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LIGHT ATTENUATION IN THE EXPERIMENTAL  
LAKES AREA - 1983, 1984, 1985 DATA

by

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## ABSTRACT

Shearer, J.A., and E.R. DeBruyn. 1987. Light attenuation in the Experimental Lakes Area - 1983, 1984, 1985 data. Can. Data Rep. Fish. Aquat. Sci. 629: iv + 149 p.

Periodic measurements of photosynthetically active radiation depth profiles were taken in a number of lakes in the Experimental Lakes Area, northwestern Ontario, over a three year period from 1983 through 1985. Measurements were taken during the ice free season only. The collected data are tabulated and plots of irradiance versus depth are presented. Mean vertical attenuation coefficients and percent transmission at depth have been calculated.

Key words: light penetration; water transparency; limnological data.

## RÉSUMÉ

Shearer, J.A., and E.R. DeBruyn. 1987. Light attenuation in the Experimental Lakes Area - 1983, 1984, 1985 data. Can. Data Rep. Fish. Aquat. Sci. 629: iv + 149 p.

Les profils de profondeur du rayonnement photosynthétiquement utilisable ont été mesurés de façon périodique pendant trois ans, de 1983 à 1985, dans un certain nombre de lacs du Région des Lacs Expérimentaux, dans le nord-ouest ontarien, au cours de l'inter-glaciel. Les données recueillies ont été groupées en tableaux et l'éclairement a été figuré par rapport à la profondeur. À partir de ces données, les coefficients moyens d'atténuation verticale et le pourcentage de transmission ont été calculés.

Mots-clés: pénétration de la lumière; transparence de l'eau; données limnologiques.

## INTRODUCTION

This report presents solar irradiance at depth data collected over a three year period for selected lakes within the Experimental Lakes Area (ELA), northwestern Ontario (Johnson and Vallentyne 1971). These data were collected in conjunction with, and in support of, phytoplankton productivity studies conducted on the same lakes during the same years (DeBruyn et al., unpublished data).

The measured irradiances represent the quantum flux density in the 400-700 nanometer waveband and can be defined as photosynthetically active radiation (PAR).

The content of this report supplements that found in nine previous reports of this series (Appendix 3). The methodology for data collection is briefly described and the data are presented in graphic and tabular form.

## DATA COLLECTION AND ANALYSIS

The vertical attenuation of downwelling PAR was monitored during the ice-free season in 22 lake basins during 1983, 26 lake basins during 1984 and 23 lake basins during 1985. These lakes range in size from 1.3 to 509 hectares and in maximum depth from 1.0 to 52 metres. In each lake studied, vertical light attenuation profiles were taken at the deepest location.

Light attenuation surveys were conducted either every two weeks or monthly. Generally, experimentally perturbed lake basins (see below) were surveyed more frequently than the reference lake basins. The identification numbers of the lakes studied in each year are listed below.

### 1983

109	227	375
110	239	382B
114	240	382
222	302N	622
223	302S	623
224	305	629
226N	373	
226S	374	

### 1984

93	226N	305
109	226S	373
110	227	374
111	239	375
114	240	382B
222	302N	382
223	302S	623
224	303	629
225	304	

### 1985

109	226N	303
110	226S	304
114	227	305
221	239	373
222	240	374
223	260	382
224	302N	623
225	302S	

During 1983, each of lakes 302, 226 and 382 was divided (with a reinforced plastic "sea curtain" (Schindler 1975; Cruikshank et al. 1983)) into separate basins for whole basin comparative perturbation studies. On July 11, 1984 the curtain dividing Lake 226 was removed to allow the water from the two basins to mix. However, each basin was studied separately through 1985. Lakes 302 and 382 remained divided through 1985. Lake 382 Bay was not studied in 1985 because of the deteriorated condition of the "sea curtain".

Lakes 114, 302S and 223 were undergoing controlled acidification with H<sub>2</sub>SO<sub>4</sub> (Schindler et al. 1980; Cruikshank 1984). Lake 302N was undergoing a similar controlled acidification with HNO<sub>3</sub> (Turner et al. 1987). Lake 227 was being artificially enriched with nitrogen and phosphorus as part of a long term eutrophication experiment started in 1969 (Schindler et al. 1971). From mid-July through October 1984, Lake 303 was artificially enriched as part of a bait-fish enhancement study (Mohr 1986).

Profiling techniques and equipment were unchanged throughout the study period and are described in detail elsewhere (Shearer et al. 1985; Appendix 3). Profiles were measured with either a Licor LI-192S, underwater quantum sensor and a LI-185 meter or a LI-192B sensor and a LI-188 meter. Whenever possible, profiles were measured near mid-morning and mid-afternoon (Combs 1977) and under clear or uniformly overcast skies.

Surface readings were taken in air and corrected for sensor immersion effect. The immersion-corrected, surface irradiance value serves as the surface reference (100 percent) to which the remaining underwater percentages for the profile refer.

The measured light profiles included in this report are presented in two formats. Appendix 1 lists the measured values of irradiance versus depth. These irradiances have been converted to percentages of the coincident surface irradiance. Appendix 2 shows the calculated 60, 30, 10, 3, and 0.5 percent light isopleths at their respective depth intercepts for each lake year.

## ACKNOWLEDGMENTS

We greatly appreciated the assistance of Kimberley Hallard in the collection and computer entry of data. We also thank Susan Kasian for her assistance with inter-computer data transfers and David Gilbertson for graphing data.

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## APPENDIX 1

This appendix lists the data (as percent of surface) for vertical attenuation profiles taken at the ELA from 1983 through 1985.

All times reported are standard time, i.e. Central Standard Time (CST).

The attenuation coefficient ( $k$ ) is the negative slope of a regression of the natural logarithm of the percent surface irradiance at depth. The  $R^{**2}$  (or  $r^2$ ) value is a measure of the linearity of the regression, wherein 1.00 would represent perfect linearity. The relationship of  $k$  to surface irradiance ( $I_0$ ) and to irradiance at a given depth ( $I_z$ ) is expressed in the equation:

$$k_z = \ln I_0 - \ln I_z$$

where  $z$  is the depth in meters and  $\ln$  is the natural logarithm of irradiance  $I$  (Wetzel 1975, p. 53).

The depths are in meters. Irradiance values at depth, expressed as percentages of the immersion-corrected, surface irradiance, are calculated from actual measurements at that depth.



LAKE 93 1984

DATE: 22 MAY 84 TIME: 0940 HOURS  
ATTENUATION COEFFICIENT: .79 R\*\*2: .9981

DEPTH	% SURF.								
0.00	100.00	0.50	56.82	1.00	37.34	2.00	17.86	3.00	8.77
4.00	4.09	5.00	1.95	6.00	0.81	7.00	0.32		

DATE: 19 JUN 84 TIME: 0835 HOURS  
ATTENUATION COEFFICIENT: .92 R\*\*2: .9913

DEPTH	% SURF.								
0.00	100.00	0.50	67.27	1.00	43.03	2.00	19.39	3.00	8.48
4.00	3.88	5.00	1.82	6.00	0.58	7.00	0.18	8.00	0.05

DATE: 17 JUL 84 TIME: 0904 HOURS  
ATTENUATION COEFFICIENT: .89 R\*\*2: .9763

DEPTH	% SURF.								
0.00	100.00	0.50	61.39	1.00	40.51	2.00	18.99	3.00	9.81
4.00	4.87	5.00	2.28	6.00	0.53	7.00	0.12		

DATE: 14 AUG 84 TIME: 0902 HOURS  
ATTENUATION COEFFICIENT: .91 R\*\*2: .9623

DEPTH	% SURF.								
0.00	100.00	0.50	60.57	1.00	42.16	2.00	21.36	3.00	11.70
4.00	5.57	5.00	2.27	6.00	0.60	7.00	0.09		

DATE: 12 SEP 84 TIME: 0815 HOURS  
ATTENUATION COEFFICIENT: .81 R\*\*2: .9696

DEPTH	% SURF.								
0.00	100.00	0.50	50.62	1.00	32.10	2.00	16.05	3.00	9.01
4.00	4.94	5.00	2.72	6.00	0.89	7.00	0.16		

DATE: 15 OCT 84 TIME: 1005 HOURS  
ATTENUATION COEFFICIENT: .77 R\*\*2: .9975

DEPTH	% SURF.								
0.00	100.00	0.50	55.39	1.00	34.66	2.00	16.26	3.00	7.79
4.00	3.75	5.00	1.86	6.00	0.91	7.00	0.35		

LAKE 109 1983

DATE: 04 JUL 83 TIME: 0750 HOURS  
 ATTENUATION COEFFICIENT: .36 R\*\*2: .9843  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 62.03 1.00 39.34 2.00 31.90 3.00 22.15  
 4.00 16.84 5.00 12.14 6.00 8.15 7.00 6.08 8.00 4.45  
 9.00 2.66

DATE: 29 AUG 83 TIME: 0750 HOURS  
 ATTENUATION COEFFICIENT: .48 R\*\*2: .9140  
 DEPTH % SURF.  
 0.00 100.00 0.50 69.03 1.00 50.21 2.00 35.48 3.00 26.55  
 4.00 20.52 5.00 14.87 6.00 10.62 7.00 6.47 8.00 3.67  
 9.00 1.35 9.50 0.34

DATE: 03 OCT 83 TIME: 0915 HOURS  
 ATTENUATION COEFFICIENT: .56 R\*\*2: .9947  
 DEPTH % SURF.  
 0.00 100.00 0.50 58.71 1.00 39.37 2.00 21.00 3.00 12.16  
 4.00 7.05 5.00 4.14 6.00 2.43 7.00 1.44 8.00 0.88  
 9.00 0.52

LAKE 109 1984

LAKE 109 1984

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .48

TIME: 0820 HOURS

R\*\*2: .9937

LAKE 109 1985

DATE: 29 MAY 85 TIME: 1005 HOURS  
 ATTENUATION COEFFICIENT: .43 R\*\*2: .9786

DEPTH	% SURF.								
0.00	100.00	0.50	57.56	1.00	42.27	2.00	29.05	3.00	22.03
4.00	16.19	5.00	11.33	6.00	7.19	7.00	4.23	8.00	1.98

DATE: 25 JUN 85 TIME: 1001 HOURS  
 ATTENUATION COEFFICIENT: .43 R\*\*2: .9926  
 DEPTH % SURF.  
 0.00 100.00 0.50 64.25 1.00 45.00 2.00 28.00 3.00 18.88  
 4.00 13.13 5.00 9.38 6.00 6.11 7.00 4.10 8.00 2.59  
 9.00 1.54

DATE: 20 AUG 85 TIME: 0950 HOURS  
 ATTENUATION COEFFICIENT: .43 R\*\*2: .9923  
 DEPTH % SURF.  
 0.00 100.00 0.50 65.85 1.00 49.76 2.00 30.24 3.00 20.98  
 4.00 14.63 5.00 9.59 6.00 7.04 7.00 4.78 8.00 2.88  
 9.00 1.48

DATE: 25 SEP 85 TIME: 0950 HOURS  
 ATTENUATION COEFFICIENT: .54 R\*\*2: .9939  
 DEPTH % SURF.  
 0.00 100.00 0.50 66.46 1.00 52.96 2.00 25.34 3.00 13.50  
 4.00 8.10 5.00 4.97 6.00 2.76 7.00 1.83 8.00 1.16  
 9.00 0.74

LAKE 110 1983

DATE: 07 JUN 83 TIME: 1540 HOURS ATTENUATION COEFFICIENT: .61 R\*\*2: .9974

DATE: 04 JUL 83 TIME: 0925 HOURS ATTENUATION COEFFICIENT: .57 R\*\*2: .9872

DATE: 29 JUL 83 TIME: 1040 HOURS ATTENUATION COEFFICIENT: .64 R\*\*2: .9699

DATE: 29 AUG 83 TIME: 0830 HOURS ATTENUATION COEFFICIENT: .50 R\*\*2: .9713

DATE: 03 OCT 83 TIME: 0830 HOURS ATTENUATION COEFFICIENT: .50 R\*\*2: .9858

DEPTH	% SURF.								
4.00	100.00	0.50	64.29	1.00	42.64	2.00	25.38	3.00	16.58
4.00	11.23	5.00	7.51	6.00	5.04	7.00	3.32	8.00	2.00
9.00	0.94	10.00	0.38						

DEPTH	% SURF.								
4.00	100.00	0.50	62.55	1.00	48.26	2.00	30.68	3.00	22.64
4.00	17.57	5.00	12.09	6.00	7.86	7.00	4.53	8.00	1.85
9.00	0.89	10.00	0.45						

DEPTH	% SURF.								
0.00	100.00	0.50	64.29	1.00	42.64	2.00	25.38	3.00	16.58
4.00	11.23	5.00	7.51	6.00	5.04	7.00	3.32	8.00	2.00
9.00	0.94	10.00	0.38						

LAKE 110 1984

DATE: 21 MAY 84

ATTENUATION COEFFICIENT: .49

TIME: 0835 HOURS

R\*\*2: .9932

DEPTH	% SURF.								
0.00	100.00	0.50	65.26	1.00	46.55	2.00	28.28	3.00	18.45
4.00	13.49	5.00	8.53	6.00	5.57	7.00	3.31	8.00	1.91
9.00	1.04	10.00	0.52						

DATE: 18 JUN 84

ATTENUATION COEFFICIENT: .50

TIME: 0850 HOURS

R\*\*2: .9909

DEPTH	% SURF.								
0.00	100.00	0.50	67.00	1.00	48.16	2.00	29.31	3.00	19.09
4.00	11.31	5.00	7.45	6.00	4.56	7.00	3.14	8.00	2.18
9.00	1.09	10.00	0.42						

DATE: 16 JUL 84

ATTENUATION COEFFICIENT: .52

TIME: 0825 HOURS

R\*\*2: .9904

DEPTH	% SURF.								
0.00	100.00	0.50	63.40	1.00	46.11	2.00	30.26	3.00	20.46
4.00	12.39	5.00	7.15	6.00	4.50	7.00	2.94	8.00	1.84
9.00	0.95	10.00	0.35						

DATE: 13 AUG 84

ATTENUATION COEFFICIENT: .61

TIME: 0823 HOURS

R\*\*2: .9843

DEPTH	% SURF.								
0.00	100.00	0.50	66.26	1.00	53.01	2.00	31.66	3.00	17.38
4.00	12.07	5.00	7.22	6.00	4.05	7.00	2.15	8.00	0.99
9.00	0.41	10.00	0.15						

DATE: 11 SEP 84

ATTENUATION COEFFICIENT: .54

TIME: 0810 HOURS

R\*\*2: .9624

DEPTH	% SURF.								
0.00	100.00	0.50	53.60	1.00	34.84	2.00	24.57	3.00	20.55
4.00	13.04	5.00	8.84	6.00	5.54	7.00	3.22	8.00	1.34
9.00	0.62	10.00	0.20						

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .46

TIME: 0823 HOURS

R\*\*2: .9951

DEPTH	% SURF.								
0.00	100.00	0.50	61.90	1.00	44.67	2.00	26.80	3.00	17.87
4.00	12.25	5.00	8.04	6.00	4.98	7.00	3.45	8.00	2.30
9.00	1.47	10.00	0.77	11.00	0.45				

LAKE 110 1985

LAKE 111 1984

DATE: 22 MAY 84	ATTENUATION COEFFICIENT:	.55	TIME: 1007 HOURS	R**2: .9963
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 64.24	1.00 42.71	2.00 21.74	3.00 13.75
4.00 8.06	5.00 4.58	6.00 2.57	7.00 1.53	8.00 0.90
9.00 0.56	10.00 0.35			
DATE: 19 JUN 84	ATTENUATION COEFFICIENT:	.54	TIME: 0900 HOURS	R**2: .9979
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 61.54	1.00 43.08	2.00 24.62	3.00 13.46
4.00 8.08	5.00 5.23	6.00 2.92	7.00 1.81	8.00 1.05
9.00 0.60	10.00 0.35	11.00 0.22	12.00 0.14	
DATE: 17 JUL 84	ATTENUATION COEFFICIENT:	.53	TIME: 0930 HOURS	R**2: .9987
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 69.61	1.00 49.17	2.00 25.97	3.00 17.13
4.00 9.50	5.00 5.86	6.00 3.48	7.00 2.10	8.00 1.22
9.00 0.72	10.00 0.44	11.00 0.27	12.00 0.17	
DATE: 14 AUG 84	ATTENUATION COEFFICIENT:	.52	TIME: 0815 HOURS	R**2: .9977
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 66.67	1.00 43.83	2.00 26.54	3.00 17.65
4.00 10.49	5.00 6.91	6.00 3.95	7.00 2.41	8.00 1.33
9.00 0.75	10.00 0.47			
DATE: 12 SEP 84	ATTENUATION COEFFICIENT:	.48	TIME: 0900 HOURS	R**2: .9922
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 55.88	1.00 37.06	2.00 22.94	3.00 15.88
4.00 10.59	5.00 7.35	6.00 4.76	7.00 2.76	8.00 1.56
9.00 0.97	10.00 0.56			
DATE: 15 OCT 84	ATTENUATION COEFFICIENT:	.44	TIME: 0924 HOURS	R**2: .9959
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 64.04	1.00 44.83	2.00 26.11	3.00 17.24
4.00 12.17	5.00 8.18	6.00 5.42	7.00 3.50	8.00 2.36
9.00 1.58	10.00 0.97	11.00 0.60	12.00 0.36	

LAKE 111 1984

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .44

TIME: 0924 HOURS

R\*\*2: .9959

DEPTH	% SURF.								
0.00	100.00	0.50	64.04	1.00	44.83	2.00	26.11	3.00	17.24
4.00	12.17	5.00	8.18	6.00	5.42	7.00	3.50	8.00	2.36
9.00	1.58	10.00	0.97	11.00	0.60	12.00	0.36		

LAKE 114 1983

DATE: 26 MAY 83 TIME: 1505 HOURS  
 ATTENUATION COEFFICIENT: .68 R\*\*2: .9963  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 65.57 1.00 45.62 2.00 22.33 3.00 11.21  
 4.00 6.56

DATE: 22 JUL 83 TIME: 0825 HOURS  
 ATTENUATION COEFFICIENT: .74 R\*\*2: .9675  
 DEPTH % SURF.  
 0.00 100.00 0.50 48.39 1.00 29.16 2.00 13.52 3.00 7.94  
 4.00 4.65

DATE: 09 AUG 83 TIME: 0830 HOURS  
 ATTENUATION COEFFICIENT: .73 R\*\*2: .9726  
 DEPTH % SURF.  
 0.00 100.00 0.50 48.95 1.00 28.89 2.00 14.84 3.00 8.51  
 4.00 4.59

LAKE 114 1983

DATE: 23 AUG 83 TIME: 0845 HOURS  
 ATTENUATION COEFFICIENT: .82 R\*\*2: .9885  
 DEPTH % SURF.  
 0.00 100.00 0.50 55.83 1.00 32.38 2.00 13.74 3.00 7.20  
 4.00 3.57

DATE: 06 SEP 83 TIME: 0855 HOURS  
 ATTENUATION COEFFICIENT: .75 R\*\*2: .9911  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 54.94 1.00 34.84 2.00 17.42 3.00 8.84  
 4.00 4.49

DATE: 20 SEP 83 TIME: 0905 HOURS  
 ATTENUATION COEFFICIENT: .70 R\*\*2: .9777  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 55.51 1.00 32.54 2.00 16.85 3.00 9.57  
 4.00 5.55

DATE: 04 OCT 83 TIME: 1515 HOURS  
 ATTENUATION COEFFICIENT: .64 R\*\*2: .9954  
 DEPTH % SURF.  
 0.00 100.00 0.50 68.72 1.00 46.38 2.00 23.94 3.00 13.17  
 4.00 7.79

LAKE 114 1984

DATE: 26 APR 84 TIME: 1035 HOURS  
 ATTENUATION COEFFICIENT: .67 R\*\*2: .9834  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 50.09 1.00 40.83 2.00 19.54 3.00 10.27  
 4.00 6.26

DATE: 15 MAY 84 TIME: 0925 HOURS  
 ATTENUATION COEFFICIENT: .69 R\*\*2: .9914  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 62.94 1.00 38.58 2.00 21.32 3.00 10.66  
 4.00 6.19

DATE: 26 JUN 84 TIME: 1002 HOURS  
 ATTENUATION COEFFICIENT: .70 R\*\*2: .9726  
 DEPTH % SURF.  
 0.00 100.00 0.50 51.87 1.00 28.75 2.00 17.94 3.00 9.77  
 4.00 5.08

DATE: 02 JUL 84 TIME: 0725 HOURS  
 ATTENUATION COEFFICIENT: 1.00 R\*\*2: .9951  
 DEPTH % SURF.  
 0.00 100.00 0.50 55.83 1.00 29.31 2.00 11.35 3.00 5.30  
 4.00 1.63

LAKE 114 1984

DATE: 10 JUL 84 TIME: 0955 HOURS  
 ATTENUATION COEFFICIENT: .58 R\*\*2: .9935  
 DEPTH % SURF.  
 0.00 100.00 0.50 75.76 1.00 52.57 2.00 26.80 3.00 16.75  
 4.00 10.31

DATE: 07 AUG 84 TIME: 0900 HOURS  
 ATTENUATION COEFFICIENT: .92 R\*\*2: .9787

DEPTH	% SURF.								
0.00	100.00	0.50	69.58	1.00	40.20	2.00	20.10	3.00	11.34
4.00	2.32	4.50	1.44						

DATE: 03 OCT 84 TIME: 0800 HOURS  
 ATTENUATION COEFFICIENT: .48 R\*\*2: .9598  
 DEPTH % SURF.  
 0.00 100.00 0.50 60.71 1.00 42.12 2.00 26.51 3.00 19.33  
 4.00 13.26

LAKE 114 1984

DATE: 16 OCT 84 TIME: 0837 HOURS  
 ATTENUATION COEFFICIENT: .48 R\*\*2: .9676  
 DEPTH % SURF.  
 0.00 100.00 0.50 61.88 1.00 44.83 2.00 26.90 3.00 18.52  
 4.00 13.40

DATE: 29 OCT 84 TIME: 0835 HOURS  
 ATTENUATION COEFFICIENT: .62 R\*\*2: .9466  
 DEPTH % SURF.  
 0.00 100.00 0.50 46.45 1.00 28.59 2.00 17.87 3.00 10.99  
 4.00 6.88

LAKE 114 1985

DATE: 01 MAY 85 TIME: 0910 HOURS  
ATTENUATION COEFFICIENT: .96 R\*\*2: .9862

DEPTH	% SURF.								
0.00	100.00	0.50	38.75	1.00	20.31	2.00	8.44	3.00	3.72
4.00	1.69	5.00	0.59						

DATE: 07 MAY 85 TIME: 0830 HOURS  
ATTENUATION COEFFICIENT: .98 R\*\*2: .9749

DATE: 04 JUN 85 TIME: 1037 HOURS  
ATTENUATION COEFFICIENT: .84 R\*\*2: .9917

DATE: 18 JUN 85 TIME: 1020 HOURS  
ATTENUATION COEFFICIENT: .63 R\*\*2: .9837

DATE: 16 JUL 85 TIME: 0905 HOURS  
ATTENUATION COEFFICIENT: .80 R\*\*2: .9688

DATE: 30 JUL 85 TIME: 1015 HOURS  
ATTENUATION COEFFICIENT: .77 R\*\*2: .9862

LAKE 114 1985

DATE: 24 SEP 85 TIME: 1020 HOURS  
 ATTENUATION COEFFICIENT: .72 R\*\*2: .9587  
 DEPTH % SURF.  
 0.00 100.00 0.50 50.38 1.00 20.99 2.00 12.82 3.00 6.60  
 4.00 3.63 5.00 2.25

DATE: 07 OCT 85 TIME: 0929 HOURS  
 ATTENUATION COEFFICIENT: .58 R\*\*2: .9305

DEPTH	% SURF.								
0.00	100.00	0.50	48.28	1.00	22.10	2.00	15.54	3.00	10.32
4.00	6.24	5.00	4.14						

LAKE 221 1985

DATE: 04 JUN 85	ATTENUATION COEFFICIENT: 1.78	TIME: 0805 HOURS		
		R**2: .9167		
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 9.62	1.00 3.78	2.00 0.93	3.00 0.29
DATE: 08 JUL 85	ATTENUATION COEFFICIENT: 1.85	TIME: 0955 HOURS		
		R**2: .9746		
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 41.14	1.00 19.39	2.00 4.00	3.00 0.95
4.00 0.04				
DATE: 11 JUL 85	ATTENUATION COEFFICIENT: 1.66	TIME: 0925 HOURS		
		R**2: .9953		
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 39.12	1.00 15.37	2.00 4.24	3.00 0.82
4.00 0.10				
DATE: 17 JUL 85	ATTENUATION COEFFICIENT: 1.74	TIME: 0808 HOURS		
		R**2: .9959		
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 35.00	1.00 13.76	2.00 3.43	3.00 0.60
4.00 0.07				
DATE: 18 JUL 85	ATTENUATION COEFFICIENT: 1.62	TIME: 0846 HOURS		
		R**2: .9947		
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 39.16	1.00 13.87	2.00 3.18	3.00 0.75
DATE: 25 JUL 85	ATTENUATION COEFFICIENT: 1.45	TIME: 0941 HOURS		
		R**2: .9977		
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 38.73	1.00 18.45	2.00 5.36	3.00 1.25
4.00 0.26				

LAKE 221 1985

DATE: 07 AUG 85 TIME: 0735 HOURS  
 ATTENUATION COEFFICIENT: 1.57 R\*\*2: .9980  
 DEPTH % SURF.  
 0.00 100.00 0.50 38.98 1.00 17.12 2.00 4.49 3.00 0.93  
 4.00 0.16

DATE: 08 AUG 85 TIME: 0824 HOURS  
 ATTENUATION COEFFICIENT: 1.46 R\*\*2: .9595  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 43.24 1.00 9.94 2.00 3.58 3.00 1.23

DATE: 15 AUG 85 TIME: 0844 HOURS  
 ATTENUATION COEFFICIENT: 1.58 R\*\*2: .9342  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 36.95 1.00 5.97 2.00 2.50 3.00 0.80

DATE: 22 AUG 85 TIME: 0805 HOURS  
 ATTENUATION COEFFICIENT: 1.48 R\*\*2: .9872  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 35.16 1.00 13.83 2.00 3.68 3.00 1.09

DATE: 29 AUG 85 TIME: 0827 HOURS  
 ATTENUATION COEFFICIENT: 1.64 R\*\*2: .9132  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 35.80 1.00 4.43 2.00 1.99 3.00 0.67

LAKE 221 1985

DATE: 05 SEP 85	ATTENUATION COEFFICIENT: 1.55	TIME: 0846 HOURS	R**2: .9883						
DEPTH 0.00	% SURF. 100.00	DEPTH 0.50	% SURF. 36.22	DEPTH 1.00	% SURF. 13.42	DEPTH 2.00	% SURF. 3.07	DEPTH 3.00	% SURF. 0.92
DATE: 11 SEP 85	ATTENUATION COEFFICIENT: 1.74	TIME: 0900 HOURS	R**2: .9904						
DEPTH 0.00	% SURF. 100.00	DEPTH 0.50	% SURF. 33.68	DEPTH 1.00	% SURF. 11.05	DEPTH 2.00	% SURF. 2.11	DEPTH 3.00	% SURF. 0.53
DATE: 26 SEP 85	ATTENUATION COEFFICIENT: 2.13	TIME: 0948 HOURS	R**2: .9965						
DEPTH 0.00	% SURF. 100.00	DEPTH 0.50	% SURF. 23.33	DEPTH 1.00	% SURF. 8.62	DEPTH 2.00	% SURF. 1.17	DEPTH 3.00	% SURF. 0.14

LAKE 222 1983

DATE: 24 MAY 83 TIME: 0720 HOURS  
ATTENUATION COEFFICIENT: 1.31 R\*\*2: .9856

DEPTH	% SURF.								
0.00	100.00	0.50	39.39	1.00	19.90	2.00	6.90	3.00	2.42
4.00	0.69	5.00	0.08						

DATE: 16 JUN 83 TIME: 1105 HOURS  
ATTENUATION COEFFICIENT: 1.28 R\*\*2: .9790

DEPTH	% SURF.								
0.00	100.00	0.50	46.10	1.00	25.35	2.00	9.09	3.00	3.25
4.00	0.96	5.00	0.10						

DATE: 08 JUL 83 TIME: 1025 HOURS  
ATTENUATION COEFFICIENT: 1.28 R\*\*2: .9850

DEPTH	% SURF.								
0.00	100.00	0.50	44.67	1.00	23.82	2.00	5.96	3.00	2.48
4.00	0.89	5.00	0.10						

DATE: 04 AUG 83 TIME: 1045 HOURS  
ATTENUATION COEFFICIENT: 1.34 R\*\*2: .9599

DEPTH	% SURF.								
0.00	100.00	0.50	48.50	1.00	27.65	2.00	9.53	3.00	3.40
4.00	1.08	5.00	0.06						

DATE: 13 SEP 83 TIME: 0830 HOURS  
ATTENUATION COEFFICIENT: 1.15 R\*\*2: .9923

DEPTH	% SURF.								
0.00	100.00	0.50	40.20	1.00	18.83	2.00	5.83	3.00	2.21
4.00	0.85	5.00	0.24						

DATE: 18 OCT 83 TIME: 0940 HOURS  
ATTENUATION COEFFICIENT: 1.43 R\*\*2: .9904

DEPTH	% SURF.								
0.00	100.00	0.50	29.89	1.00	11.85	2.00	2.73	3.00	0.77
4.00	0.22	5.00	0.06						

LAKE 222 1984

DATE: 07 MAY 84

ATTENUATION COEFFICIENT: 1.35

TIME: 0935 HOURS

R\*\*2: .9839

DEPTH	% SURF.								
0.00	100.00	0.50	30.26	1.00	12.10	2.00	4.75	3.00	1.47
4.00	0.29								

DATE: 05 JUN 84

ATTENUATION COEFFICIENT: 1.01

TIME: 0905 HOURS

R\*\*2: .9958

DEPTH	% SURF.								
0.00	100.00	0.50	56.84	1.00	30.37	2.00	12.00	3.00	5.21
4.00	1.97	5.00	0.52						

DATE: 28 JUN 84

ATTENUATION COEFFICIENT: 1.17

TIME: 1610 HOURS

R\*\*2: .9950

DEPTH	% SURF.								
0.00	100.00	0.50	40.45	1.00	21.27	2.00	6.29	3.00	2.02
4.00	0.75	5.00	0.25						

DATE: 31 JUL 84

ATTENUATION COEFFICIENT: 1.11

TIME: 0845 HOURS

R\*\*2: .9893

DEPTH	% SURF.								
0.00	100.00	0.50	40.70	1.00	21.11	2.00	8.04	3.00	3.52
4.00	1.23	5.00	0.25						

DATE: 27 AUG 84

ATTENUATION COEFFICIENT: 1.18

TIME: 1525 HOURS

R\*\*2: .9842

DEPTH	% SURF.								
0.00	100.00	0.50	50.00	1.00	25.04	2.00	10.08	3.00	3.95
4.00	1.26	5.00	0.18						

DATE: 02 OCT 84

ATTENUATION COEFFICIENT: 1.33

TIME: 1545 HOURS

R\*\*2: .9944

DEPTH	% SURF.								
0.00	100.00	0.50	37.56	1.00	16.22	2.00	4.27	3.00	1.16
4.00	0.38	5.00	0.11						

LAKE 222 1985

DATE: 14 MAY 85 TIME: 0946 HOURS  
 ATTENUATION COEFFICIENT: 1.40 R\*\*2: .9861  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 30.12 1.00 12.70 2.00 3.36 3.00 0.92  
 4.00 0.31

DATE: 11 JUN 85 TIME: 0725 HOURS  
 ATTENUATION COEFFICIENT: 1.38 R\*\*2: .9901  
 DEPTH % SURF.  
 0.00 100.00 0.50 29.24 1.00 12.18 2.00 3.29 3.00 0.88  
 4.00 0.24 5.00 0.08

DATE: 10 JUL 85 TIME: 0715 HOURS  
 ATTENUATION COEFFICIENT: 1.80 R\*\*2: .9944  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 27.18 1.00 9.80 2.00 2.26 3.00 0.44  
 4.00 0.05

DATE: 06 AUG 85 TIME: 0808 HOURS  
 ATTENUATION COEFFICIENT: 1.54 R\*\*2: .9996  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 42.67 1.00 18.67 2.00 4.33 3.00 0.92  
 4.00 0.20

DATE: 04 SEP 85 TIME: 0918 HOURS  
 ATTENUATION COEFFICIENT: 1.56 R\*\*2: .9915  
 DEPTH % SURF.  
 0.00 100.00 0.50 27.58 1.00 11.26 2.00 2.73 3.00 0.66  
 4.00 0.15

DATE: 01 OCT 85 TIME: 0835 HOURS  
 ATTENUATION COEFFICIENT: 2.56 R\*\*2: .9933  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 21.49 1.00 6.08 2.00 0.81 3.00 0.03

LAKE 222 1985

DATE: 23 OCT 85  
ATTENUATION COEFFICIENT: 2.14TIME: 0830 HOURS  
R\*\*2: .9979DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
0.00 100.00 0.50 24.96 1.00 9.45 2.00 1.19 3.00 0.14

LAKE 223 1983

DATE: 11 MAY 83  
 ATTENUATION COEFFICIENT: .44  
 DEPTH % SURF.  
 0.00 100.00 0.50 65.33 1.00 50.25 2.00 31.32 3.00 20.94  
 4.00 13.07 5.00 8.96 6.00 5.78 7.00 3.85 8.00 2.45  
 9.00 1.59 10.00 1.01 11.00 0.65 12.00 0.40

DATE: 31 MAY 83  
 ATTENUATION COEFFICIENT: .43  
 DEPTH % SURF.  
 0.00 100.00 0.50 80.40 1.00 60.62 2.00 32.54 3.00 22.46  
 4.00 18.76 5.00 12.76 6.00 8.36 7.00 5.42 8.00 3.57  
 9.00 2.35 10.00 1.48 11.00 0.91 12.00 0.55 13.00 0.29

DATE: 14 JUN 83  
 ATTENUATION COEFFICIENT: .36  
 DEPTH % SURF.  
 0.00 100.00 0.50 67.63 1.00 53.73 2.00 37.92 3.00 32.87  
 4.00 27.31 5.00 22.00 6.00 17.07 7.00 12.89 8.00 9.86  
 9.00 7.33 10.00 5.03 11.00 3.06 12.00 1.69 13.00 0.73  
 14.00 0.15

DATE: 27 JUN 83  
 ATTENUATION COEFFICIENT: .42  
 DEPTH % SURF.  
 0.00 100.00 0.50 78.82 1.00 70.94 2.00 51.67 3.00 38.97  
 4.00 27.59 5.00 20.41 6.00 14.36 7.00 10.42 8.00 7.93  
 9.00 5.69 10.00 3.77 11.00 2.29 12.00 1.16 13.00 0.51  
 14.00 0.06

DATE: 07 JUL 83  
 ATTENUATION COEFFICIENT: .44  
 DEPTH % SURF.  
 0.00 100.00 0.50 73.63 1.00 58.90 2.00 39.76 3.00 27.98  
 4.00 19.73 5.00 14.36 6.00 10.01 7.00 7.04 8.00 4.99  
 9.00 3.56 10.00 2.24 11.00 1.21 12.00 0.47 13.00 0.11

