APPENDICES TO

WATER QUALITY MONITORING IN MASSACHUSETTS AND CAPE COD BAYS: FEBRUARY-MARCH 1992

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APPENDIX A

February 1992 Station Data Tables

Part 1

Physical and Chemical Parameters at Discrete Bottle Measurement Depths

Depth, Temperature, Dissolved oxygen, Conductivity, Sigma T, Fluorescence, Salinity, and Beam Attenuation all were obtained electronically, from *in situ* sensor readings during the upcast of vertical profiling during which water samples were taken by closing bottles. The Table(s) values represent (20-sec) time-averaged values, the approximate mid-point of the time period being the actual time of closing of the Niskin/GO-FLO bottle. As footnoted, Dissolved oxygen and Fluorescence values have been calculated using a post-cruise calibration with wet chemistry analysis on water samples for dissolved oxygen and chlorophyll. The other parameters rely on factory calibrations of sensors to calculate values. The dissolved inorganic nutrient data (Table A-1a) and additional measurements (Table A-1b) come from analysis of water samples from bottles.

TABLE A-1a. FEBRUARY 1992 STATION DATA TABLES: PHYSICAL AND CHEMICAL PARAMETERS AT DISCRETE BOTTLE MEASUREMENT DEPTHS.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)		CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
F01P	02-23-92	1438	2.16	2.52	13.52		28.84	25.56	5.98	32.04	1.212	0.59	0.00	1.83	0.29	1.75
F01P	02-23-92	1437	5.12	2.39	13.35		28.73	25.57	10.22	32.04	1.228	1.29	0.00	1.65	0.34	1.53
F01P	02-23-92	1436	12.21	2.18	13.10		28.57	25.59	8.21	32.05	1.248	1.18	0.00	2.70	0.34	1.51
F01P	02-23-92	1434	16.56	2.13	12.99		28.54	25.60	7.14	32.06	1.298	0.44	0.00	3.64	0.44	2.20
F01P	02-23-92	1433	23.56	2.12	13.02		28.53	25.61	6.61	32.06	1.312	1.62	0.00	4.11	0.38	2.23
F02P	02-23-92	1152	1.62	2.34	12.55		28.72	25.62	2.48	32.09	1.096	0.39	0.00	0.00	0.31	3.14
F02P	02-23-92	1147	6.86	2.25	13.13		28.70	25.66	9.34	32.13	1.038	0.26	0.01	4.19	0.48	3.47
F02P	02-23-92	1223	14.42	2.47	13.19		28.91	25.68	6.60	32.18	0.931	0.33	0.07	4.78	0.50	8.11
F02P	02-23-92	1144	22.09	2.39	12.99		28.84	25.67	5.52	32.16	0.953	0.39	0.00	4.69	0.55	4.27
F02P	02-23-92	1144	29.05	2.41	13.04		28.86	25.67	5.19	32.17	0.951	1.93	0.00	2.01	0.40	4.17
F03	02-23-92	1623	1.69	2.35	13.61		28.71	25.59	8.19	32.05	1.103	0.34	0.00	1.50	0.33	1.34
F03	02-23-92	1622	4.70	2.37	13.64		28.73	25.59	8.52	32.06	1.093	0.18	0.12	2.68	0.37	1.33
F03	02-23-92	1621	9.69	2.32	13.60		28.69	25.59	7.87	32.06	1.113	0.47	0.07	2.89	0.33	1.71
F03	02-23-92	1620	13.62	2.22	13.39		28.60	25.60	7.56	32.05	1.156	0.34	0.00	2.28	0.32	1.65
F04	02-23-92	1015	1.71	1.21	13.35		27.69	25.57	11.97	31.94	1.407	0.73	0.02	0.84	0.18	1.54
F04	02-23-92	1013	15.06	1.22	13.22		27.72	25.59	11.96	31.96	1.329	0.38	0.01	1.37	0.22	1.90
F04	02-23-92	1012	24.92	1.28	13.23		27.79	25.60	11.49	31.97	1.286	0.65	0.00	1.36	0.26	1.96
F04	02-23-92	1011	34.93	1.41	13.17		27.92	25.61	11.20	32.00	1.270	0.68	0.03	2.26	0.31	2.44
F05	02-23-92	1757	1.82	2.60	8.46	s	28.82	25.50	5.33	31.96	0.971	0.76	0.14	5.56	0.78	3.52
F05	02-23-92	1754	7.22	2.58	8.54	s	28.69	25.51	4.78	31.97	0.976	0.97	0.12	5.65	1.01	3.76
F05	02-23-92	1752	14.59	2.25	8.71	s	28.62	25.55	5.09	32.01	1.016	0.43	0.04	5.50	0.45	3.50
F05	02-23-92	1750	18.30	2.33	8.91	s	28.64	25.56	3.40	32.01	0.889	0.23	0.00	6.27	0.60	3.70
F06	02-23-92	1856	1.85	2.82	12.36		29.25	25.70	2.51	32.24	0.703	0.48	0.09	6.48	0.71	5.04
F06	02-23-92	1854	7.93	2.81	12.36		29.24	25.70	2.46	32.24	0.700	0.08	0.09	6.26	0.54	5.44
F06	02-23-92	1852	16.09	2.82	12.40		29.26	25.70	2.47	32.24	0.700	1.17	0.09	6.21	0.72	5.07
F06	02-23-92	1850	24.40	2.79	12.37		29.24	25.70	2.35	32.25	0.694	1.51	0.00	5.93	0.62	5.70
F06	02-23-92	1848	32.25	2.75	12.31		29.21	25.71	1.50	32.25	0.656	1.04	0.00	5.44	0.58	5.55
F07	02-23-92	1939	1.94	2.86	12.29		29.30	25.71	1.66	32.26	0.663	1.04	0.07	6.61	0.71	5.97
F07	02-23-92	1937	14.34	2.86	12.31		29.30	25.71	2.01	32.26	0.659	0.58	0.05	6.14	0.56	6.01

TABLE A-1a. CONTINUED.

STATION	DATE TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
F07	02-23-92 1935	25.07	2.81	12.29	29.26	25.71	1.57	32.26	0.649	1.58	0.00	6.28	0.67	6.69
F07	02-23-92 1934	35.12	2.77	12.23	29.24	25.72	1.85	32.26	0.681	0.29	0.00	5.98	0.57	6.16
F07	02-23-92 1932	52.51	2.74	12.30	29.22	25.72	1.50	32.26	0.781	1.88	0.02	6.72	0.60	7.07
F08	02-23-92 2034	1.78	2.93	12.51	29.37	25.72	2.60	32.28	0.705	0.39	0.10	2.90	0.36	5.83
F08	02-23-92 2031	13.23	3.13	12.43	29.55	25.72	1.99	32.30	0.696	0.77	0.08	5.98	0.53	5.82
F08	02-23-92 2030	20.81	3.50	12.26	29.92	25.73	2.12	32.36	0.667	0.24	0.17	0.55	0.02	7.22
F08	02-23-92 2027	34.30	3.50	12.20	29.93	25.74	1.51	32.36	0.666	1.90	0.08	6.81	0.68	6.48
F08	02-23-92 2024	72.90	3.60	11.93	30.05	25.75	1.05	32.39	1.044	0.21	0.00	6.36	0.28	8.41
F09	02-23-92 2316	2.04	2.51	12.48	28.76	25.49	3.87	31.95	0.935	0.35	0.15	6.82	0.59	3.73
F09	02-23-92 2315	5.87	2.51	12.46	28.76	25.49	3.91	31.95	0.940	0.42	0.09	6.77	0.53	3.83
F09	02-23-92 2313	16.10	2.49	12.39	28.76	25.50	3.60	31.96	0.920	0.65	0.24	5.92	0.49	3.79
F10	02-23-92 2248	1.84	2.94	12.29	29.34	25.69	1.31	32.24	0.705	0.09	0.03	5.90	0.62	5.57
F10	02-23-92 2247	10.14	2.95	12.27	29.36	25.69	1.50	32.24	0.701	0.53	0.00	5.76	0.58	5.89
F10	02-23-92 2245	18.84	2.92	12.17	29.35	25.70	0.93	32.26	0.654	0.43	0.00	5.83	0.58	5.99
F10	02-23-92 2243	28.09	2.89	12.14	29.33	25.71	1.37	32.26	0.639	0.21	0.00	5.81	0.55	5.89
F11	02-24-92 0000	2.00	3.18	11.80	29.60	25.72	0.75	32.30	0.685	0.17	0.06	6.82	0.64	6.24
F11	02-23-92 2213	19.59	3.19	12.09	29.61	25.72	0.85	32.30	0.669	0.29	0.06	5.77	0.55	6.26
F11	02-23-92 2210	40.62	3.25	11.98	29.69	25.73	1.04	32.32	0.721	1.71	0.08	7.05	0.70	6.73
F11	02-23-92 2209	47.94	3.27	11.96	29.71	25.73	0.62	32.32	0.737	0.08	0.01	6.94	0.59	6.81
F12	02-23-92 2113	2.02	3.59	12.12	30.00	25.75	1.65	32.38	0.691	0.53	0.00	5.41	0.53	6.59
F12	02-23-92 2111	22.06	3.66	12.08	30.09	25.76	1.68	32.41	0.705	0.65	0.11	6.79	0.57	6.74
F12	02-23-92 2109	34.64	3.64	12.03	30.09	25.76	0.79	32.41	0.700	0.33	0.09	6.99	0.58	7.70
F12	02-23-92 2107	55.40	3.65	12.00	30.11	25.76	0.93	32.41	0.693	0.22	0.04	6.95	0.60	6.75
F12	02-23-92 2104	84.20	3.81	11.69	30.30	25.79	0.02	32.47	0.932	1.30	0.00	7.19	0.63	9.12
F13P	02-24-92 1030	2.12	2.45	12.46	28.68	25.47	3.82	31.92	1.011	1.13	0.03	6.48	0.60	3.57
F13P	02-24-92 1029	7.86	2.55	12.21	28.84	25.54	2.89	32.01	0.916	0.62	0.03	6.30	0.55	4.06
F13P	02-24-92 1028	9.11	2.57	12.17	28.88	25.56	2.46	32.04	0.984	1.02	0.03	6.76	0.56	4.39
F13P	02-24-92 1027	14.94	2.61	12.11	28.94	25.58	1.93	32.07	0.857	0.33	0.06	6.26	0.57	4.71
F14	02-24-92 0000	2.00	2.69	11.94	28.86	25.44	1.96	31.90	1.109	2.55	0.18	6.87	0.69	4.04

TABLE A-1a. CONTINUED.

STATION	DATE TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
F14	02-24-92 1418	5.05	2.70	12.13	28.87	25.44	2.56	31.90	1.013	0.61	0.13	6.44	0.54	4.07
F14	02-24-92 1420	5.55	2.70	12.33	28.87	25.44	3.53	31.90	0.995	0.52	0.09	6.60	0.56	13.89
F14	02-24-92 1419	11.62	2.70	12.31	28.87	25.44	3.63	31.90	0.991	2.45	0.19	6.77	0.67	4.41
F15	02-24-92 1503	2.13	3.13	11.95	29.54	25.71	1.65	32.28	0.862	0.24	0.00	5.59	0.61	5.66
F15	02-24-92 1503	4.57	3.13	12.11	29.54	25.71	1.31	32.28	0.801	0.21	0.01	5.37	0.56	5.60
F15	02-24-92 1508	6.56	3.13	12.24	29.54	25.71	1.72	32.28	0.762	0.24	0.04	5.39	0.55	5.74
F15	02-24-92 1507	14.21	3.13	12.23	29.54	25.71	1.66	32.28	0.761	0.42	0.00	5.58	0.63	5.88
F15	02-24-92 1505	35.65	3.16	12.17	29.59	25.71	1.55	32.30	0.753	0.41	0.00	5.53	0.65	5.88
F16	02-24-92 1603	2.05	3.41	12.12	29.82	25.73	1.48	32.34	0.799	0.20	0.00	5.17	0.62	6.06
F16	02-24-92 1602	7.14	3.40	12.14	29.82	25.73	1.56	32.34	0.776	0.22	0.07	6.68	0.70	6.74
F16	02-24-92 1601	15.87	3.40	12.12	29.82	25.73	1.69	32.34	0.778	0.16	0.08	6.52	0.63	6.05
F16	02-24-92 1559	31.03	3.40	12.09	29.82	25.73	1.22	32.34	0.782	0.44	0.08	5.63	0.56	6.05
F16	02-24-92 1557	48.90	3.38	11.98	29.82	25.73	1.12	32.34	0.957	0.46	0.00	6.23	0.65	6.18
F17	02-24-92 1647	2.07	3.49	12.21	29.90	25.74	2.81	32.36	0.786	0.49	0.03	6.32	0.65	5.74
F17	02-24-92 1645	21.10	3.49	12.20	29.91	25.74	2.57	32.36	0.761	0.36	0.32	4.79	0.60	5.71
F17	02-24-92 1644	33.72	3.50	12.14	29.93	25.74	2.59	32.37	0.738	0.16	0.09	6.49	0.68	5.82
F17	02-24-92 1643	49.55	3.51	11.95	29.96	25.75	1.78	32.38	0.728	0.18	0.01	6.60	0.63	6.81
F17	02-24-92 1641	70.29	3.53	11.87	29.99	25.76	2.07	32.39	0.941	0.87	0.00	6.71	0.62	7.25
F18	02-24-92 2045	2.40	2.85	12.14	29.25	25.67	1.01	32.21	0.741	0.87	0.10	6.29	0.59	5.03
F18	02-24-92 2044	5.10	2.85	12.14	29.25	25.67	1.04	32.21	0.728	0.44	0.00	5.70	0.58	5.22
F18	02-24-92 2044	10.07	2.85	12.14	29.25	25.68	0.96	32.21	0.723	0.56	0.00	5.80	0.57	5.01
F18	02-24-92 2043	20.02	2.86	12.14	29.27	25.68	0.51	32.22	0.732	1.12	0.00	5.84	0.59	5.36
F19	02-24-92 1736	15.01	3.53	12.23	29.91	25.71	3.73	32.33	0.789	0.38	0.01	5.26	0.49	5.06
F19	02-24-92 1735	25.76	3.41	12.14	29.82	25.72	3.20	32.33	0.788	0.15	0.02	5.80	0.48	5.21
F19	02-24-92 1734	45.43	3.40	11.89	29.85	25.74	1.70	32.36	0.773	0.35	0.01	6.23	0.53	5.93
F19	02-24-92 1732	68.68	3.65	11.62	30.12	25.77	1.59	32.43	0.912	1.35	0.10	6.98	0.62	7.81
F20	02-24-92 1941	2.30	3.39	12.62	29.70	25.63	7.25	32.22	0.931	1.21	0.00	2.43	0.41	3.67
F20	02-24-92 1941	6.92	3.38	12.60	29.70	25.63	6.48	32.22	0.886	1.25	0.06	3.30	0.35	3.72
F20	02-24-92 1954	7.59	3.38	12.06	29.69	25.63	6.54	32.21	0.885	0.35	0.00	3.50	0.39	3.69
F20	02-24-92 1940	12.05	3.37	12.57	29.69	25.63	6.33	32.22	0.882	0.55	0.00	3.51	0.37	3.53

TABLE A-1a. CONTINUED.

STATION	DATE TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
F20	02-24-92 1938	30.39	3.10	12.34	29.46	25.65	3.93	32.21	0.786	0.93	0.00	4.57	0.40	3.84
F21	02-24-92 1903	2.19	3.56	12.70	29.78	25.55	7.63	32.14	0.901	1.14	0.00	2.38	0.34	4.81
F21	02-24-92 1901	10.20	3.57	12.67	29.78	25.55	6.88	32.14	0.877	0.26	0.21	0.71	0.24	4.58
F21	02-24-92 1900	20.22	3.49	12.46	29.76	25.59	5.83	32.18	0.862	0.57	0.10	4.79	0.45	4.46
F21	02-24-92 1859	29.96	3.35	12.30	29.72	25.67	4.71	32.26	0.805	0.75	0.02	5.11	0.54	4.39
F21	02-24-92 1858	51.01	3.10	11.90	29.54	25.72	1.15	32.30	0.789	1.12	0.00	6.34	0.55	6.33
F22	02-24-92 1814	1.69	3.52	12.55	29.66	25.48	5.21	32.04	0.858	0.51	0.00	3.93	0.39	5.64
F22	02-24-92 1813	15.01	3.63	12.45	29.82	25.53	5.36	32.12	0.860	1.24	0.10	2.96	0.45	5.24
F22	02-24-92 1812	25.00	3.61	12.27	29.89	25.61	4.37	32.22	0.791	0.46	0.00	2.08	0.27	6.17
F22	02-24-92 1810	45.31	3.64	11.87	30.07	25.74	1.95	32.39	0.724	0.71	0.09	7.49	0.71	7.81
F23P	02-25-92 1401	2.34	2.81	11.87	28.62	25.09	2.90	31.48	1.235	5.21	0.24	6.96	0.92	4.82
F23P	02-25-92 1400	5.23	2.81	11.93	28.65	25.13	3.34	31.52	1.184	4.79	0.25	6.93	0.88	4.77
F23P	02-25-92 1359	9.51	2.81	11.99	28.70	25.17	1.29	31.58	1.141	5.31	0.24	6.94	0.89	4.92
F23P	02-25-92 1358	9.93	2.80	11.96	28.69	25.18	2.80	31.59	1.120					
F23P	02-25-92 1356	14.71	2.80	11.98	28.70	25.18	2.23	31.58	1.131	3.64	0.25	6.87	0.71	4.66
F24	02-24-92 2203	2.09	2.89	12.06	28.80	25.20	2.70	31.63	1.255	6.68	0.25	6.74	0.93	5.11
F24	02-24-92 2202	6.47	2.88	12.00	28.98	25.39	2.25	31.86	1.003	2.48	0.18	6.73	0.73	4.79
F24	02-24-92 2201	11.06	2.87	12.00	29.01	25.42	2.16	31.90	0.982	1.47	0.18	6.67	0.70	4.71
F24	02-24-92 2200	15.22	2.88	11.95	29.06	25.45	2.75	31.94	0.999	1.95	0.16	6.66	0.70	4.75
F25	02-25-92 1031	3.36	2.61	12.30	28.63	25.28	2.14	31.69	1.109	2.88	0.22	7.08	0.65	3.98
F25	02-25-92 1030	4.20	2.61	12.12	28.63	25.28	2.43	31.69	1.093	2.35	0.21	7.06	0.69	3.92
F25	02-25-92 1029	7.02	2.61	12.17	28.63	25.28	2.48	31.69	1.089	2.17	0.21	7.10	0.62	3.84
F25	02-25-92 1029	10.35	2.61	12.20	28.63	25.28	1.93	31.69	1.082	0.49	0.18	6.96	0.56	4.00
N01P	02-25-92 1242	2.19	2.85	12.23	29.27	25.70	0.01	32.24	0.775	0.63	0.02	6.60	0.61	5.08
N01P	02-25-92 1240	7.15	2.85	12.23	29.27	25.69	1.17	32.24	0.805	1.32	0.00	6.14	0.51	5.03
N01P	02-25-92 1239	12.77	2.85	12.21	29.28	25.70	1.14	32.24	0.749	0.82	0.00	6.37	0.53	5.04
N01P	02-25-92 1238	18.74	2.85	12.24	29.28	25.70	0.59	32.24	0.756	0.34	0.06	5.75	0.52	5.07
N01P	02-25-92 1237	25.90	2.85	12.24	29.28	25.70	0.56	32.24	0.756	0.47	0.00	6.28	0.52	5.26
N01P	02-26-92 0826	2.28	3.16	12.48	29.45	25.59	9.91	32.15	1.117	2.53	0.25	3.73	0.40	2.99

TABLE A-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N01P	02-26-92	0825	7.21	3.16	12.42	29.47	25.62	5.43	32.18	0.782	0.83	s 0.20	s	e 0.04	s 2.87 s
N01P	02-26-92	0823	15.76	3.04	12.33	29.39	25.64	3.67	32.19	0.742	5.15	0.16	4.69	0.41	3.42
N01P	02-26-92	0822	19.89	3.00	12.30	29.36	25.64	3.38	32.19	0.736	1.19	0.02	5.07	0.41	3.50
N01P	02-26-92	0821	24.48	2.94	12.23	29.31	25.64	2.10	32.19	0.743	0.35	0.00	3.40	0.45	3.23
N02	02-26-92	0915	1.78	3.12	12.45	29.45	25.63	4.95	32.18	0.785	0.46	0.00	3.55	0.49	2.97
N02	02-26-92	0915	6.98	3.12	12.45	29.45	25.63	5.13	32.18	0.785	0.85	0.00	3.75	0.46	3.14
N02	02-26-92	0913	14.99	3.03	12.37	29.40	25.66	3.77	32.21	0.752	0.81	0.00	4.31	0.47	3.19
N02	02-26-92	0912	25.50	2.90	12.29	29.30	25.67	2.76	32.21	0.696	0.67	0.00	5.04	0.51	3.72
N02	02-26-92	0911	34.48	2.88	12.20	29.30	25.68	2.40	32.23	0.977	3.66	0.03	5.07	0.48	3.89
N03	02-26-92	0948	2.27	3.36	12.57	29.61	25.57	7.51	32.14	0.832	0.27	0.08	3.33	0.45	2.79
N03	02-26-92	0946	10.39	3.30	12.43	29.60	25.61	5.99	32.18	0.795	1.04	0.00	3.56	0.48	3.16
N03	02-26-92	0945	19.00	3.21	12.37	29.56	25.64	4.88	32.21	0.769	0.43	0.00	3.92	0.44	3.44
N03	02-26-92	0943	30.08	3.03	12.31	29.42	25.67	4.12	32.23	0.761	0.53	0.00	4.46	0.54	3.70
N03	02-26-92	0942	40.88	2.90	12.23	29.34	25.69	2.90	32.24	0.972	0.35	0.00	5.82	0.62	4.31
N04P	02-26-92	1039	2.30	3.43	12.61	29.68	25.58	5.75	32.16	0.835	0.53	0.00	2.70	0.43	3.74
N04P	02-26-92	1039	10.46	3.40	12.52	29.68	25.60	7.05	32.18	0.810	0.62	0.00	2.93	0.39	3.11
N04P	02-26-92	1037	20.52	3.36	12.43	29.71	25.66	5.19	32.25	0.776	0.25	0.08	4.60	0.57	3.96
N04P	02-26-92	1036	30.64	3.31	12.30	29.69	25.68	3.81	32.27	0.724	0.24	0.00	4.29	0.48	4.33
N04P	02-26-92	1034	45.21	3.30	12.27	29.71	25.70	3.85	32.30	0.785	2.16	0.04	5.12	0.56	5.11
N05	02-26-92	1121	1.61	3.35	12.42	29.66	25.63	4.44	32.21	0.758	1.89	0.26	4.71	0.54	4.22
N05	02-26-92	1120	10.06	3.33	12.37	29.66	25.64	5.40	32.22	0.743	1.55	0.21	4.14	0.50	4.15
N05	02-26-92	1119	20.21	3.29	12.31	29.65	25.67	4.43	32.25	0.730	1.07	0.28	5.37	0.49	4.38
N05	02-26-92	1118	29.78	3.19	12.31	29.59	25.69	3.76	32.27	0.754	0.91	0.00	4.24	0.52	4.20
N05	02-26-92	1116	44.29	3.16	12.30	29.59	25.71	3.26	32.29	0.804	0.09	0.00	5.23	0.55	4.10
N06	02-26-92	1149	1.96	3.11	12.33	29.50	25.69	1.94	32.27	0.737	0.42	0.00	4.33	0.56	4.09
N06	02-26-92	1148	10.39	3.12	12.31	29.53	25.71	3.37	32.28	0.748		e 0.08	5.51	0.95	4.33
N06	02-26-92	1147	20.37	3.12	12.30	29.55	25.71	3.09	32.29	0.775	0.32	0.06	5.62	0.61	4.20
N06	02-26-92	1146	30.30	3.11	12.33	29.54	25.72	3.01	32.29	0.855	0.67	0.00	4.80	0.56	4.02
N06	02-26-92	1145	44.55	3.11	12.33	29.55	25.72	3.16	32.30	0.842	0.52	0.00	5.14	0.54	4.01

TABLE A-1a. CONTINUED.

STATION	DATE TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N07P	02-24-92 1226	2.15	2.98	12.36	29.39	25.69	1.55	32.25	0.811	1.00	0.00	5.81	0.59	4.67
N07P	02-24-92 1225	9.47	2.98	12.37	29.39	25.69	2.50	32.25	0.791	e	e	e	e	e
N07P	02-24-92 1223	15.06	2.97	12.36	29.39	25.69	1.84	32.25	0.788	1.10	0.00	5.81	0.50	5.37
N07P	02-24-92 1221	25.55	3.00	12.24	29.43	25.70	1.97	32.26	0.769	0.79	0.04	4.89	0.49	5.03
N07P	02-24-92 1220	35.04	3.08	12.18	29.52	25.72	1.23	32.29	0.709	0.30	0.00	5.87	0.54	5.94
N07P	02-26-92 1233	1.72	2.94	12.45	29.29	25.64	2.81	32.18	0.875	2.50	0.00	5.66	0.55	3.45
N07P	02-26-92 1232	10.06	2.93	12.39	29.30	25.65	3.52	32.19	0.801	0.81	0.18	5.18	0.55	3.93
N07P	02-26-92 1231	20.57	3.02	12.27	29.46	25.72	1.59	32.29	0.706	0.90	0.00	5.09	0.58	4.60
N07P	02-26-92 1230	29.72	3.05	12.26	29.49	25.73	1.28	32.30	0.699	0.79	0.00	6.21	0.56	5.08
N07P	02-26-92 1229	45.67	3.05	12.27	29.51	25.73	1.39	32.30	0.698	0.27	0.00	5.84	0.60	4.87
N08	02-26-92 1303	2.47	2.86	12.54	29.13	25.54	3.39	32.05	0.893	0.98	0.00	5.06	0.59	3.31
N08	02-26-92 1302	5.11	2.83	12.52	29.11	25.56	4.37	32.06	0.876	2.67	0.00	4.85	0.48	3.05
N08	02-26-92 1302	10.08	2.83	12.51	29.12	25.56	3.65	32.07	0.862	0.51	0.00	4.93	0.50	3.24
N08	02-26-92 1301	17.12	2.99	12.29	29.38	25.68	1.98	32.23	0.779	2.21	0.00	5.15	0.55	4.87
N08	02-26-92 1300	22.33	3.06	12.27	29.50	25.73	1.78	32.30	0.754	0.53	0.00	5.33	0.60	5.06
N09	02-26-92 0000	2.00	2.76	12.66	28.92	25.44	2.45	31.91	1.058	0.83	0.07	5.92	0.66	3.50
N09	02-26-92 1332	7.30	2.72	12.58	28.88	25.43	5.23	31.90	0.921	0.49	0.16	5.97	0.61	3.37
N09	02-26-92 1331	11.98	2.70	12.54	28.88	25.45	4.29	31.91	0.913	0.58	0.04	4.89	0.52	3.65
N09	02-26-92 1352	30.22	3.11	12.14	29.55	25.72	2.69	32.30	0.995	0.78	0.00	5.17	0.59	4.93
N09	02-26-92 1352	30.25	3.10	12.12	29.54	25.72	2.32	32.30	0.948	0.74	0.00	5.43	0.58	5.30
N10P	02-24-92 1335	2.07	2.66	12.39	28.69	25.30	4.13	31.72	1.154	2.09	0.21	7.19	0.65	4.20
N10P	02-24-92 1334	5.18	2.64	12.37	28.69	25.31	3.36	31.73	1.049	2.09	0.20	7.20	0.67	4.27
N10P	02-24-92 1333	10.02	2.64	12.36	28.73	25.35	3.24	31.78	1.011	1.59	0.19	7.15	0.66	4.19
N10P	02-24-92 1332	13.13	2.63	12.36	28.75	25.37	3.22	31.81	0.994	1.06	0.18	7.17	0.60	4.15
N10P	02-24-92 1331	18.94	2.63	12.29	28.76	25.38	3.55	31.83	0.970	1.23	0.17	7.17	0.65	4.16
N10P	02-26-92 1424	2.00	2.69	12.40	28.67	25.25	4.39	31.67	1.568	1.11	0.21	6.36	0.76	3.28
N10P	02-26-92 1423	7.03	2.64	12.46	28.69	25.32	3.76	31.75	1.041	0.74	0.20	6.39	0.69	3.16
N10P	02-26-92 1422	12.00	2.60	12.49	28.68	25.33	4.44	31.76	0.973	0.87	0.17	6.19	0.68	3.26
N10P	02-26-92 1421	15.04	2.66	12.40	28.83	25.43	3.95	31.89	1.051	0.45	0.13	5.24	0.60	3.63

TABLE A-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N10P	02-26-92	1420	19.62	2.68	12.39	28.91	25.48	3.67	31.96	1.035	0.98	0.16	5.60	0.66	3.24
N11	02-26-92	1449	2.17	2.84	12.54	29.03	25.47	4.84	31.96	0.927	0.85	0.00	5.56	0.62	3.36
N11	02-26-92	1448	5.34	2.82	12.49	29.02	25.47	4.61	31.96	0.918	1.20	0.06	6.07	0.58	3.46
N11	02-26-92	1447	10.59	2.79	12.46	29.02	25.50	4.43	31.99	0.920	0.17	0.05	4.31	0.49	3.35
N11	02-26-92	1447	15.57	2.82	12.33	29.10	25.55	3.49	32.05	0.922	0.69	0.01	5.96	0.61	3.39
N11	02-26-92	1446	24.29	2.96	12.30	29.32	25.64	2.82	32.18	1.038	0.55	0.00	5.70	0.62	4.57
N12	02-26-92	1512	1.78	2.91	12.36	29.28	25.65	2.35	32.19	0.723	1.18	0.00	5.47	0.61	4.39
N12	02-26-92	1512	5.23	2.87	12.37	29.25	25.66	2.19	32.20	0.732	0.21	0.02	5.70	0.61	4.34
N12	02-26-92	1511	9.90	2.85	12.36	29.23	25.66	1.91	32.20	0.743	0.86	0.00	4.93	0.59	4.54
N12	02-26-92	1510	14.93	2.83	12.34	29.23	25.66	2.09	32.20	0.764	0.90	0.00	5.02	0.56	4.52
N12	02-26-92	1509	19.50	2.83	12.30	29.24	25.68	2.10	32.21	0.930	1.29	0.00	5.35	0.61	5.62
N13	02-26-92	1533	1.83	2.96	12.40	29.33	25.65	2.33	32.20	0.773	0.38	0.00	4.05	0.50	4.17
N13	02-26-92	1532	6.96	2.91	12.36	29.29	25.66	2.53	32.21	0.770	0.27	0.09	4.59	0.51	4.28
N13	02-26-92	1531	12.23	2.89	12.36	29.29	25.67	2.63	32.21	0.754	1.07	0.12	2.58	0.32	4.52
N13	02-26-92	1530	18.01	2.89	12.33	29.30	25.68	2.86	32.22	0.729	0.43	0.00	5.40	0.52	4.29
N13	02-26-92	1530	25.16	2.88	12.27	29.31	25.70	2.27	32.25	0.833	1.70	0.00	5.60	0.62	5.01
N14	02-26-92	1553	1.55	3.12	12.51	29.48	25.66	4.89	32.22	0.779	0.32	0.05	4.96	0.55	3.71
N14	02-26-92	1552	7.09	3.02	12.43	29.40	25.67	4.07	32.22	0.763	0.78	0.00	4.26	0.50	3.98
N14	02-26-92	1551	12.36	2.95	12.31	29.35	25.68	3.42	32.23	0.765	0.77	0.00	5.30	0.50	3.87
N14	02-26-92	1551	18.70	2.92	12.24	29.35	25.70	2.77	32.25	0.883	0.88	0.00	5.21	0.55	4.46
N14	02-26-92	1550	27.56	2.94	12.23	29.37	25.71	2.47	32.26	0.957	0.41	0.00	5.19	0.57	4.76
N15	02-26-92	1615	1.61	3.40	12.52	29.72	25.64	5.13	32.23	0.752	1.34	0.00	3.94	0.45	4.33
N15	02-26-92	1614	10.03	3.27	12.46	29.62	25.66	4.85	32.24	0.748	2.37	0.00	4.15	0.50	4.28
N15	02-26-92	1613	20.23	3.06	12.37	29.45	25.68	3.35	32.25	0.758	0.39	0.10	4.98	0.53	4.20
N15	02-26-92	1612	30.44	3.04	12.36	29.46	25.69	3.04	32.26	0.795	0.36	0.09	5.16	0.58	4.18
N15	02-26-92	1611	39.95	2.98	12.34	29.41	25.71	2.57	32.27	0.830	0.37	0.00	5.20	0.53	4.43
N16P	02-25-92	0830	2.38	2.95	12.36	29.37	25.71	3.18	32.27	0.851	0.27	0.00	5.13	0.43	4.29
N16P	02-25-92	0829	6.50	2.95	12.34	29.38	25.71	3.04	32.27	0.832	0.85	0.00	4.72	0.46	4.22
N16P	02-25-92	0828	12.01	2.96	12.33	29.40	25.72	2.16	32.28	0.828	0.50	0.00	4.84	0.48	4.51

TABLE A-1a. CONTINUED.

STATION	DATE TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N16P	02-25-92 0827	20.11	3.01	12.30	29.46	25.73	1.83	32.30	0.803	0.40	0.00	6.16	0.53	4.69
N16P	02-25-92 0826	32.00	3.04	12.26	29.50	25.73	1.83	32.31	0.806	0.68	0.13	4.95	0.44	4.63
N16P	02-26-92 1637	1.98	3.27	12.45	29.63	25.67	5.30	32.25	0.803	1.40	0.00	4.12	0.47	4.02
N16P	02-26-92 1636	10.06	3.23	12.42	29.60	25.67	4.72	32.25	0.758	0.23	0.00	1.84	0.38	4.01
N16P	02-26-92 1635	17.94	3.14	12.37	29.53	25.68	4.87	32.25	0.761	0.98	0.00	4.25	0.46	4.08
N16P	02-26-92 1634	27.06	2.99	12.34	29.41	25.70	3.27	32.26	0.785	0.26	0.08	3.01	0.43	3.90
N16P	02-26-92 1633	37.00	3.01	12.30	29.46	25.72	3.07	32.28	0.871	0.63	0.00	4.53	0.53	4.18
N17	02-26-92 1930	1.78	3.18	12.39	29.57	25.69	3.37	32.27	0.768	1.27	0.11	2.20	0.65	4.03
N17	02-26-92 1929	6.75	3.18	12.39	29.57	25.69	3.44	32.27	0.738	0.47	0.00	4.46	0.53	4.90
N17	02-26-92 1929	15.21	3.17	12.34	29.57	25.69	3.13	32.27	0.736	0.38 s	0.07 s	s	e 0.32	s 4.01 s
N17	02-26-92 1927	25.03	3.08	12.30	29.50	25.70	3.05	32.27	0.752	0.58	0.00	4.43	0.54	4.32
N17	02-26-92 1926	34.94	3.03	12.23	29.47	25.71	2.28	32.28	0.757	0.72	0.00	4.02	0.32	4.33
N18	02-26-92 1857	1.82	2.94	12.31	29.28	25.63	4.40	32.17	0.827	1.21	0.00	4.81	0.46	3.55
N18	02-26-92 1856	5.16	2.94	12.34	29.29	25.63	3.65	32.17	0.822	1.39	0.00	4.63	0.49	4.11
N18	02-26-92 1856	9.87	2.95	12.23	29.31	25.65	3.65	32.19	0.814	0.17	0.04	3.74	0.39	3.59
N18	02-26-92 1855	15.13	2.99	12.12	29.42	25.71	2.80	32.27	0.824	1.06	0.03	5.69	0.51	4.31
N18	02-26-92 1854	20.02	3.00	12.14	29.44	25.71	2.25	32.28	0.838	0.14	0.01	5.48	0.50	4.37
N19	02-26-92 1835	1.86	2.83	12.49	29.04	25.49	4.77	31.98	0.933	0.60	0.00	4.84	0.51	3.26
N19	02-26-92 1834	3.41	2.83	12.36	29.05	25.49	4.69	31.98	0.922	0.39	0.12	6.04	0.54	3.16
N19	02-26-92 1833	12.11	2.84	12.40	29.07	25.50	5.08	32.00	0.922	0.39	0.30	5.45	0.53	3.50
N19	02-26-92 1832	17.86	2.85	12.30	29.15	25.57	4.52	32.09	0.903	0.27	0.15	4.62	0.50	3.22
N19	02-26-92 1830	23.67	2.97	12.23	29.40	25.70	2.52	32.26	0.894	0.67	0.02	5.08	0.47	4.05
N20P	02-25-92 0923	2.84	2.70	12.36	28.94	25.50	2.64	31.98	0.980	1.16	0.19	6.60	0.59	4.02
N20P	02-25-92 0922	6.86	2.77	12.31	29.05	25.54	3.35	32.04	0.959	0.39	0.00	6.00	0.52	4.15
N20P	02-25-92 0921	12.14	3.05	12.21	29.48	25.72	1.34	32.29	0.895	1.18	0.00	5.37	0.47	4.79
N20P	02-25-92 0920	16.80	3.07	12.18	29.50	25.72	1.97	32.30	0.972	0.30	0.40	4.33	0.43	4.90
N20P	02-25-92 0919	25.05	3.08	12.20	29.52	25.72	2.44	32.30	1.021	0.20	0.01	4.07	0.47	5.06
N20P	02-26-92 1812	1.50	2.89	11.06	29.19	25.59	3.96	32.11	0.993	0.72	0.00	5.06	0.54	3.48
N20P	02-26-92 1802	10.22	2.86	12.36	29.19	25.61	3.49	32.13	0.866	0.95	0.00	4.91	0.53	4.05

TABLE A-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	DISS OXYGEN* (mg/L)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N20P	02-26-92	1801	16.22	2.85	12.24	29.27	25.68	1.91	32.23	0.745	0.27	0.00	5.31	0.54	4.66
N20P	02-26-92	1800	20.73	2.90	12.21	29.32	25.69	2.33	32.24	1.056	0.41	0.00	5.33	0.55	4.38
N20P	02-26-92	1741	26.87	2.91	12.24	29.33	25.70	2.13	32.25	1.111	0.47	0.00	4.90	0.48	4.34
N21	02-26-92	1707	1.88	2.92	12.55	29.24	25.60	4.34	32.13	0.855	0.49	0.00	4.51	0.48	3.49
N21	02-26-92	1706	7.04	2.91	12.51	29.24	25.61	4.44	32.14	0.841	0.70	0.00	4.22	0.47	3.40
N21	02-26-92	1705	15.10	2.97	12.30	29.40	25.71	2.41	32.27	0.817	0.65	0.00	5.33	0.53	4.24
N21	02-26-92	1703	19.60	2.98	12.30	29.41	25.71	1.95	32.27	0.837	0.20	0.00	4.64	0.53	4.48
N21	02-26-92	1702	30.11	2.98	12.30	29.42	25.71	1.79	32.27	0.858	0.37	0.00	4.71	0.53	4.28

s = Suspect value not used in data synthesis.
e = Data not reported by the analysis laboratory.
* = These values are from in situ readings from the upcast as converted using calibration described in Appendix A, Part 2.

TABLE A-1b. FEBRUARY 1992 STATION DATA TABLES: CHEMICAL AND BIOLOGICAL PARAMETERS AT TWO DEPTHS OF BIOPRODUCTIVITY STATIONS AND SPECIAL STATION F25.

STATION	DATE	TIME	DEPTH (M)	LAB REP	CHL A (ug/L)		DO (mg/L)	DOC (uM)	PHA (ug/L)	POC (uM)		PON (uM)		TDN (uM)	TDP (uM)	TSS (mg/L)	
F01P	02-23-92	1415	2.16	1	8.81	j	13.62	143.00	2.37	23.0		4.6		11.03	0.31	1.75	
F01P	02-23-92	1415	2.16	2	8.52	j		133.00	2.23	21.9		4.6		10.56	0.42	1.45	
F01P	02-23-92	1415	12.21	1	8.52	j	13.02	124.00	2.30	23.6		4.5		11.38	0.28	1.70	
F01P	02-23-92	1415	12.21	2	7.39	j		129.00	1.99	16.7		3.9		13.12	0.21	1.85	
F02P	02-23-92	1142	1.62	1	5.35		12.57	113.00	1.14	19.0		3.5		12.76	0.33	1.15	
F02P	02-23-92	1142	1.62	2	4.22			105.00	1.17	21.1		3.9		12.96	0.27	1.45	
F02P	02-23-92	1142	14.42	1	4.64		12.61	121.00	1.27	19.0		3.8		13.40	0.60	1.60	
F02P	02-23-92	1142	14.42	2	4.46			141.00	1.15	19.2		3.7		13.43	0.59	1.30	
F13P	02-24-92	0800	2.12	1	3.30		12.68	121.00	1.08	11.4		2.8		17.60	0.47	1.95	
F13P	02-24-92	0800	2.12	2	3.79			121.00	0.76	17.9		3.1		17.34	0.52	1.57	
F13P	02-24-92	0800	9.11	1	2.17		8.69	119.00	0.69	20.1		4.2		15.98	0.52	1.25	
F13P	02-24-92	0800	9.11	2	2.10			119.00	0.70	10.4		2.4		16.12	0.52	1.40	
F23P	02-25-92	1339	2.34	1	2.23		12.39	143.00	0.84	12.9		3.6		22.77	0.79	1.70	
F23P	02-25-92	1339	2.34	2	2.41			150.00	0.64	17.8		3.6		23.73	0.62	1.50	
F23P	02-25-92	1339	9.51	1	1.77		12.13	170.00	0.72	27.3		6.4		23.63	0.81	1.35	
F23P	02-25-92	1339	9.51	2	1.82			161.00	0.69	15.8		4.6		24.13	0.60	1.45	
F25	03-16-92	1156	2.12	1	4.75			138.00	1.21	37.5		5.0		15.03	1.15	1.37	
F25	03-16-92	1156	2.12	2	3.98			144.00	1.40	39.4		6.7		13.95	0.69	2.05	
F25	03-16-92	1156	4.10	1	3.06			137.00	1.31	34.8		4.7		14.03	0.83	1.86	
F25	03-16-92	1156	4.10	2	3.67			136.00	1.28	40.9		6.6		13.75	0.83	1.73	
F25	02-25-92	1019	4.20	1	1.84			154.00	0.60	17.4		3.6		20.77	0.66	1.40	
F25	02-25-92	1019	4.20	2	2.07			167.00	0.90	19.0		3.9		21.76	0.84	1.35	
N01P	02-25-92	1215	2.19	1	1.10		12.42	118.00	0.63	-2.0	s	-0.8	s	14.87	0.50	0.75	
N01P	02-25-92	1215	2.19	2	1.06			125.00	0.41	9.5	s	-0.8	s	13.64	0.57	0.65	
N01P	02-25-92	1215	12.77	1	1.15		12.03	147.00	0.47	7.8		2.2		13.94	0.51		e
N01P	02-25-92	1215	12.77	2	1.14			140.00	0.52	7.4		2.8		14.57	0.52	2.05	
N04P	02-26-92	1005	2.30	1	6.03		12.81	109.00	1.41	23.2		4.0		10.73	0.20	0.95	
N04P	02-26-92	1005	2.30	2	6.66			115.00	0.22	15.2		4.3		10.61	0.31	1.30	
N04P	02-26-92	1005	20.52	1	5.18		12.57	131.00	1.53	10.0	s	-0.8	s	11.25	0.39	0.90	

TABLE A-1b. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	LAB REP	CHL A (ug/L)	DO (mg/L)	DOC (uM)	PHA (ug/L)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
N04P	02-26-92	1005	20.52	2	5.09		130.00	1.30	50.3 s	2.3 s	11.33	0.35	1.65
N07P	02-24-92	1120	2.15	1	1.93	12.24	124.00	0.64	14.7	2.6	13.58	0.45	1.25
N07P	02-24-92	1120	2.15	2	2.21		127.00	0.93	25.4	4.0	13.22	0.48	1.80
N07P	02-24-92	1120	15.06	1	1.61	12.15	128.00	0.81	11.4	2.2	13.92	0.44	1.25
N07P	02-24-92	1120	15.06	2	2.06		129.00	0.96	9.6	2.3	14.38	0.51	0.80
N10P	02-24-92	1310	2.07	1	2.31	12.52	141.00	0.56	27.4	5.6	19.36	0.74	1.55
N10P	02-24-92	1310	2.07	2	2.58		278.00 s	0.77	32.3	7.4	20.57	0.72	1.46
N10P	02-24-92	1310	10.02	1	2.24	12.27	139.00	1.02	25.6	8.6	20.81	0.70	1.11
N10P	02-24-92	1310	10.02	2	2.39		143.00	0.72	14.8	3.1	19.24	0.70	1.16
N16P	02-25-92	0800	2.38	1	2.27	12.87	124.00	0.62	7.3	2.8	12.48	0.47	1.20
N16P	02-25-92	0800	2.38	2	1.84		129.00	0.85	11.7	2.4	14.19	0.55	1.70
N16P	02-25-92	0800	12.01	1	2.27	12.68	134.00	0.77	20.7	2.8	13.95	0.47	1.07
N16P	02-25-92	0800	12.01	2	2.30		132.00	0.79	15.2	2.7	14.39	0.49	1.07
N20P	02-25-92	0900	2.84	1	2.79	12.72	124.00	0.92	16.5	4.1	15.49	0.59	1.35
N20P	02-25-92	0900	2.84	2	2.80		128.00	0.59	11.8	3.1	15.11	0.48	1.00
N20P	02-25-92	0900	12.14	1	2.03	13.43	158.00	0.64	22.2	3.6	13.55	0.55	1.25
N20P	02-25-92	0900	12.14	2	2.37		156.00	0.93	16.1 s	-0.4 s	13.60	0.47	1.00

s = Database values qualified as suspect were omitted from the data synthesis.
e = Data not reported by the analysis laboratory.
j = Estimated value for chl A using an assumed chl A/pha ratio based on other samples.

APPENDIX A

Part 2

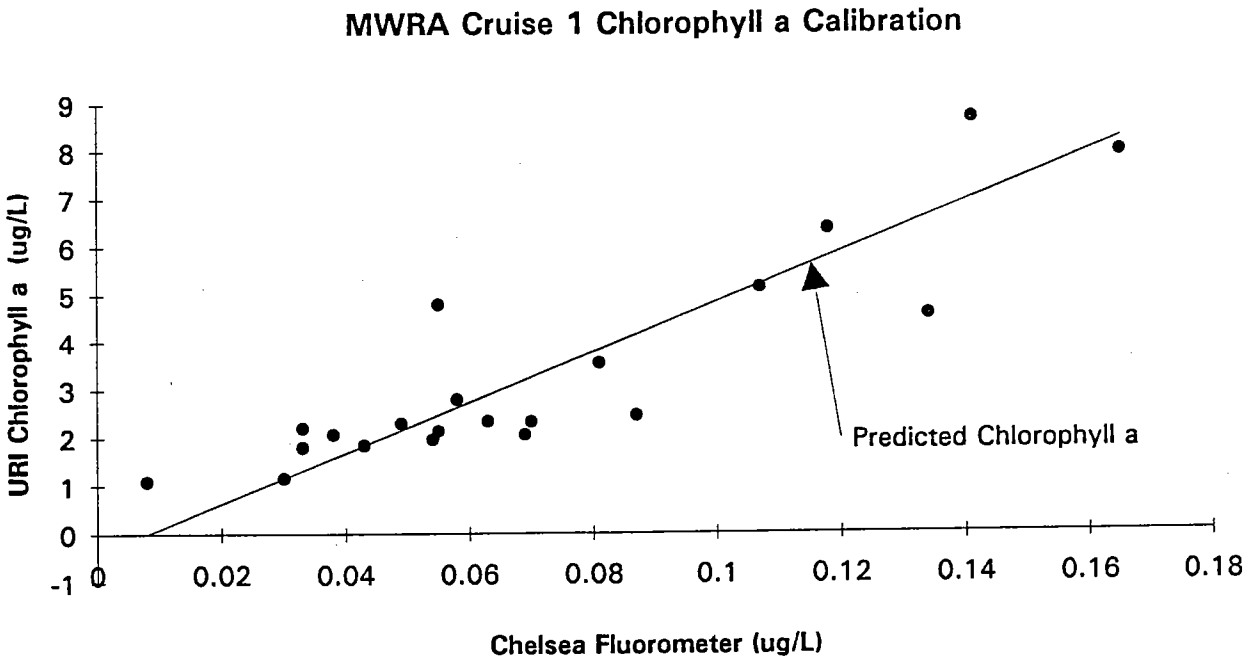
Instrument Calibration Data

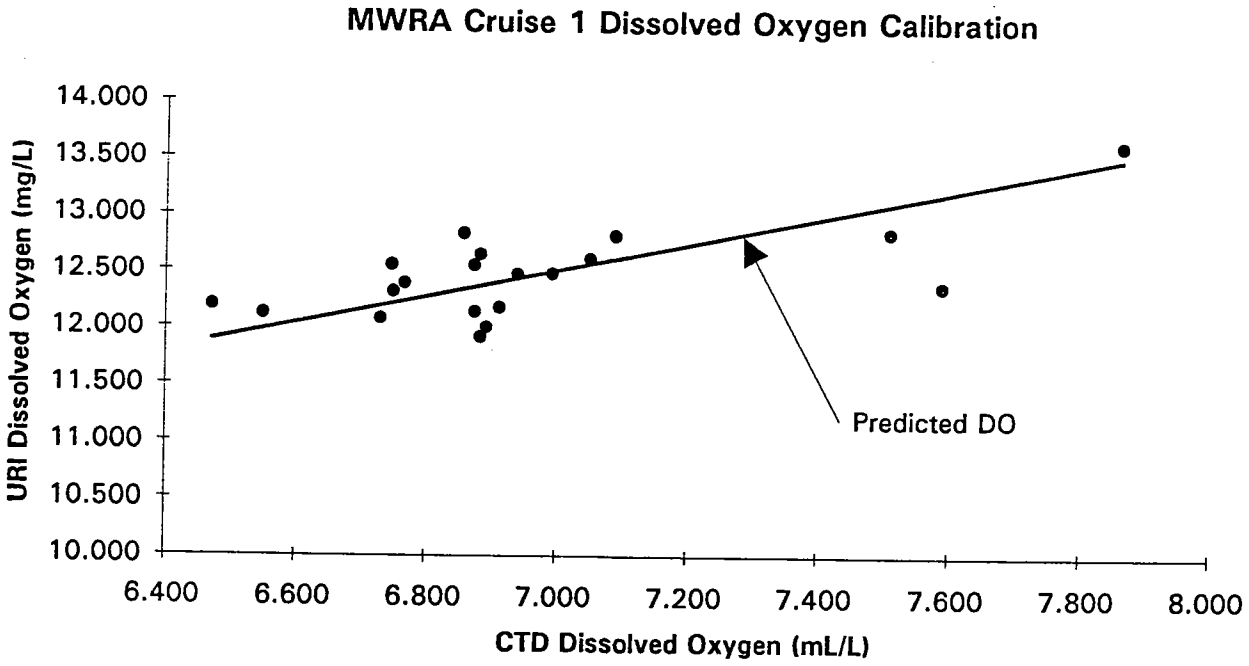
The average chlorophyll (n= 2 replicate determinations) and dissolved oxygen (n= 3 replicate determinations) concentrations from wet chemistry analyses were used to post-calibrate *in situ* sensors. Water samples were taken at BioProductivity stations. A functional regression (Ricker, 1973) was used given that both x- and y- values have inherent errors. The regressions were not forced to zero in either case; in general, this should not be forced if the majority of data are not near the zero intercept.

A second type of calibration was performed. The Turner fluorometer on board the ship, with water pumped to it, was used in towing. It was calibrated to the (post-calibrated) Chelsea *in situ* fluorometer used in vertical profiling. To do this calibration, sensors were operated simultaneously during vertical profiling; time series at station F21 on 24 February 1992 and station N9 on 26 February 1992 form the data points for this plot and regression.

MWRA Cruise 1 Chlorophyll a Calibration

STATION	BOTTLE	CTD	Chlg	Predicted Chlg (b*CTD+a)		
N01P	5	0.030	1.1486	1.1534		
N01P	9	0.008	1.0783	-0.0012		
N04P	5	0.107	5.1349	5.1947		
N04P	9	0.118	6.3485	5.7721		
N07P	5	0.043	1.8329	1.8357		
N07P	9	0.038	2.0698	1.5733		
N10P	5	0.070	2.3120	3.2528		
N10P	9	0.087	2.4459	4.1450		
N16P	5	0.049	2.2824	2.1506		
N16P	9	0.069	2.0563	3.2003		
N20P	5	0.033	2.2029	1.3109		
N20P	9	0.058	2.7912	2.6230		
F02P	5	0.134	4.5467	6.6118		
F02P	9	0.055	4.7825	2.4655		
F13P	5	0.055	2.1355	2.4655		
F13P	9	0.081	3.5459	3.8301		
F23P	5	0.033	1.7966	1.3109		
F23P	9	0.063	2.3245	2.8854		
F25	5	0.054	1.9558	2.4131		
F1P	5	0.165	7.9550	8.2388		
F1P	9	0.141	8.6650	6.9792		
Regression Statistics						
			Average	New Slope	b	
Multiple R	0.88527	X mean	0.071	x1/Multiple R	52.48454303	
R Square	0.78370	Y mean	3.3052873			
Adjusted R Square	0.77231			New Intercept	a	
Standard Error	1.02497			Ym-b*Xm	-0.42111527	
Observations	21					
Analysis of Variance						
	df	*Sum of Squares*	*Mean Square*	*F*	*Significance F*	
Regression	1	72.3195	72.3195	68.8392	9.71E-08	
Residual	19	19.9606	1.0506			
Total	20	92.2800				
	Coefficients	*Standard Error*	*t Statistic*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.0064	0.4562	0.0141	0.98889365	-0.94839	0.96125
x1	46.4628	5.6000	8.2969	6.6079E-08	34.74186	58.18369


MWRA Cruise 1 Chlorophyll a Calibration
URI Chlorophyll a (ug/L)
9
8
7
6
5
4
3
2
1
0
-1
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
Predicted Chlorophyll a
Chelsea Fluorometer (ug/L)

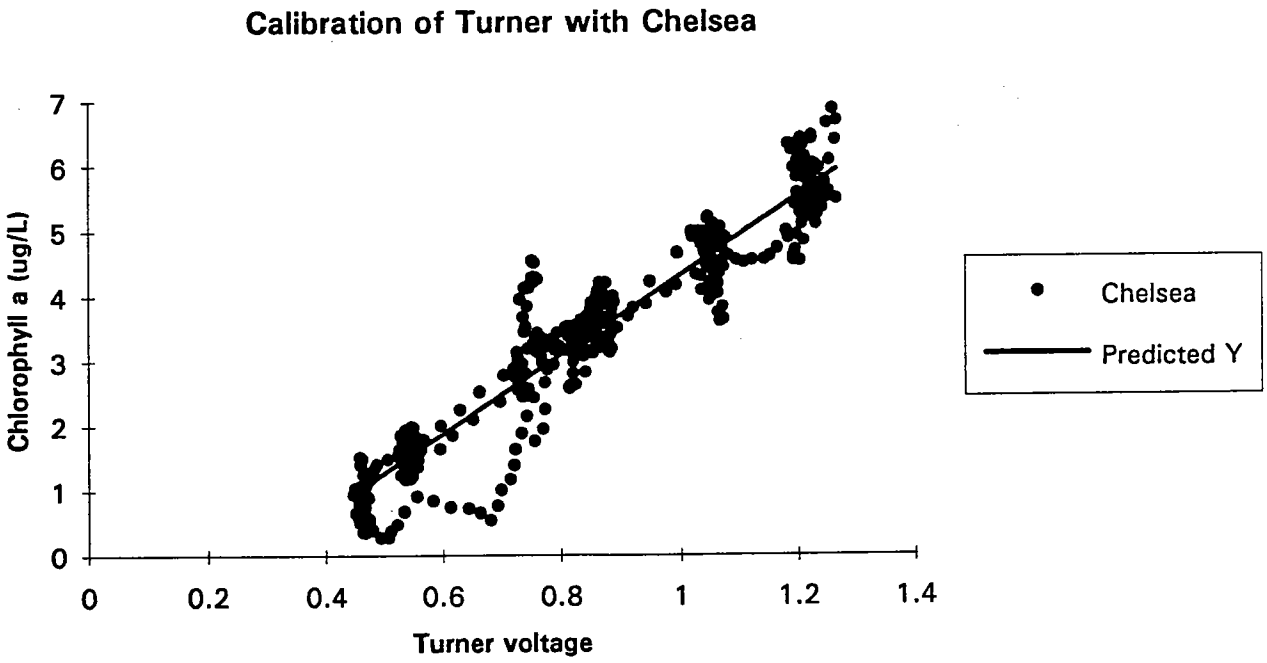

MWRA Cruise 1 Dissolved Oxygen Calibration
URI Dissolved Oxygen (mg/L)
14.000
13.500
13.000
12.500
12.000
11.500
11.000
10.500
10.000
6.400
6.600
6.800
7.000
7.200
7.400
7.600
7.800
8.000
CTD Dissolved Oxygen (mL/L)
Predicted DO

A-16

Dissolved Oxygen Concentrations for Cruise 1						
from 2/23/92 to 2/26/92						
Station	*Bottle*	*CTD Dissolved Oxygen (mL/L)*	*URI Dissolved Oxygen (mg/L)*	Predicted Dissolved Oxygen (mg/L)		
F2	5	7.590	12.368	13.17886666		
F2	9	7.050	12.603	12.55824295		
F1	5	7.509	12.841	13.0860106		
F1	9	7.865	13.623	13.49534673		
F13	5	6.730	12.082	12.19030036		
F13	9	6.992	12.474	12.49155335		
N7	5	6.883	11.917	12.36622291		
N7	9	6.874	12.138	12.35587453		
N10	5	6.891	12.005	12.37542148		
N10	9	6.911	12.176	12.39841789		
N16	5	6.856	12.830	12.33517775		
N16	9	6.881	12.643	12.36392327		
N20	5	6.746	12.555	12.20869749		
N20	9	6.873	12.551	12.3547247		
N1	5	6.749	12.319	12.21214695		
N1	9	6.766	12.391	12.2316939		
F23	5	6.549	12.123	11.98218283		
F23	9	6.471	12.191	11.89249683		
N4	5	6.939	12.468	12.43061286		
N4	9	7.089	12.813	12.60308595		
ion Statistics						
			Average	New Slope	b	
Multiple R	0.677574	X mean	6.961	x1/Multiple R	1.149820591	
R Square	0.459106	Y mean	12.456			
Adjusted R	0.429056			New Intercept	a	
Standard E	0.294104			Ym-b*Xm	4.452007781	
Observatio	20					
is of Variance						
	df	*um of Squares*	*Mean Square*	*F*	*Significance F*	
Regression	1	1.3215278	1.3215278	15.27823802	0.0010292	
Residual	18	1.5569531	0.0864974			
Total	19	2.878481				
	Coefficients	*Standard Error*	*t Statistic*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	7.032561	1.388959	5.0631885	6.90506E-05	4.1144643	9.950658
x1	0.779088	0.1993196	3.9087387	0.000943783	0.3603329	1.197843

Calibration of Turner with Chelsea

Regression Statistics						
Multiple R	0.9626					
R Square	0.9265					
Adjusted R Square	0.9264					
Standard Error	0.4578					
Observations	548					
Analysis of Variance						
	df	*Sum of Squares*	*Mean Square*	*F*	*Significance F*	
Regression	1	1443.141869	1443.141869	6886.201	0	
Residual	546	114.4252754	0.209570101			
Total	547	1557.567144				
	Coefficients	*Standard Error*	*t Statistic*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-1.79257	0.062109177	-28.86166964	5.306E-112	-1.9146	-1.6706
x1	6.11192	0.073652601	82.98313761	0	5.9672	6.2566


Calibration of Turner with Chelsea
Chlorophyll a (ug/L)
0
1
2
3
4
5
6
7
0
0.2
0.4
0.6
0.8
1
1.2
1.4
Turner voltage
Chelsea
Predicted Y

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APPENDIX B

March 1992 Station Data Tables

Part 1

Physical and Chemical Parameters at Discrete Bottle Measurement Depths

Depth, Temperature, Conductivity, Sigma T, Fluorescence, Salinity, and Beam Attenuation all were obtained electronically, from *in situ* sensor readings during the upcast of vertical profiling during which water samples were taken by closing bottles. The Table(s) values represent (20-sec) time-averaged values, the approximate mid-point of the time period being the actual time of closing of the Niskin/GO-FLO bottle. As footnoted, Fluorescence values have been calculated using a post-cruise calibration with wet chemistry analysis on water samples for chlorophyll. Unsuccessful operation of the dissolved oxygen sensor was detected in performing the calibration (see part 2). The other parameters rely on factory calibrations of sensors to calculate values. The dissolved inorganic nutrient data (Table B-1a) and additional measurements (Table B-1b) come from analysis of water samples from bottles.

TABLE B-1a. MARCH 1992 STATION DATA TABLES: PHYSICAL AND CHEMICAL PARAMETERS AT DISCRETE BOTTLE MEASUREMENT DEPTHS.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
F01P	03-14-92	1009	2.42	2.54	28.92	25.63	1.38	32.13	0.934	0.22	0.00	3.70	0.45	2.65
F01P	03-14-92	1008	8.77	2.53	28.92	25.63	1.89	32.13	0.818	0.87	0.14	1.04	0.51	2.43
F01P	03-14-92	1006	12.17	2.53	28.93	25.63	1.88	32.13	0.819	0.17	0.14	2.05	0.41	3.37
F01P	03-14-92	1005	14.69	2.53	28.93	25.63	1.79	32.13	0.818	0.48	0.25	1.59	0.44	3.41
F01P	03-14-92	1004	20.43	2.53	28.93	25.63	1.89	32.13	0.826	0.58	0.19	0.61	0.43	3.44
F02P	03-14-92	1207	5.48	2.50	28.90	25.65	4.37	32.14	0.952	0.32	0.08	0.18	0.26	1.33
F02P	03-14-92	1206	10.65	2.49	28.90	25.65	4.51	32.14	0.952	1.36	0.07	0.23	0.31	1.09
F02P	03-14-92	1204	14.53	2.50	28.91	25.65	4.24	32.14	0.949	0.25	0.17	0.64	0.23	1.44
F02P	03-14-92	1203	19.68	2.49	28.90	25.65	4.53	32.14	0.944	1.27	0.14	1.81	0.11	1.06
F02P	03-14-92	1202	24.32	2.49	28.91	25.65	4.35	32.15	0.937	1.14	0.13	1.24	0.26	1.38
F03	03-14-92	0832	2.30	2.30	28.75	25.67	0.56	32.15	0.852	1.78	0.08	4.15	0.48	2.76
F03	03-14-92	0831	5.30	2.30	28.75	25.67	0.62	32.15	0.830	0.31	0.07	3.64	0.40	3.50
F03	03-14-92	0830	7.20	2.29	28.73	25.66	0.84	32.14	0.830	0.37	0.39	2.38	0.31	2.77
F03	03-14-92	0000	10.00	2.29	28.70	25.63	1.42	32.10	0.824	1.32	0.15	2.13	0.45	2.96
F03	03-14-92	0000	13.00	2.31	28.70	25.61	1.37	32.08	0.834	0.45	0.24	2.09	0.30	3.54
F05	03-14-92	1602	2.30	2.62	28.93	25.56	0.04	32.05	0.943	0.87	0.15	1.62	0.31	2.01
F05	03-14-92	1601	5.24	2.62	28.94	25.57	1.03	32.06	0.925	0.43	0.08	2.30	0.45	1.82
F05	03-14-92	1600	10.00	2.63	28.95	25.57	0.89	32.07	0.921	2.54	0.16	0.63	0.49	2.36
F05	03-14-92	1558	15.44	2.63	28.95	25.58	0.09	32.07	0.924	0.75	0.14	3.05	0.42	1.88
F06	03-14-92	1711	2.44	2.78	29.21	25.69	1.04	32.23	0.930	1.06	0.14	4.91	0.43	3.98
F06	03-14-92	1709	10.91	2.79	29.22	25.70	0.39	32.24	0.778	1.50	0.13	2.82	0.58	4.16
F06	03-14-92	1707	16.39	2.79	29.23	25.70	0.56	32.24	0.774	1.01	0.19	3.89	0.42	4.04
F06	03-14-92	1706	22.92	2.78	29.22	25.70	0.71	32.24	0.779	1.43	0.14	2.95	0.50	3.93
F06	03-14-92	1704	33.80	2.77	29.22	25.70	0.37	32.24	0.783	0.42	0.17	3.89	0.47	4.35
F07	03-14-92	1803	4.67	2.93	29.35	25.70	1.27	32.26	0.758	0.35	0.00	0.84	0.22	4.07
F07	03-14-92	1801	14.63	2.93	29.36	25.70	1.84	32.26	0.765	1.77	0.11	2.57	0.50	4.19
F07	03-14-92	1800	24.58	2.93	29.36	25.70	1.48	32.26	0.760	3.26	0.15	4.75	0.69	3.94
F07	03-14-92	1757	35.59	2.95	29.38	25.70	1.26	32.26	0.764	0.57	0.23	3.80	0.40	4.21
F07	03-14-92	1756	44.93	2.95	29.39	25.70	2.24	32.26	0.771	0.25	0.11	3.87	0.35	4.04

TABLE B-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
F09	03-15-92	1020	1.98	2.60	28.80	25.46	1.41	31.92	0.895	2.49	0.12	3.37	0.57	2.31
F09	03-15-92	1020	5.56	2.59	28.80	25.46	1.57	31.92	0.893	0.37	0.00	1.83	0.57	2.47
F09	03-15-92	1018	11.16	2.59	28.80	25.46	2.13	31.92	0.894	0.26	0.09	2.89	0.62	2.42
F09	03-15-92	1016	17.47	2.60	28.83	25.48	2.19	31.94	0.912	0.35	0.12	2.45	0.17	2.15
F10	03-15-92	1053	2.33	2.98	29.40	25.71	1.38	32.27	0.750	0.12	0.00	4.24	0.70	4.46
F10	03-15-92	1053	9.42	2.95	29.38	25.71	2.25	32.27	0.724	0.15	0.09	3.17	1.03	4.43
F10	03-15-92	1052	18.60	2.93	29.37	25.71	2.78	32.27	0.726	0.13	0.06	2.32	0.97	4.56
F10	03-15-92	1050	25.98	2.93	29.37	25.71	2.20	32.27	0.724	0.14	0.00	3.93	0.57	4.61
F11	03-16-92	1915	2.04	3.16	29.55	25.70	1.81	32.28	0.739	0.08	0.01	4.10	0.53	4.60
F11	03-16-92	1914	14.07	3.08	29.50	25.70	2.85	32.27	0.719	0.16	0.12	1.83	0.37	4.02
F11	03-16-92	1913	23.88	3.05	29.48	25.71	1.90	32.27	0.714	0.08	0.06	2.69	0.44	3.79
F11	03-16-92	1912	39.53	3.06	29.49	25.71	1.64	32.28	0.720	0.08	0.09	2.83	0.42	4.05
F11	03-16-92	1911	50.54	3.05	29.49	25.71	1.43	32.28	0.721	0.23	0.07	2.85	0.49	4.05
F13P	03-15-92	0904	2.05	2.58	28.70	25.38	1.65	31.82	0.969	0.21	0.27	3.45	0.33	1.90
F13P	03-15-92	0904	4.67	2.57	28.70	25.38	2.23	31.82	0.964	0.18	0.10	3.15	0.43	2.08
F13P	03-15-92	0903	9.90	2.57	28.71	25.39	2.49	31.83	0.958	0.16	0.20	3.41	0.41	2.18
F13P	03-15-92	0902	16.02	2.62	28.79	25.43	2.76	31.88	0.972	0.24	0.12	3.13	0.47	2.11
F13P	03-15-92	0901	23.90	2.70	28.97	25.52	1.95	32.01	0.872	0.56	0.10	3.80	0.48	2.58
F14	03-15-92	1623	2.23	2.63	28.77	25.41	1.67	31.86	0.909	0.31	0.13	3.25	0.85	1.94
F14	03-15-92	1622	4.66	2.63	28.78	25.41	1.70	31.86	0.900	0.39	0.12	3.26	0.73	1.92
F14	03-15-92	1621	5.27	2.63	28.78	25.42	1.71	31.87	0.897	0.54	0.00	2.64	0.54	2.38
F14	03-15-92	1619	11.90	2.62	28.81	25.45	1.76	31.90	0.884	0.57	0.12	3.32	0.61	2.50
F15	03-15-92	1711	2.13	3.19	29.57	25.69	3.36	32.27	0.797	0.13	0.00	2.24	0.52	3.82
F15	03-15-92	1710	4.95	3.19	29.58	25.69	3.02	32.27	0.768	0.13	0.07	3.44	0.72	3.13
F15	03-15-92	1708	12.65	3.19	29.58	25.69	3.12	32.27	0.766	0.81	0.06	3.54	0.89	3.14
F15	03-15-92	1705	31.96	3.00	29.43	25.70	2.24	32.26	0.751	0.35	0.06	2.80	0.56	3.74
F16	03-15-92	1801	2.98	3.22	29.59	25.68	3.77	32.26	1.065	0.79	0.04	4.27	0.62	3.50
F16	03-15-92	1802	3.12	3.22	29.60	25.69	2.68	32.27	0.769	0.07	0.00	4.15	0.52	3.50
F16	03-15-92	1759	13.85	3.22	29.61	25.69	2.25	32.27	0.764	0.42	0.05	1.53	0.51	4.19

TABLE B-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	Si04 (uM)
F16	03-15-92	1757	30.51	3.22	29.61	25.69	2.00	32.27	0.766	0.51	0.05	4.31	0.70	4.37
F16	03-15-92	1755	49.81	3.36	29.78	25.71	2.21	32.32	1.018	0.09	0.09	4.16	0.66	4.88
F18	03-16-92	1554	1.66	2.87	29.26	25.66	0.63	32.20	0.680	0.61	0.04	1.57	0.50	3.92
F18	03-16-92	1554	5.36	2.84	29.23	25.66	0.97	32.20	0.678	0.22	0.13	2.04	0.48	2.87
F18	03-16-92	1552	14.37	2.63	29.06	25.68	0.99	32.20	0.677	0.11	0.00	2.57	0.39	2.95
F18	03-16-92	1551	18.00	2.68	29.11	25.68	1.12	32.21	0.679	0.61	0.04	2.43	0.57	2.96
F18	03-16-92	1550	20.50	2.68	29.11	25.68	0.97	32.20	0.682	0.34	0.04	2.99	0.67	3.00
F19	03-16-92	1825	2.03	3.48	29.89	25.74	2.01	32.36	0.740	0.11	0.00	4.88	0.57	5.46
F19	03-16-92	1824	15.73	3.39	29.83	25.75	2.05	32.37	0.720	0.94	0.00	5.64	0.74	5.58
F19	03-16-92	1823	26.13	3.38	29.83	25.75	2.48	32.37	0.744	0.12	0.02	4.23	0.63	5.73
F19	03-16-92	1822	52.90	3.37	29.84	25.76	2.22	32.38	0.754	1.05	0.03	3.33	0.62	5.57
F19	03-16-92	1821	75.55	3.44	29.91	25.76	2.73	32.39	0.966	1.10	0.00	6.16	0.75	6.14
F20	03-16-92	1642	1.86	2.91	29.30	25.67	1.22	32.22	0.733	0.12	0.00	3.87	0.59	3.70
F20	03-16-92	1642	7.75	2.92	29.31	25.67	1.36	32.22	0.734	0.30	0.24	2.10	0.54	3.71
F20	03-16-92	1641	14.93	2.85	29.28	25.69	1.69	32.24	0.783	0.13	0.13	3.89	0.60	4.48
F20	03-16-92	1640	23.53	2.83	29.26	25.70	1.74	32.24	0.770	1.32	0.11	2.24	0.63	3.61
F20	03-16-92	1638	31.48	2.82	29.26	25.70	1.86	32.24	0.792	0.54	0.04	2.53	0.63	3.59
F21	03-16-92	1715	1.92	3.25	29.64	25.70	2.32	32.29	0.780	0.12	0.06	3.70	0.50	3.80
F21	03-16-92	1714	10.23	3.10	29.53	25.71	2.11	32.29	0.831	0.87	0.06	4.47	0.66	3.74
F21	03-16-92	1713	20.56	3.08	29.51	25.71	1.99	32.29	0.810	0.41	0.14	1.81	0.52	3.81
F21	03-16-92	1712	33.99	3.08	29.52	25.72	2.13	32.29	0.829	0.41	0.09	2.69	0.57	3.84
F21	03-16-92	1711	51.95	3.09	29.53	25.72	2.30	32.29	0.851	0.48	0.09	2.94	0.56	3.96
F22	03-16-92	1751	1.99	3.24	29.64	25.71	1.81	32.30	0.718	0.18	0.08	4.07	0.51	4.10
F22	03-16-92	1750	20.37	3.14	29.57	25.72	2.30	32.30	0.738	0.17	0.13	2.80	0.51	4.15
F22	03-16-92	1748	29.92	3.13	29.57	25.72	2.15	32.30	0.732	0.15	0.17	1.82	0.42	4.14
F22	03-16-92	1746	53.38	3.27	29.72	25.73	1.61	32.33	0.690	0.10	0.12	3.04	0.50	4.61
F22	03-16-92	1745	78.06	3.55	30.03	25.77	2.41	32.42	0.976	0.65	0.10	4.08	0.60	6.23
F23P	03-16-92	1250	1.97	2.51	27.45	24.22	1.70	30.36	1.358	0.89	0.26	4.67	0.76	3.39
F23P	03-16-92	1249	4.61	2.42	27.67	24.51	2.97	30.71	1.285	1.19	0.21	4.42	0.63	3.09
F23P	03-16-92	1247	9.74	2.22	27.78	24.78	3.82	31.03	1.239	1.62	0.21	3.94	0.82	2.58
F23P	03-16-92	1246	14.16	2.19	27.79	24.82	3.57	31.08	1.246	1.83	0.19	3.86	1.24	2.52

TABLE B-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
F23P	03-16-92	1245	17.70	2.20	27.91	24.92	3.30	31.21	1.191	1.44	0.19	3.72	1.16	2.89
F24	03-16-92	1404	1.90	2.36	28.30	25.18	0.89	31.54	1.181	2.91	0.15	3.50	0.77	3.30
F24	03-16-92	1403	5.20	2.49	28.69	25.45	0.96	31.89	0.937	1.49	0.14	3.58	0.81	3.21
F24	03-16-92	1402	10.04	2.39	28.70	25.54	1.10	32.00	0.831	0.50	0.12	3.52	0.71	3.34
F24	03-16-92	1400	16.47	2.58	28.97	25.64	1.16	32.14	0.784	0.62	0.10	2.64	0.58	2.66
F25	03-16-92	1201	2.12	2.02	27.85	25.02	2.16	31.32	1.324	1.12	0.21	3.02	0.64	1.66
F25	03-16-92	1200	4.10	2.07	28.01	25.14	3.19	31.47	1.238	1.07	0.20	3.44	0.70	2.02
F25	03-16-92	1159	7.90	2.11	28.12	25.21	3.26	31.56	1.098	0.47	0.20	2.72	0.72	2.29
F25	03-16-92	1157	11.71	2.12	28.12	25.20	3.17	31.55	1.093	1.26	0.19	2.75	1.13	1.92
N01P	03-16-92	1502	1.90	3.03	29.41	25.67	0.81	32.23	0.757	0.45	0.24	2.21	0.50	3.00
N01P	03-16-92	1501	5.15	2.95	29.33	25.66	1.89	32.21	0.786	0.19	0.04	3.35	0.60	3.86
N01P	03-16-92	1500	13.13	2.79	29.22	25.69	2.30	32.23	0.798	1.99	0.10	3.96	0.88	2.96
N01P	03-16-92	1459	20.54	2.81	29.24	25.69	1.78	32.23	0.796	0.19	0.10	2.23	0.46	3.64
N01P	03-16-92	1458	26.04	2.81	29.25	25.69	1.79	32.24	0.802	0.23	0.15	2.07	0.51	3.95
N01P	03-17-92	0840	2.70	2.79	29.22	25.70	1.30	32.24	0.786	1.04	0.07	3.27	0.55	3.13
N01P	03-17-92	0839	7.93	2.79	29.22	25.70	1.48	32.24	0.784	1.53	0.07	3.92	0.60	3.13
N01P	03-17-92	0838	15.93	2.79	29.23	25.70	1.54	32.24	0.782	0.94	0.09	1.77	0.48	3.10
N01P	03-17-92	0837	20.71	2.79	29.23	25.70	2.06	32.24	0.787	0.15	0.00	3.26	0.46	3.11
N01P	03-17-92	0836	27.13	2.79	29.23	25.70	1.90	32.24	0.778	0.60	0.11	2.52	0.49	3.12
N02	03-17-92	0938	4.76	2.99	29.40	25.70	2.29	32.26	0.879	1.28	0.09	0.91	0.48	3.35
N02	03-17-92	0936	8.82	2.98	29.40	25.70	2.55	32.26	0.881	0.61	0.09	2.32	0.48	3.36
N02	03-17-92	0935	15.69	2.98	29.41	25.70	2.54	32.26	0.879	0.87	0.08	3.92	0.58	3.34
N02	03-17-92	0933	35.18	2.98	29.41	25.70	2.37	32.26	0.883	0.33	0.06	1.64	0.40	3.36
N04P	03-17-92	1026	3.60	3.12	29.55	25.72	1.48	32.31	0.771	1.89	0.14	4.43	0.65	4.02
N04P	03-17-92	1025	11.14	3.12	29.55	25.72	3.22	32.31	0.773	0.20	0.00	3.17	0.44	3.98
N04P	03-17-92	1023	22.42	3.12	29.55	25.73	2.36	32.31	0.767	0.71	0.09	4.41	0.63	3.99
N04P	03-17-92	1021	34.88	3.12	29.56	25.72	2.48	32.31	0.766	0.14	0.25	4.18	0.46	3.98
N04P	03-17-92	1020	45.90	3.12	29.57	25.73	2.63	32.31	0.762	0.78	0.09	2.58	0.54	4.06
N07P	03-15-92	1248	2.04	3.23	29.61	25.69	1.44	32.27	1.009	0.57	0.23	3.26	0.51	4.22
N07P	03-15-92	1247	10.23	3.21	29.60	25.69	2.36	32.27	0.819	0.23	0.00	3.05	0.76	4.41

TABLE B-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N07P	03-15-92	1246	22.44	3.21	29.61	25.69	2.01	32.27	0.815	0.21	0.35	3.57	0.43	4.36
N07P	03-15-92	1244	34.27	3.21	29.62	25.69	2.56	32.28	0.816	0.21	0.14	2.93	0.72	4.06
N07P	03-15-92	1242	44.82	3.23	29.63	25.70	2.06	32.28	0.813	1.10	0.10	4.51	1.13	4.70
N07P	03-17-92	1712	2.25	3.06	29.47	25.71	2.84	32.28	0.832	0.25	0.15	2.74	0.53	4.05
N07P	03-17-92	1711	13.54	3.07	29.49	25.71	2.60	32.28	0.837	0.90	0.07	3.96	0.63	4.89
N07P	03-17-92	1711	29.73	3.14	29.57	25.72	2.77	32.30	0.832	0.20	0.00	2.60	0.47	4.28
N07P	03-17-92	1709	34.73	3.17	29.60	25.72	2.92	32.31	0.829	0.78	0.09	2.09	0.53	4.45
N07P	03-17-92	1708	45.39	3.25	29.69	25.73	2.39	32.33	0.883	0.92	0.07	1.85	0.67	5.17
N08	03-17-92	1647	1.88	2.83	29.24	25.68	2.14	32.23	0.867	0.29	0.01	1.81	0.43	3.44
N08	03-17-92	1646	7.88	2.83	29.25	25.69	2.71	32.23	0.840	1.15	0.15	1.01	0.42	3.49
N08	03-17-92	1646	15.30	2.85	29.27	25.69	2.63	32.23	0.846	0.19	0.00	1.88	0.44	2.80
N08	03-17-92	1645	22.11	2.90	29.32	25.69	3.16	32.24	0.851	0.12	0.00	2.19	0.43	2.95
N08	03-17-92	1644	25.72	2.91	29.34	25.69	3.04	32.24	0.850	0.63	0.07	3.54	0.58	3.47
N09	03-17-92	1744	1.96	2.59	28.98	25.65	2.51	32.15	0.851	0.38	0.10	1.48	0.48	3.53
N09	03-17-92	1743	5.66	2.59	28.99	25.64	2.07	32.15	0.847	1.28	0.08	3.48	0.61	3.37
N09	03-17-92	1742	11.53	2.59	28.99	25.64	1.84	32.15	0.846	1.30	0.08	3.47	0.65	3.05
N09	03-17-92	1741	19.08	2.59	28.99	25.65	2.30	32.15	0.851	1.25	0.09	3.46	0.54	2.36
N09	03-17-92	1740	28.18	2.61	29.04	25.67	1.66	32.19	0.827	1.09	0.07	3.52	0.61	2.40
N10P	03-16-92	1049	2.20	2.72	29.11	25.66	0.66	32.18	0.815	0.22	0.20	2.55	0.67	2.24
N10P	03-16-92	1048	5.41	2.68	29.08	25.66	1.30	32.18	0.820	0.30	0.21	2.58	1.49	2.96
N10P	03-16-92	1047	10.49	2.65	29.06	25.66	2.00	32.18	0.826	0.19	0.19	2.77	0.51	2.22
N10P	03-16-92	1046	14.41	2.64	29.05	25.66	2.06	32.18	0.822	0.91	0.15	1.17	0.53	2.23
N10P	03-16-92	1045	20.49	2.64	29.05	25.66	1.89	32.18	0.834	1.07	0.13	1.76	0.96	2.32
N10P	03-17-92	1252	2.03	2.41	28.64	25.47	1.73	31.91	0.941	2.19	0.13	3.40	0.66	2.97
N10P	03-17-92	1252	4.21	2.41	28.65	25.47	2.25	31.92	0.929	0.40	0.20	2.72	0.55	2.69
N10P	03-17-92	1250	9.56	2.44	28.71	25.51	2.64	31.96	0.917	0.33	0.15	3.23	0.51	2.99
N10P	03-17-92	1249	16.07	2.58	28.97	25.63	2.02	32.13	0.843	1.59	0.09	3.56	0.65	3.30
N10P	03-17-92	1248	19.46	2.69	29.12	25.68	1.87	32.21	0.884	1.15	0.09	1.78	0.49	2.58
N11	03-17-92	1334	2.07	2.56	28.86	25.55	1.32	32.03	0.944	0.32	0.11	3.56	0.86	3.11

TABLE B-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N11	03-17-92	1333	5.63	2.55	28.86	25.55	1.69	32.03	0.869	0.48	0.11	3.57	1.45	3.29
N11	03-17-92	1332	12.11	2.64	29.04	25.66	1.93	32.17	0.840	1.41	0.08	3.57	0.78	3.23
N11	03-17-92	1331	18.08	2.66	29.08	25.67	2.05	32.19	0.813	1.39	0.08	0.07	0.78	2.63
N11	03-17-92	1330	25.98	2.68	29.11	25.68	1.99	32.21	0.798	0.53	0.10	2.11	0.77	3.49
N12	03-17-92	1415	2.31	2.73	29.15	25.68	2.04	32.21	0.887	0.25	0.11	2.27	0.53	3.34
N12	03-17-92	1414	5.26	2.73	29.15	25.68	2.01	32.21	0.877	0.22	0.11	2.70	0.57	3.24
N12	03-17-92	1413	11.56	2.73	29.15	25.68	2.08	32.21	0.875	0.27	0.11	2.43	0.66	3.40
N12	03-17-92	1412	16.94	2.73	29.16	25.69	1.82	32.21	0.877	0.30	0.09	2.22	0.52	2.73
N12	03-17-92	1412	20.89	2.73	29.16	25.69	2.17	32.22	0.882	0.11	0.08	2.90	0.63	3.42
N13	03-17-92	1444	2.42	2.84	29.26	25.69	1.56	32.24	0.876	0.23	0.00	2.69	0.43	3.38
N13	03-17-92	1444	5.41	2.84	29.26	25.70	2.52	32.24	0.862	1.09	0.07	3.81	1.53	3.27
N13	03-17-92	1443	12.02	2.84	29.27	25.70	2.35	32.24	0.855	0.35	0.13	2.40	0.54	5.57
N13	03-17-92	1442	19.64	2.84	29.27	25.70	2.06	32.24	0.855	1.13	0.08	1.12	0.54	3.40
N13	03-17-92	1441	26.46	2.85	29.28	25.70	2.47	32.24	0.855	0.19	0.08	2.74	0.52	3.43
N16P	03-15-92	1408	2.20	2.87	29.26	25.66	0.75	32.20	0.795	0.21	0.09	3.97	0.67	3.13
N16P	03-15-92	1407	9.50	2.85	29.24	25.66	1.71	32.20	0.791	0.19	0.01	3.47	3.20	3.13
N16P	03-15-92	1406	17.48	2.82	29.22	25.67	1.82	32.20	0.778	0.23	0.21	2.49	0.43	3.26
N16P	03-15-92	1405	27.10	2.82	29.23	25.67	2.05	32.20	0.767	0.33	0.00	1.73	1.19	3.45
N16P	03-15-92	1402	35.38	2.85	29.27	25.67	1.47	32.21	0.760	0.37	0.25	1.73	0.56	3.66
N18	03-17-92	1621	1.89	2.68	29.10	25.68	1.92	32.21	0.896	0.34	0.14	2.07	0.47	2.25
N18	03-17-92	1620	3.21	2.67	29.10	25.68	2.31	32.21	0.801	1.06	0.07	3.63	0.62	2.74
N18	03-17-92	1619	7.81	2.67	29.10	25.69	1.97	32.21	0.800	1.00	0.07	3.66	0.59	2.92
N18	03-17-92	1619	12.23	2.67	29.10	25.69	1.85	32.21	0.798	0.39	0.11	1.57	0.42	3.08
N18	03-17-92	1618	16.72	2.66	29.10	25.69	2.15	32.21	0.802	0.79	0.09	1.42	0.47	2.32
N19	03-17-92	1806	2.35	2.60	28.92	25.57	2.27	32.05	0.877	2.09	0.12	3.44	0.64	2.60
N19	03-17-92	1805	5.18	2.61	28.94	25.58	2.42	32.07	0.877	1.79	0.13	0.25	0.43	2.58
N19	03-17-92	1804	10.86	2.61	28.97	25.61	2.28	32.10	0.865	1.61	0.10	3.44	0.62	2.49
N19	03-17-92	1804	16.91	2.63	29.03	25.65	2.36	32.16	0.840	1.29	0.10	3.62	0.88	2.47
N19	03-17-92	1803	20.72	2.65	29.07	25.67	2.01	32.18	0.827	1.21	0.09	0.50	0.46	2.41
N20P	03-15-92	1516	1.91	2.93	29.31	25.67	1.29	32.21	0.830	0.22	0.10	3.56	1.57	3.04

TABLE B-1a. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	TEMP (C)	CONDUCTIVITY (mmhos/cm)	SIGMA T	FLUORESCENCE* (ug/L chlorophyll)	SALINITY (PSU)	BEAM ATTENUATION (1/M)	NH4 (uM)	NO2 (uM)	NO3 (uM)	PO4 (uM)	SiO4 (uM)
N20P	03-15-92	1515	4.77	2.92	29.30	25.67	1.68	32.21	0.830	0.22	0.05	3.15	0.90	2.59
N20P	03-15-92	1514	11.57	2.88	29.28	25.67	2.41	32.21	0.831	0.17	0.18	2.96	0.67	2.55
N20P	03-15-92	1513	17.68	2.86	29.26	25.67	2.06	32.21	0.830	0.55	0.10	1.94	0.65	3.11
N20P	03-15-92	1512	25.16	2.84	29.25	25.68	1.84	32.22	0.826	0.25	0.04	2.81	0.76	3.38
N20P	03-17-92	1518	2.30	2.72	29.12	25.66	1.39	32.18	0.899	0.31	0.08	-0.08 s	0.33	3.21
N20P	03-17-92	1517	4.63	2.72	29.12	25.66	1.64	32.18	0.889	0.30	0.33	2.46	0.68	3.25
N20P	03-17-92	1516	10.53	2.71	29.11	25.66	2.10	32.19	0.888	0.15	0.11	3.58	0.66	3.48
N20P	03-17-92	1515	17.79	2.71	29.12	25.67	2.12	32.19	0.876	1.20	0.11	1.66	0.54	2.64
N20P	03-17-92	1514	24.70	2.70	29.13	25.68	2.08	32.20	0.850	0.98	0.10	1.50	0.51	3.36
N21	03-17-92	1549	1.70	2.81	29.23	25.69	1.35	32.23	0.959	0.20	0.03	2.91	0.52	3.20
N21	03-17-92	1549	5.61	2.80	29.22	25.69	2.77	32.23	0.842	0.27	0.00	1.46	0.41	3.23
N21	03-17-92	1548	15.20	2.80	29.22	25.69	2.92	32.23	0.845	0.15	0.08	2.53	0.51	3.35
N21	03-17-92	1547	20.87	2.80	29.23	25.69	1.94	32.23	0.848	0.79	0.09	1.48	0.53	3.35

s = Suspect value not used in data synthesis

e = Data not reported by the analysis laboratory

* = These values are from in situ reading from the upcast as converted using calibration described in Appendix A, Part 2. The in situ Dissolved Oxygen data from the March survey were discarded.

TABLE B-1b. MARCH 1992 STATION DATA TABLES: CHEMICAL AND BIOLOGICAL PARAMETERS AT TWO DEPTHS OF BIOPRODUCTIVITY STATIONS AND SPECIAL STATION F25.

STATION	DATE	TIME	DEPTH (M)	LAB REP	CHL A (ug/L)	DO (mg/L)	DOC (uM)	PHA (ug/L)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
F01P	03-14-92	0940	2.42	1	0.63	10.26	118.00	0.84	19.3	3.2	14.10	0.68	1.18
F01P	03-14-92	0940	2.42	2	1.49		124.00	0.73	22.5	2.8	12.68	0.65	1.07
F01P	03-14-92	0940	12.17	1	1.46	10.33	117.00	1.03	19.4	3.1	15.53	0.69	1.54
F01P	03-14-92	0940	12.17	2	1.35		118.00	0.73	20.2	2.9	14.17	0.65	1.30
F02P	03-14-92	1147	5.48	1	3.30	10.45	122.00	1.28	25.2	4.1	9.74	0.55	1.36
F02P	03-14-92	1147	5.48	2	3.17		133.00	1.07	23.3	3.4	9.70	0.53	1.05
F02P	03-14-92	1147	14.53	1	3.71	10.63	114.00	1.08	22.8	3.3	11.45	0.54	1.57
F02P	03-14-92	1147	14.53	2	3.22		104.00	1.04	22.0	4.0	11.37	0.60	1.38
F13P	03-15-92	0839	2.05	1	2.38	10.35	129.00	0.83	18.0	3.1	13.75	0.57	0.82
F13P	03-15-92	0839	2.05	2	2.29		124.00	0.91	21.8	4.2	12.80	0.42	0.82
F13P	03-15-92	0839	9.90	1	2.51	10.54	131.00	0.67	22.8	3.3	13.14	0.54	1.82
F13P	03-15-92	0839	9.90	2	2.39		141.00	0.82	19.7	3.1	13.17	0.56	1.43
F23P	03-16-92	1239	1.97	1	3.21	10.80	134.00	1.19	37.1	6.6	16.46	0.82	1.65
F23P	03-16-92	1239	1.97	2	3.08		143.00	1.14	34.0	6.6	17.48	0.90	1.72
F23P	03-16-92	1239	9.74	1	3.65	10.63	122.00	1.09	37.5	6.6	15.43	0.86	2.39
F23P	03-16-92	1239	9.74	2	3.54		117.00	1.11	39.2	5.9	15.84	1.20	1.63
F25	03-16-92	1156	2.12	1	4.75		138.00	1.21	37.5	5.0	15.03	1.15	1.37
F25	03-16-92	1156	2.12	2	3.98		144.00	1.40	39.4	6.7	13.95	0.69	2.05
F25	03-16-92	1156	4.10	1	3.06		137.00	1.31	34.8	4.7	14.03	0.83	1.86
F25	03-16-92	1156	4.10	2	3.67		136.00	1.28	40.9	6.6	13.75	0.83	1.73
F25	02-25-92	1019	4.20	1	1.84		154.00	0.60	17.4	3.6	20.77	0.66	1.40
F25	02-25-92	1019	4.20	2	2.07		167.00	0.90	19.0	3.9	21.76	0.84	1.35
N01P	03-16-92	1454	1.90	1	0.98	10.41	167.00	0.45	19.5	-0.1 s	15.79	0.91	0.73
N01P	03-16-92	1454	1.90	2	0.80		160.00	0.57	21.5	-0.1 s	14.32	0.97	0.14
N01P	03-16-92	1454	13.13	1	0.86	10.31	171.00	0.56	35.2	5.3	13.95	0.68	1.00
N01P	03-16-92	1454	13.13	2	0.59		148.00	0.87	20.2	-0.1 s	14.59	1.15	0.91
N04P	03-17-92	1017	3.60	1	2.20	10.43	140.00	0.90	33.0	5.2	14.14	0.66	1.30
N04P	03-17-92	1017	3.60	2	1.82		234.00 s	0.53			14.36	0.74	1.11
N04P	03-17-92	1017	22.42	1	1.82	10.38	170.00	0.83	11.7	-0.1 s	14.93	0.74	1.33

TABLE B-1b. CONTINUED.

STATION	DATE	TIME	DEPTH (M)	LAB REP	CHL A (ug/L)	DO (mg/L)	DOC (uM)	PHA (ug/L)	POC (uM)	PON (uM)	TDN (uM)	TDP (uM)	TSS (mg/L)
N04P	03-17-92	1017	22.42	2	1.98		180.00	0.72			e	e	2.13
N07P	03-15-92	1205	2.04	1	1.25	10.22	129.00	0.54	26.5	3.9	13.40	0.61	2.08
N07P	03-15-92	1205	2.04	2	1.01		125.00	0.69	23.2	-0.1 s	13.01	0.63	1.08
N07P	03-15-92	1205	22.44	1	1.40	10.19	382.00 s	1.05	26.4	3.5	12.83	0.61	1.58
N07P	03-15-92	1205	22.44	2	2.57		376.00 s	0.93	24.4	4.3	12.54	0.61	1.40
N10P	03-16-92	1020	2.20	1	1.01	10.24	167.00	0.58	20.1	3.5	10.79	0.81	1.44
N10P	03-16-92	1020	2.20	2	1.38		166.00	0.81	20.8	-0.1 s	12.63	0.82	1.84
N10P	03-16-92	1020	10.49	1	1.05	10.14	152.00	1.00	31.2	5.7	9.96	0.54	1.53
N10P	03-16-92	1020	10.49	2	1.33		133.00	0.75	20.8	3.2	10.53	0.56	1.43
N16P	03-15-92	1355	2.20	1	1.20	10.19	110.00	0.59	23.2	3.6	14.54	0.74	1.01
N16P	03-15-92	1355	2.20	2	1.34		125.00	0.78	25.9	4.3	14.43	0.84	1.33
N16P	03-15-92	1355	17.48	1	1.66	11.60	126.00	0.79	20.2	3.7	11.36	0.68	1.40
N16P	03-15-92	1355	17.48	2	1.57		128.00	0.86	23.7	-0.1 s	12.41	0.65	1.51
N20P	03-15-92	1503	1.91	1	1.70	10.35	119.00	0.69	25.0	4.0	11.96	1.58	1.04
N20P	03-15-92	1503	1.91	2	1.31		119.00	0.68	22.1	5.7	16.85	2.26	0.69
N20P	03-15-92	1503	11.57	1	e	10.22	128.00	e	23.5	5.3	11.98	0.85	1.35
N20P	03-15-92	1503	11.57	2	e		112.00	e	23.4	3.0	12.87	1.11	e

s = Database values qualified as suspect were omitted from the data synthesis.
e = Data not reported by the analysis laboratory.

APPENDIX B

Part 2

Instrument Calibration Data

The average chlorophyll (n= 2 replicate determinations) and dissolved oxygen (n= 3 replicate determinations) concentrations from wet chemistry analyses were used to post-calibrate *in situ* sensors. Water samples were taken at BioProductivity stations. A functional regression (Ricker, 1973) was used given that both x- and y- values have inherent errors. The regressions were not forced to zero in either case; in general, this should not be forced if the majority of data are not near the zero intercept. The regression for dissolved oxygen indicated a failure in the dissolved oxygen sensor, which gave a wide range of readings at a small range of true values as estimated by the wet chemistry determinations.

Station	Bottle	CTD Chlor. a (ug/L)	URI Chlor. a (ug/L)	Perdicted Chlg (b*CTD+a)		
F1P	5	6.72E-02	1.40	1.8809		
F1P	9	5.24E-02	1.06	1.3771		
F2P	5	1.36E-01	3.46	4.2433		
F2P	9	1.40E-01	3.24	4.3728		
F13P	5	8.51E-02	2.45	2.4917		
F13P	9	6.04E-02	2.33	1.6512		
N7P	5	7.10E-02	1.98	2.0108		
N7P	9	5.43E-02	1.13	1.4404		
N16P	5	6.53E-02	1.61	1.8163		
N16P	9	3.41E-02	1.27	0.7525		
N20P	9	4.99E-02	1.50	1.2922		
N10P	5	7.07E-02	1.19	2.0030		
N10P	9	3.15E-02	1.19	0.6637		
F25	5	1.06E-01	3.37	3.1920		
F25	9	7.55E-02	4.37	2.1646		
F23P	5	1.24E-01	3.59	3.8249		
F23P	9	6.18E-02	3.14	1.6995		
N1P	5	7.95E-02	0.73	2.3022		
N1P	9	3.57E-02	0.89	0.8076		
N4P	5	8.13E-02	1.90	2.3621		
N4P	9	5.54E-02	2.01	1.4782		

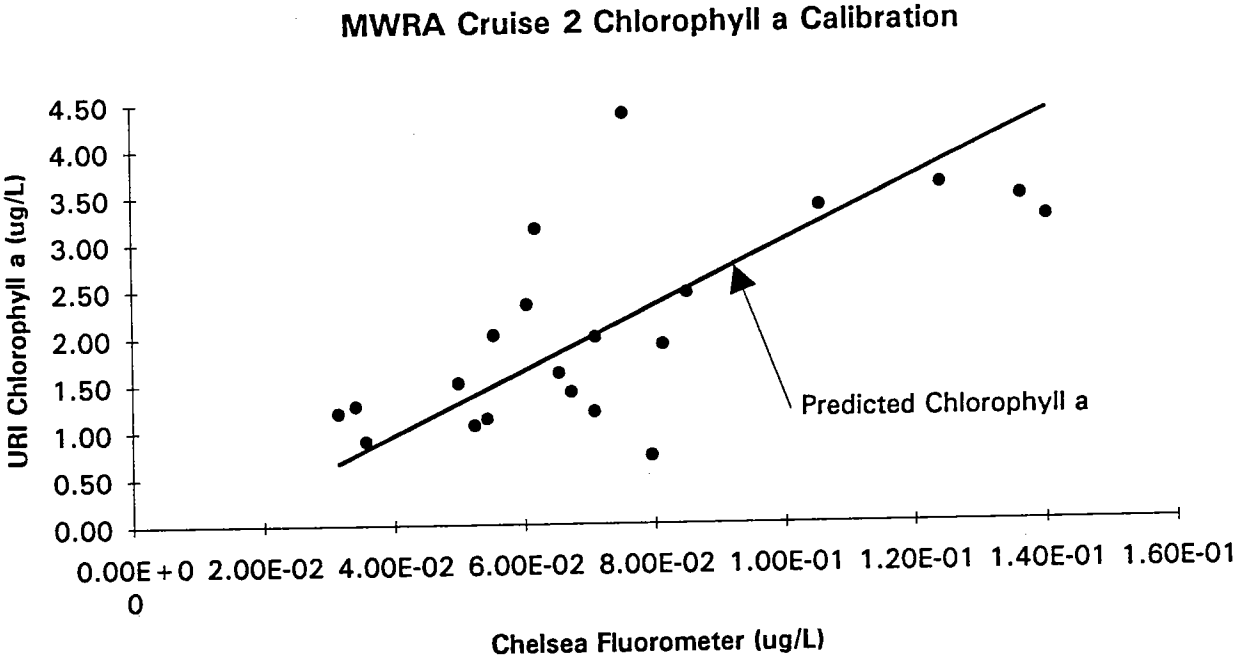
Regression Statistics

			Average	New Slope	b	
Multiple R	0.68347	X mean	7.32E-02	x1/Multiple R	34.127	
R Square	0.46713	Y mean	2.09			
Adjusted R Square	0.43909			New Intercept	a	
Standard Error	0.78984			Ym-b*Xm	-0.411	
Observations	21					

Analysis of Variance

	df	*Sum of Squares*	*Mean Square*	*F*	*nificance F*	
Regression	1	10.3910	10.3910	16.6563	0.0006	
Residual	19	11.8531	0.6238			
Total	20	22.2441				

	Coefficients	*Standard Error*	*t Statistic*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.379712	0.452445668	0.83924235	0.411252947	-0.5673	1.327
x1	23.3251	5.71523544	4.08121397	0.000581833	11.363	35.29


MWRA Cruise 2 Chlorophyll a Calibration
URI Chlorophyll a (ug/L)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.00E+0 0
2.00E-02
4.00E-02
6.00E-02
8.00E-02
1.00E-01
1.20E-01
1.40E-01
1.60E-01
Chelsea Fluorometer (ug/L)
Predicted Chlorophyll a

B-13

Station	Bottle	Dis. Oxy. (mL/L)	Dis. Oxy. (mg/L)			
F1P	5	6.88	10.33			
F1P	9	6.45	10.28			
F2P	5	7.24	10.58			
F2P	9	6.94	10.61			
F13P	5	7.14	10.38			
F13P	9	6.80	10.40			
N7P	5	8.69	10.10			
N7P	9	7.79	10.11			
N16P	5	9.34	10.01			
N16P	9	8.37	10.04			
N20P	5	8.59	10.30			
N20P	9	8.01	10.34			
N10P	5	6.62	10.09			
N10P	9	6.29	10.07			
F23P	5	6.72	10.44			
F23P	9	6.57	10.39			
N1P	5	6.82	10.26			
N1P	9	6.19	10.25			
N4P	5	6.67	10.21			
N4P	9	6.69	10.24			

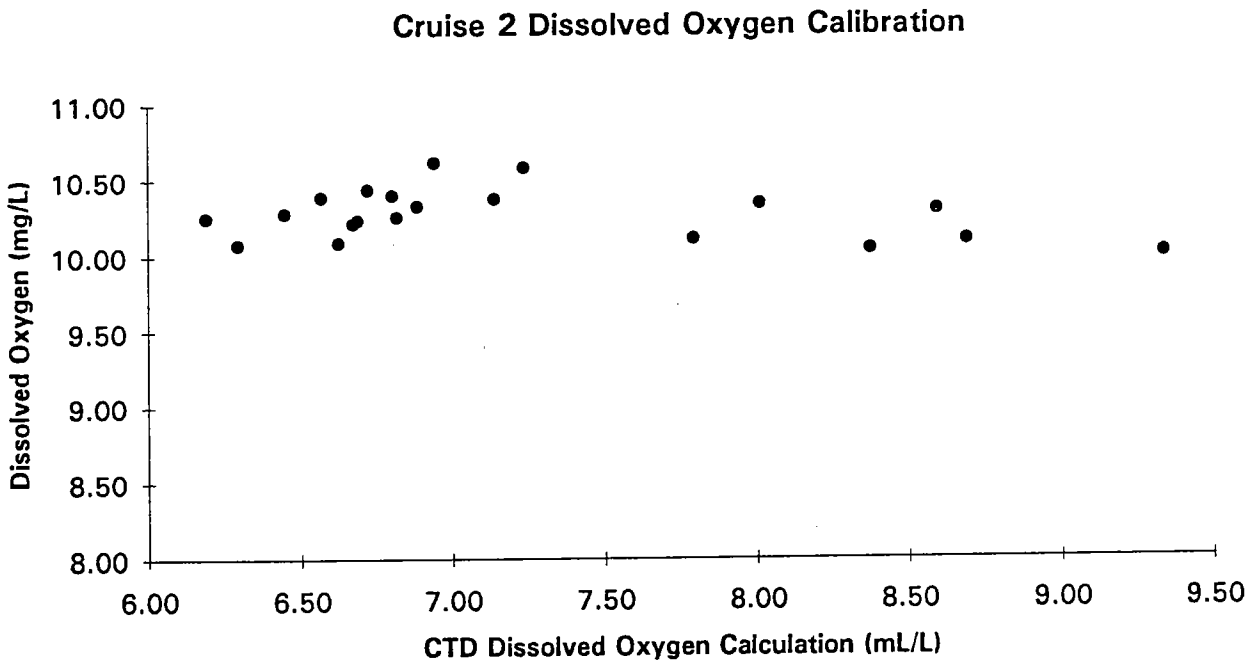
Regression Statistics

Multiple R	0.35752472
R Square	0.127823925
Adjusted R Square	0.079369699
Standard Error	0.162182308
Observations	20

Analysis of Variance

	df	*Sum of Squares*	*Mean Square*	*F*	*Significance F*
Regression	1	0.06938849	0.06938849	2.638	0.1217
Residual	18	0.473455818	0.026303101		
Total	19	0.542844308			

	Coefficients	*Standard Error*	*t Statistic*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	10.75681104	0.300772194	35.76398097	7E-19	10.125	11.39
x1	-0.066975832	0.041236128	-1.624202757	0.1208	-0.1536	0.02


Cruise 2 Dissolved Oxygen Calibration
Dissolved Oxygen (mg/L)
11.00
10.50
10.00
9.50
9.00
8.50
8.00
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
CTD Dissolved Oxygen Calculation (mL/L)

B-15

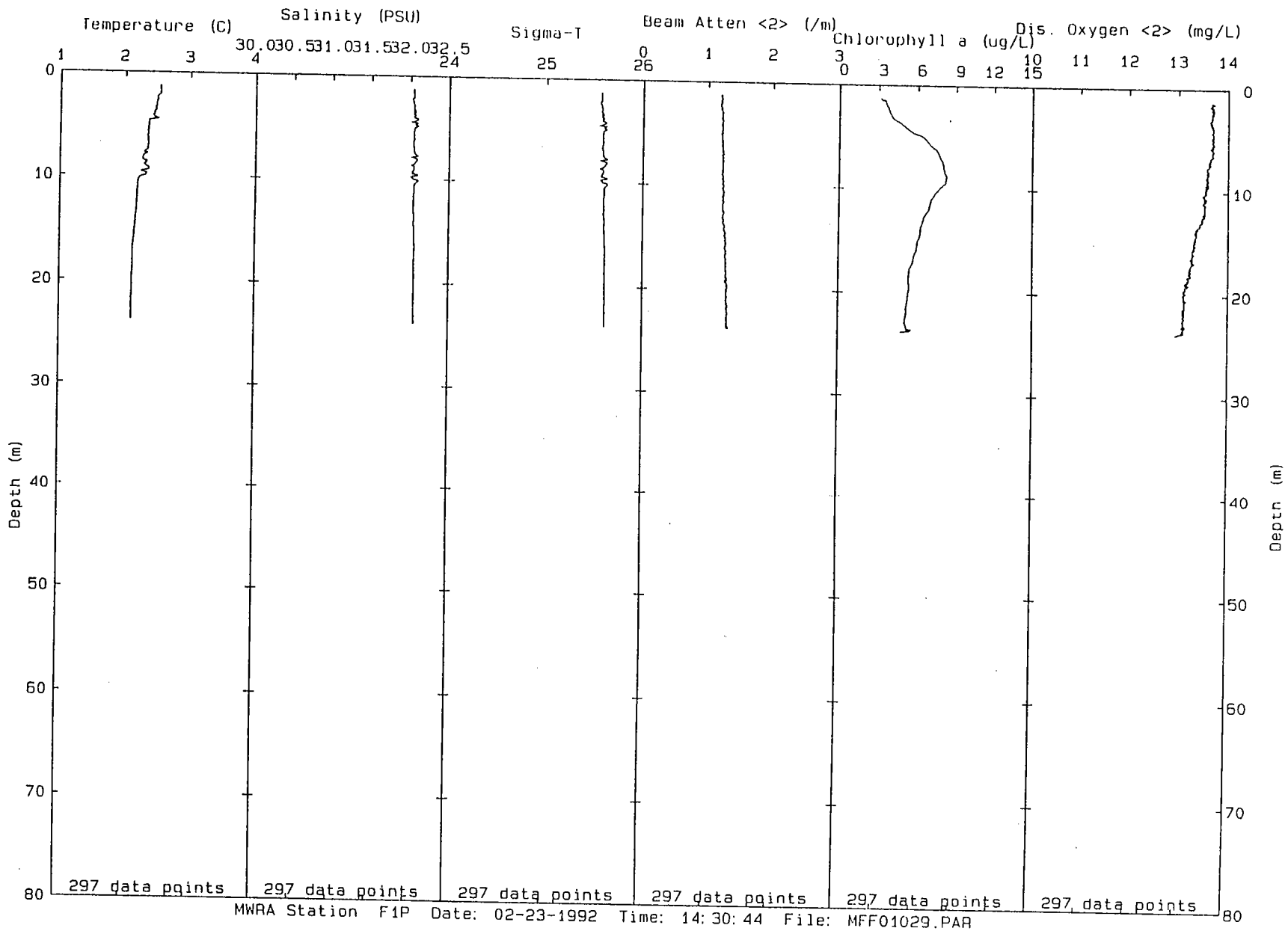
APPENDIX C

February 1992 Cruises

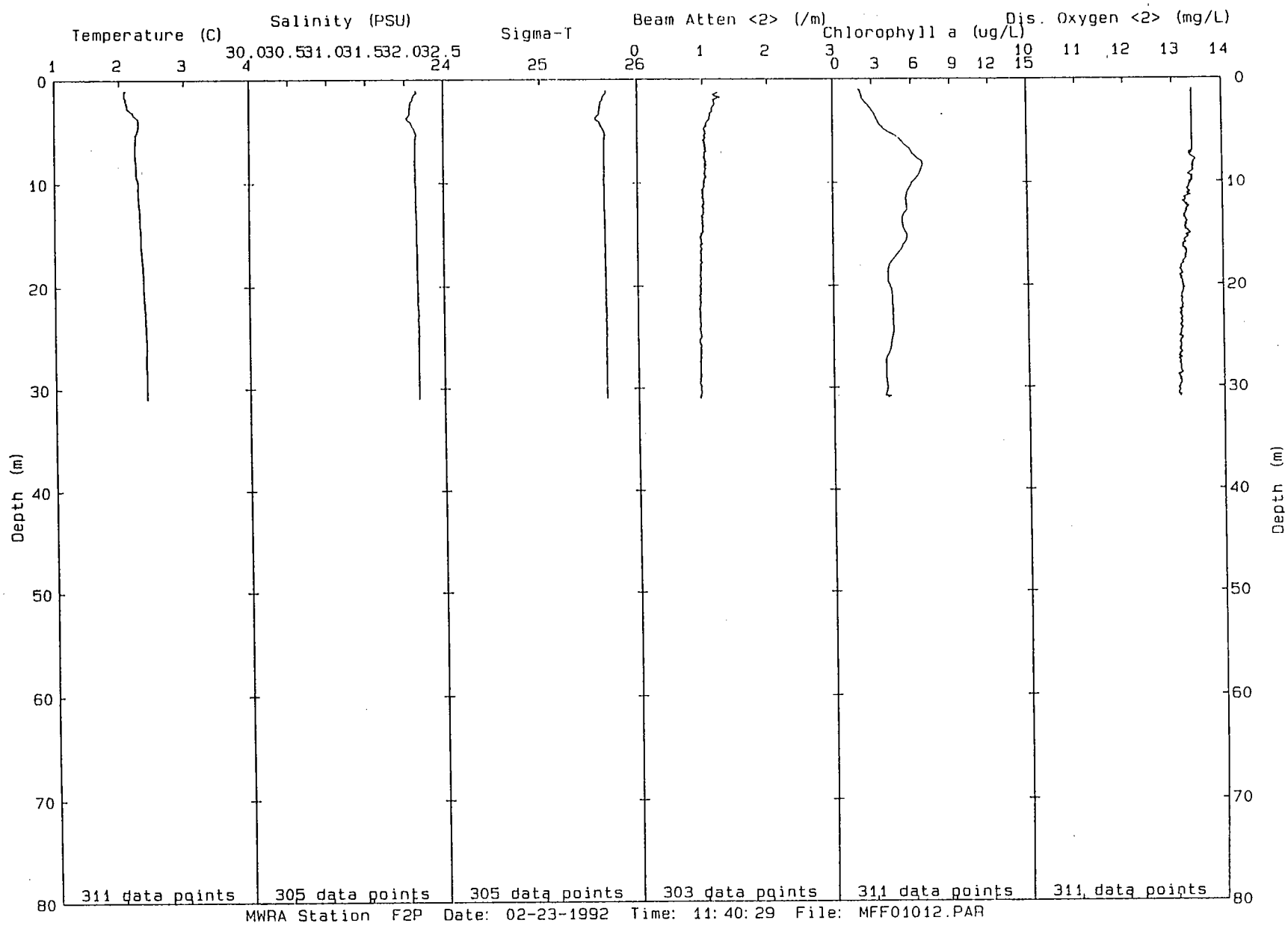
Part 1

Vertical Profiles from February 1992 Farfield and Nearfield Stations

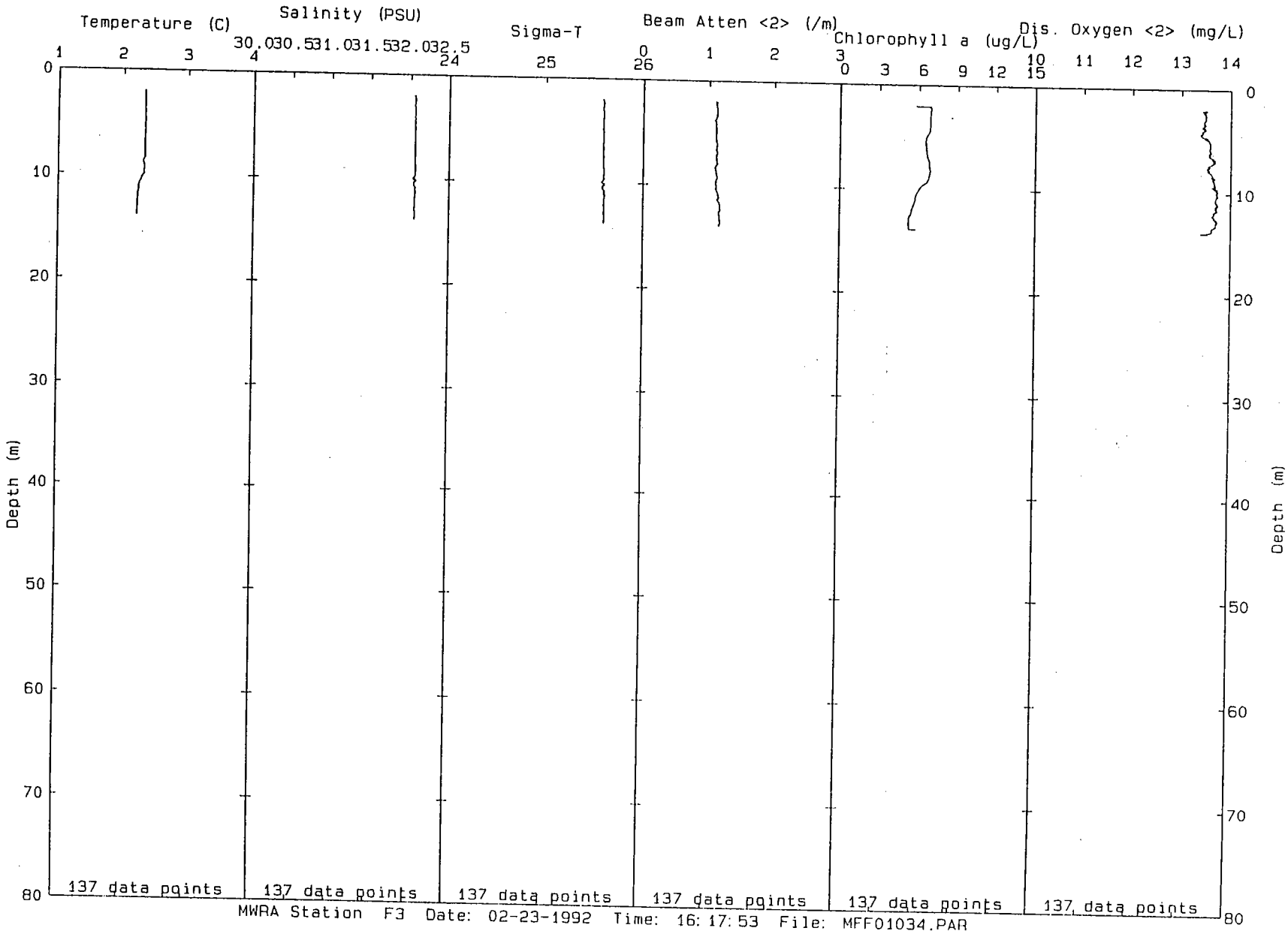
Only calibrated data are presented, where calibrations for sensors have been performed as described for bottle-firing data in Appendix A. The data are from the downcast of the rosette and may not match the data in Appendix A, since the bottles are closed on the upcast.


Temperature (C)
1 2 3 4
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Sigma-T
24 25 26
Beam Atten <2> (/m)
0 1 2 3
Chlorophyll a (ug/L)
0 3 6 9 12 15
Dis. Oxygen <2> (mg/L)
10 11 12 13 14
Depth (m)
0 10 20 30 40 50 60 70 80
297 data points
297 data points
297 data points
297 data points
297 data points
297 data points
MWRA Station F1P Date: 02-23-1992 Time: 14:30:44 File: MFF01029.PAR

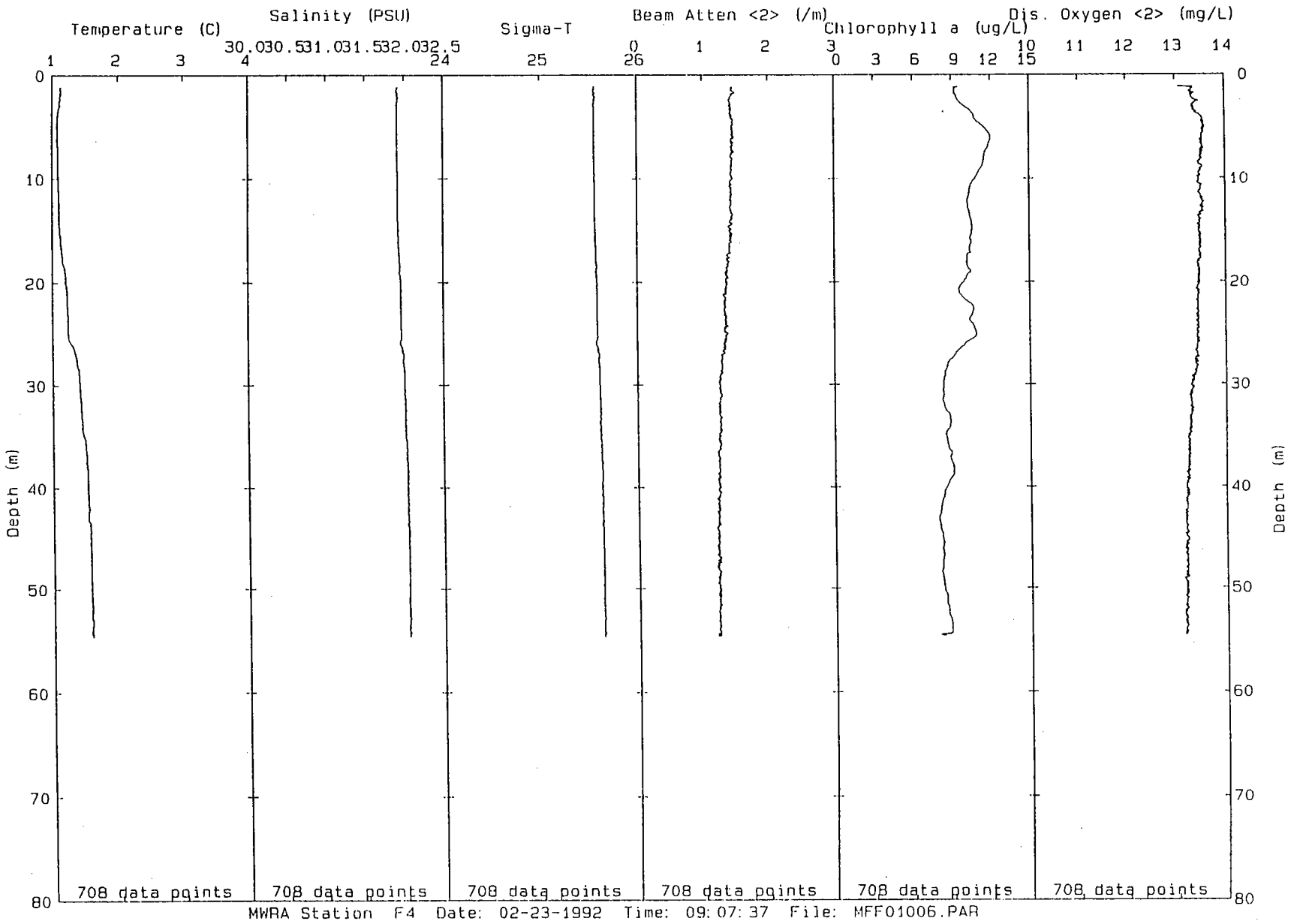
C-2


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
311 data points
305 data points
305 data points
303 data points
311 data points
311 data points
MWRA Station F2P Date: 02-23-1992 Time: 11:40:29 File: MFF01012.PAR

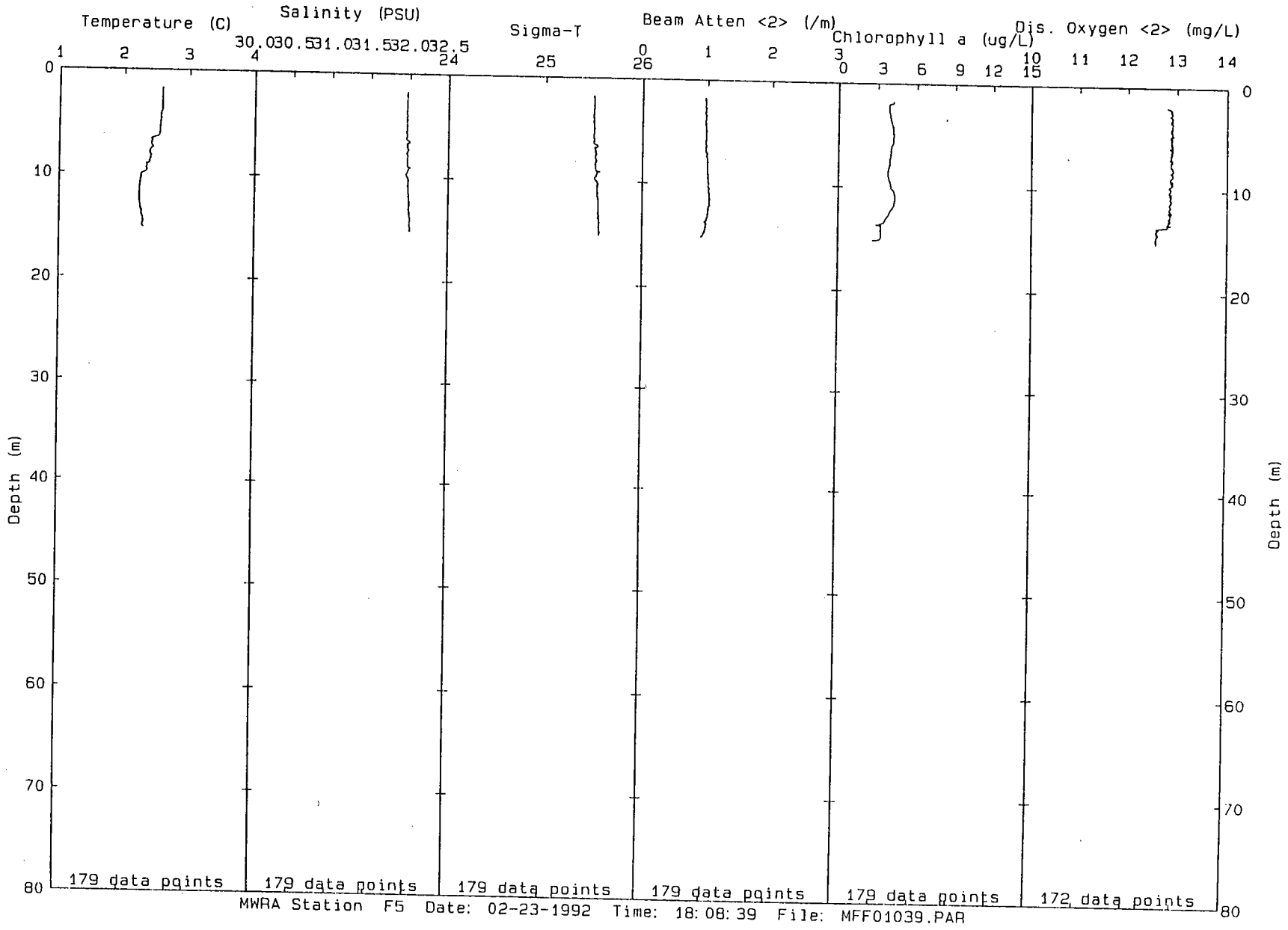
C-3


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
137 data points
MWRA Station F3 Date: 02-23-1992 Time: 16:17:53 File: MFF01034.PAR

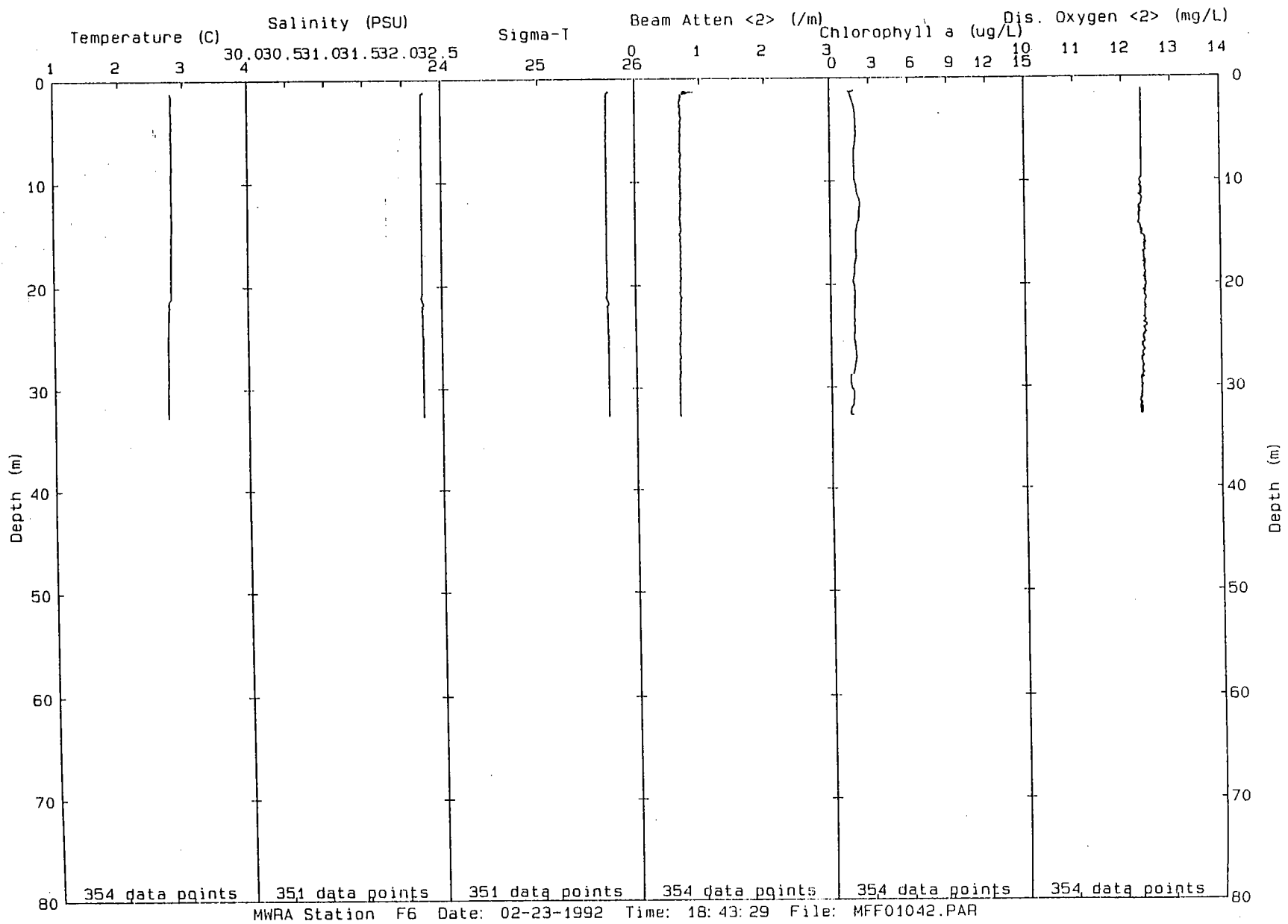
C-F


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
708 data points
MWRA Station F4 Date: 02-23-1992 Time: 09:07:37 File: MFF01006.PAR

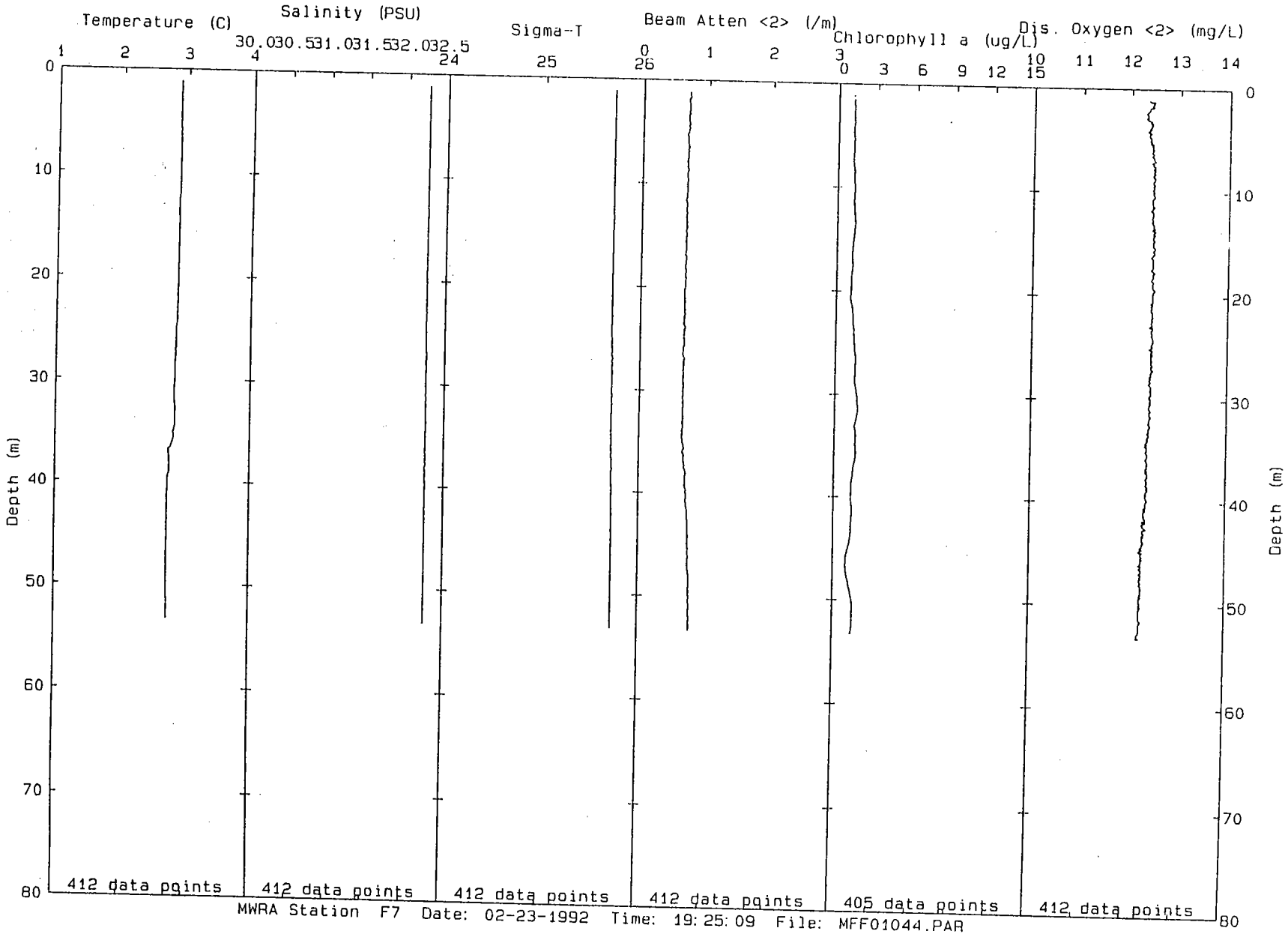
5-7


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
179 data points
179 data points
179 data points
179 data points
179 data points
172 data points
MWRA Station F5 Date: 02-23-1992 Time: 18:08:39 File: MFF01039.PAR

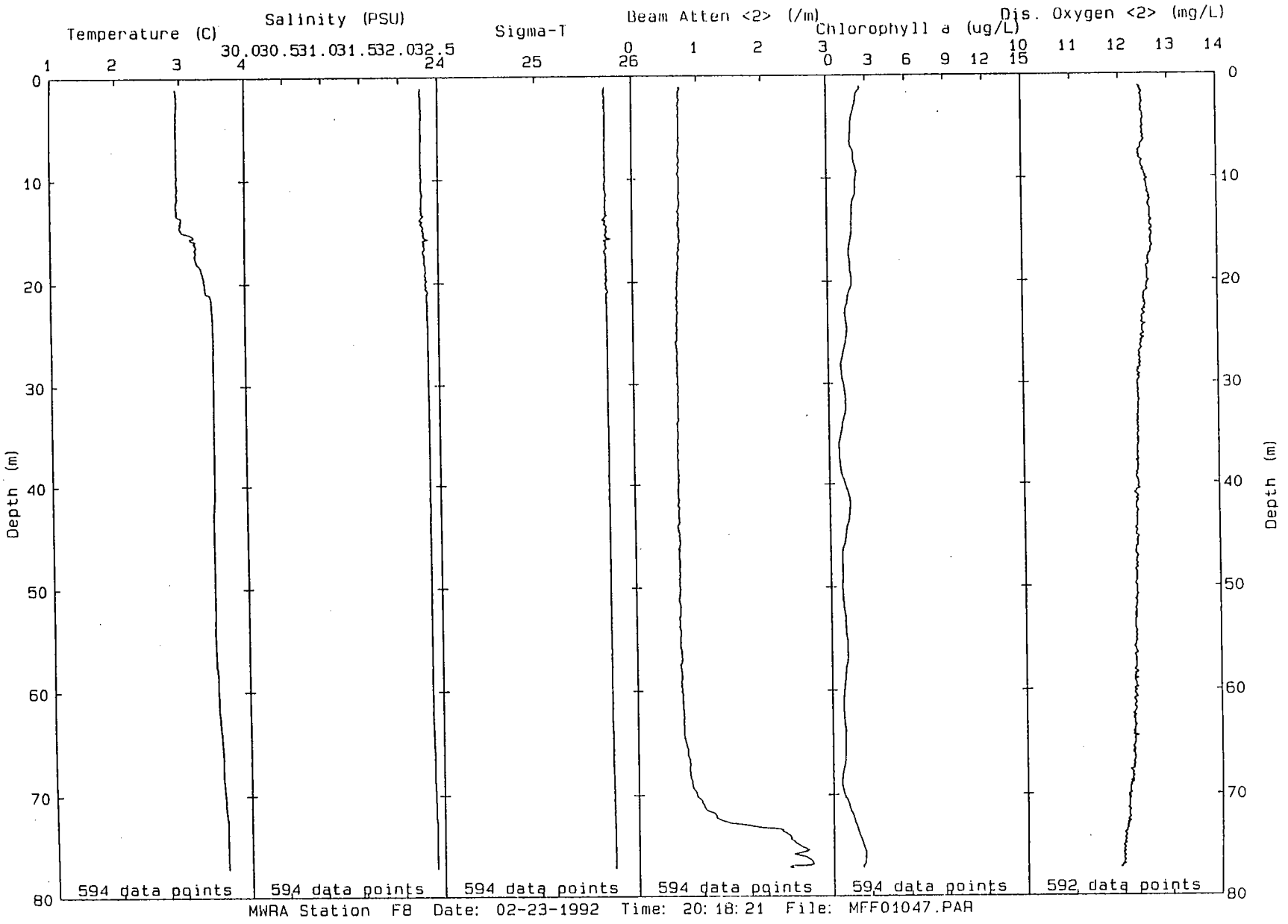
C-6


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
354 data points
351 data points
351 data points
354 data points
354 data points
354 data points
MWRA Station F6 Date: 02-23-1992 Time: 18:43:29 File: MFF01042.PAR

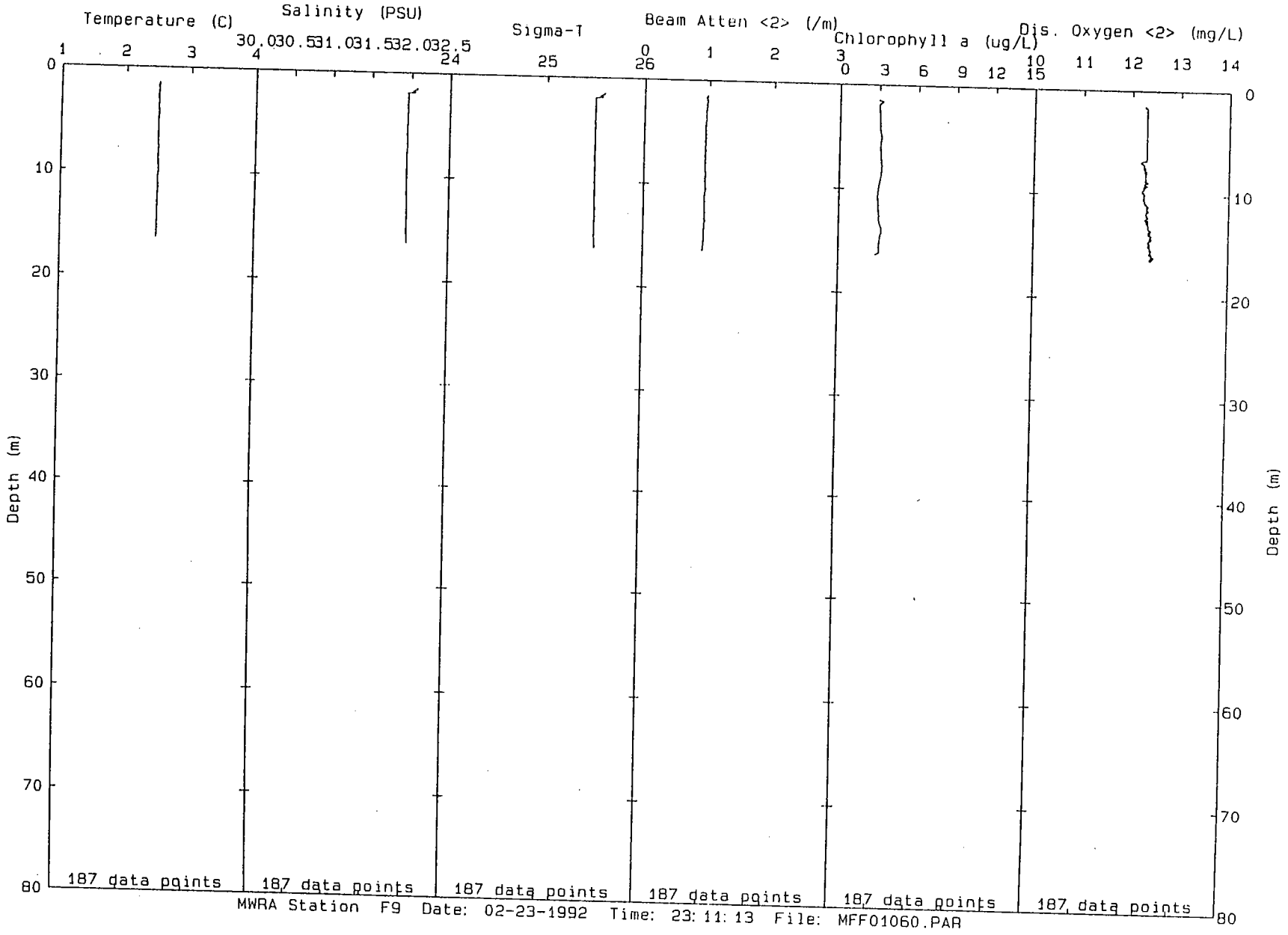
L-7


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
412 data points
412 data points
412 data points
412 data points
405 data points
412 data points
MWRA Station F7 Date: 02-23-1992 Time: 19:25:09 File: MFF01044.PAR

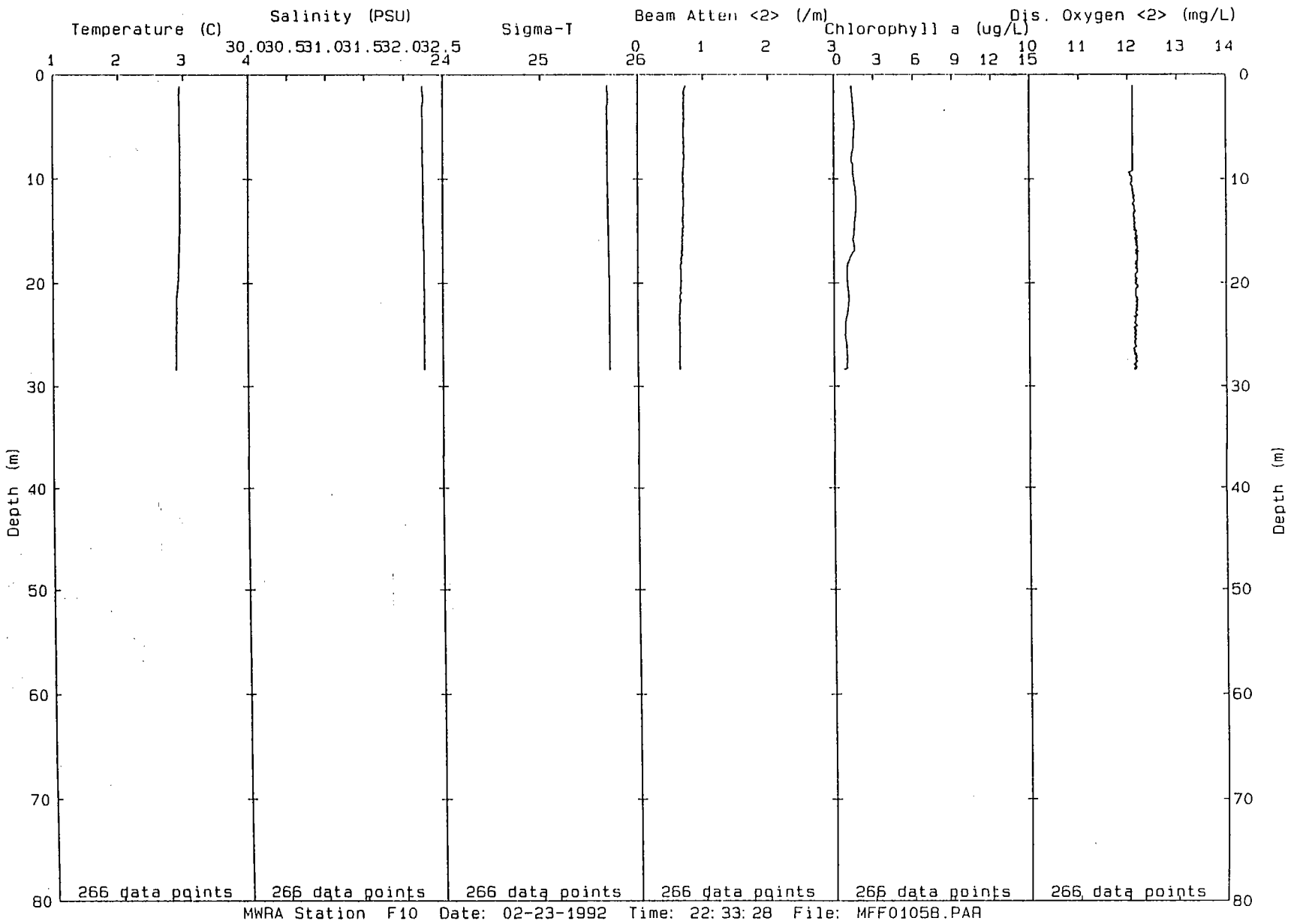
C-8


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
594 data points
594 data points
594 data points
594 data points
594 data points
592 data points
MWRA Station F8 Date: 02-23-1992 Time: 20:18:21 File: MFF01047.PAR

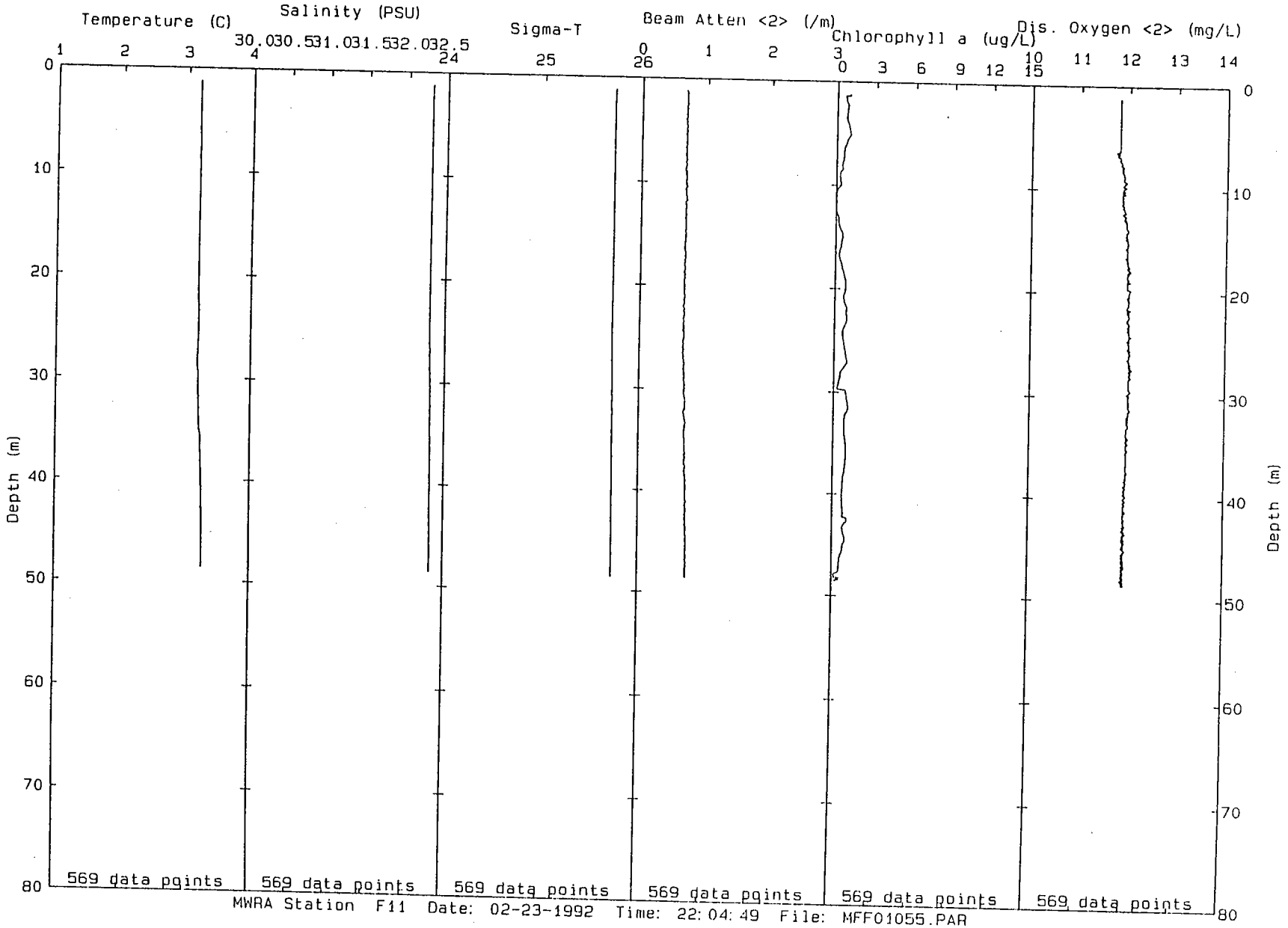
b-7

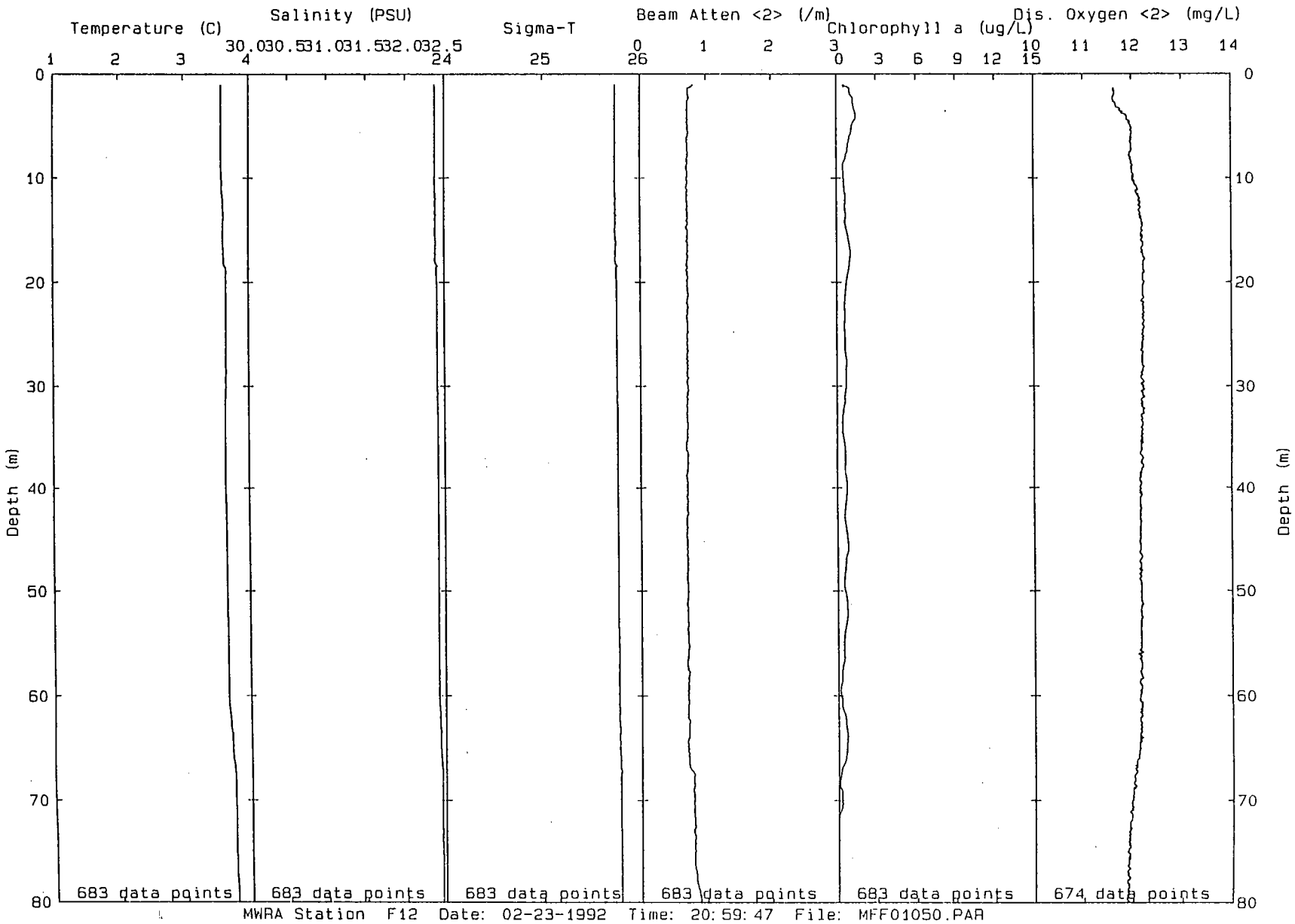

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
187 data points
MWRA Station F9 Date: 02-23-1992 Time: 23:11:13 File: MFF01060.PAR

C-18

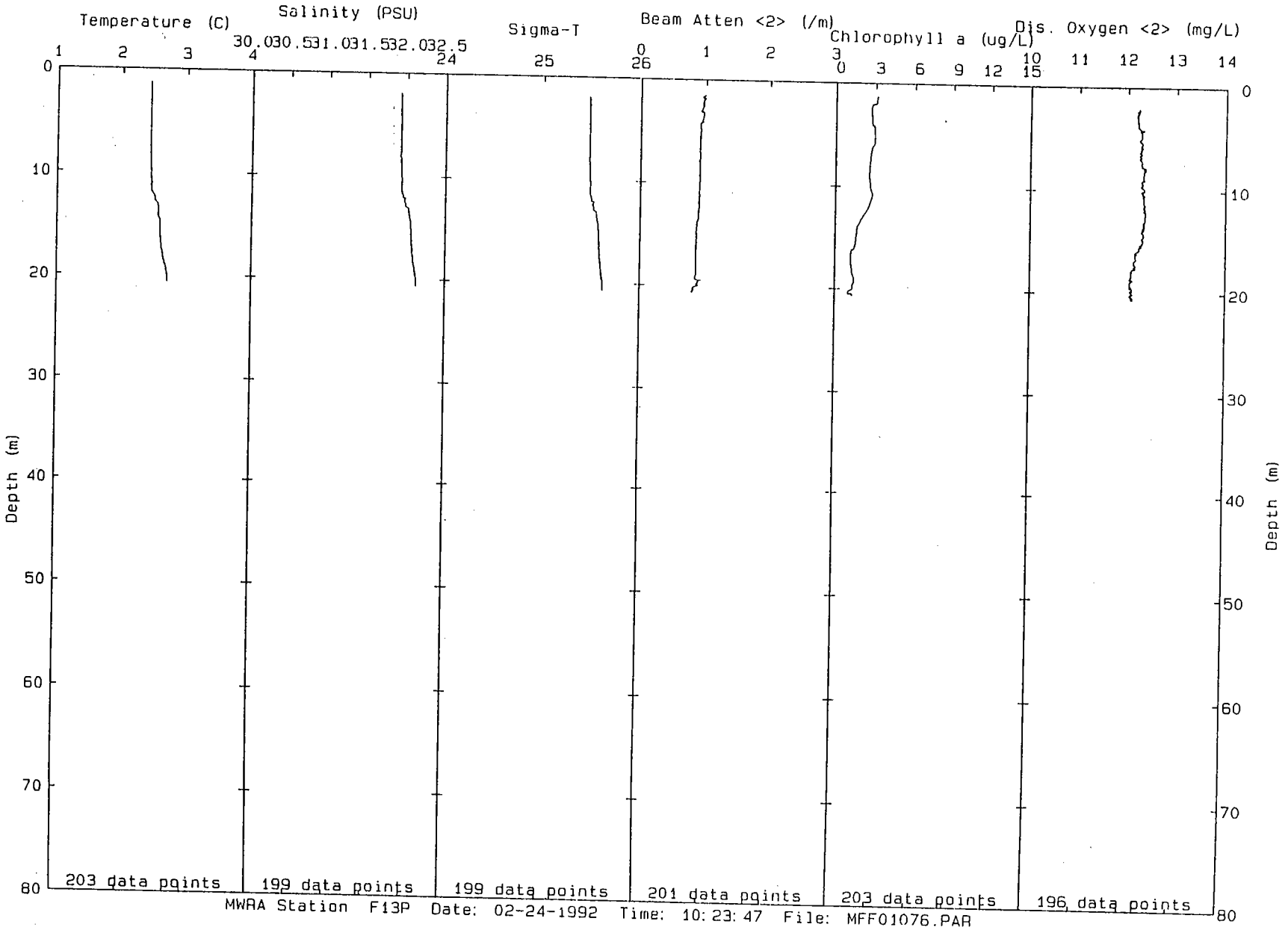

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
266 data points
266 data points
266 data points
266 data points
266 data points
266 data points
MWRA Station F10 Date: 02-23-1992 Time: 22:33:28 File: MFF01058.PAR

II-C

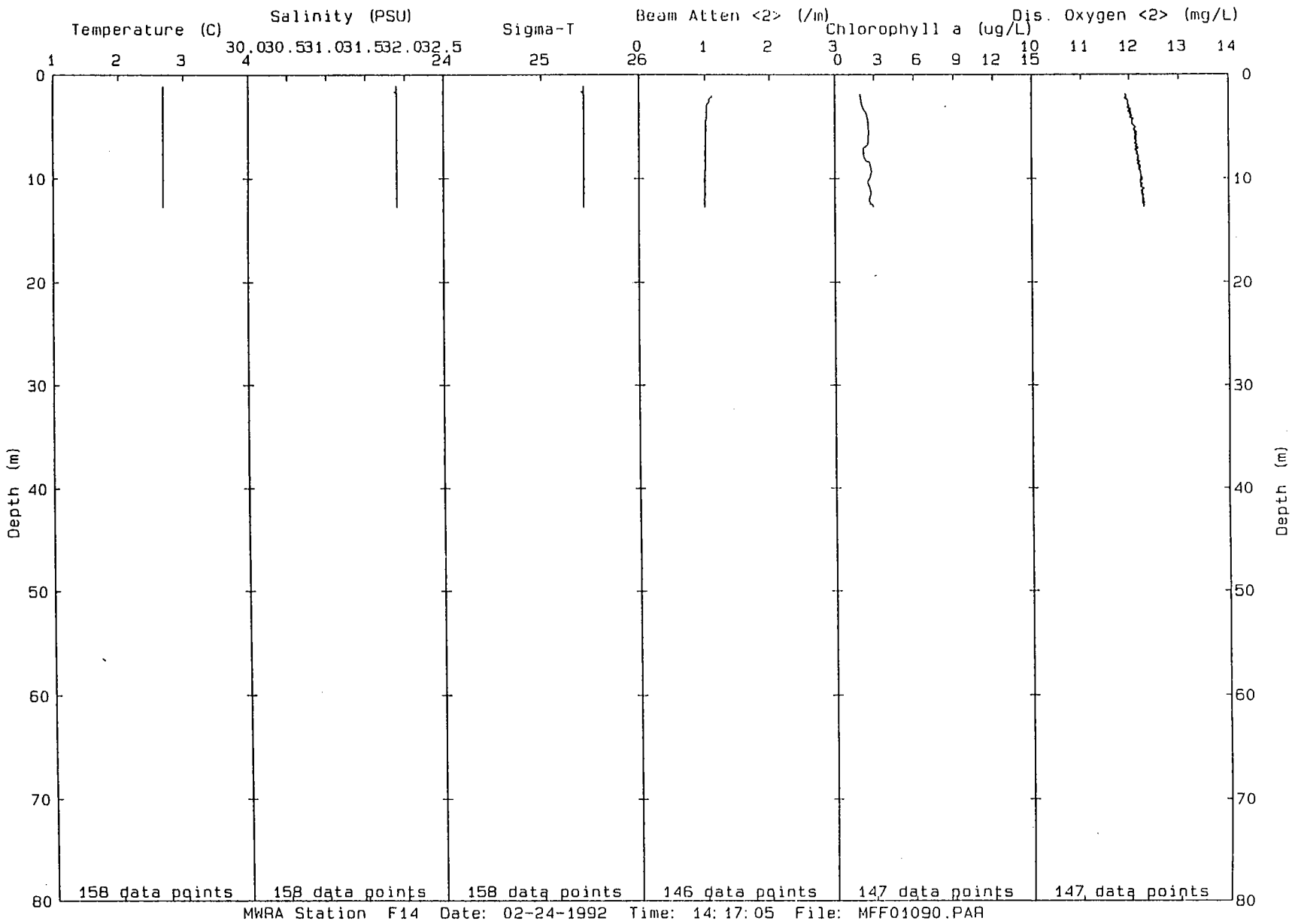

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
569 data points
569 data points
569 data points
569 data points
569 data points
569 data points
MWRA Station F11 Date: 02-23-1992 Time: 22:04:49 File: MFF01055.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
683 data points
683 data points
683 data points
683 data points
683 data points
674 data points
MWRA Station F12 Date: 02-23-1992 Time: 20:59:47 File: MFF01050.PAR

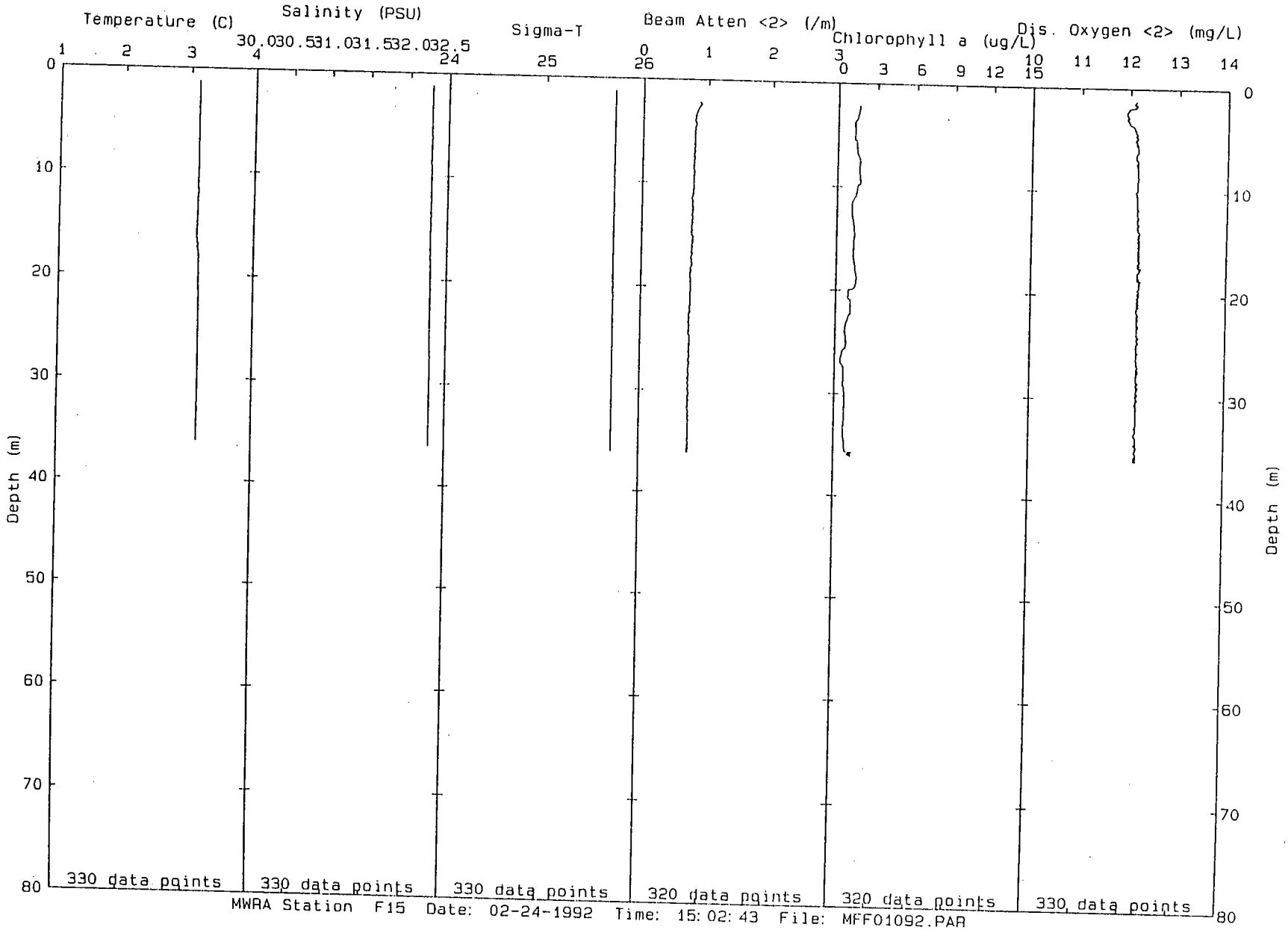
C-13


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
203 data points
199 data points
199 data points
201 data points
203 data points
196 data points
MWRA Station F13P Date: 02-24-1992 Time: 10:23:47 File: MFF01076.PAR

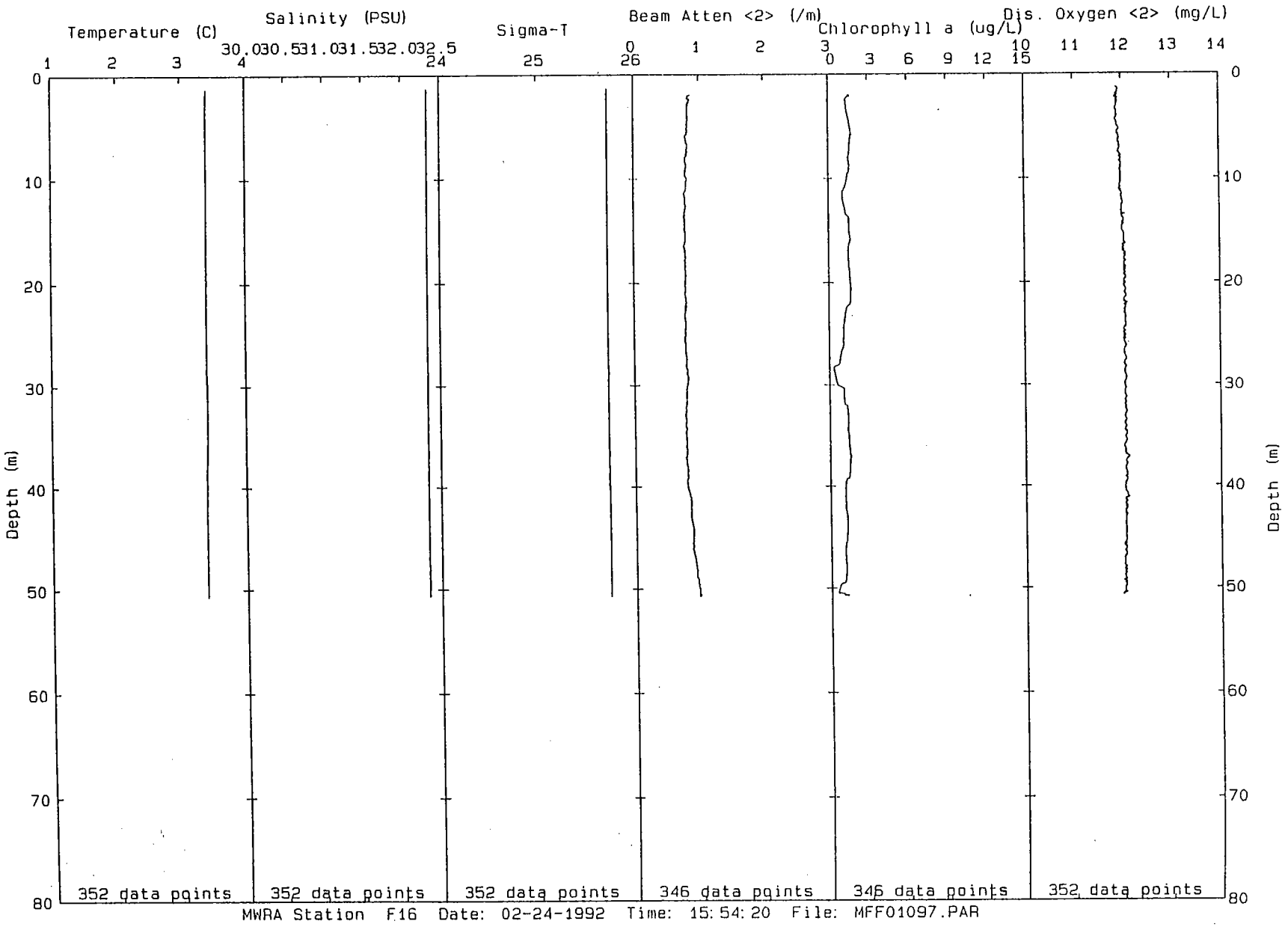
F1-C


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
158 data points
158 data points
158 data points
146 data points
147 data points
147 data points
MWRA Station F14 Date: 02-24-1992 Time: 14:17:05 File: MFF01090.PAR

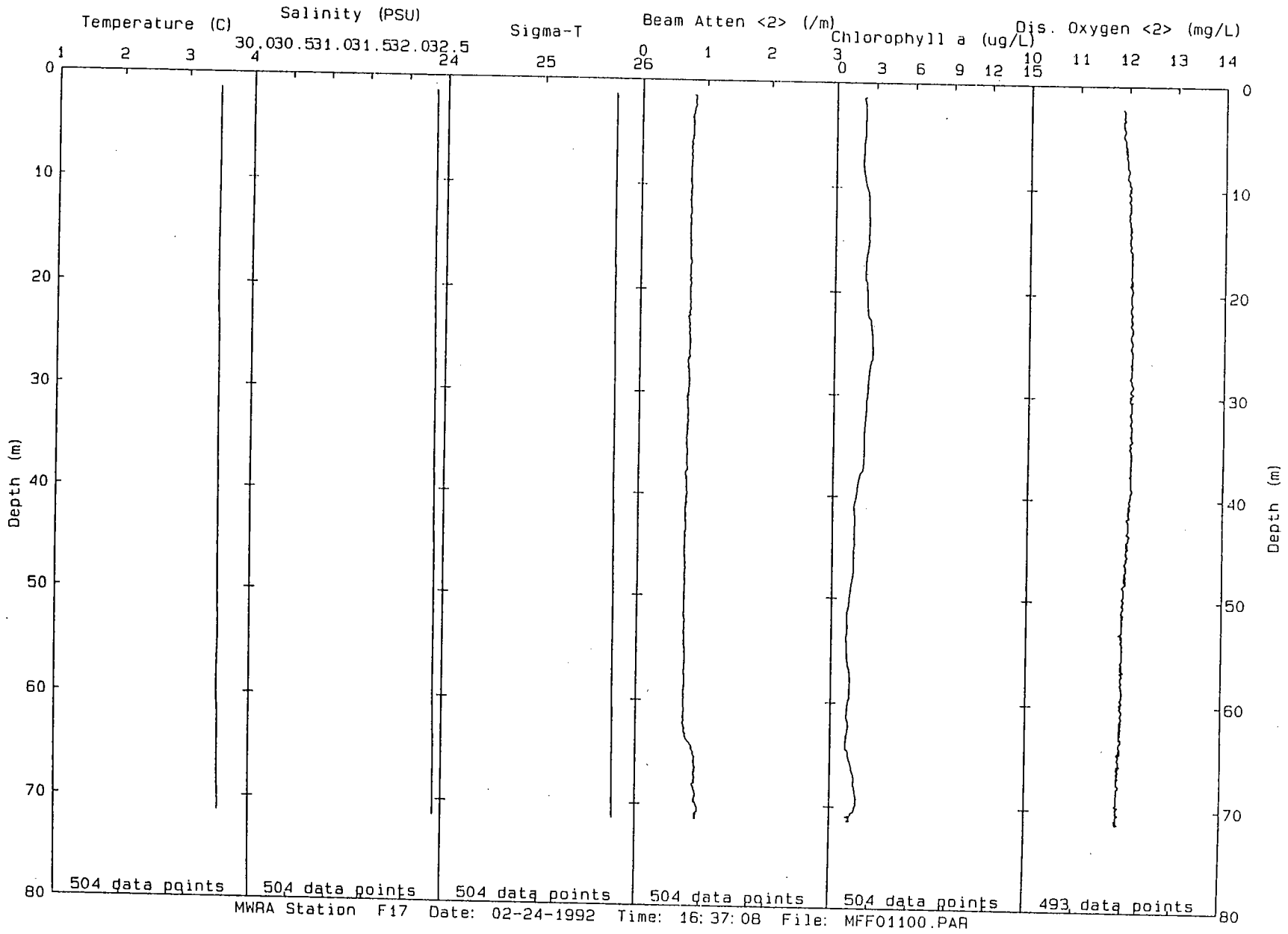
C-15


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
330 data points
330 data points
330 data points
320 data points
320 data points
330 data points
MWRA Station F15 Date: 02-24-1992 Time: 15:02:43 File: MFF01092.PAR

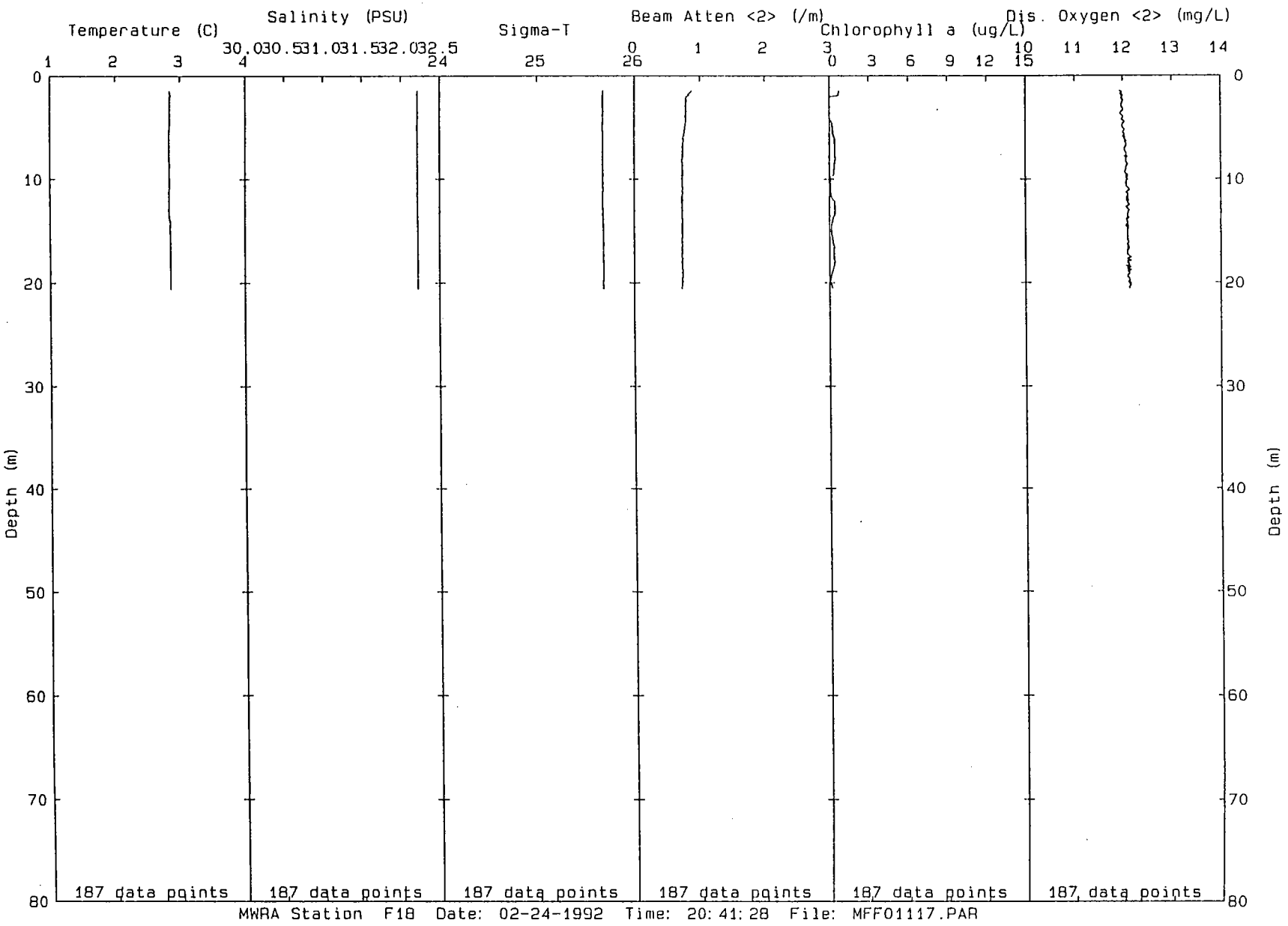
C-16

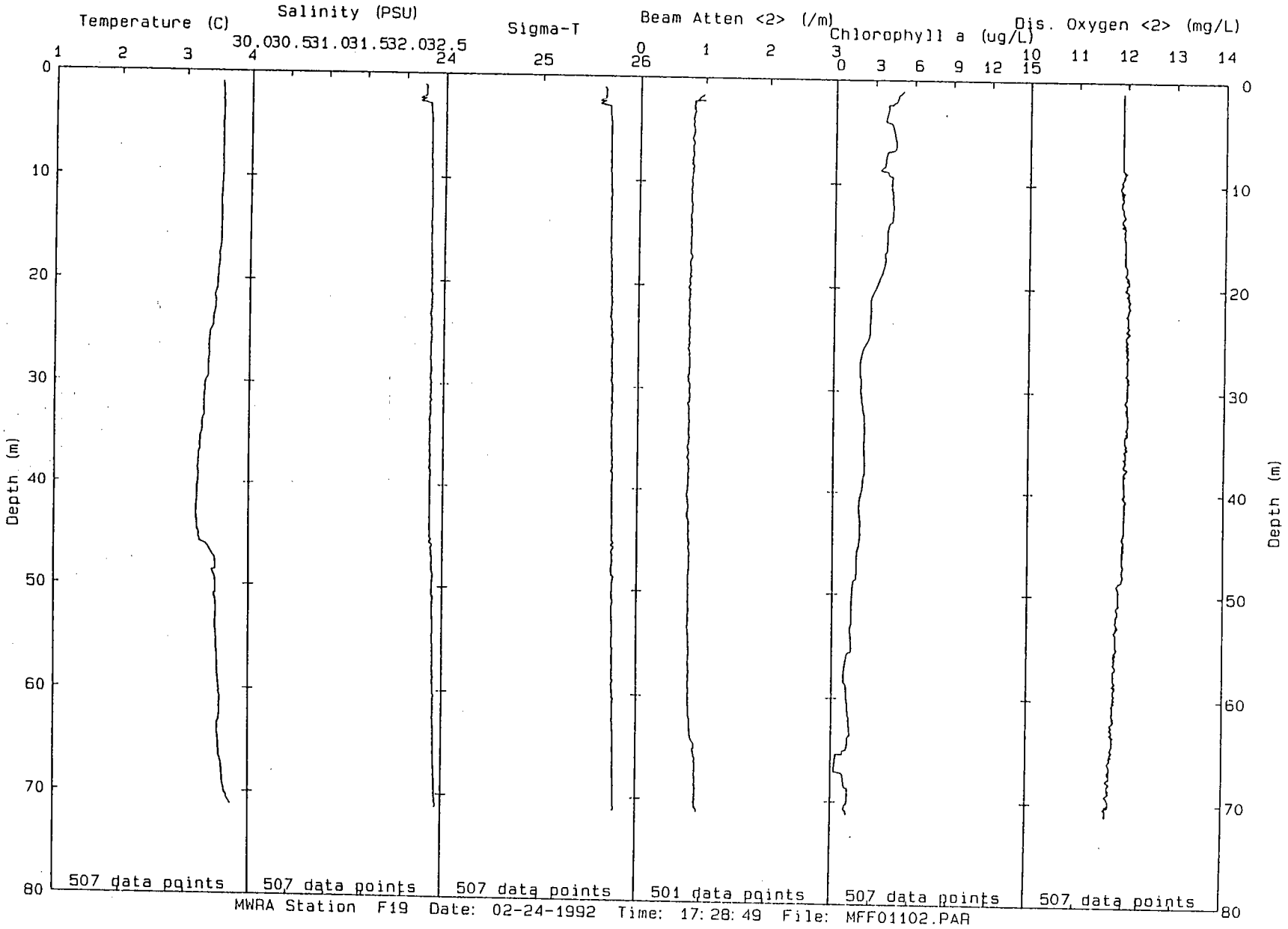

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
352 data points
352 data points
352 data points
346 data points
346 data points
352 data points
MWRA Station F16 Date: 02-24-1992 Time: 15:54:20 File: MFF01097.PAR

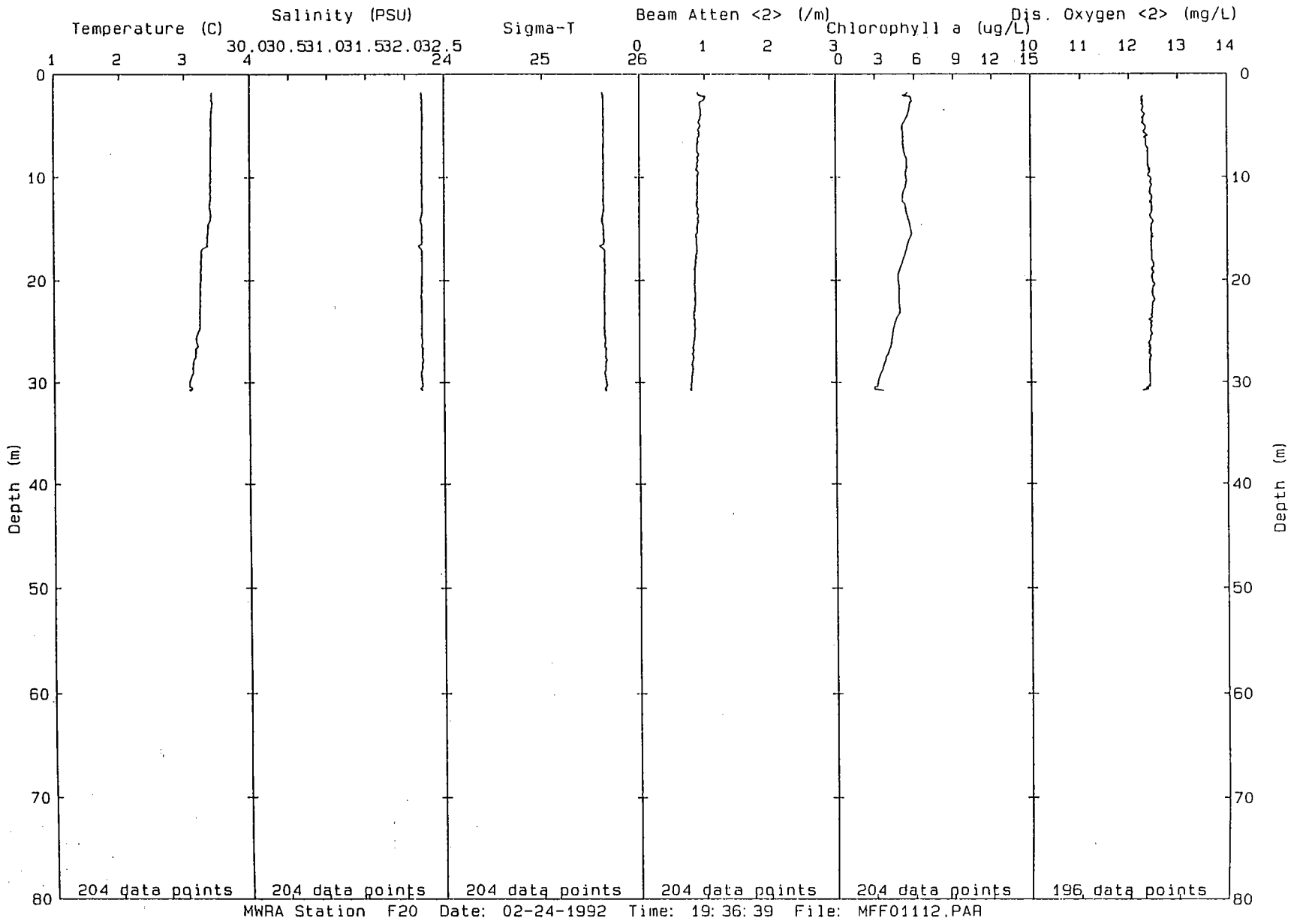
(1-7)

