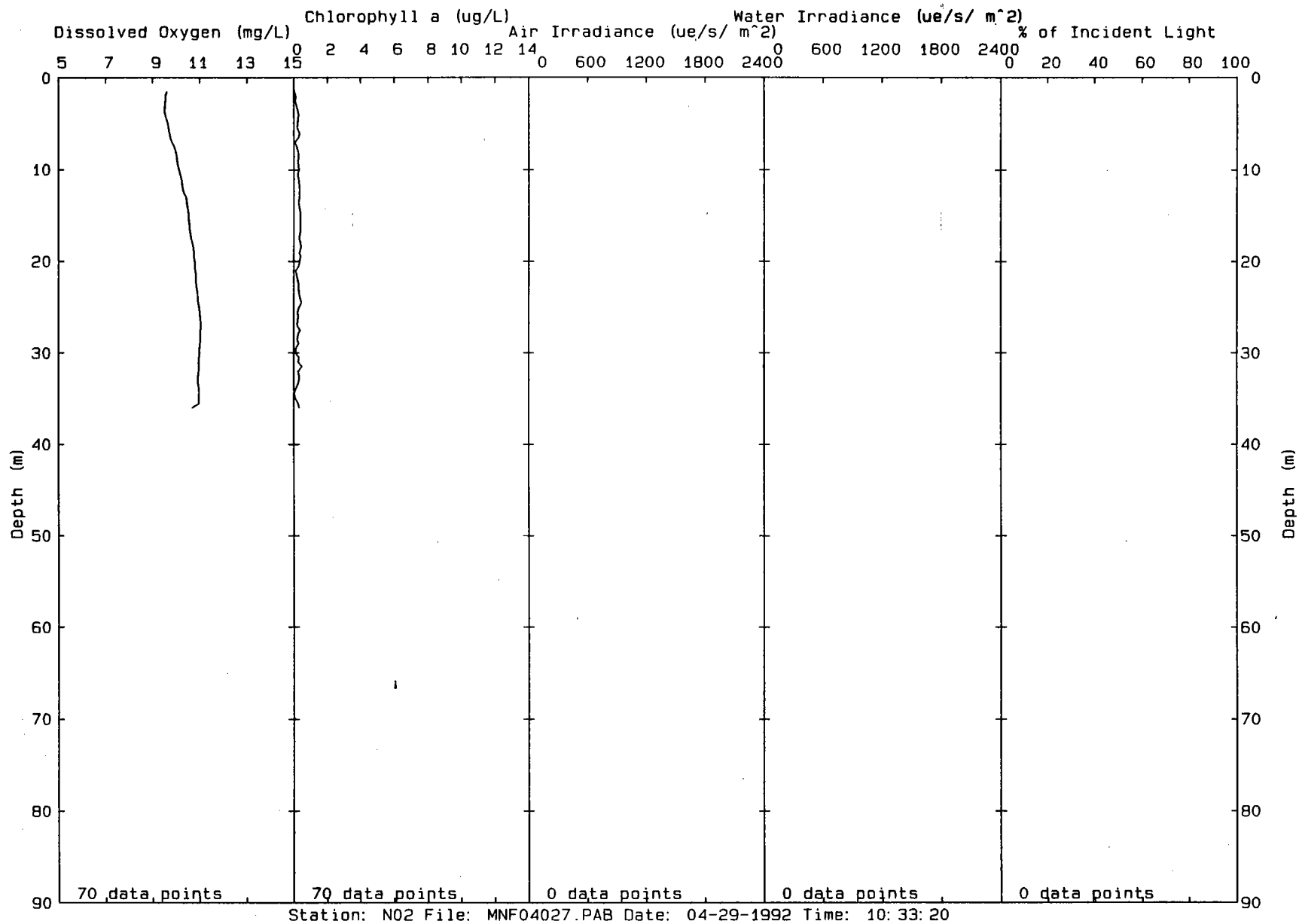




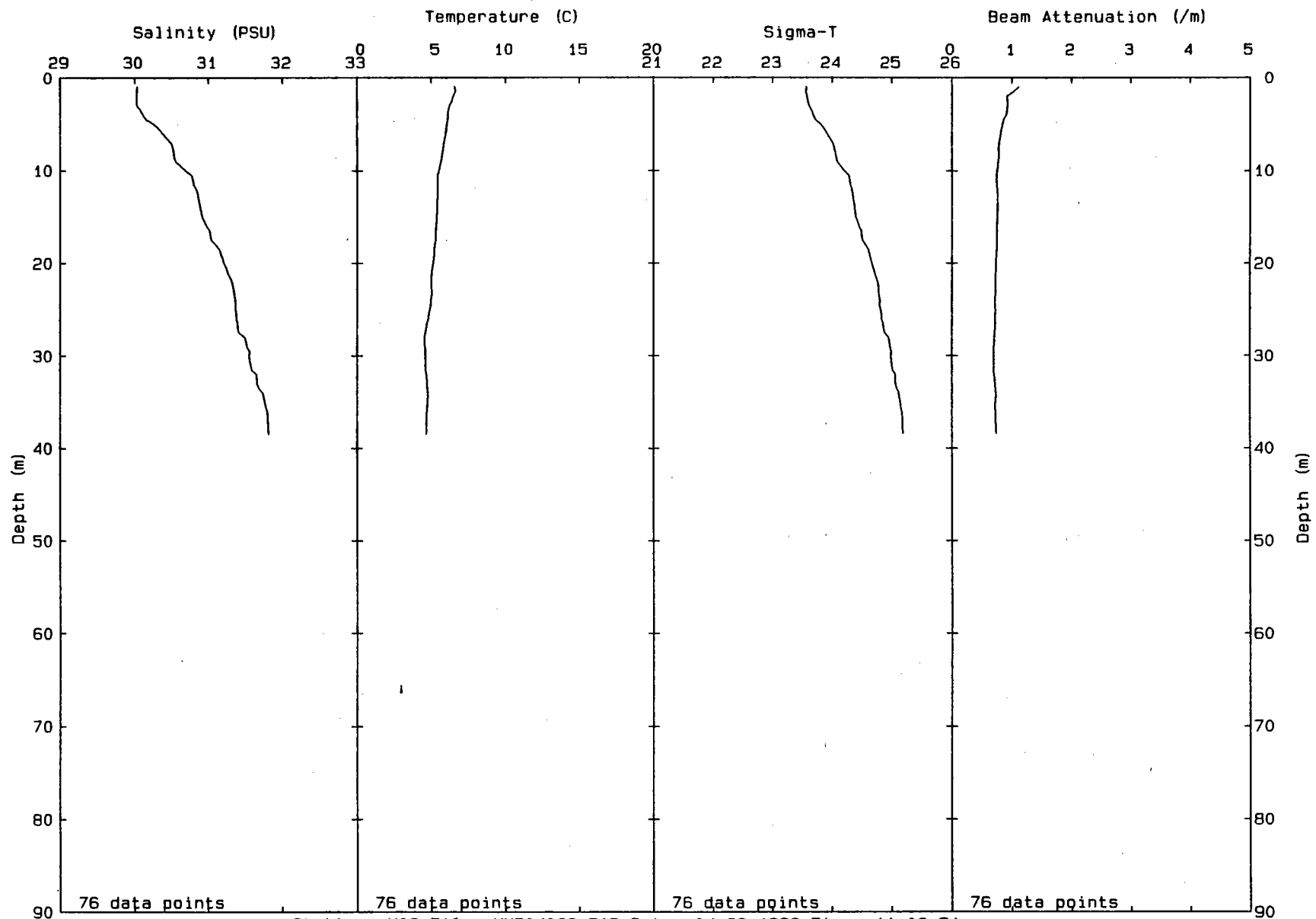
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00176

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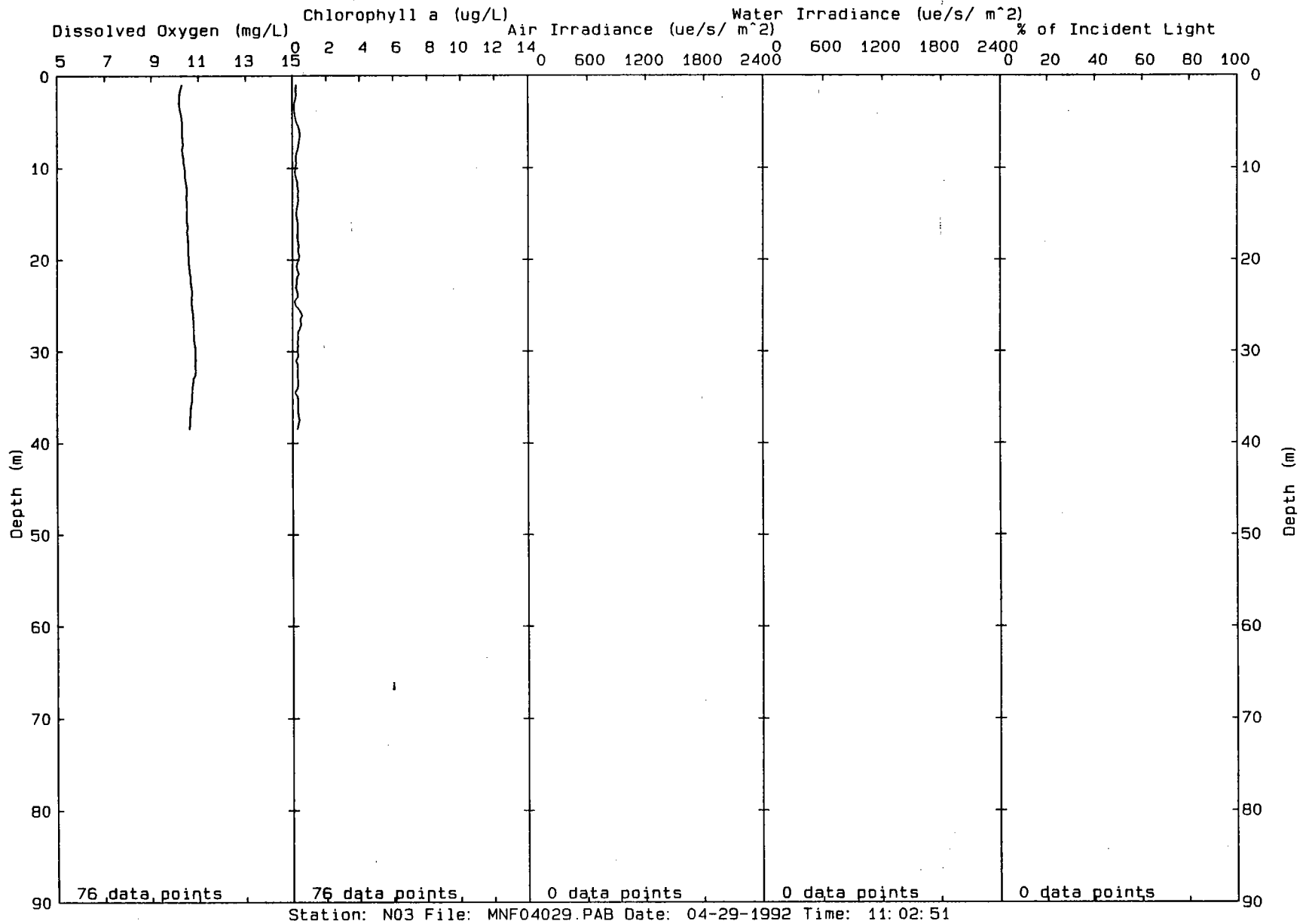


00178

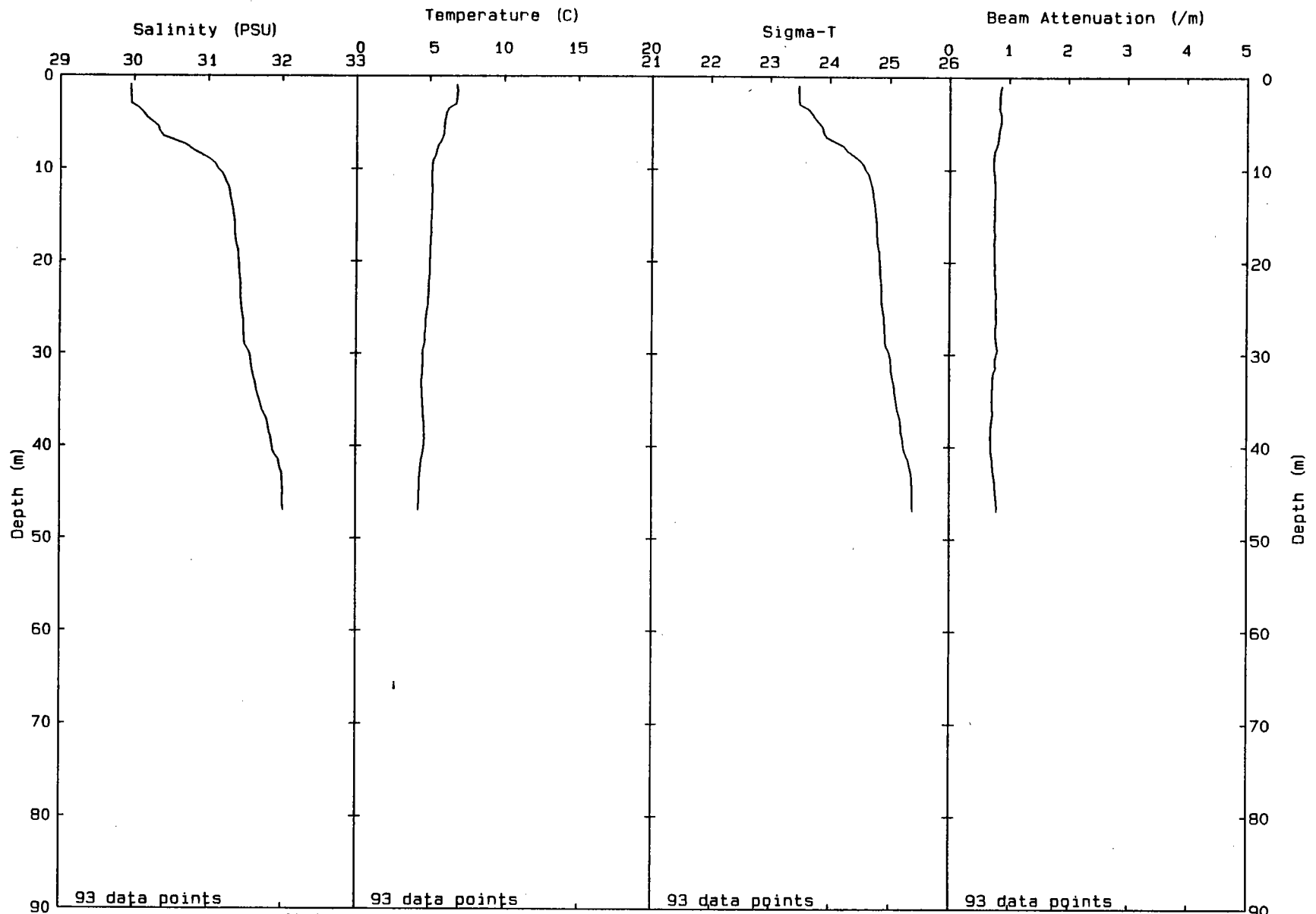


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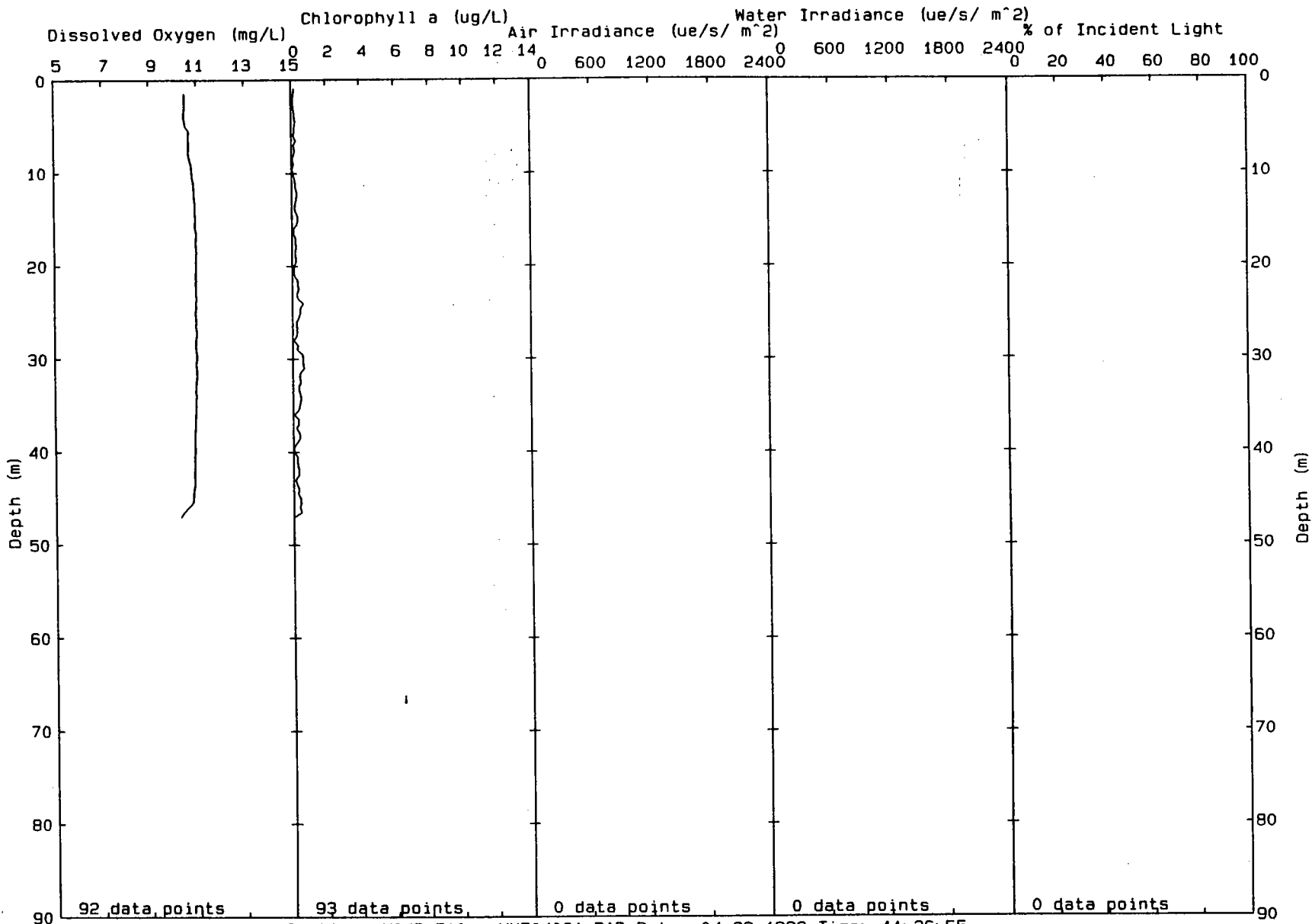
00179



00180



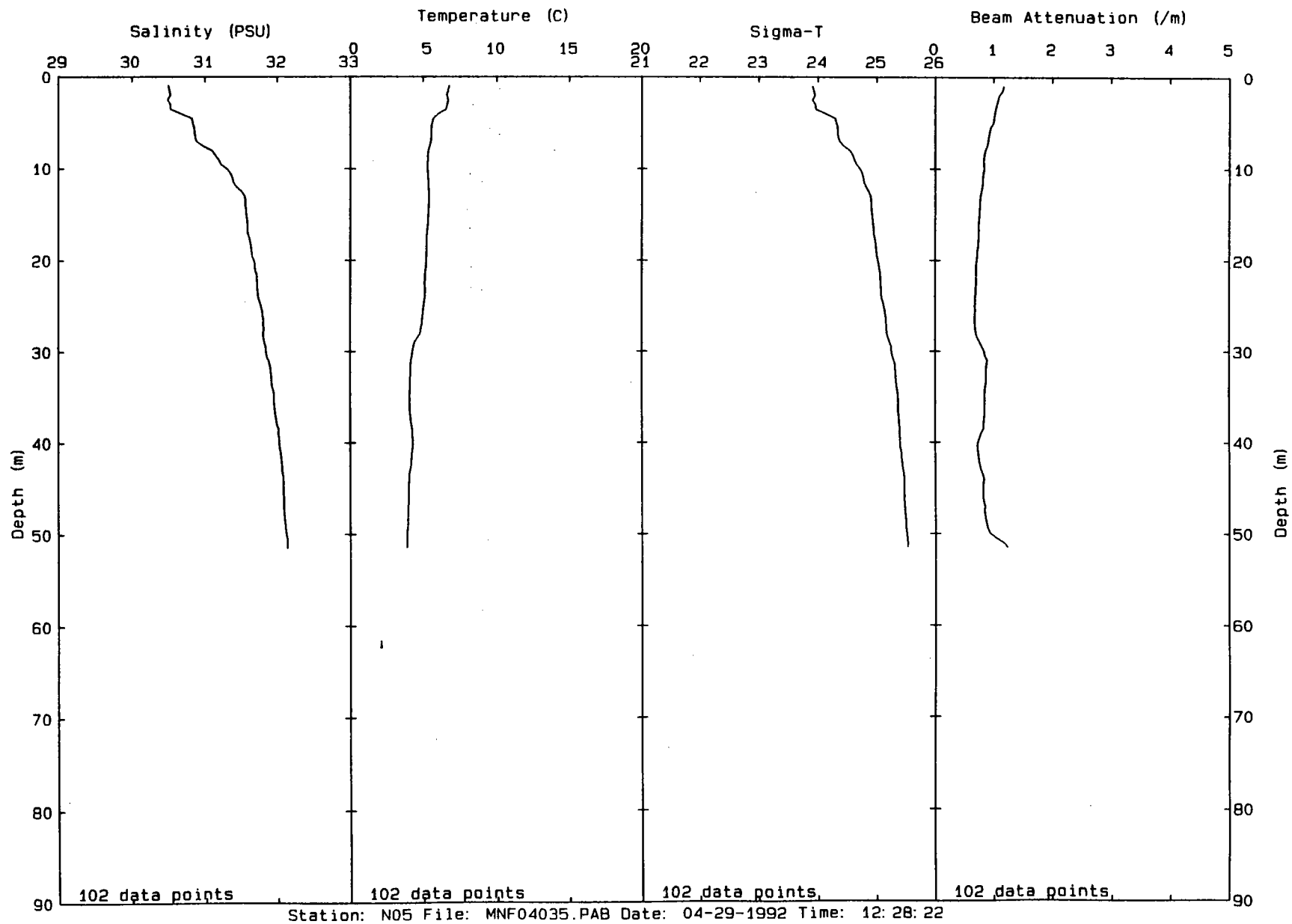
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Station: N04P File: MNF04031.PAB Date: 04-29-1992 Time: 11:36:55

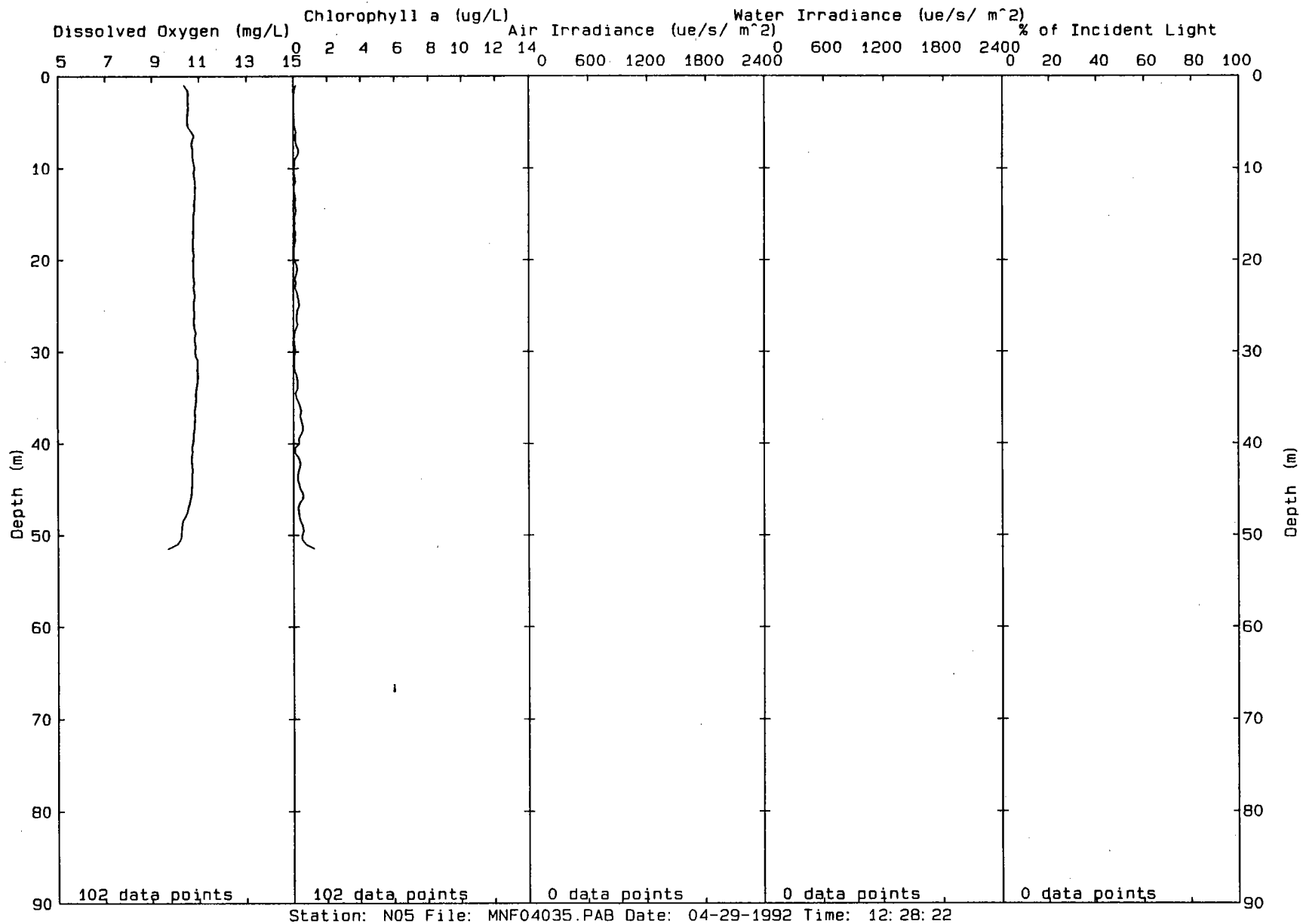
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00182

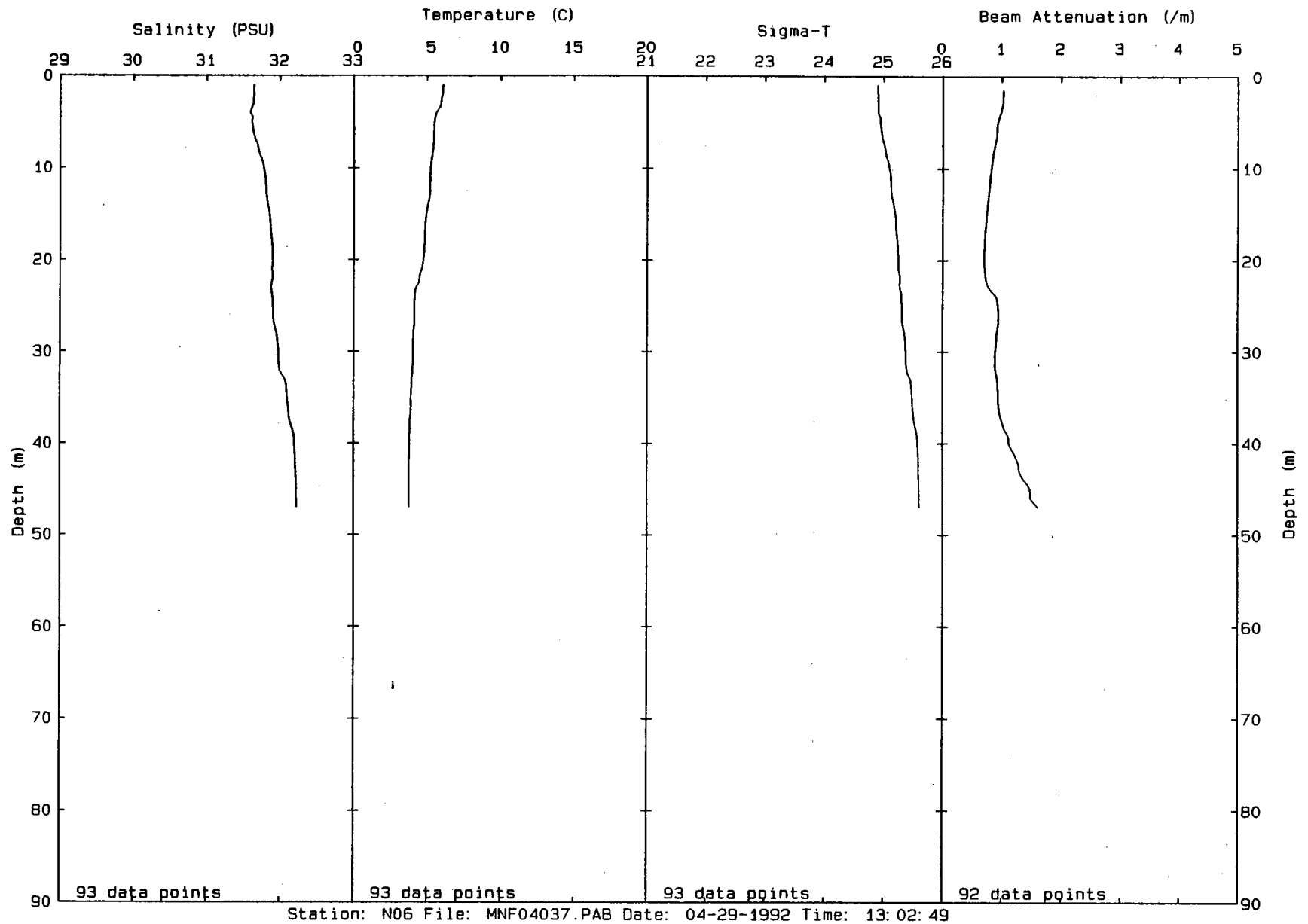


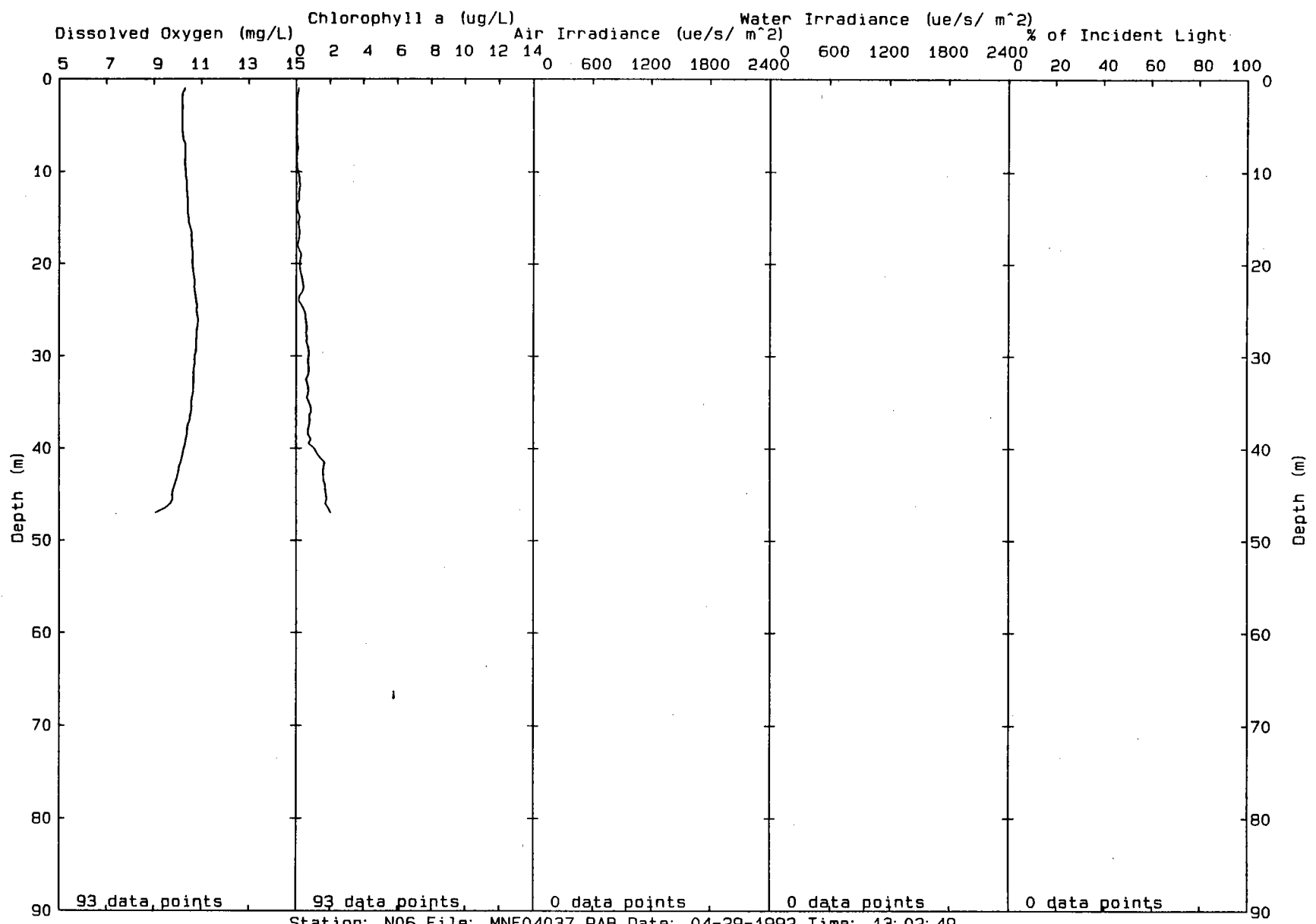
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00183



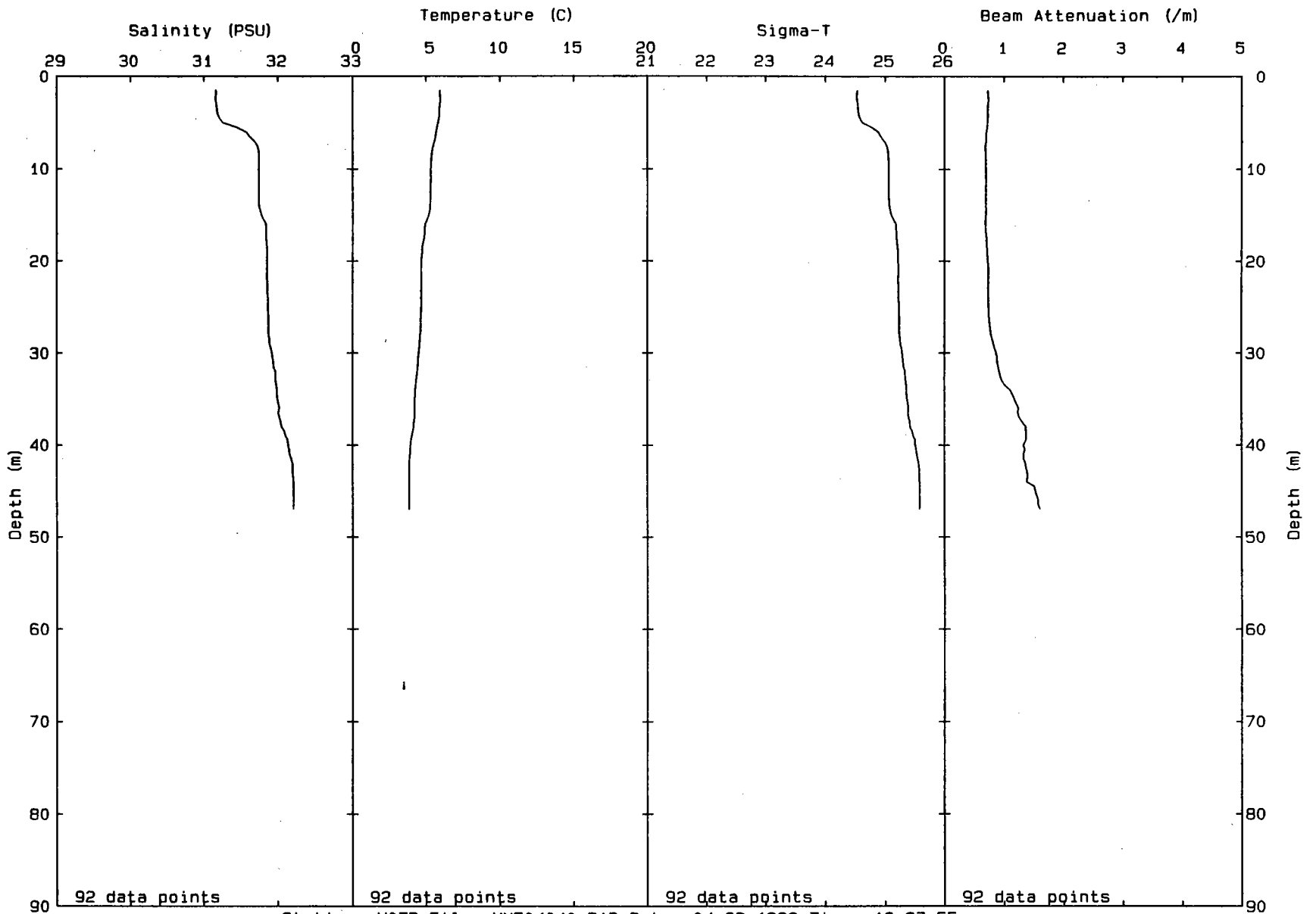
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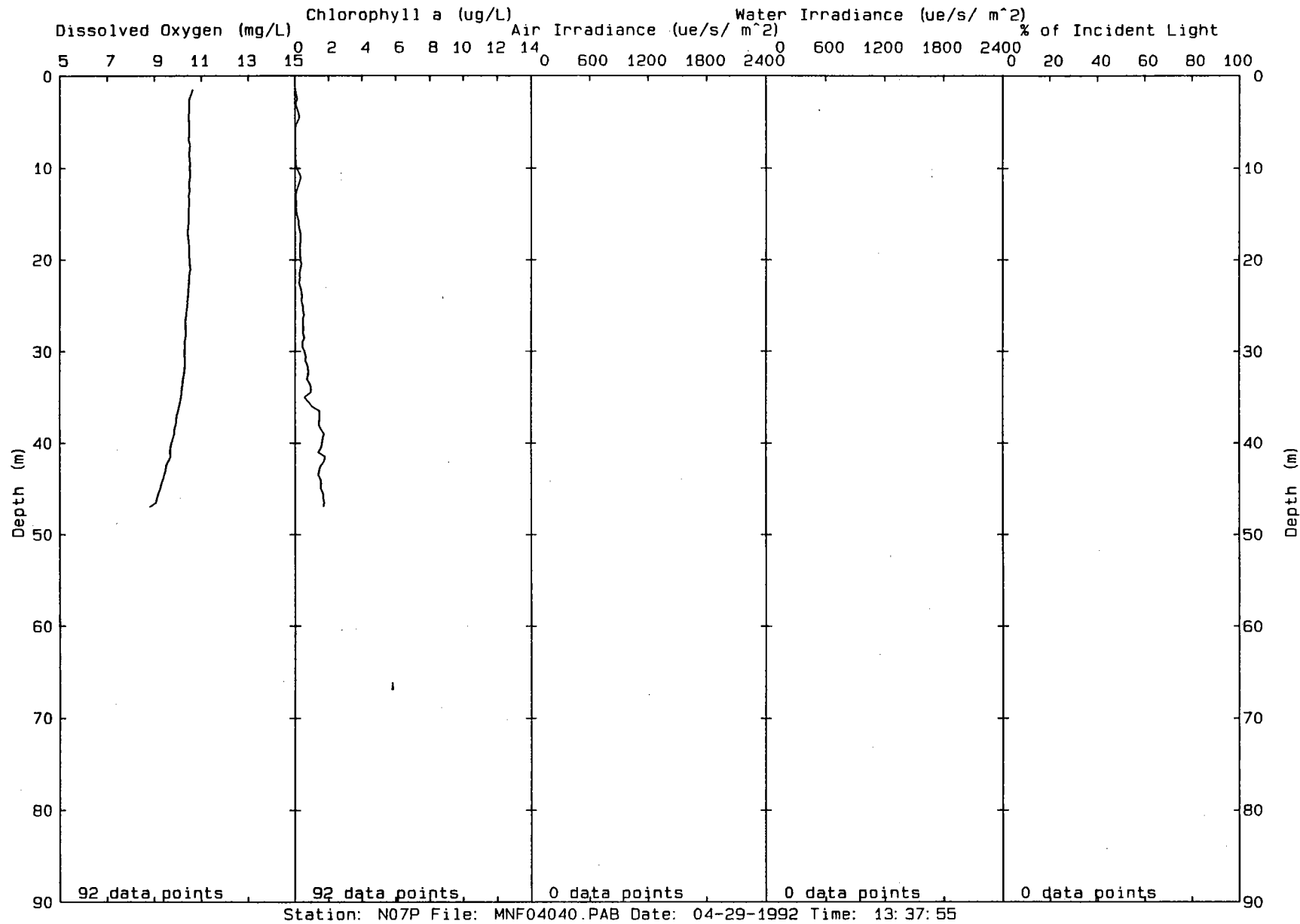
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00185



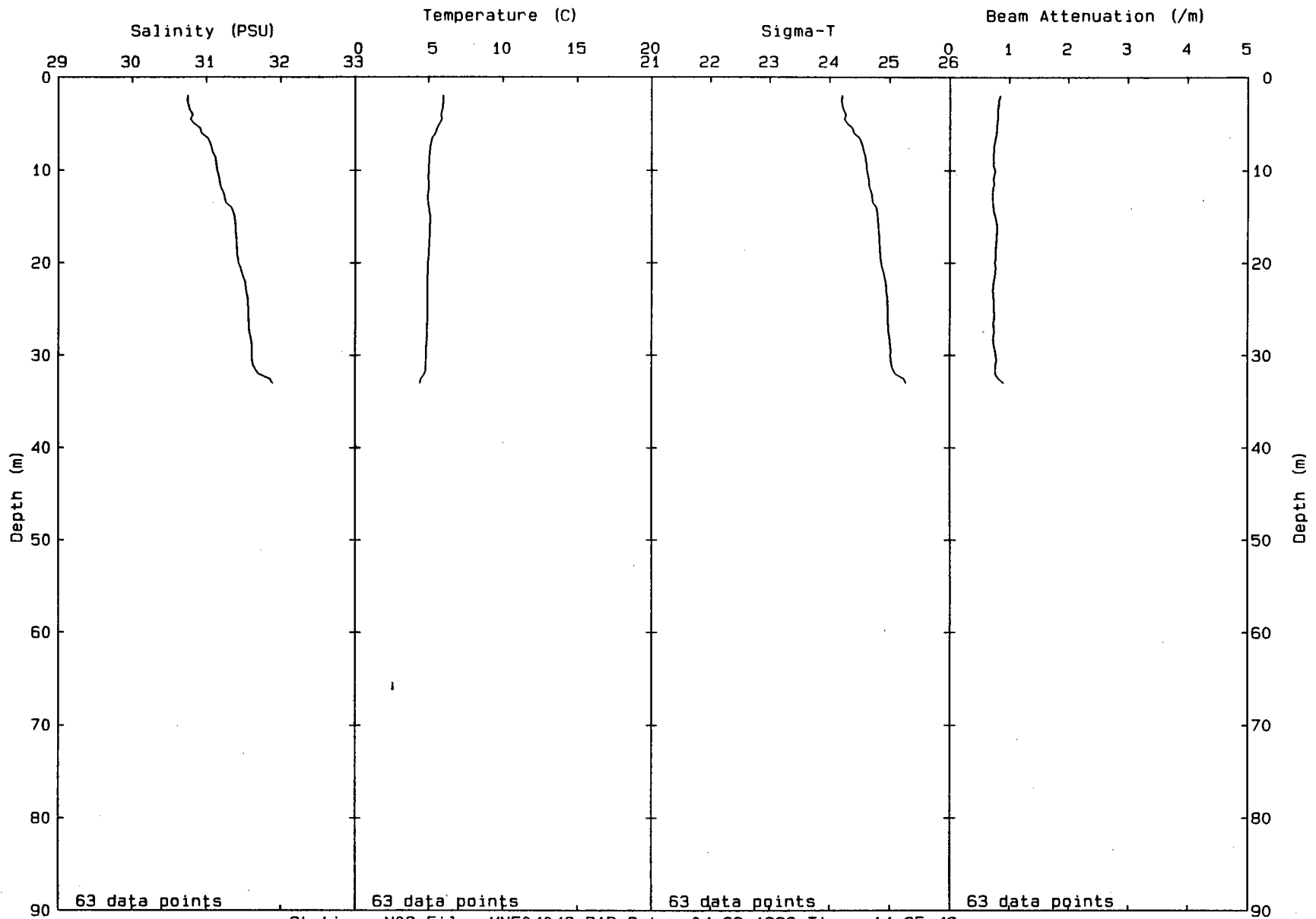
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00186

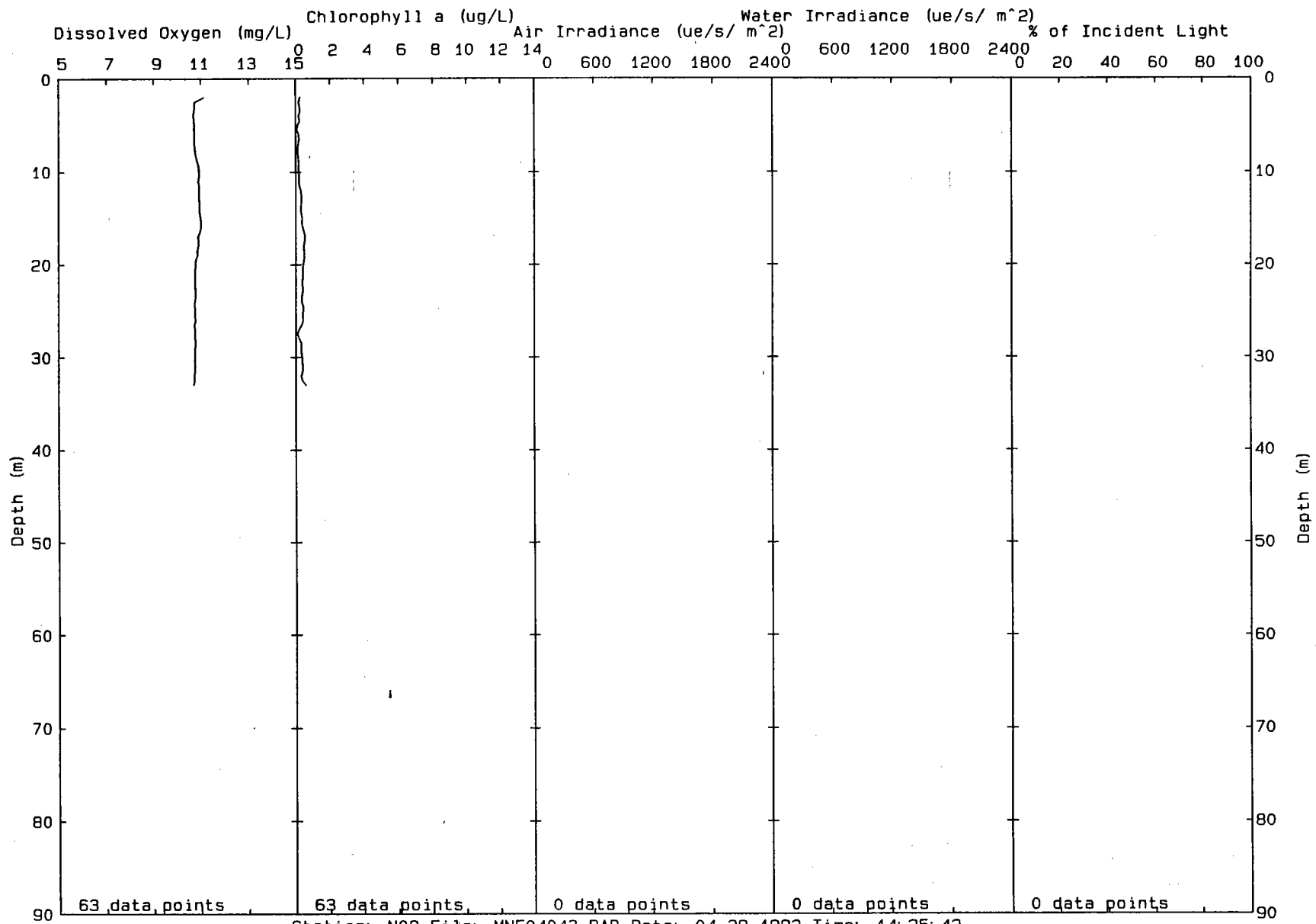


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00188



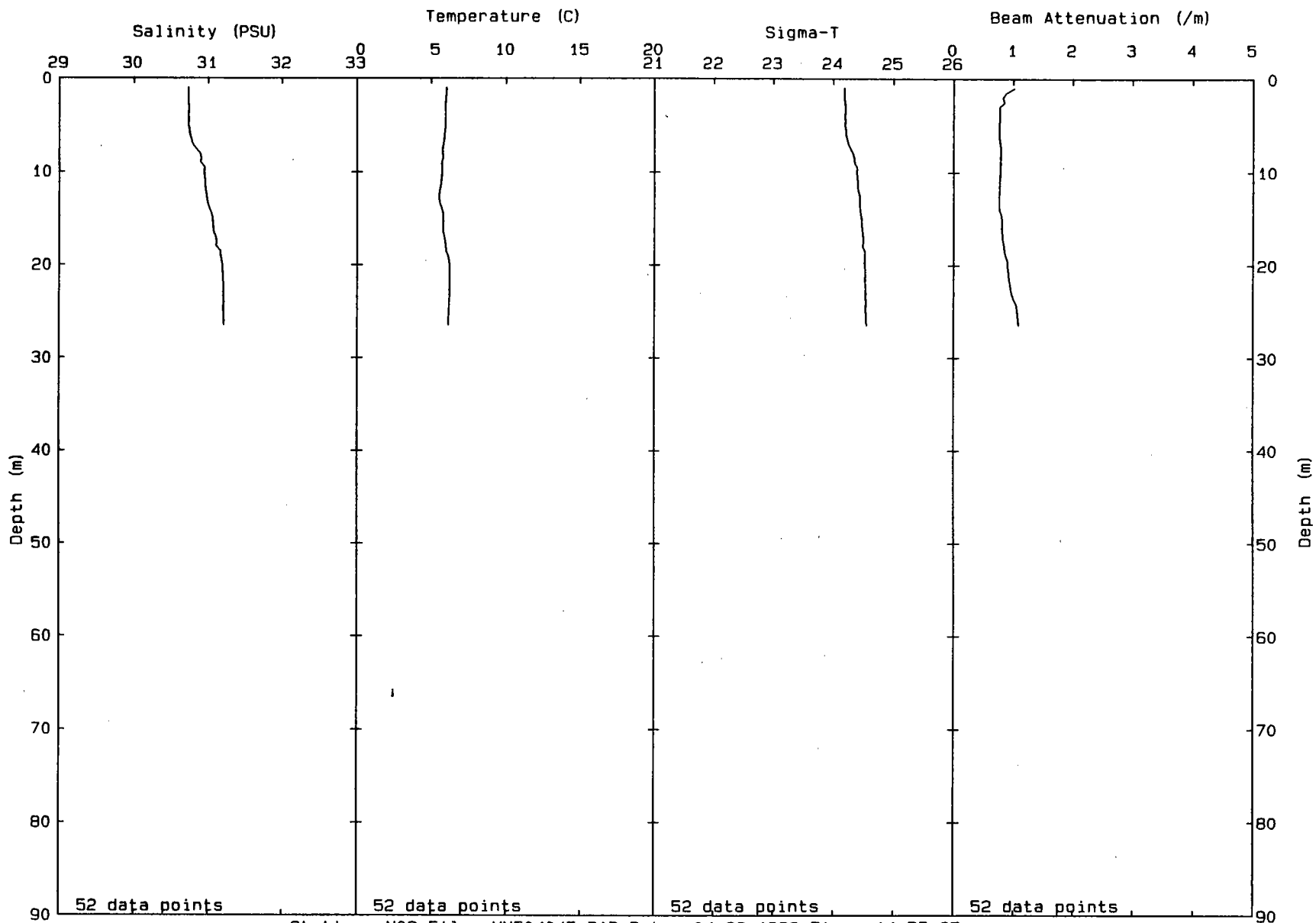
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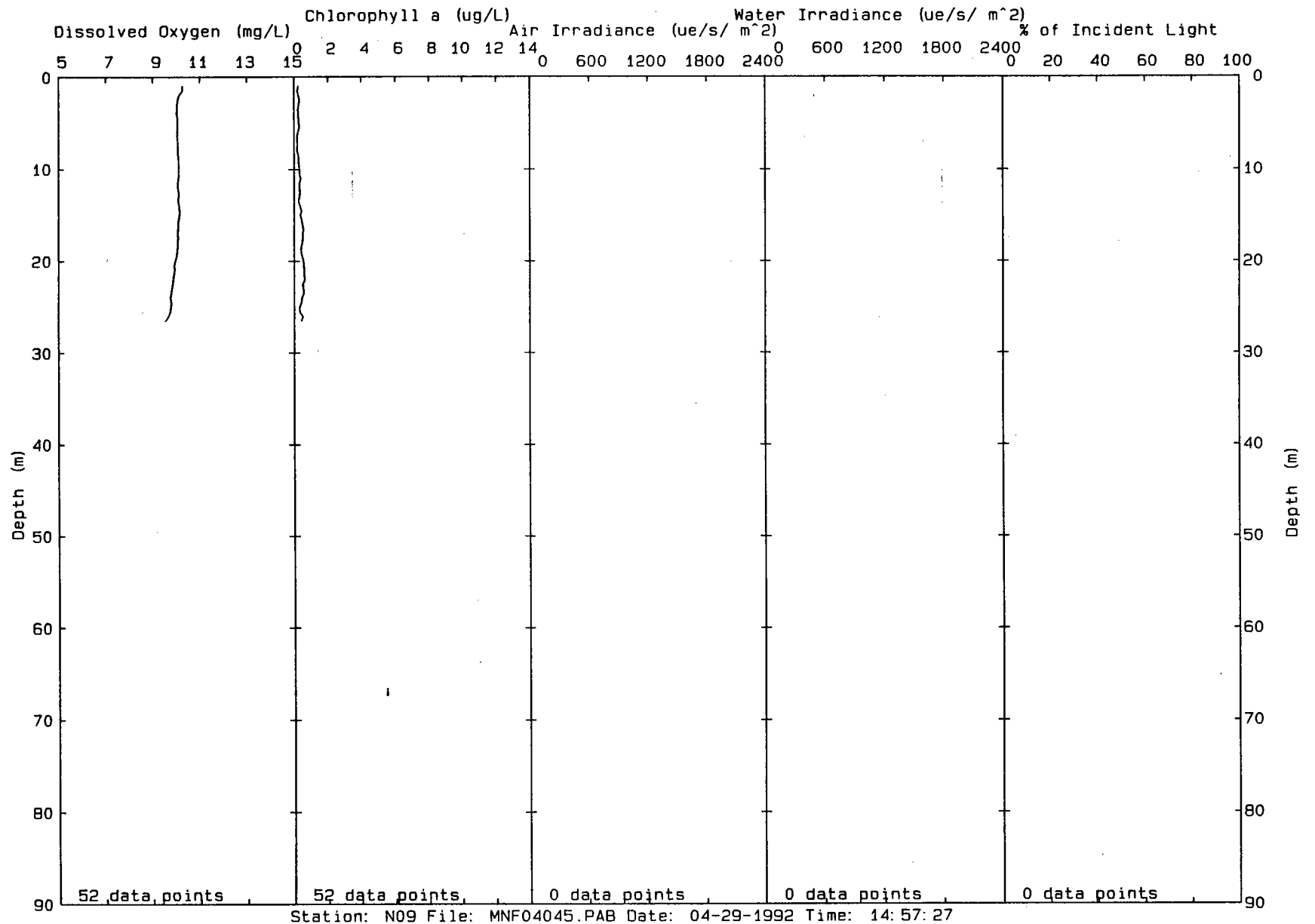
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00190

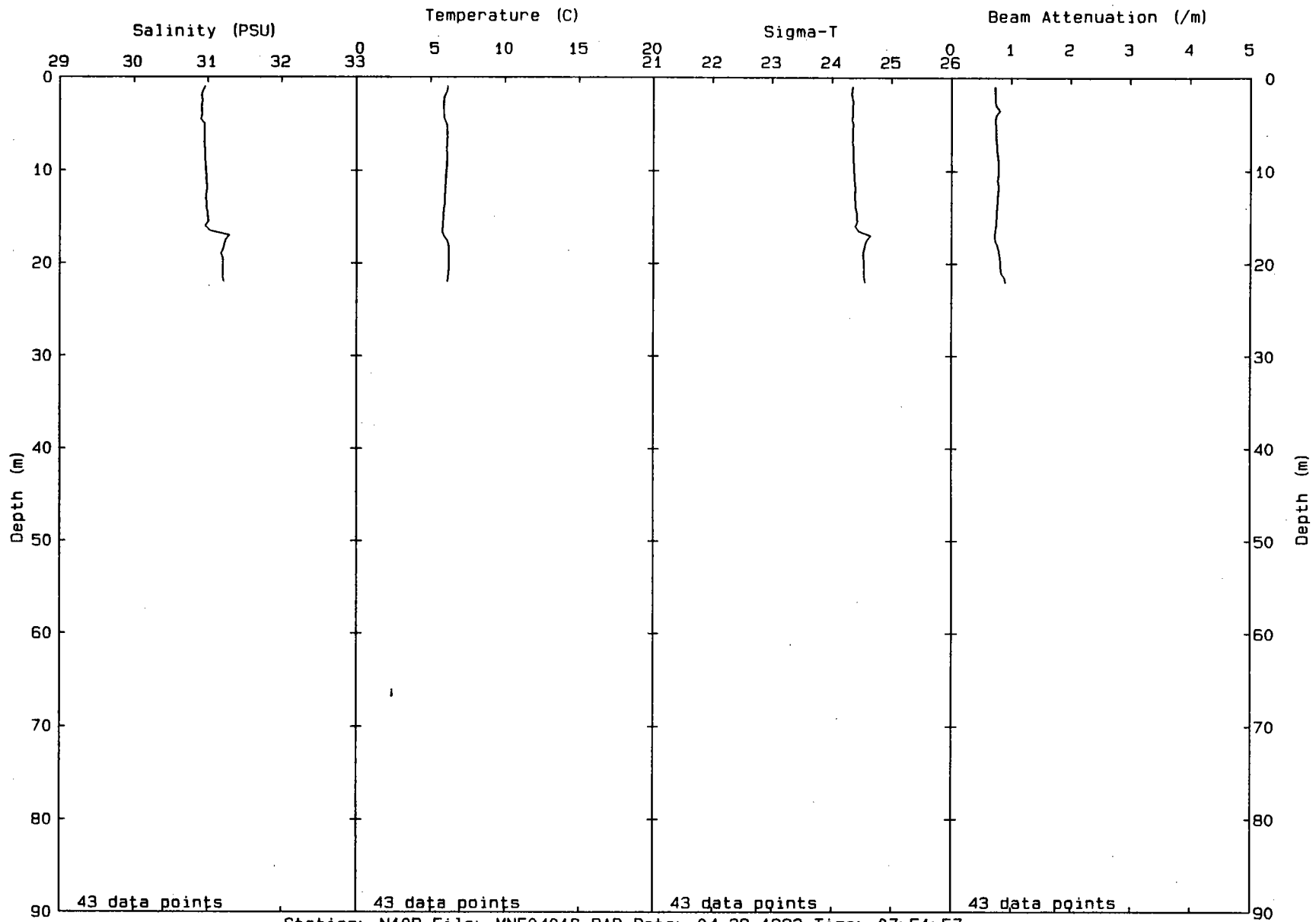


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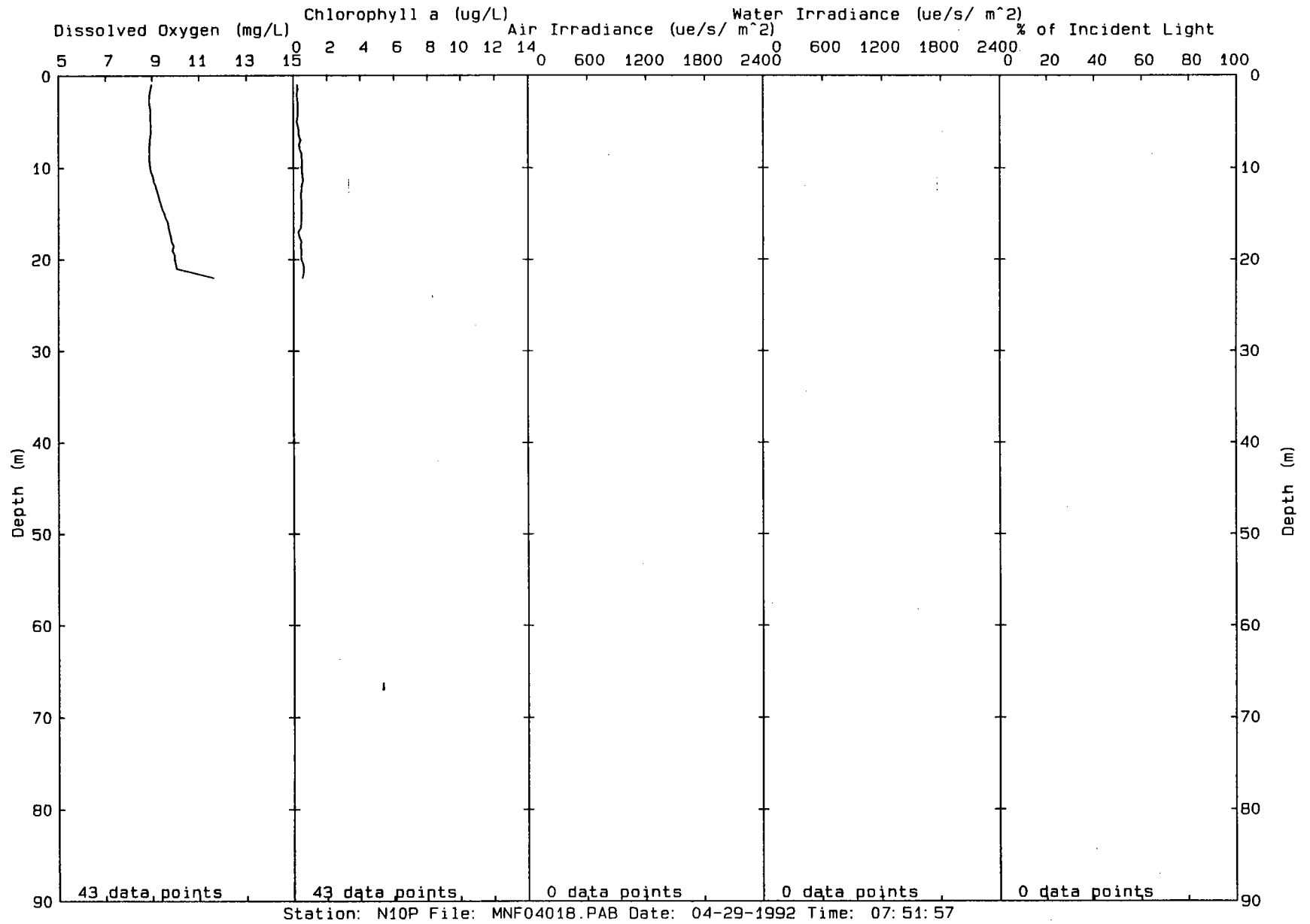


00192

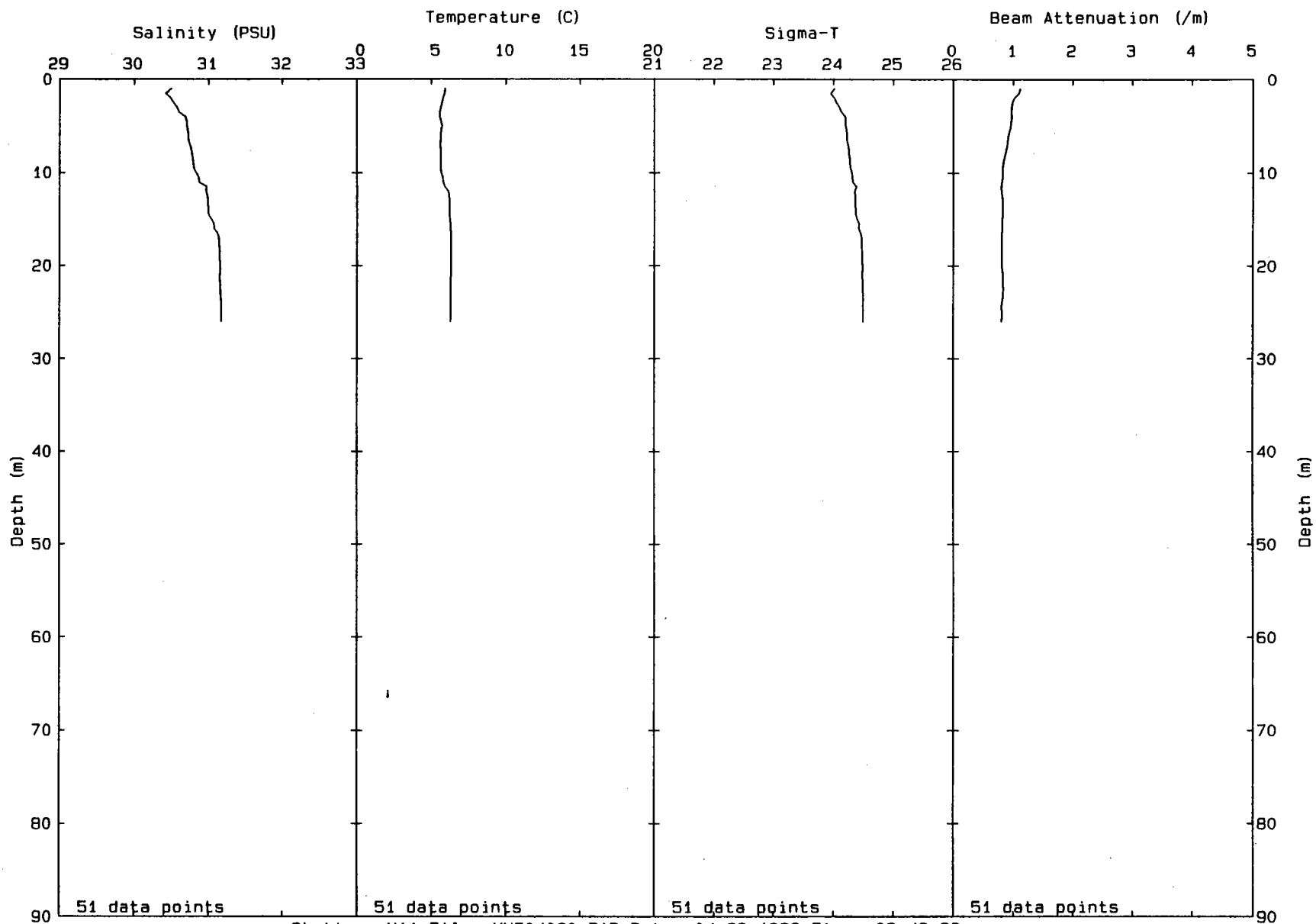


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00193

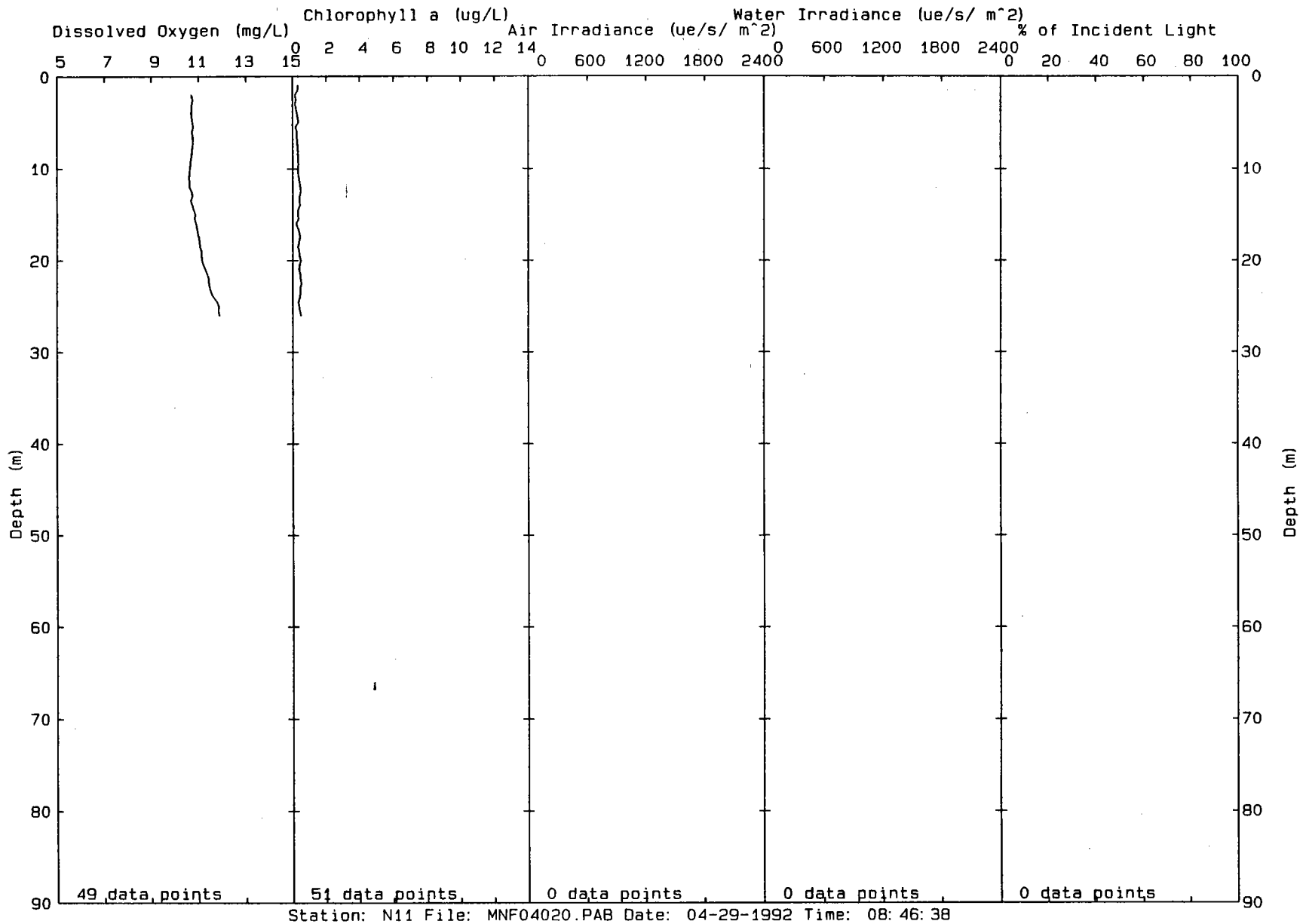


00194

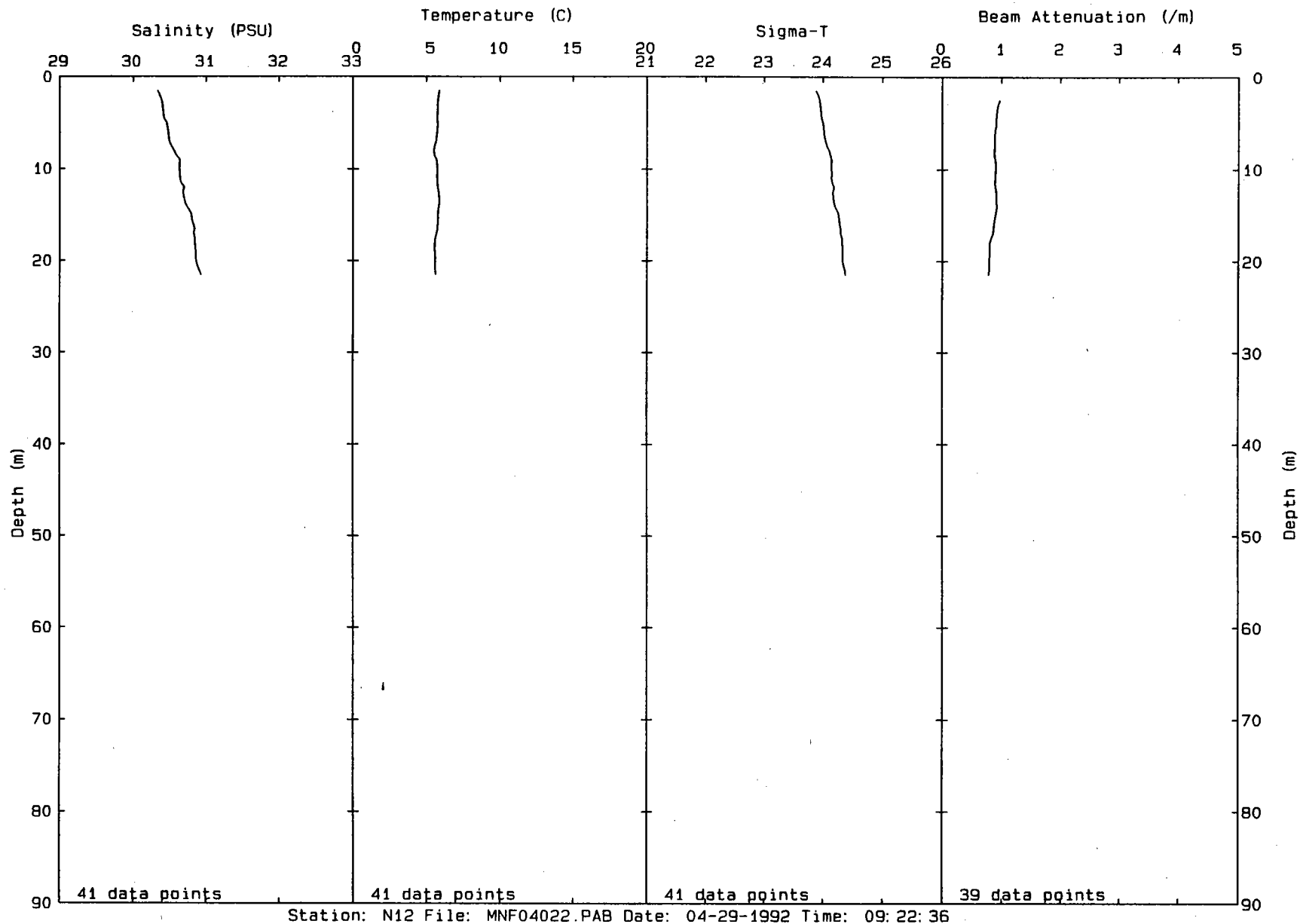


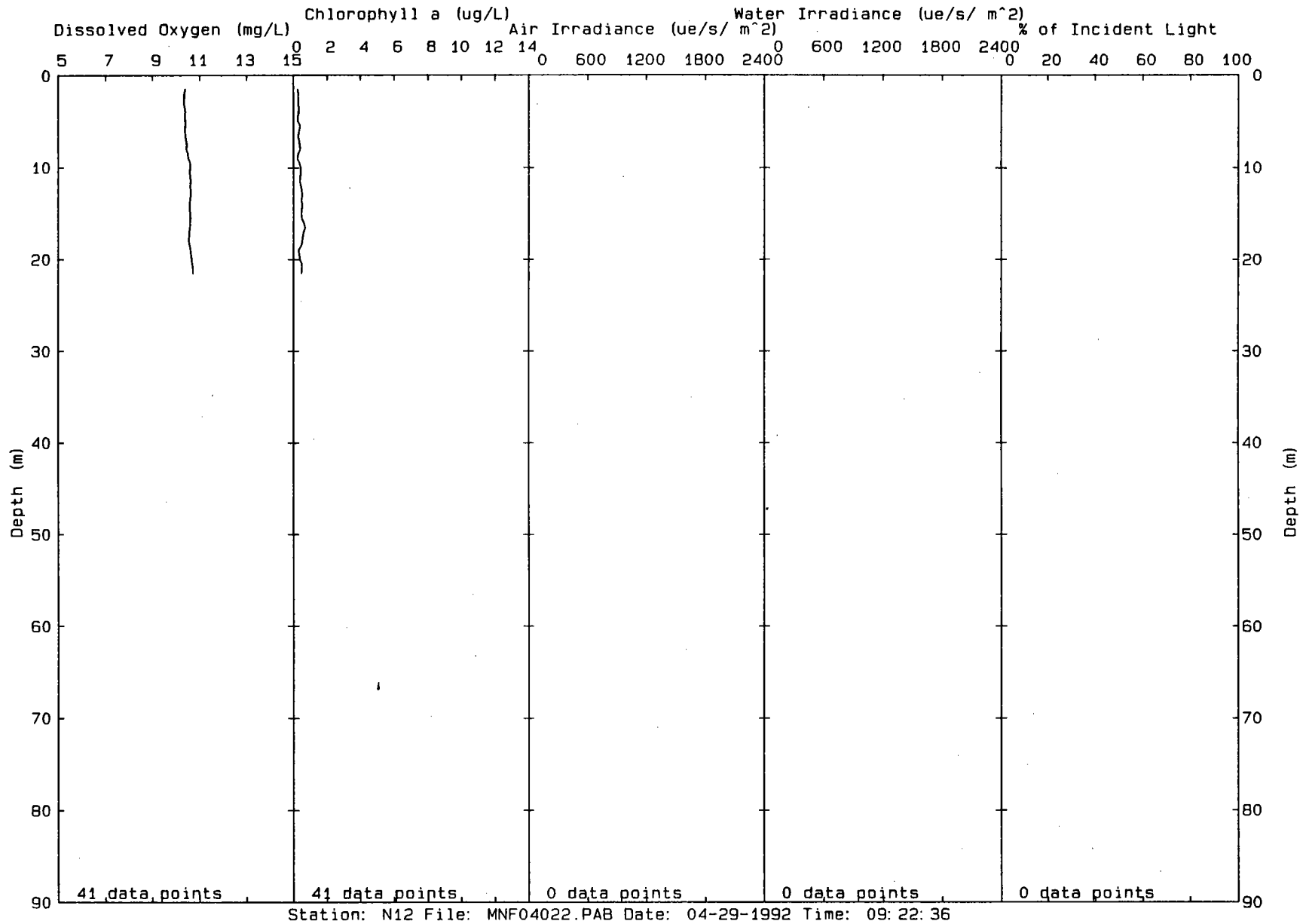
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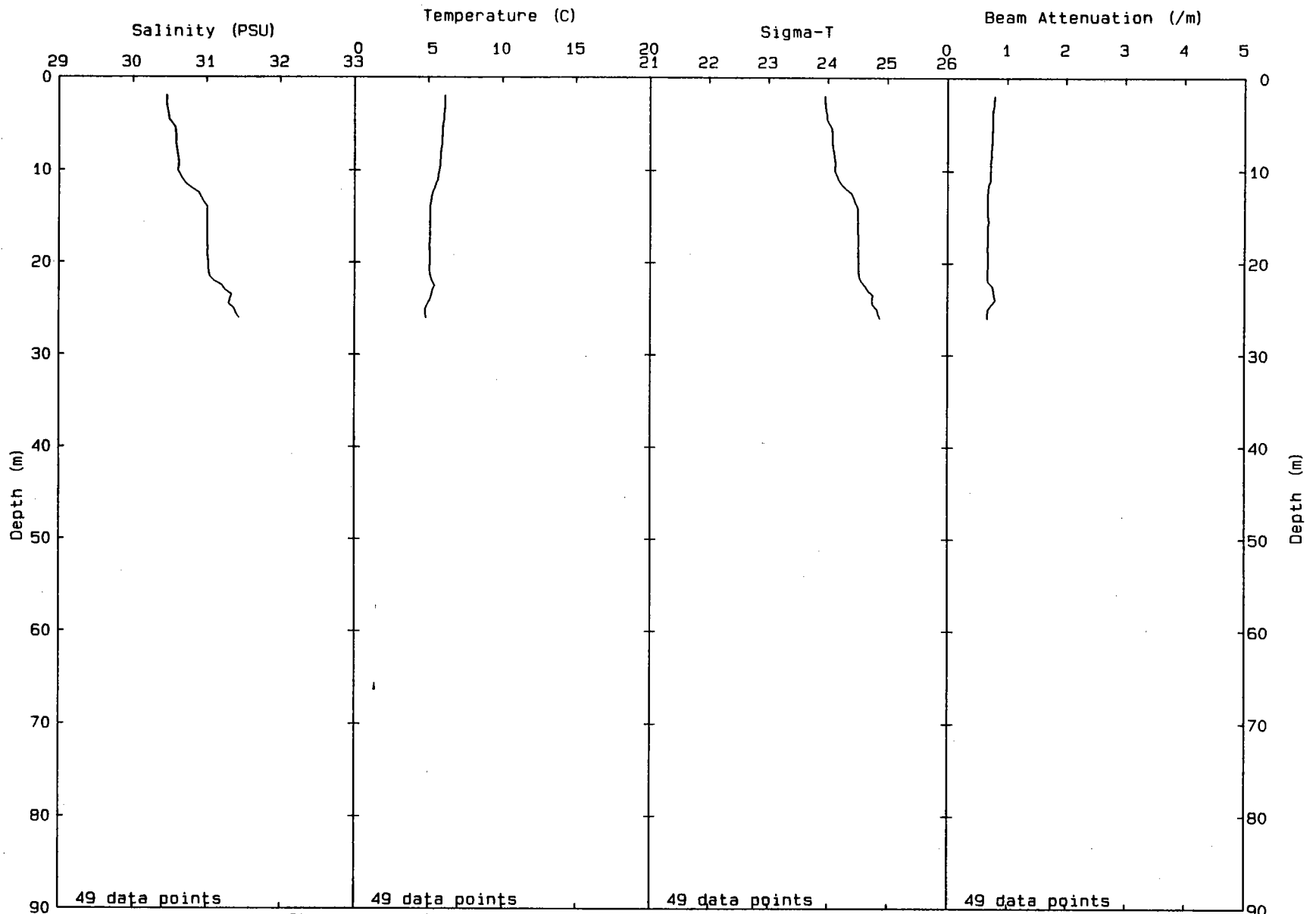
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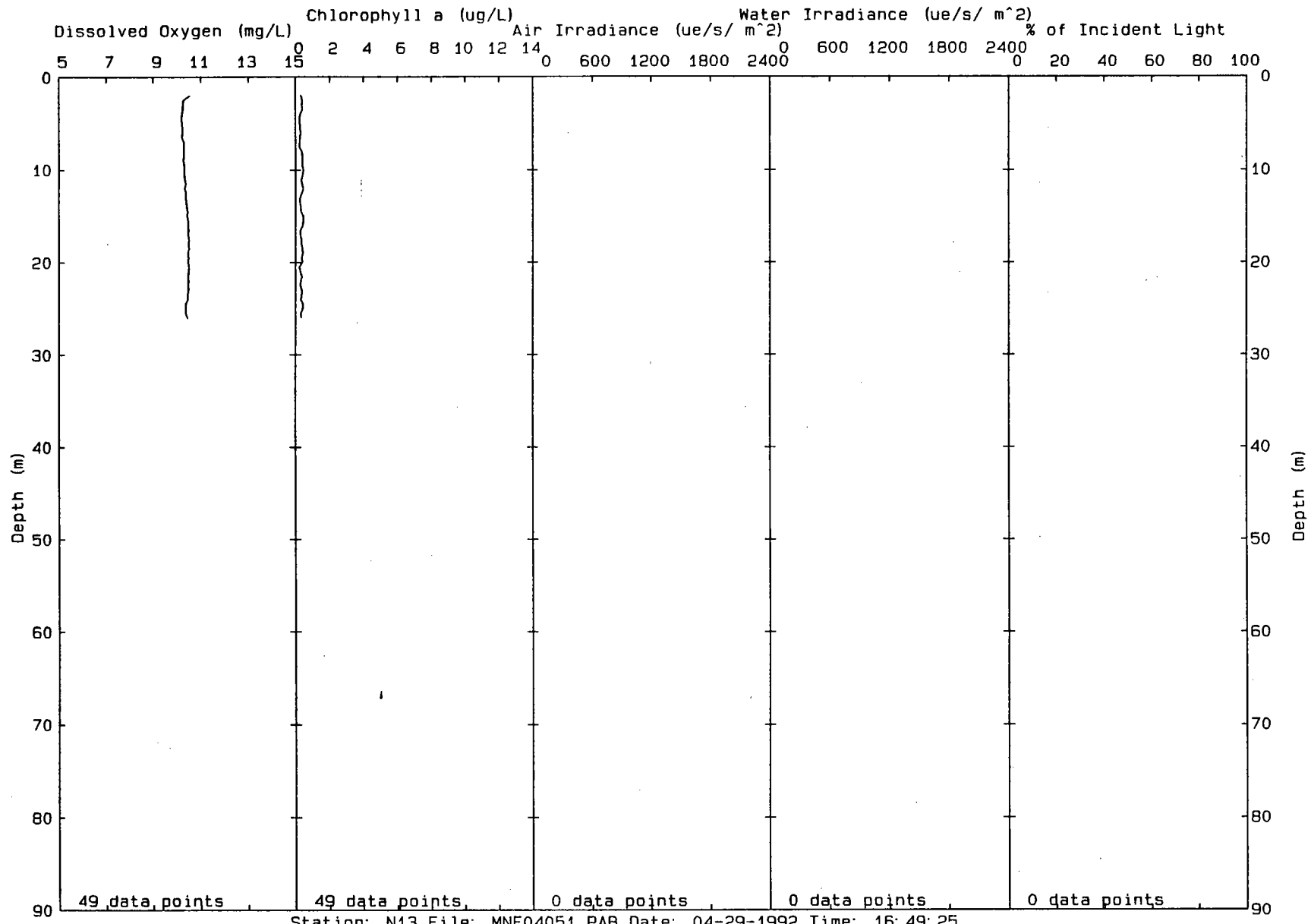
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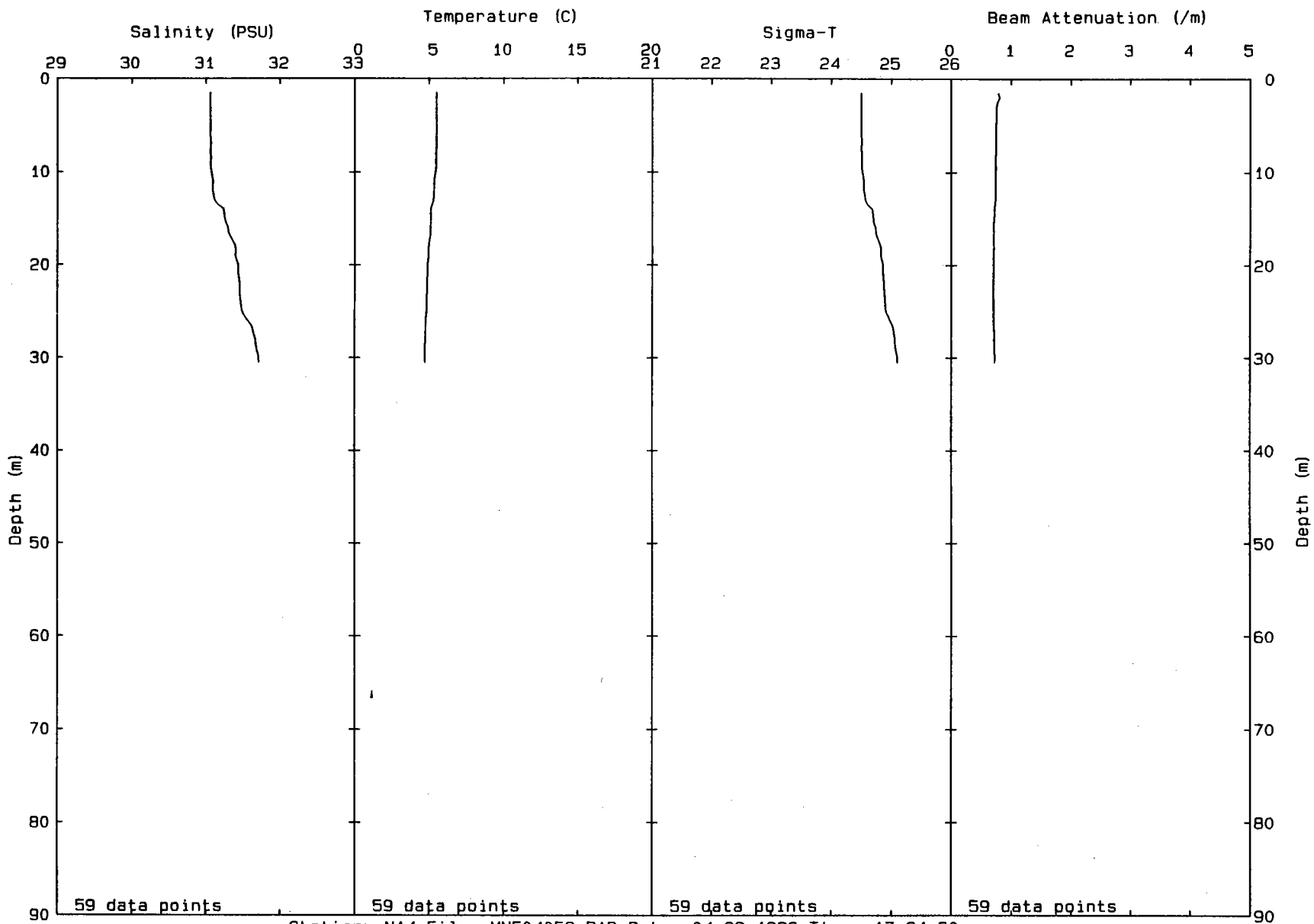


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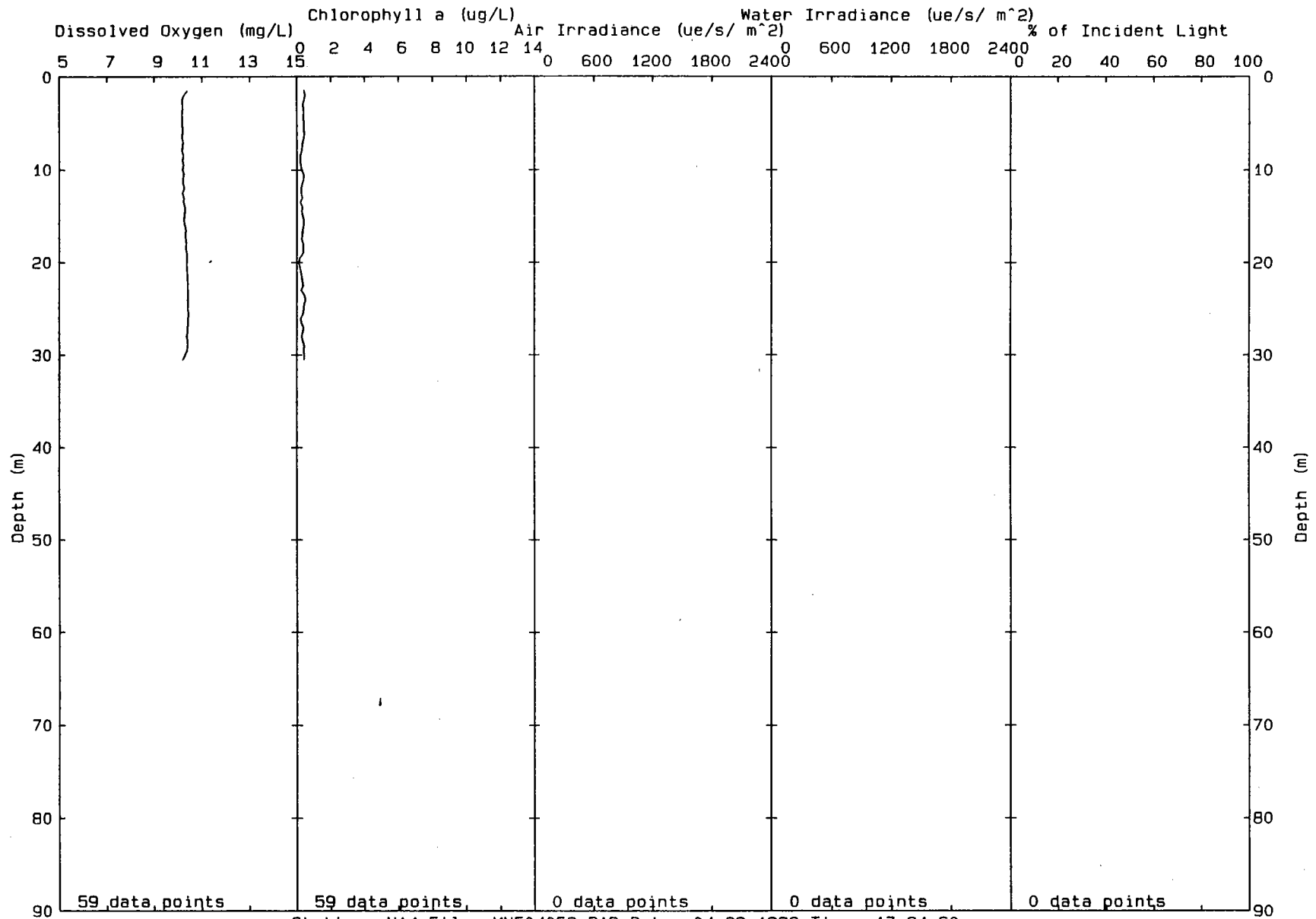


Station: N13 File: MNF04051.PAB Date: 04-29-1992 Time: 16:49:25



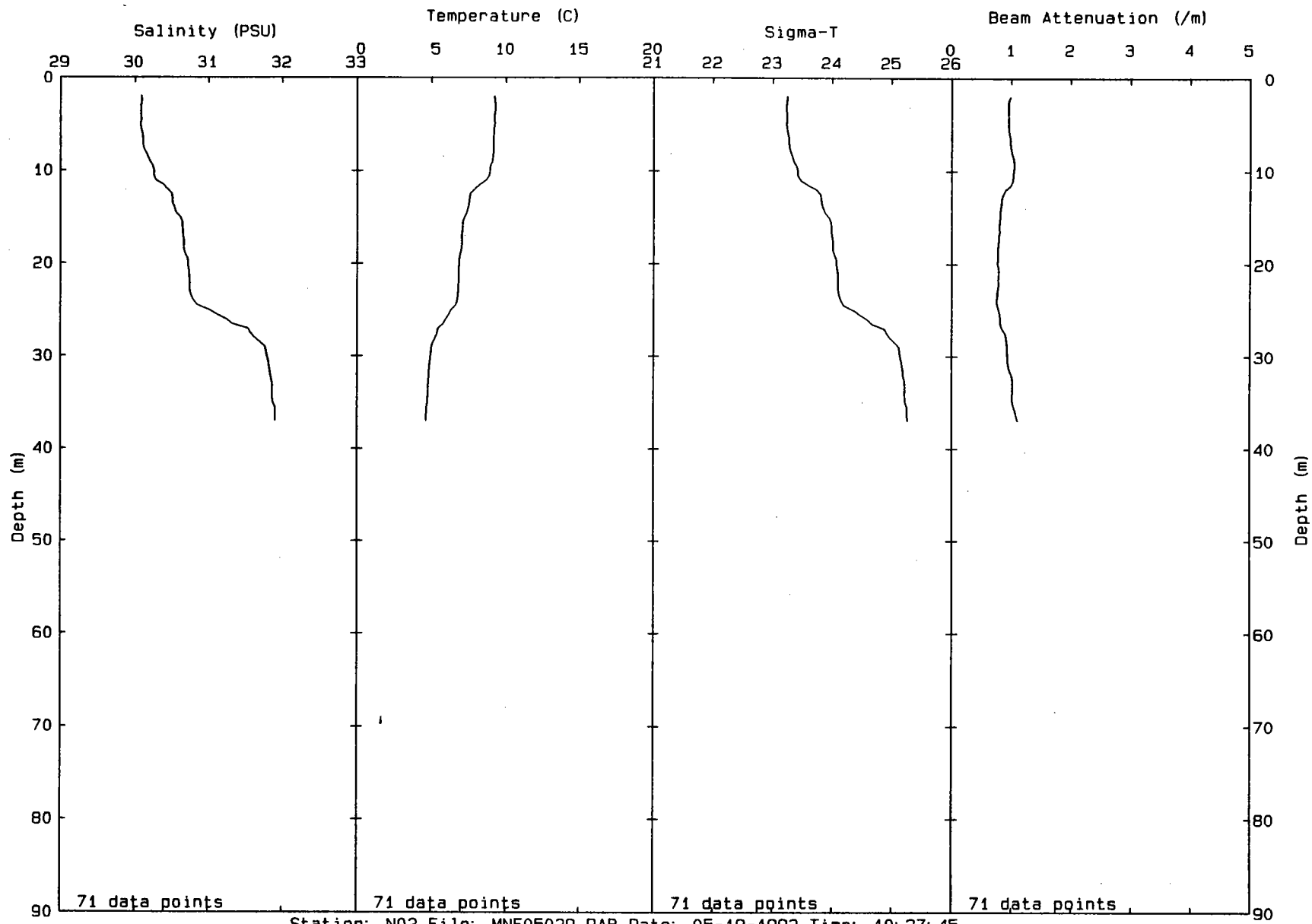
Station: N14 File: MNF04053.PAB Date: 04-29-1992 Time: 17:24:60

00200



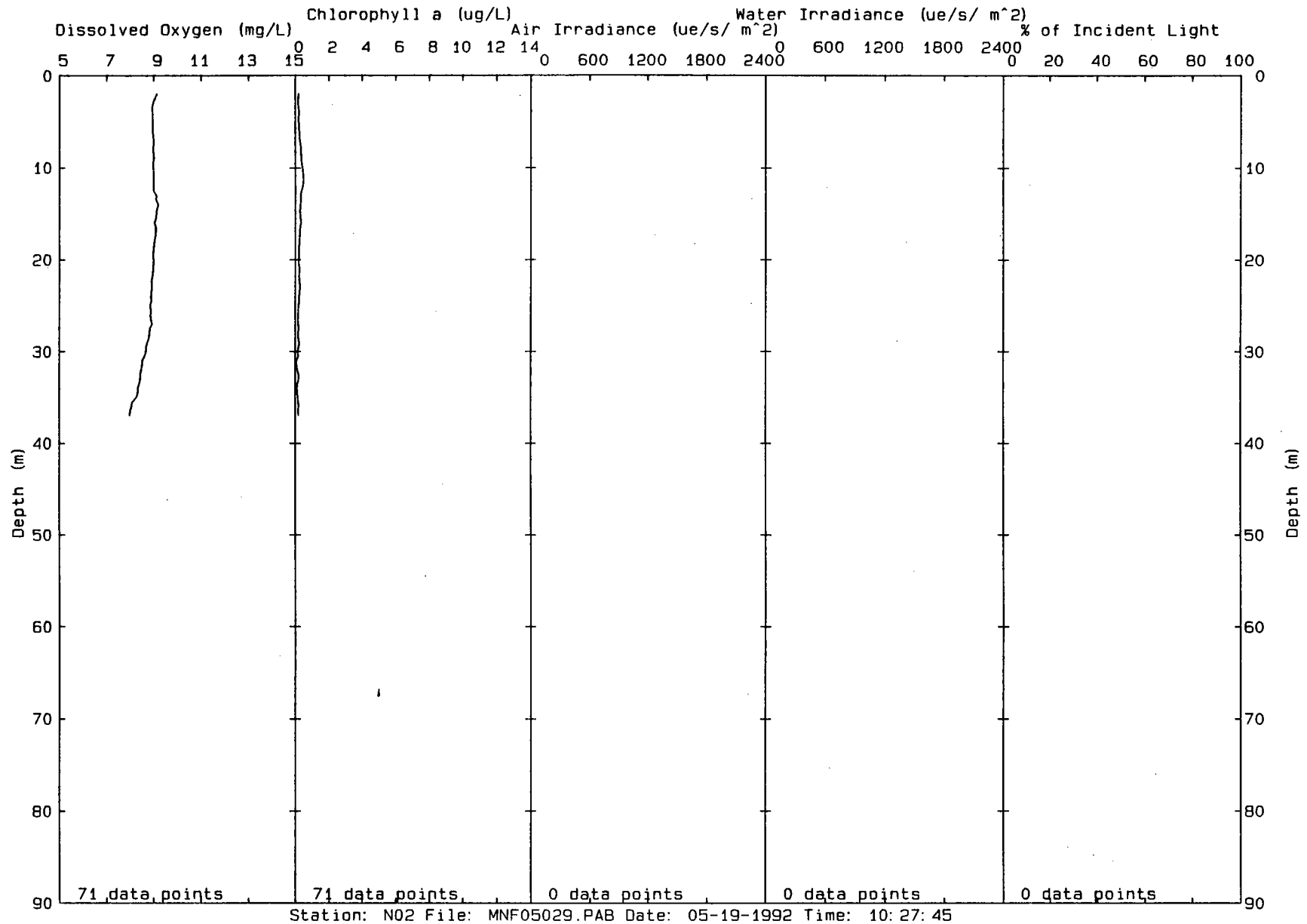
Station: N14 File: MNF04053.PAB Date: 04-29-1992 Time: 17: 24: 60

00201



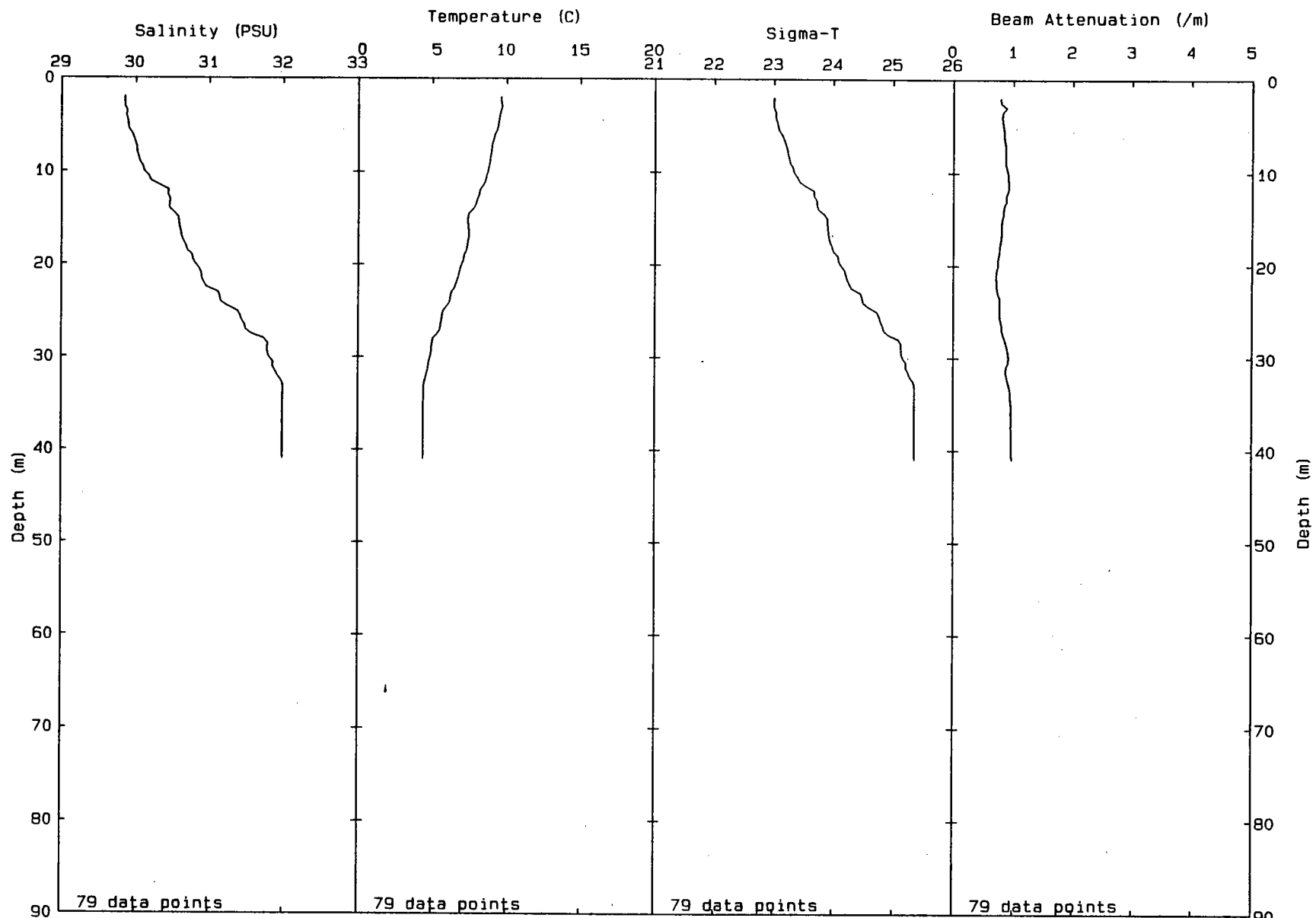
Station: N02 File: MNF05029.PAB Date: 05-19-1992 Time: 10:27:45

00216

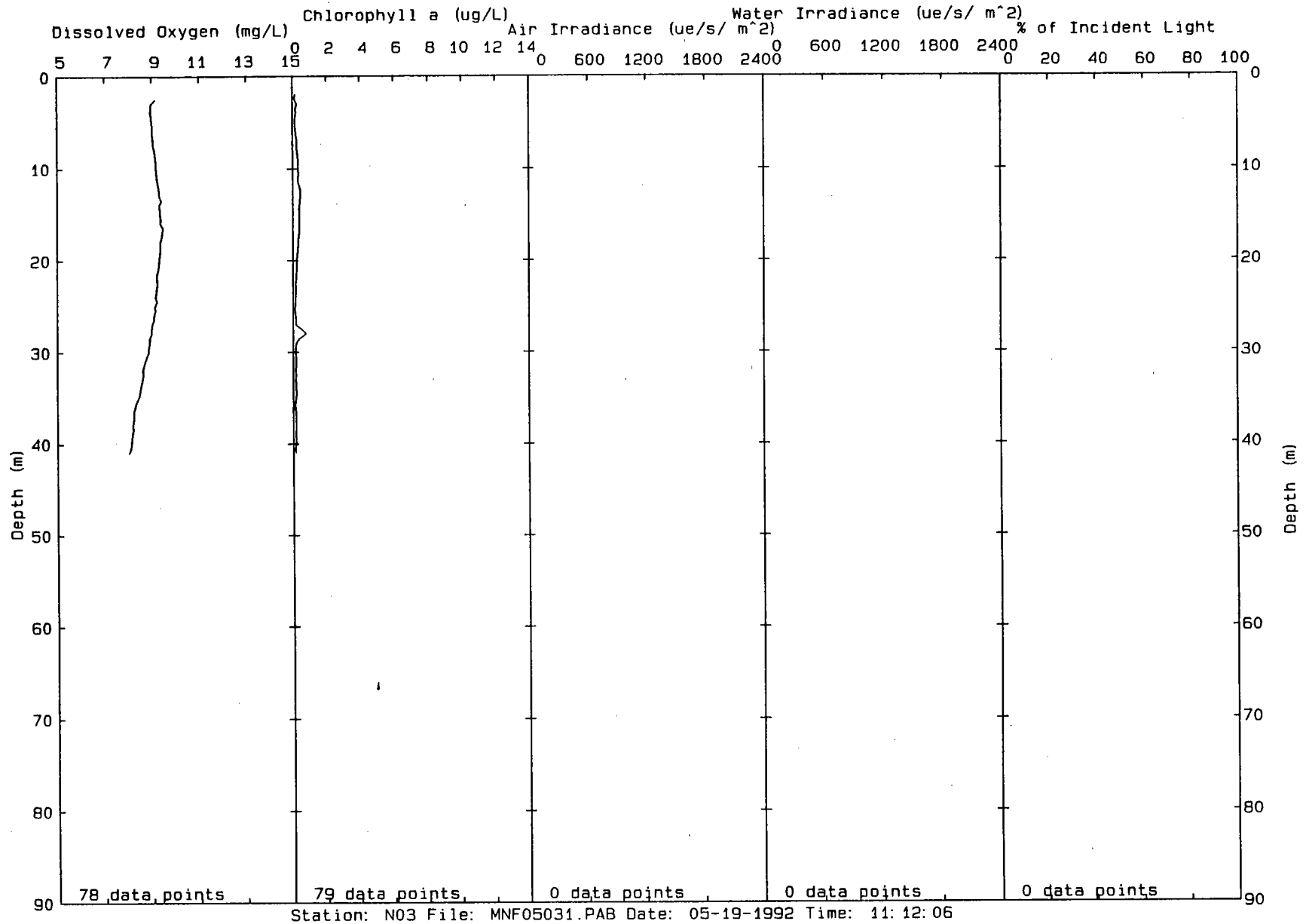


00217

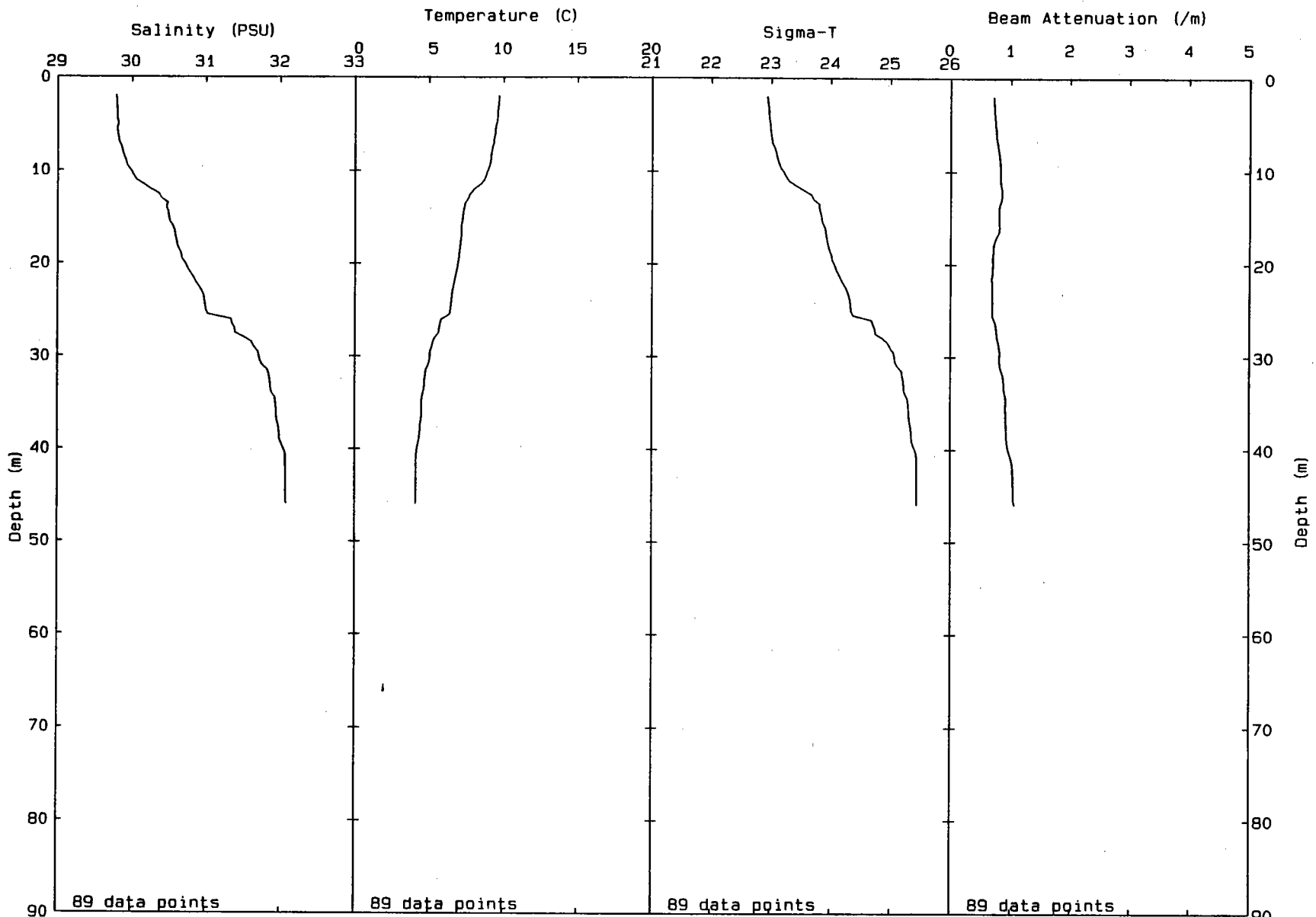
00218



Station: N03 File: MNF05031.PAB Date: 05-19-1992 Time: 11:12:06

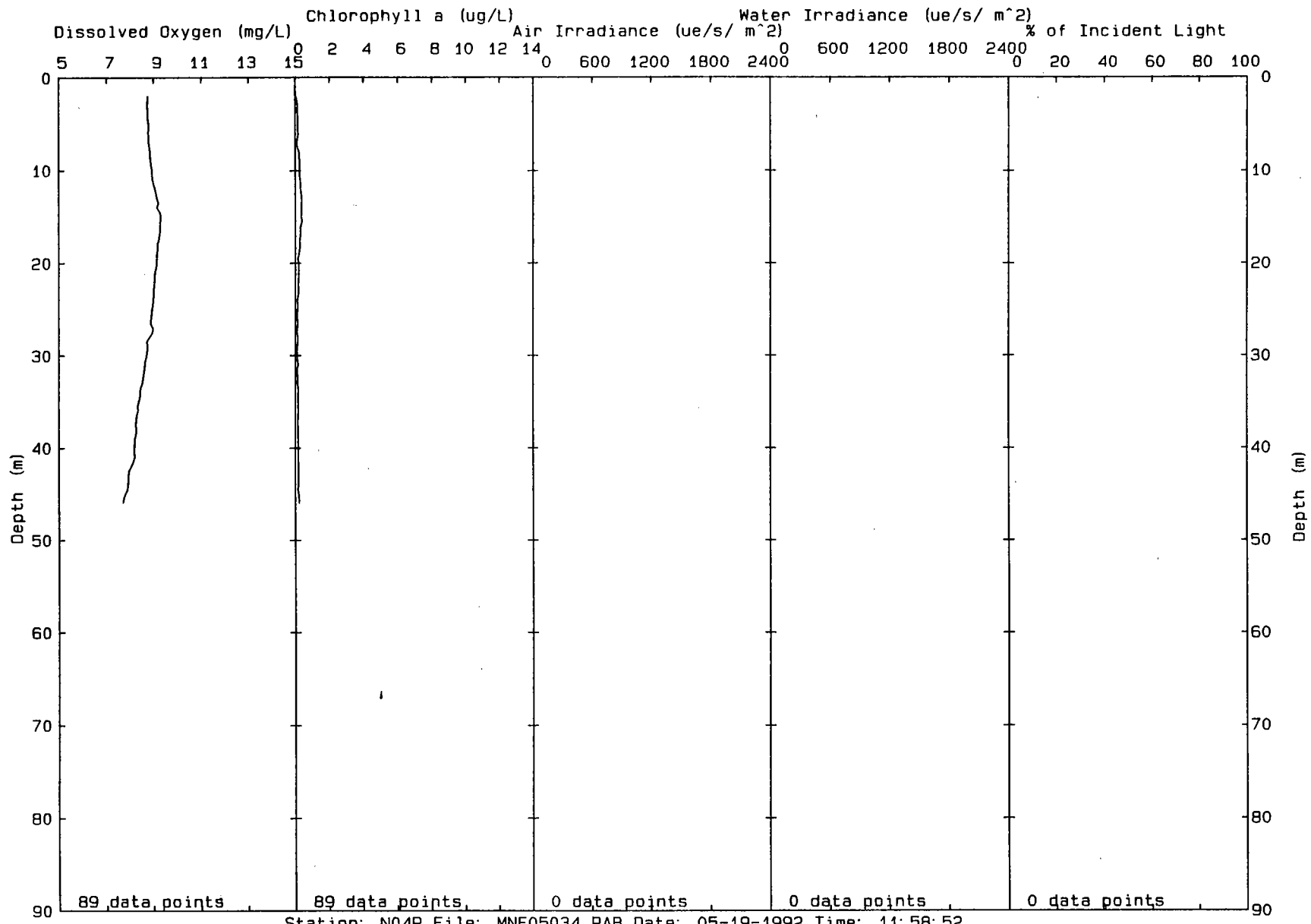


00219

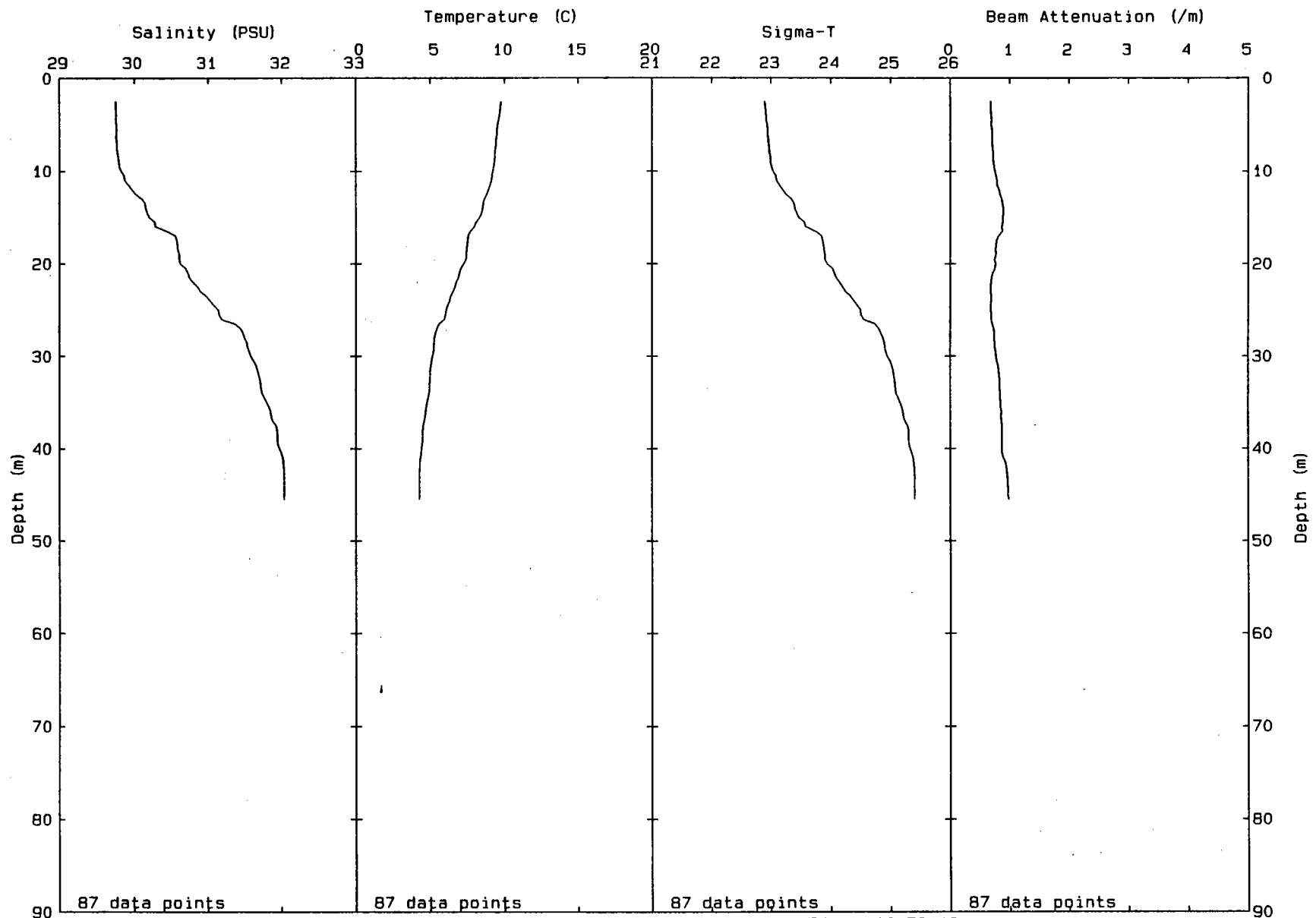


Station: N04P File: MNF05034.PAB Date: 05-19-1992 Time: 11:58:52

00220

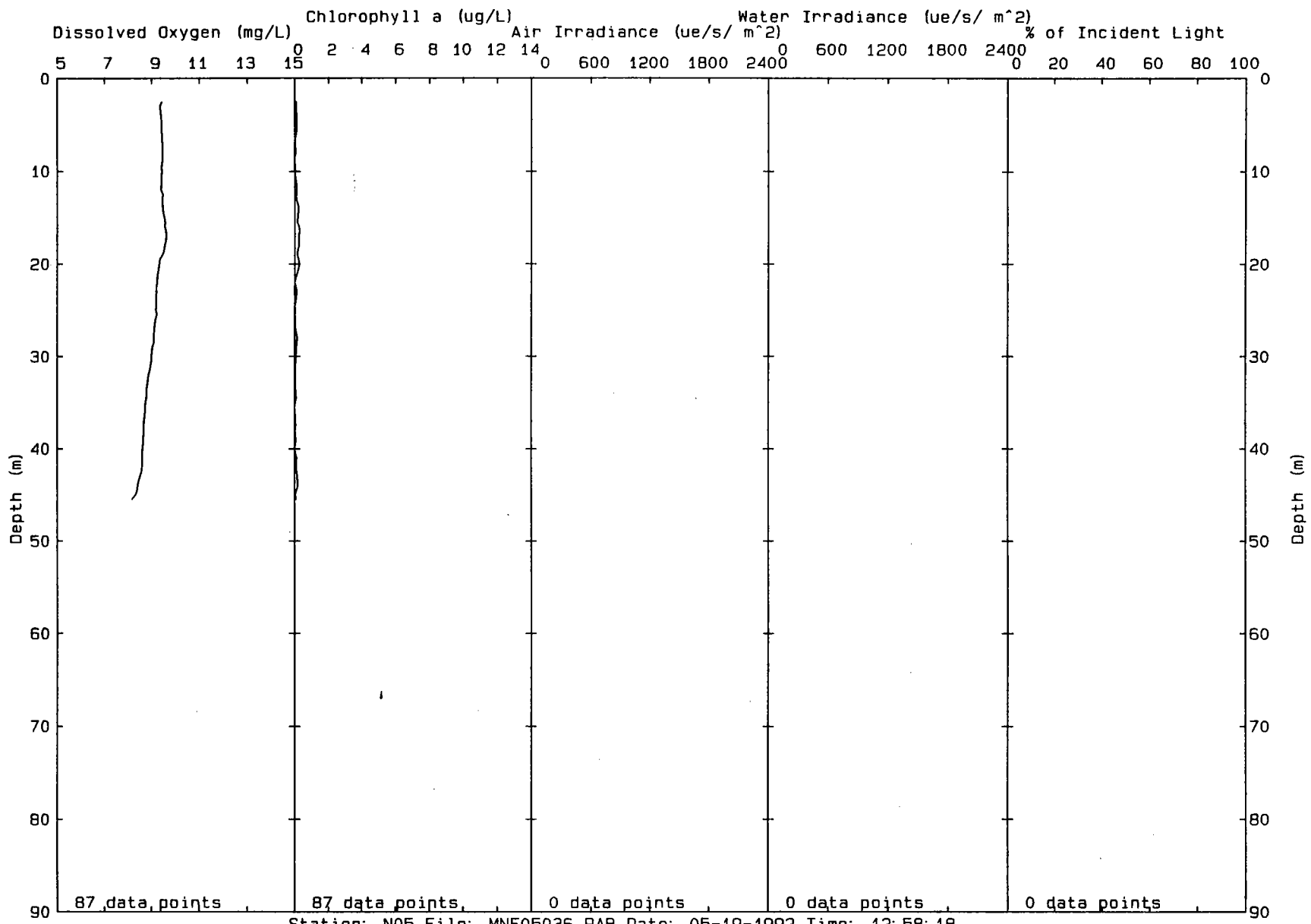


00221



Station: N05 File: MNF05036.PAB Date: 05-19-1992 Time: 12: 58: 18

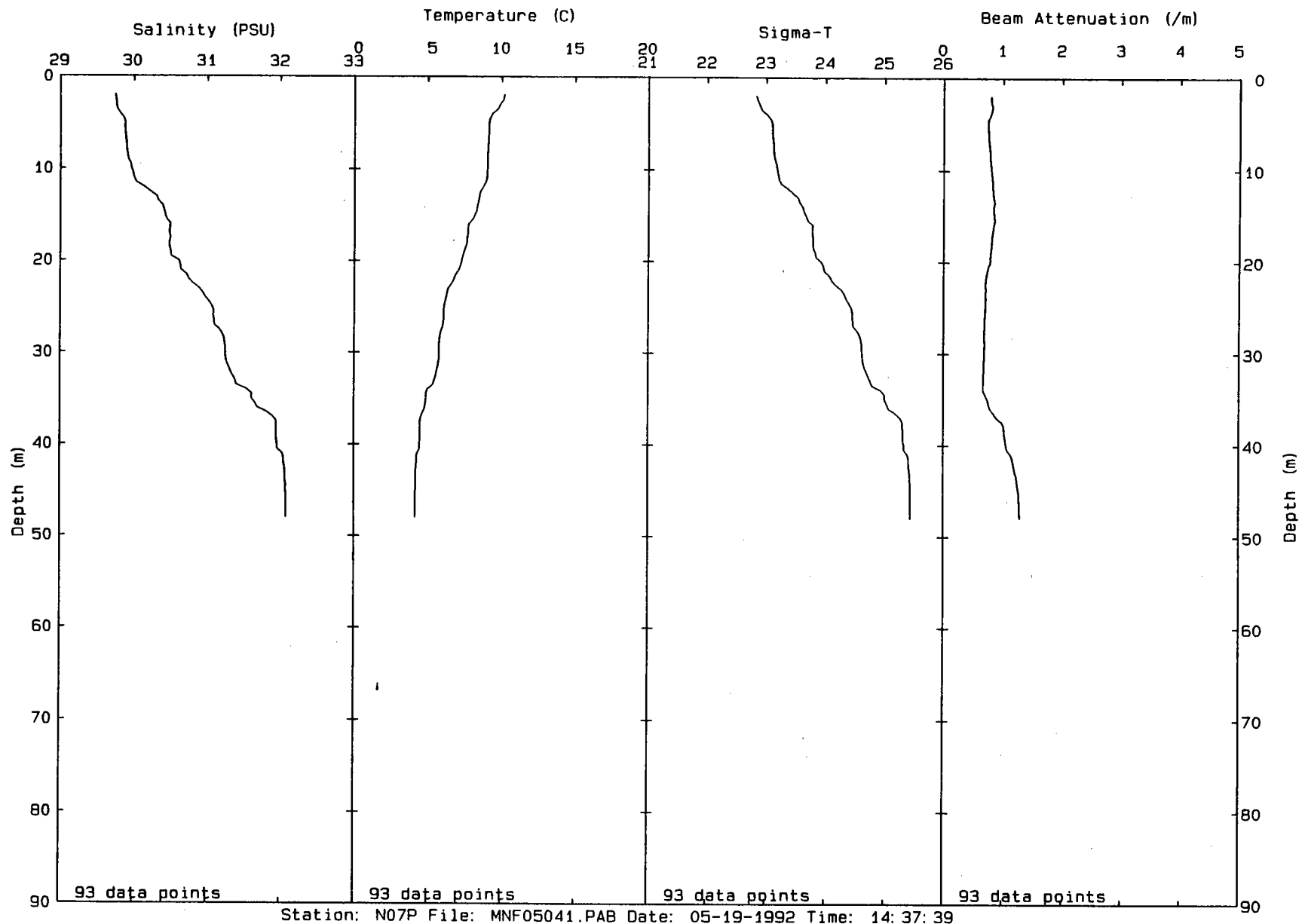
00222

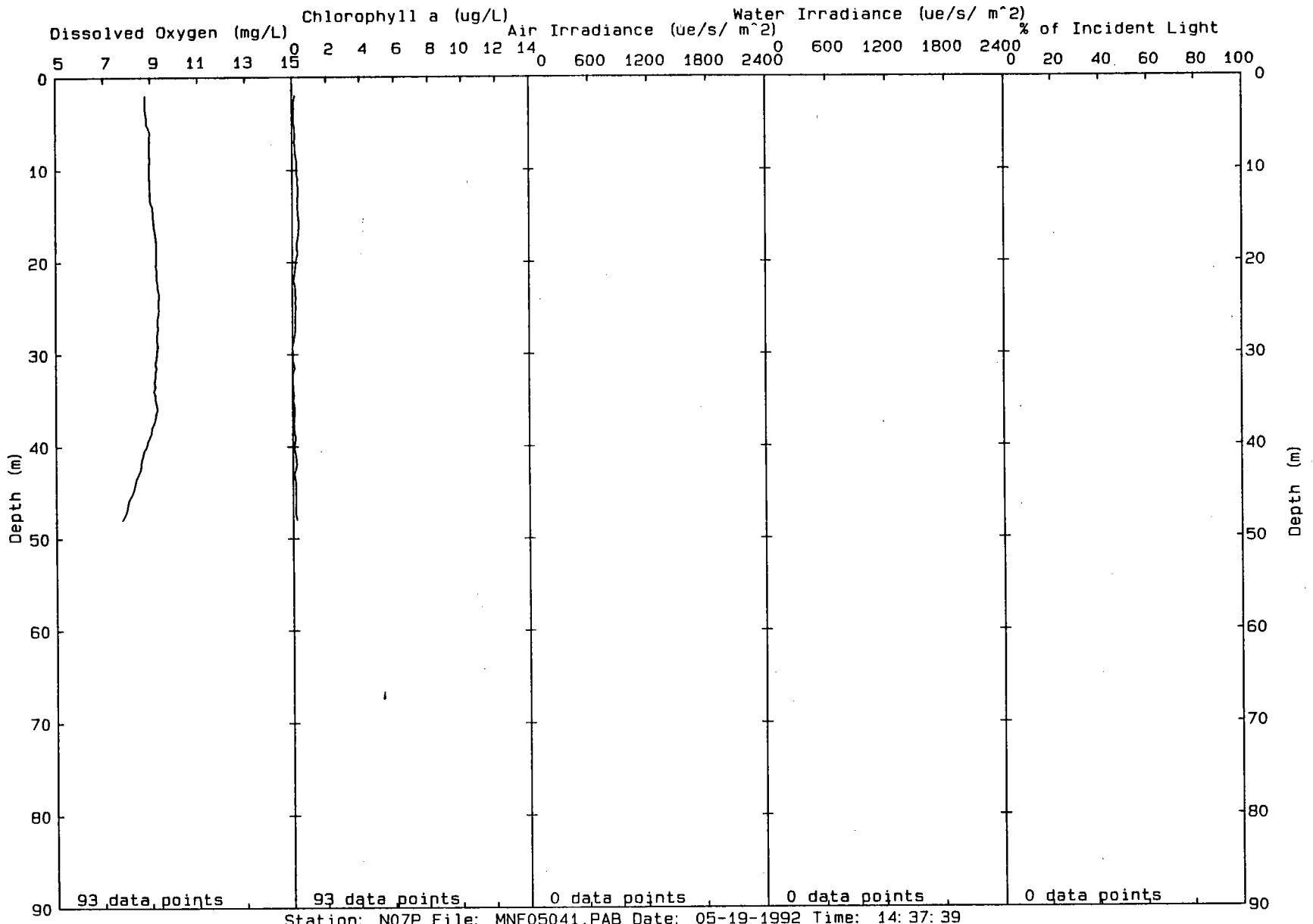


Station: N05 File: MNF05036.PAB Date: 05-19-1992 Time: 12:58:18

00223

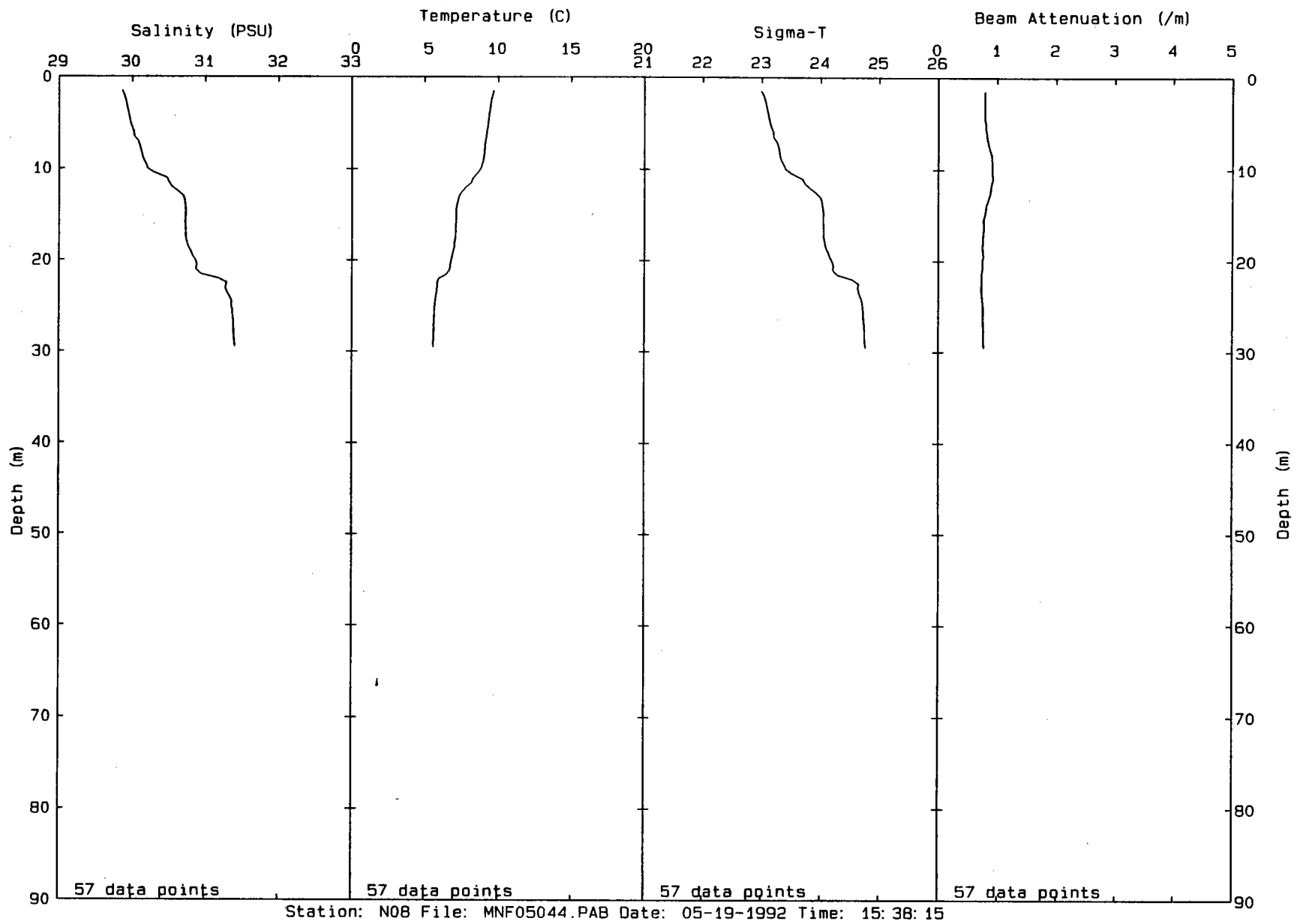
00226



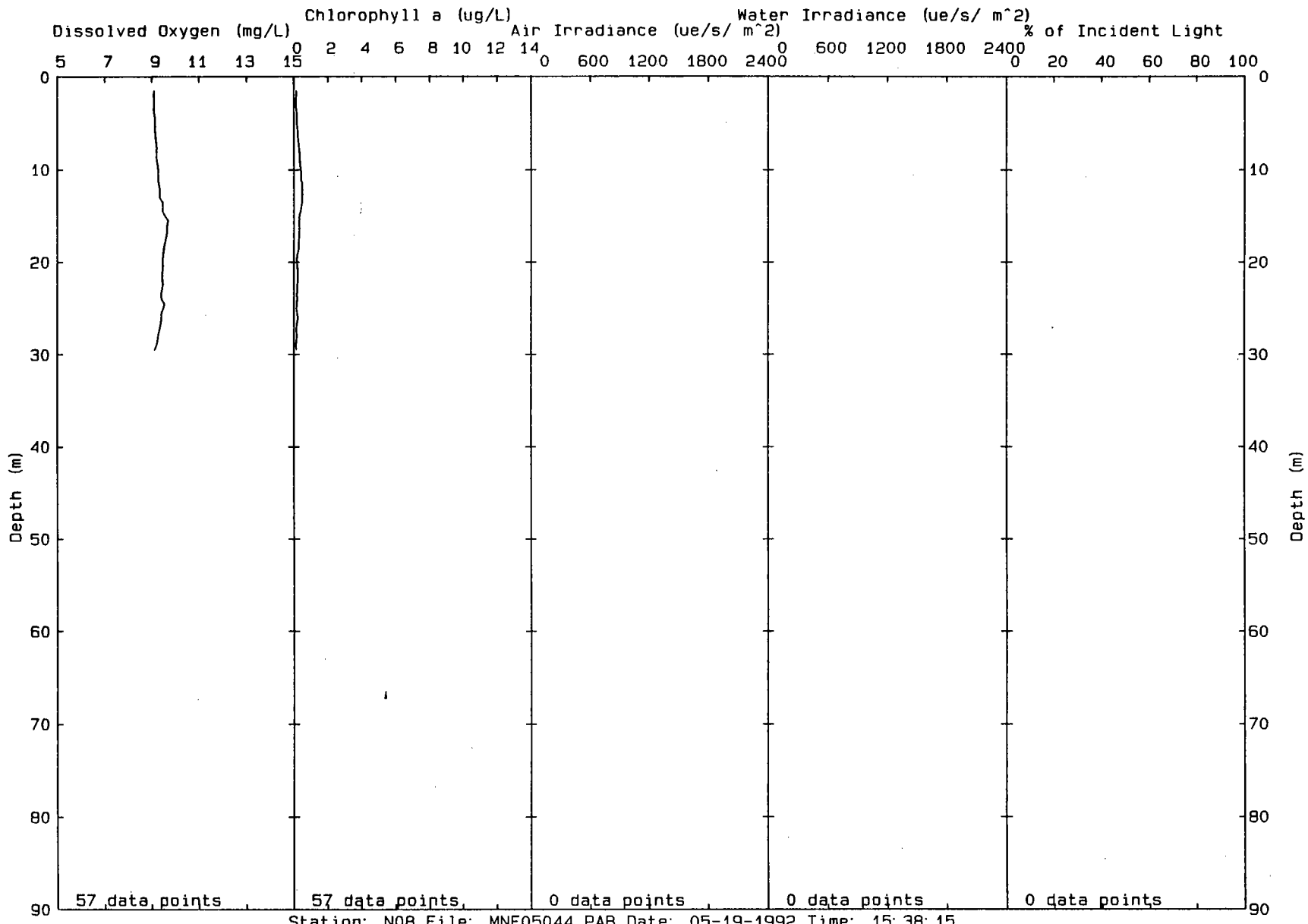


00227

00228

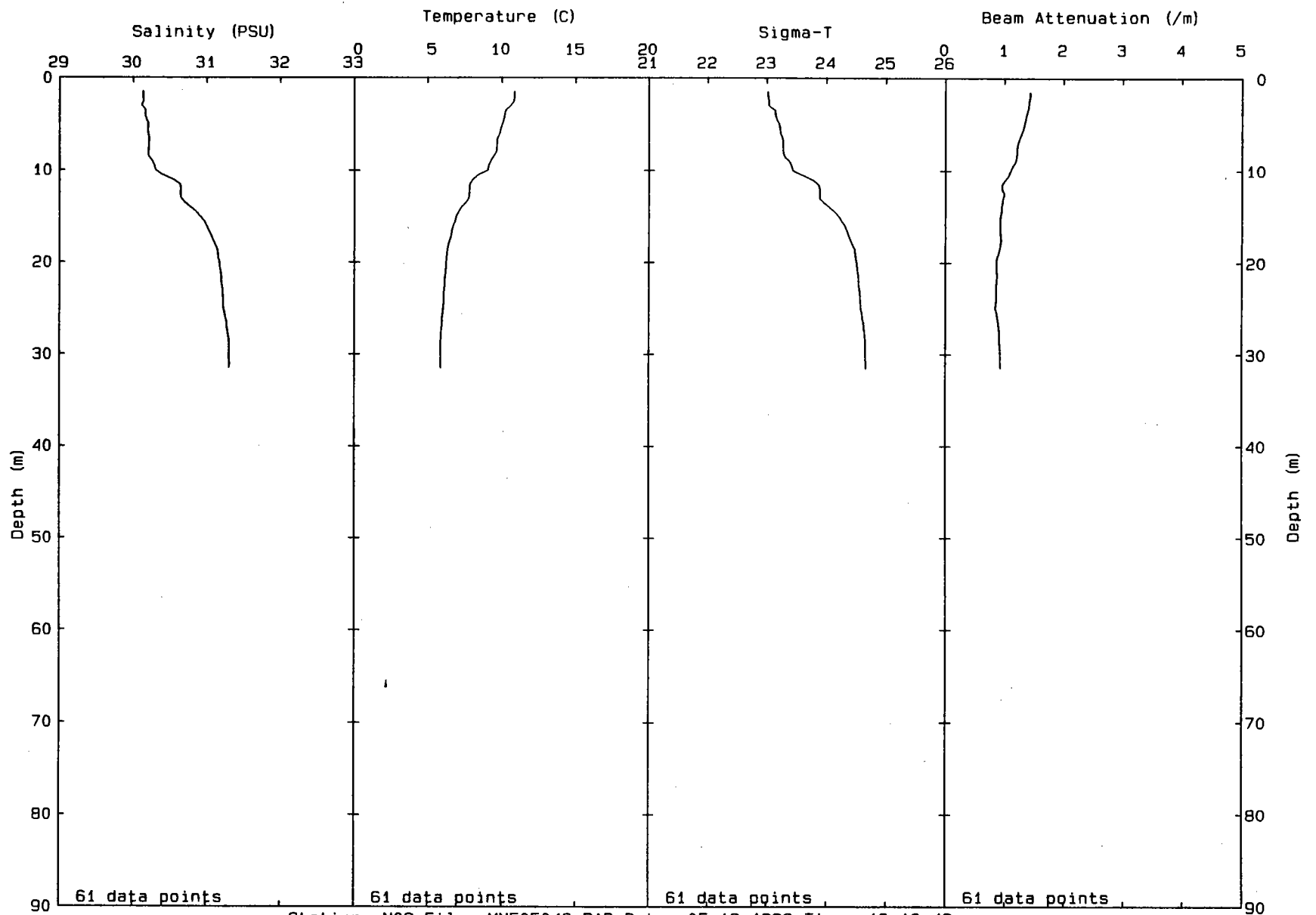


Station: N08 File: MNF05044.PAB Date: 05-19-1992 Time: 15:38:15



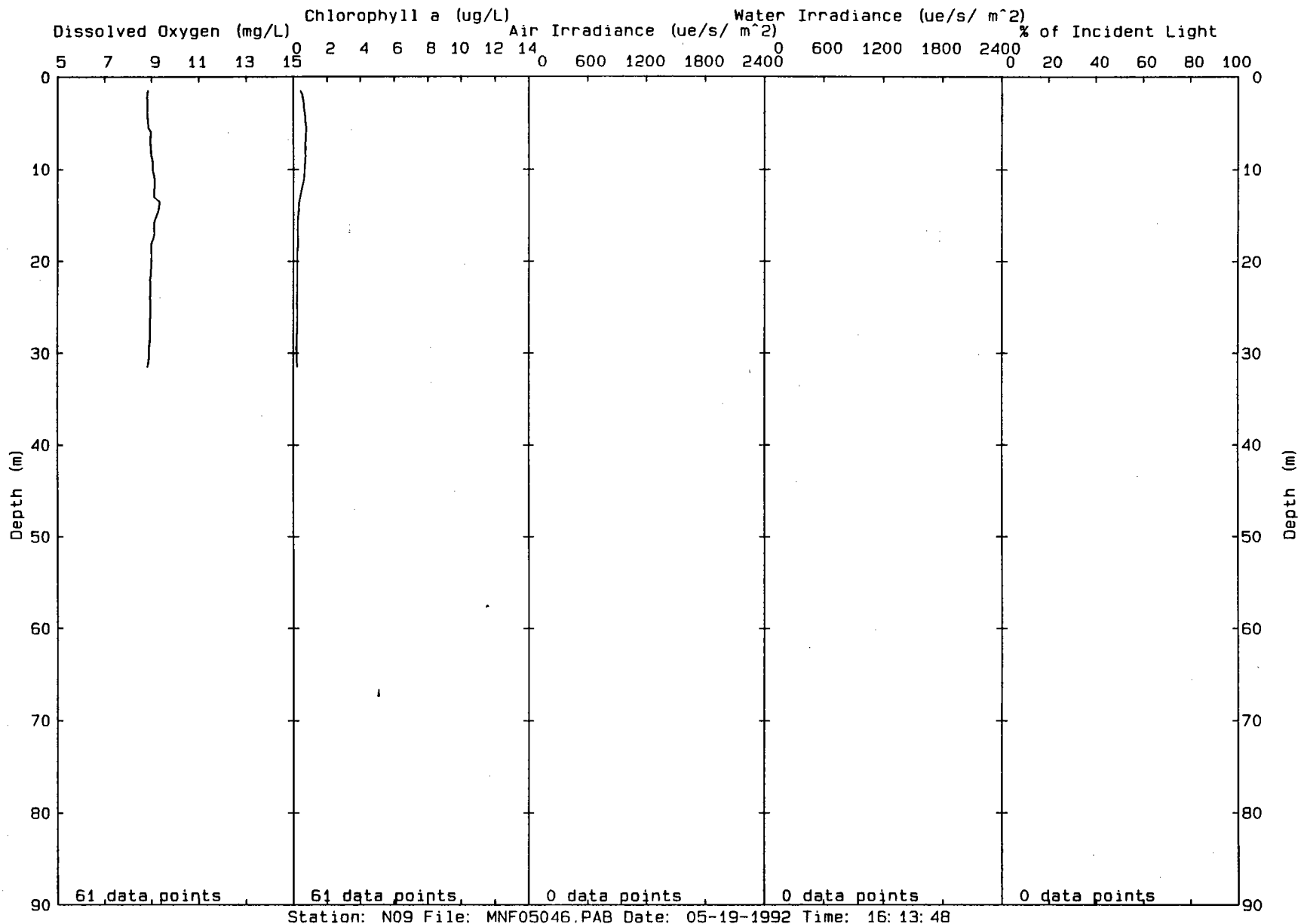
Station: N08 File: MNF05044.PAB Date: 05-19-1992 Time: 15:38:15

00229

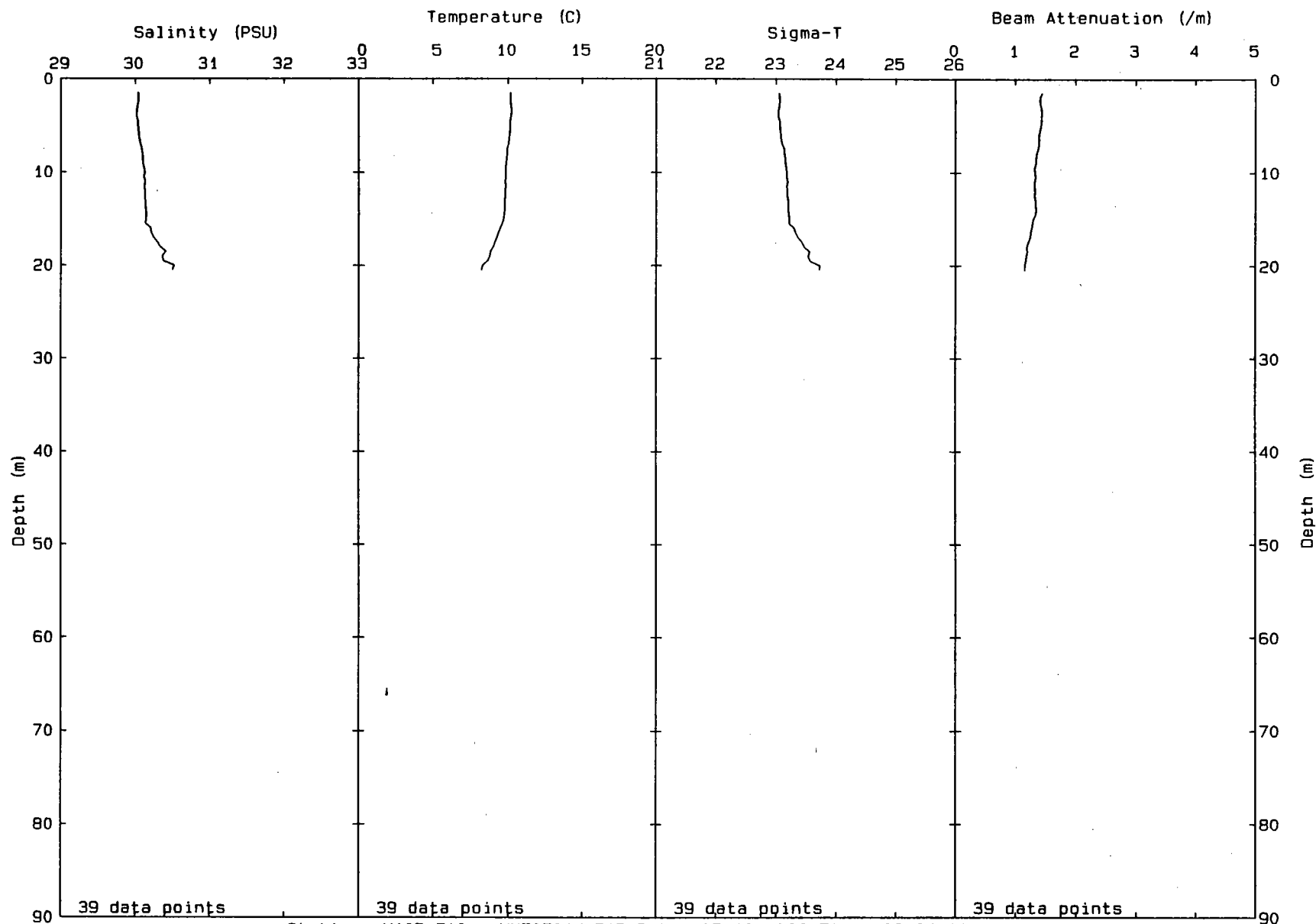


Station: N09 File: MNF05046.PAB Date: 05-19-1992 Time: 16:13:48

00230

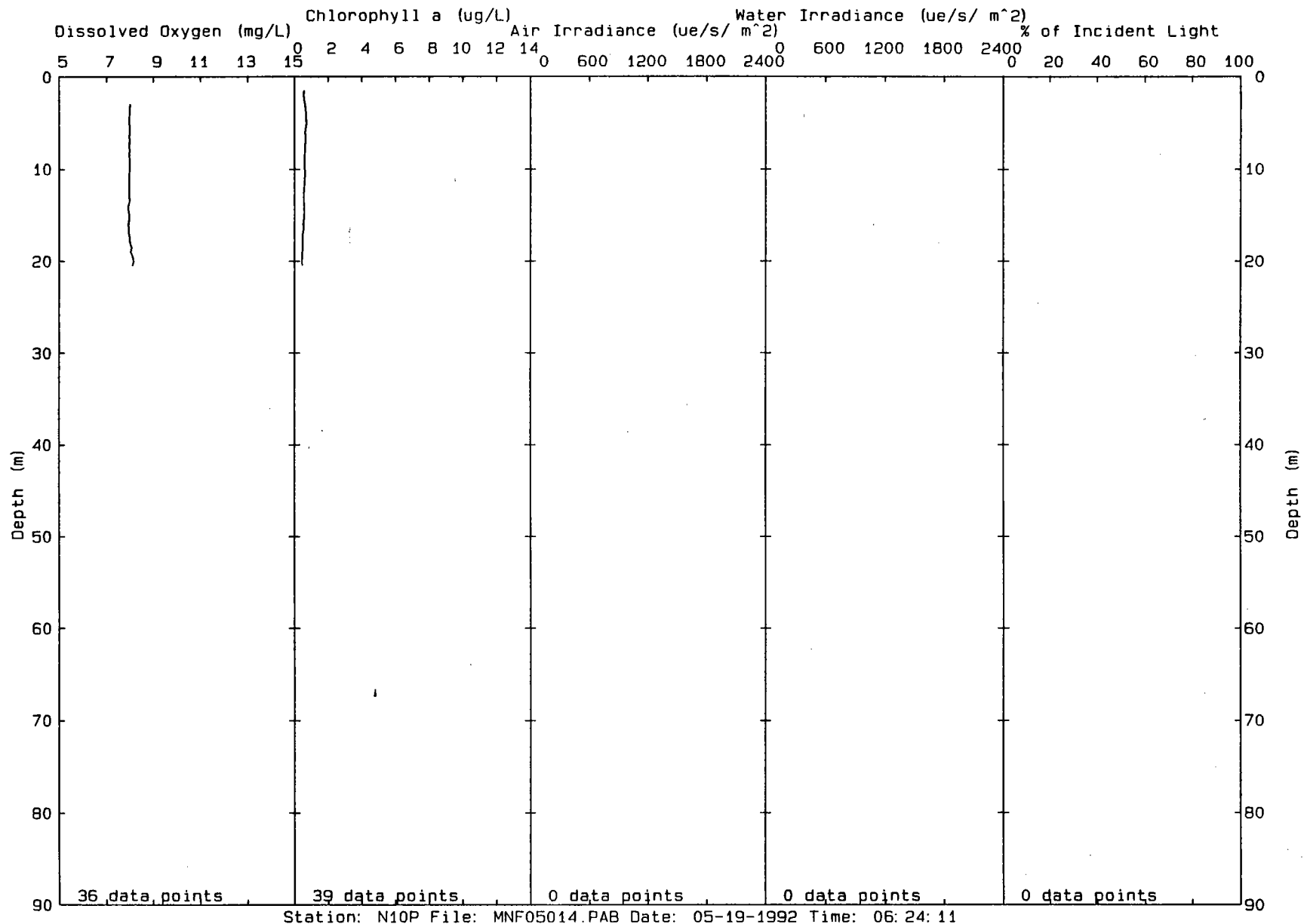


00231

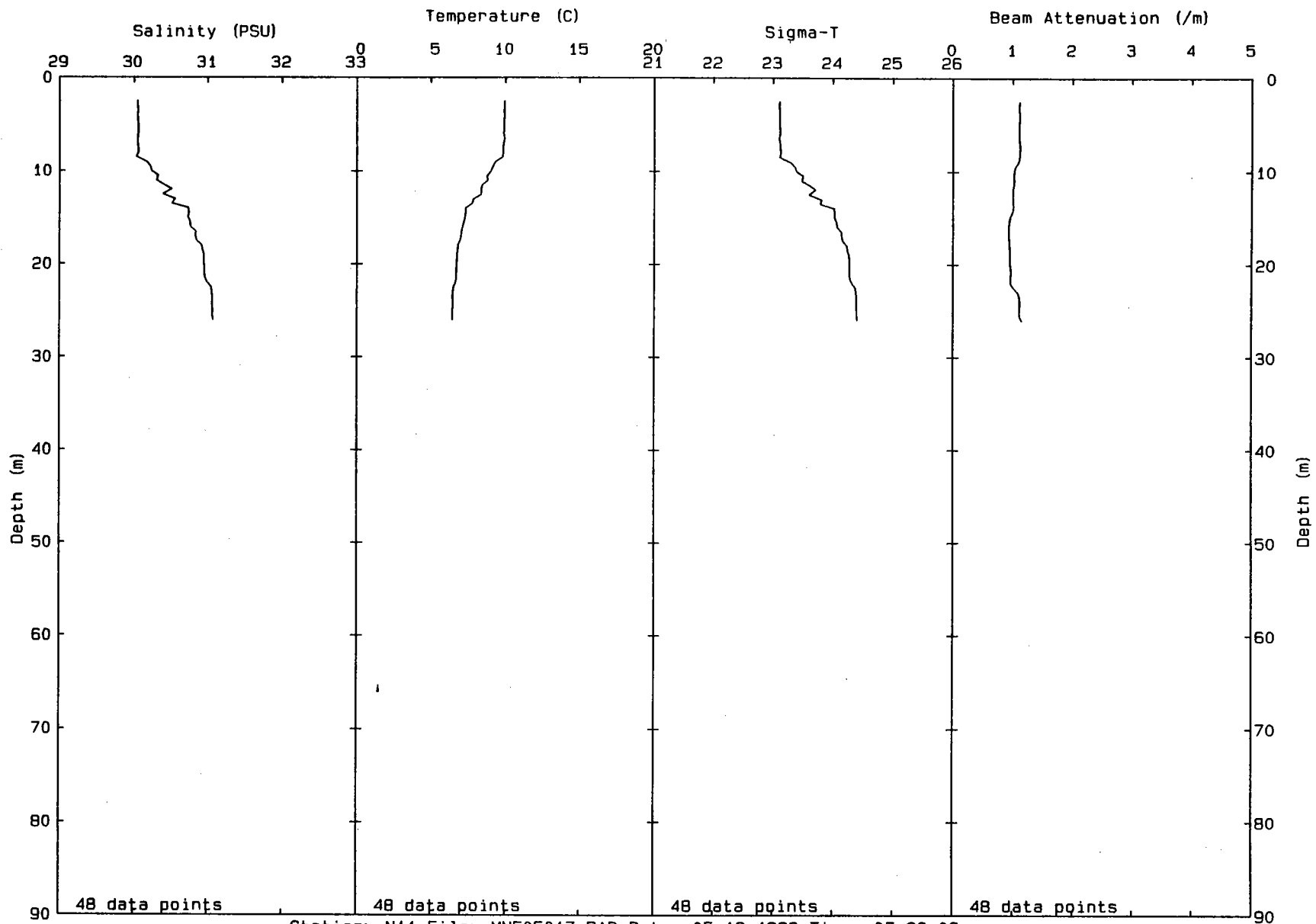


Station: N10P File: MNF05014.PAB Date: 05-19-1992 Time: 06:24:11

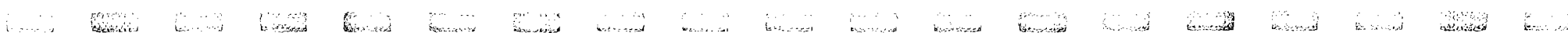
00232



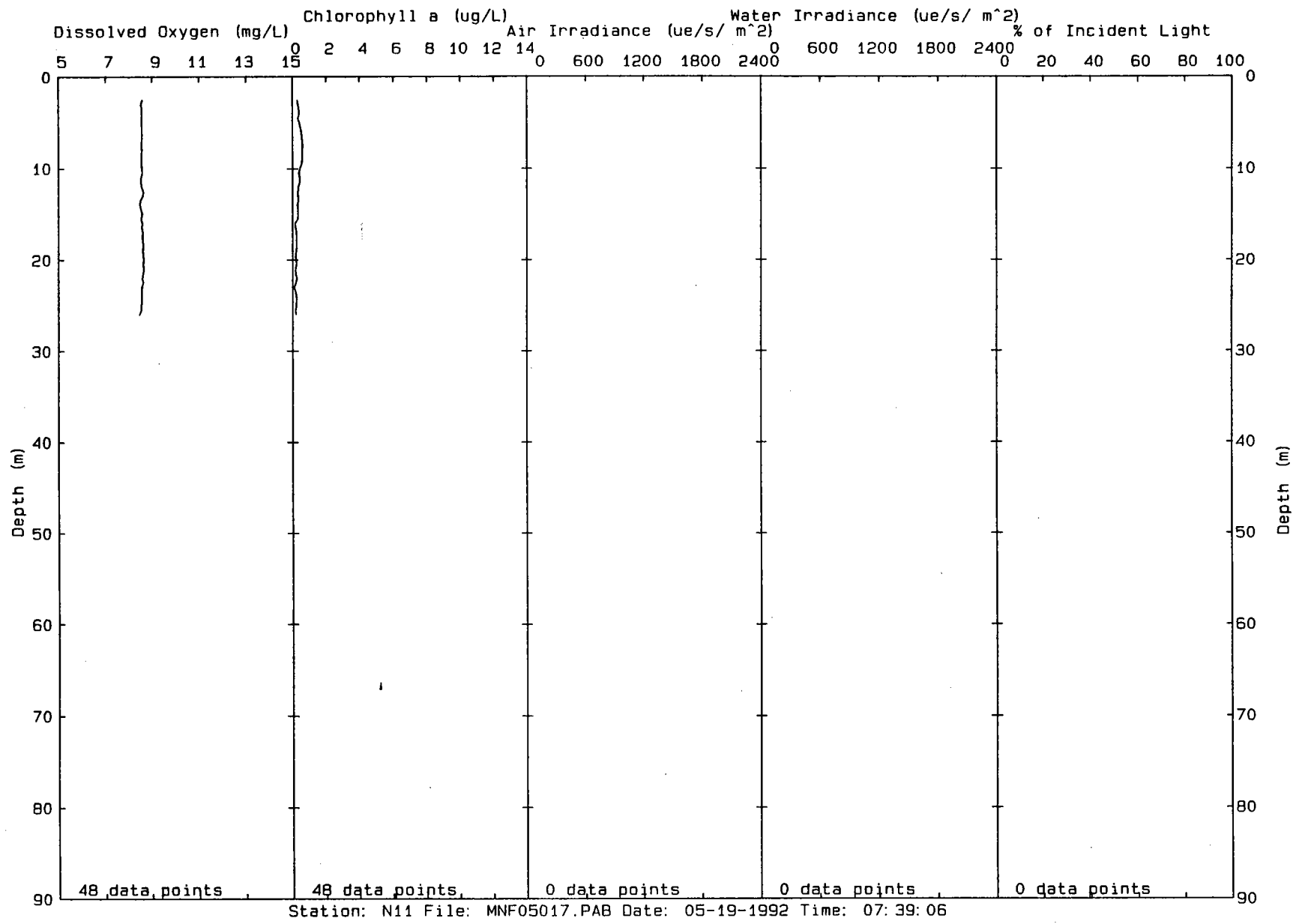
00233

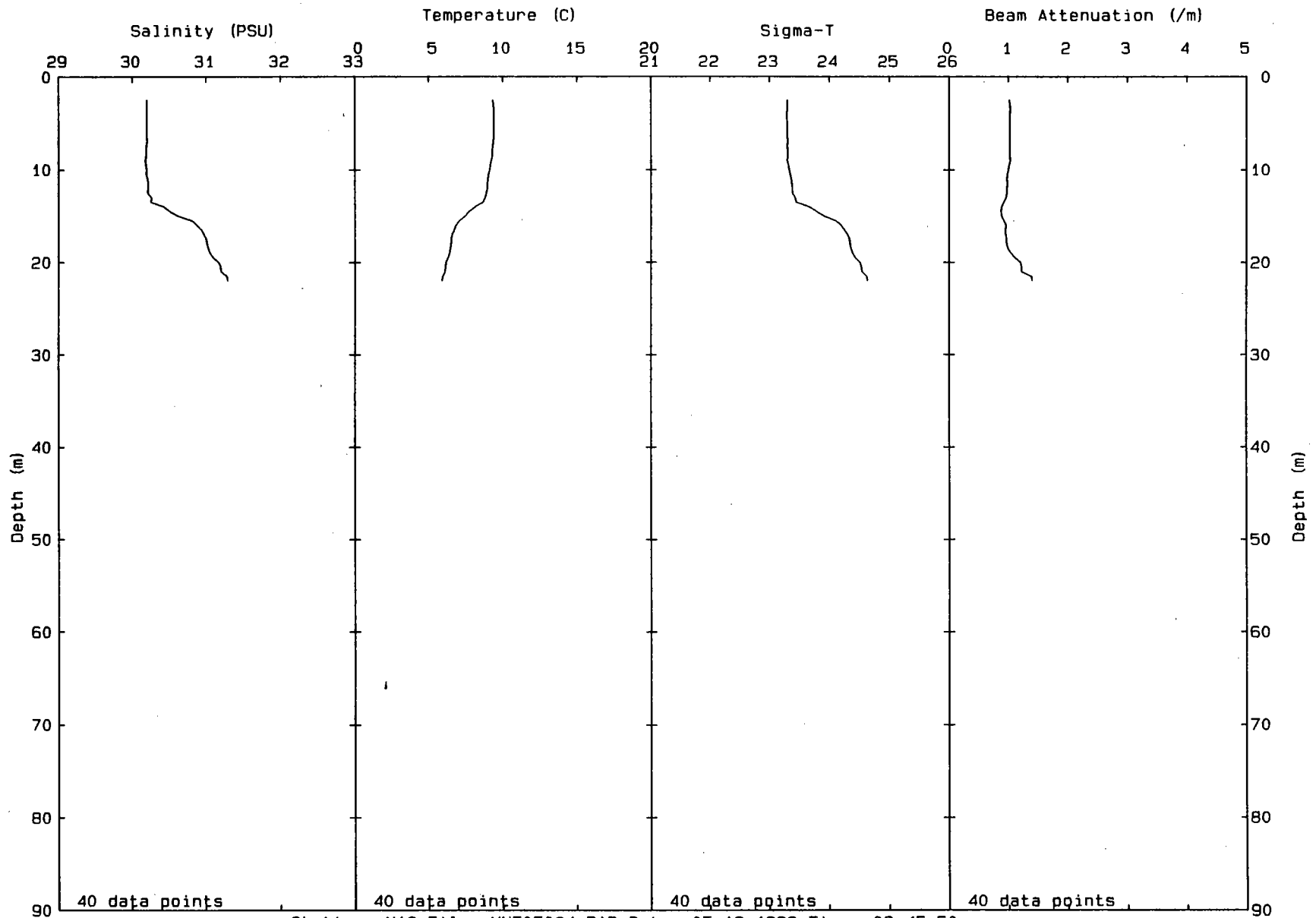


00234



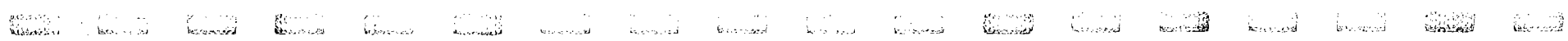
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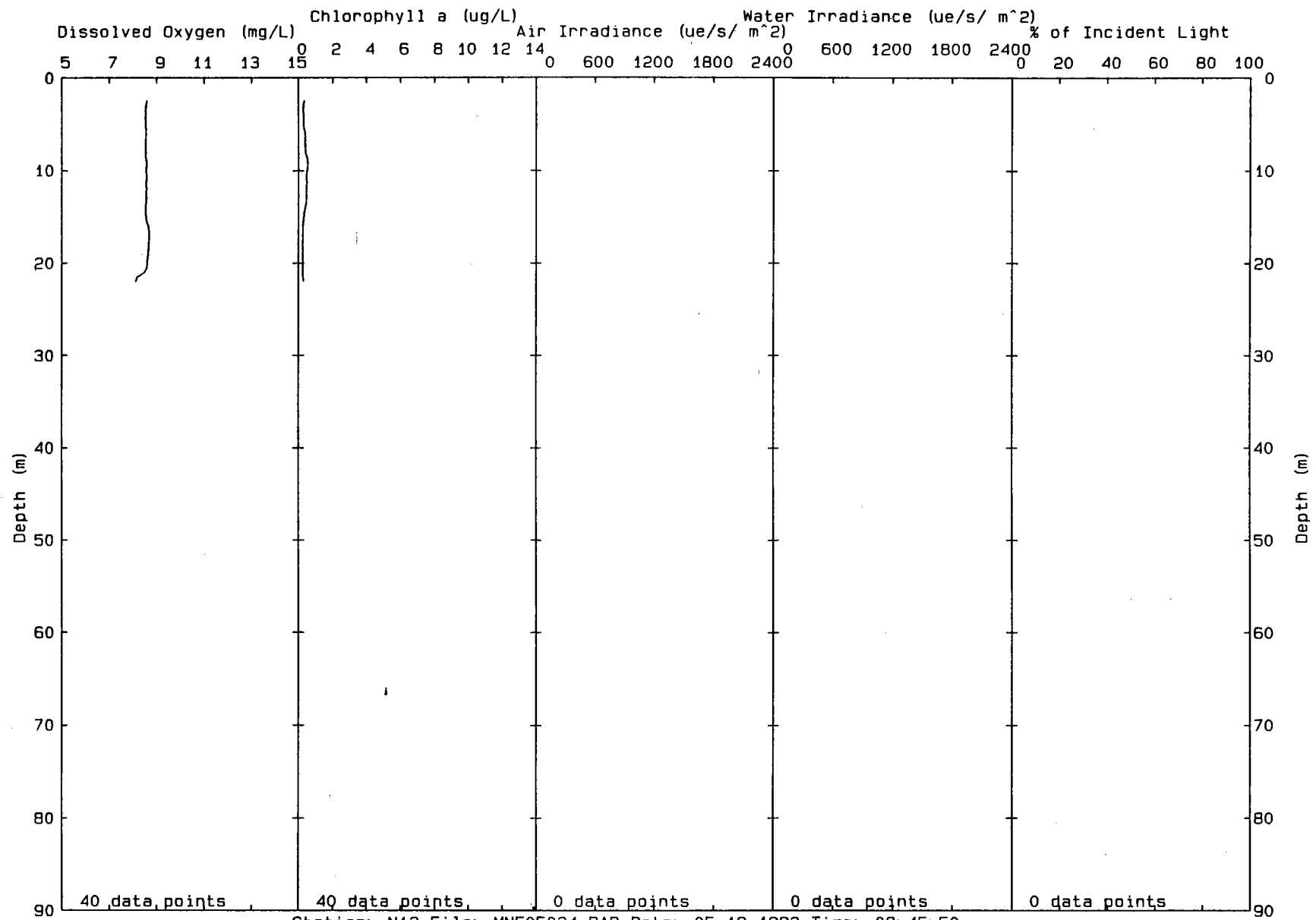




Station: N12 File: MNF05024.PAB Date: 05-19-1992 Time: 08:45:50

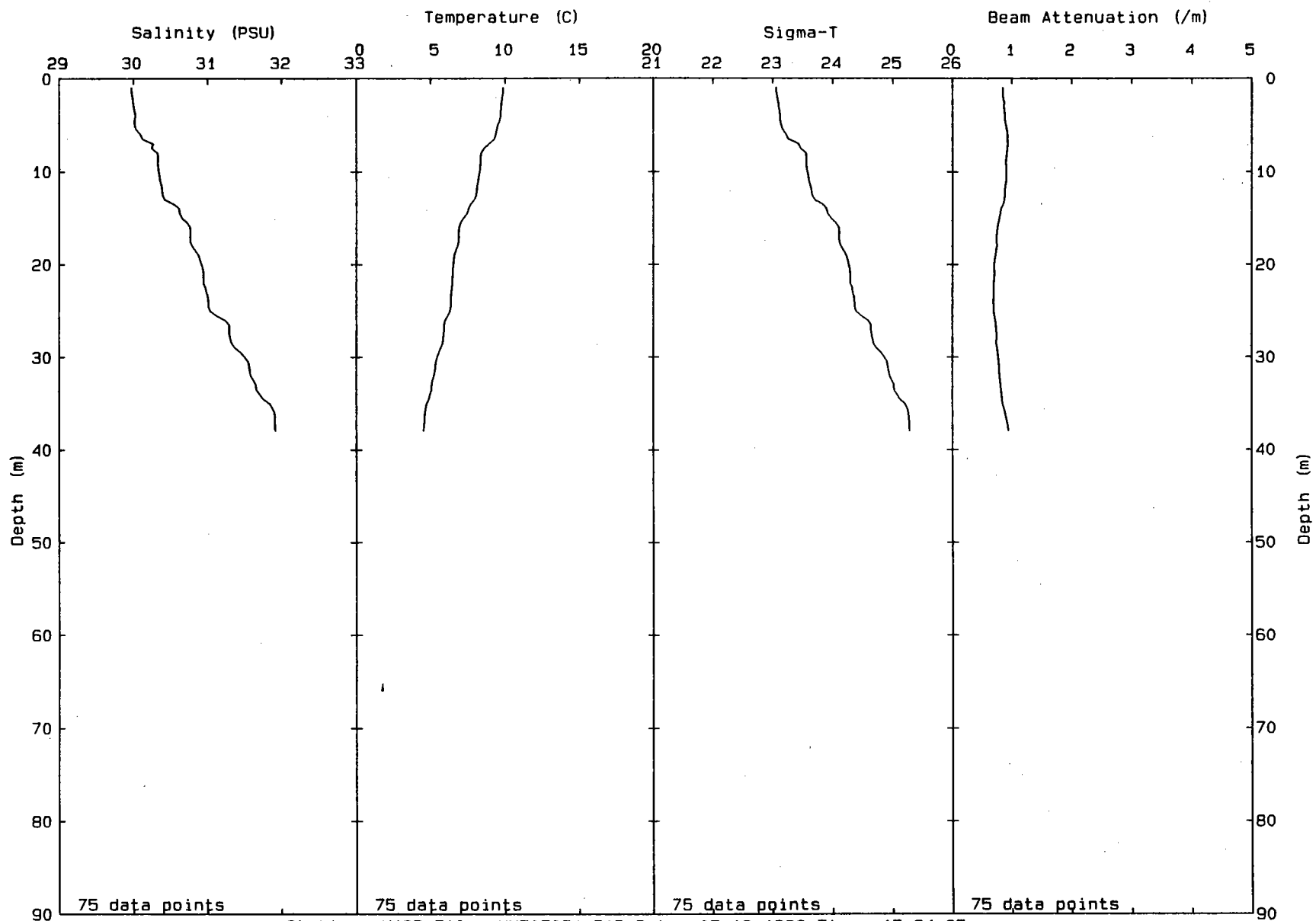
00236





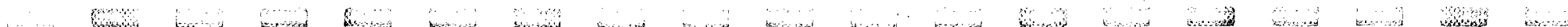
Station: N12 File: MNF05024.PAB Date: 05-19-1992 Time: 08:45:50

00237

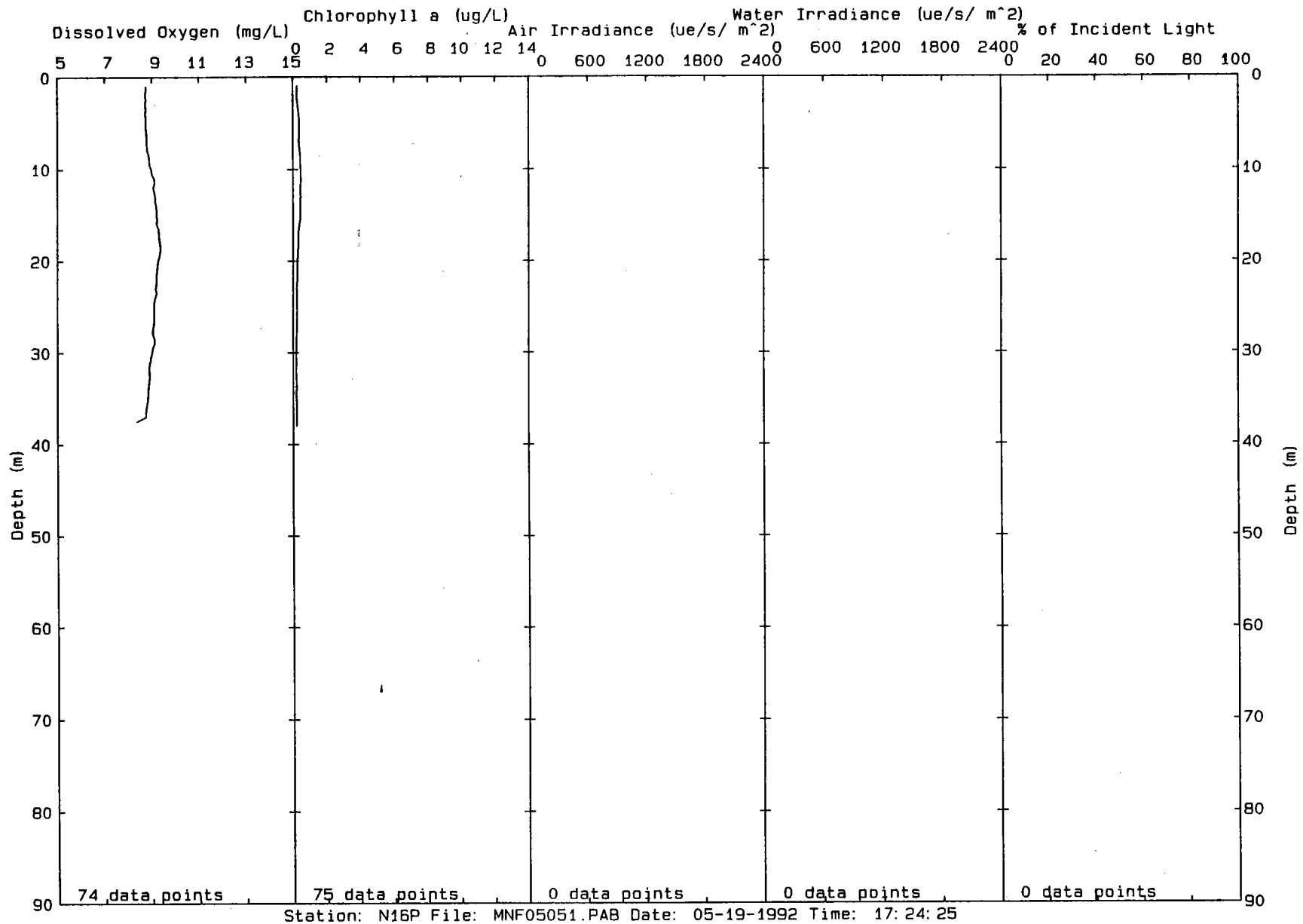


Station: N16P File: MNF05051.PAB Date: 05-19-1992 Time: 17:24:25

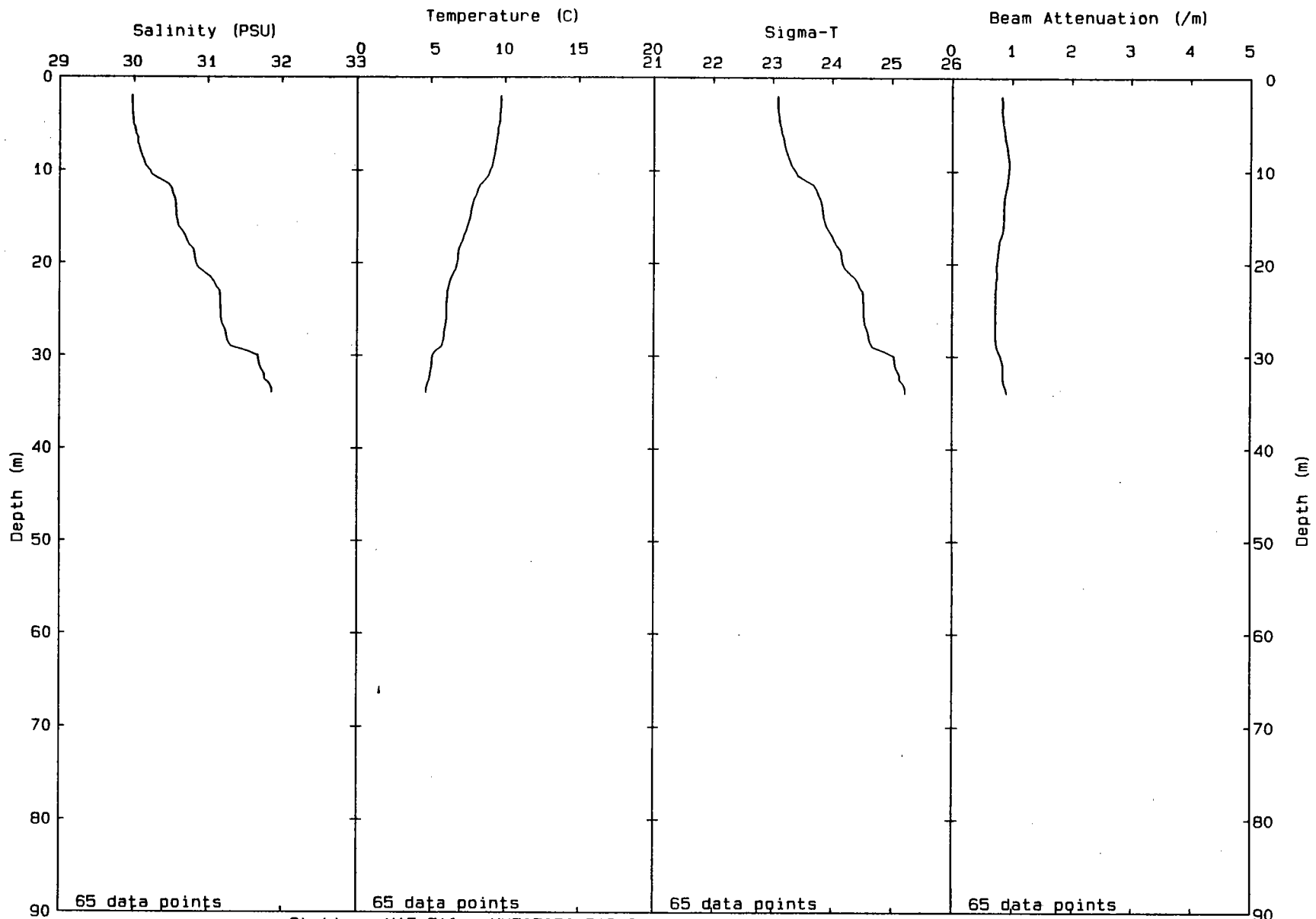
00238



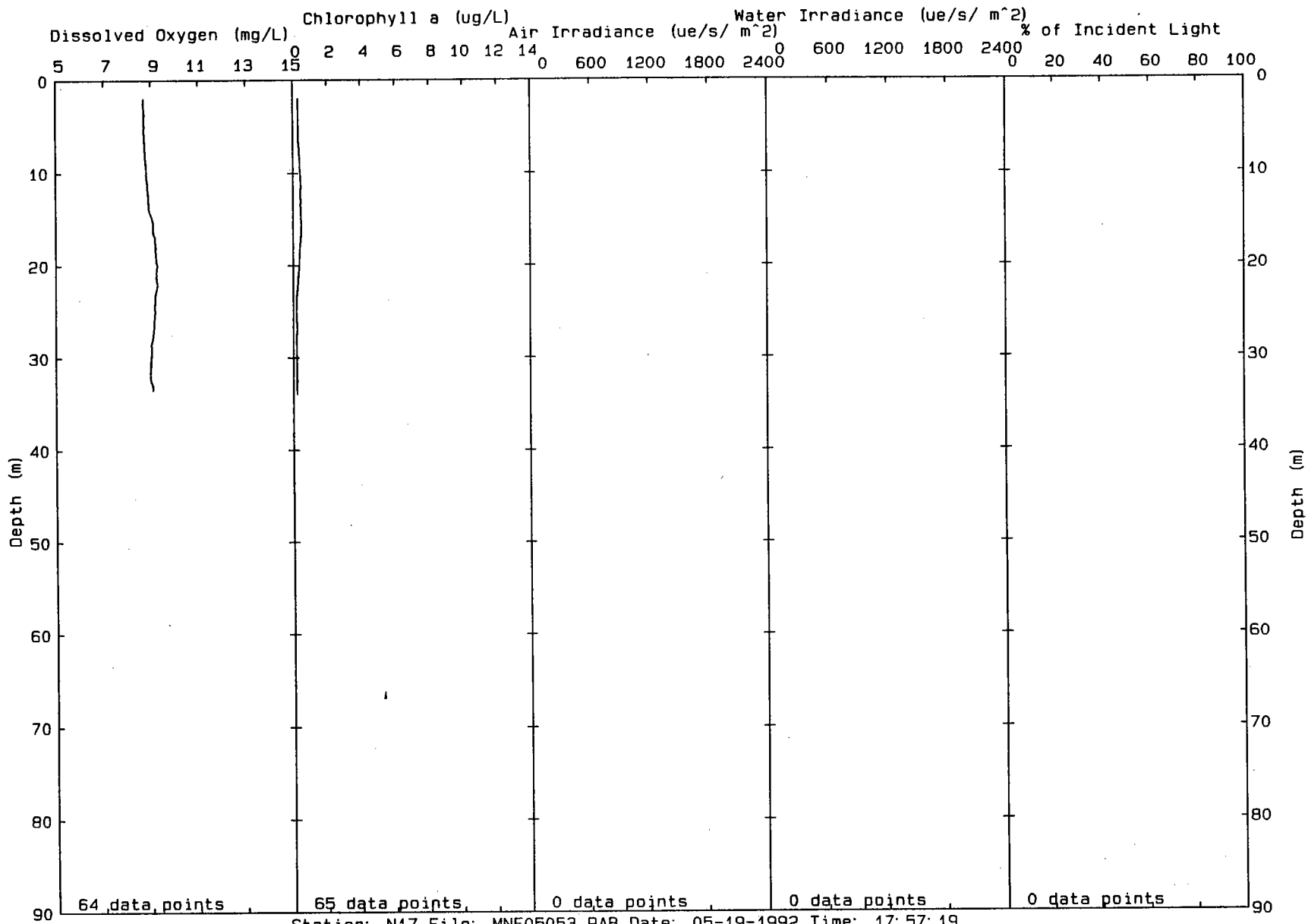
00239



00240

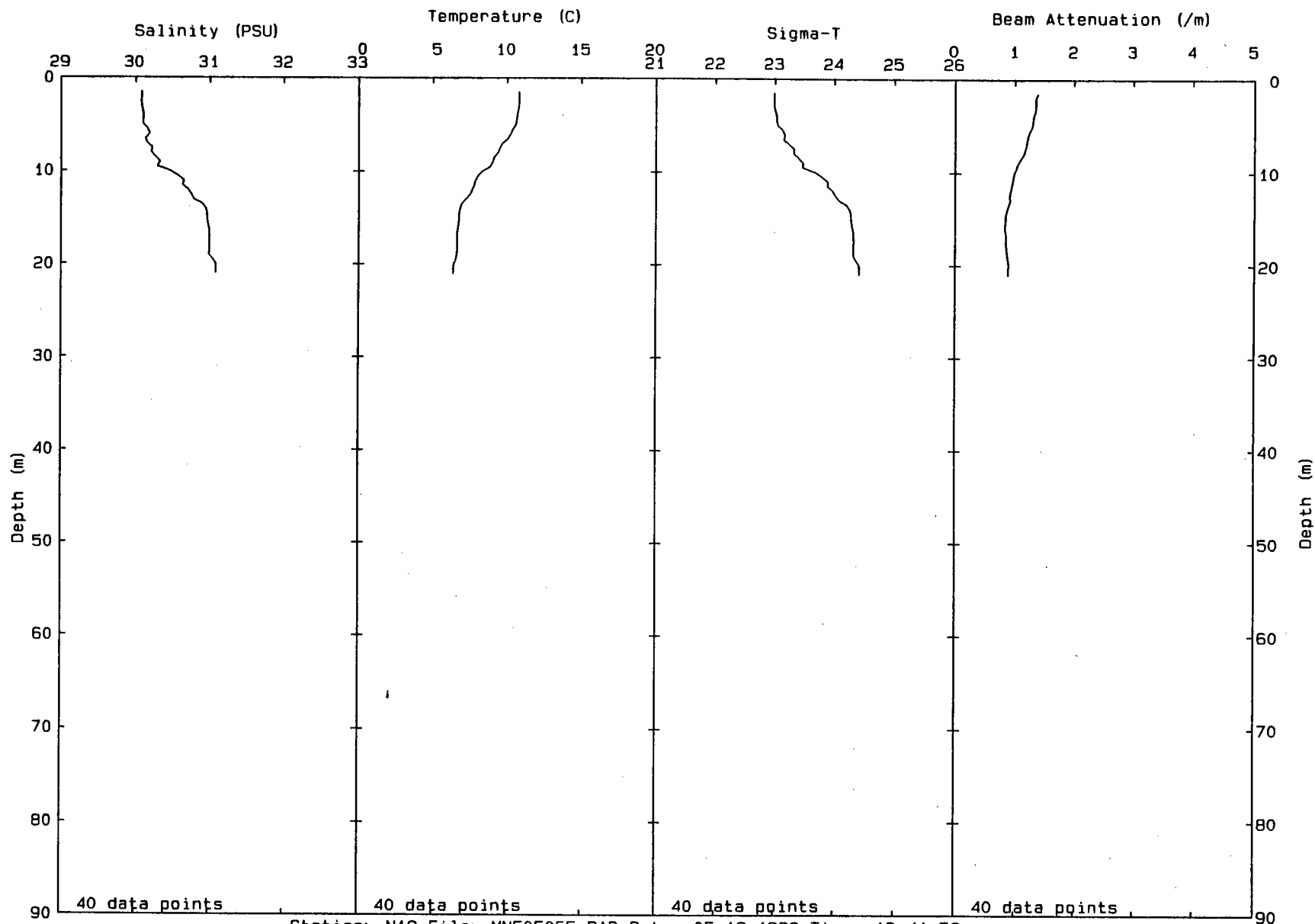


Station: N17 File: MNF05053.PAB Date: 05-19-1992 Time: 17: 57: 19



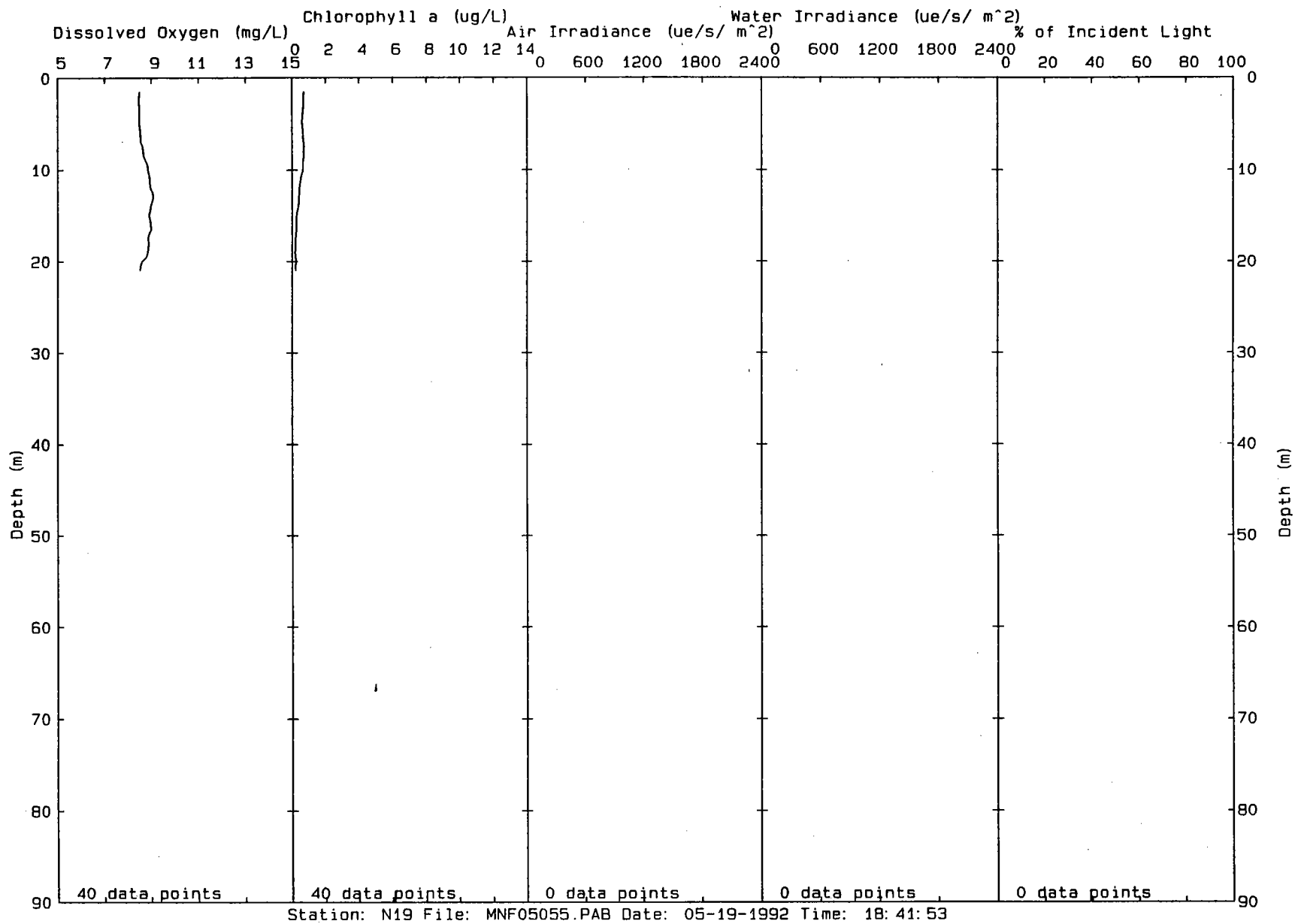
Station: N17 File: MNF05053.PAB Date: 05-19-1992 Time: 17:57:19

00241



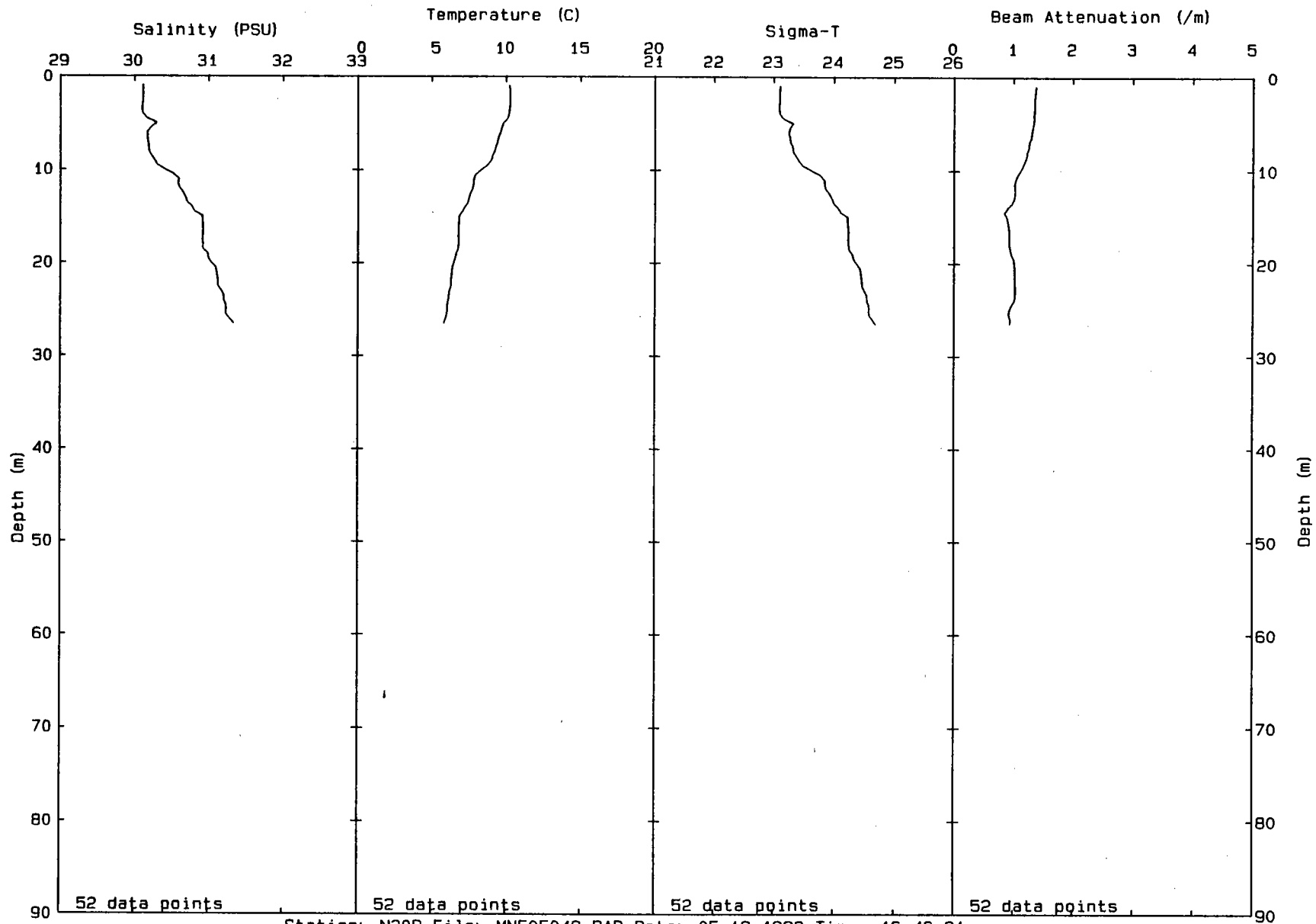
Station: N19 File: MNF05055.PAB Date: 05-19-1992 Time: 18:41:53

00242



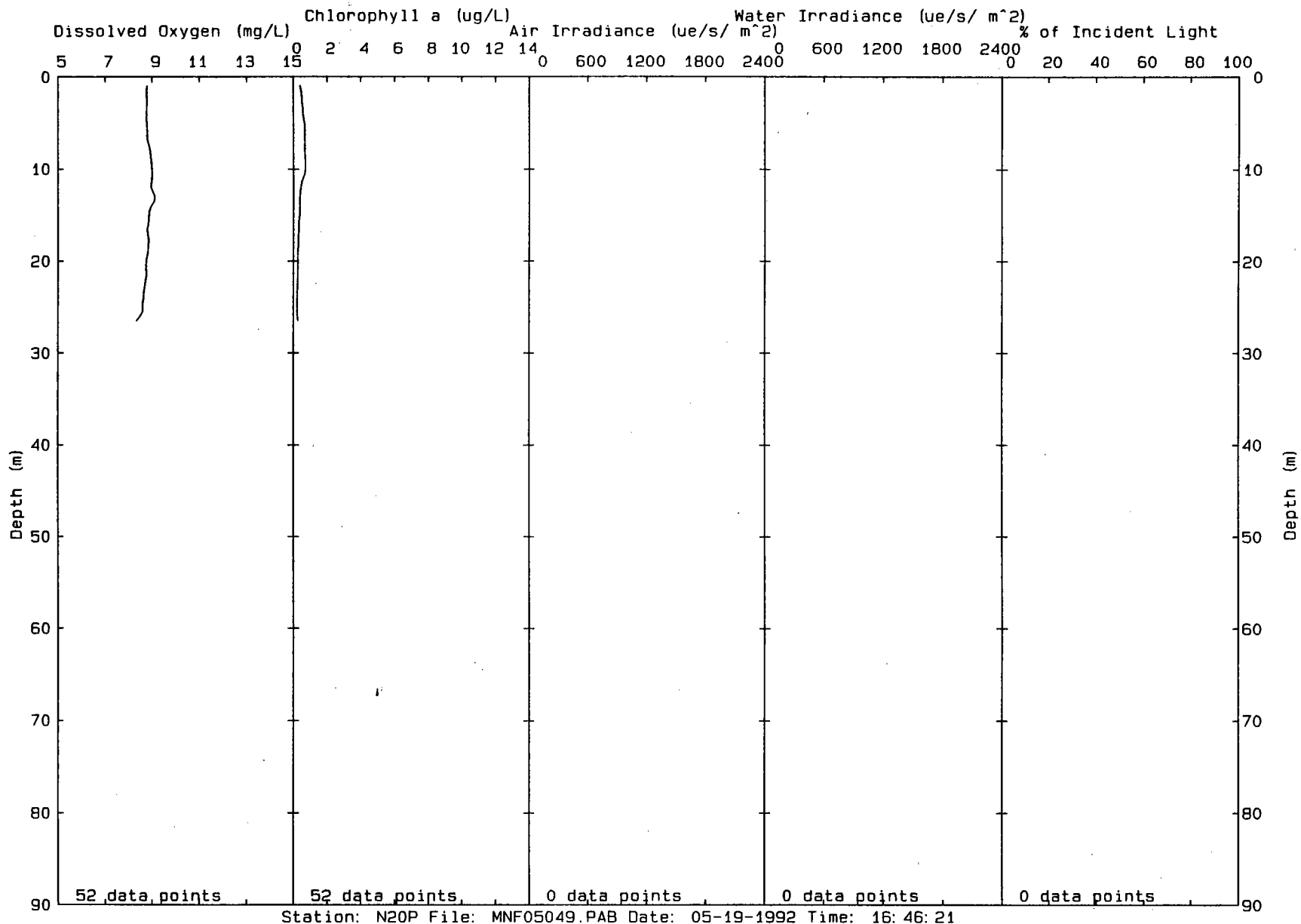
00243

00244



Station: N20P File: MNF05049.PAB Date: 05-19-1992 Time: 16:46:21

00245



**TABLE B-3. IRRADIANCE DATA FROM MAY 1992.**

<b>STATION</b>	<b>DATE</b>	<b>TIME</b>	<b>WIRE OUT</b>	<b>WIRE ANGLE<sup>a</sup></b>	<b>APPROX DEPTH<sup>b</sup></b>	<b>IN SITU LIGHT<sup>c</sup></b>	<b>DECK CELL<sup>d</sup></b>	<b>LIGHT/ DECK CELL</b>
N01P	5/19/92	10:54	AIR		AIR	2352.0	1650	1.425
N01P	5/19/92	10:54	1		1	1497.0	1650	0.907
N01P	5/19/92	10:54	2		2	1097.8	1650	0.665
N01P	5/19/92	10:54	3		3	798.4	1650	0.484
N01P	5/19/92	10:54	4		4	648.7	1650	0.393
N01P	5/19/92	10:54	5		5	429.1	1650	0.260
N01P	5/19/92	10:54	10		10	164.7	1425	0.116
N01P	5/19/92	10:54	15		15	67.9	1650	0.041
N01P	5/19/92	10:54	20		20	34.9	1650	0.021
N01P	5/19/92	10:54	25		25	12.5	1688	0.007
N04P	5/19/92	13:25	AIR		AIR	2469.6	2063	1.197
N04P	5/19/92	13:25	1		1	1696.6	2063	0.823
N04P	5/19/92	13:25	2		2	1197.6	2063	0.581
N04P	5/19/92	13:25	3		3	898.2	2063	0.435
N04P	5/19/92	13:25	4		4	598.8	2063	0.290
N04P	5/19/92	13:25	5		5	598.8	2063	0.290
N04P	5/19/92	13:25	10		10	299.4	2063	0.145
N04P	5/19/92	13:25	15		15	149.7	2063	0.073
N04P	5/19/92	13:25	20		20	64.9	2063	0.031
N04P	5/19/92	13:25	25		25	27.9	2025	0.014

00246

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
N04P	5/19/92	13:25	30		30	20.0	2025	0.010
N04P	5/19/92	13:25	35		35	11.5	1988	0.006
N04P	5/19/92	13:25	40		40	7.5	1988	0.004
N07P	5/19/92	16:08	AIR		AIR	2234.4	1425	1.568
N07P	5/19/92	16:08	1		1	1097.8	1425	0.770
N07P	5/19/92	16:08	2		2	798.4	1388	0.575
N07P	5/19/92	16:08	3		3	648.7	1425	0.455
N07P	5/19/92	16:08	4		4	499.0	1425	0.350
N07P	5/19/92	16:08	5		5	399.2	1425	0.280
N07P	5/19/92	16:08	10		10	159.7	1500	0.106
N07P	5/19/92	16:08	15		15	62.9	1463	0.043
N07P	5/19/92	16:08	20		20	25.9	1463	0.018
N07P	5/19/92	16:08	25		25	11.5	1500	0.008
N07P	5/19/92	16:08	30		30	4.0	1463	0.003
N07P	5/19/92	16:08	35		35	3.2	1463	0.002
N10P	5/19/92	08:01	AIR		AIR	2352.0	938	2.509
N10P	5/19/92	08:01	1		1	898.2	1050	0.855
N10P	5/19/92	08:01	2		2	499.0	1050	0.475
N10P	5/19/92	08:01	3		3	349.3	1050	0.333
N10P	5/19/92	08:01	4		4	249.5	1050	0.238
N10P	5/19/92	08:01	5		5	139.7	1013	0.138

00247

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
N10P	5/19/92	08:01	10		10	25.0	1013	0.025
N10P	5/19/92	08:01	15		15	6.0	975	0.006
N10P	5/19/92	08:01	20		20	1.2	1013	0.001

<sup>a</sup> The wire angle was visually estimated: the table value represents the mid-point of a range if thus recorded. Usually, no entry was recorded if angle was <15 degrees.

<sup>b</sup> Approximate depth = wireout (cos  $\theta$ ) where  $\theta$  = wire angle visually estimated.

<sup>c</sup> The meter/( $4\pi$ , spherical) sensor pair reading was corrected to provide the actual light values in air and underwater. The recorded reading in air was multiplied by 0.588 and the recorded reading in water was multiplied by 0.998. These factors were based upon post-cruise calibration of the meter/sensor pair. Units are  $\mu$ Einsteins/m<sup>2</sup>/sec, as for deck cell.