LAKE 223 1983

DATE: 22 JUL 83

ATTENUATION COEFFICIENT: .49

TIME: 0730 HOURS

R\*\*2: .9544

DEPTH	% SURF.								
0.00	100.00	0.50	79.01	1.00	60.42	2.00	42.60	3.00	30.21
4.00	21.69	5.00	15.34	6.00	10.69	7.00	7.28	8.00	4.88
9.00	3.16	10.00	1.52	11.00	0.55	12.00	0.19	13.00	0.10

DATE: 04 AUG 83

ATTENUATION COEFFICIENT: .47

TIME: 1000 HOURS

R\*\*2: .9405

DEPTH	% SURF.								
0.00	100.00	0.50	86.45	1.00	69.16	2.00	46.11	3.00	32.66
4.00	25.94	5.00	18.64	6.00	13.64	7.00	9.41	8.00	6.53
9.00	4.27	10.00	2.29	11.00	0.66	12.00	0.28	13.00	0.12

DATE: 23 AUG 83

ATTENUATION COEFFICIENT: .50

TIME: 0730 HOURS

R\*\*2: .9583

DEPTH	% SURF.								
0.00	100.00	0.50	75.24	1.00	53.74	2.00	35.65	3.00	23.65
4.00	15.68	5.00	11.20	6.00	7.70	7.00	5.34	8.00	3.69
9.00	2.10	10.00	0.94	11.00	0.29	12.00	0.10		

DATE: 26 AUG 83

ATTENUATION COEFFICIENT: .48

TIME: 0905 HOURS

R\*\*2: .9438

DEPTH	% SURF.								
0.00	100.00	0.50	69.39	1.00	59.82	2.00	43.07	3.00	29.67
4.00	22.49	5.00	16.39	6.00	11.25	7.00	7.54	8.00	4.79
9.00	2.73	10.00	1.28	11.00	0.41	12.00	0.14		

DATE: 06 SEP 83

ATTENUATION COEFFICIENT: .52

TIME: 0725 HOURS

R\*\*2: .9394

DEPTH	% SURF.								
0.00	100.00	0.50	77.58	1.00	55.01	2.00	33.85	3.00	22.29
4.00	15.23	5.00	10.58	6.00	7.84	7.00	5.59	8.00	3.58
9.00	2.03	10.00	0.98	11.00	0.26	12.00	0.06		

LAKE 223 1983

DATE: 20 SEP 83 TIME: 0745 HOURS  
 ATTENUATION COEFFICIENT: .41 R\*\*2: .9318

DEPTH	% SURF.								
0.00	100.00	0.50	64.58	1.00	48.43	2.00	35.52	3.00	25.51
4.00	18.40	5.00	13.08	6.00	9.28	7.00	6.49	8.00	4.60
9.00	3.29	10.00	2.47	11.00	0.31				

DATE: 04 OCT 83 TIME: 1300 HOURS  
 ATTENUATION COEFFICIENT: .43 R\*\*2: .8880

DEPTH	% SURF.								
0.00	100.00	0.50	69.19	1.00	50.68	2.00	35.57	3.00	26.17
4.00	19.30	5.00	13.94	6.00	10.23	7.00	7.50	8.00	5.51
9.00	3.98	10.00	2.87	11.00	2.01	12.00	0.68	13.00	0.05

DATE: 18 OCT 83 TIME: 0900 HOURS  
 ATTENUATION COEFFICIENT: .36 R\*\*2: .9924

DEPTH	% SURF.								
0.00	100.00	0.50	79.25	1.00	57.63	2.00	36.02	3.00	24.49
4.00	15.27	5.00	10.95	6.00	7.78	7.00	5.56	8.00	3.89
9.00	2.82	10.00	2.10	11.00	1.57	12.00	1.15	13.00	0.84

LAKE 223 1984

DATE: 26 APR 84

ATTENUATION COEFFICIENT: .35

DEPTH	% SURF.								
0.00	100.00	0.50	64.61	1.00	47.86	2.00	41.87	3.00	31.59
4.00	24.41	5.00	18.19	6.00	13.40	7.00	9.57	8.00	6.51
9.00	4.50	10.00	2.78	11.00	1.72	12.00	1.05		

TIME: 0742 HOURS

R\*\*2: .9862

DATE: 07 MAY 84

ATTENUATION COEFFICIENT: .32

DEPTH	% SURF.								
0.00	100.00	0.50	73.48	1.00	57.92	2.00	38.90	3.00	29.83
4.00	22.91	5.00	16.86	6.00	11.41	7.00	8.56	8.00	6.31
9.00	4.67	10.00	3.54	11.00	2.42	12.00	1.90	13.00	1.38

TIME: 0835 HOURS

R\*\*2: .9973

DATE: 15 MAY 84

ATTENUATION COEFFICIENT: .36

DEPTH	% SURF.								
0.00	100.00	0.50	71.39	1.00	57.11	2.00	37.34	3.00	29.66
4.00	20.54	5.00	14.83	6.00	10.65	7.00	7.47	8.00	5.22
9.00	3.68	10.00	2.80	11.00	2.00	12.00	1.37	13.00	0.89
14.00	0.38								

TIME: 0820 HOURS

R\*\*2: .9930

DATE: 29 MAY 84

ATTENUATION COEFFICIENT: .29

DEPTH	% SURF.								
0.00	100.00	0.50	85.27	1.00	66.27	2.00	53.60	3.00	42.39
4.00	31.67	5.00	26.31	6.00	21.93	7.00	17.25	8.00	13.25
9.00	9.94	10.00	7.33	11.00	4.78	12.00	2.73	13.00	1.20

TIME: 0900 HOURS

R\*\*2: .9640

DATE: 13 JUN 84

ATTENUATION COEFFICIENT: .24

DEPTH	% SURF.								
0.00	100.00	0.50	60.00	1.00	50.00	2.00	41.36	3.00	36.82
4.00	32.27	5.00	27.95	6.00	23.86	7.00	20.09	8.00	16.52
9.00	13.23	10.00	9.80	11.00	7.66	12.00	5.41	13.00	2.98
14.00	1.36								

TIME: 0830 HOURS

R\*\*2: .9356

LAKE 223 1984

DATE: 26 JUN 84 TIME: 0745 HOURS  
ATTENUATION COEFFICIENT: .40 R\*\*2: .8788

DEPTH	% SURF.								
0.00	100.00	0.50	60.30	1.00	43.55	2.00	37.69	3.00	34.34
4.00	30.99	5.00	25.13	6.00	20.44	7.00	15.58	8.00	10.30
9.00	7.37	10.00	4.76	11.00	2.43	12.00	1.02	13.00	0.42
14.00	0.08								

DATE: 10 JUL 84 TIME: 0810 HOURS  
ATTENUATION COEFFICIENT: .36 R\*\*2: .9238

DEPTH	% SURF.								
0.00	100.00	0.50	83.27	1.00	66.04	2.00	47.86	3.00	38.67
4.00	29.29	5.00	22.40	6.00	17.99	7.00	13.88	8.00	10.24
9.00	7.62	10.00	5.32	11.00	2.74	12.00	1.36	13.00	0.30

DATE: 24 JUL 84 TIME: 0840 HOURS  
ATTENUATION COEFFICIENT: .42 R\*\*2: .9408

DEPTH	% SURF.								
0.00	100.00	0.50	90.91	1.00	65.69	2.00	44.46	3.00	32.05
4.00	24.17	5.00	18.39	6.00	14.92	7.00	10.72	8.00	7.57
9.00	4.52	10.00	2.31	11.00	0.91	12.00	0.28		

DATE: 01 AUG 84 TIME: 0850 HOURS  
ATTENUATION COEFFICIENT: .50 R\*\*2: .9153

DEPTH	% SURF.								
0.00	100.00	0.50	80.25	1.00	67.16	2.00	46.50	3.00	35.39
4.00	25.35	5.00	18.68	6.00	14.24	7.00	10.37	8.00	6.58
9.00	3.95	10.00	1.98	11.00	0.69	12.00	0.16	13.00	0.06

DATE: 07 AUG 84 TIME: 0735 HOURS  
ATTENUATION COEFFICIENT: .50 R\*\*2: .9204

DEPTH	% SURF.								
0.00	100.00	0.50	83.75	1.00	67.00	2.00	49.90	3.00	34.91
4.00	24.68	5.00	17.98	6.00	12.34	7.00	9.73	8.00	6.52
9.00	3.17	10.00	1.23	11.00	0.39	12.00	0.10		

LAKE 223 1984

DATE: 15 AUG 84

ATTENUATION COEFFICIENT: .41

DEPTH	% SURF.								
0.00	100.00	0.50	78.39	1.00	62.98	2.00	46.36	3.00	40.54
4.00	34.04	5.00	28.34	6.00	22.78	7.00	18.09	8.00	13.00
9.00	7.57	10.00	2.58	11.00	0.87	12.00	0.27		

TIME: 0725 HOURS

R\*\*2: .8658

DATE: 06 SEP 84

ATTENUATION COEFFICIENT: .47

DEPTH	% SURF.								
0.00	100.00	0.50	69.89	1.00	52.06	2.00	33.74	3.00	23.23
4.00	15.42	5.00	10.12	6.00	7.18	7.00	5.06	8.00	3.49
9.00	2.31	10.00	1.42	11.00	0.17				

TIME: 0800 HOURS

R\*\*2: .9412

DATE: 18 SEP 84

ATTENUATION COEFFICIENT: .53

DEPTH	% SURF.								
0.00	100.00	0.50	57.72	1.00	47.59	2.00	23.16	3.00	12.91
4.00	7.09	5.00	4.05	6.00	2.56	7.00	1.58	8.00	1.03
9.00	0.67	10.00	0.44	11.00	0.23				

TIME: 0825 HOURS

R\*\*2: .9930

DATE: 02 OCT 84

ATTENUATION COEFFICIENT: .65

DEPTH	% SURF.								
0.00	100.00	0.50	63.57	1.00	34.05	2.00	15.74	3.00	7.79
4.00	3.94	5.00	2.22	6.00	1.25	7.00	0.70	8.00	0.40
9.00	0.24	10.00	0.13						

TIME: 1520 HOURS

R\*\*2: .9908

DATE: 17 OCT 84

ATTENUATION COEFFICIENT: .50

DEPTH	% SURF.								
0.00	100.00	0.50	57.43	1.00	35.73	2.00	17.87	3.00	11.49
4.00	6.76	5.00	4.40	6.00	2.68	7.00	1.75	8.00	1.15
9.00	0.77	10.00	0.51						

TIME: 0820 HOURS

R\*\*2: .9850

DATE: 30 OCT 84

ATTENUATION COEFFICIENT: .73

DEPTH	% SURF.								
0.00	100.00	0.50	52.72	1.00	28.56	2.00	10.10	3.00	5.05
4.00	2.46	5.00	1.30	6.00	0.69	7.00	0.39	8.00	0.21
9.00	0.11								

TIME: 0850 HOURS

R\*\*2: .9862

LAKE 223 1985

DATE: 30 APR 85 TIME: 0740 HOURS  
ATTENUATION COEFFICIENT: .61 R\*\*2: .9968

DEPTH	% SURF.								
0.00	100.00	0.50	58.63	1.00	46.06	2.00	21.10	3.00	10.55
4.00	5.78	5.00	3.27	6.00	1.74	7.00	1.02	8.00	0.58
9.00	0.35	10.00	0.20	11.00	0.10				

DATE: 07 MAY 85 TIME: 0820 HOURS  
ATTENUATION COEFFICIENT: .60 R\*\*2: .9977

DEPTH	% SURF.								
0.00	100.00	0.50	68.17	1.00	49.52	2.00	23.30	3.00	13.17
4.00	6.82	5.00	3.82	6.00	2.16	7.00	1.22	8.00	0.68
9.00	0.41	10.00	0.24						

DATE: 21 MAY 85 TIME: 0815 HOURS  
ATTENUATION COEFFICIENT: .63 R\*\*2: .9982

DEPTH	% SURF.								
0.00	100.00	0.50	67.30	1.00	42.28	2.00	20.96	3.00	11.32
4.00	5.84	5.00	3.39	6.00	1.79	7.00	0.99	8.00	0.54
9.00	0.30	10.00	0.15						

DATE: 04 JUN 85 TIME: 0852 HOURS  
ATTENUATION COEFFICIENT: .54 R\*\*2: .9956

DEPTH	% SURF.								
0.00	100.00	0.50	53.28	1.00	37.13	2.00	20.99	3.00	13.88
4.00	8.40	5.00	5.49	6.00	3.33	7.00	1.91	8.00	1.10
9.00	0.61	10.00	0.36	11.00	0.18				

DATE: 18 JUN 85 TIME: 0845 HOURS  
ATTENUATION COEFFICIENT: .58 R\*\*2: .9925

DEPTH	% SURF.								
0.00	100.00	0.50	64.39	1.00	46.97	2.00	26.52	3.00	15.15
4.00	8.71	5.00	5.21	6.00	3.20	7.00	2.03	8.00	1.17
9.00	0.59	10.00	0.29	11.00	0.10				

LAKE 223 1985

DATE: 02 JUL 85

ATTENUATION COEFFICIENT: .55

TIME: 0840 HOURS

R\*\*2: .9977

DEPTH	% SURF.								
0.00	100.00	0.50	66.14	1.00	43.31	2.00	27.17	3.00	15.35
4.00	8.82	5.00	5.51	6.00	3.13	7.00	1.92	8.00	1.16
9.00	0.65	10.00	0.31						

DATE: 16 JUL 85

ATTENUATION COEFFICIENT: .61

TIME: 0800 HOURS

R\*\*2: .9705

DEPTH	% SURF.								
0.00	100.00	0.50	74.52	1.00	53.44	2.00	34.62	3.00	19.95
4.00	13.55	5.00	8.43	6.00	4.67	7.00	2.37	8.00	1.21
9.00	0.53	10.00	0.11						

DATE: 30 JUL 85

ATTENUATION COEFFICIENT: .51

TIME: 0917 HOURS

R\*\*2: .9806

DEPTH	% SURF.								
0.00	100.00	0.50	66.22	1.00	48.96	2.00	32.14	3.00	22.17
4.00	15.33	5.00	10.27	6.00	6.13	7.00	3.65	8.00	2.11
9.00	1.03	10.00	0.36						

DATE: 07 AUG 85

ATTENUATION COEFFICIENT: .54

TIME: 0840 HOURS

R\*\*2: .9800

DEPTH	% SURF.								
0.00	100.00	0.50	69.79	1.00	55.21	2.00	35.94	3.00	21.56
4.00	14.58	5.00	9.38	6.00	5.64	7.00	3.29	8.00	1.84
9.00	0.85	10.00	0.26						

DATE: 27 AUG 85

ATTENUATION COEFFICIENT: .56

TIME: 0820 HOURS

R\*\*2: .9885

DEPTH	% SURF.								
0.00	100.00	0.50	68.82	1.00	48.42	2.00	27.89	3.00	17.89
4.00	9.05	5.00	6.01	6.00	3.49	7.00	2.20	8.00	1.26
9.00	0.78	10.00	0.20						

LAKE 223 1985

DATE: 10 SEP 85 TIME: 0915 HOURS  
 ATTENUATION COEFFICIENT: .56 R\*\*2: .9687  
 DEPTH % SURF.  
 0.00 100.00 0.50 59.70 1.00 47.98 2.00 28.69 3.00 18.18  
 4.00 10.20 5.00 6.57 6.00 4.06 7.00 2.56 8.00 1.64  
 9.00 0.83 10.00 0.14

DATE: 24 SEP 85 TIME: 0840 HOURS  
 ATTENUATION COEFFICIENT: .51 R\*\*2: .9797  
 DEPTH % SURF.  
 0.00 100.00 0.50 60.44 1.00 29.07 2.00 17.53 3.00 11.59  
 4.00 7.47 5.00 4.89 6.00 3.19 7.00 1.98 8.00 1.32  
 9.00 0.88 10.00 0.27

LAKE 224 1983

DATE: 24 MAY 83

ATTENUATION COEFFICIENT: .26

TIME: 0820 HOURS

R\*\*2: .9913

DATE: 16 JUN 83

ATTENUATION COEFFICIENT: .27

TIME: 1135 HOURS

R\*\*2: .9957

DEPTH	% SURF.								
0.00	100.00	0.50	83.53	1.00	74.15	2.00	55.83	3.00	42.88
4.00	31.71	5.00	25.01	6.00	20.10	7.00	16.97	8.00	12.69
9.00	10.54	10.00	8.04	11.00	6.25	12.00	5.36	13.00	3.84
14.00	2.68	15.00	1.79	16.00	1.34	17.00	1.07	18.00	0.76
19.00	0.56	19.50	0.48						

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: .26

TIME: 1505 HOURS

R\*\*2: .9927

DATE: 08 JUL 83

ATTENUATION COEFFICIENT: 24

TIME: 0945 HOURS

R\*\*2: .9946

LAKE 224 1983

LAKE 224 1984

DATE: 07 MAY 84

ATTENUATION COEFFICIENT: .23

TIME: 1010 HOURS

R\*\*2: .9932

DEPTH	% SURF.								
0.00	100.00	0.50	68.04	1.00	58.37	2.00	45.73	3.00	41.37
4.00	35.30	5.00	28.87	6.00	23.83	7.00	20.10	8.00	15.89
9.00	12.29	10.00	9.46	11.00	7.32	12.00	5.70	13.00	4.28
14.00	3.18	15.00	2.43	16.00	1.90	17.00	1.51	18.00	1.24

DATE: 05 JUN 84

ATTENUATION COEFFICIENT: .25

TIME: 0820 HOURS

R\*\*2: .9919

DEPTH	% SURF.								
0.00	100.00	0.50	69.96	1.00	55.14	2.00	41.98	3.00	36.63
4.00	30.45	5.00	25.51	6.00	20.41	7.00	16.79	8.00	13.66
9.00	10.95	10.00	8.81	11.00	7.00	12.00	5.56	13.00	4.32
14.00	3.31	15.00	2.55	16.00	1.93	17.00	1.43	18.00	1.05
19.00	0.73	20.00	0.53	21.00	0.40	22.00	0.30		

DATE: 28 JUN 84

ATTENUATION COEFFICIENT: .25

TIME: 1540 HOURS

R\*\*2: .9941

DEPTH	% SURF.								
0.00	100.00	0.50	80.34	1.00	67.68	2.00	53.20	3.00	41.48
4.00	32.46	5.00	26.20	6.00	20.74	7.00	16.23	8.00	13.33
9.00	10.44	10.00	8.48	11.00	6.80	12.00	5.39	13.00	4.44
14.00	3.50	15.00	2.79	16.00	2.07	17.00	1.54	18.00	1.08
19.00	0.75	20.00	0.48						

DATE: 31 JUL 84

ATTENUATION COEFFICIENT: .24

TIME: 0805 HOURS

R\*\*2: .9871

DEPTH	% SURF.								
0.00	100.00	0.50	73.00	1.00	57.00	2.00	44.25	3.00	38.25
4.00	33.25	5.00	28.25	6.00	23.50	7.00	19.75	8.00	16.00
9.00	12.75	10.00	10.00	11.00	8.00	12.00	6.37	13.00	5.08
14.00	4.00	15.00	3.17	16.00	2.40	17.00	1.75	18.00	1.40
19.00	0.90	20.00	0.60	21.00	0.43				

LAKE 224 1984

DATE: 27 AUG 84 TIME: 1500 HOURS  
 ATTENUATION COEFFICIENT: .25 R\*\*2: .9908

DEPTH	% SURF.								
0.00	100.00	0.50	77.94	1.00	64.71	2.00	47.06	3.00	38.97
4.00	31.25	5.00	25.74	6.00	21.76	7.00	17.79	8.00	14.63
9.00	11.84	10.00	9.12	11.00	6.76	12.00	5.51	13.00	4.26
14.00	3.31	15.00	2.50	16.00	1.84	17.00	1.40	18.00	0.97
19.00	0.65	20.00	0.43						

DATE: 02 OCT 84 TIME: 0750 HOURS  
 ATTENUATION COEFFICIENT: .26 R\*\*2: .9895

DEPTH	% SURF.								
0.00	100.00	0.50	65.00	1.00	48.75	2.00	35.00	3.00	26.50
4.00	21.25	5.00	15.50	6.00	12.25	7.00	9.75	8.00	7.62
9.00	6.50	10.00	5.30	11.00	4.25	12.00	3.45	13.00	2.78
14.00	2.20	15.00	1.60	16.00	1.21	17.00	0.86	18.00	0.60
19.00	0.41	20.00	0.26						

DATE: 30 OCT 84 TIME: 0925 HOURS  
 ATTENUATION COEFFICIENT: .30 R\*\*2: .9890

DEPTH	% SURF.								
0.00	100.00	0.50	63.35	1.00	48.73	2.00	31.67	3.00	23.15
4.00	16.81	5.00	11.57	6.00	8.53	7.00	5.85	8.00	4.51
9.00	3.53	10.00	2.62	11.00	2.00	12.00	1.53	13.00	1.18
14.00	0.96	15.00	0.74	16.00	0.57	17.00	0.44	18.00	0.35

LAKE 224 1985

DATE: 08 MAY 85

ATTENUATION COEFFICIENT: .30

TIME: 0840 HOURS

R\*\*2: .9965

DEPTH	% SURF.								
0.00	100.00	0.50	71.05	1.00	54.74	2.00	36.84	3.00	27.37
4.00	20.53	5.00	15.16	6.00	11.58	7.00	8.42	8.00	6.11
9.00	4.42	10.00	3.16	11.00	2.32	12.00	1.77	13.00	1.34
14.00	1.01	15.00	0.78	16.00	0.59	17.00	0.46	18.00	0.36

DATE: 11 JUN 85

ATTENUATION COEFFICIENT: .20

TIME: 0810 HOURS

R\*\*2: .9905

DEPTH	% SURF.								
0.00	100.00	0.50	92.77	1.00	82.46	2.00	67.00	3.00	51.54
4.00	41.23	5.00	30.92	6.00	25.77	7.00	20.62	8.00	15.46
9.00	14.60	10.00	12.03	11.00	8.76	12.00	7.22	13.00	6.18
14.00	5.15	15.00	4.64	16.00	4.12	17.00	3.61	18.00	3.09
19.00	2.58								

DATE: 20 JUN 85

ATTENUATION COEFFICIENT: .30

TIME: 0922 HOURS

R\*\*2: .9990

DEPTH	% SURF.								
0.00	100.00	0.50	78.04	1.00	66.05	2.00	49.52	3.00	34.35
4.00	25.24	5.00	19.49	6.00	13.90	7.00	10.86	8.00	8.23
9.00	6.29	10.00	4.76	11.00	3.53	12.00	2.74	13.00	2.00
14.00	1.45	15.00	0.97	16.00	0.72	17.00	0.55	18.00	0.42

DATE: 10 JUL 85

ATTENUATION COEFFICIENT: .30

TIME: 0748 HOURS

R\*\*2: .9981

DEPTH	% SURF.								
0.00	100.00	0.50	80.00	1.00	60.00	2.00	45.60	3.00	29.20
4.00	24.40	5.00	17.76	6.00	13.84	7.00	9.76	8.00	7.44
9.00	5.28	10.00	4.16	11.00	3.12	12.00	2.32	13.00	1.68
14.00	1.33	15.00	0.94	16.00	0.70	17.00	0.44		

LAKE 224 1985

DATE: 06 AUG 85 TIME: 0843 HOURS  
 ATTENUATION COEFFICIENT: .30 R\*\*2: .9982

DEPTH	% SURF.								
0.00	100.00	0.50	76.47	1.00	51.96	2.00	37.25	3.00	32.35
4.00	25.00	5.00	18.14	6.00	13.53	7.00	10.10	8.00	7.55
9.00	5.71	10.00	4.33	11.00	3.19	12.00	2.52	13.00	1.73
14.00	1.35	15.00	1.02	16.00	0.75	17.00	0.52	18.00	0.37
19.00	0.27	20.00	0.21						

DATE: 04 SEP 85 TIME: 0830 HOURS  
 ATTENUATION COEFFICIENT: .26 R\*\*2: .9914

DEPTH	% SURF.								
0.00	100.00	0.50	68.62	1.00	55.69	2.00	40.17	3.00	31.98
4.00	27.16	5.00	21.72	6.00	17.59	7.00	13.79	8.00	10.78
9.00	8.36	10.00	6.47	11.00	5.26	12.00	4.14	13.00	3.10
14.00	2.24	15.00	1.55	16.00	1.12	17.00	0.69		

DATE: 23 OCT 85 TIME: 0920 HOURS  
 ATTENUATION COEFFICIENT: .31 R\*\*2: .9905

DEPTH	% SURF.								
0.00	100.00	0.50	70.71	1.00	38.08	2.00	36.82	3.00	27.57
4.00	20.25	5.00	12.76	6.00	9.16	7.00	6.49	8.00	4.94
9.00	3.72	10.00	2.85	11.00	2.13	12.00	1.67	13.00	1.30
14.00	0.96	15.00	0.79	16.00	0.42				

LAKE 225 1984

DATE: 12 JUN 84

ATTENUATION COEFFICIENT: 1.47

TIME: 0900 HOURS

R\*\*2: .9923

DEPTH	% SURF.								
0.00	100.00	0.50	40.58	1.00	20.13	1.50	10.86		

DATE: 10 JUL 84

ATTENUATION COEFFICIENT: 2.04

TIME: 0855 HOURS

R\*\*2: .9941

DEPTH	% SURF.								
0.00	100.00	0.25	69.06	0.50	41.23	0.75	23.71	1.00	13.40

DATE: 07 AUG 84

ATTENUATION COEFFICIENT: 1.97

TIME: 0820 HOURS

R\*\*2: .9947

DEPTH	% SURF.								
0.00	100.00	0.50	33.17	1.00	14.86	1.25	7.96		

DATE: 18 SEP 84

ATTENUATION COEFFICIENT: 1.80

TIME: 0755 HOURS

R\*\*2: .9999

DEPTH	% SURF.								
0.00	100.00	0.50	40.16	1.00	16.59				

LAKE 225 1985

DATE: 21 MAY 85	ATTENUATION COEFFICIENT: 2.30	TIME: 0747 HOURS	R**2: .9987
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 29.48	1.00 10.05	
DATE: 18 JUN 85	ATTENUATION COEFFICIENT: 1.96	TIME: 0930 HOURS	R**2: .9913
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 33.82	1.00 15.82	1.25 7.88
DATE: 17 JUL 85	ATTENUATION COEFFICIENT: 2.36	TIME: 0850 HOURS	R**2: .9858
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 24.02	1.00 9.43	
DATE: 07 AUG 85	ATTENUATION COEFFICIENT: 2.00	TIME: 0817 HOURS	R**2: .9698
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 23.94	1.00 9.34	1.50 4.90
DATE: 11 SEP 85	ATTENUATION COEFFICIENT: 2.03	TIME: 1000 HOURS	R**2: .9788
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 29.78	1.00 9.15	1.50 5.06

LAKE 226N 1983

DATE: 25 MAY 83	ATTENUATION COEFFICIENT:	.87	TIME: 0800 HOURS	R**2: .9990
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 55.77	1.00 40.56	2.00 14.49	3.00 6.88
4.00 3.04	5.00 1.32	6.00 0.51	7.00 0.19	8.00 0.09
DATE: 21 JUN 83	ATTENUATION COEFFICIENT:	.70	TIME: 0915 HOURS	R**2: .9850
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 56.04	1.00 35.33	2.00 20.40	3.00 12.18
4.00 6.82	5.00 3.53	6.00 1.49	7.00 0.46	
DATE: 27 JUN 83	ATTENUATION COEFFICIENT:	.77	TIME: 1405 HOURS	R**2: .9782
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 70.70	1.00 50.15	2.00 27.95	3.00 16.44
4.00 9.04	5.00 4.77	6.00 2.04	7.00 0.69	8.00 0.19
DATE: 19 JUL 83	ATTENUATION COEFFICIENT:	.81	TIME: 1000 HOURS	R**2: .9851
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 54.03	1.00 35.23	2.00 19.45	3.00 11.24
4.00 6.16	5.00 3.13	6.00 1.44	7.00 0.46	8.00 0.17
9.00 0.06	10.00 0.02			
DATE: 12 AUG 83	ATTENUATION COEFFICIENT:	.87	TIME: 0835 HOURS	R**2: .9748
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 70.45	1.00 48.35	2.00 23.90	3.00 13.40
4.00 6.98	5.00 3.51	6.00 1.42	7.00 0.31	8.00 0.10
9.00 0.03				
DATE: 07 SEP 83	ATTENUATION COEFFICIENT:	.84	TIME: 1550 HOURS	R**2: .9843
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 69.99	1.00 45.24	2.00 22.53	3.00 11.52
4.00 6.35	5.00 3.55	6.00 1.28	7.00 0.28	8.00 0.12
9.00 0.05				

LAKE 226N 1983

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: .78

TIME: 1410 HOURS

R\*\*2: .9960

LAKE 226N 1984

DATE: 03 MAY 84

ATTENUATION COEFFICIENT: .70

DEPTH	% SURF.								
0.00	100.00	0.50	61.42	1.00	37.84	2.00	18.11	3.00	8.87
4.00	4.28	5.00	2.17	6.00	1.20	7.00	0.62	8.00	0.32
9.00	0.17								

TIME: 0830 HOURS

R\*\*2: .9973

DATE: 05 JUN 84

ATTENUATION COEFFICIENT: .56

DEPTH	% SURF.								
0.00	100.00	0.50	66.29	1.00	41.61	2.00	24.40	3.00	16.93
4.00	11.00	5.00	7.05	6.00	3.53	7.00	1.62	8.00	0.85
9.00	0.56								

TIME: 0850 HOURS

R\*\*2: .9924

DATE: 28 JUN 84

ATTENUATION COEFFICIENT: .77

DEPTH	% SURF.								
0.00	100.00	0.50	63.01	1.00	44.27	2.00	22.82	3.00	12.14
4.00	6.02	5.00	3.30	6.00	1.75	7.00	0.82	8.00	0.28
9.00	0.08	10.00	0.03						

TIME: 1650 HOURS

R\*\*2: .9855

DATE: 31 JUL 84

ATTENUATION COEFFICIENT: .60

DEPTH	% SURF.								
0.00	100.00	0.50	52.64	1.00	38.86	2.00	21.82	3.00	13.21
4.00	8.14	5.00	4.31	6.00	2.01				

TIME: 0831 HOURS

R\*\*2: .9906

DATE: 25 AUG 84

ATTENUATION COEFFICIENT: .73

DEPTH	% SURF.								
0.00	100.00	0.50	62.61	1.00	46.22	2.00	23.53	3.00	13.45
4.00	6.72	5.00	3.78	6.00	1.85	7.00	0.81	8.00	0.32
9.00	0.08								

TIME: 1510 HOURS

R\*\*2: .9869

LAKE 226N 1984

DATE: 01 OCT 84 TIME: 0820 HOURS  
 ATTENUATION COEFFICIENT: .71 R\*\*2: .9943  
 DEPTH % SURF.  
 0.00 100.00 0.50 51.37 1.00 31.82 2.00 14.52 3.00 6.93  
 4.00 3.46 5.00 1.79 6.00 0.95 7.00 0.51 8.00 0.29  
 9.00 0.12

DATE: 30 OCT 84 TIME: 0900 HOURS  
 ATTENUATION COEFFICIENT: .76 R\*\*2: .9976

DEPTH	% SURF.								
0.00	100.00	0.50	54.09	1.00	33.19	2.00	17.21	3.00	7.13
4.00	3.69	5.00	1.77	6.00	0.86	7.00	0.37	8.00	0.20

LAKE 226N 1985

DATE: 08 MAY 85

ATTENUATION COEFFICIENT: .83

TIME: 0810 HOURS

R\*\*2: .9992

DEPTH	% SURF.								
0.00	100.00	0.50	56.67	1.00	38.33	2.00	17.22	3.00	7.00
4.00	3.00	5.00	1.29	6.00	0.57	7.00	0.27	8.00	0.13

DATE: 14 MAY 85

ATTENUATION COEFFICIENT: .74

TIME: 0822 HOURS

R\*\*2: .9992

DEPTH	% SURF.								
0.00	100.00	0.50	61.08	1.00	42.38	2.00	18.39	3.00	9.47
4.00	4.49	5.00	2.06	6.00	1.00	7.00	0.50	8.00	0.25

DATE: 12 JUN 85

ATTENUATION COEFFICIENT: .82

TIME: 0801 HOURS

R\*\*2: .9964

DEPTH	% SURF.								
0.00	100.00	0.50	66.60	1.00	41.23	2.00	20.46	3.00	9.36
4.00	4.60	5.00	2.09	6.00	0.65	7.00	0.29		

DATE: 10 JUL 85

ATTENUATION COEFFICIENT: .73

TIME: 1020 HOURS

R\*\*2: .9979

DEPTH	% SURF.								
0.00	100.00	0.50	67.54	1.00	45.68	2.00	25.05	3.00	13.02
4.00	6.39	5.00	2.90	6.00	1.35	7.00	0.59	8.00	0.26

DATE: 06 AUG 85

ATTENUATION COEFFICIENT: .74

TIME: 1010 HOURS

R\*\*2: .9988

DEPTH	% SURF.								
0.00	100.00	0.50	61.81	1.00	37.50	2.00	20.07	3.00	10.76
4.00	4.78	5.00	2.26	6.00	1.08	7.00	0.47	8.00	0.24

DATE: 03 SEP 85

ATTENUATION COEFFICIENT: .71

TIME: 1015 HOURS

R\*\*2: .9927

DEPTH	% SURF.								
0.00	100.00	0.50	50.83	1.00	28.93	2.00	12.69	3.00	7.15
4.00	3.97	5.00	2.02	6.00	0.99	7.00	0.50	8.00	0.25

LAKE 226N 1985

DATE: 26 SEP 85 TIME: 1002 HOURS  
ATTENUATION COEFFICIENT: .92 R\*\*2: .9939

DEPTH	% SURF.								
0.00	100.00	0.50	56.56	1.00	26.15	2.00	10.78	3.00	4.02
4.00	1.57	5.00	0.83	6.00	0.30	7.00	0.15		

DATE: 23 OCT 85 TIME: 0855 HOURS  
ATTENUATION COEFFICIENT: .80 R\*\*2: .9941

DEPTH	% SURF.								
0.00	100.00	0.50	49.37	1.00	28.21	2.00	12.64	3.00	5.88
4.00	2.95	5.00	1.45	6.00	0.71	7.00	0.28		

LAKE 226S 1983

DATE: 25 MAY 83

ATTENUATION COEFFICIENT: .88

TIME: 0740 HOURS

R\*\*2: .9994

DEPTH	% SURF.										
0.00	100.00	0.50	55.97	1.00	35.28	2.00	13.82	3.00	5.77		
4.00	2.63	5.00	1.03	6.00	0.44	7.00	0.18	8.00	0.08		

DATE: 21 JUN 83

ATTENUATION COEFFICIENT: .75

TIME: 0850 HOURS

R\*\*2: .9908

DEPTH	% SURF.										
0.00	100.00	0.50	53.23	1.00	29.37	2.00	19.09	3.00	9.73		
4.00	5.14	5.00	2.39	6.00	1.01	7.00	0.36				

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: .79

TIME: 1355 HOURS

R\*\*2: .9842

DATE: 19 JUL 83

ATTENUATION COEFFICIENT: .80

TIME: 0940 HOURS

R\*\*2: .9678

DEPTH	% SURF.								
0.00	100.00	0.50	59.61	1.00	39.34	2.00	21.46	3.00	13.11
4.00	7.56	5.00	4.17	6.00	2.11	7.00	0.84	8.00	0.21
9.00	0.06	10.00	0.02						