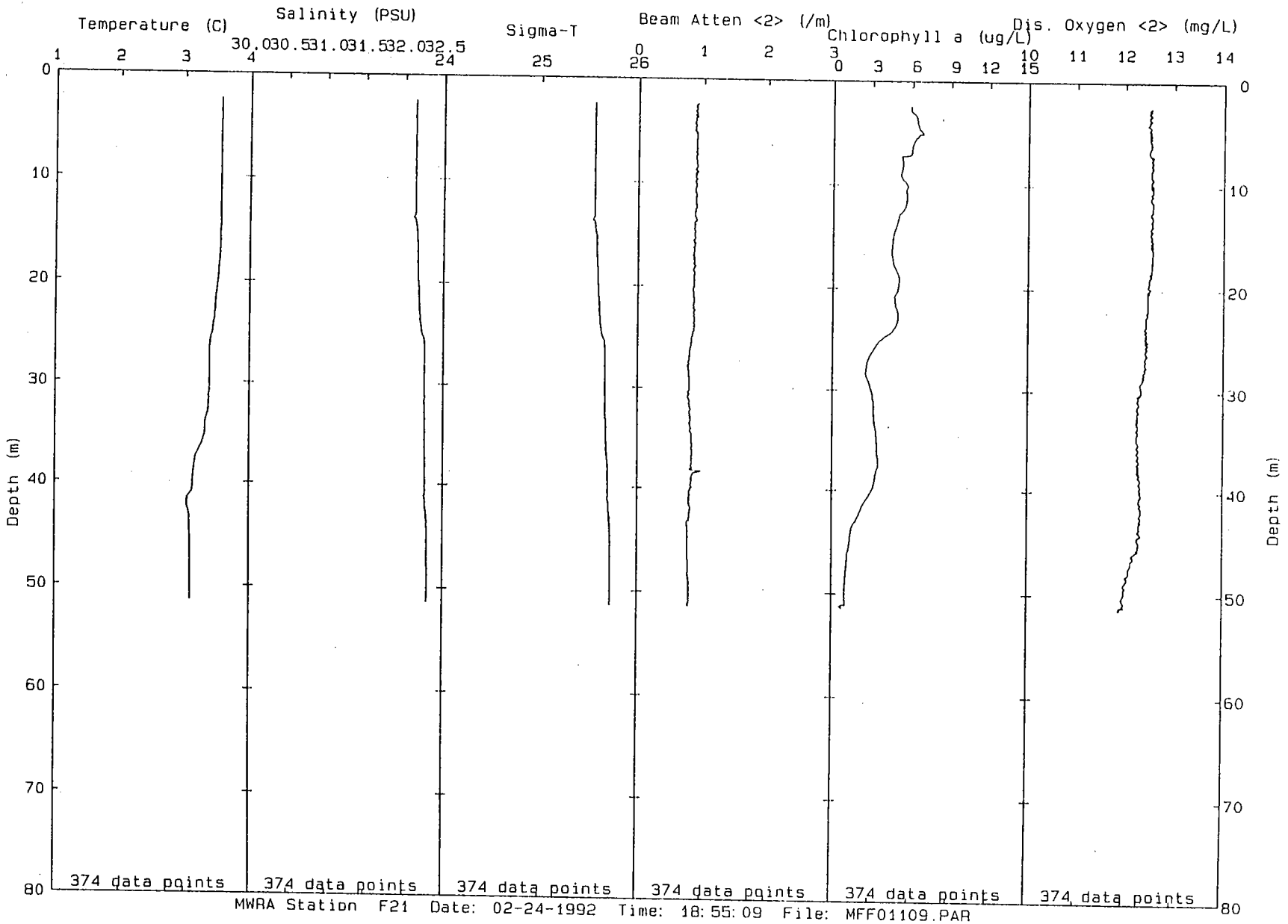

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
504 data points
504 data points
504 data points
504 data points
504 data points
493 data points
MWRA Station F17 Date: 02-24-1992 Time: 16:37:08 File: MFF01100.PAR

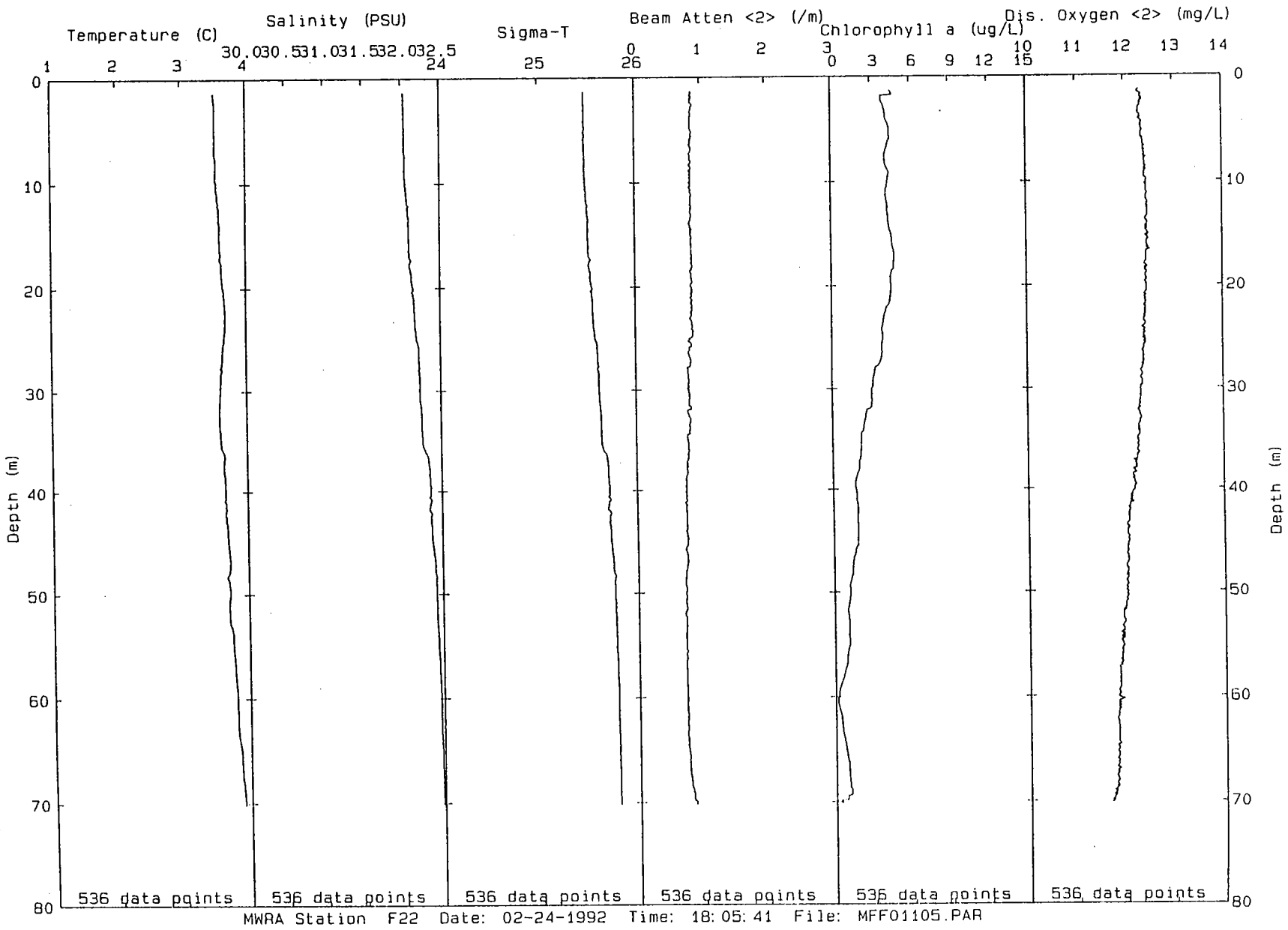
81-C

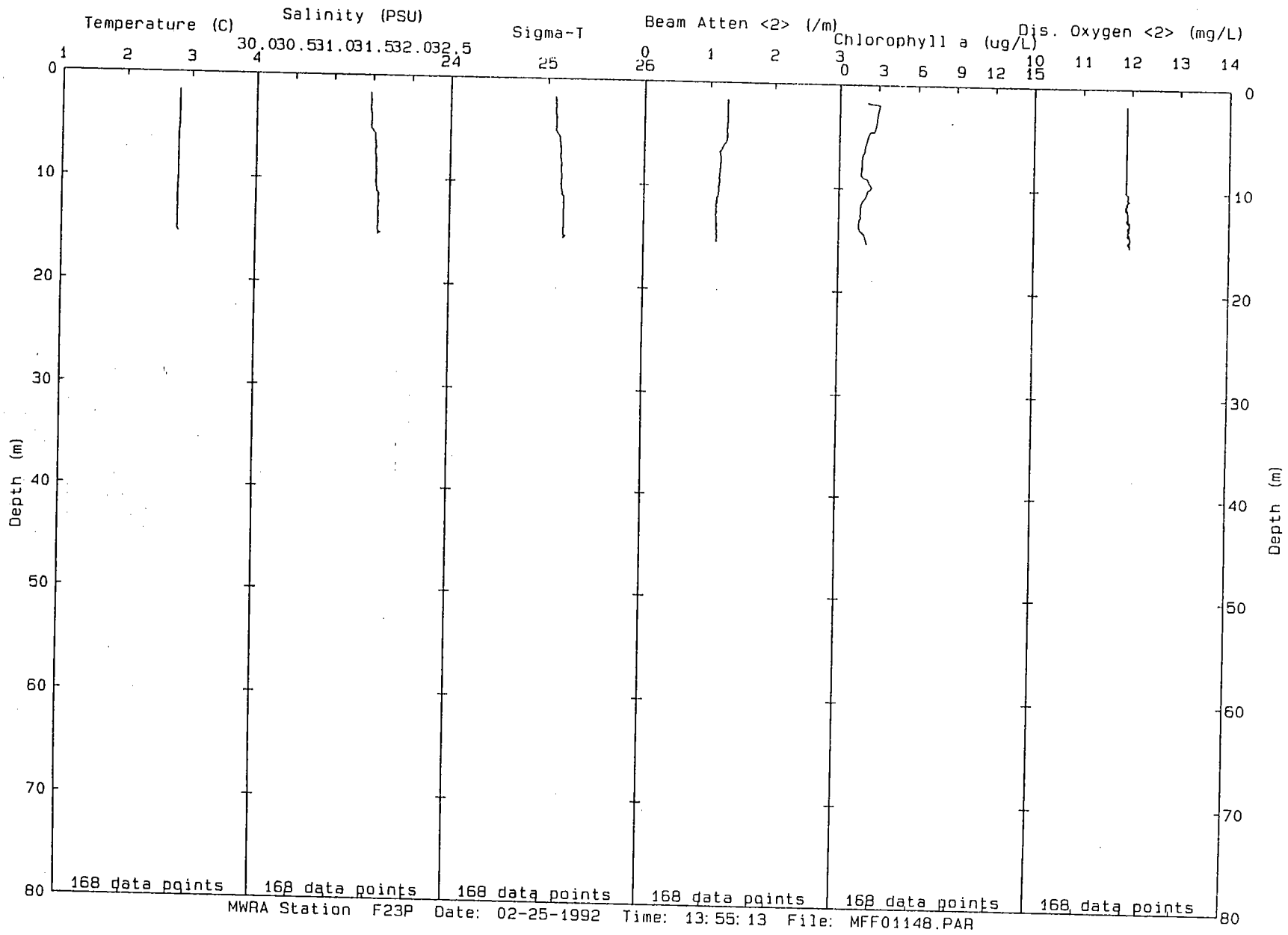

Temperature (C)
Salinity (PSU)
30.030.531.031.532.032.5
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
187 data points
187 data points
187 data points
187 data points
187 data points
187 data points
MWRA Station F18 Date: 02-24-1992 Time: 20:41:28 File: MFF01117.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
507 data points
507 data points
507 data points
501 data points
507 data points
507 data points
MWRA Station F19 Date: 02-24-1992 Time: 17:28:49 File: MFF01102.PAR

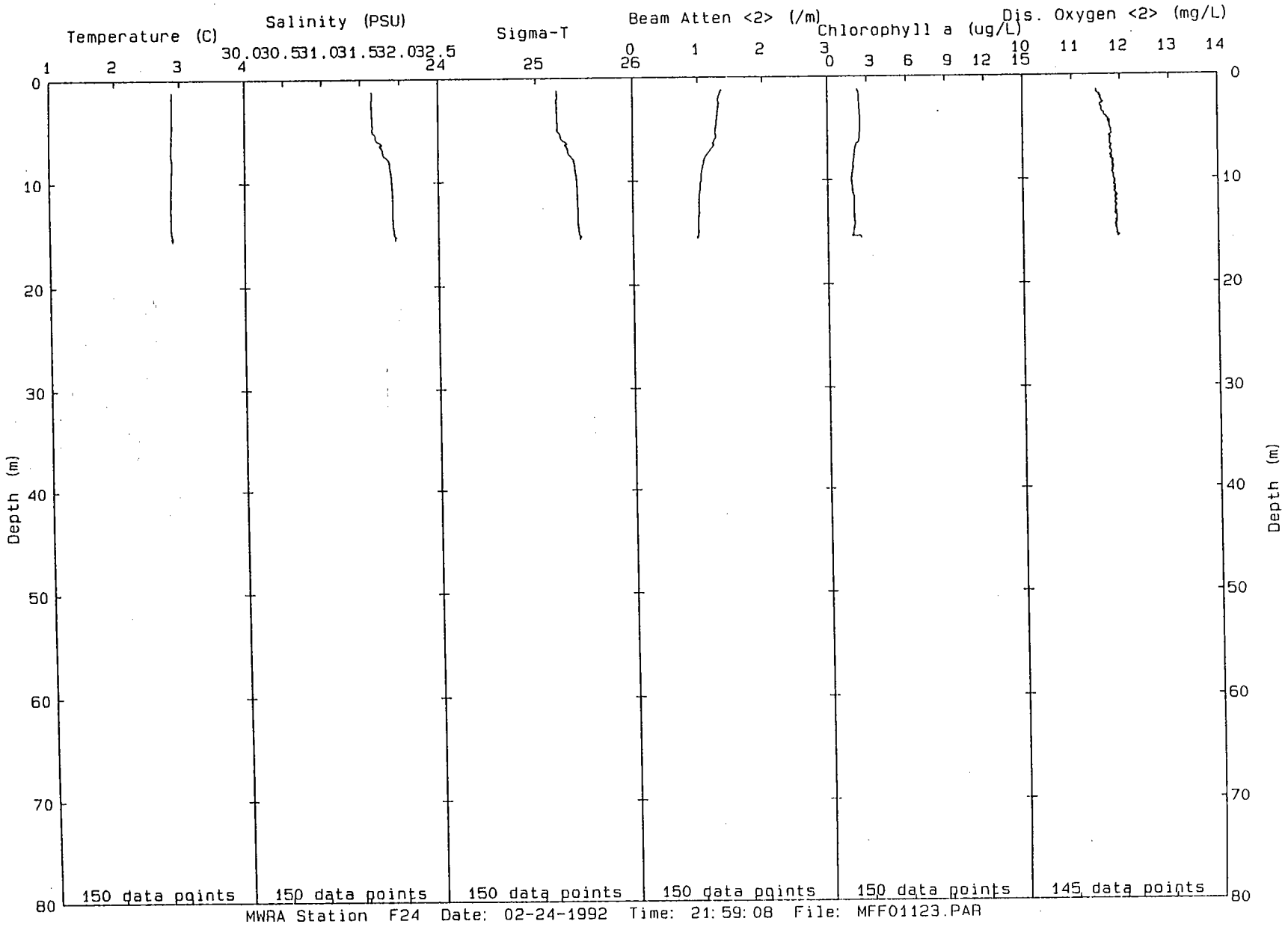

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
204 data points
204 data points
204 data points
204 data points
204 data points
196 data points
MWRA Station F20 Date: 02-24-1992 Time: 19:36:39 File: MFF01112.PAR

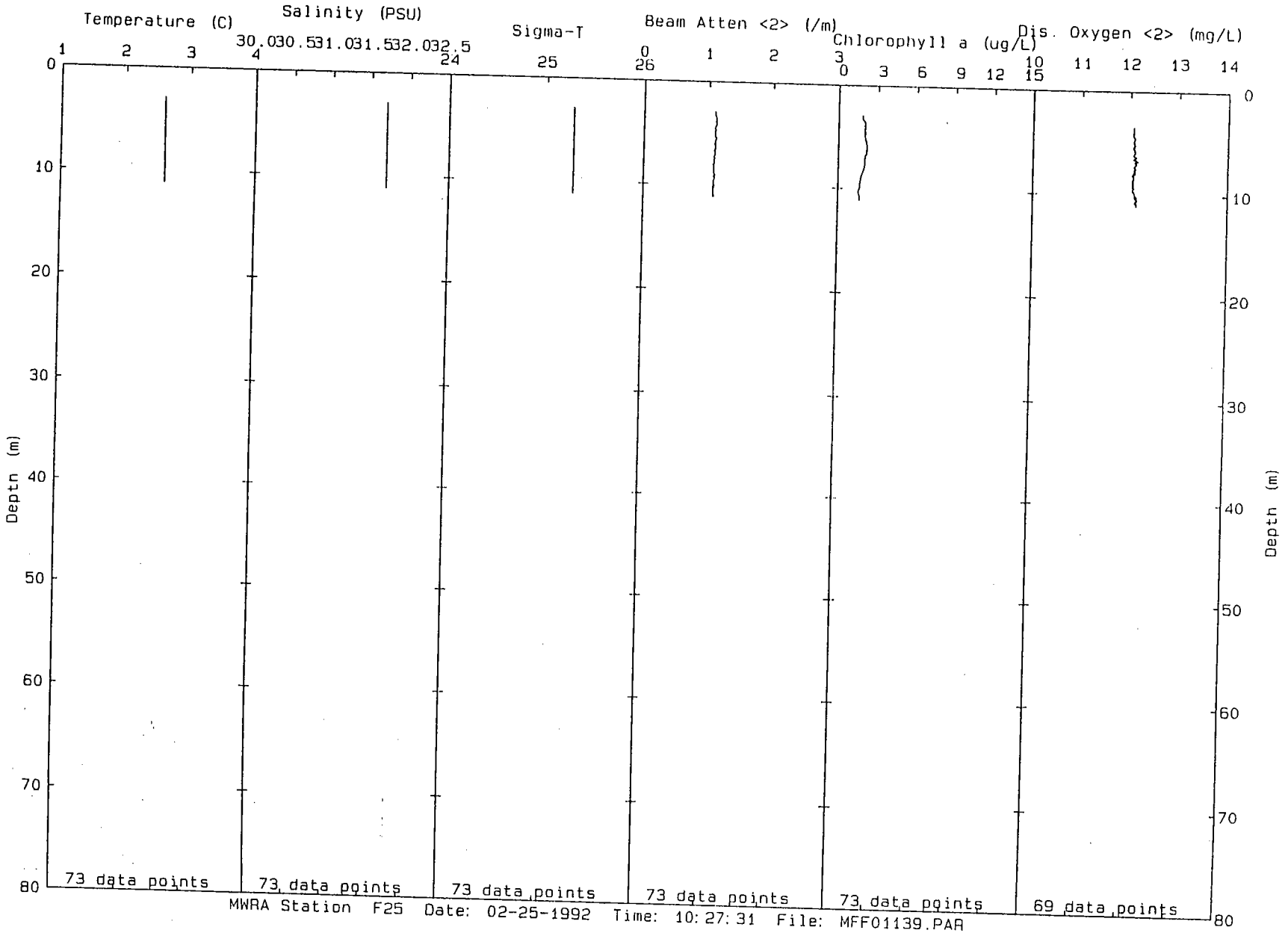

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
374 data points
MWRA Station F21 Date: 02-24-1992 Time: 18:55:09 File: MFF01109.PAR

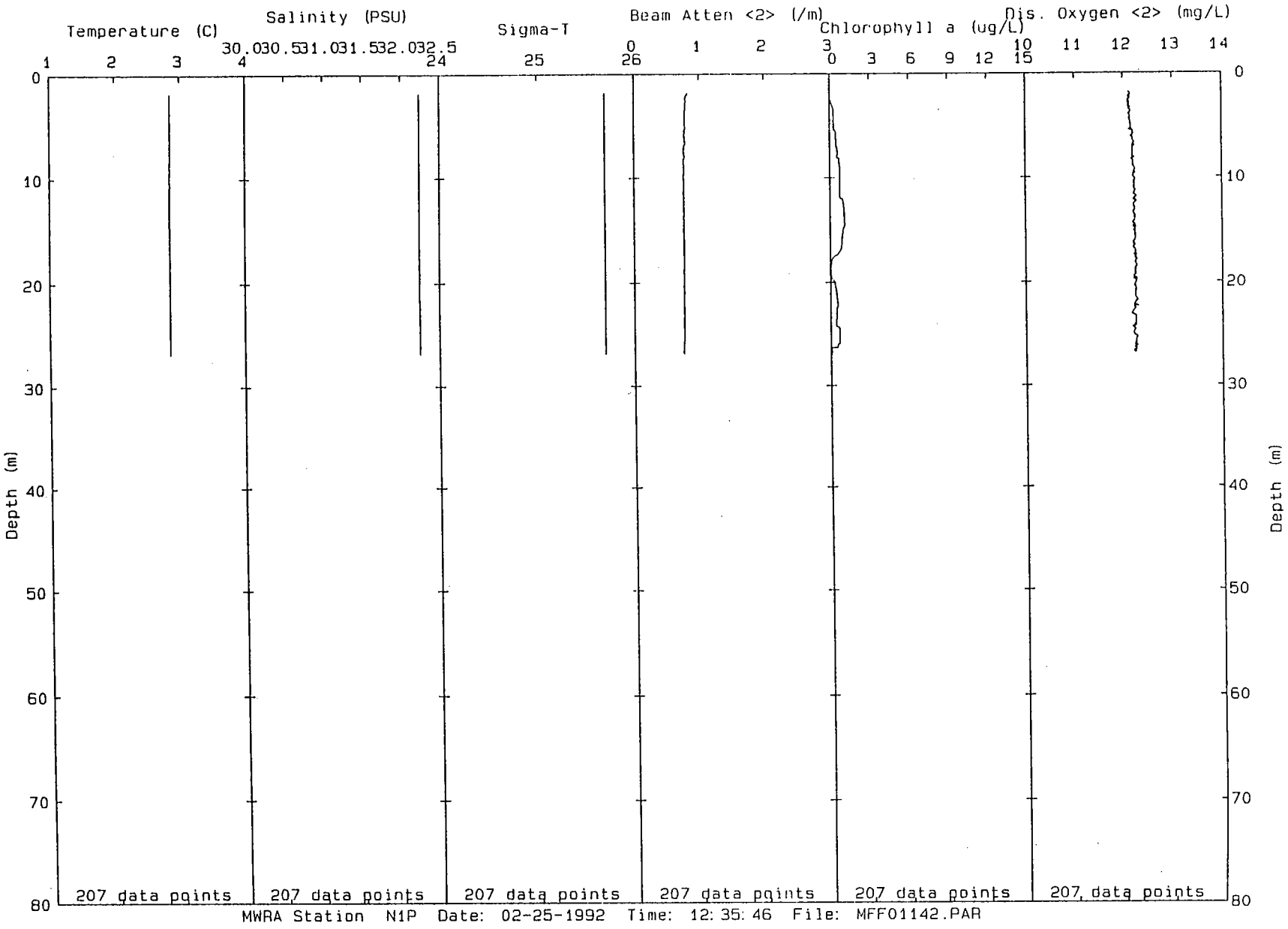

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
536 data points
536 data points
536 data points
536 data points
536 data points
536 data points
MWRA Station F22 Date: 02-24-1992 Time: 18:05:41 File: MFF01105.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
168 data points
168 data points
168 data points
168 data points
168 data points
168 data points
MWRA Station F23P Date: 02-25-1992 Time: 13:55:13 File: MFF01148.PAR

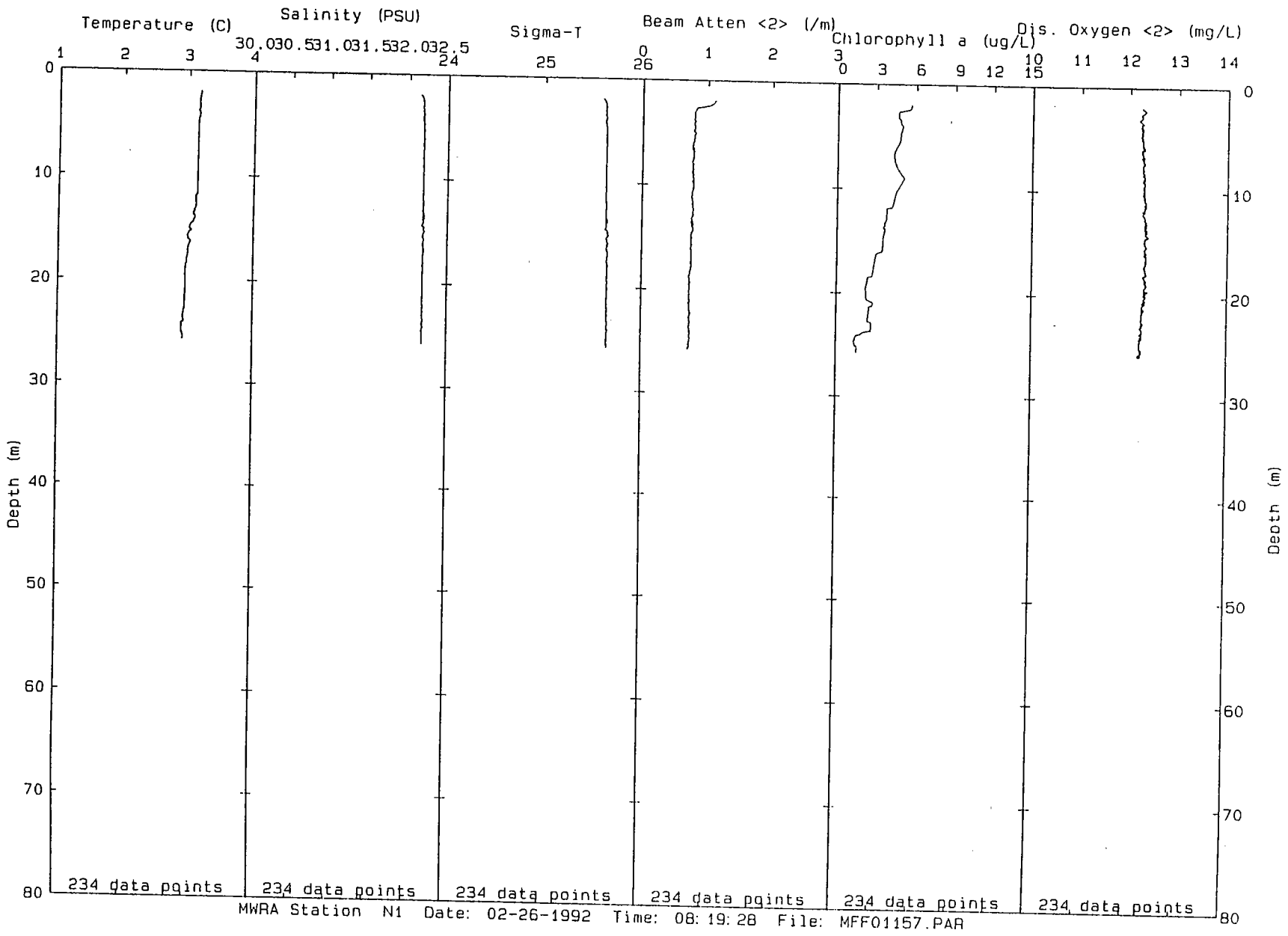
C-24


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
150 data points
150 data points
150 data points
150 data points
150 data points
145 data points
MWRA Station F24 Date: 02-24-1992 Time: 21:59:08 File: MFF01123.PAR

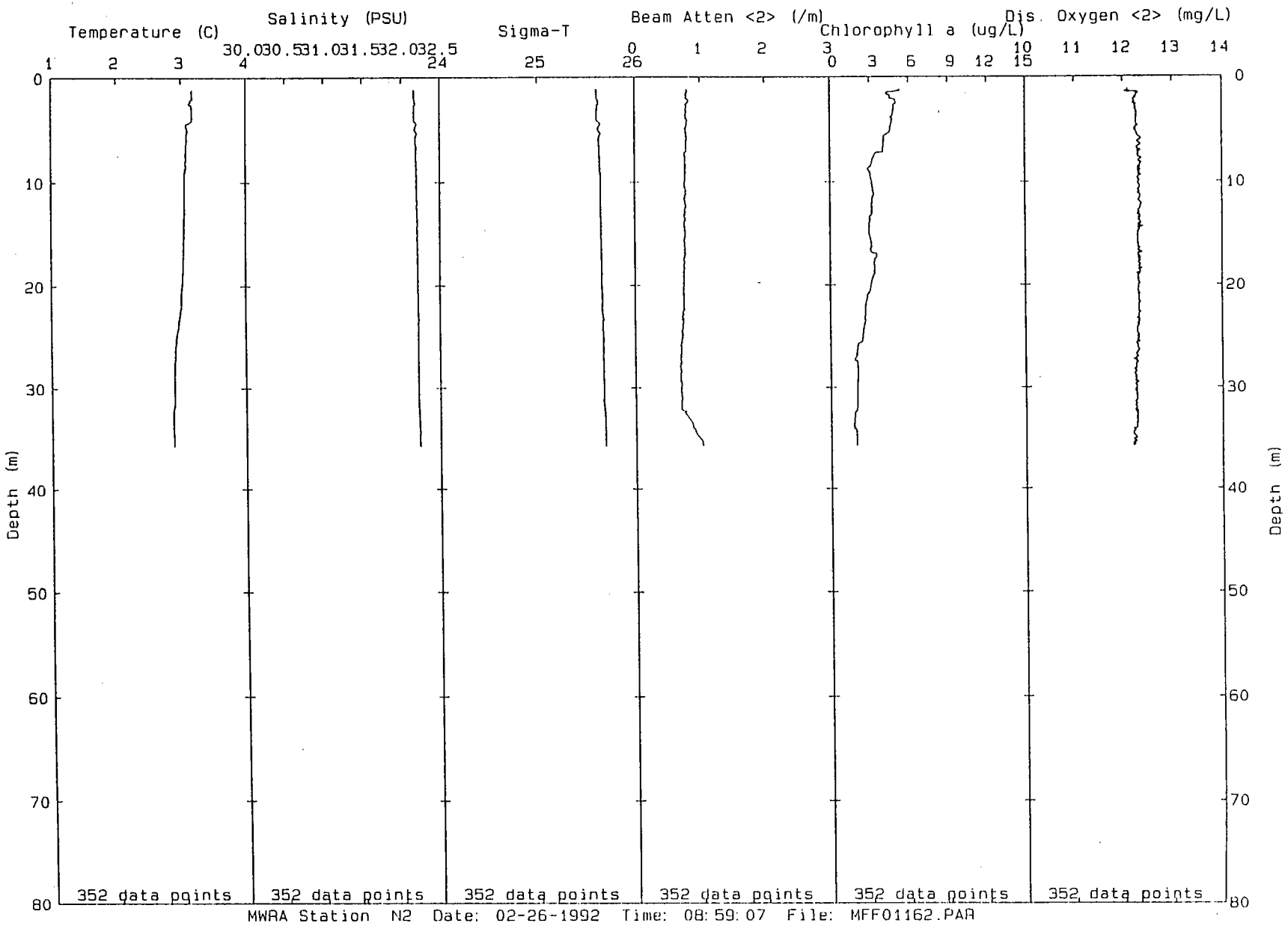

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
73 data points
73 data points
73 data points
73 data points
73 data points
69 data points
MWRA Station F25 Date: 02-25-1992 Time: 10:27:31 File: MFF01139.PAR

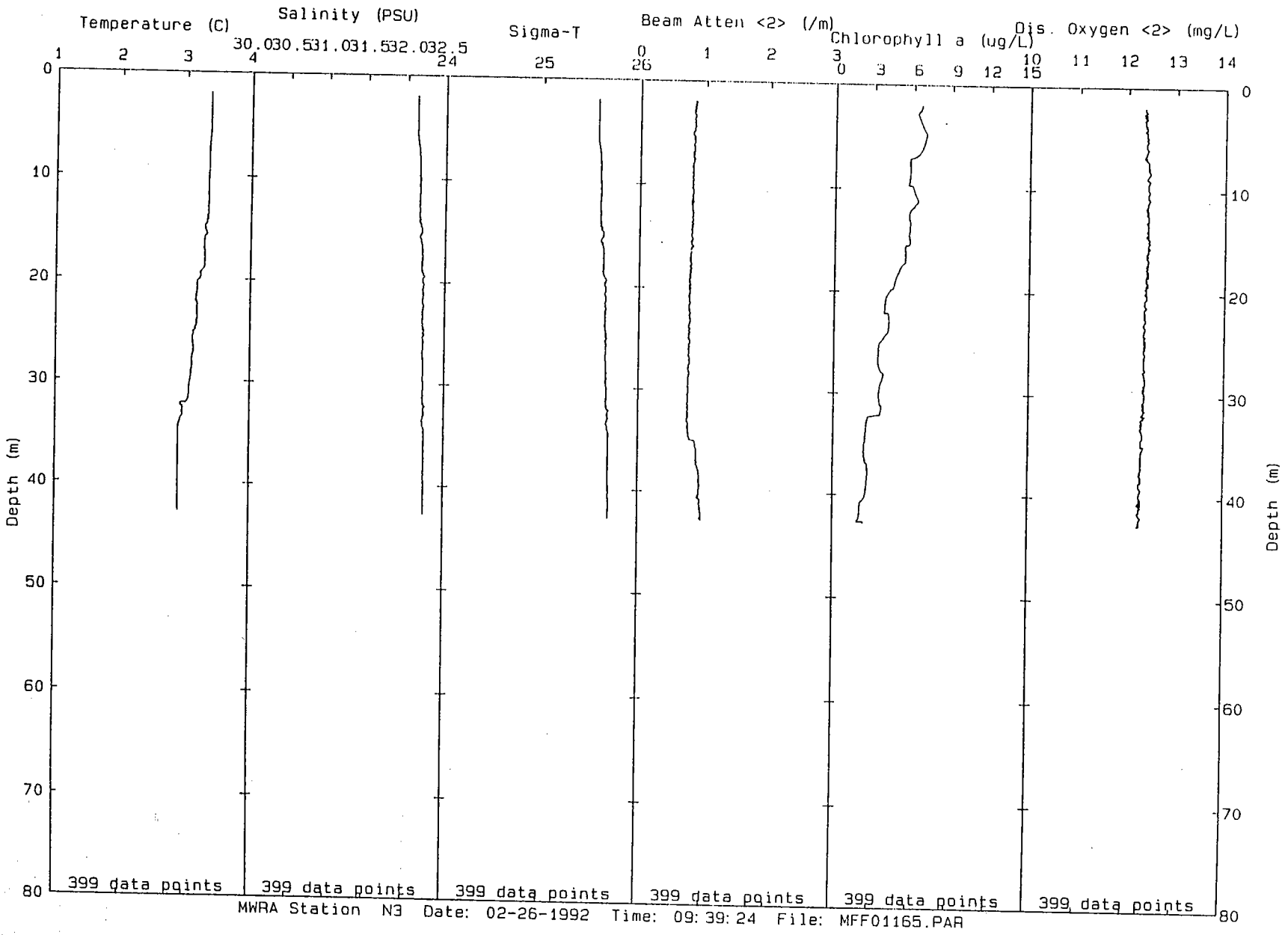

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
207 data points
207 data points
207 data points
207 data points
207 data points
207 data points
MWRA Station N1P Date: 02-25-1992 Time: 12:35:46 File: MFF01142.PAR

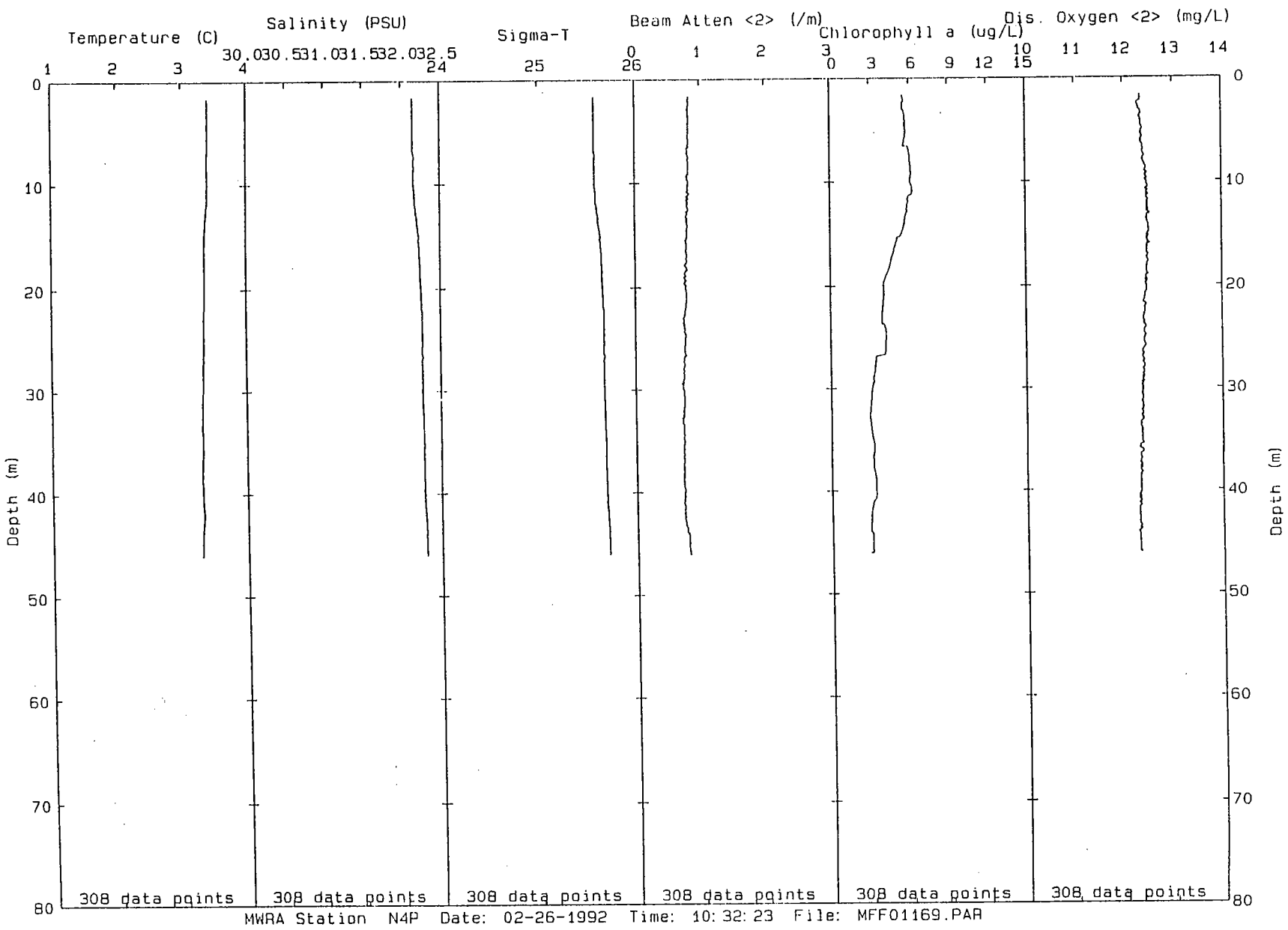
C-27


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
234 data points
234 data points
234 data points
234 data points
234 data points
234 data points
MWRA Station N1 Date: 02-26-1992 Time: 08:19:28 File: MFF01157.PAR

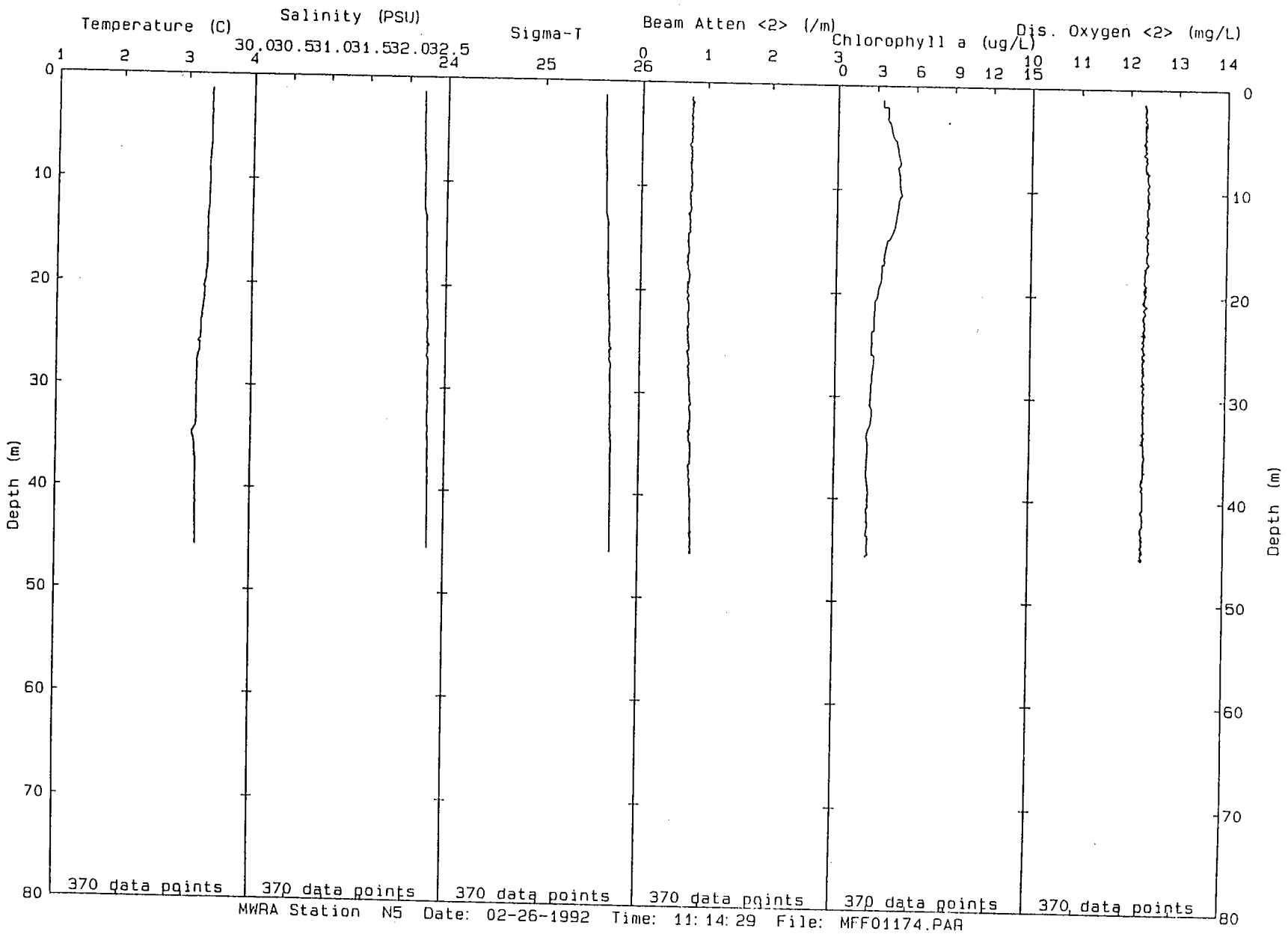
C-28

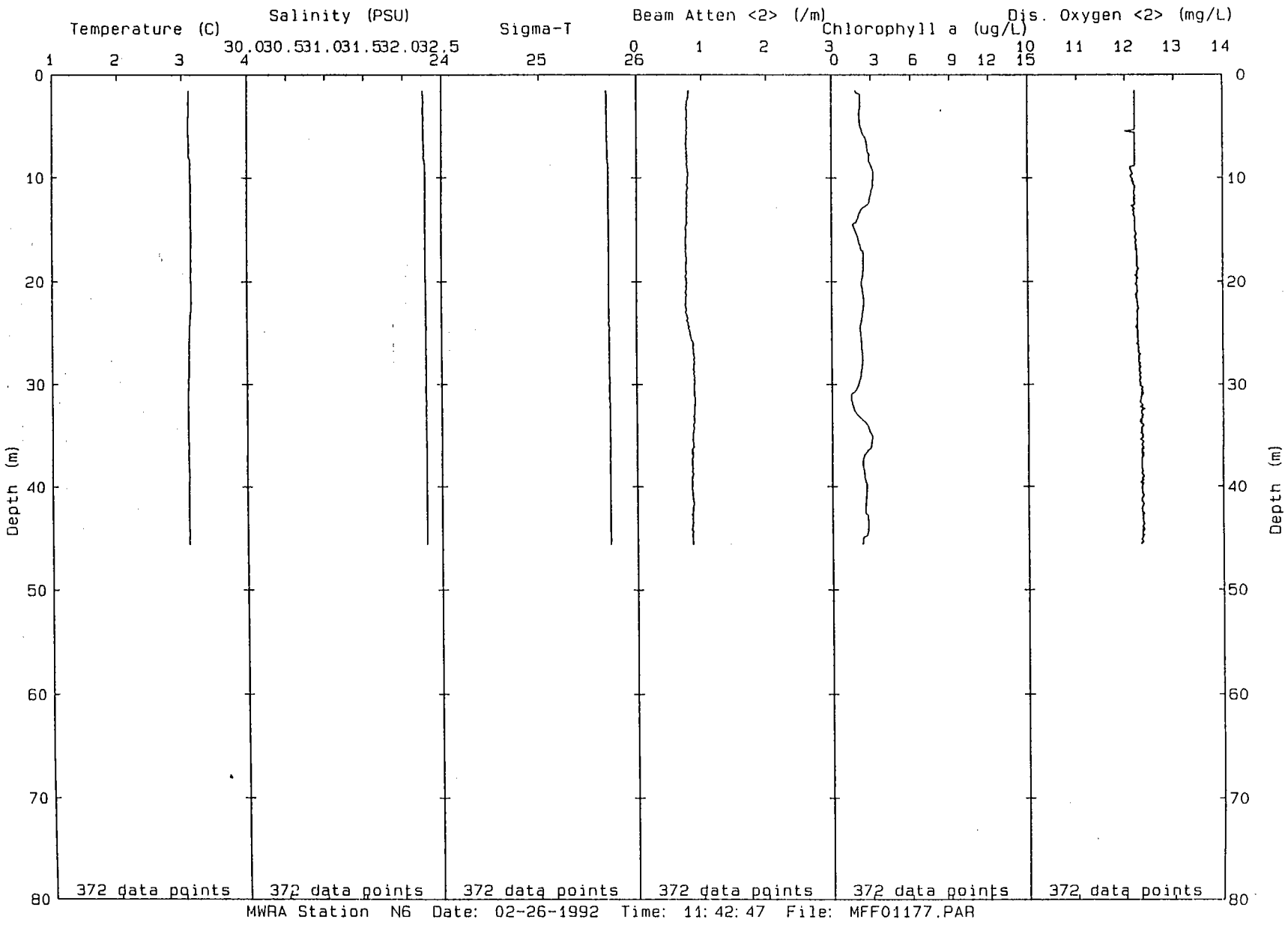

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
352 data points
352 data points
352 data points
352 data points
352 data points
352 data points
MWRA Station N2 Date: 02-26-1992 Time: 08:59:07 File: MFF01162.PAR

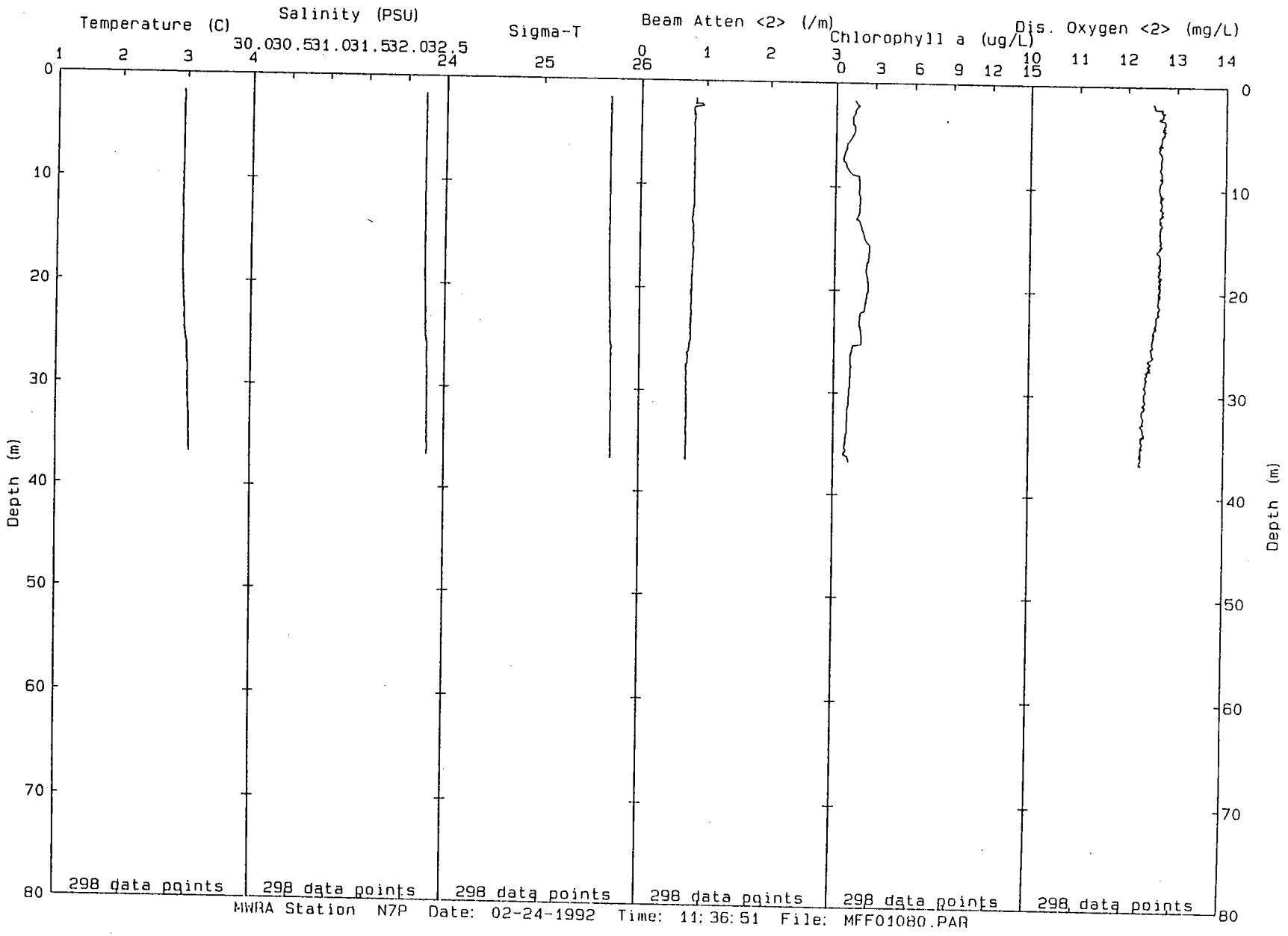

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
399 data points
MWRA Station N3 Date: 02-26-1992 Time: 09:39:24 File: MFF01165.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
308 data points
308 data points
308 data points
308 data points
308 data points
308 data points
MWRA Station N4P Date: 02-26-1992 Time: 10:32:23 File: MFF01169.PAR

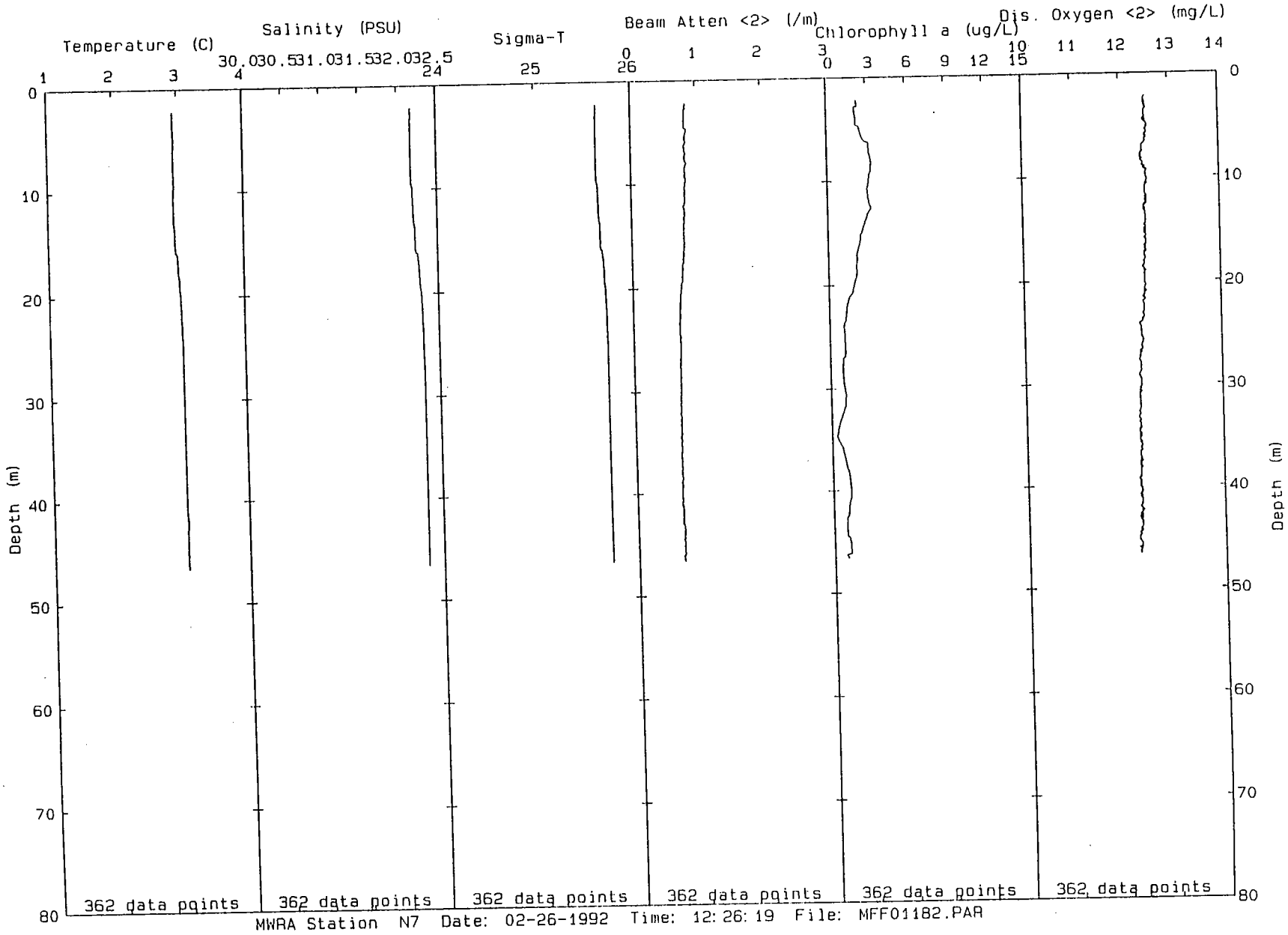
C-31


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
370 data points
370 data points
370 data points
370 data points
370 data points
370 data points
MWRA Station N5 Date: 02-26-1992 Time: 11:14:29 File: MFF01174.PAR

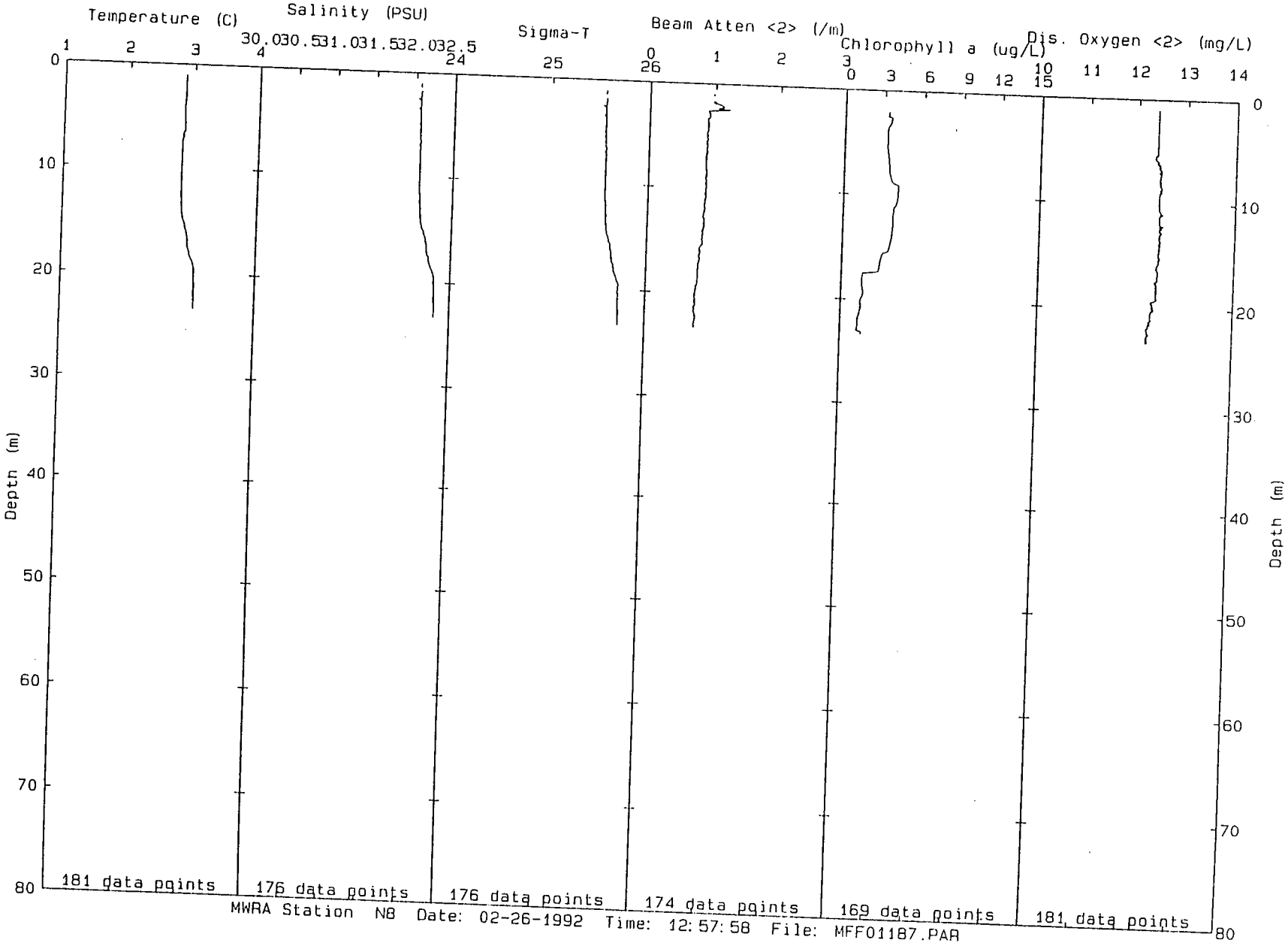

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
372 data points
MWRA Station N6 Date: 02-26-1992 Time: 11:42:47 File: MFF01177.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
298 data points
MWRA Station N7P Date: 02-24-1992 Time: 11:36:51 File: MFF01080.PAR

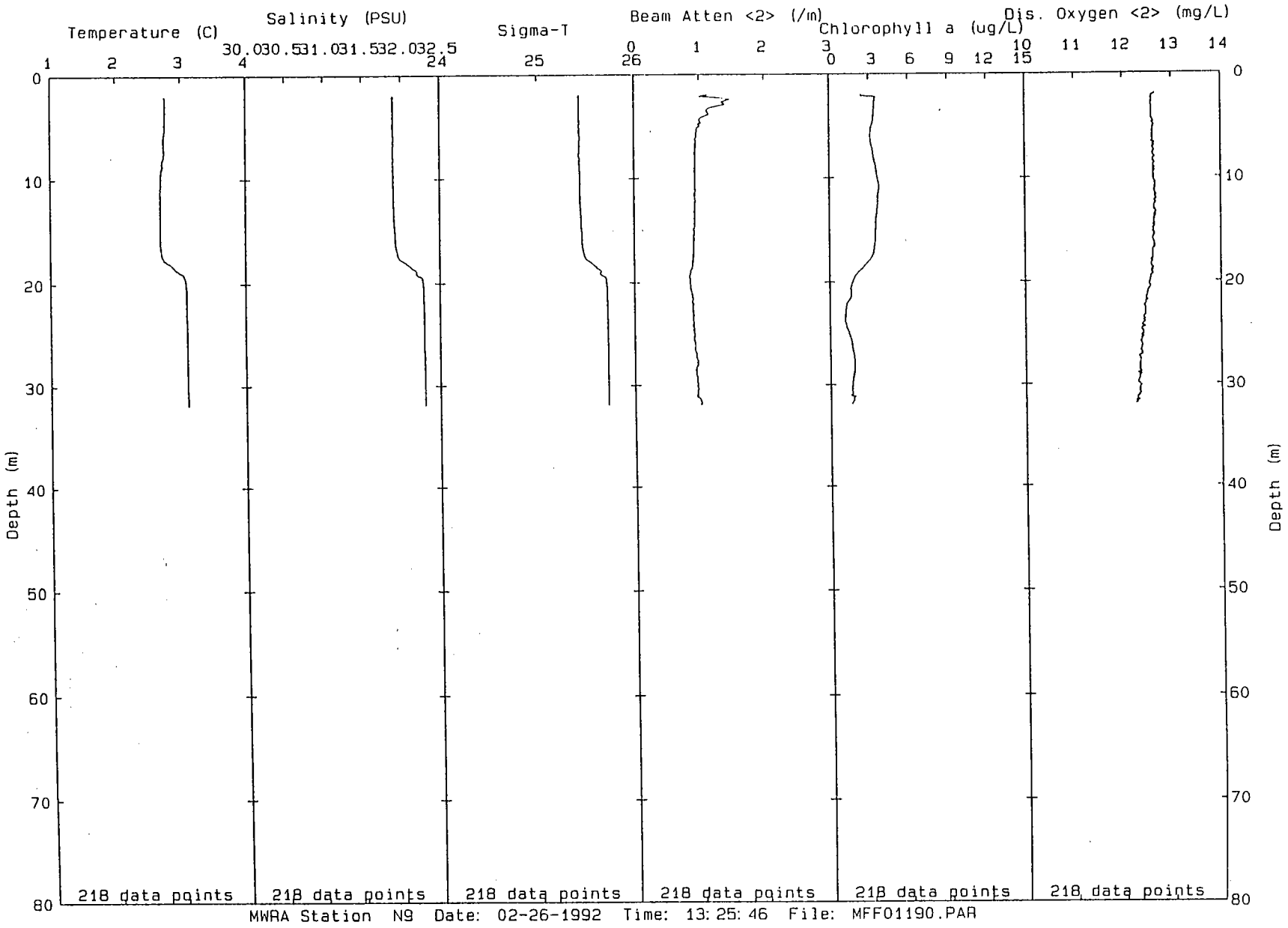
C-34

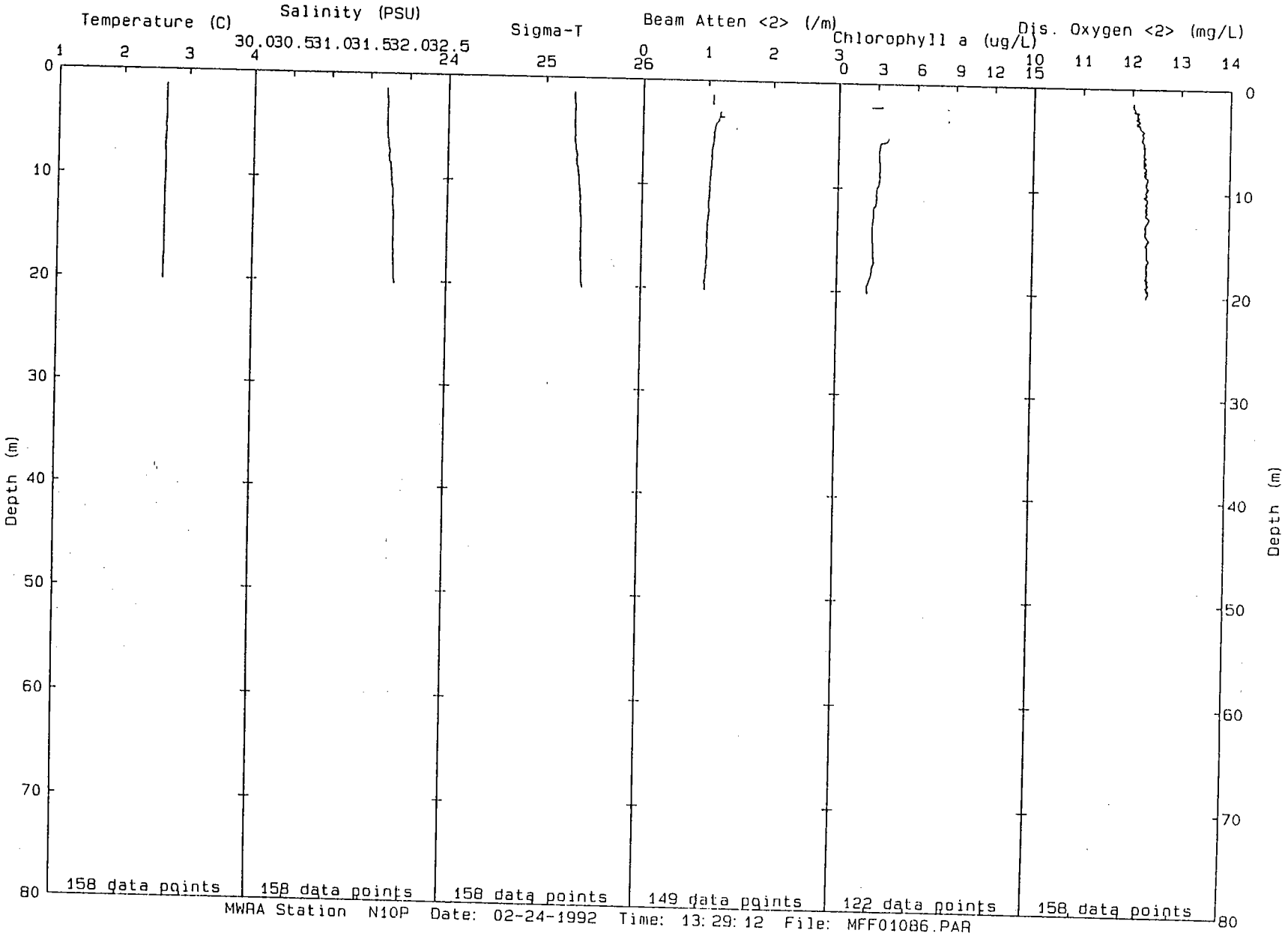

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
362 data points
MWRA Station N7 Date: 02-26-1992 Time: 12:26:19 File: MFF01182.PAR

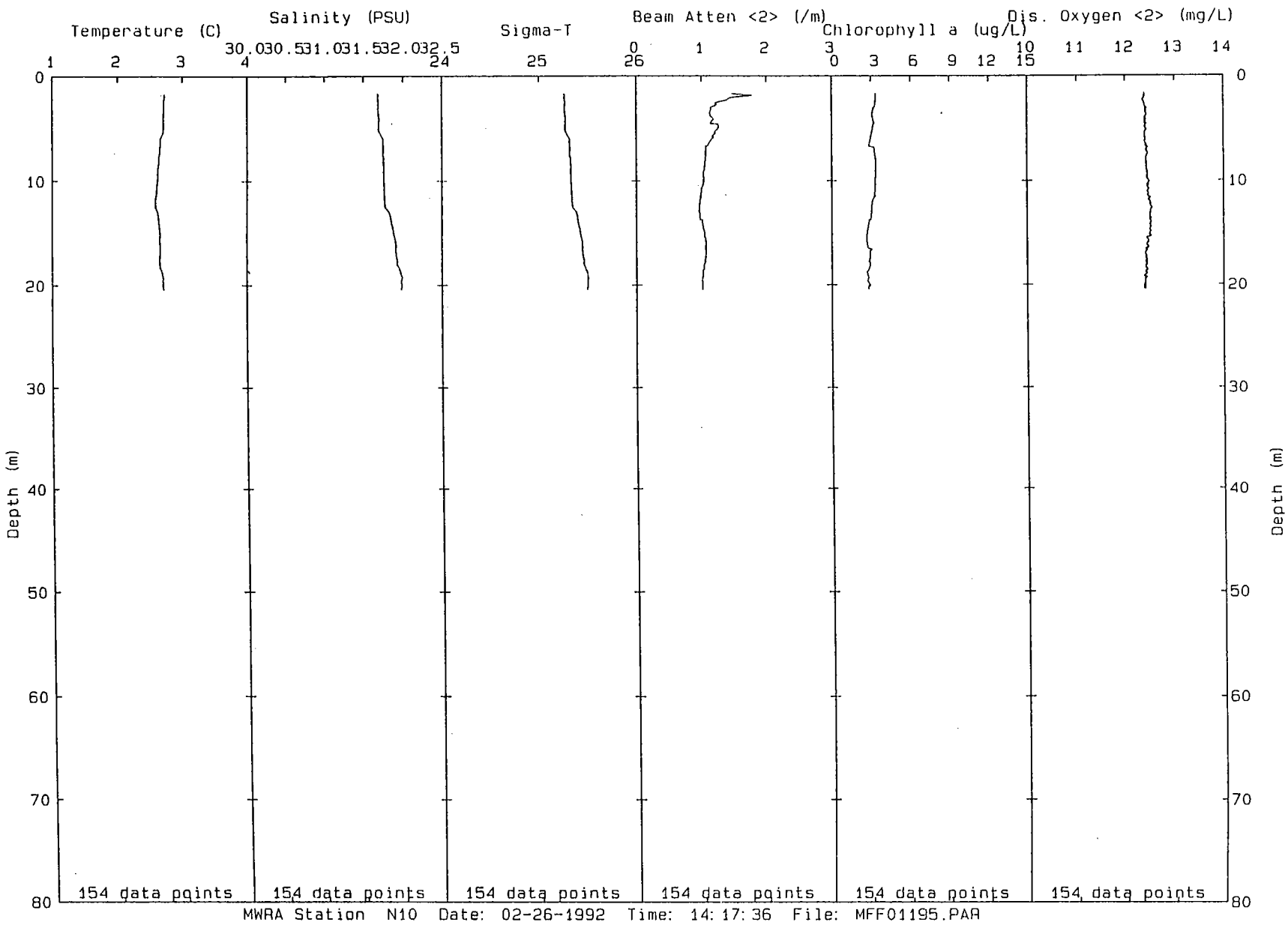
C-35

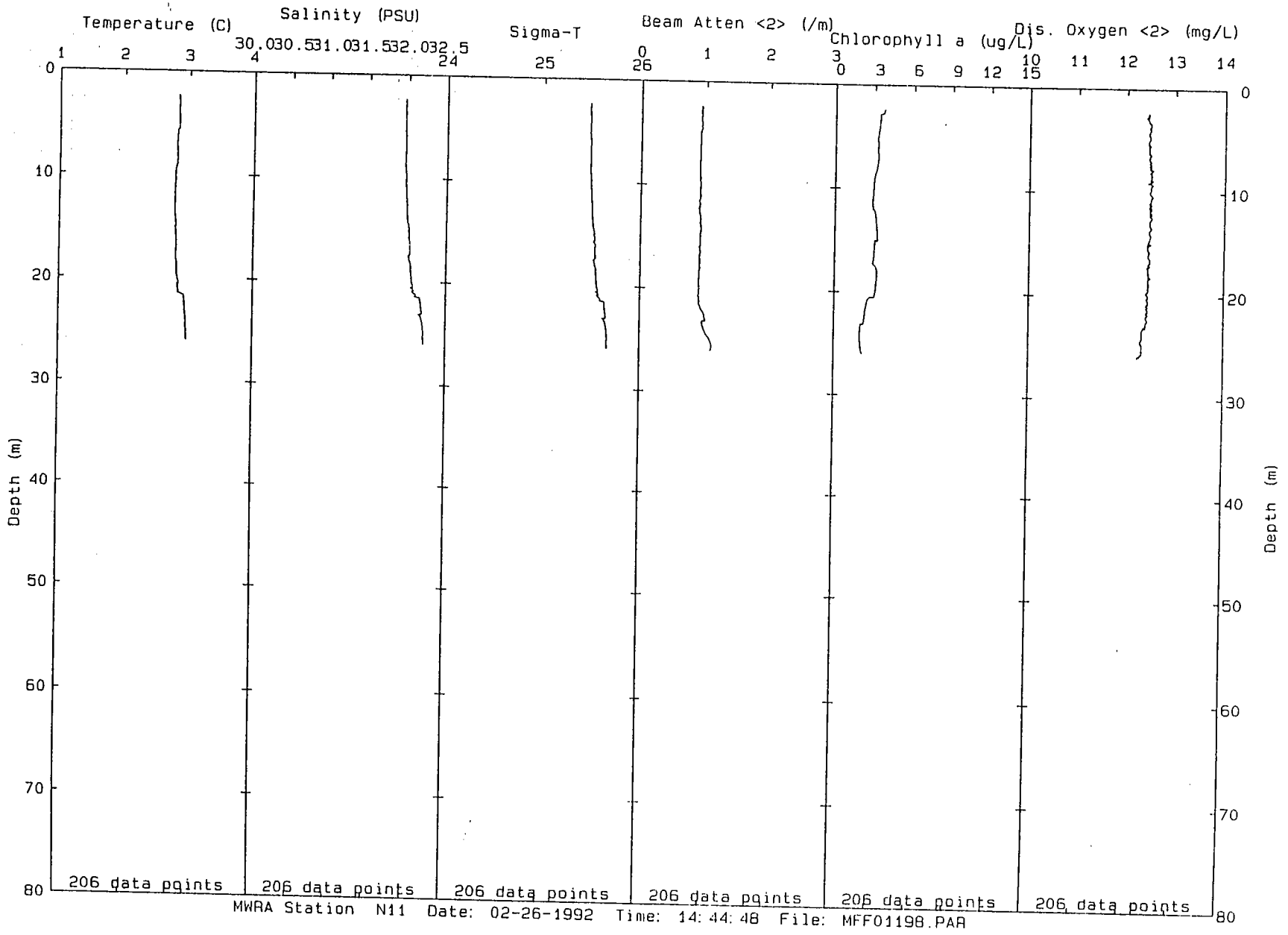

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
181 data points
176 data points
176 data points
174 data points
169 data points
181 data points
MWRA Station N8 Date: 02-26-1992 Time: 12:57:58 File: MFF01187.PAR

C-36

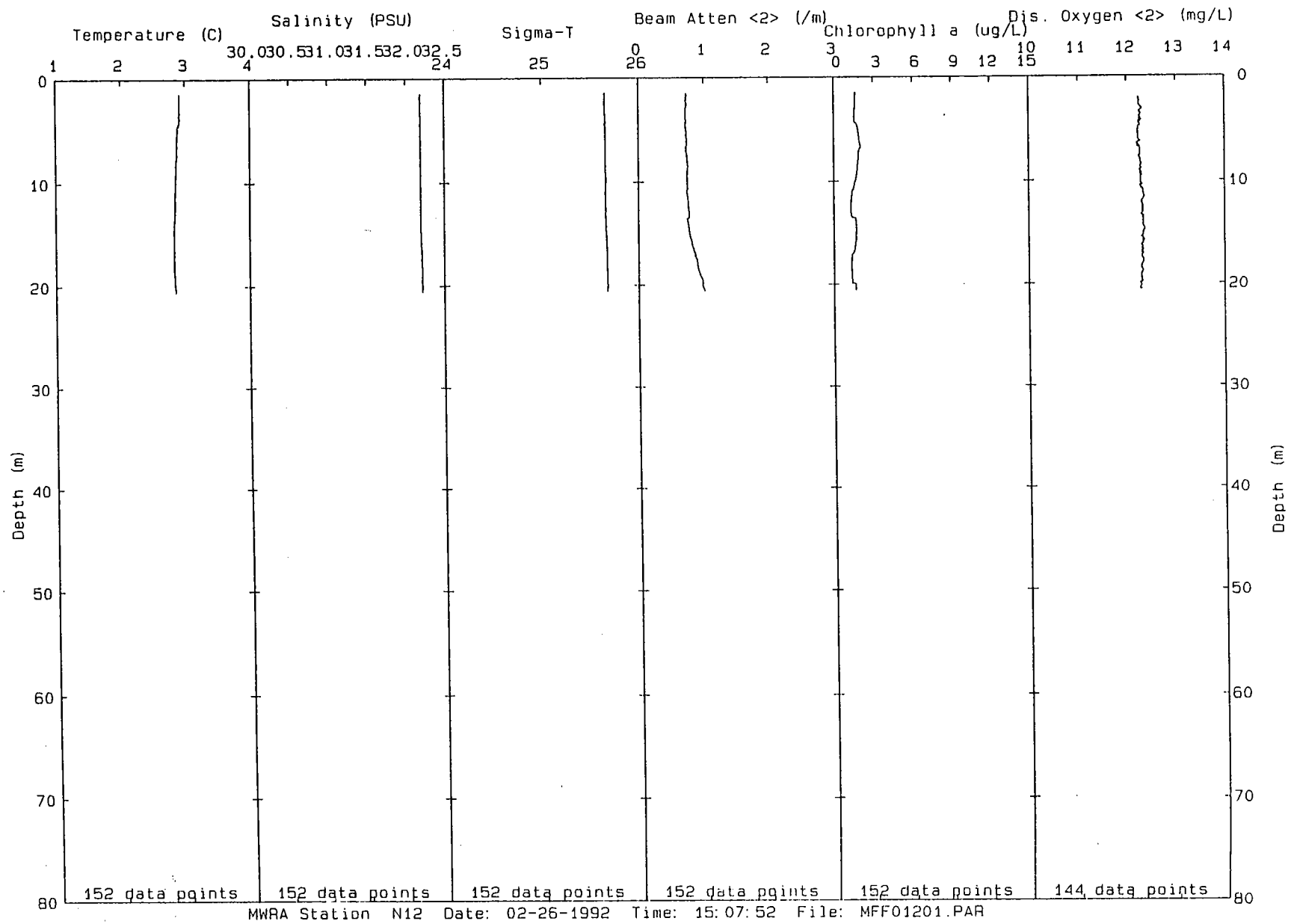

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
218 data points
MWRA Station N9 Date: 02-26-1992 Time: 13:25:46 File: MFF01190.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
158 data points
158 data points
158 data points
149 data points
122 data points
158 data points
MWRA Station N10P Date: 02-24-1992 Time: 13:29:12 File: MFF01086.PAR

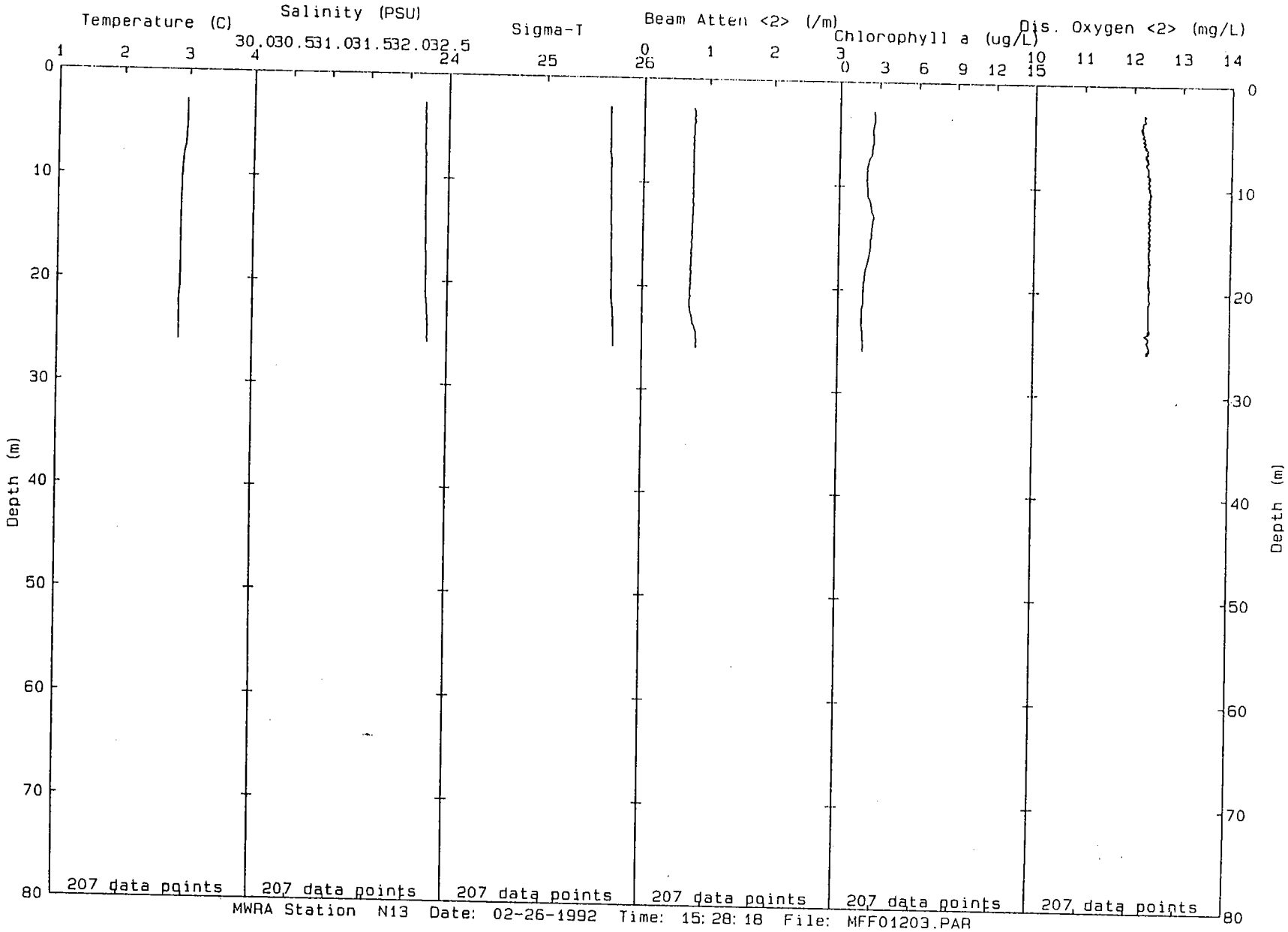

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
154 data points
MWRA Station N10 Date: 02-26-1992 Time: 14:17:36 File: MFF01195.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
206 data points
206 data points
206 data points
206 data points
206 data points
206 data points
MWRA Station N11 Date: 02-26-1992 Time: 14:44:48 File: MFF01198.PAR

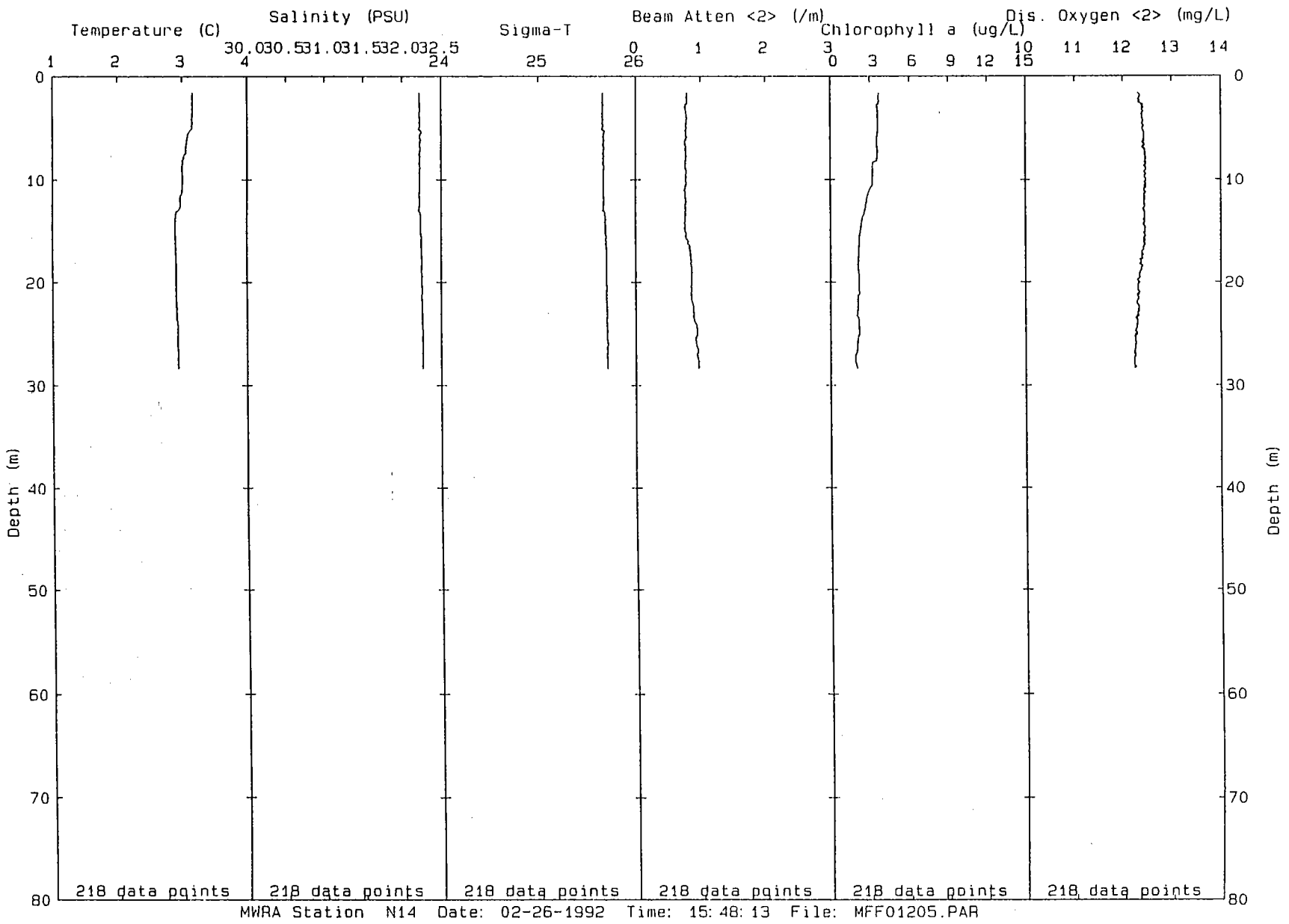
ah-)


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
152 data points
152 data points
152 data points
152 data points
152 data points
144 data points
MWRA Station N12 Date: 02-26-1992 Time: 15:07:52 File: MFF01201.PAR

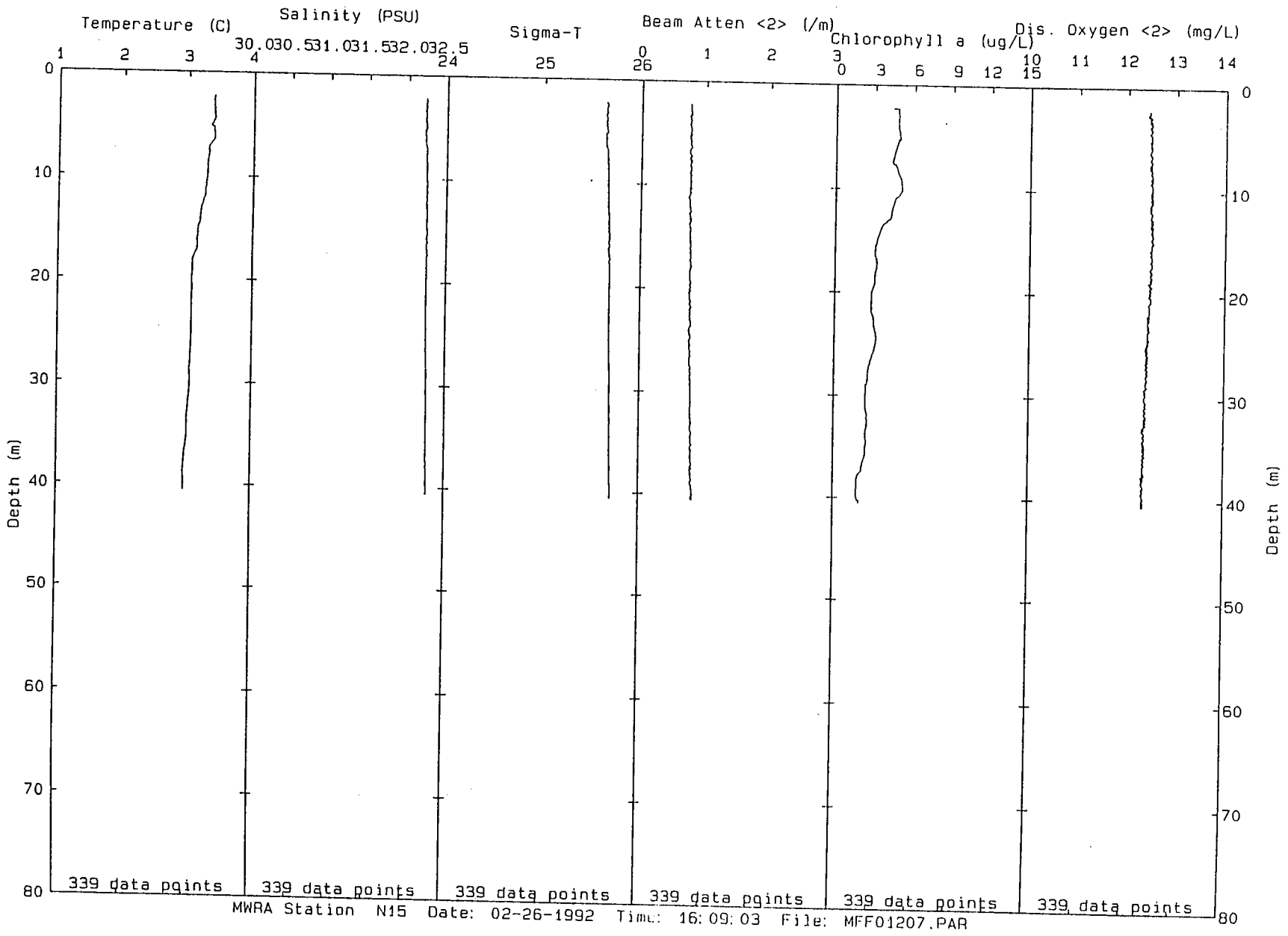
(4-)

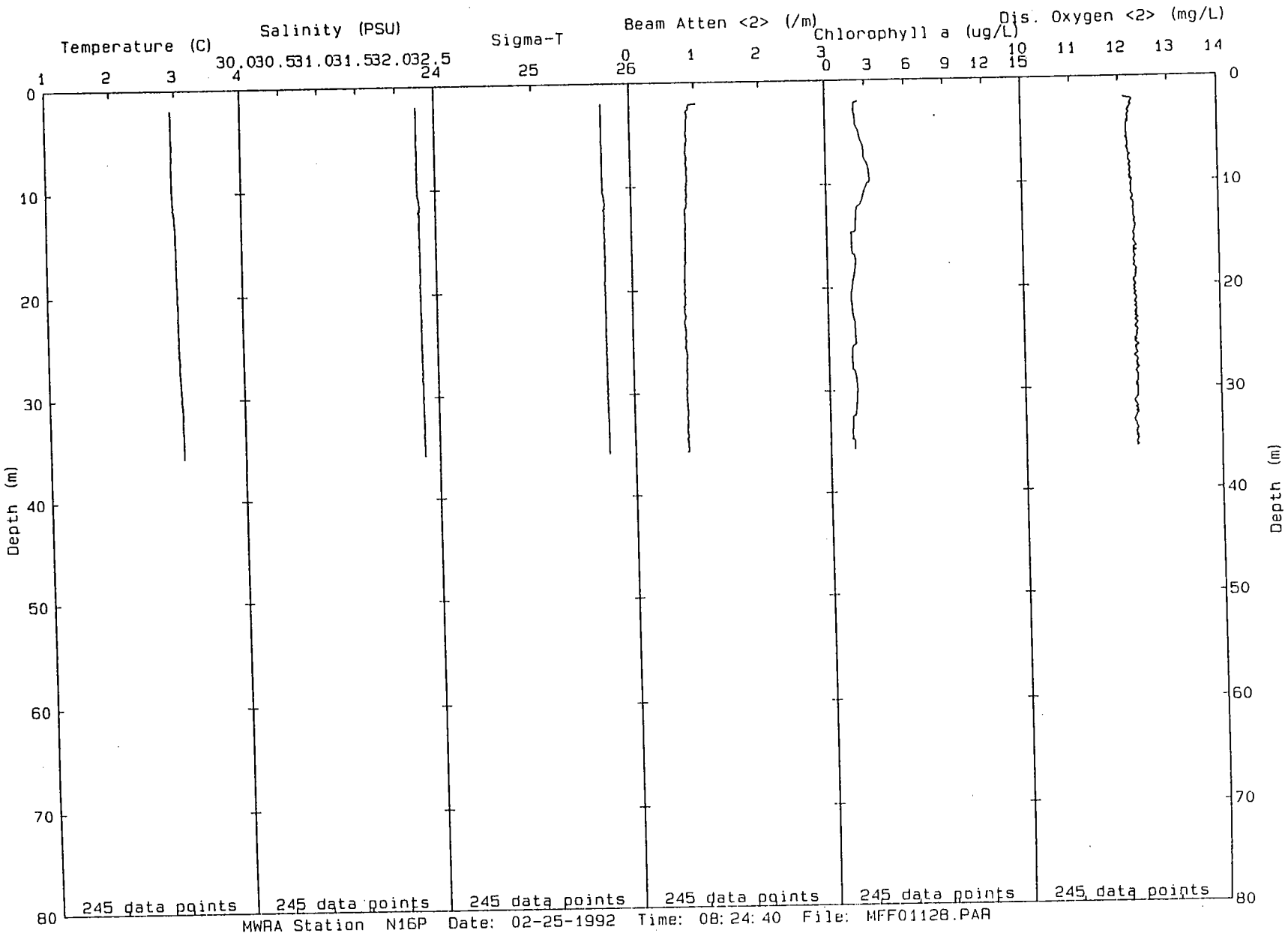

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
207 data points
MWRA Station N13 Date: 02-26-1992 Time: 15:28:18 File: MFF01203.PAR

C-42


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
218 data points
MWRA Station N14 Date: 02-26-1992 Time: 15:48:13 File: MFF01205.PAR

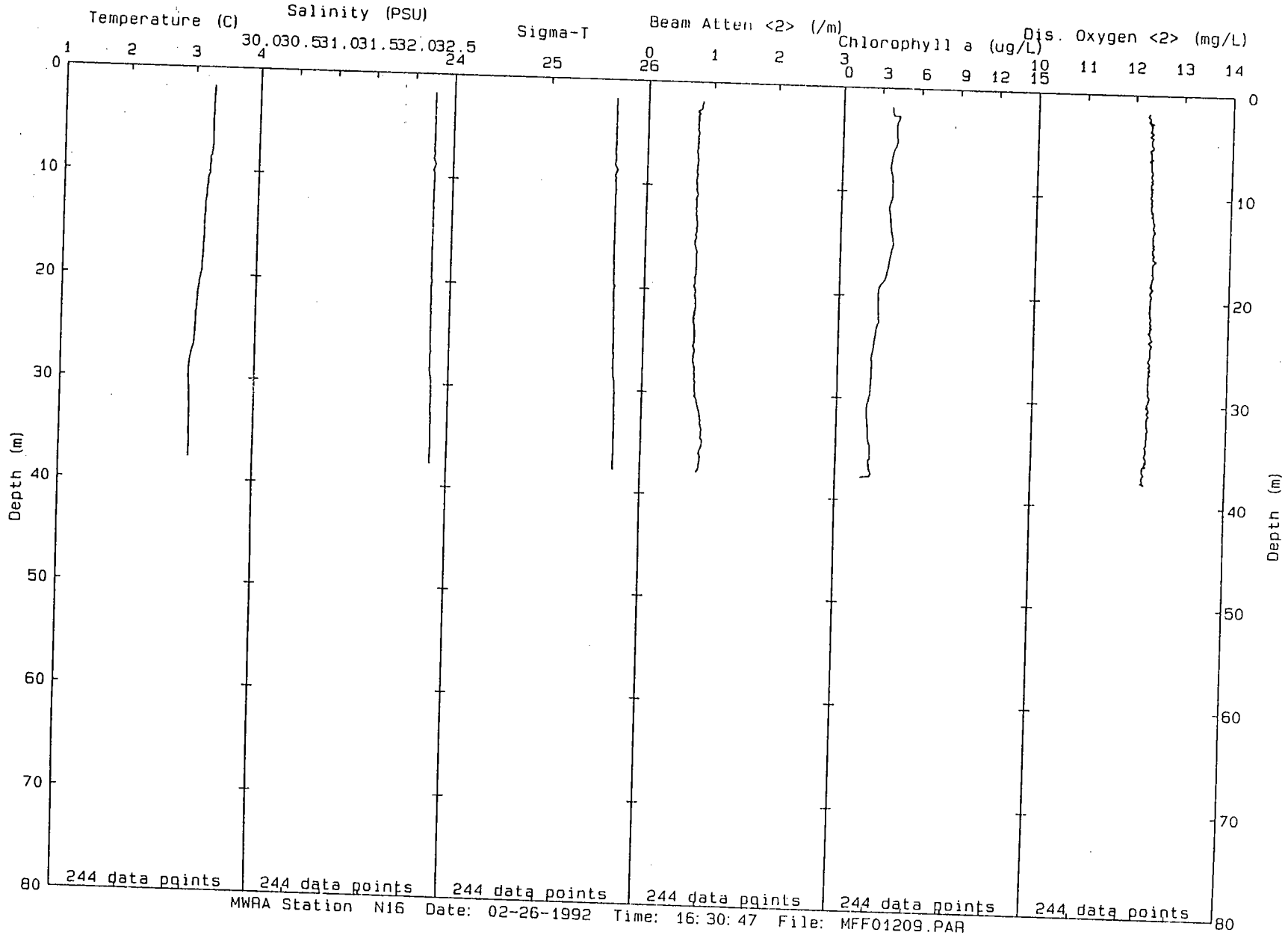
C-43

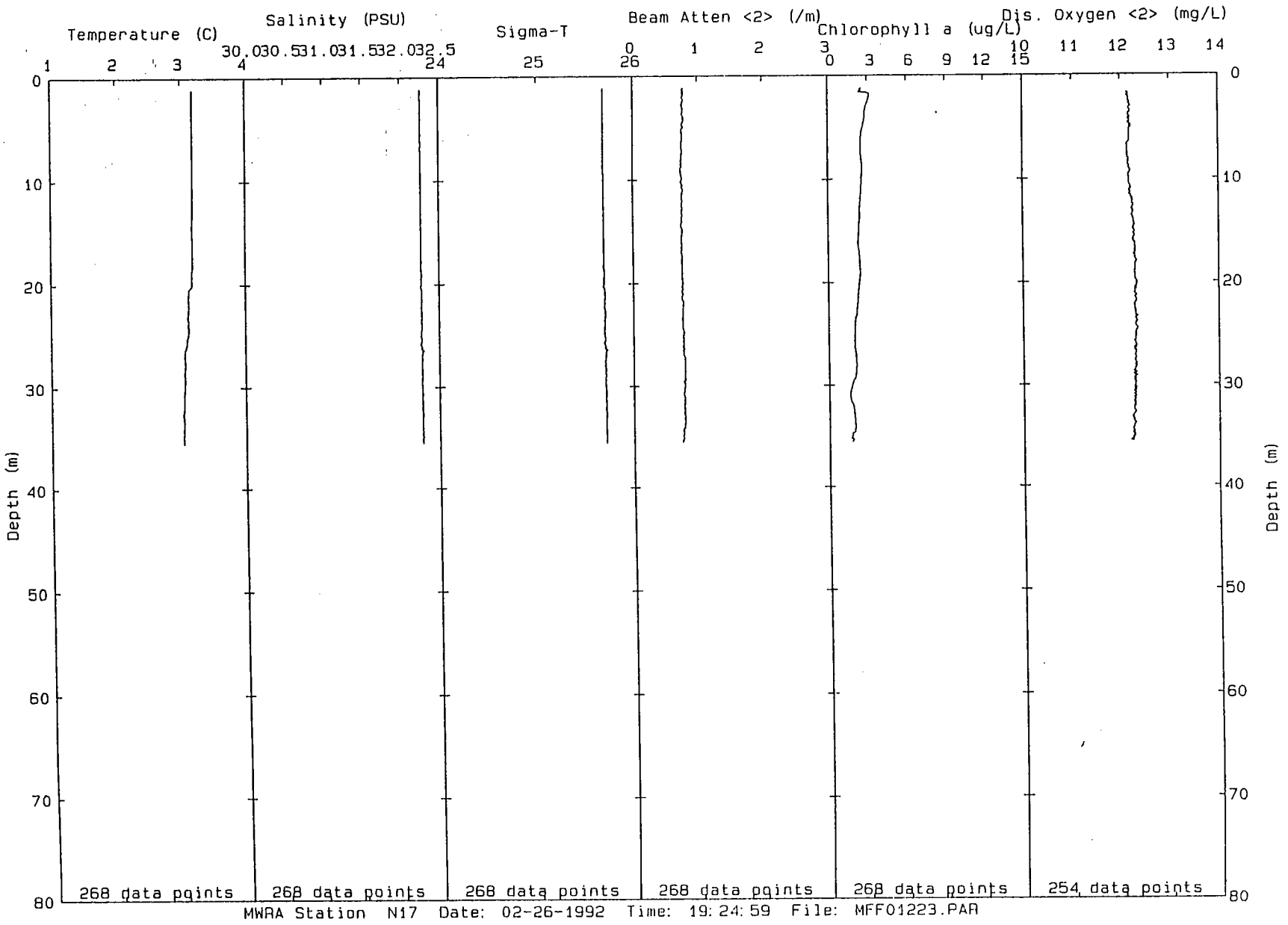

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
339 data points
339 data points
339 data points
339 data points
339 data points
339 data points
MWRA Station N15 Date: 02-26-1992 Time: 16:09:03 File: MFF01207.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
245 data points
245 data points
245 data points
245 data points
245 data points
245 data points
MWRA Station N16P Date: 02-25-1992 Time: 08:24:40 File: MFF01128.PAR

Sh-7

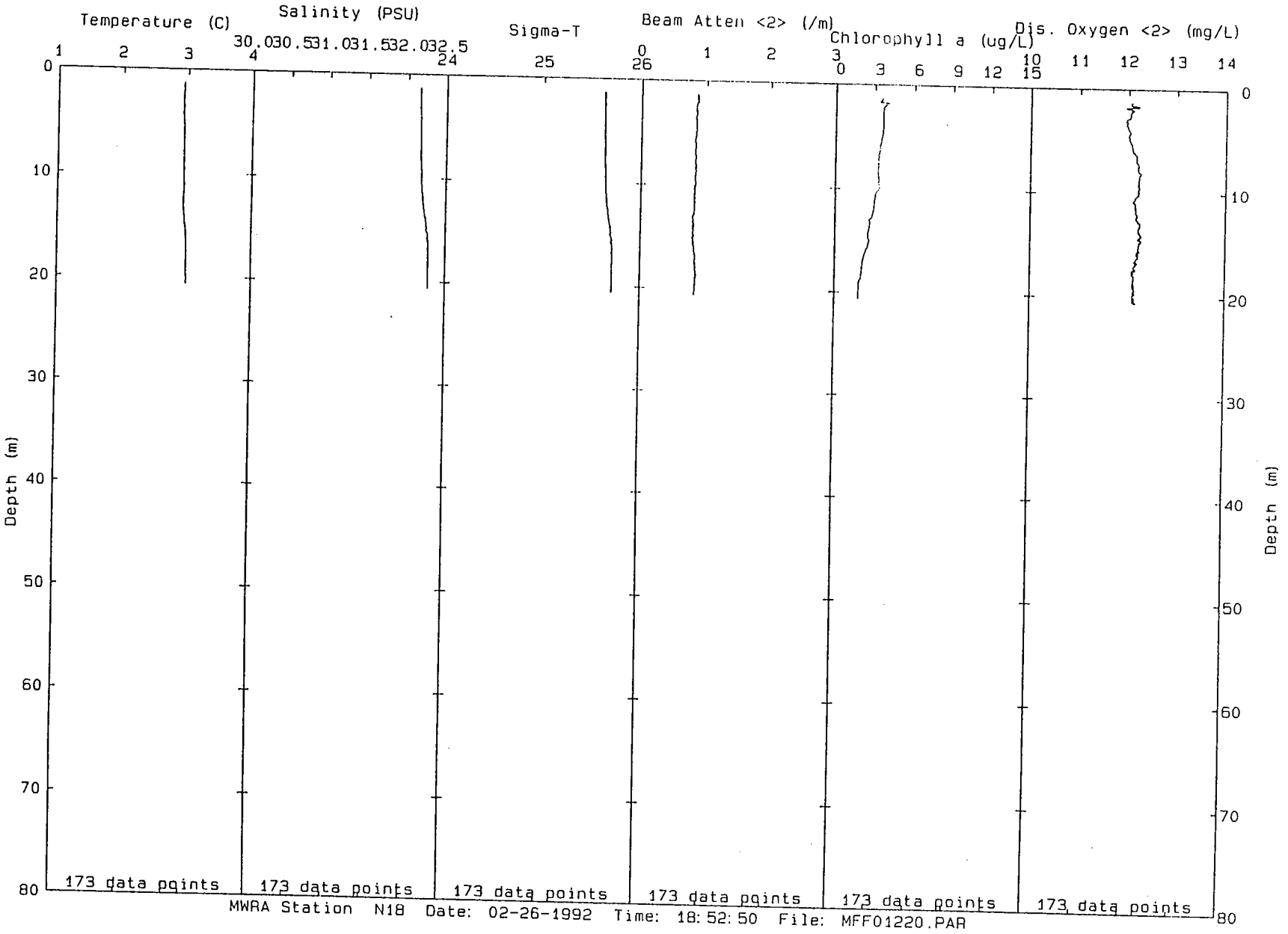
9h-7

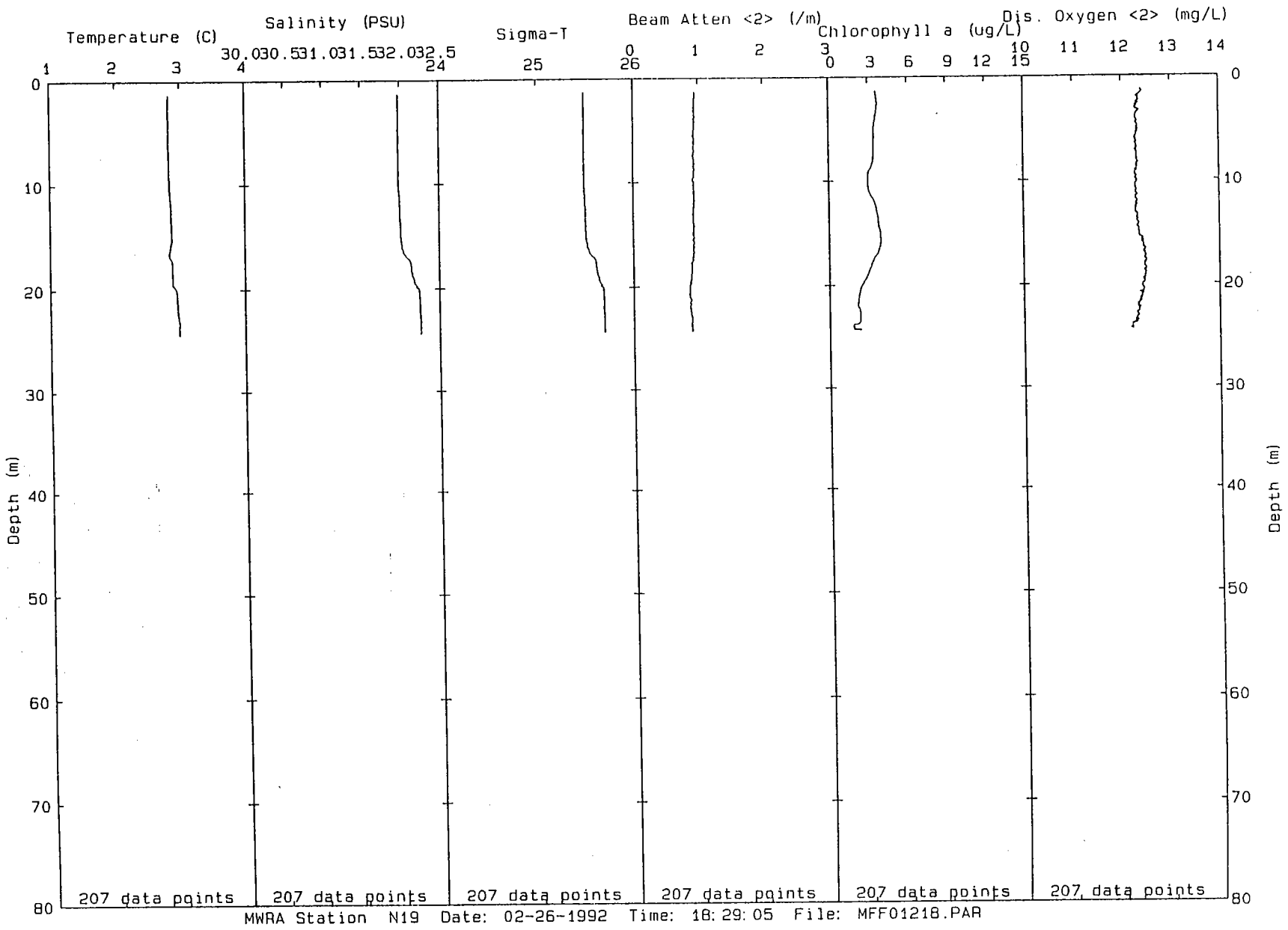

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
244 data points
244 data points
244 data points
244 data points
244 data points
244 data points
MWRA Station N16 Date: 02-26-1992 Time: 16:30:47 File: MFF01209.PAR


Temperature (C)
1 2 3 4
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Sigma-T
24 25 26
Beam Atten <2> (/m)
0 1 2 3
Chlorophyll a (ug/L)
0 3 6 9 12 15
Dis. Oxygen <2> (mg/L)
10 11 12 13 14
Depth (m)
0 10 20 30 40 50 60 70 80
268 data points
268 data points
268 data points
268 data points
268 data points
254 data points
MWRA Station N17 Date: 02-26-1992 Time: 19:24:59 File: MFF01223.PAR

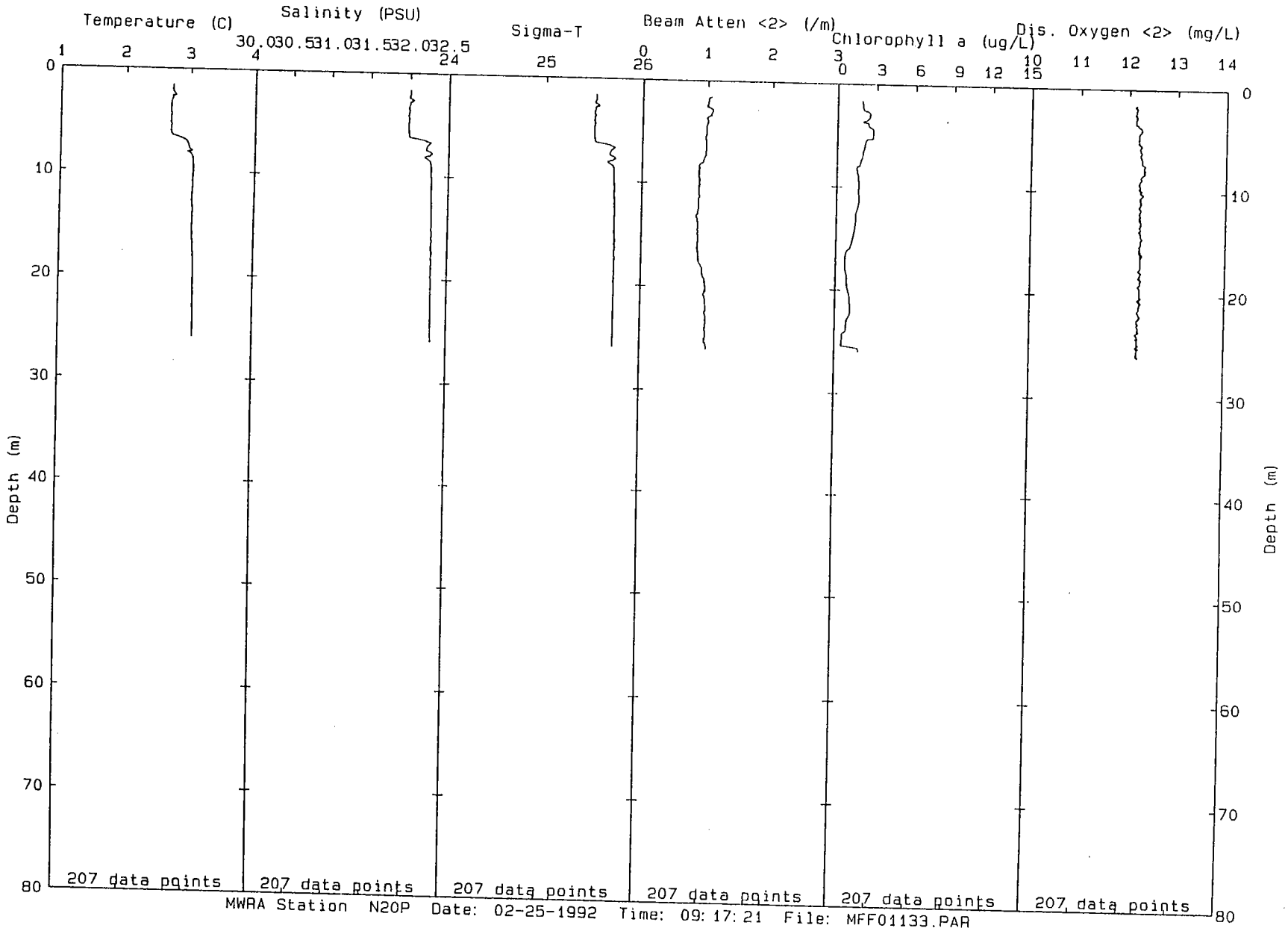
C-47

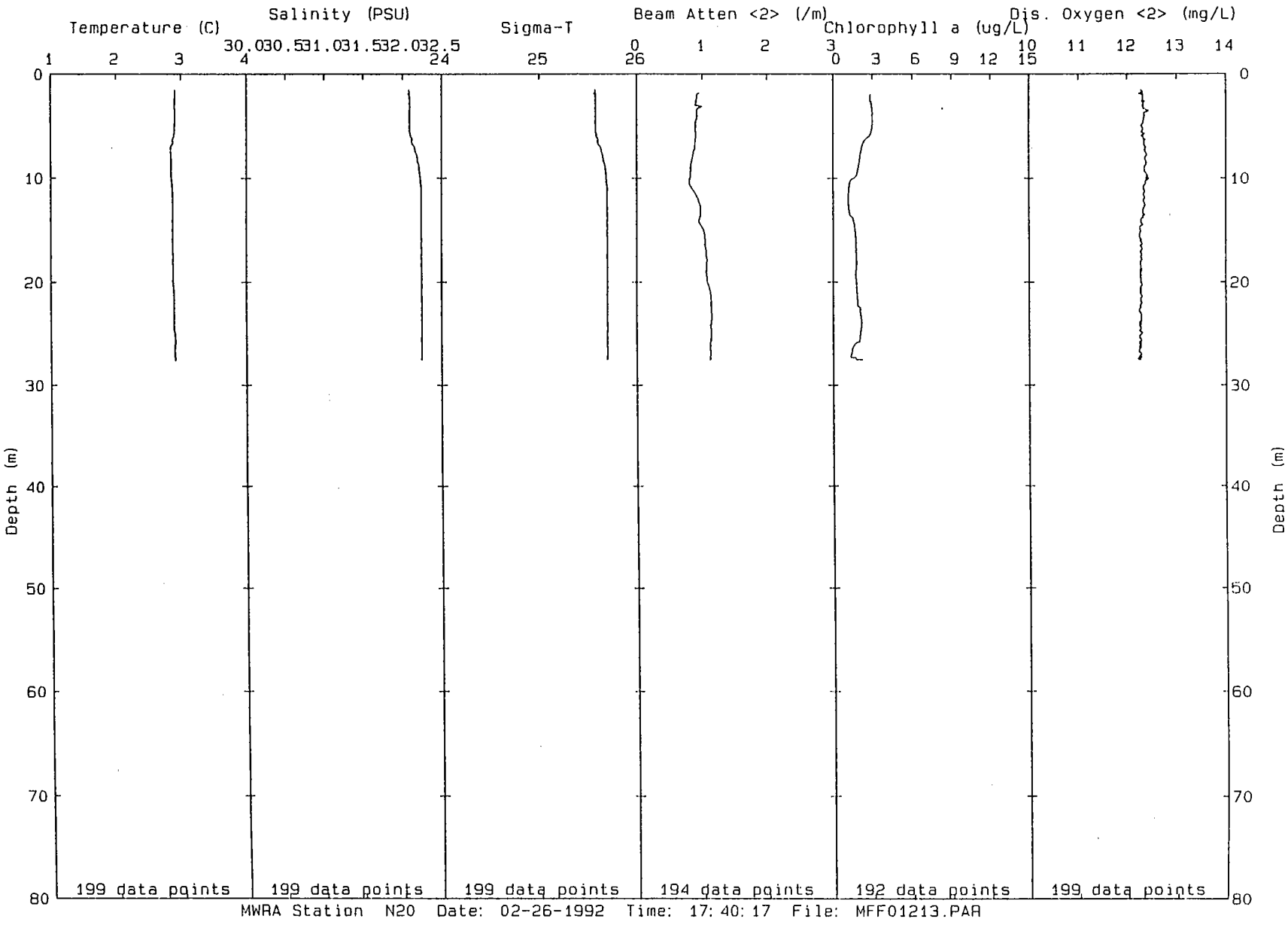
8h-7


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
173 data points
MWRA Station N18 Date: 02-26-1992 Time: 18:52:50 File: MFF01220.PAR

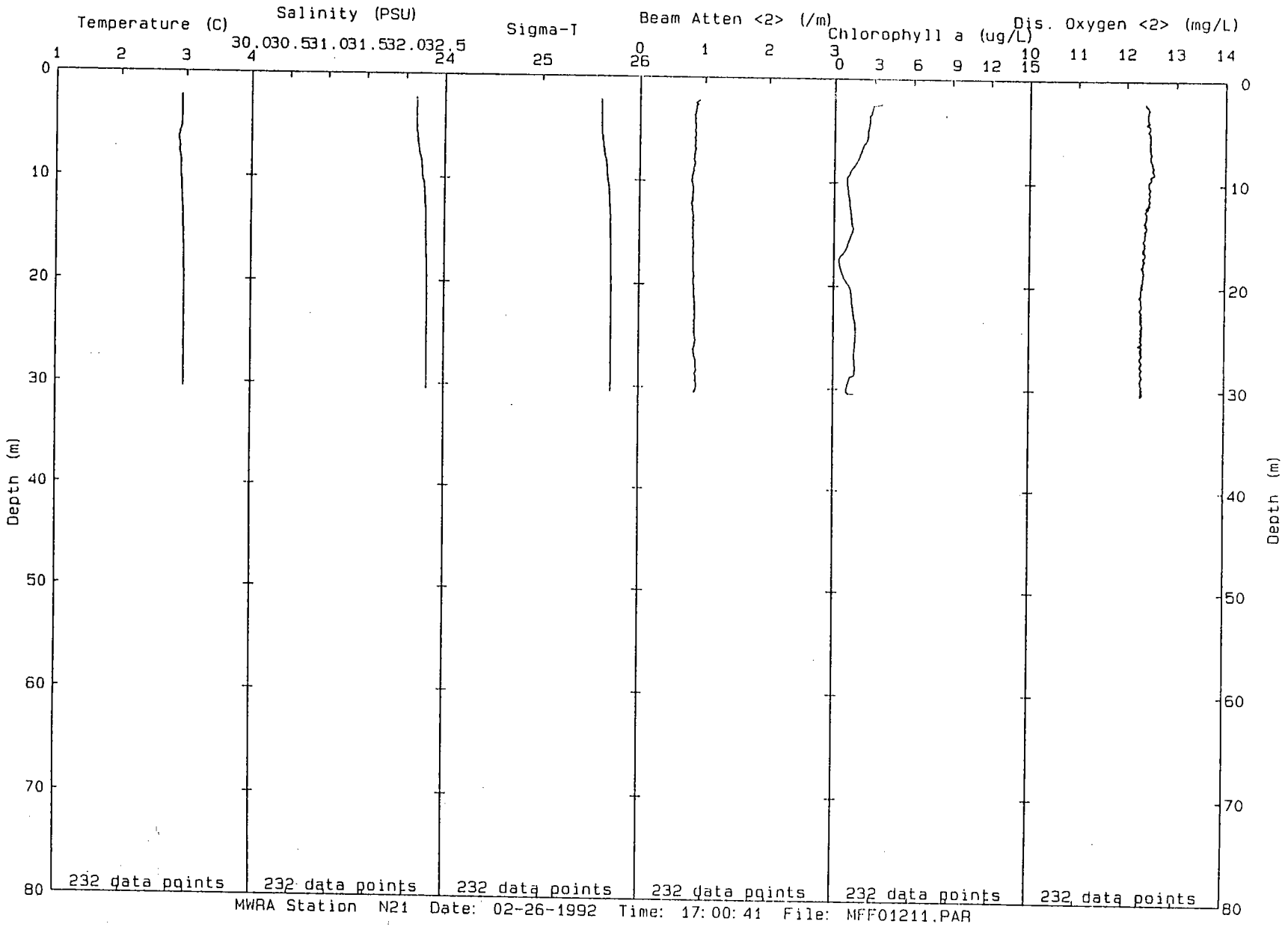

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
207 data points
MWRA Station N19 Date: 02-26-1992 Time: 18:29:05 File: MFF01218.PAR

6h-)


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
207 data points
MWRA Station N20P Date: 02-25-1992 Time: 09:17:21 File: MFF01133.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
199 data points
199 data points
199 data points
194 data points
192 data points
199 data points
MWRA Station N20 Date: 02-26-1992 Time: 17:40:17 File: MFF01213.PAR

C-51


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Dis. Oxygen <2> (mg/L)
Depth (m)
232 data points
MWRA Station N21 Date: 02-26-1992 Time: 17:00:41 File: MFF01211.PAR

C-52

APPENDIX C

February 1992 Cruises

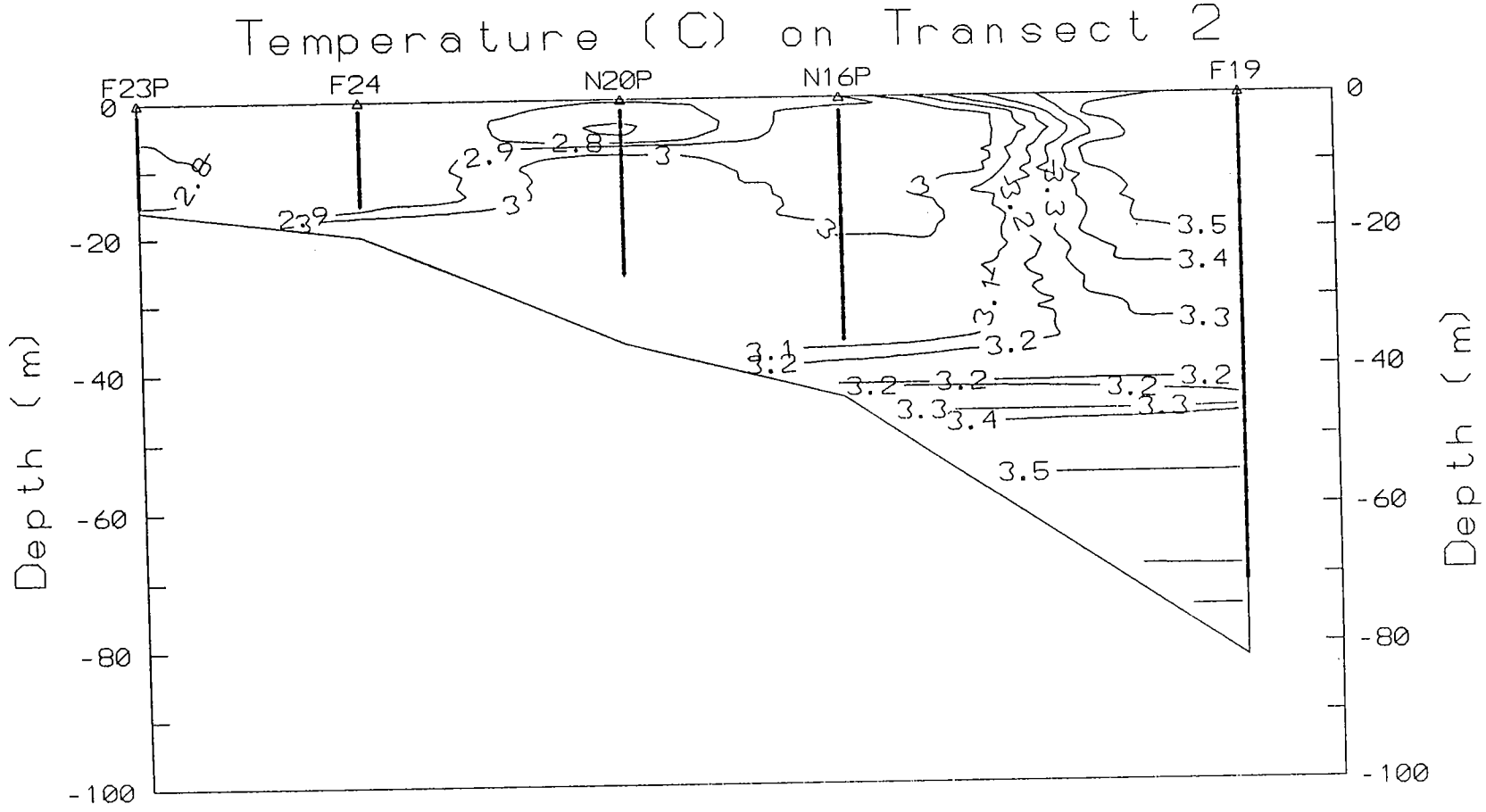
Part 2

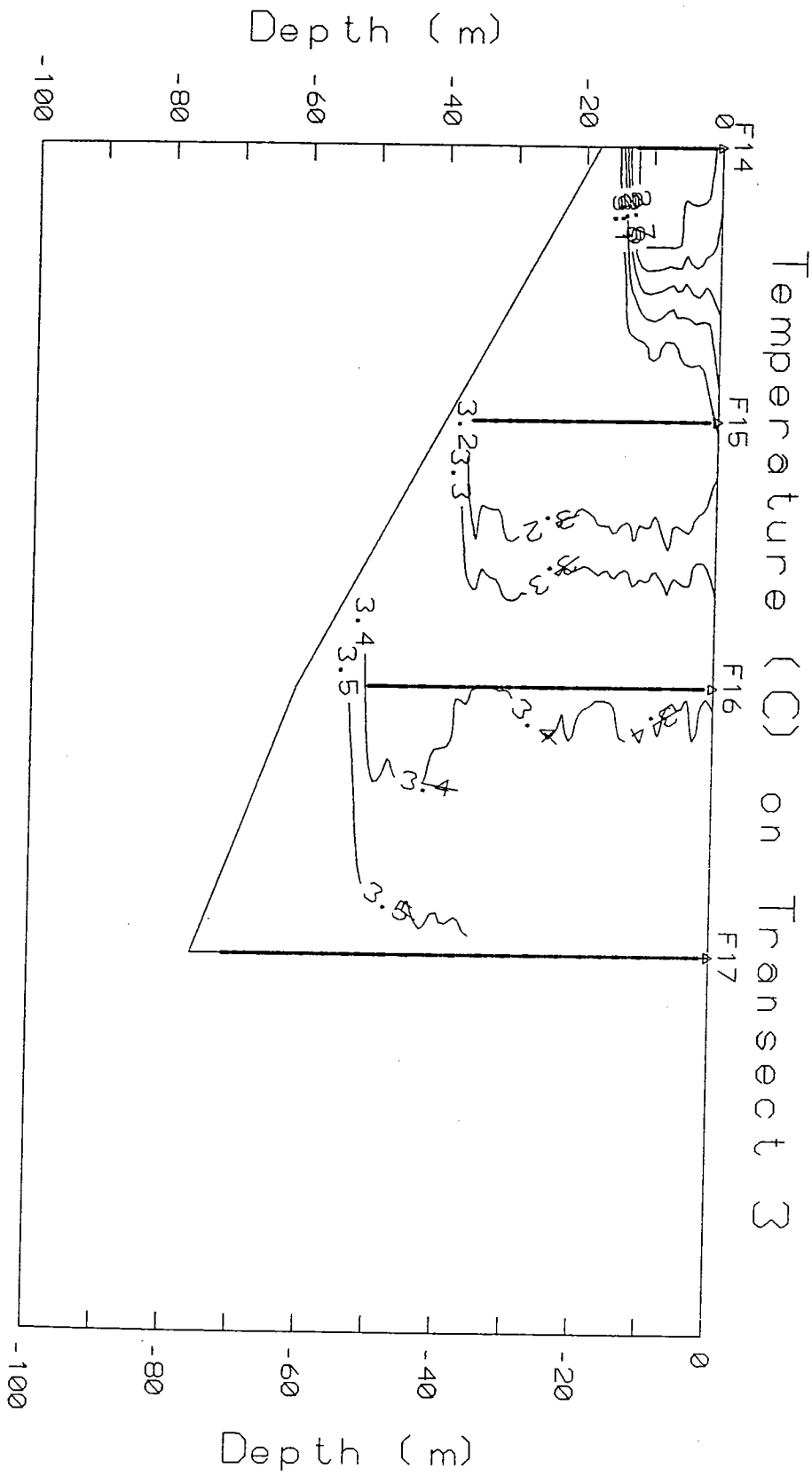
Vertical Sections for Transects from February 1992

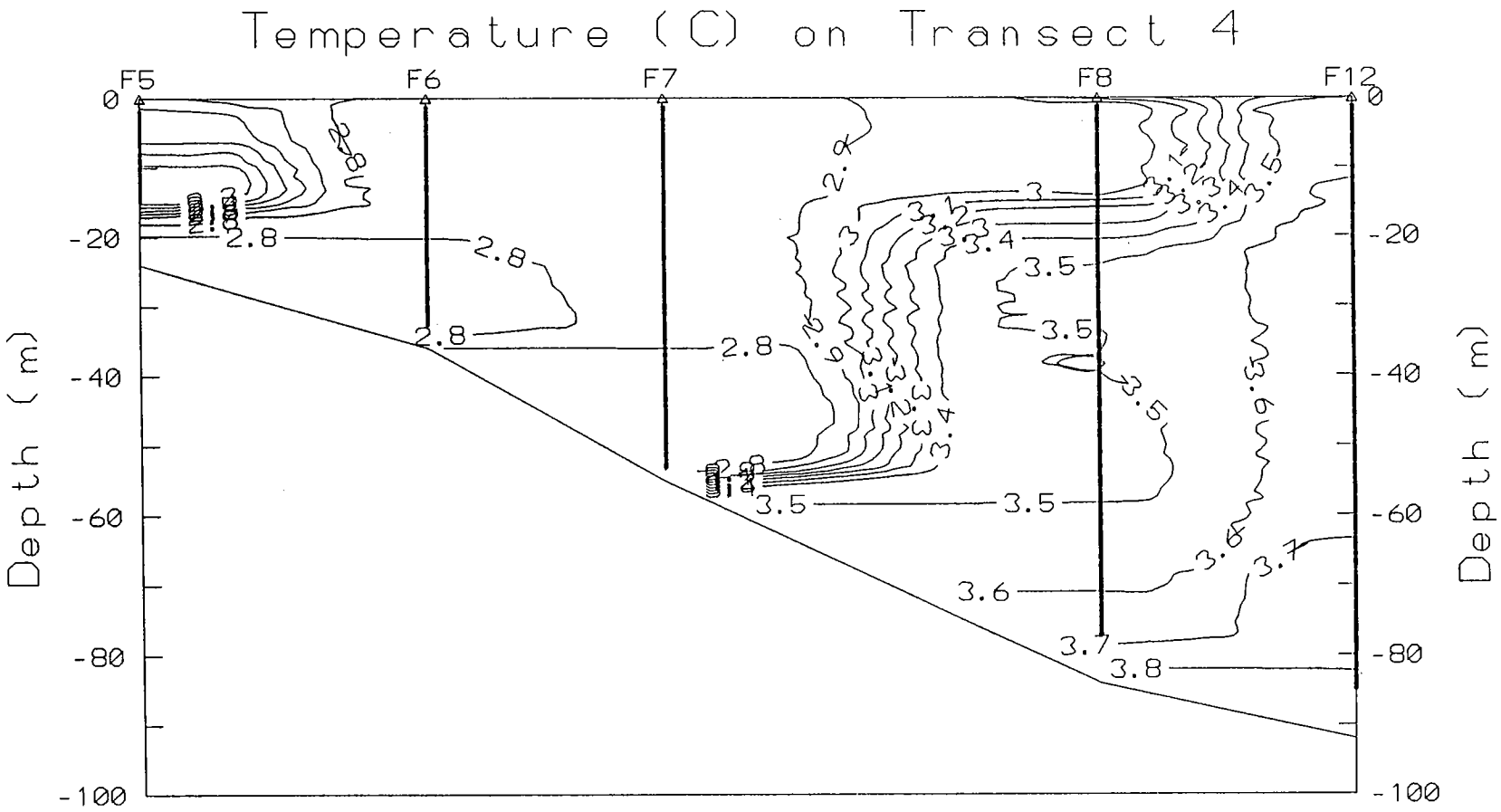
Temperature, Salinity, Sigma T, Beam Attenuation, and Chlorophyll (Fluorescence) are given for standard transects (see text and Figure 3-11). 1= Northern transect, 2= Boston-Nearfield transect, 3= Cohasset transect, 4= Marshfield transect. Contours have been generated from vertical profile data (Appendix C, part 1) using the method of inverse distance to the second power, with the search window set to overlap adjacent profiles.

C-54

Temperature (C) on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
3.4
3.5
3.6
3.3
3.2
3.8

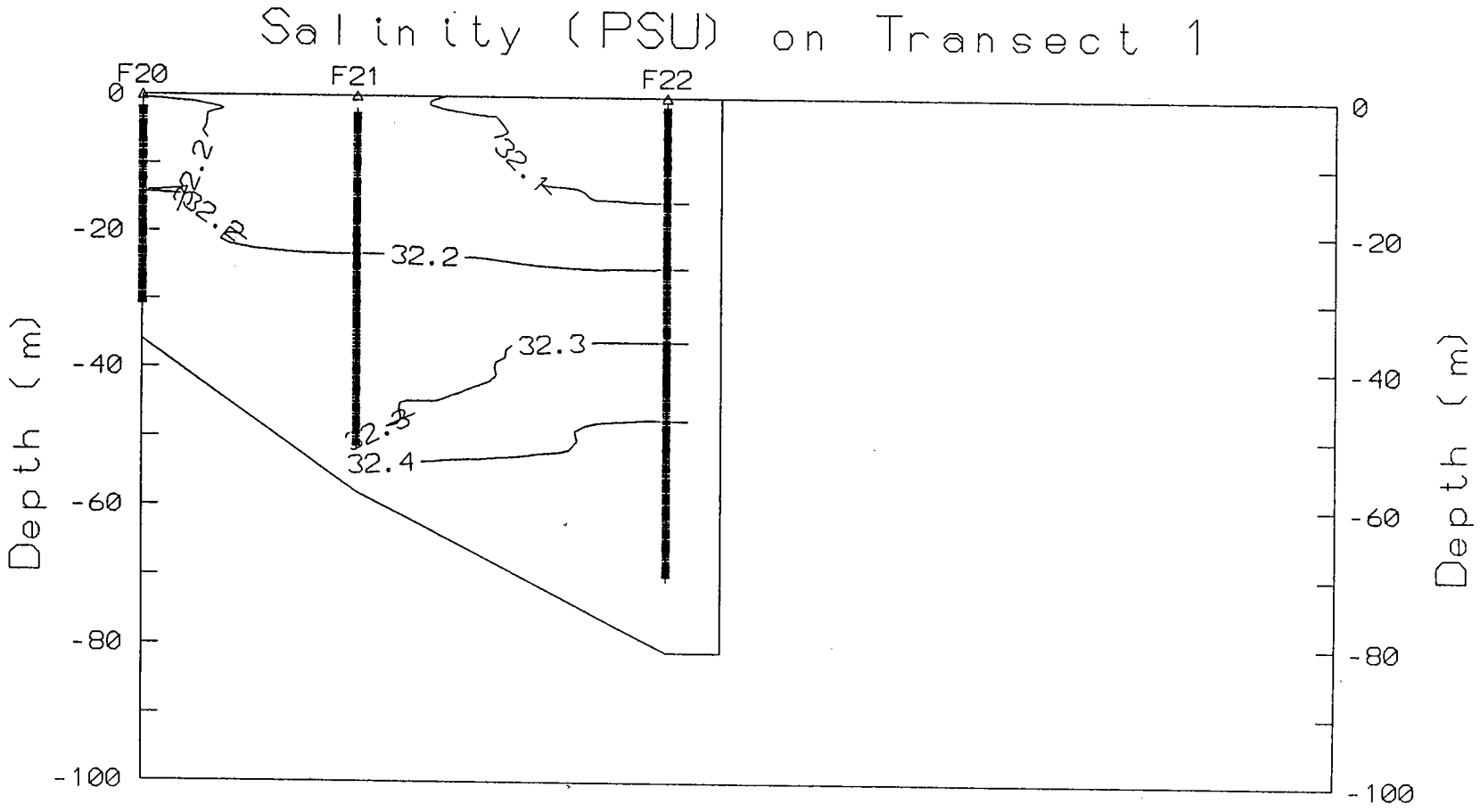

Temperature (C) on Transect 2
F23P
F24
N20P
N16P
F19
0
-20
-40
-60
-80
-100
Depth (m)
2.9
2.8
3
3.1
3.2
3.3
3.4
3.5


Depth (m)
-100
-80
-60
-40
-20
0
F14
F15
F16
F17
3.2
3.3
3.4
3.5
Temperature (C) on Transect 3
Depth (m)

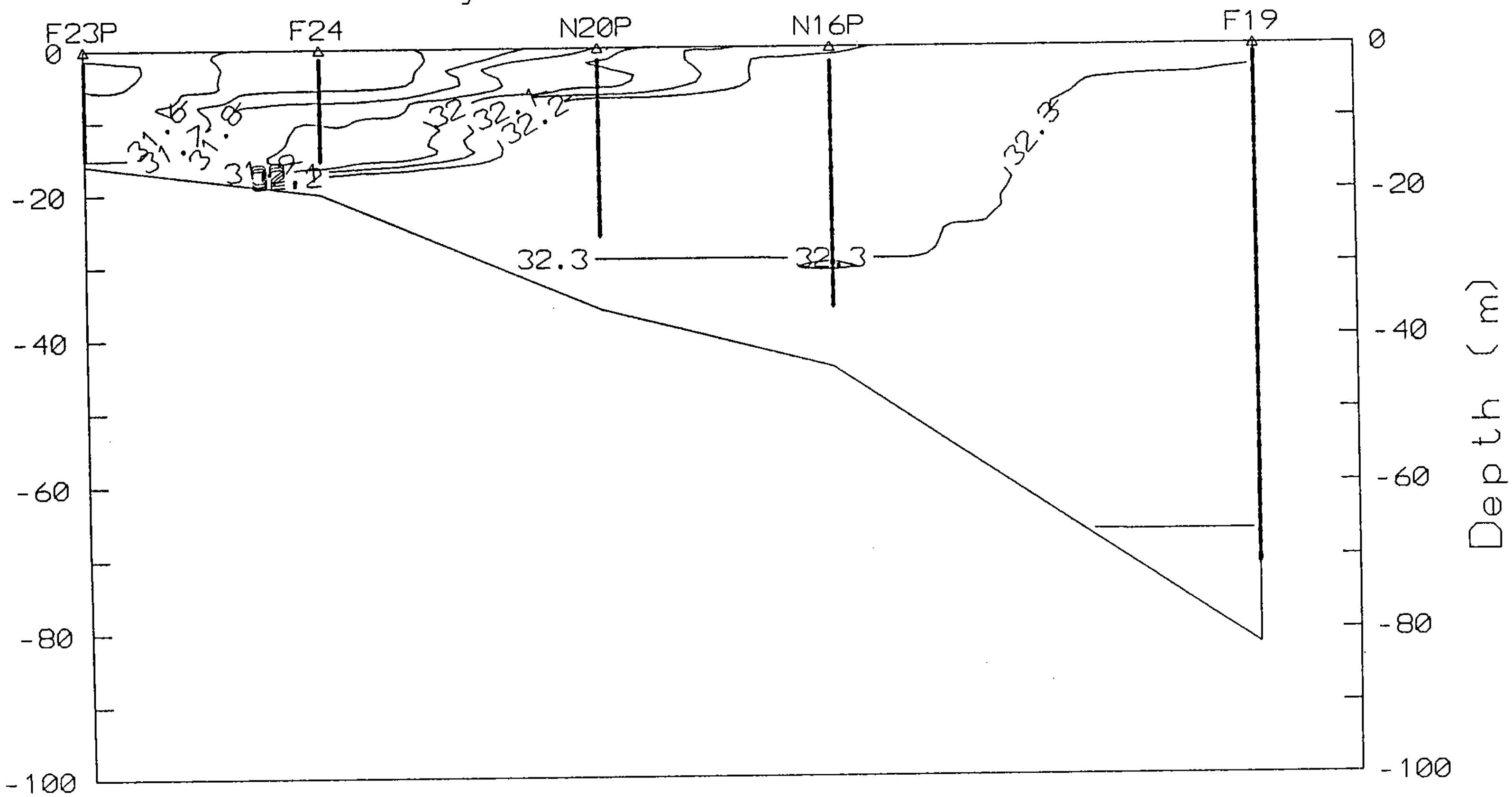

Temperature (C) on Transect 4
F5
F6
F7
F8
F12
0
-20
-40
-60
-80
-100
Depth (m)
2.8
3
3.4
3.5
3.6
3.7
3.8

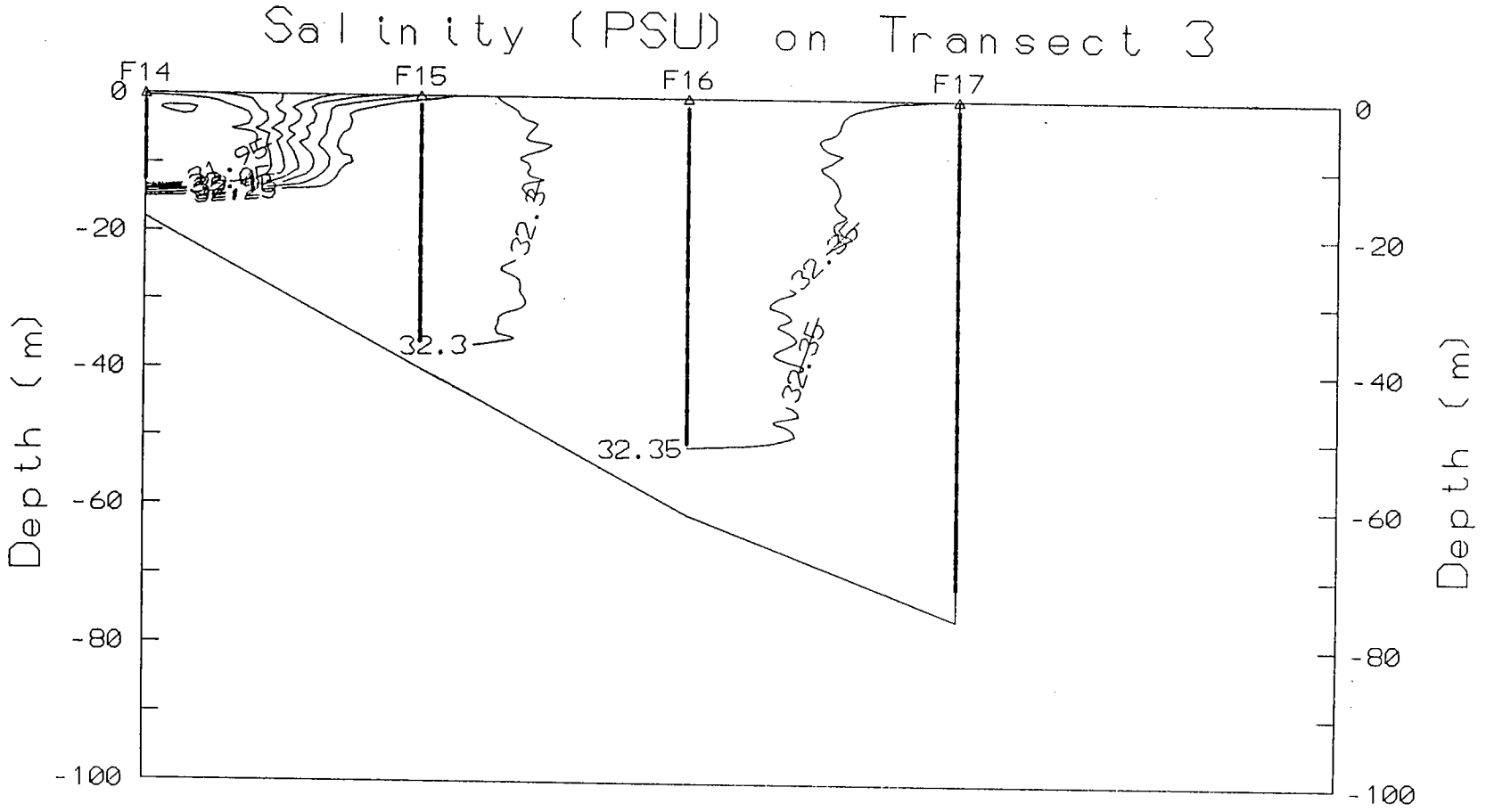
(-57)

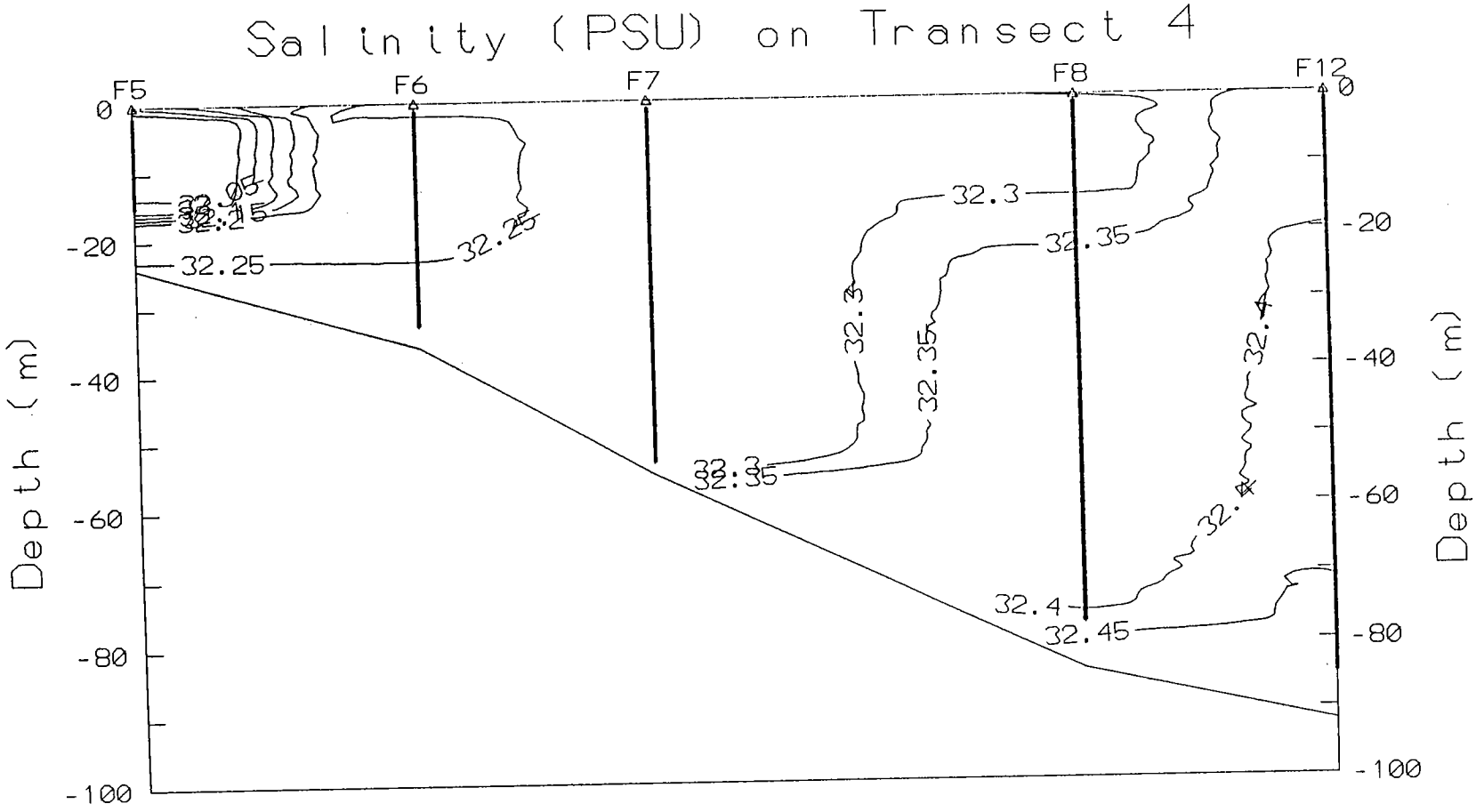
8 S-7


Salinity (PSU) on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
32.2
32.2
32.2
32.3
32.3
32.4

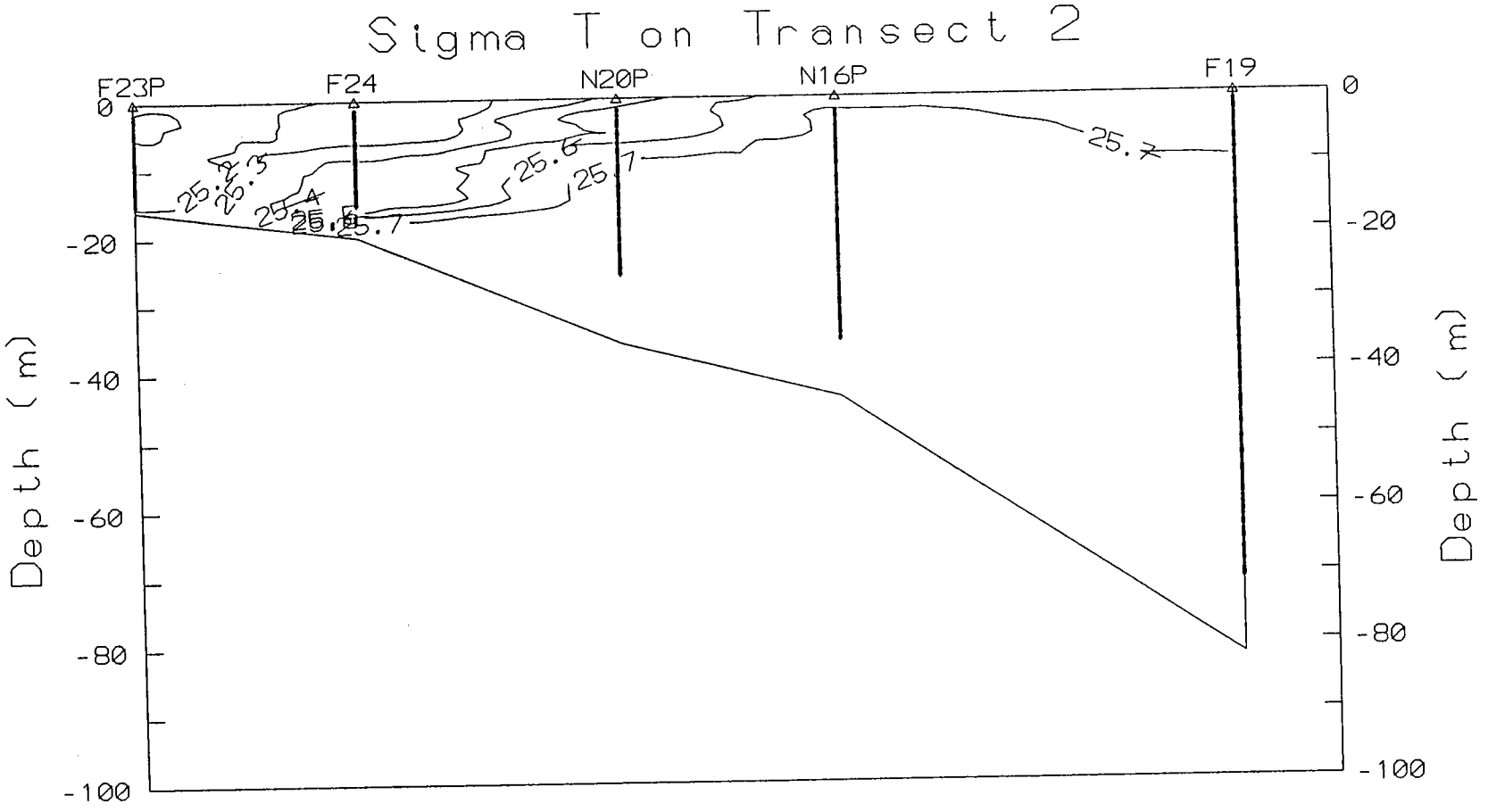
Salinity (PSU) on Transect 2

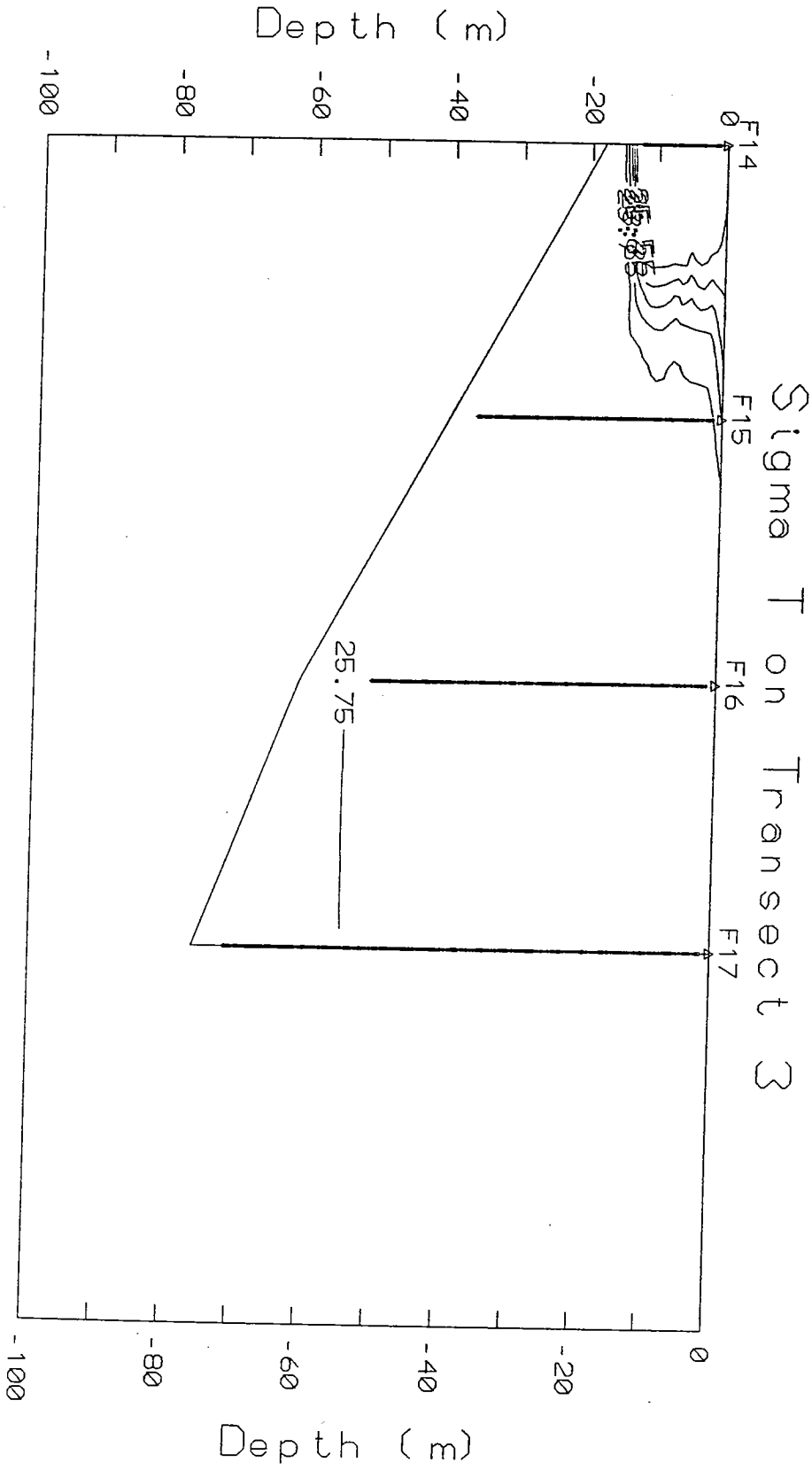


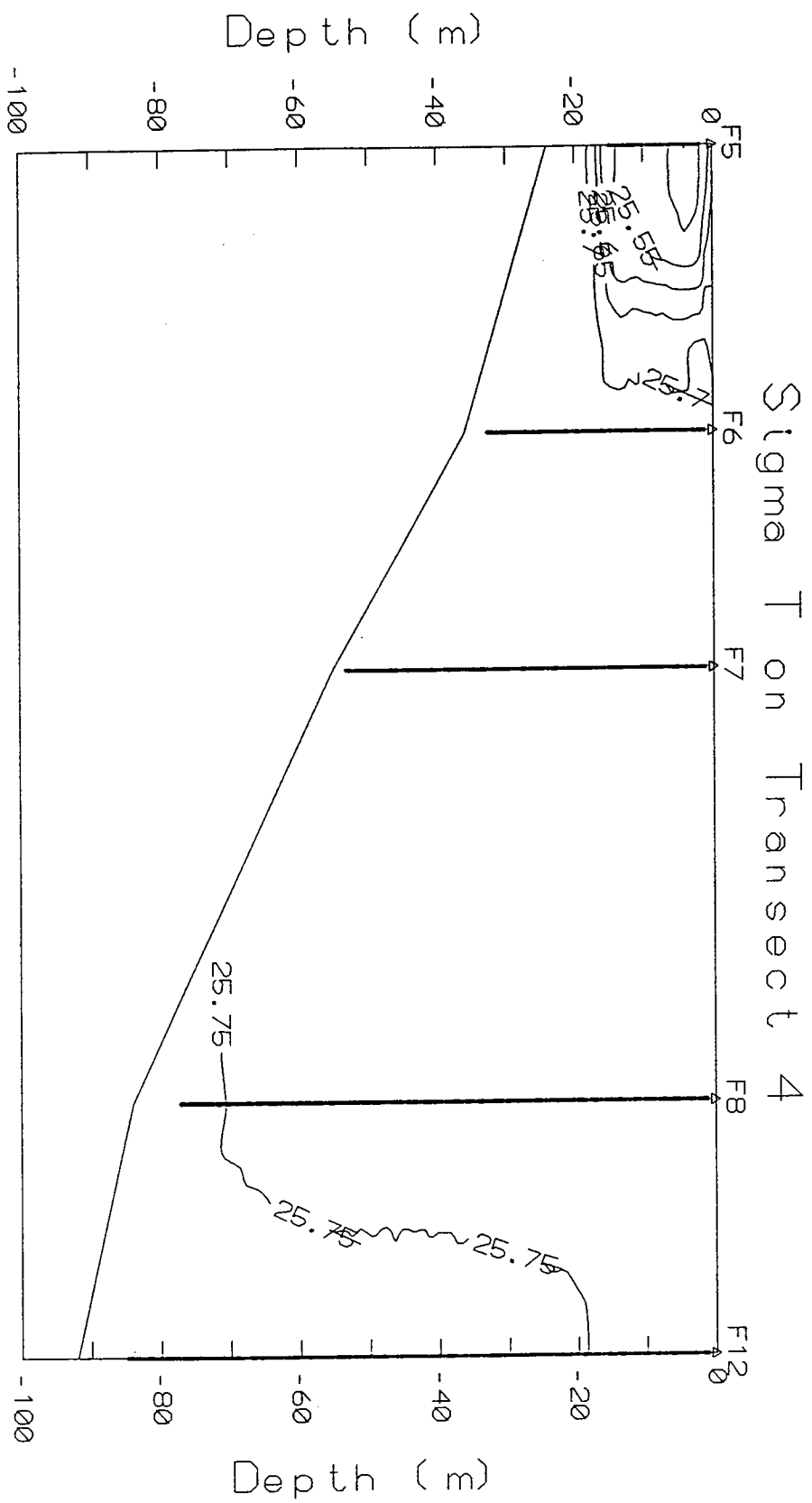

Salinity (PSU) on Transect 3
F14
F15
F16
F17
0
-20
-40
-60
-80
-100
Depth (m)
32.3
32.35


Salinity (PSU) on Transect 4
F5
F6
F7
F8
F12
0
-20
-40
-60
-80
-100
Depth (m)
32.25
32.3
32.35
32.4
32.45

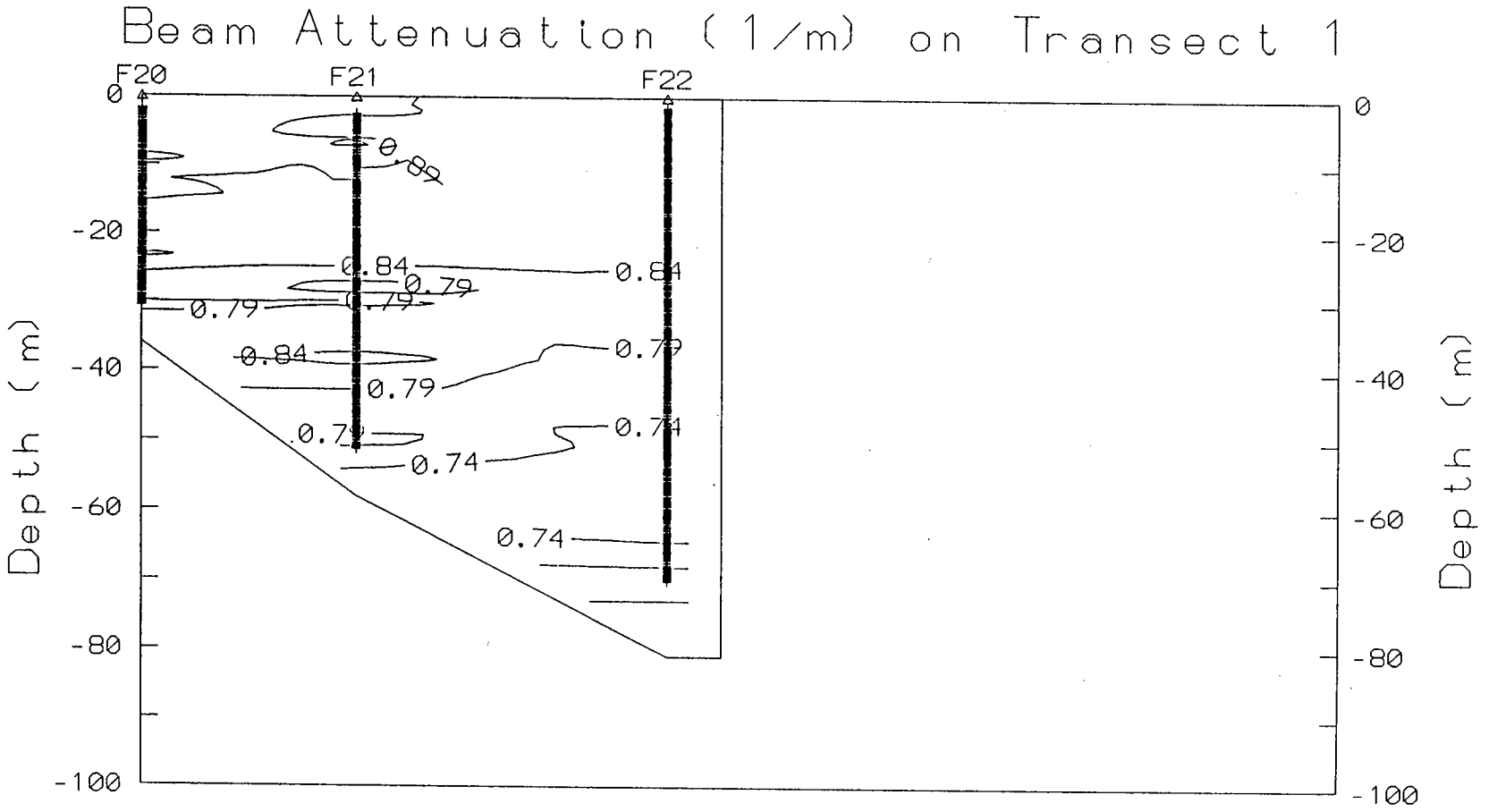
Sigma T on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
25.5
25.55
25.6
25.65
25.7
25.75

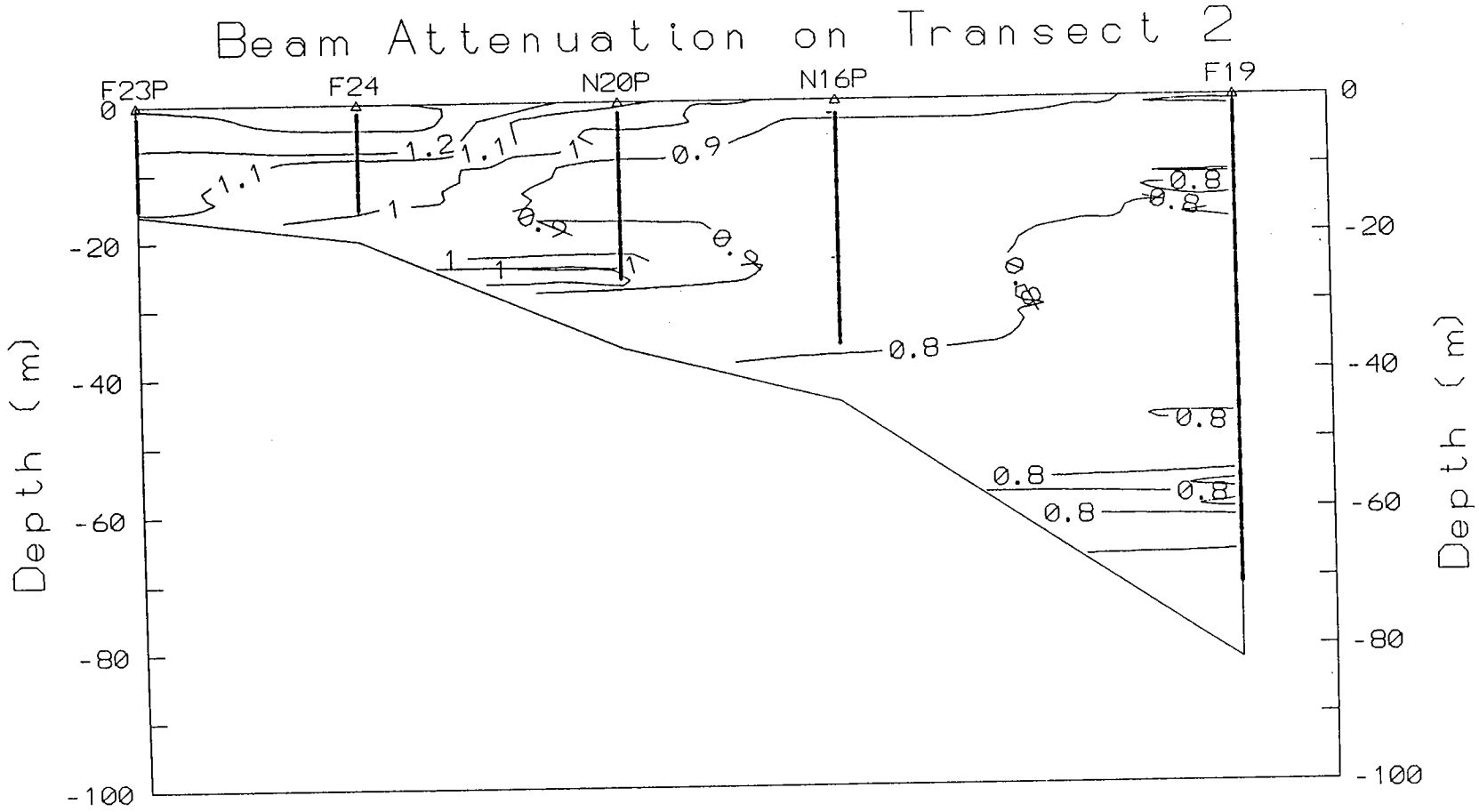

Sigma T on Transect 2
F23P
F24
N20P
N16P
F19
0
-20
-40
-60
-80
-100
Depth (m)
25.2
25.3
25.4
25.5
25.6
25.7
25.7

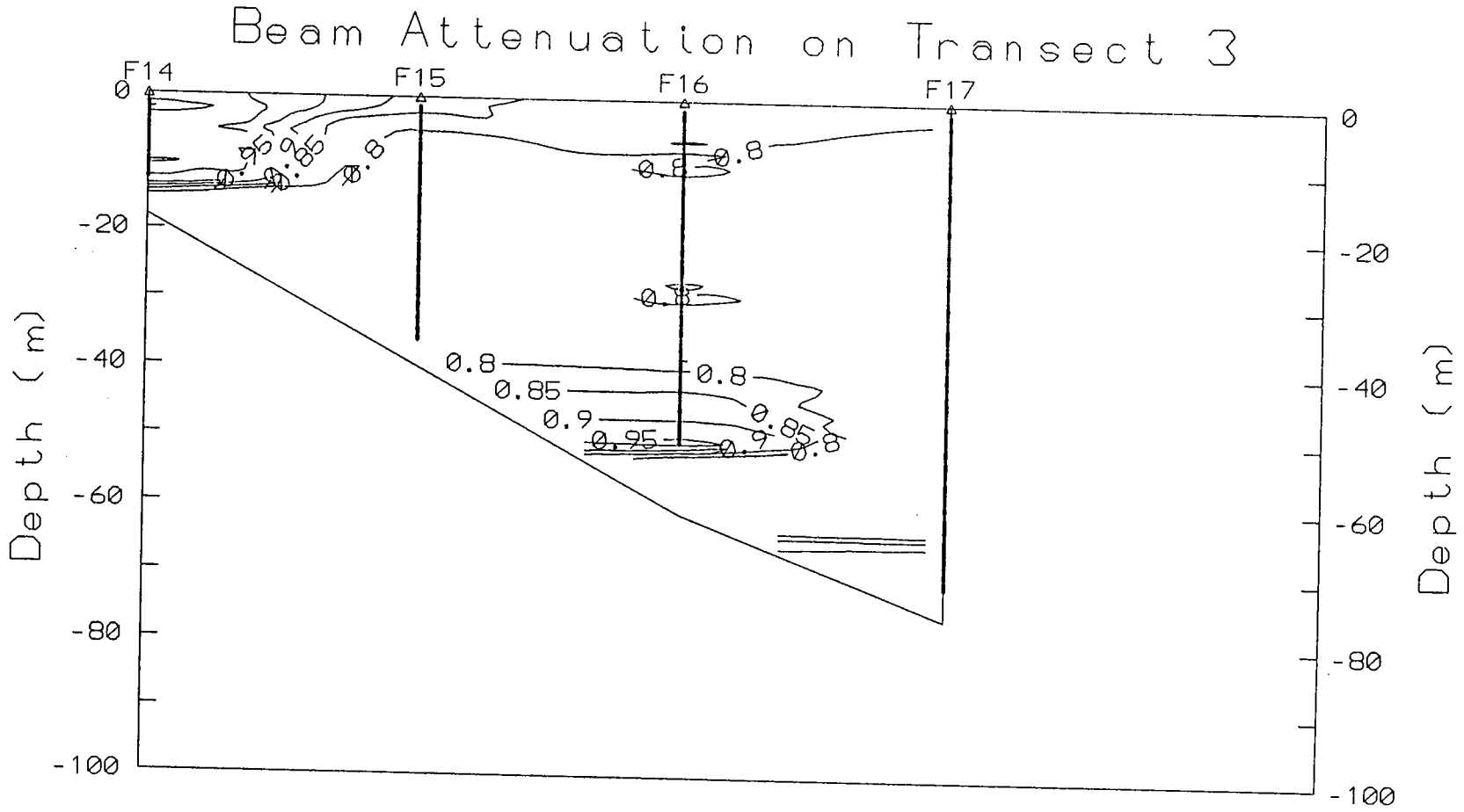

Depth (m)
-100
-80
-60
-40
-20
0
F14
F15
F16
F17
25.75
Sigma T on Transect 3
Depth (m)



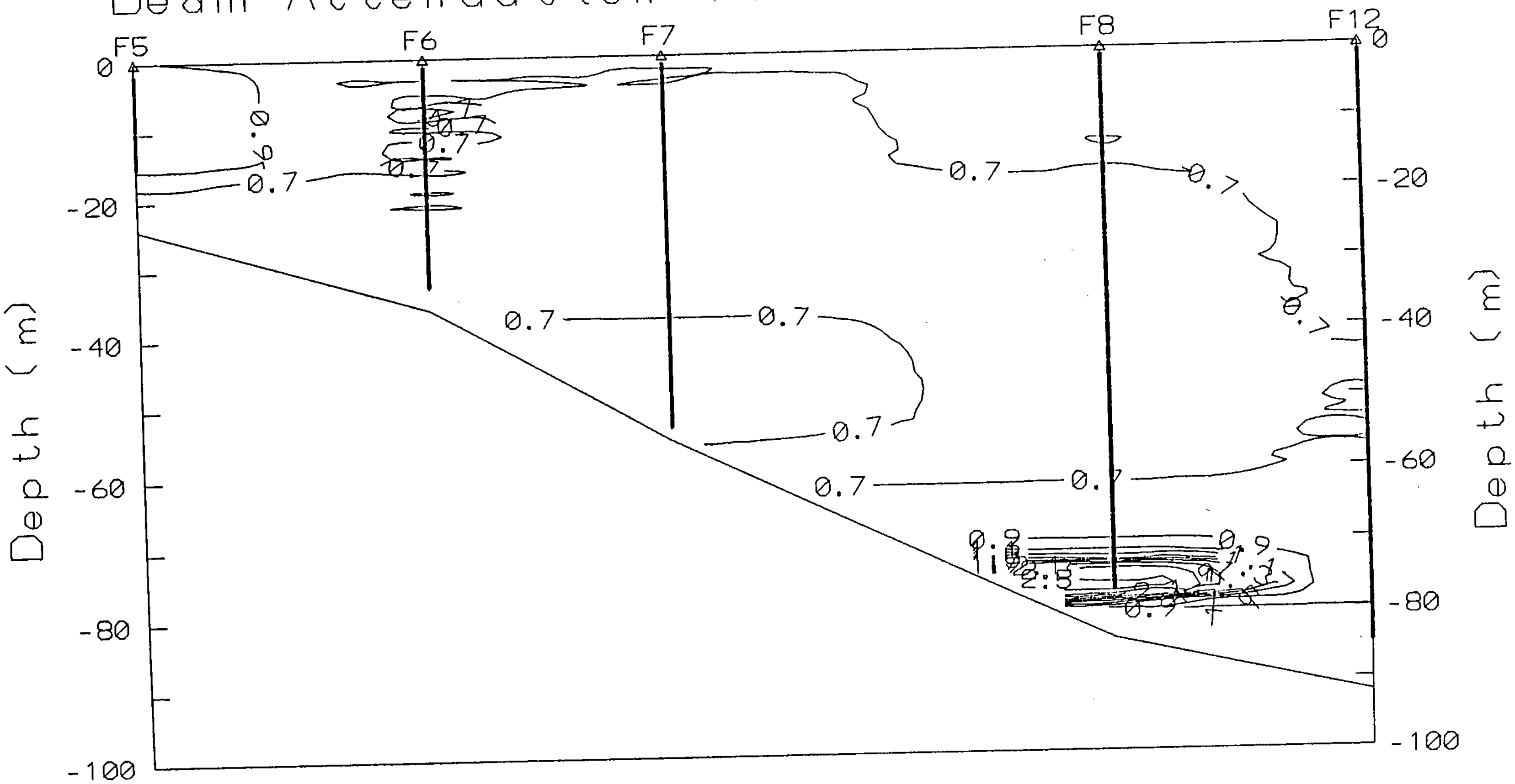
Sigma T on Transect 4

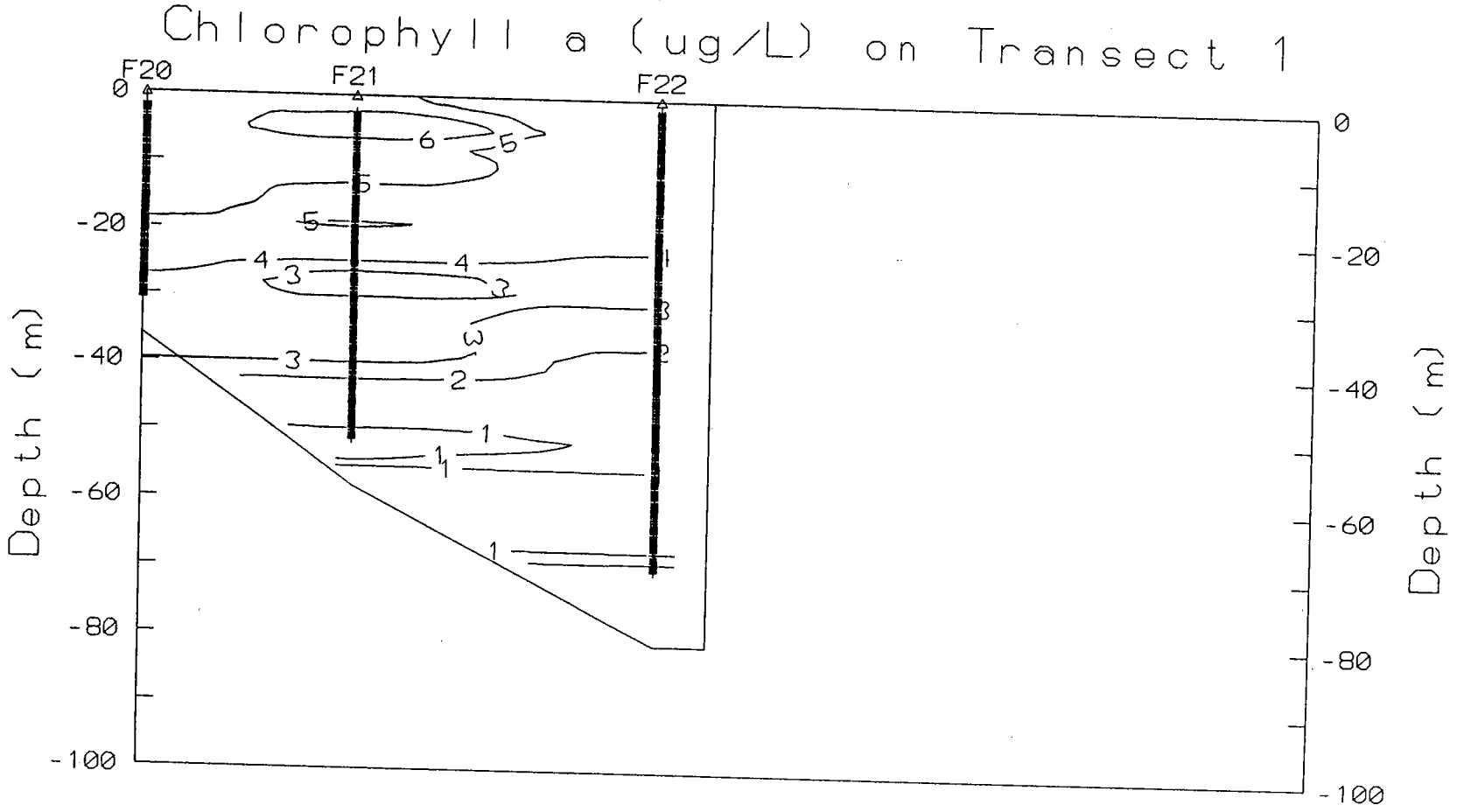

Beam Attenuation (1/m) on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
0.84
0.79
0.74

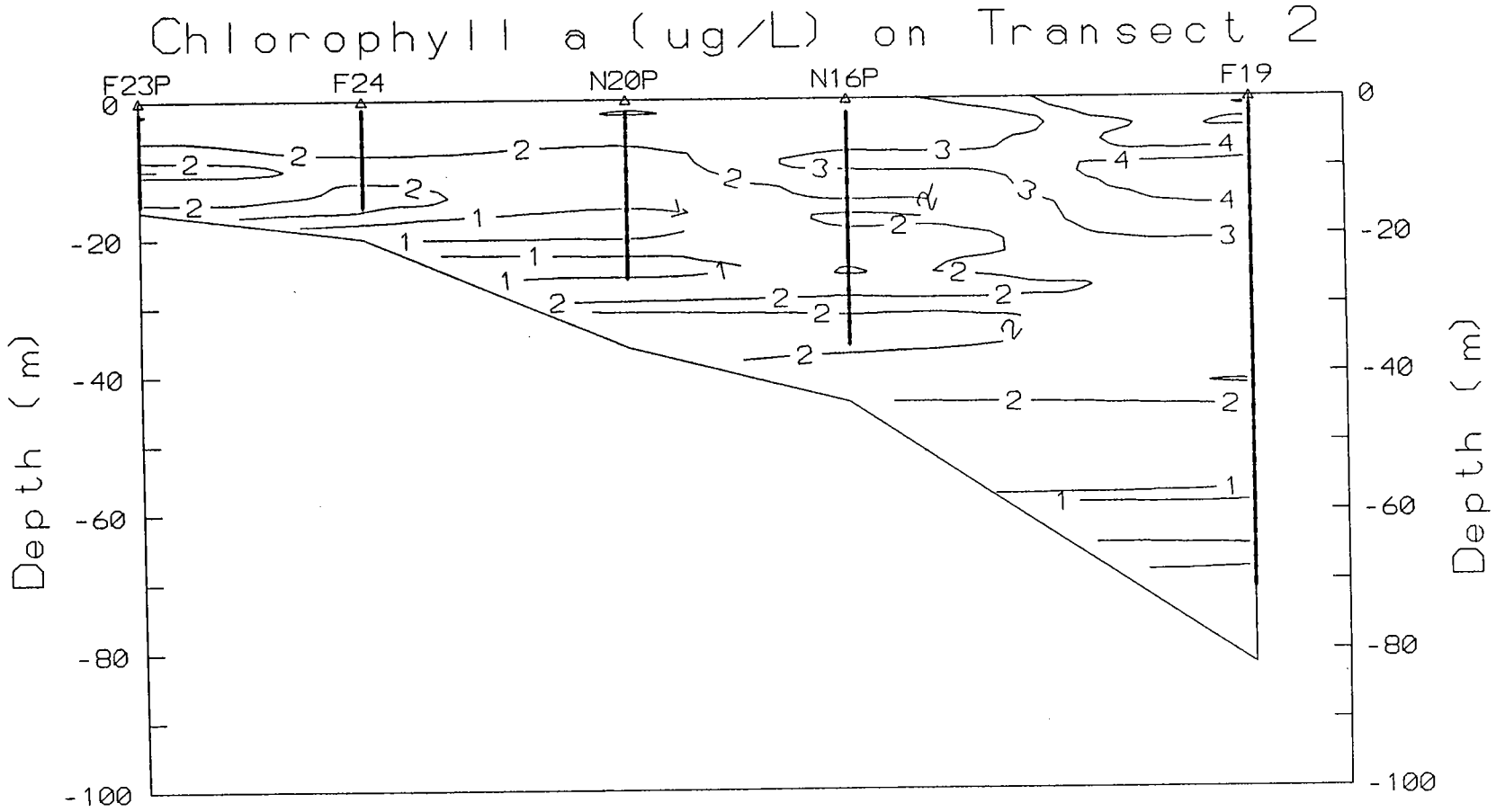

Beam Attenuation on Transect 2
F23P
F24
N20P
N16P
F19
0
-20
-40
-60
-80
-100
Depth (m)
1.2
1.1
1
0.9
0.8

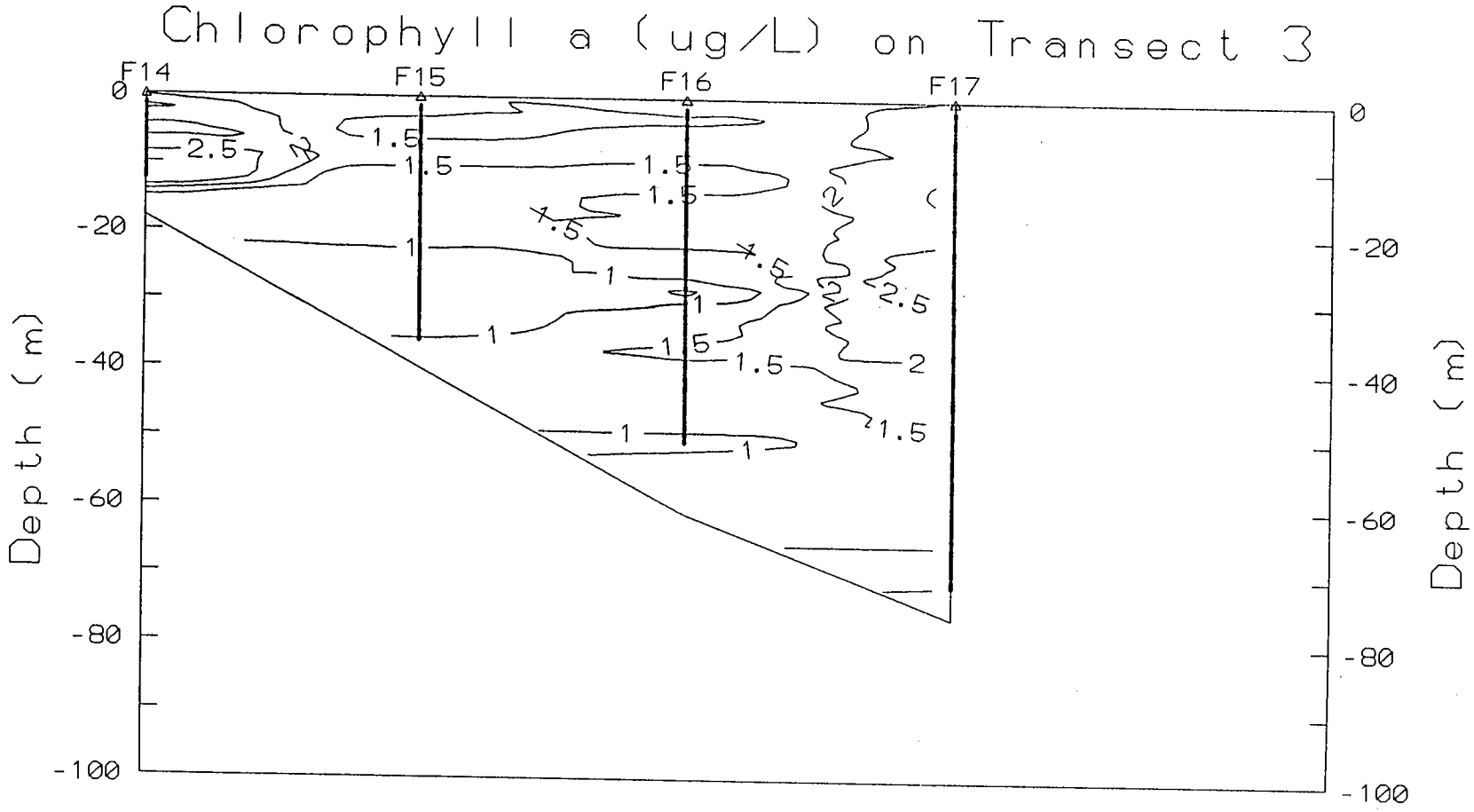

Beam Attenuation on Transect 3
F14
F15
F16
F17
0
-20
-40
-60
-80
-100
Depth (m)
0.8
0.85
0.9
0.95

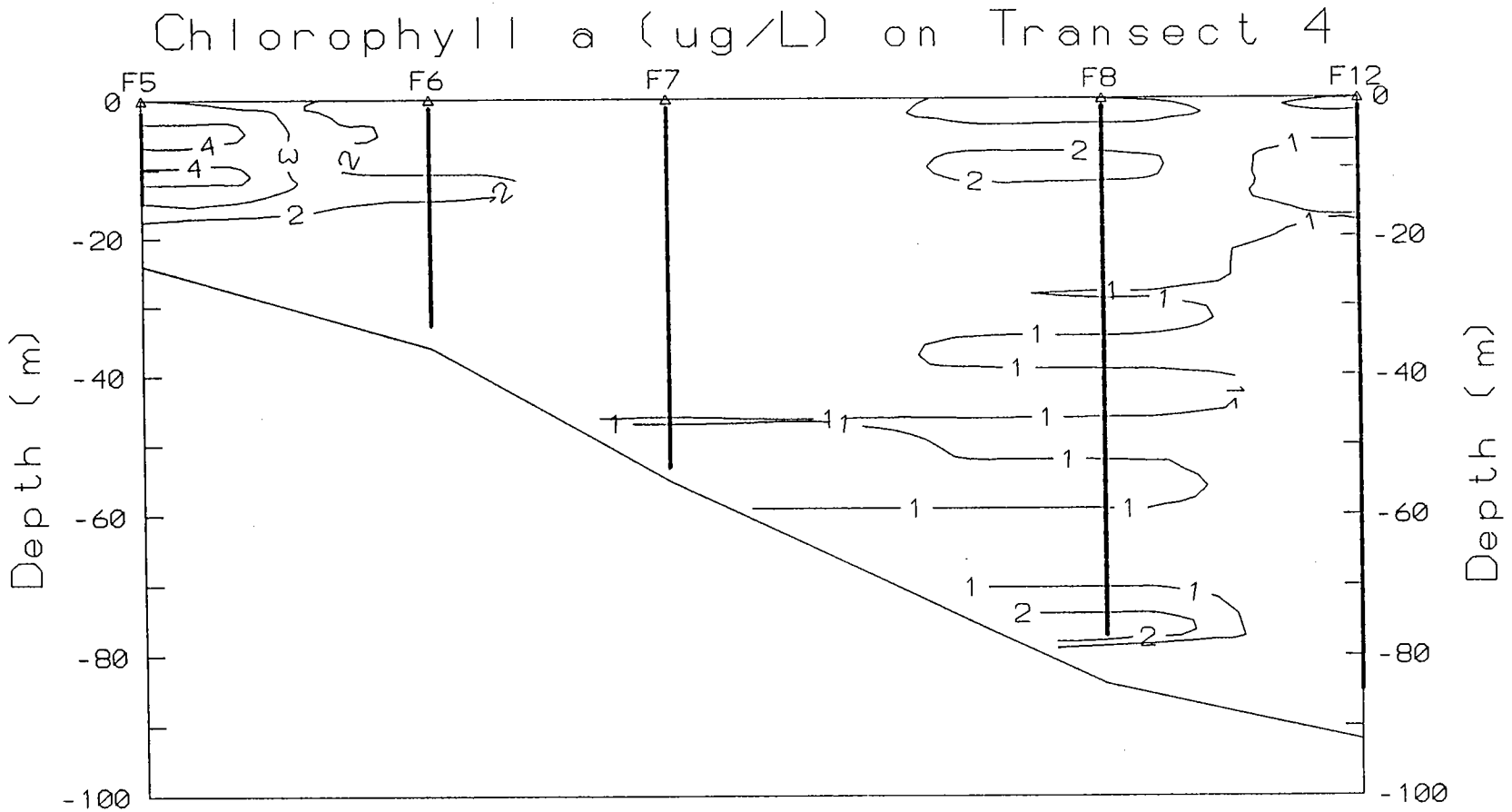
Beam Attenuation (1/m) on Transect 4




Chlorophyll a (ug/L) on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
Depth (m)
6
5
5
5
4
4
3
3
3
2
2
1
1
1
1


Chlorophyll a (ug/L) on Transect 2
F23P
F24
N20P
N16P
F19
0
-20
-40
-60
-80
-100
Depth (m)
Depth (m)


Chlorophyll a (ug/L) on Transect 3
F14
F15
F16
F17
0
-20
-40
-60
-80
-100
Depth (m)
2.5
2
1.5
1
2
2.5
1.5
2
1.5
1
1


Chlorophyll a (ug/L) on Transect 4
F5
F6
F7
F8
F12
0
-20
-40
-60
-80
-100
Depth (m)
Depth (m)

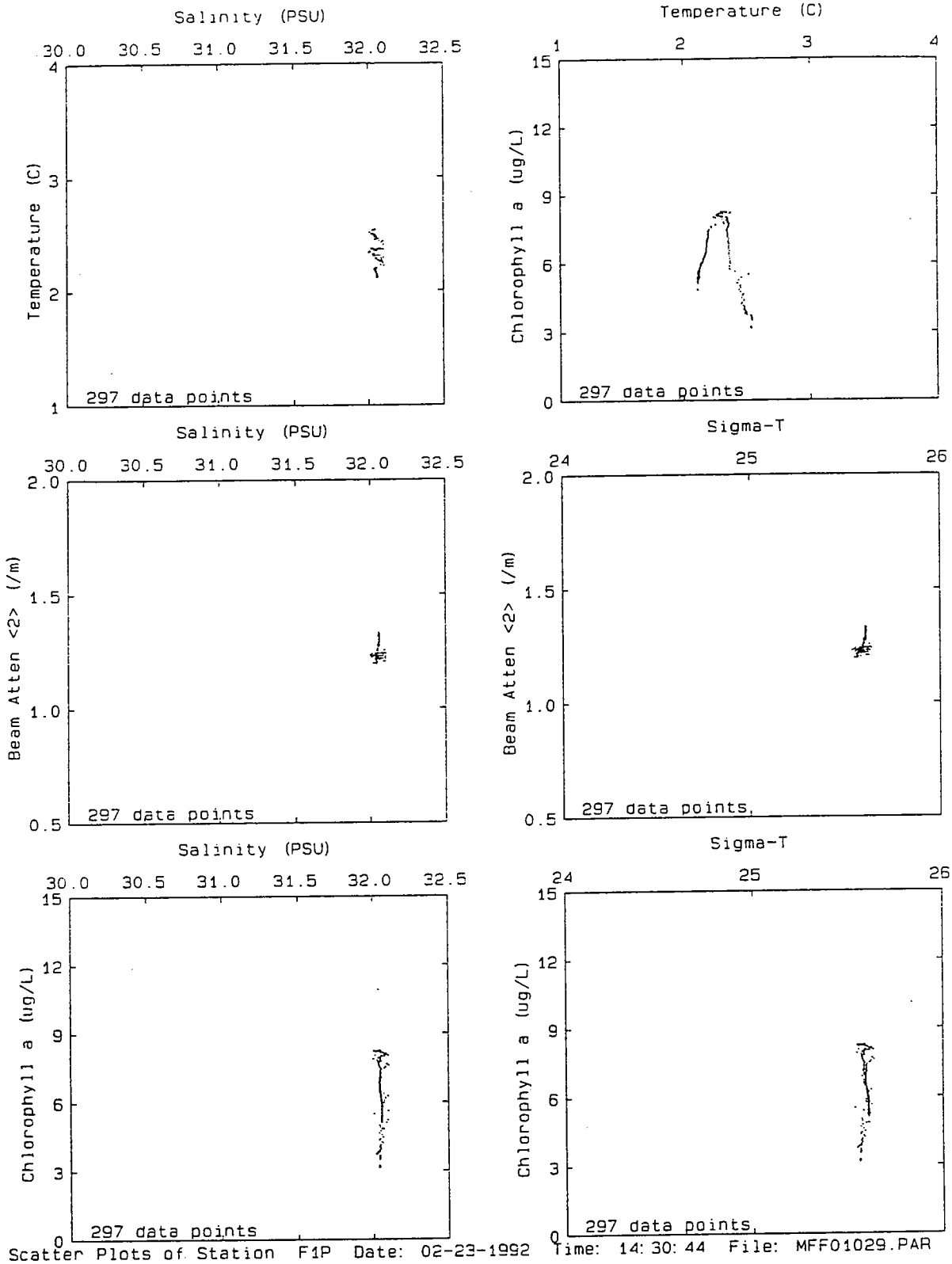
APPENDIX C

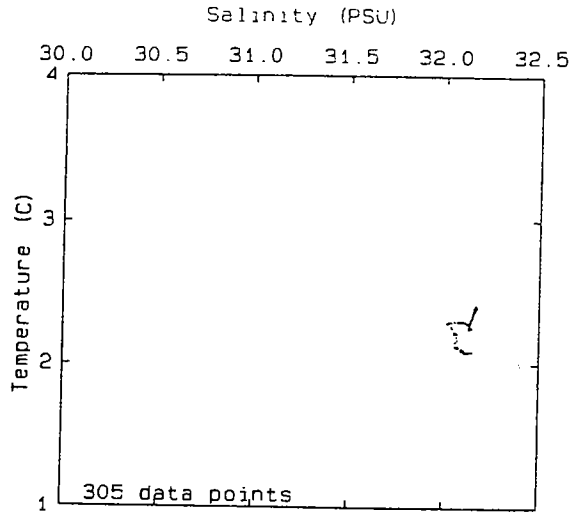
February 1992 Cruises

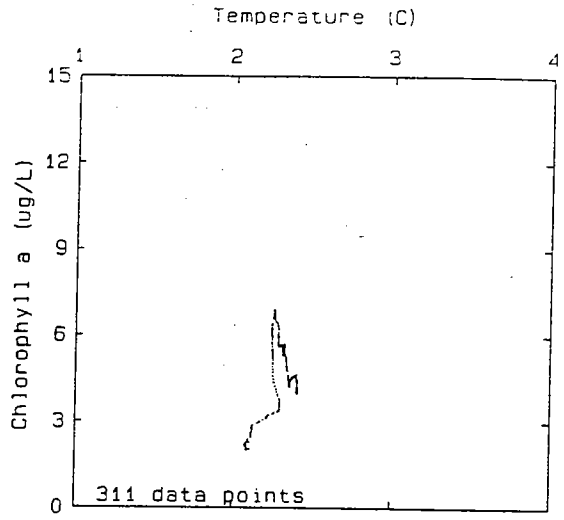
Part 3

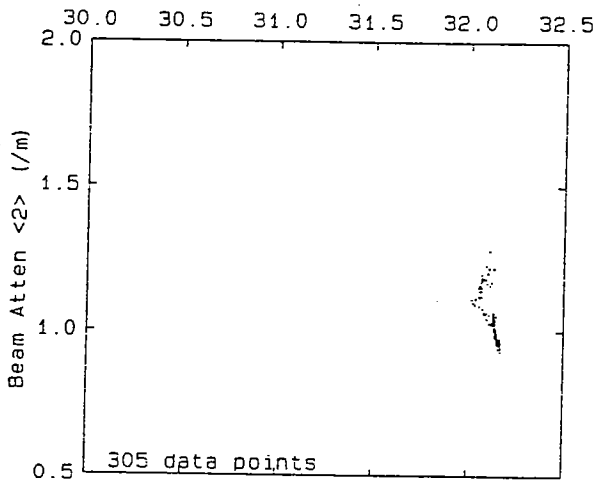
Parameter-Parameter Plots of Vertical Profile Data from February 1992

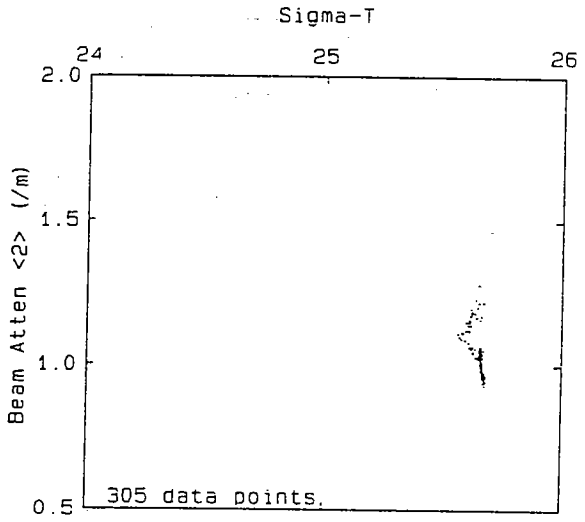
Data are as described in Appendix C, Part 1, and include the entire profile for each station.