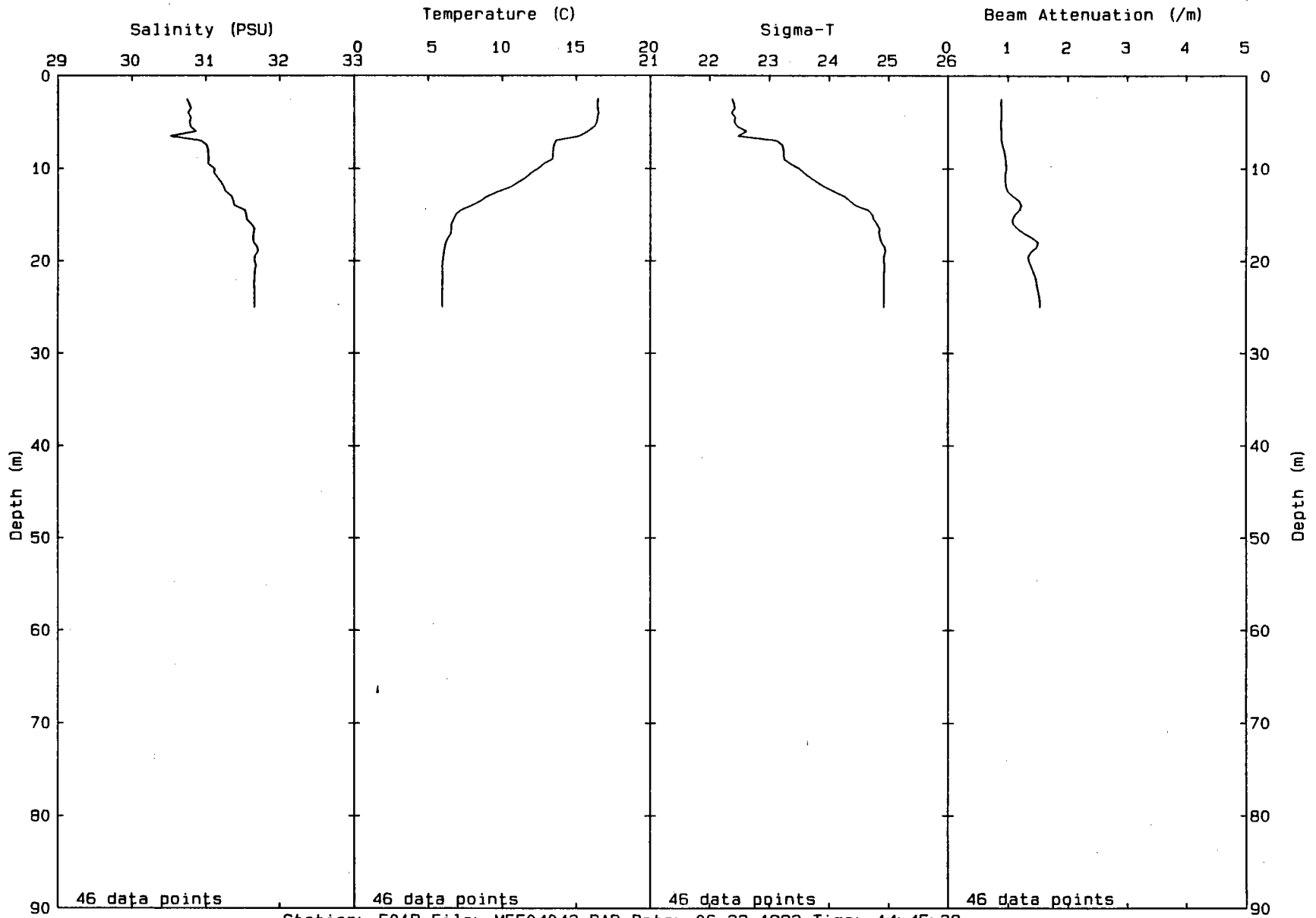
<sup>d</sup> Deck cell (cosine sensor, flat plane) readings were made using an uncalibrated meter sensor pair. Post-cruise calibration was performed; recorded readings of this sensor-meter pair were multiplied by 0.75 to arrive at actual values in air. Only one meter (box) was available for this cruise, so sensors were alternatively read for each depth. As overhead light was not fluctuating much at a station, paired readings are fairly reliable.

00248

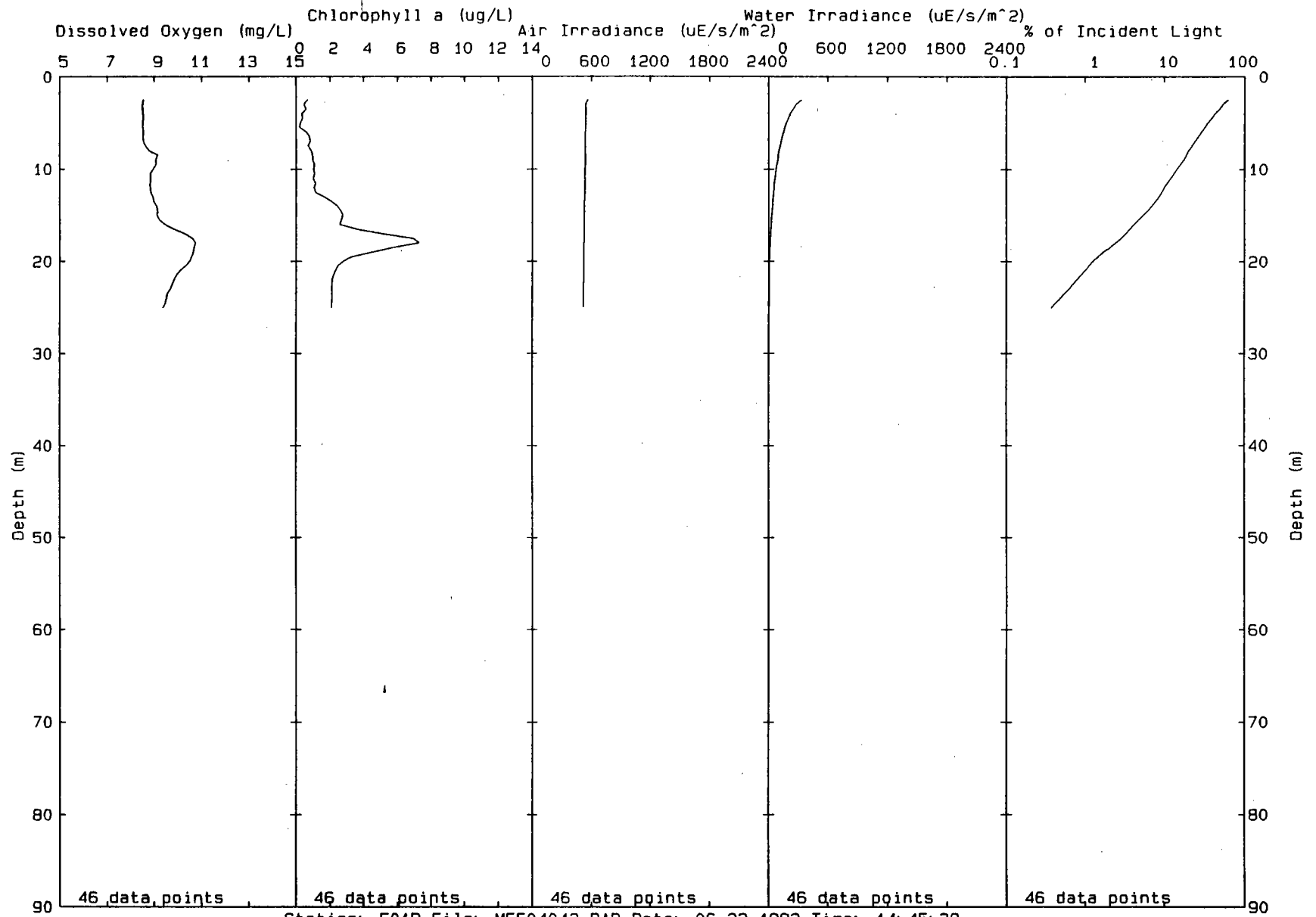
**June Profiles**

**00249**

00250

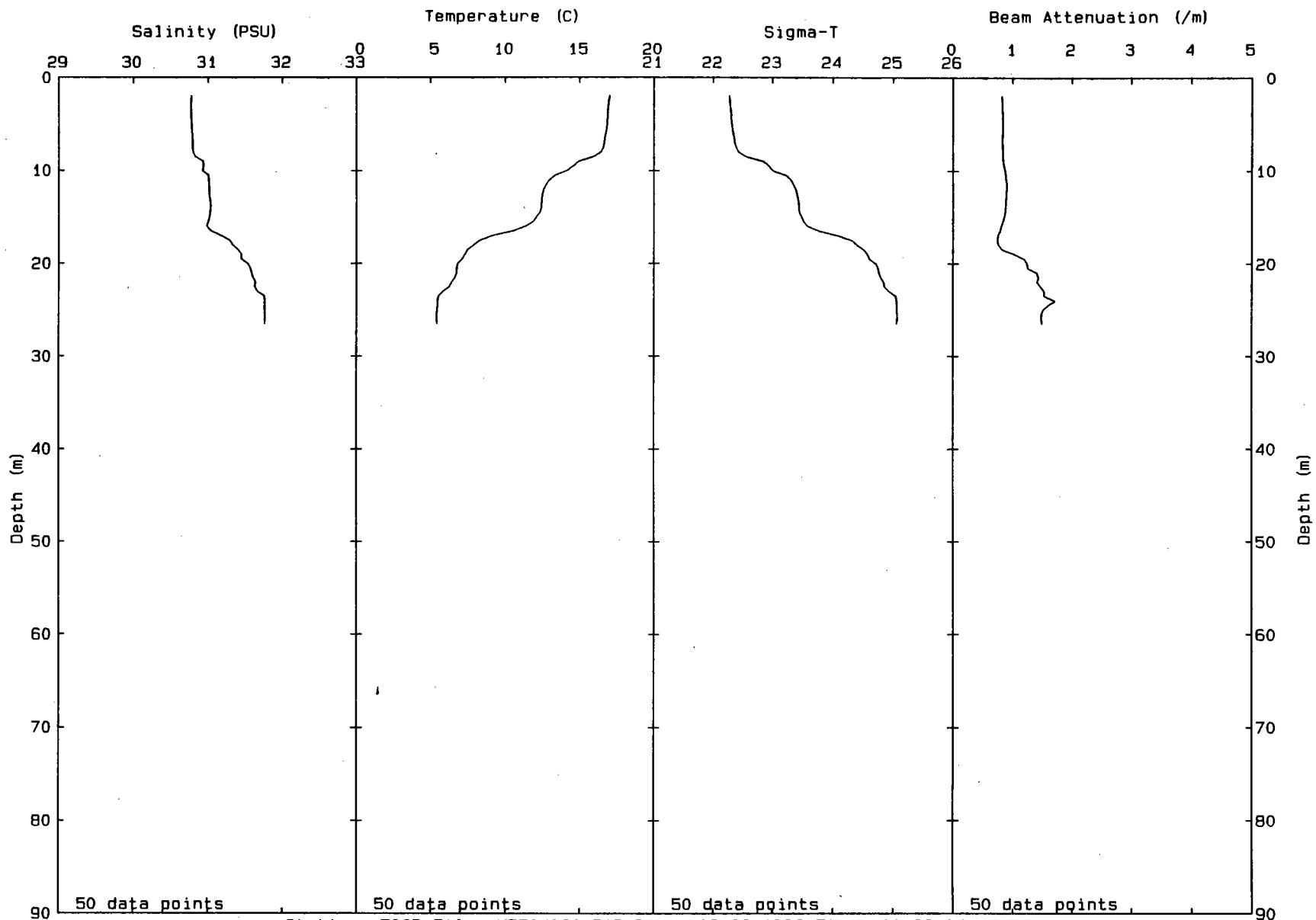


Station: F01P File: MFF04042.PAB Date: 06-22-1992 Time: 14: 45: 39

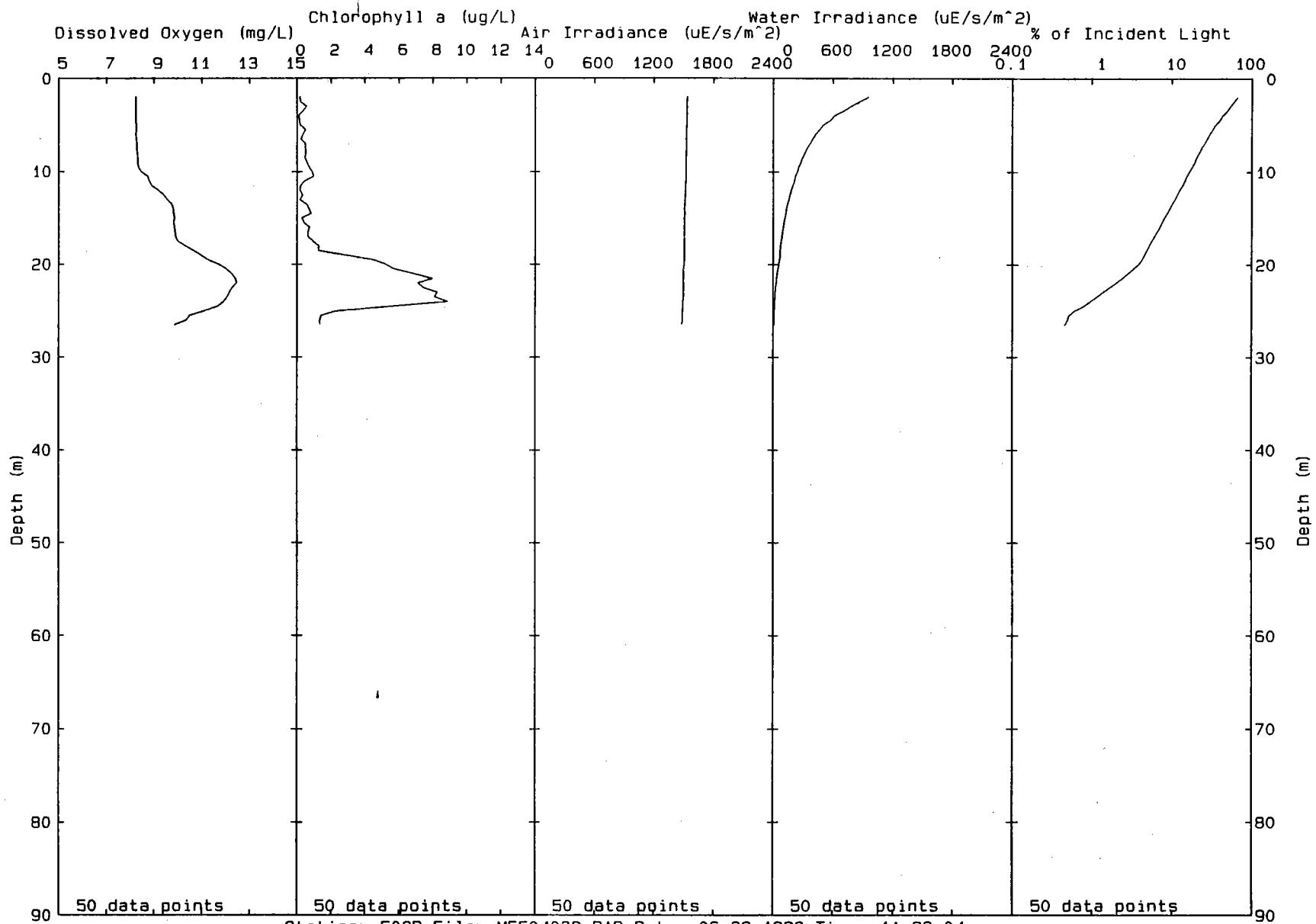


00251

00252

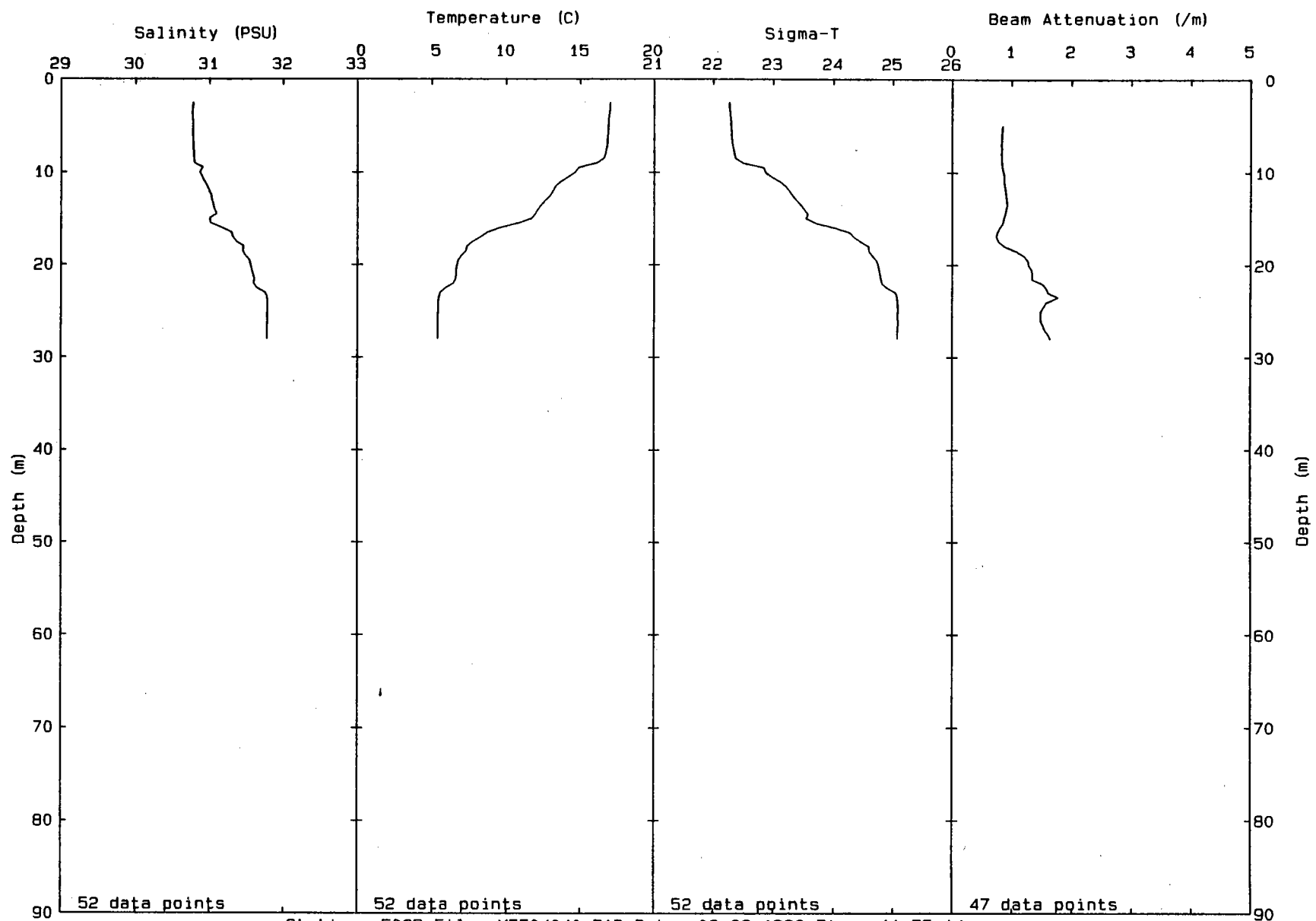


Station: F02P File: MFF04038.PAB Date: 06-22-1992 Time: 11:23:04



Station: F02P File: MFF04038.PAB Date: 06-22-1992 Time: 11:23:04

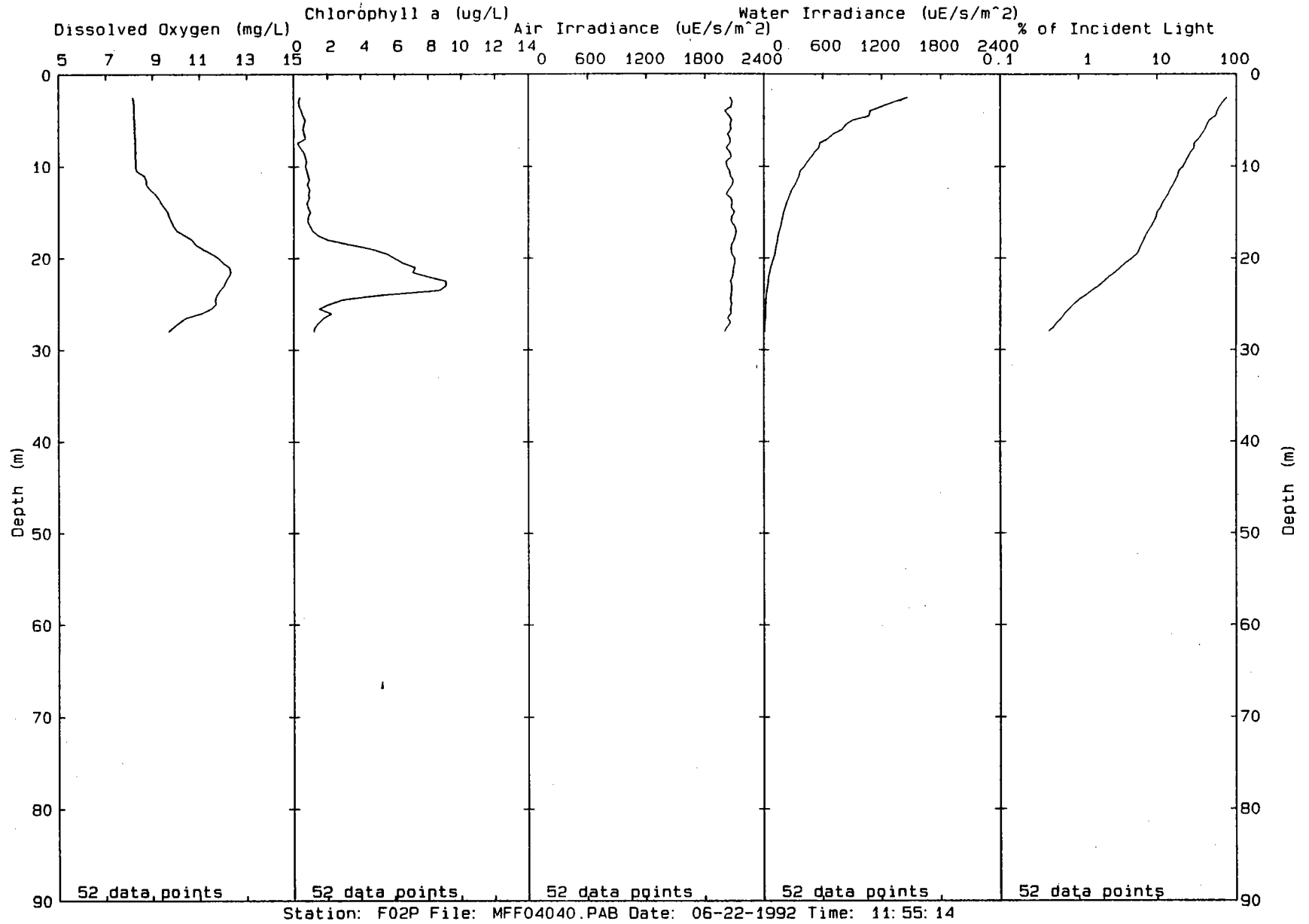
00253



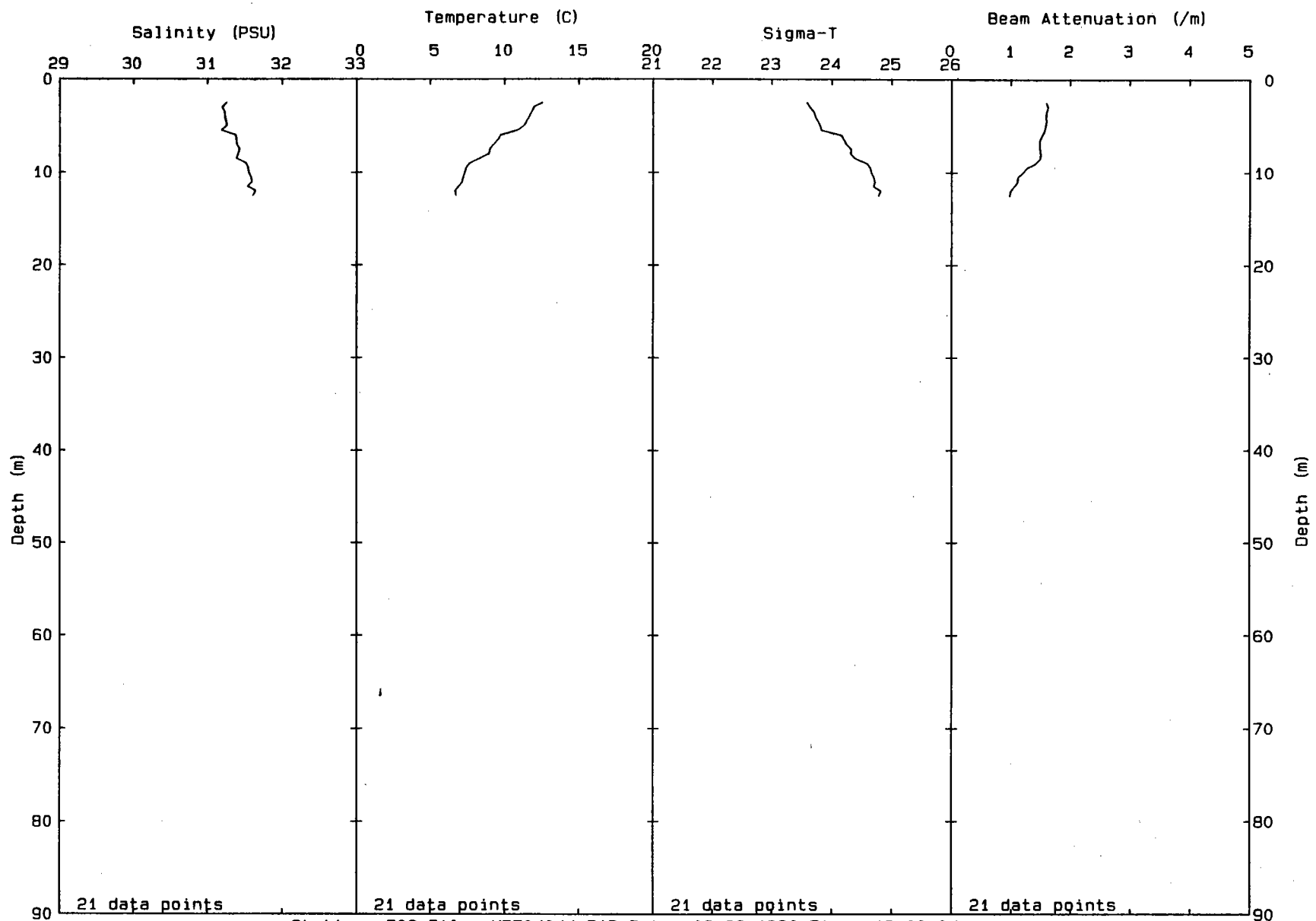
Station: F02P File: MFF04040.PAB Date: 06-22-1992 Time: 11:55:14

00254

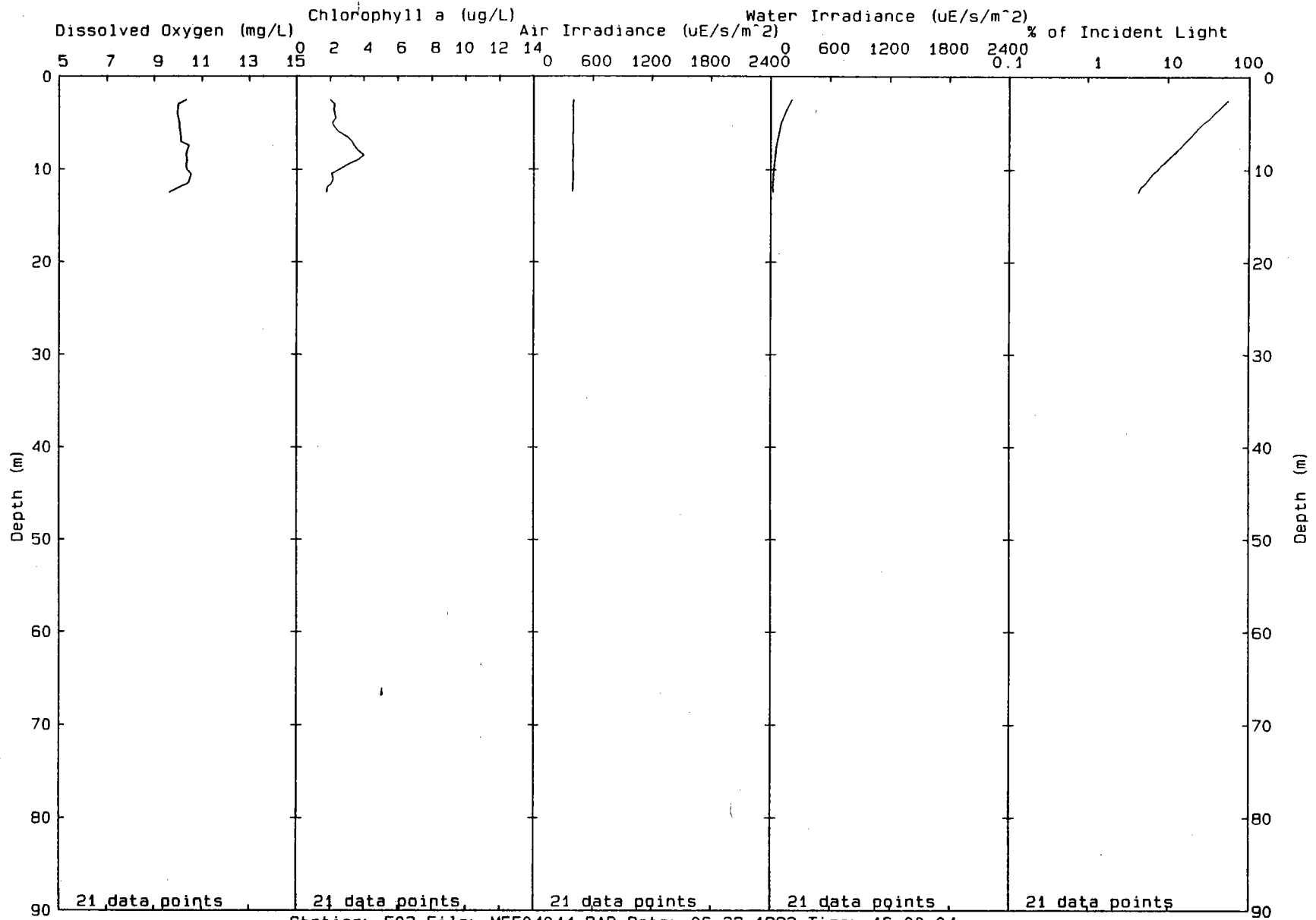
00255



00256

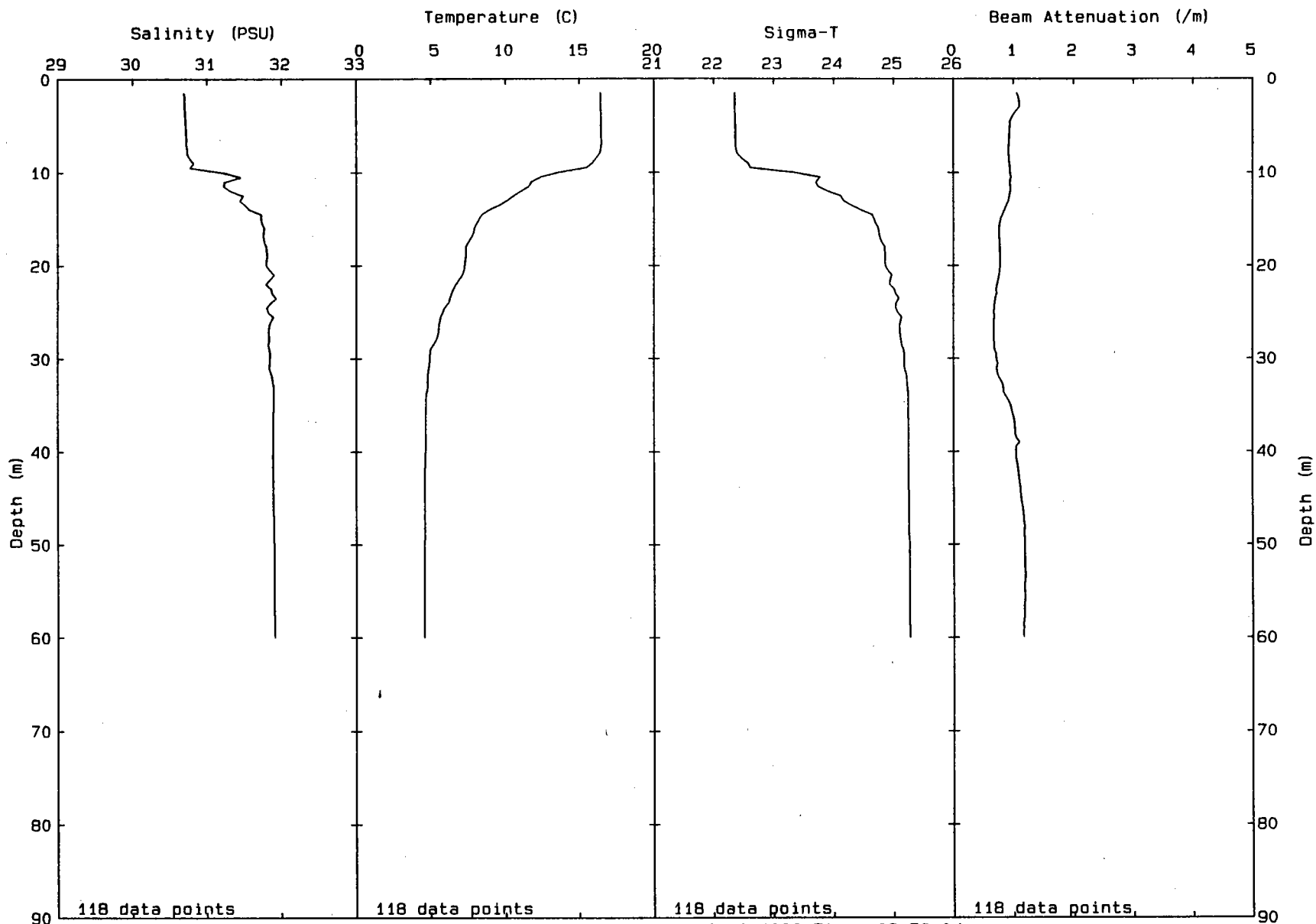


Station: F03 File: MFF04044.PAB Date: 06-22-1992 Time: 16:00:04



Station: F03 File: MFF04044.PAB Date: 06-22-1992 Time: 16: 00: 04

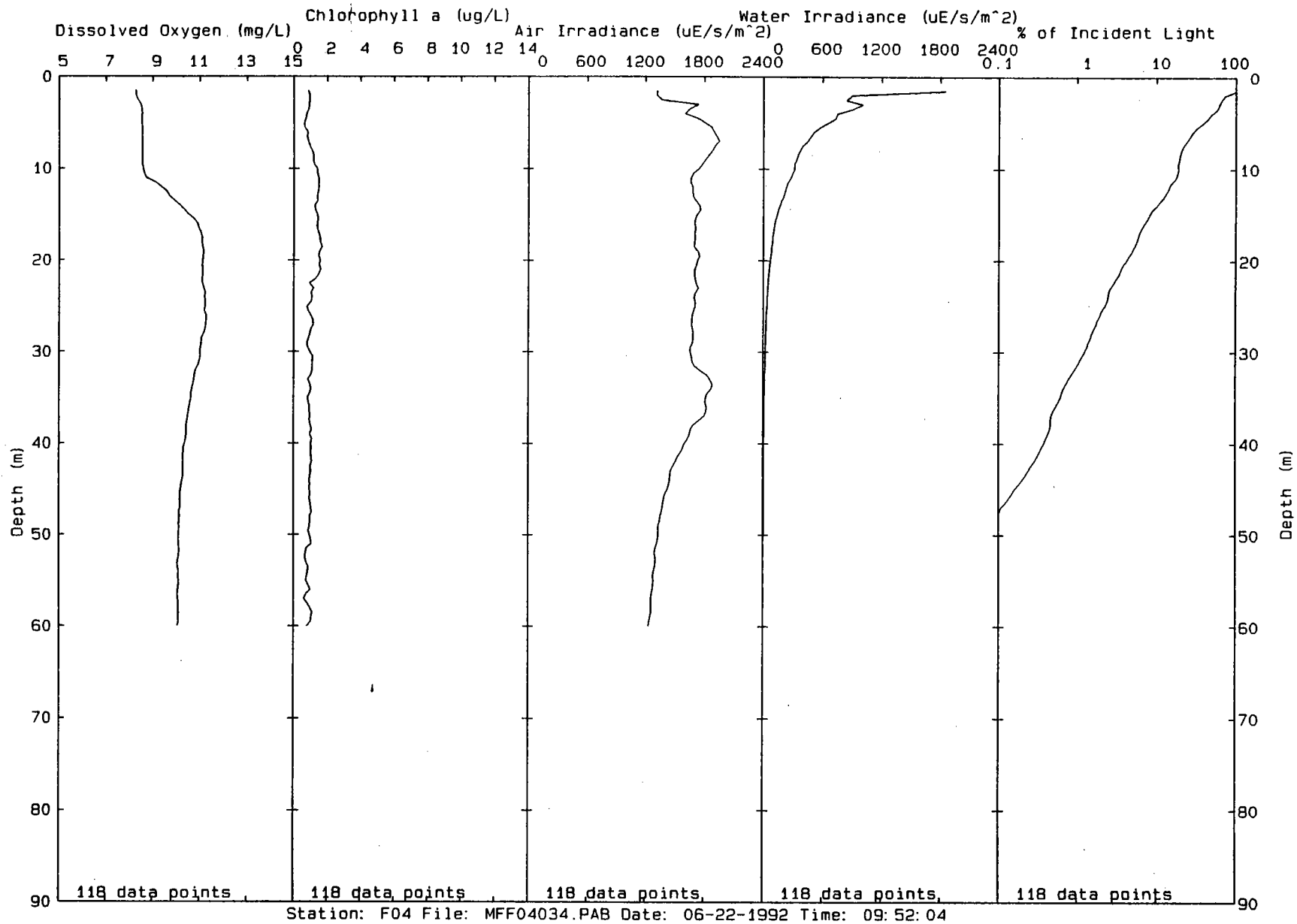
00257



Station: F04 File: MFF04034.PAB Date: 06-22-1992 Time: 09: 52: 04

00258



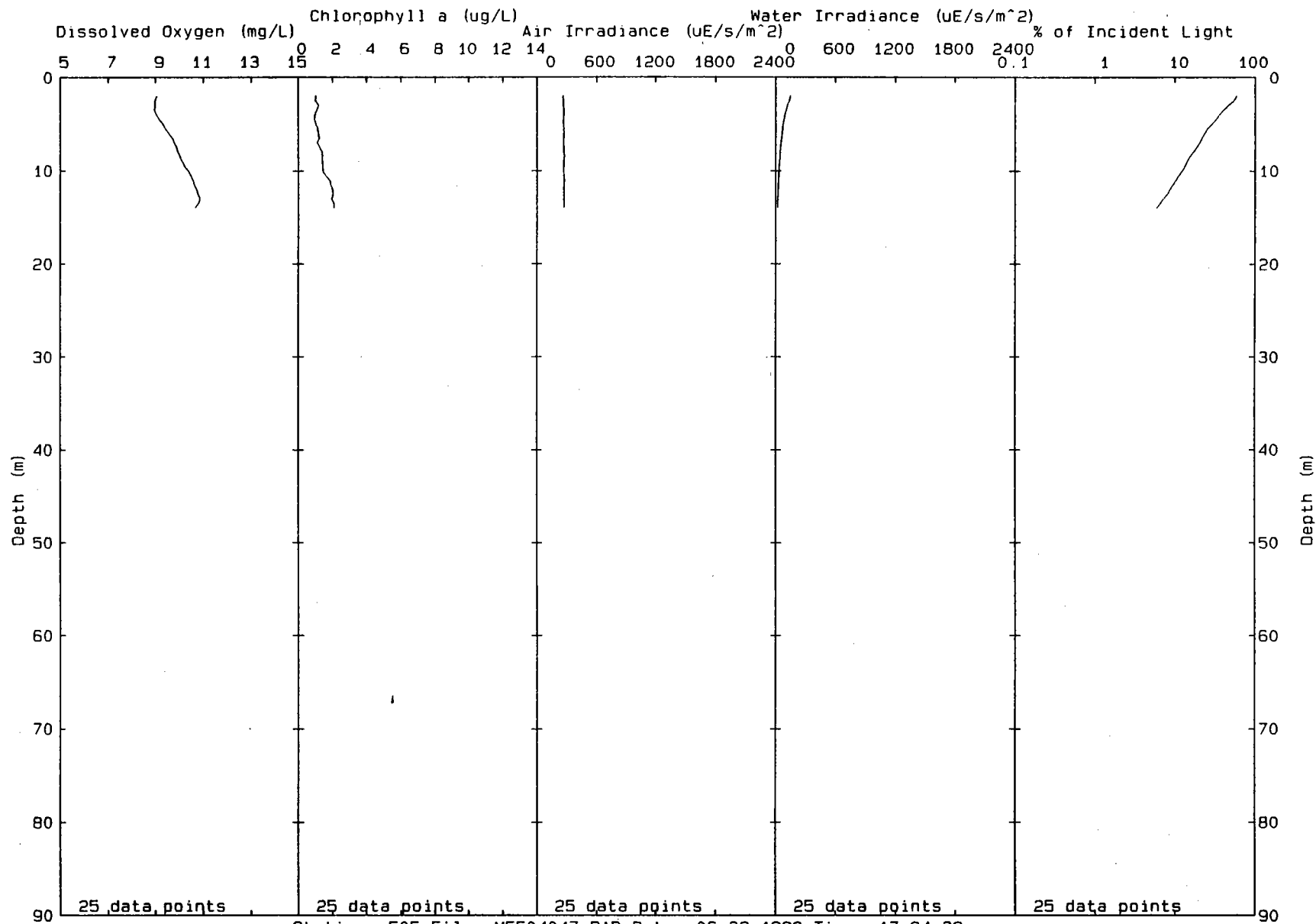


00259

00260



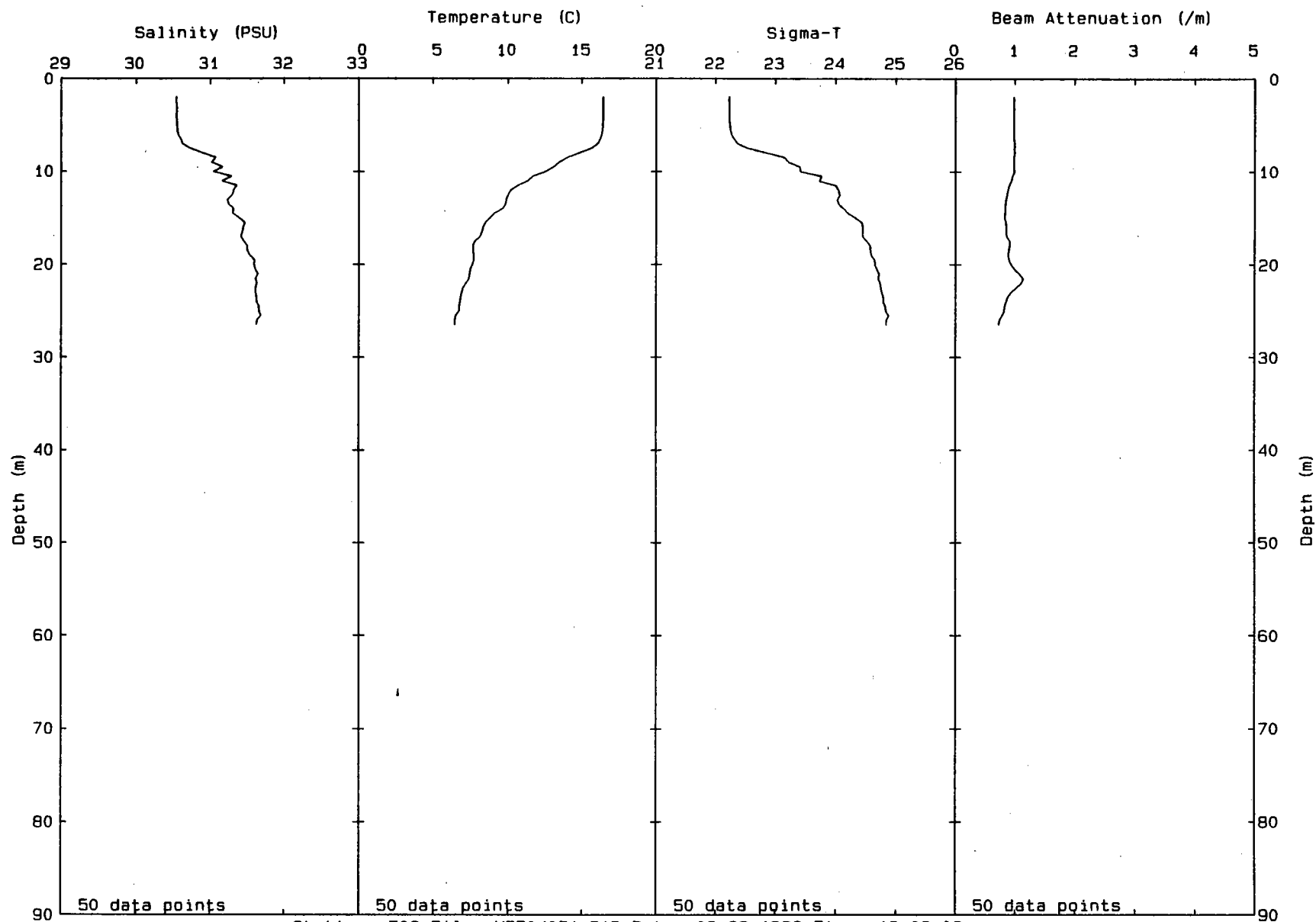
Station: F05 File: MFF04047.PAB Date: 06-22-1992 Time: 17: 24: 32



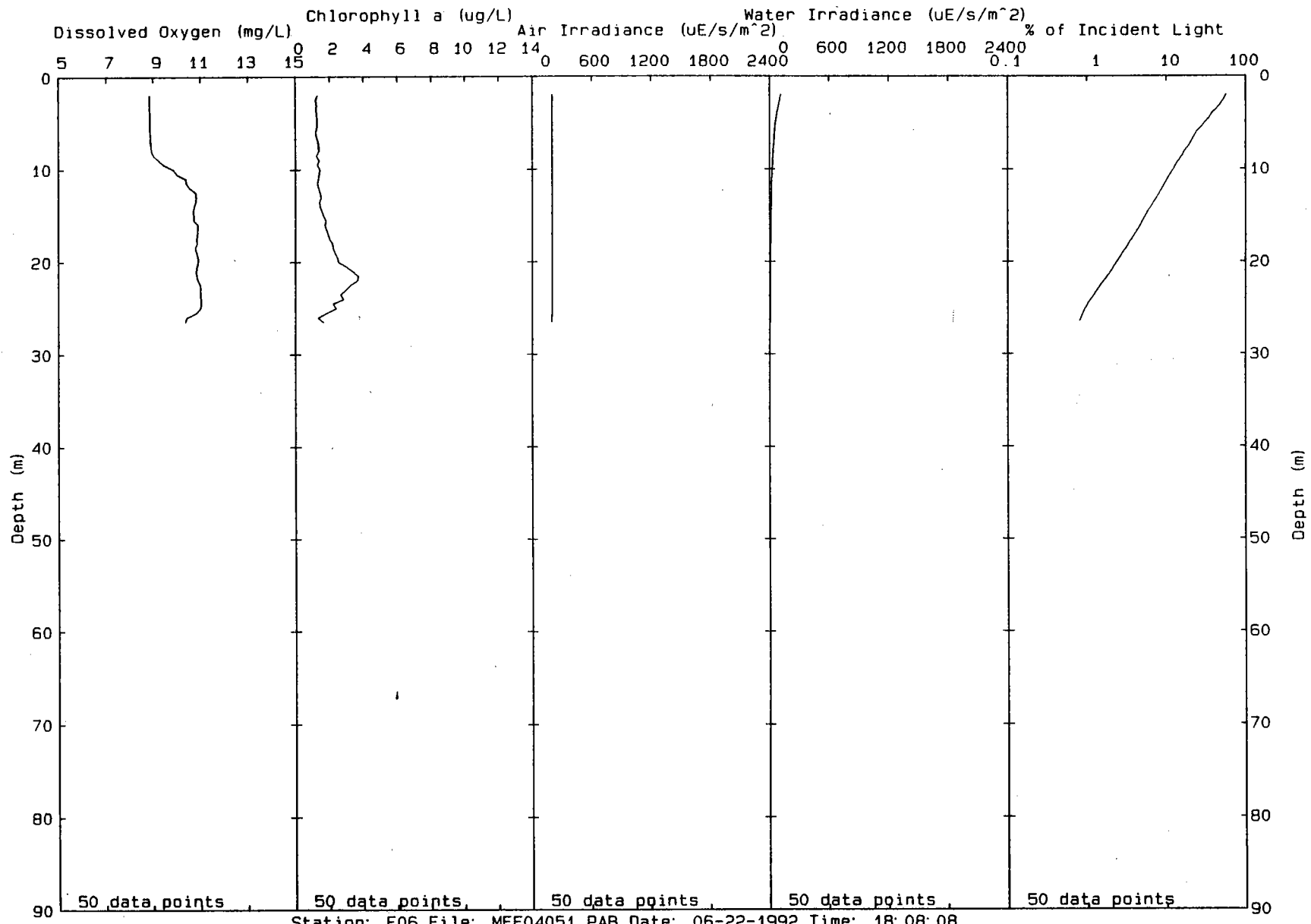
Station: F05 File: MFF04047.PAB Date: 06-22-1992 Time: 17:24:32

00261

00262

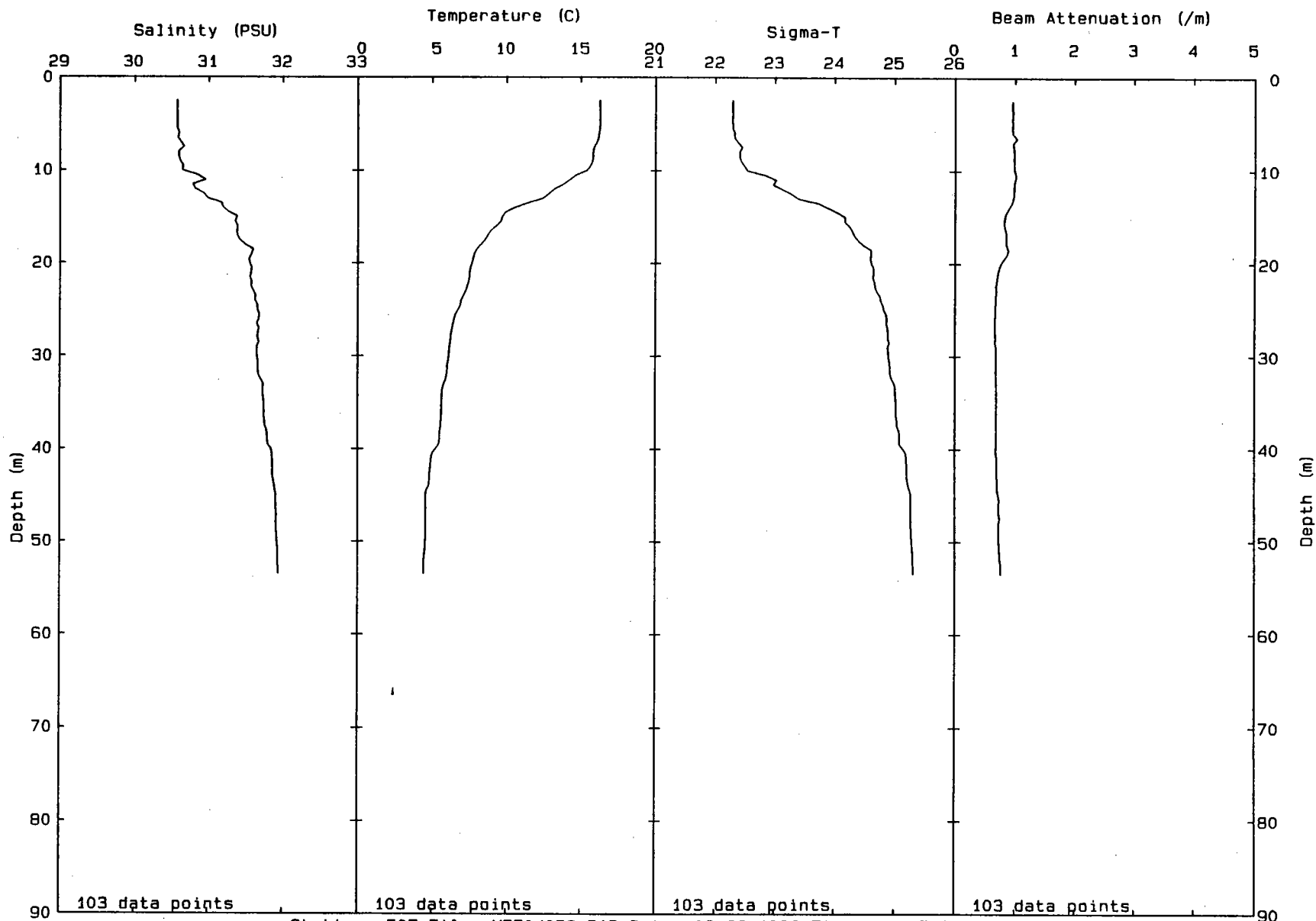


Station: F06 File: MFF04051.PAB Date: 06-22-1992 Time: 18:08:08



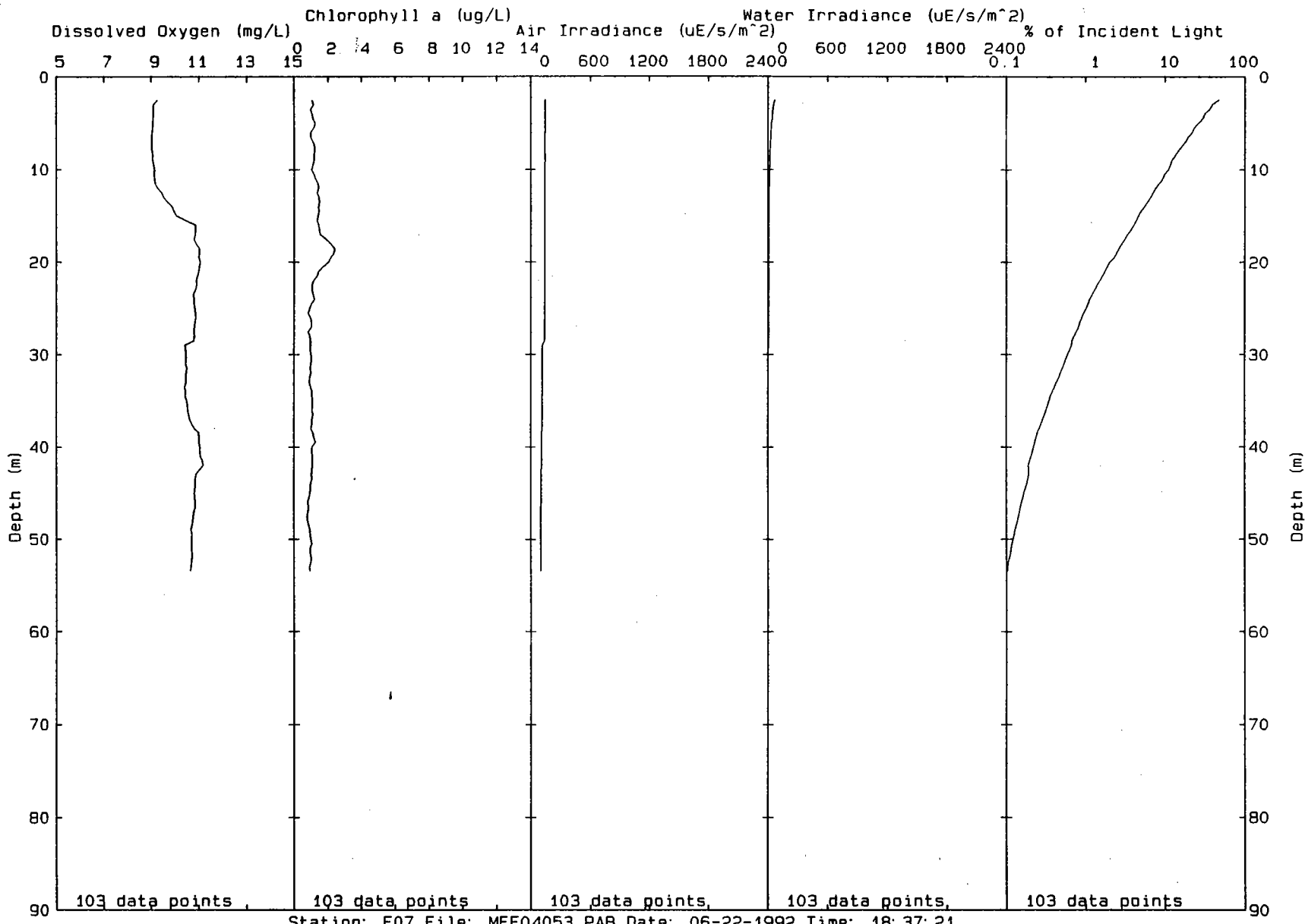
Station: F06 File: MFF04051.PAB Date: 06-22-1992 Time: 18:08:08

00263



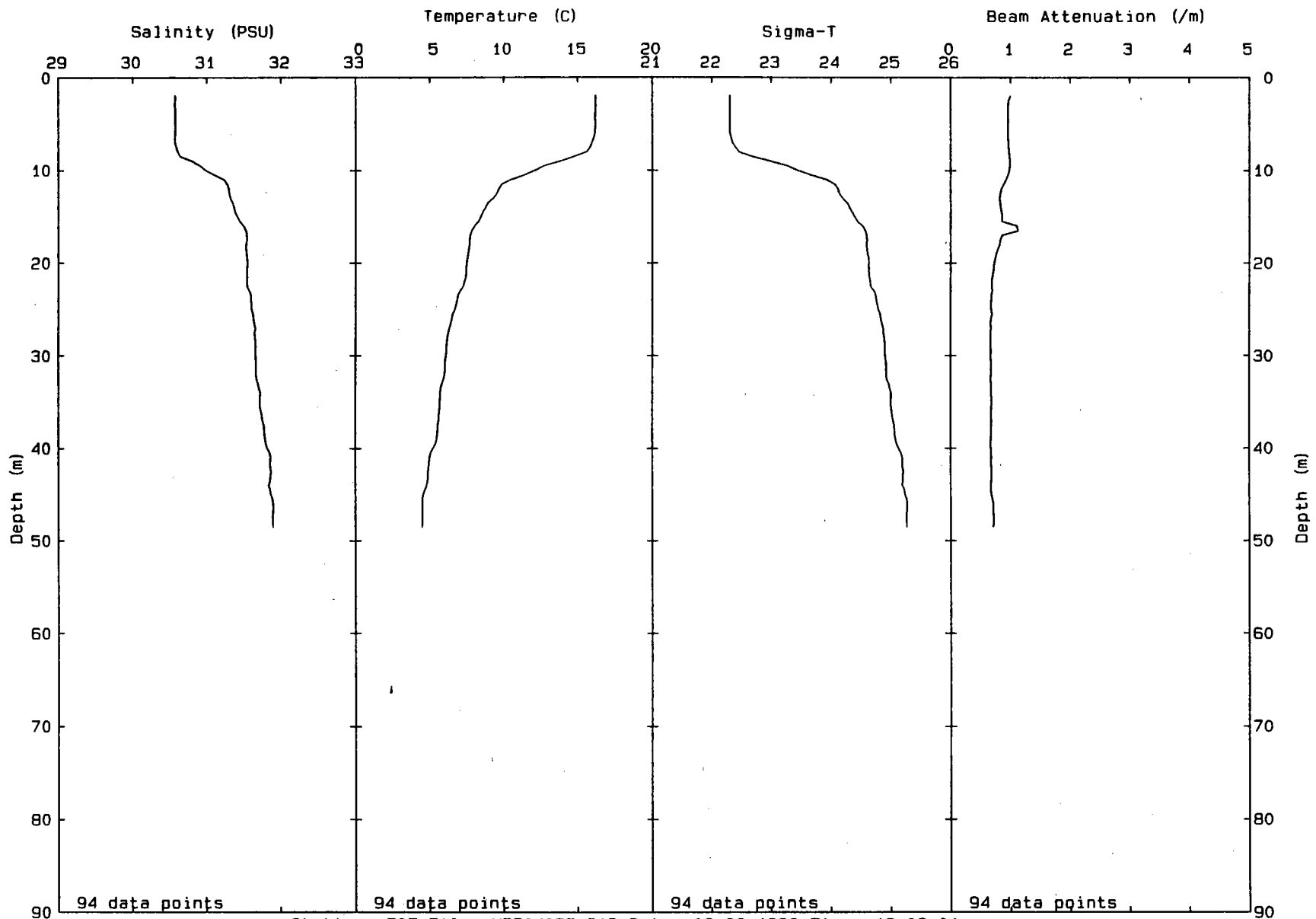
Station: F07 File: MFF04053.PAB Date: 06-22-1992 Time: 18:37:21

00264



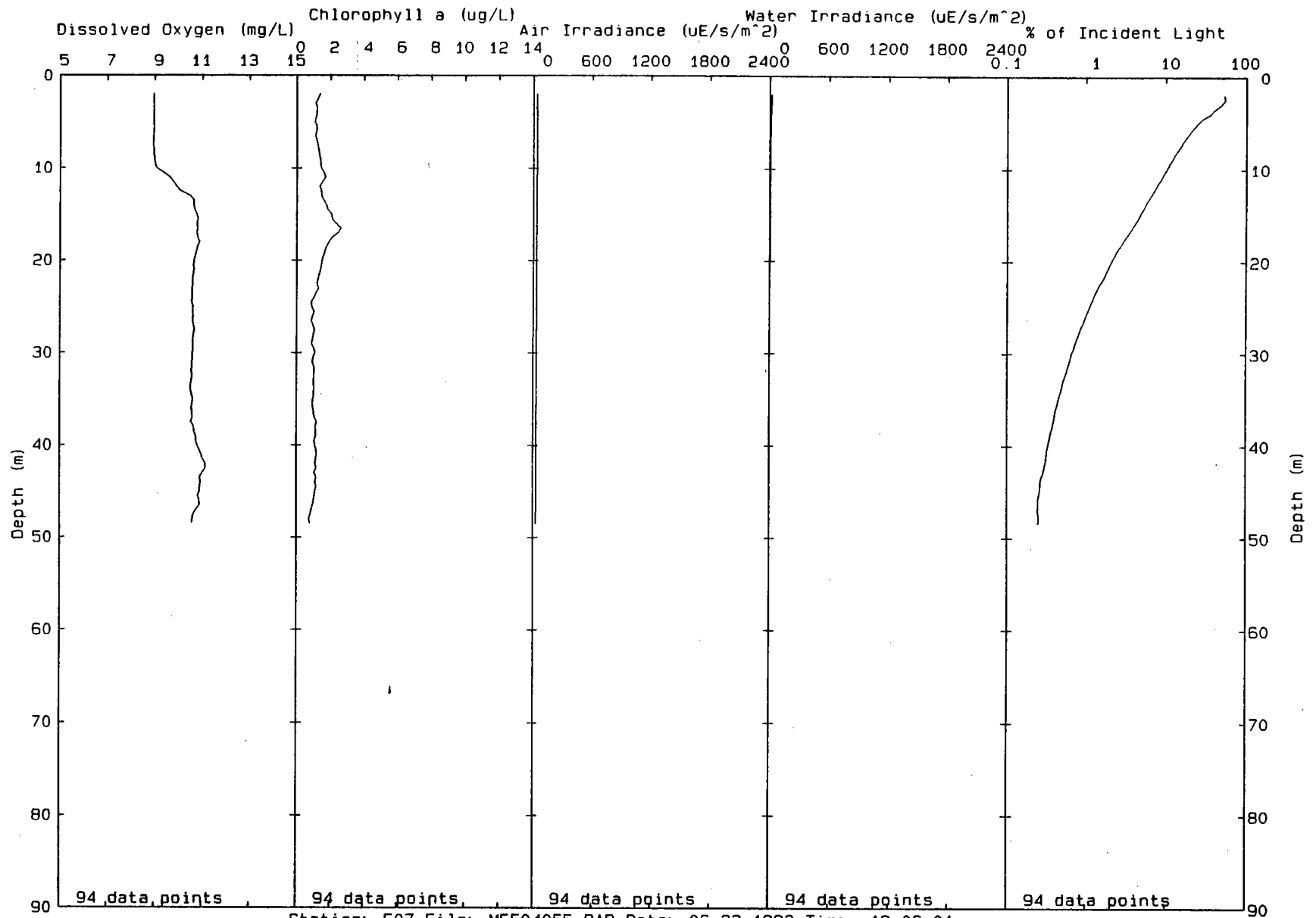
Station: F07 File: MFF04053.PAB Date: 06-22-1992 Time: 18:37:21

00265



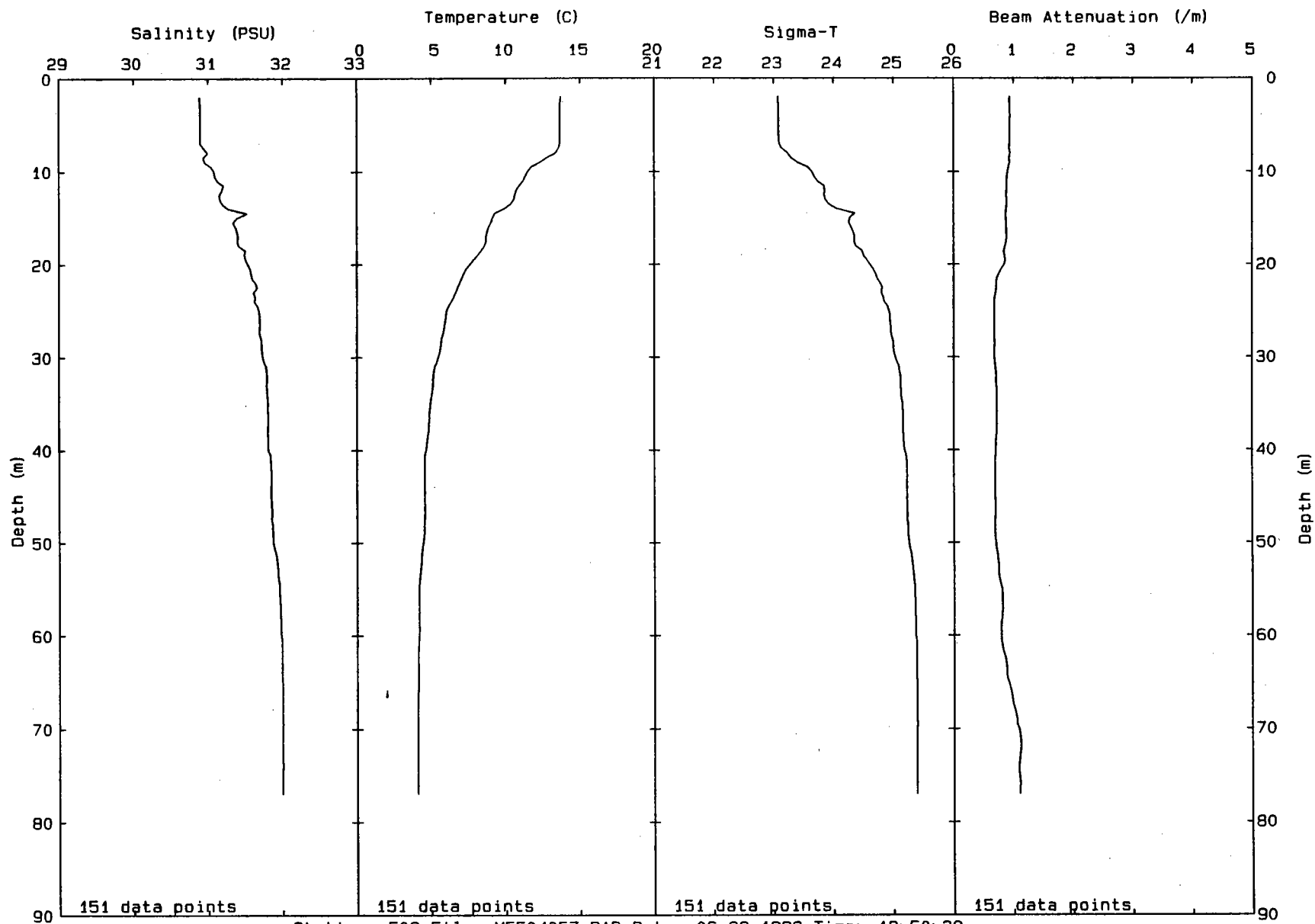
Station: F07 File: MFF04055.PAB Date: 06-22-1992 Time: 19:06:01

00266



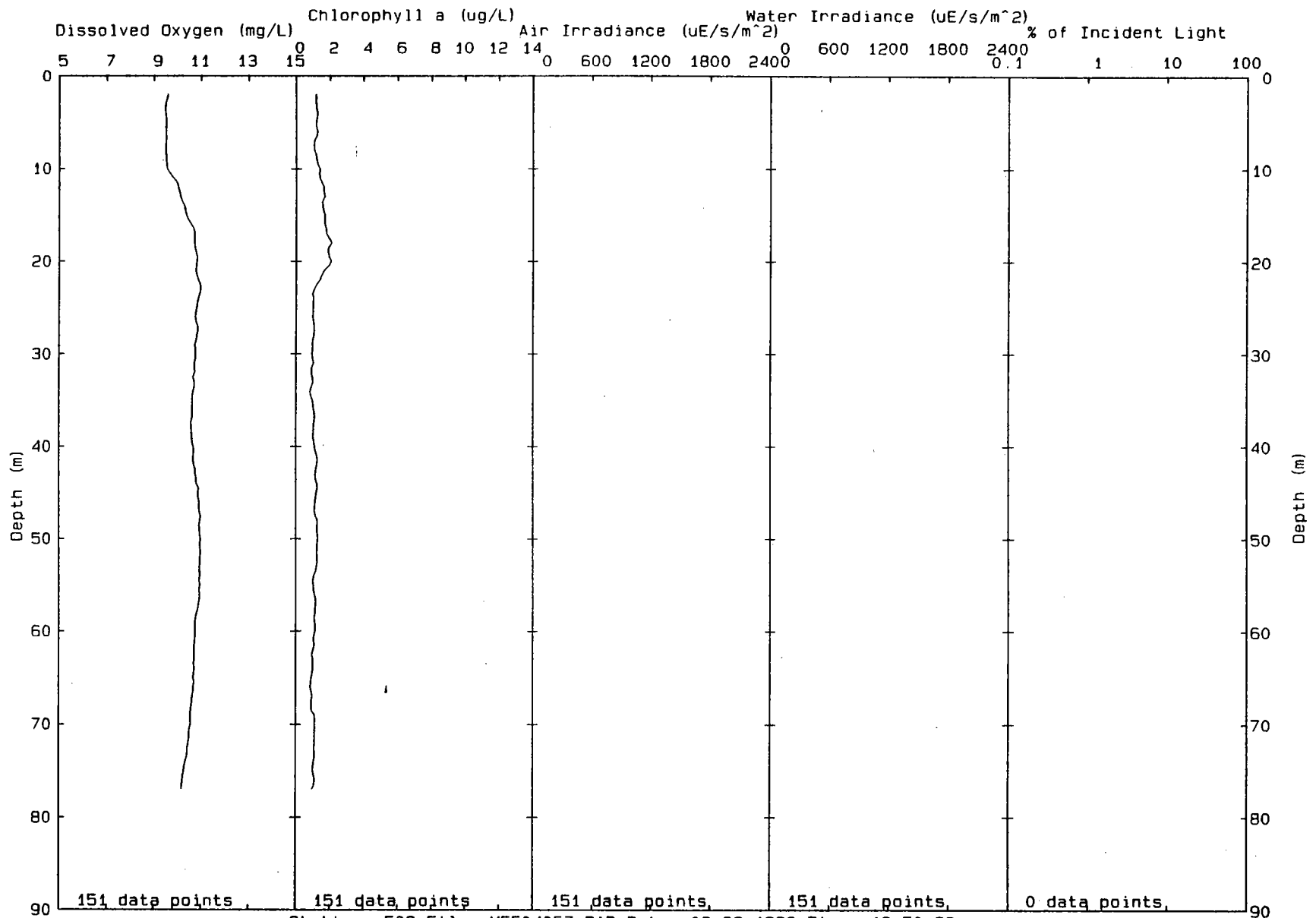
Station: F07 File: MFF04055.PAB Date: 06-22-1992 Time: 19:06:01

00267



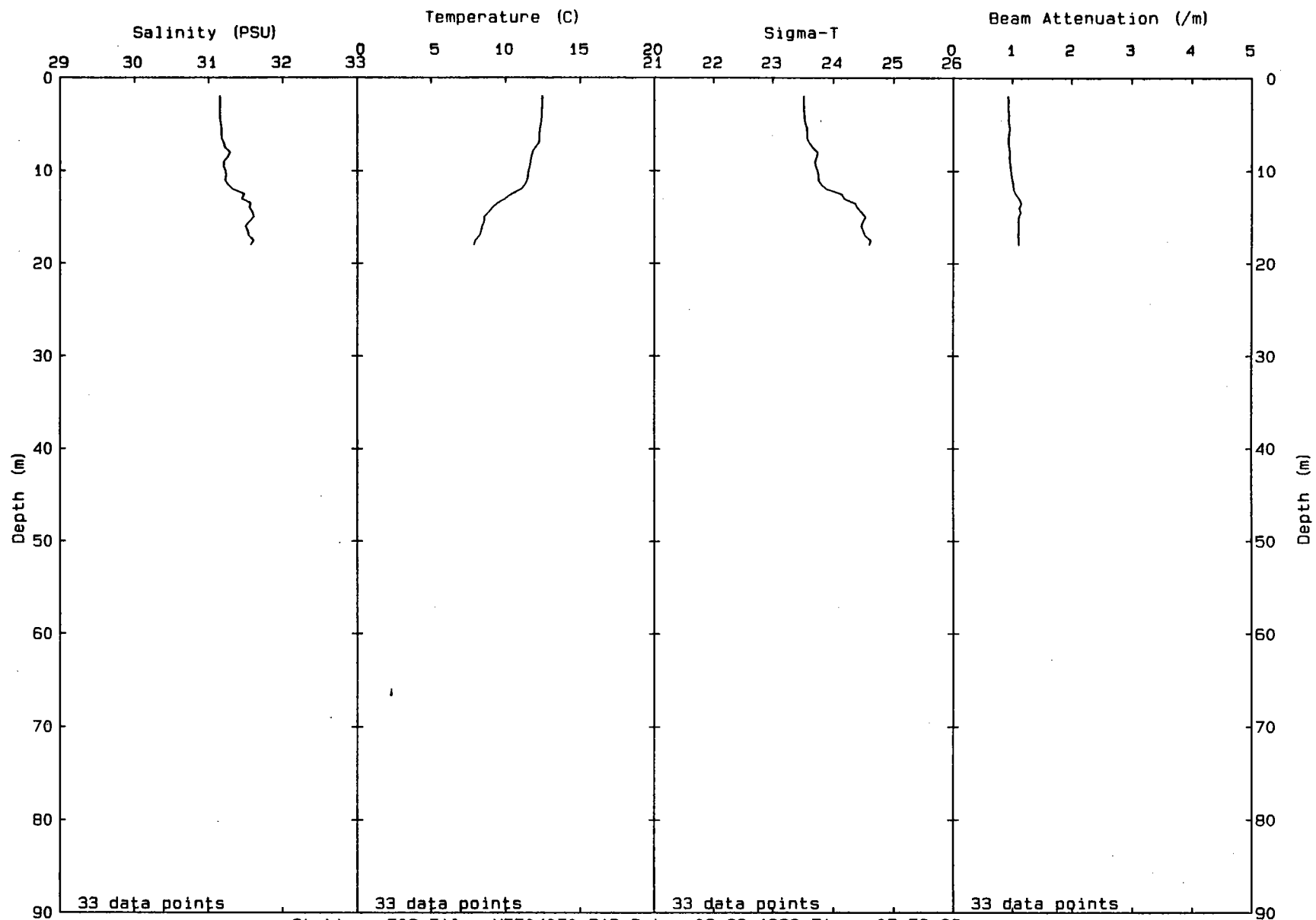
Station: F08 File: MFF04057.PAB Date: 06-22-1992 Time: 19:50:38

00268



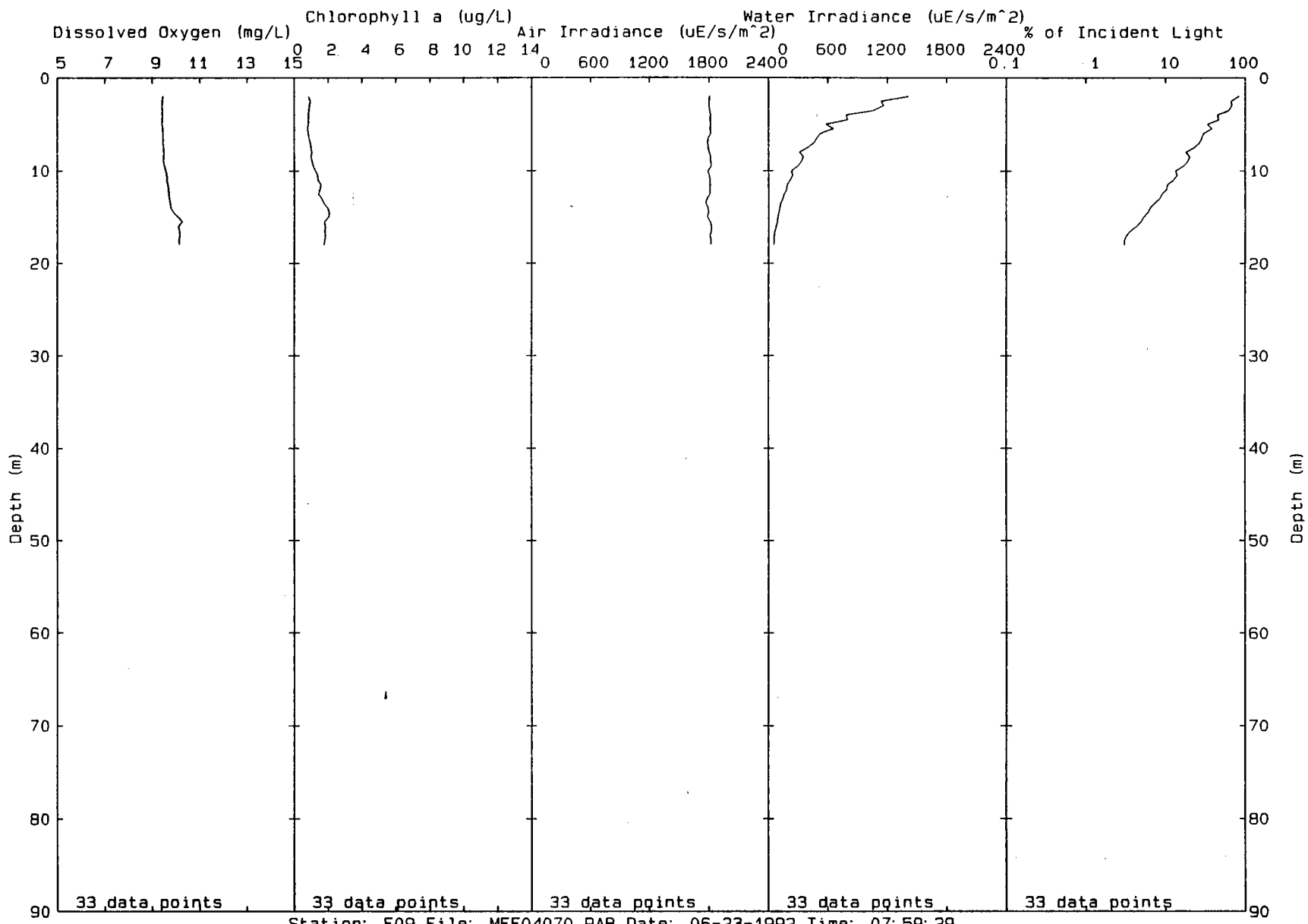
Station: F08 File: MFF04057.PAB Date: 06-22-1992 Time: 19:50:38

00269



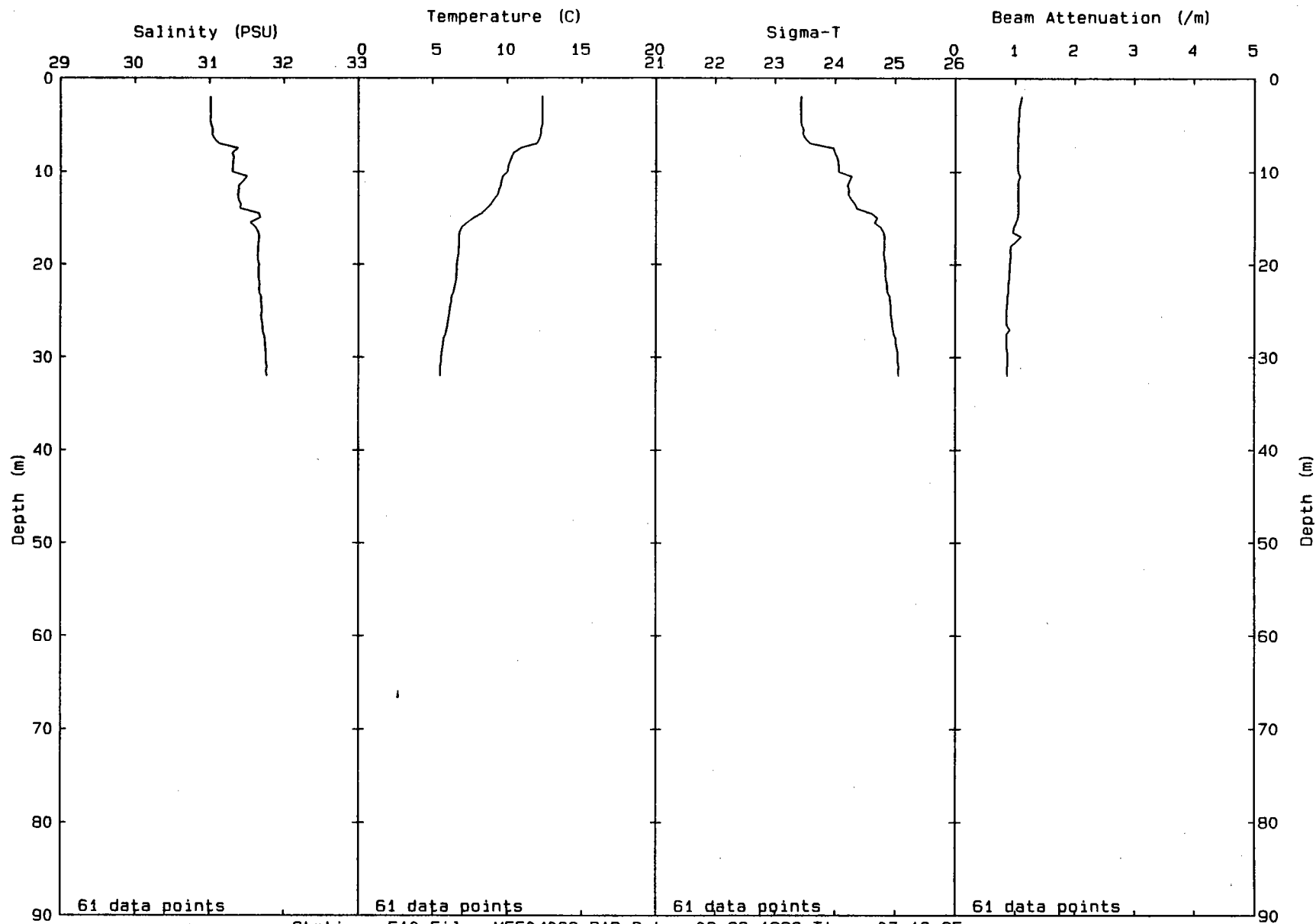
Station: F09 File: MFF04070.PAB Date: 06-23-1992 Time: 07:59:29

00270



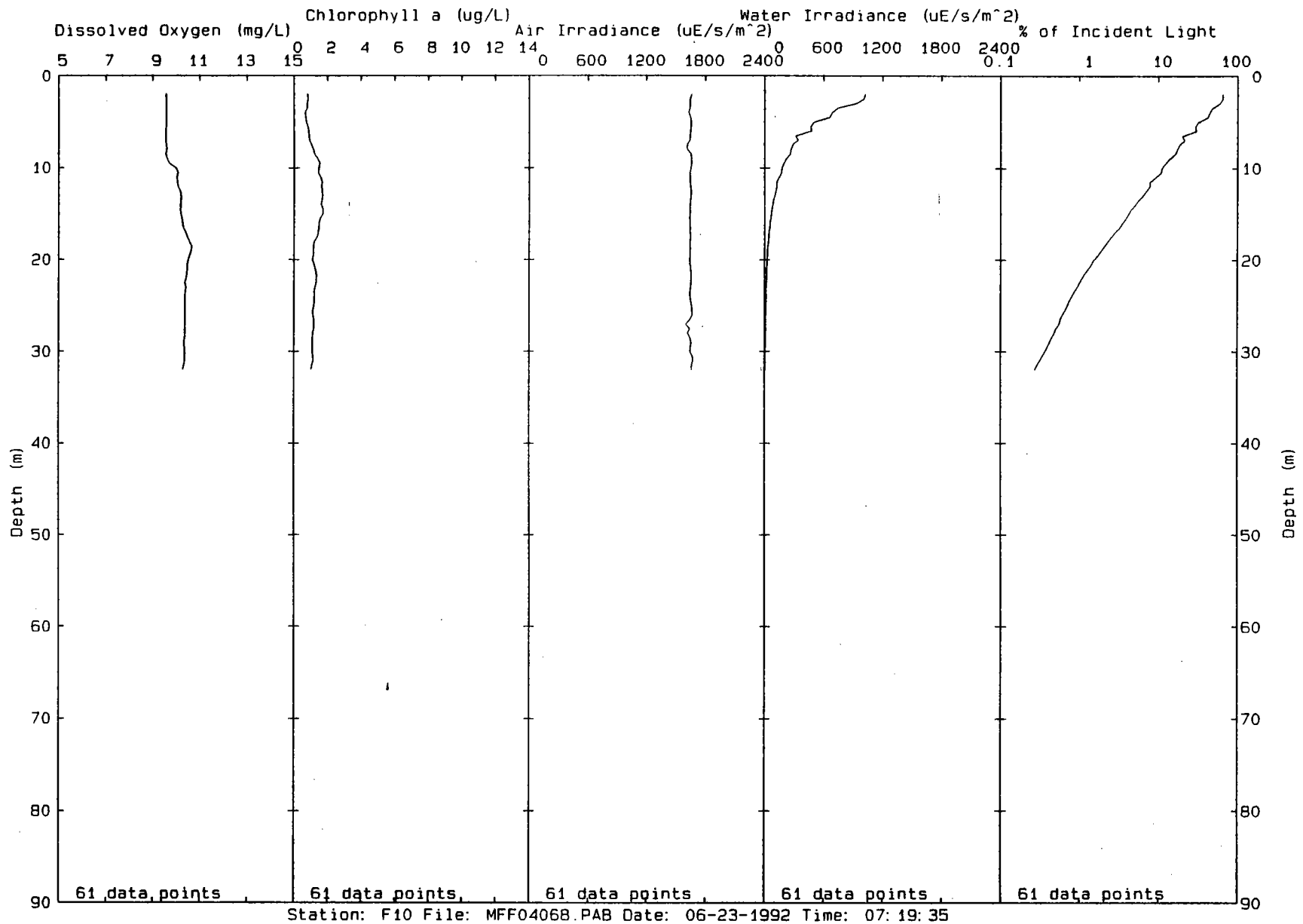
Station: F09 File: MFF04070.PAB Date: 06-23-1992 Time: 07:59:29

00271

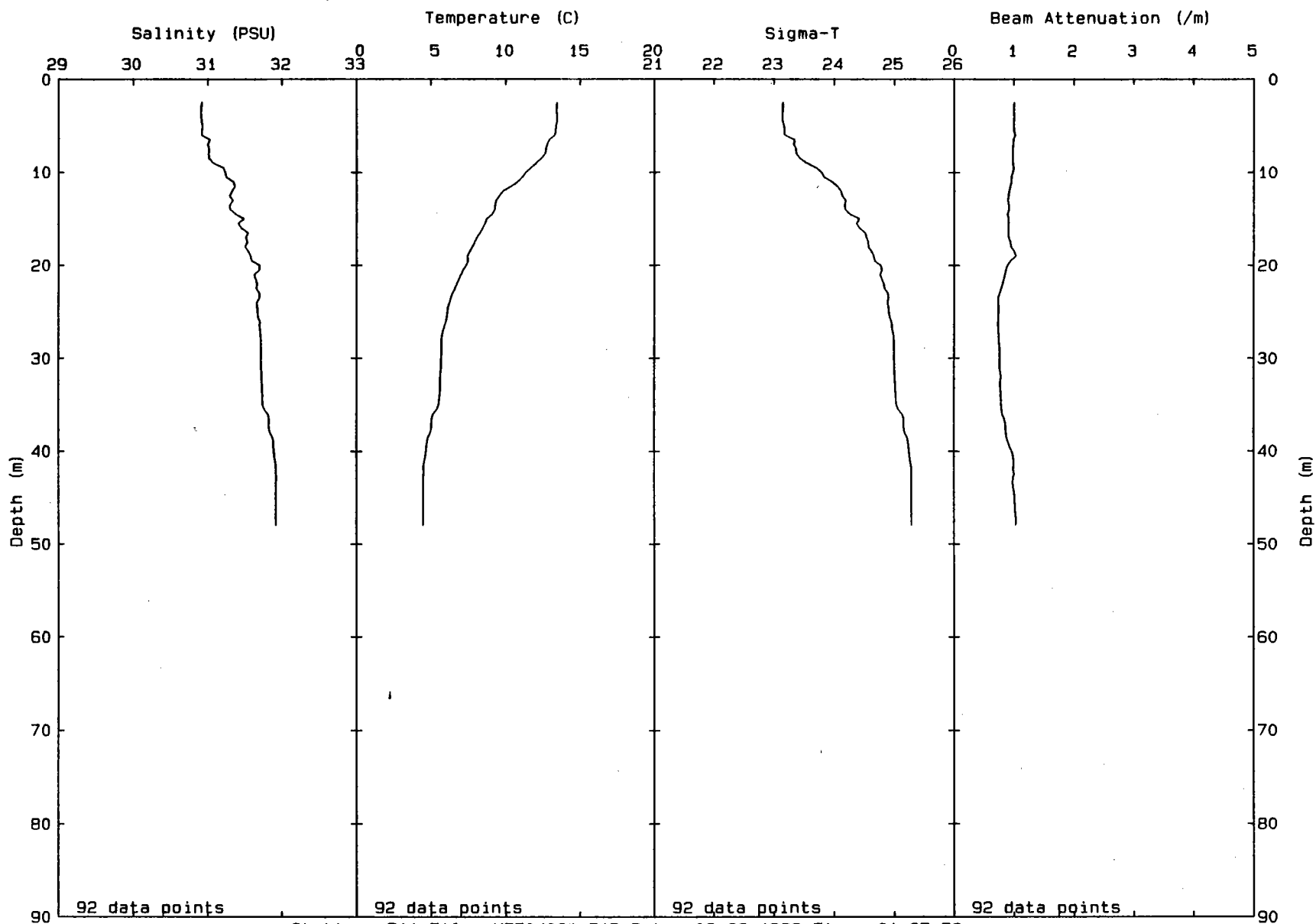


Station: F10 File: MFF04068.PAB Date: 06-23-1992 Time: 07:19:35

00272

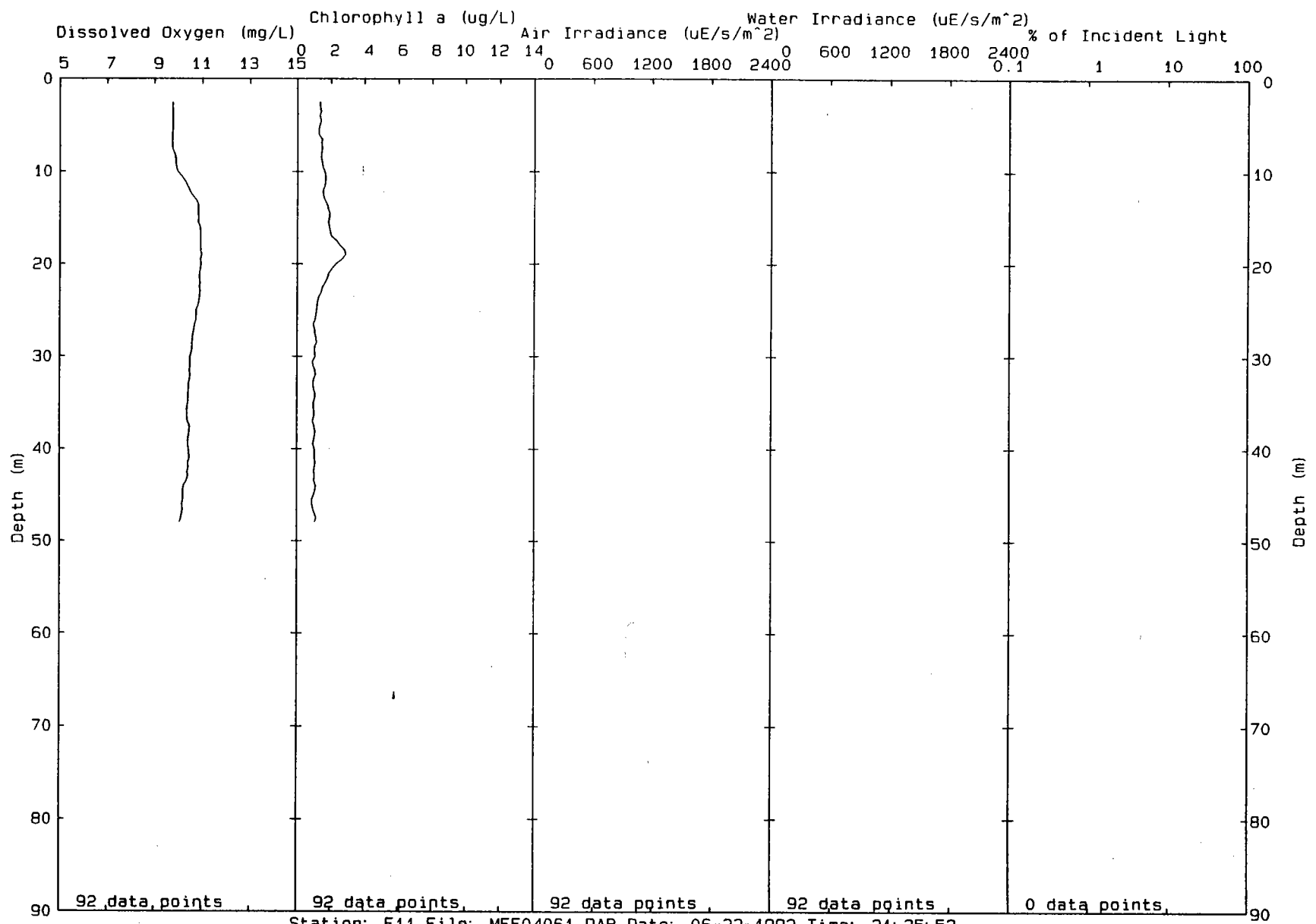


00273



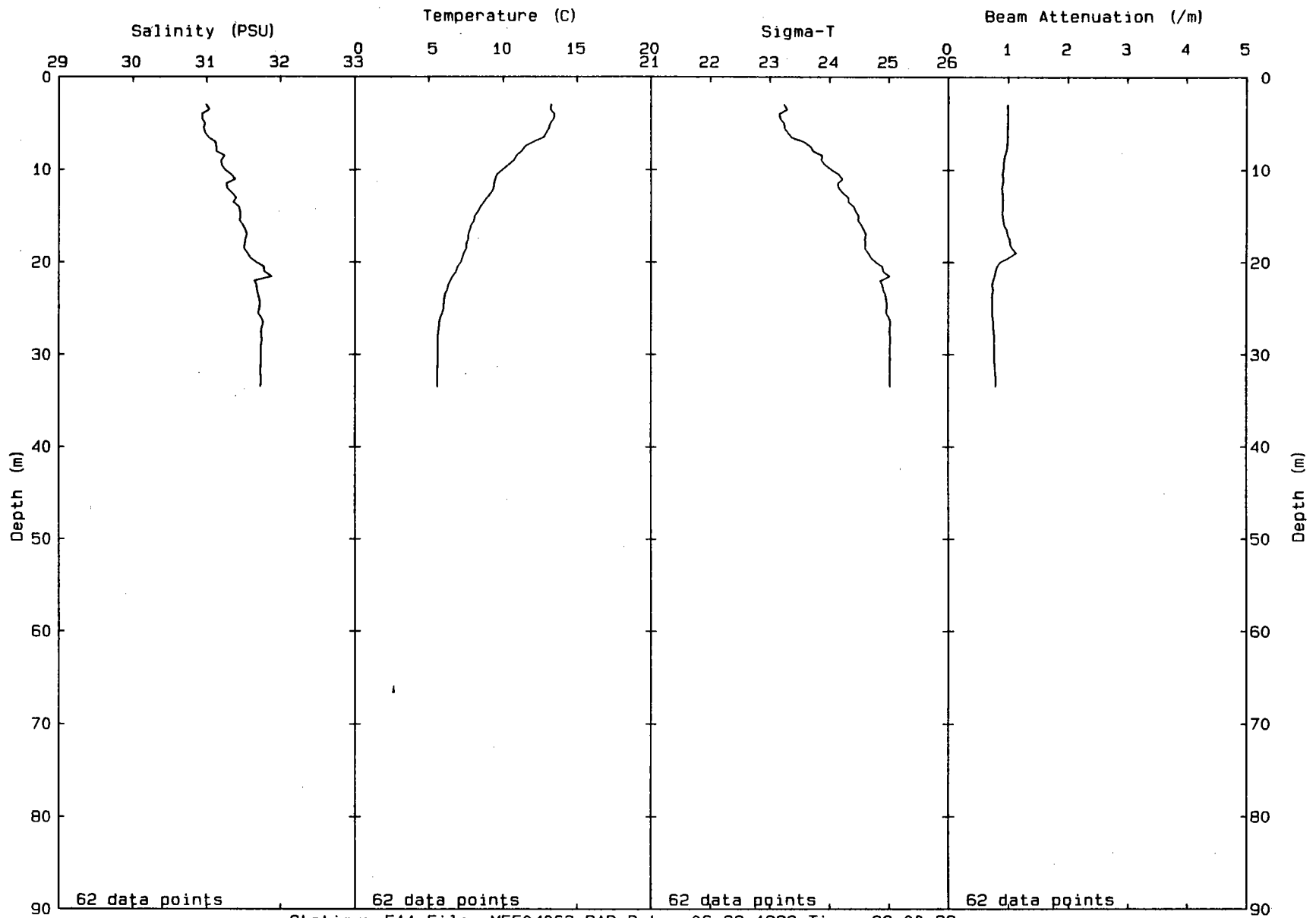
Station: F11 File: MFF04061.PAB Date: 06-22-1992 Time: 21:35:52

002:4



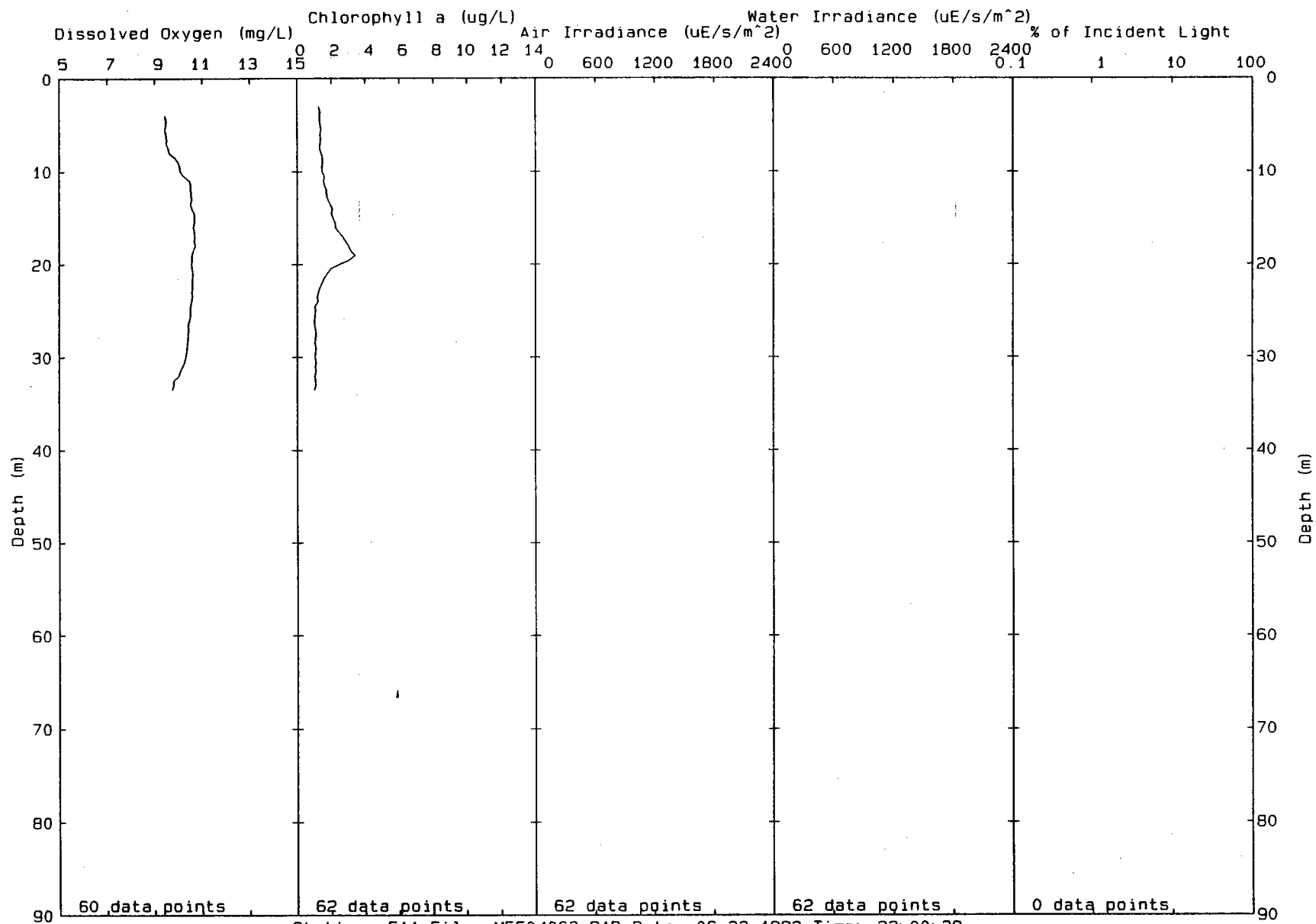
Station: F11 File: MFF04061.PAB Date: 06-22-1992 Time: 21:35:52

002:5



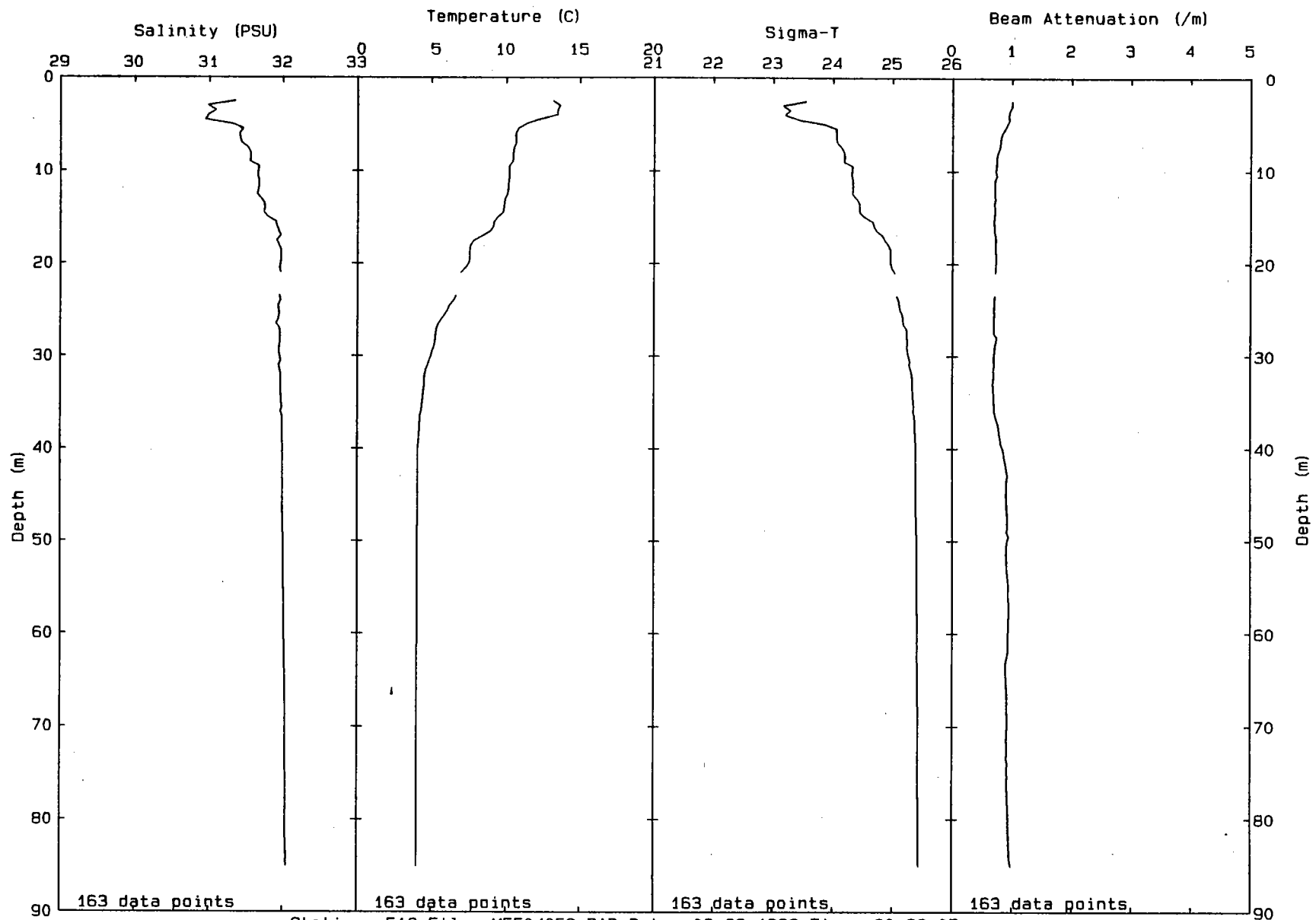
Station: F11 File: MFF04063.PAB Date: 06-22-1992 Time: 22:00:39

002:6



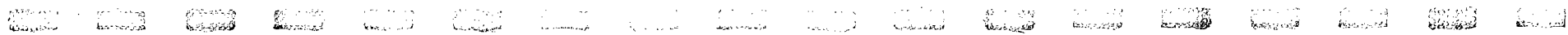
Station: F11 File: MFF04063.PAB Date: 06-22-1992 Time: 22:00:39

002:7

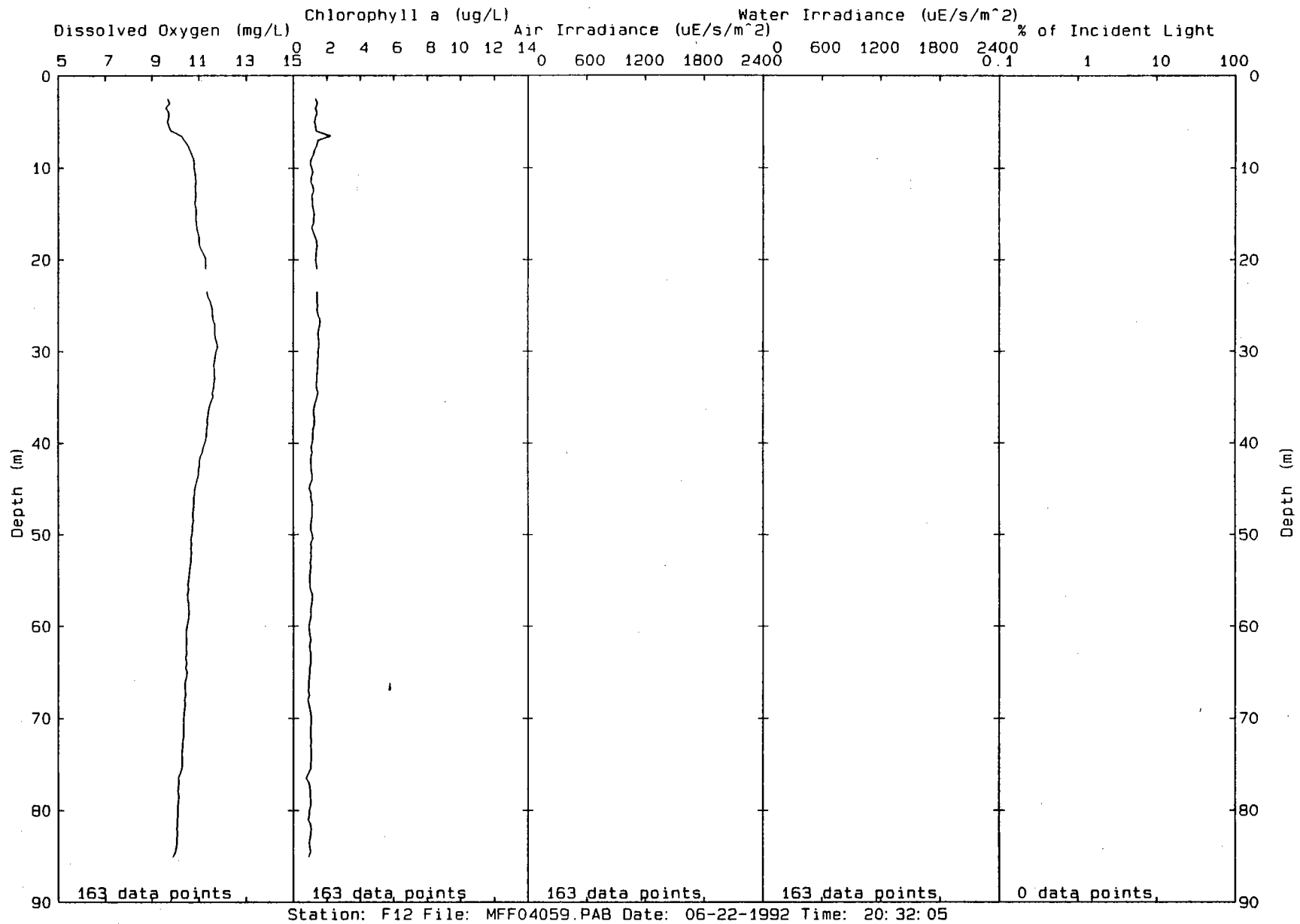


Station: F12 File: MFF04059.PAB Date: 06-22-1992 Time: 20:32:05

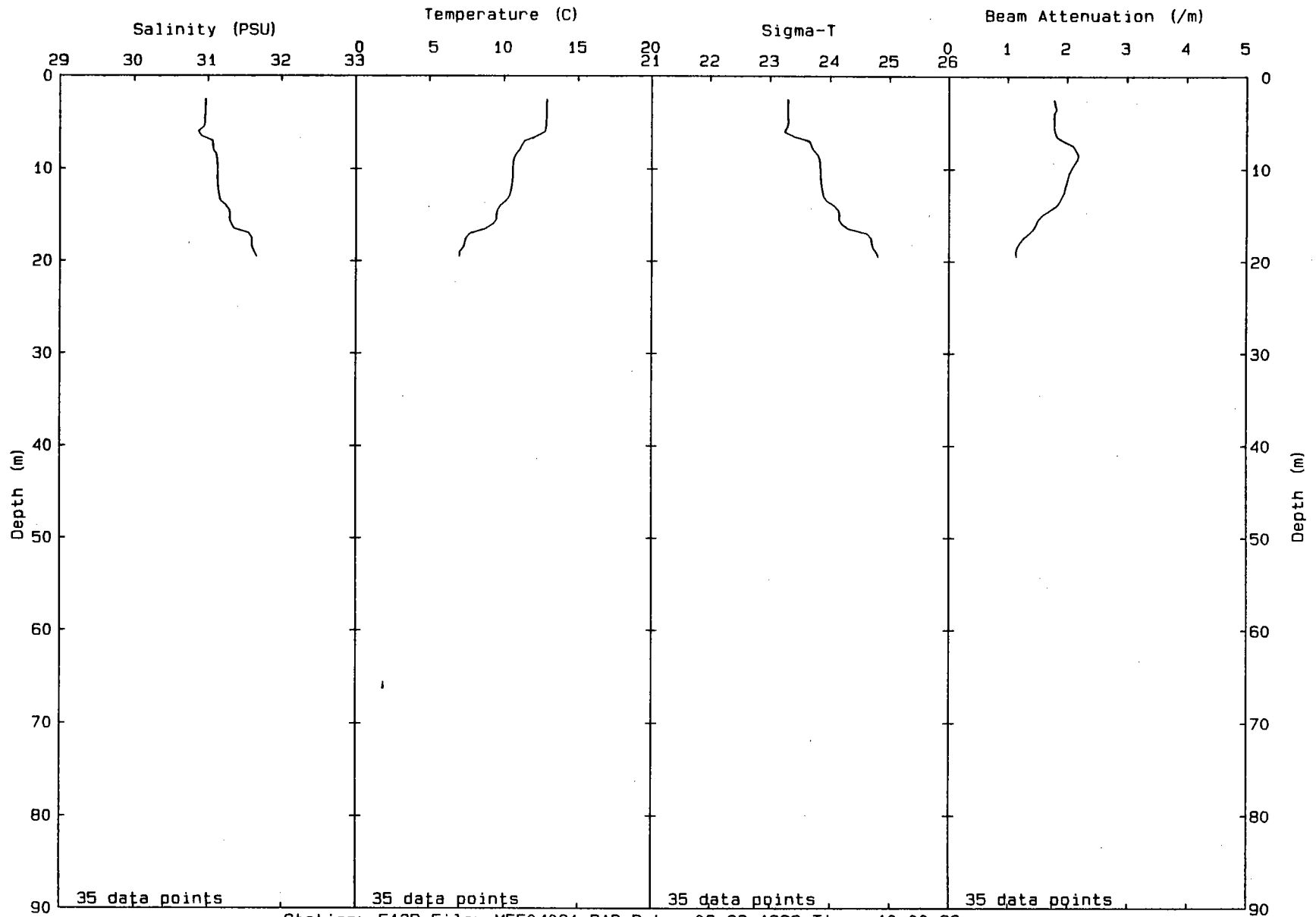
002:8



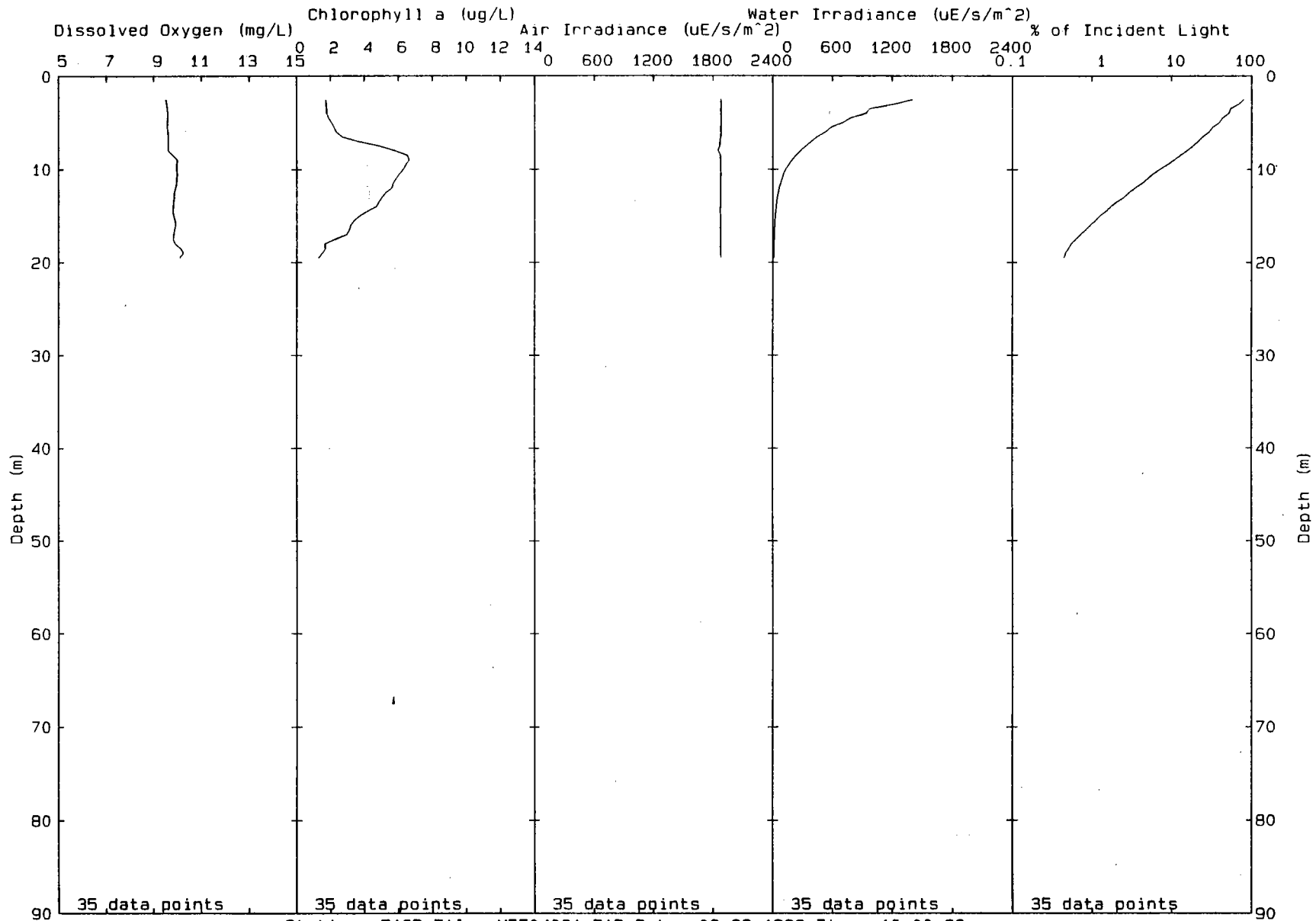
00279



00280

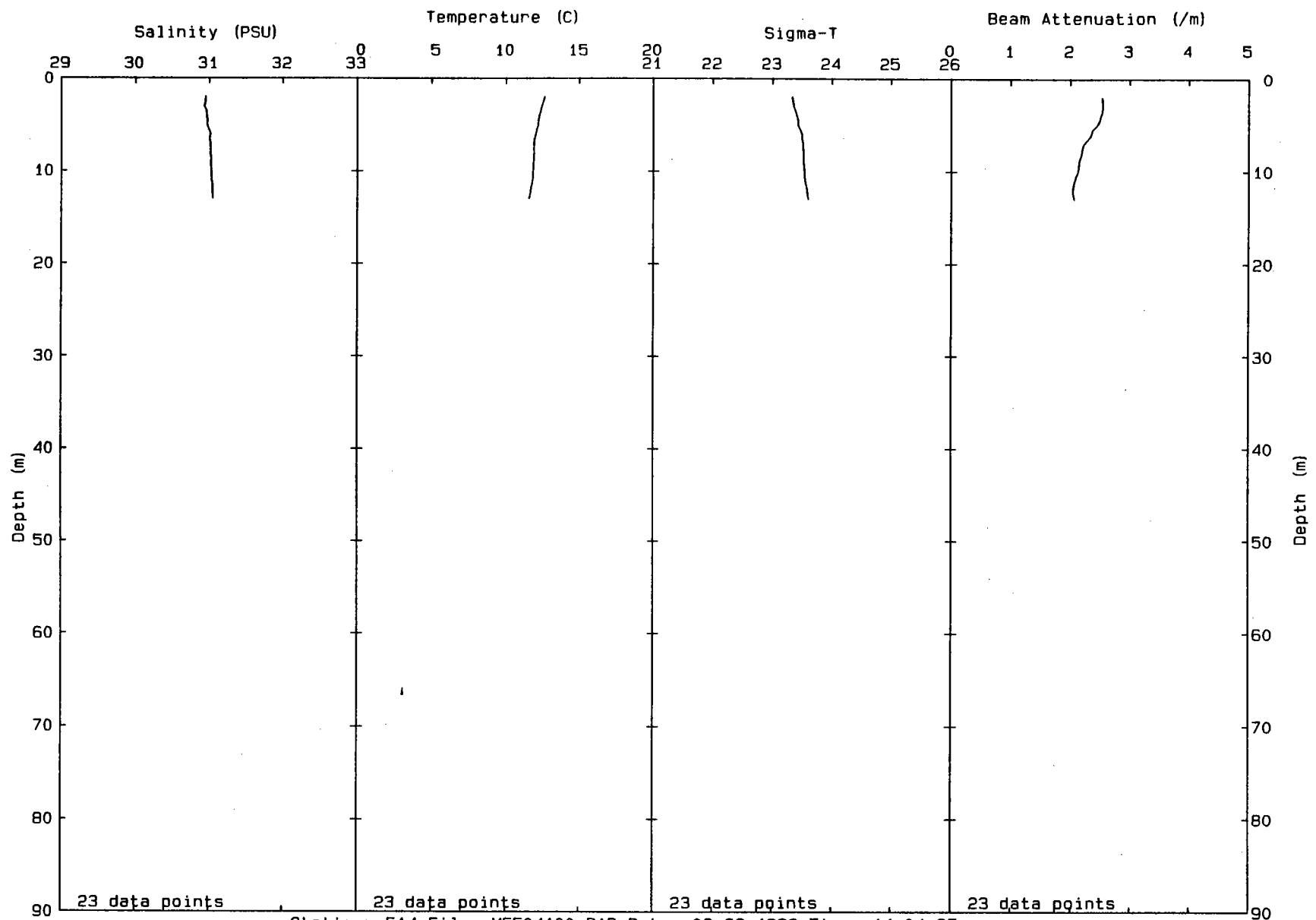


Station: F13P File: MFF04081.PAB Date: 06-23-1992 Time: 10:00:23



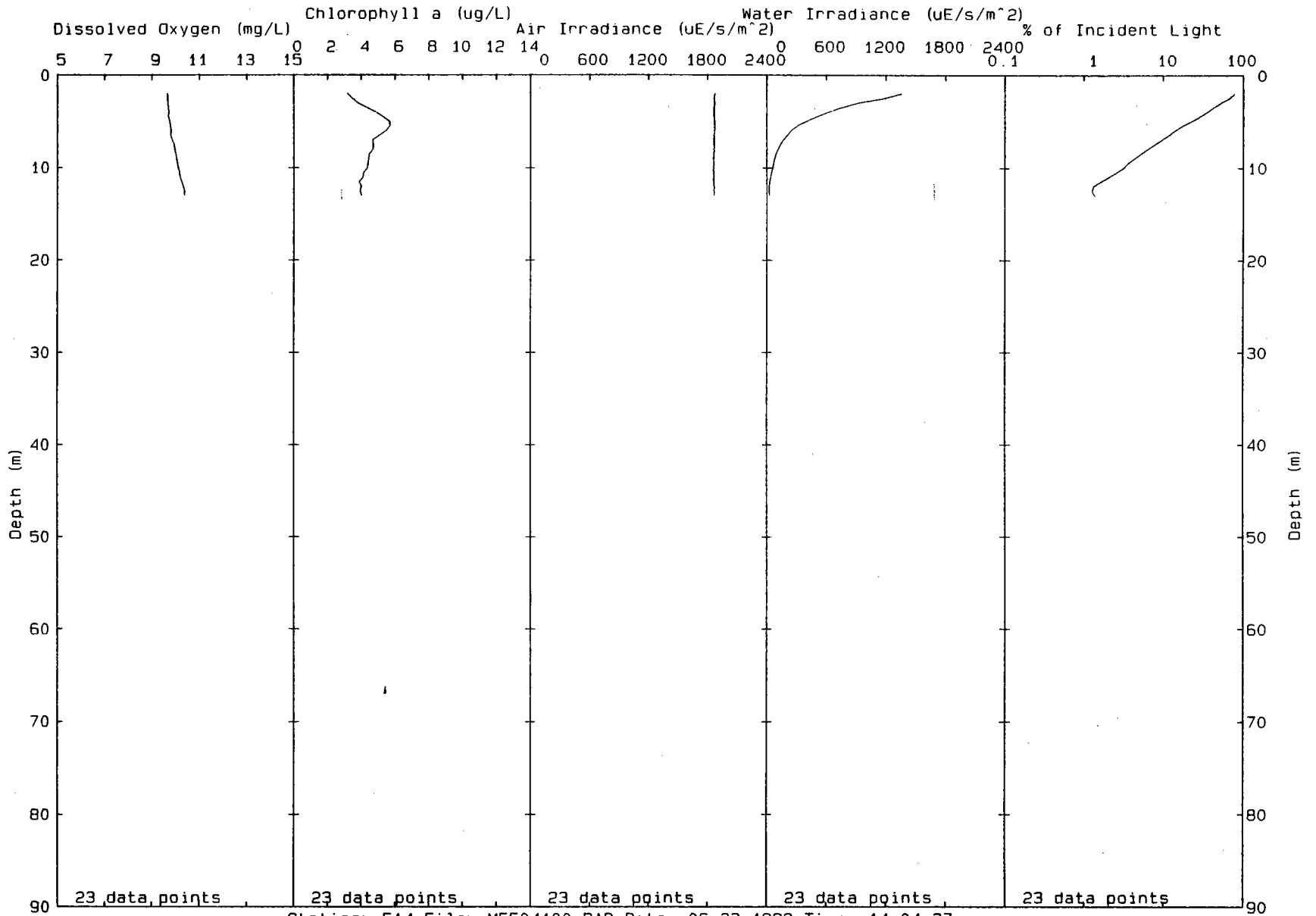
Station: F13P File: MFF04081.PAB Date: 06-23-1992 Time: 10:00:23

00281



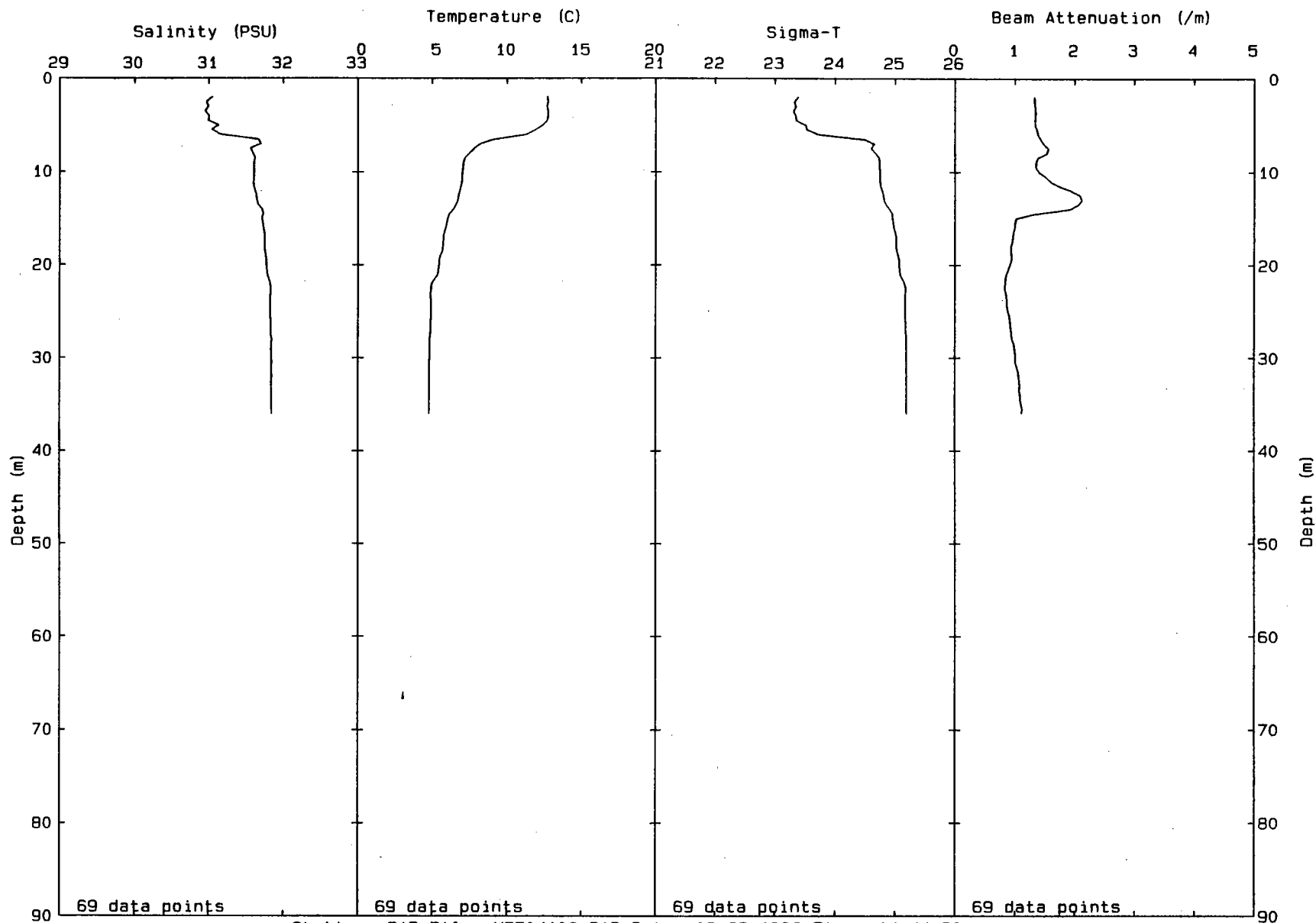
Station: F14 File: MFF04100.PAB Date: 06-23-1992 Time: 14: 04: 37

00282



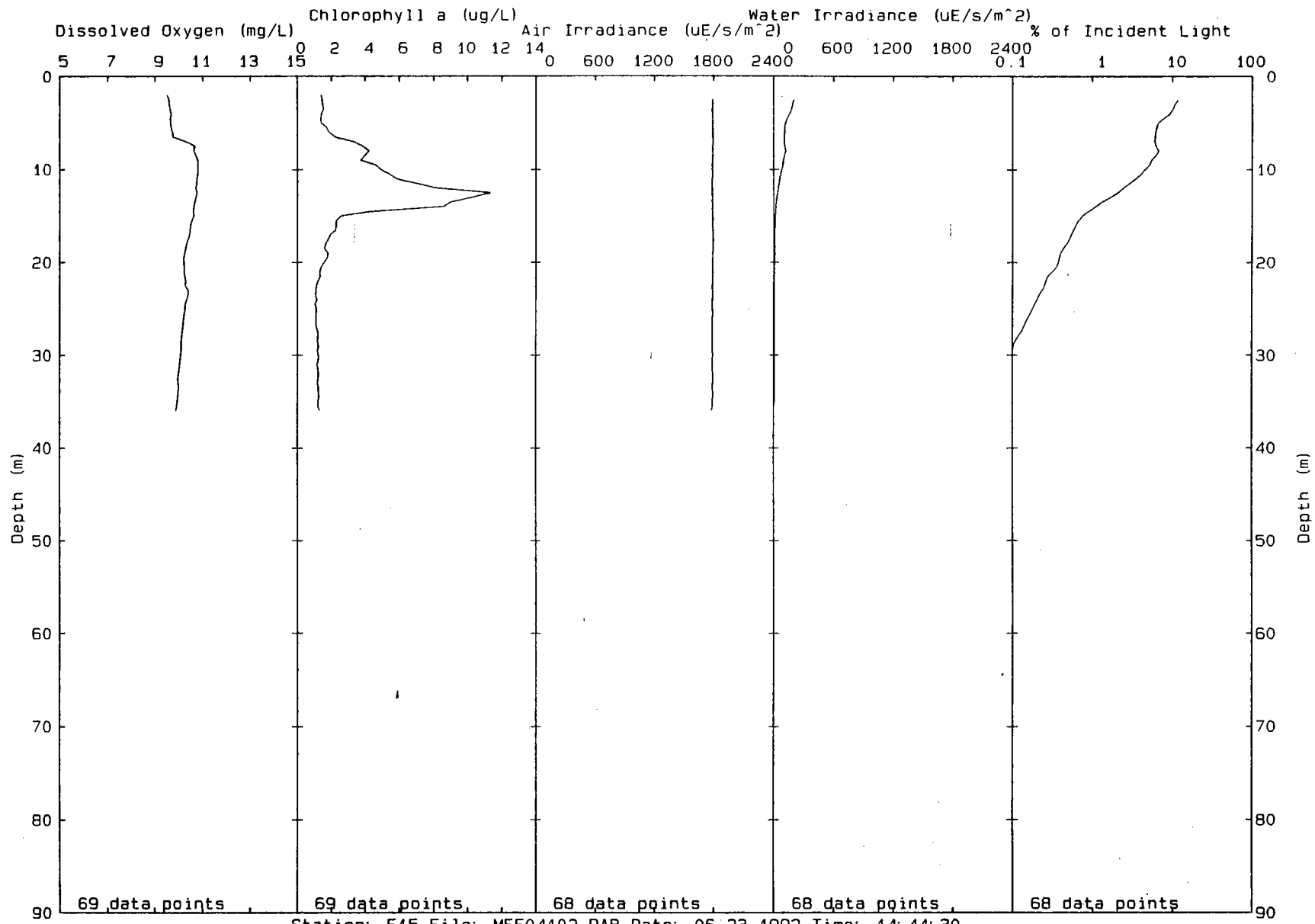
Station: F14 File: MFF04100.PAB Date: 06-23-1992 Time: 14: 04: 37

00283



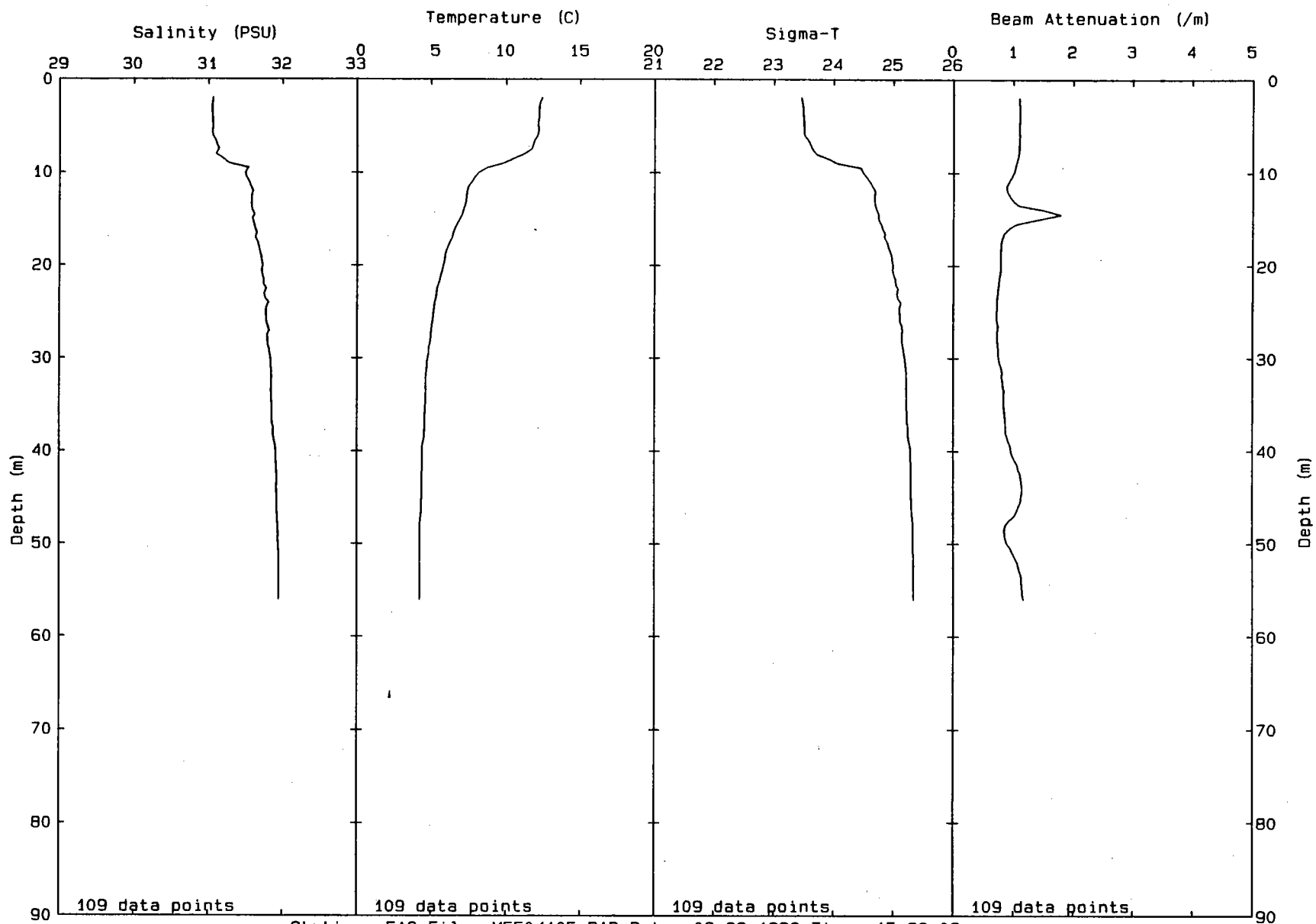
Station: F15 File: MFF04102.PAB Date: 06-23-1992 Time: 14: 44: 30

00284



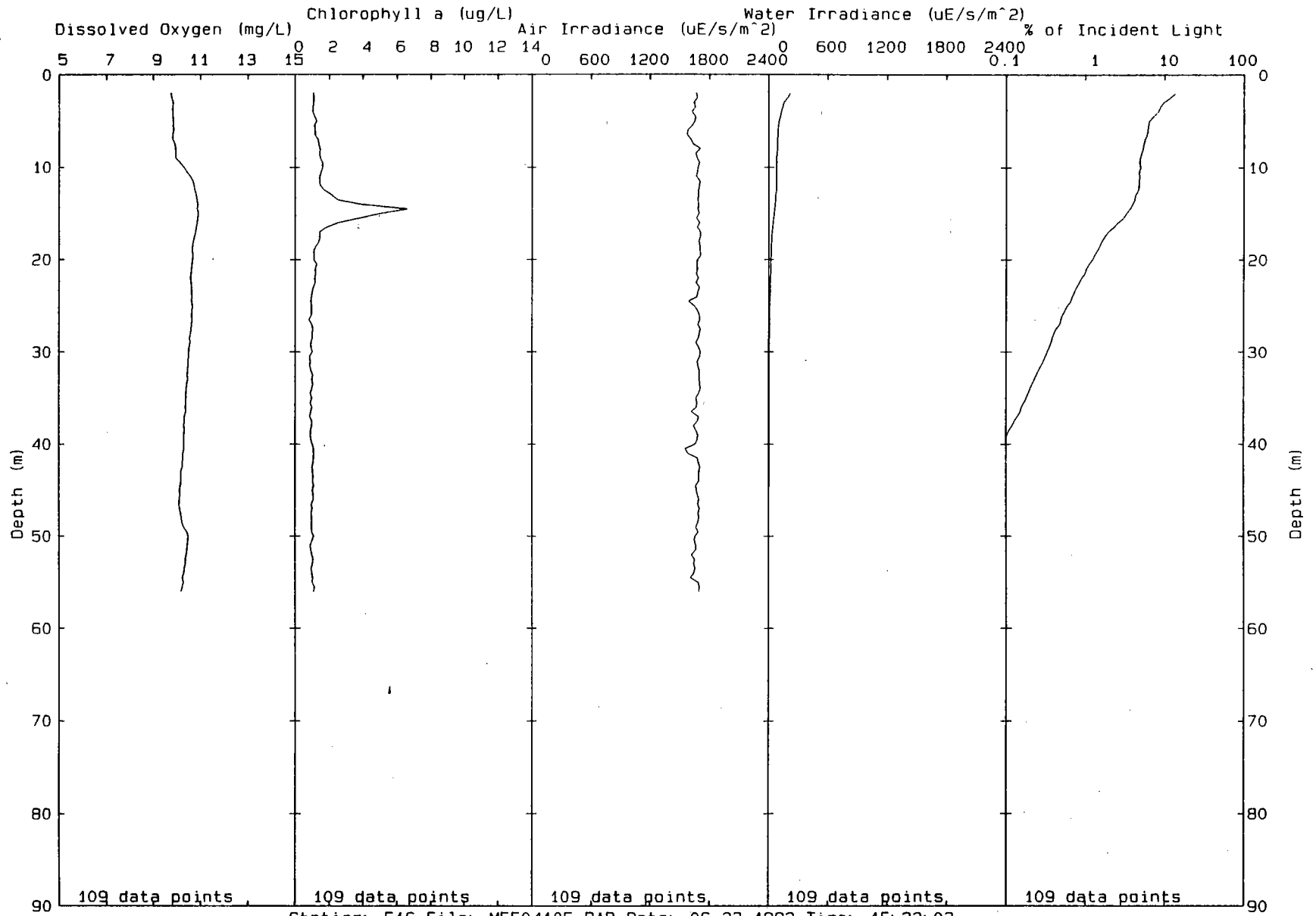
Station: F15 File: MFF04102.PAB Date: 06-23-1992 Time: 14:44:30

00285



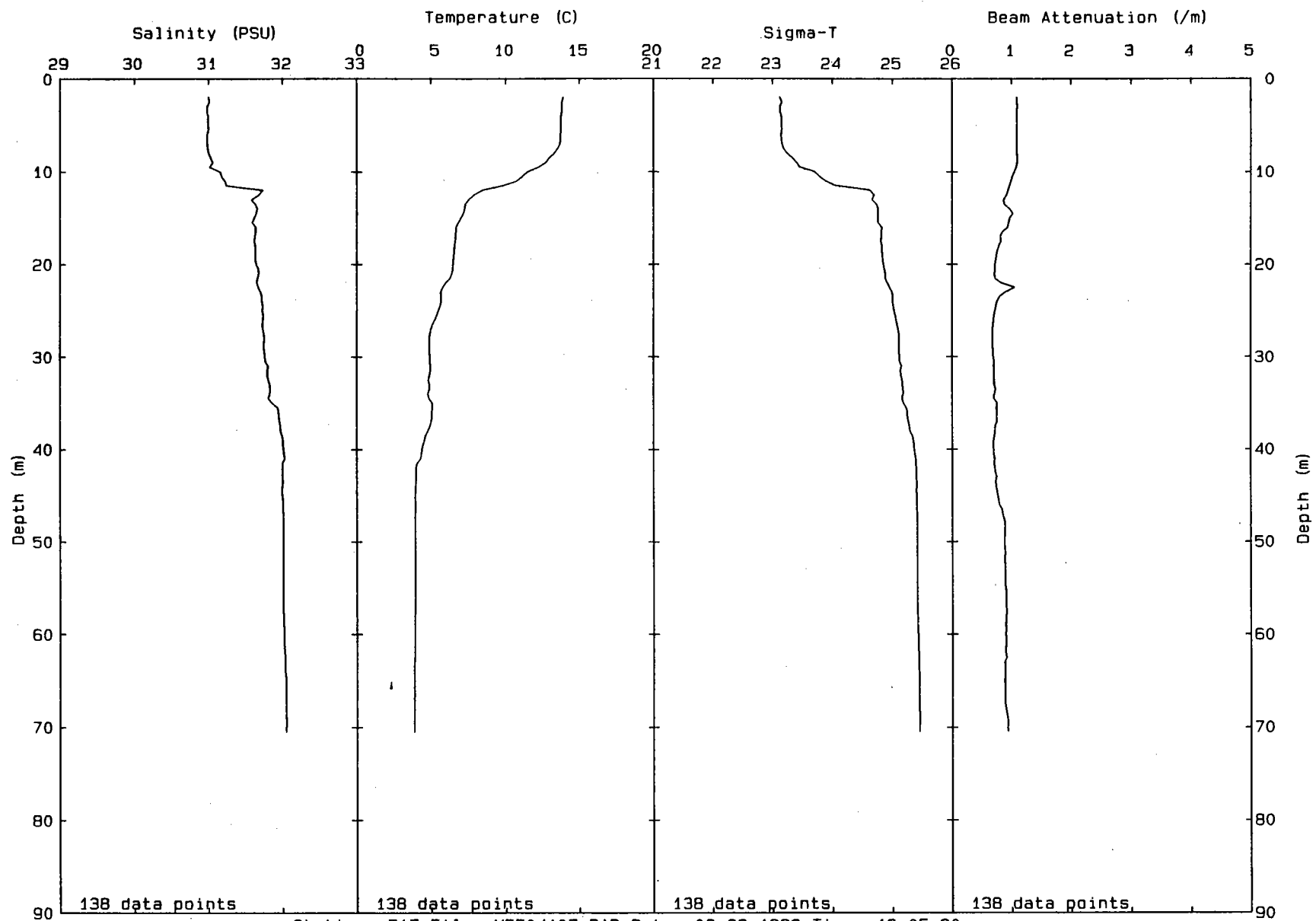
Station: F16 File: MFF04105.PAB Date: 06-23-1992 Time: 15:22:03

00286



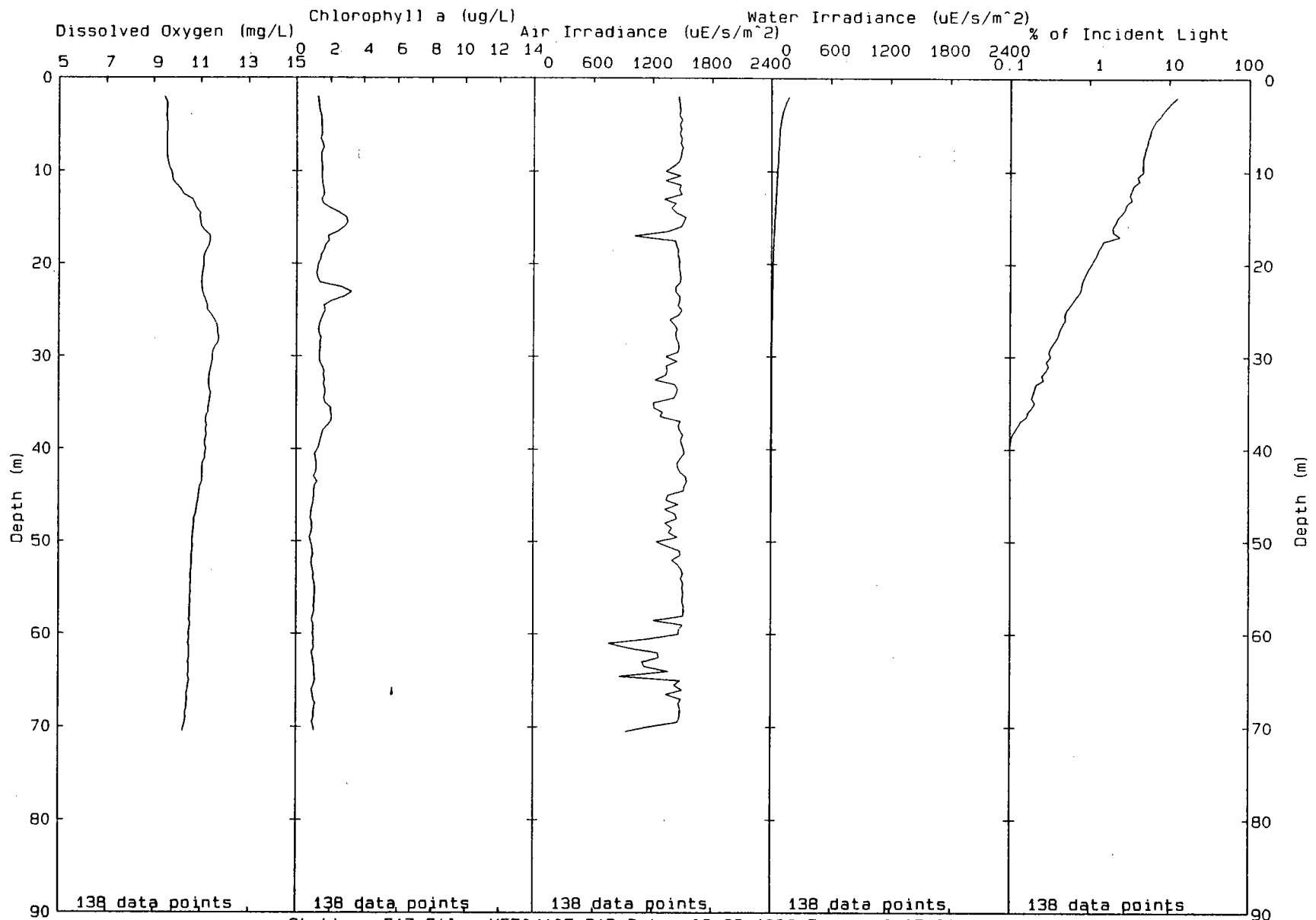
Station: F16 File: MFF04105.PAB Date: 06-23-1992 Time: 15: 22: 03

00287

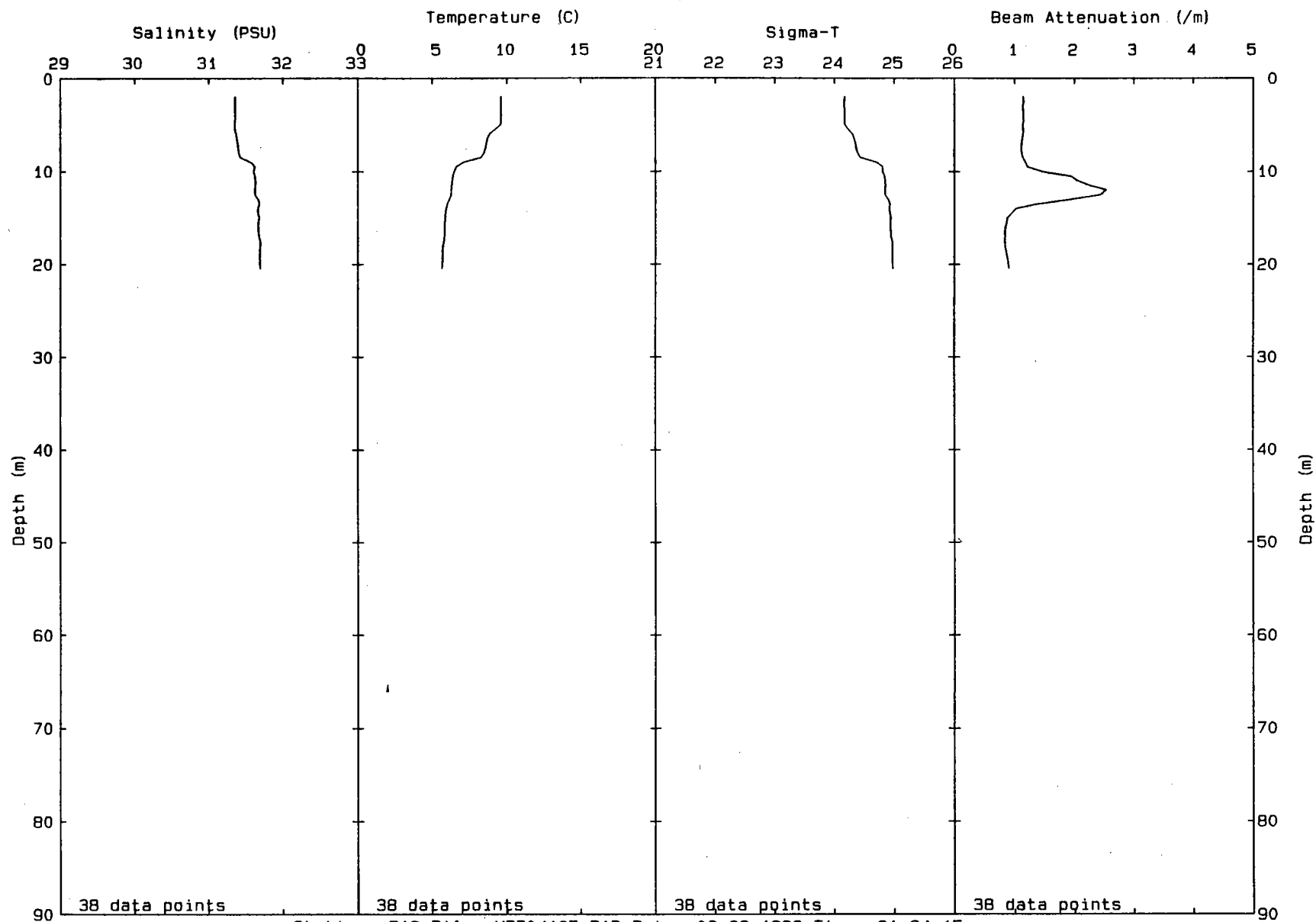


Station: F17 File: MFF04107.PAB Date: 06-23-1992 Time: 16:05:60

00288

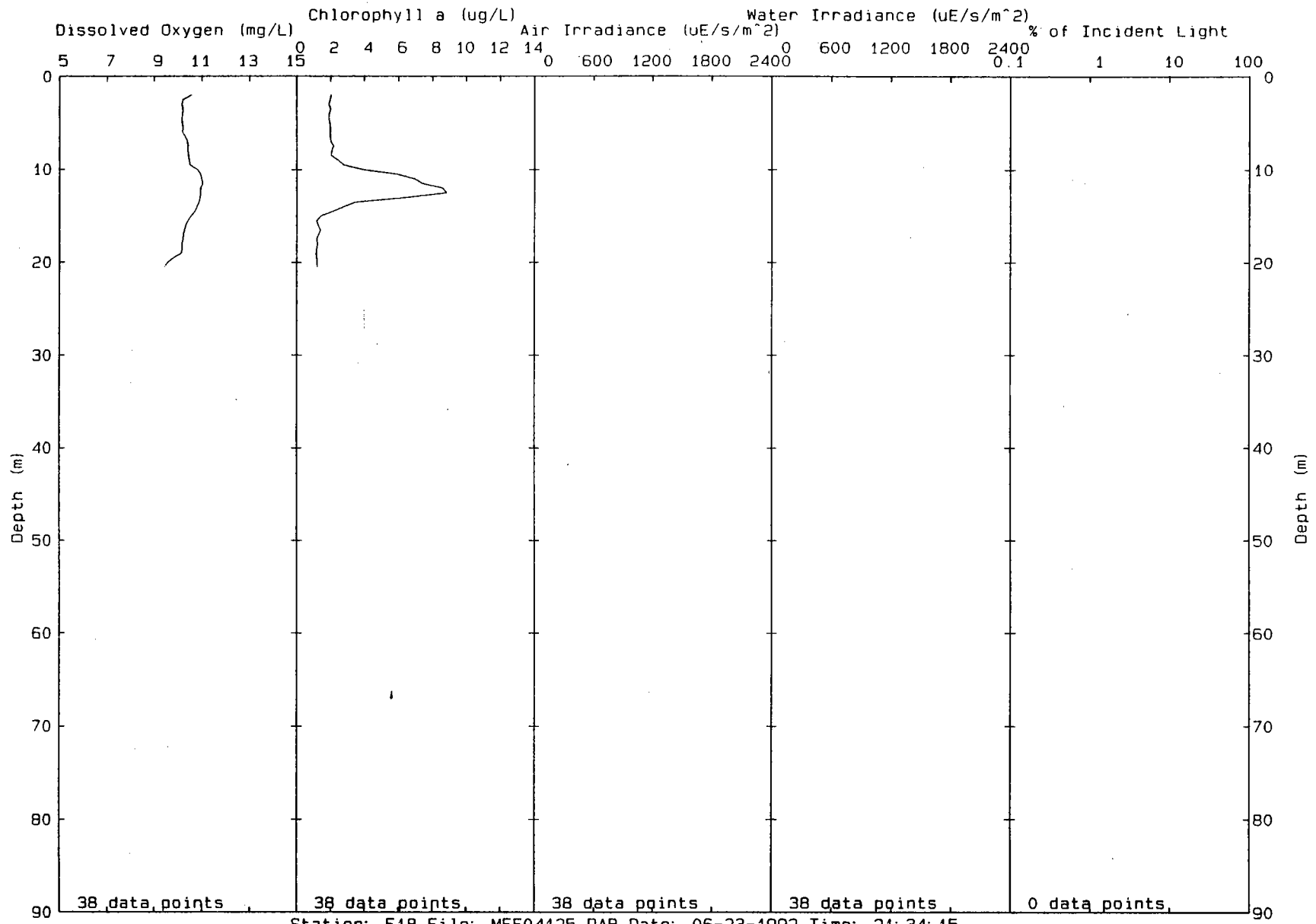


00289



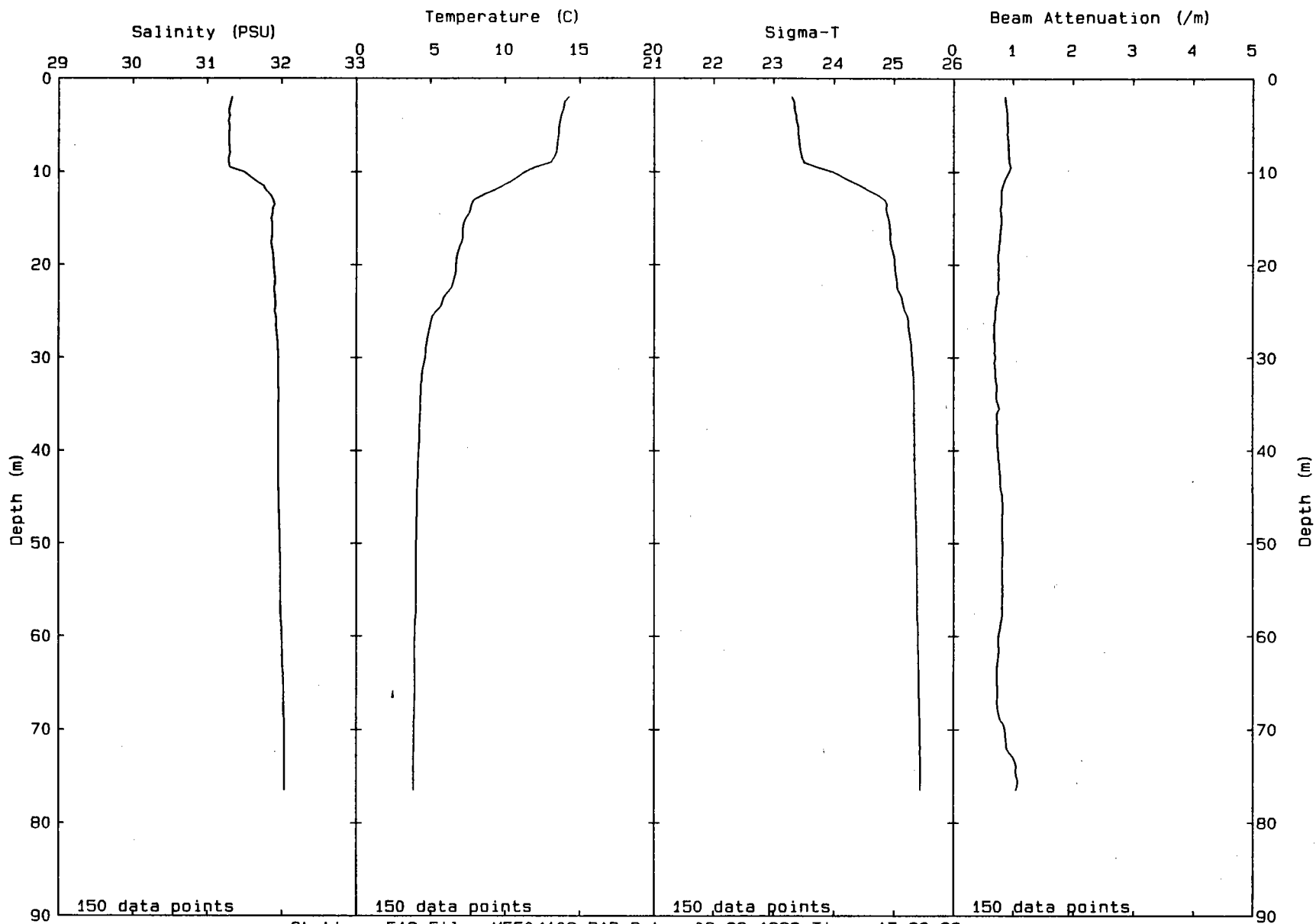
Station: F18 File: MFF04125.PAB Date: 06-23-1992 Time: 21:34:15

00290



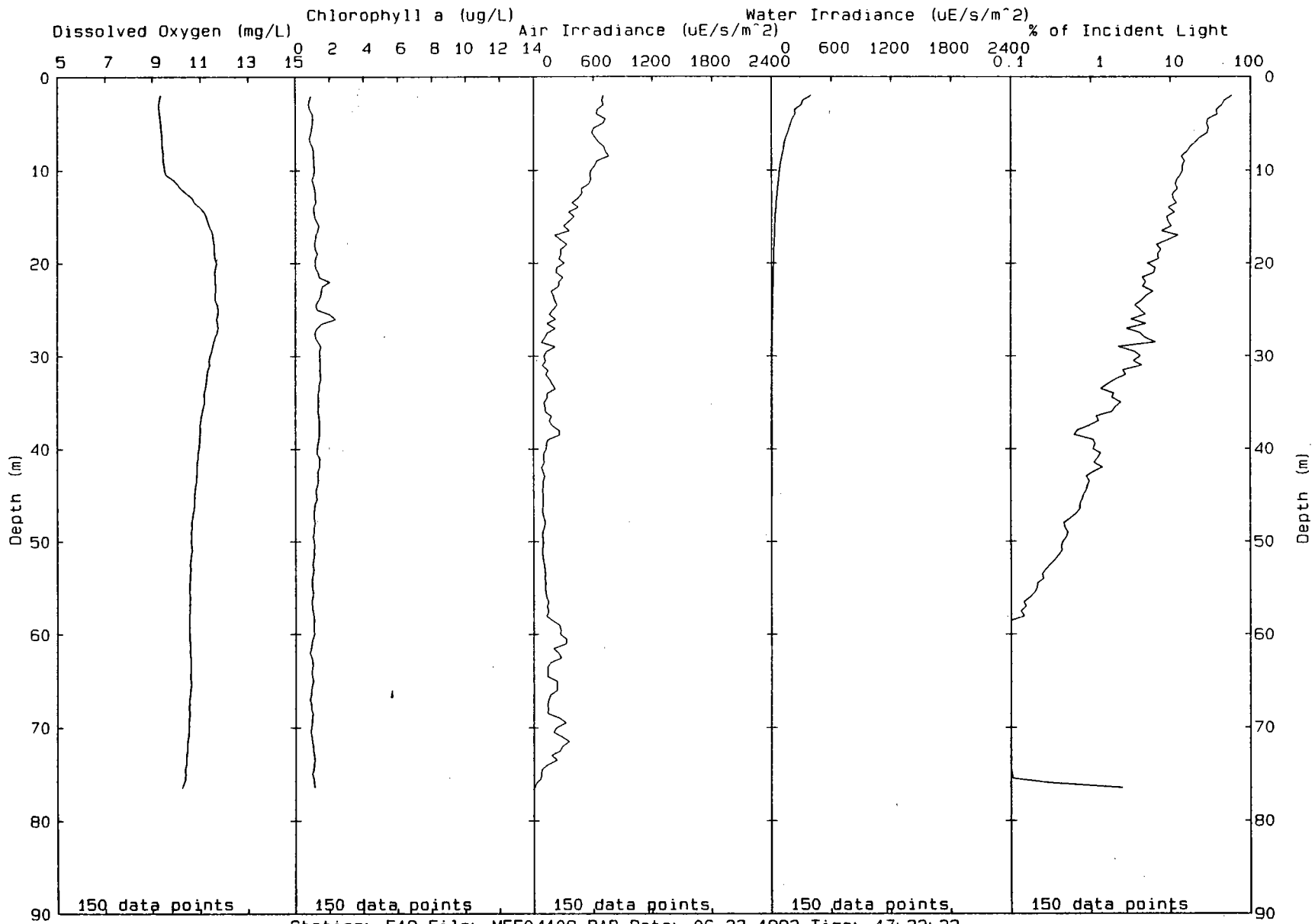
Station: F18 File: MFF04125.PAB Date: 06-23-1992 Time: 21:34:15

00291



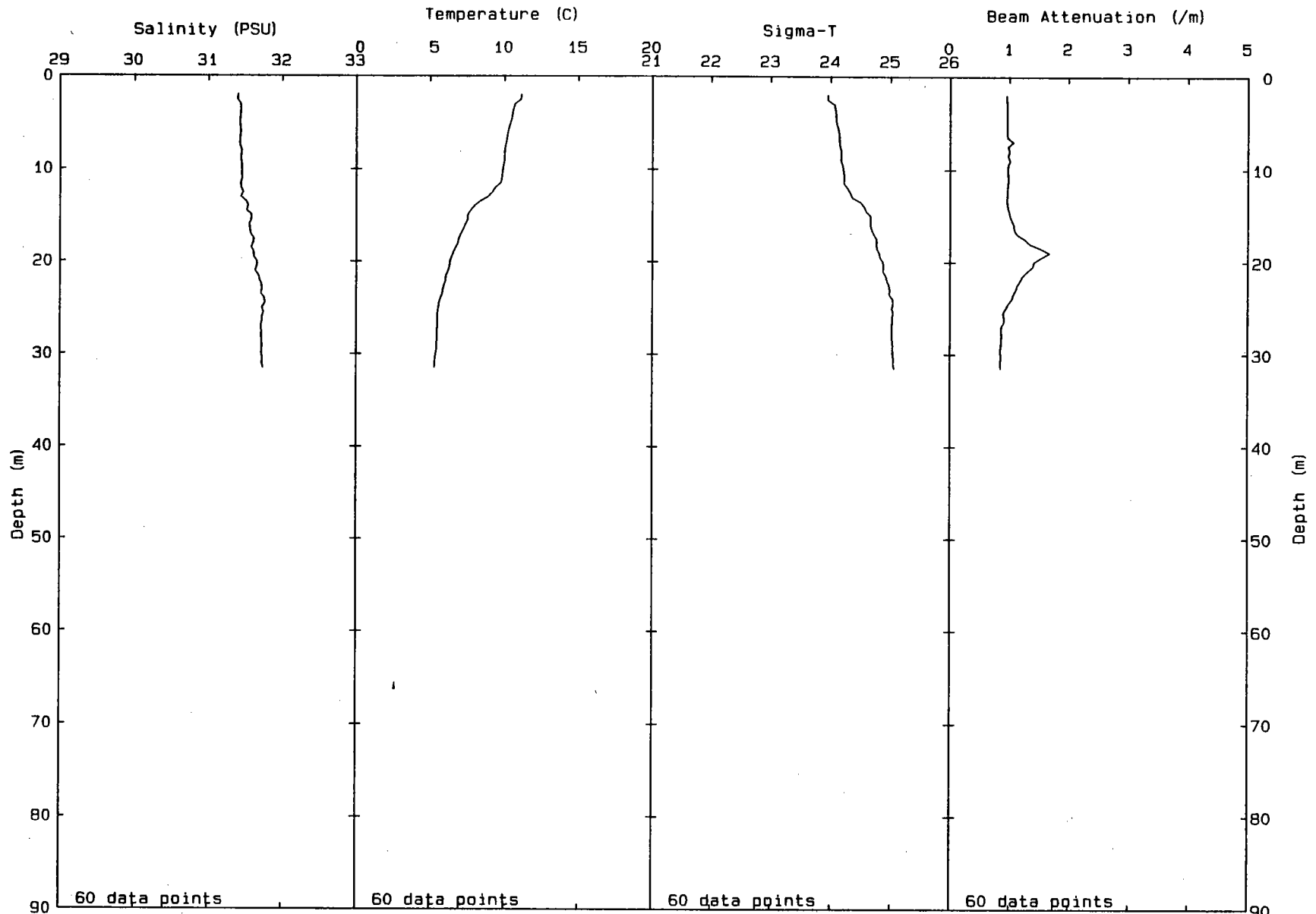
Station: F19 File: MFF04109.PAB Date: 06-23-1992 Time: 17: 22: 22

00292



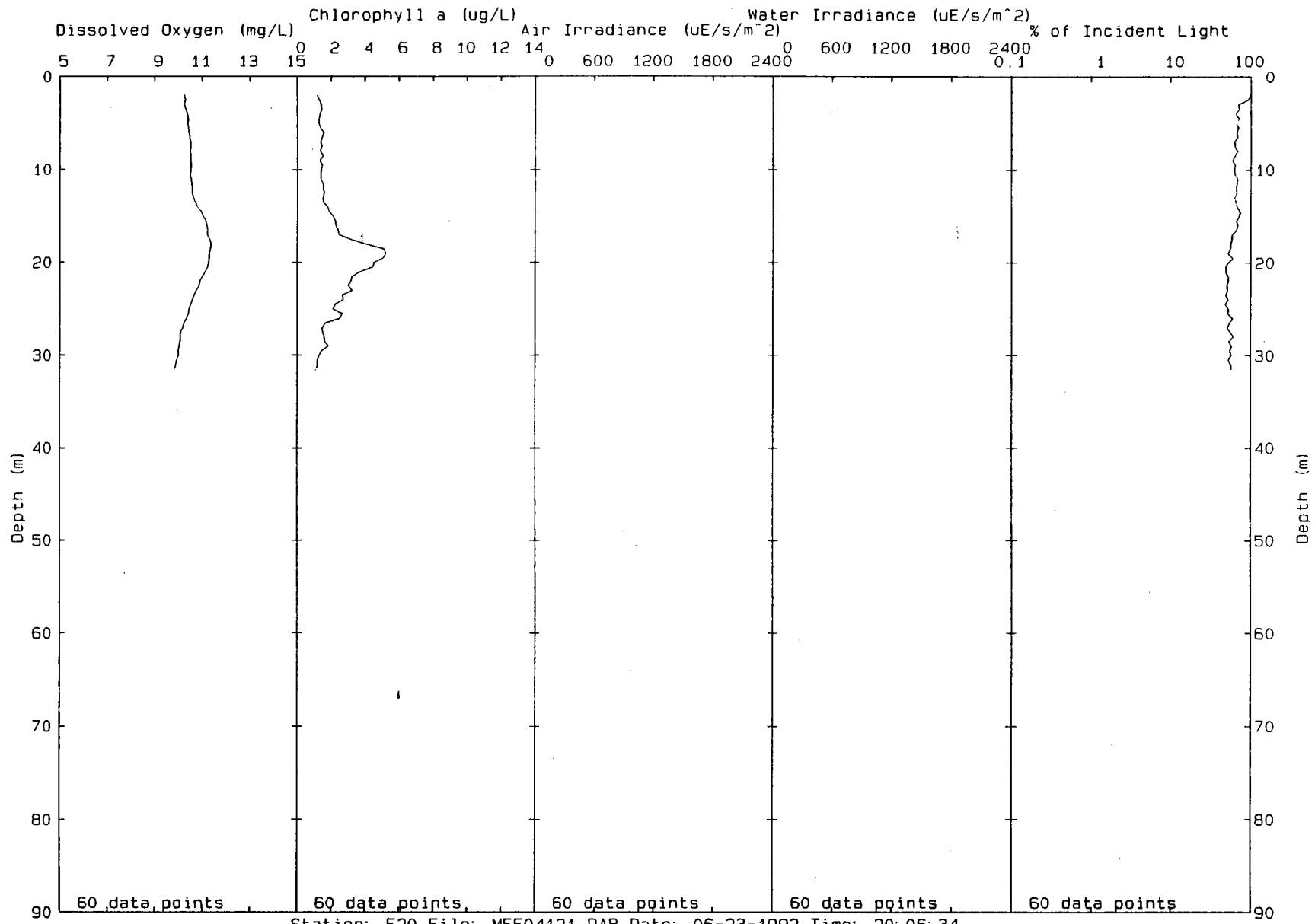
Station: F19 File: MFF04109.PAB Date: 06-23-1992 Time: 17: 22: 22

00293



Station: F20 File: MFF04121.PAB Date: 06-23-1992 Time: 20:06:34

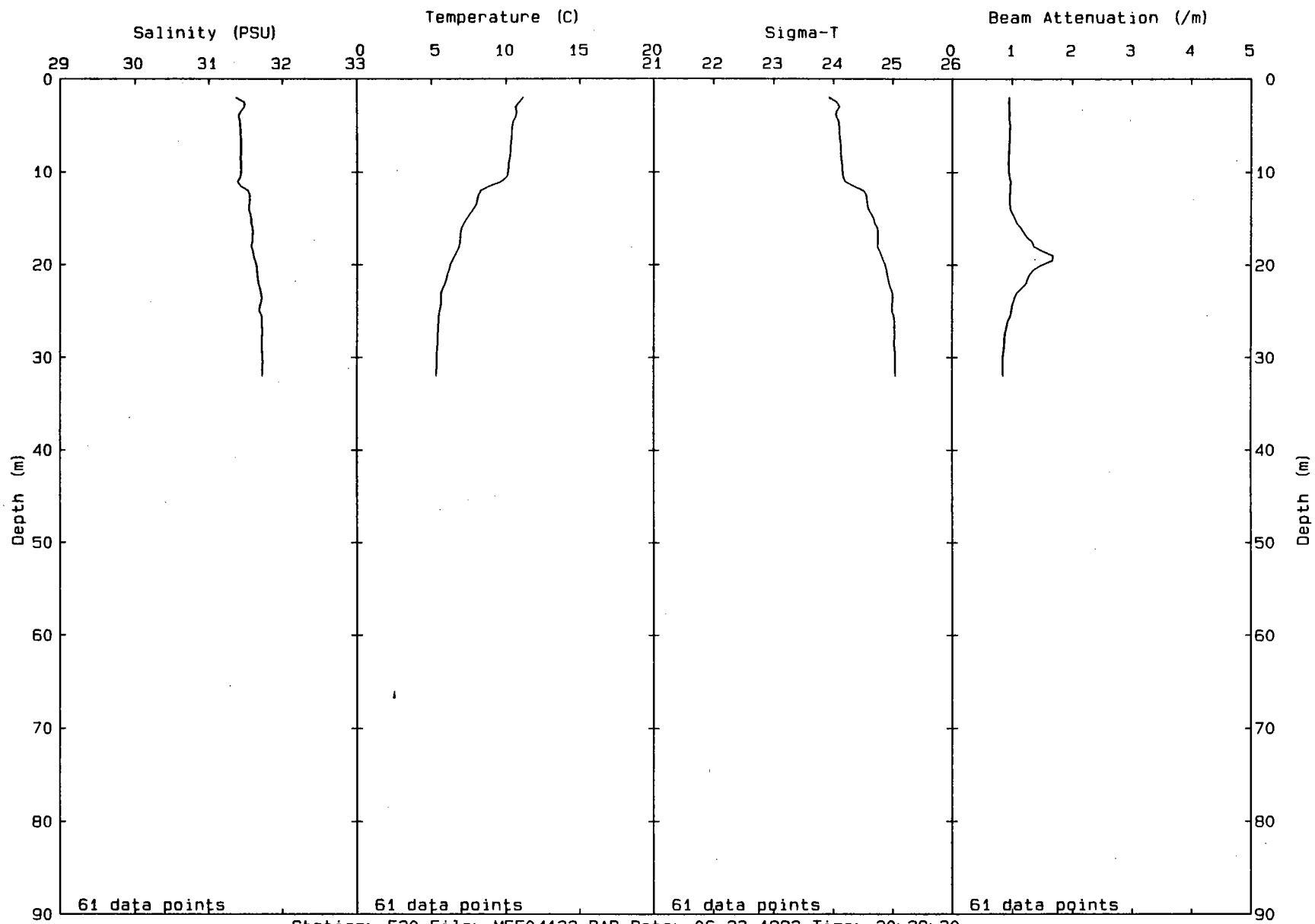
00294



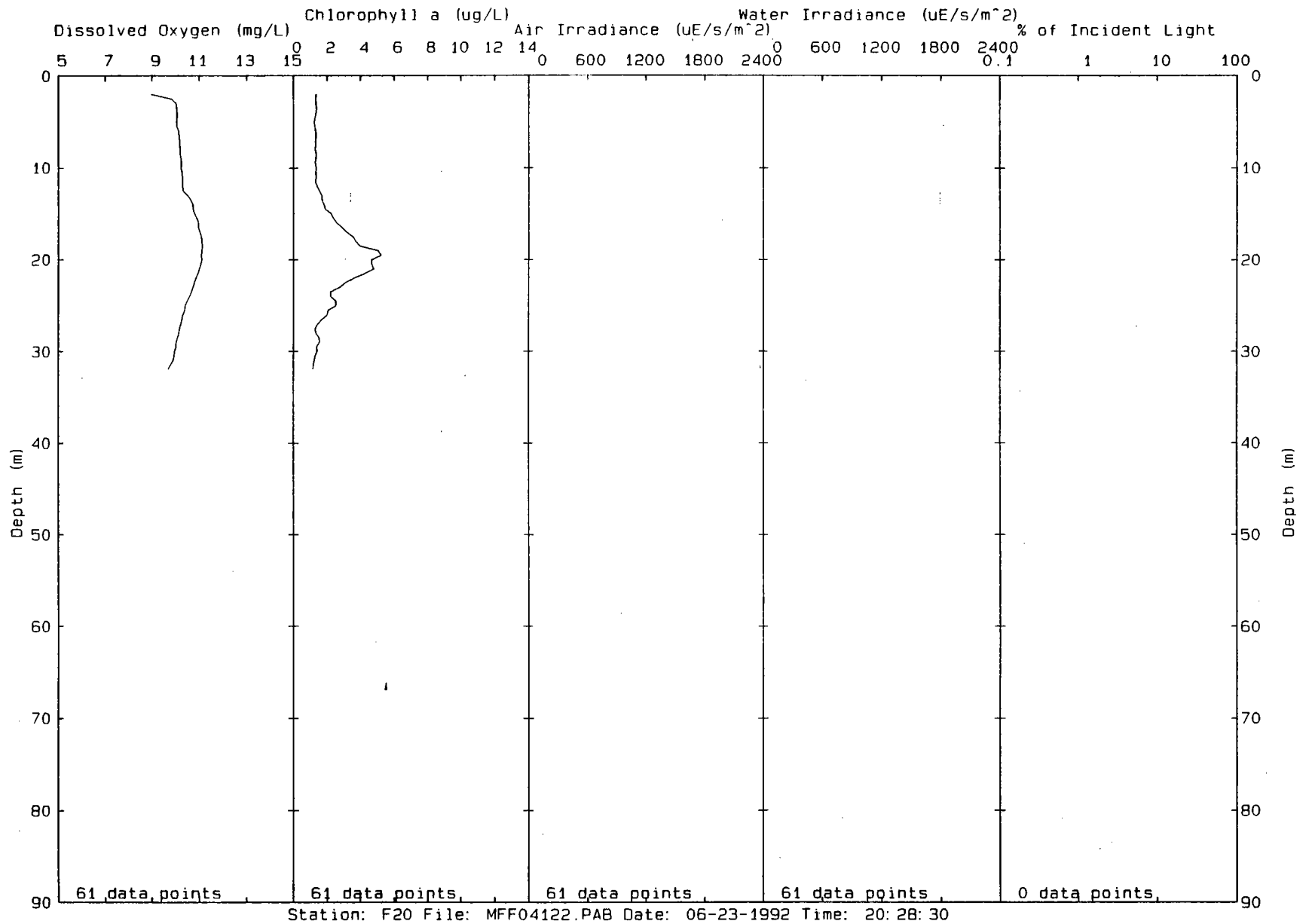
Station: F20 File: MFF04121.PAB Date: 06-23-1992 Time: 20:06:34

00295

00296

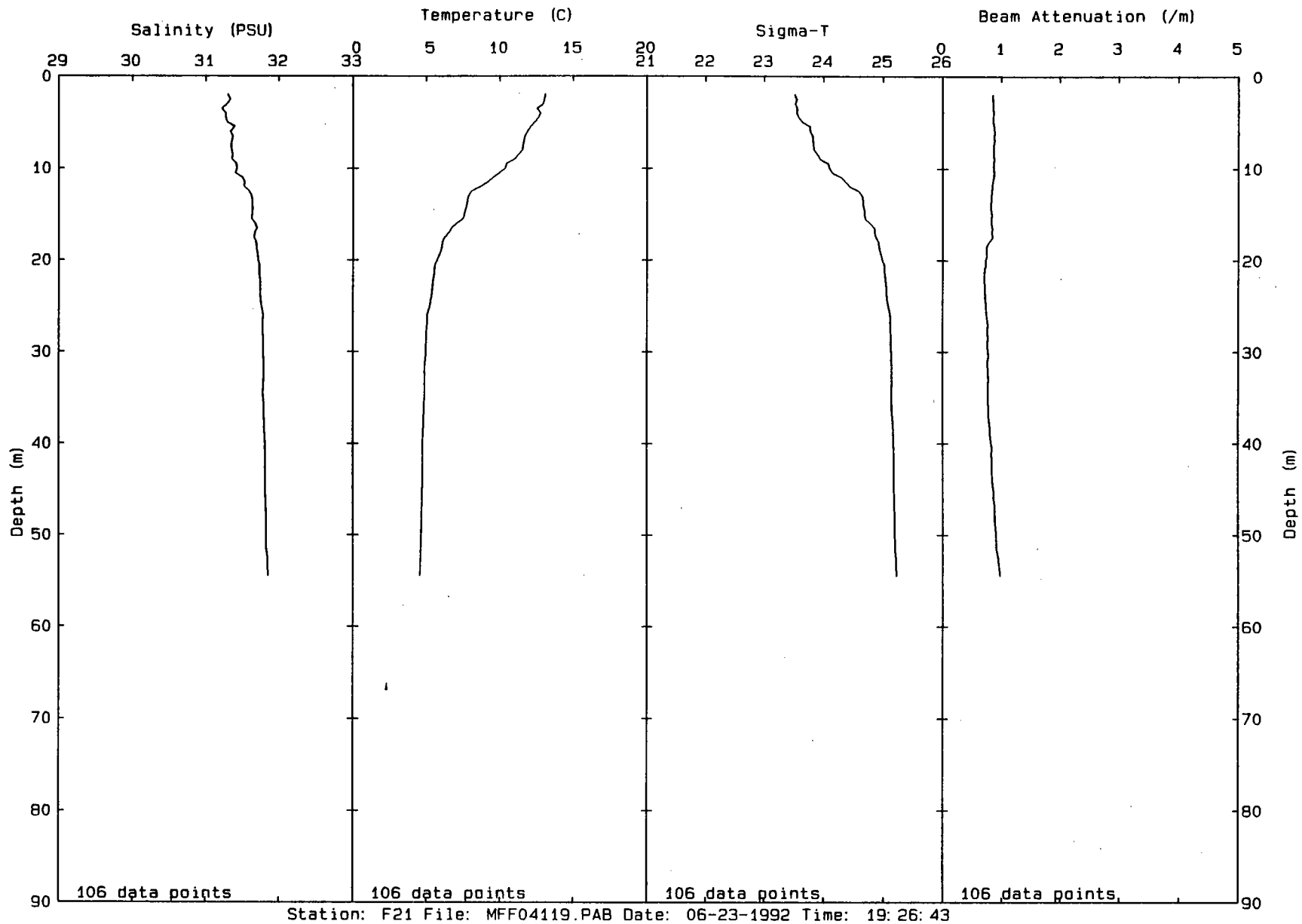


Station: F20 File: MFF04122.PAB Date: 06-23-1992 Time: 20: 28: 30

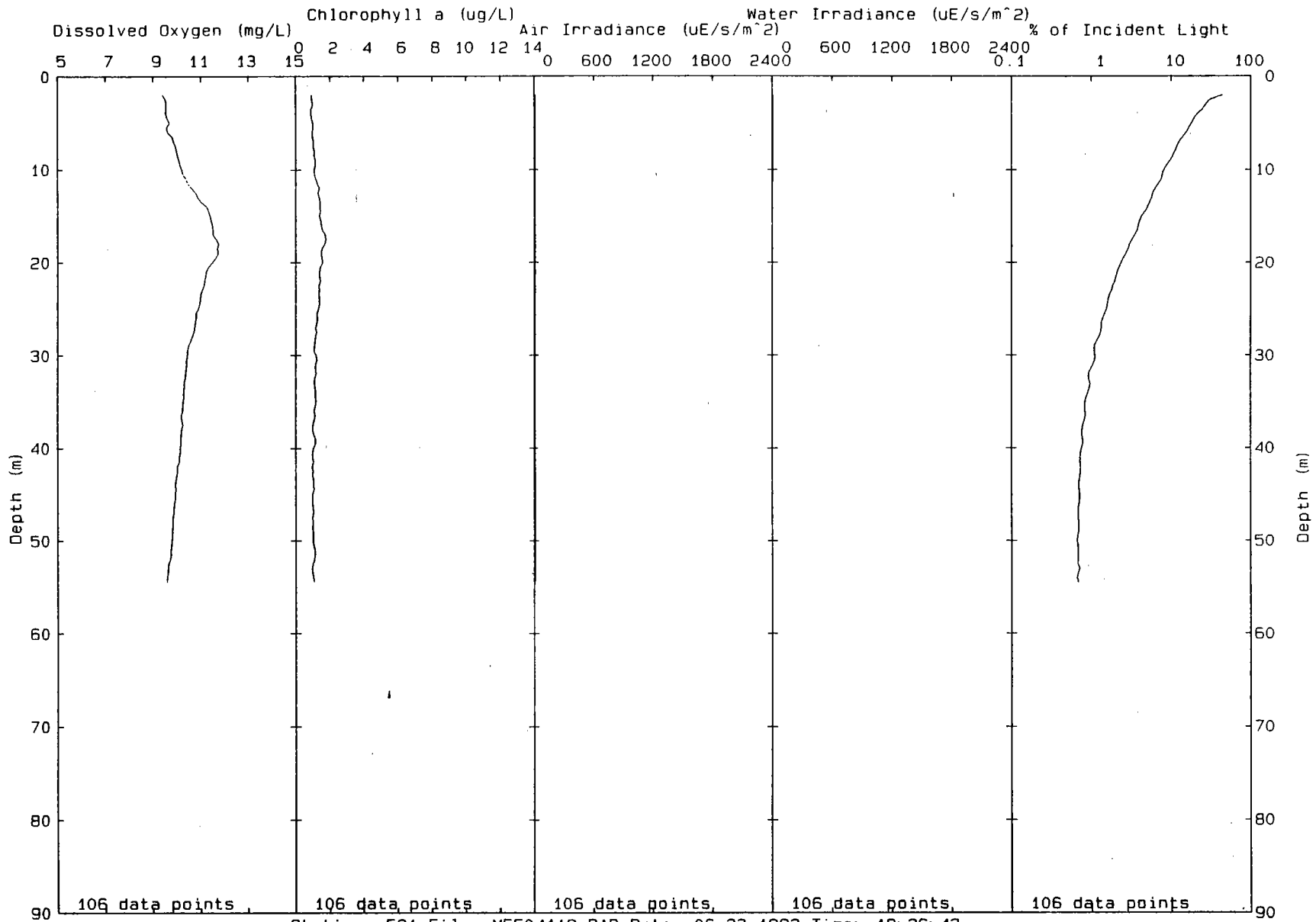


00297

00298

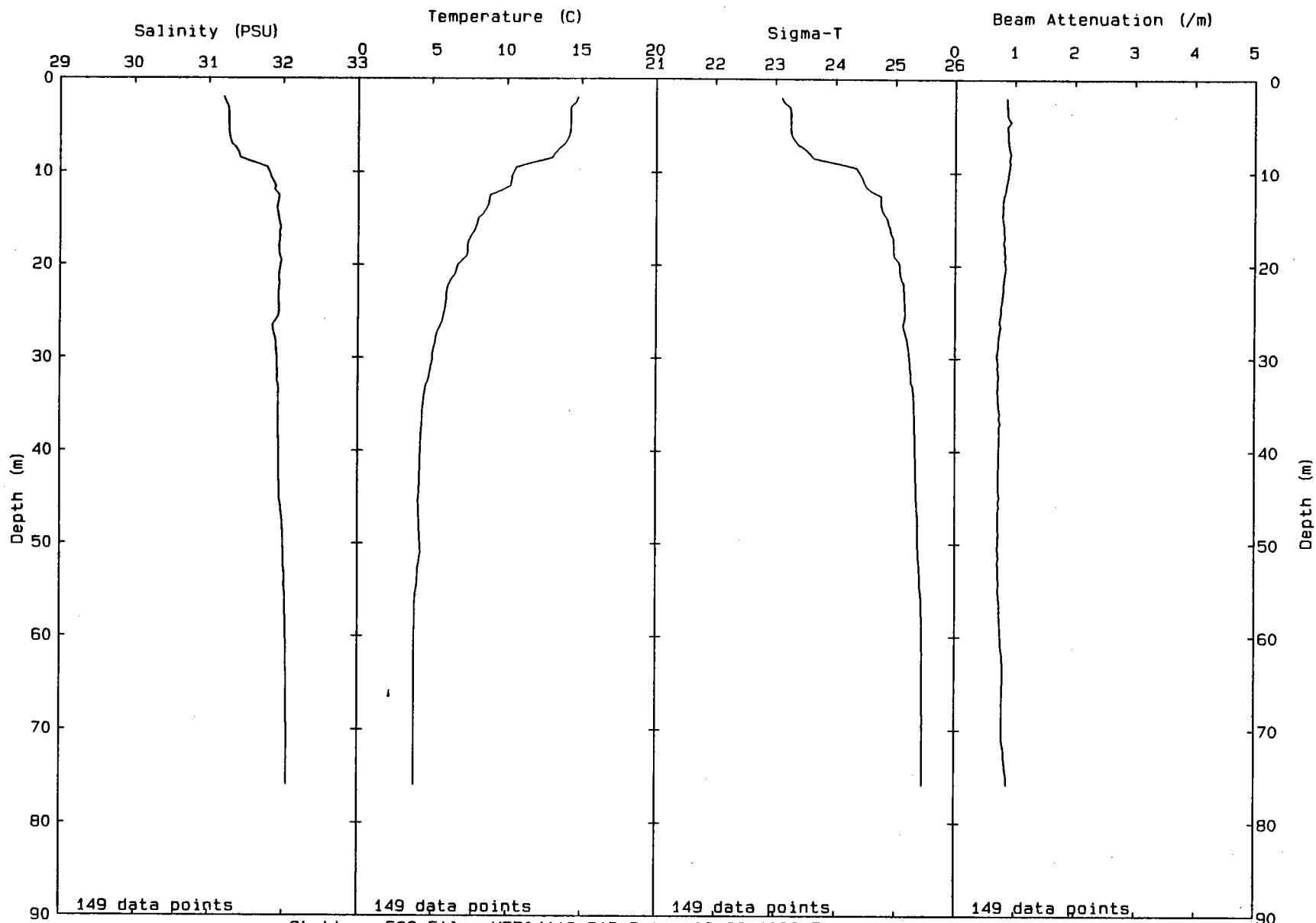


Station: F21 File: MFF04119.PAB Date: 06-23-1992 Time: 19:26:43



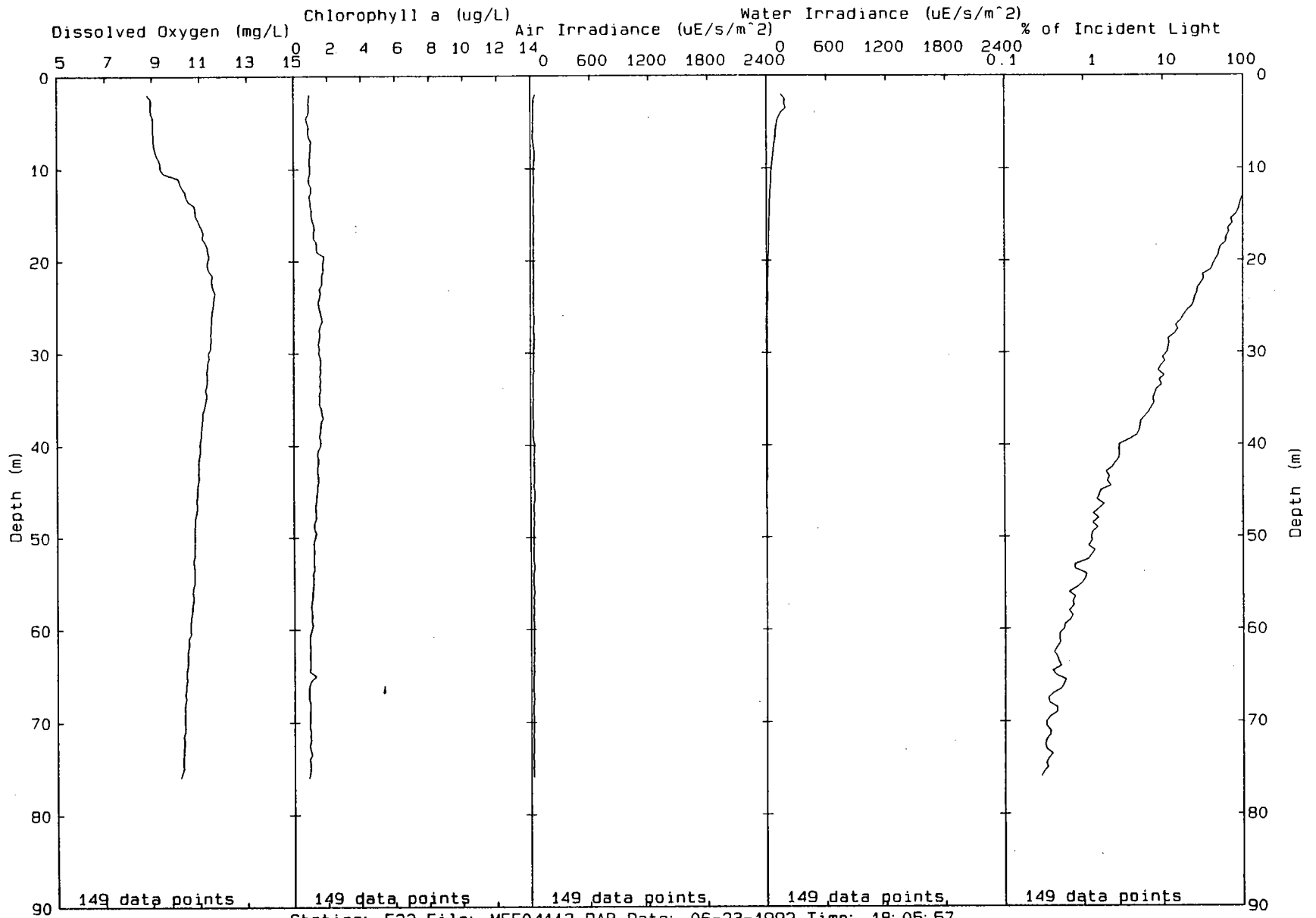
Station: F21 File: MFF04119.PAB Date: 06-23-1992 Time: 19:26:43

00299



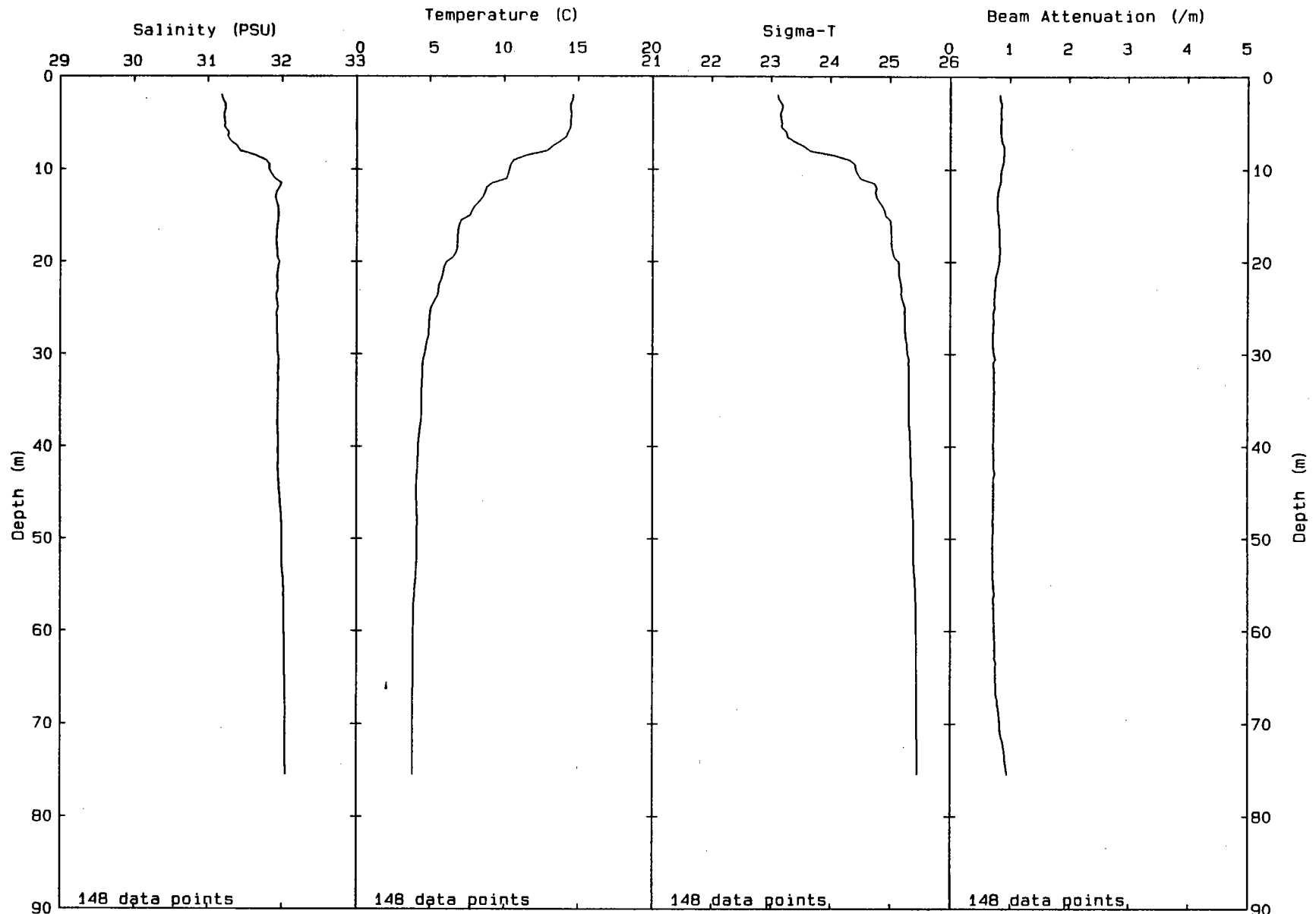
Station: F22 File: MFF04113.PAB Date: 06-23-1992 Time: 18:05:57

00300



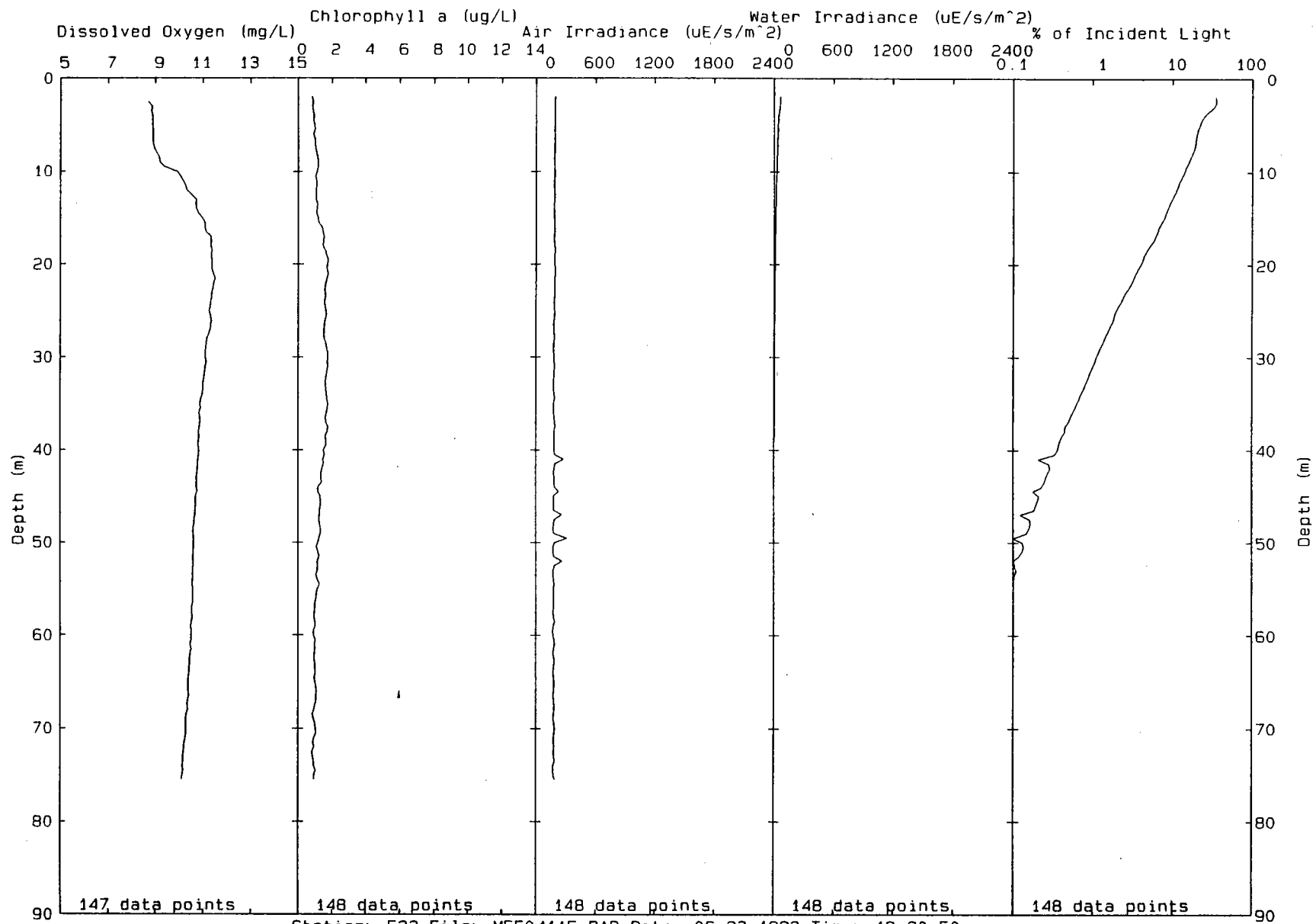
Station: F22 File: MFF04113.PAB Date: 06-23-1992 Time: 18: 05: 57

00301



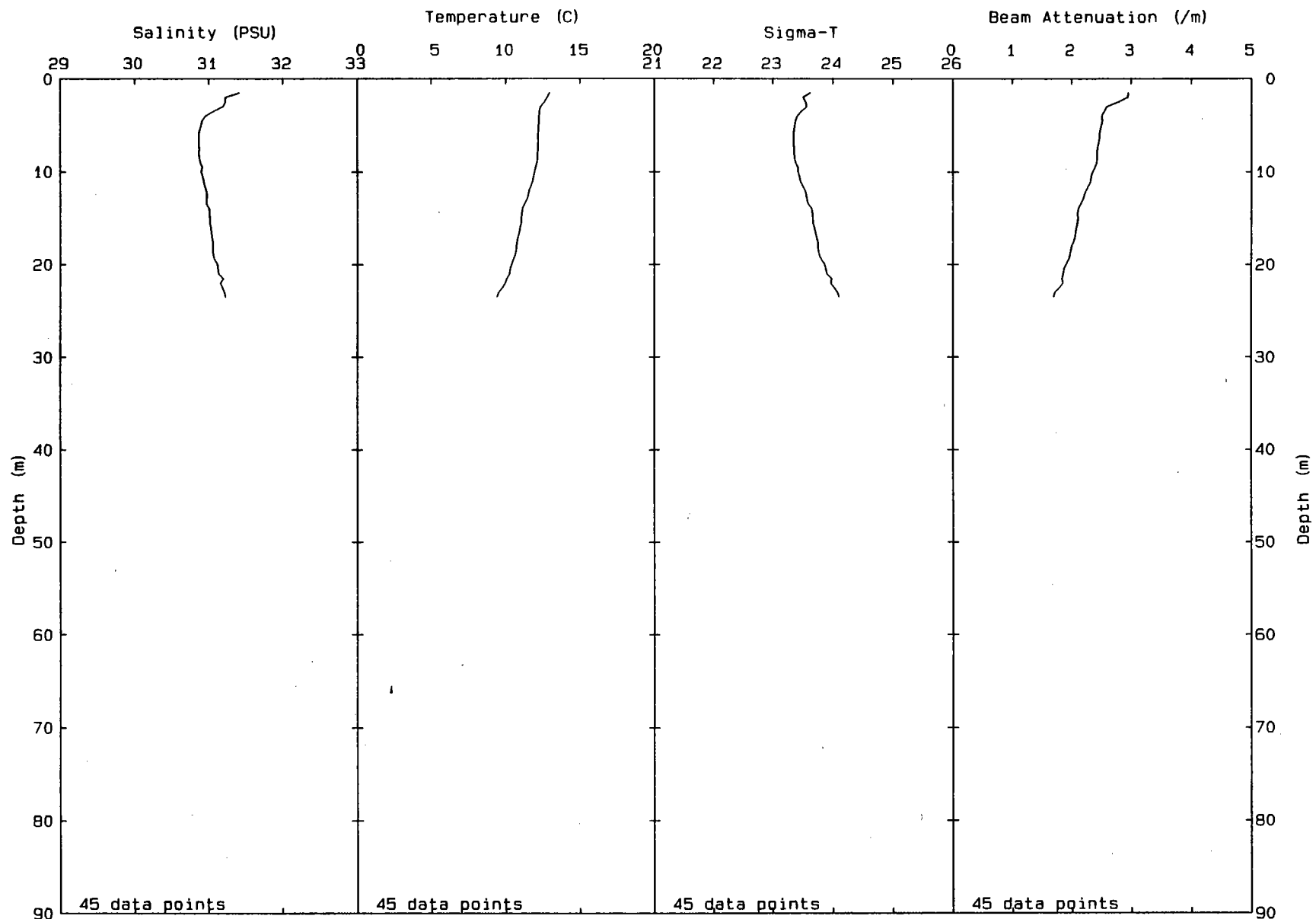
Station: F22 File: MFF04115.PAB Date: 06-23-1992 Time: 18: 30: 50