DATE: 12 AUG 83

ATTENUATION COEFFICIENT: .77

TIME: 0825 HOURS

R\*\*2: .9663

DATE: 07 SEP 83

ATTENUATION COEFFICIENT: .73

TIME: 1600 HOURS

R\*\*2: .9471

LAKE 226S 1983

LAKE 226S 1984

DATE: 03 MAY 84 TIME: 0800 HOURS  
ATTENUATION COEFFICIENT: .73 R\*\*2: .9971

DATE: 05 JUN 84 TIME: 0815 HOURS  
ATTENUATION COEFFICIENT: .64 R\*\*2: .9773

DEPTH	% SURF.								
0.00	100.00	0.50	56.14	1.00	32.59	2.00	19.74	3.00	12.86
4.00	7.70	5.00	4.47	6.00	2.23	7.00	0.63		

DATE: 28 JUN 84 TIME: 1645 HOURS  
ATTENUATION COEFFICIENT: .81 R\*\*2: .9590

DATE: 31 JUL 84 TIME: 0800 HOURS  
ATTENUATION COEFFICIENT: .84 R\*\*2: .8941

DEPTH	% SURF.								
0.00	100.00	0.50	45.03	1.00	26.30	2.00	13.90	3.00	8.93
4.00	5.40	5.00	3.17	6.00	1.30	7.00	0.06		

DATE: 25 AUG 84 TIME: 1500 HOURS  
ATTENUATION COEFFICIENT: .71 R\*\*2: .9538

DATE: 01 OCT 84 TIME: 0800 HOURS  
ATTENUATION COEFFICIENT: .73 R\*\*2: .9964

LAKE 226S 1985

DATE: 08 MAY 85		TIME: 0805 HOURS
ATTENUATION COEFFICIENT:	.81	R**2: .9979
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 53.85	1.00 32.54
4.00 2.91	5.00 1.30	6.00 0.60
2.00 14.79	3.00 6.75	7.00 0.29
8.00 0.14		
DATE: 14 MAY 85		TIME: 0745 HOURS
ATTENUATION COEFFICIENT:	.75	R**2: .9943
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 51.07	1.00 31.35
4.00 3.59	5.00 1.72	6.00 0.86
2.00 13.80	3.00 6.93	7.00 0.43
DATE: 12 JUN 85		TIME: 0723 HOURS
ATTENUATION COEFFICIENT:	.91	R**2: .9392
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 51.69	1.00 30.63
4.00 4.02	5.00 2.13	6.00 0.80
2.00 17.23	3.00 8.61	7.00 0.05
DATE: 10 JUL 85		TIME: 0955 HOURS
ATTENUATION COEFFICIENT:	.77	R**2: .9874
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 64.07	1.00 42.71
4.00 6.17	5.00 3.23	6.00 1.45
2.00 22.07	3.00 12.10	7.00 0.58
9.00 0.06		8.00 0.25
DATE: 06 AUG 85		TIME: 0950 HOURS
ATTENUATION COEFFICIENT:	.73	R**2: .9997
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 63.60	1.00 48.00
4.00 5.48	5.00 2.68	6.00 1.24
2.00 21.60	3.00 11.12	7.00 0.58
8.00 0.29		
DATE: 03 SEP 85		TIME: 0950 HOURS
ATTENUATION COEFFICIENT:	.70	R**2: .9940
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 48.71	1.00 30.34
4.00 4.18	5.00 2.24	6.00 1.16
2.00 14.14	3.00 7.89	7.00 0.56
8.00 0.26		

LAKE 226S 1985

DATE: 26 SEP 85

ATTENUATION COEFFICIENT: .86

TIME: 0945 HOURS

R\*\*2: .9968

DEPTH	% SURF.								
0.00	100.00	0.50	42.23	1.00	34.28	2.00	13.40	3.00	5.67
4.00	2.30	5.00	1.06	6.00	0.49	7.00	0.20		

DATE: 23 OCT 85

ATTENUATION COEFFICIENT: .76

TIME: 0840 HOURS

R\*\*2: .9774

DEPTH	% SURF.								
0.00	100.00	0.50	37.74	1.00	20.79	2.00	9.01	3.00	4.35
4.00	2.25	5.00	1.14	6.00	0.59	7.00	0.36		

LAKE 227 1983

DATE: 09 MAY 83 TIME: 0850 HOURS  
ATTENUATION COEFFICIENT: 1.54 R\*\*2: .9963

DEPTH	% SURF.								
0.00	100.00	0.50	43.70	1.00	22.72	2.00	7.17	3.00	1.17
4.00	0.20	5.00	0.05						

DATE: 16 MAY 83 TIME: 0735 HOURS  
ATTENUATION COEFFICIENT: 1.50 R\*\*2: .9848

DEPTH	% SURF.								
0.00	100.00	0.50	43.35	1.00	21.28	2.00	6.26	3.00	1.80
4.00	0.17								

DATE: 30 MAY 83 TIME: 0735 HOURS  
ATTENUATION COEFFICIENT: 1.60 R\*\*2: .9961

DEPTH	% SURF.								
0.00	100.00	0.50	39.45	1.00	18.53	2.00	4.63	3.00	1.19
4.00	0.14	5.00	0.03						

DATE: 13 JUN 83 TIME: 0715 HOURS  
ATTENUATION COEFFICIENT: 1.84 R\*\*2: .9435

DEPTH	% SURF.								
0.00	100.00	0.50	43.35	1.00	24.04	2.00	7.88	3.00	1.32
4.00	0.04								

DATE: 27 JUN 83 TIME: 0735 HOURS  
ATTENUATION COEFFICIENT: 1.90 R\*\*2: .9676

DEPTH	% SURF.								
0.00	100.00	0.50	33.89	1.00	14.63	2.00	3.60	3.00	0.83
4.00	0.03								

DATE: 12 JUL 83 TIME: 1600 HOURS  
ATTENUATION COEFFICIENT: 2.10 R\*\*2: .9811

DEPTH	% SURF.								
0.00	100.00	0.25	52.48	0.50	33.50	1.00	13.07	2.00	2.35
3.00	0.40	4.00	0.01						

LAKE 227 1983

DATE: 21 JUL 83

ATTENUATION COEFFICIENT: 1.91

TIME: 0800 HOURS

R\*\*2: .9956

DEPTH	% SURF.								
0.00	100.00	0.25	47.37	0.50	32.48	1.00	12.99	2.00	2.44
3.00	0.39	4.00	0.03						

DATE: 25 JUL 83

ATTENUATION COEFFICIENT: 2.83

TIME: 0910 HOURS

R\*\*2: .9903

DEPTH	% SURF.								
0.00	100.00	0.25	58.35	0.50	39.44	1.00	4.00	2.00	0.54
3.00	0.02								

DATE: 01 AUG 83

ATTENUATION COEFFICIENT: 1.68

TIME: 1535 HOURS

R\*\*2: .9612

DEPTH	% SURF.								
0.00	100.00	0.25	62.47	0.50	47.35	1.00	25.19	1.50	13.50
2.00	7.96	2.50	3.53	3.00	1.37	3.50	0.33	4.00	0.06

DATE: 08 AUG 83

ATTENUATION COEFFICIENT: 1.50

TIME: 0735 HOURS

R\*\*2: .9918

DEPTH	% SURF.								
0.00	100.00	0.50	46.95	1.00	22.50	2.00	6.16	3.00	1.60
4.00	0.19								

DATE: 17 AUG 83

ATTENUATION COEFFICIENT: 1.53

TIME: 0730 HOURS

R\*\*2: .9435

DEPTH	% SURF.								
0.00	100.00	0.25	62.00	0.50	48.00	1.00	26.00	1.50	15.50
2.00	9.84	2.50	5.48	3.00	2.10	3.50	0.64	4.00	0.09

DATE: 22 AUG 83

ATTENUATION COEFFICIENT: 1.42

TIME: 0745 HOURS

R\*\*2: .9580

DEPTH	% SURF.								
0.00	100.00	0.25	67.00	0.50	54.44	1.00	32.87	2.00	14.03
3.00	4.92	3.50	1.93	4.00	0.43	4.50	0.15	5.00	0.05

LAKE 227 1983

DATE: 05 SEP 83 TIME: 0755 HOURS  
 ATTENUATION COEFFICIENT: 1.34 R\*\*2: .9957

DEPTH	% SURF.								
0.00	100.00	0.50	44.67	1.00	22.87	2.00	6.97	3.00	2.34
4.00	0.36	5.00	0.12						

DATE: 19 SEP 83 TIME: 0935 HOURS  
 ATTENUATION COEFFICIENT: 1.30 R\*\*2: .9851

DEPTH	% SURF.								
0.00	100.00	0.50	42.88	1.00	21.44	2.00	6.70	3.00	2.32
4.00	0.84	5.00	0.09						

DATE: 04 OCT 83 TIME: 1410 HOURS  
 ATTENUATION COEFFICIENT: 1.07 R\*\*2: .9831

DEPTH	% SURF.								
0.00	100.00	0.50	36.67	1.00	17.98	2.00	5.78	3.00	2.19
4.00	0.96	5.00	0.39						

DATE: 17 OCT 83 TIME: 0955 HOURS  
 ATTENUATION COEFFICIENT: 1.30 R\*\*2: .9948

DEPTH	% SURF.								
0.00	100.00	0.50	38.37	1.00	17.21	2.00	4.63	3.00	1.38
4.00	0.42	5.00	0.13						

LAKE 227 1984

DATE: 02 MAY 84

ATTENUATION COEFFICIENT: 1.40

TIME: 0911 HOURS

R\*\*2: .9971

DEPTH	% SURF.								
0.00	100.00	0.50	36.06	1.00	19.49	2.00	4.68	3.00	1.25
4.00	0.33								

DATE: 14 MAY 84

ATTENUATION COEFFICIENT: 1.26

TIME: 0815 HOURS

R\*\*2: .9939

DEPTH	% SURF.								
0.00	100.00	0.50	48.88	1.00	26.22	2.00	8.97	3.00	2.99
4.00	0.76	5.00	0.14						

DATE: 28 MAY 84

ATTENUATION COEFFICIENT: 1.27

TIME: 0845 HOURS

R\*\*2: .9902

DEPTH	% SURF.								
0.00	100.00	0.50	54.69	1.00	30.08	2.00	11.16	3.00	3.58
4.00	0.81	5.00	0.14						

DATE: 11 JUN 84

ATTENUATION COEFFICIENT: 1.27

TIME: 0800 HOURS

R\*\*2: .9781

DEPTH	% SURF.								
0.00	100.00	0.50	56.15	1.00	30.63	2.00	12.12	3.00	4.08
4.00	1.02	5.00	0.11						

DATE: 25 JUN 84

ATTENUATION COEFFICIENT: 1.22

TIME: 0845 HOURS

R\*\*2: .9549

DEPTH	% SURF.								
0.00	100.00	0.50	53.71	1.00	31.90	2.00	12.97	3.00	5.21
4.00	1.68	5.00	0.12						

DATE: 09 JUL 84

ATTENUATION COEFFICIENT: 1.16

TIME: 0845 HOURS

R\*\*2: .9818

DEPTH	% SURF.								
0.00	100.00	0.50	53.60	1.00	29.48	2.00	10.72	3.00	4.29
4.00	1.53	5.00	0.19						

LAKE 227 1984

DATE: 23 JUL 84 TIME: 0905 HOURS  
 ATTENUATION COEFFICIENT: 1.24 R\*\*2: .9967

DEPTH	% SURF.								
0.00	100.00	0.50	46.70	1.00	23.35	2.00	7.92	3.00	2.13
4.00	0.80	5.00	0.16						

DATE: 06 AUG 84 TIME: 0824 HOURS  
 ATTENUATION COEFFICIENT: 1.44 R\*\*2: .9978  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 50.25 1.00 21.54 2.00 4.79 3.00 1.14  
 4.00 0.34

DATE: 29 AUG 84 TIME: 0825 HOURS  
 ATTENUATION COEFFICIENT: 1.75 R\*\*2: .9647  
 DEPTH % SURF.  
 0.00 100.00 0.50 22.11 1.00 7.19 2.00 0.89 3.00 0.20  
 4.00 0.09

DATE: 17 SEP 84 TIME: 0925 HOURS  
 ATTENUATION COEFFICIENT: 2.19 R\*\*2: .9935

DEPTH	% SURF.										
0.00	100.00	0.50	22.00	1.00	6.61	2.00	0.90	3.00	0.12		

DATE: 01 OCT 84 TIME: 0840 HOURS  
 ATTENUATION COEFFICIENT: 2.43 R\*\*2: .9906

DEPTH	% SURF.								
0.00	100.00	0.50	16.56	1.00	4.50	2.00	0.47	3.00	0.06

LAKE 227 1984

DATE: 29 OCT 84

ATTENUATION COEFFICIENT: 1.74

TIME: 0928 HOURS

R\*\*2: .9714

Lake 227 1985

DATE: 30 APR 85 TIME: 1100 HOURS  
 ATTENUATION COEFFICIENT: 1.52 R\*\*2: .9970  
 DEPTH % SURF.  
 0.00 100.00 0.50 36.65 1.00 16.15 2.00 3.17 3.00 0.73  
 4.00 0.18 5.00 0.05

DATE: 20 MAY 85 TIME: 0820 HOURS  
 ATTENUATION COEFFICIENT: 1.23 R\*\*2: .9800

DEPTH	% SURF.								
0.00	100.00	0.50	29.17	1.00	12.50	2.00	3.61	3.00	1.14
4.00	0.44	5.00	0.17						

DATE: 03 JUN 85 TIME: 0952 HOURS  
 ATTENUATION COEFFICIENT: 1.47 R\*\*2: .9985  
 DEPTH % SURF.  
 0.00 100.00 0.50 38.52 1.00 20.27 2.00 4.44 3.00 1.01  
 4.00 0.27

DATE: 21 JUN 85 TIME: 0820 HOURS  
 ATTENUATION COEFFICIENT: 1.57 R\*\*2: .9950  
 DEPTH % SURF.  
 0.00 100.00 0.50 30.72 1.00 14.66 2.00 2.74 3.00 0.68  
 4.00 0.16

DATE: 01 JUL 85 TIME: 1000 HOURS  
 ATTENUATION COEFFICIENT: 1.76 R\*\*2: .9804  
 DEPTH % SURF.  
 0.00 100.00 0.50 21.43 1.00 8.95 2.00 1.67 3.00 0.42

LAKE 227 1985

DATE: 15 JUL 85

ATTENUATION COEFFICIENT: 1.92

TIME: 0814 HOURS

R\*\*2: .9904

DEPTH	% SURF.								
0.00	100.00	0.50	25.62	1.00	7.99	2.00	1.67	3.00	0.26

DATE: 29 JUL 85

ATTENUATION COEFFICIENT: 2.02

TIME: 0820 HOURS

R\*\*2: .9956

DEPTH	% SURF.								
0.00	100.00	0.50	25.95	1.00	9.06	2.00	1.33	3.00	0.21

DATE: 12 AUG 85

ATTENUATION COEFFICIENT: 1.68

TIME: 0745 HOURS

R\*\*2: .9892

DEPTH	% SURF.								
0.00	100.00	0.50	30.52	1.00	15.08	2.00	4.10	3.00	0.49

DATE: 26 AUG 85

ATTENUATION COEFFICIENT: 1.73

TIME: 0810 HOURS

R\*\*2: .9927

DEPTH	% SURF.								
0.00	100.00	0.50	28.89	1.00	12.00	2.00	2.22	3.00	0.50

DATE: 08 SEP 85

ATTENUATION COEFFICIENT: 1.50

TIME: 1505 HOURS

R\*\*2: .9976

DEPTH	% SURF.								
0.00	100.00	0.50	35.68	1.00	16.51	2.00	3.88	3.00	0.91
4.00									
	0.22								

DATE: 23 SEP 85

ATTENUATION COEFFICIENT: 1.69

TIME: 0920 HOURS

R\*\*2: .9914

DEPTH	% SURF.								
0.00	100.00	0.50	29.57	1.00	11.93	2.00	2.40	3.00	0.57

LAKE 227 1985

DATE: 07 OCT 85 TIME: 0945 HOURS  
 ATTENUATION COEFFICIENT: 1.74 R\*\*2: .9982  
 DEPTH % SURF.  
 0.00 100.00 0.50 31.87 1.00 13.09 2.00 2.70 3.00 0.51  
 4.00 0.08

DATE: 22 OCT 85 TIME: 0903 HOURS  
 ATTENUATION COEFFICIENT: 1.64 R\*\*2: .9732  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 27.49 1.00 8.00 2.00 2.73 3.00 0.57

LAKE 239 1983

DATE: 10 MAY 83

ATTENUATION COEFFICIENT: .55

DEPTH	% SURF.								
0.00	100.00	0.50	54.17	1.00	32.79	2.00	17.11	3.00	9.98
4.00	6.67	5.00	3.93	6.00	2.34	7.00	1.40	8.00	0.88
9.00	0.55								

TIME: 0950 HOURS

R\*\*2: .9874

DATE: 31 MAY 83

ATTENUATION COEFFICIENT: .64

DEPTH	% SURF.								
0.00	100.00	0.50	62.81	1.00	35.18	2.00	18.84	3.00	10.22
4.00	5.28	5.00	2.89	6.00	1.47	7.00	0.83	8.00	0.46
9.00	0.28								

TIME: 0955 HOURS

R\*\*2: .9957

DATE: 09 JUN 83

ATTENUATION COEFFICIENT: .63

DEPTH	% SURF.								
0.00	100.00	0.50	65.20	1.00	42.72	2.00	21.58	3.00	11.24
4.00	5.98	5.00	3.28	6.00	1.80	7.00	0.95	8.00	0.52
9.00	0.29	10.00	0.18						

TIME: 0920 HOURS

R\*\*2: .9979

DATE: 24 JUN 83

ATTENUATION COEFFICIENT: .57

DEPTH	% SURF.								
0.00	100.00	0.50	70.75	1.00	49.11	2.00	26.63	3.00	15.40
4.00	8.32	5.00	4.91	6.00	2.91	7.00	1.70	8.00	0.92
9.00	0.53	10.00	0.28						

TIME: 1000 HOURS

R\*\*2: .9992

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: .65

DEPTH	% SURF.								
0.00	100.00	0.50	58.21	1.00	42.84	2.00	20.32	3.00	10.43
4.00	5.49	5.00	2.88	6.00	1.47	7.00	0.80	8.00	0.42
9.00	0.24	10.00	0.14						

TIME: 1610 HOURS

R\*\*2: .9977

LAKE 239 1983

DATE: 12 JUL 83 TIME: 0835 HOURS  
 ATTENUATION COEFFICIENT: .64 R\*\*2: .9964

DEPTH	% SURF.								
0.00	100.00	0.50	69.68	1.00	39.66	2.00	19.83	3.00	11.04
4.00	6.00	5.00	2.89	6.00	2.07	7.00	0.87	8.00	0.49
9.00	0.27	10.00	0.17						

DATE: 22 JUL 83 TIME: 0900 HOURS  
 ATTENUATION COEFFICIENT: .62 R\*\*2: .9991

DEPTH	% SURF.								
0.00	100.00	0.50	67.00	1.00	45.35	2.00	25.25	3.00	13.40
4.00	7.52	5.00	4.12	6.00	2.11	7.00	1.10	8.00	0.60
9.00	0.35	10.00	0.21						

DATE: 09 AUG 83 TIME: 0855 HOURS  
 ATTENUATION COEFFICIENT: .60 R\*\*2: .9957

DEPTH	% SURF.								
0.00	100.00	0.50	58.55	1.00	38.18	2.00	19.09	3.00	11.45
4.00	6.36	5.00	4.23	6.00	2.24	7.00	1.07	8.00	0.59
9.00	0.33	10.00	0.23						

DATE: 17 AUG 83 TIME: 1605 HOURS  
 ATTENUATION COEFFICIENT: .65 R\*\*2: .9980

DEPTH	% SURF.								
0.00	100.00	0.50	57.43	1.00	42.11	2.00	21.70	3.00	11.74
4.00	6.38	5.00	3.64	6.00	1.95	7.00	0.91	8.00	0.40
9.00	0.22	10.00	0.14						

DATE: 23 AUG 83 TIME: 0850 HOURS  
 ATTENUATION COEFFICIENT: .64 R\*\*2: .9955

DEPTH	% SURF.										
0.00	100.00	0.50	61.54	1.00	35.69	2.00	20.00	3.00	10.46		
4.00	6.15	5.00	3.35	6.00	2.00	7.00	0.92	8.00	0.45		

LAKE 239 1983

DATE: 31 AUG 83

ATTENUATION COEFFICIENT: .63

TIME: 1625 HOURS

R\*\*2: .9980

DEPTH	% SURF.								
0.00	100.00	0.50	63.17	1.00	41.16	2.00	21.44	3.00	11.87
4.00	6.51	5.00	3.79	6.00	2.18	7.00	1.08	8.00	0.49
9.00	0.29	10.00	0.18						

DATE: 22 SEP 83

ATTENUATION COEFFICIENT: .56

TIME: 0840 HOURS

R\*\*2: .9966

DEPTH	% SURF.								
0.00	100.00	0.50	61.04	1.00	42.43	2.00	21.59	3.00	12.73
4.00	7.44	5.00	4.32	6.00	2.57	7.00	1.52	8.00	0.89
9.00	0.54	10.00	0.31						

DATE: 05 OCT 83

ATTENUATION COEFFICIENT: .52

TIME: 0830 HOURS

R\*\*2: .9947

DEPTH	% SURF.								
0.00	100.00	0.50	54.60	1.00	38.27	2.00	21.09	3.00	12.97
4.00	8.03	5.00	4.99	6.00	2.99	7.00	1.75	8.00	1.05
9.00	0.68	10.00	0.41						

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: .62

TIME: 1540 HOURS

R\*\*2: .9884

DEPTH	% SURF.								
0.00	100.00	0.50	53.26	1.00	31.61	2.00	15.12	3.00	7.56
4.00	4.09	5.00	2.23	6.00	1.27	7.00	0.74	8.00	0.42
9.00	0.29	10.00	0.16						

LAKE 239 1984

DATE: 26 APR 84 TIME: 1108 HOURS  
ATTENUATION COEFFICIENT: .48 R\*\*2: .9929

DEPTH	% SURF.								
0.00	100.00	0.50	63.35	1.00	42.88	2.00	23.39	3.00	14.86
4.00	9.55	5.00	6.19	6.00	3.97	7.00	2.51	8.00	1.66
9.00	1.10	10.00	0.66						

DATE: 23 MAY 84 TIME: 1425 HOURS  
ATTENUATION COEFFICIENT: .57 R\*\*2: .9952

DEPTH	% SURF.								
0.00	100.00	0.50	62.72	1.00	42.13	2.00	22.25	3.00	12.13
4.00	6.63	5.00	3.96	6.00	2.25	7.00	1.30	8.00	0.77
9.00	0.48	10.00	0.31						

DATE: 12 JUN 84 TIME: 0851 HOURS  
ATTENUATION COEFFICIENT: .56 R\*\*2: .9939

DEPTH	% SURF.								
0.00	100.00	0.50	58.83	1.00	39.22	2.00	22.88	3.00	13.73
4.00	9.41	5.00	5.49	6.00	3.33	7.00	2.12	8.00	0.82
9.00	0.55	10.00	0.27						

DATE: 26 JUN 84 TIME: 0855 HOURS  
ATTENUATION COEFFICIENT: .52 R\*\*2: .9886

DEPTH	% SURF.								
0.00	100.00	0.50	48.28	1.00	28.88	2.00	17.24	3.00	10.78
4.00	6.90	5.00	4.31	6.00	2.63	7.00	1.61	8.00	0.97
9.00	0.59	10.00	0.37						

DATE: 29 JUN 84 TIME: 1110 HOURS  
ATTENUATION COEFFICIENT: .54 R\*\*2: .9978

DEPTH	% SURF.								
0.00	100.00	0.50	69.54	1.00	52.88	2.00	26.44	3.00	16.66
4.00	9.05	5.00	5.76	6.00	3.22	7.00	2.03	8.00	1.20
9.00	0.69	10.00	0.47						

LAKE 239 1984

DATE: 19 JUL 84

ATTENUATION COEFFICIENT: .53

TIME: 0850 HOURS

R\*\*2: .9971

DEPTH	% SURF.								
0.00	100.00	0.50	69.31	1.00	47.27	2.00	26.33	3.00	15.13
4.00	8.73	5.00	4.95	6.00	2.98	7.00	1.75	8.00	1.08
9.00	0.66	10.00	0.40	11.00	0.25	12.00	0.17		

DATE: 24 JUL 84

ATTENUATION COEFFICIENT: .50

TIME: 0841 HOURS

R\*\*2: .9972

DEPTH	% SURF.								
0.00	100.00	0.50	69.57	1.00	49.57	2.00	25.22	3.00	16.52
4.00	10.00	5.00	6.09	6.00	3.65	7.00	2.30	8.00	1.44
9.00	0.83	10.00	0.52	11.00	0.37	12.00	0.23		

DATE: 07 AUG 84

ATTENUATION COEFFICIENT: .51

TIME: 0841 HOURS

R\*\*2: .9974

DEPTH	% SURF.								
0.00	100.00	0.50	96.18	1.00	54.36	2.00	32.42	3.00	22.15
4.00	13.51	5.00	7.29	6.00	4.48	7.00	3.06	8.00	1.83
9.00	1.02	10.00	0.61						

DATE: 15 AUG 84

ATTENUATION COEFFICIENT: .49

TIME: 0835 HOURS

R\*\*2: .9967

DEPTH	% SURF.								
0.00	100.00	0.50	59.80	1.00	39.22	2.00	23.14	3.00	15.49
4.00	9.80	5.00	6.08	6.00	3.82	7.00	2.33	8.00	1.41
9.00	0.86	10.00	0.53	11.00	0.35	12.00	0.22		

DATE: 05 SEP 84

ATTENUATION COEFFICIENT: .52

TIME: 0951 HOURS

R\*\*2: .9973

DEPTH	% SURF.								
0.00	100.00	0.50	61.98	1.00	43.39	2.00	27.55	3.00	15.15
4.00	8.95	5.00	5.73	6.00	3.55	7.00	2.22	8.00	1.26
9.00	0.76	10.00	0.48						

LAKE 239 1984

DATE: 18 SEP 84

ATTENUATION COEFFICIENT:	.51	TIME: 0950 HOURS							
DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.00	1.00	52.26	2.00	26.00	3.00	14.74
4.00	8.36	5.00	4.98	6.00	3.30	7.00	2.03	8.00	1.22
9.00	0.87	10.00	0.53	11.00	0.31				

DATE: 03 OCT 84

ATTENUATION COEFFICIENT:	.51	TIME: 0830 HOURS							
DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.07	1.00	41.09	2.00	22.24	3.00	13.58
4.00	7.82	5.00	4.56	6.00	2.95	7.00	1.70	8.00	1.21
9.00	0.78	10.00	0.51	11.00	0.25				

DATE: 16 OCT 84

ATTENUATION COEFFICIENT:	.44	TIME: 1355 HOURS							
DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.88	1.00	38.56	2.00	24.10	3.00	15.91
4.00	10.85	5.00	7.23	6.00	4.72	7.00	3.18	8.00	2.10
9.00	1.33	10.00	0.88	11.00	0.59	12.00	0.39		

DATE: 30 OCT 84

ATTENUATION COEFFICIENT:	.58	TIME: 1055 HOURS							
DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.12	1.00	35.47	2.00	17.74	3.00	10.09
4.00	5.68	5.00	3.15	6.00	1.85	7.00	1.08	8.00	0.68
9.00	0.40	10.00	0.25						

LAKE 239 1985

DATE: 30 APR 85

ATTENUATION COEFFICIENT: .61

TIME: 0915 HOURS

R\*\*2: .9962

DEPTH	% SURF.								
0.00	100.00	0.50	61.85	1.00	40.74	2.00	20.00	3.00	10.00
4.00	5.41	5.00	2.81	6.00	1.59	7.00	0.88	8.00	0.50
9.00	0.29	10.00	0.17	11.00	0.10	12.00	0.06	13.00	0.03

DATE: 07 MAY 85

ATTENUATION COEFFICIENT: .63

TIME: 1030 HOURS

R\*\*2: .9970

DEPTH	% SURF.								
0.00	100.00	0.50	65.61	1.00	40.13	2.00	21.02	3.00	11.59
4.00	6.05	5.00	3.18	6.00	1.78	7.00	0.98	8.00	0.55
9.00	0.33								

DATE: 21 MAY 85

ATTENUATION COEFFICIENT: .75

TIME: 0830 HOURS

R\*\*2: .9962

DEPTH	% SURF.								
0.00	100.00	0.50	58.40	1.00	35.29	2.00	15.21	3.00	7.66
4.00	3.42	5.00	1.73	6.00	0.80	7.00	0.42	8.00	0.23

DATE: 04 JUN 85

ATTENUATION COEFFICIENT: .64

TIME: 0952 HOURS

R\*\*2: .9852

DEPTH	% SURF.								
0.00	100.00	0.50	45.94	1.00	25.60	2.00	11.73	3.00	7.08
4.00	3.83	5.00	2.11	6.00	1.10	7.00	0.62	8.00	0.36
9.00	0.24								

DATE: 18 JUN 85

ATTENUATION COEFFICIENT: .74

TIME: 1547 HOURS

R\*\*2: .9857

DEPTH	% SURF.								
0.00	100.00	0.50	44.72	1.00	26.97	2.00	10.31	3.00	5.03
4.00	2.63	5.00	1.30	6.00	0.70	7.00	0.36	8.00	0.22

LAKE 239 1985

DATE: 02 JUL 85 TIME: 0915 HOURS  
 ATTENUATION COEFFICIENT: .64 R\*\*2: .9829  
 DEPTH % SURF.  
 0.00 100.00 0.50 55.83 1.00 23.57 2.00 15.26 3.00 6.58  
 4.00 3.60 5.00 1.71 6.00 0.97 7.00 0.71 8.00 0.41  
 9.00 0.26 10.00 0.11

DATE: 16 JUL 85 TIME: 1040 HOURS  
 ATTENUATION COEFFICIENT: .73 R\*\*2: .9969  
 DEPTH % SURF.  
 0.00 100.00 0.50 51.13 1.00 40.17 2.00 17.77 3.00 8.52  
 4.00 4.87 5.00 2.63 6.00 1.19 7.00 0.55 8.00 0.24  
 9.00 0.10

DATE: 30 JUL 85 TIME: 0818 HOURS  
 ATTENUATION COEFFICIENT: .66 R\*\*2: .9906

DEPTH	% SURF.								
0.00	100.00	0.50	41.73	1.00	29.72	2.00	14.76	3.00	7.87
4.00	4.29	5.00	2.19	6.00	1.14	7.00	0.75	8.00	0.33

DATE: 12 AUG 85 TIME: 0917 HOURS  
 ATTENUATION COEFFICIENT: .59 R\*\*2: .9614  
 DEPTH % SURF.  
 0.00 100.00 0.50 48.91 1.00 16.73 2.00 10.27 3.00 5.98  
 4.00 3.58 5.00 2.00 6.00 1.13 7.00 0.71 8.00 0.51  
 9.00 0.33

DATE: 27 AUG 85 TIME: 0925 HOURS  
 ATTENUATION COEFFICIENT: .76 R\*\*2: .9942

DEPTH	% SURF.								
0.00	100.00	0.50	53.45	1.00	28.36	2.00	15.55	3.00	6.45
4.00	3.16	5.00	1.49	6.00	0.74	7.00	0.39	8.00	0.21

LAKE 239 1985

DATE: 08 SEP 85

ATTENUATION COEFFICIENT: .75

TIME: 1358 HOURS

R\*\*2: .9940

DEPTH	% SURF.								
0.00	100.00	0.50	44.74	1.00	36.23	2.00	14.82	3.00	6.83
4.00	3.60	5.00	2.02	6.00	0.82	7.00	0.43		

DATE: 24 SEP 85

ATTENUATION COEFFICIENT: .85

TIME: 1029 HOURS

R\*\*2: .9813

DEPTH	% SURF.								
0.00	100.00	0.50	33.27	1.00	20.79	2.00	9.01	3.00	4.82
4.00	2.44	5.00	1.08	6.00	0.33				

DATE: 07 OCT 85

ATTENUATION COEFFICIENT: .72

TIME: 1240 HOURS

R\*\*2: .9920

DEPTH	% SURF.								
0.00	100.00	0.50	49.58	1.00	27.25	2.00	12.55	3.00	6.54
4.00	3.31	5.00	1.73	6.00	0.91	7.00	0.45	8.00	0.23

DATE: 21 OCT 85

ATTENUATION COEFFICIENT: .78

TIME: 1000 HOURS

R\*\*2: .9947

DEPTH	% SURF.								
0.00	100.00	0.50	52.00	1.00	31.85	2.00	12.89	3.00	6.07
4.00	2.81	5.00	1.35	6.00	0.68	7.00	0.34	8.00	0.17

LAKE 240 1983

DATE: 05 MAY 83  
ATTENUATION COEFFICIENT: .70  
TIME: 0900 HOURS  
R\*\*2: .9918

DEPTH	% SURF.								
0.00	100.00	0.50	55.75	1.00	34.23	2.00	13.60	3.00	7.08
4.00	3.89	5.00	2.05	6.00	1.06	7.00	0.57	8.00	0.31

DATE: 23 MAY 83  
ATTENUATION COEFFICIENT: .67  
TIME: 0830 HOURS  
R\*\*2: .9944

DEPTH	% SURF.								
0.00	100.00	0.50	58.88	1.00	34.52	2.00	16.45	3.00	8.81
4.00	4.87	5.00	2.62	6.00	1.38	7.00	0.74	8.00	0.41

DATE: 09 JUN 83  
ATTENUATION COEFFICIENT: .60  
TIME: 0940 HOURS  
R\*\*2: .9987

DEPTH	% SURF.								
0.00	100.00	0.50	65.19	1.00	46.18	2.00	25.80	3.00	13.58
4.00	8.42	5.00	4.98	6.00	2.76	7.00	1.49	8.00	0.75
9.00	0.40	10.00	0.22						

DATE: 24 JUN 83  
ATTENUATION COEFFICIENT: .57  
TIME: 1015 HOURS  
R\*\*2: .9992

DEPTH	% SURF.								
0.00	100.00	0.50	70.53	1.00	48.95	2.00	26.55	3.00	15.35
4.00	8.30	5.00	4.90	6.00	2.90	7.00	1.69	8.00	0.92
9.00	0.53	10.00	0.28						

DATE: 18 JUL 83  
ATTENUATION COEFFICIENT: .52  
TIME: 0845 HOURS  
R\*\*2: .9898

DEPTH	% SURF.								
0.00	100.00	0.50	55.68	1.00	33.73	2.00	21.32	3.00	15.27
4.00	10.50	5.00	6.24	6.00	3.69	7.00	2.07	8.00	1.11
9.00	0.60								

DATE: 12 AUG 83  
ATTENUATION COEFFICIENT: .64  
TIME: 0740 HOURS  
R\*\*2: .9944

DEPTH	% SURF.								
0.00	100.00	0.50	60.16	1.00	45.58	2.00	22.79	3.00	13.67
4.00	7.47	5.00	4.74	6.00	2.64	7.00	1.34	8.00	0.60
9.00	0.27	10.00	0.12						