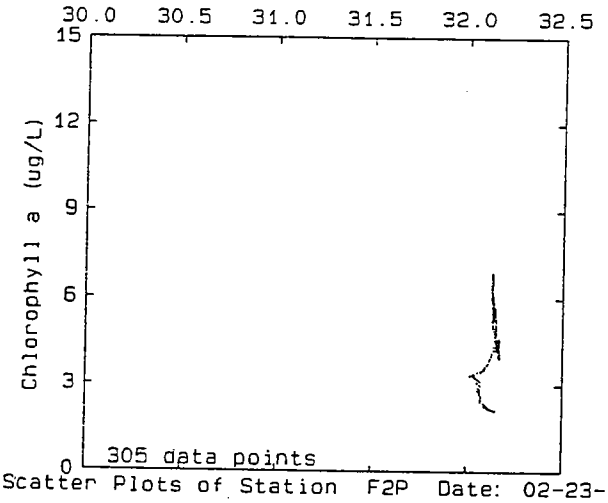

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
Temperature (C)
Chlorophyll a (ug/L)
297 data points
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
297 data points,
Salinity (PSU)
Sigma-T
Chlorophyll a (ug/L)
297 data points
297 data points,
Scatter Plots of Station F1P Date: 02-23-1992 Time: 14:30:44 File: MFF01029.PAR

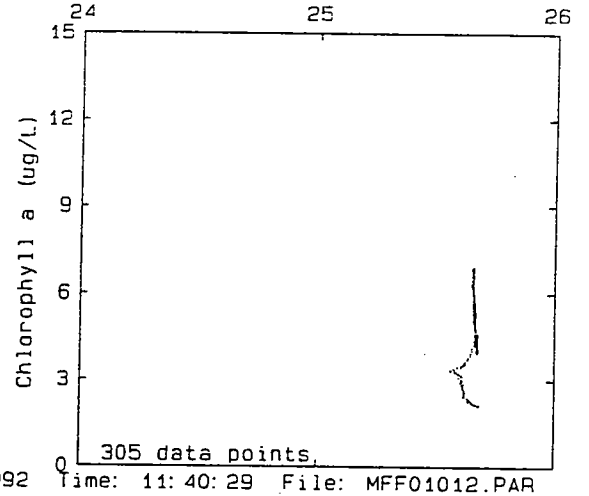




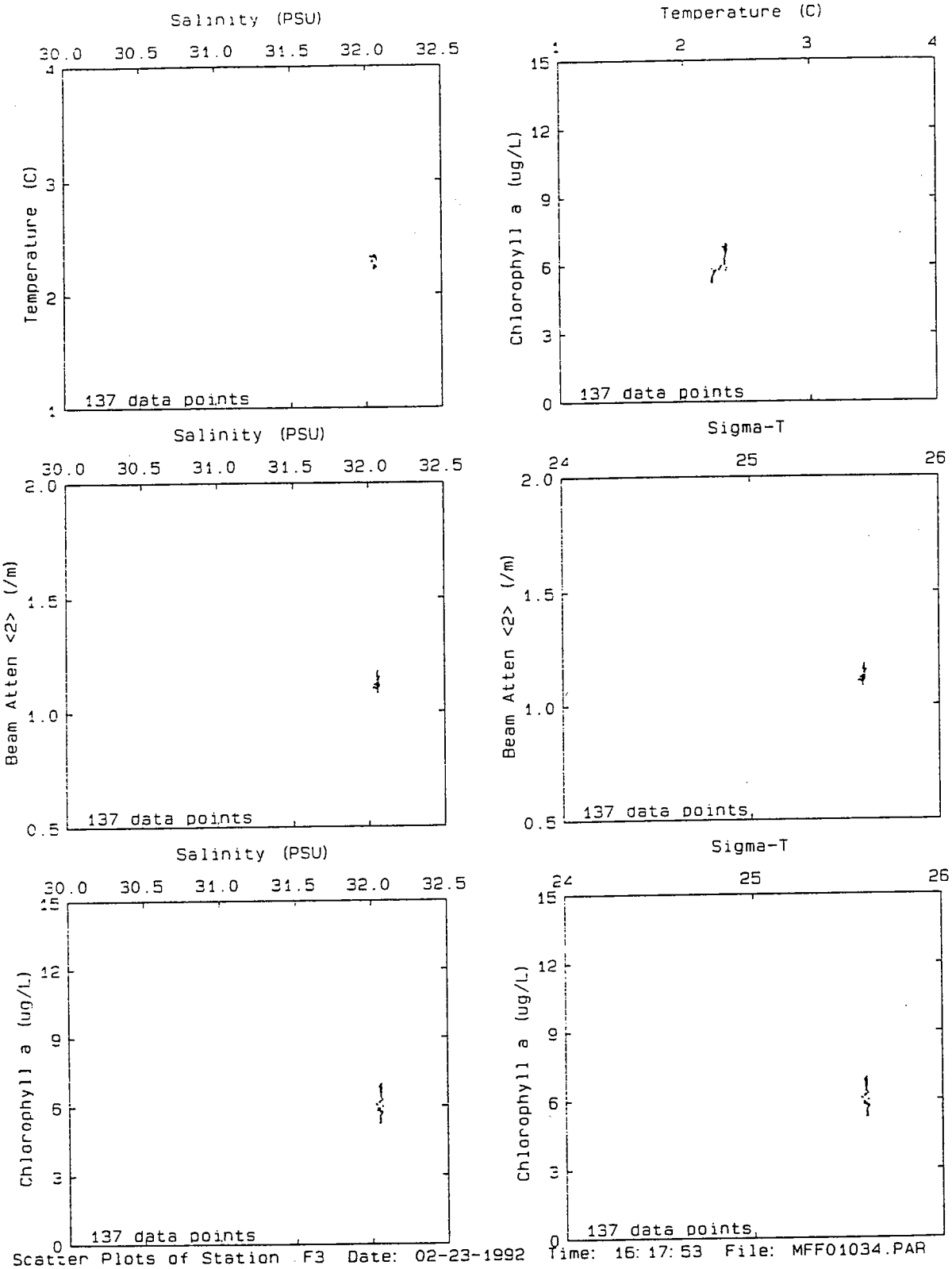




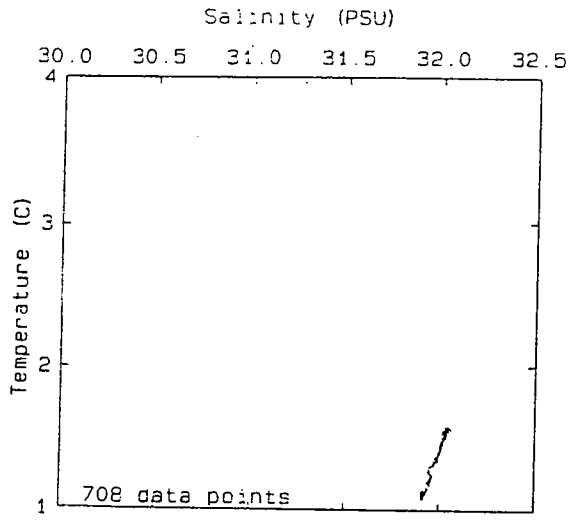


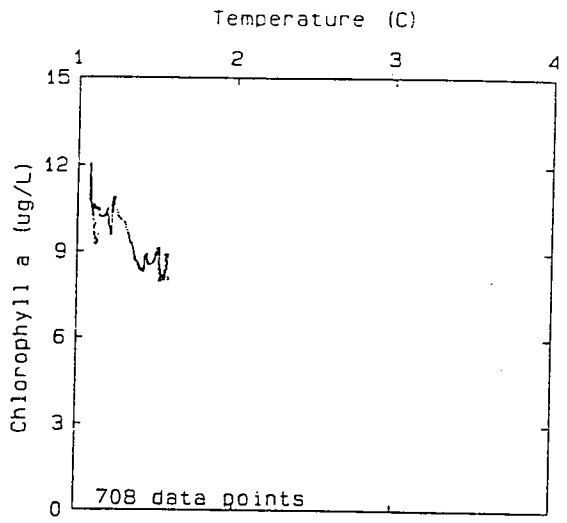


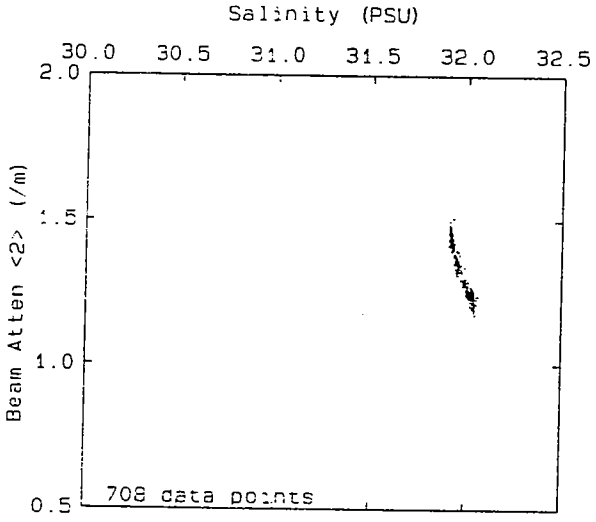
Scatter Plots of Station F2P Date: 02-23-1992 Time: 11:40:29 File: MFF01012.PAR

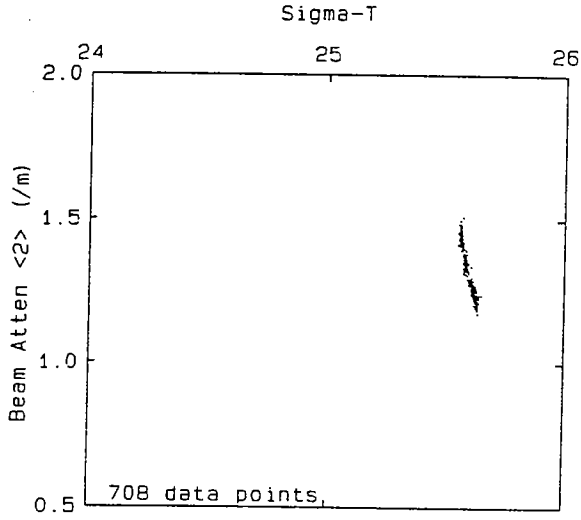


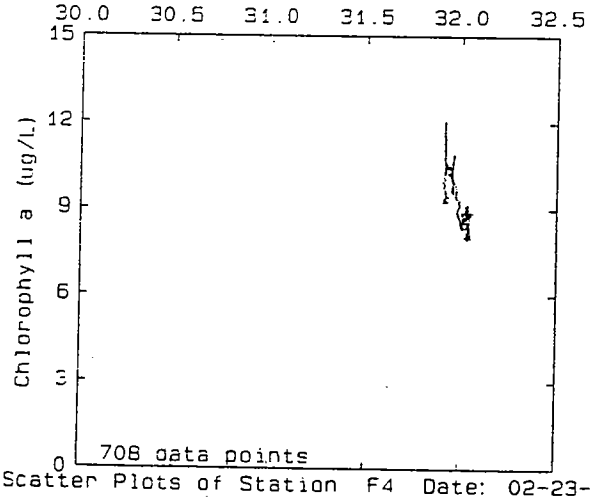
Scatter Plots of Station F3 Date: 02-23-1992 Time: 16:17:53 File: MFF01034.PAR

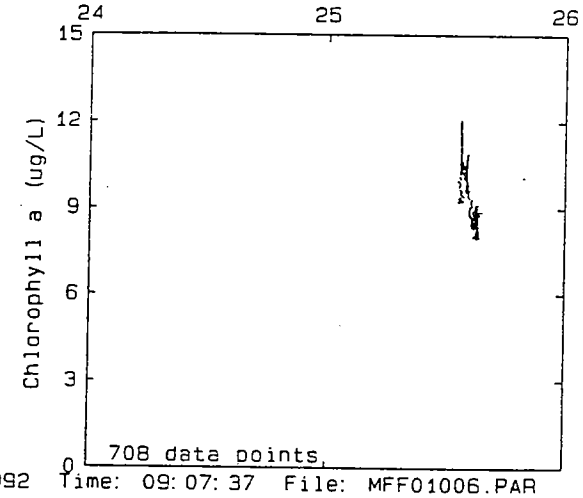




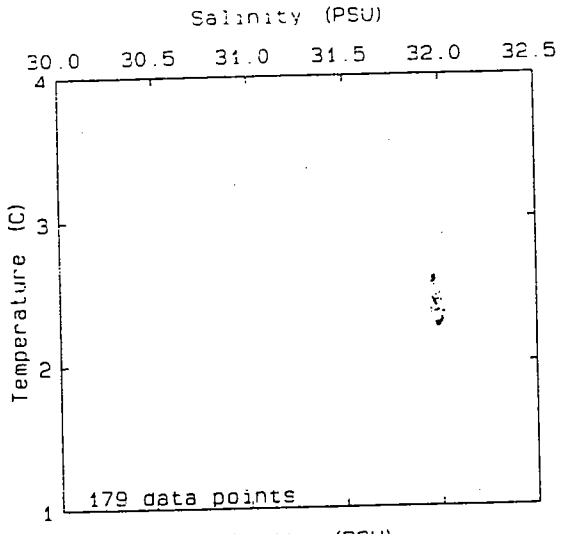


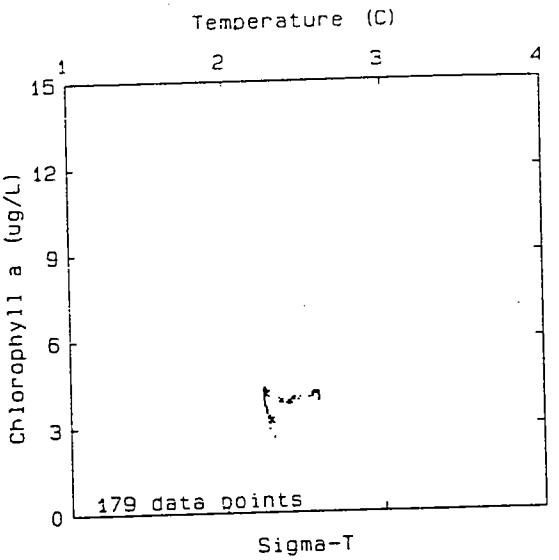


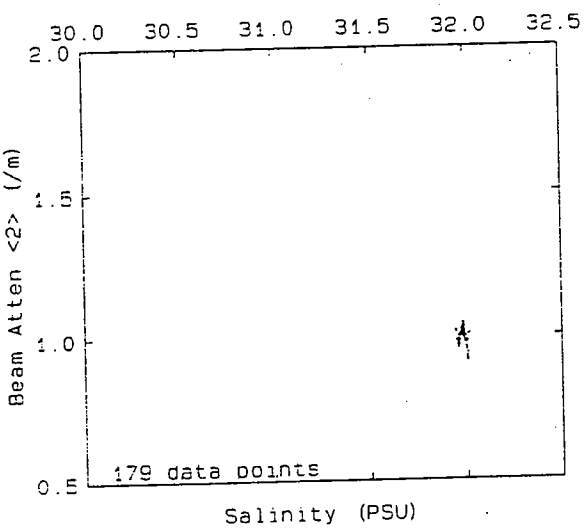


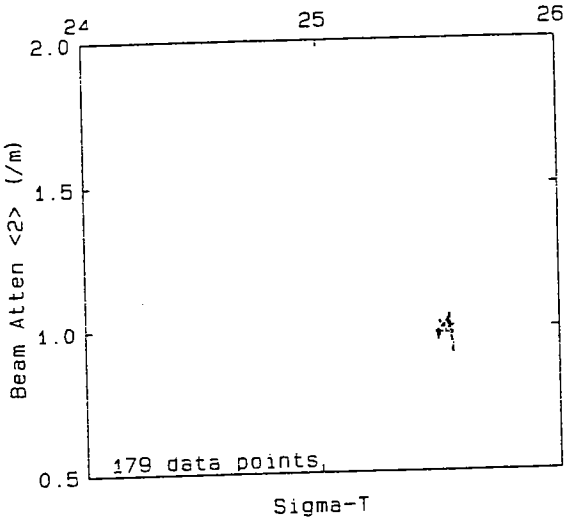


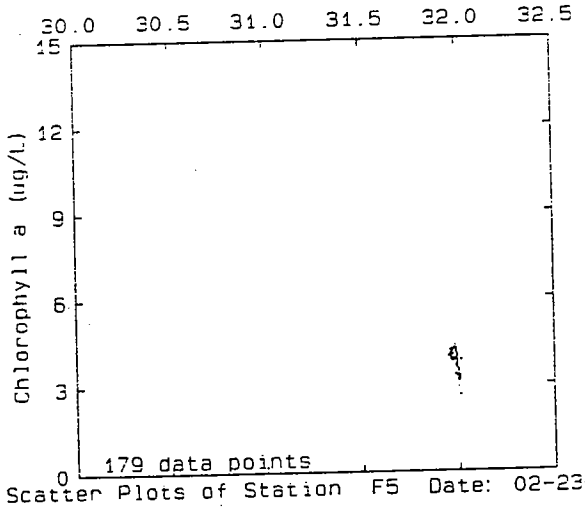
Scatter Plots of Station F4 Date: 02-23-1992 Time: 09:07:37 File: MFF01006.PAR

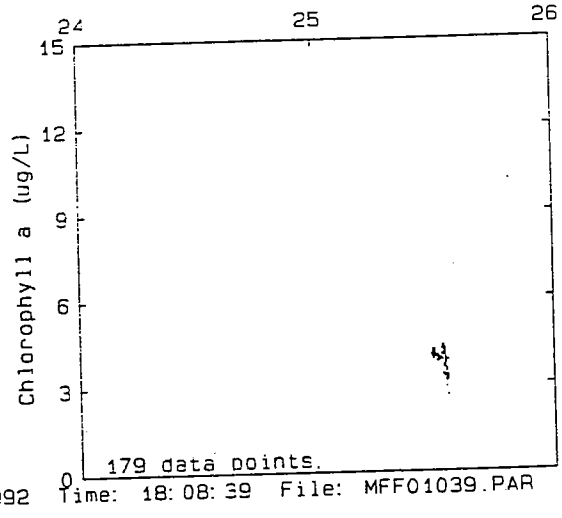




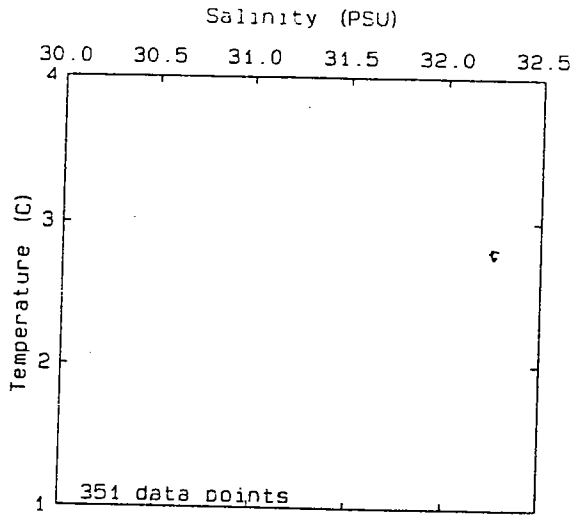


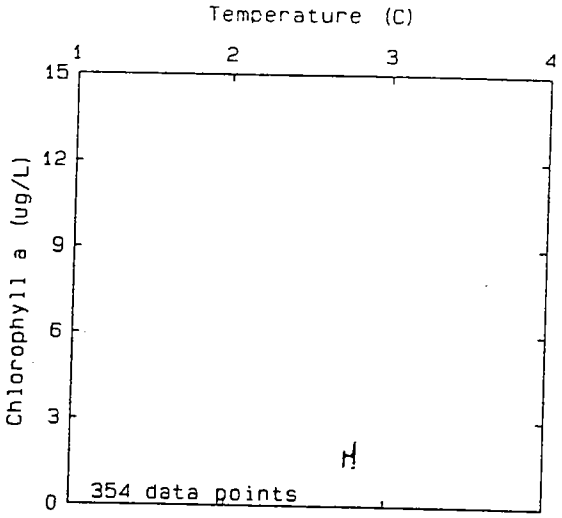


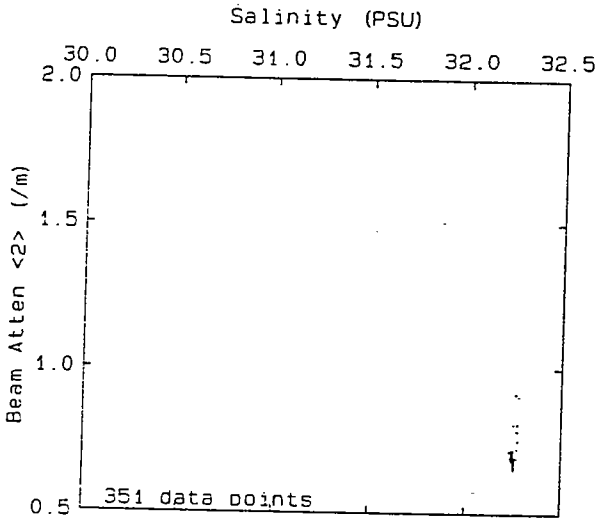


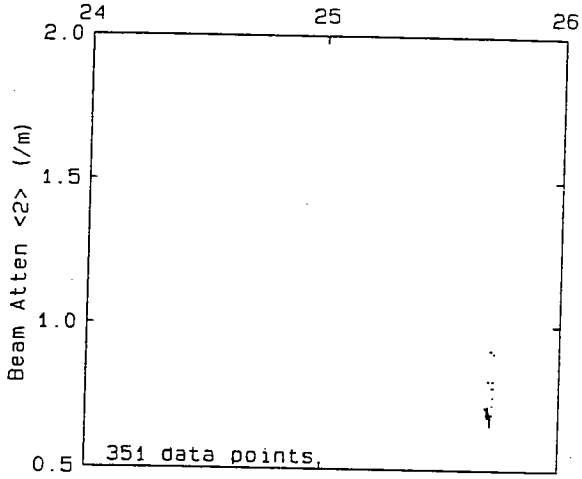


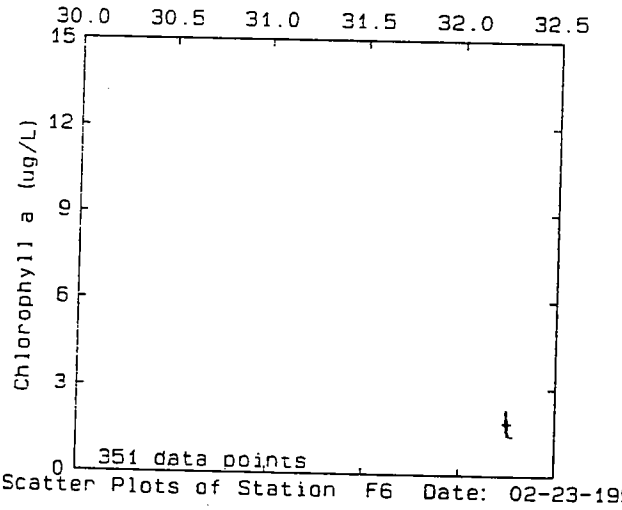
Scatter Plots of Station F5 Date: 02-23-1992 Time: 18:08:39 File: MFF01039.PAR

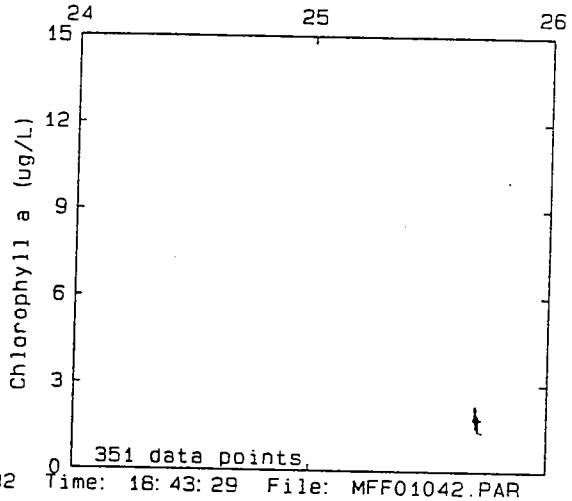




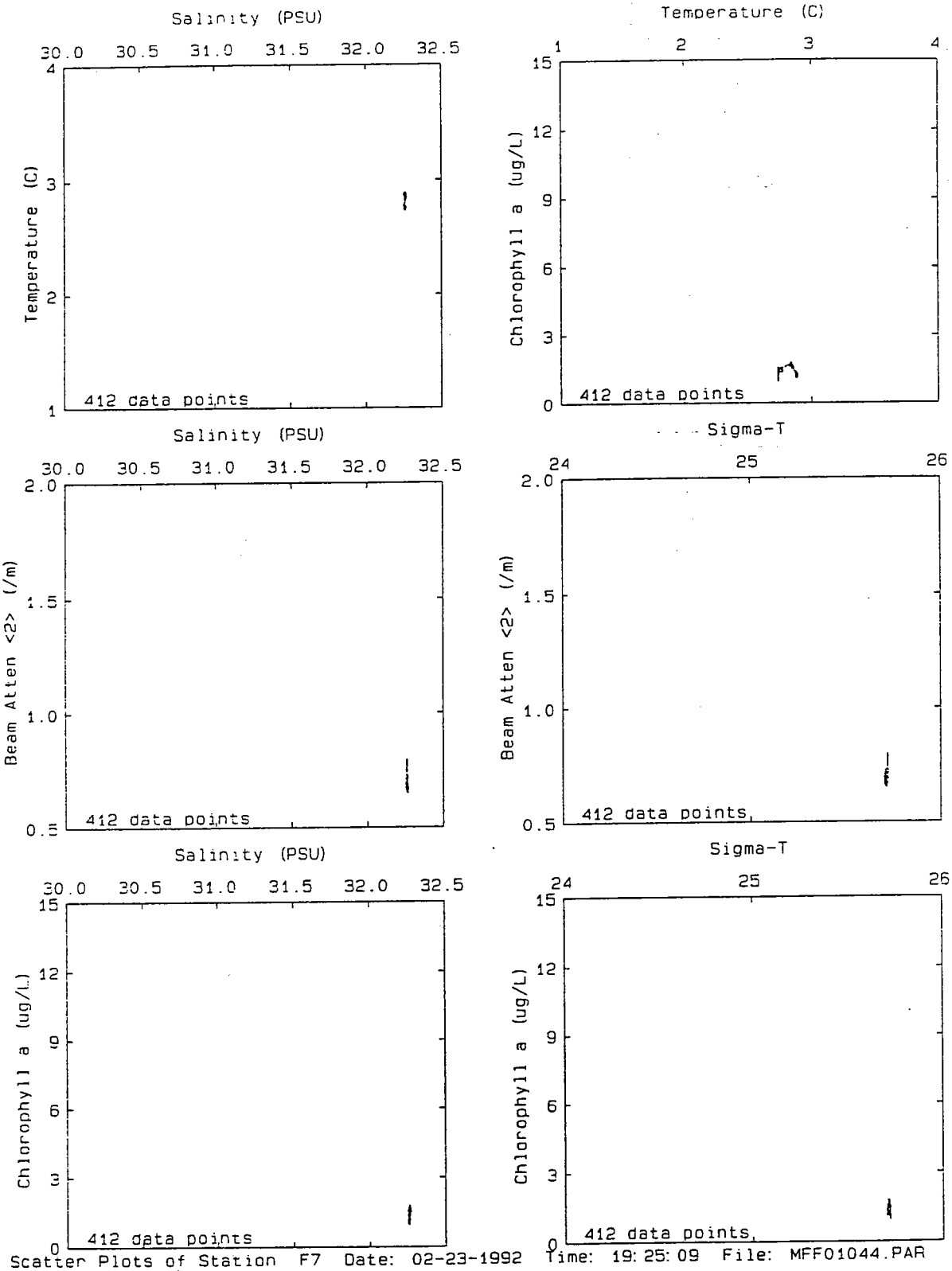


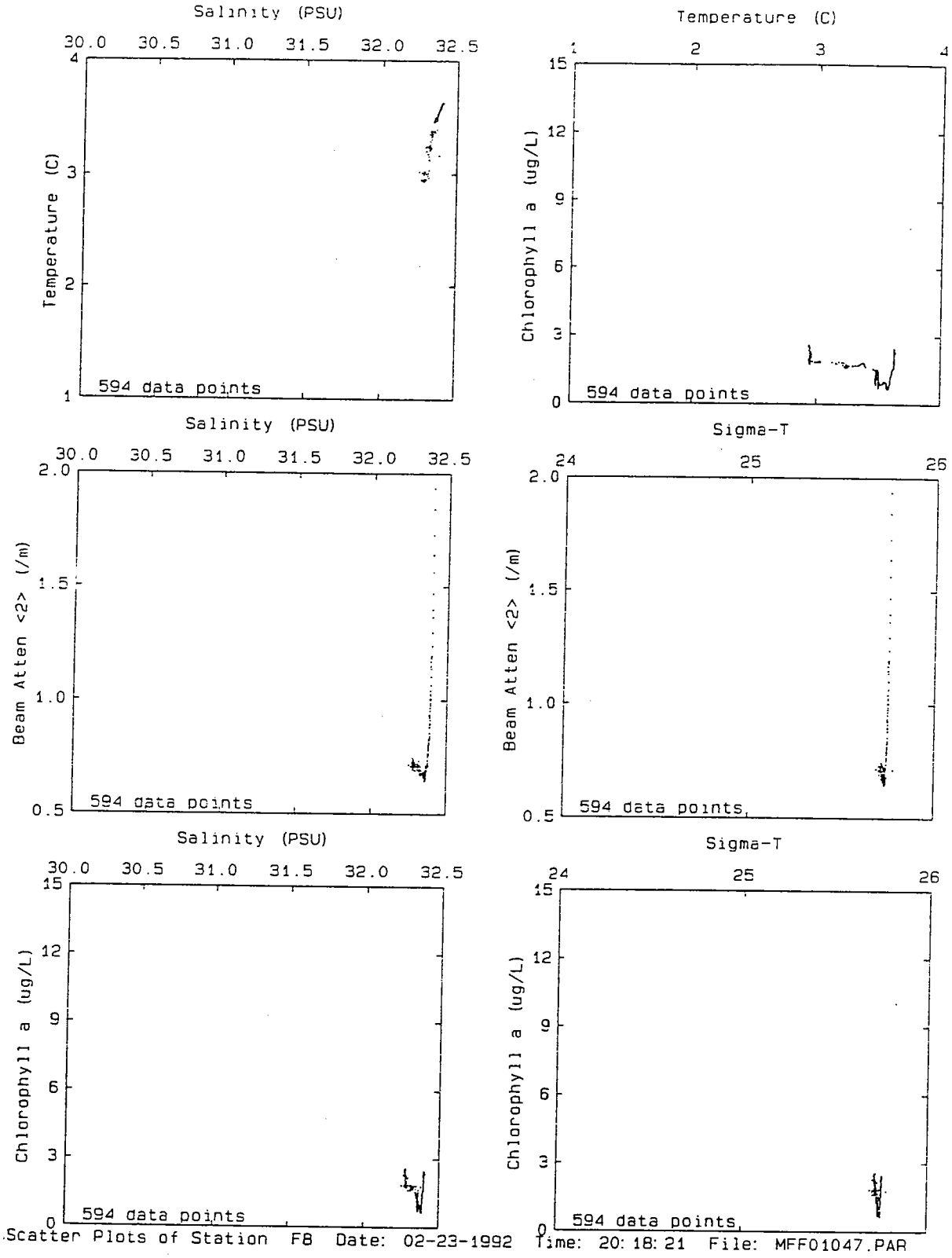




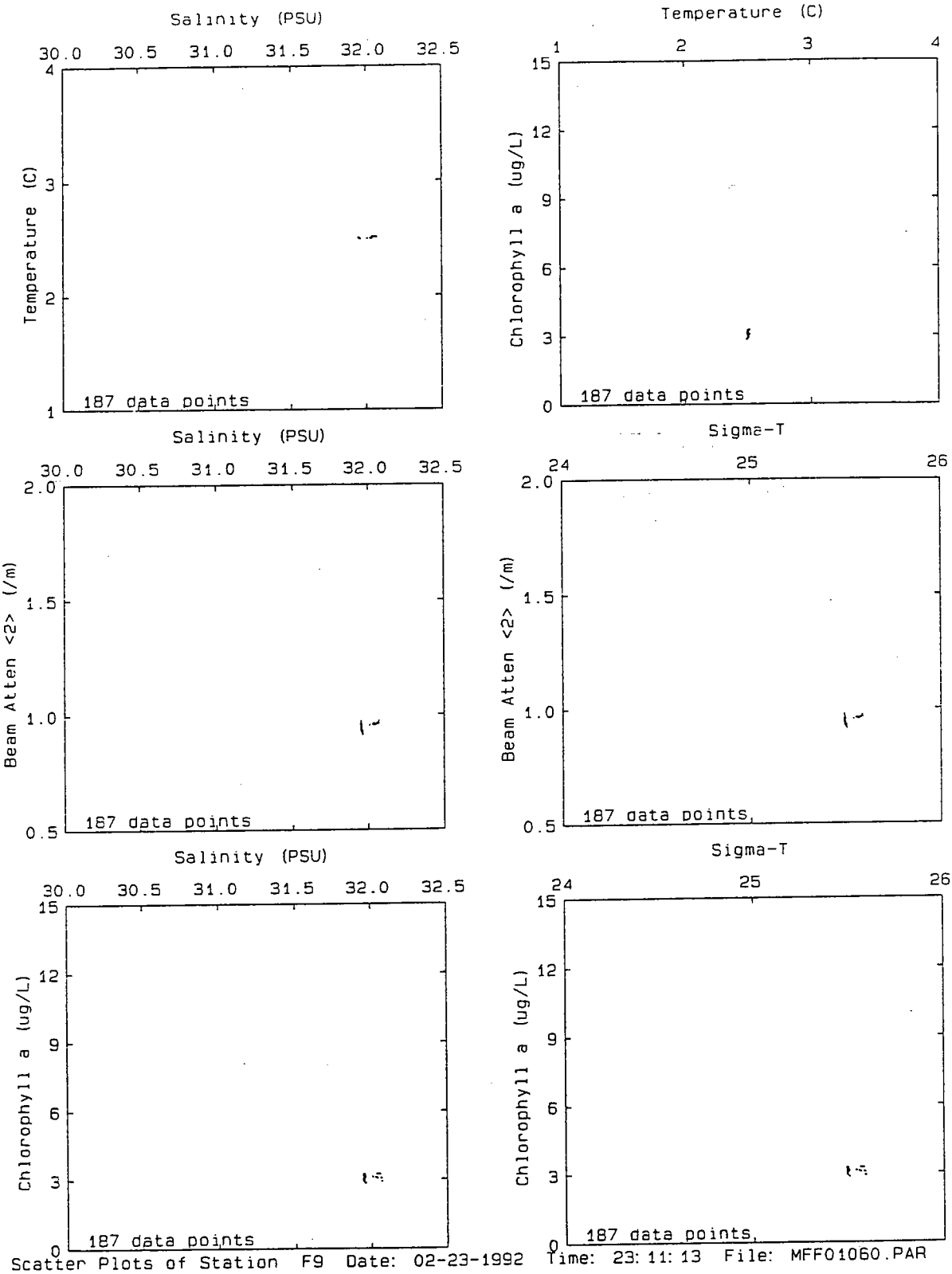


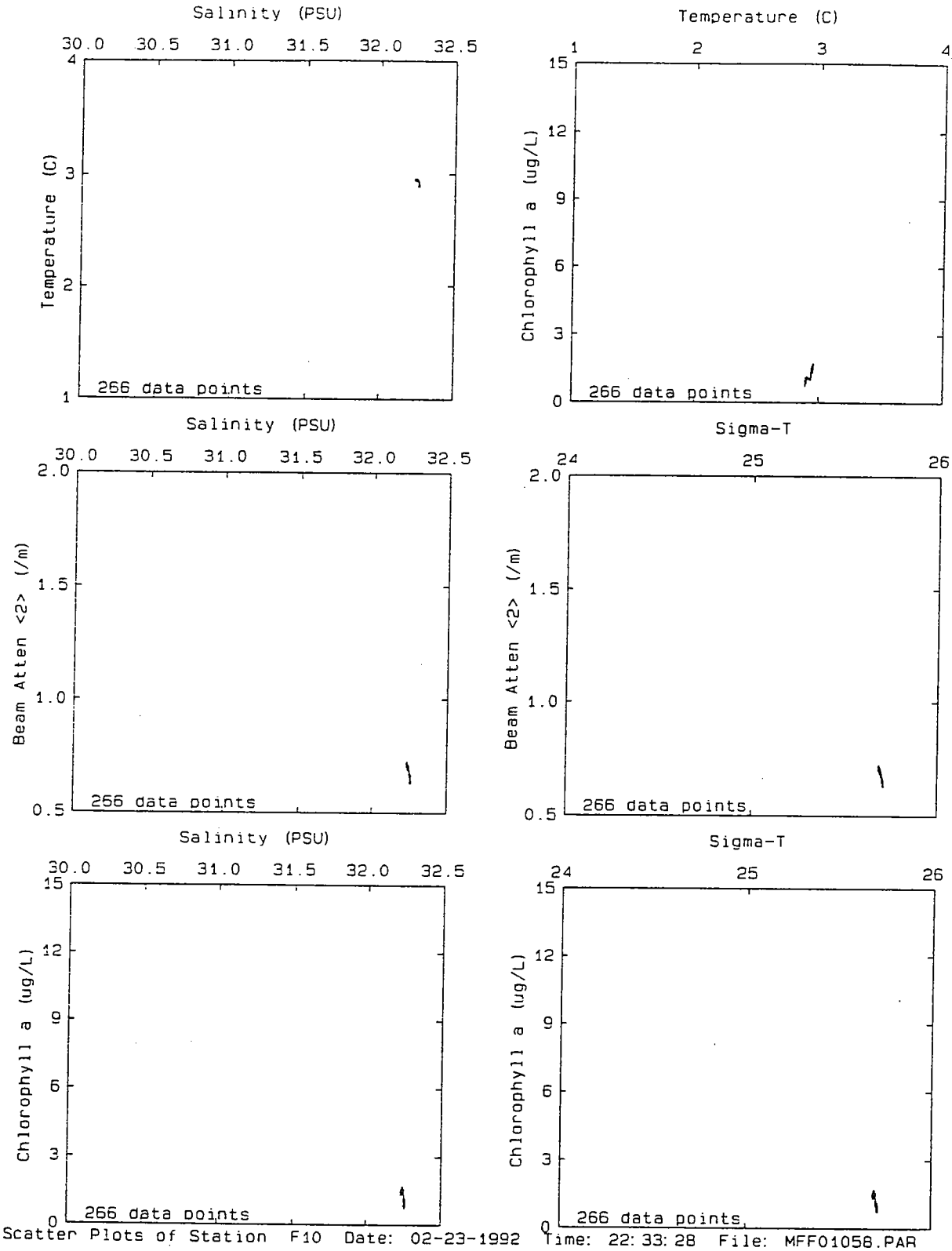
Scatter Plots of Station F6 Date: 02-23-1992 Time: 18:43:29 File: MFF01042.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
412 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
412 data points
F7
Salinity (PSU)
Beam Atten <2> (/m)
412 data points
Sigma-T
24 25 26
412 data points
Salinity (PSU)
Chlorophyll a (ug/L)
412 data points
Sigma-T
412 data points
Scatter Plots of Station F7 Date: 02-23-1992 Time: 19:25:09 File: MFF01044.PAR

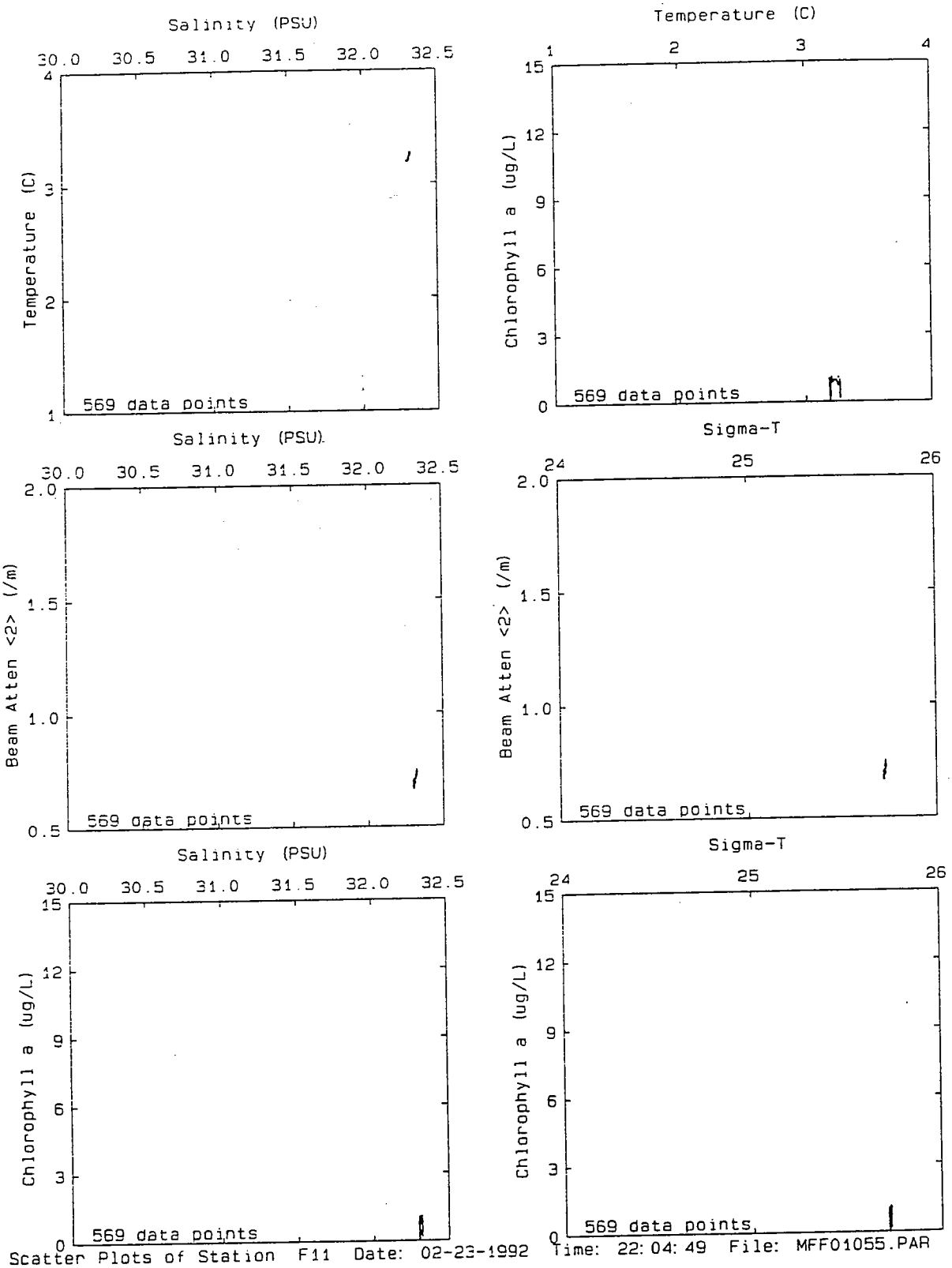


Scatter Plots of Station F8 Date: 02-23-1992 Time: 20:18:21 File: MFF01047.PAR

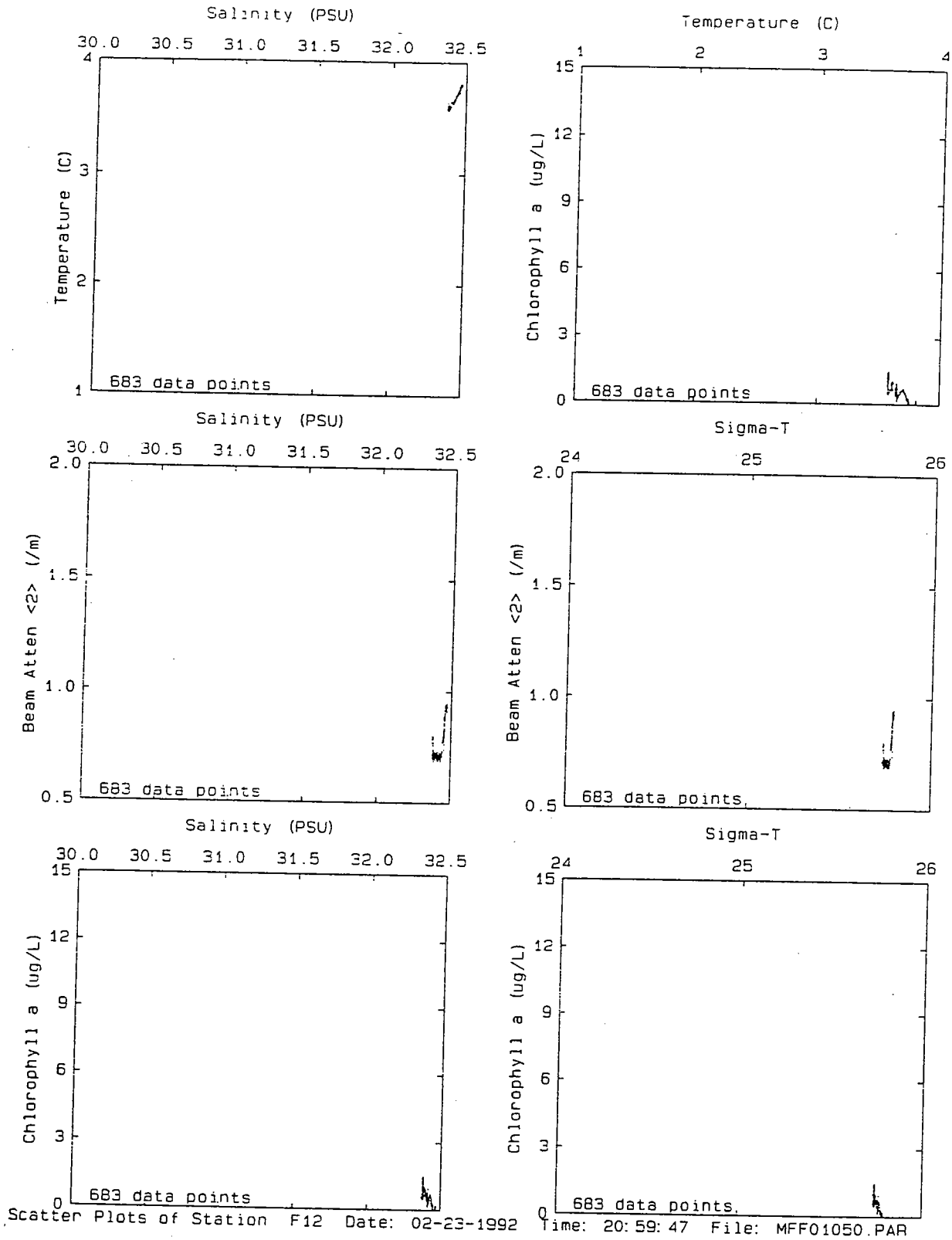

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
Temperature (C)
Chlorophyll a (ug/L)
187 data points
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
187 data points
Salinity (PSU)
Sigma-T
Chlorophyll a (ug/L)
187 data points
Scatter Plots of Station F9 Date: 02-23-1992 Time: 23:11:13 File: MFF01060.PAR



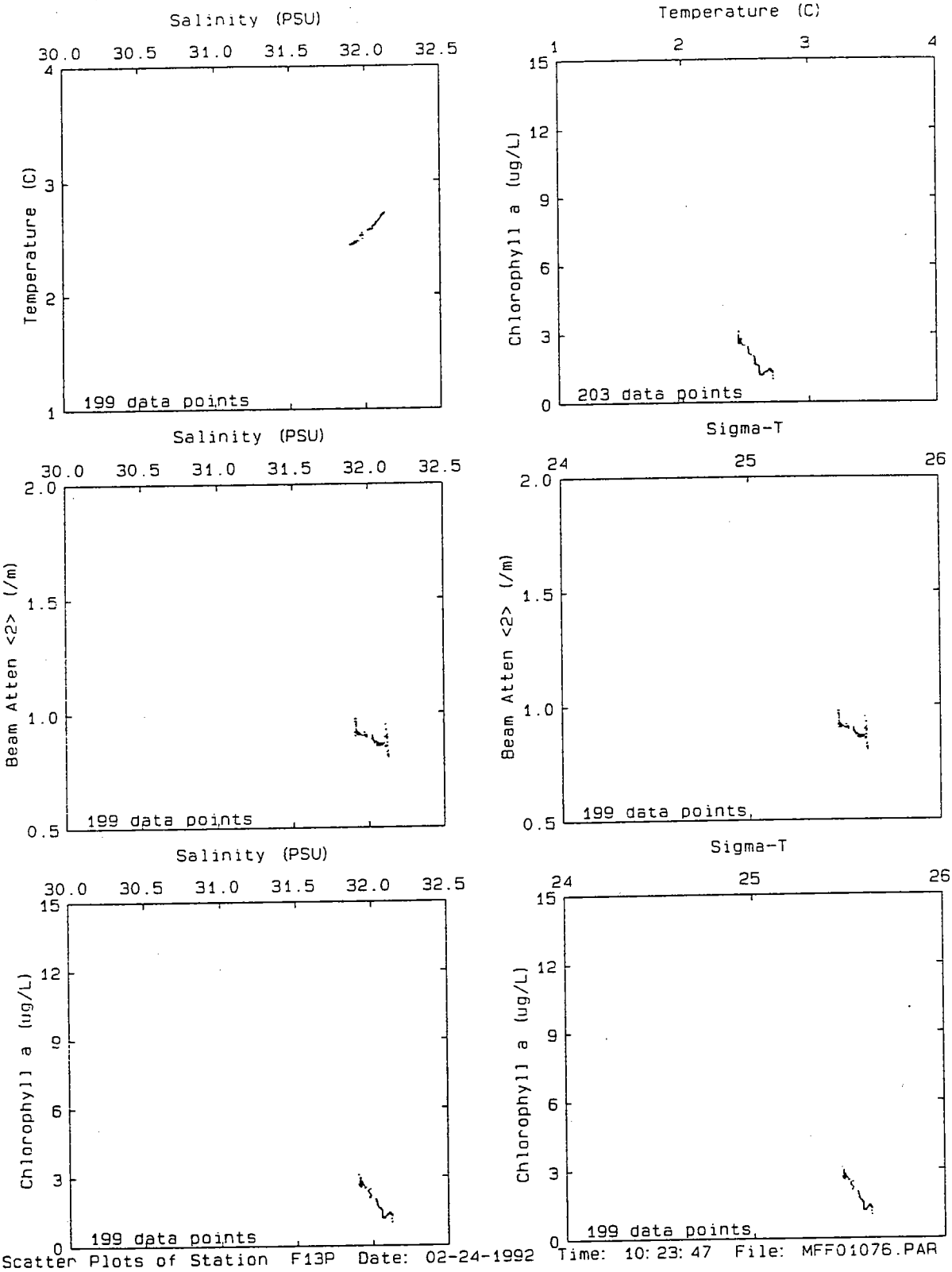
Scatter Plots of Station F10 Date: 02-23-1992 Time: 22:33:28 File: MFF01058.PAR

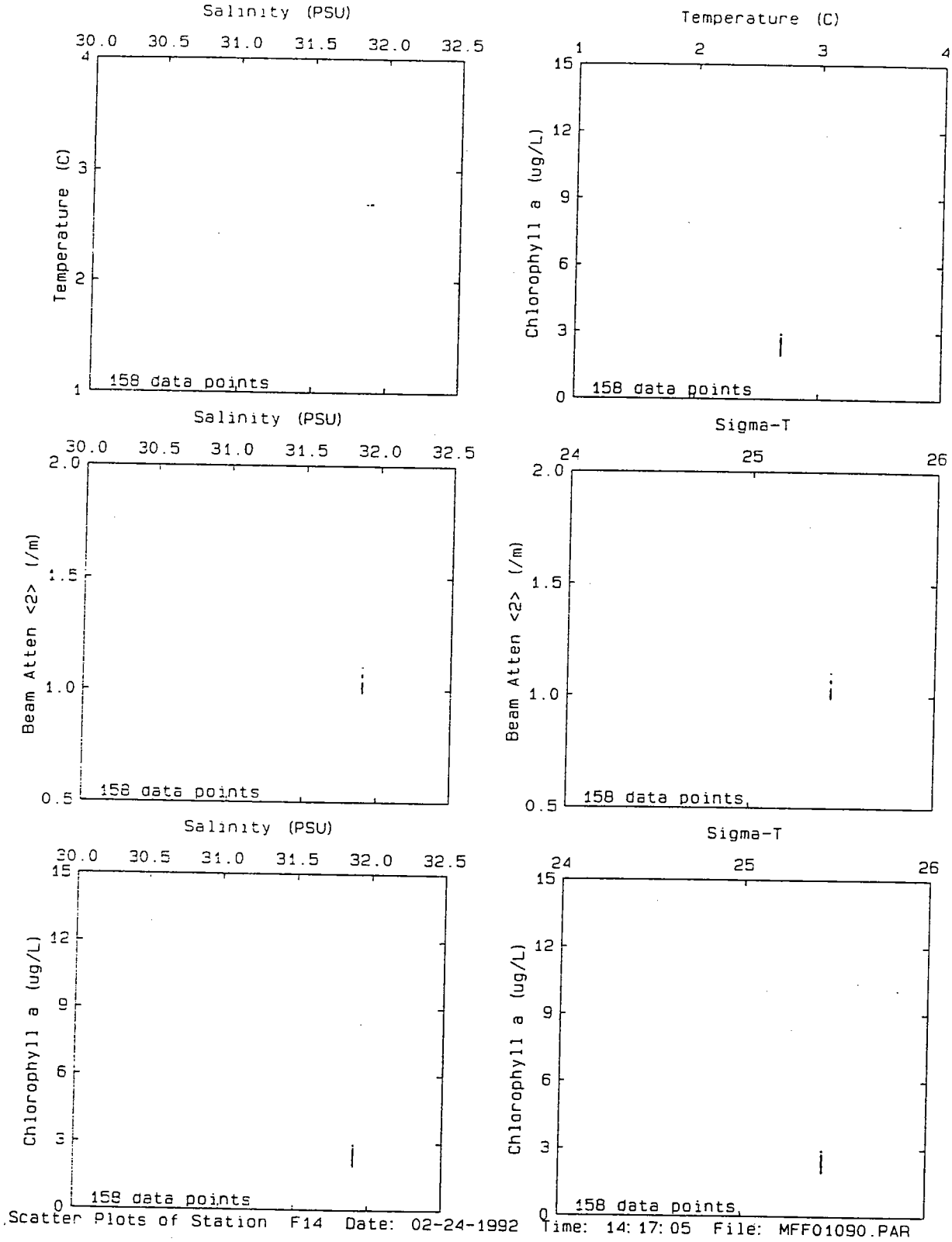


Scatter Plots of Station F11 Date: 02-23-1992 Time: 22:04:49 File: MFF01055.PAR

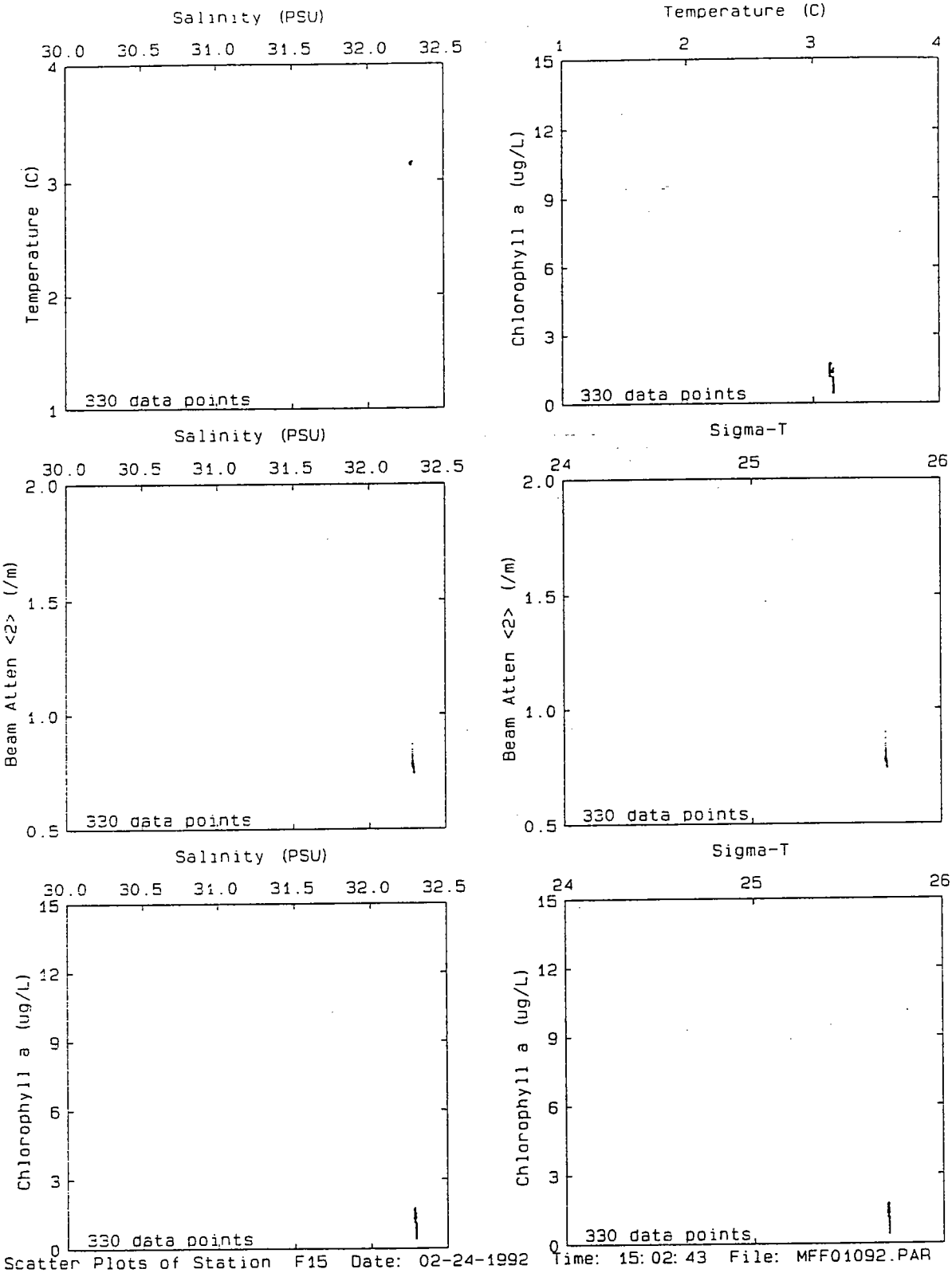


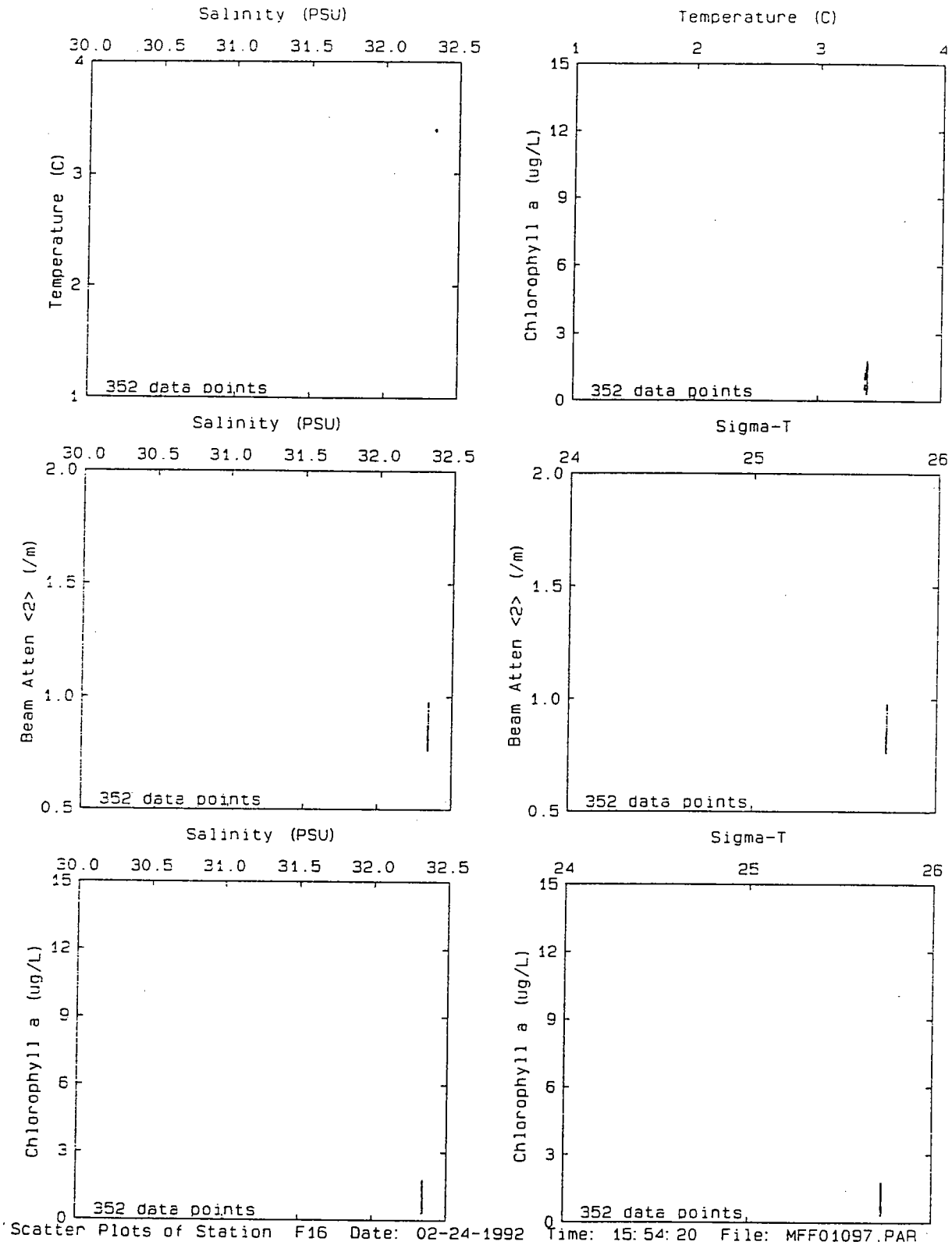
Scatter Plots of Station F12 Date: 02-23-1992 Time: 20:59:47 File: MFF01050.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
199 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
203 data points
Salinity (PSU)
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
199 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
199 data points,
Salinity (PSU)
Chlorophyll a (ug/L)
199 data points
Sigma-T
Chlorophyll a (ug/L)
199 data points,
Scatter Plots of Station F13P Date: 02-24-1992 Time: 10:23:47 File: MFF01076.PAR

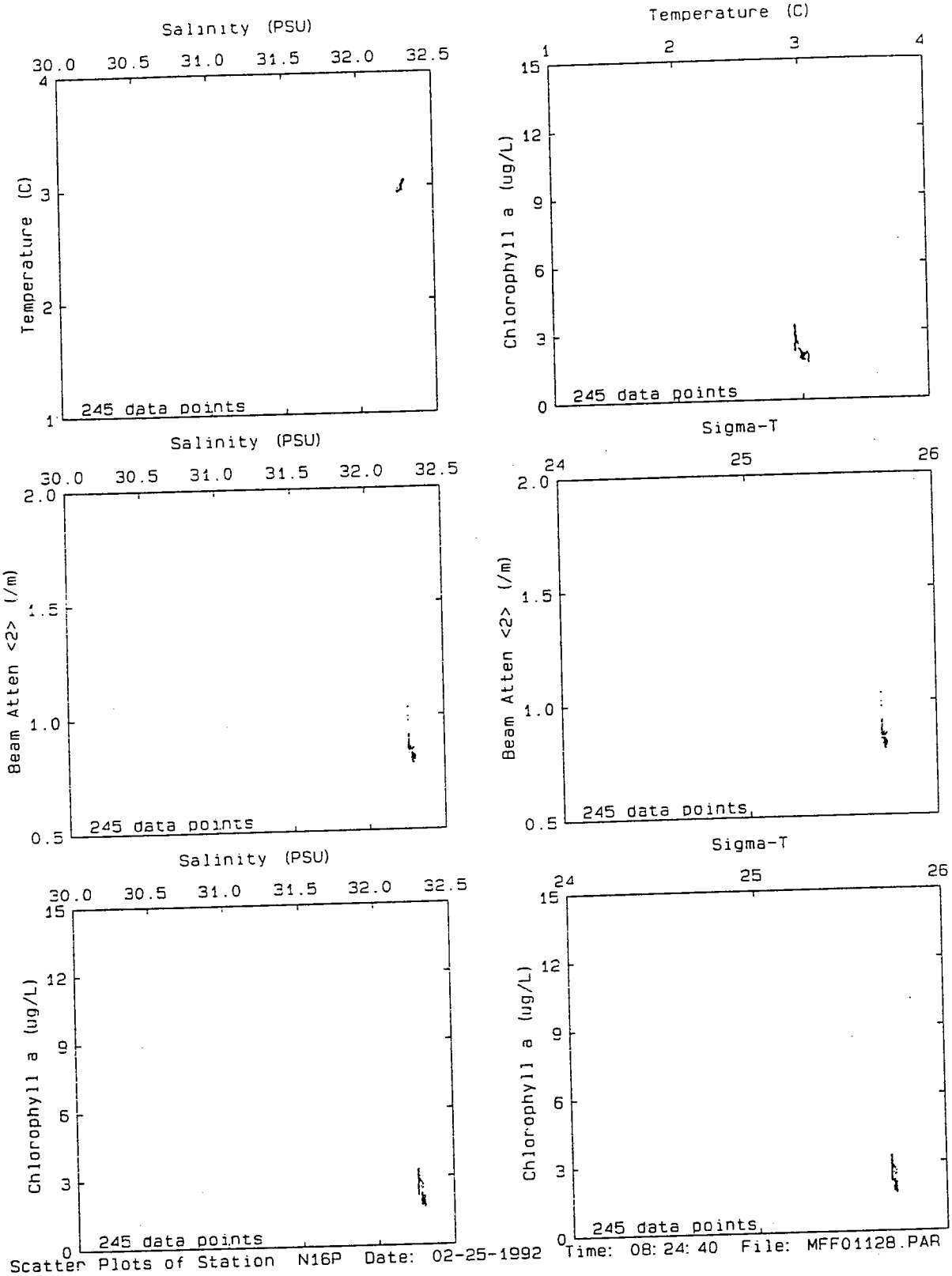


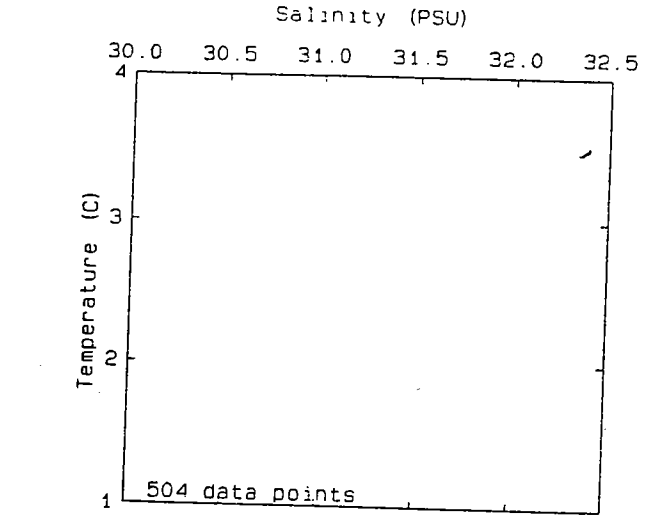
Scatter Plots of Station F14 Date: 02-24-1992 Time: 14:17:05 File: MFF01090.PAR

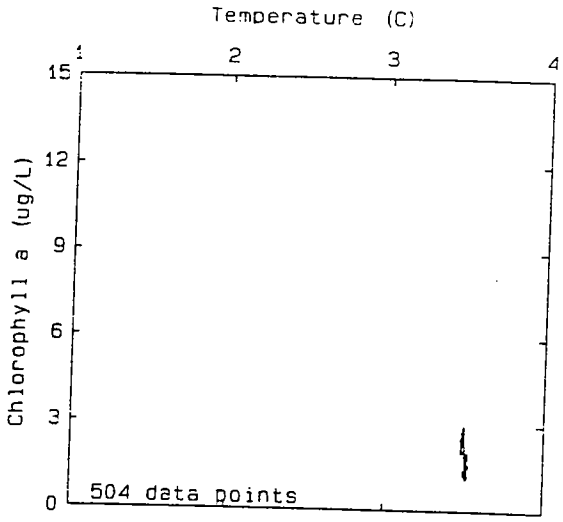

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
330 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
330 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
330 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
330 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
330 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
330 data points,
Scatter Plots of Station F15 Date: 02-24-1992 Time: 15:02:43 File: MFF01092.PAR

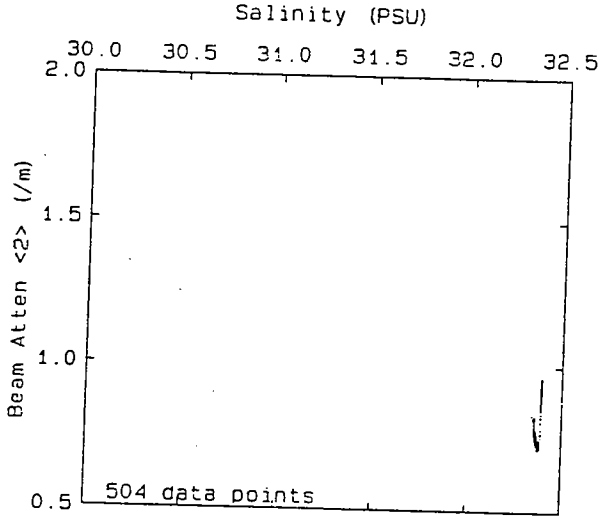


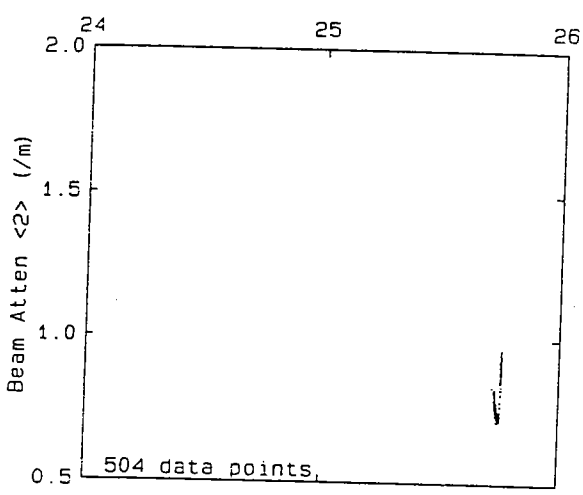
Scatter Plots of Station F16 Date: 02-24-1992 Time: 15:54:20 File: MFF01097.PAR

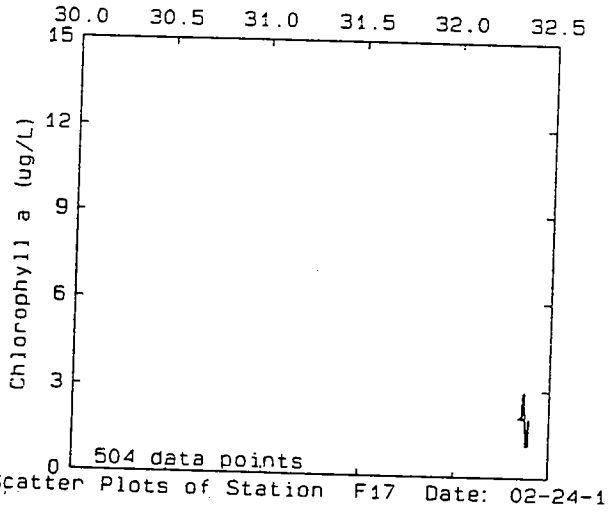

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
245 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
245 data points
Sigma-T
Salinity (PSU)
Beam Atten <2> (/m)
245 data points
Sigma-T
24 25 26
245 data points
Salinity (PSU)
Chlorophyll a (ug/L)
245 data points
Chlorophyll a (ug/L)
245 data points
Scatter Plots of Station N16P Date: 02-25-1992 Time: 08:24:40 File: MFF01128.PAR

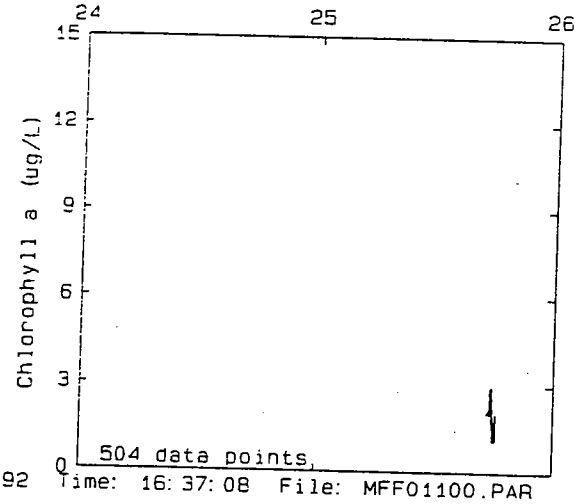




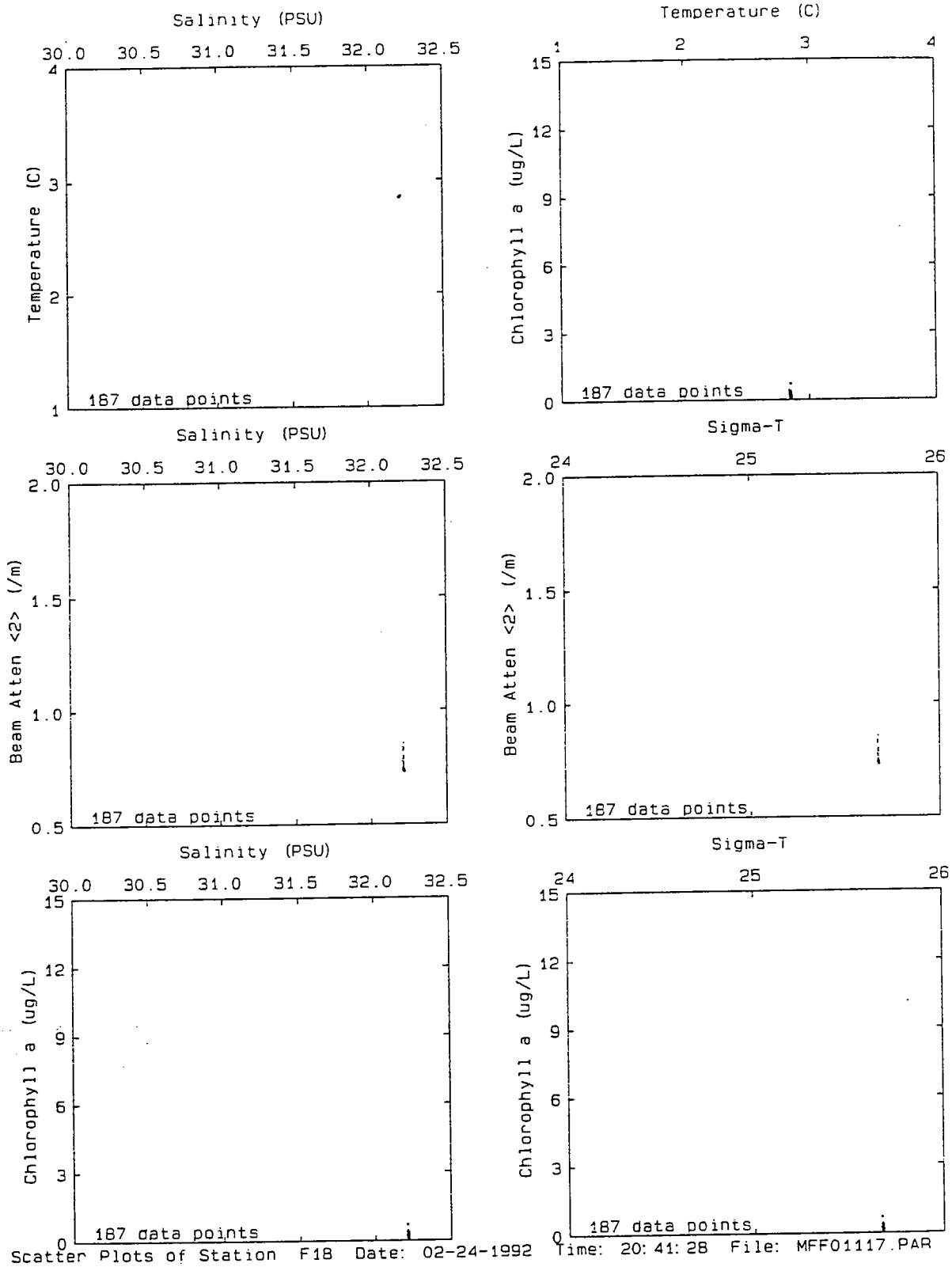


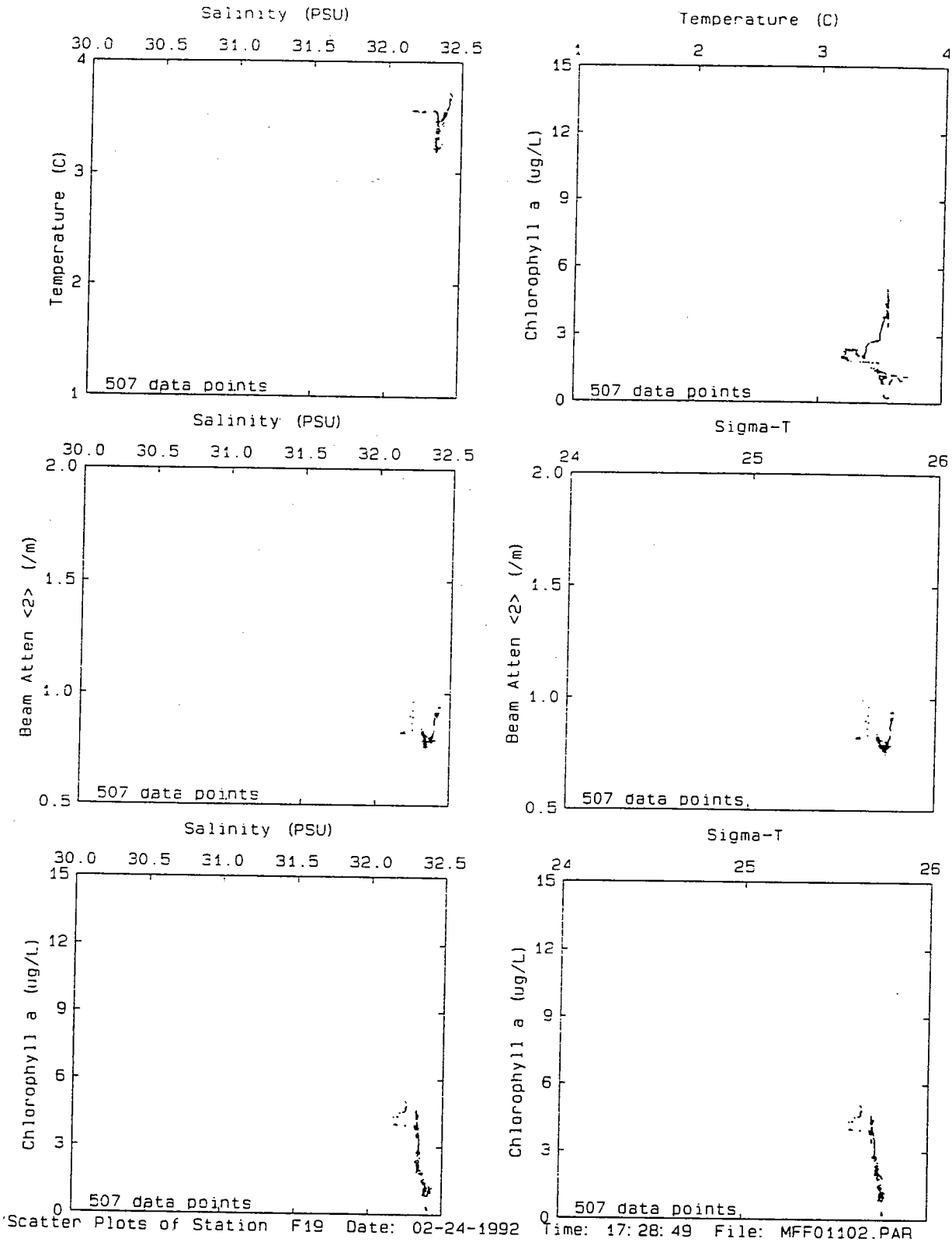




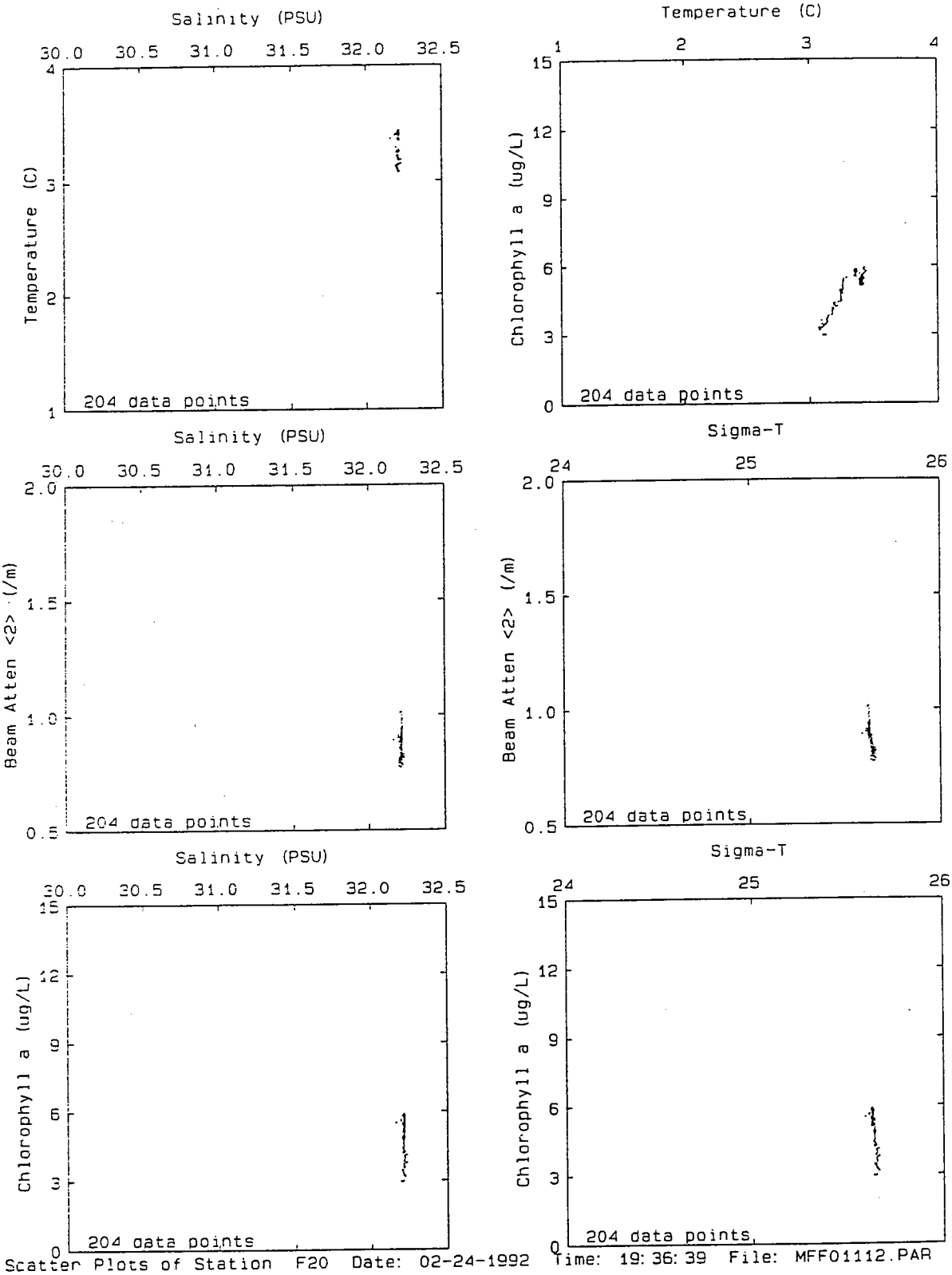


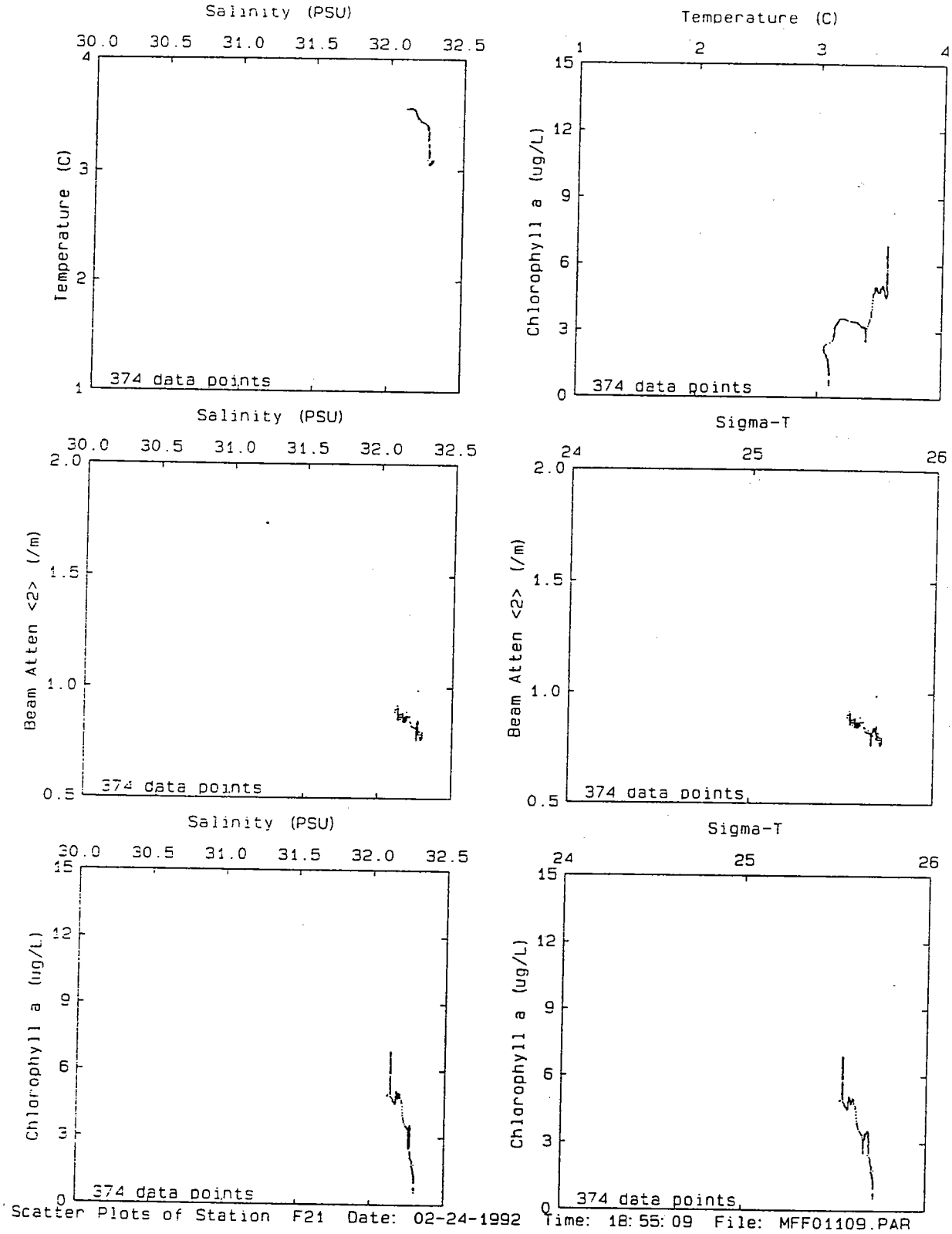
Scatter Plots of Station F17 Date: 02-24-1992 Time: 16:37:08 File: MFF01100.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
Temperature (C)
Chlorophyll a (ug/L)
187 data points
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
187 data points,
Salinity (PSU)
Sigma-T
Chlorophyll a (ug/L)
187 data points
187 data points,
Scatter Plots of Station F18 Date: 02-24-1992 Time: 20:41:28 File: MFF01117.PAR

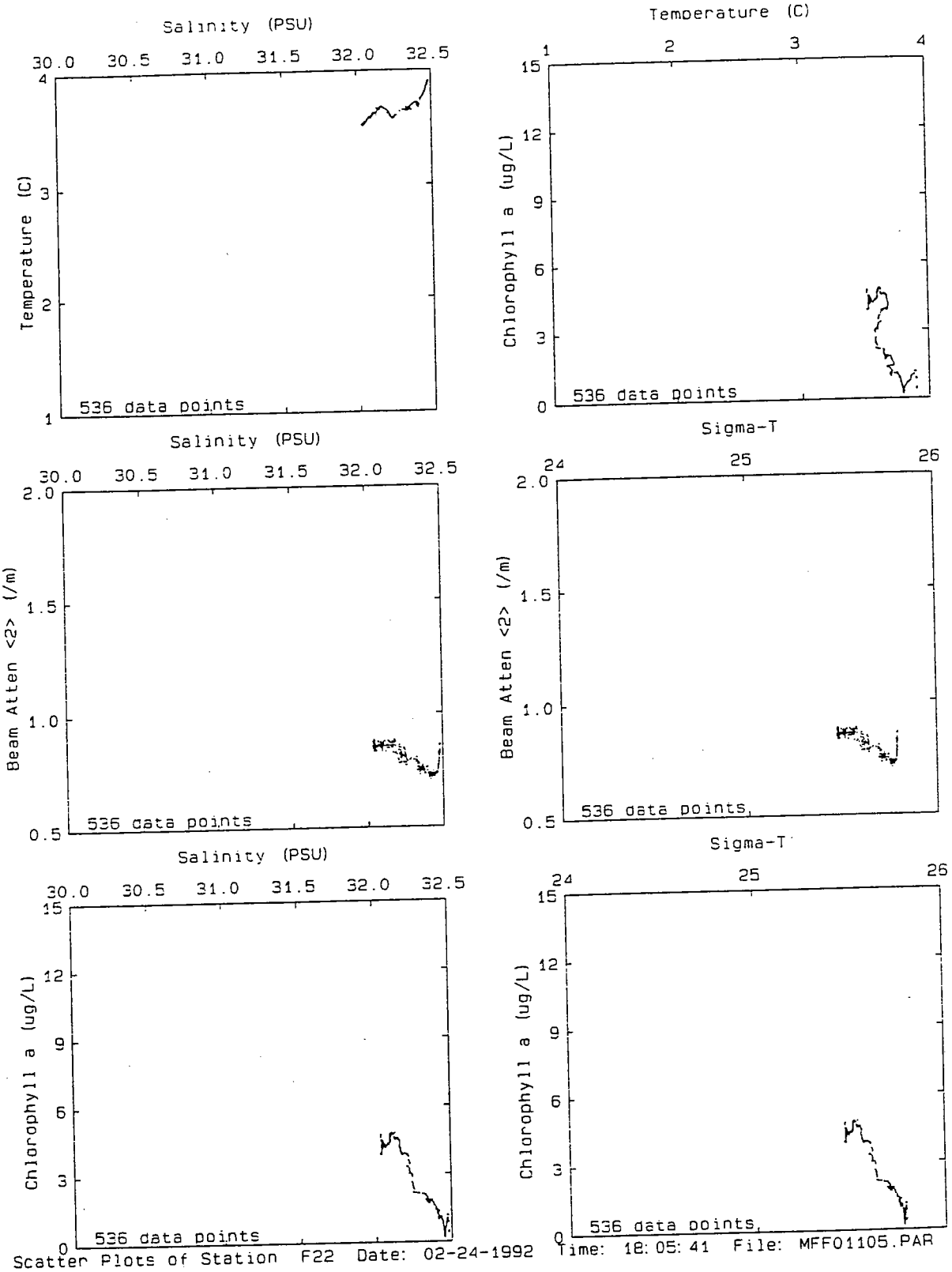


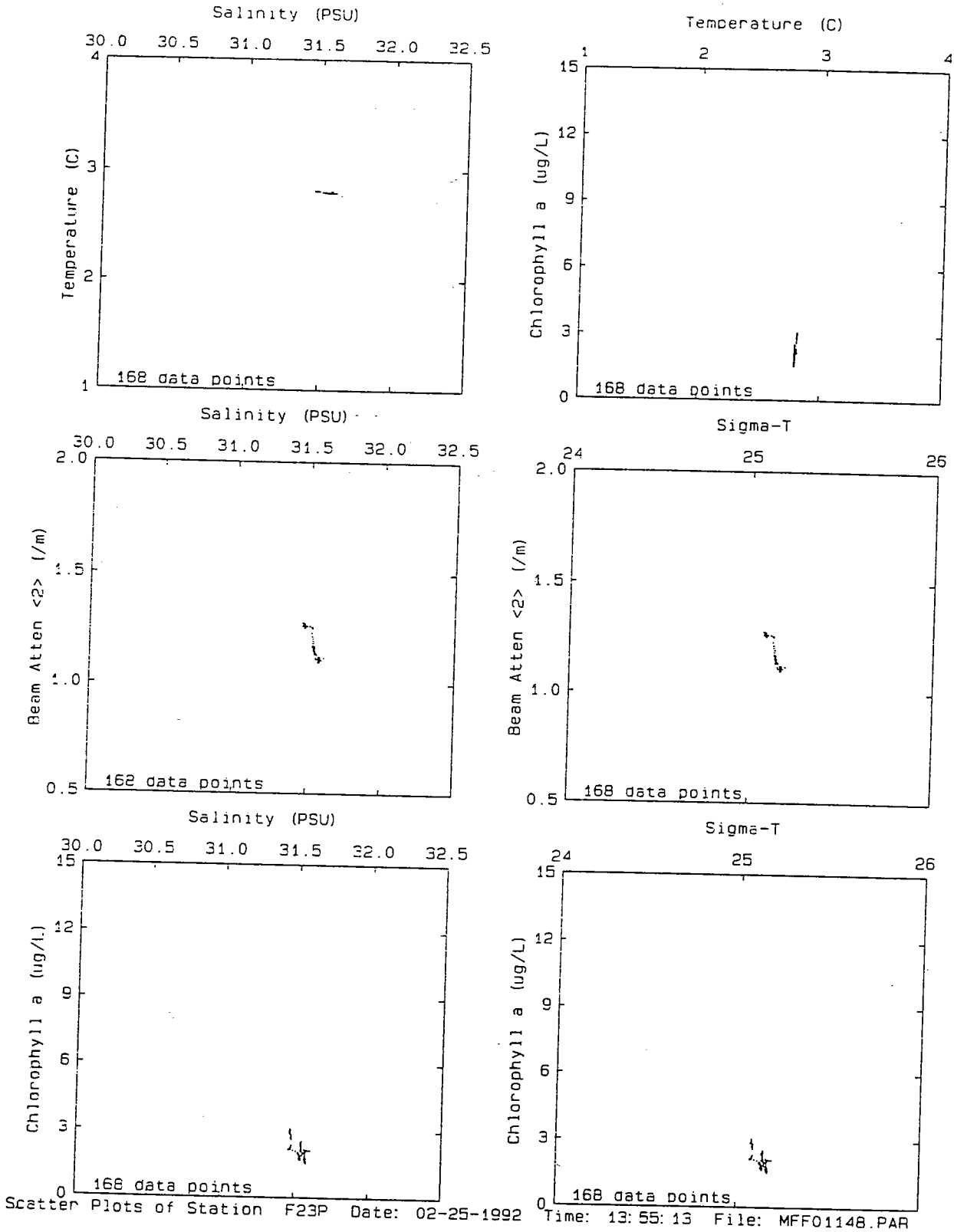
Scatter Plots of Station F19 Date: 02-24-1992 Time: 17:28:49 File: MFF01102.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
204 data points
Temperature (C)
Chlorophyll a (ug/L)
204 data points
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
204 data points
Beam Atten <2> (/m)
204 data points,
Salinity (PSU)
Sigma-T
Chlorophyll a (ug/L)
204 data points
Chlorophyll a (ug/L)
204 data points,
Scatter Plots of Station F20 Date: 02-24-1992
Time: 19:36:39 File: MFF01112.PAR

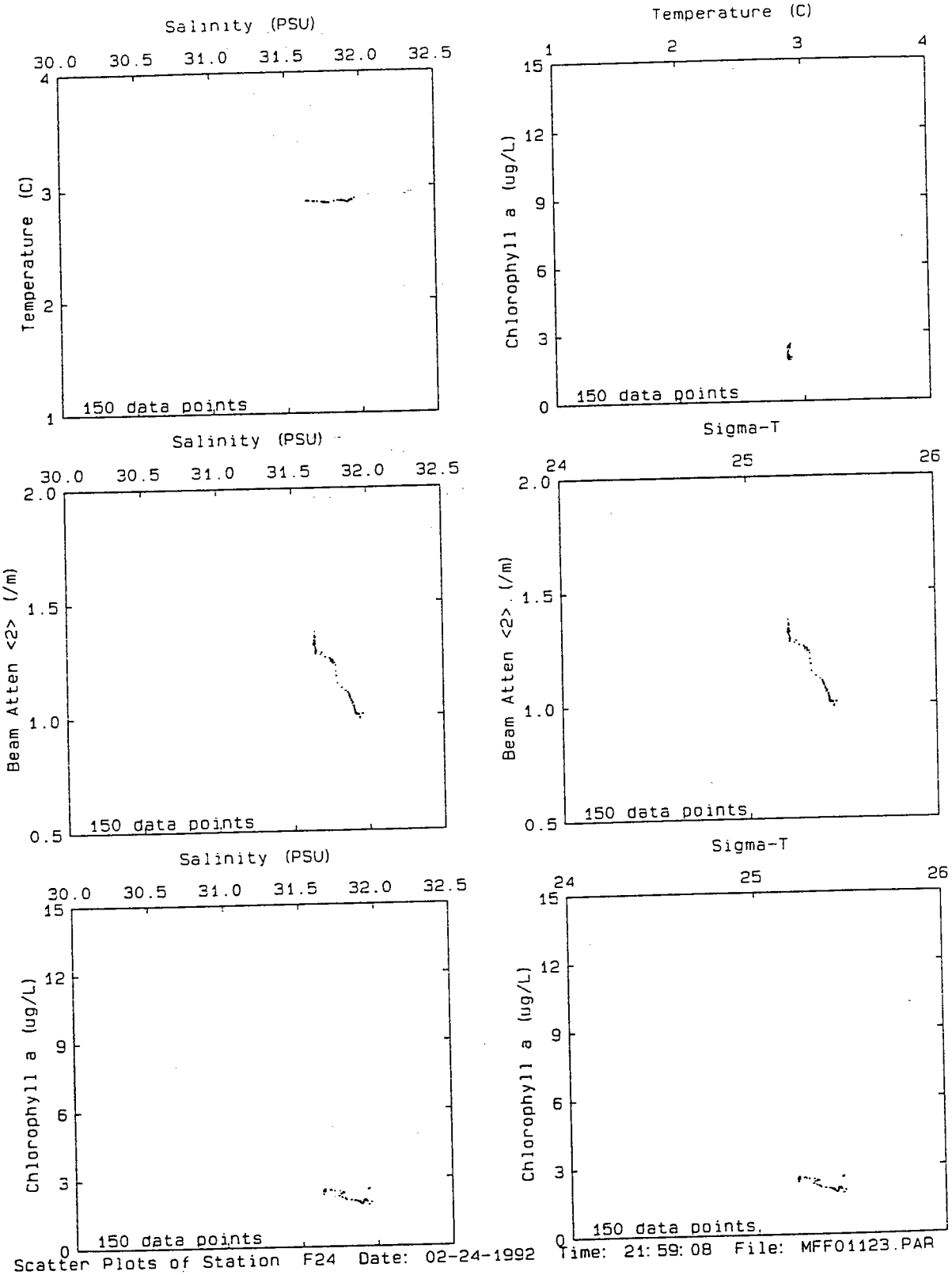


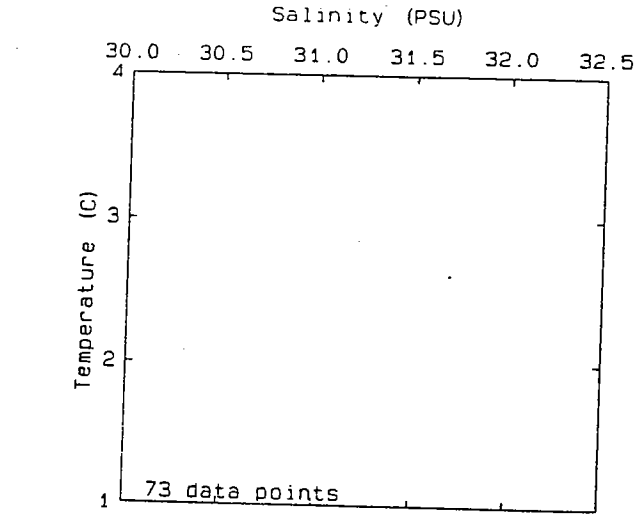
Scatter Plots of Station F21 Date: 02-24-1992 Time: 18:55:09 File: MFF01109.PAR

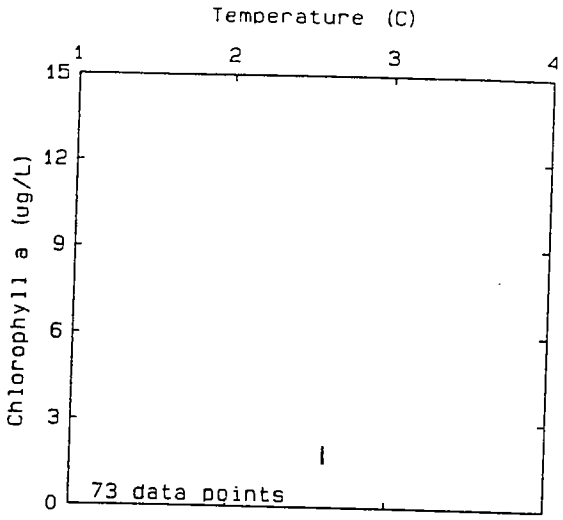

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
536 data points
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
536 data points,
Salinity (PSU)
Sigma-T
Scatter Plots of Station F22 Date: 02-24-1992
Time: 18:05:41 File: MFF01105.PAR

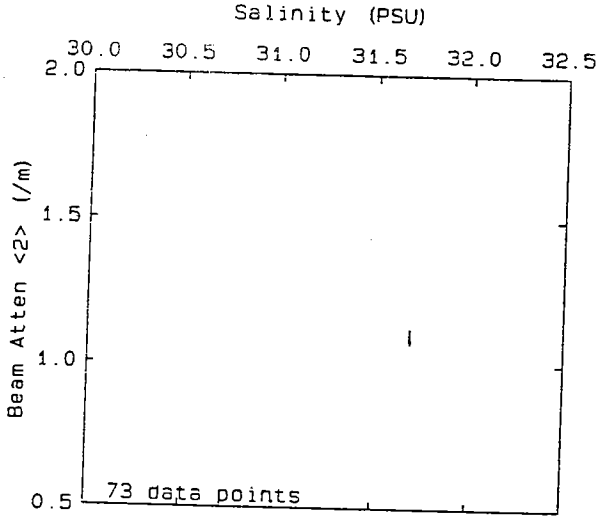


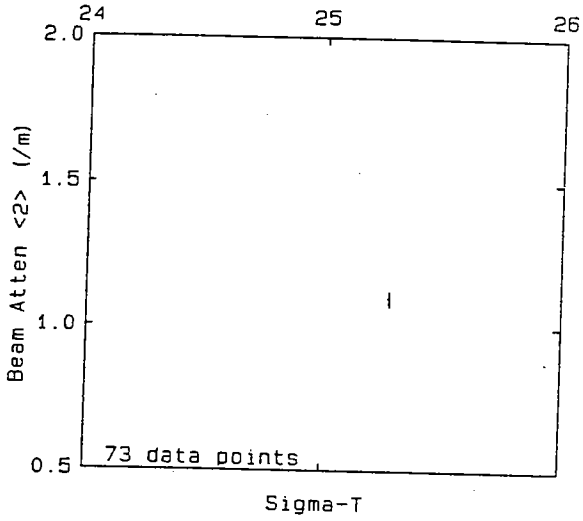
Scatter Plots of Station F23P Date: 02-25-1992 Time: 13:55:13 File: MFF01148.PAR

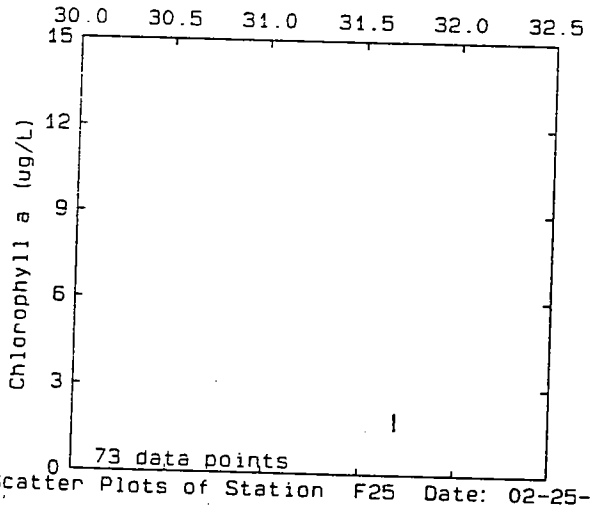

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
150 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
150 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
150 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
150 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
150 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
150 data points
Scatter Plots of Station F24 Date: 02-24-1992 Time: 21:59:08 File: MFF01123.PAR

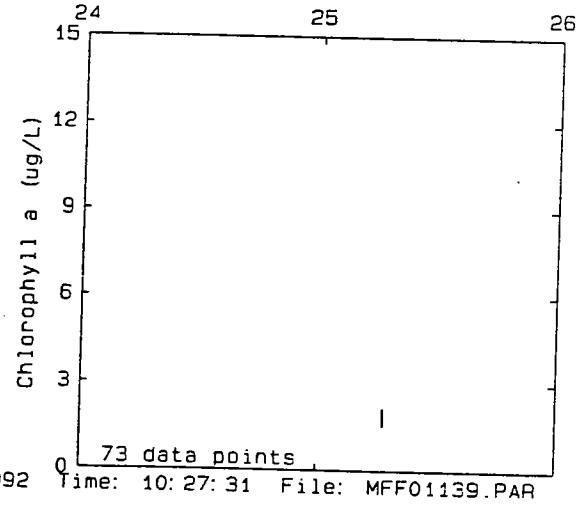




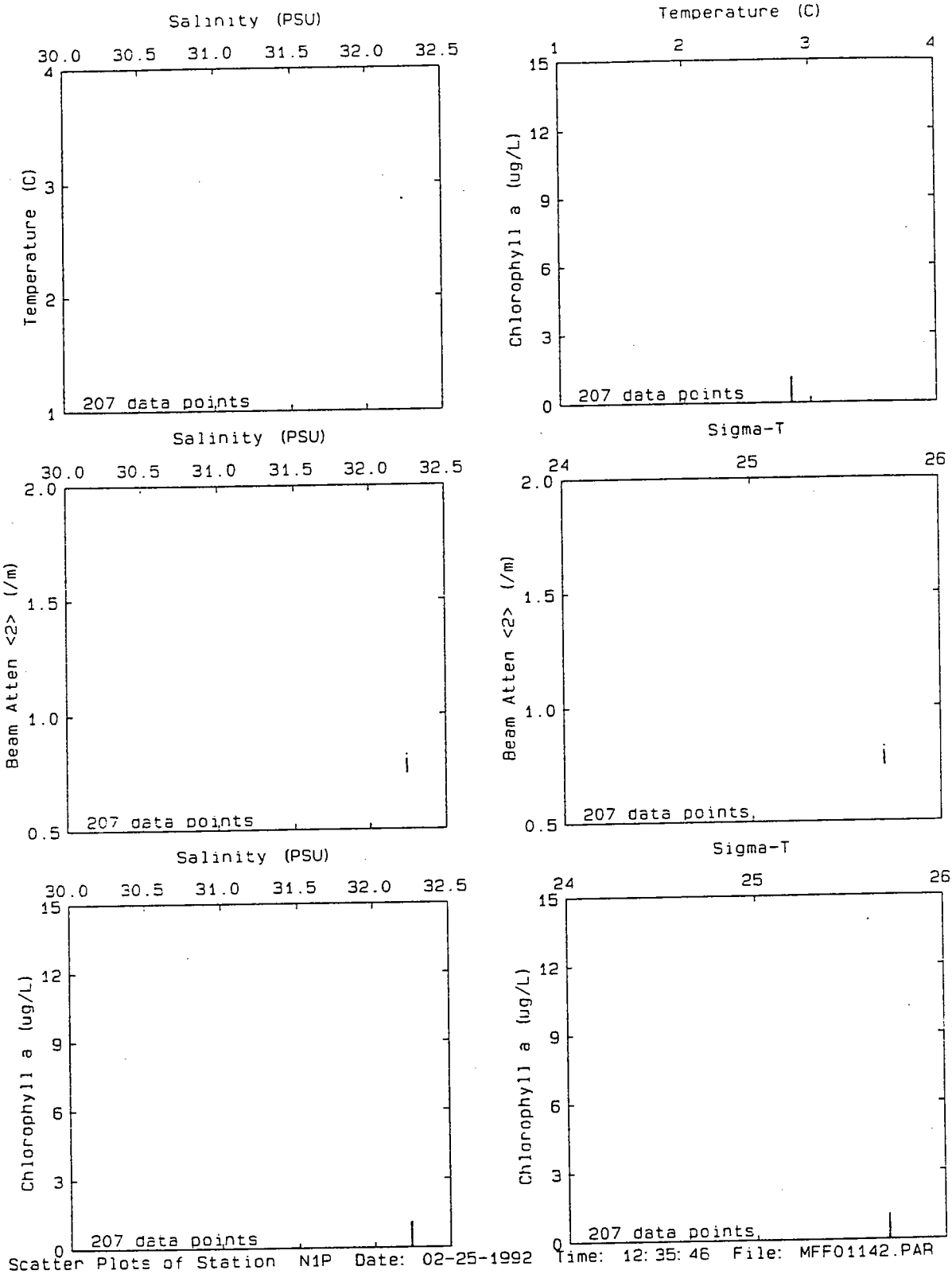


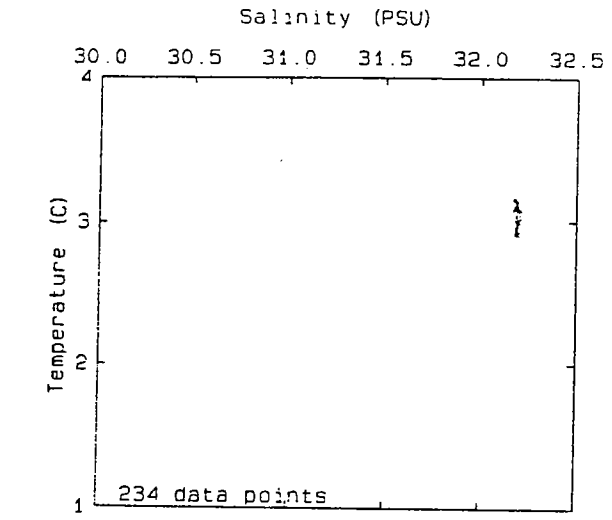


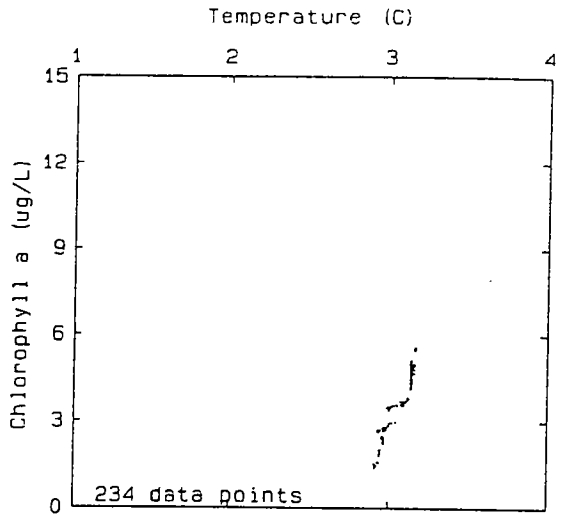


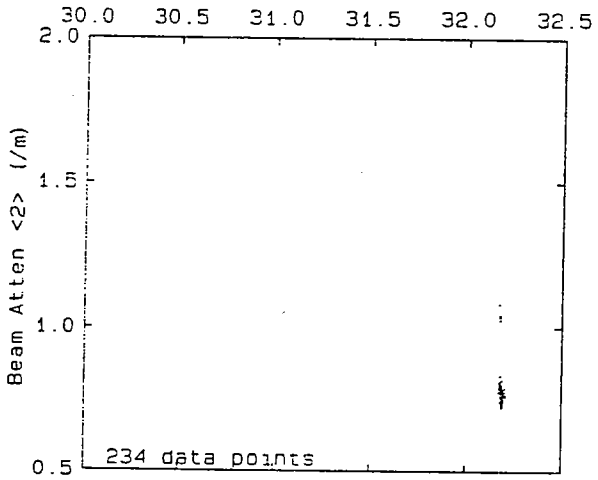


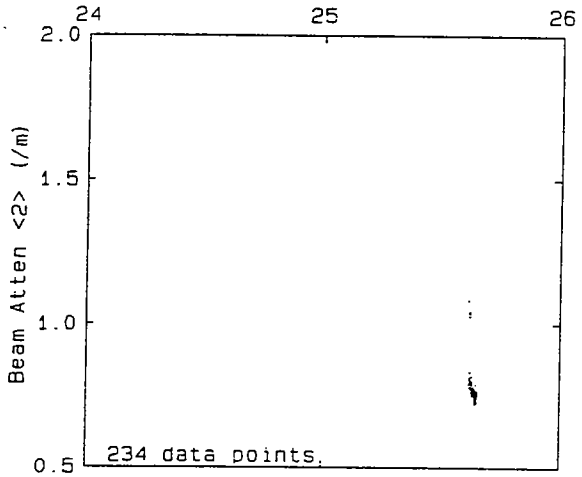
Scatter Plots of Station F25 Date: 02-25-1992 Time: 10:27:31 File: MFF01139.PAR

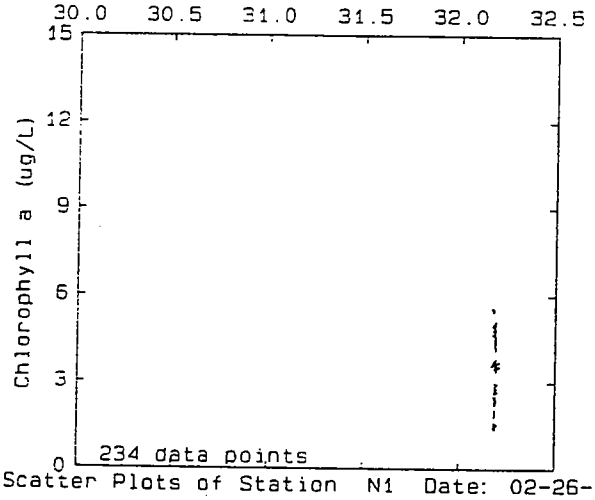

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
207 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
207 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
207 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
207 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
207 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
207 data points,
Scatter Plots of Station N1P Date: 02-25-1992
Time: 12:35:46 File: MFF01142.PAR

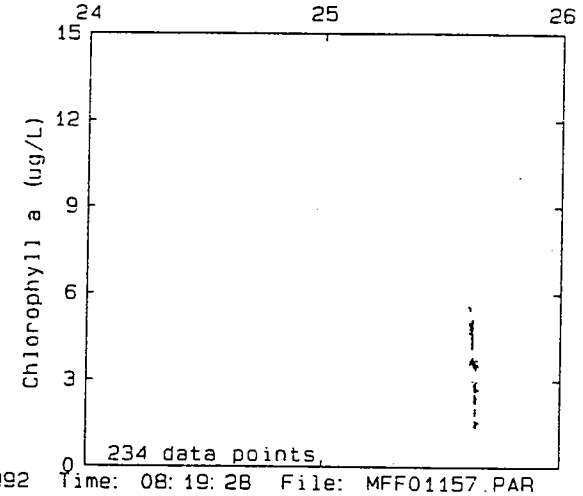




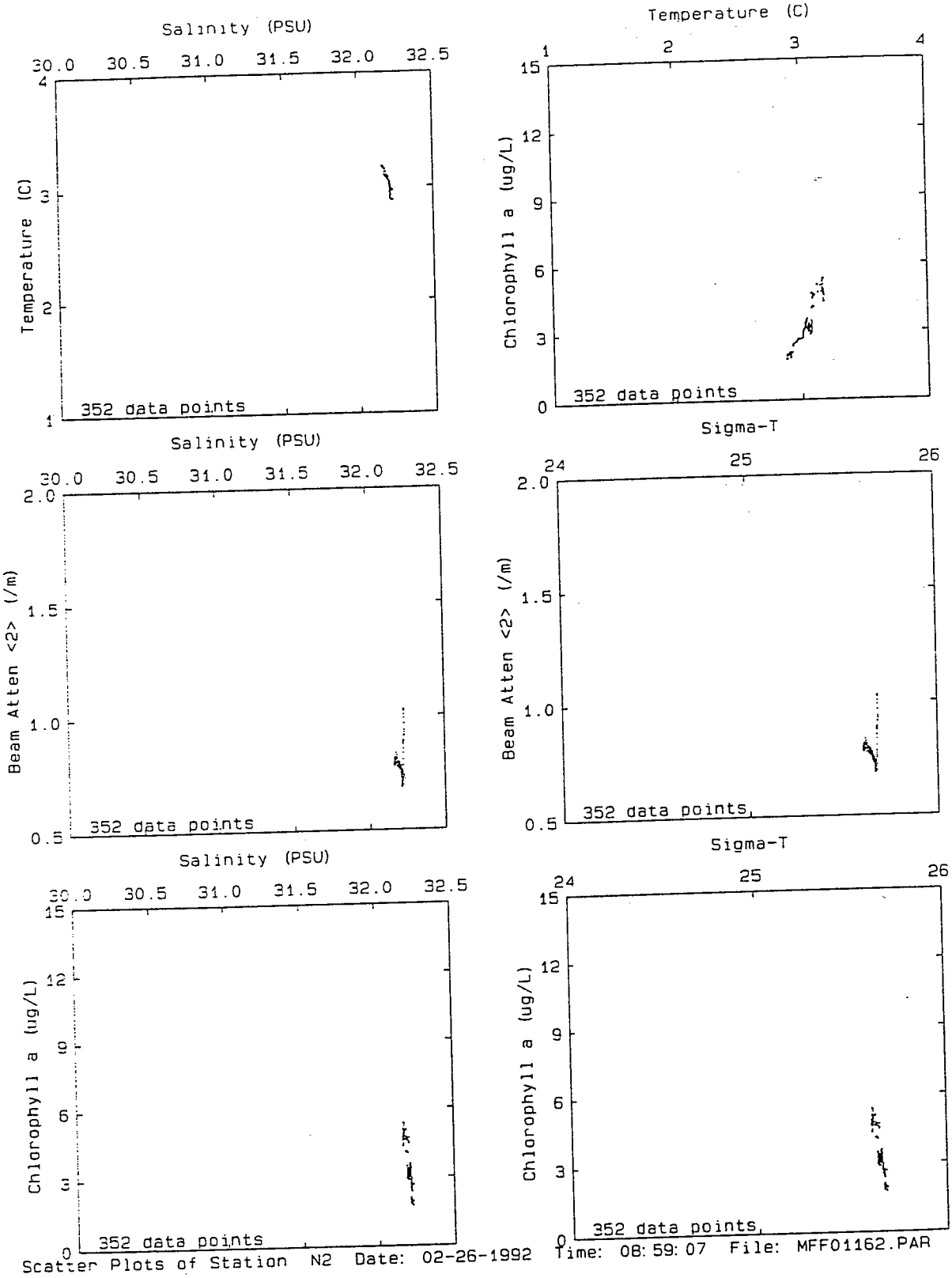


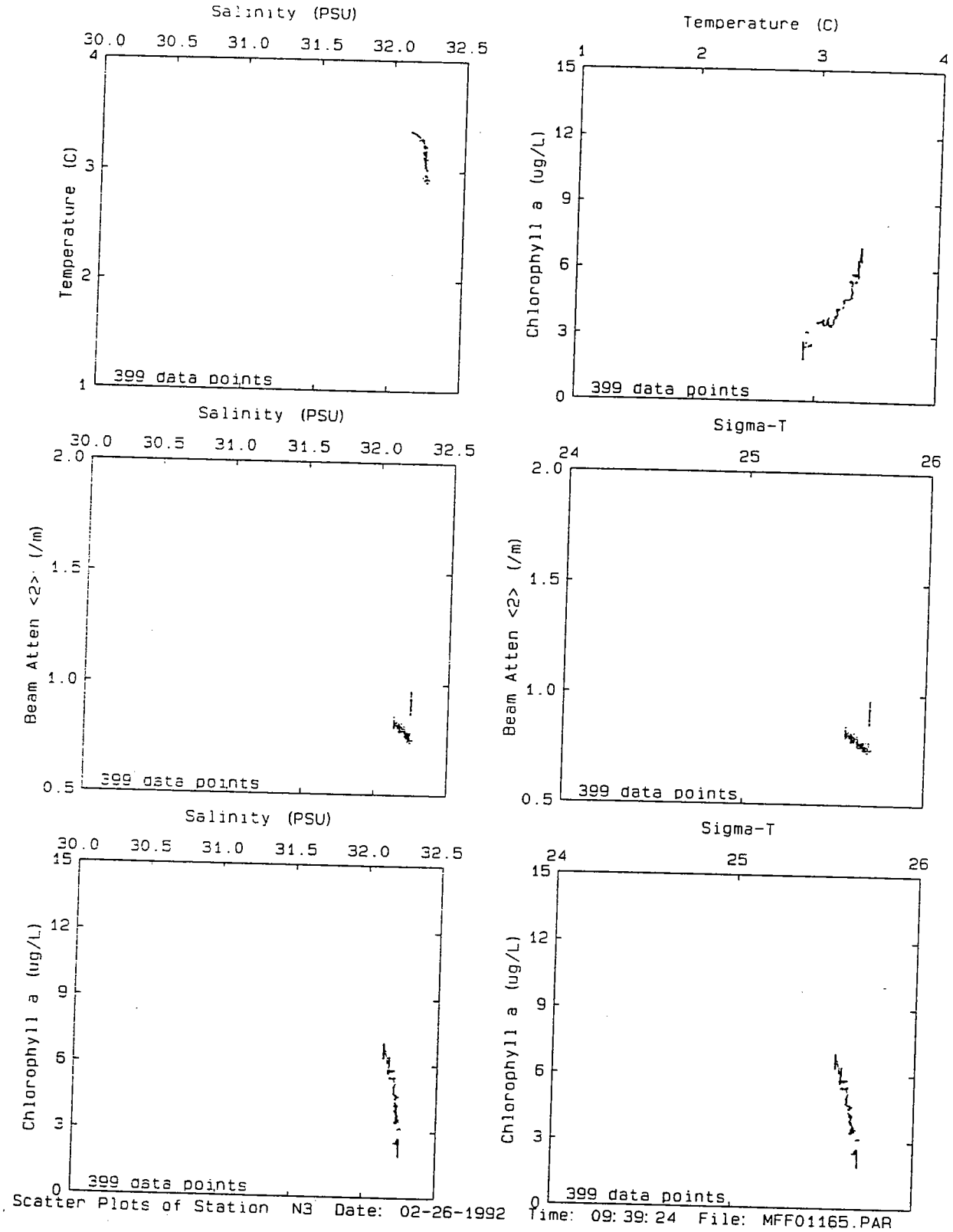


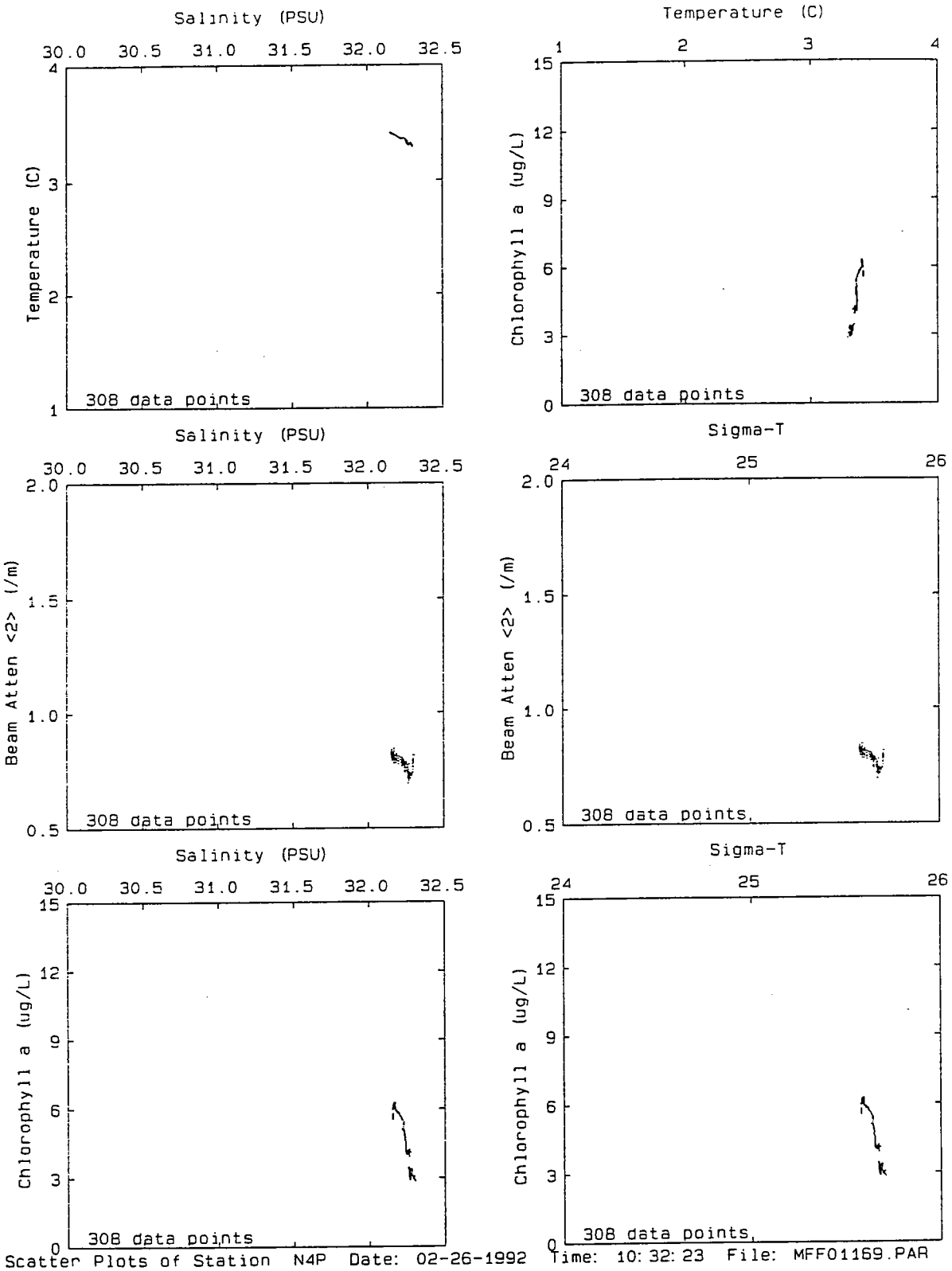


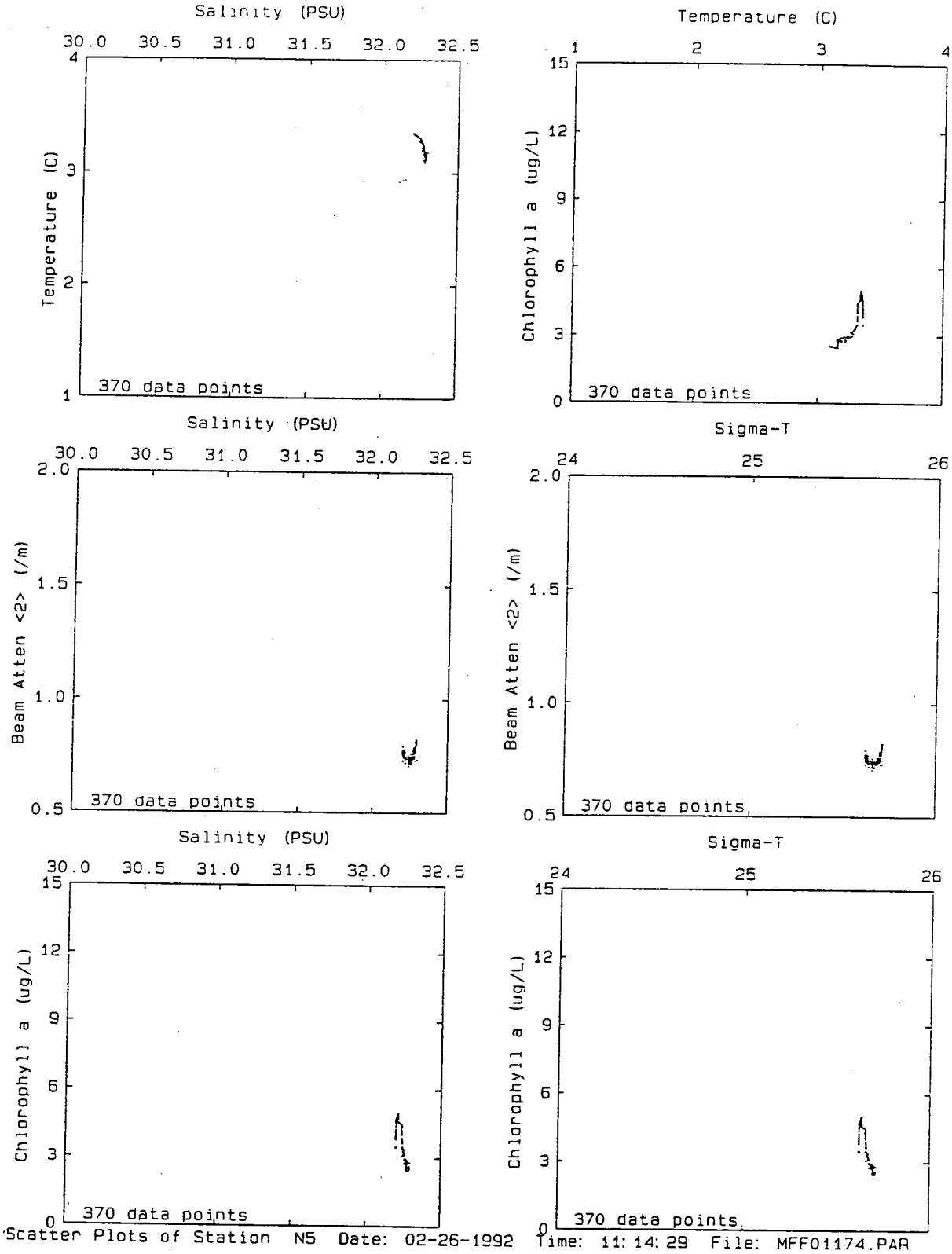


Scatter Plots of Station N1 Date: 02-26-1992 Time: 08:19:28 File: MFF01157.PAR

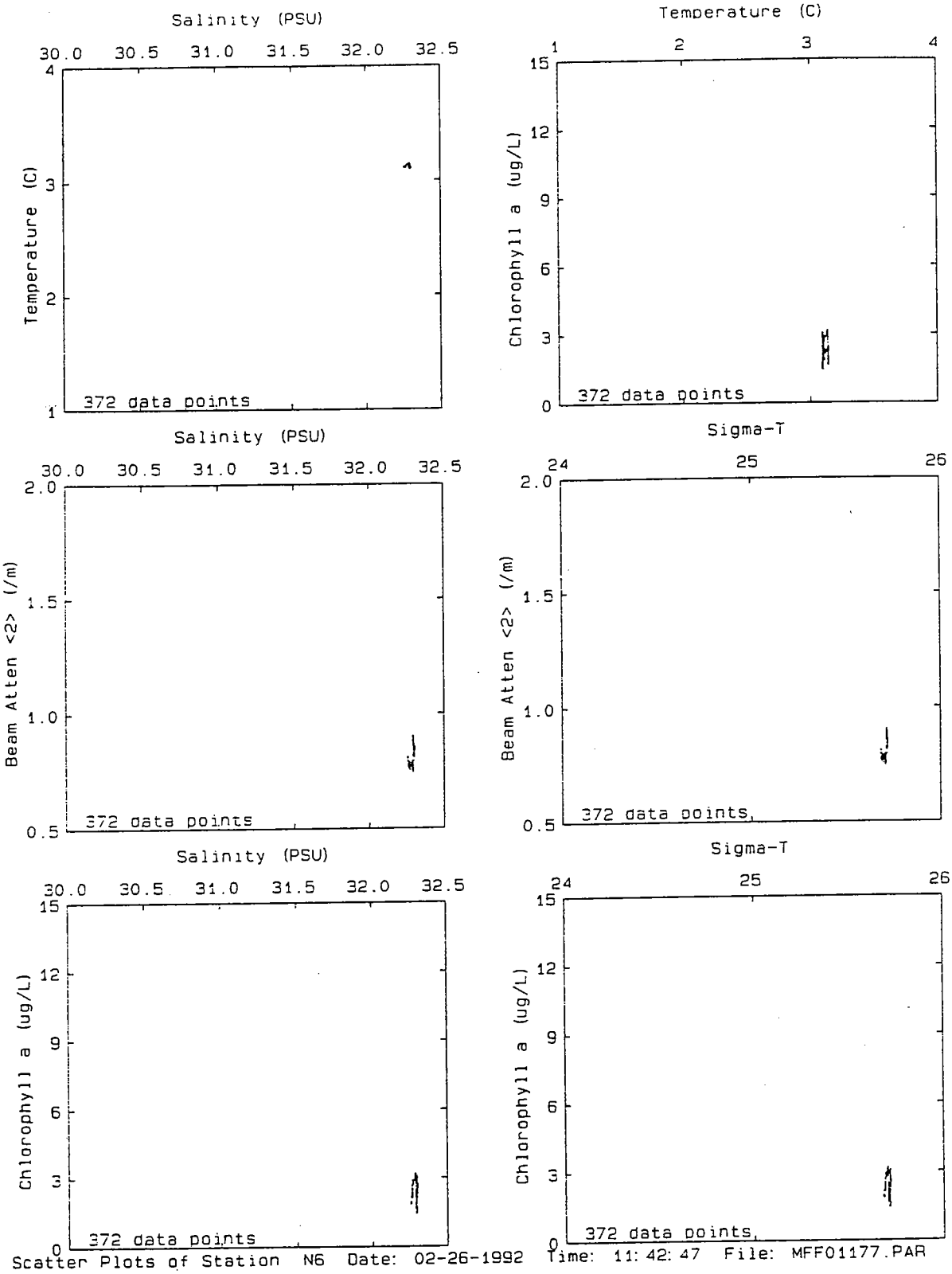

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
352 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
352 data points
Sigma-T
Salinity (PSU)
Beam Atten <2> (/m)
352 data points
Sigma-T
24 25 26
352 data points,
Salinity (PSU)
Chlorophyll a (ug/L)
352 data points
Sigma-T
352 data points,
Scatter Plots of Station N2 Date: 02-26-1992 Time: 08:59:07 File: MFF01162.PAR

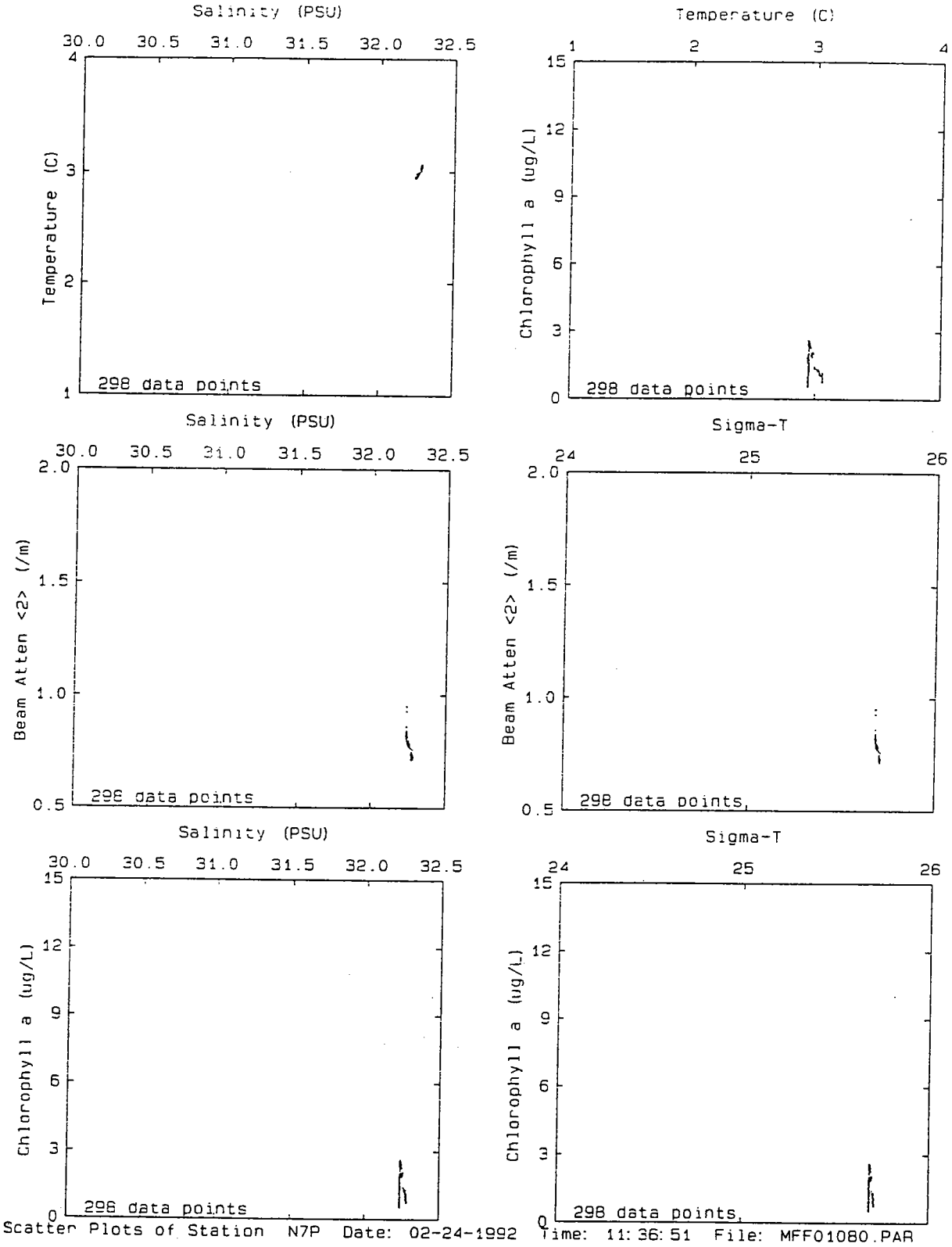

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4
3
2
1
399 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15
12
9
6
3
0
399 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0
1.5
1.0
0.5
399 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0
1.5
1.0
0.5
399 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15
12
9
6
3
0
399 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15
12
9
6
3
0
399 data points
Scatter Plots of Station N3 Date: 02-26-1992 Time: 09:39:24 File: MFF01165.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
308 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
308 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
308 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
308 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
308 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
308 data points,
Scatter Plots of Station N4P Date: 02-26-1992
Time: 10:32:23 File: MFF01169.PAR

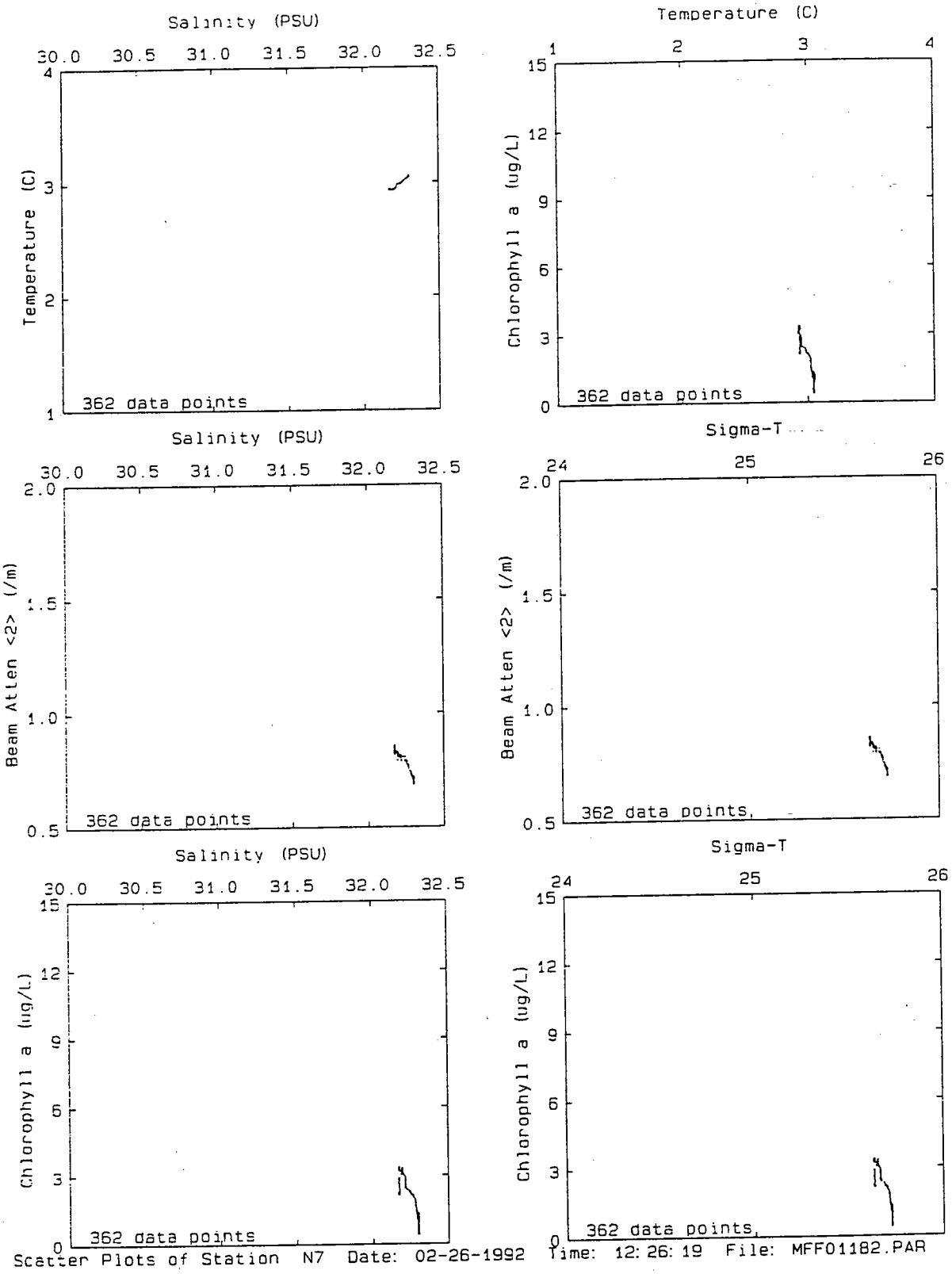


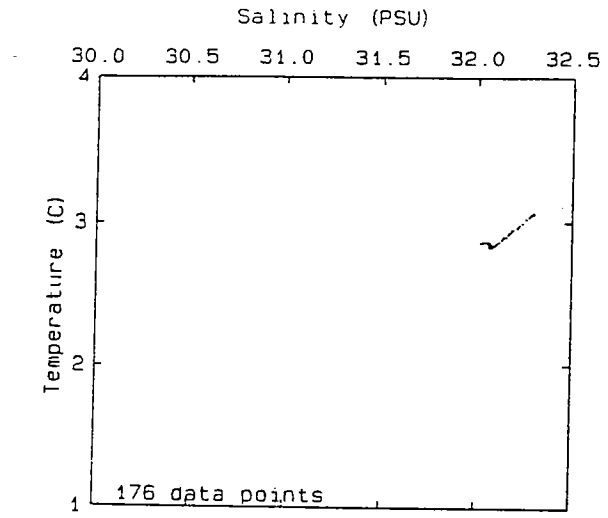
Scatter Plots of Station N5 Date: 02-26-1992 Time: 11:14:29 File: MFF01174.PAR

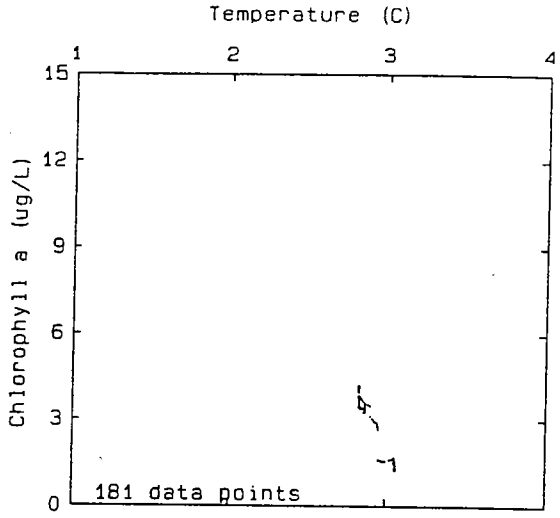

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
372 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
372 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
372 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
372 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
372 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
372 data points,
Scatter Plots of Station N6 Date: 02-26-1992 Time: 11:42:47 File: MFF01177.PAR

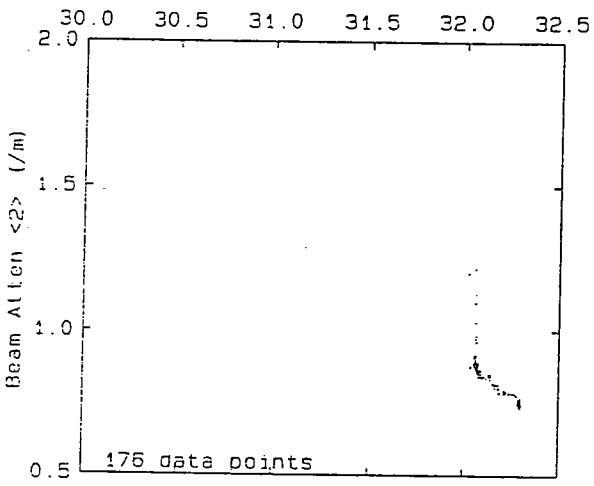


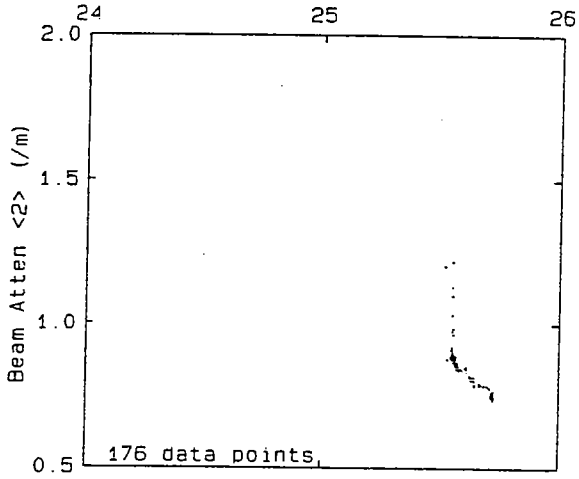
Scatter Plots of Station N7P Date: 02-24-1992 Time: 11:36:51 File: MFF01080.PAR

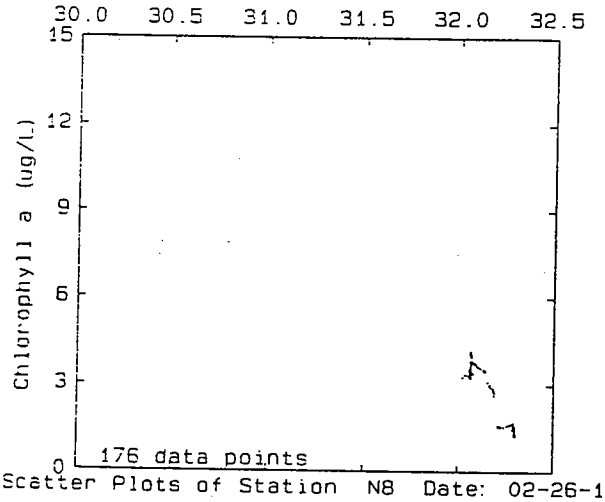

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
362 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
362 data points
Salinity (PSU)
Beam Atten <2> (/m)
362 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
362 data points,
Salinity (PSU)
Chlorophyll a (ug/L)
362 data points
Sigma-T
Chlorophyll a (ug/L)
362 data points,
Scatter Plots of Station N7 Date: 02-26-1992
Time: 12:26:19 File: MFF01182.PAR

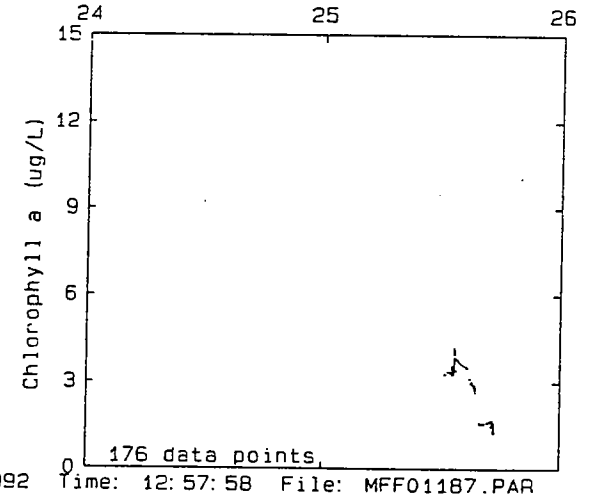




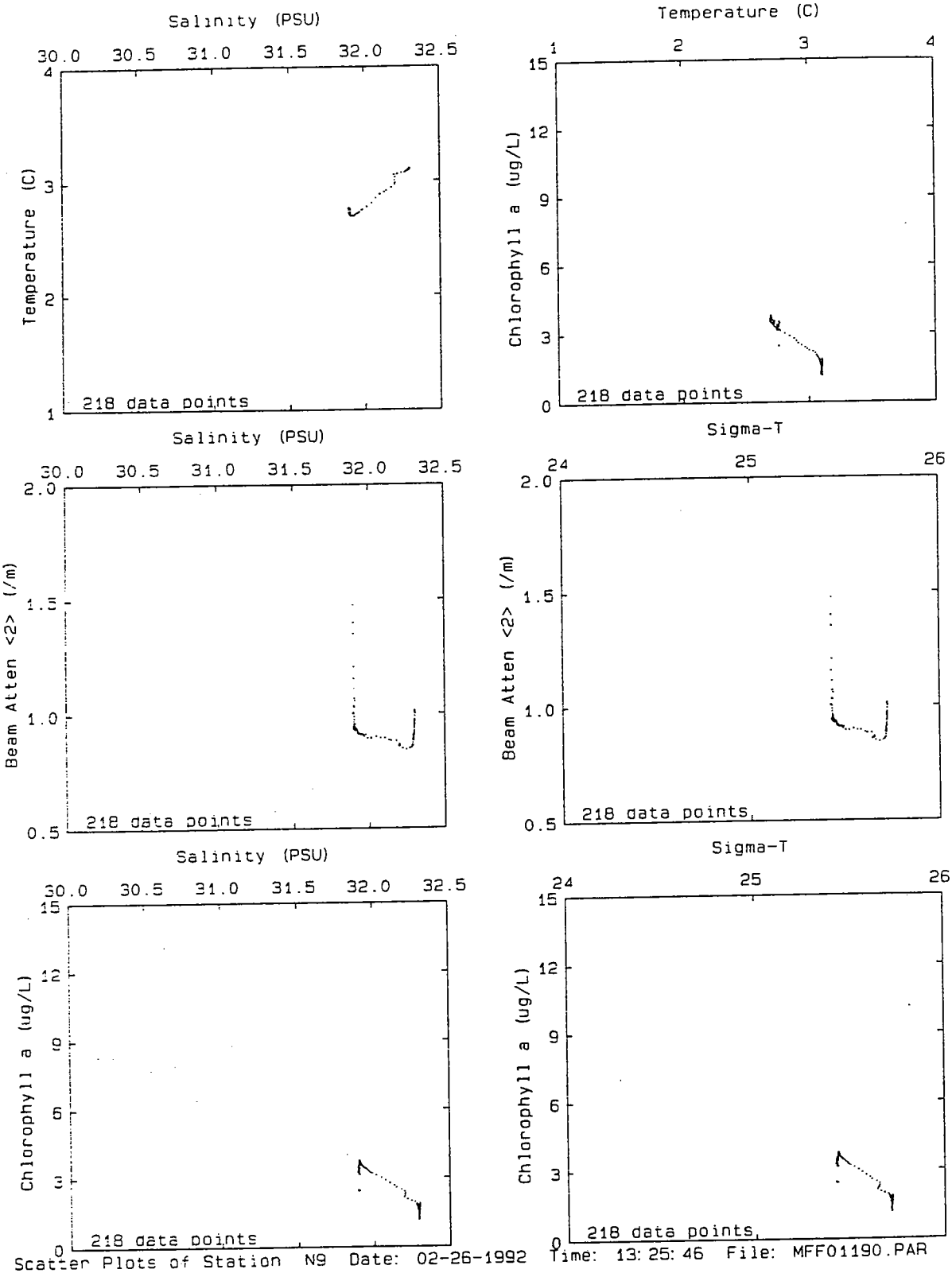


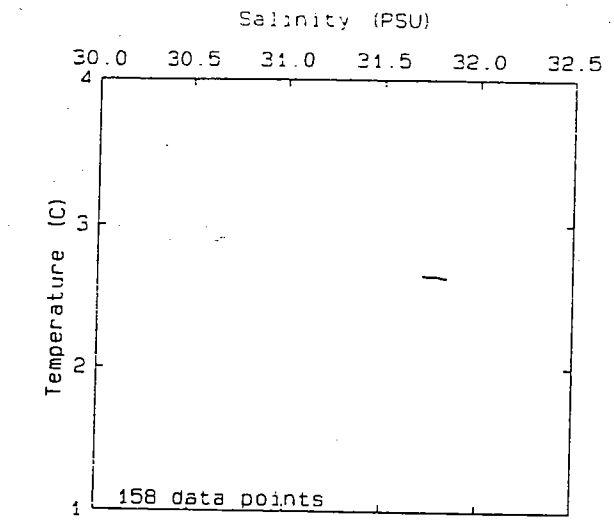


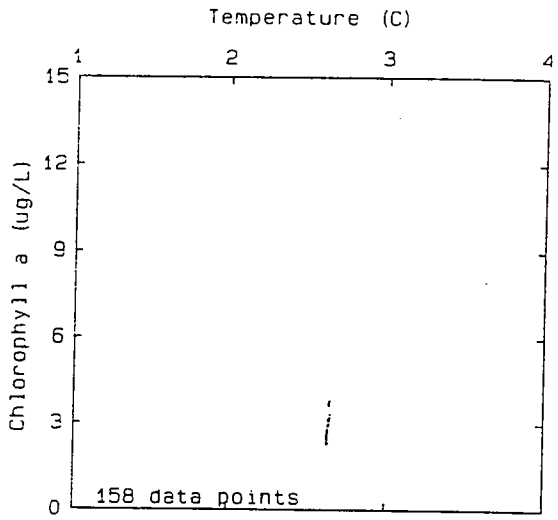


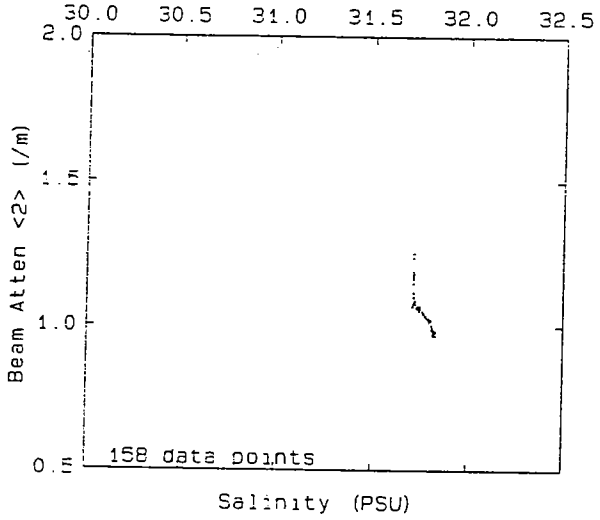


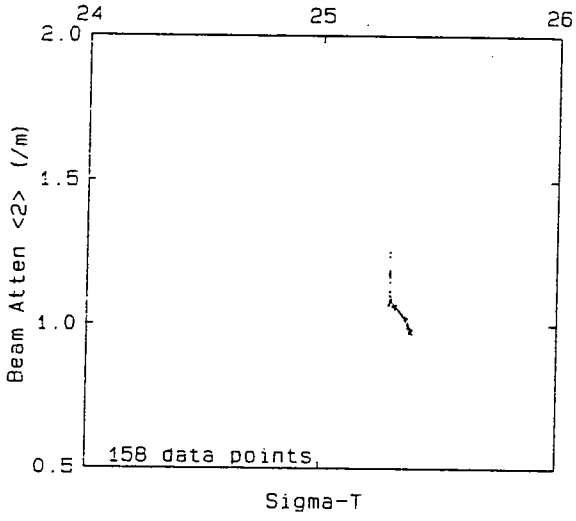
Scatter Plots of Station N8 Date: 02-26-1992 Time: 12:57:58 File: MFF01187.PAR

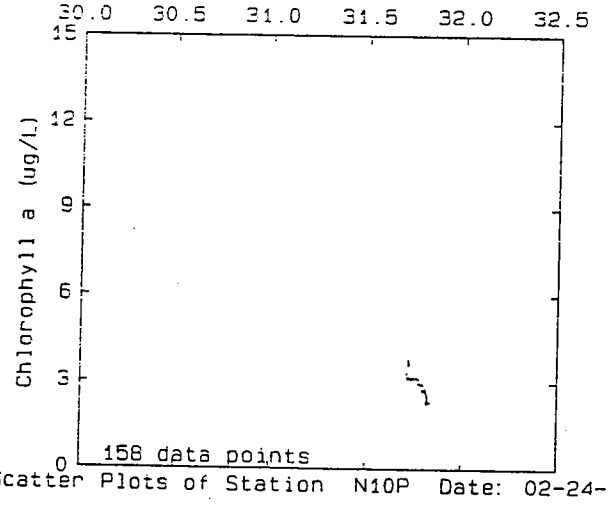

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
218 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
218 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
218 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
218 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
218 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
218 data points,
Scatter Plots of Station N9 Date: 02-26-1992
Time: 13:25:46 File: MFF01190.PAR

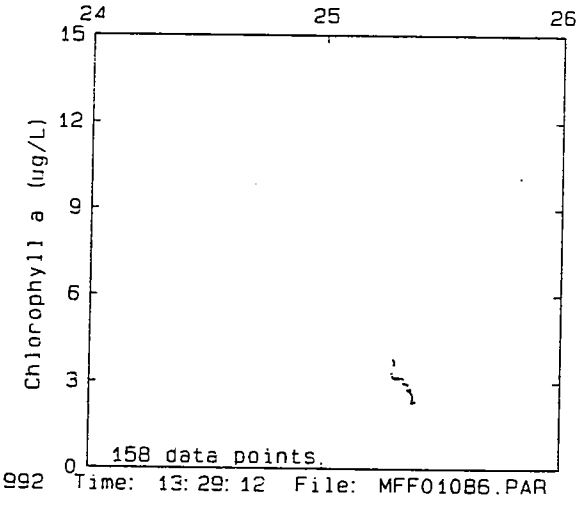




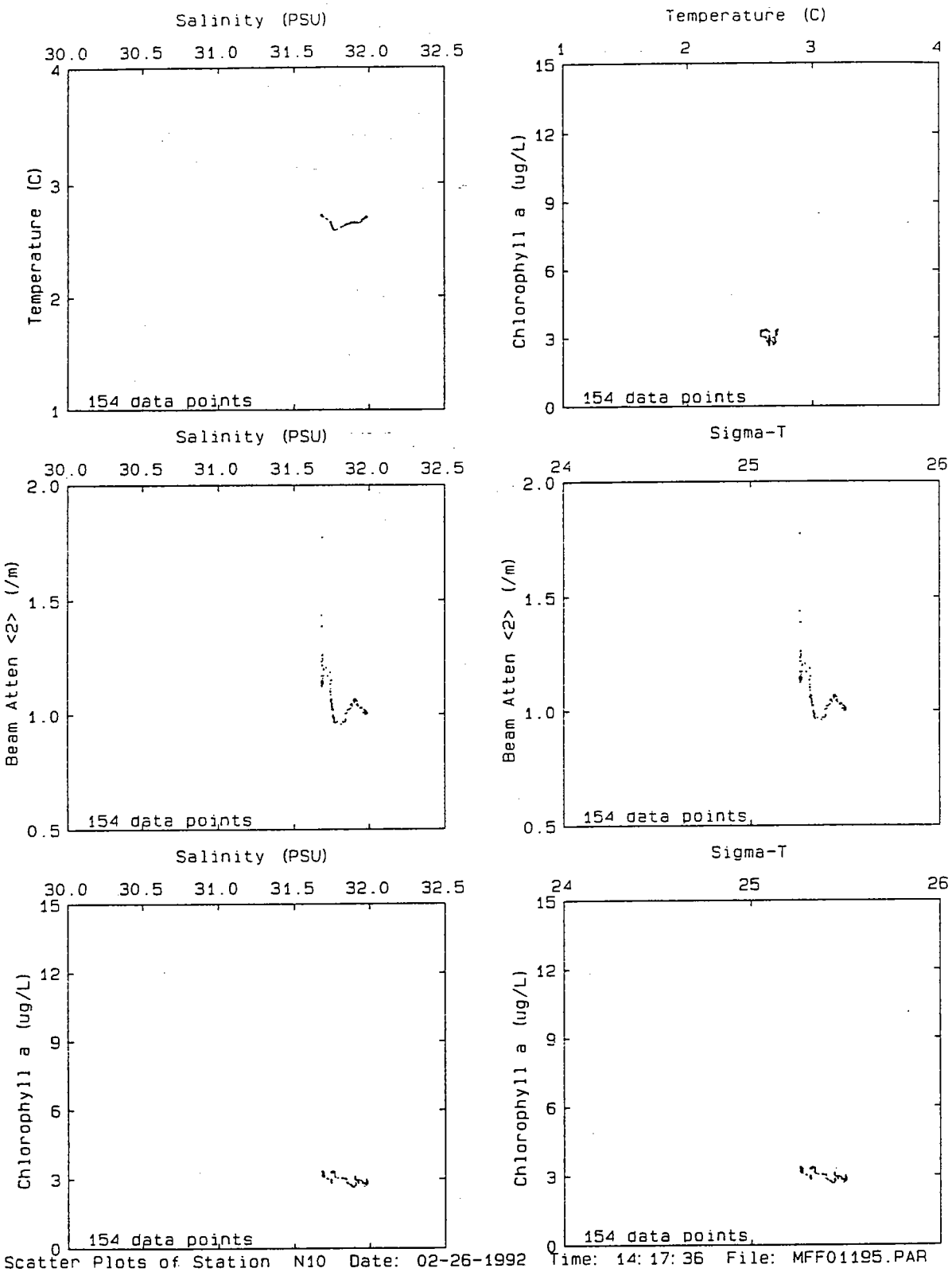


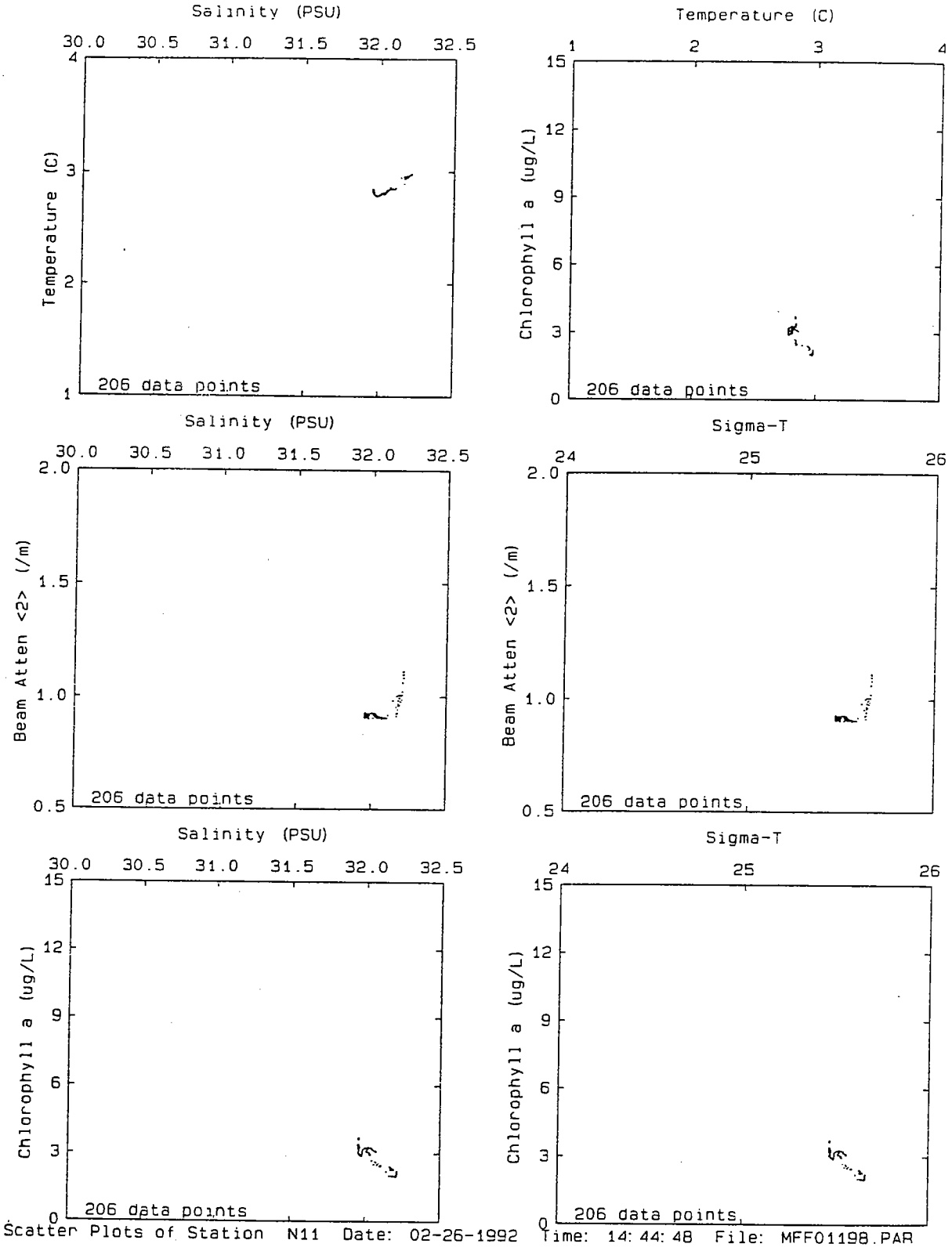




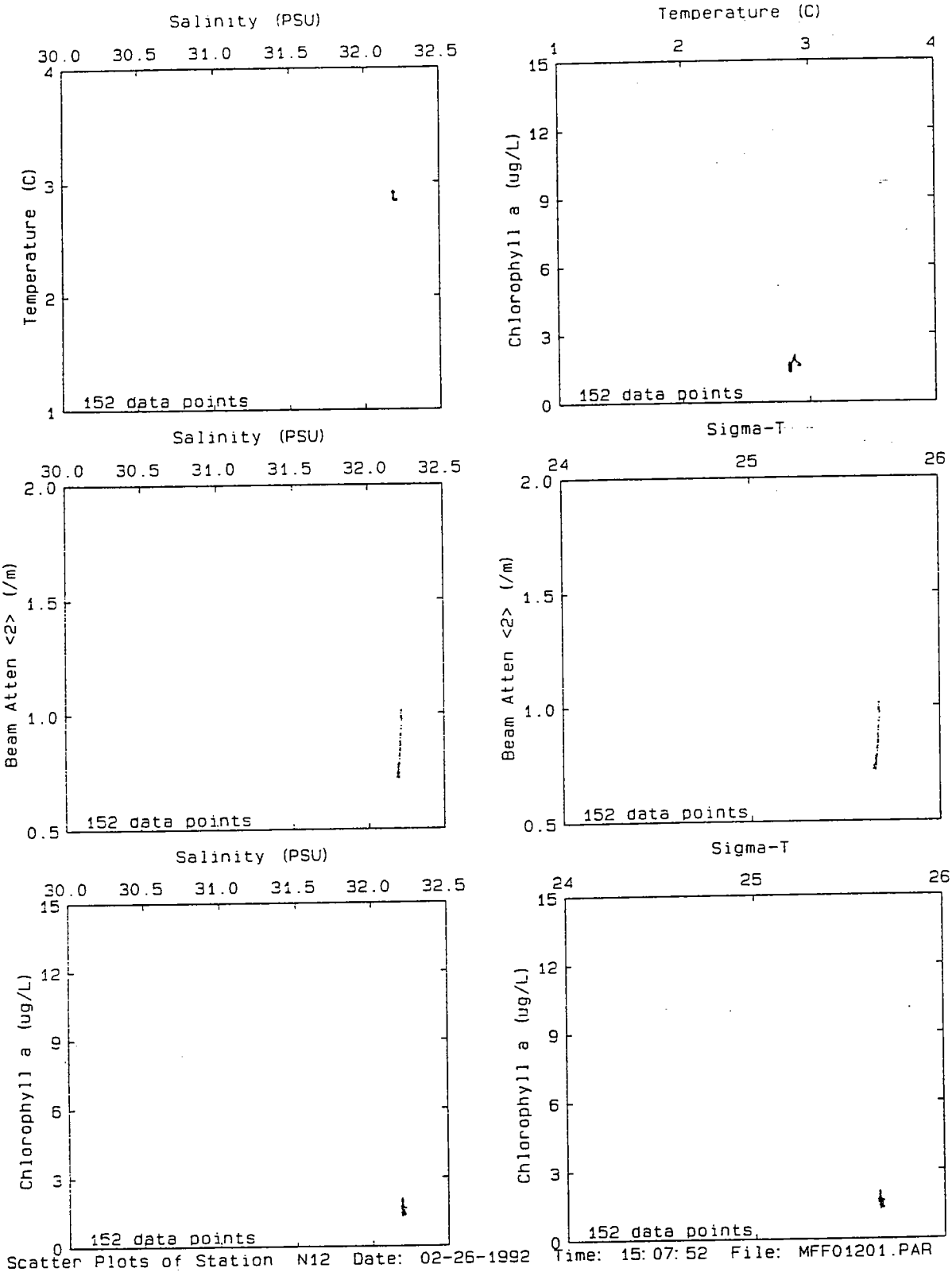


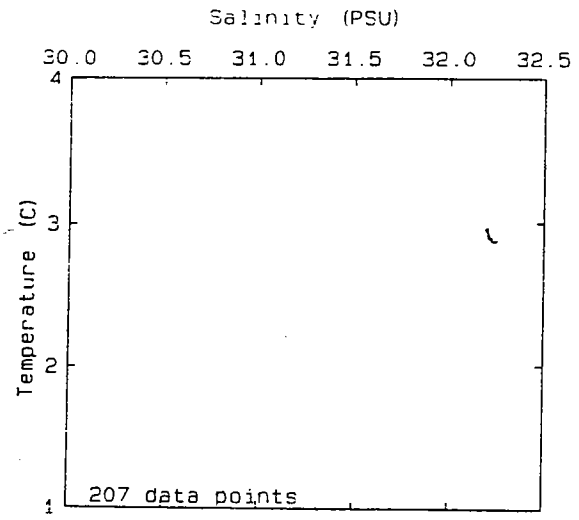
Scatter Plots of Station N10P Date: 02-24-1992 Time: 13:29:12 File: MFF01086.PAR