00302



Station: F22 File: MFF04115.PAB Date: 06-23-1992 Time: 18:30:50

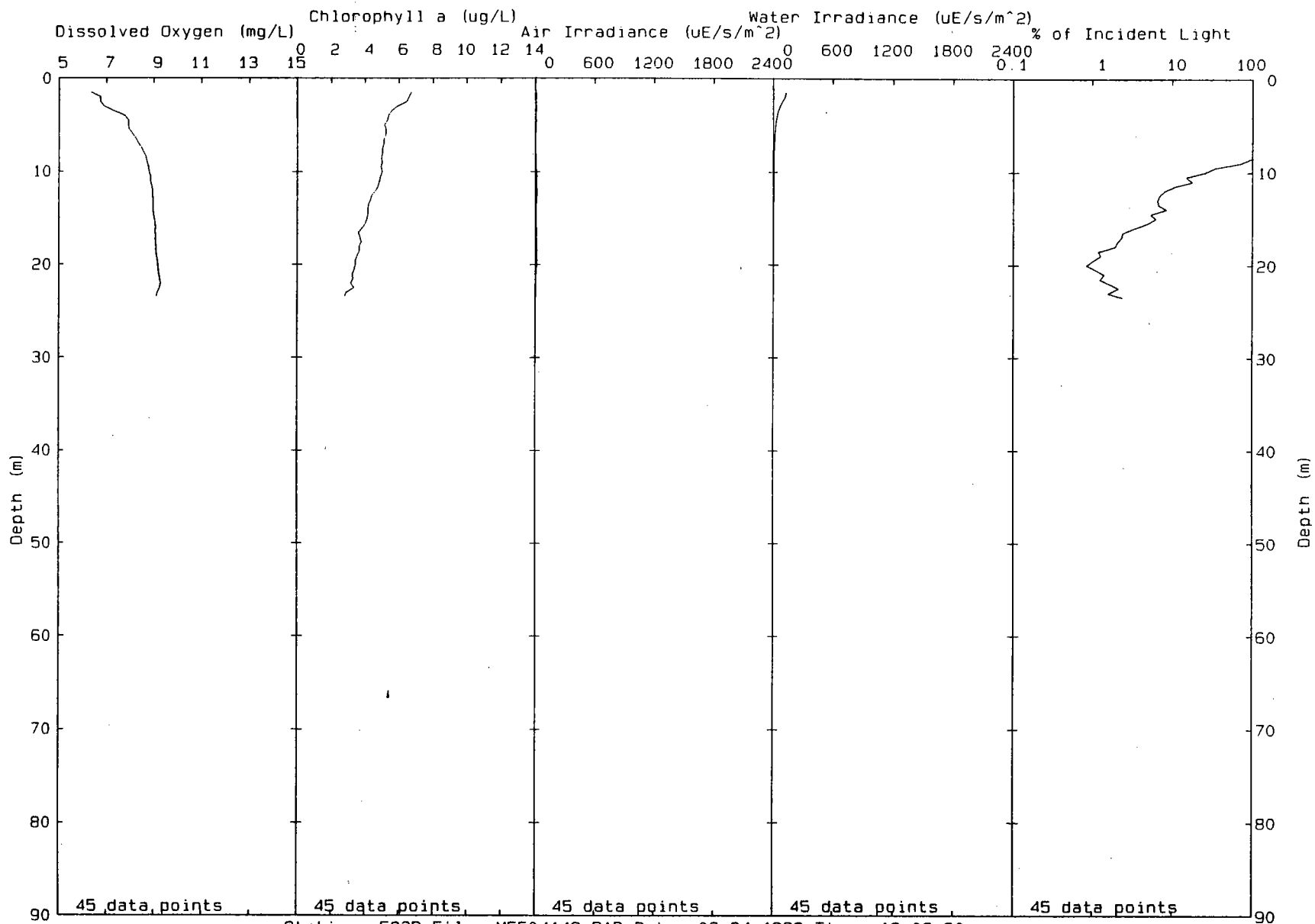
00303



Station: F23P File: MFF04148.PAB Date: 06-24-1992 Time: 12:02:60

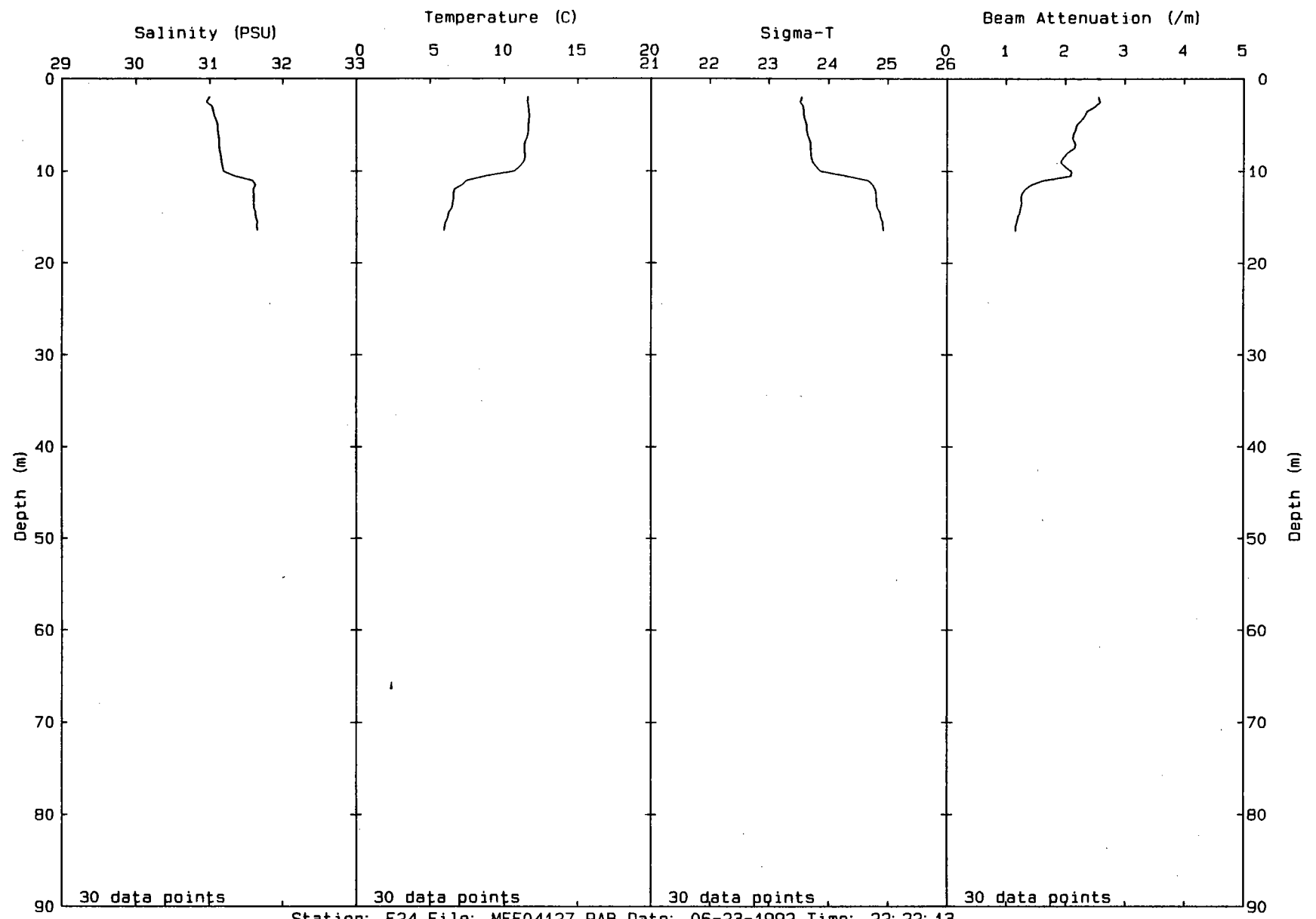
00304

00305

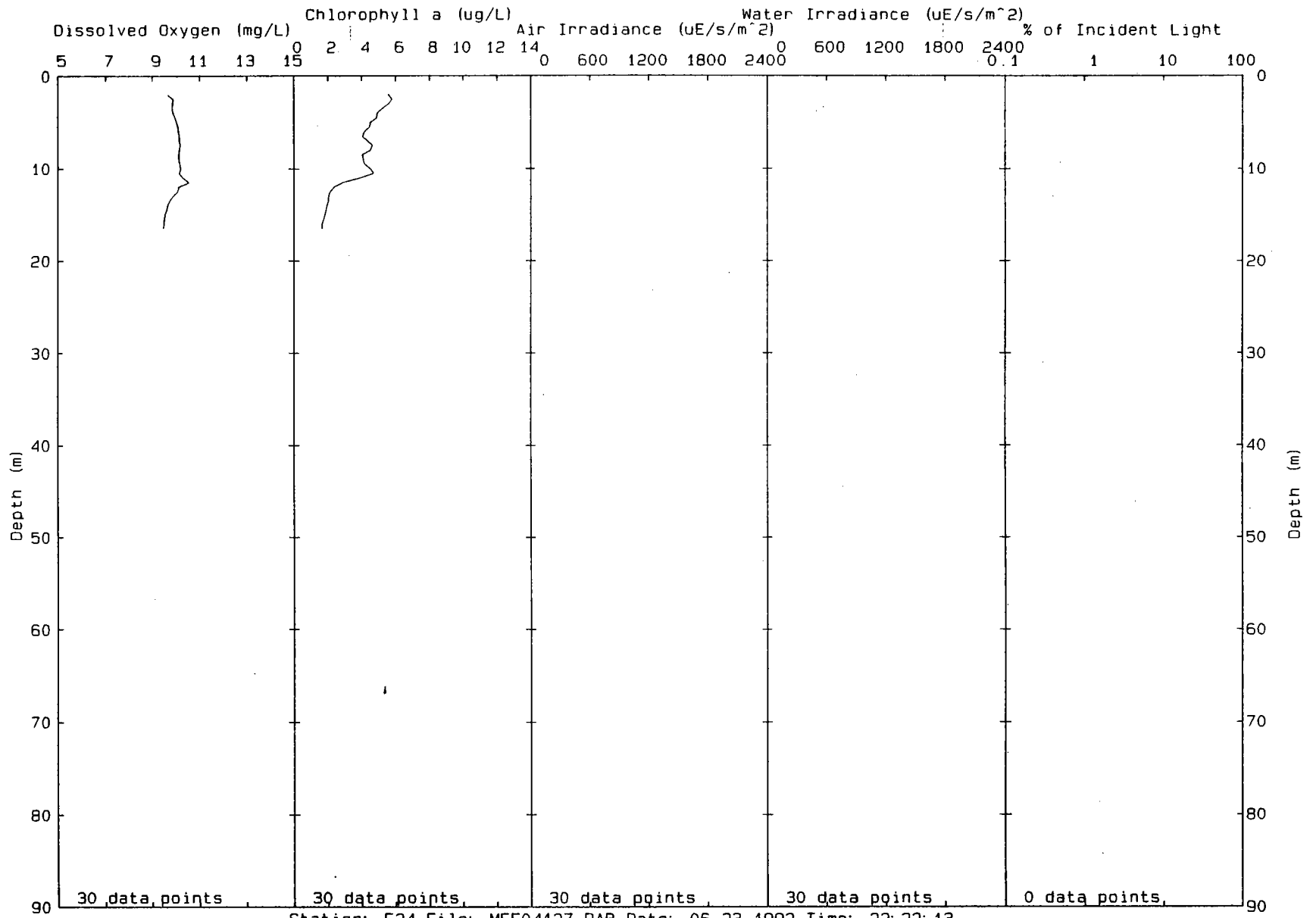


Station: F23P File: MFF04148.PAB Date: 06-24-1992 Time: 12:02:60

00300



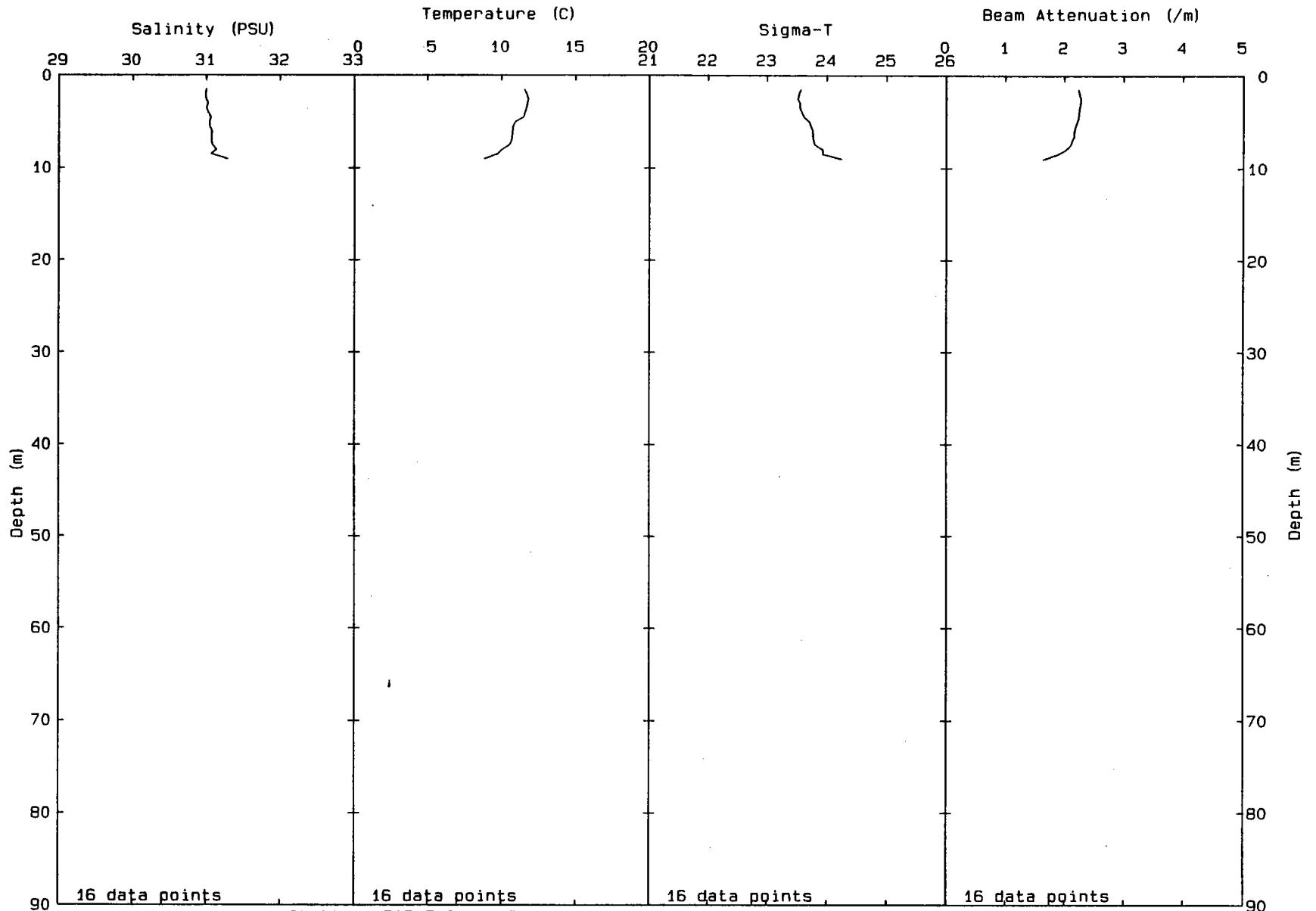
Station: F24 File: MFF04127.PAB Date: 06-23-1992 Time: 22:22:13



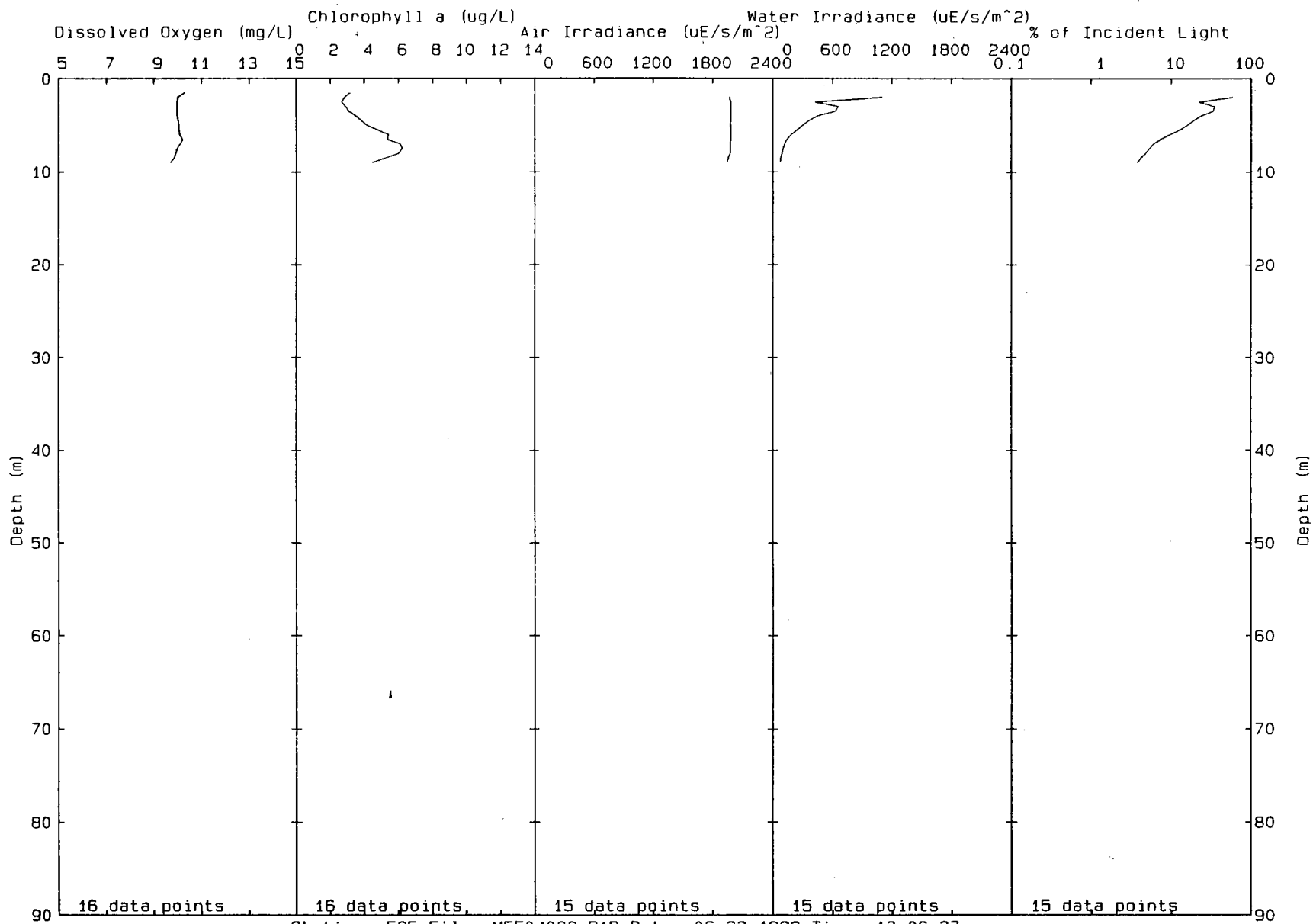
Station: F24 File: MFF04127.PAB Date: 06-23-1992 Time: 22: 22: 13

00307

80308



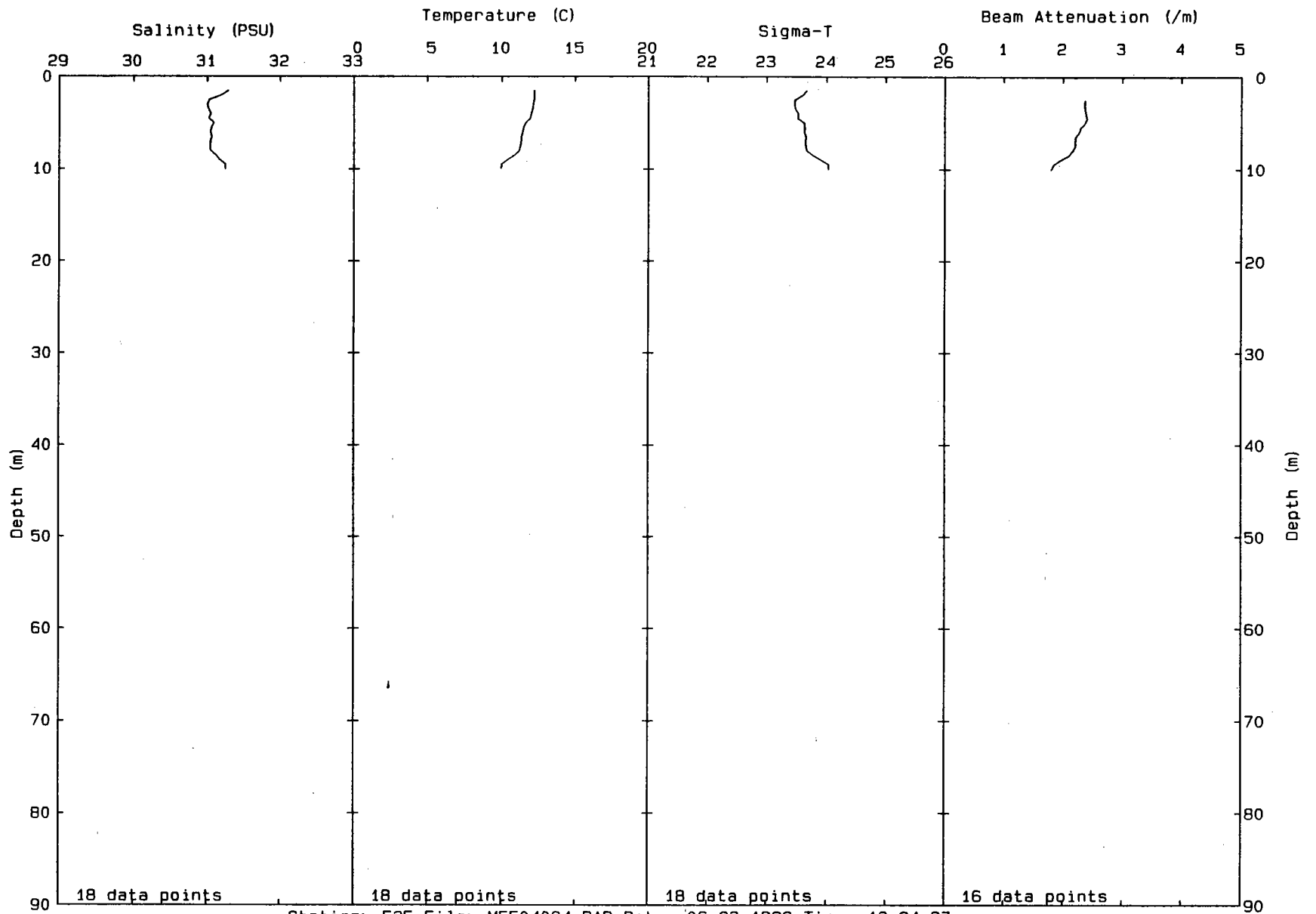
Station: F25 File: MFF04092.PAB Date: 06-23-1992 Time: 13:06:37



Station: F25 File: MFF04092.PAB Date: 06-23-1992 Time: 13:06:37

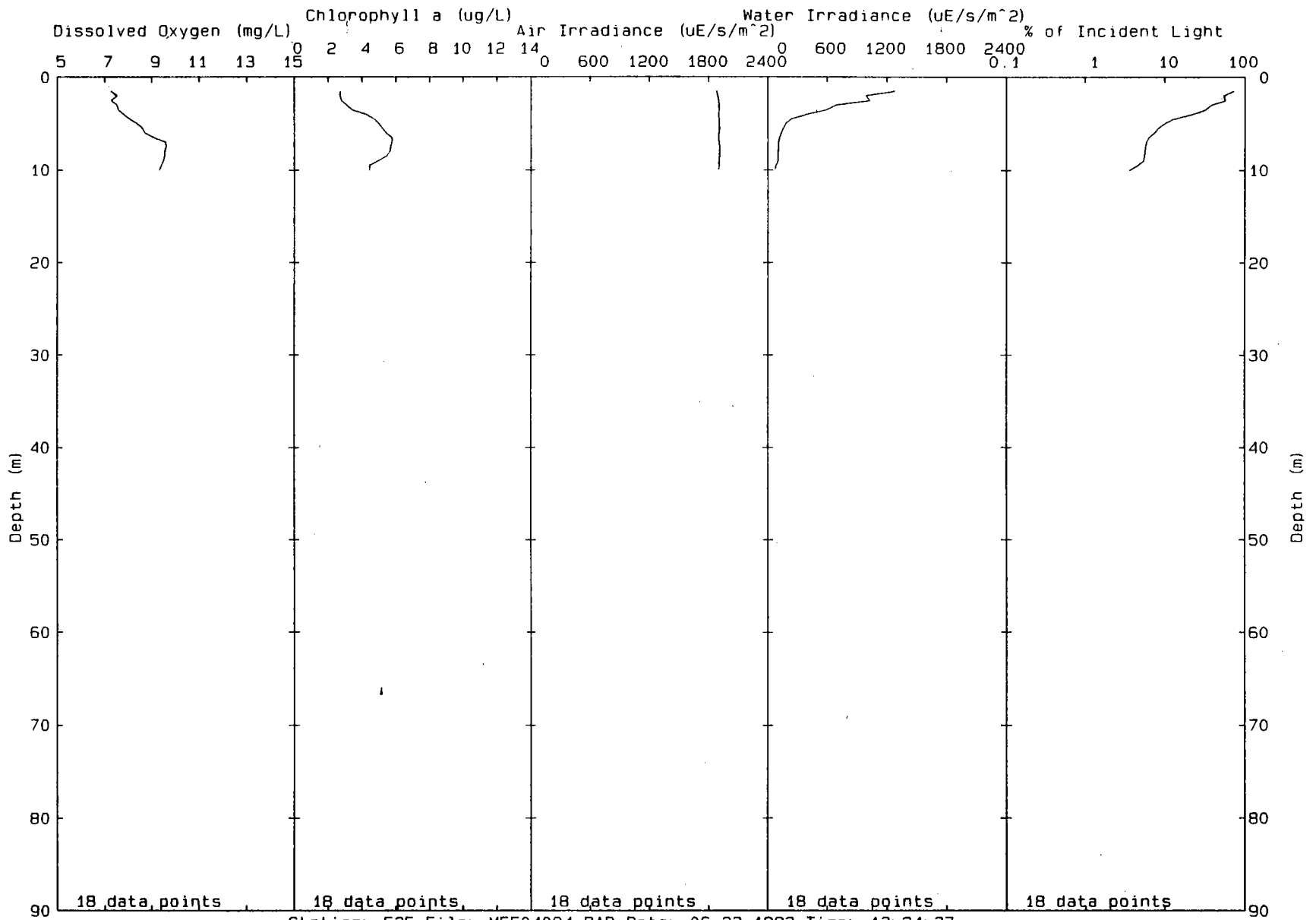
00309

00310



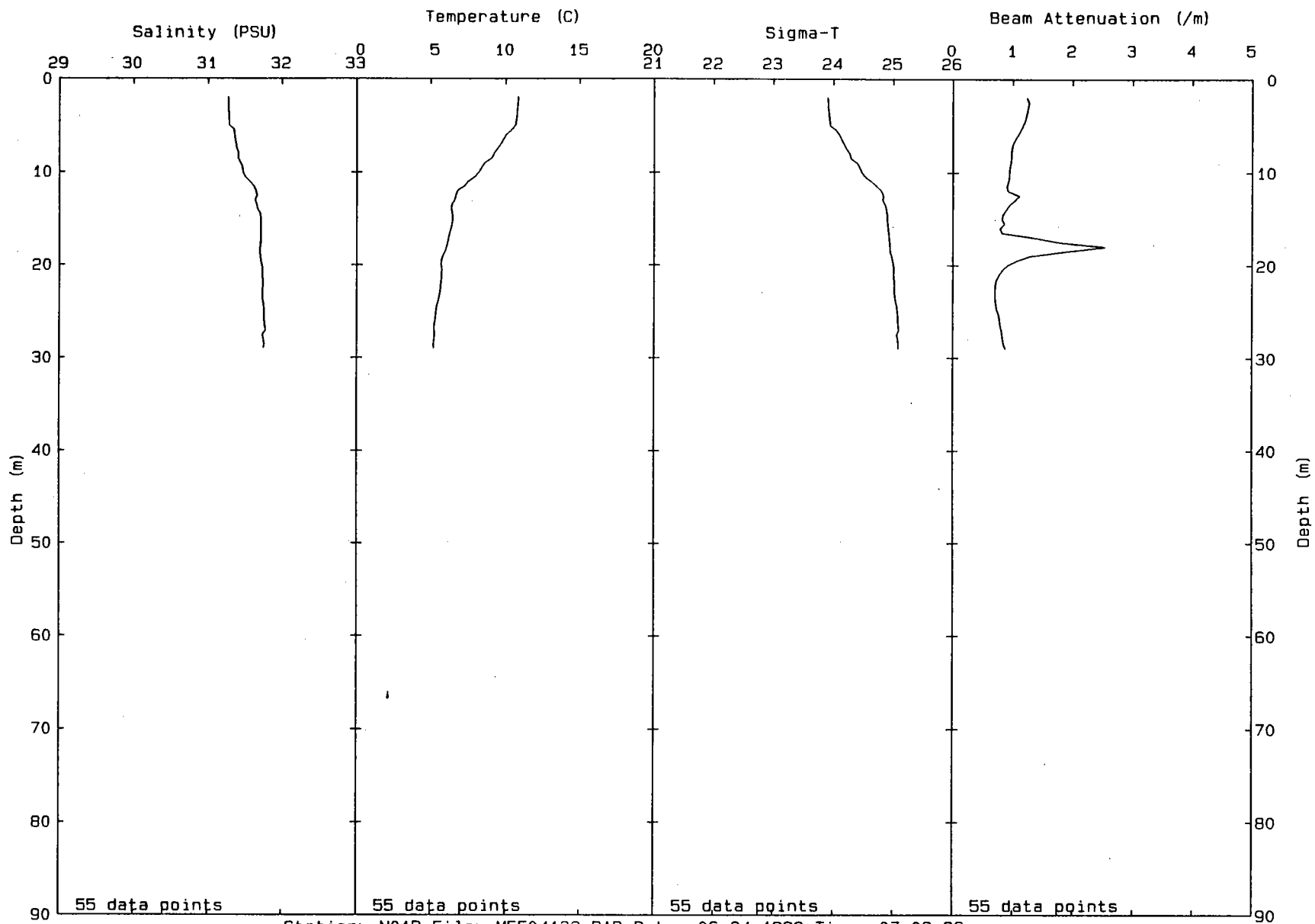
Station: F25 File: MFF04094.PAB Date: 06-23-1992 Time: 13:24:37

00311



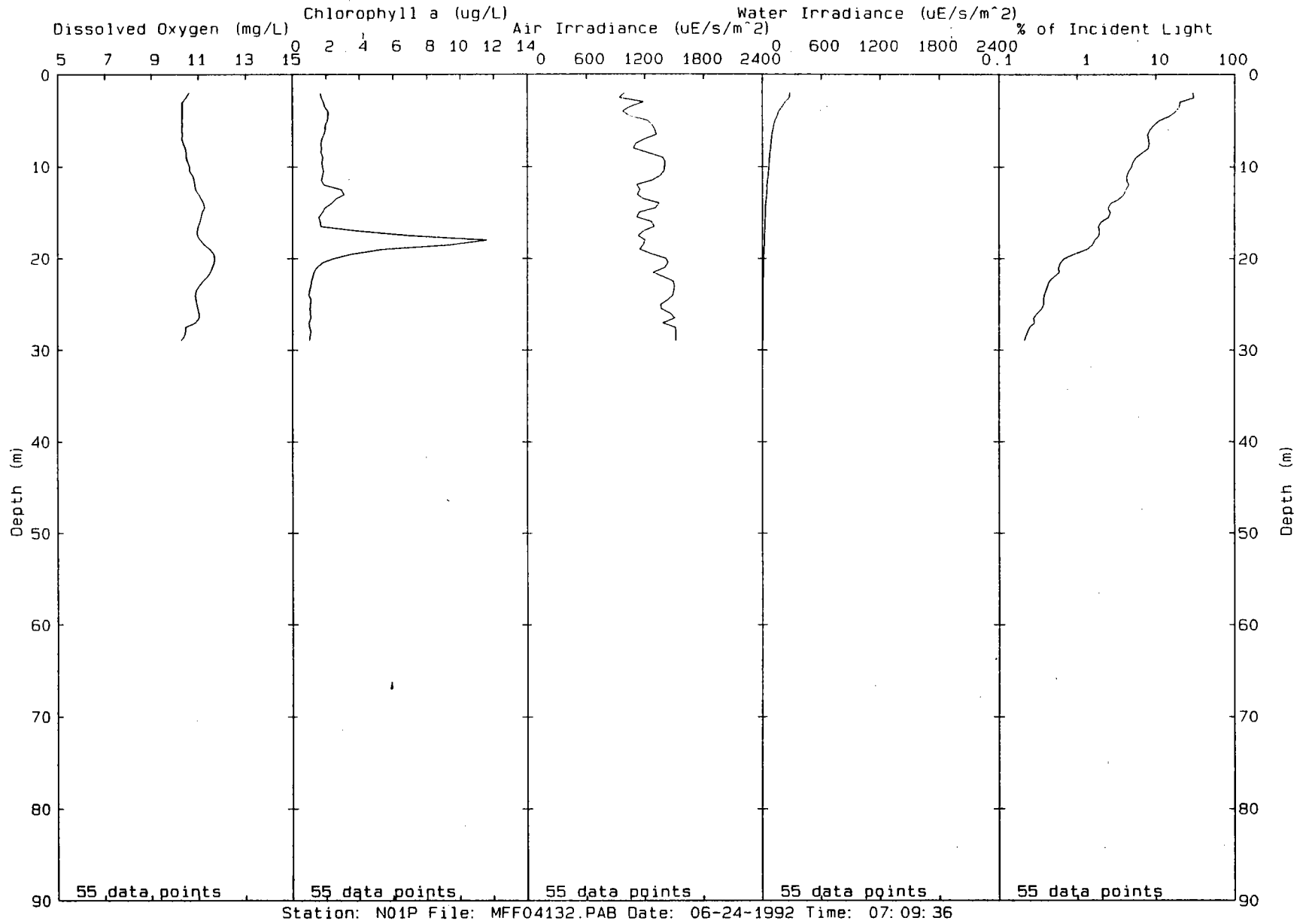
Station: F25 File: MFF04094.PAB Date: 06-23-1992 Time: 13:24:37

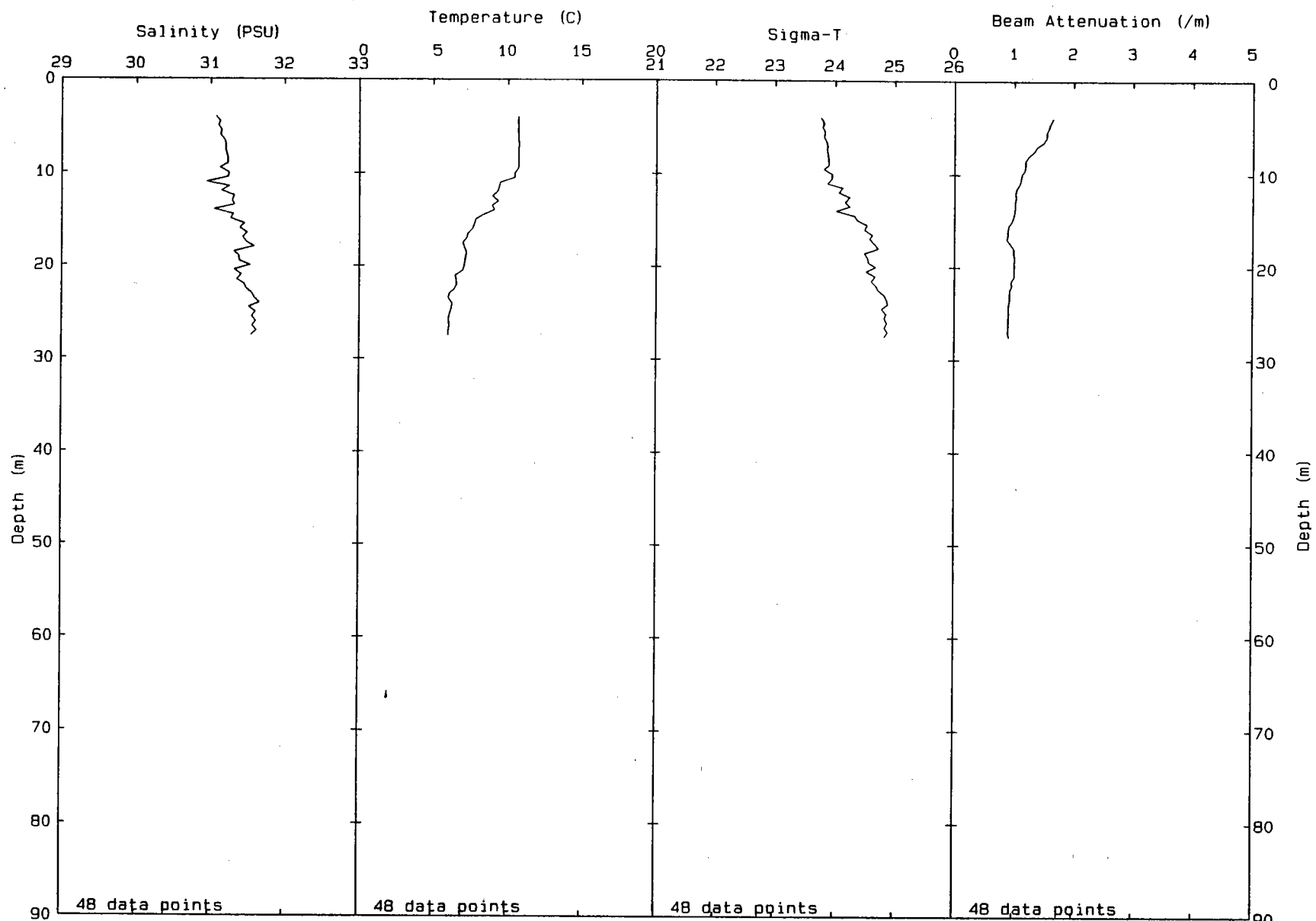
00312



Station: N01P File: MFF04132.PAB Date: 06-24-1992 Time: 07: 09: 36

00313

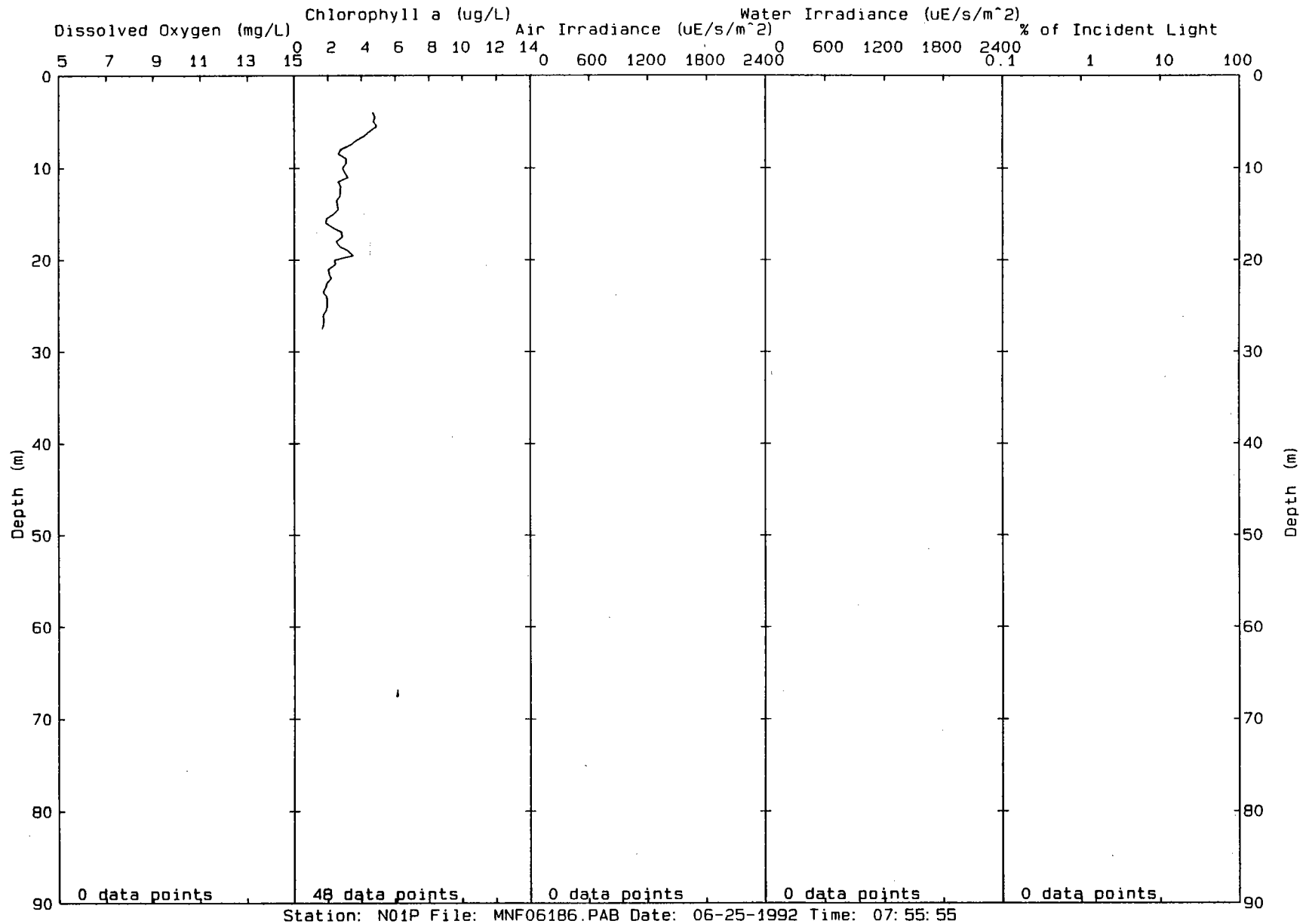




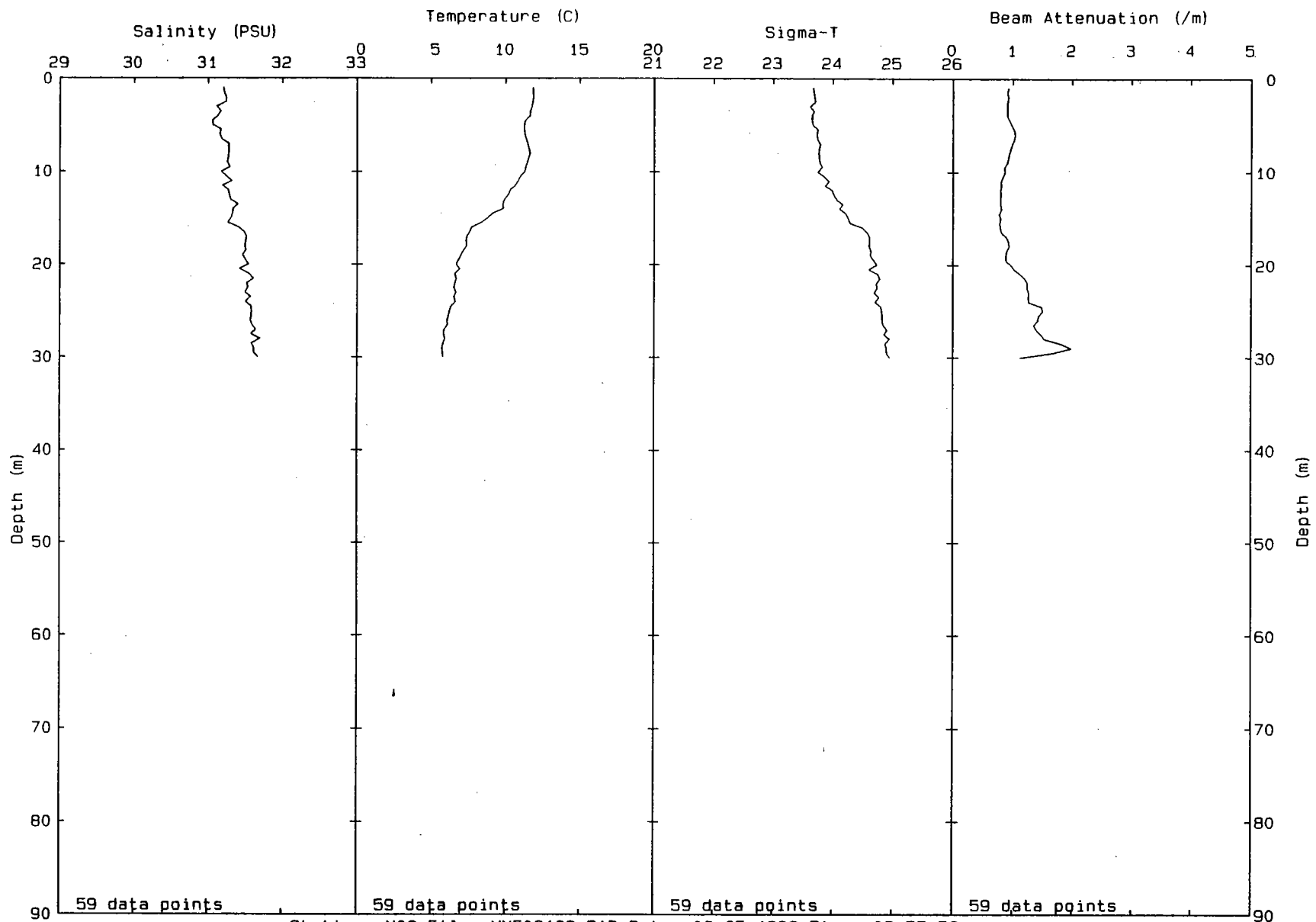
Station: N01P File: MNF06186.PAB Date: 06-25-1992 Time: 07:55:55

00314

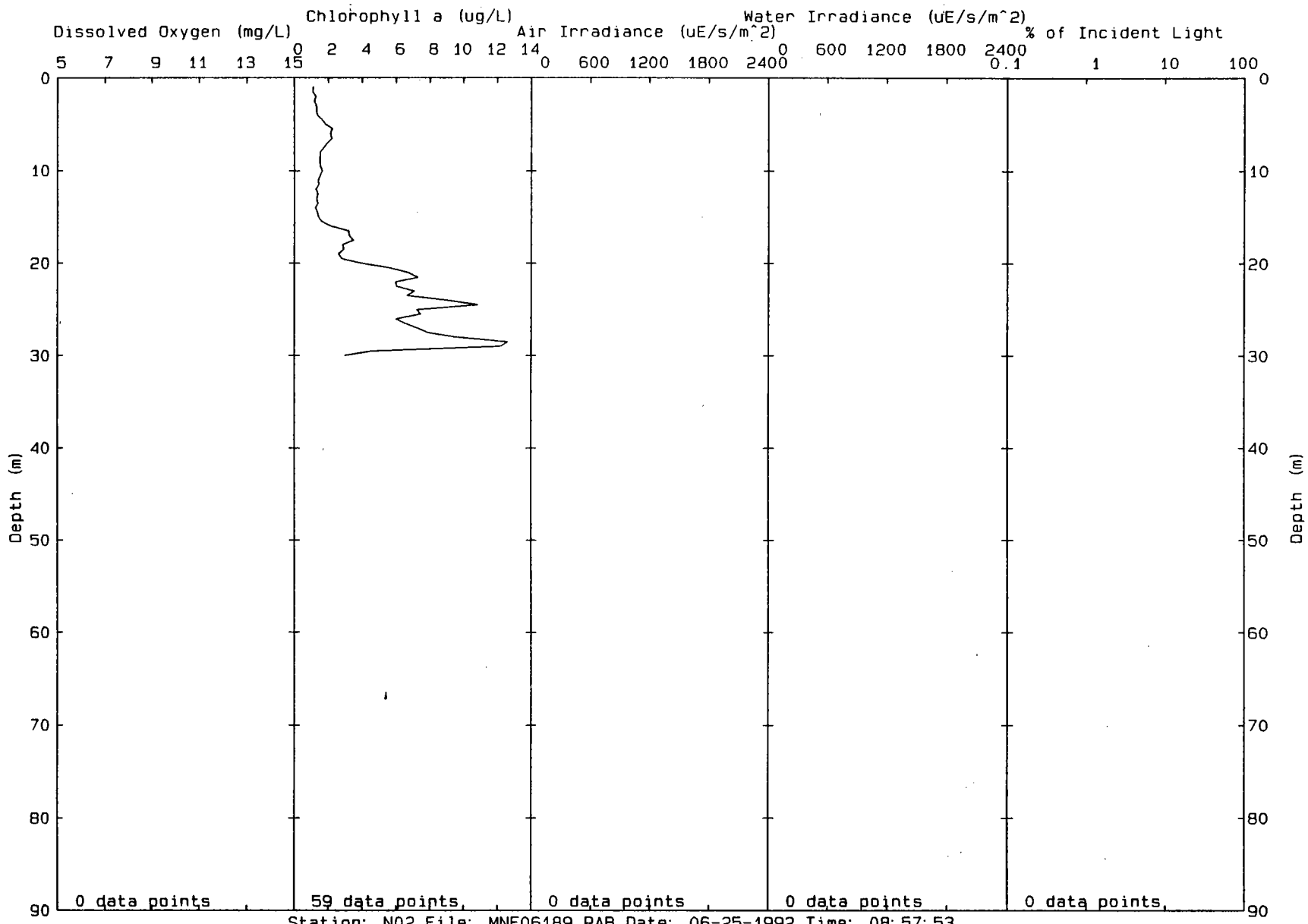
00315



00316



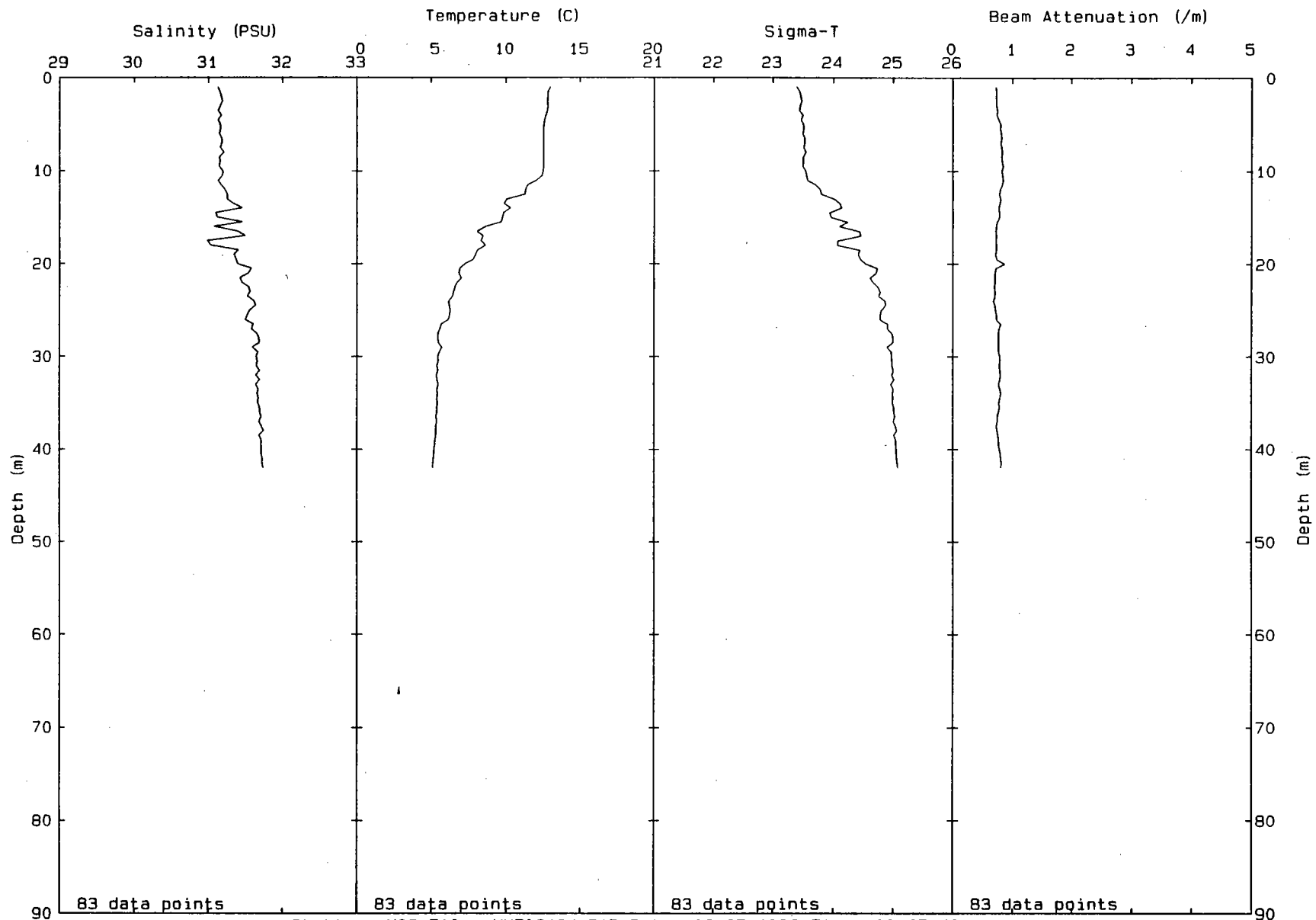
Station: N02 File: MNF06189.PAB Date: 06-25-1992 Time: 08: 57: 53



Station: N02 File: MNF06189.PAB Date: 06-25-1992 Time: 08:57:53

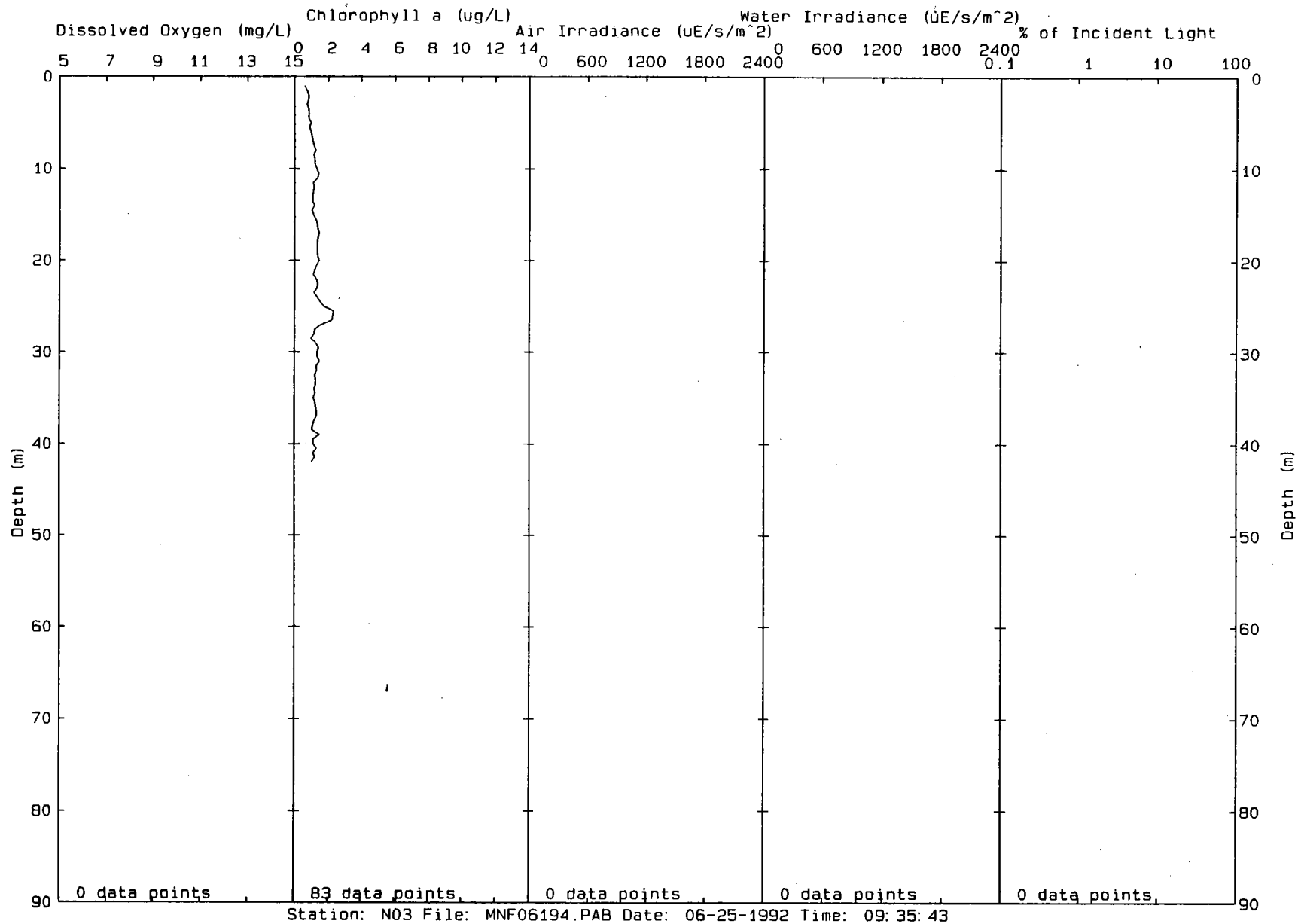
00317

00318

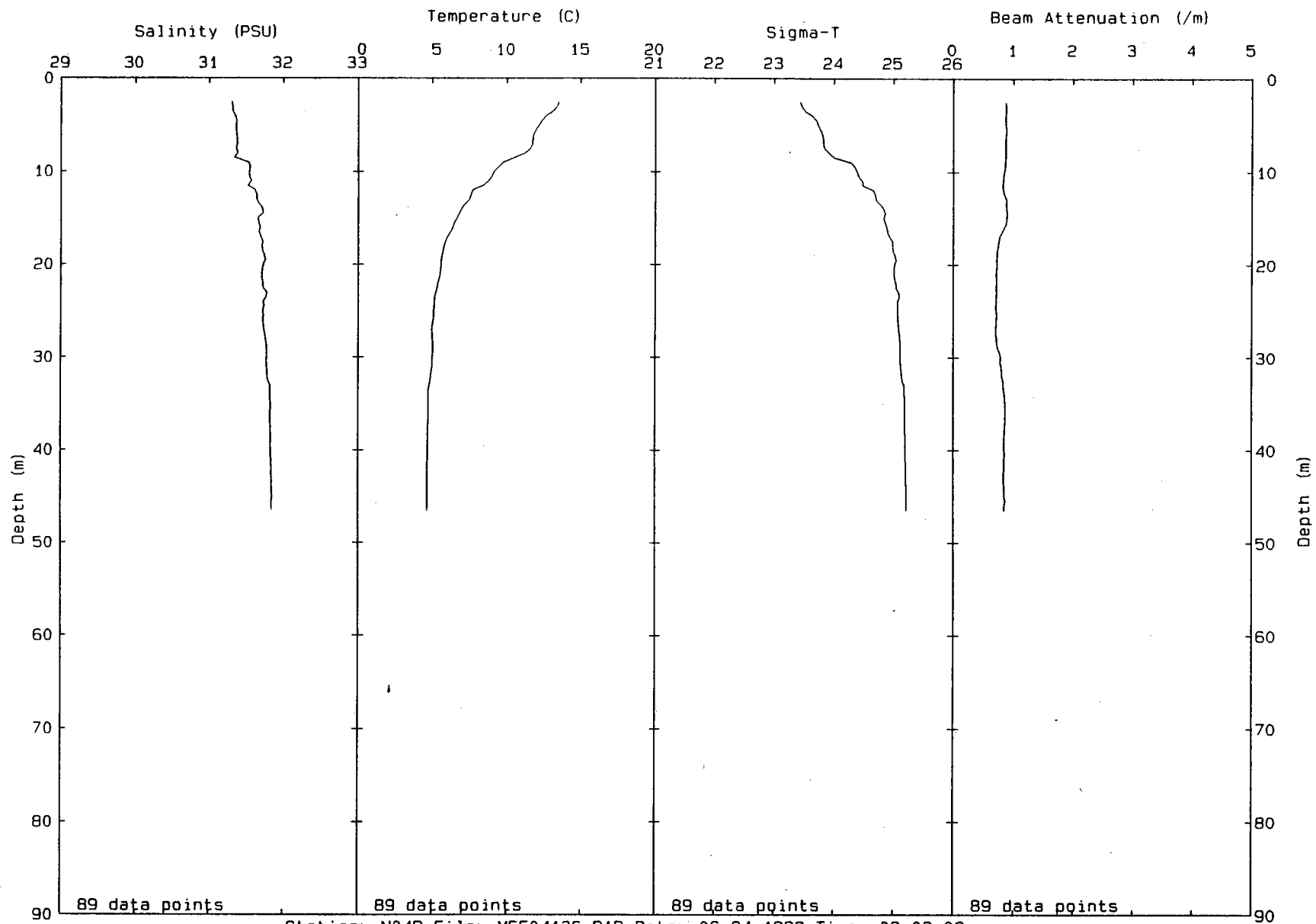


Station: N03 File: MNF06194.PAB Date: 06-25-1992 Time: 09:35:43

00319

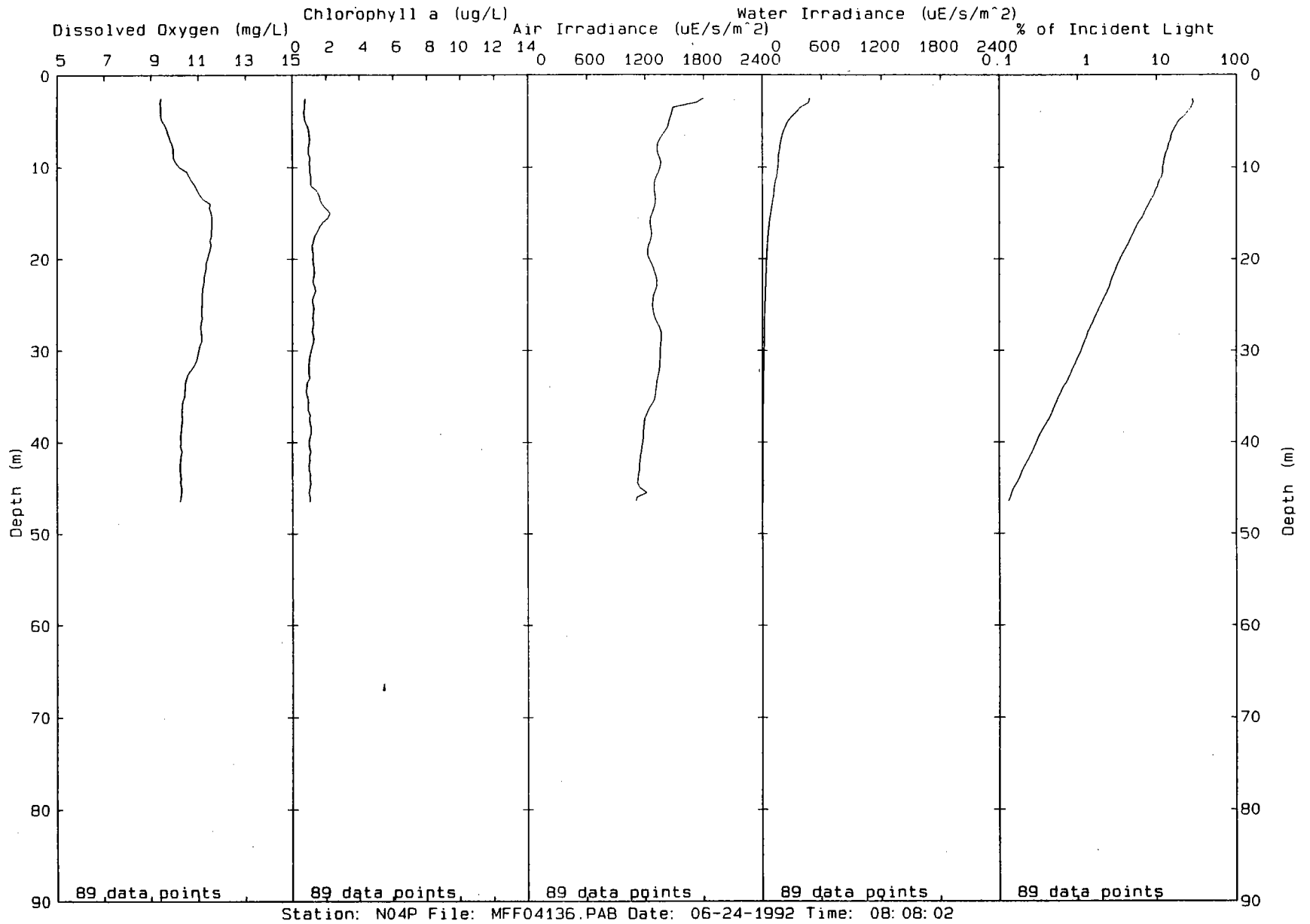


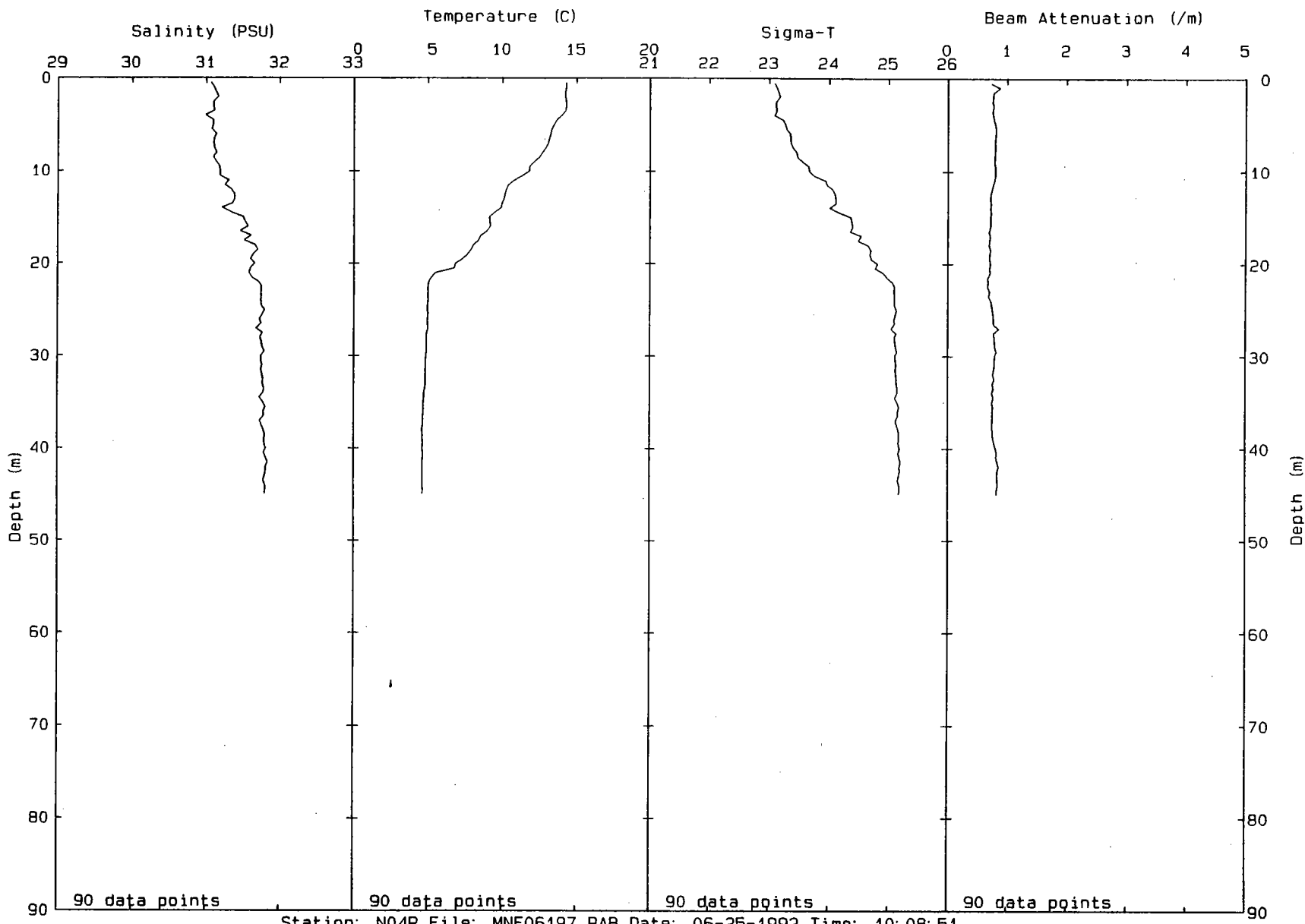
00320



Station: N04P File: MFF04136.PAB Date: 06-24-1992 Time: 08:08:02

00321

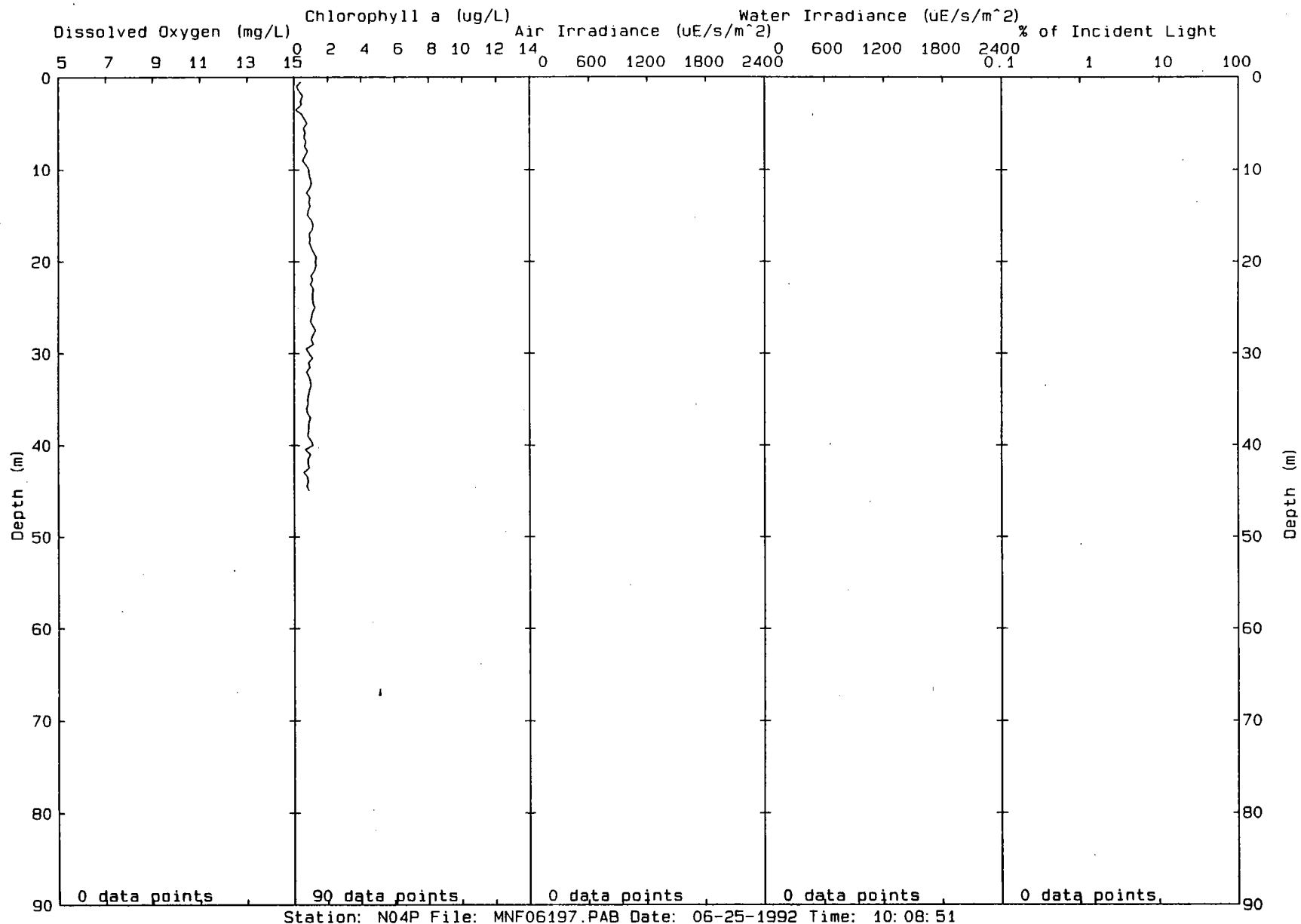




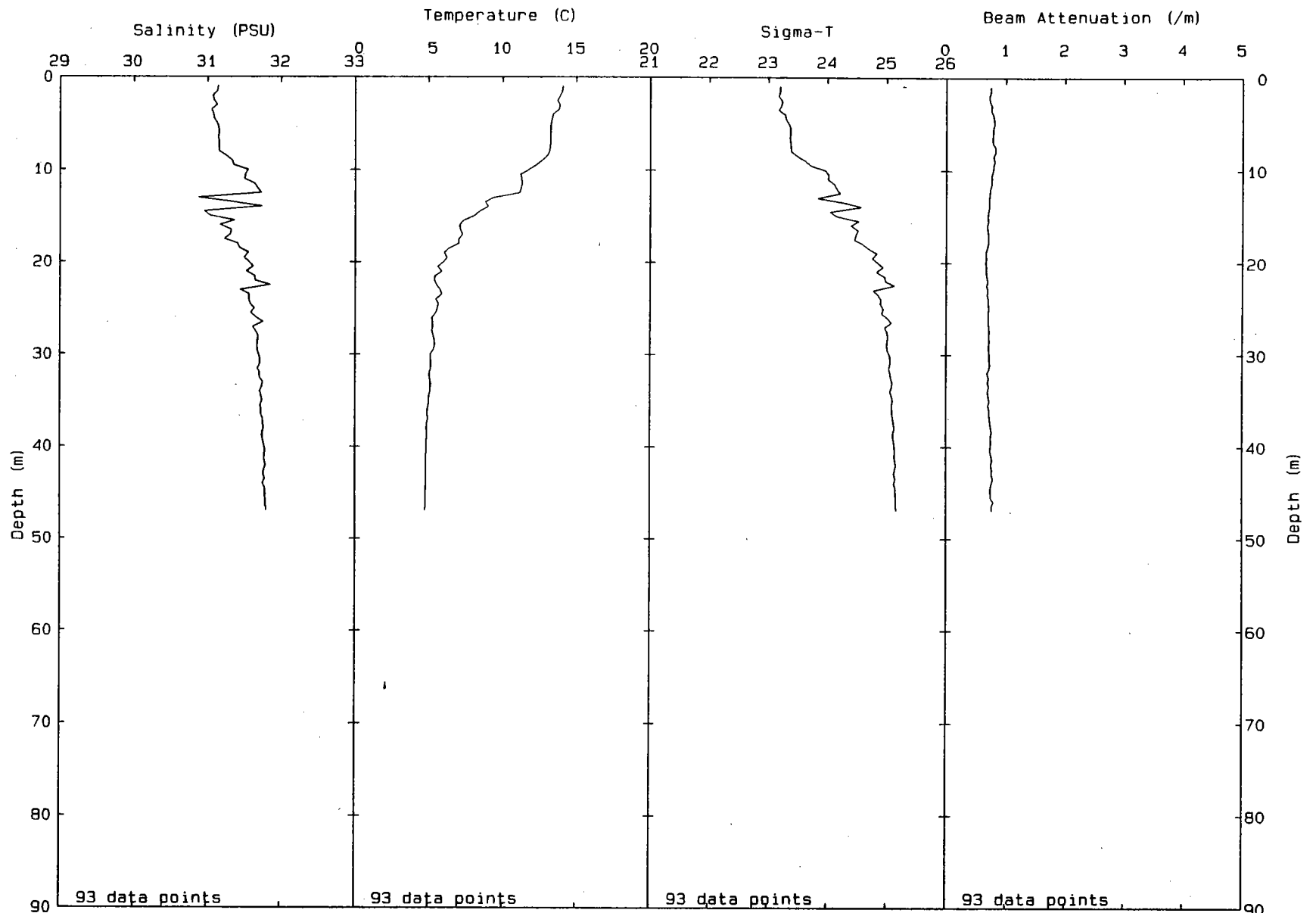
Station: N04P File: MNF06197.PAB Date: 06-25-1992 Time: 10:08:51

00322

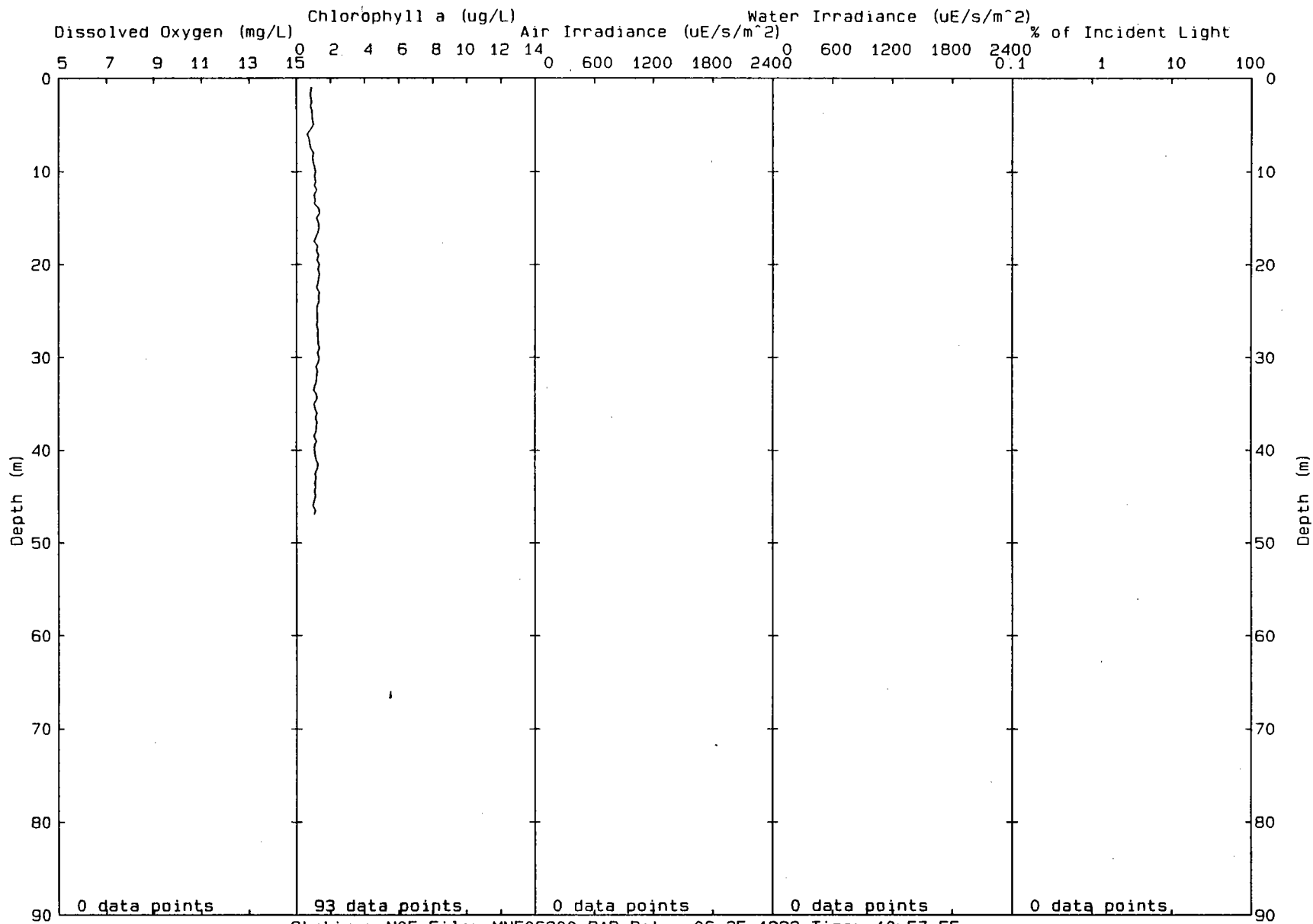
00323



00324



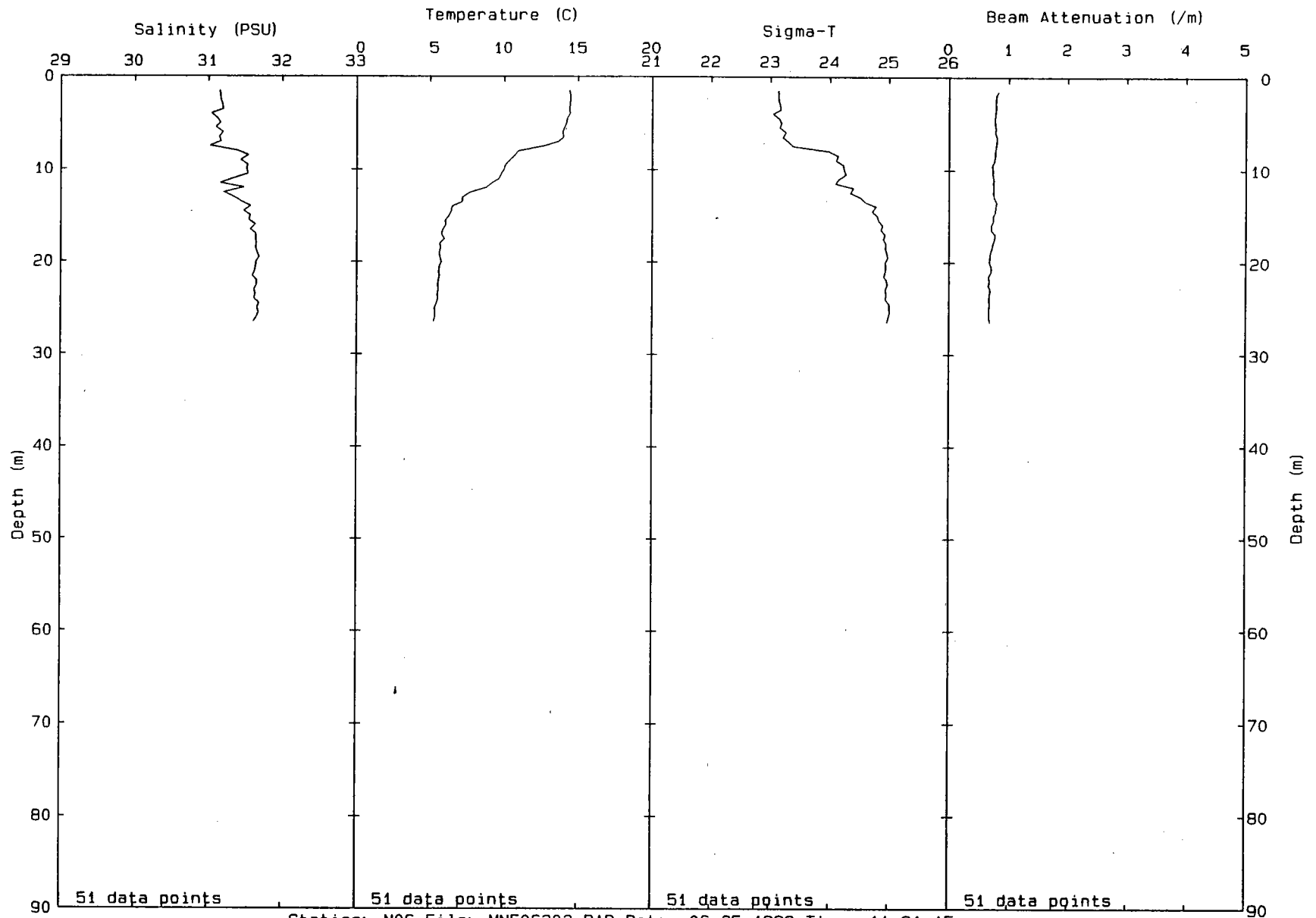
Station: N05 File: MNF06200.PAB Date: 06-25-1992 Time: 10:57:55



Station: N05 File: MNF06200.PAB Date: 06-25-1992 Time: 10:57:55

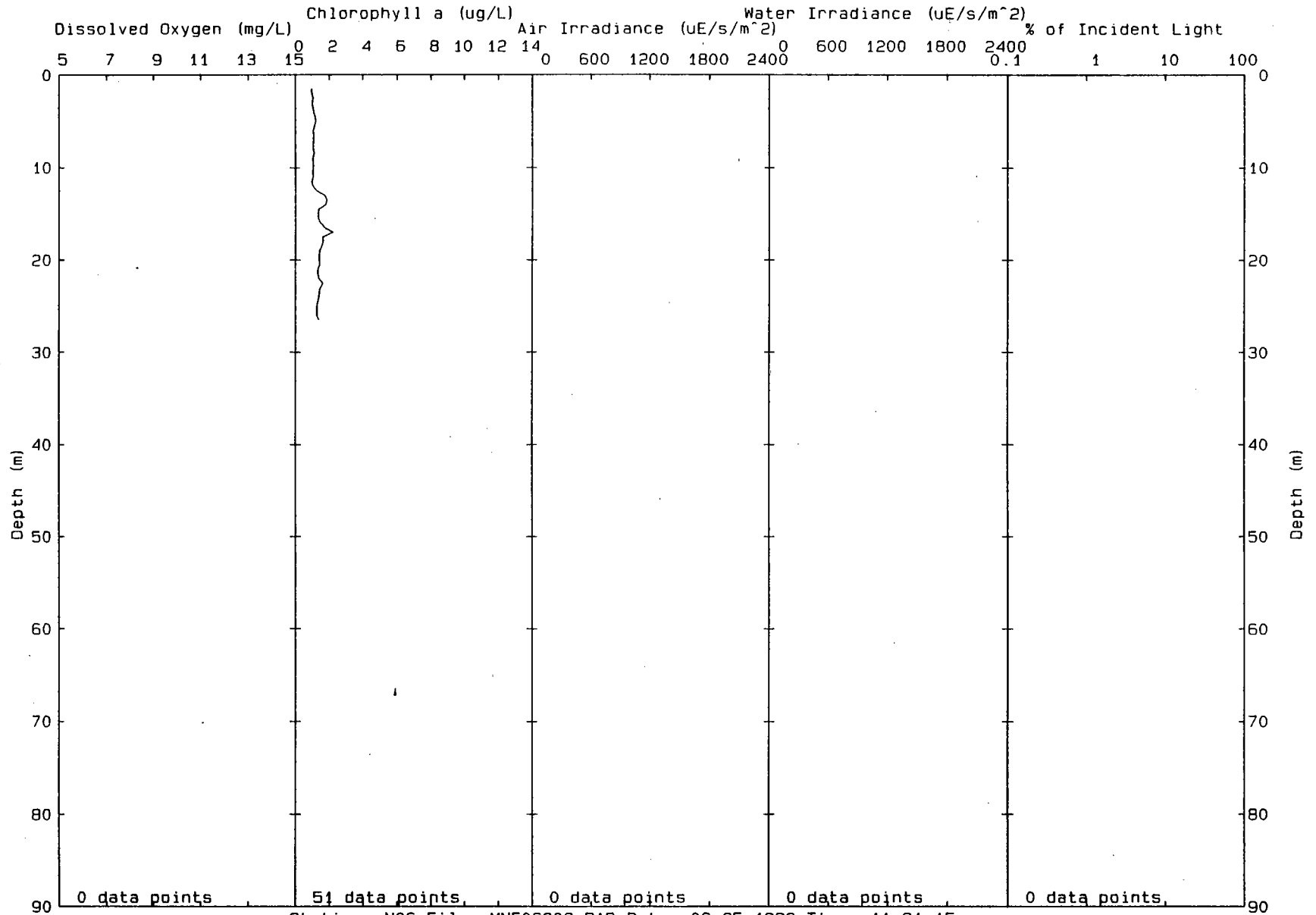
00325

00326



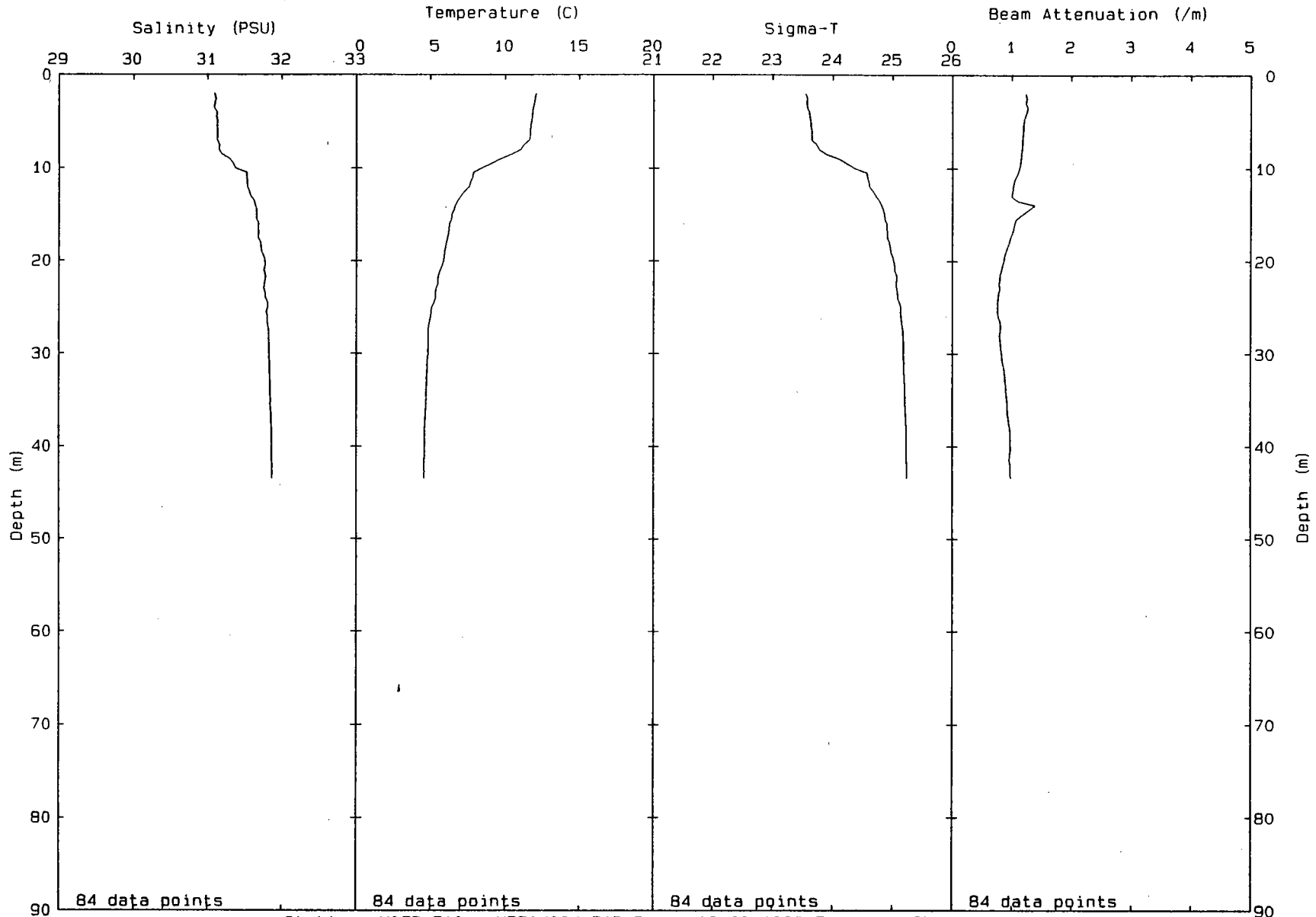
Station: N06 File: MNF06202.PAB Date: 06-25-1992 Time: 11:31:15

00327

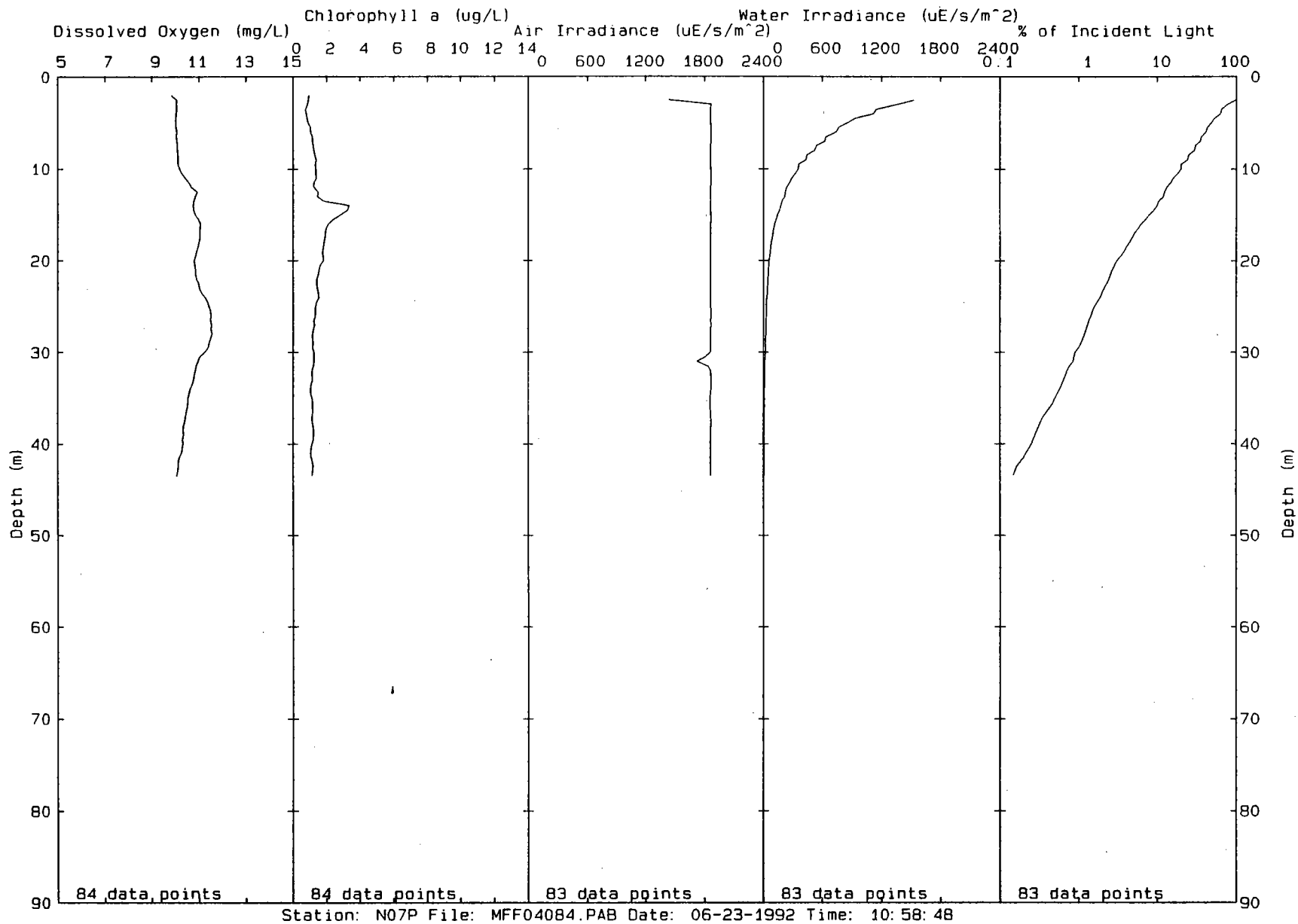


Station: N06 File: MNF06202.PAB Date: 06-25-1992 Time: 11:31:15

87800

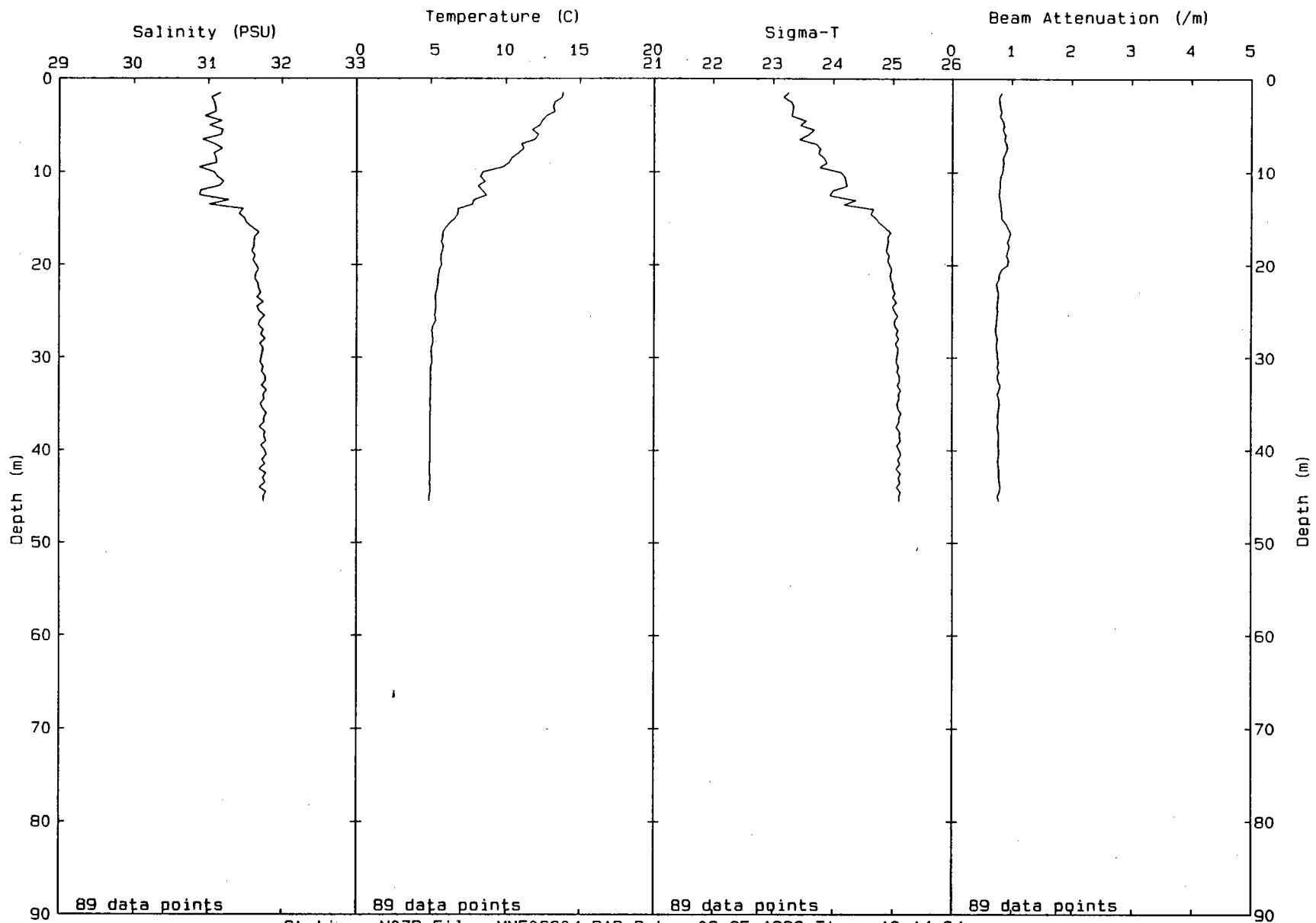


Station: N07P File: MFF04084.PAB Date: 06-23-1992 Time: 10: 58: 48

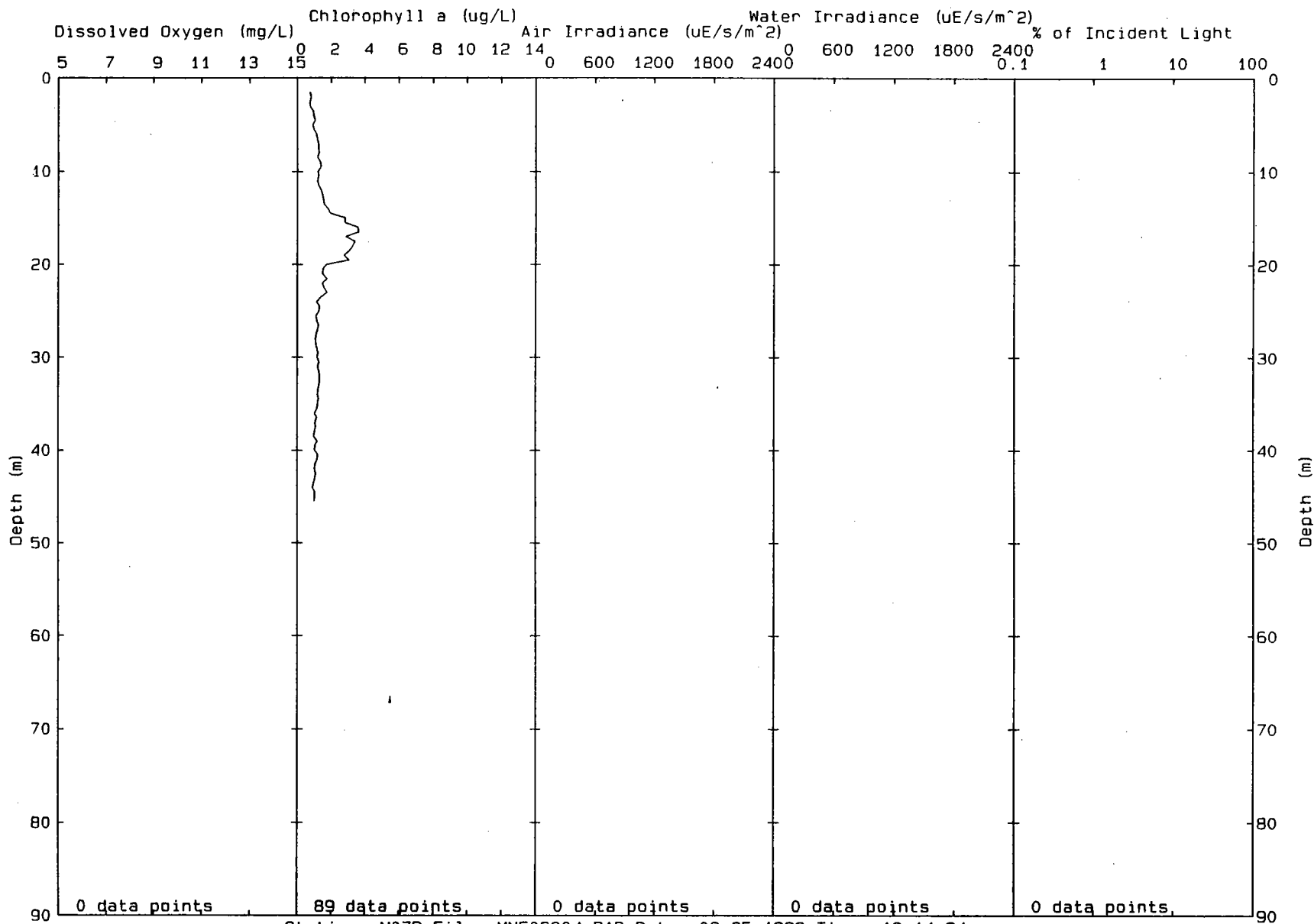


67300

00330

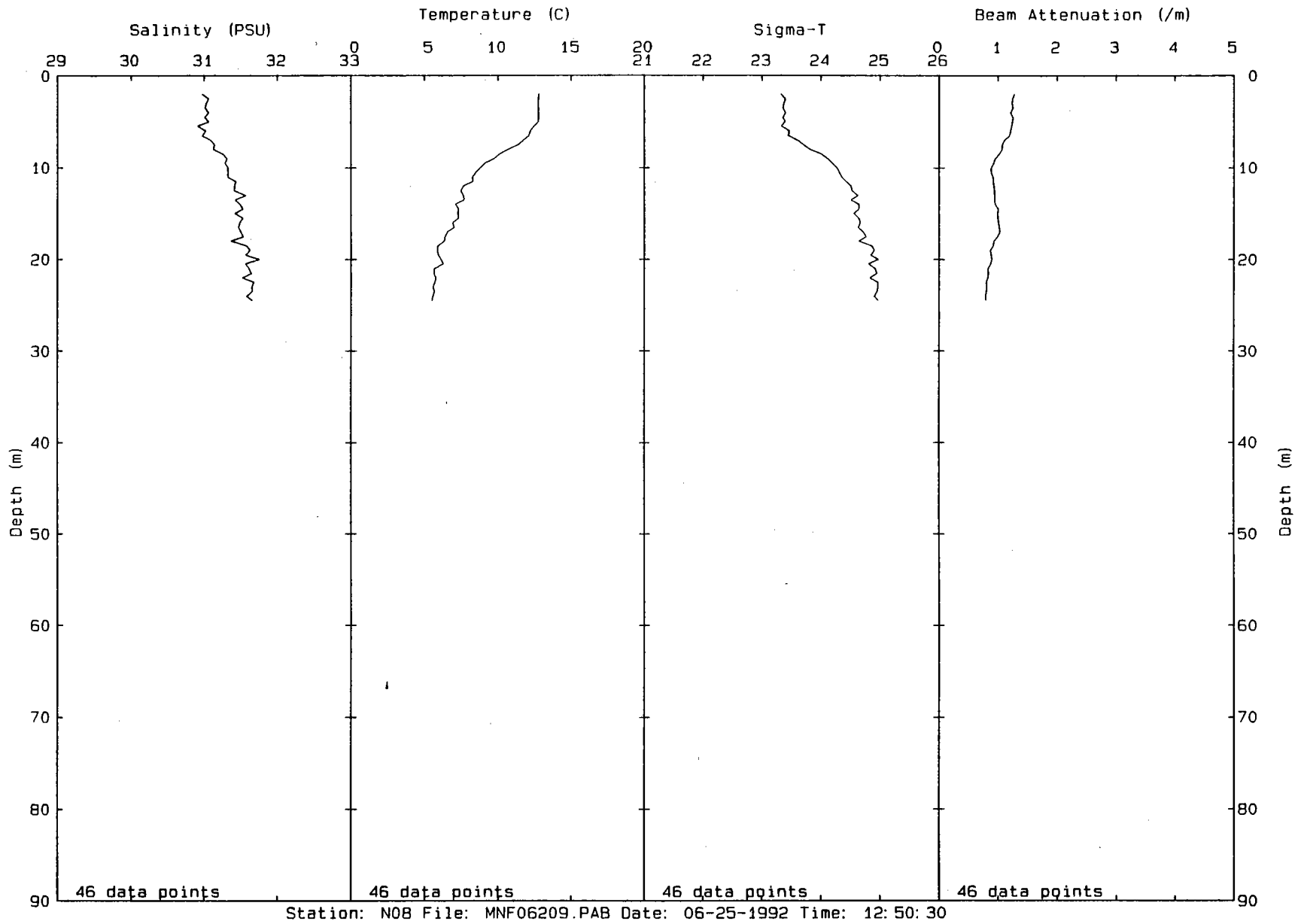


Station: N07P File: MNF06204.PAB Date: 06-25-1992 Time: 12:14:24



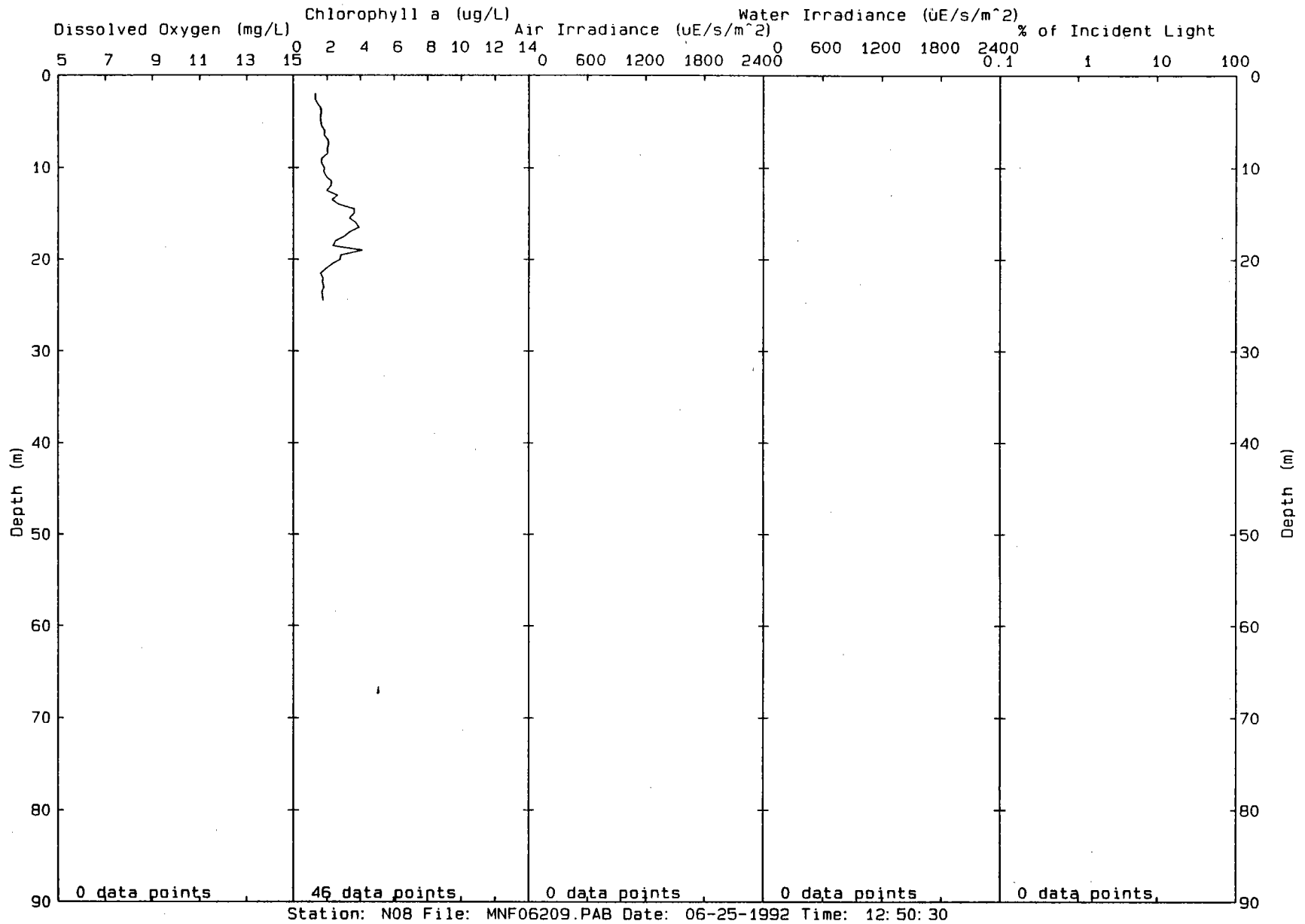
Station: N07P File: MNF06204.PAB Date: 06-25-1992 Time: 12:14:24

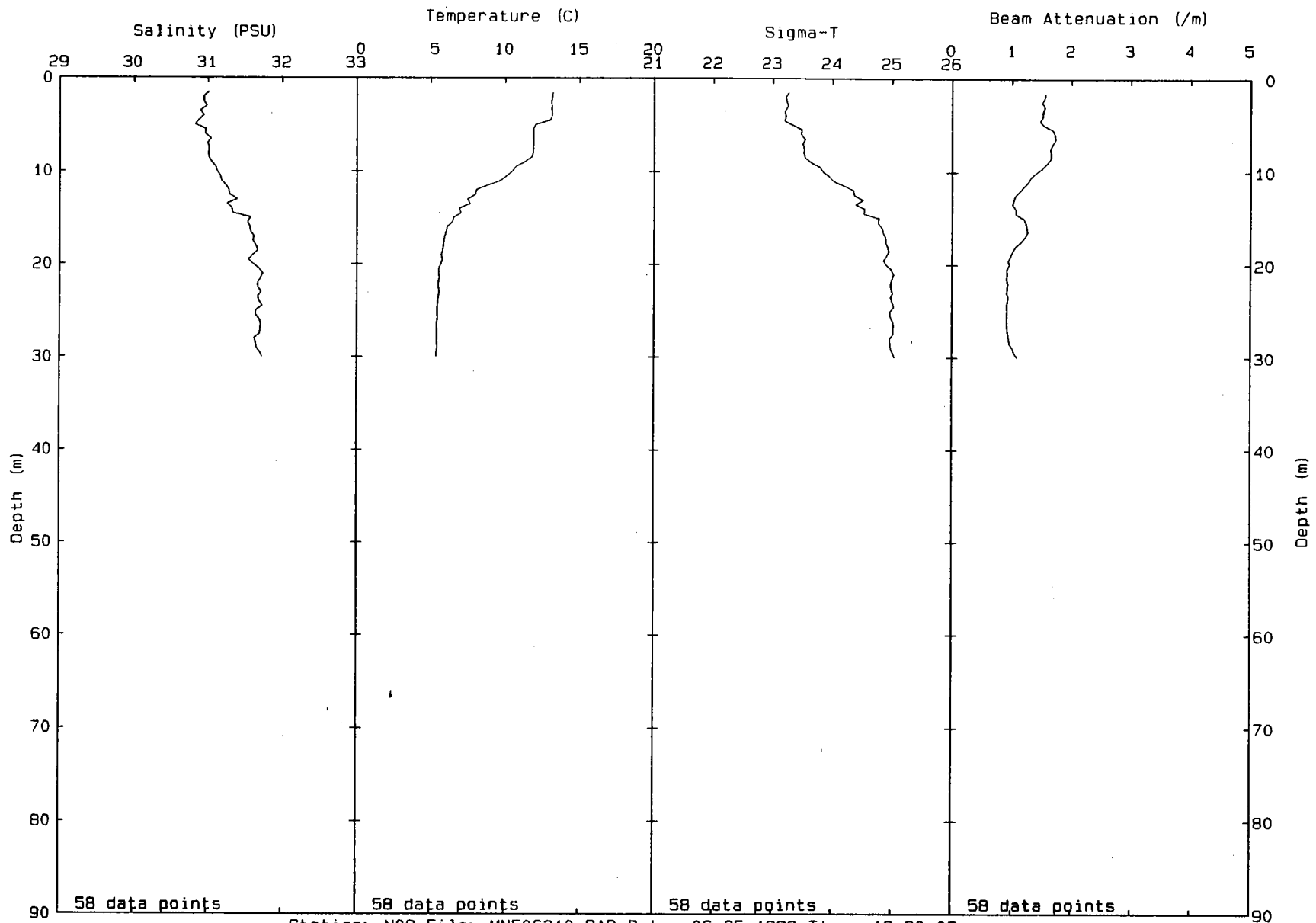
00331



00332

00333

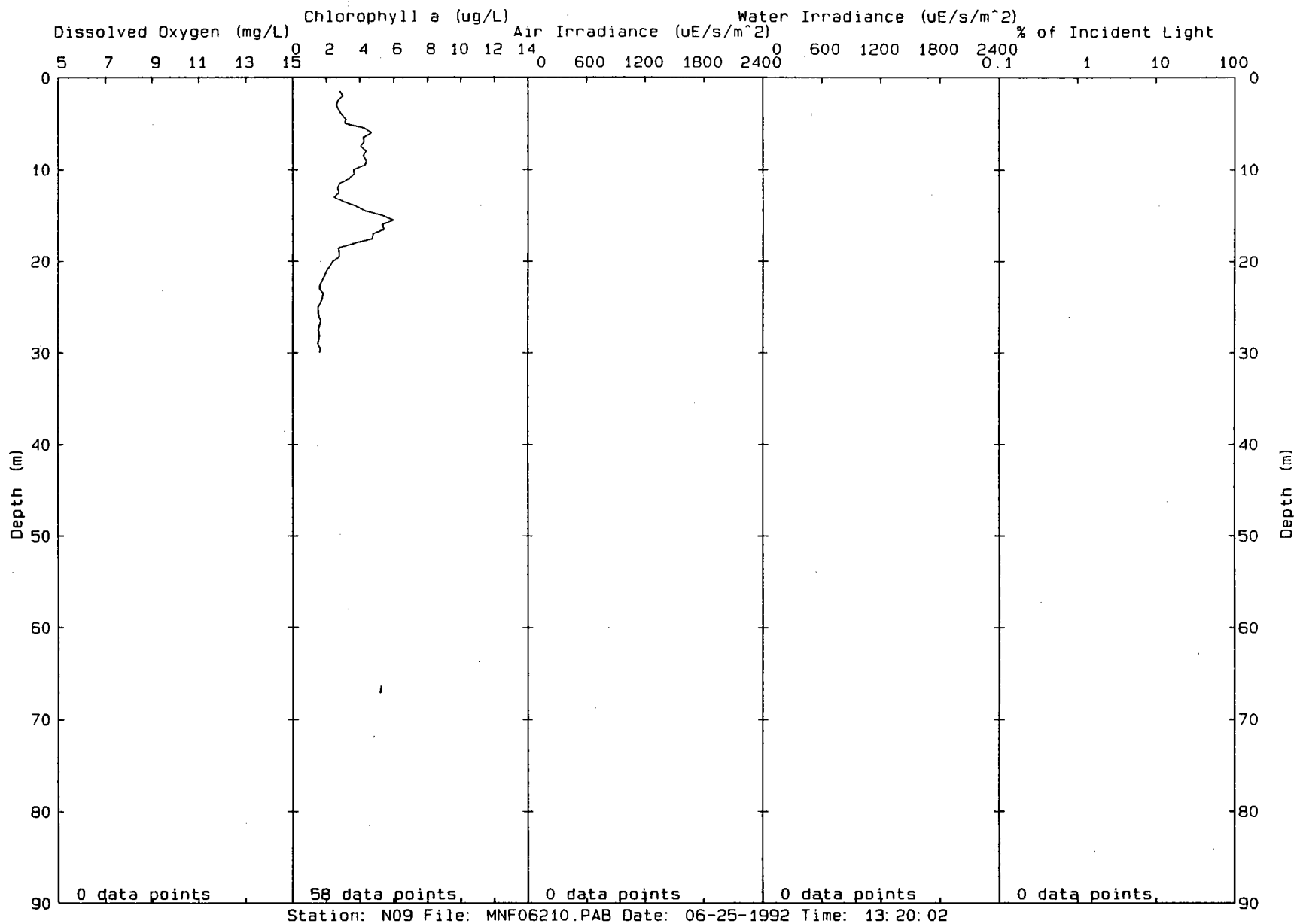


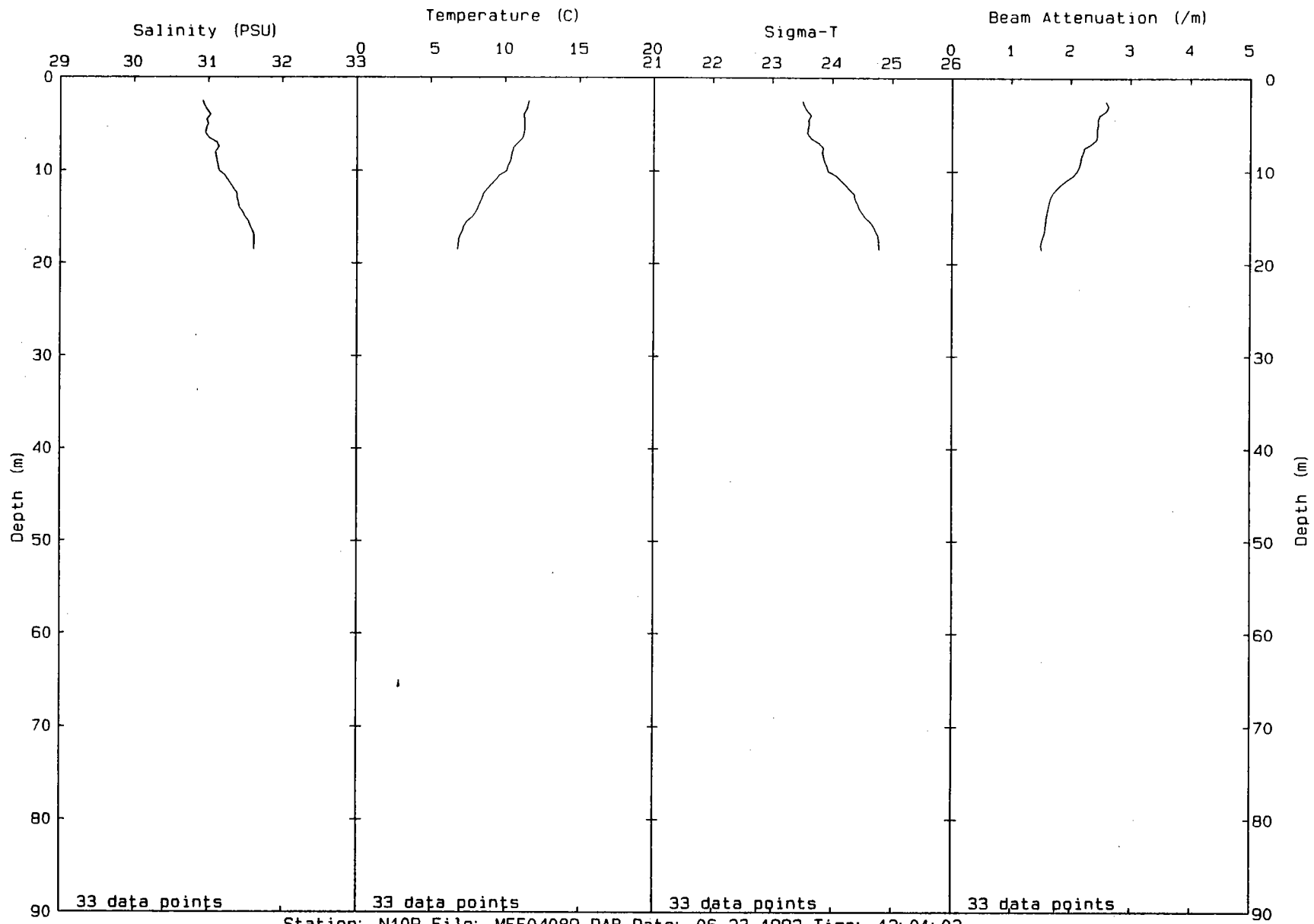


Station: N09 File: MNF06210.PAB Date: 06-25-1992 Time: 13:20:02

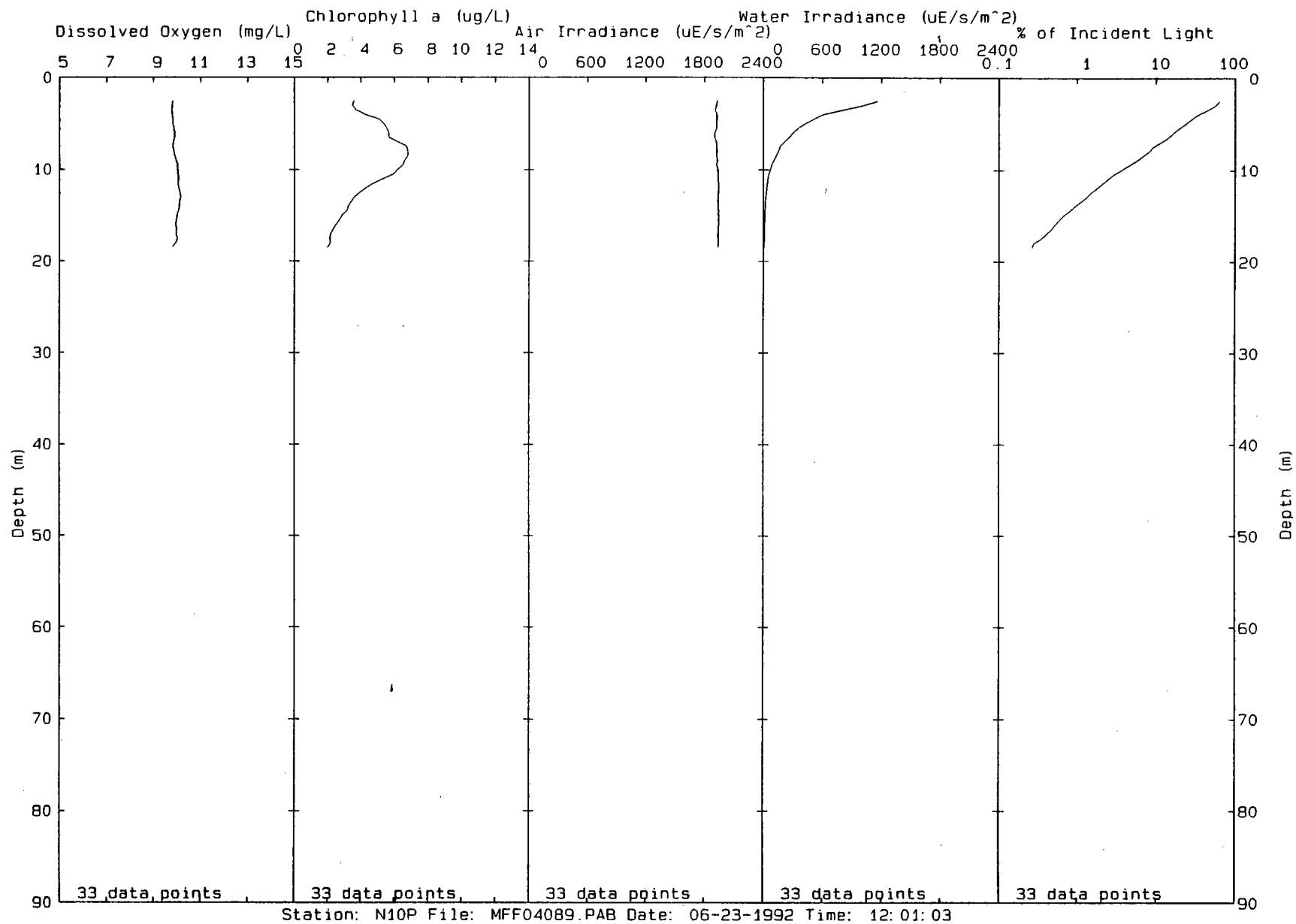
00334

00335



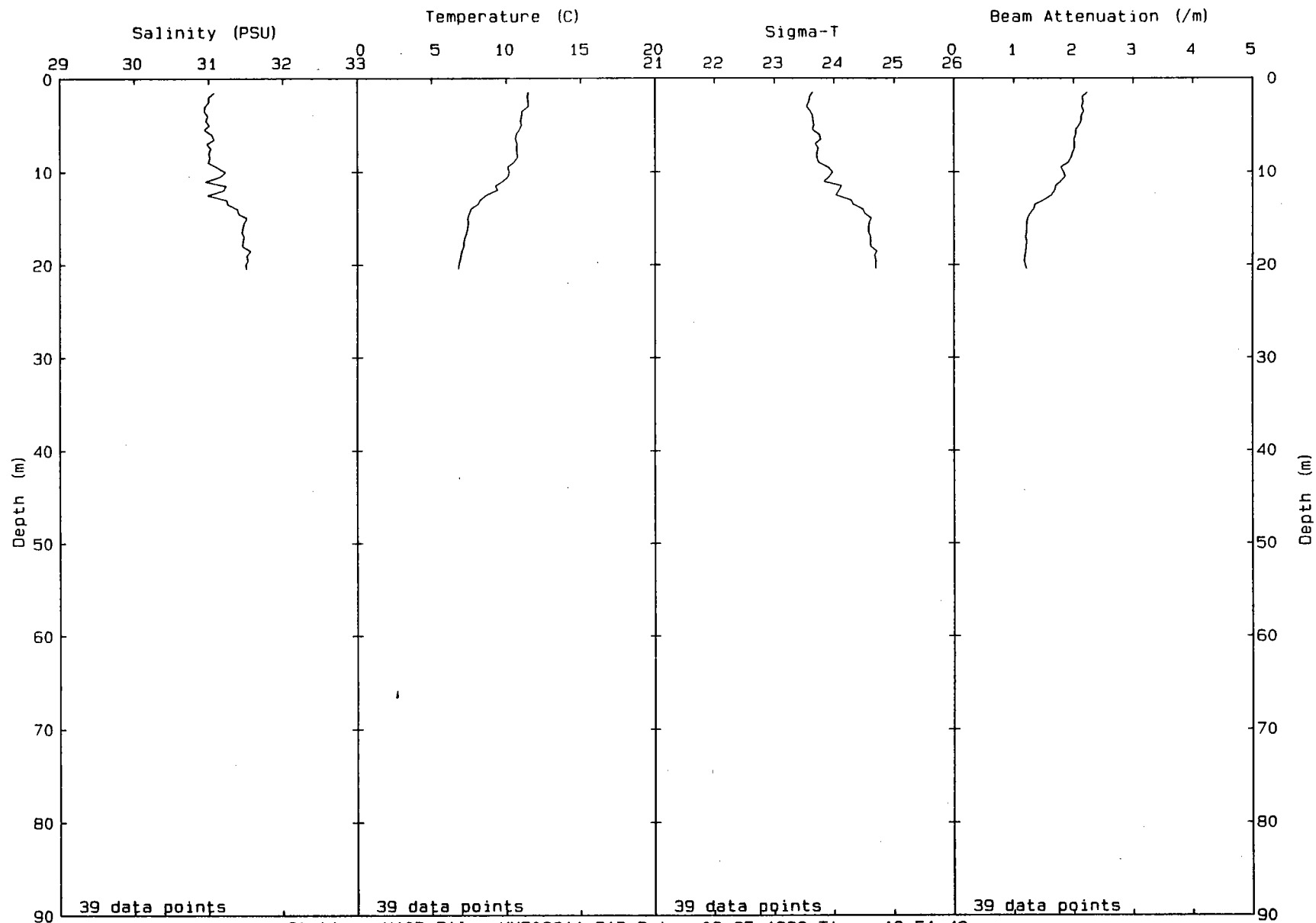


00336



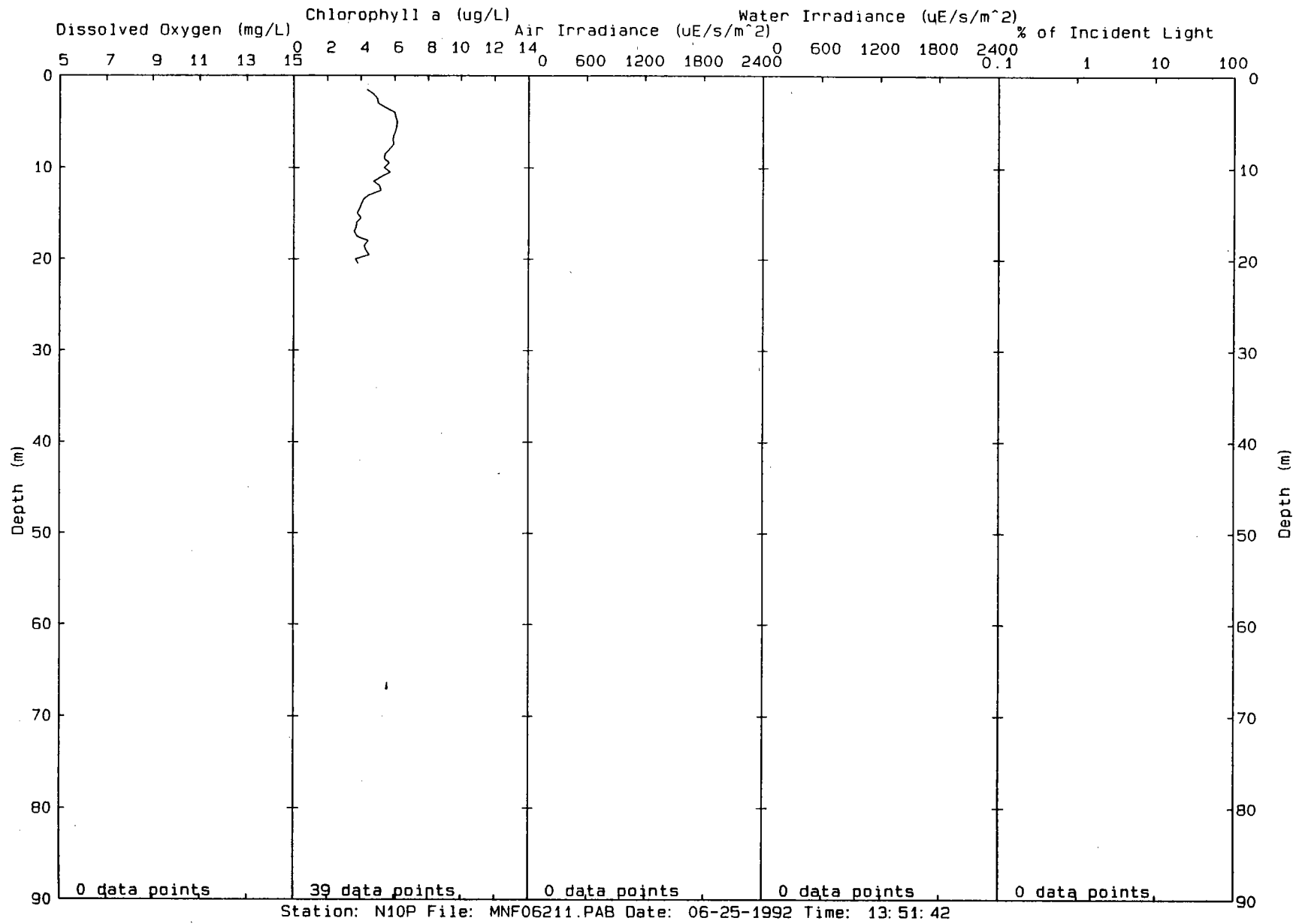
00337

00338

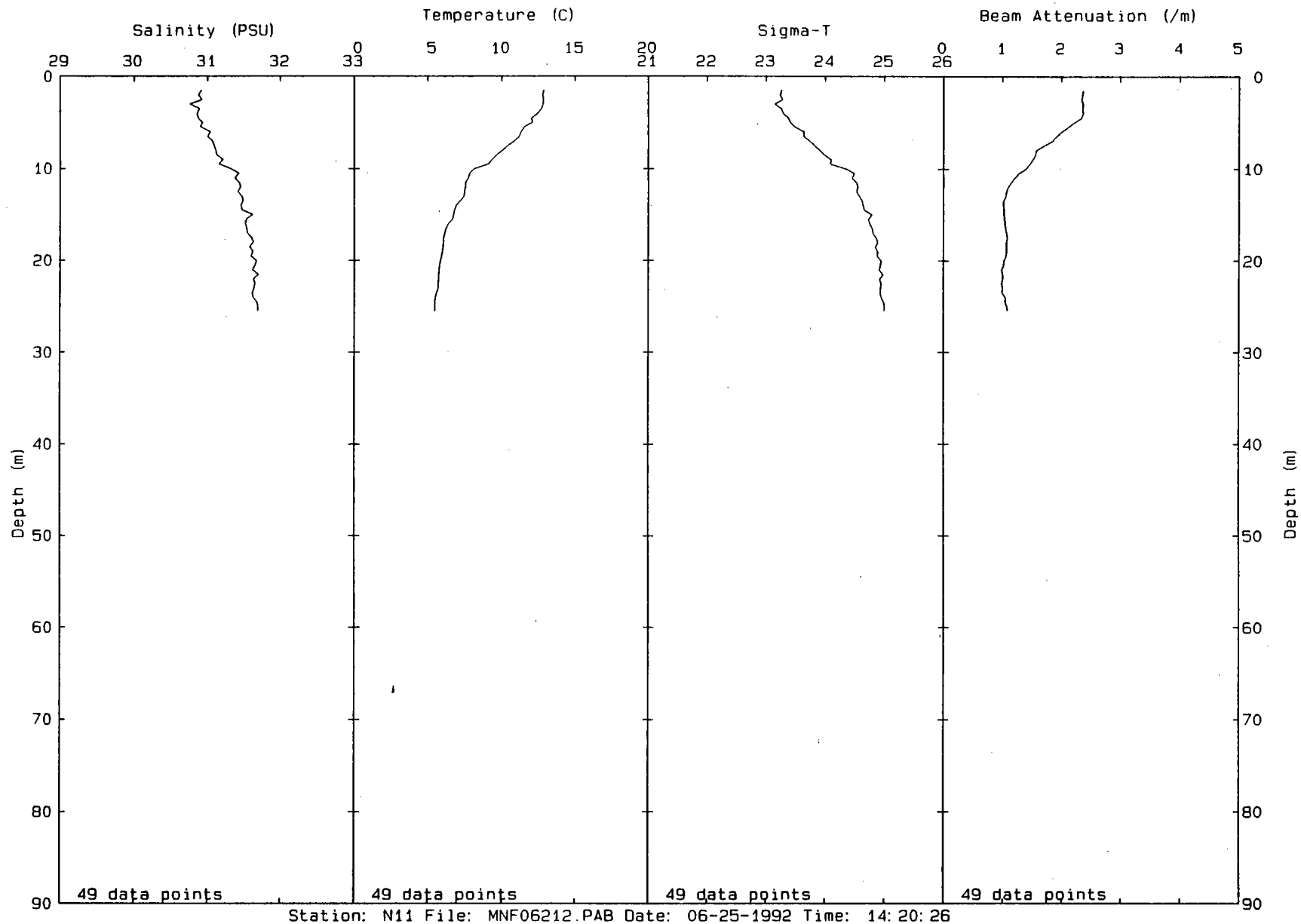


Station: N10P File: MNF06211.PAB Date: 06-25-1992 Time: 13:51:42

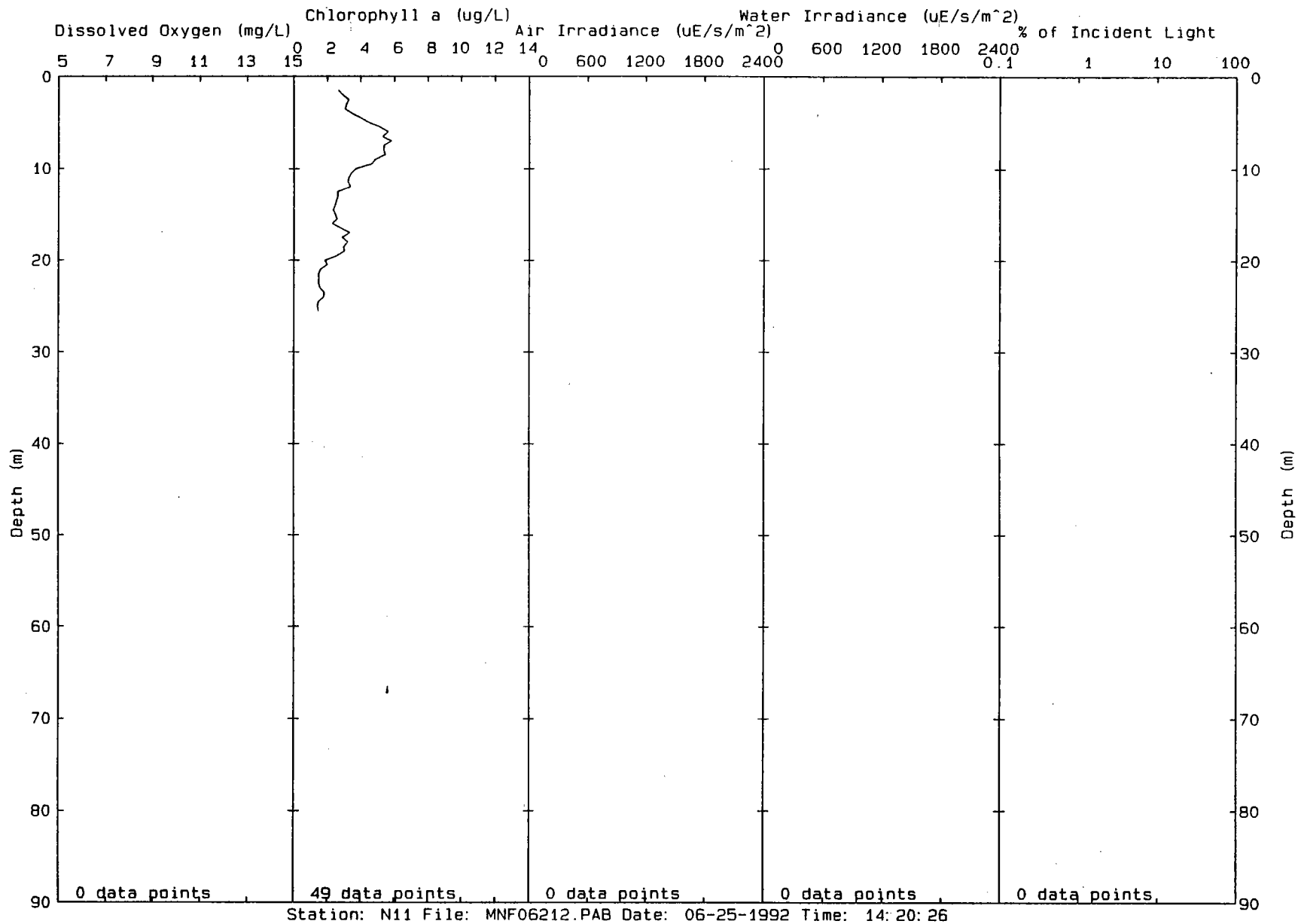
00339



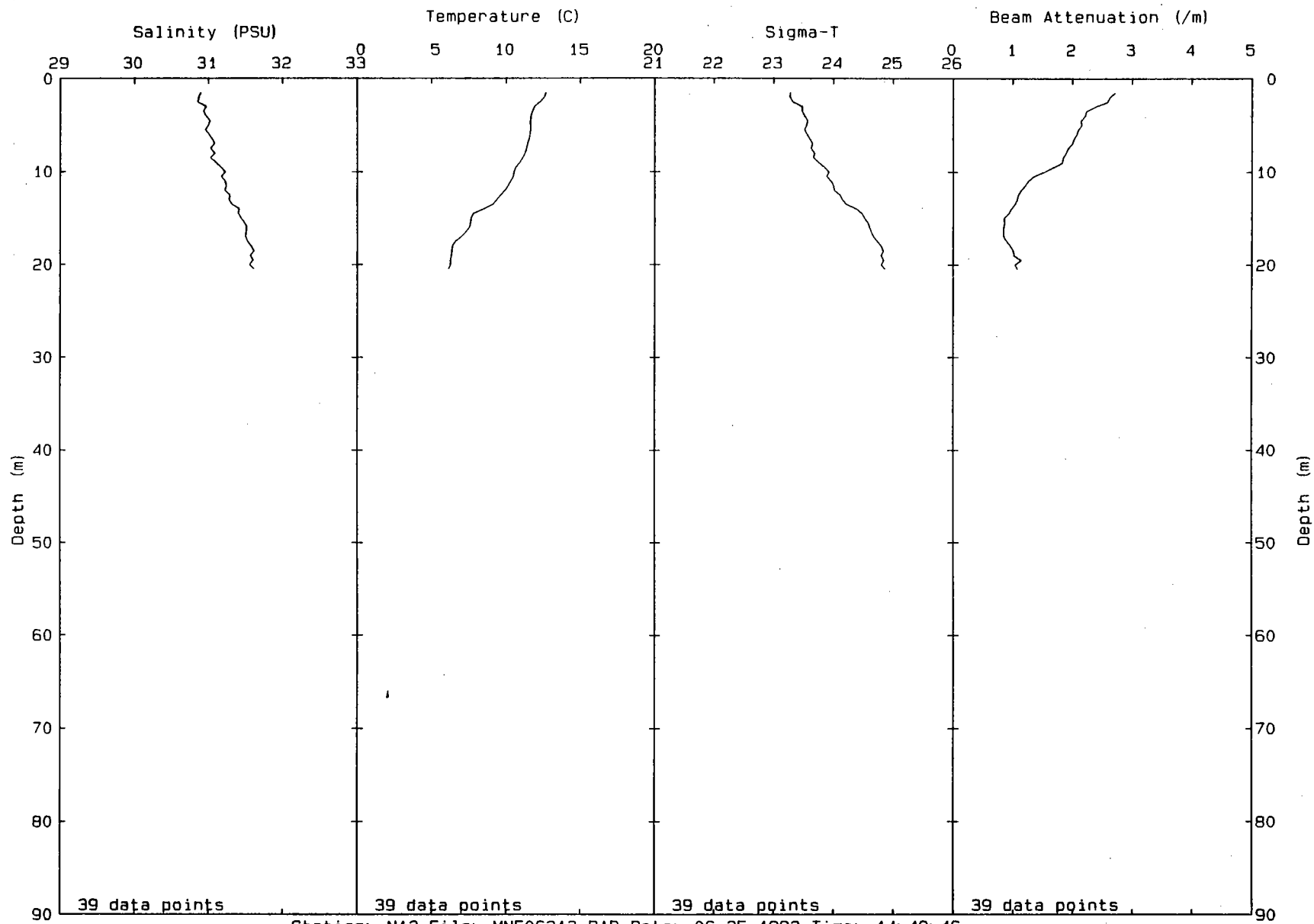
00340



Station: N11 File: MNF06212.PAB Date: 06-25-1992 Time: 14:20:26

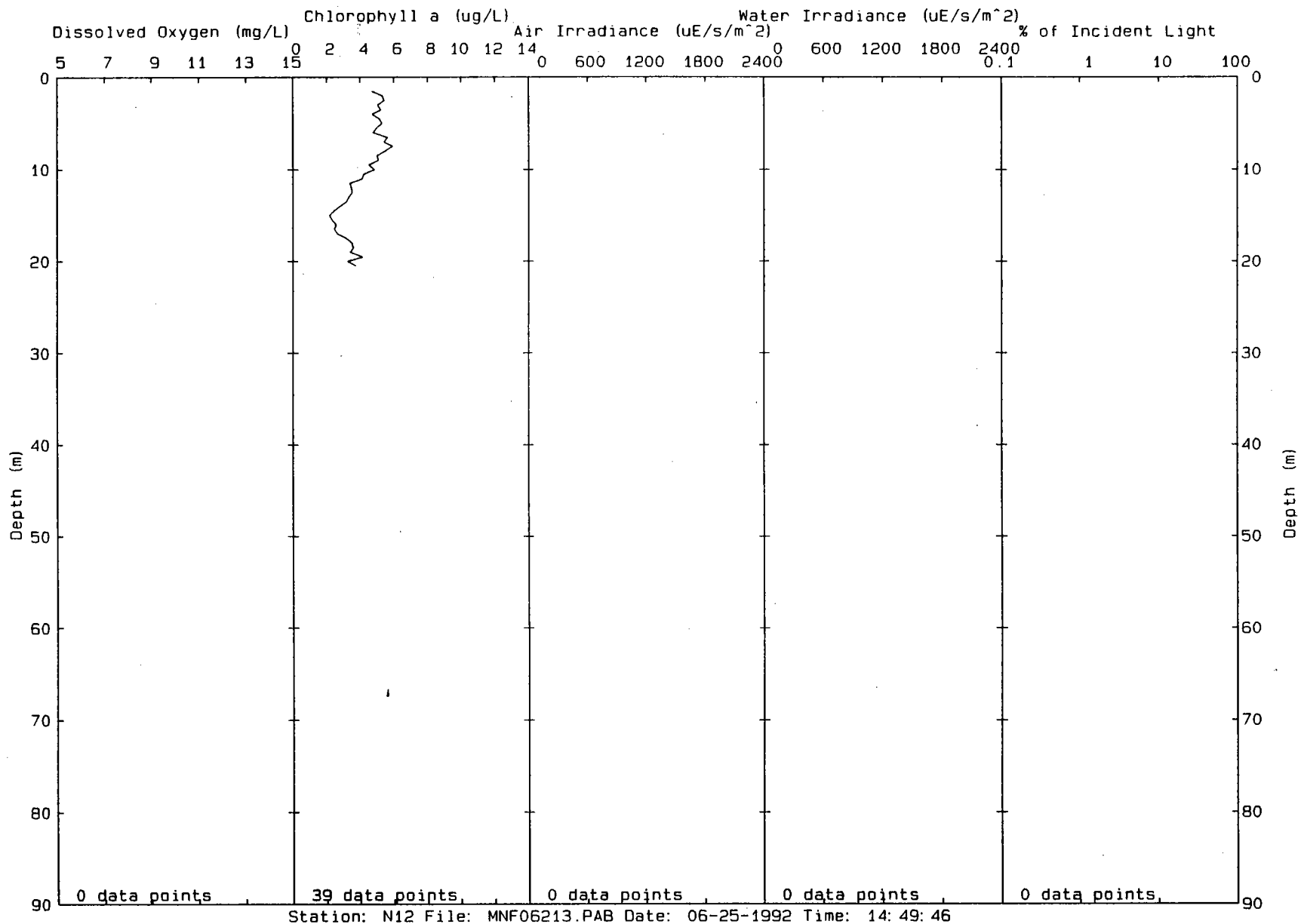


00341

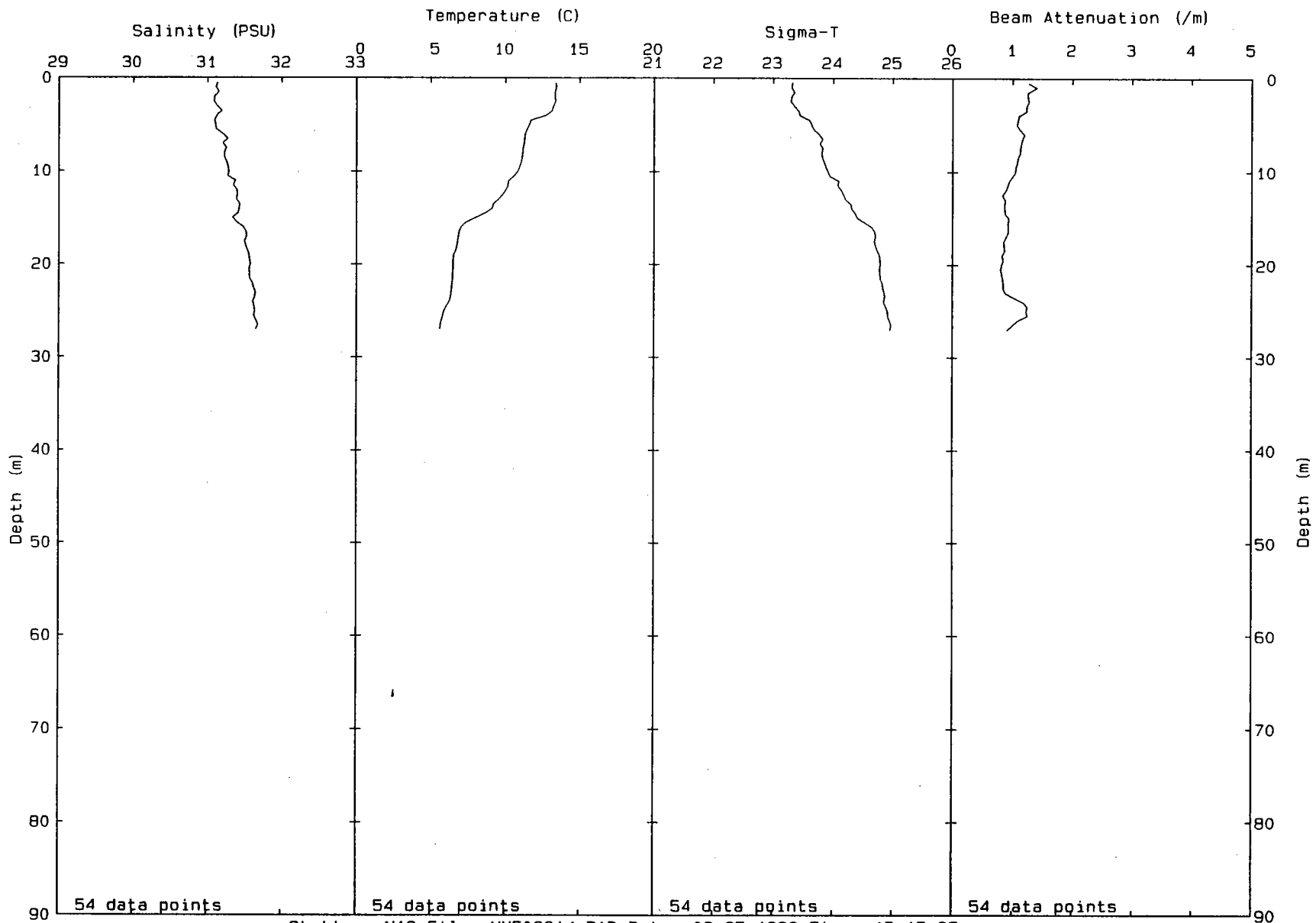


Station: N12 File: MNF06213.PAB Date: 06-25-1992 Time: 14:49:46

00342



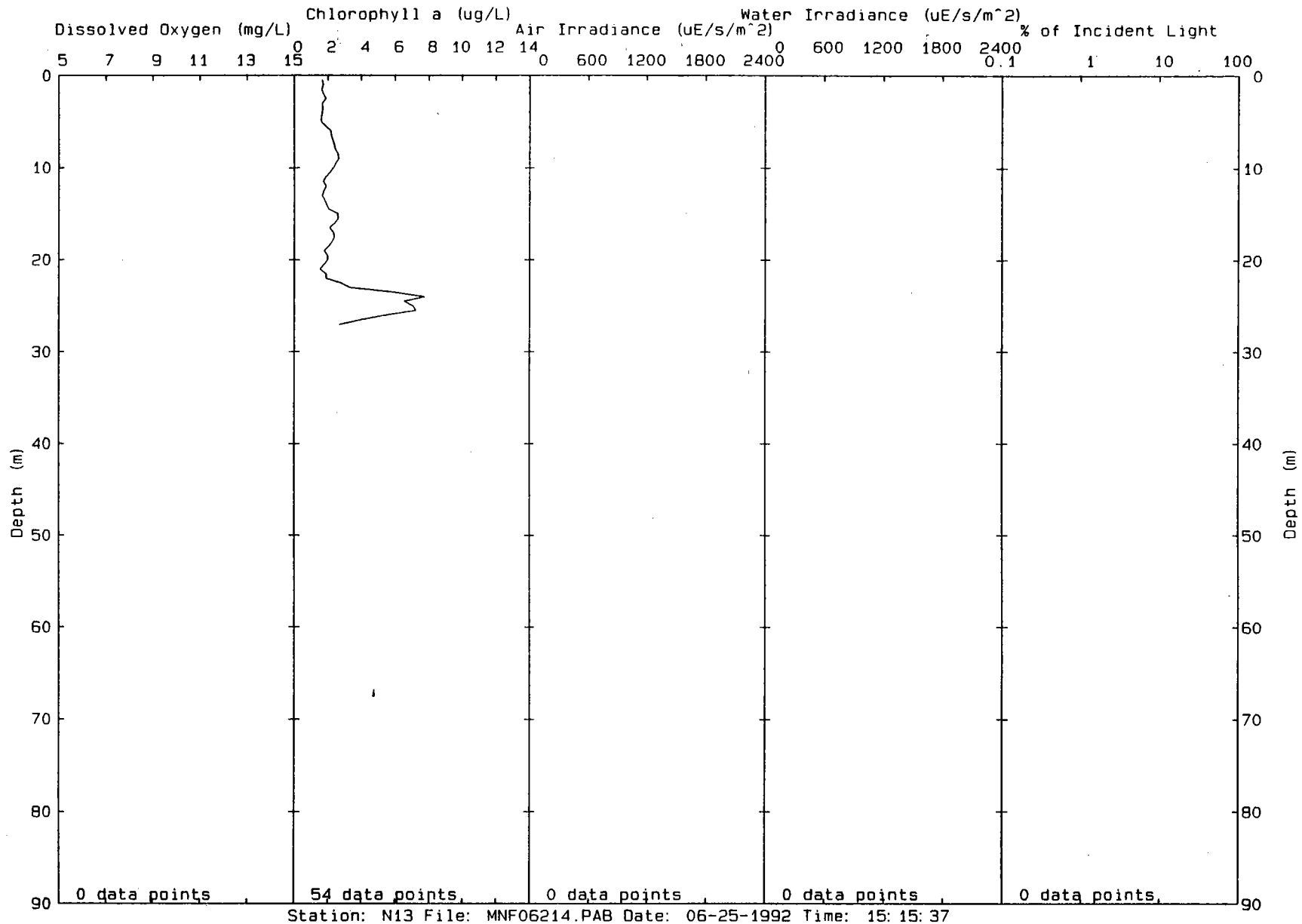
00343



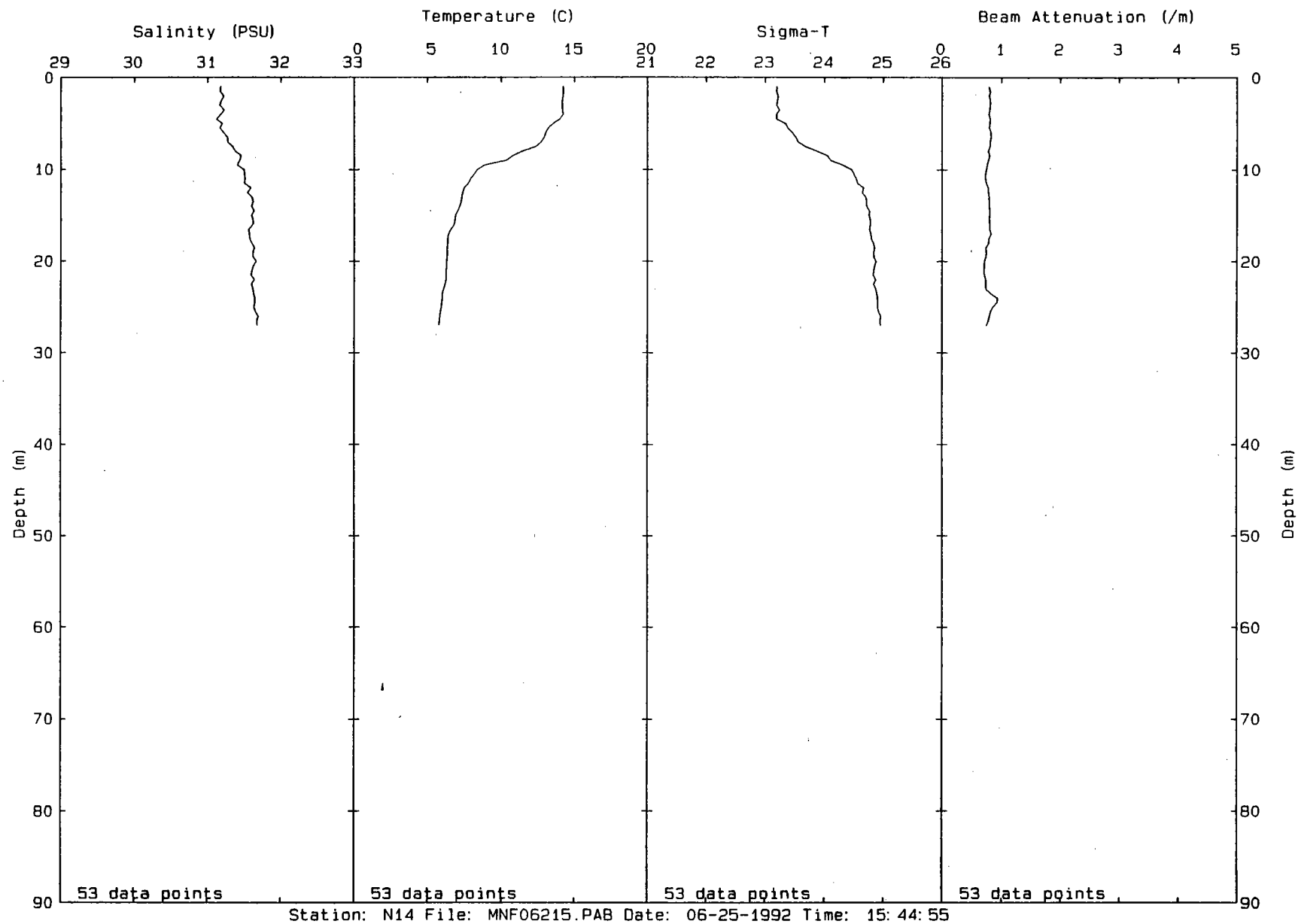
Station: N13 File: MNF06214.PAB Date: 06-25-1992 Time: 15: 15: 37

00344

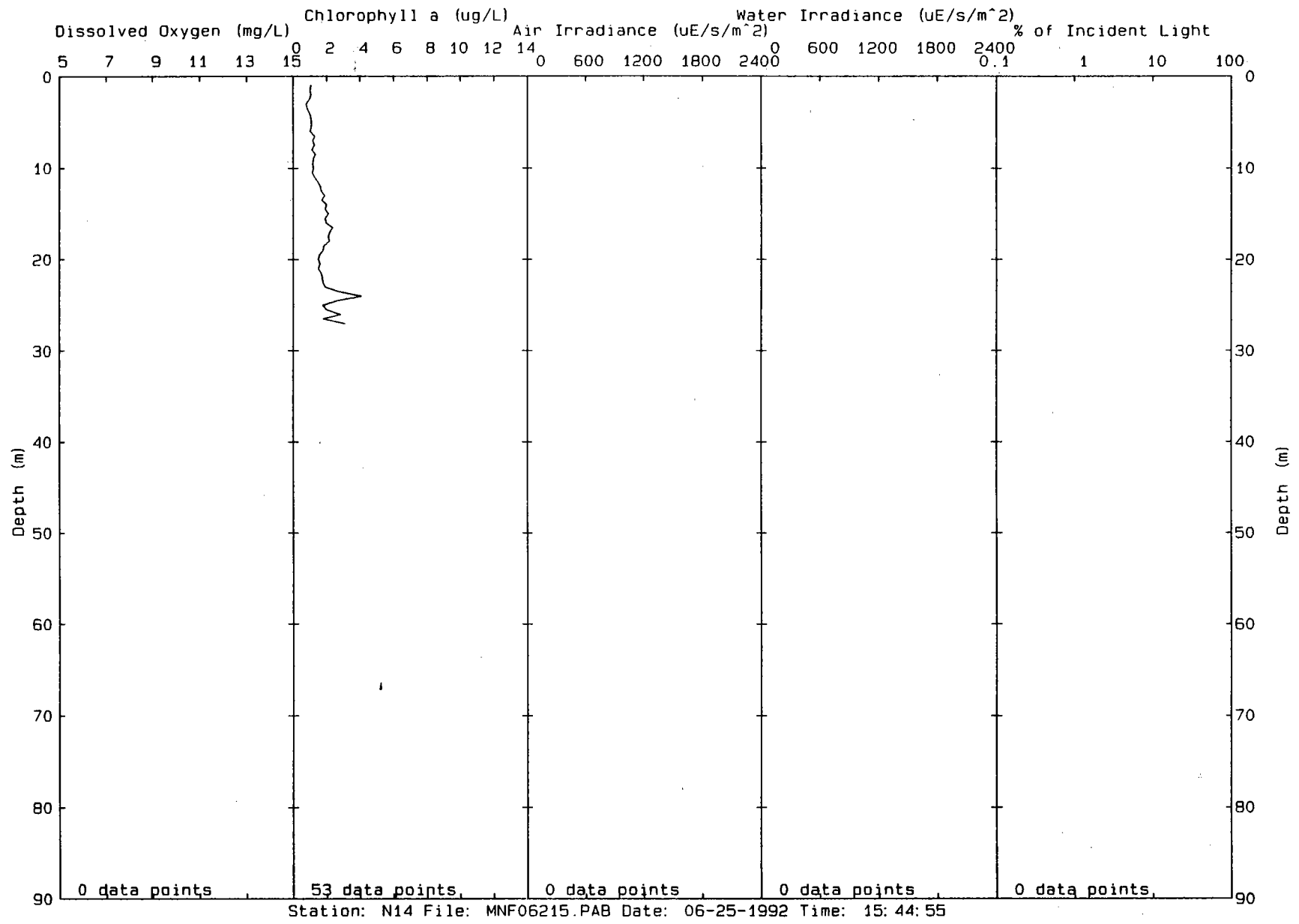
00345



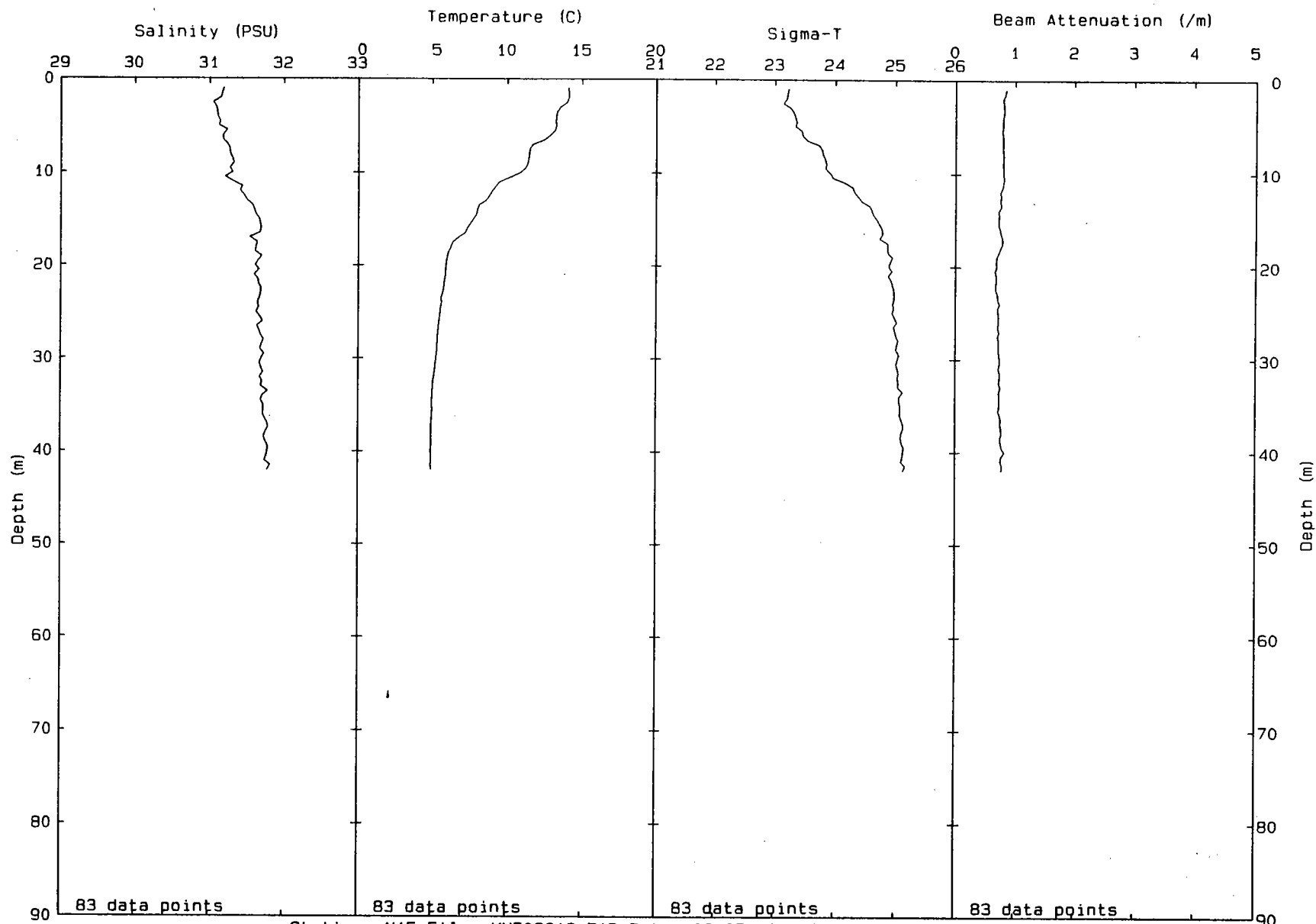
00346



00347

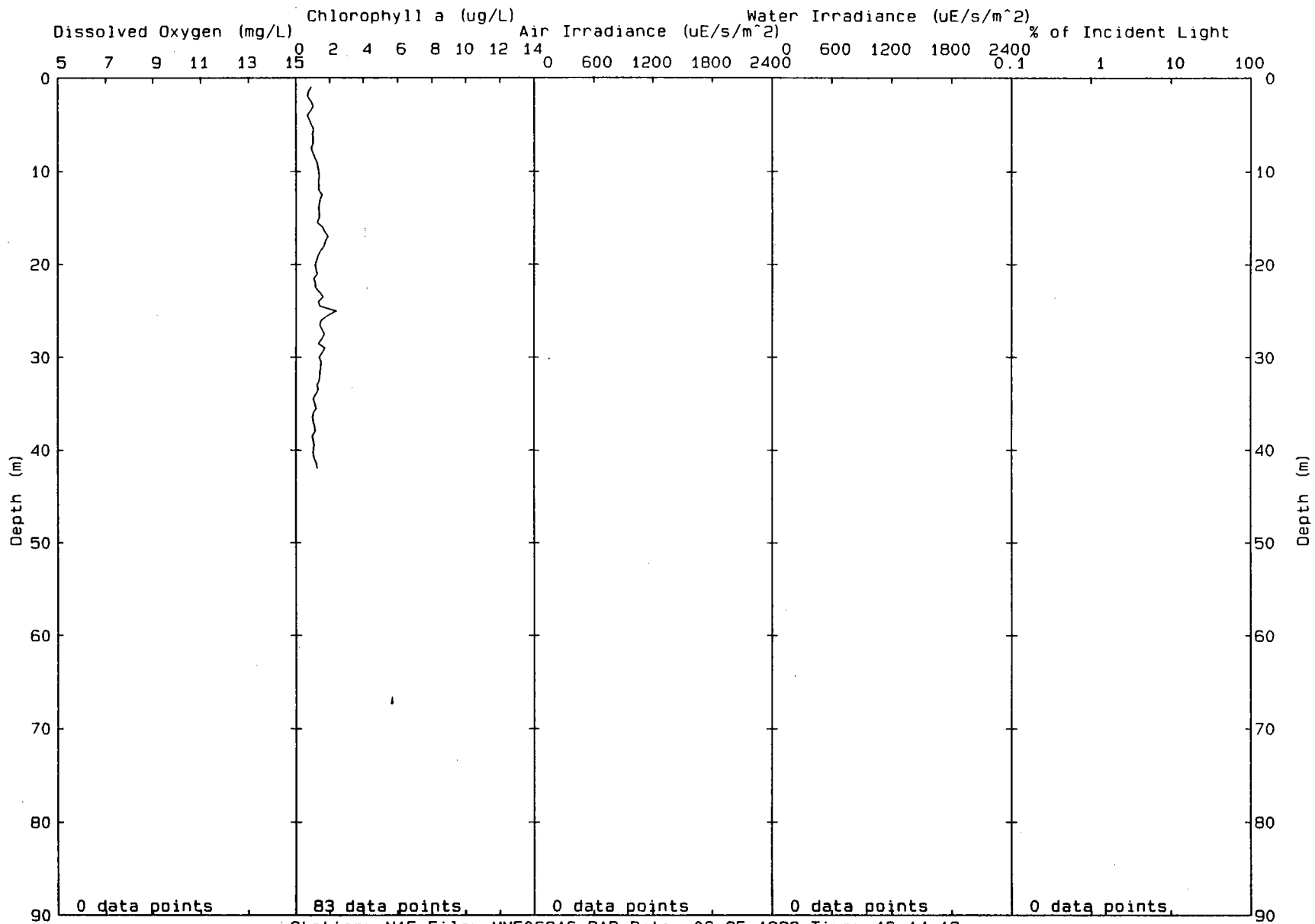


Station: N14 File: MNF06215.PAB Date: 06-25-1992 Time: 15:44:55



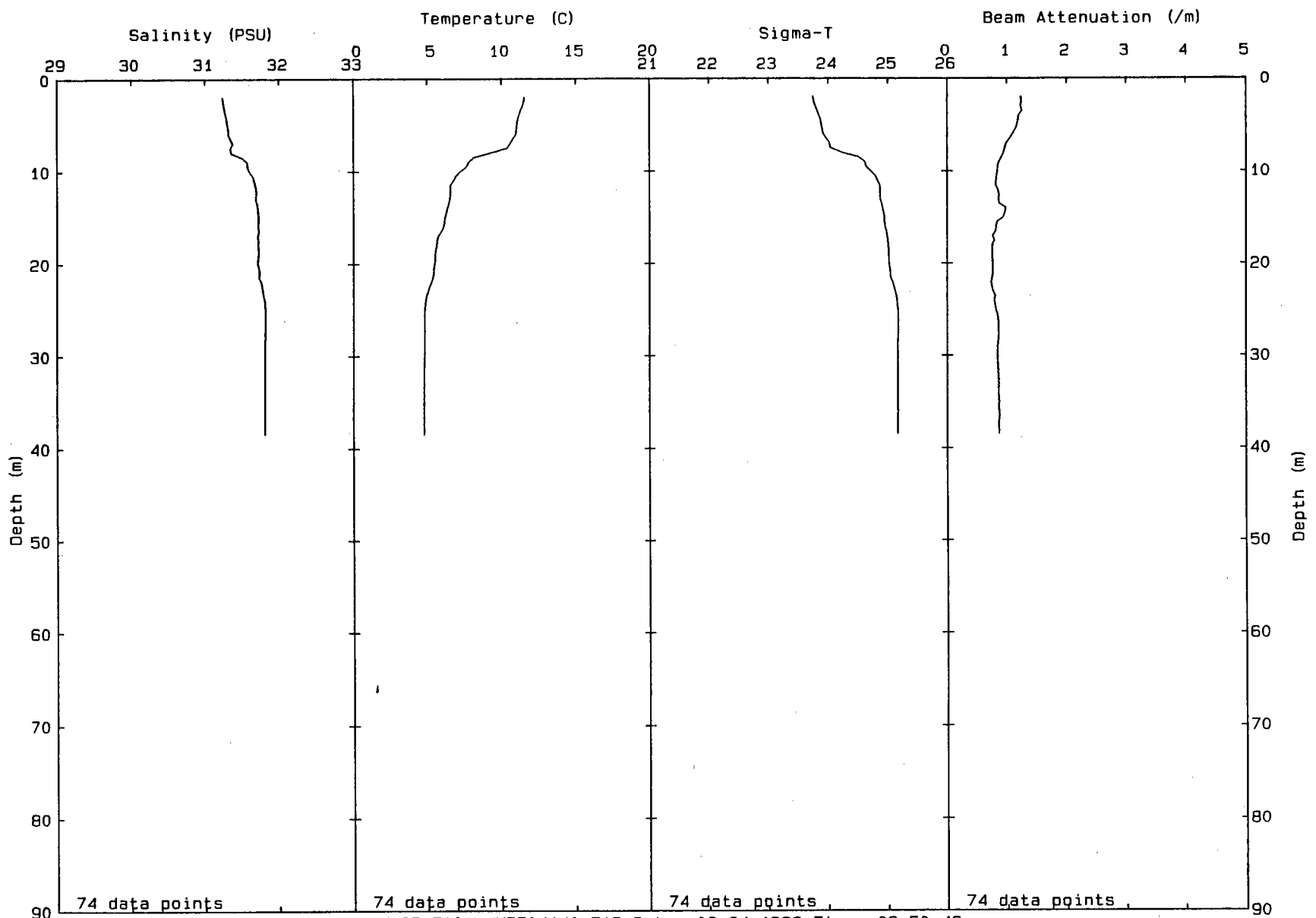
Station: N15 File: MNF06216.PAB Date: 06-25-1992 Time: 16: 14: 13

00348



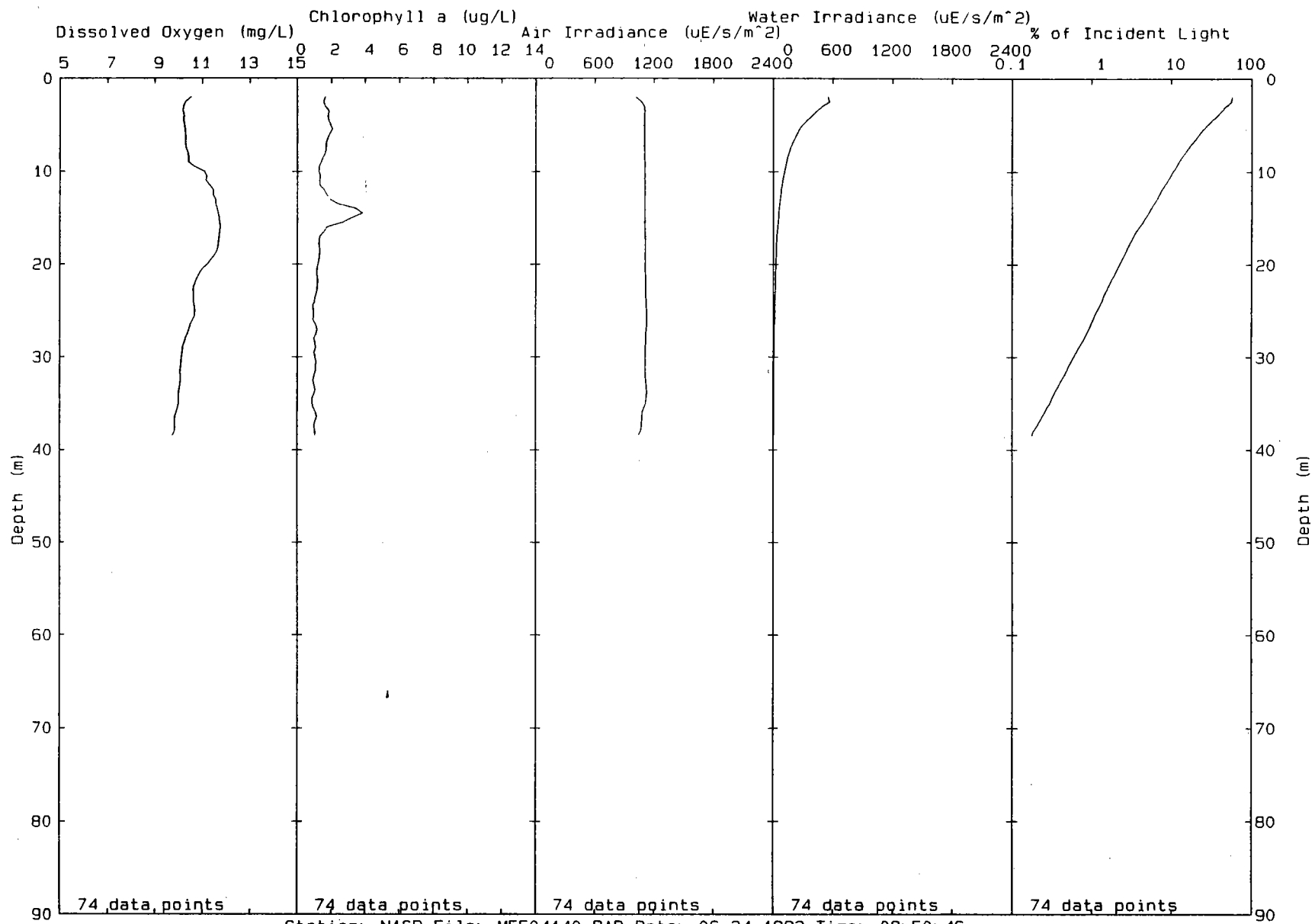
00349

00350



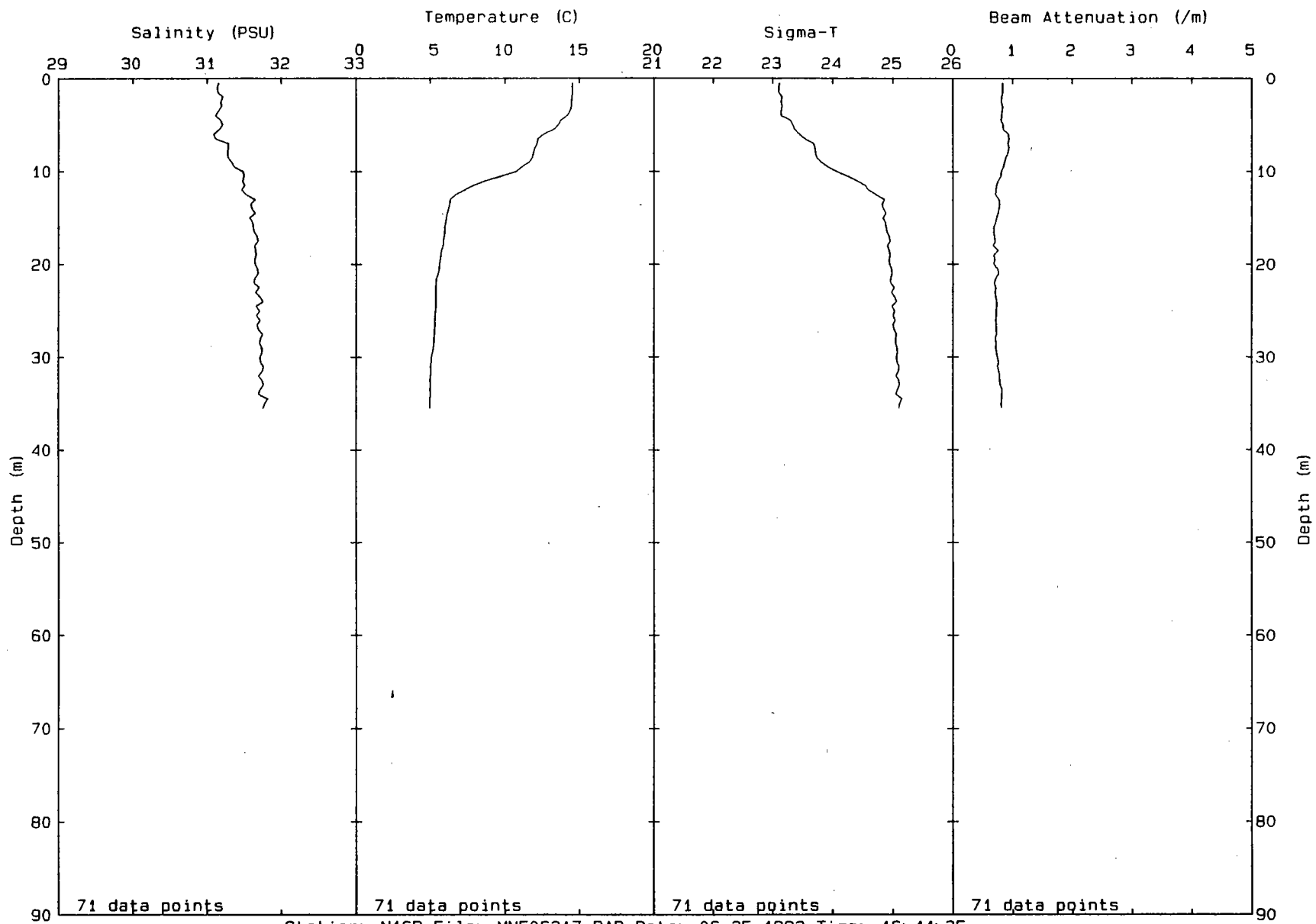
Station: N16P File: MFF04140.PAB Date: 06-24-1992 Time: 08:50:46

00351

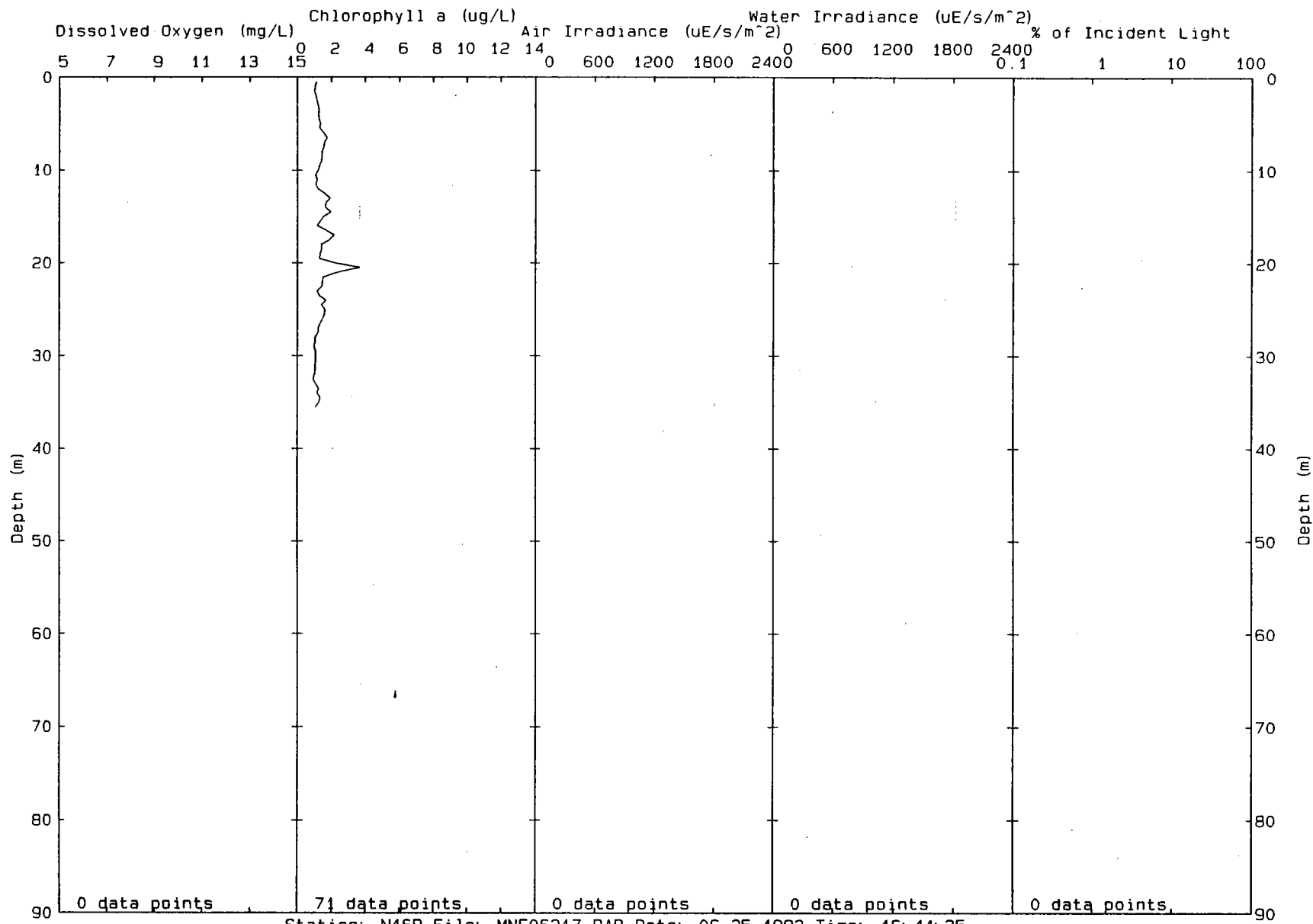


Station: N16P File: MFF04140.PAB Date: 06-24-1992 Time: 08: 50: 46

00352



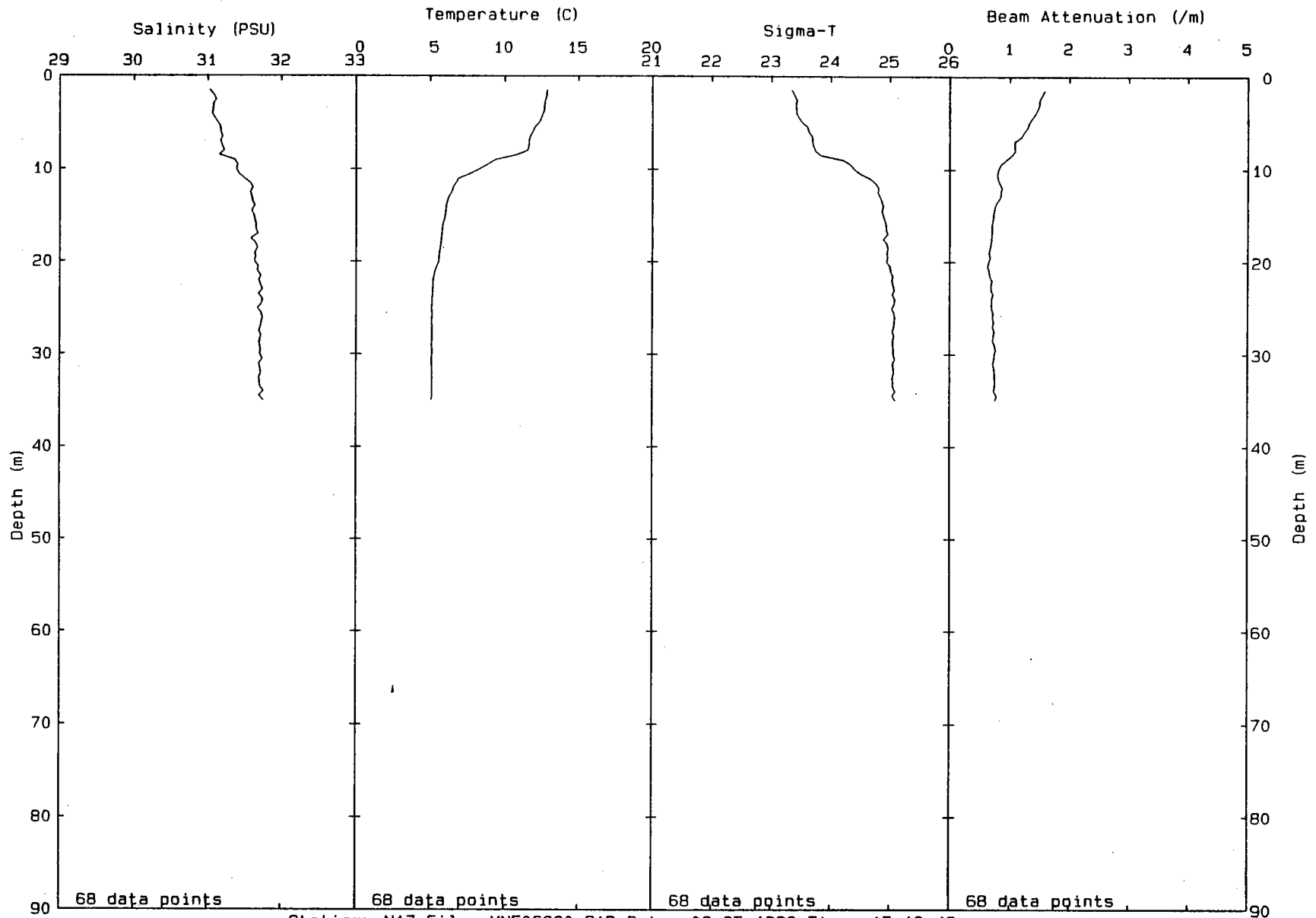
Station: N16P File: MNF06217.PAB Date: 06-25-1992 Time: 16:44:35



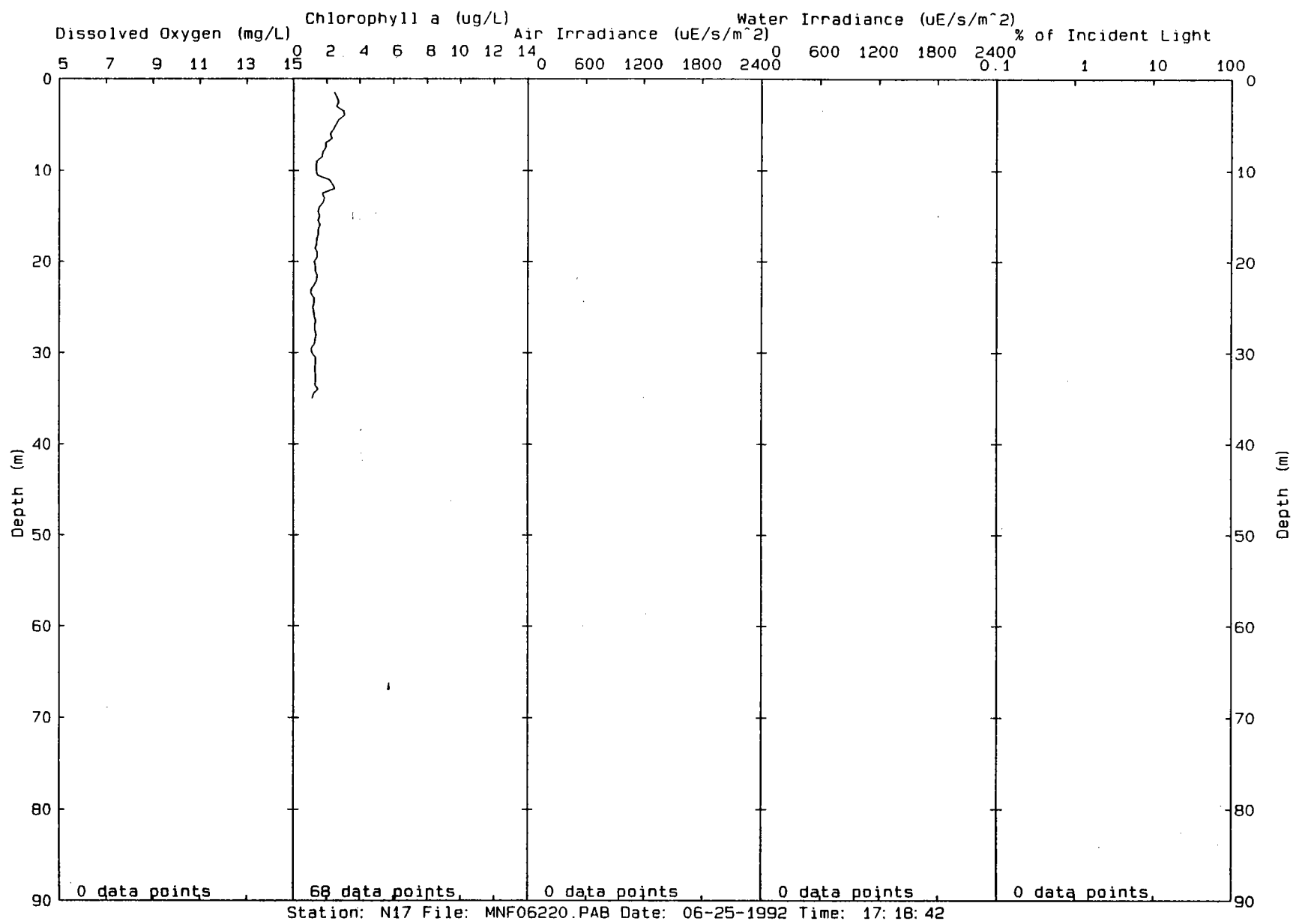
Station: N16P File: MNF06217.PAB Date: 06-25-1992 Time: 16:44:35