LAKE 240 1983

DATE: 25 AUG 83 TIME: 0935 HOURS  
ATTENUATION COEFFICIENT: .60 R\*\*2: .9913

DEPTH	% SURF.								
0.00	100.00	0.50	71.82	1.00	52.53	2.00	28.94	3.00	16.62
4.00	10.29	5.00	6.43	6.00	3.86	7.00	2.12	8.00	0.95
9.00	0.42	10.00	0.18						

DATE: 12 SEP 83 TIME: 0845 HOURS  
ATTENUATION COEFFICIENT: .52 R\*\*2: .9777

DATE: 17 OCT 83 TIME: 1030 HOURS  
ATTENUATION COEFFICIENT: .57 R\*\*2: .9953

LAKE 240 1984

DATE: 08 MAY 84

ATTENUATION COEFFICIENT: .62

TIME: 0925 HOURS

R\*\*2: .9908

DATE: 03 JUN 84

### ATTENUATION COEFFICIENT:

TIME: 0900 HOURS

R\*\*2: .9989

DEPTH	% SURF.								
0.00	100.00	0.50	65.49	1.00	47.89	2.00	28.52	3.00	16.55
4.00	10.21	5.00	6.20	6.00	3.73	7.00	2.25	8.00	1.30
9.00	0.75	10.00	0.42						

DATE: 03 JUL 84

ATTENUATION COEFFICIENT:

TIME: 0810 HOURS

R\*\*2: .9984

DEPTH	% SURF.								
0.00	100.00	0.50	78.82	1.00	53.86	2.00	30.22	3.00	20.49
4.00	11.82	5.00	7.75	6.00	4.99	7.00	2.50	8.00	1.58
9.00	0.87	10.00	0.56						

DATE: 30 JUL 84

ATTENUATION COEFFICIENT:

TIME: 0855 HOURS

R\*\*2: .9831

DEPTH	% SURF.								
0.00	100.00	0.50	55.32	1.00	40.43	2.00	27.66	3.00	20.38
4.00	14.17	5.00	9.74	6.00	6.38	7.00	4.19	8.00	2.38
9.00	1.24	10.00	0.56						

DATE: 25 AUG 84

### ATTENUATION COEFFICIENT:

TIME: 1425 HOURS

R\*\*2: .9897

DEPTH	% SURF.								
0.00	100.00	0.50	69.54	1.00	49.67	2.00	30.79	3.00	18.21
4.00	12.91	5.00	8.15	6.00	5.43	7.00	3.31	8.00	1.66
9.00	0.80	10.00	0.36						

LAKE 240 1984

DATE: 01 OCT 84

ATTENUATION COEFFICIENT: .60

TIME: 0935 HOURS

R\*\*2: .9955

DEPTH	% SURF.								
0.00	100.00	0.50	60.50	1.00	39.20	2.00	20.10	3.00	10.50
4.00	5.90	5.00	3.30	6.00	1.80	7.00	1.12	8.00	0.63
9.00	0.37	10.00	0.21						

DATE: 29 OCT 84

ATTENUATION COEFFICIENT: .51

TIME: 1030 HOURS

R\*\*2: .9946

DEPTH	% SURF.								
0.00	100.00	0.50	54.92	1.00	38.22	2.00	22.85	3.00	13.84
4.00	8.70	5.00	5.23	6.00	3.16	7.00	1.98	8.00	1.23
9.00	0.77	10.00	0.49						

LAKE 240 1985

DATE: 30 APR 85 TIME: 1000 HOURS  
 ATTENUATION COEFFICIENT: .68 R\*\*2: .9974

DEPTH	% SURF.								
0.00	100.00	0.50	62.67	1.00	39.33	2.00	18.00	3.00	8.80
4.00	4.40	5.00	2.33	6.00	1.17	7.00	0.62	8.00	0.32
9.00	0.17	10.00	0.09	11.00	0.05				

DATE: 14 MAY 85 TIME: 1029 HOURS  
 ATTENUATION COEFFICIENT: .67 R\*\*2: .9926

DEPTH	% SURF.								
0.00	100.00	0.50	54.93	1.00	32.35	2.00	16.48	3.00	9.06
4.00	4.67	5.00	2.46	6.00	1.35	7.00	0.76		

LAKE 240 1985

DATE: 30 AUG 85

ATTENUATION COEFFICIENT: .64

TIME: 1337 HOURS

R\*\*2: .9907

DEPTH	% SURF.								
0.00	100.00	0.50	49.53	1.00	31.40	2.00	18.37	3.00	13.53
4.00	6.53	5.00	3.60	6.00	1.83	7.00	0.91	8.00	0.39

DATE: 24 SEP 85

ATTENUATION COEFFICIENT: .90

TIME: 0934 HOURS

R\*\*2: .9814

DEPTH	% SURF.								
0.00	100.00	0.50	40.25	1.00	22.75	2.00	9.80	3.00	4.90
4.00	2.45	5.00	1.17	6.00	0.50	7.00	0.24	8.00	0.06
9.00	0.01								

DATE: 23 OCT 85

ATTENUATION COEFFICIENT: .92

TIME: 1000 HOURS

R\*\*2: .9920

DEPTH	% SURF.								
0.00	100.00	0.50	48.24	1.00	25.01	2.00	9.83	3.00	3.75
4.00	1.79	5.00	0.78	6.00	0.35				

LAKE 260 1985

DATE: 30 MAY 85 TIME: 0835 HOURS  
 ATTENUATION COEFFICIENT: .47 R\*\*2: .9955

DEPTH	% SURF.								
0.00	100.00	0.50	65.44	1.00	44.41	2.00	25.71	3.00	16.83
4.00	11.30	5.00	7.01	6.00	4.44	7.00	2.80	8.00	1.87
9.00	1.17	10.00	0.86	11.00	0.43				

DATE: 21 AUG 85 TIME: 0740 HOURS  
 ATTENUATION COEFFICIENT: .66 R\*\*2: .9932

DEPTH	% SURF.								
0.00	100.00	0.50	57.35	1.00	34.71	2.00	15.88	3.00	9.26
4.00	4.51	5.00	2.62	6.00	1.46	7.00	0.78	8.00	0.43

LAKE 302N 1983

DATE: 04 MAY 83

ATTENUATION COEFFICIENT: .61

TIME: 0925 HOURS

R\*\*2: .9977

DEPTH	% SURF.								
0.00	100.00	0.50	61.77	1.00	43.97	2.00	23.03	3.00	11.73
4.00	6.28	5.00	3.35	6.00	1.87	7.00	1.07	8.00	0.61
9.00	0.35	10.00	0.20						

DATE: 16 MAY 83

ATTENUATION COEFFICIENT: .70

TIME: 0850 HOURS

R\*\*2: .9985

DEPTH	% SURF.								
0.00	100.00	0.50	61.64	1.00	41.27	2.00	20.05	3.00	9.22
4.00	4.77	5.00	2.36	6.00	1.24	7.00	0.64	8.00	0.34
9.00	0.17								

DATE: 02 JUN 83

ATTENUATION COEFFICIENT: .71

TIME: 1600 HOURS

R\*\*2: .9975

DEPTH	% SURF.								
0.00	100.00	0.50	65.76	1.00	45.91	2.00	24.19	3.00	13.03
4.00	6.82	5.00	3.42	6.00	1.61	7.00	0.76	8.00	0.34
9.00	0.14								

DATE: 16 JUN 83

ATTENUATION COEFFICIENT: .73

TIME: 0840 HOURS

R\*\*2: .9957

DEPTH	% SURF.								
0.00	100.00	0.50	68.57	1.00	44.04	2.00	21.39	3.00	11.07
4.00	5.03	5.00	2.52	6.00	1.26	7.00	0.77	8.00	0.35
9.00	0.10								

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: .73

TIME: 0855 HOURS

R\*\*2: .9982

DEPTH	% SURF.								
0.00	100.00	0.50	64.97	1.00	43.65	2.00	23.35	3.00	11.07
4.00	5.68	5.00	2.76	6.00	1.37	7.00	0.72	8.00	0.31
9.00	0.12	10.00	0.05						

LAKE 302N 1983

DATE: 19 JUL 83 TIME: 1545 HOURS  
 ATTENUATION COEFFICIENT: .74 R\*\*2: .9890

DEPTH	% SURF.								
0.00	100.00	0.50	65.42	1.00	48.54	2.00	26.91	3.00	14.67
4.00	7.91	5.00	3.90	6.00	1.88	7.00	0.92	8.00	0.39
9.00	0.12	10.00	0.04						

LAKE 302N 1983

DATE: 22 AUG 83

ATTENUATION COEFFICIENT: .73

TIME: 0935 HOURS

R\*\*2: .9815

DEPTH	% SURF.								
0.00	100.00	0.50	74.82	1.00	50.25	2.00	26.80	3.00	15.08
4.00	8.26	5.00	4.52	6.00	2.03	7.00	0.95	8.00	0.35
9.00	0.08								

DATE: 05 SEP 83

ATTENUATION COEFFICIENT: .72

TIME: 0930 HOURS

R\*\*2: .9698

DEPTH	% SURF.								
0.00	100.00	0.50	74.18	1.00	50.25	2.00	27.76	3.00	15.55
4.00	9.93	5.00	5.86	6.00	3.17	7.00	1.44	8.00	0.56
9.00	0.12	10.00	0.05						

DATE: 19 SEP 83

ATTENUATION COEFFICIENT: .64

TIME: 0750 HOURS

R\*\*2: .9688

DEPTH	% SURF.								
0.00	100.00	0.50	62.53	1.00	42.28	2.00	23.23	3.00	14.17
4.00	8.52	5.00	5.21	6.00	3.24	7.00	2.02	8.00	0.88
9.00	0.30	10.00	0.07						

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: .60

TIME: 1450 HOURS

R\*\*2: .9712

DEPTH	% SURF.								
0.00	100.00	0.50	56.67	1.00	38.37	2.00	21.25	3.00	13.52
4.00	8.15	5.00	4.97	6.00	3.02	7.00	2.02	8.00	1.05
9.00	0.47	10.00	0.09						

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: .63

TIME: 1500 HOURS

R\*\*2: .9935

DEPTH	% SURF.								
0.00	100.00	0.50	65.28	1.00	41.23	2.00	19.47	3.00	9.39
4.00	5.06	5.00	2.66	6.00	1.46	7.00	0.82	8.00	0.51
9.00	0.30	10.00	0.17						

LAKE 302N 1984

DATE: 26 APR 84 TIME: 0940 HOURS  
 ATTENUATION COEFFICIENT: .54 R\*\*2: .9927  
 DEPTH % SURF.  
 0.00 100.00 0.50 59.40 1.00 46.42 2.00 29.29 3.00 19.31  
 4.00 12.49 5.00 7.60 6.00 4.56 7.00 2.49 8.00 1.35  
 9.00 0.66 10.00 0.33

LAKE 302N 1984

DATE: 25 JUN 84

ATTENUATION COEFFICIENT: .72

TIME: 0730 HOURS

R\*\*2: .9971

DEPTH	% SURF.								
0.00	100.00	0.50	65.10	1.00	37.75	2.00	19.51	3.00	10.00
4.00	5.49	5.00	2.86	6.00	1.53	7.00	0.70	8.00	0.32
9.00	0.13	10.00	0.06						

DATE: 08 JUL 84

ATTENUATION COEFFICIENT: .72

TIME: 0740 HOURS

R\*\*2: .9923

DEPTH	% SURF.								
0.00	100.00	0.50	61.40	1.00	43.44	2.00	22.60	3.00	12.65
4.00	6.79	5.00	3.63	6.00	1.69	7.00	0.80	8.00	0.28
9.00	0.11								

DATE: 23 JUL 84

ATTENUATION COEFFICIENT: .72

TIME: 0730 HOURS

R\*\*2: .9817

DEPTH	% SURF.								
0.00	100.00	0.50	61.06	1.00	44.44	2.00	23.81	3.00	14.60
4.00	8.15	5.00	4.44	6.00	2.17	7.00	0.87	8.00	0.32
9.00	0.09								

DATE: 01 AUG 84

ATTENUATION COEFFICIENT: .74

TIME: 0755 HOURS

R\*\*2: .9807

DEPTH	% SURF.								
0.00	100.00	0.50	67.47	1.00	45.47	2.00	24.95	3.00	14.63
4.00	11.26	5.00	4.42	6.00	2.24	7.00	0.91	8.00	0.38
9.00	0.12	10.00	0.04						

DATE: 06 AUG 84

ATTENUATION COEFFICIENT: .76

TIME: 0735 HOURS

R\*\*2: .9664

DEPTH	% SURF.								
0.00	100.00	0.50	69.74	1.00	47.37	2.00	28.42	3.00	16.84
4.00	9.47	5.00	5.26	6.00	2.70	7.00	1.07	8.00	0.41
9.00	0.12	10.00	0.02						

LAKE 302N 1984

DATE: 16 AUG 84  
ATTENUATION COEFFICIENT: .61  
TIME: 0700 HOURS  
R\*\*2: .9587

DEPTH	% SURF.								
0.00	100.00	0.50	67.00	1.00	44.67	2.00	27.92	3.00	19.54
4.00	13.40	5.00	7.82	6.00	5.03	7.00	2.01	8.00	0.75
9.00	0.20								

DATE: 29 AUG 84  
ATTENUATION COEFFICIENT: .62  
TIME: 0802 HOURS  
R\*\*2: .9594

DEPTH	% SURF.								
0.00	100.00	0.50	52.11	1.00	40.20	2.00	22.33	3.00	14.44
4.00	9.83	5.00	6.25	6.00	3.57	7.00	1.35	8.00	0.31
9.00									

DATE: 17 SEP 84  
ATTENUATION COEFFICIENT: .67  
TIME: 0800 HOURS  
R\*\*2: .9932

DEPTH	% SURF.								
0.00	100.00	0.50	69.48	1.00	46.16	2.00	21.84	3.00	10.82
4.00	5.96	5.00	3.45	6.00	2.07	7.00	1.21	8.00	0.45
9.00	0.17								

DATE: 03 OCT 84  
ATTENUATION COEFFICIENT: .60  
TIME: 0845 HOURS  
R\*\*2: .9961

DEPTH	% SURF.								
0.00	100.00	0.50	61.46	1.00	40.98	2.00	23.22	3.00	12.02
4.00	5.87	5.00	3.36	6.00	1.98	7.00	1.20	8.00	0.71
9.00	0.38	10.00	0.23						

DATE: 16 OCT 84  
ATTENUATION COEFFICIENT: .53  
TIME: 0743 HOURS  
R\*\*2: .9863

DEPTH	% SURF.								
0.00	100.00	0.50	57.26	1.00	30.92	2.00	18.90	3.00	12.48
4.00	6.99	5.00	3.95	6.00	2.23	7.00	1.34	8.00	0.97
9.00	0.61	10.00	0.45						

DATE: 29 OCT 84  
ATTENUATION COEFFICIENT: .58  
TIME: 0940 HOURS  
R\*\*2: .9945

DEPTH	% SURF.								
0.00	100.00	0.50	57.86	1.00	36.55	2.00	18.58	3.00	10.35
4.00	6.09	5.00	3.47	6.00	2.01	7.00	1.14	8.00	0.69
9.00	0.40	10.00	0.23						

LAKE 302N 1985

DATE: 30 APR 85 TIME: 0800 HOURS  
 ATTENUATION COEFFICIENT: .74 R\*\*2: .9936

DEPTH	% SURF.								
0.00	100.00	0.50	58.35	1.00	33.30	2.00	13.09	3.00	5.77
4.00	2.68	5.00	1.37	6.00	0.67	7.00	0.33	8.00	0.18
9.00	0.09	10.00	0.05	11.00	0.03				

DATE: 07 MAY 85 TIME: 0720 HOURS  
 ATTENUATION COEFFICIENT: .83 R\*\*2: .9938

DEPTH	% SURF.								
0.00	100.00	0.50	54.14	1.00	32.48	2.00	12.48	3.00	5.10
4.00	2.17	5.00	1.02	6.00	0.50	7.00	0.25	8.00	0.13

DATE: 20 MAY 85 TIME: 0900 HOURS  
 ATTENUATION COEFFICIENT: .75 R\*\*2: .9962  
 DEPTH % SURF.  
 0.00 100.00 0.50 51.24 1.00 30.54 2.00 13.60 3.00 6.31  
 4.00 3.25 5.00 1.68 6.00 0.89 7.00 0.38 8.00 0.19  
 9.00 0.08

DATE: 03 JUN 85 TIME: 1044 HOURS  
 ATTENUATION COEFFICIENT: .74 R\*\*2: .9985

DEPTH	% SURF.								
0.00	100.00	0.50	68.80	1.00	42.80	2.00	20.80	3.00	10.88
4.00	5.44	5.00	2.68	6.00	1.24	7.00	0.59	8.00	0.30
9.00	0.14	10.00	0.05						

DATE: 19 JUN 85 TIME: 0805 HOURS  
 ATTENUATION COEFFICIENT: .79 R\*\*2: .9988

DEPTH	% SURF.								
0.00	100.00	0.50	55.36	1.00	39.29	2.00	16.52	3.00	7.32
4.00	3.73	5.00	1.81	6.00	0.81	7.00	0.37	8.00	0.16

LAKE 302N 1985

DATE: 15 JUL 85	TIME: 0845 HOURS
ATTENUATION COEFFICIENT: .70	R**2: .9907
DEPTH % SURF.	DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.
0.00 100.00 0.50 47.42 1.00 32.98 2.00 20.27 3.00 12.71	4.00 7.04 5.00 3.40 6.00 1.55 7.00 0.72 8.00 0.27
9.00 0.13	
DATE: 16 JUL 85	TIME: 0945 HOURS
ATTENUATION COEFFICIENT: .77	R**2: .9846
DEPTH % SURF.	DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.
0.00 100.00 0.50 69.68 1.00 44.98 2.00 25.66 3.00 14.00	4.00 6.97 5.00 3.33 6.00 1.44 7.00 0.60 8.00 0.14
DATE: 29 JUL 85	TIME: 0920 HOURS
ATTENUATION COEFFICIENT: .77	R**2: .9966
DEPTH % SURF.	DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.
0.00 100.00 0.50 61.97 1.00 42.75 2.00 21.13 3.00 10.92	4.00 5.55 5.00 2.61 6.00 0.99 7.00 0.41 8.00 0.18
DATE: 13 AUG 85	TIME: 0750 HOURS
ATTENUATION COEFFICIENT: .75	R**2: .9928
DEPTH % SURF.	DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.
0.00 100.00 0.50 52.34 1.00 31.78 2.00 14.95 3.00 9.72	4.00 5.14 5.00 2.43 6.00 0.99 7.00 0.40 8.00 0.17
DATE: 26 AUG 85	TIME: 0903 HOURS
ATTENUATION COEFFICIENT: .66	R**2: .9918
DEPTH % SURF.	DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.
0.00 100.00 0.50 58.46 1.00 35.90 2.00 22.31 3.00 12.13	4.00 7.38 5.00 4.56 6.00 1.79 7.00 0.82 8.00 0.38
DATE: 08 SEP 85	TIME: 1249 HOURS
ATTENUATION COEFFICIENT: .69	R**2: .9946
DEPTH % SURF.	DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.
0.00 100.00 0.50 65.34 1.00 40.76 2.00 21.98 3.00 12.06	4.00 6.63 5.00 3.55 6.00 1.80 7.00 0.77 8.00 0.28

LAKE 302N 1985

DATE: 23 SEP 85

ATTENUATION COEFFICIENT: .67

TIME: 1030 HOURS

R\*\*2: .9904

DEPTH	% SURF.								
0.00	100.00	0.50	53.62	1.00	31.30	2.00	14.55	3.00	7.71
4.00	4.35	5.00	2.55	6.00	1.30	7.00	0.81	8.00	0.32

DATE: 07 OCT 85

ATTENUATION COEFFICIENT: .79

TIME: 0835 HOURS

R\*\*2: .9822

DEPTH	% SURF.								
0.00	100.00	0.50	40.08	1.00	25.99	2.00	8.33	3.00	4.23
4.00	2.22	5.00	1.09	6.00	0.56	7.00	0.30		

DATE: 21 OCT 85

ATTENUATION COEFFICIENT: .88

TIME: 0755 HOURS

R\*\*2: .9904

DEPTH	% SURF.								
0.00	100.00	0.50	57.59	1.00	38.28	2.00	11.03	3.00	4.76
4.00	1.83	5.00	0.90	6.00	0.45	7.00	0.24		

Lake 302S 1983

DATE: 16 MAY 83 TIME: 0915 HOURS  
 ATTENUATION COEFFICIENT: .39 R\*\*2: .9952  
 DEPTH % SURF.  
 0.00 100.00 0.50 72.46 1.00 62.04 2.00 32.76 3.00 26.30  
 4.00 18.36 5.00 12.41 6.00 8.73 7.00 6.01 8.00 4.12  
 9.00 2.53

DATE: 16 JUN 83 TIME: 0820 HOURS  
 ATTENUATION COEFFICIENT: .45 R\*\*2: .9740

DEPTH	% SURF.								
0.00	100.00	0.50	80.27	1.00	64.73	2.00	43.37	3.00	30.43
4.00	20.71	5.00	13.34	6.00	10.36	7.00	5.18	8.00	1.94

DATE: 27 JUN 83 TIME: 0845 HOURS  
 ATTENUATION COEFFICIENT: .63 R\*\*2: .8997

DEPTH	% SURF.								
0.00	100.00	0.50	80.72	1.00	56.51	2.00	41.98	3.00	30.14
4.00	19.70	5.00	13.13	6.00	8.99	7.00	4.79	8.00	1.74
9.00	0.35	10.00	0.06						

LAKE 302S 1983

DATE: 19 JUL 83

ATTENUATION COEFFICIENT: .64

DEPTH	% SURF.								
0.00	100.00	0.50	80.86	1.00	64.69	2.00	46.21	3.00	32.92
4.00	23.10	5.00	14.56	6.00	7.91	7.00	3.18	8.00	1.12
9.00	0.09								

TIME: 1555 HOURS

R\*\*2: .8795

DATE: 25 JUL 83

ATTENUATION COEFFICIENT: .67

DEPTH	% SURF.								
0.00	100.00	0.50	74.44	1.00	59.56	2.00	42.19	3.00	30.11
4.00	22.00	5.00	13.98	6.00	7.20	7.00	2.71	8.00	0.88
9.00	0.06								

TIME: 0745 HOURS

R\*\*2: .8711

DATE: 04 AUG 83

ATTENUATION COEFFICIENT: .70

DEPTH	% SURF.								
0.00	100.00	0.50	85.06	1.00	69.91	2.00	44.28	3.00	30.88
4.00	19.23	5.00	13.98	6.00	6.76	7.00	1.84	8.00	0.70
9.00	0.07								

TIME: 0910 HOURS

R\*\*2: .9014

DATE: 17 AUG 83

ATTENUATION COEFFICIENT: .70

DEPTH	% SURF.								
0.00	100.00	0.50	69.31	1.00	57.76	2.00	32.92	3.00	18.71
4.00	11.32	5.00	6.82	6.00	3.81	7.00	0.99	8.00	0.38
8.50	0.16								

TIME: 0910 HOURS

R\*\*2: .9647

DATE: 22 AUG 83

ATTENUATION COEFFICIENT: .66

DEPTH	% SURF.								
0.00	100.00	0.50	75.74	1.00	47.77	2.00	27.97	3.00	15.85
4.00	9.21	5.00	5.42	6.00	3.32	7.00	1.62	8.00	0.76
9.00	0.11								

TIME: 0920 HOURS

R\*\*2: .9635

DATE: 05 SEP 83

ATTENUATION COEFFICIENT: .66

DEPTH	% SURF.								
0.00	100.00	0.50	75.09	1.00	53.14	2.00	31.19	3.00	18.48
4.00	10.86	5.00	6.70	6.00	4.04	7.00	1.40	8.00	0.70
9.00	0.15								

TIME: 0955 HOURS

R\*\*2: .9706

LAKE 302S 1983

DATE: 19 SEP 83 TIME: 0810 HOURS  
ATTENUATION COEFFICIENT: .55 R\*\*2: .9962

DEPTH	% SURF.								
0.00	100.00	0.50	61.71	1.00	41.73	2.00	22.33	3.00	13.93
4.00	8.46	5.00	5.11	6.00	3.06	7.00	1.76	8.00	1.06
9.00	0.54								

DATE: 04 OCT 83 TIME: 1500 HOURS  
ATTENUATION COEFFICIENT: .45 R\*\*2: .9926

DEPTH	% SURF.								
0.00	100.00	0.50	63.17	1.00	44.51	2.00	26.08	3.00	16.99
4.00	11.39	5.00	7.51	6.00	4.93	7.00	3.28	8.00	2.16
9.00	1.37								

DATE: 18 OCT 83 TIME: 1450 HOURS  
ATTENUATION COEFFICIENT: .49 R\*\*2: .9929

DEPTH	% SURF.								
0.00	100.00	0.50	71.19	1.00	49.20	2.00	25.96	3.00	15.70
4.00	9.46	5.00	5.84	6.00	3.85	7.00	2.41	8.00	1.66
9.00	1.10	9.50	0.85						

LAKE 302S 1984

DATE: 26 APR 84

ATTENUATION COEFFICIENT: .37

TIME: 1000 HOURS

R\*\*2: .9977

DEPTH	% SURF.								
0.00	100.00	0.50	69.86	1.00	54.52	2.00	38.48	3.00	28.17
4.00	19.93	5.00	14.09	6.00	9.62	7.00	6.76	8.00	4.58
9.00	3.07	9.75	2.29						

DATE: 03 MAY 84

ATTENUATION COEFFICIENT: .37

TIME: 1005 HOURS

R\*\*2: .9932

DEPTH	% SURF.								
0.00	100.00	0.50	77.22	1.00	59.05	2.00	39.97	3.00	24.98
4.00	16.81	5.00	11.99	6.00	8.45	7.00	5.68	8.00	4.27
9.00	3.13	10.00	2.45						

DATE: 14 MAY 84

ATTENUATION COEFFICIENT: .40

TIME: 1020 HOURS

R\*\*2: .9886

DEPTH	% SURF.								
0.00	100.00	0.50	82.13	1.00	64.84	2.00	45.82	3.00	32.85
4.00	24.64	5.00	16.60	6.00	10.81	7.00	7.95	8.00	4.84
9.00	2.94	9.50	1.73						

DATE: 28 MAY 84

DATE: 20 MAY 64 ATTENUATION COEFFICIENT: .49

TIME: 0755 HOURS

R\*\*2: .9836

DATE: 11 JUN 84

ATTENUATION COEFFICIENT: .44

TIME: 1007 HOURS

R\*\*2: .9667

DEPTH	% SURF.								
0.00	100.00	0.50	83.86	1.00	70.79	2.00	45.93	3.00	31.18
4.00	21.91	5.00	16.27	6.00	10.70	7.00	5.62	8.00	1.96

DATE: 25 JUN 84

ATTENUATION COEFFICIENT: .59

TIME: 0835 HOURS

R\*\*2: .8900

LAKE 302S 1984

DATE: 16 AUG 84 TIME: 0730 HOURS  
 ATTENUATION COEFFICIENT: .74 R\*\*2: .9444

DEPTH	% SURF.										
0.00	100.00	0.50	58.35	1.00	38.90	2.00	21.18	3.00	13.62		
4.00	8.00	5.00	5.27	6.00	2.85	7.00	0.38	8.00	0.13		

DATE: 29 AUG 84 TIME: 0838 HOURS  
 ATTENUATION COEFFICIENT: .67 R\*\*2: .9797

DEPTH	% SURF.										
0.00	100.00	0.50	78.73	1.00	50.25	2.00	30.15	3.00	15.58		
4.00	9.55	5.00	5.53	6.00	3.02	7.00	1.01	8.00	0.30		

LAKE 302S 1984

DATE: 17 SEP 84

ATTENUATION COEFFICIENT: .63

TIME: 0825 HOURS

R\*\*2: .9928

DEPTH	% SURF.								
0.00	100.00	0.50	73.82	1.00	48.90	2.00	19.28	3.00	9.97
4.00	5.41	5.00	3.24	6.00	1.94	7.00	1.02	8.00	0.64
9.00	0.33								

DATE: 03 OCT 84

ATTENUATION COEFFICIENT: .54

TIME: 0905 HOURS

R\*\*2: .9934

DEPTH	% SURF.								
0.00	100.00	0.50	63.00	1.00	41.00	2.00	22.40	3.00	13.00
4.00	7.60	5.00	4.60	6.00	2.80	7.00	1.74	8.00	1.08
9.00	0.68								

DATE: 16 OCT 84

ATTENUATION COEFFICIENT: .51

TIME: 0800 HOURS

R\*\*2: .9919

DEPTH	% SURF.								
0.00	100.00	0.50	58.96	1.00	42.88	2.00	27.87	3.00	18.76
4.00	12.60	5.00	7.77	6.00	4.77	7.00	2.50	8.00	1.29
9.00	0.70								

DATE: 29 OCT 84

ATTENUATION COEFFICIENT: .63

TIME: 0920 HOURS

R\*\*2: .9802

DEPTH	% SURF.								
0.00	100.00	0.50	57.25	1.00	35.94	2.00	17.91	3.00	9.26
4.00	5.36	5.00	3.29	6.00	1.99	7.00	1.18	8.00	0.71
9.00	0.41	10.00	0.07						

LAKE 302S 1985

DATE: 30 APR 85 TIME: 0740 HOURS  
 ATTENUATION COEFFICIENT: .60 R\*\*2: .9964

DEPTH	% SURF.								
0.00	100.00	0.50	69.14	1.00	42.40	2.00	20.80	3.00	11.31
4.00	6.17	5.00	3.54	6.00	2.02	7.00	1.17	8.00	0.67
9.00	0.39	10.00	0.20						

DATE: 07 MAY 85 TIME: 0725 HOURS  
 ATTENUATION COEFFICIENT: .65 R\*\*2: .9989  
 DEPTH % SURF.  
 0.00 100.00 0.50 65.00 1.00 42.68 2.00 20.37 3.00 11.34  
 4.00 5.98 5.00 3.29 6.00 1.78 7.00 0.95 8.00 0.49  
 9.00 0.25 10.00 0.12

DATE: 20 MAY 85 TIME: 0930 HOURS  
 ATTENUATION COEFFICIENT: .60 R\*\*2: .9937  
 DEPTH % SURF.  
 0.00 100.00 0.50 66.58 1.00 50.27 2.00 24.80 3.00 14.98  
 4.00 9.07 5.00 5.64 6.00 3.20 7.00 1.66 8.00 0.77  
 9.00 0.32

DATE: 01 JUL 85 TIME: 0925 HOURS  
 ATTENUATION COEFFICIENT: .72 R\*\*2: .9714

DEPTH	% SURF.								
0.00	100.00	0.50	74.05	1.00	49.37	2.00	26.45	3.00	15.16
4.00	8.64	5.00	5.05	6.00	2.41	7.00	0.78	8.00	0.18

LAKE 302S 1985

DATE: 16 JUL 85	ATTENUATION COEFFICIENT:	.65	TIME: 1000 HOURS	R**2: .9548
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 78.40	1.00 58.24	2.00 34.72	3.00 22.55
4.00 .15.01	5.00 8.59	6.00 4.85	7.00 2.02	8.00 0.65
9.00 0.15				
DATE: 29 JUL 85	ATTENUATION COEFFICIENT:	.58	TIME: 0945 HOURS	R**2: .9240
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 75.81	1.00 62.82	2.00 40.40	3.00 28.06
4.00 20.73	5.00 14.52	6.00 8.47	7.00 3.65	8.00 0.93
9.00 0.27				
DATE: 13 AUG 85	ATTENUATION COEFFICIENT:	.57	TIME: 0735 HOURS	R**2: .9614
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 58.82	1.00 39.87	2.00 24.18	3.00 16.99
4.00 11.57	5.00 7.78	6.00 4.90	7.00 2.61	8.00 0.86
9.00 0.27				
DATE: 26 AUG 85	ATTENUATION COEFFICIENT:	.57	TIME: 0922 HOURS	R**2: .9481
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 71.70	1.00 51.79	2.00 24.25	3.00 16.23
4.00 11.23	5.00 8.11	6.00 5.00	7.00 3.49	8.00 1.32
9.00 0.24				
DATE: 08 SEP 85	ATTENUATION COEFFICIENT:	.64	TIME: 1258 HOURS	R**2: .9191
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 72.69	1.00 56.30	2.00 36.30	3.00 21.94
4.00 13.83	5.00 9.16	6.00 5.88	7.00 3.25	8.00 0.73
9.00 0.11				
DATE: 23 SEP 85	ATTENUATION COEFFICIENT:	.52	TIME: 1045 HOURS	R**2: .9894
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 52.02	1.00 35.61	2.00 19.42	3.00 11.73
4.00 7.69	5.00 4.91	6.00 3.06	7.00 1.85	8.00 1.21
9.00 0.58				

LAKE 302S 1985

DATE: 07 OCT 85 TIME: 0900 HOURS  
 ATTENUATION COEFFICIENT: .59 R\*\*2: .9919  
 DEPTH % SURF.  
 0.00 100.00 0.50 53.21 1.00 35.47 2.00 19.27 3.00 9.71  
 4.00 5.44 5.00 3.10 6.00 1.82 7.00 1.10 8.00 0.66  
 9.00 0.40

DATE: 21 OCT 85 TIME: 0820 HOURS  
 ATTENUATION COEFFICIENT: .65 R\*\*2: .9879  
 DEPTH % SURF.  
 0.00 100.00 0.50 58.75 1.00 33.94 2.00 16.40 3.00 7.91  
 4.00 4.33 5.00 2.56 6.00 1.46 7.00 0.94 8.00 0.55  
 9.00 0.16