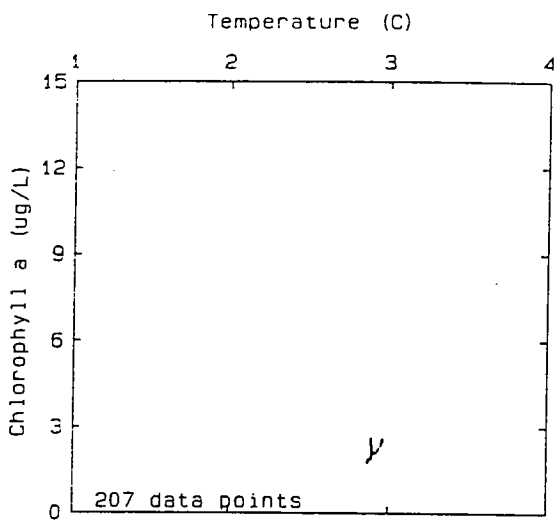

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
Temperature (C)
Chlorophyll a (ug/L)
154 data points
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
Salinity (PSU)
Sigma-T
Chlorophyll a (ug/L)
Scatter Plots of Station N10 Date: 02-26-1992 Time: 14:17:36 File: MFF01195.PAR

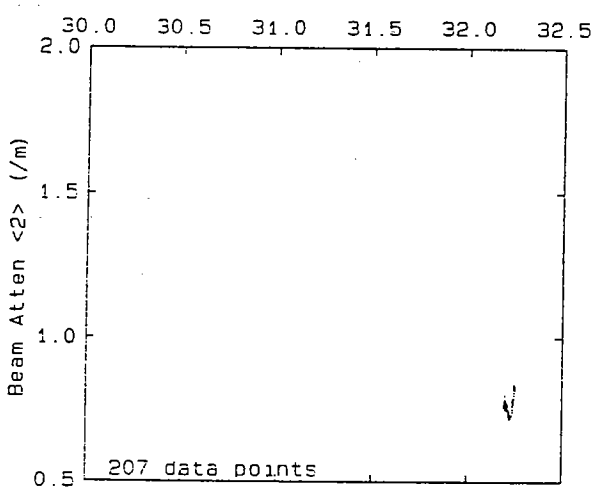


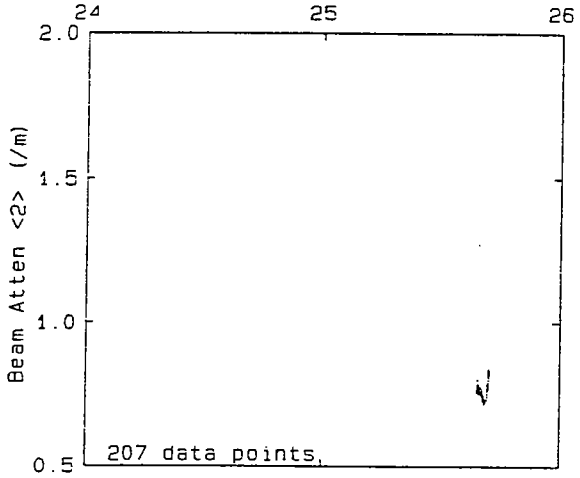
Scatter Plots of Station N11 Date: 02-26-1992 Time: 14:44:48 File: MFF01198.PAR

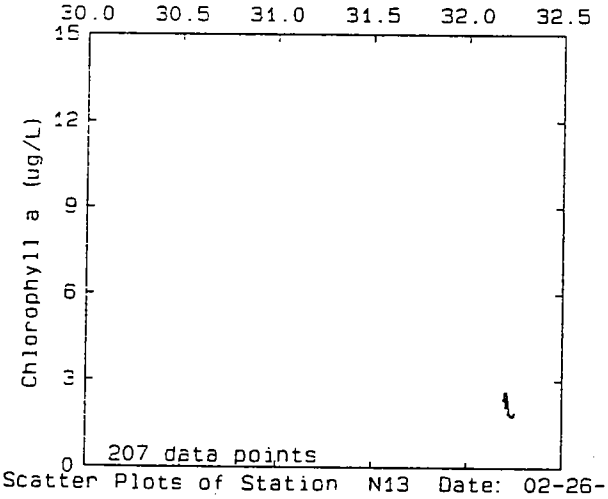

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
152 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
152 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
152 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
152 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
152 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
152 data points
Scatter Plots of Station N12 Date: 02-26-1992
Time: 15:07:52 File: MFF01201.PAR

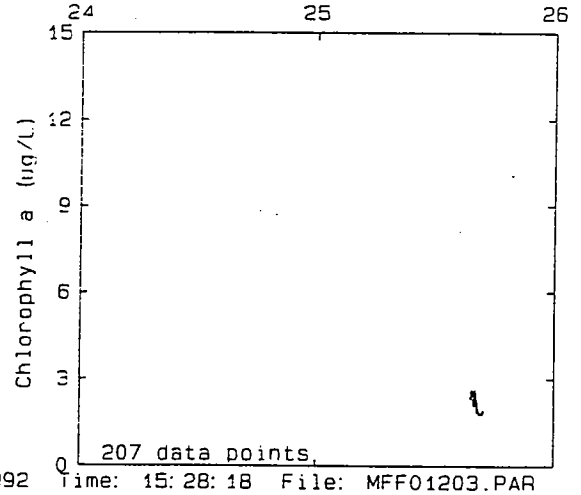




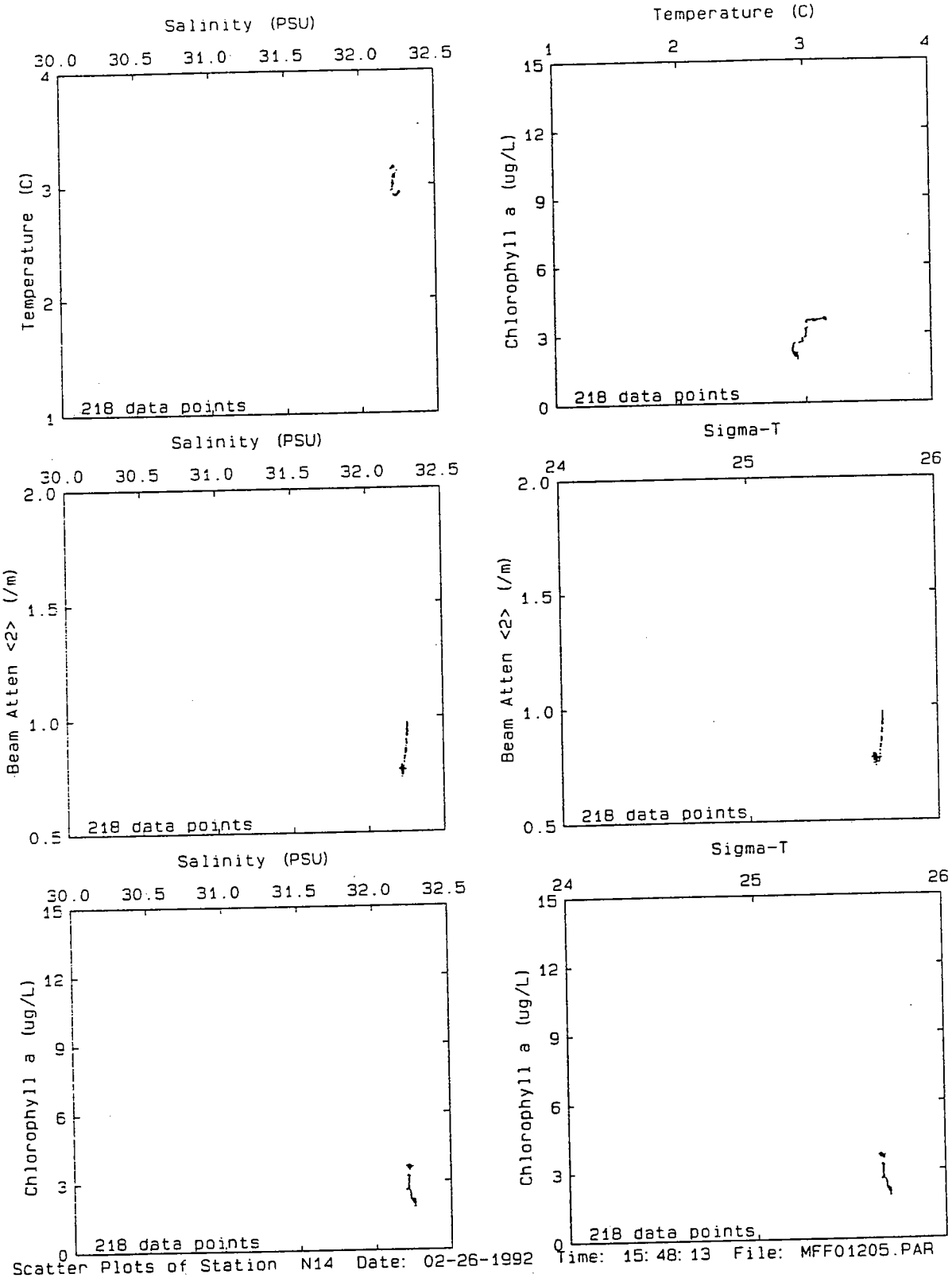


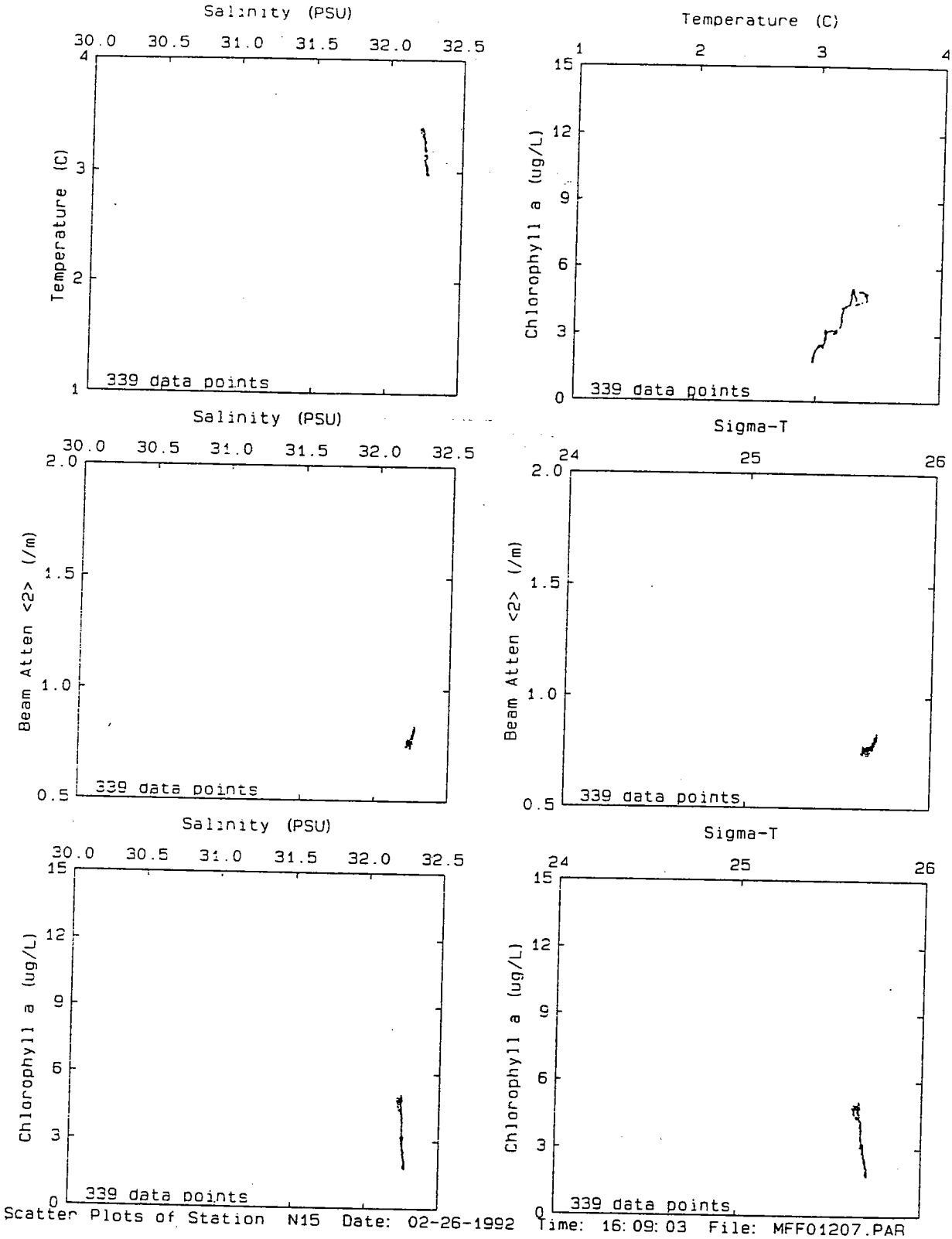




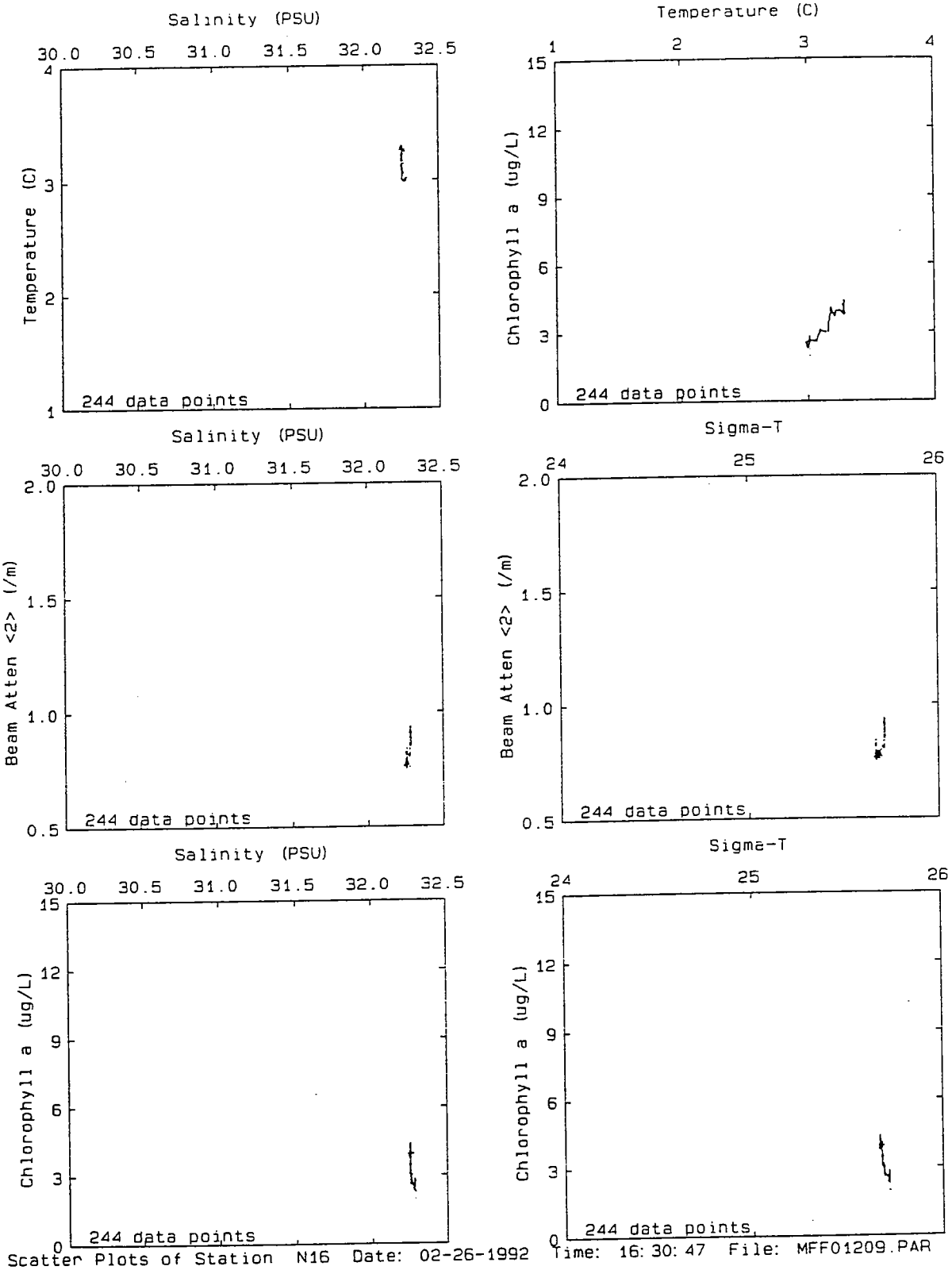


Scatter Plots of Station N13 Date: 02-26-1992 Time: 15:28:18 File: MFF01203.PAR

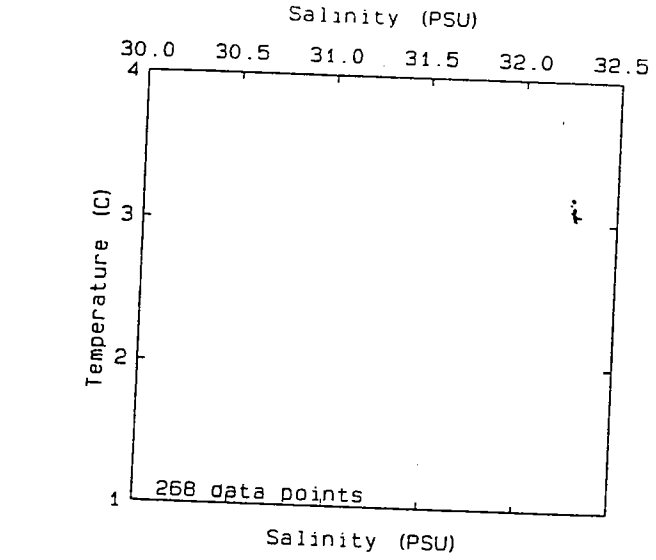

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
218 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
218 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
218 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
218 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
218 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
218 data points
Scatter Plots of Station N14 Date: 02-26-1992
Time: 15:48:13 File: MFF01205.PAR

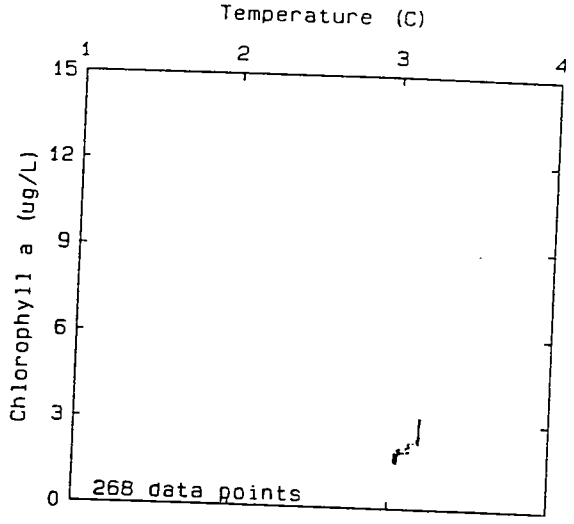


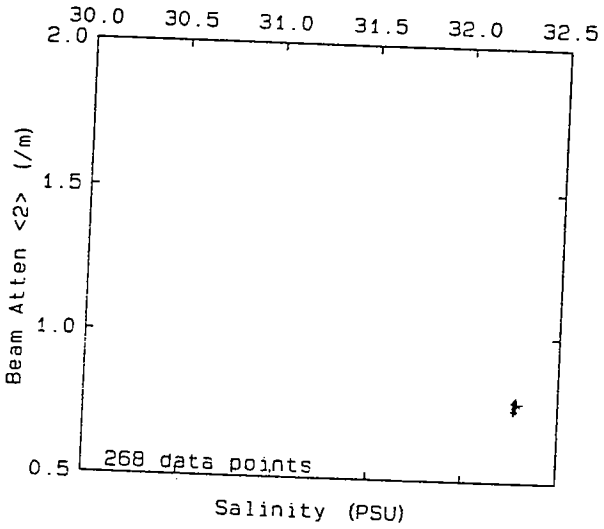
Scatter Plots of Station N15 Date: 02-26-1992 Time: 16:09:03 File: MFF01207.PAR

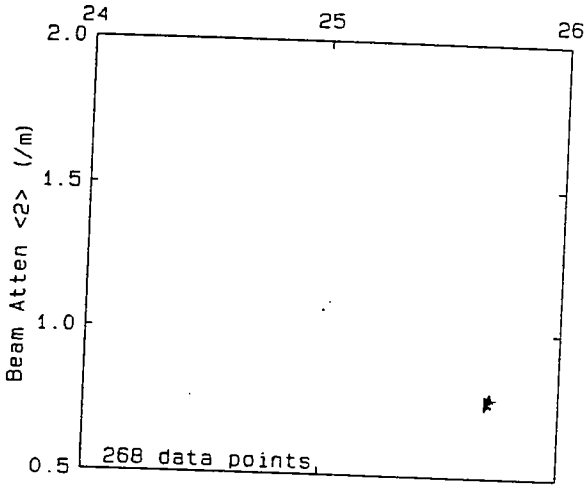


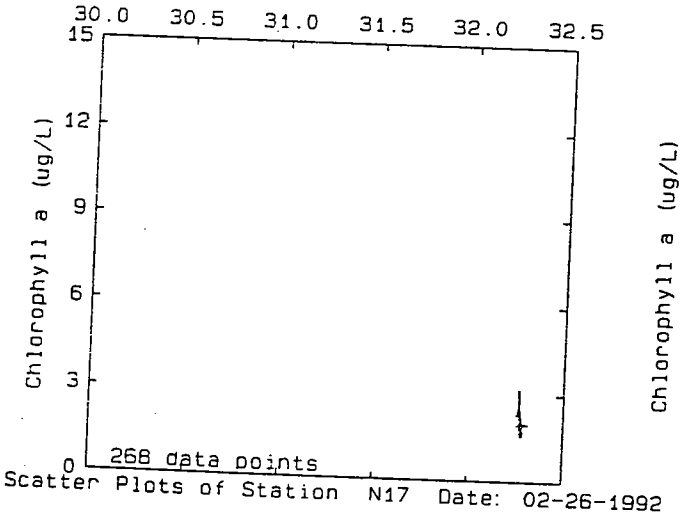
Scatter Plots of Station N16 Date: 02-26-1992 Time: 16:30:47 File: MFF01209.PAR

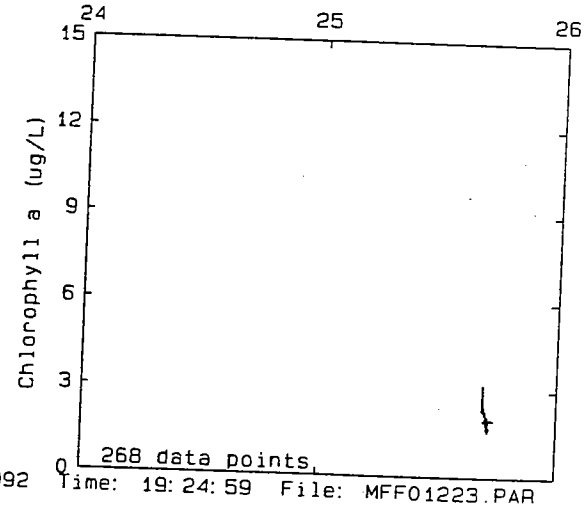






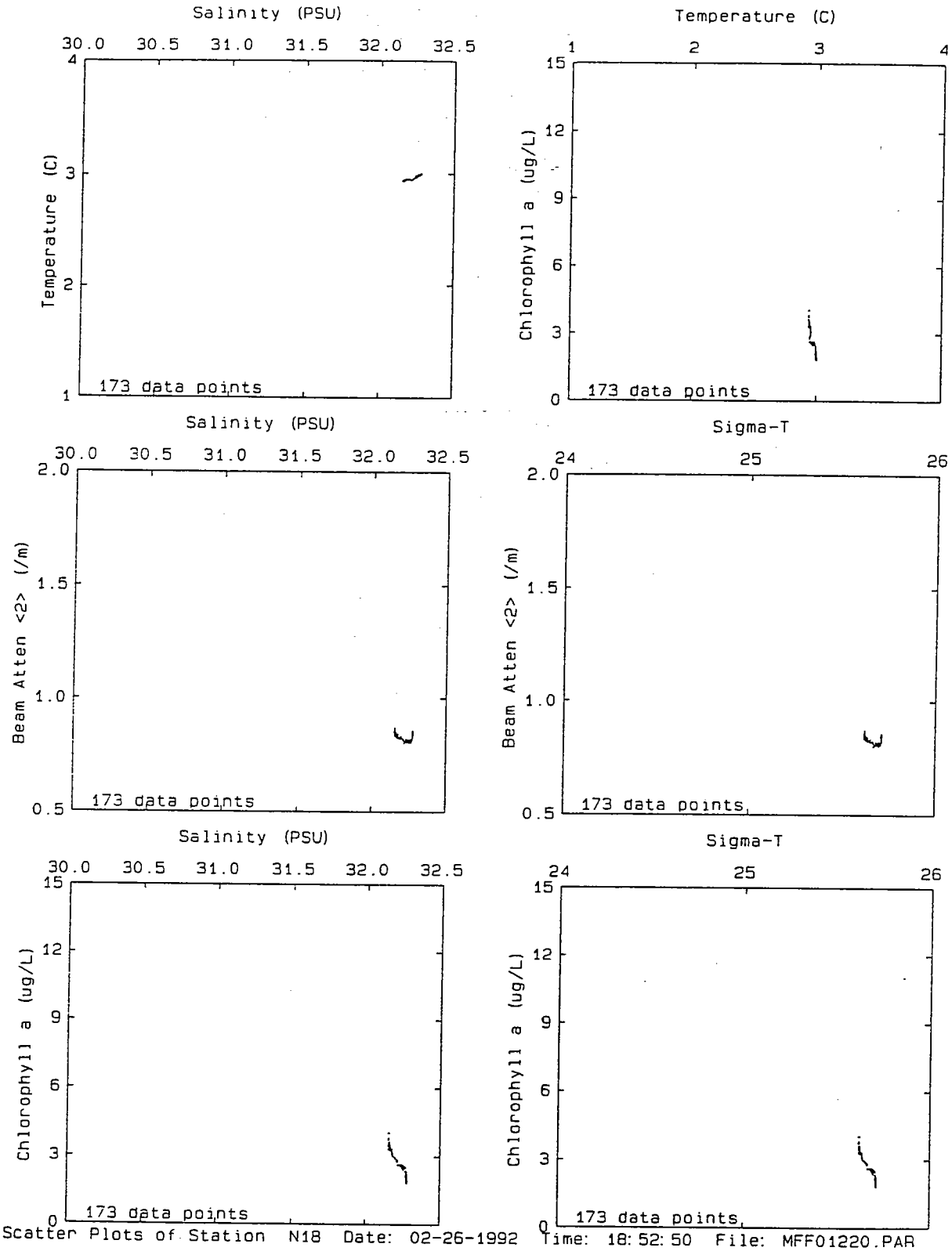


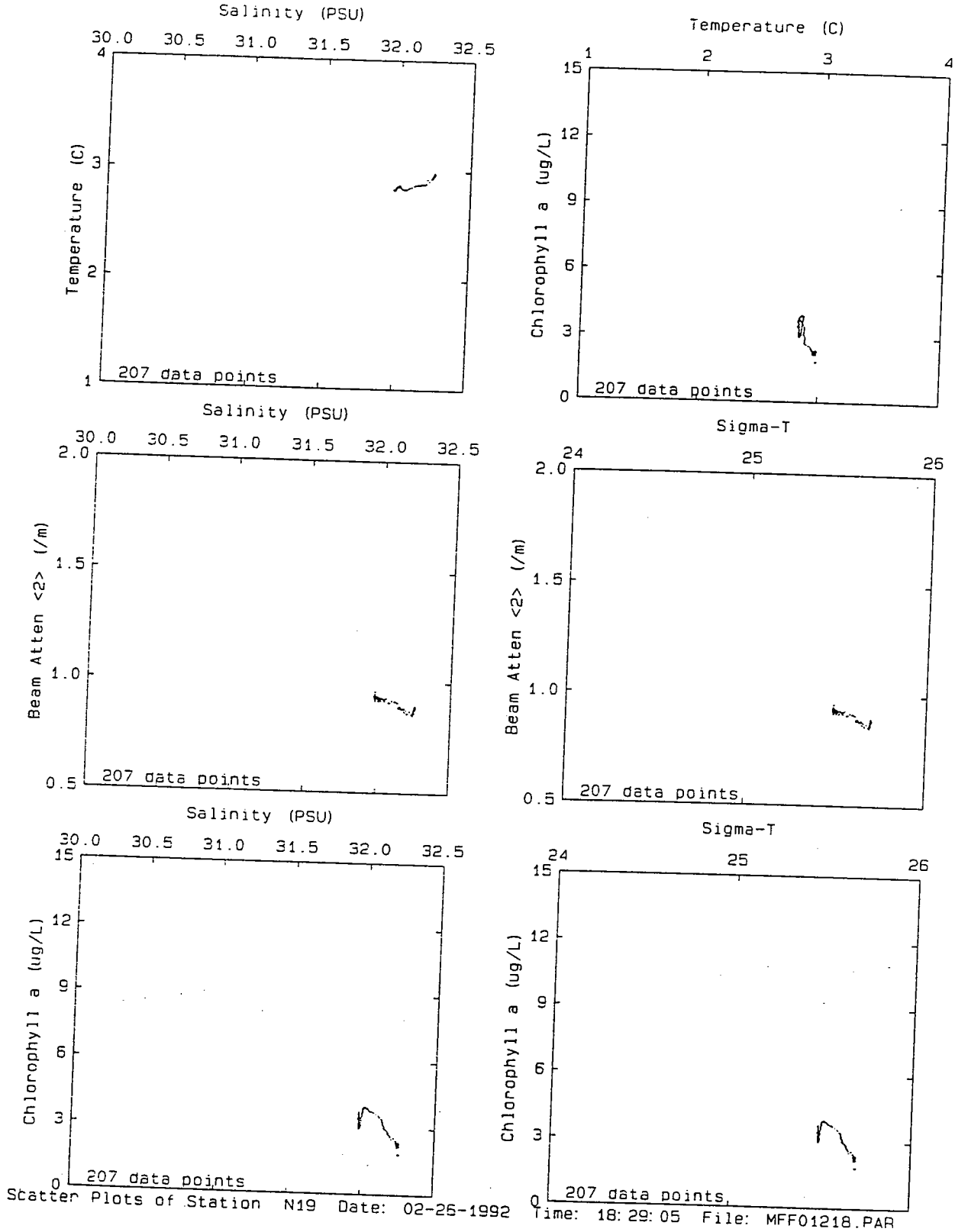


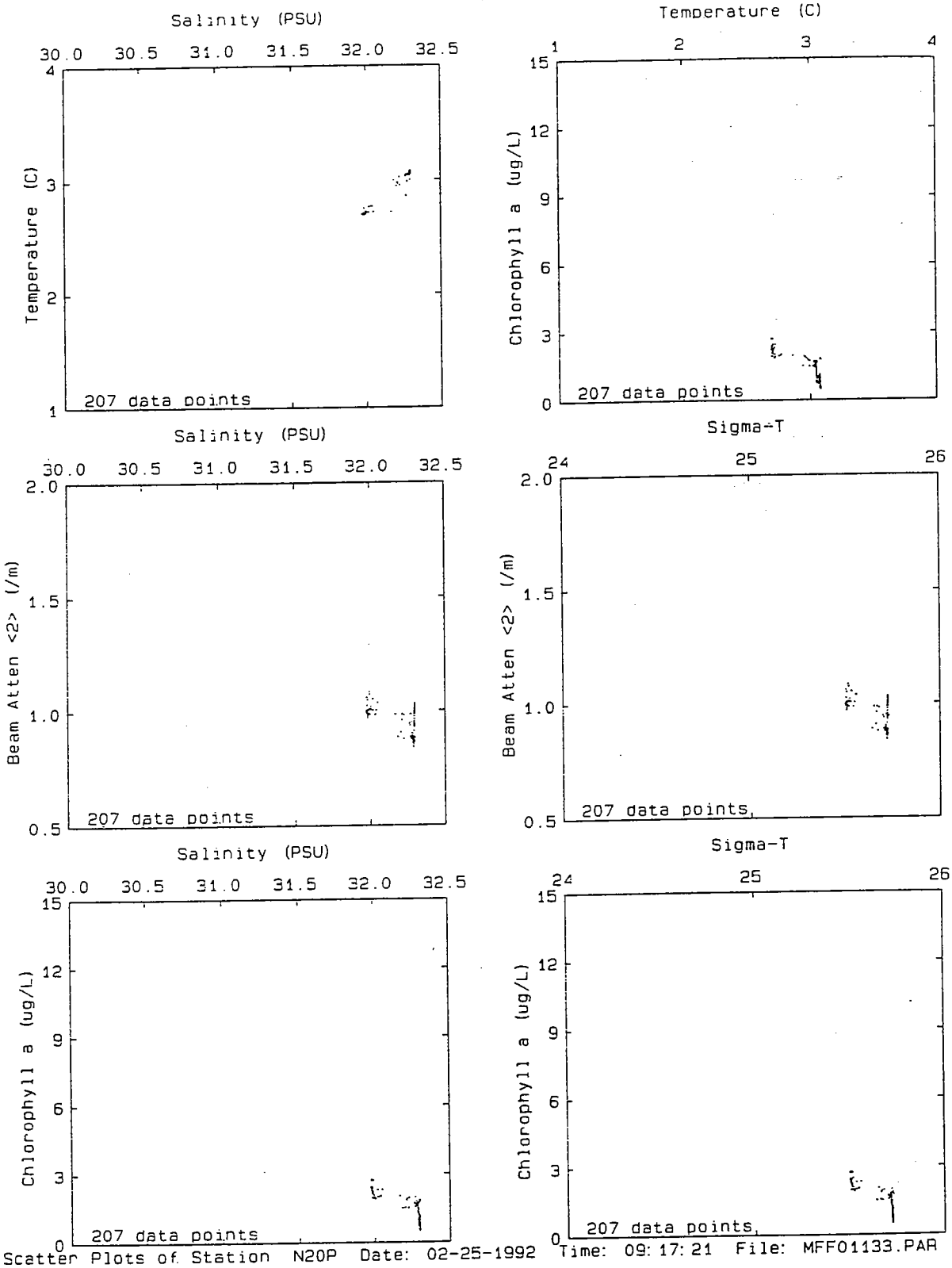


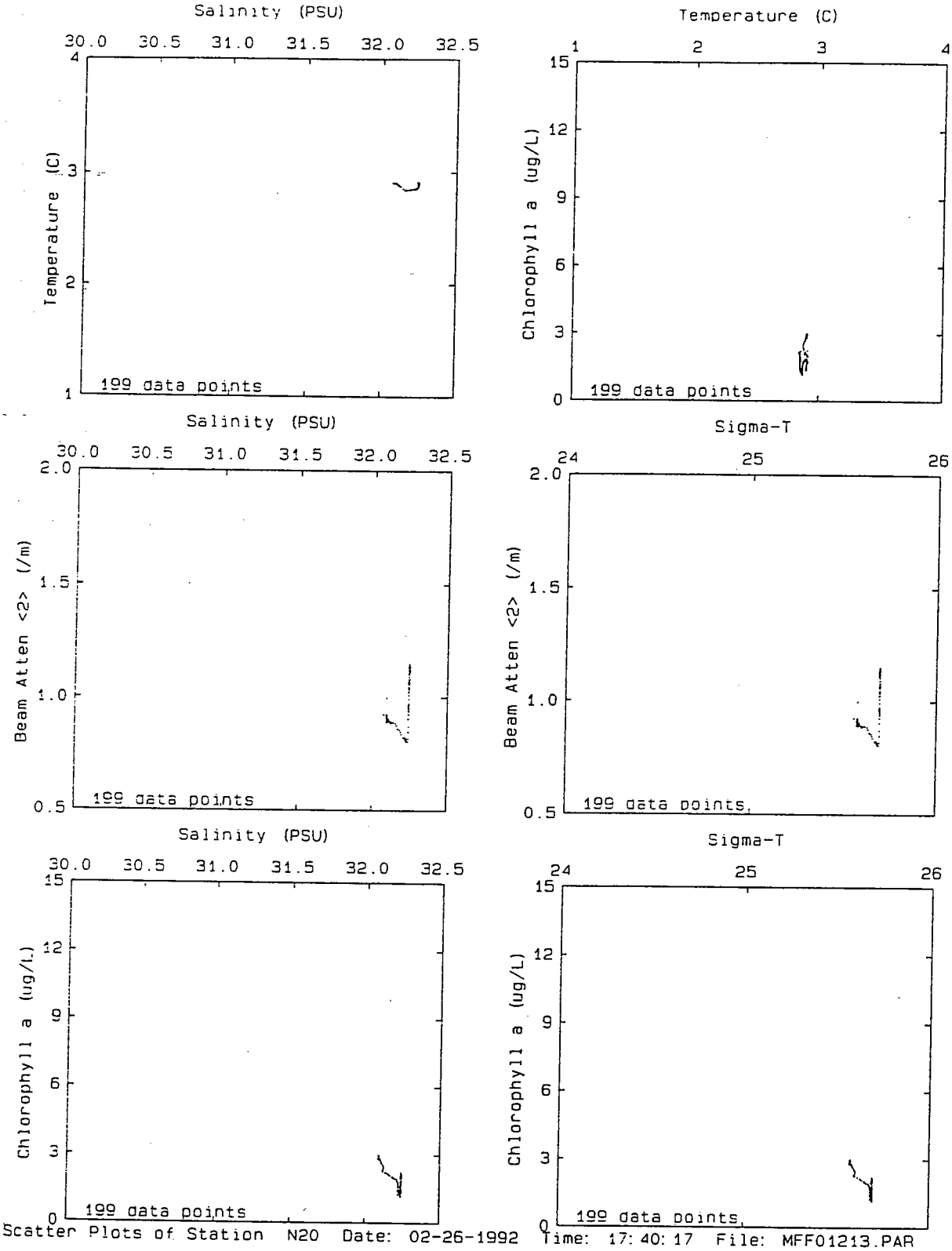
Scatter Plots of Station N17 Date: 02-26-1992 Time: 19:24:59 File: MFF01223.PAR

C-120

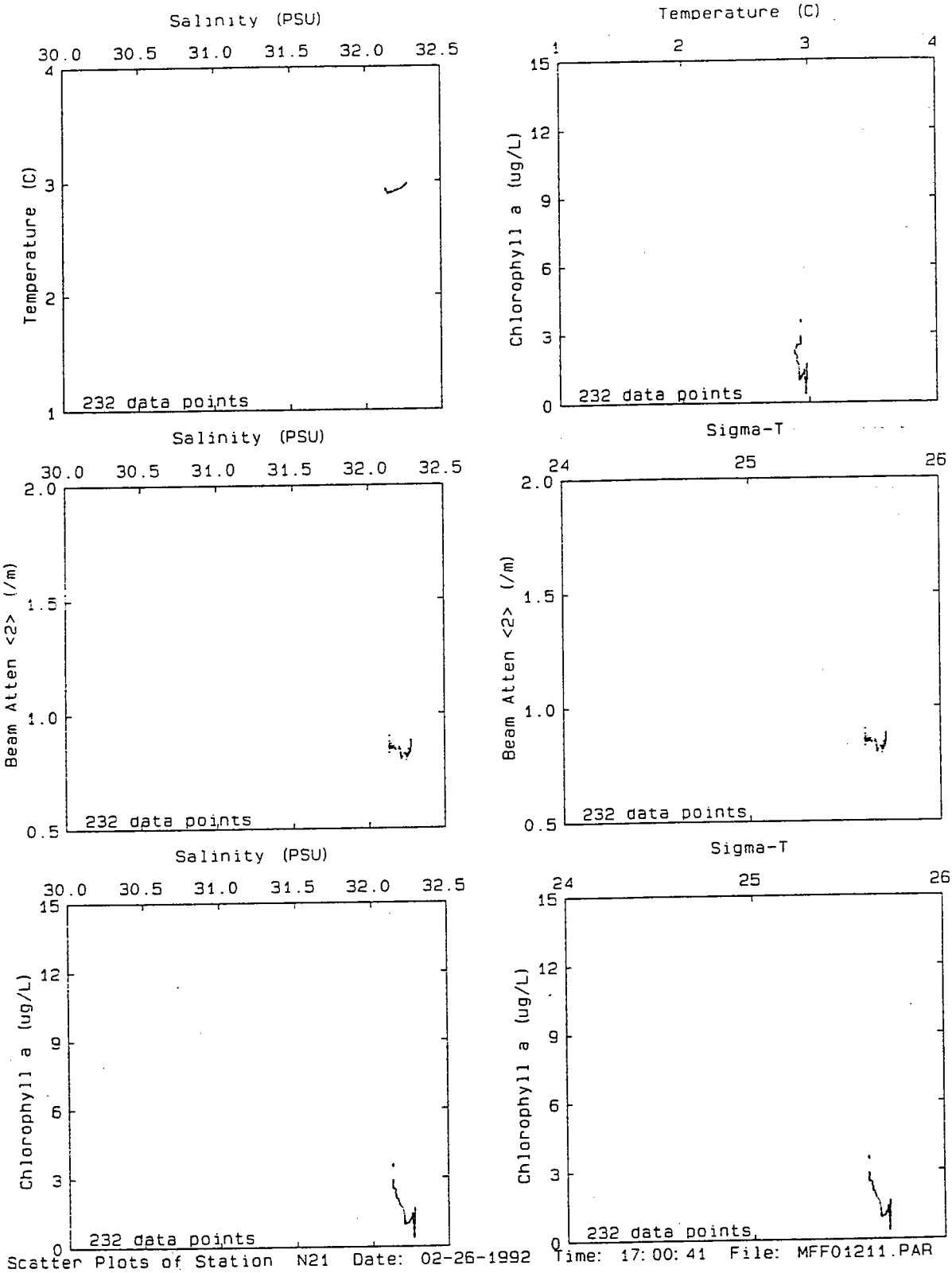

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
173 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
173 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
173 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
173 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
173 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
173 data points,
Scatter Plots of Station N18 Date: 02-26-1992 Time: 18:52:50 File: MFF01220.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
207 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
207 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
207 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
207 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
207 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
207 data points
Scatter Plots of Station N19 Date: 02-26-1992
Time: 18:29:05 File: MFF01218.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
207 data points
Temperature (C)
Chlorophyll a (ug/L)
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
207 data points,
Salinity (PSU)
Sigma-T
Chlorophyll a (ug/L)
207 data points
207 data points,
Scatter Plots of Station N20P Date: 02-25-1992 Time: 09:17:21 File: MFF01133.PAR



Scatter Plots of Station N20 Date: 02-26-1992 Time: 17:40:17 File: MFF01213.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
232 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
232 data points
Salinity (PSU)
Beam Atten <2> (/m)
232 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
232 data points
Salinity (PSU)
Chlorophyll a (ug/L)
232 data points
Sigma-T
Chlorophyll a (ug/L)
232 data points
Scatter Plots of Station N21 Date: 02-26-1992
Time: 17:00:41 File: MFF01211.PAR

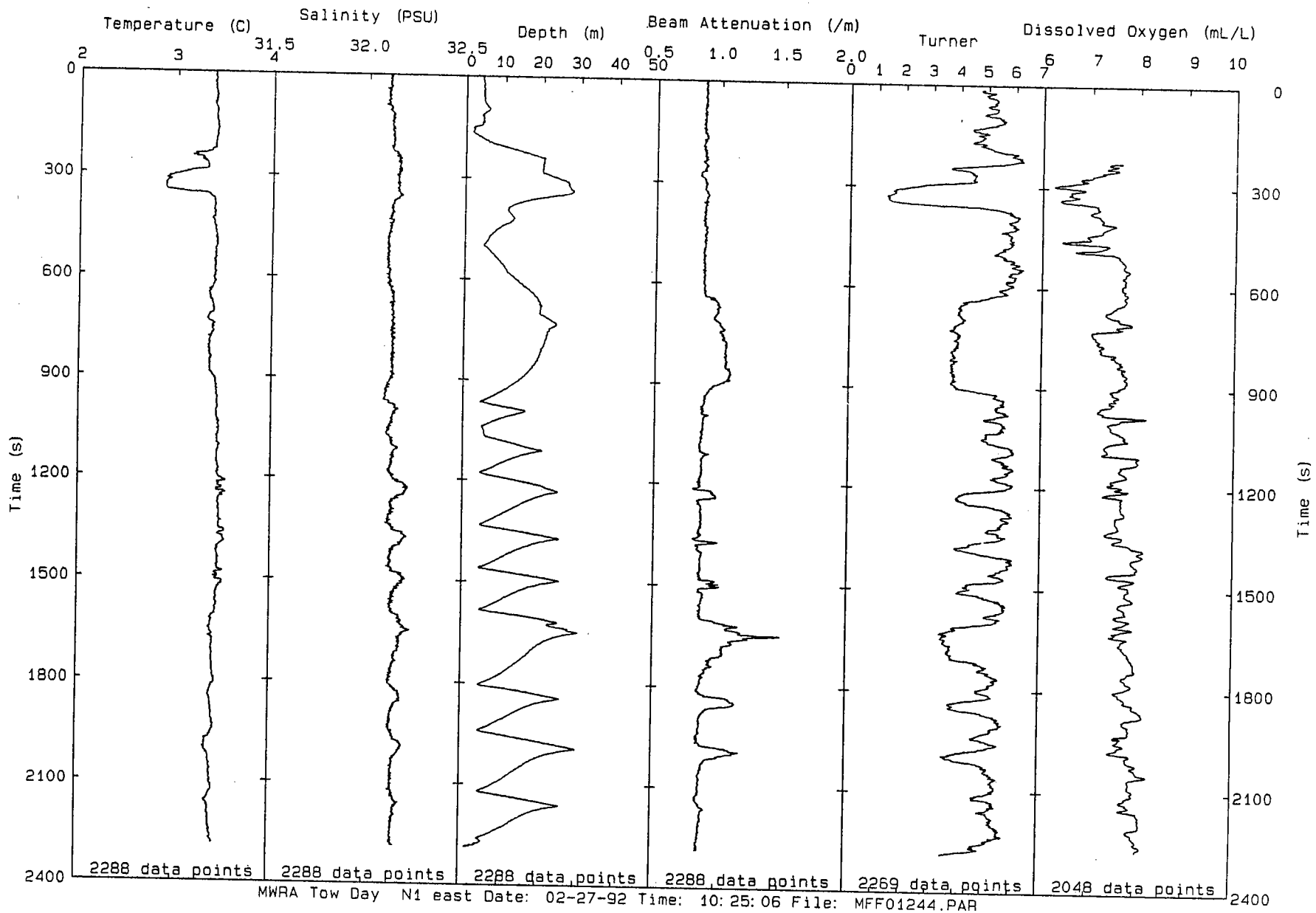
APPENDIX D

Towing Profiles from February 1992 Nearfield Stations

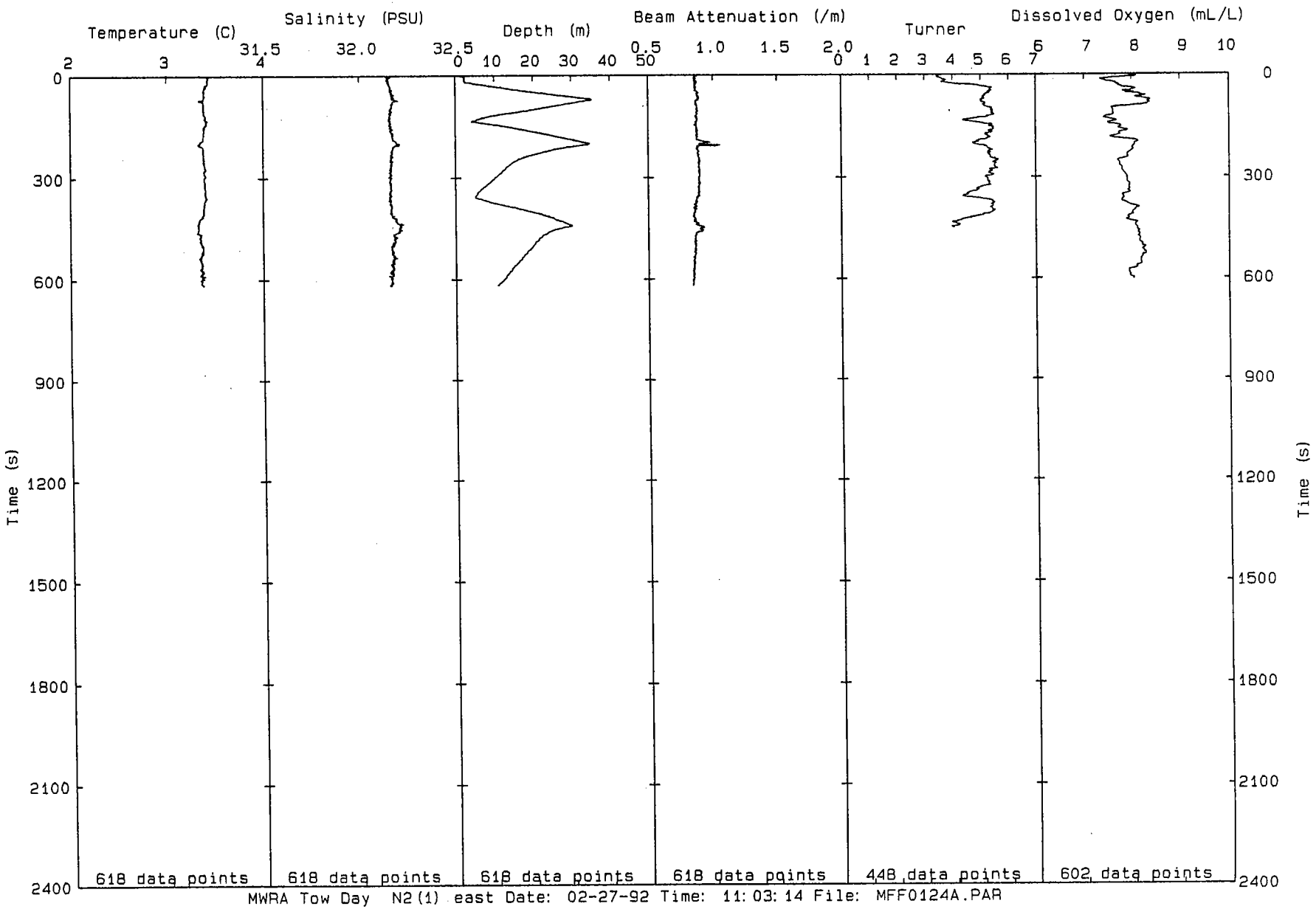
Part 1

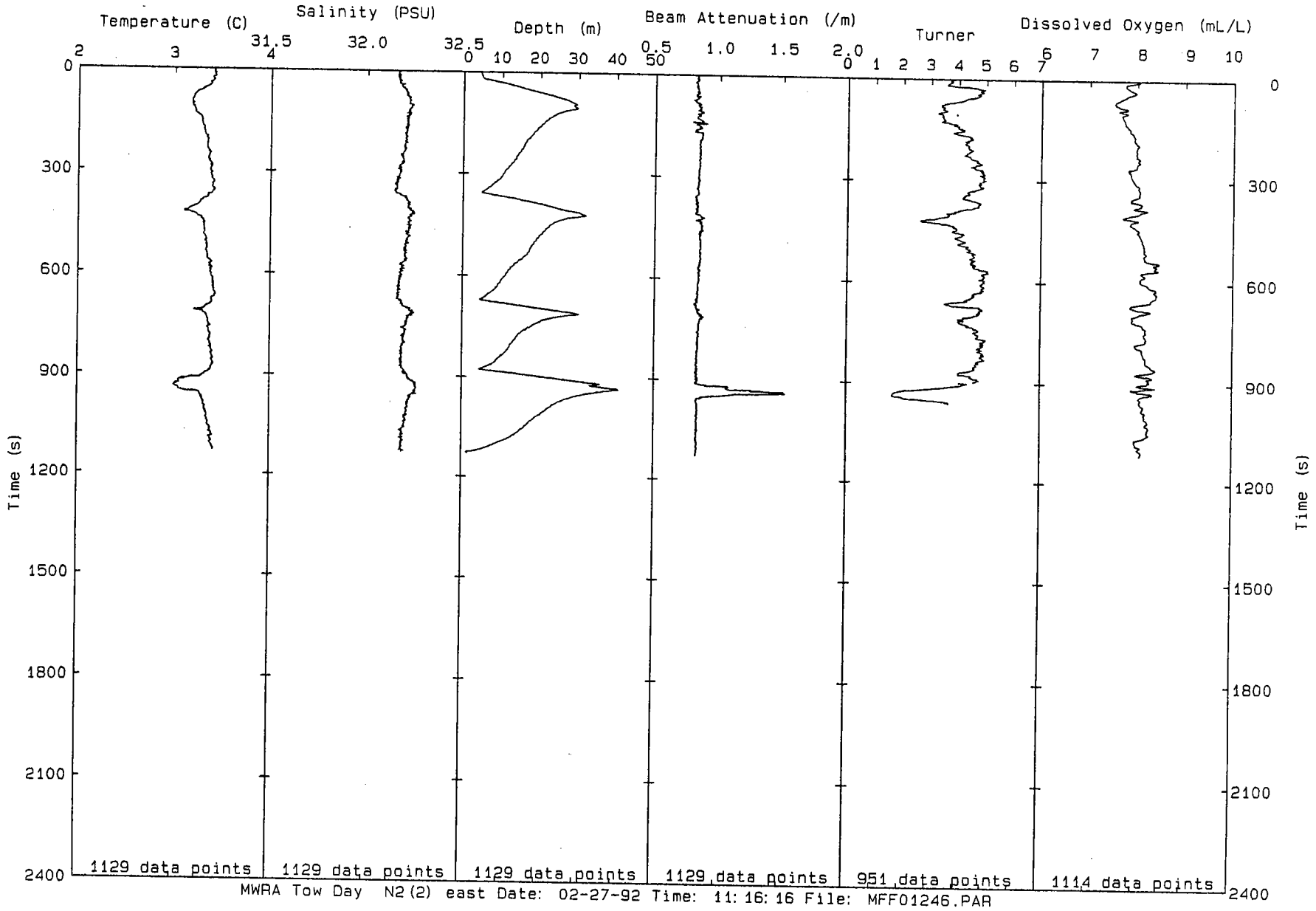
Time Plots

Data are from tow-yo sampling on the second day of the nearfield survey. Instrument calibration methods are given in Appendix A and Appendix C, Part 1.

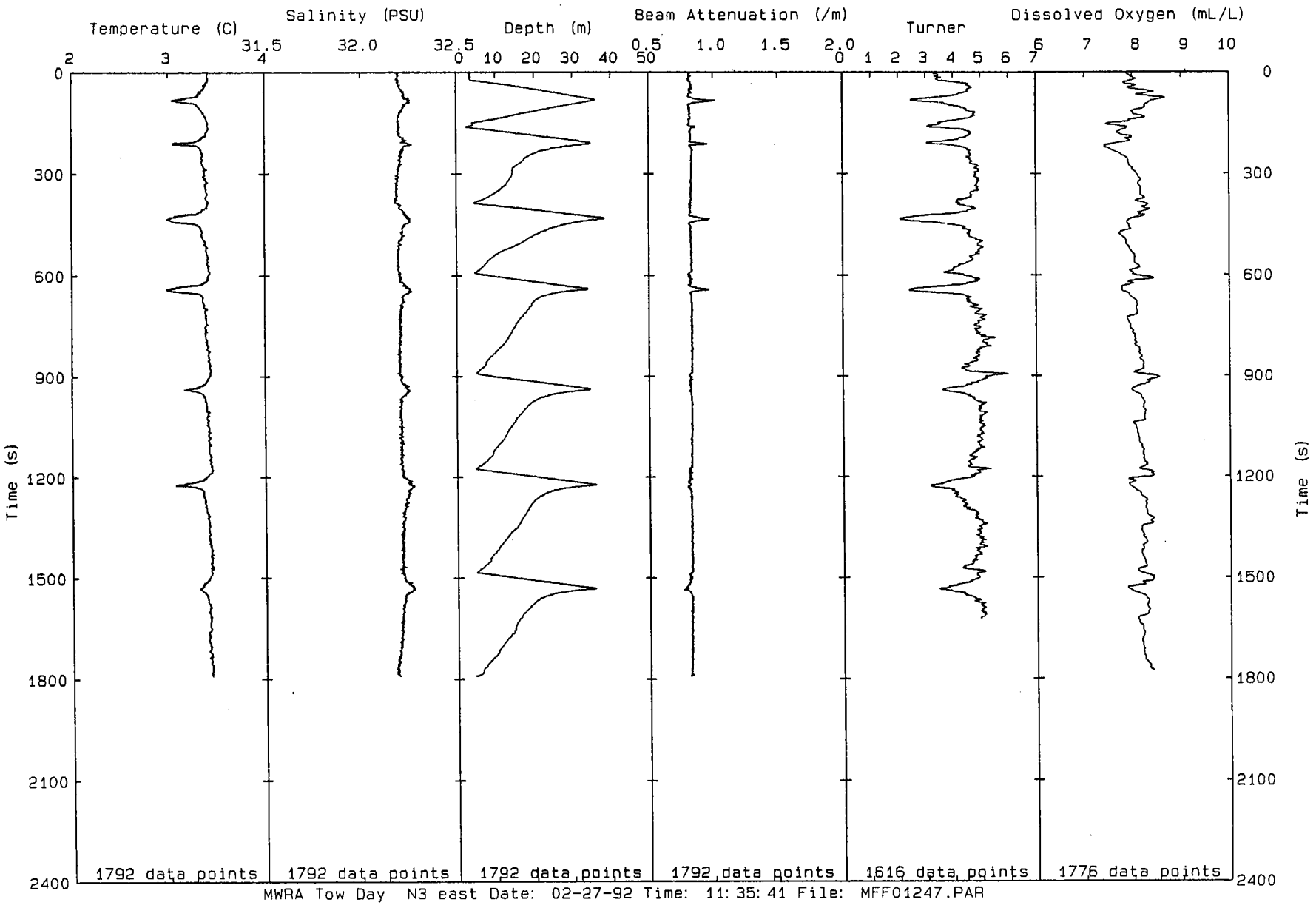

Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
2288 data points
2288 data points
2288 data points
2288 data points
2269 data points
2048 data points
MWRA Tow Day N1 east Date: 02-27-92 Time: 10:25:06 File: MFF01244.PAR

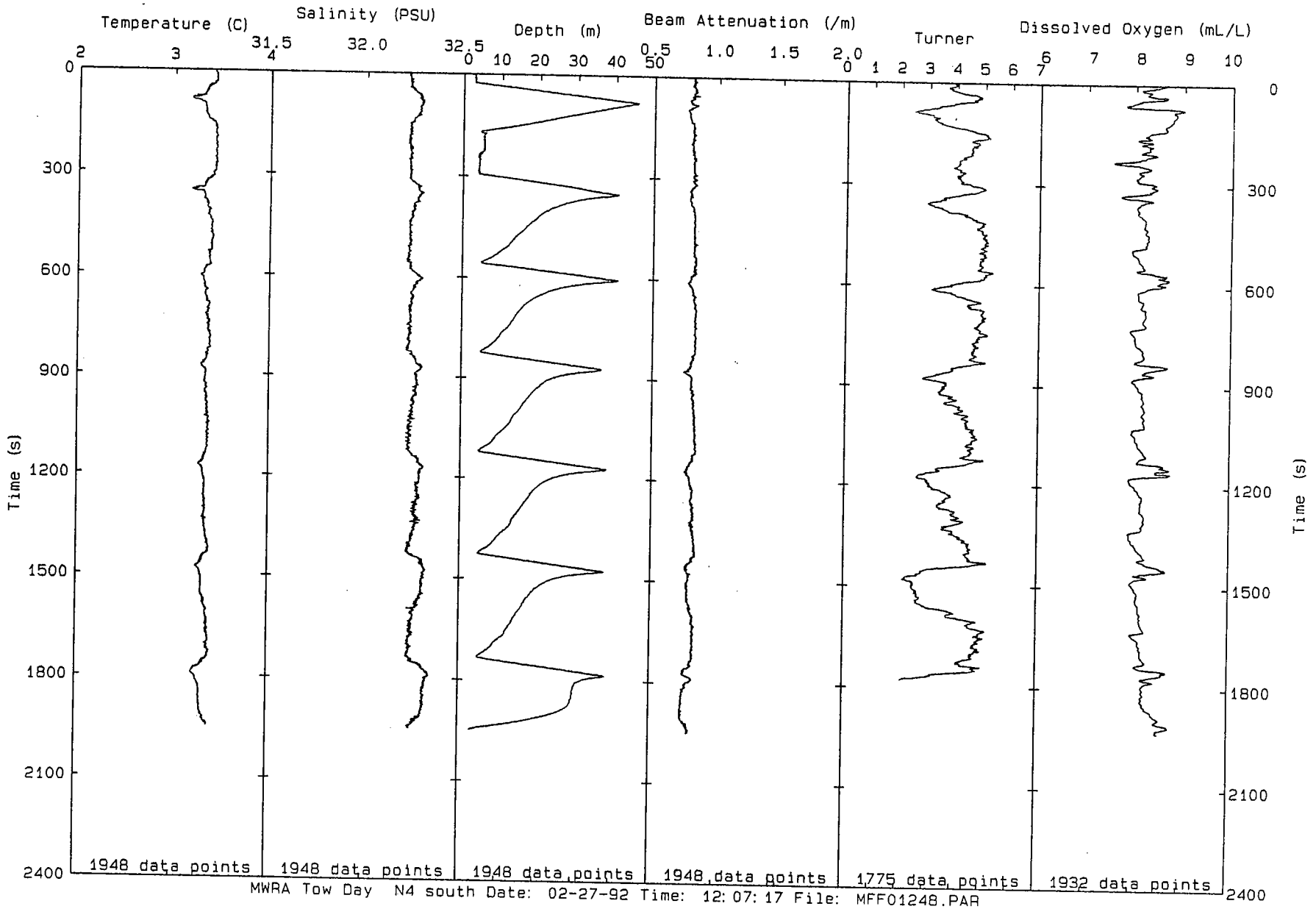
D-2

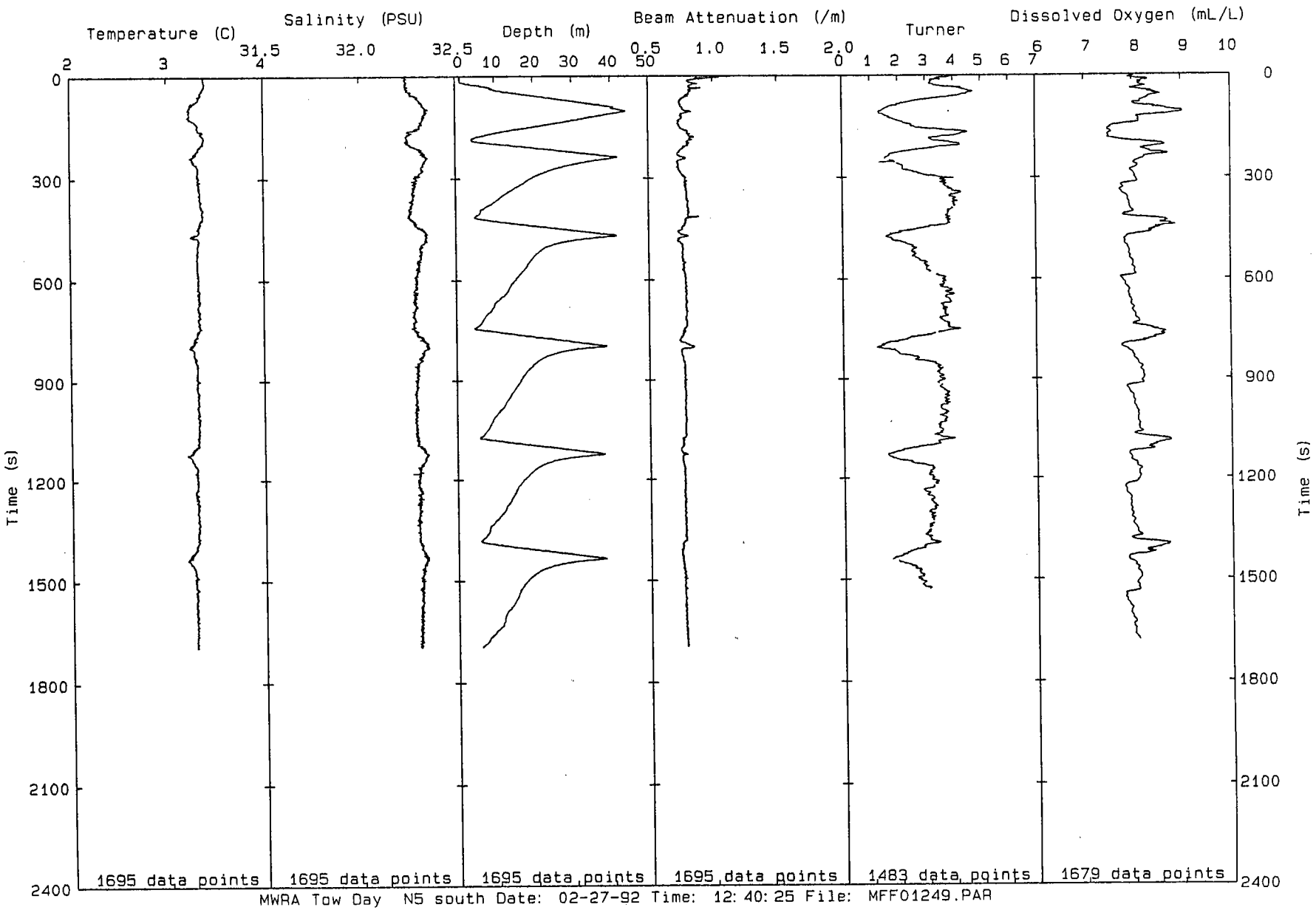

Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0
1
2
3
4
5
6
7
Dissolved Oxygen (mL/L)
5
6
7
8
9
10
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
618 data points
618 data points
618 data points
618 data points
448 data points
602 data points
MWRA Tow Day N2(1) east Date: 02-27-92 Time: 11:03:14 File: MFF0124A.PAR

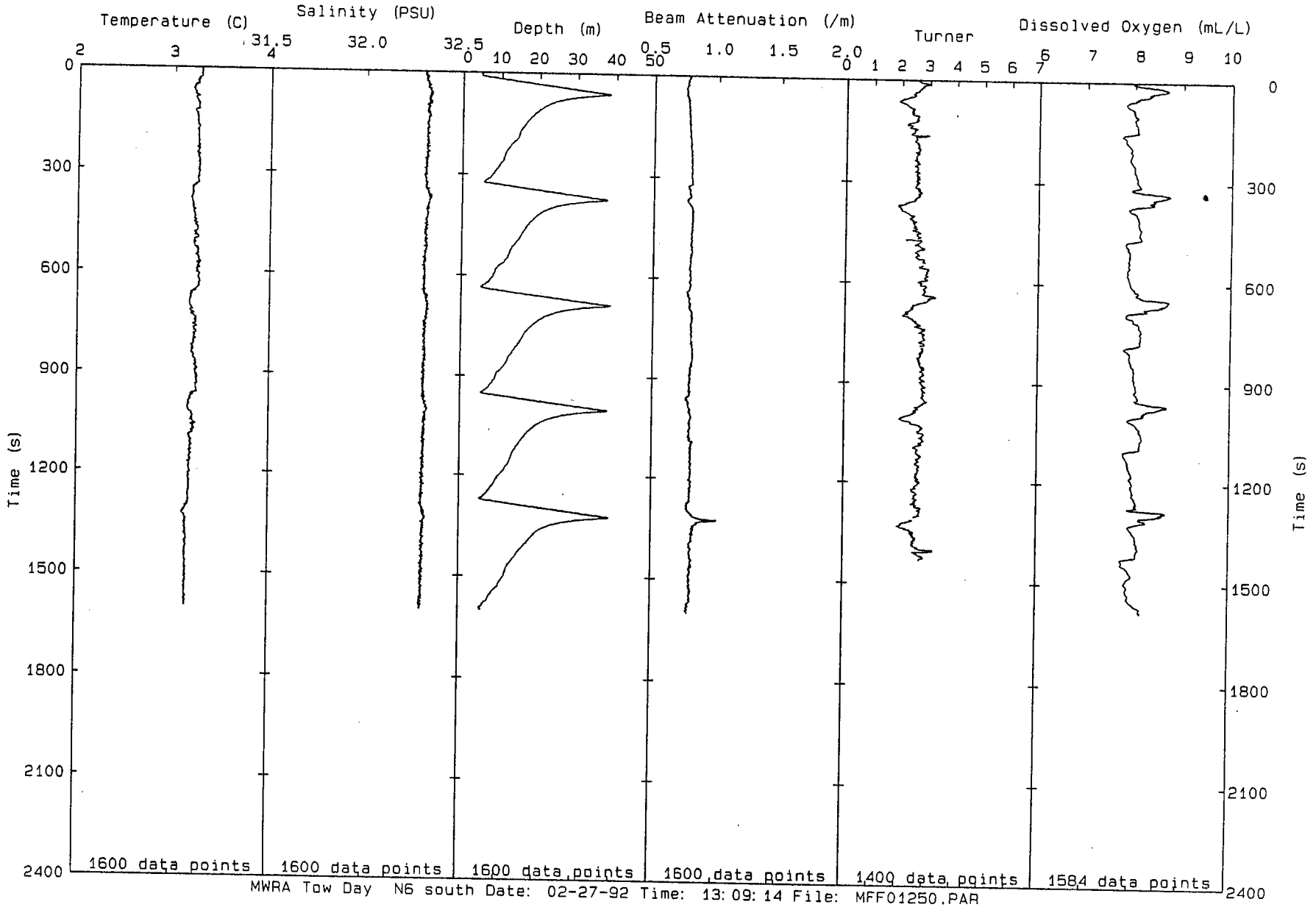

Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
1129 data points
1129 data points
1129 data points
1129 data points
951 data points
1114 data points
MWRA Tow Day N2(2) east Date: 02-27-92 Time: 11:16:16 File: MFF01246.PAR

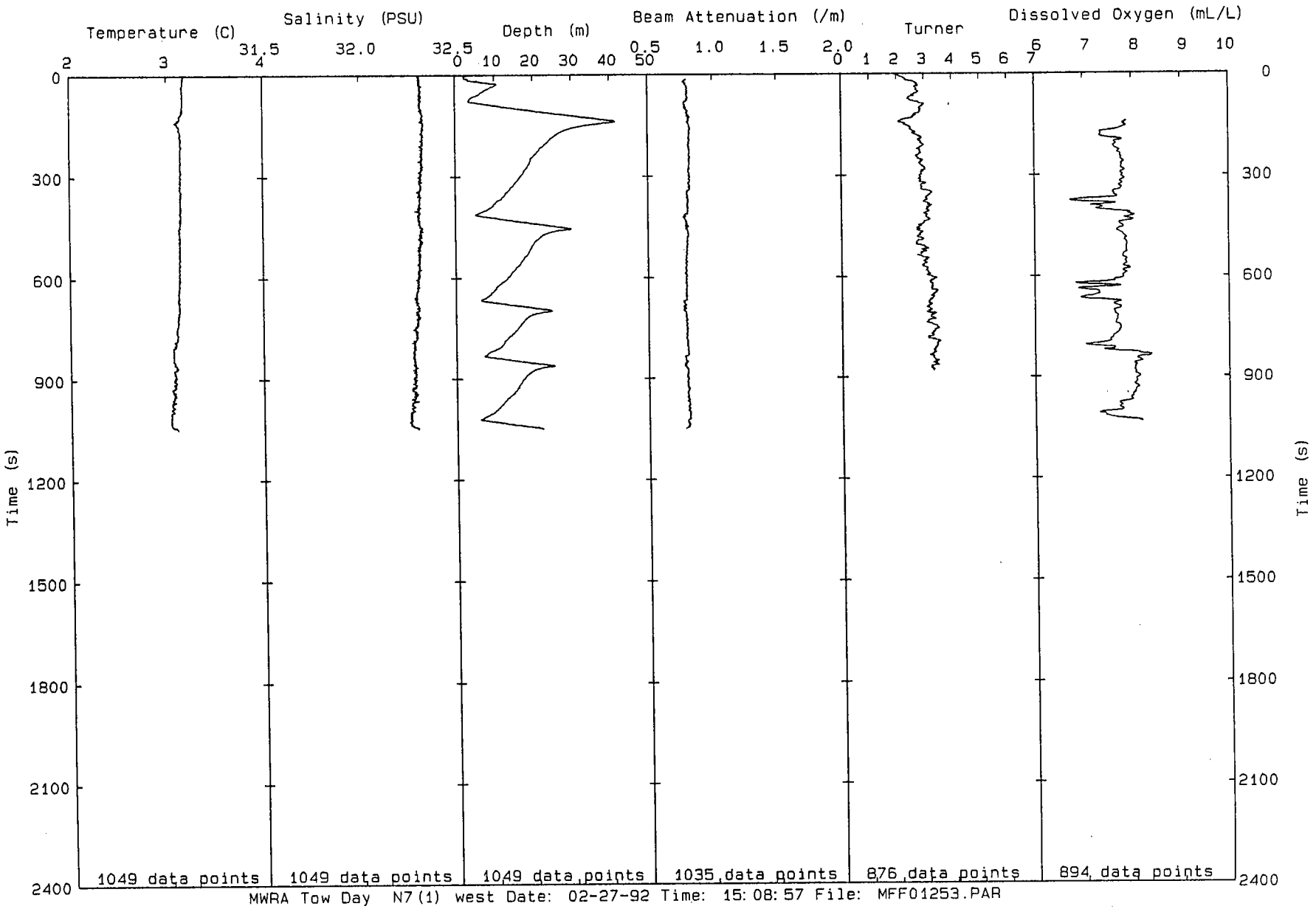
D-4


Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0
1
2
3
4
5
6
7
Dissolved Oxygen (mL/L)
6
7
8
9
10
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1792 data points
1792 data points
1792 data points
1792 data points
1616 data points
1776 data points
MWRA Tow Day N3 east Date: 02-27-92 Time: 11:35:41 File: MFF01247.PAR

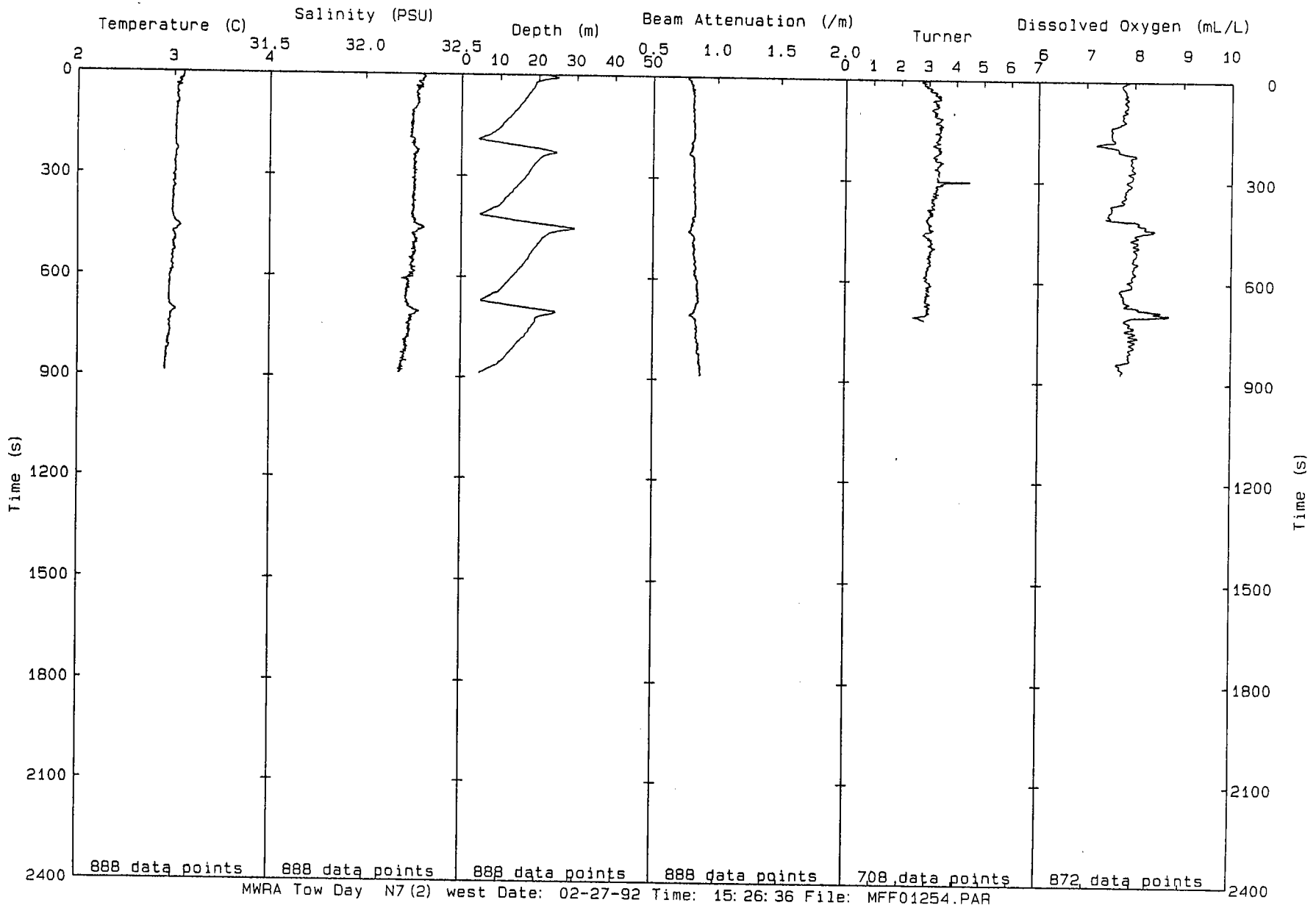

Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
1948 data points
1948 data points
1948 data points
1948 data points
1775 data points
1932 data points
MWRA Tow Day N4 south Date: 02-27-92 Time: 12:07:17 File: MFF01248.PAR


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
1695 data points
1695 data points
1695 data points
1695 data points
1483 data points
1679 data points
MWRA Tow Day N5 south Date: 02-27-92 Time: 12:40:25 File: MFF01249.PAR

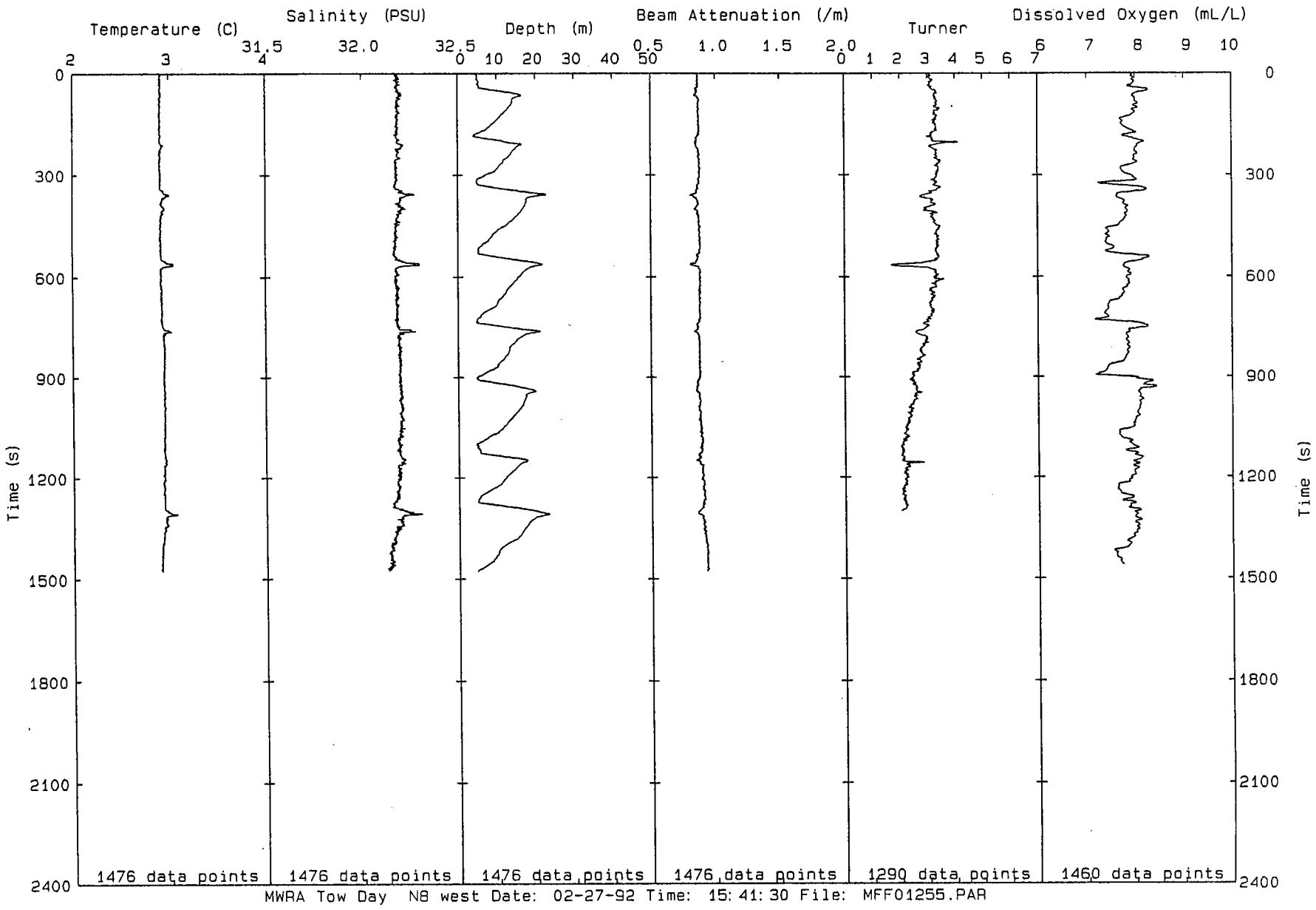

Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
1600 data points
1600 data points
1600 data points
1600 data points
1400 data points
1584 data points
MWRA Tow Day N6 south Date: 02-27-92 Time: 13:09:14 File: MFF01250.PAR

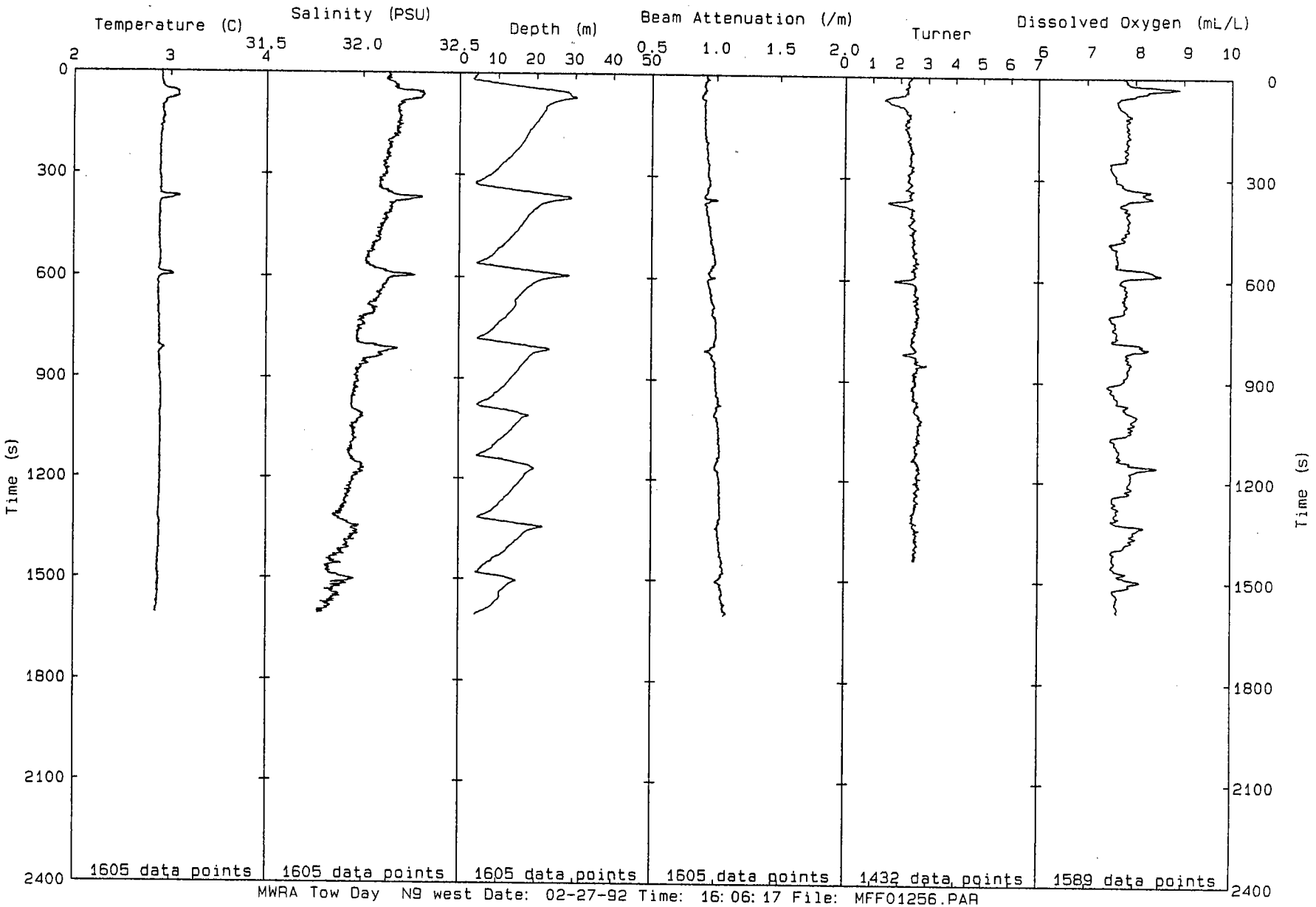

Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0
1
2
3
4
5
6
7
Dissolved Oxygen (mL/L)
6
7
8
9
10
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1049 data points
1049 data points
1049 data points
1035 data points
876 data points
894 data points
MWRA Tow Day N7(1) west Date: 02-27-92 Time: 15:08:57 File: MFF01253.PAR

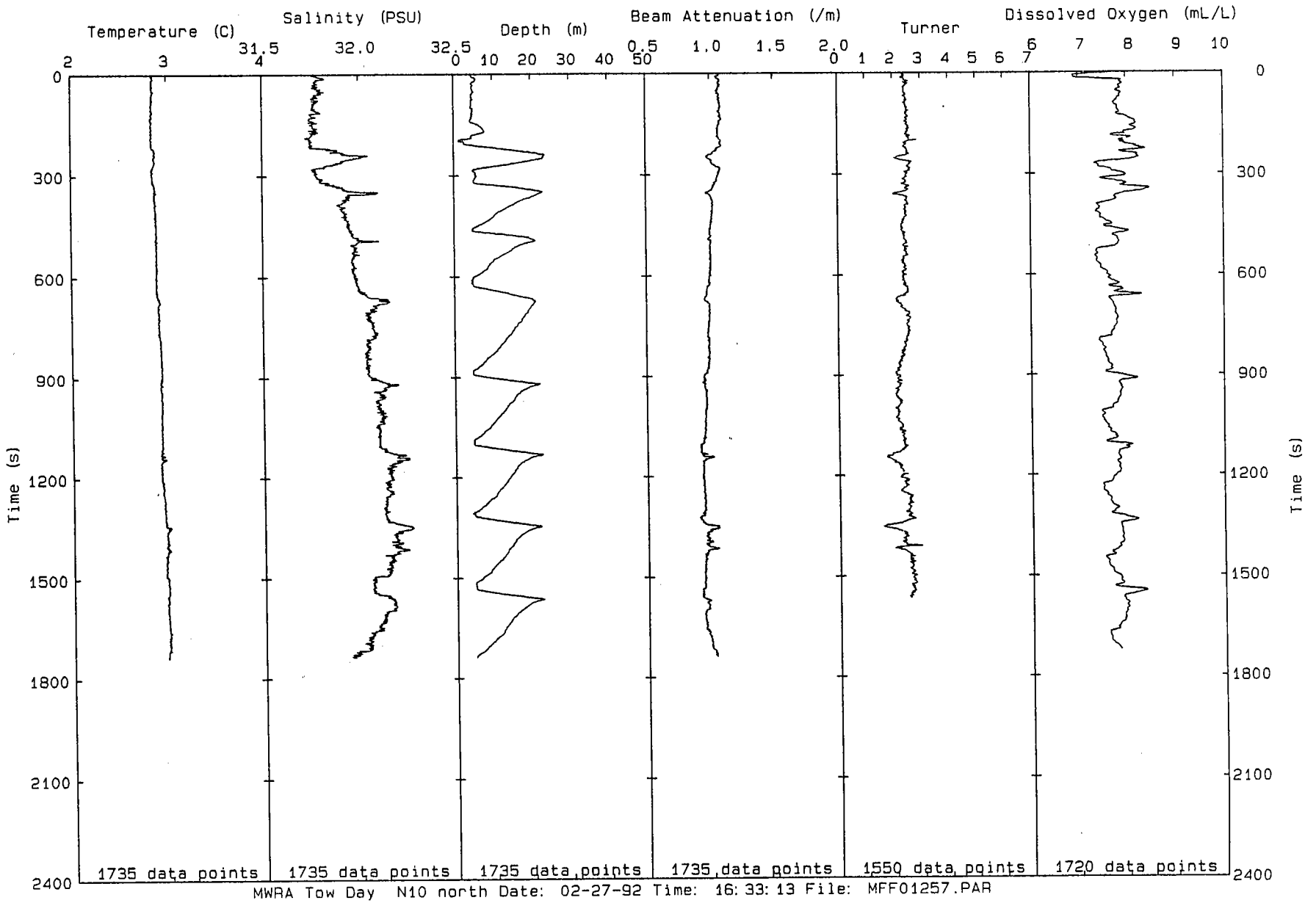
D-9


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
888 data points
888 data points
888 data points
888 data points
708 data points
872 data points
MWRA Tow Day N7 (2) west Date: 02-27-92 Time: 15:26:36 File: MFF01254.PAR

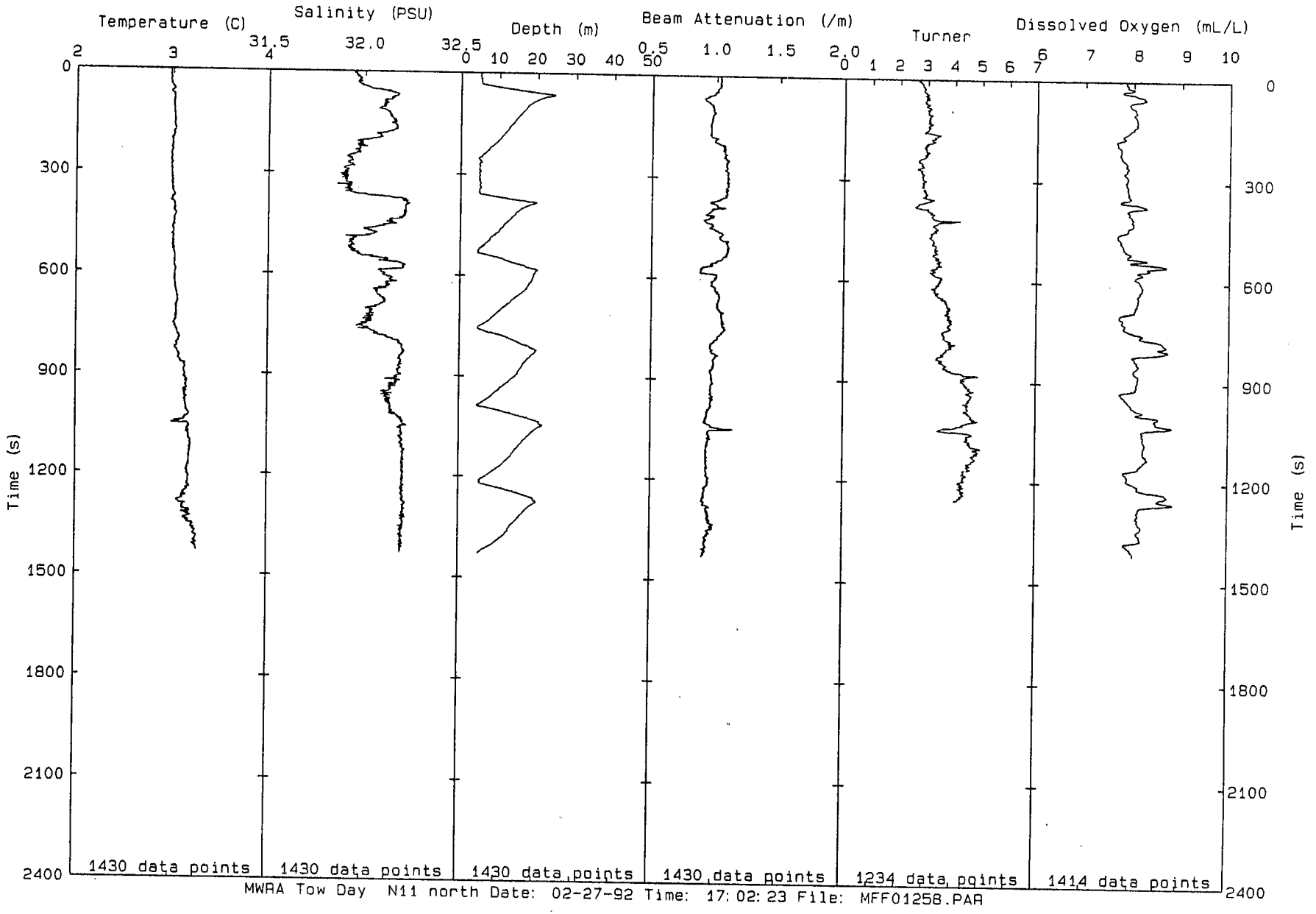
D-10


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
1476 data points
1476 data points
1476 data points
1476 data points
1290 data points
1460 data points
MWRA Tow Day N8 west Date: 02-27-92 Time: 15:41:30 File: MFF01255.PAR

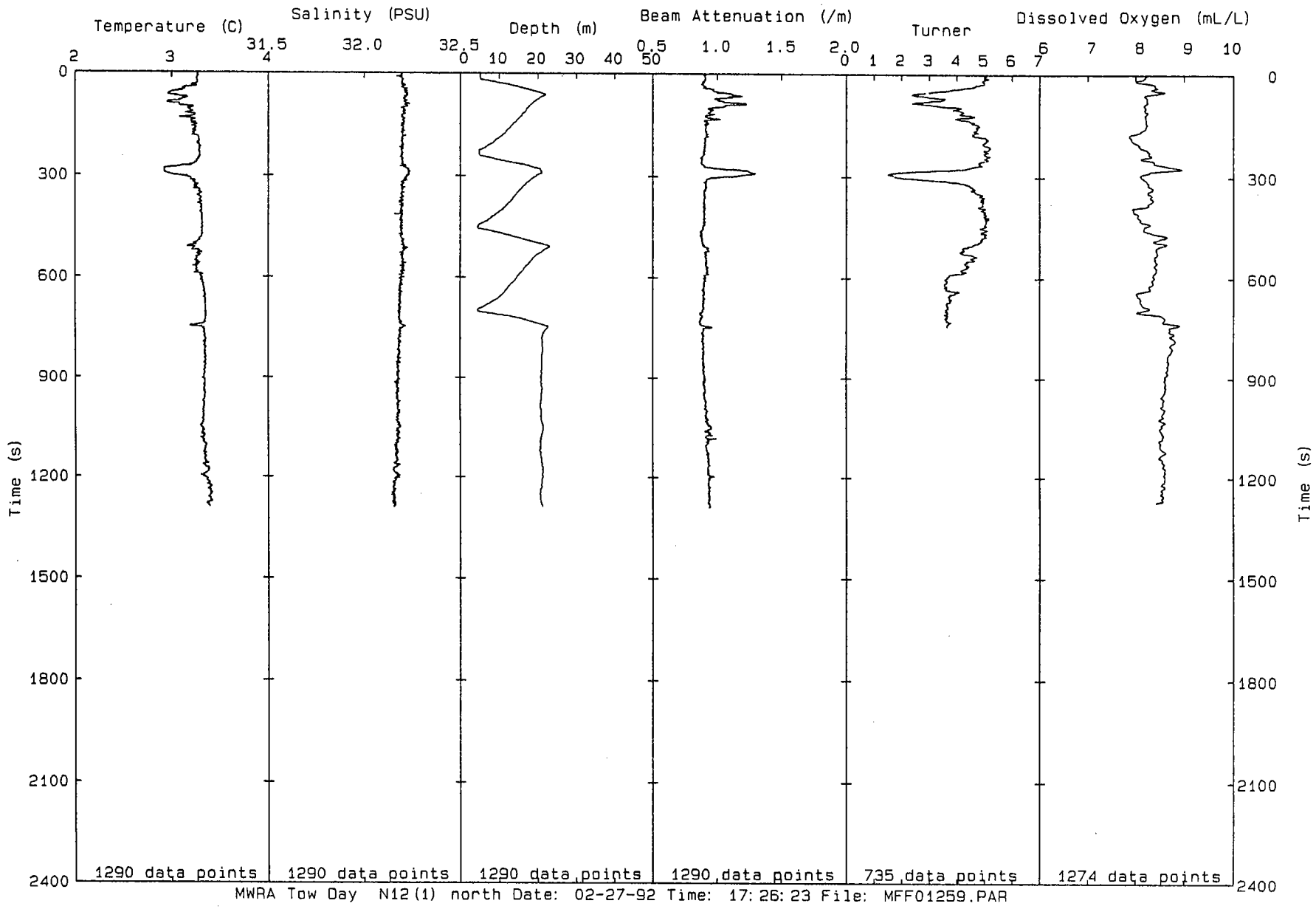

Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0
1
2
3
4
5
6
7
Dissolved Oxygen (mL/L)
6
7
8
9
10
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1605 data points
1605 data points
1605 data points
1605 data points
1432 data points
1589 data points
MWRA Tow Day N9 west Date: 02-27-92 Time: 16:06:17 File: MFF01256.PAR


Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0
1
2
3
4
5
6
7
Dissolved Oxygen (mL/L)
6
7
8
9
10
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1735 data points
1735 data points
1735 data points
1735 data points
1550 data points
1720 data points
MWRA Tow Day N10 north Date: 02-27-92 Time: 16:33:13 File: MFF01257.PAR

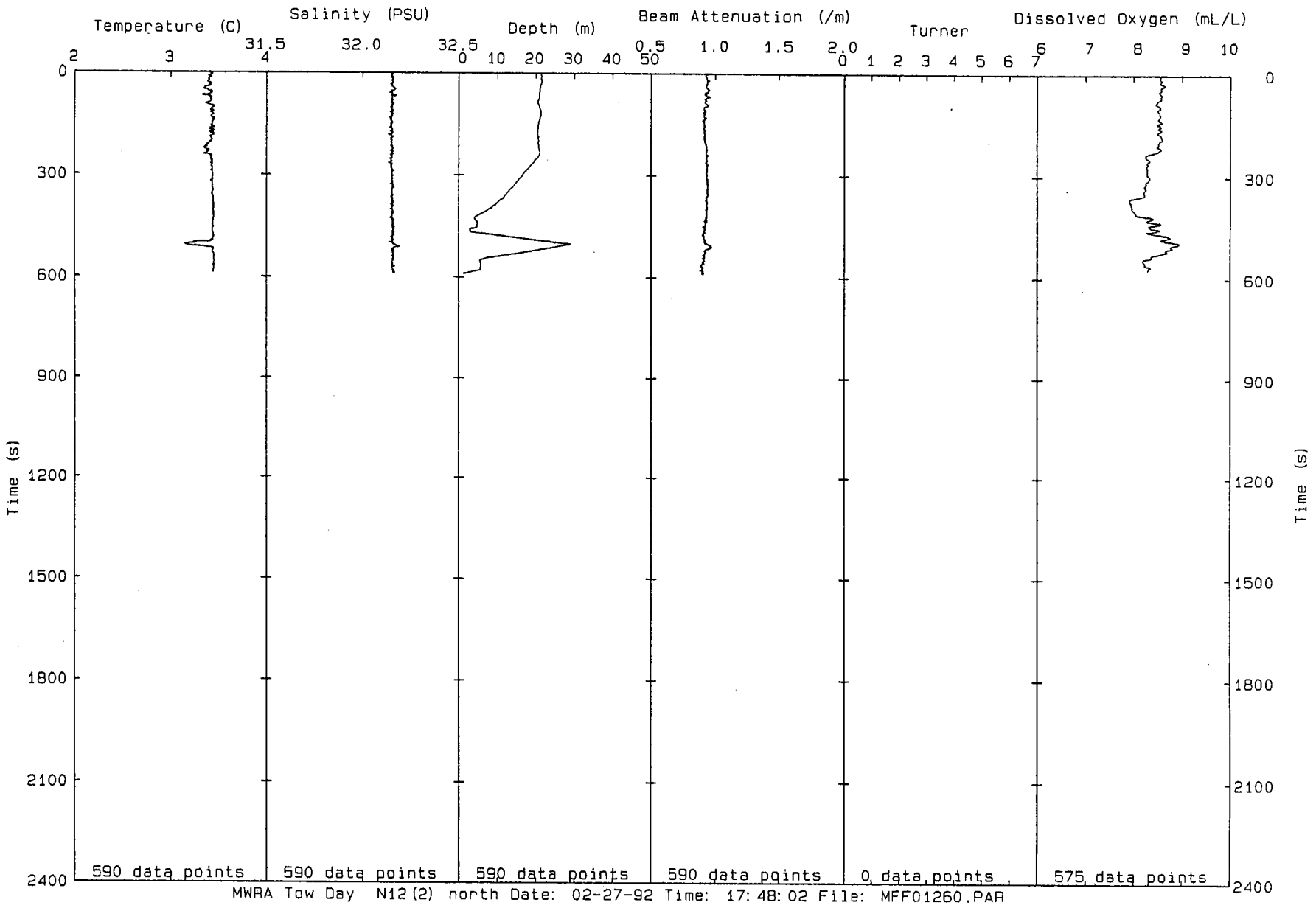
D-13


Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0
1
2
3
4
5
6
7
Dissolved Oxygen (mL/L)
6
7
8
9
10
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1430 data points
1430 data points
1430 data points
1430 data points
1234 data points
1414 data points
MWRA Tow Day N11 north Date: 02-27-92 Time: 17:02:23 File: MFF01258.PAR

D-14


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
1290 data points
1290 data points
1290 data points
1290 data points
735 data points
1274 data points
MWRA Tow Day N12(1) north Date: 02-27-92 Time: 17:26:23 File: MFF01259.PAR

D-15


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Time (s)
590 data points
590 data points
590 data points
590 data points
0 data points
575 data points
MWRA Tow Day N12(2) north Date: 02-27-92 Time: 17:48:02 File: MFF01260.PAR

D-16

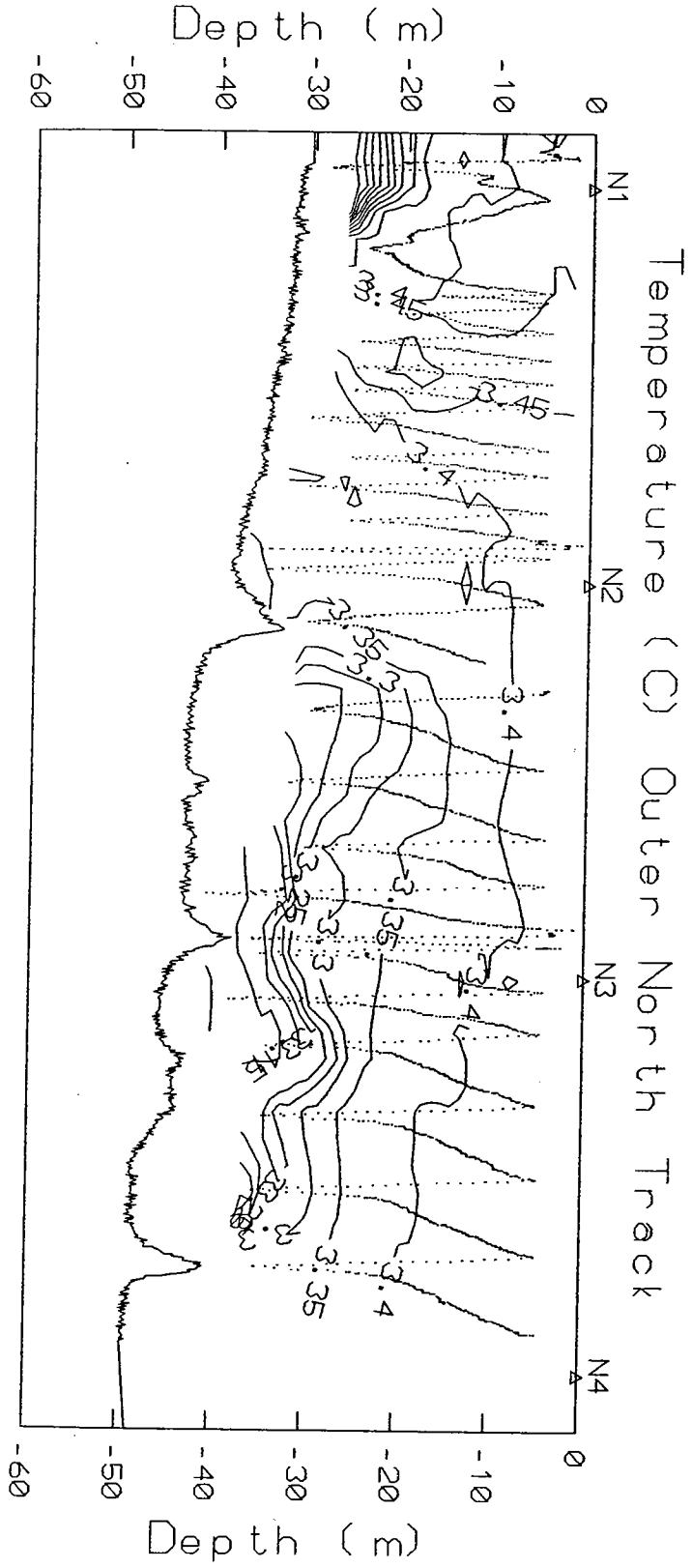
APPENDIX D

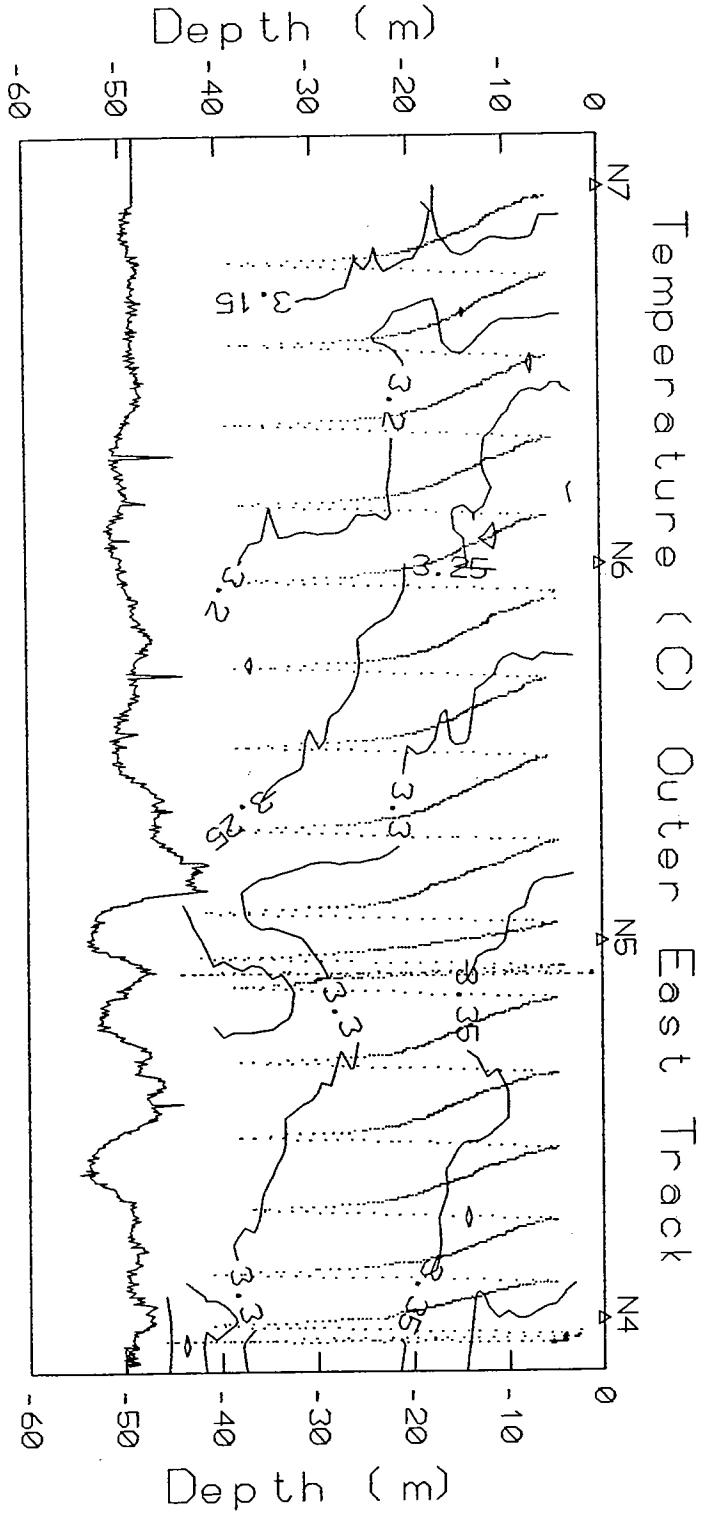
Towing Profiles from February 1992 Nearfield Stations

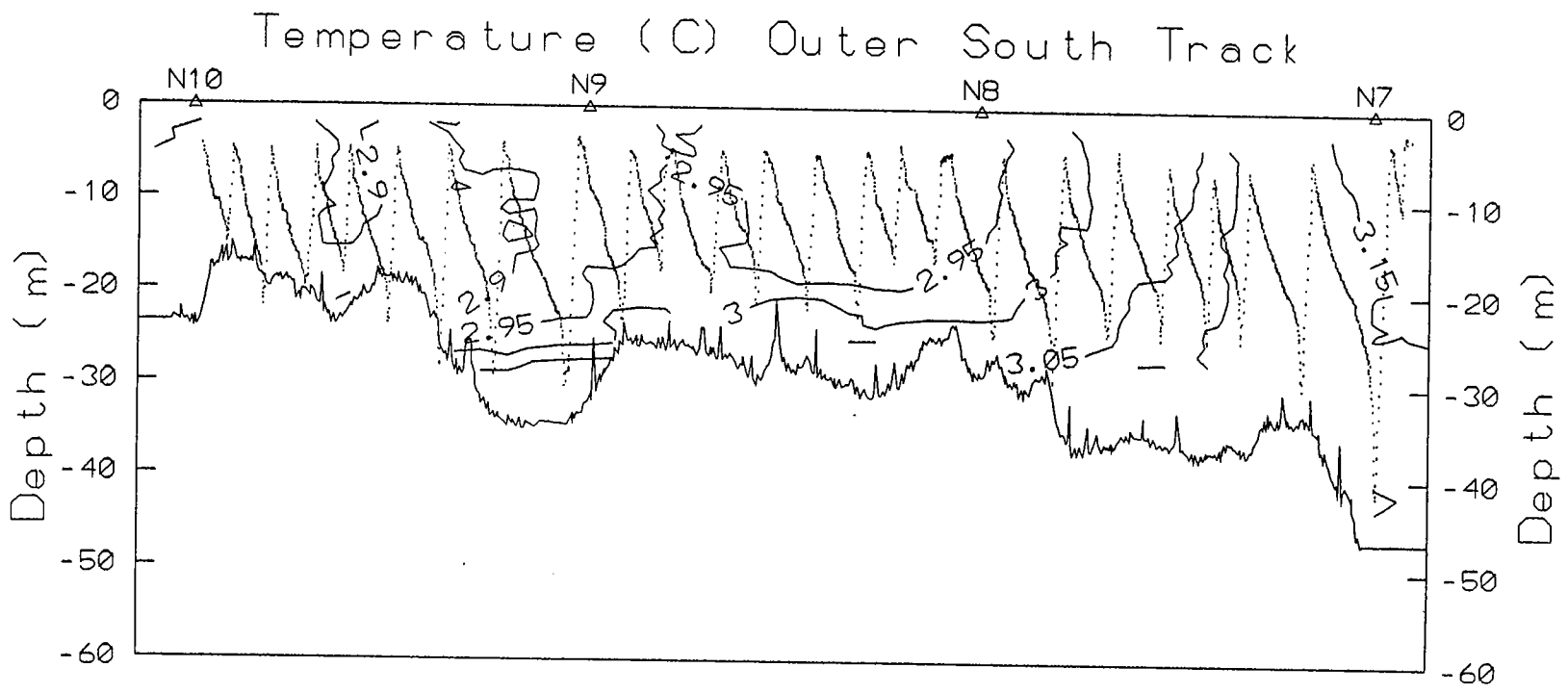
Part 2

Outer Track Vertical Section Plots

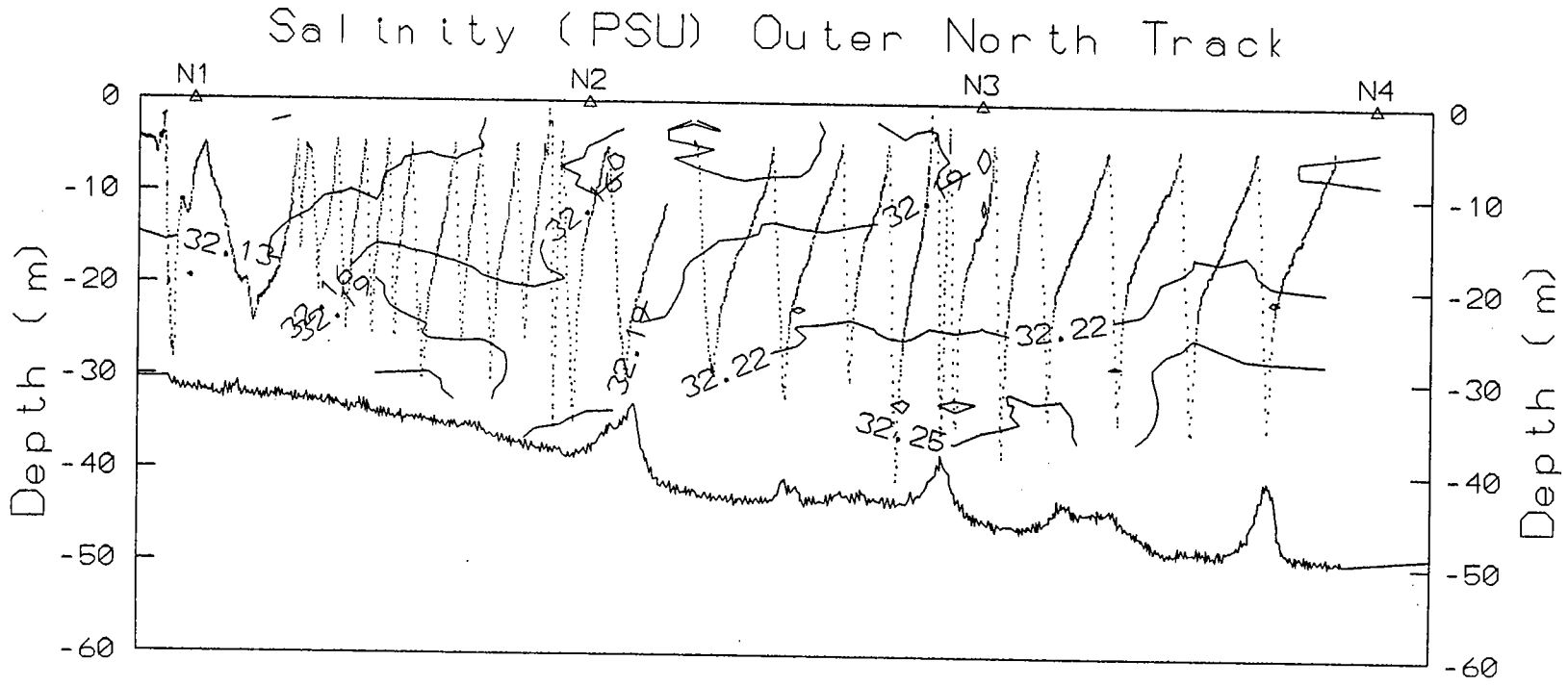
Temperature, Salinity, Sigma T, Beam Attenuation, and Chlorophyll (Fluorescence) are contoured as a function of depth along tracks of tow-yo sampling; contours are generated using the data of Appendix D, part 1. Dotted V tracks show position of the towfish with sampling sensors along the track; all data used to produce contours using the inverse distance to the second power, with the search window set to overlap adjacent profiles.


Depth (m)
-60
-50
-40
-30
-20
-10
0
N1
N2
N3
N4
Temperature (C) Outer North Track
Depth (m)


Depth (m)
-60
-50
-40
-30
-20
-10
0
N7
N6
N5
N4
3.15
3.2
3.25
3.3
3.35
Temperature (C) Outer East Track
Depth (m)

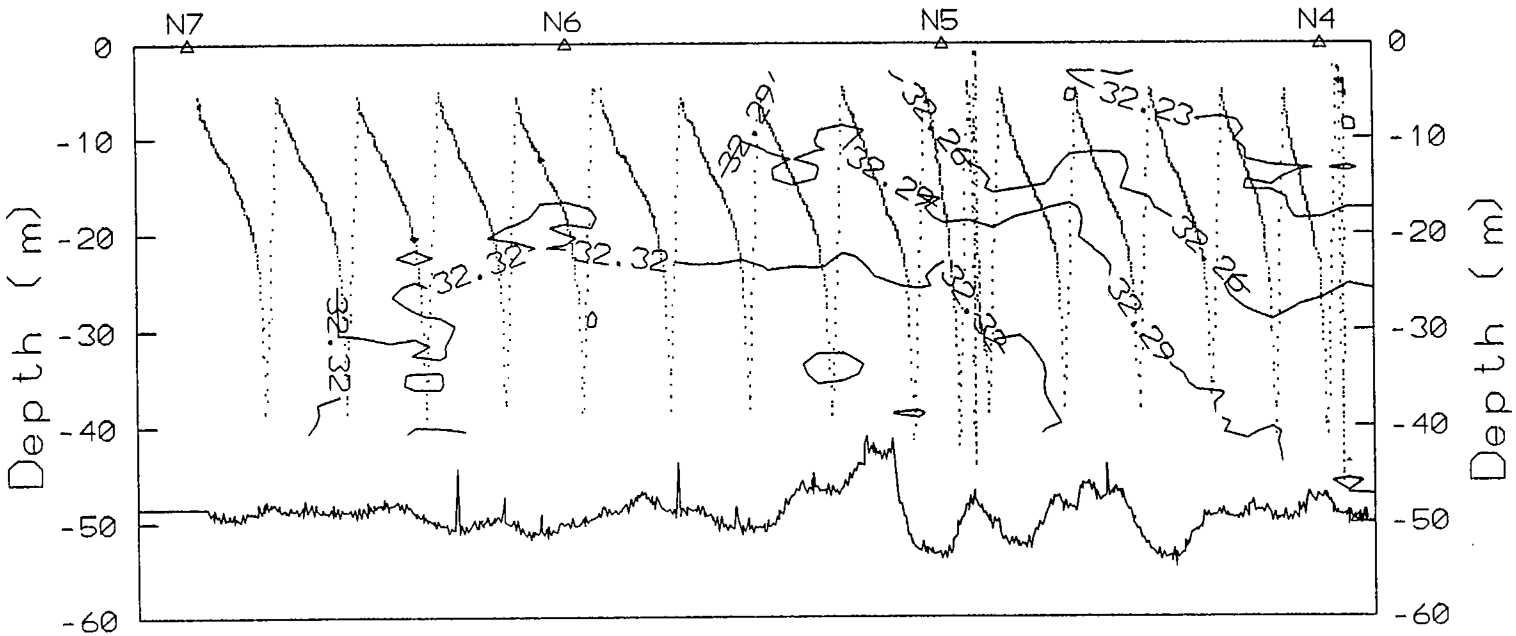

Temperature (C) Outer South Track
N10
N9
N8
N7
0
-10
-20
-30
-40
-50
-60
Depth (m)
2.9
2.95
3
3.05
3.15

Temperature (C) Outer West Track
N10
N11
N12
N1
0
-10
-20
-30
-40
-50
-60
Depth (m)

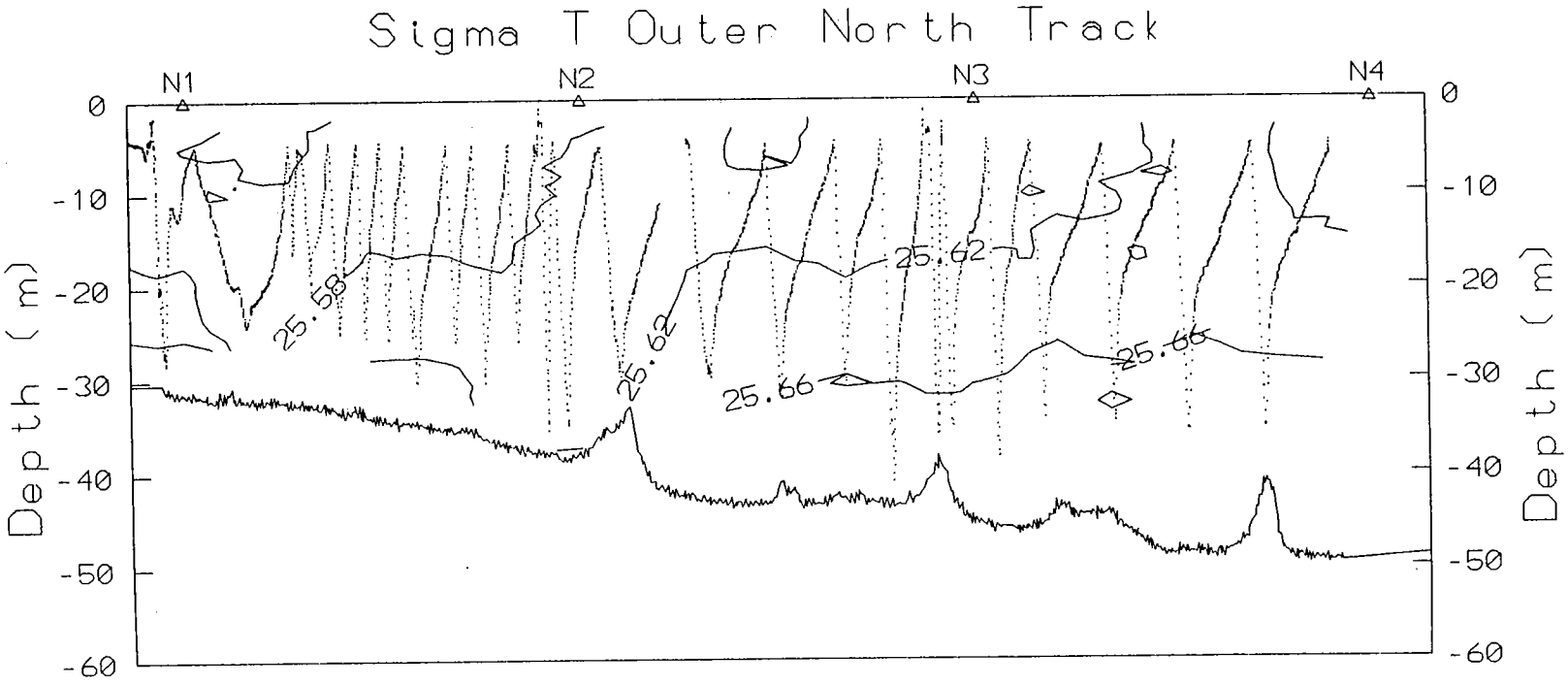

Salinity (PSU) Outer North Track
N1
N2
N3
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
32.13
32.19
32.22
32.25

D-23

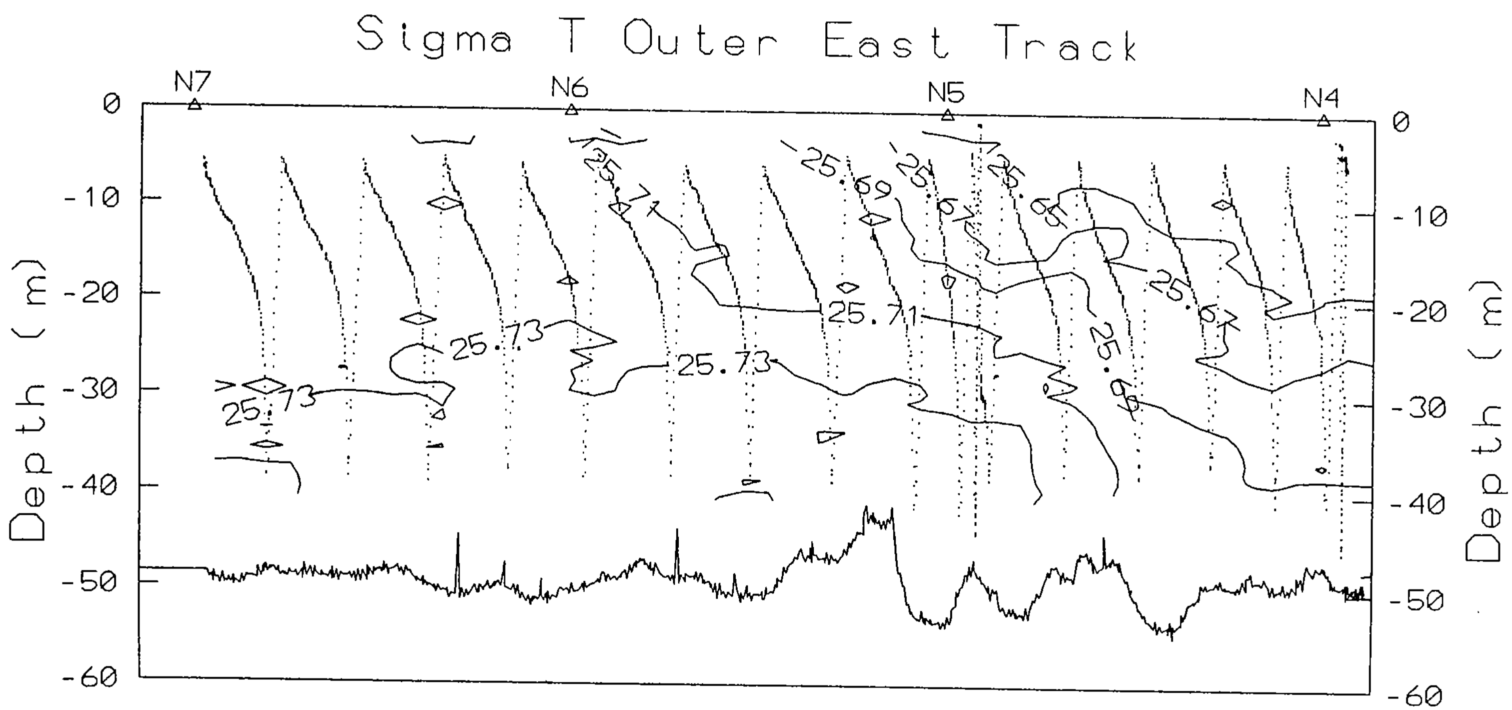
Salinity (PSU) Outer East Track



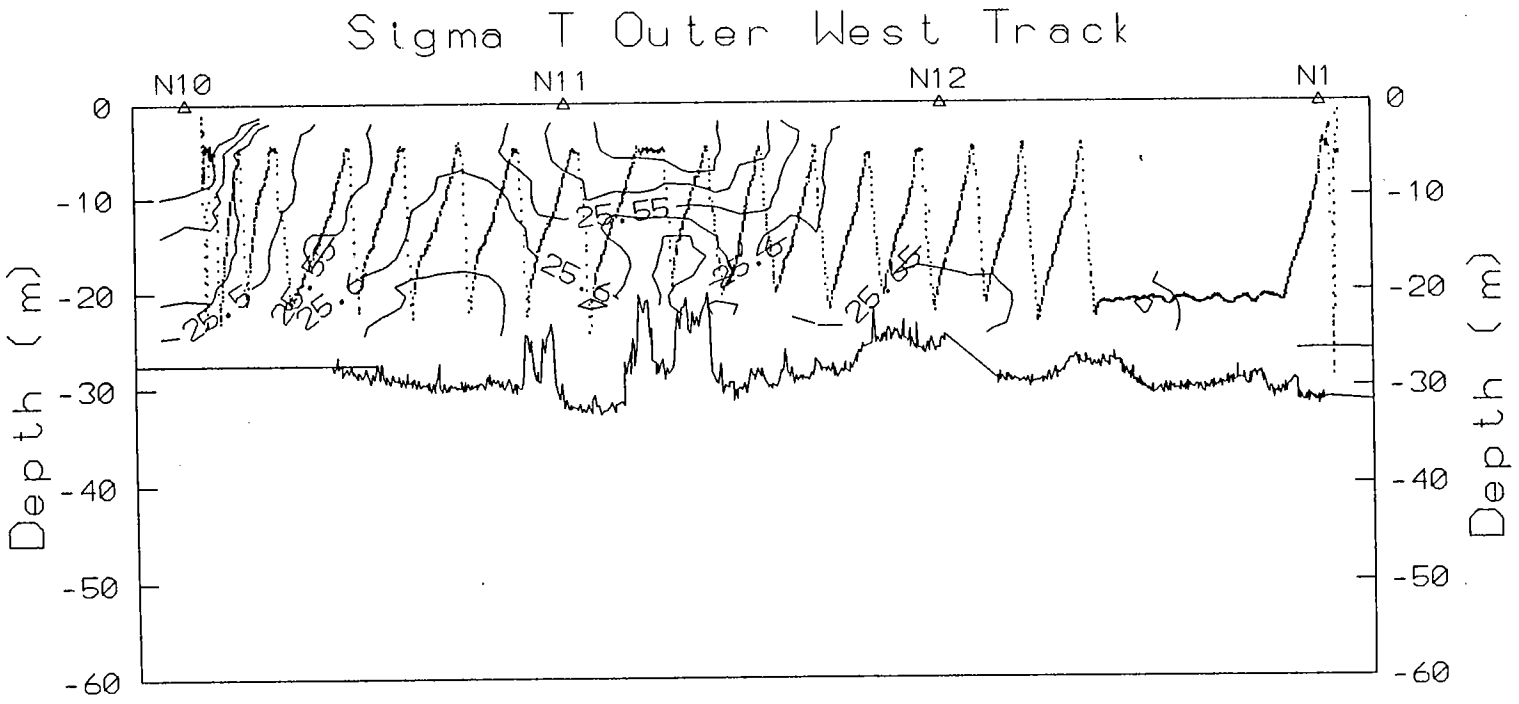
Salinity (PSU) Outer South Track
N10
N9
N8
N7
0
-10
-20
-30
-40
-50
-60
Depth (m)
32.15
32.2
32.25
32.3
32.35

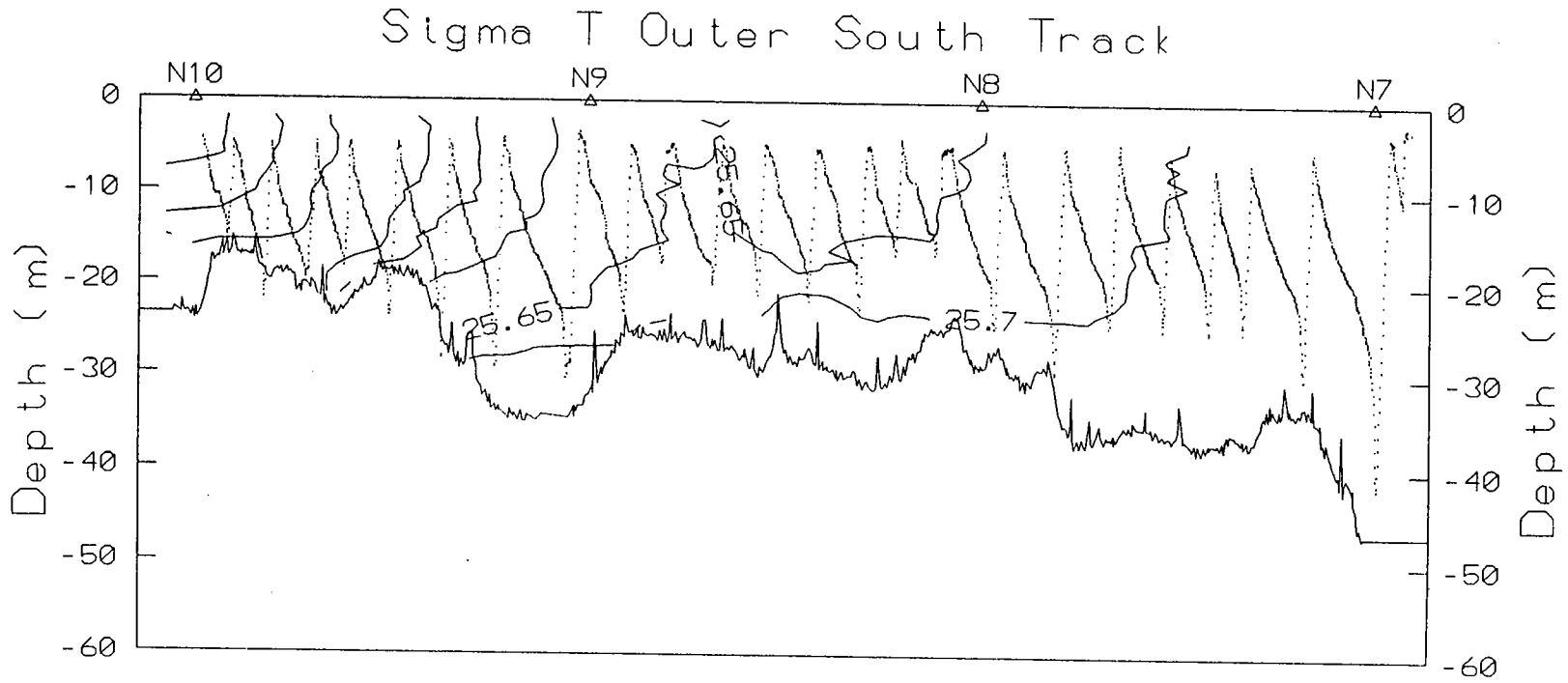

Sigma T Outer North Track
N1
N2
N3
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
25.58
25.62
25.62
25.66
25.66

D-26

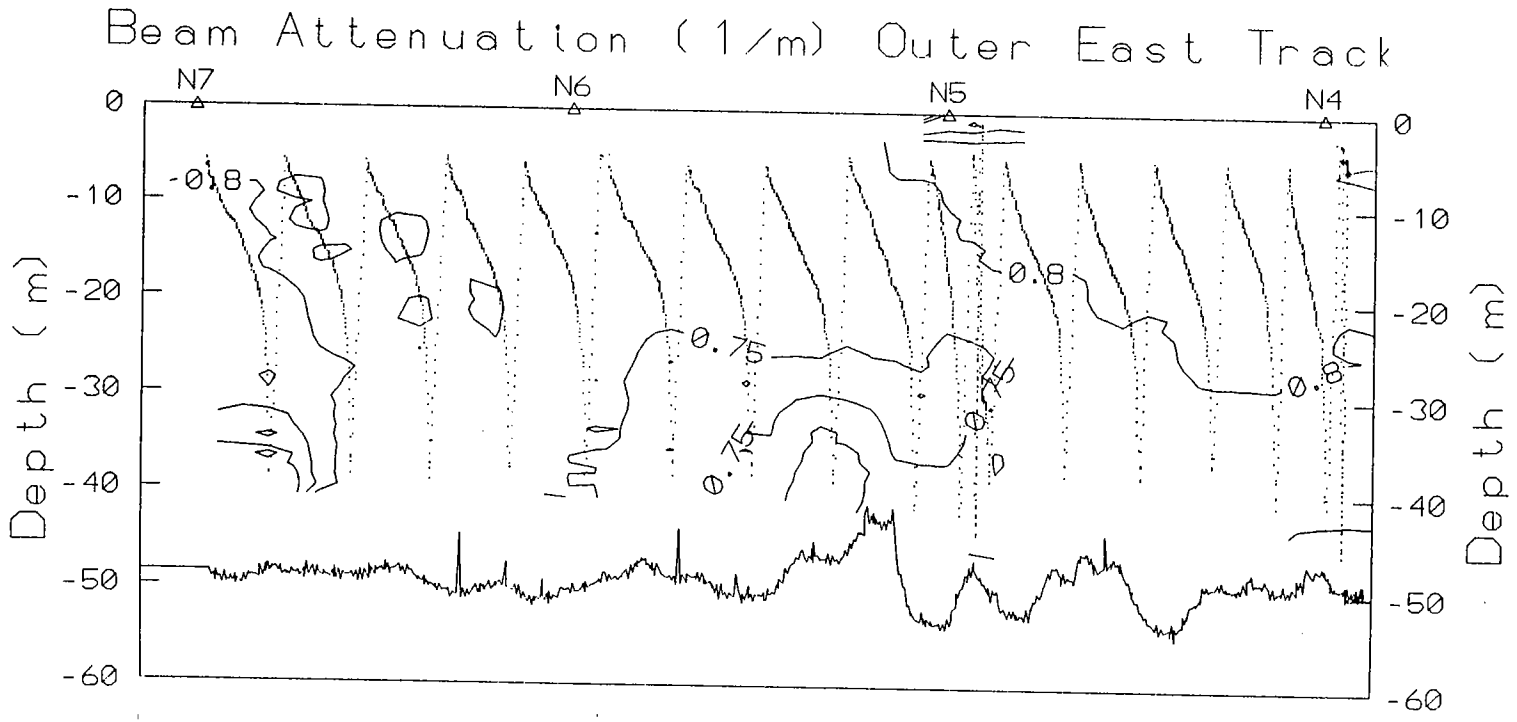


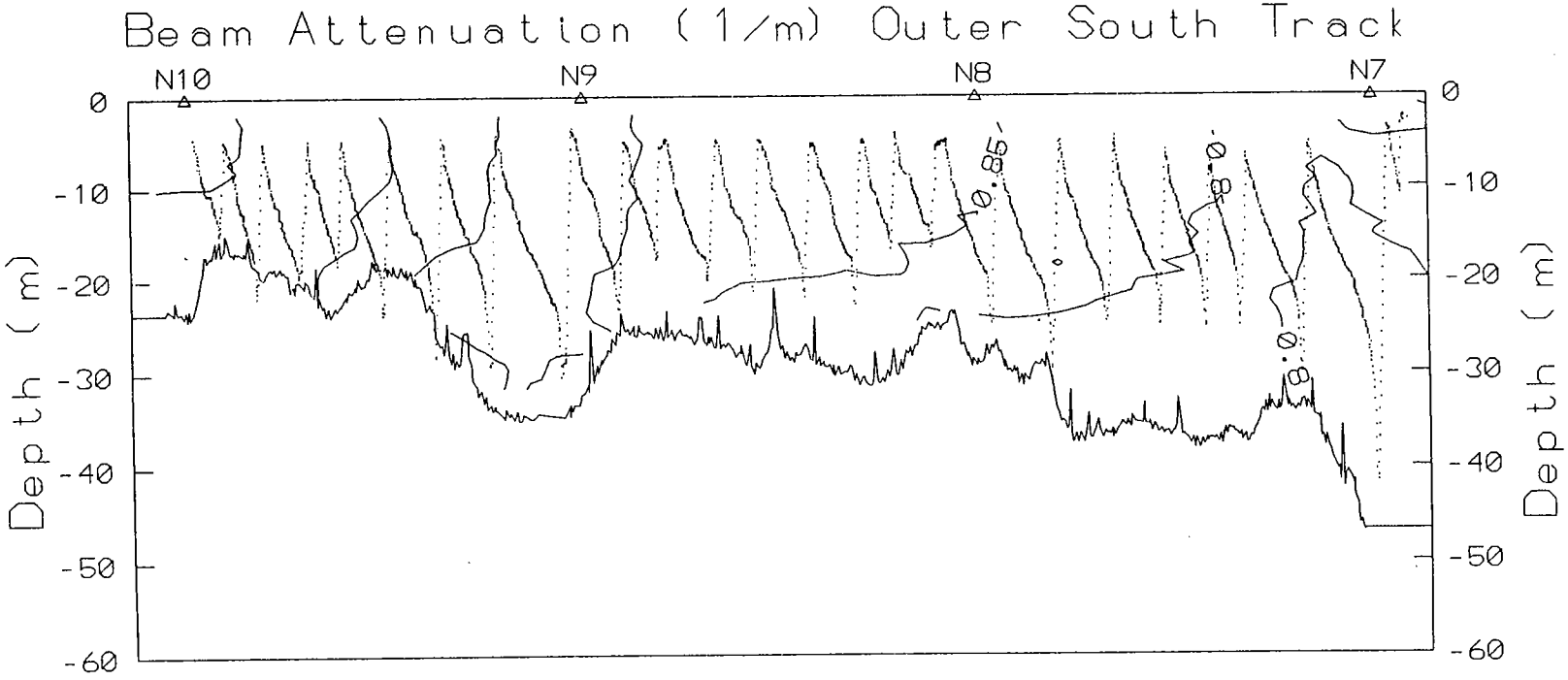
Sigma T Outer East Track
N7
N6
N5
N4
Depth (m)
0
-10
-20
-30
-40
-50
-60
25.73
25.73
25.73
25.71
25.71
25.69
25.67
25.65
25.67
25.67

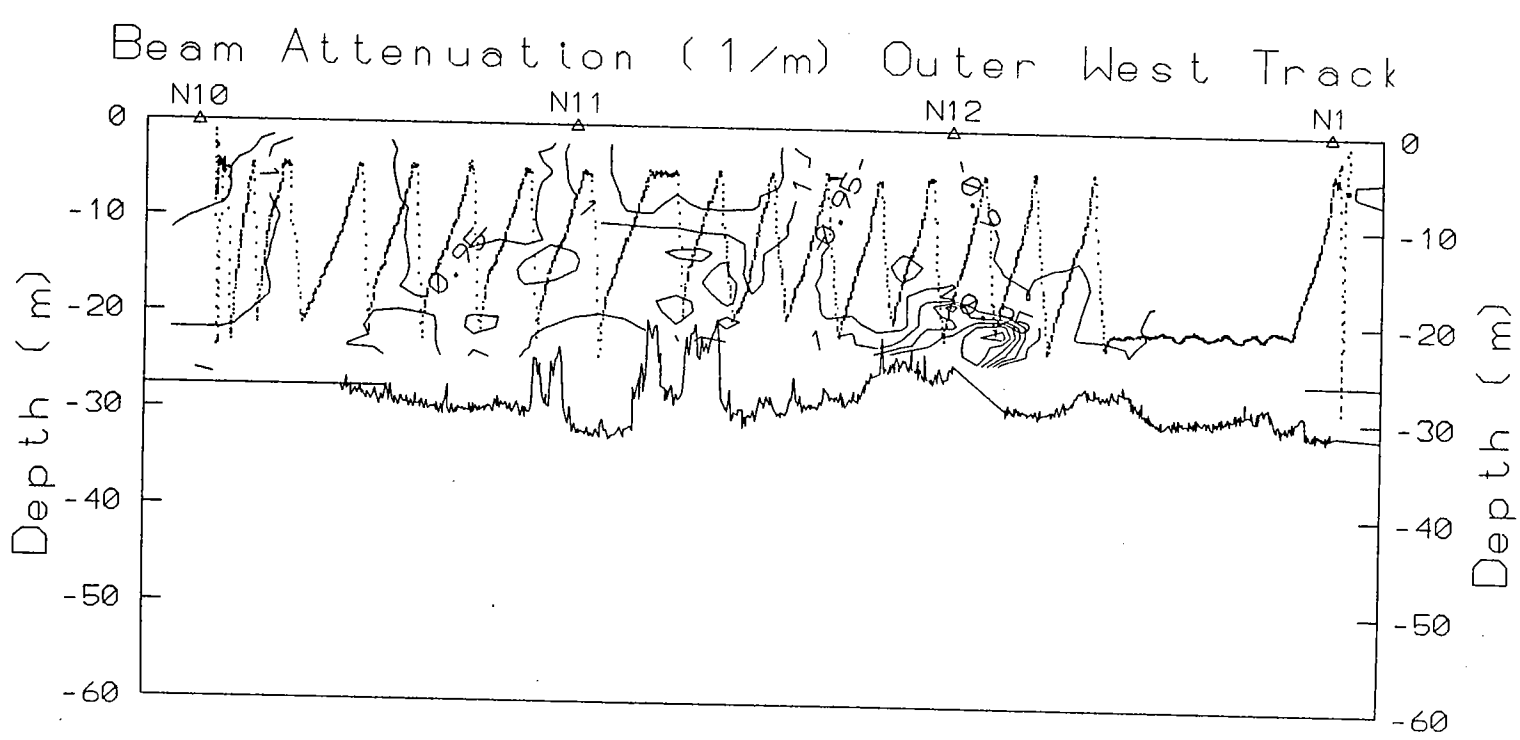

Sigma T Outer West Track
N10
N11
N12
N1
0
-10
-20
-30
-40
-50
-60
Depth (m)
25.5
25.55
25.6
25.65

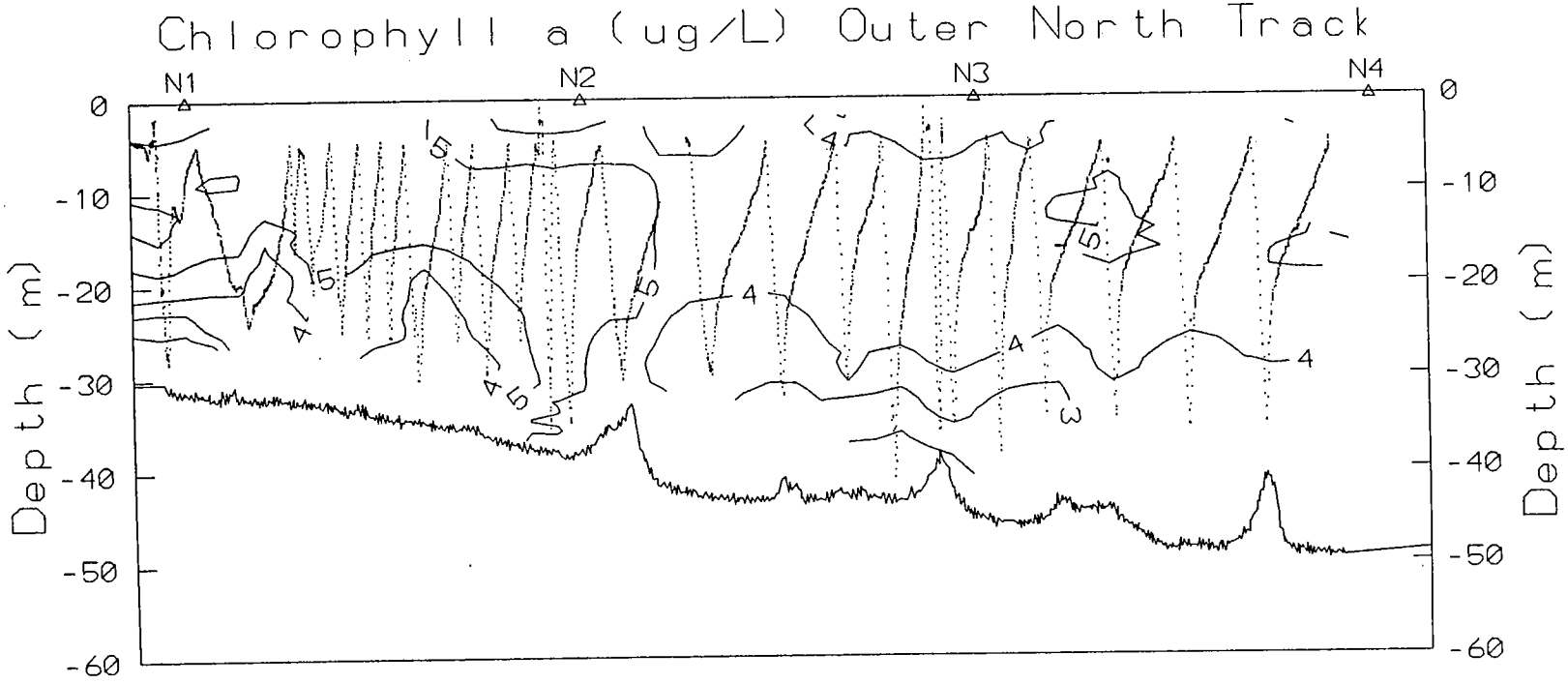

Sigma T Outer South Track
N10
N9
N8
N7
0
-10
-20
-30
-40
-50
-60
Depth (m)
25.65
25.65
25.7

Beam Attenuation (1/m) Outer North Track
N1
N2
N3
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
0.85
0.8


Beam Attenuation (1/m) Outer East Track
N7
N6
N5
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
0.8
0.75
0.8
0.75
0.8


Beam Attenuation (1/m) Outer South Track
N10
N9
N8
N7
0
-10
-20
-30
-40
-50
-60
Depth (m)
0.85
0.8
0.8

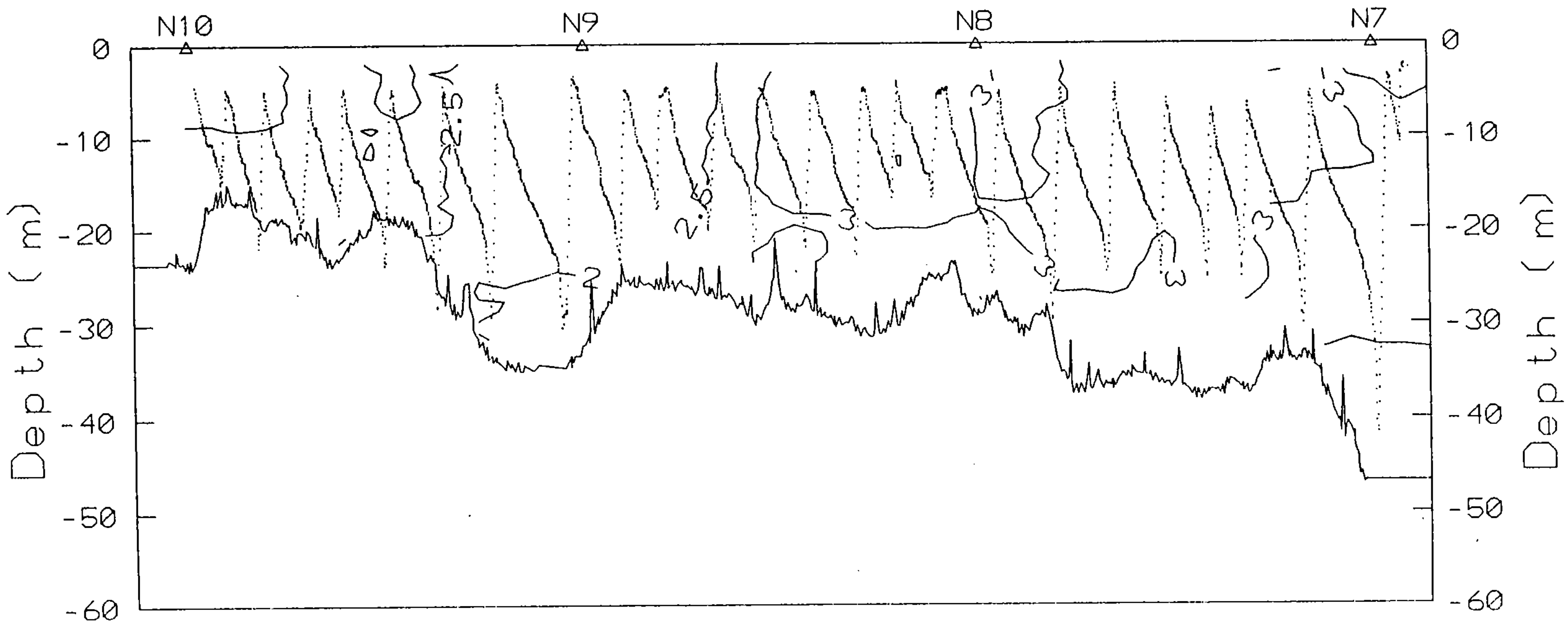

Beam Attenuation (1/m) Outer West Track
N10
N11
N12
N1
0
-10
-20
-30
-40
-50
-60
Depth (m)
Depth (m)


Chlorophyll a (ug/L) Outer North Track
N1
N2
N3
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
Depth (m)
5
4
3

Chlorophyll a (ug/L) Outer East Track
N7
N6
N5
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
2
3
4

D-35

Chlorophyll a (ug/L) Outer South Track



Chlorophyll a (ug/L) Outer West Track
N10
N11
N12
N1
0
-10
-20
-30
-40
-50
-60
Depth (m)
2.5
3
3.5
4
4.5
5

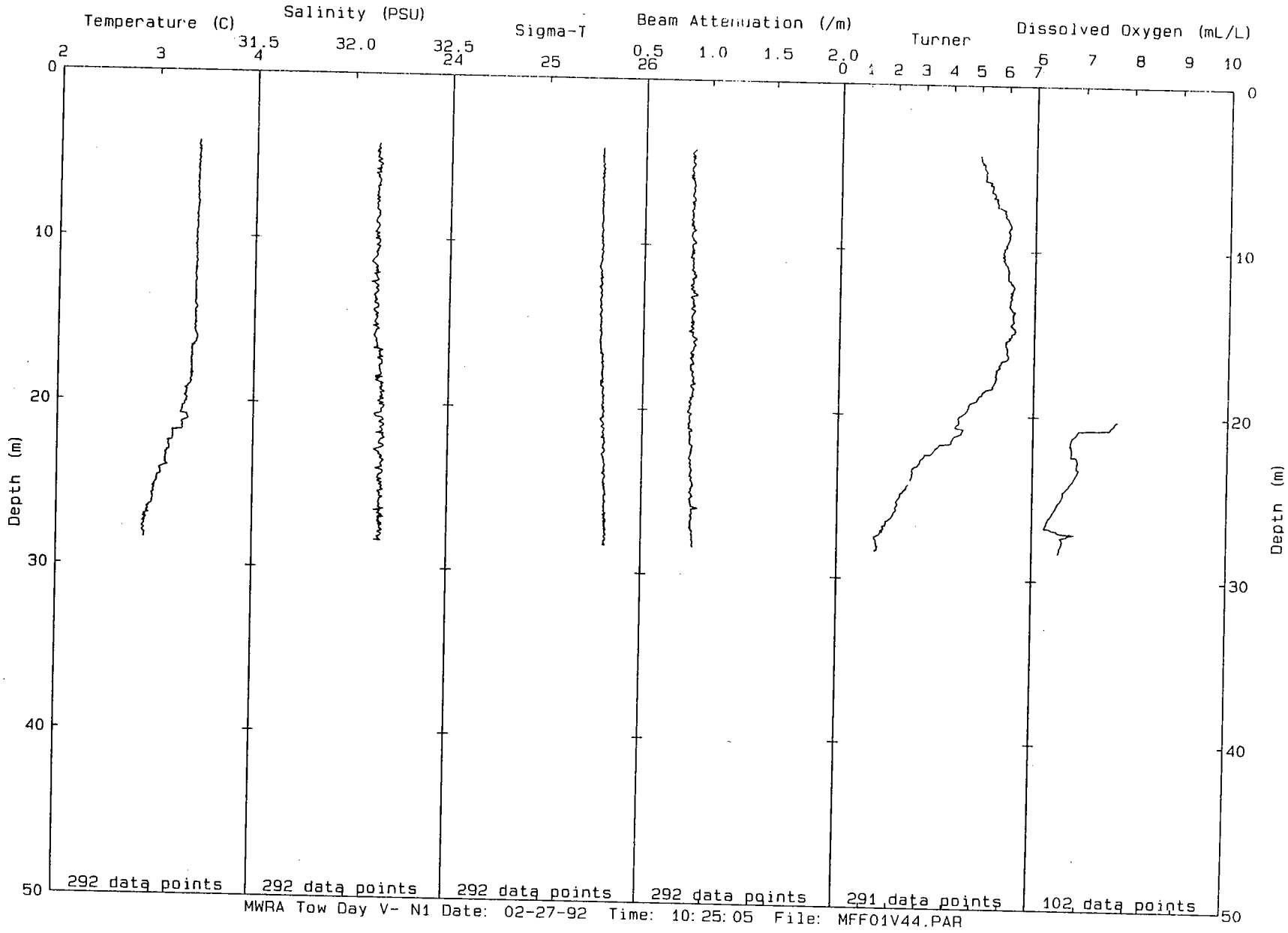
APPENDIX D

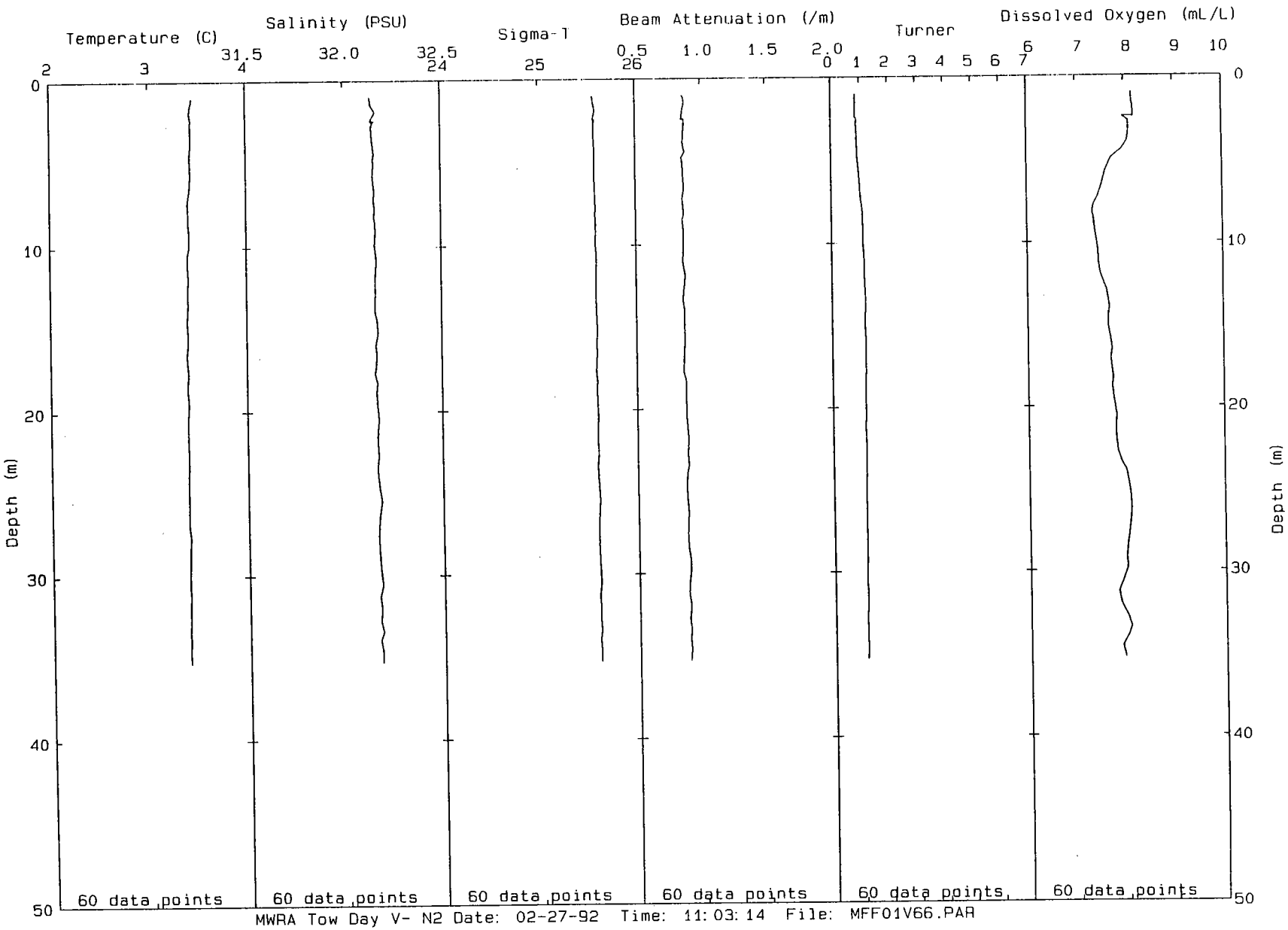
Towing Profiles from February 1992 Nearfield Stations

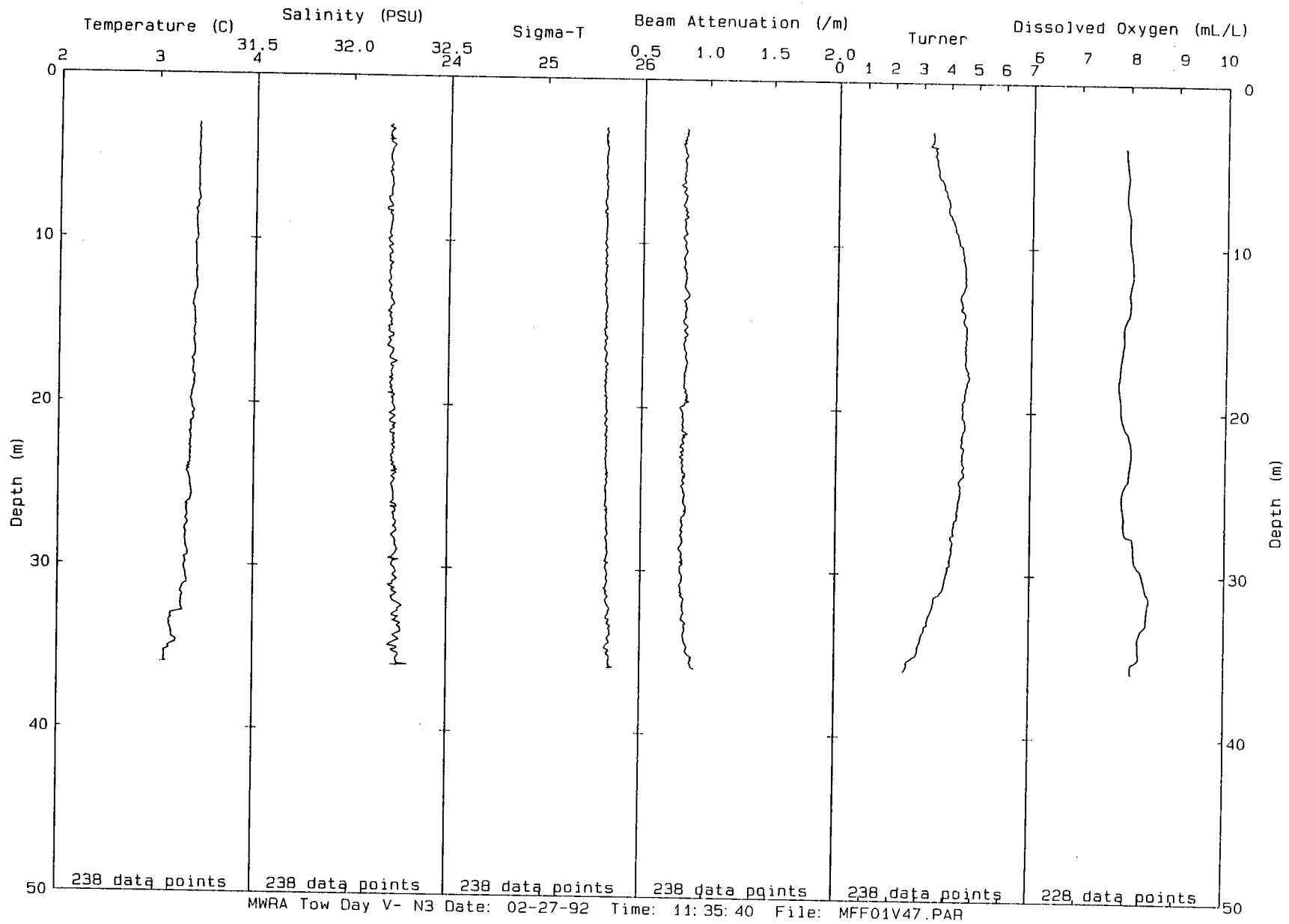
Part 3

Station Vertical Casts Used to Produce Contour Comparison to Towing Profiles

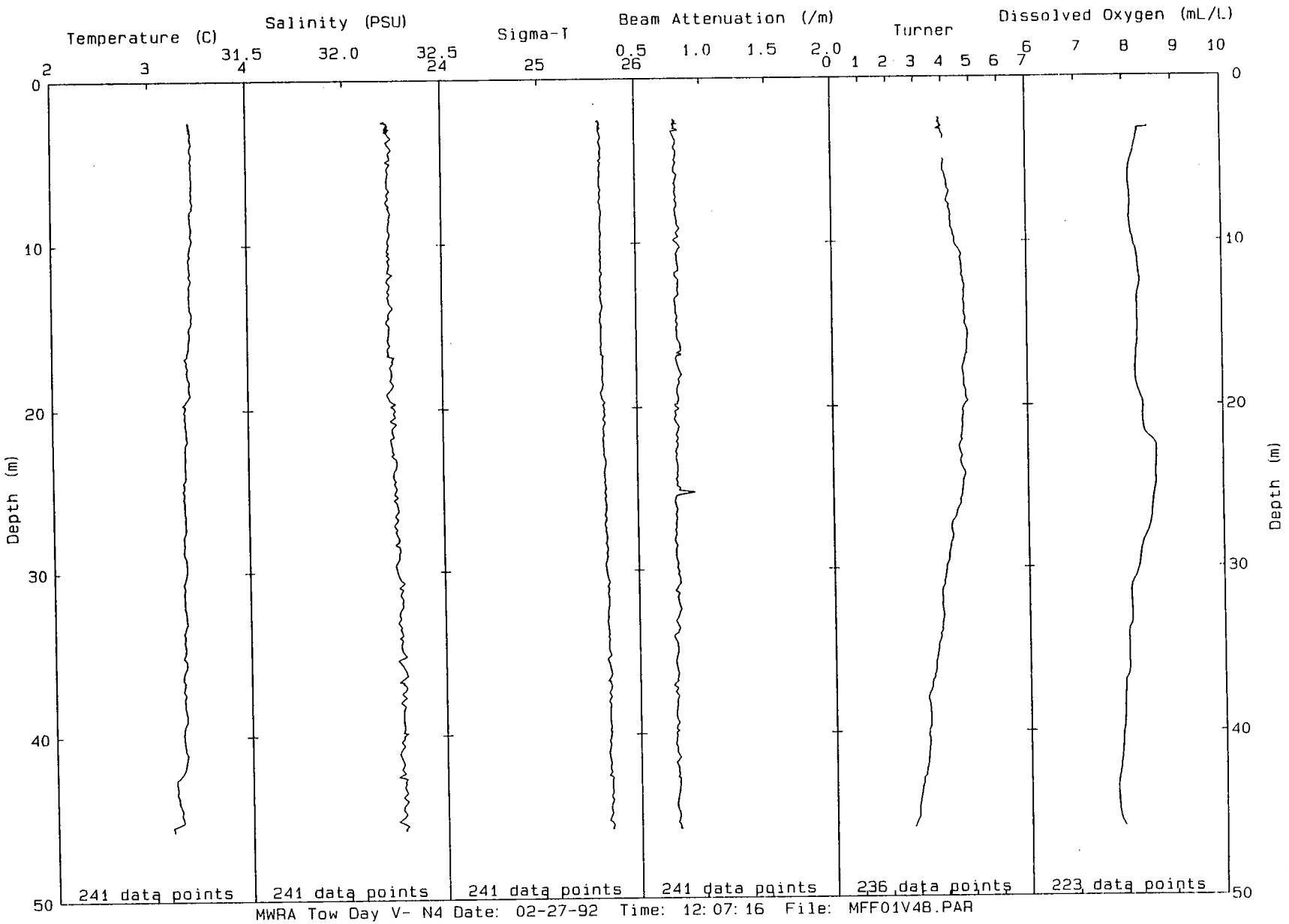
The vertical downcast portion of the electronic sampling file was used to generate vertical profile plots at each nearfield station. These profiles were used to compare the contoured image obtained from the continuous time series of towing compared to only the small set of station profiles, see Section 3 text.