00353

00354

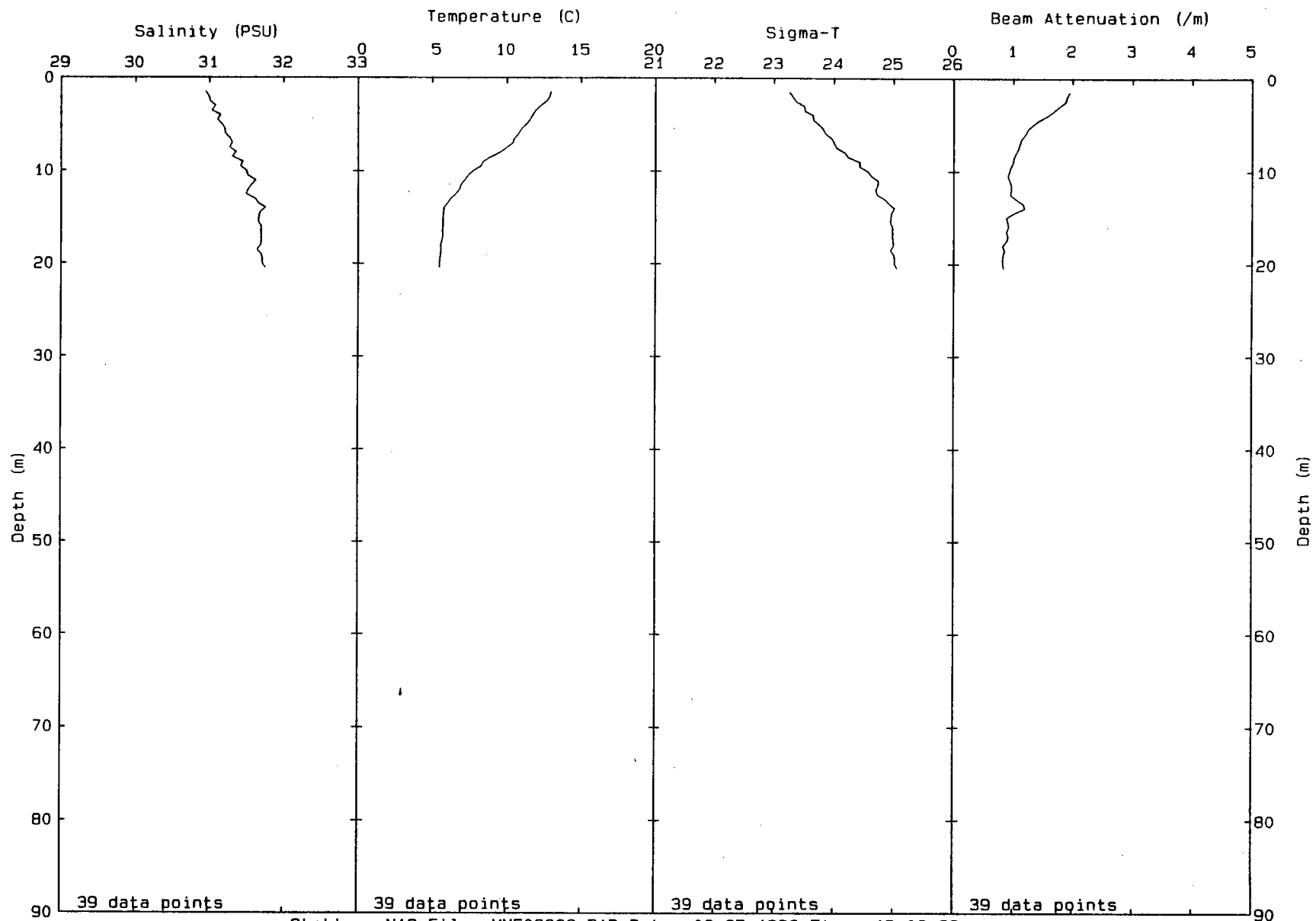


Station: N17 File: MNF06220.PAB Date: 06-25-1992 Time: 17: 18: 42



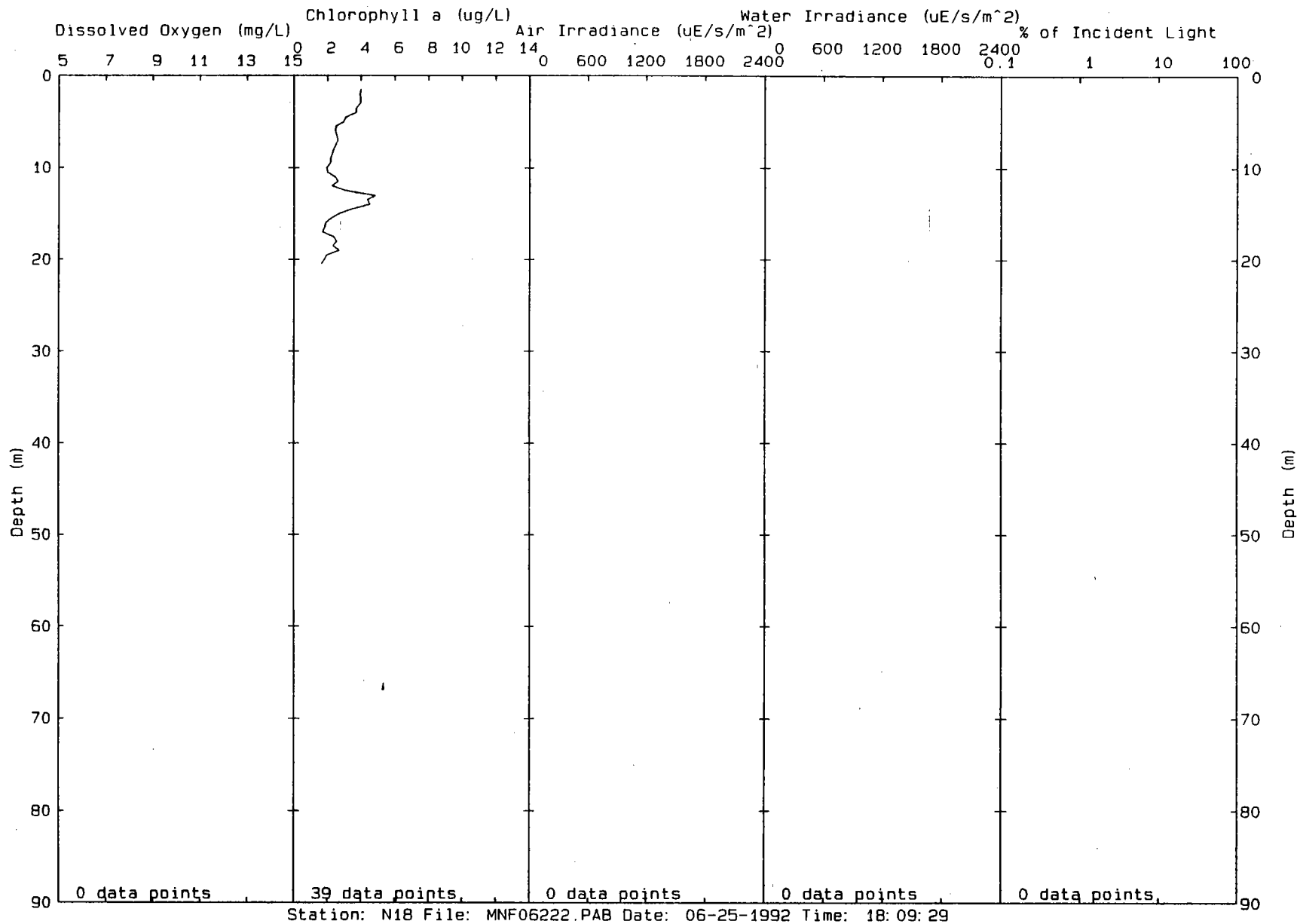
00355

00356

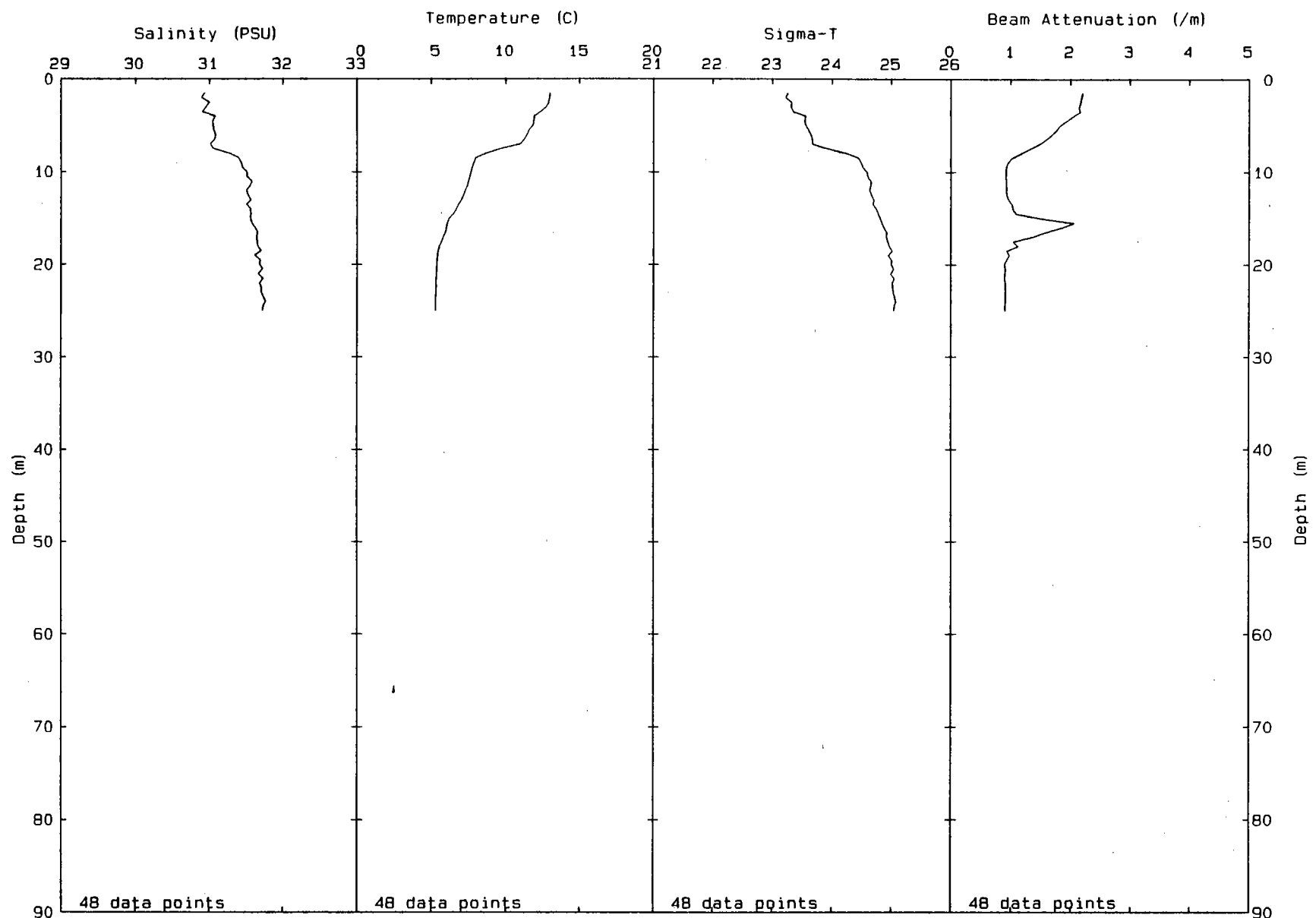


Station: N18 File: MNF06222.PAB Date: 06-25-1992 Time: 18:09:29

00357

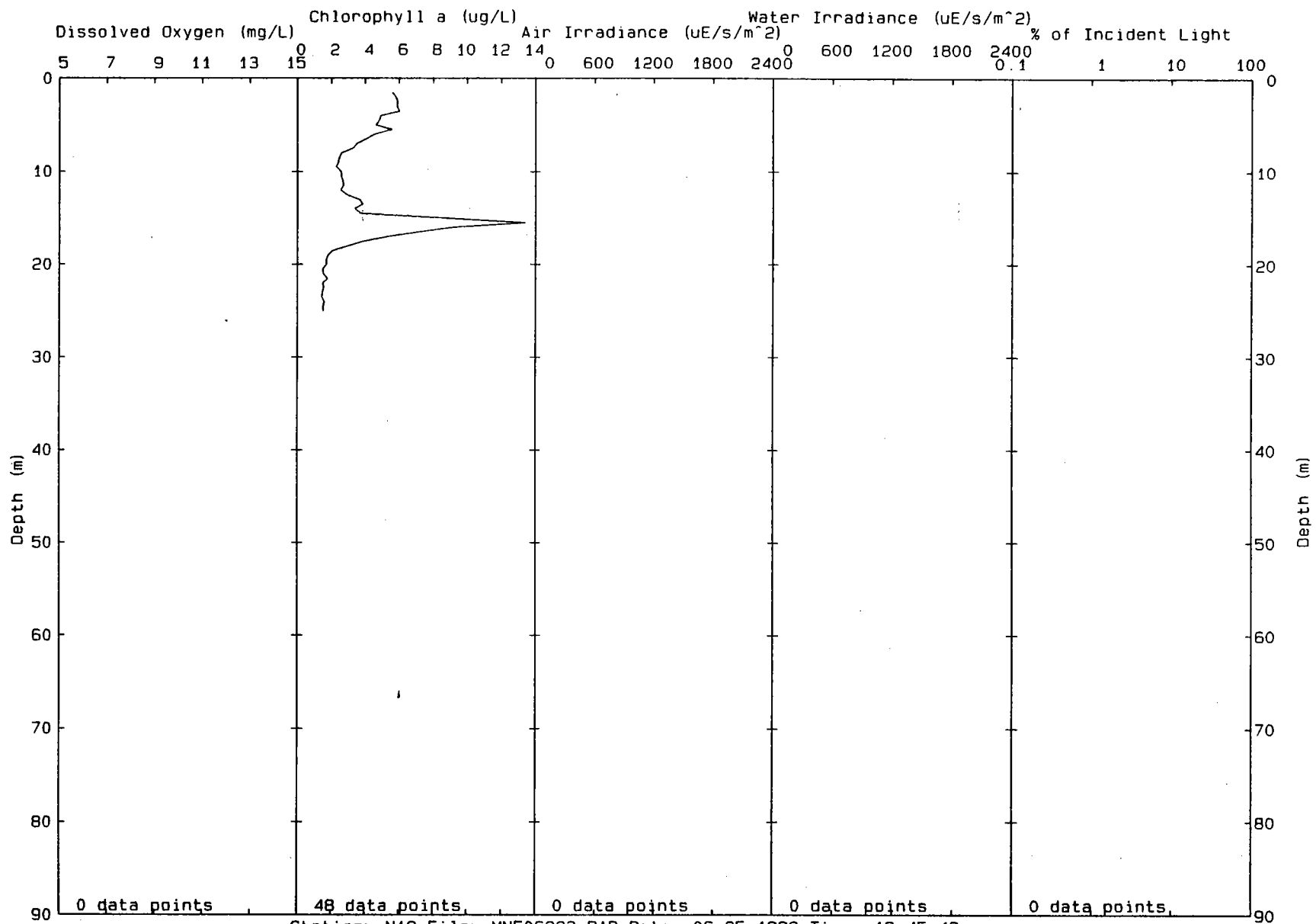


00358



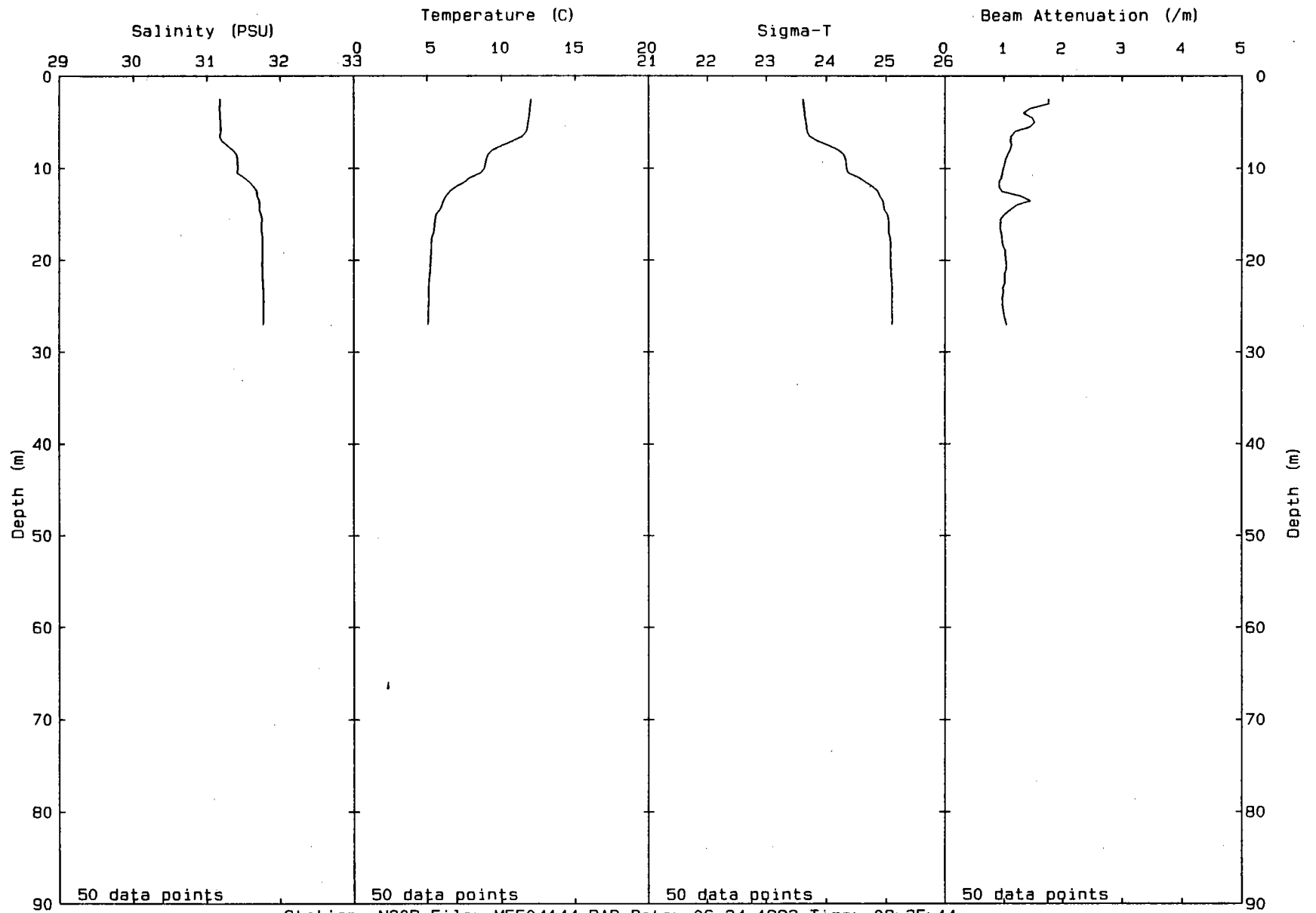
Station: N19 File: MNF06223.PAB Date: 06-25-1992 Time: 18: 45: 49

00359



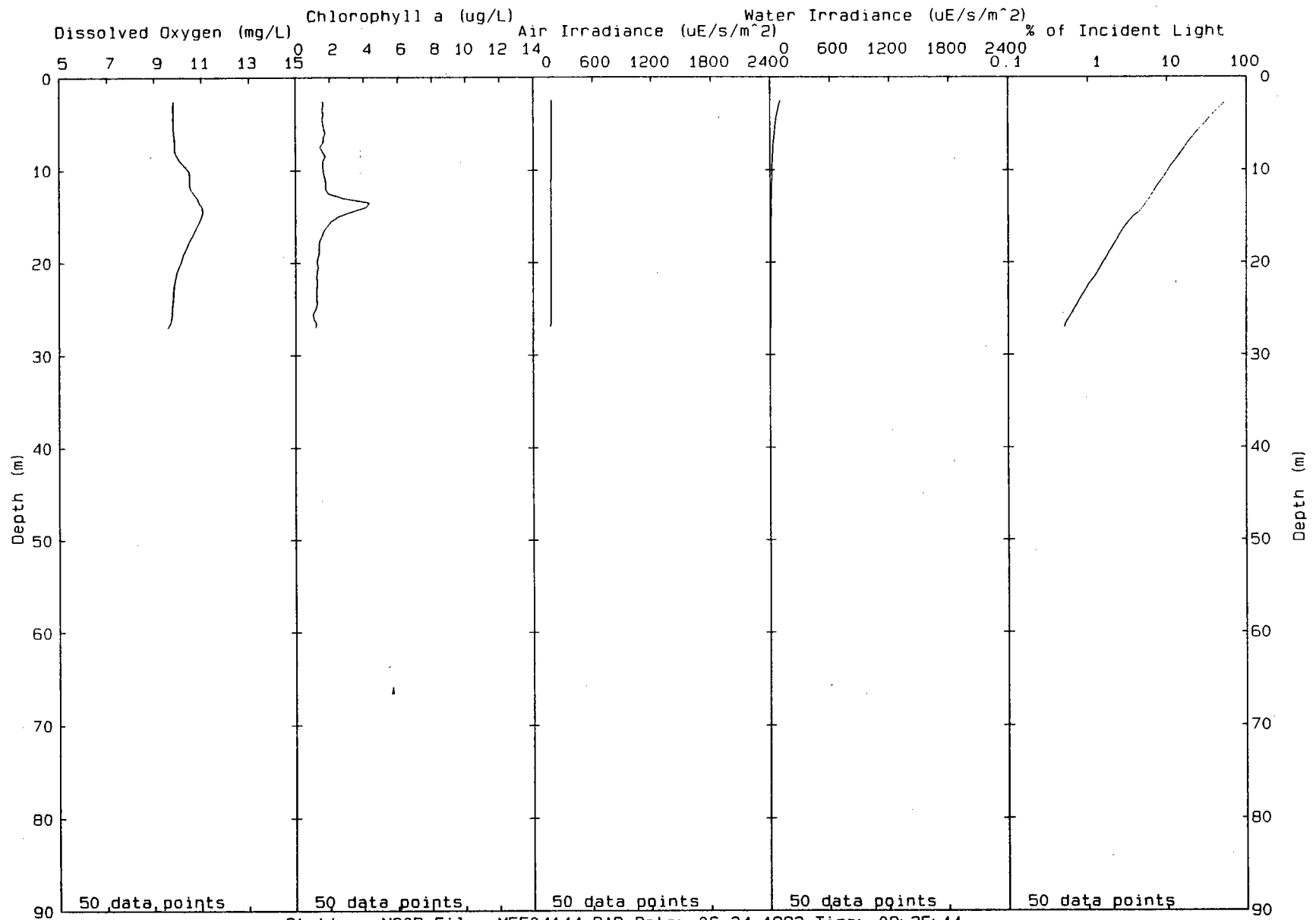
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00360



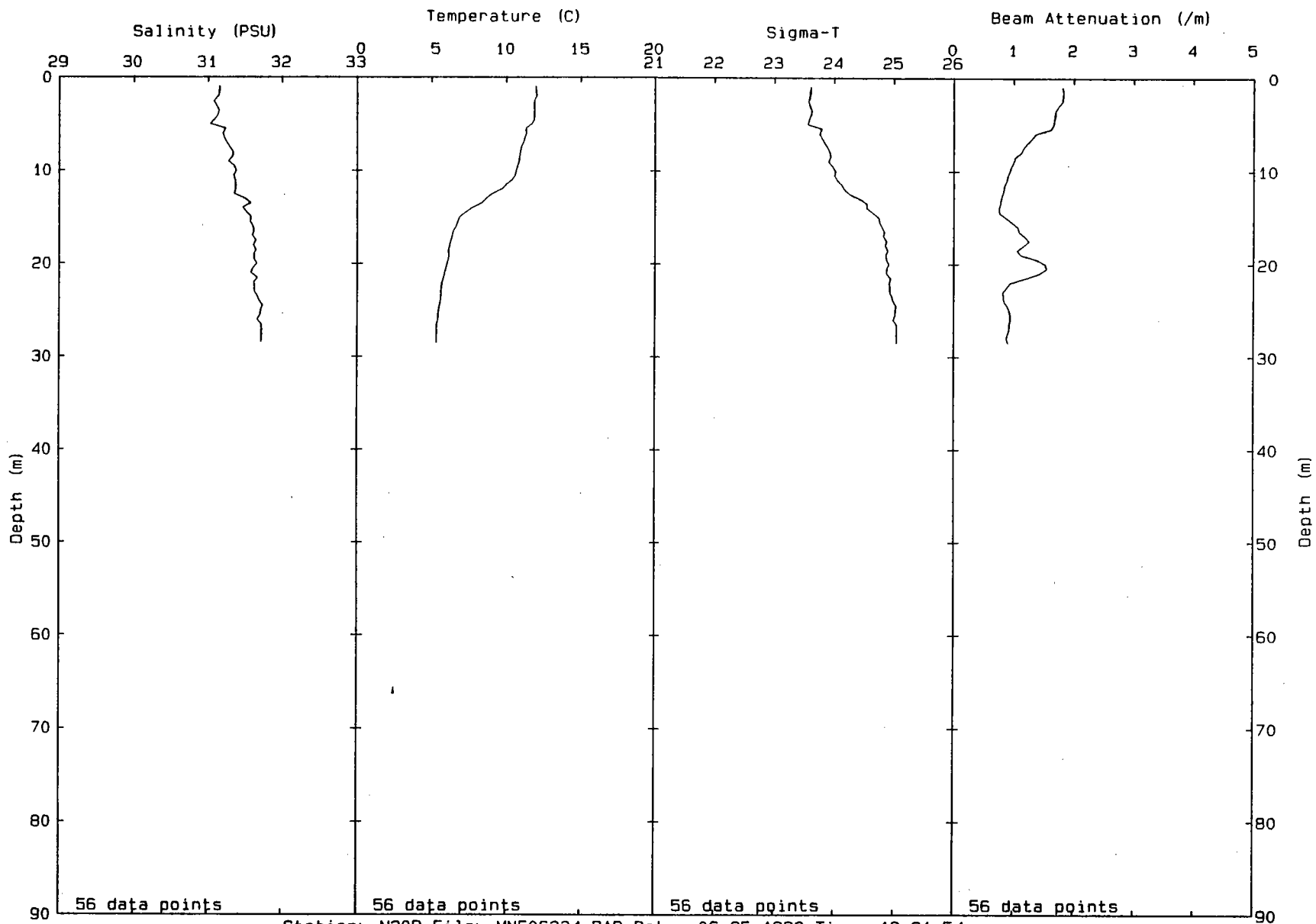
Station: N20P File: MFF04144.PAB Date: 06-24-1992 Time: 09:35:11

00361



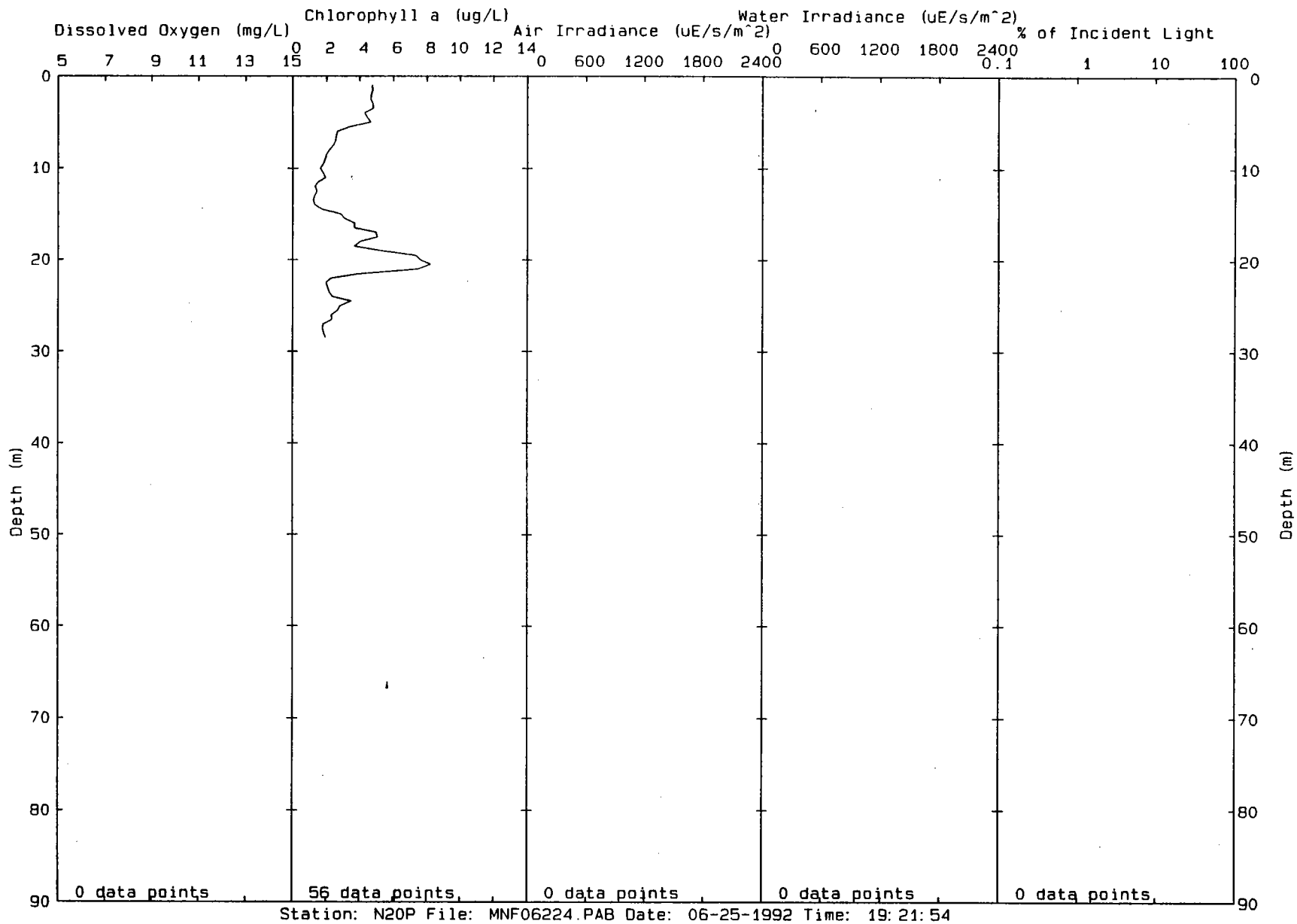
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00362

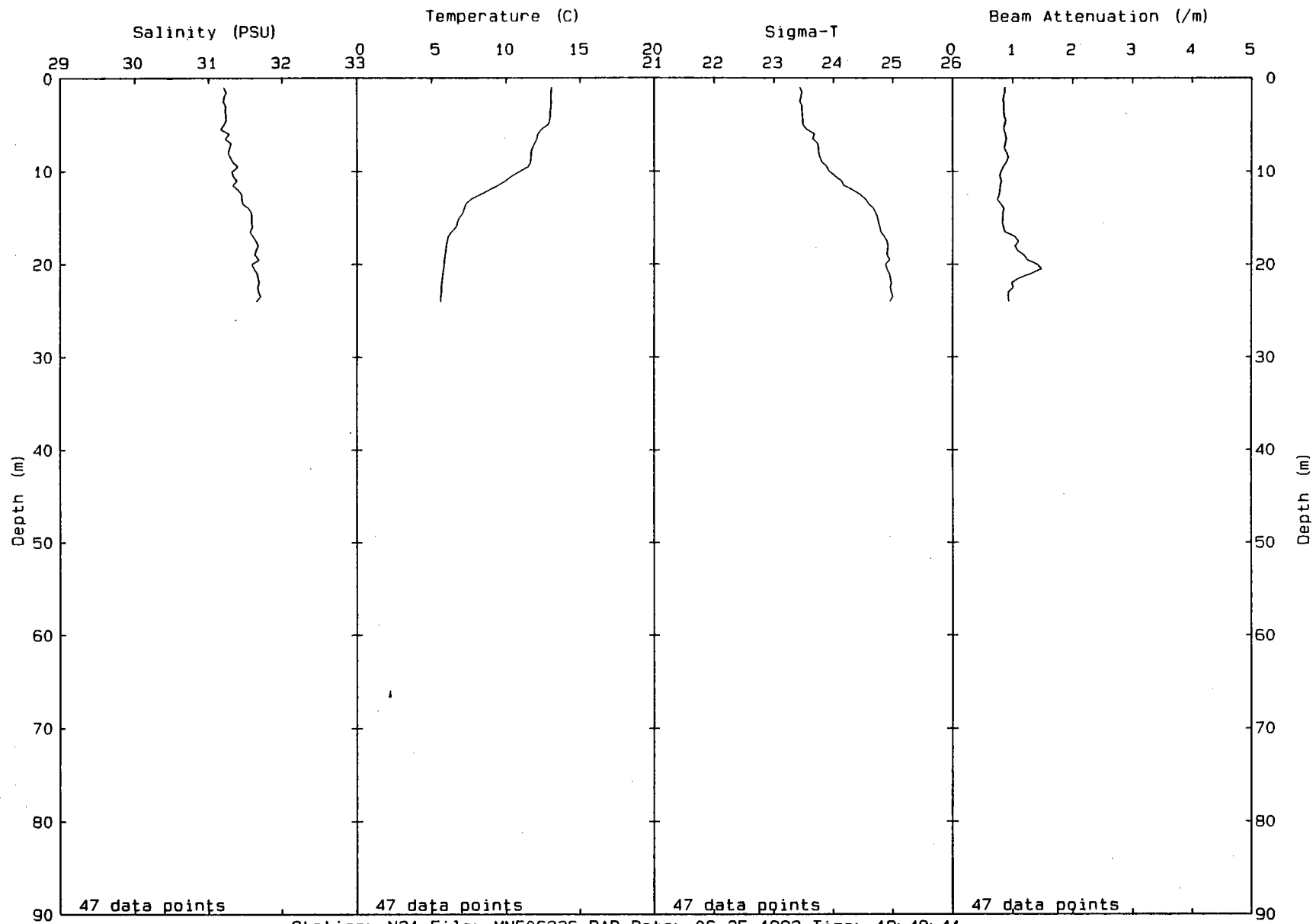


Station: N20P File: MNF06224.PAB Date: 06-25-1992 Time: 19:21:54

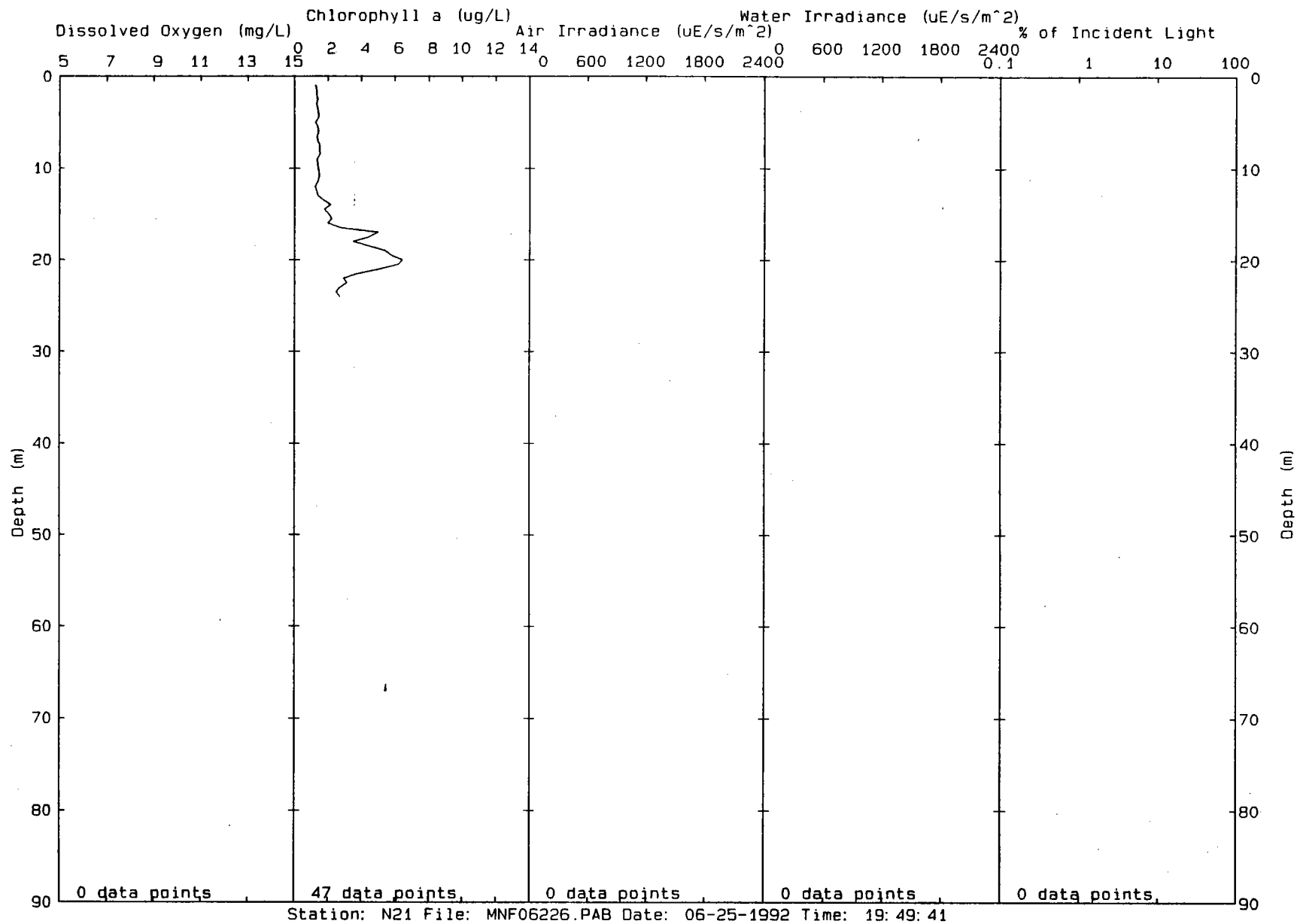
00363



00364



00305



**TABLE B-4. IRRADIANCE DATA FROM JUNE 1992. (These data may be compared to vertical plots using sensor on rosette)**

STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL	
F01P	6/22/92	15:50	AIR			AIR	588.0	375	1.568
F01P	6/22/92	15:50	1			1	159.7	345	0.463
F01P	6/22/92	15:50	2			2	79.8	323	0.248
F01P	6/22/92	15:50	3			3	65.9	323	0.204
F01P	6/22/92	15:50	4			4	64.9	308	0.211
F01P	6/22/92	15:50	5			5	58.9	308	0.191
F01P	6/22/92	15:50	10			10	32.9	293	0.113
F01P	6/22/92	15:50	15			15	11.0	278	0.040
F01P	6/22/92	15:50	20			20	3.4	263	0.013
F01P	6/22/92	15:50	25			25	0.9	255	0.004
F13P	6/23/92	10:50	AIR	30		AIR	2293.2	1725	1.329
F13P	6/23/92	10:50	1	30		1	1297.4	1538	0.844
F13P	6/23/92	10:50	2	30		2	898.2	1650	0.544
F13P	6/23/92	10:50	3	30		3	668.7	1613	0.415
F13P	6/23/92	10:50	4	30		3	399.2	1575	0.253
F13P	6/23/92	10:50	5	30		4	319.4	1575	0.203
F13P	6/23/92	10:50	10	30		9	53.9	1650	0.033
F13P	6/23/92	10:50	15	30		13	14.0	1613	0.009
F13P	6/23/92	10:50	20	30		17	5.5	1575	0.003
N01P	6/25/92	08:28	AIR			AIR	2116.8	825	2.566

00306

STATION	DATE	TIME	WIREOUT	WIRE ANGLE <sup>a</sup>	APPROX DEPTH <sup>b</sup>	IN SITU LIGHT <sup>c</sup>	DECK CELL <sup>d</sup>	LIGHT/ DECK CELL
N01P	6/25/92	08:28	1		1	998.0	825	1.210
N01P	6/25/92	08:28	2		2	598.8	825	0.726
N01P	6/25/92	08:28	3		3	349.3	863	0.405
N01P	6/25/92	08:28	4		4	259.5	825	0.315
N01P	6/25/92	08:28	5		5	154.7	825	0.188
N01P	6/25/92	08:28	10		10	47.9	863	0.056
N01P	6/25/92	08:28	15		15	21.0	825	0.025
N01P	6/25/92	08:28	20		20	7.5	825	0.009
N01P	6/25/92	08:28	25		25	3.7	825	0.004
N01P	6/25/92	08:28	30		30	1.6	863	0.002
N04P	6/25/92		AIR		AIR	2234.4	1425	1.568
N04P	6/25/92		1		1	1097.8	1388	0.791
N04P	6/25/92		2		2	329.3	1388	0.237
N04P	6/25/92		3		3	289.4	1388	0.209
N04P	6/25/92		4		4	289.4	1388	0.209
N04P	6/25/92		5		5	299.4	1425	0.210
N04P	6/25/92		10		10	309.4	1418	0.218
N04P	6/25/92		15		15	184.6	1403	0.132
N04P	6/25/92		20		20	64.9	1403	0.046
N04P	6/25/92		25		25	38.9	1425	0.027

00337

**<sup>a</sup> The wire angle was visually estimated: the table value represents the mid-point of a range if thus recorded. Usually, no entry was recorded if angle was <15 degrees.**

**<sup>b</sup> Approximate depth = wireout (cos  $\theta$ ) where  $\theta$  = wire angle visually estimated.**

**<sup>c</sup> The meter/( $4\pi$ , spherical) sensor pair reading was corrected to provide the actual light values in air and underwater. The recorded reading in air was multiplied by 0.588 and the recorded reading in water was multiplied by 0.998. These factors were based upon post-cruise calibration of the meter/sensor pair. Units are  $\mu\text{Einsteins}/\text{m}^2/\text{sec}$ , as for deck cell.**

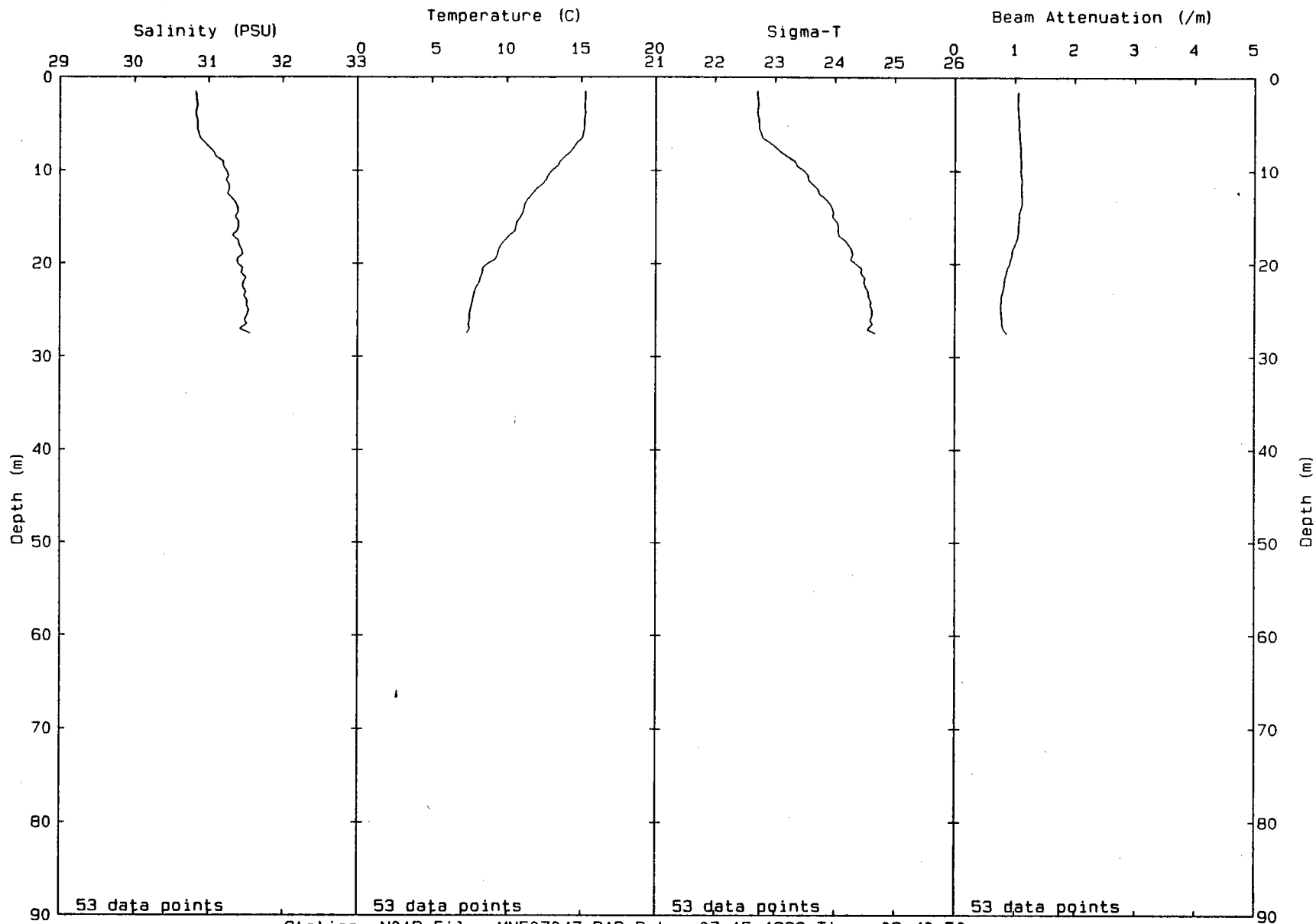
**<sup>d</sup> Deck cell (cosine sensor, flat plane) readings were made using an uncalibrated meter sensor pair. Post-cruise calibration was performed; recorded readings of this sensor-meter pair were multiplied by 0.75 to arrive at actual values in air. Only one meter (box) was available for this cruise, so sensors were alternatively read for each depth. As overhead light was not fluctuating much at a station, paired readings are fairly reliable.**

00308

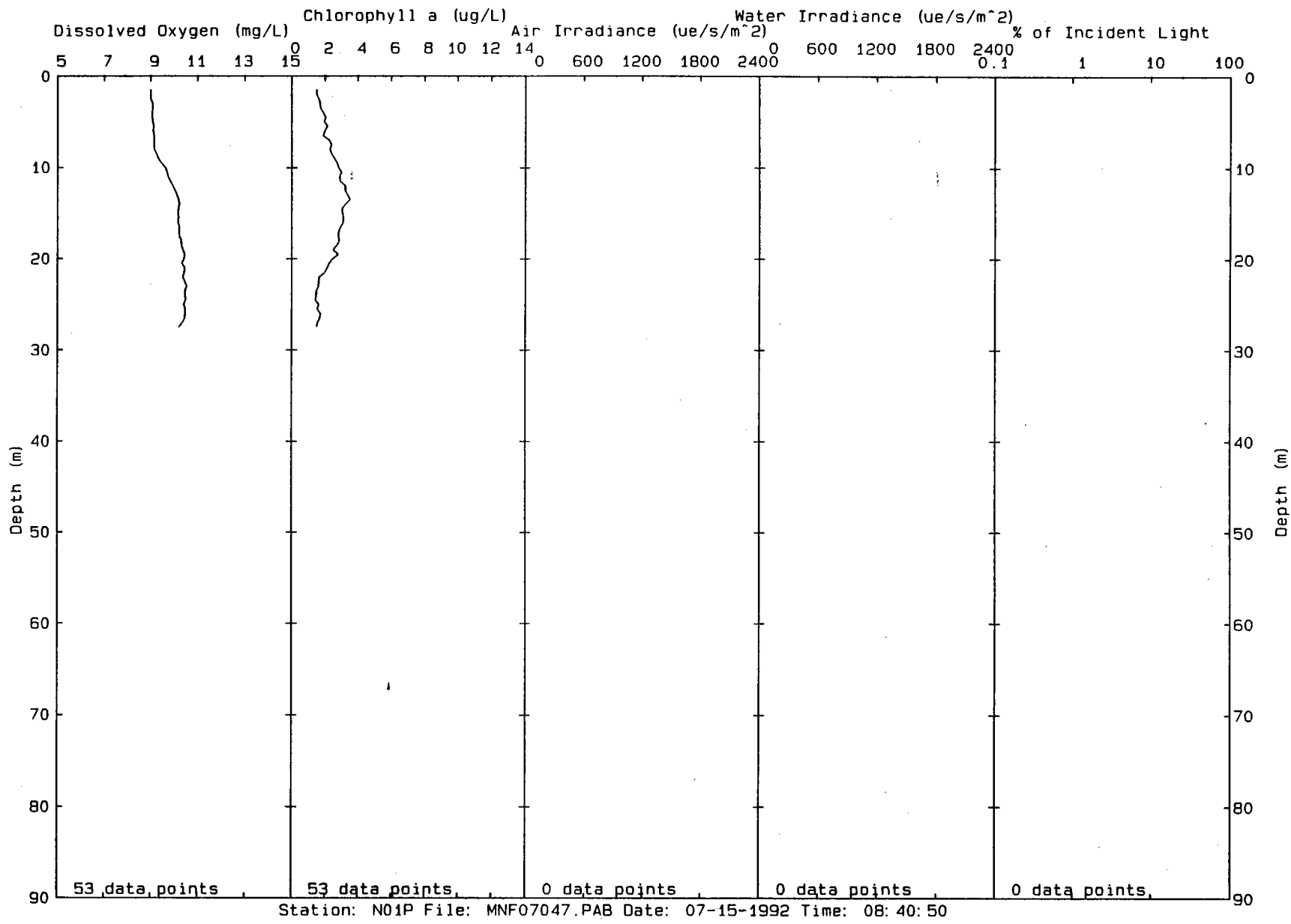
**Mid-July Profiles**

00309

0:300

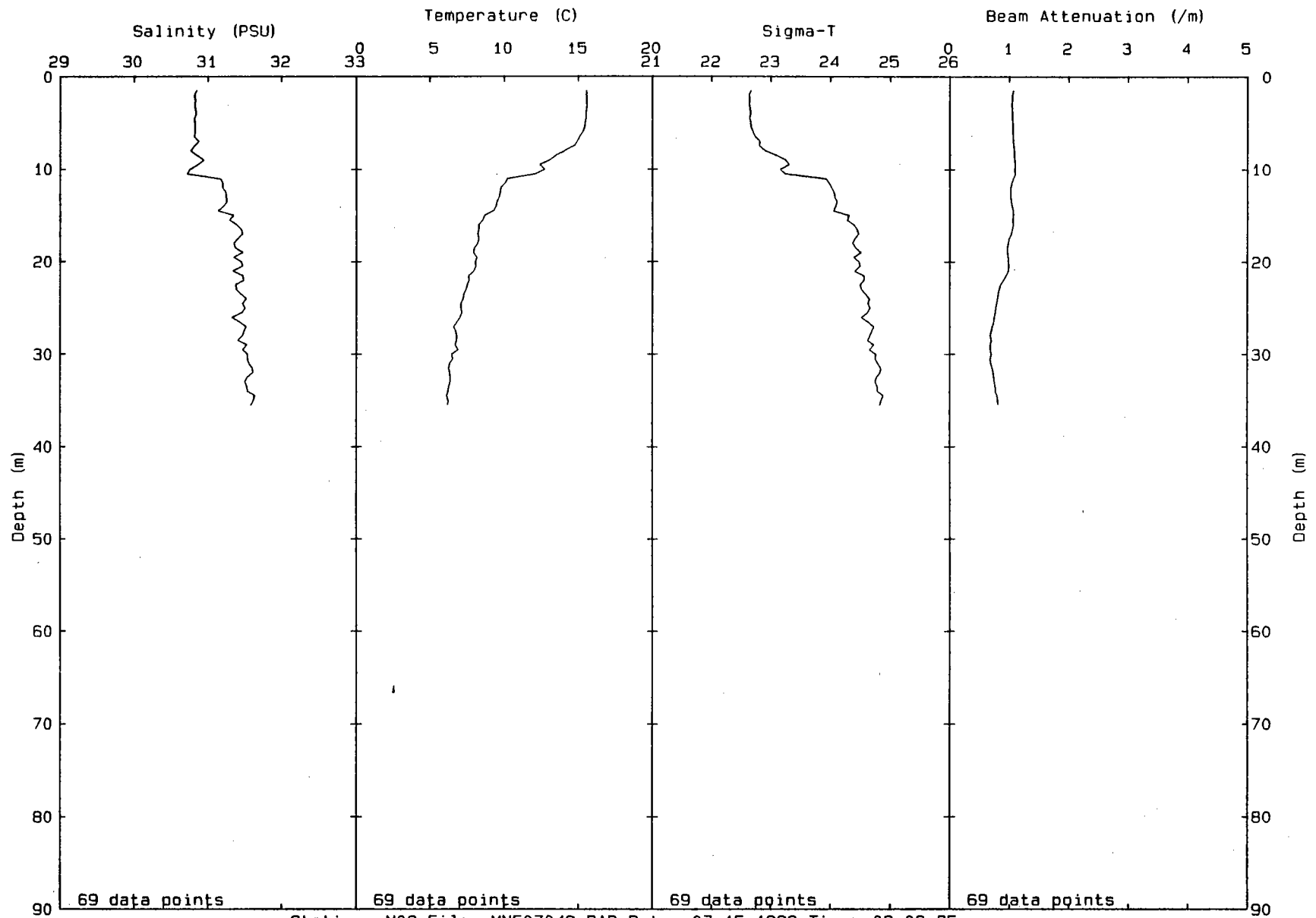


Station: N01P File: MNF07047.PAB Date: 07-15-1992 Time: 08:40:50

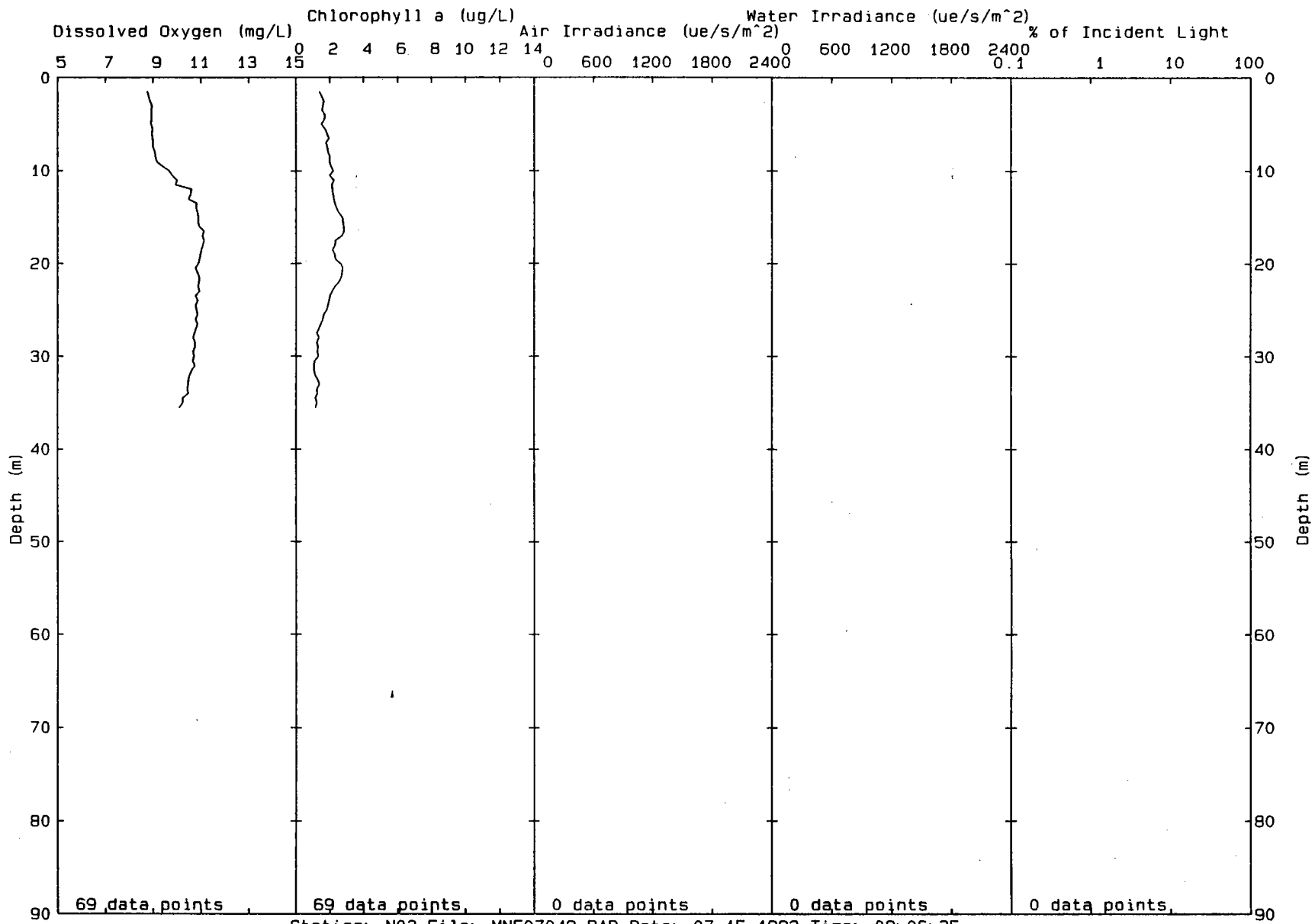


00371

00372

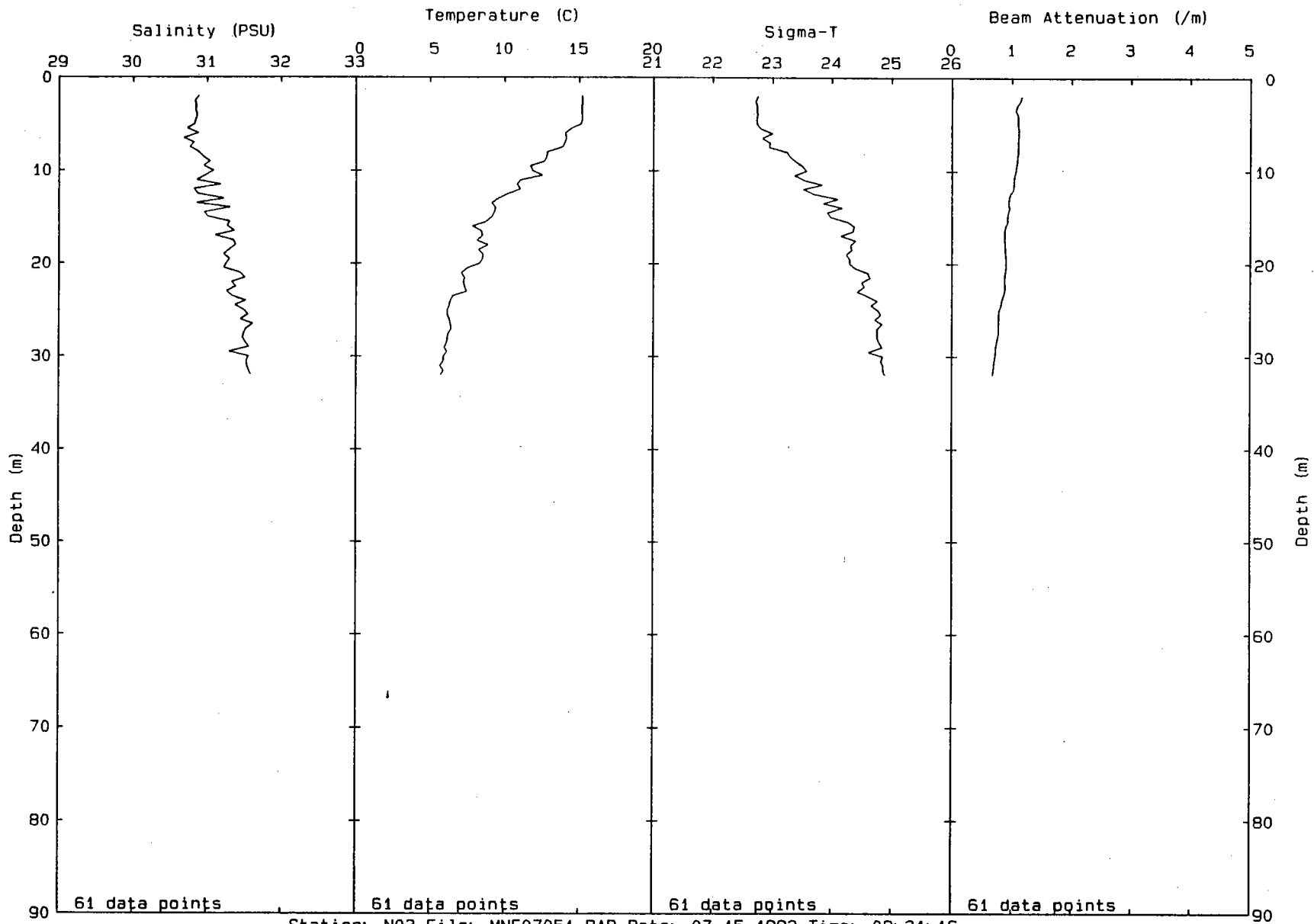


Station: N02 File: MNF07049.PAB Date: 07-15-1992 Time: 09:06:35



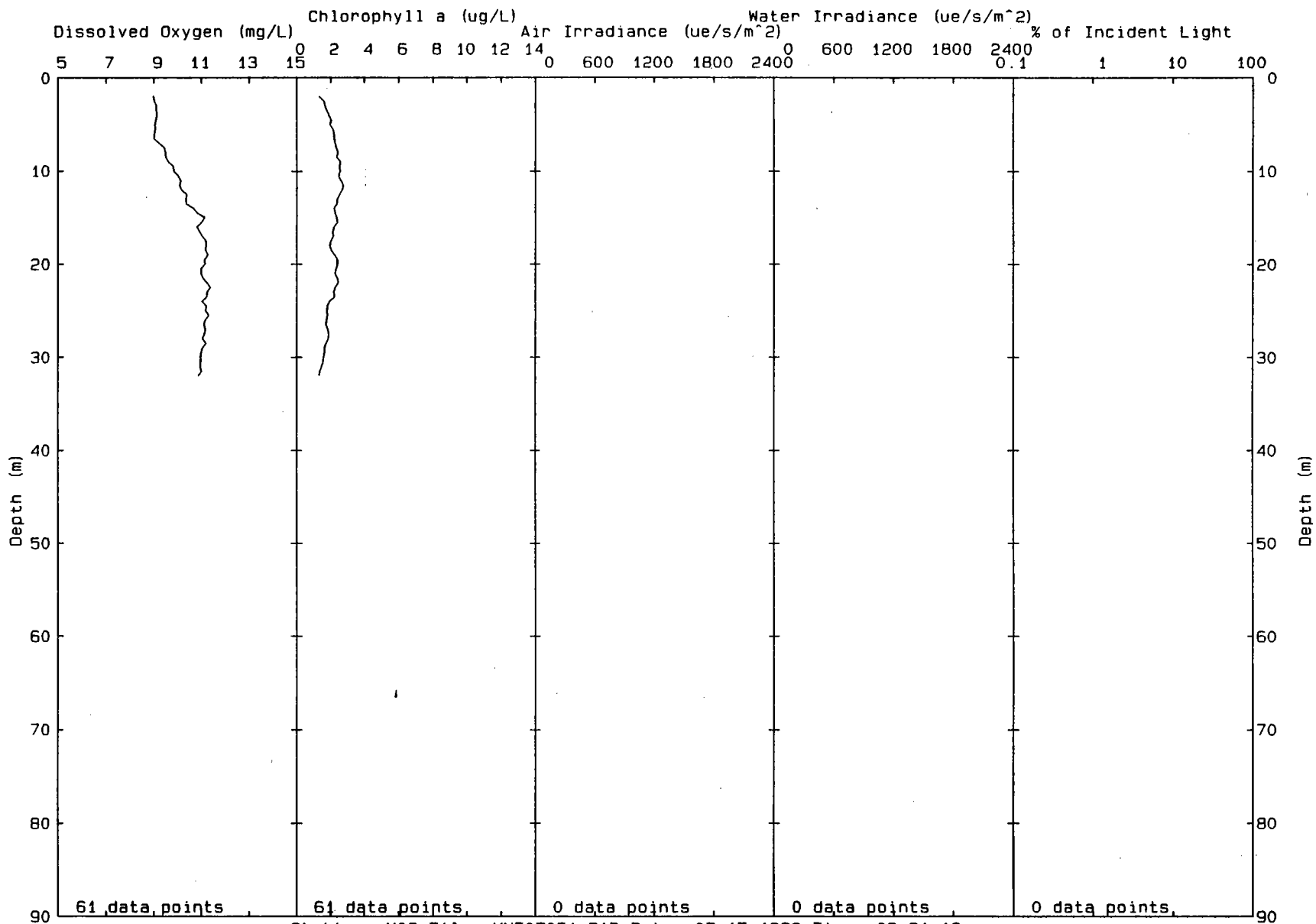
Station: N02 File: MNF07049.PAB Date: 07-15-1992 Time: 09:06:35

003:3



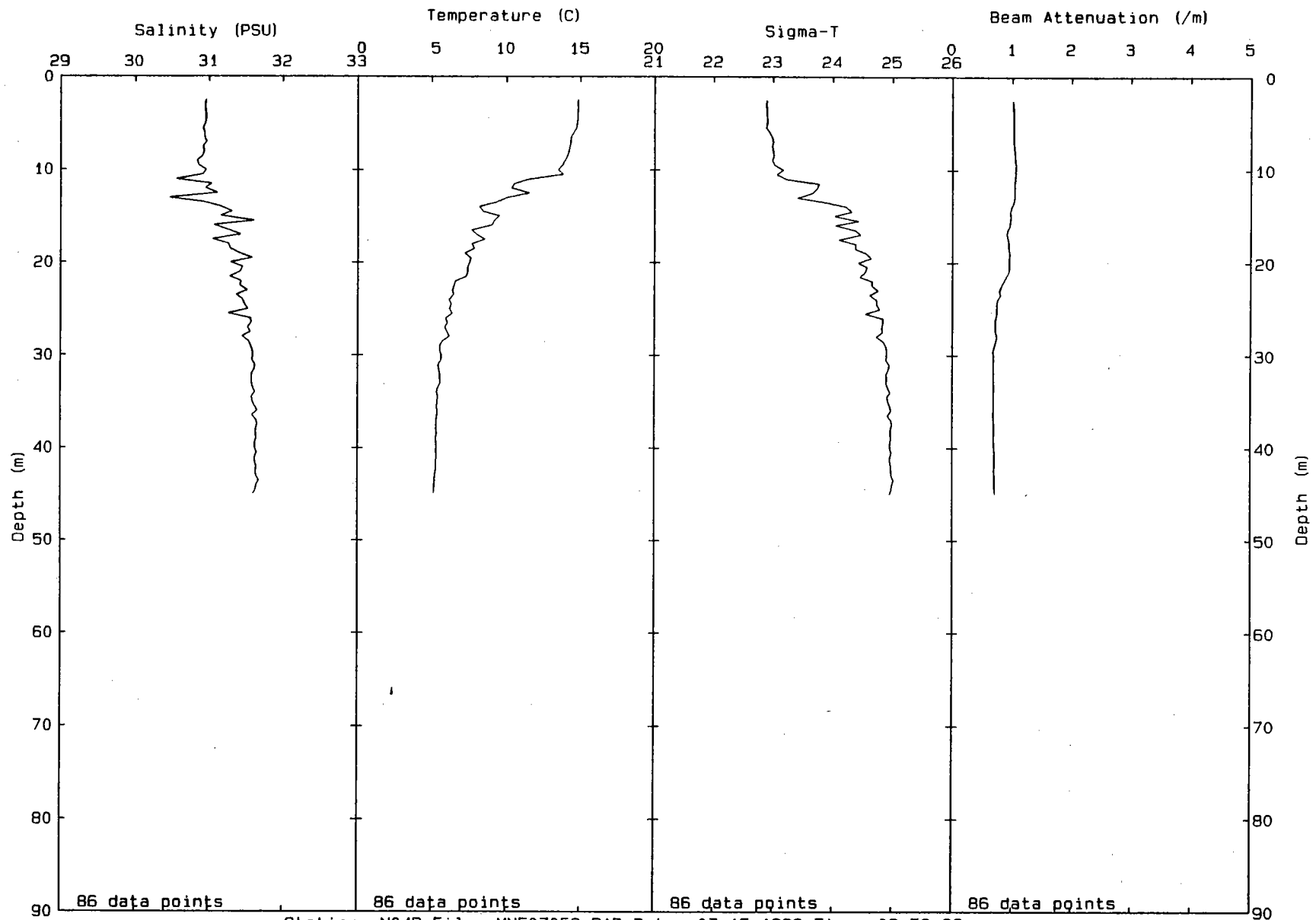
00374

Station: N03 File: MNF07051.PAB Date: 07-15-1992 Time: 09:31:16



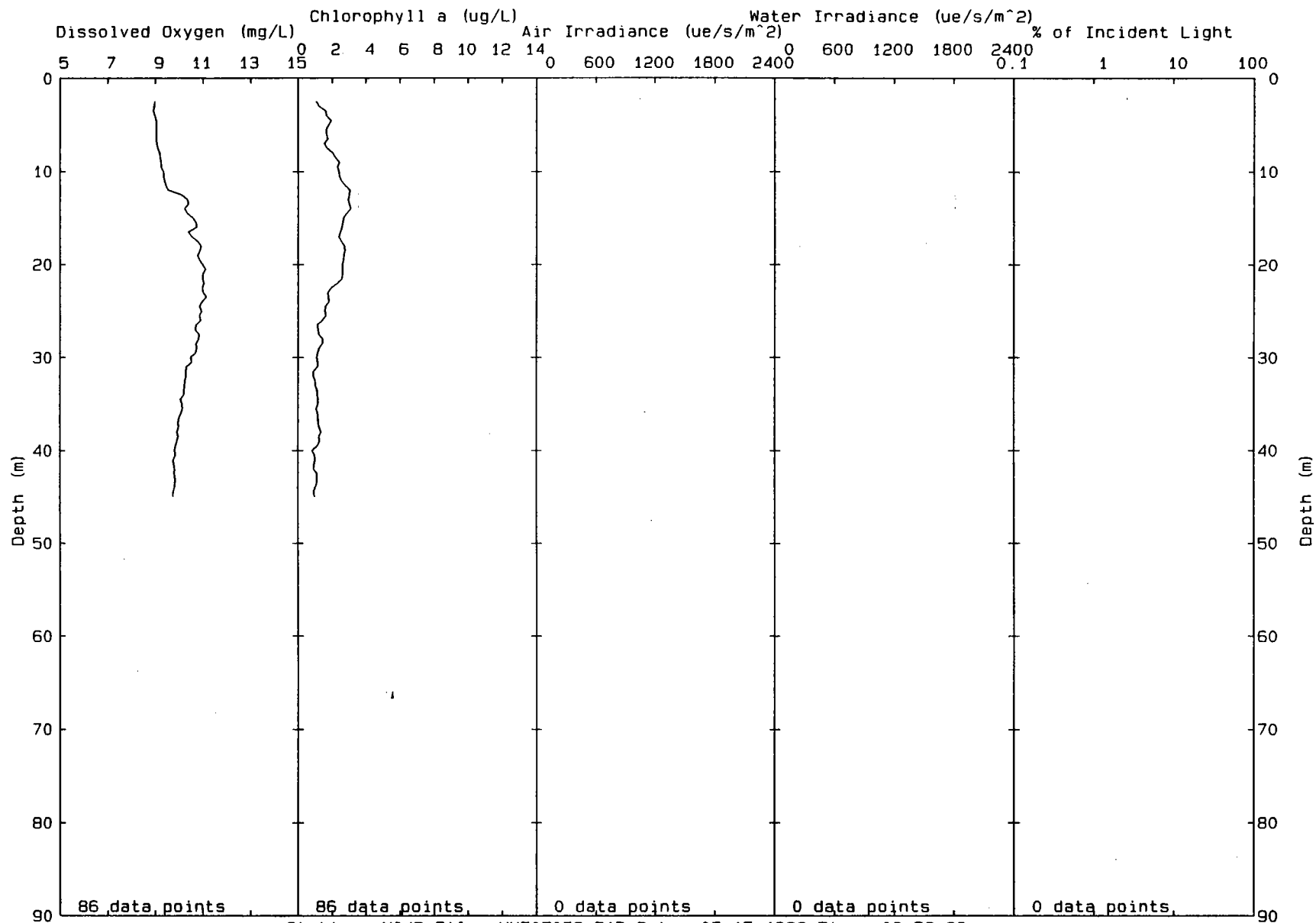
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003:5



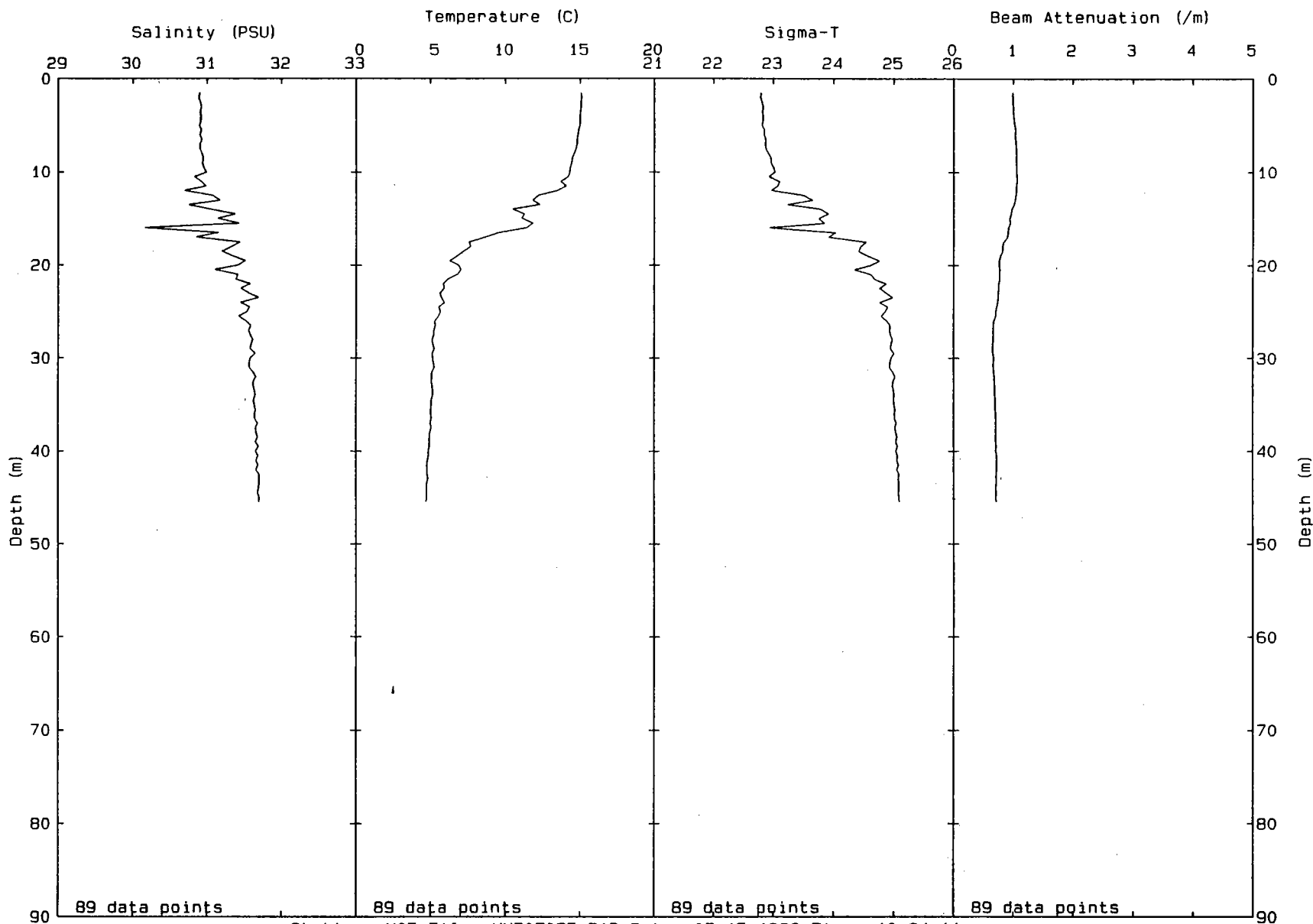
Station: N04P File: MNF07053.PAB Date: 07-15-1992 Time: 09:59:29

00376



Station: N04P File: MNF07053.PAB Date: 07-15-1992 Time: 09:59:29

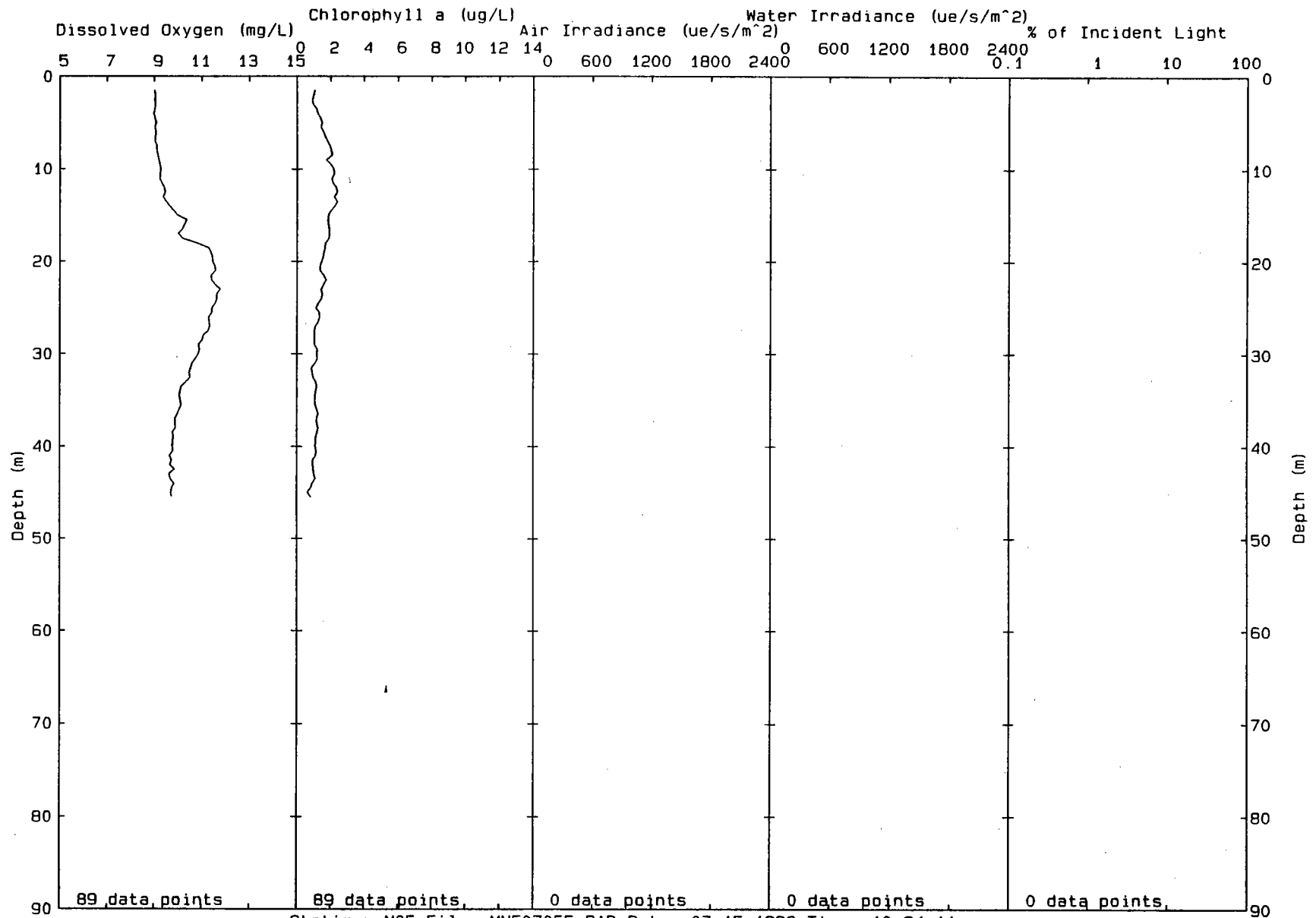
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Station: N05 File: MNF07055.PAB Date: 07-15-1992 Time: 10:24:11

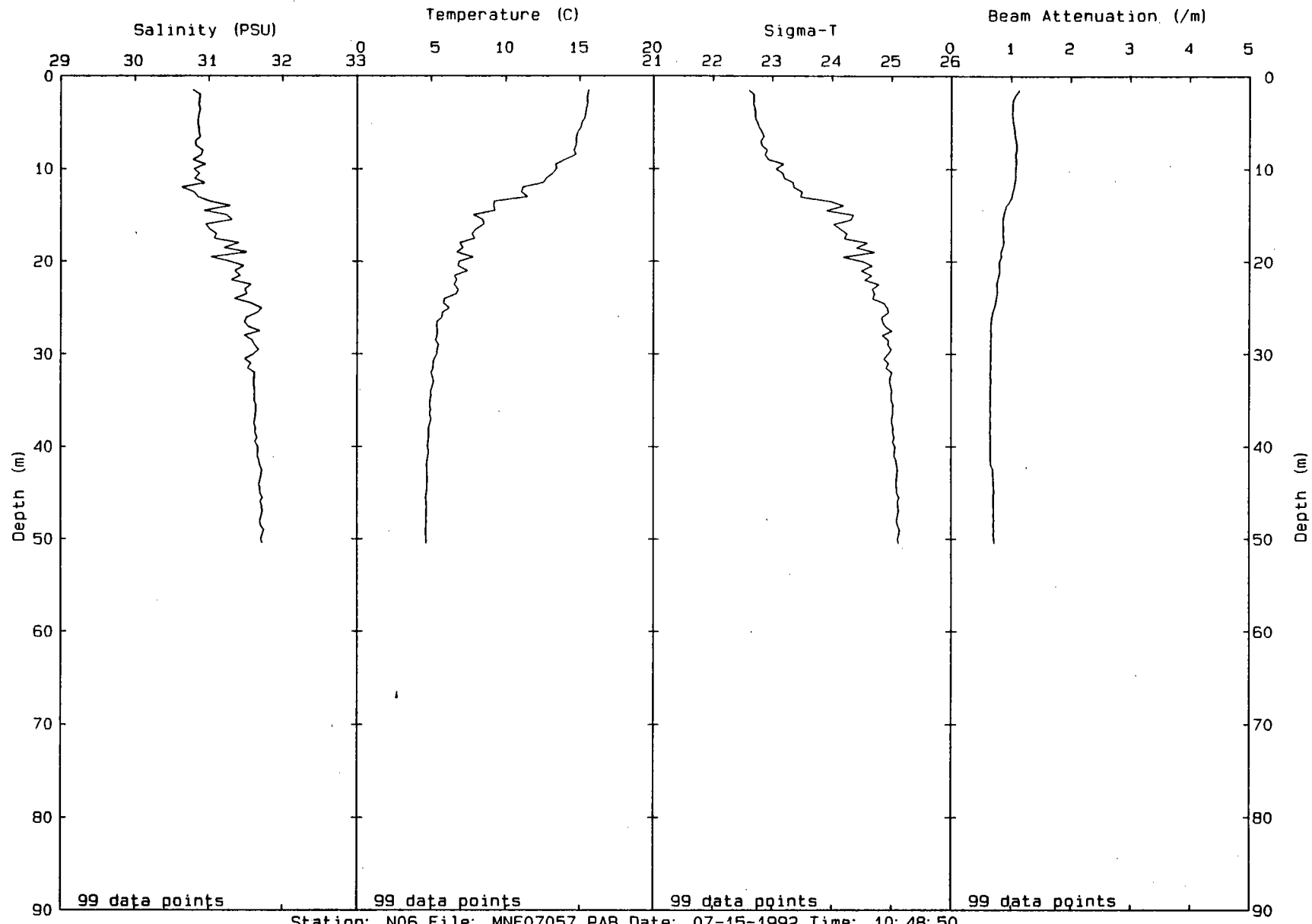
8:30

003:9

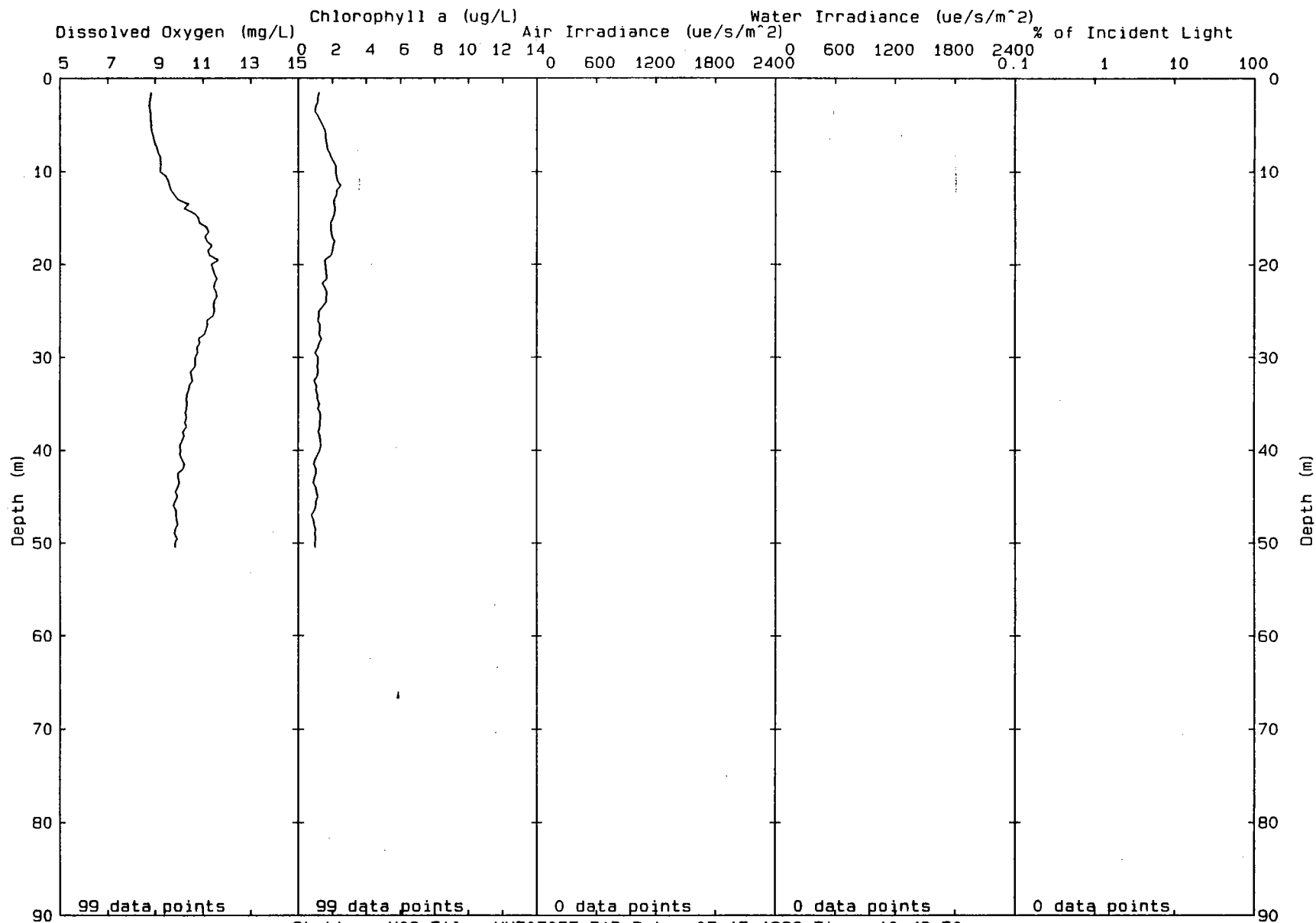


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00380



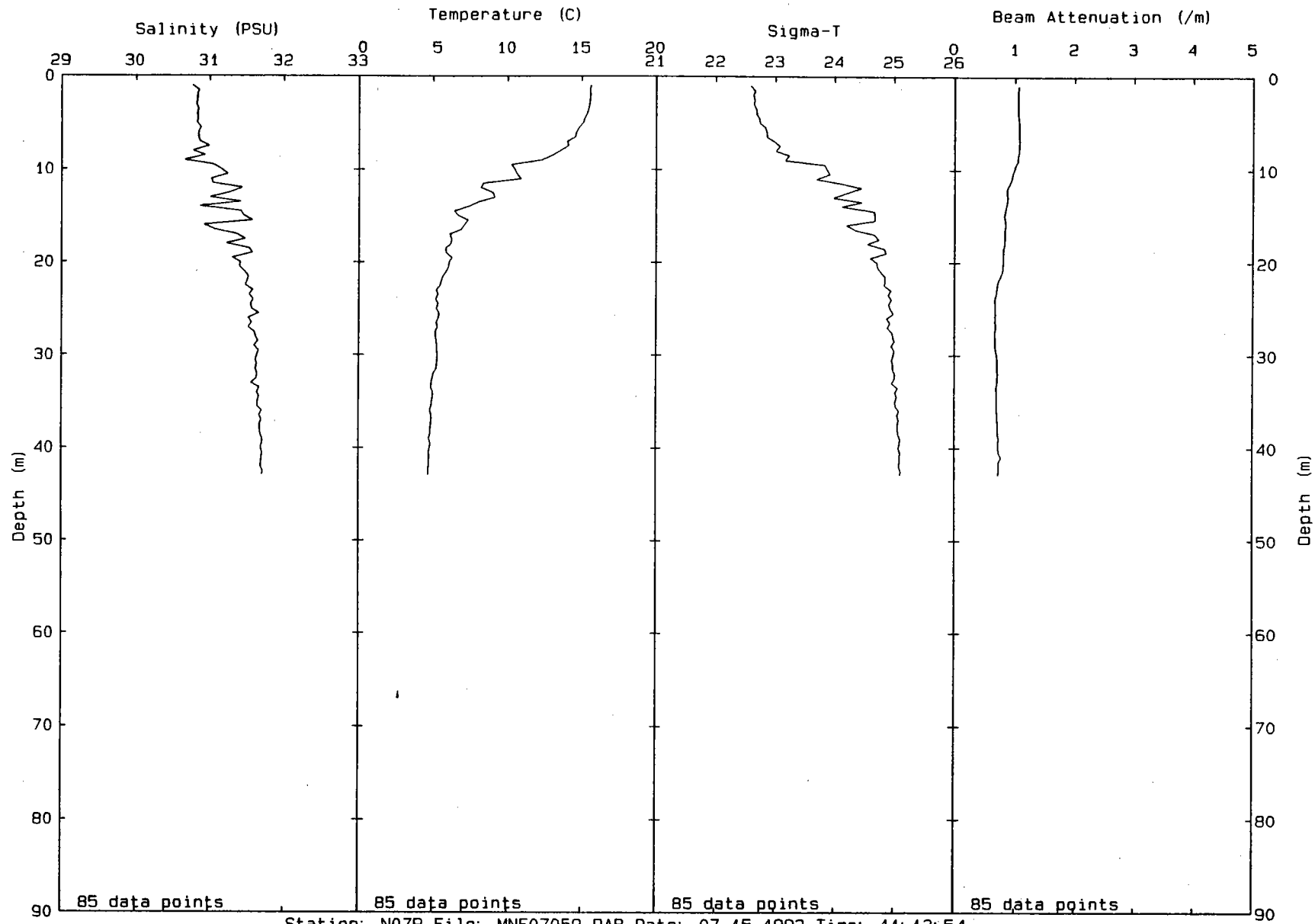
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Station: N06 File: MNF07057.PAB Date: 07-15-1992 Time: 10:48:50

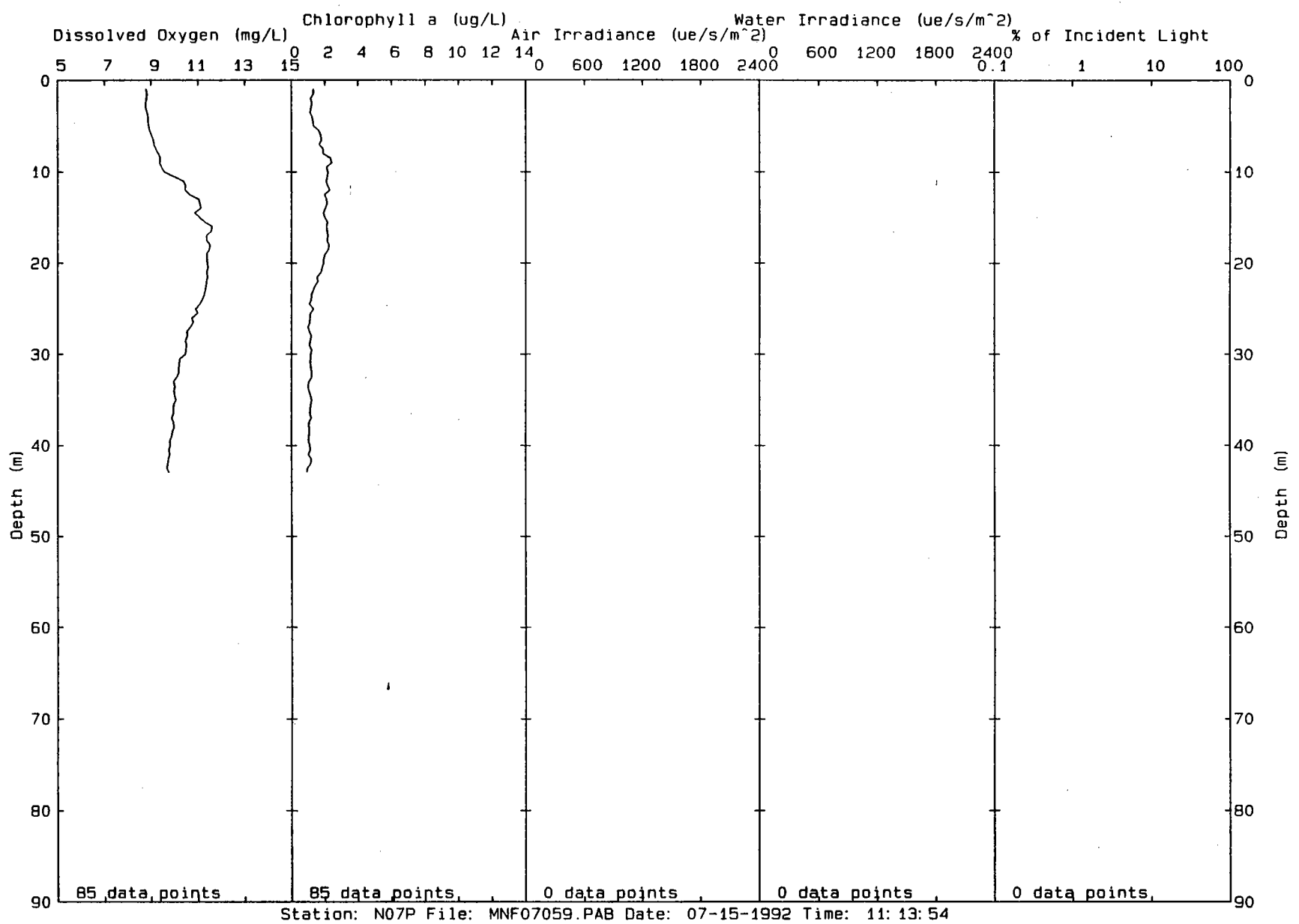
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00382



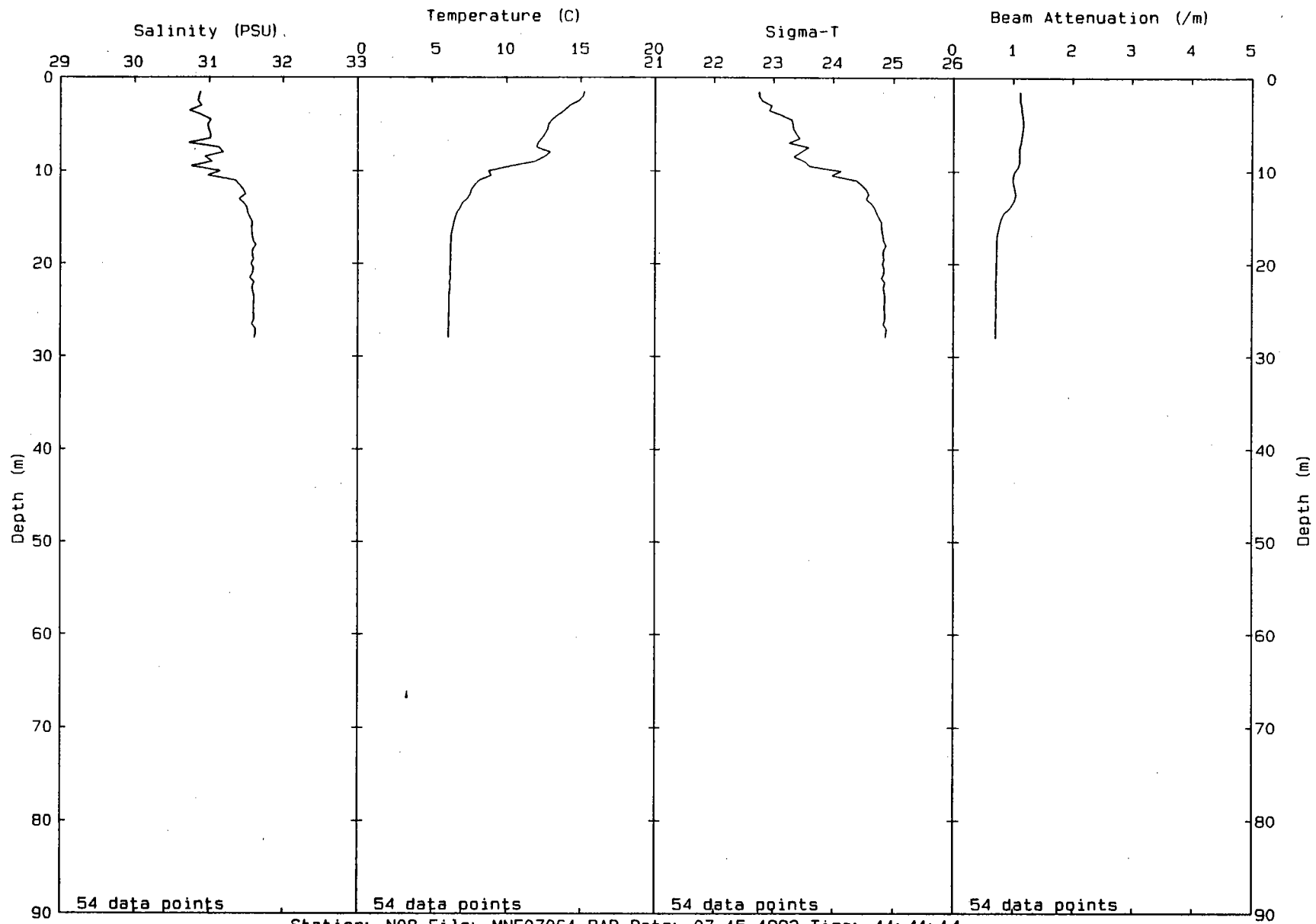
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00383

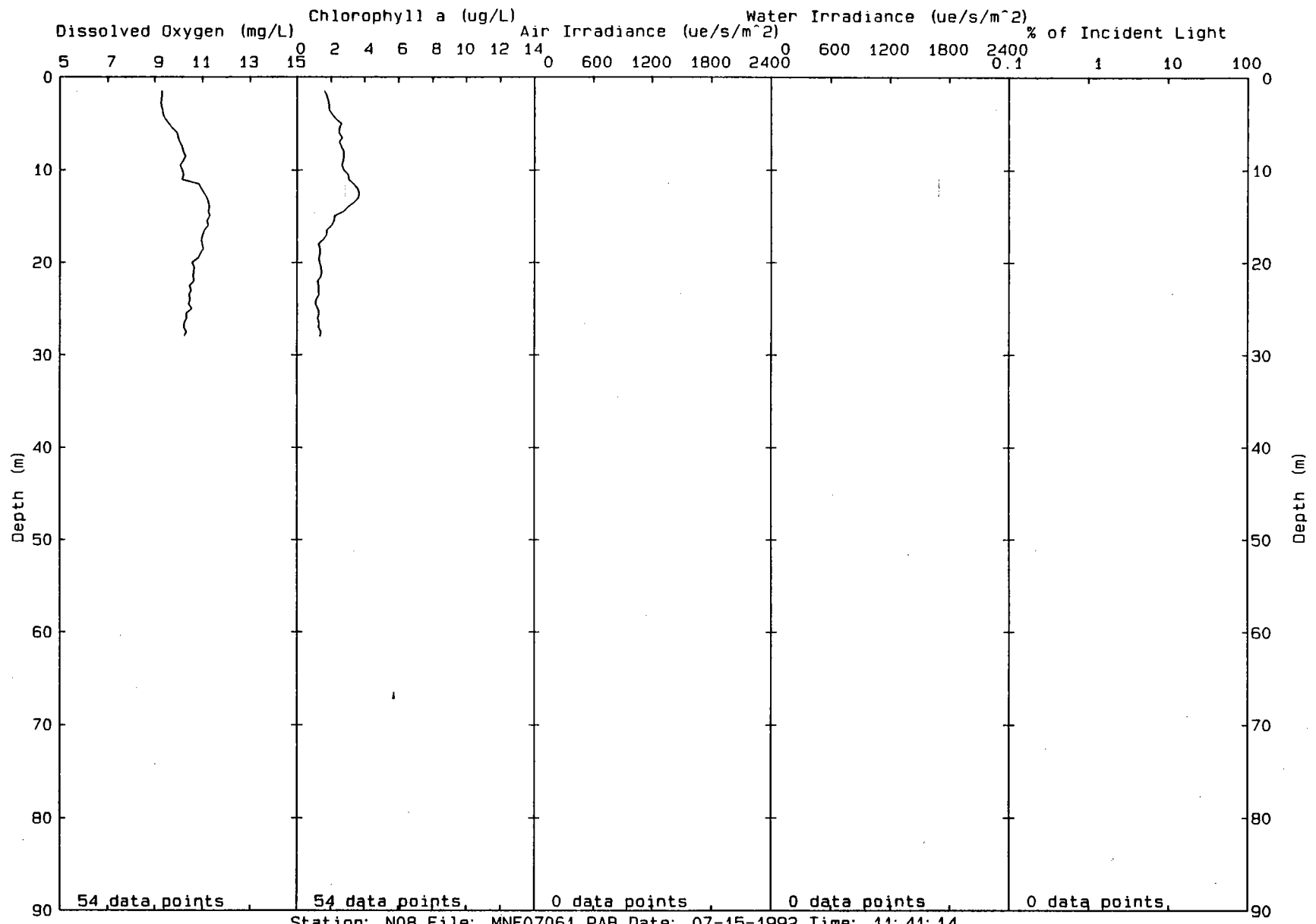


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00334

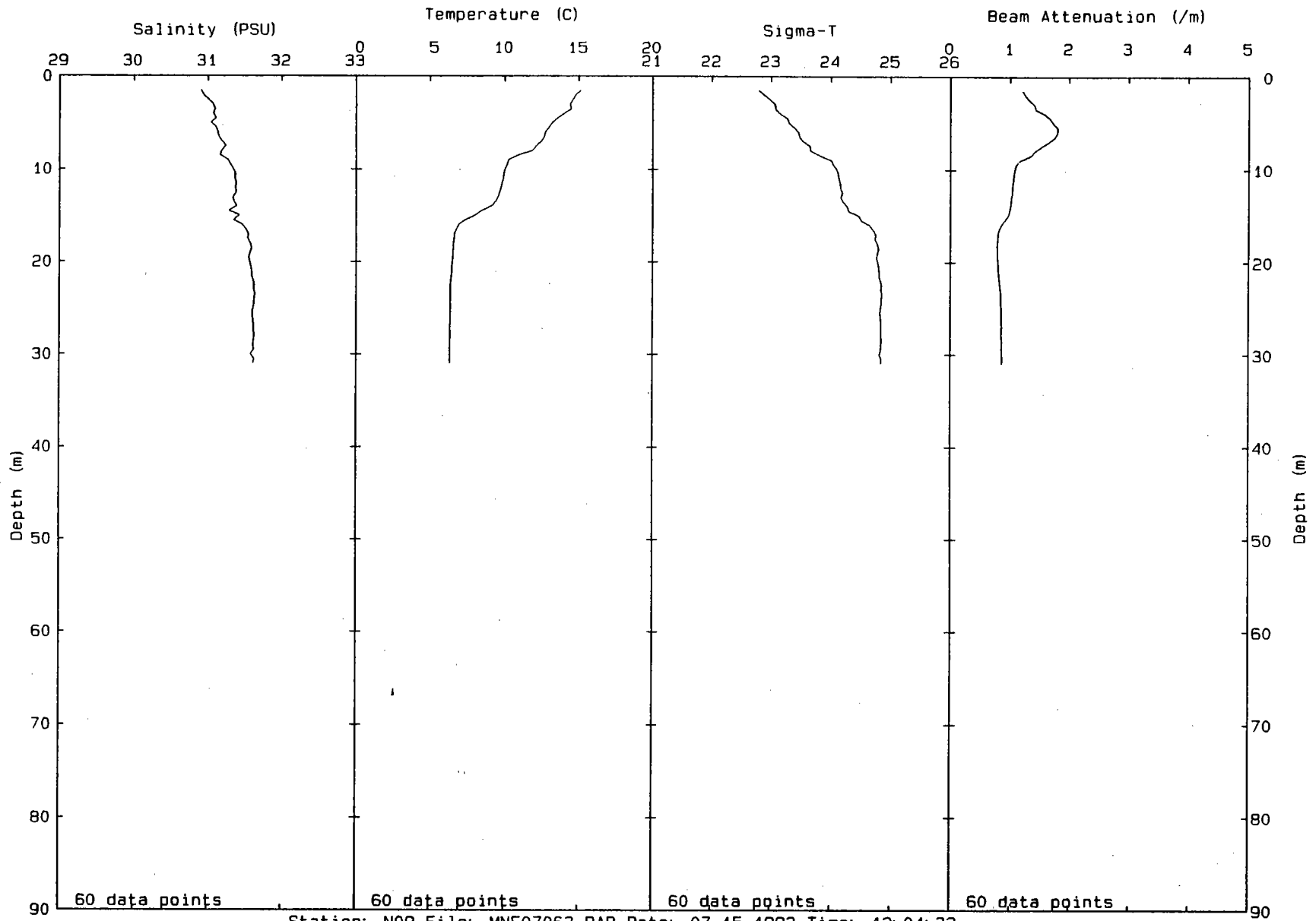


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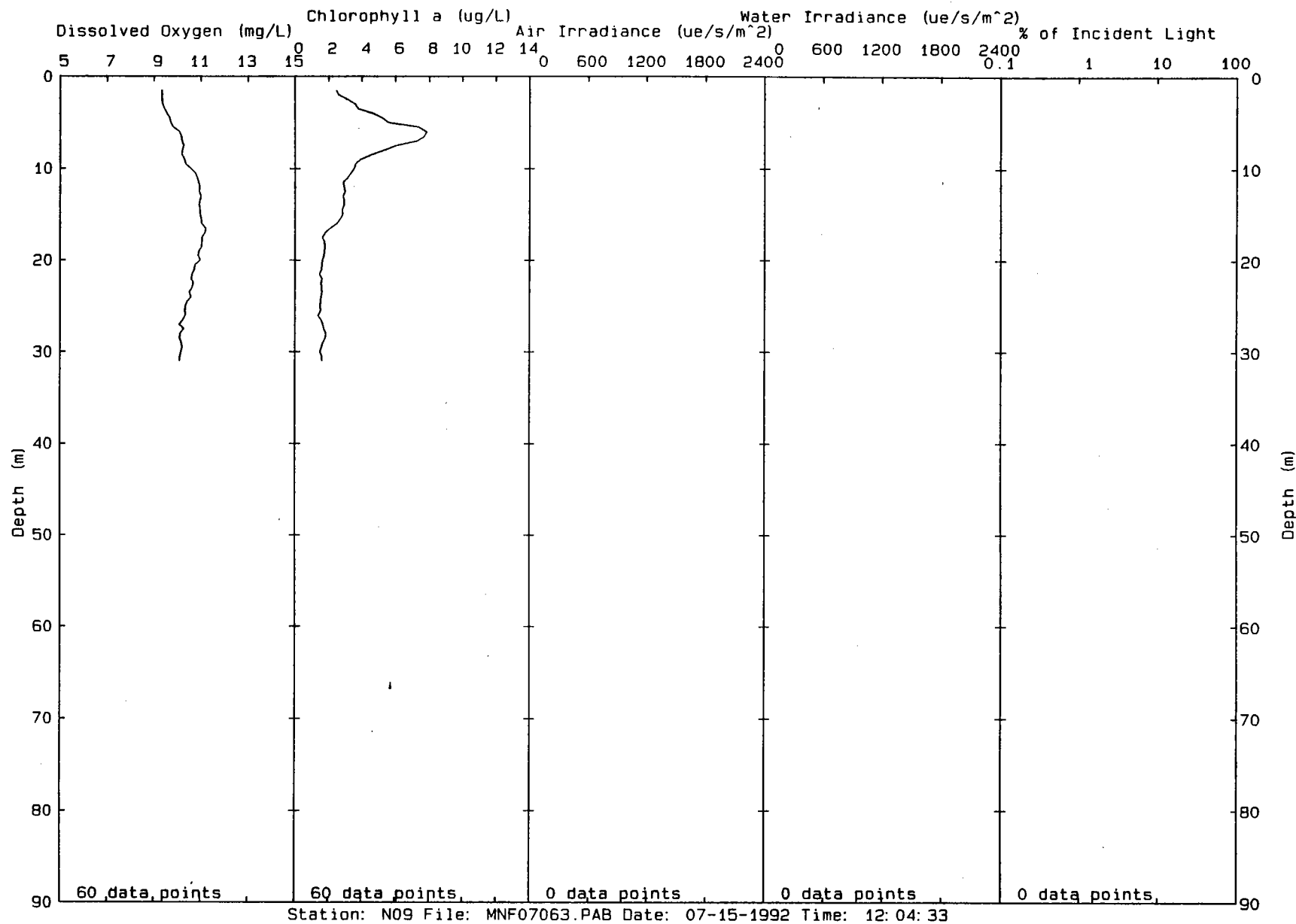
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00335

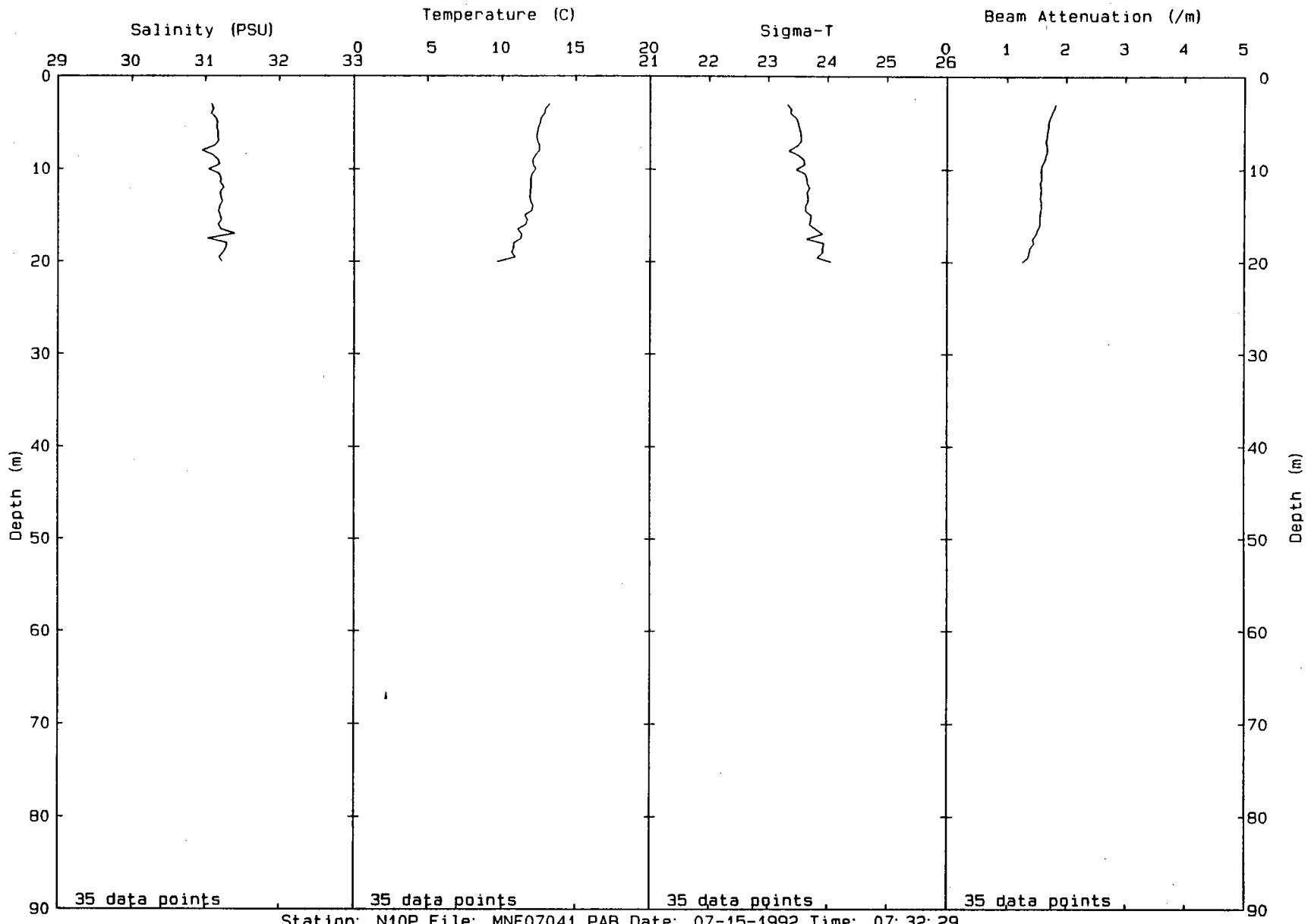


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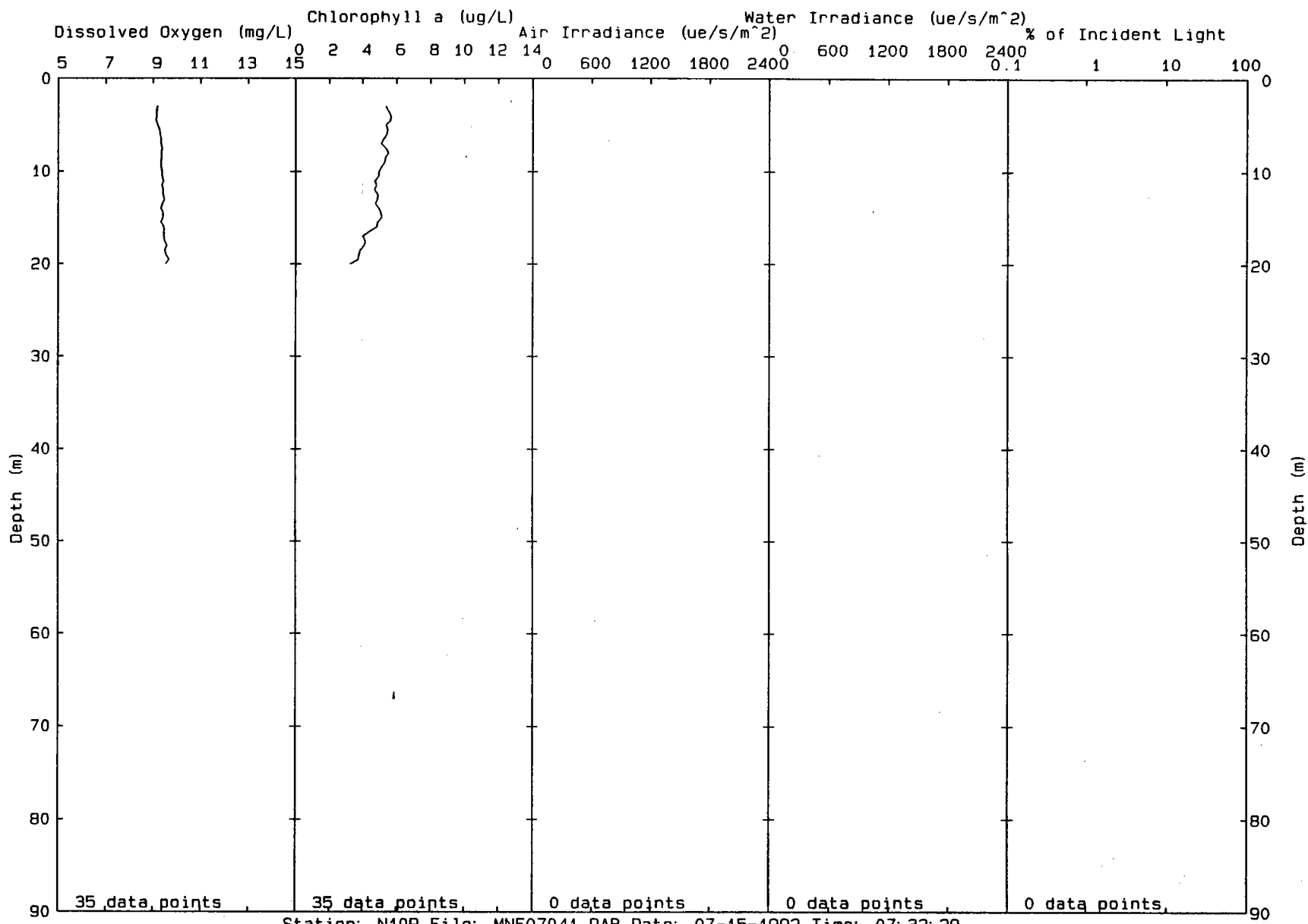


00387



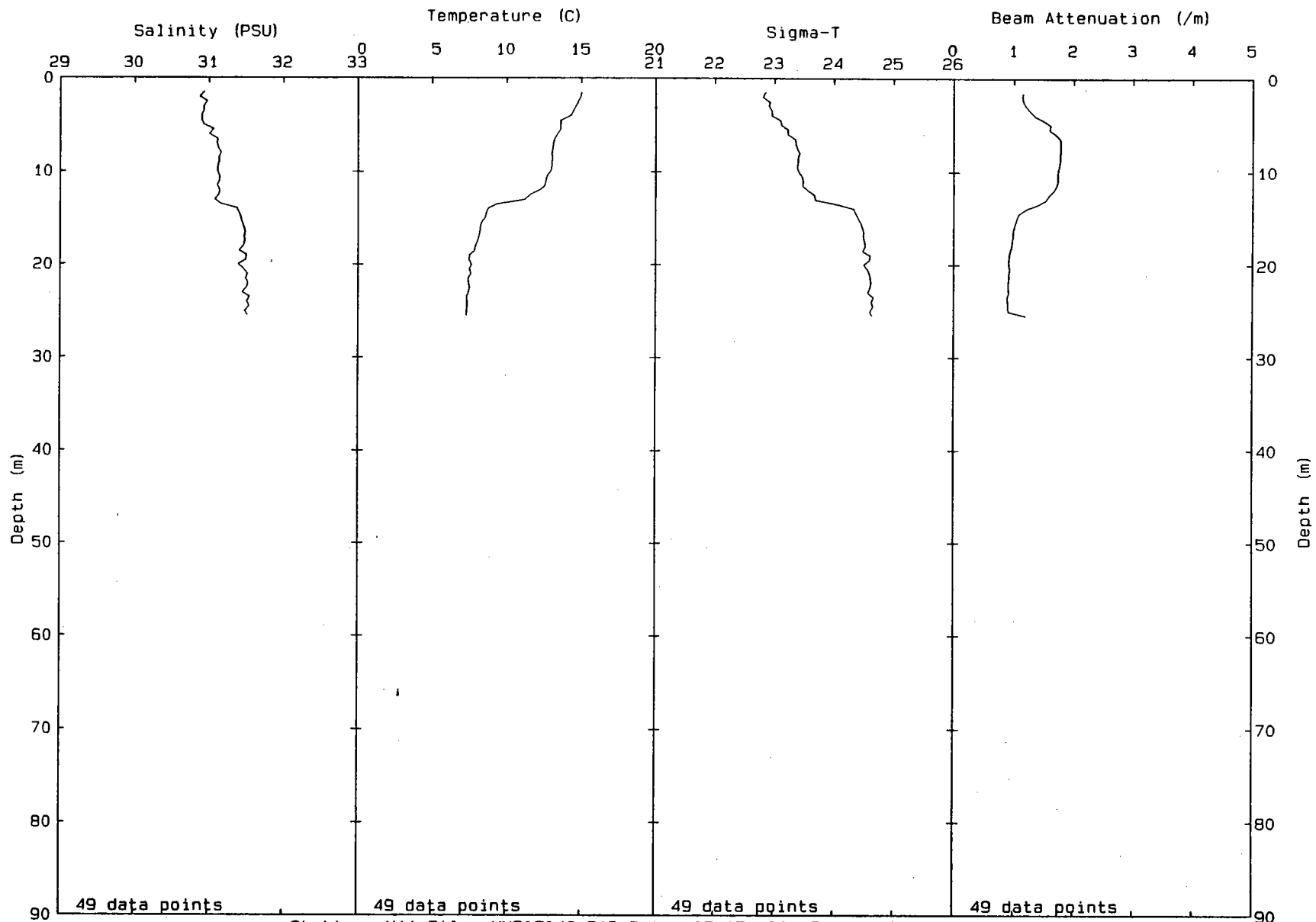
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80308



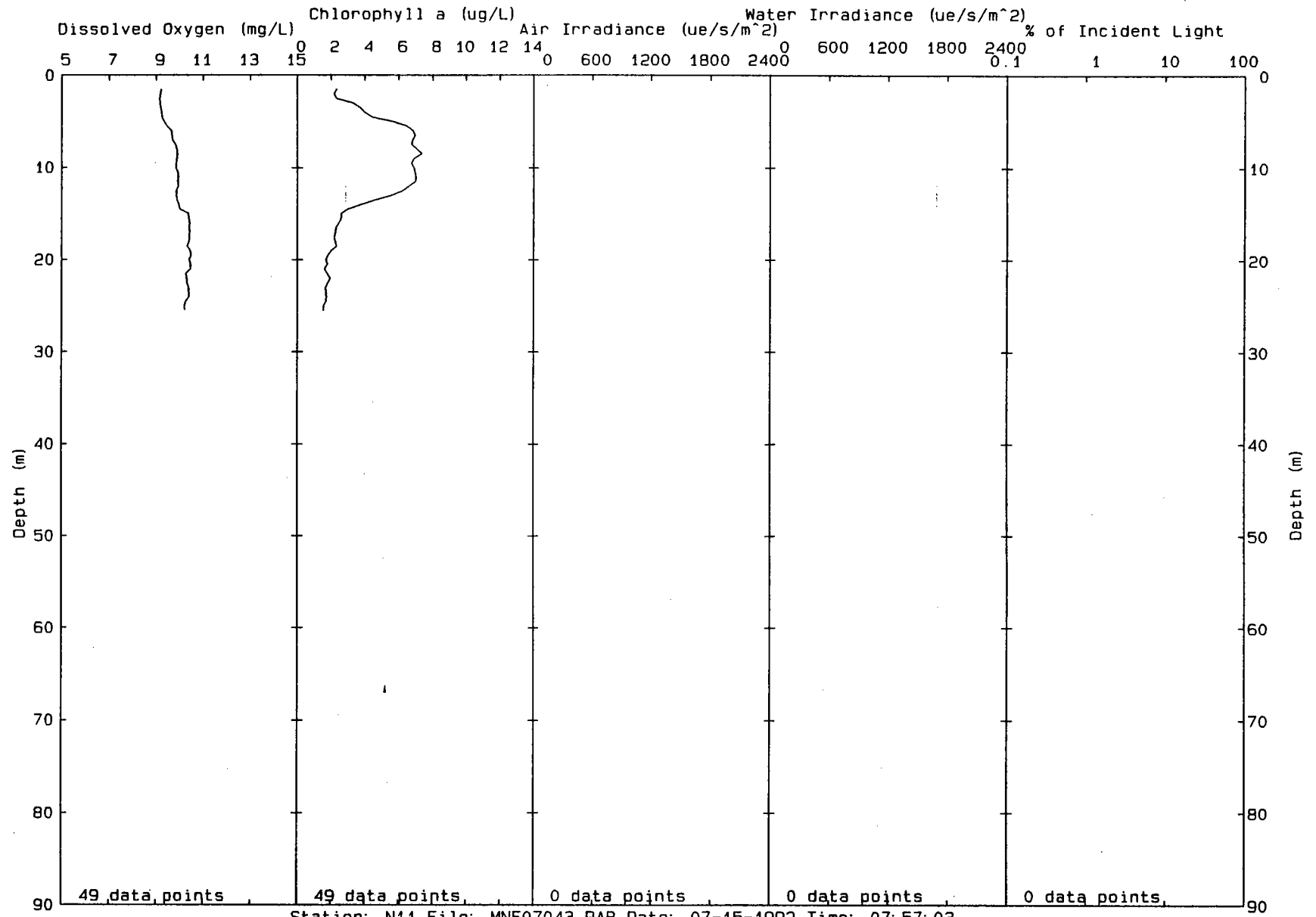
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00339



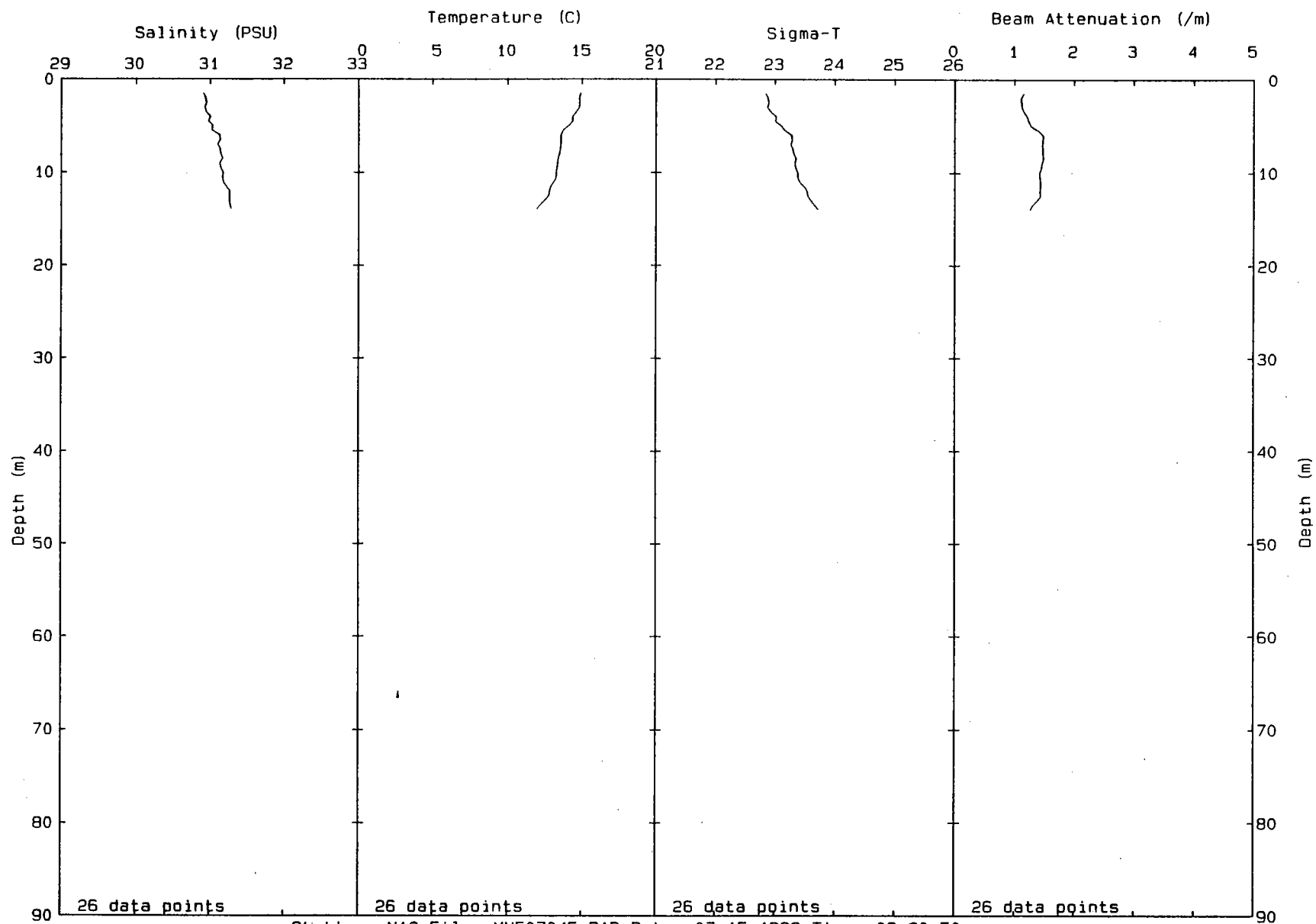
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00390

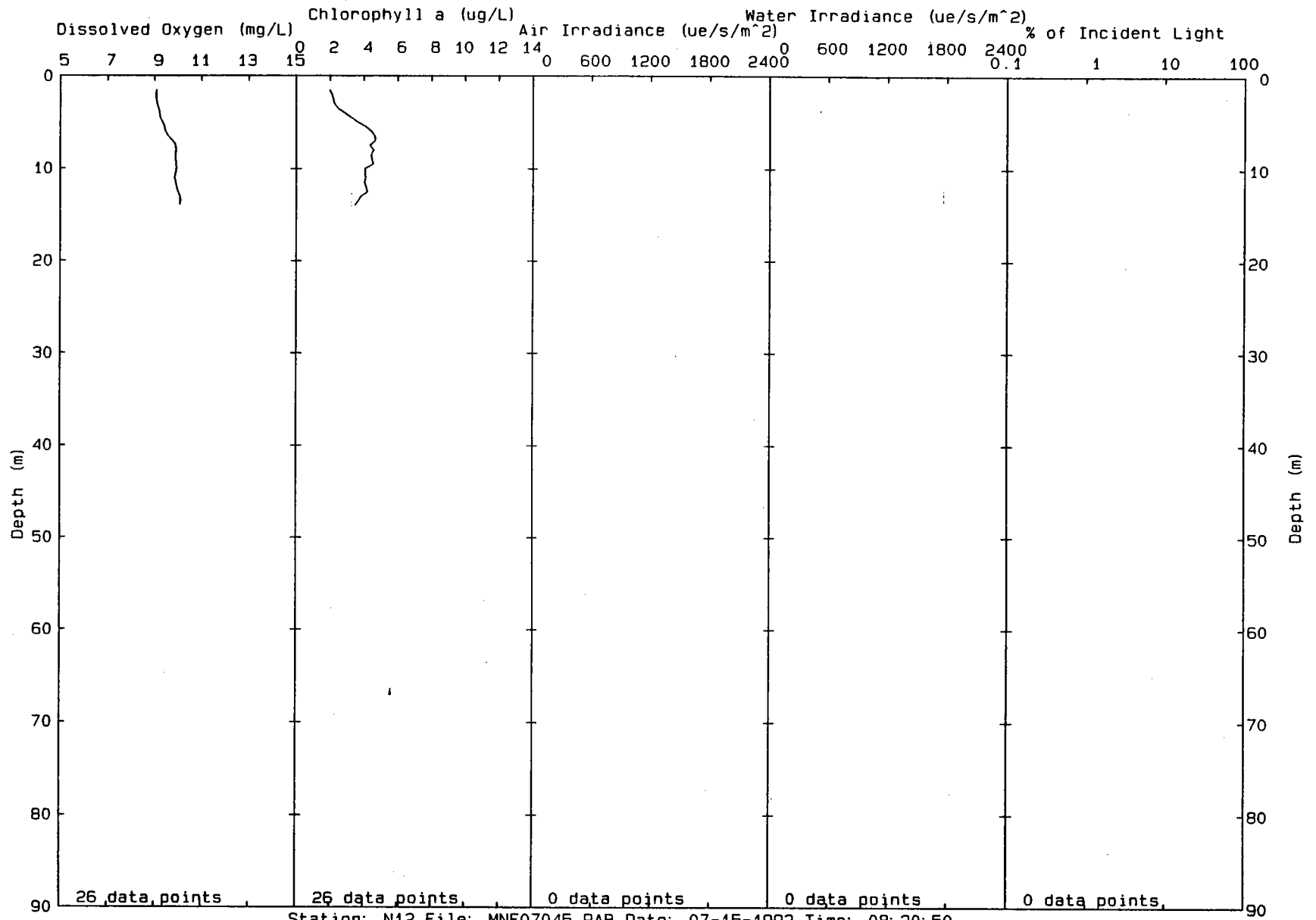


00391

00392



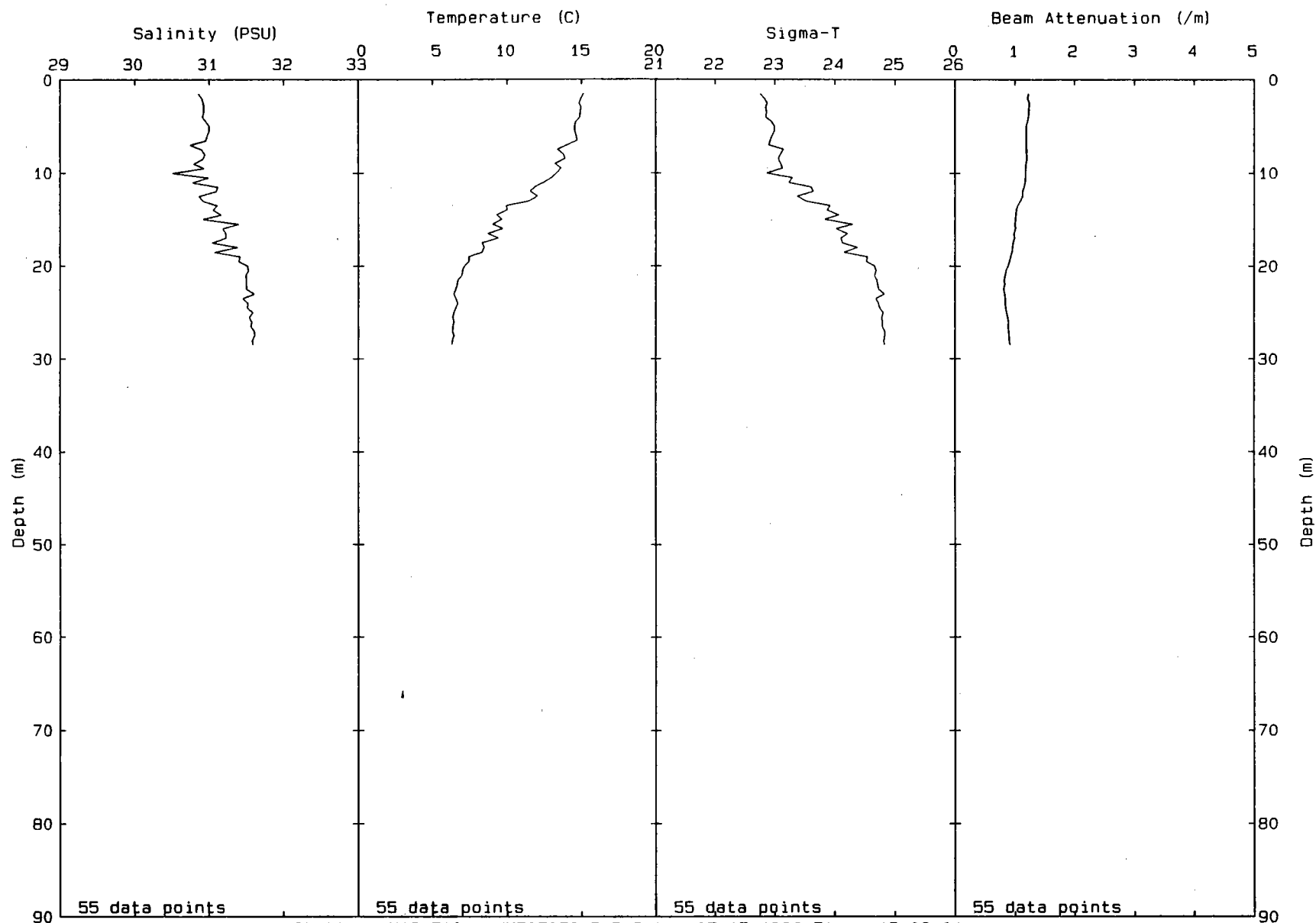
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Station: N12 File: MNF07045.PAB Date: 07-15-1992 Time: 08:20:50

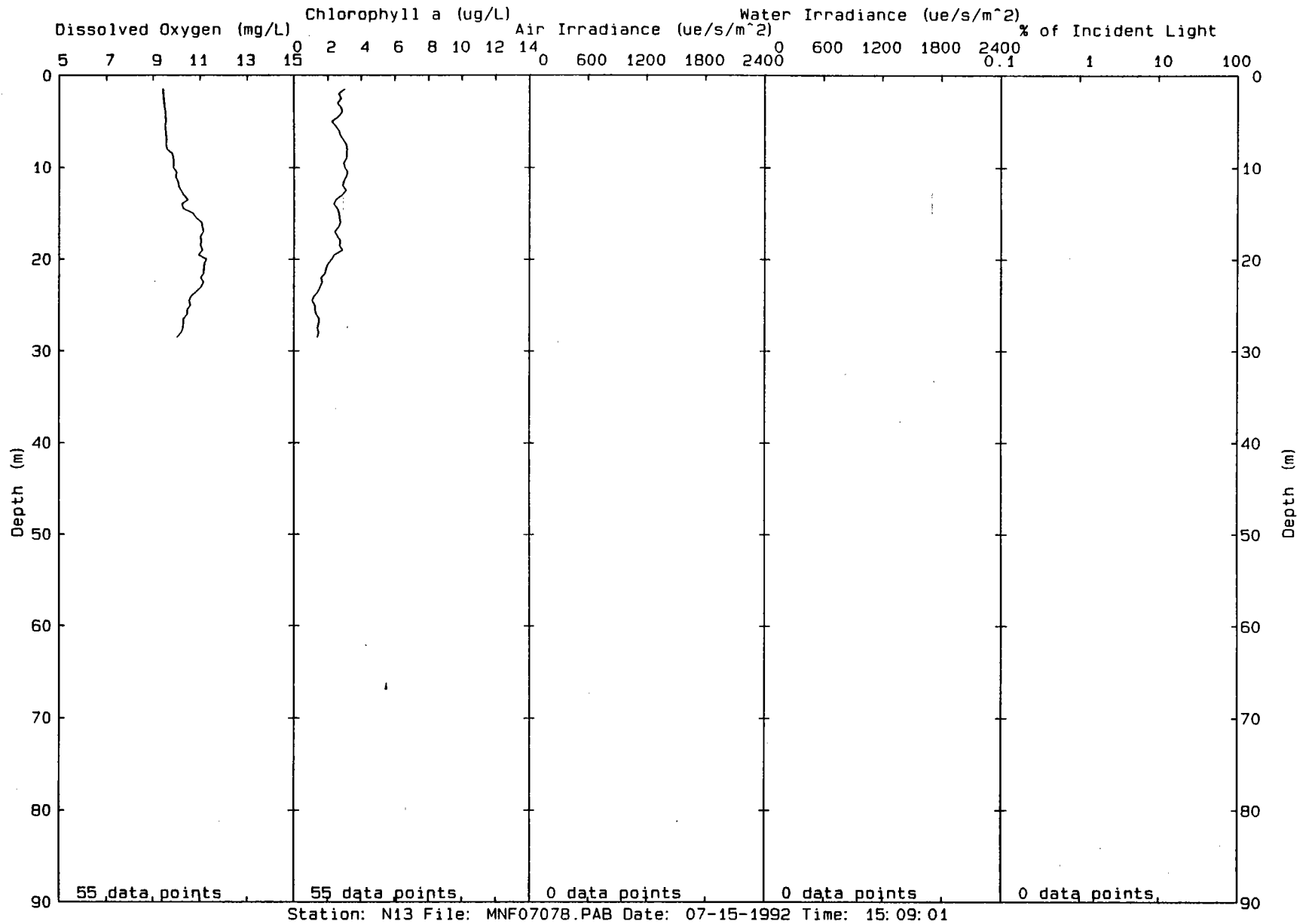
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00394

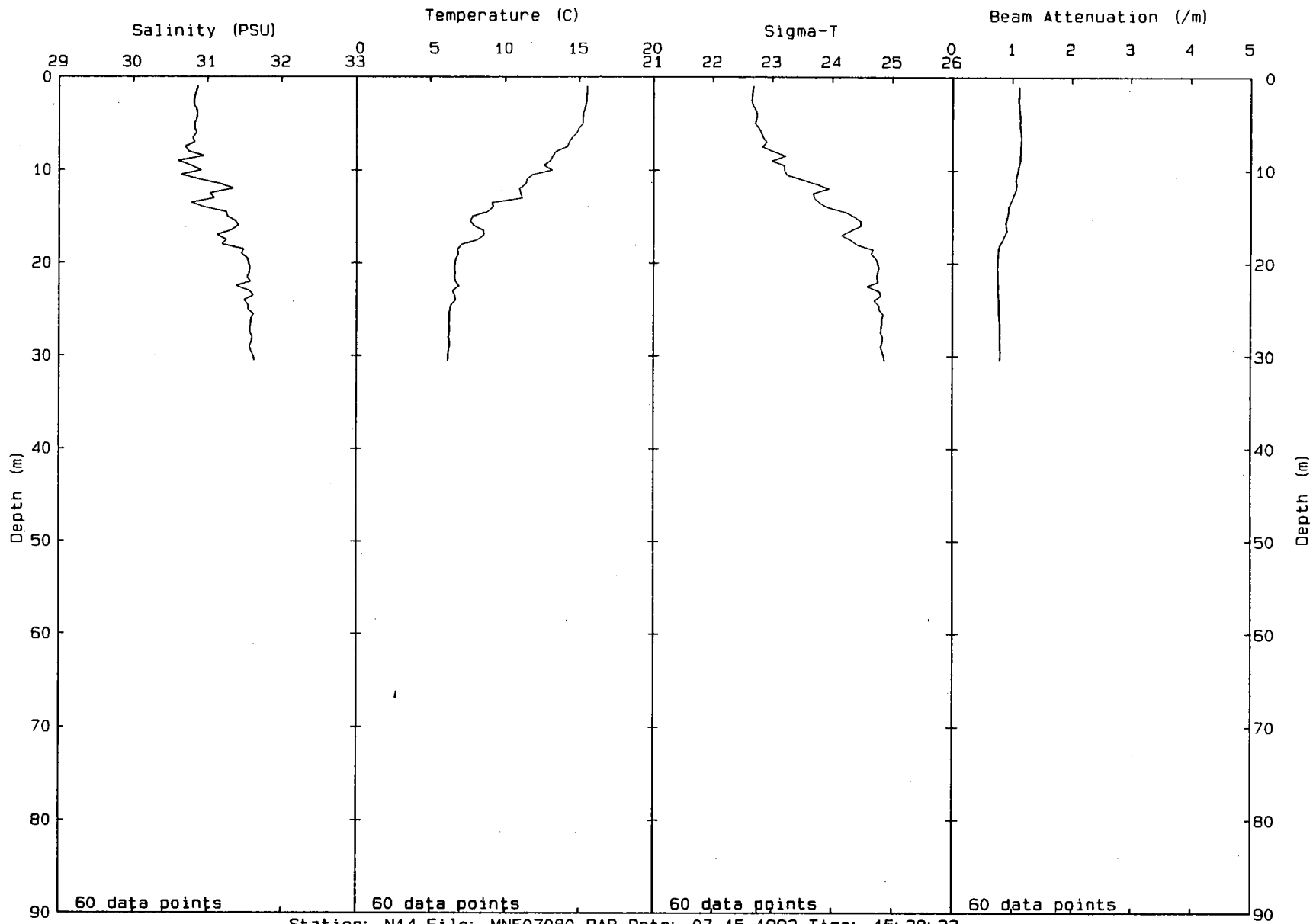


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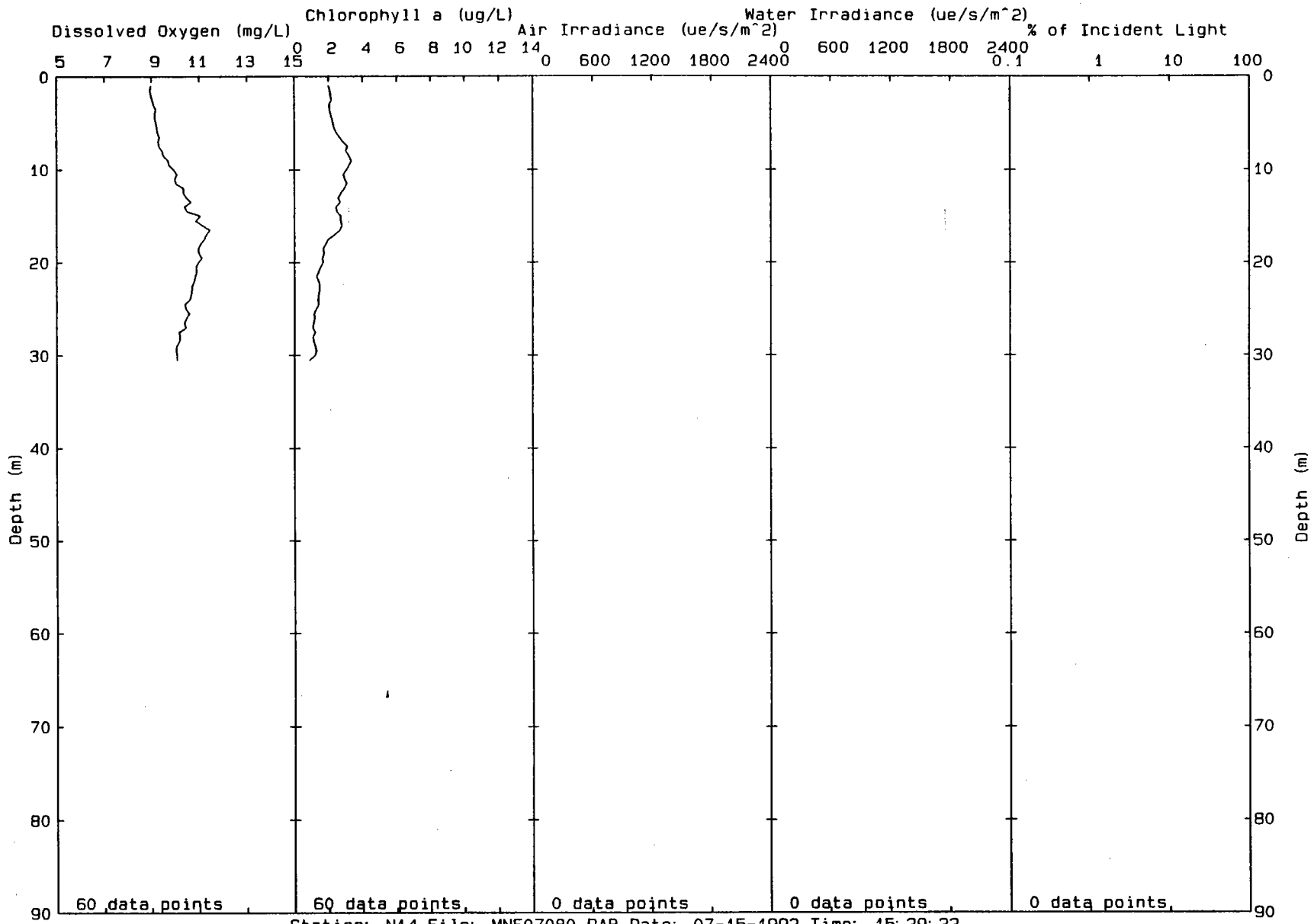
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00306

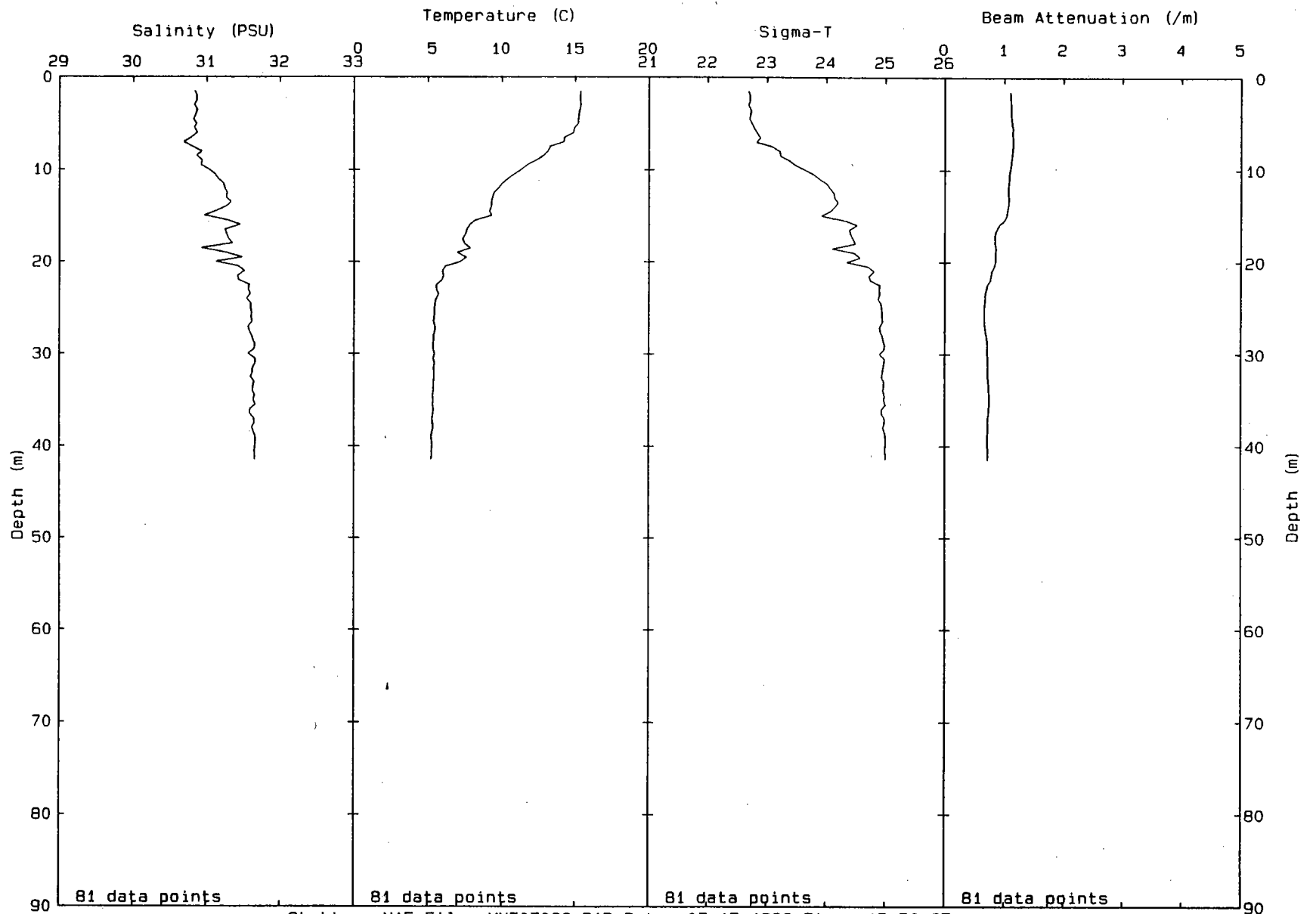


Station: N14 File: MNF07080.PAB Date: 07-15-1992 Time: 15:29:22



Station: N14 File: MNF07080.PAB Date: 07-15-1992 Time: 15:29:22

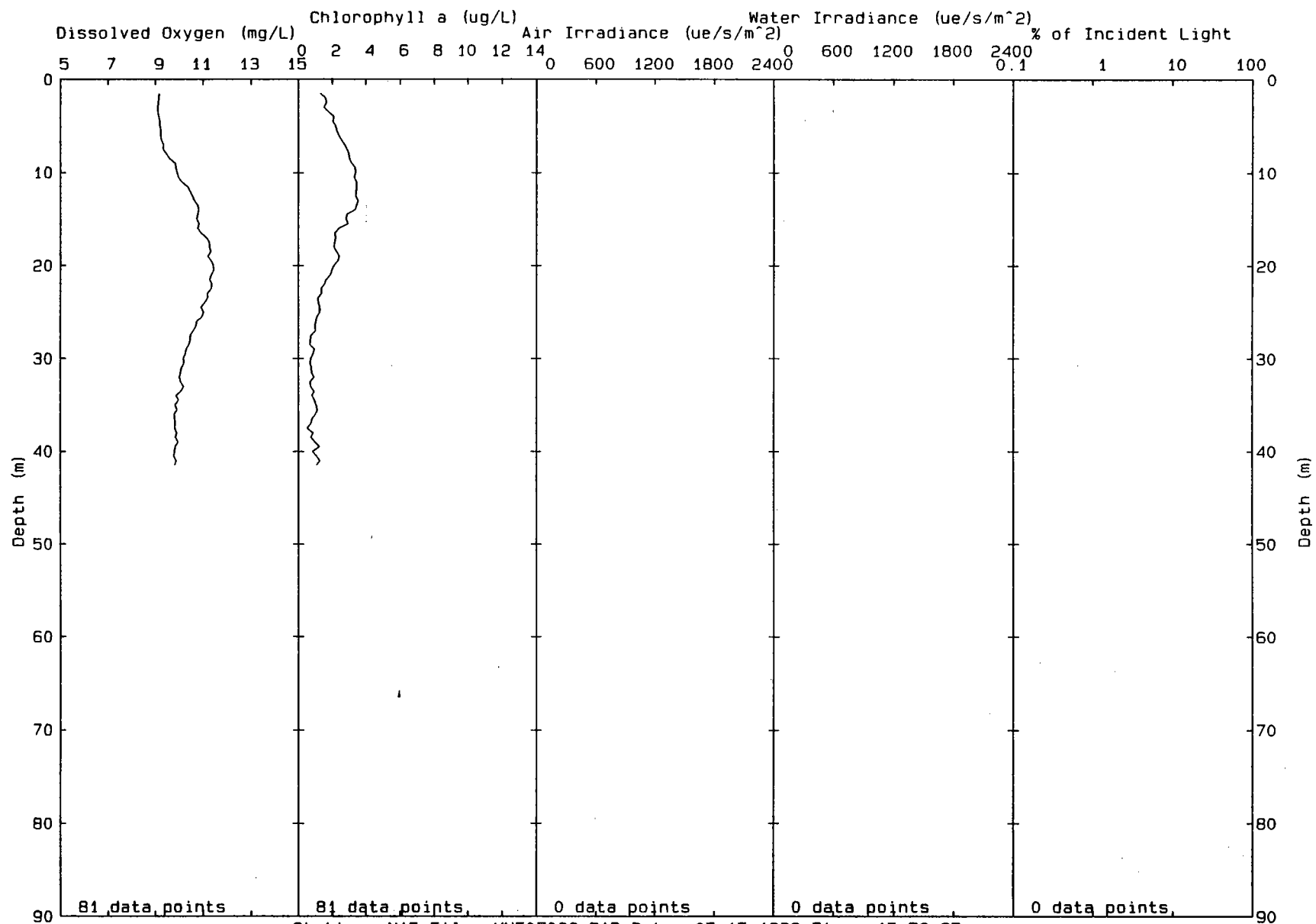
00307



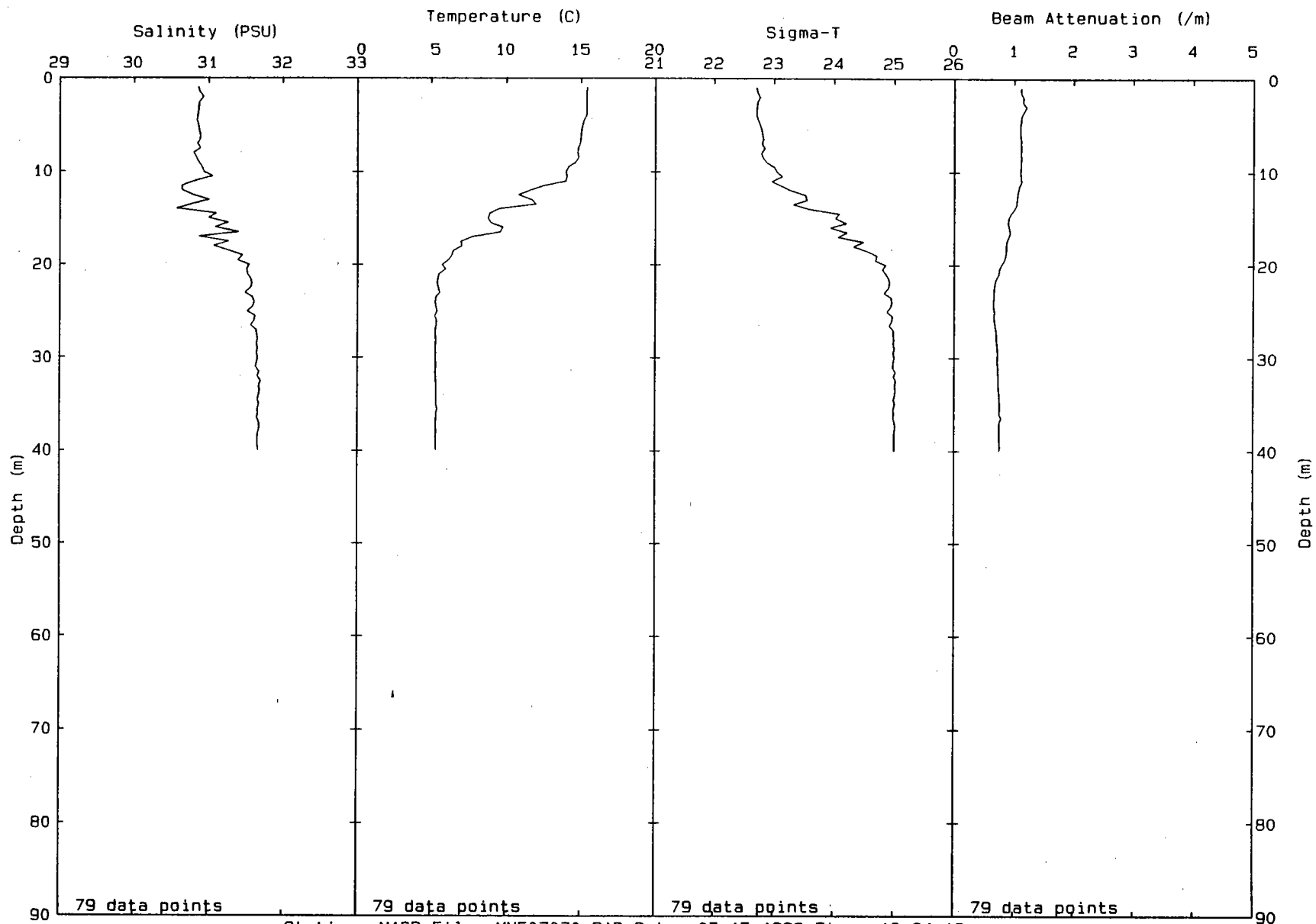
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80300

00309

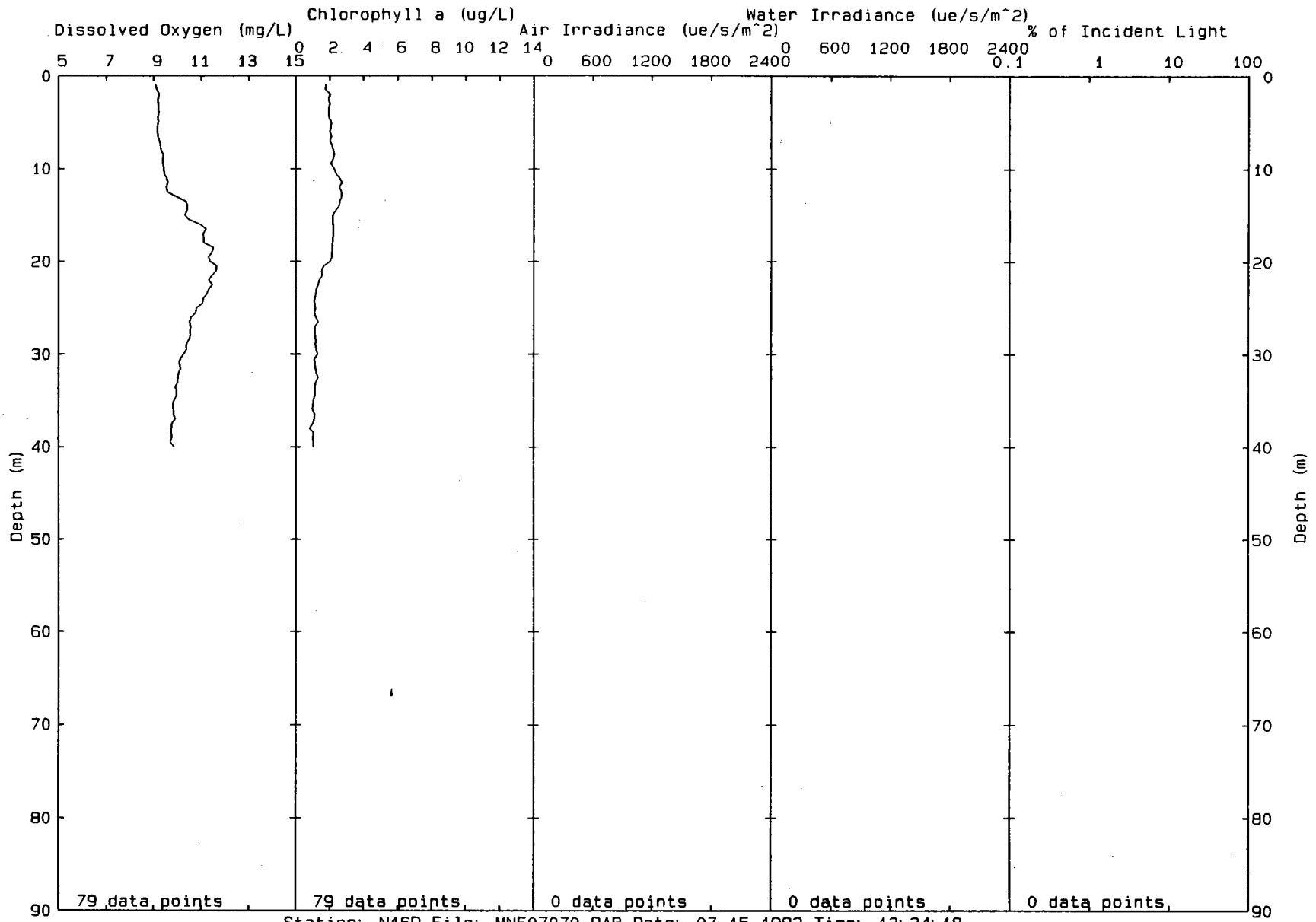


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Station: N16P File: MNF07070.PAB Date: 07-15-1992 Time: 13:34:18

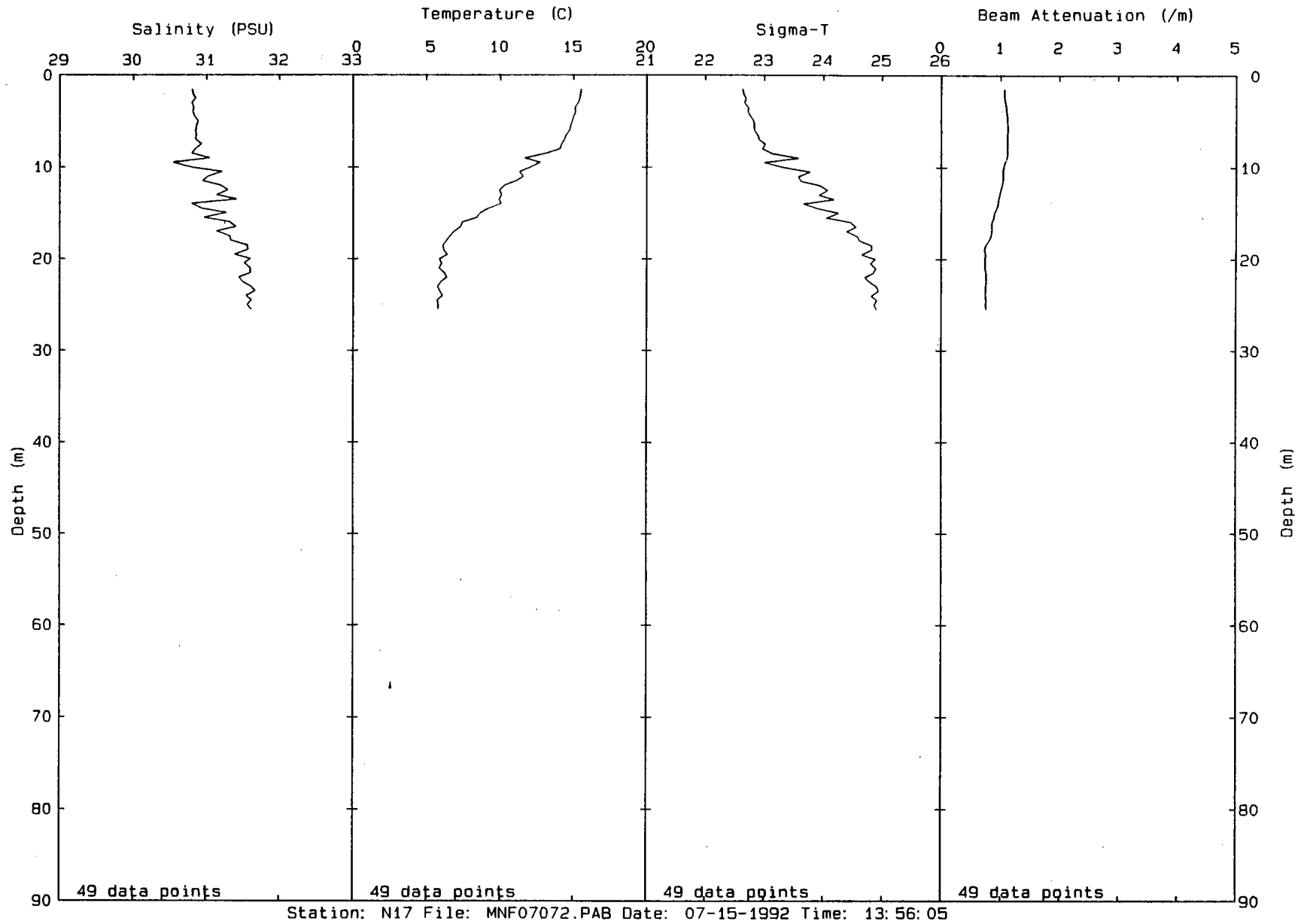
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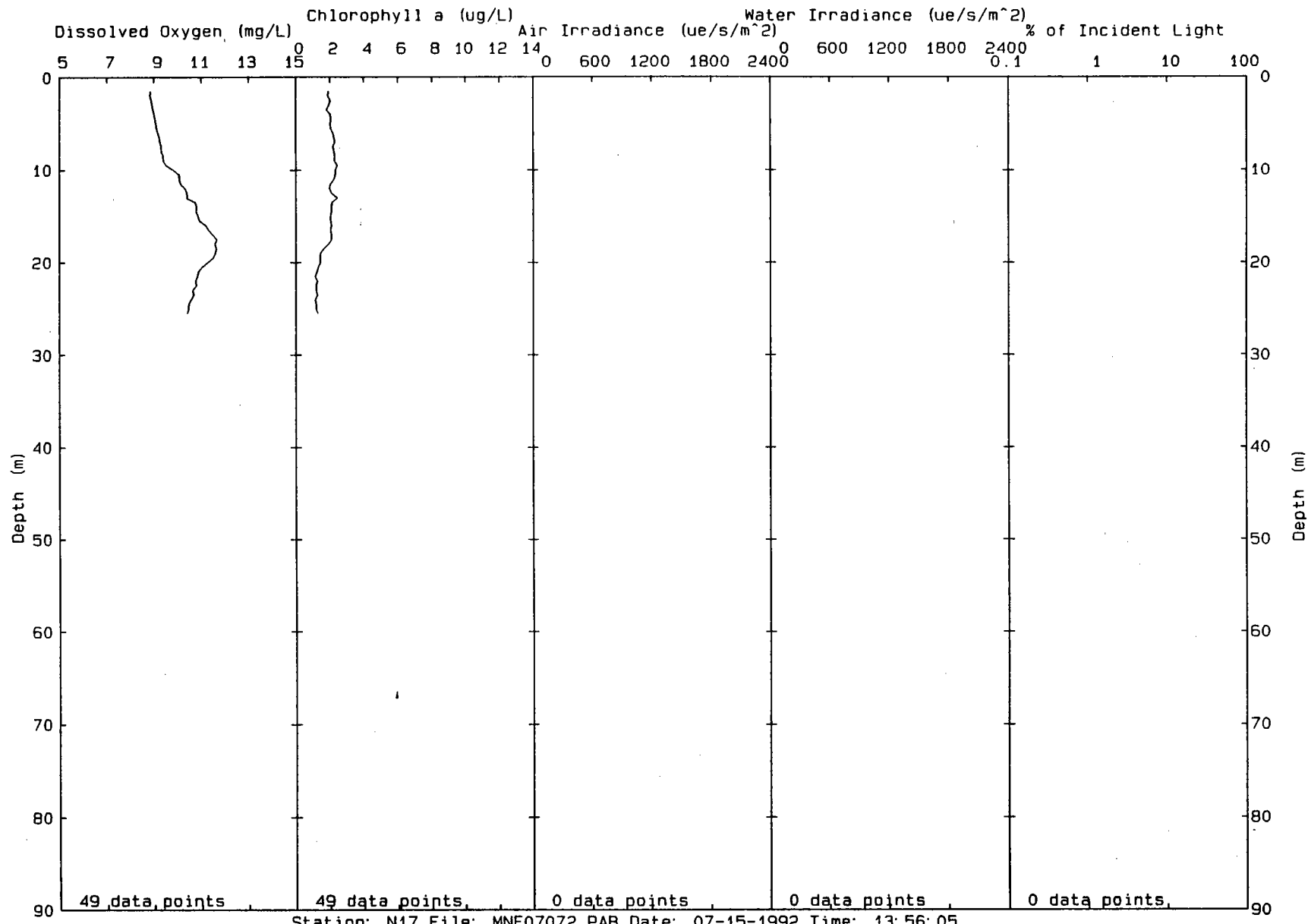


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00401

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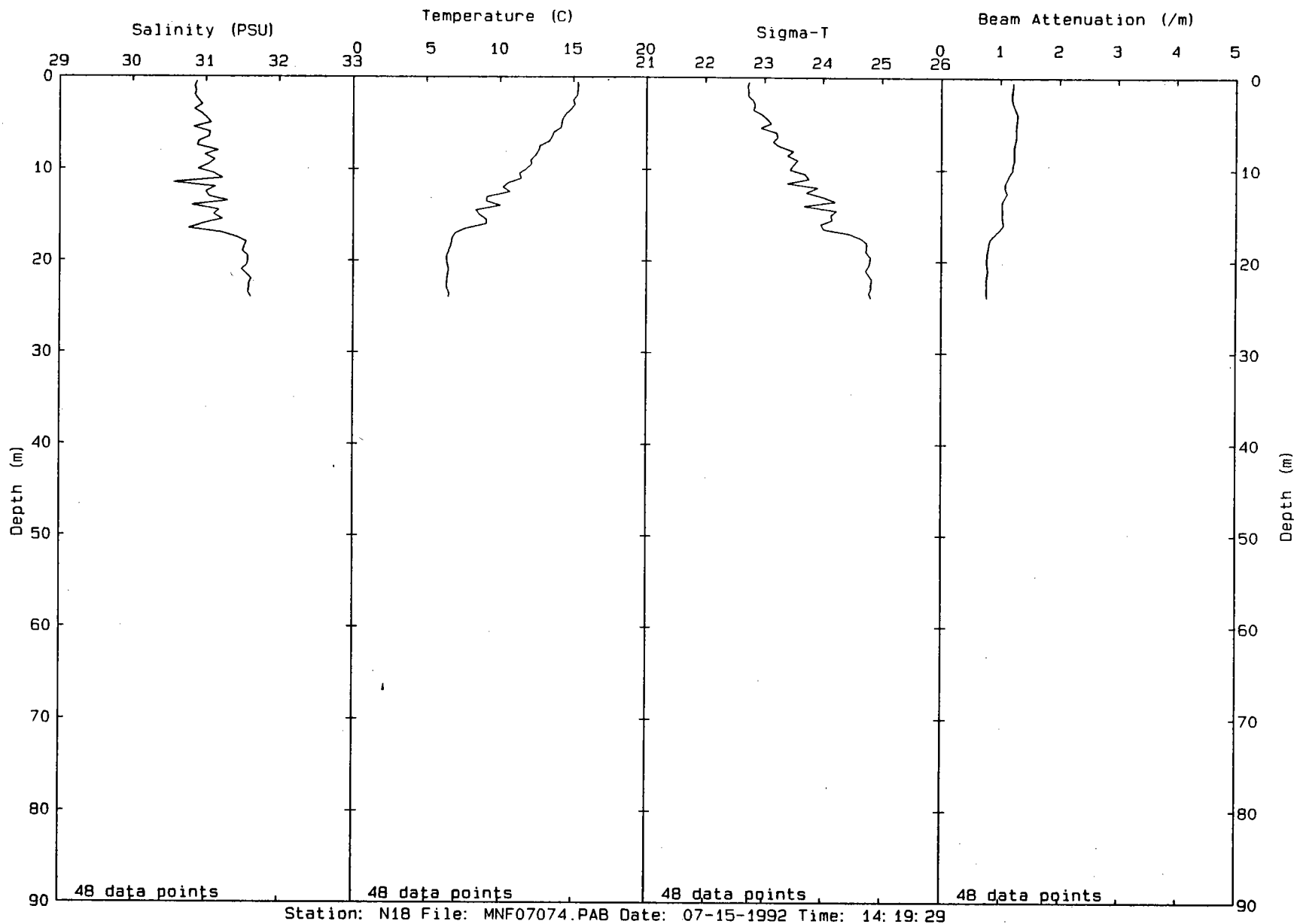




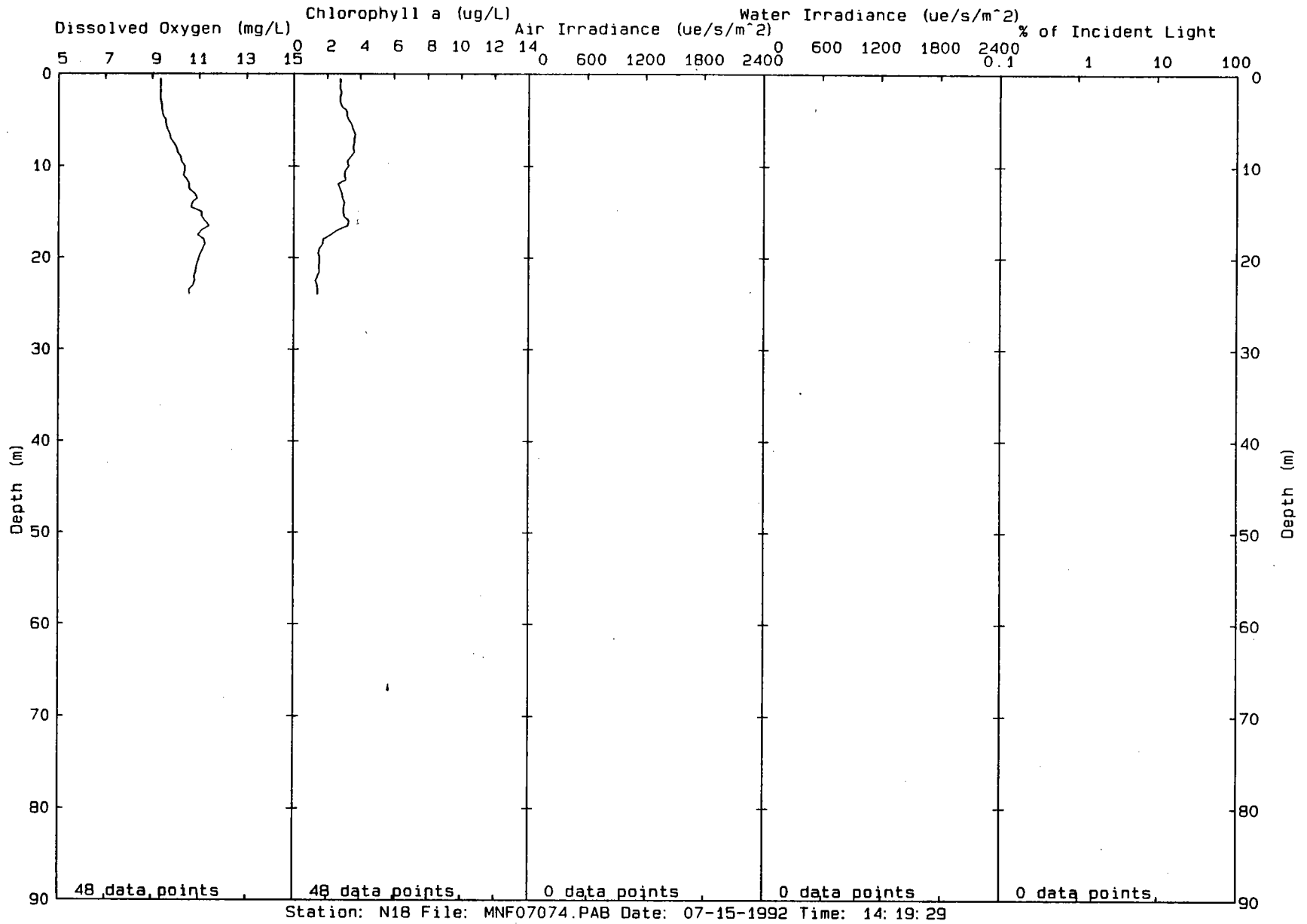
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00403

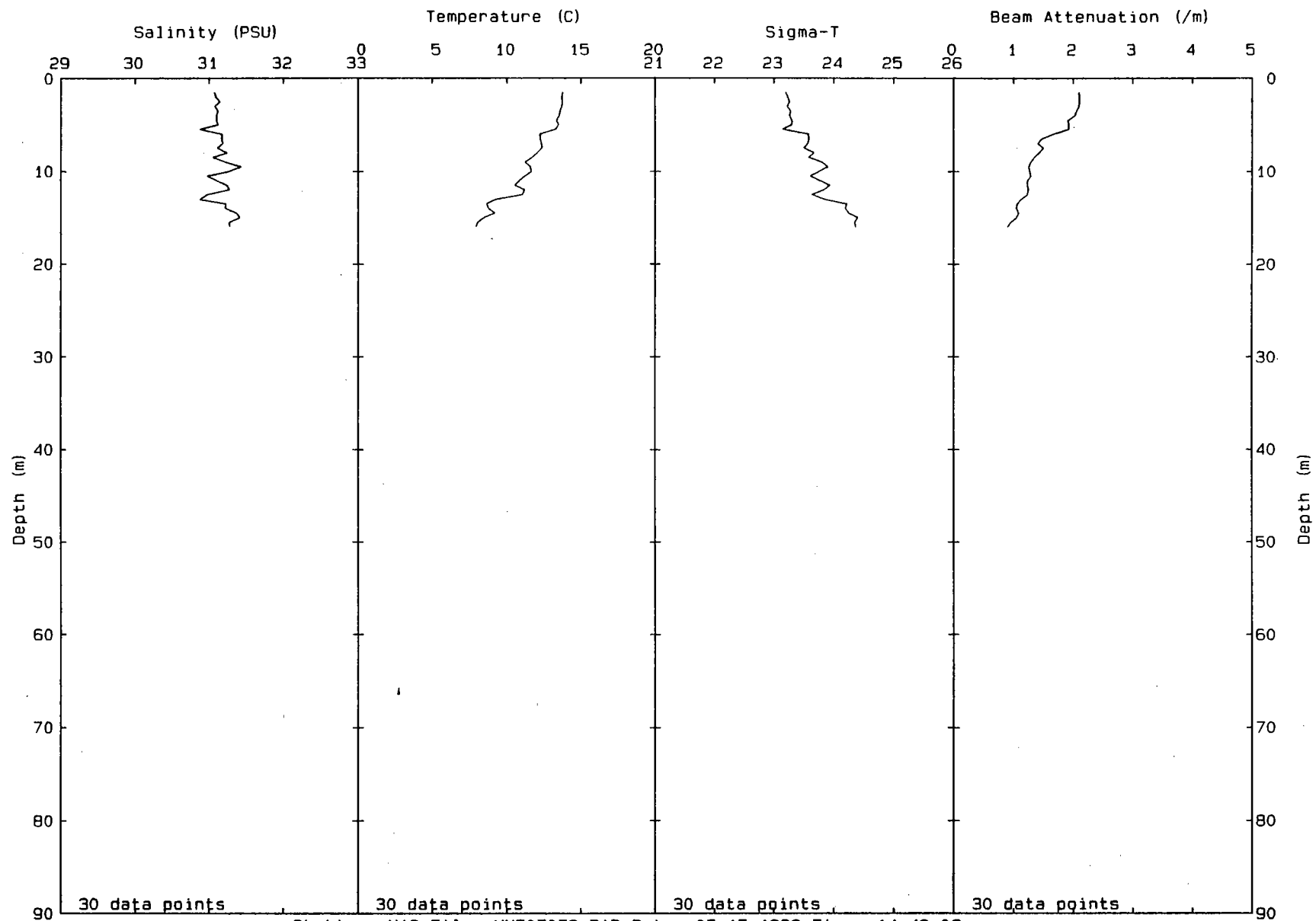
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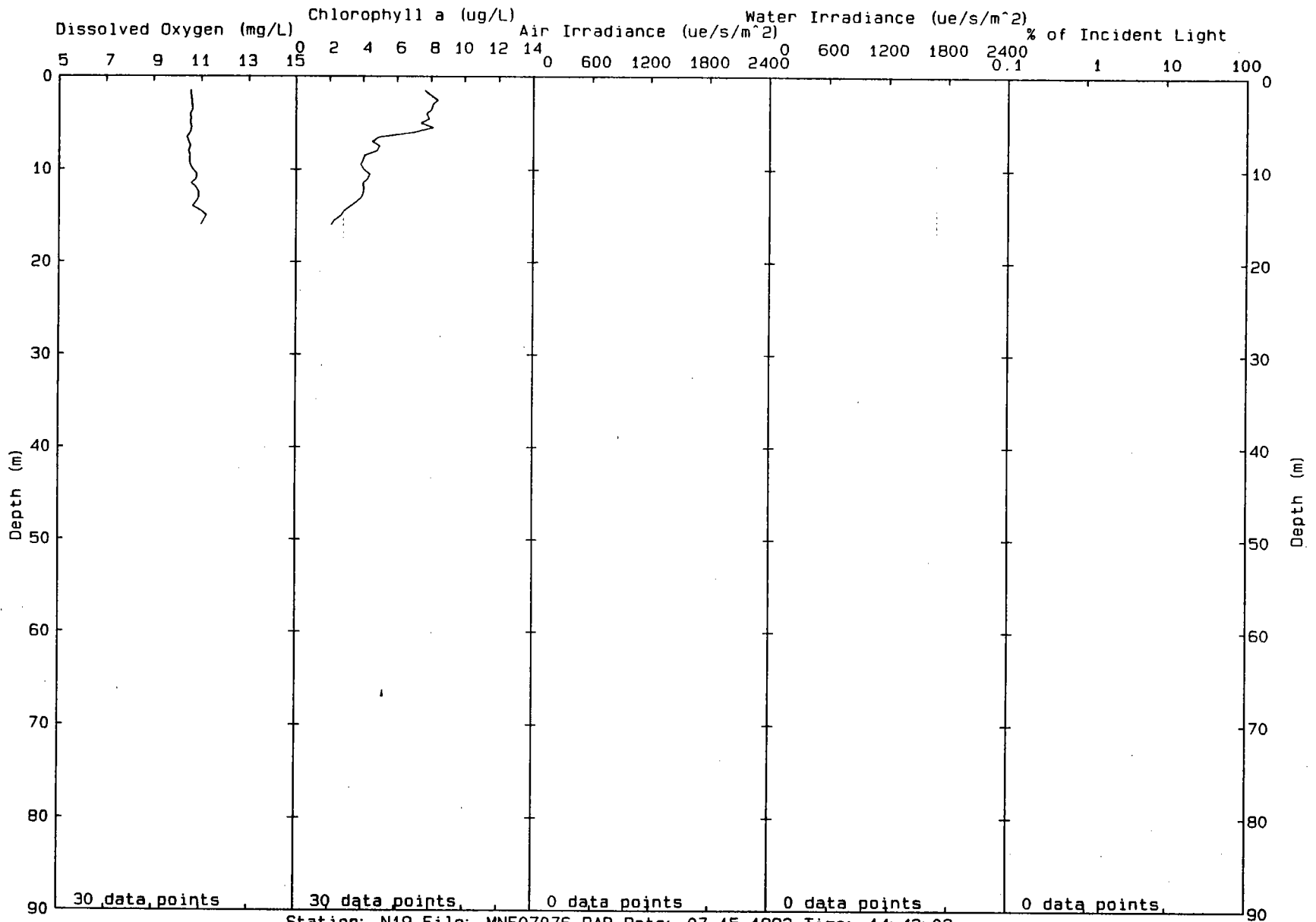
00405



00406

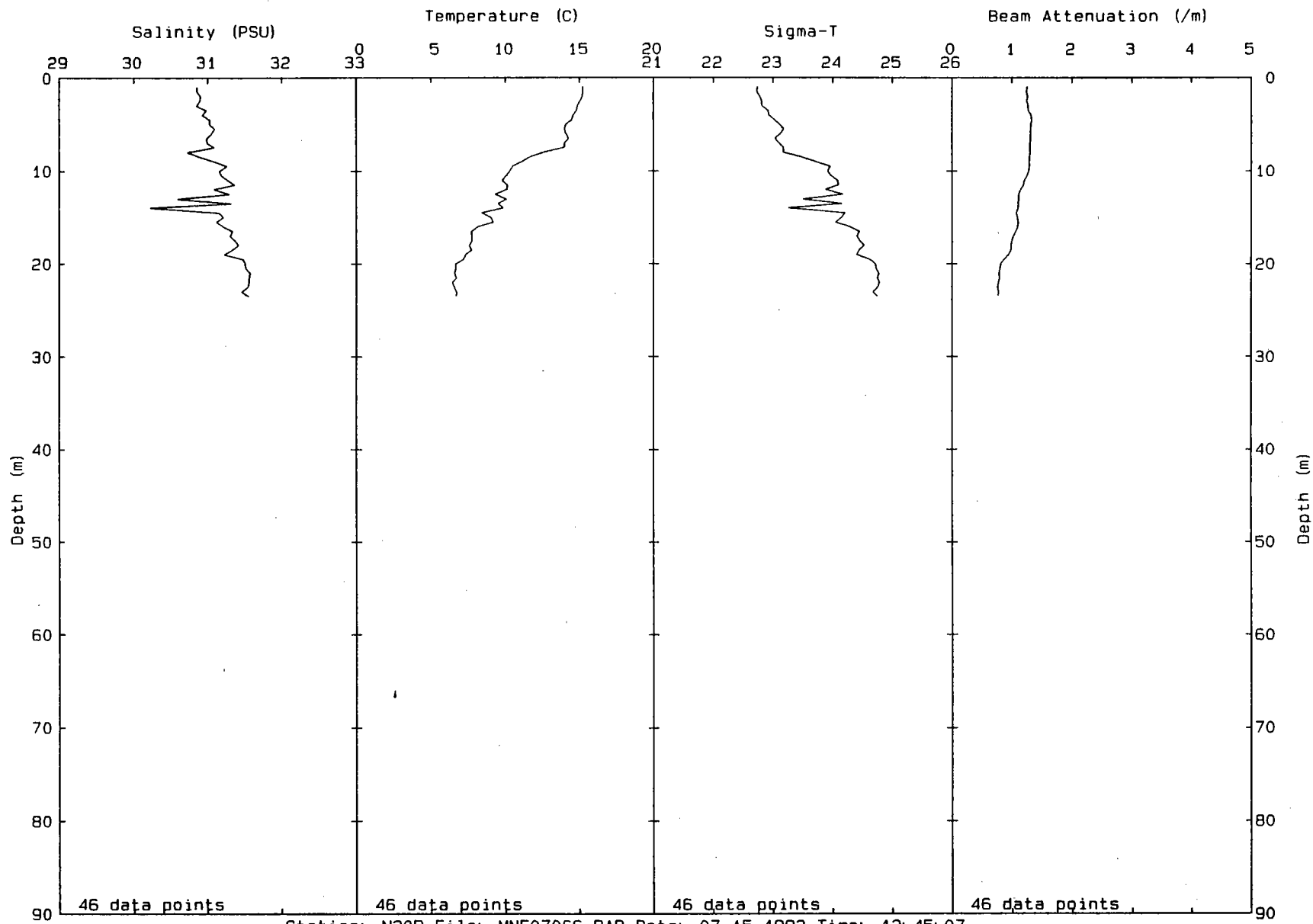


Station: N19 File: MNF07076.PAB Date: 07-15-1992 Time: 14:42:02

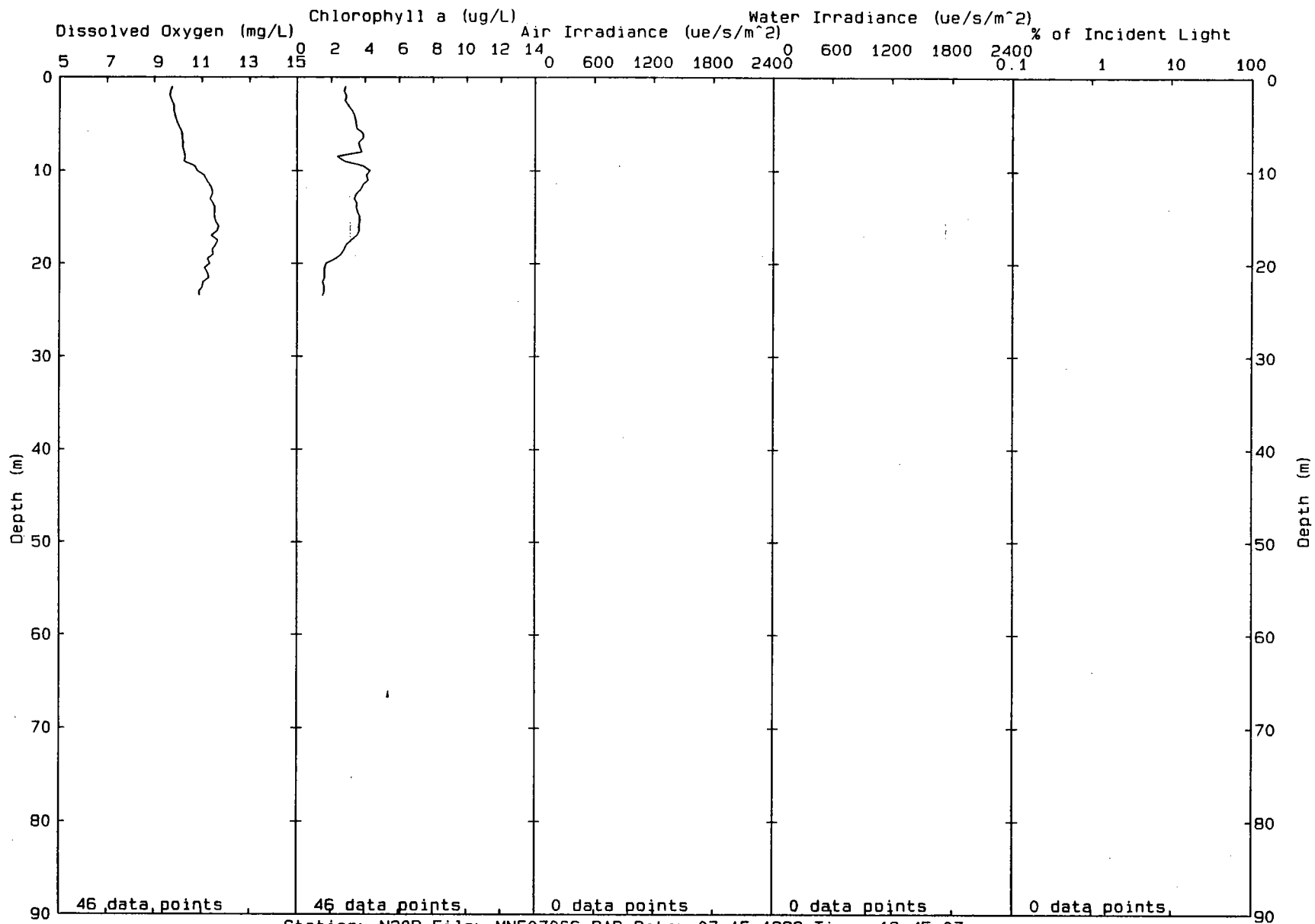


00467

80400

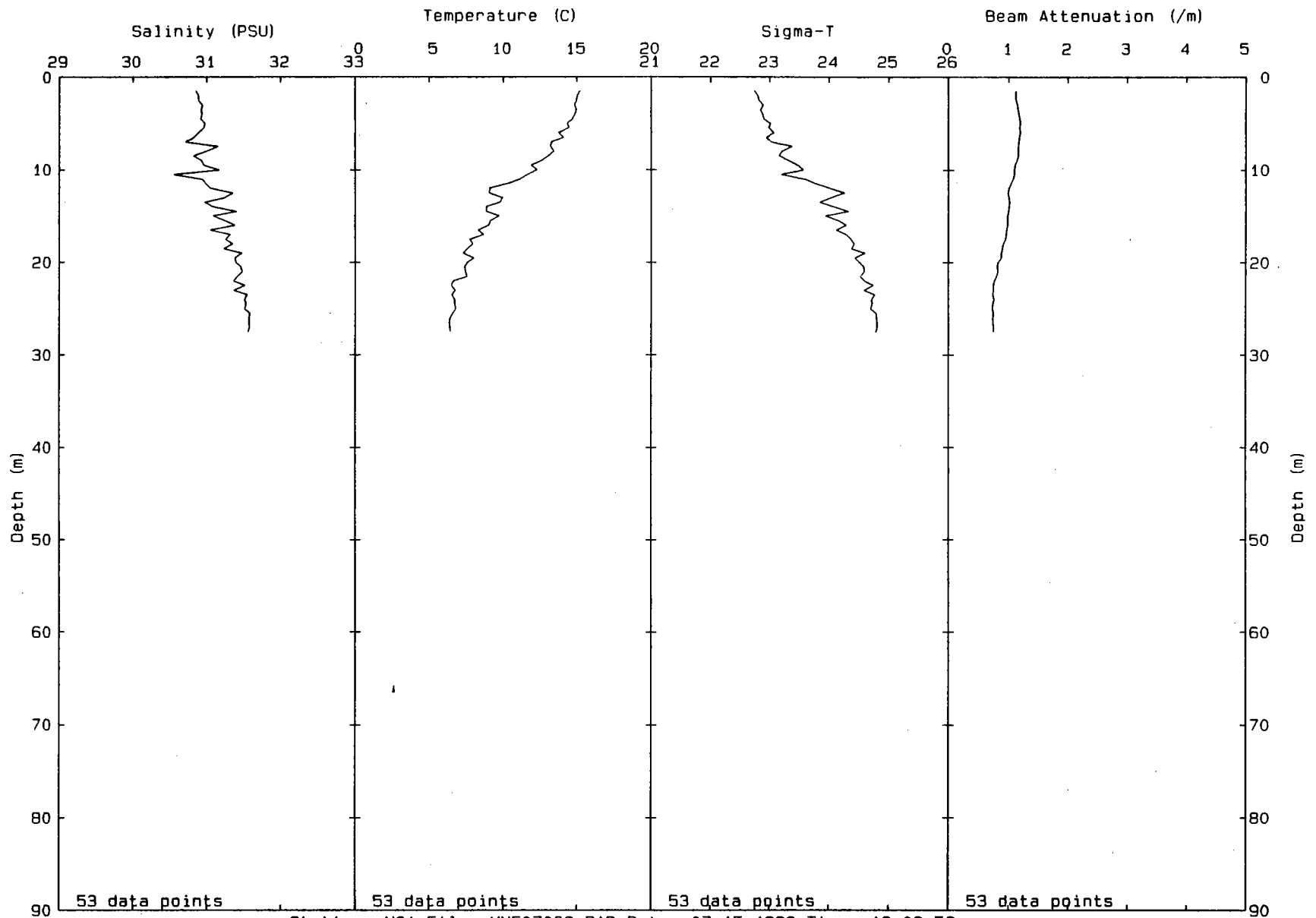


Station: N20P File: MNF07066.PAB Date: 07-15-1992 Time: 12:45:07



Station: N20P File: MNF07066.PAB Date: 07-15-1992 Time: 12:45:07

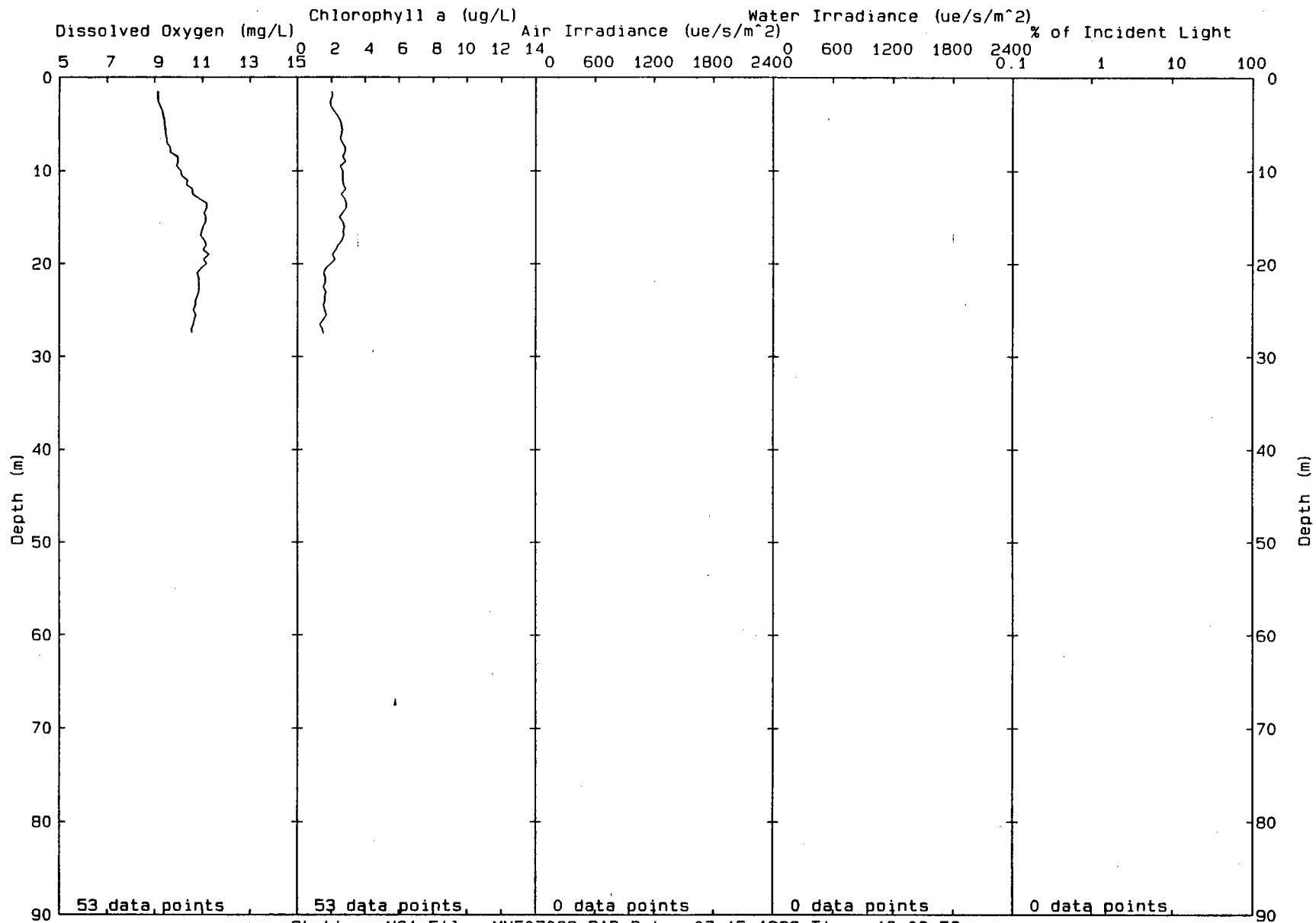
00409



Station: N21 File: MNF07068.PAB Date: 07-15-1992 Time: 13:08:56

00410

00411

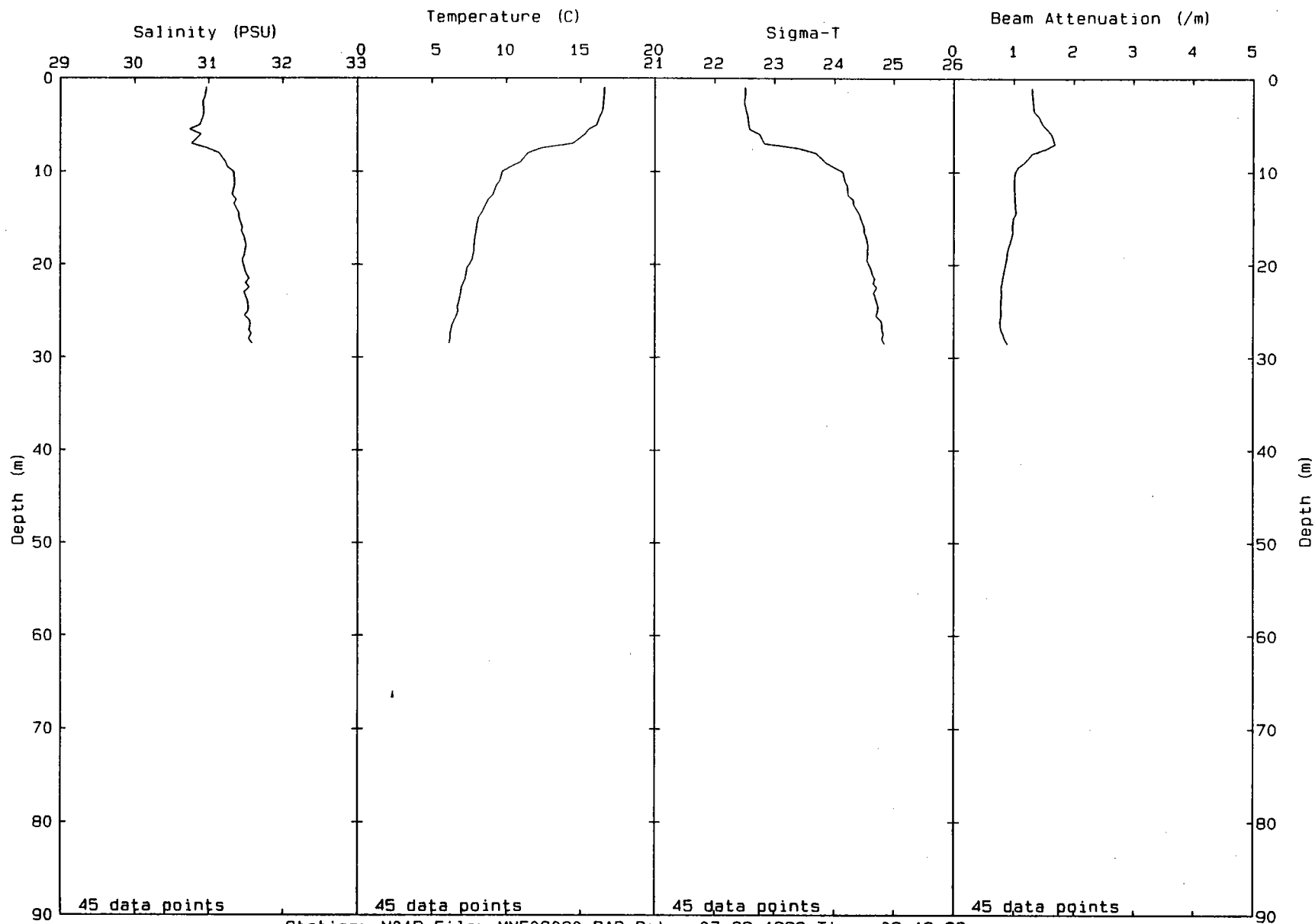


Station: N21 File: MNF07068.PAB Date: 07-15-1992 Time: 13:08:56

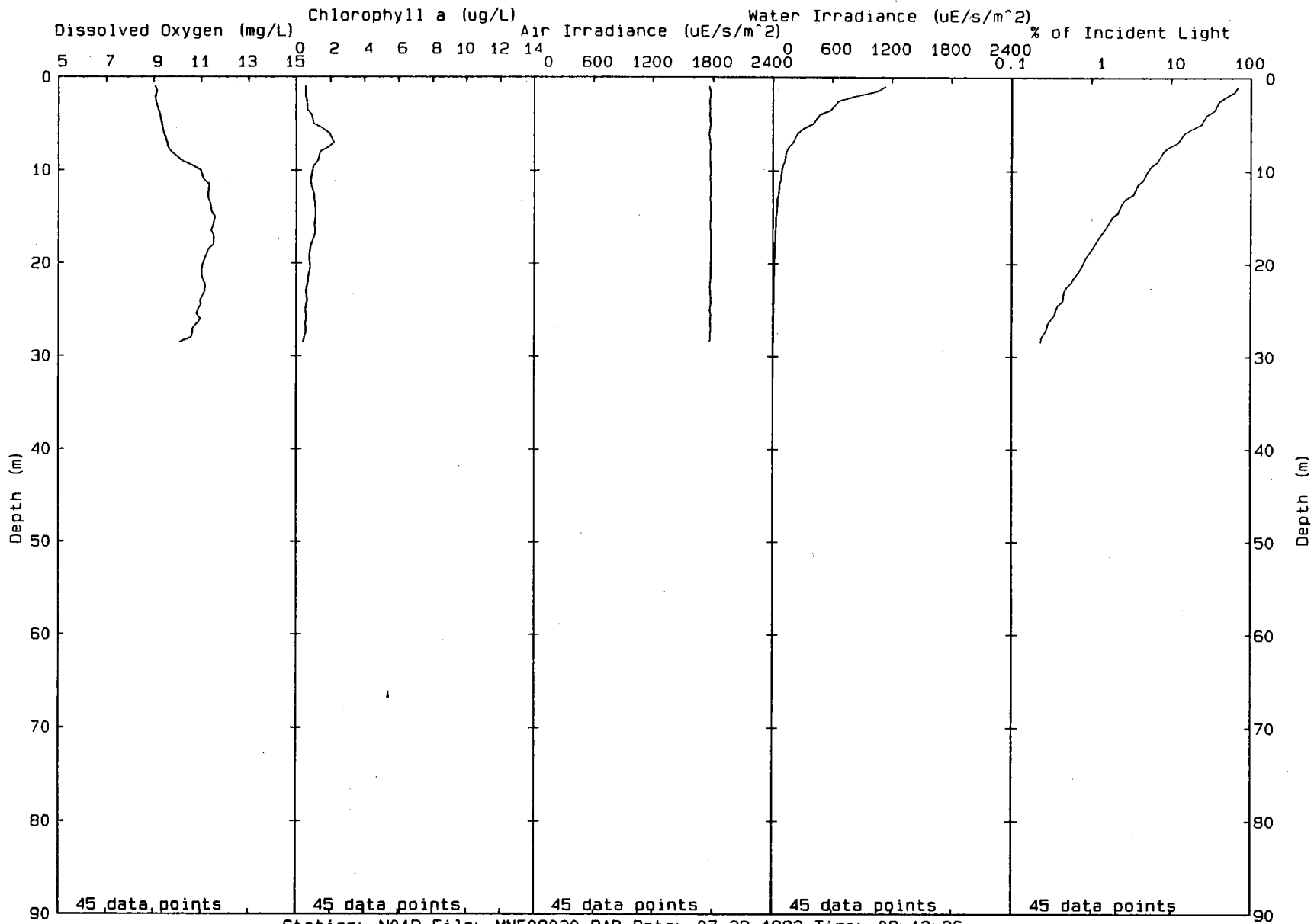
**Late July Profiles**

00412

00413



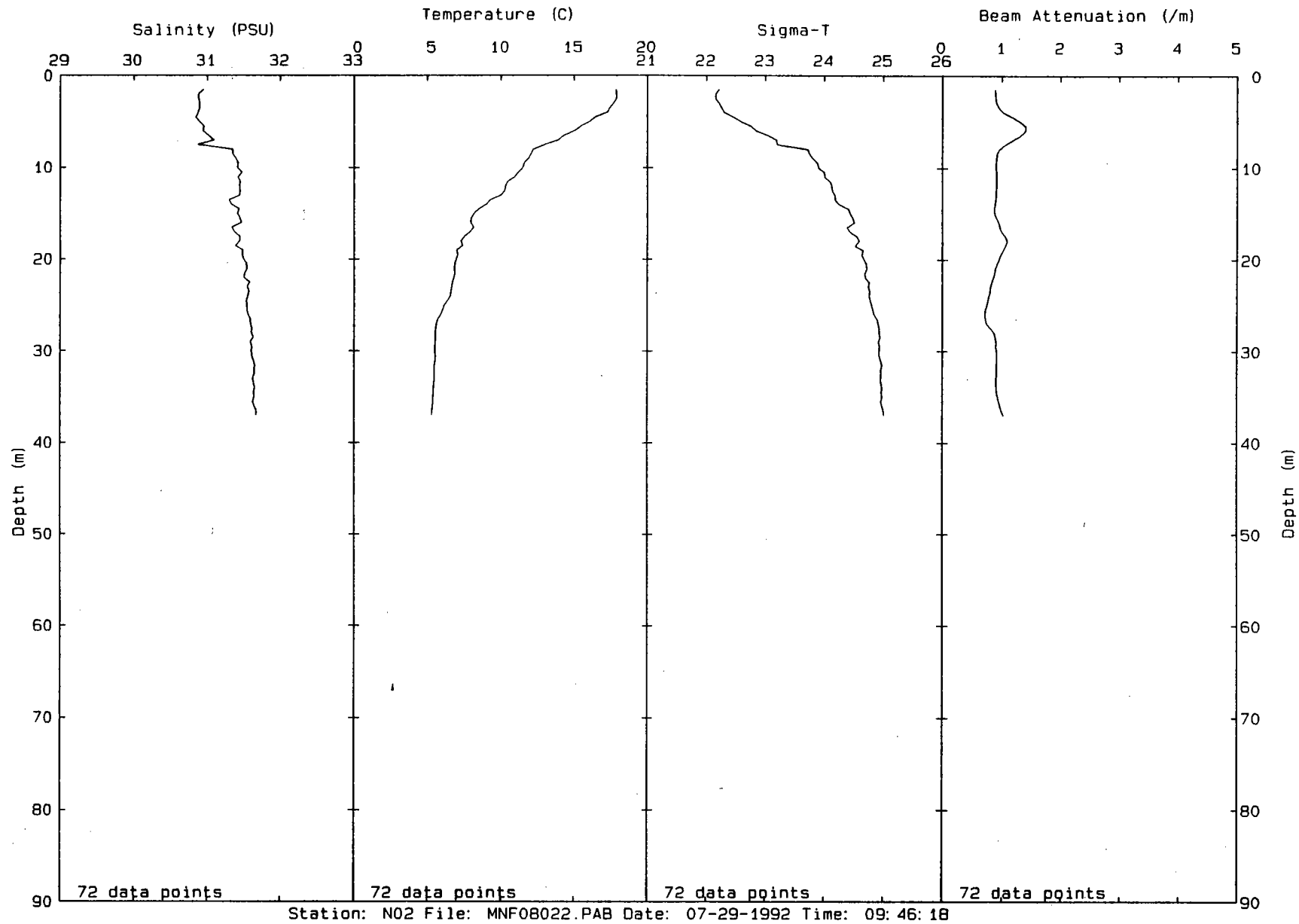
Station: N01P File: MNF08020.PAB Date: 07-29-1992 Time: 09:12:26