LAKE 303 1984

DATE: 05 JUN 84

ATTENUATION COEFFICIENT: .74

TIME: 1046 HOURS

R\*\*2: .9314

DEPTH	% SURF.								
0.00	100.00	0.50	47.72	1.00	35.99	2.00	20.88		

DATE: 02 JUL 84

ATTENUATION COEFFICIENT: .80

TIME: 0940 HOURS

R\*\*2: .9598

DEPTH	% SURF.								
0.00	100.00	0.50	50.38	1.00	34.95	2.00	18.93		

DATE: 30 JUL 84

ATTENUATION COEFFICIENT: 1.20

TIME: 0845 HOURS

R\*\*2: .9895

DEPTH	% SURF.								
0.00	100.00	0.50	48.62	1.00	24.12	2.00	9.00		

DATE: 27 AUG 84

ATTENUATION COEFFICIENT: 2.12

TIME: 0755 HOURS

R\*\*2: .9883

DEPTH	% SURF.								
0.00	100.00	0.50	24.55	1.00	8.10	2.00	1.35		

DATE: 02 OCT 84

ATTENUATION COEFFICIENT: 1.81

TIME: 0850 HOURS

R\*\*2: .9866

DEPTH	% SURF.								
0.00	100.00	0.50	29.89	1.00	11.34	2.00	2.53		

LAKE 303 1985

DATE: 15 MAY 85 TIME: 0835 HOURS  
ATTENUATION COEFFICIENT: 1.14 R\*\*2: .9782

DEPTH	% SURF.								
0.00	100.00	0.50	43.07	1.00	23.93	2.00	9.57		

DATE: 10 JUN 85 TIME: 0825 HOURS  
ATTENUATION COEFFICIENT: .89 R\*\*2: .9986

DEPTH	% SURF.								
0.00	100.00	0.50	59.09	1.00	38.18	2.00	15.91	2.50	10.55

DATE: 09 JUL 85 TIME: 0905 HOURS  
ATTENUATION COEFFICIENT: .99 R\*\*2: .9893

DEPTH	% SURF.								
0.00	100.00	0.50	52.14	1.00	31.02	2.00	13.30		

DATE: 05 AUG 85 TIME: 0821 HOURS  
ATTENUATION COEFFICIENT: 1.32 R\*\*2: .9886

DEPTH	% SURF.								
0.00	100.00	0.50	41.34	1.00	21.04	2.00	6.80		

DATE: 30 AUG 85 TIME: 0956 HOURS  
ATTENUATION COEFFICIENT: 1.41 R\*\*2: .9927

DEPTH	% SURF.								
0.00	100.00	0.50	41.14	1.00	19.82	2.00	5.73		

DATE: 30 SEP 85 TIME: 0808 HOURS  
ATTENUATION COEFFICIENT: 1.51 R\*\*2: .9903

DEPTH	% SURF.								
0.00	100.00	0.50	32.26	1.00	15.74	2.00	4.23	2.50	1.97

DATE: 21 OCT 85 TIME: 0850 HOURS  
ATTENUATION COEFFICIENT: 1.16 R\*\*2: .9862

DEPTH	% SURF.								
0.00	100.00	0.50	44.22	1.00	25.46	2.00	9.38		

LAKE 304 1984

DATE: 08 MAY 84  
ATTENUATION COEFFICIENT: 1.59

DEPTH	% SURF.								
0.00	100.00	0.50	43.67	1.00	20.56	2.00	2.22	3.00	0.73
4.00	0.21	5.00	0.03						

TIME: 0800 HOURS  
R\*\*2: .9923

DATE: 04 JUN 84  
ATTENUATION COEFFICIENT: 1.04

DEPTH	% SURF.								
0.00	100.00	0.50	46.29	1.00	28.02	2.00	12.67	3.00	5.60
4.00	1.75	5.00	0.36						

TIME: 0805 HOURS  
R\*\*2: .9861

DATE: 02 JUL 84  
ATTENUATION COEFFICIENT: 1.18

DEPTH	% SURF.								
0.00	100.00	0.50	51.88	1.00	26.11	2.00	11.17	3.00	4.88
4.00	1.44	4.50	0.26						

TIME: 0900 HOURS  
R\*\*2: .9631

DATE: 30 JUL 84  
ATTENUATION COEFFICIENT: .85

DEPTH	% SURF.								
0.00	100.00	0.50	46.38	1.00	27.06	2.00	15.08	3.00	7.09
4.00	2.58								

TIME: 0810 HOURS  
R\*\*2: .9842

DATE: 27 AUG 84  
ATTENUATION COEFFICIENT: 1.22

DEPTH	% SURF.								
0.00	100.00	0.50	51.63	1.00	29.89	2.00	11.74	3.00	5.00
4.00	1.79	5.00	0.11						

TIME: 0825 HOURS  
R\*\*2: .9499

DATE: 02 OCT 84  
ATTENUATION COEFFICIENT: 1.04

DEPTH	% SURF.								
0.00	100.00	0.50	43.73	1.00	21.86	2.00	8.52	3.00	2.82
4.00	1.18	5.00	0.49	6.00	0.14				

TIME: 0820 HOURS  
R\*\*2: .9947

LAKE 304 1985

DATE: 15 MAY 85 TIME: 0758 HOURS  
 ATTENUATION COEFFICIENT: 1.27 R\*\*2: .9958

DEPTH	% SURF.								
0.00	100.00	0.50	36.97	1.00	17.71	2.00	5.39	3.00	1.85
4.00	0.49	5.00	0.14						

DATE: 10 JUN 85 TIME: 0714 HOURS  
 ATTENUATION COEFFICIENT: 1.36 R\*\*2: .9952

DEPTH	% SURF.								
0.00	100.00	0.50	39.11	1.00	21.12	2.00	5.53	3.00	1.97
4.00	0.46	5.00	0.08						

DATE: 30 AUG 85 TIME: 0928 HOURS  
 ATTENUATION COEFFICIENT: 1.37 R\*\*2: .9709  
 DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
 0.00 100.00 0.50 46.19 1.00 27.64 2.00 7.36 3.00 2.55  
 4.00 0.90 5.00 0.06

DATE: 30 SEP 85 TIME: 0859 HOURS  
ATTENUATION COEFFICIENT: 1.42 R\*\*2: .9850  
DEPTH % SURF. DEPTH % SURF. DEPTH % SURF. DEPTH % SURF.  
0.00 100.00 0.50 23.39 1.00 12.50 2.00 3.37 3.00 1.01  
4.00 0.24

LAKE 304 1985

DATE: 21 OCT 85

ATTENUATION COEFFICIENT: 1.68

TIME: 0815 HOURS

R\*\*2: .9873

LAKE 305 1983

DATE: 19 MAY 83

ATTENUATION COEFFICIENT:

.31

TIME: 0855 HOURS

R\*\*2: .9963

DEPTH	% SURF.								
0.00	100.00	0.50	69.68	1.00	52.43	2.00	37.05	3.00	26.33
4.00	19.23	5.00	13.75	6.00	10.02	7.00	7.34	8.00	5.29
9.00	4.03	10.00	2.98	11.00	2.19	12.00	1.68	13.00	1.25
14.00	0.93	15.00	0.69	16.00	0.52	17.00	0.38		

DATE: 20 JUN 83

### ATTENUATION COEFFICIENT:

.31

TIME: 0840 HOURS

R\*\*2: .9958

DEPTH	% SURF.								
0.00	100.00	0.50	71.70	1.00	54.64	2.00	34.81	3.00	26.45
4.00	19.84	5.00	14.44	6.00	10.79	7.00	8.28	8.00	5.99
9.00	4.32	10.00	3.24	11.00	2.50	12.00	1.85	13.00	1.41
14.00	1.04	15.00	0.77	16.00	0.58				

DATE: 18 JUL 83

### ATTENUATION COEFFICIENT:

33

TIME: 0725 HOURS

R\*\*2: .9979

DEPTH	% SURF.								
0.00	100.00	0.50	69.75	1.00	53.23	2.00	39.47	3.00	27.53
4.00	20.19	5.00	13.95	6.00	10.28	7.00	7.34	8.00	5.14
9.00	3.80	10.00	2.74	11.00	2.00	12.00	1.51	13.00	1.07
14.00	0.79	15.00	0.58	16.00	0.44	17.00	0.32		

DATE: 12 AUG 83

ATTENUATION COEFFICIENT:

32

TIME: 0910 HOURS

R\*\*2: .9971

DEPTH	% SURF.								
0.00	100.00	0.50	83.32	1.00	65.96	2.00	45.13	3.00	34.02
4.00	22.91	5.00	16.94	6.00	12.64	7.00	8.89	8.00	6.11
9.00	4.24	10.00	3.15	11.00	2.35	12.00	1.75	13.00	1.32
14.00	1.00	15.00	0.76	16.00	0.59	17.00	0.44	18.00	0.34

DATE: 08 SEP 83

### ATTENUATION COEFFICIENT:

28

TIME: 0835 HOURS

R\*\*2: .9961

LAKE 305 1983

DATE: 17 OCT 83

ATTENUATION COEFFICIENT: .27

TIME: 0915 HOURS

R\*\*2: .9971

LAKE 305 1984

DATE: 09 MAY 84  
ATTENUATION COEFFICIENT: .28

DEPTH	% SURF.								
0.00	100.00	0.50	61.37	1.00	51.15	2.00	34.27	3.00	27.11
4.00	21.48	5.00	16.11	6.00	12.53	7.00	9.46	8.00	7.06
9.00	5.17	10.00	3.99	11.00	3.02	12.00	2.25	13.00	1.74
14.00	1.33	15.00	1.02	16.00	0.82	17.00	0.61		

DATE: 11 JUN 84  
ATTENUATION COEFFICIENT: .32

DEPTH	% SURF.								
0.00	100.00	0.50	86.38	1.00	74.20	2.00	48.73	3.00	32.12
4.00	22.70	5.00	17.17	6.00	12.29	7.00	9.75	8.00	7.25
9.00	5.20	10.00	3.71	11.00	2.71	12.00	2.10	13.00	1.54
14.00	1.01	15.00	0.70	16.00	0.50				

DATE: 09 JUL 84  
ATTENUATION COEFFICIENT: .32

DEPTH	% SURF.								
0.00	100.00	0.50	87.29	1.00	53.60	2.00	45.94	3.00	32.93
4.00	26.34	5.00	17.92	6.00	14.47	7.00	9.34	8.00	6.51
9.00	5.34	10.00	4.21	11.00	3.22	12.00	2.14	13.00	1.53
14.00	1.13	15.00	0.74	16.00	0.52	17.00	0.32		

DATE: 06 AUG 84  
ATTENUATION COEFFICIENT: .30

DEPTH	% SURF.								
0.00	100.00	0.50	78.49	1.00	67.00	2.00	47.86	3.00	33.50
4.00	23.93	5.00	19.14	6.00	14.36	7.00	10.72	8.00	7.79
9.00	5.84	10.00	4.17	11.00	2.97	12.00	2.20	13.00	1.67
14.00	1.24	15.00	0.94	16.00	0.70	17.00	0.51	18.00	0.39

DATE: 29 AUG 84  
ATTENUATION COEFFICIENT: .33

DEPTH	% SURF.								
0.00	100.00	0.50	75.64	1.00	64.10	2.00	39.74	3.00	27.56
4.00	19.87	5.00	14.74	6.00	10.51	7.00	8.59	8.00	6.15
9.00	4.62	10.00	3.21	11.00	2.18	12.00	1.60	13.00	1.15
14.00	0.86	15.00	0.60	16.00	0.46				

LAKE 305 1984

DATE: 01 OCT 84

ATTENUATION COEFFICIENT: .34

TIME: 0750 HOURS

R\*\*2: .9890

DEPTH	% SURF.								
0.00	100.00	0.50	89.09	1.00	63.09	2.00	34.00	3.00	23.64
4.00	15.82	5.00	10.73	6.00	7.82	7.00	5.64	8.00	4.18
9.00	3.27	10.00	2.45	11.00	1.91	12.00	1.45	13.00	1.05
14.00	0.73	15.00	0.53	16.00	0.38				

DATE: 29 OCT 84

ATTENUATION COEFFICIENT: .33

TIME: 0853 HOURS

R\*\*2: .9915

DEPTH	% SURF.								
0.00	100.00	0.50	82.60	1.00	60.58	2.00	43.14	3.00	29.37
4.00	20.56	5.00	15.05	6.00	8.81	7.00	6.98	8.00	5.05
9.00	3.69	10.00	2.75	11.00	2.18	12.00	1.74	13.00	1.38
14.00	0.97	15.00	0.75	16.00	0.40	17.00	0.20		

LAKE 305 1985

DATE: 20 MAY 85

ATTENUATION COEFFICIENT: .42

TIME: 0750 HOURS

R\*\*2: .9903

DEPTH	% SURF.								
0.00	100.00	0.50	62.50	1.00	42.19	2.00	25.00	3.00	16.25
4.00	10.31	5.00	6.87	6.00	4.44	7.00	3.00	8.00	2.00
9.00	1.38	10.00	0.98	11.00	0.68	12.00	0.49	13.00	0.36

DATE: 19 JUN 85

ATTENUATION COEFFICIENT: .37

TIME: 0945 HOURS

R\*\*2: .9922

DEPTH	% SURF.								
0.00	100.00	0.50	76.62	1.00	55.84	2.00	35.71	3.00	22.73
4.00	14.94	5.00	10.06	6.00	6.36	7.00	4.25	8.00	3.05
9.00	2.13	10.00	1.68	11.00	1.10	12.00	0.81	13.00	0.59
14.00	0.44	15.00	0.34	16.00	0.25				

DATE: 15 JUL 85

ATTENUATION COEFFICIENT: .39

TIME: 0735 HOURS

R\*\*2: .9959

DEPTH	% SURF.								
0.00	100.00	0.50	60.00	1.00	43.75	2.00	28.00	3.00	23.00
4.00	15.75	5.00	10.75	6.00	6.62	7.00	4.62	8.00	3.20
9.00	2.15	10.00	1.58	11.00	1.15	12.00	0.80	13.00	0.50
14.00	0.30								

DATE: 12 AUG 85

ATTENUATION COEFFICIENT: .26

TIME: 0816 HOURS

R\*\*2: .9837

DEPTH	% SURF.								
0.00	100.00	0.50	51.30	1.00	41.26	2.00	30.89	3.00	22.79
4.00	16.39	5.00	12.45	6.00	9.44	7.00	6.77	8.00	4.76
9.00	3.75	10.00	3.16	11.00	2.49	12.00	2.01	13.00	1.67
14.00	1.34	15.00	1.08	16.00	0.78	17.00	0.67	18.00	0.56
19.00	0.45								

DATE: 08 SEP 85

ATTENUATION COEFFICIENT: .35

TIME: 1531 HOURS

R\*\*2: .9815

DEPTH	% SURF.								
0.00	100.00	0.50	77.71	1.00	60.35	2.00	38.85	3.00	22.61
4.00	14.30	5.00	9.28	6.00	6.29	7.00	3.57	8.00	2.60
9.00	1.89	10.00	1.42	11.00	0.96	12.00	0.63	13.00	0.45
14.00	0.34	15.00	0.24	16.00	0.20	17.00	0.16	18.00	0.13
19.00	0.11	20.00	0.08	21.00	0.07	22.00	0.05		

LAKE 305 1985

DATE: 07 OCT 85

ATTENUATION COEFFICIENT: .43

TIME: 0915 HOURS

R\*\*2: .9922

DEPTH	% SURF.								
0.00	100.00	0.50	71.47	1.00	47.35	2.00	25.01	3.00	15.45
4.00	9.56	5.00	6.61	6.00	4.20	7.00	2.81	8.00	1.89
9.00	1.27	10.00	0.86	11.00	0.59	12.00	0.40	13.00	0.28
14.00	0.19	15.00	0.13						

LAKE 373 1983

DATE: 07 JUN 83

ATTENUATION COEFFICIENT: .34

TIME: 0855 HOURS

R\*\*2: .9982

DEPTH	% SURF.								
0.00	100.00	0.50	80.21	1.00	61.25	2.00	36.46	3.00	29.17
4.00	19.40	5.00	15.75	6.00	10.21	7.00	8.11	8.00	6.07
9.00	3.85	10.00	2.95	11.00	2.13	12.00	1.52	13.00	1.09
14.00	0.77	15.00	0.52	16.00	0.35	17.00	0.27		

DATE: 05 JUL 83

ATTENUATION COEFFICIENT: .31

TIME: 0920 HOURS

R\*\*2: .9950

DEPTH	% SURF.								
0.00	100.00	0.50	58.33	1.00	50.56	2.00	40.83	3.00	35.00
4.00	27.22	5.00	21.00	6.00	14.65	7.00	11.67	8.00	7.65
9.00	5.60	10.00	4.02	11.00	2.83	12.00	2.20	13.00	1.43
14.00	1.13	15.00	0.82	16.00	0.54	17.00	0.37		

DATE: 02 AUG 83

ATTENUATION COEFFICIENT: .30

TIME: 0910 HOURS

R\*\*2: .9892

DEPTH	% SURF.								
0.00	100.00	0.50	76.57	1.00	64.92	2.00	48.27	3.00	39.95
4.00	32.46	5.00	24.97	6.00	19.64	7.00	15.31	8.00	11.80
9.00	8.81	10.00	6.46	11.00	4.73	12.00	3.48	13.00	2.45
14.00	1.70	15.00	1.20	16.00	0.73	17.00	0.45		

DATE: 04 AUG 83

ATTENUATION COEFFICIENT: .33

TIME: 0755 HOURS

R\*\*2: .9899

DEPTH	% SURF.								
0.00	100.00	0.50	74.44	1.00	62.04	2.00	46.32	3.00	37.22
4.00	27.79	5.00	20.18	6.00	14.89	7.00	10.84	8.00	8.11
9.00	6.12	10.00	4.53	11.00	3.21	12.00	2.35	13.00	1.65
14.00	1.11	15.00	0.76	16.00	0.49	17.00	0.27	18.00	0.14

DATE: 30 AUG 83

ATTENUATION COEFFICIENT: .32

TIME: 0855 HOURS

R\*\*2: .9977

DEPTH	% SURF.								
0.00	100.00	0.50	88.23	1.00	76.60	2.00	57.58	3.00	43.85
4.00	29.06	5.00	21.66	6.00	16.38	7.00	12.15	8.00	8.34
9.00	6.55	10.00	4.97	11.00	3.06	12.00	2.28	13.00	1.63
14.00	1.17	15.00	0.86	16.00	0.49				

LAKE 373 1983

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: .27

TIME: 0915 HOURS

R\*\*2: .9805

DEPTH	% SURF.								
0.00	100.00	0.50	58.48	1.00	48.56	2.00	38.99	3.00	34.20
4.00	28.07	5.00	23.39	6.00	18.61	7.00	14.85	8.00	11.77
9.00	9.53	10.00	7.27	11.00	5.49	12.00	3.97	13.00	2.76
14.00	1.97	15.00	1.38	16.00	0.94	17.00	0.53		

LAKE 373 1984

DATE: 21 MAY 84

ATTENUATION COEFFICIENT:

.32

TIME: 0930 HOURS

R\*\*2: .9961

DEPTH	% SURF.								
0.00	100.00	0.50	58.46	1.00	43.08	2.00	30.77	3.00	24.92
4.00	18.92	5.00	14.31	6.00	10.00	7.00	7.08	8.00	5.23
9.00	3.91	10.00	2.92	11.00	2.18	12.00	1.60	13.00	1.17
14.00	0.83	15.00	0.58	16.00	0.40	17.00	0.29		

DATE: 18 JUN 84

ATTENUATION COEFFICIENT:

.27

TIME: 0945 HOURS

R\*\*2: .9966

DEPTH	% SURF.								
0.00	100.00	0.50	66.63	1.00	51.34	2.00	37.29	3.00	29.22
4.00	23.47	5.00	18.46	6.00	15.16	7.00	11.49	8.00	8.56
9.00	6.60	10.00	5.01	11.00	3.79	12.00	2.93	13.00	2.14
14.00	1.70	15.00	1.28	16.00	0.99	17.00	0.77	18.00	0.50

DATE: 16 JUL 84

ATTENUATION COEFFICIENT:

.29

TIME: 0915 HOURS

R\*\*2: .9864

DEPTH	% SURF.								
0.00	100.00	0.50	66.67	1.00	47.78	2.00	34.89	3.00	28.89
4.00	24.22	5.00	19.56	6.00	15.56	7.00	12.22	8.00	9.56
9.00	7.11	10.00	5.44	11.00	4.13	12.00	3.20	13.00	2.38
14.00	1.71	15.00	1.19	16.00	0.81	17.00	0.54	18.00	0.33
19.00	0.20								

DATE: 13 AUG 84

ATTENUATION COEFFICIENT:

.31

TIME: 0905 HOURS

R\*\*2: .9963

DEPTH	% SURF.								
0.00	100.00	0.50	74.38	1.00	60.91	2.00	46.45	3.00	35.12
4.00	27.27	5.00	20.50	6.00	15.87	7.00	11.82	8.00	8.93
9.00	6.69	10.00	4.79	11.00	3.55	12.00	2.64	13.00	1.86
14.00	1.41	15.00	0.99	16.00	0.69	17.00	0.45	18.00	0.28

DATE: 11 SEP 84

ATTENUATION COEFFICIENT:

.34

TIME: 0755 HOURS

R\*\*2: .9964

DEPTH	% SURF.								
0.00	100.00	0.50	72.83	1.00	54.34	2.00	35.84	3.00	23.70
4.00	16.42	5.00	12.49	6.00	9.02	7.00	6.94	8.00	5.20
9.00	3.82	10.00	2.66	11.00	1.85	12.00	1.24	13.00	0.92
14.00	0.65	15.00	0.47	16.00	0.37				

LAKE 373 1984

DATE: 16 OCT 84

ATTENUATION COEFFICIENT: .29

TIME: 0915 HOURS

R\*\*2: .9876

DEPTH	% SURF.								
0.00	100.00	0.50	65.05	1.00	49.44	2.00	39.03	3.00	30.18
4.00	23.16	5.00	18.21	6.00	13.79	7.00	10.54	8.00	8.07
9.00	6.37	10.00	5.05	11.00	4.14	12.00	3.10	13.00	2.32
14.00	1.64	15.00	1.14	16.00	0.70	17.00	0.43	18.00	0.26

LAKE 373 1985

DATE: 29 MAY 85  
ATTENUATION COEFFICIENT: .32

DEPTH	% SURF.								
0.00	100.00	0.50	60.23	1.00	43.18	2.00	28.41	3.00	21.14
4.00	15.68	5.00	11.36	6.00	8.64	7.00	6.70	8.00	4.89
9.00	3.58	10.00	2.58	11.00	1.84	12.00	1.34	13.00	0.99
14.00	0.70	15.00	0.51	16.00	0.38				

DATE: 26 JUN 85  
ATTENUATION COEFFICIENT: .31

DEPTH	% SURF.								
0.00	100.00	0.50	68.06	1.00	50.00	2.00	34.03	3.00	27.08
4.00	21.46	5.00	16.88	6.00	12.78	7.00	9.65	8.00	7.29
9.00	5.35	10.00	3.96	11.00	2.92	12.00	2.08	13.00	1.46
14.00	1.04	15.00	0.71	16.00	0.52	17.00	0.35		

DATE: 24 JUL 85  
ATTENUATION COEFFICIENT: .33

DEPTH	% SURF.								
0.00	100.00	0.50	87.53	1.00	66.32	2.00	45.53	3.00	35.34
4.00	28.07	5.00	21.00	6.00	15.80	7.00	11.64	8.00	6.57
9.00	4.97	10.00	3.70	11.00	2.74	12.00	1.98	13.00	1.50
14.00	1.04	15.00	0.69	16.00	0.46				

DATE: 21 AUG 85  
ATTENUATION COEFFICIENT: .34

DEPTH	% SURF.								
0.00	100.00	0.50	72.73	1.00	56.82	2.00	40.15	3.00	24.09
4.00	17.88	5.00	13.86	6.00	9.55	7.00	7.27	8.00	5.45
9.00	3.82	10.00	2.46	11.00	1.80	12.00	1.32	13.00	0.90
14.00	0.71	15.00	0.50						

DATE: 25 SEP 85  
ATTENUATION COEFFICIENT: .36

DEPTH	% SURF.								
0.00	100.00	0.50	57.38	1.00	49.73	2.00	35.19	3.00	21.42
4.00	17.60	5.00	10.71	6.00	8.42	7.00	6.12	8.00	3.83
9.00	2.68	10.00	1.91	11.00	1.45	12.00	0.99	13.00	0.73
14.00	0.50	15.00	0.34	16.00	0.21				

LAKE 374 1983

DATE: 07 JUN 83

ATTENUATION COEFFICIENT: .35

DEPTH	% SURF.								
0.00	100.00	0.50	77.31	1.00	60.99	2.00	40.37	3.00	25.77
4.00	18.04	5.00	12.46	6.00	8.59	7.00	6.18	8.00	4.29
9.00	3.14	10.00	2.15	11.00	1.59	12.00	1.17	13.00	0.84
14.00	0.63	15.00	0.45	16.00	0.33	17.00	0.25		

TIME: 1440 HOURS

R\*\*2: .9966

DATE: 06 JUL 83

ATTENUATION COEFFICIENT: .36

DEPTH	% SURF.								
0.00	100.00	0.50	78.82	1.00	61.93	2.00	33.78	3.00	24.77
4.00	18.02	5.00	11.26	6.00	8.45	7.00	5.63	8.00	4.17
9.00	2.82	10.00	2.14	11.00	1.58	12.00	1.13	13.00	0.79
14.00	0.56	15.00	0.44						

TIME: 0900 HOURS

R\*\*2: .9952

DATE: 29 JUL 83

ATTENUATION COEFFICIENT: .35

DEPTH	% SURF.								
0.00	100.00	0.50	79.41	1.00	64.52	2.00	43.67	3.00	27.30
4.00	19.85	5.00	12.90	6.00	8.83	7.00	6.60	8.00	4.47
9.00	3.18	10.00	2.23	11.00	1.49	12.00	1.06	13.00	0.83
14.00	0.61	15.00	0.45	16.00	0.32	17.00	0.25		

TIME: 0920 HOURS

R\*\*2: .9971

DATE: 29 AUG 83

ATTENUATION COEFFICIENT: .31

DEPTH	% SURF.								
0.00	100.00	0.50	64.75	1.00	50.67	2.00	35.19	3.00	27.03
4.00	20.55	5.00	15.76	6.00	12.11	7.00	9.06	8.00	6.64
9.00	4.87	10.00	3.40	11.00	2.43	12.00	1.78	13.00	1.28
14.00	0.92	15.00	0.67	16.00	0.50	17.00	0.38	18.00	0.28

TIME: 0905 HOURS

R\*\*2: .9978

DATE: 03 OCT 83

ATTENUATION COEFFICIENT: .30

DEPTH	% SURF.								
0.00	100.00	0.50	68.04	1.00	45.79	2.00	33.50	3.00	27.21
4.00	20.41	5.00	15.18	6.00	11.51	7.00	8.37	8.00	6.67
9.00	4.76	10.00	3.56	11.00	2.62	12.00	2.01	13.00	1.52
14.00	1.11	15.00	0.80	16.00	0.63				

TIME: 0910 HOURS

R\*\*2: .9954

LAKE 374 1984

DATE: 22 MAY 84

ATTENUATION COEFFICIENT: .32

TIME: 0840 HOURS

R\*\*2: .9917

DEPTH	% SURF.								
0.00	100.00	0.50	69.80	1.00	54.12	2.00	36.47	3.00	23.92
4.00	16.47	5.00	11.76	6.00	8.24	7.00	5.88	8.00	4.24
9.00	2.98	10.00	2.20	11.00	1.65	12.00	1.18	13.00	0.94
14.00	0.72	15.00	0.55	16.00	0.42	17.00	0.33	18.00	0.25

DATE: 19 JUN 84

ATTENUATION COEFFICIENT: .32

TIME: 0742 HOURS

R\*\*2: .9920

DEPTH	% SURF.								
0.00	100.00	0.50	67.04	1.00	53.93	2.00	33.71	3.00	21.47
4.00	14.98	5.00	10.36	6.00	7.74	7.00	5.74	8.00	4.12
9.00	3.12	10.00	2.25	11.00	1.69	12.00	1.22	13.00	0.91
14.00	0.69	15.00	0.52	16.00	0.40	17.00	0.30	18.00	0.24

DATE: 17 JUL 84

ATTENUATION COEFFICIENT: .35

TIME: 0755 HOURS

R\*\*2: .9962

DEPTH	% SURF.								
0.00	100.00	0.50	70.18	1.00	57.80	2.00	38.07	3.00	24.77
4.00	16.51	5.00	11.47	6.00	8.26	7.00	5.87	8.00	4.13
9.00	2.94	10.00	2.11	11.00	1.52	12.00	1.06	13.00	0.77
14.00	0.59	15.00	0.44	16.00	0.32				

DATE: 14 AUG 84

ATTENUATION COEFFICIENT: .31

TIME: 0949 HOURS

R\*\*2: .9975

DEPTH	% SURF.								
0.00	100.00	1.00	60.25	3.00	29.79	5.00	16.32	7.00	11.38
10.00	3.68	13.00	1.38	16.00	0.55	19.00	0.24		

DATE: 12 SEP 84

ATTENUATION COEFFICIENT: .30

TIME: 0926 HOURS

R\*\*2: .9958

DEPTH	% SURF.								
0.00	100.00	0.50	64.71	1.00	47.06	2.00	32.94	3.00	25.10
4.00	18.82	5.00	14.90	6.00	11.37	7.00	9.02	8.00	6.67
9.00	5.10	10.00	3.88	11.00	2.90	12.00	2.08	13.00	1.41
14.00	1.02	15.00	0.75	16.00	0.53	17.00	0.41	18.00	0.30

LAKE 374 1984

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .27

TIME: 0900 HOURS

R\*\*2: .9948

DEPTH	% SURF.								
0.00	100.00	0.50	62.30	1.00	50.54	2.00	36.44	3.00	28.92
4.00	22.10	5.00	17.28	6.00	13.16	7.00	10.23	8.00	8.05
9.00	6.23	10.00	4.76	11.00	3.82	12.00	3.01	13.00	2.32
14.00	1.72	15.00	1.29	16.00	0.85	17.00	0.79		

LAKE 374 1985

DATE: 29 MAY 85

ATTENUATION COEFFICIENT: .49

TIME: 0930 HOURS

R\*\*2: .9838

DEPTH	% SURF.								
0.00	100.00	0.50	67.00	1.00	47.15	2.00	29.03	3.00	21.09
4.00	14.39	5.00	9.68	6.00	5.96	7.00	3.72	8.00	1.86
9.00	0.74								

DATE: 25 JUN 85

ATTENUATION COEFFICIENT: .41

TIME: 0845 HOURS

R\*\*2: .9831

DEPTH	% SURF.								
0.00	100.00	0.50	56.52	1.00	42.39	2.00	24.78	3.00	14.15
4.00	8.70	5.00	5.65	6.00	3.70	7.00	2.61	8.00	1.74
9.00	1.50	10.00	1.09	11.00	0.67	12.00	0.46	13.00	0.35

DATE: 20 AUG 85

ATTENUATION COEFFICIENT: .34

TIME: 0830 HOURS

R\*\*2: .9895

DEPTH	% SURF.								
0.00	100.00	0.50	48.84	1.00	30.53	2.00	25.26	3.00	18.95
4.00	13.96	5.00	10.13	6.00	6.84	7.00	5.16	8.00	3.75
9.00	2.65	10.00	1.87	11.00	1.43	12.00	1.03	13.00	0.74
14.00	0.55	15.00	0.40						

TAKE 375 1983

DATE: 07 JUN 83 TIME: 0905 HOURS  
 ATTENUATION COEFFICIENT: .47 R\*\*2: .9984

DEPTH	% SURF.								
0.00	100.00	0.50	76.29	1.00	55.75	2.00	30.81	3.00	19.07
4.00	11.93	5.00	7.34	6.00	4.65	7.00	2.89	8.00	1.78
9.00	1.13	10.00	0.69	11.00	0.45	12.00	0.29	13.00	0.19
14.00	0.12	15.00	0.08						

DATE: 05 JUL 83 TIME: 0940 HOURS  
 ATTENUATION COEFFICIENT: .48 R\*\*2: .9986

DEPTH	% SURF.								
0.00	100.00	0.50	73.38	1.00	55.04	2.00	31.90	3.00	18.74
4.00	12.36	5.00	7.82	6.00	4.47	7.00	2.87	8.00	1.83
9.00	1.14	10.00	0.76	11.00	0.49	12.00	0.30		

DATE: 04 AUG 83 TIME: 0730 HOURS  
 ATTENUATION COEFFICIENT: .48 R\*\*2: .9983

DEPTH	% SURF.								
0.00	100.00	0.50	68.97	1.00	51.24	2.00	30.54	3.00	18.72
4.00	12.02	5.00	7.29	6.00	4.24	7.00	2.58	8.00	1.62
9.00	1.02	10.00	0.66	11.00	0.44	12.00	0.29		

DATE: 30 AUG 83 TIME: 0900 HOURS  
 ATTENUATION COEFFICIENT: .44 R\*\*2: .9975

DEPTH	% SURF.								
0.00	100.00	0.50	75.20	1.00	54.69	2.00	34.18	3.00	22.56
4.00	14.36	5.00	9.57	6.00	6.02	7.00	3.62	8.00	2.13
9.00	1.38	10.00	0.92	11.00	0.63	12.00	0.42	13.00	0.31
14.00	0.21	15.00	0.14						

LAKE 382 1983

DATE: 19 MAY 83  
ATTENUATION COEFFICIENT: .58

DEPTH	% SURF.								
0.00	100.00	0.50	56.53	1.00	37.27	2.00	20.73	3.00	12.14
4.00	6.99	5.00	3.98	6.00	2.28	7.00	1.30	8.00	0.75
9.00	0.42	10.00	0.23						

TIME: 0745 HOURS  
R\*\*2: .9971

DATE: 20 JUN 83  
ATTENUATION COEFFICIENT: .58

DEPTH	% SURF.								
0.00	100.00	0.50	58.85	1.00	39.39	2.00	21.73	3.00	12.95
4.00	7.88	5.00	4.39	6.00	2.45	7.00	1.39	8.00	0.81
9.00	0.42	10.00	0.24						

TIME: 0740 HOURS  
R\*\*2: .9978

DATE: 12 JUL 83  
ATTENUATION COEFFICIENT: .64

DEPTH	% SURF.								
0.00	100.00	0.50	64.62	1.00	46.57	2.00	24.71	3.00	13.30
4.00	7.79	5.00	4.09	6.00	2.09	7.00	1.06	8.00	0.59
9.00	0.30	10.00	0.13						

TIME: 1515 HOURS  
R\*\*2: .9990

DATE: 12 AUG 83  
ATTENUATION COEFFICIENT: .62

DEPTH	% SURF.								
0.00	100.00	0.50	70.79	1.00	53.09	2.00	29.08	3.00	16.43
4.00	9.86	5.00	5.88	6.00	2.88	7.00	1.49	8.00	0.76
9.00	0.36	10.00	0.20						

TIME: 0945 HOURS  
R\*\*2: .9978

DATE: 08 SEP 83  
ATTENUATION COEFFICIENT: .56

DEPTH	% SURF.								
0.00	100.00	0.50	63.70	1.00	42.62	2.00	23.72	3.00	14.23
4.00	8.87	5.00	5.49	6.00	3.38	7.00	1.76	8.00	0.95
9.00	0.50	10.00	0.30						

TIME: 0800 HOURS  
R\*\*2: .9972

DATE: 17 OCT 83  
ATTENUATION COEFFICIENT: .57

DEPTH	% SURF.								
0.00	100.00	0.50	57.20	1.00	38.67	2.00	19.61	3.00	11.44
4.00	6.54	5.00	3.68	6.00	2.12	7.00	1.27	8.00	0.75
9.00	0.46	10.00	0.29						

TIME: 0825 HOURS  
R\*\*2: .9944

LAKE 382 1984

DATE: 09 MAY 84	ATTENUATION COEFFICIENT:	.51	TIME: 0930 HOURS	R**2: .9931
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 54.31	1.00 35.26	2.00 20.92	3.00 13.16
4.00 8.23	5.00 5.15	6.00 3.17	7.00 1.95	8.00 1.22
9.00 0.72	10.00 0.46			
DATE: 28 MAY 84	ATTENUATION COEFFICIENT:	.59	TIME: 0740 HOURS	R**2: .9975
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 70.60	1.00 45.76	2.00 24.19	3.00 13.99
4.00 8.30	5.00 4.90	6.00 3.09	7.00 1.58	8.00 0.78
9.00 0.44				
DATE: 25 JUN 84	ATTENUATION COEFFICIENT:	.64	TIME: 0740 HOURS	R**2: .9948
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 65.44	1.00 38.64	2.00 21.81	3.00 11.97
4.00 7.17	5.00 3.93	6.00 2.36	7.00 1.21	8.00 0.65
9.00 0.28	10.00 0.11			
DATE: 16 AUG 84	ATTENUATION COEFFICIENT:	.63	TIME: 0725 HOURS	R**2: .9941
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 58.46	1.00 39.23	2.00 22.00	3.00 12.62
4.00 7.69	5.00 4.77	6.00 2.46	7.00 1.29	8.00 0.62
9.00 0.28	10.00 0.12			
DATE: 17 SEP 84	ATTENUATION COEFFICIENT:	.66	TIME: 0825 HOURS	R**2: .9943
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 55.53	1.00 36.06	2.00 17.86	3.00 8.64
4.00 4.72	5.00 2.53	6.00 1.54	7.00 0.86	8.00 0.50
9.00 0.22	10.00 0.08			
DATE: 17 OCT 84	ATTENUATION COEFFICIENT:	.50	TIME: 0840 HOURS	R**2: .9945
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 60.14	1.00 38.57	2.00 22.88	3.00 14.38
4.00 10.33	5.00 6.28	6.00 3.73	7.00 2.35	8.00 1.44
9.00 0.85	10.00 0.47			