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
292 data points
292 data points
292 data points
292 data points
291 data points
102 data points
MWRA Tow Day V- N1 Date: 02-27-92 Time: 10:25:05 File: MFF01V44.PAR

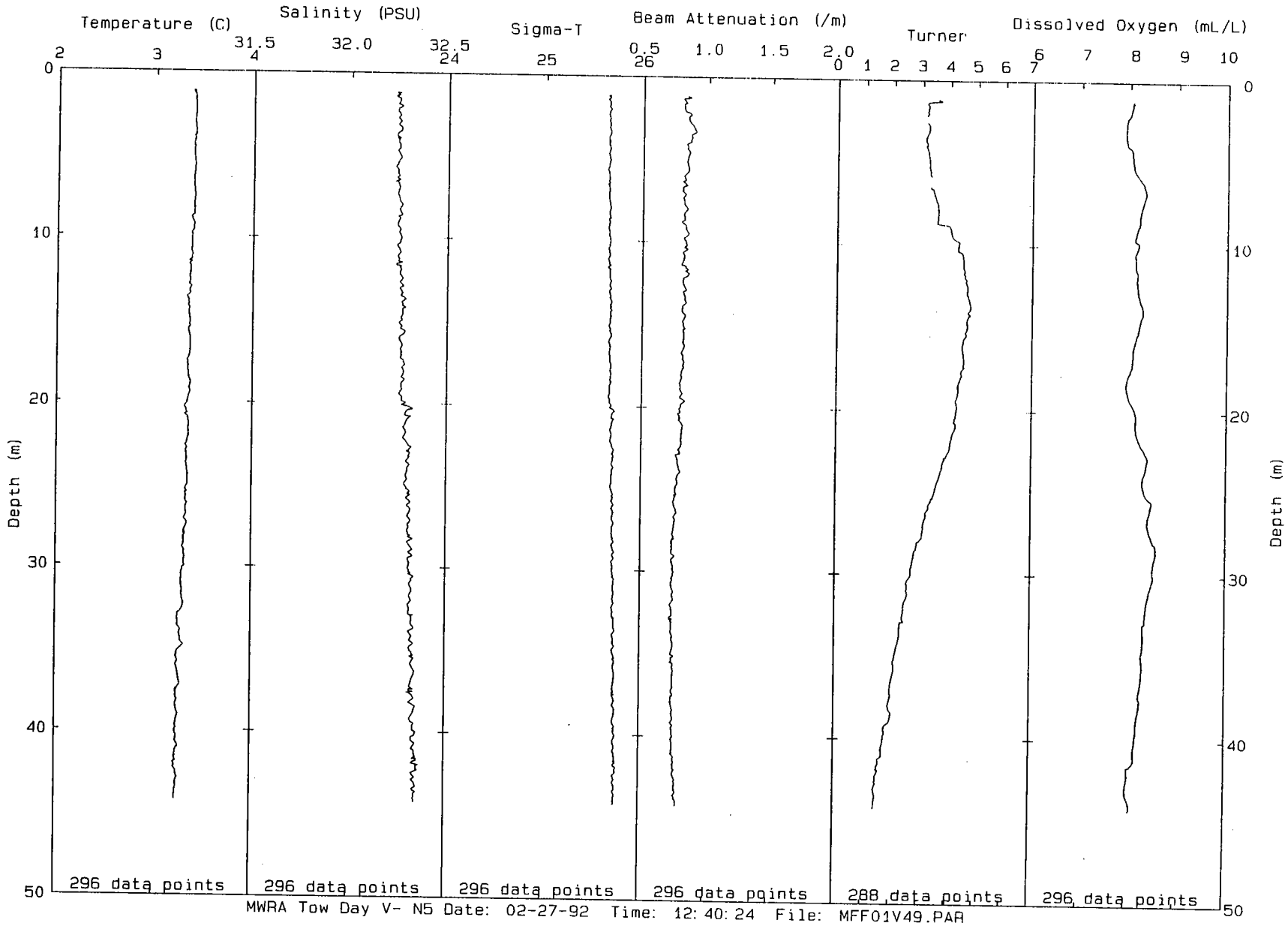

Temperature (C)
Salinity (PSU)
Sigma-1
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
60 data points
60 data points
60 data points
60 data points
60 data points
60 data points
MWRA Tow Day V- N2 Date: 02-27-92 Time: 11:03:14 File: MFF01V66.PAR

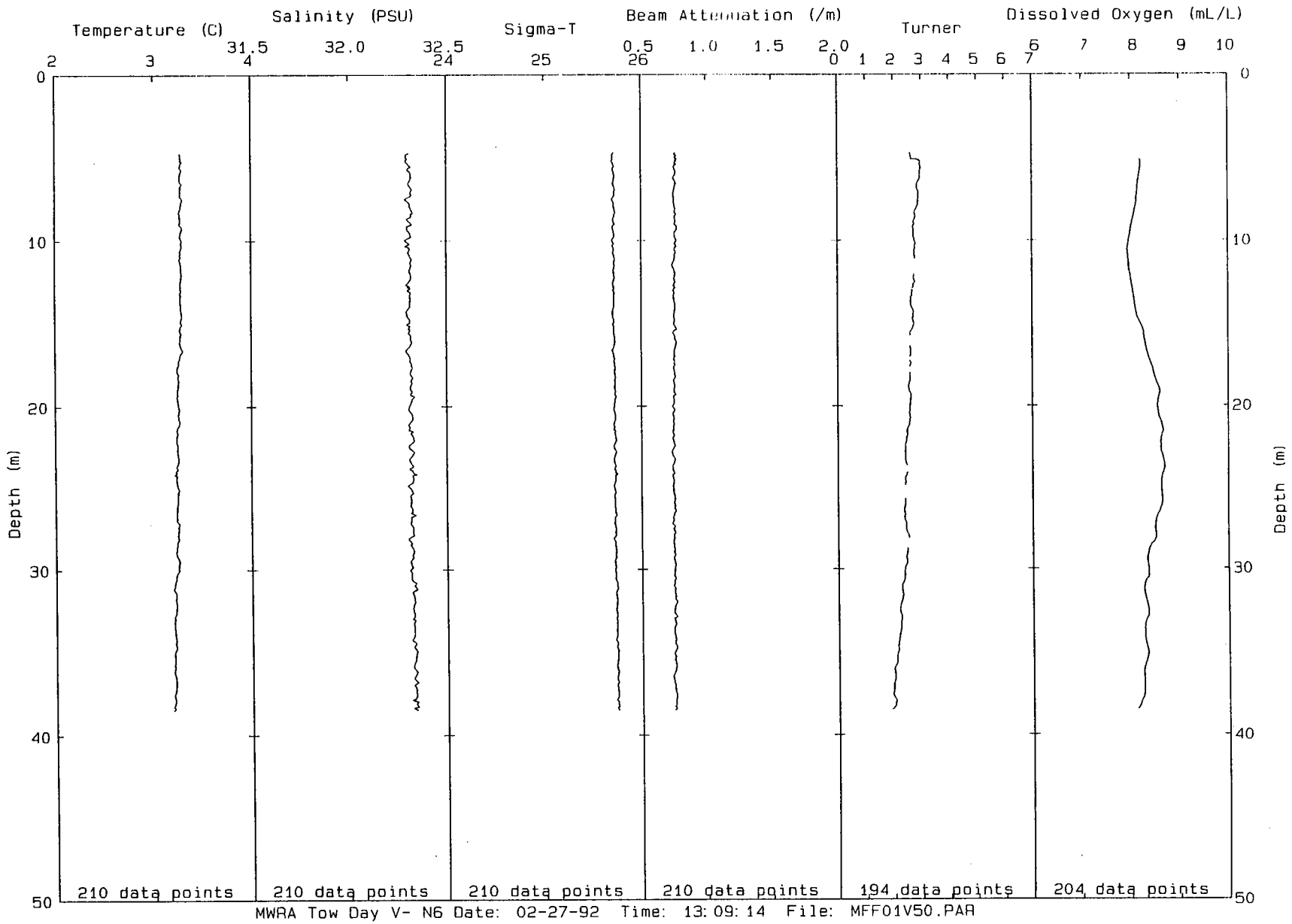

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
238 data points
238 data points
238 data points
238 data points
238 data points
228 data points
MWRA Tow Day V- N3 Date: 02-27-92 Time: 11:35:40 File: MFF01V47.PAR

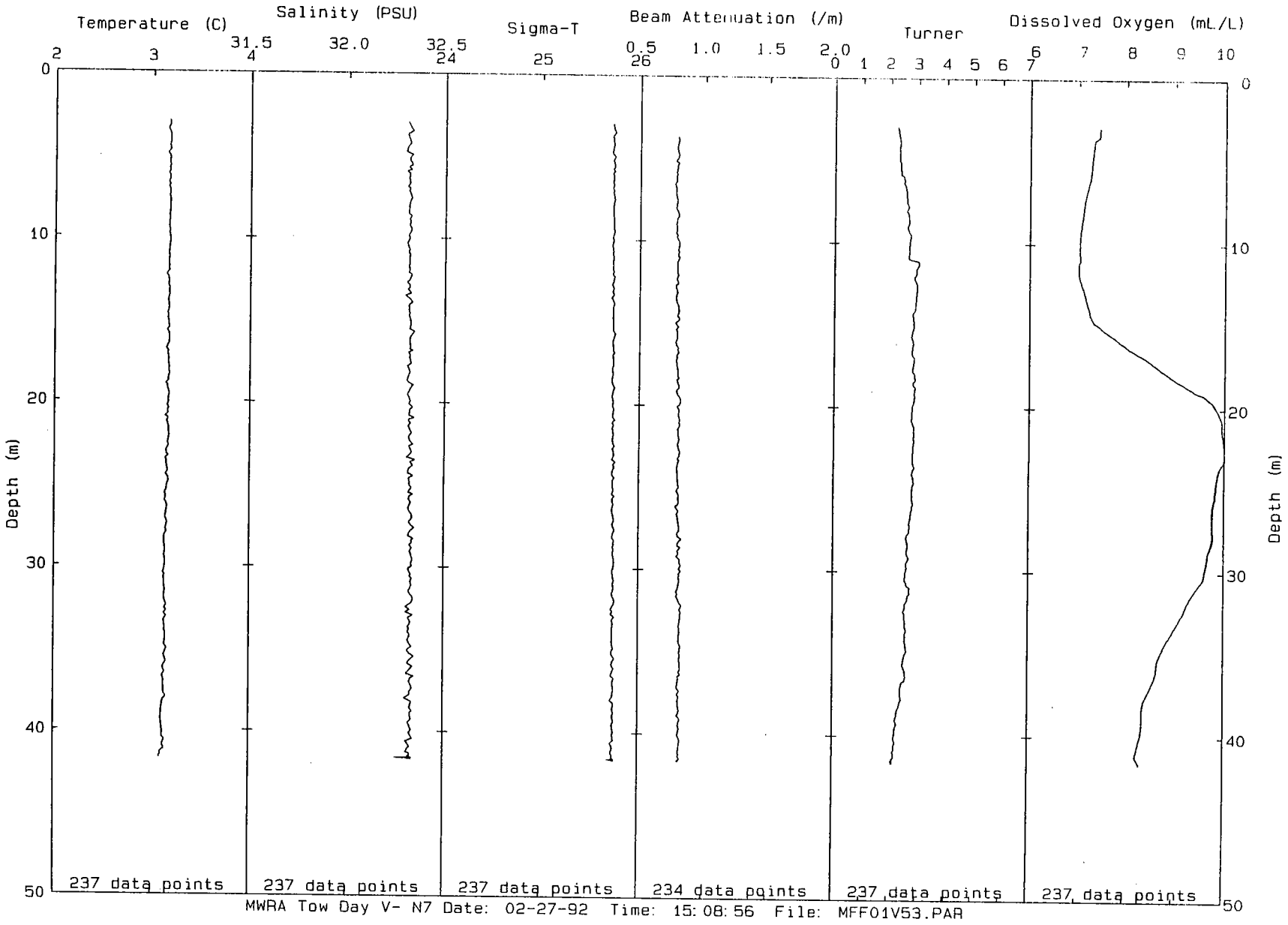
D-40


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
241 data points
241 data points
241 data points
241 data points
236 data points
223 data points
MWRA Tow Day V- N4 Date: 02-27-92 Time: 12:07:16 File: MFF01V48.PAR

H-1

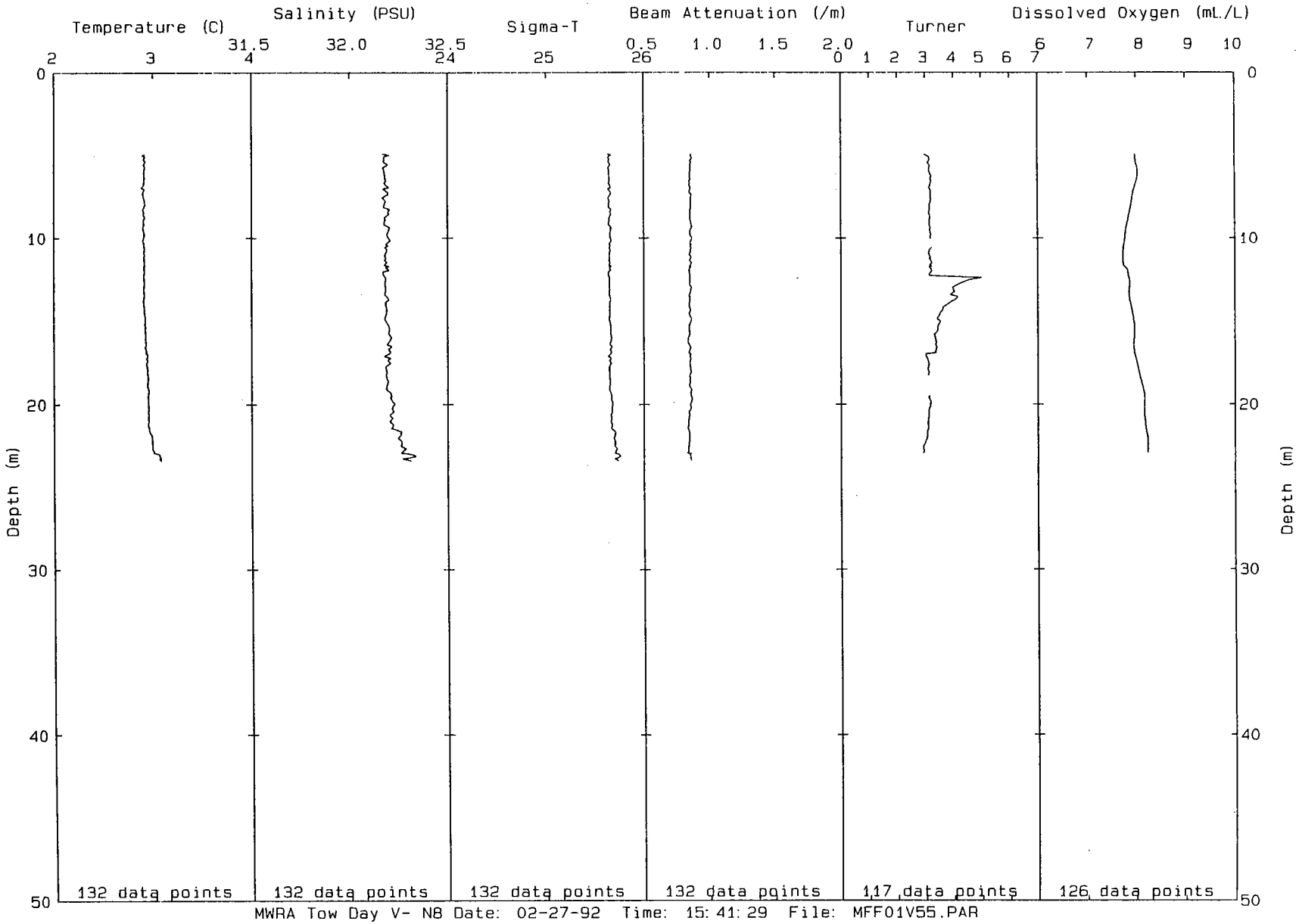

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
296 data points
296 data points
296 data points
296 data points
288 data points
296 data points
MWRA Tow Day V- N5 Date: 02-27-92 Time: 12:40:24 File: MFF01V49.PAR

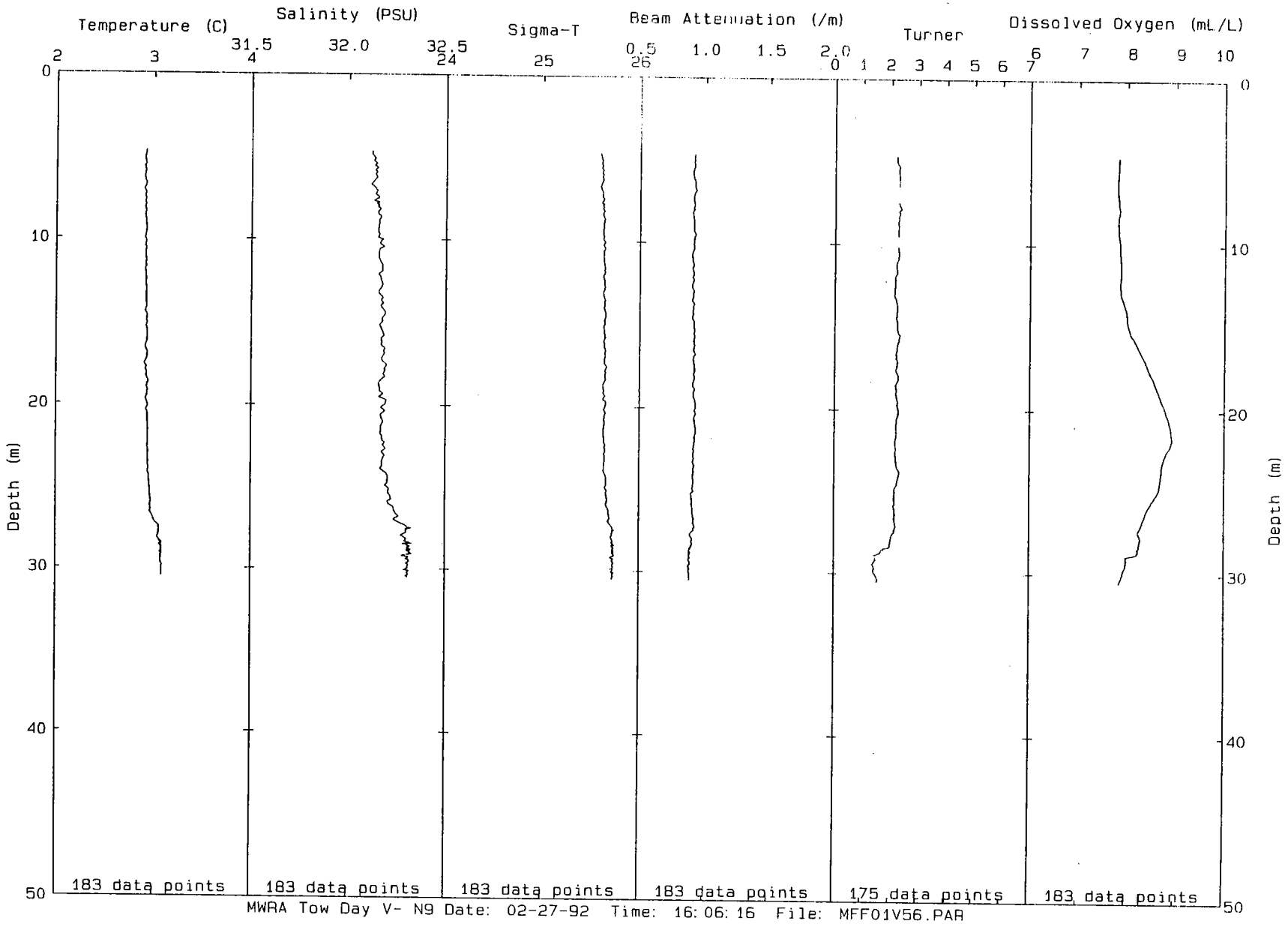

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
210 data points
210 data points
210 data points
210 data points
194 data points
204 data points
MWRA Tow Day V- N6 Date: 02-27-92 Time: 13:09:14 File: MFF01V50.PAR

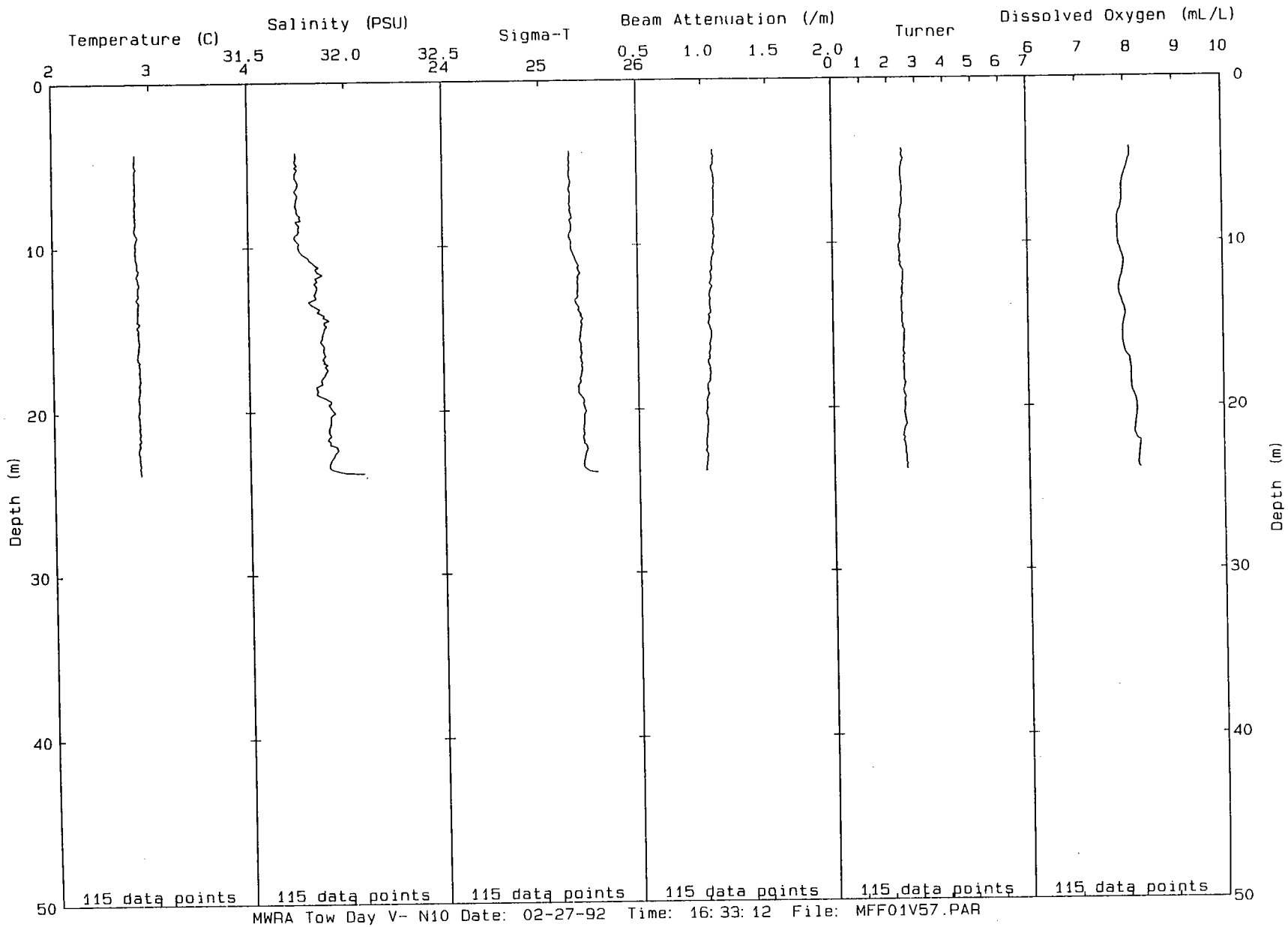

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
237 data points
237 data points
237 data points
234 data points
237 data points
237 data points
MWRA Tow Day V- N7 Date: 02-27-92 Time: 15:08:56 File: MFF01V53.PAR

4h-4

5h-D

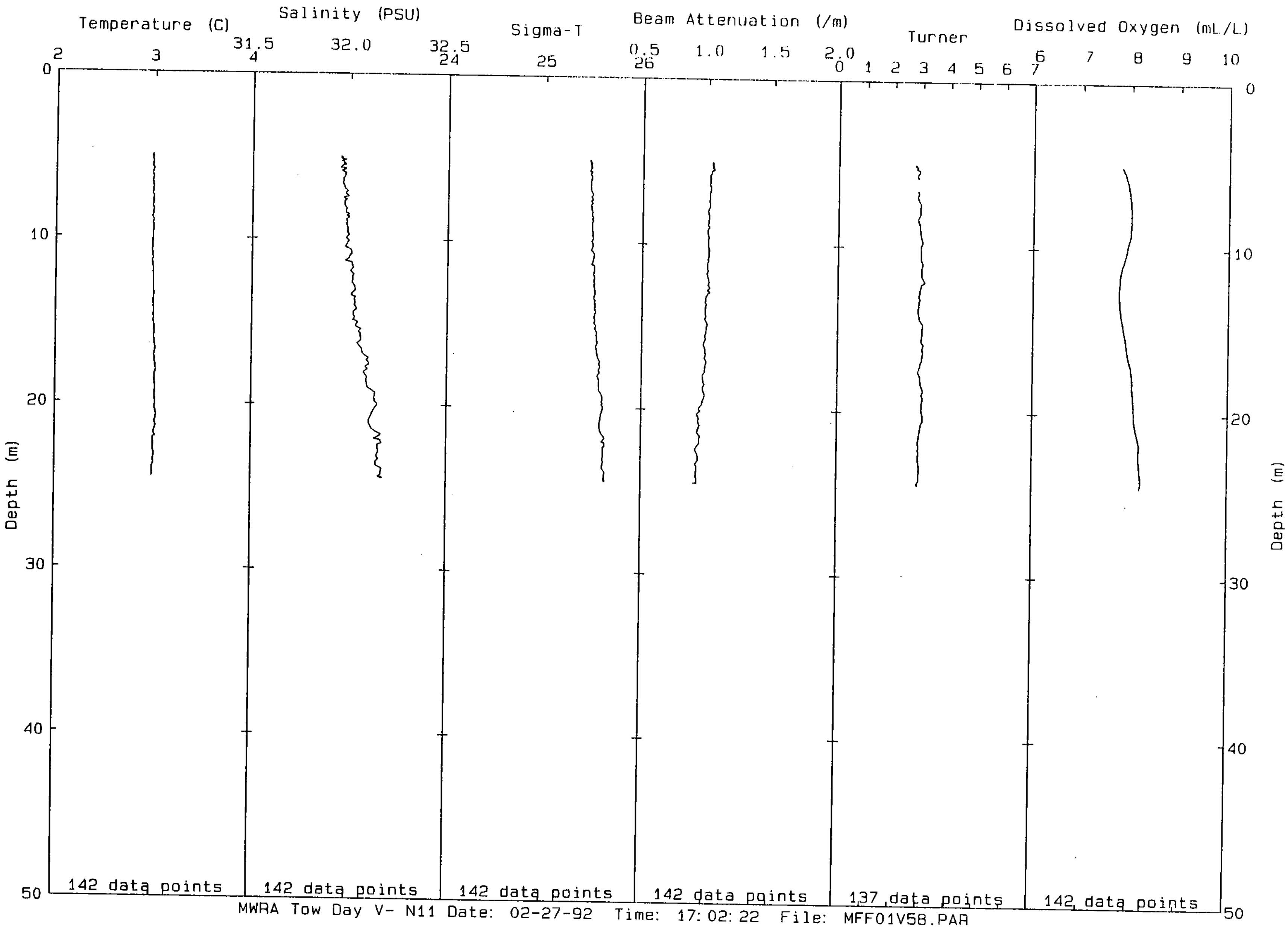

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
132 data points
132 data points
132 data points
132 data points
117 data points
126 data points
MWRA Tow Day V- N8 Date: 02-27-92 Time: 15:41:29 File: MFF01V55.PAR

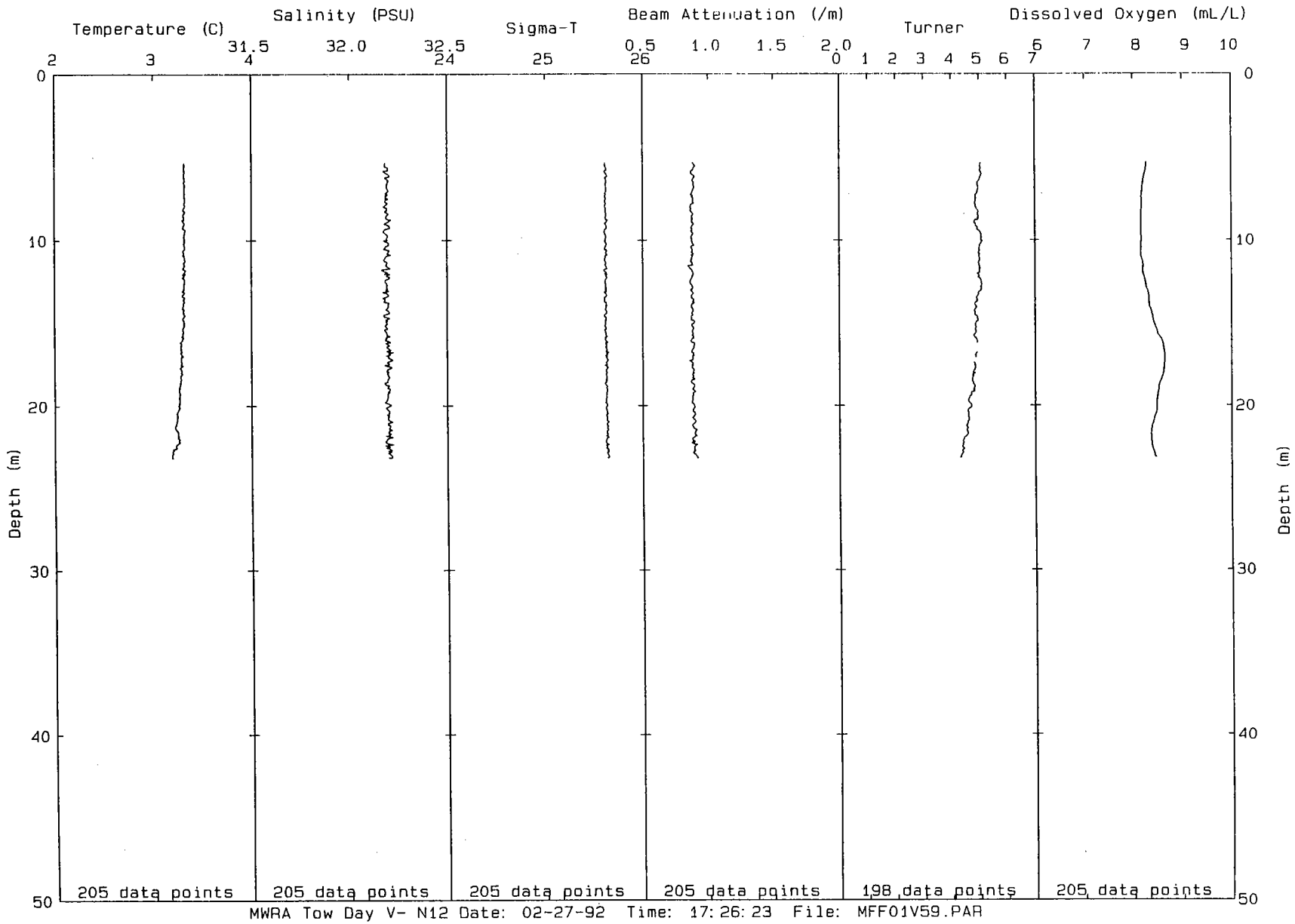

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
183 data points
183 data points
183 data points
183 data points
175 data points
183 data points
MWRA Tow Day V- N9 Date: 02-27-92 Time: 16:06:16 File: MFF01V56.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
115 data points
115 data points
115 data points
115 data points
115 data points
115 data points
MWRA Tow Day V- N10 Date: 02-27-92 Time: 16:33:12 File: MFF01V57.PAR

D-47

D-48


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
2 3 4
31.5 32.0 32.5
24 25 26
0.5 1.0 1.5 2.0
0 1 2 3 4 5 6 7
6 7 8 9 10
Depth (m)
0 10 20 30 40 50
142 data points
142 data points
142 data points
142 data points
137 data points
142 data points
MWRA Tow Day V- N11 Date: 02-27-92 Time: 17:02:22 File: MFF01V58.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Attenuation (/m)
Turner
Dissolved Oxygen (mL/L)
Depth (m)
205 data points
205 data points
205 data points
205 data points
198 data points
205 data points
MWRA Tow Day V- N12 Date: 02-27-92 Time: 17:26:23 File: MFF01V59.PAR

D-49

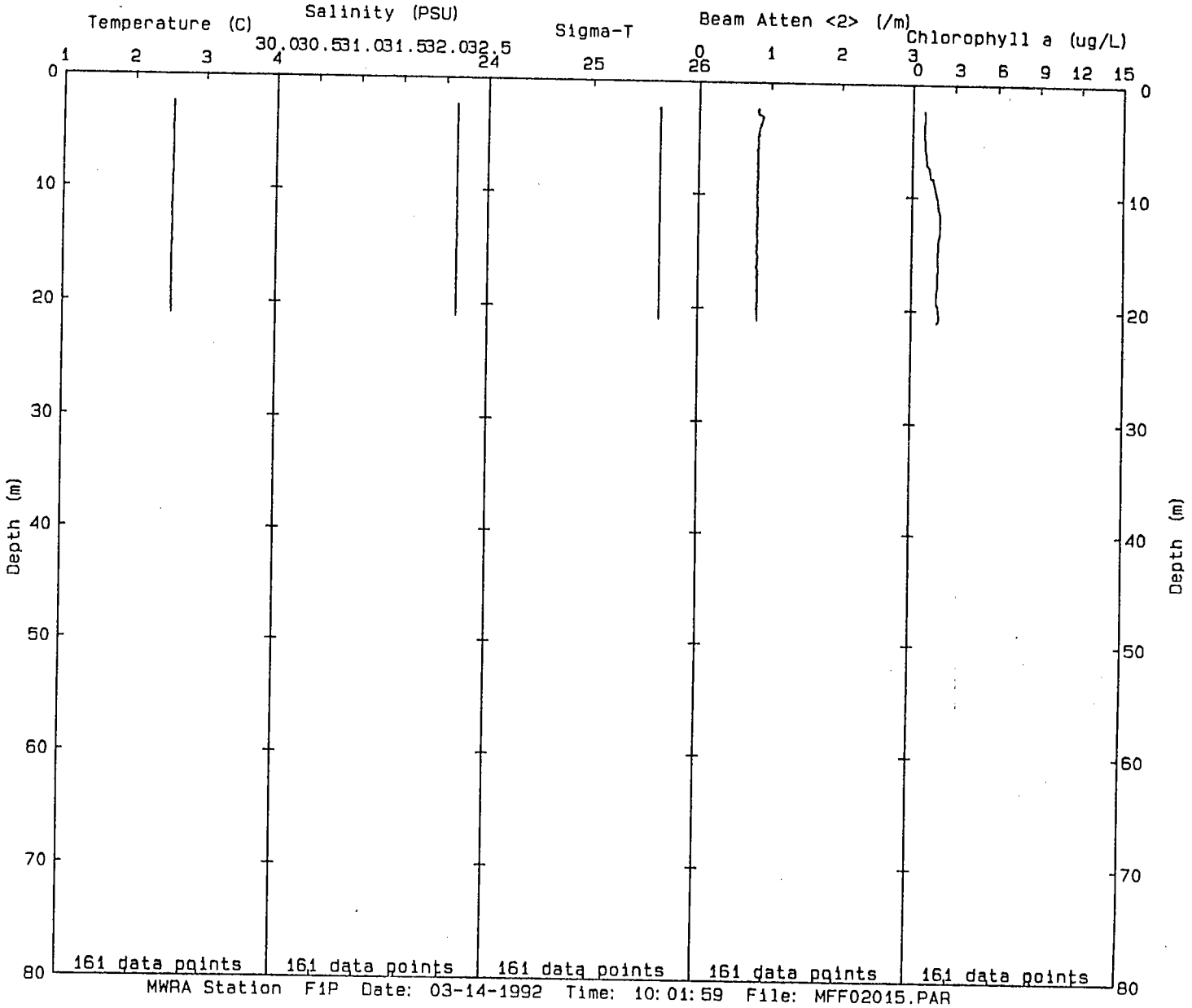
APPENDIX E

March 1992 Cruises

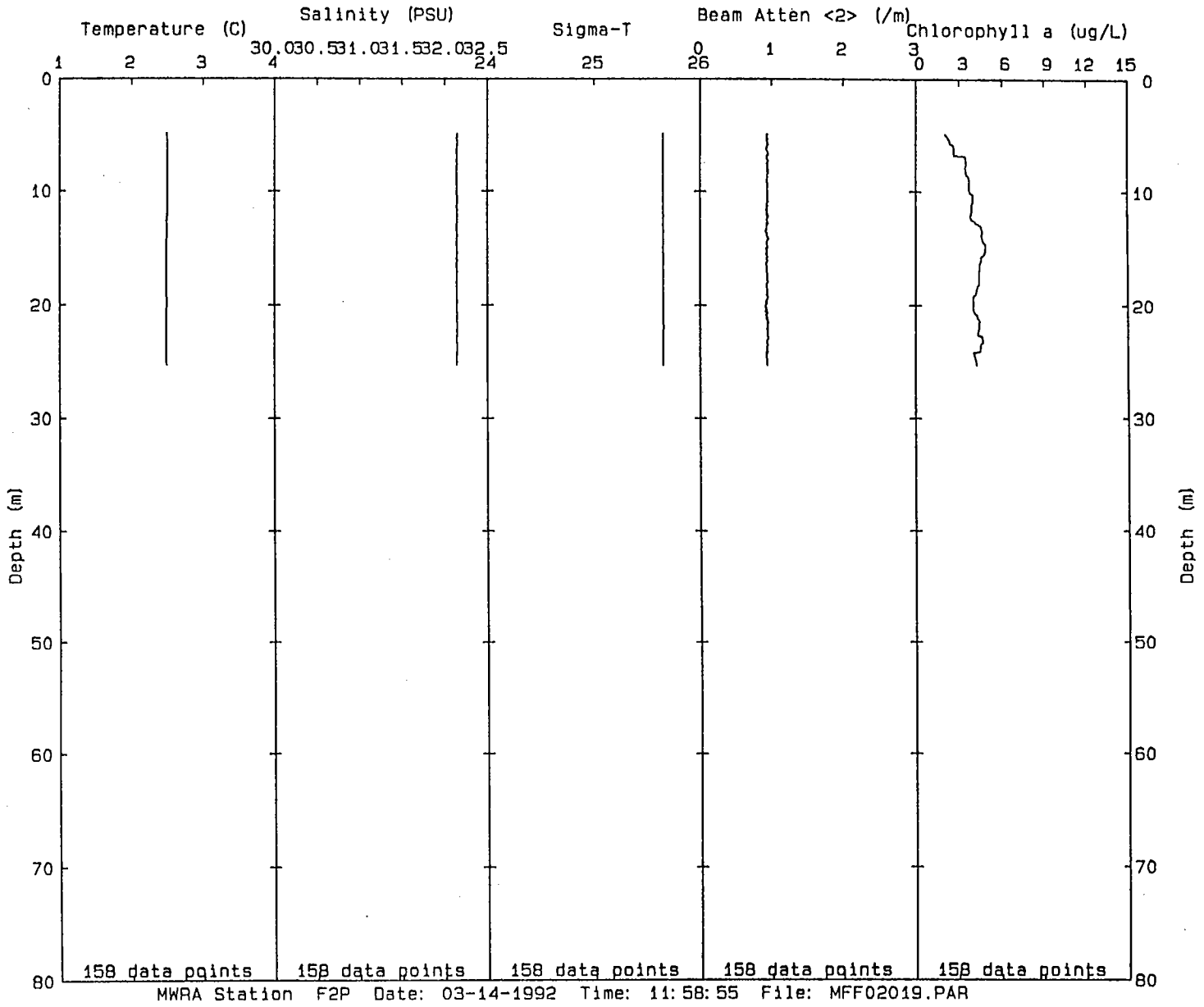
Part 1

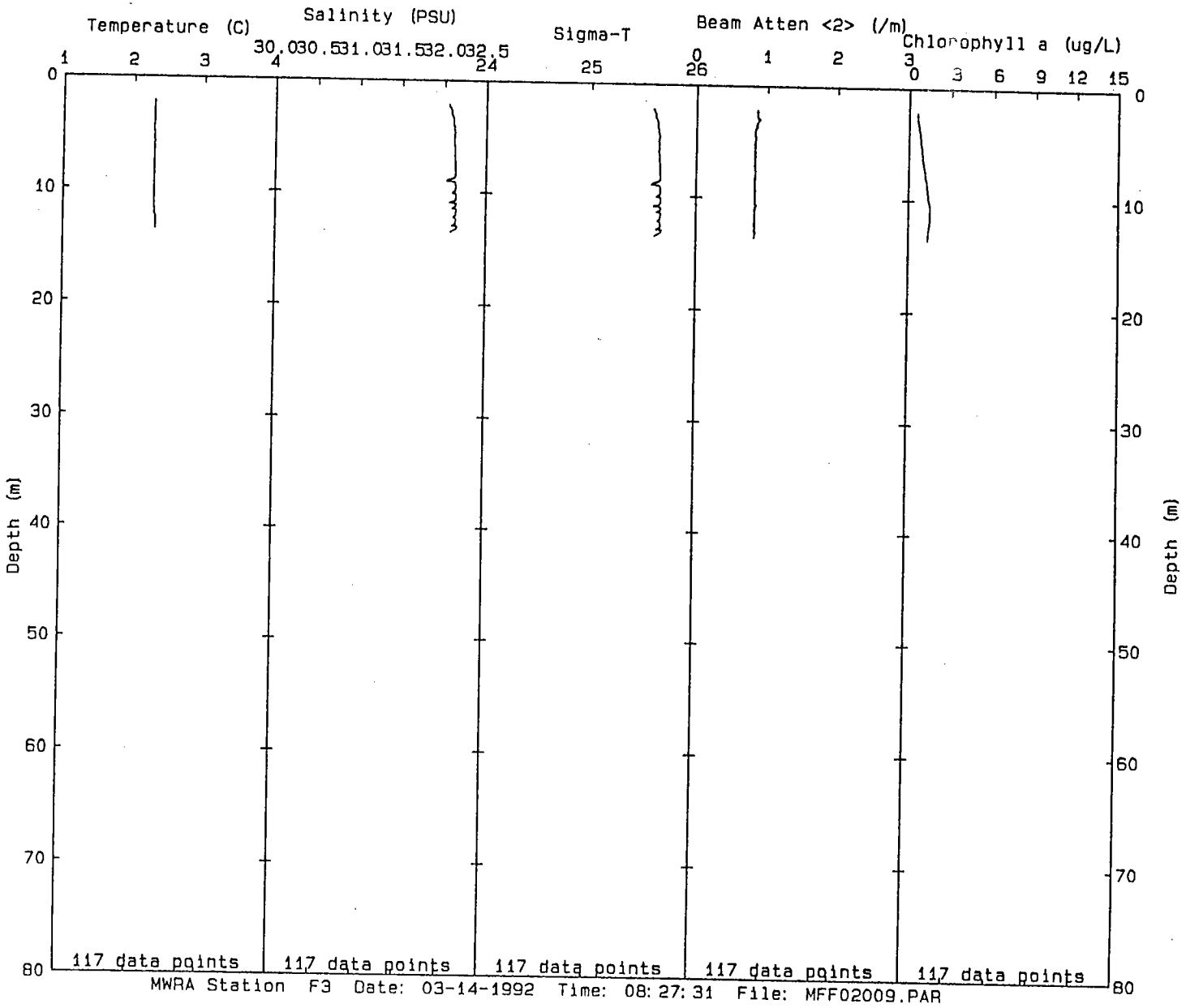
Vertical Profiles from March 1992 Farfield and Nearfield Stations

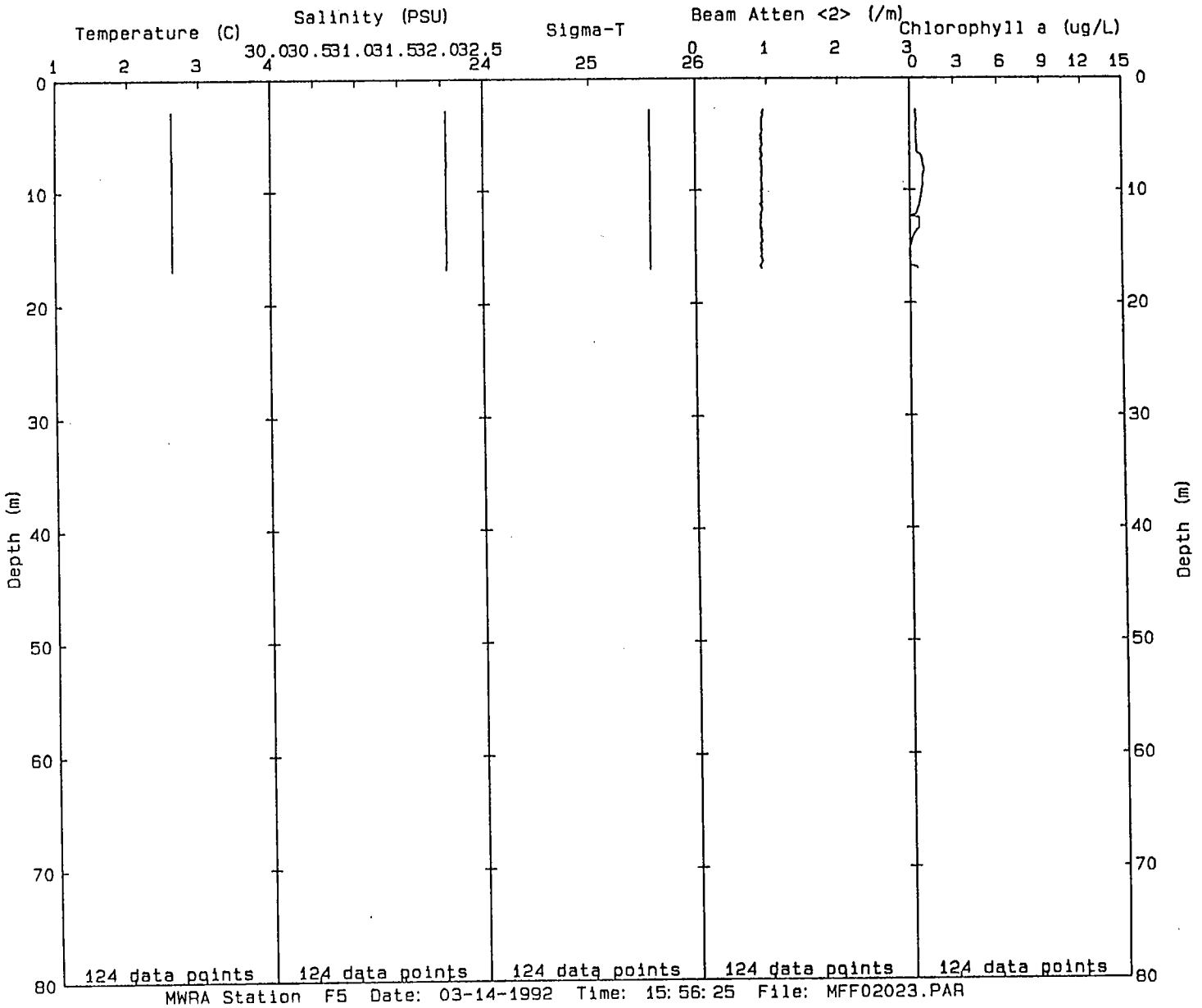
Only calibrated data are presented, where calibrations for sensors have been performed as described for bottle-firing data in Appendix B. The data are from the downcast of the rosette and may not match the data in Appendix B, since the bottles are closed on the upcast.


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
161 data points
161 data points
161 data points
161 data points
161 data points
MWRA Station F1P Date: 03-14-1992 Time: 10:01:59 File: MFF02015.PAR

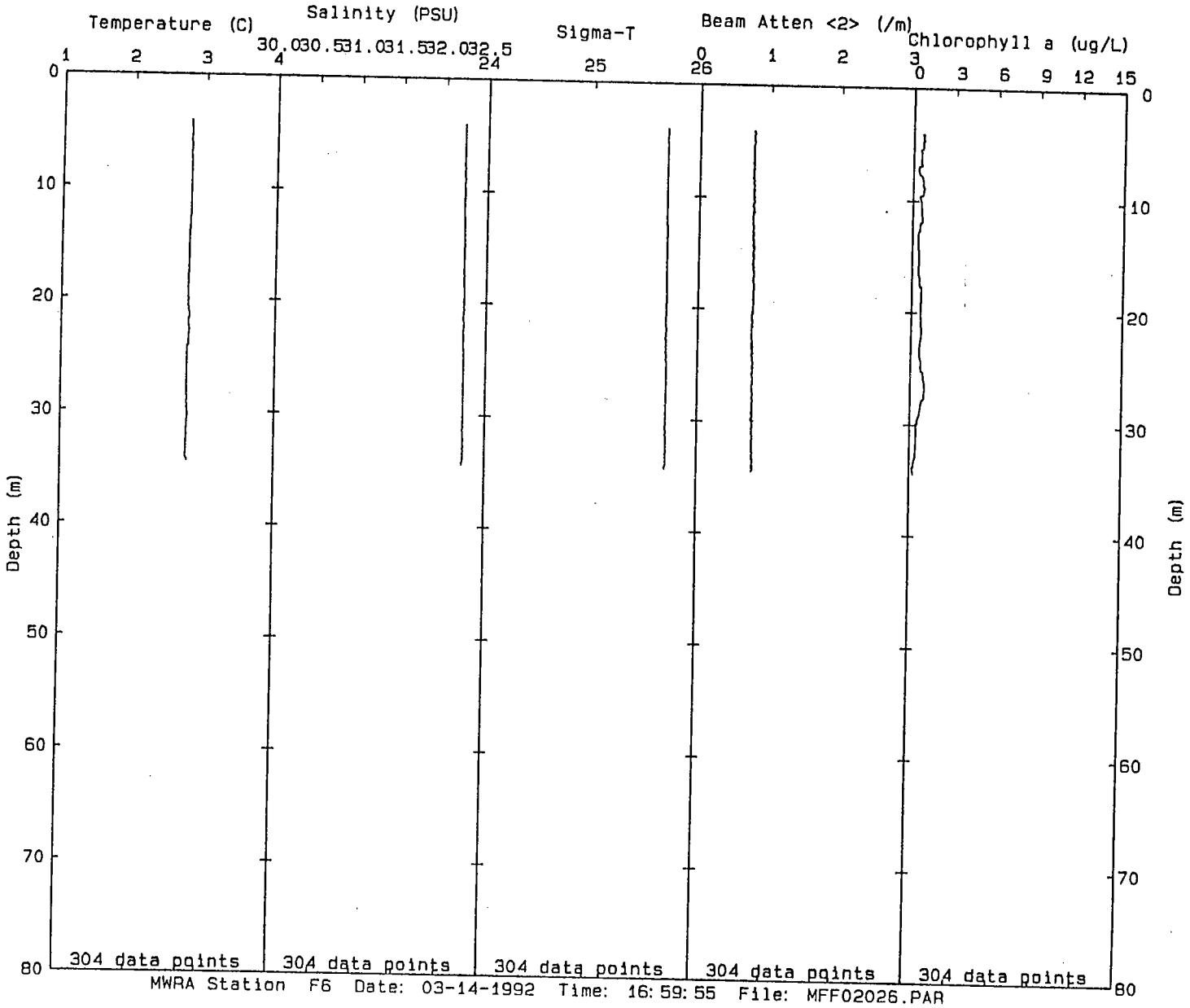
F-2

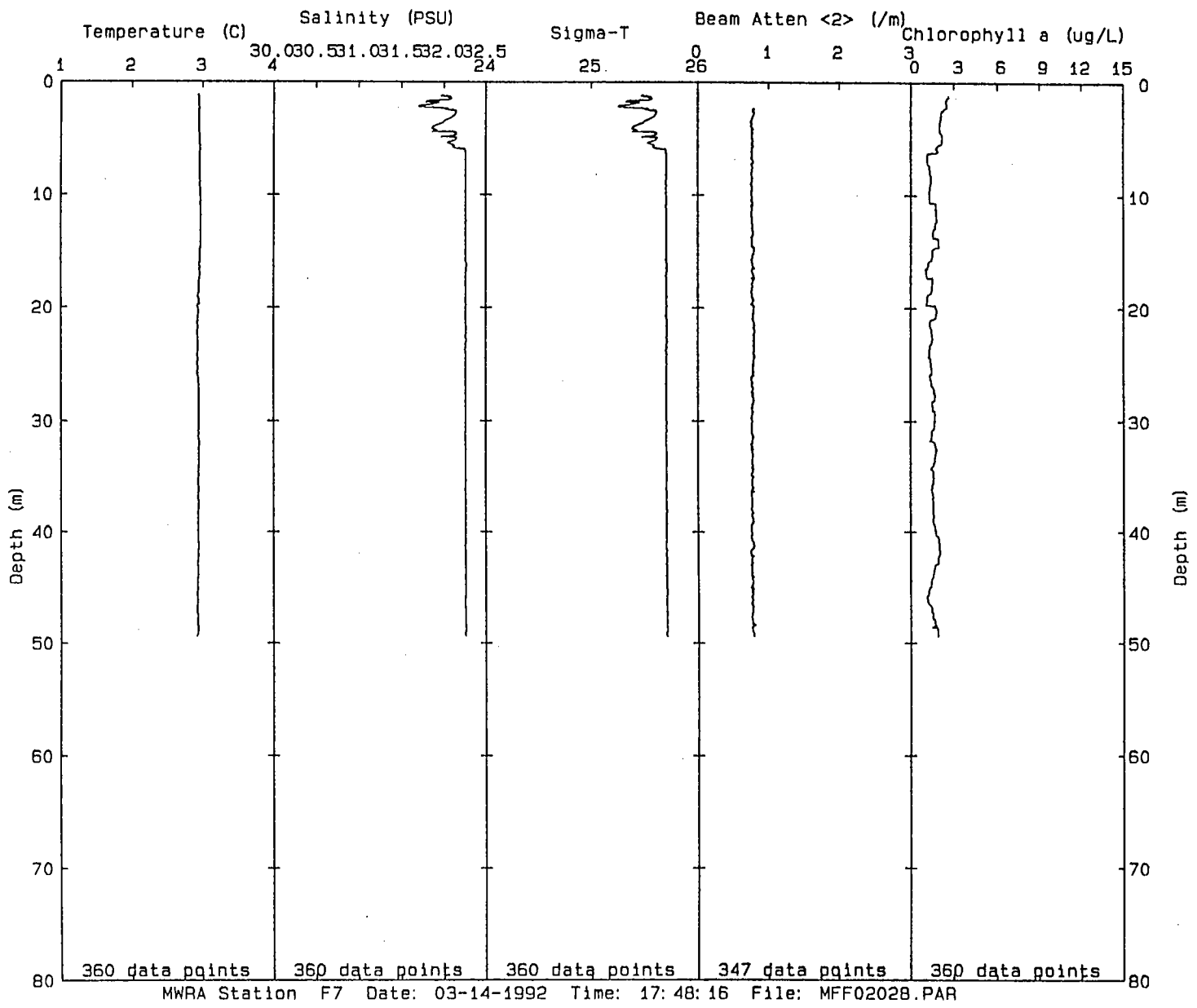

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
158 data points
158 data points
158 data points
158 data points
158 data points
MWRA Station F2P Date: 03-14-1992 Time: 11:58:55 File: MFF02019.PAR

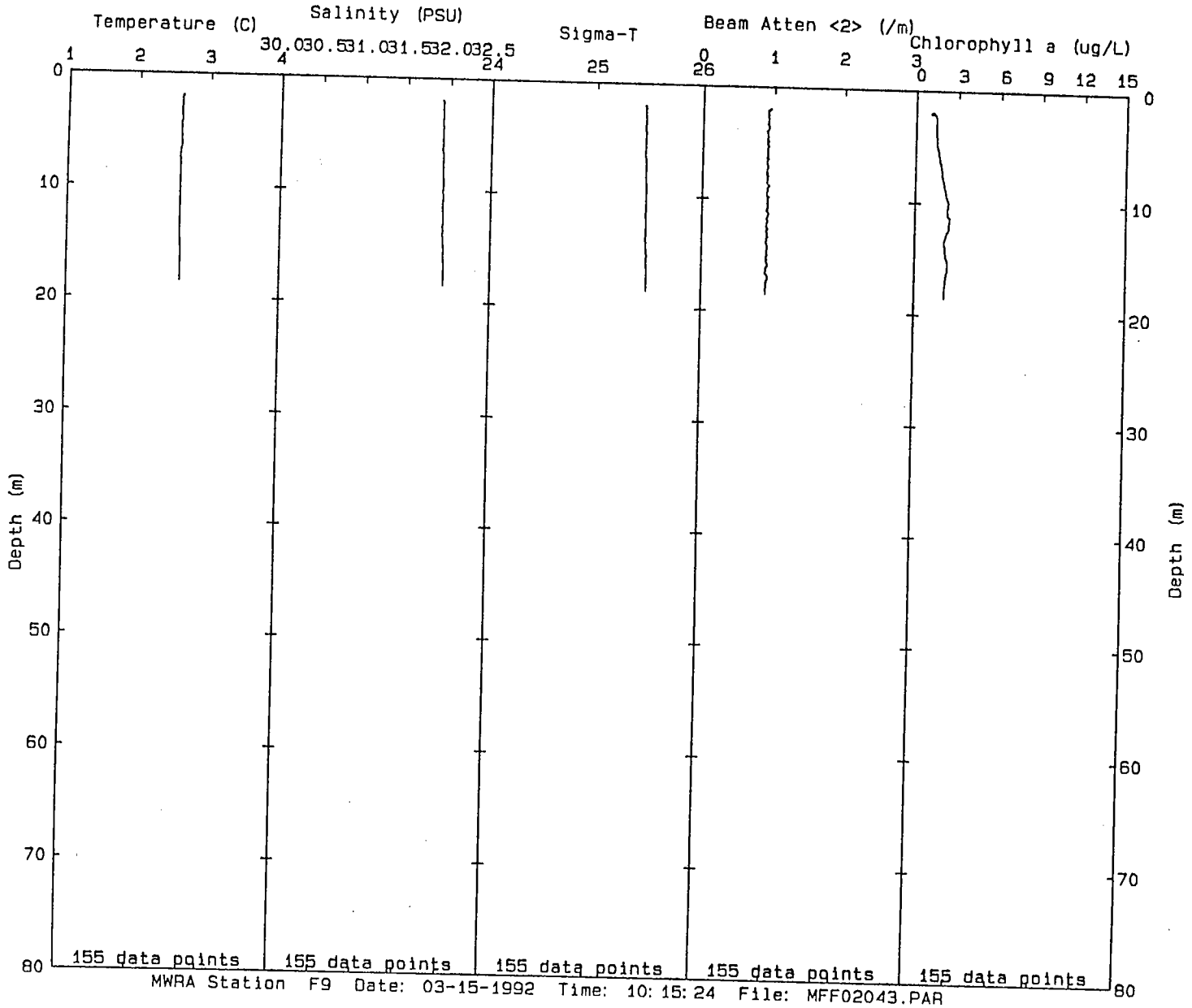

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
117 data points
117 data points
117 data points
117 data points
117 data points
MWRA Station F3 Date: 03-14-1992 Time: 08:27:31 File: MFF02009.PAR

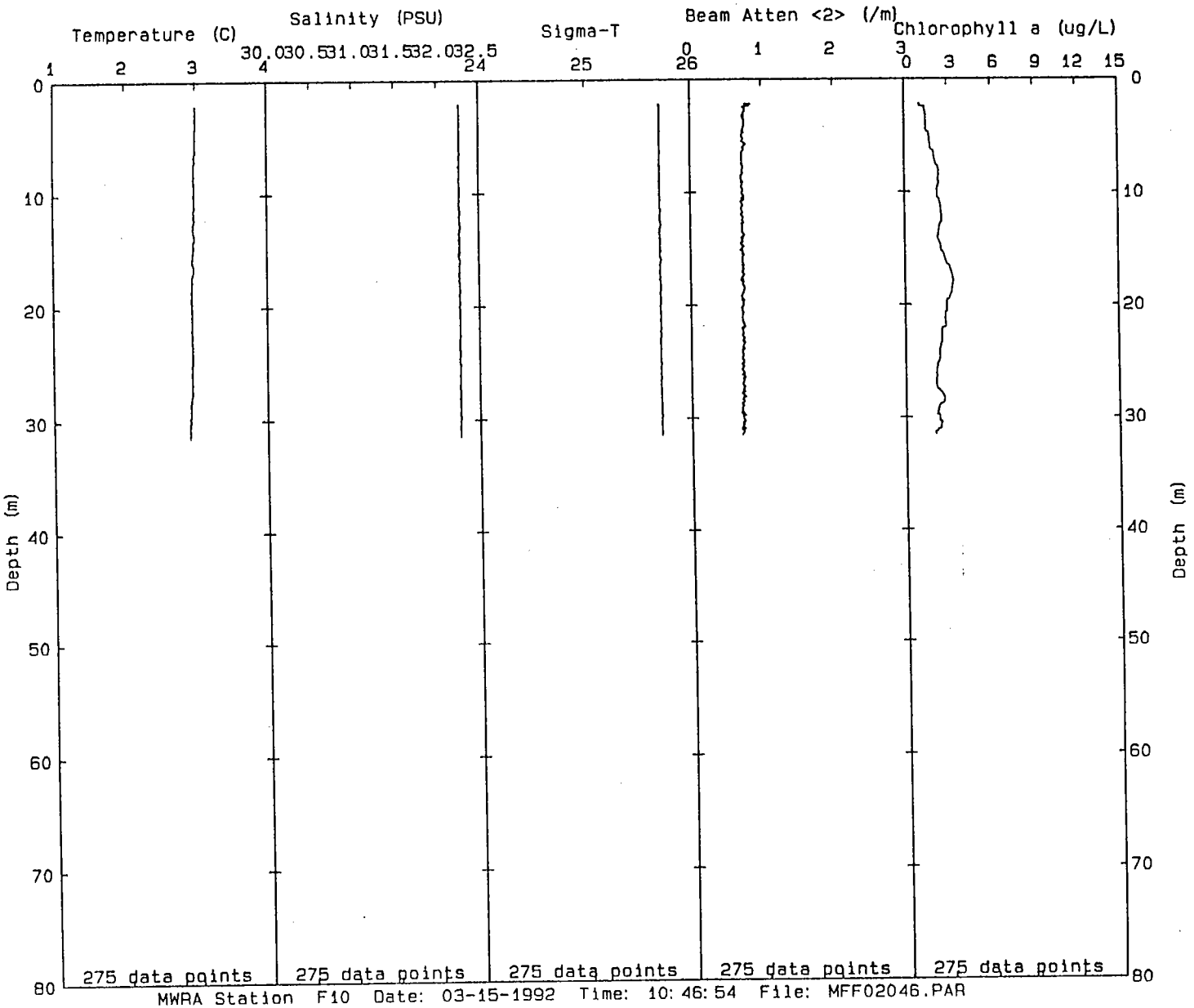

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
124 data points
124 data points
124 data points
124 data points
124 data points
MWRA Station F5 Date: 03-14-1992 Time: 15:56:25 File: MFF02023.PAR

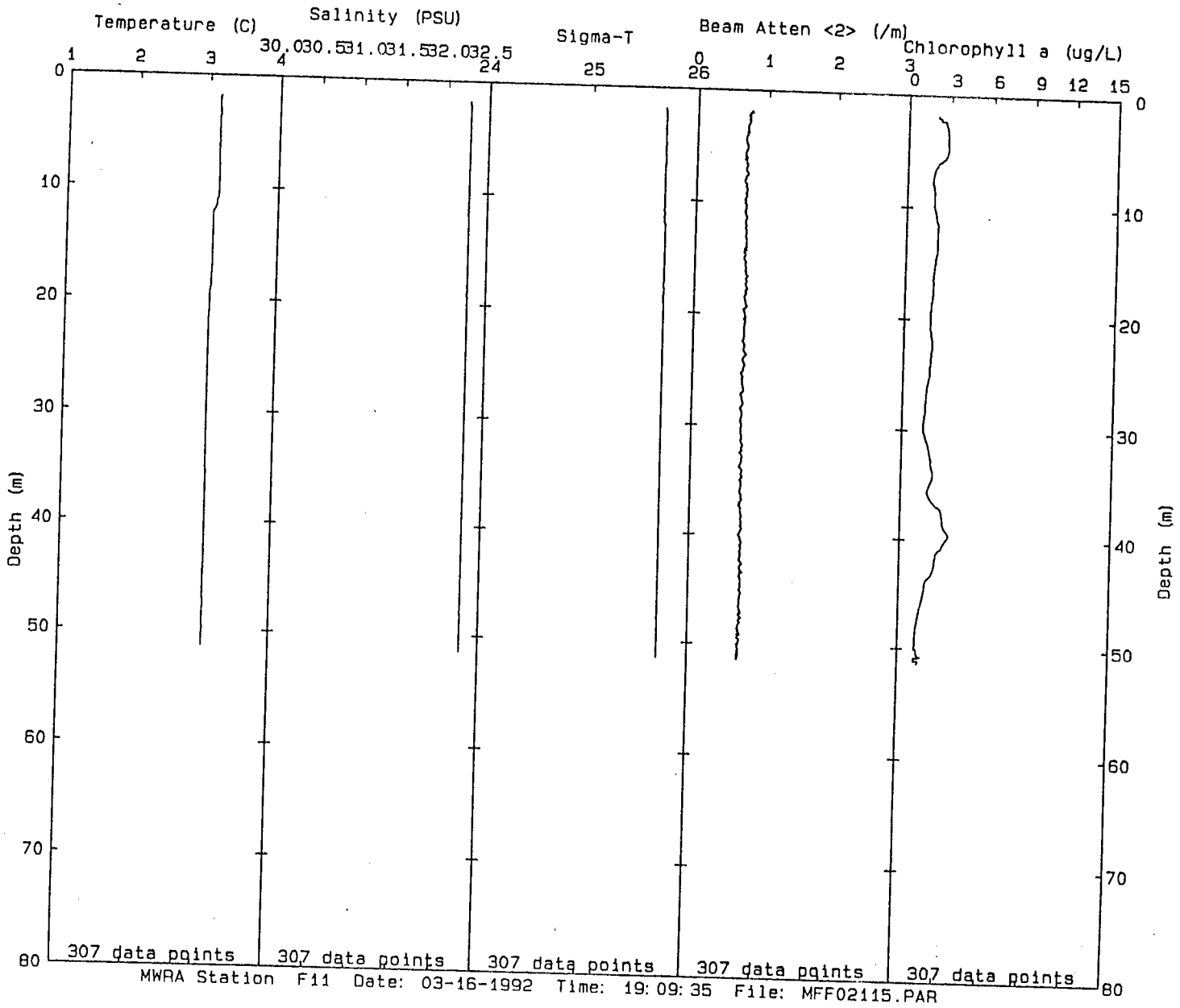
F-5

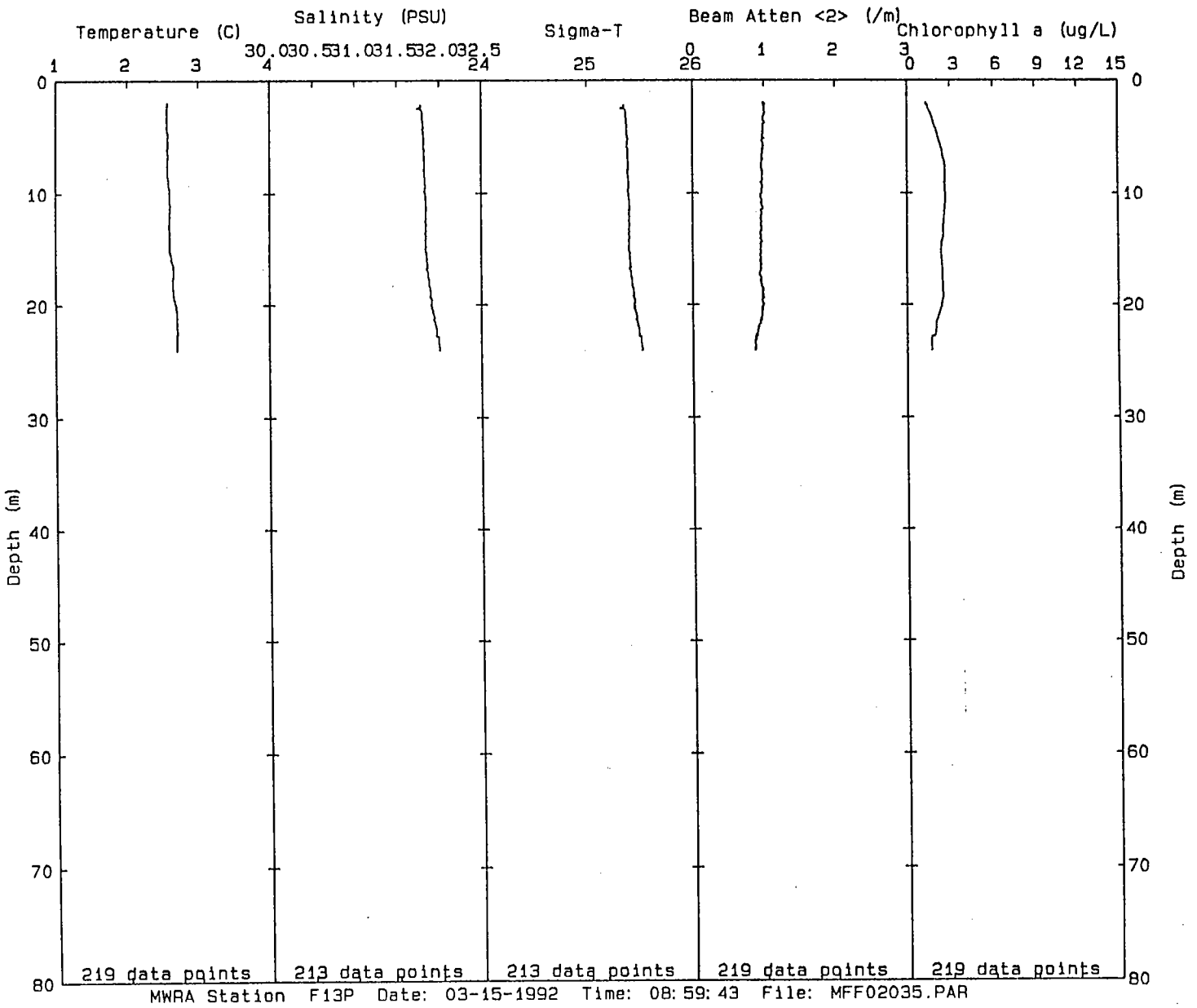

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
304 data points
304 data points
304 data points
304 data points
304 data points
MWRA Station F6 Date: 03-14-1992 Time: 16:59:55 File: MFF02026.PAR

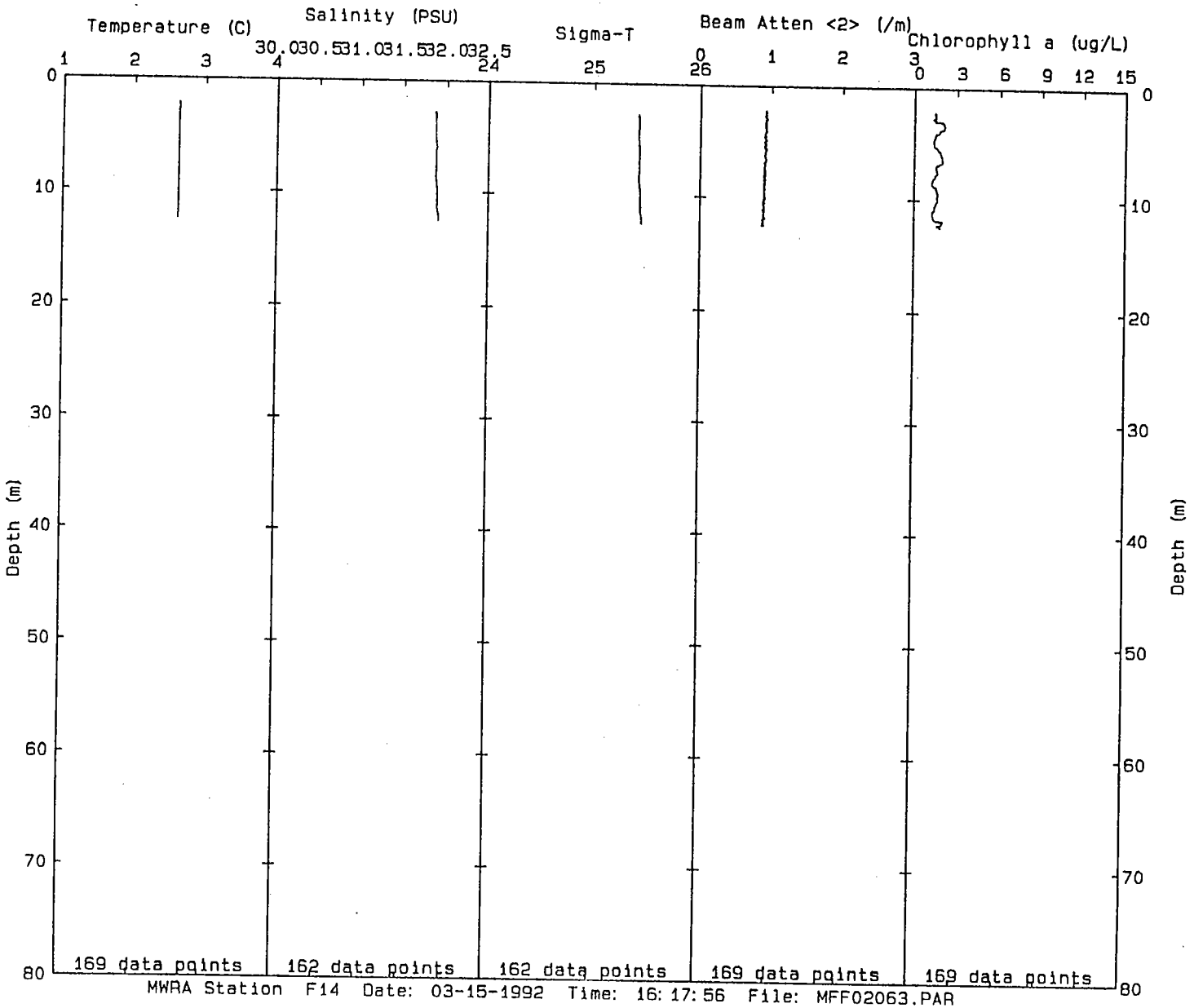

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
360 data points
360 data points
360 data points
347 data points
360 data points
MWRA Station F7 Date: 03-14-1992 Time: 17:48:16 File: MFF02028.PAR

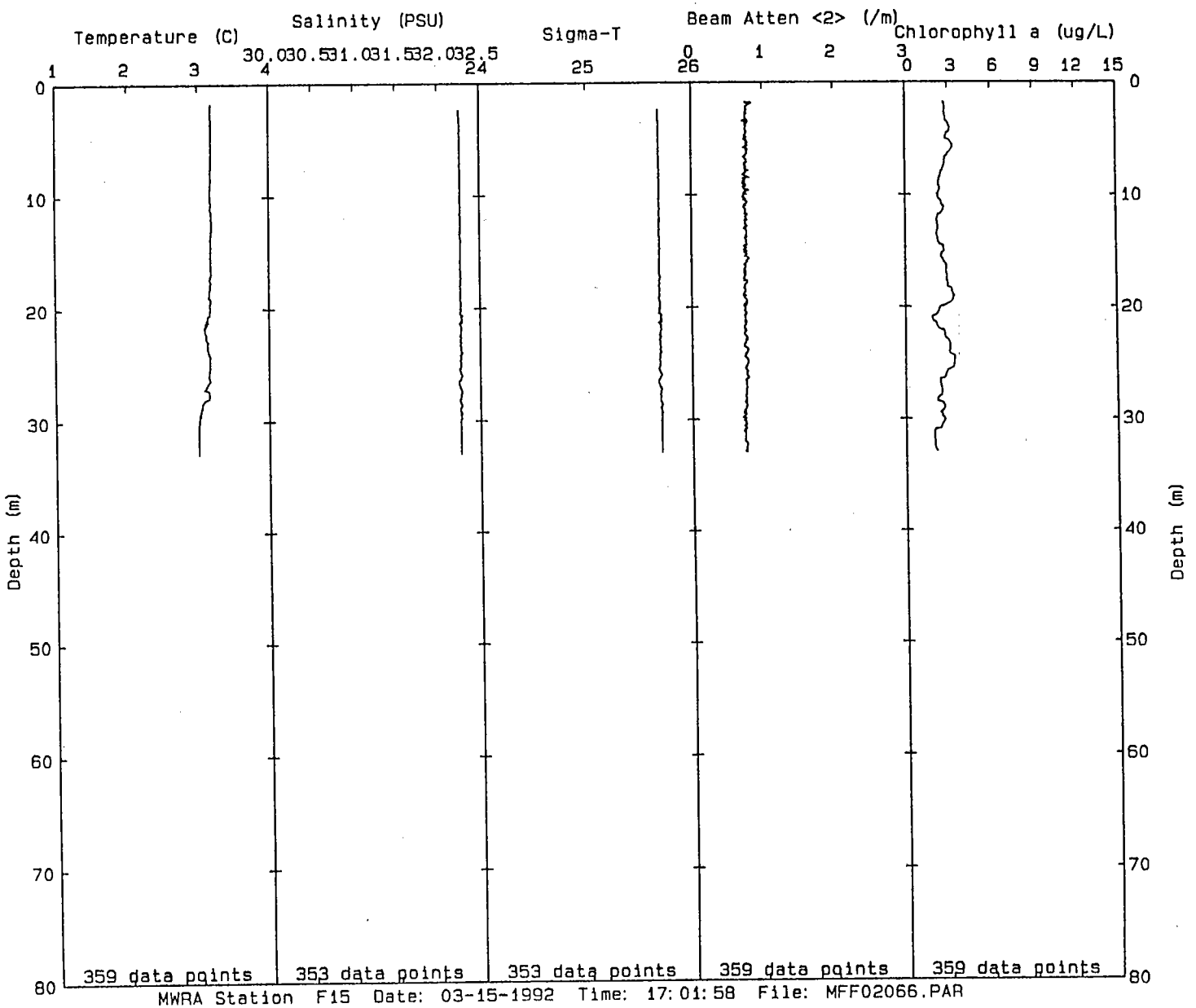

Temperature (C)
1 2 3 4
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Sigma-T
24 25 26
Beam Atten <2> (/m)
0 1 2 3
Chlorophyll a (ug/L)
0 3 6 9 12 15
Depth (m)
0 10 20 30 40 50 60 70 80
155 data points
155 data points
155 data points
155 data points
155 data points
MWRA Station F9 Date: 03-15-1992 Time: 10:15:24 File: MFF02043.PAR

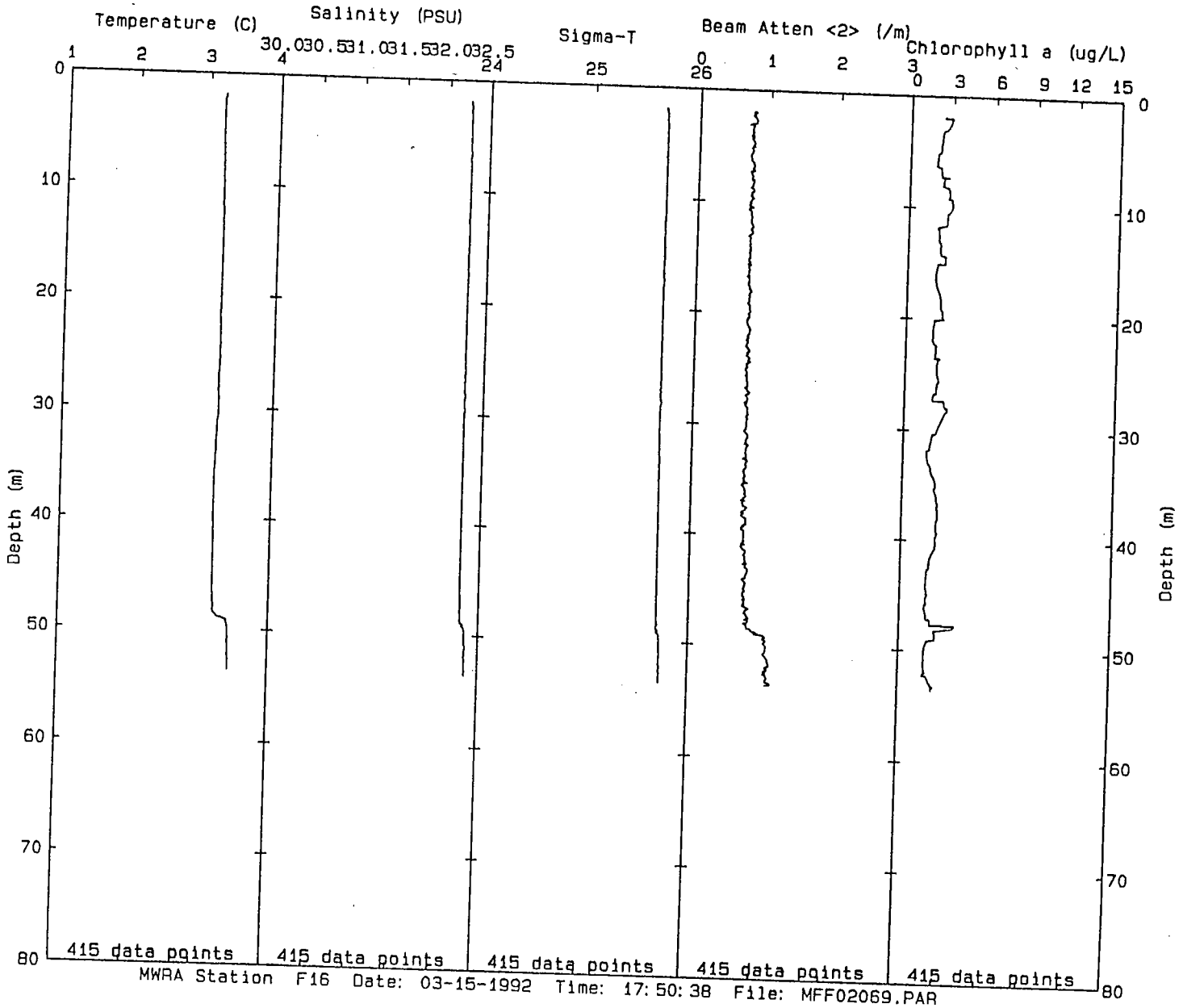

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
275 data points
275 data points
275 data points
275 data points
275 data points
MWRA Station F10 Date: 03-15-1992 Time: 10:46:54 File: MFF02046.PAR

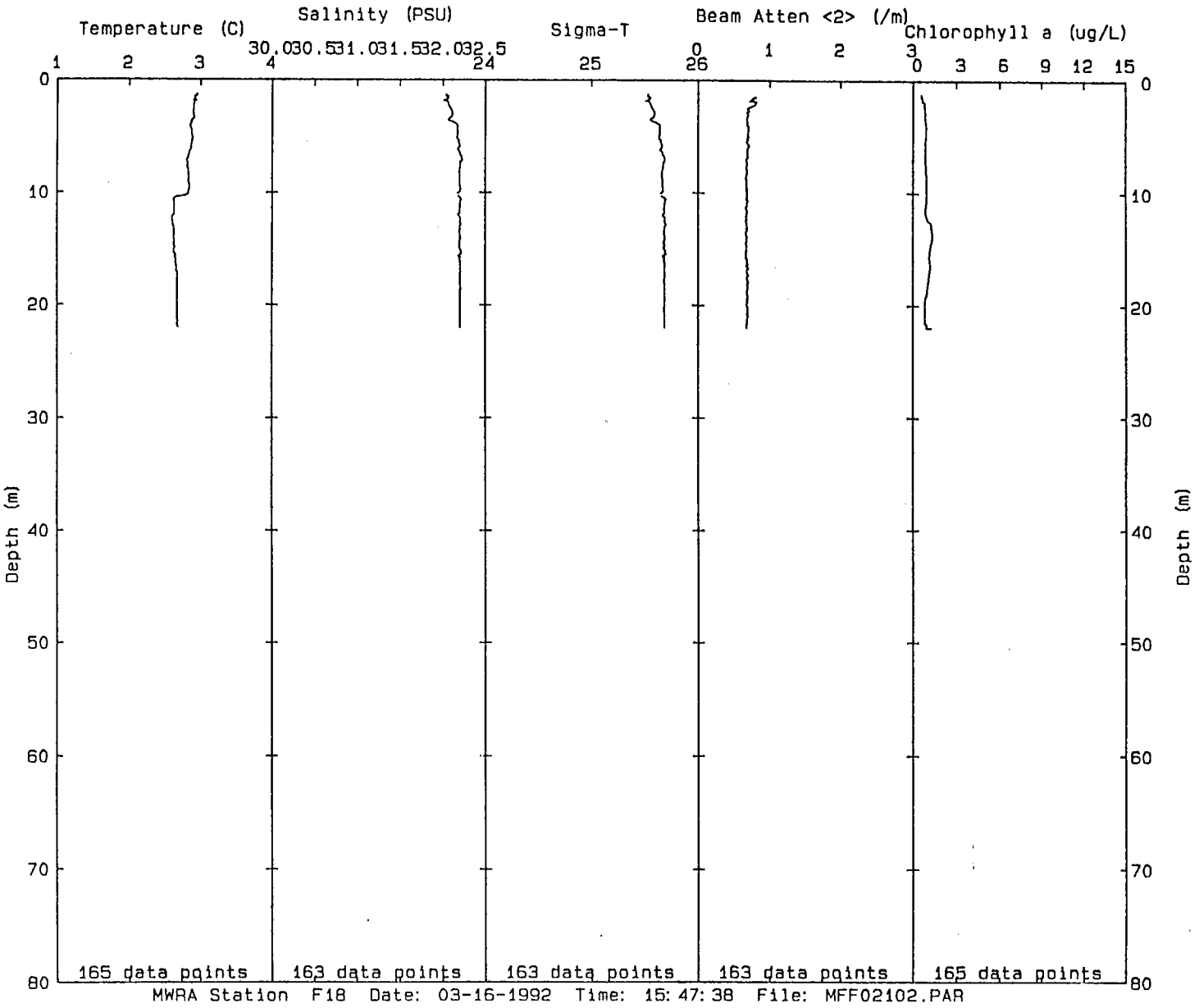

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
307 data points
307 data points
307 data points
307 data points
307 data points
MWRA Station F11 Date: 03-16-1992 Time: 19:09:35 File: MFF02115.PAR

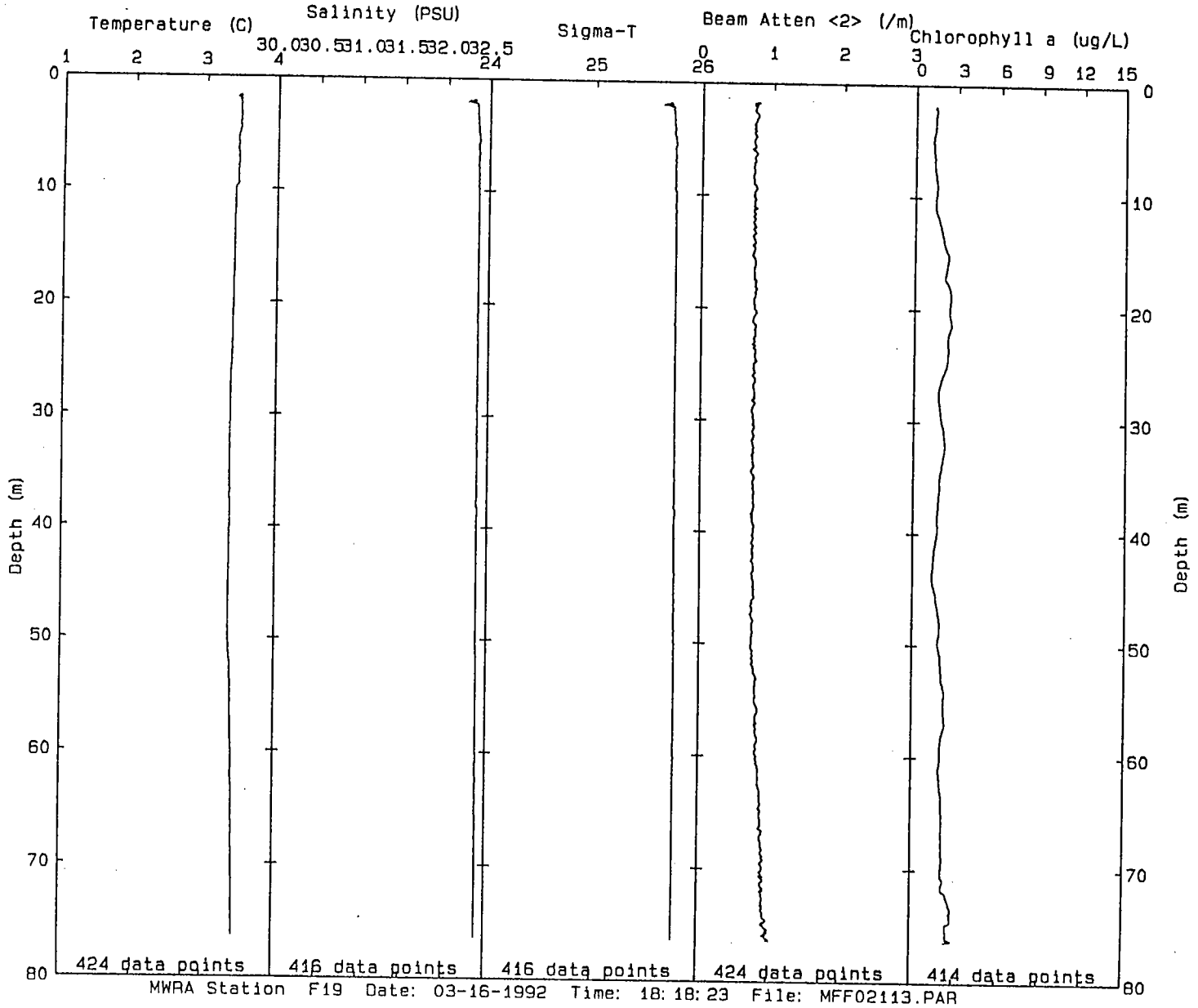

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
219 data points
213 data points
213 data points
219 data points
219 data points
MWRA Station F13P Date: 03-15-1992 Time: 08:59:43 File: MFF02035.PAR

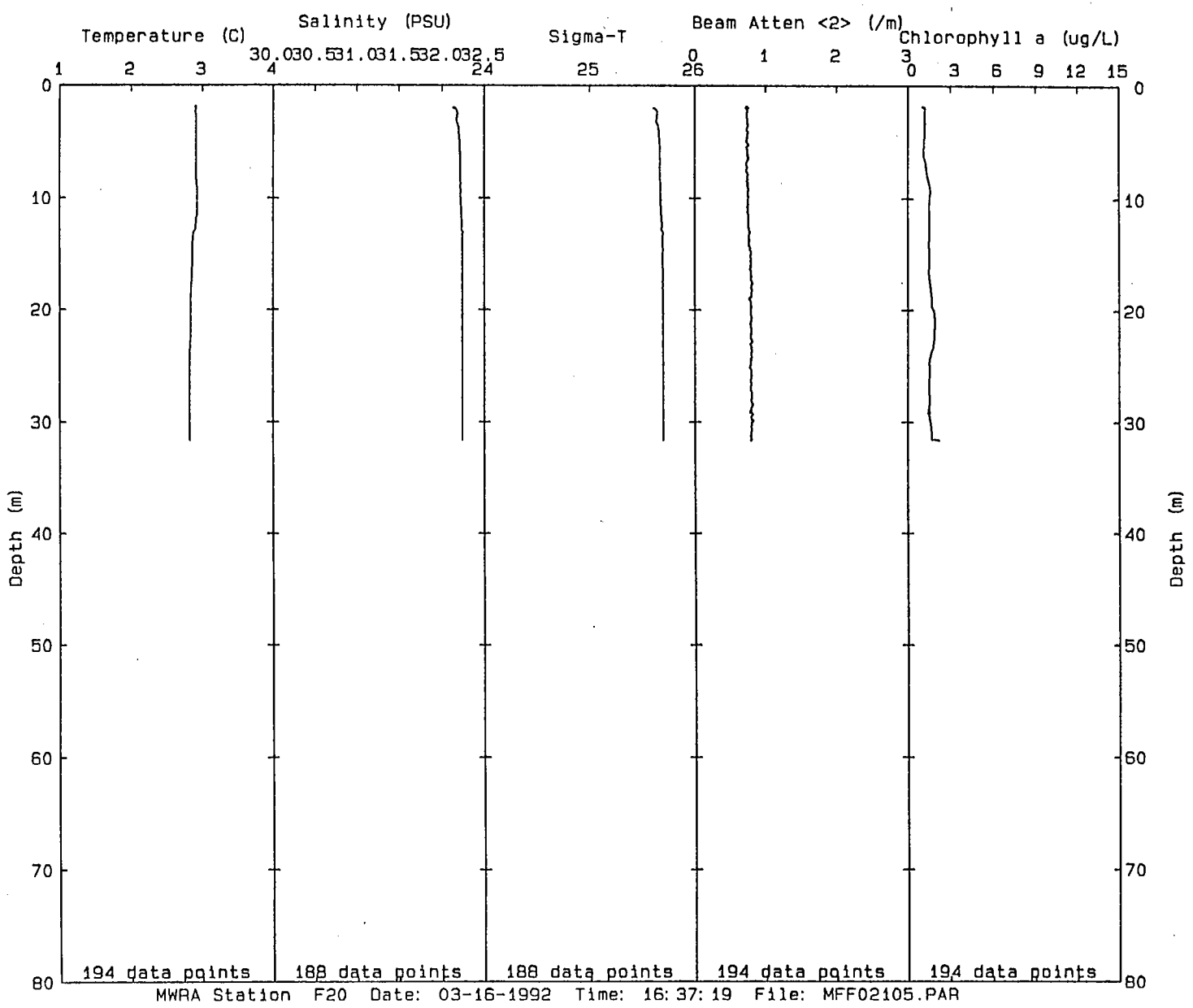

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
169 data points
162 data points
162 data points
169 data points
169 data points
MWRA Station F14 Date: 03-15-1992 Time: 16:17:56 File: MFF02063.PAR

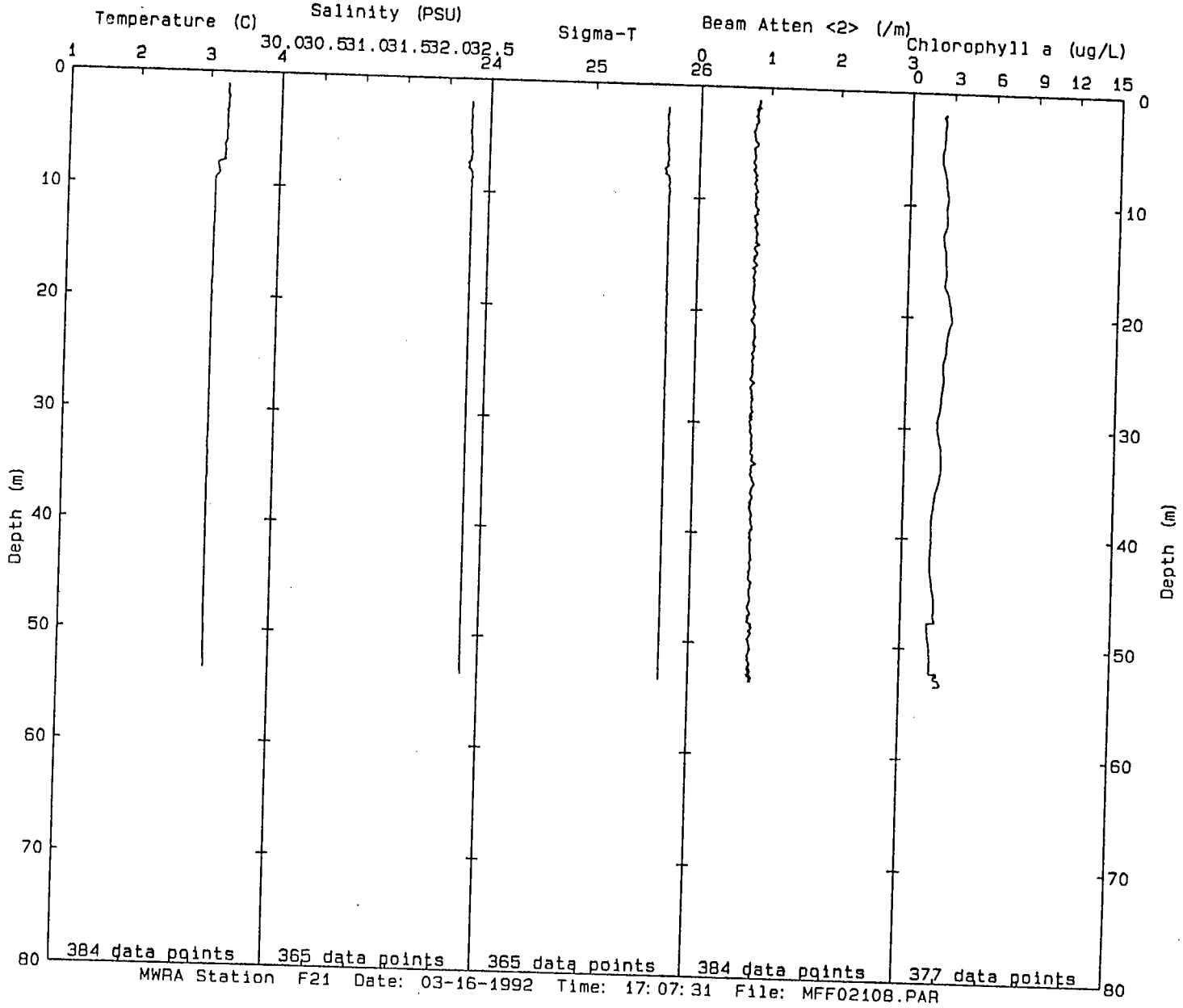

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
359 data points
353 data points
353 data points
359 data points
359 data points
MWRA Station F15 Date: 03-15-1992 Time: 17:01:58 File: MFF02066.PAR

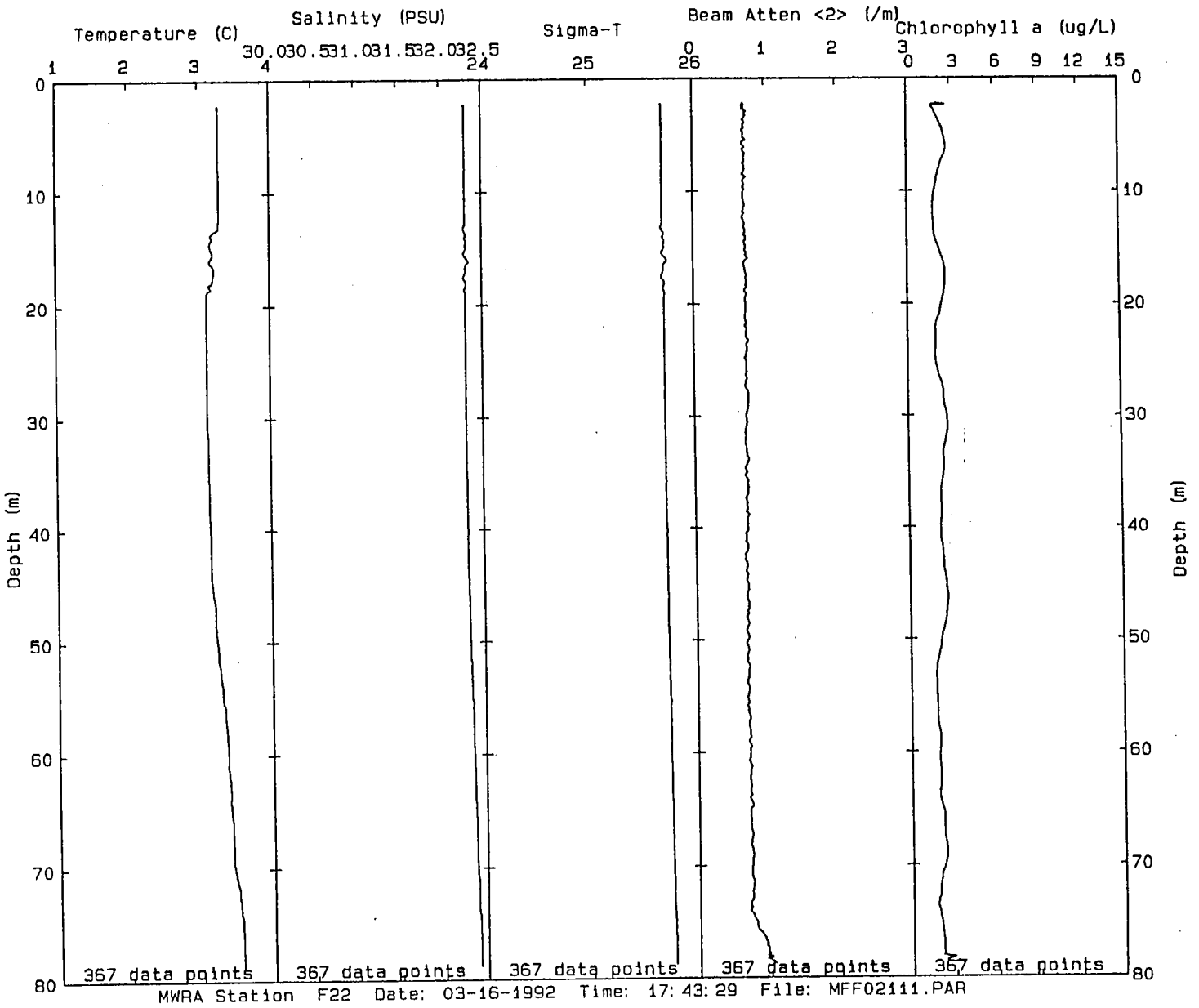

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
415 data points
415 data points
415 data points
415 data points
415 data points
MWRA Station F16 Date: 03-15-1992 Time: 17:50:38 File: MFF02069.PAR

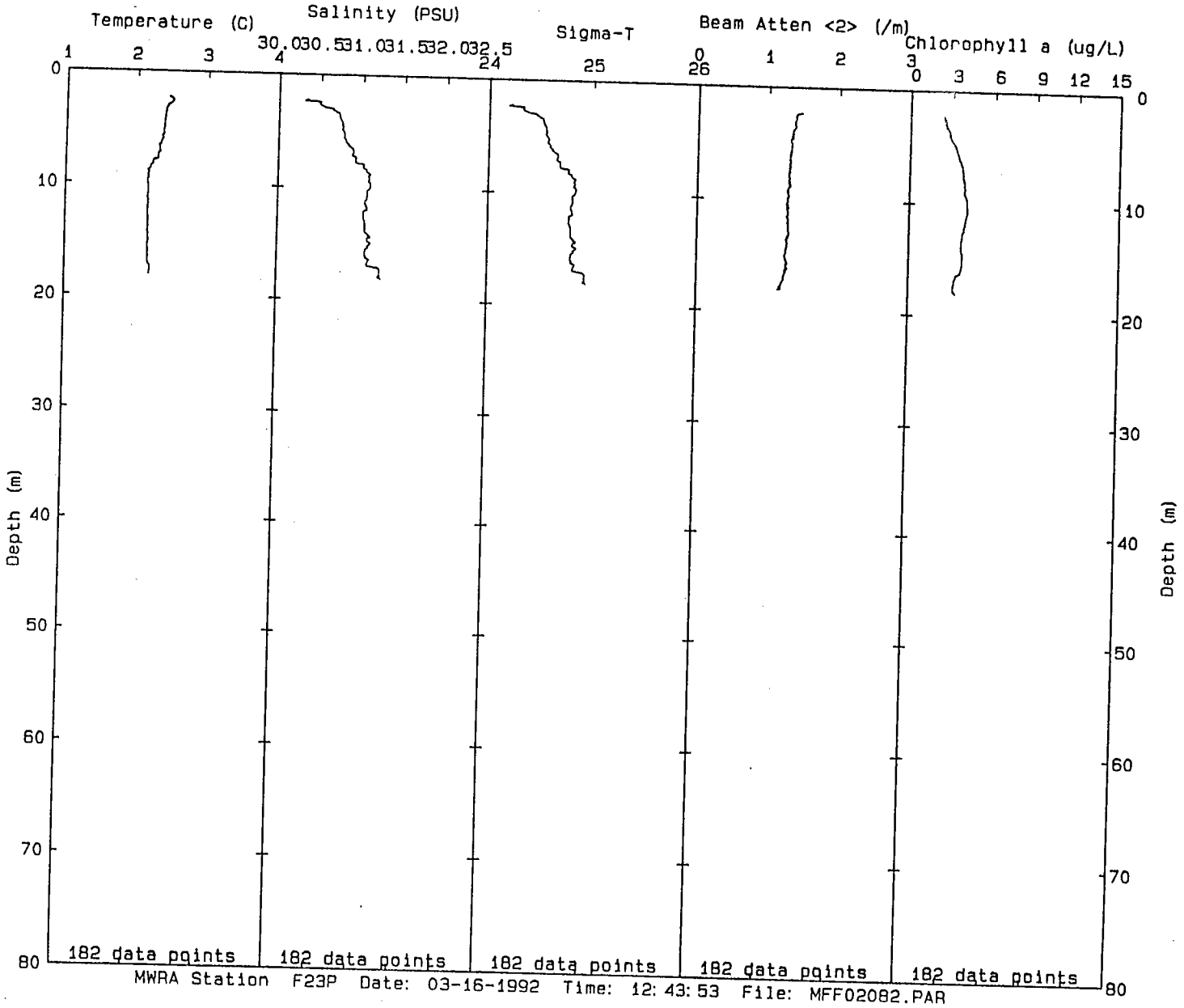

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
165 data points
163 data points
163 data points
163 data points
165 data points
MWRA Station F18 Date: 03-16-1992 Time: 15:47:38 File: MFF02102.PAR

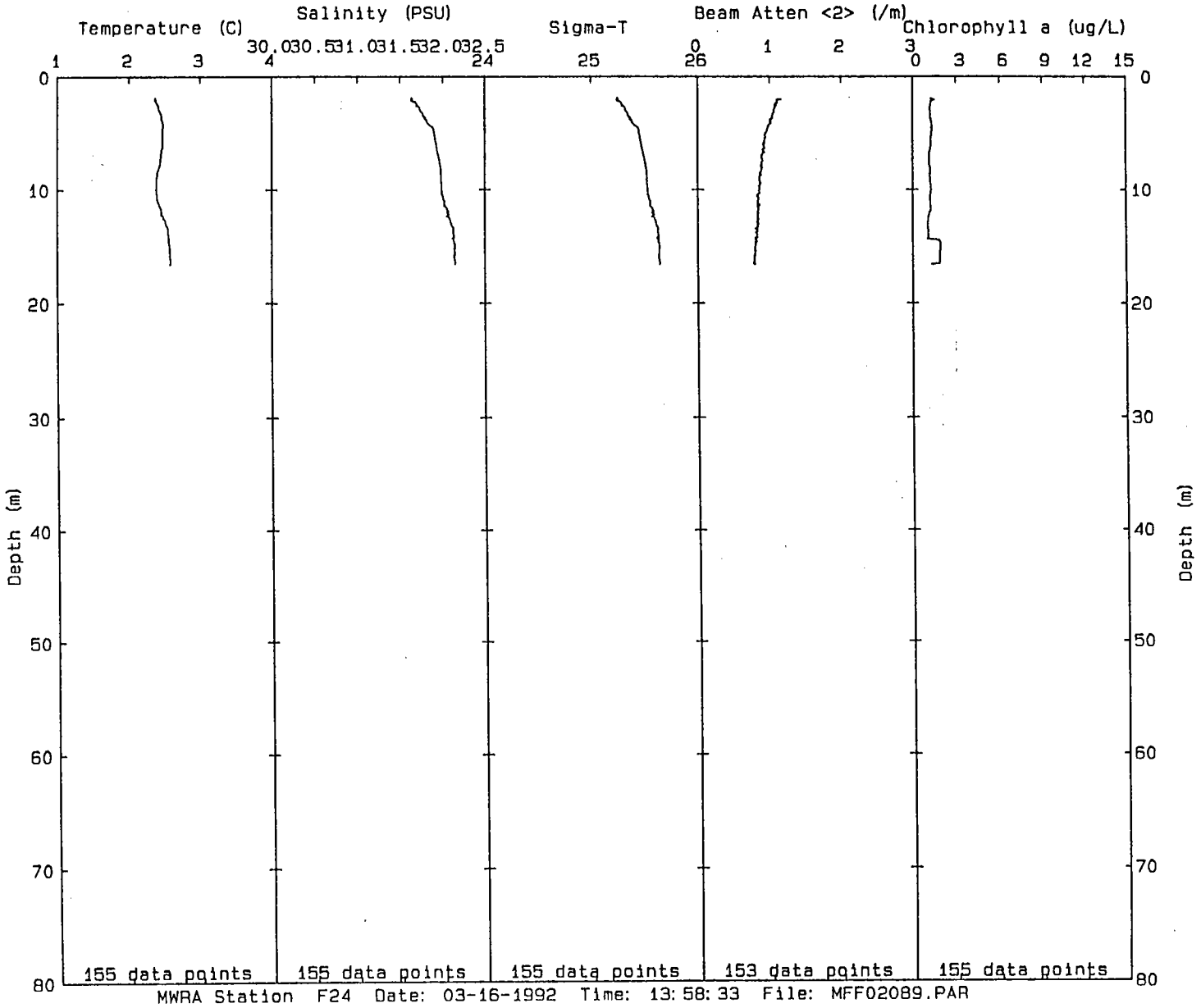

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
424 data points
416 data points
416 data points
424 data points
414 data points
MWRA Station F19 Date: 03-16-1992 Time: 18:18:23 File: MFF02113.PAR

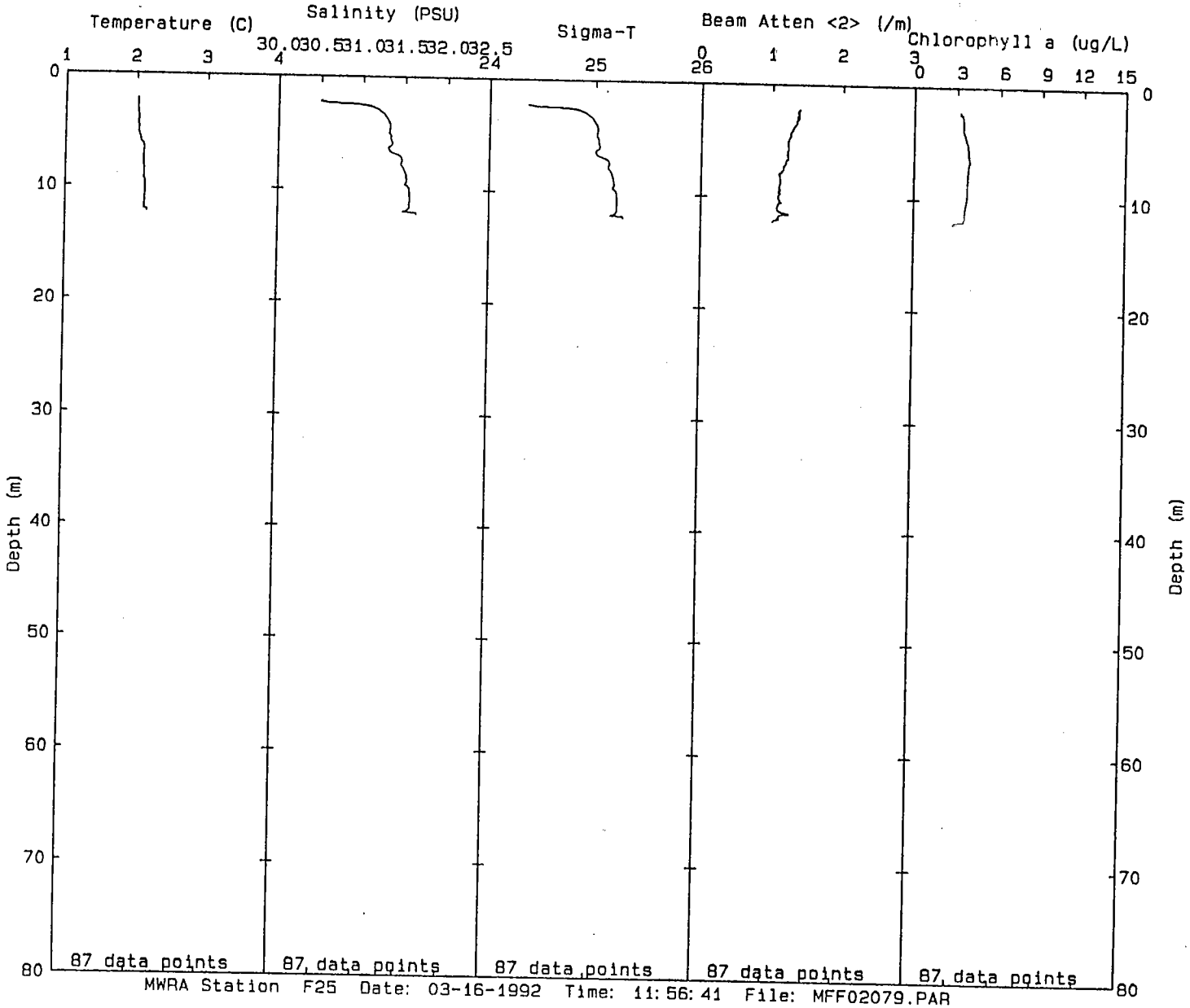

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
194 data points
188 data points
188 data points
194 data points
194 data points
MWRA Station F20 Date: 03-16-1992 Time: 16:37:19 File: MFF02105.PAR

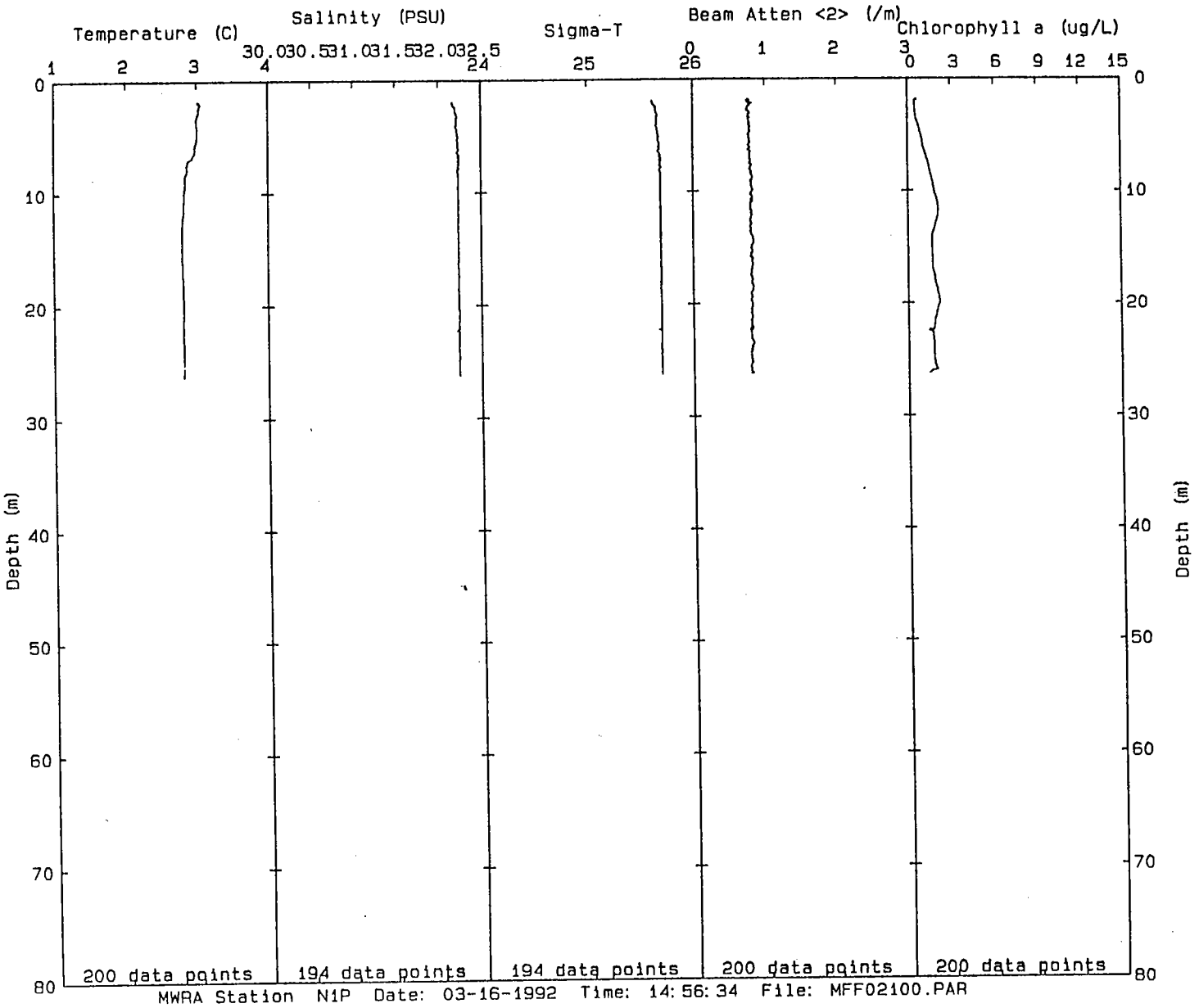

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
384 data points
365 data points
365 data points
384 data points
377 data points
MWRA Station F21 Date: 03-16-1992 Time: 17:07:31 File: MFF02108.PAR

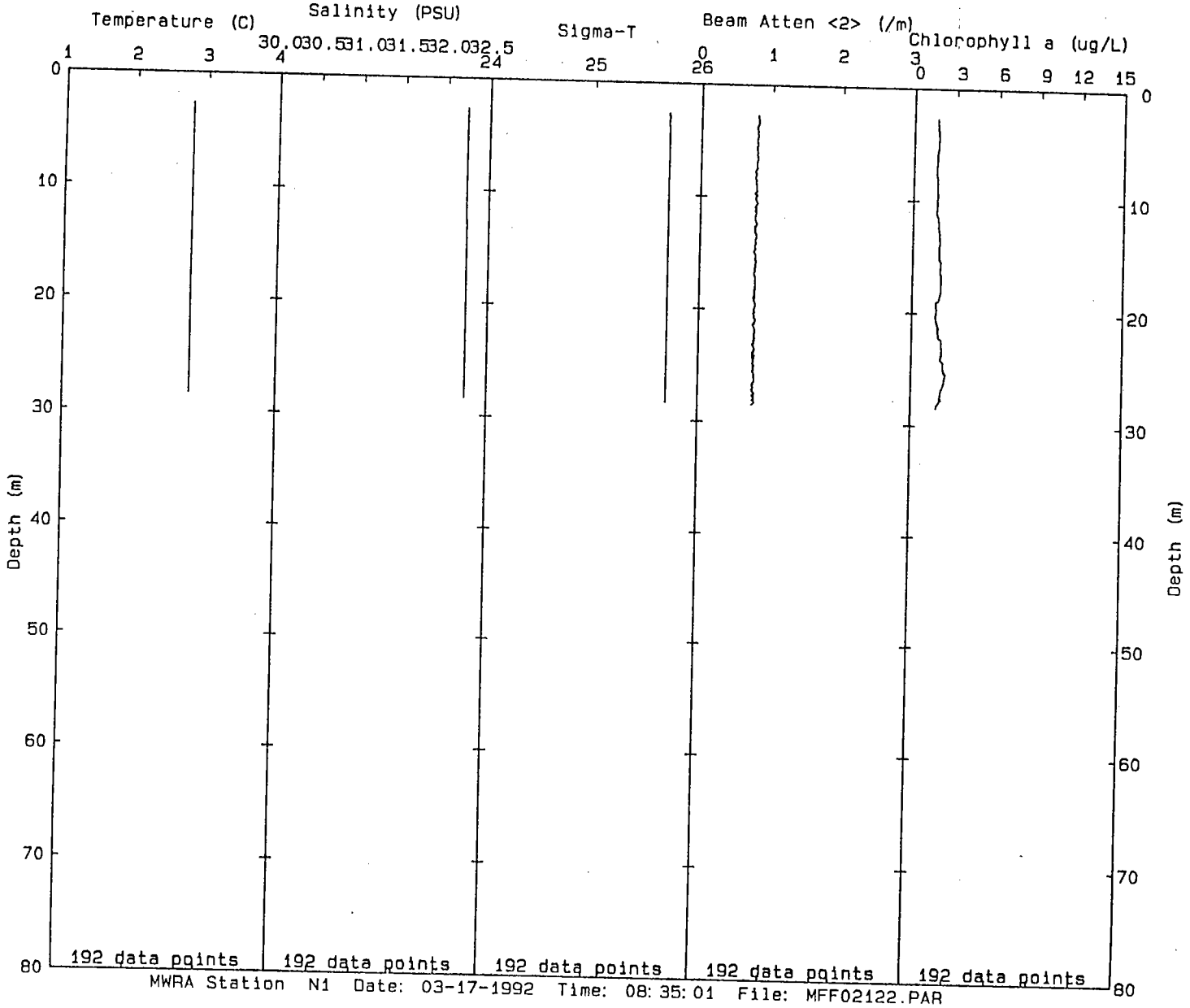

Temperature (C)
1 2 3 4
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Sigma-T
24 25 26
Beam Atten <2> (/m)
0 1 2 3
Chlorophyll a (ug/L)
0 3 6 9 12 15
Depth (m)
0 10 20 30 40 50 60 70 80
367 data points
367 data points
367 data points
367 data points
367 data points
MWRA Station F22 Date: 03-16-1992 Time: 17:43:29 File: MFF02111.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
182 data points
182 data points
182 data points
182 data points
182 data points
MWRA Station F23P Date: 03-16-1992 Time: 12:43:53 File: MFF02082.PAR

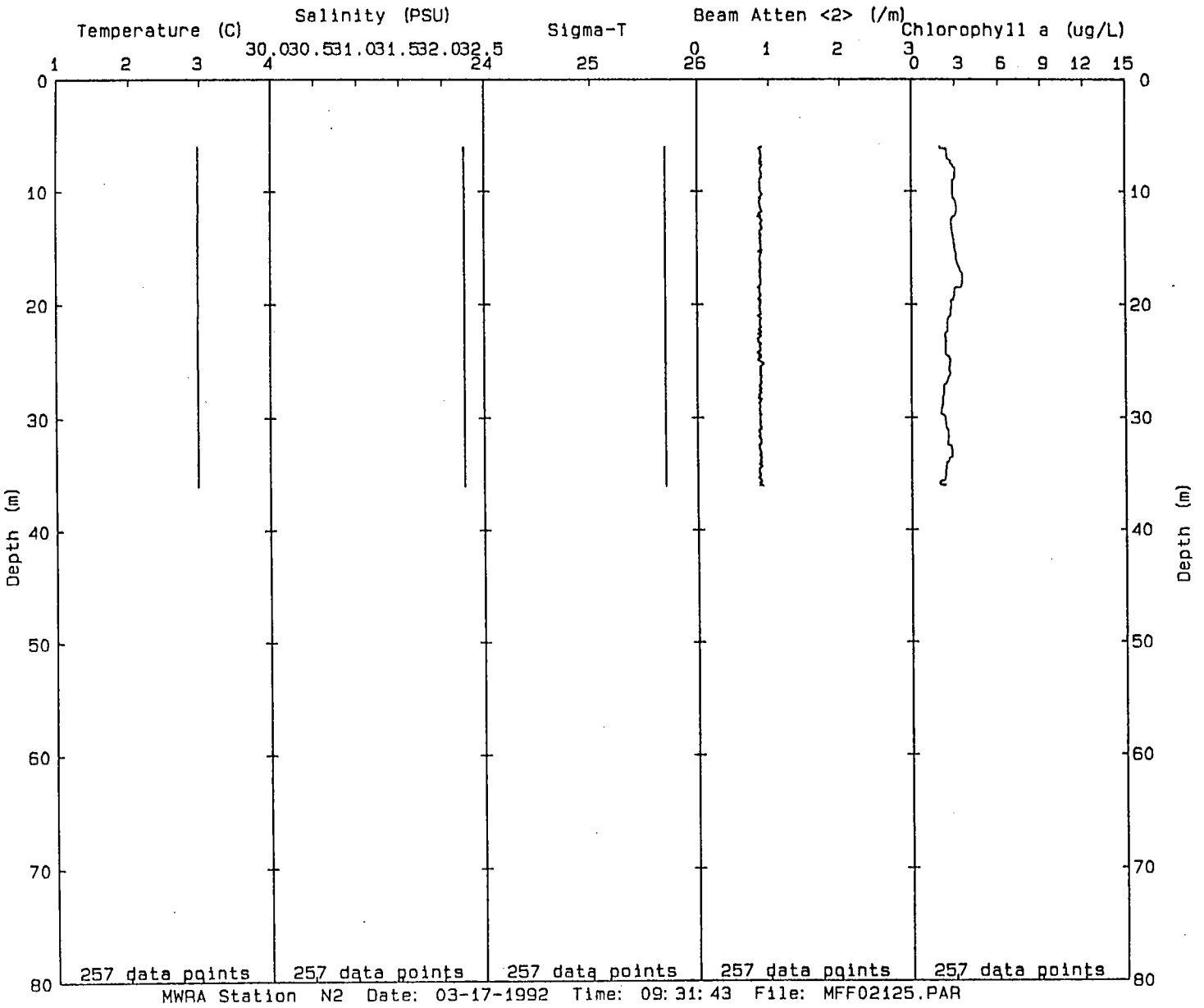

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
155 data points
155 data points
155 data points
153 data points
155 data points
MWRA Station F24 Date: 03-16-1992 Time: 13:58:33 File: MFF02089.PAR

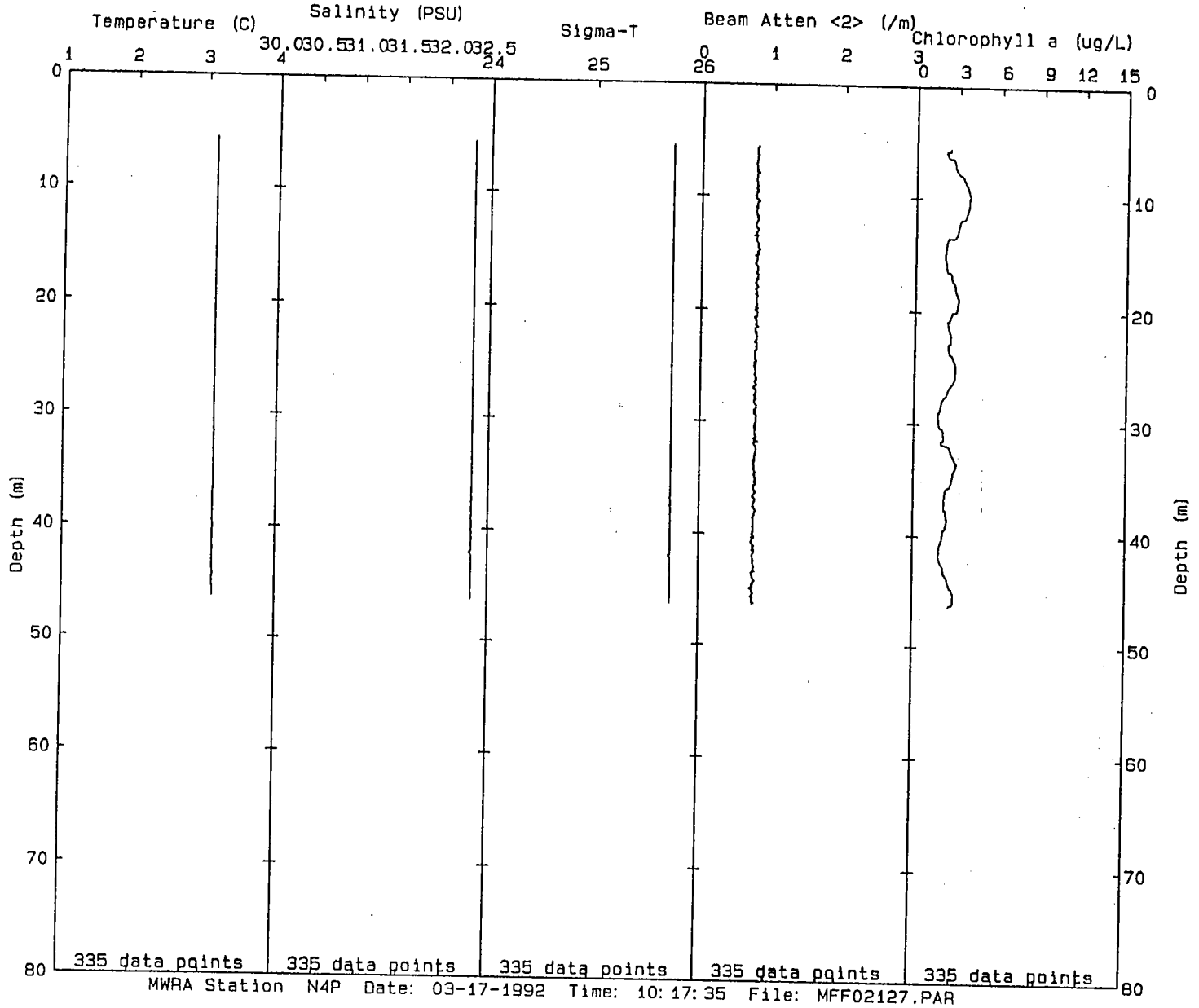

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
87 data points
87 data points
87 data points
87 data points
87 data points
MWRA Station F25 Date: 03-16-1992 Time: 11:56:41 File: MFF02079.PAR

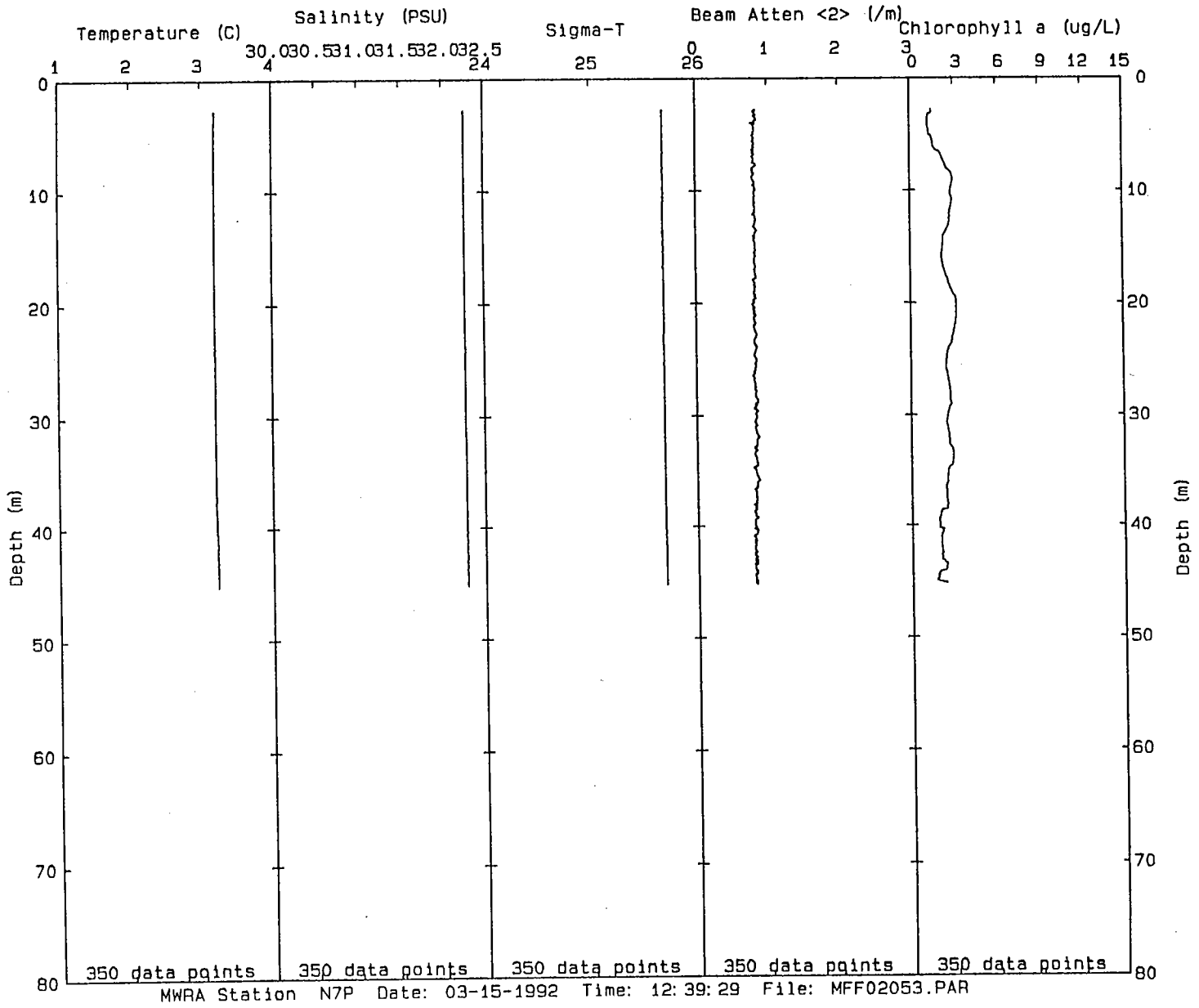

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
200 data points
194 data points
194 data points
200 data points
200 data points
MWRA Station N1P Date: 03-16-1992 Time: 14:56:34 File: MFF02100.PAR

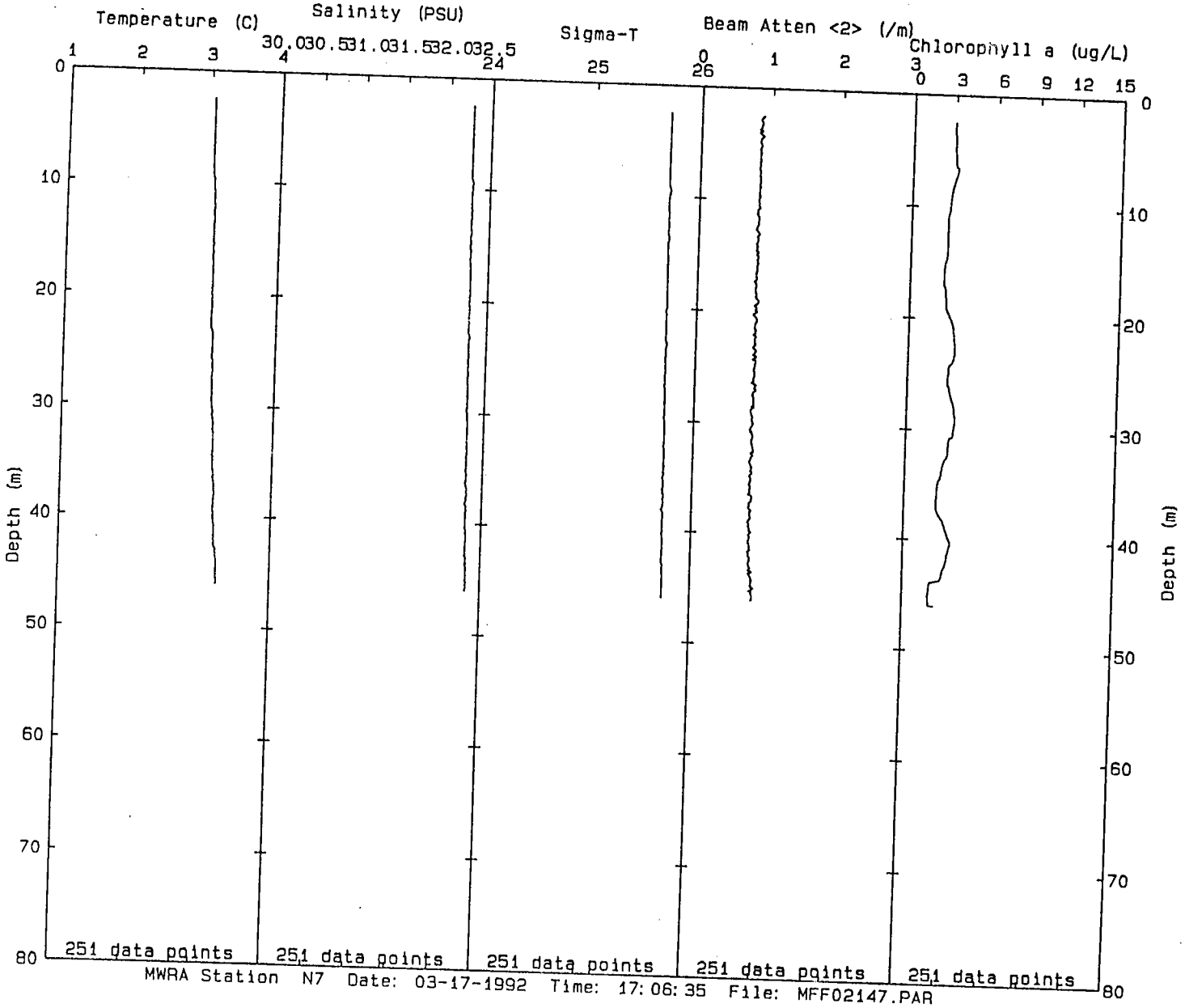

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
192 data points
192 data points
192 data points
192 data points
192 data points
MWRA Station N1 Date: 03-17-1992 Time: 08:35:01 File: MFF02122.PAR

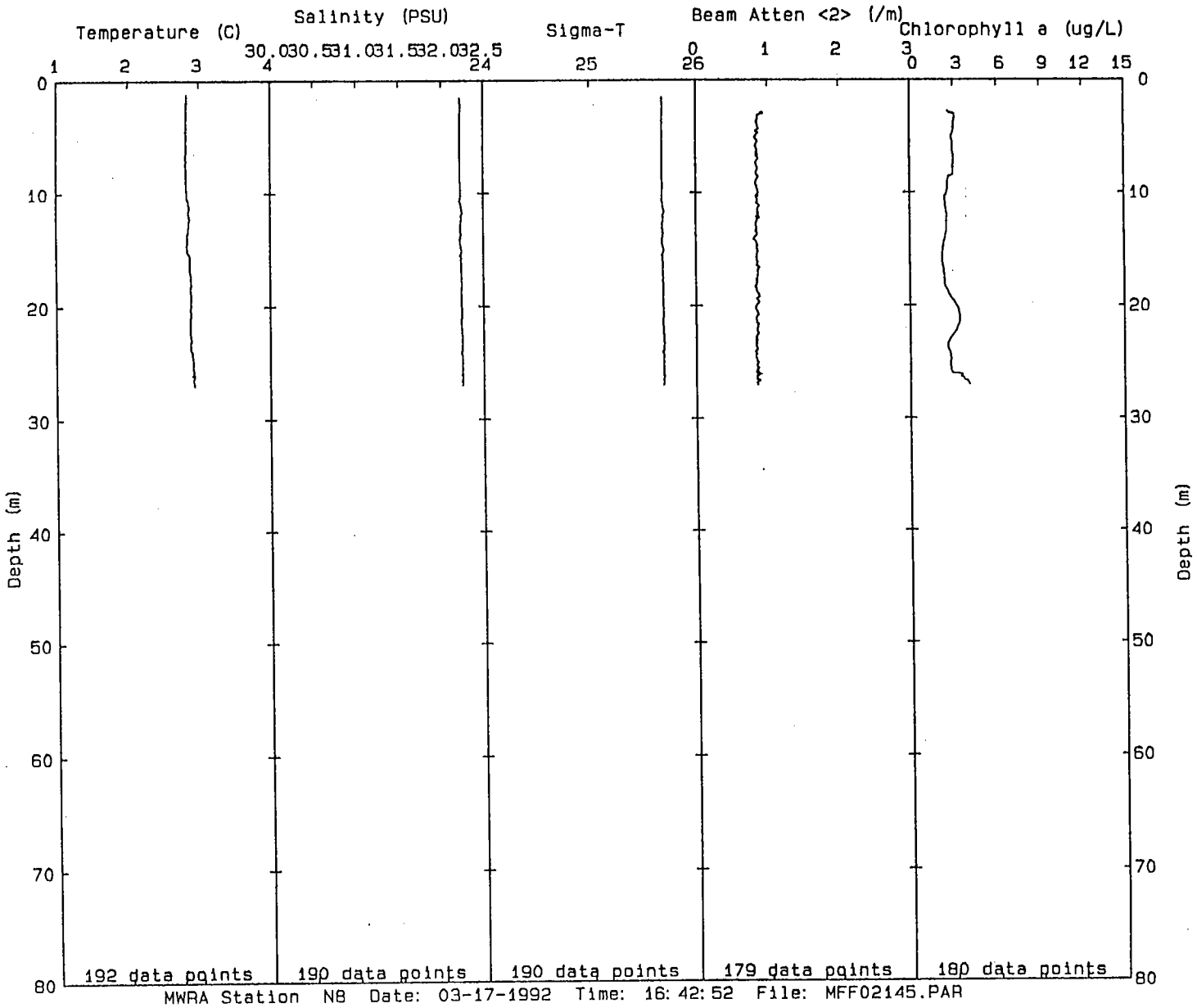
E-24

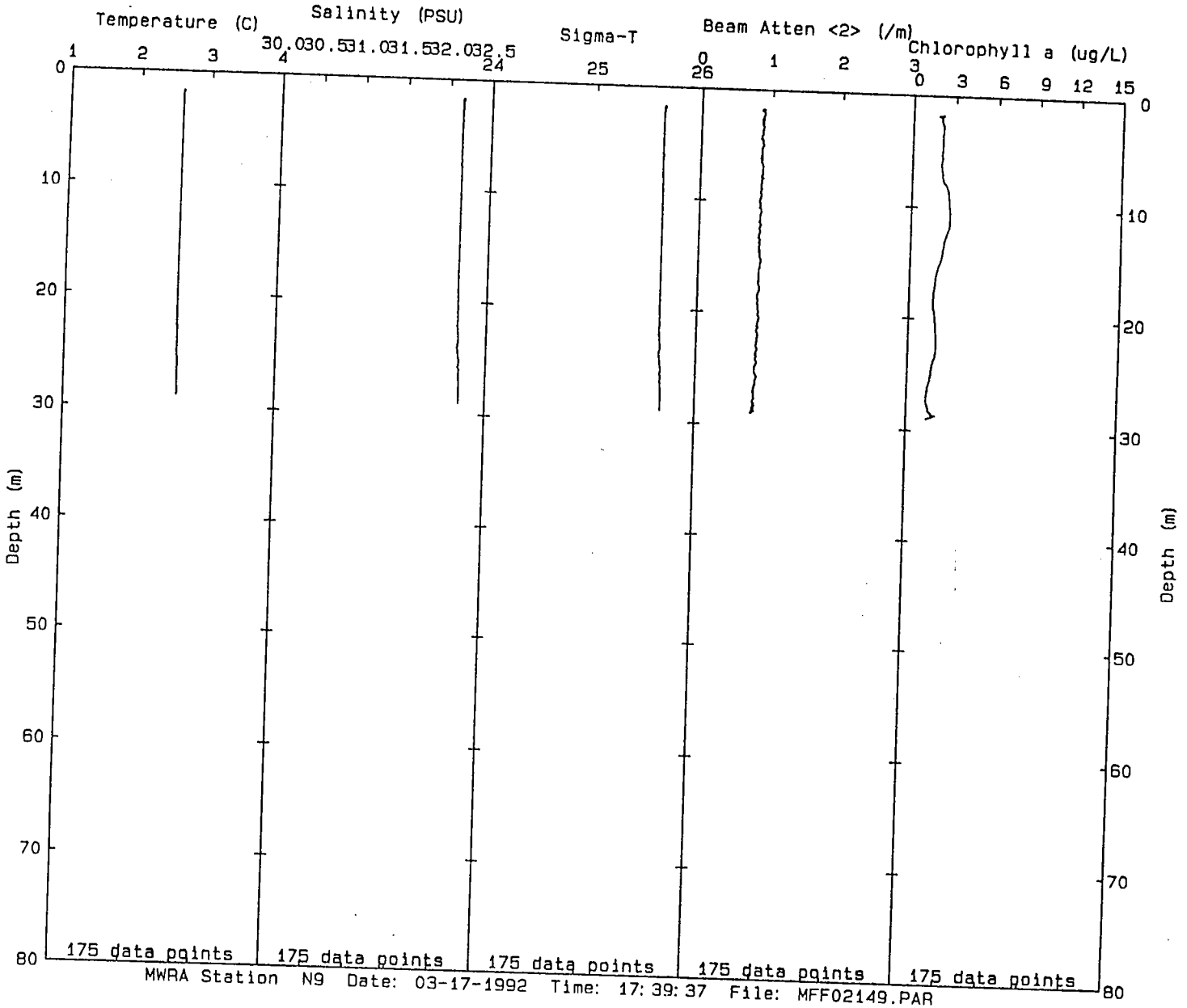

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
1 2 3
30.0 30.5 31.0 31.5 32.0 32.5
4 24
25 26
0 1 2 3
0 3 6 9 12 15
Depth (m)
0 10 20 30 40 50 60 70 80
257 data points
257 data points
257 data points
257 data points
257 data points
MWRA Station N2 Date: 03-17-1992 Time: 09:31:43 File: MFF02125.PAR

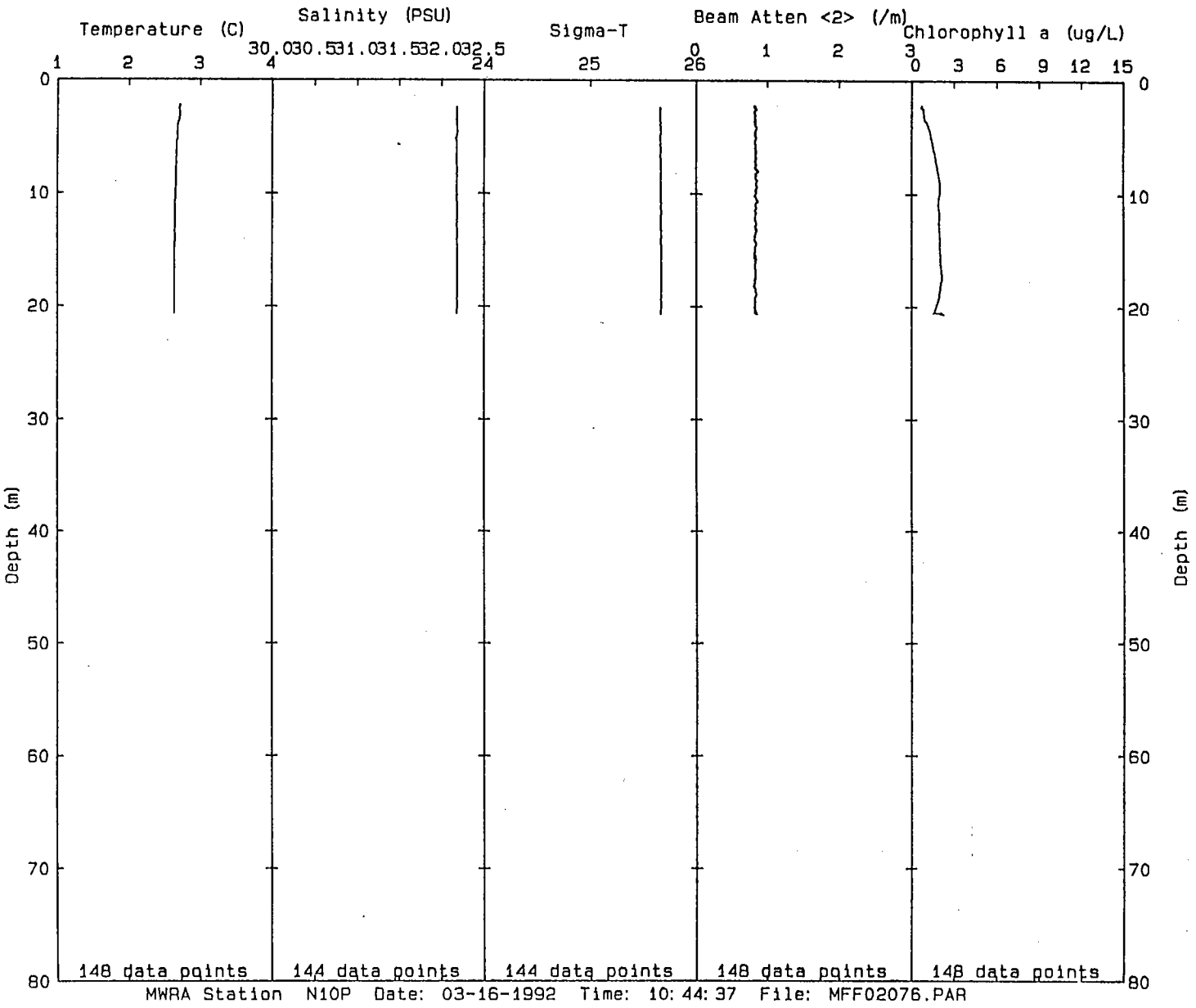

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
335 data points
335 data points
335 data points
335 data points
335 data points
MWRA Station N4P Date: 03-17-1992 Time: 10:17:35 File: MFF02127.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
350 data points
350 data points
350 data points
350 data points
350 data points
MWRA Station N7P Date: 03-15-1992 Time: 12:39:29 File: MFF02053.PAR

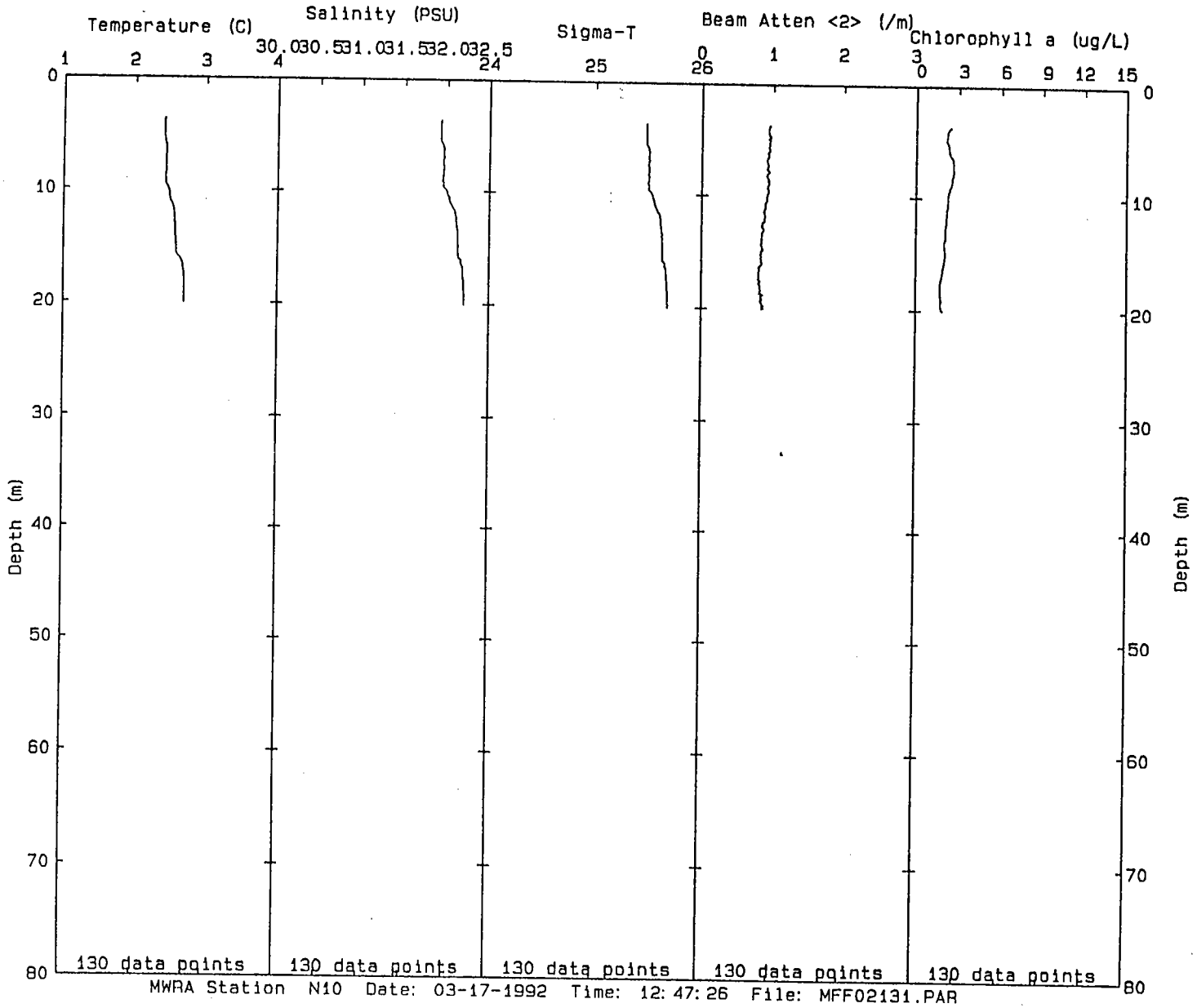

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
251 data points
251 data points
251 data points
251 data points
251 data points
MWRA Station N7 Date: 03-17-1992 Time: 17:06:35 File: MFF02147.PAR

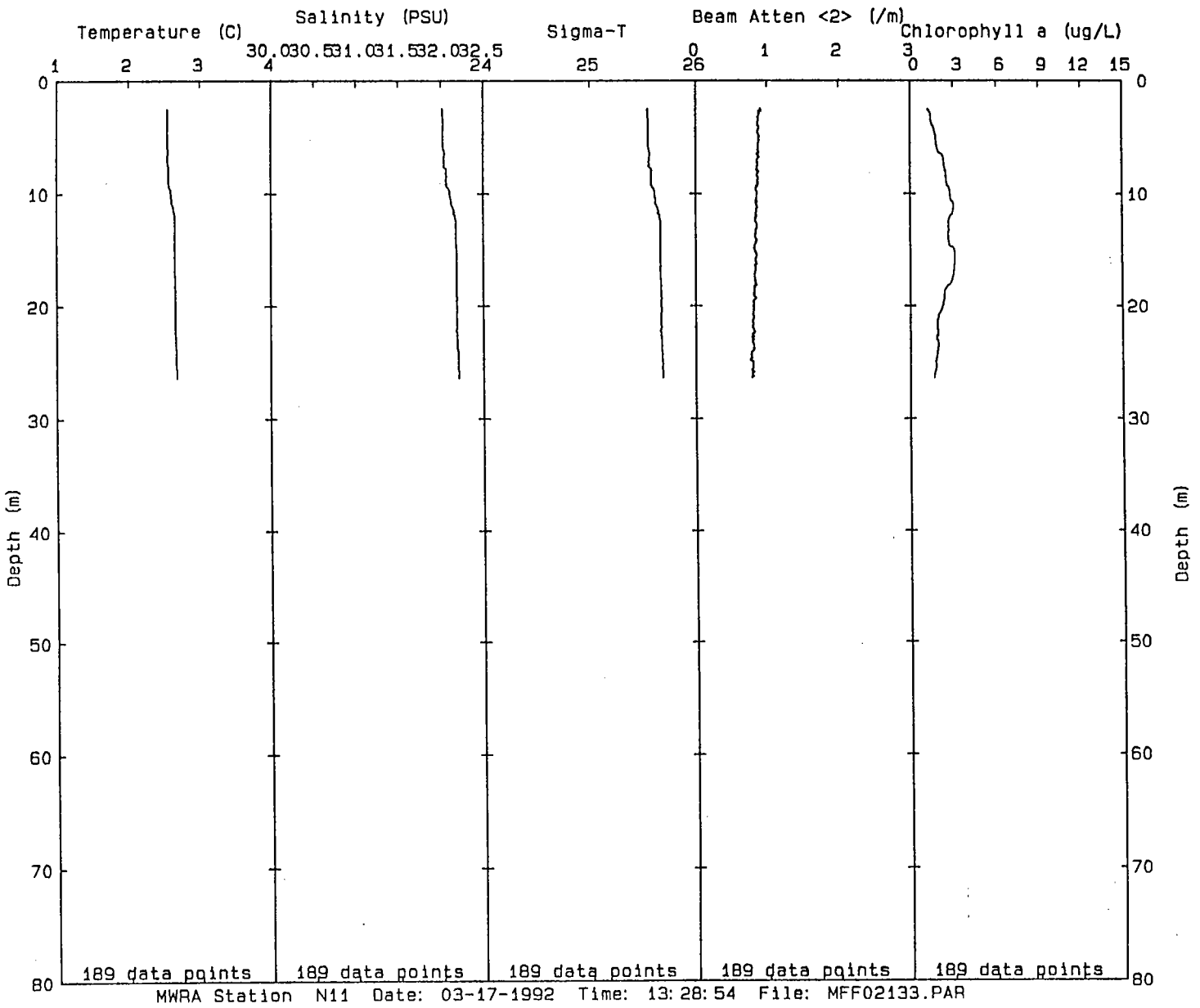

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
1 2 3
30.0 30.5 31.0 31.5 32.0 32.5
4 24
25
26
0 1 2 3
0 3 6 9 12 15
0 10 20 30 40 50 60 70 80
Depth (m)
192 data points
190 data points
190 data points
179 data points
180 data points
MWRA Station N8 Date: 03-17-1992 Time: 16:42:52 File: MFF02145.PAR

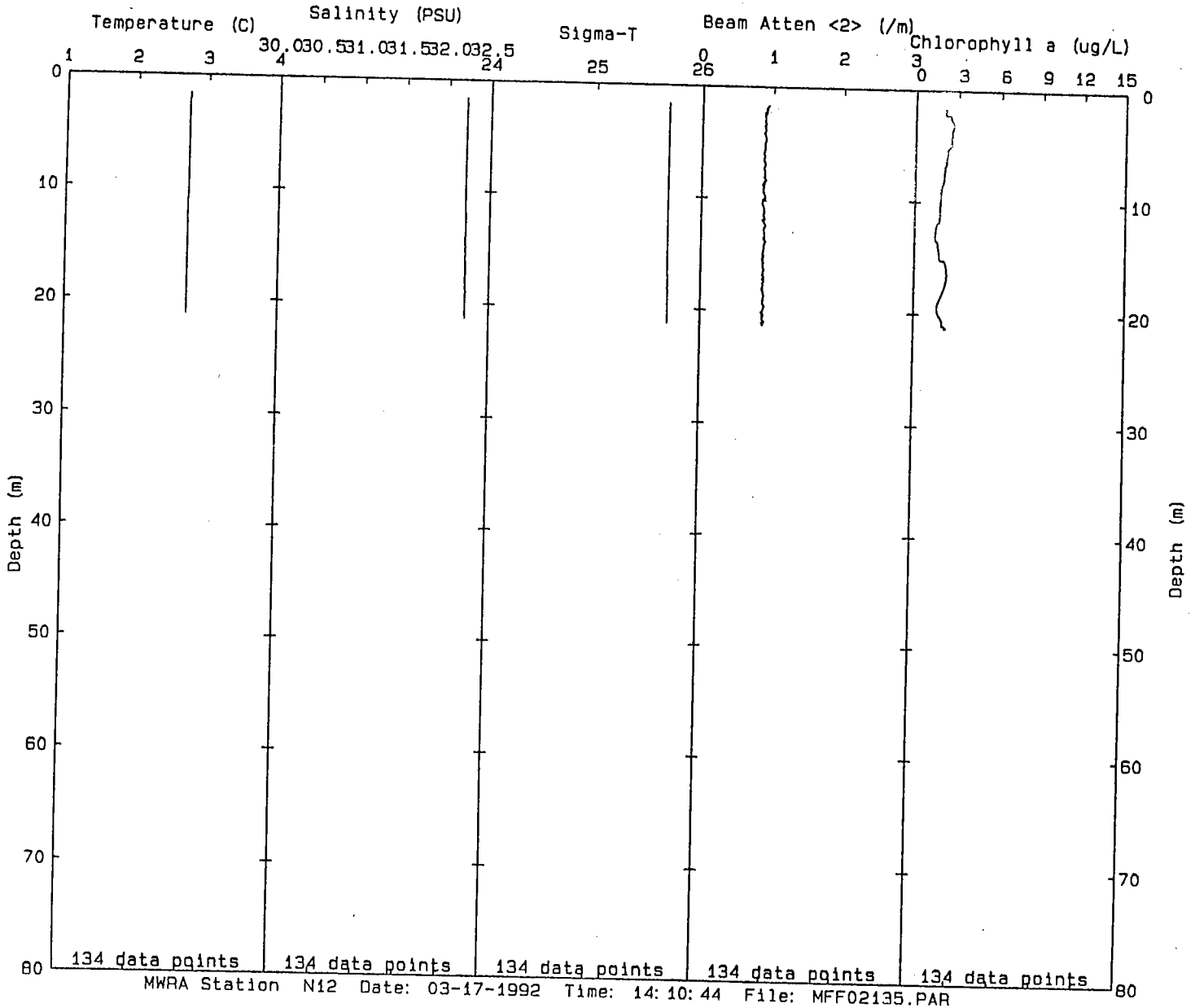

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
175 data points
175 data points
175 data points
175 data points
175 data points
MWRA Station N9 Date: 03-17-1992 Time: 17:39:37 File: MFF02149.PAR


Temperature (C)
1 2 3 4
Salinity (PSU)
30.030.531.031.532.032.5
24
Sigma-T
25 26
Beam Atten <2> (/m)
0 1 2 3
Chlorophyll a (ug/L)
0 3 6 9 12 15
Depth (m)
0 10 20 30 40 50 60 70 80
148 data points
144 data points
144 data points
148 data points
148 data points
MWRA Station N10P Date: 03-16-1992 Time: 10:44:37 File: MFF02076.PAR

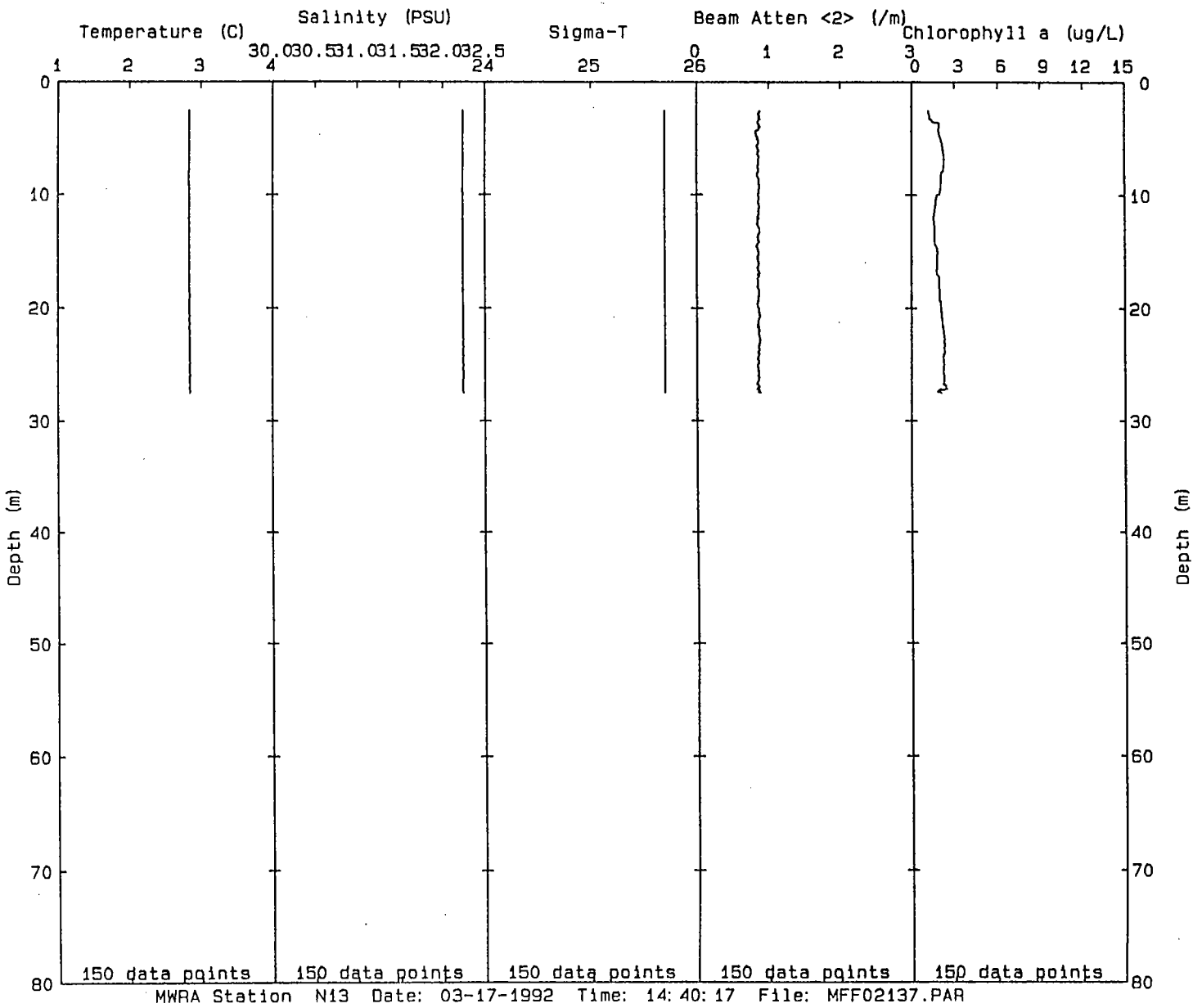
E.31

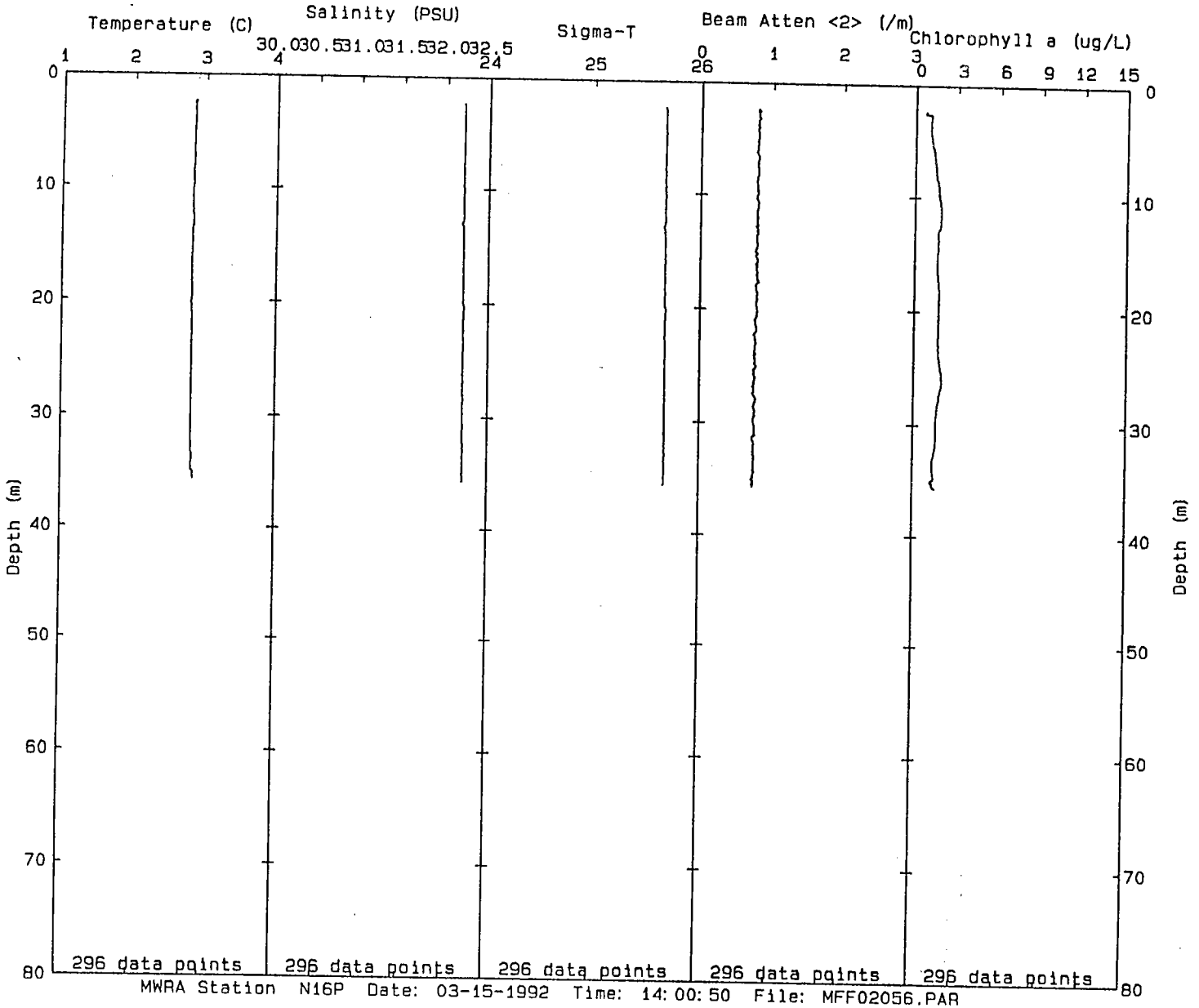

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
130 data points
130 data points
130 data points
130 data points
130 data points
MWRA Station N10 Date: 03-17-1992 Time: 12:47:26 File: MFF02131.PAR

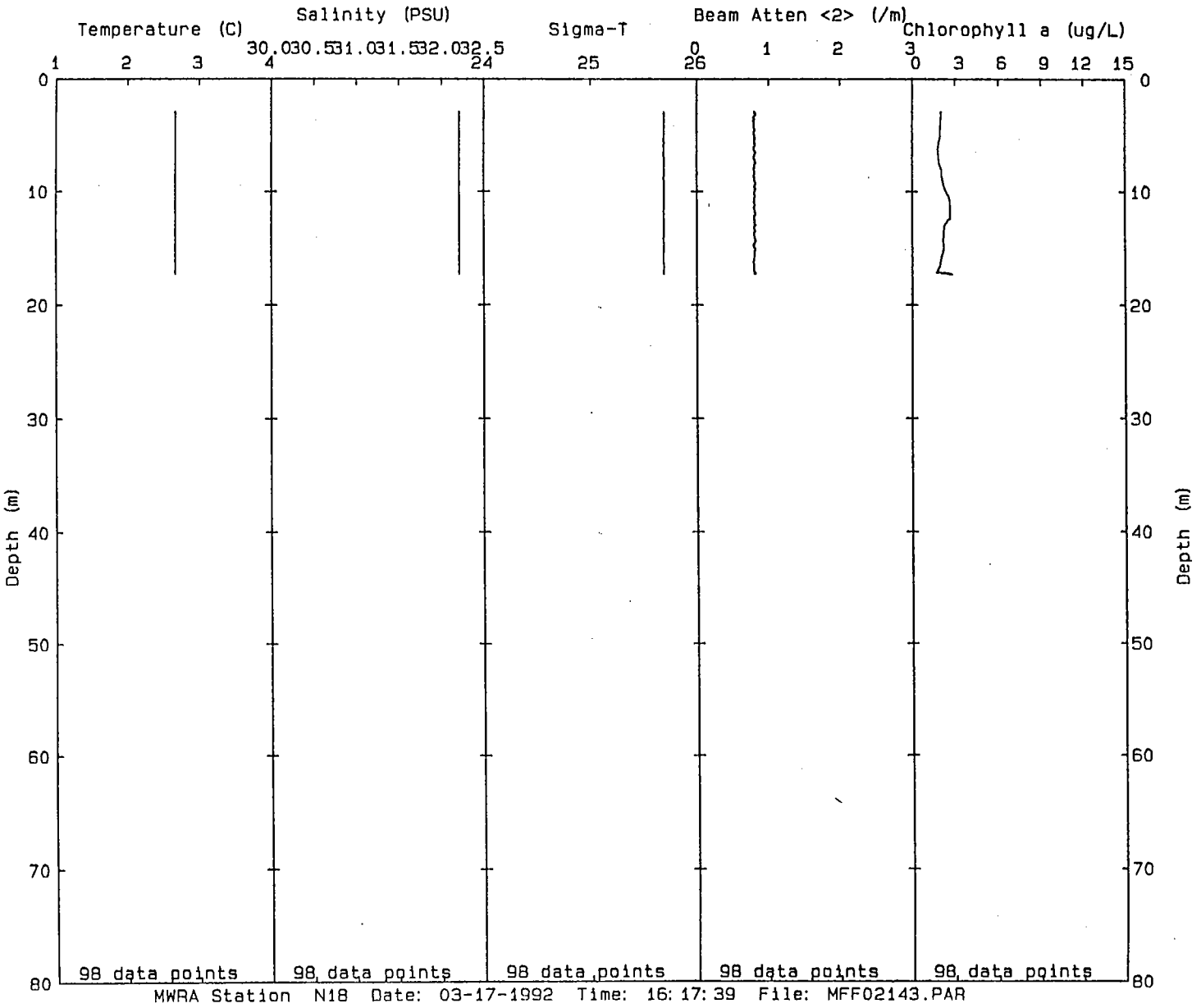

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
189 data points
189 data points
189 data points
189 data points
189 data points
MWRA Station N11 Date: 03-17-1992 Time: 13:28:54 File: MFF02133.PAR

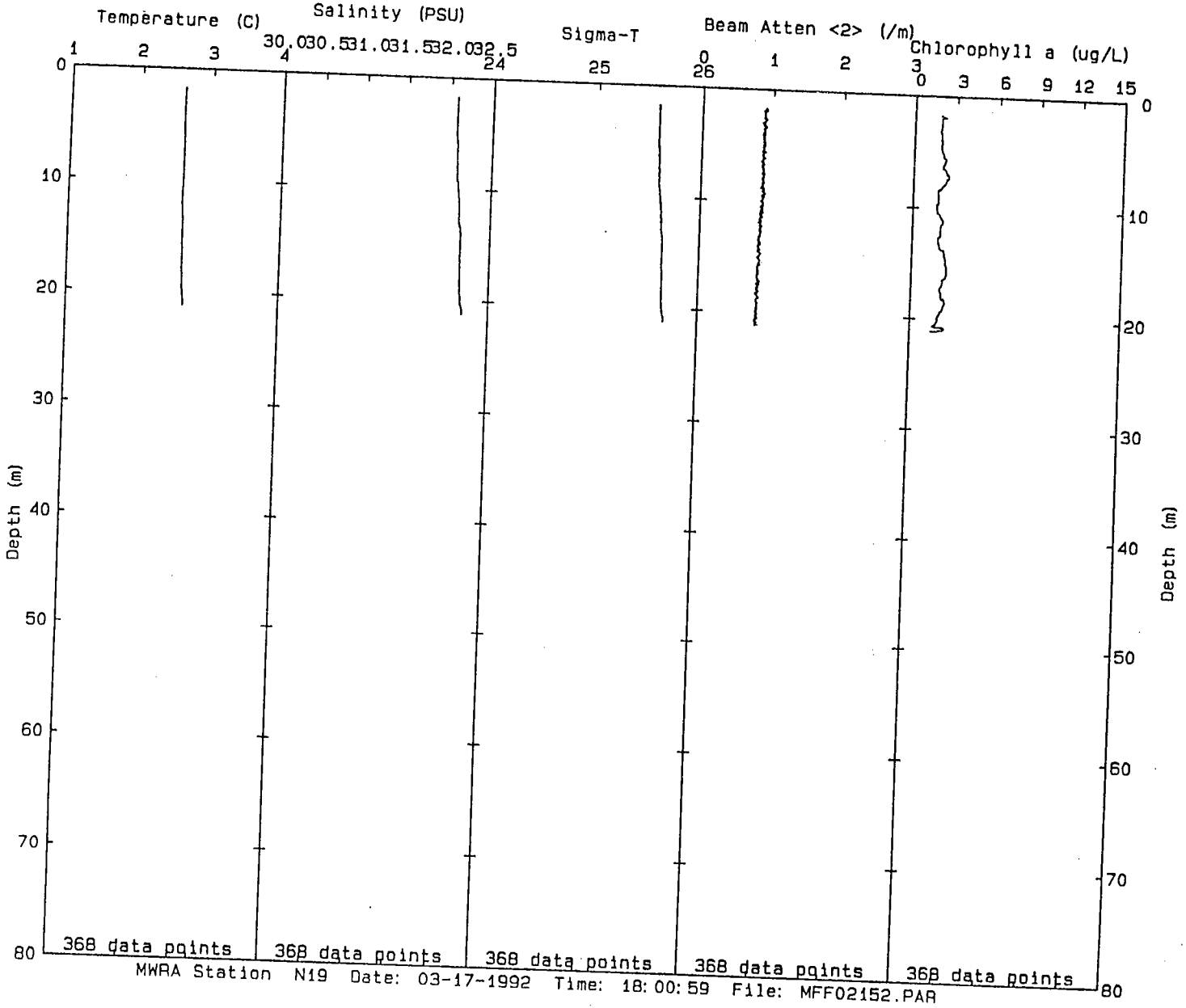

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
134 data points
134 data points
134 data points
134 data points
134 data points
MWRA Station N12 Date: 03-17-1992 Time: 14:10:44 File: MFF02135.PAR

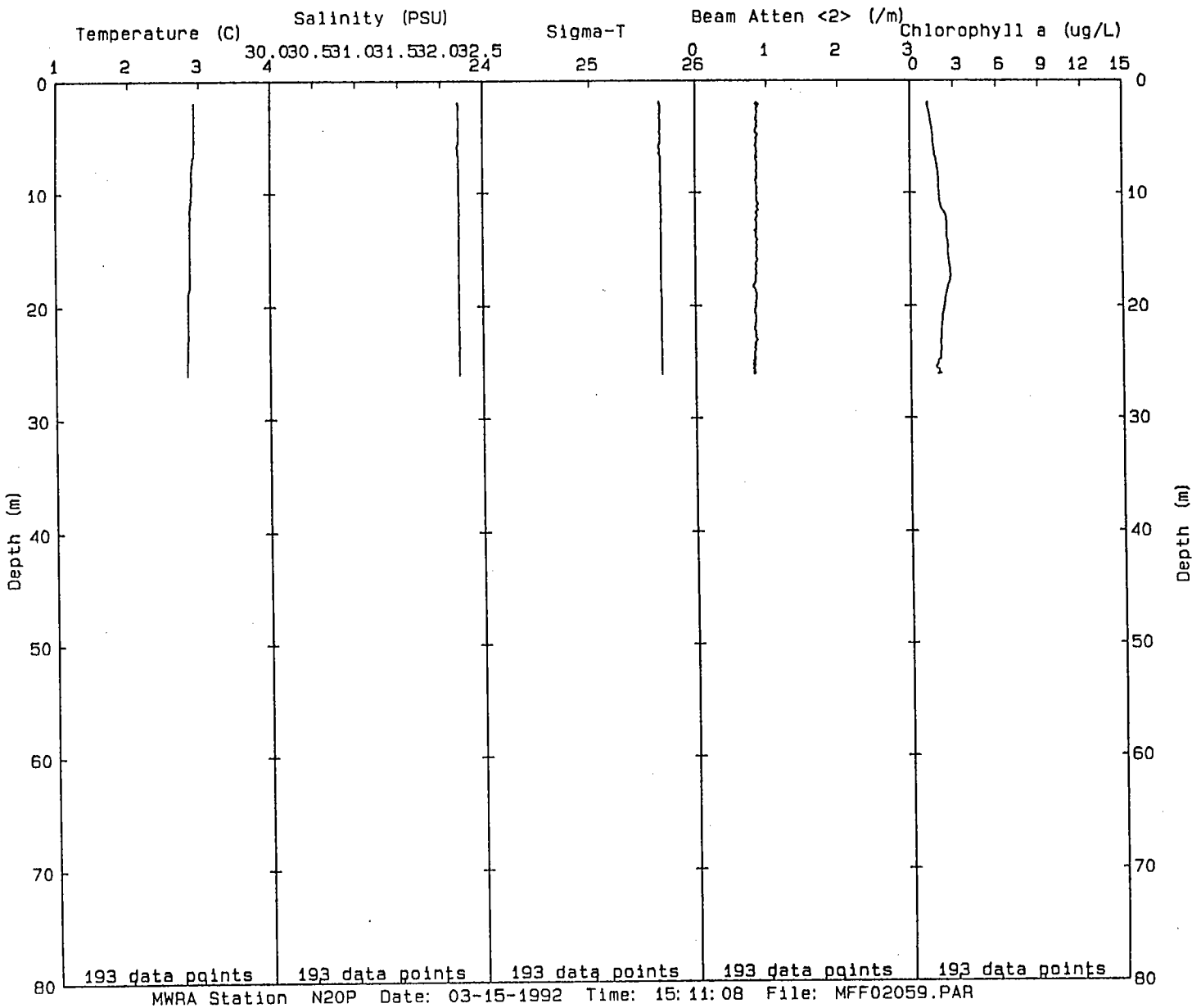
E-34

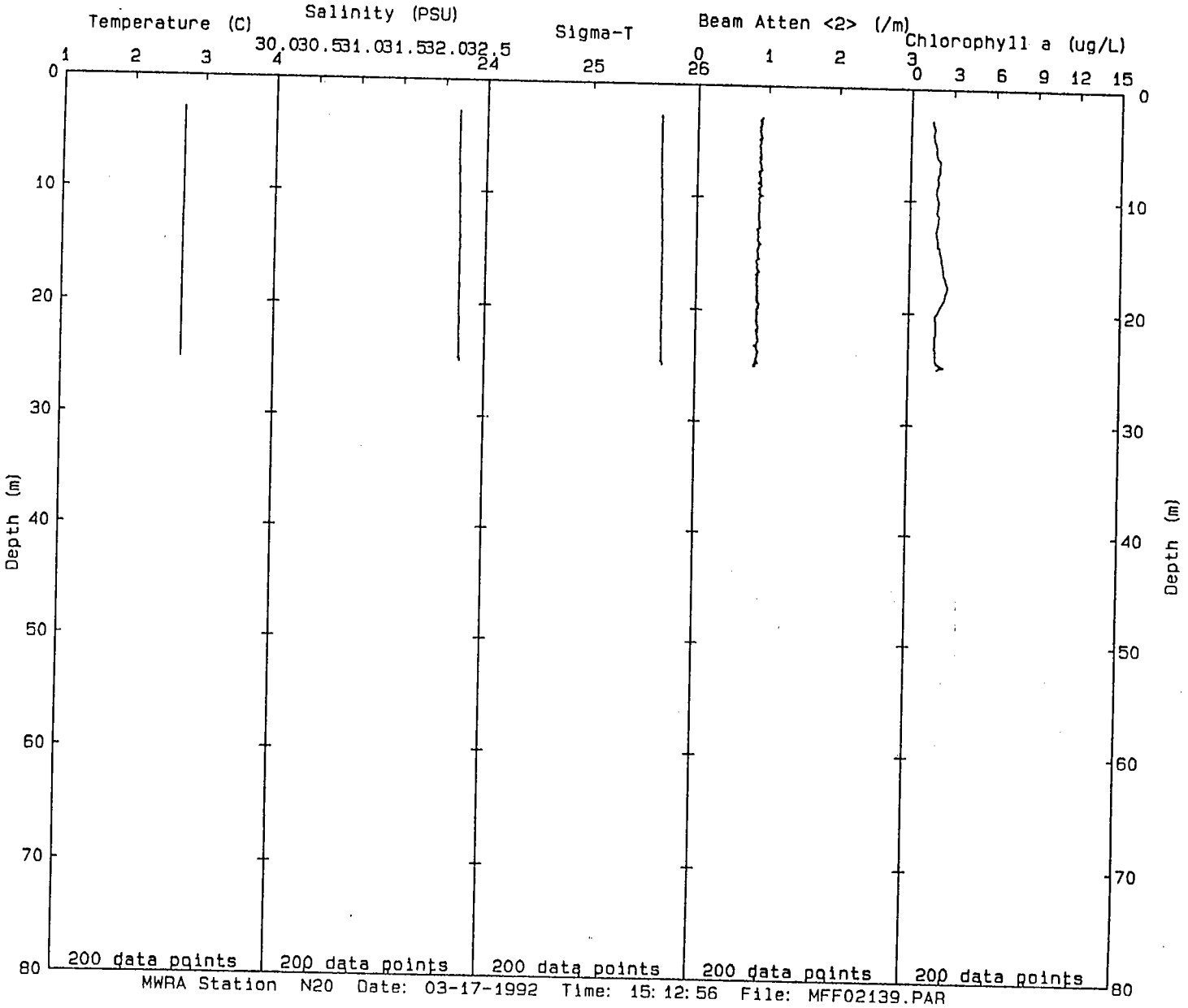

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
150 data points
150 data points
150 data points
150 data points
150 data points
MWRA Station N13 Date: 03-17-1992 Time: 14:40:17 File: MFF02137.PAR

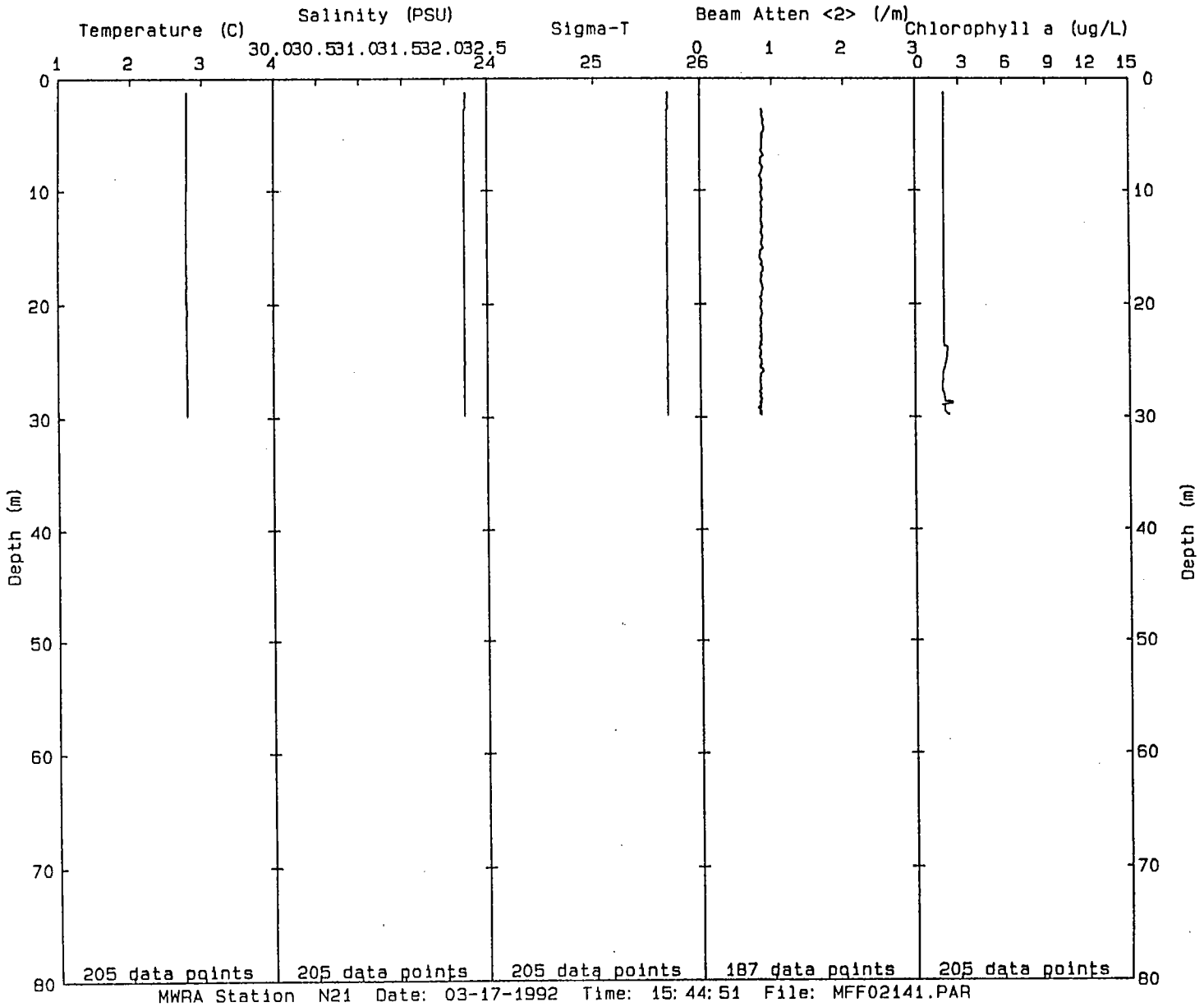

Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
296 data points
296 data points
296 data points
296 data points
296 data points
MWRA Station N16P Date: 03-15-1992 Time: 14:00:50 File: MFF02056.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
98 data points
98 data points
98 data points
98 data points
98 data points
MWRA Station N18 Date: 03-17-1992 Time: 16:17:39 File: MFF02143.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
368 data points
368 data points
368 data points
368 data points
368 data points
MWRA Station N19 Date: 03-17-1992 Time: 18:00:59 File: MFF02152.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
193 data points
193 data points
193 data points
193 data points
193 data points
MWRA Station N20P Date: 03-15-1992 Time: 15:11:08 File: MFF02059.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
200 data points
200 data points
200 data points
200 data points
200 data points
MWRA Station N20 Date: 03-17-1992 Time: 15:12:56 File: MFF02139.PAR


Temperature (C)
Salinity (PSU)
Sigma-T
Beam Atten <2> (/m)
Chlorophyll a (ug/L)
Depth (m)
205 data points
205 data points
205 data points
187 data points
205 data points
MWRA Station N21 Date: 03-17-1992 Time: 15:44:51 File: MFF02141.PAR

APPENDIX E

March 1992 Cruises

Part 2

Vertical Sections for Transects from March 1992

Temperature, Salinity, Sigma T, Beam Attenuation, and Chlorophyll (Fluorescence) are given for standard transects (see text and Figure 3-11). 1= Northern transect, 2= Boston-Nearfield transect, 3= Cohasset transect, 4= Marshfield transect. Contours have been generated from vertical profile data (Appendix E, part 1) using the method of inverse distance to the second power, with the search window set to overlap adjacent profiles.