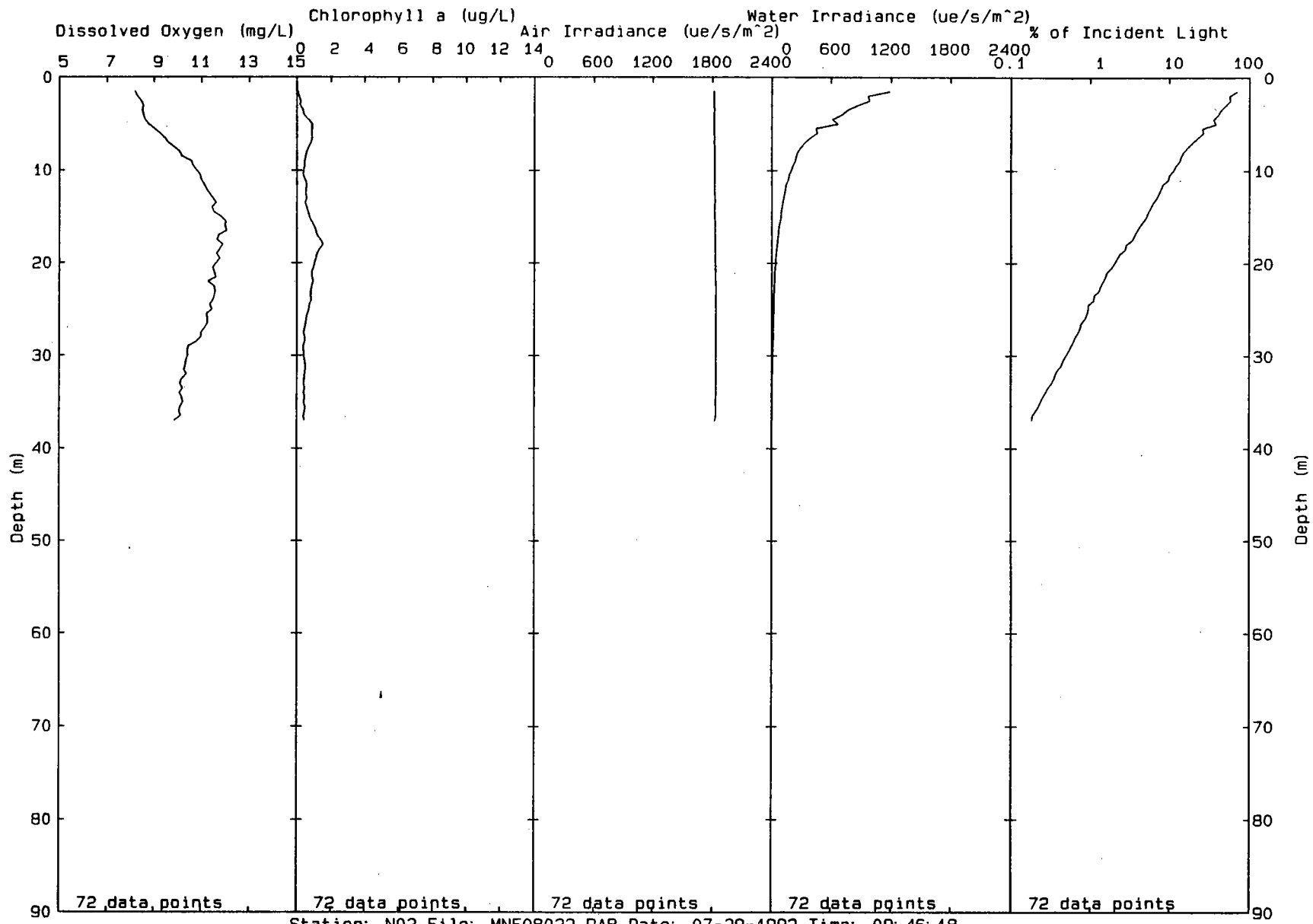


Station: N01P File: MNF08020.PAB Date: 07-29-1992 Time: 09:12:26

00414

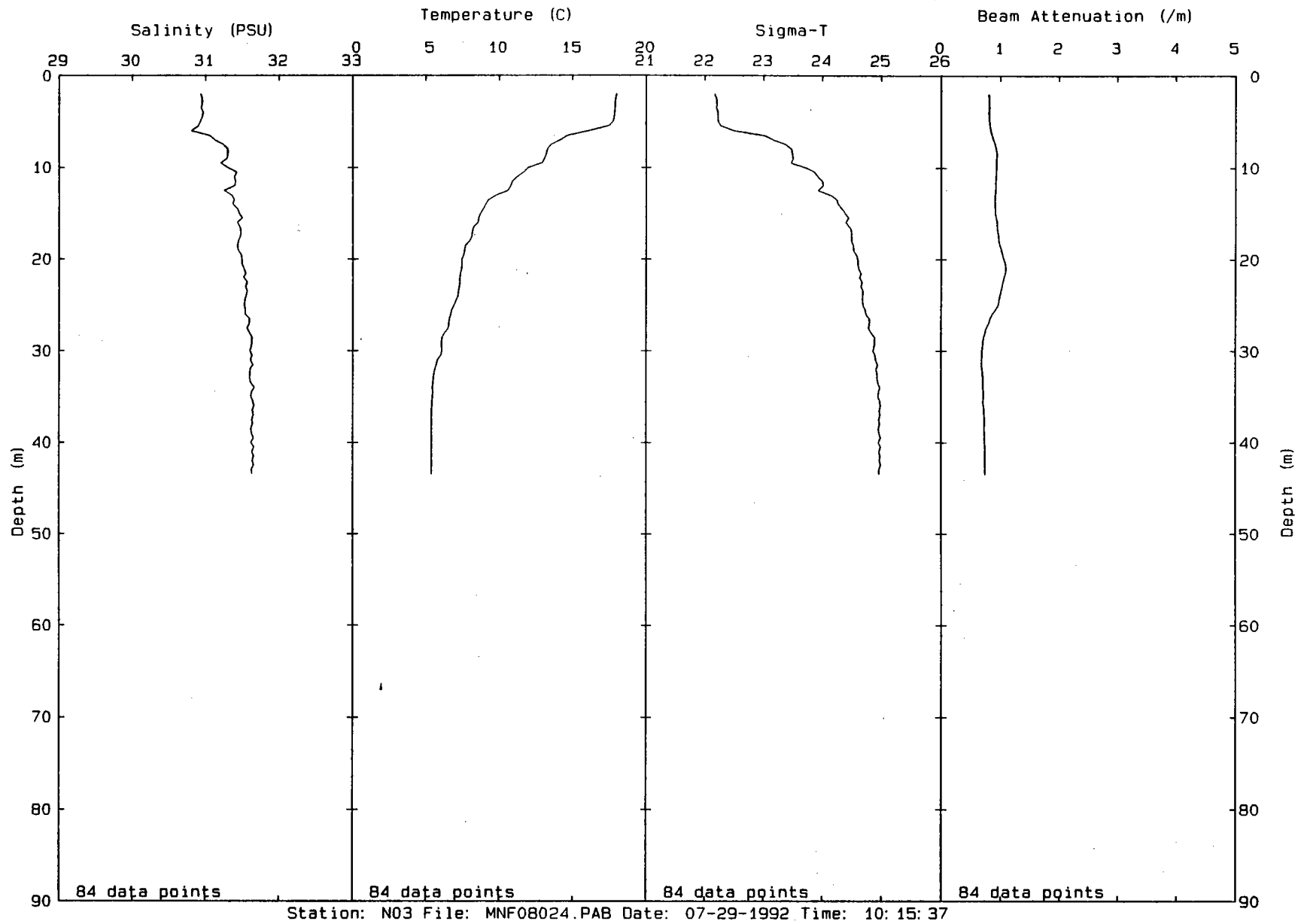
00415





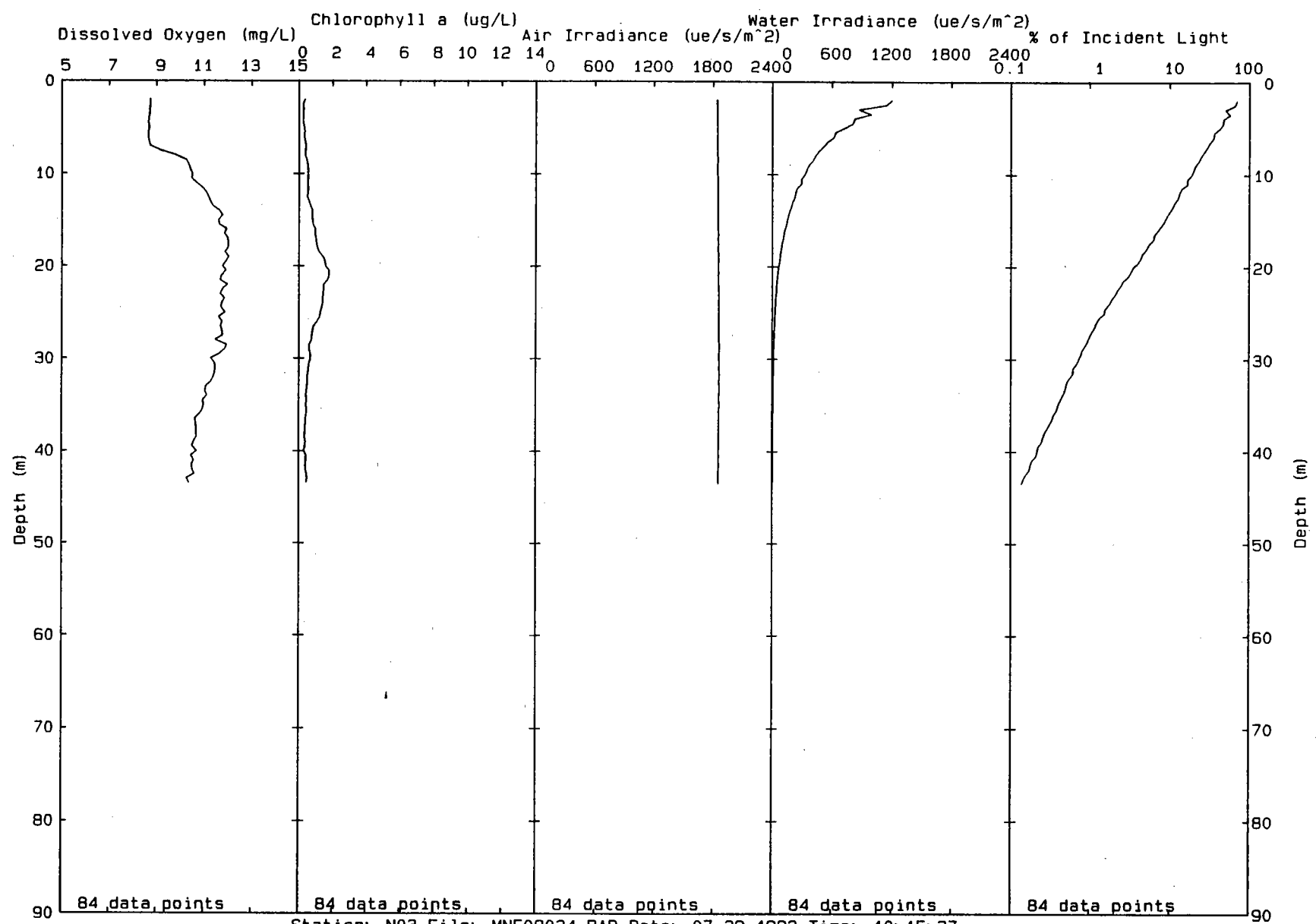
Station: N02 File: MNF08022.PAB Date: 07-29-1992 Time: 09:46:18

00416



Station: N03 File: MNF08024.PAB Date: 07-29-1992 Time: 10:15:37

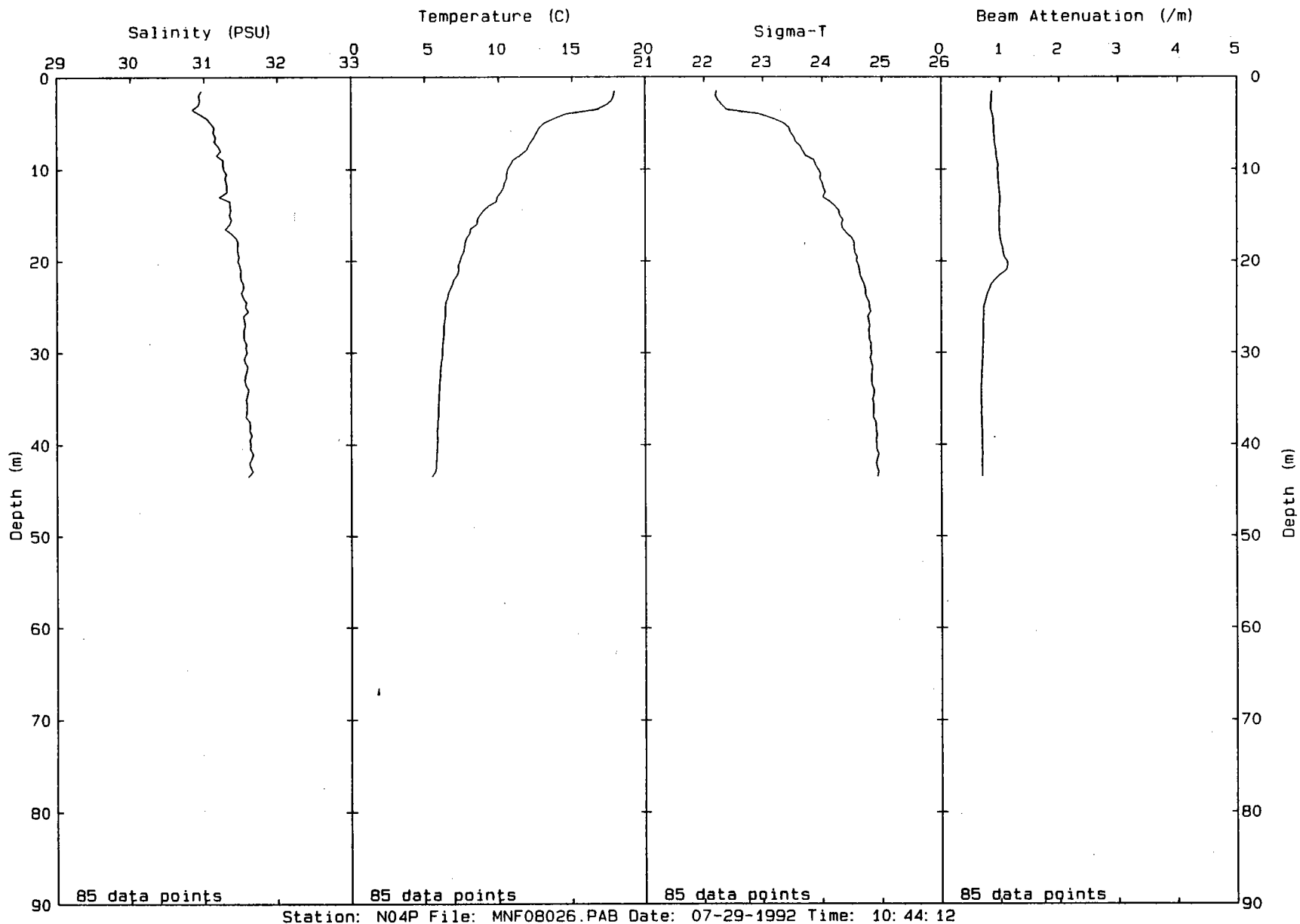
00417

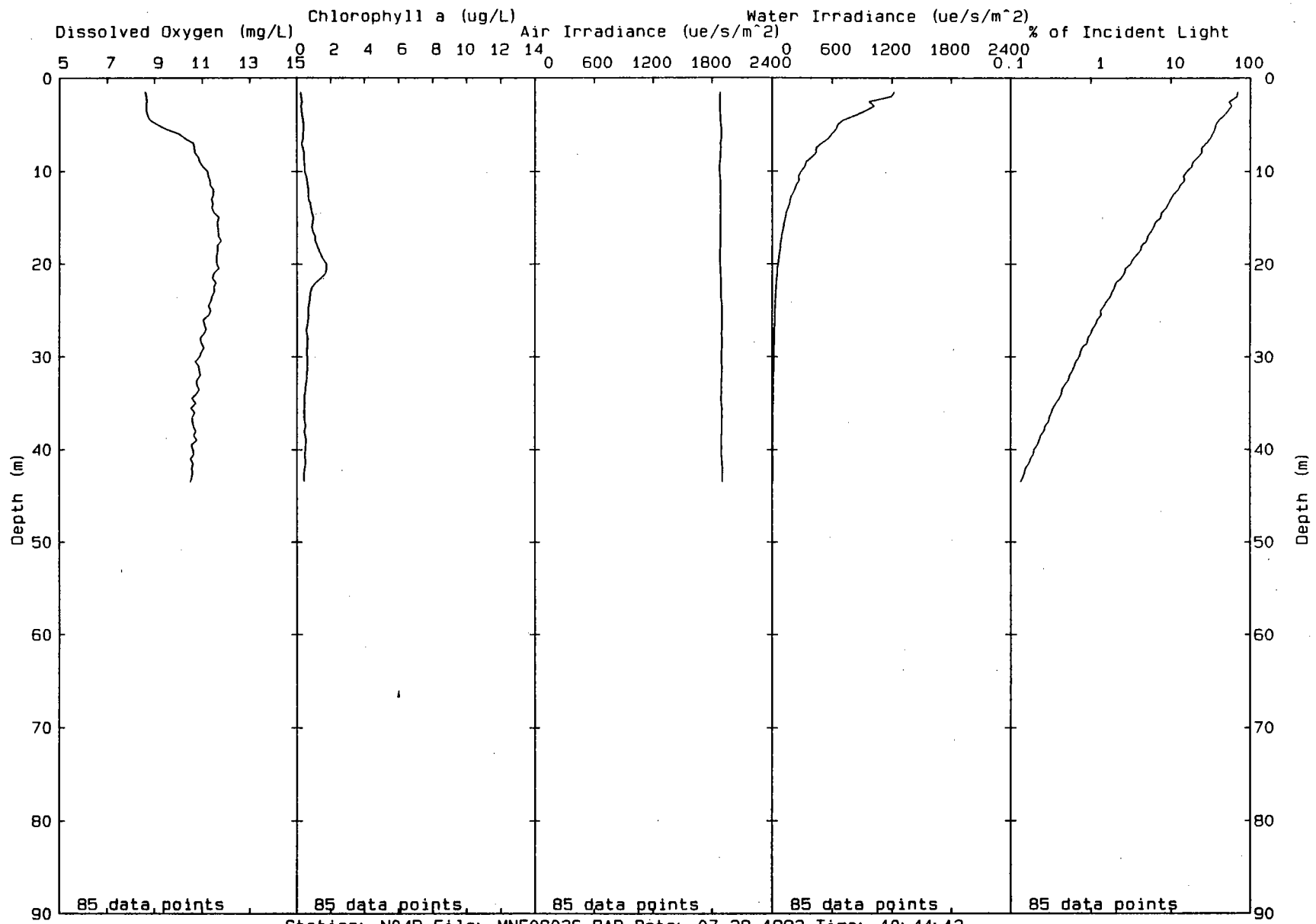


Station: N03 File: MNF08024.PAB Date: 07-29-1992 Time: 10:15:37

00418

00419

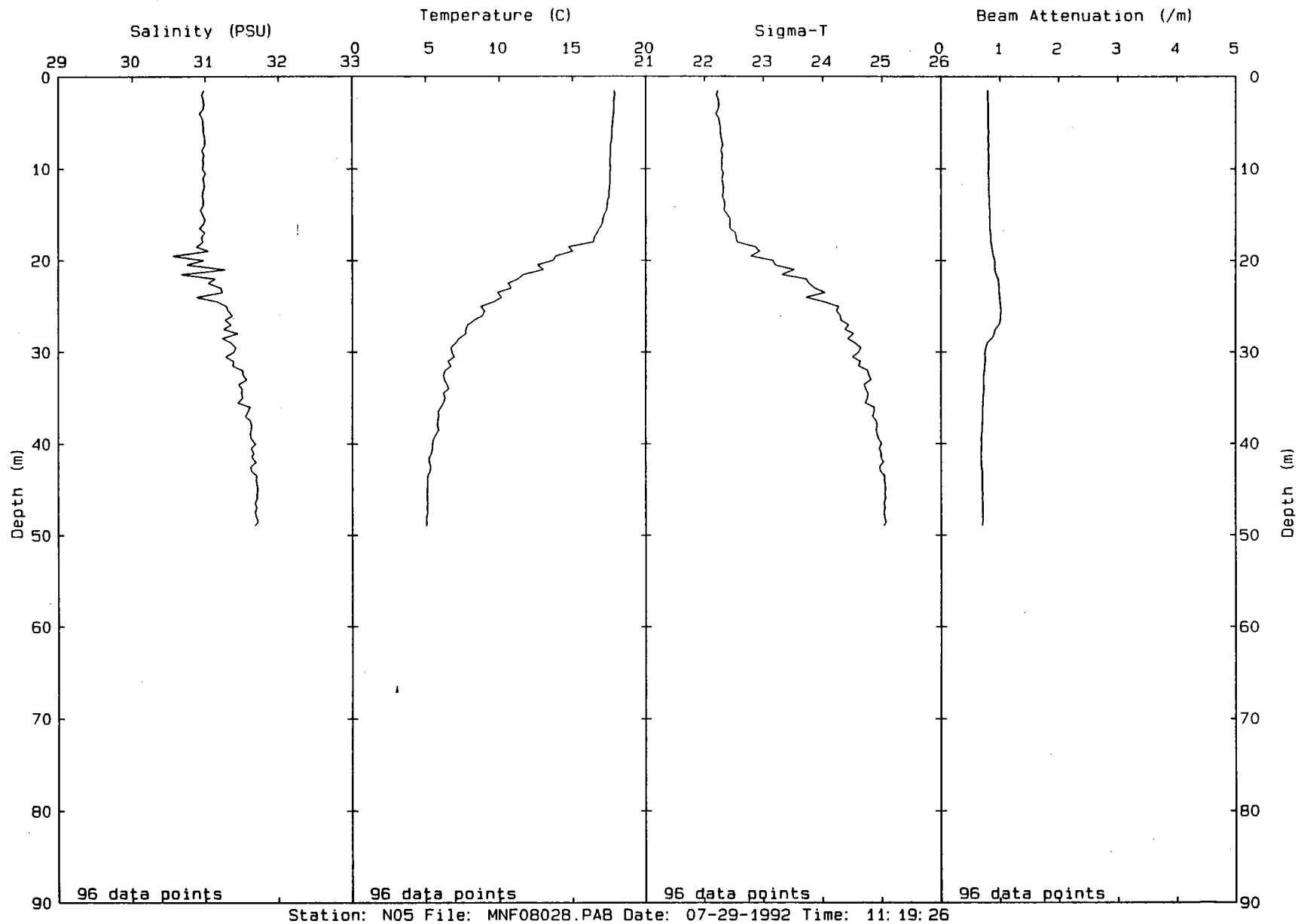




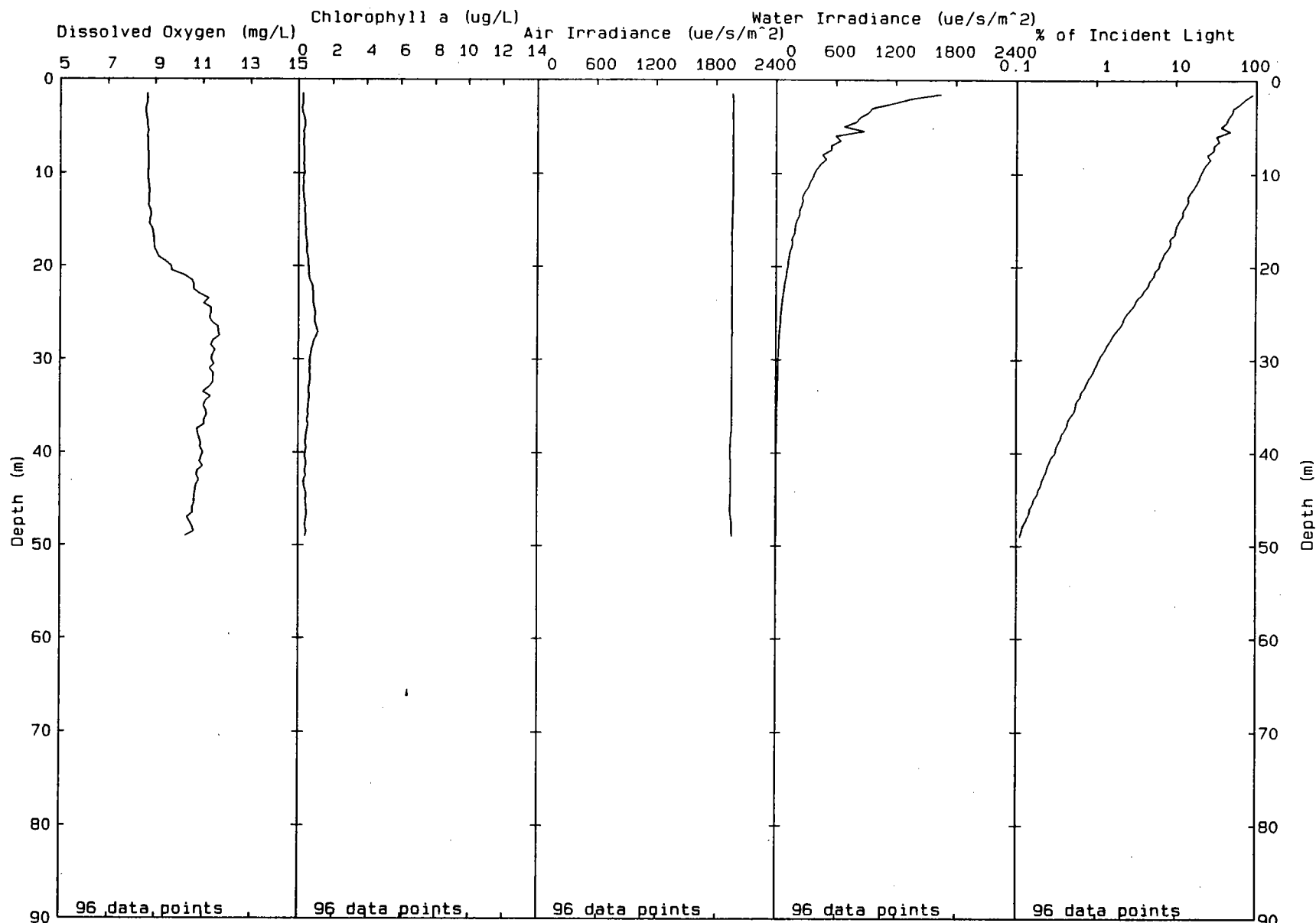
Station: N04P File: MNF08026.PAB Date: 07-29-1992 Time: 10:44:12

00420

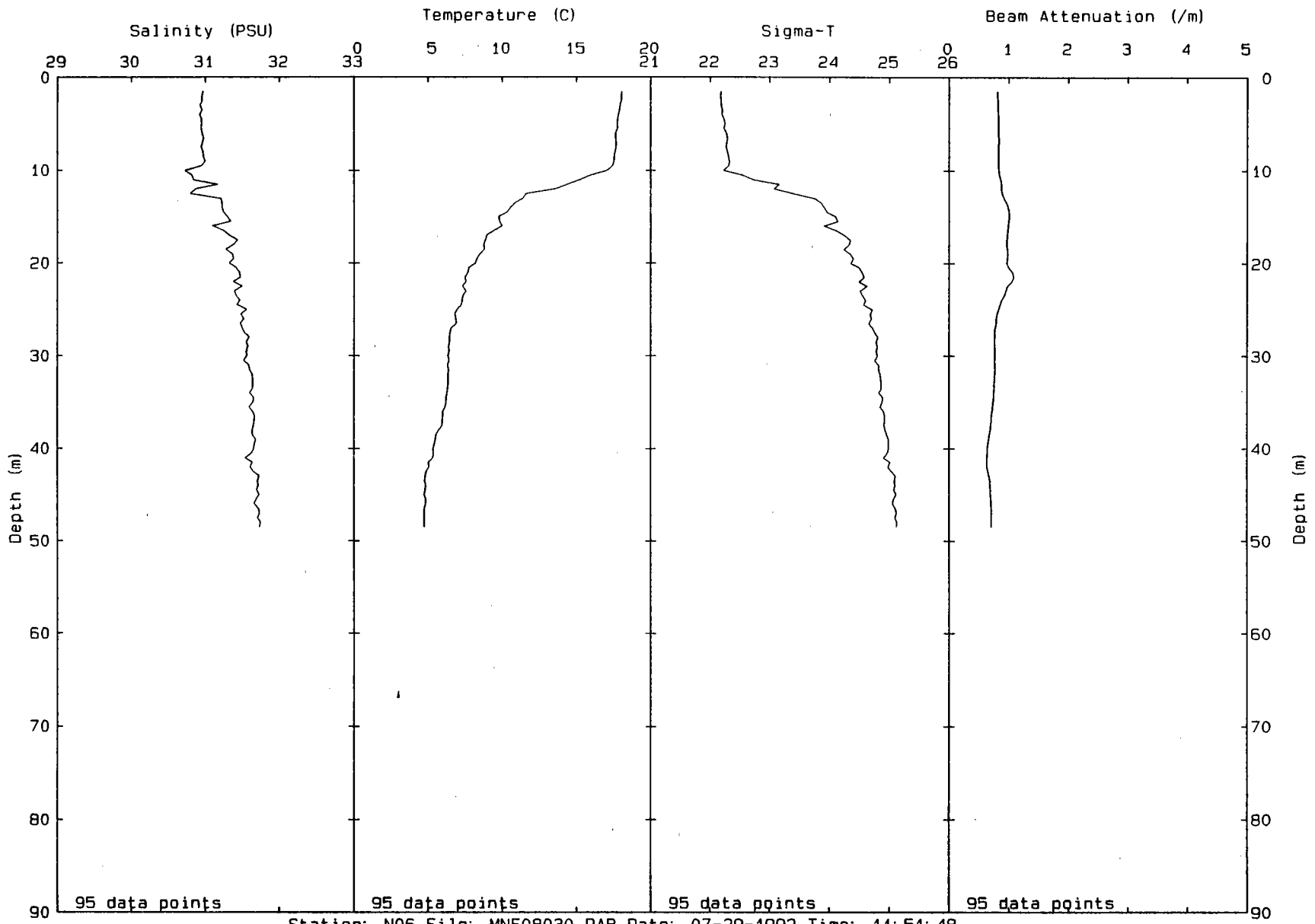
00421



00422

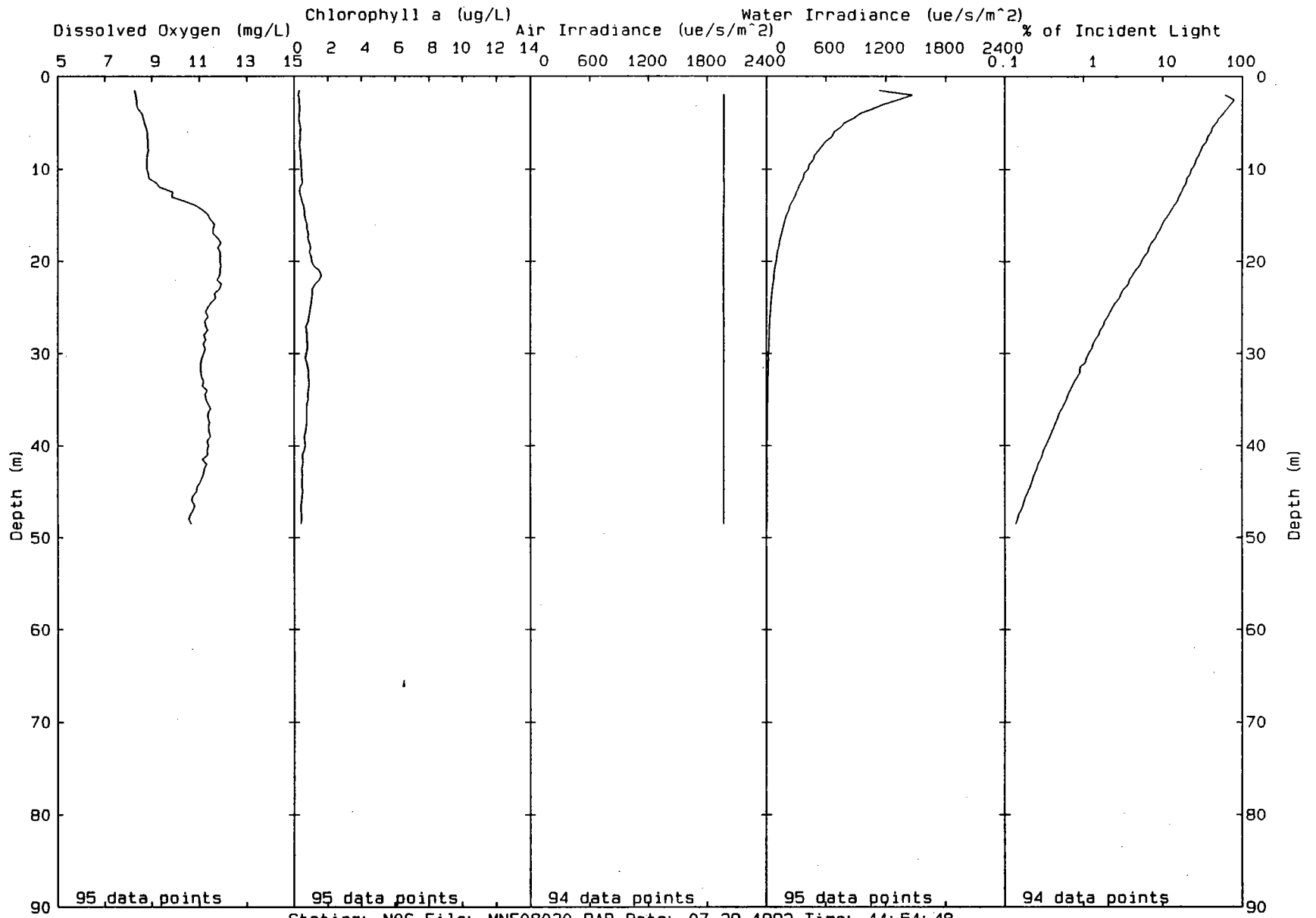


Station: N05 File: MNF08028.PAB Date: 07-29-1992 Time: 11:19:26

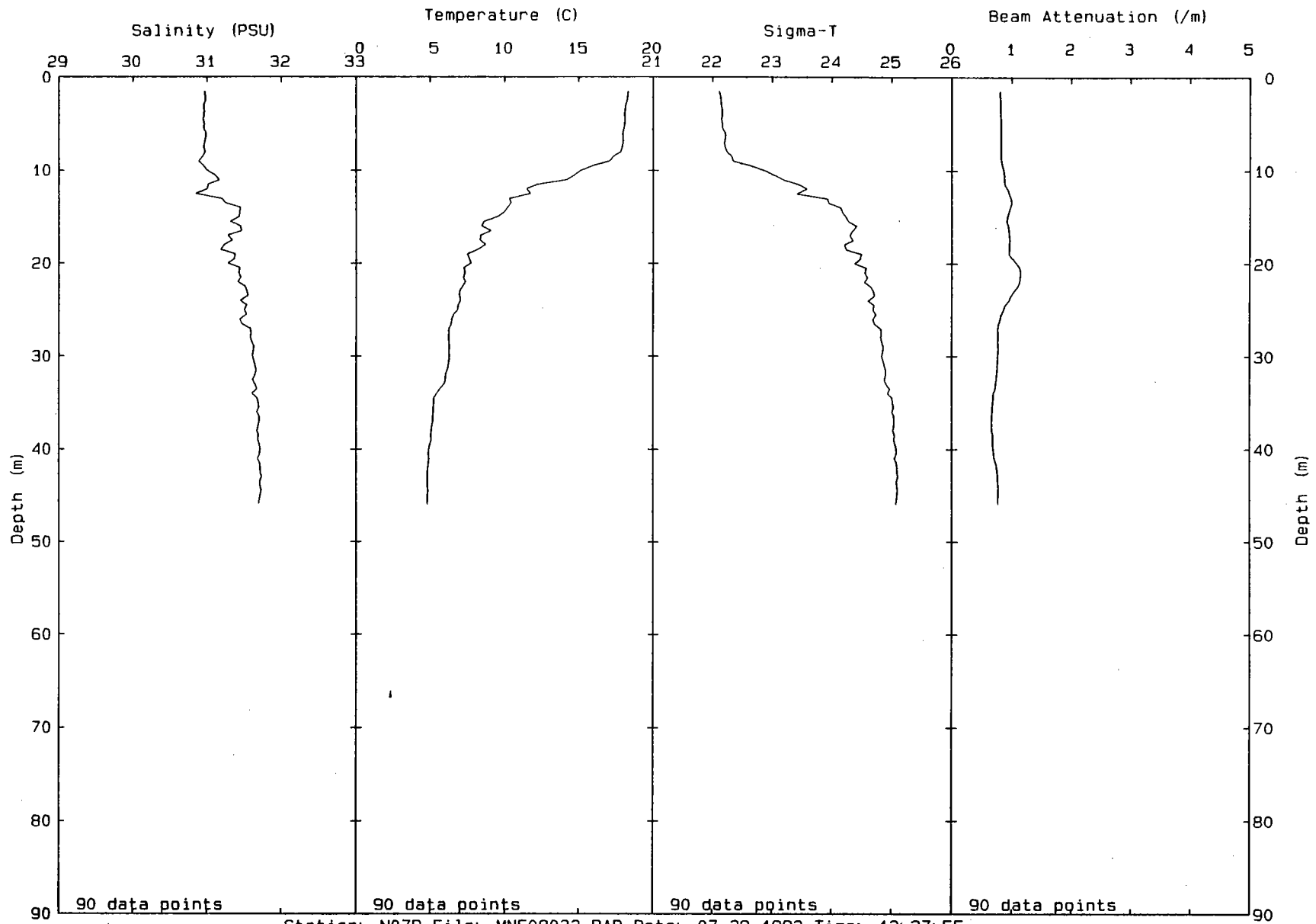


Station: N06 File: MNF08030.PAB Date: 07-29-1992 Time: 11:51:48

00423

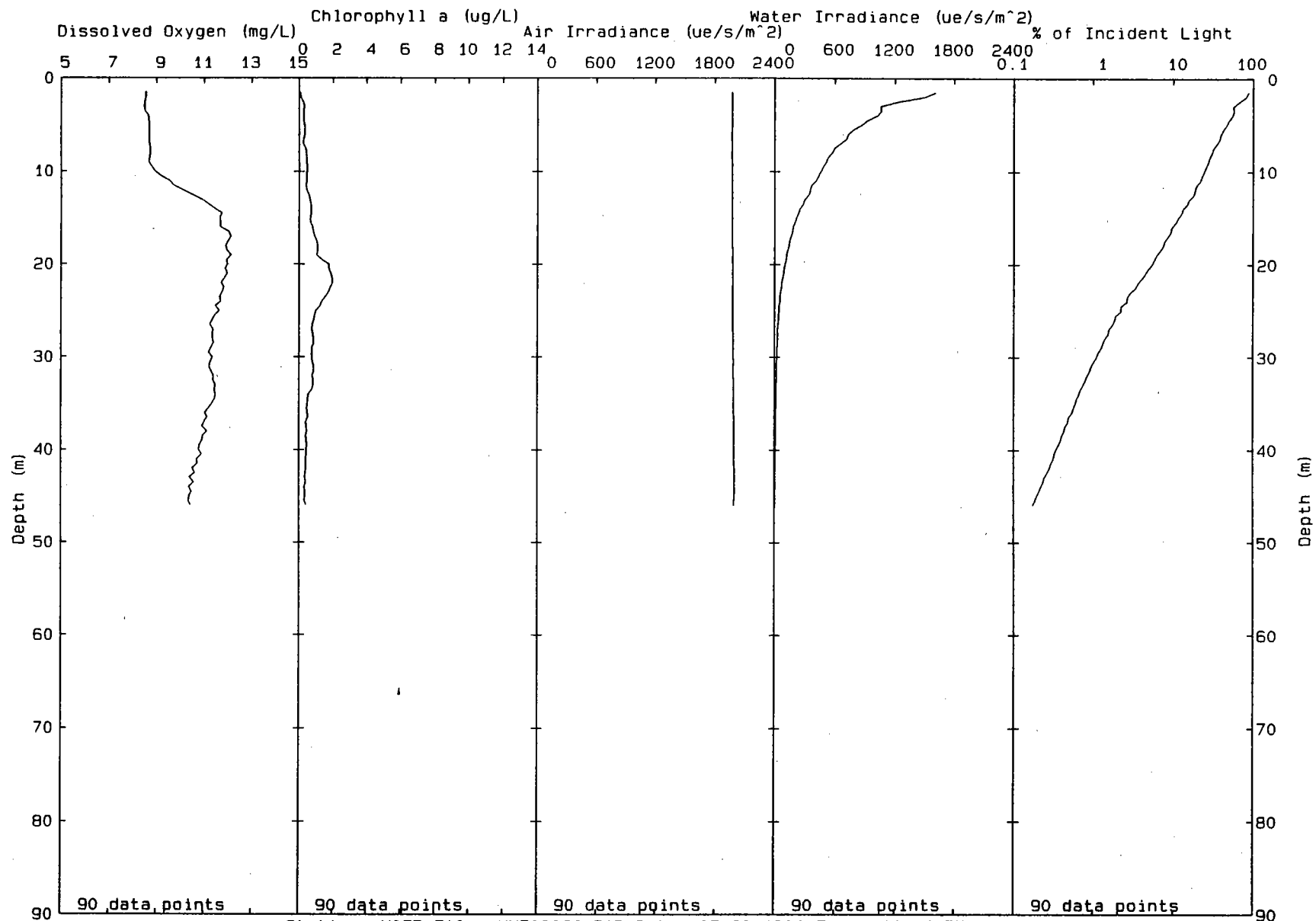


0044



Station: N07P File: MNF08032.PAB Date: 07-29-1992 Time: 12:27:55

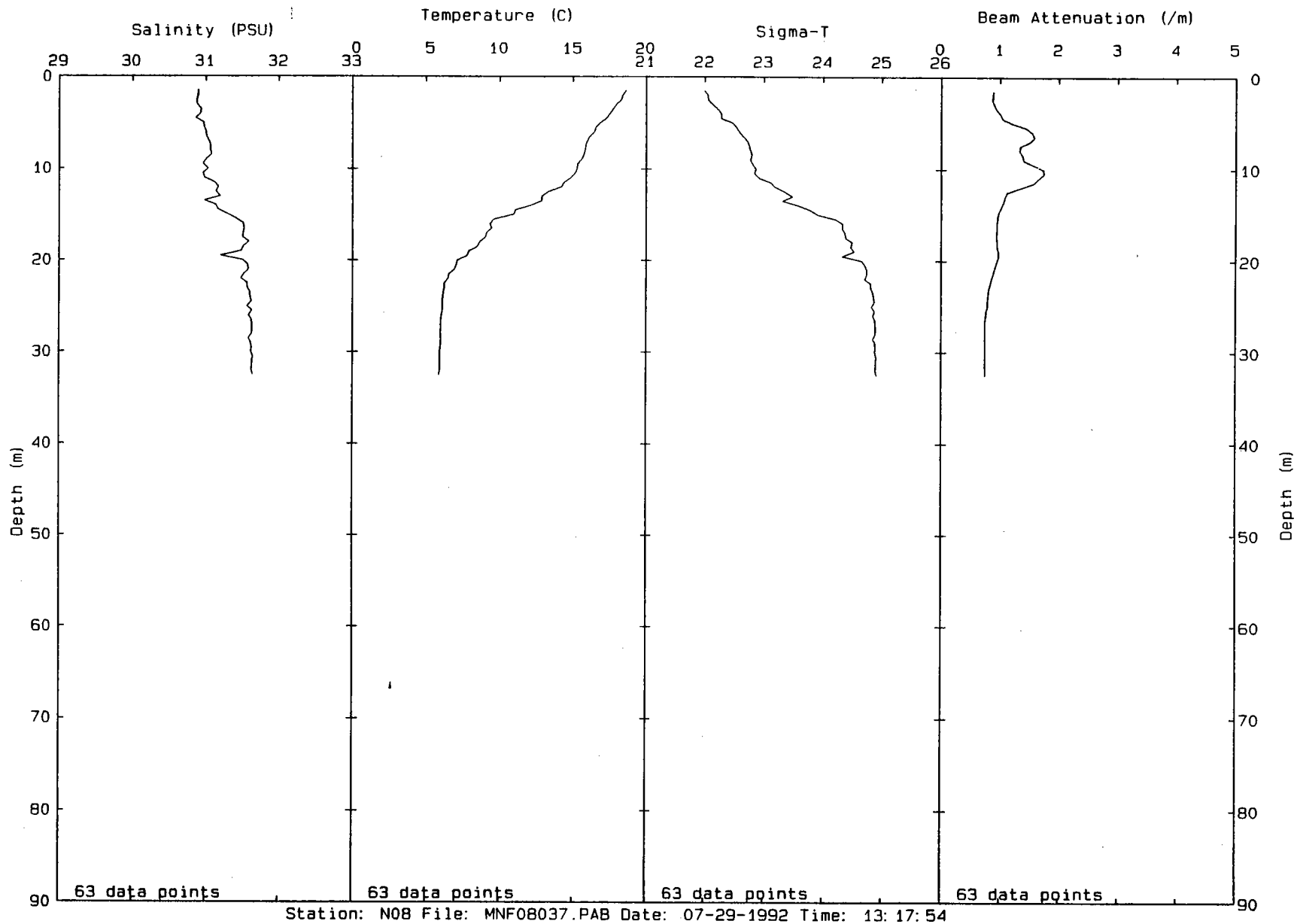
00425



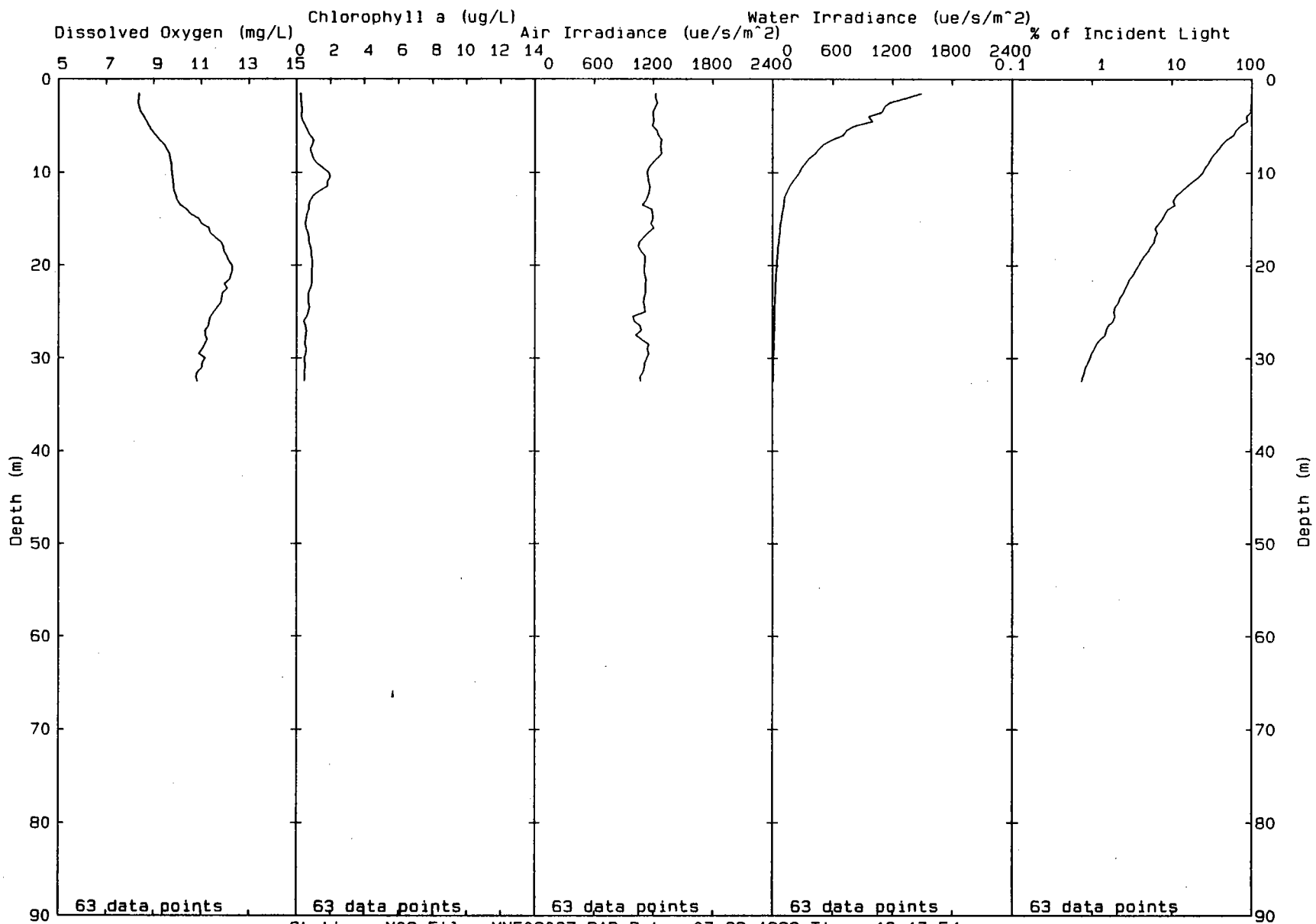
Station: N07P File: MNF08032.PAB Date: 07-29-1992 Time: 12:27:55

00426

00427



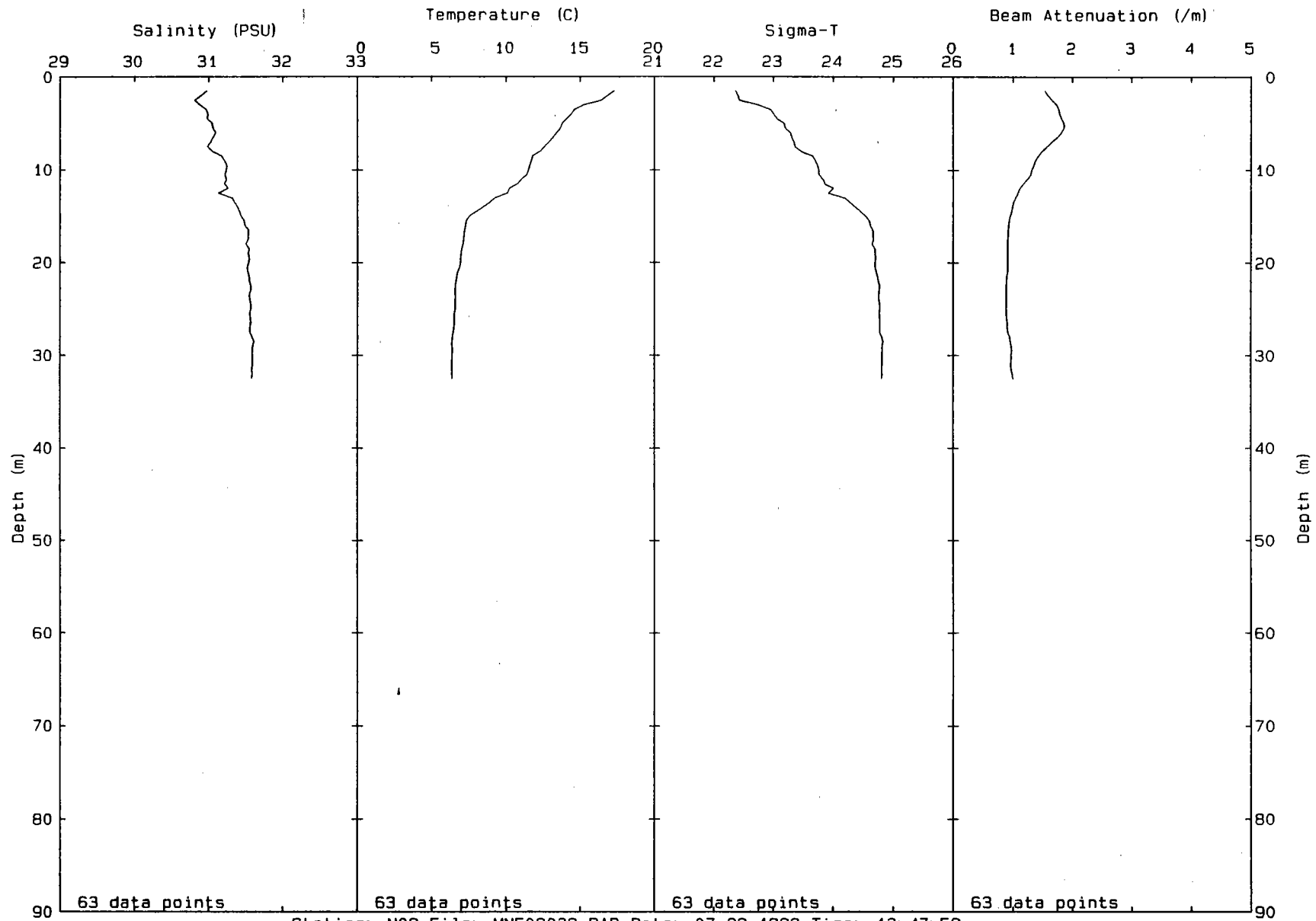
Station: N08 File: MNF08037.PAB Date: 07-29-1992 Time: 13:17:54



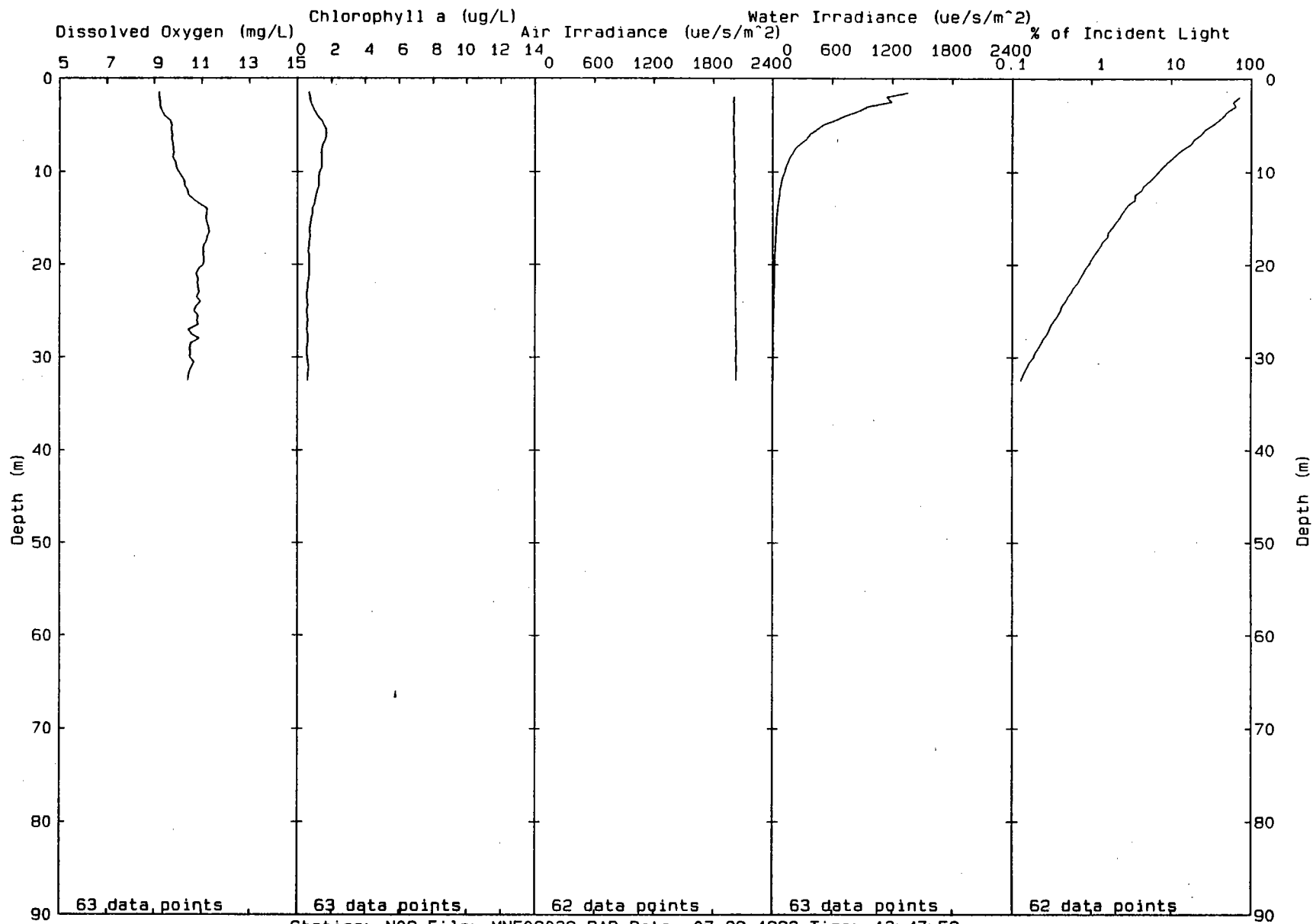
00428

Station: N08 File: MNF08037.PAB Date: 07-29-1992 Time: 13:17:54

00429



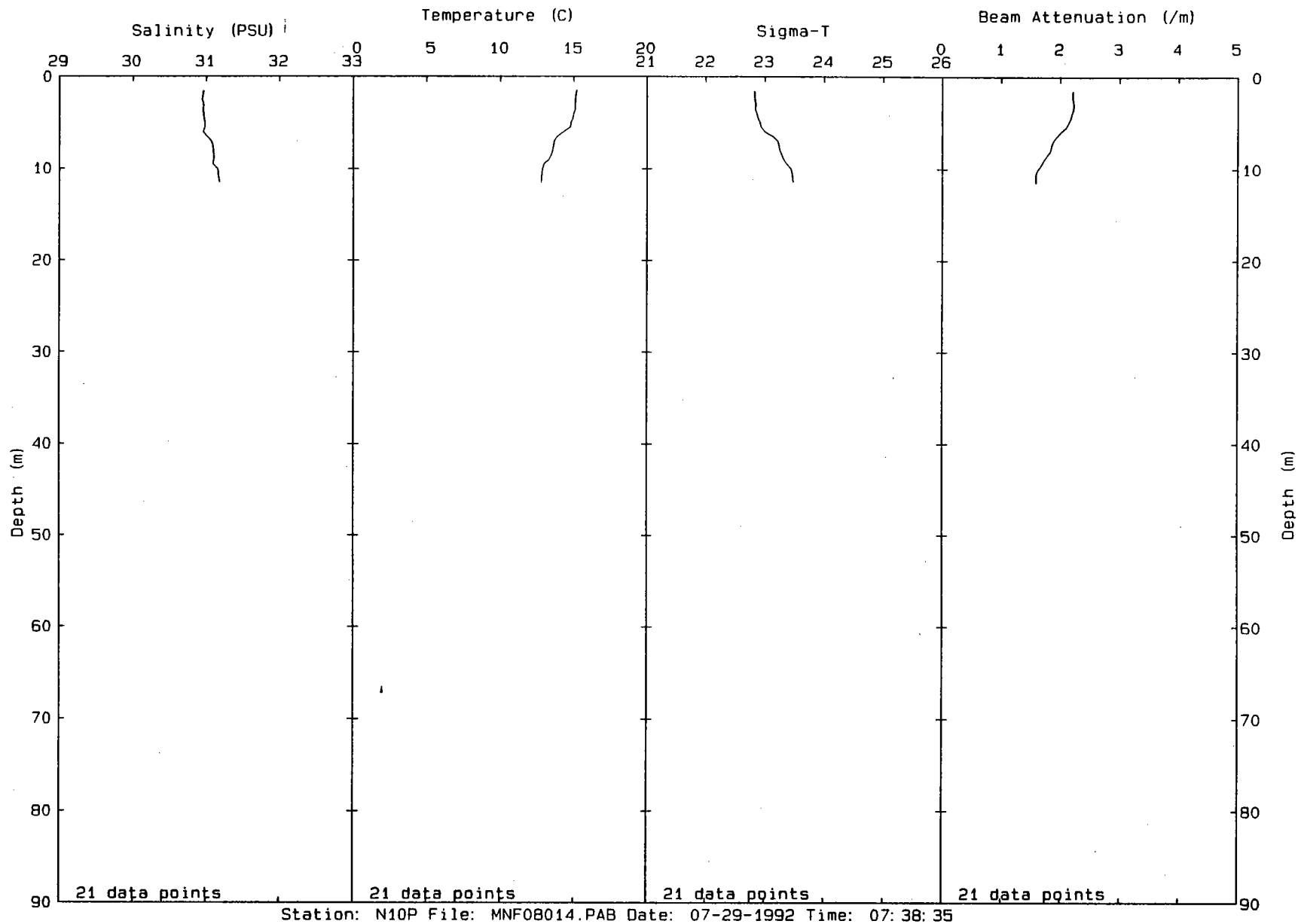
Station: N09 File: MNF08039.PAB Date: 07-29-1992 Time: 13:47:59

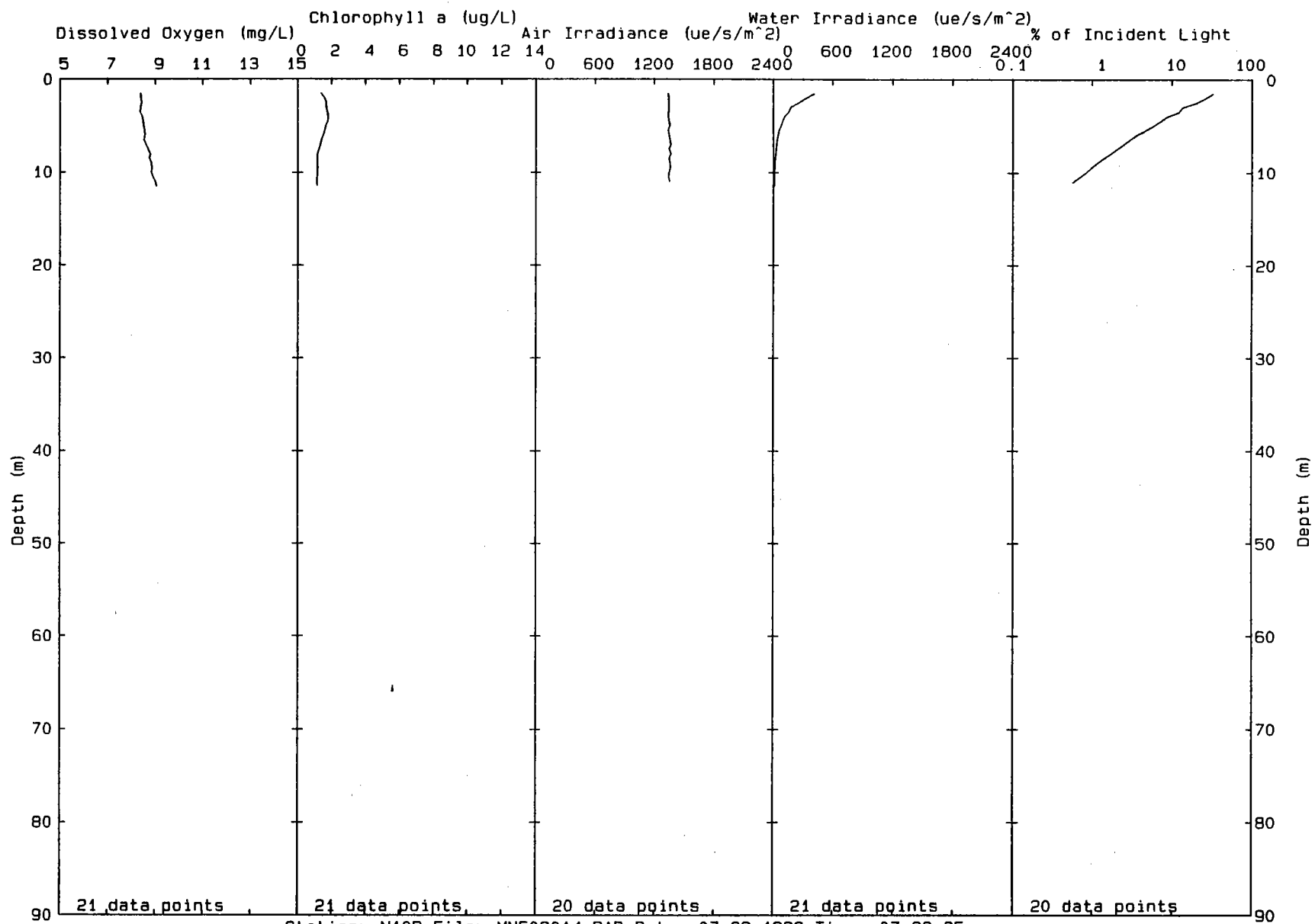


Station: N09 File: MNF08039.PAB Date: 07-29-1992 Time: 13:47:59

00430

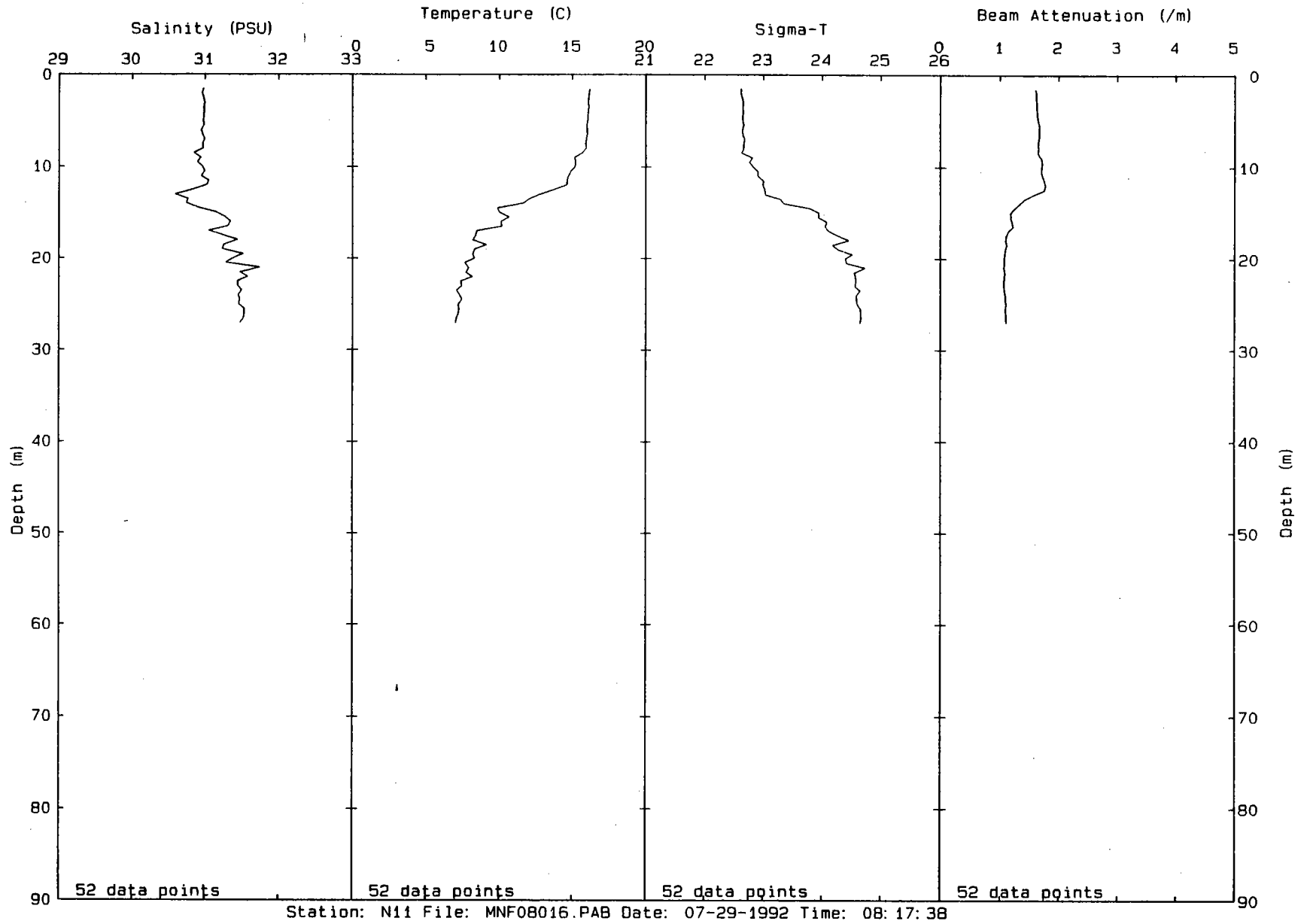
00431

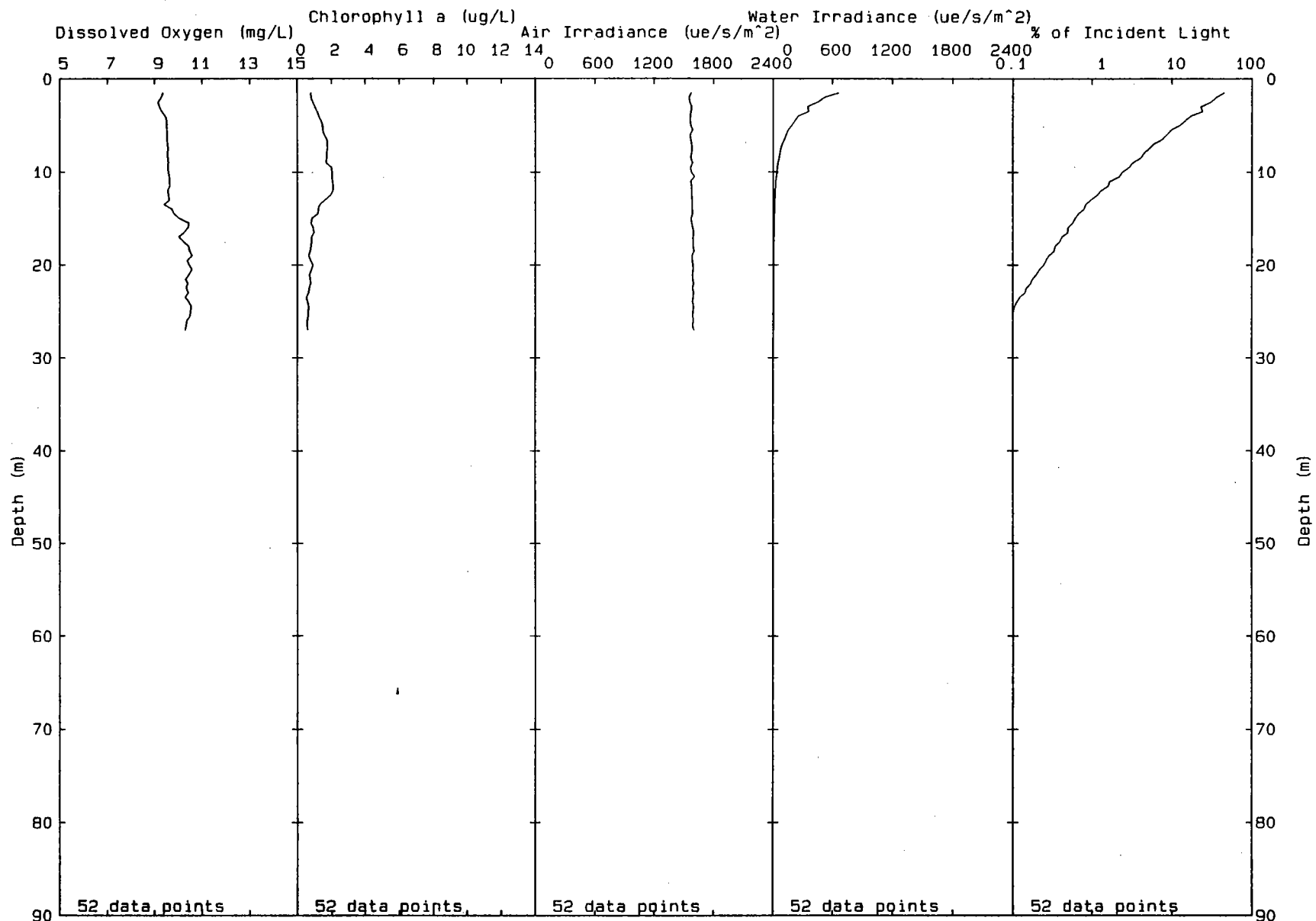




00432

00433

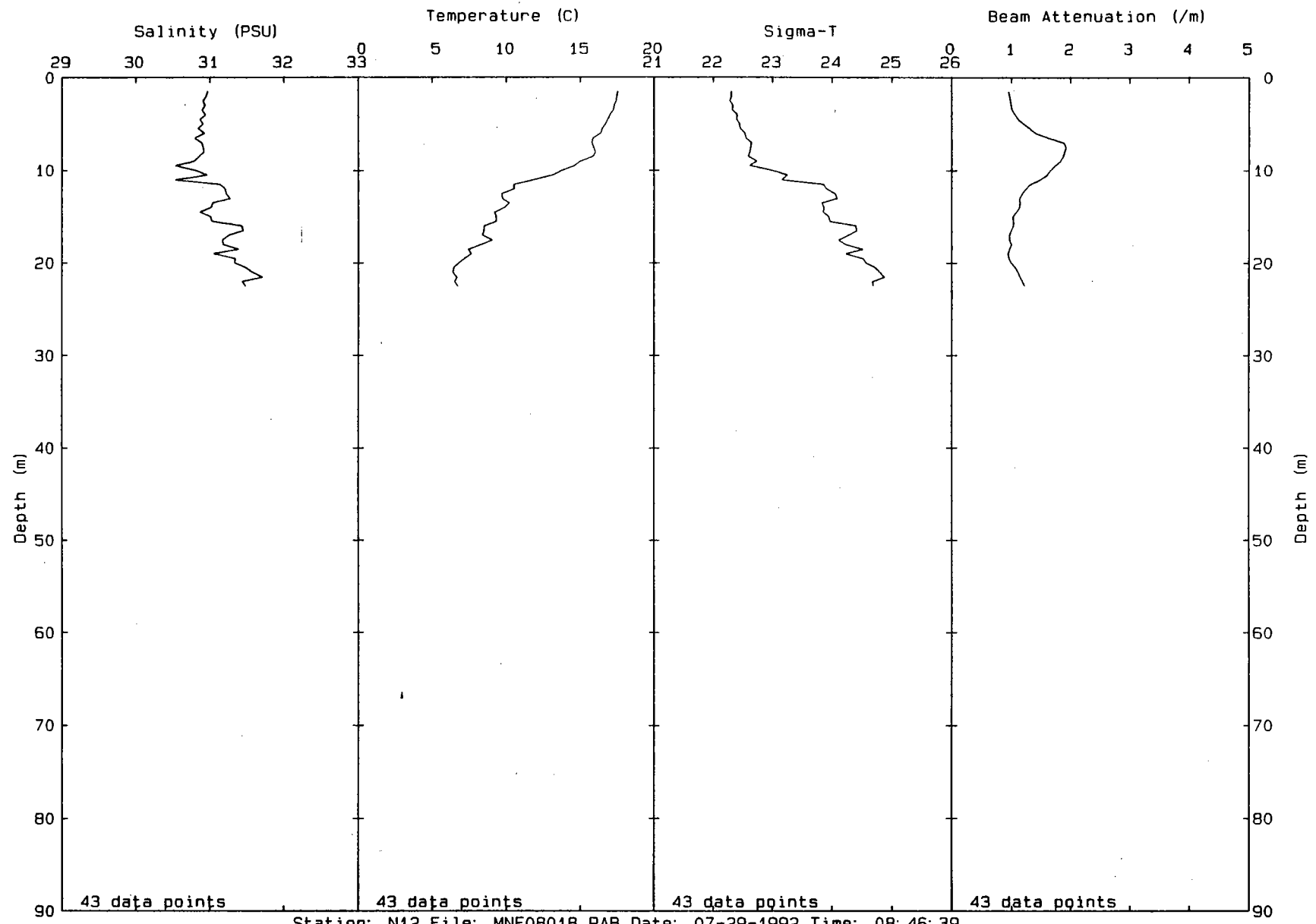




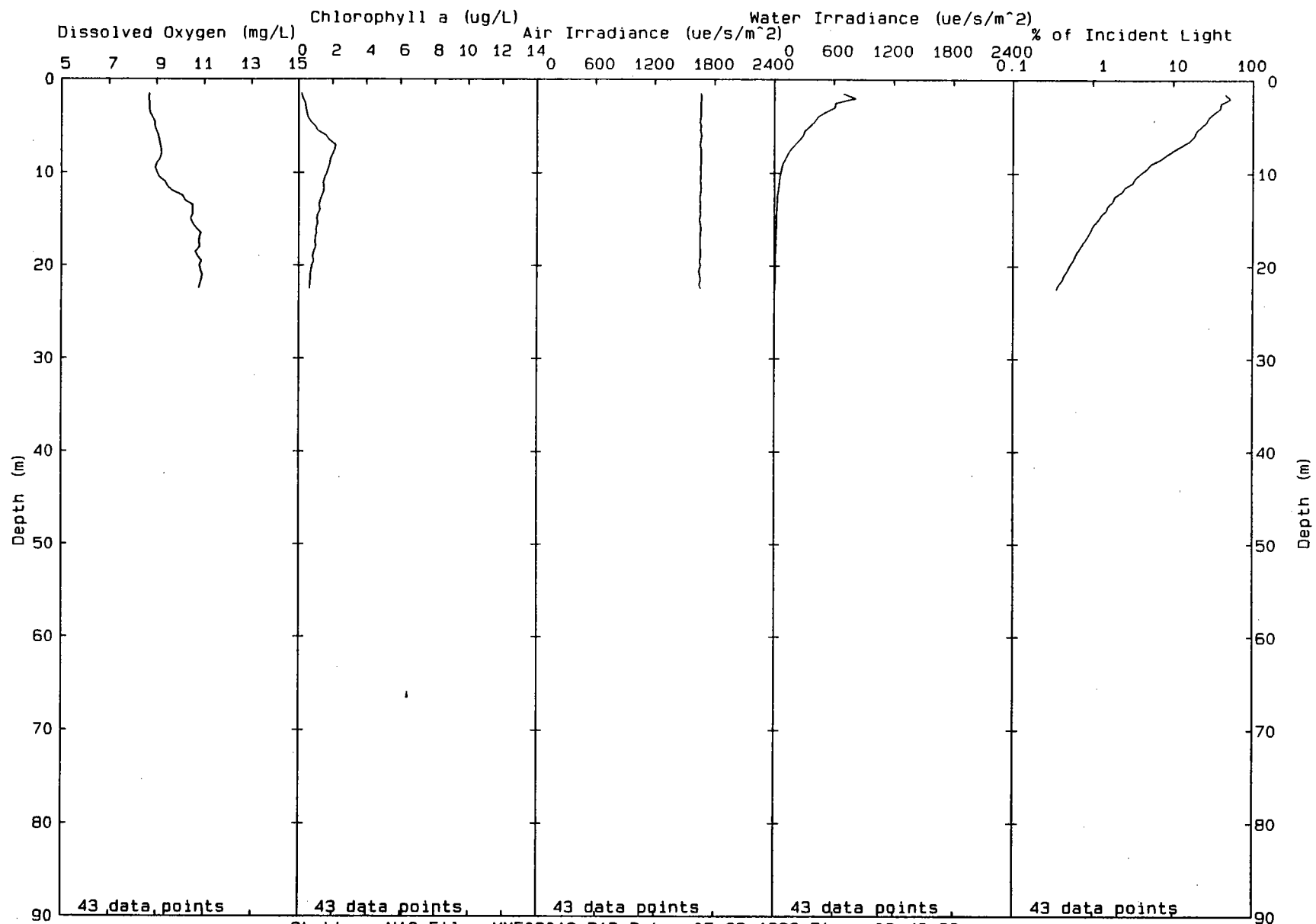
Station: N11 File: MNF08016.PAB Date: 07-29-1992 Time: 08:17:38

00434

00435



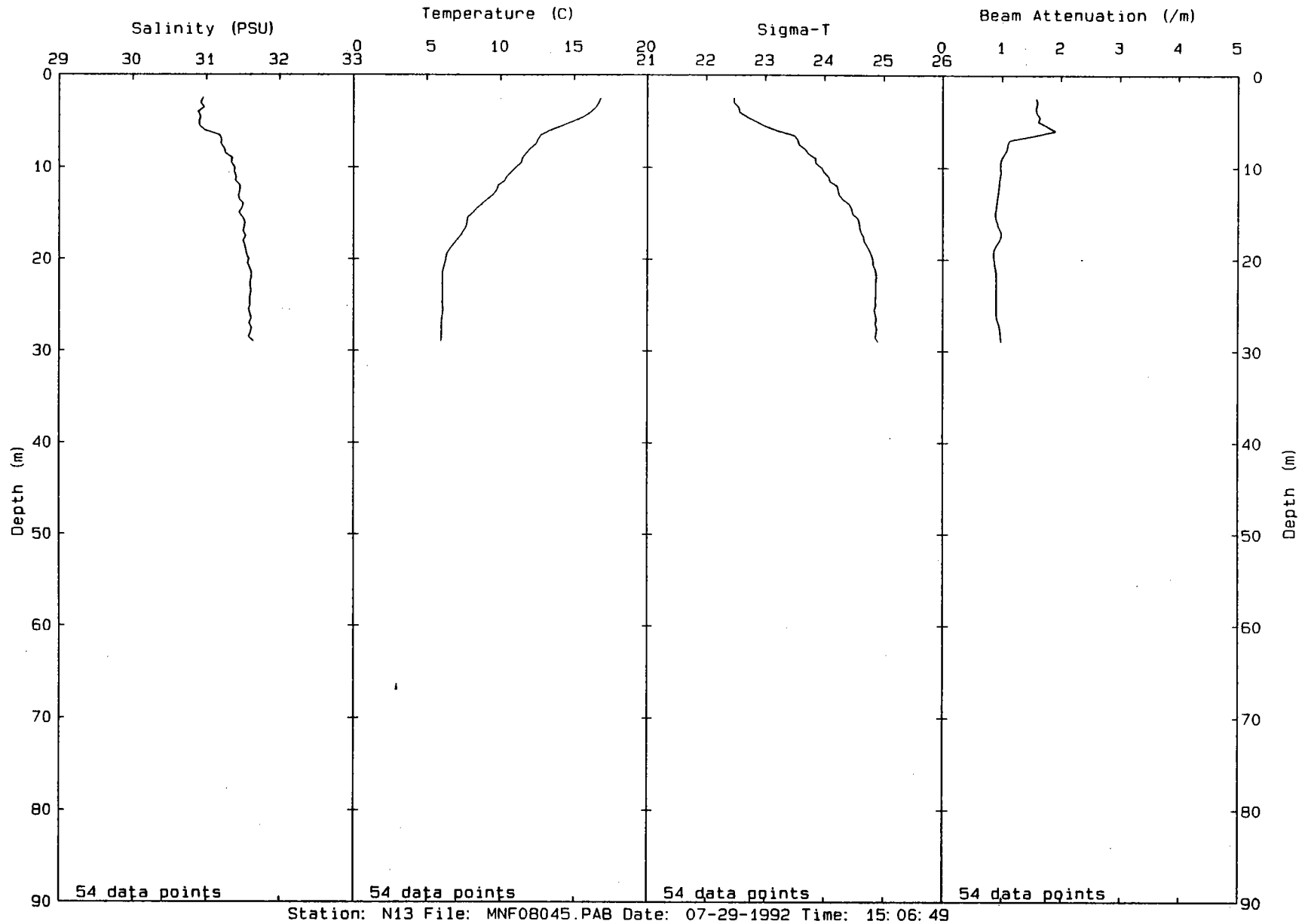
Station: N12 File: MNF08018.PAB Date: 07-29-1992 Time: 08:46:39

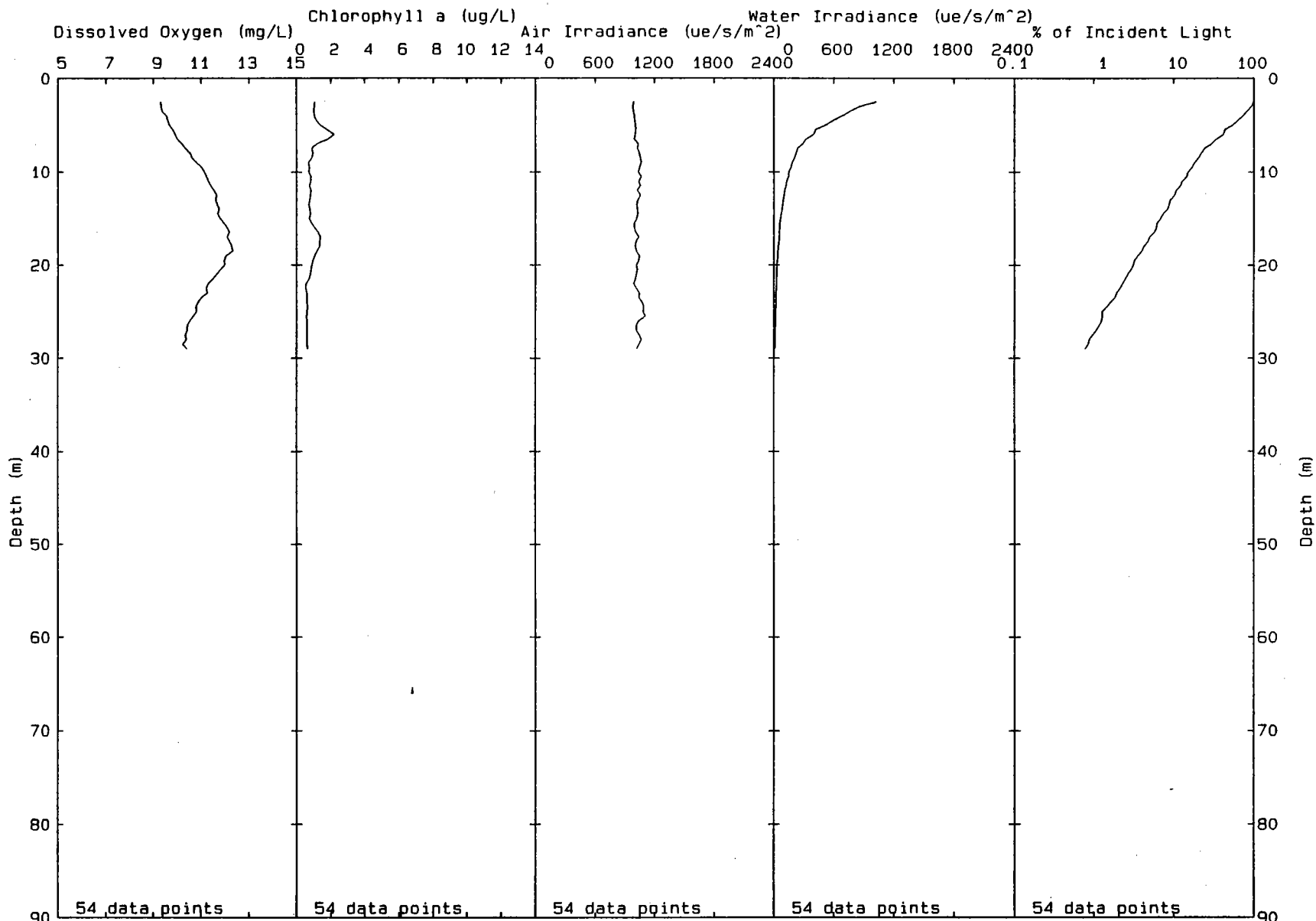


Station: N12 File: MNF08018.PAB Date: 07-29-1992 Time: 08:46:39

00436

00437

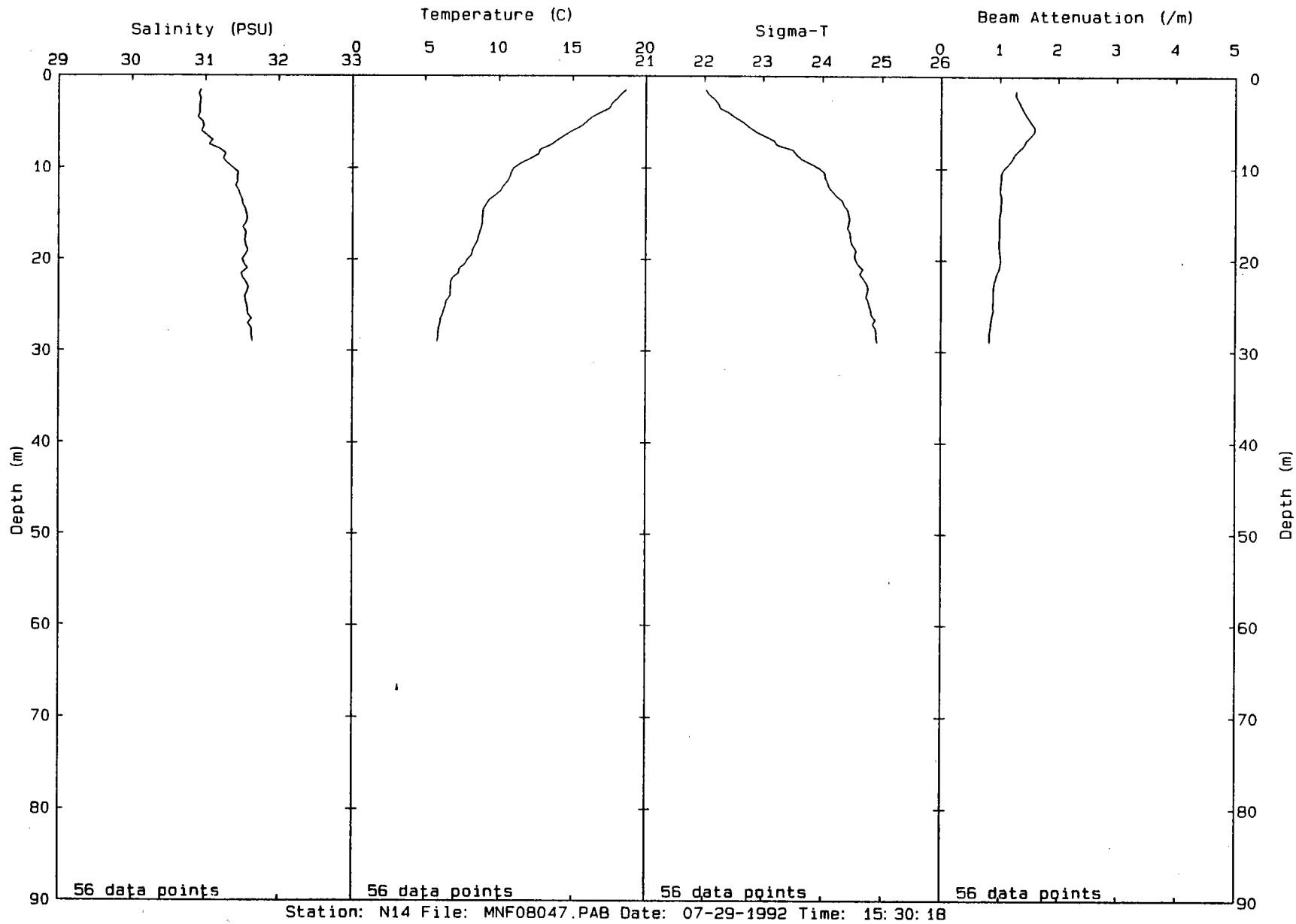


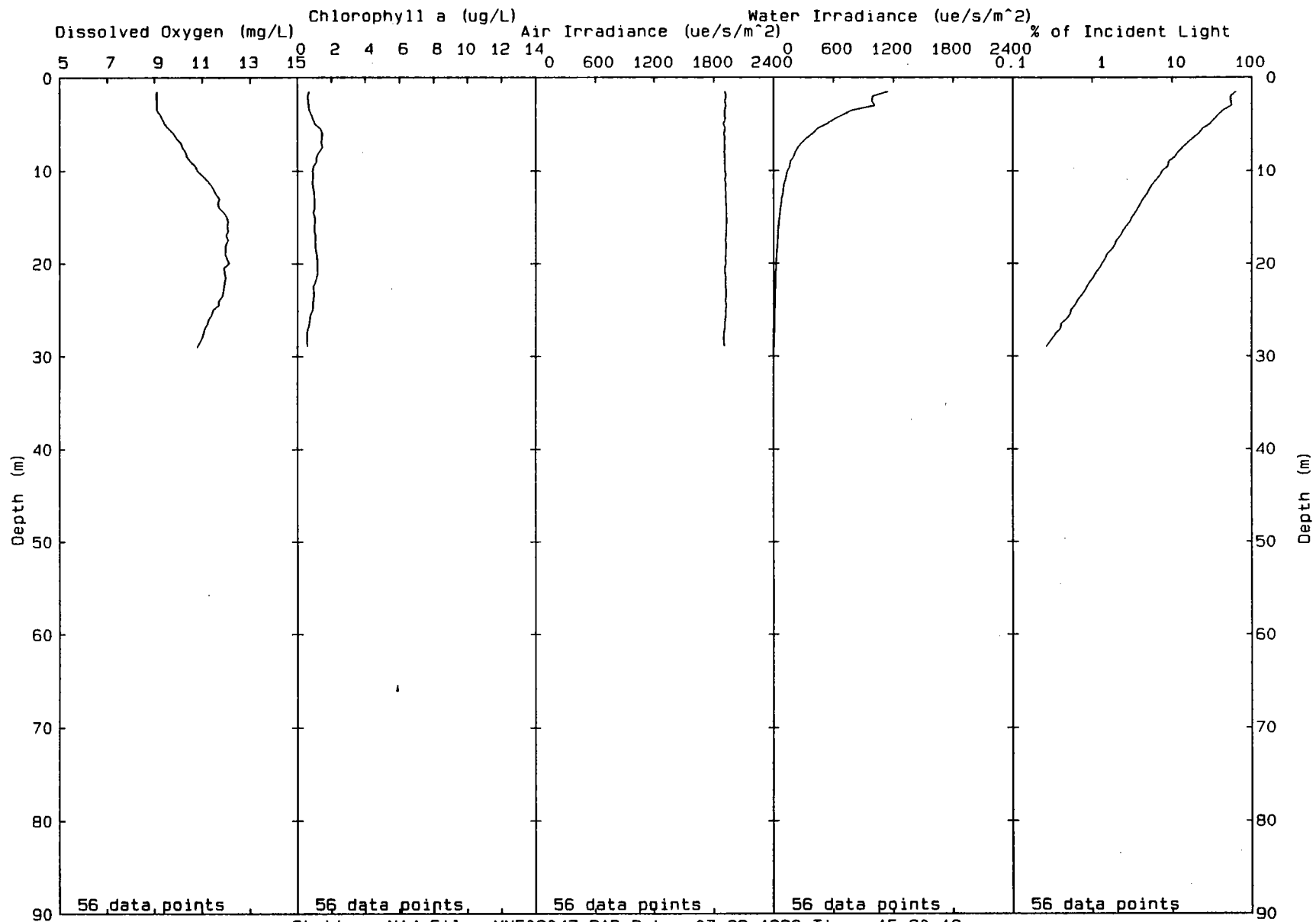


Station: N13 File: MNF08045.PAB Date: 07-29-1992 Time: 15:06:49

00438

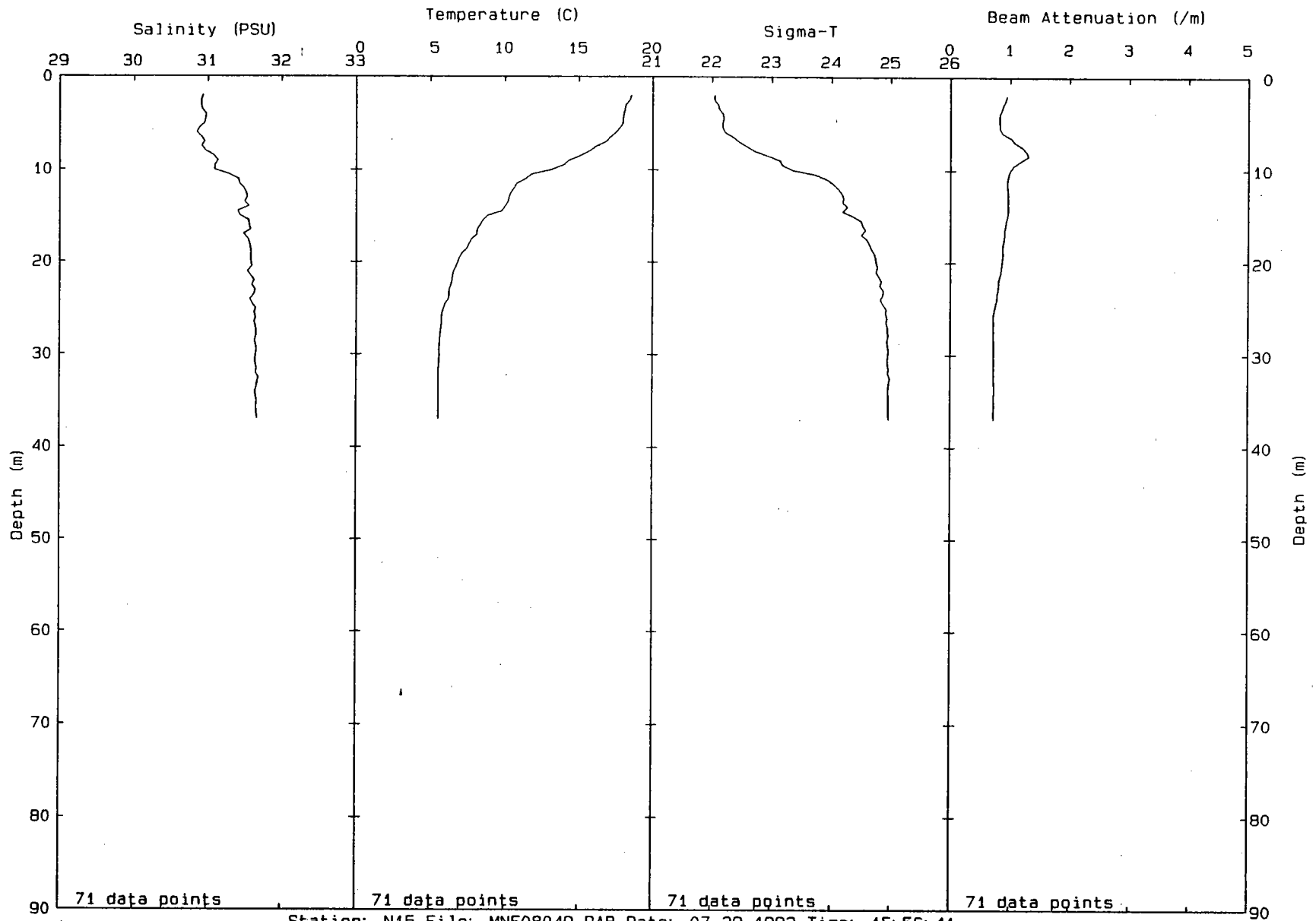
00439





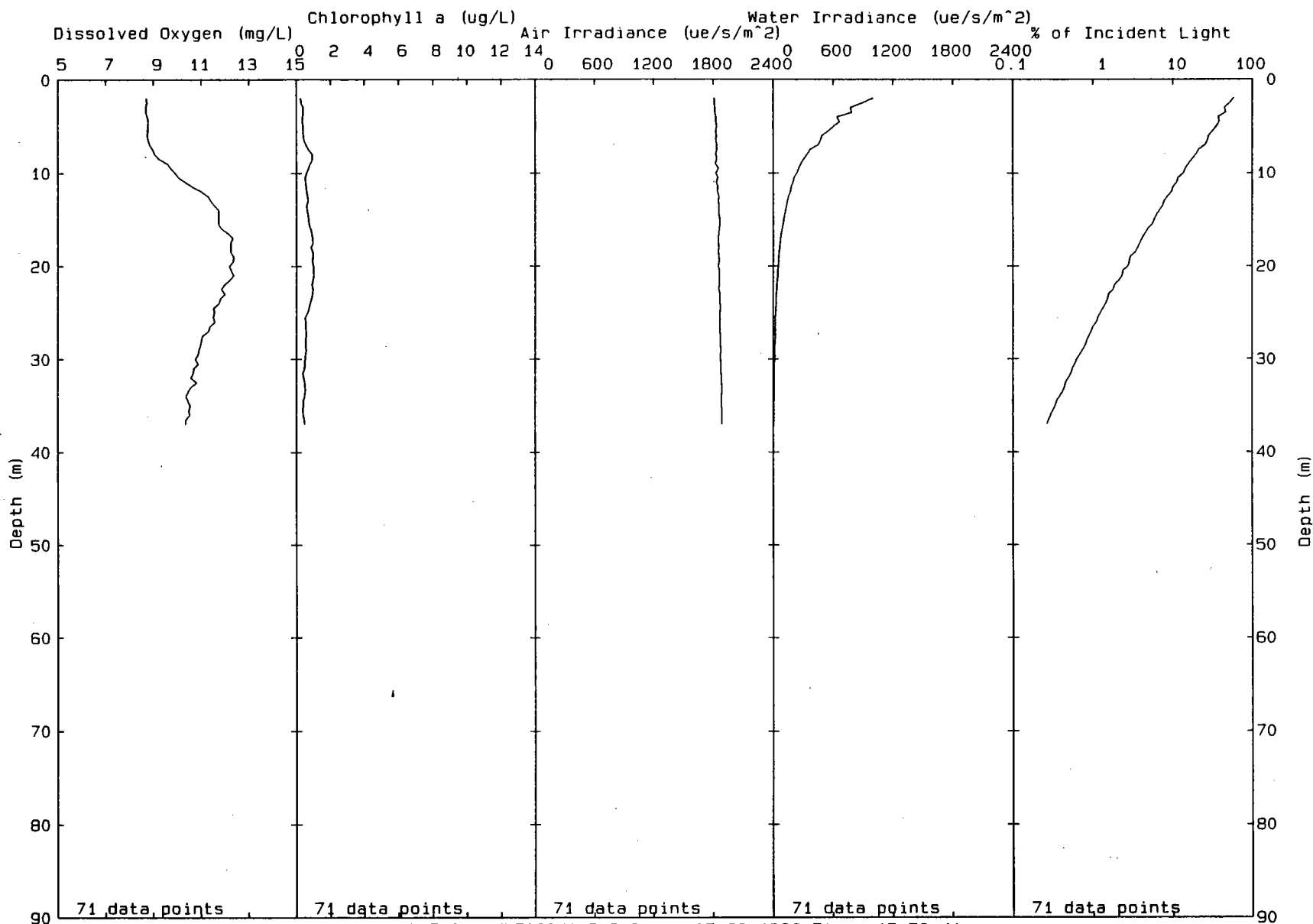
Station: N14 File: MNF08047.PAB Date: 07-29-1992 Time: 15:30:18

00440



Station: N15 File: MNF08049.PAB Date: 07-29-1992 Time: 15:56:41

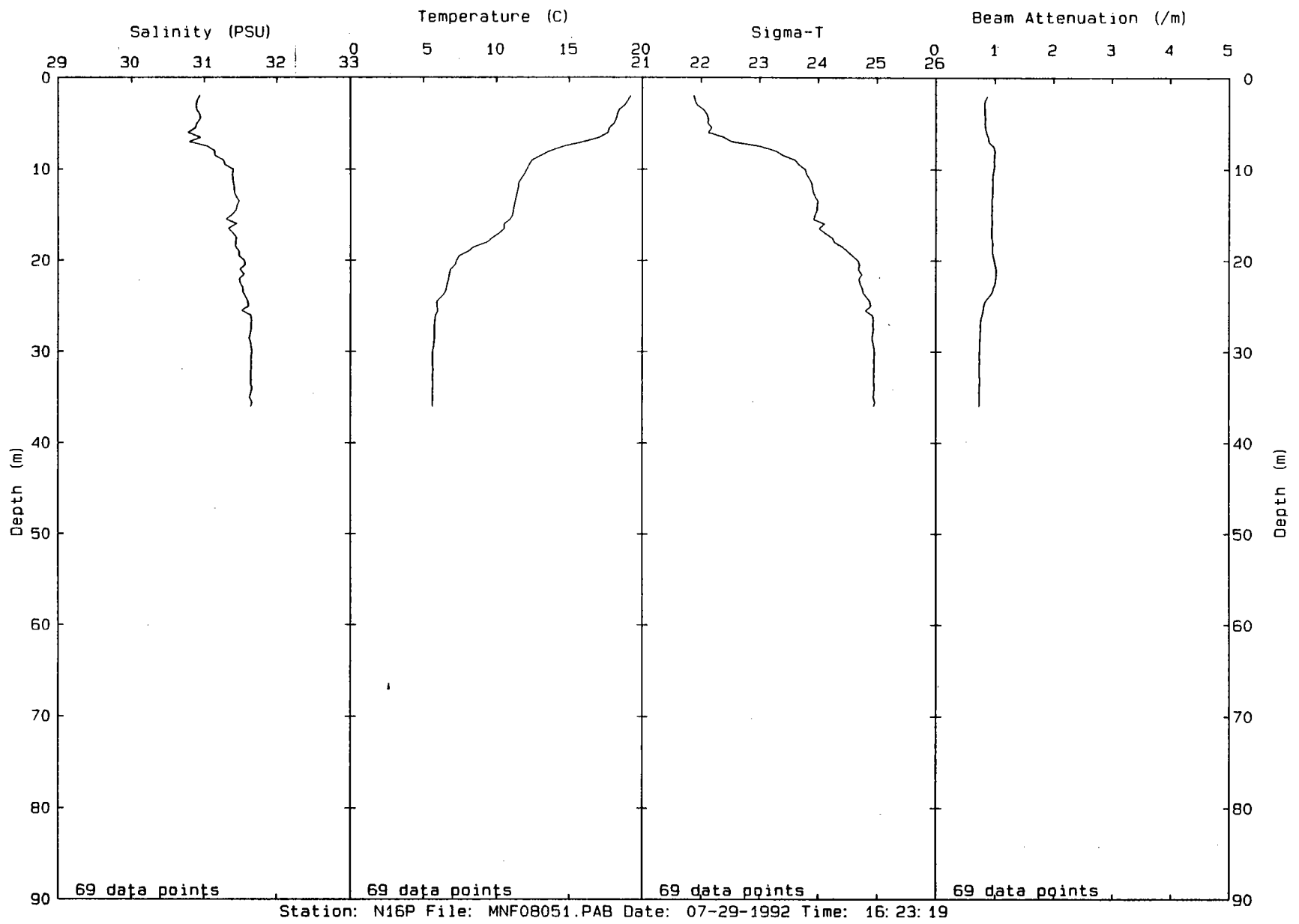
00441

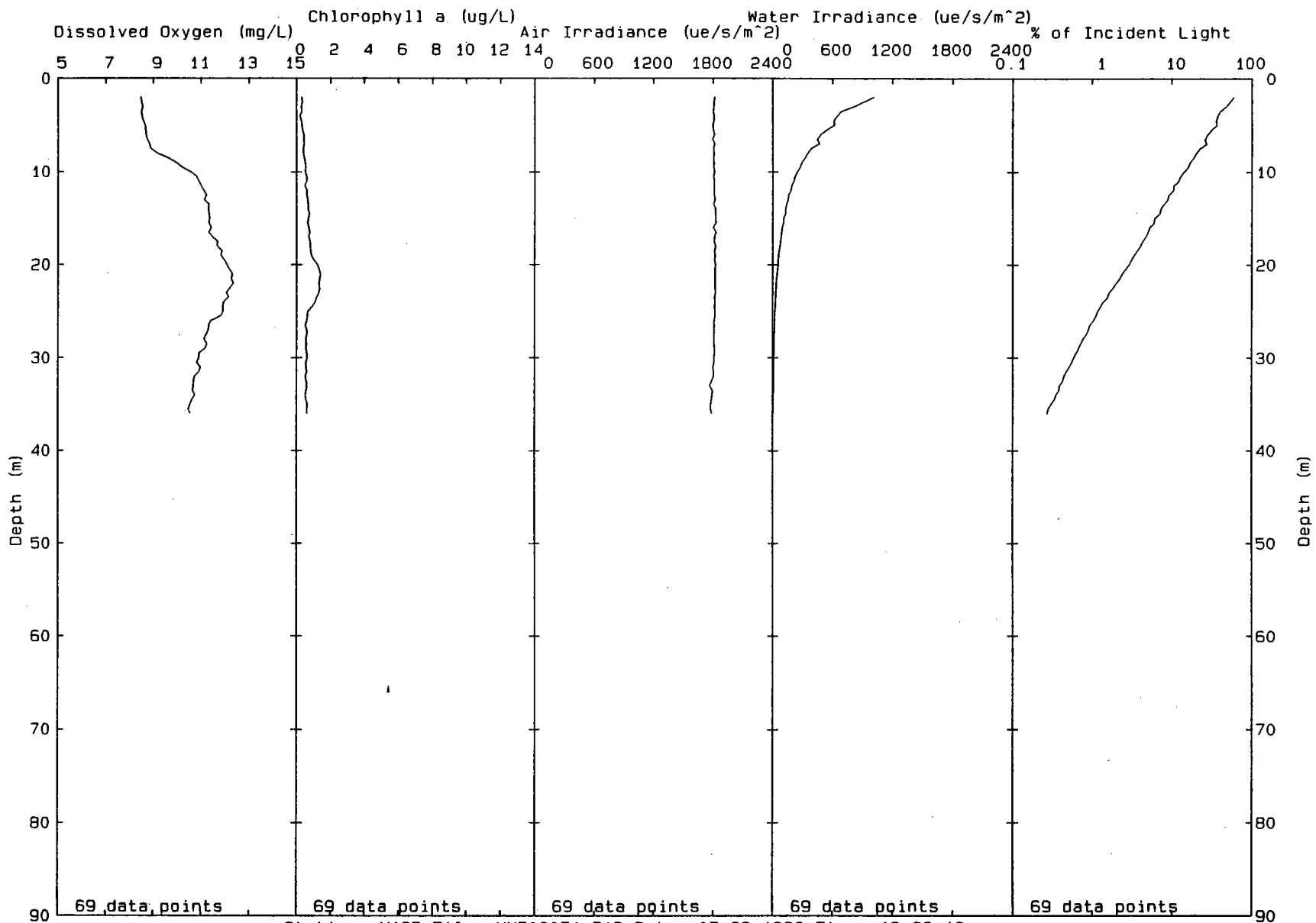


Station: N15 File: MNF08049.PAB Date: 07-29-1992 Time: 15:56:41

00442

00443

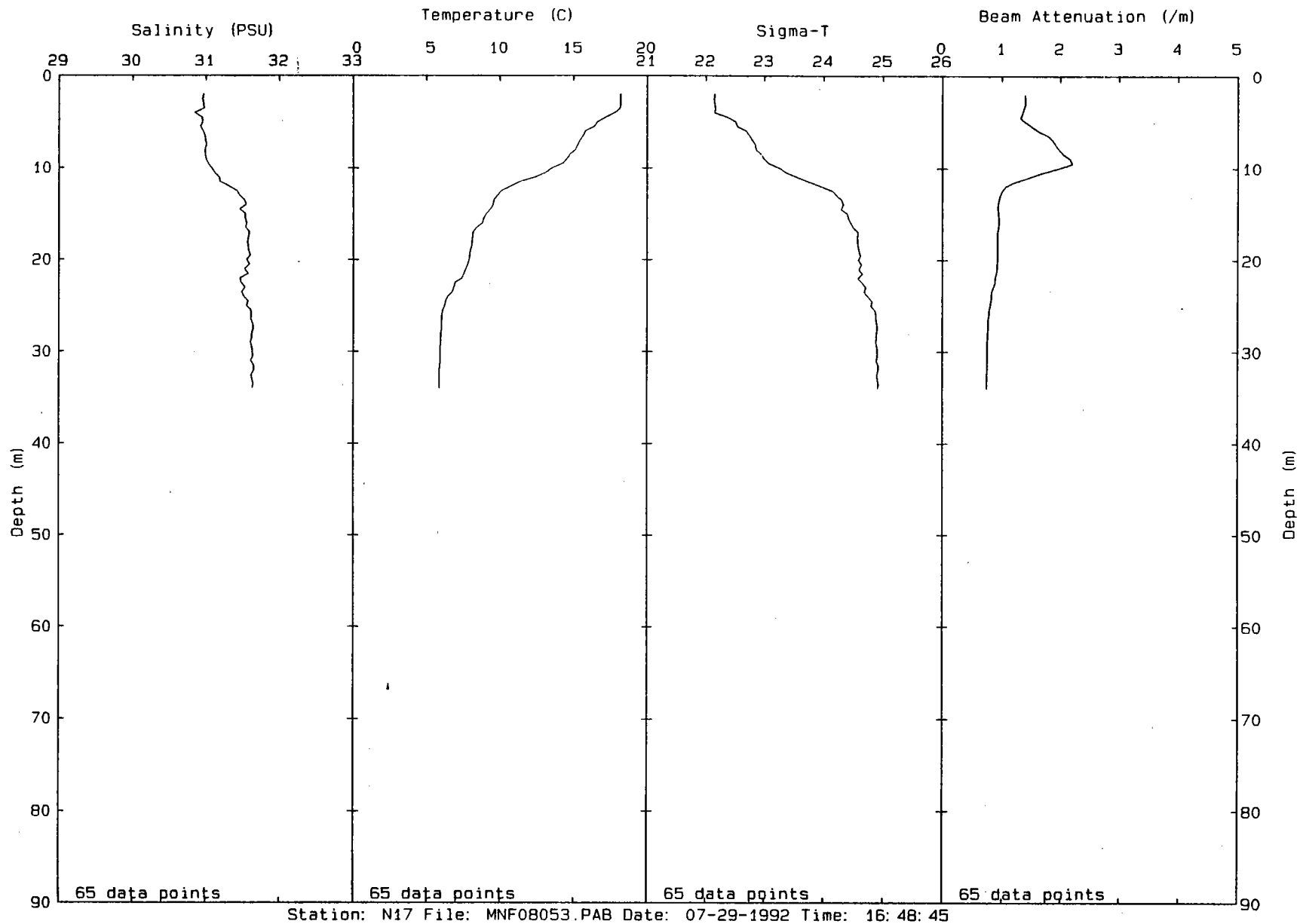




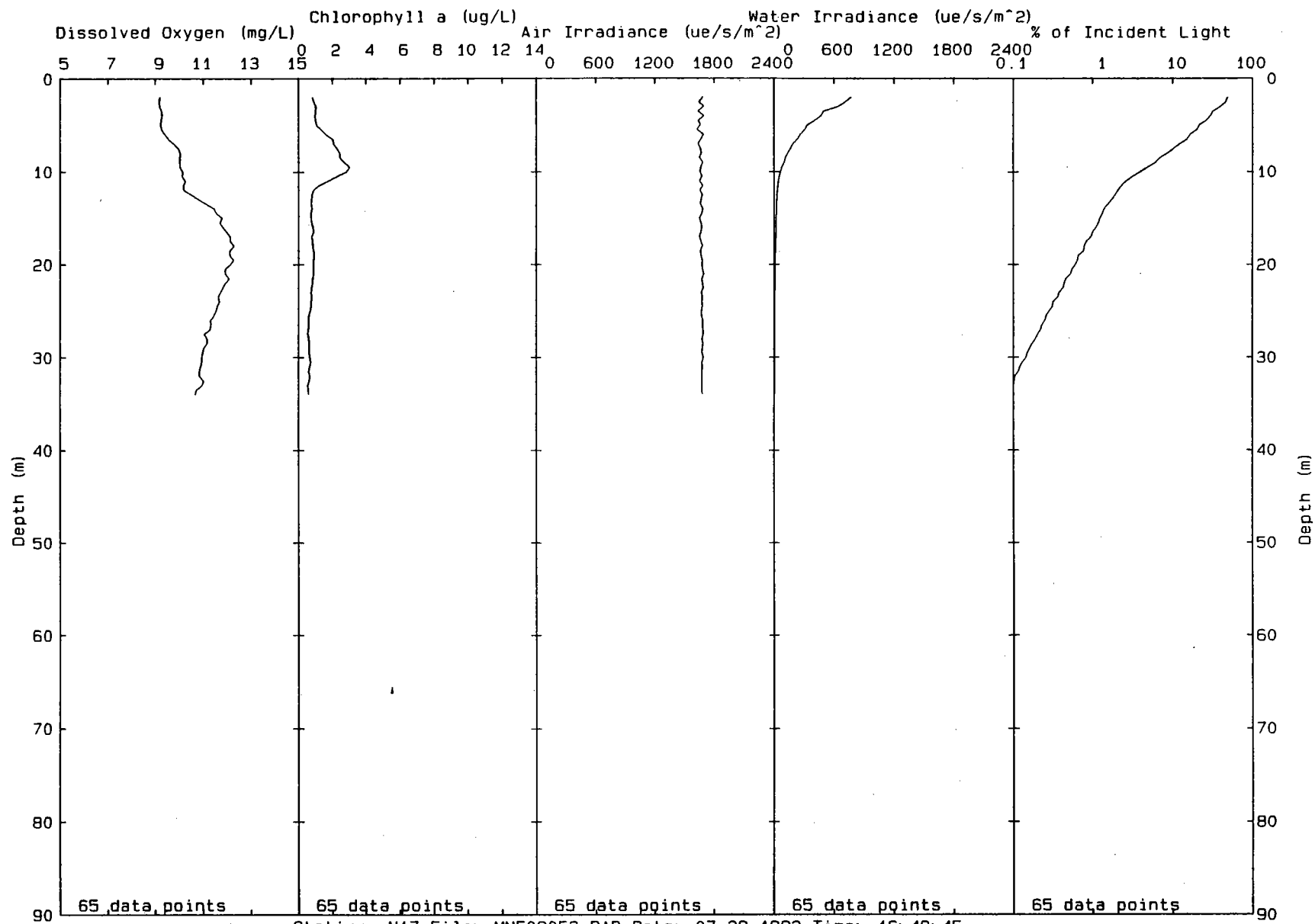
Station: N16P File: MNF08051.PAB Date: 07-29-1992 Time: 16:23:19

00444

00445

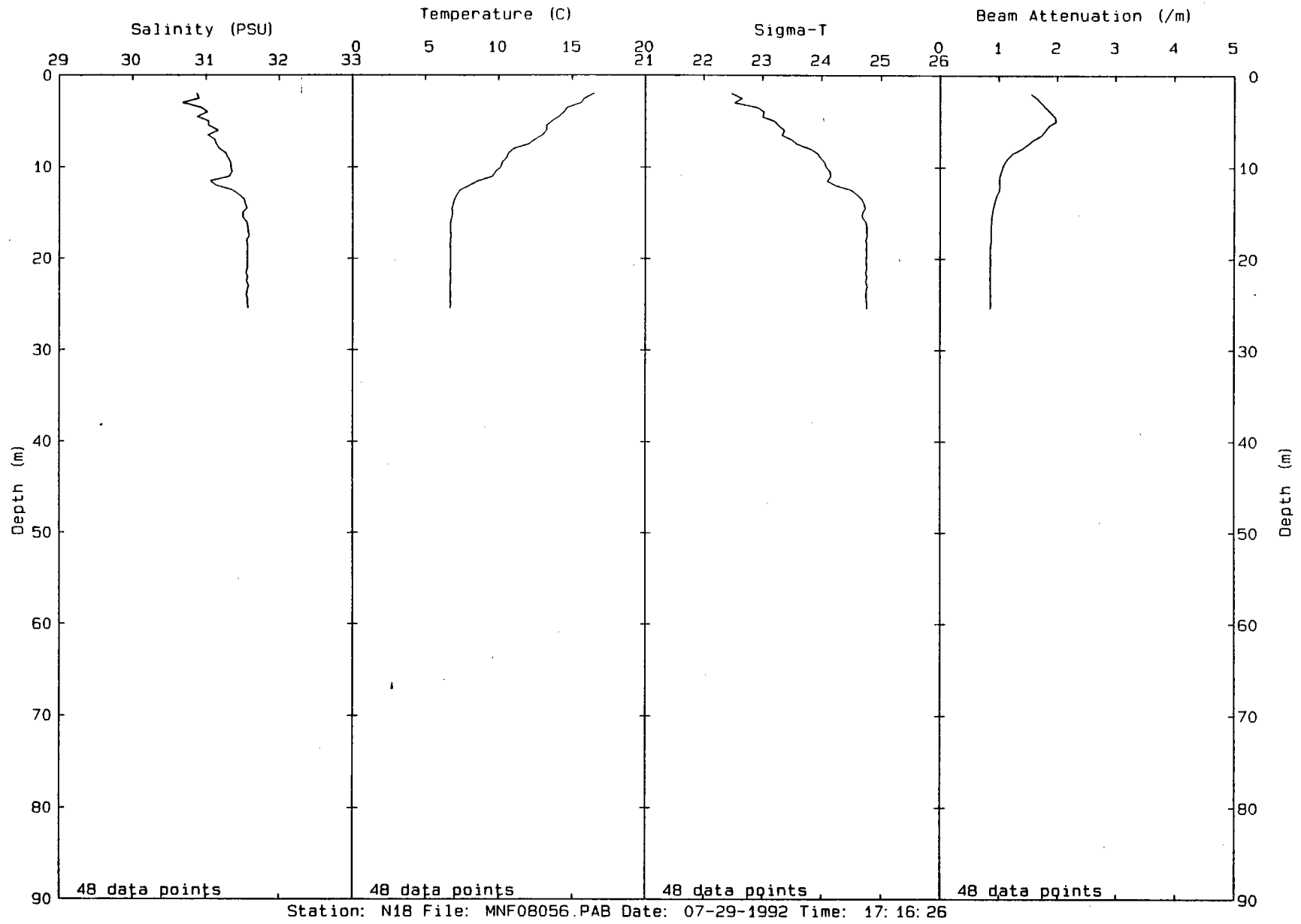


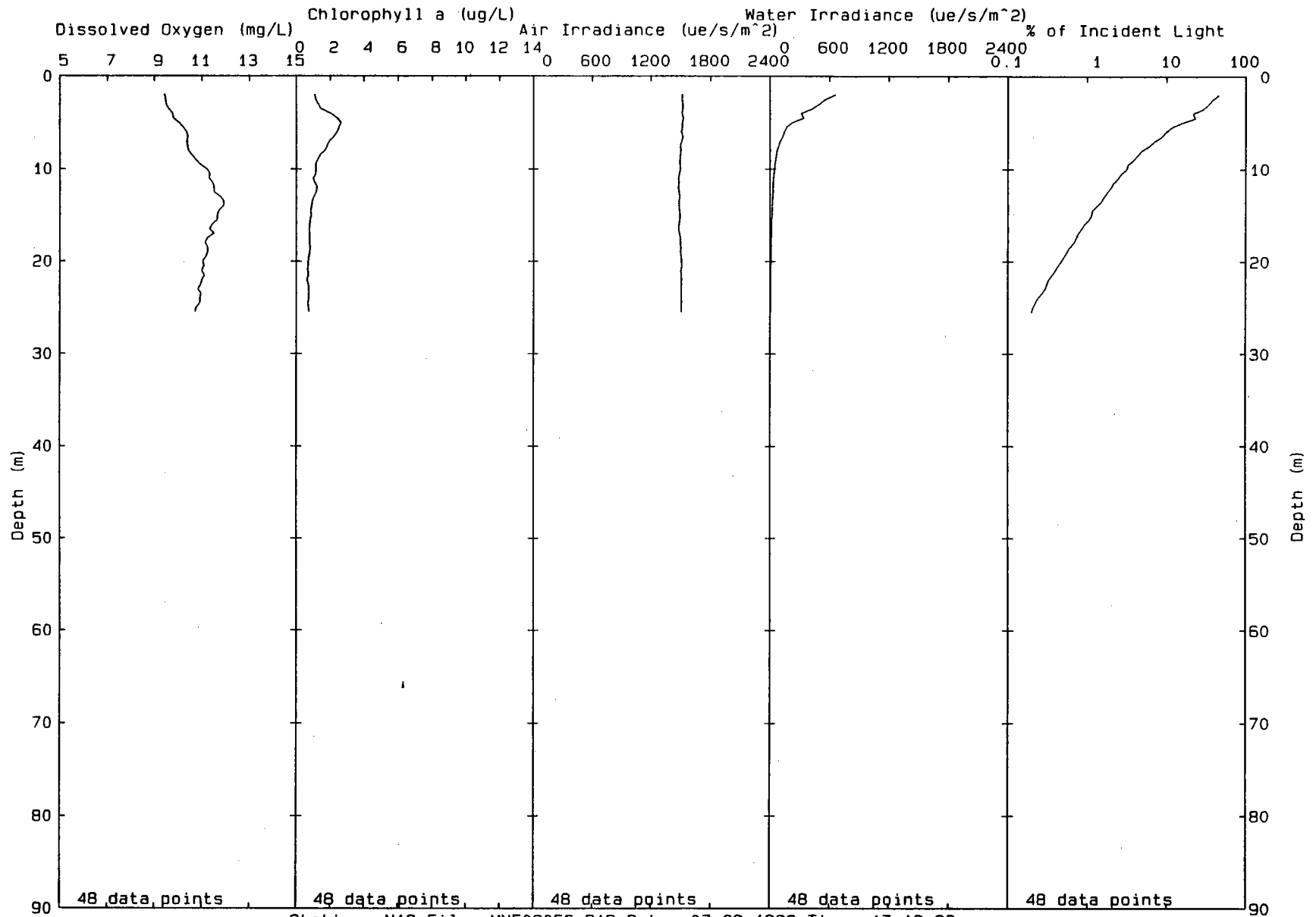
00446



Station: N17 File: MNF08053.PAB Date: 07-29-1992 Time: 16:48:45

00447

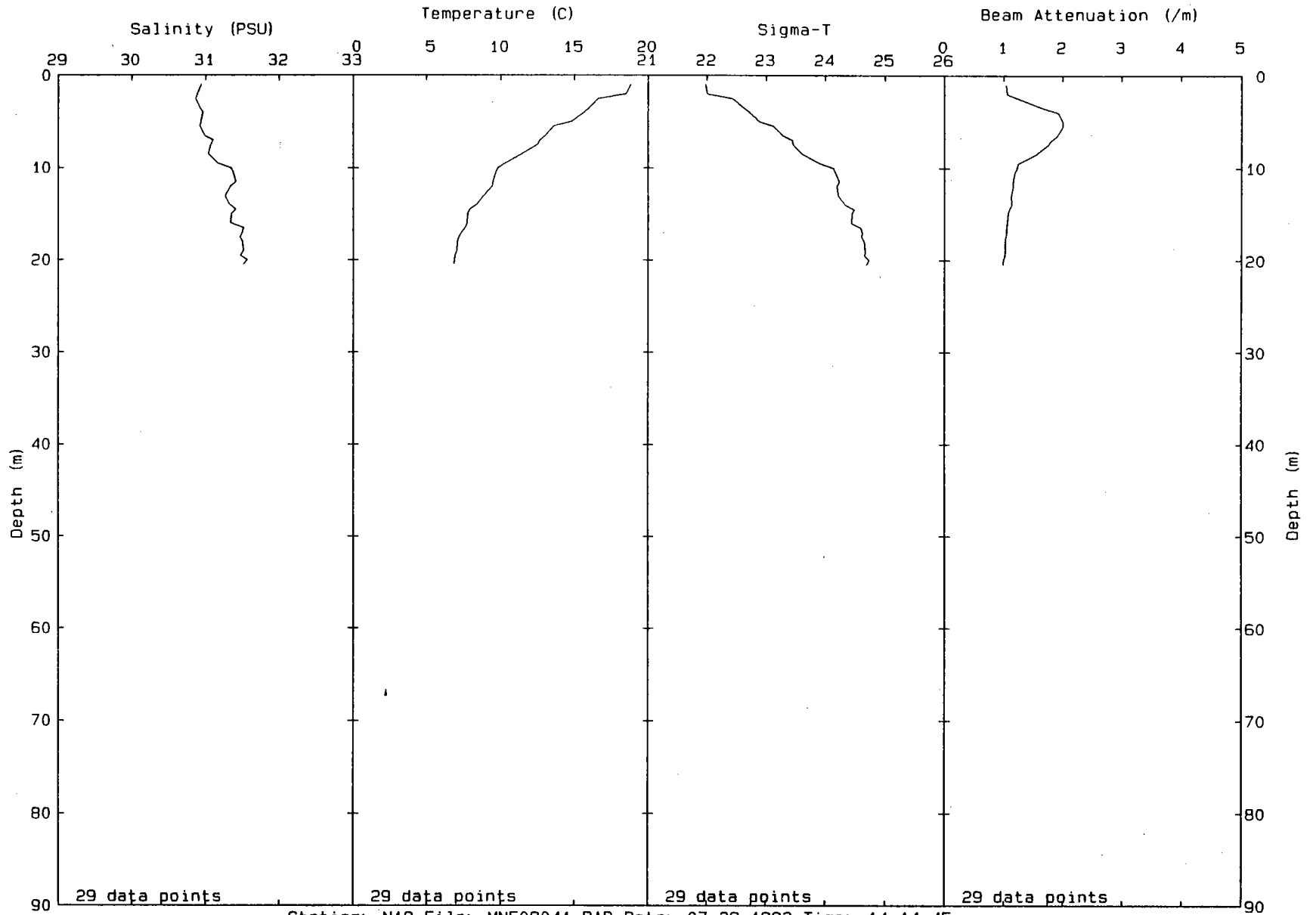


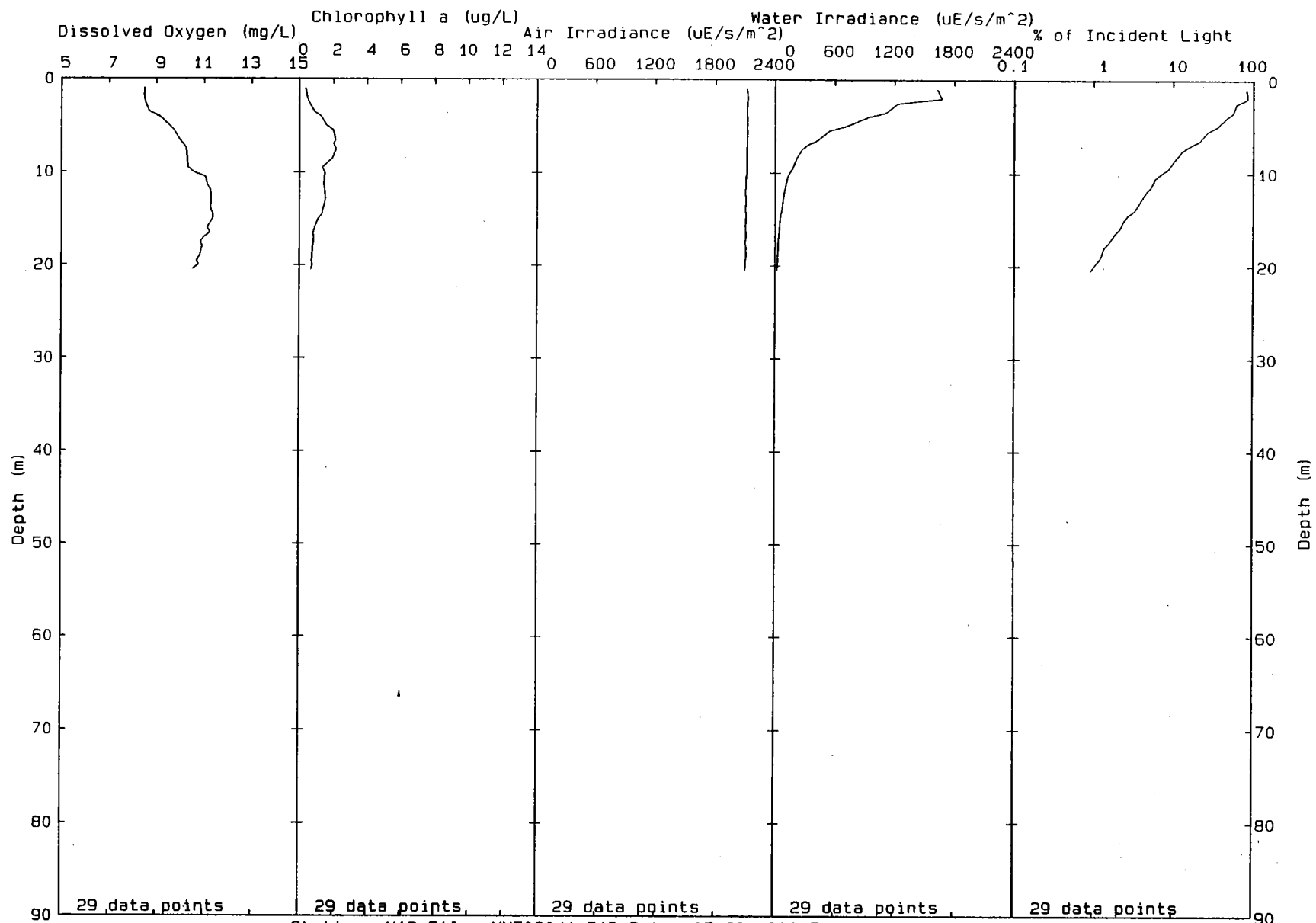


Station: N18 File: MNF08056.PAB Date: 07-29-1992 Time: 17:16:26

00448

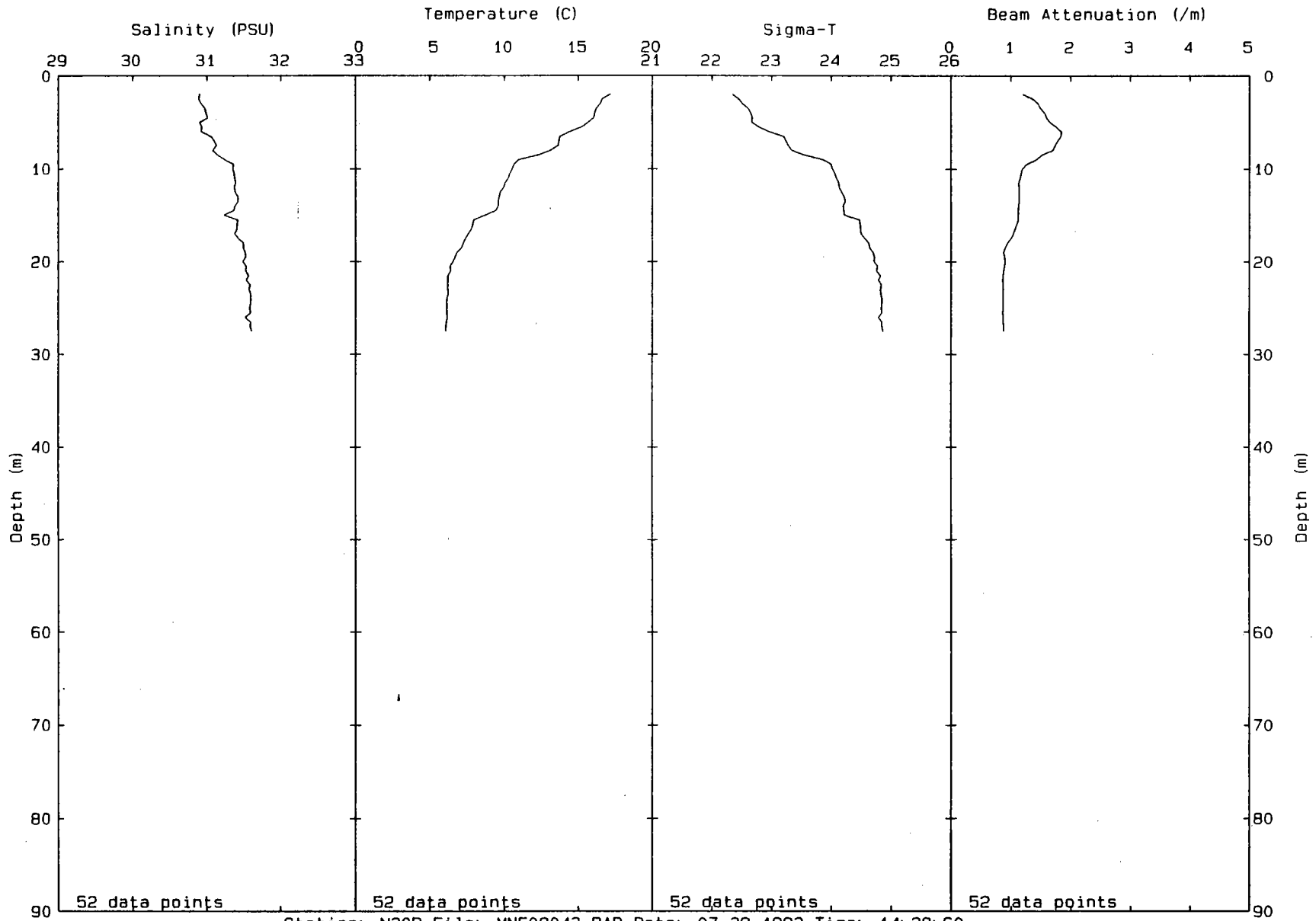
00449





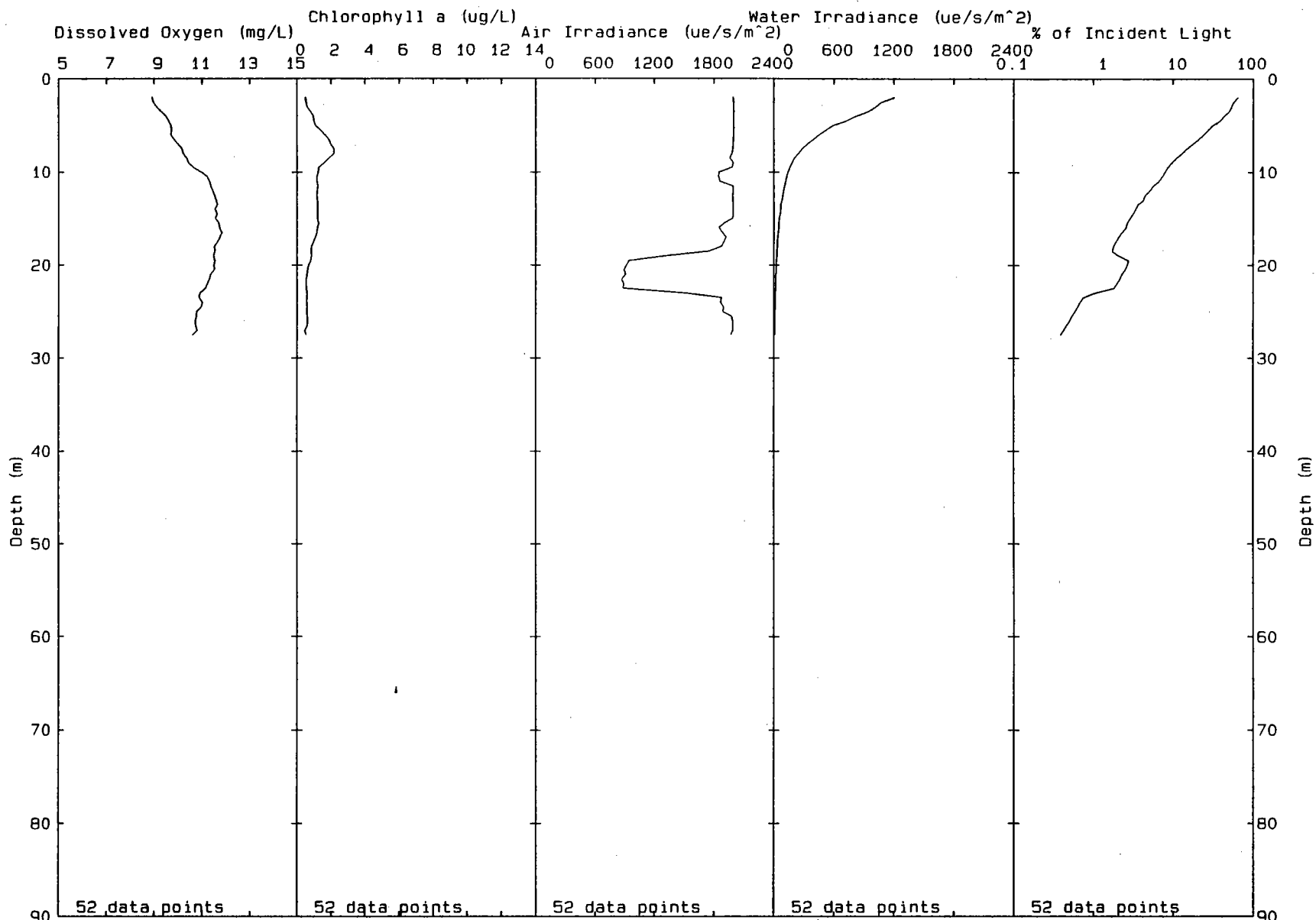
Station: N19 File: MNF08041.PAB Date: 07-29-1992 Time: 14:14:45

00450



Station: N20P File: MNF08043.PAB Date: 07-29-1992 Time: 14:38:60

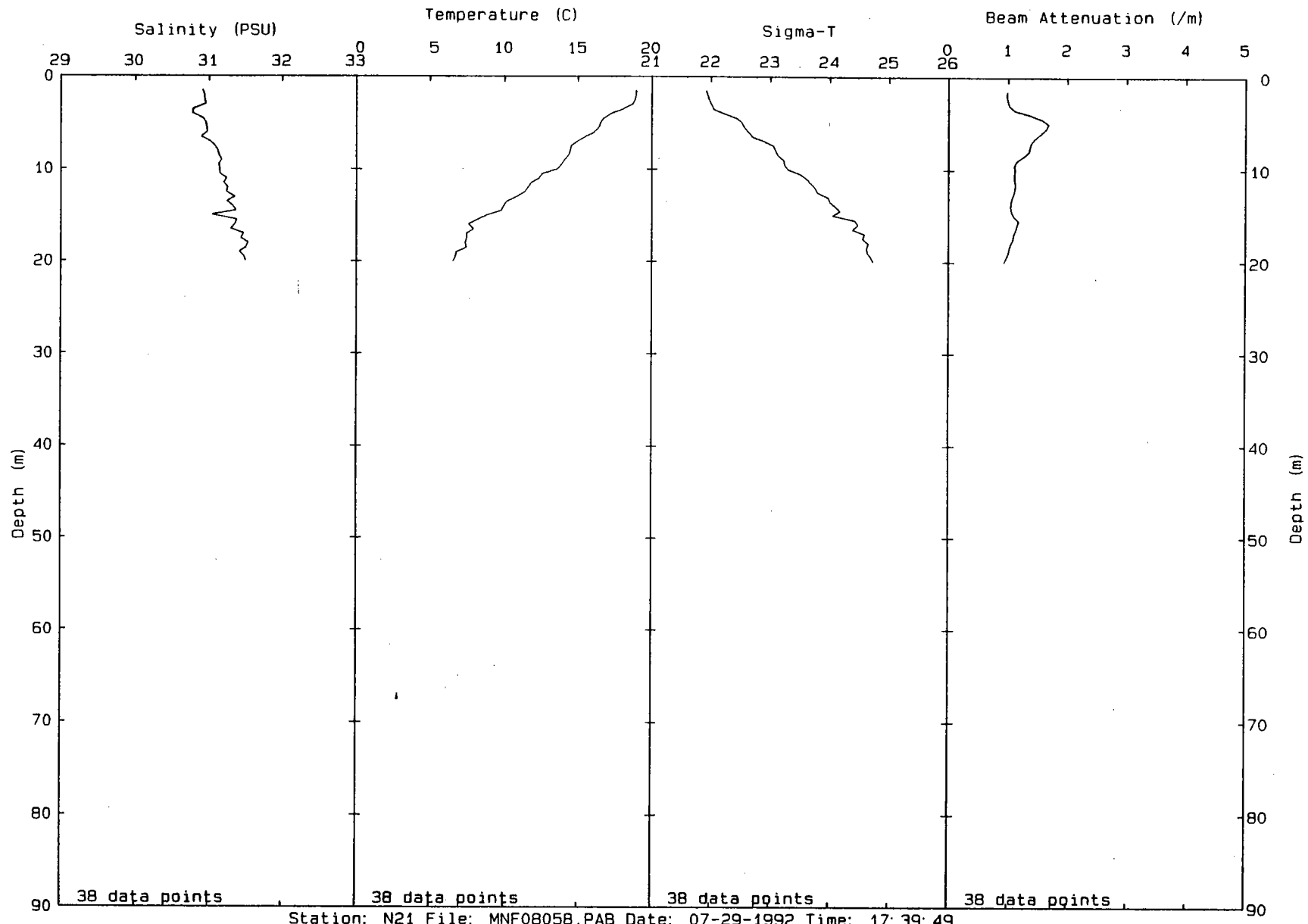
00451



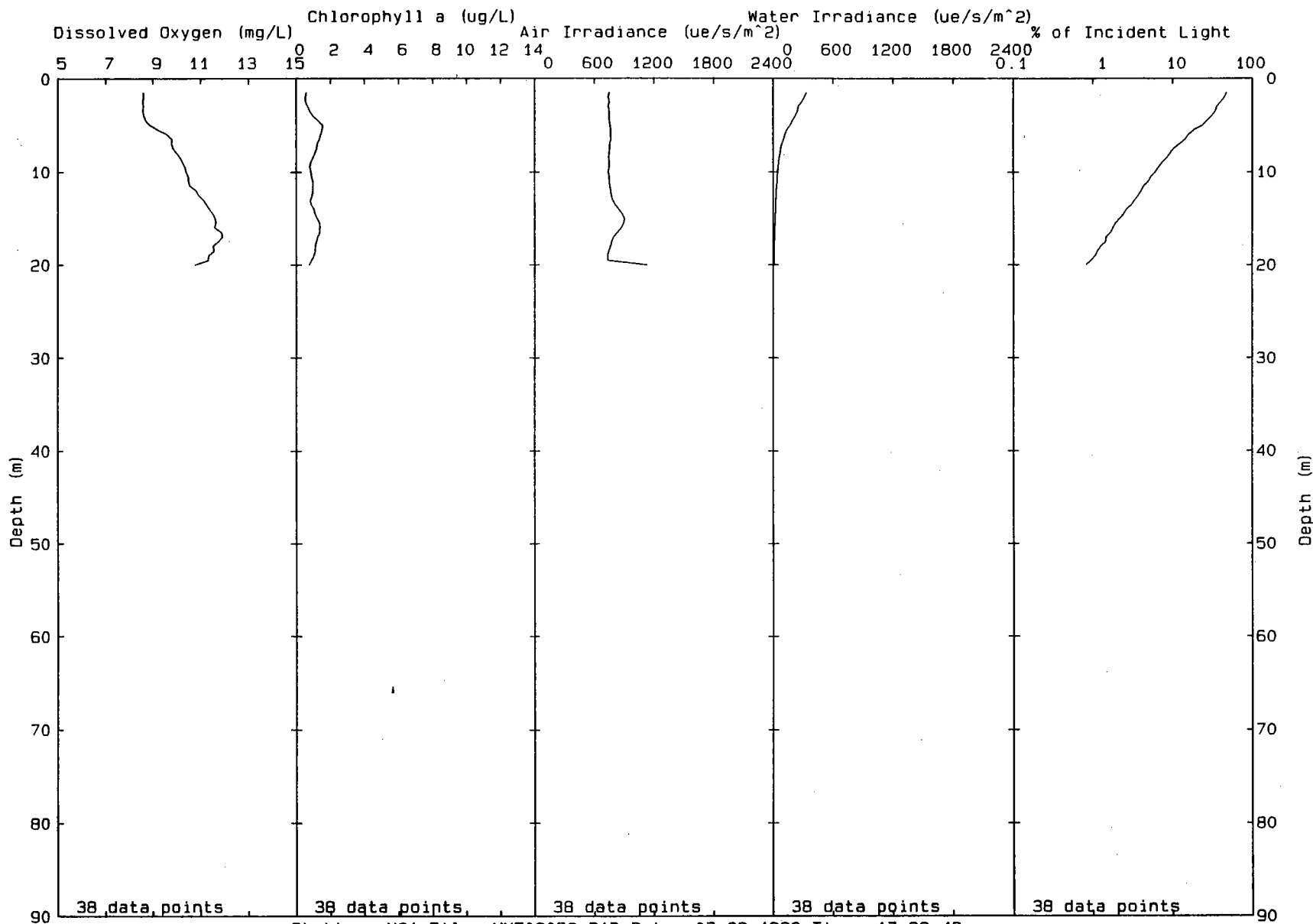
Station: N20P File: MNF08043.PAB Date: 07-29-1992 Time: 14:38:60

03452

00453



Station: N21 File: MNF08058.PAB Date: 07-29-1992 Time: 17:39:49

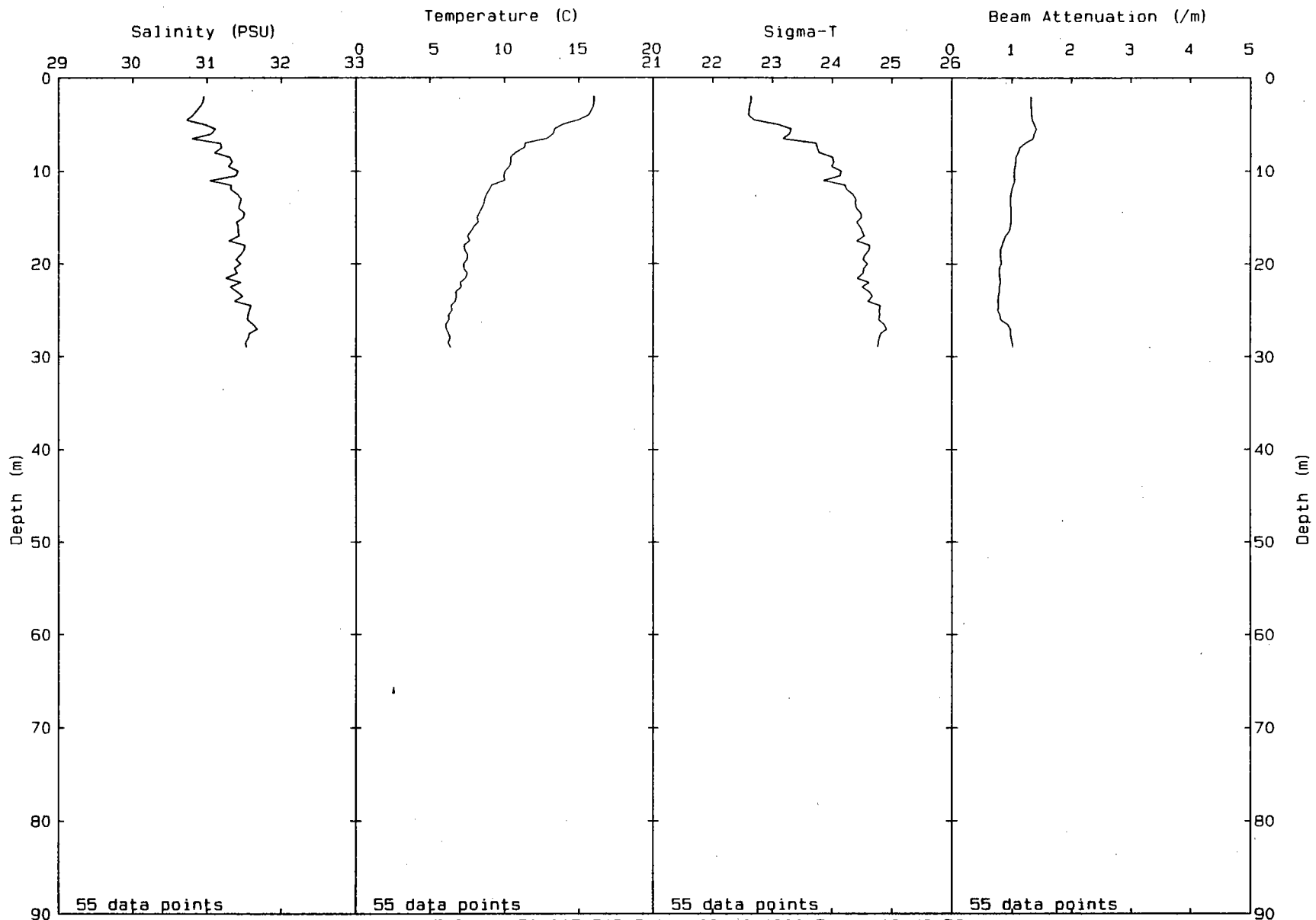


Station: N21 File: MNF08058.PAB Date: 07-29-1992 Time: 17:39:49

00454

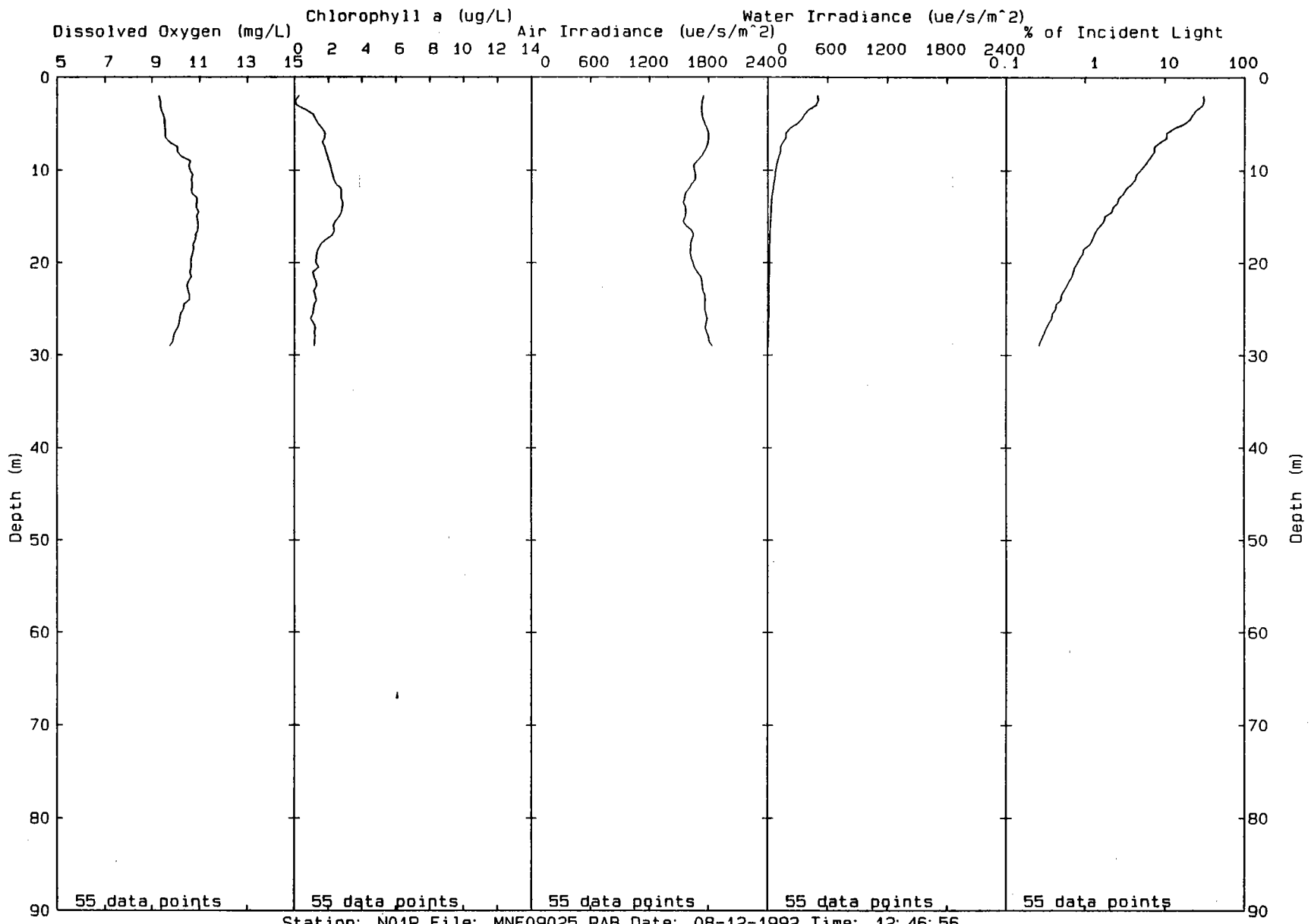
**Mid-August Profiles**

00455



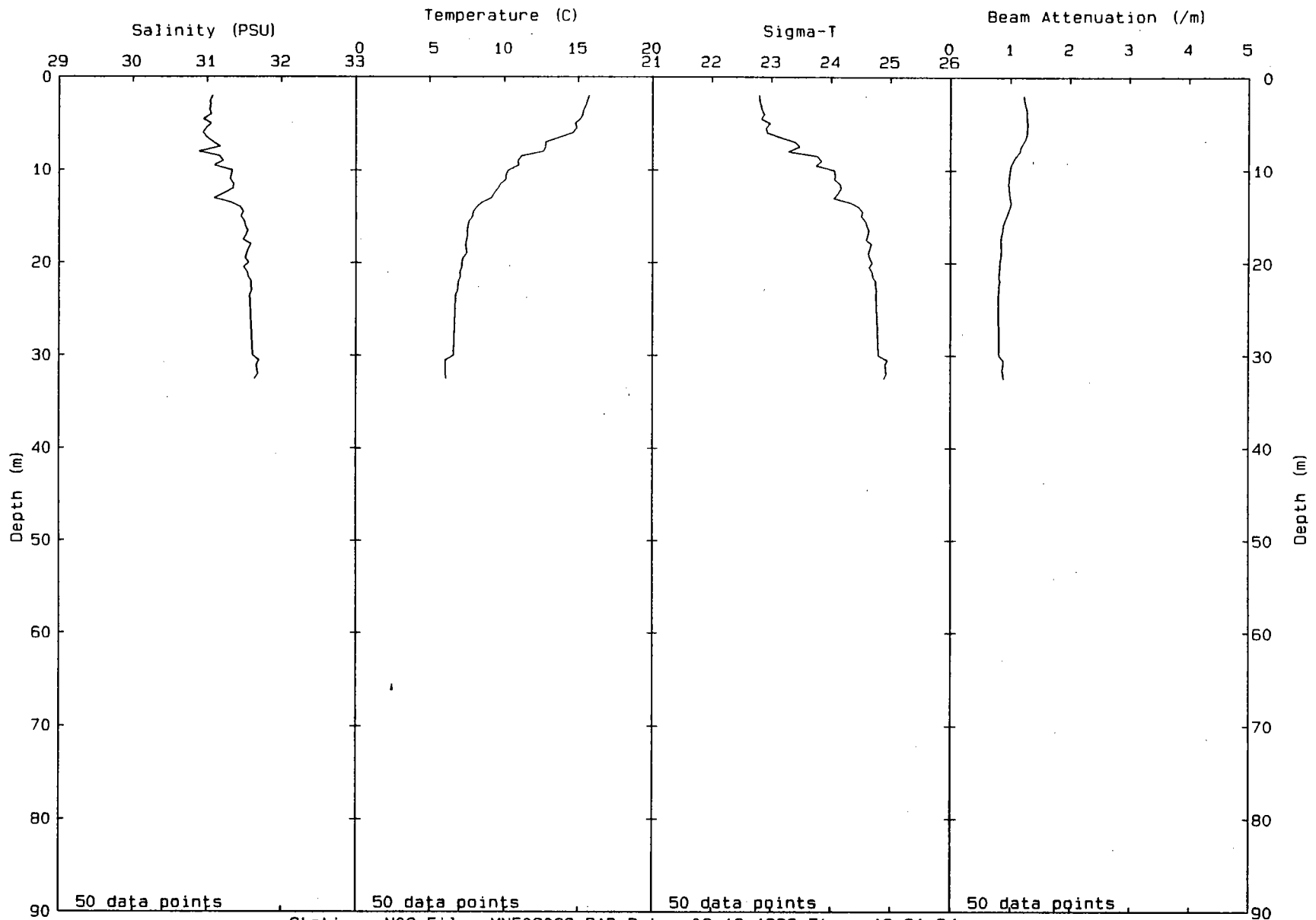
Station: N01P File: MNF09025.PAB Date: 08-12-1992 Time: 12:46:56

00456

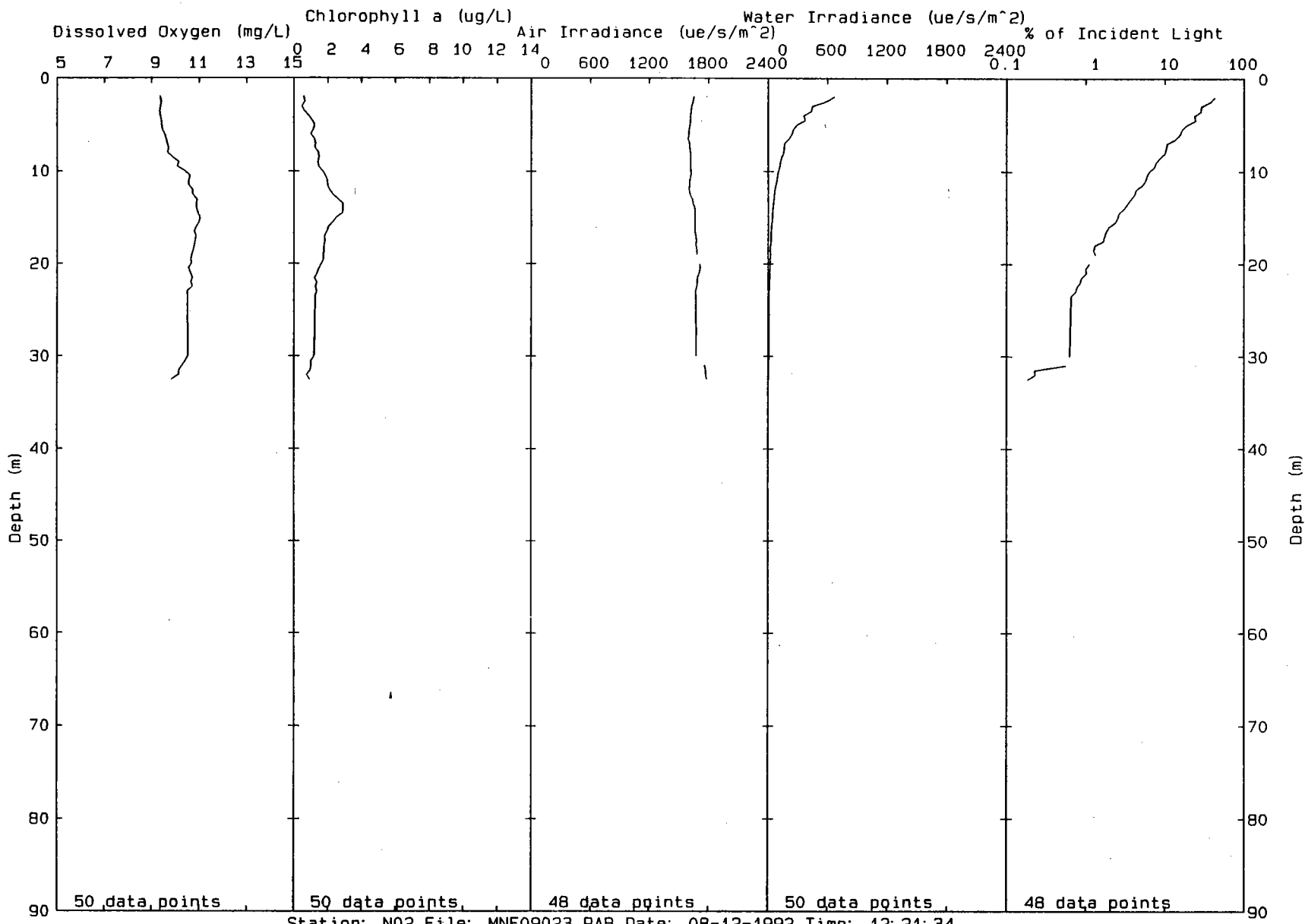


00457

00453

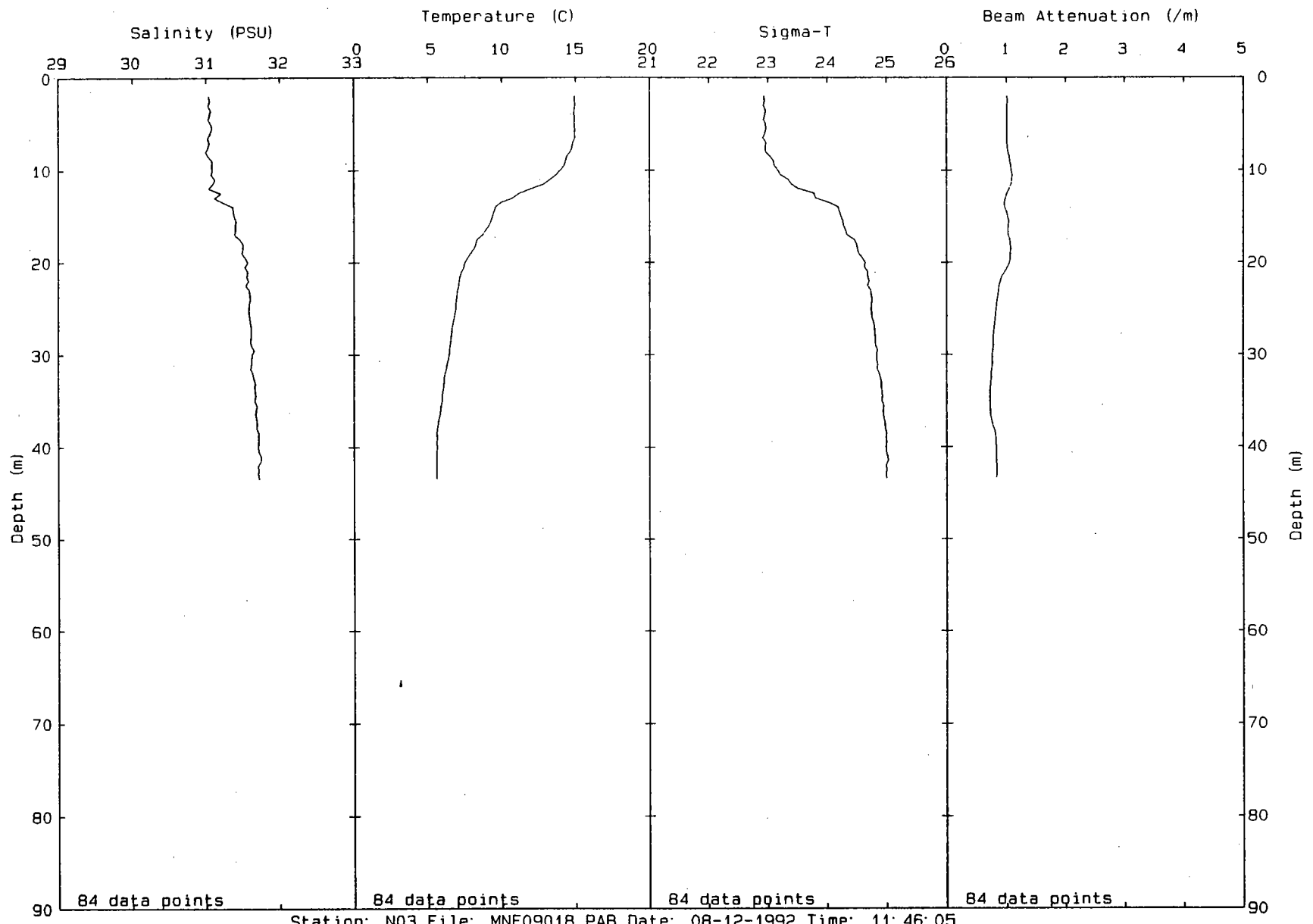


Station: N02 File: MNF09023.PAB Date: 08-12-1992 Time: 12: 21: 34



Station: N02 File: MNF09023.PAB Date: 08-12-1992 Time: 12: 21: 34

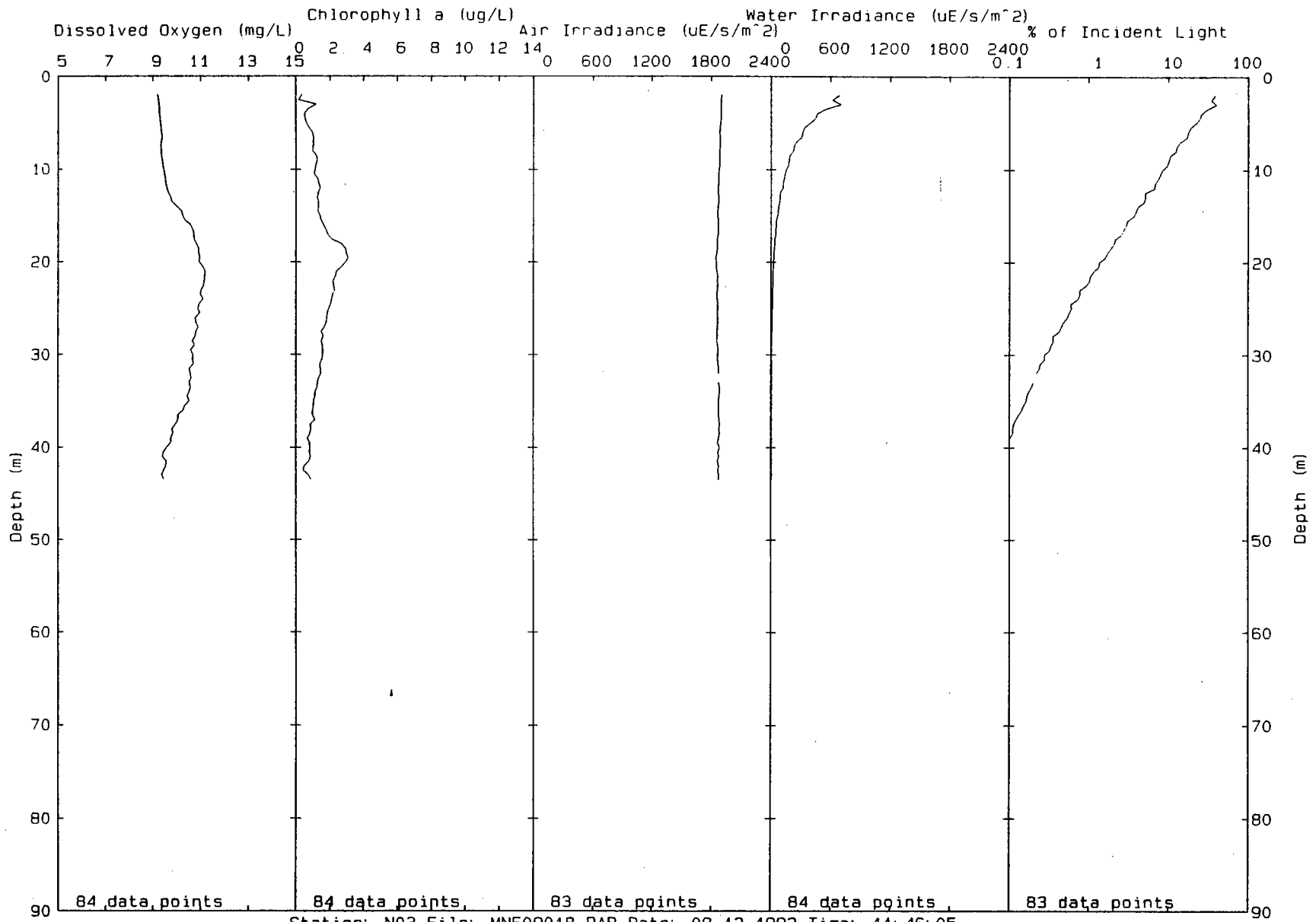
00459



Station: N03 File: MNF09018.PAB Date: 08-12-1992 Time: 11:46:05

00400

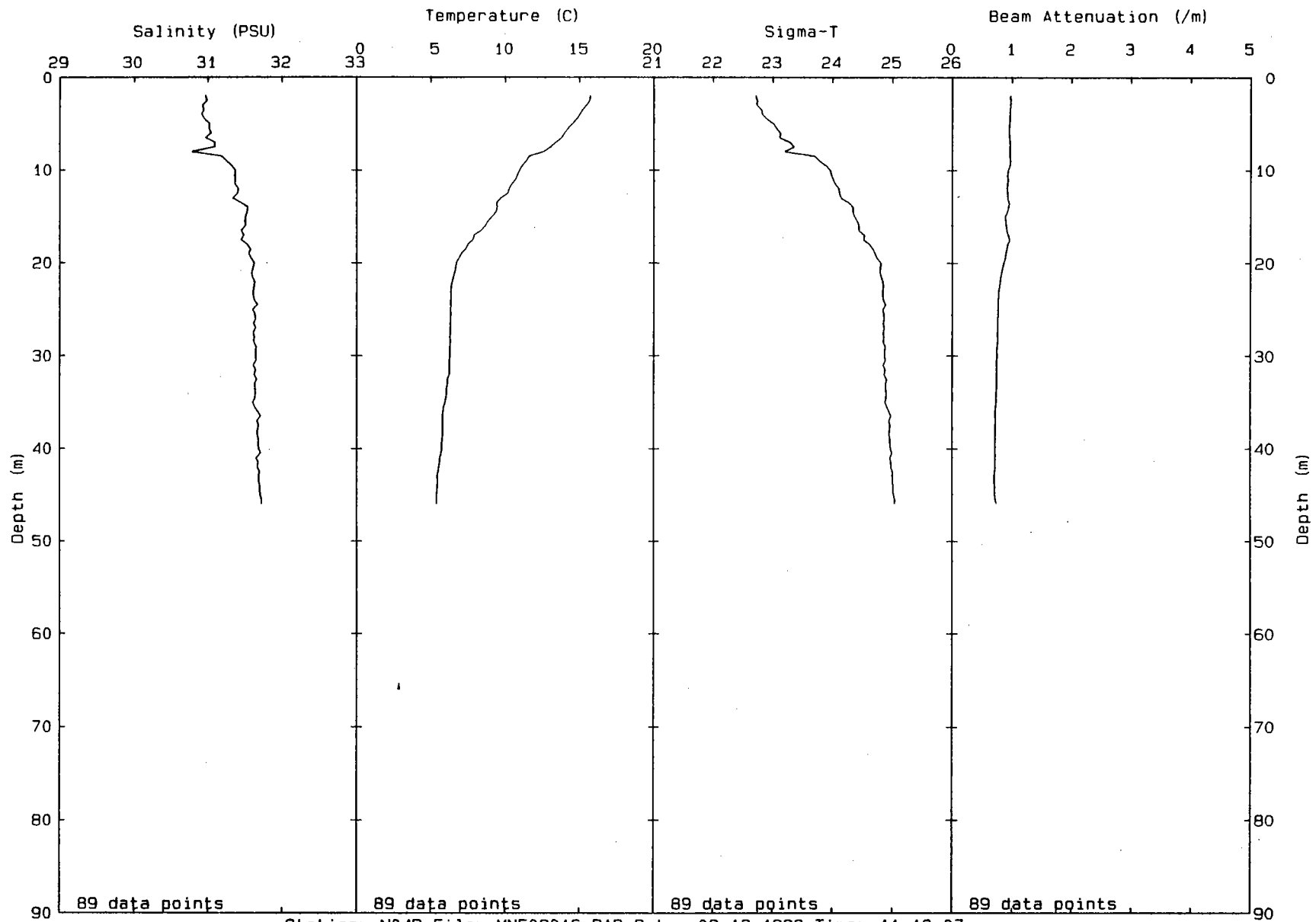




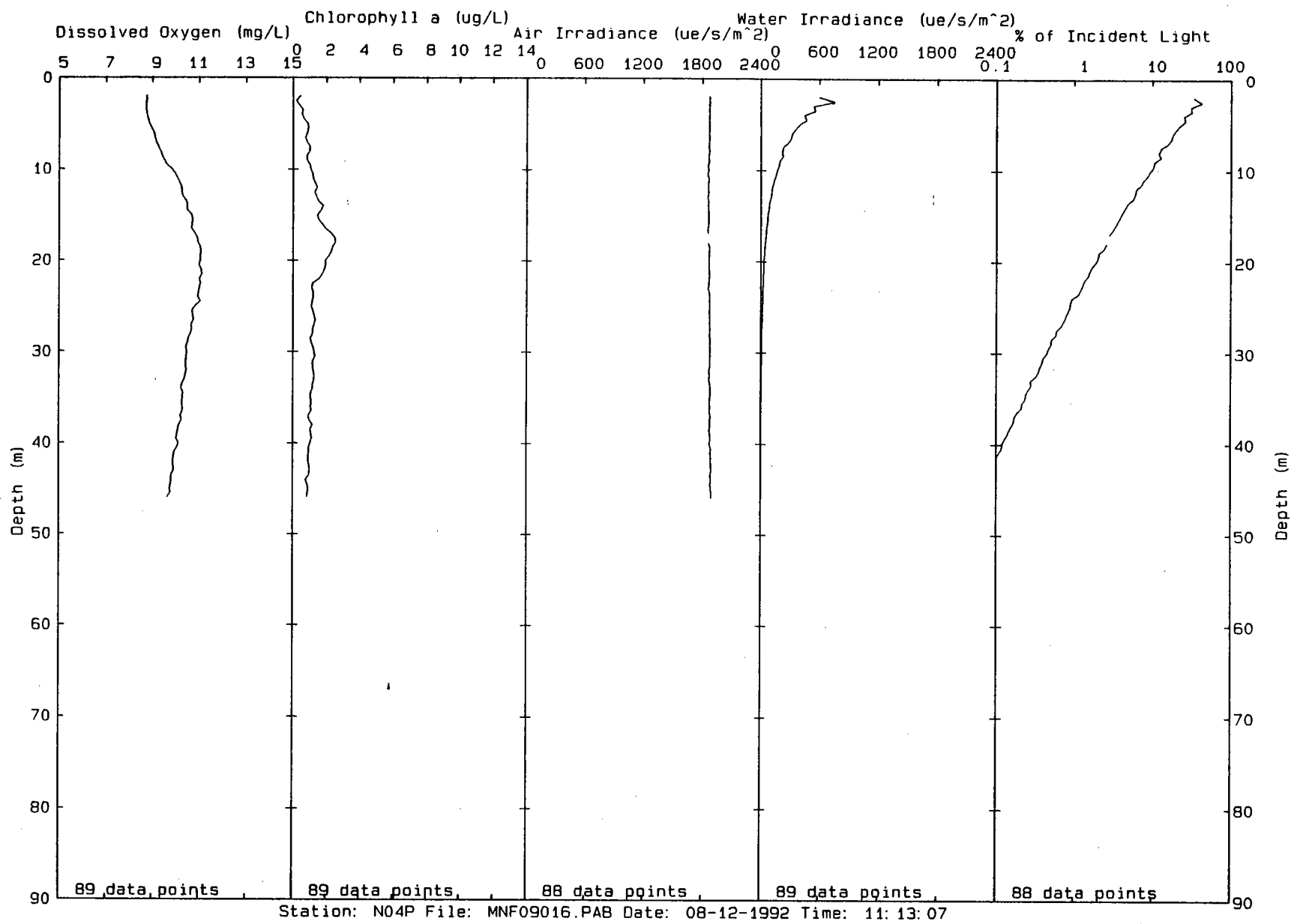
Station: N03 File: MNF09018.PAB Date: 08-12-1992 Time: 11:46:05

00401

00402

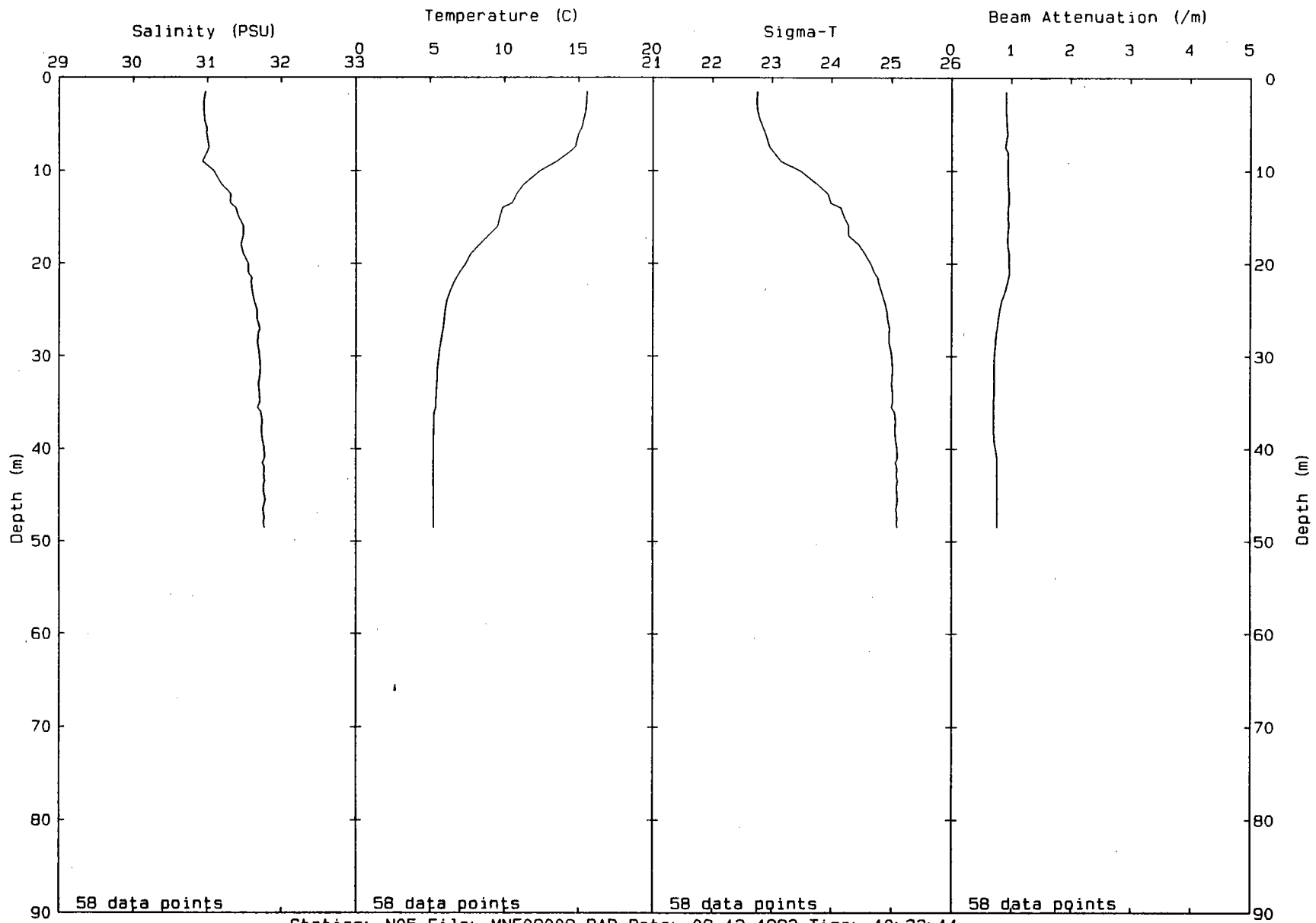


Station: N04P File: MNF09016.PAB Date: 08-12-1992 Time: 11:13:07

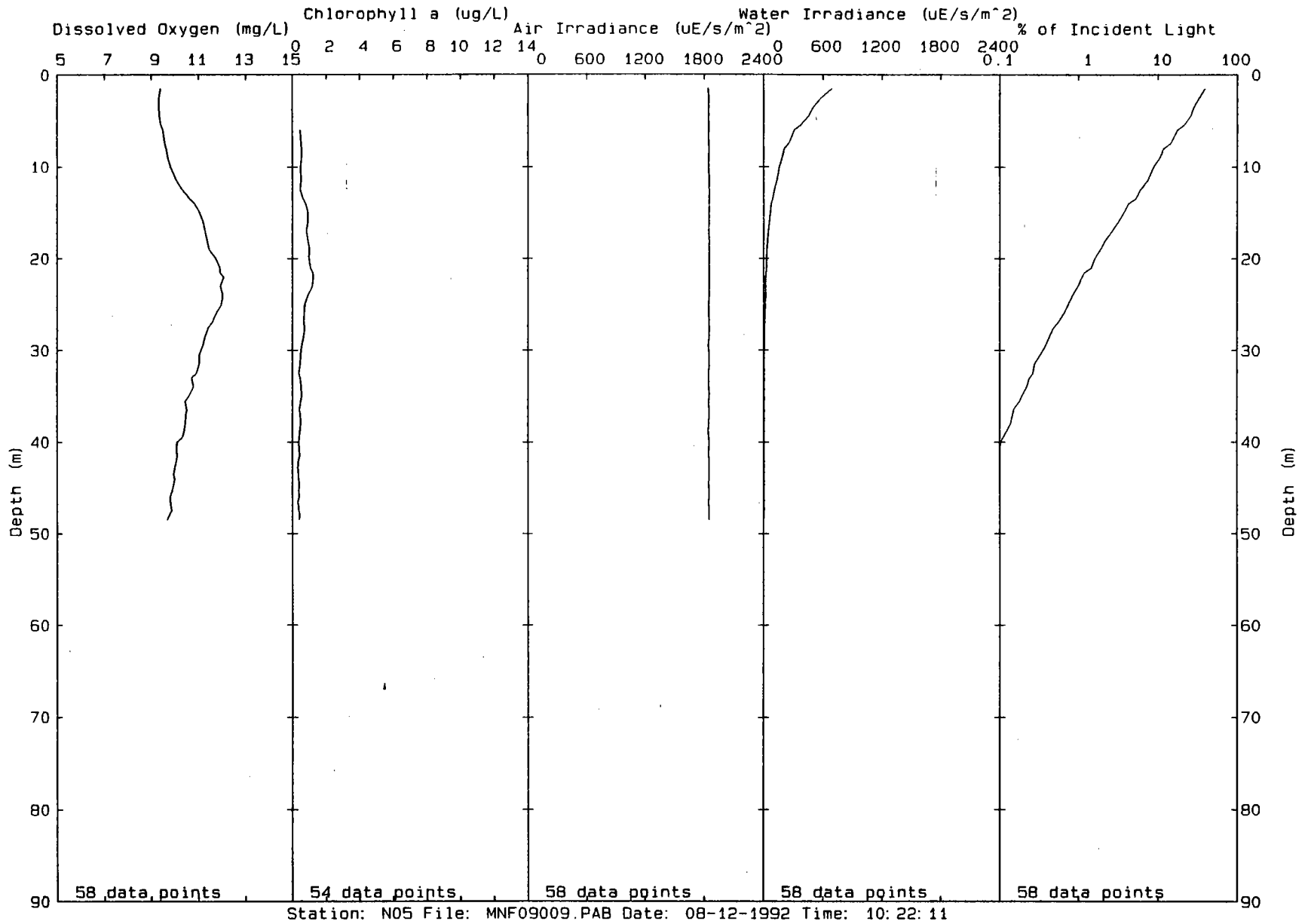


00403

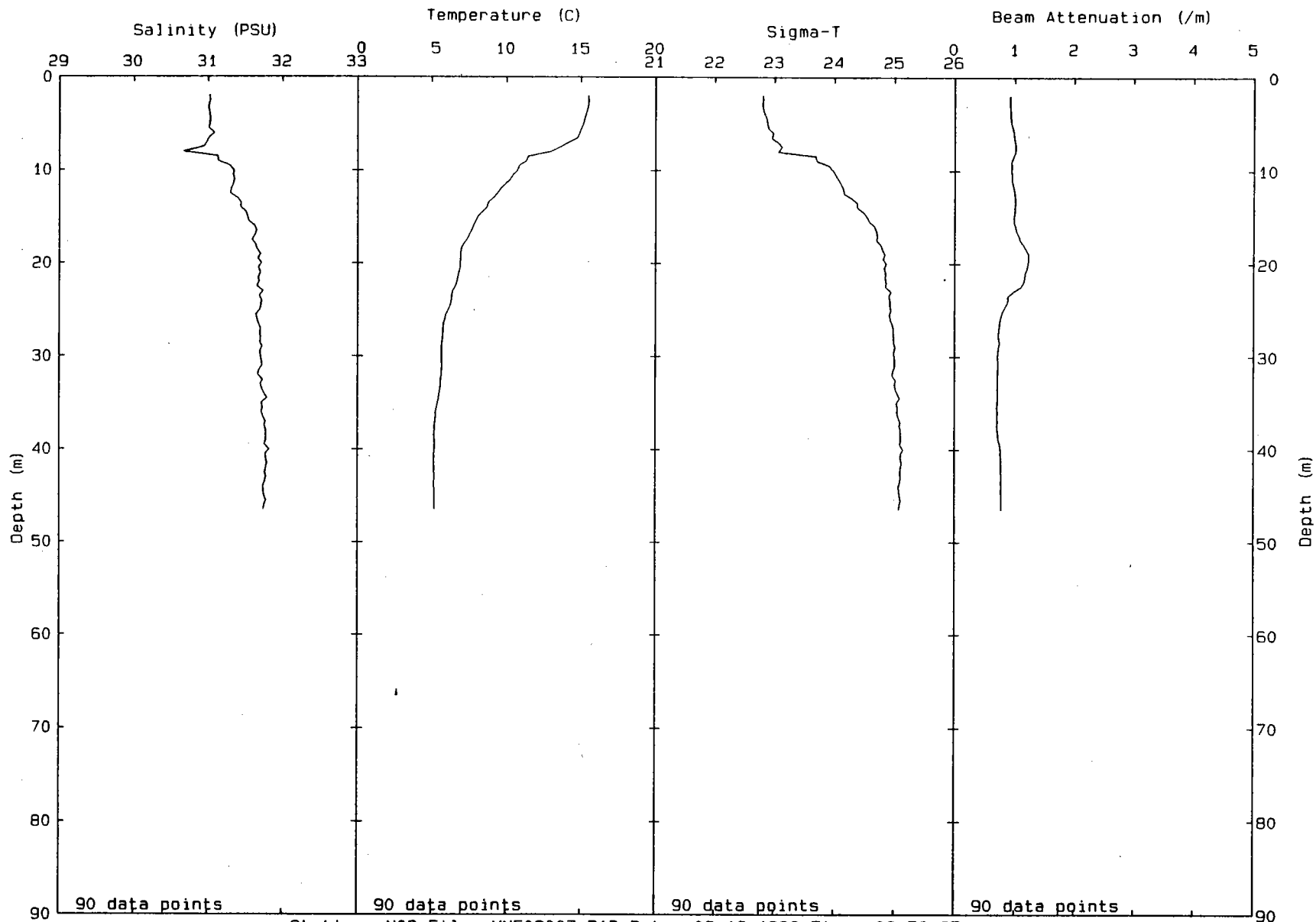
00400



Station: N05 File: MNF09009.PAB Date: 08-12-1992 Time: 10:22:11

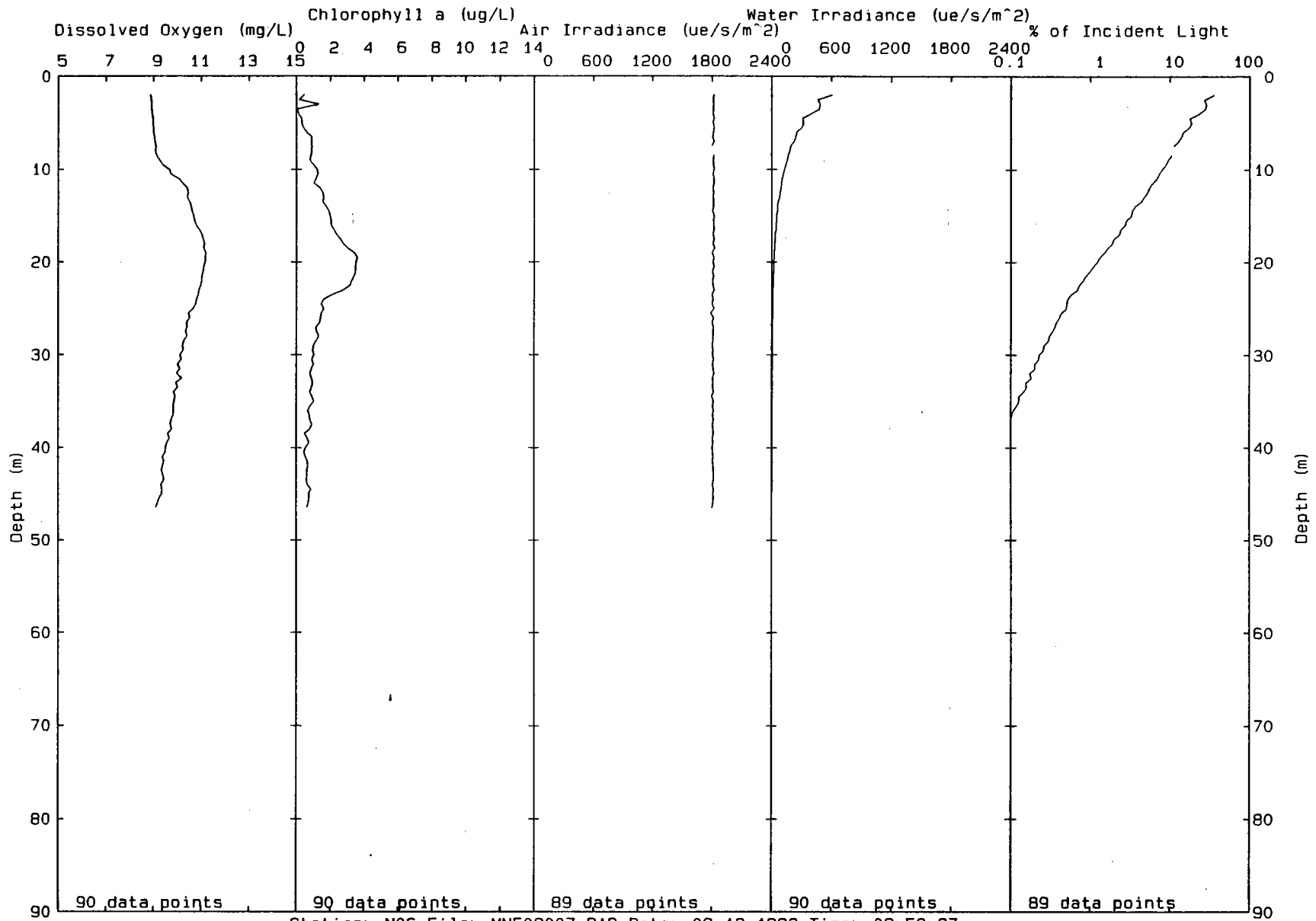


00405

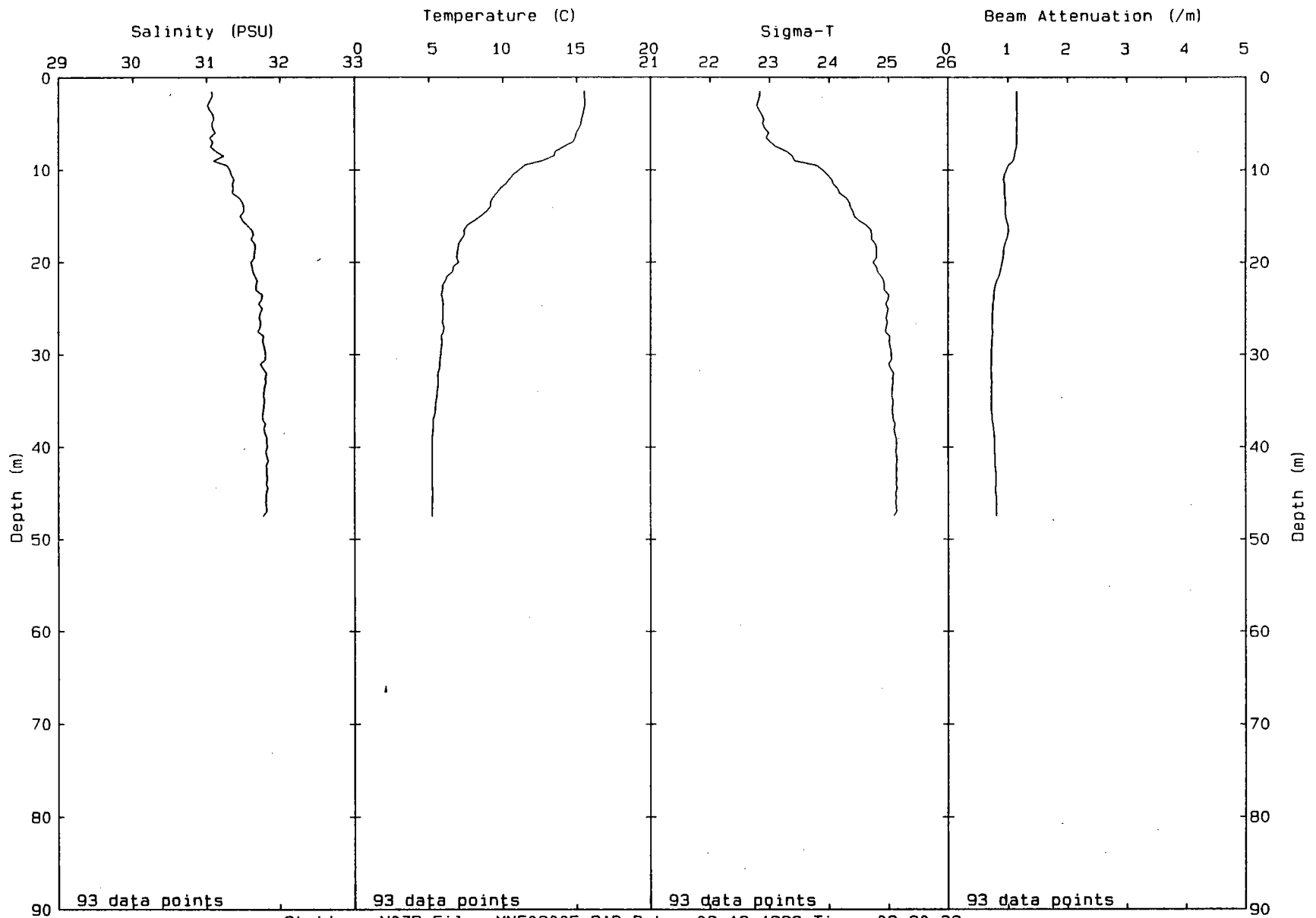


Station: N06 File: MNF09007.PAB Date: 08-12-1992 Time: 09:53:27

00406



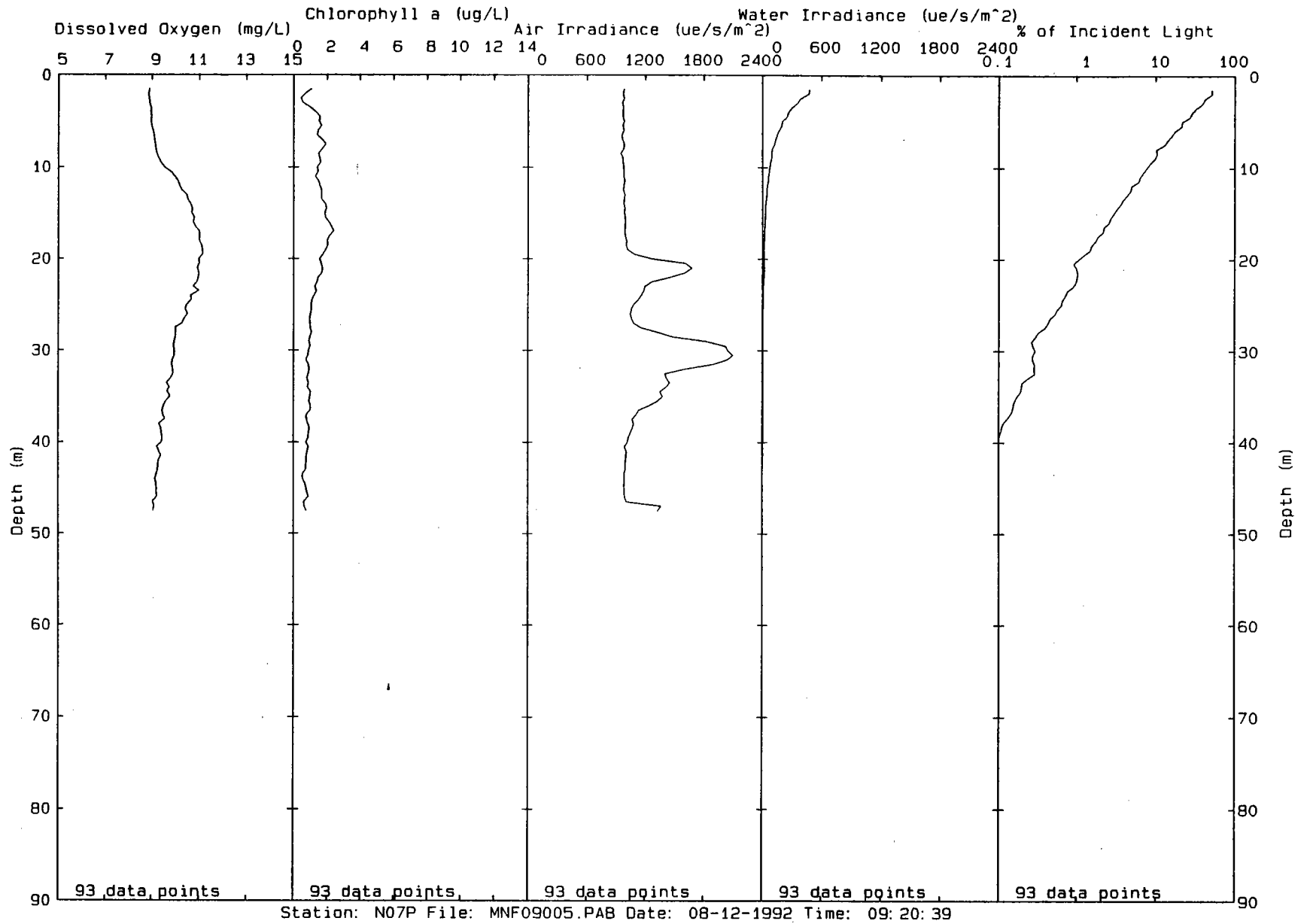
00467

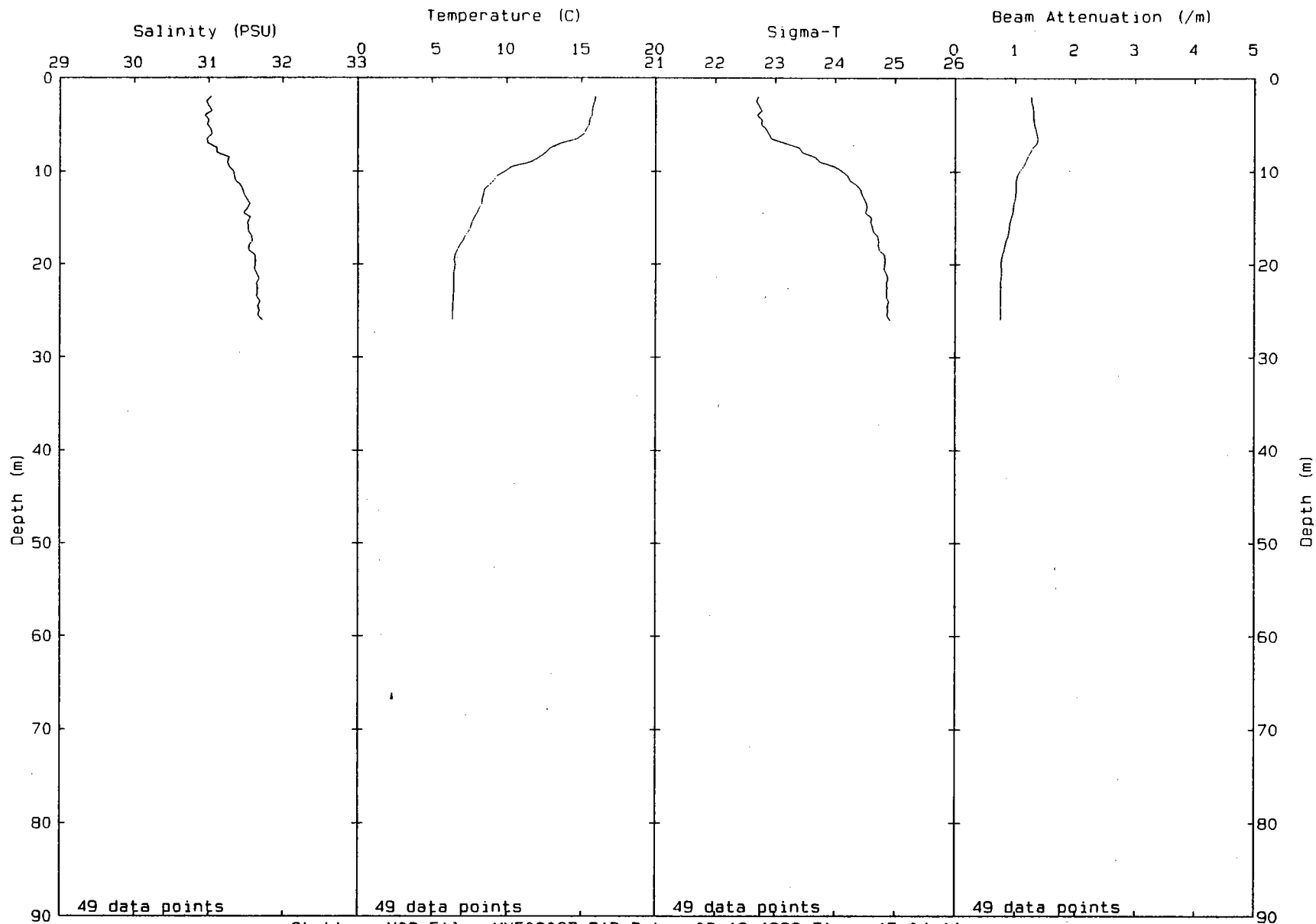


Station: N07P File: MNF09005.PAB Date: 08-12-1992 Time: 09: 20: 39

00468

00409

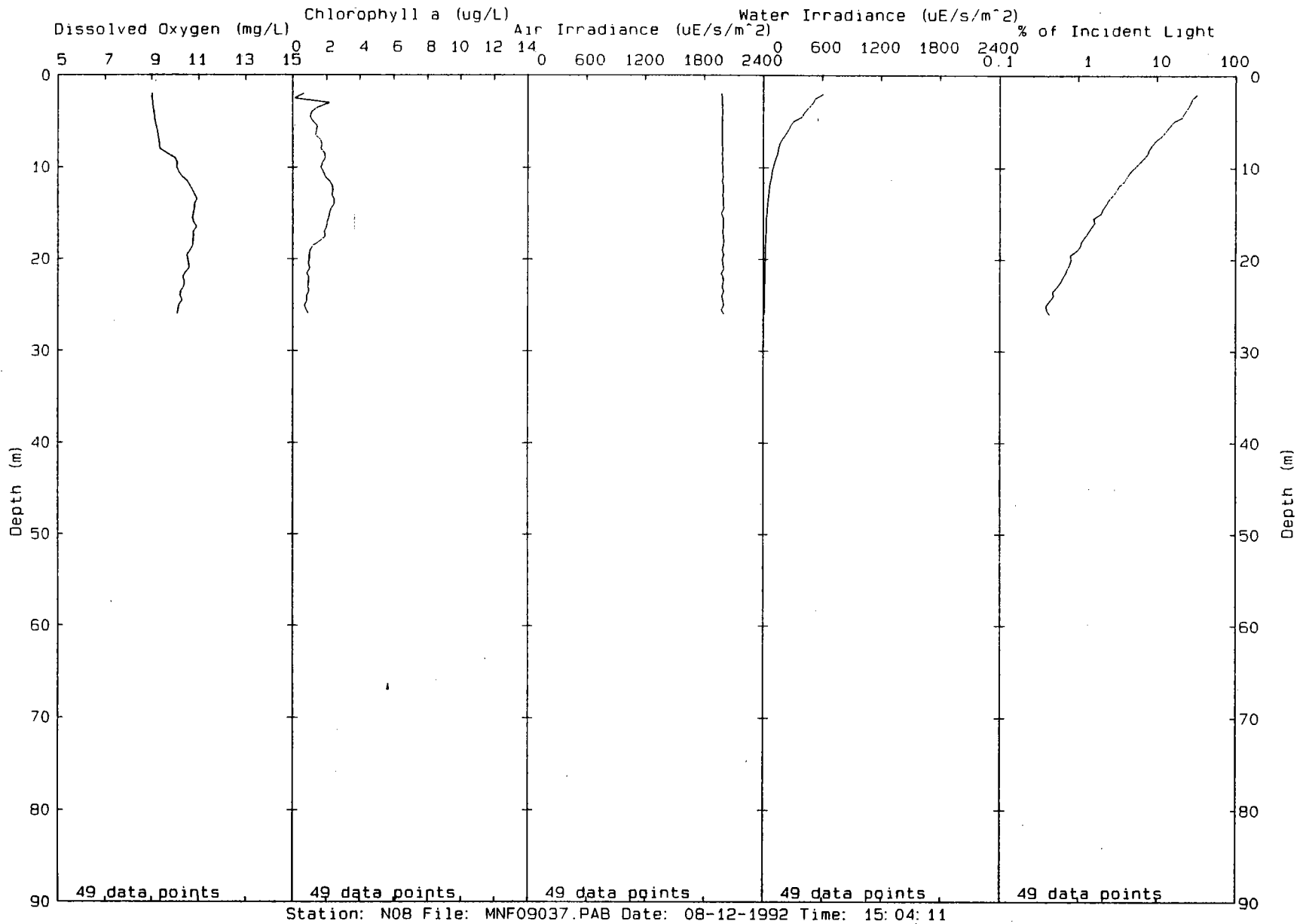


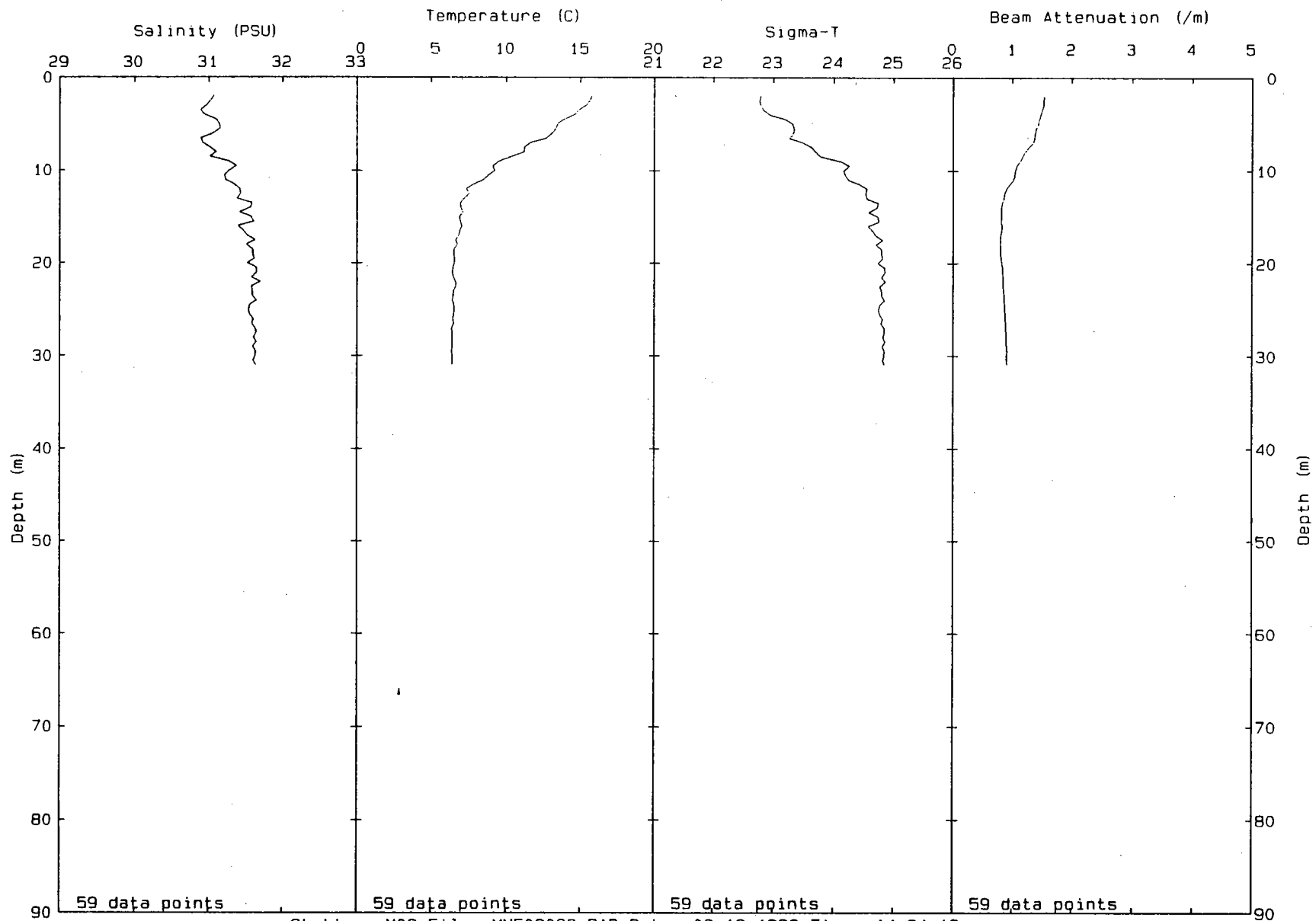


Station: NO8 File: MNF09037.PAB Date: 08-12-1992 Time: 15:04:11

00470

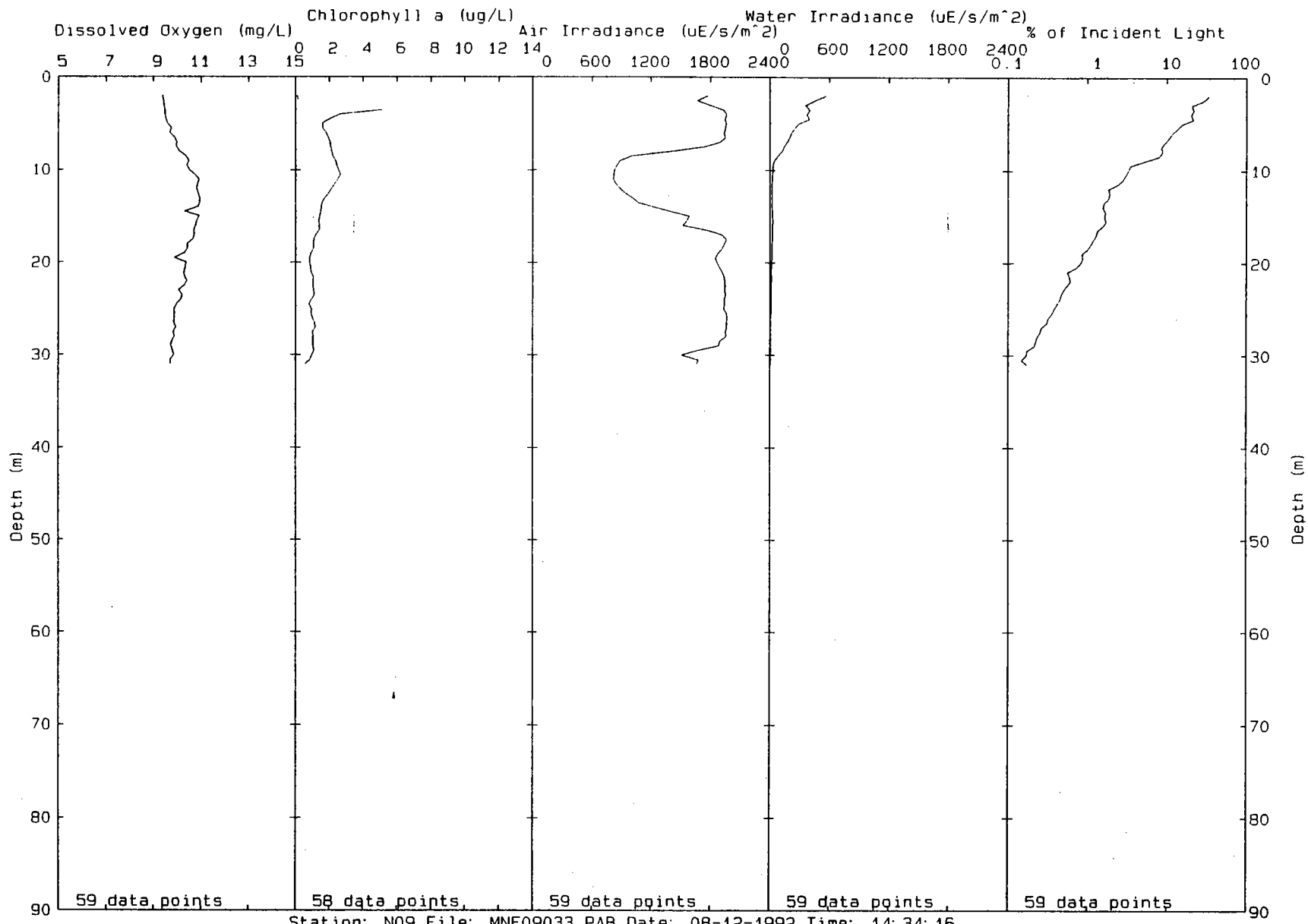
00471



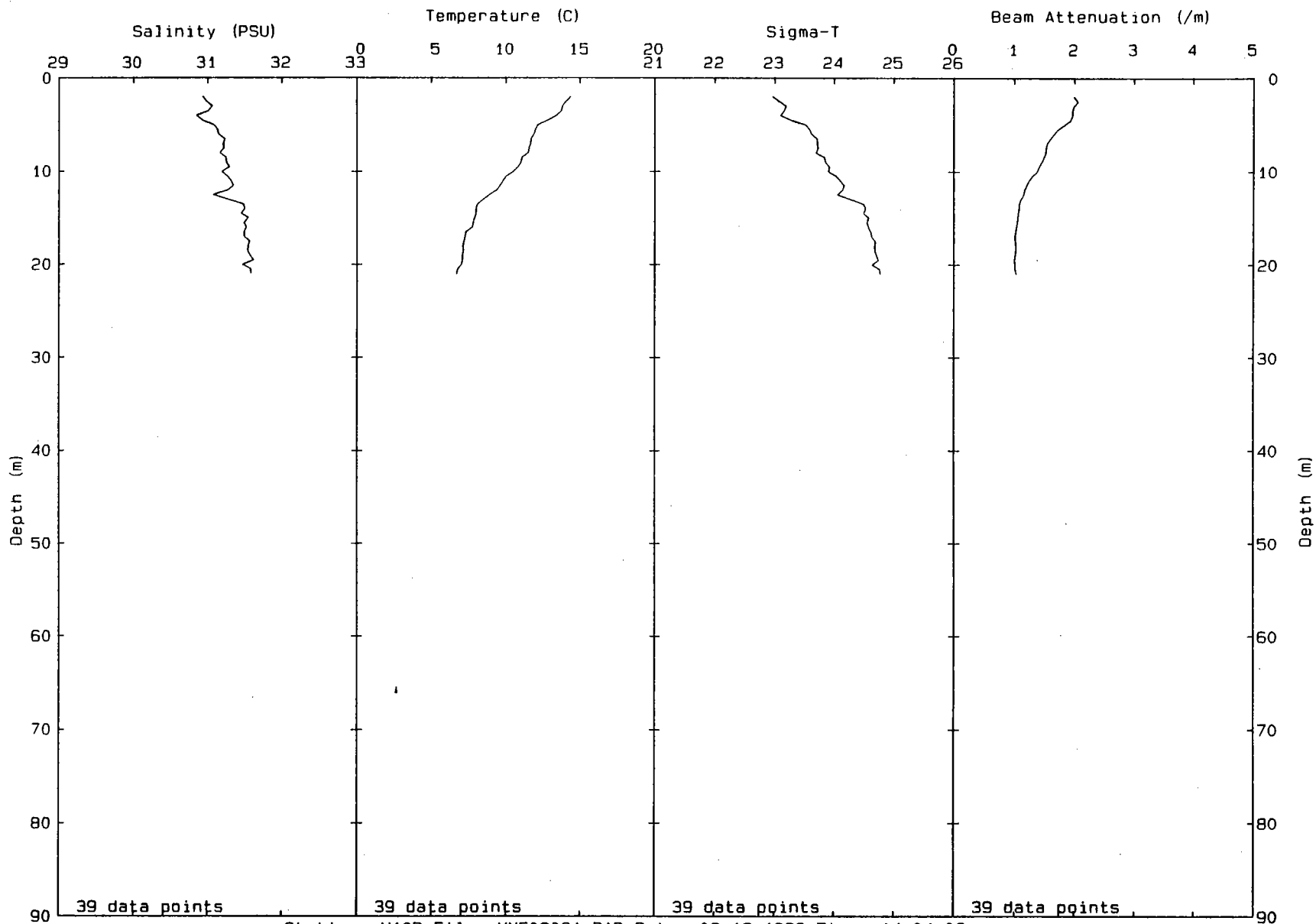


Station: N09 File: MNF09033.PAB Date: 08-12-1992 Time: 14:34:16

00412



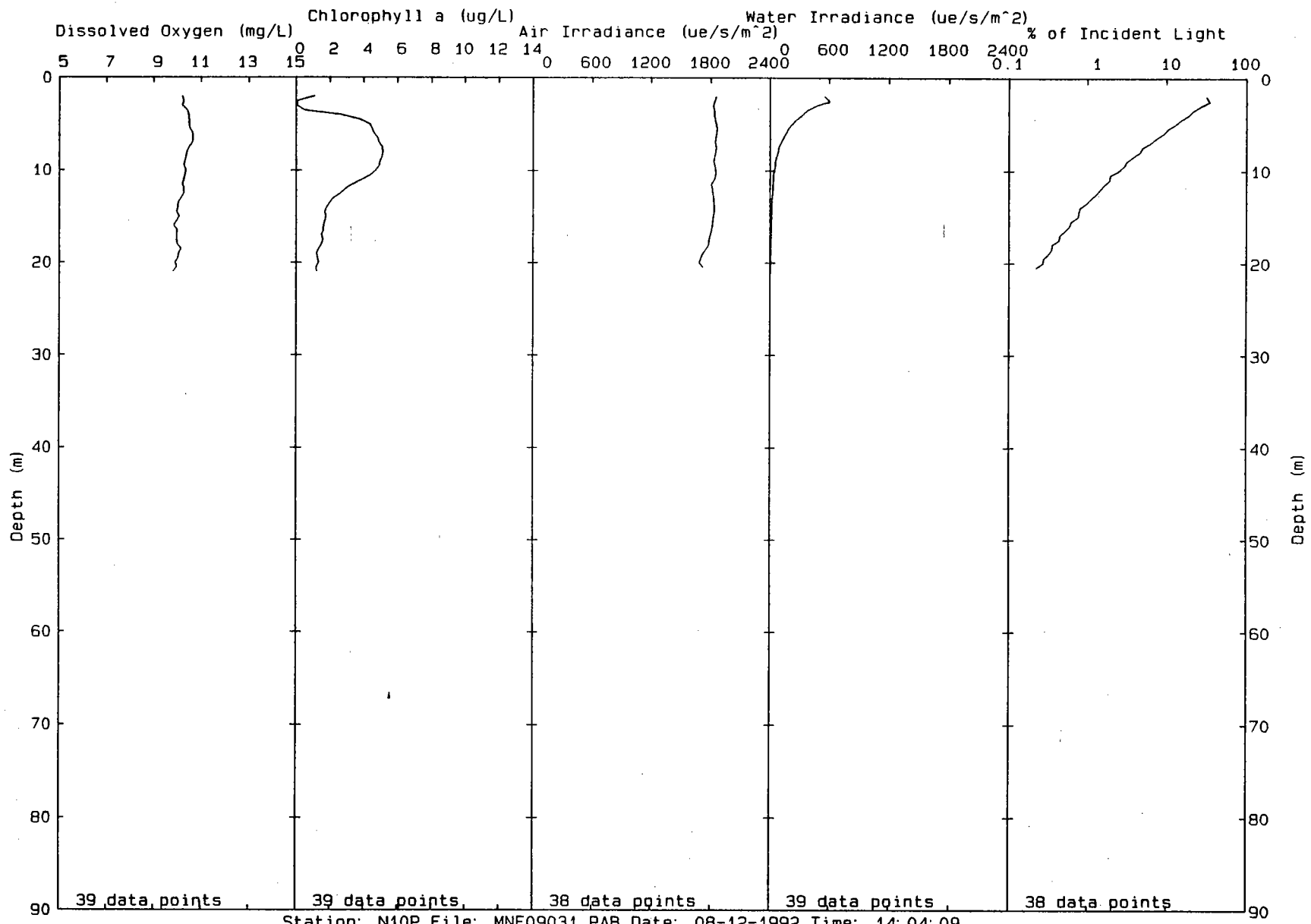
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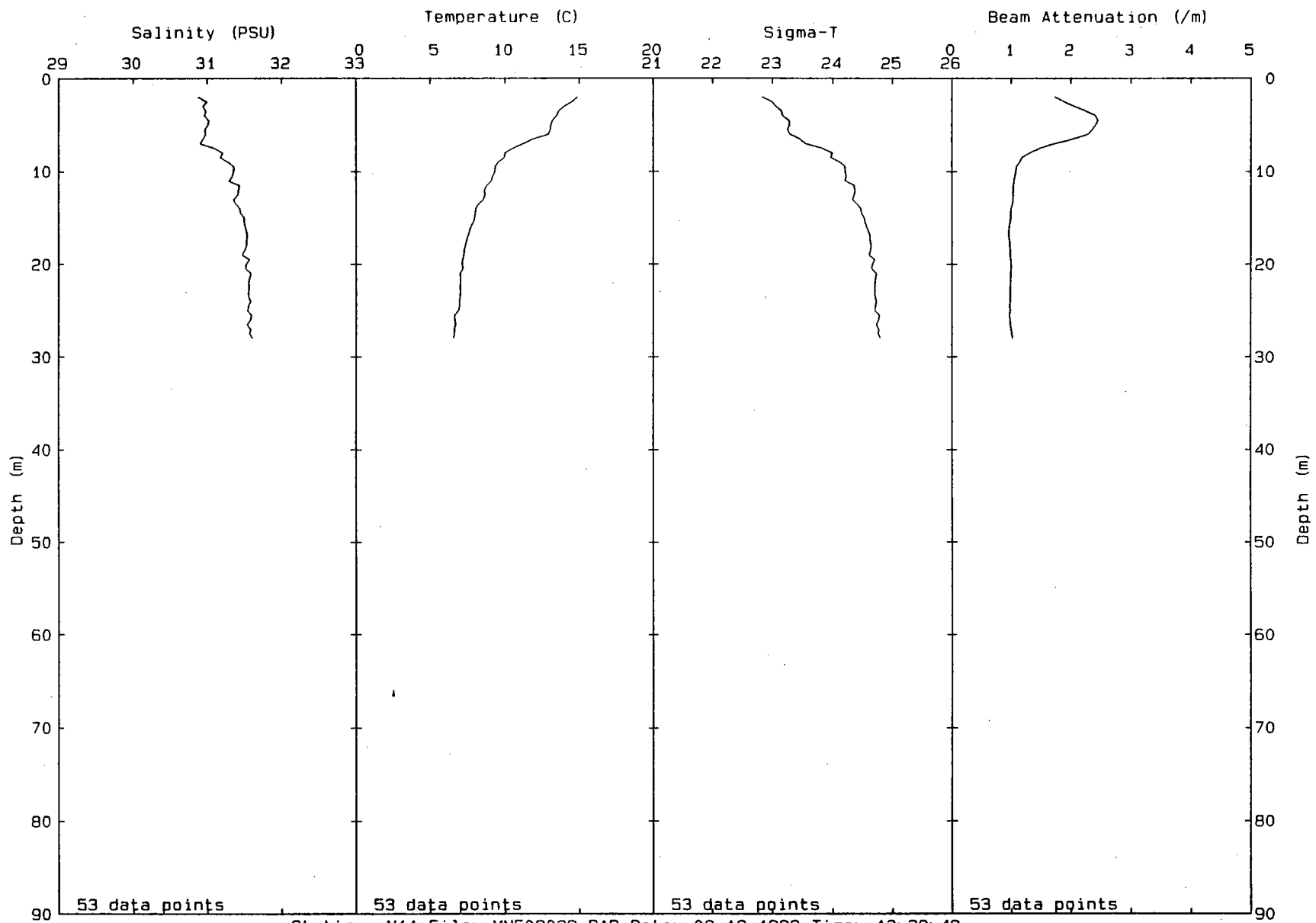
Station: N10P File: MNF09031.PAB Date: 08-12-1992 Time: 14:04:09