LAKE 382 1985

DATE: 08 MAY 85 TIME: 0815 HOURS  
 ATTENUATION COEFFICIENT: .67 R\*\*2: .9948  
 DEPTH % SURF.  
 0.00 100.00 0.50 53.60 1.00 35.51 2.00 16.35 3.00 8.51  
 4.00 3.91 5.00 2.18 6.00 1.16 7.00 0.60 8.00 0.33  
 9.00 0.19 10.00 0.11

DATE: 01 JUL 85 TIME: 0855 HOURS  
 ATTENUATION COEFFICIENT: .74 R\*\*2: .9979  
 DEPTH % SURF.  
 0.00 100.00 0.50 58.61 1.00 39.56 2.00 18.02 3.00 8.28  
 4.00 3.88 5.00 1.89 6.00 0.94 7.00 0.45 8.00 0.26

DATE: 28 AUG 85 TIME: 0720 HOURS  
 ATTENUATION COEFFICIENT: .78 R\*\*2: .9959  
 DEPTH % SURF.  
 0.00 100.00 0.50 46.26 1.00 34.81 2.00 16.21 3.00 6.29  
 4.00 3.06 5.00 1.64 6.00 0.70 7.00 0.35

DATE: 26 SEP 85 TIME: 0850 HOURS  
 ATTENUATION COEFFICIENT: .89 R\*\*2: .9955

DEPTH	% SURF.								
0.00	100.00	0.50	51.52	1.00	27.12	2.00	12.09	3.00	4.59
4.00	1.94	5.00	0.83	6.00	0.39	7.00	0.18		

DATE: 22 OCT 85 TIME: 0820 HOURS  
 ATTENUATION COEFFICIENT: .84 R\*\*2: .9958

DEPTH	% SURF.								
0.00	100.00	0.50	48.34	1.00	29.70	2.00	12.98	3.00	5.52
4.00	2.62	5.00	1.38	6.00	0.55	7.00	0.21		

LAKE 382BAY 1983

DATE: 19 MAY 83 TIME: 0805 HOURS  
ATTENUATION COEFFICIENT: .79 R\*\*2: .9527

DEPTH	% SURF.								
0.00	100.00	0.50	45.64	1.00	27.64	2.00	13.82	3.00	8.37

DATE: 20 JUN 83 TIME: 0800 HOURS  
ATTENUATION COEFFICIENT: .93 R\*\*2: .9827

DEPTH	% SURF.								
0.00	100.00	0.50	47.24	1.00	27.48	2.00	12.22	3.00	5.63

DATE: 12 JUL 83 TIME: 1530 HOURS  
ATTENUATION COEFFICIENT: .84 R\*\*2: .9923

DEPTH	% SURF.								
0.00	100.00	0.50	59.33	1.00	34.78	2.00	16.16	3.00	7.88

DATE: 12 AUG 83 TIME: 0955 HOURS  
ATTENUATION COEFFICIENT: .73 R\*\*2: .9963

DEPTH	% SURF.								
0.00	100.00	0.50	60.00	1.00	43.00	2.00	21.50	3.00	10.40

DATE: 08 SEP 83 TIME: 0810 HOURS  
ATTENUATION COEFFICIENT: .76 R\*\*2: .9876

DEPTH	% SURF.								
0.00	100.00	0.50	54.54	1.00	36.51	2.00	18.25	3.00	9.36

DATE: 17 OCT 83 TIME: 0840 HOURS  
ATTENUATION COEFFICIENT: .67 R\*\*2: .9877

DEPTH	% SURF.								
0.00	100.00	0.50	60.52	1.00	40.63	2.00	22.48	3.00	12.54

LAKE 382BAY 1984

DATE: 09 MAY 84 ATTENUATION COEFFICIENT:	.85	TIME: 0950 HOURS R**2: .9639			
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 47.98	1.00 26.47	2.00 14.72	2.75	8.60
DATE: 28 MAY 84 ATTENUATION COEFFICIENT:	.75	TIME: 0805 HOURS R**2: .9908			
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 60.85	1.00 38.72	2.00 18.69	3.00	10.20
DATE: 25 JUN 84 ATTENUATION COEFFICIENT:	1.03	TIME: 0805 HOURS R**2: .9891			
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 51.61	1.00 25.71	2.00 10.41	3.00	4.35
DATE: 16 AUG 84 ATTENUATION COEFFICIENT:	.83	TIME: 0755 HOURS R**2: .9893			
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 53.73	1.00 34.12	2.00 16.08	3.00	7.84
DATE: 17 SEP 84 ATTENUATION COEFFICIENT:	.80	TIME: 0845 HOURS R**2: .9891			
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 53.61	1.00 35.21	2.00 17.72	3.00	8.35
DATE: 17 OCT 84 ATTENUATION COEFFICIENT:	.68	TIME: 0855 HOURS R**2: .9925			
DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.	DEPTH % SURF.
0.00 100.00	0.50 61.06	1.00 42.41	2.00 23.07	3.00	12.21

LAKE 622 1983

DATE: 07 JUN 83 TIME: 0755 HOURS  
ATTENUATION COEFFICIENT: .58 R\*\*2: .9963

DEPTH	% SURF.								
0.00	100.00	0.50	66.35	1.00	44.23	2.00	22.38	3.00	10.93
4.00	6.37	5.00	3.71	6.00	1.99	7.00	1.13	8.00	0.65
9.00	0.39	10.00	0.23	11.00	0.14	12.00	0.08		

DATE: 05 JUL 83 TIME: 0815 HOURS  
ATTENUATION COEFFICIENT: .58 R\*\*2: .9911

DEPTH	% SURF.								
0.00	100.00	0.50	65.12	1.00	45.58	2.00	19.86	3.00	11.23
4.00	5.37	5.00	3.42	6.00	1.95	7.00	1.22	8.00	0.66
9.00	0.45	10.00	0.28						

DATE: 02 AUG 83 TIME: 0755 HOURS  
ATTENUATION COEFFICIENT: .50 R\*\*2: .9942

DEPTH	% SURF.								
0.00	100.00	0.50	61.26	1.00	40.84	2.00	22.97	3.00	14.29
4.00	8.68	5.00	5.31	6.00	3.09	7.00	1.82	8.00	1.12
9.00	0.74	10.00	0.50	11.00	0.33	12.00	0.22		

DATE: 30 AUG 83 TIME: 0740 HOURS  
ATTENUATION COEFFICIENT: .55 R\*\*2: .9948

DEPTH	% SURF.								
0.00	100.00	0.50	63.58	1.00	44.14	2.00	25.53	3.00	15.98
4.00	10.28	5.00	6.59	6.00	3.95	7.00	2.08	8.00	1.12
9.00	0.59	10.00	0.28						

DATE: 04 OCT 83 TIME: 0820 HOURS  
ATTENUATION COEFFICIENT: .47 R\*\*2: .9919

DEPTH	% SURF.								
0.00	100.00	0.50	60.18	1.00	36.79	2.00	21.44	3.00	13.77
4.00	8.87	5.00	6.51	6.00	3.75	7.00	2.39	8.00	1.56
9.00	1.02	10.00	0.63	11.00	0.41				

LAKE 623 1983

DATE: 07 JUN 83

ATTENUATION COEFFICIENT: .55

DEPTH	% SURF.								
0.00	100.00	0.50	62.00	1.00	38.00	2.00	26.00	3.00	14.60
4.00	8.20	5.00	4.36	6.00	2.52	7.00	1.72	8.00	0.98
9.00	0.54	10.00	0.34						

TIME: 0735 HOURS

R\*\*2: .9965

DATE: 05 JUL 83

ATTENUATION COEFFICIENT: .54

DEPTH	% SURF.								
0.00	100.00	0.50	68.37	1.00	45.12	2.00	25.98	3.00	15.04
4.00	9.16	5.00	5.26	6.00	3.17	7.00	1.90	8.00	1.14
9.00	0.67	10.00	0.40						

TIME: 0750 HOURS

R\*\*2: .9980

DATE: 02 AUG 83

ATTENUATION COEFFICIENT: .49

DEPTH	% SURF.								
0.00	100.00	0.50	63.95	1.00	45.41	2.00	28.76	3.00	16.88
4.00	11.73	5.00	7.19	6.00	4.74	7.00	2.69	8.00	1.59
9.00	0.93	10.00	0.59	11.00	0.37	12.00	0.23	13.00	0.16

TIME: 0735 HOURS

R\*\*2: .9985

DATE: 30 AUG 83

ATTENUATION COEFFICIENT: .51

DEPTH	% SURF.								
0.00	100.00	0.50	66.80	1.00	47.60	2.00	29.60	3.00	19.20
4.00	12.64	5.00	8.40	6.00	5.48	7.00	3.16	8.00	1.62
9.00	0.92	10.00	0.54	11.00	0.31	12.00	0.20		

TIME: 0755 HOURS

R\*\*2: .9967

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: .44

DEPTH	% SURF.								
0.00	100.00	0.50	60.99	1.00	38.81	2.00	23.91	3.00	16.43
4.00	10.88	5.00	7.28	6.00	4.82	7.00	3.22	8.00	2.15
9.00	1.40	10.00	0.97	11.00	0.48				

TIME: 0755 HOURS

R\*\*2: .9921

LAKE 623 1984

DATE: 23 MAY 84 TIME: 1015 HOURS  
ATTENUATION COEFFICIENT: .40 R\*\*2: .9898

DEPTH	% SURF.								
0.00	100.00	0.50	71.30	1.00	53.04	2.00	34.78	3.00	20.87
4.00	14.49	5.00	9.51	6.00	6.67	7.00	4.29	8.00	2.84
9.00	2.90	10.00	1.74	11.00	1.10	12.00	0.49		

DATE: 18 JUN 84 TIME: 0830 HOURS  
ATTENUATION COEFFICIENT: .44 R\*\*2: .9989

DEPTH	% SURF.								
0.00	100.00	0.50	69.92	1.00	51.33	2.00	31.02	3.00	20.70
4.00	13.44	5.00	8.98	6.00	5.86	7.00	3.83	8.00	2.42
9.00	1.56	10.00	1.02	11.00	0.64	12.00	0.40	13.00	0.27

DATE: 16 JUL 84 TIME: 0755 HOURS  
ATTENUATION COEFFICIENT: .41 R\*\*2: .9931

DEPTH	% SURF.								
0.00	100.00	0.50	57.07	1.00	37.60	2.00	23.20	3.00	16.80
4.00	11.73	5.00	8.00	6.00	5.44	7.00	3.57	8.00	2.35
9.00	1.57	10.00	1.07	11.00	0.72	12.00	0.51	13.00	0.36

DATE: 13 AUG 84 TIME: 0800 HOURS  
ATTENUATION COEFFICIENT: .49 R\*\*2: .9983

DEPTH	% SURF.								
0.00	100.00	0.50	67.13	1.00	46.21	2.00	29.31	3.00	18.39
4.00	11.49	5.00	7.36	6.00	4.60	7.00	2.99	8.00	1.78
9.00	1.08	10.00	0.64	11.00	0.37	12.00	0.21		

DATE: 11 SEP 84 TIME: 0905 HOURS  
ATTENUATION COEFFICIENT: .44 R\*\*2: .9940

DEPTH	% SURF.								
0.00	100.00	0.50	54.67	1.00	40.80	2.00	26.40	3.00	17.60
4.00	11.73	5.00	8.00	6.00	5.33	7.00	3.68	8.00	2.35
9.00	1.49	10.00	0.85	11.00	0.51				

DATE: 16 OCT 84 TIME: 0835 HOURS  
ATTENUATION COEFFICIENT: .51 R\*\*2: .9917

DEPTH	% SURF.								
0.00	100.00	0.50	56.09	1.00	35.53	2.00	19.57	3.00	11.47
4.00	7.23	5.00	4.49	6.00	2.49	7.00	1.68	8.00	1.17
9.00	0.69	10.00	0.42	11.00	0.24				

LAKE 623 1985

DATE: 29 MAY 85

ATTENUATION COEFFICIENT: .52

TIME: 0850 HOURS

R\*\*2: .9918

DEPTH	% SURF.								
0.00	100.00	0.50	51.00	1.00	34.00	2.00	19.00	3.00	12.10
4.00	7.50	5.00	4.57	6.00	2.70	7.00	1.63	8.00	1.00
9.00	0.63	10.00	0.41						

DATE: 26 JUN 85

ATTENUATION COEFFICIENT: .50

TIME: 0820 HOURS

R\*\*2: .9872

DEPTH	% SURF.								
0.00	100.00	0.50	50.08	1.00	35.28	2.00	18.74	3.00	11.89
4.00	7.72	5.00	4.96	6.00	2.99	7.00	1.97	8.00	1.18
9.00	0.79								

DATE: 24 JUL 85

ATTENUATION COEFFICIENT: .48

TIME: 0757 HOURS

R\*\*2: .9929

DEPTH	% SURF.								
0.00	100.00	0.50	49.58	1.00	38.87	2.00	21.13	3.00	14.14
4.00	8.59	5.00	5.52	6.00	3.72	7.00	2.17	8.00	1.44
9.00	0.93	10.00	0.56	11.00	0.39				

DATE: 21 AUG 85

ATTENUATION COEFFICIENT: .54

TIME: 0850 HOURS

R\*\*2: .9957

DEPTH	% SURF.								
0.00	100.00	0.50	59.61	1.00	44.61	2.00	22.65	3.00	13.33
4.00	8.21	5.00	4.79	6.00	2.79	7.00	1.66	8.00	1.07
9.00	0.66	10.00	0.40						

DATE: 25 SEP 85

ATTENUATION COEFFICIENT: .63

TIME: 0843 HOURS

R\*\*2: .9894

DEPTH	% SURF.								
0.00	100.00	0.50	57.83	1.00	34.49	2.00	12.17	3.00	7.91
4.00	4.57	5.00	2.43	6.00	1.42	7.00	0.76	8.00	0.45
9.00	0.26	10.00	0.14						

LAKE 629 1983

DATE: 06 JUN 83

ATTENUATION COEFFICIENT: .66

TIME: 0820 HOURS

R\*\*2: .9986

DEPTH	% SURF.								
0.00	100.00	0.50	58.74	1.00	41.61	2.00	21.42	3.00	10.52
4.00	5.45	5.00	2.69	6.00	1.49	7.00	0.79	8.00	0.39
9.00	0.22	10.00	0.12						

DATE: 04 JUL 83

ATTENUATION COEFFICIENT: .55

TIME: 0825 HOURS

R\*\*2: .9912

DEPTH	% SURF.								
0.00	100.00	0.50	51.14	1.00	31.72	2.00	17.37	3.00	10.15
4.00	6.34	5.00	4.27	6.00	2.52	7.00	1.49	8.00	0.86
9.00	0.49	10.00	0.28						

DATE: 29 JUL 83

ATTENUATION COEFFICIENT: .60

TIME: 0950 HOURS

R\*\*2: .9973

DEPTH	% SURF.								
0.00	100.00	0.50	64.84	1.00	45.39	2.00	23.77	3.00	13.23
4.00	7.78	5.00	3.59	6.00	1.95	7.00	1.18	8.00	0.65
9.00	0.41	10.00	0.24						

DATE: 29 AUG 83

ATTENUATION COEFFICIENT: .57

TIME: 0815 HOURS

R\*\*2: .9965

DEPTH	% SURF.								
0.00	100.00	0.50	55.96	1.00	37.52	2.00	19.71	3.00	12.30
4.00	7.65	5.00	4.48	6.00	2.52	7.00	1.39	8.00	0.79
9.00	0.44	10.00	0.24						

DATE: 03 OCT 83

ATTENUATION COEFFICIENT: .52

TIME: 0830 HOURS

R\*\*2: .9878

DEPTH	% SURF.								
0.00	100.00	0.50	55.50	1.00	27.24	2.00	17.91	3.00	11.60
4.00	7.11	5.00	4.52	6.00	2.83	7.00	1.70	8.00	1.05
9.00	0.66	10.00	0.35						

LAKE 629 1984

DATE: 22 MAY 84

ATTENUATION COEFFICIENT: .59

DEPTH	% SURF.								
0.00	100.00	0.50	62.95	1.00	45.32	2.00	23.96	3.00	12.59
4.00	7.27	5.00	4.17	6.00	2.30	7.00	1.29	8.00	0.73
9.00	0.44	10.00	0.26						

TIME: 0918 HOURS

R\*\*2: .9980

DATE: 19 JUN 84

ATTENUATION COEFFICIENT: .51

DEPTH	% SURF.								
0.00	100.00	0.50	58.43	1.00	37.95	2.00	19.88	3.00	12.29
4.00	7.11	5.00	4.46	6.00	2.77	7.00	1.81	8.00	1.14
9.00	0.70	10.00	0.42	11.00	0.24	12.00	0.17		

TIME: 0810 HOURS

R\*\*2: .9938

DATE: 17 JUL 84

ATTENUATION COEFFICIENT: .54

DEPTH	% SURF.								
0.00	100.00	0.50	65.20	1.00	46.00	2.00	24.00	3.00	13.60
4.00	8.24	5.00	4.72	6.00	2.72	7.00	1.60	8.00	1.02
9.00	0.58	10.00	0.34	11.00	0.22	12.00	0.14		

TIME: 0835 HOURS

R\*\*2: .9974

DATE: 14 AUG 84

ATTENUATION COEFFICIENT: .55

DEPTH	% SURF.								
0.00	100.00	0.50	63.58	1.00	44.53	2.00	25.47	3.00	14.62
4.00	9.43	5.00	5.75	6.00	3.02	7.00	1.60	8.00	0.99
9.00	0.62	10.00	0.38						

TIME: 0840 HOURS

R\*\*2: .9978

DATE: 12 SEP 84

ATTENUATION COEFFICIENT: .50

DEPTH	% SURF.								
0.00	100.00	0.50	56.43	1.00	35.71	2.00	20.71	3.00	13.57
4.00	8.57	5.00	5.50	6.00	3.50	7.00	2.21	8.00	1.36
9.00	0.81	10.00	0.51						

TIME: 0835 HOURS

R\*\*2: .9923

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .46

DEPTH	% SURF.								
0.00	100.00	0.50	62.69	1.00	45.84	2.00	27.82	3.00	18.02
4.00	11.75	5.00	7.80	6.00	4.98	7.00	3.17	8.00	2.02
9.00	1.33	10.00	0.86	11.00	0.53	12.00	0.30		

TIME: 0944 HOURS

R\*\*2: .9975

## APPENDIX 2

This appendix presents the data as depth-time isopleths of light for each lake for each year. The depth values for 60, 30, 10, 3, and 0.5 percent of surface light are calculated from Appendix 1 data and plotted over time for each year. Zero depth would be 100 percent light in each lake.

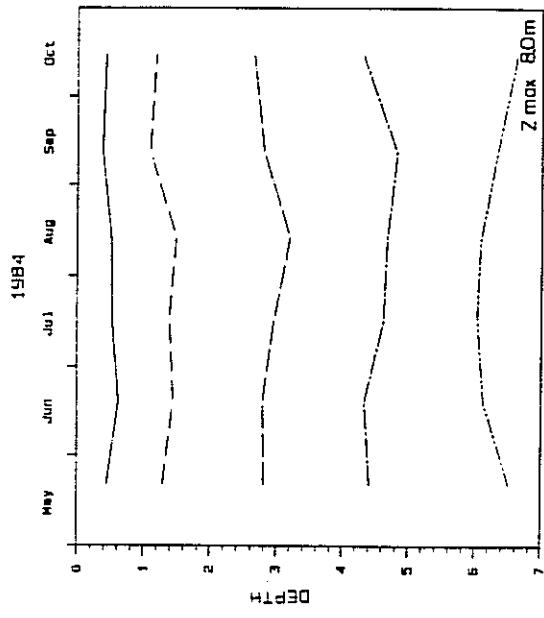
In some lakes at the profiling station (e.g. Lake 114) the light is not totally attenuated before reaching the sediments ( $Z_{max}$ ). The  $Z_{max}$  for each lake is shown on each panel. A line is drawn where more than 0.5% of surface light reaches the sediments.

The 60, 30, 10, 3, and 0.5 percent light isopleths are not calculated from the mean attenuation coefficient; i.e. the negative slope of the regression of the profile as described in Appendix 1. Rather, the depth intercept for each distinct percent light value is derived from the slope between the two measured light-depth data points immediately above and below that desired percent light value. Where  $Z_{max}$  is reached before the light is completely attenuated, the last two light-depth data points are used for the slope determination.

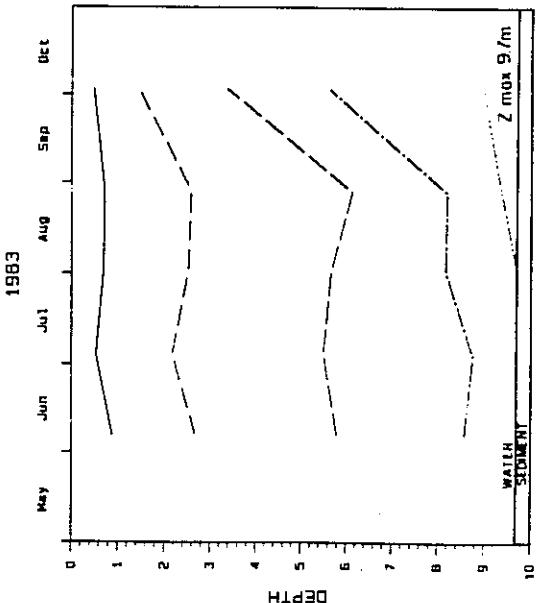
Because of weather or other logistical problems, some of the light isopleth panels are missing monthly or biweekly data points. Some discretion should be used when interpolating these data although the data points are interconnected on the plots (e.g. Lake 374, 1985).



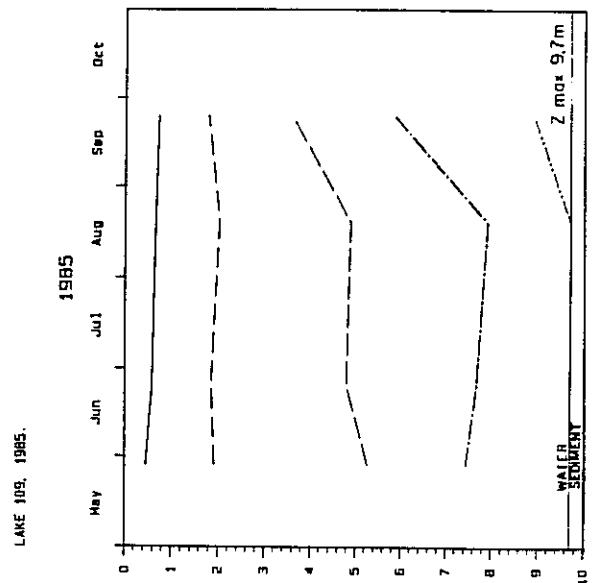
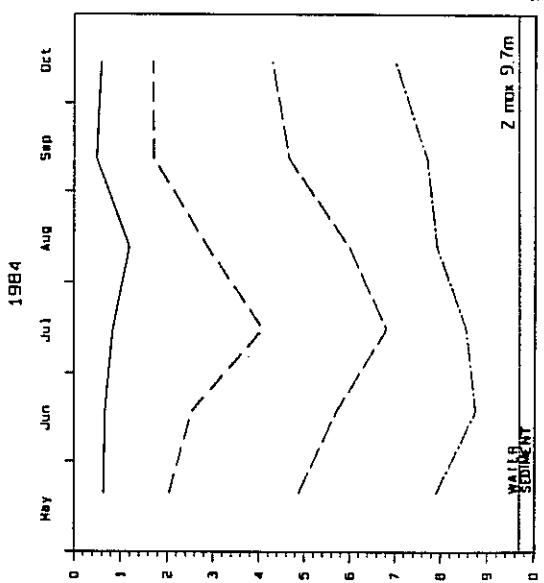
LAKE 93, 1984.



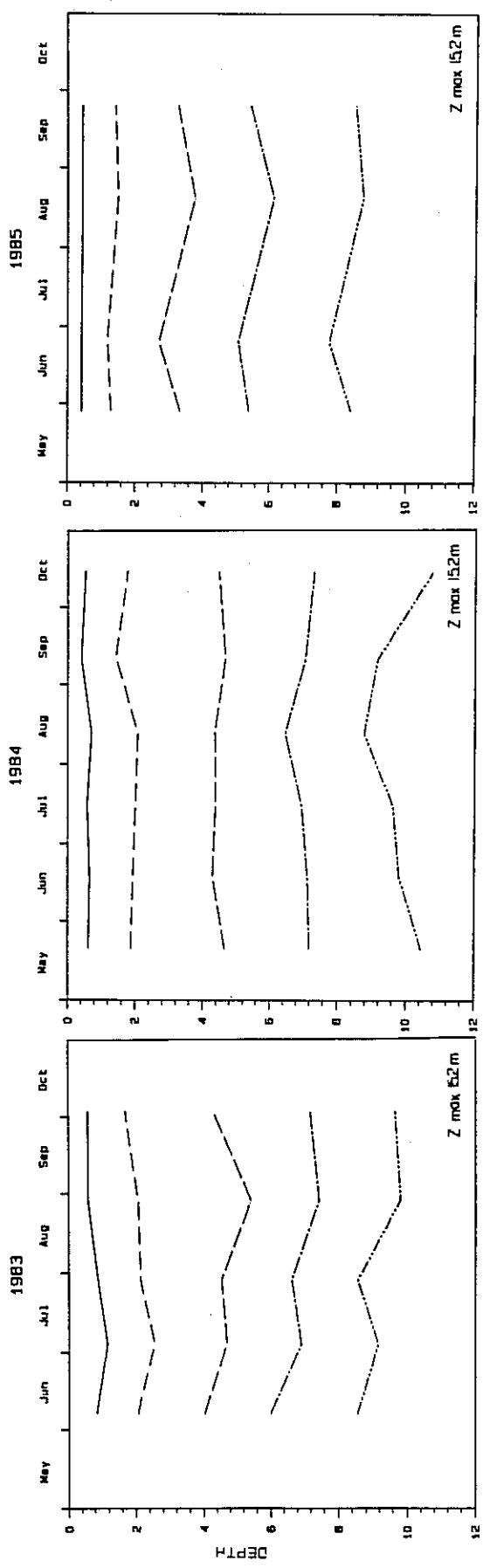
LAKE 109, 1983.



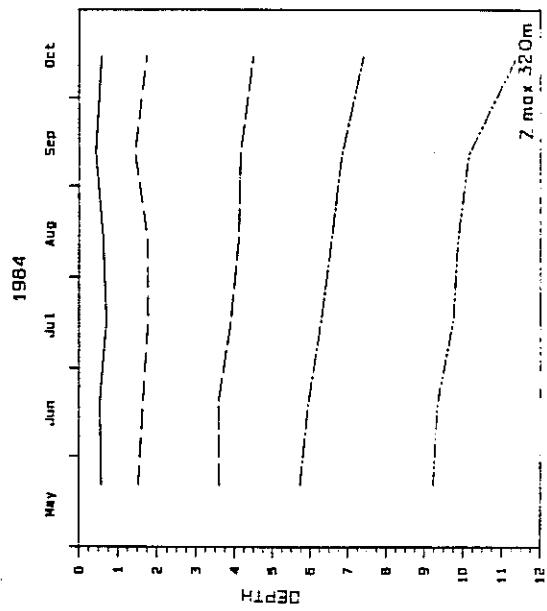
LAKE 109, 1985.

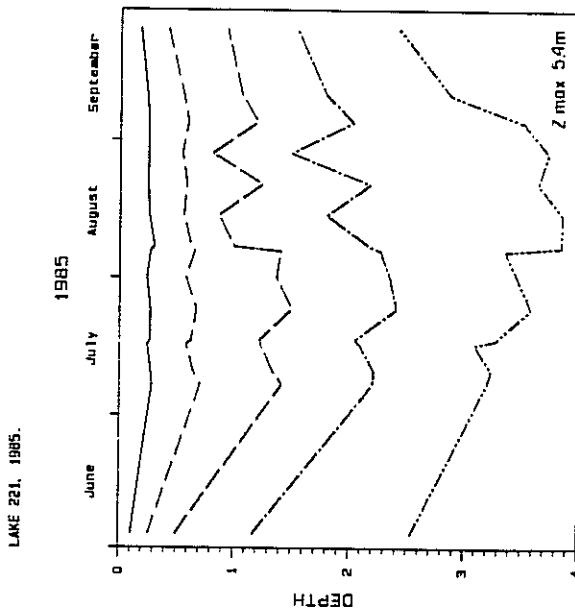
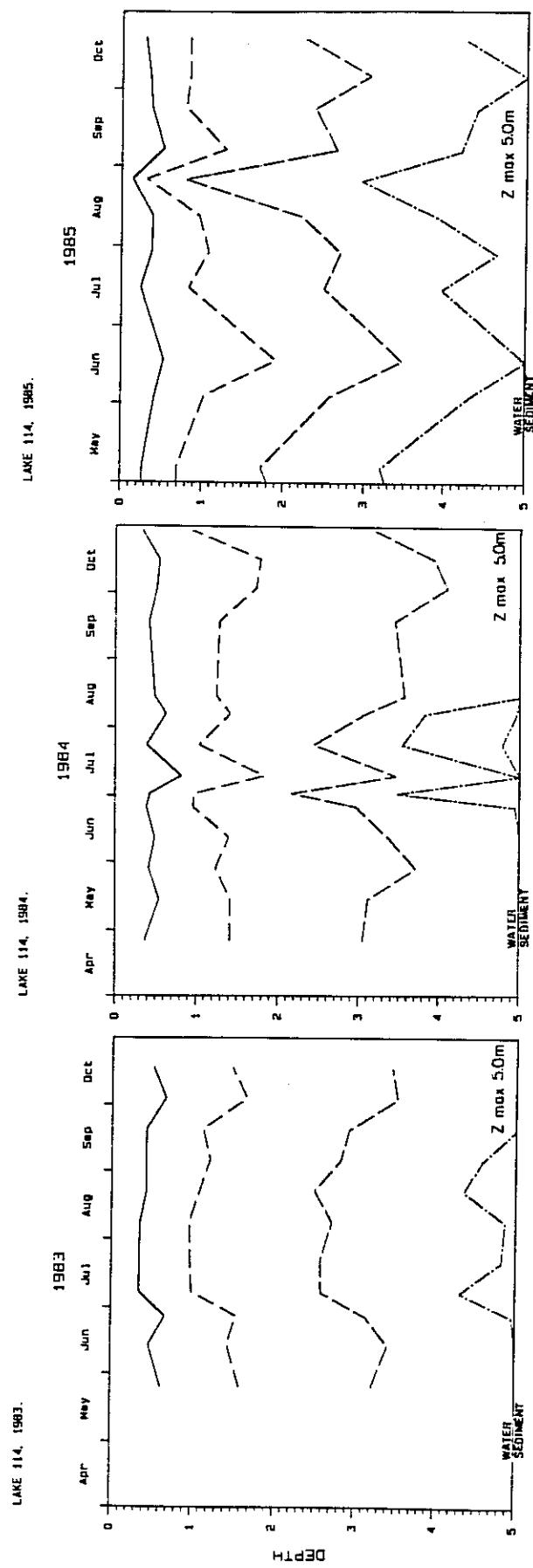


LAKE 110, 1983.

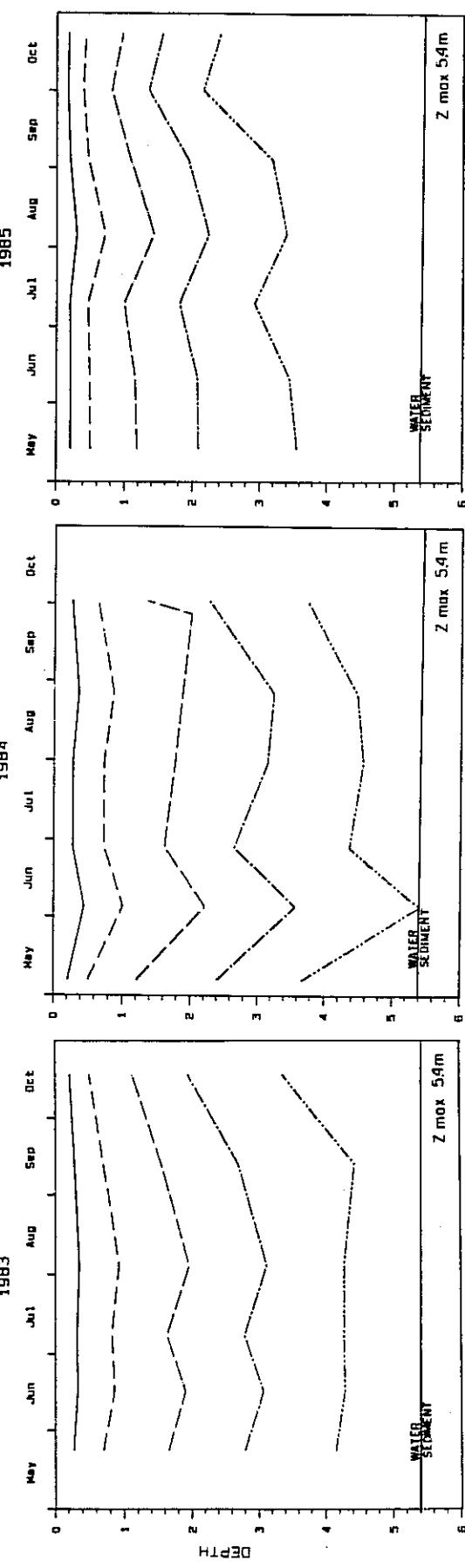


LAKE 111, 1984.