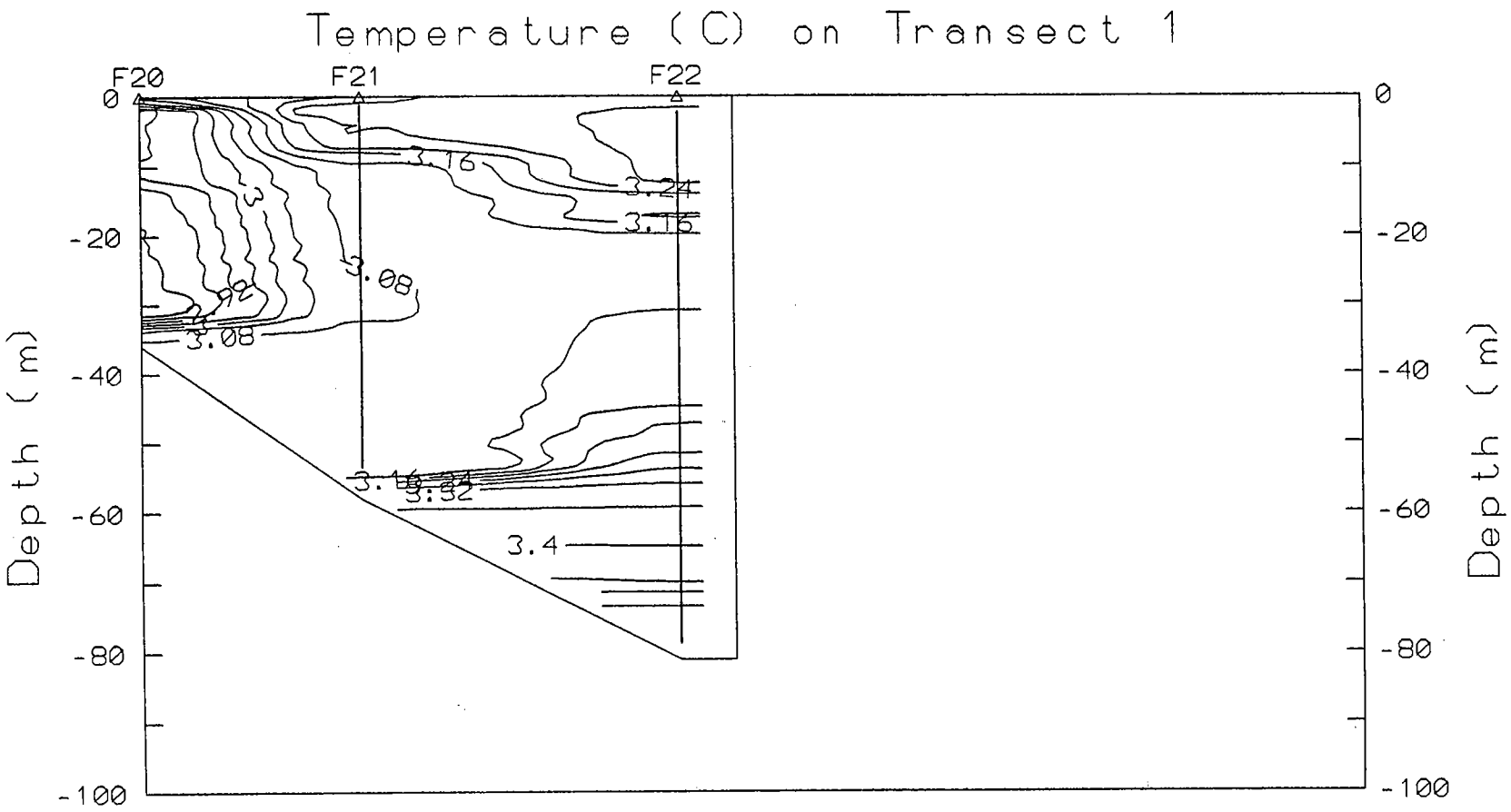
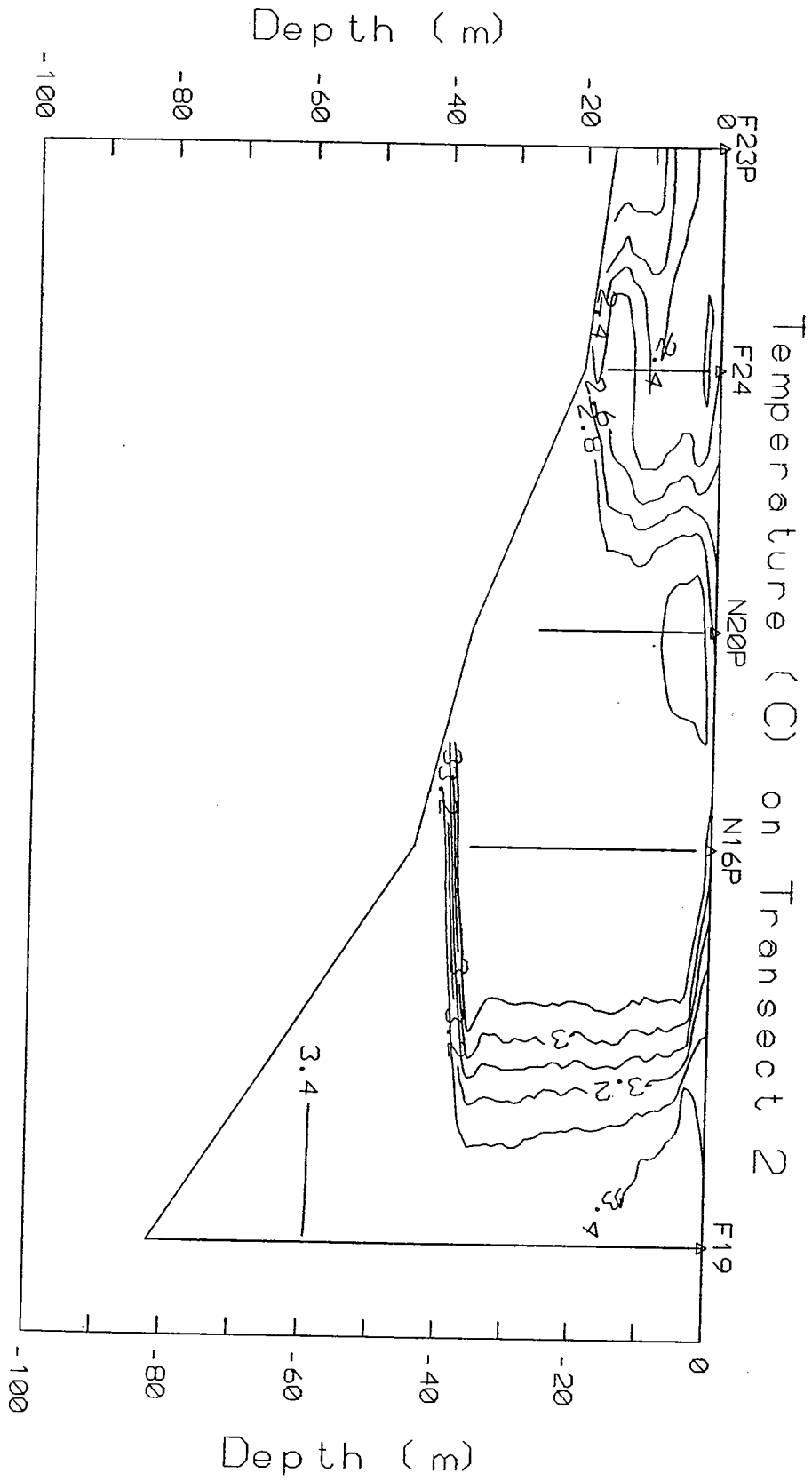
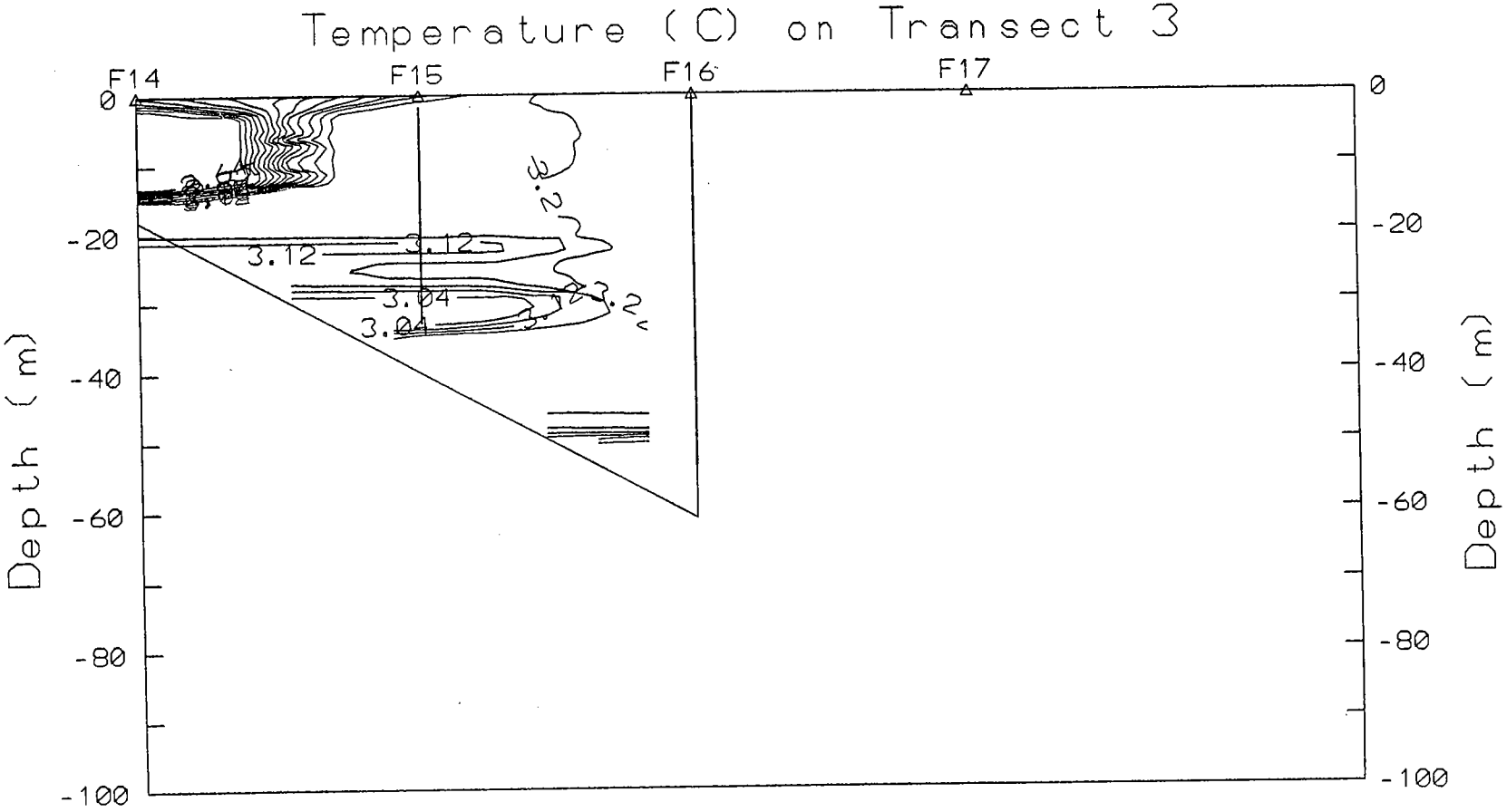
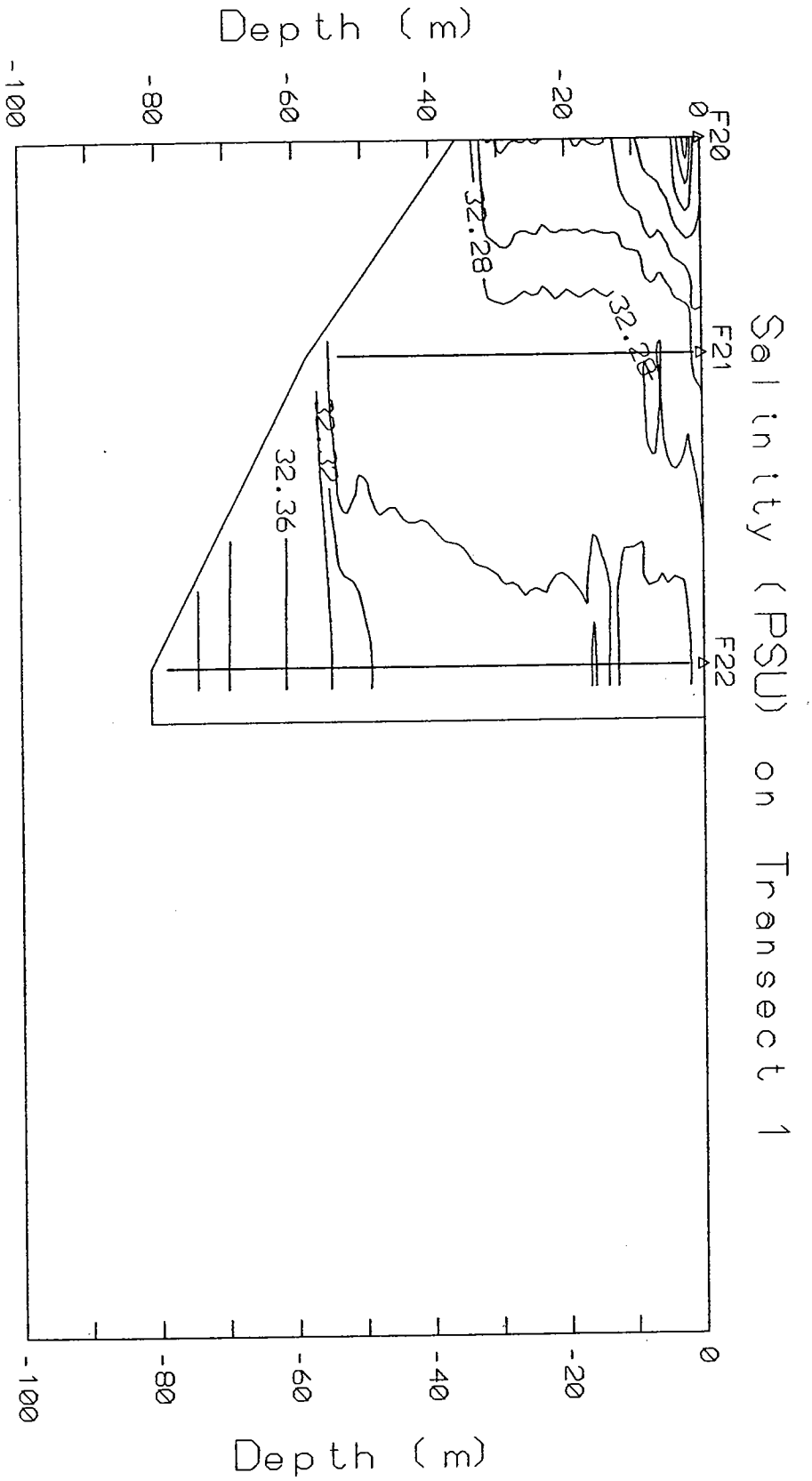

Temperature (C) on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
3.16
3.24
3.16
3.08
3.08
3.32
3.4

fig 4-3

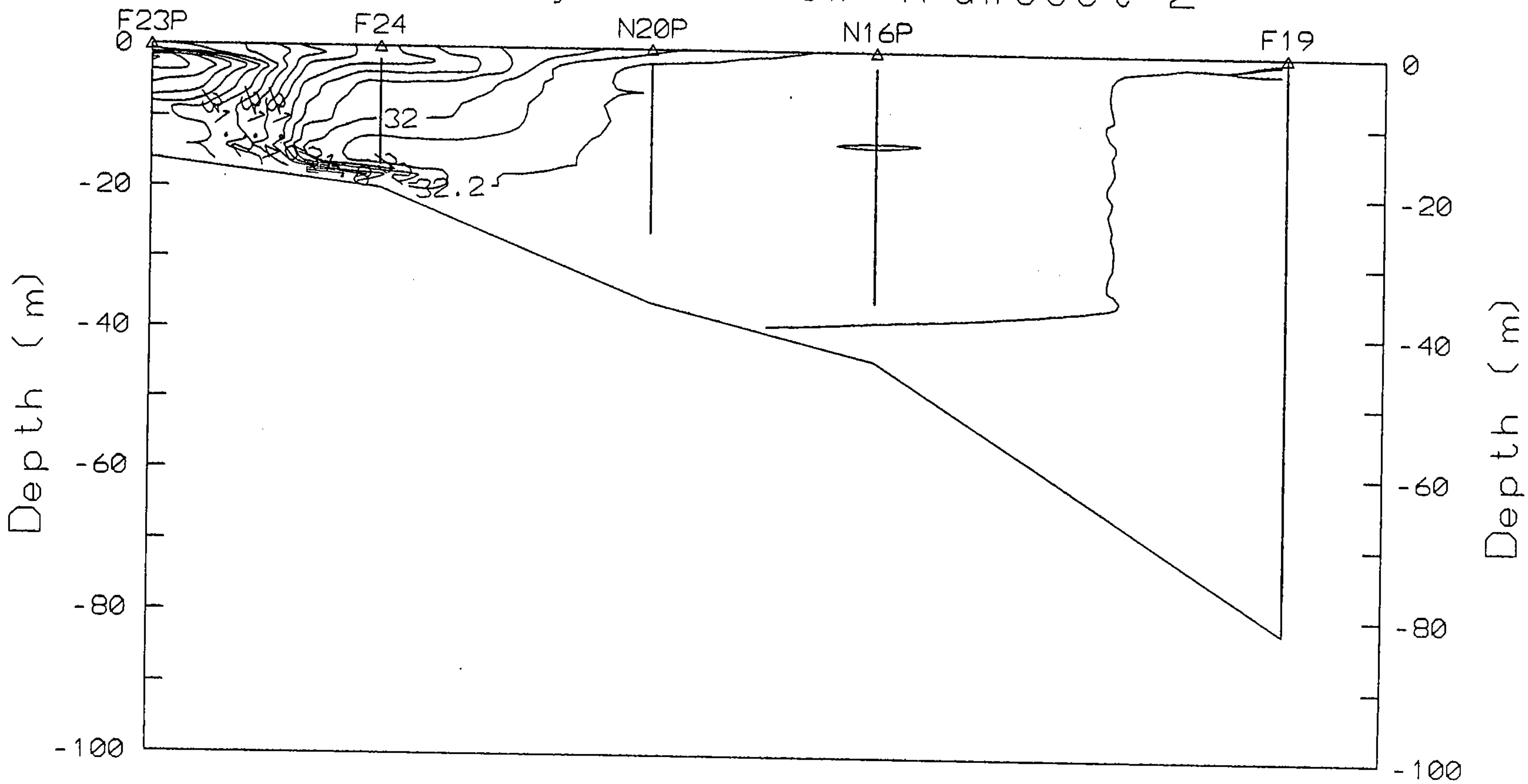

Depth (m)
-100
-80
-60
-40
-20
0
F23P
F24
N20P
N16P
F19
2.4
2.6
2.8
3.2
3.4
3.6
Temperature (C) on Transect 2
Depth (m)


Temperature (C) on Transect 3
F14
F15
F16
F17
0
-20
-40
-60
-80
-100
Depth (m)
3.2
3.12
3.04
3.04

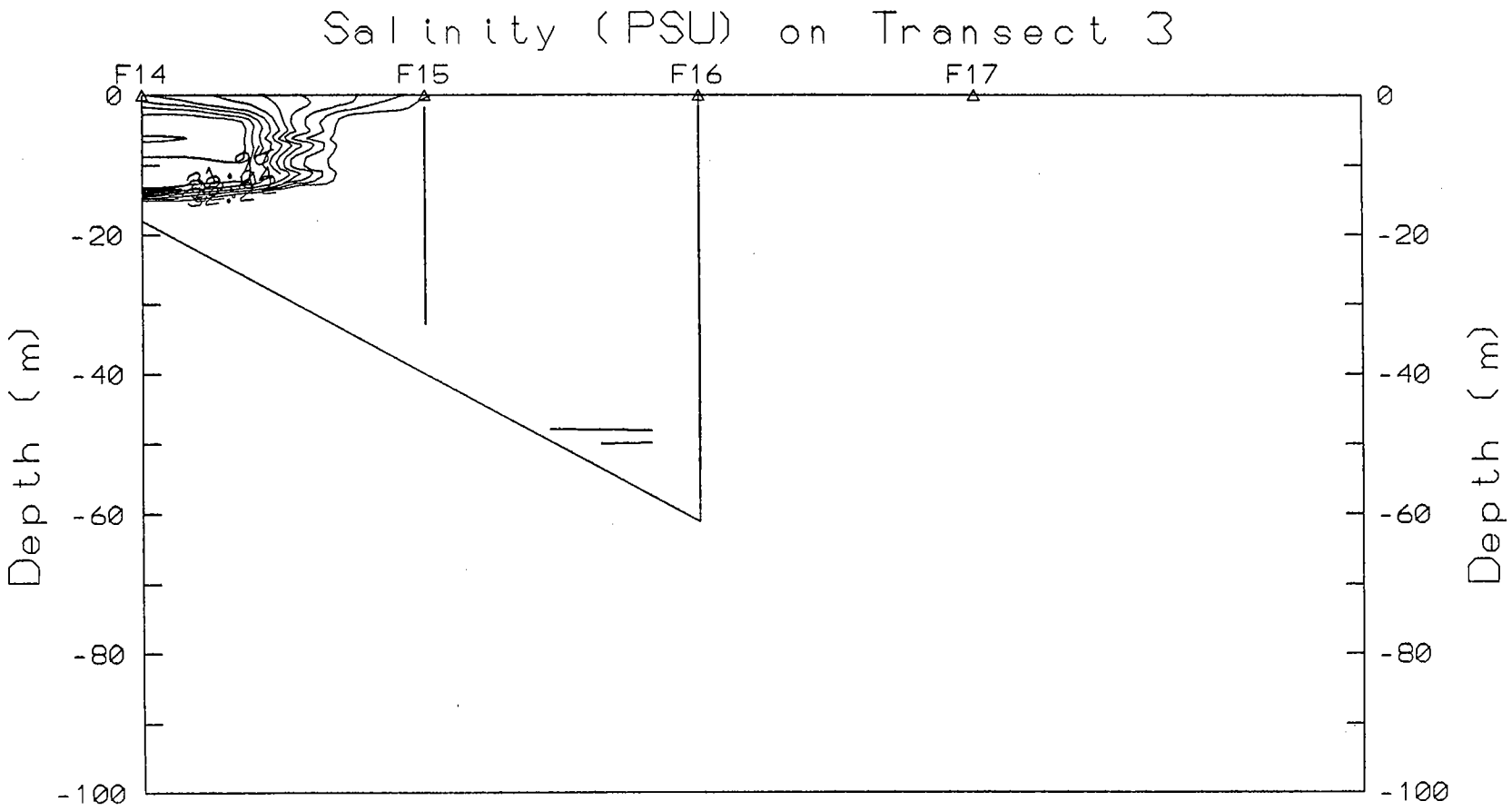
Temperature (C) on Transect 4
F5
F6
F7
F8
F12
0
-20
-40
-60
-80
-100
Depth (m)
2.60
2.74
2.78
2.82
2.86
2.90
2.94

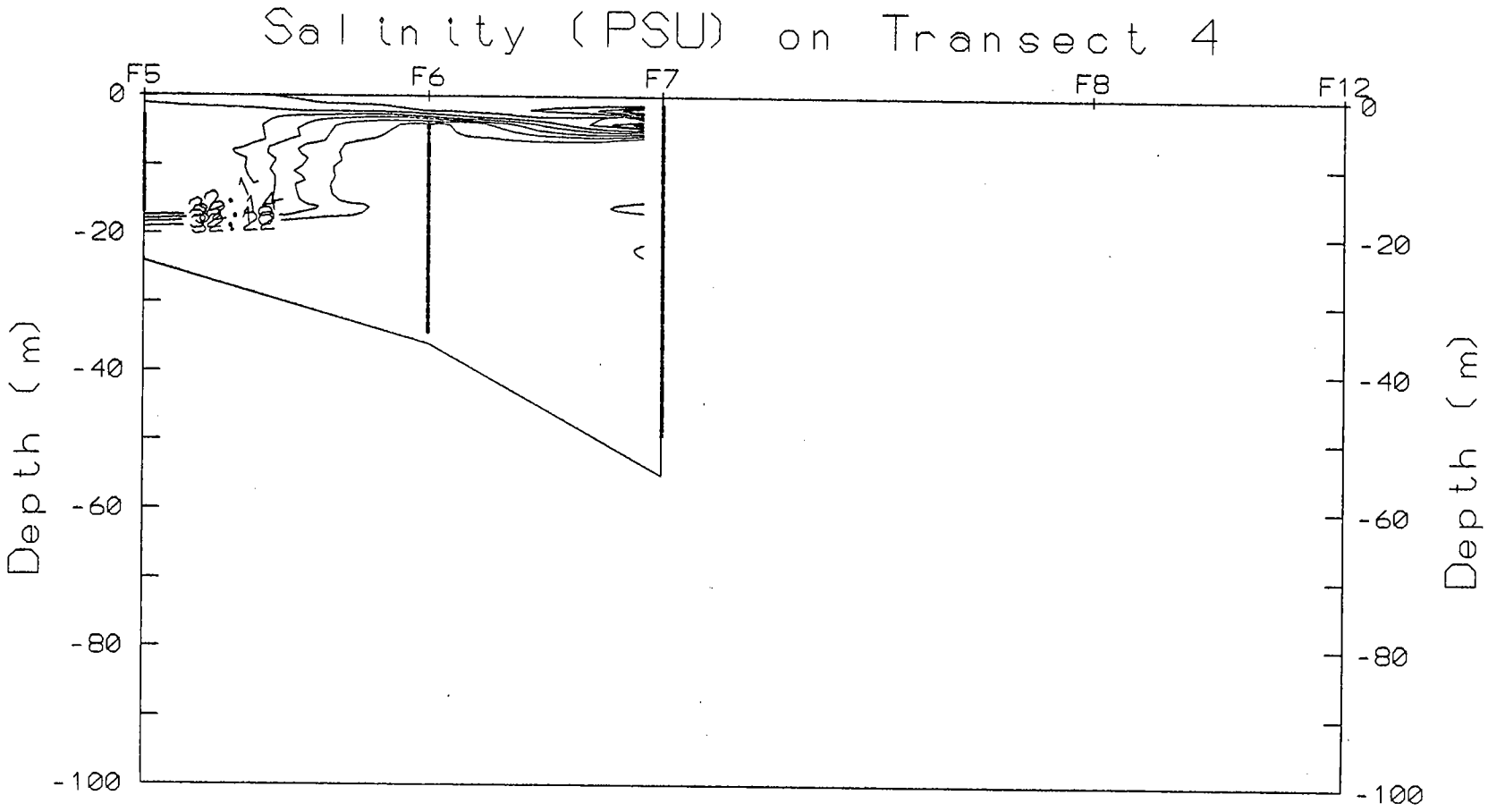

Depth (m)
-100
-80
-60
-40
-20
0
F20
F21
F22
32.28
32.32
32.36
Salinity (PSU) on Transect 1
Depth (m)

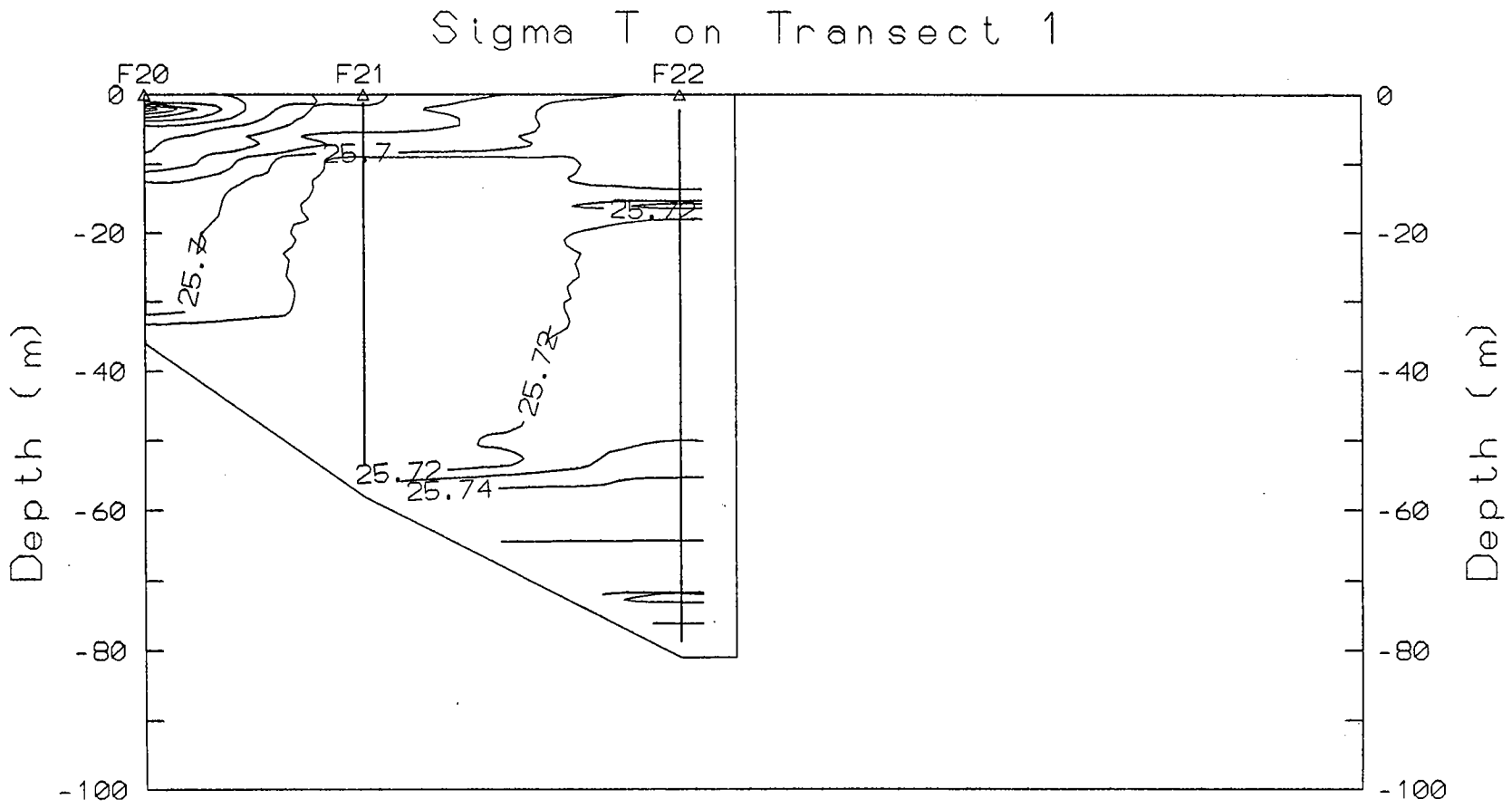
Salinity (PSU) on Transect 2

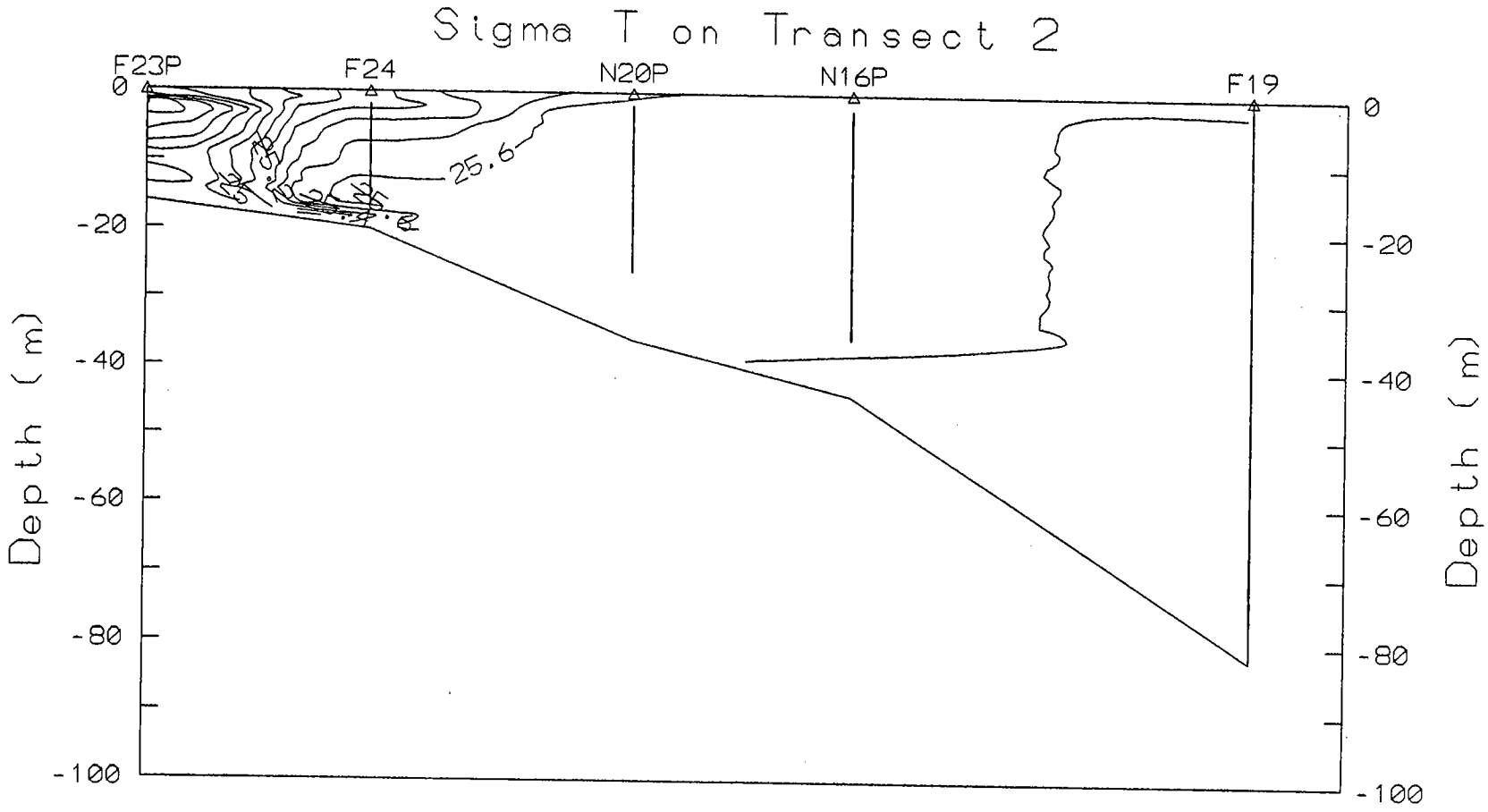


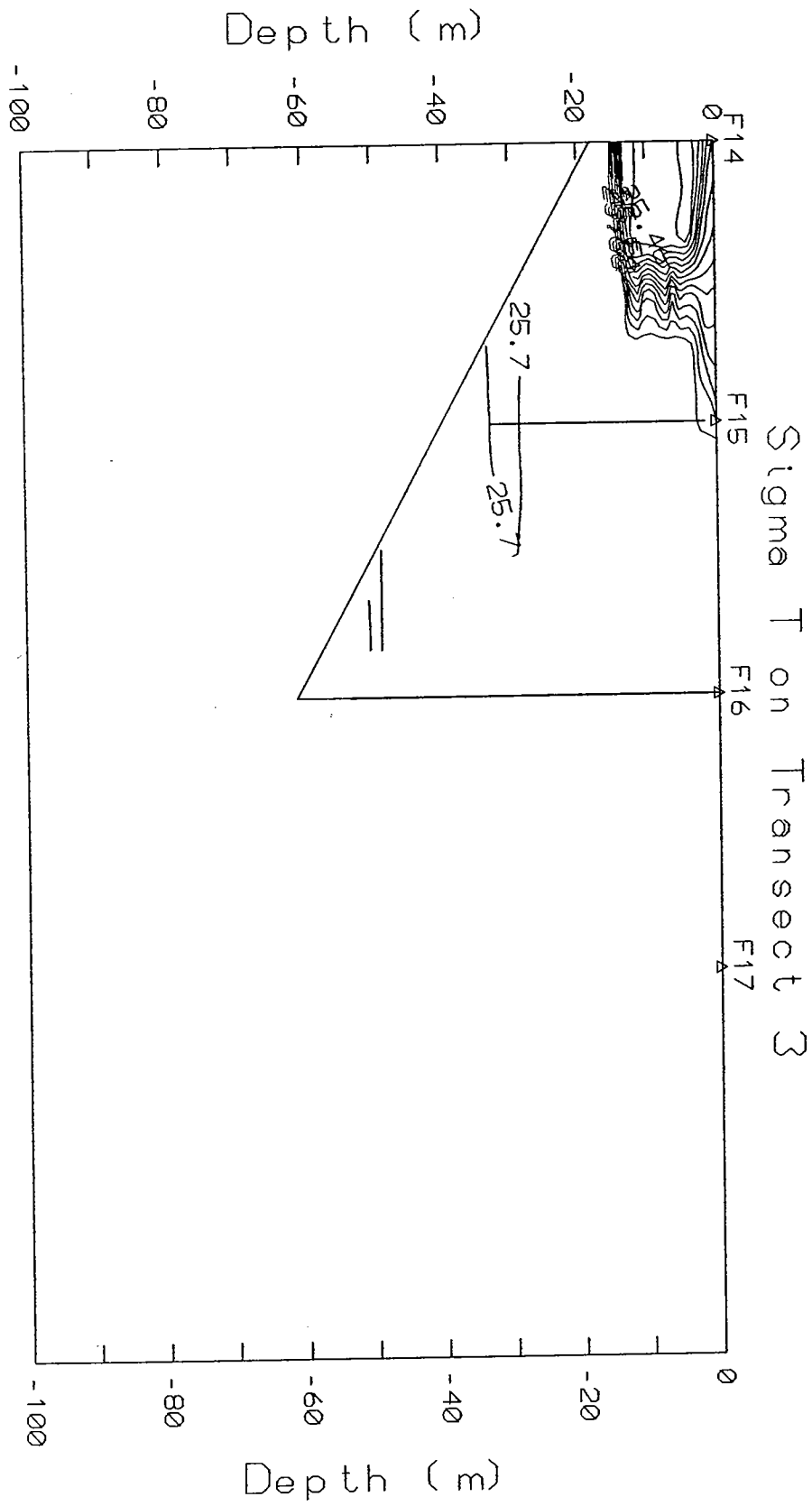
E-49


Salinity (PSU) on Transect 3
F14
F15
F16
F17
0
-20
-40
-60
-80
-100
Depth (m)


Salinity (PSU) on Transect 4
F5
F6
F7
F8
F12
0
-20
-40
-60
-80
-100
Depth (m)
32.14
32.16
32.18
32.20
32.22


Sigma T on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
25.7
25.72
25.74


Sigma T on Transect 2
F23P
F24
N20P
N16P
F19
0
-20
-40
-60
-80
-100
25.6
Depth (m)
Depth (m)


Depth (m)
-100
-80
-60
-40
-20
0
F14
F15
F16
F17
25.7
25.7
Sigma T on Transect 3
Depth (m)

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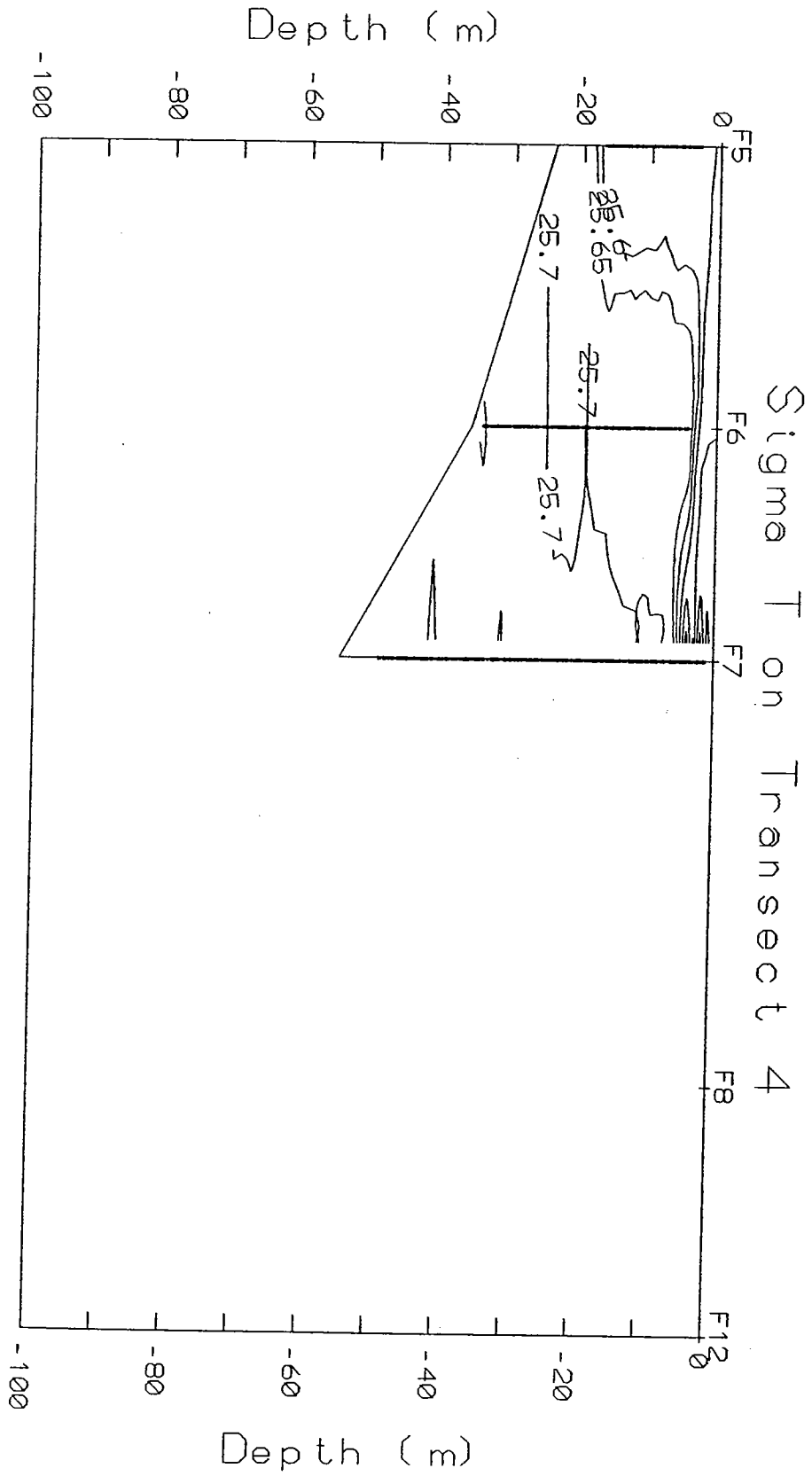
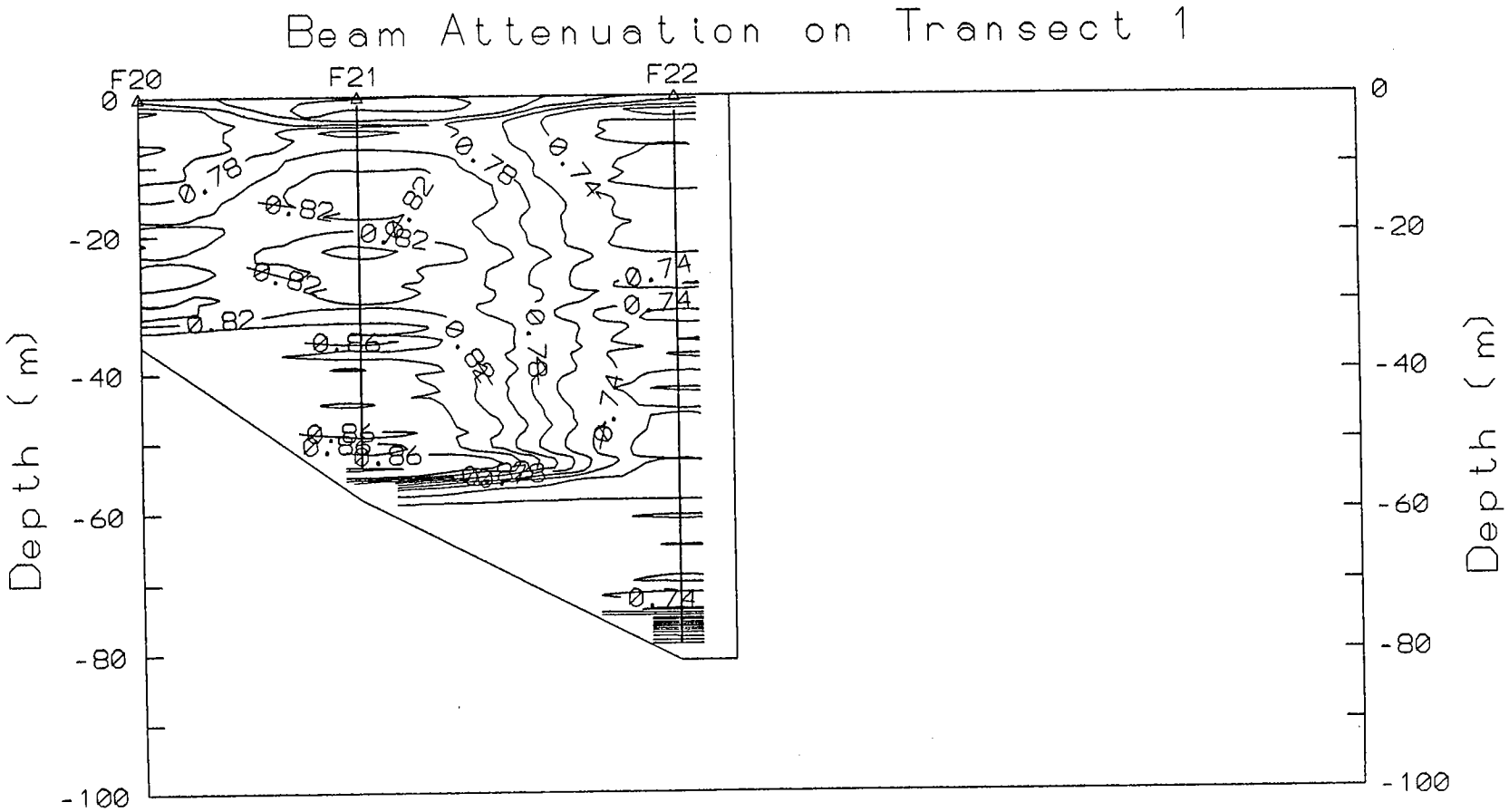
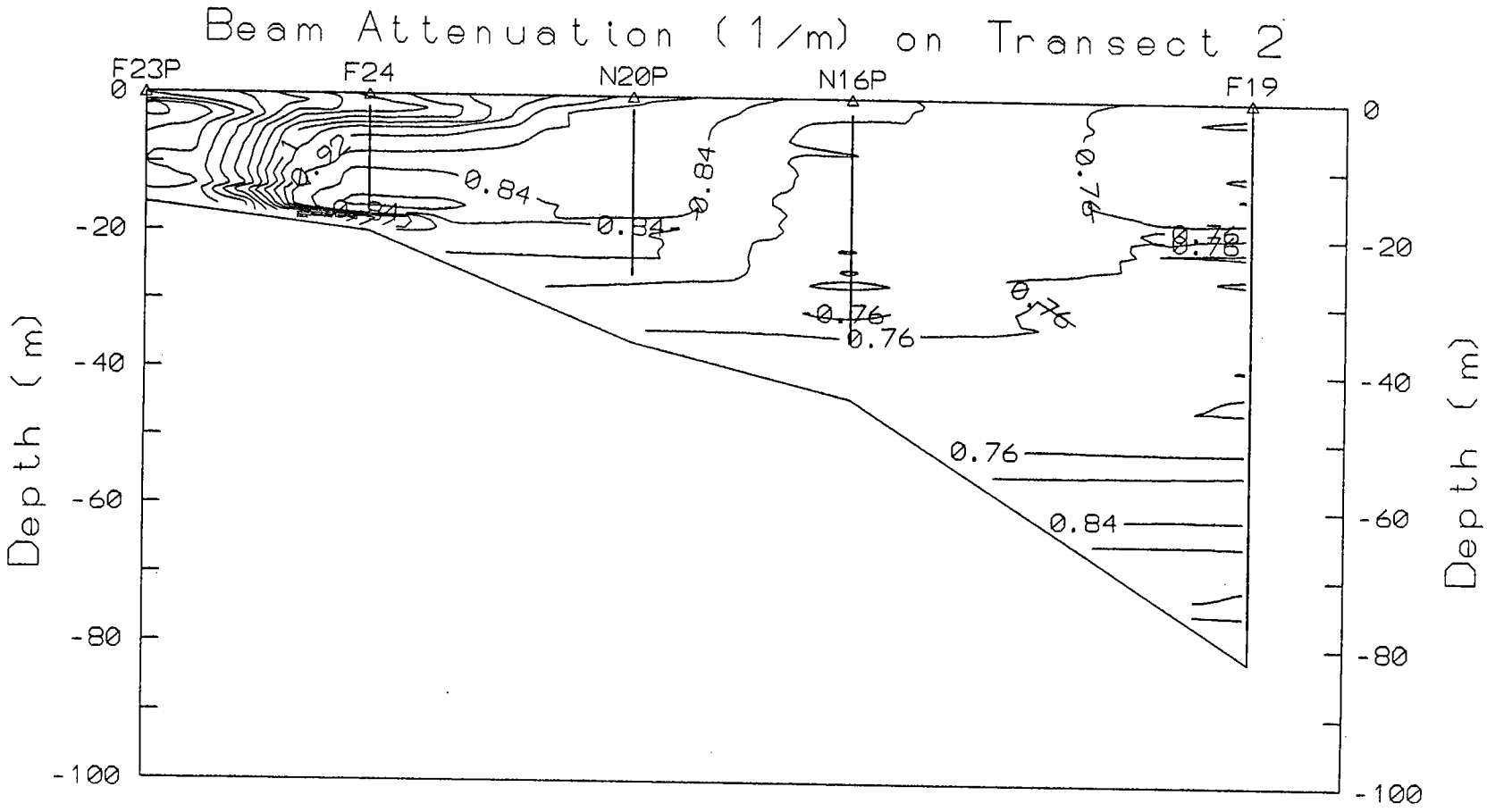
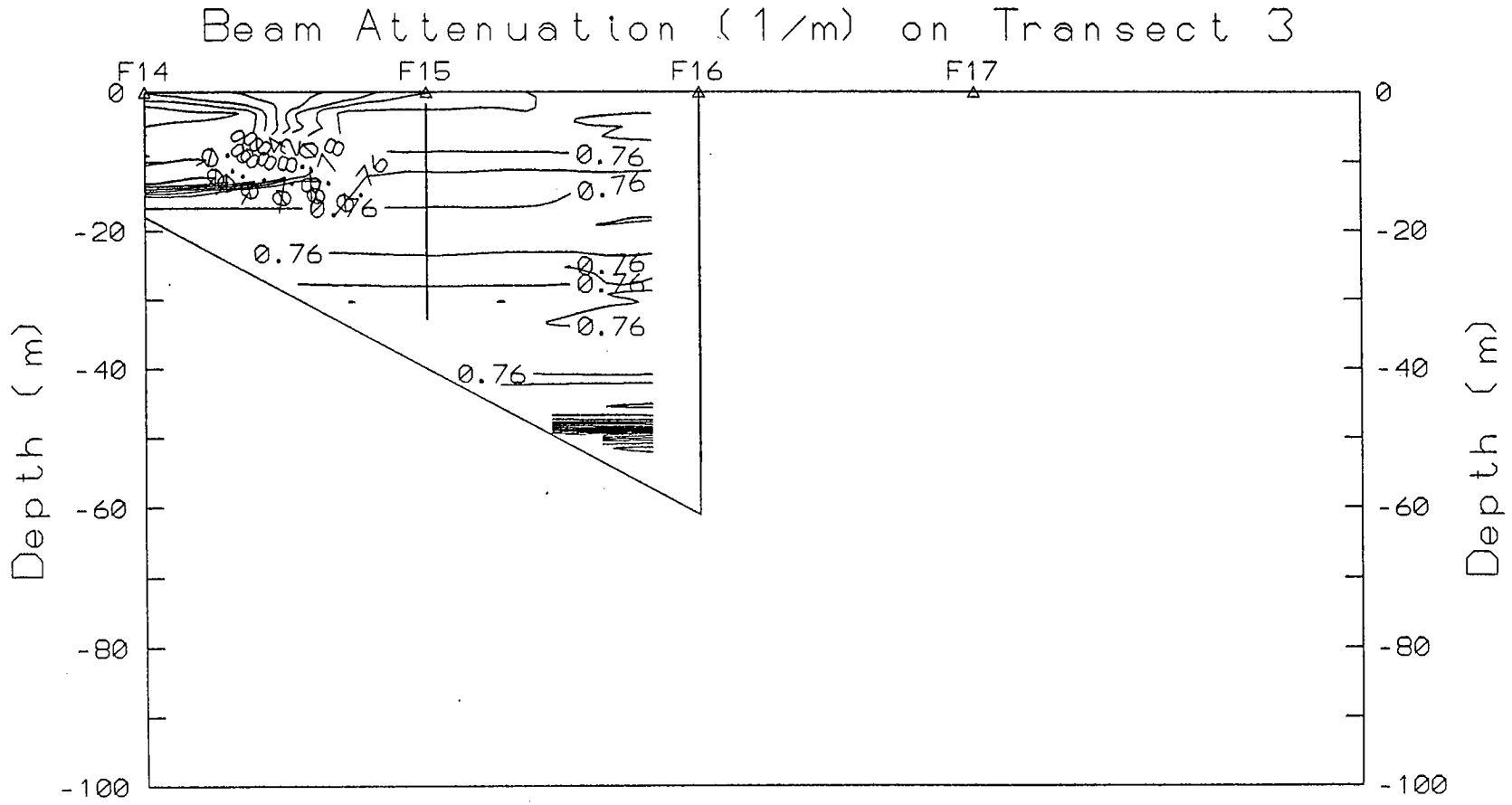
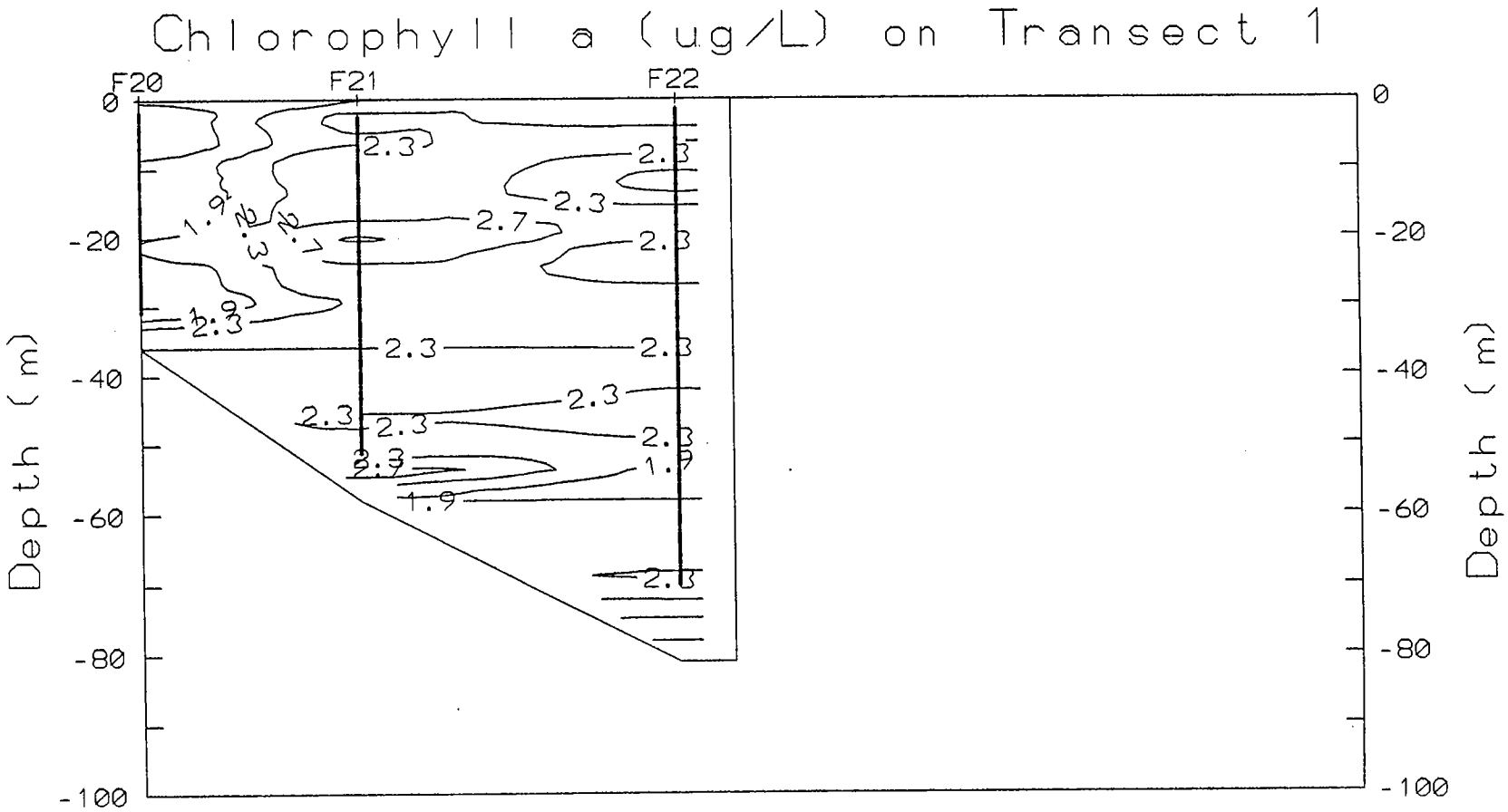

Depth (m)
-100
-80
-60
-40
-20
0
F5
F6
F7
F8
F12
25.65
25.7
25.7
25.7
Sigma T on Transect 4
Depth (m)

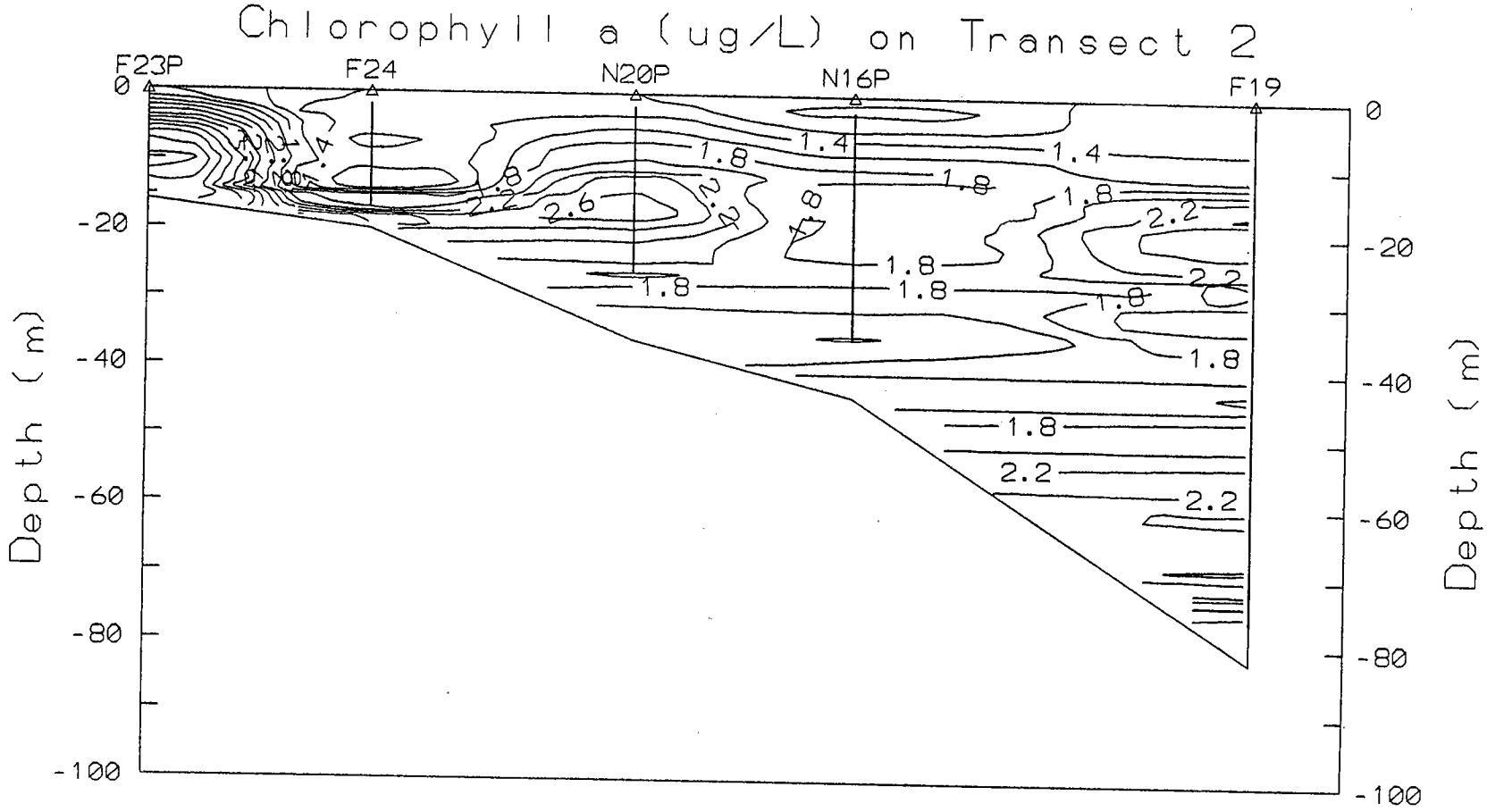

Beam Attenuation on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
0.78
0.82
0.86
0.74

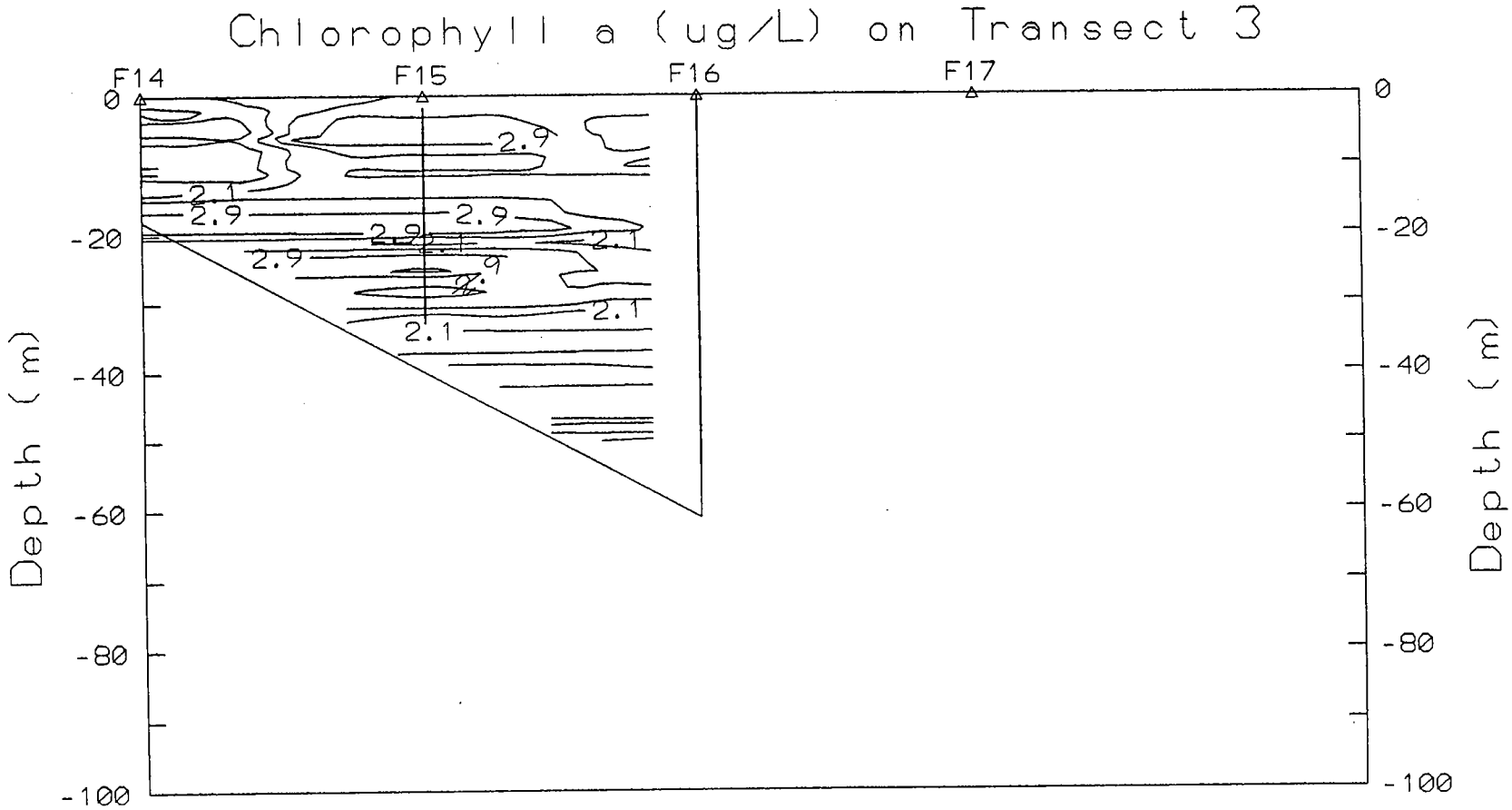

Beam Attenuation (1/m) on Transect 2
F23P
F24
N20P
N16P
F19
0
-20
-40
-60
-80
-100
Depth (m)
0.84
0.76


Beam Attenuation (1/m) on Transect 3
F14
F15
F16
F17
0
-20
-40
-60
-80
-100
Depth (m)
0.76

Beam Attenuation (1/m) on Transect 4
F5
F6
F7
F8
F12
0
-20
-40
-60
-80
-100
Depth (m)
.9
.85
.8


Chlorophyll a (ug/L) on Transect 1
F20
F21
F22
0
-20
-40
-60
-80
-100
Depth (m)
2.3
1.9
2.7


Chlorophyll a (ug/L) on Transect 2
F23P
F24
N20P
N16P
F19
0
-20
-40
-60
-80
-100
Depth (m)
1.4
1.8
2.2
2.6


Chlorophyll a (ug/L) on Transect 3
F14
F15
F16
F17
0
-20
-40
-60
-80
-100
Depth (m)
2.9
2.1

Chlorophyll a (ug/L) on Transect 4
F5
F6
F7
F8
F12
0
-20
-40
-60
-80
-100
Depth (m)
0.5
1
1.5

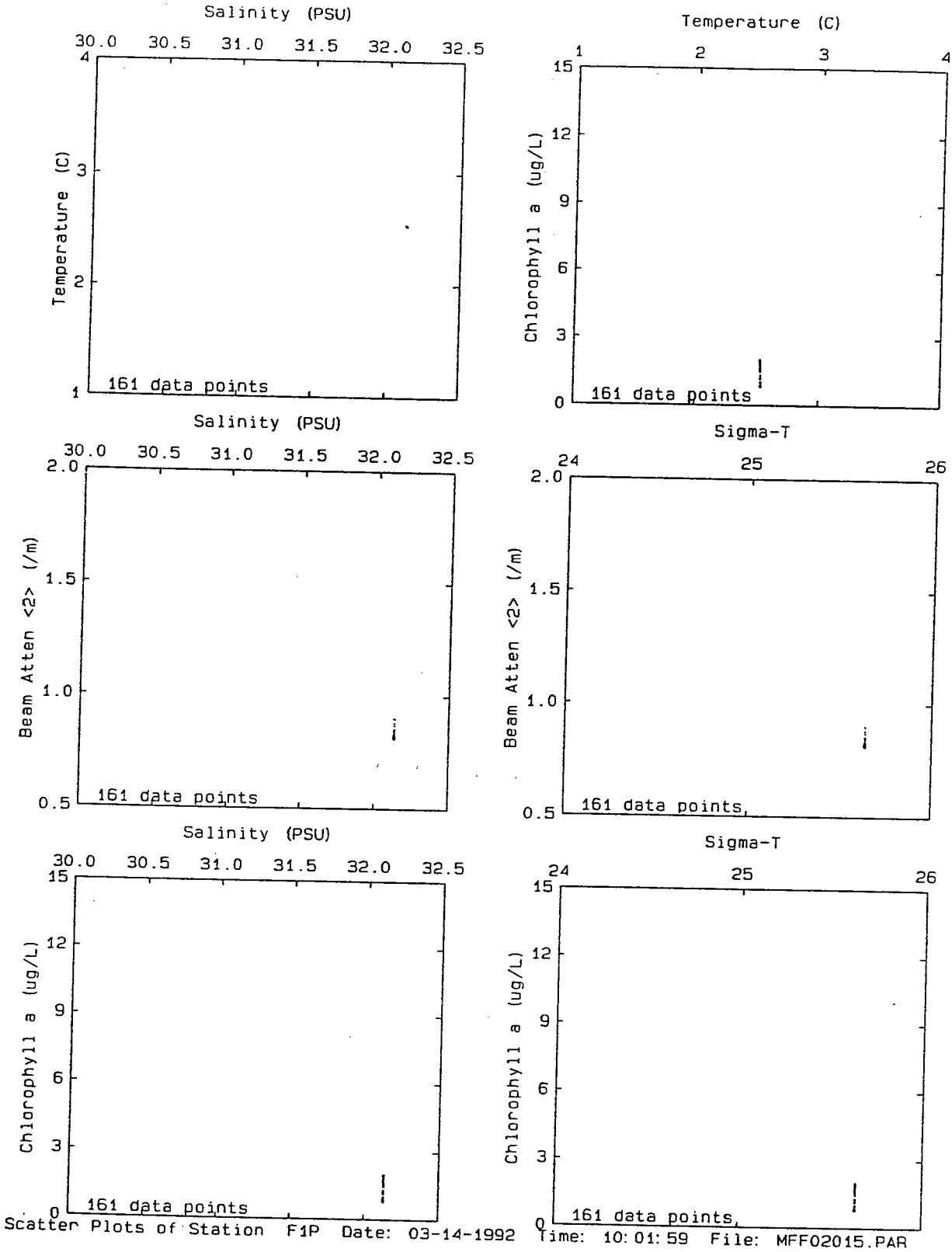
APPENDIX E

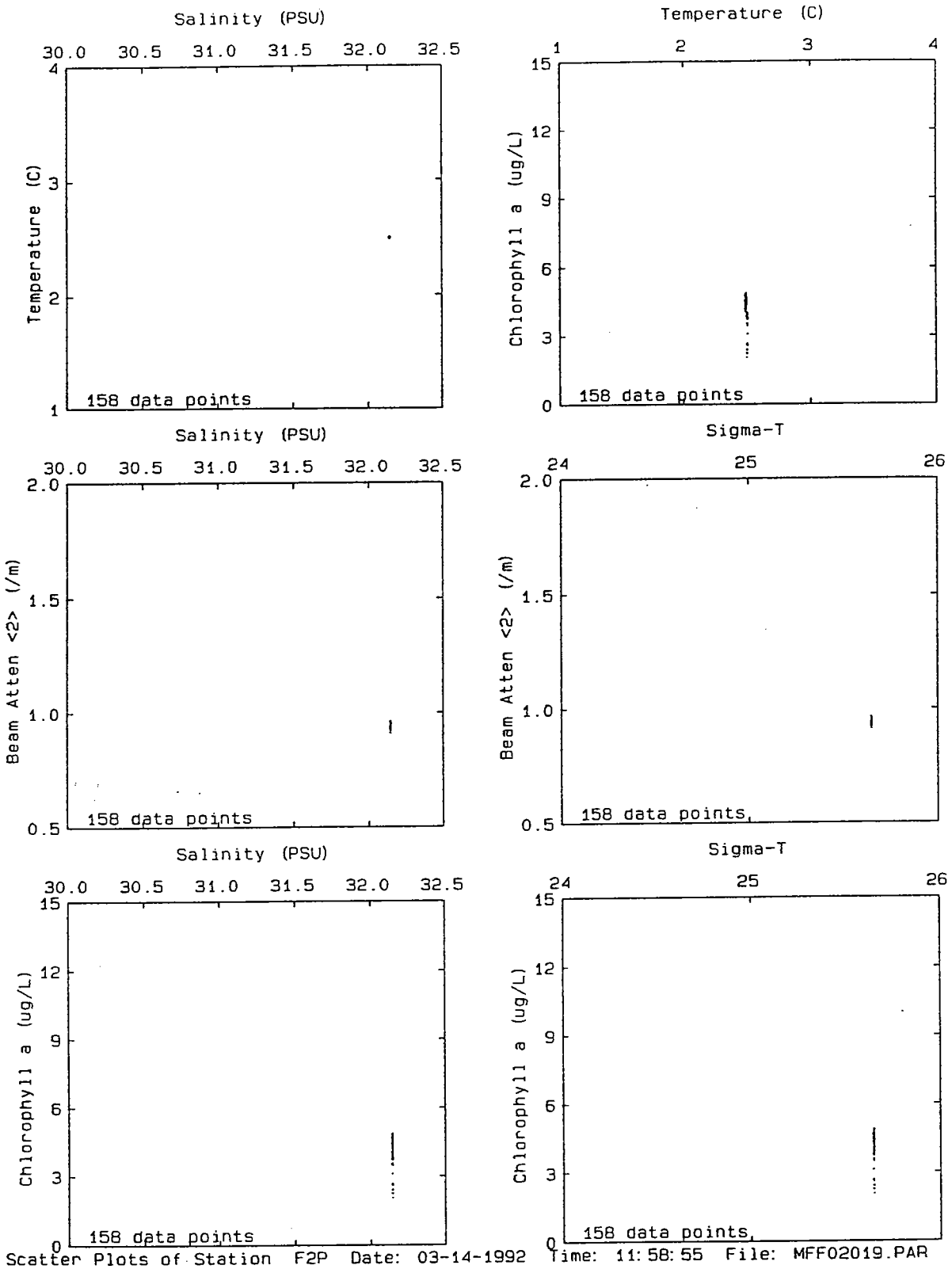
March 1992 Cruises

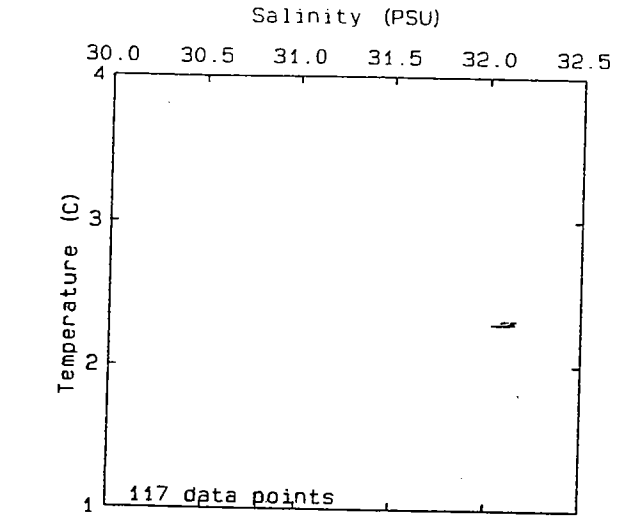
Part 3

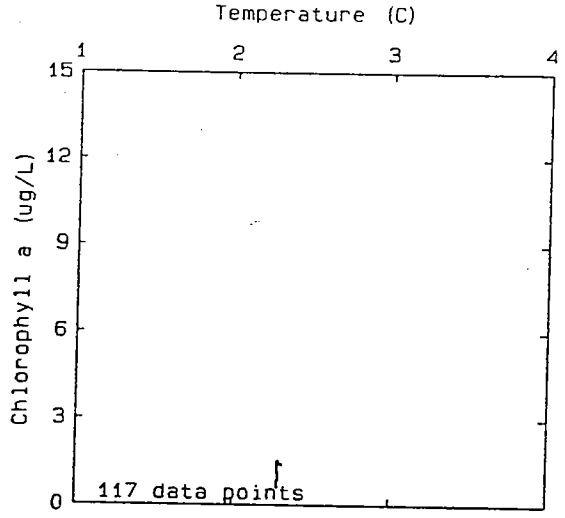
Parameter-Parameter Plots of Vertical Profile Data from March 1992

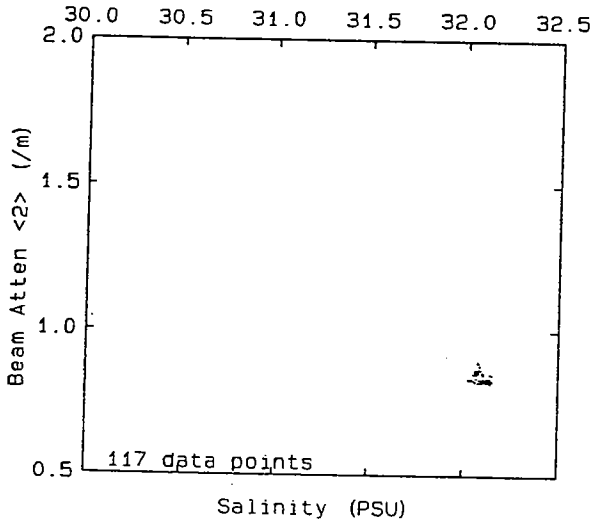
Data are as described in Appendix E, Part 1, and include the entire profile for each station.

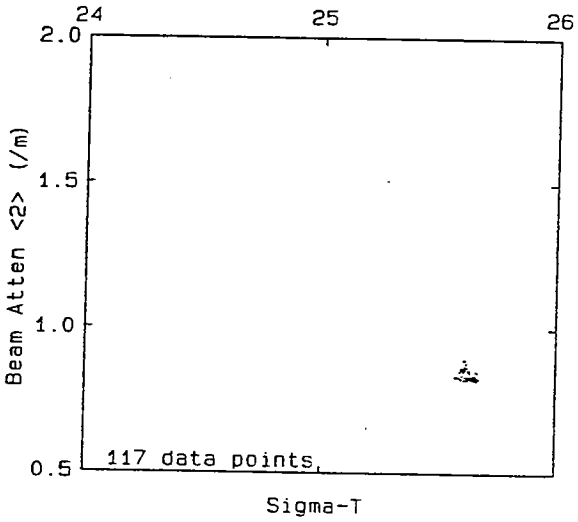

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
161 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
161 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
161 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
161 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
161 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
161 data points,
Scatter Plots of Station F1P Date: 03-14-1992
Time: 10:01:59 File: MFF02015.PAR

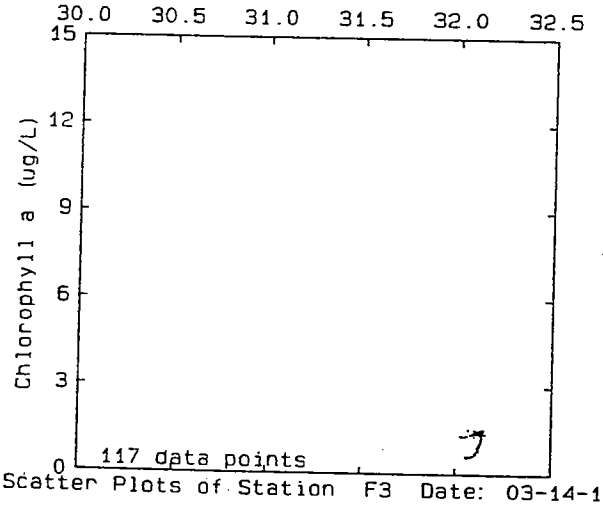

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
158 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
158 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
158 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
158 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
158 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
158 data points,
Scatter Plots of Station F2P Date: 03-14-1992
Time: 11:58:55 File: MFF02019.PAR

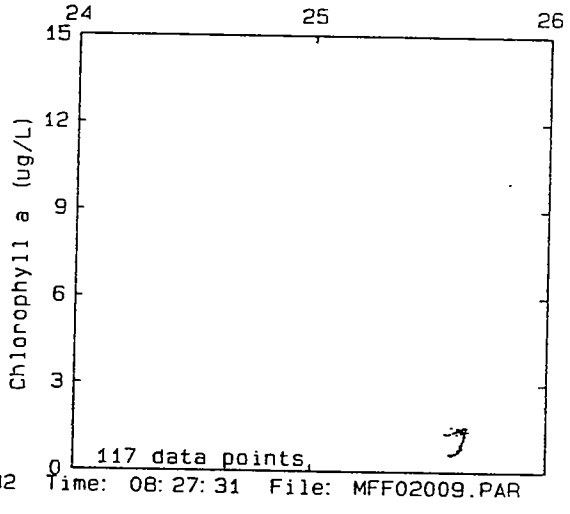




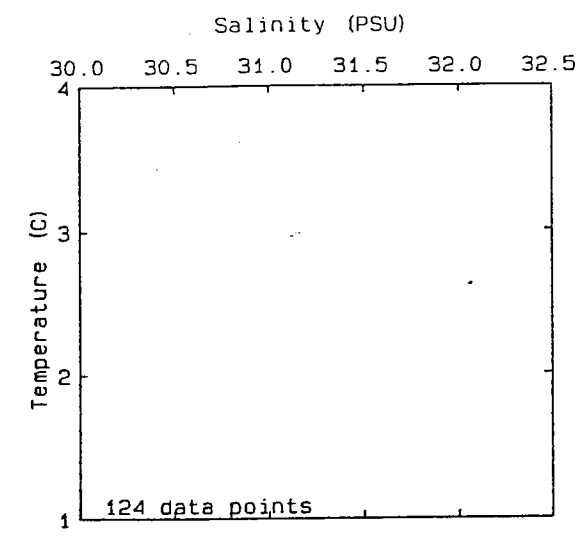


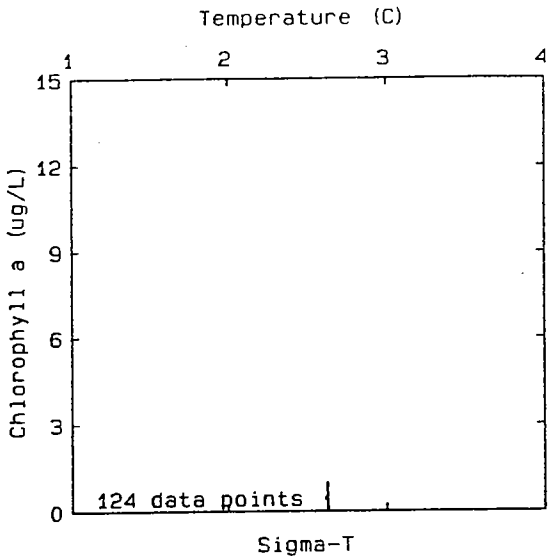


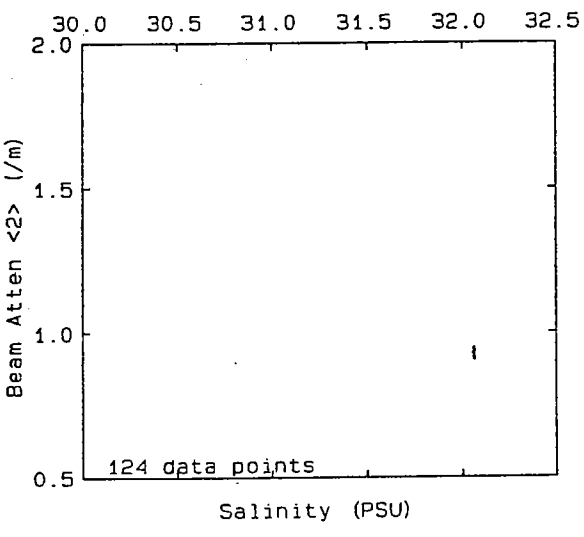


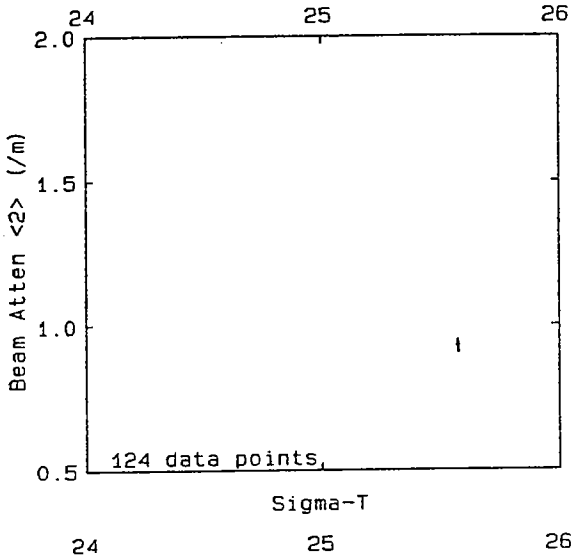


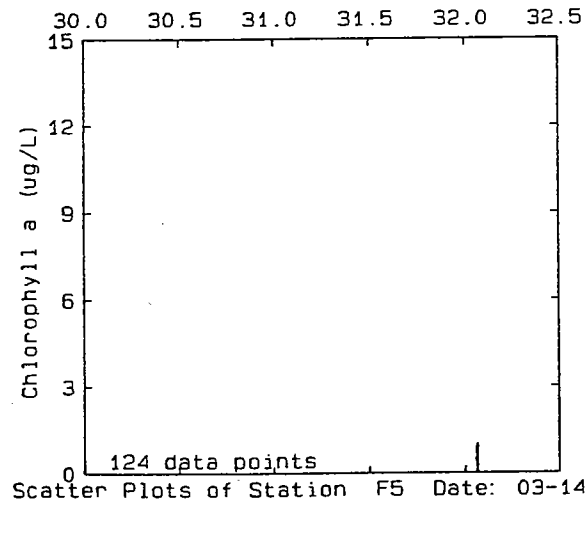
Scatter Plots of Station F3 Date: 03-14-1992 Time: 08:27:31 File: MFF02009.PAR

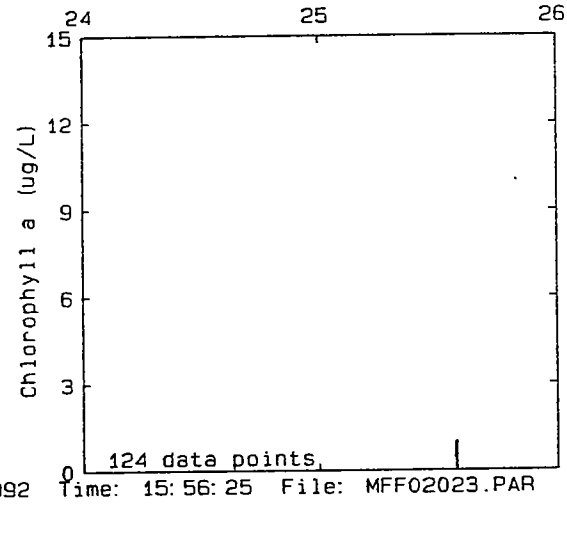




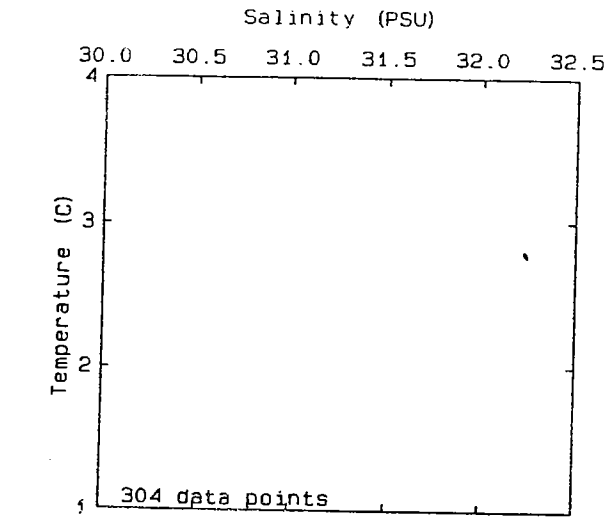


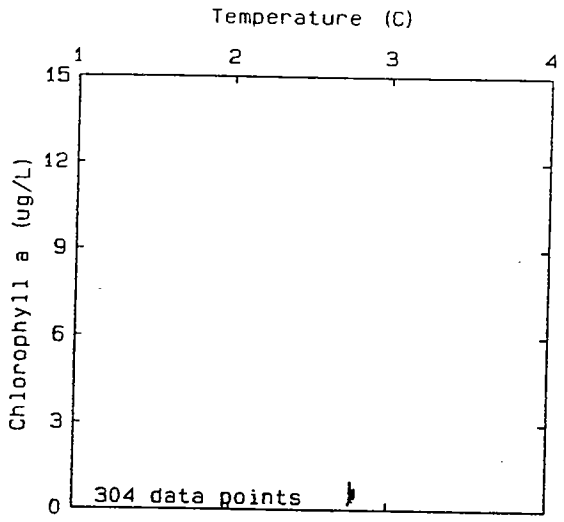


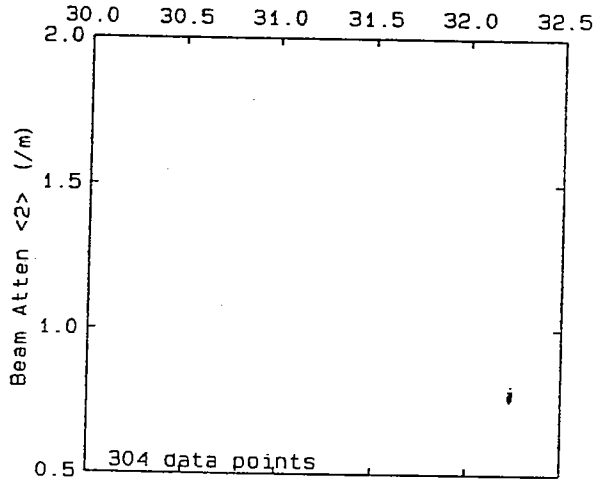


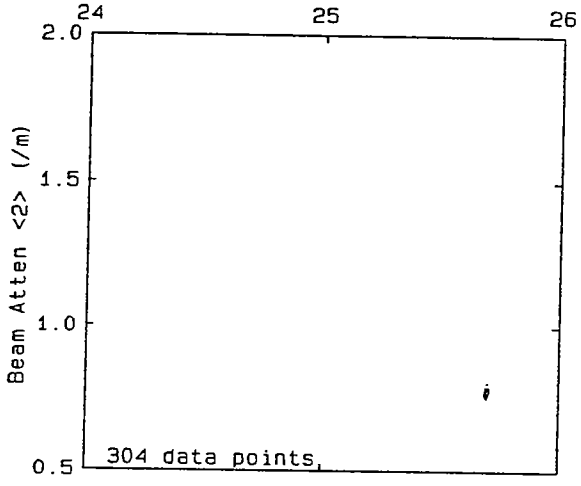


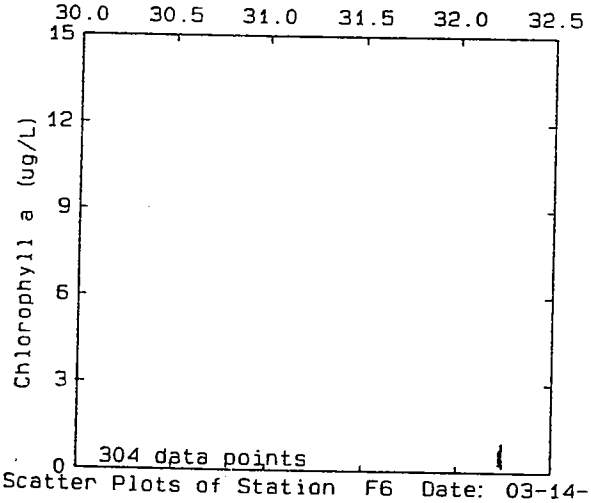
Scatter Plots of Station F5 Date: 03-14-1992 Time: 15:56:25 File: MFF02023.PAR

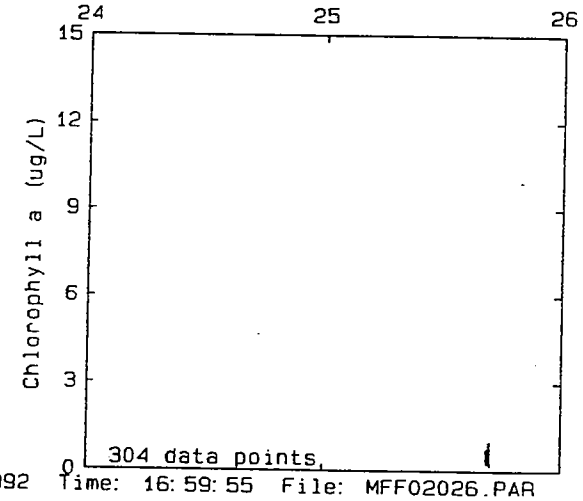




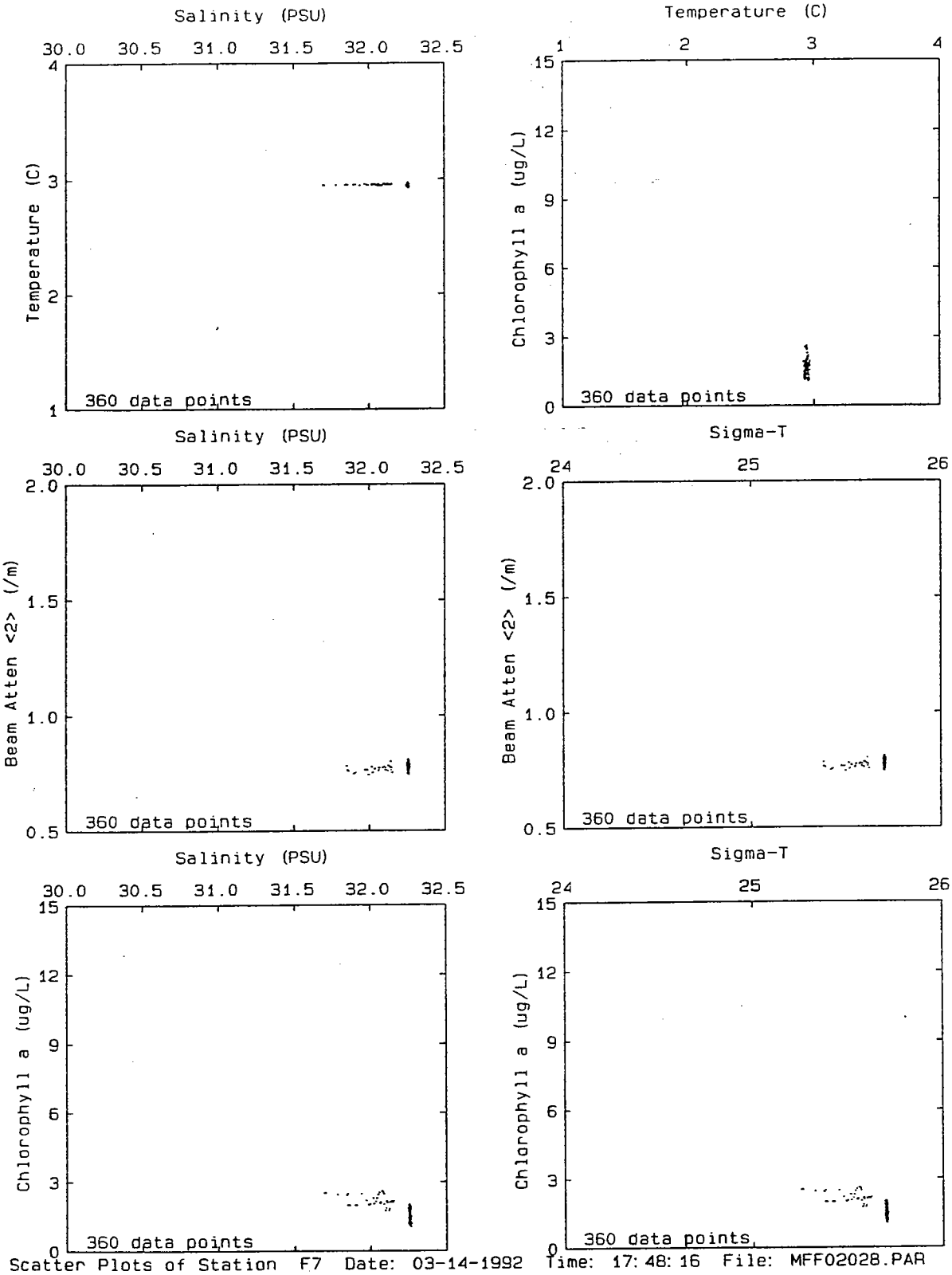


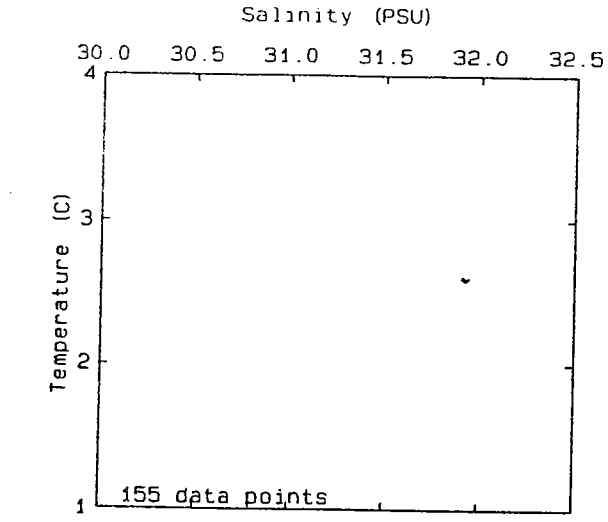


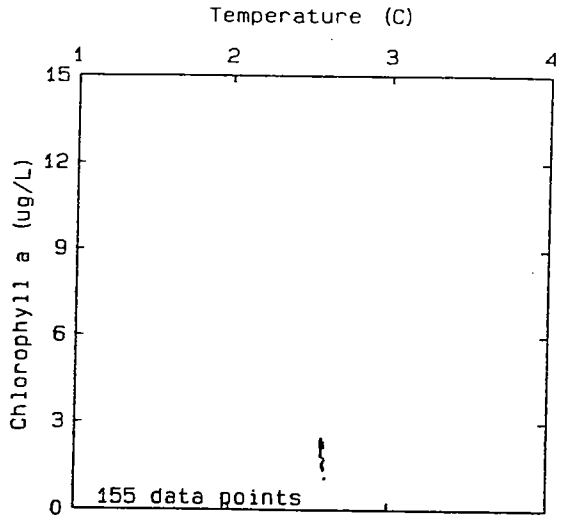


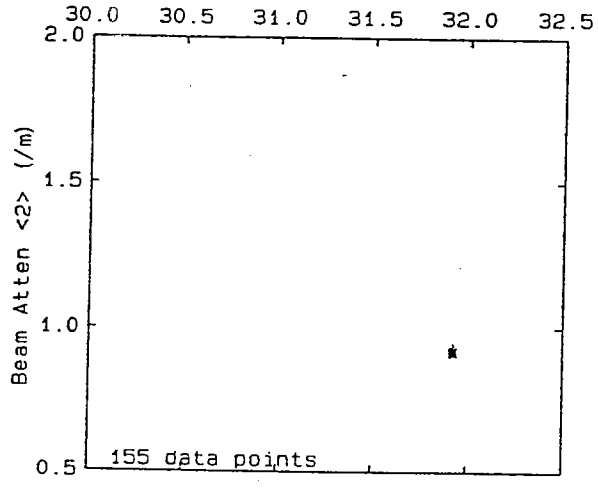


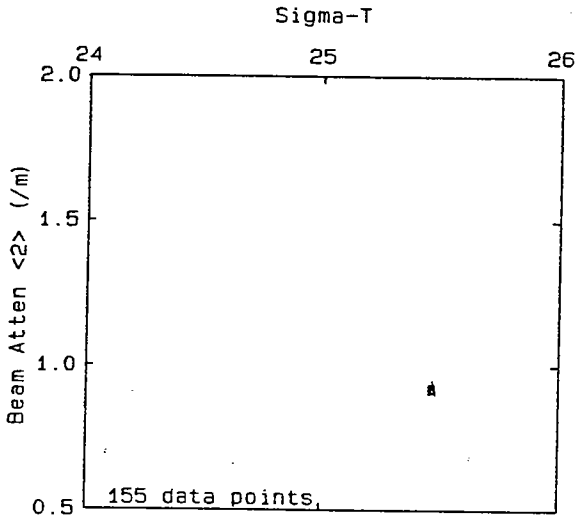
Scatter Plots of Station F6 Date: 03-14-1992 Time: 16:59:55 File: MFF02026.PAR

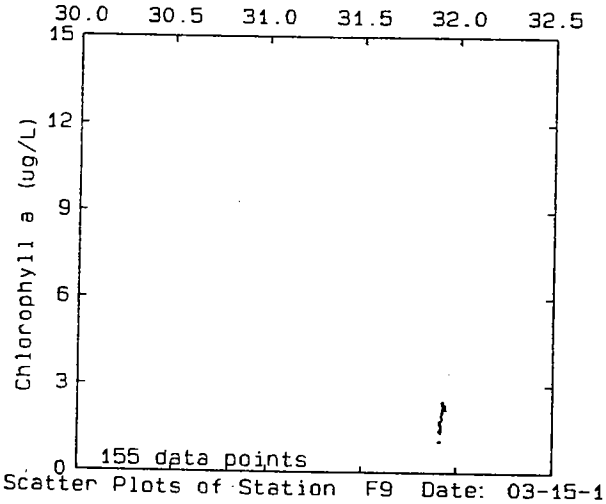

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
360 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
360 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
360 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
360 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
360 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
360 data points
Scatter Plots of Station F7 Date: 03-14-1992 Time: 17:48:16 File: MFF02028.PAR

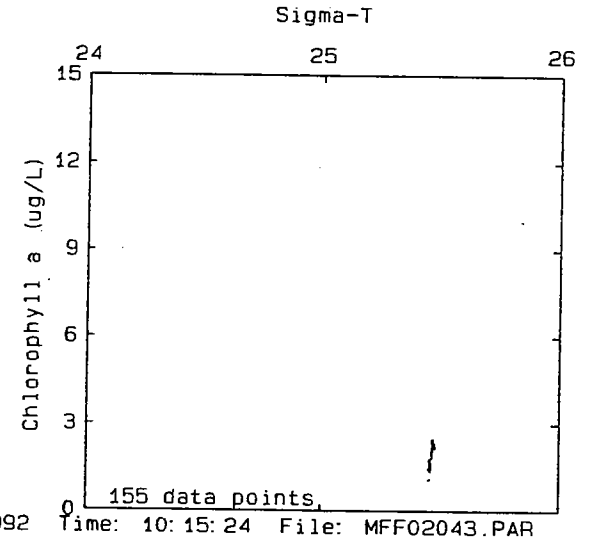




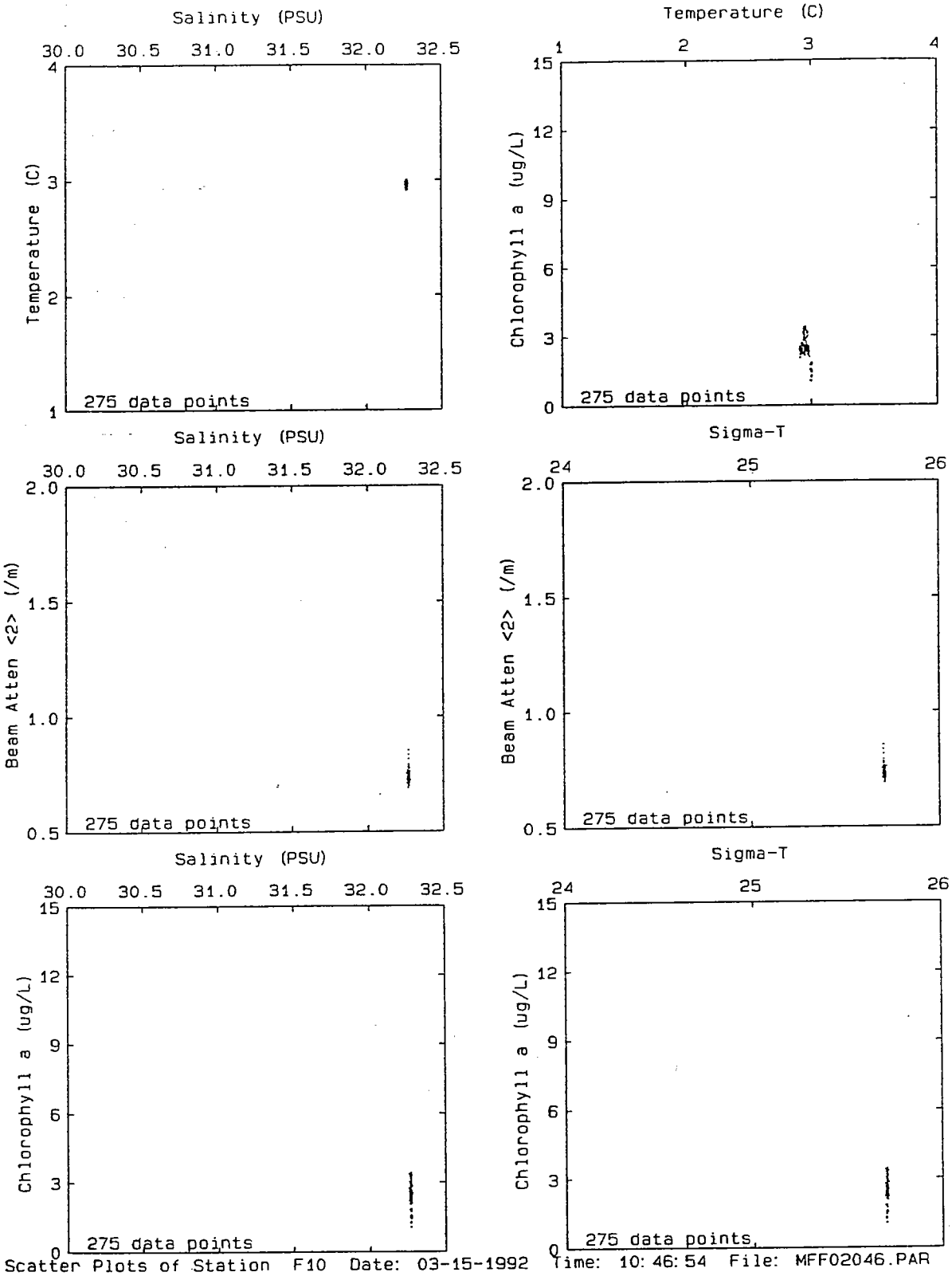




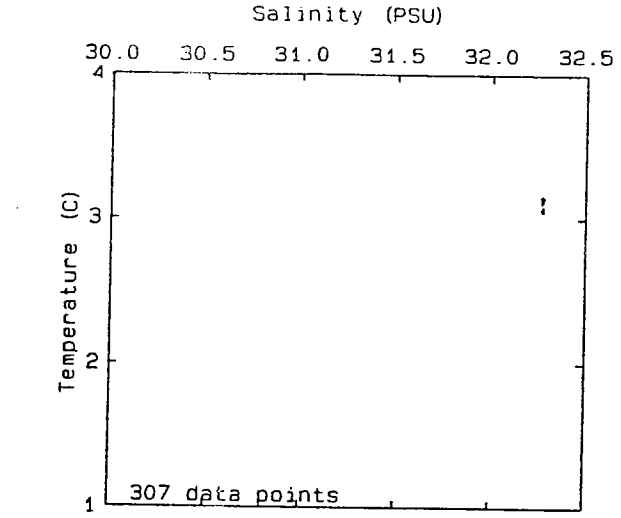


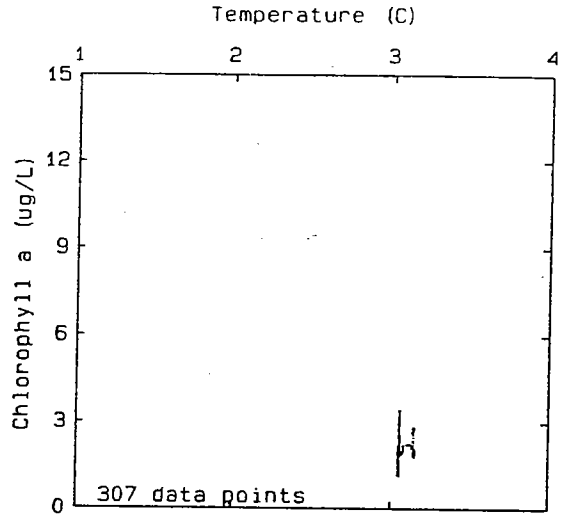


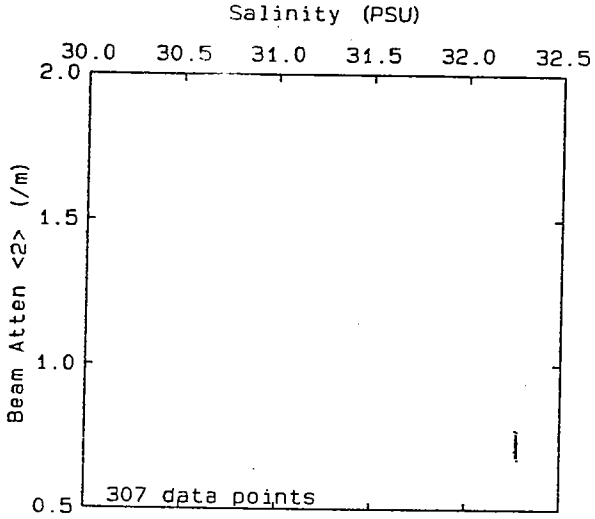
Scatter Plots of Station F9 Date: 03-15-1992 Time: 10:15:24 File: MFF02043.PAR

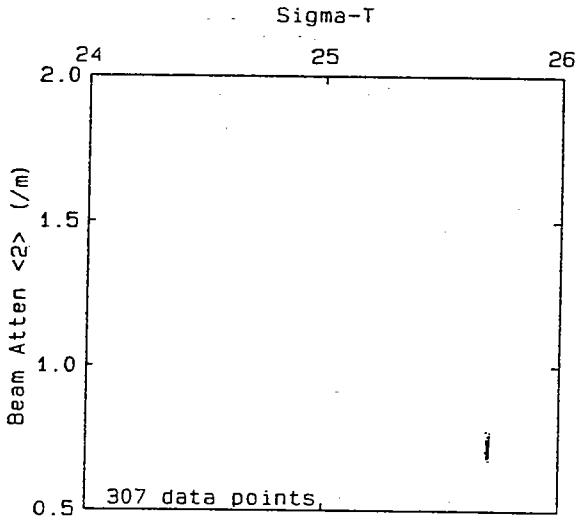


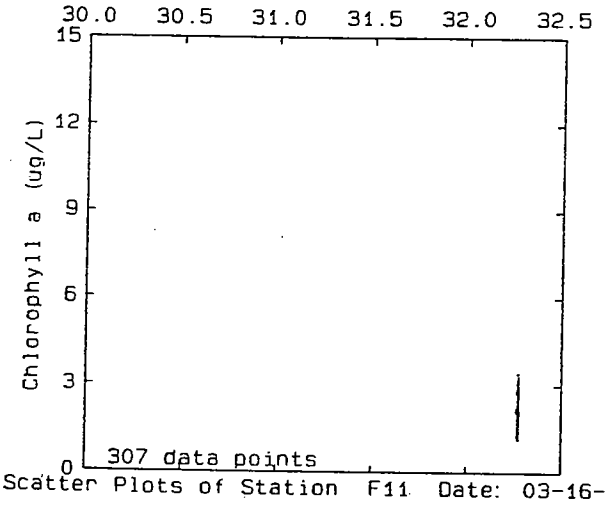
Scatter Plots of Station F10 Date: 03-15-1992 Time: 10:46:54 File: MFF02046.PAR

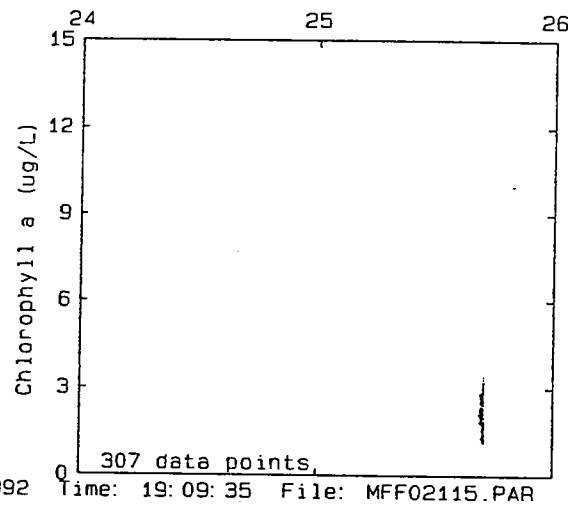




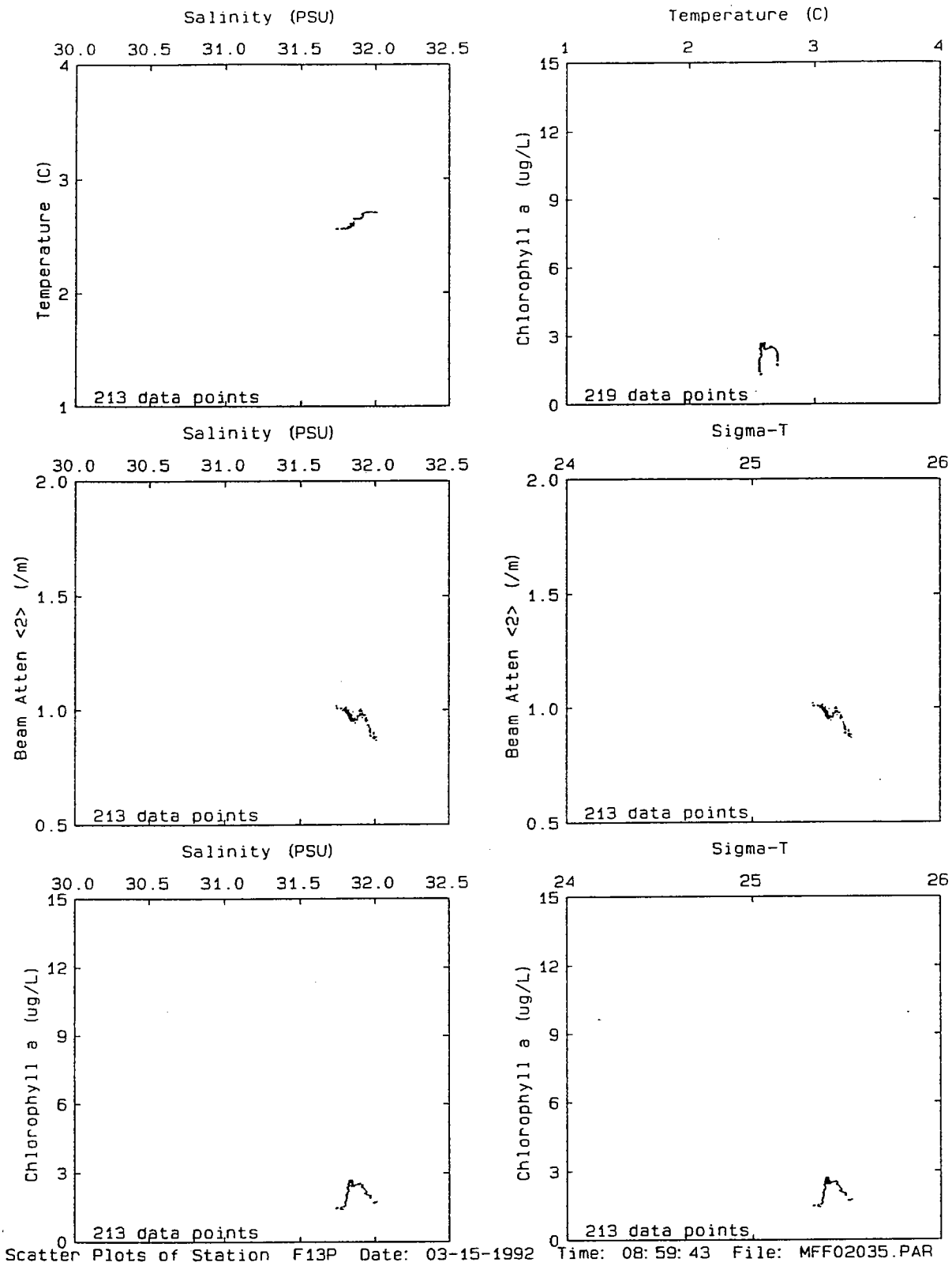




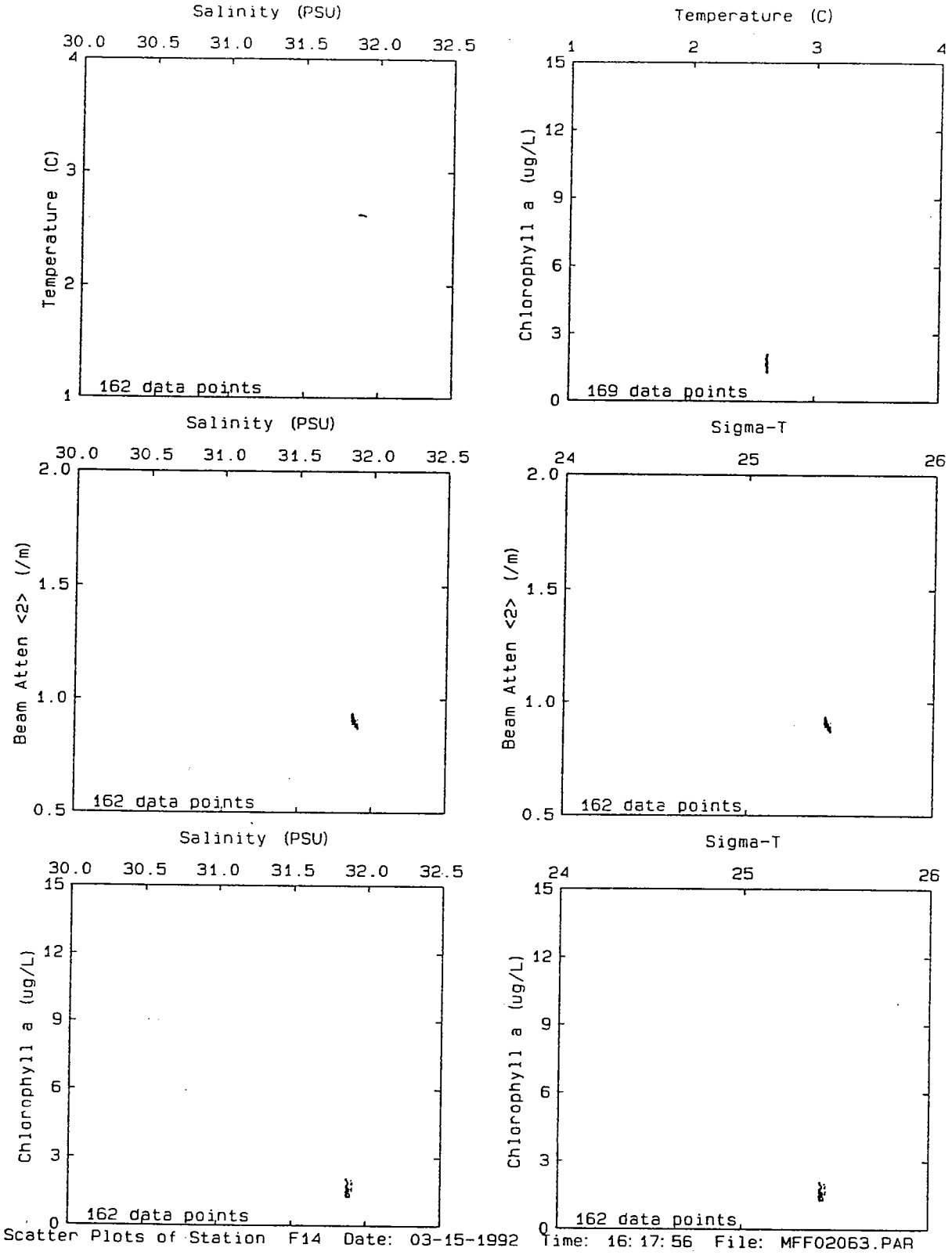




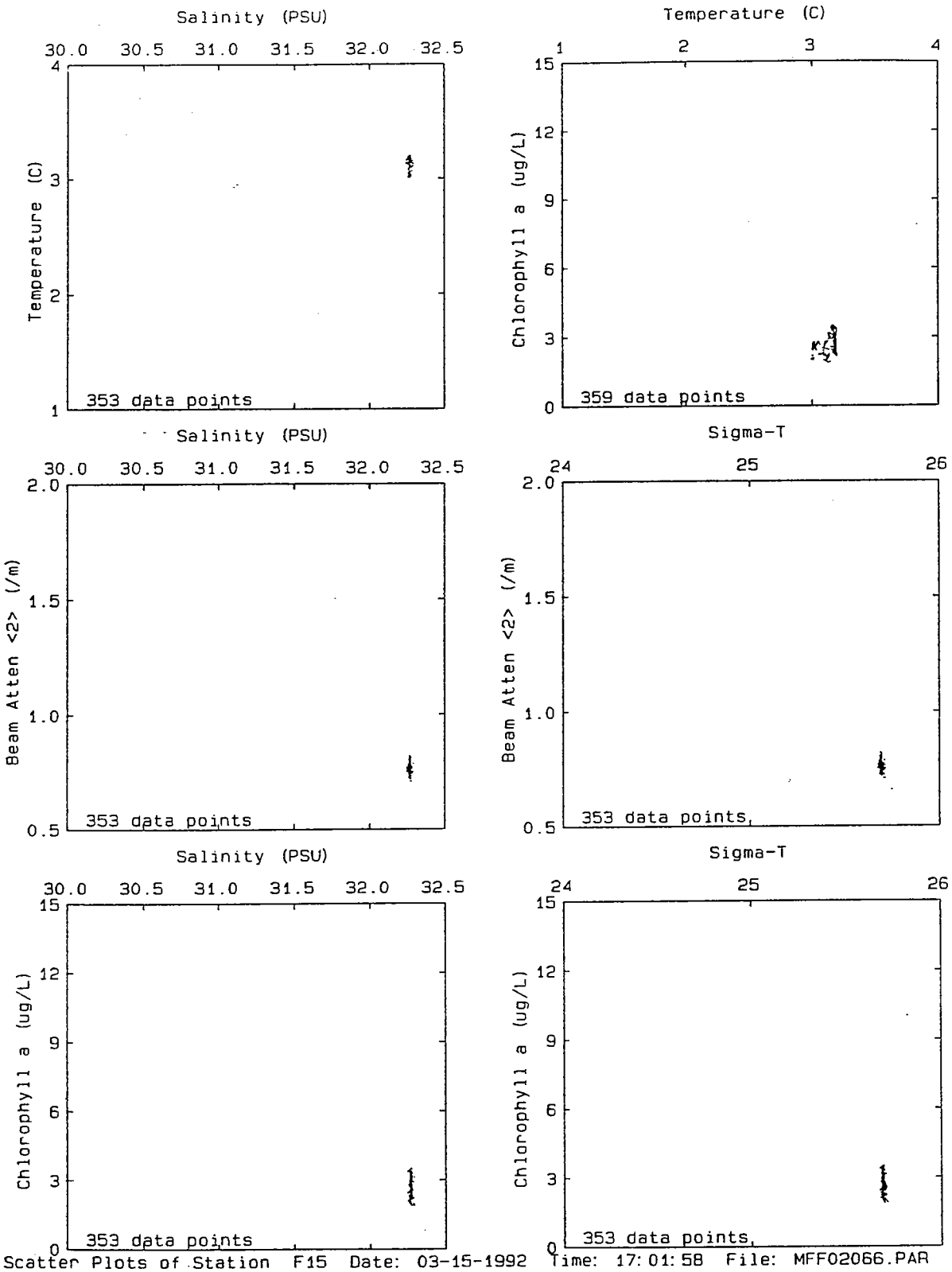
Scatter Plots of Station F11 Date: 03-16-1992 Time: 19:09:35 File: MFF02115.PAR



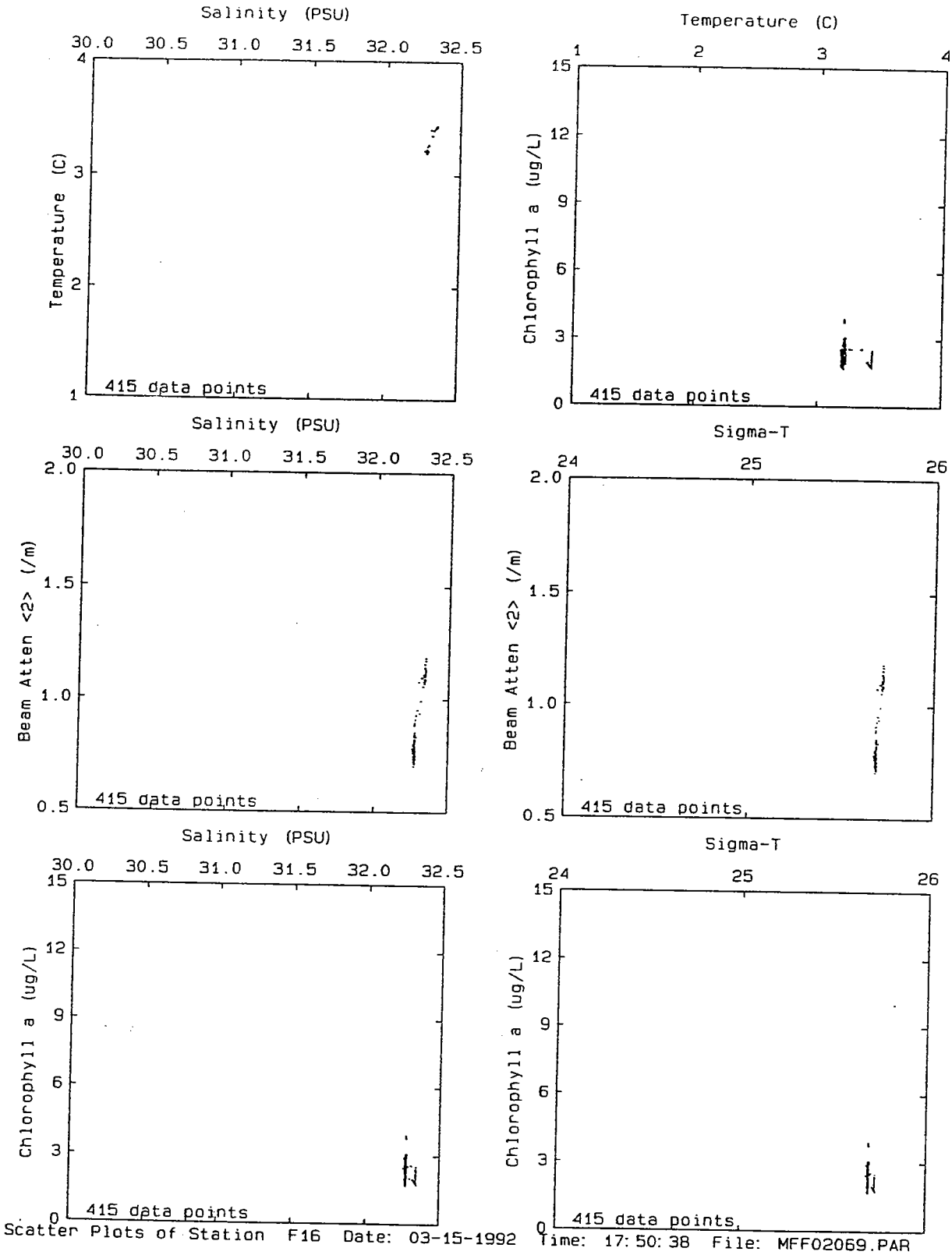
Scatter Plots of Station F13P Date: 03-15-1992 Time: 08:59:43 File: MFF02035.PAR

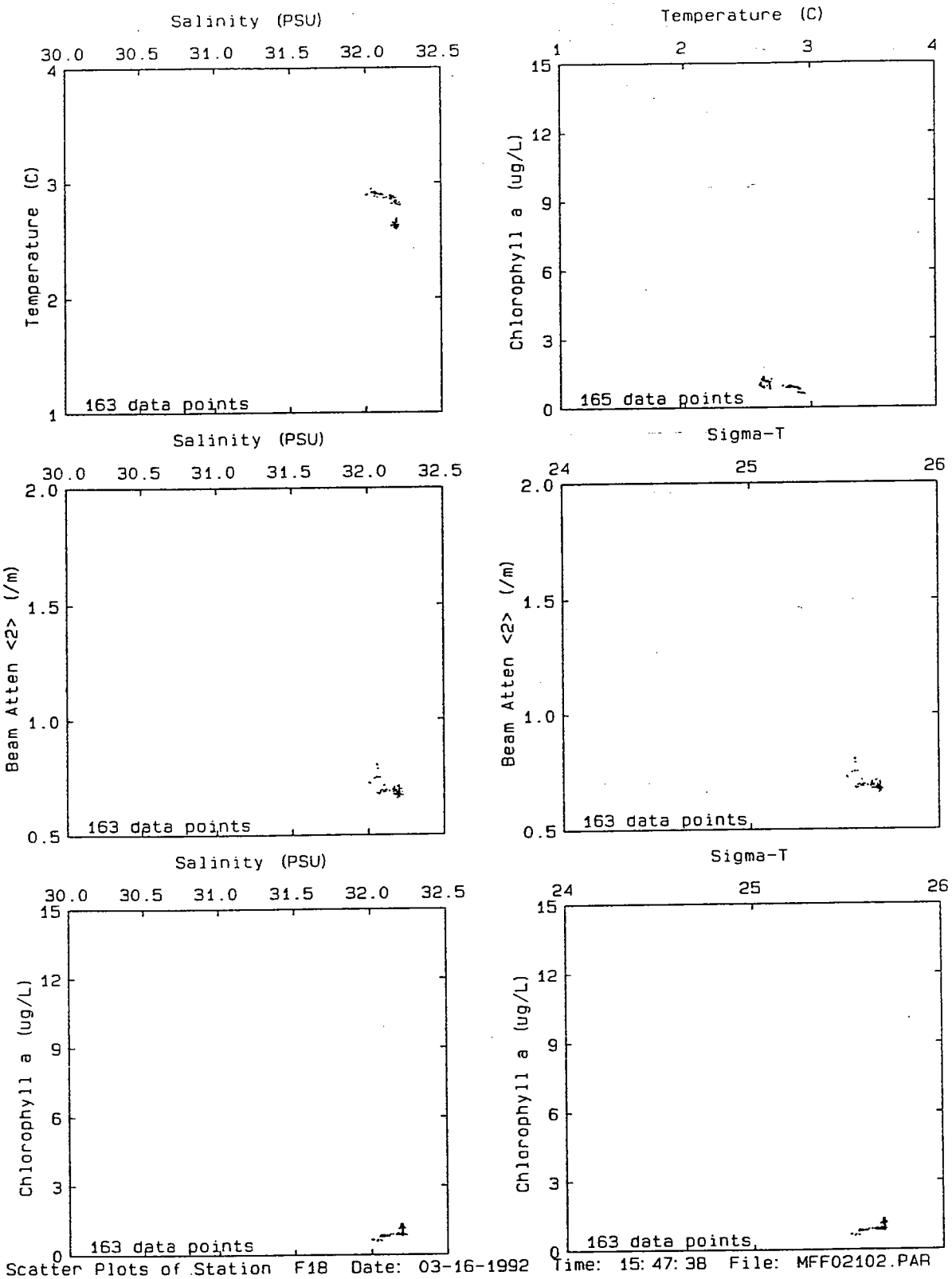


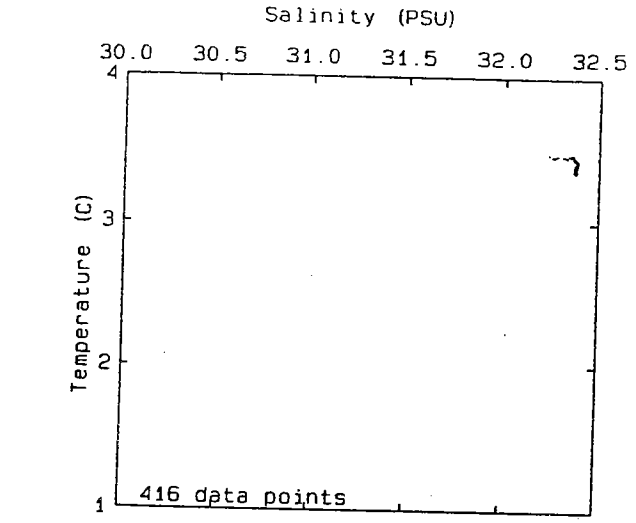
Scatter Plots of Station F14 Date: 03-15-1992 Time: 16:17:56 File: MFF02063.PAR

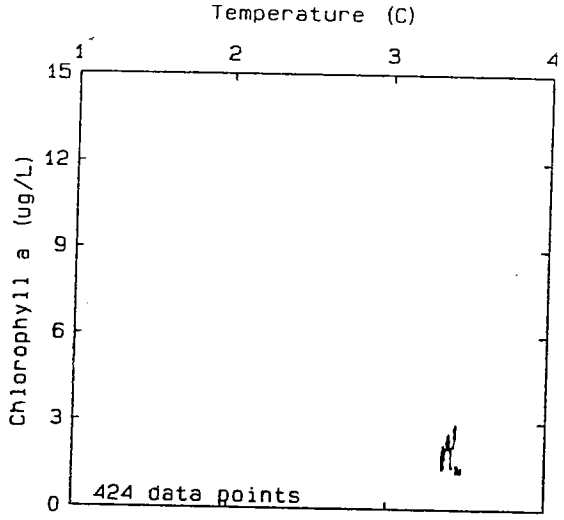


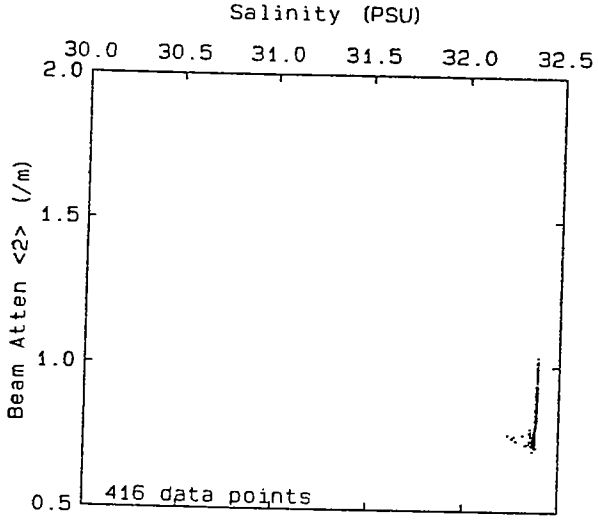
Scatter Plots of Station F15 Date: 03-15-1992 Time: 17:01:58 File: MFF02066.PAR

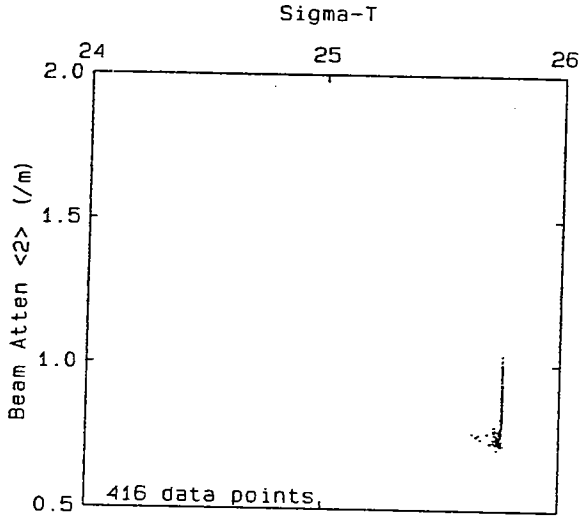

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
415 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
415 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
415 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
415 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
415 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
415 data points,
Scatter Plots of Station F16 Date: 03-15-1992 Time: 17:50:38 File: MFF02069.PAR

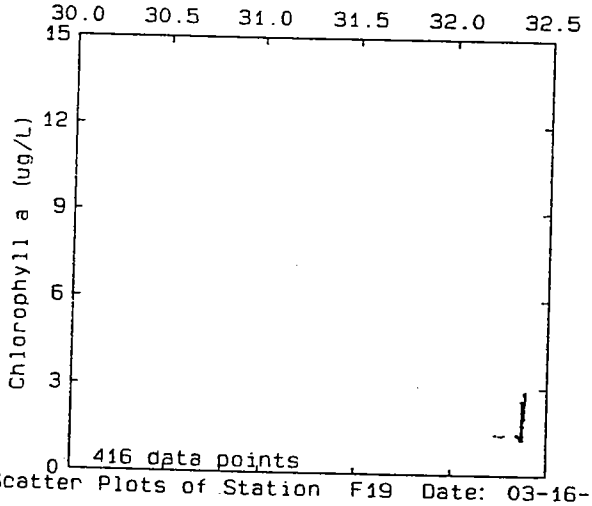

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
163 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
165 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
163 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
163 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
163 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
163 data points
Scatter Plots of Station F18 Date: 03-16-1992 Time: 15:47:38 File: MFF02102.PAR

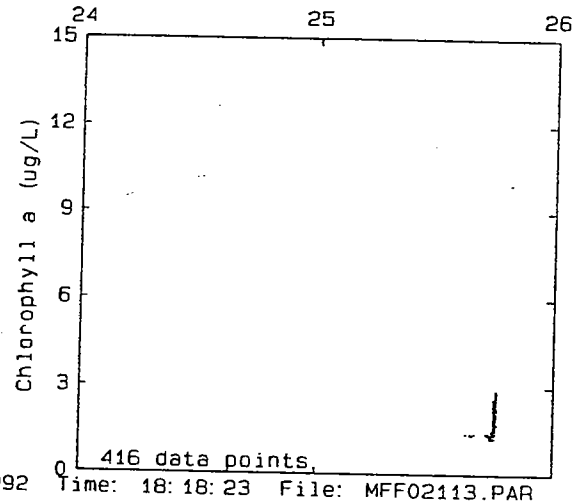




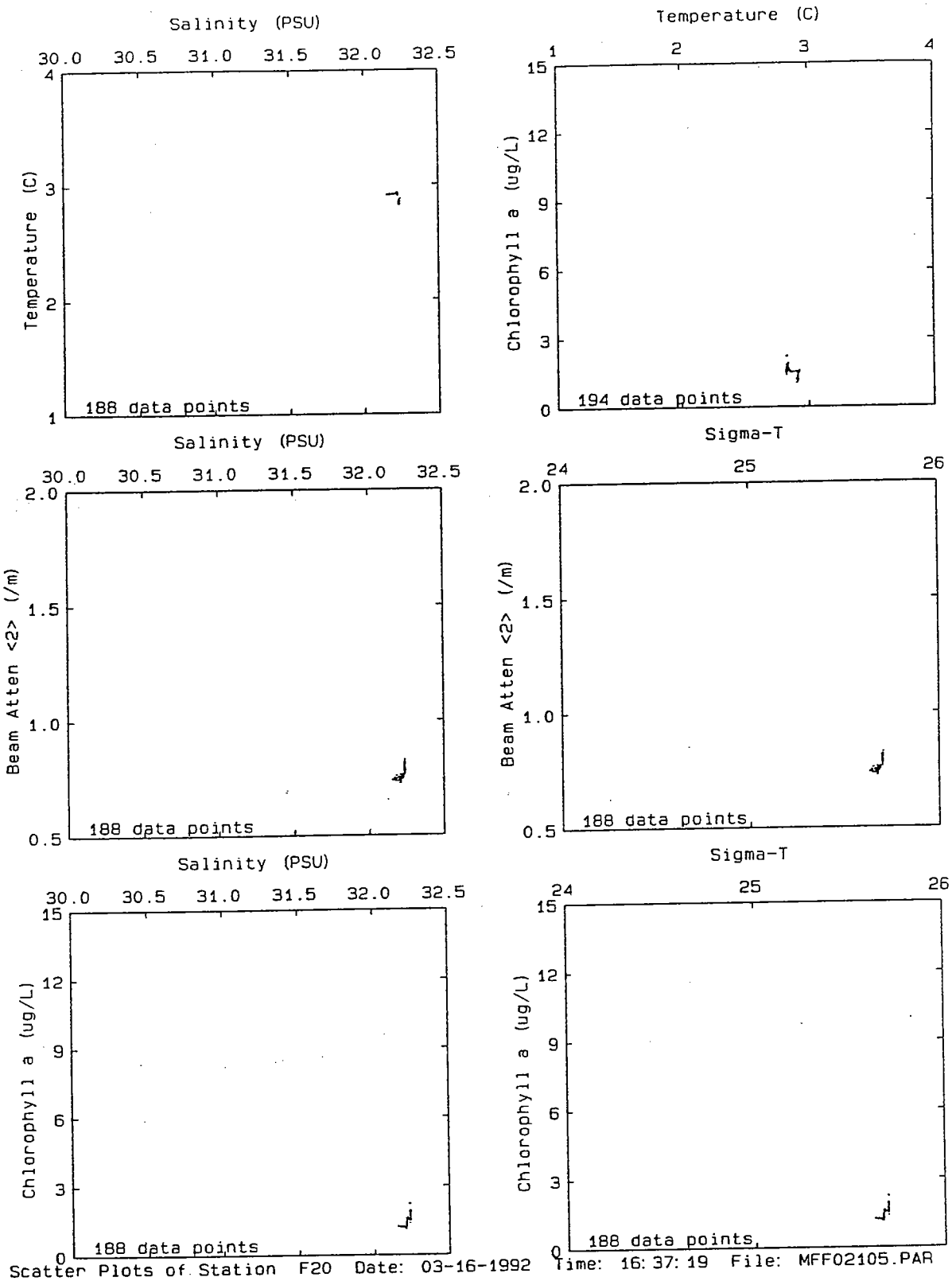


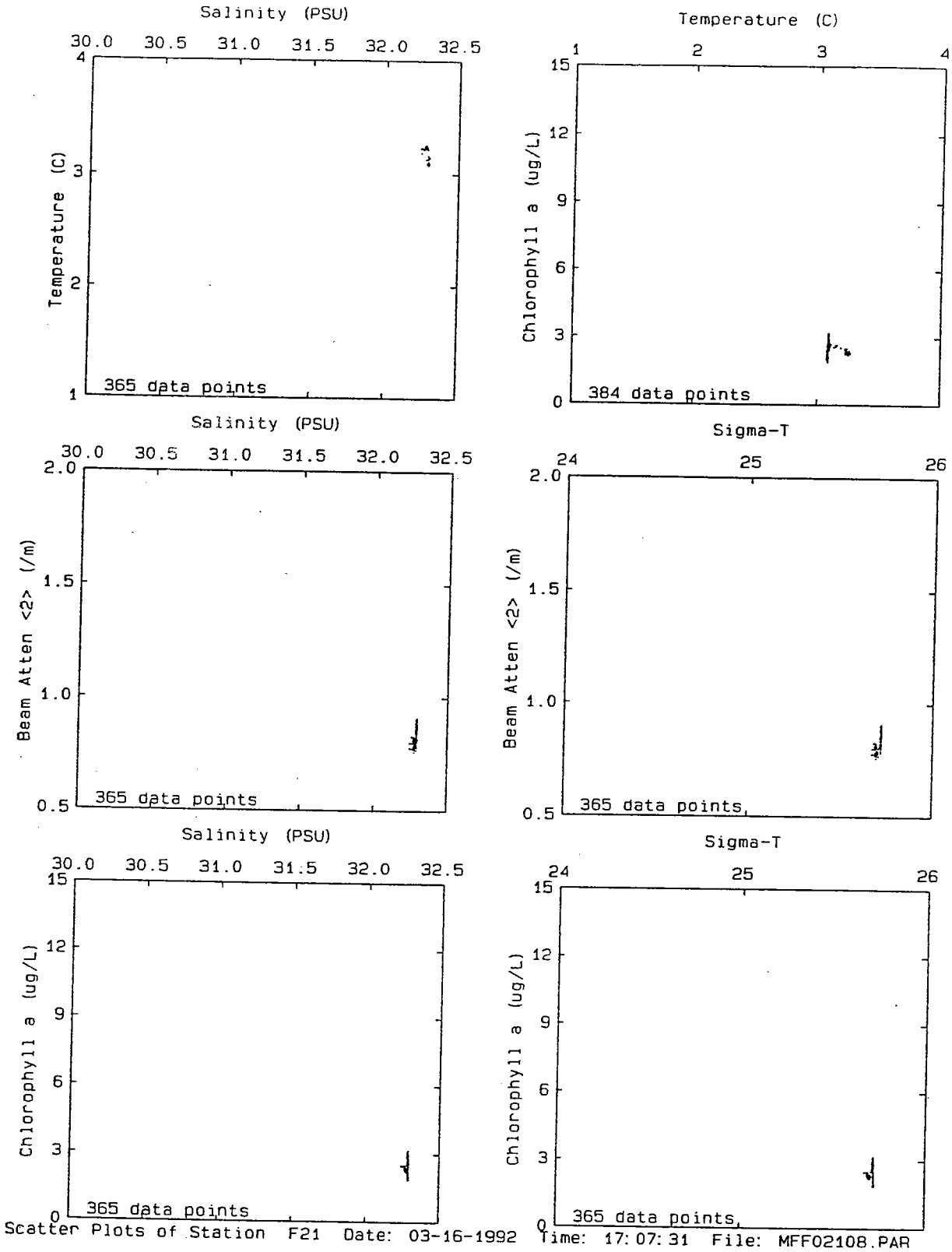




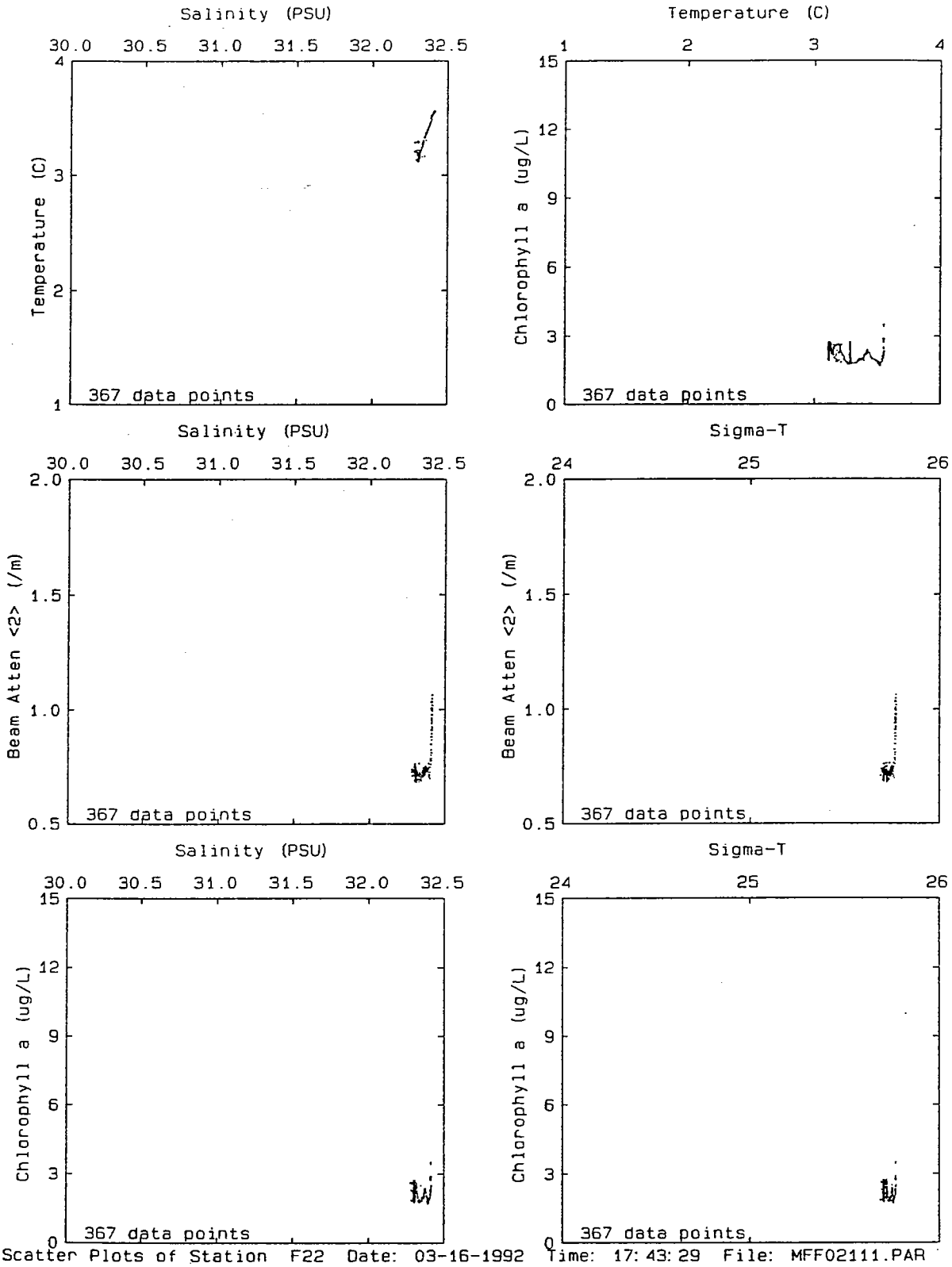


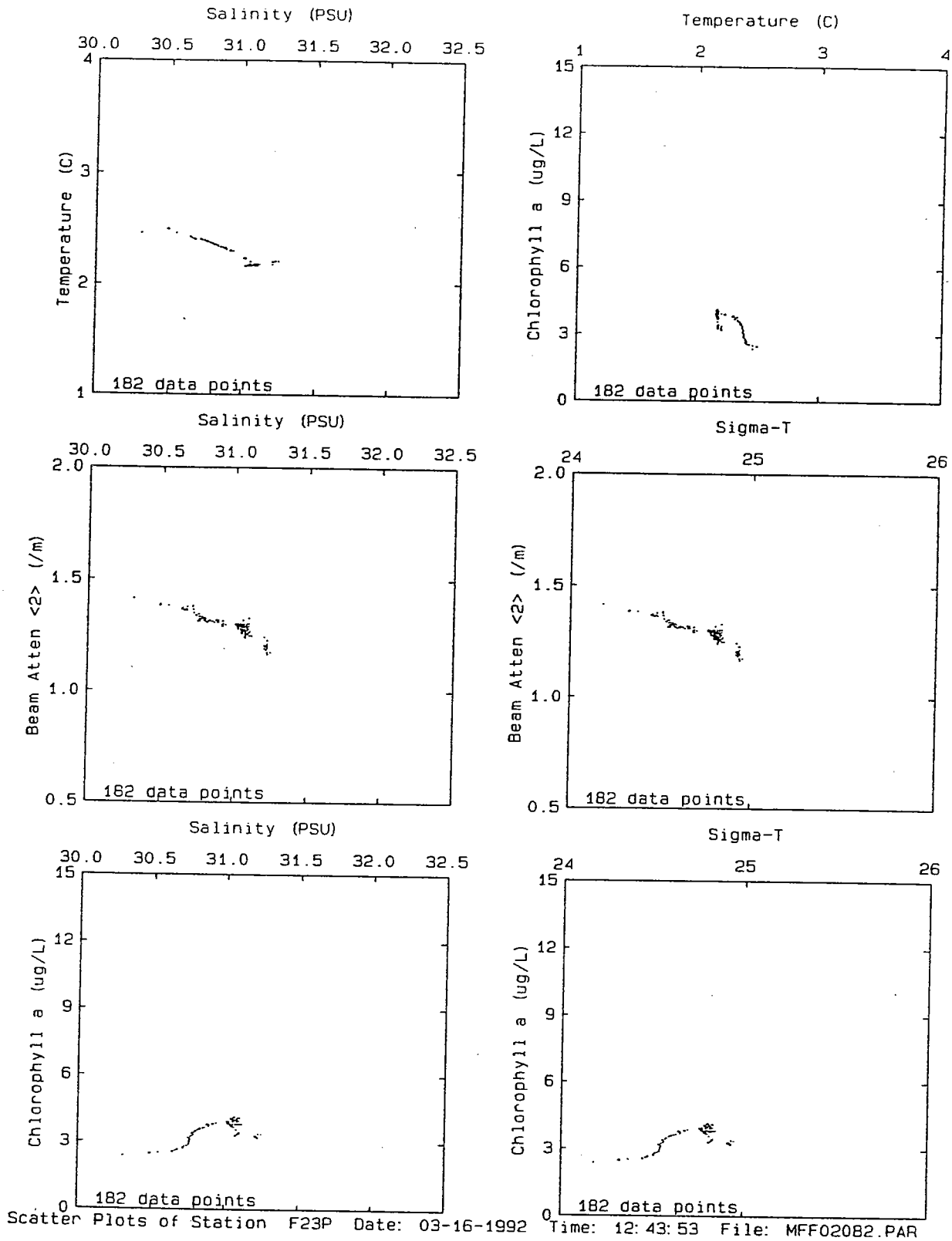
Scatter Plots of Station F19 Date: 03-16-1992 Time: 18:18:23 File: MFF02113.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4
3
2
1
188 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15
12
9
6
3
0
194 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.5
Beam Atten <2> (/m)
2.0
1.5
1.0
0.5
188 data points
Sigma-T
24 25 26
188 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
188 data points
Sigma-T
24 25 26
188 data points,
Scatter Plots of Station F20 Date: 03-16-1992 Time: 16:37:19 File: MFF02105.PAR

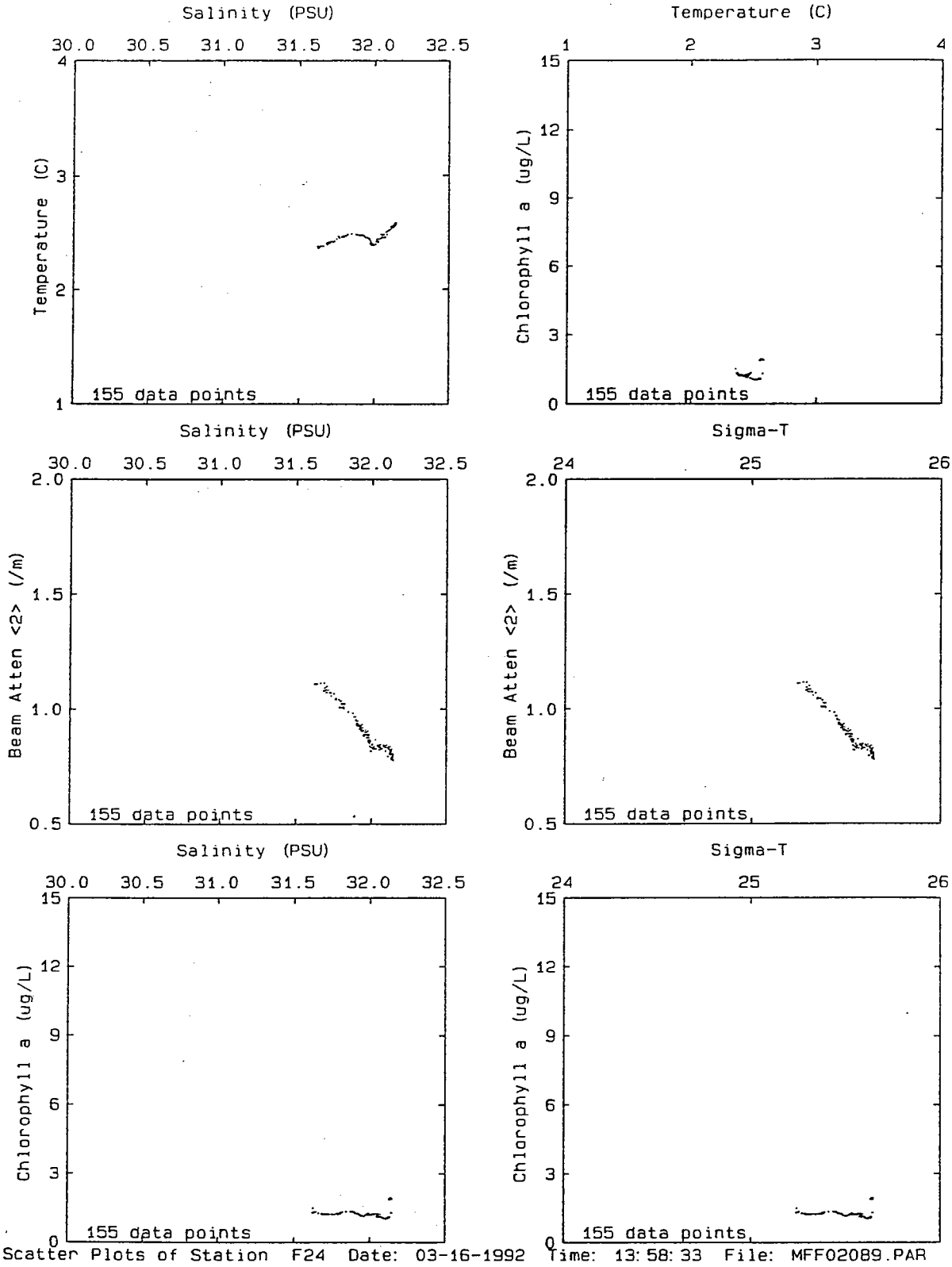


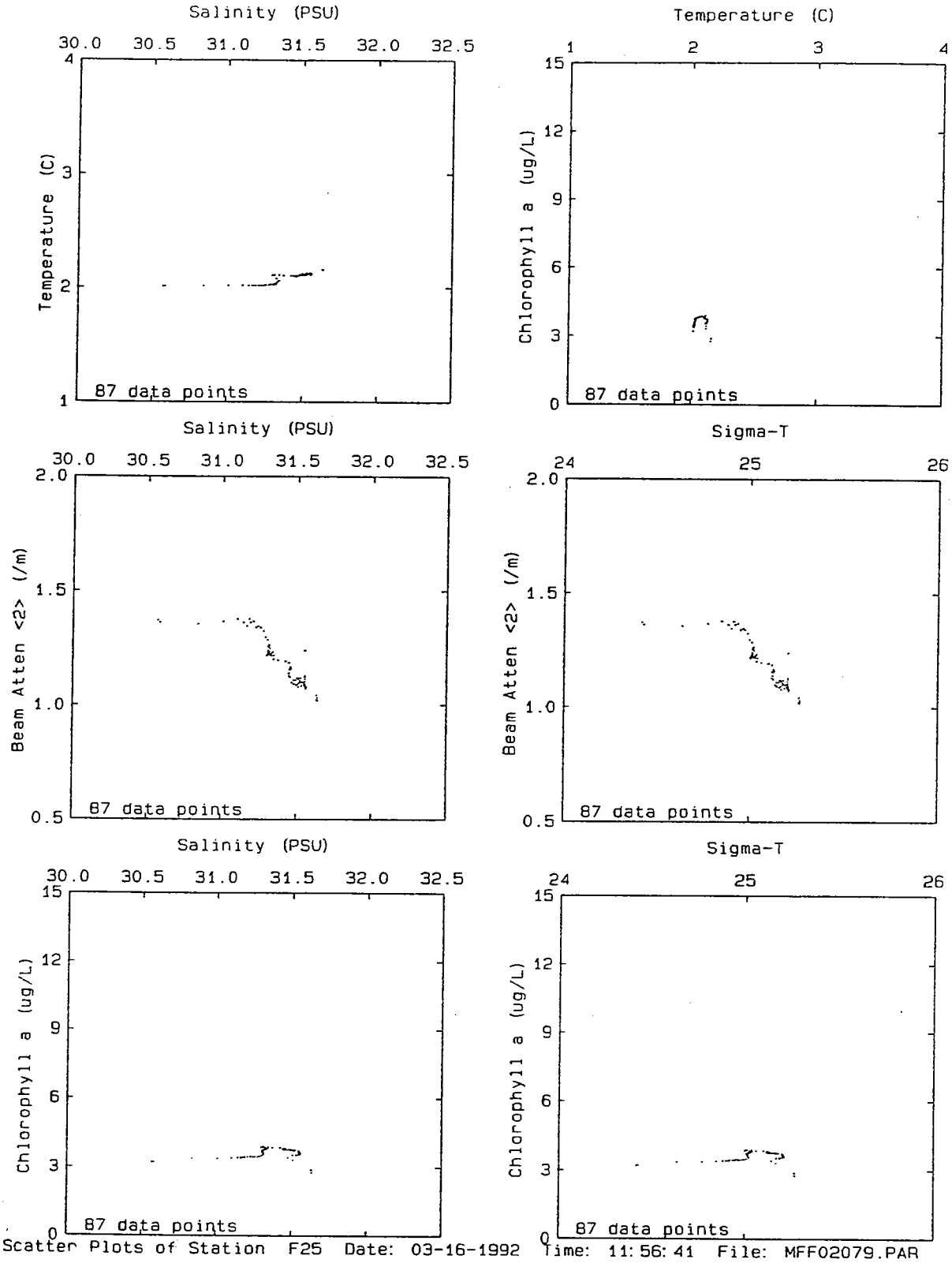
Scatter Plots of Station F21 Date: 03-16-1992 Time: 17:07:31 File: MFF02108.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
367 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
367 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
367 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
367 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
367 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
367 data points,
Scatter Plots of Station F22 Date: 03-16-1992 Time: 17:43:29 File: MFF02111.PAR

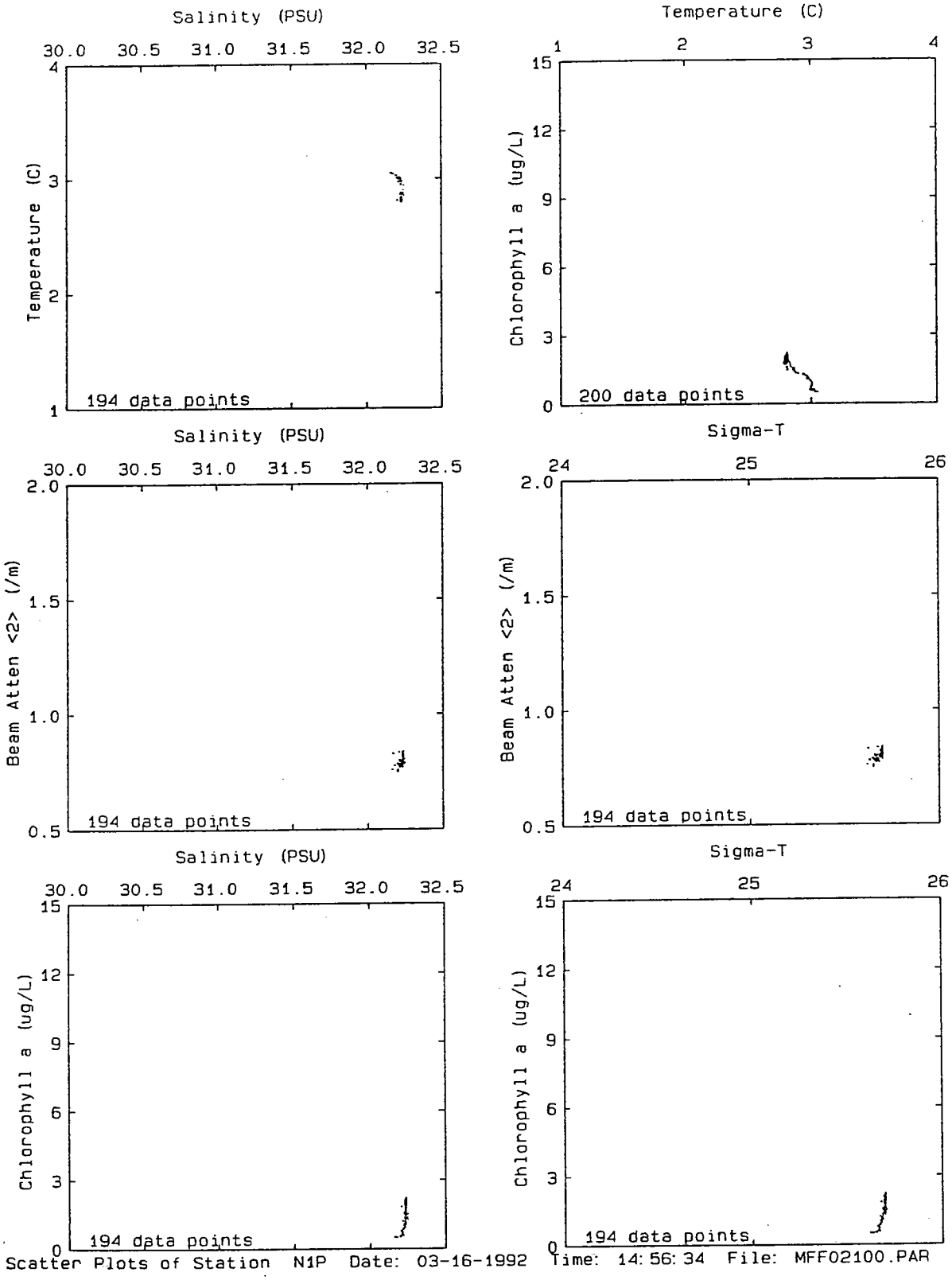


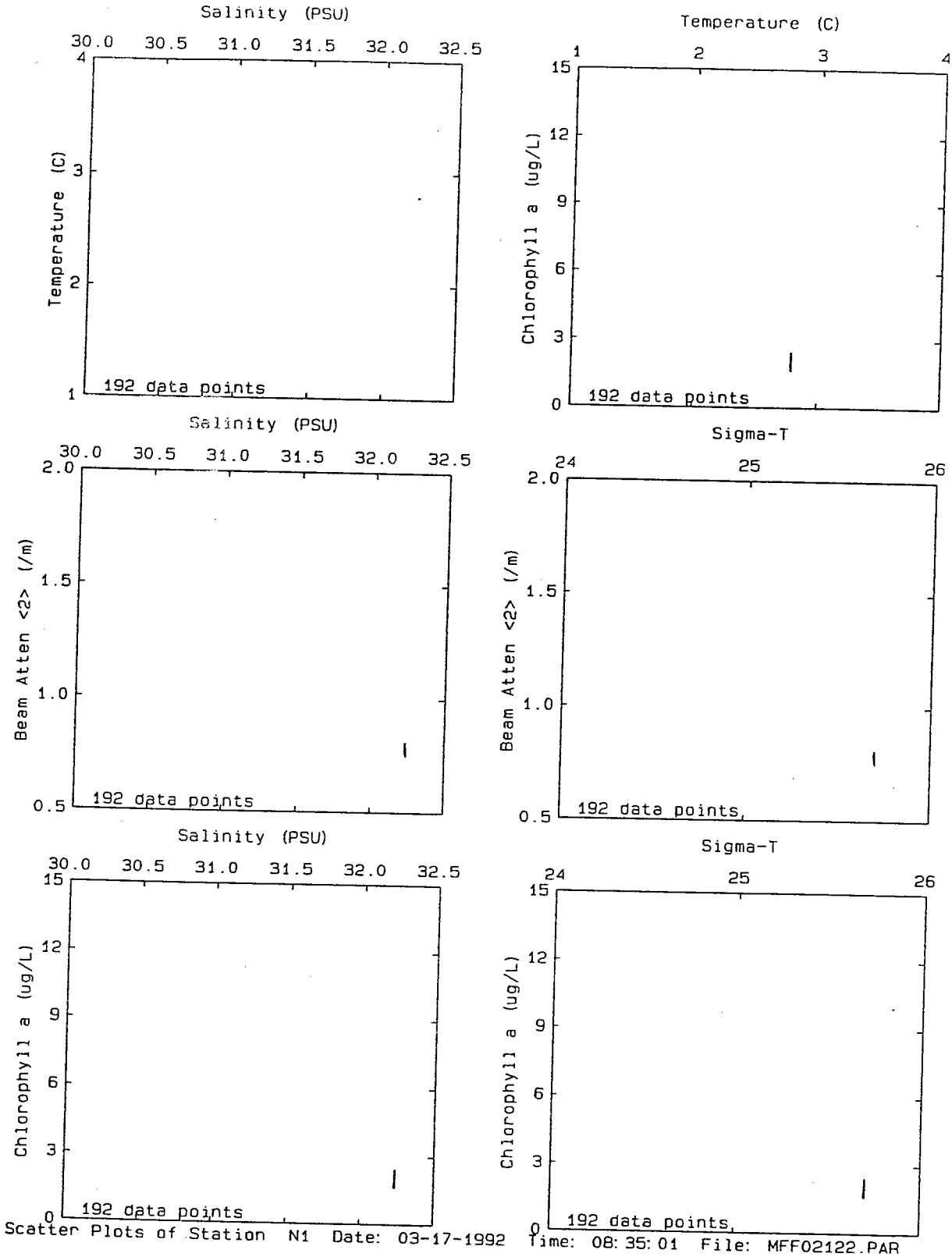
Scatter Plots of Station F23P Date: 03-16-1992 Time: 12:43:53 File: MFF02082.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
155 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
155 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
155 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
155 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
155 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
155 data points,
Scatter Plots of Station F24 Date: 03-16-1992
Time: 13:58:33 File: MFF02089.PAR

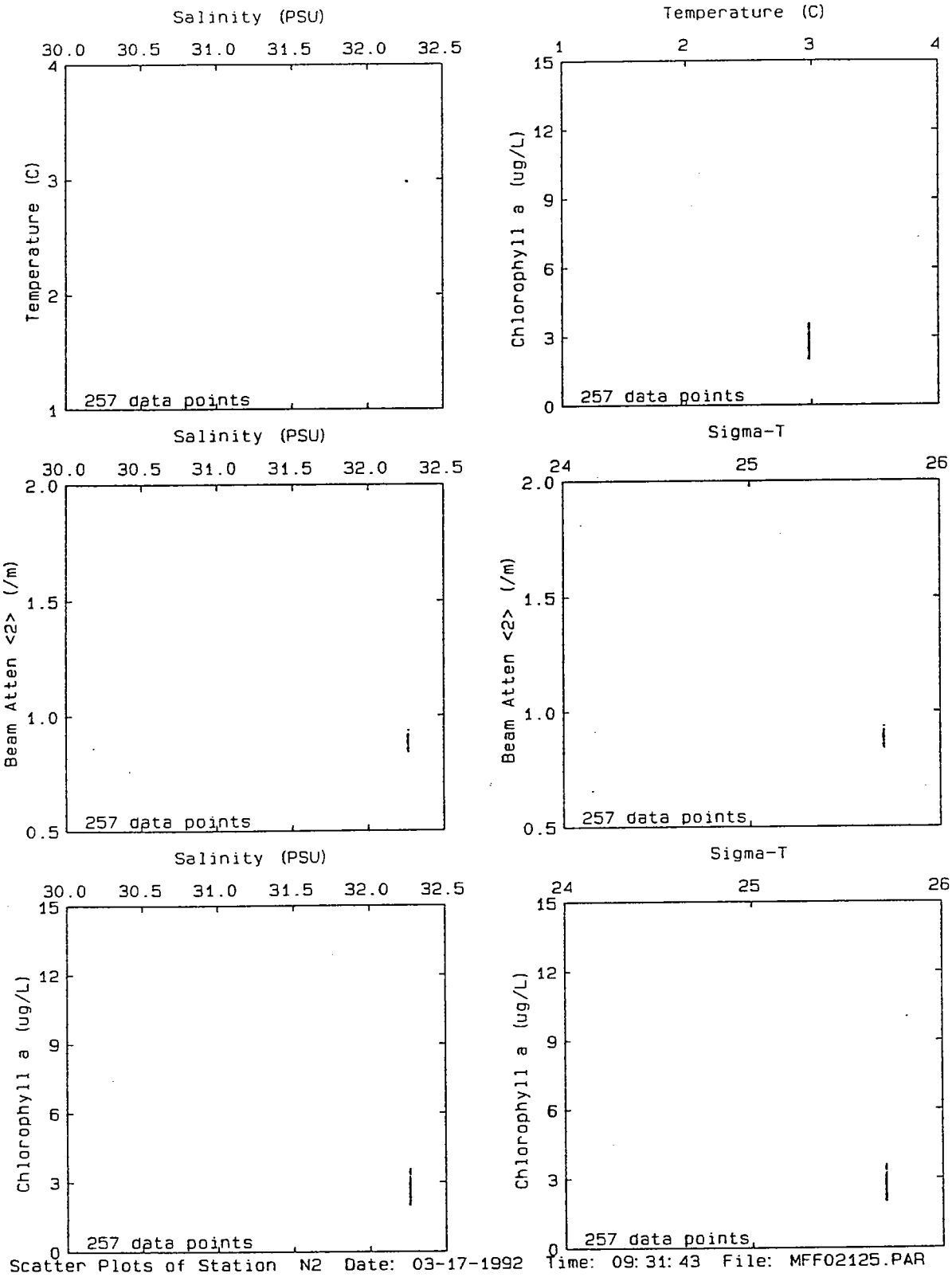

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
87 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
87 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
87 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
87 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
87 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
87 data points
Scatter Plots of Station F25 Date: 03-16-1992 Time: 11:56:41 File: MFF02079.PAR

E-84

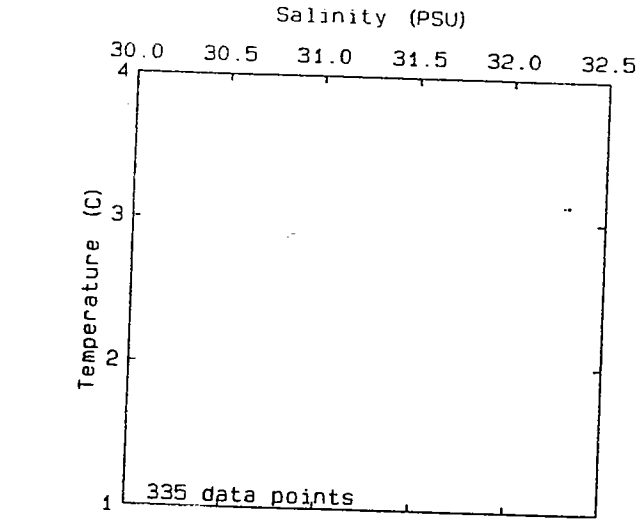

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
194 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
200 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
194 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
194 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
194 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
194 data points,
Scatter Plots of Station N1P Date: 03-16-1992 Time: 14:56:34 File: MFF02100.PAR

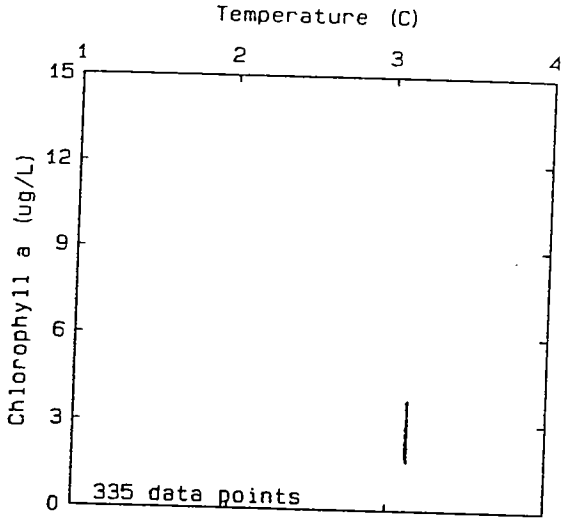


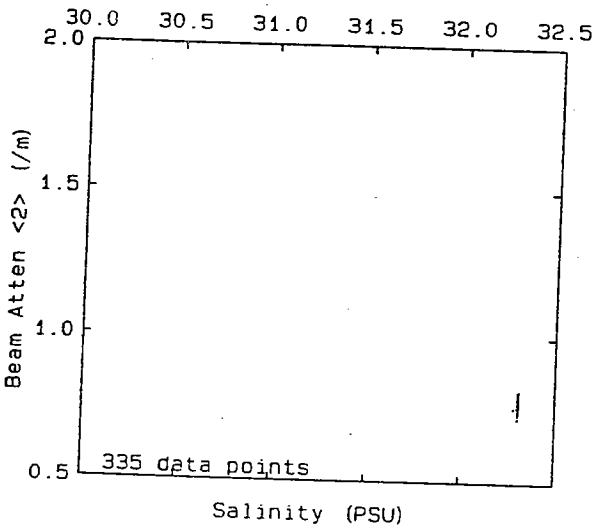
Scatter Plots of Station N1 Date: 03-17-1992 Time: 08:35:01 File: MFF02122.PAR

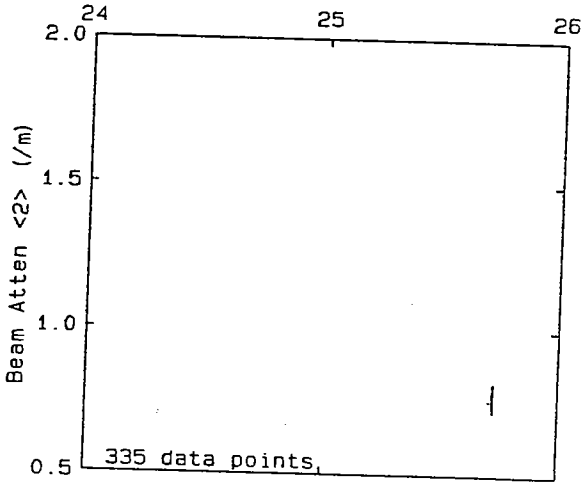


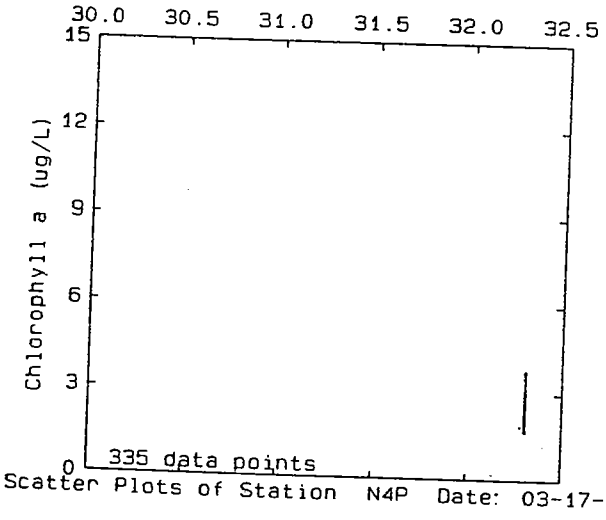
Scatter Plots of Station N2 Date: 03-17-1992 Time: 09:31:43 File: MFF02125.PAR

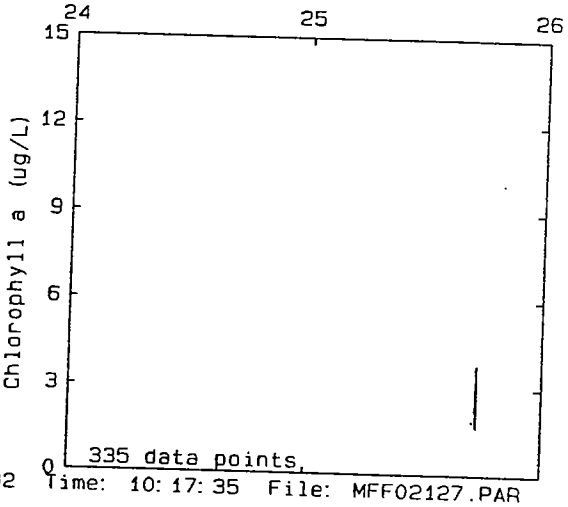




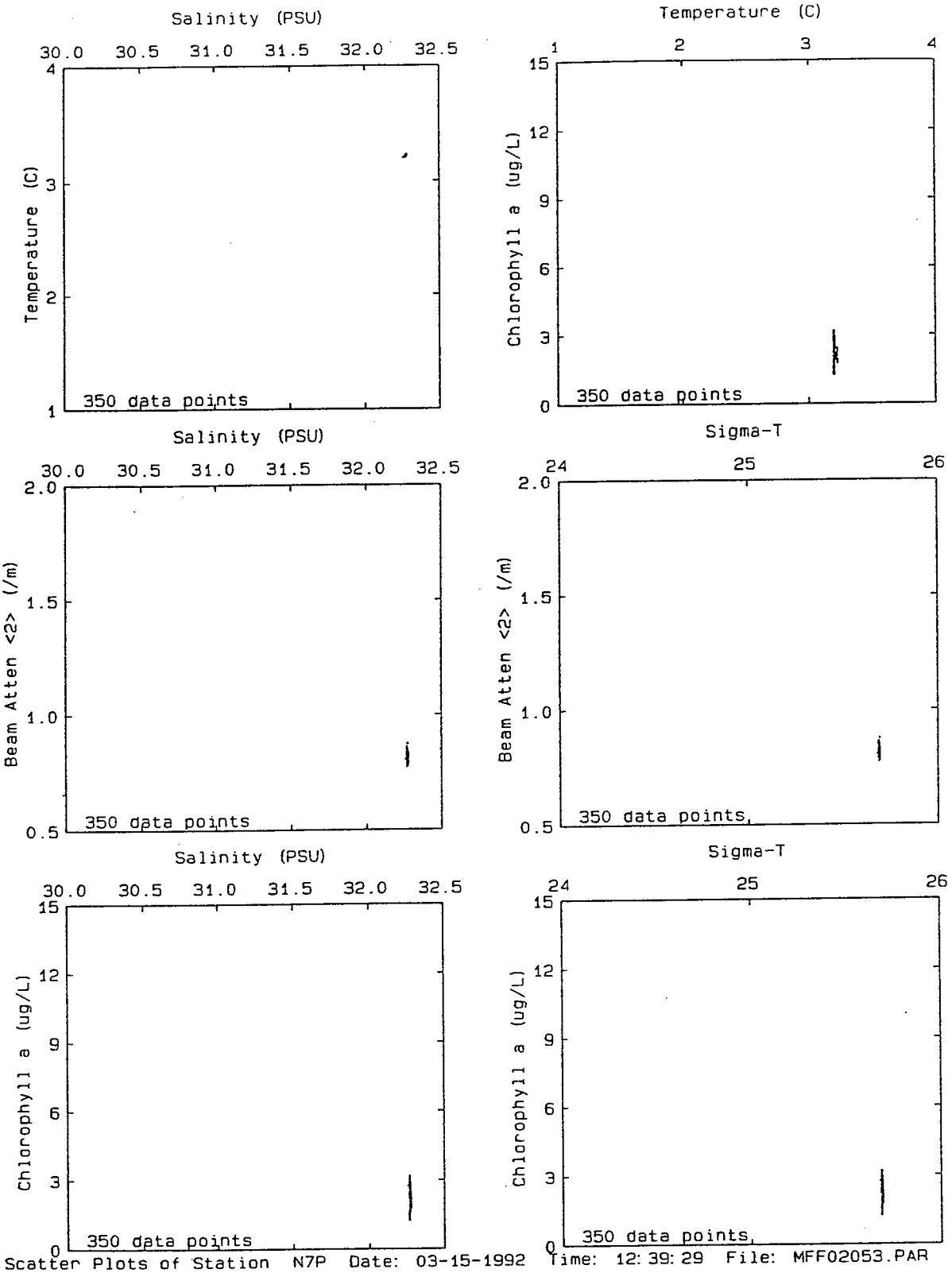


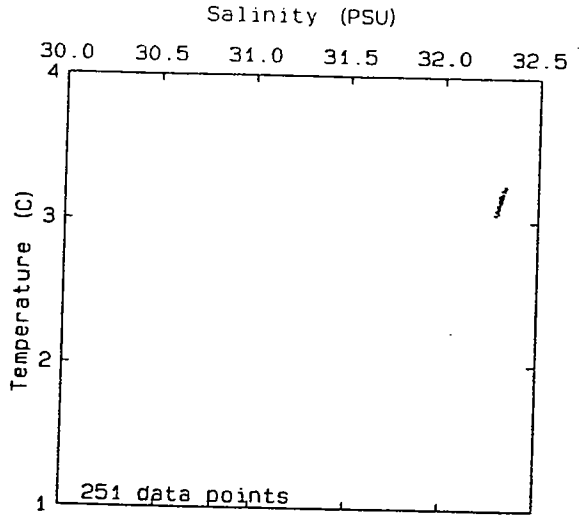


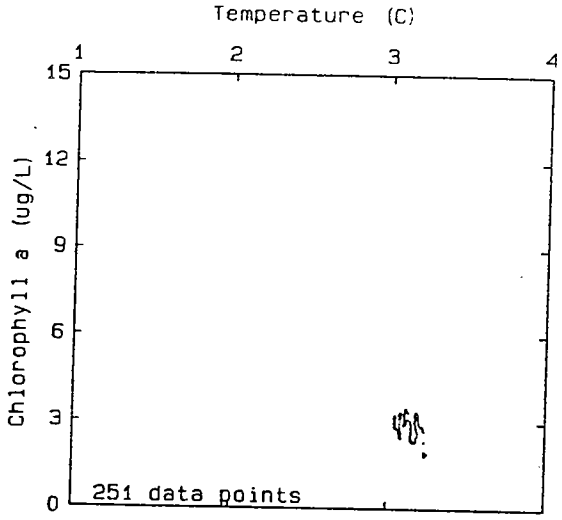


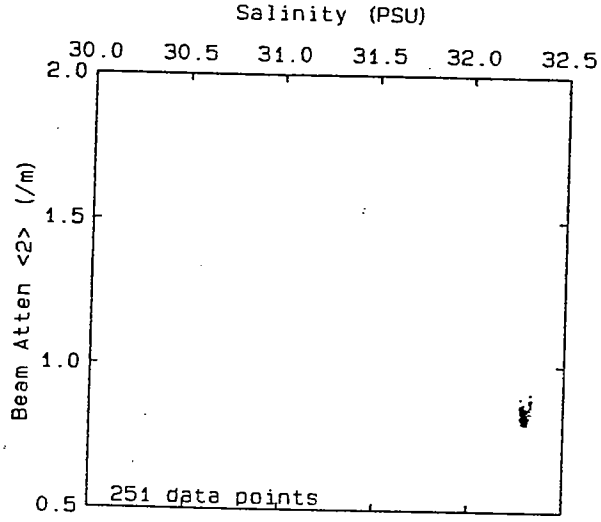


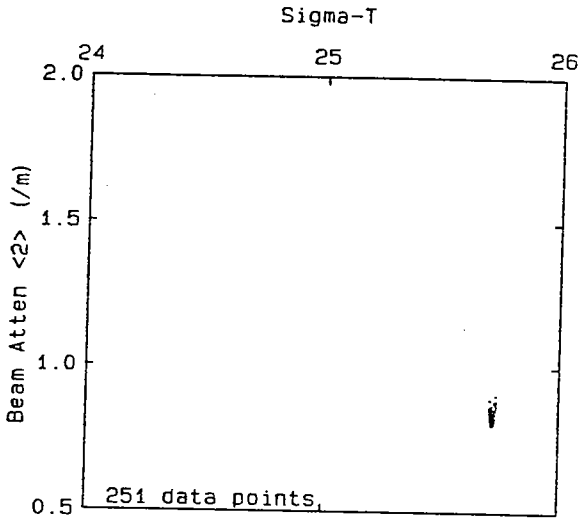
Scatter Plots of Station N4P Date: 03-17-1992 Time: 10:17:35 File: MFF02127.PAR

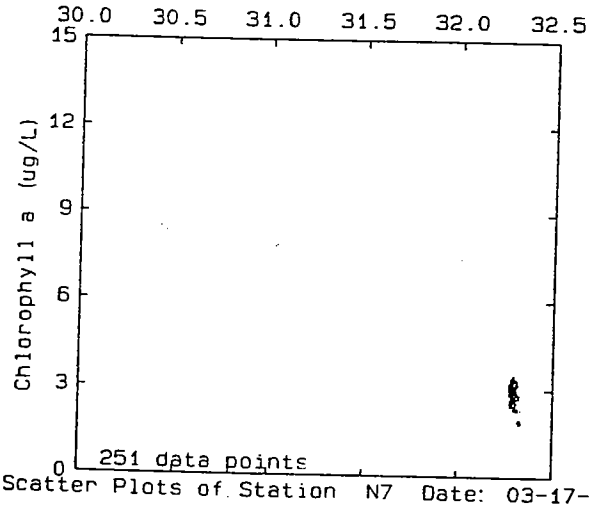

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
350 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
350 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
350 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
350 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
350 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
350 data points,
Scatter Plots of Station N7P Date: 03-15-1992 Time: 12:39:29 File: MFF02053.PAR

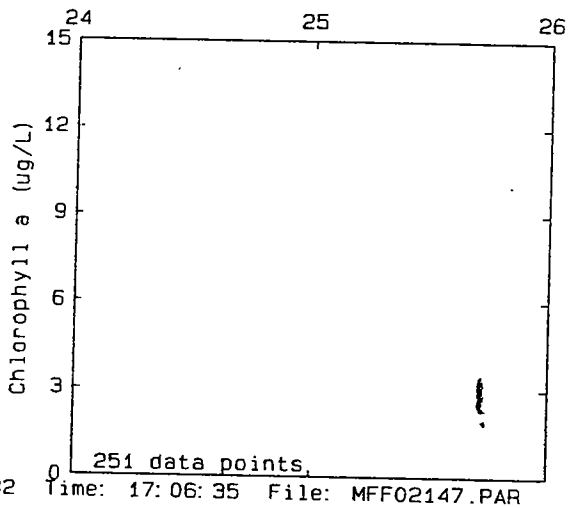






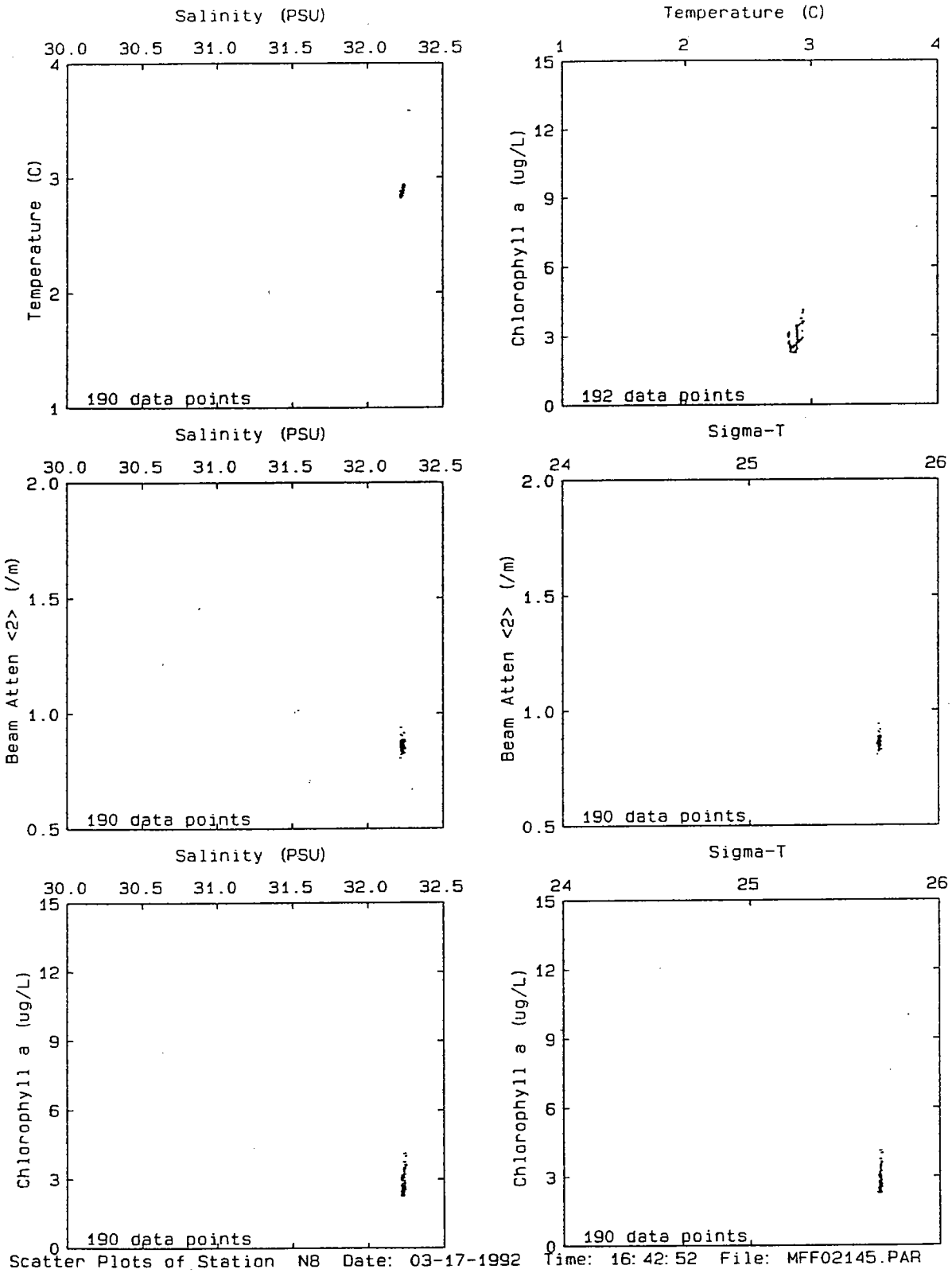


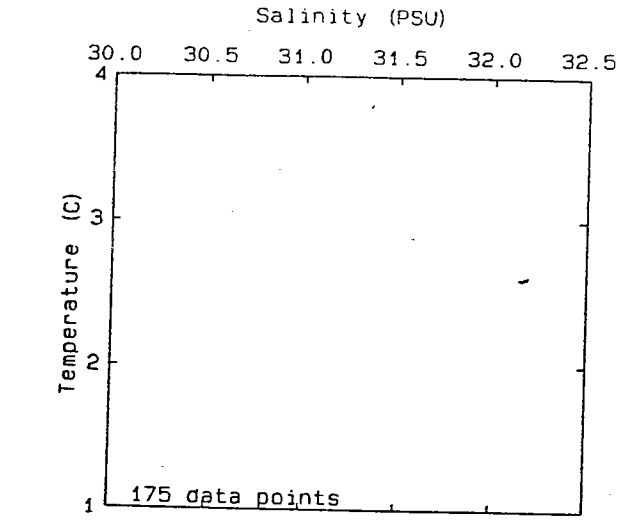


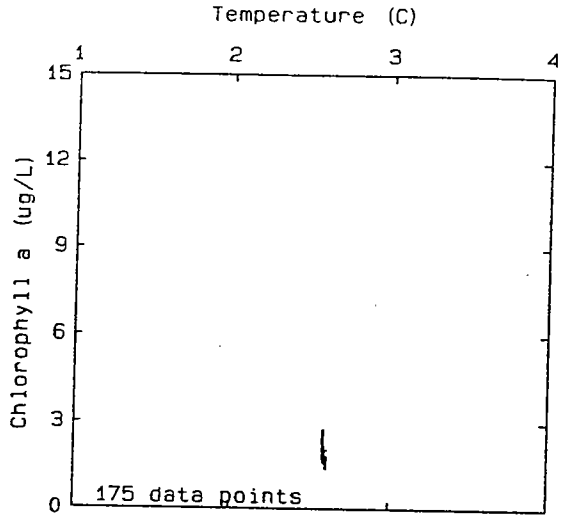


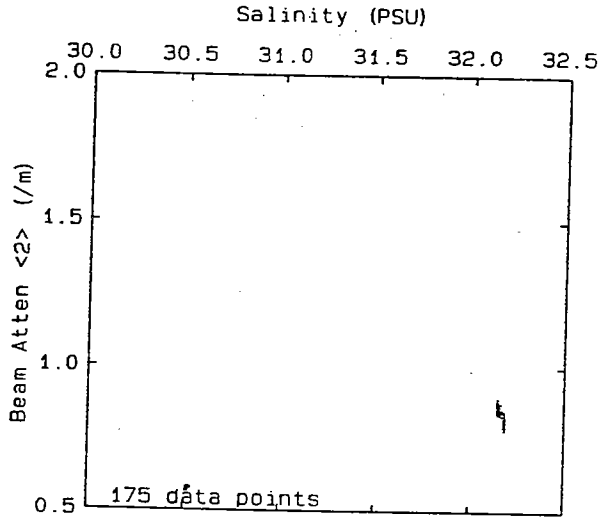
Scatter Plots of Station N7 Date: 03-17-1992 Time: 17:06:35 File: MFF02147.PAR