0040

0340

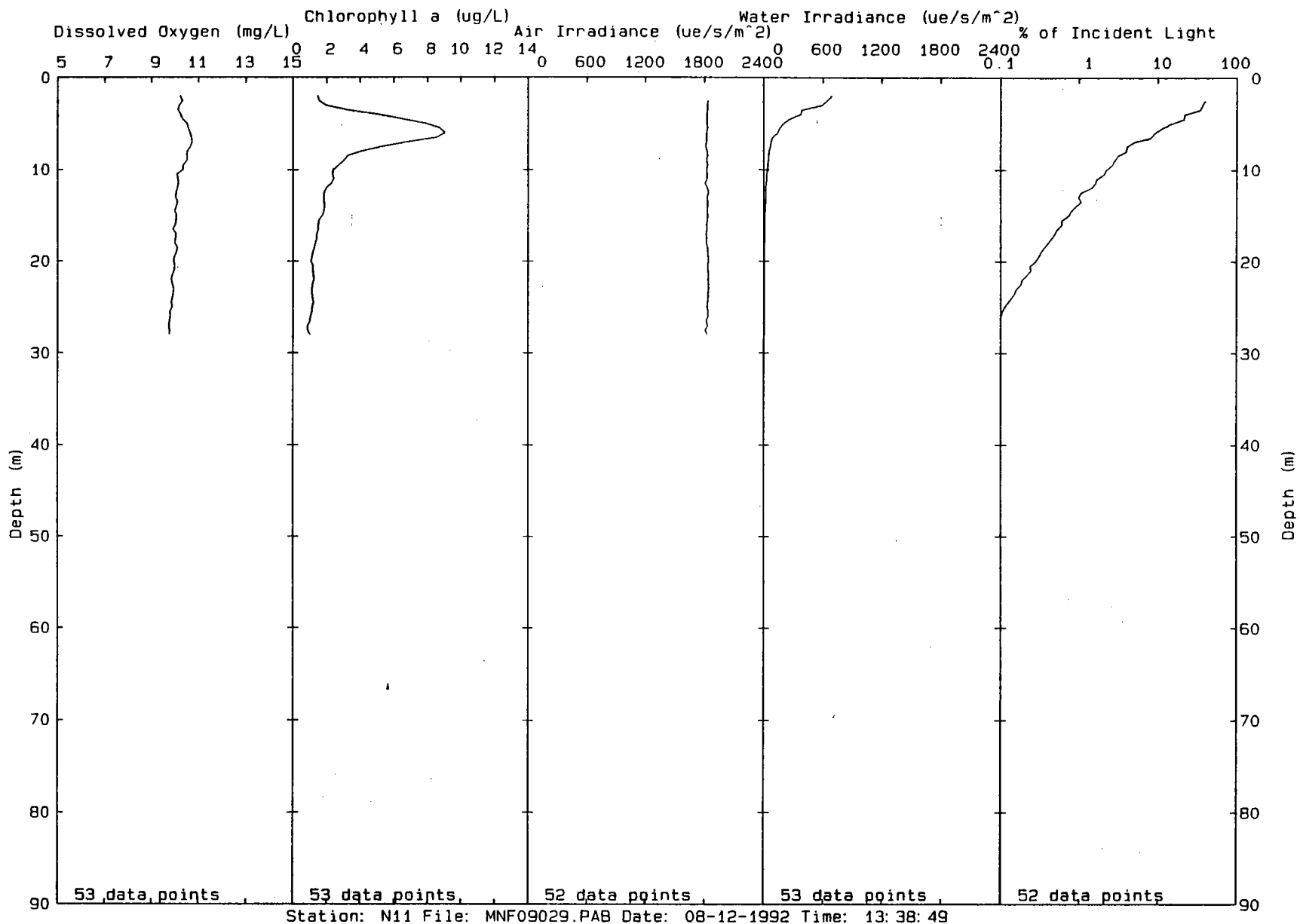


Station: N10P File: MNF09031.PAB Date: 08-12-1992 Time: 14: 04: 09

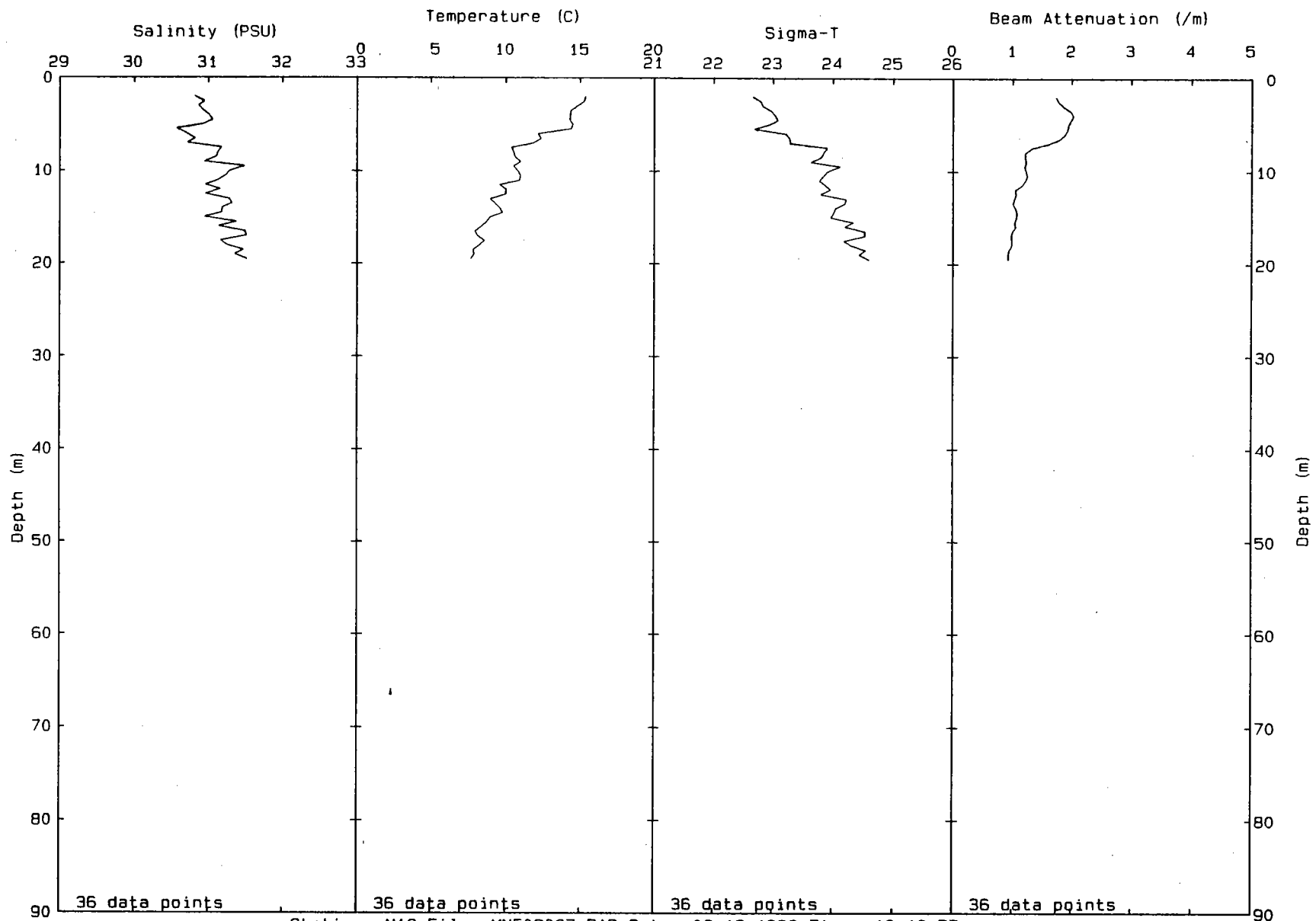


Station: N11 File: MNF09029.PAB Date: 08-12-1992 Time: 13:38:49

9:40



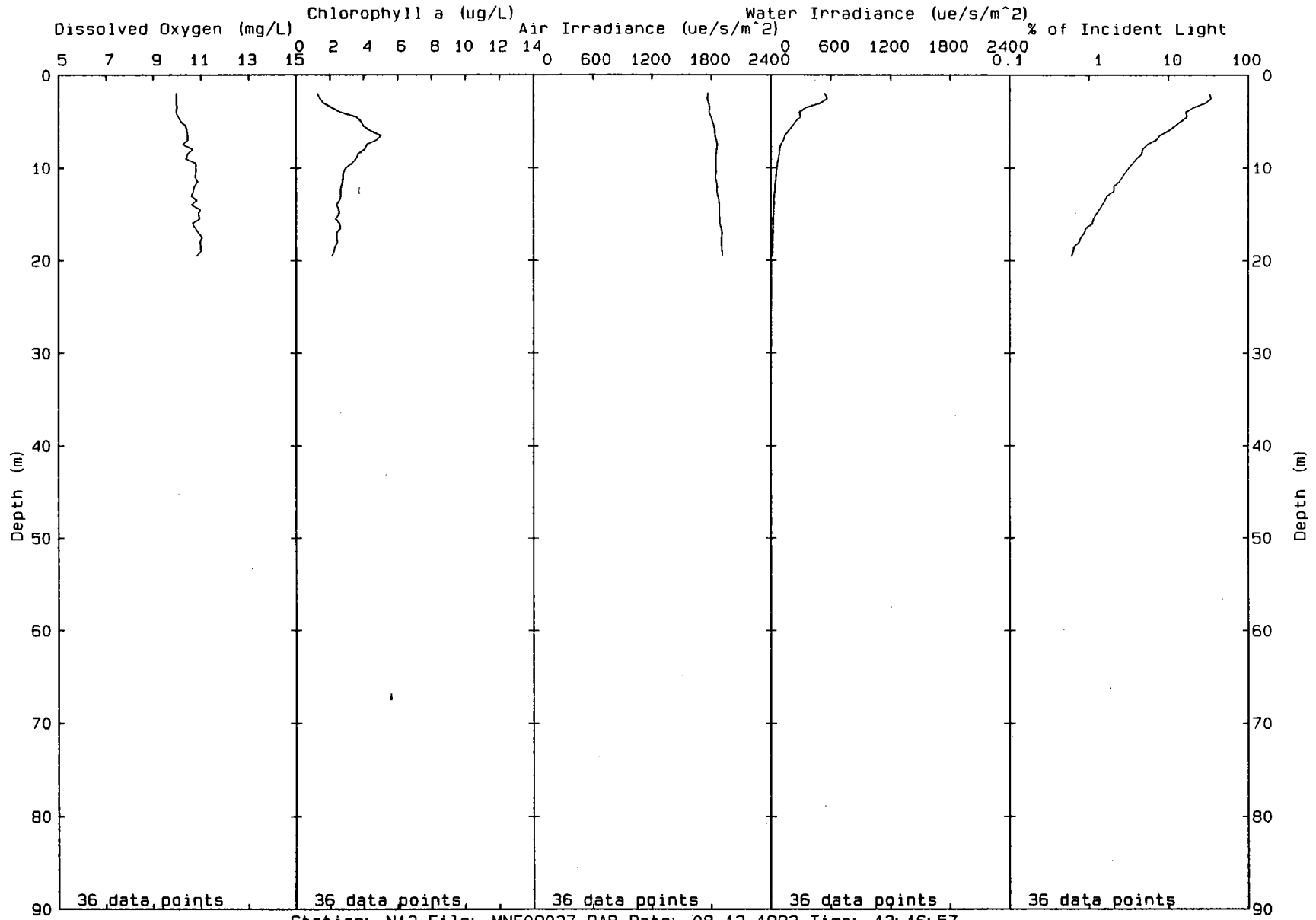
004:7



Station: N12 File: MNF09027.PAB Date: 08-12-1992 Time: 13:16:57

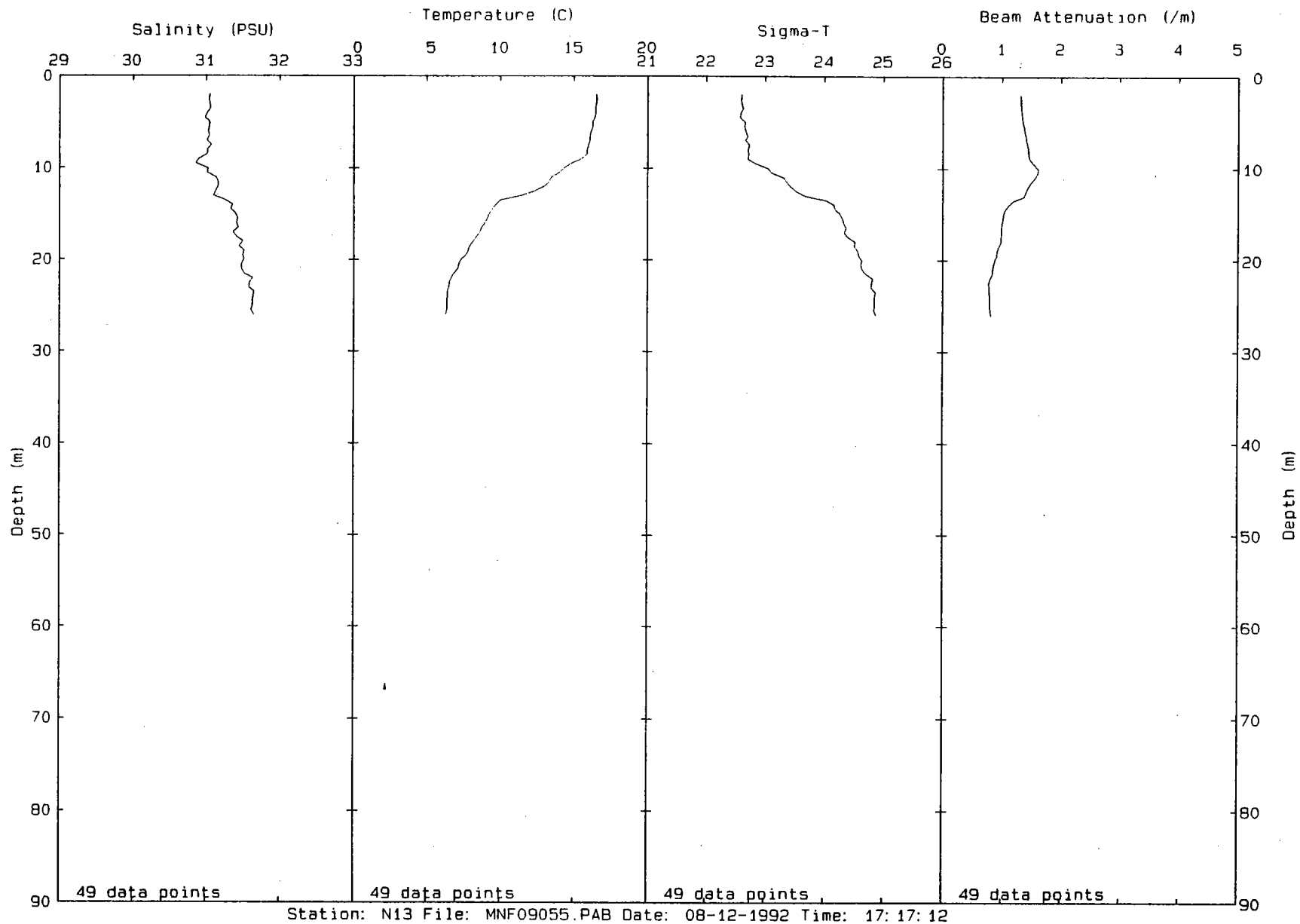
004:8

6:40

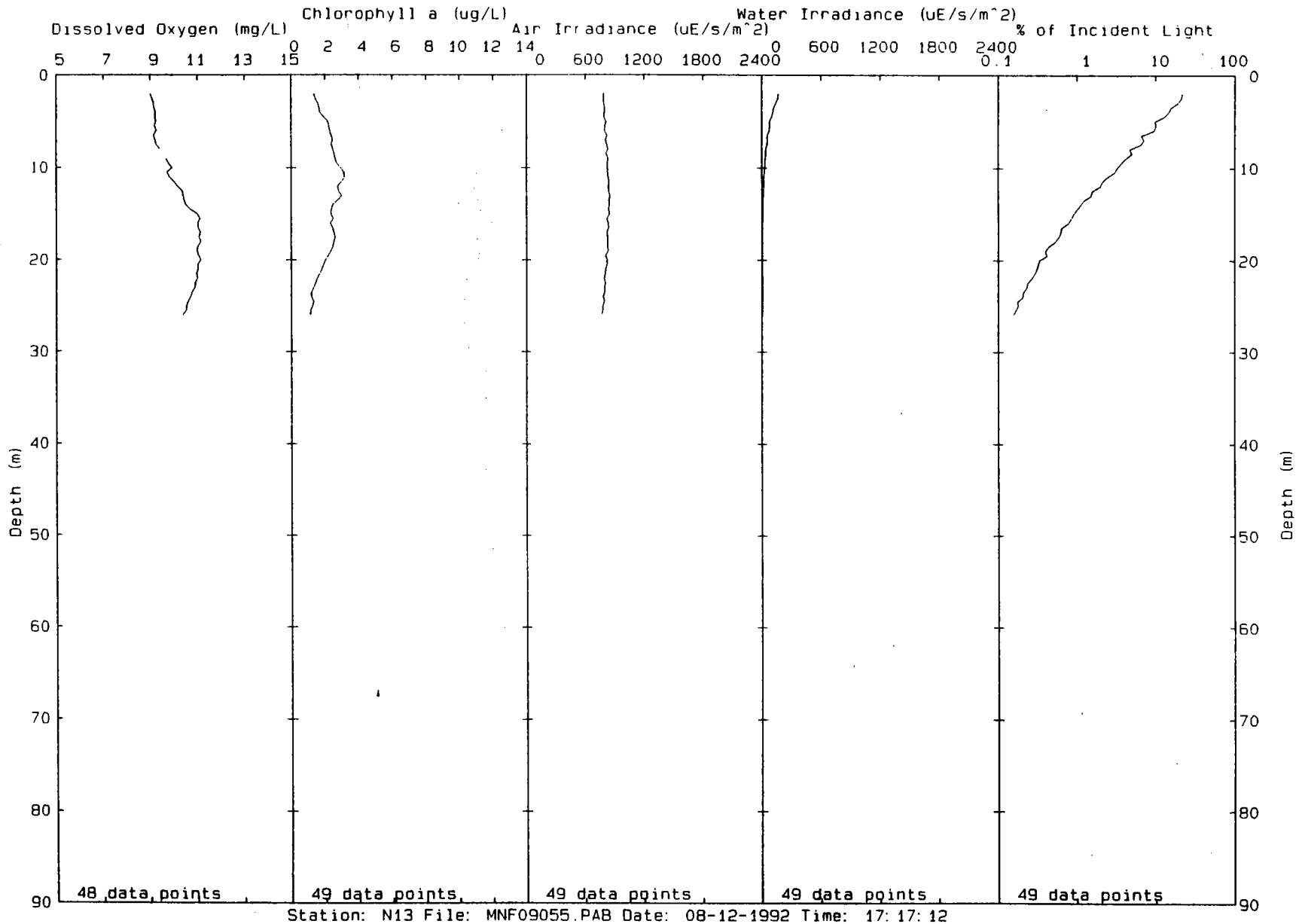


Station: N12 File: MNF09027.PAB Date: 08-12-1992 Time: 13:16:57

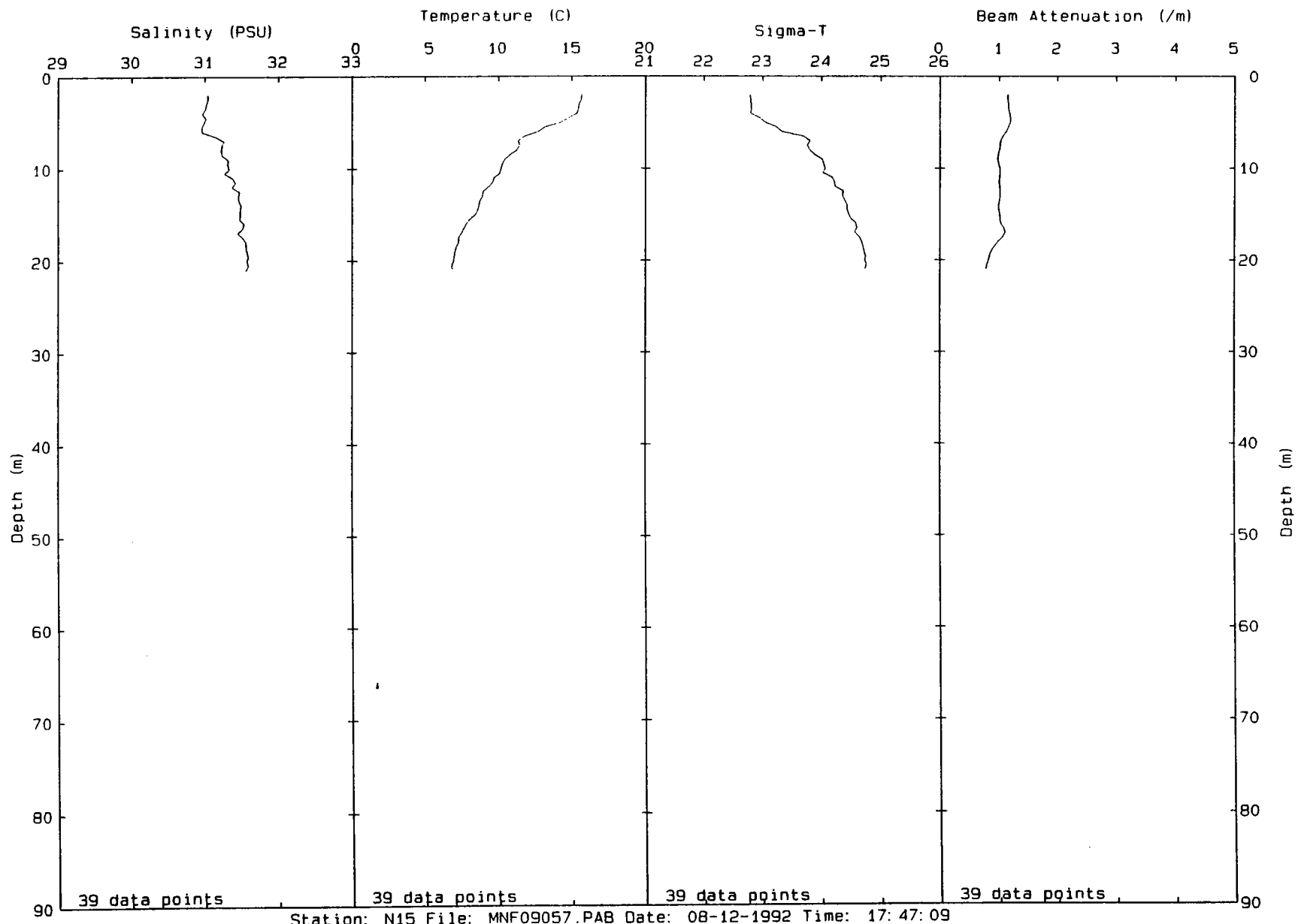
00480



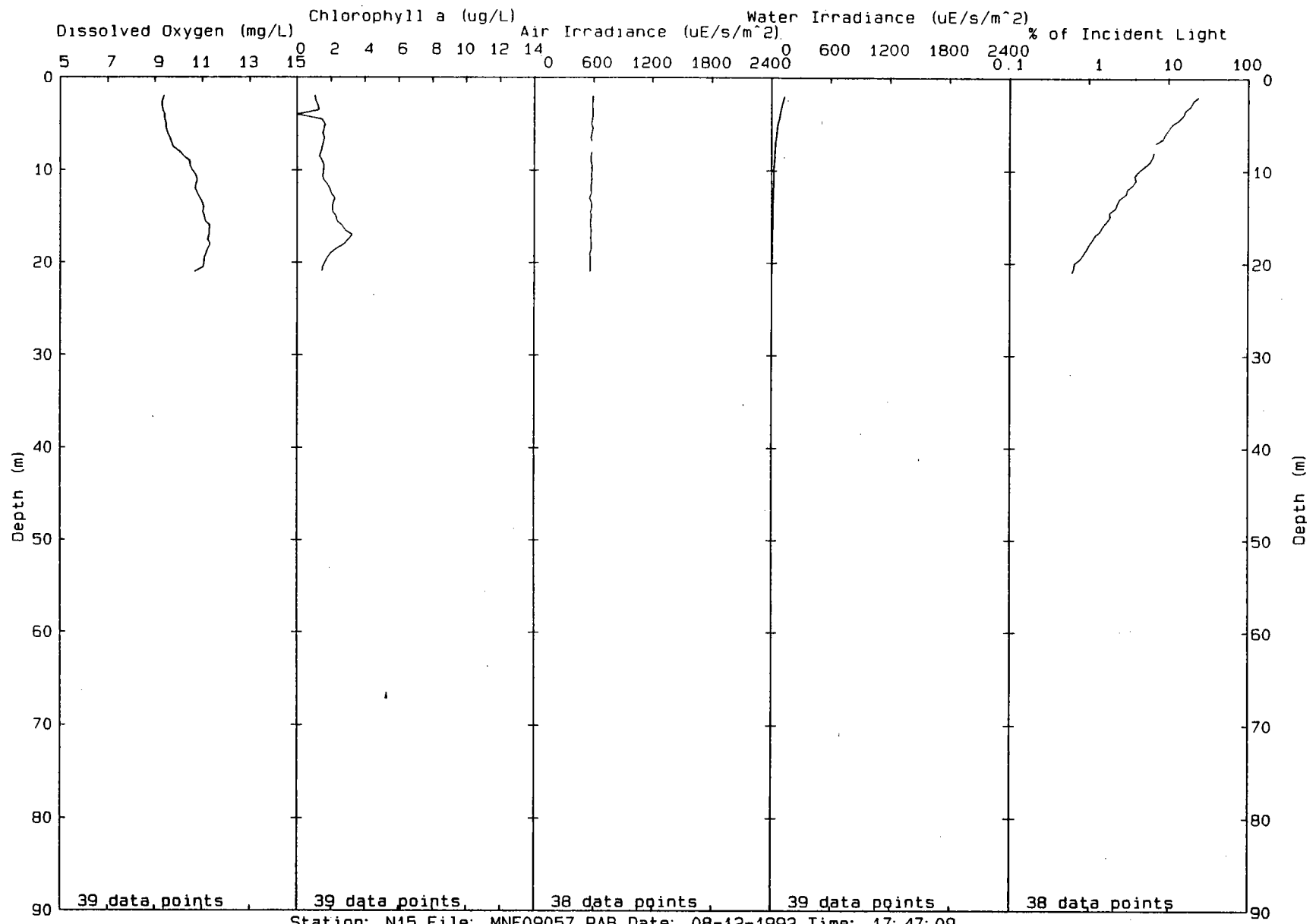
00401



00482

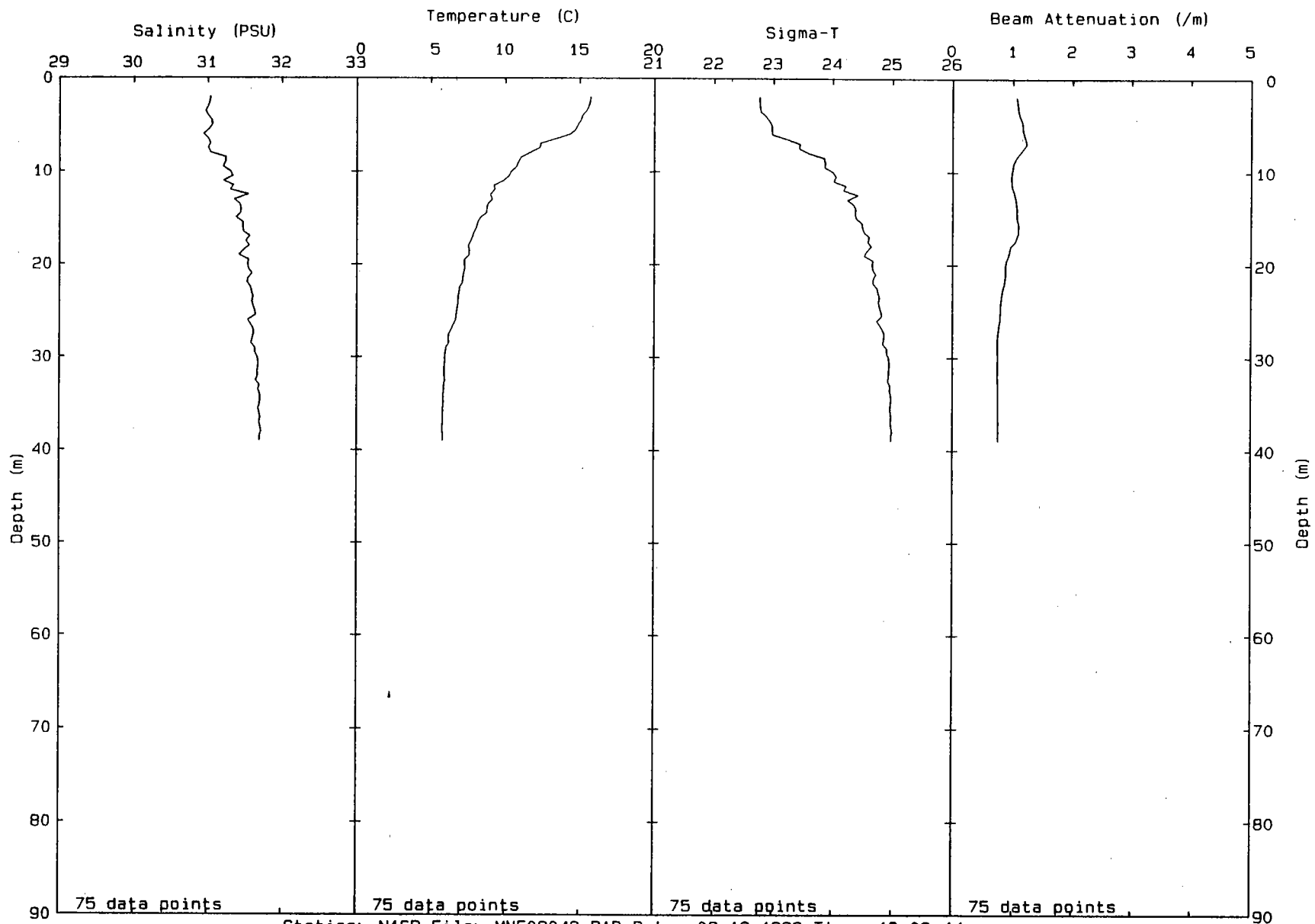


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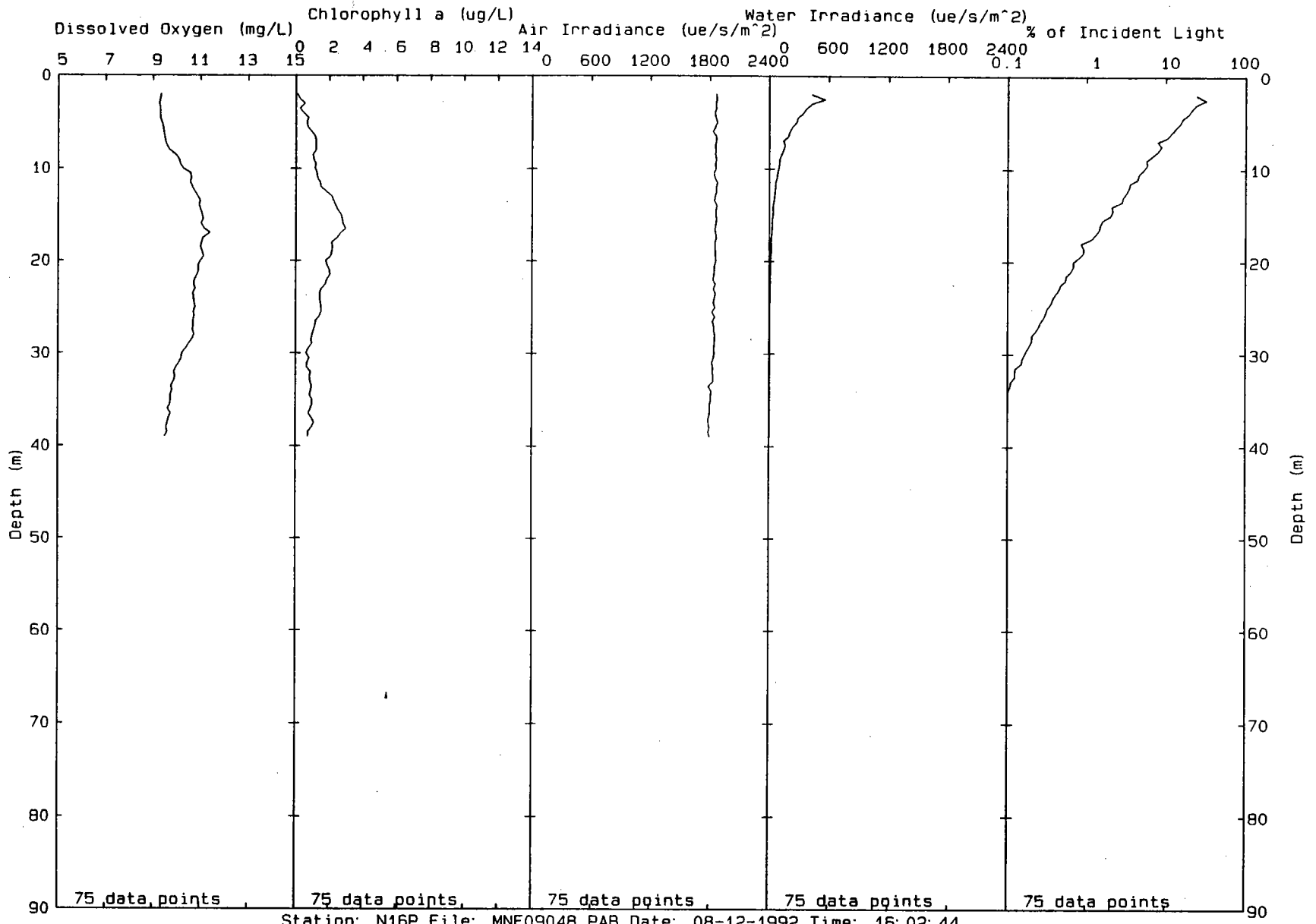
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00483



Station: N16P File: MNF09048.PAB Date: 08-12-1992 Time: 16:02:44

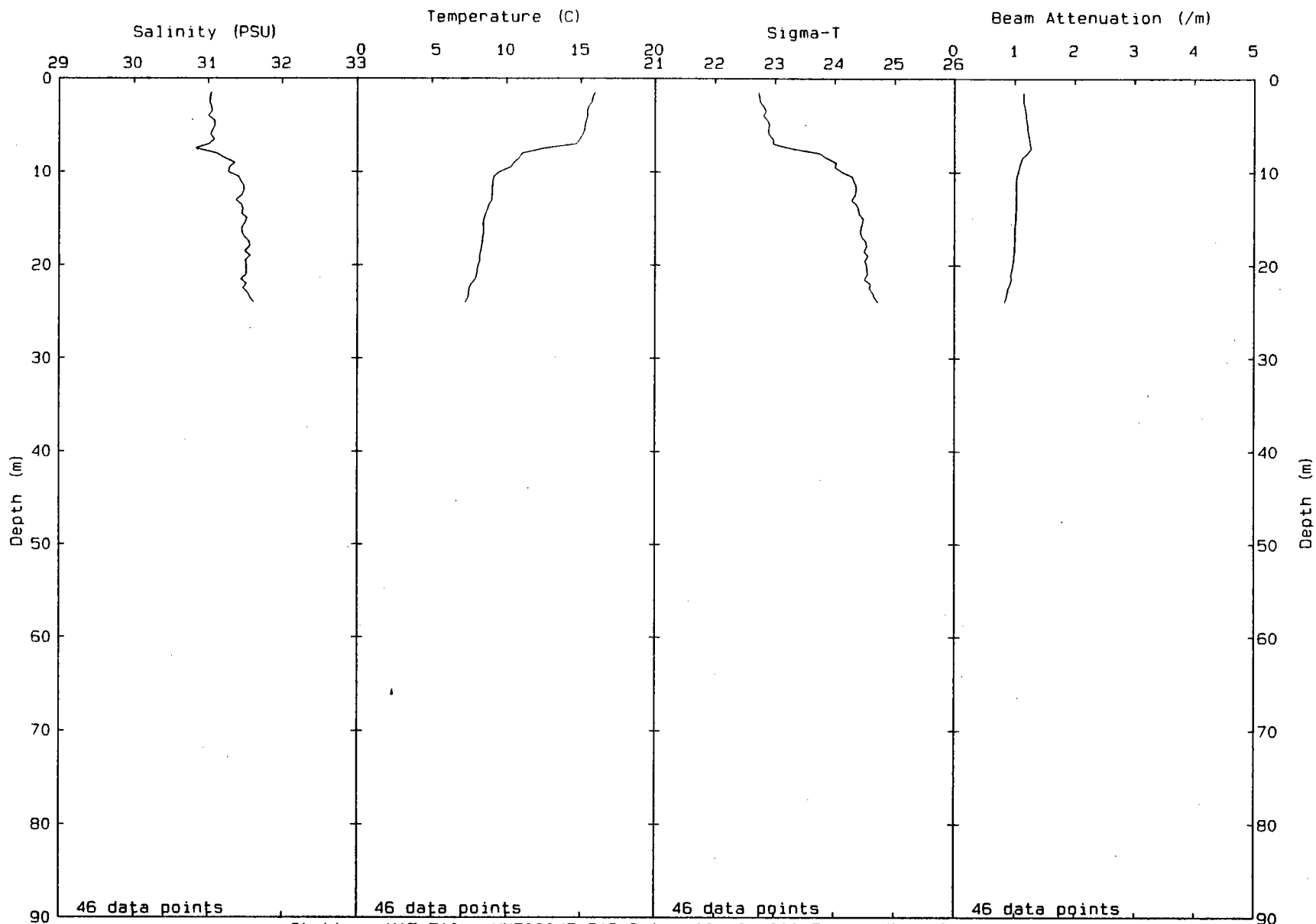
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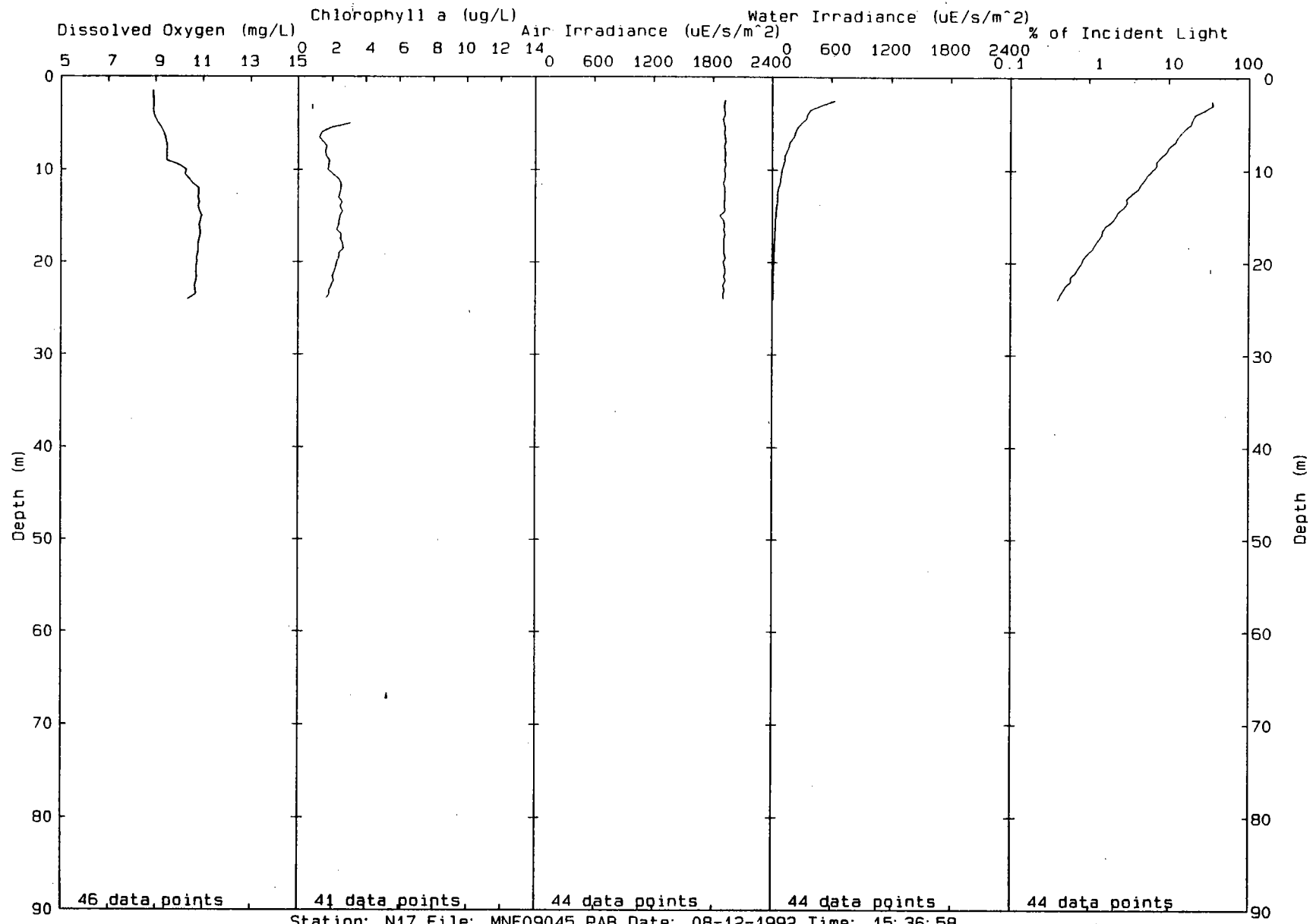
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00485

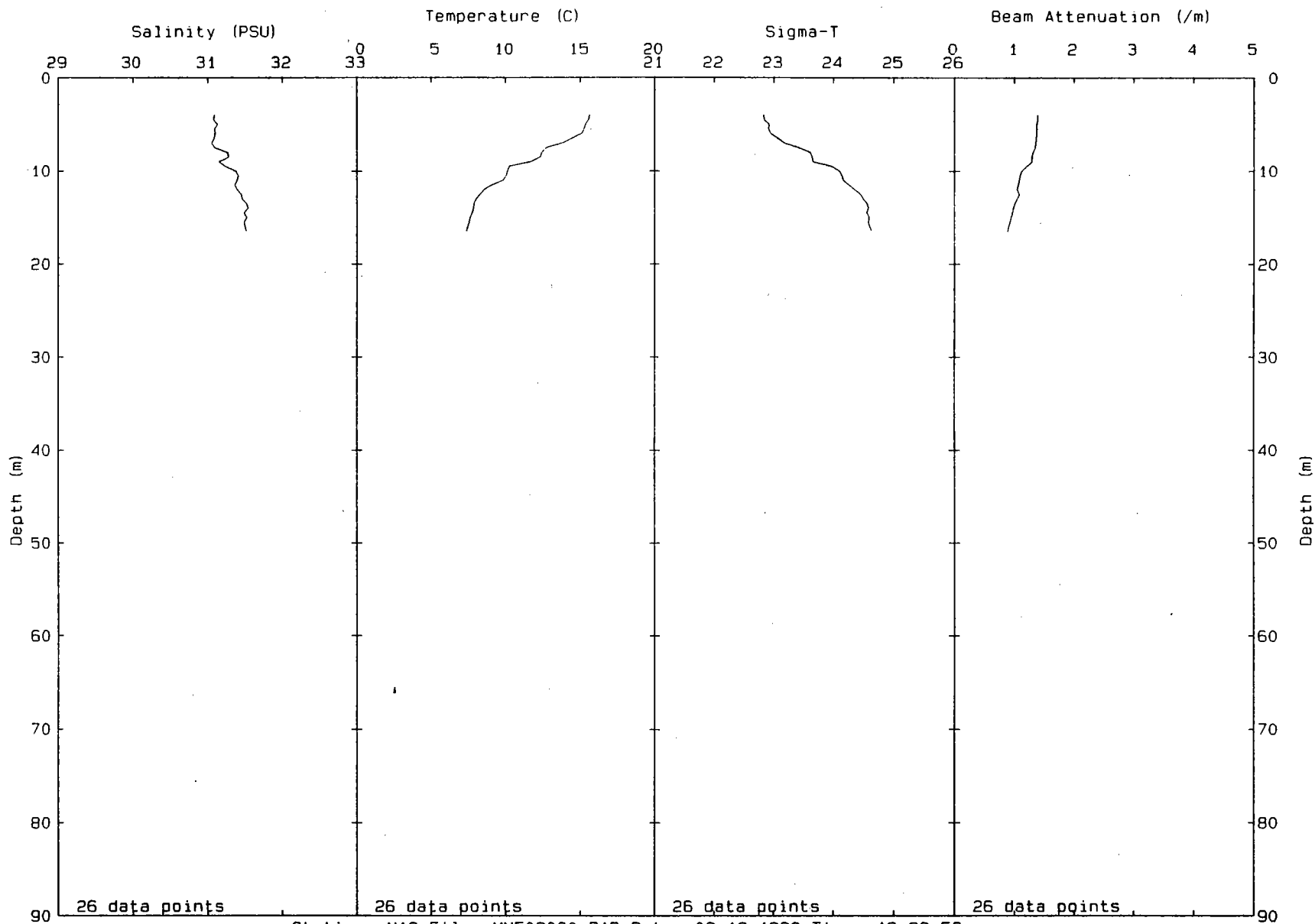
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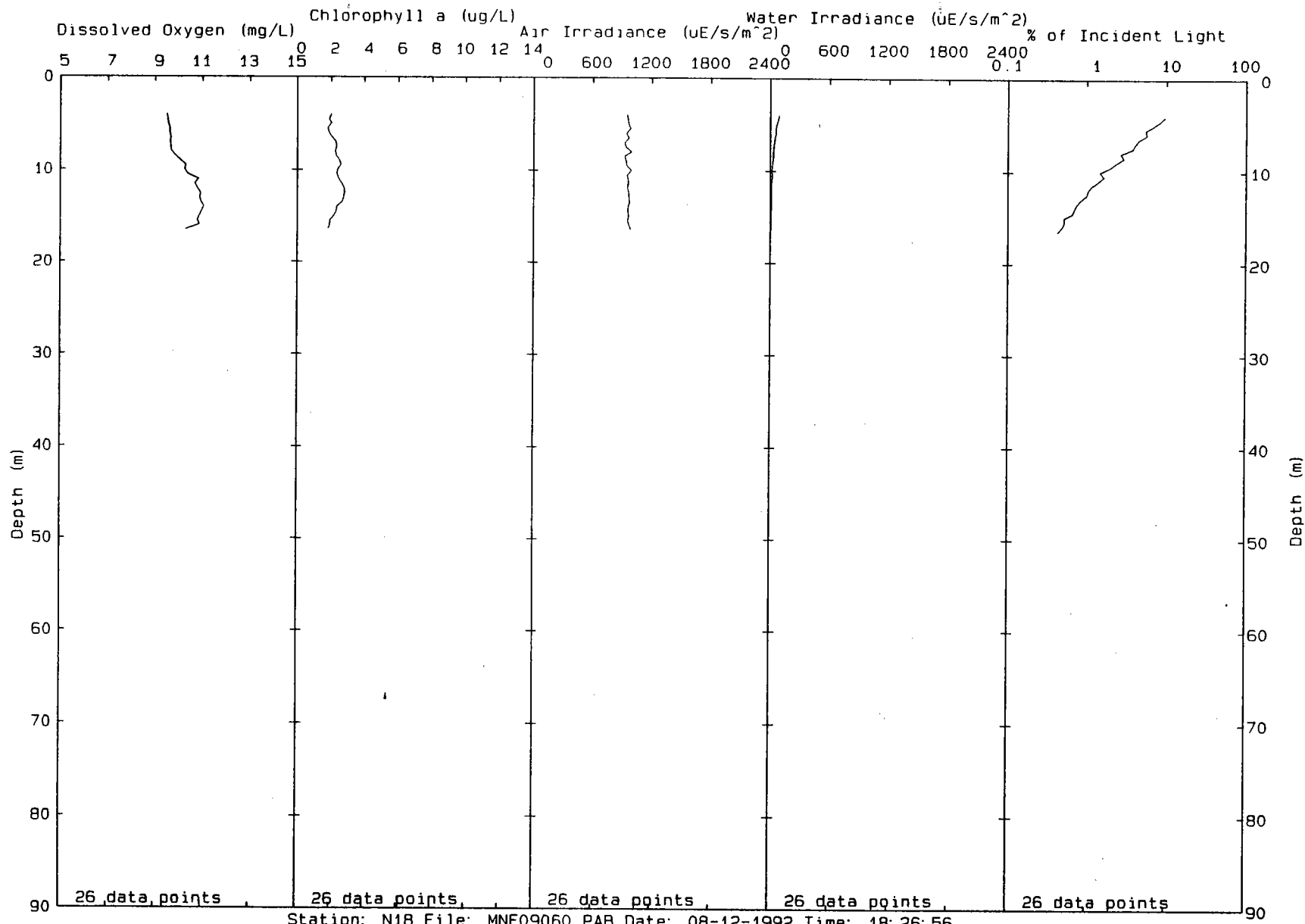


00487



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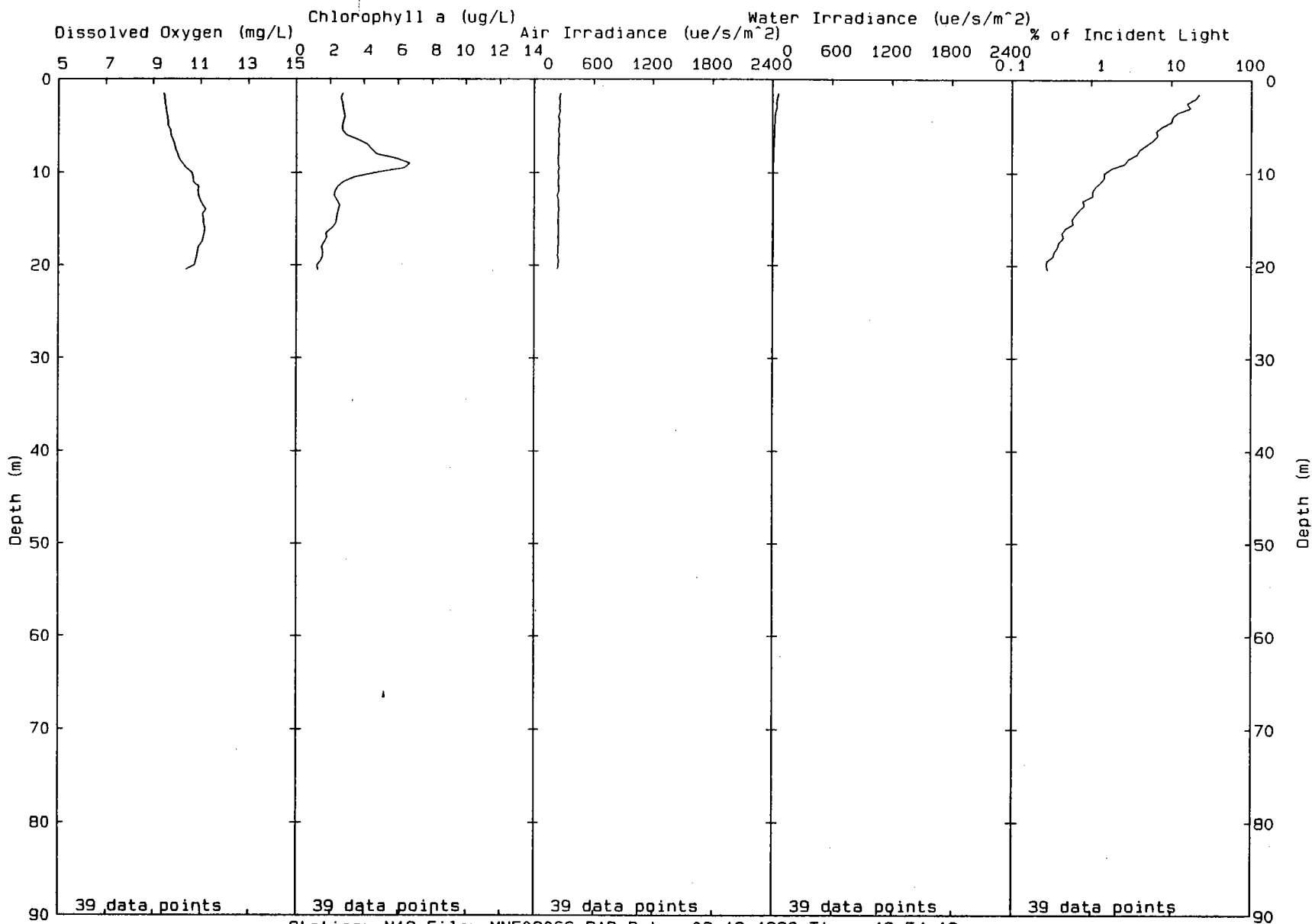
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Station: N18 File: MNF09060.PAB Date: 08-12-1992 Time: 18:26:56

00489

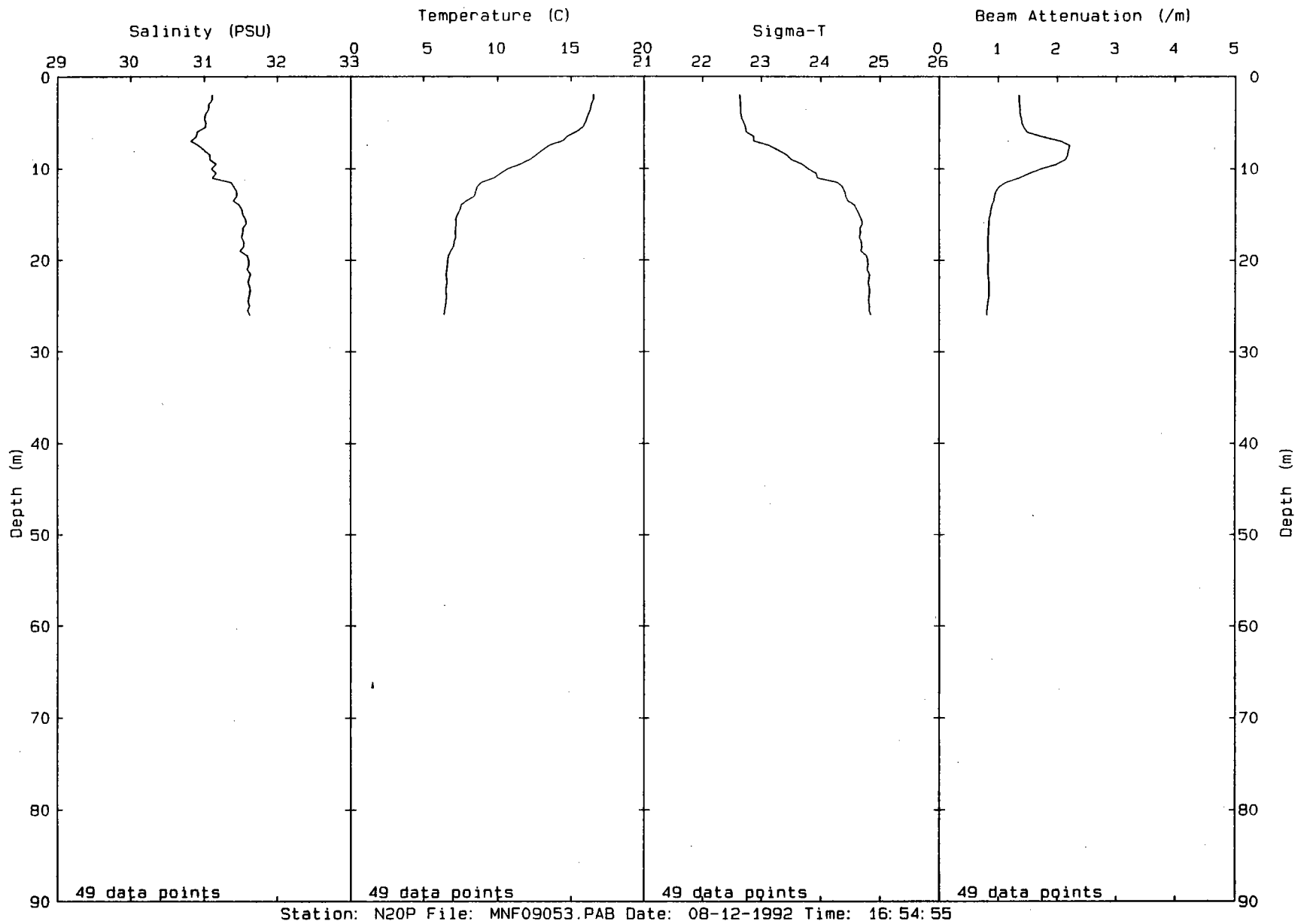


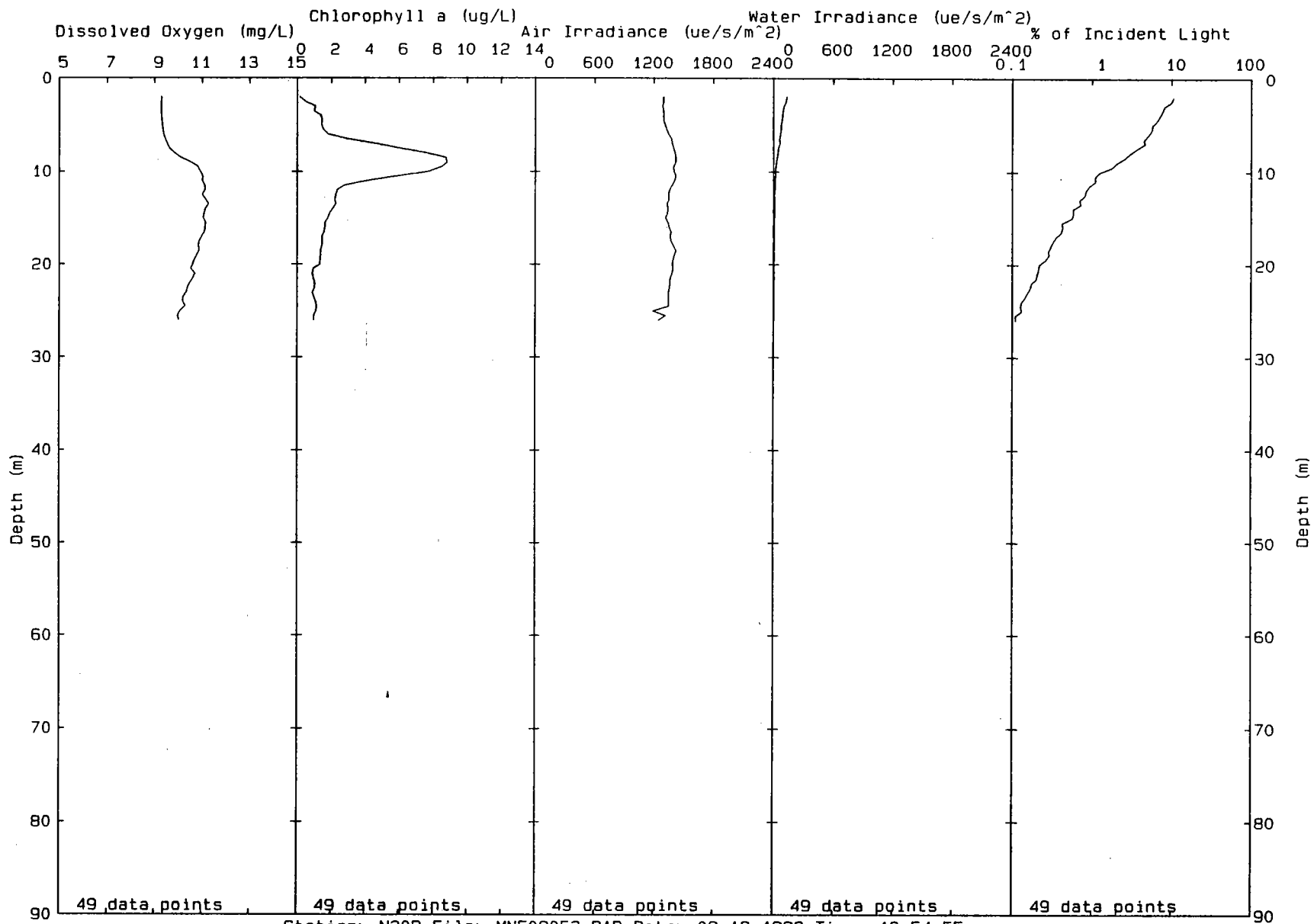


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00401

00492

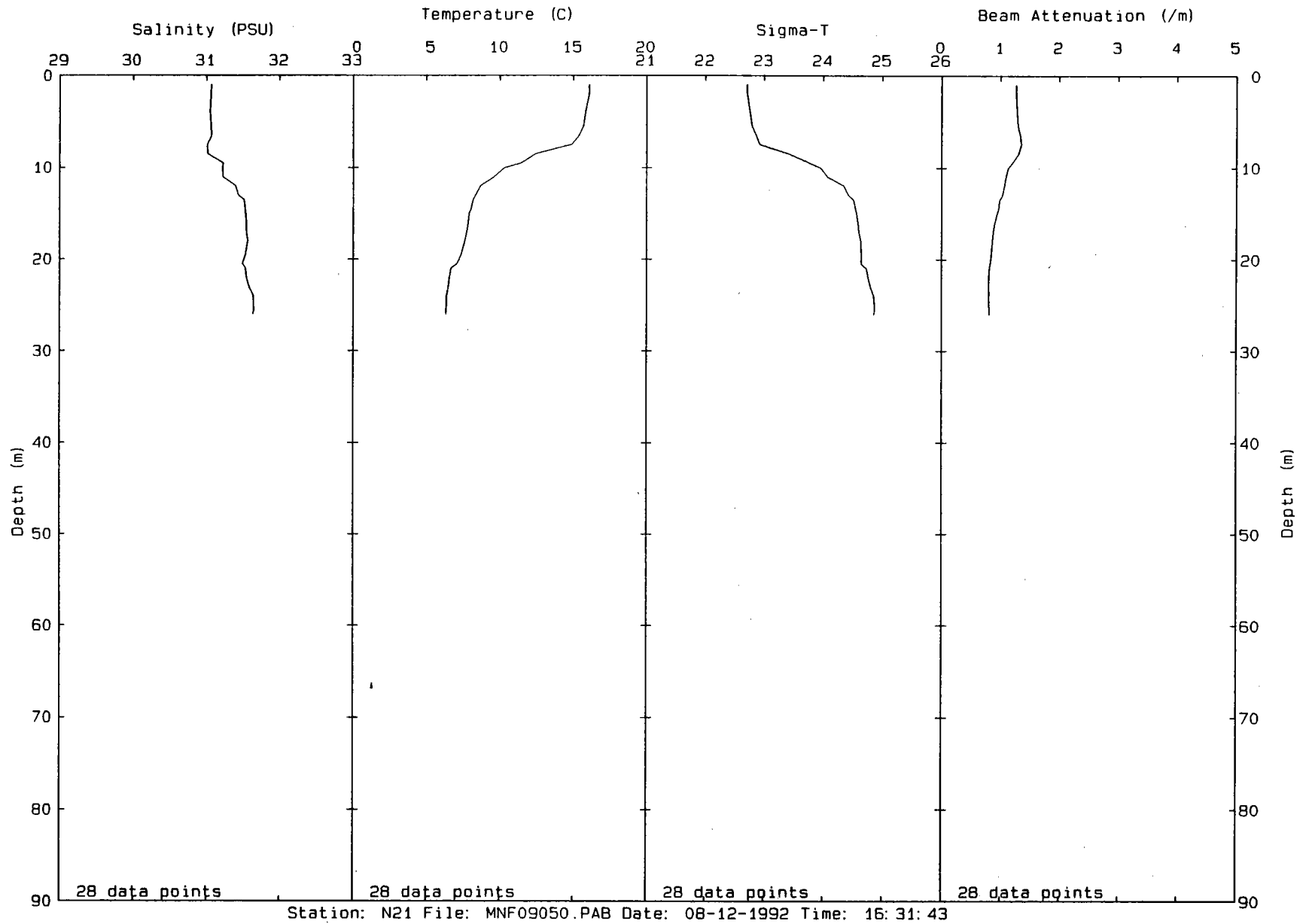


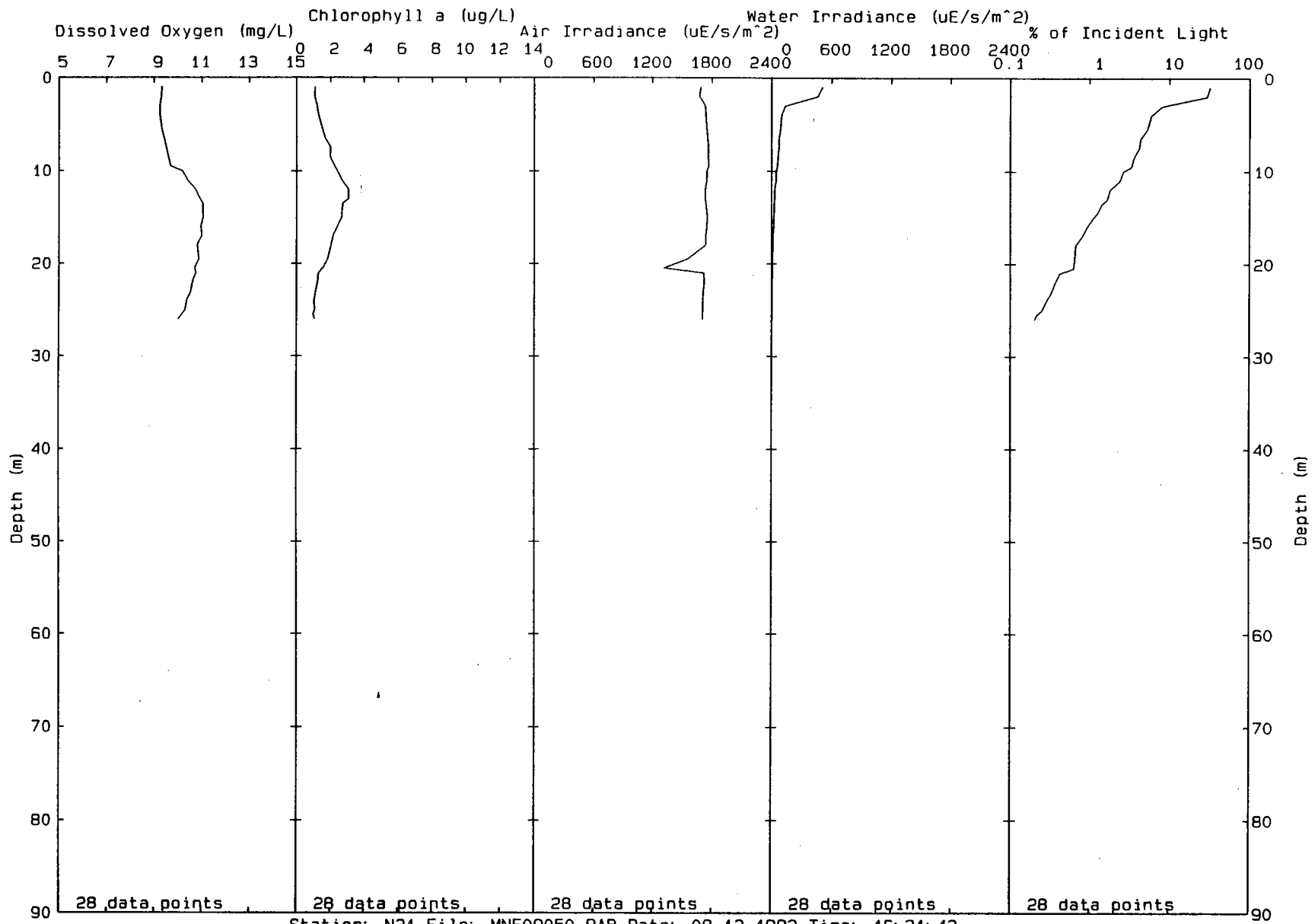


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00493

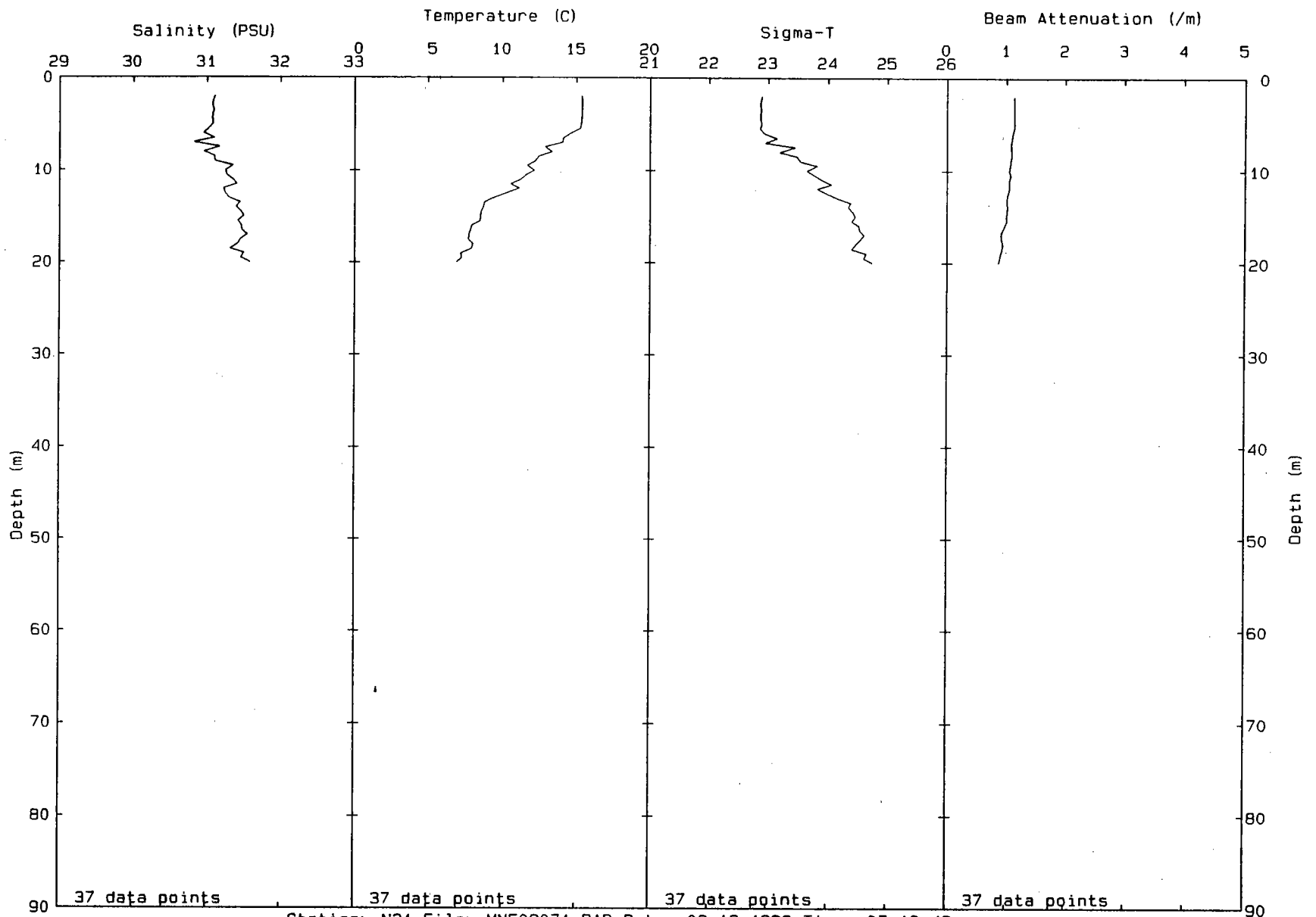
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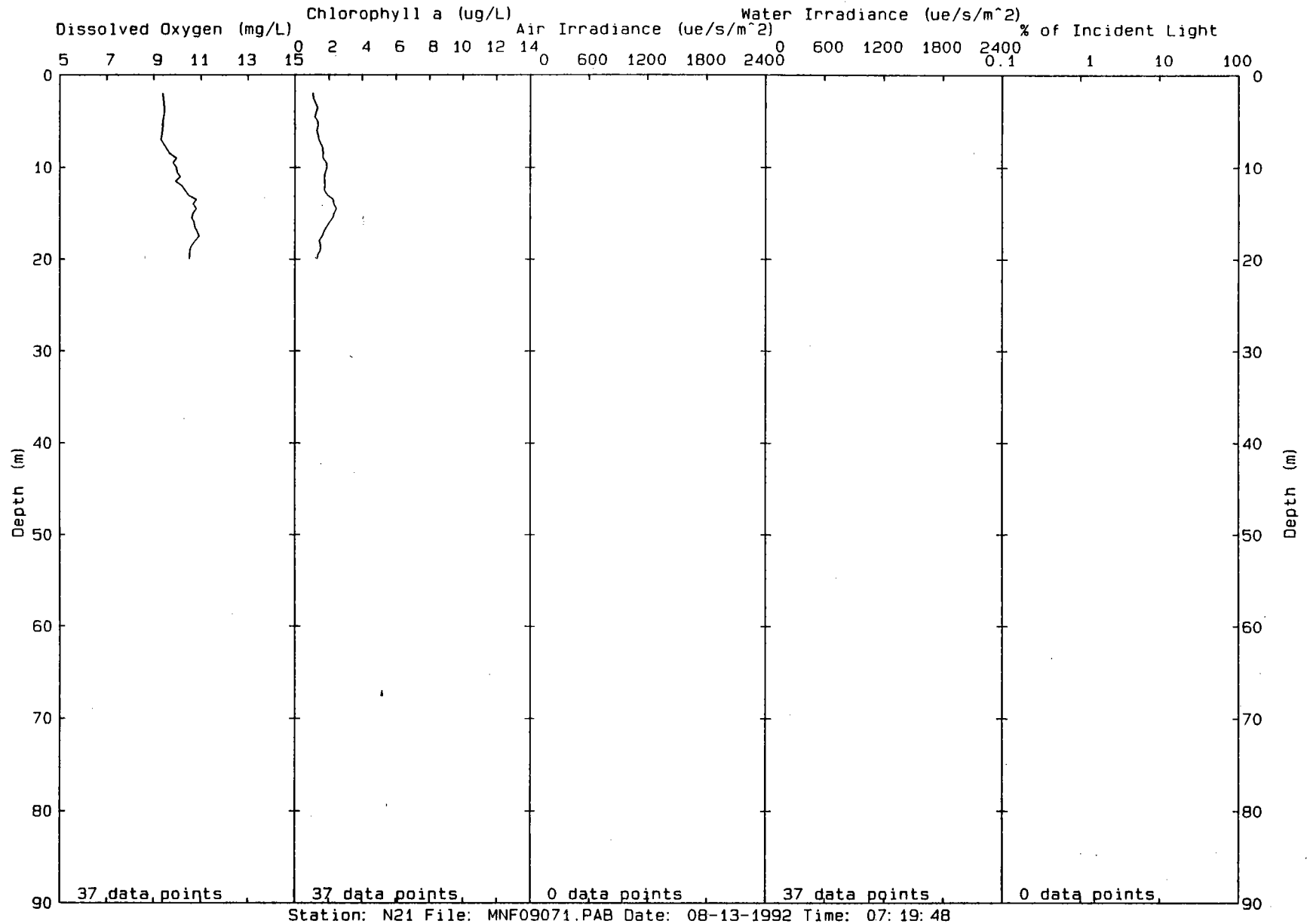
00435



Station: N21 File: MNF09071.PAB Date: 08-13-1992 Time: 07:19:48

00406

00497



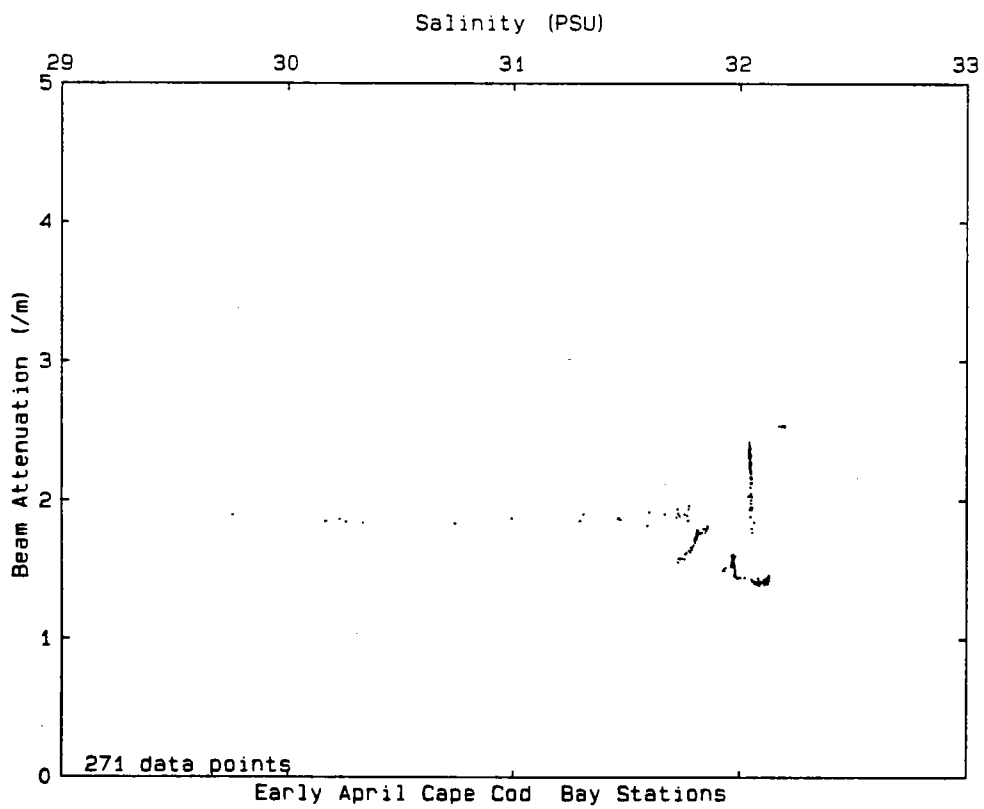
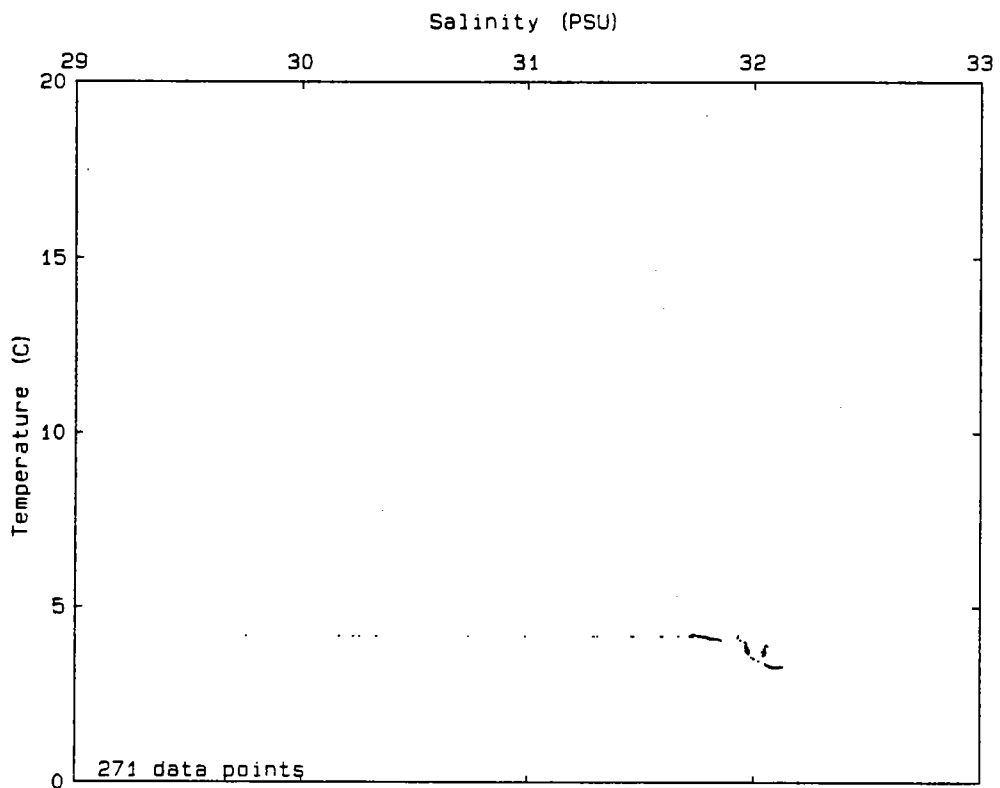
## APPENDIX C

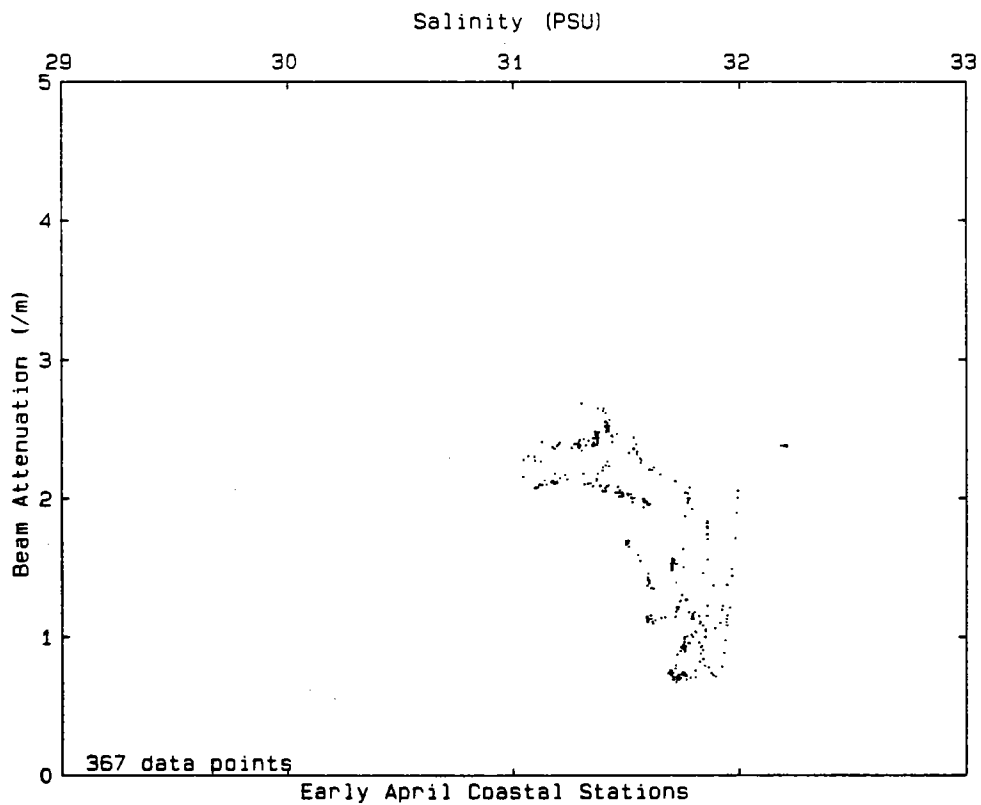
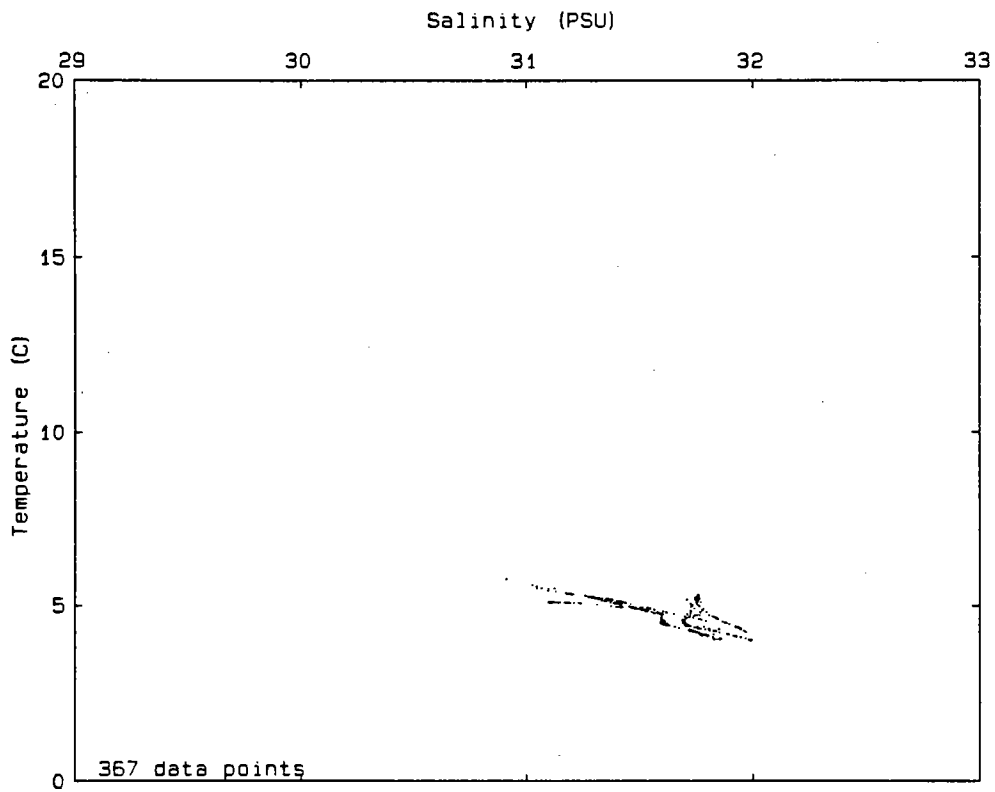
### COMPARISON OF VERTICAL PROFILE DATA: SCATTER PLOTS AND TRANSECTS

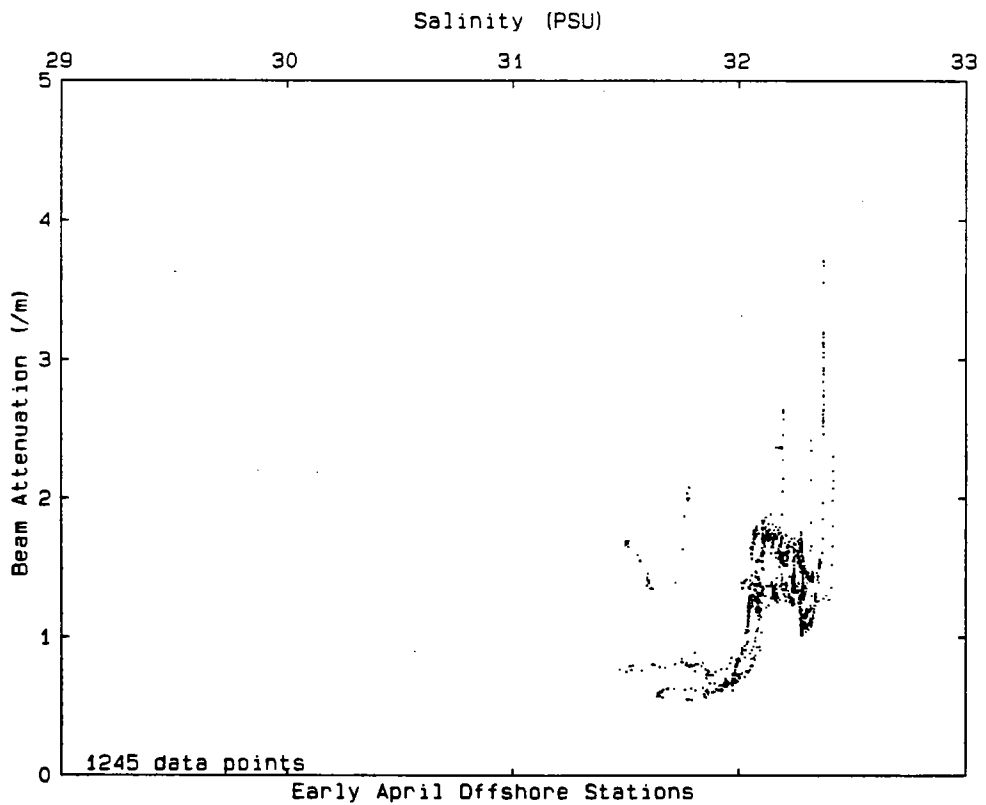
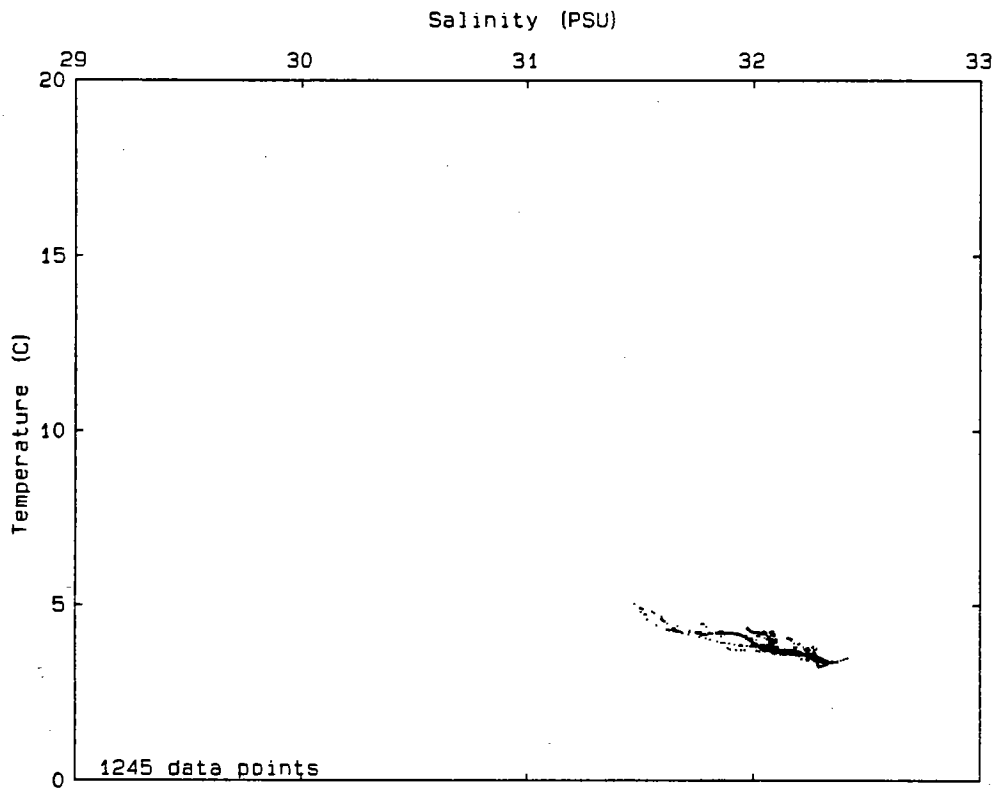
#### Part 1

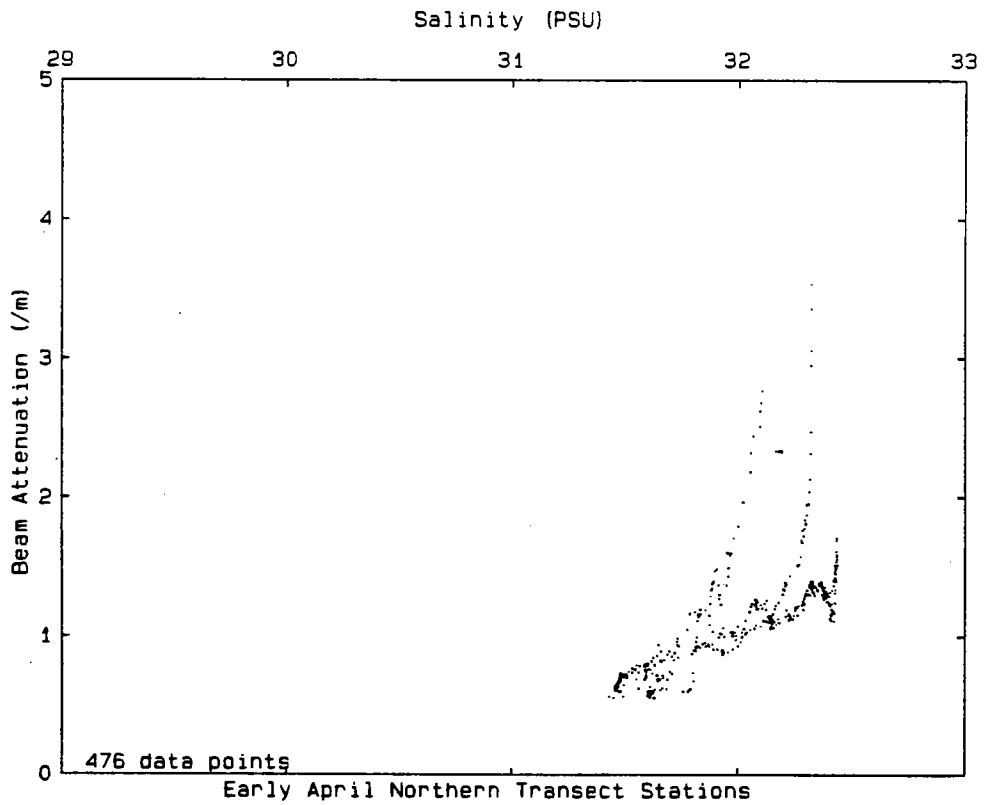
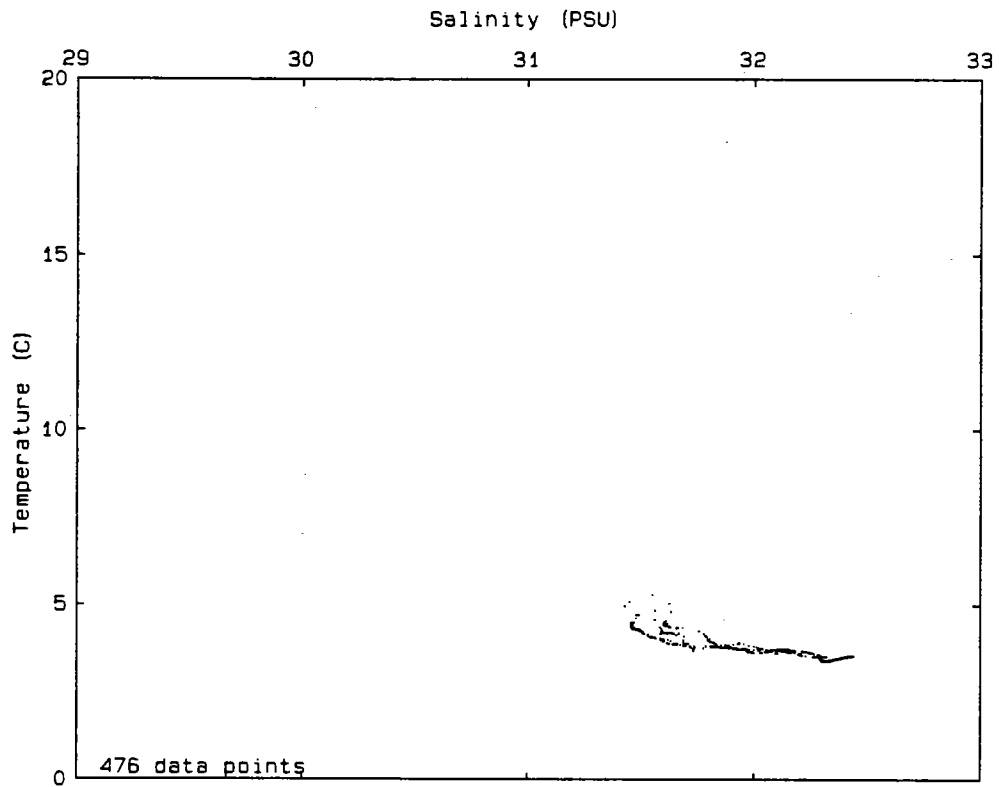
##### Parameter-Parameter Plots of Vertical Profile Data, Early April and June Surveys

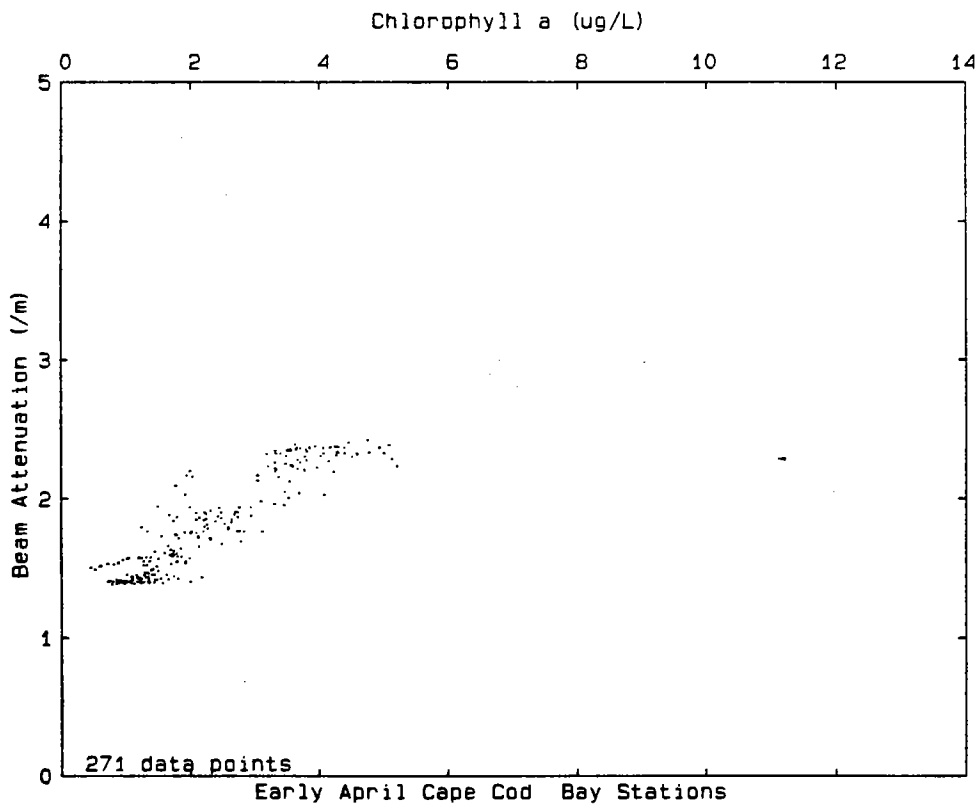
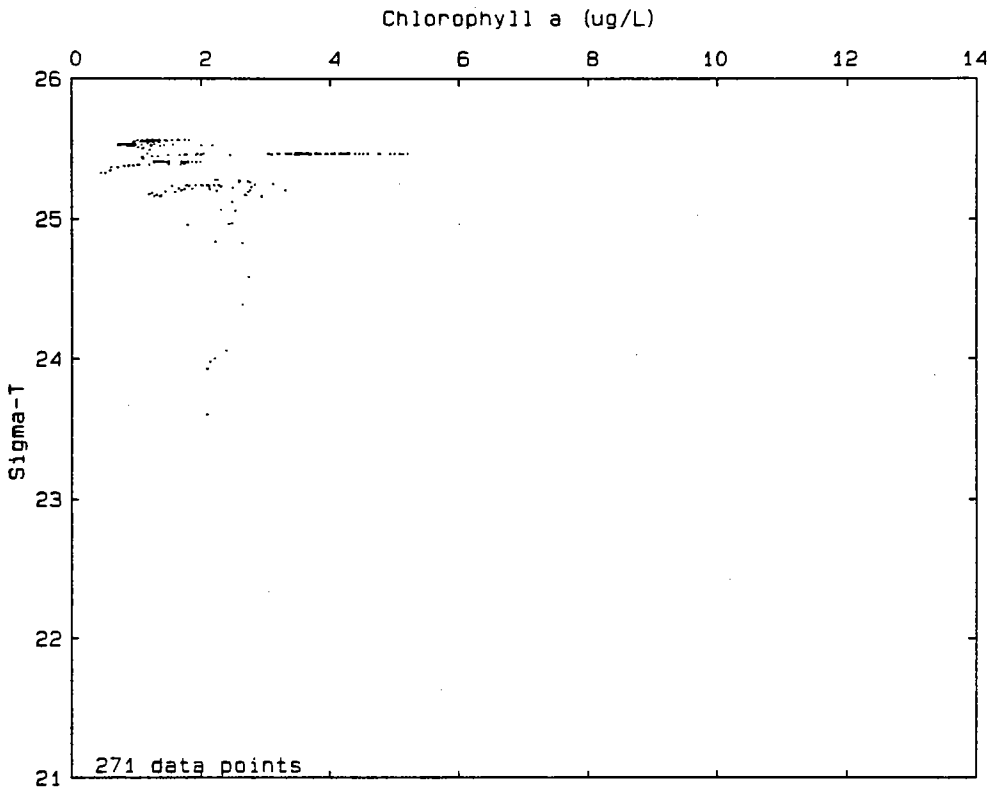
Data are as described in Appendix B and include the entire profile at each station. Plots are by station groups as defined in the text report, which itself gives composite plots for all stations.

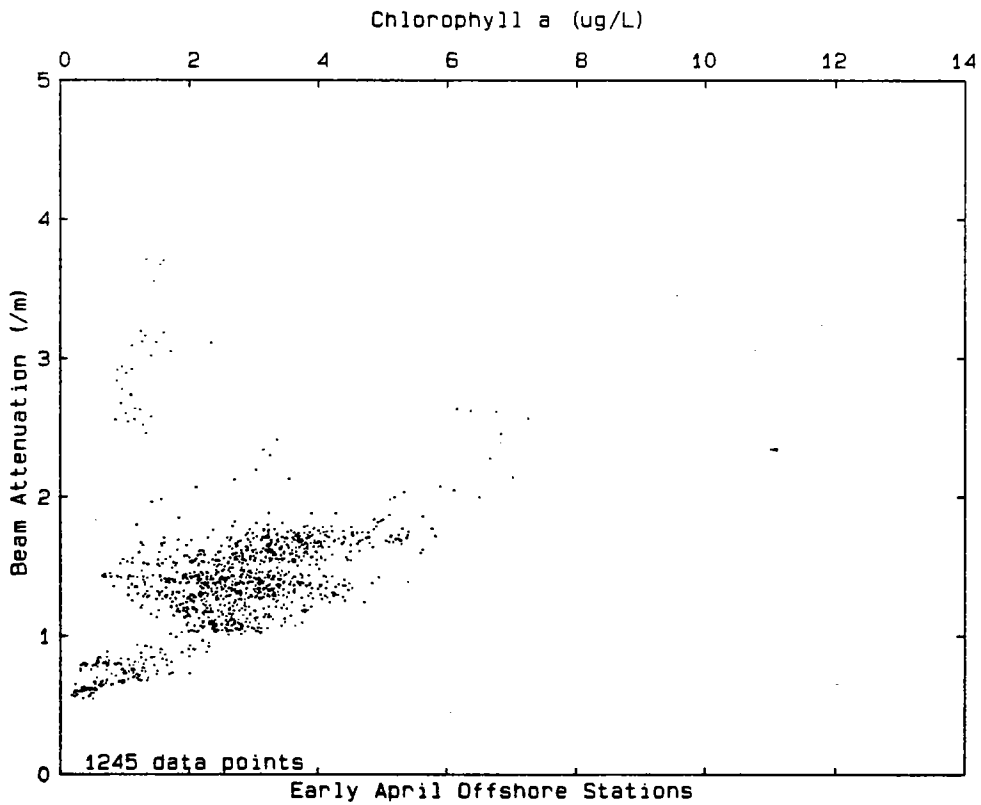
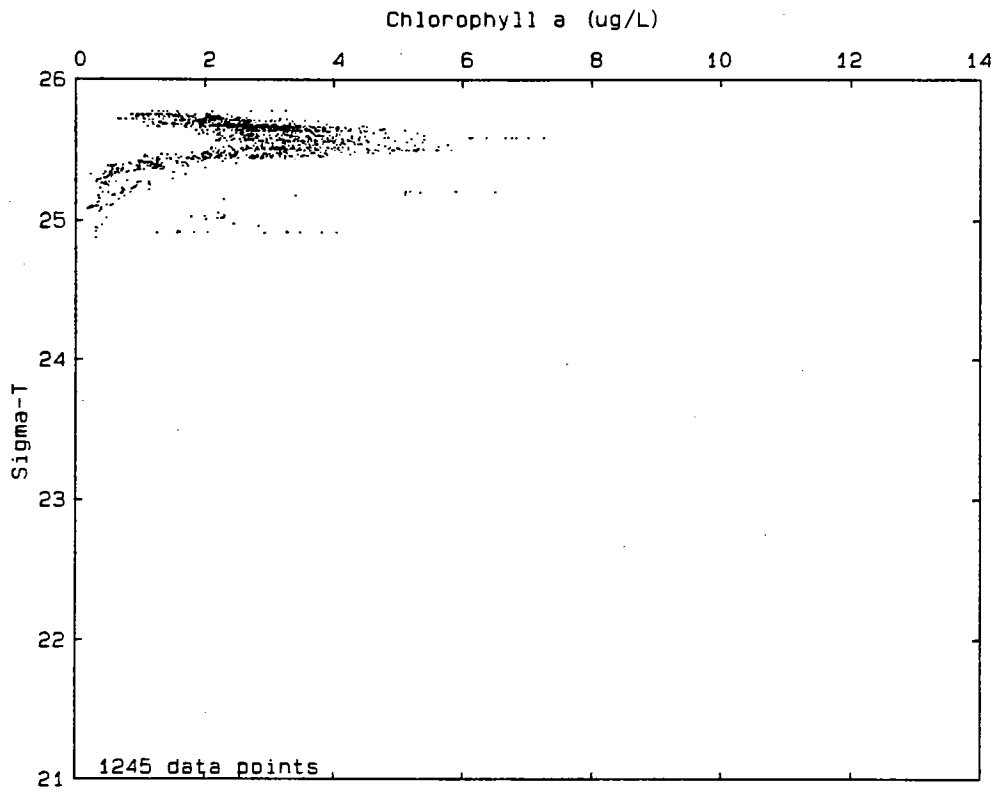


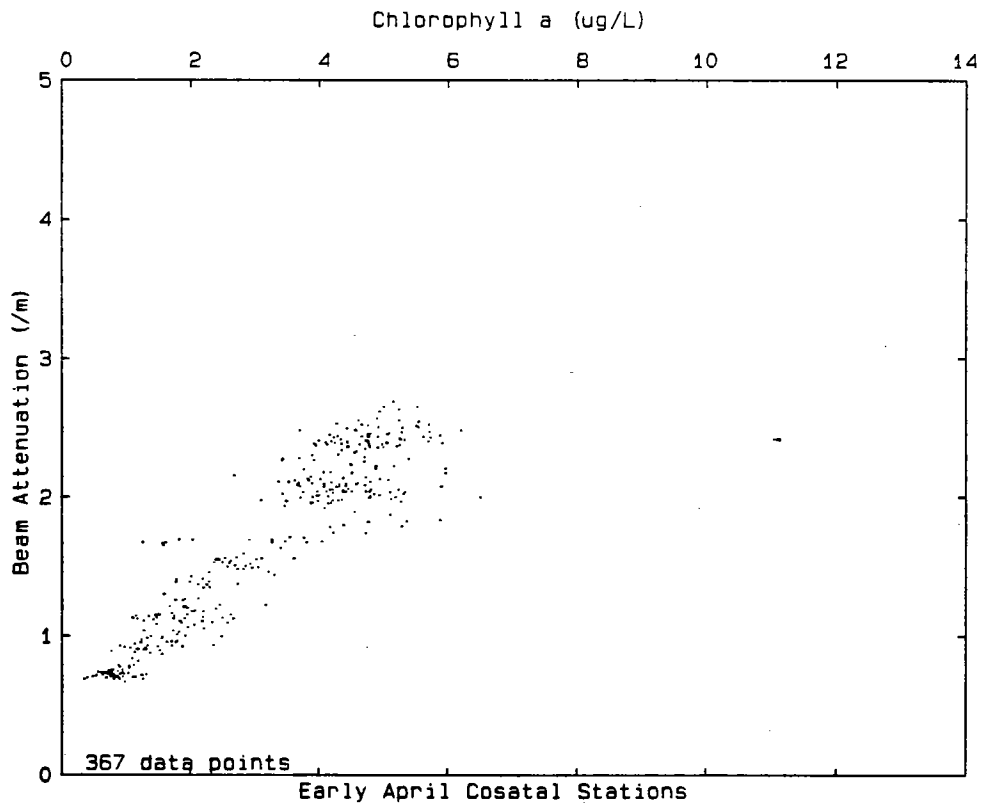
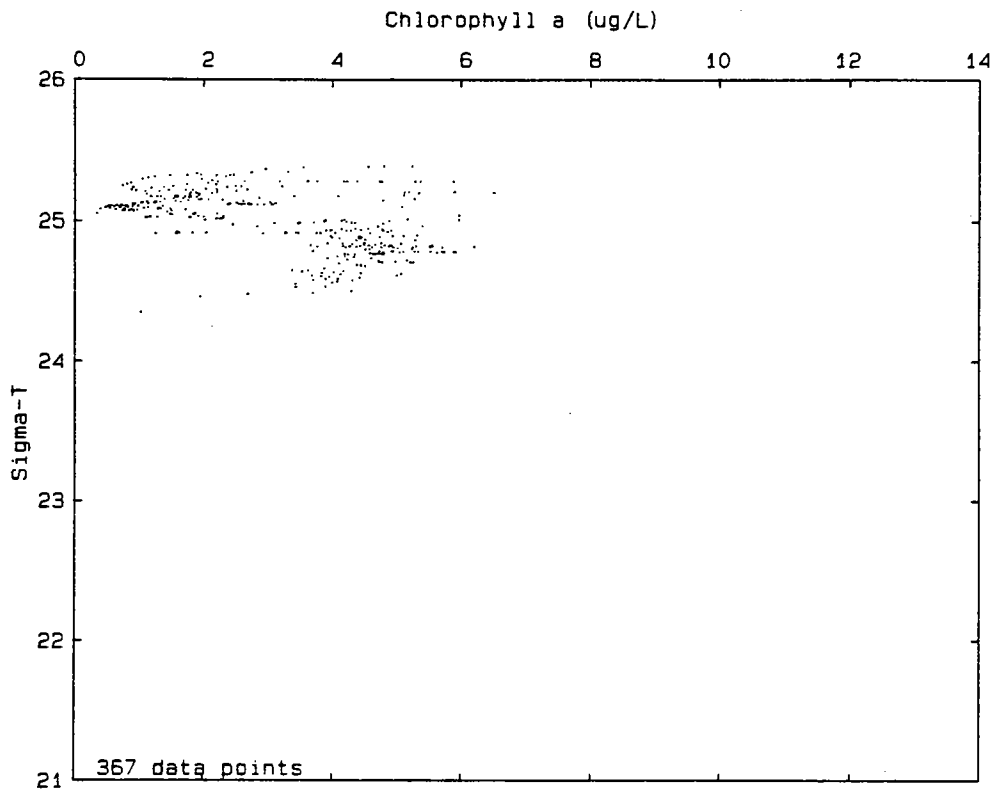


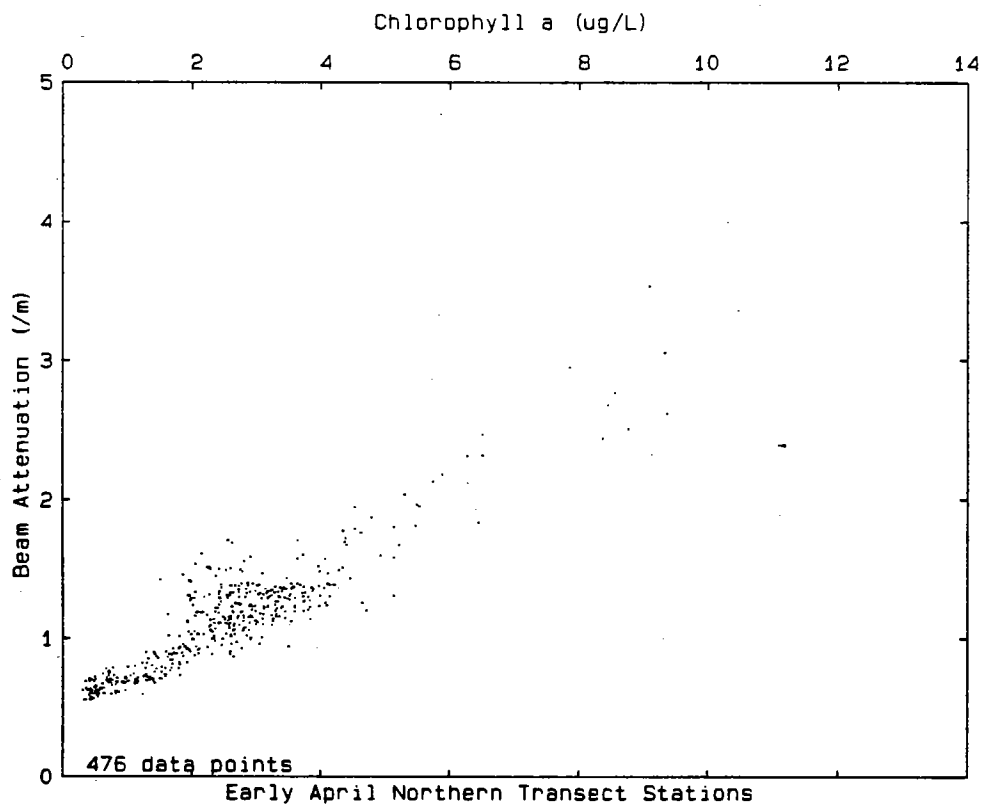
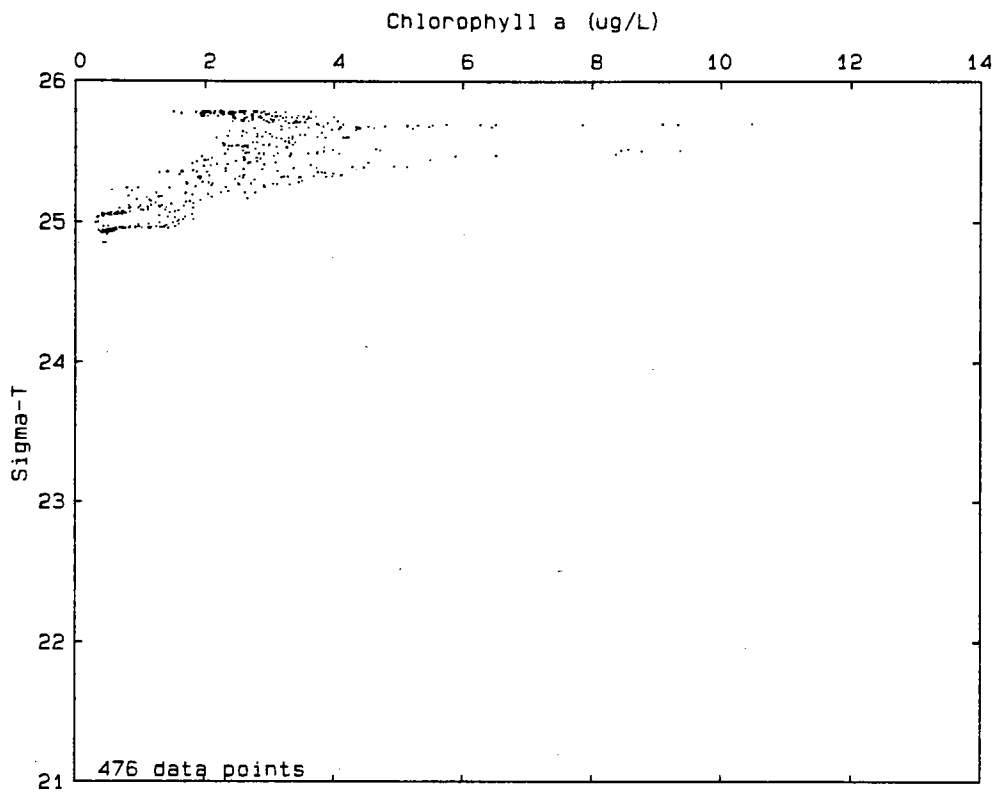


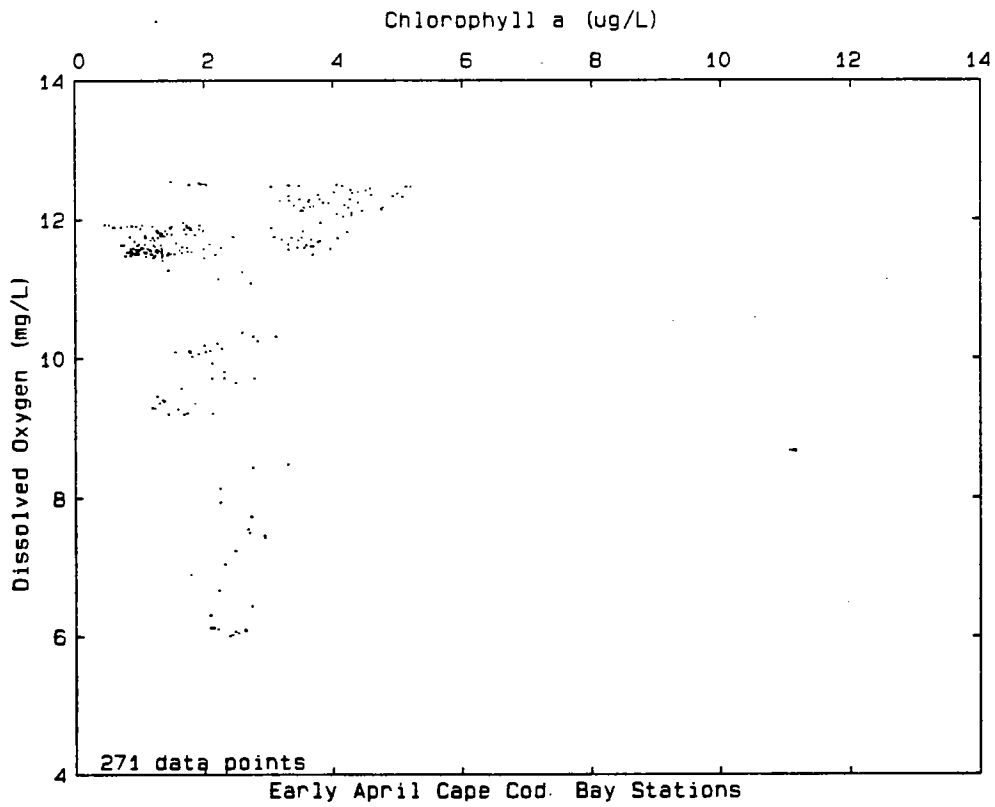
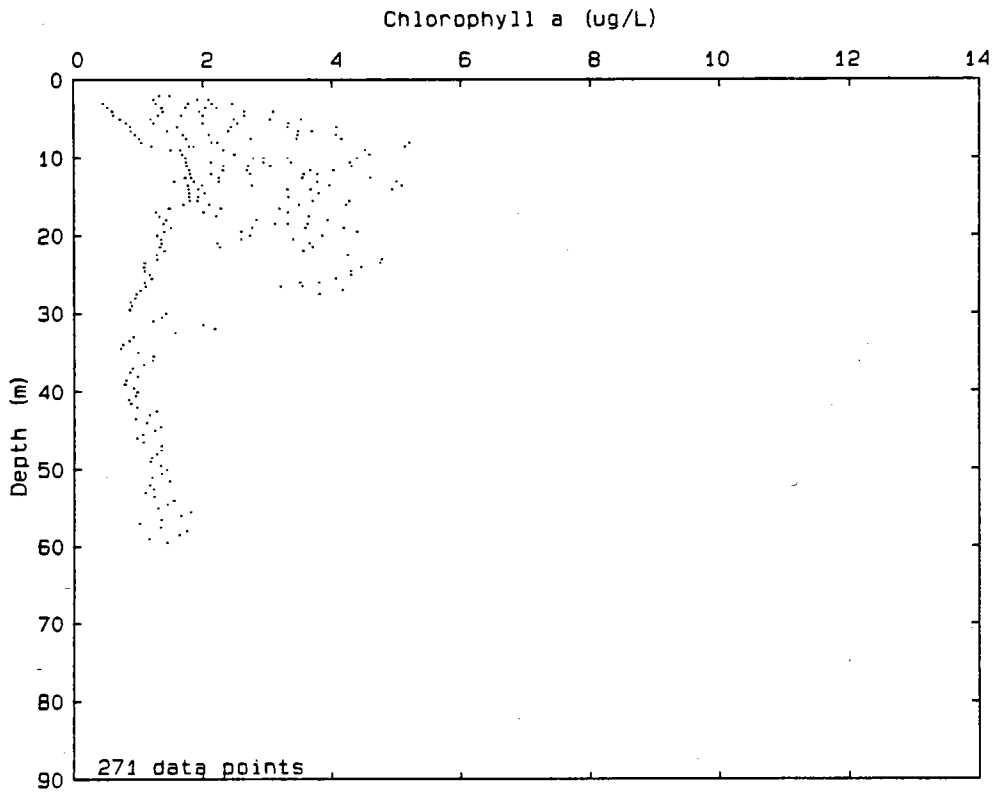


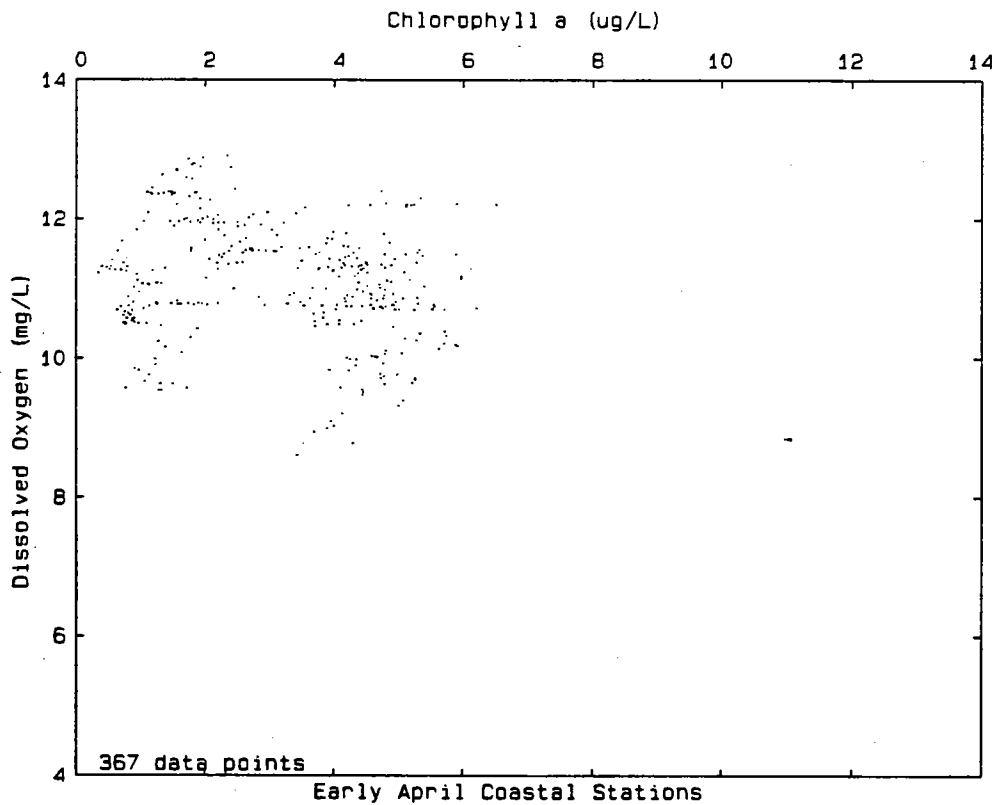
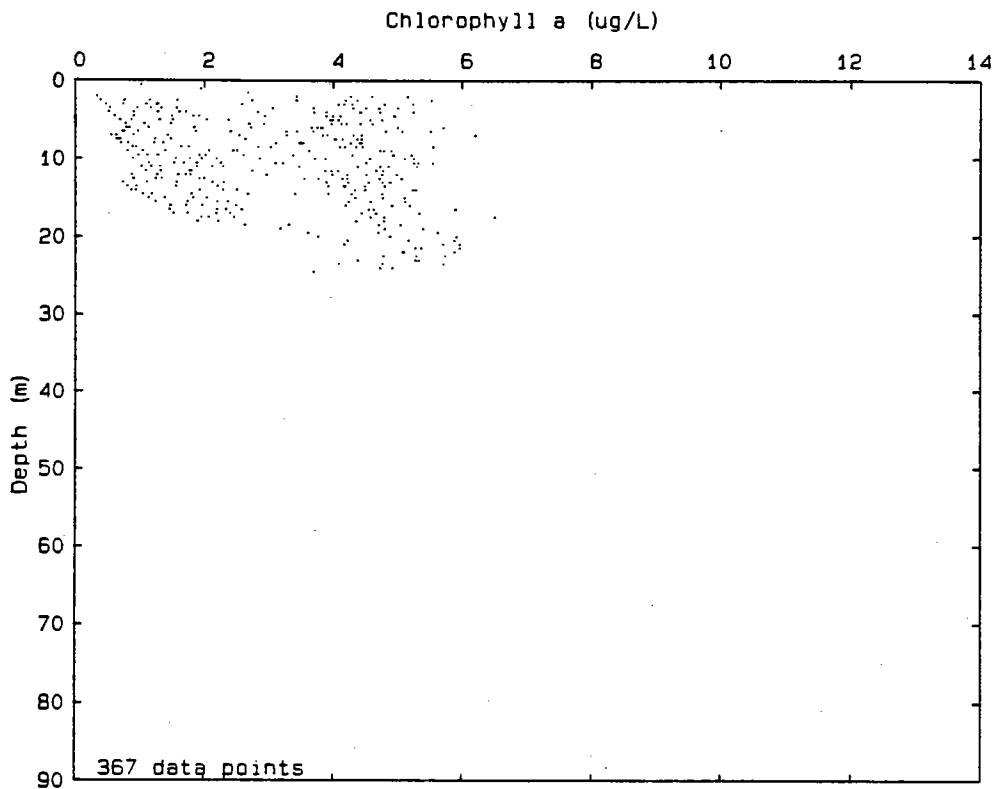


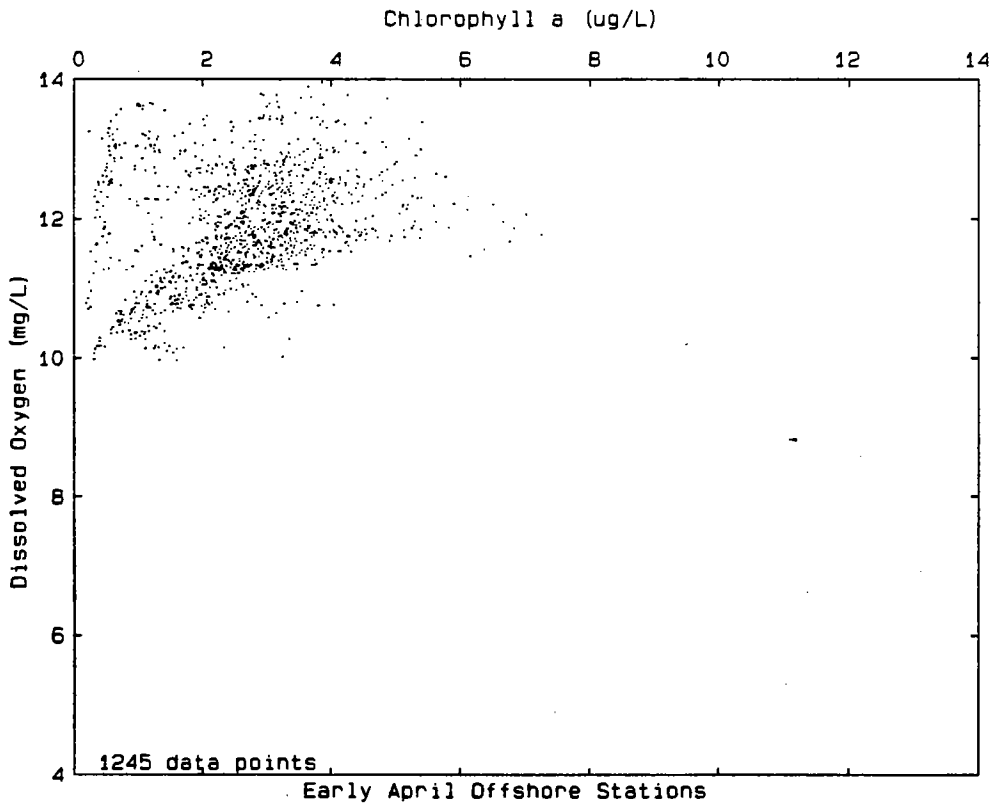
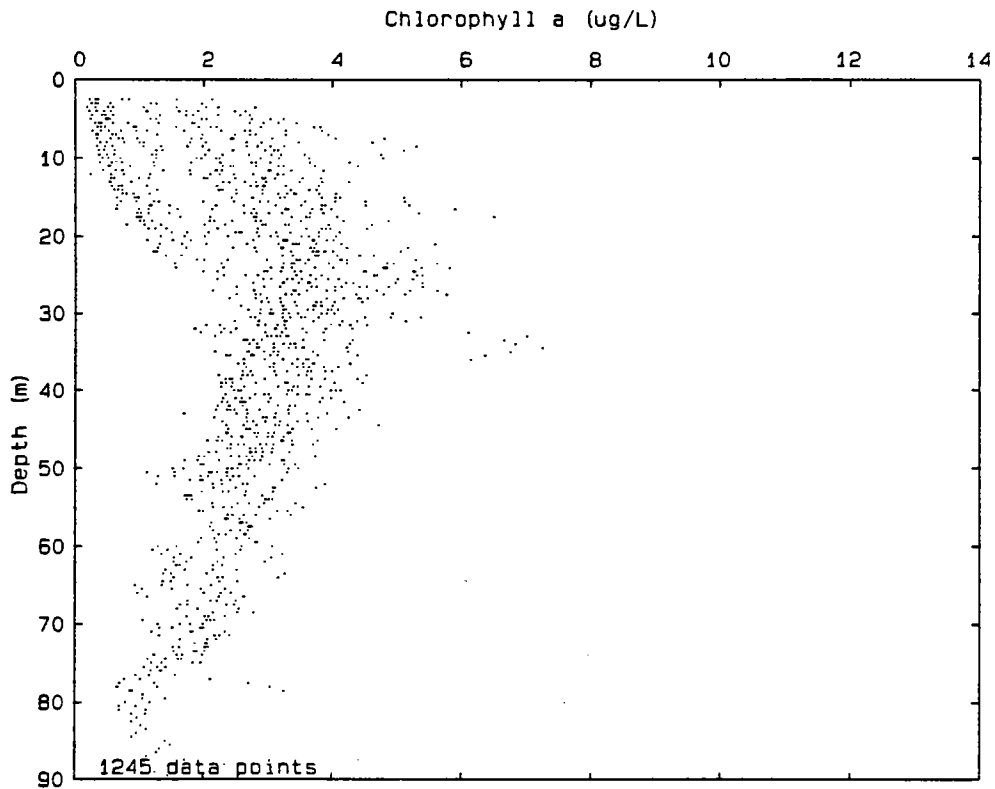


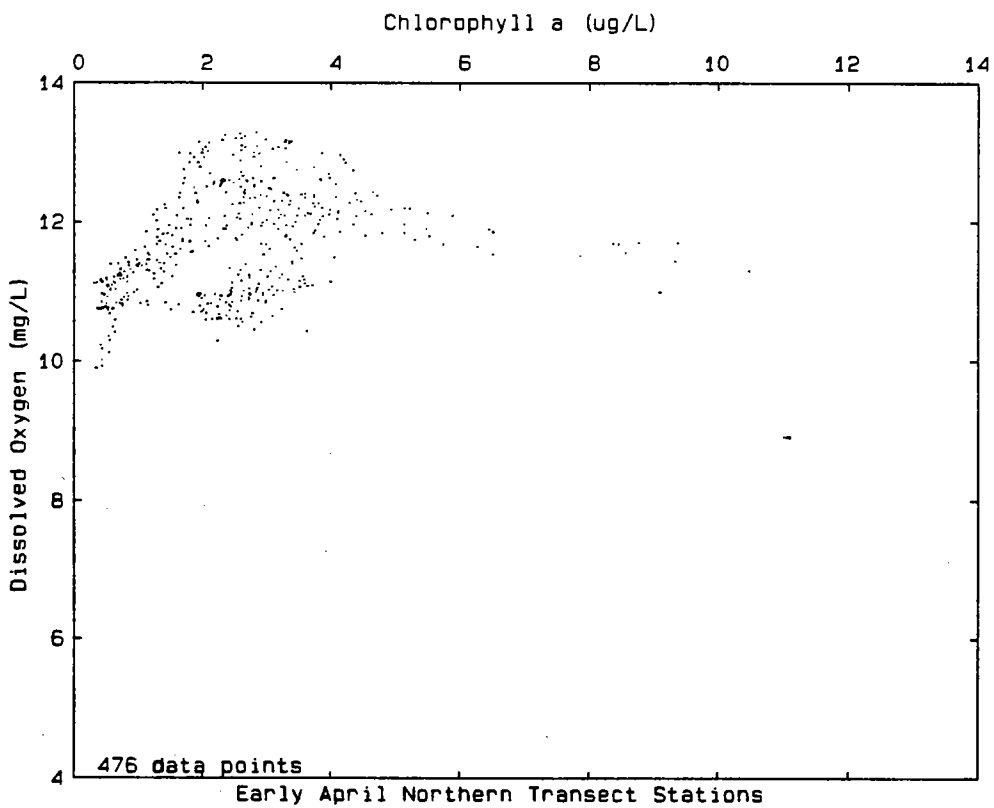
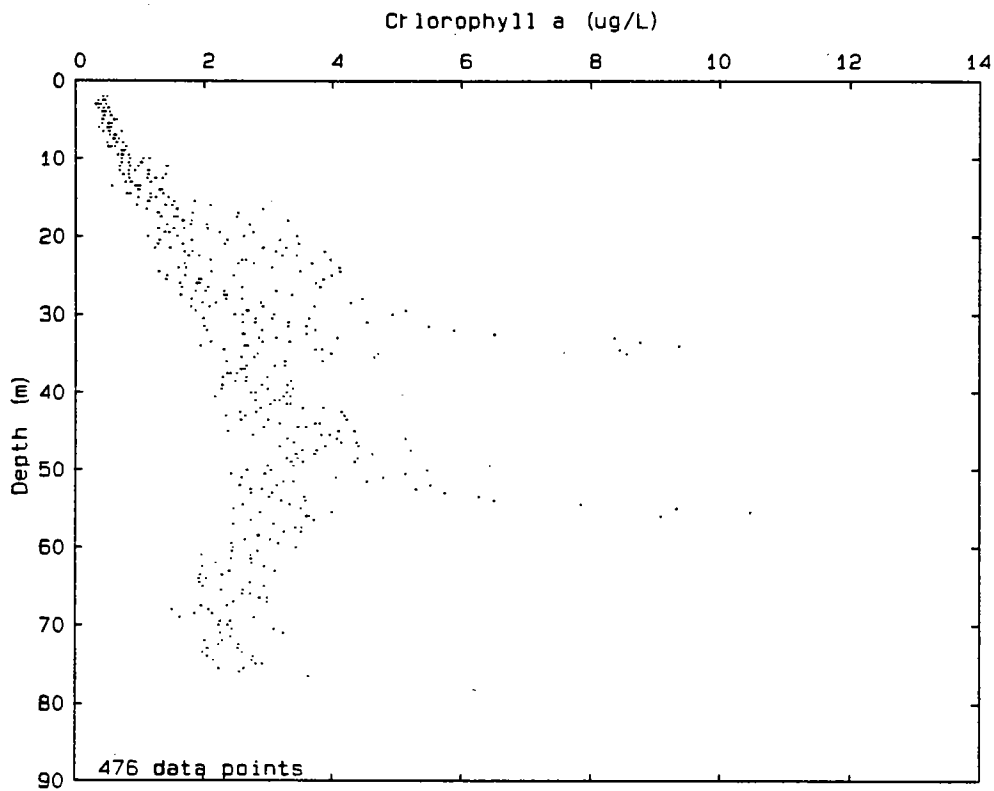


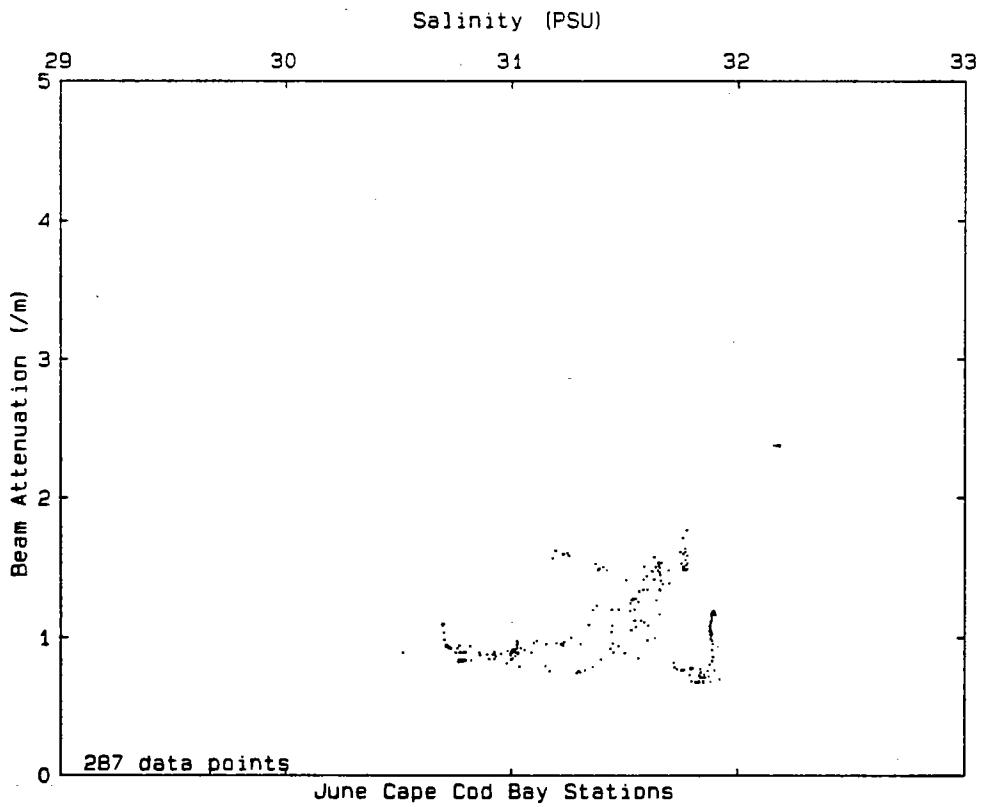
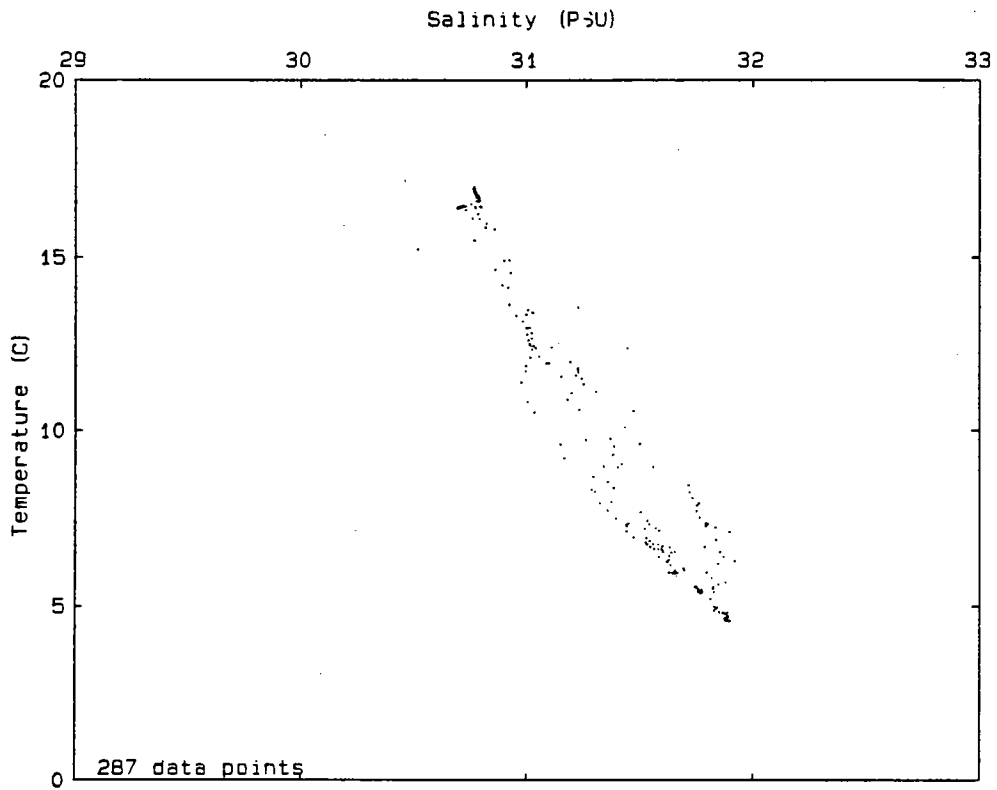


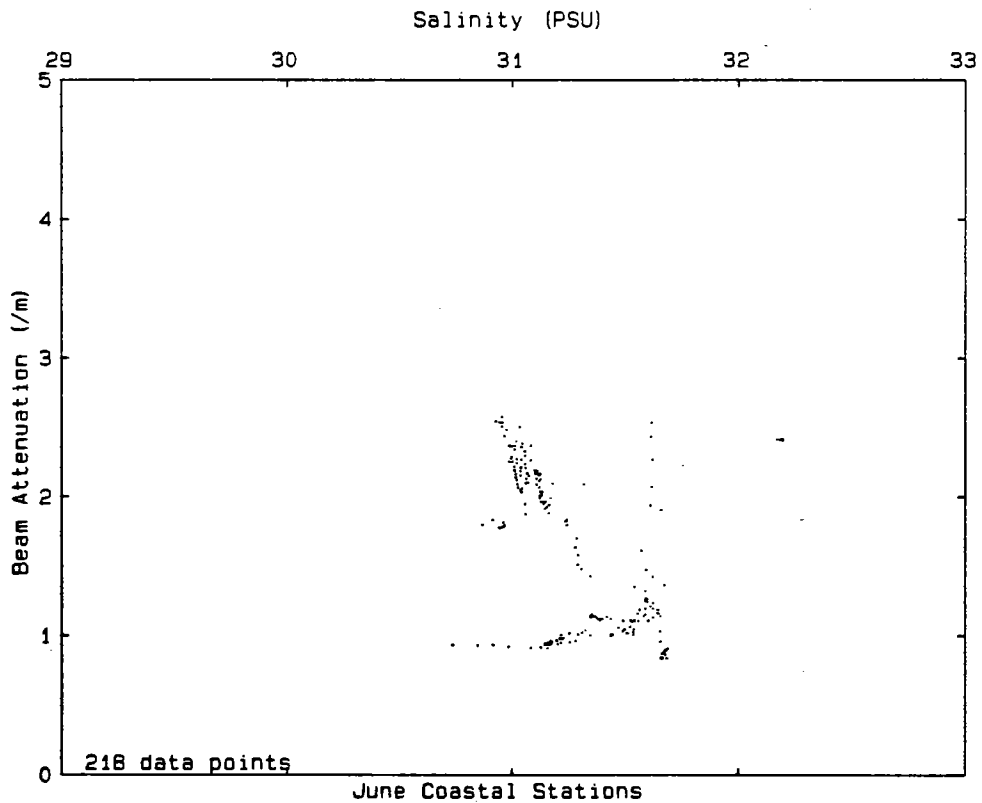
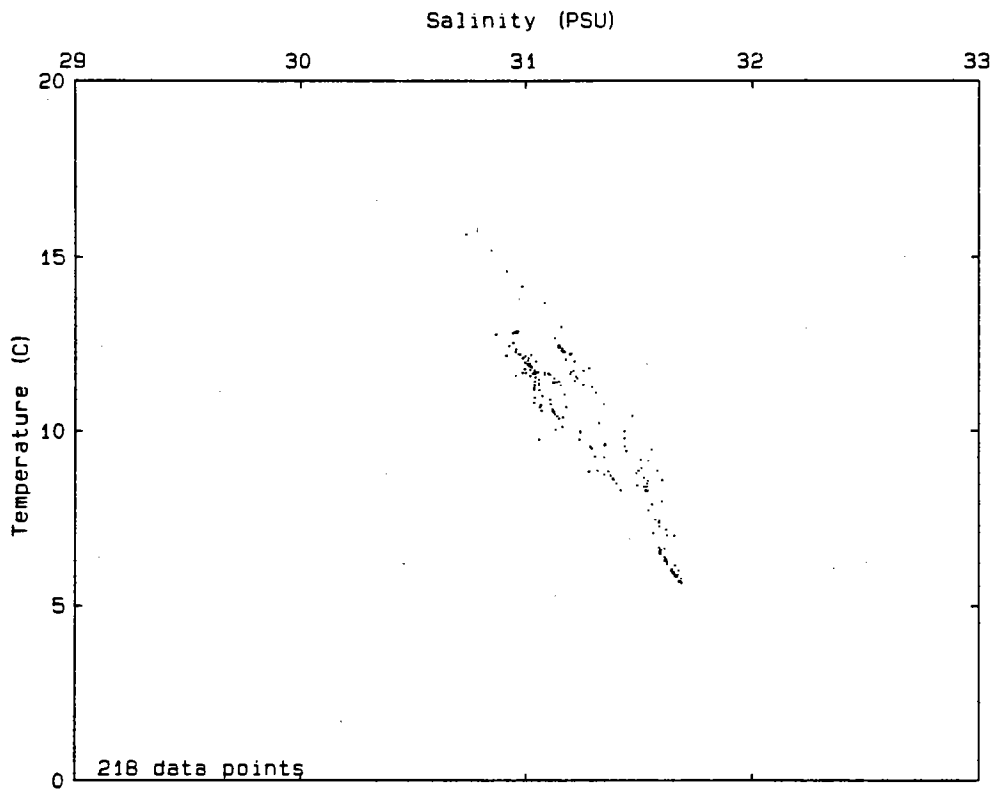


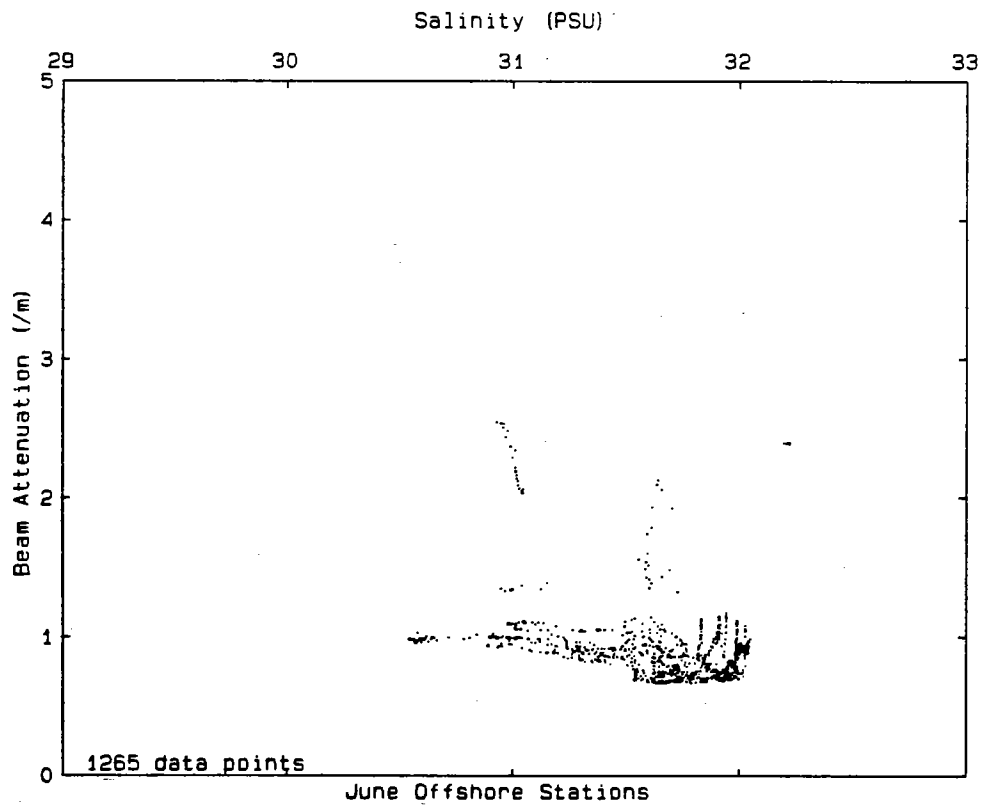
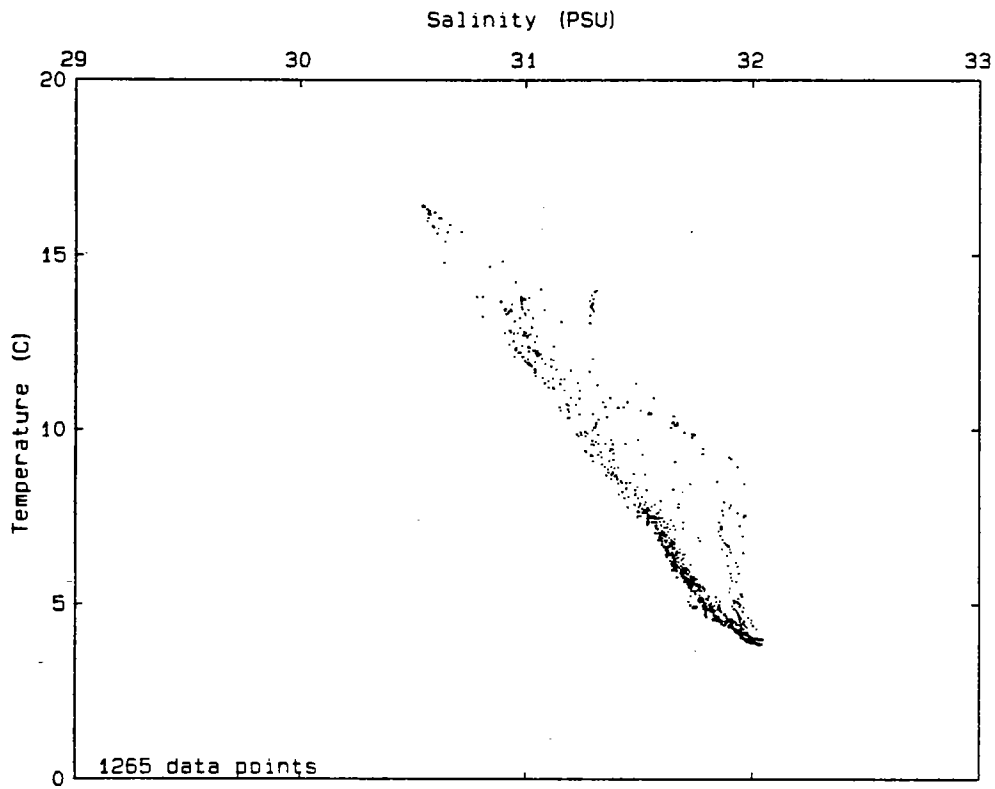


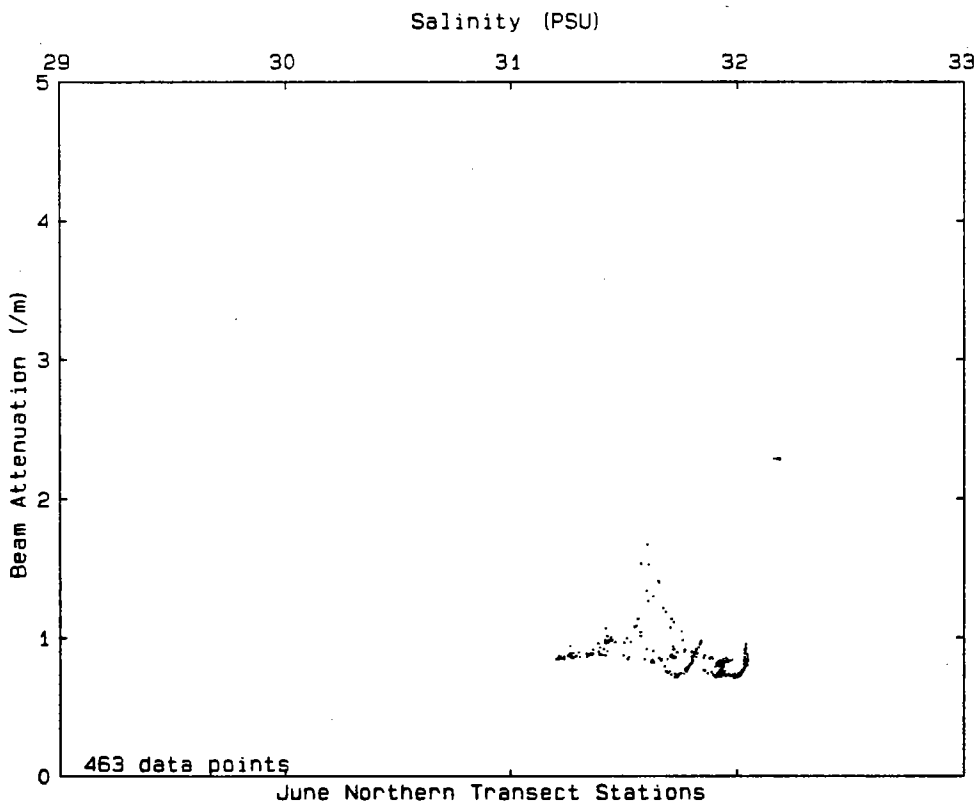
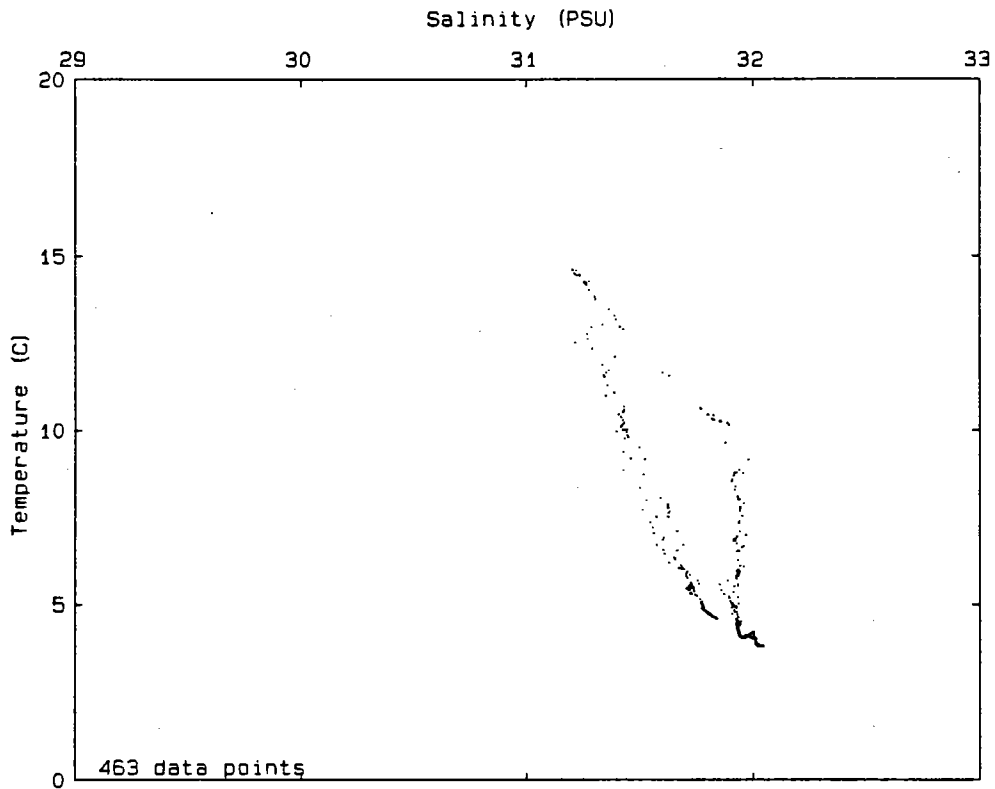


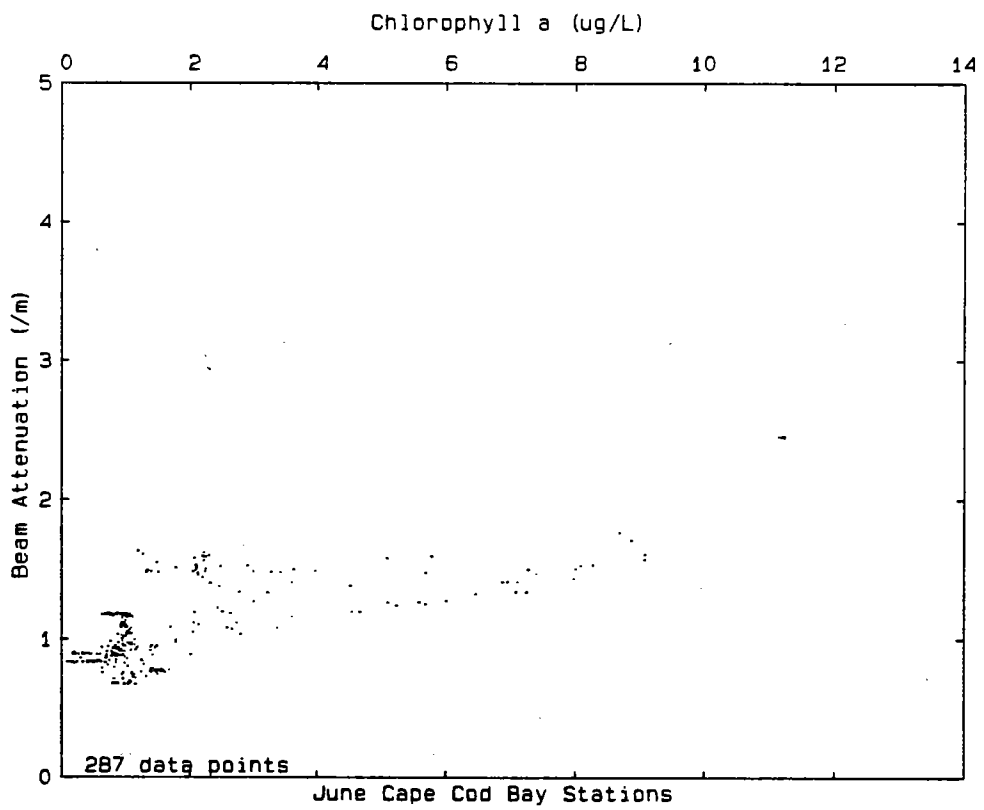
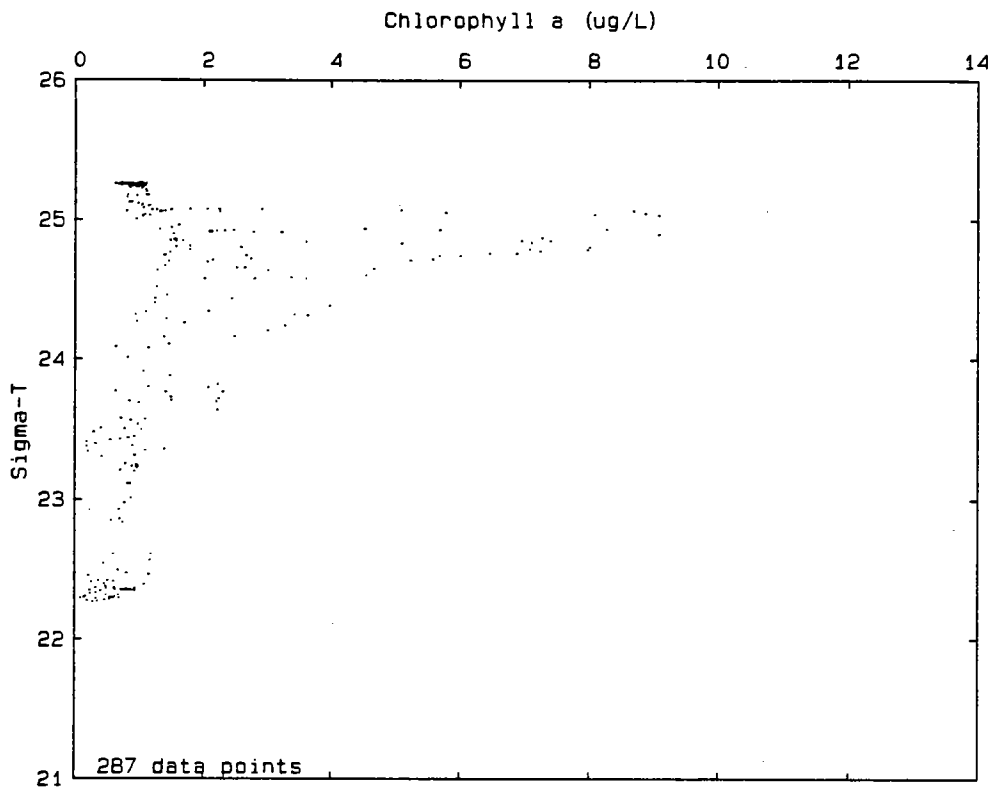


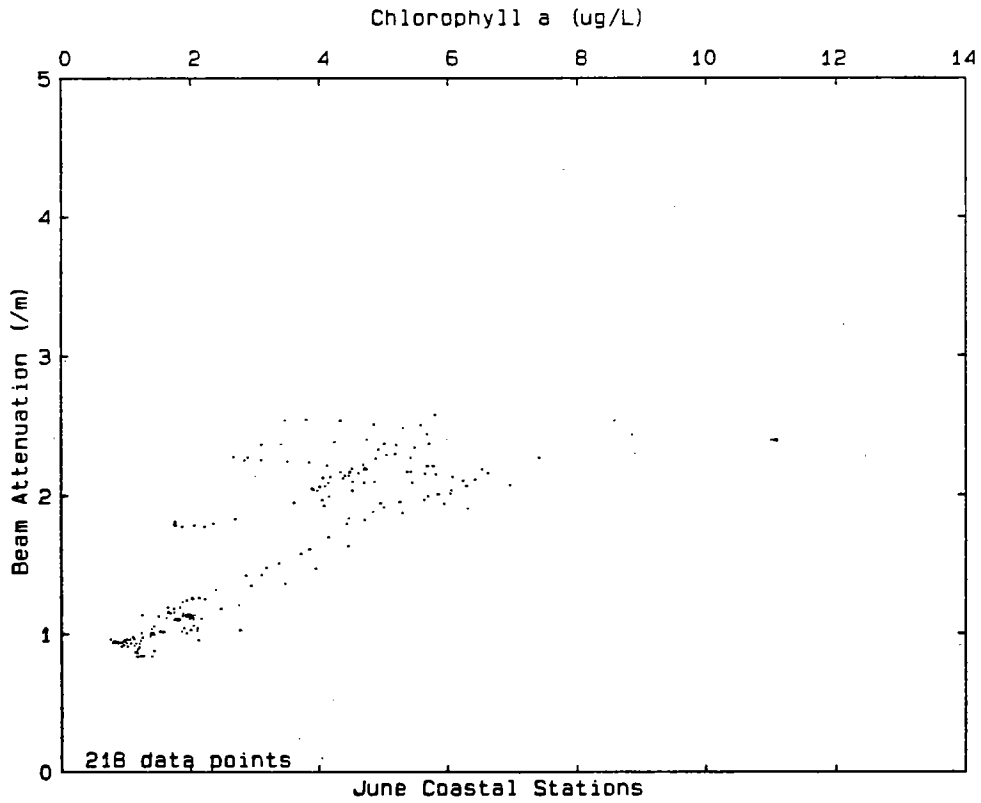
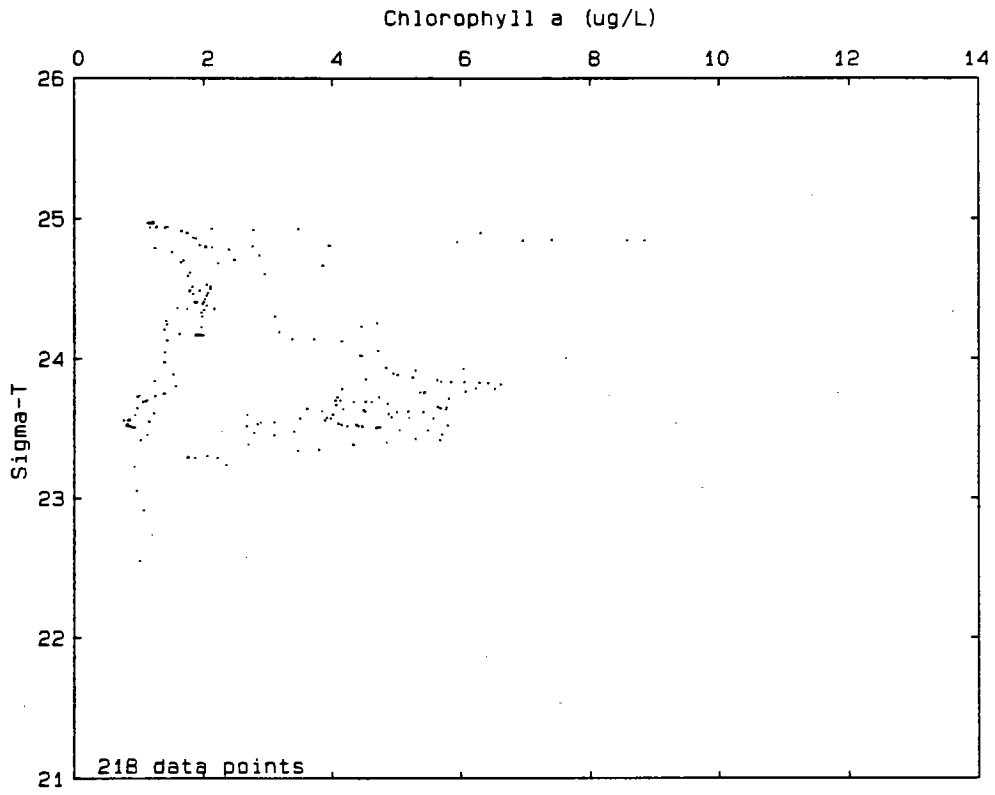


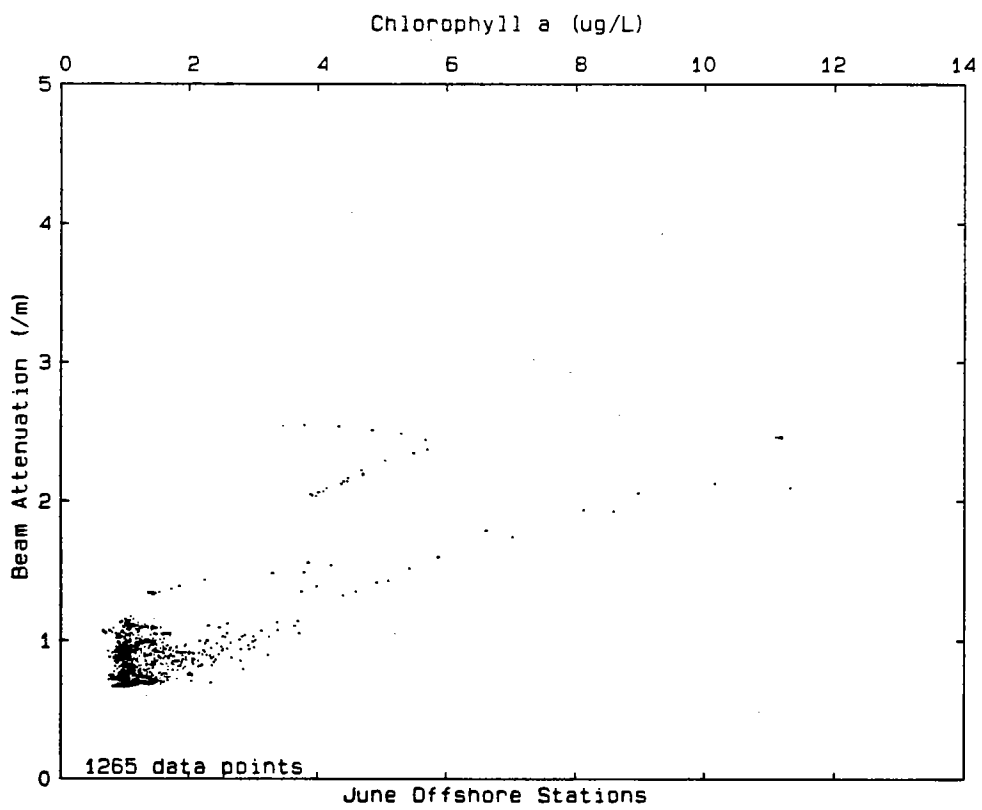
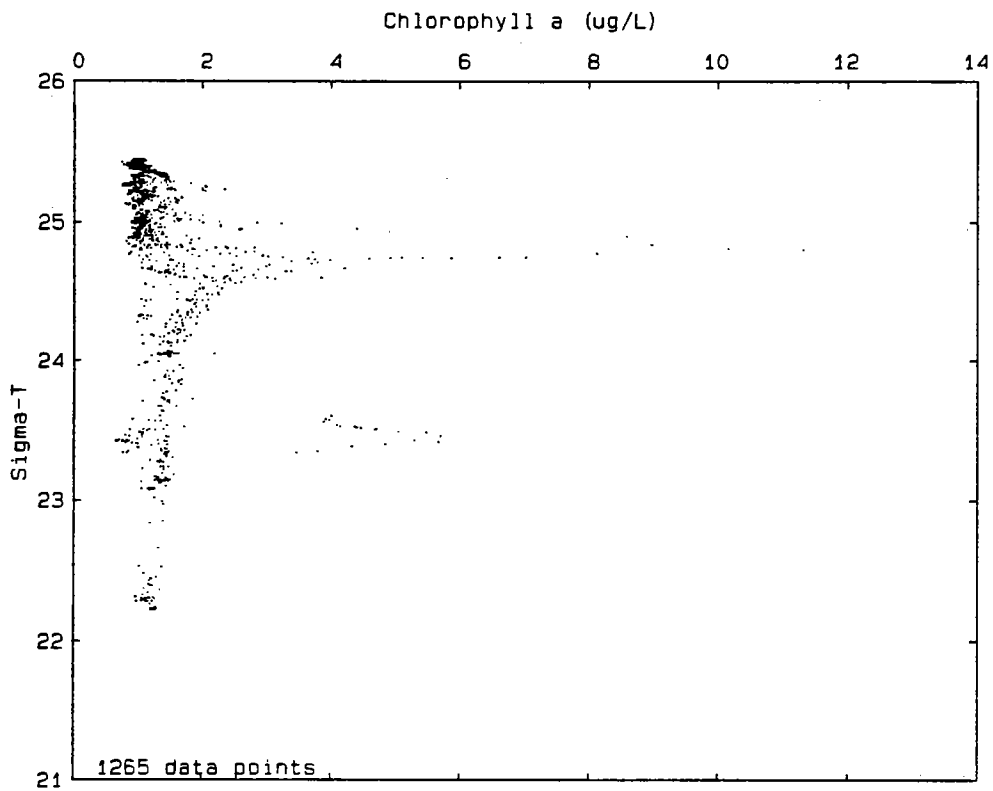


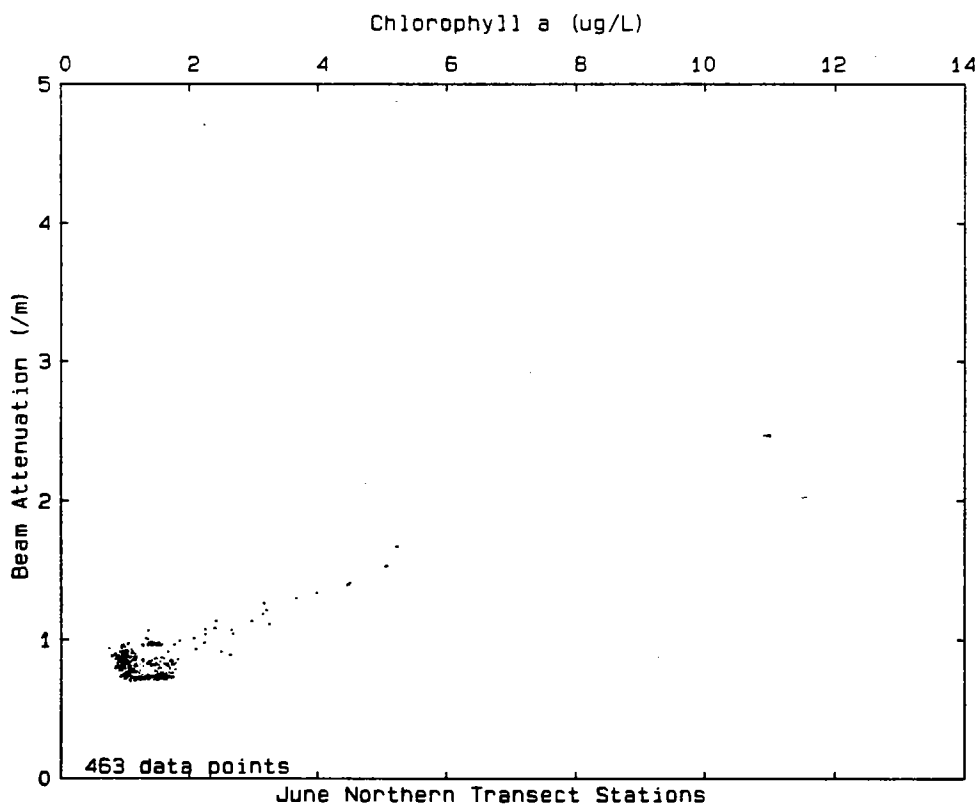
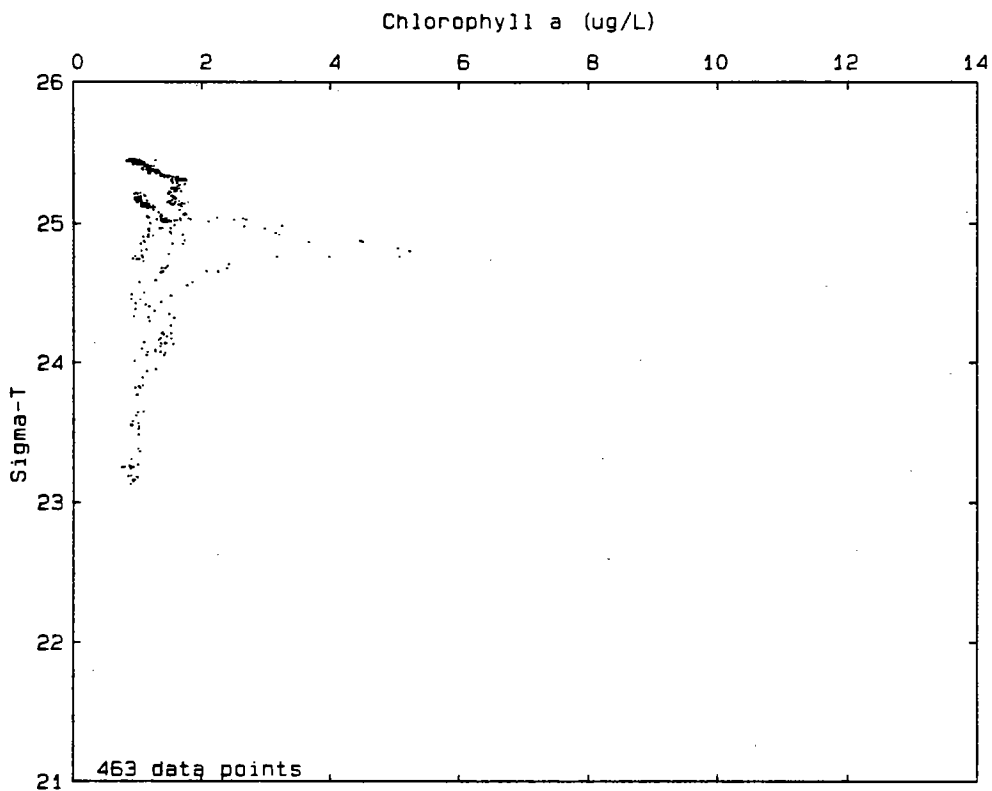


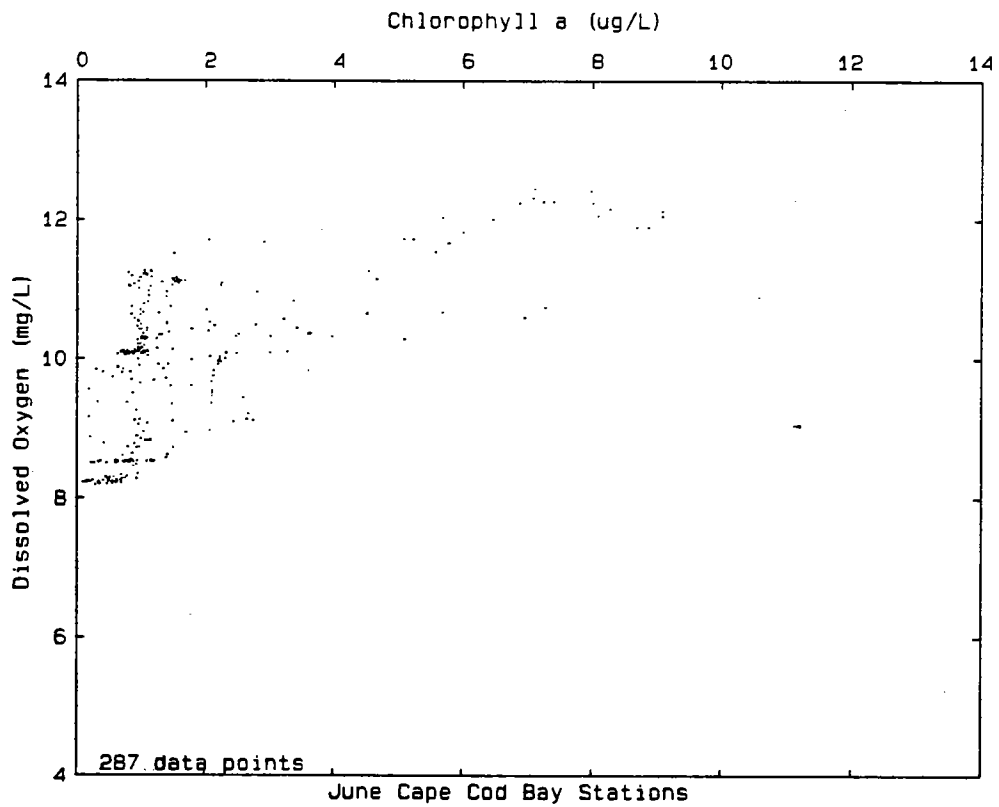
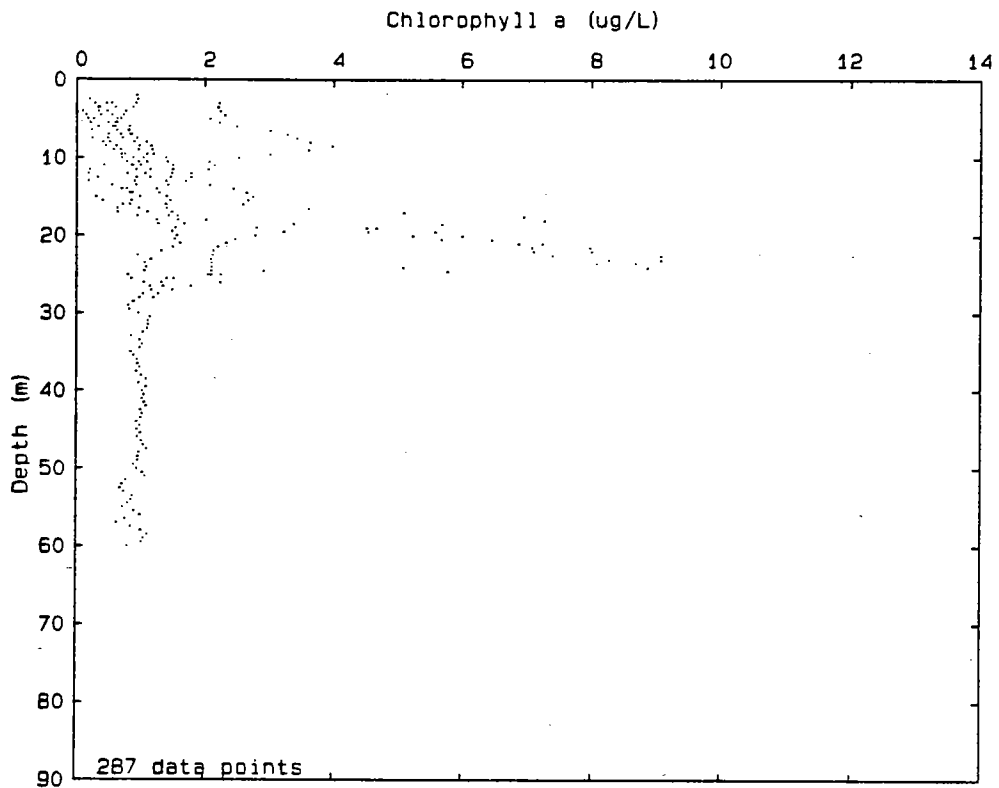


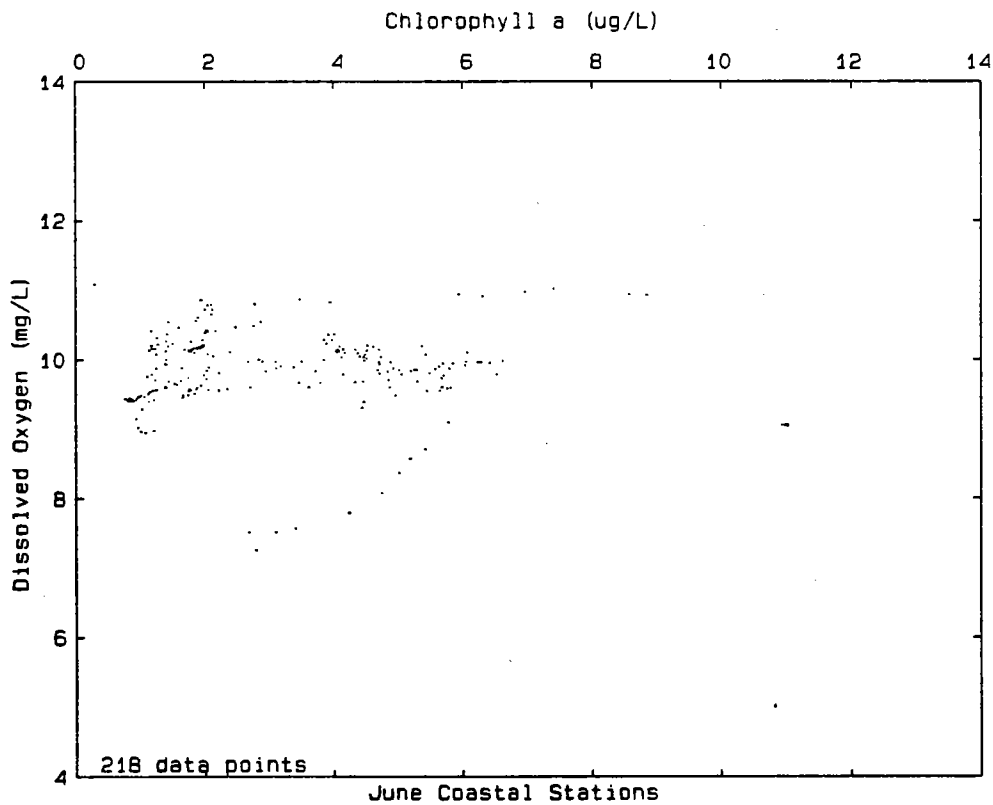
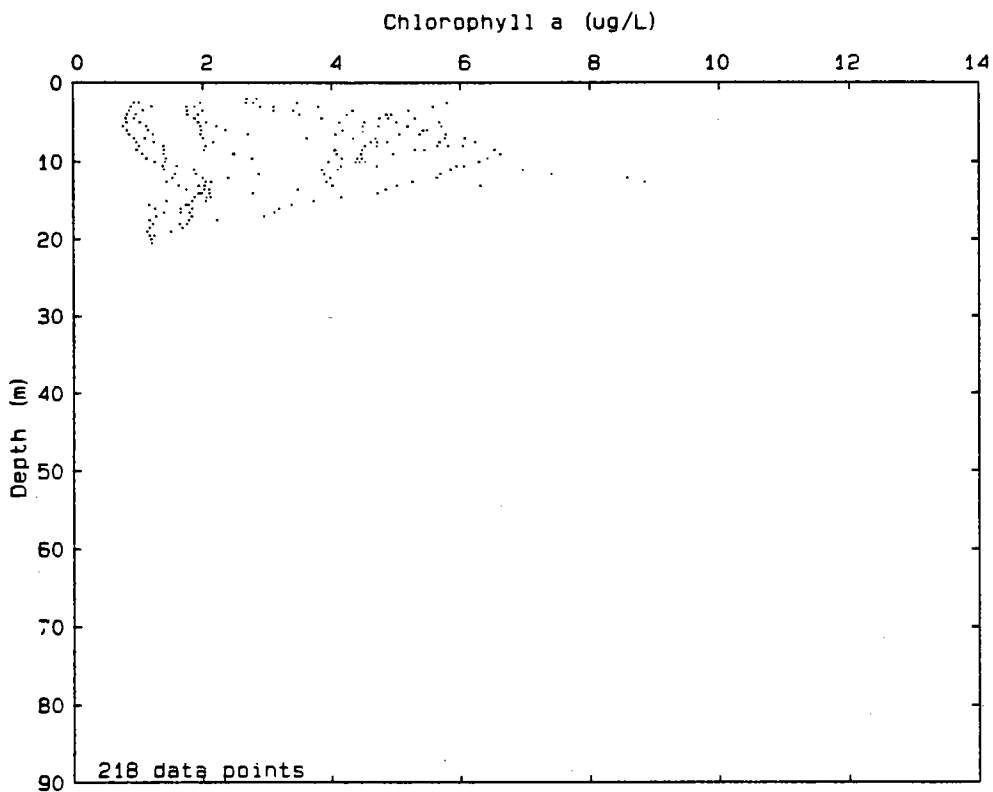


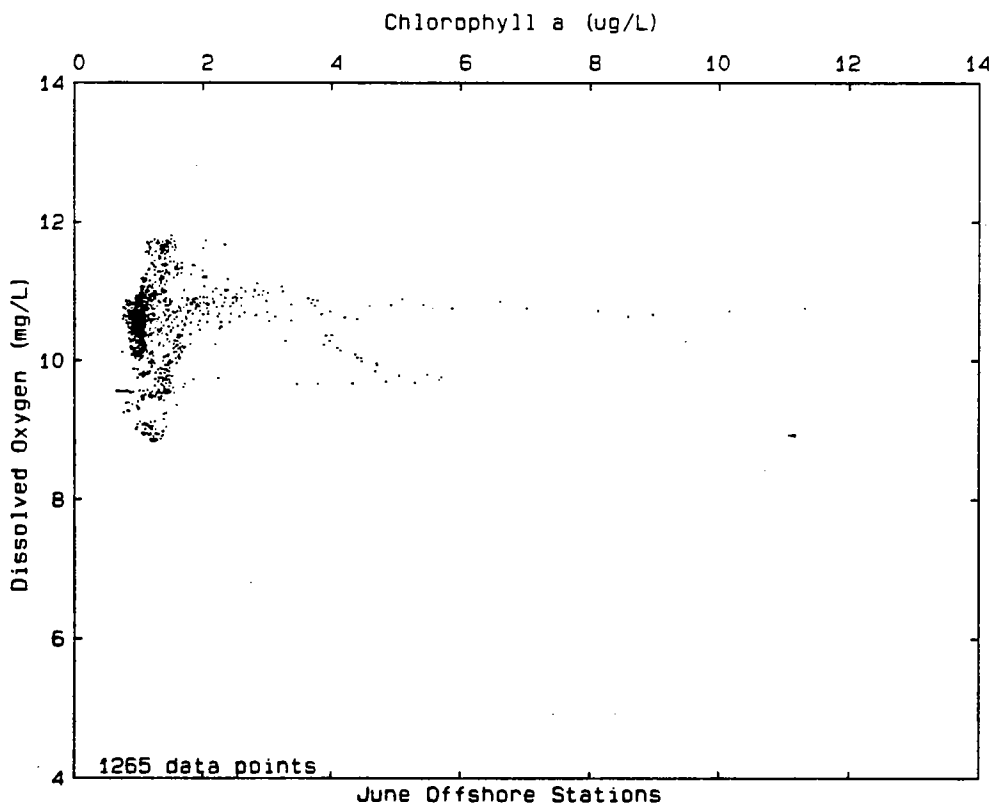
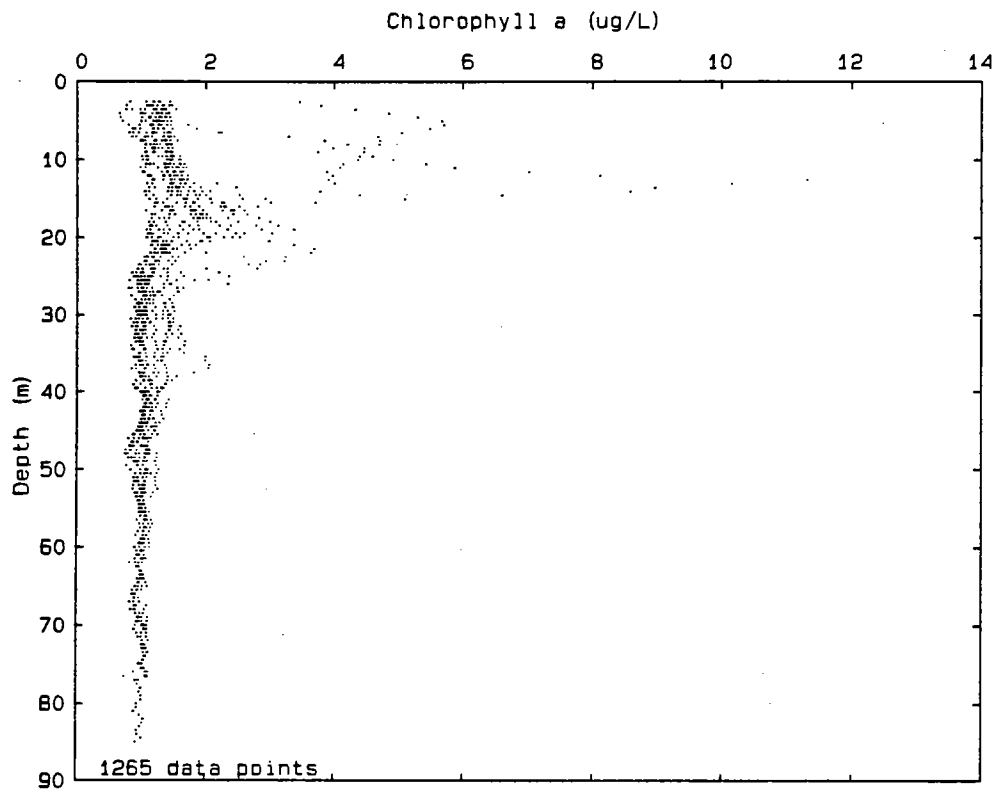


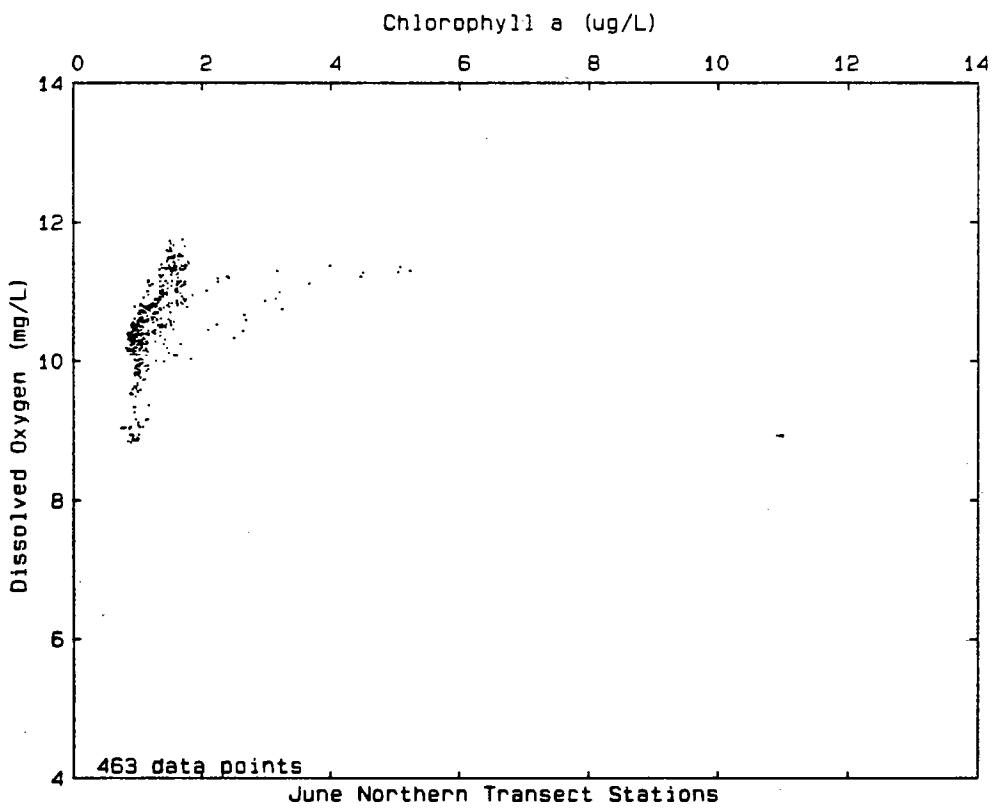
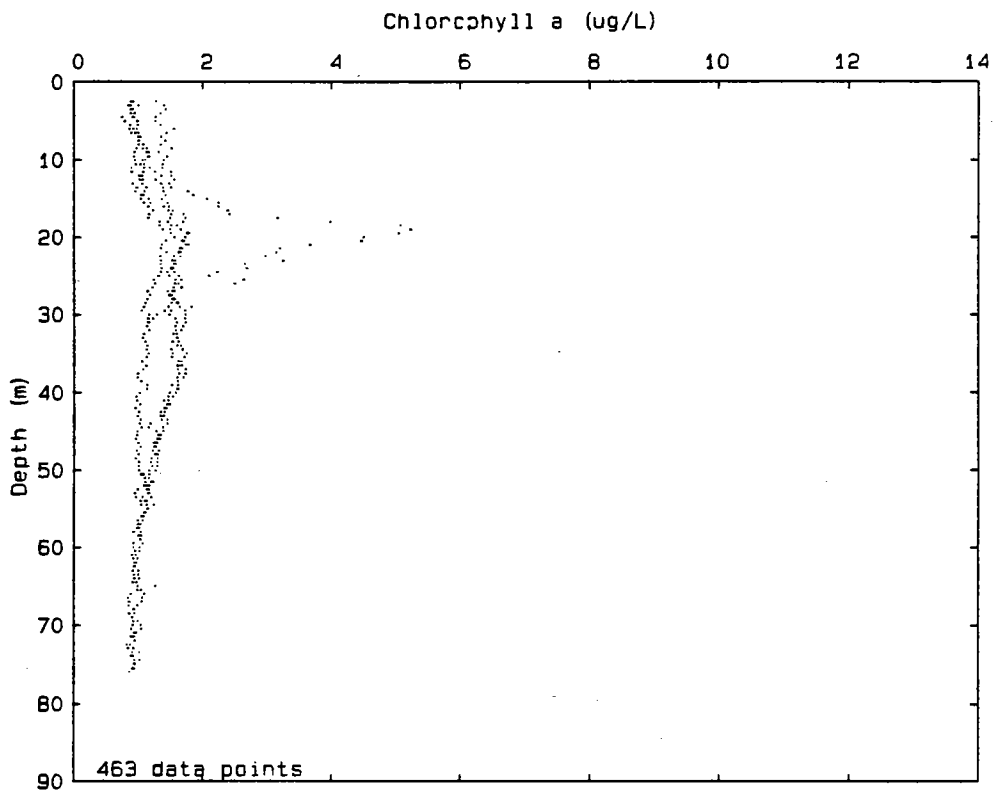












## APPENDIX C

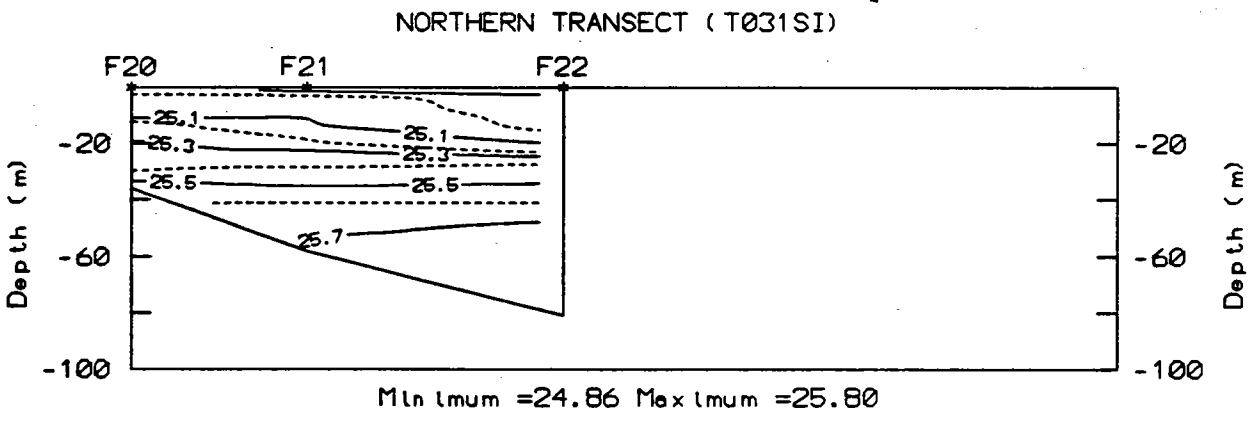
### COMPARISON OF VERTICAL PROFILE DATA: SCATTER PLOTS AND TRANSECTS

#### Part 2

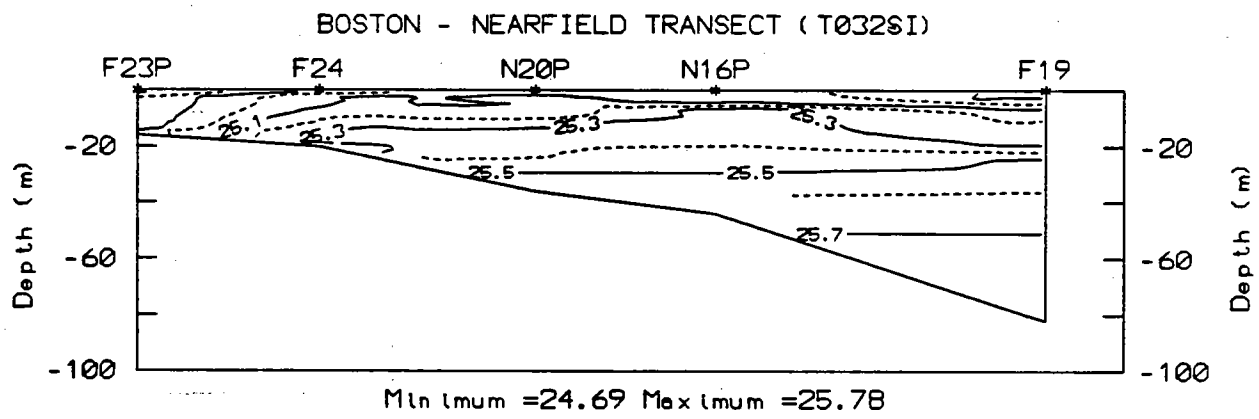
#### **Additional Parameter Vertical Sections for Standard Transects, Early April and June Surveys**

In the accompanying text report, sections are displayed for temperature, salinity, and chlorophyll (fluorescence), and nutrients. Sigma-T (SI) and beam attenuation (BA) sections were also contoured and are given here. Note that the designation T03 is for early April and T04 is for June. The designation, x, in the example coding T03xSI stands for the transect, as described verbally in the figure heading. Contours were generated by the kriging method for these plots as well as parameters displayed in text figures.