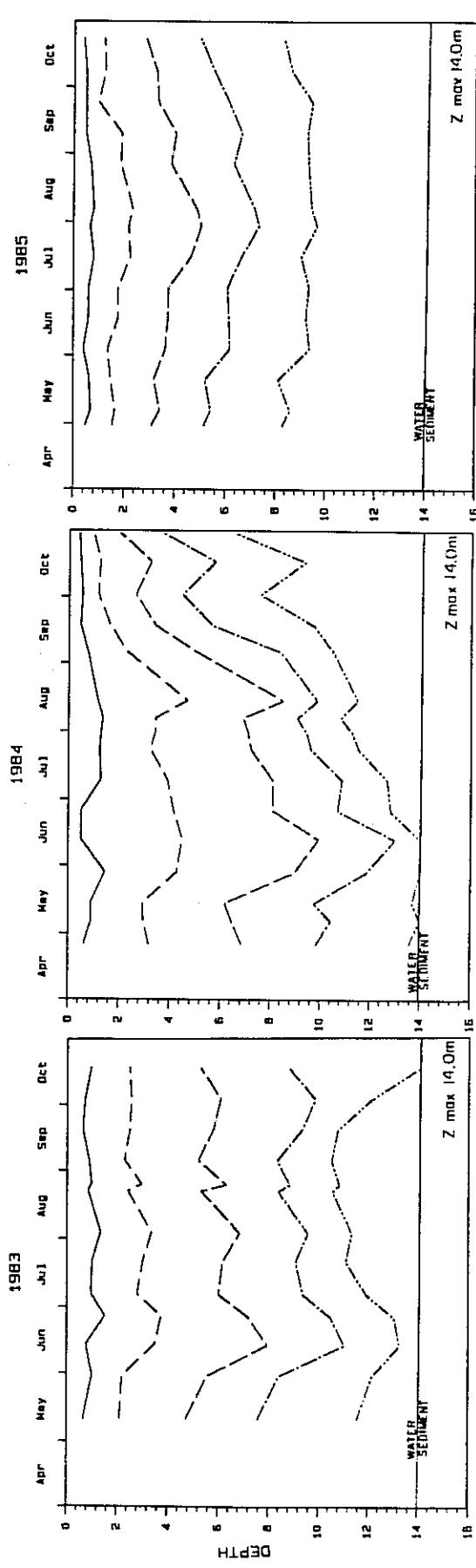


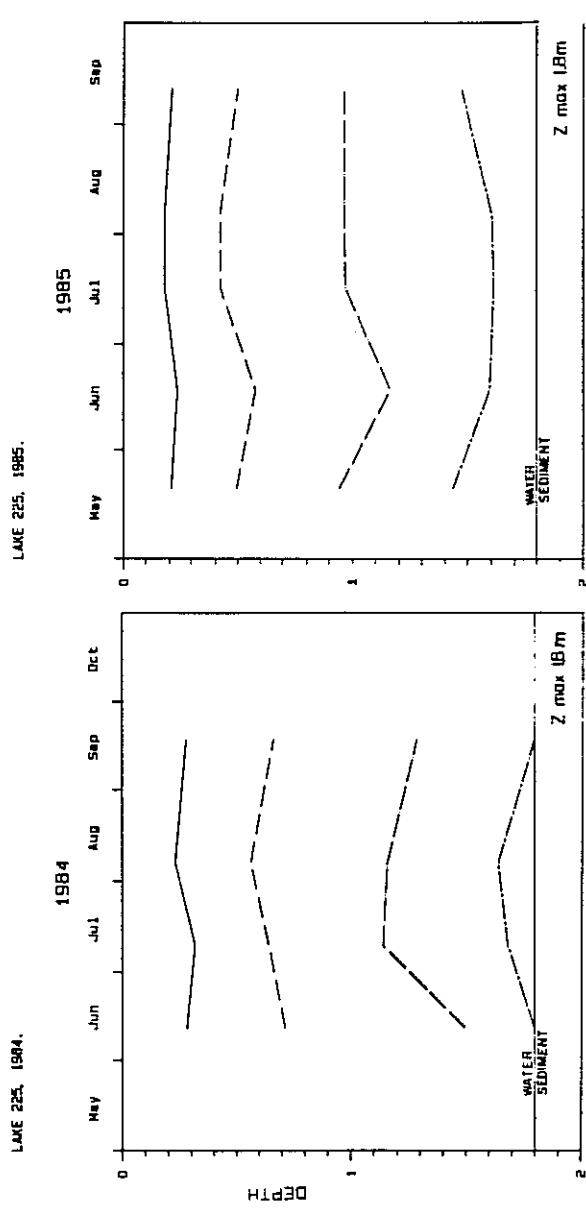
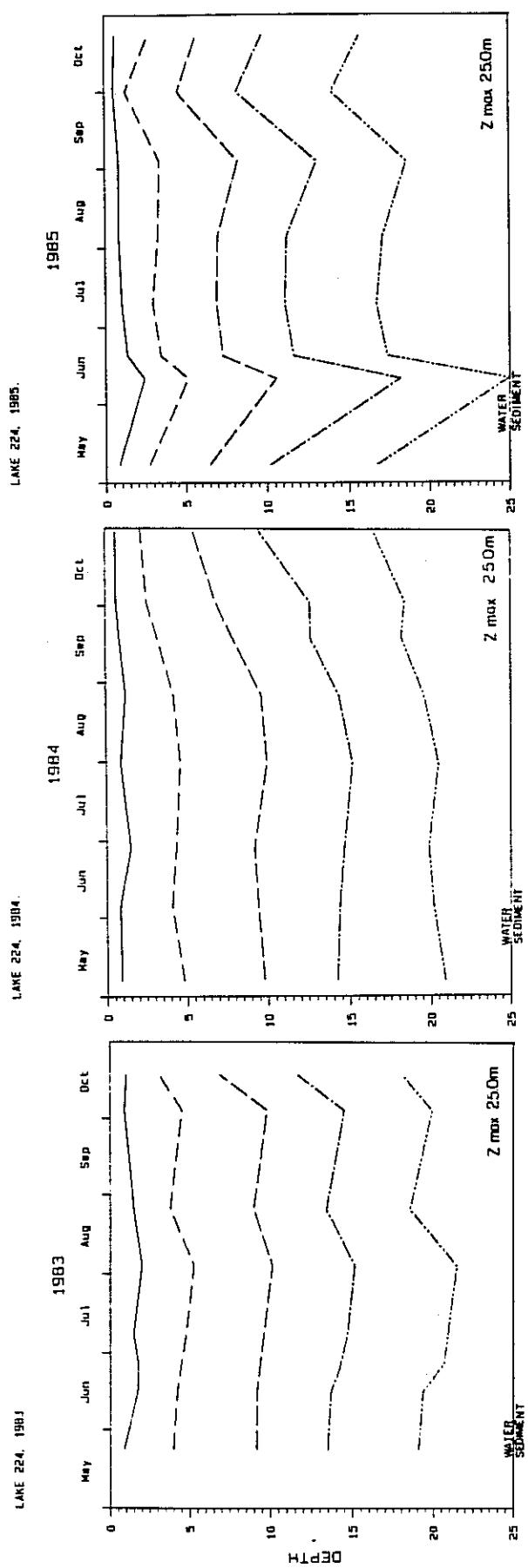


LAKE 222, 1985.

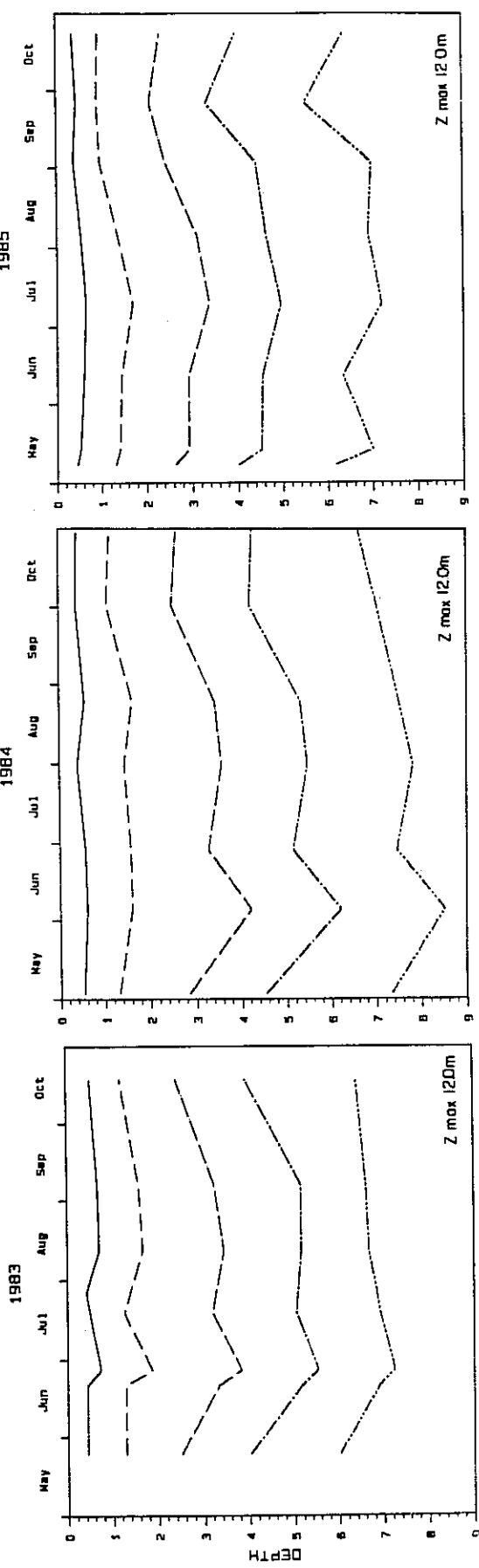


LAKE 223, 1985.

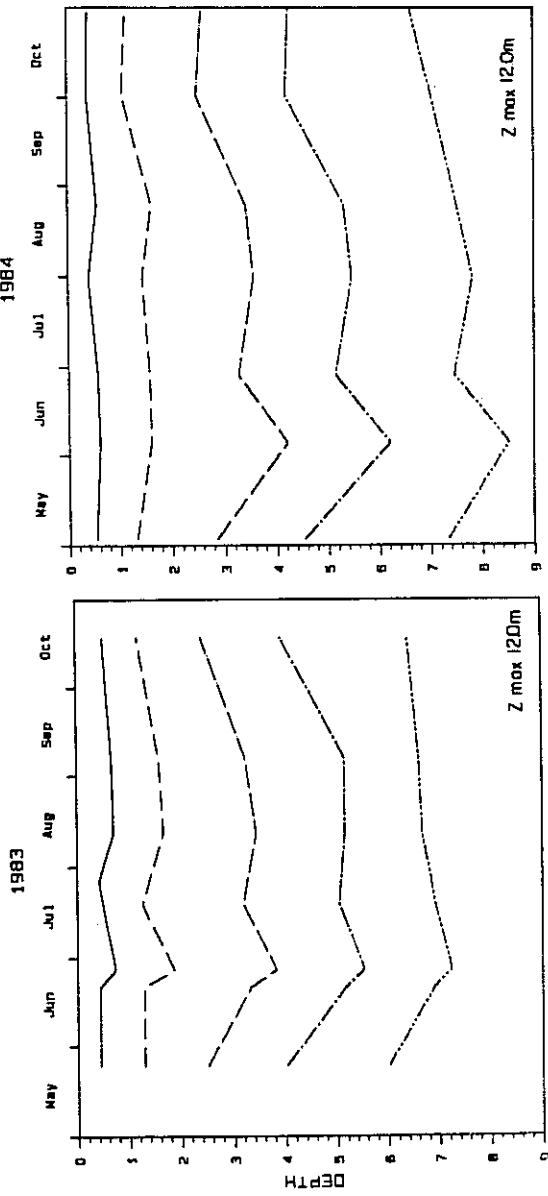




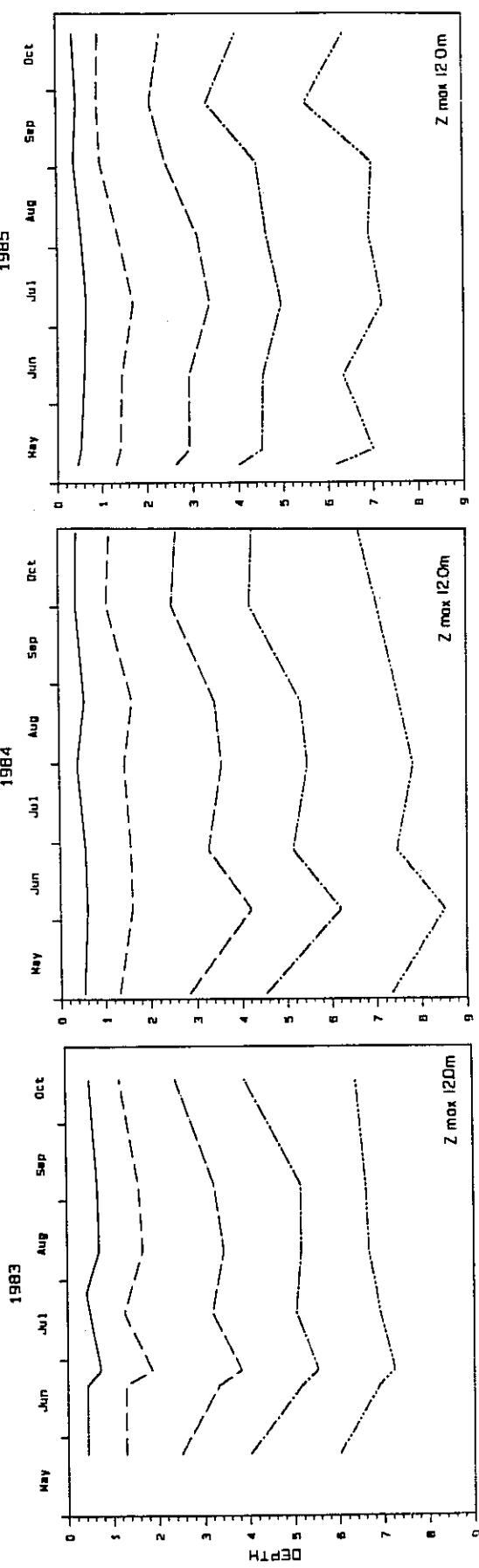
LAKE 226N, 1985.



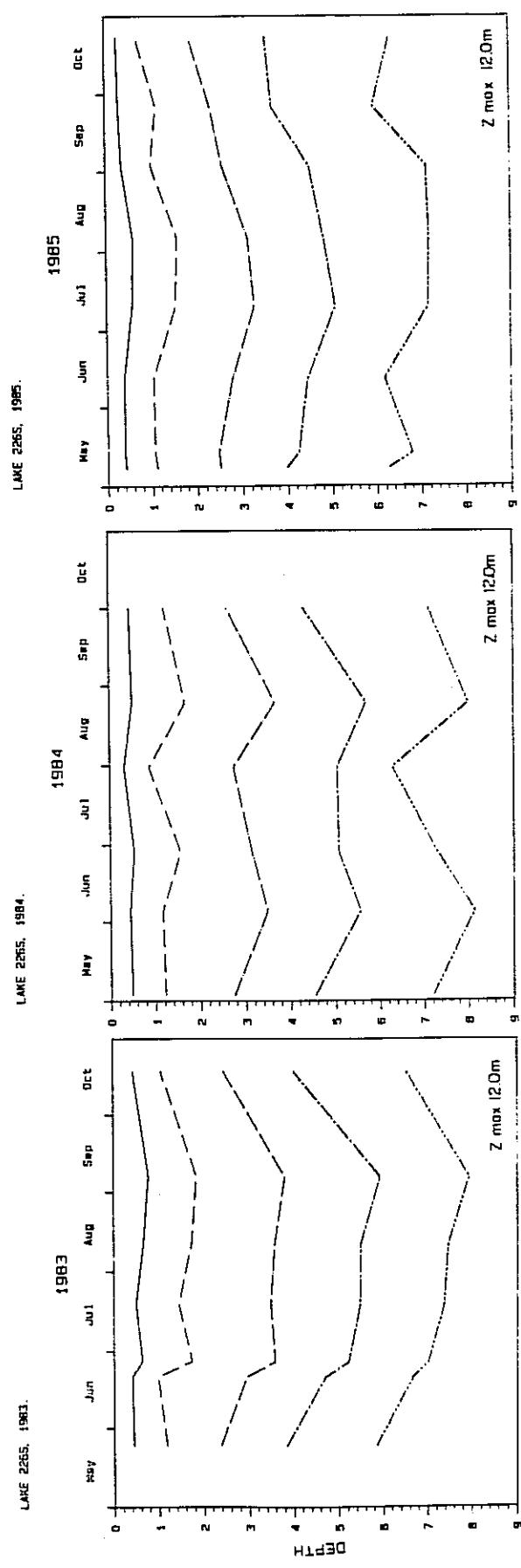
LAKE 226N, 1984.



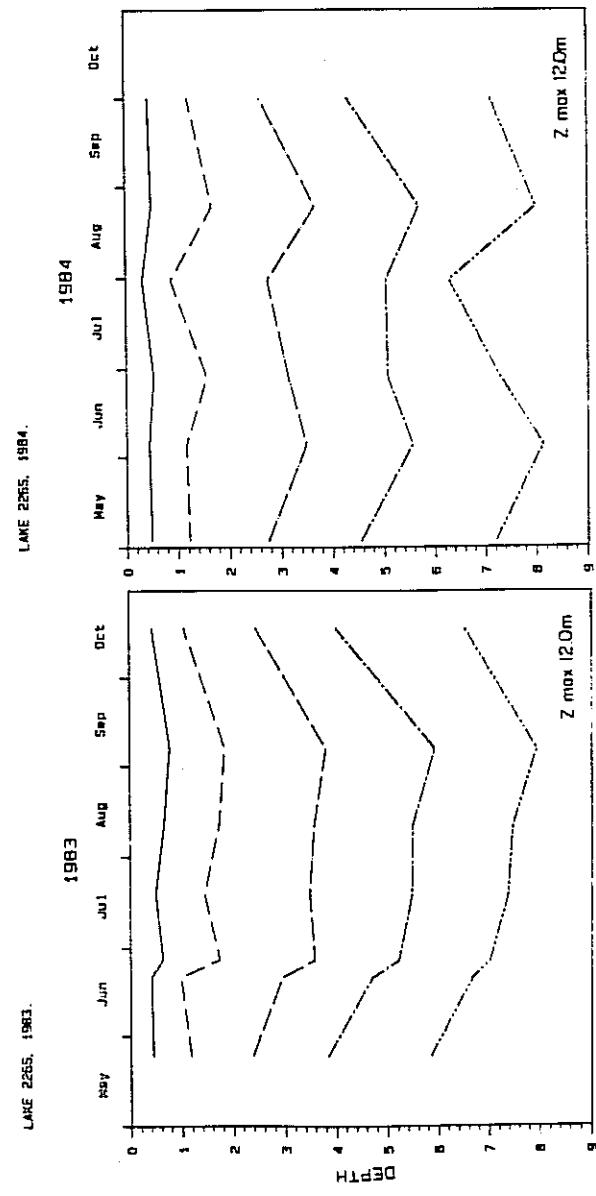
LAKE 226N, 1983.



LAKE 226S, 1985.

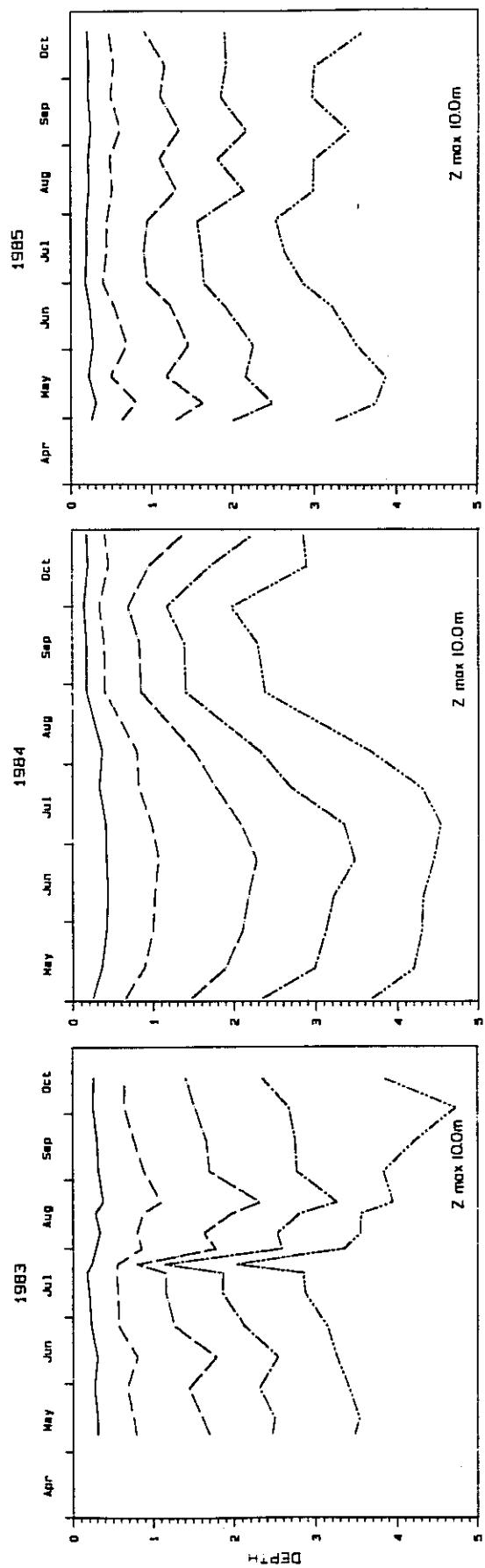


LAKE 226S, 1984.

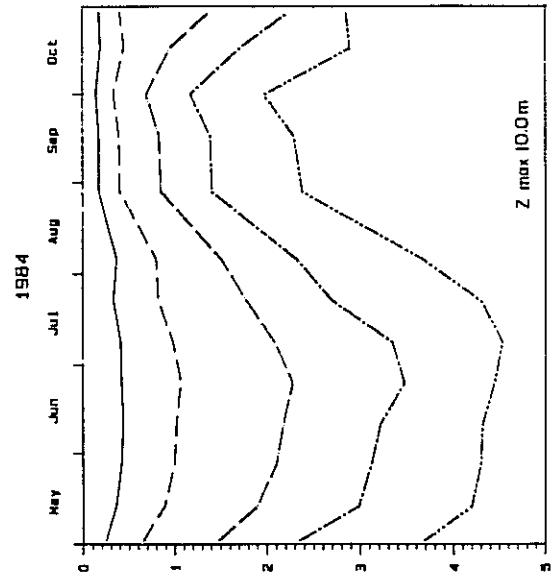


LAKE 226S, 1983.

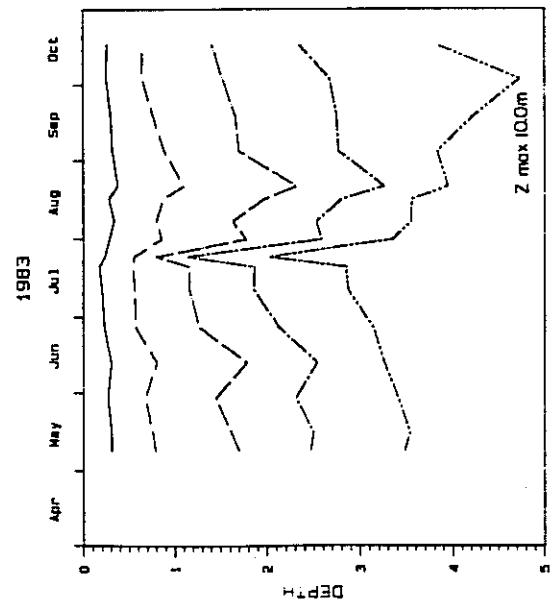
LAKE 227, 1985.



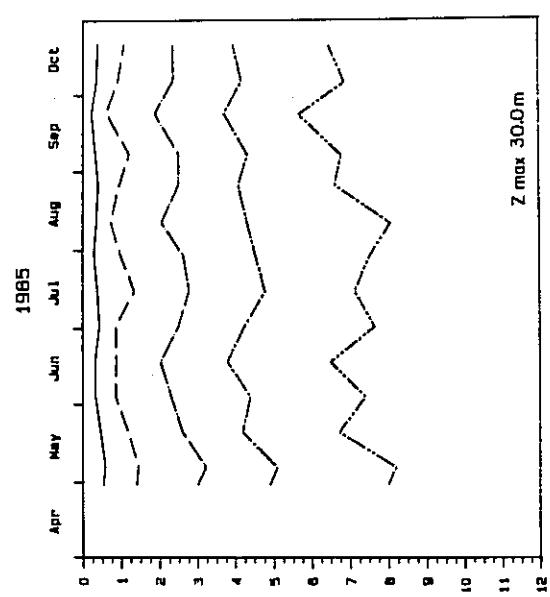
LAKE 227, 1984.



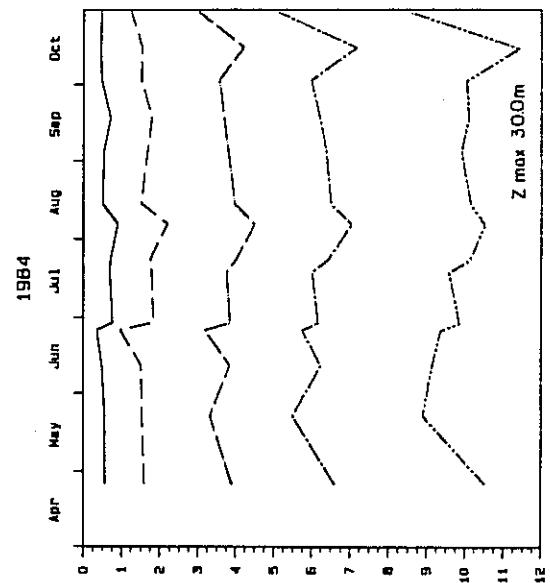
LAKE 227, 1983.



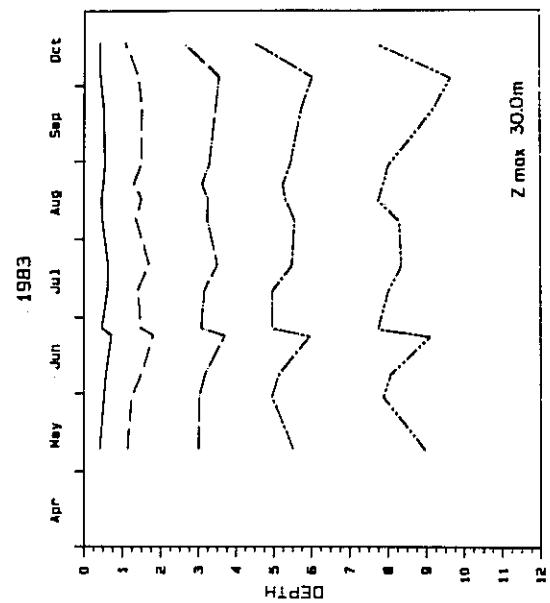
LAKE 239, 1985.



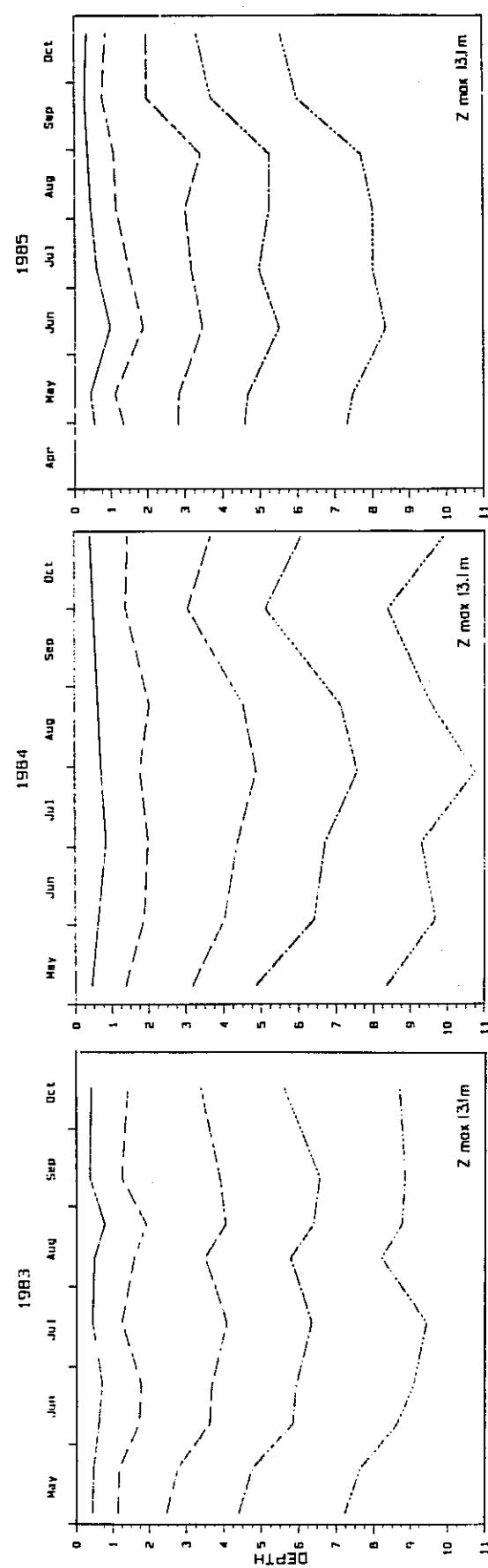
LAKE 239, 1984.



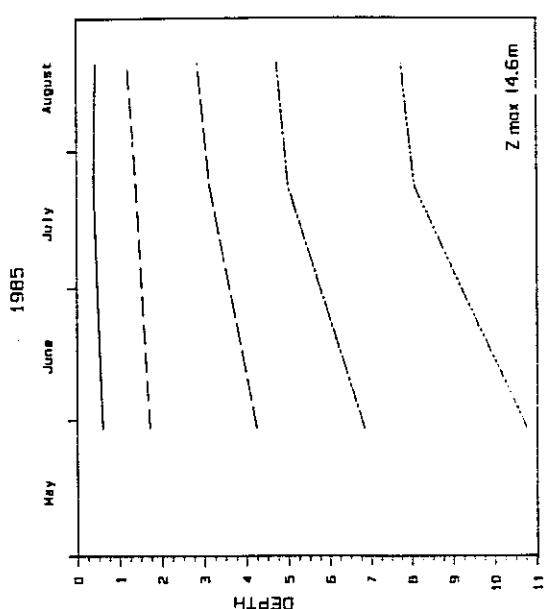
LAKE 239, 1983.



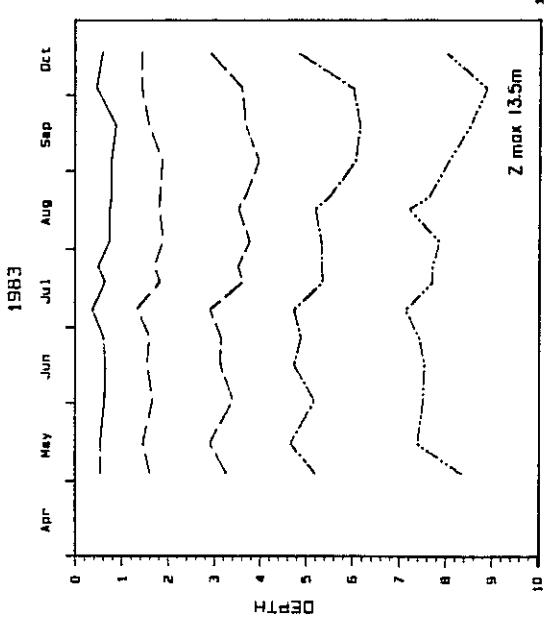
LAKE 240, 1985.



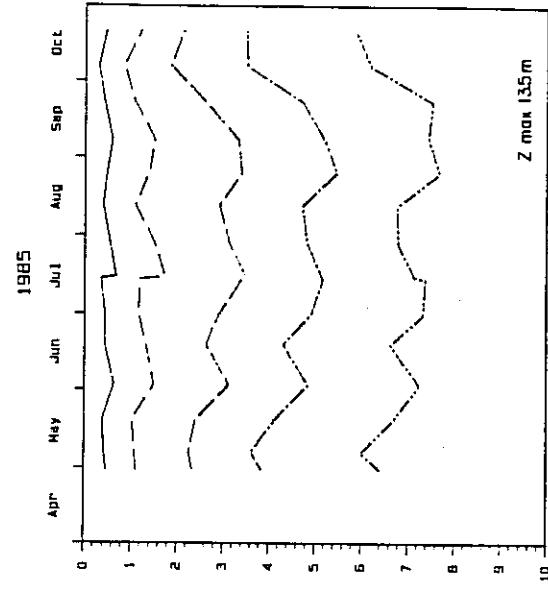
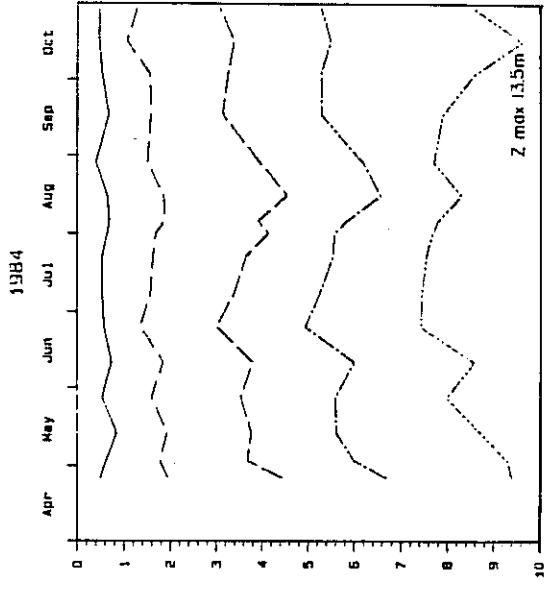
LAKE 260, 1985.



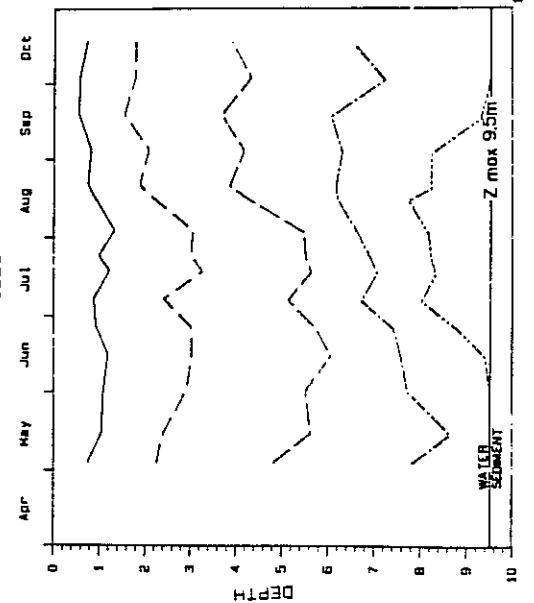
LAKE 302N, 1983.



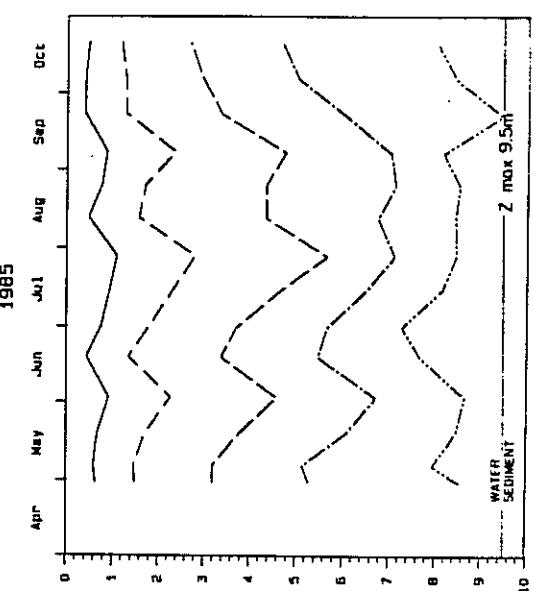
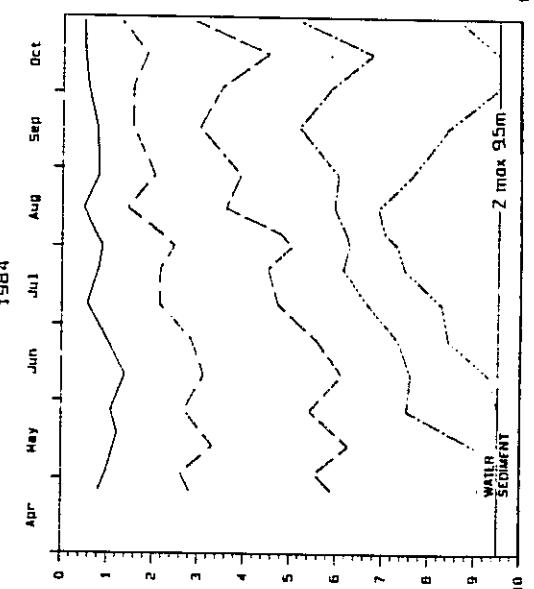
LAKE 302N, 1984.