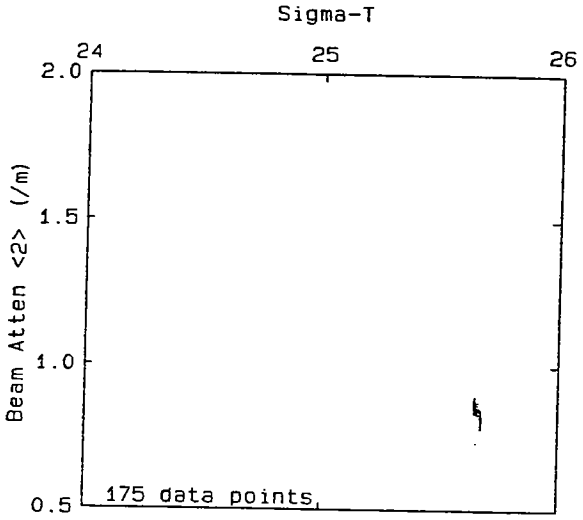
E-90

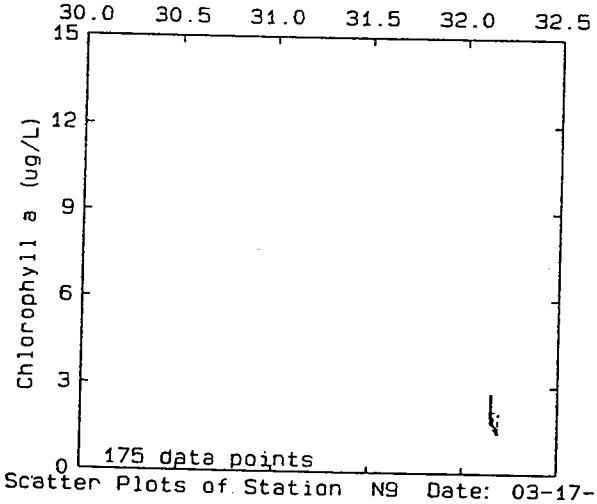

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
190 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
192 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
190 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
190 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
190 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
190 data points
Scatter Plots of Station N8 Date: 03-17-1992 Time: 16:42:52 File: MFF02145.PAR

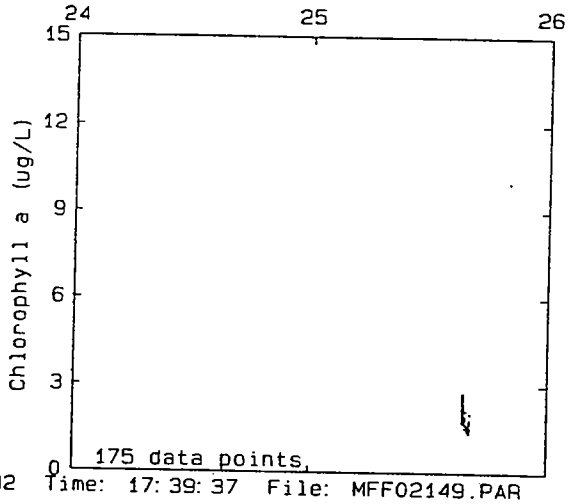




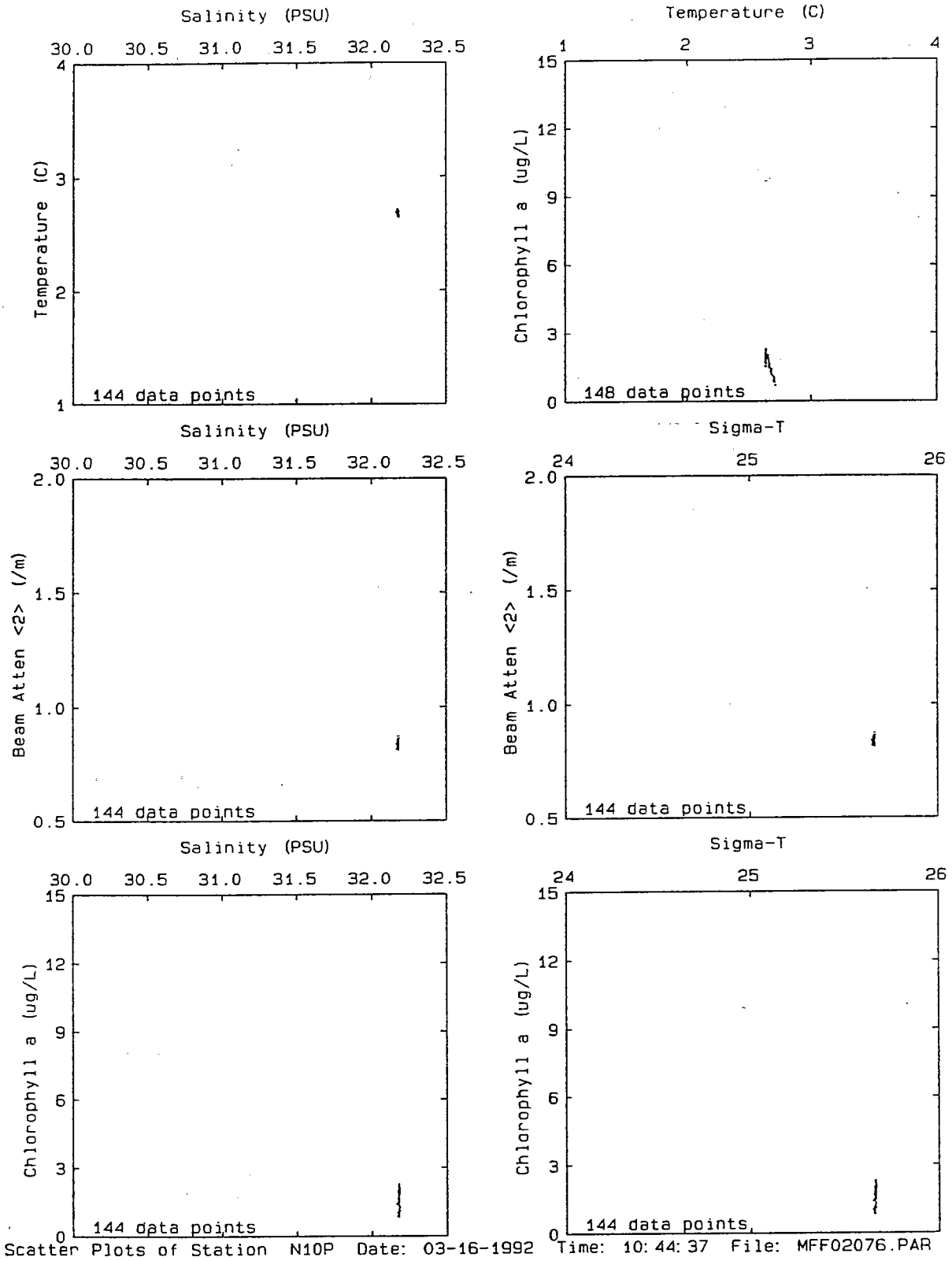




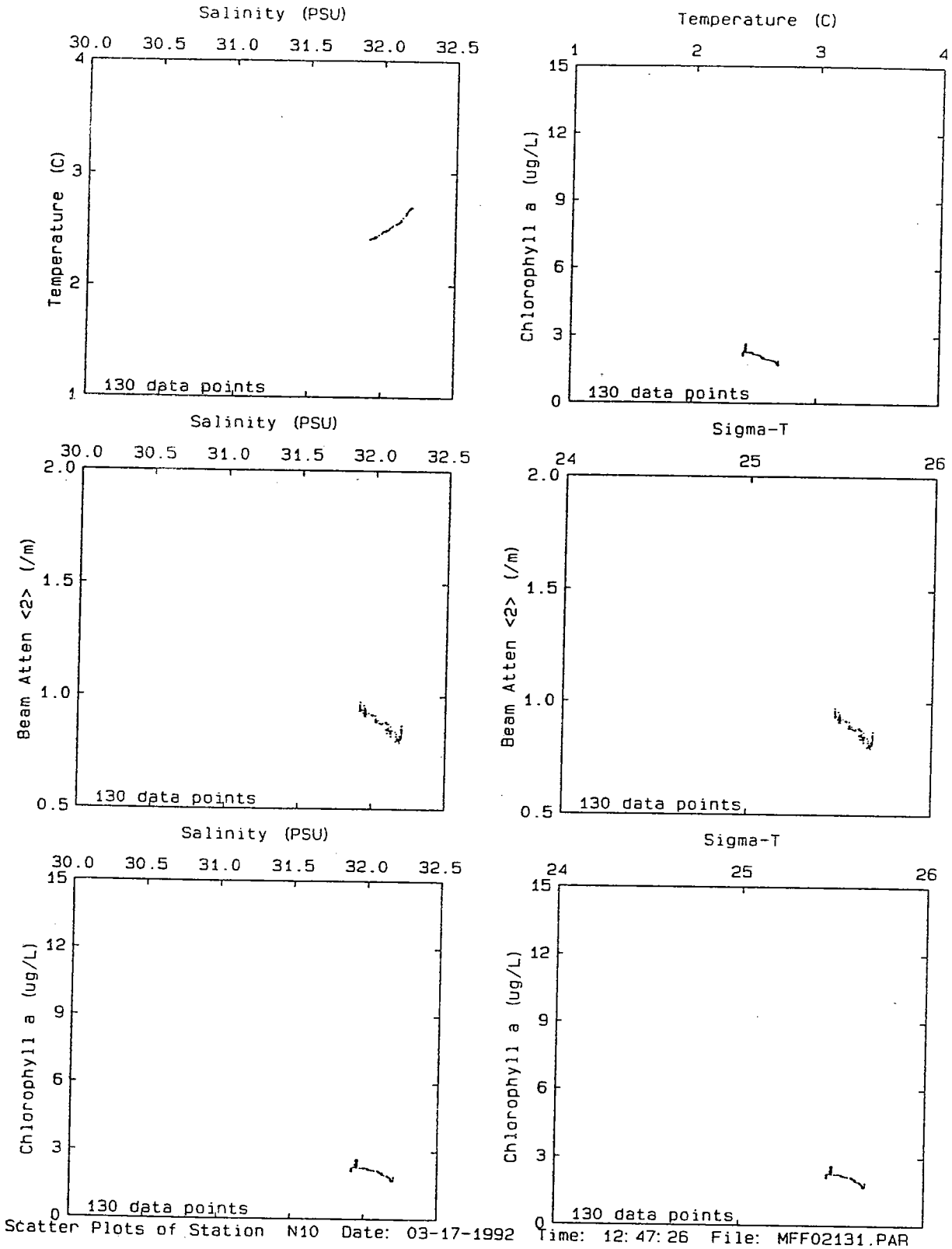


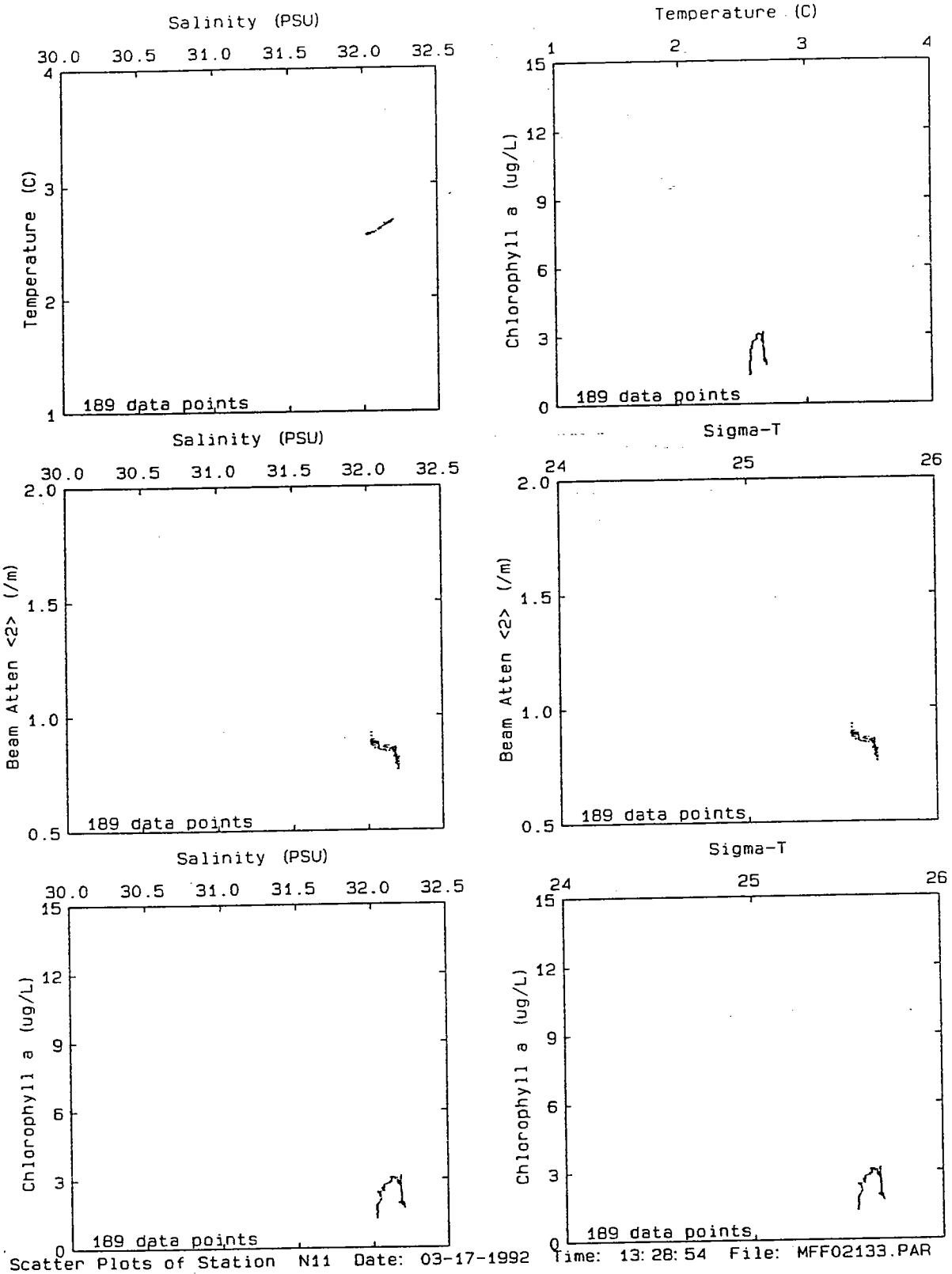


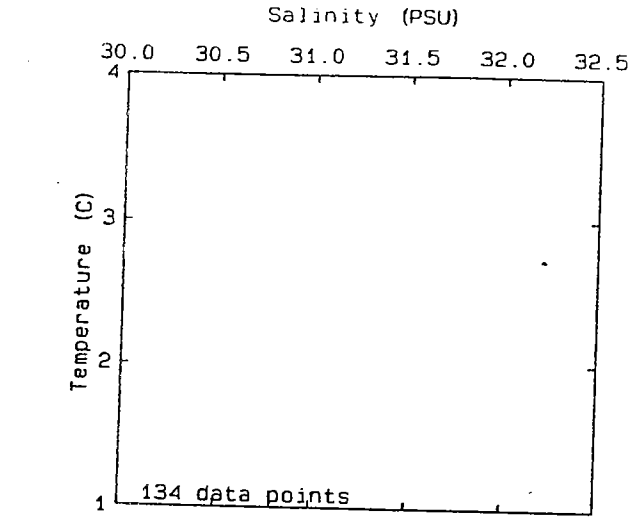
Scatter Plots of Station N9 Date: 03-17-1992 Time: 17:39:37 File: MFF02149.PAR

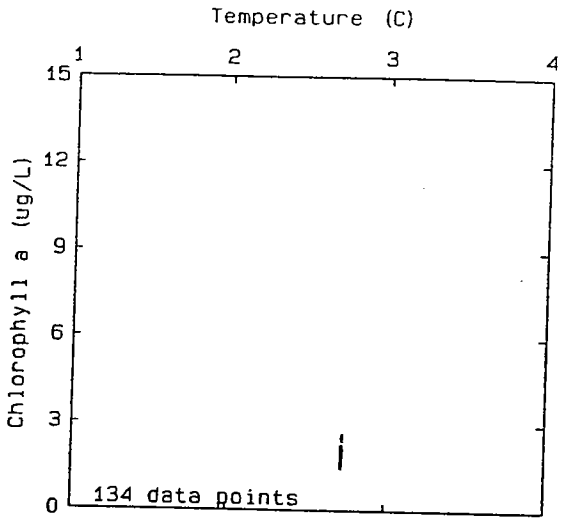


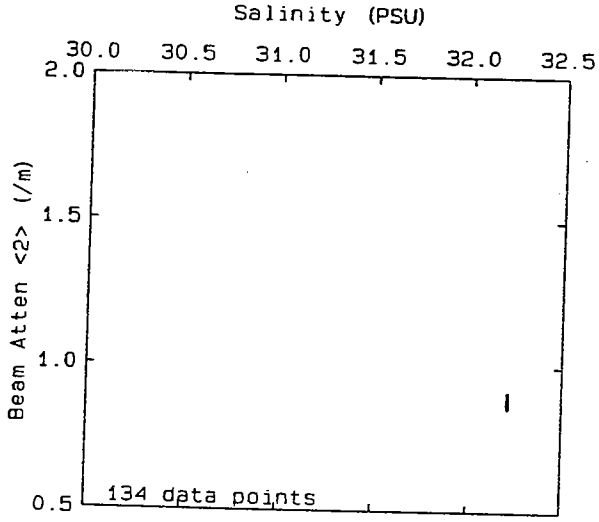
Scatter Plots of Station N10P Date: 03-16-1992 Time: 10:44:37 File: MFF02076.PAR

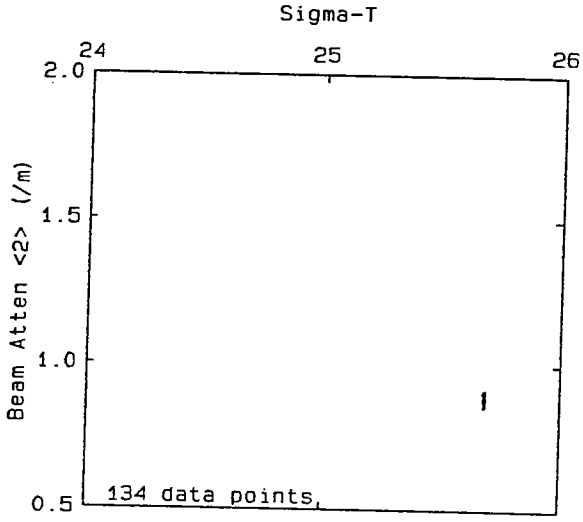

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
130 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
130 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
130 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
130 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
130 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
130 data points,
Scatter Plots of Station N10 Date: 03-17-1992 Time: 12:47:26 File: MFF02131.PAR

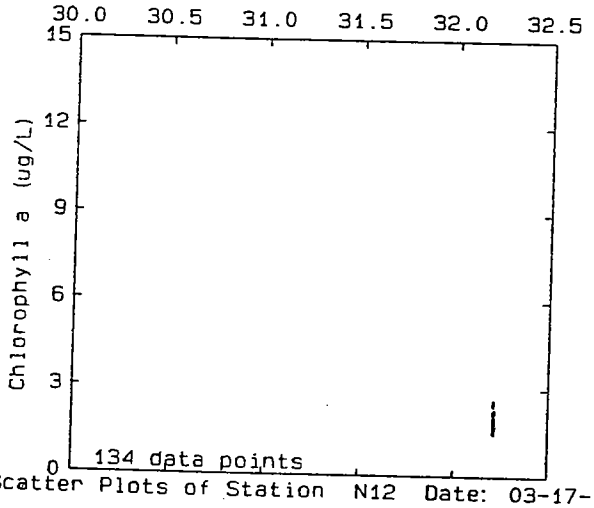

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
189 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
189 data points
Salinity (PSU)
Beam Atten <2> (/m)
189 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
189 data points,
Salinity (PSU)
Chlorophyll a (ug/L)
189 data points
Sigma-T
Chlorophyll a (ug/L)
189 data points,
Scatter Plots of Station N11 Date: 03-17-1992 Time: 13:28:54 File: MFF02133.PAR

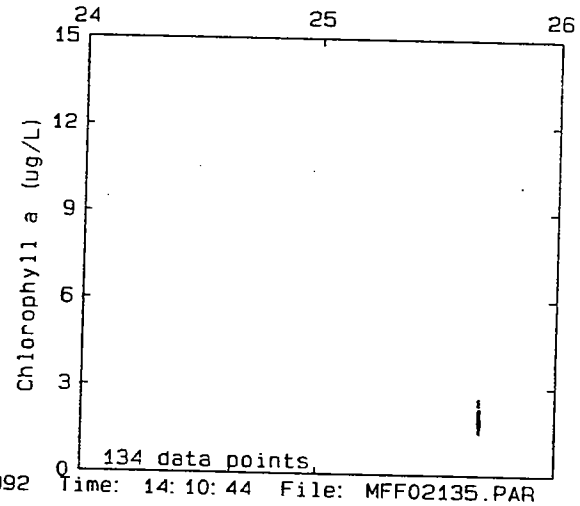




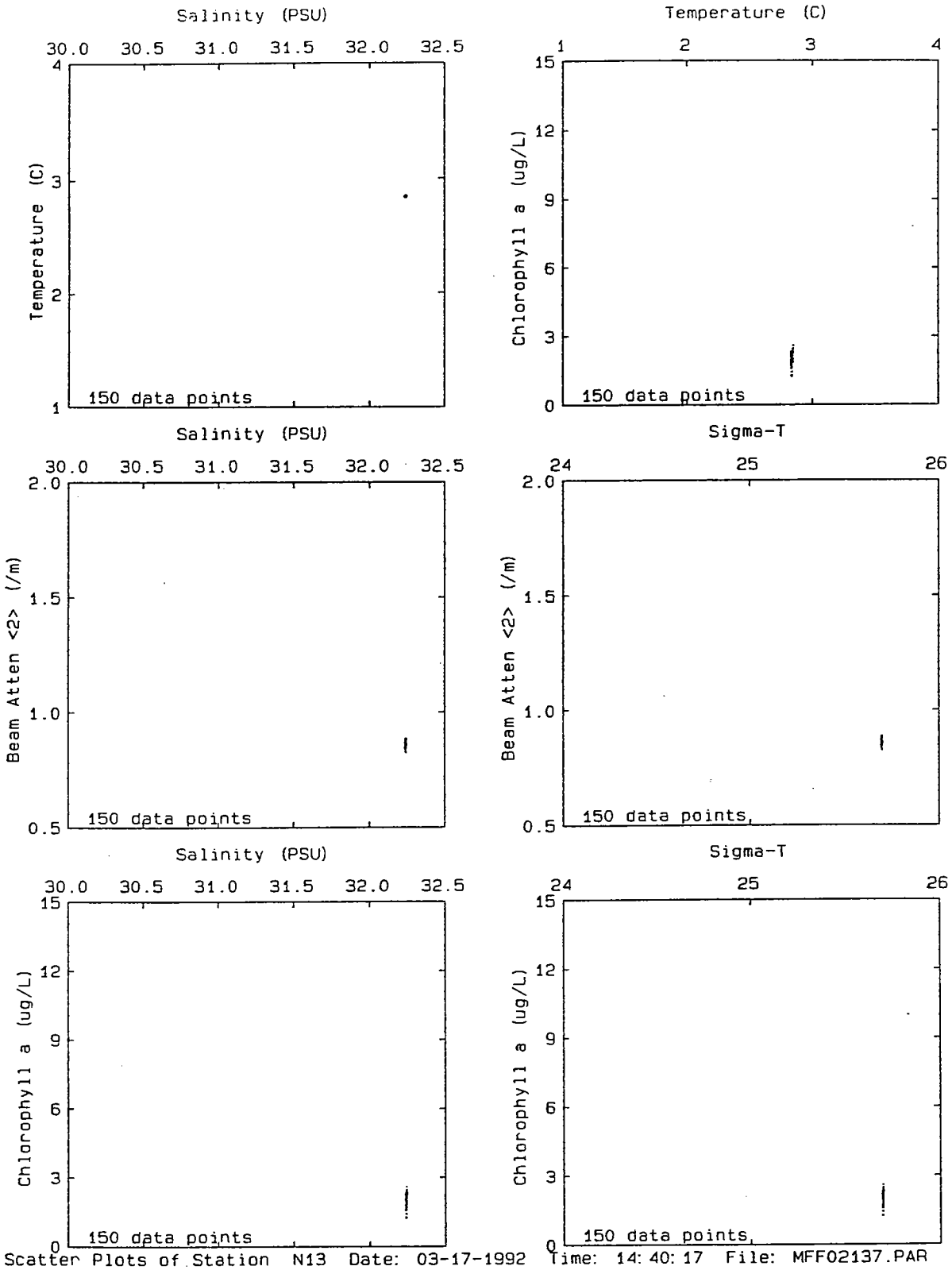




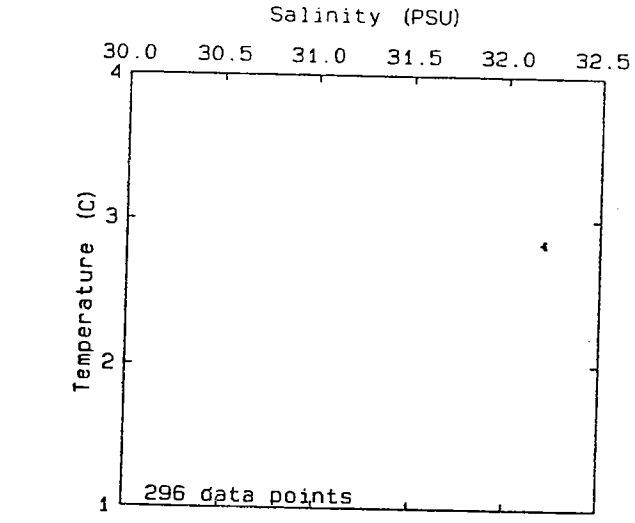


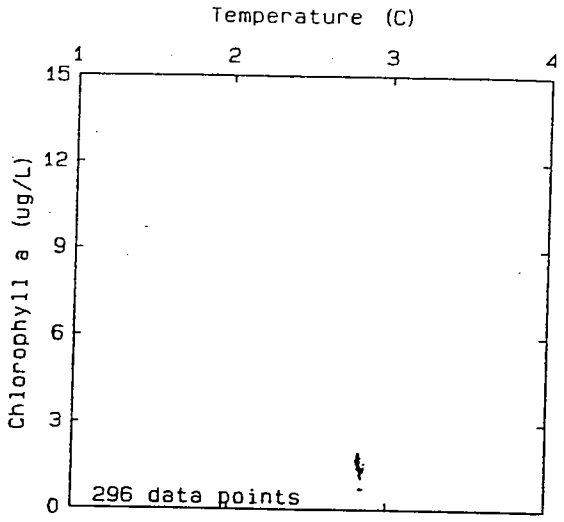


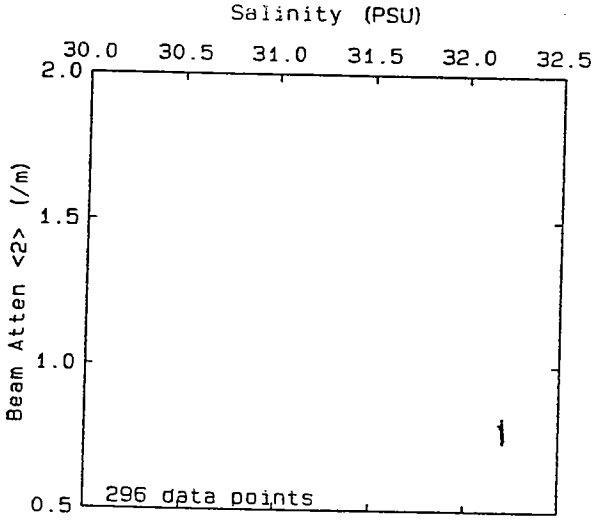
Scatter Plots of Station N12 Date: 03-17-1992 Time: 14:10:44 File: MFF02135.PAR

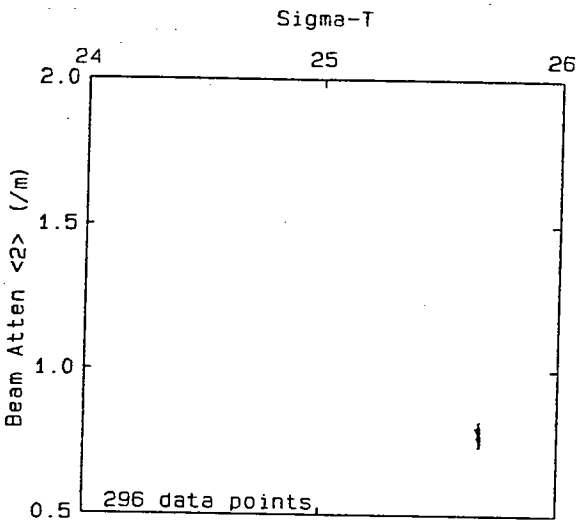


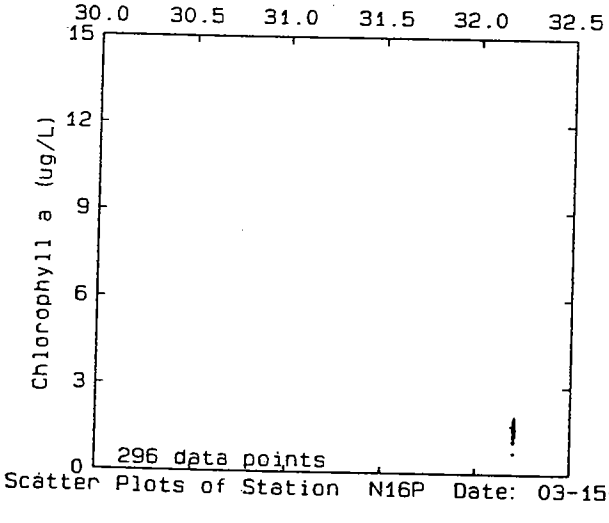
Scatter Plots of Station N13 Date: 03-17-1992 Time: 14:40:17 File: MFF02137.PAR

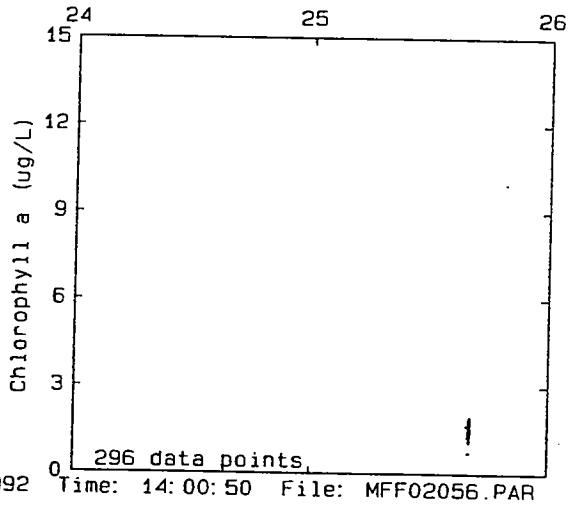




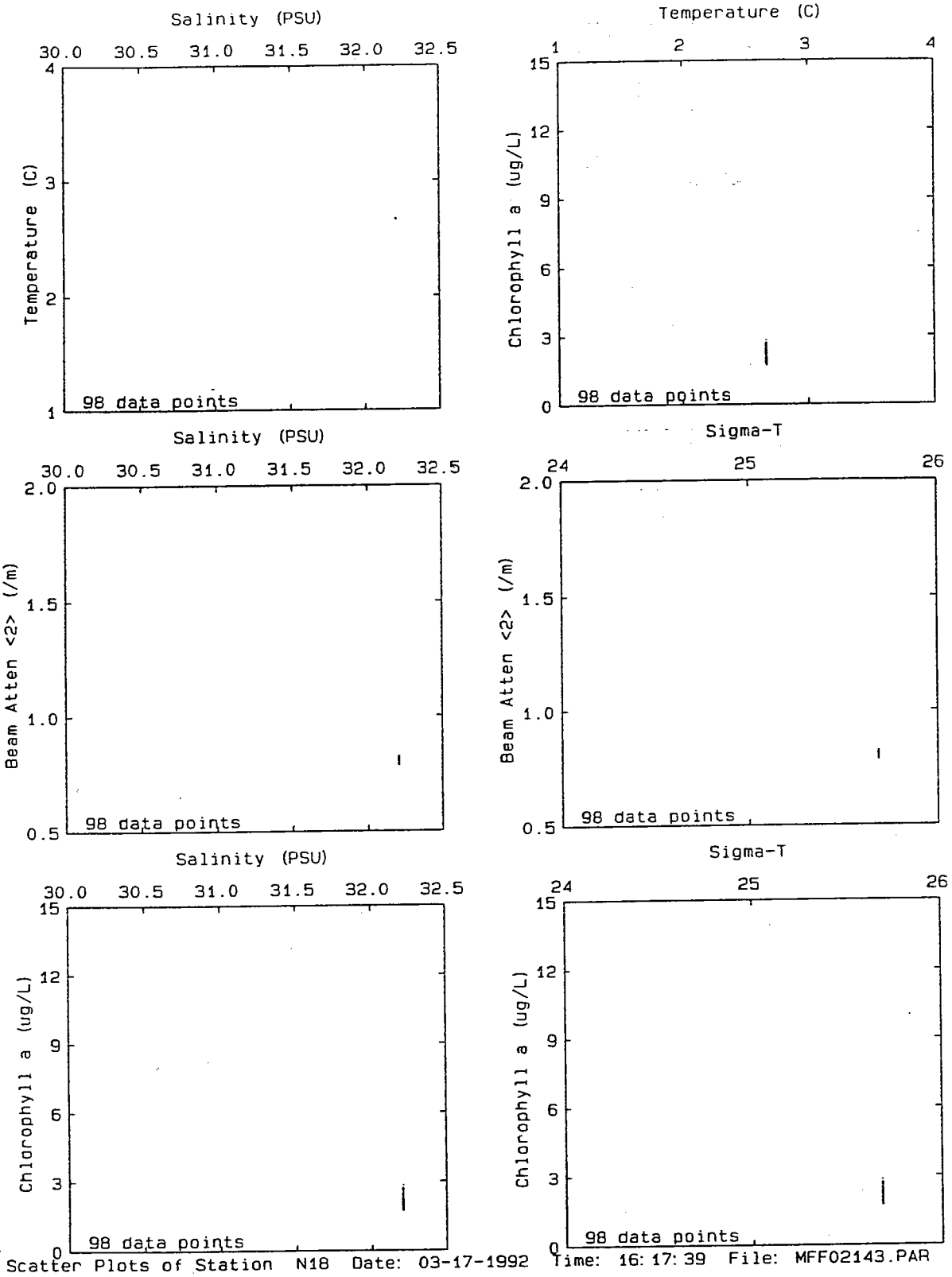


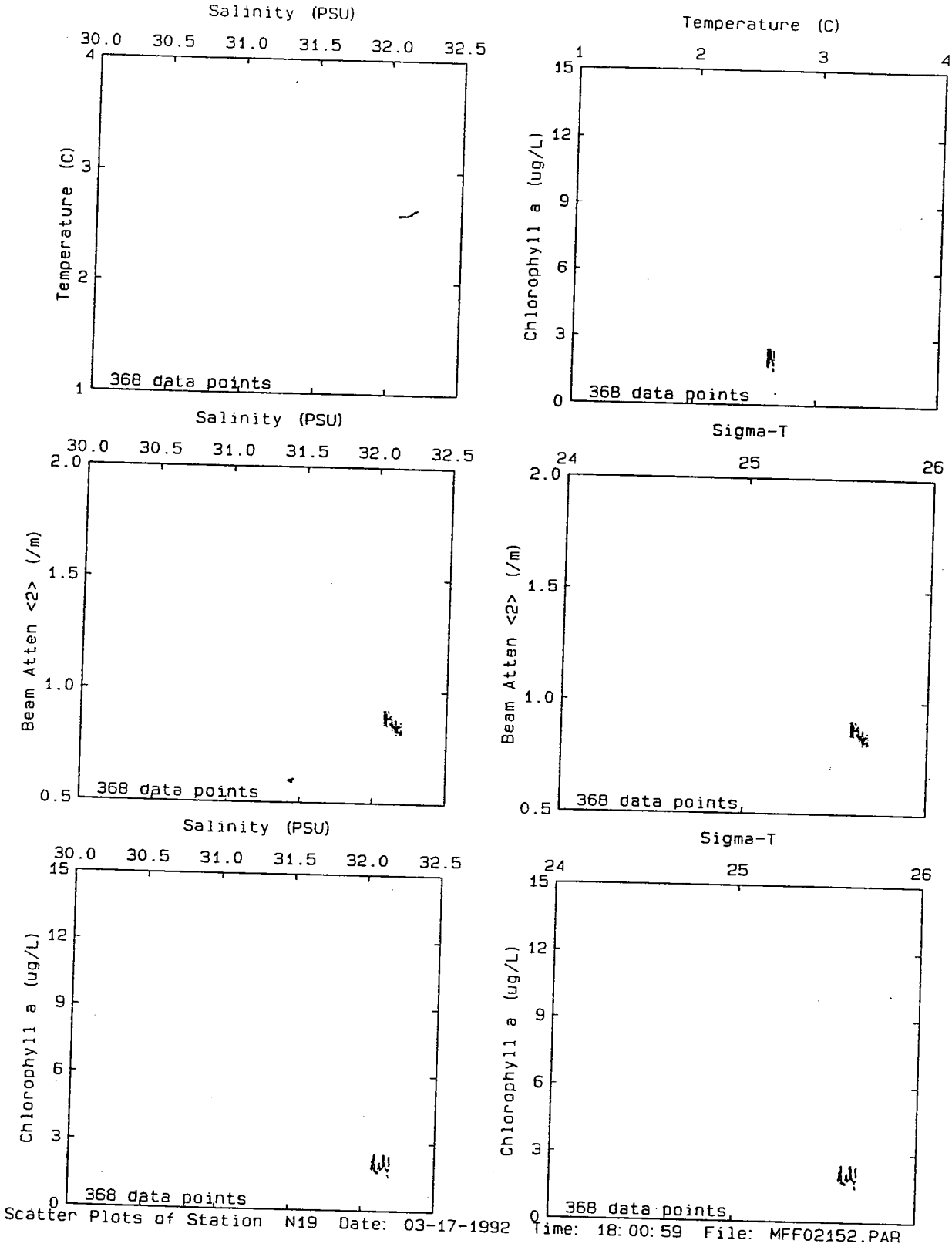




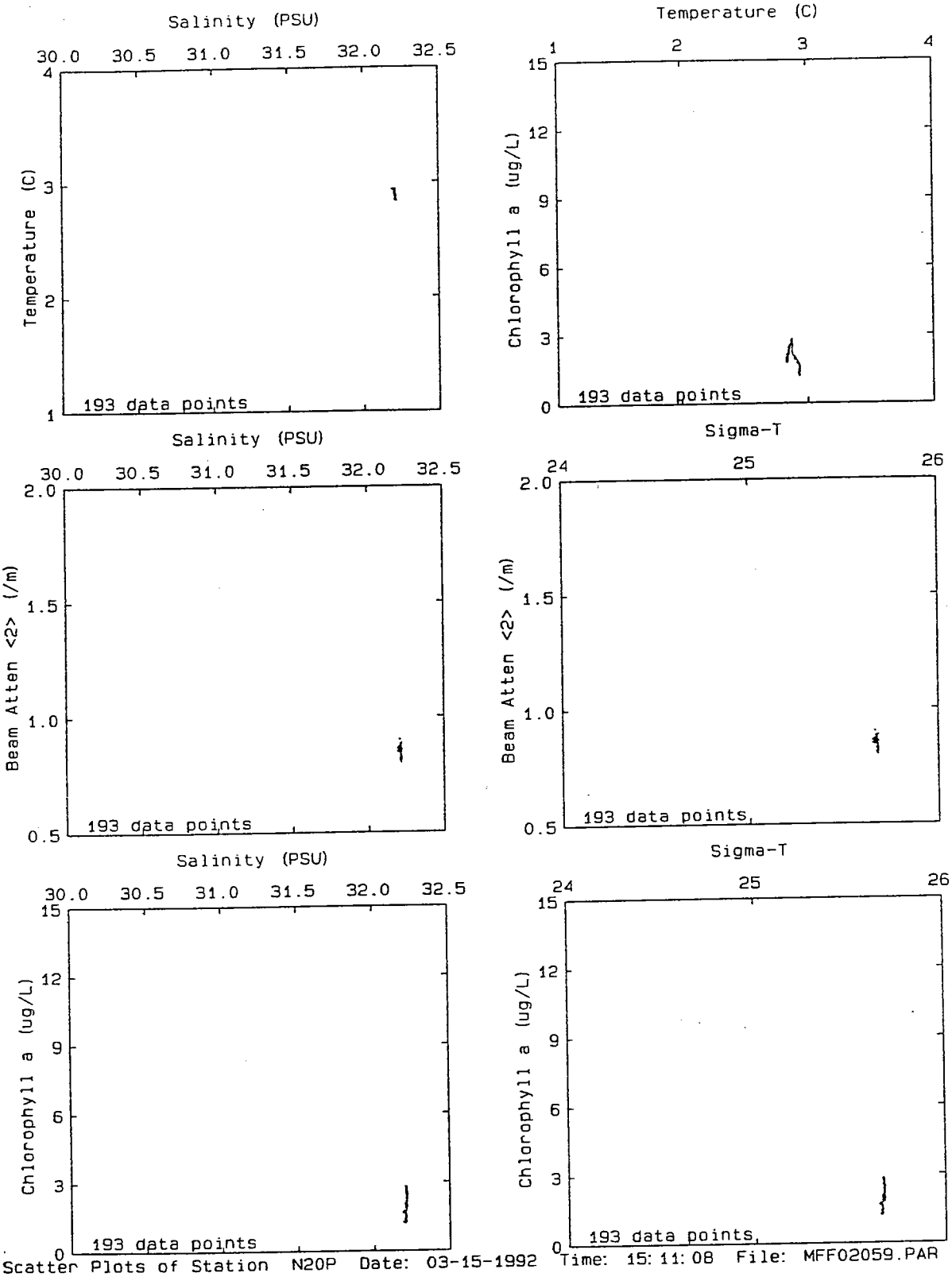


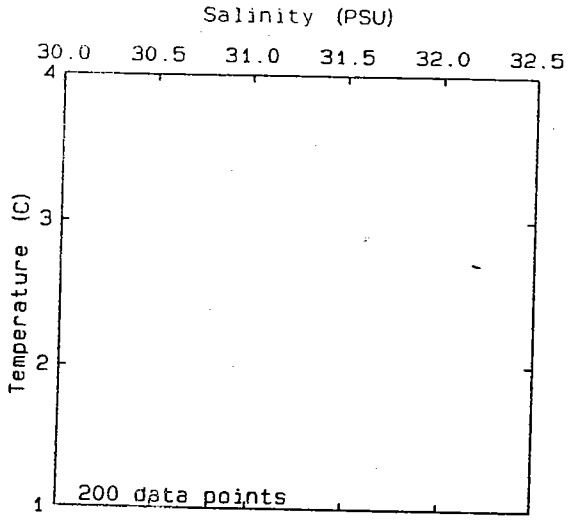
Scatter Plots of Station N16P Date: 03-15-1992 Time: 14:00:50 File: MFF02056.PAR

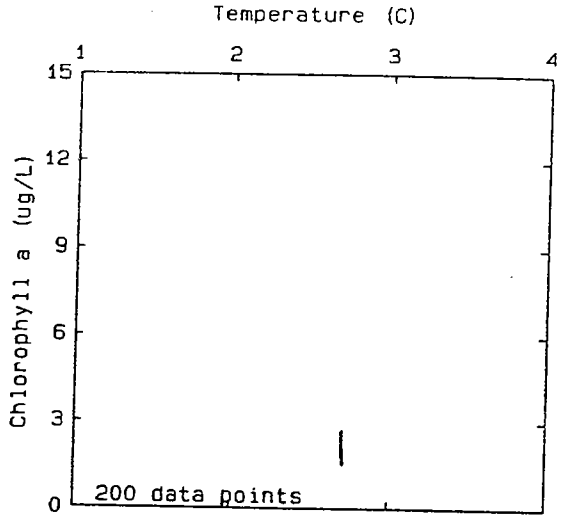

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
98 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
98 data points
Salinity (PSU)
Beam Atten <2> (/m)
98 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
98 data points
Salinity (PSU)
Chlorophyll a (ug/L)
98 data points
Sigma-T
Chlorophyll a (ug/L)
98 data points
Scatter Plots of Station N18 Date: 03-17-1992 Time: 16:17:39 File: MFF02143.PAR

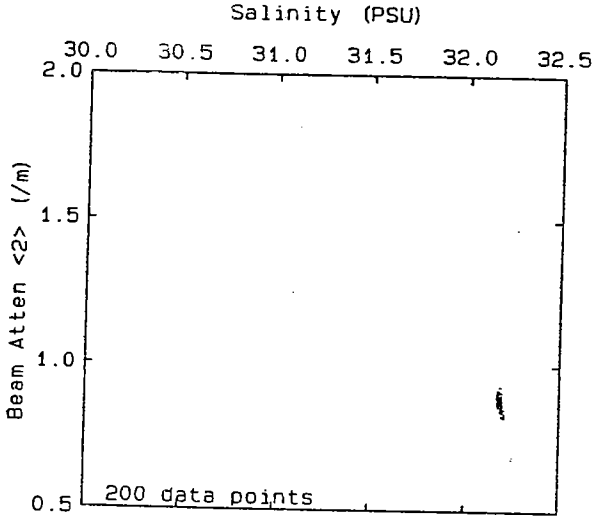


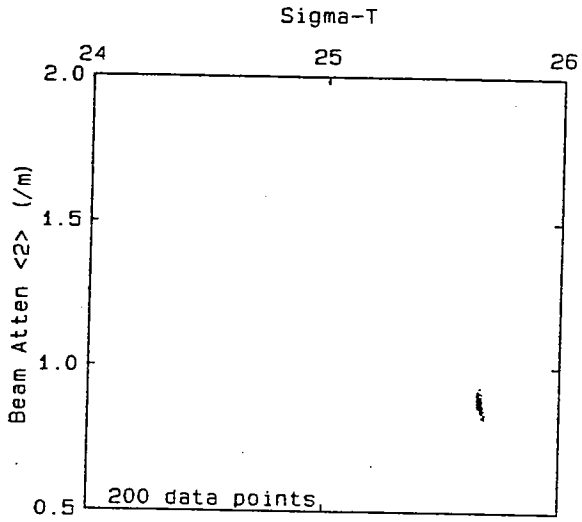
Scatter Plots of Station N19 Date: 03-17-1992 Time: 18:00:59 File: MFF02152.PAR

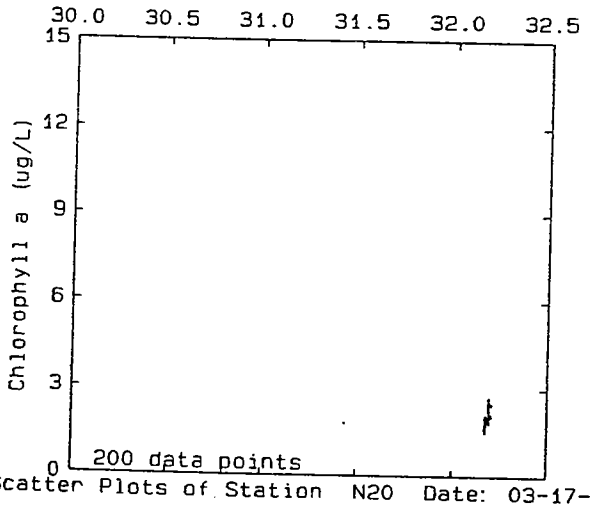

Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
1 2 3 4
Temperature (C)
Chlorophyll a (ug/L)
193 data points
Salinity (PSU)
Sigma-T
24 25 26
Beam Atten <2> (/m)
193 data points,
Salinity (PSU)
Sigma-T
Chlorophyll a (ug/L)
193 data points
193 data points,
Scatter Plots of Station N20P Date: 03-15-1992 Time: 15:11:08 File: MFF02059.PAR

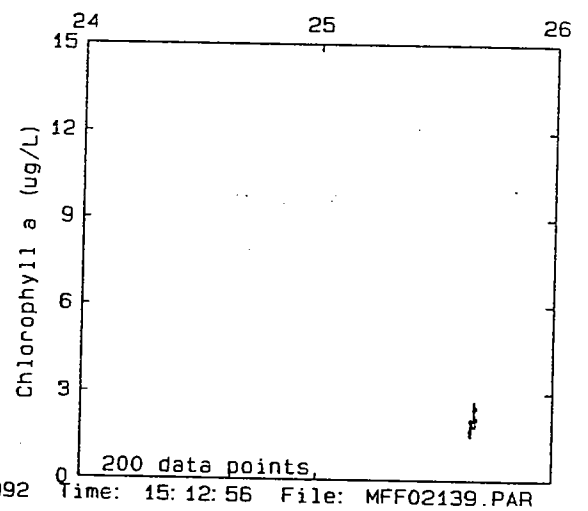




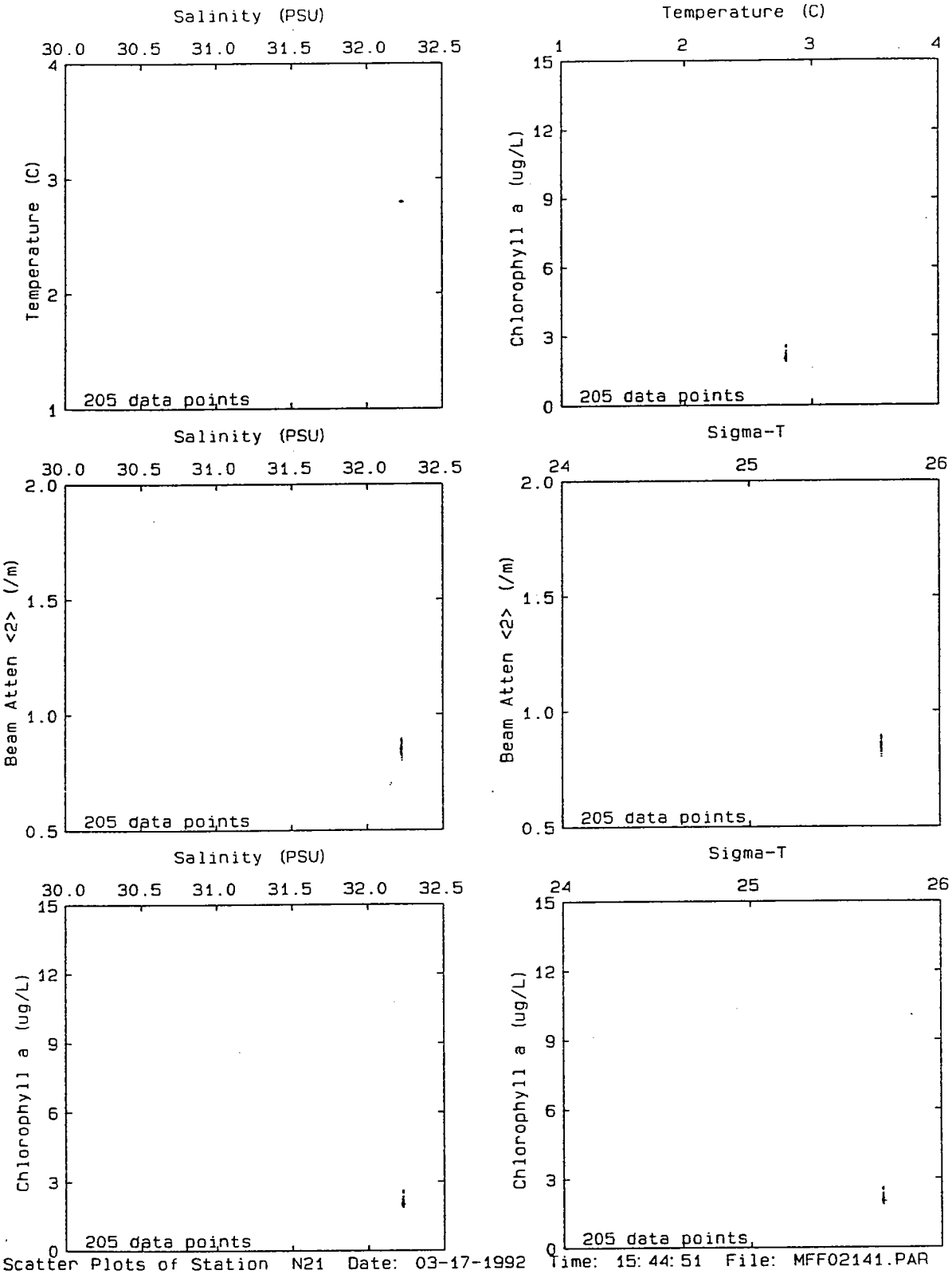








Scatter Plots of Station N20 Date: 03-17-1992 Time: 15:12:56 File: MFF02139.PAR


Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Temperature (C)
4 3 2 1
205 data points
Temperature (C)
1 2 3 4
Chlorophyll a (ug/L)
15 12 9 6 3 0
205 data points
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
205 data points
Sigma-T
24 25 26
Beam Atten <2> (/m)
2.0 1.5 1.0 0.5
205 data points,
Salinity (PSU)
30.0 30.5 31.0 31.5 32.0 32.5
Chlorophyll a (ug/L)
15 12 9 6 3 0
205 data points
Sigma-T
24 25 26
Chlorophyll a (ug/L)
15 12 9 6 3 0
205 data points,
Scatter Plots of Station N21 Date: 03-17-1992
Time: 15:44:51 File: MFF02141.PAR

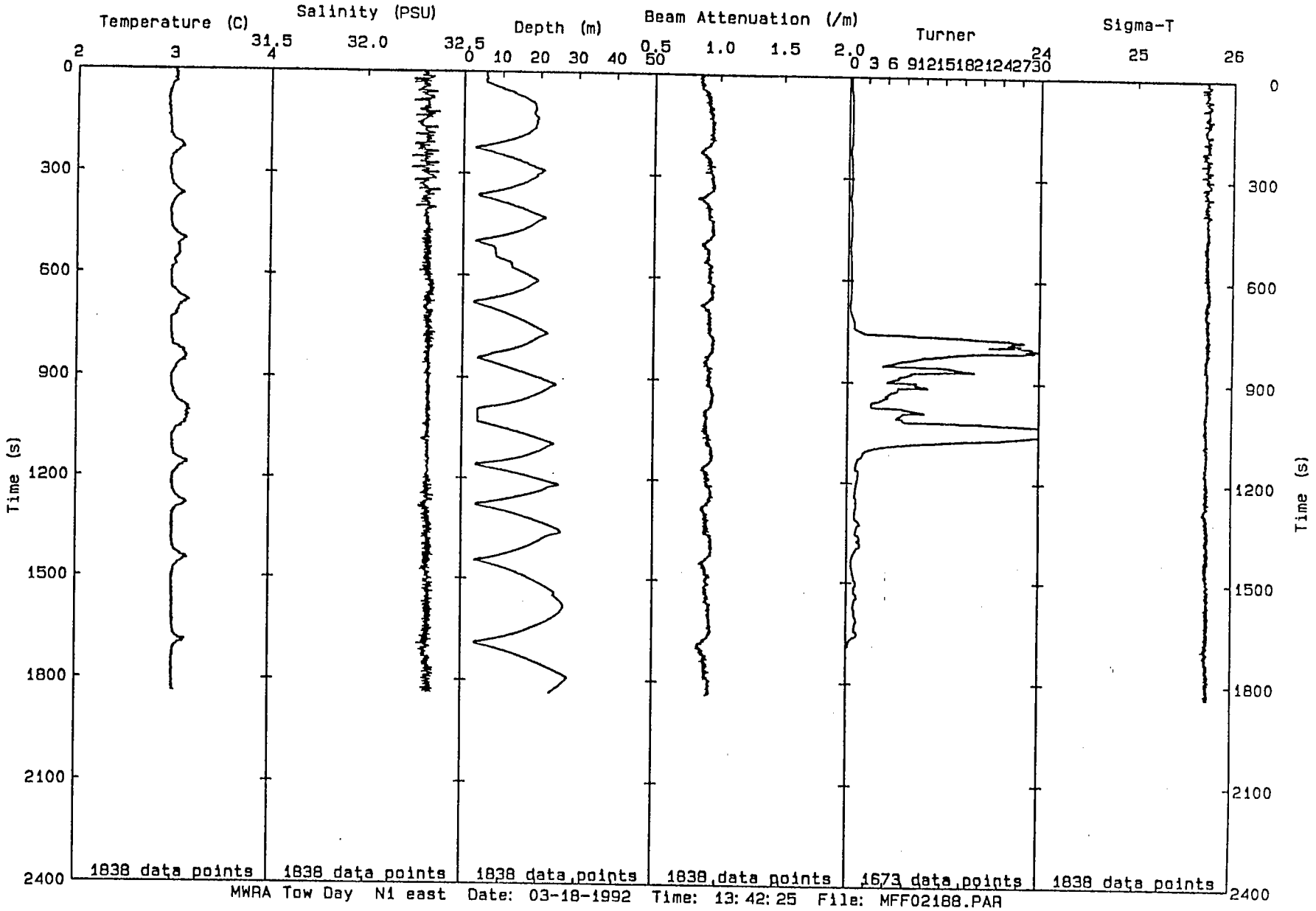
APPENDIX F

Towing Profiles from March 1992 Nearfield Stations

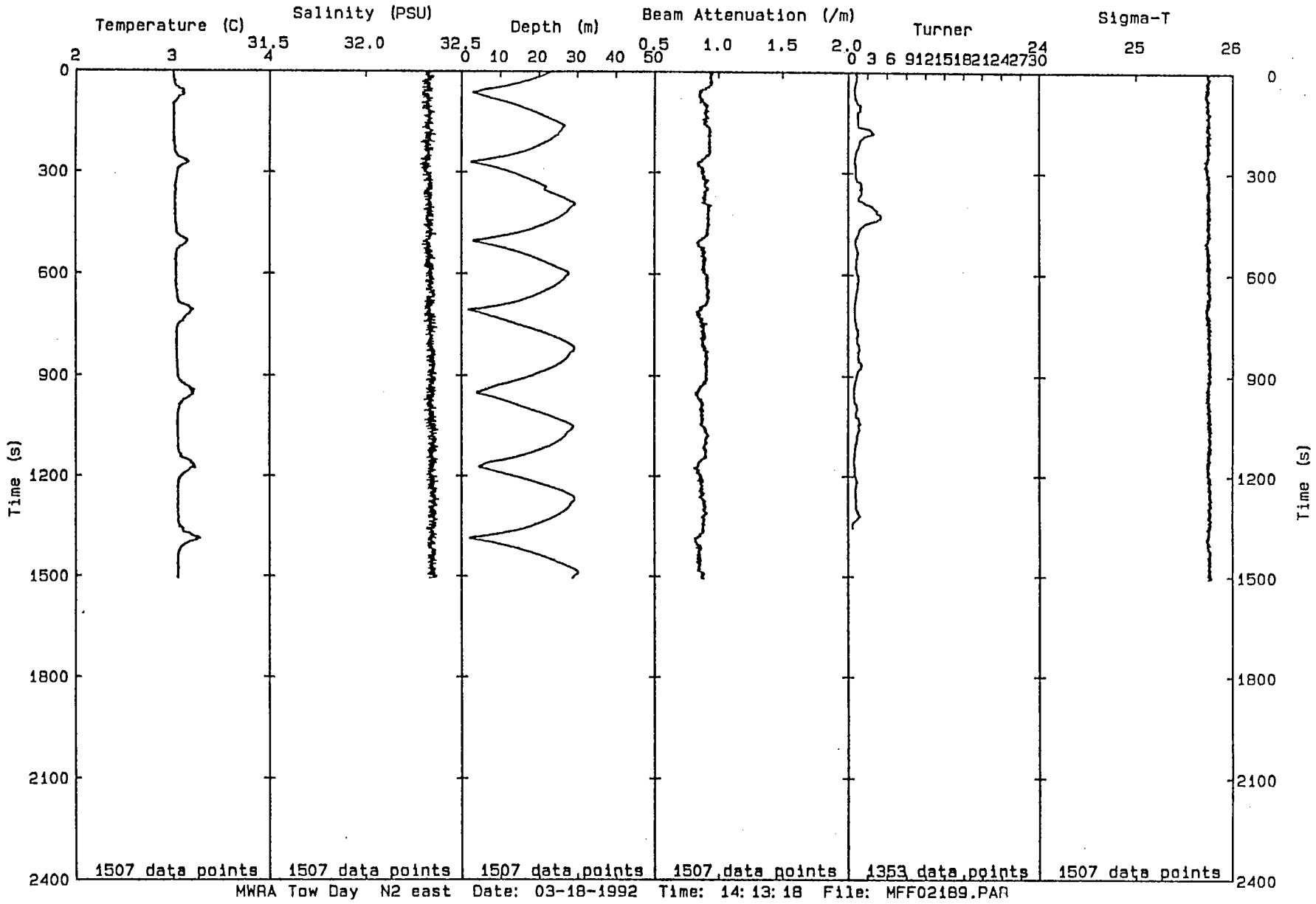
Part 1

Time Plots

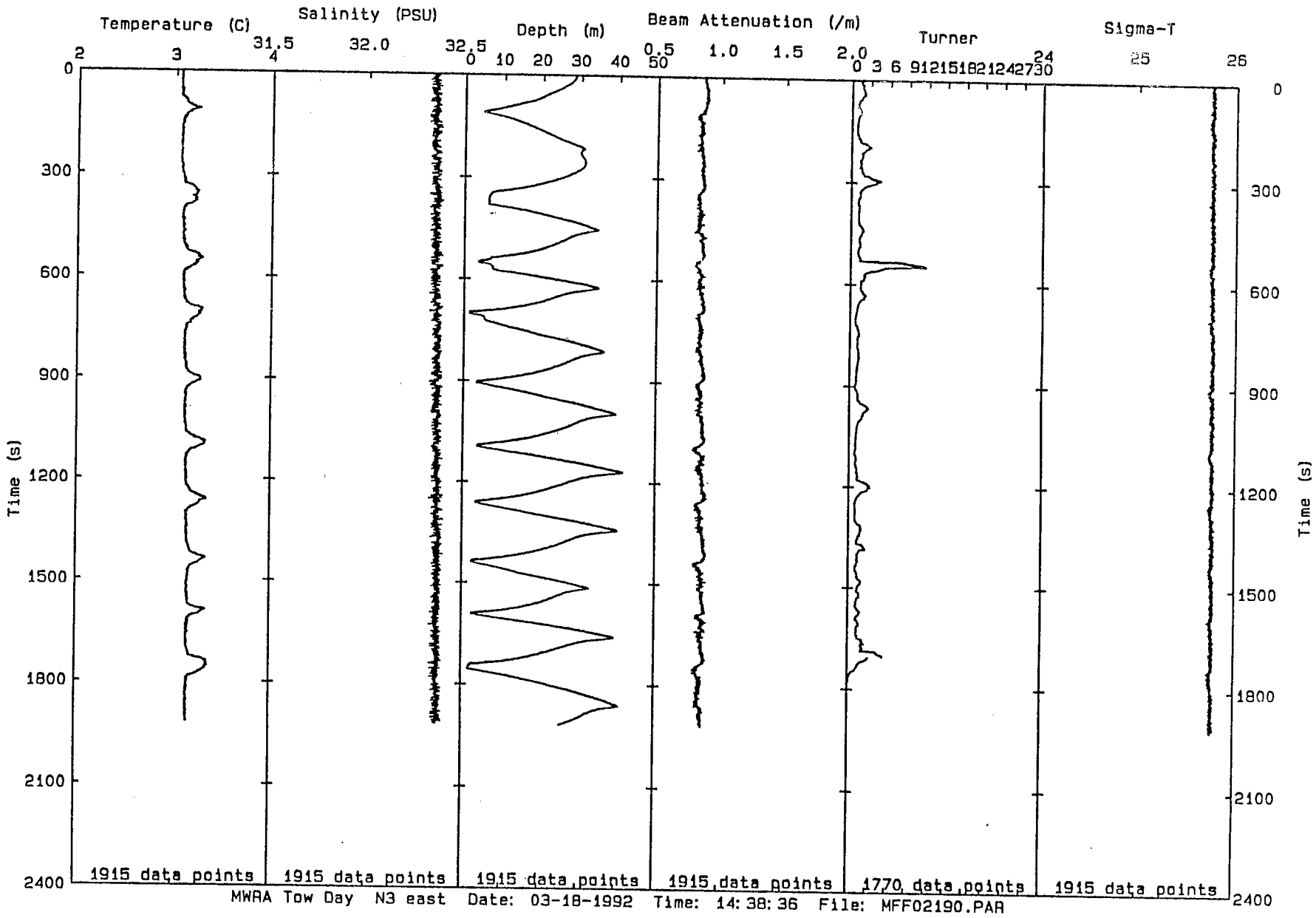
Data are from tow-yo sampling on the second day of the nearfield survey. Instrument calibration methods are given in Appendix B and Appendix E, Part 1. The Turner fluorometer readings for chlorophyll are not fully calibrated against a Chelsea fluorometer time series for this cruise and thus are relative readings.


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Sigma-T
Time (s)
1838 data points
1838 data points
1838 data points
1838 data points
1673 data points
1838 data points
MWRA Tow Day N1 east Date: 03-18-1992 Time: 13:42:25 File: MFF02188.PAR

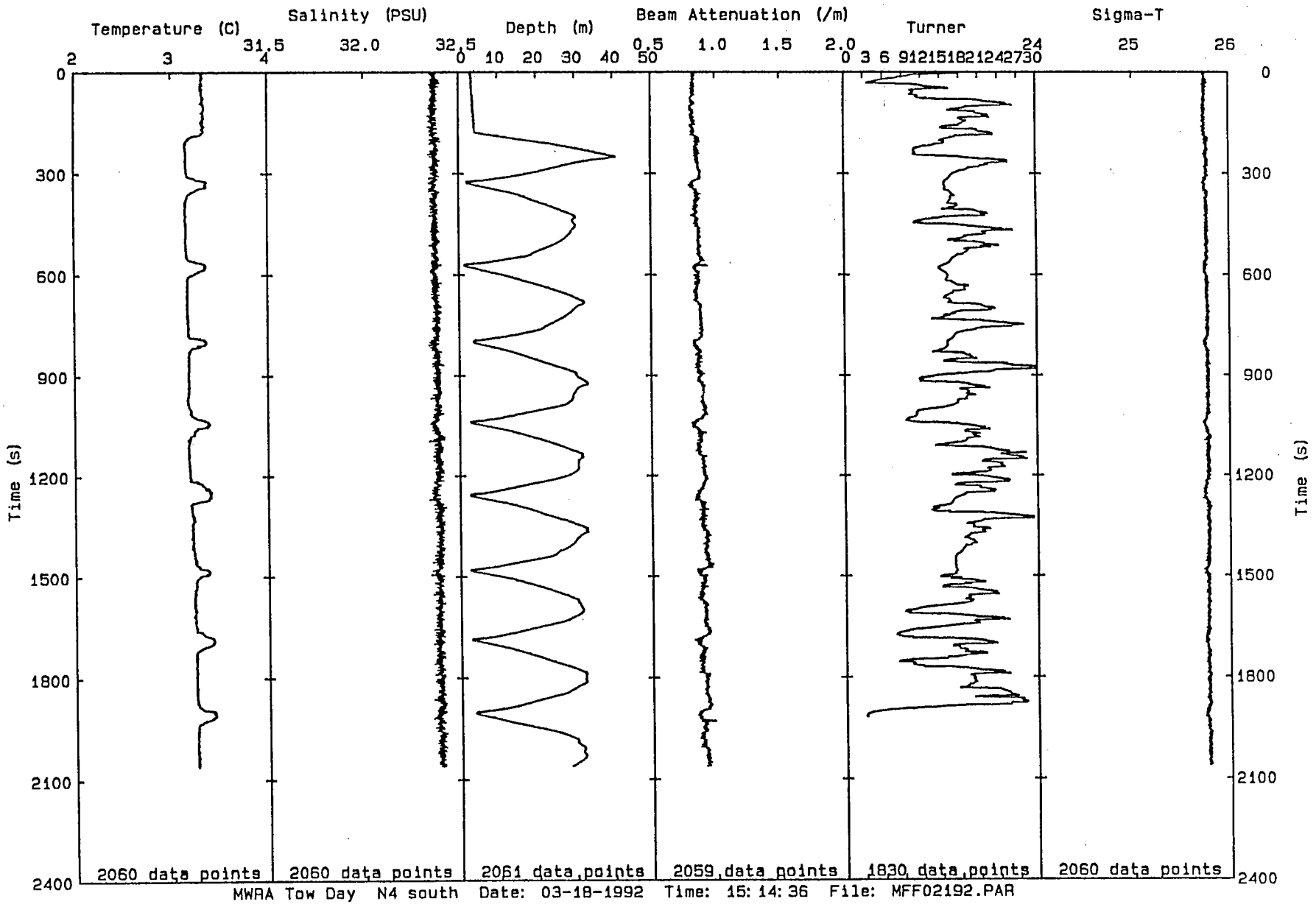
F-2


Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0
3
6
9
12
15
18
21
24
27
30
Sigma-T
24
25
26
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1507 data points
1507 data points
1507 data points
1507 data points
1353 data points
1507 data points
MWRA Tow Day N2 east Date: 03-18-1992 Time: 14:13:18 File: MFF02189.PAR

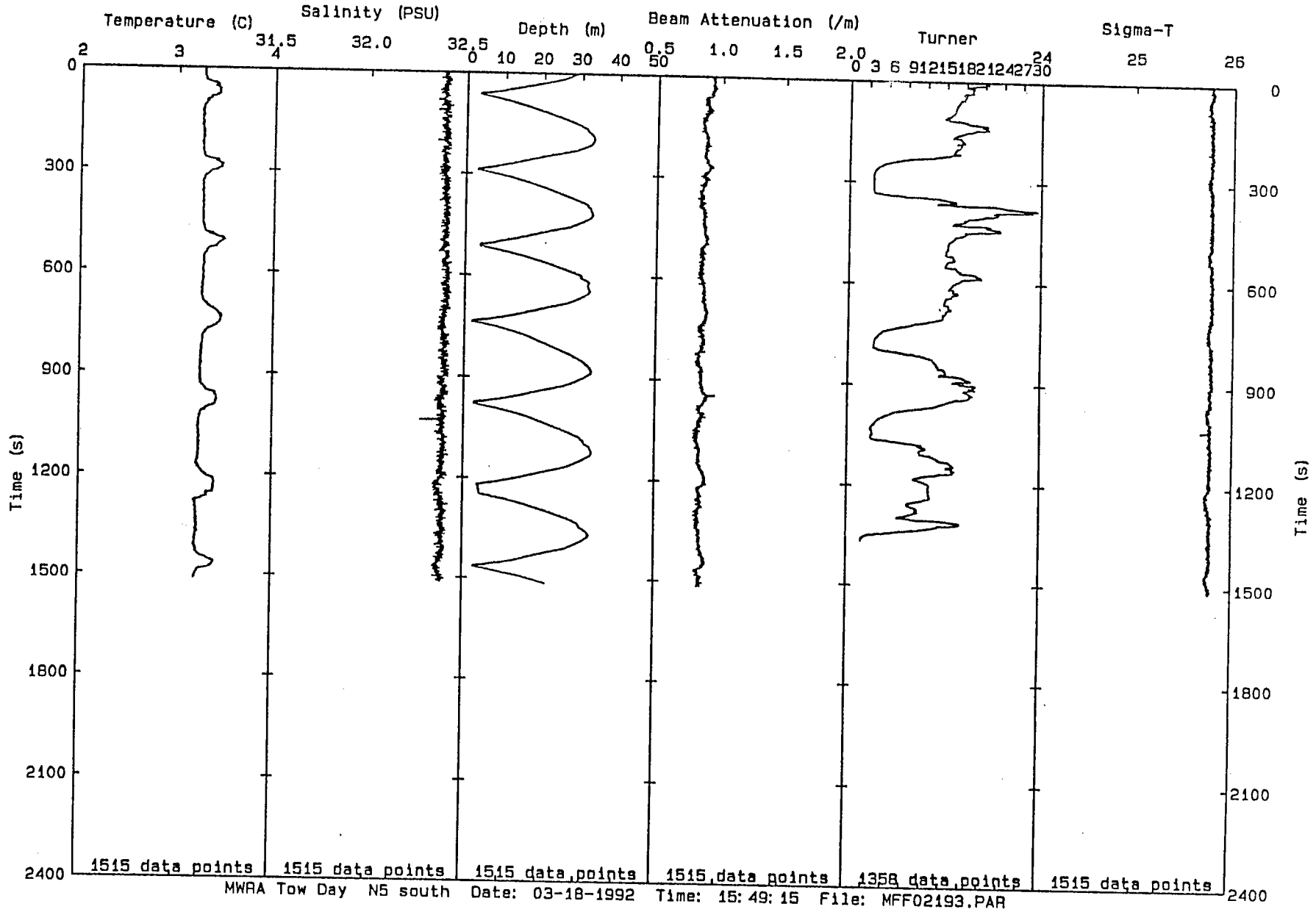
F-3


Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0 3 6 9 12 15 18 21 24 27 30
Sigma-T
24
25
26
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1915 data points
1915 data points
1915 data points
1915 data points
1770 data points
1915 data points
MWRA Tow Day N3 east Date: 03-18-1992 Time: 14:38:36 File: MFF02190.PAR

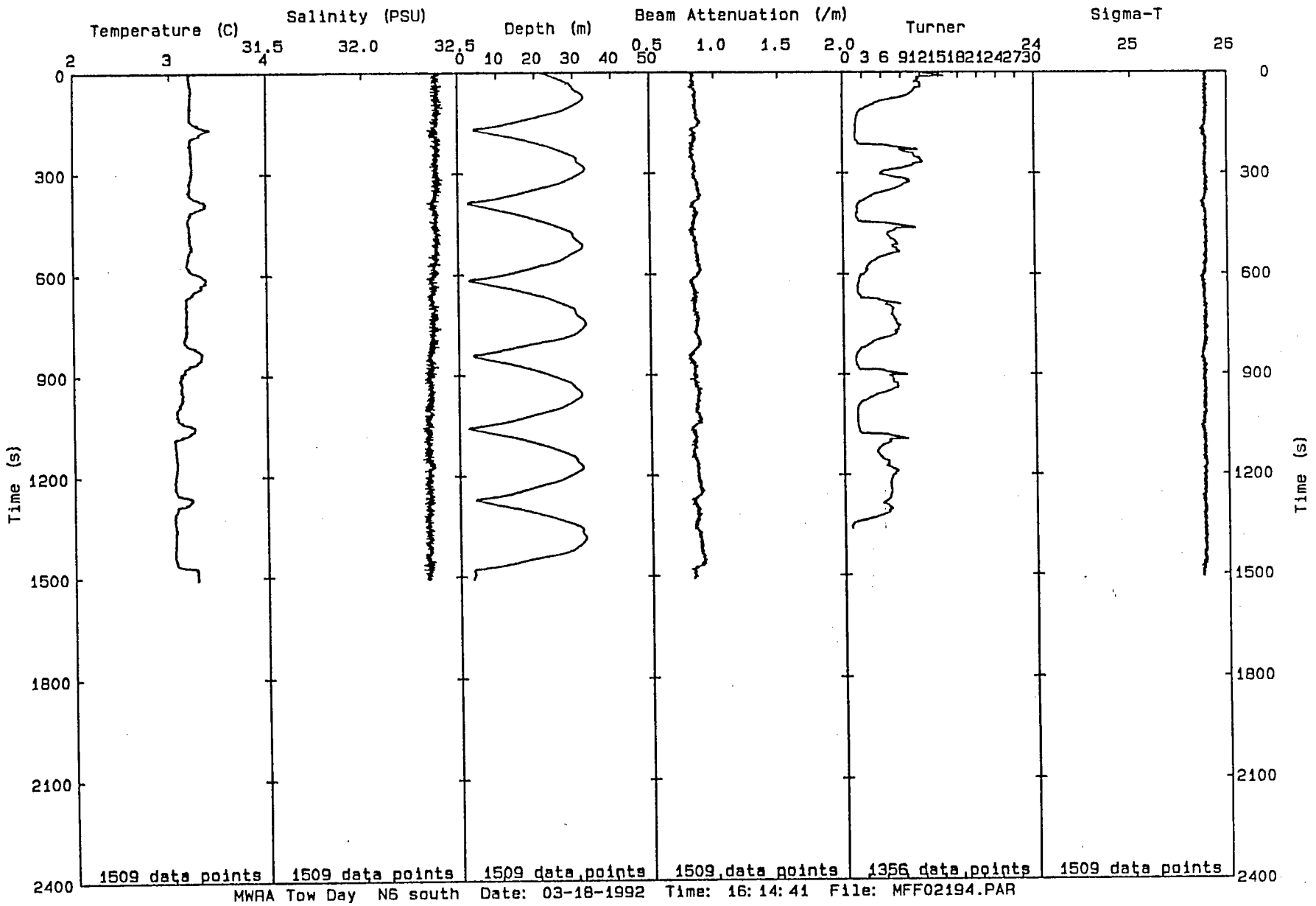
h-4

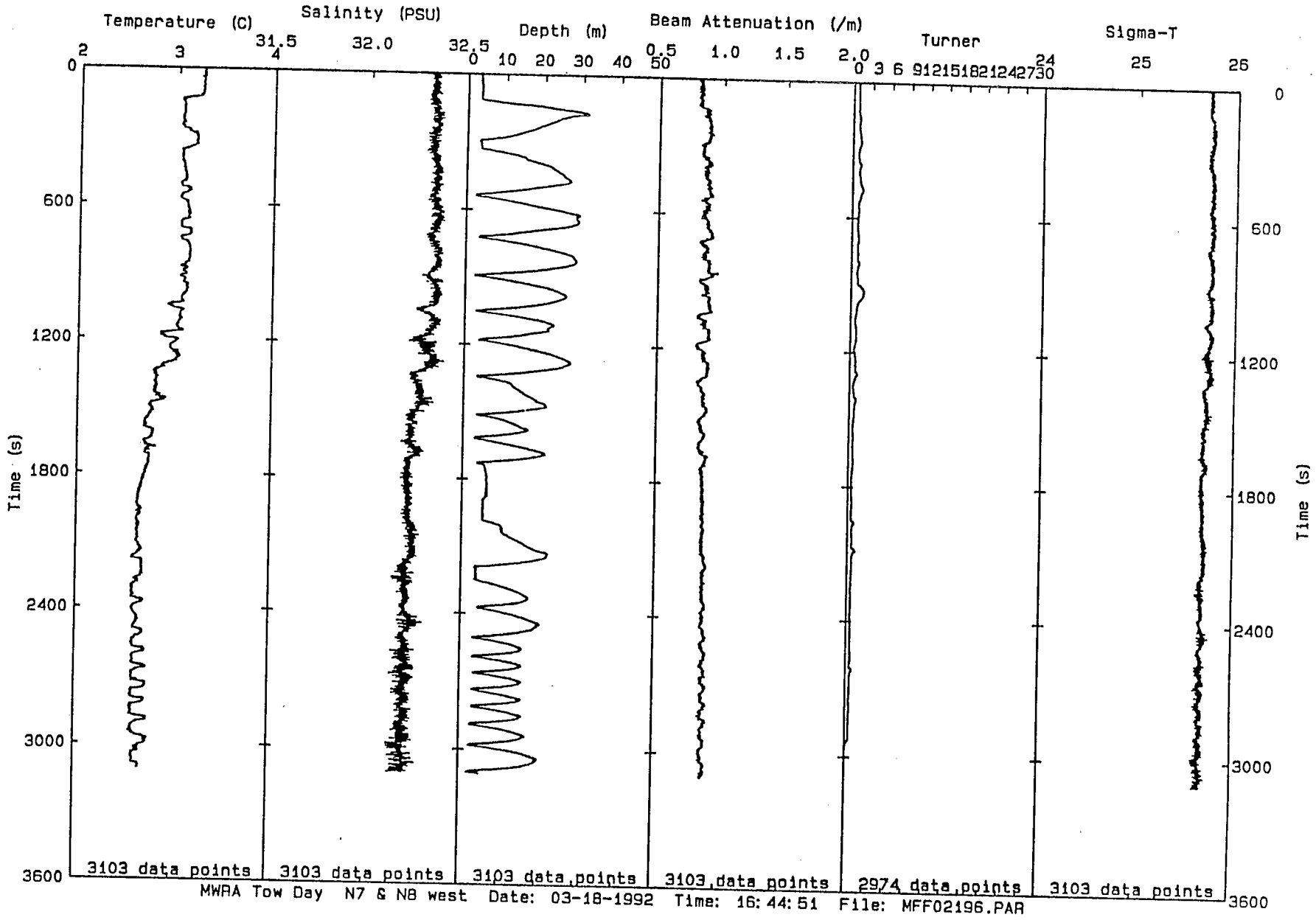

Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Turner
0 3 6 9 12 15 18 21 24 27 30
Sigma-T
24
25
26
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
2060 data points
2060 data points
2061 data points
2059 data points
1830 data points
2060 data points
MWRA Tow Day N4 south Date: 03-18-1992 Time: 15:14:36 File: MFF02192.PAR

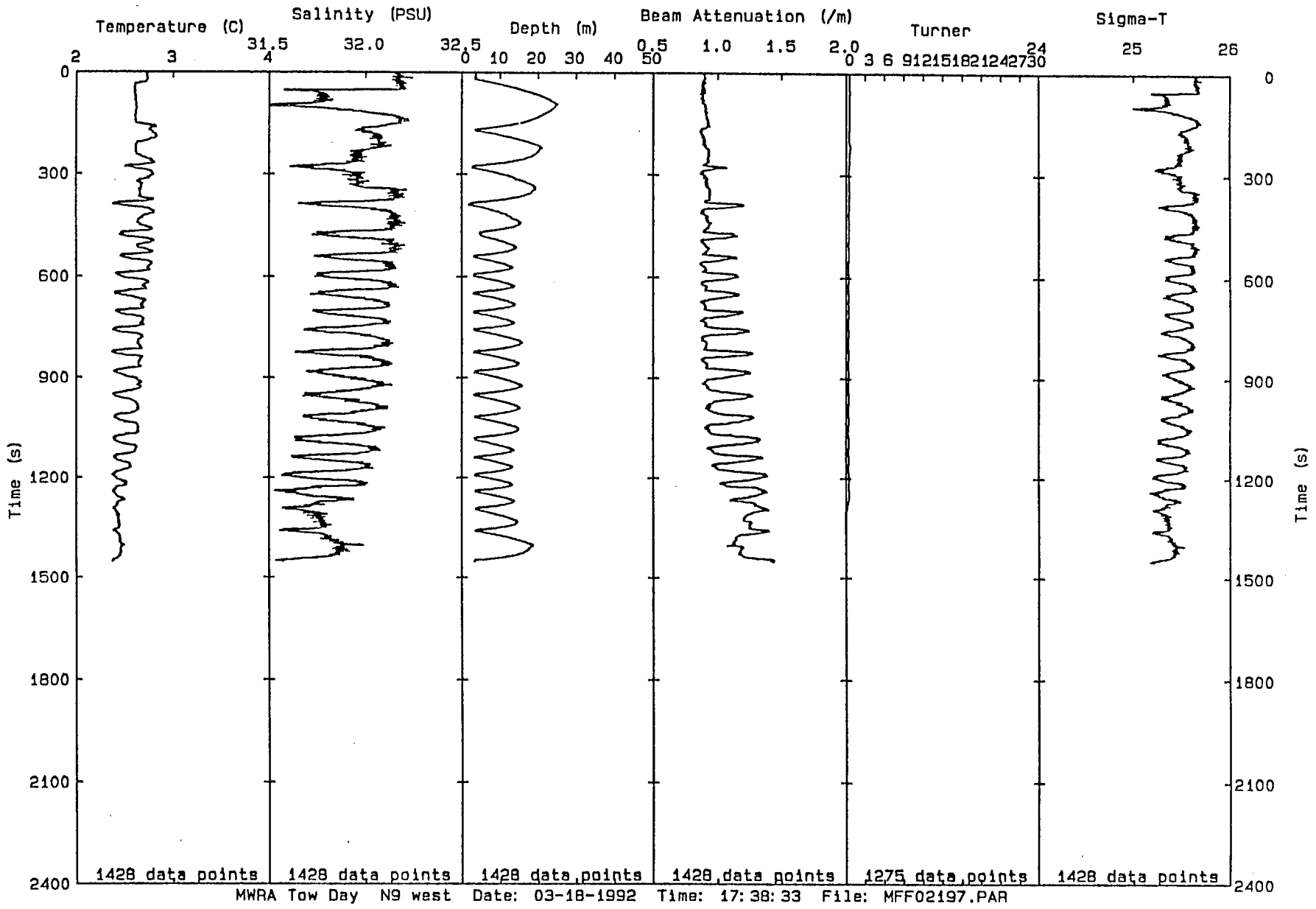
F-5


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Sigma-T
Time (s)
1515 data points
1515 data points
1515 data points
1515 data points
1358 data points
1515 data points
MWRA Tow Day N5 south Date: 03-18-1992 Time: 15:49:15 File: MFF02193.PAR

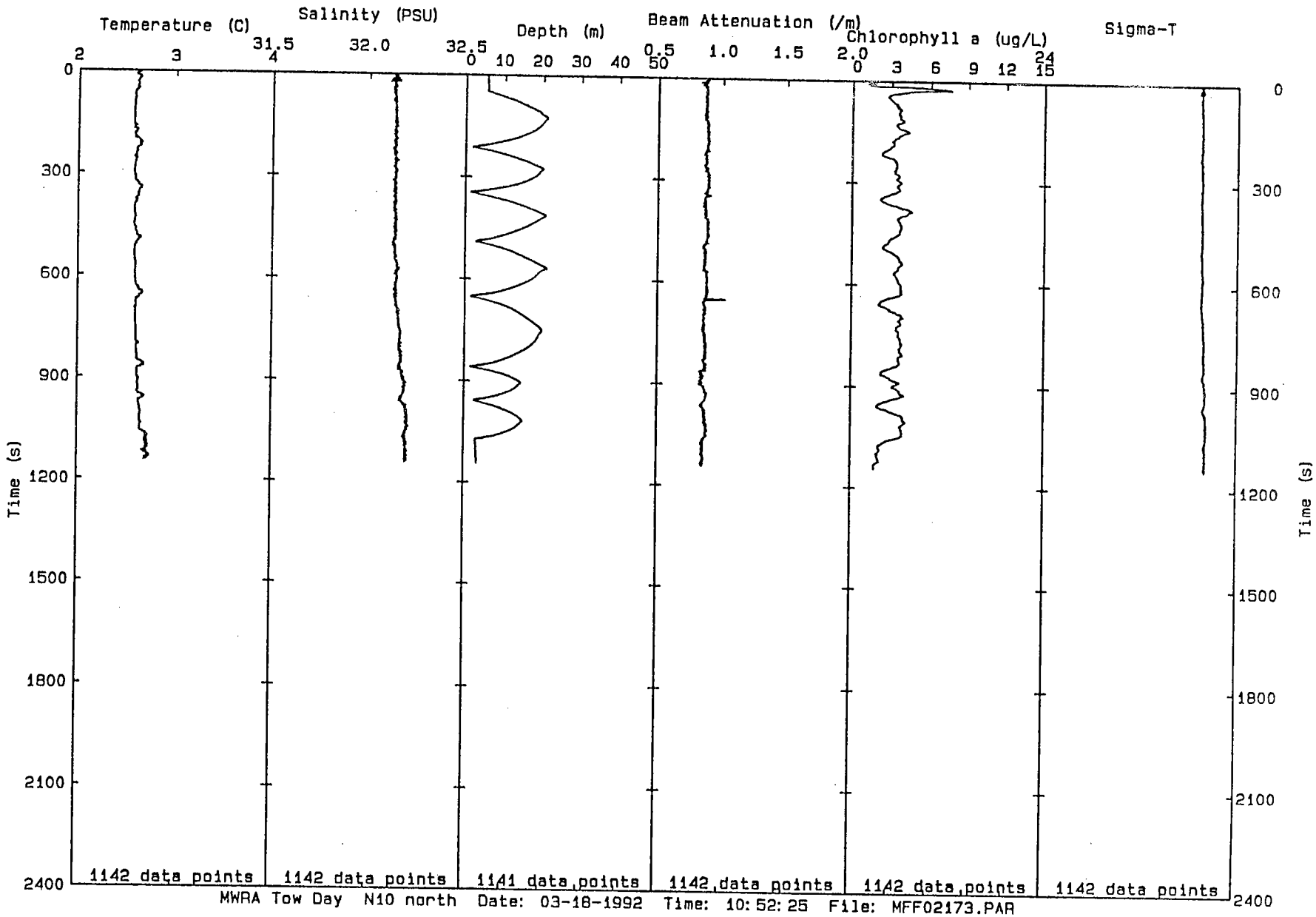
F-6


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Sigma-T
Time (s)
1509 data points
1509 data points
1509 data points
1509 data points
1356 data points
1509 data points
MWRA Tow Day N6 south Date: 03-18-1992 Time: 16:14:41 File: MFF02194.PAR

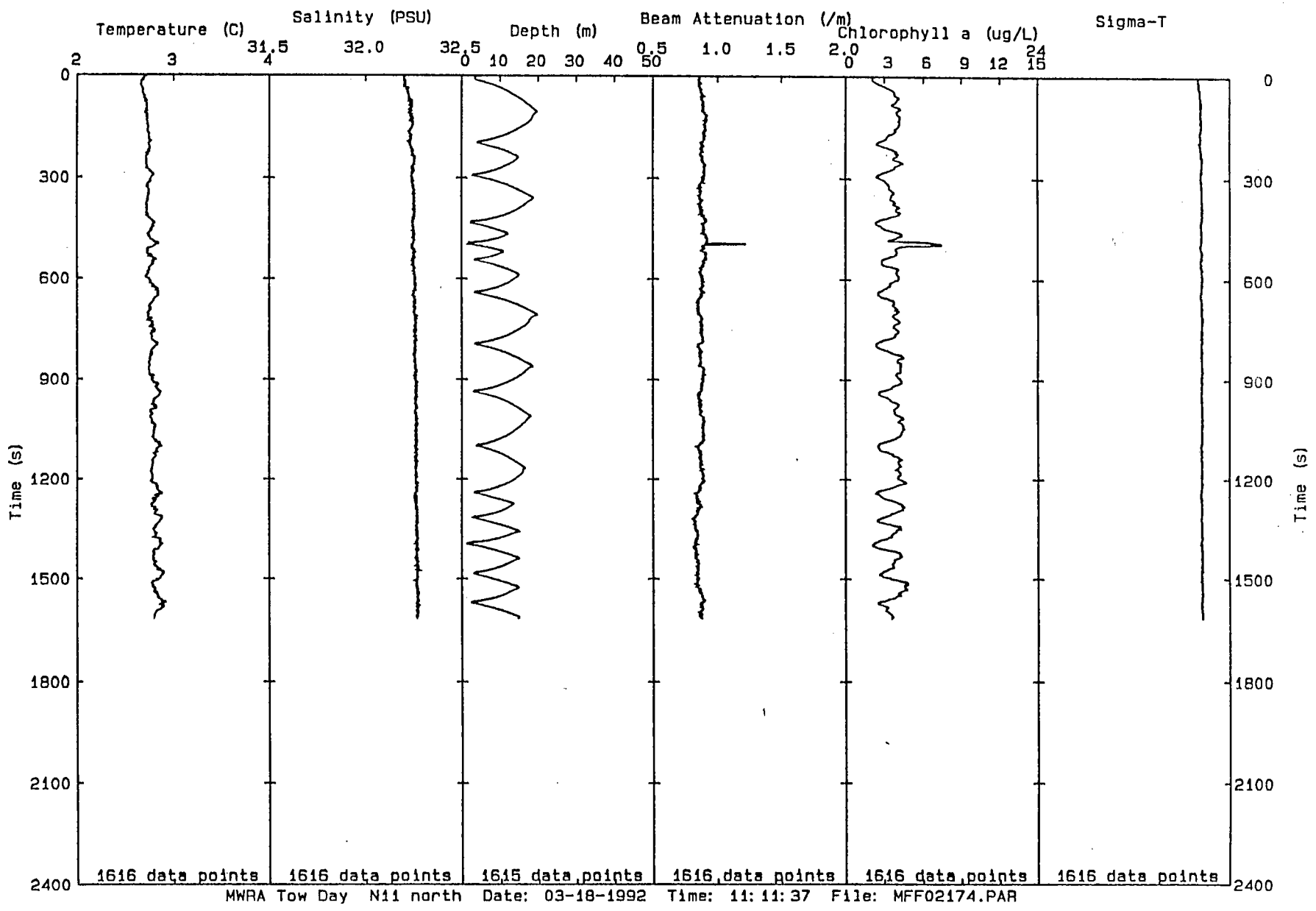

Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Sigma-T
Time (s)
3103 data points
3103 data points
3103 data points
3103 data points
2974 data points
3103 data points
MWRA Tow Day N7 & N8 west Date: 03-18-1992 Time: 16:44:51 File: MFF02196.PAR


Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Sigma-T
Time (s)
1428 data points
1428 data points
1428 data points
1428 data points
1275 data points
1428 data points
MWRA Tow Day N9 west Date: 03-18-1992 Time: 17:38:33 File: MFF02197.PAR

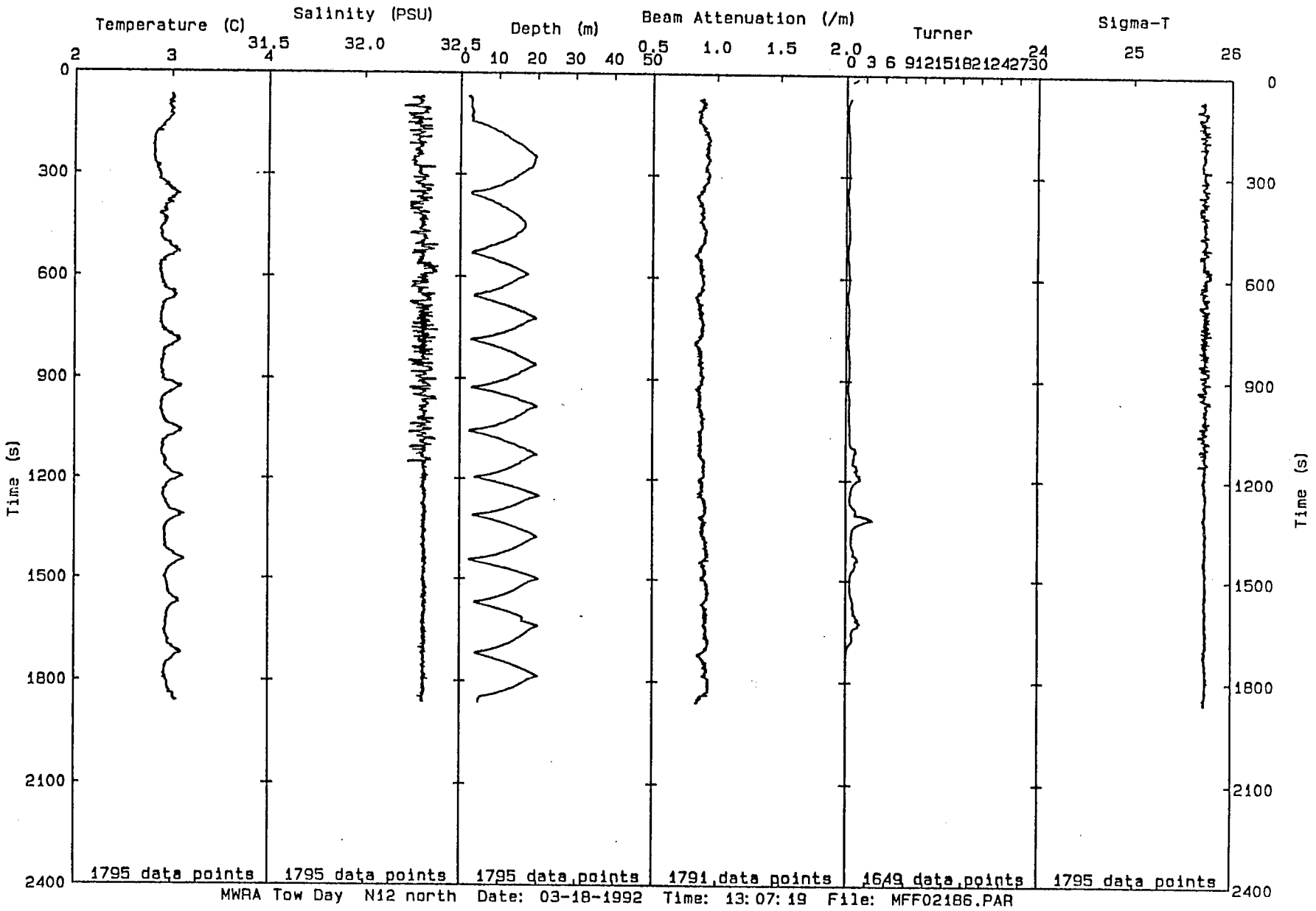
6-4


Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Chlorophyll a (ug/L)
0
3
6
9
12
15
24
Sigma-T
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1142 data points
1142 data points
1141 data points
1142 data points
1142 data points
1142 data points
MWRA Tow Day N10 north Date: 03-18-1992 Time: 10:52:25 File: MFF02173.PAR

F-10


Temperature (C)
2
3
4
Salinity (PSU)
31.5
32.0
32.5
Depth (m)
0
10
20
30
40
50
Beam Attenuation (/m)
0.5
1.0
1.5
2.0
Chlorophyll a (ug/L)
0
3
6
9
12
15
24
Sigma-T
Time (s)
0
300
600
900
1200
1500
1800
2100
2400
1616 data points
1616 data points
1615 data points
1616 data points
1616 data points
1616 data points
MWRA Tow Day N11 north Date: 03-18-1992 Time: 11:11:37 File: MFF02174.PAR

F-11

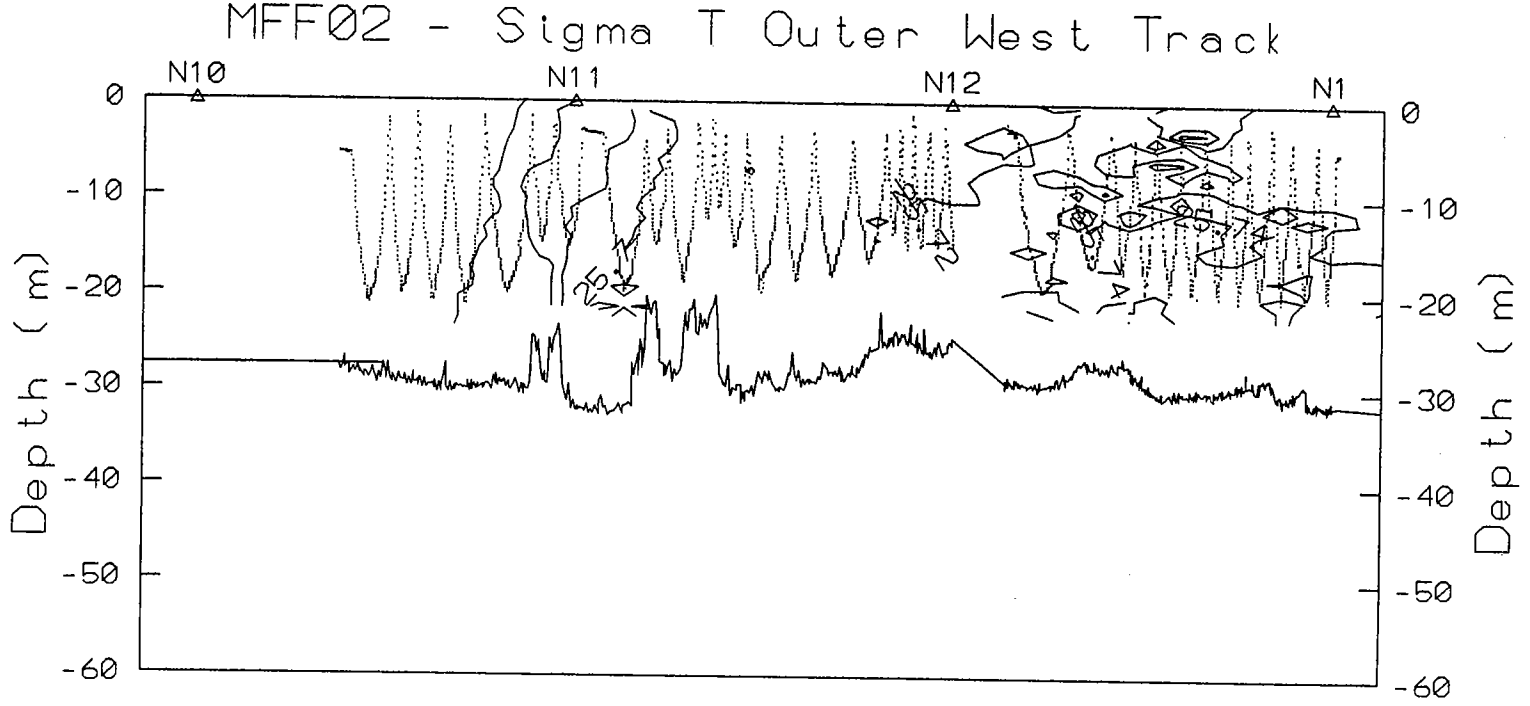

Temperature (C)
Salinity (PSU)
Depth (m)
Beam Attenuation (/m)
Turner
Sigma-T
Time (s)
1795 data points
1795 data points
1795 data points
1791 data points
1649 data points
1795 data points
MWRA Tow Day N12 north Date: 03-18-1992 Time: 13:07:19 File: MFF02186.PAR

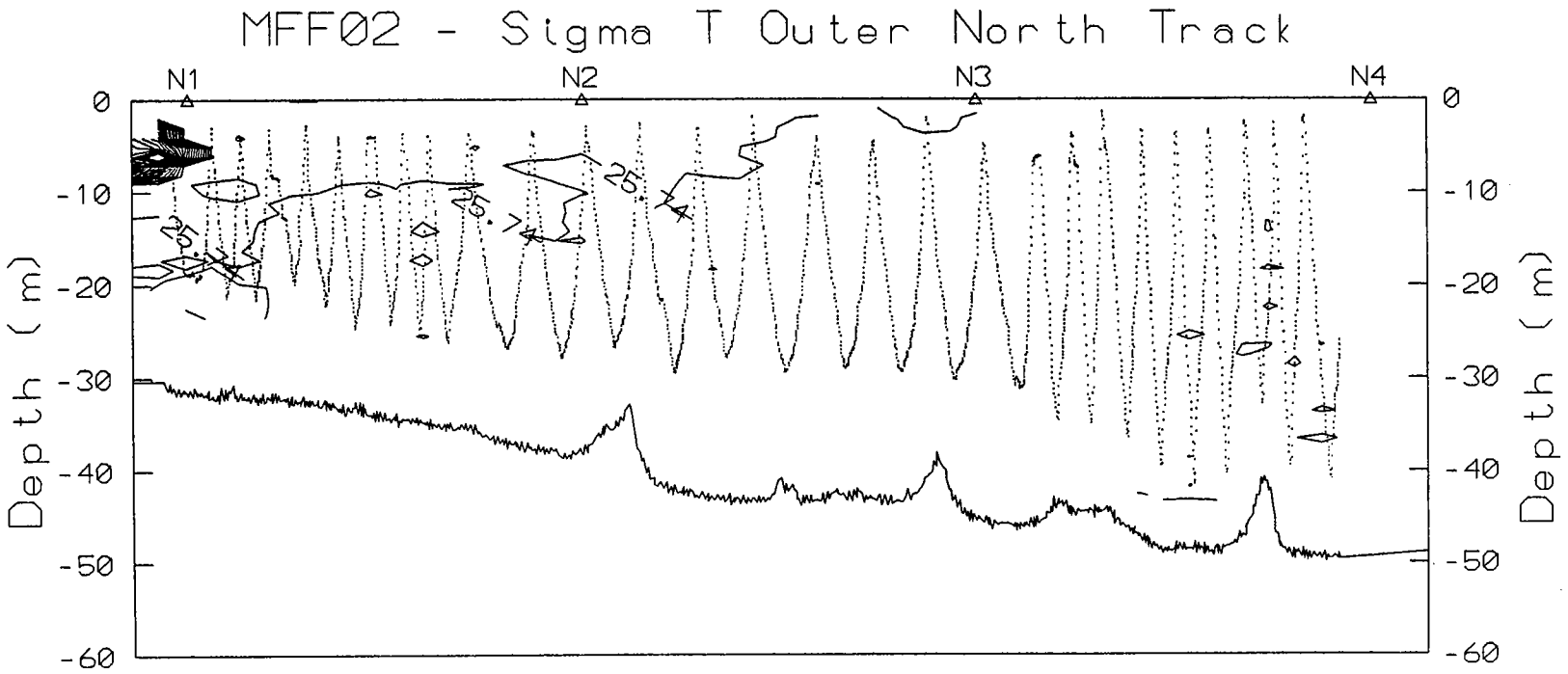
APPENDIX F

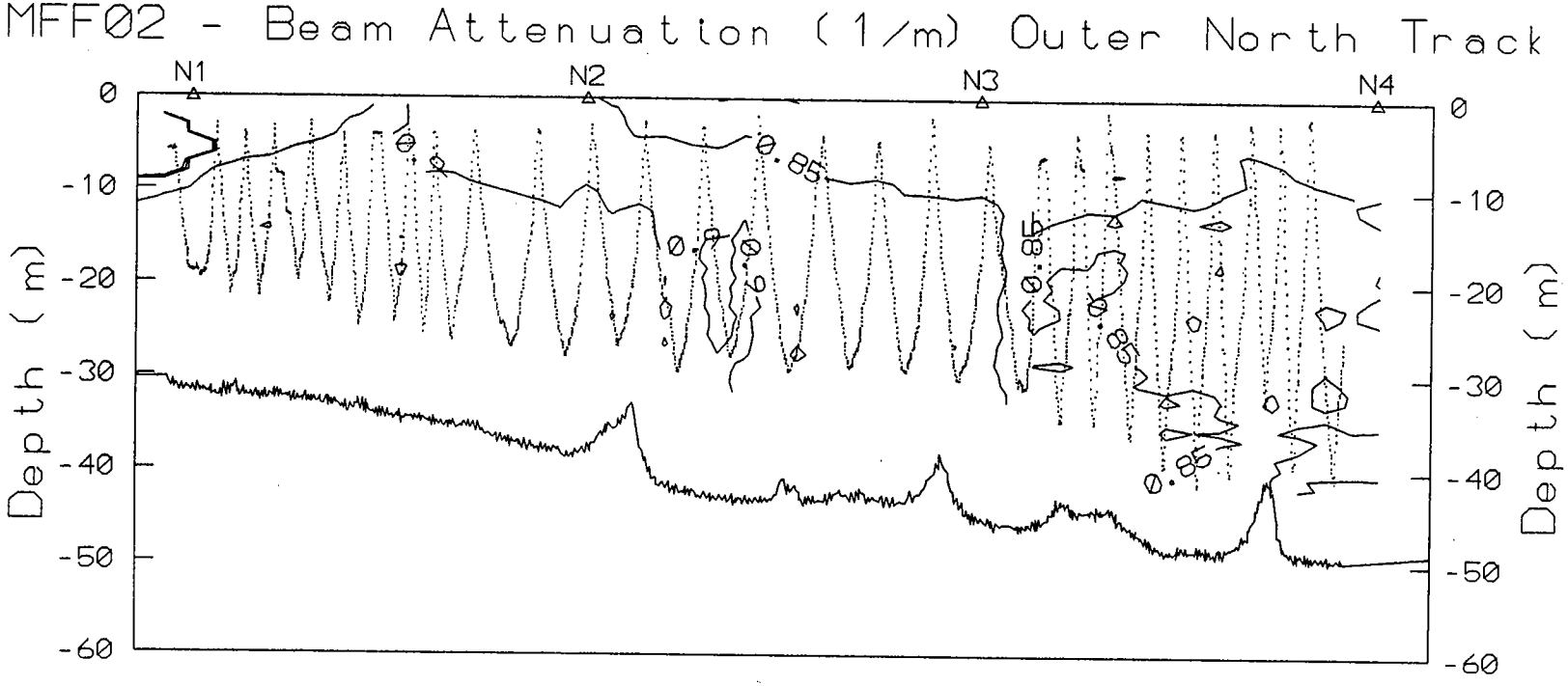
Towing Profiles for March 1992 Nearfield Stations

Part 2 Outer Track Vertical Section Plots

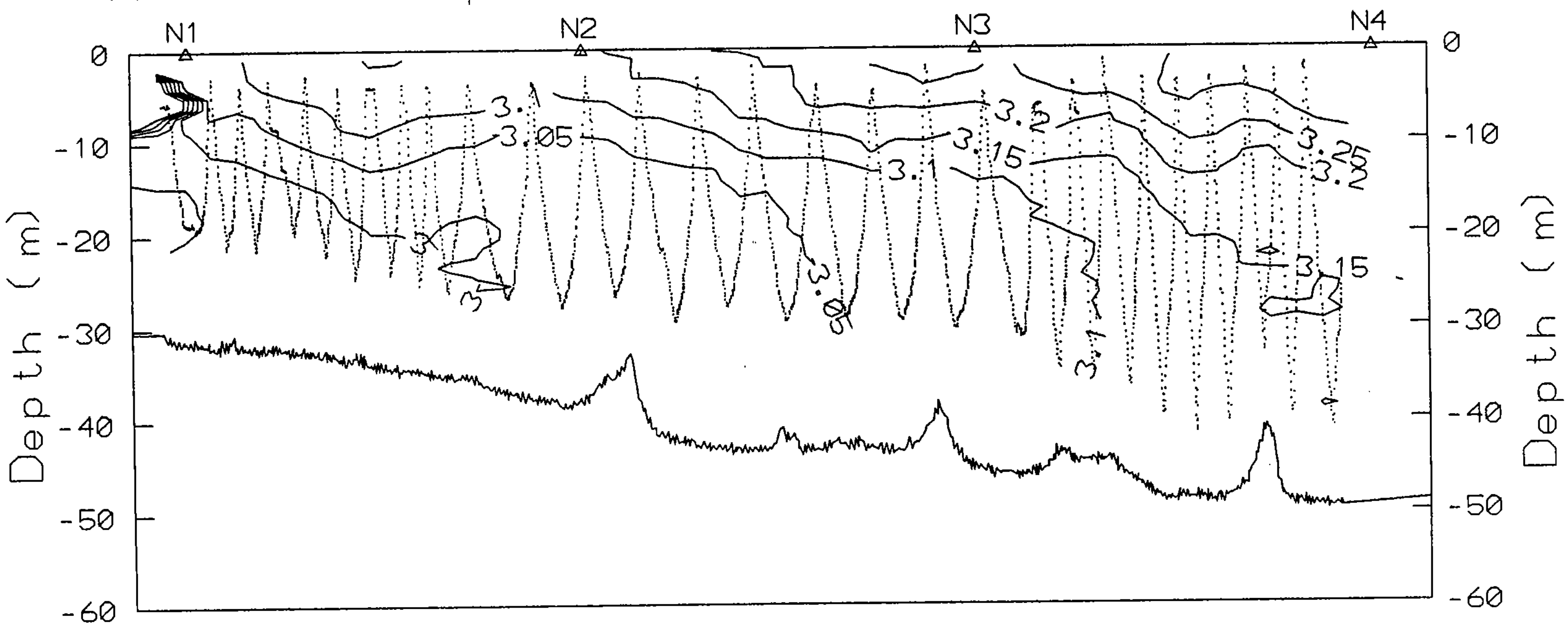
For a limited selection of parameters and tracks, data are contoured as a function of depth along tracks of tow-yo sampling; contours are generated using the data of Appendix F, part 1. Dotted V tracks show position of the towfish with sampling sensors along the track; all data used to produce contours using the inverse distance to the second power, with the search window set to overlap adjacent profiles.


MFF02 - Sigma T Outer West Track
N10
N11
N12
N1
0
-10
-20
-30
-40
-50
-60
Depth (m)
25


MFF02 - Sigma T Outer North Track
N1
N2
N3
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
25.
25.
25.


MFF02 - Beam Attenuation (1/m) Outer North Track
N1
N2
N3
N4
0
-10
-20
-30
-40
-50
-60
Depth (m)
0.85

MFF02 - Temperature (C) Outer North Track



APPENDIX G

Metabolism and Light Measurements from February 1992 Stations

Part 1

Initial Dissolved Oxygen Concentrations and Results of Light-Dark Incubations

Table data include the initial and final concentrations of dissolved oxygen. The initial concentrations were determined in triplicate from samples fixed immediately after being taken from the Niskin/GO-FLO bottle at a surface or deeper sample. Final concentrations in 300-mL BOD bottles were determined after an approximately 6-h incubation at a range of levels, or in the dark. The replicate dark bottles were for respiration estimates, where final (average of reps) minus initial (average of reps), divided by the incubation time, would yield the estimate. NPR = net production, estimated as final (single rep at a light level) minus initial (average of reps), divide by the incubation time.

TABLE G-1. DISSOLVED OXYGEN AND METABOLISM AT TWO DEPTHS OF BIOPRODUCTIVITY STATIONS FROM FEBRUARY 1992.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F01P	23-FEB-92	1415	2.16	145	DARK	13.888	0.0	0.044
F01P	23-FEB-92	1415	2.16	149B		13.973	670.0	0.058
F01P	23-FEB-92	1415	2.16	151	DARK	13.530	0.0	-0.015
F01P	23-FEB-92	1415	2.16	155B		14.098	365.0	0.079
F01P	23-FEB-92	1415	2.16	156B		14.018	660.0	0.066
F01P	23-FEB-92	1415	2.16	157B		14.075	125.0	0.075
F01P	23-FEB-92	1415	2.16	158B		14.033	750.0	0.068
F01P	23-FEB-92	1415	2.16	159	DARK	13.714	0.0	0.015
F01P	23-FEB-92	1415	2.16	159B		14.046	1000.0	0.070
F01P	23-FEB-92	1415	2.16	160B		13.935	80.0	0.052
F01P	23-FEB-92	1415	2.16	161B	INIT	13.604	0.0	
F01P	23-FEB-92	1415	2.16	162B		13.986	1400.0	0.061
F01P	23-FEB-92	1415	2.16	163B		13.996	150.0	0.062
F01P	23-FEB-92	1415	2.16	164B		14.116	1050.0	0.082
F01P	23-FEB-92	1415	2.16	165B		14.199	455.0	0.096
F01P	23-FEB-92	1415	2.16	166B		14.005	90.0	0.064
F01P	23-FEB-92	1415	2.16	167B	INIT	13.642	0.0	
F01P	23-FEB-92	1415	2.16	168B	INIT	13.622	0.0	
F01P	23-FEB-92	1415	12.21	148C		13.429	100.0	0.098
F01P	23-FEB-92	1415	12.21	153C		13.690	650.0	0.142
F01P	23-FEB-92	1415	12.21	154C		13.601	900.0	0.127
F01P	23-FEB-92	1415	12.21	157C		13.521	145.0	0.113
F01P	23-FEB-92	1415	12.21	158	DARK	12.993	0.0	0.025
F01P	23-FEB-92	1415	12.21	158C		13.611	200.0	0.128
F01P	23-FEB-92	1415	12.21	159C		13.640	890.0	0.133
F01P	23-FEB-92	1415	12.21	160C		13.616	595.0	0.129
F01P	23-FEB-92	1415	12.21	161C	INIT	12.865	0.0	
F01P	23-FEB-92	1415	12.21	162C	INIT	12.800	0.0	
F01P	23-FEB-92	1415	12.21	163	DARK	13.191	0.0	0.058

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F01P	23-FEB-92	1415	12.21	163C		13.224	90.0	0.064
F01P	23-FEB-92	1415	12.21	164	DARK	13.023	0.0	0.030
F01P	23-FEB-92	1415	12.21	164C		13.670	460.0	0.138
F01P	23-FEB-92	1415	12.21	165C		13.741	950.0	0.150
F01P	23-FEB-92	1415	12.21	166C		13.588	1400.0	0.124
F01P	23-FEB-92	1415	12.21	167C		13.666	375.0	0.137
F01P	23-FEB-92	1415	12.21	168C	INIT	12.858	0.0	
F02P	23-FEB-92	1142	1.62	145A	INIT	12.617	0.0	
F02P	23-FEB-92	1142	1.62	146A		12.907	450.0	0.051
F02P	23-FEB-92	1142	1.62	147A		13.338	400.0	0.123
F02P	23-FEB-92	1142	1.62	148A		13.052	1070.0	0.075
F02P	23-FEB-92	1142	1.62	149A	INIT	12.625	0.0	
F02P	23-FEB-92	1142	1.62	151A		13.051	560.0	0.075
F02P	23-FEB-92	1142	1.62	152A		13.002	1400.0	0.066
F02P	23-FEB-92	1142	1.62	153A		12.946	56.0	0.057
F02P	23-FEB-92	1142	1.62	154A		13.158	170.0	0.093
F02P	23-FEB-92	1142	1.62	157	DARK	12.561	0.0	-0.007
F02P	23-FEB-92	1142	1.62	157A		13.269	825.0	0.111
F02P	23-FEB-92	1142	1.62	158A		13.203	74.0	0.100
F02P	23-FEB-92	1142	1.62	159A	INIT	12.567	0.0	
F02P	23-FEB-92	1142	1.62	164A		13.097	475.0	0.082
F02P	23-FEB-92	1142	1.62	165	DARK	12.570	0.0	-0.006
F02P	23-FEB-92	1142	1.62	167	DARK	12.837	0.0	0.039
F02P	23-FEB-92	1142	1.62	167A		13.245	145.0	0.107
F02P	23-FEB-92	1142	1.62	168A		13.167	1200.0	0.094
F02P	23-FEB-92	1142	14.42	145E	INIT	12.385	0.0	
F02P	23-FEB-92	1142	14.42	146E		12.721	135.0	0.059
F02P	23-FEB-92	1142	14.42	147E		12.660	1100.0	0.049
F02P	23-FEB-92	1142	14.42	148E		12.611	115.0	0.040

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F02P	23-FEB-92	1142	14.42	149E	INIT	12.369	0.0	
F02P	23-FEB-92	1142	14.42	151E		12.689	1650.0	0.053
F02P	23-FEB-92	1142	14.42	152	DARK	12.399	0.0	0.005
F02P	23-FEB-92	1142	14.42	152E		12.672	310.0	0.051
F02P	23-FEB-92	1142	14.42	153	DARK	12.091	0.0	-0.046
F02P	23-FEB-92	1142	14.42	153E		12.660	155.0	0.049
F02P	23-FEB-92	1142	14.42	154E	INIT	12.351	0.0	
F02P	23-FEB-92	1142	14.42	157E		12.603	1050.0	0.039
F02P	23-FEB-92	1142	14.42	159E		12.525	450.0	0.026
F02P	23-FEB-92	1142	14.42	160E		12.730	610.0	0.060
F02P	23-FEB-92	1142	14.42	162	DARK	12.329	0.0	-0.006
F02P	23-FEB-92	1142	14.42	164E		12.680	475.0	0.052
F02P	23-FEB-92	1142	14.42	165E		12.673	1150.0	0.051
F02P	23-FEB-92	1142	14.42	166E		12.642	65.0	0.046
F13P	24-FEB-92	0800	2.12	145E		12.578	235.0	0.017
F13P	24-FEB-92	0800	2.12	146E		12.918	1150.0	0.074
F13P	24-FEB-92	0800	2.12	148E		12.678	185.0	0.034
F13P	24-FEB-92	0800	2.12	149E		12.403	27.0	-0.012
F13P	24-FEB-92	0800	2.12	151E	INIT	12.510	0.0	
F13P	24-FEB-92	0800	2.12	152	DARK	12.314	0.0	-0.027
F13P	24-FEB-92	0800	2.12	152E		12.635	1650.0	0.027
F13P	24-FEB-92	0800	2.12	153E		12.654	195.0	0.030
F13P	24-FEB-92	0800	2.12	154E		12.367	8.0	-0.018
F13P	24-FEB-92	0800	2.12	157E		12.708	420.0	0.039
F13P	24-FEB-92	0800	2.12	159E		12.788	400.0	0.052
F13P	24-FEB-92	0800	2.12	160E		12.675	210.0	0.033
F13P	24-FEB-92	0800	2.12	162	DARK	12.428	0.0	-0.008
F13P	24-FEB-92	0800	2.12	164E	INIT	12.479	0.0	
F13P	24-FEB-92	0800	2.12	165E		12.449	7.0	-0.004
F13P	24-FEB-92	0800	2.12	166E		12.298	25.0	-0.029

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F13P	24-FEB-92	0800	2.12	167	DARK	12.416	0.0	-0.010
F13P	24-FEB-92	0800	2.12	167E	INIT	12.435	0.0	
F13P	24-FEB-92	0800	9.11	145C		12.445	230.0	0.060
F13P	24-FEB-92	0800	9.11	146C		12.072	9.5	-0.002
F13P	24-FEB-92	0800	9.11	147B	INIT	12.083	0.0	
F13P	24-FEB-92	0800	9.11	147C		12.215	33.0	0.022
F13P	24-FEB-92	0800	9.11	148B		12.382	300.0	0.050
F13P	24-FEB-92	0800	9.11	149C		12.258	32.0	0.029
F13P	24-FEB-92	0800	9.11	150B		12.327	1750.0	0.041
F13P	24-FEB-92	0800	9.11	150C		12.201	130.0	0.020
F13P	24-FEB-92	0800	9.11	151C		12.168	11.0	0.014
F13P	24-FEB-92	0800	9.11	152B		12.415	400.0	0.056
F13P	24-FEB-92	0800	9.11	155C		12.395	190.0	0.052
F13P	24-FEB-92	0800	9.11	156	DARK	12.075	0.0	-0.001
F13P	24-FEB-92	0800	9.11	156C		12.411	190.0	0.055
F13P	24-FEB-92	0800	9.11	157A		12.432	1150.0	0.058
F13P	24-FEB-92	0800	9.11	161	DARK	8.692	0.0	-0.565
F13P	24-FEB-92	0800	9.11	165A	INIT	12.033	0.0	
F13P	24-FEB-92	0800	9.11	166	DARK	12.250	0.0	0.028
F13P	24-FEB-92	0800	9.11	166A	INIT	12.132	0.0	
F23P	25-FEB-92	1339	2.34	146D		12.480	195.0	0.048
F23P	25-FEB-92	1339	2.34	147E		12.560	80.0	0.062
F23P	25-FEB-92	1339	2.34	151D		12.778	185.0	0.098
F23P	25-FEB-92	1339	2.34	152D		12.472	260.0	0.047
F23P	25-FEB-92	1339	2.34	155E		12.541	850.0	0.058
F23P	25-FEB-92	1339	2.34	156E		12.443	2.5	0.042
F23P	25-FEB-92	1339	2.34	157	DARK	12.387	0.0	0.033
F23P	25-FEB-92	1339	2.34	157B	DARK	12.642	0.0	0.075
F23P	25-FEB-92	1339	2.34	158C	INIT	12.368	0.0	
F23P	25-FEB-92	1339	2.34	158D		12.490	11.0	0.050

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F23P	25-FEB-92	1339	2.34	160A		12.458	12.0	0.045
F23P	25-FEB-92	1339	2.34	162E		12.428	6.0	0.040
F23P	25-FEB-92	1339	2.34	163D		12.519	77.0	0.055
F23P	25-FEB-92	1339	2.34	163E	INIT	12.099	0.0	
F23P	25-FEB-92	1339	2.34	165D		12.684	620.0	0.082
F23P	25-FEB-92	1339	2.34	168C	INIT	12.106	0.0	
F23P	25-FEB-92	1339	2.34	168E		12.849	100.0	0.110
F23P	25-FEB-92	1339	9.51	147A		12.397	190.0	0.046
F23P	25-FEB-92	1339	9.51	151	DARK	12.424	0.0	0.050
F23P	25-FEB-92	1339	9.51	152A		11.978	4.0	-0.024
F23P	25-FEB-92	1339	9.51	153D		12.096	5.5	-0.004
F23P	25-FEB-92	1339	9.51	154C		12.595	195.0	0.079
F23P	25-FEB-92	1339	9.51	155B		12.459	640.0	0.056
F23P	25-FEB-92	1339	9.51	156	DARK	12.240	0.0	0.019
F23P	25-FEB-92	1339	9.51	156B		12.548	85.0	0.071
F23P	25-FEB-92	1339	9.51	157C	INIT	12.173	0.0	
F23P	25-FEB-92	1339	9.51	158	DARK	12.245	0.0	0.020
F23P	25-FEB-92	1339	9.51	159A		12.453	70.0	0.055
F23P	25-FEB-92	1339	9.51	159C		12.655	270.0	0.089
F23P	25-FEB-92	1339	9.51	159D	INIT	12.070	0.0	
F23P	25-FEB-92	1339	9.51	160C		12.506	900.0	0.064
F23P	25-FEB-92	1339	9.51	164B		12.433	13.0	0.052
F23P	25-FEB-92	1339	9.51	164C		12.536	95.0	0.069
F23P	25-FEB-92	1339	9.51	165C		12.403	50.0	0.047
F23P	25-FEB-92	1339	9.51	167A	INIT	12.127	0.0	
N01P	25-FEB-92	1215	2.19	145C		12.518	120.0	0.021
N01P	25-FEB-92	1215	2.19	146C		12.404	4.5	0.002
N01P	25-FEB-92	1215	2.19	147C		12.425	28.0	0.006
N01P	25-FEB-92	1215	2.19	148C	INIT	12.390	0.0	

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N01P	25-FEB-92	1215	2.19	149C		12.324	25.0	-0.011
N01P	25-FEB-92	1215	2.19	150C		12.399	40.0	0.001
N01P	25-FEB-92	1215	2.19	151C		12.304	3.0	-0.015
N01P	25-FEB-92	1215	2.19	153C		12.478	330.0	0.015
N01P	25-FEB-92	1215	2.19	155C		12.597	175.0	0.034
N01P	25-FEB-92	1215	2.19	156C		12.522	185.0	0.022
N01P	25-FEB-92	1215	2.19	161	DARK	12.030	0.0	-0.060
N01P	25-FEB-92	1215	2.19	161C	INIT	12.382	0.0	
N01P	25-FEB-92	1215	2.19	162C		12.549	1100.0	0.026
N01P	25-FEB-92	1215	2.19	163C	INIT	12.401	0.0	
N01P	25-FEB-92	1215	2.19	164	DARK	11.671	0.0	-0.120
N01P	25-FEB-92	1215	2.19	166	DARK	11.921	0.0	-0.078
N01P	25-FEB-92	1215	2.19	166C		12.458	430.0	0.011
N01P	25-FEB-92	1215	2.19	167C		12.614	1250.0	0.037
N01P	25-FEB-92	1215	12.77	145A		12.596	360.0	0.046
N01P	25-FEB-92	1215	12.77	146A		12.574	1250.0	0.042
N01P	25-FEB-92	1215	12.77	146B		12.500	12.0	0.030
N01P	25-FEB-92	1215	12.77	148A		12.570	400.0	0.042
N01P	25-FEB-92	1215	12.77	149	DARK	12.065	0.0	-0.042
N01P	25-FEB-92	1215	12.77	149A		12.643	195.0	0.054
N01P	25-FEB-92	1215	12.77	150	DARK	12.028	0.0	-0.049
N01P	25-FEB-92	1215	12.77	150E	INIT	12.346	0.0	
N01P	25-FEB-92	1215	12.77	151A		12.611	67.0	0.049
N01P	25-FEB-92	1215	12.77	153	DARK	11.873	0.0	-0.075
N01P	25-FEB-92	1215	12.77	153A		12.346	205.0	0.004
N01P	25-FEB-92	1215	12.77	154B		12.445	4.0	0.021
N01P	25-FEB-92	1215	12.77	157D		12.505	73.0	0.031
N01P	25-FEB-92	1215	12.77	161E	INIT	12.324	0.0	
N01P	25-FEB-92	1215	12.77	162A		12.732	1150.0	0.069
N01P	25-FEB-92	1215	12.77	164A	INIT	12.289	0.0	

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N01P	25-FEB-92	1215	12.77	164D		12.493	25.0	0.029
N01P	25-FEB-92	1215	12.77	167B		12.530	4.7	0.035
N04P	26-FEB-92	1005	2.3	145	DARK	12.807	0.0	-0.001
N04P	26-FEB-92	1005	2.3	145E		13.362	130.0	0.089
N04P	26-FEB-92	1005	2.3	146E		13.222	1750.0	0.067
N04P	26-FEB-92	1005	2.3	148E		13.322	90.0	0.083
N04P	26-FEB-92	1005	2.3	149E		12.804	15.0	-0.002
N04P	26-FEB-92	1005	2.3	151E		13.374	1200.0	0.091
N04P	26-FEB-92	1005	2.3	153E		13.273	105.0	0.075
N04P	26-FEB-92	1005	2.3	154E		12.785	3.0	-0.005
N04P	26-FEB-92	1005	2.3	157E		13.473	210.0	0.107
N04P	26-FEB-92	1005	2.3	159E		13.636	370.0	0.134
N04P	26-FEB-92	1005	2.3	160E		13.324	160.0	0.083
N04P	26-FEB-92	1005	2.3	162	DARK	12.637	0.0	-0.029
N04P	26-FEB-92	1005	2.3	163	DARK	12.690	0.0	-0.020
N04P	26-FEB-92	1005	2.3	164E	INIT	12.814	0.0	
N04P	26-FEB-92	1005	2.3	165E		12.925	3.0	0.018
N04P	26-FEB-92	1005	2.3	166E		12.833	13.0	0.003
N04P	26-FEB-92	1005	2.3	167E	INIT	12.812	0.0	
N04P	26-FEB-92	1005	20.52	145B		13.015	50.0	0.089
N04P	26-FEB-92	1005	20.52	145D		12.744	85.0	0.045
N04P	26-FEB-92	1005	20.52	148		12.561	14.0	0.015
N04P	26-FEB-92	1005	20.52	148D		12.613	3.0	0.024
N04P	26-FEB-92	1005	20.52	149D		12.567	17.0	0.016
N04P	26-FEB-92	1005	20.52	150A		13.096	160.0	0.102
N04P	26-FEB-92	1005	20.52	154D		12.587	5.0	0.019
N04P	26-FEB-92	1005	20.52	155	DARK	12.436	0.0	-0.005
N04P	26-FEB-92	1005	20.52	155A	INIT	12.362	0.0	
N04P	26-FEB-92	1005	20.52	156D		13.107	145.0	0.104
N04P	26-FEB-92	1005	20.52	160	DARK	12.501	0.0	0.005
N04P	26-FEB-92	1005	20.52	160D		12.876	1200.0	0.066

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N04P	26-FEB-92	1005	20.52	161A		12.981	1650.0	0.083
N04P	26-FEB-92	1005	20.52	163A		13.280	410.0	0.132
N04P	26-FEB-92	1005	20.52	165A	INIT	12.542	0.0	
N04P	26-FEB-92	1005	20.52	166D	INIT	12.502	0.0	
N04P	26-FEB-92	1005	20.52	168	DARK	12.525	0.0	0.009
N04P	26-FEB-92	1005	20.52	168B		13.119	165.0	0.106
N07P	24-FEB-92	1120	2.15	145D		12.160	240.0	0.004
N07P	24-FEB-92	1120	2.15	146	DARK	11.968	0.0	-0.028
N07P	24-FEB-92	1120	2.15	148D		12.123	7.0	-0.003
N07P	24-FEB-92	1120	2.15	149D		12.090	28.0	-0.008
N07P	24-FEB-92	1120	2.15	150D		12.268	240.0	0.022
N07P	24-FEB-92	1120	2.15	153D		12.213	1500.0	0.013
N07P	24-FEB-92	1120	2.15	154	DARK	11.814	0.0	-0.054
N07P	24-FEB-92	1120	2.15	154D		12.065	7.5	-0.012
N07P	24-FEB-92	1120	2.15	155D		12.186	23.0	0.008
N07P	24-FEB-92	1120	2.15	156D		12.126	185.0	-0.002
N07P	24-FEB-92	1120	2.15	159D	INIT	12.080	0.0	
N07P	24-FEB-92	1120	2.15	160	DARK	12.001	0.0	-0.023
N07P	24-FEB-92	1120	2.15	160D		12.262	900.0	0.021
N07P	24-FEB-92	1120	2.15	161D		12.090	330.0	-0.008
N07P	24-FEB-92	1120	2.15	162D		12.237	240.0	0.016
N07P	24-FEB-92	1120	2.15	165D	INIT	12.171	0.0	
N07P	24-FEB-92	1120	2.15	166D	INIT	12.163	0.0	
N07P	24-FEB-92	1120	2.15	167D		12.260	370.0	0.020
N07P	24-FEB-92	1120	15.06	145B		12.154	145.0	0.039
N07P	24-FEB-92	1120	15.06	146B		12.129	24.0	0.035
N07P	24-FEB-92	1120	15.06	147	DARK	11.753	0.0	-0.027
N07P	24-FEB-92	1120	15.06	148		12.122	22.0	0.034
N07P	24-FEB-92	1120	15.06	150A		12.270	145.0	0.059
N07P	24-FEB-92	1120	15.06	151B		12.107	1350.0	0.032
N07P	24-FEB-92	1120	15.06	152C		12.195	135.0	0.046

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N07P	24-FEB-92	1120	15.06	153B	INIT	11.877	0.0	
N07P	24-FEB-92	1120	15.06	154		12.214	6.0	0.049
N07P	24-FEB-92	1120	15.06	155	DARK	11.687	0.0	-0.038
N07P	24-FEB-92	1120	15.06	155A	INIT	11.813	0.0	
N07P	24-FEB-92	1120	15.06	156A		12.223	150.0	0.051
N07P	24-FEB-92	1120	15.06	161A		12.280	1000.0	0.060
N07P	24-FEB-92	1120	15.06	161B	INIT	12.062	0.0	
N07P	24-FEB-92	1120	15.06	163A		12.253	350.0	0.056
N07P	24-FEB-92	1120	15.06	167B		11.913	7.0	-0.001
N07P	24-FEB-92	1120	15.06	168	DARK	10.985	0.0	-0.155
N07P	24-FEB-92	1120	15.06	168B		12.210	470.0	0.049
N10P	24-FEB-92	1310	2.07	145A		12.553	400.0	0.063
N10P	24-FEB-92	1310	2.07	146A	INIT	12.179	0.0	
N10P	24-FEB-92	1310	2.07	149	DARK	11.783	0.0	-0.066
N10P	24-FEB-92	1310	2.07	149A		12.427	80.0	0.042
N10P	24-FEB-92	1310	2.07	150	DARK	12.442	0.0	0.044
N10P	24-FEB-92	1310	2.07	151A		12.521	195.0	0.057
N10P	24-FEB-92	1310	2.07	152A		11.863	4.2	-0.052
N10P	24-FEB-92	1310	2.07	153A		12.309	200.0	0.022
N10P	24-FEB-92	1310	2.07	154A		12.317	3.5	0.023
N10P	24-FEB-92	1310	2.07	157D		12.009	120.0	-0.028
N10P	24-FEB-92	1310	2.07	158A		12.592	1050.0	0.069
N10P	24-FEB-92	1310	2.07	159A		12.280	32.0	0.017
N10P	24-FEB-92	1310	2.07	160A		11.525	25.5	-0.109
N10P	24-FEB-92	1310	2.07	162A		12.534	1350.0	0.060
N10P	24-FEB-92	1310	2.07	164A	INIT	12.162	0.0	
N10P	24-FEB-92	1310	2.07	168A	INIT	12.188	0.0	
N10P	24-FEB-92	1310	10.02	146D		12.590	420.0	0.097
N10P	24-FEB-92	1310	10.02	147A	INIT	12.047	0.0	
N10P	24-FEB-92	1310	10.02	147E		12.255	200.0	0.042

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N10P	24-FEB-92	1310	10.02	150E		12.424	1300.0	0.070
N10P	24-FEB-92	1310	10.02	151D		12.260	195.0	0.042
N10P	24-FEB-92	1310	10.02	152D		12.311	360.0	0.051
N10P	24-FEB-92	1310	10.02	155E		12.490	1100.0	0.081
N10P	24-FEB-92	1310	10.02	156E	INIT	11.991	0.0	
N10P	24-FEB-92	1310	10.02	157	DARK	11.662	0.0	-0.057
N10P	24-FEB-92	1310	10.02	157B	DARK	11.983	0.0	-0.004
N10P	24-FEB-92	1310	10.02	158D		12.265	15.0	0.043
N10P	24-FEB-92	1310	10.02	161E		12.274	2.9	0.045
N10P	24-FEB-92	1310	10.02	162E		12.358	4.5	0.059
N10P	24-FEB-92	1310	10.02	163D		12.026	51.0	0.003
N10P	24-FEB-92	1310	10.02	164D		12.342	28.0	0.056
N10P	24-FEB-92	1310	10.02	165	DARK	12.083	0.0	0.013
N10P	24-FEB-92	1310	10.02	167A	INIT	11.979	0.0	
N10P	24-FEB-92	1310	10.02	168E		12.401	85.0	0.066
N16P	25-FEB-92	0800	2.38	145E		12.866	145.0	0.037
N16P	25-FEB-92	0800	2.38	146E	INIT	12.608	0.0	
N16P	25-FEB-92	0800	2.38	148E		12.982	200.0	0.056
N16P	25-FEB-92	0800	2.38	149E		12.757	29.0	0.019
N16P	25-FEB-92	0800	2.38	151E		12.978	1650.0	0.056
N16P	25-FEB-92	0800	2.38	152	DARK	12.552	0.0	-0.015
N16P	25-FEB-92	0800	2.38	152E		13.104	1200.0	0.077
N16P	25-FEB-92	0800	2.38	153E		13.016	170.0	0.062
N16P	25-FEB-92	0800	2.38	154E		12.808	10.0	0.028
N16P	25-FEB-92	0800	2.38	157E		12.841	490.0	0.033
N16P	25-FEB-92	0800	2.38	159E		13.005	350.0	0.060
N16P	25-FEB-92	0800	2.38	160E		12.991	145.0	0.058
N16P	25-FEB-92	0800	2.38	162	DARK	12.536	0.0	-0.018
N16P	25-FEB-92	0800	2.38	164E	INIT	12.657	0.0	
N16P	25-FEB-92	0800	2.38	165E		12.775	5.4	0.022

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N16P	25-FEB-92	0800	2.38	166E		12.808	28.0	0.027
N16P	25-FEB-92	0800	2.38	167	DARK	12.399	0.0	-0.041
N16P	25-FEB-92	0800	2.38	167E	INIT	12.665	0.0	
N16P	25-FEB-92	0800	12.01	145B		12.998	145.0	0.028
N16P	25-FEB-92	0800	12.01	145D		13.058	170.0	0.038
N16P	25-FEB-92	0800	12.01	148		12.712	30.0	-0.020
N16P	25-FEB-92	0800	12.01	148D		12.845	9.5	0.002
N16P	25-FEB-92	0800	12.01	149D		12.682	28.5	-0.025
N16P	25-FEB-92	0800	12.01	150A		12.947	110.0	0.019
N16P	25-FEB-92	0800	12.01	153D	INIT	12.817	0.0	
N16P	25-FEB-92	0800	12.01	154D		12.879	5.3	0.008
N16P	25-FEB-92	0800	12.01	155	DARK	12.653	0.0	-0.030
N16P	25-FEB-92	0800	12.01	156D		12.938	200.0	0.018
N16P	25-FEB-92	0800	12.01	159D	INIT	12.832	0.0	
N16P	25-FEB-92	0800	12.01	160	DARK	12.794	0.0	-0.006
N16P	25-FEB-92	0800	12.01	160D		13.083	1200.0	0.042
N16P	25-FEB-92	0800	12.01	163A		13.012	490.0	0.030
N16P	25-FEB-92	0800	12.01	165D	INIT	12.842	0.0	
N16P	25-FEB-92	0800	12.01	166D		12.983	1700.0	0.025
N16P	25-FEB-92	0800	12.01	168	DARK	12.598	0.0	-0.039
N16P	25-FEB-92	0800	12.01	168B		13.096	490.0	0.044
N20P	25-FEB-92	0900	2.84	145	DARK	12.718	0.0	0.027
N20P	25-FEB-92	0900	2.84	148B		13.178	390.0	0.102
N20P	25-FEB-92	0900	2.84	149B		12.726	26.0	0.028
N20P	25-FEB-92	0900	2.84	150B		13.052	145.0	0.082
N20P	25-FEB-92	0900	2.84	151B		13.102	900.0	0.090
N20P	25-FEB-92	0900	2.84	152B		13.088	380.0	0.088
N20P	25-FEB-92	0900	2.84	153B		12.884	120.0	0.054
N20P	25-FEB-92	0900	2.84	155A	INIT	12.548	0.0	
N20P	25-FEB-92	0900	2.84	158B		13.033	1200.0	0.079
N20P	25-FEB-92	0900	2.84	159	DARK	12.693	0.0	0.023

TABLE G-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N20P	25-FEB-92	0900	2.84	159B		12.762	5.0	0.034
N20P	25-FEB-92	0900	2.84	160B		13.118	215.0	0.093
N20P	25-FEB-92	0900	2.84	161A	INIT	12.623	0.0	
N20P	25-FEB-92	0900	2.84	162B		13.159	191.0	0.099
N20P	25-FEB-92	0900	2.84	163	DARK	12.723	0.0	0.028
N20P	25-FEB-92	0900	2.84	163B		12.740	6.6	0.031
N20P	25-FEB-92	0900	2.84	165A	INIT	12.482	0.0	
N20P	25-FEB-92	0900	2.84	165B		12.919	21.0	0.060
N20P	25-FEB-92	0900	12.14	146	DARK	12.185	0.0	-0.060
N20P	25-FEB-92	0900	12.14	147	DARK	12.294	0.0	-0.043
N20P	25-FEB-92	0900	12.14	147B	INIT	12.567	0.0	
N20P	25-FEB-92	0900	12.14	150D		12.631	115.0	0.012
N20P	25-FEB-92	0900	12.14	152C		13.426	145.0	0.142
N20P	25-FEB-92	0900	12.14	154	DARK	12.283	0.0	-0.044
N20P	25-FEB-92	0900	12.14	154A		12.559	31.0	0.001
N20P	25-FEB-92	0900	12.14	155D		12.490	26.0	-0.011
N20P	25-FEB-92	0900	12.14	156A		12.741	240.0	0.030
N20P	25-FEB-92	0900	12.14	157A		12.727	950.0	0.028
N20P	25-FEB-92	0900	12.14	158A		12.352	7.0	-0.033
N20P	25-FEB-92	0900	12.14	161B	INIT	12.529	0.0	
N20P	25-FEB-92	0900	12.14	161D		12.813	320.0	0.042
N20P	25-FEB-92	0900	12.14	162D		12.688	226.0	0.022
N20P	25-FEB-92	0900	12.14	166A		12.647	1350.0	0.015
N20P	25-FEB-92	0900	12.14	166B	INIT	12.571	0.0	
N20P	25-FEB-92	0900	12.14	167D		12.623	445.0	0.011
N20P	25-FEB-92	0900	12.14	168A		12.480	5.0	-0.012

APPENDIX G

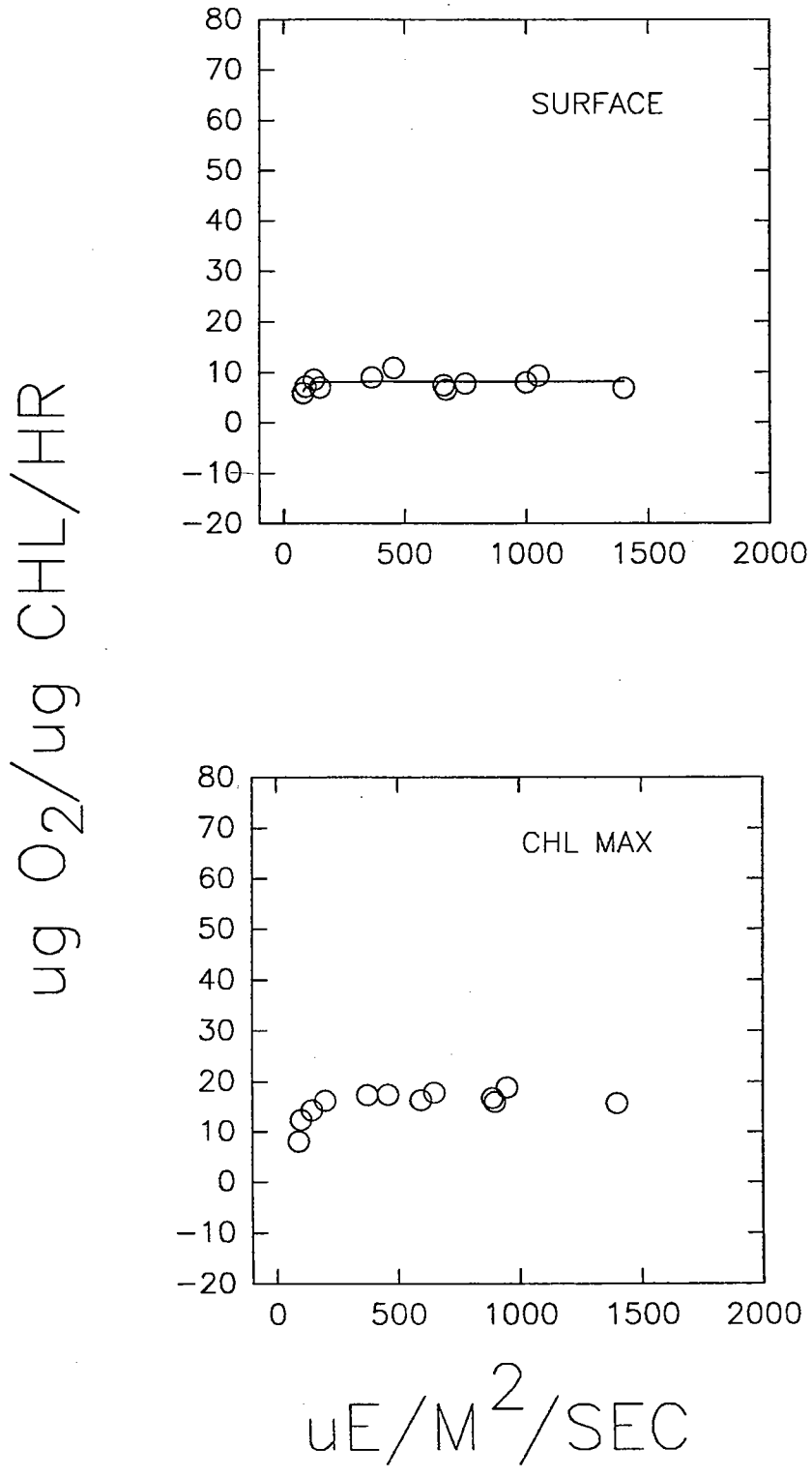
Metabolism and Light Measurements from February 1992 Stations

Part 2

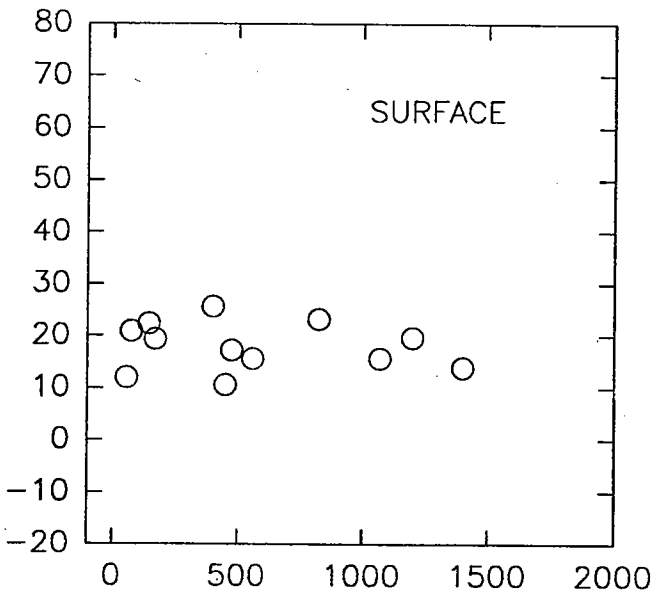
P-I Plots

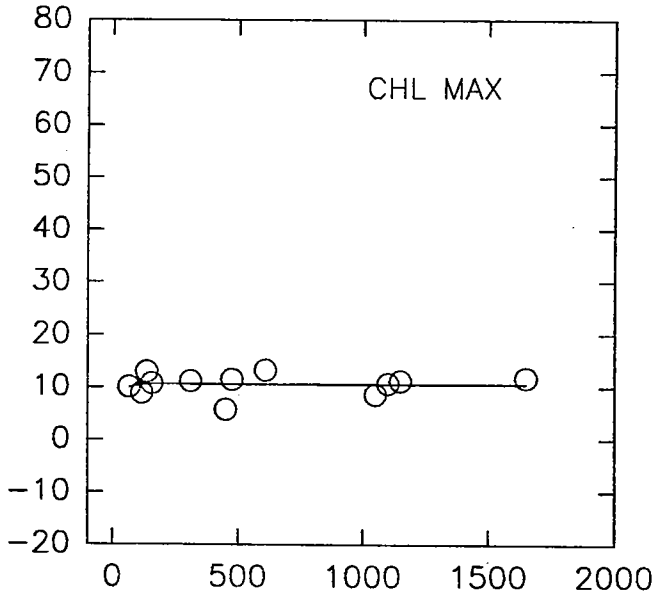
Rates of net production (Appendix G, part 1) have been normalized by dividing by the average chlorophyll concentration determined by wet chemical analysis on duplicate samples taken from the Niskin/GO-FLO bottles used for incubations. These chlorophyll data are given in Appendix A. Curves were drawn as described in methods, based on modeling (SAS, 1985). Where no curve is drawn, the model could not be fit. Fitted model coefficients are given in Appendix G, part 3 (following). SUR= surface sample (~1-3 m) and CHL MAX = deeper sample (variable depth from station to station).

STATION F1P CRUISE 1



STATION F2P CRUISE 1

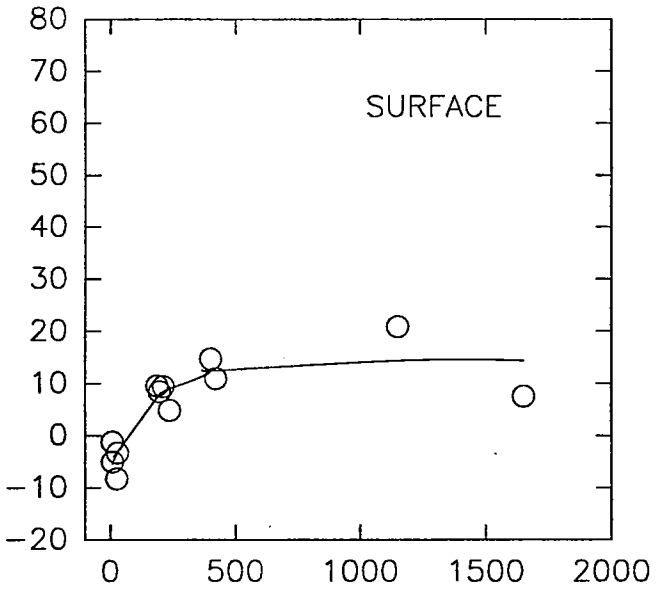


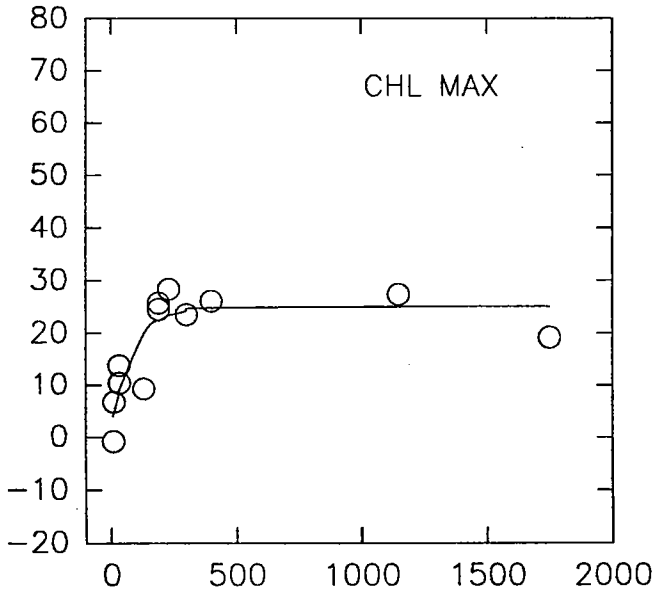


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION F13P CRUISE 1

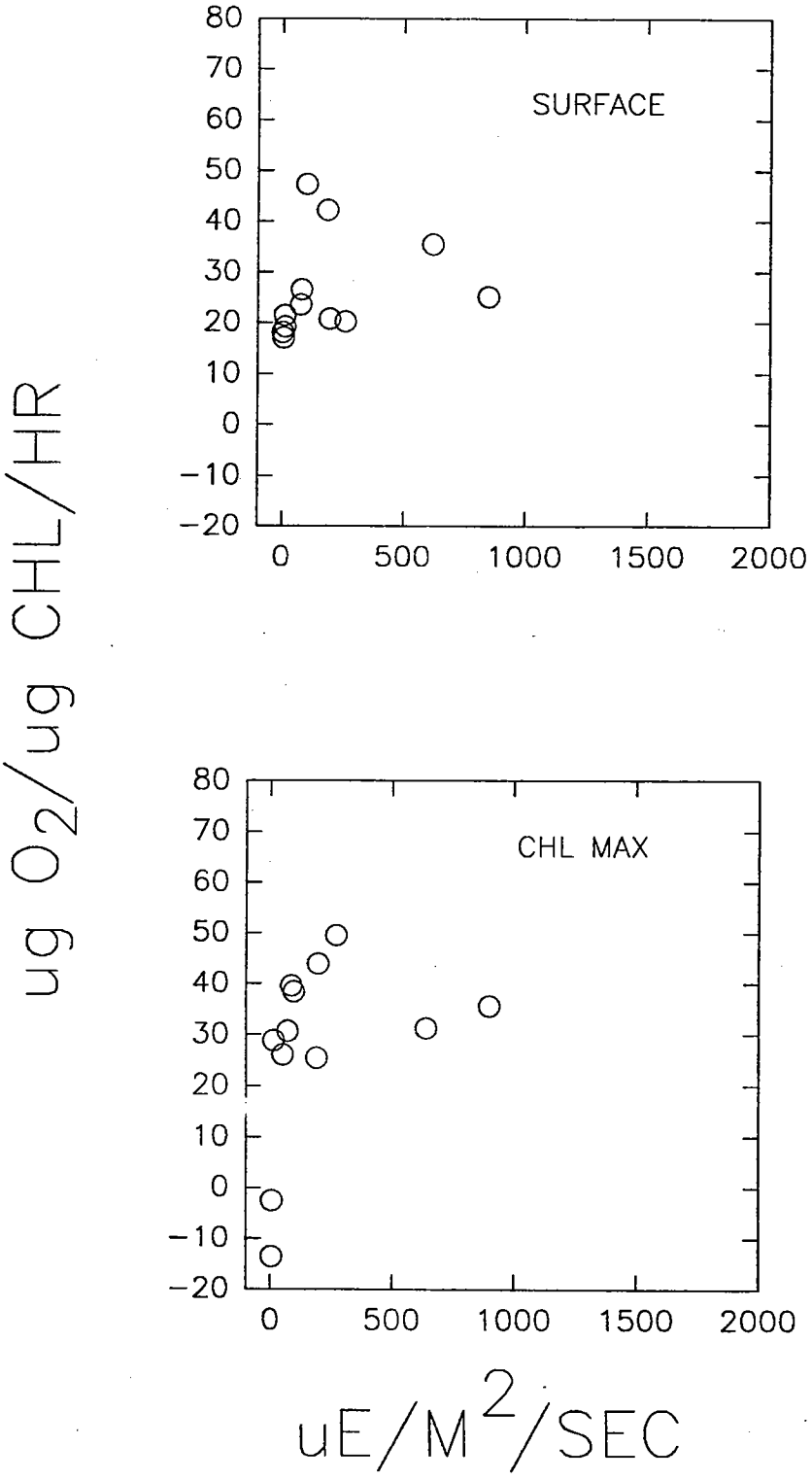




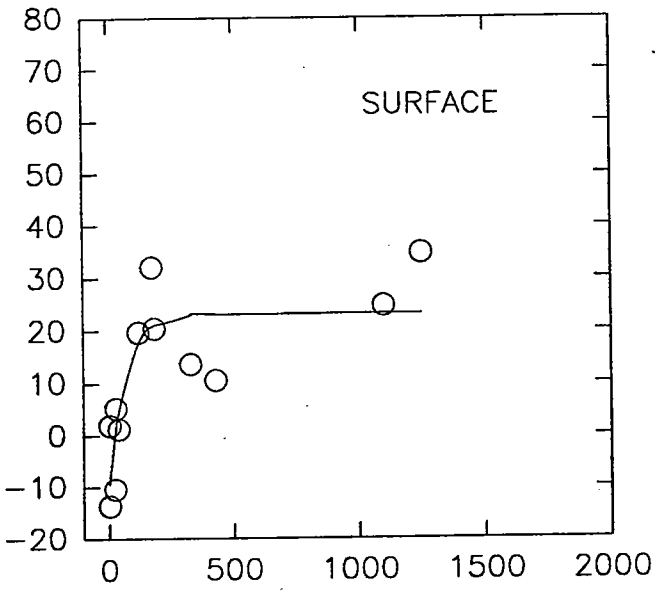
ug O_2/ug CHL/HR

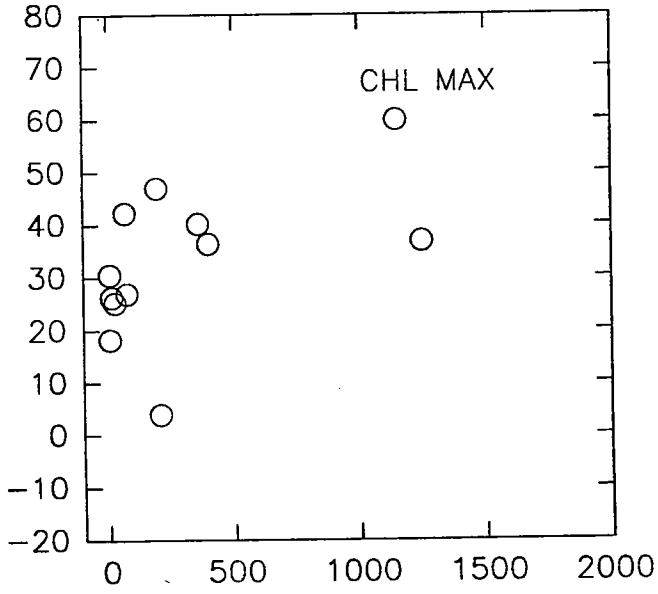
uE/M^2/SEC

STATION F23P CRUISE 1



STATION N1P CRUISE 1

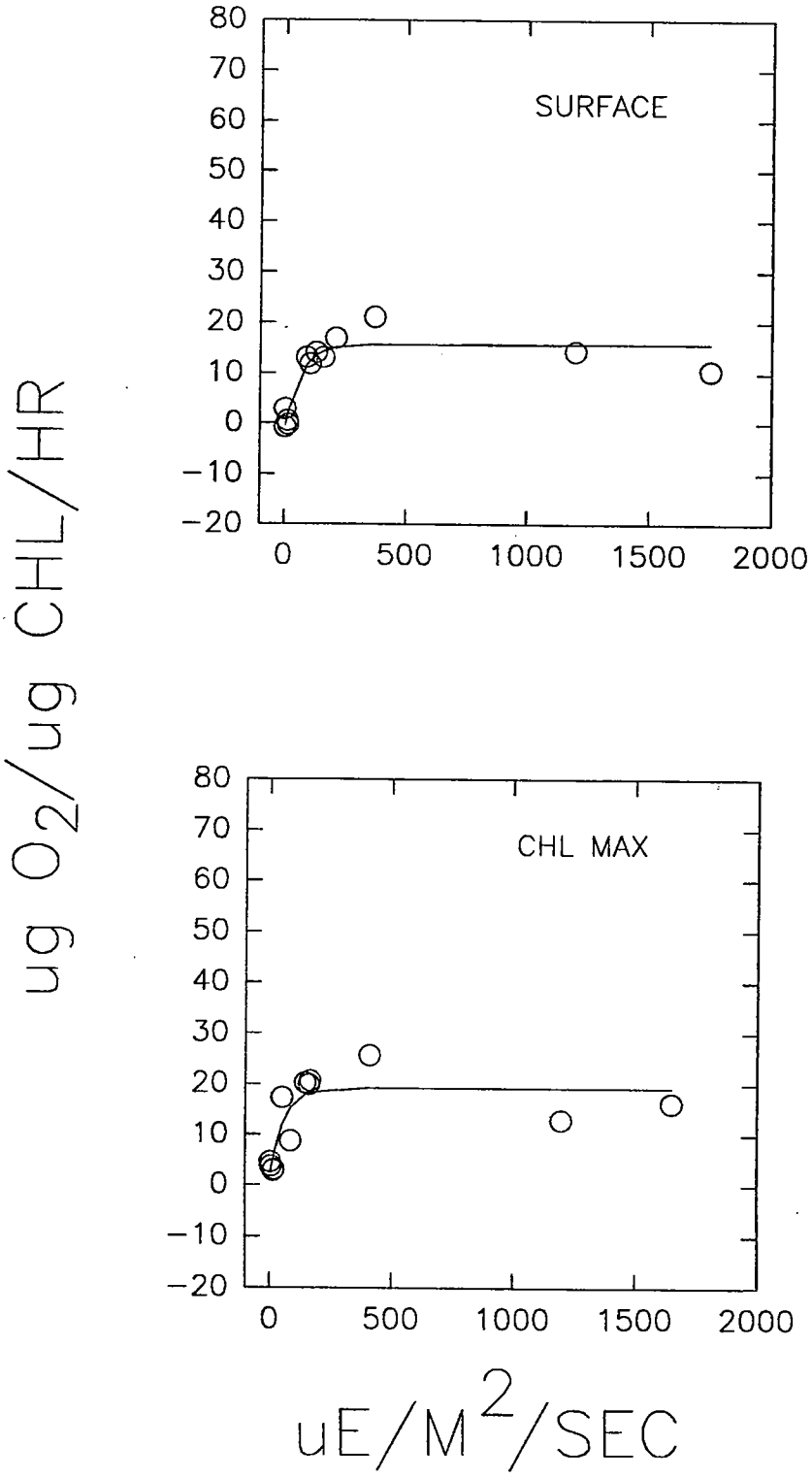




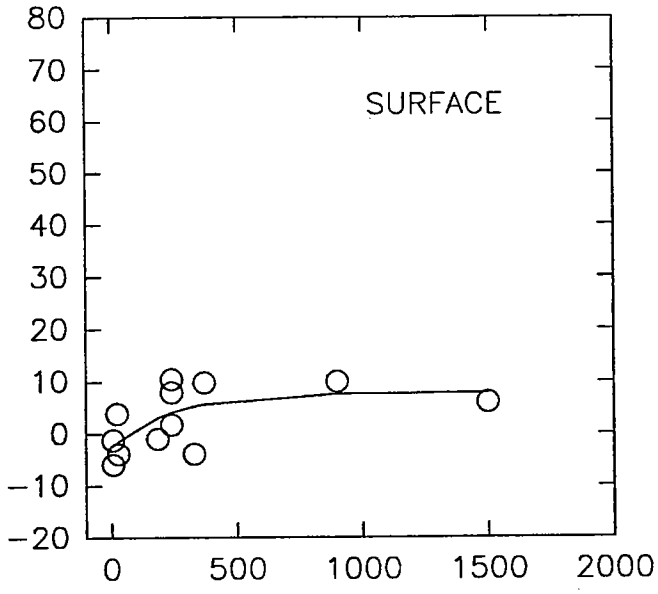
ug O_2/ug CHL/HR

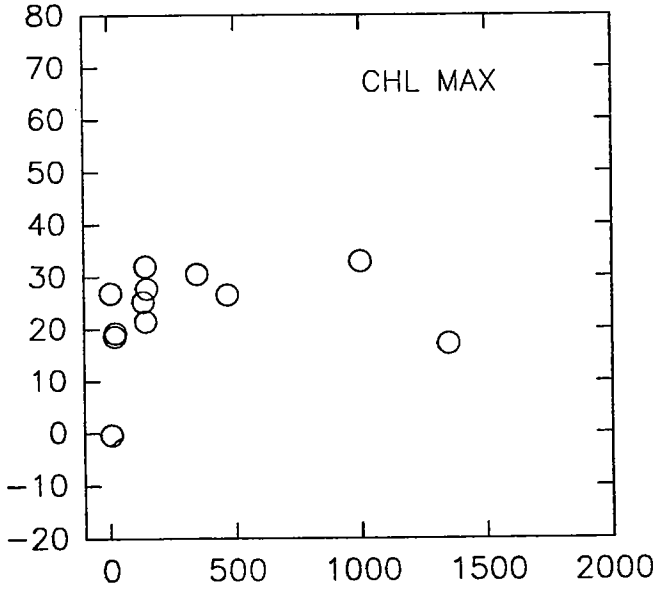
uE/M^2/SEC

STATION N4P CRUISE 1



STATION N7P CRUISE 1

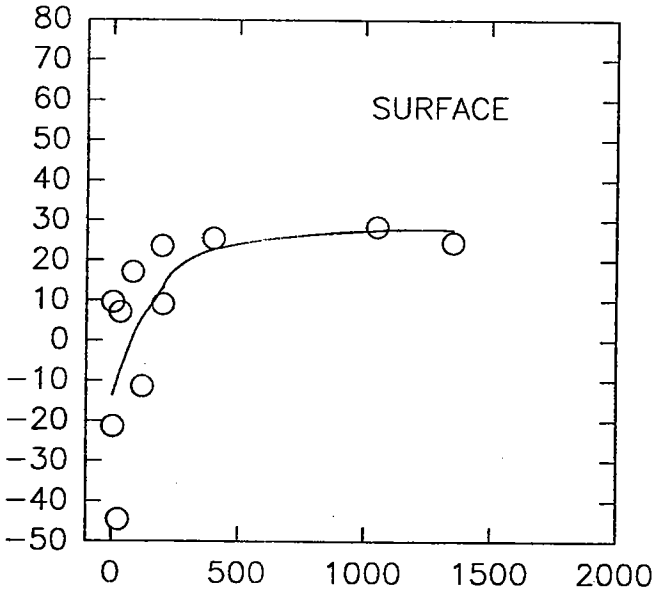


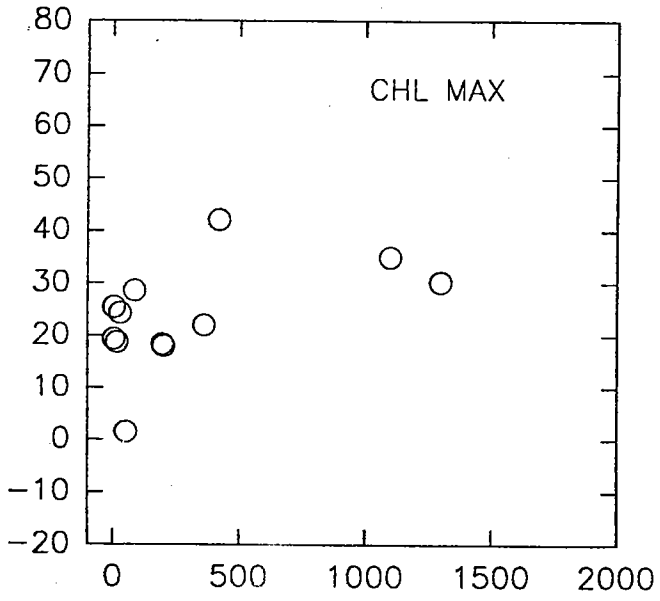


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION N10P CRUISE 1

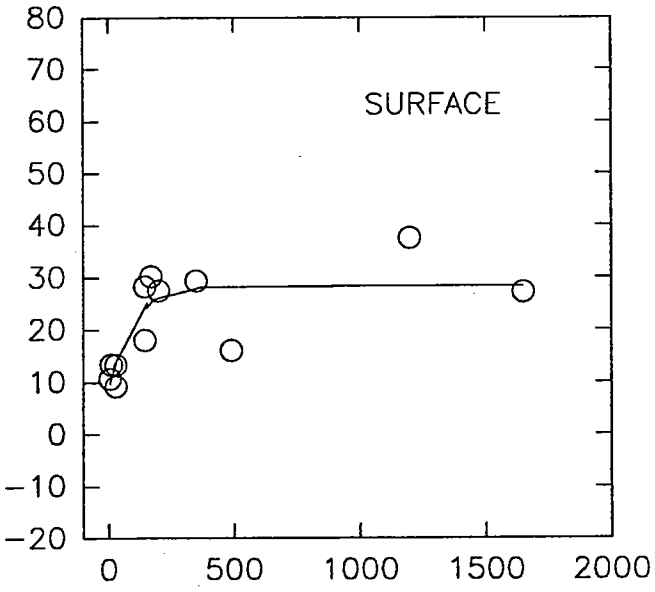


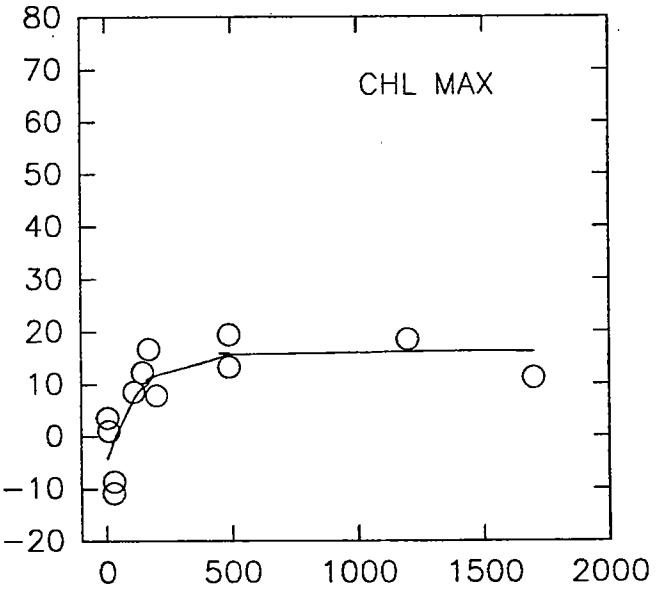


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION N16P CRUISE 1

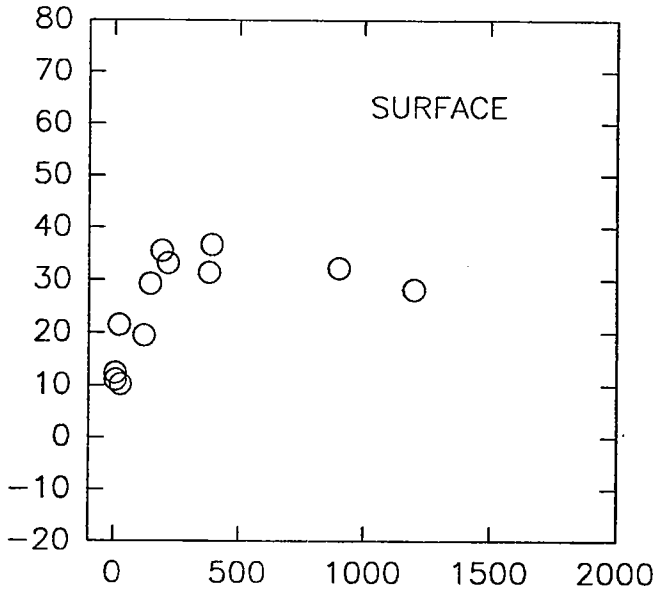


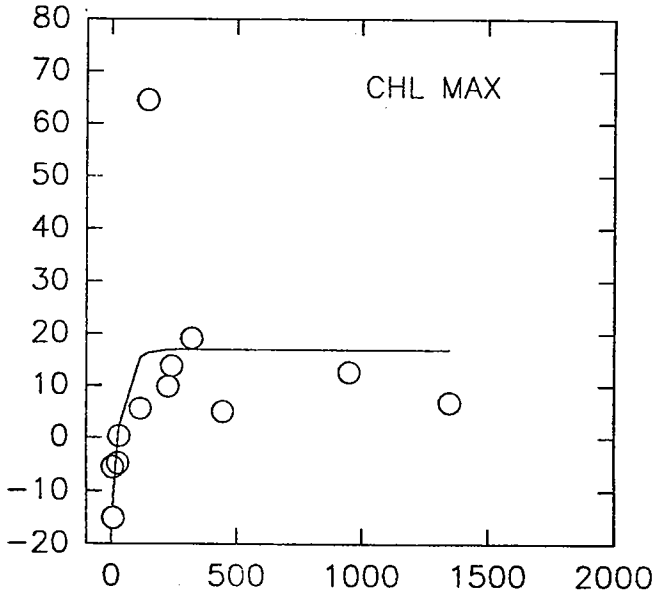


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION N20P CRUISE 1





ug O_2/ug CHL/HR

uE/M^2/SEC

APPENDIX G

Metabolism and Light Measurements from February 1992 Stations

Part 3

Summary of Model—Fit Parameters

The model is described in the text, Section 2. Parameters were estimated using SAS (1985). If no values are given for a sample, the statistical routine did not converge on a model fit. Numbers in parentheses give standard deviations of the parameter. The fit judged by R^2 of the model compared against the data was excellent in some cases, poor in others.

P VS I CURVE PARAMETERS CRUISE 1

STATION	DEPTH	PMAX	ALPHA	RESP	R_2
F13P	CHL	23.09(10.08)	0.03(0.04)	-1.89(10.14)	0.94
	SUR	20.41(7.93)	0.12(0.11)	6.05(5.84)	0.86
F1P	CHL	. .	. .	. .	.
	SUR	58.19(0.03)	2.45(0.98)	49.99(1.01)	0.98
F23P	CHL	. .	. .	. .	.
	SUR	. .	. .	. .	.
F2P	CHL	11.26(1.92)	0.49(1.39)	0.65(3.23)	0.97
	SUR	. .	. .	. .	.
N10P	CHL	. .	. .	. .	.
	SUR	41.70(36.58)	0.22(0.50)	14.08(25.69)	0.51
N16P	CHL	21.27(8.38)	0.17(0.14)	5.14(7.71)	0.80
	SUR	19.69(11.26)	0.21(0.41)	-8.63(10.50)	0.94
N1P	CHL	. .	. .	. .	.
	SUR	33.69(12.58)	0.51(0.87)	10.54(12.72)	0.82
N20P	CHL	33.85(43.77)	0.91(2.88)	16.92(39.12)	0.47
	SUR	. .	. .	. .	.
N4P	CHL	17.82(7.25)	0.31(0.47)	-1.43(7.63)	0.93
	SUR	16.89(4.77)	0.26(0.27)	1.18(4.51)	0.95
N7P	CHL	. .	. .	. .	.
	SUR	10.42(10.49)	0.04(0.09)	2.59(6.69)	0.51

APPENDIX G

Metabolism and Light Measurements from February 1992 Stations

Part 4

Dark Respiration Measurements

The table compares mean dissolved oxygen concentrations (mg O_2 L^{-1}) for initial samples and those incubated in the dark for about 6 h. Number in parentheses are standard deviations. n= 3 in most cases. ns= t-test not significant at $p<0.05$, otherwise the level of statistical significance is given.

RESPIRATION CRUISE 1

STATION	DEPTH	INITIAL	DARK	p
F13P	CHL	12.082(0.049)	12.162(0.123)	ns
	SUR	12.474(0.037)	12.386(0.063)	ns
F1P	CHL	12.840(0.035)	13.069(0.107)	0.02
	SUR	13.623(0.018)	13.710(0.178)	ns
F23P	CHL	12.123(0.051)	12.303(0.105)	ns
	SUR	12.191(0.153)	12.514(0.180)	ns
F2P	CHL	12.368(0.017)	12.273(0.161)	ns
	SUR	12.603(0.031)	12.656(0.157)	ns
N10P	CHL	12.005(0.036)	11.909(0.220)	ns
	SUR	12.176(0.012)	12.113(0.466)	ns
N16P	CHL	12.830(0.012)	12.682(0.101)	ns
	SUR	12.643(0.031)	12.495(0.084)	ns
N1P	CHL	12.319(0.028)	11.988(0.012)	ns
	SUR	12.391(0.009)	11.873(0.184)	0.04
N20P	CHL	12.556(0.023)	12.254(0.059)	0.001
	SUR	12.551(0.071)	12.711(0.016)	0.02
N4P	CHL	12.468(0.094)	12.487(0.046)	ns
	SUR	12.813(0.002)	12.711(0.087)	ns
N7P	CHL	11.917(0.129)	11.475(0.425)	ns
	SUR	12.138(0.050)	11.927(0.099)	ns

APPENDIX G

Metabolism and Light Measurements from February 1992 Stations

Part 5

In Situ Irradiance Measurements

TABLE G-5. IRRADIANCE DATA FROM FEBRUARY 1992.

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F01P	02/23/92	14:17	AIR		0	998.4	653	1.530
F01P	02/23/92	14:17	1		1	300.3	653	0.460
F01P	02/23/92	14:17	2		2	177.5	600	0.296
F01P	02/23/92	14:17	3		3	90.1	600	0.150
F01P	02/23/92	14:17	4		4	51.9	593	0.088
F01P	02/23/92	14:17	5		5	35.5	600	0.059
F01P	02/23/92	14:17	10		10	8.7	638	0.014
F01P	02/23/92	14:17	15		15	2.2	653	0.003
F01P	02/23/92	14:17	20		20	0.5	788	0.001
F01P	02/23/92	14:17	25		25	0.3	938	0.000
F02P	02/23/92	11:33	AIR		0	1872.0	1125	1.664
F02P	02/23/92	11:33	1		1	327.6	300	1.092
F02P	02/23/92	11:33	2		2	150.2	390	0.385
F02P	02/23/92	11:33	3		3	191.1	390	0.490
F02P	02/23/92	11:33	4		4	158.3	345	0.459
F02P	02/23/92	11:33	5		5	54.6	375	0.146
F02P	02/23/92	11:33	10		10	35.5	383	0.093
F02P	02/23/92	11:33	15		15	11.7	383	0.031
F02P	02/23/92	11:33	20		20	3.8	383	0.010
F02P	02/23/92	11:33	25		25	1.2	390	0.003

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F02P	02/23/92	11:33	30		30	0.5	390	0.001
F03	02/23/92	16:10	AIR		0	811.2	308	2.638
F03	02/23/92	16:10	1		1	122.9	293	0.420
F03	02/23/92	16:10	2		2	76.4	308	0.249
F03	02/23/92	16:10	3		3	45.0	308	0.146
F03	02/23/92	16:10	4		4	32.8	308	0.107
F03	02/23/92	16:10	5		5	20.7	308	0.067
F03	02/23/92	16:10	10		10	4.4	308	0.014
F03	02/23/92	16:10	15		15	0.8	293	0.003
F04	02/23/92	09:44	AIR		0	572.0	405	1.412
F04	02/23/92	09:44	1		1	122.9	270	0.455
F04	02/23/92	09:44	2		2	76.4	270	0.283
F04	02/23/92	09:44	3		3	49.1	278	0.177
F04	02/23/92	09:44	4		4	34.1	281	0.121
F04	02/23/92	09:44	5		5	16.4	300	0.055
F04	02/23/92	09:44	10		10	4.9	300	0.016
F04	02/23/92	09:44	15		15	1.1	315	0.003
F04	02/23/92	09:44	20		20	0.5	323	0.002
F13P	02/24/92	08:56	AIR		0	249.6	150	1.664
F13P	02/24/92	08:56	1		1	65.5	150	0.437
F13P	02/24/92	08:56	2		2	51.9	150	0.346

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F13P	02/24/92	08:56	3		3	41.0	150	0.273
F13P	02/24/92	08:56	4		4	32.8	150	0.218
F13P	02/24/92	08:56	10		10	9.3	150	0.062
F13P	02/24/92	08:56	15		15	4.1	150	0.027
F13P	02/24/92	08:56	20		20	2.2	150	0.015
F14	02/24/92	14:11	AIR		0	239.2	150	1.595
F14	02/24/92	14:11	1		1	81.9	150	0.546
F14	02/24/92	14:11	2		2	49.1	150	0.328
F14	02/24/92	14:11	3		3	27.3	150	0.182
F14	02/24/92	14:11	4		4	23.2	150	0.155
F14	02/24/92	14:11	5		5	17.7	150	0.118
F14	02/24/92	14:11	10	30	9	6.3	150	0.042
F14	02/24/92	14:11	15	30	13	2.7	150	0.018
F15	02/24/92	14:55	AIR		0	582.4	345	1.688
F15	02/24/92	14:55	1	22.5	1	477.8	345	1.385
F15	02/24/92	14:55	2	22.5	2	150.2	345	0.435
F15	02/24/92	14:55	3	22.5	3	95.6	345	0.277
F15	02/24/92	14:55	4	22.5	4	73.7	345	0.214
F15	02/24/92	14:55	5	22.5	5	60.1	345	0.174
F15	02/24/92	14:55	10	22.5	9	25.9	338	0.077
F15	02/24/92	14:55	15	22.5	14	13.1	338	0.039

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F15	02/24/92	14:55	20	22.5	18	6.0	330	0.018
F15	02/24/92	14:55	25	22.5	23	3.3	326	0.010
F15	02/24/92	14:55	30	22.5	28	1.4	323	0.004
F16	02/24/92	15:44	AIR		0	139.4	75	1.858
F16	02/24/92	15:44	1		1	35.5	79	0.451
F16	02/24/92	15:44	2		2	25.9	83	0.314
F16	02/24/92	15:44	3		3	23.2	83	0.281
F16	02/24/92	15:44	4		4	17.7	83	0.215
F16	02/24/92	15:44	5		5	12.8	83	0.154
F16	02/24/92	15:44	10		10	6.0	83	0.073
F16	02/24/92	15:44	15	30	13	2.6	83	0.031
F16	02/24/92	15:44	20	45	14	1.4	80	0.017
F23P	02/25/92	13:40	AIR		0	280.8	161	1.741
F23P	02/25/92	13:40	1		1	84.6	166	0.511
F23P	02/25/92	13:40	2		2	49.1	166	0.296
F23P	02/25/92	13:40	3		3	32.8	166	0.198
F23P	02/25/92	13:40	4		4	25.9	166	0.156
F23P	02/25/92	13:40	5		5	21.3	166	0.128
F23P	02/25/92	13:40	10		10	5.2	165	0.031
F23P	02/25/92	13:40	15		15	1.9	164	0.012
F25	02/25/92	10:20	AIR		0	280.8	143	1.960

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F25	02/25/92	10:20	1	7.5	1	76.4	150	0.510
F25	02/25/92	10:20	2	7.5	2	32.8	150	0.218
F25	02/25/92	10:20	3	7.5	3	24.6	154	0.160
F25	02/25/92	10:20	4	7.5	4	17.7	153	0.116
F25	02/25/92	10:20	5	7.5	5	13.4	150	0.089
F25	02/25/92	10:20	10	7.5	10	5.5	154	0.036
F25	02/25/92	10:20	12	7.5	12	4.1	154	0.027
N01P	02/25/92	12:20	AIR		0	312.0	220	1.420
N01P	02/25/92	12:20	1	15	1	103.7	214	0.485
N01P	02/25/92	12:20	2	15	2	71.0	218	0.326
N01P	02/25/92	12:20	3	15	3	51.9	199	0.261
N01P	02/25/92	12:20	4	15	4	46.4	206	0.226
N01P	02/25/92	12:20	5	15	5	35.5	206	0.172
N01P	02/25/92	12:20	10	15	10	16.4	206	0.079
N01P	02/25/92	12:20	15	15	14	8.7	206	0.042
N01P	02/25/92	12:20	20	30	17	4.1	204	0.020
N01P	02/25/92	12:20	25	30	22	2.0	204	0.010
N01P	02/26/92	08:15	AIR		0	43.7	30	1.456
N01P	02/26/92	08:15	1		1	13.7	30	0.455
N01P	02/26/92	08:15	2		2	10.9	33	0.331
N01P	02/26/92	08:15	3		3	8.7	33	0.265

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
N01P	02/26/92	08:15	4		4	7.4	33	0.223
N01P	02/26/92	08:15	5		5	6.3	33	0.190
N01P	02/26/92	08:15	10		10	3.0	33	0.091
N01P	02/26/92	08:15	15		15	2.5	33	0.074
N01P	02/26/92	08:15	20	25	18	1.6	33	0.050
N01P	02/26/92	08:15	25	25	23	1.4	36	0.038
N01P	02/26/92	08:15	30	25	27	1.4	38	0.036
N04P	02/26/92	10:08	AIR		0	455.5	270	1.687
N04P	02/26/92	10:08	1	30	1	--	278	--
N04P	02/26/92	10:08	2	30	2	122.9	285	0.431
N04P	02/26/92	10:08	3	30	3	81.9	270	0.303
N04P	02/26/92	10:08	4	30	3	49.1	255	0.193
N04P	02/26/92	10:08	5	30	4	32.8	240	0.137
N04P	02/26/92	10:08	10	30	9	27.3	233	0.117
N04P	02/26/92	10:08	15	30	13	21.8	240	0.091
N04P	02/26/92	10:08	20	45	14	16.4	240	0.068
N04P	02/26/92	10:08	25	45	18	13.7	240	0.057
N04P	02/26/92	10:08	30	45	21	10.9	248	0.044
N07P	02/24/92	11:27	AIR		0	1331.2	728	1.830
N07P	02/24/92	11:27	1		1	491.4	900	0.546
N07P	02/24/92	11:27	2		2	436.8	1013	0.431

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
N07P	02/24/92	11:27	3		3	327.6	1125	0.291
N07P	02/24/92	11:27	4		4	259.4	1050	0.247
N07P	02/24/92	11:27	5		5	191.1	975	0.196
N07P	02/24/92	11:27	10		10	76.4	863	0.089
N07P	02/24/92	11:27	15		15	32.8	863	0.038
N07P	02/24/92	11:27	20		20	15.0	863	0.017
N07P	02/24/92	11:27	25		25	6.8	863	0.008
N07P	02/24/92	11:27	30		30	4.1	975	0.004
N10P	02/24/92	13:20	AIR		0	301.6	188	1.609
N10P	02/24/92	13:20	1		1	218.4	188	1.165
N10P	02/24/92	13:20	2		2	41.0	188	0.218
N10P	02/24/92	13:20	3		3	35.5	191	0.186
N10P	02/24/92	13:20	4		4	20.5	195	0.105
N10P	02/24/92	13:20	5		5	17.7	199	0.089
N10P	02/24/92	13:20	10	30	9	5.2	203	0.026
N10P	02/24/92	13:20	15	30	13	2.2	206	0.011
N16P	02/25/92	8:17	AIR		0	156.0	89	1.763
N16P	02/25/92	8:17	1		1	32.8	83	0.397
N16P	02/25/92	8:17	2		2	32.8	86	0.383
N16P	02/25/92	8:17	3		3	17.7	83	0.213
N16P	02/25/92	8:17	4		4	13.7	83	0.165

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
N16P	02/25/92	8:17	5		5	11.5	83	0.139
N16P	02/25/92	8:17	10	45	7	5.5	83	0.066
N16P	02/25/92	8:17	15	45	11	3.0	83	0.036
N16P	02/25/92	8:17	20	45	14	1.6	83	0.020
N16P	02/25/92	8:17	25	45	18	0.8	83	0.010
N20P	02/25/92	9:10	AIR		0	228.8	123	1.860
N20P	02/25/92	9:10	1	2.5	1	43.7	122	0.357
N20P	02/25/92	9:10	2	2.5	2	35.5	128	0.277
N20P	02/25/92	9:10	3	2.5	3	27.3	131	0.208
N20P	02/25/92	9:10	4	2.5	4	21.8	132	0.165
N20P	02/25/92	9:10	5	2.5	5	17.7	135	0.131
N20P	02/25/92	9:10	10	2.5	10	7.9	135	0.059
N20P	02/25/92	9:10	15	2.5	15	2.7	139	0.020
N20P	02/25/92	9:10	20	2.5	20	1.1	140	0.008
N20P	02/25/92	9:10	25	2.5	25	0.5	144	0.004

[a] 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.