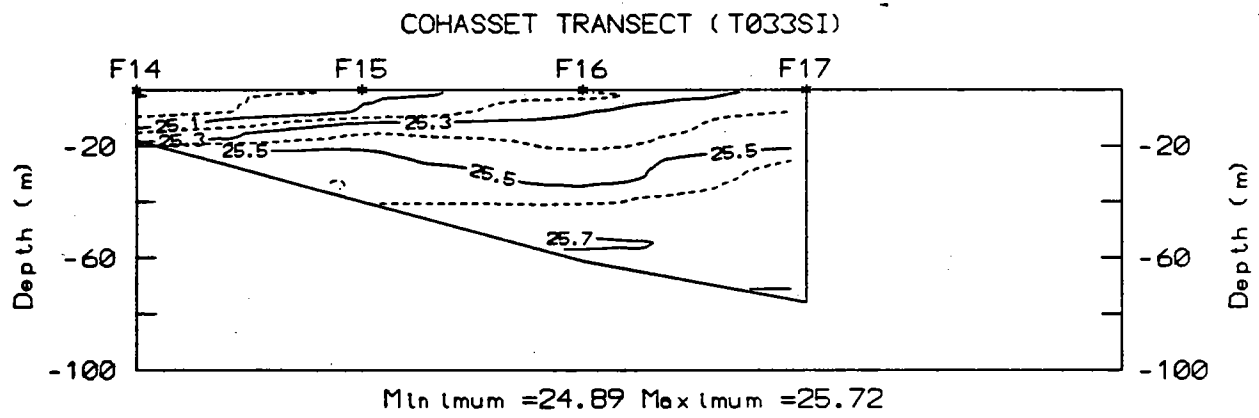
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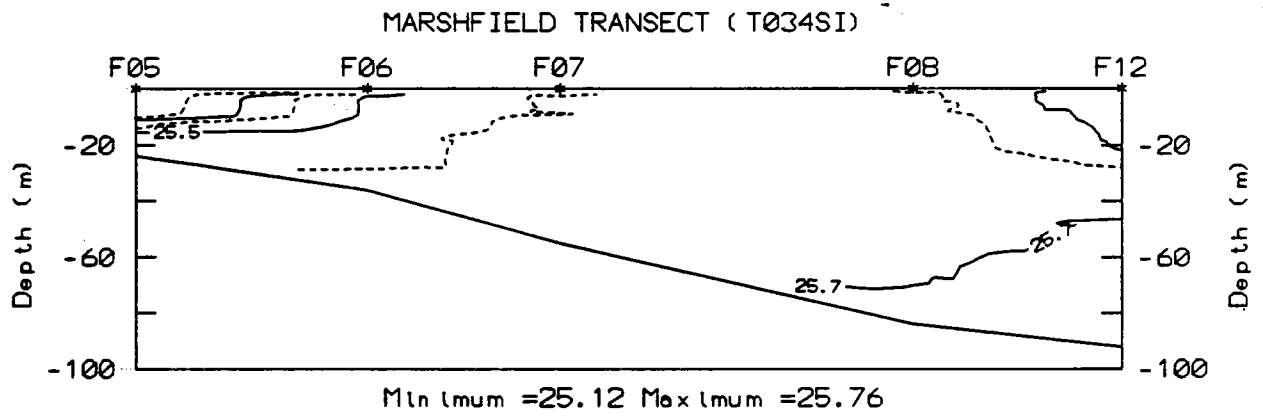
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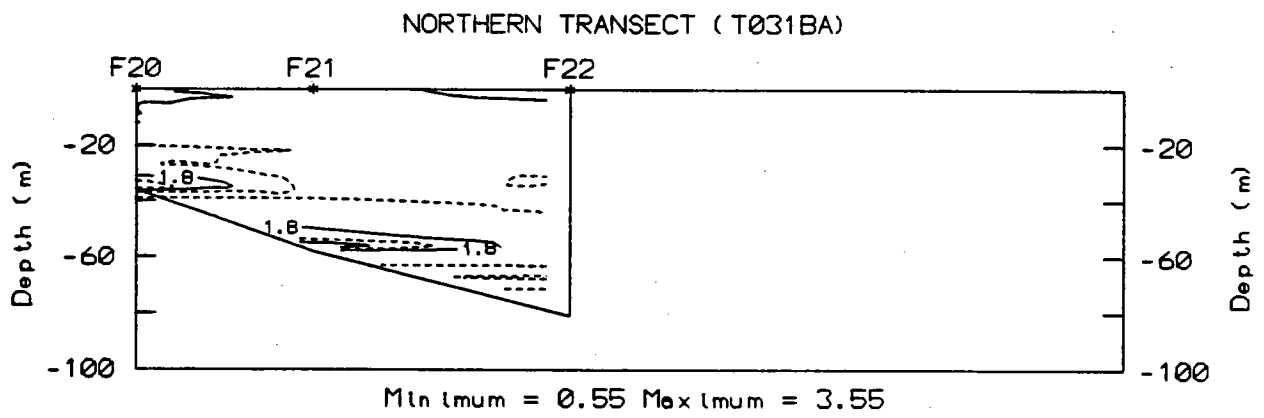
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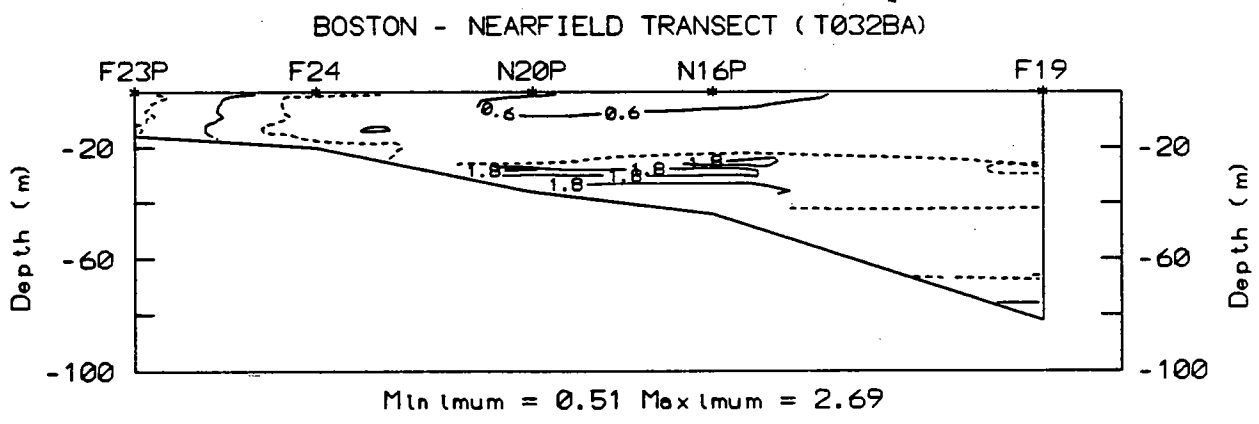
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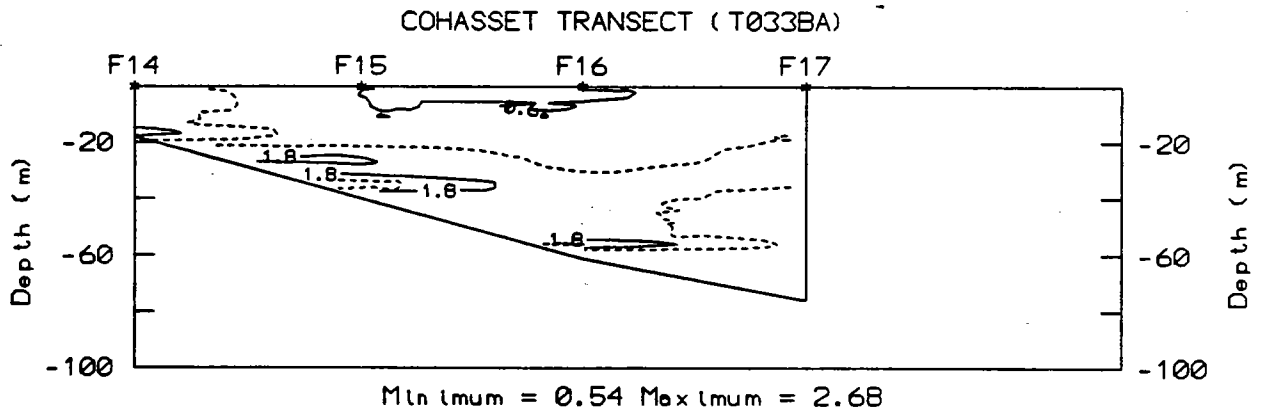


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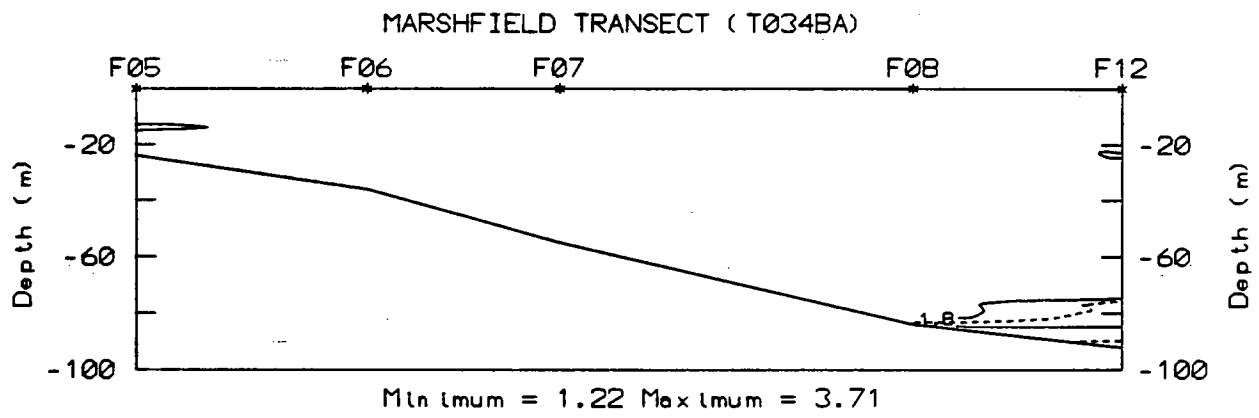


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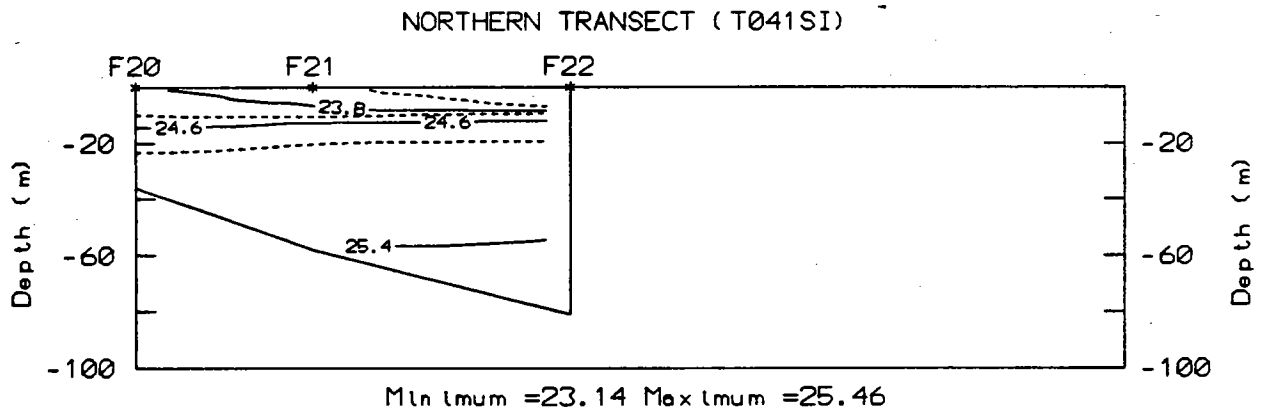




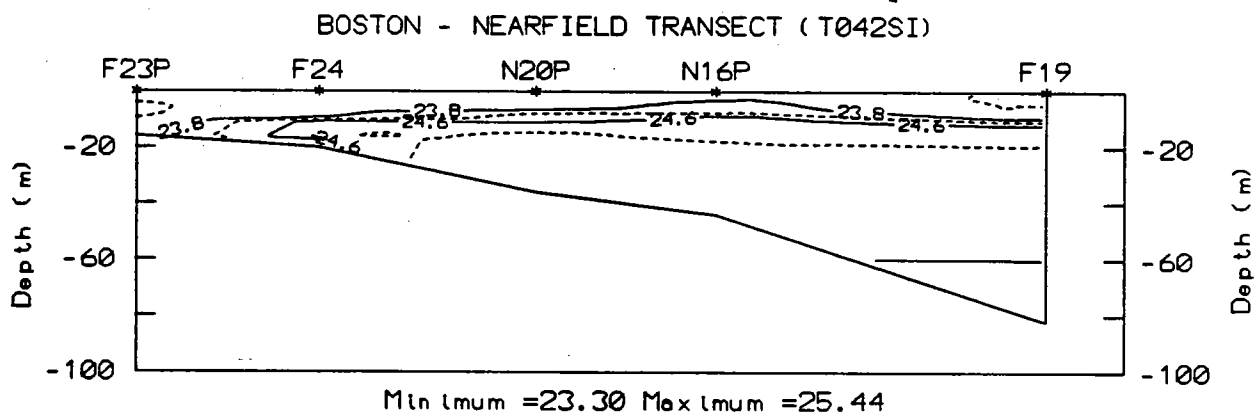
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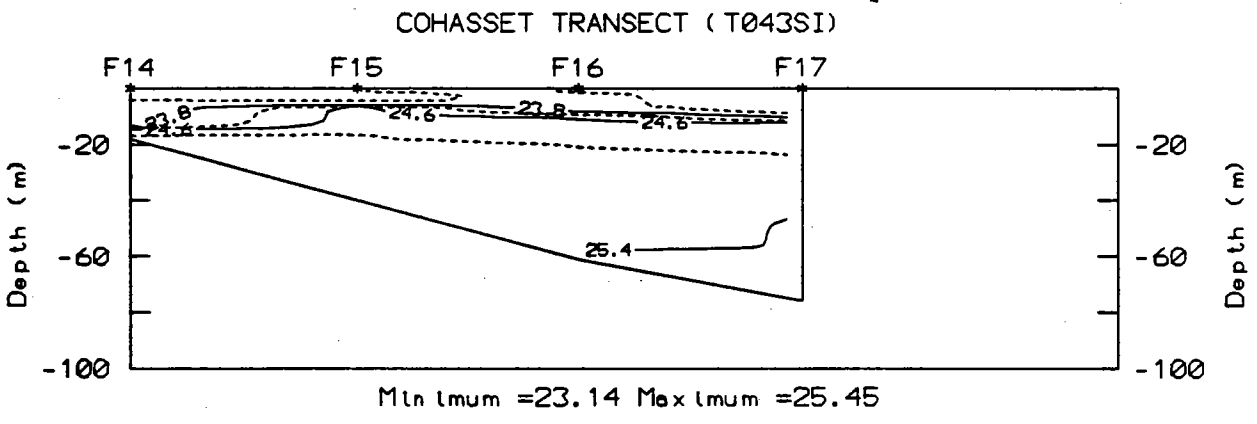
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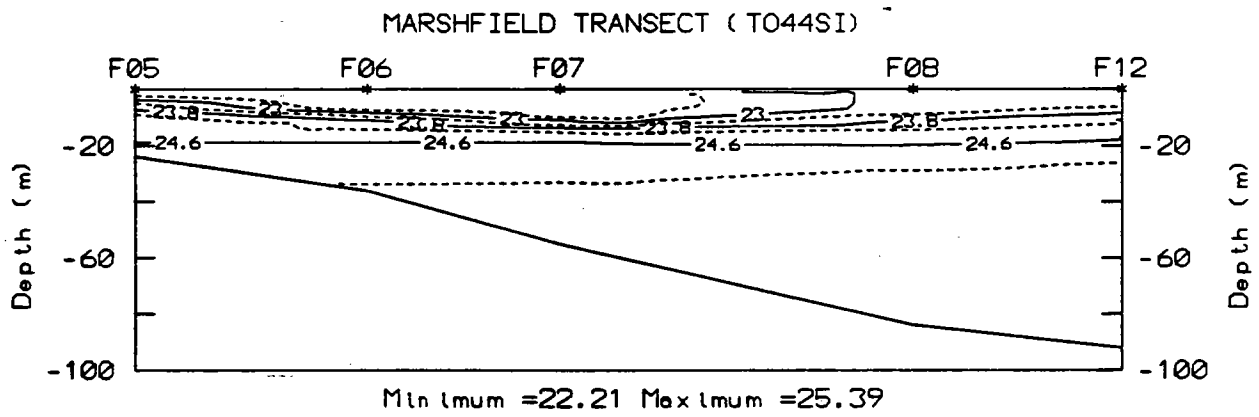
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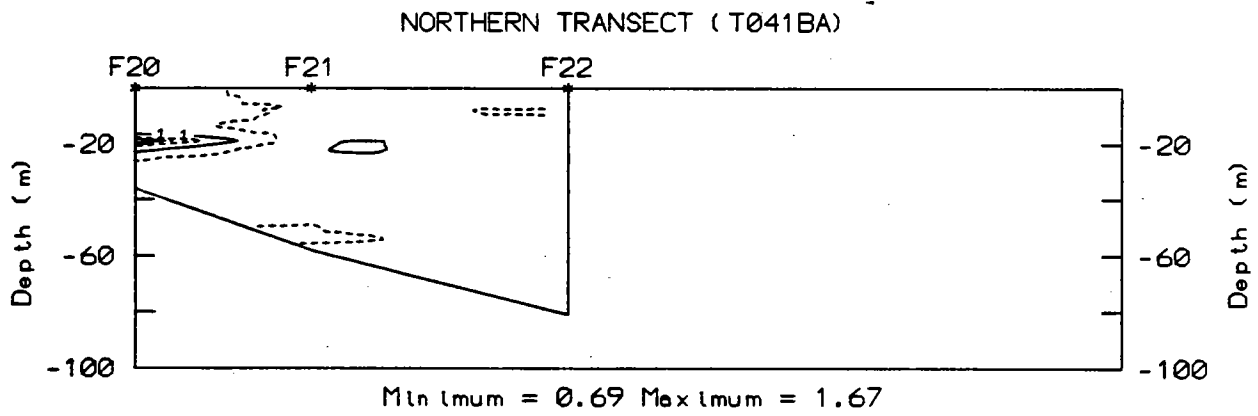
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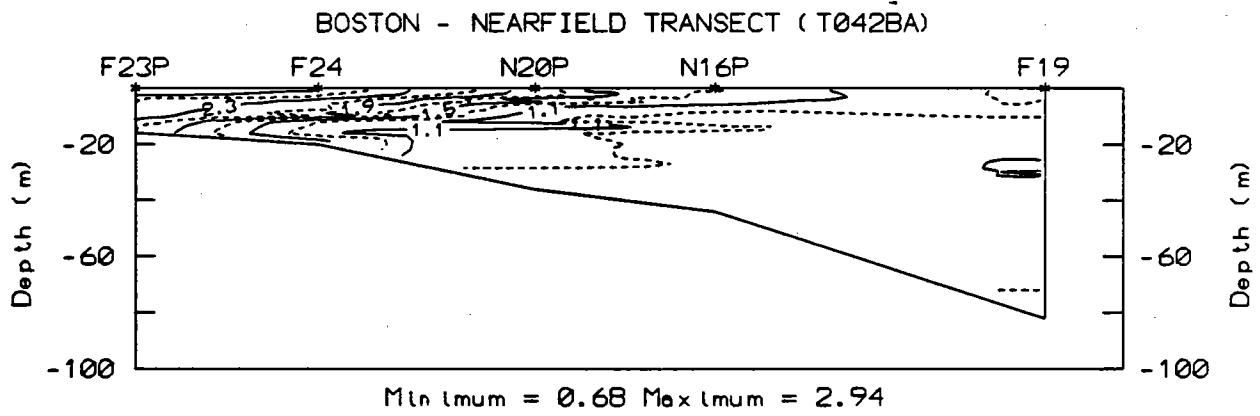
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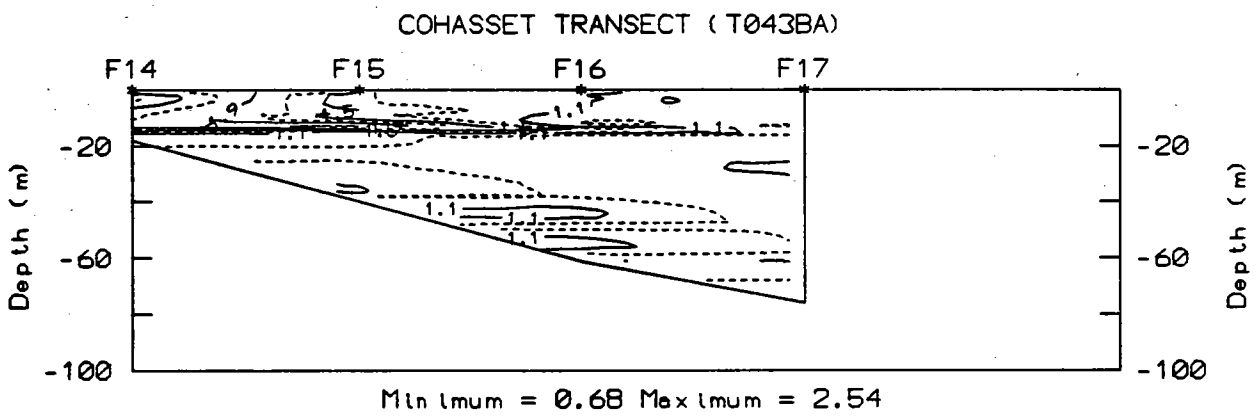
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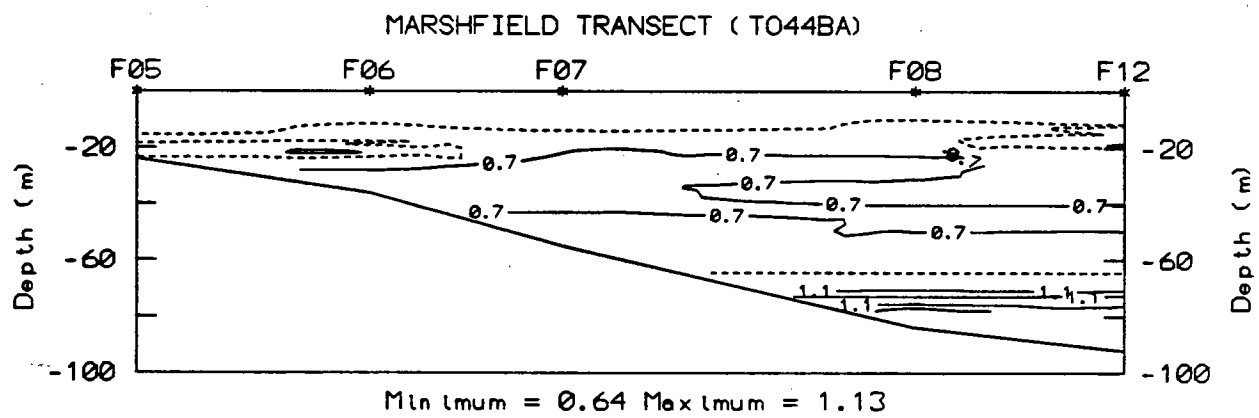
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00537



00538



00539

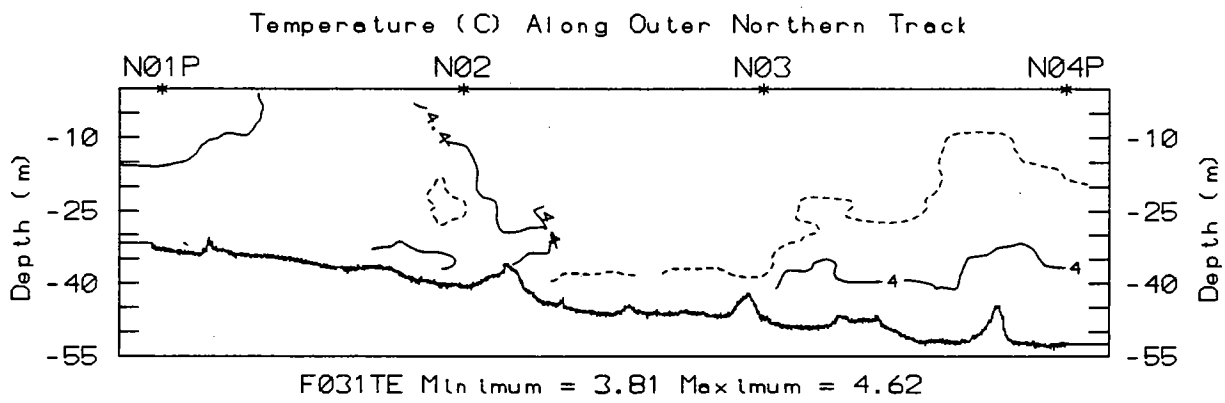
## APPENDIX D

### TOWING PROFILE DATA FROM NEARFIELD STATIONS

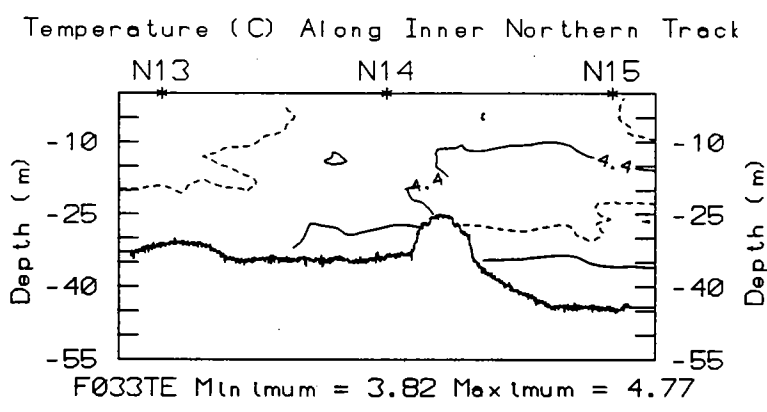
Sigma-T and chlorophyll (fluorescence) from towing tracks are contoured and compiled in figures in the accompanying text report. Temperatures for each towing leg of the nearfield track are presented in this Appendix. Data are from oscillating tow-yos from near surface to near bottom with a number of tow-yos between each station. The method for contouring was inverse distance to the second power; if no data were encountered horizontally for 500 m or vertically for 3 m, then the section is blanked out and not contoured. On the mid-July survey, the echosounder was not functioning; for that survey the bottom bathymetry of the late July survey was used in the plots. Otherwise, the actual bathymetry was recorded continuously and is displayed in the figures.

Note that the tracks are given in headings, with stations also listed for each section. The cruises are designated below the figure using the following coding:

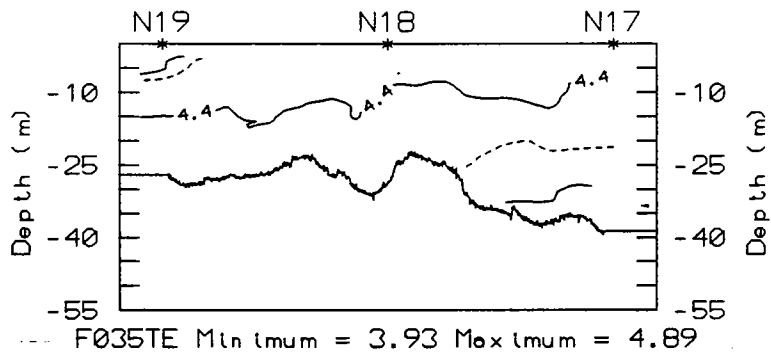
F03 = early April  
F04 = June  
N04 = late April  
N05 = May  
N07 = mid-July  
N08 = late July  
N09 = mid-August

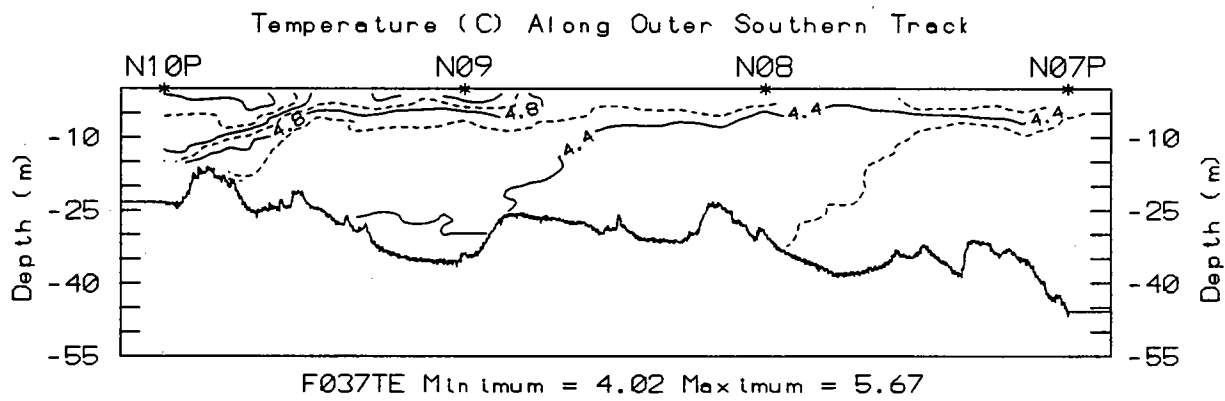


00541

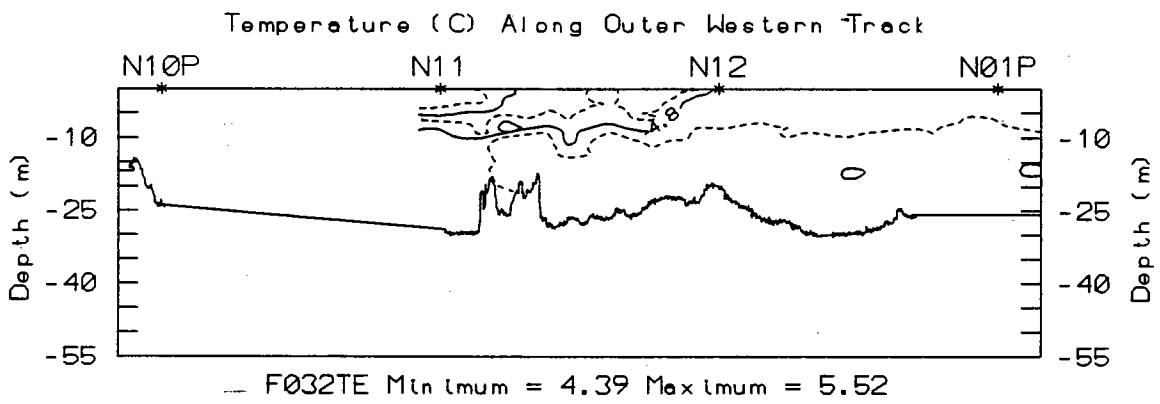


Temperature (C) Along Inner Southern Track

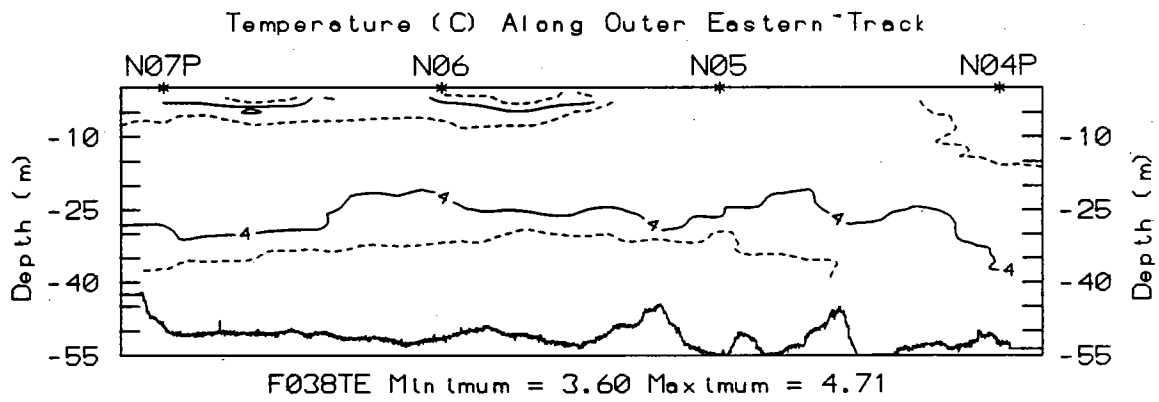




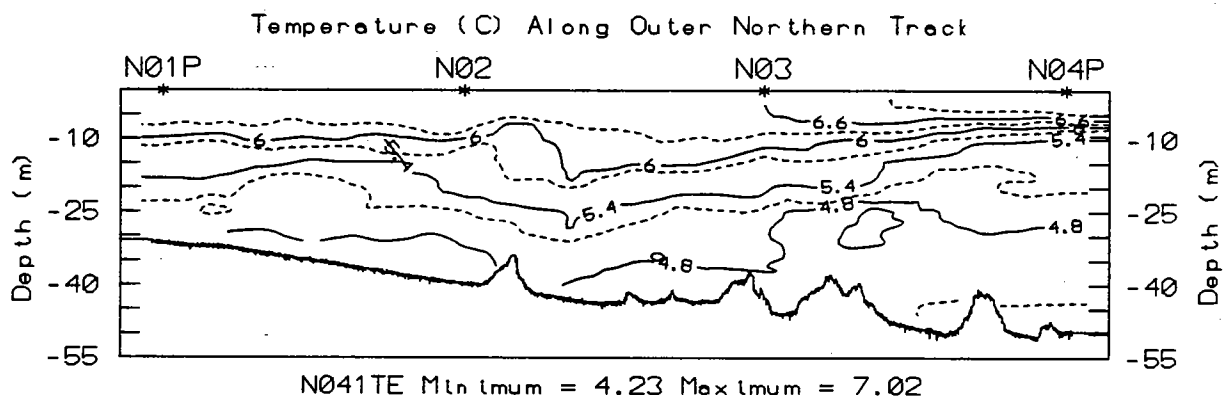
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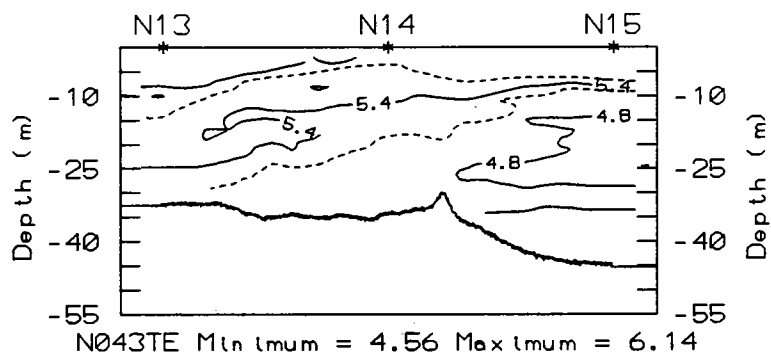


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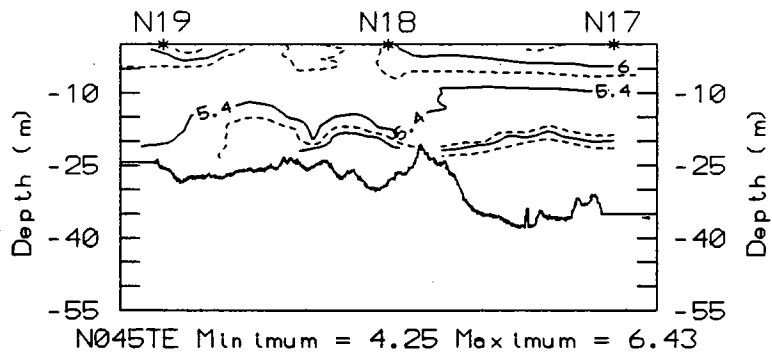
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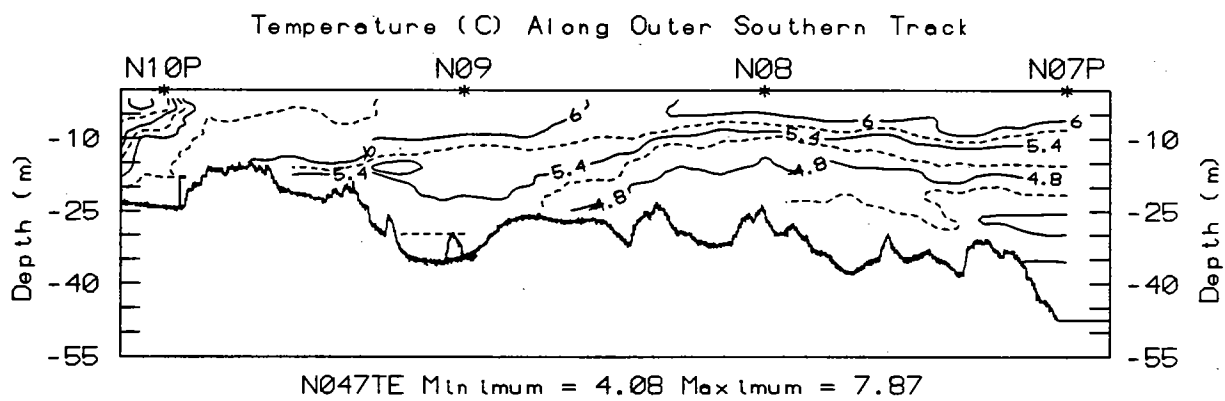
Temperature (C) Along Inner Northern Track



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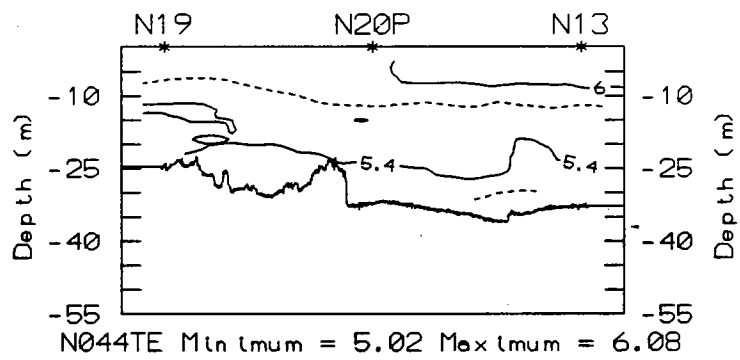
Temperature (C) Along Inner Southern Track



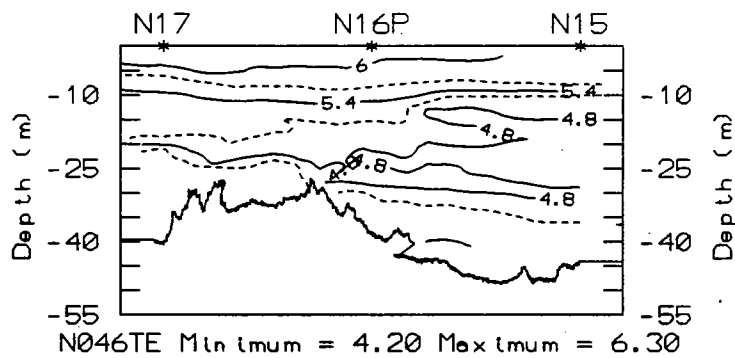


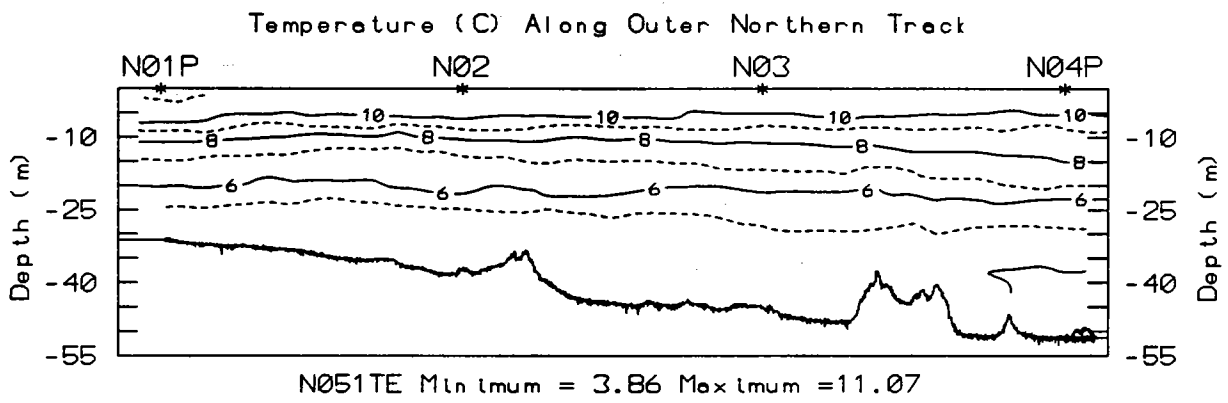
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Temperature (C) Along Inner Western Track



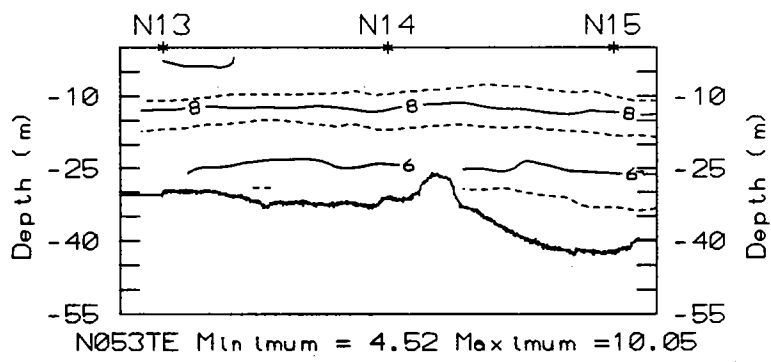
Temperature (C) Along Inner Eastern Track

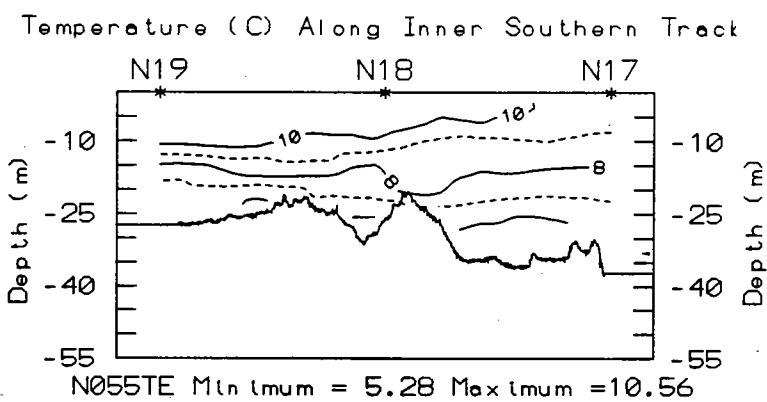




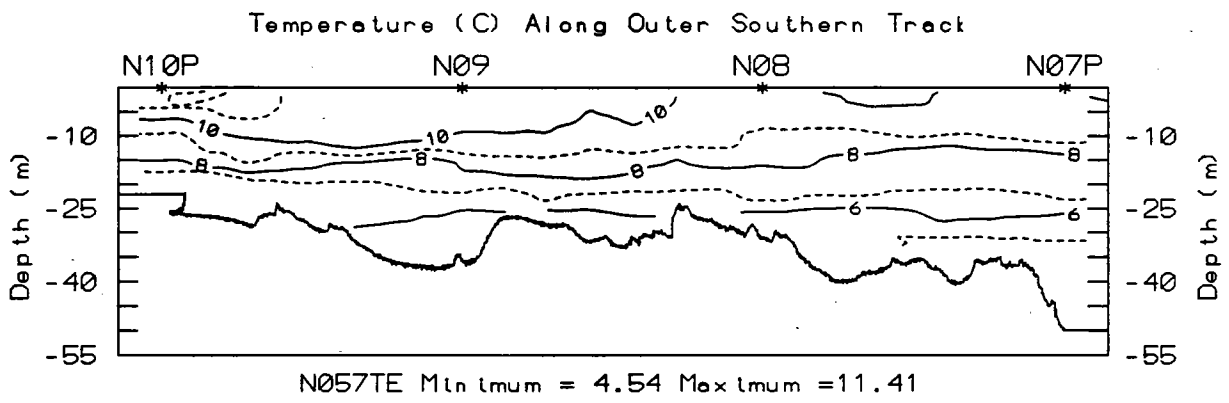
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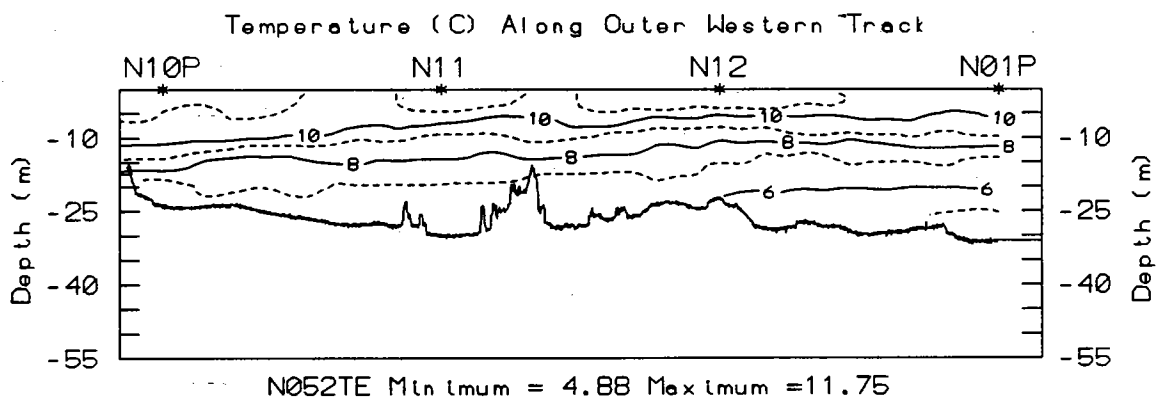




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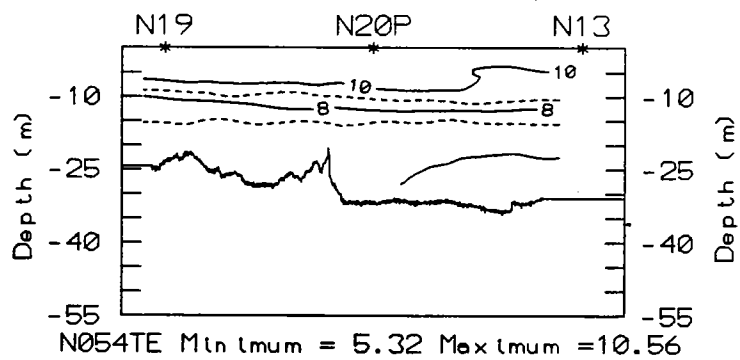


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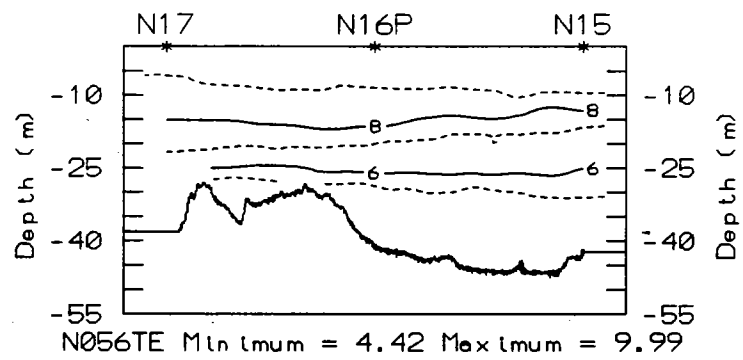
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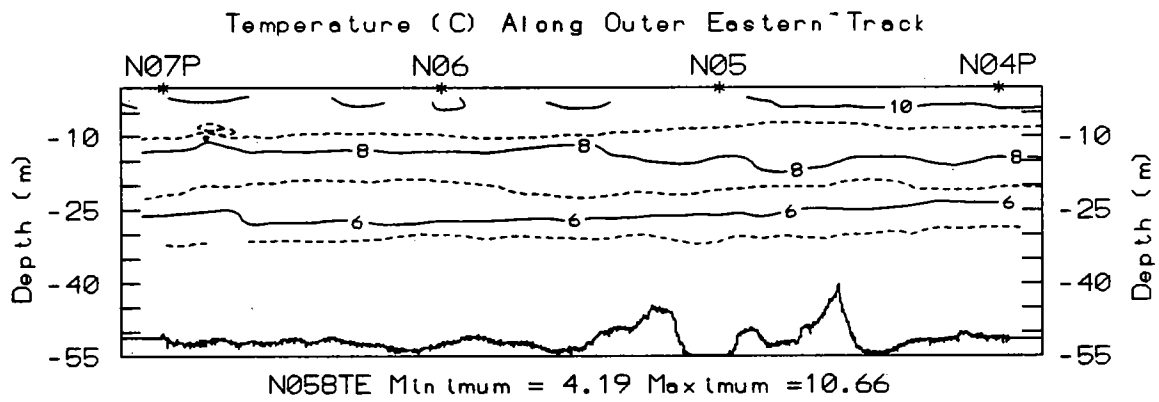
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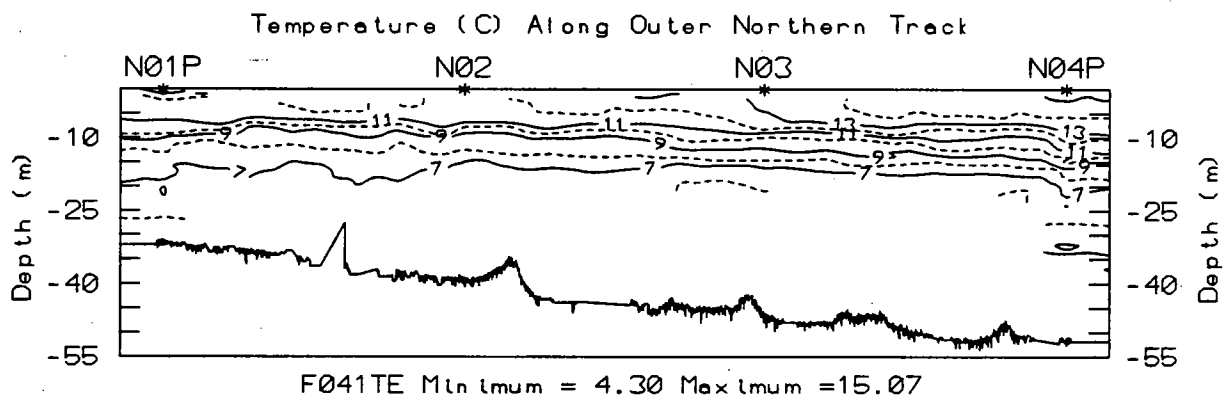
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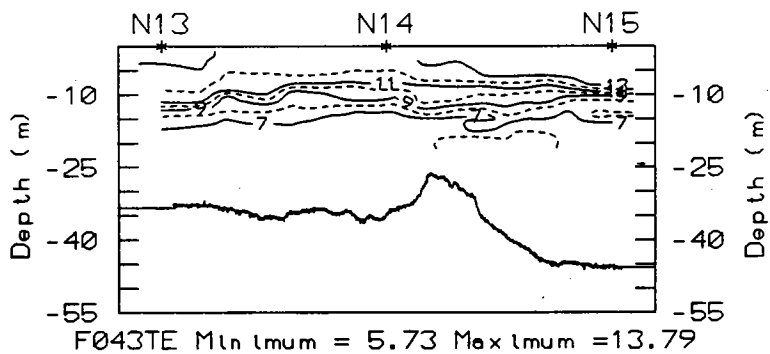


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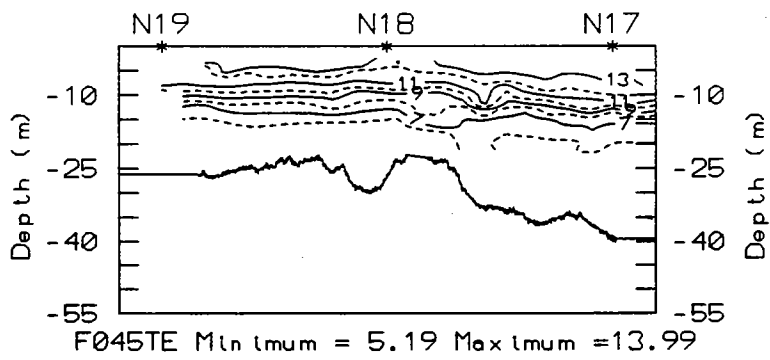


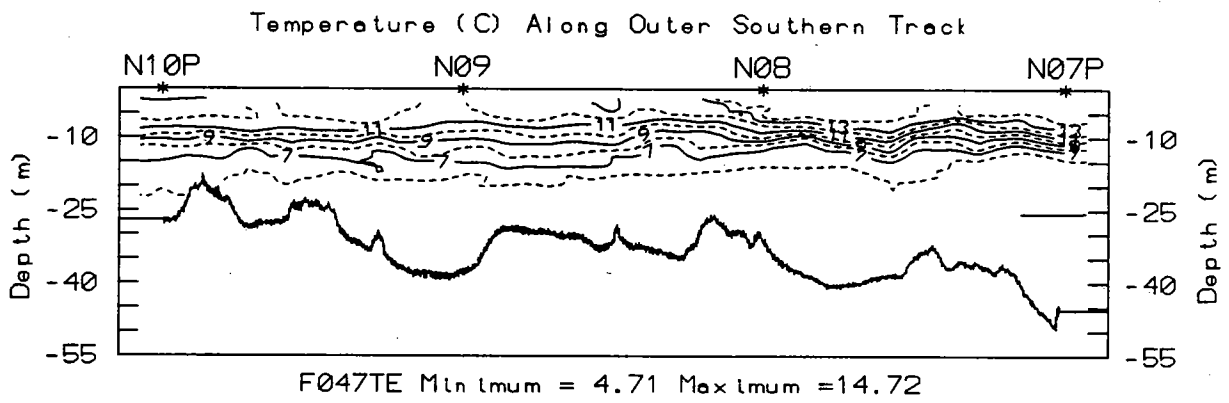
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Temperature (C) Along Inner Northern Track



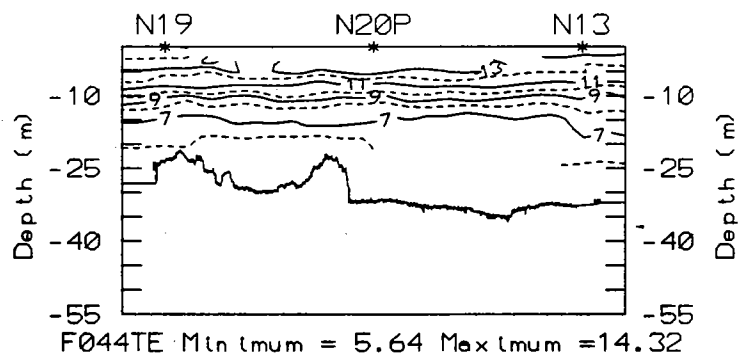
Temperature (C) Along Inner Southern Track



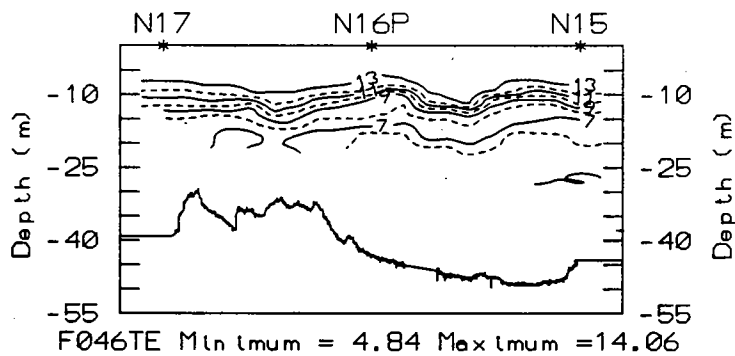


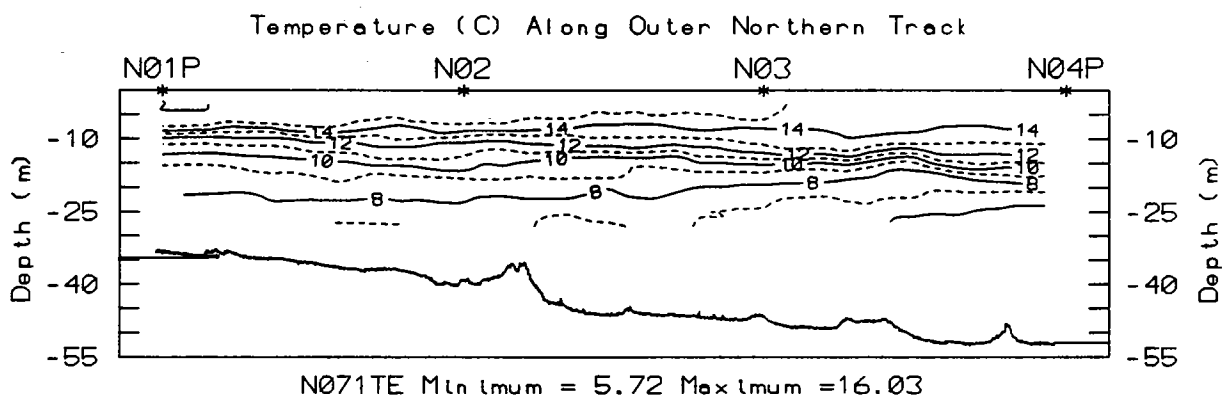
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Temperature (C) Along Inner Western Track

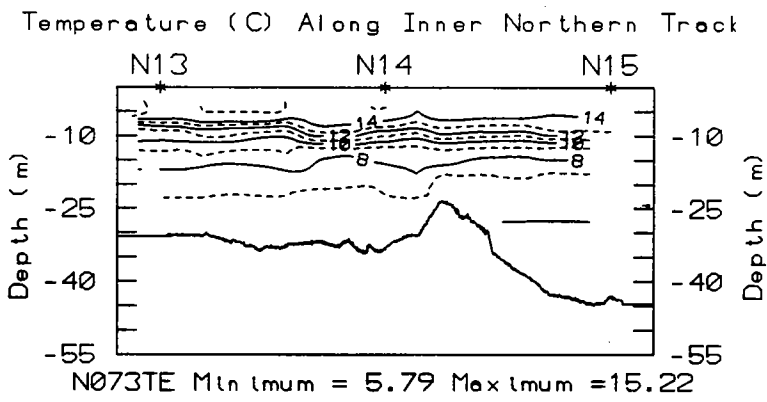


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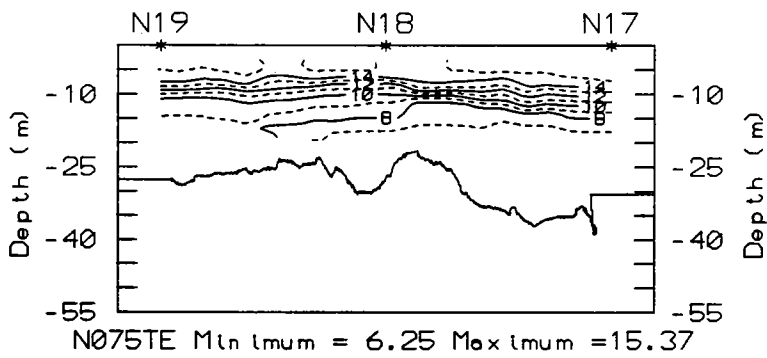


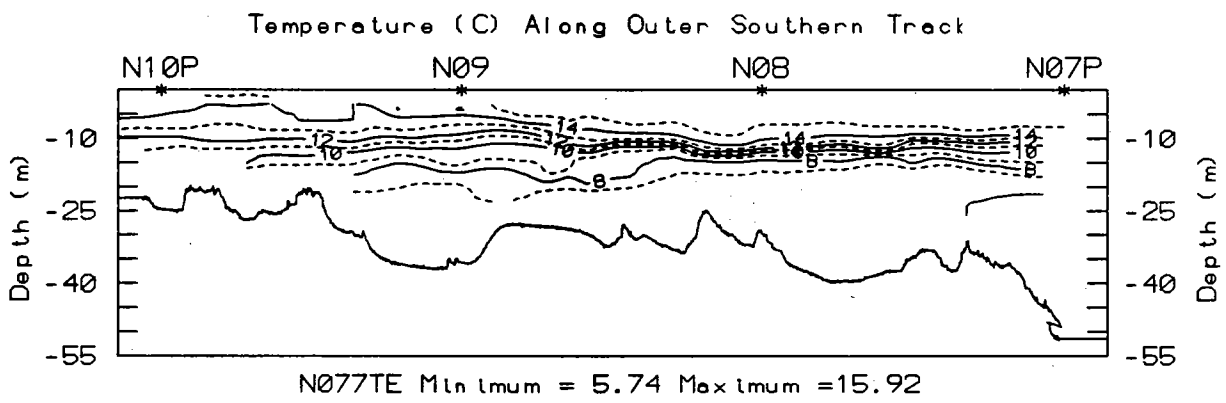


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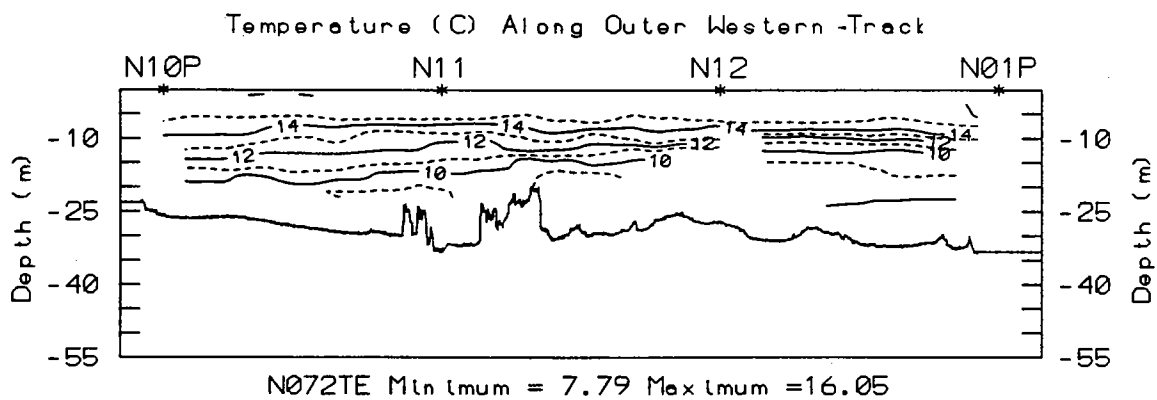


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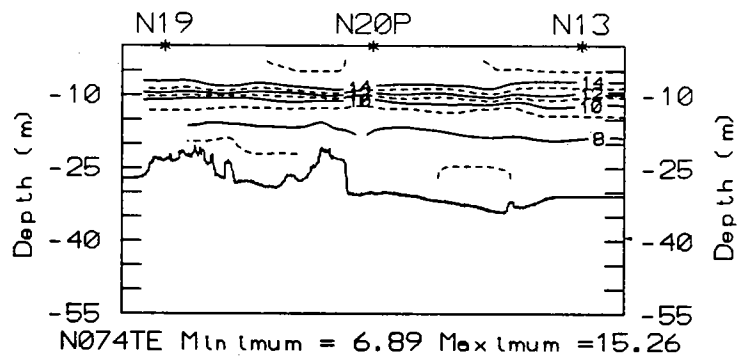


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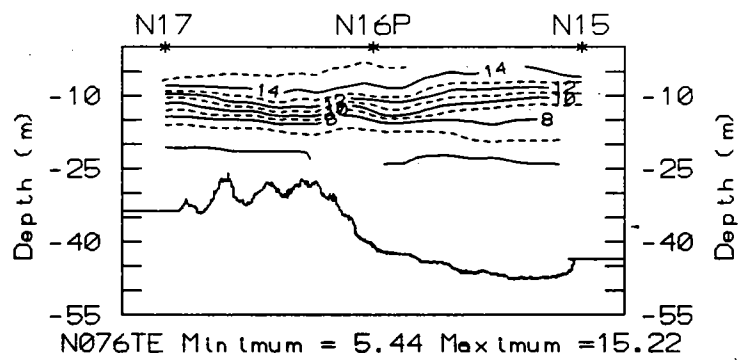


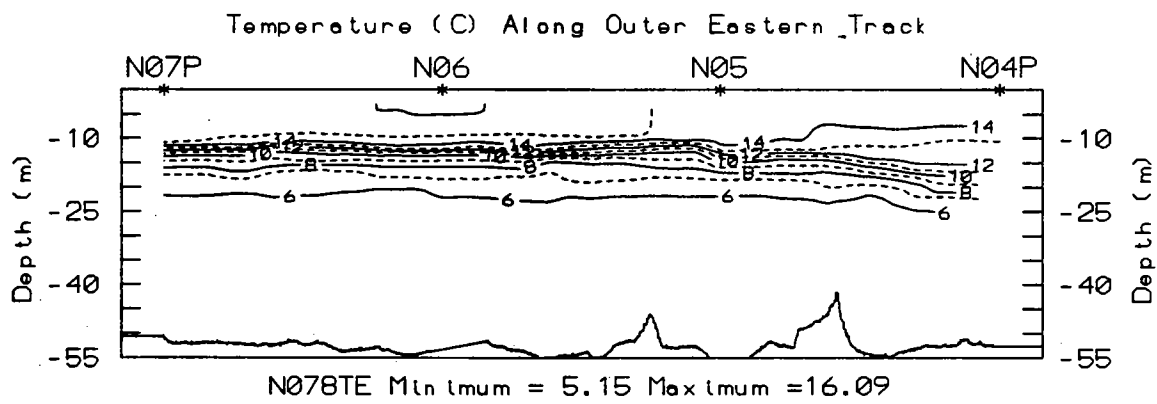
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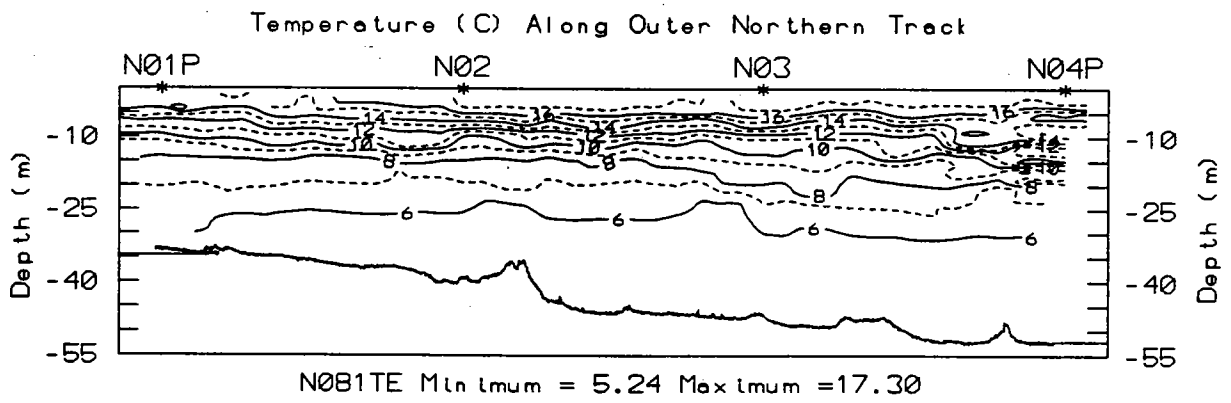


Temperature (C) Along Inner Eastern Track



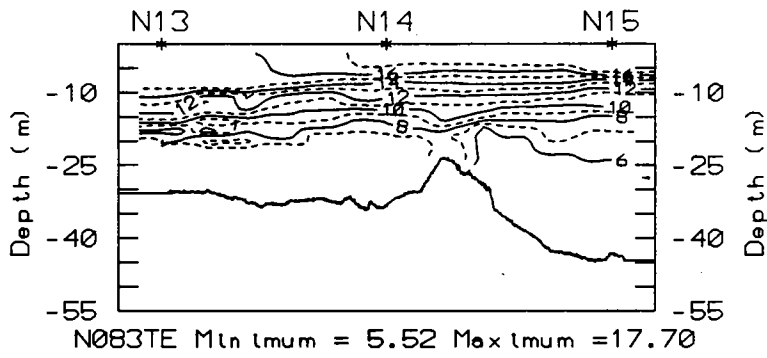


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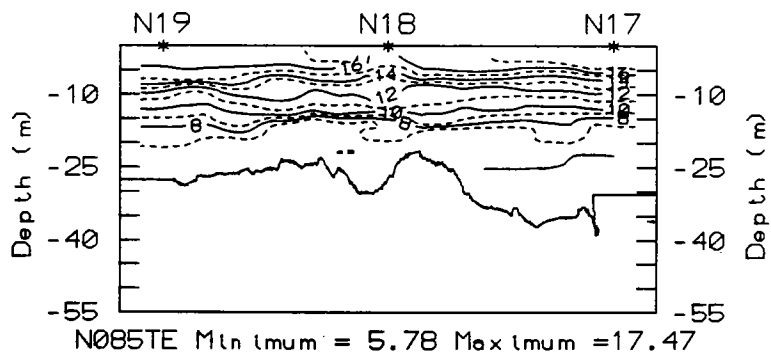
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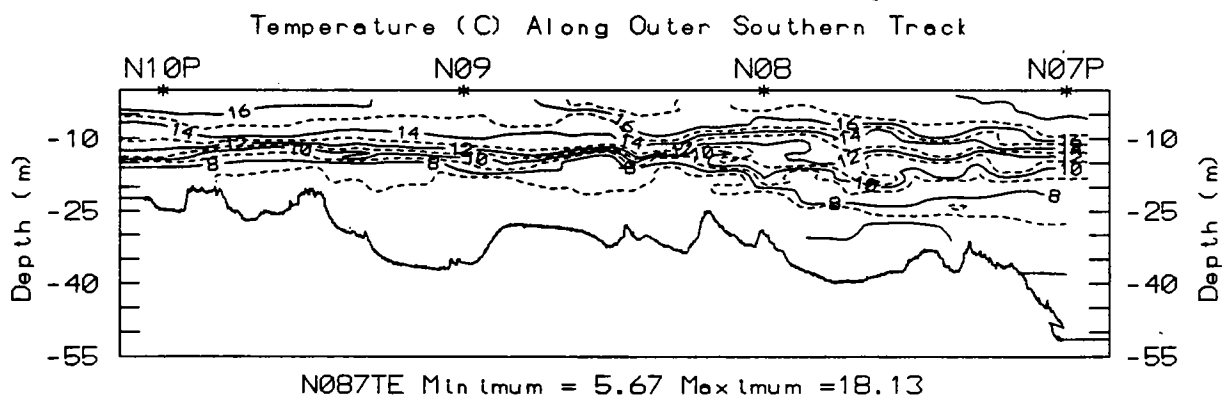
Temperature (C) Along Inner Northern Track



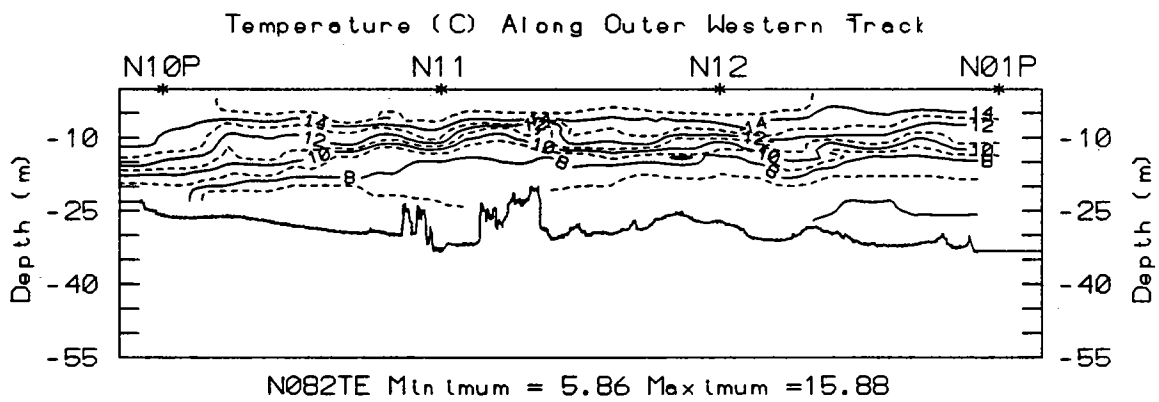
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Temperature (C) Along Inner Southern Track



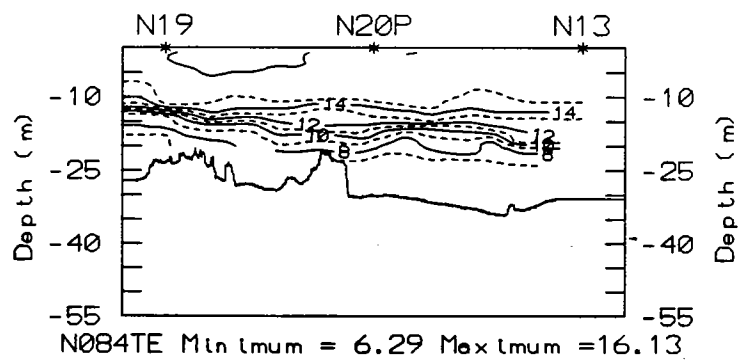


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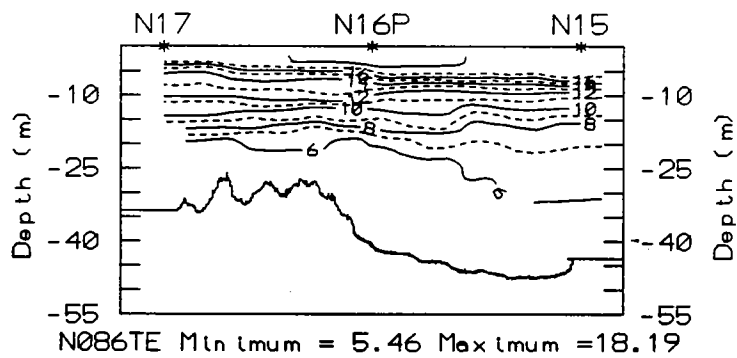


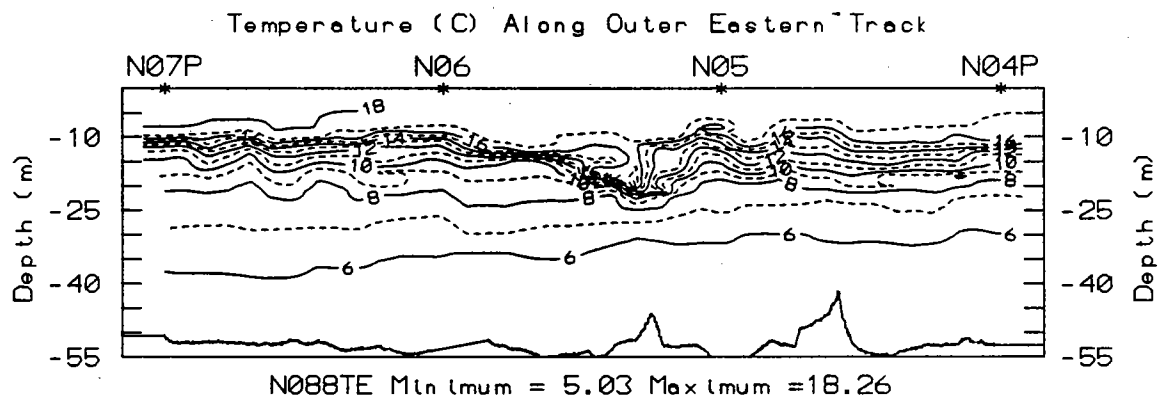
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Temperature (C) Along Inner Western Track

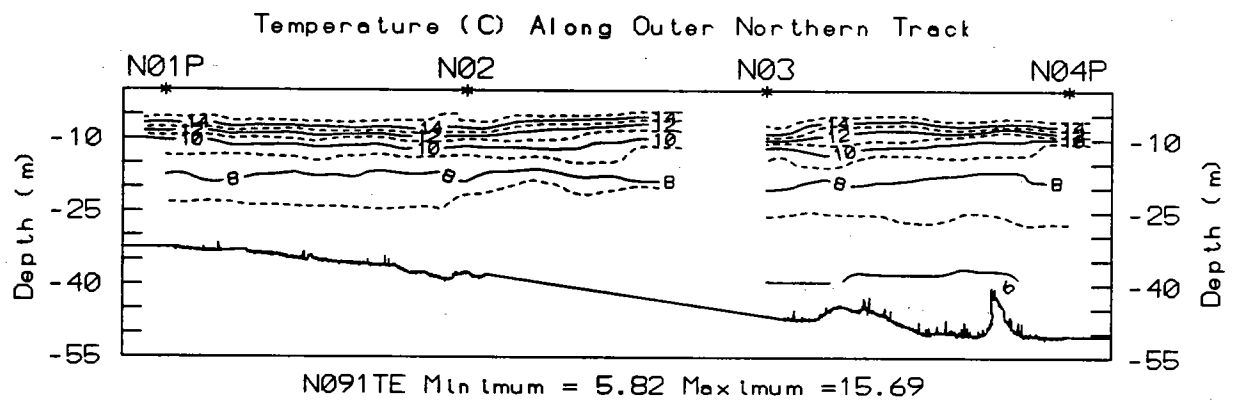


Temperature (C) Along Inner Eastern Track



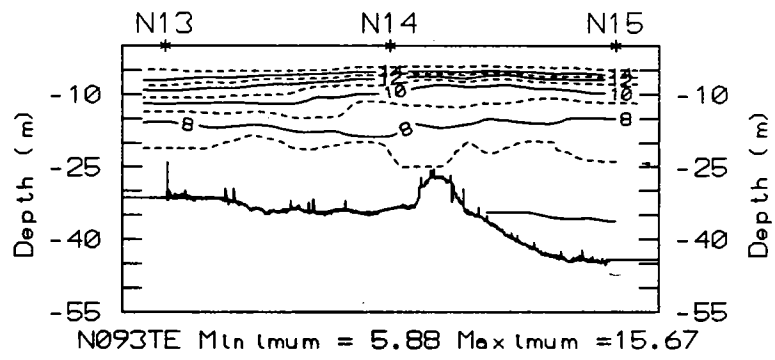


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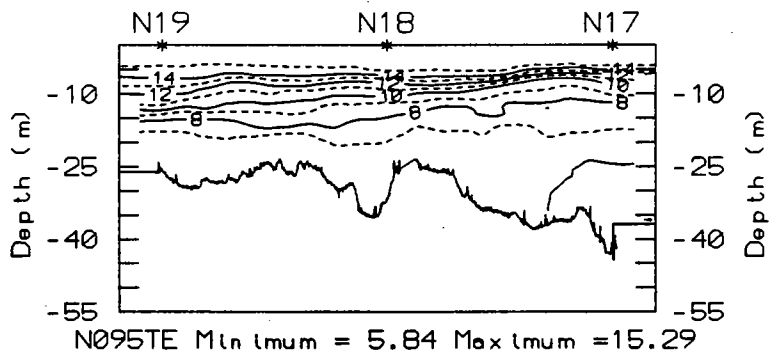
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Temperature (C) Along Inner Northern Track

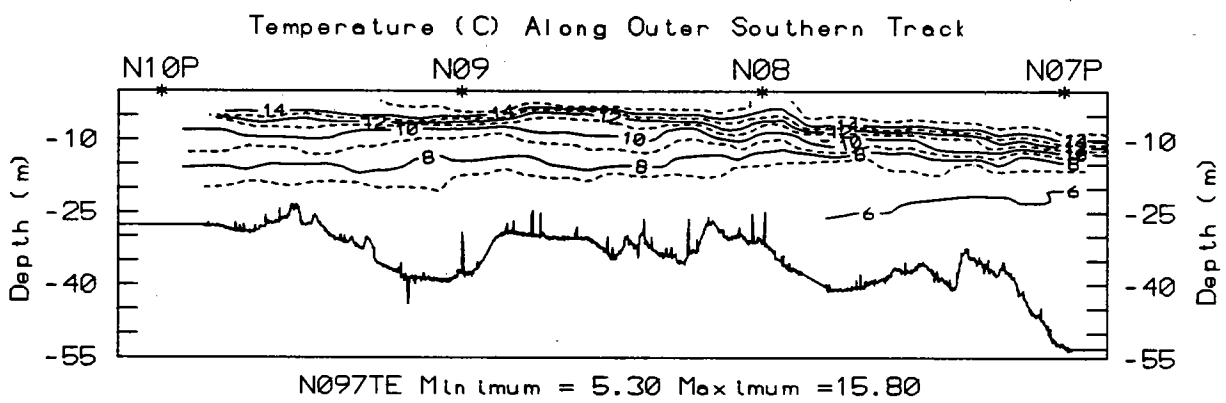


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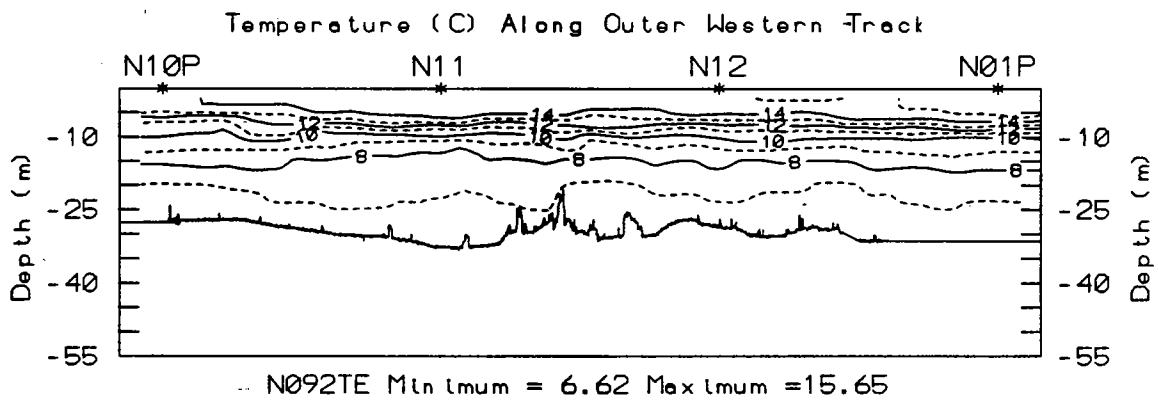
Temperature (C) Along Inner Southern Track



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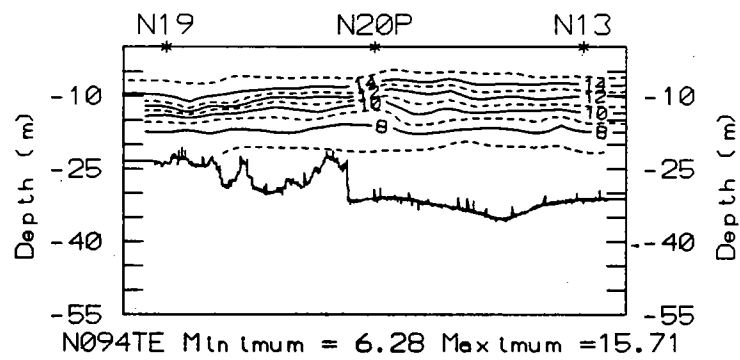


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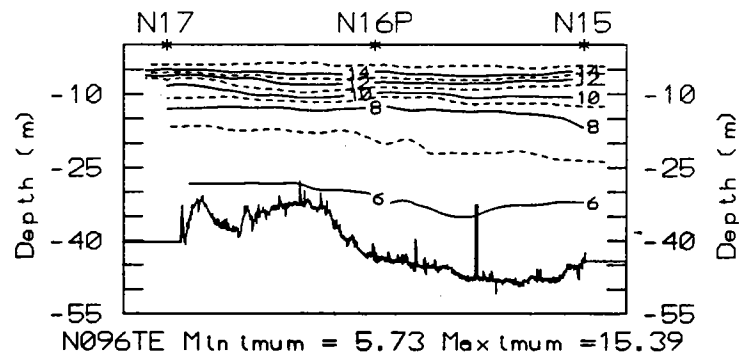
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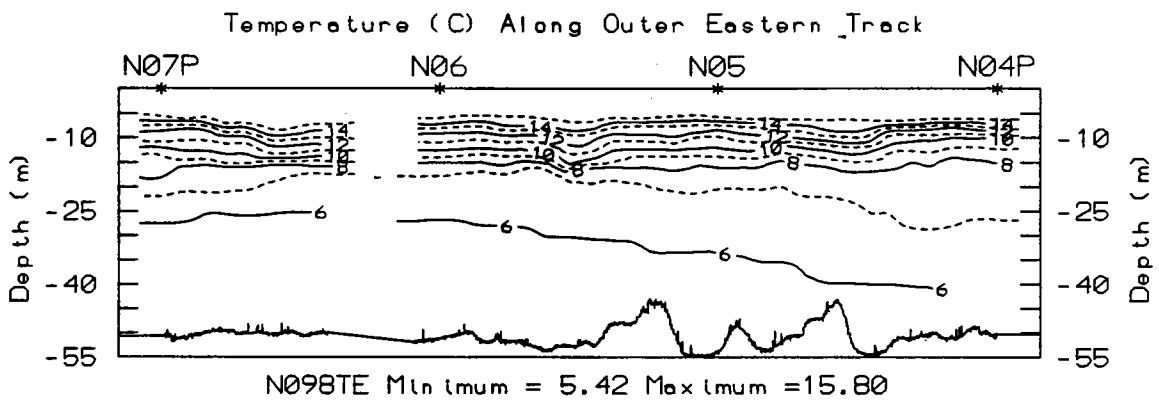
Temperature (C) Along Inner Western Track



00588

Temperature (C) Along Inner Eastern Track





00590

## APPENDIX E

### METABOLISM DATA AND PRODUCTIVITY—IRRADIANCE MODELING

#### Part 3

#### Respiration Data

Tables E3-1 and E3-2 for early April (cruise 3) and June (cruise 6) give mean dissolved concentrations ( $\text{mg O}_2 \text{ L}^{-1}$ ) for initial samples and those incubated in the dark for about 6 h. The numbers in parentheses are standard deviations ( $n=3$  in most cases) for initial and final concentrations.  $p$  = the probability, from a t-test for statistical significance, that one can reject the null hypothesis that the initial concentration is equal to the final concentration. Routinely,  $p \leq 0.05$  is used as the significance level.

**Table E3-1. Respiration Data for Early April.**

RESPIRATION CRUISE 3				
STATION	DEPTH	INITIAL	DARK	p
F13P	CHL	11.102 (0.847)	11.378 (0.043)	0.602
	SUR	11.711 (0.016)	11.430 (0.063)	0.002
F1P	CHL	11.297 (0.048)	11.304 (0.011)	0.809
	SUR	11.361 (0.058)	11.284 (0.005)	0.088
F23P	CHL	11.025 (0.171)	10.856 (0.031)	0.169
	SUR	10.994 (0.145)	10.889 (0.032)	0.286
F2P	CHL	11.407 (0.079)	11.434 (0.035)	0.608
	SUR	11.515 (0.011)	11.625 (0.013)	0.001
N10P	CHL	11.304 (0.107)	11.118 (0.227)	0.267
	SUR	11.422 (0.154)	11.109 (0.178)	0.083
N16P	CHL	10.928 (0.147)	10.665 (0.055)	0.043
	SUR	11.502 (0.056)	11.422 (0.078)	0.223
N1P	CHL	11.064 (0.074)	11.067 (0.036)	0.946
	SUR	11.271 (0.067)	11.229 (0.072)	0.495
N20P	CHL	11.442 (0.038)	11.559 (0.294)	0.532
	SUR	11.330 (0.028)	11.323 (0.066)	0.872
N4P	CHL	10.199 (0.059)	10.133 (0.018)	0.141
	SUR	11.230 (0.056)	11.149 (0.057)	0.156
N7P	CHL	10.680 (0.078)	10.228 (0.161)	0.012
	SUR	11.629 (0.052)	11.286 (0.050)	0.001

**Table E3-2. Respiration Data for June.**

RESPIRATION CRUISE 6				
STATION	DEPTH	INITIAL	DARK	P
F13P	BOT	9.628 (0.030)	9.607 (0.066)	0.66
	CHL	9.793 (0.043)	9.682 (0.089)	0.12
	SUR	9.898 (0.159)	9.664 (0.083)	0.08
F1P	BOT	8.687 (0.058)	8.771 (0.039)	0.11
	CHL	9.677 (0.880)	9.726 (0.149)	0.64
	SUR	8.822 (0.089)	8.677 (0.007)	0.04
F23P	BOT	9.095 (0.044)	9.107 (0.025)	0.71
	CHL	9.058 (0.010)	8.959 (0.044)	0.01
	SUR	9.361 (0.014)	9.253 (0.020)	0.01
F2P	BOT	9.889 (0.063)	9.984 (0.085)	0.21
	CHL	9.428 (0.229)	9.396 (0.074)	0.83
	SUR	8.504 (0.123)	8.516 (0.064)	0.89
N10P	BOT	9.236 (0.095)	9.155 ( . )	0.54
	CHL	9.599 (0.063)	9.466 (0.025)	0.02
	SUR	9.697 (0.067)	9.605 (0.087)	0.22
N16P	BOT	9.503 (0.018)	9.647 (0.060)	0.01
	CHL	10.447 (0.130)	10.631 (0.245)	0.31
	SUR	10.035 (0.049)	9.903 (0.093)	0.09
N1P	BOT	9.957 (0.081)	9.963 (0.084)	0.93
	CHL	10.318 (0.016)	10.405 (0.073)	0.12
	SUR	10.025 (0.141)	9.963 (0.062)	0.52
N20P	BOT	9.280 (0.017)	9.234 (0.035)	0.13
	CHL	9.606 (0.030)	9.581 (0.035)	0.39
	SUR	9.840 (0.028)	9.629 (0.098)	0.02
N4P	BOT	9.875 (0.009)	9.815 (0.032)	0.03
	CHL	10.680 (0.111)	10.348 (0.480)	0.31
	SUR	9.788 (0.057)	9.668 (0.065)	0.07
N7P	BOT	9.633 (0.005)	9.314 (0.082)	0.01
	CHL	10.172 (0.159)	9.994 (0.090)	0.17
	SUR	9.907 (0.052)	9.814 (0.113)	0.33

## APPENDIX E

### METABOLISM DATA AND PRODUCTIVITY—IRRADIANCE MODELING

#### Part 1

##### Initial Dissolved Oxygen Concentrations and Results of Light-Dark Incubations

Table E1-1 includes data from the early April (MFF03) and June (MFF04) cruises. The initial dissolved oxygen (DO) concentrations were determined in triplicate from samples fixed immediately after being taken from the hydrocast bottles. Final DO concentrations were determined by fixing samples after incubating (time indicated) bottles in the light (irradiance given) or dark. The table includes data for samples from the BioProductivity stations that were incubated from surface and a subsurface chlorophyll maximum depths (dark and light bottles), as well as (in June) an intermediate bottom water sample incubated for respiration only (dark). Net respiration (NETR) or net production (NPR) was calculated for each individual bottle, as the final concentration minus the initial (average of  $n=3$ ) concentration, divided by the incubation time.

TABLE E1-1. DISSOLVED OXYGEN AND METABOLISM AT TWO DEPTHS OF BIOPRODUCTIVITY STATIONS FROM EARLY APRIL AND JUNE 1992.

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	F01P	07-APR-92	0805	196	2.06	0.000	INIT	11.428			
MFF03	F01P	07-APR-92	0805	201	2.06	0.000	INIT	11.339			
MFF03	F01P	07-APR-92	0805	213	2.06	0.000	INIT	11.317			
MFF03	F01P	07-APR-92	0805	20V	2.06	0.000	DARK	11.282	-0.013		6.000
MFF03	F01P	07-APR-92	0805	23V	2.06	0.000	DARK	11.291	-0.012		6.000
MFF03	F01P	07-APR-92	0805	39V	2.06	0.000	DARK	11.282	-0.013		6.000
MFF03	F01P	07-APR-92	0805	214	2.06	4.900		11.223		-0.023	6.000
MFF03	F01P	07-APR-92	0805	216	2.06	6.500		11.241		-0.020	6.000
MFF03	F01P	07-APR-92	0805	197	2.06	38.000		11.327		-0.006	6.000
MFF03	F01P	07-APR-92	0805	204	2.06	41.000		11.390		0.005	6.000
MFF03	F01P	07-APR-92	0805	211	2.06	124.000		11.406		0.007	6.000
MFF03	F01P	07-APR-92	0805	195	2.06	166.000		11.507		0.024	6.000
MFF03	F01P	07-APR-92	0805	199	2.06	272.000		11.407		0.008	6.000
MFF03	F01P	07-APR-92	0805	194	2.06	290.000		11.357		-0.001	6.000
MFF03	F01P	07-APR-92	0805	207	2.06	750.000		11.417		0.009	6.000
MFF03	F01P	07-APR-92	0805	215	2.06	1050.000		11.311		-0.008	6.000
MFF03	F01P	07-APR-92	0805	205	2.06	1475.000		11.373		0.002	6.000
MFF03	F01P	07-APR-92	0805	200	2.06	1750.000		11.440		0.013	6.000
MFF03	F01P	07-APR-92	0803	152D	10.42	0.000	INIT	11.351			
MFF03	F01P	07-APR-92	0803	167D	10.42	0.000	INIT	11.283			
MFF03	F01P	07-APR-92	0803	163D	10.42	0.000	INIT	11.258			
MFF03	F01P	07-APR-92	0803	19V	10.42	0.000	DARK	11.310	0.002		6.000
MFF03	F01P	07-APR-92	0803	44V	10.42	0.000	DARK	11.313	0.003		6.000
MFF03	F01P	07-APR-92	0803	5V	10.42	0.000	DARK	11.292	-0.001		6.000
MFF03	F01P	07-APR-92	0803	146D	10.42	4.900		11.225		-0.012	6.000
MFF03	F01P	07-APR-92	0803	156D	10.42	6.500		11.287		-0.002	6.000
MFF03	F01P	07-APR-92	0803	145D	10.42	42.000		11.340		0.007	6.000
MFF03	F01P	07-APR-92	0803	151D	10.42	44.000		11.391		0.016	6.000
MFF03	F01P	07-APR-92	0803	159D	10.42	75.000		11.411		0.019	6.000

00592

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	F01P	07-APR-92	0803	166D	10.42	117.000		11.610		0.052	6.000
MFF03	F01P	07-APR-92	0803	161D	10.42	248.000		11.569		0.045	6.000
MFF03	F01P	07-APR-92	0803	154D	10.42	303.000		11.503		0.034	6.000
MFF03	F01P	07-APR-92	0803	149D	10.42	410.000		11.552		0.042	6.000
MFF03	F01P	07-APR-92	0803	153D	10.42	1225.000		11.603		0.051	6.000
MFF03	F01P	07-APR-92	0803	150D	10.42	1525.000		11.560		0.044	6.000
MFF03	F01P	07-APR-92	0803	165D	10.42	1775.000		11.434		0.023	6.000
MFF03	F02P	07-APR-92	1037	104	1.69	0.000	INIT	11.529			
MFF03	F02P	07-APR-92	1037	99	1.69	0.000	INIT	11.511			
MFF03	F02P	07-APR-92	1037	116	1.69	0.000	INIT	11.506			
MFF03	F02P	07-APR-92	1037	27V	1.69	0.000	DARK	11.642	0.021		6.000
MFF03	F02P	07-APR-92	1037	38V	1.69	0.000	DARK	11.618	0.017		6.000
MFF03	F02P	07-APR-92	1037	9V	1.69	0.000	DARK	11.617	0.017		6.000
MFF03	F02P	07-APR-92	1037	119	1.69	5.100		11.562		0.008	6.000
MFF03	F02P	07-APR-92	1037	118	1.69	54.000		11.725		0.035	6.000
MFF03	F02P	07-APR-92	1037	113	1.69	56.000		11.649		0.022	6.000
MFF03	F02P	07-APR-92	1037	98	1.69	173.000		11.933		0.070	6.000
MFF03	F02P	07-APR-92	1037	102	1.69	219.000		11.961		0.074	6.000
MFF03	F02P	07-APR-92	1037	108	1.69	284.000		11.991		0.079	6.000
MFF03	F02P	07-APR-92	1037	97	1.69	405.000		12.013		0.083	6.000
MFF03	F02P	07-APR-92	1037	101	1.69	800.000		12.004		0.082	6.000
MFF03	F02P	07-APR-92	1037	117	1.69	1050.000		12.061		0.091	6.000
MFF03	F02P	07-APR-92	1037	106	1.69	1475.000		11.981		0.078	6.000
MFF03	F02P	07-APR-92	1037	107	1.69	1900.000		11.754		0.040	6.000
MFF03	F02P	07-APR-92	1035	147E	9.67	0.000	INIT	11.497			
MFF03	F02P	07-APR-92	1035	166E	9.67	0.000	INIT	11.345			
MFF03	F02P	07-APR-92	1035	165E	9.67	0.000	INIT	11.379			
MFF03	F02P	07-APR-92	1035	13V	9.67	0.000	DARK	11.432	0.004		6.000
MFF03	F02P	07-APR-92	1035	22V	9.67	0.000	DARK	11.401	-0.001		6.000

00593

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	F02P	07-APR-92	1035	36V	9.67	0.000	DARK	11.472	0.011		6.000
MFF03	F02P	07-APR-92	1035	150E	9.67	5.100		11.441		0.006	6.000
MFF03	F02P	07-APR-92	1035	156E	9.67	8.500		11.457		0.008	6.000
MFF03	F02P	07-APR-92	1035	152E	9.67	48.000		11.584		0.030	6.000
MFF03	F02P	07-APR-92	1035	168E	9.67	53.000		11.690		0.047	6.000
MFF03	F02P	07-APR-92	1035	153E	9.67	112.000		11.762		0.059	6.000
MFF03	F02P	07-APR-92	1035	146E	9.67	168.000		11.909		0.084	6.000
MFF03	F02P	07-APR-92	1035	164E	9.67	337.000		12.044		0.106	6.000
MFF03	F02P	07-APR-92	1035	155E	9.67	359.000		12.037		0.105	6.000
MFF03	F02P	07-APR-92	1035	151E	9.67	475.000		12.004		0.099	6.000
MFF03	F02P	07-APR-92	1035	159E	9.67	1300.000		11.913		0.084	6.000
MFF03	F02P	07-APR-92	1035	149E	9.67	1450.000		11.841		0.072	6.000
MFF03	F02P	07-APR-92	1035	160E	9.67	1975.000		11.925		0.086	6.000
MFF03	F13P	08-APR-92	0843	152A	1.8	0.000	INIT	11.717			6.000
MFF03	F13P	08-APR-92	0843	162A	1.8	0.000	INIT	11.724			6.000
MFF03	F13P	08-APR-92	0843	161A	1.8	0.000	INIT	11.692			6.000
MFF03	F13P	08-APR-92	0843	18V	1.8	0.000	DARK	11.387	-0.054		6.000
MFF03	F13P	08-APR-92	0843	2	1.8	0.000	DARK	11.503	-0.035		6.000
MFF03	F13P	08-APR-92	0843	3V	1.8	0.000	DARK	11.400	-0.052		6.000
MFF03	F13P	08-APR-92	0843	166A	1.8	4.500		11.566		-0.024	6.000
MFF03	F13P	08-APR-92	0843	147A	1.8	6.000		11.642		-0.011	6.000
MFF03	F13P	08-APR-92	0843	155A	1.8	35.000		11.630		-0.014	6.000
MFF03	F13P	08-APR-92	0843	165A	1.8	38.000		11.343		-0.061	6.000
MFF03	F13P	08-APR-92	0843	154A	1.8	108.000		11.709		-0.000	6.000
MFF03	F13P	08-APR-92	0843	168A	1.8	154.000		11.706		-0.001	6.000
MFF03	F13P	08-APR-92	0843	159A	1.8	229.000		11.849		0.023	6.000
MFF03	F13P	08-APR-92	0843	149A	1.8	268.000		11.585		-0.021	6.000
MFF03	F13P	08-APR-92	0843	167A	1.8	660.000		11.697		-0.002	6.000
MFF03	F13P	08-APR-92	0843	158A	1.8	915.000		11.713		0.000	6.000
MFF03	F13P	08-APR-92	0843	153A	1.8	1275.000		11.761		0.008	6.000

00594

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	F13P	08-APR-92	0843	156A	1.8	1775.000		11.406		-0.051	6.000
MFF03	F13P	08-APR-92	0840	56	7.36	0.000	INIT	11.546			
MFF03	F13P	08-APR-92	0840	66	7.36	0.000	INIT	11.635			
MFF03	F13P	08-APR-92	0840	62	7.36	0.000	INIT	10.125			
MFF03	F13P	08-APR-92	0840	11V	7.36	0.000	DARK	11.378	0.046		6.000
MFF03	F13P	08-APR-92	0840	4V	7.36	0.000	DARK	11.423	0.053		6.000
MFF03	F13P	08-APR-92	0840	16V	7.36	0.000	DARK	11.335	0.039		6.000
MFF03	F13P	08-APR-92	0840	59	7.36	4.500		11.533		0.072	6.000
MFF03	F13P	08-APR-92	0840	53	7.36	6.000		11.593		0.082	6.000
MFF03	F13P	08-APR-92	0840	68	7.36	39.000		11.517		0.069	6.000
MFF03	F13P	08-APR-92	0840	49	7.36	41.000		10.822		-0.047	6.000
MFF03	F13P	08-APR-92	0840	52	7.36	69.000		11.425		0.054	6.000
MFF03	F13P	08-APR-92	0840	64	7.36	114.000		11.659		0.093	6.000
MFF03	F13P	08-APR-92	0840	71	7.36	252.000		11.721		0.103	6.000
MFF03	F13P	08-APR-92	0840	72	7.36	280.000		11.892		0.132	6.000
MFF03	F13P	08-APR-92	0840	50	7.36	345.000		11.759		0.109	6.000
MFF03	F13P	08-APR-92	0840	51	7.36	1175.000		11.551		0.075	6.000
MFF03	F13P	08-APR-92	0840	65	7.36	1325.000		11.472		0.062	6.000
MFF03	F13P	08-APR-92	0840	58	7.36	1650.000		11.557		0.076	6.000
MFF03	F23P	10-APR-92	0625	155E	1.69	0.000	INIT	11.158			
MFF03	F23P	10-APR-92	0625	166E	1.69	0.000	INIT	10.882			
MFF03	F23P	10-APR-92	0625	156E	1.69	0.000	INIT	10.944			
MFF03	F23P	10-APR-92	0625	13V	1.69	0.000	DARK	10.884	-0.018		6.250
MFF03	F23P	10-APR-92	0625	36V	1.69	0.000	DARK	10.924	-0.011		6.250
MFF03	F23P	10-APR-92	0625	27V	1.69	0.000	DARK	10.860	-0.022		6.250
MFF03	F23P	10-APR-92	0625	150E	1.69	5.500		11.074		0.013	6.250
MFF03	F23P	10-APR-92	0625	149E	1.69	8.300		11.036		0.007	6.250
MFF03	F23P	10-APR-92	0625	160E	1.69	42.000		11.269		0.044	6.250
MFF03	F23P	10-APR-92	0625	152E	1.69	51.000		11.244		0.040	6.250
MFF03	F23P	10-APR-92	0625	146E	1.69	112.000		11.601		0.097	6.250

00595

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O <sub>2</sub> /l/hr	NPR mg O <sub>2</sub> /l/hr	INCUBATION TIME hours
MFF03	F23P	10-APR-92	0625	159E	1.69	136.000		11.439			
MFF03	F23P	10-APR-92	0625	153E	1.69	288.000		11.885		0.071	6.250
MFF03	F23P	10-APR-92	0625	168E	1.69	315.000		11.982		0.142	6.250
MFF03	F23P	10-APR-92	0625	147E	1.69	415.000		11.767		0.158	6.250
MFF03	F23P	10-APR-92	0625	164E	1.69	1110.000		11.985		0.124	6.250
MFF03	F23P	10-APR-92	0625	165E	1.69	1115.000		11.947		0.159	6.250
MFF03	F23P	10-APR-92	0625	151E	1.69	1725.000		11.902		0.152	6.250
MFF03	F23P	10-APR-92	0623	107	10.48	0.000	INIT	11.014		0.145	6.250
MFF03	F23P	10-APR-92	0623	117	10.48	0.000	INIT	10.859			
MFF03	F23P	10-APR-92	0623	97	10.48	0.000	INIT	11.202			
MFF03	F23P	10-APR-92	0623	22V	10.48	0.000	DARK	10.893	-0.021		6.250
MFF03	F23P	10-APR-92	0623	38V	10.48	0.000	DARK	10.843	-0.029		6.250
MFF03	F23P	10-APR-92	0623	9V	10.48	0.000	DARK	10.835	-0.030		6.250
MFF03	F23P	10-APR-92	0623	101	10.48	5.500		10.961		-0.010	6.250
MFF03	F23P	10-APR-92	0623	113	10.48	6.900		10.877		-0.024	6.250
MFF03	F23P	10-APR-92	0623	116	10.48	43.000		11.132		0.017	6.250
MFF03	F23P	10-APR-92	0623	98	10.48	50.000		11.359		0.054	6.250
MFF03	F23P	10-APR-92	0623	103	10.48	143.000		11.558		0.085	6.250
MFF03	F23P	10-APR-92	0623	118	10.48	185.000		11.744		0.115	6.250
MFF03	F23P	10-APR-92	0623	102	10.48	213.000		11.960		0.150	6.250
MFF03	F23P	10-APR-92	0623	99	10.48	284.000		11.798		0.124	6.250
MFF03	F23P	10-APR-92	0623	108	10.48	712.000		11.777		0.120	6.250
MFF03	F23P	10-APR-92	0623	104	10.48	770.000		11.837		0.130	6.250
MFF03	F23P	10-APR-92	0623	119	10.48	1100.000		11.879		0.137	6.250
MFF03	F23P	10-APR-92	0623	106	10.48	1600.000		11.808		0.125	6.250
MFF03	N01P	12-APR-92	0914	154D	1.97	0.000	INIT	11.296			
MFF03	N01P	12-APR-92	0914	159D	1.97	0.000	INIT	11.196			
MFF03	N01P	12-APR-92	0914	163D	1.97	0.000	INIT	11.324			
MFF03	N01P	12-APR-92	0914	20V	1.97	0.000	DARK	11.147	-0.021		6.000
MFF03	N01P	12-APR-92	0914	31V	1.97	0.000	DARK	11.259	-0.002		6.000

00506

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	N01P	12-APR-92	0914	5V	1.97	0.000	DARK	11.282	0.002		6.000
MFF03	N01P	12-APR-92	0914	150D	1.97	4.300		11.239		-0.005	6.000
MFF03	N01P	12-APR-92	0914	152D	1.97	5.700		11.187		-0.014	6.000
MFF03	N01P	12-APR-92	0914	167D	1.97	37.000		11.212		-0.010	6.000
MFF03	N01P	12-APR-92	0914	151D	1.97	38.000		11.203		-0.011	6.000
MFF03	N01P	12-APR-92	0914	166D	1.97	66.000		11.126		-0.024	6.000
MFF03	N01P	12-APR-92	0914	161D	1.97	103.000		11.360		0.015	6.000
MFF03	N01P	12-APR-92	0914	146D	1.97	217.000		11.359		0.014	6.000
MFF03	N01P	12-APR-92	0914	153D	1.97	266.000		11.404		0.022	6.000
MFF03	N01P	12-APR-92	0914	156D	1.97	675.000		11.351		0.013	6.000
MFF03	N01P	12-APR-92	0914	145D	1.97	1075.000		11.265		-0.001	6.000
MFF03	N01P	12-APR-92	0914	165D	1.97	1275.000		11.193		-0.013	6.000
MFF03	N01P	12-APR-92	0914	149D	1.97	1575.000		11.230		-0.007	6.000
MFF03	N01P	12-APR-92	0913	199	16.72	0.000	INIT	11.056			
MFF03	N01P	12-APR-92	0913	211	16.72	0.000	INIT	11.143			
MFF03	N01P	12-APR-92	0913	205	16.72	0.000	INIT	10.995			
MFF03	N01P	12-APR-92	0913	19V	16.72	0.000	DARK	11.067	0.000		6.000
MFF03	N01P	12-APR-92	0913	23V	16.72	0.000	DARK	11.104	0.007		6.000
MFF03	N01P	12-APR-92	0913	29V	16.72	0.000	DARK	11.032	-0.005		6.000
MFF03	N01P	12-APR-92	0913	196	16.72	4.300		11.277		0.035	6.000
MFF03	N01P	12-APR-92	0913	213	16.72	5.700		11.114		0.008	6.000
MFF03	N01P	12-APR-92	0913	216	16.72	33.000		11.265		0.033	6.000
MFF03	N01P	12-APR-92	0913	195	16.72	35.000		11.323		0.043	6.000
MFF03	N01P	12-APR-92	0913	207	16.72	108.000		11.331		0.044	6.000
MFF03	N01P	12-APR-92	0913	215	16.72	146.000		11.252		0.031	6.000
MFF03	N01P	12-APR-92	0913	194	16.72	238.000		11.438		0.062	6.000
MFF03	N01P	12-APR-92	0913	201	16.72	255.000		11.401		0.056	6.000
MFF03	N01P	12-APR-92	0913	204	16.72	385.000		11.360		0.049	6.000
MFF03	N01P	12-APR-92	0913	200	16.72	1175.000		11.297		0.039	6.000
MFF03	N01P	12-APR-92	0913	197	16.72	1325.000		11.365		0.050	6.000

00597

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	N01P	12-APR-92	0913	214	16.72	1550.000		11.448			
MFF03	N04P	10-APR-92	1036	145E	1.59	0.000	INIT	11.221		0.064	6.000
MFF03	N04P	10-APR-92	1036	163E	1.59	0.000	INIT	11.292			
MFF03	N04P	10-APR-92	1036	161E	1.59	0.000	INIT	11.180			
MFF03	N04P	10-APR-92	1036	24V	1.59	0.000	DARK	11.210	-0.003		6.000
MFF03	N04P	10-APR-92	1036	34V	1.59	0.000	DARK	11.144	-0.015		6.000
MFF03	N04P	10-APR-92	1036	40V	1.59	0.000	DARK	11.095	-0.023		6.000
MFF03	N04P	10-APR-92	1036	148E	1.59	3.000		11.168		-0.010	6.000
MFF03	N04P	10-APR-92	1036	157E	1.59	3.000		11.027		-0.034	6.000
MFF03	N04P	10-APR-92	1036	157D	1.59	24.000		11.435		0.034	6.000
MFF03	N04P	10-APR-92	1036	154E	1.59	32.000		11.216		-0.002	6.000
MFF03	N04P	10-APR-92	1036	167E	1.59	44.000		11.218		-0.002	6.000
MFF03	N04P	10-APR-92	1036	155D	1.59	84.000		11.209		-0.004	6.000
MFF03	N04P	10-APR-92	1036	162E	1.59	107.000		11.278		0.008	6.000
MFF03	N04P	10-APR-92	1036	160D	1.59	128.000		11.161		-0.012	6.000
MFF03	N04P	10-APR-92	1036	158D	1.59	440.000		11.125		-0.018	6.000
MFF03	N04P	10-APR-92	1036	148D	1.59	600.000		11.064		-0.028	6.000
MFF03	N04P	10-APR-92	1036	164D	1.59	890.000		11.208		-0.004	6.000
MFF03	N04P	10-APR-92	1036	162D	1.59	1175.000		11.111		-0.020	6.000
MFF03	N04P	10-APR-92	1031	193	37.86	0.000	INIT	10.246			
MFF03	N04P	10-APR-92	1031	206	37.86	0.000	INIT	10.133			
MFF03	N04P	10-APR-92	1031	198	37.86	0.000	INIT	10.219			
MFF03	N04P	10-APR-92	1031	32V	37.86	0.000	DARK	10.139	-0.010		6.000
MFF03	N04P	10-APR-92	1031	33V	37.86	0.000	DARK	10.113	-0.014		6.000
MFF03	N04P	10-APR-92	1031	35V	37.86	0.000	DARK	10.150	-0.008		6.000
MFF03	N04P	10-APR-92	1031	109	37.86	4.000		10.243		0.007	6.000
MFF03	N04P	10-APR-92	1031	111	37.86	4.000		10.266		0.011	6.000
MFF03	N04P	10-APR-92	1031	120	37.86	25.000		10.479		0.047	6.000
MFF03	N04P	10-APR-92	1031	115	37.86	27.000		10.106		-0.016	6.000
MFF03	N04P	10-APR-92	1031	110	37.86	48.000		10.647		0.075	6.000

00508

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	N04P	10-APR-92	1031	114	37.86	54.000		10.683		0.081	6.000
MFF03	N04P	10-APR-92	1031	212	37.86	104.000		10.697		0.083	6.000
MFF03	N04P	10-APR-92	1031	105	37.86	140.000		10.699		0.083	6.000
MFF03	N04P	10-APR-92	1031	209	37.86	250.000		10.682		0.080	6.000
MFF03	N04P	10-APR-92	1031	210	37.86	765.000		10.619		0.070	6.000
MFF03	N04P	10-APR-92	1031	202	37.86	915.000		10.645		0.074	6.000
MFF03	N04P	10-APR-92	1031	208	37.86	1105.000		10.665		0.078	6.000
MFF03	N07P	08-APR-92	1136	145A	5.36	0.000	INIT	11.674			
MFF03	N07P	08-APR-92	1136	164A	5.36	0.000	INIT	11.571			
MFF03	N07P	08-APR-92	1136	146A	5.36	0.000	INIT	11.644			
MFF03	N07P	08-APR-92	1136	21V	5.36	0.000	DARK	11.243	-0.064		6.000
MFF03	N07P	08-APR-92	1136	31V	5.36	0.000	DARK	11.275	-0.059		6.000
MFF03	N07P	08-APR-92	1136	37V	5.36	0.000	DARK	11.341	-0.048		6.000
MFF03	N07P	08-APR-92	1136	148A	5.36	5.000		11.451		-0.030	6.000
MFF03	N07P	08-APR-92	1136	160A	5.36	6.300		11.375		-0.042	6.000
MFF03	N07P	08-APR-92	1136	168B	5.36	39.000		11.414		-0.036	6.000
MFF03	N07P	08-APR-92	1136	159B	5.36	45.000		11.190		-0.073	6.000
MFF03	N07P	08-APR-92	1136	163A	5.36	130.000		11.530		-0.017	6.000
MFF03	N07P	08-APR-92	1136	153B	5.36	169.000		11.324		-0.051	6.000
MFF03	N07P	08-APR-92	1136	156B	5.36	194.000		11.563		-0.011	6.000
MFF03	N07P	08-APR-92	1136	164B	5.36	259.000		11.372		-0.043	6.000
MFF03	N07P	08-APR-92	1136	158B	5.36	650.000		11.531		-0.016	6.000
MFF03	N07P	08-APR-92	1136	152B	5.36	765.000		11.413		-0.036	6.000
MFF03	N07P	08-APR-92	1136	162B	5.36	975.000		11.446		-0.031	6.000
MFF03	N07P	08-APR-92	1136	146B	5.36	1450.000		11.395		-0.039	6.000
MFF03	N07P	08-APR-92	1133	145	25.86	0.000	INIT	10.629			
MFF03	N07P	08-APR-92	1133	67	25.86	0.000	INIT	10.641			
MFF03	N07P	08-APR-92	1133	55	25.86	0.000	INIT	10.771			
MFF03	N07P	08-APR-92	1133	10V	25.86	0.000	DARK	10.325	-0.059		6.000
MFF03	N07P	08-APR-92	1133	6V	25.86	0.000	DARK	10.319	-0.060		6.000

00500

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/l/hr	NPR mg O2/l/hr	INCUBATION TIME hours
MFF03	N07P	08-APR-92	1133	41V	25.86	0.000	DARK	10.042	-0.106		6.000
MFF03	N07P	08-APR-92	1133	57	25.86	5.000		10.650		-0.005	6.000
MFF03	N07P	08-APR-92	1133	69	25.86	7.600		10.527		-0.026	6.000
MFF03	N07P	08-APR-92	1133	163	25.86	38.000		10.685		0.001	6.000
MFF03	N07P	08-APR-92	1133	16	25.86	47.000		11.023		0.057	6.000
MFF03	N07P	08-APR-92	1133	61	25.86	102.000		11.507		0.138	6.000
MFF03	N07P	08-APR-92	1133	54	25.86	124.000		11.778		0.183	6.000
MFF03	N07P	08-APR-92	1133	156	25.86	263.000		11.847		0.195	6.000
MFF03	N07P	08-APR-92	1133	15	25.86	288.000		11.603		0.154	6.000
MFF03	N07P	08-APR-92	1133	162	25.86	355.000		11.281		0.100	6.000
MFF03	N07P	08-APR-92	1133	70	25.86	1012.000		11.320		0.107	6.000
MFF03	N07P	08-APR-92	1133	63	25.86	1075.000		11.194		0.086	6.000
MFF03	N07P	08-APR-92	1133	60	25.86	1550.000		10.778		0.016	6.000
MFF03	N10P	08-APR-92	1007	147B	3.22	0.000	INIT	11.251			
MFF03	N10P	08-APR-92	1007	160B	3.22	0.000	INIT	11.550			
MFF03	N10P	08-APR-92	1007	161B	3.22	0.000	INIT	11.466			
MFF03	N10P	08-APR-92	1007	12V	3.22	0.000	DARK	10.994	-0.070		6.100
MFF03	N10P	08-APR-92	1007	6V	3.22	0.000	DARK	11.018	-0.066		6.100
MFF03	N10P	08-APR-92	1007	25V	3.22	0.000	DARK	11.315	-0.018		6.100
MFF03	N10P	08-APR-92	1007	155B	3.22	5.000		11.137		-0.047	6.100
MFF03	N10P	08-APR-92	1007	165B	3.22	5.000		11.282		-0.023	6.100
MFF03	N10P	08-APR-92	1007	148B	3.22	47.000		11.155		-0.044	6.100
MFF03	N10P	08-APR-92	1007	145B	3.22	53.000		11.493		0.012	6.100
MFF03	N10P	08-APR-92	1007	167B	3.22	112.000		11.778		0.058	6.100
MFF03	N10P	08-APR-92	1007	150B	3.22	168.000		11.604		0.030	6.100
MFF03	N10P	08-APR-92	1007	154B	3.22	335.000		11.844		0.069	6.100
MFF03	N10P	08-APR-92	1007	166B	3.22	357.000		11.847		0.070	6.100
MFF03	N10P	08-APR-92	1007	157B	3.22	445.000		11.988		0.093	6.100
MFF03	N10P	08-APR-92	1007	149B	3.22	1175.000		11.903		0.079	6.100
MFF03	N10P	08-APR-92	1007	163B	3.22	1400.000		11.782		0.059	6.100

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TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O <sub>2</sub> /1/hr	NPR mg O <sub>2</sub> /1/hr	INCUBATION TIME hours
MFF03	N10P	08-APR-92	1007	151B	3.22	2000.000		11.715		0.048	6.100
MFF03	N10P	08-APR-92	1003	14	13.3	0.000	INIT	11.371			
MFF03	N10P	08-APR-92	1003	4	13.3	0.000	INIT	11.181			
MFF03	N10P	08-APR-92	1003	24	13.3	0.000	INIT	11.363			
MFF03	N10P	08-APR-92	1003	15V	13.3	0.000	DARK	11.159	-0.024		6.100
MFF03	N10P	08-APR-92	1003	28V	13.3	0.000	DARK	10.873	-0.071		6.100
MFF03	N10P	08-APR-92	1003	17V	13.3	0.000	DARK	11.322	0.003		6.100
MFF03	N10P	08-APR-92	1003	6	13.3	5.000		11.160		-0.024	6.100
MFF03	N10P	08-APR-92	1003	18	13.3	8.500		11.143		-0.027	6.100
MFF03	N10P	08-APR-92	1003	11	13.3	54.000		11.224		-0.013	6.100
MFF03	N10P	08-APR-92	1003	22	13.3	56.000		11.358		0.009	6.100
MFF03	N10P	08-APR-92	1003	20	13.3	173.000		11.378		0.012	6.100
MFF03	N10P	08-APR-92	1003	9	13.3	218.000		11.643		0.055	6.100
MFF03	N10P	08-APR-92	1003	13	13.3	283.000		11.771		0.076	6.100
MFF03	N10P	08-APR-92	1003	21	13.3	403.000		11.612		0.050	6.100
MFF03	N10P	08-APR-92	1003	12	13.3	740.000		11.649		0.056	6.100
MFF03	N10P	08-APR-92	1003	10	13.3	1000.000		11.611		0.050	6.100
MFF03	N10P	08-APR-92	1003	17	13.3	1475.000		11.743		0.072	6.100
MFF03	N10P	08-APR-92	1003	8	13.3	1900.000		11.603		0.049	6.100
MFF03	N16P	10-APR-92	0929	152C	1.74	0.000	INIT	11.517			
MFF03	N16P	10-APR-92	0929	159C	1.74	0.000	INIT	11.550			
MFF03	N16P	10-APR-92	0929	155C	1.74	0.000	INIT	11.440			
MFF03	N16P	10-APR-92	0929	29V	1.74	0.000	DARK	11.495	-0.001		6.083
MFF03	N16P	10-APR-92	0929	85V	1.74	0.000	DARK	11.340	-0.027		6.083
MFF03	N16P	10-APR-92	0929	42V	1.74	0.000	DARK	11.431	-0.012		6.083
MFF03	N16P	10-APR-92	0929	146C	1.74	5.000		11.461		-0.007	6.083
MFF03	N16P	10-APR-92	0929	160C	1.74	8.300		11.406		-0.016	6.083
MFF03	N16P	10-APR-92	0929	164C	1.74	51.000		11.567		0.011	6.083
MFF03	N16P	10-APR-92	0929	149C	1.74	63.000		11.393		-0.018	6.083
MFF03	N16P	10-APR-92	0929	151C	1.74	168.000		11.314		-0.031	6.083

T0900

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF03	N16P	10-APR-92	0929	145C	1.74	213.000		11.593		0.015	6.083
MFF03	N16P	10-APR-92	0929	157C	1.74	276.000		11.526		0.004	6.083
MFF03	N16P	10-APR-92	0929	162C	1.74	393.000		11.668		0.027	6.083
MFF03	N16P	10-APR-92	0929	163C	1.74	500.000		11.456		-0.008	6.083
MFF03	N16P	10-APR-92	0929	147C	1.74	1000.000		11.589		0.014	6.083
MFF03	N16P	10-APR-92	0929	165C	1.74	1425.000		11.530		0.005	6.083
MFF03	N16P	10-APR-92	0929	156C	1.74	1875.000		11.581		0.013	6.083
MFF03	N16P	10-APR-92	0924	148C	25.7	0.000	INIT	11.098			
MFF03	N16P	10-APR-92	0924	161C	25.7	0.000	INIT	10.845			
MFF03	N16P	10-APR-92	0924	167C	25.7	0.000	INIT	10.843			
MFF03	N16P	10-APR-92	0924	1V	25.7	0.000	DARK	10.651	-0.046		6.083
MFF03	N16P	10-APR-92	0924	8V	25.7	0.000	DARK	10.726	-0.033		6.083
MFF03	N16P	10-APR-92	0924	7V	25.7	0.000	DARK	10.619	-0.051		6.083
MFF03	N16P	10-APR-92	0924	37	25.7	5.000		10.838		-0.015	6.083
MFF03	N16P	10-APR-92	0924	47	25.7	5.000		10.849		-0.013	6.083
MFF03	N16P	10-APR-92	0924	29	25.7	53.000		11.087		0.026	6.083
MFF03	N16P	10-APR-92	0924	45	25.7	54.000		11.008		0.013	6.083
MFF03	N16P	10-APR-92	0924	34	25.7	109.000		11.250		0.053	6.083
MFF03	N16P	10-APR-92	0924	39	25.7	163.000		11.480		0.091	6.083
MFF03	N16P	10-APR-92	0924	48	25.7	327.000		11.307		0.062	6.083
MFF03	N16P	10-APR-92	0924	32	25.7	348.000		11.571		0.106	6.083
MFF03	N16P	10-APR-92	0924	38	25.7	825.000		11.393		0.076	6.083
MFF03	N16P	10-APR-92	0924	5	25.7	1225.000		11.341		0.068	6.083
MFF03	N16P	10-APR-92	0924	40	25.7	1425.000		11.068		0.023	6.083
MFF03	N16P	10-APR-92	0924	30	25.7	1875.000		11.016		0.014	6.083
MFF03	N20P	10-APR-92	0817	31	1.47	0.000	INIT	11.332			
MFF03	N20P	10-APR-92	0817	76	1.47	0.000	INIT	11.358			
MFF03	N20P	10-APR-92	0817	42	1.47	0.000	INIT	11.301			
MFF03	N20P	10-APR-92	0817	1	1.47	0.000	DARK	11.269	-0.010		6.000
MFF03	N20P	10-APR-92	0817	2V	1.47	0.000	DARK	11.398	0.011		6.000

00602

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O <sub>2</sub> /l/hr	NPR mg O <sub>2</sub> /l/hr	INCUBATION TIME hours
MFF03	N20P	10-APR-92	0817	3	1.47	0.000	DARK	11.303	-0.005		6.000
MFF03	N20P	10-APR-92	0817	88	1.47	4.700		11.214		-0.019	6.000
MFF03	N20P	10-APR-92	0817	90	1.47	6.300		11.341		0.002	6.000
MFF03	N20P	10-APR-92	0817	92	1.47	41.000		11.166		-0.027	6.000
MFF03	N20P	10-APR-92	0817	73	1.47	43.000		11.233		-0.016	6.000
MFF03	N20P	10-APR-92	0817	75	1.47	72.000		11.157		-0.029	6.000
MFF03	N20P	10-APR-92	0817	87	1.47	113.000		11.350		0.003	6.000
MFF03	N20P	10-APR-92	0817	85	1.47	239.000		11.350		0.003	6.000
MFF03	N20P	10-APR-92	0817	89	1.47	293.000		11.319		-0.002	6.000
MFF03	N20P	10-APR-92	0817	79	1.47	700.000		11.294		-0.006	6.000
MFF03	N20P	10-APR-92	0817	91	1.47	1060.000		11.393		0.010	6.000
MFF03	N20P	10-APR-92	0817	93	1.47	1375.000		11.409		0.013	6.000
MFF03	N20P	10-APR-92	0817	82	1.47	1750.000		11.435		0.017	6.000
MFF03	N20P	10-APR-92	0811	46	25.02	0.000	INIT	11.399			
MFF03	N20P	10-APR-92	0811	95	25.02	0.000	INIT	11.460			
MFF03	N20P	10-APR-92	0811	84	25.02	0.000	INIT	11.469			
MFF03	N20P	10-APR-92	0811	14V	25.02	0.000	DARK	11.347	-0.016		6.000
MFF03	N20P	10-APR-92	0811	43V	25.02	0.000	DARK	11.895	0.075		6.000
MFF03	N20P	10-APR-92	0811	30V	25.02	0.000	DARK	11.436	-0.001		6.000
MFF03	N20P	10-APR-92	0811	158	25.02	4.700		11.400		-0.007	6.000
MFF03	N20P	10-APR-92	0811	155	25.02	6.300		11.439		-0.001	6.000
MFF03	N20P	10-APR-92	0811	160	25.02	36.000		11.374		-0.011	6.000
MFF03	N20P	10-APR-92	0811	159	25.02	39.000		11.254		-0.031	6.000
MFF03	N20P	10-APR-92	0811	161	25.02	120.000		11.493		0.008	6.000
MFF03	N20P	10-APR-92	0811	150	25.02	161.000		11.429		-0.002	6.000
MFF03	N20P	10-APR-92	0811	151	25.02	263.000		11.420		-0.004	6.000
MFF03	N20P	10-APR-92	0811	149	25.02	280.000		11.526		0.014	6.000
MFF03	N20P	10-APR-92	0811	166	25.02	380.000		11.366		-0.013	6.000
MFF03	N20P	10-APR-92	0811	164	25.02	1250.000		11.494		0.009	6.000
MFF03	N20P	10-APR-92	0811	154	25.02	1475.000		11.626		0.031	6.000

00303

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/l/hr	NPR mg O2/l/hr	INCUBATION TIME hours
MFF03	N20P	10-APR-92	0811	167	25.02	1700.000		11.493			6.000
MFF04	F01P	22-JUN-92	1457	113	1.4	0.000	INIT	8.860		0.008	
MFF04	F01P	22-JUN-92	1457	199	1.4	0.000	INIT	8.888			
MFF04	F01P	22-JUN-92	1457	207	1.4	0.000	INIT	8.721			
MFF04	F01P	22-JUN-92	1457	22V	1.4	0.000	DARK	8.685	-0.034		4.000
MFF04	F01P	22-JUN-92	1457	31V	1.4	0.000	DARK	8.673	-0.037		4.000
MFF04	F01P	22-JUN-92	1457	5V	1.4	0.000	DARK	8.674	-0.037		4.000
MFF04	F01P	22-JUN-92	1457	197	1.4	3.000		8.856		0.008	4.000
MFF04	F01P	22-JUN-92	1457	203	1.4	3.000		8.820		-0.001	4.000
MFF04	F01P	22-JUN-92	1457	195	1.4	17.000		8.750		-0.018	4.000
MFF04	F01P	22-JUN-92	1457	210	1.4	23.000		8.842		0.005	4.000
MFF04	F01P	22-JUN-92	1457	214	1.4	35.000		8.875		0.013	4.000
MFF04	F01P	22-JUN-92	1457	206	1.4	39.000		9.047		0.056	4.000
MFF04	F01P	22-JUN-92	1457	211	1.4	79.000		8.661		-0.040	4.000
MFF04	F01P	22-JUN-92	1457	212	1.4	103.000		8.807		-0.004	4.000
MFF04	F01P	22-JUN-92	1457	194	1.4	160.000		8.835		0.003	4.000
MFF04	F01P	22-JUN-92	1457	204	1.4	570.000		8.868		0.011	4.000
MFF04	F01P	22-JUN-92	1457	196	1.4	670.000		8.868		0.011	4.000
MFF04	F01P	22-JUN-92	1457	104	1.4	840.000		8.835		0.003	4.000
MFF04	F01P	22-JUN-92	1453	147C	18.01	0.000	INIT	9.716			
MFF04	F01P	22-JUN-92	1453	168C	18.01	0.000	INIT	9.741			
MFF04	F01P	22-JUN-92	1453	153C	18.01	0.000	INIT	9.576			
MFF04	F01P	22-JUN-92	1453	24V	18.01	0.000	DARK	9.821	0.024		6.000
MFF04	F01P	22-JUN-92	1453	32V	18.01	0.000	DARK	9.554	-0.021		6.000
MFF04	F01P	22-JUN-92	1453	8V	18.01	0.000	DARK	9.806	0.021		6.000
MFF04	F01P	22-JUN-92	1453	163C	18.01	4.000		9.920		0.040	6.000
MFF04	F01P	22-JUN-92	1453	150C	18.01	5.400		9.894		0.036	6.000
MFF04	F01P	22-JUN-92	1453	165C	18.01	31.000		9.970		0.049	6.000
MFF04	F01P	22-JUN-92	1453	162C	18.01	34.000		10.049		0.062	6.000
MFF04	F01P	22-JUN-92	1453	160C	18.01	63.000		9.984		0.051	6.000

00504

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF04	F01P	22-JUN-92	1453	158C	18.01	98.000		9.759		0.014	6.000
MFF04	F01P	22-JUN-92	1453	155C	18.01	227.000		9.953		0.046	6.000
MFF04	F01P	22-JUN-92	1453	154C	18.01	240.000		10.067		0.065	6.000
MFF04	F01P	22-JUN-92	1453	152C	18.01	253.000		9.917		0.040	6.000
MFF04	F01P	22-JUN-92	1453	167C	18.01	950.000		9.791		0.019	6.000
MFF04	F01P	22-JUN-92	1453	146C	18.01	1370.000		9.649		-0.005	6.000
MFF04	F01P	22-JUN-92	1453	156C	18.01	1400.000		9.951		0.046	6.000
MFF04	F02P	22-JUN-92	1206	146E	1.78	0.000	INIT	8.439			
MFF04	F02P	22-JUN-92	1206	154E	1.78	0.000	INIT	8.428			
MFF04	F02P	22-JUN-92	1206	151E	1.78	0.000	INIT	8.647			
MFF04	F02P	22-JUN-92	1206	14V	1.78	0.000	DARK	8.564	0.015		4.000
MFF04	F02P	22-JUN-92	1206	1V	1.78	0.000	DARK	8.444	-0.015		4.000
MFF04	F02P	22-JUN-92	1206	41V	1.78	0.000	DARK	8.541	0.009		4.000
MFF04	F02P	22-JUN-92	1206	153E	1.78	2.000		8.653		0.037	4.000
MFF04	F02P	22-JUN-92	1206	160E	1.78	2.000		8.717		0.053	4.000
MFF04	F02P	22-JUN-92	1206	166E	1.78	18.000		8.618		0.028	4.000
MFF04	F02P	22-JUN-92	1206	147E	1.78	19.000		8.752		0.062	4.000
MFF04	F02P	22-JUN-92	1206	145E	1.78	32.000		8.838		0.083	4.000
MFF04	F02P	22-JUN-92	1206	168E	1.78	62.000		8.825		0.080	4.000
MFF04	F02P	22-JUN-92	1206	157E	1.78	77.000		8.825		0.080	4.000
MFF04	F02P	22-JUN-92	1206	165E	1.78	94.000		8.803		0.075	4.000
MFF04	F02P	22-JUN-92	1206	148E	1.78	310.000		8.695		0.048	4.000
MFF04	F02P	22-JUN-92	1206	164E	1.78	440.000		8.794		0.072	4.000
MFF04	F02P	22-JUN-92	1206	149E	1.78	640.000		8.766		0.065	4.000
MFF04	F02P	22-JUN-92	1206	167E	1.78	860.000		8.699		0.049	4.000
MFF04	F02P	22-JUN-92	1200	47	22.45	0.000	INIT	9.163			
MFF04	F02P	22-JUN-92	1200	99	22.45	0.000	INIT	9.560			
MFF04	F02P	22-JUN-92	1200	67	22.45	0.000	INIT	9.561			
MFF04	F02P	22-JUN-92	1200	13V	22.45	0.000	DARK	9.476	0.008		6.000
MFF04	F02P	22-JUN-92	1200	20V	22.45	0.000	DARK	9.386	-0.007		6.000

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TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/l/hr	NPR mg O2/l/hr	INCUBATION TIME hours
MFF04	F02P	22-JUN-92	1200	7V	22.45	0.000	DARK	9.329	-0.017		6.000
MFF04	F02P	22-JUN-92	1200	91	22.45	4.000		9.491		0.010	6.000
MFF04	F02P	22-JUN-92	1200	44	22.45	5.400		9.345		-0.014	6.000
MFF04	F02P	22-JUN-92	1200	59	22.45	35.000		9.615		0.031	6.000
MFF04	F02P	22-JUN-92	1200	93	22.45	37.000		9.498		0.012	6.000
MFF04	F02P	22-JUN-92	1200	56	22.45	103.000		9.397		-0.005	6.000
MFF04	F02P	22-JUN-92	1200	62	22.45	139.000		9.526		0.016	6.000
MFF04	F02P	22-JUN-92	1200	4	22.45	206.000		9.743		0.053	6.000
MFF04	F02P	22-JUN-92	1200	68	22.45	242.000		9.666		0.040	6.000
MFF04	F02P	22-JUN-92	1200	76	22.45	580.000		9.656		0.038	6.000
MFF04	F02P	22-JUN-92	1200	37	22.45	900.000		9.439		0.002	6.000
MFF04	F02P	22-JUN-92	1200	70	22.45	1270.000		9.656		0.038	6.000
MFF04	F02P	22-JUN-92	1200	72	22.45	1400.000		9.581		0.026	6.000
MFF04	F13P	23-JUN-92	1008	151C	2.32	0.000	INIT	9.866			
MFF04	F13P	23-JUN-92	1008	157C	2.32	0.000	INIT	9.757			
MFF04	F13P	23-JUN-92	1008	152E	2.32	0.000	INIT	10.071			
MFF04	F13P	23-JUN-92	1008	12V	2.32	0.000	DARK	9.752	-0.037		4.000
MFF04	F13P	23-JUN-92	1008	19V	2.32	0.000	DARK	9.586	-0.078		4.000
MFF04	F13P	23-JUN-92	1008	40V	2.32	0.000	DARK	9.656	-0.061		4.000
MFF04	F13P	23-JUN-92	1008	145C	2.32	2.300		9.688		-0.053	4.000
MFF04	F13P	23-JUN-92	1008	155E	2.32	2.300		9.815		-0.021	4.000
MFF04	F13P	23-JUN-92	1008	149C	2.32	18.000		9.814		-0.021	4.000
MFF04	F13P	23-JUN-92	1008	150E	2.32	20.000		9.786		-0.028	4.000
MFF04	F13P	23-JUN-92	1008	164C	2.32	33.000		9.799		-0.025	4.000
MFF04	F13P	23-JUN-92	1008	159E	2.32	63.000		9.950		0.013	4.000
MFF04	F13P	23-JUN-92	1008	163E	2.32	78.000		9.833		-0.016	4.000
MFF04	F13P	23-JUN-92	1008	148C	2.32	96.000		9.943		0.011	4.000
MFF04	F13P	23-JUN-92	1008	162E	2.32	300.000		9.902		0.001	4.000
MFF04	F13P	23-JUN-92	1008	161E	2.32	440.000		10.096		0.049	4.000
MFF04	F13P	23-JUN-92	1008	159C	2.32	660.000		9.923		0.006	4.000

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TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/l/hr	NPR mg O2/l/hr	INCUBATION TIME hours
MFF04	F13P	23-JUN-92	1008	156E	2.32	875.000		10.032		0.033	4.000
MFF04	F13P	23-JUN-92	1005	160	8.91	0.000	INIT	9.745			
MFF04	F13P	23-JUN-92	1005	198	8.91	0.000	INIT	9.802			
MFF04	F13P	23-JUN-92	1005	193	8.91	0.000	INIT	9.831			
MFF04	F13P	23-JUN-92	1005	27V	8.91	0.000	DARK	9.642	-0.025		6.000
MFF04	F13P	23-JUN-92	1005	33V	8.91	0.000	DARK	9.620	-0.029		6.000
MFF04	F13P	23-JUN-92	1005	39V	8.91	0.000	DARK	9.785	-0.001		6.000
MFF04	F13P	23-JUN-92	1005	201	8.91	4.000		9.672		-0.020	6.000
MFF04	F13P	23-JUN-92	1005	209	8.91	5.500		9.703		-0.015	6.000
MFF04	F13P	23-JUN-92	1005	205	8.91	36.000		9.798		0.001	6.000
MFF04	F13P	23-JUN-92	1005	152	8.91	37.000		9.851		0.010	6.000
MFF04	F13P	23-JUN-92	1005	145	8.91	105.000		9.944		0.025	6.000
MFF04	F13P	23-JUN-92	1005	159	8.91	141.000		10.200		0.068	6.000
MFF04	F13P	23-JUN-92	1005	148	8.91	210.000		10.125		0.055	6.000
MFF04	F13P	23-JUN-92	1005	156	8.91	246.000		10.171		0.063	6.000
MFF04	F13P	23-JUN-92	1005	165	8.91	580.000		10.130		0.056	6.000
MFF04	F13P	23-JUN-92	1005	109	8.91	900.000		10.112		0.053	6.000
MFF04	F13P	23-JUN-92	1005	163	8.91	1310.000		10.099		0.051	6.000
MFF04	F13P	23-JUN-92	1005	157	8.91	1460.000		9.951		0.026	6.000
MFF04	F23P	24-JUN-92	1212	120	1.7	0.000	INIT	9.368			
MFF04	F23P	24-JUN-92	1212	79	1.7	0.000	INIT	9.372			
MFF04	F23P	24-JUN-92	1212	160	1.7	0.000	INIT	9.344			
MFF04	F23P	24-JUN-92	1212	24V	1.7	0.000	DARK	9.273	-0.022		4.000
MFF04	F23P	24-JUN-92	1212	35V	1.7	0.000	DARK	9.254	-0.027		4.000
MFF04	F23P	24-JUN-92	1212	25V	1.7	0.000	DARK	9.232	-0.032		4.000
MFF04	F23P	24-JUN-92	1212	204	1.7	2.400		9.232		-0.032	4.000
MFF04	F23P	24-JUN-92	1212	90	1.7	2.400		9.304		-0.014	4.000
MFF04	F23P	24-JUN-92	1212	114	1.7	19.000		9.350		-0.003	4.000
MFF04	F23P	24-JUN-92	1212	92	1.7	21.000		9.352		-0.002	4.000
MFF04	F23P	24-JUN-92	1212	117	1.7	34.000		9.434		0.018	4.000

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TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF04	F23P	24-JUN-92	1212	103	1.7	65.000		9.631		0.067	4.000
MFF04	F23P	24-JUN-92	1212	36	1.7	80.000		9.809		0.112	4.000
MFF04	F23P	24-JUN-92	1212	212	1.7	98.000		9.701		0.085	4.000
MFF04	F23P	24-JUN-92	1212	202	1.7	340.000		10.141		0.195	4.000
MFF04	F23P	24-JUN-92	1212	95	1.7	475.000		10.239		0.220	4.000
MFF04	F23P	24-JUN-92	1212	22	1.7	710.000		10.321		0.240	4.000
MFF04	F23P	24-JUN-92	1212	88	1.7	890.000		10.294		0.233	4.000
MFF04	F23P	24-JUN-92	1209	146C	10.56	0.000	INIT	9.055			
MFF04	F23P	24-JUN-92	1209	165C	10.56	0.000	INIT	9.070			
MFF04	F23P	24-JUN-92	1209	148E	10.56	0.000	INIT	9.051			
MFF04	F23P	24-JUN-92	1209	1V	10.56	0.000	DARK	8.917	-0.036		4.000
MFF04	F23P	24-JUN-92	1209	5V	10.56	0.000	DARK	9.005	-0.013		4.000
MFF04	F23P	24-JUN-92	1209	85V	10.56	0.000	DARK	8.956	-0.026		4.000
MFF04	F23P	24-JUN-92	1209	149E	10.56	3.200		9.055		-0.001	4.000
MFF04	F23P	24-JUN-92	1209	161B	10.56	3.200		9.047		-0.003	4.000
MFF04	F23P	24-JUN-92	1209	164E	10.56	18.000		9.051		-0.002	4.000
MFF04	F23P	24-JUN-92	1209	160C	10.56	25.000		8.852		-0.052	4.000
MFF04	F23P	24-JUN-92	1209	157E	10.56	37.000		9.055		-0.001	4.000
MFF04	F23P	24-JUN-92	1209	155C	10.56	41.000		9.099		0.010	4.000
MFF04	F23P	24-JUN-92	1209	147E	10.56	83.000		9.331		0.068	4.000
MFF04	F23P	24-JUN-92	1209	160E	10.56	108.000		9.301		0.061	4.000
MFF04	F23P	24-JUN-92	1209	166E	10.56	180.000		9.452		0.098	4.000
MFF04	F23P	24-JUN-92	1209	145E	10.56	565.000		9.529		0.117	4.000
MFF04	F23P	24-JUN-92	1209	168E	10.56	740.000		9.552		0.123	4.000
MFF04	F23P	24-JUN-92	1209	152C	10.56	825.000		9.573		0.129	4.000
MFF04	N01P	24-JUN-92	0719	205	2.17	0.000	INIT	9.877			
MFF04	N01P	24-JUN-92	0719	45	2.17	0.000	INIT	10.158			
MFF04	N01P	24-JUN-92	0719	58	2.17	0.000	INIT	10.043			
MFF04	N01P	24-JUN-92	0719	21V	2.17	0.000	DARK	10.012	-0.004		4.000
MFF04	N01P	24-JUN-92	0719	3V	2.17	0.000	DARK	9.986	-0.010		4.000

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TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/l/hr	NPR mg O2/l/hr	INCUBATION TIME hours
MFF04	N01P	24-JUN-92	0719	6V	2.17	0.000	DARK	9.893	-0.033		4.000
MFF04	N01P	24-JUN-92	0719	165	2.17	2.400		9.978		-0.012	4.000
MFF04	N01P	24-JUN-92	0719	38	2.17	2.400		10.032		0.001	4.000
MFF04	N01P	24-JUN-92	0719	194	2.17	19.000		10.029		0.001	4.000
MFF04	N01P	24-JUN-92	0719	209	2.17	20.000		9.998		-0.007	4.000
MFF04	N01P	24-JUN-92	0719	156	2.17	34.000		9.917		-0.027	4.000
MFF04	N01P	24-JUN-92	0719	145	2.17	65.000		10.011		-0.004	4.000
MFF04	N01P	24-JUN-92	0719	61	2.17	80.000		10.089		0.016	4.000
MFF04	N01P	24-JUN-92	0719	109	2.17	98.000		10.143		0.029	4.000
MFF04	N01P	24-JUN-92	0719	152	2.17	340.000		10.171		0.036	4.000
MFF04	N01P	24-JUN-92	0719	201	2.17	475.000		10.153		0.032	4.000
MFF04	N01P	24-JUN-92	0719	157	2.17	710.000		10.223		0.049	4.000
MFF04	N01P	24-JUN-92	0719	163	2.17	890.000		10.228		0.051	4.000
MFF04	N01P	24-JUN-92	0715	152B	18.32	0.000	INIT	10.329			
MFF04	N01P	24-JUN-92	0715	164B	18.32	0.000	INIT	10.339			
MFF04	N01P	24-JUN-92	0715	158C	18.32	0.000	INIT	10.287			
MFF04	N01P	24-JUN-92	0715	36V	18.32	0.000	DARK	10.471	0.025		6.050
MFF04	N01P	24-JUN-92	0715	7V	18.32	0.000	DARK	10.421	0.017		6.050
MFF04	N01P	24-JUN-92	0715	8V	18.32	0.000	DARK	10.326	0.001		6.050
MFF04	N01P	24-JUN-92	0715	154C	18.32	5.300		10.359		0.007	6.050
MFF04	N01P	24-JUN-92	0715	149B	18.32	7.000		10.433		0.019	6.050
MFF04	N01P	24-JUN-92	0715	151B	18.32	46.000		10.541		0.037	6.050
MFF04	N01P	24-JUN-92	0715	159B	18.32	47.000		10.528		0.035	6.050
MFF04	N01P	24-JUN-92	0715	146B	18.32	133.000		10.682		0.060	6.050
MFF04	N01P	24-JUN-92	0715	168B	18.32	178.000		10.531		0.035	6.050
MFF04	N01P	24-JUN-92	0715	156B	18.32	266.000		10.736		0.069	6.050
MFF04	N01P	24-JUN-92	0715	148B	18.32	311.000		10.652		0.055	6.050
MFF04	N01P	24-JUN-92	0715	157B	18.32	880.000		10.610		0.048	6.050
MFF04	N01P	24-JUN-92	0715	146A	18.32	1200.000		10.428		0.018	6.050
MFF04	N01P	24-JUN-92	0715	155A	18.32	1600.000		10.442		0.020	6.050

60900

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O <sub>2</sub> /l/hr	NPR mg O <sub>2</sub> /l/hr	INCUBATION TIME hours
MFF04	N01P	24-JUN-92	0715	150B	18.32	1900.000		10.277			
MFF04	N04P	24-JUN-92	0820	148C	1.84	0.000	INIT	9.728		-0.007	6.050
MFF04	N04P	24-JUN-92	0820	150E	1.84	0.000	INIT	9.843			
MFF04	N04P	24-JUN-92	0820	166B	1.84	0.000	INIT	9.795			
MFF04	N04P	24-JUN-92	0820	2	1.84	0.000	DARK	9.695	-0.023		4.050
MFF04	N04P	24-JUN-92	0820	44V	1.84	0.000	DARK	9.716	-0.018		4.050
MFF04	N04P	24-JUN-92	0820	41V	1.84	0.000	DARK	9.594	-0.048		4.050
MFF04	N04P	24-JUN-92	0820	155B	1.84	3.200		9.804		0.004	4.050
MFF04	N04P	24-JUN-92	0820	163B	1.84	3.200		9.771		-0.004	4.050
MFF04	N04P	24-JUN-92	0820	161E	1.84	18.000		9.838		0.012	4.050
MFF04	N04P	24-JUN-92	0820	158B	1.84	24.000		9.826		0.009	4.050
MFF04	N04P	24-JUN-92	0820	165B	1.84	37.000		9.834		0.011	4.050
MFF04	N04P	24-JUN-92	0820	154B	1.84	41.000		9.786		-0.001	4.050
MFF04	N04P	24-JUN-92	0820	159E	1.84	83.000		9.826		0.009	4.050
MFF04	N04P	24-JUN-92	0820	147B	1.84	108.000		9.793		0.001	4.050
MFF04	N04P	24-JUN-92	0820	167B	1.84	180.000		9.743		-0.011	4.050
MFF04	N04P	24-JUN-92	0820	163E	1.84	565.000		9.753		-0.009	4.050
MFF04	N04P	24-JUN-92	0820	153B	1.84	740.000		9.787		-0.000	4.050
MFF04	N04P	24-JUN-92	0820	160B	1.84	825.000		9.753		-0.009	4.050
MFF04	N04P	24-JUN-92	0817	107	15.02	0.000	INIT	10.733			
MFF04	N04P	24-JUN-92	0817	193	15.02	0.000	INIT	10.552			
MFF04	N04P	24-JUN-92	0817	44	15.02	0.000	INIT	10.755			
MFF04	N04P	24-JUN-92	0817	22V	15.02	0.000	DARK	9.804	-0.146		6.000
MFF04	N04P	24-JUN-92	0817	40V	15.02	0.000	DARK	10.715	0.006		6.000
MFF04	N04P	24-JUN-92	0817	39V	15.02	0.000	DARK	10.526	-0.026		6.000
MFF04	N04P	24-JUN-92	0817	113	15.02	5.000		10.647		-0.006	6.000
MFF04	N04P	24-JUN-92	0817	67	15.02	7.000		10.830		0.025	6.000
MFF04	N04P	24-JUN-92	0817	214	15.02	40.000		10.733		0.009	6.000
MFF04	N04P	24-JUN-92	0817	101	15.02	44.000		10.803		0.020	6.000
MFF04	N04P	24-JUN-92	0817	211	15.02	80.000		10.712		0.005	6.000

010010

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O <sub>2</sub> /l/hr	NPR mg O <sub>2</sub> /l/hr	INCUBATION TIME hours
MFF04	N04P	24-JUN-92	0817	158	15.02	126.000		10.803		0.020	6.000
MFF04	N04P	24-JUN-92	0817	41	15.02	292.000		10.783		0.017	6.000
MFF04	N04P	24-JUN-92	0817	116	15.02	325.000		10.899		0.036	6.000
MFF04	N04P	24-JUN-92	0817	4	15.02	475.000		10.843		0.027	6.000
MFF04	N04P	24-JUN-92	0817	104	15.02	1400.000		10.730		0.008	6.000
MFF04	N04P	24-JUN-92	0817	198	15.02	1650.000		10.774		0.016	6.000
MFF04	N04P	24-JUN-92	0817	216	15.02	1850.000		10.829		0.025	6.000
MFF04	N07P	23-JUN-92	1111	107	2.24	0.000	INIT	9.870			
MFF04	N07P	23-JUN-92	1111	138	2.24	0.000	INIT				
MFF04	N07P	23-JUN-92	1111	120	2.24	0.000	INIT	9.944			
MFF04	N07P	23-JUN-92	1111	1	2.24	0.000	DARK	9.696	-0.052		4.080
MFF04	N07P	23-JUN-92	1111	22V	2.24	0.000	DARK	9.883	-0.006		4.080
MFF04	N07P	23-JUN-92	1111	31V	2.24	0.000	DARK	9.865	-0.010		4.080
MFF04	N07P	23-JUN-92	1111	203	2.24	3.000		9.863		-0.011	4.080
MFF04	N07P	23-JUN-92	1111	204	2.24	3.000		9.893		-0.004	4.080
MFF04	N07P	23-JUN-92	1111	196	2.24	18.000		9.905		-0.001	4.080
MFF04	N07P	23-JUN-92	1111	212	2.24	24.000		9.901		-0.001	4.080
MFF04	N07P	23-JUN-92	1111	206	2.24	36.000		9.872		-0.009	4.080
MFF04	N07P	23-JUN-92	1111	111	2.24	40.000		10.079		0.042	4.080
MFF04	N07P	23-JUN-92	1111	215	2.24	81.000		9.967		0.015	4.080
MFF04	N07P	23-JUN-92	1111	197	2.24	105.000		10.011		0.026	4.080
MFF04	N07P	23-JUN-92	1111	114	2.24	150.000		9.975		0.017	4.080
MFF04	N07P	23-JUN-92	1111	117	2.24	560.000		9.897		-0.003	4.080
MFF04	N07P	23-JUN-92	1111	153	2.24	710.000		9.765		-0.035	4.080
MFF04	N07P	23-JUN-92	1111	195	2.24	830.000		9.930		0.005	4.080
MFF04	N07P	23-JUN-92	1108	154E	13.65	0.000	INIT	10.315			
MFF04	N07P	23-JUN-92	1108	167E	13.65	0.000	INIT	10.204			
MFF04	N07P	23-JUN-92	1108	156C	13.65	0.000	INIT	9.999			
MFF04	N07P	23-JUN-92	1108	14V	13.65	0.000	DARK	10.099	-0.012		6.000
MFF04	N07P	23-JUN-92	1108	35V,	13.65	0.000	DARK	9.955	-0.036		6.000

00011

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/l/hr	NPR mg O2/l/hr	INCUBATION TIME hours
MFF04	N07P	23-JUN-92	1108	1V	13.65	0.000	DARK	9.931	-0.040		6.000
MFF04	N07P	23-JUN-92	1108	146C	13.65	4.000		9.978		-0.032	6.000
MFF04	N07P	23-JUN-92	1108	157E	13.65	5.500		10.119		-0.009	6.000
MFF04	N07P	23-JUN-92	1108	166E	13.65	32.000		10.075		-0.016	6.000
MFF04	N07P	23-JUN-92	1108	148E	13.65	35.000		10.125		-0.008	6.000
MFF04	N07P	23-JUN-92	1108	165E	13.65	64.000		10.156		-0.003	6.000
MFF04	N07P	23-JUN-92	1108	149E	13.65	99.000		10.198		0.004	6.000
MFF04	N07P	23-JUN-92	1108	153E	13.65	231.000		10.288		0.019	6.000
MFF04	N07P	23-JUN-92	1108	145E	13.65	257.000		10.180		0.001	6.000
MFF04	N07P	23-JUN-92	1108	168E	13.65	270.000		10.131		-0.007	6.000
MFF04	N07P	23-JUN-92	1108	160E	13.65	1000.000		10.147		-0.004	6.000
MFF04	N07P	23-JUN-92	1108	164A	13.65	1300.000		10.152		-0.003	6.000
MFF04	N07P	23-JUN-92	1108	147E	13.65	1460.000		10.188		0.003	6.000
MFF04	N10P	23-JUN-92	1210	145B	1.33	0.000	INIT	9.712			
MFF04	N10P	23-JUN-92	1210	163C	1.33	0.000	INIT	9.624			
MFF04	N10P	23-JUN-92	1210	160C	1.33	0.000	INIT	9.757			
MFF04	N10P	23-JUN-92	1210	25V	1.33	0.000	DARK	9.707	0.002		4.000
MFF04	N10P	23-JUN-92	1210	5V	1.33	0.000	DARK	9.547	-0.038		4.000
MFF04	N10P	23-JUN-92	1210	85V	1.33	0.000	DARK	9.564	-0.033		4.000
MFF04	N10P	23-JUN-92	1210	150C	1.33	4.300		9.747		0.012	4.000
MFF04	N10P	23-JUN-92	1210	162B	1.33	5.400		9.636		-0.015	4.000
MFF04	N10P	23-JUN-92	1210	149B	1.33	33.000		9.861		0.041	4.000
MFF04	N10P	23-JUN-92	1210	148B	1.33	39.000		9.393		-0.076	4.000
MFF04	N10P	23-JUN-92	1210	152C	1.33	105.000		11.328		0.408	4.000
MFF04	N10P	23-JUN-92	1210	154C	1.33	143.000		10.012		0.079	4.000
MFF04	N10P	23-JUN-92	1210	161B	1.33	165.000		10.147		0.112	4.000
MFF04	N10P	23-JUN-92	1210	162C	1.33	219.000		10.362		0.166	4.000
MFF04	N10P	23-JUN-92	1210	155C	1.33	600.000		10.484		0.197	4.000
MFF04	N10P	23-JUN-92	1210	165C	1.33	850.000		10.521		0.206	4.000
MFF04	N10P	23-JUN-92	1210	167C	1.33	850.000		10.642		0.236	4.000

00012

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/l/hr	NPR mg O2/l/hr	INCUBATION TIME hours
MFF04	N10P	23-JUN-92	1210	158C	1.33	1250.000		10.398		0.175	4.000
MFF04	N10P	23-JUN-92	1206	113	8.83	0.000	INIT	9.665			
MFF04	N10P	23-JUN-92	1206	9	8.83	0.000	INIT	9.539			
MFF04	N10P	23-JUN-92	1206	17	8.83	0.000	INIT	9.593			
MFF04	N10P	23-JUN-92	1206	21V	8.83	0.000	DARK	9.445	-0.026		6.000
MFF04	N10P	23-JUN-92	1206	8V	8.83	0.000	DARK	9.460	-0.023		6.000
MFF04	N10P	23-JUN-92	1206	7V	8.83	0.000	DARK	9.494	-0.017		6.000
MFF04	N10P	23-JUN-92	1206	199	8.83	4.400		9.854		0.042	6.000
MFF04	N10P	23-JUN-92	1206	45	8.83	7.400		9.680		0.013	6.000
MFF04	N10P	23-JUN-92	1206	194	8.83	47.000		9.954		0.059	6.000
MFF04	N10P	23-JUN-92	1206	71	8.83	49.000		9.863		0.044	6.000
MFF04	N10P	23-JUN-92	1206	55	8.83	98.000		10.116		0.086	6.000
MFF04	N10P	23-JUN-92	1206	38	8.83	151.000		9.868		0.045	6.000
MFF04	N10P	23-JUN-92	1206	61	8.83	247.000		10.182		0.097	6.000
MFF04	N10P	23-JUN-92	1206	58	8.83	292.000		10.164		0.094	6.000
MFF04	N10P	23-JUN-92	1206	46	8.83	370.000		10.143		0.091	6.000
MFF04	N10P	23-JUN-92	1206	89	8.83	870.000		10.135		0.089	6.000
MFF04	N10P	23-JUN-92	1206	50	8.83	1300.000		10.091		0.082	6.000
MFF04	N10P	23-JUN-92	1206	33	8.83	1650.000		10.016		0.069	6.000
MFF04	N16P	24-JUN-92	0900	153	1.96	0.000	INIT	9.983			
MFF04	N16P	24-JUN-92	0900	33	1.96	0.000	INIT	10.079			
MFF04	N16P	24-JUN-92	0900	215	1.96	0.000	INIT	10.045			
MFF04	N16P	24-JUN-92	0900	11V	1.96	0.000	DARK	9.807	-0.056		4.080
MFF04	N16P	24-JUN-92	0900	37V	1.96	0.000	DARK	9.908	-0.031		4.080
MFF04	N16P	24-JUN-92	0900	29V	1.96	0.000	DARK	9.995	-0.010		4.080
MFF04	N16P	24-JUN-92	0900	195	1.96	4.500		9.961		-0.018	4.080
MFF04	N16P	24-JUN-92	0900	206	1.96	5.600		9.848		-0.046	4.080
MFF04	N16P	24-JUN-92	0900	111	1.96	35.000		10.031		-0.001	4.080
MFF04	N16P	24-JUN-92	0900	148	1.96	40.000		9.998		-0.009	4.080
MFF04	N16P	24-JUN-92	0900	203,	1.96	110.000		9.878		-0.039	4.080

00613

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF04	N16P	24-JUN-92	0900	159	1.96	151.000		10.123			
MFF04	N16P	24-JUN-92	0900	199	1.96	173.000		10.007		0.021	4.080
MFF04	N16P	24-JUN-92	0900	55	1.96	231.000		10.022		-0.007	4.080
MFF04	N16P	24-JUN-92	0900	71	1.96	625.000		10.141		-0.003	4.080
MFF04	N16P	24-JUN-92	0900	46	1.96	640.000		10.050		0.026	4.080
MFF04	N16P	24-JUN-92	0900	50	1.96	865.000		10.129		0.004	4.080
MFF04	N16P	24-JUN-92	0900	89	1.96	1350.000		10.117		0.023	4.080
MFF04	N16P	24-JUN-92	0857	147A	14.45	0.000	INIT	10.526		0.020	4.080
MFF04	N16P	24-JUN-92	0857	153A	14.45	0.000	INIT	10.520			
MFF04	N16P	24-JUN-92	0857	158A	14.45	0.000	INIT	10.297			
MFF04	N16P	24-JUN-92	0857	1	14.45	0.000	DARK	10.348	-0.016		6.080
MFF04	N16P	24-JUN-92	0857	10V	14.45	0.000	DARK	10.772	0.053		6.080
MFF04	N16P	24-JUN-92	0857	15V	14.45	0.000	DARK	10.774	0.054		6.080
MFF04	N16P	24-JUN-92	0857	162A	14.45	6.000		10.496			6.080
MFF04	N16P	24-JUN-92	0857	152A	14.45	10.000		10.464		0.008	6.080
MFF04	N16P	24-JUN-92	0857	167A	14.45	64.000		10.611		0.003	6.080
MFF04	N16P	24-JUN-92	0857	168A	14.45	66.000		10.517		0.027	6.080
MFF04	N16P	24-JUN-92	0857	149A	14.45	132.000		10.696		0.011	6.080
MFF04	N16P	24-JUN-92	0857	154A	14.45	205.000		10.597		0.041	6.080
MFF04	N16P	24-JUN-92	0857	156A	14.45	336.000		10.883		0.024	6.080
MFF04	N16P	24-JUN-92	0857	148A	14.45	398.000		10.723		0.072	6.080
MFF04	N16P	24-JUN-92	0857	157A	14.45	660.000		10.437		0.045	6.080
MFF04	N16P	24-JUN-92	0857	150A	14.45	1350.000		10.928		-0.002	6.080
MFF04	N16P	24-JUN-92	0857	165A	14.45	1800.000		10.354		0.079	6.080
MFF04	N16P	24-JUN-92	0857	159A	14.45	2250.000		10.680		-0.015	6.080
MFF04	N20P	24-JUN-92	0944	149C	1.46	0.000	INIT	9.818		0.038	6.080
MFF04	N20P	24-JUN-92	0944	156C	1.46	0.000	INIT	9.830			
MFF04	N20P	24-JUN-92	0944	163C	1.46	0.000	INIT	9.873			
MFF04	N20P	24-JUN-92	0944	12V	1.46	0.000	DARK	9.707	-0.033		4.000
MFF04	N20P	24-JUN-92	0944	19V	1.46	0.000	DARK	9.520	-0.080		4.000

00014

TABLE E1-1. (CONTINUED.)

EVENT	STATION	DATE	TIME	LAB ID	DEPTH	LIGHT uEm-2sec-1	LEVEL	DO mg/L	NETR mg O2/1/hr	NPR mg O2/1/hr	INCUBATION TIME hours
MFF04	N20P	24-JUN-92	0944	3	1.46	0.000	DARK	9.663	-0.044		4.000
MFF04	N20P	24-JUN-92	0944	159C	1.46	4.500		9.677		-0.041	4.000
MFF04	N20P	24-JUN-92	0944	145C	1.46	6.800		9.723		-0.029	4.000
MFF04	N20P	24-JUN-92	0944	152E	1.46	33.000		9.819		-0.005	4.000
MFF04	N20P	24-JUN-92	0944	145B	1.46	42.000		9.740		-0.025	4.000
MFF04	N20P	24-JUN-92	0944	154E	1.46	91.000		9.707		-0.033	4.000
MFF04	N20P	24-JUN-92	0944	156E	1.46	116.000		9.863		0.006	4.000
MFF04	N20P	24-JUN-92	0944	151C	1.46	234.000		9.859		0.005	4.000
MFF04	N20P	24-JUN-92	0944	162E	1.46	257.000		9.969		0.032	4.000
MFF04	N20P	24-JUN-92	0944	167E	1.46	257.000		9.819		-0.005	4.000
MFF04	N20P	24-JUN-92	0944	164C	1.46	325.000		9.943		0.026	4.000
MFF04	N20P	24-JUN-92	0944	155E	1.46	900.000		9.754		-0.022	4.000
MFF04	N20P	24-JUN-92	0944	157C	1.46	1400.000		9.961		0.030	4.000
MFF04	N20P	24-JUN-92	0939	37	12.4	0.000	INIT	9.639			
MFF04	N20P	24-JUN-92	0939	91	12.4	0.000	INIT	9.604			
MFF04	N20P	24-JUN-92	0939	68	12.4	0.000	INIT	9.578			
MFF04	N20P	24-JUN-92	0939	13V	12.4	0.000	DARK	9.605	-0.000		6.000
MFF04	N20P	24-JUN-92	0939	43V	12.4	0.000	DARK	9.540	-0.011		6.000
MFF04	N20P	24-JUN-92	0939	20V	12.4	0.000	DARK	9.598	-0.001		6.000
MFF04	N20P	24-JUN-92	0939	56	12.4	6.000		9.636		0.005	6.000
MFF04	N20P	24-JUN-92	0939	76	12.4	6.000		9.676		0.012	6.000
MFF04	N20P	24-JUN-92	0939	84	12.4	56.000		9.747		0.023	6.000
MFF04	N20P	24-JUN-92	0939	62	12.4	62.000		9.722		0.019	6.000
MFF04	N20P	24-JUN-92	0939	70	12.4	199.000		10.023		0.069	6.000
MFF04	N20P	24-JUN-92	0939	74	12.4	260.000		9.797		0.032	6.000
MFF04	N20P	24-JUN-92	0939	72	12.4	425.000		9.913		0.051	6.000
MFF04	N20P	24-JUN-92	0939	93	12.4	479.000		9.885		0.046	6.000
MFF04	N20P	24-JUN-92	0939	59	12.4	1100.000		9.873		0.044	6.000
MFF04	N20P	24-JUN-92	0939	47	12.4	1600.000		9.825		0.036	6.000
MFF04	N20P	24-JUN-92	0939	73	12.4	1750.000		9.819		0.035	6.000
MFF04	N20P	24-JUN-92	0939	39	12.4	2250.000		9.808		0.033	6.000

NETR = INDIVIDUAL DARK - X initial / TIME

NPR = INDIVIDUAL LIGHT - X initial / TIME

00015

## APPENDIX E

### METABOLISM DATA AND PRODUCTIVITY—IRRADIANCE MODELING

#### Part 2

#### Summary of P-I Modeling

The modeling effort is described in Section 2 of the accompanying text report. All parameters were estimated using SAS (1985). For each survey, early April and June, P-I incubations were performed using water from two depths (surface and subsurface chlorophyll maximum) at ten BioProductivity stations. Volumetric net production rates for these are given in Table E1-1. The rates were normalized for each sample by dividing the volumetric rate by the average chlorophyll value for that sample (Appendix A, Table A-2), to yield an estimate of net production as  $\mu\text{g O}_2 (\mu\text{g Chl})^{-1} \text{ hr}^{-1}$ ; rates thus expressed were used in modeling and graphics that follow.

This appendix provides the following sequence for early April data: modeled parameters for a 4-parameter model of Platt *et al.* (1980) (Table E2-1), followed by graphs of situations which were fit by this model; modeled parameters for a 3-parameter model of Platt and Jassby (1976) (Table E2-2), followed by graphs of situations which were fit by this model; ending with graphs of situations not fit by either model. A similar sequence is presented, with Tables E2-3 and E2-4, for June data.

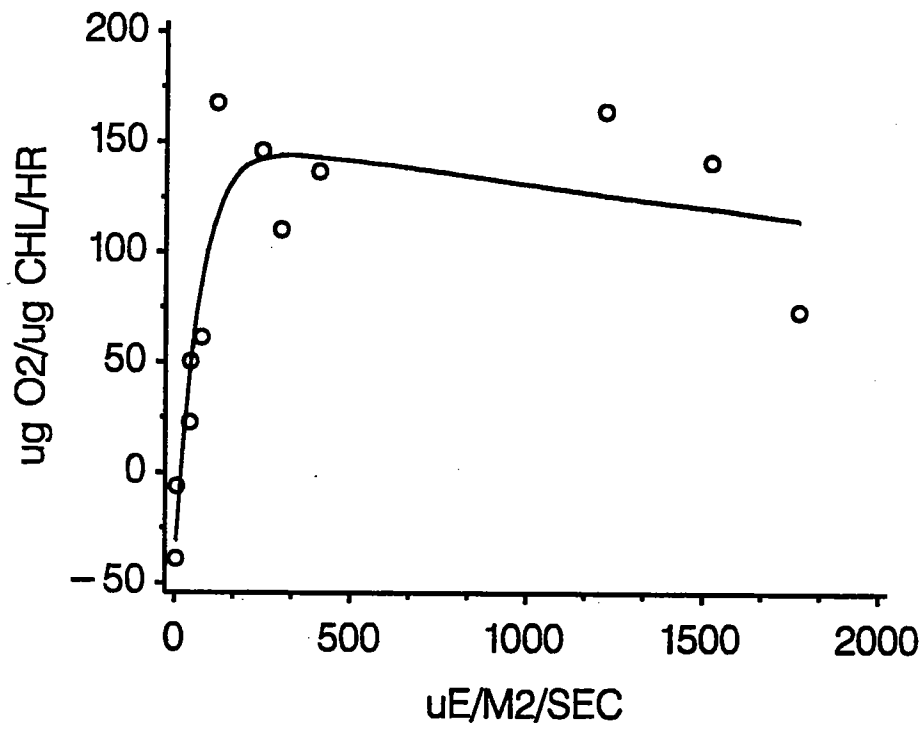
00016

**Table E2-1. P vs. I Curve Parameters for the Platt *et al.* (1980) Model: Early April.**  
 Numbers in parentheses are standard errors of the estimates.  
 The R<sup>2</sup> is significant at p ≤ 0.05 in every case.

P VS I CURVE PARAMETERS CRUISE 3  
 MODEL PLATT ET AL, 1980

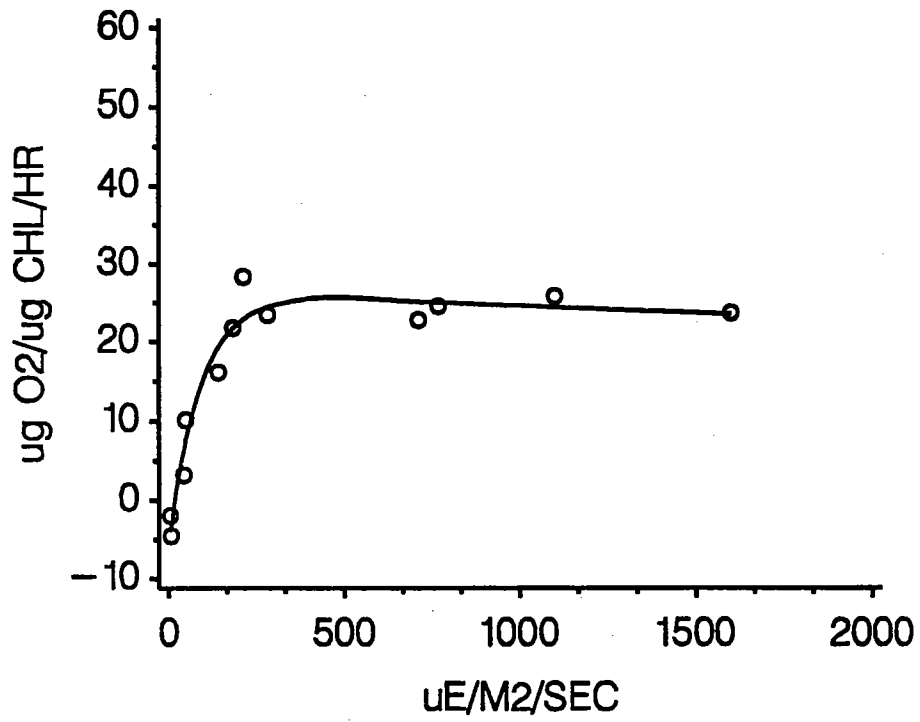
STA	DEPTH	P_SB	ALPHA	BETA	RESP	R_2
F13P	CHL SUR	. .	. .	. .	. .	. .
F1P	CHL SUR	197.7 (36.91) .	2.850 (1.360) .	0.024 (0.030) .	43.80 (28.77) .	0.82 .
F23P	CHL SUR	32.17 ( 3.65) 31.89 ( 5.50)	0.340 (0.095) 0.197 (0.056)	0.002 (0.004) 0.002 (0.005)	5.58 ( 2.37) -0.52 ( 2.22)	0.95 0.95
F2P	CHL SUR	87.86 ( 8.47) 271.8 (91.55)	0.682 (0.140) 0.857 (0.228)	0.019 (0.009) 0.168 (0.124)	-0.38 ( 4.64) -11.7 (14.76)	0.96 0.92
N10P	CHL SUR	42.57 ( 9.86) 56.86 (17.85)	0.288 (0.132) 0.290 (0.125)	0.003 (0.008) 0.016 (0.019)	13.55 ( 5.05) 14.97 ( 5.27)	0.86 0.86
N16P	CHL SUR	29.66 ( 8.97) .	0.172 (0.061) .	0.022 (0.016) .	3.57 ( 2.19) .	0.86 .
N1P	CHL SUR	. .	. .	. .	. .	. .
N20P	CHL SUR	. .	. .	. .	. .	. .
N4P	CHL SUR	18.64 ( 5.02) .	0.417 (0.268) .	0.004 (0.007) .	1.05 ( 3.65) .	0.72 .
N7P	CHL SUR	29.82 ( 5.47) .	0.367 (0.156) .	0.021 (0.012) .	5.40 ( 3.39) .	0.84 .

STATION F1P CHLA MAXIMUM



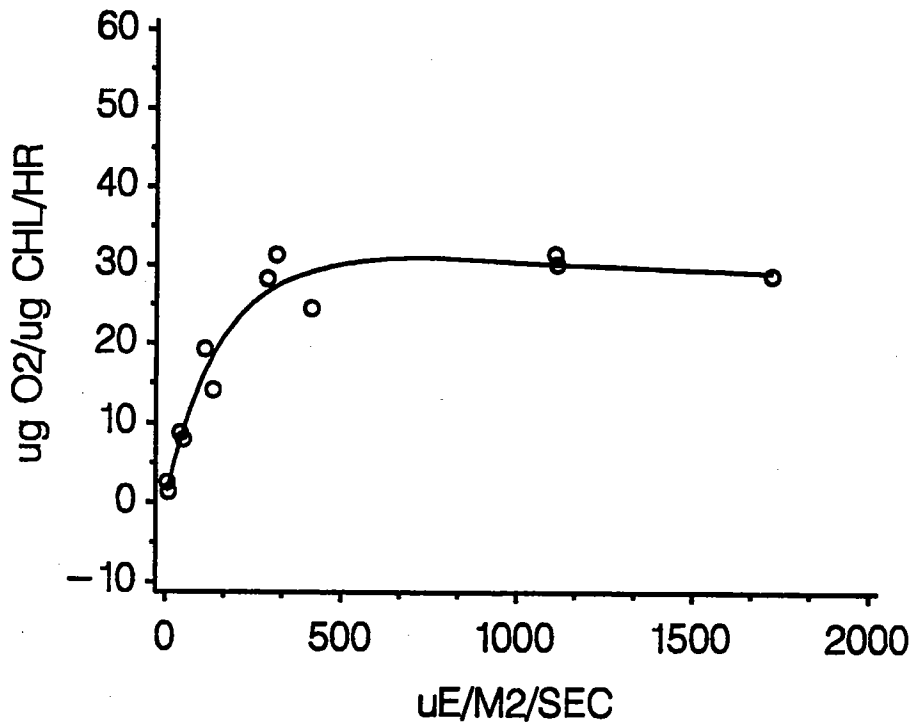
MODEL FROM PLATT ET AL, 1990

STATION F23P CHLA MAXIMUM



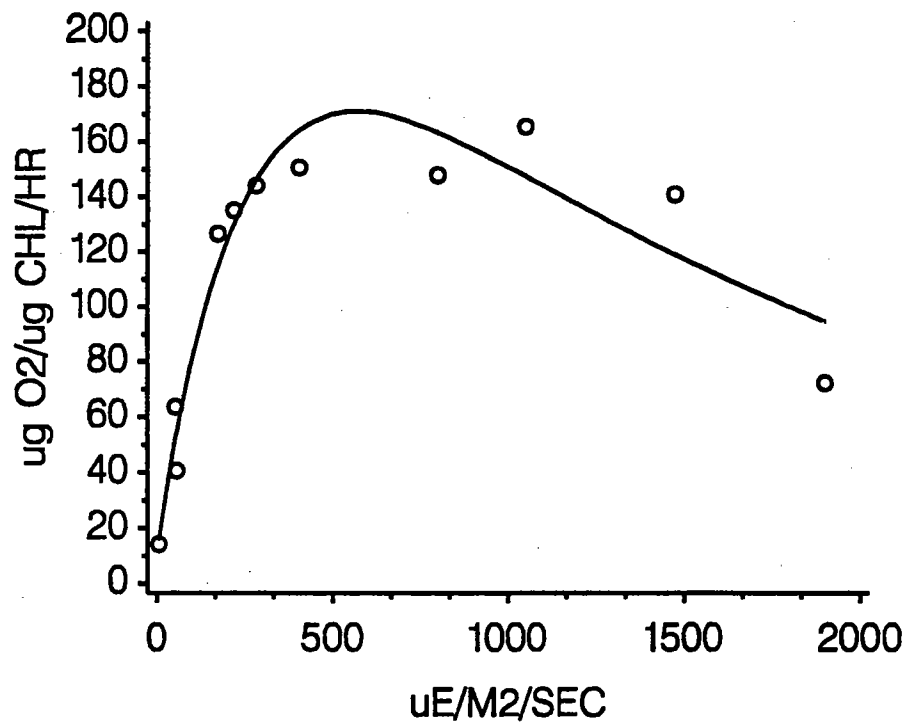
MODEL FROM PLATT ET AL, 1980

STATION F23P SURFACE



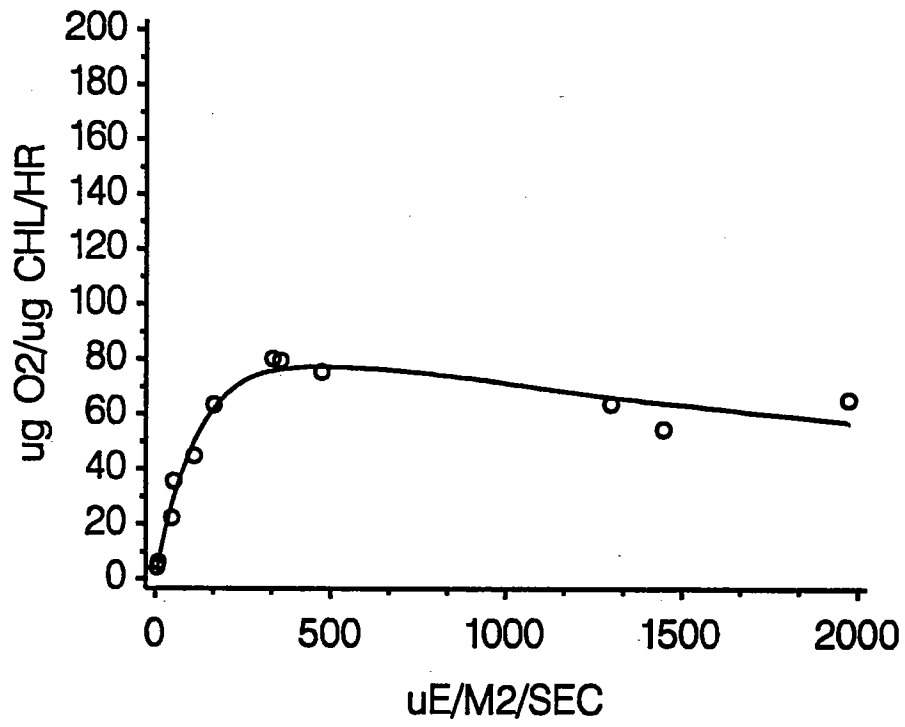
MODEL FROM PLATT ET AL, 1980

# STATION F2P SURFACE



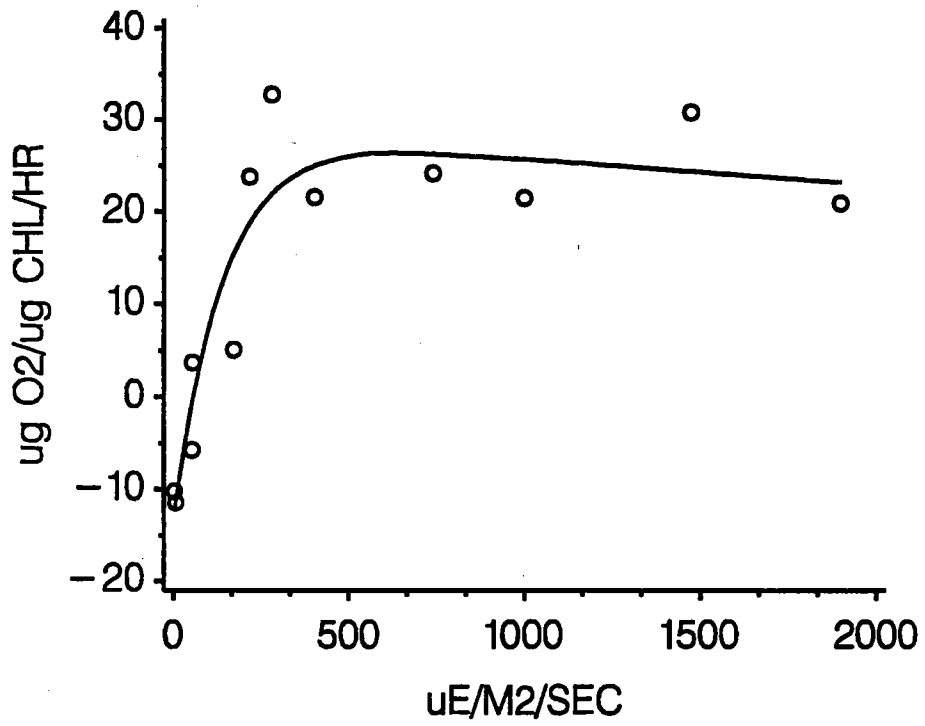
MODEL FROM PLATT ET AL, 1980

STATION F2P CHLA MAXIMUM



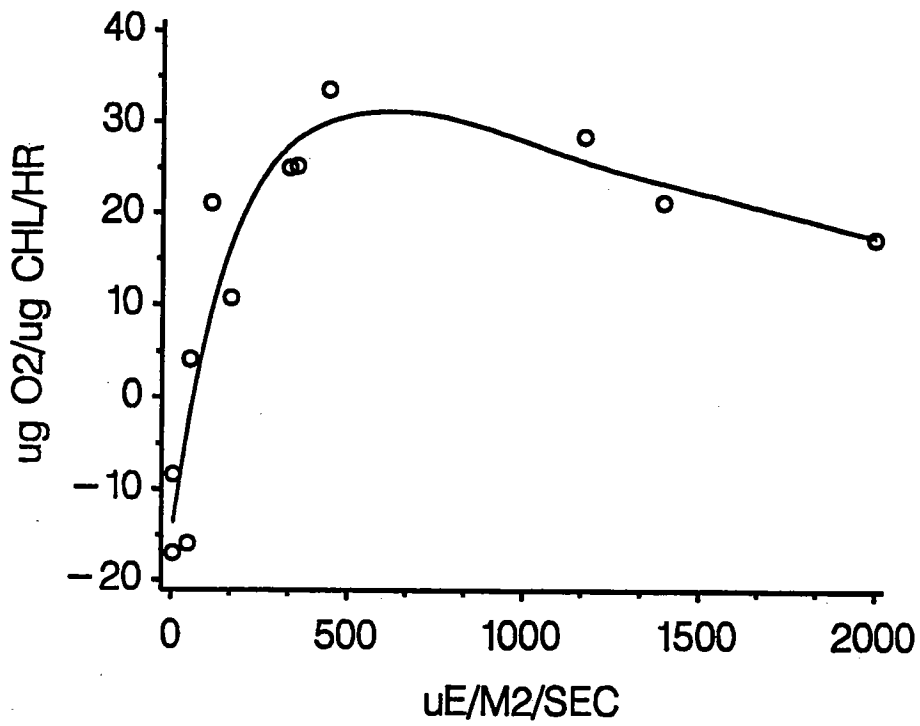
MODEL FROM PLATT ET AL, 1980

STATION N10P CHLA MAXIMUM



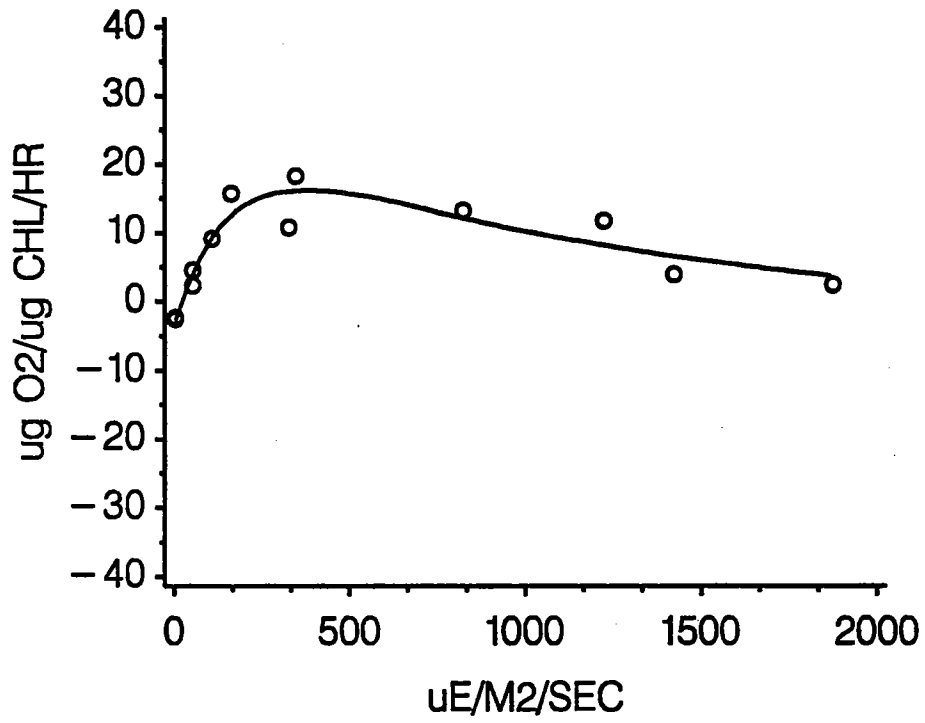
MODEL FROM PLATT ET AL, 1980

STATION N10P SURFACE



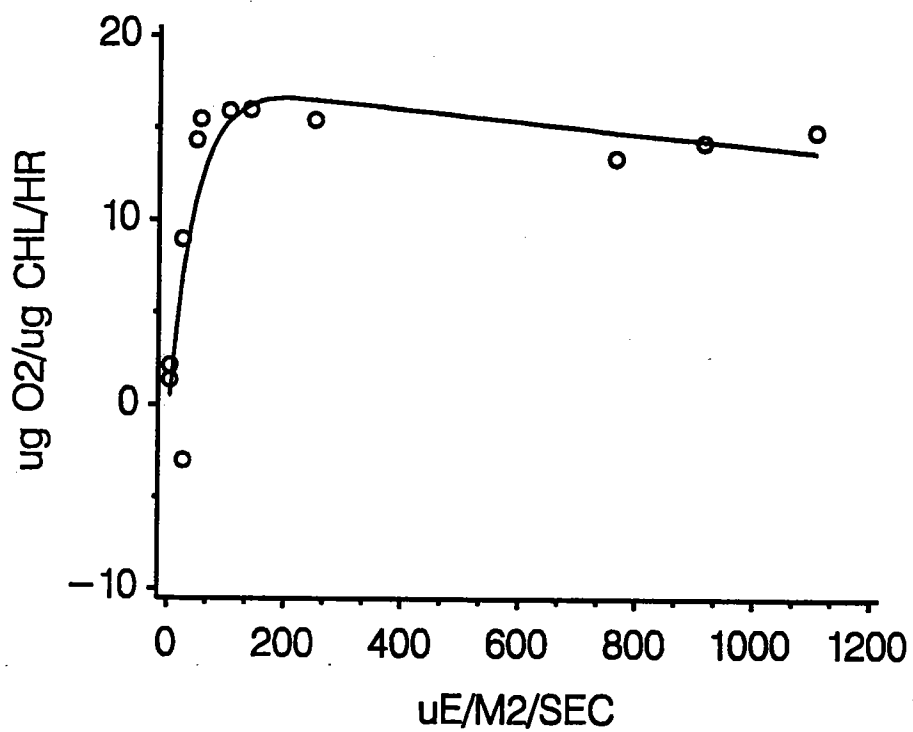
MODEL FROM PLATT ET AL, 1980

STATION N16P CHLA MAXIMUM



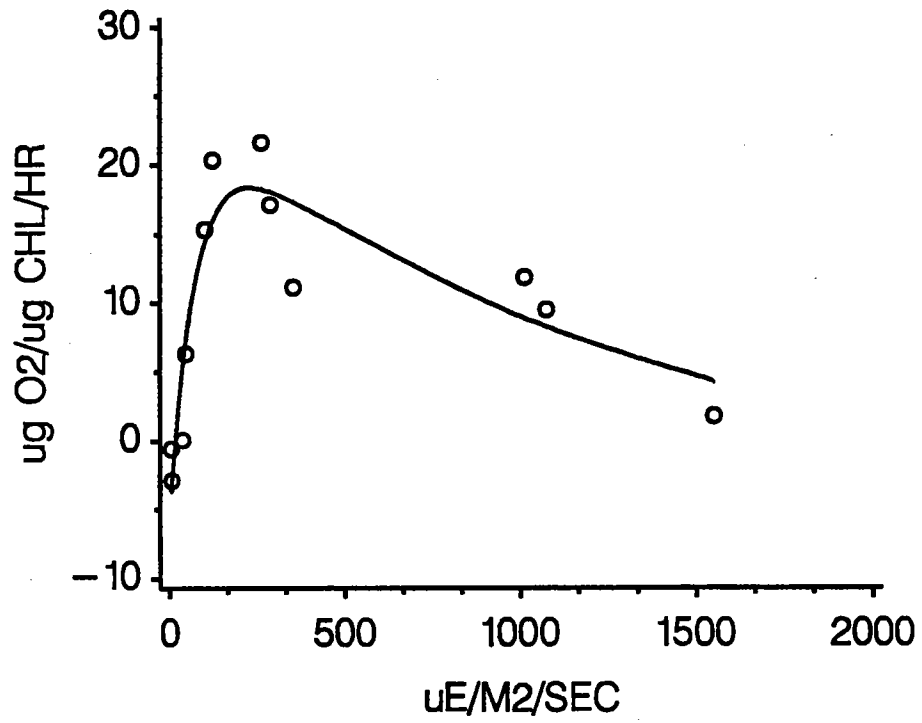
MODEL FROM PLATT ET AL, 1980

STATION N4P CHLA MAXIMUM



MODEL FROM PLATT ET AL, 1980

# STATION N7P CHLA MAXIMUM



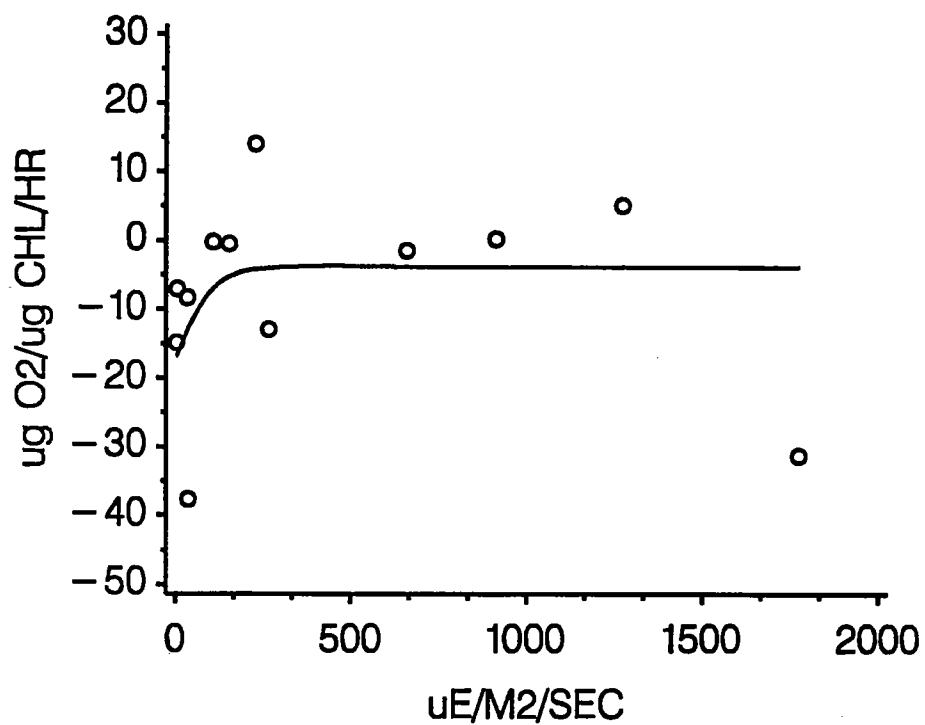
MODEL FROM PLATT ET AL, 1980

**Table E2-2. P vs. I Curve Parameters for the Platt and Jassby (1976) Model: Early April.**  
 Numbers in parentheses are standard errors of the estimates.  
 The  $R^2$  is significant at  $p \leq 0.05$  if it exceeds 0.36.