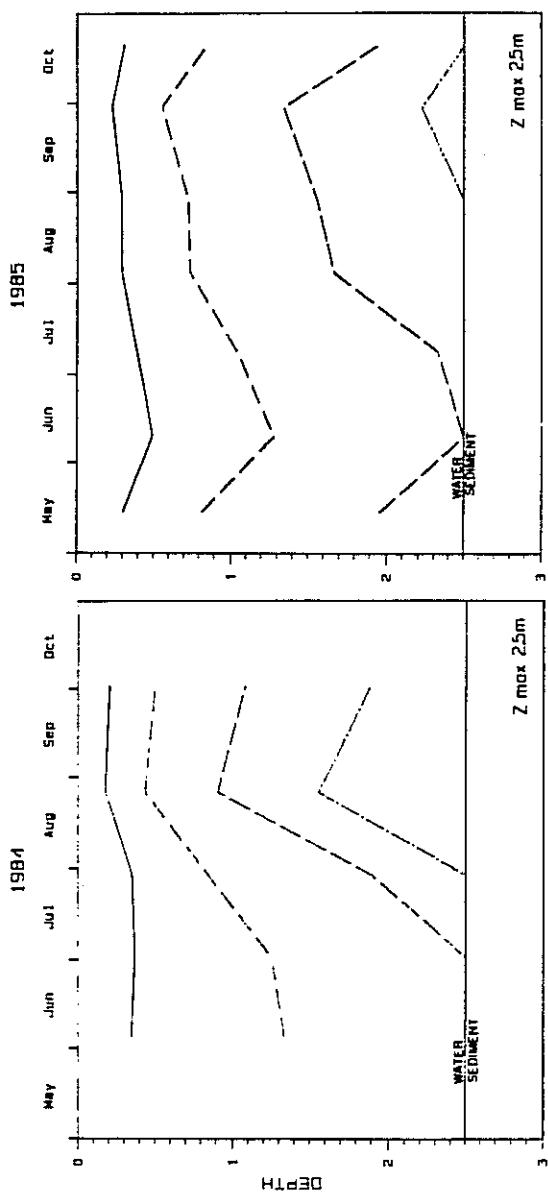
LAKE 302S, 1983.



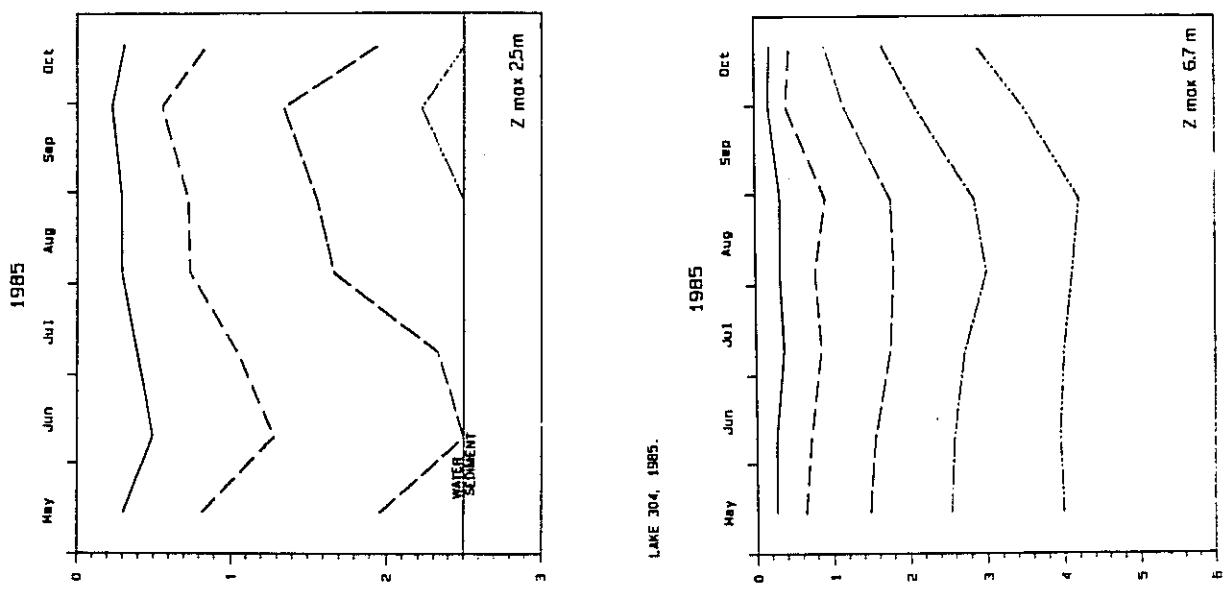
LAKE 302S, 1984.



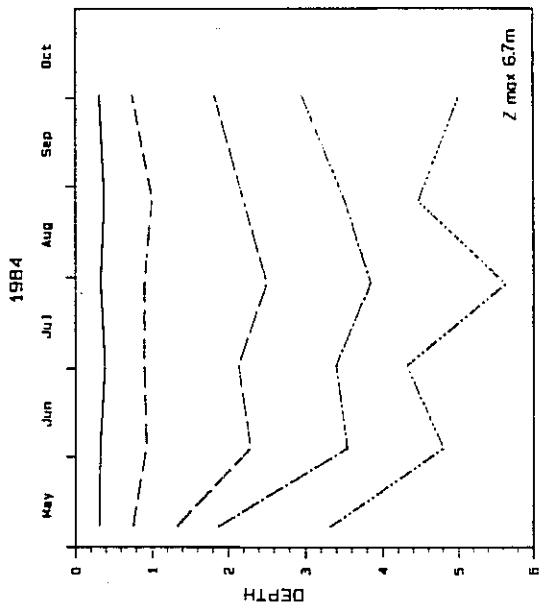
LAKE 303. 1984.



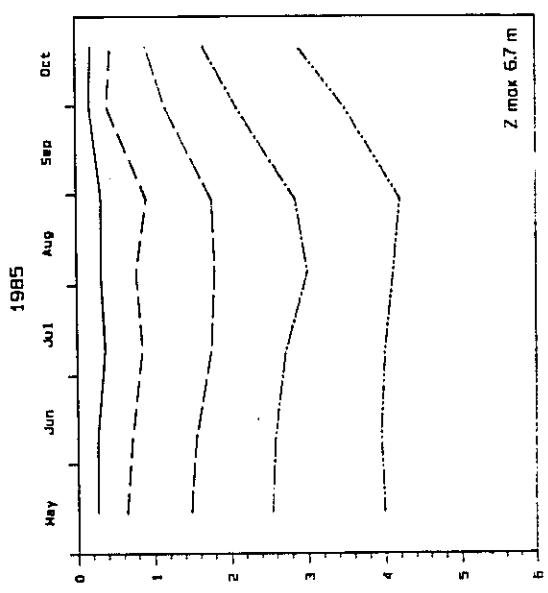
LAKE 303. 1985.



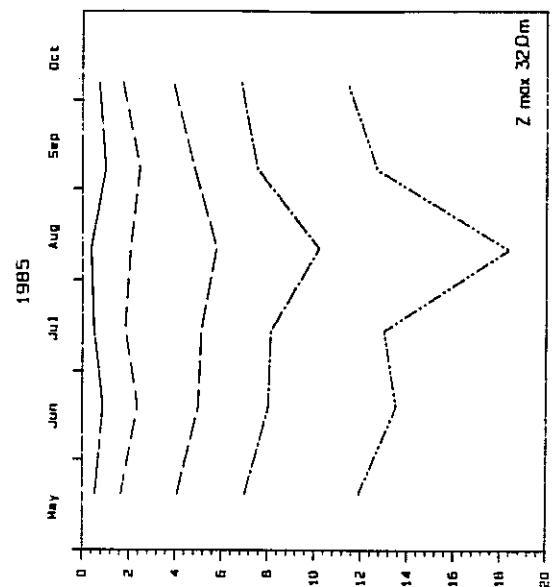
LAKE 304. 1984.



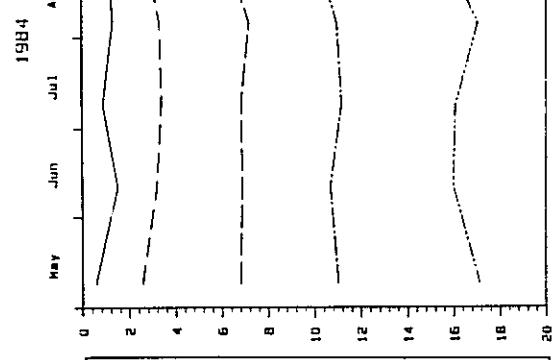
LAKE 304. 1985.



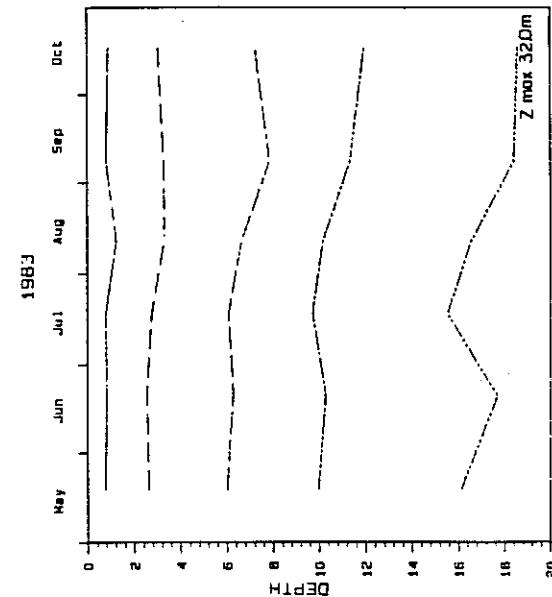
LAKE 305, 1985.



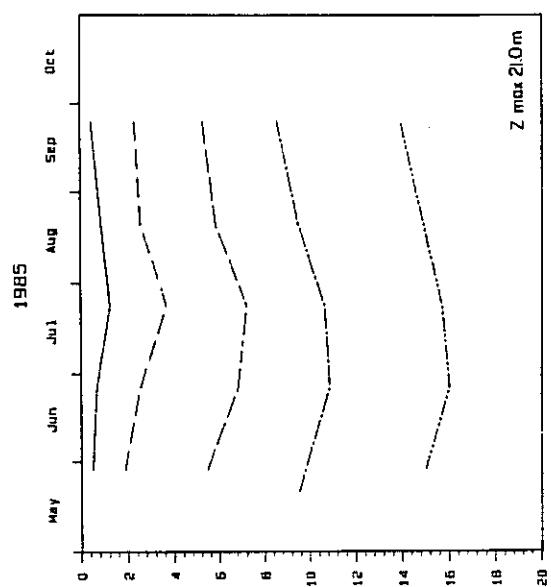
LAKE 305, 1984.



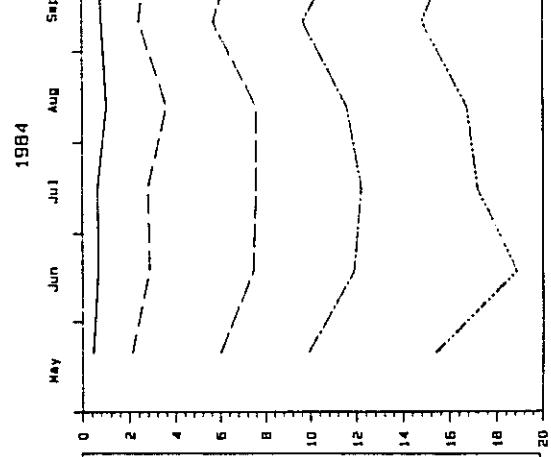
LAKE 305, 1983.



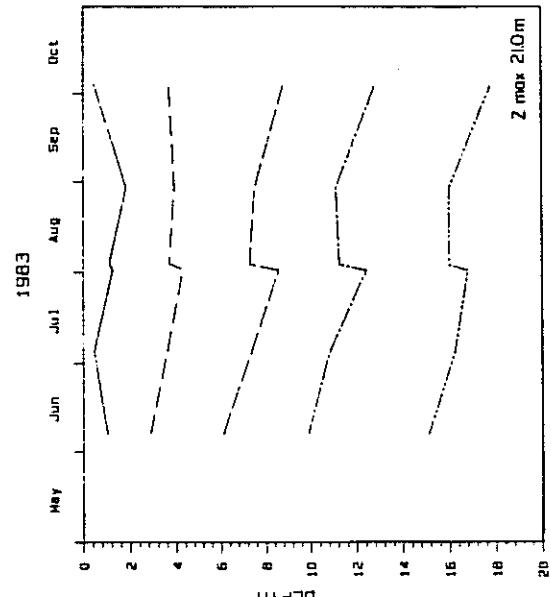
LAKE 373, 1985.



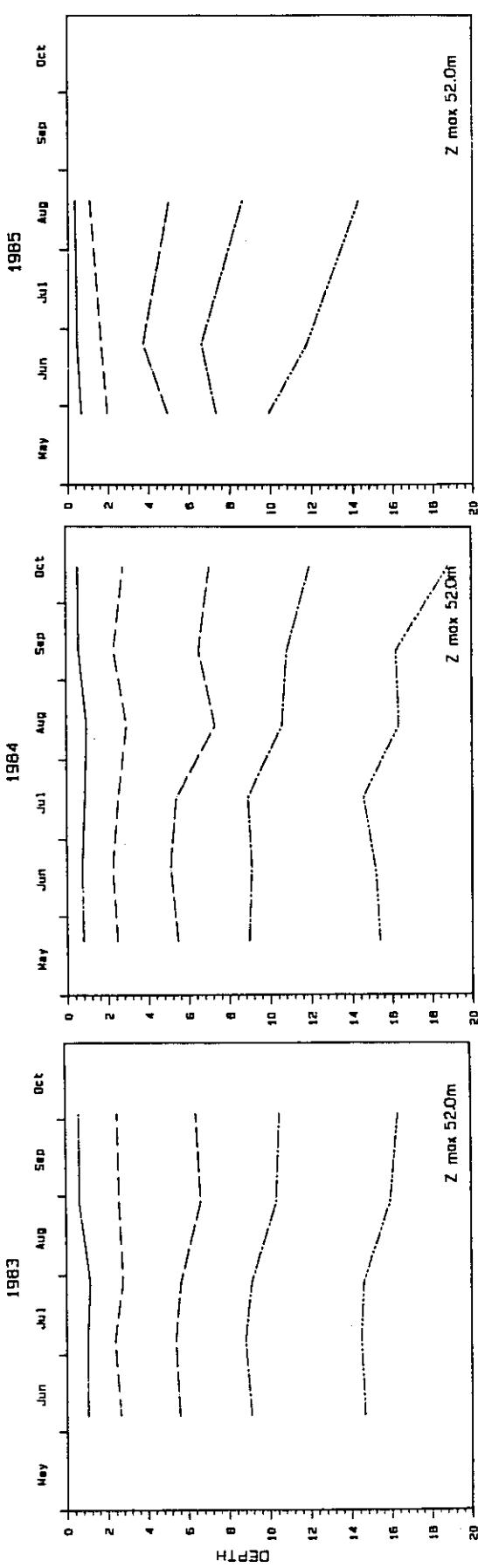
LAKE 373, 1984.



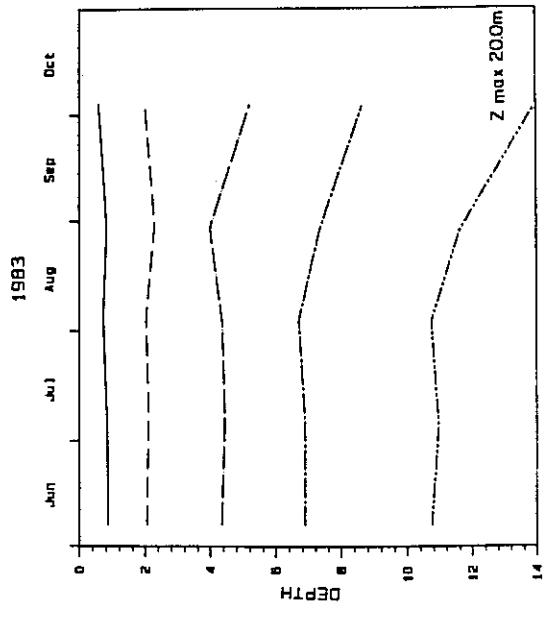
LAKE 373, 1983.



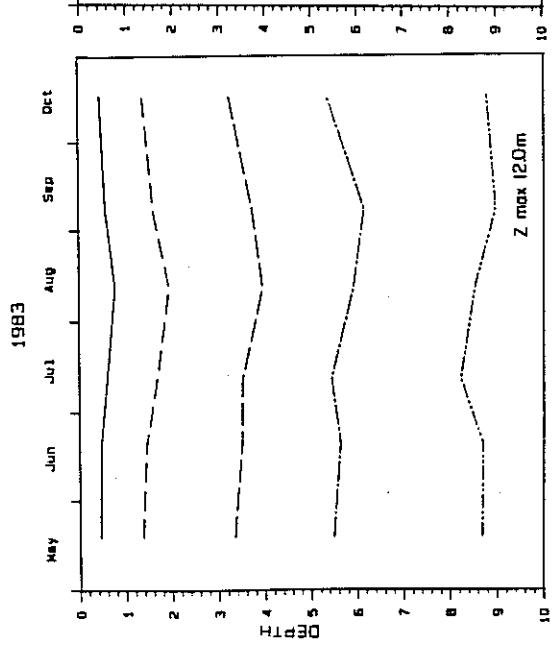
LAKE 374, 1985.



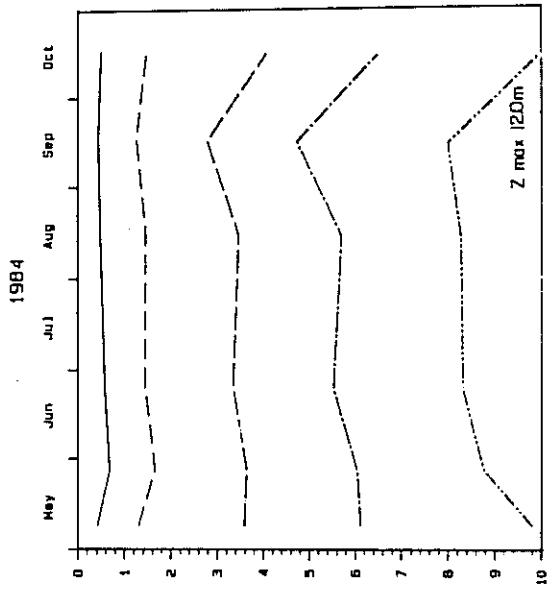
LAKE 375, 1983.



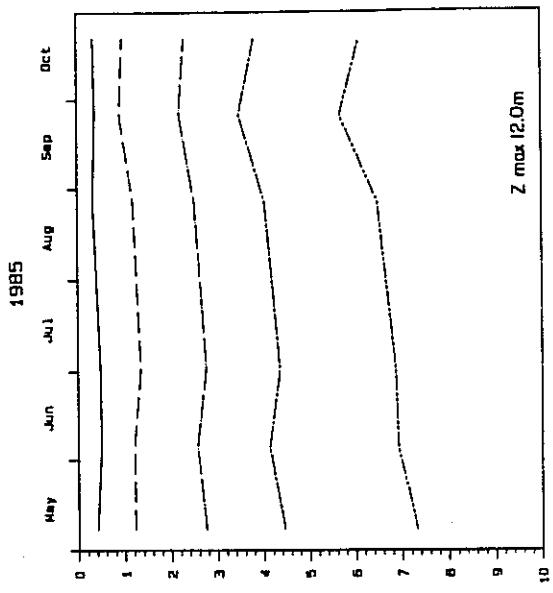
LAKE 382, 1983.



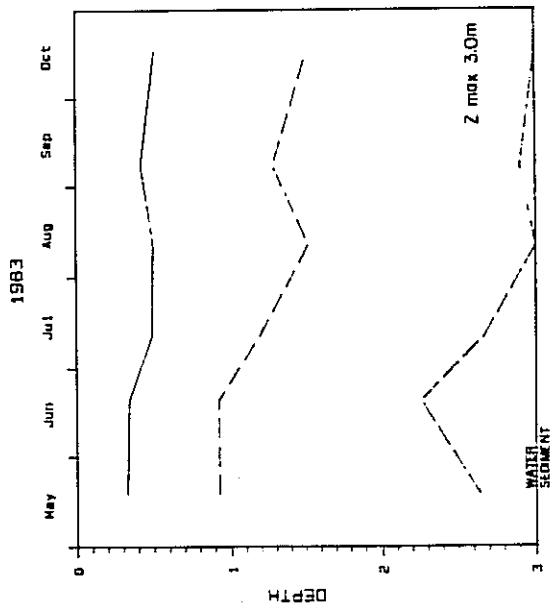
LAKE 382, 1984.



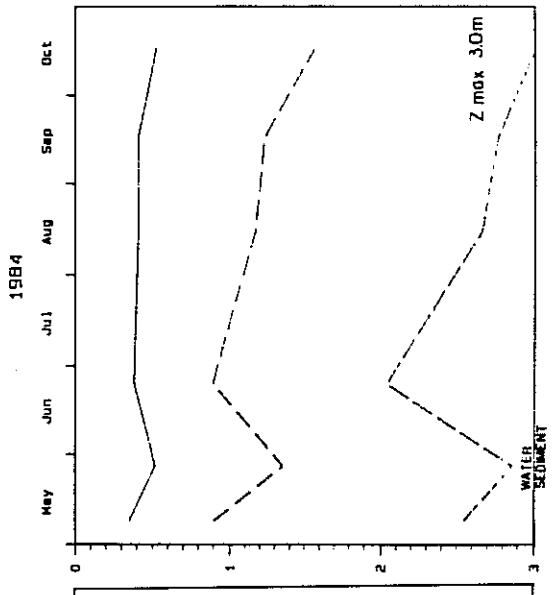
LAKE 382, 1985.



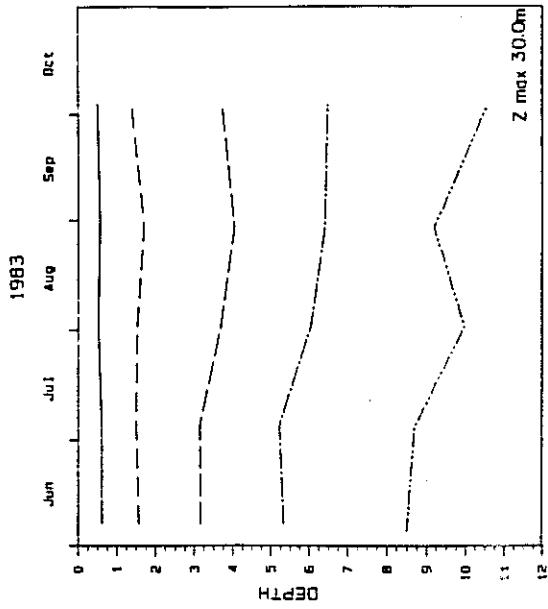
LAKE 382B 1983.



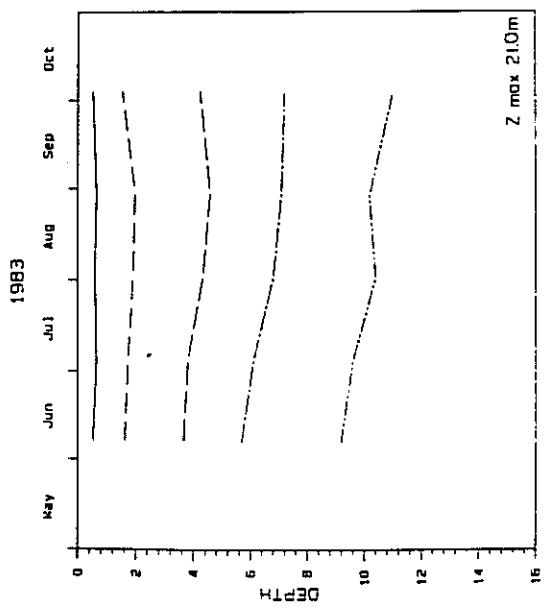
LAKE 382B 1984.



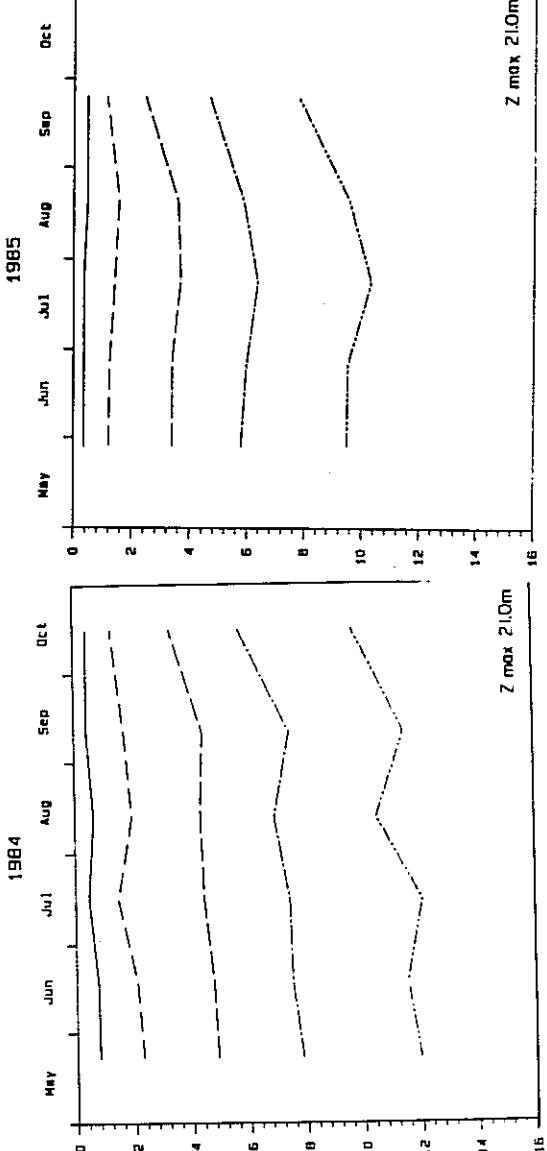
LAKE 622, 1983



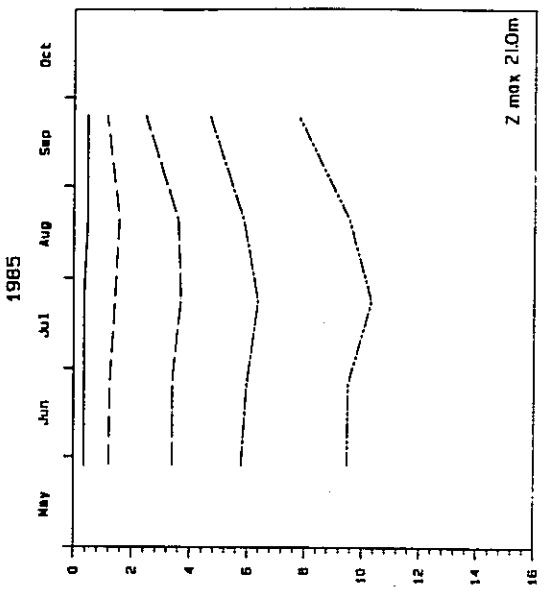
LAKE 623, 1983



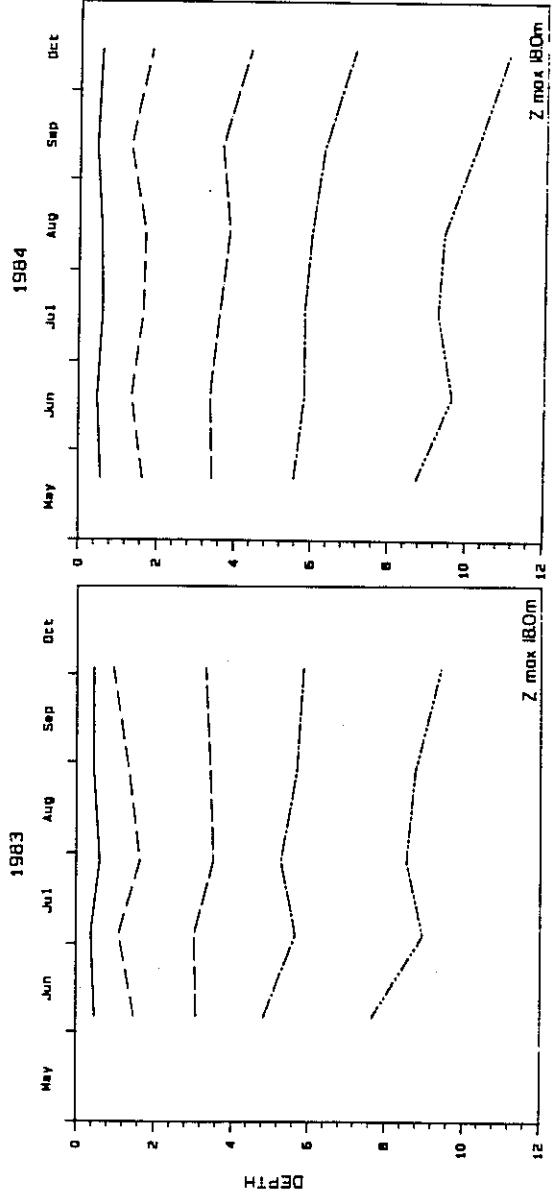
LAKE 623, 1984

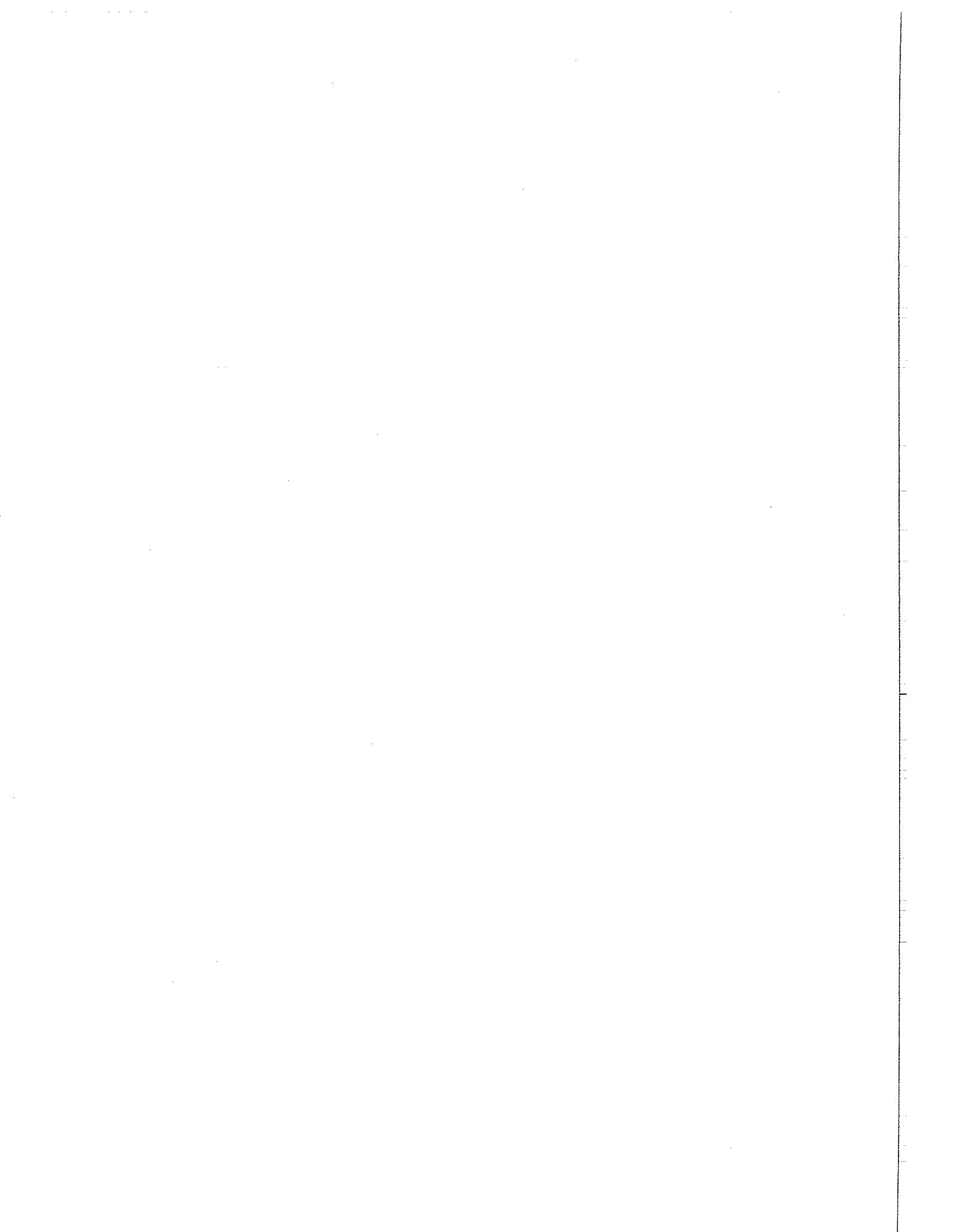


LAKE 623, 1985.



LAKE 629, 1983.





## APPENDIX 3

This appendix lists previous data or technical reports on light attenuation in selected lakes at the Experimental Lakes Area.

SHEARER, J.A. 1976. Light extinction measurements in the Experimental Lakes Area - 1974 data. Can. Fish. Mar. Serv. Tech. Rep. 615: v + 79 p.

SHEARER, J.A., and D.R. DeCLERCQ. 1976. Light extinction measurements in the Experimental Lakes Area - 1975 data. Can. Fish. Mar. Serv. Tech. Rep. 646: v + 113 p.

SHEARER, J.A., and D.R. DeCLERCQ. 1977. Light extinction measurements in the Experimental Lakes Area - 1976 data. Can. Fish. Mar. Serv. Data Rep. 33: v + 103 p.

SHEARER, J.A., and D.R. DeCLERCQ. 1978. Light extinction measurements in the Experimental Lakes Area - 1977 data. Can. Fish. Mar. Serv. Data Rep. 73: iv + 49 p.

SHEARER, J.A., and D.R. DeCLERCQ. 1979. Light extinction measurements in the Experimental Lakes Area - 1978 data. Can. Fish. Mar. Serv. Data Rep. 121: iv + 59 p.

SHEARER, J.A., and D.R. DeCLERCQ. 1980. Light extinction measurements in the Experimental Lakes Area - 1979 data. Can. Data Rep. Fish. Aquat. Sci. 189: iv + 63 p.

SHEARER, J.A., and E.R. DeBRUYN. 1981. Light attenuation in the Experimental Lakes Area - 1980 data. Can. Data Rep. Fish. Aquat. Sci. 259: iv + 50 p.

SHEARER, J.A., and E.R. DeBRUYN. 1982. Light attenuation in the Experimental Lakes Area - 1981 data. Can. Data Rep. Fish. Aquat. Sci. 337: iv + 51 p.

SHEARER, J.A., and E.R. DeBRUYN. 1983. Light attenuation in the Experimental Lakes Area - 1982 data. Can. Data Rep. Fish. Aquat. Sci. 411: iv + 63 p.