[b] Approximate depth = wireout (cos θ) where θ = wire angle visually estimated.

[c] The meter/sensor pair reading had to be corrected to provide the actual light values in air and underwater. The recorded reading in air was multiplied by 2.08 and the recorded reading in water was multiplied by 2.73. These factors were based upon post-cruise calibration of the meter/sensor pair. Units are μEinsteins/m^2/sec, as for deck cell.

[d] Deck cell (cosine sensor, flat plane) readings had to be corrected to provide the actual light values in air. Post-cruise calibration was performed; recorded readings of this sensor-meter pair were multiplied by 0.75.

APPENDIX H

Metabolism and Light Measurements from March 1992 Stations

Part 1

Initial Dissolved Oxygen Concentrations and Results from Light-Dark Incubations

Table data include the initial and final concentrations of dissolved oxygen. The initial concentrations were determined in triplicate from samples fixed immediately after being taken from the Niskin/GO-FLO bottle at a surface or deeper sample. Final concentrations in 300-mL BOD bottles were determined after an approximately 6-h incubation at a range of levels, or in the dark. The replicate dark bottles were for respiration estimates, where final (average of reps) minus initial (average of reps), divided by the incubation time, would yield the estimate. NPR = net production, estimated as final (single rep at a light level) minus initial (average of reps), divided by the incubation time.

TABLE H-1. DISSOLVED OXYGEN AND METABOLISM AT TWO DEPTHS OF BIOPRODUCTIVITY STATIONS FROM MARCH 1992.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F01P	14-MAR-92	0940	2.42	11V	DARK	10.317	0.0	0.005
F01P	14-MAR-92	0940	2.42	145A		10.504	1500.0	0.036
F01P	14-MAR-92	0940	2.42	146A		10.413	38.0	0.021
F01P	14-MAR-92	0940	2.42	147A		10.331	105.0	0.008
F01P	14-MAR-92	0940	2.42	148A		10.275	3.8	-0.001
F01P	14-MAR-92	0940	2.42	151A	INIT	10.263	0.0	
F01P	14-MAR-92	0940	2.42	152A		10.535	150.0	0.041
F01P	14-MAR-92	0940	2.42	153A		10.379	350.0	0.016
F01P	14-MAR-92	0940	2.42	154A		10.278	4.8	-0.001
F01P	14-MAR-92	0940	2.42	157A	INIT	10.319	0.0	
F01P	14-MAR-92	0940	2.42	158A		10.452	200.0	0.028
F01P	14-MAR-92	0940	2.42	159A		10.342	35.0	0.010
F01P	14-MAR-92	0940	2.42	15V	DARK	10.194	0.0	-0.015
F01P	14-MAR-92	0940	2.42	160A		10.315	21.0	0.005
F01P	14-MAR-92	0940	2.42	163A	INIT	10.267	0.0	
F01P	14-MAR-92	0940	2.42	164A		10.460	1150.0	0.029
F01P	14-MAR-92	0940	2.42	165A		10.384	40.0	0.016
F01P	14-MAR-92	0940	2.42	7V	DARK	10.003	0.0	-0.046
F01P	14-MAR-92	0940	12.17	145E		10.350	110.0	0.003
F01P	14-MAR-92	0940	12.17	146E		10.303	300.0	-0.004
F01P	14-MAR-92	0940	12.17	147E		10.440	200.0	0.018
F01P	14-MAR-92	0940	12.17	148E		10.273	2.0	-0.009
F01P	14-MAR-92	0940	12.17	151E	INIT	10.330	0.0	
F01P	14-MAR-92	0940	12.17	152E		10.445	1000.0	0.019
F01P	14-MAR-92	0940	12.17	153E		10.426	310.0	0.016
F01P	14-MAR-92	0940	12.17	154E		10.381	70.0	0.008
F01P	14-MAR-92	0940	12.17	157E	INIT	10.348	0.0	
F01P	14-MAR-92	0940	12.17	159E		10.077	30.0	-0.041
F01P	14-MAR-92	0940	12.17	160E		10.324	3.0	-0.001

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F01P	14-MAR-92	0940	12.17	163E	INIT	10.308	0.0	
F01P	14-MAR-92	0940	12.17	164E		10.434	1500.0	0.017
F01P	14-MAR-92	0940	12.17	165E		10.329	17.0	0.000
F01P	14-MAR-92	0940	12.17	166E		10.410	43.0	0.013
F01P	14-MAR-92	0940	12.17	1V	DARK	10.335	0.0	0.001
F01P	14-MAR-92	0940	12.17	2V	DARK	10.398	0.0	0.011
F01P	14-MAR-92	0940	12.17	8V	DARK	10.286	0.0	-0.007
F02P	14-MAR-92	1147	5.48	145B	INIT	10.601	0.0	
F02P	14-MAR-92	1147	5.48	146B		10.827	1050.0	0.036
F02P	14-MAR-92	1147	5.48	147B		10.606	32.0	-0.001
F02P	14-MAR-92	1147	5.48	148B		10.407	0.8	-0.035
F02P	14-MAR-92	1147	5.48	151B	INIT	10.635	0.0	
F02P	14-MAR-92	1147	5.48	152B		10.779	800.0	0.028
F02P	14-MAR-92	1147	5.48	153B		10.500	3.5	-0.019
F02P	14-MAR-92	1147	5.48	154B		10.450	1.9	-0.028
F02P	14-MAR-92	1147	5.48	157B	INIT	10.602	0.0	
F02P	14-MAR-92	1147	5.48	158B		10.759	230.0	0.025
F02P	14-MAR-92	1147	5.48	159B		10.554	8.5	-0.010
F02P	14-MAR-92	1147	5.48	160B		10.393	3.5	-0.037
F02P	14-MAR-92	1147	5.48	163B		10.768	140.0	0.026
F02P	14-MAR-92	1147	5.48	164B		10.787	170.0	0.030
F02P	14-MAR-92	1147	5.48	165B		10.588	11.5	-0.004
F02P	14-MAR-92	1147	5.48	18V	DARK	10.345	0.0	-0.045
F02P	14-MAR-92	1147	5.48	3V	DARK	8.668	0.0	-0.330
F02P	14-MAR-92	1147	5.48	4V	DARK	8.549	0.0	-0.350
F02P	14-MAR-92	1147	14.53	12V	DARK	8.697	0.0	-0.320
F02P	14-MAR-92	1147	14.53	145C	INIT	10.637	0.0	
F02P	14-MAR-92	1147	14.53	146C		10.847	650.0	0.045
F02P	14-MAR-92	1147	14.53	147C		10.730	85.0	0.025

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F02P	14-MAR-92	1147	14.53	148C		10.536	6.5	-0.008
F02P	14-MAR-92	1147	14.53	151C	INIT	10.632	0.0	
F02P	14-MAR-92	1147	14.53	152C		10.822	1050.0	0.040
F02P	14-MAR-92	1147	14.53	153C		10.311	35.0	-0.046
F02P	14-MAR-92	1147	14.53	154C		10.582	1.8	-0.000
F02P	14-MAR-92	1147	14.53	157C	INIT	10.480	0.0	
F02P	14-MAR-92	1147	14.53	158C		10.709	135.0	0.021
F02P	14-MAR-92	1147	14.53	159C		10.716	15.0	0.022
F02P	14-MAR-92	1147	14.53	160C		10.521	1.7	-0.011
F02P	14-MAR-92	1147	14.53	163C		10.661	70.0	0.013
F02P	14-MAR-92	1147	14.53	164C		10.426	120.0	-0.027
F02P	14-MAR-92	1147	14.53	165C		10.608	25.0	0.004
F02P	14-MAR-92	1147	14.53	16V	DARK	8.792	0.0	-0.304
F02P	14-MAR-92	1147	14.53	17V	DARK	10.380	0.0	-0.034
F13P	15-MAR-92	0839	2.05	13V	DARK	10.308	0.0	-0.015
F13P	15-MAR-92	0839	2.05	19V	DARK	11.183	0.0	0.129
F13P	15-MAR-92	0839	2.05	49	INIT	10.351	0.0	
F13P	15-MAR-92	0839	2.05	50	INIT	10.446	0.0	
F13P	15-MAR-92	0839	2.05	51	INIT	10.399	0.0	
F13P	15-MAR-92	0839	2.05	52		10.296	11.5	-0.017
F13P	15-MAR-92	0839	2.05	53		10.633	800.0	0.039
F13P	15-MAR-92	0839	2.05	54		10.634	1050.0	0.039
F13P	15-MAR-92	0839	2.05	55		10.552	230.0	0.025
F13P	15-MAR-92	0839	2.05	56		10.533	140.0	0.022
F13P	15-MAR-92	0839	2.05	57		10.347	170.0	-0.009
F13P	15-MAR-92	0839	2.05	58		10.236	15.0	-0.027
F13P	15-MAR-92	0839	2.05	59		10.216	3.5	-0.030
F13P	15-MAR-92	0839	2.05	60		10.516	32.0	0.019
F13P	15-MAR-92	0839	2.05	64		10.259	25.0	-0.023
F13P	15-MAR-92	0839	2.05	65		10.222	0.8	-0.029

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F13P	15-MAR-92	0839	2.05	66		10.108	1.9	-0.048
F13P	15-MAR-92	0839	2.05	9V	DARK	10.307	0.0	-0.015
F13P	15-MAR-92	0839	9.9	149A		10.402	35.0	0.004
F13P	15-MAR-92	0839	9.9	149E		10.543	120.0	0.027
F13P	15-MAR-92	0839	9.9	14V	DARK	10.350	0.0	-0.004
F13P	15-MAR-92	0839	9.9	155A		10.214	8.5	-0.027
F13P	15-MAR-92	0839	9.9	155E	INIT	10.352	0.0	
F13P	15-MAR-92	0839	9.9	156E		10.383	85.0	0.001
F13P	15-MAR-92	0839	9.9	161A		10.356	1.7	-0.003
F13P	15-MAR-92	0839	9.9	161E	INIT	10.381	0.0	
F13P	15-MAR-92	0839	9.9	162A		10.570	650.0	0.032
F13P	15-MAR-92	0839	9.9	162E		10.293	70.0	-0.014
F13P	15-MAR-92	0839	9.9	167A		10.240	3.5	-0.023
F13P	15-MAR-92	0839	9.9	167E	INIT	10.398	0.0	
F13P	15-MAR-92	0839	9.9	168A		10.285	6.5	-0.015*
F13P	15-MAR-92	0839	9.9	168E		10.553	135.0	0.029
F13P	15-MAR-92	0839	9.9	20V	DARK	10.309	0.0	-0.011
F13P	15-MAR-92	0839	9.9	44V	DARK	11.547	0.0	0.193
F23P	16-MAR-92	1239	1.97	12V	DARK	10.592	0.0	0.034
F23P	16-MAR-92	1239	1.97	145A		10.379	2.0	-0.001
F23P	16-MAR-92	1239	1.97	146A		10.421	3.8	0.006
F23P	16-MAR-92	1239	1.97	147A	INIT	10.345	0.0	
F23P	16-MAR-92	1239	1.97	148A		10.889	200.0	0.084
F23P	16-MAR-92	1239	1.97	151A	INIT	10.421	0.0	
F23P	16-MAR-92	1239	1.97	153A		10.655	35.0	0.045
F23P	16-MAR-92	1239	1.97	153E		10.801	1150.0	0.069
F23P	16-MAR-92	1239	1.97	154A		10.711	21.0	0.054
F23P	16-MAR-92	1239	1.97	157A	INIT	10.397	0.0	
F23P	16-MAR-92	1239	1.97	158A		10.801	70.0	0.069
F23P	16-MAR-92	1239	1.97	159A		10.970	300.0	0.097

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
F23P	16-MAR-92	1239	1.97	160A		10.996	38.0	0.101
F23P	16-MAR-92	1239	1.97	163A		10.747	200.0	0.060
F23P	16-MAR-92	1239	1.97	164A		10.654	40.0	0.044
F23P	16-MAR-92	1239	1.97	165A		11.022	1500.0	0.106
F23P	16-MAR-92	1239	1.97	18V	DARK	10.630	0.0	0.040
F23P	16-MAR-92	1239	1.97	8V	DARK	10.717	0.0	0.055
F23P	16-MAR-92	1239	9.74	100		10.674	30.0	0.040
F23P	16-MAR-92	1239	9.74	101		10.825	150.0	0.065
F23P	16-MAR-92	1239	9.74	102		10.801	1000.0	0.061
F23P	16-MAR-92	1239	9.74	103	INIT	10.395	0.0	
F23P	16-MAR-92	1239	9.74	104		10.633	310.0	0.033
F23P	16-MAR-92	1239	9.74	105		10.509	17.0	0.012
F23P	16-MAR-92	1239	9.74	106		10.465	4.8	0.005
F23P	16-MAR-92	1239	9.74	111		10.516	3.0	0.013
F23P	16-MAR-92	1239	9.74	112		10.414	43.0	-0.004
F23P	16-MAR-92	1239	9.74	113		10.913	1500.0	0.079
F23P	16-MAR-92	1239	9.74	114	INIT	10.478	0.0	
F23P	16-MAR-92	1239	9.74	115	INIT	10.439	0.0	
F23P	16-MAR-92	1239	9.74	116		10.757	110.0	0.053
F23P	16-MAR-92	1239	9.74	117		10.850	350.0	0.069
F23P	16-MAR-92	1239	9.74	118		10.677	105.0	0.040
F23P	16-MAR-92	1239	9.74	25V	DARK	10.621	0.0	0.031
F23P	16-MAR-92	1239	9.74	26V	DARK	10.471	0.0	0.006
F23P	16-MAR-92	1239	9.74	43V	DARK	10.520	0.0	0.014
N01P	16-MAR-92	1454	1.9	145B		10.299	1400.0	0.008
N01P	16-MAR-92	1454	1.9	145C		10.224	10.5	-0.005
N01P	16-MAR-92	1454	1.9	145E	INIT	10.260	0.0	
N01P	16-MAR-92	1454	1.9	146E		10.380	200.0	0.021
N01P	16-MAR-92	1454	1.9	151B		10.410	230.0	0.026

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N01P	16-MAR-92	1454	1.9	151C		10.341	26.0	0.014
N01P	16-MAR-92	1454	1.9	151E	INIT	10.299	0.0	
N01P	16-MAR-92	1454	1.9	154E		10.267	87.0	0.002
N01P	16-MAR-92	1454	1.9	157B		10.423	180.0	0.028
N01P	16-MAR-92	1454	1.9	157C		10.198	18.0	-0.009
N01P	16-MAR-92	1454	1.9	157E	INIT	10.202	0.0	
N01P	16-MAR-92	1454	1.9	159E		10.369	4.0	0.019
N01P	16-MAR-92	1454	1.9	160E		10.388	750.0	0.022
N01P	16-MAR-92	1454	1.9	163E		10.286	1.2	0.005
N01P	16-MAR-92	1454	1.9	164E		10.442	200.0	0.031
N01P	16-MAR-92	1454	1.9	16V	DARK	10.206	0.0	-0.008
N01P	16-MAR-92	1454	1.9	17V	DARK	10.246	0.0	-0.001
N01P	16-MAR-92	1454	1.9	4V	DARK	10.152	0.0	-0.017
N01P	16-MAR-92	1454	13.13	11V	DARK	10.193	0.0	-0.011
N01P	16-MAR-92	1454	13.13	193	INIT	10.308	0.0	
N01P	16-MAR-92	1454	13.13	194	INIT	10.250	0.0	
N01P	16-MAR-92	1454	13.13	195		10.310	800.0	0.009
N01P	16-MAR-92	1454	13.13	196		10.387	80.0	0.021
N01P	16-MAR-92	1454	13.13	197	INIT	10.216	0.0	
N01P	16-MAR-92	1454	13.13	198		10.356	3.4	0.016
N01P	16-MAR-92	1454	13.13	199		10.213	4.3	-0.008
N01P	16-MAR-92	1454	13.13	1V	DARK	10.245	0.0	-0.002
N01P	16-MAR-92	1454	13.13	200		10.352	33.0	0.016
N01P	16-MAR-92	1454	13.13	201		10.347	44.0	0.015
N01P	16-MAR-92	1454	13.13	208		10.434	1350.0	0.029
N01P	16-MAR-92	1454	13.13	209		10.419	100.0	0.027
N01P	16-MAR-92	1454	13.13	210		10.374	10.0	0.019
N01P	16-MAR-92	1454	13.13	211		10.406	12.5	0.025

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N01P	16-MAR-92	1454	13.13	212		10.374	95.0	0.019
N01P	16-MAR-92	1454	13.13	213		10.384	350.0	0.021
N01P	16-MAR-92	1454	13.13	3V	DARK	10.327	0.0	0.011
N04P	17-MAR-92	1017	3.6	1	DARK	10.430	0.0	0.030
N04P	17-MAR-92	1017	3.6	147B		10.288	44.0	0.008
N04P	17-MAR-92	1017	3.6	147E		10.278	242.0	0.006
N04P	17-MAR-92	1017	3.6	148C		10.506	1014.0	0.042
N04P	17-MAR-92	1017	3.6	148E		10.347	267.0	0.017
N04P	17-MAR-92	1017	3.6	152A		10.383	59.0	0.022
N04P	17-MAR-92	1017	3.6	152B	INIT	10.193	0.0	
N04P	17-MAR-92	1017	3.6	152E		10.351	15.0	0.018
N04P	17-MAR-92	1017	3.6	154B		10.201	5.5	-0.006
N04P	17-MAR-92	1017	3.6	154C		10.253	1.8	0.002
N04P	17-MAR-92	1017	3.6	158B	INIT	10.302	0.0	
N04P	17-MAR-92	1017	3.6	160B	INIT	10.216	0.0	
N04P	17-MAR-92	1017	3.6	164C		10.525	1877.0	0.045
N04P	17-MAR-92	1017	3.6	165C		10.641	267.0	0.063
N04P	17-MAR-92	1017	3.6	165E		10.391	24.0	0.024
N04P	17-MAR-92	1017	3.6	166E		10.517	134.0	0.043
N04P	17-MAR-92	1017	3.6	2V	DARK	10.351	0.0	0.018
N04P	17-MAR-92	1017	3.6	7V	DARK	10.328	0.0	0.014
N04P	17-MAR-92	1017	22.42	107		10.430	17.0	0.034
N04P	17-MAR-92	1017	22.42	108		10.379	107.0	0.026
N04P	17-MAR-92	1017	22.42	109		10.468	1811.0	0.039
N04P	17-MAR-92	1017	22.42	110		10.555	127.0	0.053
N04P	17-MAR-92	1017	22.42	119		10.513	309.0	0.047
N04P	17-MAR-92	1017	22.42	120		10.523	1069.0	0.048
N04P	17-MAR-92	1017	22.42	15V	DARK	10.384	0.0	0.027
N04P	17-MAR-92	1017	22.42	2	DARK	10.306	0.0	0.014

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
NO4P	17-MAR-92	1017	22.42	202		10.535	470.0	0.050
NO4P	17-MAR-92	1017	22.42	203		10.215	4.6	0.000
NO4P	17-MAR-92	1017	22.42	204		10.335	5.5	0.019
NO4P	17-MAR-92	1017	22.42	205		10.363	35.0	0.023
NO4P	17-MAR-92	1017	22.42	207		10.427	13.0	0.033
NO4P	17-MAR-92	1017	22.42	214		10.490	116.0	0.043
NO4P	17-MAR-92	1017	22.42	3	DARK	10.331	0.0	0.018
NO4P	17-MAR-92	1017	22.42	97	INIT	10.202	0.0	
NO4P	17-MAR-92	1017	22.42	98	INIT	10.198	0.0	
NO4P	17-MAR-92	1017	22.42	99	INIT	10.236	0.0	
NO7P	15-MAR-92	1205	2.04	25	INIT	10.006	0.0	
NO7P	15-MAR-92	1205	2.04	26		10.400	200.0	0.041
NO7P	15-MAR-92	1205	2.04	27		10.490	110.0	0.054
NO7P	15-MAR-92	1205	2.04	28		10.351	1150.0	0.034
NO7P	15-MAR-92	1205	2.04	31	INIT	10.195	0.0	
NO7P	15-MAR-92	1205	2.04	32		10.402	350.0	0.041
NO7P	15-MAR-92	1205	2.04	33		10.362	1500.0	0.035
NO7P	15-MAR-92	1205	2.04	34		10.144	4.8	0.004
NO7P	15-MAR-92	1205	2.04	37	INIT	10.142	0.0	
NO7P	15-MAR-92	1205	2.04	38		10.315	43.0	0.029
NO7P	15-MAR-92	1205	2.04	39		10.226	17.0	0.016
NO7P	15-MAR-92	1205	2.04	42V	DARK	10.199	0.0	0.012
NO7P	15-MAR-92	1205	2.04	43		10.344	310.0	0.033
NO7P	15-MAR-92	1205	2.04	44		10.238	35.0	0.018
NO7P	15-MAR-92	1205	2.04	45		10.196	70.0	0.012
NO7P	15-MAR-92	1205	2.04	46		10.097	3.0	-0.002
NO7P	15-MAR-92	1205	2.04	5V	DARK	10.222	0.0	0.015
NO7P	15-MAR-92	1205	2.04	85V	DARK	11.413	0.0	0.185
NO7P	15-MAR-92	1205	22.44	10V	DARK	10.186	0.0	0.012
NO7P	15-MAR-92	1205	22.44	149B	INIT	10.164	0.0	

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N07P	15-MAR-92	1205	22.44	149C		10.104	105.0	0.000
N07P	15-MAR-92	1205	22.44	150A		10.233	150.0	0.019
N07P	15-MAR-92	1205	22.44	150B		10.030	2.0	-0.010
N07P	15-MAR-92	1205	22.44	155B	INIT	10.102	0.0	
N07P	15-MAR-92	1205	22.44	156A		10.201	1000.0	0.014
N07P	15-MAR-92	1205	22.44	156B		10.326	38.0	0.032
N07P	15-MAR-92	1205	22.44	161B	INIT	10.035	0.0	
N07P	15-MAR-92	1205	22.44	161C		10.252	40.0	0.022
N07P	15-MAR-92	1205	22.44	162B		10.137	30.0	0.005
N07P	15-MAR-92	1205	22.44	166B		10.229	300.0	0.018
N07P	15-MAR-92	1205	22.44	166C		10.276	1500.0	0.025
N07P	15-MAR-92	1205	22.44	167B		10.456	200.0	0.051
N07P	15-MAR-92	1205	22.44	167C		10.113	3.8	0.002
N07P	15-MAR-92	1205	22.44	168B		10.194	21.0	0.013
N07P	15-MAR-92	1205	22.44	21V	DARK	11.432	0.0	0.190
N07P	15-MAR-92	1205	22.44	6V	DARK	10.187	0.0	0.012
N10P	16-MAR-92	1020	2.2	146B		10.085	1.8	0.002
N10P	16-MAR-92	1020	2.2	146C		10.251	85.0	0.030
N10P	16-MAR-92	1020	2.2	147C		10.310	650.0	0.039
N10P	16-MAR-92	1020	2.2	148B		10.196	1.7	0.020
N10P	16-MAR-92	1020	2.2	152C		10.138	35.0	0.011
N10P	16-MAR-92	1020	2.2	153B		10.215	135.0	0.023
N10P	16-MAR-92	1020	2.2	153C		10.127	15.0	0.009
N10P	16-MAR-92	1020	2.2	158C		10.236	25.0	0.027
N10P	16-MAR-92	1020	2.2	159B	INIT	10.077	0.0	
N10P	16-MAR-92	1020	2.2	159C		10.343	230.0	0.045
N10P	16-MAR-92	1020	2.2	160C		10.316	1050.0	0.040
N10P	16-MAR-92	1020	2.2	163B		10.226	70.0	0.025
N10P	16-MAR-92	1020	2.2	163C	INIT	10.056	0.0	
N10P	16-MAR-92	1020	2.2	164B		10.179	6.5	0.017

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N10P	16-MAR-92	1020	2.2	165B	INIT	10.088	0.0	
N10P	16-MAR-92	1020	2.2	34V	DARK	10.175	0.0	0.017
N10P	16-MAR-92	1020	2.2	40V	DARK	10.061	0.0	-0.002
N10P	16-MAR-92	1020	2.2	41V	DARK	10.199	0.0	0.021
N10P	16-MAR-92	1020	10.49	148		10.157	170.0	0.011
N10P	16-MAR-92	1020	10.49	149		10.132	3.5	0.007
N10P	16-MAR-92	1020	10.49	151		10.144	1050.0	0.009
N10P	16-MAR-92	1020	10.49	152	INIT	10.233	0.0	
N10P	16-MAR-92	1020	10.49	153		10.146	0.8	0.010
N10P	16-MAR-92	1020	10.49	155		10.045	11.5	-0.007
N10P	16-MAR-92	1020	10.49	156		10.166	120.0	0.013
N10P	16-MAR-92	1020	10.49	157		10.165	3.5	0.013
N10P	16-MAR-92	1020	10.49	159	INIT	9.981	0.0	
N10P	16-MAR-92	1020	10.49	160	INIT	10.051	0.0	
N10P	16-MAR-92	1020	10.49	161		10.188	8.5	0.017
N10P	16-MAR-92	1020	10.49	162		10.265	162.0	0.029
N10P	16-MAR-92	1020	10.49	168		10.217	32.0	0.021
N10P	16-MAR-92	1020	10.49	29V	DARK	10.118	0.0	0.005
N10P	16-MAR-92	1020	10.49	30V	DARK	10.099	0.0	0.002
N10P	16-MAR-92	1020	10.49	33V	DARK	10.128	0.0	0.007
N10P	16-MAR-92	1020	10.49	61		10.114	1.9	0.004
N10P	16-MAR-92	1020	10.49	67		10.210	800.0	0.020
N16P	15-MAR-92	1355	2.2	22V	DARK	11.761	0.0	0.287
N16P	15-MAR-92	1355	2.2	27V	DARK	9.957	0.0	-0.014
N16P	15-MAR-92	1355	2.2	29		10.096	87.0	0.009
N16P	15-MAR-92	1355	2.2	30		10.322	1400.0	0.047
N16P	15-MAR-92	1355	2.2	31V	DARK	10.848	0.0	0.134
N16P	15-MAR-92	1355	2.2	35		10.094	95.0	0.009
N16P	15-MAR-92	1355	2.2	36		10.186	100.0	0.024
N16P	15-MAR-92	1355	2.2	40		10.291	12.5	0.042

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N16P	15-MAR-92	1355	2.2	41		10.223	26.0	0.030
N16P	15-MAR-92	1355	2.2	42		10.067	3.4	0.004
N16P	15-MAR-92	1355	2.2	47		10.218	10.0	0.029
N16P	15-MAR-92	1355	2.2	48		10.093	4.3	0.009
N16P	15-MAR-92	1355	2.2	62		10.340	350.0	0.050
N16P	15-MAR-92	1355	2.2	63	INIT	10.077	0.0	
N16P	15-MAR-92	1355	2.2	68		10.377	200.0	0.056
N16P	15-MAR-92	1355	2.2	69		10.386	800.0	0.057
N16P	15-MAR-92	1355	2.2	70	INIT	10.061	0.0	
N16P	15-MAR-92	1355	2.2	72	INIT	9.987	0.0	
N16P	15-MAR-92	1355	17.48	145D		10.065	200.0	0.009
N16P	15-MAR-92	1355	17.48	146D		10.099	230.0	0.015
N16P	15-MAR-92	1355	17.48	151D		10.144	10.5	0.022
N16P	15-MAR-92	1355	17.48	152D		10.155	44.0	0.024
N16P	15-MAR-92	1355	17.48	153D		10.156	80.0	0.024
N16P	15-MAR-92	1355	17.48	154D	INIT	9.944	0.0	
N16P	15-MAR-92	1355	17.48	157D		10.118	18.0	0.018
N16P	15-MAR-92	1355	17.48	158D		9.968	33.0	-0.007
N16P	15-MAR-92	1355	17.48	159D		10.218	750.0	0.034
N16P	15-MAR-92	1355	17.48	160D	INIT	10.116	0.0	
N16P	15-MAR-92	1355	17.48	163D		10.005	1.2	-0.001
N16P	15-MAR-92	1355	17.48	164D		10.047	4.0	0.006
N16P	15-MAR-92	1355	17.48	165D		10.295	1350.0	0.047
N16P	15-MAR-92	1355	17.48	166D	INIT	9.975	0.0	
N16P	15-MAR-92	1355	17.48	167D		10.062	180.0	0.008
N16P	15-MAR-92	1355	17.48	28V	DARK	9.940	0.0	-0.012
N16P	15-MAR-92	1355	17.48	32V	DARK	11.599	0.0	0.264
N16P	15-MAR-92	1355	17.48	35V	DARK	11.358	0.0	0.224
N20P	15-MAR-92	1503	1.91	10		10.398	1014.0	0.009

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N20P	15-MAR-92	1503	1.91	11		10.409	267.0	0.011
N20P	15-MAR-92	1503	1.91	12		10.402	13.0	0.010
N20P	15-MAR-92	1503	1.91	15	INIT	10.341	0.0	
N20P	15-MAR-92	1503	1.91	16		10.960	107.0	0.103
N20P	15-MAR-92	1503	1.91	17		10.369	17.0	0.005
N20P	15-MAR-92	1503	1.91	18		10.275	1.8	-0.011
N20P	15-MAR-92	1503	1.91	21	INIT	10.347	0.0	
N20P	15-MAR-92	1503	1.91	22		10.557	242.0	0.036
N20P	15-MAR-92	1503	1.91	23		10.335	116.0	-0.001
N20P	15-MAR-92	1503	1.91	23V	DARK	10.373	0.0	0.005
N20P	15-MAR-92	1503	1.91	24		10.332	5.5	-0.002
N20P	15-MAR-92	1503	1.91	36V	DARK	11.543	0.0	0.200
N20P	15-MAR-92	1503	1.91	4		10.442	1811.0	0.017
N20P	15-MAR-92	1503	1.91	5		10.455	309.0	0.019
N20P	15-MAR-92	1503	1.91	6		10.424	35.0	0.014
N20P	15-MAR-92	1503	1.91	9	INIT	10.338	0.0	
N20P	15-MAR-92	1503	11.57	145	INIT	10.322	0.0	
N20P	15-MAR-92	1503	11.57	146	INIT	10.216	0.0	
N20P	15-MAR-92	1503	11.57	147	INIT	10.355	0.0	
N20P	15-MAR-92	1503	11.57	148D		10.399	5.5	0.017
N20P	15-MAR-92	1503	11.57	149D		10.219	4.6	-0.013
N20P	15-MAR-92	1503	11.57	150C		10.535	1877.0	0.040
N20P	15-MAR-92	1503	11.57	150D		10.450	59.0	0.025
N20P	15-MAR-92	1503	11.57	155C		10.401	267.0	0.017
N20P	15-MAR-92	1503	11.57	155D		10.451	44.0	0.025
N20P	15-MAR-92	1503	11.57	156C		10.414	15.0	0.019
N20P	15-MAR-92	1503	11.57	156D		10.478	1069.0	0.030
N20P	15-MAR-92	1503	11.57	161D		10.475	127.0	0.030
N20P	15-MAR-92	1503	11.57	162C		10.448	134.0	0.025
N20P	15-MAR-92	1503	11.57	162D		10.454	470.0	0.026

TABLE H-1. CONTINUED.

STATION	DATE	TIME	DEPTH	LABID	LEVEL	DO (mg/L)	LIGHT (uEm-2sec-1)	NPR (mgO2/L/hr)
N20P	15-MAR-92	1503	11.57	168C		10.342	24.0	0.007
N20P	15-MAR-92	1503	11.57	24V	DARK	11.826	0.0	0.255
N20P	15-MAR-92	1503	11.57	38V	DARK	11.277	0.0	0.163
N20P	15-MAR-92	1503	11.57	39V	DARK	10.220	0.0	-0.013

* Laboratory sample bottles mislabelled. Use data with caution.

APPENDIX H

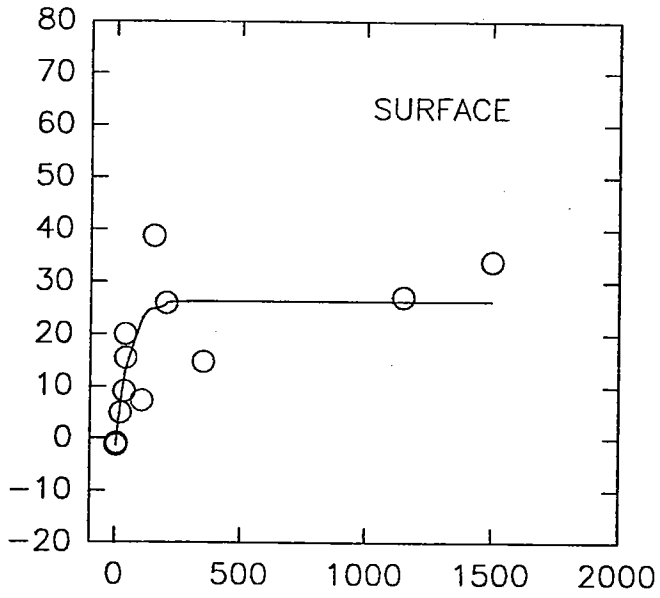
Metabolism and Light Measurements from March 1992 Stations

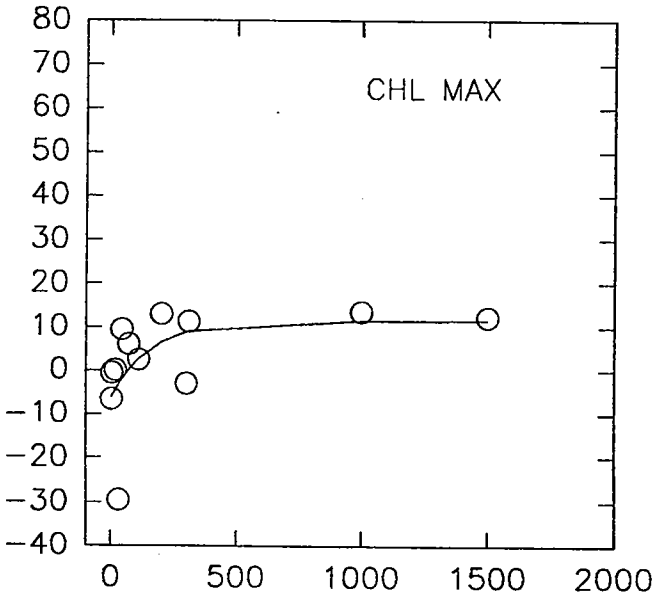
Part 2

P-I Plots

Rates of net production (Appendix H, part 1) have been normalized by dividing by the average chlorophyll concentration determined by wet chemical analysis on duplicate samples taken from the Niskin/GO-FLO bottles used for incubations. These chlorophyll data are given in Appendix A. Curves were drawn as described in methods, based on modeling (SAS, 1985). Where no curve is drawn, the model could not be fit. Fitted model coefficients are given in Appendix H, part 3 (following). SUR= surface sample (~1-3 m) and CHL MAX = deeper sample (variable depth from station to station).

STATION F1P CRUISE 2





ug O_2/ug CHL/HR

uE/M^2/SEC

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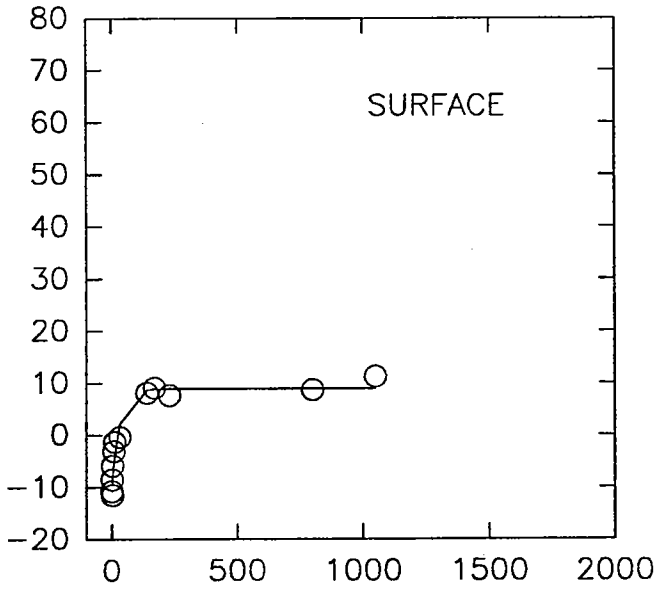
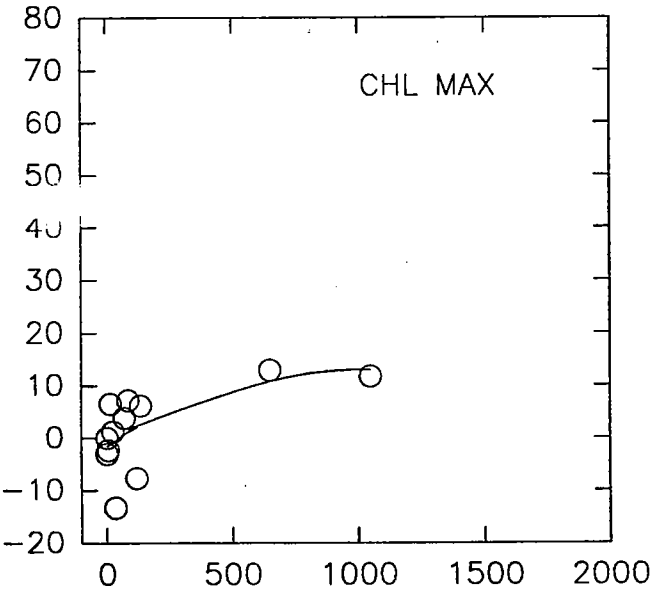
STATION F2P CRUISE 2

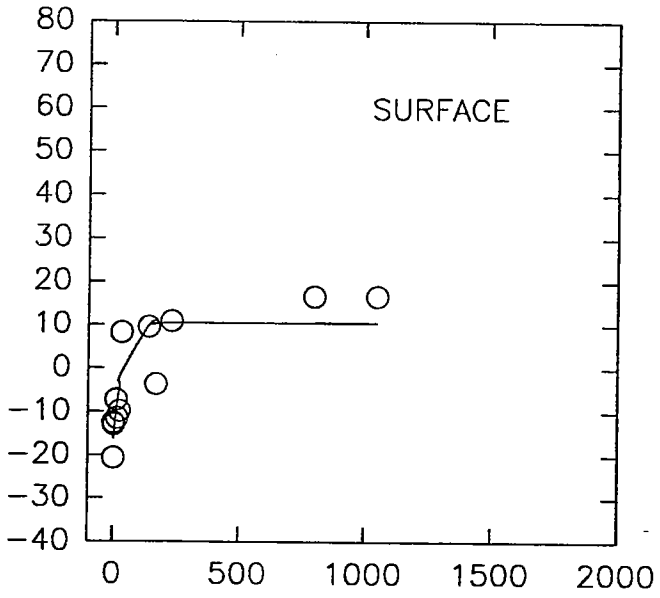


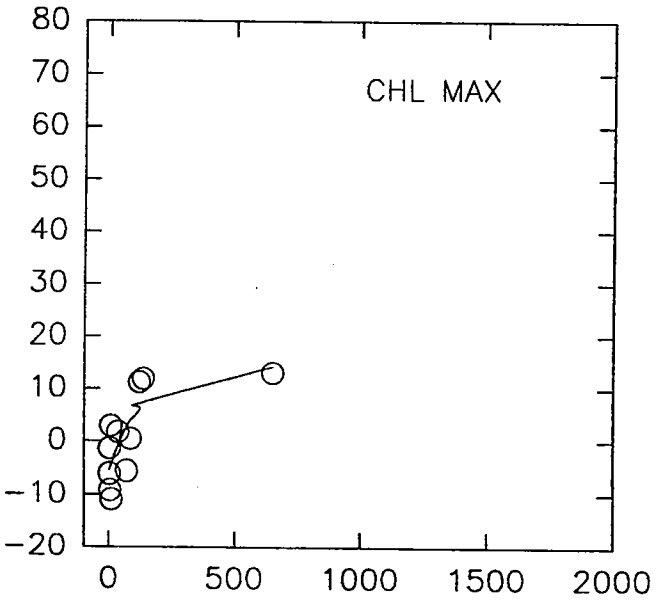


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION F13P CRUISE 2



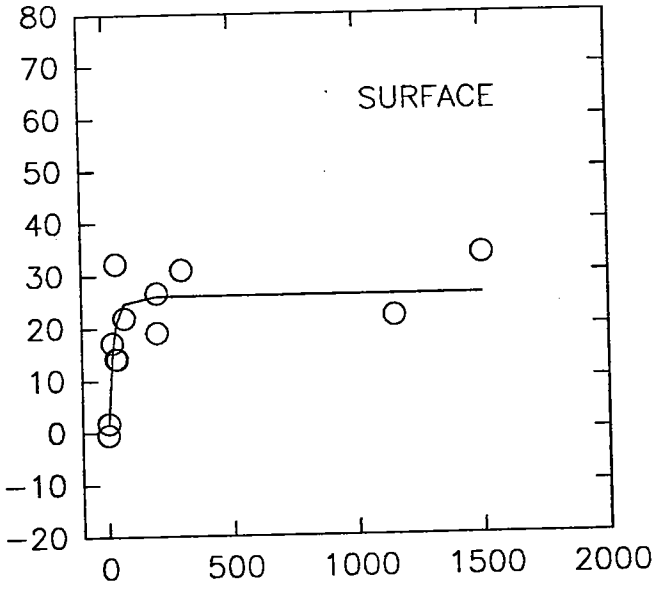


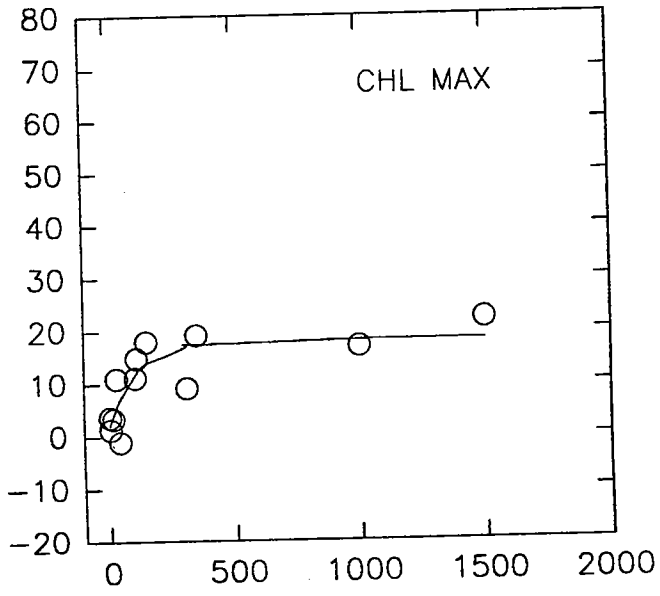
ug O_2/ug CHL/HR

uE/M^2/SEC

H-18

STATION F23P CRUISE 2

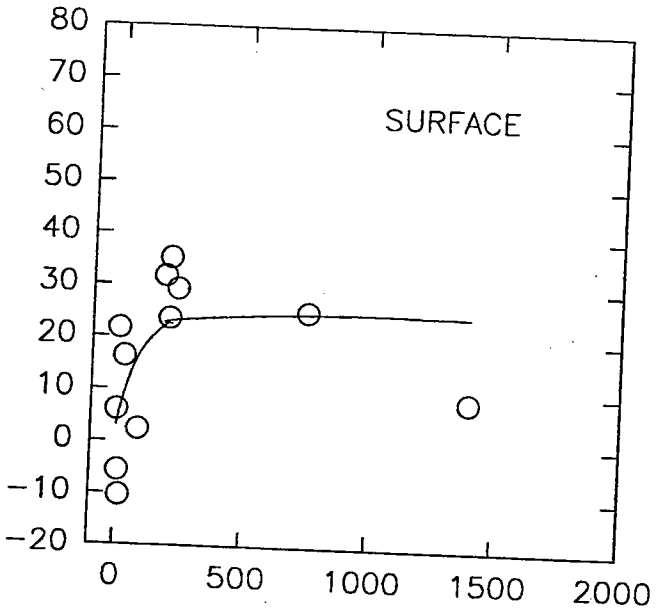


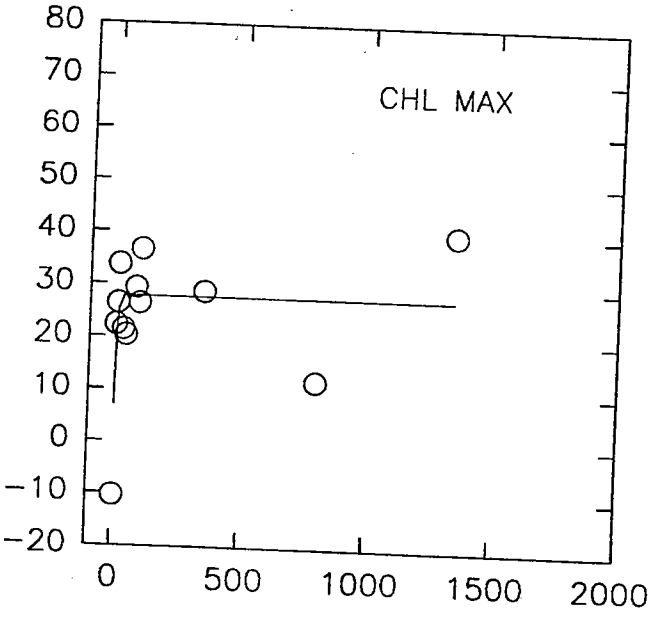


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION N1P CRUISE 2



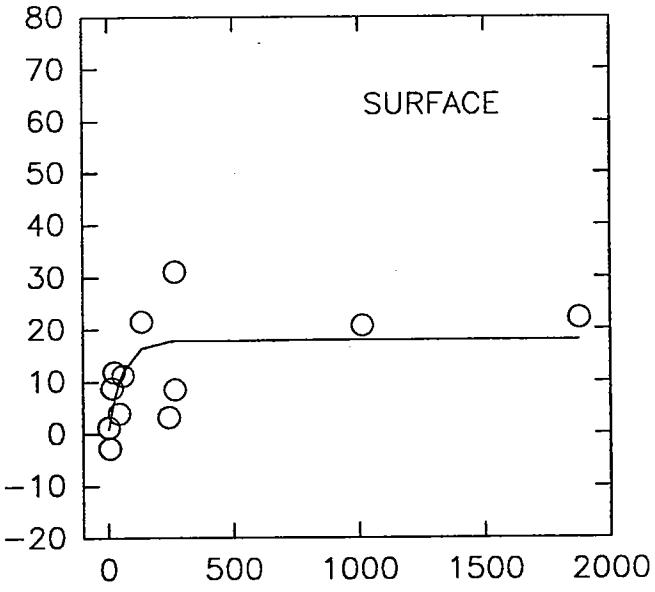


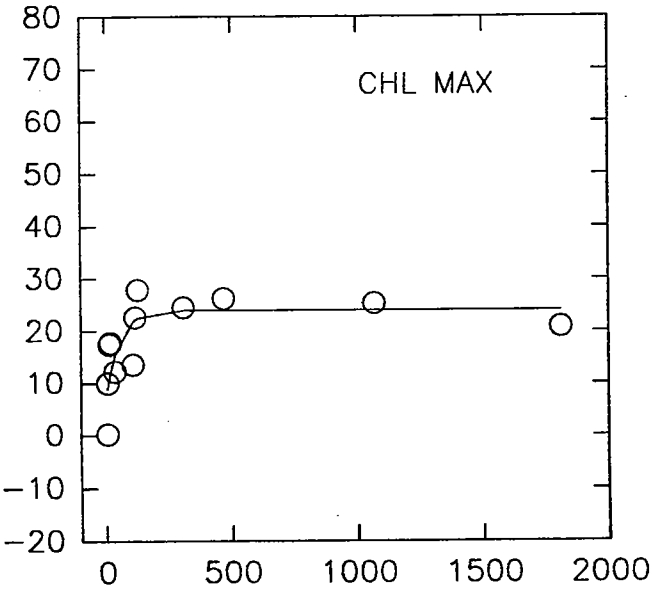
ug O_2/ug CHL/HR

uE/M^2/SEC

H-20

STATION N4P CRUISE 2

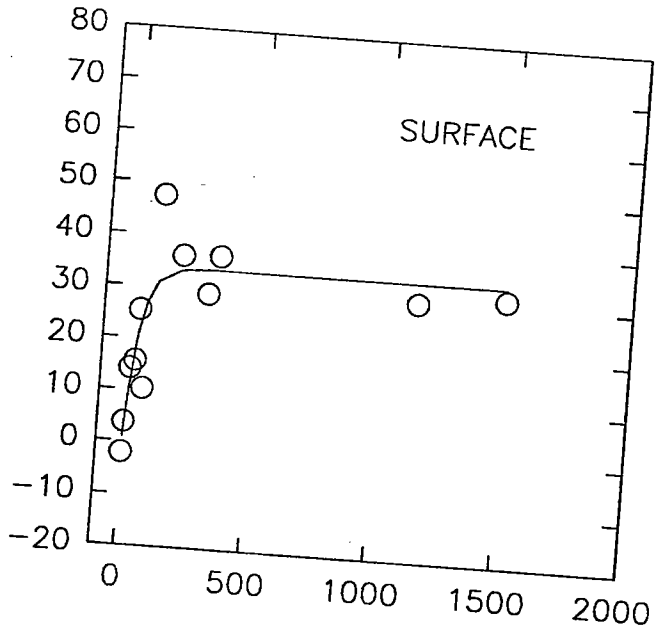


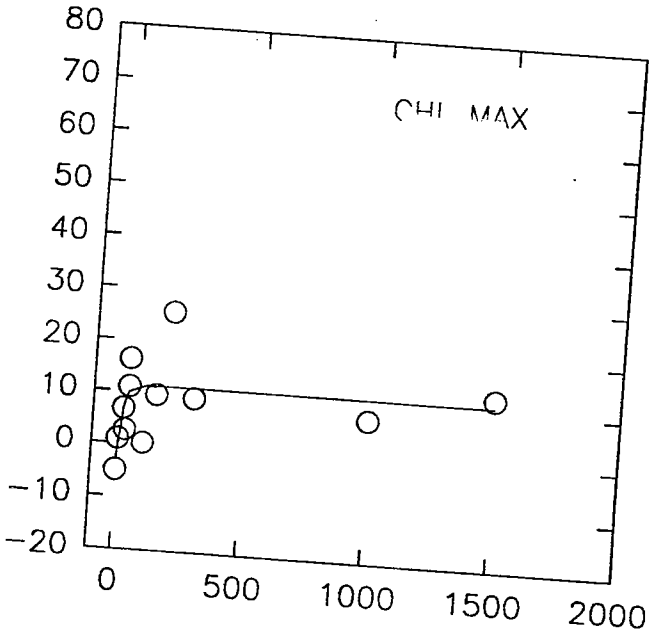


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION N7P CRUISE 2

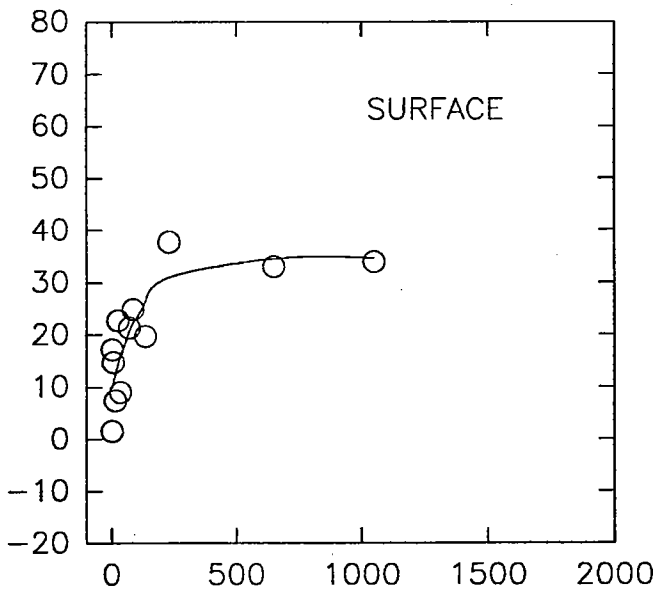


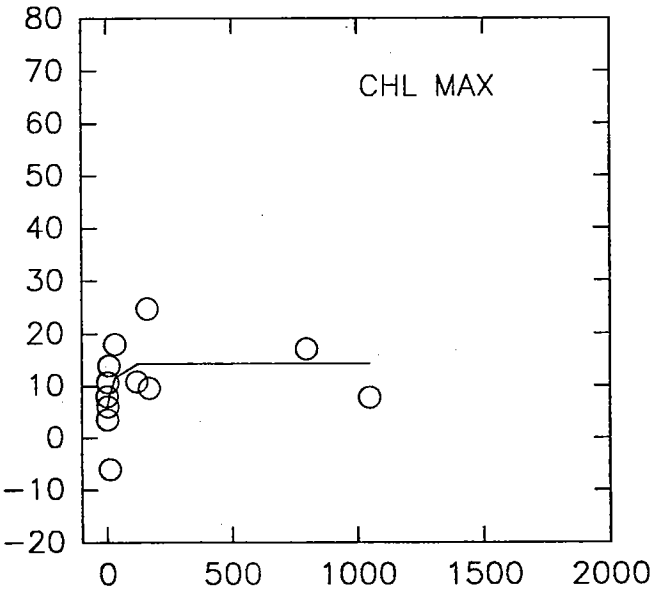


ug O_2/ug CHL/HR

uE/M^2/SEC

STATION N10P CRUISE 2



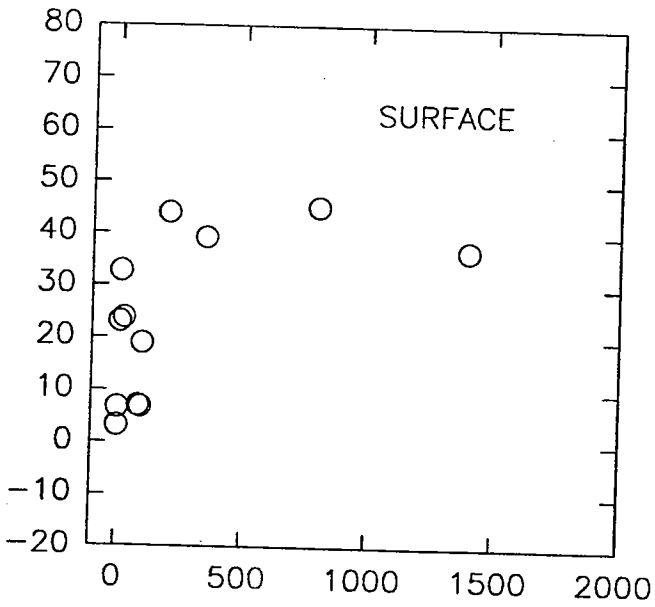


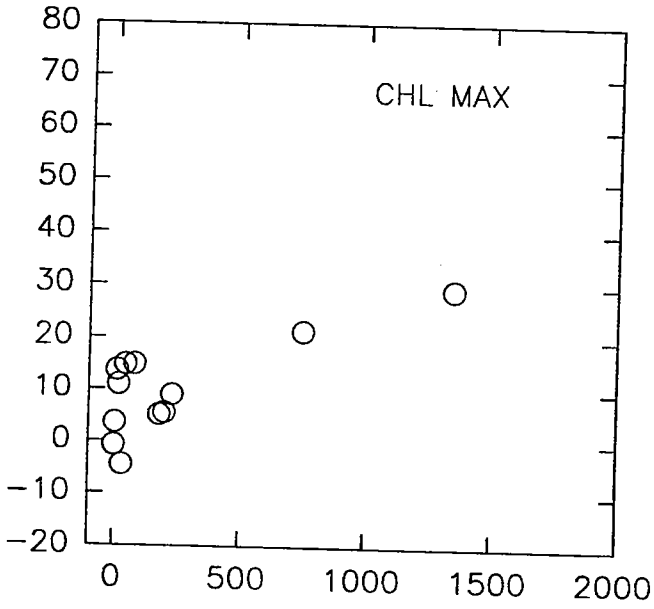
ug O_2/ug CHL/HR

uE/M^2/SEC

H-23

STATION N16P CRUISE 2



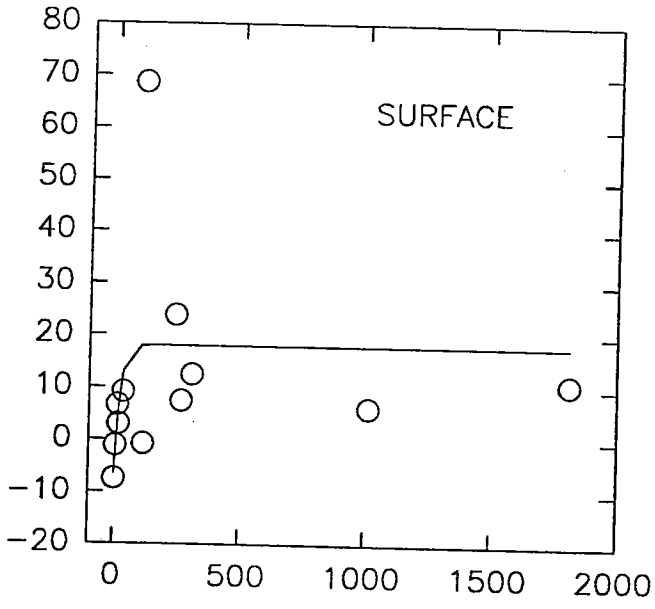


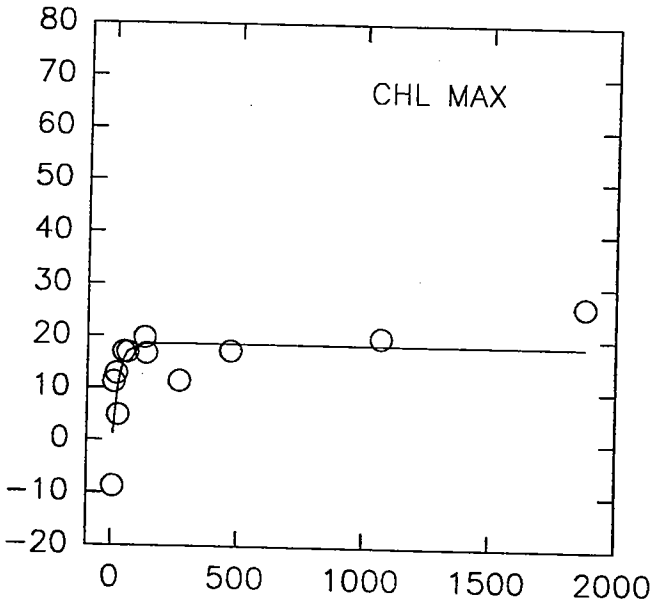
ug O_2/ug CHL/HR

uE/M^2/SEC

H-24

STATION N20P CRUISE 2





ug O_2/ug CHL/HR

uE/M^2/SEC

H-25

APPENDIX H

Metabolism and Light Measurements from March 1992 Stations

Part 3

Summary of Model—Fit Parameters

The model is described in the text, Section 2. Parameters were estimated using SAS (1985). If no values are given for a sample, the statistical routine did not converge on a model fit. Numbers in parentheses give standard deviations of the parameter. The fit judged by R^2 of the model compared against the data was excellent in some cases, poor in others.

P VS I CURVE PARAMETERS CRUISE 2

STATION	DEPTH	PMAX	ALPHA	RESP	R_2
F13P	CHL	20.15(14.76)	0.16(0.20)	5.85(5.76)	0.63
	SUR	27.41(12.33)	0.73(1.13)	16.88(10.48)	0.76
F1P	CHL	17.82(20.01)	0.11(0.35)	6.27(14.17)	0.35
	SUR	29.43(17.85)	0.59(0.84)	3.13(16.68)	0.86
F23P	CHL	16.42(8.56)	0.15(0.22)	-1.64(6.89)	0.89
	SUR	28.45(13.94)	1.26(1.62)	2.47(13.23)	0.94
F2P	CHL	16.08(24.92)	0.04(0.11)	1.69(2.81)	0.44
	SUR	18.77(1.22)	0.60(0.48)	9.84(2.65)	0.94
N10P	CHL	8.87(12.55)	0.32(1.74)	-5.48(10.09)	0.74
	SUR	25.07(2.92)	0.21(0.24)	-9.56(6.29)	0.94
N16P	CHL	. .	. .	. .	.
	SUR	. .	. .	. .	.
N1P	CHL	43.98(79.79)	9.75(39.97)	16.27(75.37)	0.85
	SUR	21.97(22.34)	0.25(0.88)	-2.78(17.84)	0.70
N20P	CHL	21.38(17.23)	0.94(2.21)	2.77(17.31)	0.88
	SUR	27.71(46.53)	1.28(6.64)	8.74(45.05)	0.43
N4P	CHL	16.55(10.17)	0.31(0.69)	-7.39(9.71)	0.94
	SUR	17.56(15.58)	0.32(0.89)	-0.37(14.32)	0.77
N7P	CHL	16.22(16.51)	1.05(3.17)	5.15(16.35)	0.71
	SUR	35.00(17.03)	0.81(1.14)	1.44(15.90)	0.93

APPENDIX H

Metabolism and Light Measurements from March 1992 Stations

Part 4

Dark Respiration Measurements

The table compares mean dissolved oxygen concentrations (mg O_2 L^{-1}) for initial samples and those incubated in the dark for about 6 h. Number in parentheses are standard deviations. n= 3 in most cases. ns= t-test not significant at $p<0.05$, otherwise the level of statistical significance is given.

RESPIRATION CRUISE 2

STATION	DEPTH	INITIAL	DARK	p
F13P	CHL	10.376(0.023)	10.735(0.703)	ns
	SUR	10.398(0.047)	10.599(0.505)	ns
F1P	CHL	10.328(0.019)	10.339(0.056)	ns
	SUR	10.283(0.031)	10.171(0.158)	ns
F23P	CHL	10.437(0.041)	10.537(0.076)	ns
	SUR	10.387(0.038)	10.645(0.064)	0.004
F2P	CHL	10.583(0.089)	9.289(0.945)	ns
	SUR	10.612(0.019)	9.187(1.004)	ns
N10P	CHL	10.088(0.129)	10.115(0.014)	ns
	SUR	10.074(0.016)	10.145(0.074)	ns
N16P	CHL	10.011(0.091)	10.965(0.896)	ns
	SUR	10.041(0.048)	10.855(0.902)	ns
N1P	CHL	10.258(0.046)	10.254(0.067)	ns
	SUR	10.253(0.048)	10.201(0.047)	ns
N20P	CHL	10.297(0.072)	11.107(0.817)	ns
	SUR	10.342(0.004)	10.957(0.827)	ns
N4P	CHL	10.212(0.021)	10.340(0.039)	0.008
	SUR	10.236(0.057)	10.369(0.053)	0.04
N7P	CHL	10.100(0.065)	10.602(0.719)	ns
	SUR	10.114(0.097)	10.611(0.694)	ns

APPENDIX H

Metabolism and Light Measurements from March 1992 Stations

Part 5

In Situ Irradiance Measurements

TABLE H-5. IRRADIANCE DATA FROM MARCH 1992.

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F01P	03/14/92	10:35	AIR		0	2080.0	1275	1.631
F01P	03/14/92	10:35	1		1	819.0	1350	0.607
F01P	03/14/92	10:35	2		2	546.0	1425	0.383
F01P	03/14/92	10:35	3		3	273.0	1388	0.197
F01P	03/14/92	10:35	4		4	191.1	1350	0.142
F01P	03/14/92	10:35	5		5	95.6	1275	0.075
F01P	03/14/92	10:35	10		10	49.1	1575	0.031
F01P	03/14/92	10:35	15		15	16.4	1500	0.011
F01P	03/14/92	10:35	20		20	10.9	750	0.015
F01P	03/14/92	10:35	25		25	3.3	525	0.006
F02P	03/14/92		AIR		0	1809.6	1275	1.419
F02P	03/14/92		1		1	409.5	1350	0.303
F02P	03/14/92		2		2	300.3	1425	0.211
F02P	03/14/92		3		3	273.0	1425	0.192
F02P	03/14/92		4		4	191.1	1275	0.150
F02P	03/14/92		5		5	136.5	1200	0.114
F02P	03/14/92		10		10	114.7	1425	0.080
F02P	03/14/92		15		15	21.8	1500	0.015

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F02P	03/14/92		20		20	6.8	1275	0.005
F02P	03/14/92		25		25	3.5	1275	0.003
F03	03/14/92	8:43	AIR		0	1934.4	1088	1.779
F03	03/14/92	8:43	1		1	600.6	1050	0.572
F03	03/14/92	8:43	2		2	436.8	1050	0.416
F03	03/14/92	8:43	3		3	382.2	1088	0.351
F03	03/14/92	8:43	4		4	273.0	1088	0.251
F03	03/14/92	8:43	5		5	204.8	1050	0.195
F03	03/14/92	8:43	10	15	10	79.2	1050	0.075
F03	03/14/92	8:43	15	15	14	32.8	1050	0.031
F05	03/14/92	16:11	AIR		0	728.0	338	2.157
F05	03/14/92	16:11	1		1	109.2	300	0.364
F05	03/14/92	16:11	2		2	163.8	338	0.485
F05	03/14/92	16:11	3		3	95.6	300	0.319
F05	03/14/92	16:11	4		4	73.7	263	0.281
F05	03/14/92	16:11	5		5	68.3	300	0.228
F05	03/14/92	16:11	10		10	21.8	263	0.083
F05	03/14/92	16:11	15		15	9.6	263	0.036
F10	03/15/92		AIR		0	1206.4	900	1.340
F10	03/15/92		1		1	518.7	863	0.601
F10	03/15/92		2		2	300.3	825	0.364

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F10	03/15/92		3		3	218.4	825	0.265
F10	03/15/92		4		4	191.1	825	0.232
F10	03/15/92		5		5	163.8	788	0.208
F10	03/15/92		10		10	73.7	788	0.094
F10	03/15/92		15		15	30.0	788	0.038
F10	03/15/92		20		20	14.5	788	0.018
F10	03/15/92		25		25	9.6	750	0.013
F10	03/15/92		30		30	4.1	750	0.005
F13P	03/15/92		AIR		0	1580.8	1125	1.405
F13P	03/15/92		1		1	819.0	1350	0.607
F13P	03/15/92		2		2	546.0	1275	0.428
F13P	03/15/92		3		3	273.0	1275	0.214
F13P	03/15/92		4		4	259.4	1275	0.203
F13P	03/15/92		5		5	204.8	1275	0.161
F13P	03/15/92		10		10	54.6	1425	0.038
F13P	03/15/92		15		15	18.3	1425	0.013
F13P	03/15/92		20		20	8.2	1500	0.005
F13P	03/15/92		25		25	3.0	1500	0.002
F23P	03/16/92	13:15	AIR		0	1453.5[e]	1575	0.923
F23P	03/16/92	13:15	1		1	884.0[e]	1575	0.561
F23P	03/16/92	13:15	2		2	574.6[e]	1575	0.365

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
F23P	03/16/92	13:15	3		3	309.4[e]	1613	0.192
F23P	03/16/92	13:15	4		4	221.0[e]	1613	0.137
F23P	03/16/92	13:15	5		5	154.7[e]	1650	0.094
F23P	03/16/92	13:15	10		10	26.5[e]	1650	0.016
F23P	03/16/92	13:15	15		15	6.6[e]	1650	0.004
F23P	03/16/92	13:15	20		20	1.3[e]	1688	0.001
N01P	03/17/92	8:45	AIR		0	1065.9[e]	405	2.632
N01P	03/17/92	8:45	1	35	1	185.6[e]	390	0.476
N01P	03/17/92	8:45	2	35	2	110.5[e]	375	0.295
N01P	03/17/92	8:45	3	35	2	106.1[e]	383	0.277
N01P	03/17/92	8:45	4	35	3	75.1[e]	375	0.200
N01P	03/17/92	8:45	5	35	4	75.1[e]	375	0.200
N01P	03/17/92	8:45	10	35	8	30.9[e]	375	0.083
N01P	03/17/92	8:45	15	35	12	8.4[e]	375	0.022
N01P	03/17/92	8:45	20	35	16	4.9[e]	375	0.013
N01P	03/17/92	8:45	25	35	20	4.4[e]	375	0.012
N01P	03/17/92	8:45	30	35	25	1.3[e]	390	0.003
N01P	03/16/92	15:17	AIR		0	726.8[e]	1200	0.606
N01P	03/16/92	15:17	1		1	442.0[e]	1200	0.368
N01P	03/16/92	15:17	2		2	375.7[e]	1200	0.313
N01P	03/16/92	15:17	3		3	265.2[e]	1125	0.236

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
N01P	03/16/92	15:17	4		4	207.7[e]	1125	0.185
N01P	03/16/92	15:17	5		5	176.8[e]	1125	0.157
N01P	03/16/92	15:17	10		10	66.3[e]	1050	0.063
N01P	03/16/92	15:17	15		15	26.5[e]	1088	0.024
N01P	03/16/92	15:17	20		20	10.2[e]	1125	0.009
N01P	03/16/92	15:17	25		25	4.4[e]	1125	0.004
N07P	03/15/92		AIR		0	1248.0	750	1.664
N07P	03/15/92		1		1	273.0	1313	0.208
N07P	03/15/92		2		2	273.0	1313	0.208
N07P	03/15/92		3		3	436.8	1350	0.324
N07P	03/15/92		4		4	382.2	1350	0.283
N07P	03/15/92		5		5	273.0	1350	0.202
N07P	03/15/92		10		10	109.2	1425	0.077
N07P	03/15/92		15		15	43.7	1313	0.033
N07P	03/15/92		20		20	19.1	1125	0.017
N07P	03/15/92		25		25	2.7	563	0.005
N07P	03/15/92		30		30	1.4	825	0.002
N07P	03/15/92		35		35	0.5	675	0.001
N10P	03/16/92	10:05	AIR		0	1518.1[e]	1725	0.880
N10P	03/16/92	10:05	1		1	1105.0[e]	1800	0.614
N10P	03/16/92	10:05	2		2	795.6[e]	1800	0.442

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
N10P	03/16/92	10:05	3		3	574.6[e]	1800	0.319
N10P	03/16/92	10:05	4		4	442.0[e]	1763	0.251
N10P	03/16/92	10:05	5		5	375.7[e]	1763	0.213
N10P	03/16/92	10:05	10		10	128.2[e]	1763	0.073
N10P	03/16/92	10:05	15		15	48.6[e]	1763	0.028
N10P	03/16/92	10:05	20		20	19.0[e]	1763	0.011
N16P	03/15/92	14:13	AIR		0	1872.0	1050	1.783
N16P	03/15/92	14:13	1		1	764.4	1050	0.728
N16P	03/15/92	14:13	2		2	491.4	1088	0.452
N16P	03/15/92	14:13	3		3	300.3	975	0.308
N16P	03/15/92	14:13	4		4	354.9	1125	0.315
N16P	03/15/92	14:13	5		5	273.0	1125	0.243
N16P	03/15/92	14:13	10		10	95.6	1050	0.091
N16P	03/15/92	14:13	15		15	41.0	975	0.042
N16P	03/15/92	14:13	20		20	14.5	1125	0.013
N16P	03/15/92	14:13	25		25	6.3	600	0.010
N16P	03/15/92	14:13	30		30	3.3	975	0.003
N16P	03/15/92	14:13	35		35	1.4	1200	0.001
N20P	03/15/92	15:20	AIR		0	1726.4	1088	1.587
N20P	03/15/92	15:20	1		1	546.0	1088	0.502
N20P	03/15/92	15:20	2		2	382.2	1013	0.377

STATION	DATE	TIME	WIRE OUT	WIRE ANGLE[a]	APPROX DEPTH[b]	IN SITU LIGHT[c]	DECK CELL[d]	LIGHT/ DECK CELL
N20P	03/15/92	15:20	3		3	286.7	1088	0.264
N20P	03/15/92	15:20	4		4	210.2	1050	0.200
N20P	03/15/92	15:20	5		5	172.0	1013	0.170
N20P	03/15/92	15:20	10		10	62.8	1013	0.062
N20P	03/15/92	15:20	15		15	24.6	1013	0.024
N20P	03/15/92	15:20	20		20	9.0	1013	0.009
N20P	03/15/92	15:20	25		25	2.7	1013	0.003
N20P	03/15/92	15:20	30		30	1.6	1088	0.002

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[a] 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.

[b] Approximate depth = wireout (cos θ) where θ = wire angle visually estimated.

[c] The meter/sensor pair reading had to be corrected to provide the actual light values in air and underwater. The recorded reading in air was multiplied by 2.08 and the recorded reading in water was multiplied by 2.73. These factors were based upon post-cruise calibration of the meter/sensor pair. Units are μEinsteins/m^2/sec, as for deck cell.

[d] Deck cell (cosine sensor, flat plane) readings had to be corrected to provide the actual light readings in air. Post-cruise calibration was performed; recorded readings of this sensor-meter pair were multiplied by 0.75.

[e] The 4π spherical sensor was damaged on the cruise (3/15/92). A back-up cosine sensor was used on 3/16-17/92. Recorded readings in air have been multiplied by 3.23 and recorded readings in water have been multiplied by 4.42 to yield actual values for this sensor-meter pair. Post-cruise calibration of sensor-meter pairs was conducted to arrive at these correction factors.

APPENDIX I

Phytoplankton Species Data Tables for February 1992

In coding taxa, an alphabetic character prefix was used to denote groups, where D= diatoms, F= dinoflagellates, U= microflagellates, and O= other.

TABLE I-1. PHYTOPLANKTON SPECIES DATA FOR FEBRUARY 1992.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F01P	S	ASTERIONELLA GLACIALIS	D5	.014
MFF01	F01P	S	BIDDULPHIA SINENSIS	D9	.018
MFF01	F01P	S	CHAETOCEROS DEBILIS	D18	.267
MFF01	F01P	S	CHAETOCEROS SEPTENTRIOLIS	D26	.023
MFF01	F01P	S	CHAETOCEROS SOCIALIS	D27	.032
MFF01	F01P	S	CHAETOCEROS SPP.	D29	.118
MFF01	F01P	S	CORETHRON CRIOPHILUM	D33	.014
MFF01	F01P	S	COSCINODISCUS EXCENTRICUS	D35	.005
MFF01	F01P	S	CRYPTOMONADS	01	.163
MFF01	F01P	S	CYLINDROTHECA CLOSTERIUM	D42	.014
MFF01	F01P	S	DETONULA CONFERVACEA	D43	.163
MFF01	F01P	S	DITYLUM BRIGHTWELLII	D45	.005
MFF01	F01P	S	LEPTOCYLINDRUS MINIMUS	D53	.018
MFF01	F01P	S	MICROFLAGELLATES	U1	.127
MFF01	F01P	S	NAVICULOID DIATOMS	D59	.018
MFF01	F01P	S	NITZSCHIA CLOSTERIUM	D62	.005
MFF01	F01P	S	NITZSCHIA SPP.	D67	.009
MFF01	F01P	S	RHIZOSELENIA ALATA	D74	.009
MFF01	F01P	S	RHIZOSELENIA DELICATULA	D76	.041
MFF01	F01P	S	SKELETONEMA COSTATUM	D84	.194
MFF01	F01P	S	THALASSIONEMA NITZSCHOIDES	D91	.122
MFF01	F01P	S	THALASSIOSIRA GRAVIDA	D92	.090
MFF01	F01P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.289
MFF01	F01P	S	THALASSIOSIRA SPP.	D95	.054
MFF01	F01P	S	TOTAL PHYTOPLANKTON		1.863
MFF01	F01P	S	UNID. CENTRALES	D100	.041
MFF01	F01P	S	UNID. NAKED DINOFLAGELLATE	F50	.009
MFF01	F01P	S	UNID. PENNALES	D101	.005
MFF01	F02P	S	AMPHIDINIUM SPP.	F4	.010

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F02P	S	ASTERIONELLA GLACIALIS	D5	.026
MFF01	F02P	S	BIDDULPHIA SINENSIS	D9	.005
MFF01	F02P	S	CHAETOCEROS ATLANTICUS	D12	.010
MFF01	F02P	S	CHAETOCEROS DEBILIS	D18	.256
MFF01	F02P	S	CHAETOCEROS DECIPIENS	D19	.036
MFF01	F02P	S	CHAETOCEROS SOCIALIS	D27	.092
MFF01	F02P	S	CHAETOCEROS SPP.	D29	.087
MFF01	F02P	S	CRYPTOMONADS	01	.051
MFF01	F02P	S	DETONULA CONFERVACEA	D43	.067
MFF01	F02P	S	DINOPHYSIS ACUMINATA	F10	.010
MFF01	F02P	S	DITYLUM BRIGHTWELLII	D45	.031
MFF01	F02P	S	GUINARDIA FLACCIDA	D48	.021
MFF01	F02P	S	LEPTOCYLINDRUS MINIMUS	D53	.318
MFF01	F02P	S	MICROFLAGELLATES	U1	.215
MFF01	F02P	S	NAVICULOID DIATOMS	D59	.021
MFF01	F02P	S	NITZSCHIA CLOSTERIUM	D62	.015
MFF01	F02P	S	NITZSCHIA SERIATA	D66	.010
MFF01	F02P	S	RHIZOSELENIA ALATA	D74	.005
MFF01	F02P	S	RHIZOSELENIA DELICATULA	D76	.051
MFF01	F02P	S	RHIZOSELENIA SHRUBSOLEI	D80	.005
MFF01	F02P	S	SKELETONEMA COSTATUM	D84	.318
MFF01	F02P	S	THALASSIONEMA NITZSCHOIDES	D91	.154
MFF01	F02P	S	THALASSIOSIRA GRAVIDA	D92	.056
MFF01	F02P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.226
MFF01	F02P	S	THALASSIOSIRA SPP.	D95	.010
MFF01	F02P	S	TOTAL PHYTOPLANKTON		2.138
MFF01	F02P	S	UNID. CENTRALES	D100	.026
MFF01	F02P	S	UNID. NAKED DINOFLAGELLATE	F50	.005
MFF01	F13P	S	BIDDULPHIA SINENSIS	D9	.009

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F13P	S	CHAETOCEROS AFFINIS	D11	.026
MFF01	F13P	S	CHAETOCEROS ATLANTICUS	D12	.006
MFF01	F13P	S	CHAETOCEROS DEBILIS	D18	.017
MFF01	F13P	S	CHAETOCEROS SOCIALIS	D27	.094
MFF01	F13P	S	CHAETOCEROS SPP.	D29	.020
MFF01	F13P	S	CRYPTOMONADS	01	.023
MFF01	F13P	S	DETONULA CONFERVACEA	D43	.029
MFF01	F13P	S	DITYLUM BRIGHTWELLII	D45	.003
MFF01	F13P	S	MICROFLAGELLATES	U1	.229
MFF01	F13P	S	NAVICULOID DIATOMS	D59	.006
MFF01	F13P	S	NITZSCHIA SPP.	D67	.003
MFF01	F13P	S	PROTOPERIDINIUM DEPRESSUM	F39	.003
MFF01	F13P	S	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.006
MFF01	F13P	S	SKELETONEMA COSTATUM	D84	.046
MFF01	F13P	S	THALASSIONEMA NITZSCHOIDES	D91	.051
MFF01	F13P	S	THALASSIOSIRA GRAVIDA	D92	.046
MFF01	F13P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.063
MFF01	F13P	S	THALASSIOSIRA SPP.	D95	.031
MFF01	F13P	S	THALASSOTHRIX FRAUENFELDII	D97	.006
MFF01	F13P	S	TOTAL PHYTOPLANKTON		.729
MFF01	F13P	S	UNID. CENTRALES	D100	.011
MFF01	F13P	S	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF01	F23P	S	ASTERIONELLA GLACIALIS	D5	.003
MFF01	F23P	S	BIDDULPHIA SINENSIS	D9	.003
MFF01	F23P	S	CHAETOCEROS COMPRESSUS	D13	.017
MFF01	F23P	S	CHAETOCEROS DEBILIS	D18	.012
MFF01	F23P	S	CHAETOCEROS SOCIALIS	D27	.105
MFF01	F23P	S	CHAETOCEROS SPP.	D29	.029
MFF01	F23P	S	COSCINODISCUS EXCENTRICUS	D35	.023
MFF01	F23P	S	CRYPTOMONADS	01	.035

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F23P	S	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF01	F23P	S	DETONULA CONFERVACEA	D43	.017
MFF01	F23P	S	MICROFLAGELLATES	U1	.216
MFF01	F23P	S	NAVICULOIDS (LYRATE)	D60	.006
MFF01	F23P	S	NITZSCHIA SPP.	D67	.003
MFF01	F23P	S	PLEUROSIGMA SPP.	D71	.003
MFF01	F23P	S	RHIZOSELENIA DELICATULA	D76	.003
MFF01	F23P	S	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF01	F23P	S	SKELETONEMA COSTATUM	D84	.006
MFF01	F23P	S	THALASSIONEMA NITZSCHOIDES	D91	.023
MFF01	F23P	S	THALASSIOSIRA GRAVIDA	D92	.038
MFF01	F23P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.105
MFF01	F23P	S	TOTAL PHYTOPLANKTON		.670
MFF01	F23P	S	UNID. CENTRALES	D100	.017
MFF01	N01P	S	ASTERIONELLA GLACIALIS	D5	.006
MFF01	N01P	S	BIDDULPHIA SINENSIS	D9	.003
MFF01	N01P	S	CHAETOCEROS ATLANTICUS	D12	.012
MFF01	N01P	S	CHAETOCEROS DEBILIS	D18	.022
MFF01	N01P	S	CHAETOCEROS SOCIALIS	D27	.025
MFF01	N01P	S	CHAETOCEROS SPP.	D29	.019
MFF01	N01P	S	CORETHRON CRIOPHILUM	D33	.003
MFF01	N01P	S	COSCINODISCUS RADIATUS	D39	.003
MFF01	N01P	S	CRYPTOMONADS	01	.071
MFF01	N01P	S	CYLINDROTHECA CLOSTERIUM	D42	.012
MFF01	N01P	S	DINOPHYSIS ACUTA	F11	.003
MFF01	N01P	S	DITYLUM BRIGHTWELLII	D45	.003
MFF01	N01P	S	GYRODINIUM SPIRALE	F23	.009
MFF01	N01P	S	LEPTOCYLINDRUS DANICUS	D52	.006
MFF01	N01P	S	MICROFLAGELLATES	U1	.314
MFF01	N01P	S	NAVICULOID DIATOMS	D59	.006

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N01P	S	NAVICULOIDS (LYRATE)	D60	.016
MFF01	N01P	S	NITZSCHIA CLOSTERIUM	D62	.028
MFF01	N01P	S	NITZSCHIA SPP.	D67	.006
MFF01	N01P	S	RHIZOSELENIA DELICATULA	D76	.003
MFF01	N01P	S	RHIZOSELENIA FRAGILISSIMA	D77	.003
MFF01	N01P	S	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF01	N01P	S	SKELETONEMA COSTATUM	D84	.062
MFF01	N01P	S	THALASSIONEMA NITZSCHOIDES	D91	.075
MFF01	N01P	S	THALASSIOSIRA GRAVIDA	D92	.025
MFF01	N01P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.053
MFF01	N01P	S	THALASSIOSIRA SPP.	D95	.006
MFF01	N01P	S	TOTAL PHYTOPLANKTON		.823
MFF01	N01P	S	UNID. CENTRALES	D100	.022
MFF01	N01P	S	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF01	N04P	S	CERATIUM TRIPOS	F9	.003
MFF01	N04P	S	CHAETOCEROS DEBILIS	D18	.087
MFF01	N04P	S	CHAETOCEROS EIBENII	D22	.006
MFF01	N04P	S	CHAETOCEROS SOCIALIS	D27	.138
MFF01	N04P	S	CHAETOCEROS SPP.	D29	.020
MFF01	N04P	S	CORETHRON CRIOPHILUM	D33	.003
MFF01	N04P	S	COSCINODISCUS EXCENTRICUS	D35	.014
MFF01	N04P	S	COSCINOSIRA POLYCHORDA	D41	.014
MFF01	N04P	S	CRYPTOMONADS	01	.011
MFF01	N04P	S	CYLINDROTHECA CLOSTERIUM	D42	.037
MFF01	N04P	S	DISTEPHANUS SPECULUM	04	.003
MFF01	N04P	S	DITYLUM BRIGHTWELLII	D45	.011
MFF01	N04P	S	GYRODINIUM COMPLANATUM	F22	.003
MFF01	N04P	S	GYRODINIUM SPIRALE	F23	.003
MFF01	N04P	S	MICROFLAGELLATES	U1	.281
MFF01	N04P	S	NAVICULOIDS (LYRATE)	D60	.042

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N04P	S	NITZSCHIA CLOSTERIUM	D62	.006
MFF01	N04P	S	NITZSCHIA SPP.	D67	.039
MFF01	N04P	S	PROTOPERIDINIUM BREVIPES	F36	.003
MFF01	N04P	S	RHIZOSELENIA DELICATULA	D76	.006
MFF01	N04P	S	RHIZOSELENIA FRAGILISSIMA	D77	.006
MFF01	N04P	S	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.006
MFF01	N04P	S	THALASSIONEMA NITZSCHOIDES	D91	.059
MFF01	N04P	S	THALASSIOSIRA GRAVIDA	D92	.090
MFF01	N04P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.233
MFF01	N04P	S	THALASSIOSIRA SPP.	D95	.017
MFF01	N04P	S	TOTAL PHYTOPLANKTON		1.147
MFF01	N04P	S	UNID. CENTRALES	D100	.008
MFF01	N07P	S	ASTERIONELLA GLACIALIS	D5	.018
MFF01	N07P	S	CHAETOCEROS ATLANTICUS	D12	.006
MFF01	N07P	S	CHAETOCEROS COMPRESSUS	D13	.030
MFF01	N07P	S	CHAETOCEROS DEBILIS	D18	.039
MFF01	N07P	S	CHAETOCEROS SOCIALIS	D27	.083
MFF01	N07P	S	CHAETOCEROS SPP.	D29	.024
MFF01	N07P	S	CORETHRON CRIOPHILUM	D33	.003
MFF01	N07P	S	COSCINODISCUS EXCENTRICUS	D35	.015
MFF01	N07P	S	COSCINOSIRA POLYCHORDA	D41	.003
MFF01	N07P	S	CRYPTOMONADS	01	.039
MFF01	N07P	S	CYLINDROTHECA CLOSTERIUM	D42	.015
MFF01	N07P	S	GYRO/PLEUROSIGMA SPP.	D49	.003
MFF01	N07P	S	LEPTOCYLINDRUS MINIMUS	D53	.012
MFF01	N07P	S	MICROFLAGELLATES	U1	.172
MFF01	N07P	S	NAVICULOID DIATOMS	D59	.003
MFF01	N07P	S	NITZSCHIA CLOSTERIUM	D62	.006
MFF01	N07P	S	NITZSCHIA SPP.	D67	.003
MFF01	N07P	S	RHIZOSELENIA DELICATULA	D76	.015

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N07P	S	THALASSIONEMA NITZSCHOIDES	D91	.077
MFF01	N07P	S	THALASSIOSIRA GRAVIDA	D92	.030
MFF01	N07P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.053
MFF01	N07P	S	THALASSIOSIRA SPP.	D95	.006
MFF01	N07P	S	THALASSOTHRIX FRAUENFELDII	D97	.009
MFF01	N07P	S	TOTAL PHYTOPLANKTON		.686
MFF01	N07P	S	UNID. CENTRALES	D100	.021
MFF01	N07P	S	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF01	N10P	S	BIDDULPHIA SINENSIS	D9	.004
MFF01	N10P	S	CHAETOCEROS DEBILIS	D18	.060
MFF01	N10P	S	CHAETOCEROS SEPTENTRIOLIS	D26	.009
MFF01	N10P	S	CHAETOCEROS SOCIALIS	D27	.047
MFF01	N10P	S	CHAETOCEROS SPP.	D29	.051
MFF01	N10P	S	COCCONEIS SCUTELLUM	D32	.004
MFF01	N10P	S	CRYPTOMONADS	01	.068
MFF01	N10P	S	CYANOPHYCEAE	02	.021
MFF01	N10P	S	CYLINDROTHECA CLOSTERIUM	D42	.004
MFF01	N10P	S	DITYLUM BRIGHTWELLII	D45	.004
MFF01	N10P	S	GRAMMATOPHORA MARINA	D47	.004
MFF01	N10P	S	GYRO/PLEUROSIGMA SPP.	D49	.009
MFF01	N10P	S	LEPTOCYLINDRUS MINIMUS	D53	.009
MFF01	N10P	S	MICROFLAGELLATES	U1	.277
MFF01	N10P	S	NAVICULOID DIATOMS	D59	.013
MFF01	N10P	S	NAVICULOIDS (LYRATE)	D60	.004
MFF01	N10P	S	RHIZOSELENIA FRAGILISSIMA	D77	.009
MFF01	N10P	S	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.009
MFF01	N10P	S	SKELETONEMA COSTATUM	D84	.017
MFF01	N10P	S	THALASSIONEMA NITZSCHOIDES	D91	.090
MFF01	N10P	S	THALASSIOSIRA GRAVIDA	D92	.043
MFF01	N10P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.051

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N10P	S	THALASSIOSIRA SPP.	D95	.038
MFF01	N10P	S	TOTAL PHYTOPLANKTON		.887
MFF01	N10P	S	UNID. CENTRALES	D100	.038
MFF01	N10P	S	UNID. NAKED DINOFLAGELLATE	F50	.004
MFF01	N16P	S	ASTERIONELLA GLACIALIS	D5	.028
MFF01	N16P	S	BIDDULPHIA SINENSIS	D9	.003
MFF01	N16P	S	CERATIUM TRIPOS	F9	.003
MFF01	N16P	S	CHAETOCEROS CONSTRICTUS	D14	.016
MFF01	N16P	S	CHAETOCEROS DEBILIS	D18	.031
MFF01	N16P	S	CHAETOCEROS DECIPIENS	D19	.028
MFF01	N16P	S	CHAETOCEROS SOCIALIS	D27	.043
MFF01	N16P	S	CHAETOCEROS SPP.	D29	.040
MFF01	N16P	S	CRYPTOMONADS	01	.053
MFF01	N16P	S	CYLINDROTHECA CLOSTERIUM	D42	.025
MFF01	N16P	S	DITYLUM BRIGHTWELLII	D45	.006
MFF01	N16P	S	GYRO/PLEUROSIGMA SPP.	D49	.003
MFF01	N16P	S	GYROSIGMA SPP.	D51	.003
MFF01	N16P	S	MELOSIRA NUMMOLOIDES	D57	.003
MFF01	N16P	S	MICROFLAGELLATES	U1	.345
MFF01	N16P	S	NAVICULOID DIATOMS	D59	.025
MFF01	N16P	S	NITZSCHIA CLOSTERIUM	D62	.012
MFF01	N16P	S	PROTOPERIDINIUM DEPRESSUM	F39	.003
MFF01	N16P	S	RHIZOSELENIA ALATA	D74	.003
MFF01	N16P	S	RHIZOSELENIA DELICATULA	D76	.034
MFF01	N16P	S	SURRIELLA SPP.	D88	.003
MFF01	N16P	S	THALASSIONEMA NITZSCHOIDES	D91	.155
MFF01	N16P	S	THALASSIOSIRA GRAVIDA	D92	.012
MFF01	N16P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.031
MFF01	N16P	S	THALASSIOSIRA SPP.	D95	.022
MFF01	N16P	S	TOTAL PHYTOPLANKTON		.937

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N16P	S	UNID. CENTRALES	D100	.006
MFF01	N20P	S	ASTERIONELLA GLACIALIS	D5	.019
MFF01	N20P	S	CHAETOCEROS ATLANTICUS	D12	.023
MFF01	N20P	S	CHAETOCEROS DEBILIS	D18	.109
MFF01	N20P	S	CHAETOCEROS DECIPIENS	D19	.015
MFF01	N20P	S	CHAETOCEROS SOCIALIS	D27	.188
MFF01	N20P	S	CHAETOCEROS SPP.	D29	.034
MFF01	N20P	S	CORETHRON CRIOPHILUM	D33	.015
MFF01	N20P	S	CRYPTOMONADS	01	.083
MFF01	N20P	S	CYLINDROTHECA CLOSTERIUM	D42	.004
MFF01	N20P	S	DETONULA CONFERVACEA	D43	.143
MFF01	N20P	S	DITYLUM BRIGHTWELLII	D45	.008
MFF01	N20P	S	LEPTOCYLINDRUS MINIMUS	D53	.045
MFF01	N20P	S	MICROFLAGELLATES	U1	.447
MFF01	N20P	S	NAVICULOID DIATOMS	D59	.023
MFF01	N20P	S	NAVICULOIDS (LYRATE)	D60	.011
MFF01	N20P	S	NITZSCHIA CLOSTERIUM	D62	.015
MFF01	N20P	S	NITZSCHIA SPP.	D67	.015
MFF01	N20P	S	RHIZOSELENIA DELICATULA	D76	.038
MFF01	N20P	S	RHIZOSELENIA SPP	D81	.004
MFF01	N20P	S	SKELETONEMA COSTATUM	D84	.053
MFF01	N20P	S	THALASSIONEMA NITZSCHOIDES	D91	.045
MFF01	N20P	S	THALASSIOSIRA GRAVIDA	D92	.026
MFF01	N20P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.060
MFF01	N20P	S	THALASSIOSIRA SPP.	D95	.071
MFF01	N20P	S	TOTAL PHYTOPLANKTON		1.507
MFF01	N20P	S	UNID. CENTRALES	D100	.011
MFF01	N20P	S	UNID. NAKED DINOFLAGELLATE	F50	.004
MFF01	F01P	M	ASTERIONELLA GLACIALIS	D5	.003
MFF01	F01P	M	BIDDULPHIA SINENSIS	D9	.006

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F01P	M	CHAETOCEROS ATLANTICUS	D12	.006
MFF01	F01P	M	CHAETOCEROS COMPRESSUS	D13	.031
MFF01	F01P	M	CHAETOCEROS DEBILIS	D18	.153
MFF01	F01P	M	CHAETOCEROS SOCIALIS	D27	.054
MFF01	F01P	M	CHAETOCEROS SPP.	D29	.068
MFF01	F01P	M	COSCINODISCUS EXCENTRICUS	D35	.014
MFF01	F01P	M	CRYPTOMONADS	01	.045
MFF01	F01P	M	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF01	F01P	M	DETONULA CONFERVACEA	D43	.085
MFF01	F01P	M	DINOPHYSIS ACUMINATA	F10	.003
MFF01	F01P	M	DITYLUM BRIGHTWELLII	D45	.009
MFF01	F01P	M	LEPTOCYLINDRUS MINIMUS	D53	.028
MFF01	F01P	M	MICROFLAGELLATES	U1	.193
MFF01	F01P	M	NAVICULOID DIATOMS	D59	.006
MFF01	F01P	M	NAVICULOIDS (LYRATE)	D60	.009
MFF01	F01P	M	NITZSCHIA CLOSTERIUM	D62	.003
MFF01	F01P	M	NITZSCHIA SPP.	D67	.003
MFF01	F01P	M	RHIZOSELENIA DELICATULA	D76	.006
MFF01	F01P	M	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.011
MFF01	F01P	M	SKELETONEMA COSTATUM	D84	.048
MFF01	F01P	M	THALASSIONEMA NITZSCHOIDES	D91	.057
MFF01	F01P	M	THALASSIOSIRA GRAVIDA	D92	.080
MFF01	F01P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.202
MFF01	F01P	M	THALASSIOSIRA SPP.	D95	.011
MFF01	F01P	M	TOTAL PHYTOPLANKTON		1.142
MFF01	F01P	M	UNID. CENTRALES	D100	.003
MFF01	F01P	M	UNID. DINOFLAGELLATES	F49	.003
MFF01	F02P	M	ASTERIONELLA GLACIALIS	D5	.061
MFF01	F02P	M	CHAETOCEROS ATLANTICUS	D12	.023
MFF01	F02P	M	CHAETOCEROS CONSTRICTUS	D14	.023

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F02P	M	CHAETOCEROS DEBILIS	D18	.167
MFF01	F02P	M	CHAETOCEROS DECIPIENS	D19	.006
MFF01	F02P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.003
MFF01	F02P	M	CHAETOCEROS SOCIALIS	D27	.068
MFF01	F02P	M	CHAETOCEROS SPP.	D29	.051
MFF01	F02P	M	CRYPTOMONADS	01	.035
MFF01	F02P	M	CYLINDROTHECA CLOSTERIUM	D42	.016
MFF01	F02P	M	DINOPHYSIS ACUMINATA	F10	.006
MFF01	F02P	M	GUINARDIA FLACCIDA	D48	.010
MFF01	F02P	M	LEPTOCYLINDRUS MINIMUS	D53	.084
MFF01	F02P	M	MICROFLAGELLATES	U1	.277
MFF01	F02P	M	NAVICULOID DIATOMS	D59	.010
MFF01	F02P	M	NAVICULOIDS (LYRATE)	D60	.023
MFF01	F02P	M	NITZSCHIA CLOSTERIUM	D62	.006
MFF01	F02P	M	NITZSCHIA SPP.	D67	.003
MFF01	F02P	M	PROROCENTRUM MICANS	F31	.003
MFF01	F02P	M	RHIZOSELENIA ALATA	D74	.006
MFF01	F02P	M	RHIZOSELENIA DELICATULA	D76	.051
MFF01	F02P	M	SKELETONEMA COSTATUM	D84	.084
MFF01	F02P	M	THALASSIONEMA NITZSCHOIDES	D91	.151
MFF01	F02P	M	THALASSIOSIRA GRAVIDA	D92	.006
MFF01	F02P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.116
MFF01	F02P	M	TOTAL PHYTOPLANKTON		1.306
MFF01	F02P	M	UNID. CENTRALES	D100	.006
MFF01	F02P	M	UNID. NAKED DINOFLAGELLATE	F50	.010
MFF01	F13P	M	ASTERIONELLA GLACIALIS	D5	.003
MFF01	F13P	M	BIDDULPHIA SINENSIS	D9	.005
MFF01	F13P	M	CHAETOCEROS AFFINIS	D11	.005
MFF01	F13P	M	CHAETOCEROS DEBILIS	D18	.059
MFF01	F13P	M	CHAETOCEROS SOCIALIS	D27	.043

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F13P	M	CHAETOCEROS SPP.	D29	.013
MFF01	F13P	M	COSCINODISCUS SPP.	D40	.003
MFF01	F13P	M	CRYPTOMONADS	01	.036
MFF01	F13P	M	CYLINDROTHECA CLOSTERIUM	D42	.010
MFF01	F13P	M	DETONULA CONFERVACEA	D43	.003
MFF01	F13P	M	LEPTOCYLINDRUS MINIMUS	D53	.005
MFF01	F13P	M	MICROFLAGELLATES	U1	.143
MFF01	F13P	M	NITZSCHIA SPP.	D67	.008
MFF01	F13P	M	RHIZOSELENIA DELICATULA	D76	.010
MFF01	F13P	M	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF01	F13P	M	SKELETONEMA COSTATUM	D84	.005
MFF01	F13P	M	THALASSIONEMA NITZSCHOIDES	D91	.031
MFF01	F13P	M	THALASSIOSIRA GRAVIDA	D92	.043
MFF01	F13P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.082
MFF01	F13P	M	TOTAL PHYTOPLANKTON		.519
MFF01	F13P	M	UNID. CENTRALES	D100	.010
MFF01	F23P	M	CHAETOCEROS DECIPIENS	D19	.013
MFF01	F23P	M	CHAETOCEROS SOCIALIS	D27	.102
MFF01	F23P	M	CHAETOCEROS SPP.	D29	.029
MFF01	F23P	M	CORETHRON CRIOPHILUM	D33	.003
MFF01	F23P	M	CRYPTOMONADS	01	.048
MFF01	F23P	M	CYANOPHYCEAE	02	.013
MFF01	F23P	M	DINOPHYSIS ACUMINATA	F10	.003
MFF01	F23P	M	DITYLUM BRIGHTWELLII	D45	.003
MFF01	F23P	M	MICROFLAGELLATES	U1	.295
MFF01	F23P	M	NAVICULOID DIATOMS	D59	.013
MFF01	F23P	M	NAVICULOIDS (LYRATE)	D60	.003
MFF01	F23P	M	NITZSCHIA SPP.	D67	.006
MFF01	F23P	M	PLEUROSIGMA AESTUARII	D69	.006
MFF01	F23P	M	PROTOPERIDINIUM BREVIPES	F36	.003

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	F23P	M	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF01	F23P	M	THALASSIONEMA NITZSCHOIDES	D91	.022
MFF01	F23P	M	THALASSIOSIRA GRAVIDA	D92	.032
MFF01	F23P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.136
MFF01	F23P	M	TOTAL PHYTOPLANKTON		.755
MFF01	F23P	M	UNID. CENTRALES	D100	.019
MFF01	F23P	M	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF01	N01P	M	ASTERIONELLA GLACIALIS	D5	.003
MFF01	N01P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.006
MFF01	N01P	M	CHAETOCEROS SOCIALIS	D27	.054
MFF01	N01P	M	CHAETOCEROS SPP.	D29	.014
MFF01	N01P	M	COSCINODISCUS EXCENTRICUS	D35	.003
MFF01	N01P	M	CRYPTOMONADS	01	.062
MFF01	N01P	M	CYLINDROTHECA CLOSTERIUM	D42	.006
MFF01	N01P	M	DITYLUM BRIGHTWELLII	D45	.006
MFF01	N01P	M	LICMOPHORA SPP.	D55	.003
MFF01	N01P	M	MICROFLAGELLATES	U1	.233
MFF01	N01P	M	NAVICULOIDS (LYRATE)	D60	.011
MFF01	N01P	M	NITZSCHIA CLOSTERIUM	D62	.003
MFF01	N01P	M	NITZSCHIA SERIATA	D66	.003
MFF01	N01P	M	NITZSCHIA SPP.	D67	.003
MFF01	N01P	M	RHIZOSELENIA DELICATULA	D76	.006
MFF01	N01P	M	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF01	N01P	M	THALASSIONEMA NITZSCHOIDES	D91	.085
MFF01	N01P	M	THALASSIOSIRA GRAVIDA	D92	.014
MFF01	N01P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.062
MFF01	N01P	M	THALASSIOSIRA SPP.	D95	.006
MFF01	N01P	M	TOTAL PHYTOPLANKTON		.597
MFF01	N01P	M	UNID. CENTRALES	D100	.011
MFF01	N04P	M	ASTERIONELLA GLACIALIS	D5	.003

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	NO4P	M	CERATIUM TRIPOS	F9	.003
MFF01	NO4P	M	CHAETOCEROS ATLANTICUS	D12	.009
MFF01	NO4P	M	CHAETOCEROS COMPRESSUS	D13	.029
MFF01	NO4P	M	CHAETOCEROS DEBILIS	D18	.117
MFF01	NO4P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.012
MFF01	NO4P	M	CHAETOCEROS SOCIALIS	D27	.152
MFF01	NO4P	M	CHAETOCEROS SPP.	D29	.050
MFF01	NO4P	M	COSCINOSIRA POLYCHORDA	D41	.015
MFF01	NO4P	M	CRYPTOMONADS	O1	.041
MFF01	NO4P	M	CYLINDROTHECA CLOSTERIUM	D42	.026
MFF01	NO4P	M	DETONULA CONFERVACEA	D43	.006
MFF01	NO4P	M	DITYLUM BRIGHTWELLII	D45	.015
MFF01	NO4P	M	GYRODINIUM SPIRALE	F23	.003
MFF01	NO4P	M	MELOSIRA NUMMOLOIDES	D57	.003
MFF01	NO4P	M	MICROFLAGELLATES	U1	.187
MFF01	NO4P	M	NAVICULOID DIATOMS	D59	.020
MFF01	NO4P	M	NAVICULOIDS (LYRATE)	D60	.006
MFF01	NO4P	M	NITZSCHIA SERIATA	D66	.003
MFF01	NO4P	M	NITZSCHIA SPP.	D67	.006
MFF01	NO4P	M	RHIZOSELENIA DELICATULA	D76	.012
MFF01	NO4P	M	THALASSIONEMA NITZSCHOIDES	D91	.105
MFF01	NO4P	M	THALASSIOSIRA GRAVIDA	D92	.064
MFF01	NO4P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.294
MFF01	NO4P	M	TOTAL PHYTOPLANKTON		1.183
MFF01	NO4P	M	UNID. CENTRALES	D100	.003
MFF01	NO4P	M	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF01	NO7P	M	ASTERIONELLA GLACIALIS	D5	.009
MFF01	NO7P	M	CHAETOCEROS ATLANTICUS	D12	.006
MFF01	NO7P	M	CHAETOCEROS DEBILIS	D18	.052
MFF01	NO7P	M	CHAETOCEROS DECIPIENS	D19	.003

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N07P	M	CHAETOCEROS SOCIALIS	D27	.047
MFF01	N07P	M	CHAETOCEROS SPP.	D29	.038
MFF01	N07P	M	COSCINODISCUS SPP.	D40	.003
MFF01	N07P	M	CRYPTOMONADS	01	.044
MFF01	N07P	M	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF01	N07P	M	DINOPHYSIS ACUMINATA	F10	.003
MFF01	N07P	M	DISTEPHANUS SPECULUM	04	.003
MFF01	N07P	M	DITYLUM BRIGHTWELLII	D45	.003
MFF01	N07P	M	GUINARDIA FLACCIDA	D48	.009
MFF01	N07P	M	LEPTOCYLINDRUS MINIMUS	D53	.026
MFF01	N07P	M	MICROFLAGELLATES	U1	.216
MFF01	N07P	M	NAVICULOIDS (LYRATE)	D60	.015
MFF01	N07P	M	RHIZOSELENIA DELICATULA	D76	.009
MFF01	N07P	M	THALASSIONEMA NITZSCHOIDES	D91	.093
MFF01	N07P	M	THALASSIOSIRA GRAVIDA	D92	.017
MFF01	N07P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.052
MFF01	N07P	M	TOTAL PHYTOPLANKTON		.656
MFF01	N07P	M	UNID. CENTRALES	D100	.006
MFF01	N10P	M	CHAETOCEROS COMPRESSUS	D13	.023
MFF01	N10P	M	CHAETOCEROS DEBILIS	D18	.023
MFF01	N10P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.003
MFF01	N10P	M	CHAETOCEROS SOCIALIS	D27	.138
MFF01	N10P	M	CHAETOCEROS SPP.	D29	.023
MFF01	N10P	M	COSCINODISCUS EXCENTRICUS	D35	.003
MFF01	N10P	M	CRYPTOMONADS	01	.023
MFF01	N10P	M	CYANOPHYCEAE	02	.123
MFF01	N10P	M	DITYLUM BRIGHTWELLII	D45	.003
MFF01	N10P	M	LICMOPHORA ABREVIATA	D54	.003
MFF01	N10P	M	MICROFLAGELLATES	U1	.224
MFF01	N10P	M	NAVICULOIDS (LYRATE)	D60	.009

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N10P	M	NITZSCHIA CLOSTERIUM	D62	.003
MFF01	N10P	M	NITZSCHIA SPP.	D67	.009
MFF01	N10P	M	RHIZOSELENIA FRAGILISSIMA	D77	.006
MFF01	N10P	M	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.006
MFF01	N10P	M	THALASSIONEMA NITZSCHOIDES	D91	.029
MFF01	N10P	M	THALASSIOSIRA GRAVIDA	D92	.040
MFF01	N10P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.098
MFF01	N10P	M	THALASSIOSIRA SPP.	D95	.003
MFF01	N10P	M	TOTAL PHYTOPLANKTON		.801
MFF01	N10P	M	UNID. CENTRALES	D100	.011
MFF01	N16P	M	ASTERIONELLA GLACIALIS	D5	.017
MFF01	N16P	M	CHAETOCEROS COMPRESSUS	D13	.011
MFF01	N16P	M	CHAETOCEROS DEBILIS	D18	.079
MFF01	N16P	M	CHAETOCEROS SOCIALIS	D27	.042
MFF01	N16P	M	CHAETOCEROS SPP.	D29	.025
MFF01	N16P	M	CORETHRON CRIOPHILUM	D33	.003
MFF01	N16P	M	COSCINODISCUS EXCENTRICUS	D35	.003
MFF01	N16P	M	CRYPTOMONADS	01	.045
MFF01	N16P	M	CYANOPHYCEAE	02	.011
MFF01	N16P	M	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF01	N16P	M	DITYLUM BRIGHTWELLII	D45	.006
MFF01	N16P	M	LEPTOCYLINDRUS MINIMUS	D53	.011
MFF01	N16P	M	MICROFLAGELLATES	U1	.153
MFF01	N16P	M	NAVICULOID DIATOMS	D59	.014
MFF01	N16P	M	NAVICULOIDS (LYRATE)	D60	.003
MFF01	N16P	M	NITZSCHIA CLOSTERIUM	D62	.003
MFF01	N16P	M	NITZSCHIA SPP.	D67	.008
MFF01	N16P	M	RHIZOSELENIA DELICATULA	D76	.011
MFF01	N16P	M	SKELETONEMA COSTATUM	D84	.011
MFF01	N16P	M	THALASSIONEMA NITZSCHOIDES	D91	.122

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N16P	M	THALASSIOSIRA GRAVIDA	D92	.014
MFF01	N16P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.085
MFF01	N16P	M	TOTAL PHYTOPLANKTON		.693
MFF01	N16P	M	UNID. CENTRALES	D100	.008
MFF01	N16P	M	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF01	N20P	M	AMPHIDINIUM SPHENOIDES	F3	.003
MFF01	N20P	M	ASTERIONELLA GLACIALIS	D5	.012
MFF01	N20P	M	CERATIUM TRIPOS	F9	.003
MFF01	N20P	M	CHAETOCEROS COMPRESSUS	D13	.012
MFF01	N20P	M	CHAETOCEROS DEBILIS	D18	.073
MFF01	N20P	M	CHAETOCEROS DECIPIENS	D19	.003
MFF01	N20P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.003
MFF01	N20P	M	CHAETOCEROS SOCIALIS	D27	.126
MFF01	N20P	M	CHAETOCEROS SPP.	D29	.015
MFF01	N20P	M	CORETHRON CRIOPHILUM	D33	.006
MFF01	N20P	M	COSCINODISCUS EXCENTRICUS	D35	.003
MFF01	N20P	M	COSCINOSIRA POLYCHORDA	D41	.003
MFF01	N20P	M	CRYPTOMONADS	01	.026
MFF01	N20P	M	CYLINDROTHECA CLOSTERIUM	D42	.018
MFF01	N20P	M	DETONULA CONFERVACEA	D43	.006
MFF01	N20P	M	DINOPHYSIS LACHMANNI	F13	.003
MFF01	N20P	M	LEPTOCYLINDRUS MINIMUS	D53	.009
MFF01	N20P	M	MICROFLAGELLATES	U1	.161
MFF01	N20P	M	NAVICULOID DIATOMS	D59	.006
MFF01	N20P	M	NAVICULOIDS (LYRATE)	D60	.009
MFF01	N20P	M	NITZSCHIA CLOSTERIUM	D62	.012
MFF01	N20P	M	NITZSCHIA SERIATA	D66	.003
MFF01	N20P	M	NITZSCHIA SPP.	D67	.012
MFF01	N20P	M	RHIZOSELENIA ALATA	D74	.003
MFF01	N20P	M	RHIZOSELENIA DELICATULA	D76	.006

TABLE I-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF01	N20P	M	SKELETONEMA COSTATUM	D84	.012
MFF01	N20P	M	THALASSIONEMA NITZSCHOIDES	D91	.053
MFF01	N20P	M	THALASSIOSIRA GRAVIDA	D92	.015
MFF01	N20P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.056
MFF01	N20P	M	TOTAL PHYTOPLANKTON		.684
MFF01	N20P	M	UNID. CENTRALES	D100	.015

APPENDIX J

Phytoplankton Species Data Tables for March 1992

In coding taxa, an alphabetic character prefix was used to denote groups, where D= diatoms, F= dinoflagellates, U= microflagellates, and O= other.

TABLE J-1. PHYTOPLANKTON SPECIES DATA FOR MARCH 1992.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	F01P	S	ASTERIONELLOPSIS GLACIALIS	D6	.008
MFF02	F01P	S	CHAETOCEROS ATLANTICUS	D12	.006
MFF02	F01P	S	CHAETOCEROS COMPRESSUS	D13	.003
MFF02	F01P	S	CHAETOCEROS DEBILIS	D18	.109
MFF02	F01P	S	CHAETOCEROS SOCIALIS	D27	.014
MFF02	F01P	S	CHAETOCEROS SPP.(<10UM)	D30	.019
MFF02	F01P	S	COSCINODISCUS EXCENTRICUS	D35	.003
MFF02	F01P	S	CRYPTOMONADS	01	.064
MFF02	F01P	S	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF02	F01P	S	GYRODINIUM SPIRALE	F23	.003
MFF02	F01P	S	LEPTOCYLINDRUS MINIMUS	D53	.329
MFF02	F01P	S	MICROFLAGELLATES	U1	.128
MFF02	F01P	S	NAVICULOID DIATOMS	D59	.006
MFF02	F01P	S	NAVICULOIDS (LYRATE)	D60	.014
MFF02	F01P	S	PLEUROSIGMA AESTUARII	D69	.003
MFF02	F01P	S	PROTOPERIDINIUM BREVIPES	F36	.006
MFF02	F01P	S	RHIZOSELENIA ALATA	D74	.003
MFF02	F01P	S	RHIZOSELENIA DELICATULA	D76	.036
MFF02	F01P	S	THALASSIONEMA NITZSCHOIDES	D91	.081
MFF02	F01P	S	THALASSIOSIRA GRAVIDA	D92	.003
MFF02	F01P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.008
MFF02	F01P	S	TOTAL PHYTOPLANKTON		.852
MFF02	F01P	S	UNID. CENTRALES	D100	.006
MFF02	F02P	S	CHAETOCEROS AFFINIS	D11	.010
MFF02	F02P	S	CHAETOCEROS ATLANTICUS	D12	.010
MFF02	F02P	S	CHAETOCEROS DEBILIS	D18	.314
MFF02	F02P	S	CHAETOCEROS SEPTENTRIOLIS	D26	.055
MFF02	F02P	S	CHAETOCEROS SOCIALIS	D27	.199
MFF02	F02P	S	CHAETOCEROS SPP.(<10UM)	D30	.070

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	F02P	S	CRYPTOMONADS	01	.070
MFF02	F02P	S	DINOPHYSIS NORVEGICA	F14	.005
MFF02	F02P	S	GYRODINIUM SPIRALE	F23	.005
MFF02	F02P	S	LEPTOCYLINDRUS MINIMUS	D53	.911
MFF02	F02P	S	MELOSIRA NUMMOLOIDES	D57	.005
MFF02	F02P	S	MICROFLAGELLATES	U1	.229
MFF02	F02P	S	NAVICULOID DIATOMS	D59	.020
MFF02	F02P	S	NAVICULOIDS (LYRATE)	D60	.005
MFF02	F02P	S	NITZSCHIA SPP.	D67	.005
MFF02	F02P	S	PLEUROSIGMA SPP.	D71	.005
MFF02	F02P	S	RHIZOSELENIA DELICATULA	D76	.040
MFF02	F02P	S	THALASSIONEMA NITZSCHOIDES	D91	.105
MFF02	F02P	S	TOTAL PHYTOPLANKTON		2.071
MFF02	F02P	S	UNID. CENTRALES	D100	.005
MFF02	F02P	S	UNID. NAKED DINOFLAGELLATE	F50	.005
MFF02	F13P	S	CHAETOCEROS DEBILIS	D18	.110
MFF02	F13P	S	CHAETOCEROS SOCIALIS	D27	.027
MFF02	F13P	S	CHAETOCEROS SPP.(<10UM)	D30	.030
MFF02	F13P	S	COCCONEIS SCUTELLUM	D32	.003
MFF02	F13P	S	COSCINODISCUS EXCENTRICUS	D35	.003
MFF02	F13P	S	CRYPTOMONADS	01	.030
MFF02	F13P	S	DETONULA CONFERVACEA	D43	.132
MFF02	F13P	S	GYRODINIUM SPIRALE	F23	.003
MFF02	F13P	S	LEPTOCYLINDRUS MINIMUS	D53	.011
MFF02	F13P	S	MICROFLAGELLATES	U1	.110
MFF02	F13P	S	NAVICULOID DIATOMS	D59	.005
MFF02	F13P	S	RHIZOSELENIA ALATA	D74	.003
MFF02	F13P	S	RHIZOSELENIA DELICATULA	D76	.003
MFF02	F13P	S	THALASSIONEMA NITZSCHOIDES	D91	.022

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	F13P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.058
MFF02	F13P	S	TOTAL PHYTOPLANKTON		.565
MFF02	F13P	S	UNID. CENTRALES	D100	.016
MFF02	F23P	S	CHAETOCEROS COMPRESSUS	D13	.006
MFF02	F23P	S	CHAETOCEROS DEBILIS	D18	.122
MFF02	F23P	S	CHAETOCEROS SOCIALIS	D27	.030
MFF02	F23P	S	CHAETOCEROS SPP.(<10UM)	D30	.051
MFF02	F23P	S	CHAETOCEROS SPP.(>10UM)	D31	.018
MFF02	F23P	S	CRYPTOMONADS	01	.086
MFF02	F23P	S	DETONULA CONFERVACEA	D43	.167
MFF02	F23P	S	GYRO/PLEUROSIGMA SPP.	D49	.003
MFF02	F23P	S	MICROFLAGELLATES	U1	.077
MFF02	F23P	S	NAVICULOID DIATOMS	D59	.006
MFF02	F23P	S	NITZSCHIA CLOSTERIUM	D62	.009
MFF02	F23P	S	RHIZOSELENIA ALATA	D74	.003
MFF02	F23P	S	THALASSIONEMA NITZSCHOIDES	D91	.006
MFF02	F23P	S	THALASSIOSIRA GRAVIDA	D92	.021
MFF02	F23P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.244
MFF02	F23P	S	THALASSIOSIRA SPP.	D95	.024
MFF02	F23P	S	TOTAL PHYTOPLANKTON		.914
MFF02	F23P	S	UNID. CENTRALES	D100	.042
MFF02	N01P	S	ASTERIONELLOPSIS GLACIALIS	D6	.010
MFF02	N01P	S	CHAETOCEROS DEBILIS	D18	.112
MFF02	N01P	S	CHAETOCEROS SOCIALIS	D27	.031
MFF02	N01P	S	CHAETOCEROS SPP.(<10UM)	D30	.071
MFF02	N01P	S	CRYPTOMONADS	01	.033
MFF02	N01P	S	CYLINDROTHECA CLOSTERIUM	D42	.002
MFF02	N01P	S	DITYLUM BRIGHTWELLII	D45	.005
MFF02	N01P	S	GYRODINIUM SPIRALE	F23	.007

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N01P	S	KATODINIUM ROTUNDATUM	F27	.002
MFF02	N01P	S	LEPTOCYLINDRUS MINIMUS	D53	.017
MFF02	N01P	S	LICMOPHORA SPP.	D55	.002
MFF02	N01P	S	MELOSIRA NUMMOLOIDES	D57	.002
MFF02	N01P	S	MICROFLAGELLATES	U1	.116
MFF02	N01P	S	NAVICULOID DIATOMS	D59	.010
MFF02	N01P	S	NITZSCHIA SERIATA	D66	.005
MFF02	N01P	S	NITZSCHIA SPP.	D67	.002
MFF02	N01P	S	PROTOPERIDINIUM BREVIPES	F36	.002
MFF02	N01P	S	RHIZOSELENIA DELICATULA	D76	.002
MFF02	N01P	S	THALASSIONEMA NITZSCHOIDES	D91	.029
MFF02	N01P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.014
MFF02	N01P	S	THALASSOTHRIX FRAUENFELDII	D97	.002
MFF02	N01P	S	TOTAL PHYTOPLANKTON		.482
MFF02	N01P	S	UNID. CENTRALES	D100	.005
MFF02	N04P	S	CERATIUM TRIPOS	F9	.003
MFF02	N04P	S	CHAETOCEROS DEBILIS	D18	.084
MFF02	N04P	S	CHAETOCEROS DECIPIENS	D19	.022
MFF02	N04P	S	CHAETOCEROS SEPTENTRIOLIS	D26	.006
MFF02	N04P	S	CHAETOCEROS SOCIALIS	D27	.028
MFF02	N04P	S	CHAETOCEROS SPP.(<10UM)	D30	.154
MFF02	N04P	S	CHAETOCEROS SPP.(>10UM)	D31	.003
MFF02	N04P	S	CRYPTOMONADS	01	.011
MFF02	N04P	S	CYANOPHYCEAE	02	.590
MFF02	N04P	S	CYLINDROTHECA CLOSTERIUM	D42	.017
MFF02	N04P	S	DITYLUM BRIGHTWELLII	D45	.003
MFF02	N04P	S	GYRODINIUM SPIRALE	F23	.006
MFF02	N04P	S	LEPTOCYLINDRUS MINIMUS	D53	.022
MFF02	N04P	S	MICROFLAGELLATES	U1	.168

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N04P	S	NAVICULOIDS (LYRATE)	D60	.006
MFF02	N04P	S	NITZSCHIA SERIATA	D66	.003
MFF02	N04P	S	NITZSCHIA SPP.	D67	.006
MFF02	N04P	S	THALASSIONEMA NITZSCHOIDES	D91	.014
MFF02	N04P	S	TOTAL PHYTOPLANKTON		1.154
MFF02	N04P	S	UNID. CENTRALES	D100	.006
MFF02	N04P	S	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF02	N07P	S	BIDDULPHIA SINENSIS	D9	.003
MFF02	N07P	S	CHAETOCEROS COMPRESSUS	D13	.010
MFF02	N07P	S	CHAETOCEROS DEBILIS	D18	.151
MFF02	N07P	S	CHAETOCEROS SOCIALIS	D27	.055
MFF02	N07P	S	CHAETOCEROS SPP.(<10UM)	D30	.048
MFF02	N07P	S	CHAETOCEROS SPP.(>10UM)	D31	.021
MFF02	N07P	S	CRYPTOMONADS	01	.003
MFF02	N07P	S	CYLINDROTHECA CLOSTERIUM	D42	.007
MFF02	N07P	S	DETONULA CONFERVACEA	D43	.017
MFF02	N07P	S	DITYLUM BRIGHTWELLII	D45	.007
MFF02	N07P	S	GYRODINIUM SPIRALE	F23	.007
MFF02	N07P	S	LEPTOCYLINDRUS MINIMUS	D53	.058
MFF02	N07P	S	MELOSIRA NUMMOLOIDES	D57	.007
MFF02	N07P	S	MICROFLAGELLATES	U1	.257
MFF02	N07P	S	NAVICULOID DIATOMS	D59	.003
MFF02	N07P	S	NITZSCHIA SPP.	D67	.010
MFF02	N07P	S	PROTOPERIDINIUM DEPRESSUM	F39	.003
MFF02	N07P	S	RHIZOSELENIA DELICATULA	D76	.007
MFF02	N07P	S	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF02	N07P	S	THALASSIONEMA NITZSCHOIDES	D91	.010
MFF02	N07P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.010
MFF02	N07P	S	TOTAL PHYTOPLANKTON		.706

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N07P	S	UNID. CENTRALES	D100	.007
MFF02	N10P	S	ASTERIONELLOPSIS GLACIALIS	D6	.005
MFF02	N10P	S	CHAETOCEROS DEBILIS	D18	.214
MFF02	N10P	S	CHAETOCEROS SOCIALIS	D27	.053
MFF02	N10P	S	CHAETOCEROS SPP.(<10UM)	D30	.091
MFF02	N10P	S	CHAETOCEROS SPP.(>10UM)	D31	.003
MFF02	N10P	S	CRYPTOMONADS	01	.020
MFF02	N10P	S	GYRODINIUM SPIRALE	F23	.005
MFF02	N10P	S	GYRODINUM ESTUARIALE	F25	.003
MFF02	N10P	S	LEPTOCYLINDRUS MINIMUS	D53	.015
MFF02	N10P	S	MICROFLAGELLATES	U1	.158
MFF02	N10P	S	NAVICULOID DIATOMS	D59	.013
MFF02	N10P	S	NITZSCHIA SPP.	D67	.003
MFF02	N10P	S	PLEUROSIGMA AESTUARII	D69	.003
MFF02	N10P	S	PROTOPERIDINIUM BIPES	F35	.003
MFF02	N10P	S	THALASSIONEMA NITZSCHOIDES	D91	.035
MFF02	N10P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.005
MFF02	N10P	S	TOTAL PHYTOPLANKTON		.631
MFF02	N10P	S	UNID. CENTRALES	D100	.005
MFF02	N16P	S	ASTERIONELLOPSIS GLACIALIS	D6	.002
MFF02	N16P	S	CHAETOCEROS DEBILIS	D18	.190
MFF02	N16P	S	CHAETOCEROS SEPTENTRIOLIS	D26	.005
MFF02	N16P	S	CHAETOCEROS SOCIALIS	D27	.041
MFF02	N16P	S	CHAETOCEROS SPP.(<10UM)	D30	.022
MFF02	N16P	S	CHAETOCEROS SPP.(>10UM)	D31	.010
MFF02	N16P	S	CRYPTOMONADS	01	.017
MFF02	N16P	S	CYANOPHYCEAE	02	.005
MFF02	N16P	S	CYLINDROTHECA CLOSTERIUM	D42	.002
MFF02	N16P	S	DETONULA CONFERVACEA	D43	.005

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N16P	S	DITYLUM BRIGHTWELLII	D45	.002
MFF02	N16P	S	GUINARDIA FLACCIDA	D48	.002
MFF02	N16P	S	GYRODINIUM SPIRALE	F23	.005
MFF02	N16P	S	LEPTOCYLINDRUS MINIMUS	D53	.031
MFF02	N16P	S	MICROFLAGELLATES	U1	.108
MFF02	N16P	S	NAVICULOID DIATOMS	D59	.002
MFF02	N16P	S	RHIZOSELENIA DELICATULA	D76	.002
MFF02	N16P	S	THALASSIONEMA NITZSCHOIDES	D91	.019
MFF02	N16P	S	THALASSIOSIRA GRAVIDA	D92	.002
MFF02	N16P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.022
MFF02	N16P	S	TOTAL PHYTOPLANKTON		.503
MFF02	N16P	S	UNID. CENTRALES	D100	.005
MFF02	N16P	S	UNID. DINOFLAGELLATES	F49	.002
MFF02	N20P	S	CHAETOCEROS COMPRESSUS	D13	.006
MFF02	N20P	S	CHAETOCEROS DEBILIS	D18	.170
MFF02	N20P	S	CHAETOCEROS SEPTENTRIOLIS	D26	.003
MFF02	N20P	S	CHAETOCEROS SOCIALIS	D27	.025
MFF02	N20P	S	CHAETOCEROS SPP.(<10UM)	D30	.039
MFF02	N20P	S	CHAETOCEROS SPP.(>10UM)	D31	.011
MFF02	N20P	S	CRYPTOMONADS	01	.014
MFF02	N20P	S	GYRODINIUM SPIRALE	F23	.006
MFF02	N20P	S	LEPTOCYLINDRUS MINIMUS	D53	.017
MFF02	N20P	S	MELOSIRA NUMMOLOIDES	D57	.003
MFF02	N20P	S	MICROFLAGELLATES	U1	.228
MFF02	N20P	S	NAVICULOID DIATOMS	D59	.008
MFF02	N20P	S	NITZSCHIA SPP.	D67	.003
MFF02	N20P	S	THALASSIONEMA NITZSCHOIDES	D91	.019
MFF02	N20P	S	THALASSIOSIRA NORDENSKIOLDII	D93	.022
MFF02	N20P	S	TOTAL PHYTOPLANKTON		.582

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N20P	S	UNID. CENTRALES	D100	.006
MFF02	N20P	S	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF02	F01P	M	ASTERIONELLOPSIS GLACIALIS	D6	.005
MFF02	F01P	M	CHAETOCEROS DEBILIS	D18	.078
MFF02	F01P	M	CHAETOCEROS DECIPIENS	D19	.015
MFF02	F01P	M	CHAETOCEROS SOCIALIS	D27	.012
MFF02	F01P	M	CHAETOCEROS SPP.(<10UM)	D30	.020
MFF02	F01P	M	CRYPTOMONADS	01	.068
MFF02	F01P	M	CYLINDROTHECA CLOSTERIUM	D42	.002
MFF02	F01P	M	DISTEPHANUS SPECULUM	04	.002
MFF02	F01P	M	GUINARDIA FLACCIDA	D48	.002
MFF02	F01P	M	LEPTOCYLINDRUS MINIMUS	D53	.320
MFF02	F01P	M	MICROFLAGELLATES	U1	.130
MFF02	F01P	M	NAVICULOID DIATOMS	D59	.015
MFF02	F01P	M	PROROCENTRUM MINIMUM	F32	.002
MFF02	F01P	M	RHIZOSELENIA DELICATULA	D76	.022
MFF02	F01P	M	RHIZOSELENIA SPP	D81	.002
MFF02	F01P	M	THALASSIONEMA NITZSCHOIDES	D91	.049
MFF02	F01P	M	TOTAL PHYTOPLANKTON		.761
MFF02	F01P	M	UNID. CENTRALES	D100	.007
MFF02	F01P	M	UNID. NAKED DINOFLAGELLATE	F50	.007
MFF02	F02P	M	AMPHIDINIUM SPP.	F4	.004
MFF02	F02P	M	ASTERIONELLOPSIS GLACIALIS	D6	.008
MFF02	F02P	M	CHAETOCEROS COMPRESSUS	D13	.016
MFF02	F02P	M	CHAETOCEROS DEBILIS	D18	.417
MFF02	F02P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.039
MFF02	F02P	M	CHAETOCEROS SOCIALIS	D27	.144
MFF02	F02P	M	CHAETOCEROS SPP.(<10UM)	D30	.023
MFF02	F02P	M	CRYPTOMONADS	01	.016

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	F02P	M	CYLINDROTHECA CLOSTERIUM	D42	.004
MFF02	F02P	M	DINOPHYSIS ACUMINATA	F10	.008
MFF02	F02P	M	DISTEPHANUS SPECULUM	04	.004
MFF02	F02P	M	DITYLUM BRIGHTWELLII	D45	.004
MFF02	F02P	M	LEPTOCYLINDRUS MINIMUS	D53	.565
MFF02	F02P	M	MELOSIRA NUMMOLOIDES	D57	.004
MFF02	F02P	M	MICROFLAGELLATES	U1	.148
MFF02	F02P	M	NAVICULOID DIATOMS	D59	.035
MFF02	F02P	M	PROTOPERIDINIUM BREVIPES	F36	.004
MFF02	F02P	M	RHIZOSELENIA DELICATULA	D76	.027
MFF02	F02P	M	THALASSIONEMA NITZSCHOIDES	D91	.062
MFF02	F02P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.051
MFF02	F02P	M	TOTAL PHYTOPLANKTON		1.589
MFF02	F02P	M	UNID. CENTRALES	D100	.008
MFF02	F13P	M	CHAETOCEROS DEBILIS	D18	.101
MFF02	F13P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.003
MFF02	F13P	M	CHAETOCEROS SOCIALIS	D27	.044
MFF02	F13P	M	CHAETOCEROS SPP.(<10UM)	D30	.044
MFF02	F13P	M	CHAETOCEROS SPP.(>10UM)	D31	.022
MFF02	F13P	M	CRYPTOMONADS	01	.066
MFF02	F13P	M	CYLINDROTHECA CLOSTERIUM	D42	.009
MFF02	F13P	M	DETONULA CONFERVACEA	D43	.095
MFF02	F13P	M	DINOPHYSIS ACUMINATA	F10	.003
MFF02	F13P	M	GYRODINIUM SPIRALE	F23	.003
MFF02	F13P	M	LEPTOCYLINDRUS MINIMUS	D53	.009
MFF02	F13P	M	MICROFLAGELLATES	U1	.101
MFF02	F13P	M	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF02	F13P	M	THALASSIONEMA NITZSCHOIDES	D91	.009
MFF02	F13P	M	THALASSIOSIRA GRAVIDA	D92	.009

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	F13P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.108
MFF02	F13P	M	THALASSIOSIRA SPP.	D95	.016
MFF02	F13P	M	TOTAL PHYTOPLANKTON		.667
MFF02	F13P	M	UNID. CENTRALES	D100	.016
MFF02	F13P	M	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF02	F23P	M	ASTERIONELLOPSIS GLACIALIS	D6	.003
MFF02	F23P	M	BIDDULPHIA SINENSIS	D9	.003
MFF02	F23P	M	CHAETOCEROS DEBILIS	D18	.147
MFF02	F23P	M	CHAETOCEROS DECIPIENS	D19	.006
MFF02	F23P	M	CHAETOCEROS SPP.(<10UM)	D30	.081
MFF02	F23P	M	CHAETOCEROS SPP.(>10UM)	D31	.018
MFF02	F23P	M	CRYPTOMONADS	01	.096
MFF02	F23P	M	CYLINDROTHECA CLOSTERIUM	D42	.003
MFF02	F23P	M	DETONULA CONFERVACEA	D43	.228
MFF02	F23P	M	GYRO/PLEUROSIGMA SPP.	D49	.003
MFF02	F23P	M	MICROFLAGELLATES	U1	.087
MFF02	F23P	M	NAVICULOID DIATOMS	D59	.006
MFF02	F23P	M	RHIZOSELENIA HEBETATA F. SEMISPINA	D78	.003
MFF02	F23P	M	SKELETONEMA COSTATUM	D84	.006
MFF02	F23P	M	THALASSIONEMA NITZSCHOIDES	D91	.009
MFF02	F23P	M	THALASSIOSIRA GRAVIDA	D92	.018
MFF02	F23P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.201
MFF02	F23P	M	TOTAL PHYTOPLANKTON		.935
MFF02	F23P	M	UNID. CENTRALES	D100	.015
MFF02	N01P	M	ASTERIONELLOPSIS GLACIALIS	D6	.008
MFF02	N01P	M	CHAETOCEROS CONSTRICTUS	D14	.016
MFF02	N01P	M	CHAETOCEROS DEBILIS	D18	.162
MFF02	N01P	M	CHAETOCEROS SOCIALIS	D27	.011
MFF02	N01P	M	CHAETOCEROS SPP.(<10UM)	D30	.055

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N01P	M	CHAETOCEROS SPP.(>10UM)	D31	.005
MFF02	N01P	M	CRYPTOMONADS	01	.036
MFF02	N01P	M	GYMNODINIUM VERRUCULOSUM	F21	.003
MFF02	N01P	M	GYRODINIUM SPIRALE	F23	.005
MFF02	N01P	M	LEPTOCYLINDRUS MINIMUS	D53	.014
MFF02	N01P	M	MELOSIRA NUMMOLOIDES	D57	.005
MFF02	N01P	M	MICROFLAGELLATES	U1	.225
MFF02	N01P	M	NAVICULOID DIATOMS	D59	.003
MFF02	N01P	M	NITZSCHIA SPP.	D67	.003
MFF02	N01P	M	THALASSIONEMA NITZSCHOIDES	D91	.005
MFF02	N01P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.022
MFF02	N01P	M	TOTAL PHYTOPLANKTON		.578
MFF02	N04P	M	ASTERIONELLOPSIS GLACIALIS	D6	.003
MFF02	N04P	M	CHAETOCEROS CONSTRICTUS	D14	.009
MFF02	N04P	M	CHAETOCEROS DEBILIS	D18	.078
MFF02	N04P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.003
MFF02	N04P	M	CHAETOCEROS SOCIALIS	D27	.041
MFF02	N04P	M	CHAETOCEROS SPP.(<10UM)	D30	.209
MFF02	N04P	M	CRYPTOMONADS	01	.009
MFF02	N04P	M	CYANOPHYCEAE	02	.053
MFF02	N04P	M	DITYLUM BRIGHTWELLII	D45	.003
MFF02	N04P	M	GYRODINIUM SPIRALE	F23	.006
MFF02	N04P	M	LEPTOCYLINDRUS MINIMUS	D53	.019
MFF02	N04P	M	MICROFLAGELLATES	U1	.181
MFF02	N04P	M	NAVICULOID DIATOMS	D59	.003
MFF02	N04P	M	NAVICULOIDS (LYRATE)	D60	.022
MFF02	N04P	M	NITZSCHIA SERIATA	D66	.003
MFF02	N04P	M	NITZSCHIA SPP.	D67	.012
MFF02	N04P	M	RHIZOSELENIA DELICATULA	D76	.009

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N04P	M	THALASSIONEMA NITZSCHOIDES	D91	.016
MFF02	N04P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.028
MFF02	N04P	M	THALASSOTHRIX FRAUENFELDII	D97	.003
MFF02	N04P	M	TOTAL PHYTOPLANKTON		.730
MFF02	N04P	M	UNID. CENTRALES	D100	.016
MFF02	N04P	M	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF02	N07P	M	ASTERIONELLOPSIS GLACIALIS	D6	.003
MFF02	N07P	M	BIDDULPHIA SINENSIS	D9	.003
MFF02	N07P	M	CHAETOCEROS COMPRESSUS	D13	.008
MFF02	N07P	M	CHAETOCEROS DEBILIS	D18	.092
MFF02	N07P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.005
MFF02	N07P	M	CHAETOCEROS SOCIALIS	D27	.043
MFF02	N07P	M	CHAETOCEROS SPP.(<10UM)	D30	.061
MFF02	N07P	M	CHAETOCEROS SPP.(>10UM)	D31	.005
MFF02	N07P	M	CRYPTOMONADS	01	.015
MFF02	N07P	M	CYLINDROTHECA CLOSTERIUM	D42	.008
MFF02	N07P	M	DETONULA CONFERVACEA	D43	.008
MFF02	N07P	M	DISTEPHANUS SPECULUM	04	.003
MFF02	N07P	M	GUINARDIA FLACCIDA	D48	.005
MFF02	N07P	M	GYRODINIUM SPIRALE	F23	.003
MFF02	N07P	M	LEPTOCYLINDRUS MINIMUS	D53	.005
MFF02	N07P	M	MELOSIRA NUMMOLOIDES	D57	.008
MFF02	N07P	M	MICROFLAGELLATES	U1	.291
MFF02	N07P	M	NAVICULOID DIATOMS	D59	.005
MFF02	N07P	M	NAVICULOIDS (LYRATE)	D60	.003
MFF02	N07P	M	NITZSCHIA SERIATA	D66	.003
MFF02	N07P	M	NITZSCHIA SPP.	D67	.010
MFF02	N07P	M	PROTOPERIDINIUM DEPRESSUM	F39	.003
MFF02	N07P	M	RHIZOSELENIA DELICATULA	D76	.008

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N07P	M	THALASSIONEMA NITZSCHOIDES	D91	.026
MFF02	N07P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.013
MFF02	N07P	M	TOTAL PHYTOPLANKTON		.641
MFF02	N07P	M	UNID. CENTRALES	D100	.005
MFF02	N07P	M	UNID. NAKED DINOFLAGELLATE	F50	.003
MFF02	N10P	M	ASTERIONELLOPSIS GLACIALIS	D6	.002
MFF02	N10P	M	CERATIUM FUSUS	F6	.002
MFF02	N10P	M	CHAETOCEROS DEBILIS	D18	.177
MFF02	N10P	M	CHAETOCEROS SEPTENTRIOLIS	D26	.005
MFF02	N10P	M	CHAETOCEROS SOCIALIS	D27	.049
MFF02	N10P	M	CHAETOCEROS SPP.(<10UM)	D30	.068
MFF02	N10P	M	CHAETOCEROS SPP.(>10UM)	D31	.002
MFF02	N10P	M	COSCINODISCUS OCULUS-IRIDIS	D38	.002
MFF02	N10P	M	CRYPTOMONADS	01	.017
MFF02	N10P	M	CYLINDROTHECA CLOSTERIUM	D42	.002
MFF02	N10P	M	GYRODINIUM SPIRALE	F23	.005
MFF02	N10P	M	LEPTOCYLINDRUS MINIMUS	D53	.012
MFF02	N10P	M	MELOSIRA NUMMOLOIDES	D57	.005
MFF02	N10P	M	MICROFLAGELLATES	U1	.119
MFF02	N10P	M	NAVICULOID DIATOMS	D59	.007
MFF02	N10P	M	NAVICULOIDS (LYRATE)	D60	.002
MFF02	N10P	M	NITZSCHIA SPP.	D67	.007
MFF02	N10P	M	RHIZOSELENIA DELICATULA	D76	.002
MFF02	N10P	M	THALASSIONEMA NITZSCHOIDES	D91	.017
MFF02	N10P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.027
MFF02	N10P	M	TOTAL PHYTOPLANKTON		.543
MFF02	N10P	M	UNID. CENTRALES	D100	.005
MFF02	N10P	M	UNID. NAKED DINOFLAGELLATE	F50	.007
MFF02	N16P	M	CHAETOCEROS DEBILIS	D18	.152

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N16P	M	CHAETOCEROS SOCIALIS	D27	.053
MFF02	N16P	M	CHAETOCEROS SPP.(<10UM)	D30	.036
MFF02	N16P	M	CHAETOCEROS SPP.(>10UM)	D31	.010
MFF02	N16P	M	COCCONEIS SCUTELLUM	D32	.002
MFF02	N16P	M	CRYPTOMONADS	01	.012
MFF02	N16P	M	CYLINDROTHECA CLOSTERIUM	D42	.002
MFF02	N16P	M	DETONULA CONFERVACEA	D43	.005
MFF02	N16P	M	DITYLUM BRIGHTWELLII	D45	.002
MFF02	N16P	M	LEPTOCYLINDRUS MINIMUS	D53	.005
MFF02	N16P	M	MELOSIRA NUMMOLOIDES	D57	.002
MFF02	N16P	M	MICROFLAGELLATES	U1	.132
MFF02	N16P	M	NAVICULOID DIATOMS	D59	.007
MFF02	N16P	M	RHIZOSELENIA DELICATULA	D76	.002
MFF02	N16P	M	THALASSIONEMA NITZSCHOIDES	D91	.031
MFF02	N16P	M	THALASSIOSIRA GRAVIDA	D92	.002
MFF02	N16P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.034
MFF02	N16P	M	TOTAL PHYTOPLANKTON		.493
MFF02	N16P	M	UNID. CENTRALES	D100	.002
MFF02	N20P	M	ASTERIONELLOPSIS GLACIALIS	D6	.002
MFF02	N20P	M	CHAETOCEROS COMPRESSUS	D13	.007
MFF02	N20P	M	CHAETOCEROS DEBILIS	D18	.131
MFF02	N20P	M	CHAETOCEROS SOCIALIS	D27	.023
MFF02	N20P	M	CHAETOCEROS SPP.(<10UM)	D30	.032
MFF02	N20P	M	CHAETOCEROS SPP.(>10UM)	D31	.007
MFF02	N20P	M	CRYPTOMONADS	01	.021
MFF02	N20P	M	CYLINDROTHECA CLOSTERIUM	D42	.002
MFF02	N20P	M	DITYLUM BRIGHTWELLII	D45	.002
MFF02	N20P	M	GYRODINIUM SPIRALE	F23	.002
MFF02	N20P	M	LEPTOCYLINDRUS MINIMUS	D53	.002

TABLE J-1. CONTINUED.

EVENT	STAT	DEPTH	SPECIES NAME	SPECIES CODE	MILLIONS OF CELLS PER LITER
MFF02	N20P	M	MICROFLAGELLATES	U1	.144
MFF02	N20P	M	NAVICULOID DIATOMS	D59	.011
MFF02	N20P	M	NAVICULOIDS (LYRATE)	D60	.005
MFF02	N20P	M	RHIZOSELENIA DELICATULA	D76	.005
MFF02	N20P	M	THALASSIONEMA NITZSCHOIDES	D91	.034
MFF02	N20P	M	THALASSIOSIRA GRAVIDA	D92	.002
MFF02	N20P	M	THALASSIOSIRA NORDENSKIOLDII	D93	.041
MFF02	N20P	M	TOTAL PHYTOPLANKTON		.479
MFF02	N20P	M	UNID. CENTRALES	D100	.005

APPENDIX K

Zooplankton Species Data Tables for February 1992

Note that F= female, M= male, and C= copepidite (all for copepod stages), and N= nauplii (where appropriate).

TABLE K-1. ZOOPLANKTON SPECIES COUNTS FOR FEBRUARY 1992.

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	F01P	ACARTIA HUDSONICA	F	451.765
MFF01	F01P	ACARTIA HUDSONICA	C	489.412
MFF01	F01P	ACARTIA HUDSONICA	M	37.647
MFF01	F01P	BARNACLE NAUPLII	N	1694.118
MFF01	F01P	CENTROPAGES HAMATUS	F	301.176
MFF01	F01P	CENTROPAGES HAMATUS	M	677.647
MFF01	F01P	CENTROPAGES SPP.	C	225.882
MFF01	F01P	COPEPOD NAUPLII	N	3689.412
MFF01	F01P	OIKIOPLEURA DIOICA		75.294
MFF01	F01P	OITHONA SIMILIS	F	602.353
MFF01	F01P	OITHONA SIMILIS	M	75.294
MFF01	F01P	OITHONA SIMILIS	C	2898.824
MFF01	F01P	PARACALANUS PARVUS	M	225.882
MFF01	F01P	PARACALANUS PARVUS	C	2145.882
MFF01	F01P	PARACALANUS PARVUS	F	564.706
MFF01	F01P	POLYCHAETE LARVAE		338.824
MFF01	F01P	POLYCHAETE TROCHOPHORES		37.647
MFF01	F01P	PSEUDOCALANUS NEWMANI	C	376.471
MFF01	F01P	PSEUDOCALANUS NEWMANI	M	37.647
MFF01	F01P	PSEUDOCALANUS NEWMANI	F	752.941
MFF01	F01P	TEMORA LONGICORNIS	F	376.471
MFF01	F01P	TEMORA LONGICORNIS	C	75.294
MFF01	F01P	TEMORA LONGICORNIS	M	527.059
MFF01	F01P	TOTAL ZOOPLANKTON		16677.647
MFF01	F02P	ACARTIA HUDSONICA	M	101.426
MFF01	F02P	ACARTIA HUDSONICA	C	1014.263
MFF01	F02P	ACARTIA HUDSONICA	F	162.282
MFF01	F02P	BARNACLE NAUPLII	N	81.141
MFF01	F02P	CENTROPAGES SPP.	C	182.567
MFF01	F02P	CENTROPAGES TYPICUS	F	40.571

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	F02P	CENTROPAGES TYPICUS	M	60.856
MFF01	F02P	COPEPOD NAUPLII	N	2434.231
MFF01	F02P	GASTROPOD VELIGER		446.276
MFF01	F02P	OIKIOPLEURA DIOICA		446.276
MFF01	F02P	OITHONA SIMILIS	C	3915.055
MFF01	F02P	OITHONA SIMILIS	M	283.994
MFF01	F02P	OITHONA SIMILIS	F	770.840
MFF01	F02P	PARACALANUS PARVUS	C	1237.401
MFF01	F02P	PARACALANUS PARVUS	M	60.856
MFF01	F02P	PARACALANUS PARVUS	F	81.141
MFF01	F02P	POLYCHAETE LARVAE		243.423
MFF01	F02P	PSEUDOCALANUS NEWMANI	F	304.279
MFF01	F02P	PSEUDOCALANUS NEWMANI	M	60.856
MFF01	F02P	PSEUDOCALANUS NEWMANI	C	182.567
MFF01	F02P	TEMORA LONGICORNIS	F	20.285
MFF01	F02P	TEMORA LONGICORNIS	C	304.279
MFF01	F02P	TEMORA LONGICORNIS	M	40.571
MFF01	F02P	TORTANUS DISCAUDATUS	F	20.285
MFF01	F02P	TOTAL ZOOPLANKTON		12495.721
MFF01	F13P	ACARTIA HUDSONICA	C	303.858
MFF01	F13P	ACARTIA HUDSONICA	F	101.286
MFF01	F13P	ACARTIA HUDSONICA	M	63.304
MFF01	F13P	BARNACLE NAUPLII	N	13977.448
MFF01	F13P	CENTROPAGES SPP.	C	50.643
MFF01	F13P	COPEPOD NAUPLII	N	1924.431
MFF01	F13P	MICROSETELLA NORVEGICA		50.643
MFF01	F13P	OIKIOPLEURA DIOICA		63.304
MFF01	F13P	OITHONA SIMILIS	F	519.090
MFF01	F13P	OITHONA SIMILIS	C	1329.377

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	F13P	OITHONA SIMILIS	M	151.929
MFF01	F13P	PARACALANUS PARVUS	C	1430.663
MFF01	F13P	PARACALANUS PARVUS	F	468.447
MFF01	F13P	PARACALANUS PARVUS	M	164.590
MFF01	F13P	POLYCHAETE LARVAE		481.108
MFF01	F13P	PSEUDOCALANUS NEWMANI	C	164.590
MFF01	F13P	PSEUDOCALANUS NEWMANI	M	63.304
MFF01	F13P	PSEUDOCALANUS NEWMANI	F	316.518
MFF01	F13P	SAGITTA ELEGANS		12.661
MFF01	F13P	TEMORA LONGICORNIS	M	164.590
MFF01	F13P	TEMORA LONGICORNIS	F	151.929
MFF01	F13P	TEMORA LONGICORNIS	C	202.572
MFF01	F13P	TOTAL ZOOPLANKTON		22156.281
MFF01	F23P	ACARTIA HUDSONICA	F	218.679
MFF01	F23P	ACARTIA HUDSONICA	C	218.679
MFF01	F23P	ACARTIA HUDSONICA	M	43.736
MFF01	F23P	BARNACLE NAUPLII	N	5233.713
MFF01	F23P	CENTROPAGES HAMATUS	M	43.736
MFF01	F23P	CENTROPAGES HAMATUS	F	14.579
MFF01	F23P	CENTROPAGES SPP.	C	29.157
MFF01	F23P	COPEPOD NAUPLII	N	1457.859
MFF01	F23P	EUTERPINA ACUTIFRONS		29.157
MFF01	F23P	GASTROPOD VELIGER		14.579
MFF01	F23P	MEDUSA		14.579
MFF01	F23P	OITHONA SIMILIS	M	43.736
MFF01	F23P	OITHONA SIMILIS	F	116.629
MFF01	F23P	OITHONA SIMILIS	C	320.729
MFF01	F23P	PARACALANUS PARVUS	F	102.050
MFF01	F23P	PARACALANUS PARVUS	C	830.979
MFF01	F23P	PARACALANUS PARVUS	M	58.314

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	F23P	POLYCHAETE LARVAE		102.050
MFF01	F23P	POLYCHAETE TROCHOPHORES		131.207
MFF01	F23P	PSEUDOCALANUS NEWMANI	M	72.893
MFF01	F23P	PSEUDOCALANUS NEWMANI	C	29.157
MFF01	F23P	PSEUDOCALANUS NEWMANI	F	131.207
MFF01	F23P	TEMORA LONGICORNIS	F	29.157
MFF01	F23P	TEMORA LONGICORNIS	M	116.629
MFF01	F23P	TEMORA LONGICORNIS	C	43.736
MFF01	F23P	TOTAL ZOOPLANKTON		9446.925
MFF01	N01P	ACARTIA HUDSONICA	F	70.980
MFF01	N01P	ACARTIA HUDSONICA	M	70.980
MFF01	N01P	ACARTIA HUDSONICA	C	23.660
MFF01	N01P	BARNACLE NAUPLII	N	7381.885
MFF01	N01P	CENTROPAGES HAMATUS	M	23.660
MFF01	N01P	CENTROPAGES SPP.	C	23.660
MFF01	N01P	COPEPOD NAUPLII	N	2484.288
MFF01	N01P	MICROSETELLA NORVEGICA		47.320
MFF01	N01P	OIKIOPLEURA DIOICA		212.939
MFF01	N01P	OITHONA SIMILIS	C	2910.166
MFF01	N01P	OITHONA SIMILIS	F	591.497
MFF01	N01P	OITHONA SIMILIS	M	94.640
MFF01	N01P	PARACALANUS PARVUS	M	165.619
MFF01	N01P	PARACALANUS PARVUS	C	1821.811
MFF01	N01P	PARACALANUS PARVUS	F	94.640
MFF01	N01P	PSEUDOCALANUS NEWMANI	F	94.640
MFF01	N01P	PSEUDOCALANUS NEWMANI	C	165.619
MFF01	N01P	PSEUDOCALANUS NEWMANI	M	47.320
MFF01	N01P	SAGITTA ELEGANS		47.320
MFF01	N01P	TEMORA LONGICORNIS	M	47.320
MFF01	N01P	TEMORA LONGICORNIS	C	23.660

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	N01P	TORTANUS DISCAUDATUS	F	23.660
MFF01	N01P	TORTANUS DISCAUDATUS	C	23.660
MFF01	N01P	TOTAL ZOOPLANKTON		16490.943
MFF01	N04P	ACARTIA HUDSONICA	M	38.496
MFF01	N04P	ACARTIA HUDSONICA	C	153.985
MFF01	N04P	BARNACLE NAUPLII	N	846.917
MFF01	N04P	BIVALVE VELIGER		76.992
MFF01	N04P	CALANUS FINMARCHICUS	F	19.248
MFF01	N04P	CENTROPAGES SPP.	C	38.496
MFF01	N04P	CENTROPAGES TYPICUS	M	153.985
MFF01	N04P	CENTROPAGES TYPICUS	F	76.992
MFF01	N04P	COPEPOD NAUPLII	N	8141.955
MFF01	N04P	EUCONCHOEICA SP.		19.248
MFF01	N04P	GASTROPOD VELIGER		173.233
MFF01	N04P	OIKIOPLEURA DIOICA		2232.782
MFF01	N04P	OITHONA SIMILIS	M	115.489
MFF01	N04P	OITHONA SIMILIS	C	3714.887
MFF01	N04P	OITHONA SIMILIS	F	596.692
MFF01	N04P	PARACALANUS PARVUS	F	19.248
MFF01	N04P	PARACALANUS PARVUS	C	654.436
MFF01	N04P	POLYCHAETE LARVAE		211.729
MFF01	N04P	POLYCHAETE TROCHOPHORES		577.444
MFF01	N04P	PSEUDOCALANUS NEWMANI	F	153.985
MFF01	N04P	PSEUDOCALANUS NEWMANI	M	19.248
MFF01	N04P	TEMORA LONGICORNIS	F	38.496
MFF01	N04P	TEMORA LONGICORNIS	C	134.737
MFF01	N04P	TEMORA LONGICORNIS	M	19.248
MFF01	N04P	TOTAL ZOOPLANKTON		18227.970
MFF01	N07P	ACARTIA HUDSONICA	C	486.076
MFF01	N07P	ACARTIA HUDSONICA	F	23.146

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	N07P	ACARTIA HUDSONICA	M	23.146
MFF01	N07P	BARNACLE NAUPLII	N	3495.118
MFF01	N07P	CENTROPAGES HAMATUS	M	69.439
MFF01	N07P	CENTROPAGES HAMATUS	F	23.146
MFF01	N07P	CENTROPAGES SPP.	C	92.586
MFF01	N07P	CENTROPAGES TYPICUS	M	23.146
MFF01	N07P	COPEPOD NAUPLII	N	3518.264
MFF01	N07P	EVADNE NORDMANI		23.146
MFF01	N07P	GASTROPOD VELIGER		347.197
MFF01	N07P	MICROSETELLA NORVEGICA		46.293
MFF01	N07P	OIKIOPLEURA DIOICA		1481.374
MFF01	N07P	OITHONA ATLANTICA	F	46.293
MFF01	N07P	OITHONA SIMILIS	F	902.712
MFF01	N07P	OITHONA SIMILIS	M	277.758
MFF01	N07P	OITHONA SIMILIS	C	4050.633
MFF01	N07P	PARACALANUS PARVUS	C	2337.794
MFF01	N07P	PARACALANUS PARVUS	F	763.834
MFF01	N07P	PARACALANUS PARVUS	M	254.611
MFF01	N07P	POLYCHAETE LARVAE		810.127
MFF01	N07P	PSEUDOCALANUS NEWMANI	M	486.076
MFF01	N07P	PSEUDOCALANUS NEWMANI	F	555.515
MFF01	N07P	PSEUDOCALANUS NEWMANI	C	231.465
MFF01	N07P	TEMORA LONGICORNIS	C	231.465
MFF01	N07P	TEMORA LONGICORNIS	F	46.293
MFF01	N07P	TEMORA LONGICORNIS	M	46.293
MFF01	N07P	TOTAL ZOOPLANKTON		20692.948
MFF01	N10P	ACARTIA HUDSONICA	C	321.724
MFF01	N10P	ACARTIA HUDSONICA	F	45.961
MFF01	N10P	ACARTIA HUDSONICA	M	137.882
MFF01	N10P	BARNACLE NAUPLII	N	17648.833

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	N10P	CENTROPAGES HAMATUS	M	45.961
MFF01	N10P	COPEPOD NAUPLII	N	1838.420
MFF01	N10P	OITHONA SIMILIS	C	2711.670
MFF01	N10P	PARACALANUS PARVUS	F	367.684
MFF01	N10P	PARACALANUS PARVUS	M	229.803
MFF01	N10P	PARACALANUS PARVUS	C	1792.460
MFF01	N10P	POLYCHAETE LARVAE		1194.973
MFF01	N10P	PSEUDOCALANUS NEWMANI	F	367.684
MFF01	N10P	PSEUDOCALANUS NEWMANI	M	45.961
MFF01	N10P	PSEUDOCALANUS NEWMANI	C	91.921
MFF01	N10P	TEMORA LONGICORNIS	C	229.803
MFF01	N10P	TOTAL ZOOPLANKTON		27070.736
MFF01	N16P	ACARTIA HUDSONICA	F	49.516
MFF01	N16P	ACARTIA HUDSONICA	C	371.373
MFF01	N16P	ACARTIA HUDSONICA	M	24.758
MFF01	N16P	BARNACLE NAUPLII	N	643.714
MFF01	N16P	CENTROPAGES SPP.	C	148.549
MFF01	N16P	CENTROPAGES TYPICUS	F	24.758
MFF01	N16P	COPEPOD NAUPLII	N	5521.083
MFF01	N16P	EUCONCHOEICA SP.		24.758
MFF01	N16P	GASTROPOD VELIGER		2005.416
MFF01	N16P	MICROSETELLA NORVEGICA		74.275
MFF01	N16P	OIKIOPLEURA DIOICA		321.857
MFF01	N16P	OITHONA SIMILIS	M	272.340
MFF01	N16P	OITHONA SIMILIS	C	5521.083
MFF01	N16P	OITHONA SIMILIS	F	1138.878
MFF01	N16P	PARACALANUS PARVUS	C	1188.395
MFF01	N16P	PARACALANUS PARVUS	F	420.890
MFF01	N16P	PARACALANUS PARVUS	M	272.340
MFF01	N16P	POLYCHAETE LARVAE		49.516

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	N16P	PSEUDOCALANUS NEWMANI	M	99.033
MFF01	N16P	PSEUDOCALANUS NEWMANI	F	420.890
MFF01	N16P	PSEUDOCALANUS NEWMANI	C	148.549
MFF01	N16P	TEMORA LONGICORNIS	M	24.758
MFF01	N16P	TEMORA LONGICORNIS	C	99.033
MFF01	N16P	TOTAL ZOOPLANKTON		18865.764
MFF01	N20P	ACARTIA HUDSONICA	F	117.216
MFF01	N20P	ACARTIA HUDSONICA	C	398.535
MFF01	N20P	ACARTIA HUDSONICA	M	82.051
MFF01	N20P	BARNACLE NAUPLII	N	2074.725
MFF01	N20P	CALANUS FINMARCHICUS	C	11.722
MFF01	N20P	CENTROPAGES SPP.	C	210.989
MFF01	N20P	CENTROPAGES TYPICUS	M	23.443
MFF01	N20P	COPEPOD NAUPLII	N	1547.253
MFF01	N20P	GASTROPOD VELIGER		738.462
MFF01	N20P	MEDUSA		
MFF01	N20P	MICROSETELLA NORVEGICA		58.608
MFF01	N20P	OIKIOPLEURA DIOICA		1219.048
MFF01	N20P	OITHONA ATLANTICA	F	11.722
MFF01	N20P	OITHONA SIMILIS	F	609.524
MFF01	N20P	OITHONA SIMILIS	C	4489.377
MFF01	N20P	OITHONA SIMILIS	M	222.711
MFF01	N20P	PARACALANUS PARVUS	C	2578.755
MFF01	N20P	PARACALANUS PARVUS	M	257.875
MFF01	N20P	PARACALANUS PARVUS	F	246.154
MFF01	N20P	POLYCHAETE LARVAE		210.989
MFF01	N20P	POLYCHAETE TROCHOPHORES		105.495
MFF01	N20P	PSEUDOCALANUS NEWMANI	F	128.938
MFF01	N20P	PSEUDOCALANUS NEWMANI	C	433.700
MFF01	N20P	PSEUDOCALANUS NEWMANI	M	164.103

TABLE K-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF01	N20P	TEMORA LONGICORNIS	C	375.092
MFF01	N20P	TEMORA LONGICORNIS	M	562.637
MFF01	N20P	TEMORA LONGICORNIS	F	222.711
MFF01	N20P	TOTAL ZOOPLANKTON		17101.832

APPENDIX L

Zooplankton Species Data Tables for March 1992

Note that F= female, M= male, and C= copepidite (all for copepod stages), and N= nauplii (where appropriate).

TABLE L-1. ZOOPLANKTON SPECIES COUNTS FOR MARCH 1992.

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	F01P	ACARTIA HUDSONICA	F	20.984
MFF02	F01P	ACARTIA HUDSONICA	C	52.459
MFF02	F01P	ACARTIA HUDSONICA	M	10.492
MFF02	F01P	BARNACLE NAUPLII	N	188.852
MFF02	F01P	BIVALVE VELIGER		10.492
MFF02	F01P	CALANUS FINMARCHICUS	C	10.492
MFF02	F01P	CENTROPAGES HAMATUS	F	10.492
MFF02	F01P	CENTROPAGES HAMATUS	M	73.443
MFF02	F01P	CENTROPAGES SPP.	C	20.984
MFF02	F01P	CENTROPAGES TYPICUS	F	20.984
MFF02	F01P	CENTROPAGES TYPICUS	M	20.984
MFF02	F01P	COPEPOD NAUPLII	N	8666.230
MFF02	F01P	EUCONCHOEICA SP.		10.492
MFF02	F01P	EVADNE NORDMANI		10.492
MFF02	F01P	GASTROPOD VELIGER		157.377
MFF02	F01P	MICROSETELLA NORVEGICA		199.344
MFF02	F01P	OIKIOPLEURA DIOICA		650.492
MFF02	F01P	OITHONA SIMILIS	M	304.262
MFF02	F01P	OITHONA SIMILIS	C	1731.148
MFF02	F01P	OITHONA SIMILIS	F	765.902
MFF02	F01P	PARACALANUS PARVUS	F	325.246
MFF02	F01P	PARACALANUS PARVUS	M	73.443
MFF02	F01P	PARACALANUS PARVUS	C	1804.590
MFF02	F01P	POLYCHAETE LARVAE		3336.393
MFF02	F01P	PSEUDOCALANUS NEWMANI	M	41.967
MFF02	F01P	PSEUDOCALANUS NEWMANI	F	314.754
MFF02	F01P	PSEUDOCALANUS NEWMANI	C	20.984
MFF02	F01P	TEMORA LONGICORNIS	F	62.951
MFF02	F01P	TEMORA LONGICORNIS	C	304.262
MFF02	F01P	TEMORA LONGICORNIS	M	20.984

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	F01P	TORTANUS DISCAUDATUS	F	10.492
MFF02	F01P	TORTANUS DISCAUDATUS	C	10.492
MFF02	F01P	TOTAL ZOOPLANKTON		19273.443
MFF02	F01P	UNIDENTIFIED LARVAE		10.492
MFF02	F02P	ACARTIA HUDSONICA	F	27.948
MFF02	F02P	ACARTIA HUDSONICA	C	27.948
MFF02	F02P	BARNACLE NAUPLII	N	3130.131
MFF02	F02P	CALANUS FINMARCHICUS	F	83.843
MFF02	F02P	CALANUS FINMARCHICUS	C	139.738
MFF02	F02P	CENTROPAGES HAMATUS	F	27.948
MFF02	F02P	CENTROPAGES HAMATUS	M	27.948
MFF02	F02P	CENTROPAGES SPP.	C	83.843
MFF02	F02P	CENTROPAGES TYPICUS	F	195.633
MFF02	F02P	CENTROPAGES TYPICUS	M	223.581
MFF02	F02P	COPEPOD NAUPLII	N	7042.795
MFF02	F02P	EUCONCHOEICA SP.		111.790
MFF02	F02P	GASTROPOD VELIGER		223.581
MFF02	F02P	OITHONA ATLANTICA	F	27.948
MFF02	F02P	OITHONA SIMILIS	F	782.533
MFF02	F02P	OITHONA SIMILIS	M	419.214
MFF02	F02P	OITHONA SIMILIS	C	2096.070
MFF02	F02P	PARACALANUS PARVUS	C	782.533
MFF02	F02P	PARACALANUS PARVUS	F	27.948
MFF02	F02P	PARACALANUS PARVUS	M	27.948
MFF02	F02P	POLYCHAETE LARVAE		950.218
MFF02	F02P	PSEUDOCALANUS NEWMANI	F	167.686
MFF02	F02P	PSEUDOCALANUS NEWMANI	M	27.948
MFF02	F02P	PSEUDOCALANUS NEWMANI	C	83.843
MFF02	F02P	PTEROPOD		83.843
MFF02	F02P	TEMORA LONGICORNIS	C	195.633

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	F02P	TORTANUS DISCAUDATUS	C	27.948
MFF02	F02P	TOTAL ZOOPLANKTON		17048.035
MFF02	F13P	ACARTIA HUDSONICA	M	28.959
MFF02	F13P	ACARTIA HUDSONICA	C	86.878
MFF02	F13P	ACARTIA HUDSONICA	F	28.959
MFF02	F13P	BARNACLE NAUPLII	N	8224.434
MFF02	F13P	CALANUS FINMARCHICUS	C	28.959
MFF02	F13P	COPEPOD NAUPLII	N	3272.398
MFF02	F13P	EVADNE NORDMANI		28.959
MFF02	F13P	GASTROPOD VELIGER		28.959
MFF02	F13P	OIKIOPLEURA DIOICA		115.837
MFF02	F13P	OITHONA ATLANTICA	F	28.959
MFF02	F13P	OITHONA SIMILIS	F	781.900
MFF02	F13P	OITHONA SIMILIS	C	1505.882
MFF02	F13P	OITHONA SIMILIS	M	202.715
MFF02	F13P	PARACALANUS PARVUS	F	115.837
MFF02	F13P	PARACALANUS PARVUS	C	1940.271
MFF02	F13P	POLYCHAETE LARVAE		579.186
MFF02	F13P	POLYCHAETE TROCHOPHORES		144.796
MFF02	F13P	PSEUDOCALANUS NEWMANI	F	202.715
MFF02	F13P	PSEUDOCALANUS NEWMANI	M	57.919
MFF02	F13P	TEMORA LONGICORNIS	C	144.796
MFF02	F13P	TEMORA LONGICORNIS	M	231.674
MFF02	F13P	TOTAL ZOOPLANKTON		17780.995
MFF02	F23P	ACARTIA HUDSONICA	F	135.758
MFF02	F23P	ACARTIA HUDSONICA	M	19.394
MFF02	F23P	ACARTIA HUDSONICA	C	387.879
MFF02	F23P	BARNACLE NAUPLII	N	2113.939
MFF02	F23P	CALANUS FINMARCHICUS	C	19.394
MFF02	F23P	CENTROPAGES HAMATUS	M	58.182

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	F23P	CENTROPAGES TYPICUS	F	19.394
MFF02	F23P	COPEPOD NAUPLII	N	2812.121
MFF02	F23P	EUTERPINA ACUTIFRONS		38.788
MFF02	F23P	GASTROPOD VELIGER		19.394
MFF02	F23P	OIKIOPLEURA DIOICA		19.394
MFF02	F23P	OITHONA SIMILIS	F	1183.030
MFF02	F23P	OITHONA SIMILIS	M	252.121
MFF02	F23P	OITHONA SIMILIS	C	1415.758
MFF02	F23P	PARACALANUS PARVUS	F	58.182
MFF02	F23P	PARACALANUS PARVUS	M	38.788
MFF02	F23P	PARACALANUS PARVUS	C	1260.606
MFF02	F23P	POLYCHAETE TROCHOPHORES		290.909
MFF02	F23P	PSEUDOCALANUS NEWMANI	F	77.576
MFF02	F23P	PSEUDOCALANUS NEWMANI	M	58.182
MFF02	F23P	TEMORA LONGICORNIS	C	193.939
MFF02	F23P	TORTANUS DISCAUDATUS	F	19.394
MFF02	F23P	TOTAL ZOOPLANKTON		10492.121
MFF02	N01P	ACARTIA HUDSONICA	M	20.253
MFF02	N01P	BARNACLE NAUPLII	N	688.608
MFF02	N01P	CALANUS FINMARCHICUS	C	121.519
MFF02	N01P	CENTROPAGES TYPICUS	M	40.506
MFF02	N01P	COPEPOD NAUPLII	N	2916.456
MFF02	N01P	ECHINODERM PLUTEI		20.253
MFF02	N01P	GASTROPOD VELIGER		222.785
MFF02	N01P	OIKIOPLEURA DIOICA		384.810
MFF02	N01P	OITHONA ATLANTICA	F	40.506
MFF02	N01P	OITHONA SIMILIS	M	141.772
MFF02	N01P	OITHONA SIMILIS	C	2025.316
MFF02	N01P	OITHONA SIMILIS	F	1316.456
MFF02	N01P	PARACALANUS PARVUS	F	60.759

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	N01P	PARACALANUS PARVUS	M	101.266
MFF02	N01P	PARACALANUS PARVUS	C	789.873
MFF02	N01P	POLYCHAETE LARVAE		141.772
MFF02	N01P	POLYCHAETE TROCHOPHORES		60.759
MFF02	N01P	PSEUDOCALANUS NEWMANI	F	486.076
MFF02	N01P	PSEUDOCALANUS NEWMANI	M	121.519
MFF02	N01P	PSEUDOCALANUS NEWMANI	C	20.253
MFF02	N01P	PTEROPOD		81.013
MFF02	N01P	TEMORA LONGICORNIS	M	60.759
MFF02	N01P	TEMORA LONGICORNIS	C	141.772
MFF02	N04P	BARNACLE NAUPLII	N	562.963
MFF02	N04P	BIVALVE VELIGER		29.630
MFF02	N04P	CALANUS FINMARCHICUS	C	325.926
MFF02	N04P	CALANUS FINMARCHICUS	F	59.259
MFF02	N04P	CENTROPAGES SPP.	C	59.259
MFF02	N04P	CENTROPAGES TYPICUS	F	207.407
MFF02	N04P	CENTROPAGES TYPICUS	M	88.889
MFF02	N04P	COPEPOD NAUPLII	N	7674.074
MFF02	N04P	DECAPOD LARVAE		29.630
MFF02	N04P	ECHINODERM PLUTEI		29.630
MFF02	N04P	MEDUSA		29.630
MFF02	N04P	METRIDIA LUCENS	M	29.630
MFF02	N04P	METRIDIA LUCENS	C	266.667
MFF02	N04P	METRIDIA LUCENS	F	29.630
MFF02	N04P	MICROSETELLA NORVEGICA		59.259
MFF02	N04P	OIKIOPLEURA DIOICA		2785.185
MFF02	N04P	OITHONA ATLANTICA	F	266.667
MFF02	N04P	OITHONA SIMILIS	M	207.407
MFF02	N04P	OITHONA SIMILIS	F	1066.667
MFF02	N04P	OITHONA SIMILIS	C	3762.963

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	N04P	PARACALANUS PARVUS	M	29.630
MFF02	N04P	PARACALANUS PARVUS	F	503.704
MFF02	N04P	PARACALANUS PARVUS	C	977.778
MFF02	N04P	POLYCHAETE LARVAE		444.444
MFF02	N04P	PSEUDOCALANUS NEWMANI	F	681.481
MFF02	N04P	PSEUDOCALANUS NEWMANI	C	148.148
MFF02	N04P	PSEUDOCALANUS NEWMANI	M	59.259
MFF02	N04P	PTEROPOD		4207.407
MFF02	N04P	SAGITTA ELEGANS		29.630
MFF02	N04P	TEMORA LONGICORNIS	C	88.889
MFF02	N04P	TEMORA LONGICORNIS	F	29.630
MFF02	N04P	TEMORA LONGICORNIS	M	59.259
MFF02	N04P	TORTANUS DISCAUDATUS	C	29.630
MFF02	N04P	TOTAL ZOOPLANKTON		24859.259
MFF02	N07P	BARNACLE NAUPLII	N	597.333
MFF02	N07P	CALANUS FINMARCHICUS	C	199.111
MFF02	N07P	CENTROPAGES TYPICUS	F	56.889
MFF02	N07P	CENTROPAGES TYPICUS	M	113.778
MFF02	N07P	COPEPOD NAUPLII	N	3584.000
MFF02	N07P	ECHINODERM PLUTEI		28.444
MFF02	N07P	MEDUSA		28.444
MFF02	N07P	MICROSETELLA NORVEGICA		28.444
MFF02	N07P	OIKIOPLEURA DIOICA		768.000
MFF02	N07P	OITHONA ATLANTICA	F	56.889
MFF02	N07P	OITHONA ATLANTICA	C	28.444
MFF02	N07P	OITHONA SIMILIS	M	142.222
MFF02	N07P	OITHONA SIMILIS	F	739.556
MFF02	N07P	OITHONA SIMILIS	C	1564.444
MFF02	N07P	PARACALANUS PARVUS	F	28.444
MFF02	N07P	PARACALANUS PARVUS	C	796.444

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	N07P	POLYCHAETE LARVAE		28.444
MFF02	N07P	POLYCHAETE TROCHOPHORES		56.889
MFF02	N07P	PSEUDOCALANUS NEWMANI	F	284.444
MFF02	N07P	PSEUDOCALANUS NEWMANI	C	28.444
MFF02	N07P	PSEUDOCALANUS NEWMANI	M	85.333
MFF02	N07P	PTEROPOD		1166.222
MFF02	N07P	TEMORA LONGICORNIS	C	113.778
MFF02	N07P	TOTAL ZOOPLANKTON		10524.444
MFF02	N10P	ACARTIA HUDSONICA	C	12.075
MFF02	N10P	ACARTIA HUDSONICA	M	24.151
MFF02	N10P	BARNACLE NAUPLII	N	2910.189
MFF02	N10P	CALANUS FINMARCHICUS	C	48.302
MFF02	N10P	CENTROPAGES HAMATUS	M	12.075
MFF02	N10P	CENTROPAGES SPP.	C	24.151
MFF02	N10P	COPEPOD NAUPLII	N	4419.623
MFF02	N10P	EUCONCHOEICA SP.		12.075
MFF02	N10P	OIKIOPLEURA DIOICA		350.189
MFF02	N10P	OITHONA ATLANTICA	F	36.226
MFF02	N10P	OITHONA SIMILIS	F	748.679
MFF02	N10P	OITHONA SIMILIS	C	2366.792
MFF02	N10P	OITHONA SIMILIS	M	338.113
MFF02	N10P	PARACALANUS PARVUS	C	1871.698
MFF02	N10P	PARACALANUS PARVUS	F	241.509
MFF02	N10P	PARACALANUS PARVUS	M	72.453
MFF02	N10P	POLYCHAETE LARVAE		603.774
MFF02	N10P	POLYCHAETE TROCHOPHORES		120.755
MFF02	N10P	PSEUDOCALANUS NEWMANI	C	12.075
MFF02	N10P	PSEUDOCALANUS NEWMANI	F	422.642
MFF02	N10P	PSEUDOCALANUS NEWMANI	M	156.981
MFF02	N10P	SAGITTA ELEGANS		12.075

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	N10P	TEMORA LONGICORNIS	F	72.453
MFF02	N10P	TEMORA LONGICORNIS	M	108.679
MFF02	N10P	TEMORA LONGICORNIS	C	193.208
MFF02	N10P	TORTANUS DISCAUDATUS	F	24.151
MFF02	N10P	TOTAL ZOOPLANKTON		15215.094
MFF02	N16P	BARNACLE NAUPLII	N	668.444
MFF02	N16P	CALANUS FINMARCHICUS	C	71.111
MFF02	N16P	COPEPOD NAUPLII	N	2901.333
MFF02	N16P	EUCONCHOEICA SP.		14.222
MFF02	N16P	MICROSETELLA NORVEGICA		14.222
MFF02	N16P	OIKIOPLEURA DIOICA		327.111
MFF02	N16P	OITHONA ATLANTICA	F	71.111
MFF02	N16P	OITHONA SIMILIS	F	839.111
MFF02	N16P	OITHONA SIMILIS	M	184.889
MFF02	N16P	OITHONA SIMILIS	C	2289.778
MFF02	N16P	PARACALANUS PARVUS	C	867.556
MFF02	N16P	PARACALANUS PARVUS	M	71.111
MFF02	N16P	PARACALANUS PARVUS	F	42.667
MFF02	N16P	POLYCHAETE LARVAE		156.444
MFF02	N16P	POLYCHAETE TROCHOPHORES		28.444
MFF02	N16P	PSEUDOCALANUS NEWMANI	M	14.222
MFF02	N16P	PSEUDOCALANUS NEWMANI	C	14.222
MFF02	N16P	PSEUDOCALANUS NEWMANI	F	128.000
MFF02	N16P	PTEROPOD		14.222
MFF02	N16P	TEMORA LONGICORNIS	M	14.222
MFF02	N16P	TEMORA LONGICORNIS	F	85.333
MFF02	N16P	TEMORA LONGICORNIS	C	128.000
MFF02	N16P	TORTANUS DISCAUDATUS	C	14.222
MFF02	N16P	TOTAL ZOOPLANKTON		8960.000
MFF02	N20P	ACARTIA HUDSONICA	C	12.030

TABLE L-1. (Continued)

EVENT	STATION	TAXON	SEX/STAGE	ANIMALS/ CUBIC METER
MFF02	N20P	BARNACLE NAUPLII	N	1828.571
MFF02	N20P	CALANUS FINMARCHICUS	C	24.060
MFF02	N20P	CALANUS FINMARCHICUS	F	12.030
MFF02	N20P	CENTROPAGES SPP.	C	48.120
MFF02	N20P	CENTROPAGES TYPICUS	M	24.060
MFF02	N20P	COPEPOD NAUPLII	N	2971.429
MFF02	N20P	EUCONCHOEICA SP.		36.090
MFF02	N20P	EVADNE NORDMANI		12.030
MFF02	N20P	GASTROPOD VELIGER		36.090
MFF02	N20P	OIKIOPLEURA DIOICA		312.782
MFF02	N20P	OITHONA ATLANTICA	F	48.120
MFF02	N20P	OITHONA SIMILIS	F	457.143
MFF02	N20P	OITHONA SIMILIS	M	108.271
MFF02	N20P	OITHONA SIMILIS	C	1948.872
MFF02	N20P	PARACALANUS PARVUS	F	96.241
MFF02	N20P	PARACALANUS PARVUS	C	1118.797
MFF02	N20P	PARACALANUS PARVUS	M	60.150
MFF02	N20P	POLYCHAETE LARVAE		276.692
MFF02	N20P	POLYCHAETE TROCHOPHORES		24.060
MFF02	N20P	PSEUDOCALANUS NEWMANI	M	12.030
MFF02	N20P	PSEUDOCALANUS NEWMANI	C	24.060
MFF02	N20P	PSEUDOCALANUS NEWMANI	F	108.271
MFF02	N20P	SAGITTA ELEGANS		12.030
MFF02	N20P	TEMORA LONGICORNIS	F	48.120
MFF02	N20P	TEMORA LONGICORNIS	M	48.120
MFF02	N20P	TEMORA LONGICORNIS	C	96.241
MFF02	N20P	TORTANUS DISCAUDATUS	C	12.030
MFF02	N20P	TORTANUS DISCAUDATUS	M	24.060
MFF02	N20P	TOTAL ZOOPLANKTON		9876.692
MFF02	N20P	UNIDENTIFIED LARVAE		36.090