P VS I CURVE PARAMETERS CRUISE 3  
 MODEL PLATT AND JASSBY, 1976

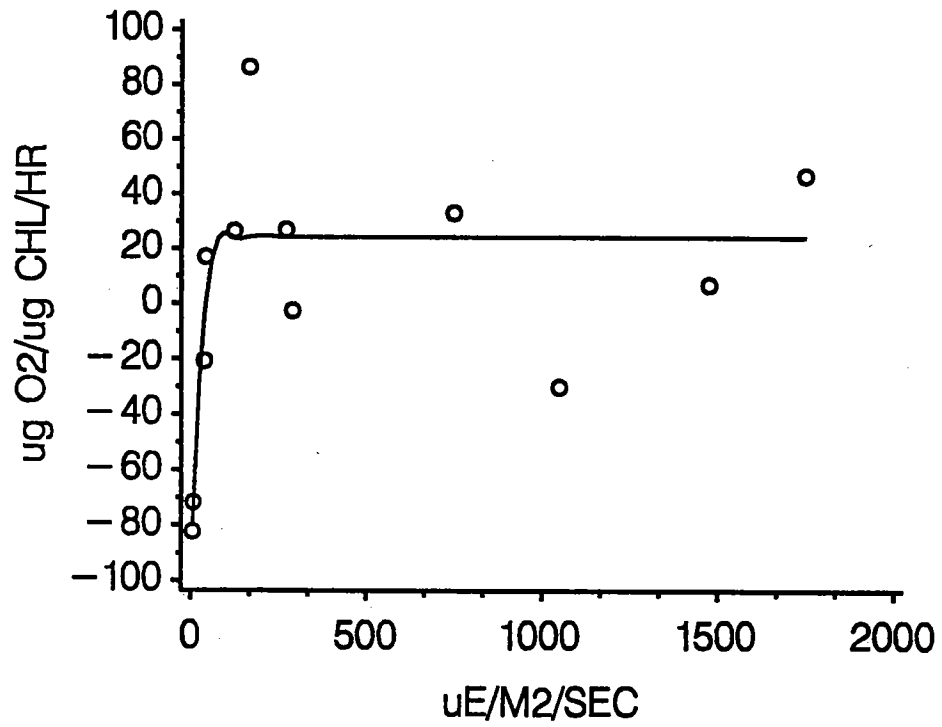
STATION	DEPTH	P <sub>MAX</sub>	ALPHA	RESP	R <sub>2</sub>
F13P	CHL SUR	13.57 (11.97)	0.125 (0.329)	17.37 (11.02)	0.12
F1P	CHL SUR	119.7 (32.26)	3.180 (2.240)	95.33 (30.33)	0.64
F23P	CHL SUR	: :	: :	: :	: :
F2P	CHL SUR	: :	: :	: :	: :
N10P	CHL SUR	: :	: :	: :	: :
N16P	CHL SUR	26.88 (15.35)	0.076 (0.099)	13.93 (11.73)	0.25
N1P	CHL SUR	25.11 (14.47)	0.225 (0.356)	19.02 (13.04)	0.26
N20P	CHL SUR	22.42 (11.82) 45.55 (38.53)	0.025 (0.032) 0.035 (0.026)	7.73 ( 5.55) 17.66 ( 6.25)	0.41 0.54
N4P	CHL SUR	: :	: :	: :	: :
N7P	CHL SUR	16.55 (16.88)	0.100 (0.256)	53.91 (14.25)	0.09

# STATION F13P SURFACE



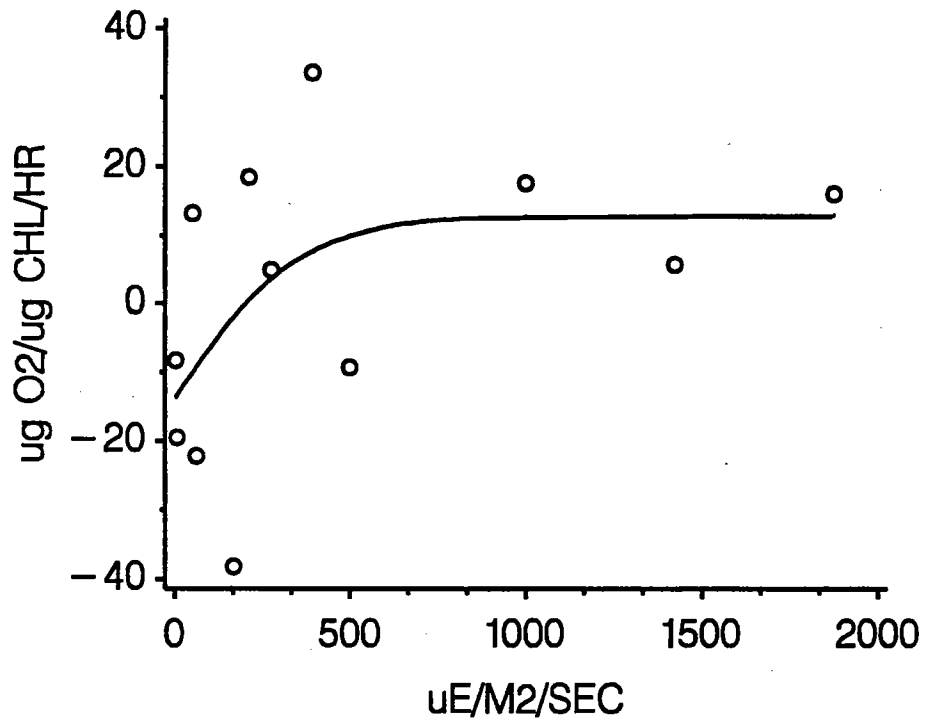
MODEL FROM PLATT AND JASSBY, 1976

STATION F1P SURFACE



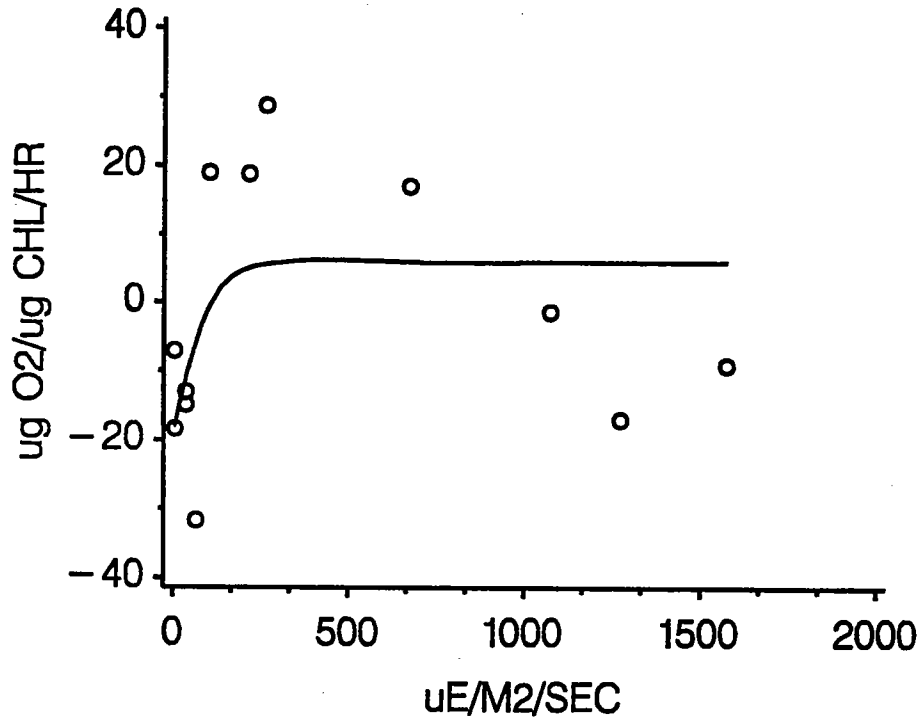
MODEL FROM PLATT AND JASSBY, 1976

STATION N16P SURFACE



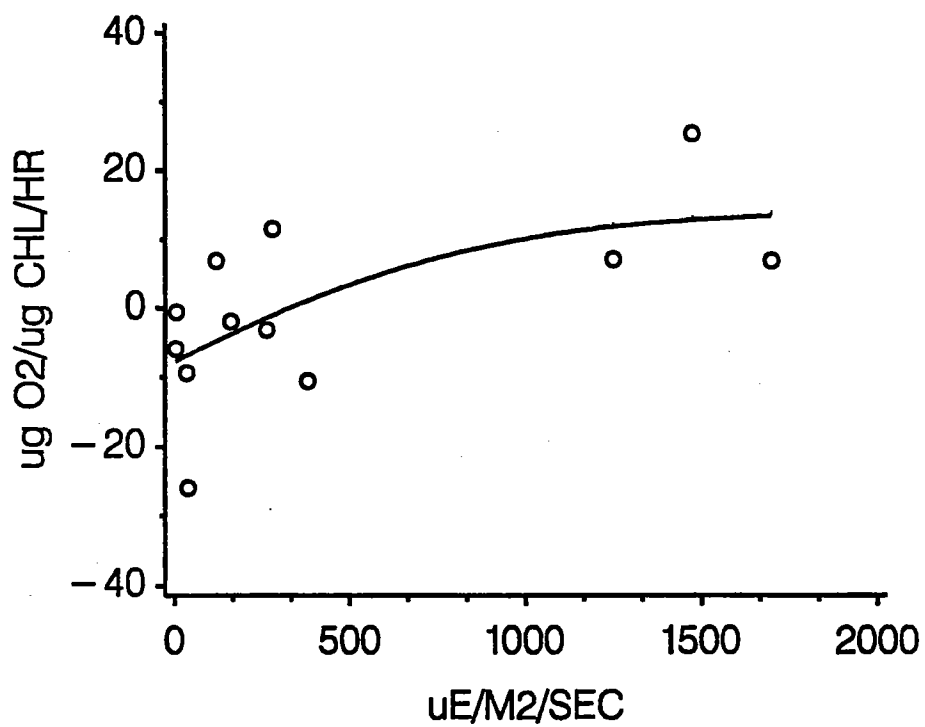
MODEL FROM PLATT AND JASSBY, 1976

STATION N1P SURFACE



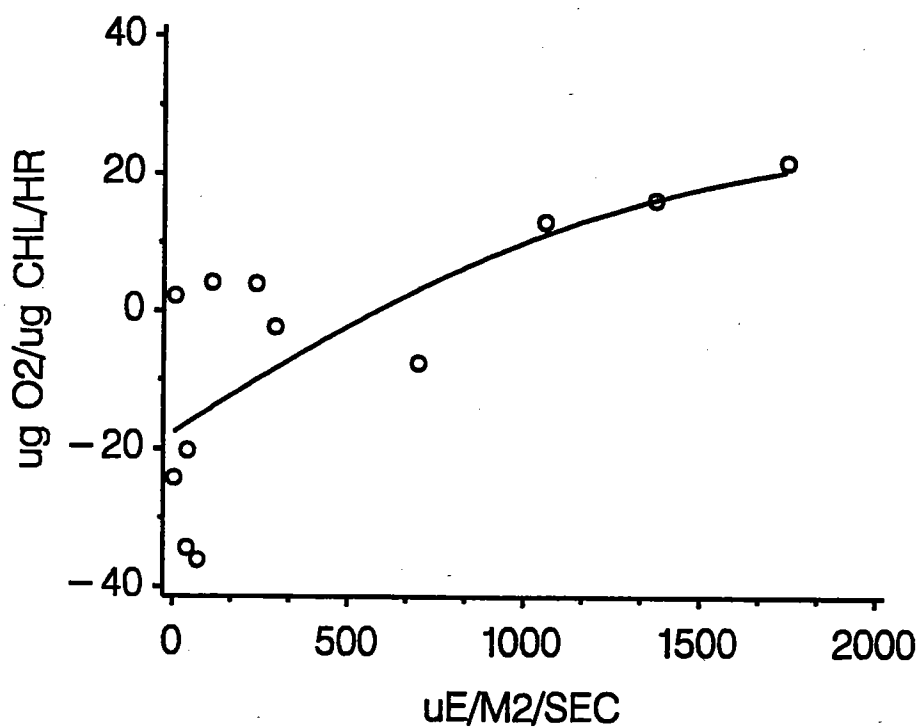
MODEL FROM PLATT AND JASSBY, 1976

STATION N20P CHLA MAXIMUM



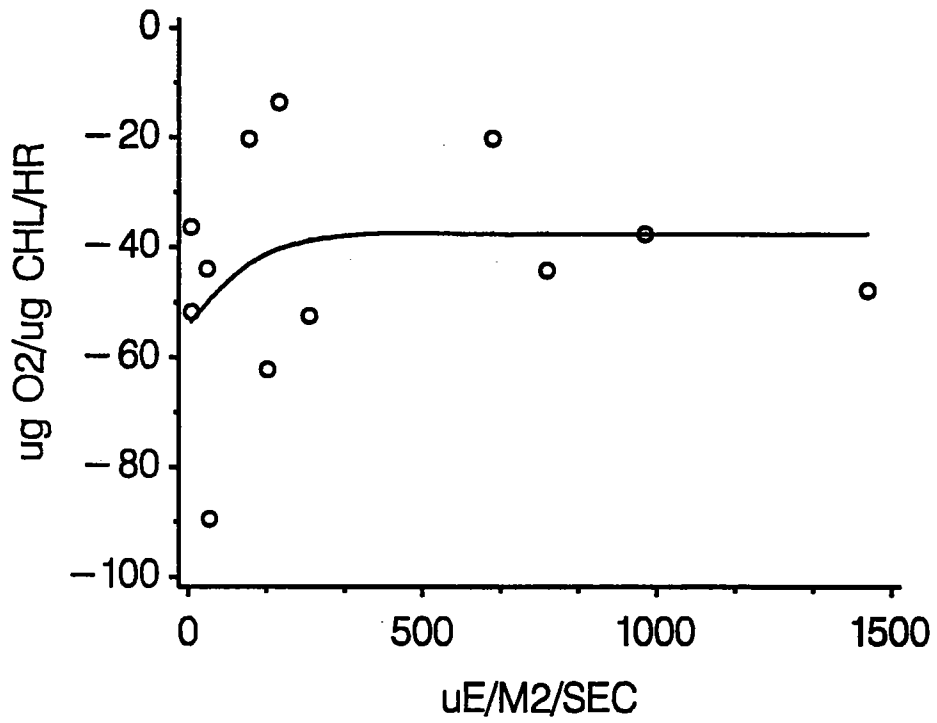
MODEL FROM PLATT AND JASSBY, 1976

STATION N20P SURFACE



MODEL FROM PLATT AND JASSBY, 1976

STATION N7P SURFACE

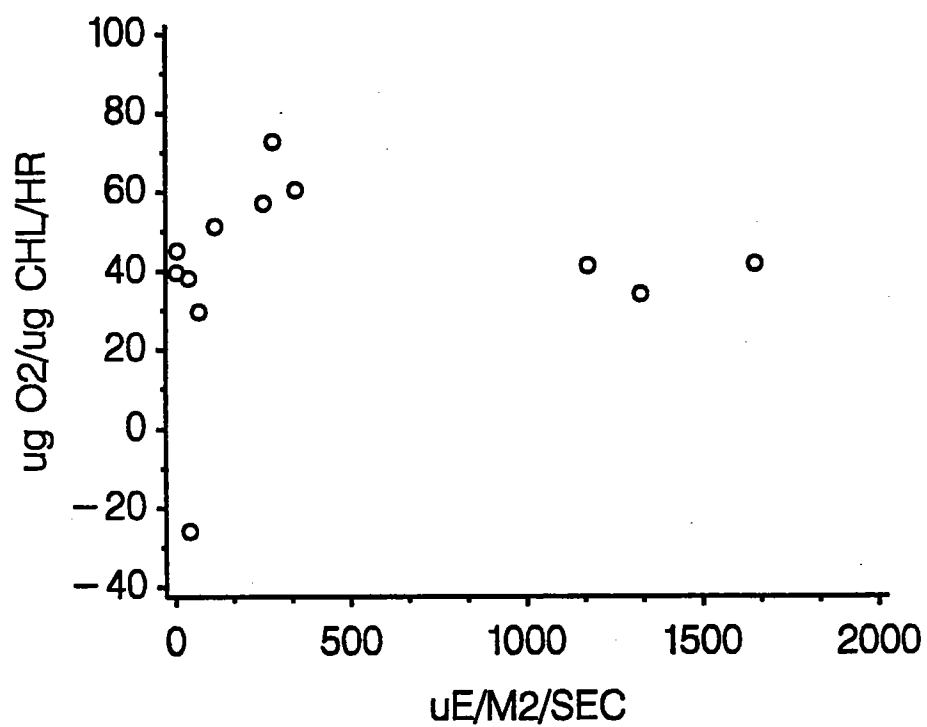


MODEL FROM PLATT AND JASSBY, 1976

**Plots of Stations Not Fit by Models: Early April**

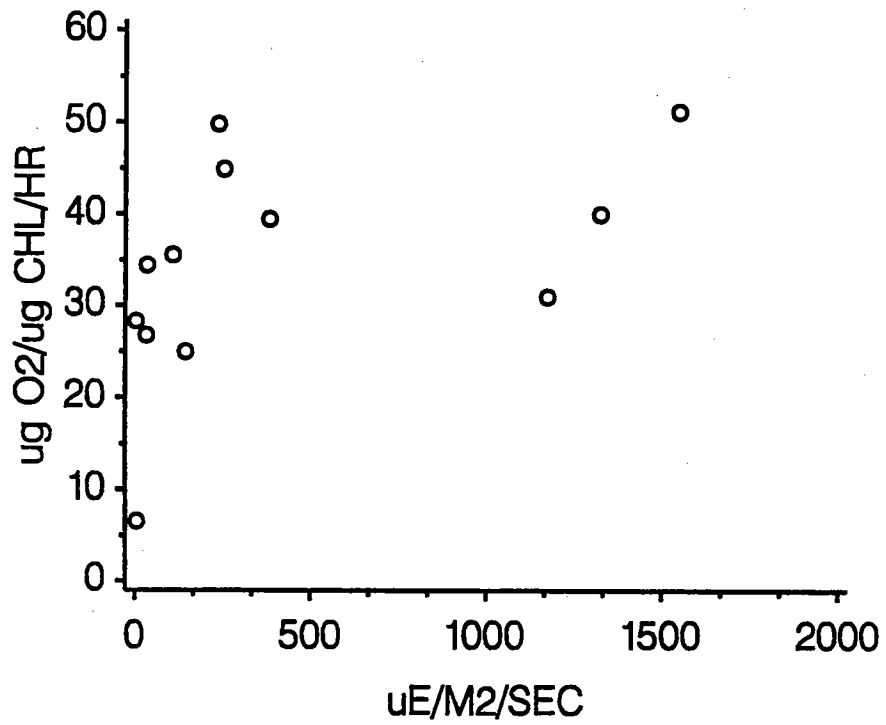
00936

STATION F13P CHLA MAXIMUM



MODEL COULD NOT BE FIT

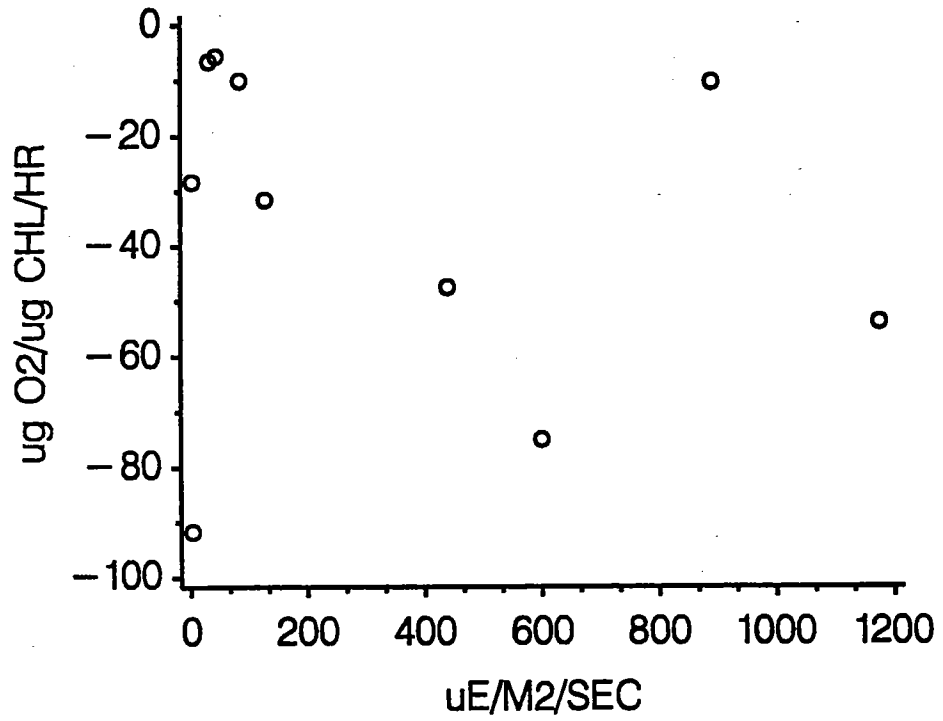
STATION N1P CHLA MAXIMUM



MODEL COULD NOT BE FIT

00938

STATION N4P SURFACE



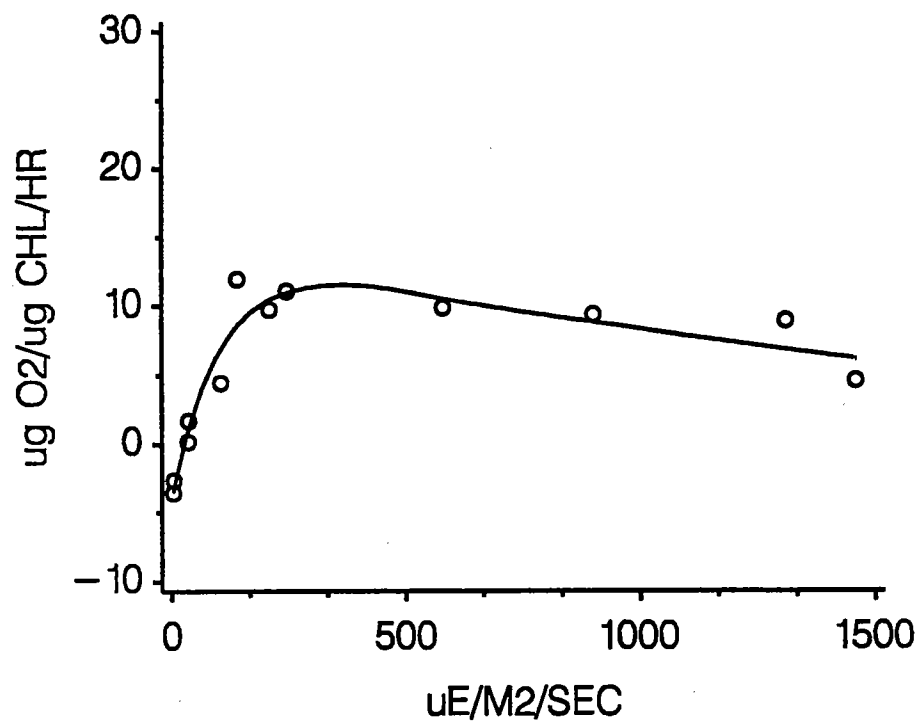
MODEL COULD NOT BE FIT

**Table E2-3. P vs. I Curve Parameters for the Platt *et al.* (1980) Model: June.**  
 Numbers in parentheses are standard errors of the estimates.  
 The R<sup>2</sup> is significant at p ≤ 0.05 if it exceeds 0.40.

P VS I CURVE PARAMETERS CRUISE 6  
 MODEL PLATT ET AL, 1980

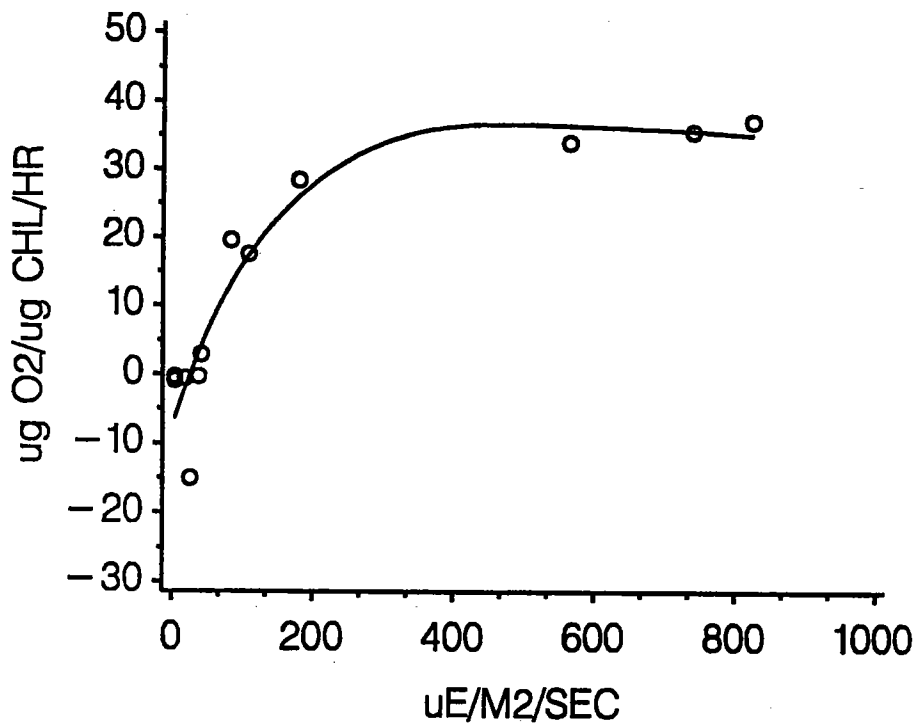
STA	DEPTH	P_SB	ALPHA	BETA	RESP	R_2
F13P	CHL	18.67 ( 3.29)	0.167(0.050)	0.007(0.004)	4.06( 1.34)	0.92
	SUR	.	.	.	.	.
F1P	CHL	.	.	.	.	.
	SUR	.	.	.	.	.
F23P	CHL	50.90(40.29)	0.322(0.144)	0.010(0.060)	7.26( 4.15)	0.89
	SUR	.	.	.	.	.
F2P	CHL	.	.	.	.	.
	SUR	.	.	.	.	.
N10P	CHL	13.74( 7.40)	0.076(0.048)	0.006(0.010)	-4.44( 1.85)	0.72
	SUR	.	.	.	.	.
N16P	CHL	.	.	.	.	.
	SUR	.	.	.	.	.
N1P	CHL	64.01(65.90)	0.363(0.247)	0.100(0.195)	-4.85( 6.59)	0.74
	SUR	.	.	.	.	.
N20P	CHL	.	.	.	.	.
	SUR	.	.	.	.	.
N4P	CHL	.	.	.	.	.
	SUR	.	.	.	.	.
N7P	CHL	111.2(36.37)	2.199(1.885)	0.025(0.038)	88.38(29.37)	0.58
	SUR	.	.	.	.	.

STATION F13P CHLA MAXIMUM



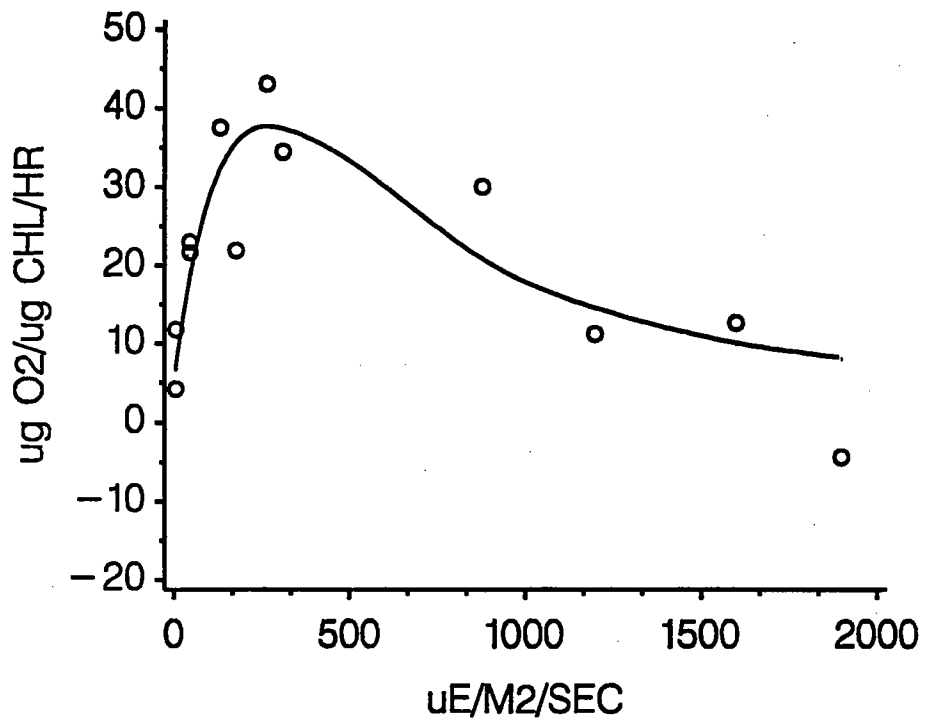
MODEL FROM PLATT ET AL, 1980  
CRUISE NUMBER 6, JUNE 1992

# STATION F23P CHLA MAXIMUM



MODEL FROM PLATT ET AL, 1980  
CRUISE NUMBER 6, JUNE 1992

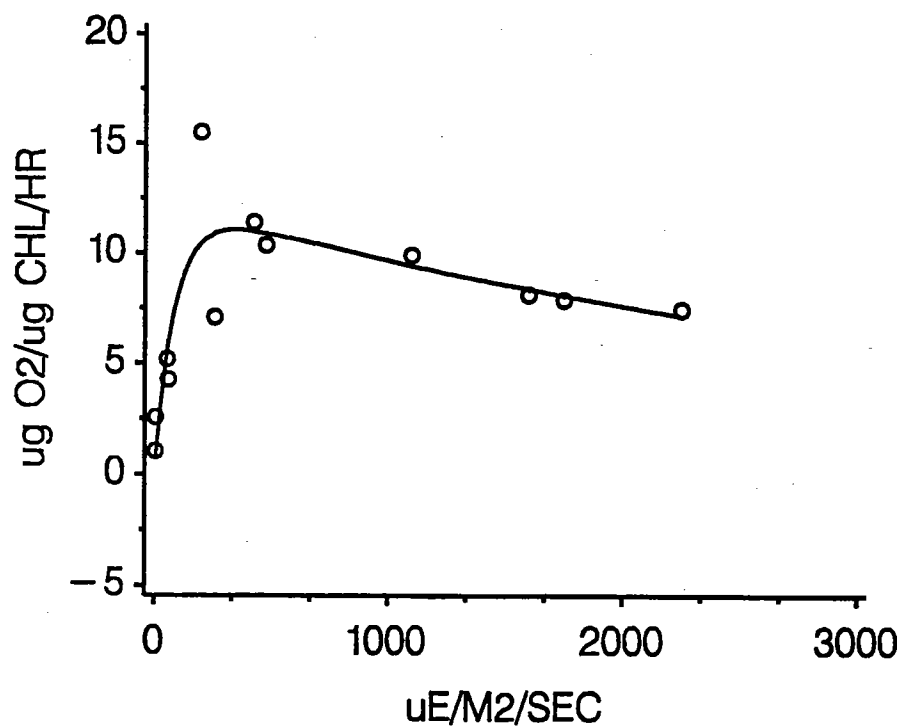
STATION N1P CHLA MAXIMUM



MODEL FROM PLATT ET AL, 1980

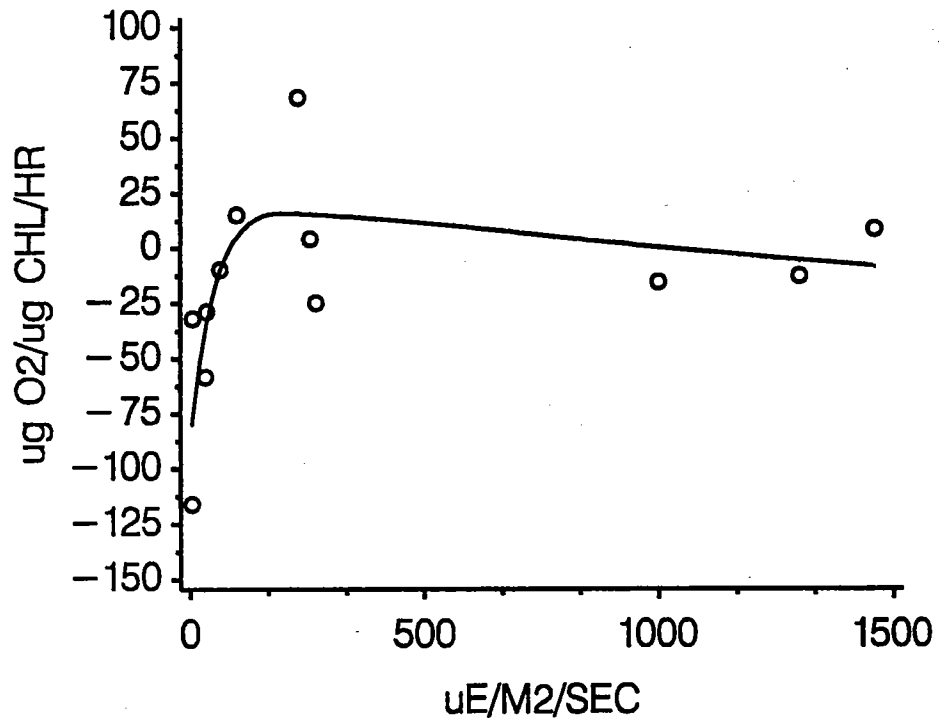
CRUISE NUMBER 6, JUNE 1992

STATION N20P CHLA MAXIMUM



MODEL FROM PLATT ET AL, 1980  
CRUISE NUMBER 8, JUNE 1992

# STATION N7P CHLA MAXIMUM

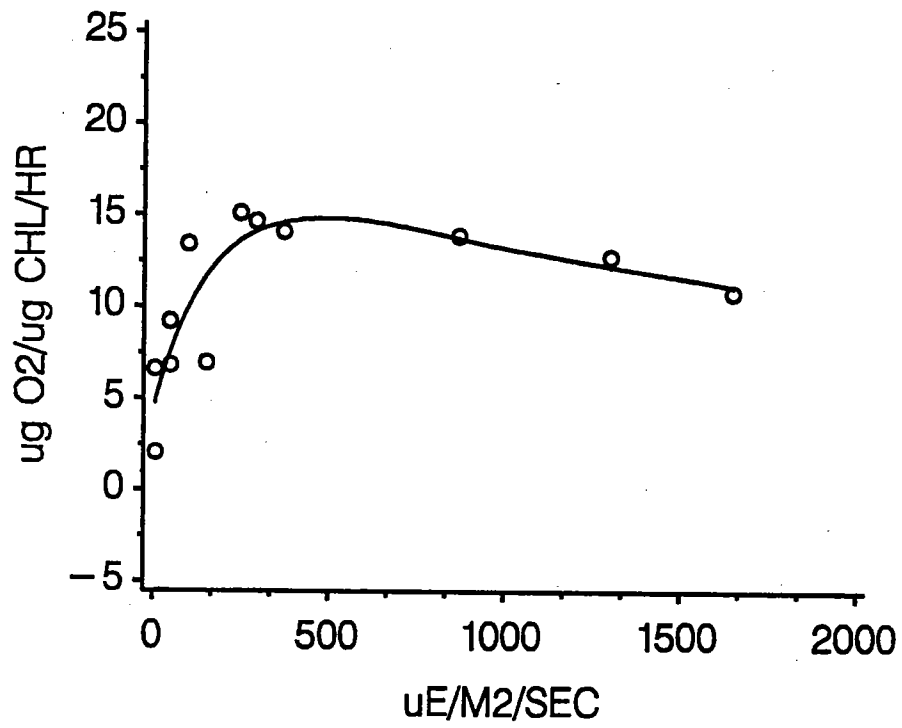


MODEL FROM PLATT ET AL, 1980

CRUISE NUMBER 6, JUNE 1992

00046

STATION N10P CHLA MAXIMUM



MODEL FROM PLATT ET AL, 1980  
CRUISE NUMBER 6, JUNE 1992

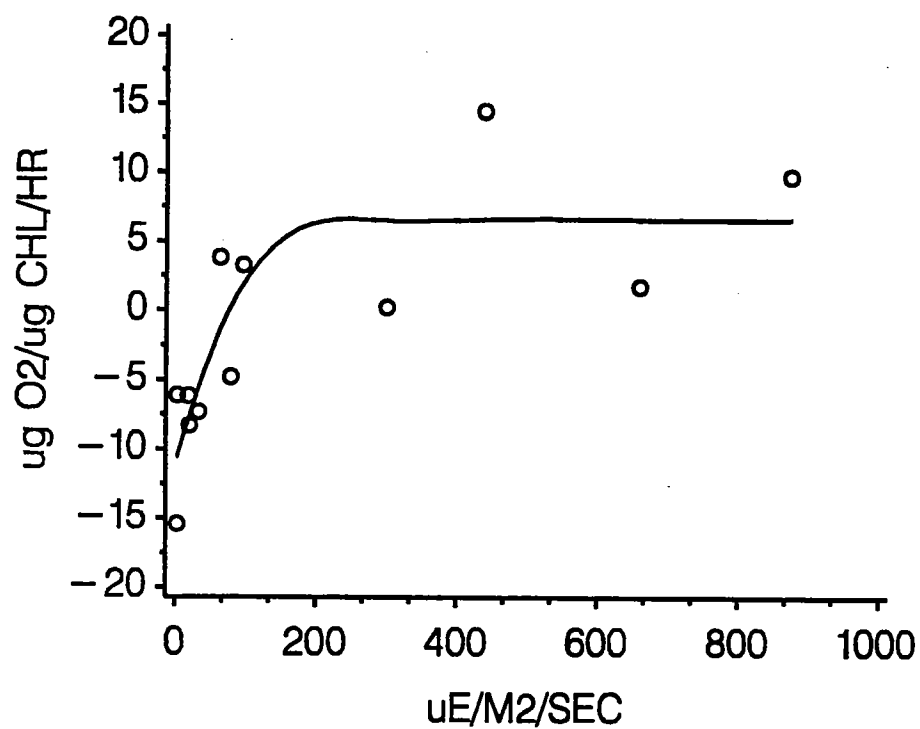
00046

**Table E2-4. P vs. I Curve Parameters for the Platt and Jassby (1976) Model: June.**  
 Numbers in parentheses are standard errors of the estimates.  
 The  $R^2$  is significant at  $p \leq 0.05$  if it exceeds 0.36.

P VS I CURVE PARAMETERS CRUISE 6  
 MODEL PLATT AND JASSBY, 1976

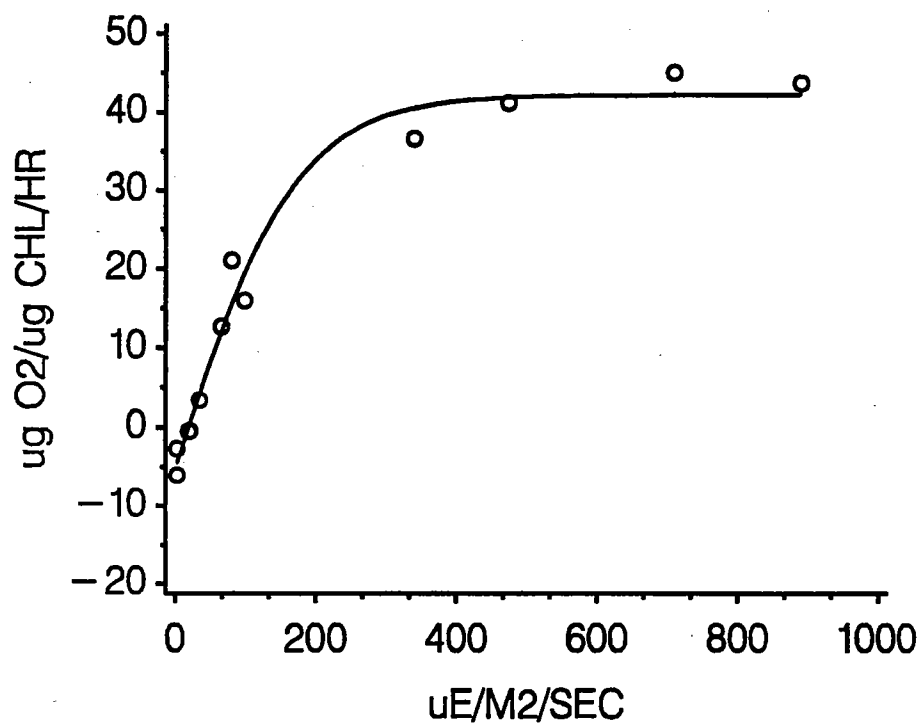
STATION	DEPTH	P <sub>MAX</sub>	ALPHA	RESP	R <sub>2</sub>
F13P	CHL SUR	17.56 ( 3.94)	0.169 (0.094)	10.91 ( 3.12)	0.69
F1P	CHL SUR	: : : :	: : : :	: : : :	: : : :
F23P	CHL SUR	47.59 ( 2.16)	0.276 (0.376)	5.15 ( 1.65)	0.98
F2P	CHL SUR	3.85 ( 2.35)	0.117 (0.193)	0.66 ( 2.26)	0.25
N10P	CHL SUR	38.69 (14.29)	0.476 (0.529)	7.22 (13.52)	0.47
N16P	CHL SUR	23.65 (17.66) 63.03 (20.31)	0.263 (0.497) 0.185 (0.143)	0.00 (16.55) 34.86 (14.55)	0.16 0.53
N1P	CHL SUR	14.88 ( 2.49)	0.074 (0.040)	3.05 ( 1.87)	0.79
N20P	CHL SUR	54.52 (18.07)	0.355 (0.322)	40.12 (15.62)	0.50
N4P	CHL SUR	: : : :	: : : :	: : : :	: : : :
N7P	CHL SUR	32.67 (39.65)	1.600 (4.990)	19.79 (38.37)	0.07

STATION F13P SURFACE



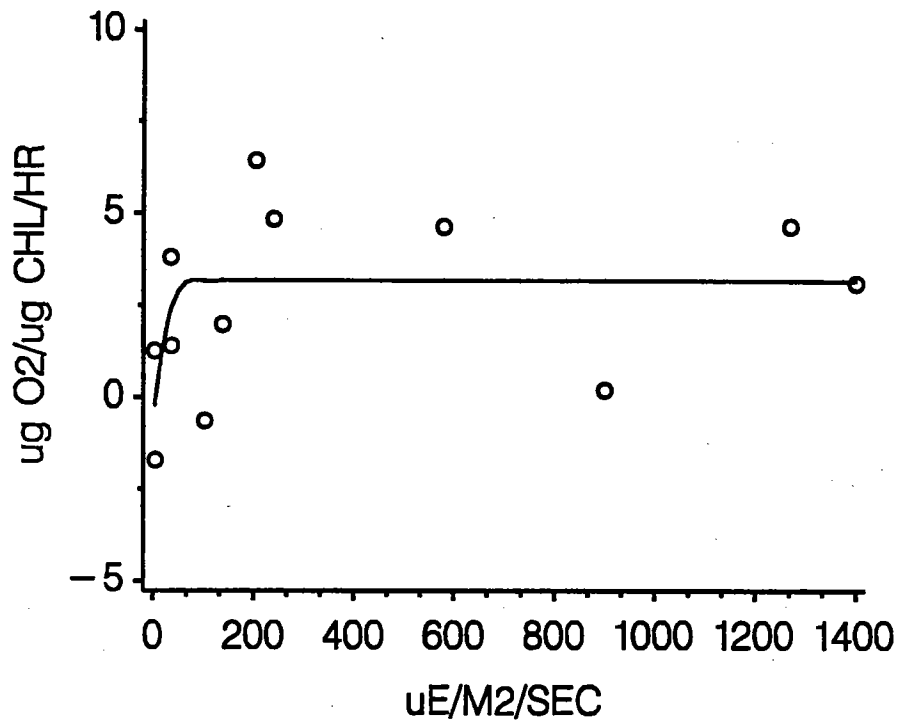
MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

STATION F23P SURFACE



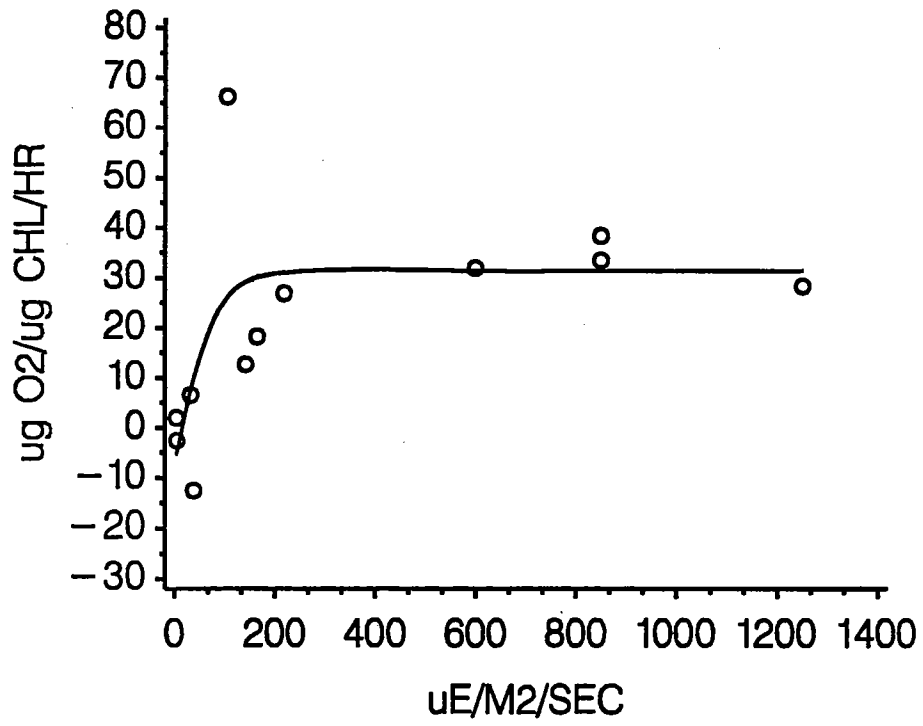
MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

STATION F2P CHLA MAXIMUM



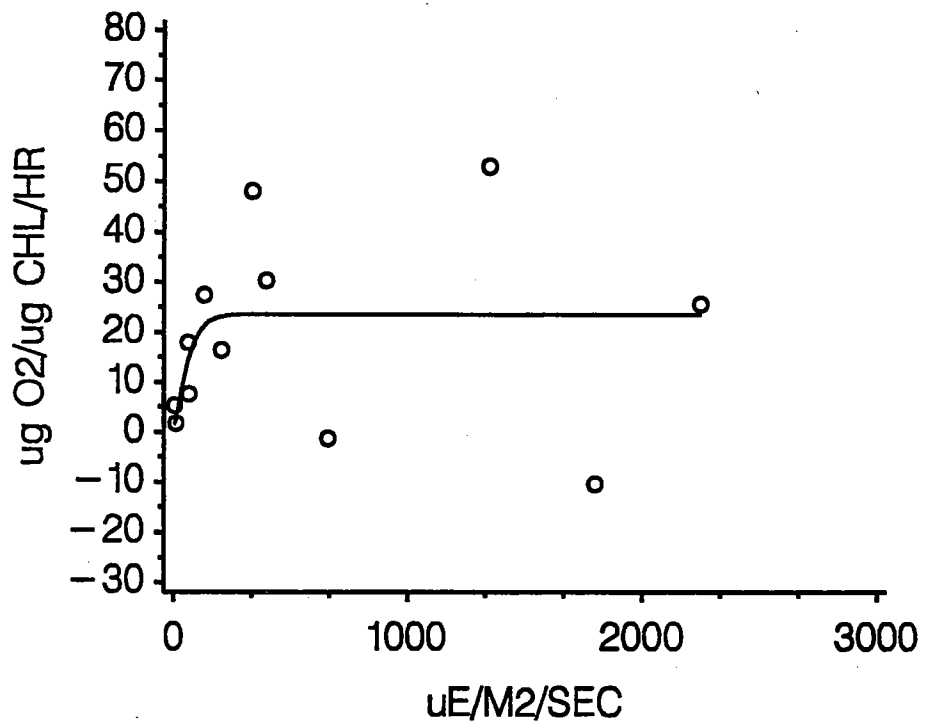
MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

STATION N10P SURFACE



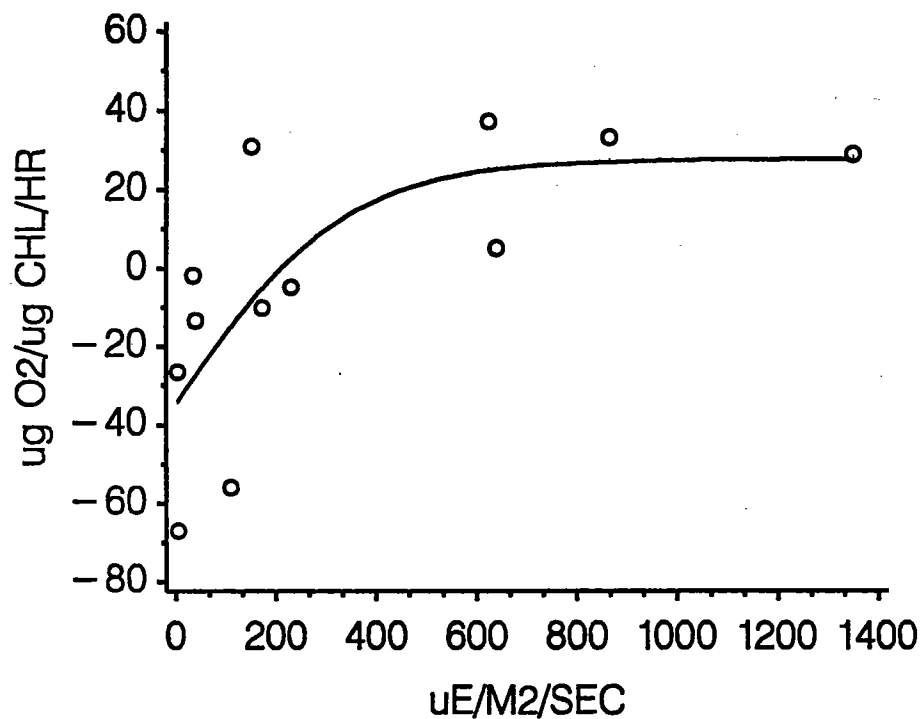
MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

STATION N16P CHLA MAXIMUM



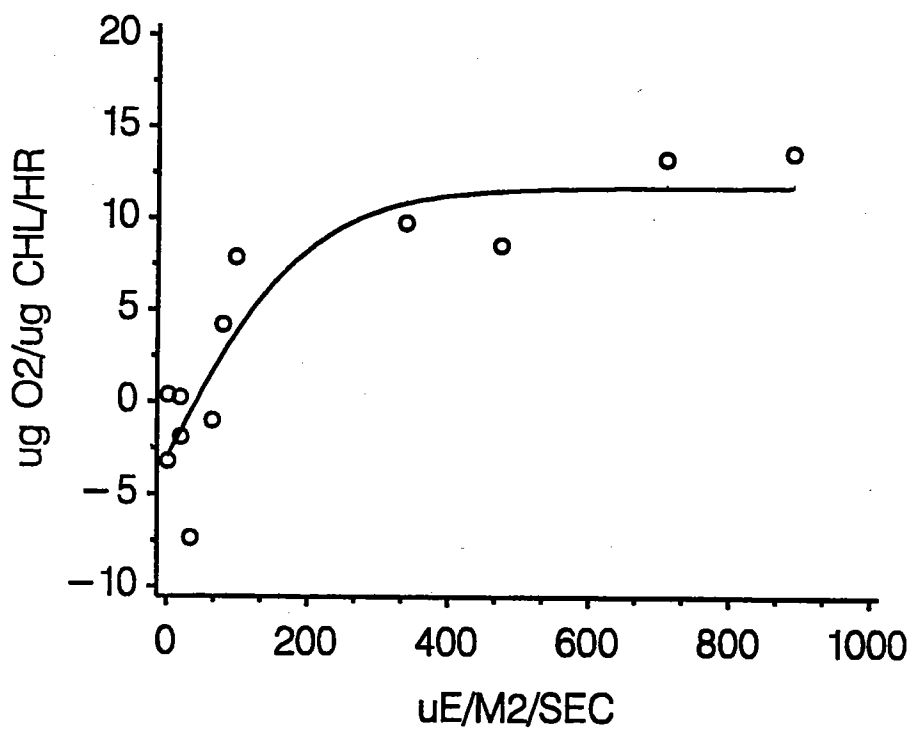
MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

STATION N16P SURFACE



MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

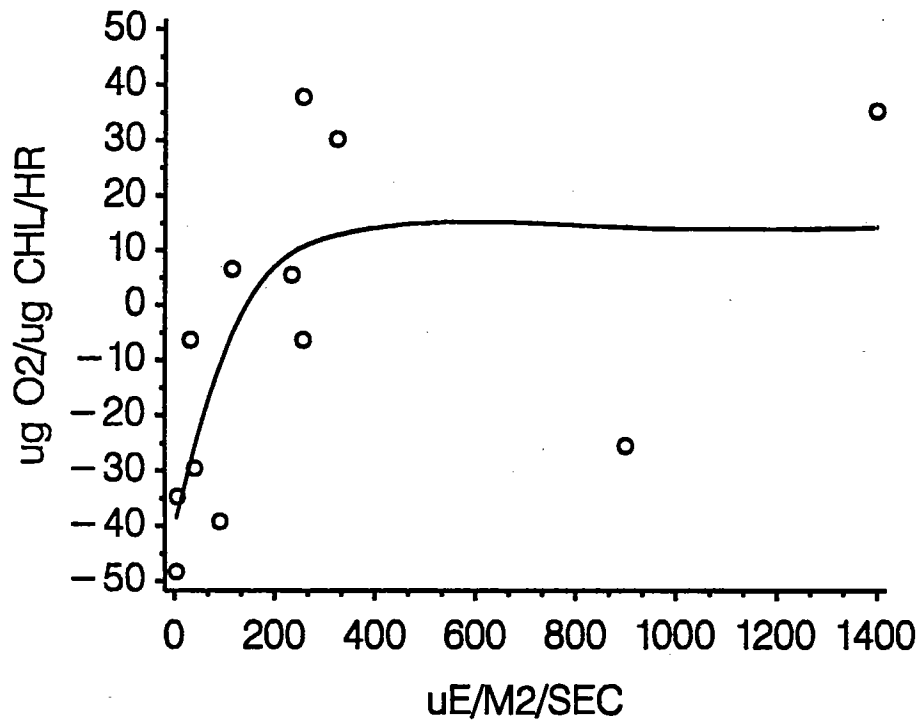
# STATION N1P SURFACE



MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

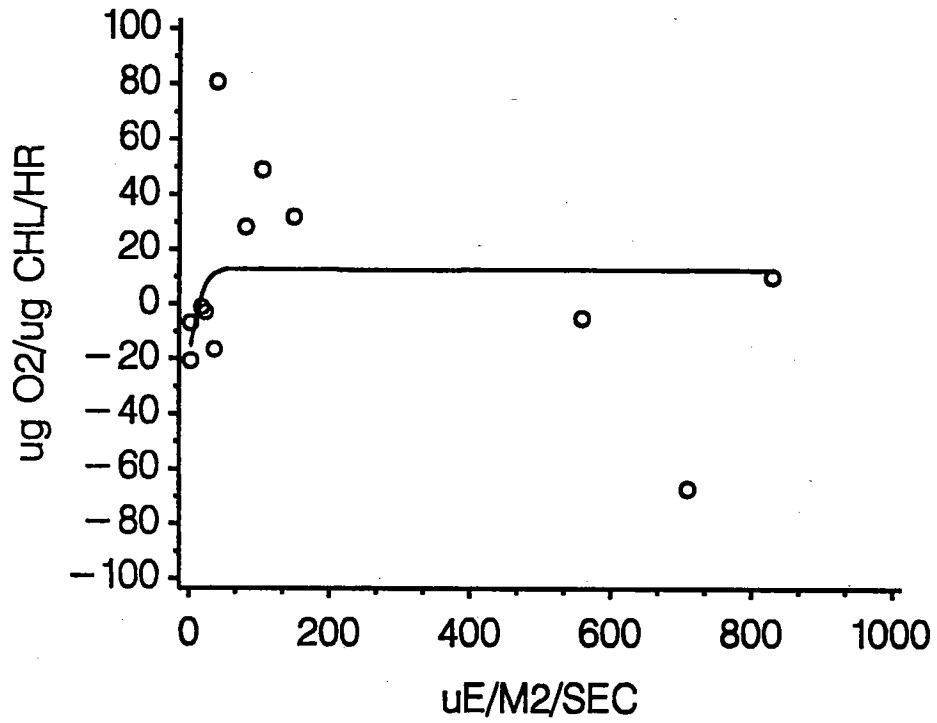
00054

STATION N20P SURFACE



MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

STATION N7P SURFACE

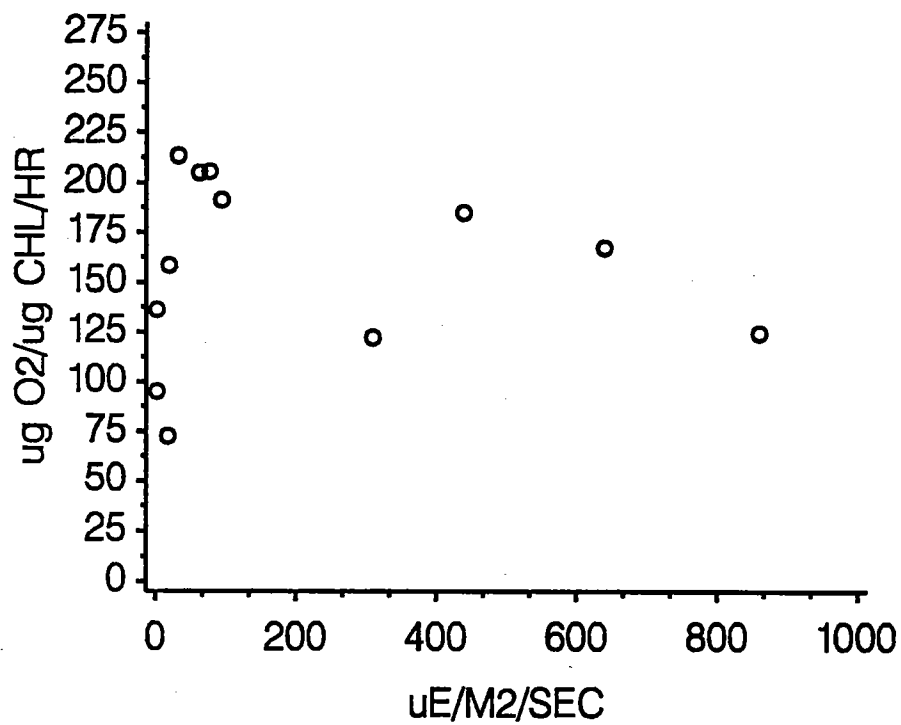


MODEL FROM PLATT AND JASSBY, 1976  
CRUISE NUMBER 6, JUNE 1992

**Plots of Stations Not Fit by Models: June**

00007

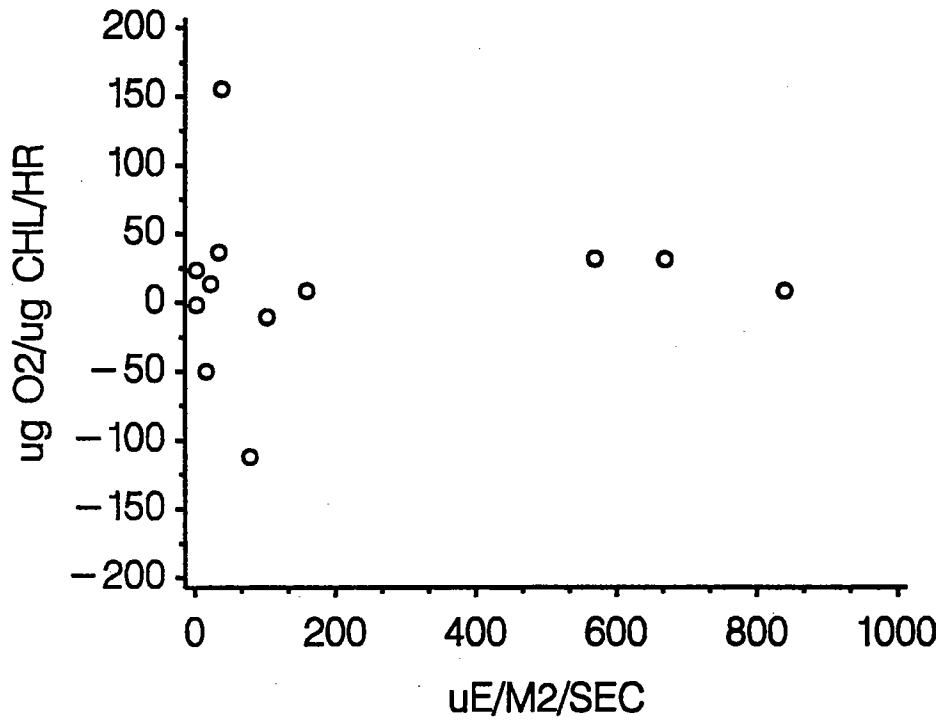
STATION F2P SURFACE



MODEL DID NOT FIT  
CRUISE NUMBER 8, JUNE 1992

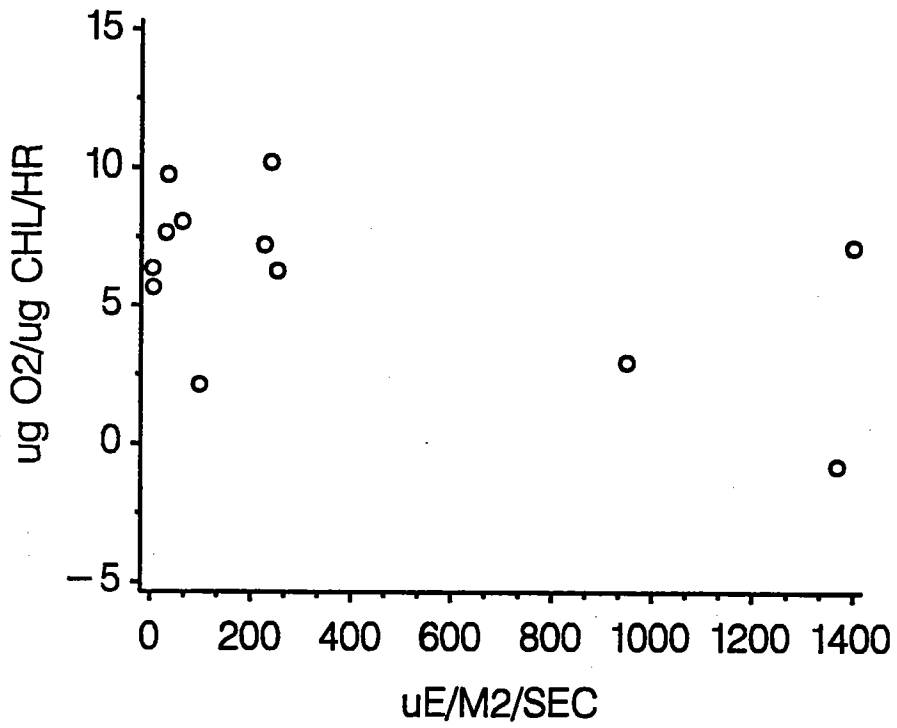
00058

STATION F1P SURFACE



MODEL DID NOT FIT  
CRUISE NUMBER 6, JUNE 1992

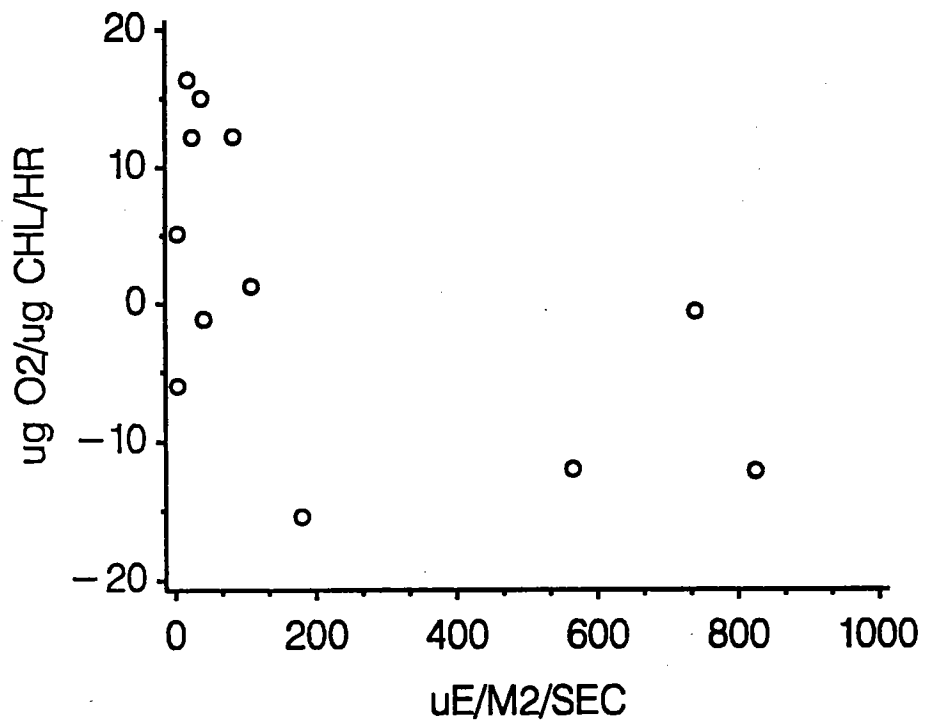
STATION F1P CHLA MAXIMUM



MODEL DID NOT FIT  
CRUISE NUMBER 6, JUNE 1992

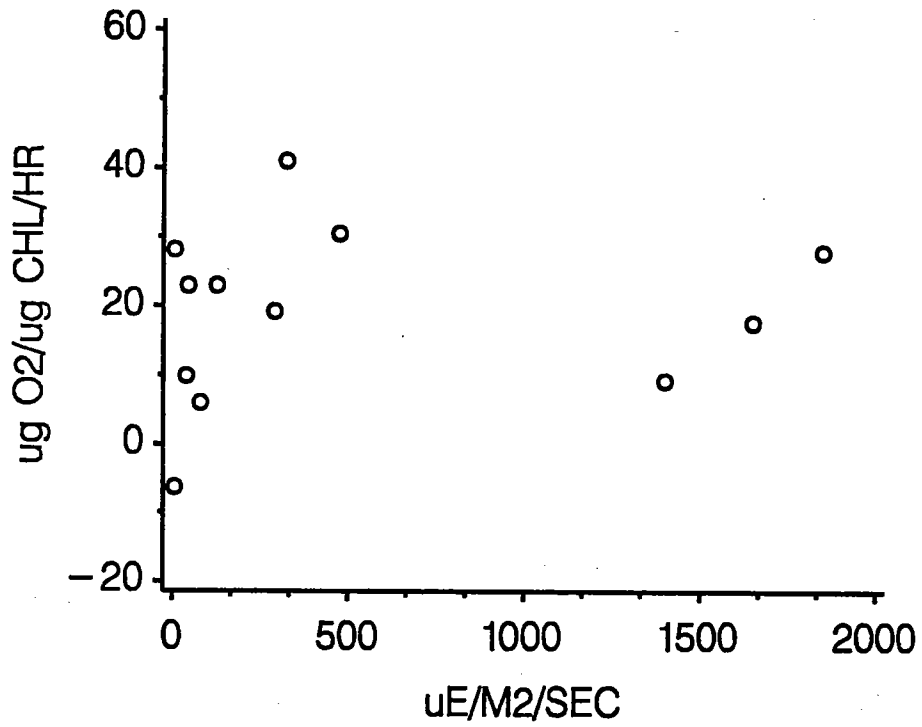
00000

STATION N4P SURFACE



MODEL DID NOT FIT  
CRUISE NUMBER 6, JUNE 1992

STATION N4P CHLA MAXIMUM



MODEL DID NOT FIT  
CRUISE NUMBER 6, JUNE 1992

## APPENDIX F

### PHYTOPLANKTON SPECIES DATA TABLES

Data are for combined farfield and nearfield surveys made during early April (MFF03) and June (MFF04 1992). In coding taxa, an alphabetic character prefix was used to denote groups, where D=diatoms, F= dinoflagellates, U=microflagellates, and O= other.

TABLE F-1. PHYTOPLANKTON SPECIES DATA TABLES FROM WHOLE-WATER SAMPLES COLLECTED IN EARLY APRIL AND JUNE 1992

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF03	F01P	04-07-92	08:05	2.06	CHAETOCEROS SEPTENTRIONALIS	D102	.025
MFF03	F01P	04-07-92	08:05	2.06	CHAETOCEROS DEBILIS	D18	.097
MFF03	F01P	04-07-92	08:05	2.06	CHAETOCEROS SOCIALIS	D27	.025
MFF03	F01P	04-07-92	08:05	2.06	CHAETOCEROS SPP.(<10UM)	D30	.085
MFF03	F01P	04-07-92	08:05	2.06	CHAETOCEROS SPP.(>10UM)	D31	.008
MFF03	F01P	04-07-92	08:05	2.06	DETOMULA CONFERVACEA	D43	.055
MFF03	F01P	04-07-92	08:05	2.06	LEPTOCYLINDRUS MINIMUS	D53	.017
MFF03	F01P	04-07-92	08:05	2.06	NAVICULOID DIATOMS	D59	.004
MFF03	F01P	04-07-92	08:05	2.06	THALASSIONEMA NITZSCHOIDES	D91	.017
MFF03	F01P	04-07-92	08:05	2.06	THALASSIOSIRA NORDENSKIOLDII	D93	.004
MFF03	F01P	04-07-92	08:05	2.06	UNID. NAKED DINOFLAGELLATE	F50	.004
MFF03	F01P	04-07-92	08:05	2.06	CRYPTOMONADS	O1	.068
MFF03	F01P	04-07-92	08:05	2.06	PHAEOCYSTIS POUCHETII	O11	1.344
MFF03	F01P	04-07-92	08:05	2.06	MICROFLAGELLATES	U1	.021
MFF03	F01P	04-07-92	08:03	10.42	UNID. CENTRALES	D100	.007
MFF03	F01P	04-07-92	08:03	10.42	CHAETOCEROS SEPTENTRIONALIS	D102	.007
MFF03	F01P	04-07-92	08:03	10.42	CHAETOCEROS DEBILIS	D18	.138
MFF03	F01P	04-07-92	08:03	10.42	CHAETOCEROS SOCIALIS	D27	.104
MFF03	F01P	04-07-92	08:03	10.42	CHAETOCEROS SPP.(<10UM)	D30	.104
MFF03	F01P	04-07-92	08:03	10.42	CHAETOCEROS SPP.(>10UM)	D31	.007
MFF03	F01P	04-07-92	08:03	10.42	LEPTOCYLINDRUS MINIMUS	D53	.007
MFF03	F01P	04-07-92	08:03	10.42	NAVICULOID DIATOMS	D59	.007
MFF03	F01P	04-07-92	08:03	10.42	NITZSCHIA SERIATA	D66	.014
MFF03	F01P	04-07-92	08:03	10.42	NITZSCHIA SPP.	D67	.007
MFF03	F01P	04-07-92	08:03	10.42	RHIZOLELENIA NEBETATA F. SEMISPINA	D78	.014
MFF03	F01P	04-07-92	08:03	10.42	THALASSIONEMA NITZSCHOIDES	D91	.014
MFF03	F01P	04-07-92	08:03	10.42	THALASSIOSIRA NORDENSKIOLDII	D93	.007
MFF03	F01P	04-07-92	08:03	10.42	GYRODINIUM SPIRALE	F23	.007
MFF03	F01P	04-07-92	08:03	10.42	PROTOPERIDINIUM BIPES	F35	.007
MFF03	F01P	04-07-92	08:03	10.42	CRYPTOMONADS	O1	.138
MFF03	F01P	04-07-92	08:03	10.42	PHAEOCYSTIS POUCHETII	O11	2.21
MFF03	F01P	04-07-92	08:03	10.42	MICROFLAGELLATES	U1	.035
MFF03	F02P	04-07-92	09:43	1.69	CHAETOCEROS SPP.(<10UM)	D30	.042
MFF03	F02P	04-07-92	09:43	1.69	MELOSIRA NUMMOLOIDES	D57	.012
MFF03	F02P	04-07-92	09:43	1.69	NITZSCHIA SPP.	D67	.006
MFF03	F02P	04-07-92	09:43	1.69	THALASSIONEMA NITZSCHOIDES	D91	.012
MFF03	F02P	04-07-92	09:43	1.69	DINOPHYSIS NORVEGICA	F14	.006
MFF03	F02P	04-07-92	09:43	1.69	GYRODINIUM SPIRALE	F23	.012
MFF03	F02P	04-07-92	09:43	1.69	UNID. NAKED DINOFLAGELLATE	F50	.006
MFF03	F02P	04-07-92	09:43	1.69	CRYPTOMONADS	O1	.036
MFF03	F02P	04-07-92	09:43	1.69	PHAEOCYSTIS POUCHETII	O11	2.32
MFF03	F02P	04-07-92	09:43	1.69	MICROFLAGELLATES	U1	.036
MFF03	F02P	04-07-92	09:41	13.56	CHAETOCEROS SPP.(<10UM)	D30	.042
MFF03	F02P	04-07-92	09:41	13.56	COSCIINODISCUS SPP.	D40	.007
MFF03	F02P	04-07-92	09:41	13.56	THALASSIONEMA NITZSCHOIDES	D91	.014
MFF03	F02P	04-07-92	09:41	13.56	DINOPHYSIS NORVEGICA	F14	.007
MFF03	F02P	04-07-92	09:41	13.56	GYRODINIUM SPIRALE	F23	.007
MFF03	F02P	04-07-92	09:41	13.56	CRYPTOMONADS	O1	.132
MFF03	F02P	04-07-92	09:41	13.56	PHAEOCYSTIS POUCHETII	O11	2.753
MFF03	F02P	04-07-92	09:41	13.56	MICROFLAGELLATES	U1	.021
MFF03	F02P	04-07-92	10:37	1.69	CHAETOCEROS SPP.(<10UM)	D30	.027
MFF03	F02P	04-07-92	10:37	1.69	COCCONEIS SCUTELLUM	D32	.007
MFF03	F02P	04-07-92	10:37	1.69	LICHOPHORA SPP.	D55	.007
MFF03	F02P	04-07-92	10:37	1.69	NAVICULOIDS (LYRATE)	D60	.007
MFF03	F02P	04-07-92	10:37	1.69	NITZSCHIA CLOSTERIUM	D62	.007
MFF03	F02P	04-07-92	10:37	1.69	DINOPHYSIS ACUMINATA	F10	.007
MFF03	F02P	04-07-92	10:37	1.69	GYRODINIUM SPIRALE	F23	.013
MFF03	F02P	04-07-92	10:37	1.69	CRYPTOMONADS	O1	.087
MFF03	F02P	04-07-92	10:37	1.69	PHAEOCYSTIS POUCHETII	O11	2.633
MFF03	F02P	04-07-92	10:37	1.69	MICROFLAGELLATES	U1	.027
MFF03	F02P	04-07-92	10:35	9.67	UNID. CENTRALES	D100	.008

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF03	F02P	04-07-92	10:35	9.67	CHAETOCEROS SPP.<(10UM)	D30	.015
MFF03	F02P	04-07-92	10:35	9.67	LEPTOCYLINDRUS MINIMUS	D53	.015
MFF03	F02P	04-07-92	10:35	9.67	NAVICULOIDS (LYRATE)	D60	.008
MFF03	F02P	04-07-92	10:35	9.67	THALASSIONEMA NITZSCHOIDES	D91	.008
MFF03	F02P	04-07-92	10:35	9.67	DINOPHYSIS NORVEGICA	F14	.008
MFF03	F02P	04-07-92	10:35	9.67	GYRODINIUM SPIRALE	F23	.023
MFF03	F02P	04-07-92	10:35	9.67	CRYPTOMONADS	O1	.166
MFF03	F02P	04-07-92	10:35	9.67	PHAEOCYSTIS POUCHETII	O11	3.049
MFF03	F02P	04-07-92	10:35	9.67	MICROFLAGELLATES	U1	.023
MFF03	F13P	04-08-92	08:43	1.8	UNID. CENTRALES	D100	.011
MFF03	F13P	04-08-92	08:43	1.8	UNID. PENNALES	D101	.005
MFF03	F13P	04-08-92	08:43	1.8	CHAETOCEROS SEPTENTRIONALIS	D102	.005
MFF03	F13P	04-08-92	08:43	1.8	CHAETOCEROS DEBILIS	D18	.049
MFF03	F13P	04-08-92	08:43	1.8	CHAETOCEROS SPP.<(10UM)	D30	.071
MFF03	F13P	04-08-92	08:43	1.8	CYLINDROTHECA CLOSTERIUM	D42	.005
MFF03	F13P	04-08-92	08:43	1.8	ASTERIONELLOPSIS GLACIALIS	D6	.005
MFF03	F13P	04-08-92	08:43	1.8	THALASSIONEMA NITZSCHOIDES	D91	.005
MFF03	F13P	04-08-92	08:43	1.8	THALASSIOSIRA NORDENSKIOLDII	D93	.011
MFF03	F13P	04-08-92	08:43	1.8	PROTOPERIDINIUM BIPES	F35	.005
MFF03	F13P	04-08-92	08:43	1.8	CRYPTOMONADS	O1	.076
MFF03	F13P	04-08-92	08:43	1.8	PHAEOCYSTIS POUCHETII	O11	1.979
MFF03	F13P	04-08-92	08:43	1.8	MICROFLAGELLATES	U1	.06
MFF03	F13P	04-08-92	08:40	7.36	UNID. CENTRALES	D100	.01
MFF03	F13P	04-08-92	08:40	7.36	CHAETOCEROS SEPTENTRIONALIS	D102	.005
MFF03	F13P	04-08-92	08:40	7.36	CHAETOCEROS DEBILIS	D18	.041
MFF03	F13P	04-08-92	08:40	7.36	CHAETOCEROS SPP.<(10UM)	D30	.072
MFF03	F13P	04-08-92	08:40	7.36	CYLINDROTHECA CLOSTERIUM	D42	.005
MFF03	F13P	04-08-92	08:40	7.36	LEPTOCYLINDRUS MINIMUS	D53	.01
MFF03	F13P	04-08-92	08:40	7.36	THALASSIONEMA NITZSCHOIDES	D91	.015
MFF03	F13P	04-08-92	08:40	7.36	THALASSIOSIRA NORDENSKIOLDII	D93	.031
MFF03	F13P	04-08-92	08:40	7.36	GYRODINIUM SPIRALE	F23	.005
MFF03	F13P	04-08-92	08:40	7.36	KATODINIUM ROTUNDATUM	F27	.005
MFF03	F13P	04-08-92	08:40	7.36	UNID. NAKED DINOFAGELLATE	F50	.005
MFF03	F13P	04-08-92	08:40	7.36	CRYPTOMONADS	O1	.052
MFF03	F13P	04-08-92	08:40	7.36	PHAEOCYSTIS POUCHETII	O11	1.813
MFF03	F13P	04-08-92	08:40	7.36	CYANOPHYCEAE	O2	.026
MFF03	F13P	04-08-92	08:40	7.36	MICROFLAGELLATES	U1	.036
MFF03	F23P	04-10-92	06:25	1.69	UNID. CENTRALES	D100	.019
MFF03	F23P	04-10-92	06:25	1.69	CHAETOCEROS DEBILIS	D18	.039
MFF03	F23P	04-10-92	06:25	1.69	CHAETOCEROS SOCIALIS	D27	.019
MFF03	F23P	04-10-92	06:25	1.69	CHAETOCEROS SPP.<(10UM)	D30	.135
MFF03	F23P	04-10-92	06:25	1.69	DETONULA CONFERVACEA	D43	.01
MFF03	F23P	04-10-92	06:25	1.69	NAVICULOIDS (LYRATE)	D60	.01
MFF03	F23P	04-10-92	06:25	1.69	SKELETONEMA COSTATUM	D84	.116
MFF03	F23P	04-10-92	06:25	1.69	THALASSIOSIRA NORDENSKIOLDII	D93	.087
MFF03	F23P	04-10-92	06:25	1.69	DINOPHYSIS NORVEGICA	F14	.01
MFF03	F23P	04-10-92	06:25	1.69	GYRODINIUM SPIRALE	F23	.01
MFF03	F23P	04-10-92	06:25	1.69	CRYPTOMONADS	O1	.174
MFF03	F23P	04-10-92	06:25	1.69	PHAEOCYSTIS POUCHETII	O11	4.373
MFF03	F23P	04-10-92	06:25	1.69	SCENEDESMUS SPP.	O13	.01
MFF03	F23P	04-10-92	06:25	1.69	MICROFLAGELLATES	U1	.029
MFF03	F23P	04-10-92	06:23	10.48	UNID. CENTRALES	D100	.036
MFF03	F23P	04-10-92	06:23	10.48	CHAETOCEROS DEBILIS	D18	.072
MFF03	F23P	04-10-92	06:23	10.48	CHAETOCEROS SPP.<(10UM)	D30	.084
MFF03	F23P	04-10-92	06:23	10.48	DETONULA CONFERVACEA	D43	.072
MFF03	F23P	04-10-92	06:23	10.48	PLEUROSIGMA SPP.	D71	.012
MFF03	F23P	04-10-92	06:23	10.48	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.012
MFF03	F23P	04-10-92	06:23	10.48	SKELETONEMA COSTATUM	D84	.096
MFF03	F23P	04-10-92	06:23	10.48	THALASSIONEMA NITZSCHOIDES	D91	.012
MFF03	F23P	04-10-92	06:23	10.48	THALASSIOSIRA NORDENSKIOLDII	D93	.084
MFF03	F23P	04-10-92	06:23	10.48	GYRODINIUM SPIRALE	F23	.024
MFF03	F23P	04-10-92	06:23	10.48	PROTOPERIDINIUM BIPES	F35	.012
MFF03	F23P	04-10-92	06:23	10.48	CRYPTOMONADS	O1	.313

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF03	F23P	04-10-92	06:23	10.48	PHAEOCYSTIS POUCHETII	O11	5.579
MFF03	F23P	04-10-92	06:23	10.48	MICROFLAGELLATES	U1	.06
MFF03	N01P	04-12-92	09:14	1.97	CHAETOCEROS DEBILIS	D18	.006
MFF03	N01P	04-12-92	09:14	1.97	CHAETOCEROS SPP.(<10UM)	D30	.012
MFF03	N01P	04-12-92	09:14	1.97	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF03	N01P	04-12-92	09:14	1.97	CERATIUM TRIPOS	F9	.003
MFF03	N01P	04-12-92	09:14	1.97	CRYPTOMONADS	O1	.012
MFF03	N01P	04-12-92	09:14	1.97	PHAEOCYSTIS POUCHETII	O11	1.099
MFF03	N01P	04-12-92	09:14	1.97	MICROFLAGELLATES	U1	.053
MFF03	N01P	04-12-92	09:13	16.72	UNID. CENTRALES	D100	.004
MFF03	N01P	04-12-92	09:13	16.72	CYLINDROTHECA CLOSTERIUM	D42	.008
MFF03	N01P	04-12-92	09:13	16.72	THALASSIOSIRA NORDENSKIOLDII	D93	.004
MFF03	N01P	04-12-92	09:13	16.72	GYRODINIUM SPIRALE	F23	.008
MFF03	N01P	04-12-92	09:13	16.72	AMPHIDIUM SPP.	F4	.004
MFF03	N01P	04-12-92	09:13	16.72	CERATIUM TRIPOS	F9	.004
MFF03	N01P	04-12-92	09:13	16.72	CRYPTOMONADS	O1	.019
MFF03	N01P	04-12-92	09:13	16.72	PHAEOCYSTIS POUCHETII	O11	1.466
MFF03	N01P	04-12-92	09:13	16.72	MICROFLAGELLATES	U1	.069
MFF03	N04P	04-10-92	10:36	1.59	UNID. CENTRALES	D100	.002
MFF03	N04P	04-10-92	10:36	1.59	CHAETOCEROS DEBILIS	D18	.007
MFF03	N04P	04-10-92	10:36	1.59	CHAETOCEROS SPP.(<10UM)	D30	.003
MFF03	N04P	04-10-92	10:36	1.59	GYRODINIUM SPIRALE	F23	.002
MFF03	N04P	04-10-92	10:36	1.59	CERATIUM TRIPOS	F9	.002
MFF03	N04P	04-10-92	10:36	1.59	CRYPTOMONADS	O1	.015
MFF03	N04P	04-10-92	10:36	1.59	PHAEOCYSTIS POUCHETII	O11	.295
MFF03	N04P	04-10-92	10:36	1.59	DISTEPHANUS SPECULUM	O4	.002
MFF03	N04P	04-10-92	10:36	1.59	MICROFLAGELLATES	U1	.027
MFF03	N04P	04-10-92	10:31	37.86	CRYPTOMONADS	O1	.023
MFF03	N04P	04-10-92	10:31	37.86	PHAEOCYSTIS POUCHETII	O11	4.593
MFF03	N04P	04-10-92	10:31	37.86	MICROFLAGELLATES	U1	.278
MFF03	N07P	04-08-92	11:36	5.36	GYRODINIUM SPIRALE	F23	.002
MFF03	N07P	04-08-92	11:36	5.36	AMPHIDIUM SPP.	F4	.005
MFF03	N07P	04-08-92	11:36	5.36	PROTOPERIDIUM SPP.	F45	.002
MFF03	N07P	04-08-92	11:36	5.36	CERATIUM TRIPOS	F9	.002
MFF03	N07P	04-08-92	11:36	5.36	CRYPTOMONADS	O1	.007
MFF03	N07P	04-08-92	11:36	5.36	PHAEOCYSTIS POUCHETII	O11	.997
MFF03	N07P	04-08-92	11:36	5.36	DISTEPHANUS SPECULUM	O4	.002
MFF03	N07P	04-08-92	11:36	5.36	MICROFLAGELLATES	U1	.01
MFF03	N07P	04-08-92	11:33	25.86	MELOSIRA NUMMOLOIDES	D57	.016
MFF03	N07P	04-08-92	11:33	25.86	NAVICULOID DIATOMS	D59	.016
MFF03	N07P	04-08-92	11:33	25.86	UNID. NAKED DINOFLAGELLATE	F50	.016
MFF03	N07P	04-08-92	11:33	25.86	CRYPTOMONADS	O1	.047
MFF03	N07P	04-08-92	11:33	25.86	PHAEOCYSTIS POUCHETII	O11	8.882
MFF03	N07P	04-08-92	11:33	25.86	MICROFLAGELLATES	U1	.047
MFF03	N10P	04-08-92	10:07	3.22	UNID. CENTRALES	D100	.03
MFF03	N10P	04-08-92	10:07	3.22	CHAETOCEROS COMPRESSUS	D13	.03
MFF03	N10P	04-08-92	10:07	3.22	CHAETOCEROS DEBILIS	D18	.103
MFF03	N10P	04-08-92	10:07	3.22	CHAETOCEROS SPP.(<10UM)	D30	.052
MFF03	N10P	04-08-92	10:07	3.22	CHAETOCEROS SPP.(>10UM)	D31	.03
MFF03	N10P	04-08-92	10:07	3.22	DETONULA CONFERVACEA	D43	.074
MFF03	N10P	04-08-92	10:07	3.22	NITZSCHIA SPP.	D67	.007
MFF03	N10P	04-08-92	10:07	3.22	SKELETONEMA COSTATUM	D84	.015
MFF03	N10P	04-08-92	10:07	3.22	THALASSIOSIRA NORDENSKIOLDII	D93	.066
MFF03	N10P	04-08-92	10:07	3.22	GYRODINIUM SPIRALE	F23	.007
MFF03	N10P	04-08-92	10:07	3.22	CRYPTOMONADS	O1	.118
MFF03	N10P	04-08-92	10:07	3.22	PHAEOCYSTIS POUCHETII	O11	2.423
MFF03	N10P	04-08-92	10:07	3.22	CYANOPHYCEAE	O2	.03
MFF03	N10P	04-08-92	10:07	3.22	MICROFLAGELLATES	U1	.089
MFF03	N10P	04-08-92	10:03	13.3	UNID. CENTRALES	D100	.023
MFF03	N10P	04-08-92	10:03	13.3	CHAETOCEROS SEPTENTRIONALIS	D102	.008
MFF03	N10P	04-08-92	10:03	13.3	CHAETOCEROS DEBILIS	D18	.046
MFF03	N10P	04-08-92	10:03	13.3	CHAETOCEROS SOCIALIS	D27	.031
MFF03	N10P	04-08-92	10:03	13.3	CHAETOCEROS SPP.(<10UM)	D30	.015

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF03	N10P	04-08-92	10:03	13.3	THALASSIONEMA NITZSCHOIDES	D91	.008
MFF03	N10P	04-08-92	10:03	13.3	THALASSIOSIRA NORDENSKIOLDII	D93	.046
MFF03	N10P	04-08-92	10:03	13.3	THALASSIOSIRA SPP.	D95	.015
MFF03	N10P	04-08-92	10:03	13.3	GYRODINIUM SPIRALE	F23	.015
MFF03	N10P	04-08-92	10:03	13.3	CRYPTOMONADS	O1	.076
MFF03	N10P	04-08-92	10:03	13.3	PHAEOCYSTIS POUCHETII	O11	3.058
MFF03	N10P	04-08-92	10:03	13.3	MICROFLAGELLATES	U1	.046
MFF03	N16P	04-10-92	09:29	1.74	CHAETOCEROS SPP. (<10UM)	D30	.006
MFF03	N16P	04-10-92	09:29	1.74	GYRODINIUM SPIRALE	F23	.002
MFF03	N16P	04-10-92	09:29	1.74	CERATIUM LONGIPES	F51	.004
MFF03	N16P	04-10-92	09:29	1.74	CRYPTOMONADS	O1	.014
MFF03	N16P	04-10-92	09:29	1.74	PHAEOCYSTIS POUCHETII	O11	.787
MFF03	N16P	04-10-92	09:29	1.74	MICROFLAGELLATES	U1	.022
MFF03	N16P	04-10-92	09:24	25.7	CYLINDROTHECA CLOSTERIUM	D42	.015
MFF03	N16P	04-10-92	09:24	25.7	GYRODINIUM SPIRALE	F23	.015
MFF03	N16P	04-10-92	09:24	25.7	CRYPTOMONADS	O1	.046
MFF03	N16P	04-10-92	09:24	25.7	PHAEOCYSTIS POUCHETII	O11	6.563
MFF03	N16P	04-10-92	09:24	25.7	MICROFLAGELLATES	U1	.076
MFF03	N20P	04-10-92	08:17	1.47	CHAETOCEROS DEBILIS	D18	.004
MFF03	N20P	04-10-92	08:17	1.47	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.002
MFF03	N20P	04-10-92	08:17	1.47	DINOPHYSIS OVUM	F15	.002
MFF03	N20P	04-10-92	08:17	1.47	GYRODINIUM SPIRALE	F23	.006
MFF03	N20P	04-10-92	08:17	1.47	PROTOPERIDINIUM BIPES	F35	.002
MFF03	N20P	04-10-92	08:17	1.47	UNID. NAKED DINOFLAGELLATE	F50	.002
MFF03	N20P	04-10-92	08:17	1.47	GYMNODINIUM SPP.	F56	.002
MFF03	N20P	04-10-92	08:17	1.47	CRYPTOMONADS	O1	.012
MFF03	N20P	04-10-92	08:17	1.47	PHAEOCYSTIS POUCHETII	O11	.519
MFF03	N20P	04-10-92	08:17	1.47	DISTEPHANUS SPECULUM	O4	.002
MFF03	N20P	04-10-92	08:17	1.47	MICROFLAGELLATES	U1	.041
MFF03	N20P	04-10-92	08:15	12.35	CHAETOCEROS DEBILIS	D18	.005
MFF03	N20P	04-10-92	08:15	12.35	CHAETOCEROS SOCIALIS	D27	.007
MFF03	N20P	04-10-92	08:15	12.35	CHAETOCEROS SPP. (<10UM)	D30	.002
MFF03	N20P	04-10-92	08:15	12.35	THALASSIOSIRA SPP.	D95	.002
MFF03	N20P	04-10-92	08:15	12.35	GYRODINIUM SPIRALE	F23	.009
MFF03	N20P	04-10-92	08:15	12.35	PROTOPERIDINIUM BIPES	F35	.002
MFF03	N20P	04-10-92	08:15	12.35	AMPHIDINIUM SPP.	F4	.005
MFF03	N20P	04-10-92	08:15	12.35	CRYPTOMONADS	O1	.021
MFF03	N20P	04-10-92	08:15	12.35	PHAEOCYSTIS POUCHETII	O11	.855
MFF03	N20P	04-10-92	08:15	12.35	CYANOPHYCEAE	O2	.007
MFF03	N20P	04-10-92	08:15	12.35	MICROFLAGELLATES	U1	.037
MFF04	F01P	06-22-92	14:57	1.4	CERATAULINA PELAGICA	D10	.015
MFF04	F01P	06-22-92	14:57	1.4	UNID. PENNALES	D101	.011
MFF04	F01P	06-22-92	14:57	1.4	CHAETOCEROS SEPTENTRIONALIS	D102	.002
MFF04	F01P	06-22-92	14:57	1.4	CHAETOCEROS DEBILIS	D18	.009
MFF04	F01P	06-22-92	14:57	1.4	CHAETOCEROS SOCIALIS	D27	.011
MFF04	F01P	06-22-92	14:57	1.4	CHAETOCEROS SPP. (<10UM)	D30	.08
MFF04	F01P	06-22-92	14:57	1.4	CHAETOCEROS SPP. (>10UM)	D31	.004
MFF04	F01P	06-22-92	14:57	1.4	LEPTOCYLINDRUS DANICUS	D52	.076
MFF04	F01P	06-22-92	14:57	1.4	LEPTOCYLINDRUS MINIMUS	D53	.009
MFF04	F01P	06-22-92	14:57	1.4	LICMOPHORA SPP.	D55	.002
MFF04	F01P	06-22-92	14:57	1.4	NAVICULOID DIATOMS	D59	.004
MFF04	F01P	06-22-92	14:57	1.4	NITZSCHIA LONGISSIMA	D63	.013
MFF04	F01P	06-22-92	14:57	1.4	NITZSCHIA SPP.	D67	.002
MFF04	F01P	06-22-92	14:57	1.4	RHIZOSELENIA ALATA	D74	.006
MFF04	F01P	06-22-92	14:57	1.4	RHIZOSELENIA DELICATULA	D76	.004
MFF04	F01P	06-22-92	14:57	1.4	SKELETONEMA COSTATUM	D84	.006
MFF04	F01P	06-22-92	14:57	1.4	AMPHIDINIUM SPP.	F4	.004
MFF04	F01P	06-22-92	14:57	1.4	PROTOPERIDINIUM SPP.	F45	.004
MFF04	F01P	06-22-92	14:57	1.4	UNID. NAKED DINOFLAGELLATE	F50	.009
MFF04	F01P	06-22-92	14:57	1.4	CERATIUM LONGIPES	F51	.009
MFF04	F01P	06-22-92	14:57	1.4	CRYPTOMONADS	O1	.117
MFF04	F01P	06-22-92	14:57	1.4	MICROFLAGELLATES	U1	.302
MFF04	F01P	06-22-92	14:53	18.01	CERATAULINA PELAGICA	D10	.002

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	F01P	06-22-92	14:53	18.01	UNID. PENNALES	D101	.002
MFF04	F01P	06-22-92	14:53	18.01	CHAETOCEROS AFFINIS	D11	.013
MFF04	F01P	06-22-92	14:53	18.01	CHAETOCEROS SPP.(<10UM)	D30	.016
MFF04	F01P	06-22-92	14:53	18.01	CHAETOCEROS SPP.(>10UM)	D31	.004
MFF04	F01P	06-22-92	14:53	18.01	COCCONEIS SCUTELLUM	D32	.002
MFF04	F01P	06-22-92	14:53	18.01	NITZSCHIA LONGISSIMA	D63	.009
MFF04	F01P	06-22-92	14:53	18.01	NITZSCHIA SERIATA	D66	.002
MFF04	F01P	06-22-92	14:53	18.01	NITZSCHIA SPP.	D67	.004
MFF04	F01P	06-22-92	14:53	18.01	RHIZOSELENIA DELICATULA	D76	.007
MFF04	F01P	06-22-92	14:53	18.01	DINOPHYSIS NORVEGICA	F14	.031
MFF04	F01P	06-22-92	14:53	18.01	AMPHIDINIUM SPP.	F4	.035
MFF04	F01P	06-22-92	14:53	18.01	PROTOPIRIDINIUM PELLUCIDUM	F43	.002
MFF04	F01P	06-22-92	14:53	18.01	UNID. NAKED DINOFLAGELLATE	F50	.011
MFF04	F01P	06-22-92	14:53	18.01	CERATIUM LONGIPES	F51	.144
MFF04	F01P	06-22-92	14:53	18.01	GYMNODINIUM SPP.	F56	.007
MFF04	F01P	06-22-92	14:53	18.01	CERATIUM FUSUS	F6	.002
MFF04	F01P	06-22-92	14:53	18.01	CERATIUM LINEATUM	F7	.002
MFF04	F01P	06-22-92	14:53	18.01	CERATIUM TRIPOS	F9	.007
MFF04	F01P	06-22-92	14:53	18.01	CRYPTOMONADS	O1	.044
MFF04	F01P	06-22-92	14:53	18.01	DISTEPHANUS SPECULUM	O4	.004
MFF04	F01P	06-22-92	14:53	18.01	MICROFLAGELLATES	U1	.133
MFF04	F02P	06-22-92	11:35	1.74	CERATAULINA PELAGICA	D10	.023
MFF04	F02P	06-22-92	11:35	1.74	UNID. CENTRALES	D100	.004
MFF04	F02P	06-22-92	11:35	1.74	UNID. PENNALES	D101	.006
MFF04	F02P	06-22-92	11:35	1.74	CHAETOCEROS DIDYMUS	D20	.004
MFF04	F02P	06-22-92	11:35	1.74	CHAETOCEROS SPP.(<10UM)	D30	.029
MFF04	F02P	06-22-92	11:35	1.74	CHAETOCEROS SPP.(>10UM)	D31	.017
MFF04	F02P	06-22-92	11:35	1.74	LEPTOCYLINDRUS DANICUS	D52	.073
MFF04	F02P	06-22-92	11:35	1.74	LICHOPHORA SPP.	D55	.002
MFF04	F02P	06-22-92	11:35	1.74	NAVICULOID DIATOMS	D59	.004
MFF04	F02P	06-22-92	11:35	1.74	NITZSCHIA LONGISSIMA	D63	.006
MFF04	F02P	06-22-92	11:35	1.74	NITZSCHIA SPP.	D67	.004
MFF04	F02P	06-22-92	11:35	1.74	RHIZOSELENIA ALATA	D74	.01
MFF04	F02P	06-22-92	11:35	1.74	RHIZOSELENIA FRAGILISSIMA	D77	.006
MFF04	F02P	06-22-92	11:35	1.74	SKELETONEMA COSTATUM	D84	.006
MFF04	F02P	06-22-92	11:35	1.74	THALASSIONEMA NITZSCHOIDES	D91	.008
MFF04	F02P	06-22-92	11:35	1.74	GYRODINIUM SPIRALE	F23	.002
MFF04	F02P	06-22-92	11:35	1.74	AMPHIDINIUM SPP.	F4	.002
MFF04	F02P	06-22-92	11:35	1.74	PROTOPIRIDINIUM SPP.	F45	.002
MFF04	F02P	06-22-92	11:35	1.74	UNID. DINOFLAGELLATES	F49	.011
MFF04	F02P	06-22-92	11:35	1.74	CERATIUM LONGIPES	F51	.004
MFF04	F02P	06-22-92	11:35	1.74	CERATIUM TRIPOS	F9	.002
MFF04	F02P	06-22-92	11:35	1.74	CRYPTOMONADS	O1	.071
MFF04	F02P	06-22-92	11:35	1.74	EUTREPTIA SPP.	O12	.002
MFF04	F02P	06-22-92	11:35	1.74	EUGLENOIDS	O6	.002
MFF04	F02P	06-22-92	11:35	1.74	MICROFLAGELLATES	U1	.178
MFF04	F02P	06-22-92	11:29	22.29	CERATAULINA PELAGICA	D10	.015
MFF04	F02P	06-22-92	11:29	22.29	UNID. PENNALES	D101	.011
MFF04	F02P	06-22-92	11:29	22.29	CHAETOCEROS SEPTENTRIONALIS	D102	.002
MFF04	F02P	06-22-92	11:29	22.29	CHAETOCEROS AFFINIS	D11	.013
MFF04	F02P	06-22-92	11:29	22.29	CHAETOCEROS SPP.(<10UM)	D30	.019
MFF04	F02P	06-22-92	11:29	22.29	CHAETOCEROS SPP.(>10UM)	D31	.004
MFF04	F02P	06-22-92	11:29	22.29	LEPTOCYLINDRUS DANICUS	D52	.011
MFF04	F02P	06-22-92	11:29	22.29	NAVICULOID DIATOMS	D59	.002
MFF04	F02P	06-22-92	11:29	22.29	NITZSCHIA LONGISSIMA	D63	.015
MFF04	F02P	06-22-92	11:29	22.29	NITZSCHIA SPP.	D67	.017
MFF04	F02P	06-22-92	11:29	22.29	RHIZOSELENIA ALATA	D74	.002
MFF04	F02P	06-22-92	11:29	22.29	SKELETONEMA COSTATUM	D84	.021
MFF04	F02P	06-22-92	11:29	22.29	DINOPHYSIS ACUMINATA	F10	.008
MFF04	F02P	06-22-92	11:29	22.29	DINOPHYSIS NORVEGICA	F14	.002
MFF04	F02P	06-22-92	11:29	22.29	GYRODINIUM SPIRALE	F23	.004
MFF04	F02P	06-22-92	11:29	22.29	PROTOPIRIDINIUM BIPES	F35	.002
MFF04	F02P	06-22-92	11:29	22.29	PROTOPIRIDINIUM DEPRESSUM	F39	.006

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	F02P	06-22-92	11:29	22.29	AMPHIDINIUM SPP.	F4	.004
MFF04	F02P	06-22-92	11:29	22.29	UNID. DINOFLAGELLATES	F49	.006
MFF04	F02P	06-22-92	11:29	22.29	CERATIUM LONGIPES	F51	.199
MFF04	F02P	06-22-92	11:29	22.29	GYMNODINIUM SPP.	F56	.002
MFF04	F02P	06-22-92	11:29	22.29	CERATIUM LINEATUM	F7	.015
MFF04	F02P	06-22-92	11:29	22.29	CERATIUM TRIPOS	F9	.015
MFF04	F02P	06-22-92	11:29	22.29	CRYPTOMONADS	O1	.027
MFF04	F02P	06-22-92	11:29	22.29	DISTEPHANUS SPECULUM	O4	.006
MFF04	F02P	06-22-92	11:29	22.29	MICROFLAGELLATES	U1	.11
MFF04	F02P	06-22-92	12:06	1.56	CERATAULINA PELAGICA	D10	.023
MFF04	F02P	06-22-92	12:06	1.56	UNID. PENNALES	D101	.009
MFF04	F02P	06-22-92	12:06	1.56	CHAETOCEROS AFFINIS	D11	.007
MFF04	F02P	06-22-92	12:06	1.56	CHAETOCEROS SPP. (<10UM)	D30	.028
MFF04	F02P	06-22-92	12:06	1.56	CHAETOCEROS SPP. (>10UM)	D31	.002
MFF04	F02P	06-22-92	12:06	1.56	LEPTOCYLINDRUS DANICUS	D52	.054
MFF04	F02P	06-22-92	12:06	1.56	LEPTOCYLINDRUS MINIMUS	D53	.009
MFF04	F02P	06-22-92	12:06	1.56	NITZSCHIA SPP.	D67	.002
MFF04	F02P	06-22-92	12:06	1.56	RHIZOSELENIA ALATA	D74	.007
MFF04	F02P	06-22-92	12:06	1.56	GYRODINIUM SPIRALE	F23	.005
MFF04	F02P	06-22-92	12:06	1.56	PROTOPERIDIUM SPP.	F45	.005
MFF04	F02P	06-22-92	12:06	1.56	UNID. DINOFLAGELLATES	F49	.009
MFF04	F02P	06-22-92	12:06	1.56	CERATIUM LONGIPES	F51	.005
MFF04	F02P	06-22-92	12:06	1.56	CERATIUM TRIPOS	F9	.007
MFF04	F02P	06-22-92	12:06	1.56	CRYPTOMONADS	O1	.087
MFF04	F02P	06-22-92	12:06	1.56	MICROFLAGELLATES	U1	.262
MFF04	F02P	06-22-92	12:00	22.45	CERATAULINA PELAGICA	D10	.002
MFF04	F02P	06-22-92	12:00	22.45	UNID. PENNALES	D101	.017
MFF04	F02P	06-22-92	12:00	22.45	CHAETOCEROS SEPTENTRIONALIS	D102	.005
MFF04	F02P	06-22-92	12:00	22.45	CHAETOCEROS AFFINIS	D11	.017
MFF04	F02P	06-22-92	12:00	22.45	CHAETOCEROS SOCIALIS	D27	.036
MFF04	F02P	06-22-92	12:00	22.45	CHAETOCEROS SPP. (<10UM)	D30	.007
MFF04	F02P	06-22-92	12:00	22.45	CHAETOCEROS SPP. (>10UM)	D31	.014
MFF04	F02P	06-22-92	12:00	22.45	LEPTOCYLINDRUS DANICUS	D52	.029
MFF04	F02P	06-22-92	12:00	22.45	NITZSCHIA LONGISSIMA	D63	.002
MFF04	F02P	06-22-92	12:00	22.45	NITZSCHIA SPP.	D67	.007
MFF04	F02P	06-22-92	12:00	22.45	DINOPHYSIS ACUMINATA	F10	.012
MFF04	F02P	06-22-92	12:00	22.45	DINOPHYSIS NORVEGICA	F14	.007
MFF04	F02P	06-22-92	12:00	22.45	DINOPHYSIS OVUM	F15	.002
MFF04	F02P	06-22-92	12:00	22.45	PROTOPERIDIUM CLAUDICANS	F37	.012
MFF04	F02P	06-22-92	12:00	22.45	AMPHIDINIUM SPP.	F4	.002
MFF04	F02P	06-22-92	12:00	22.45	PROTOPERIDIUM SPP.	F45	.002
MFF04	F02P	06-22-92	12:00	22.45	UNID. NAKED DINOFLAGELLATE	F50	.002
MFF04	F02P	06-22-92	12:00	22.45	CERATIUM LONGIPES	F51	.2
MFF04	F02P	06-22-92	12:00	22.45	CERATIUM FUSUS	F6	.002
MFF04	F02P	06-22-92	12:00	22.45	CERATIUM LINEATUM	F7	.012
MFF04	F02P	06-22-92	12:00	22.45	CERATIUM TRIPOS	F9	.005
MFF04	F02P	06-22-92	12:00	22.45	CRYPTOMONADS	O1	.06
MFF04	F02P	06-22-92	12:00	22.45	DISTEPHANUS SPECULUM	O4	.01
MFF04	F02P	06-22-92	12:00	22.45	MICROFLAGELLATES	U1	.13
MFF04	F13P	06-23-92	10:08	2.32	CERATAULINA PELAGICA	D10	.108
MFF04	F13P	06-23-92	10:08	2.32	CHAETOCEROS COMPRESSUS	D13	.011
MFF04	F13P	06-23-92	10:08	2.32	CHAETOCEROS DEBILIS	D18	.011
MFF04	F13P	06-23-92	10:08	2.32	CHAETOCEROS SOCIALIS	D27	.124
MFF04	F13P	06-23-92	10:08	2.32	CHAETOCEROS SPP. (<10UM)	D30	.173
MFF04	F13P	06-23-92	10:08	2.32	CHAETOCEROS SPP. (>10UM)	D31	.016
MFF04	F13P	06-23-92	10:08	2.32	COCCONEIS SCUTELLUM	D32	.005
MFF04	F13P	06-23-92	10:08	2.32	LEPTOCYLINDRUS DANICUS	D52	.151
MFF04	F13P	06-23-92	10:08	2.32	NAVICULOID DIATOMS	D59	.011
MFF04	F13P	06-23-92	10:08	2.32	ASTERIONELLOPSIS GLACIALIS	D6	.005
MFF04	F13P	06-23-92	10:08	2.32	NITZSCHIA LONGISSIMA	D63	.038
MFF04	F13P	06-23-92	10:08	2.32	NITZSCHIA SERIATA	D66	.005
MFF04	F13P	06-23-92	10:08	2.32	NITZSCHIA SPP.	D67	.243
MFF04	F13P	06-23-92	10:08	2.32	RHIZOSELENIA DELICATULA	D76	.059

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	F13P	06-23-92	10:08	2.32	SKELETONEMA COSTATUM	D84	.54
MFF04	F13P	06-23-92	10:08	2.32	THALASSIONEMA NITZSCHOIDES	D91	.005
MFF04	F13P	06-23-92	10:08	2.32	THALASSIOSIRA GRAVIDA	D92	.016
MFF04	F13P	06-23-92	10:08	2.32	GYRODINIUM SPIRALE	F23	.005
MFF04	F13P	06-23-92	10:08	2.32	HETEROCAPSA TRIQUETRA	F26	.032
MFF04	F13P	06-23-92	10:08	2.32	UNID. NAKED DINOFLAGELLATE	F50	.005
MFF04	F13P	06-23-92	10:08	2.32	CERATIUM LONGIPES	F51	.011
MFF04	F13P	06-23-92	10:08	2.32	GYMNODINIUM SPP.	F56	.005
MFF04	F13P	06-23-92	10:08	2.32	CRYPTOMONADS	01	.13
MFF04	F13P	06-23-92	10:08	2.32	EUTREPTIA SPP.	012	.011
MFF04	F13P	06-23-92	10:08	2.32	DISTEPHANUS SPECULUM	04	.005
MFF04	F13P	06-23-92	10:08	2.32	MICROFLAGELLATES	U1	.502
MFF04	F13P	06-23-92	10:05	8.91	CERATAULINA PELAGICA	D10	.028
MFF04	F13P	06-23-92	10:05	8.91	UNID. CENTRALES	D100	.019
MFF04	F13P	06-23-92	10:05	8.91	UNID. PENNALES	D101	.028
MFF04	F13P	06-23-92	10:05	8.91	CHAETOCEROS DEBILIS	D18	.112
MFF04	F13P	06-23-92	10:05	8.91	CHAETOCEROS SOCIALIS	D27	.074
MFF04	F13P	06-23-92	10:05	8.91	CHAETOCEROS SPP. (<10UM)	D30	.177
MFF04	F13P	06-23-92	10:05	8.91	CHAETOCEROS SPP. (>10UM)	D31	.093
MFF04	F13P	06-23-92	10:05	8.91	LEPTOCYLINDRUS MINIMUS	D53	.149
MFF04	F13P	06-23-92	10:05	8.91	LICHOPHORA SPP.	D55	.009
MFF04	F13P	06-23-92	10:05	8.91	NAVICULOID DIATOMS	D59	.019
MFF04	F13P	06-23-92	10:05	8.91	ASTERIONELLOPSIS GLACIALIS	D6	.019
MFF04	F13P	06-23-92	10:05	8.91	NITZSCHIA LONGISSIMA	D63	.028
MFF04	F13P	06-23-92	10:05	8.91	NITZSCHIA SERIATA	D66	.019
MFF04	F13P	06-23-92	10:05	8.91	NITZSCHIA SPP.	D67	.325
MFF04	F13P	06-23-92	10:05	8.91	RHIZOSELENIA DELICATULA	D76	.019
MFF04	F13P	06-23-92	10:05	8.91	SKELETONEMA COSTATUM	D84	1.367
MFF04	F13P	06-23-92	10:05	8.91	THALASSIOSIRA GRAVIDA	D92	.009
MFF04	F13P	06-23-92	10:05	8.91	DINOPHYSIS NORVEGICA	F14	.009
MFF04	F13P	06-23-92	10:05	8.91	GYRODINIUM SPIRALE	F23	.028
MFF04	F13P	06-23-92	10:05	8.91	HETEROCAPSA TRIQUETRA	F26	.074
MFF04	F13P	06-23-92	10:05	8.91	PROTOPERIDINIUM BIPES	F35	.009
MFF04	F13P	06-23-92	10:05	8.91	PROTOPERIDINIUM DEPRESSUM	F39	.009
MFF04	F13P	06-23-92	10:05	8.91	PROTOPERIDINIUM SPP.	F45	.019
MFF04	F13P	06-23-92	10:05	8.91	UNID. NAKED DINOFLAGELLATE	F50	.019
MFF04	F13P	06-23-92	10:05	8.91	CERATIUM LONGIPES	F51	.009
MFF04	F13P	06-23-92	10:05	8.91	GYMNODINIUM SPP.	F56	.009
MFF04	F13P	06-23-92	10:05	8.91	CRYPTOMONADS	01	.186
MFF04	F13P	06-23-92	10:05	8.91	CYANOPHYCEAE	02	.074
MFF04	F13P	06-23-92	10:05	8.91	MICROFLAGELLATES	U1	1.032
MFF04	F23P	06-24-92	12:12	1.7	CERATAULINA PELAGICA	D10	.04
MFF04	F23P	06-24-92	12:12	1.7	UNID. CENTRALES	D100	.006
MFF04	F23P	06-24-92	12:12	1.7	UNID. PENNALES	D101	.006
MFF04	F23P	06-24-92	12:12	1.7	CHAETOCEROS SOCIALIS	D27	.13
MFF04	F23P	06-24-92	12:12	1.7	CHAETOCEROS SPP. (<10UM)	D30	.108
MFF04	F23P	06-24-92	12:12	1.7	COCCONEIS SCUTELLUM	D32	.011
MFF04	F23P	06-24-92	12:12	1.7	CYLINDROTHECA CLOSTERIUM	D42	.011
MFF04	F23P	06-24-92	12:12	1.7	GRAMMATOPHORA MARINA	D47	.006
MFF04	F23P	06-24-92	12:12	1.7	NAVICULOID DIATOMS	D59	.006
MFF04	F23P	06-24-92	12:12	1.7	ASTERIONELLOPSIS GLACIALIS	D6	.006
MFF04	F23P	06-24-92	12:12	1.7	NITZSCHIA LONGISSIMA	D63	.04
MFF04	F23P	06-24-92	12:12	1.7	NITZSCHIA SPP.	D67	.04
MFF04	F23P	06-24-92	12:12	1.7	RHIZOSELENIA DELICATULA	D76	.034
MFF04	F23P	06-24-92	12:12	1.7	SKELETONEMA COSTATUM	D84	.068
MFF04	F23P	06-24-92	12:12	1.7	THALASSIONEMA NITZSCHOIDES	D91	.006
MFF04	F23P	06-24-92	12:12	1.7	DINOPHYSIS NORVEGICA	F14	.011
MFF04	F23P	06-24-92	12:12	1.7	DINOPHYSIS OVUM	F15	.006
MFF04	F23P	06-24-92	12:12	1.7	GYRODINIUM SPIRALE	F23	.006
MFF04	F23P	06-24-92	12:12	1.7	HETEROCAPSA TRIQUETRA	F26	.187
MFF04	F23P	06-24-92	12:12	1.7	PROTOPERIDINIUM BIPES	F35	.006
MFF04	F23P	06-24-92	12:12	1.7	PROTOPERIDINIUM PELLUCIDUM	F43	.006
MFF04	F23P	06-24-92	12:12	1.7	UNID. NAKED DINOFLAGELLATE	F50	.011

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	F23P	06-24-92	12:12	1.7	CRYPTOMONADS	O1	.385
MFF04	F23P	06-24-92	12:12	1.7	EUTREPTIA SPP.	O12	.023
MFF04	F23P	06-24-92	12:12	1.7	SCENEDESMUS SPP.	O13	.006
MFF04	F23P	06-24-92	12:12	1.7	CYANOPHYCEAE	O2	.062
MFF04	F23P	06-24-92	12:12	1.7	EBRIA TRIPARTITIA	O5	.011
MFF04	F23P	06-24-92	12:12	1.7	MICROFLAGELLATES	U1	1.154
MFF04	F23P	06-24-92	12:09	10.56	CERATAULINA PELAGICA	D10	.026
MFF04	F23P	06-24-92	12:09	10.56	UNID. PENNALES	D101	.015
MFF04	F23P	06-24-92	12:09	10.56	CHAETOCEROS COMPRESSUS	D13	.015
MFF04	F23P	06-24-92	12:09	10.56	CHAETOCEROS SOCIALIS	D27	.051
MFF04	F23P	06-24-92	12:09	10.56	CHAETOCEROS SPP.(<10UM)	D30	.077
MFF04	F23P	06-24-92	12:09	10.56	LEPTOCYLINDRUS DANICUS	D52	.01
MFF04	F23P	06-24-92	12:09	10.56	NAVICULOID DIATOMS	D59	.01
MFF04	F23P	06-24-92	12:09	10.56	NITZSCHIA LONGISSIMA	D63	.036
MFF04	F23P	06-24-92	12:09	10.56	NITZSCHIA SPP.	D67	.051
MFF04	F23P	06-24-92	12:09	10.56	RHIZOSELENIA DELICATULA	D76	.015
MFF04	F23P	06-24-92	12:09	10.56	SKELETONEMA COSTATUM	D84	.143
MFF04	F23P	06-24-92	12:09	10.56	DINOPHYSIS NORVEGICA	F14	.005
MFF04	F23P	06-24-92	12:09	10.56	GYRODINIUM SPIRALE	F23	.01
MFF04	F23P	06-24-92	12:09	10.56	HETEROCAPSA TRIQUETRA	F26	.082
MFF04	F23P	06-24-92	12:09	10.56	UNID. NAKED DINOFLAGELLATE	F50	.015
MFF04	F23P	06-24-92	12:09	10.56	GYMNODINIUM SPP.	F56	.005
MFF04	F23P	06-24-92	12:09	10.56	CRYPTOMONADS	O1	.409
MFF04	F23P	06-24-92	12:09	10.56	EUTREPTIA SPP.	O12	.005
MFF04	F23P	06-24-92	12:09	10.56	EBRIA TRIPARTITIA	O5	.015
MFF04	F23P	06-24-92	12:09	10.56	MICROFLAGELLATES	U1	1.103
MFF04	N01P	06-24-92	07:19	2.17	CERATAULINA PELAGICA	D10	.147
MFF04	N01P	06-24-92	07:19	2.17	UNID. PENNALES	D101	.004
MFF04	N01P	06-24-92	07:19	2.17	CHAETOCEROS SEPTENTRIONALIS	D102	.004
MFF04	N01P	06-24-92	07:19	2.17	STEPHANOPYXIS SPP.	D103	.004
MFF04	N01P	06-24-92	07:19	2.17	NITZSCHIA (CF) DELICATISSIMA	D104	.13
MFF04	N01P	06-24-92	07:19	2.17	CHAETOCEROS COMPRESSUS	D13	.025
MFF04	N01P	06-24-92	07:19	2.17	CHAETOCEROS SOCIALIS	D27	.26
MFF04	N01P	06-24-92	07:19	2.17	CHAETOCEROS SPP.(<10UM)	D30	.151
MFF04	N01P	06-24-92	07:19	2.17	CYLINDROTHECA CLOSTERIUM	D42	.004
MFF04	N01P	06-24-92	07:19	2.17	LEPTOCYLINDRUS DANICUS	D52	.059
MFF04	N01P	06-24-92	07:19	2.17	LEPTOCYLINDRUS MINIMUS	D53	.055
MFF04	N01P	06-24-92	07:19	2.17	NAVICULOID DIATOMS	D59	.004
MFF04	N01P	06-24-92	07:19	2.17	NITZSCHIA LONGISSIMA	D63	.05
MFF04	N01P	06-24-92	07:19	2.17	NITZSCHIA SPP.	D67	.096
MFF04	N01P	06-24-92	07:19	2.17	RHIZOSELENIA DELICATULA	D76	.126
MFF04	N01P	06-24-92	07:19	2.17	SKELETONEMA COSTATUM	D84	.113
MFF04	N01P	06-24-92	07:19	2.17	THALASSIOSIRA GRAVIDA	D92	.008
MFF04	N01P	06-24-92	07:19	2.17	GYRODINIUM SPIRALE	F23	.004
MFF04	N01P	06-24-92	07:19	2.17	HETEROCAPSA TRIQUETRA	F26	.105
MFF04	N01P	06-24-92	07:19	2.17	UNID. NAKED DINOFLAGELLATE	F50	.021
MFF04	N01P	06-24-92	07:19	2.17	CRYPTOMONADS	O1	.096
MFF04	N01P	06-24-92	07:19	2.17	EUTREPTIA SPP.	O12	.004
MFF04	N01P	06-24-92	07:19	2.17	EBRIA TRIPARTITIA	O5	.004
MFF04	N01P	06-24-92	07:19	2.17	MICROFLAGELLATES	U1	.214
MFF04	N01P	06-24-92	07:15	18.32	CERATAULINA PELAGICA	D10	.004
MFF04	N01P	06-24-92	07:15	18.32	CHAETOCEROS SEPTENTRIONALIS	D102	.008
MFF04	N01P	06-24-92	07:15	18.32	NITZSCHIA (CF) DELICATISSIMA	D104	.034
MFF04	N01P	06-24-92	07:15	18.32	CHAETOCEROS COMPRESSUS	D13	.042
MFF04	N01P	06-24-92	07:15	18.32	CHAETOCEROS DEBILIS	D18	.076
MFF04	N01P	06-24-92	07:15	18.32	CHAETOCEROS SOCIALIS	D27	.386
MFF04	N01P	06-24-92	07:15	18.32	CHAETOCEROS SPORE	D28	.011
MFF04	N01P	06-24-92	07:15	18.32	CHAETOCEROS SPP.(<10UM)	D30	.734
MFF04	N01P	06-24-92	07:15	18.32	CHAETOCEROS SPP.(>10UM)	D31	.019
MFF04	N01P	06-24-92	07:15	18.32	NITZSCHIA LONGISSIMA	D63	.023
MFF04	N01P	06-24-92	07:15	18.32	NITZSCHIA SPP.	D67	.004
MFF04	N01P	06-24-92	07:15	18.32	SKELETONEMA COSTATUM	D84	.034
MFF04	N01P	06-24-92	07:15	18.32	STEPHANOPYXIS TURRIS	D86	.008

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	NO1P	06-24-92	07:15	18.32	GYRODINIUM SPIRALE	F23	.004
MFF04	NO1P	06-24-92	07:15	18.32	CERATIUM LONGIPES	F51	.015
MFF04	NO1P	06-24-92	07:15	18.32	CRYPTOMONADS	O1	.053
MFF04	NO1P	06-24-92	07:15	18.32	MICROFLAGELLATES	U1	.14
MFF04	NO4P	06-24-92	08:20	1.84	CERATAULINA PELAGICA	D10	.012
MFF04	NO4P	06-24-92	08:20	1.84	UNID. CENTRALES	D100	.002
MFF04	NO4P	06-24-92	08:20	1.84	UNID. PENNALES	D101	.002
MFF04	NO4P	06-24-92	08:20	1.84	CHAETOCEROS COMPRESSUS	D13	.024
MFF04	NO4P	06-24-92	08:20	1.84	CHAETOCEROS SOCIALIS	D27	.045
MFF04	NO4P	06-24-92	08:20	1.84	CHAETOCEROS SPP.(>10UM)	D31	.005
MFF04	NO4P	06-24-92	08:20	1.84	COSCIINODISCUS SPP.	D40	.002
MFF04	NO4P	06-24-92	08:20	1.84	NITZSCHIA LONGISSIMA	D63	.002
MFF04	NO4P	06-24-92	08:20	1.84	RHIZOSELENIA ALATA	D74	.003
MFF04	NO4P	06-24-92	08:20	1.84	GYRODINIUM SPP.	F24	.005
MFF04	NO4P	06-24-92	08:20	1.84	UNID. NAKED DINOFLAGELLATE	F50	.005
MFF04	NO4P	06-24-92	08:20	1.84	CERATIUM LONGIPES	F51	.003
MFF04	NO4P	06-24-92	08:20	1.84	CERATIUM FUSUS	F6	.002
MFF04	NO4P	06-24-92	08:20	1.84	CERATIUM TRIPOS	F9	.003
MFF04	NO4P	06-24-92	08:20	1.84	CRYPTOMONADS	O1	.107
MFF04	NO4P	06-24-92	08:20	1.84	MICROFLAGELLATES	U1	.137
MFF04	NO4P	06-24-92	08:17	15.02	UNID. CENTRALES	D100	.002
MFF04	NO4P	06-24-92	08:17	15.02	CHAETOCEROS COMPRESSUS	D13	.159
MFF04	NO4P	06-24-92	08:17	15.02	CHAETOCEROS SPP.(<10UM)	D30	.017
MFF04	NO4P	06-24-92	08:17	15.02	CHAETOCEROS SPP.(>10UM)	D31	.015
MFF04	NO4P	06-24-92	08:17	15.02	NITZSCHIA SPP.	D67	.011
MFF04	NO4P	06-24-92	08:17	15.02	DINOPHYSIS NORVEGICA	F14	.002
MFF04	NO4P	06-24-92	08:17	15.02	GYRODINIUM SPP.	F24	.002
MFF04	NO4P	06-24-92	08:17	15.02	PROTOPERIDINIUM DEPRESSUM	F39	.002
MFF04	NO4P	06-24-92	08:17	15.02	CERATIUM FURCA	F5	.002
MFF04	NO4P	06-24-92	08:17	15.02	UNID. NAKED DINOFLAGELLATE	F50	.009
MFF04	NO4P	06-24-92	08:17	15.02	CERATIUM LONGIPES	F51	.009
MFF04	NO4P	06-24-92	08:17	15.02	CERATIUM FUSUS	F6	.002
MFF04	NO4P	06-24-92	08:17	15.02	CRYPTOMONADS	O1	.081
MFF04	NO4P	06-24-92	08:17	15.02	EBRIA TRIPARTITA	O5	.002
MFF04	NO4P	06-24-92	08:17	15.02	MICROFLAGELLATES	U1	.197
MFF04	NO7P	06-23-92	11:11	2.24	CERATAULINA PELAGICA	D10	.083
MFF04	NO7P	06-23-92	11:11	2.24	UNID. CENTRALES	D100	.002
MFF04	NO7P	06-23-92	11:11	2.24	UNID. PENNALES	D101	.004
MFF04	NO7P	06-23-92	11:11	2.24	CHAETOCEROS SEPTENTRIONALIS	D102	.004
MFF04	NO7P	06-23-92	11:11	2.24	NITZSCHIA (CF) DELICATISSIMA	D104	.024
MFF04	NO7P	06-23-92	11:11	2.24	CHAETOCEROS COMPRESSUS	D13	.006
MFF04	NO7P	06-23-92	11:11	2.24	CHAETOCEROS SOCIALIS	D27	.032
MFF04	NO7P	06-23-92	11:11	2.24	CHAETOCEROS SPP.(<10UM)	D30	.018
MFF04	NO7P	06-23-92	11:11	2.24	CHAETOCEROS SPP.(>10UM)	D31	.008
MFF04	NO7P	06-23-92	11:11	2.24	COCONEIS SCUTELLUM	D32	.002
MFF04	NO7P	06-23-92	11:11	2.24	CYLINDROTHECA CLOSTERIUM	D42	.006
MFF04	NO7P	06-23-92	11:11	2.24	LEPTOCYLINDRUS DANICUS	D52	.012
MFF04	NO7P	06-23-92	11:11	2.24	LEPTOCYLINDRUS MINIMUS	D53	.006
MFF04	NO7P	06-23-92	11:11	2.24	NAVICULOID DIATOMS	D59	.002
MFF04	NO7P	06-23-92	11:11	2.24	NITZSCHIA LONGISSIMA	D63	.012
MFF04	NO7P	06-23-92	11:11	2.24	RHIZOSELENIA DELICATULA	D76	.065
MFF04	NO7P	06-23-92	11:11	2.24	SKELETONEMA COSTATUM	D84	.014
MFF04	NO7P	06-23-92	11:11	2.24	DINOPHYSIS ACUMINATA	F10	.002
MFF04	NO7P	06-23-92	11:11	2.24	DINOPHYSIS NORVEGICA	F14	.006
MFF04	NO7P	06-23-92	11:11	2.24	GYRODINIUM SPIRALE	F23	.012
MFF04	NO7P	06-23-92	11:11	2.24	HETEROCAPSA TRIQUETRA	F26	.014
MFF04	NO7P	06-23-92	11:11	2.24	PROROCENTRUM MICANS	F31	.002
MFF04	NO7P	06-23-92	11:11	2.24	UNID. DINOFLAGELLATES	F49	.01
MFF04	NO7P	06-23-92	11:11	2.24	CERATIUM LONGIPES	F51	.008
MFF04	NO7P	06-23-92	11:11	2.24	CERATIUM FUSUS	F6	.002
MFF04	NO7P	06-23-92	11:11	2.24	CERATIUM TRIPOS	F9	.002
MFF04	NO7P	06-23-92	11:11	2.24	CRYPTOMONADS	O1	.071
MFF04	NO7P	06-23-92	11:11	2.24	EUTREPTIA SPP.	O12	.002

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	N07P	06-23-92	11:11	2.24	CYANOPHYCEAE	O2	.05
MFF04	N07P	06-23-92	11:11	2.24	EBRIA TRIPARTITIA	O5	.004
MFF04	N07P	06-23-92	11:11	2.24	MICROFLAGELLATES	U1	.2
MFF04	N07P	06-23-92	11:08	13.65	CERATAULINA PELAGICA	D10	.002
MFF04	N07P	06-23-92	11:08	13.65	NITZSCHIA (CF) DELICATISSIMA	D104	.024
MFF04	N07P	06-23-92	11:08	13.65	CHAETOCEROS DEBILIS	D18	.004
MFF04	N07P	06-23-92	11:08	13.65	CHAETOCEROS SPP.(<10UM)	D30	.026
MFF04	N07P	06-23-92	11:08	13.65	NAVICULOID DIATOMS	D59	.002
MFF04	N07P	06-23-92	11:08	13.65	NITZSCHIA LONGISSIMA	D63	.006
MFF04	N07P	06-23-92	11:08	13.65	SKELETONEMA COSTATUM	D84	.099
MFF04	N07P	06-23-92	11:08	13.65	DINOPHYSIS ACUMINATA	F10	.002
MFF04	N07P	06-23-92	11:08	13.65	GYRODINIUM SPIRALE	F23	.002
MFF04	N07P	06-23-92	11:08	13.65	PROTOPIRIDINIUM PELLUCIDUM	F43	.002
MFF04	N07P	06-23-92	11:08	13.65	UNID. NAKED DINOFLAGELLATE	F50	.009
MFF04	N07P	06-23-92	11:08	13.65	CRYPTOMONADS	O1	.026
MFF04	N07P	06-23-92	11:08	13.65	CYANOPHYCEAE	O2	.006
MFF04	N07P	06-23-92	11:08	13.65	MICROFLAGELLATES	U1	.277
MFF04	N10P	06-23-92	12:10	1.33	CERATAULINA PELAGICA	D10	.091
MFF04	N10P	06-23-92	12:10	1.33	UNID. CENTRALES	D100	.021
MFF04	N10P	06-23-92	12:10	1.33	NITZSCHIA (CF) DELICATISSIMA	D104	.086
MFF04	N10P	06-23-92	12:10	1.33	CHAETOCEROS DEBILIS	D18	.016
MFF04	N10P	06-23-92	12:10	1.33	CHAETOCEROS SOCIALIS	D27	.011
MFF04	N10P	06-23-92	12:10	1.33	CHAETOCEROS SPP.(<10UM)	D30	.187
MFF04	N10P	06-23-92	12:10	1.33	CHAETOCEROS SPP.(>10UM)	D31	.021
MFF04	N10P	06-23-92	12:10	1.33	COCCONEIS SCUTELLUM	D32	.005
MFF04	N10P	06-23-92	12:10	1.33	CYLINDROTHECA CLOSTERIUM	D42	.005
MFF04	N10P	06-23-92	12:10	1.33	LEPTOCYLINDRUS DANICUS	D52	.032
MFF04	N10P	06-23-92	12:10	1.33	LEPTOCYLINDRUS MINIMUS	D53	.021
MFF04	N10P	06-23-92	12:10	1.33	NITZSCHIA LONGISSIMA	D63	.064
MFF04	N10P	06-23-92	12:10	1.33	NITZSCHIA SPP.	D67	.091
MFF04	N10P	06-23-92	12:10	1.33	RHIZOSELENIA DELICATULA	D76	.011
MFF04	N10P	06-23-92	12:10	1.33	SKELETONEMA COSTATUM	D84	.299
MFF04	N10P	06-23-92	12:10	1.33	THALASSIOSIRA SPP.	D95	.005
MFF04	N10P	06-23-92	12:10	1.33	GLENODINIUM ROTUNDUM	F16	.005
MFF04	N10P	06-23-92	12:10	1.33	GYRODINIUM SPIRALE	F23	.011
MFF04	N10P	06-23-92	12:10	1.33	HETEROCAPSA TRIQUETRA	F26	.096
MFF04	N10P	06-23-92	12:10	1.33	PROTOPIRIDINIUM BIPES	F35	.005
MFF04	N10P	06-23-92	12:10	1.33	PROTOPIRIDINIUM PELLUCIDUM	F43	.005
MFF04	N10P	06-23-92	12:10	1.33	UNID. DINOFLAGELLATES	F49	.005
MFF04	N10P	06-23-92	12:10	1.33	UNID. NAKED DINOFLAGELLATE	F50	.005
MFF04	N10P	06-23-92	12:10	1.33	CRYPTOMONADS	O1	.235
MFF04	N10P	06-23-92	12:10	1.33	EUTREPTIA SPP.	O12	.005
MFF04	N10P	06-23-92	12:10	1.33	MICROFLAGELLATES	U1	.834
MFF04	N10P	06-23-92	12:06	8.83	CERATAULINA PELAGICA	D10	.06
MFF04	N10P	06-23-92	12:06	8.83	UNID. CENTRALES	D100	.027
MFF04	N10P	06-23-92	12:06	8.83	CHAETOCEROS SEPTENTRIONALIS	D102	.016
MFF04	N10P	06-23-92	12:06	8.83	NITZSCHIA (CF) DELICATISSIMA	D104	.131
MFF04	N10P	06-23-92	12:06	8.83	CHAETOCEROS COMPRESSUS	D13	.038
MFF04	N10P	06-23-92	12:06	8.83	CHAETOCEROS DEBILIS	D18	.011
MFF04	N10P	06-23-92	12:06	8.83	CHAETOCEROS SOCIALIS	D27	.027
MFF04	N10P	06-23-92	12:06	8.83	CHAETOCEROS SPP.(<10UM)	D30	.12
MFF04	N10P	06-23-92	12:06	8.83	CHAETOCEROS SPP.(>10UM)	D31	.06
MFF04	N10P	06-23-92	12:06	8.83	CYLINDROTHECA CLOSTERIUM	D42	.027
MFF04	N10P	06-23-92	12:06	8.83	LEPTOCYLINDRUS DANICUS	D52	.011
MFF04	N10P	06-23-92	12:06	8.83	NAVICULOID DIATOMS	D59	.005
MFF04	N10P	06-23-92	12:06	8.83	ASTERIONELLOPSIS GLACIALIS	D6	.016
MFF04	N10P	06-23-92	12:06	8.83	NITZSCHIA LONGISSIMA	D63	.038
MFF04	N10P	06-23-92	12:06	8.83	NITZSCHIA SPP.	D67	.033
MFF04	N10P	06-23-92	12:06	8.83	RHIZOSELENIA DELICATULA	D76	.054
MFF04	N10P	06-23-92	12:06	8.83	SKELETONEMA COSTATUM	D84	.332
MFF04	N10P	06-23-92	12:06	8.83	STEPHANOPYXIS TURRIS	D86	.005
MFF04	N10P	06-23-92	12:06	8.83	THALASSIOSIRA SPP.	D95	.022
MFF04	N10P	06-23-92	12:06	8.83	DINOPHYSIS ACUMINATA	F10	.011

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	N10P	06-23-92	12:06	8.83	DINOPHYSIS NORVEGICA	F14	.016
MFF04	N10P	06-23-92	12:06	8.83	GYRODINIUM SPIRALE	F23	.027
MFF04	N10P	06-23-92	12:06	8.83	HETEROCAPSA TRIQUETRA	F26	.092
MFF04	N10P	06-23-92	12:06	8.83	PROROCENTRUM MICANS	F31	.005
MFF04	N10P	06-23-92	12:06	8.83	AMPHIDINIUM SPP.	F4	.005
MFF04	N10P	06-23-92	12:06	8.83	PROTOPERIDINIUM PELLUCIDUM	F43	.005
MFF04	N10P	06-23-92	12:06	8.83	UNID. NAKED DINOFLAGELLATE	F50	.011
MFF04	N10P	06-23-92	12:06	8.83	CERATIUM LONGIPES	F51	.016
MFF04	N10P	06-23-92	12:06	8.83	CRYPTOMONADS	O1	.228
MFF04	N10P	06-23-92	12:06	8.83	MICROFLAGELLATES	U1	.811
MFF04	N16P	06-24-92	09:00	1.96	CERATAULINA PELAGICA	D10	.423
MFF04	N16P	06-24-92	09:00	1.96	UNID. CENTRALES	D100	.005
MFF04	N16P	06-24-92	09:00	1.96	CHAETOCEROS COMPRESSUS	D13	.113
MFF04	N16P	06-24-92	09:00	1.96	CHAETOCEROS DEBILIS	D18	.144
MFF04	N16P	06-24-92	09:00	1.96	CHAETOCEROS SOCIALIS	D27	.072
MFF04	N16P	06-24-92	09:00	1.96	CHAETOCEROS SPP. (<10UM)	D30	.261
MFF04	N16P	06-24-92	09:00	1.96	LEPTOCYLINDRUS DANICUS	D52	.09
MFF04	N16P	06-24-92	09:00	1.96	NITZSCHIA LONGISSIMA	D63	.005
MFF04	N16P	06-24-92	09:00	1.96	NITZSCHIA SPP.	D67	.027
MFF04	N16P	06-24-92	09:00	1.96	RHIZOSELENIA ALATA	D74	.005
MFF04	N16P	06-24-92	09:00	1.96	RHIZOSELENIA DELICATULA	D76	.113
MFF04	N16P	06-24-92	09:00	1.96	RHIZOSELENIA FRAGILISSIMA	D77	.005
MFF04	N16P	06-24-92	09:00	1.96	SKELETONEMA COSTATUM	D84	.315
MFF04	N16P	06-24-92	09:00	1.96	GYRODINIUM SPIRALE	F23	.005
MFF04	N16P	06-24-92	09:00	1.96	HETEROCAPSA TRIQUETRA	F26	.041
MFF04	N16P	06-24-92	09:00	1.96	PROROCENTRUM MINIMUM	F32	.005
MFF04	N16P	06-24-92	09:00	1.96	PROTOPERIDINIUM SPP.	F45	.005
MFF04	N16P	06-24-92	09:00	1.96	UNID. NAKED DINOFLAGELLATE	F50	.018
MFF04	N16P	06-24-92	09:00	1.96	SCRIPPSIELLA TROCHOIDEA	F58	.005
MFF04	N16P	06-24-92	09:00	1.96	CRYPTOMONADS	O1	.063
MFF04	N16P	06-24-92	09:00	1.96	MICROFLAGELLATES	U1	.198
MFF04	N16P	06-24-92	09:57	14.45	UNID. CENTRALES	D100	.004
MFF04	N16P	06-24-92	09:57	14.45	UNID. PENNALES	D101	.002
MFF04	N16P	06-24-92	09:57	14.45	CHAETOCEROS SEPTENTRIONALIS	D102	.004
MFF04	N16P	06-24-92	09:57	14.45	CHAETOCEROS COMPRESSUS	D13	.218
MFF04	N16P	06-24-92	09:57	14.45	CHAETOCEROS DEBILIS	D18	.114
MFF04	N16P	06-24-92	09:57	14.45	CHAETOCEROS SOCIALIS	D27	.054
MFF04	N16P	06-24-92	09:57	14.45	CHAETOCEROS SPP. (<10UM)	D30	.101
MFF04	N16P	06-24-92	09:57	14.45	CHAETOCEROS SPP. (>10UM)	D31	.039
MFF04	N16P	06-24-92	09:57	14.45	LEPTOCYLINDRUS DANICUS	D52	.013
MFF04	N16P	06-24-92	09:57	14.45	NITZSCHIA LONGISSIMA	D63	.013
MFF04	N16P	06-24-92	09:57	14.45	NITZSCHIA SPP.	D67	.047
MFF04	N16P	06-24-92	09:57	14.45	RHIZOSELENIA ALATA	D74	.002
MFF04	N16P	06-24-92	09:57	14.45	RHIZOSELENIA DELICATULA	D76	.011
MFF04	N16P	06-24-92	09:57	14.45	SKELETONEMA COSTATUM	D84	.019
MFF04	N16P	06-24-92	09:57	14.45	DINOPHYSIS NORVEGICA	F14	.009
MFF04	N16P	06-24-92	09:57	14.45	GYRODINIUM SPIRALE	F23	.004
MFF04	N16P	06-24-92	09:57	14.45	HETEROCAPSA TRIQUETRA	F26	.002
MFF04	N16P	06-24-92	09:57	14.45	PROTOPERIDINIUM PELLUCIDUM	F43	.002
MFF04	N16P	06-24-92	09:57	14.45	UNID. DINOFLAGELLATES	F49	.002
MFF04	N16P	06-24-92	09:57	14.45	CERATIUM LONGIPES	F51	.017
MFF04	N16P	06-24-92	09:57	14.45	CRYPTOMONADS	O1	.067
MFF04	N16P	06-24-92	09:57	14.45	CYANOPHYCEAE	O2	.013
MFF04	N16P	06-24-92	09:57	14.45	EBRIA TRIPARTITIA	O5	.002
MFF04	N16P	06-24-92	09:57	14.45	MICROFLAGELLATES	U1	.106
MFF04	N20P	06-24-92	09:44	1.46	CERATAULINA PELAGICA	D10	.243
MFF04	N20P	06-24-92	09:44	1.46	UNID. PENNALES	D101	.002
MFF04	N20P	06-24-92	09:44	1.46	CHAETOCEROS COMPRESSUS	D13	.005
MFF04	N20P	06-24-92	09:44	1.46	CHAETOCEROS DEBILIS	D18	.015
MFF04	N20P	06-24-92	09:44	1.46	CHAETOCEROS SOCIALIS	D27	.081
MFF04	N20P	06-24-92	09:44	1.46	CHAETOCEROS SPP. (<10UM)	D30	.098
MFF04	N20P	06-24-92	09:44	1.46	LEPTOCYLINDRUS DANICUS	D52	.076
MFF04	N20P	06-24-92	09:44	1.46	NITZSCHIA LONGISSIMA	D63	.02

TABLE F-1. (continued)

Event	Station	Date	Time (EST)	Depth (M)	Taxon	Code	Millions of Cells Per Liter
MFF04	N20P	06-24-92	09:44	1.46	NITZSCHIA SPP.	D67	.051
MFF04	N20P	06-24-92	09:44	1.46	RHIZOSELENIA ALATA	D74	.002
MFF04	N20P	06-24-92	09:44	1.46	RHIZOSELENIA DELICATULA	D76	.105
MFF04	N20P	06-24-92	09:44	1.46	SKELETONEMA COSTATUM	D84	.054
MFF04	N20P	06-24-92	09:44	1.46	THALASSIOSIRA SPP.	D95	.005
MFF04	N20P	06-24-92	09:44	1.46	GYRODINIUM SPIRALE	F23	.005
MFF04	N20P	06-24-92	09:44	1.46	HETEROCAPSA TRIQUETRA	F26	.081
MFF04	N20P	06-24-92	09:44	1.46	PROTOPERIDINIUM BIPES	F35	.002
MFF04	N20P	06-24-92	09:44	1.46	PROTOPERIDINIUM DEPRESSUM	F39	.002
MFF04	N20P	06-24-92	09:44	1.46	AMPHIDINIUM SPP.	F4	.005
MFF04	N20P	06-24-92	09:44	1.46	UNID. DINOFLAGELLATES	F49	.002
MFF04	N20P	06-24-92	09:44	1.46	UNID. NAKED DINOFLAGELLATE	F50	.002
MFF04	N20P	06-24-92	09:44	1.46	CERATIUM LONGIPES	F51	.002
MFF04	N20P	06-24-92	09:44	1.46	SCRIPPSIELLA TROCHOIDEA	F58	.002
MFF04	N20P	06-24-92	09:44	1.46	CRYPTOMONADS	O1	.064
MFF04	N20P	06-24-92	09:44	1.46	MICROFLAGELLATES	U1	.091
MFF04	N20P	06-24-92	09:39	12.4	CERATAULINA PELAGICA	D10	.01
MFF04	N20P	06-24-92	09:39	12.4	UNID. CENTRALES	D100	.016
MFF04	N20P	06-24-92	09:39	12.4	UNID. PENNALES	D101	.003
MFF04	N20P	06-24-92	09:39	12.4	CHAETOCEROS SEPTENTRIONALIS	D102	.016
MFF04	N20P	06-24-92	09:39	12.4	CHAETOCEROS COMPRESSUS	D13	.071
MFF04	N20P	06-24-92	09:39	12.4	CHAETOCEROS DEBILIS	D18	.065
MFF04	N20P	06-24-92	09:39	12.4	CHAETOCEROS DECIPIENS	D19	.006
MFF04	N20P	06-24-92	09:39	12.4	CHAETOCEROS SOCIALIS	D27	.139
MFF04	N20P	06-24-92	09:39	12.4	CHAETOCEROS SPP.(<10UM)	D30	.346
MFF04	N20P	06-24-92	09:39	12.4	CHAETOCEROS SPP.(>10UM)	D31	.029
MFF04	N20P	06-24-92	09:39	12.4	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF04	N20P	06-24-92	09:39	12.4	LEPTOCYLINDRUS DANICUS	D52	.029
MFF04	N20P	06-24-92	09:39	12.4	ASTERIONELLOPSIS GLACIALIS	D6	.003
MFF04	N20P	06-24-92	09:39	12.4	NITZSCHIA LONGISSIMA	D63	.068
MFF04	N20P	06-24-92	09:39	12.4	NITZSCHIA SPP.	D67	.074
MFF04	N20P	06-24-92	09:39	12.4	RHIZOSELENIA DELICATULA	D76	.006
MFF04	N20P	06-24-92	09:39	12.4	SKELETONEMA COSTATUM	D84	.074
MFF04	N20P	06-24-92	09:39	12.4	THALASSIOSIRA SPP.	D95	.029
MFF04	N20P	06-24-92	09:39	12.4	DINOPHYSIS NORVEGICA	F14	.003
MFF04	N20P	06-24-92	09:39	12.4	GYRODINIUM SPIRALE	F23	.003
MFF04	N20P	06-24-92	09:39	12.4	HETEROCAPSA TRIQUETRA	F26	.013
MFF04	N20P	06-24-92	09:39	12.4	PROTOPERIDINIUM SPP.	F45	.003
MFF04	N20P	06-24-92	09:39	12.4	UNID. DINOFLAGELLATES	F49	.003
MFF04	N20P	06-24-92	09:39	12.4	CERATIUM LONGIPES	F51	.016
MFF04	N20P	06-24-92	09:39	12.4	CRYPTOMONADS	O1	.078
MFF04	N20P	06-24-92	09:39	12.4	DISTEPHANUS SPECULUM	O4	.006
MFF04	N20P	06-24-92	09:39	12.4	MICROFLAGELLATES	U1	.185

**APPENDIX G**

**ZOOPLANKTON SPECIES DATA TABLES**

Data are for combined farfield and nearfield surveys made during early April (MFF03) and June (MFF04 1992).

TABLE G-1. ZOOPLANKTON SPECIES DATA TABLES FOR EARLY APRIL AND JUNE

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF03	F01P	04-07-92	0825	ACARTIA HUDSONICA	F	36
MFF03	F01P	04-07-92	0825	ACARTIA HUDSONICA	M	36
MFF03	F01P	04-07-92	0825	BARNACLE NAUPLII	N	579
MFF03	F01P	04-07-92	0825	CALANUS FINMARCHICUS	F	36
MFF03	F01P	04-07-92	0825	CALANUS FINMARCHICUS	C	398
MFF03	F01P	04-07-92	0825	CENTROPAGES TYPICUS	F	18
MFF03	F01P	04-07-92	0825	CENTROPAGES TYPICUS	M	18
MFF03	F01P	04-07-92	0825	COPEPOD NAUPLII	N	2314
MFF03	F01P	04-07-92	0825	EUCONCHOEICA SP.		398
MFF03	F01P	04-07-92	0825	EVADNE NORDMANI		36
MFF03	F01P	04-07-92	0825	MEDUSA		18
MFF03	F01P	04-07-92	0825	METRIDIA LUCENS	C	18
MFF03	F01P	04-07-92	0825	OIKIOPLEURA DIOICA		72
MFF03	F01P	04-07-92	0825	OITHONA ATLANTICA	F	18
MFF03	F01P	04-07-92	0825	OITHONA SIMILIS	F	633
MFF03	F01P	04-07-92	0825	OITHONA SIMILIS	M	199
MFF03	F01P	04-07-92	0825	OITHONA SIMILIS	C	1049
MFF03	F01P	04-07-92	0825	PARACALANUS PARVUS	F	163
MFF03	F01P	04-07-92	0825	PARACALANUS PARVUS	M	127
MFF03	F01P	04-07-92	0825	PARACALANUS PARVUS	C	633
MFF03	F01P	04-07-92	0825	POLYCHAETE LARVAE		72
MFF03	F01P	04-07-92	0825	POLYCHAETE TROCHOPHORES		36
MFF03	F01P	04-07-92	0825	PSEUDOCALANUS NEWMANI	F	597
MFF03	F01P	04-07-92	0825	PSEUDOCALANUS NEWMANI	C	127
MFF03	F01P	04-07-92	0825	PSEUDOCALANUS NEWMANI	M	36
MFF03	F01P	04-07-92	0825	PTEROPOD		36
MFF03	F01P	04-07-92	0825	SAPHIRELLA SP.		18
MFF03	F01P	04-07-92	0825	TEMORA LONGICORNIS	F	72
MFF03	F01P	04-07-92	0825	TEMORA LONGICORNIS	M	90
MFF03	F01P	04-07-92	0825	TEMORA LONGICORNIS	C	54
MFF03	F01P	04-07-92	0825	TOTAL ZOOPLANKTON		7937
MFF03	F02P	04-07-92	0955	ACARTIA HUDSONICA	M	37
MFF03	F02P	04-07-92	0955	ACARTIA HUDSONICA	C	37
MFF03	F02P	04-07-92	0955	BARNACLE NAUPLII	N	316
MFF03	F02P	04-07-92	0955	CALANUS FINMARCHICUS	F	56
MFF03	F02P	04-07-92	0955	CALANUS FINMARCHICUS	C	56
MFF03	F02P	04-07-92	0955	CENTROPAGES TYPICUS	F	19
MFF03	F02P	04-07-92	0955	CENTROPAGES TYPICUS	M	37
MFF03	F02P	04-07-92	0955	COPEPOD NAUPLII	N	1209
MFF03	F02P	04-07-92	0955	EUCONCHOEICA SP.		688
MFF03	F02P	04-07-92	0955	EVADNE NORDMANI		19
MFF03	F02P	04-07-92	0955	MEDUSA		19
MFF03	F02P	04-07-92	0955	METRIDIA LUCENS	M	74
MFF03	F02P	04-07-92	0955	METRIDIA LUCENS	C	19
MFF03	F02P	04-07-92	0955	OIKIOPLEURA DIOICA		19
MFF03	F02P	04-07-92	0955	OITHONA ATLANTICA	F	19
MFF03	F02P	04-07-92	0955	OITHONA SIMILIS	F	372
MFF03	F02P	04-07-92	0955	OITHONA SIMILIS	C	651
MFF03	F02P	04-07-92	0955	OITHONA SIMILIS	M	130
MFF03	F02P	04-07-92	0955	PARACALANUS PARVUS	F	167
MFF03	F02P	04-07-92	0955	PARACALANUS PARVUS	M	19
MFF03	F02P	04-07-92	0955	PARACALANUS PARVUS	C	1116
MFF03	F02P	04-07-92	0955	POLYCHAETE LARVAE		242
MFF03	F02P	04-07-92	0955	POLYCHAETE TROCHOPHORES		19
MFF03	F02P	04-07-92	0955	PSEUDOCALANUS NEWMANI	F	372
MFF03	F02P	04-07-92	0955	PSEUDOCALANUS NEWMANI	M	93
MFF03	F02P	04-07-92	0955	PSEUDOCALANUS NEWMANI	C	130
MFF03	F02P	04-07-92	0955	PTEROPOD		112
MFF03	F02P	04-07-92	0955	TEMORA LONGICORNIS	F	130
MFF03	F02P	04-07-92	0955	TEMORA LONGICORNIS	M	130
MFF03	F02P	04-07-92	0955	TEMORA LONGICORNIS	C	130
MFF03	F02P	04-07-92	0955	TORTANUS DISCAUDATUS	M	19
MFF03	F02P	04-07-92	0955	TOTAL ZOOPLANKTON		6456

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII

TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF03	F02P	04-07-92	1100	ACARTIA HUDSONICA	F	67
MFF03	F02P	04-07-92	1100	ACARTIA HUDSONICA	M	34
MFF03	F02P	04-07-92	1100	ACARTIA HUDSONICA	C	101
MFF03	F02P	04-07-92	1100	BARNACLE NAUPLII	N	184
MFF03	F02P	04-07-92	1100	CALANUS FINMARCHICUS	F	17
MFF03	F02P	04-07-92	1100	CALANUS FINMARCHICUS	C	67
MFF03	F02P	04-07-92	1100	CENTROPAGES HAMATUS	F	34
MFF03	F02P	04-07-92	1100	CENTROPAGES HAMATUS	M	50
MFF03	F02P	04-07-92	1100	CENTROPAGES TYPICUS	F	17
MFF03	F02P	04-07-92	1100	COPEPOD NAUPLII	N	2647
MFF03	F02P	04-07-92	1100	EUCONCHOEICA SP.		704
MFF03	F02P	04-07-92	1100	MEDUSA		34
MFF03	F02P	04-07-92	1100	METRIDIA LUCENS	F	17
MFF03	F02P	04-07-92	1100	METRIDIA LUCENS	C	50
MFF03	F02P	04-07-92	1100	MICROSETELLA NORVEGICA		17
MFF03	F02P	04-07-92	1100	OIKIOPLEURA DIOICA		17
MFF03	F02P	04-07-92	1100	OITHONA SIMILIS	F	419
MFF03	F02P	04-07-92	1100	OITHONA SIMILIS	M	50
MFF03	F02P	04-07-92	1100	OITHONA SIMILIS	C	754
MFF03	F02P	04-07-92	1100	PARACALANUS PARVUS	F	235
MFF03	F02P	04-07-92	1100	PARACALANUS PARVUS	M	34
MFF03	F02P	04-07-92	1100	PARACALANUS PARVUS	C	1357
MFF03	F02P	04-07-92	1100	POLYCHAETE LARVAE		218
MFF03	F02P	04-07-92	1100	PSEUDOCALANUS NEWMANI	F	385
MFF03	F02P	04-07-92	1100	PSEUDOCALANUS NEWMANI	M	34
MFF03	F02P	04-07-92	1100	PSEUDOCALANUS NEWMANI	C	117
MFF03	F02P	04-07-92	1100	PTEROPOD		50
MFF03	F02P	04-07-92	1100	TEMORA LONGICORNIS	F	134
MFF03	F02P	04-07-92	1100	TEMORA LONGICORNIS	C	168
MFF03	F02P	04-07-92	1100	TEMORA LONGICORNIS	M	151
MFF03	F02P	04-07-92	1100	TORTANUS DISCAUDATUS	F	17
MFF03	F02P	04-07-92	1100	TORTANUS DISCAUDATUS	C	17
MFF03	F02P	04-07-92	1100	TOTAL ZOOPLANKTON		8193
MFF03	F13P	04-08-92	0900	ACARTIA HUDSONICA	F	21
MFF03	F13P	04-08-92	0900	ACARTIA HUDSONICA	M	41
MFF03	F13P	04-08-92	0900	BARNACLE NAUPLII	N	185
MFF03	F13P	04-08-92	0900	CALANUS FINMARCHICUS	F	21
MFF03	F13P	04-08-92	0900	CALANUS FINMARCHICUS	C	759
MFF03	F13P	04-08-92	0900	COPEPOD NAUPLII	N	4862
MFF03	F13P	04-08-92	0900	CUMACEAN		62
MFF03	F13P	04-08-92	0900	EUCONCHOEICA SP.		62
MFF03	F13P	04-08-92	0900	EVADNE NORDMANI		21
MFF03	F13P	04-08-92	0900	OIKIOPLEURA DIOICA		1067
MFF03	F13P	04-08-92	0900	OITHONA ATLANTICA	F	21
MFF03	F13P	04-08-92	0900	OITHONA SIMILIS	F	677
MFF03	F13P	04-08-92	0900	OITHONA SIMILIS	C	2687
MFF03	F13P	04-08-92	0900	OITHONA SIMILIS	M	185
MFF03	F13P	04-08-92	0900	PARACALANUS PARVUS	F	82
MFF03	F13P	04-08-92	0900	PARACALANUS PARVUS	C	390
MFF03	F13P	04-08-92	0900	PARACALANUS PARVUS	M	21
MFF03	F13P	04-08-92	0900	POLYCHAETE LARVAE		21
MFF03	F13P	04-08-92	0900	PSEUDOCALANUS NEWMANI	F	62
MFF03	F13P	04-08-92	0900	PSEUDOCALANUS NEWMANI	C	21
MFF03	F13P	04-08-92	0900	PTEROPOD		103
MFF03	F13P	04-08-92	0900	SAPHIRELLA SP.		21
MFF03	F13P	04-08-92	0900	TEMORA LONGICORNIS	M	41
MFF03	F13P	04-08-92	0900	TEMORA LONGICORNIS	C	205
MFF03	F13P	04-08-92	0900	TOTAL ZOOPLANKTON		11631
MFF03	F23P	04-10-92	0621	ACARTIA HUDSONICA	F	64
MFF03	F23P	04-10-92	0621	ACARTIA HUDSONICA	M	46
MFF03	F23P	04-10-92	0621	ACARTIA HUDSONICA	C	82
MFF03	F23P	04-10-92	0621	BARNACLE NAUPLII	N	18
MFF03	F23P	04-10-92	0621	CALANUS FINMARCHICUS	F	9
MFF03	F23P	04-10-92	0621	CENTROPAGES HAMATUS	F	18

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-2

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TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF03	F23P	04-10-92	0621	CENTROPAGES HAMATUS	M	9
MFF03	F23P	04-10-92	0621	COPEPOD NAUPLII	N	210
MFF03	F23P	04-10-92	0621	EUCONCHOEICA SP.		18
MFF03	F23P	04-10-92	0621	EURYTEMORA HERDMANI	F	9
MFF03	F23P	04-10-92	0621	MEDUSA		9
MFF03	F23P	04-10-92	0621	MICROSETELLA NORVEGICA		347
MFF03	F23P	04-10-92	0621	OIKIOPLEURA DIOICA		9
MFF03	F23P	04-10-92	0621	OITHONA ATLANTICA	F	9
MFF03	F23P	04-10-92	0621	OITHONA SIMILIS	F	155
MFF03	F23P	04-10-92	0621	OITHONA SIMILIS	C	146
MFF03	F23P	04-10-92	0621	OITHONA SIMILIS	M	18
MFF03	F23P	04-10-92	0621	PARACALANUS PARVUS	F	55
MFF03	F23P	04-10-92	0621	PARACALANUS PARVUS	C	311
MFF03	F23P	04-10-92	0621	PARACALANUS PARVUS	M	27
MFF03	F23P	04-10-92	0621	PODON POLYPHEMOIDES		18
MFF03	F23P	04-10-92	0621	POLYCHAETE LARVAE		101
MFF03	F23P	04-10-92	0621	PSEUDOCALANUS NEWMANI	F	101
MFF03	F23P	04-10-92	0621	SAPHIRELLA SP.		64
MFF03	F23P	04-10-92	0621	TEMORA LONGICORNIS	M	18
MFF03	F23P	04-10-92	0621	TEMORA LONGICORNIS	C	46
MFF03	F23P	04-10-92	0621	TORTANUS DISCAUDATUS	M	9
MFF03	F23P	04-10-92	0621	TOTAL ZOOPLANKTON		1929
MFF03	N01P	04-12-92	0922	BARNACLE NAUPLII	N	231
MFF03	N01P	04-12-92	0922	CALANUS FINMARCHICUS	C	231
MFF03	N01P	04-12-92	0922	CENTROPAGES TYPICUS	F	39
MFF03	N01P	04-12-92	0922	COPEPOD NAUPLII	N	231
MFF03	N01P	04-12-92	0922	EUCONCHOEICA SP.		77
MFF03	N01P	04-12-92	0922	EVADNE NORDMANI		77
MFF03	N01P	04-12-92	0922	METRIDIA LUCENS	F	39
MFF03	N01P	04-12-92	0922	OIKIOPLEURA DIOICA		1504
MFF03	N01P	04-12-92	0922	OITHONA SIMILIS	F	308
MFF03	N01P	04-12-92	0922	OITHONA SIMILIS	M	77
MFF03	N01P	04-12-92	0922	OITHONA SIMILIS	C	308
MFF03	N01P	04-12-92	0922	PARACALANUS PARVUS	F	39
MFF03	N01P	04-12-92	0922	PARACALANUS PARVUS	C	193
MFF03	N01P	04-12-92	0922	PSEUDOCALANUS NEWMANI	F	193
MFF03	N01P	04-12-92	0922	PSEUDOCALANUS NEWMANI	C	154
MFF03	N01P	04-12-92	0922	PTEROPOD		39
MFF03	N01P	04-12-92	0922	SAPHIRELLA SP.		39
MFF03	N01P	04-12-92	0922	TEMORA LONGICORNIS	C	116
MFF03	N01P	04-12-92	0922	TORTANUS DISCAUDATUS	F	39
MFF03	N01P	04-12-92	0922	TOTAL ZOOPLANKTON		3933
MFF03	N04P	04-10-92	1103	BARNACLE NAUPLII	N	17
MFF03	N04P	04-10-92	1103	BIVALVE VELIGER		17
MFF03	N04P	04-10-92	1103	CALANUS FINMARCHICUS	F	52
MFF03	N04P	04-10-92	1103	CALANUS FINMARCHICUS	C	139
MFF03	N04P	04-10-92	1103	CENTROPAGES TYPICUS	M	17
MFF03	N04P	04-10-92	1103	COPEPOD NAUPLII	N	35
MFF03	N04P	04-10-92	1103	EUCONCHOEICA SP.		104
MFF03	N04P	04-10-92	1103	EVADNE NORDMANI		35
MFF03	N04P	04-10-92	1103	MEDUSA		35
MFF03	N04P	04-10-92	1103	OIKIOPLEURA DIOICA		904
MFF03	N04P	04-10-92	1103	OITHONA SIMILIS	F	313
MFF03	N04P	04-10-92	1103	OITHONA SIMILIS	M	52
MFF03	N04P	04-10-92	1103	OITHONA SIMILIS	C	591
MFF03	N04P	04-10-92	1103	PARACALANUS PARVUS	C	122
MFF03	N04P	04-10-92	1103	PSEUDOCALANUS NEWMANI	F	70
MFF03	N04P	04-10-92	1103	PSEUDOCALANUS NEWMANI	M	17
MFF03	N04P	04-10-92	1103	PSEUDOCALANUS NEWMANI	C	17
MFF03	N04P	04-10-92	1103	PTEROPOD		70
MFF03	N04P	04-10-92	1103	TEMORA LONGICORNIS	F	35
MFF03	N04P	04-10-92	1103	TEMORA LONGICORNIS	C	139
MFF03	N04P	04-10-92	1103	TEMORA LONGICORNIS	M	52
MFF03	N04P	04-10-92	1103	TOTAL ZOOPLANKTON		2835

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-3

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TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>2</sup>
MFF03	N07P	04-08-92	1152	ACARTIA HUDSONICA	F	34
MFF03	N07P	04-08-92	1152	ACARTIA HUDSONICA	M	9
MFF03	N07P	04-08-92	1152	BARNACLE NAUPLII	N	222
MFF03	N07P	04-08-92	1152	CALANUS FINMARCHICUS	F	34
MFF03	N07P	04-08-92	1152	CALANUS FINMARCHICUS	C	308
MFF03	N07P	04-08-92	1152	CENTROPAGES SPP.	C	9
MFF03	N07P	04-08-92	1152	CENTROPAGES TYPICUS	F	9
MFF03	N07P	04-08-92	1152	CENTROPAGES TYPICUS	M	9
MFF03	N07P	04-08-92	1152	COPEPOD NAUPLII	N	231
MFF03	N07P	04-08-92	1152	EUONCHOEICA SP.		43
MFF03	N07P	04-08-92	1152	EVADNE NORDMANI		60
MFF03	N07P	04-08-92	1152	METRIDIA LUCENS	C	26
MFF03	N07P	04-08-92	1152	OIKIOPLEURA DIOICA		916
MFF03	N07P	04-08-92	1152	OITHONA ATLANTICA	F	17
MFF03	N07P	04-08-92	1152	OITHONA SIMILIS	F	308
MFF03	N07P	04-08-92	1152	OITHONA SIMILIS	M	60
MFF03	N07P	04-08-92	1152	OITHONA SIMILIS	C	582
MFF03	N07P	04-08-92	1152	PARACALANUS PARVUS	F	43
MFF03	N07P	04-08-92	1152	PARACALANUS PARVUS	M	9
MFF03	N07P	04-08-92	1152	PARACALANUS PARVUS	C	9
MFF03	N07P	04-08-92	1152	PODON POLYPHEMOIDES		9
MFF03	N07P	04-08-92	1152	PSEUDOCALANUS NEWMANI	F	9
MFF03	N07P	04-08-92	1152	PSEUDOCALANUS NEWMANI	M	17
MFF03	N07P	04-08-92	1152	PSEUDOCALANUS NEWMANI	C	51
MFF03	N07P	04-08-92	1152	PTEROPOD		77
MFF03	N07P	04-08-92	1152	TEMORA LONGICORNIS	F	17
MFF03	N07P	04-08-92	1152	TEMORA LONGICORNIS	C	51
MFF03	N07P	04-08-92	1152	TORTANUS DISCAUDATUS	C	9
MFF03	N07P	04-08-92	1152	TOTAL ZOOPLANKTON		3174
MFF03	N10P	04-08-92	1025	ACARTIA HUDSONICA	F	41
MFF03	N10P	04-08-92	1025	ACARTIA HUDSONICA	C	162
MFF03	N10P	04-08-92	1025	BARNACLE NAUPLII	N	770
MFF03	N10P	04-08-92	1025	CALANUS FINMARCHICUS	F	61
MFF03	N10P	04-08-92	1025	CALANUS FINMARCHICUS	C	527
MFF03	N10P	04-08-92	1025	CALANUS FINMARCHICUS	M	20
MFF03	N10P	04-08-92	1025	COPEPOD NAUPLII	N	3443
MFF03	N10P	04-08-92	1025	EUONCHOEICA SP.		41
MFF03	N10P	04-08-92	1025	METRIDIA LUCENS	M	20
MFF03	N10P	04-08-92	1025	OIKIOPLEURA DIOICA		324
MFF03	N10P	04-08-92	1025	OITHONA SIMILIS	F	689
MFF03	N10P	04-08-92	1025	OITHONA SIMILIS	M	61
MFF03	N10P	04-08-92	1025	OITHONA SIMILIS	C	1195
MFF03	N10P	04-08-92	1025	PARACALANUS PARVUS	F	41
MFF03	N10P	04-08-92	1025	PARACALANUS PARVUS	C	608
MFF03	N10P	04-08-92	1025	PSEUDOCALANUS NEWMANI	F	122
MFF03	N10P	04-08-92	1025	PSEUDOCALANUS NEWMANI	M	41
MFF03	N10P	04-08-92	1025	PSEUDOCALANUS NEWMANI	C	61
MFF03	N10P	04-08-92	1025	PTEROPOD		122
MFF03	N10P	04-08-92	1025	TEMORA LONGICORNIS	M	41
MFF03	N10P	04-08-92	1025	TEMORA LONGICORNIS	C	446
MFF03	N10P	04-08-92	1025	TOTAL ZOOPLANKTON		8830
MFF03	N16P	04-10-92	0950	ACARTIA HUDSONICA	C	36
MFF03	N16P	04-10-92	0950	BARNACLE NAUPLII	N	375
MFF03	N16P	04-10-92	0950	CALANUS FINMARCHICUS	F	54
MFF03	N16P	04-10-92	0950	CALANUS FINMARCHICUS	C	107
MFF03	N16P	04-10-92	0950	CENTROPAGES TYPICUS	M	18
MFF03	N16P	04-10-92	0950	COPEPOD NAUPLII	N	858
MFF03	N16P	04-10-92	0950	EUONCHOEICA SP.		36
MFF03	N16P	04-10-92	0950	METRIDIA LUCENS	C	18
MFF03	N16P	04-10-92	0950	MICROSETELLA NORVEGICA		18
MFF03	N16P	04-10-92	0950	OIKIOPLEURA DIOICA		733
MFF03	N16P	04-10-92	0950	OITHONA SIMILIS	F	965
MFF03	N16P	04-10-92	0950	OITHONA SIMILIS	C	1484
MFF03	N16P	04-10-92	0950	OITHONA SIMILIS	M	143

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-4

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TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF03	N16P	04-10-92	0950	PARACALANUS PARVUS	F	72
MFF03	N16P	04-10-92	0950	PARACALANUS PARVUS	C	644
MFF03	N16P	04-10-92	0950	PARACALANUS PARVUS	M	36
MFF03	N16P	04-10-92	0950	POLYCHAETE LARVAE		18
MFF03	N16P	04-10-92	0950	PSEUDOCALANUS NEWMANI	F	143
MFF03	N16P	04-10-92	0950	PSEUDOCALANUS NEWMANI	C	18
MFF03	N16P	04-10-92	0950	PTEROPOD		697
MFF03	N16P	04-10-92	0950	TEMORA LONGICORNIS	F	18
MFF03	N16P	04-10-92	0950	TEMORA LONGICORNIS	C	107
MFF03	N16P	04-10-92	0950	TEMORA LONGICORNIS	M	18
MFF03	N16P	04-10-92	0950	TORTANUS DISCAUDATUS	C	18
MFF03	N16P	04-10-92	0950	TOTAL ZOOPLANKTON		6632
MFF03	N20P	04-10-92	0840	ACARTIA HUDSONICA	M	13
MFF03	N20P	04-10-92	0840	ACARTIA HUDSONICA	C	27
MFF03	N20P	04-10-92	0840	BARNACLE NAUPLII	N	201
MFF03	N20P	04-10-92	0840	CALANUS FINMARCHICUS	F	40
MFF03	N20P	04-10-92	0840	CALANUS FINMARCHICUS	C	121
MFF03	N20P	04-10-92	0840	CENTROPAGES SPP.	C	27
MFF03	N20P	04-10-92	0840	CENTROPAGES TYPICUS	F	27
MFF03	N20P	04-10-92	0840	COPEPOD NAUPLII	N	1098
MFF03	N20P	04-10-92	0840	EUCONCHOEICA SP.		40
MFF03	N20P	04-10-92	0840	EVADNE NORDMANI		27
MFF03	N20P	04-10-92	0840	METRIDIA LUCENS	C	13
MFF03	N20P	04-10-92	0840	OIKIOPLEURA DIOICA		1044
MFF03	N20P	04-10-92	0840	OITHONA ATLANTICA	F	27
MFF03	N20P	04-10-92	0840	OITHONA SIMILIS	F	790
MFF03	N20P	04-10-92	0840	OITHONA SIMILIS	C	1874
MFF03	N20P	04-10-92	0840	OITHONA SIMILIS	M	134
MFF03	N20P	04-10-92	0840	PARACALANUS PARVUS	F	161
MFF03	N20P	04-10-92	0840	PARACALANUS PARVUS	C	576
MFF03	N20P	04-10-92	0840	PARACALANUS PARVUS	M	40
MFF03	N20P	04-10-92	0840	POLYCHAETE LARVAE		13
MFF03	N20P	04-10-92	0840	PSEUDOCALANUS NEWMANI	F	13
MFF03	N20P	04-10-92	0840	PTEROPOD		629
MFF03	N20P	04-10-92	0840	SAPHIRELLA SP.		54
MFF03	N20P	04-10-92	0840	TEMORA LONGICORNIS	M	13
MFF03	N20P	04-10-92	0840	TEMORA LONGICORNIS	C	201
MFF03	N20P	04-10-92	0840	TORTANUS DISCAUDATUS	C	13
MFF03	N20P	04-10-92	0840	TOTAL ZOOPLANKTON		7217
MFF04	F01P	06-22-92	1506	ACARTIA TONSA	F	54
MFF04	F01P	06-22-92	1506	ACARTIA TONSA	M	82
MFF04	F01P	06-22-92	1506	ACARTIA TONSA	C	380
MFF04	F01P	06-22-92	1506	BIVALVE VELIGER		652
MFF04	F01P	06-22-92	1506	CALANUS FINMARCHICUS	F	27
MFF04	F01P	06-22-92	1506	CALANUS FINMARCHICUS	C	27
MFF04	F01P	06-22-92	1506	CALANUS FINMARCHICUS	M	54
MFF04	F01P	06-22-92	1506	CENTROPAGES HAMATUS	F	27
MFF04	F01P	06-22-92	1506	CENTROPAGES HAMATUS	M	54
MFF04	F01P	06-22-92	1506	CENTROPAGES SPP.	C	353
MFF04	F01P	06-22-92	1506	COPEPOD NAUPLII	N	11577
MFF04	F01P	06-22-92	1506	EUCONCHOEICA SP.		82
MFF04	F01P	06-22-92	1506	EVADNE NORDMANI		27
MFF04	F01P	06-22-92	1506	GASTROPOD VELIGER		27
MFF04	F01P	06-22-92	1506	MICROSETELLA NORVEGICA		136
MFF04	F01P	06-22-92	1506	OIKIOPLEURA DIOICA		54
MFF04	F01P	06-22-92	1506	OITHONA ATLANTICA	F	109
MFF04	F01P	06-22-92	1506	OITHONA SIMILIS	F	1848
MFF04	F01P	06-22-92	1506	OITHONA SIMILIS	C	9974
MFF04	F01P	06-22-92	1506	OITHONA SIMILIS	M	109
MFF04	F01P	06-22-92	1506	PARACALANUS PARVUS	F	380
MFF04	F01P	06-22-92	1506	PARACALANUS PARVUS	C	2473
MFF04	F01P	06-22-92	1506	PARACALANUS PARVUS	M	27
MFF04	F01P	06-22-92	1506	PSEUDOCALANUS NEWMANI	F	1141
MFF04	F01P	06-22-92	1506	PSEUDOCALANUS NEWMANI	M	163

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-5

TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF04	F01P	06-22-92	1506	PSEUDOCALANUS NEWMANI	C	136
MFF04	F01P	06-22-92	1506	PTEROPOD		109
MFF04	F01P	06-22-92	1506	TEMORA LONGICORNIS	F	136
MFF04	F01P	06-22-92	1506	TEMORA LONGICORNIS	M	82
MFF04	F01P	06-22-92	1506	TEMORA LONGICORNIS	C	1413
MFF04	F01P	06-22-92	1506	TORTANUS DISCAUDATUS	M	27
MFF04	F01P	06-22-92	1506	TORTANUS DISCAUDATUS	C	27
MFF04	F01P	06-22-92	1506	TOTAL ZOOPLANKTON		31878
MFF04	F01P	06-22-92	1506	UNIDENTIFIED LARVA		109
MFF04	F02P	06-22-92	1245	ACARTIA TONSA	F	61
MFF04	F02P	06-22-92	1245	ACARTIA TONSA	C	30
MFF04	F02P	06-22-92	1245	ACARTIA TONSA	M	30
MFF04	F02P	06-22-92	1245	CALANUS FINMARCHICUS	F	213
MFF04	F02P	06-22-92	1245	CALANUS FINMARCHICUS	C	396
MFF04	F02P	06-22-92	1245	CENTROPAGES SPP.	C	30
MFF04	F02P	06-22-92	1245	CENTROPAGES TYPICUS	F	30
MFF04	F02P	06-22-92	1245	CENTROPAGES TYPICUS	M	30
MFF04	F02P	06-22-92	1245	COPEPOD NAUPLII	N	4937
MFF04	F02P	06-22-92	1245	EVADNE NORDMANI		30
MFF04	F02P	06-22-92	1245	FISH EGG		30
MFF04	F02P	06-22-92	1245	METRIDIA LUCENS	F	61
MFF04	F02P	06-22-92	1245	METRIDIA LUCENS	C	30
MFF04	F02P	06-22-92	1245	MICROSETELLA NORVEGICA		610
MFF04	F02P	06-22-92	1245	OIKIOPLEURA DIOICA		30
MFF04	F02P	06-22-92	1245	OITHONA SIMILIS	F	3291
MFF04	F02P	06-22-92	1245	OITHONA SIMILIS	C	20632
MFF04	F02P	06-22-92	1245	OITHONA SIMILIS	M	274
MFF04	F02P	06-22-92	1245	PARACALANUS PARVUS	F	91
MFF04	F02P	06-22-92	1245	PARACALANUS PARVUS	C	762
MFF04	F02P	06-22-92	1245	PODON POLYPHEMOIDES		30
MFF04	F02P	06-22-92	1245	PSEUDOCALANUS NEWMANI	F	122
MFF04	F02P	06-22-92	1245	PSEUDOCALANUS NEWMANI	C	91
MFF04	F02P	06-22-92	1245	PTEROPOD		122
MFF04	F02P	06-22-92	1245	TEMORA LONGICORNIS	C	518
MFF04	F02P	06-22-92	1245	TORTANUS DISCAUDATUS	F	30
MFF04	F02P	06-22-92	1245	TOTAL ZOOPLANKTON		
MFF04	F02P	06-22-92	1258	ACARTIA TONSA	F	25
MFF04	F02P	06-22-92	1258	ACARTIA TONSA	C	25
MFF04	F02P	06-22-92	1258	CALANUS FINMARCHICUS	F	224
MFF04	F02P	06-22-92	1258	CALANUS FINMARCHICUS	C	174
MFF04	F02P	06-22-92	1258	CENTROPAGES SPP.	C	174
MFF04	F02P	06-22-92	1258	CENTROPAGES TYPICUS	M	50
MFF04	F02P	06-22-92	1258	COPEPOD NAUPLII	N	3703
MFF04	F02P	06-22-92	1258	EUCONCHOEICA SP.		25
MFF04	F02P	06-22-92	1258	EVADNE NORDMANI		75
MFF04	F02P	06-22-92	1258	METRIDIA LUCENS	C	50
MFF04	F02P	06-22-92	1258	MICROSETELLA NORVEGICA		770
MFF04	F02P	06-22-92	1258	OITHONA SIMILIS	F	3057
MFF04	F02P	06-22-92	1258	OITHONA SIMILIS	C	20977
MFF04	F02P	06-22-92	1258	OITHONA SIMILIS	M	348
MFF04	F02P	06-22-92	1258	PARACALANUS PARVUS	F	124
MFF04	F02P	06-22-92	1258	PARACALANUS PARVUS	M	50
MFF04	F02P	06-22-92	1258	PARACALANUS PARVUS	C	124
MFF04	F02P	06-22-92	1258	PSEUDOCALANUS NEWMANI	F	50
MFF04	F02P	06-22-92	1258	PSEUDOCALANUS NEWMANI	M	25
MFF04	F02P	06-22-92	1258	PTEROPOD		124
MFF04	F02P	06-22-92	1258	TEMORA LONGICORNIS	C	199
MFF04	F02P	06-22-92	1258	TOTAL ZOOPLANKTON		30372
MFF04	F13P	06-23-92	1019	ACARTIA TONSA	F	63
MFF04	F13P	06-23-92	1019	ACARTIA TONSA	M	125
MFF04	F13P	06-23-92	1019	ACARTIA TONSA	C	251
MFF04	F13P	06-23-92	1019	BARNACLE NAUPLII	N	31
MFF04	F13P	06-23-92	1019	CALANUS FINMARCHICUS	F	63
MFF04	F13P	06-23-92	1019	CALANUS FINMARCHICUS	C	31

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-6

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TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF04	F13P	06-23-92	1019	CALANUS FINMARCHICUS	M	63
MFF04	F13P	06-23-92	1019	CENTROPAGES HAMATUS	F	94
MFF04	F13P	06-23-92	1019	CENTROPAGES HAMATUS	M	94
MFF04	F13P	06-23-92	1019	CENTROPAGES SPP.	C	94
MFF04	F13P	06-23-92	1019	COPEPOD NAUPLII	N	21208
MFF04	F13P	06-23-92	1019	CRAB ZOEAE		94
MFF04	F13P	06-23-92	1019	EVADNE NORDMANI		878
MFF04	F13P	06-23-92	1019	MEDUSA		31
MFF04	F13P	06-23-92	1019	MICROSETELLA NORVEGICA		63
MFF04	F13P	06-23-92	1019	OITHONA ATLANTICA	F	31
MFF04	F13P	06-23-92	1019	OITHONA SIMILIS	F	6651
MFF04	F13P	06-23-92	1019	OITHONA SIMILIS	M	878
MFF04	F13P	06-23-92	1019	OITHONA SIMILIS	C	10667
MFF04	F13P	06-23-92	1019	PARACALANUS PARVUS	F	910
MFF04	F13P	06-23-92	1019	PARACALANUS PARVUS	M	157
MFF04	F13P	06-23-92	1019	PARACALANUS PARVUS	C	4173
MFF04	F13P	06-23-92	1019	PODON POLYPHEMOIDES		31
MFF04	F13P	06-23-92	1019	PSEUDOCALANUS NEWMANI	F	1224
MFF04	F13P	06-23-92	1019	PSEUDOCALANUS NEWMANI	C	345
MFF04	F13P	06-23-92	1019	PSEUDOCALANUS NEWMANI	M	188
MFF04	F13P	06-23-92	1019	PTEROPOD		63
MFF04	F13P	06-23-92	1019	TEMORA LONGICORNIS	F	188
MFF04	F13P	06-23-92	1019	TEMORA LONGICORNIS	C	753
MFF04	F13P	06-23-92	1019	TEMORA LONGICORNIS	M	282
MFF04	F13P	06-23-92	1019	TORTANUS DISCAUDATUS	C	31
MFF04	F13P	06-23-92	1019	TOTAL ZOOPLANKTON		49757
MFF04	F23P	06-24-92	1158	ACARTIA TONSA	F	2726
MFF04	F23P	06-24-92	1158	ACARTIA TONSA	C	8474
MFF04	F23P	06-24-92	1158	ACARTIA TONSA	M	2400
MFF04	F23P	06-24-92	1158	BARNACLE NAUPLII	N	356
MFF04	F23P	06-24-92	1158	BIVALVE VELIGER		1748
MFF04	F23P	06-24-92	1158	CENTROPAGES HAMATUS	F	89
MFF04	F23P	06-24-92	1158	CENTROPAGES HAMATUS	M	148
MFF04	F23P	06-24-92	1158	CENTROPAGES SPP.	C	296
MFF04	F23P	06-24-92	1158	COPEPOD NAUPLII	N	15881
MFF04	F23P	06-24-92	1158	CRAB ZOEAE		119
MFF04	F23P	06-24-92	1158	DECAPOD LARVAE		30
MFF04	F23P	06-24-92	1158	EUCONCHOEICA SP.		30
MFF04	F23P	06-24-92	1158	EURYTEMORA HERDMANI	F	59
MFF04	F23P	06-24-92	1158	EURYTEMORA HERDMANI	C	356
MFF04	F23P	06-24-92	1158	EURYTEMORA HERDMANI	M	89
MFF04	F23P	06-24-92	1158	EVADNE NORDMANI		1007
MFF04	F23P	06-24-92	1158	FISH EGG		30
MFF04	F23P	06-24-92	1158	GASTROPOD VELIGER		2193
MFF04	F23P	06-24-92	1158	MEDUSA		30
MFF04	F23P	06-24-92	1158	OITHONA SIMILIS	F	385
MFF04	F23P	06-24-92	1158	OITHONA SIMILIS	C	593
MFF04	F23P	06-24-92	1158	OITHONA SIMILIS	M	119
MFF04	F23P	06-24-92	1158	PARACALANUS PARVUS	F	652
MFF04	F23P	06-24-92	1158	PARACALANUS PARVUS	M	89
MFF04	F23P	06-24-92	1158	PARACALANUS PARVUS	C	2548
MFF04	F23P	06-24-92	1158	PODON POLYPHEMOIDES		356
MFF04	F23P	06-24-92	1158	POLYCHAETE LARVAE		1511
MFF04	F23P	06-24-92	1158	PSEUDOCALANUS NEWMANI	F	652
MFF04	F23P	06-24-92	1158	PSEUDOCALANUS NEWMANI	M	59
MFF04	F23P	06-24-92	1158	PSEUDOCALANUS NEWMANI	C	30
MFF04	F23P	06-24-92	1158	SAPHIRELLA SP.		30
MFF04	F23P	06-24-92	1158	TEMORA LONGICORNIS	F	59
MFF04	F23P	06-24-92	1158	TEMORA LONGICORNIS	C	444
MFF04	F23P	06-24-92	1158	TORTANUS DISCAUDATUS	F	59
MFF04	F23P	06-24-92	1158	TORTANUS DISCAUDATUS	C	119
MFF04	F23P	06-24-92	1158	TOTAL ZOOPLANKTON		43763
MFF04	N01P	06-24-92	0723	ACARTIA TONSA	F	121
MFF04	N01P	06-24-92	0723	ACARTIA TONSA	M	243

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-7

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TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF04	N01P	06-24-92	0723	CALANUS FINMARCHICUS	F	121
MFF04	N01P	06-24-92	0723	COPEPOD NAUPLII	N	24387
MFF04	N01P	06-24-92	0723	ECHINODERM PLUTEI		364
MFF04	N01P	06-24-92	0723	EVADNE NORDMANI		364
MFF04	N01P	06-24-92	0723	MEDUSA		121
MFF04	N01P	06-24-92	0723	METRIDIA LUCENS	F	243
MFF04	N01P	06-24-92	0723	MICROSETELLA NORVEGICA		121
MFF04	N01P	06-24-92	0723	OIKIOPLEURA DIOICA		121
MFF04	N01P	06-24-92	0723	OITHONA ATLANTICA	F	121
MFF04	N01P	06-24-92	0723	OITHONA SIMILIS	F	3761
MFF04	N01P	06-24-92	0723	OITHONA SIMILIS	M	971
MFF04	N01P	06-24-92	0723	OITHONA SIMILIS	C	18806
MFF04	N01P	06-24-92	0723	PARACALANUS PARVUS	M	121
MFF04	N01P	06-24-92	0723	PARACALANUS PARVUS	C	3518
MFF04	N01P	06-24-92	0723	PODON POLYPHEMOIDES		364
MFF04	N01P	06-24-92	0723	POLYCHAETE LARVAE		364
MFF04	N01P	06-24-92	0723	PSEUDOCALANUS NEWMANI	F	728
MFF04	N01P	06-24-92	0723	PTEROPOD		971
MFF04	N01P	06-24-92	0723	TEMORA LONGICORNIS	F	607
MFF04	N01P	06-24-92	0723	TEMORA LONGICORNIS	C	7765
MFF04	N01P	06-24-92	0723	TEMORA LONGICORNIS	M	1092
MFF04	N01P	06-24-92	0723	TOTAL ZOOPLANKTON		65759
MFF04	N01P	06-24-92	0723	UNIDENTIFIED LARVAE		364
MFF04	N04P	06-24-92	0826	ACARTIA TONSA	M	57
MFF04	N04P	06-24-92	0826	ACARTIA TONSA	C	515
MFF04	N04P	06-24-92	0826	CALANUS FINMARCHICUS	F	57
MFF04	N04P	06-24-92	0826	CALANUS FINMARCHICUS	C	115
MFF04	N04P	06-24-92	0826	CALANUS FINMARCHICUS	M	286
MFF04	N04P	06-24-92	0826	CENTROPAGES SPP.	C	57
MFF04	N04P	06-24-92	0826	CENTROPAGES TYPICUS	F	57
MFF04	N04P	06-24-92	0826	COPEPOD NAUPLII	N	5899
MFF04	N04P	06-24-92	0826	DECAPOD LARVAE		115
MFF04	N04P	06-24-92	0826	EVADNE NORDMANI		916
MFF04	N04P	06-24-92	0826	FISH EGG		57
MFF04	N04P	06-24-92	0826	FISH LARVA		57
MFF04	N04P	06-24-92	0826	MICROSETELLA NORVEGICA		57
MFF04	N04P	06-24-92	0826	OIKIOPLEURA DIOICA		229
MFF04	N04P	06-24-92	0826	OITHONA SIMILIS	F	5040
MFF04	N04P	06-24-92	0826	OITHONA SIMILIS	C	31499
MFF04	N04P	06-24-92	0826	OITHONA SIMILIS	M	172
MFF04	N04P	06-24-92	0826	PARACALANUS PARVUS	C	286
MFF04	N04P	06-24-92	0826	PODON POLYPHEMOIDES		57
MFF04	N04P	06-24-92	0826	PSEUDOCALANUS NEWMANI	F	57
MFF04	N04P	06-24-92	0826	TEMORA LONGICORNIS	M	57
MFF04	N04P	06-24-92	0826	TEMORA LONGICORNIS	C	57
MFF04	N04P	06-24-92	0826	TORTANUS DISCAUDATUS	F	57
MFF04	N04P	06-24-92	0826	TOTAL ZOOPLANKTON		45988
MFF04	N04P	06-24-92	0826	UNIDENTIFIED LARVAE		229
MFF04	N07P	06-23-92	1117	ACARTIA TONSA	F	58
MFF04	N07P	06-23-92	1117	ACARTIA TONSA	C	405
MFF04	N07P	06-23-92	1117	BIVALVE VELIGER		8321
MFF04	N07P	06-23-92	1117	CALANUS FINMARCHICUS	F	173
MFF04	N07P	06-23-92	1117	CALANUS FINMARCHICUS	C	289
MFF04	N07P	06-23-92	1117	COPEPOD NAUPLII	N	38140
MFF04	N07P	06-23-92	1117	DECAPOD LARVAE		58
MFF04	N07P	06-23-92	1117	EVADNE NORDMANI		2023
MFF04	N07P	06-23-92	1117	MEDUSA		116
MFF04	N07P	06-23-92	1117	MICROSETELLA NORVEGICA		58
MFF04	N07P	06-23-92	1117	OIKIOPLEURA DIOICA		58
MFF04	N07P	06-23-92	1117	OITHONA ATLANTICA	F	116
MFF04	N07P	06-23-92	1117	OITHONA SIMILIS	F	7570
MFF04	N07P	06-23-92	1117	OITHONA SIMILIS	M	1040
MFF04	N07P	06-23-92	1117	OITHONA SIMILIS	C	18492
MFF04	N07P	06-23-92	1117	PARACALANUS PARVUS	F	231

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-8

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TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>3</sup>
MFF04	N07P	06-23-92	1117	PARACALANUS PARVUS	M	116
MFF04	N07P	06-23-92	1117	PARACALANUS PARVUS	C	2080
MFF04	N07P	06-23-92	1117	PODON POLYPHEMOIDES		809
MFF04	N07P	06-23-92	1117	PSEUDOCALANUS NEWMANI	F	1098
MFF04	N07P	06-23-92	1117	PSEUDOCALANUS NEWMANI	M	58
MFF04	N07P	06-23-92	1117	PTEROPOD		231
MFF04	N07P	06-23-92	1117	TEMORA LONGICORNIS	F	231
MFF04	N07P	06-23-92	1117	TEMORA LONGICORNIS	M	231
MFF04	N07P	06-23-92	1117	TEMORA LONGICORNIS	C	5028
MFF04	N07P	06-23-92	1117	TORTANUS DISCAUDATUS	F	58
MFF04	N07P	06-23-92	1117	TOTAL ZOOPLANKTON		87375
MFF04	N07P	06-23-92	1117	UNIDENTIFIED LARVAE		289
MFF04	N10P	06-23-92	1216	ACARTIA TONSA	F	274
MFF04	N10P	06-23-92	1216	ACARTIA TONSA	C	753
MFF04	N10P	06-23-92	1216	BARNACLE NAUPLII	N	137
MFF04	N10P	06-23-92	1216	BIVALVE VELIGER		3422
MFF04	N10P	06-23-92	1216	CENTROPAGES HAMATUS	F	68
MFF04	N10P	06-23-92	1216	COPEPOD NAUPLII	N	25532
MFF04	N10P	06-23-92	1216	EVADNE NORDMANI		753
MFF04	N10P	06-23-92	1216	MICROSETELLA NORVEGICA		68
MFF04	N10P	06-23-92	1216	OITHONA ATLANTICA	F	68
MFF04	N10P	06-23-92	1216	OITHONA SIMILIS	F	2190
MFF04	N10P	06-23-92	1216	OITHONA SIMILIS	M	342
MFF04	N10P	06-23-92	1216	OITHONA SIMILIS	C	10473
MFF04	N10P	06-23-92	1216	PARACALANUS PARVUS	F	821
MFF04	N10P	06-23-92	1216	PARACALANUS PARVUS	M	205
MFF04	N10P	06-23-92	1216	PARACALANUS PARVUS	C	6229
MFF04	N10P	06-23-92	1216	PODON POLYPHEMOIDES		68
MFF04	N10P	06-23-92	1216	POLYCHAETE LARVAE		205
MFF04	N10P	06-23-92	1216	PSEUDOCALANUS NEWMANI	F	1711
MFF04	N10P	06-23-92	1216	PSEUDOCALANUS NEWMANI	M	411
MFF04	N10P	06-23-92	1216	PTEROPOD		548
MFF04	N10P	06-23-92	1216	SAGITTA ELEGANS		274
MFF04	N10P	06-23-92	1216	TEMORA LONGICORNIS	F	1095
MFF04	N10P	06-23-92	1216	TEMORA LONGICORNIS	M	1711
MFF04	N10P	06-23-92	1216	TEMORA LONGICORNIS	C	3559
MFF04	N10P	06-23-92	1216	TORTANUS DISCAUDATUS	F	205
MFF04	N10P	06-23-92	1216	TORTANUS DISCAUDATUS	M	137
MFF04	N10P	06-23-92	1216	TOTAL ZOOPLANKTON		61262
MFF04	N16P	06-24-92	0904	ACARTIA TONSA	C	680
MFF04	N16P	06-24-92	0904	BIVALVE VELIGER		2209
MFF04	N16P	06-24-92	0904	CALANUS FINMARCHICUS	F	57
MFF04	N16P	06-24-92	0904	CALANUS FINMARCHICUS	C	170
MFF04	N16P	06-24-92	0904	CENTROPAGES SPP.	C	57
MFF04	N16P	06-24-92	0904	COPEPOD NAUPLII	N	32396
MFF04	N16P	06-24-92	0904	CRAB ZOEAE		113
MFF04	N16P	06-24-92	0904	ECHINODERM PLUTEI		340
MFF04	N16P	06-24-92	0904	EVADNE NORDMANI		850
MFF04	N16P	06-24-92	0904	FISH EGG		57
MFF04	N16P	06-24-92	0904	METRIDIA LUCENS	C	57
MFF04	N16P	06-24-92	0904	MICROSETELLA NORVEGICA		57
MFF04	N16P	06-24-92	0904	OIKIOPLEURA DIOICA		57
MFF04	N16P	06-24-92	0904	OITHONA ATLANTICA	F	57
MFF04	N16P	06-24-92	0904	OITHONA SIMILIS	F	2832
MFF04	N16P	06-24-92	0904	OITHONA SIMILIS	M	113
MFF04	N16P	06-24-92	0904	OITHONA SIMILIS	C	21635
MFF04	N16P	06-24-92	0904	PARACALANUS PARVUS	F	963
MFF04	N16P	06-24-92	0904	PARACALANUS PARVUS	M	57
MFF04	N16P	06-24-92	0904	PARACALANUS PARVUS	C	3568
MFF04	N16P	06-24-92	0904	PODON POLYPHEMOIDES		906
MFF04	N16P	06-24-92	0904	PSEUDOCALANUS NEWMANI	F	1756
MFF04	N16P	06-24-92	0904	PSEUDOCALANUS NEWMANI	M	170
MFF04	N16P	06-24-92	0904	PSEUDOCALANUS NEWMANI	C	283
MFF04	N16P	06-24-92	0904	PTEROPOD		57

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-9

TABLE G-1. (continued)

Event	Station	Date	Time (EST)	Taxon	Qual <sup>1</sup>	Individuals Per M <sup>2</sup>
MFF04	N16P	06-24-92	0904	SAGITTA ELEGANS		170
MFF04	N16P	06-24-92	0904	TEMORA LONGICORNIS	F	227
MFF04	N16P	06-24-92	0904	TEMORA LONGICORNIS	M	113
MFF04	N16P	06-24-92	0904	TEMORA LONGICORNIS	C	2549
MFF04	N16P	06-24-92	0904	TORTANUS DISCAUDATUS	C	57
MFF04	N16P	06-24-92	0904	TOTAL ZOOPLANKTON		72609
MFF04	N20P	06-24-92	0949	ACARTIA TONSA	F	168
MFF04	N20P	06-24-92	0949	ACARTIA TONSA	C	449
MFF04	N20P	06-24-92	0949	ACARTIA TONSA	M	56
MFF04	N20P	06-24-92	0949	BIVALVE VELIGER		6344
MFF04	N20P	06-24-92	0949	CALANUS FINMARCHICUS	F	168
MFF04	N20P	06-24-92	0949	CALANUS FINMARCHICUS	C	56
MFF04	N20P	06-24-92	0949	COPEPOD NAUPLII	N	37165
MFF04	N20P	06-24-92	0949	CRAB ZOEAE		56
MFF04	N20P	06-24-92	0949	DECAPOD LARVAE		56
MFF04	N20P	06-24-92	0949	EVADNE NORDMANI		730
MFF04	N20P	06-24-92	0949	FISH LARVA		56
MFF04	N20P	06-24-92	0949	GASTROPOD VELIGER		1011
MFF04	N20P	06-24-92	0949	METRIDIA LUCENS	F	168
MFF04	N20P	06-24-92	0949	METRIDIA LUCENS	C	56
MFF04	N20P	06-24-92	0949	OITHONA ATLANTICA	F	168
MFF04	N20P	06-24-92	0949	OITHONA SIMILIS	F	3649
MFF04	N20P	06-24-92	0949	OITHONA SIMILIS	M	674
MFF04	N20P	06-24-92	0949	OITHONA SIMILIS	C	22232
MFF04	N20P	06-24-92	0949	PARACALANUS PARVUS	F	505
MFF04	N20P	06-24-92	0949	PARACALANUS PARVUS	M	112
MFF04	N20P	06-24-92	0949	PARACALANUS PARVUS	C	8589
MFF04	N20P	06-24-92	0949	PODON POLYPHEMOIDES		112
MFF04	N20P	06-24-92	0949	POLYCHAETE LARVAE		112
MFF04	N20P	06-24-92	0949	PSEUDOCALANUS NEWMANI	F	1067
MFF04	N20P	06-24-92	0949	PSEUDOCALANUS NEWMANI	M	56
MFF04	N20P	06-24-92	0949	PSEUDOCALANUS NEWMANI	C	56
MFF04	N20P	06-24-92	0949	TEMORA LONGICORNIS	F	112
MFF04	N20P	06-24-92	0949	TEMORA LONGICORNIS	M	281
MFF04	N20P	06-24-92	0949	TEMORA LONGICORNIS	C	4772
MFF04	N20P	06-24-92	0949	TORTANUS DISCAUDATUS	M	56
MFF04	N20P	06-24-92	0949	TOTAL ZOOPLANKTON		89263
MFF04	N20P	06-24-92	0949	UNIDENTIFIED LARVAE		168

<sup>1</sup>C = COPEPIDITES, F = FEMALE, M = MALE, N = NAUPLII G-10



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